

UI GUIDE FOR RISKScape

RiskScape is a joint GNS and NIWA project to develop a natural hazard impact and risk modelling tool for New Zealand.

<http://riskscape.org.nz/>

This guide is aimed at new users of RiskScape and provides an introduction to the User Interface (UI) of RiskScape. This guide follows on from the Quick Start guide. You can work through this guide at your own pace once you have successfully installed RiskScape onto your PC.

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Overview

Key differences between this version and the last.

1

1.1

- The UI has changed and looks different from older versions
- Built-in RS tools and quick link buttons appear on the main menu, including help and module manager.
- The module builder tools are now accessible from the UI (in previous versions they were loaded separately).
- Styling and viewing of layers and maps based on Geotools
- More user input/choice in display options
- Better visual integration of modules and functionality

If you get stuck the RiskScape team are available:

For more information about RiskScape software or installation
support@riskscape.org.nz

For general RiskScape enquires
info@riskscape.org.nz

The Menu Buttons

2

The three sections on the Menu Buttons toolbar are General Features (yellow), Module Builder (orange) and Module Editor (red)



2.1.1

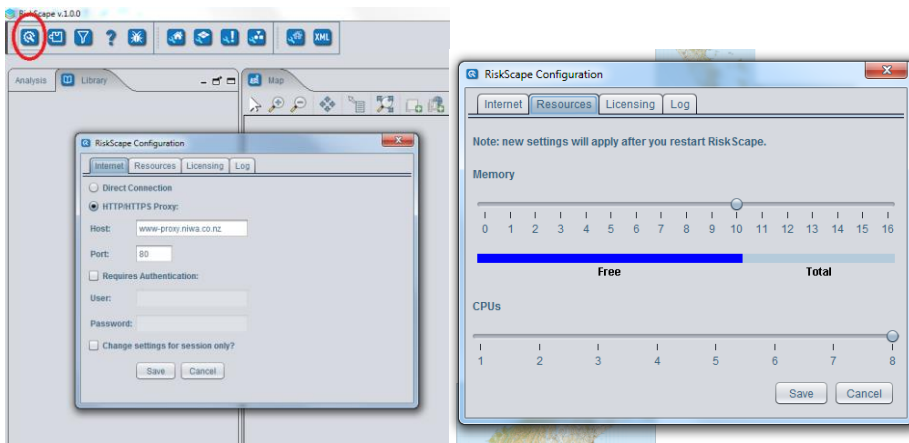
 Please make notes

The General Feature Buttons

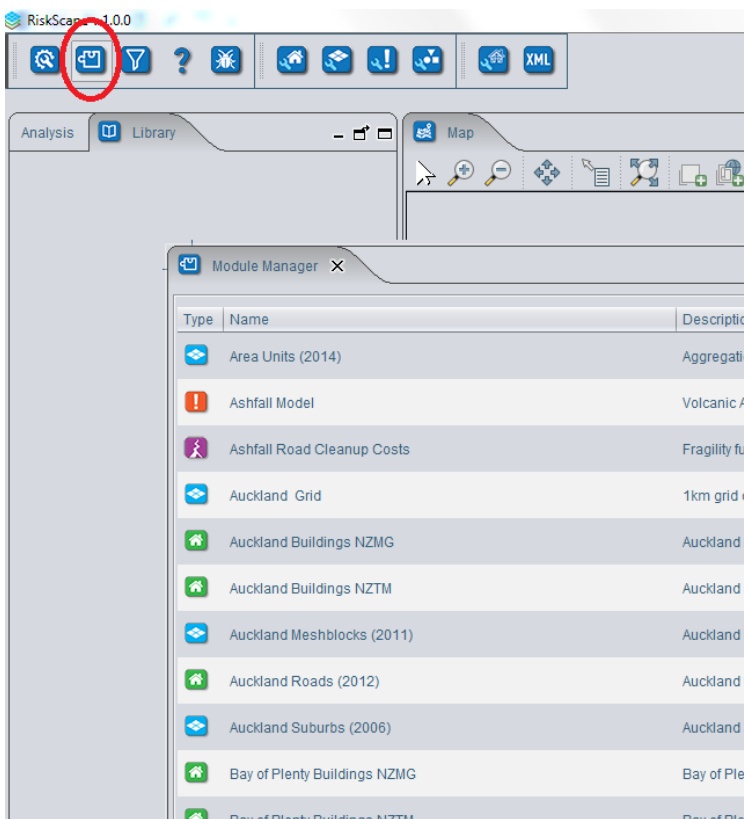
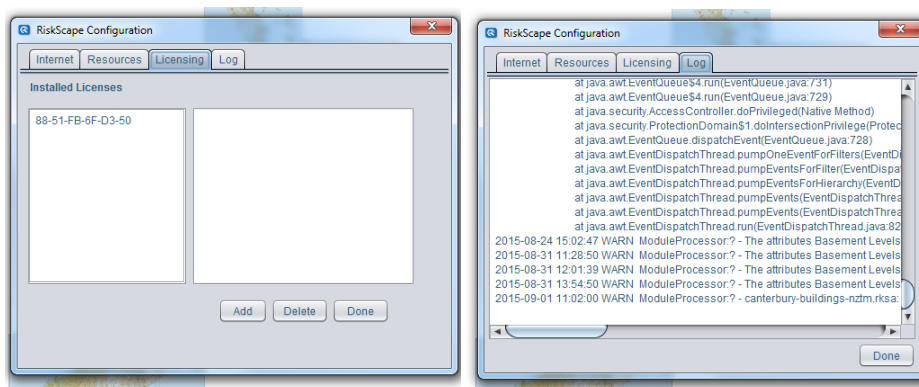


The buttons on the General Features menu open the following features:

- RS Configuration Dialog (Preferences)
- Module Manager
- Filter Manager
- Online Help
- Helpdesk and Bug reporting



RS Configuration Dialog (Preferences) gives the user options to view or alter the proxy settings along with Resources, Licensing and Log Information



2.1

Module Builder Menu

The buttons on the Module Builder menu open the following features:

- Asset Module Builder
- Aggregation Module Builder
- Hazard Module Builder
- Resource Module Builder



Module Editor Menu

The buttons on the Module Editor menu open the following features:

- Asset Modification Tool
- Module Metadata Editor



The User Interface panels

The User Interface Introduction

 Please make notes

3 Navigating the User Interface

- 3.1 Open RiskScape (RS) by double clicking on the RS icon on your desktop

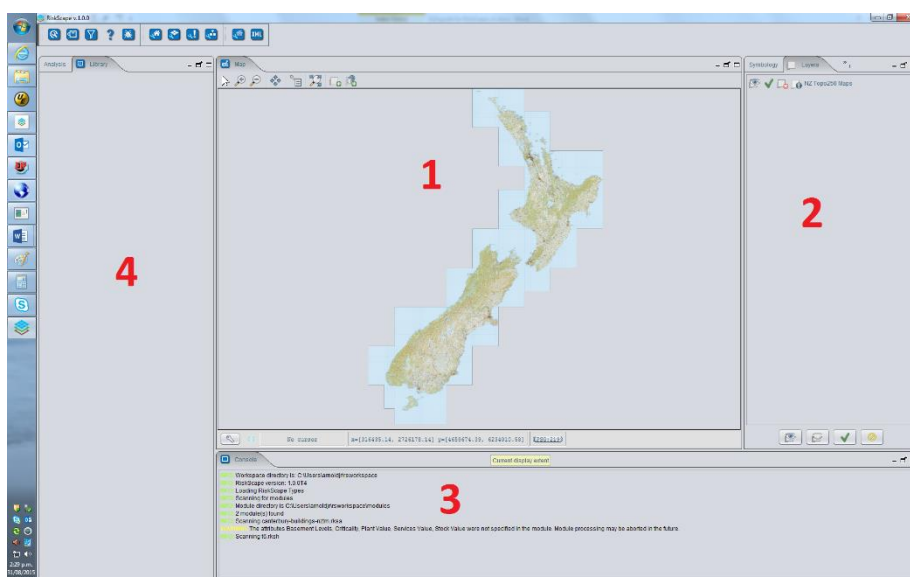
Wiki link 1. [If you do not already have RiskScape running see the Quick Start Guide.](#)

3.1.1

The screen below will appear (without the numbers shown). This is the User Interface (UI). This is where all the work will take place.

There are four docking spaces. The initial four visible panels are:

1. Map Panel – in the centre
2. Layers, Panel – on the right (also Symbolology, Asset Exposures)
3. Console Panel – under the Map Panel
4. Library Panel – on the left (also Analysis)



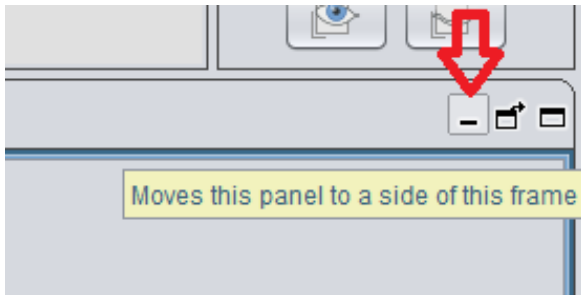
Note: If the map doesn't load then there is a problem with the LINZ server (or connection to it) see next section on loading a map.

Wiki link 2. [Initial Map Load error - see troubleshooting](#)

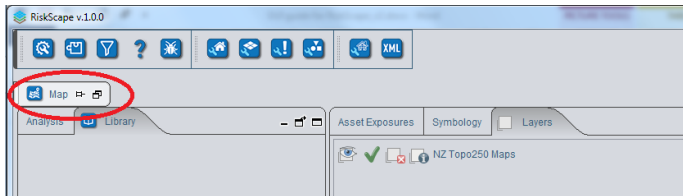
Panels can be adjusted to suit the user. To do this, hover your cursor over the border between panels until a double arrow appears, then drag/adjust to suit your preference.

The tabbed panels can be moved between the docking spaces by dragging and dropping the tab.

The panels can also be relocated or minimised by using the buttons at the top right of each Tab.



When minimised, the panel will show up at top left under the main tool bar.



Some tabs are closable (these will have an X on the tab to close), others are not closable and can only be minimised.

DESCRIBE TABS IN USER MANUAL

MOVE TO TROUBLE SHOOTING

The user will have to select map again from the add WMS layer button and accept the default (which is the LINZ layer)

ERROR MESSAGES IN CONSOLE PANEL AND COORDINATE SYSTEMS

Map Tab

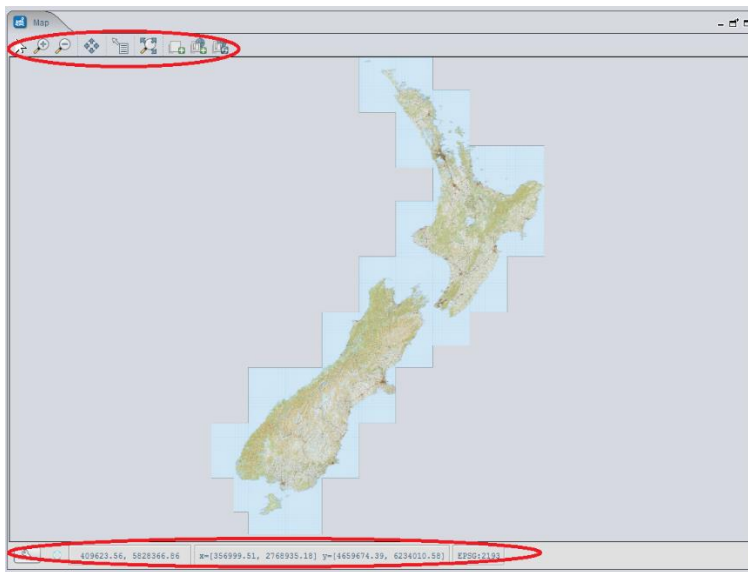
In this Section

- Introduction to Map Tab/Panel
- Adding a Map
- Adding a Layer
- Show/Hide info on the Display Bar
- 3.2 • Changing the Coordinate system
- Selecting the Coordinate System
- Zoom and Extent Buttons
- Pan, Identify and Extent buttons
- Refresh button

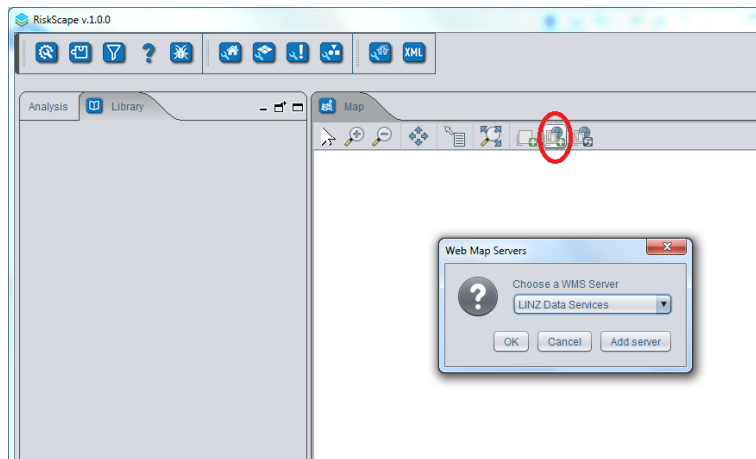
 Please make notes

Map Tab/Panel

The following instructions relate to the map Tab functionality. This is where Maps and layers are graphically displayed. There are **buttons** at the top left of the Map tab and an interactive **display bar** at the base of the tab. The Map tab appears in the centre of the RS window at start up



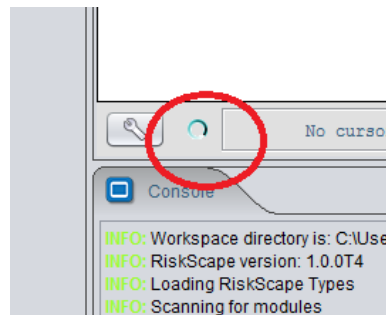
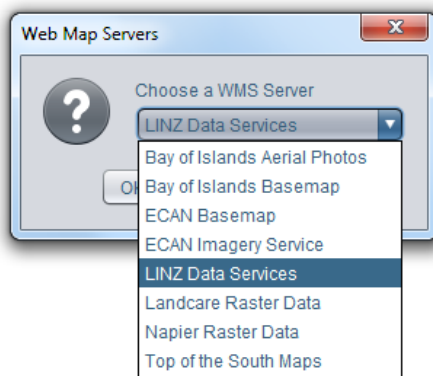
Adding a map



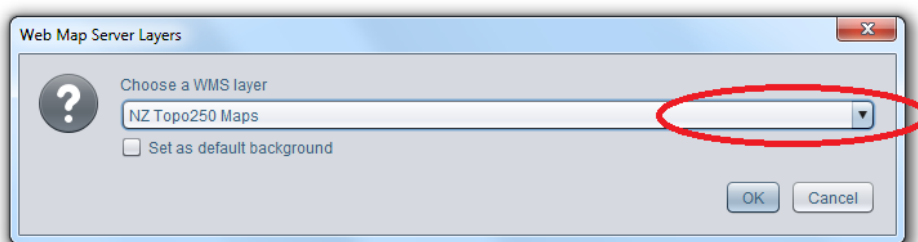
Click the Add WMS Layer button.

A selection box will appear showing the default server in the drop down. (The default is LINZ Data Services).

Select the server you want.



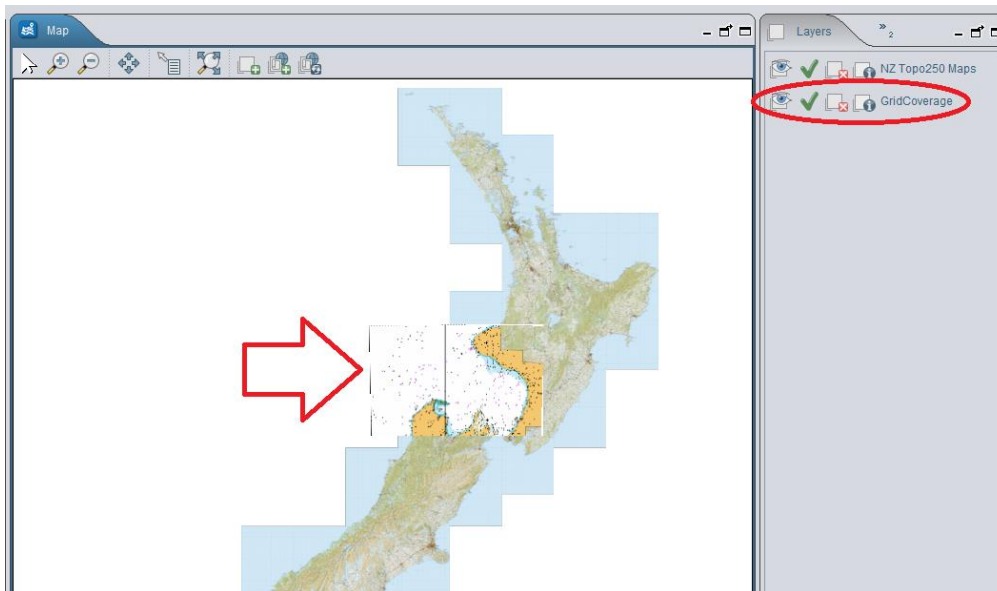
RS will attempt to contact the selected server. The loading symbol will appear in the display bar.



From the drop down menu in the selection box that appears, select the map to view. These maps are available from the selected server.

Tick ☒ the box to set the selected map as the default background.

The map will appear graphically in the Map tab and as an entry in the Layer tab on the right.



The section on Symbology, Layer and Asset Exposure tabs will illustrate the ways you can change the view of the map layer.

Adding a Shapefile or other Layer

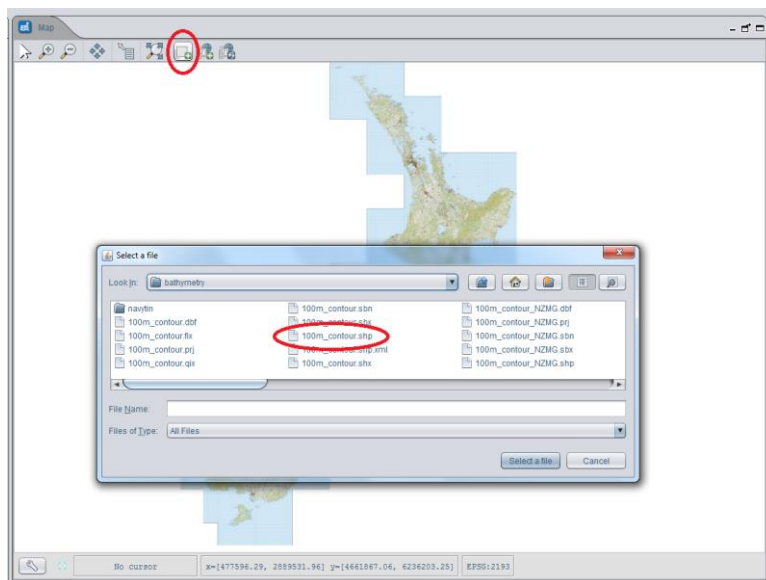
3.2.3 Add a .shp layer from file using the add layer button on the Map tab.

TABLE OF TYPES OF LAYERS ACCEPTABLE TO RS

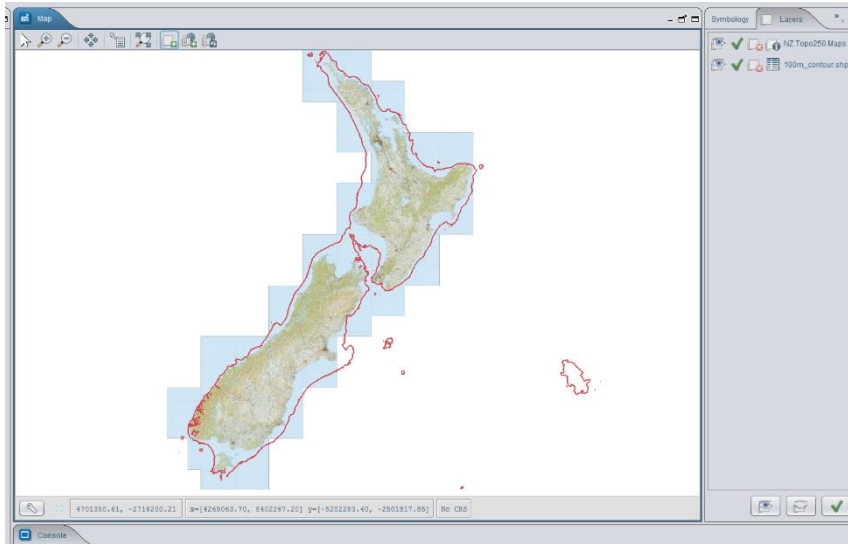
Click the Add Layer button.

Select the .shp shapefile to load from the selection dialog box.

Click the “Select a File” button



The layer will appear graphically in the Map tab and as an entry in the Layer tab on the right



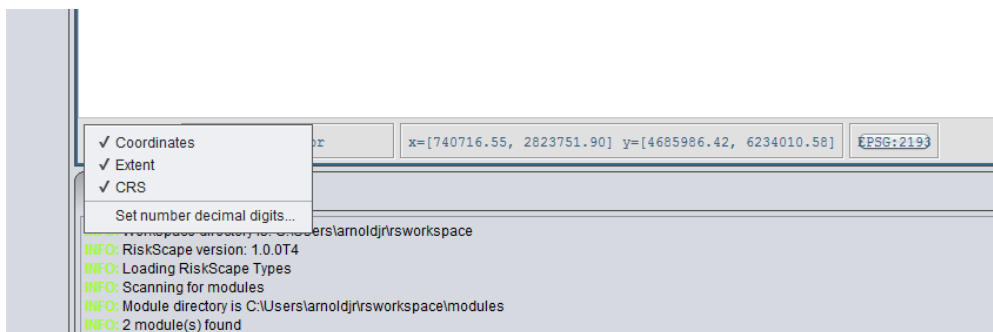
NOTE: Remember when loading JPG georeferenced files that there must be a jpgw (world file) in the same location and with the same name for RiskScape to use to locate the file. Also true for PNG and TIFF.

The section on Symbology, Layer and Asset Exposure tabs will illustrate the ways you can change the view of the layer.

Show/ Hide information on the display bar.

3.2.4

The display bar shows information about the **Coordinates** of the cursor position, the **Extent** of the data, and the coordinate system (**CRS**).

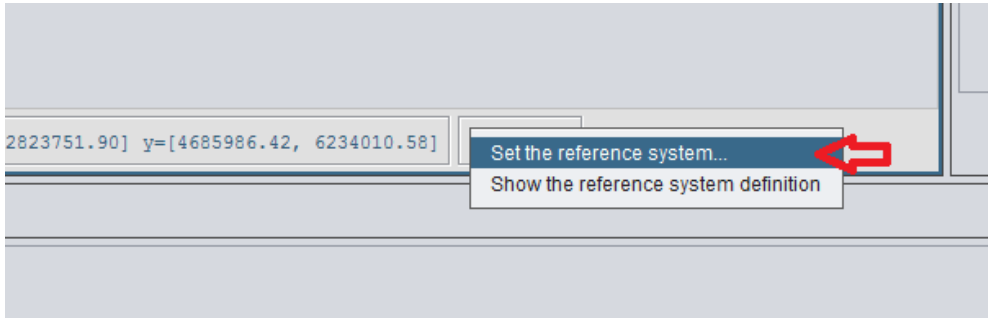
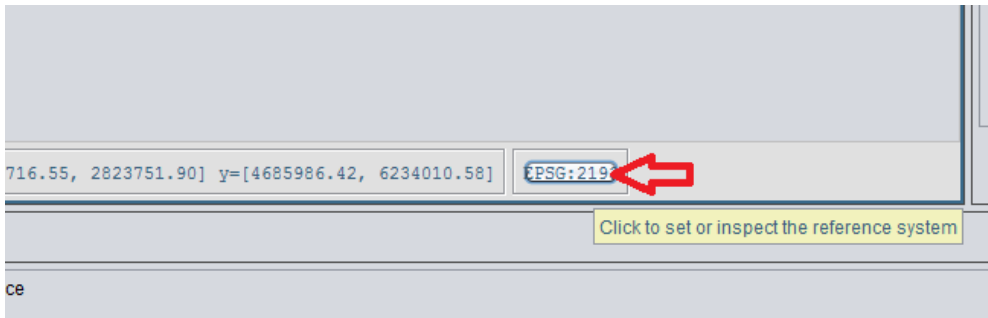


3.2.5 Tick to show or untick to hide these features on the Display Bar.

Use Set number decimal digits to change the length of the numbers displayed.

Changing the Coordinate system

Use the button EPSG... at the bottom right of the Map tab to select "Set the reference system..." option



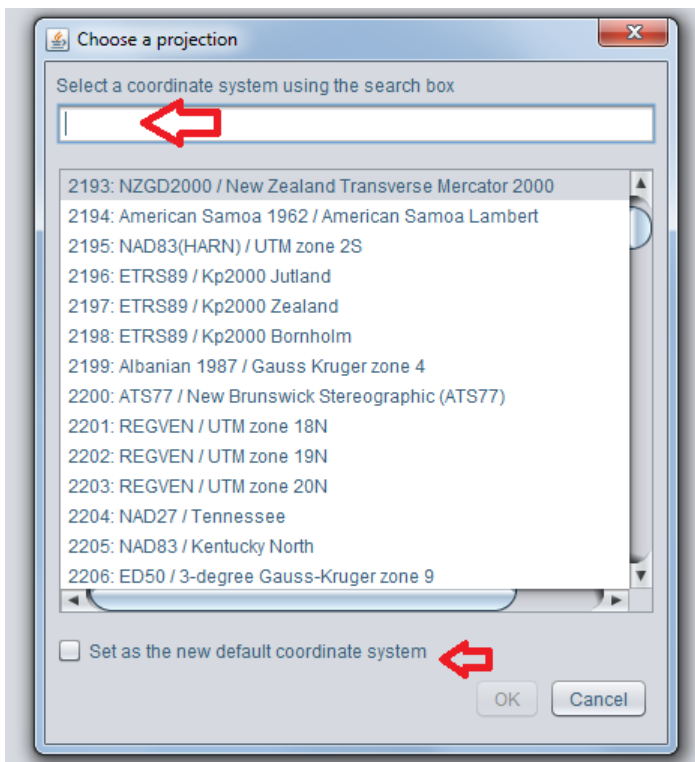
A selection Dialog box will open for you to select the coordinate system from (next section).

Selecting the Coordinate system

3.2.4 If you have selected Set the reference system from the display bar or have selected Other coordinate systems during Installation/first start up then the coordinate selection dialog box will open.

Type the number or name of the coordinate system you want in the top text box.

Tick ☒ the box to set the selected map as the default coordinate system.

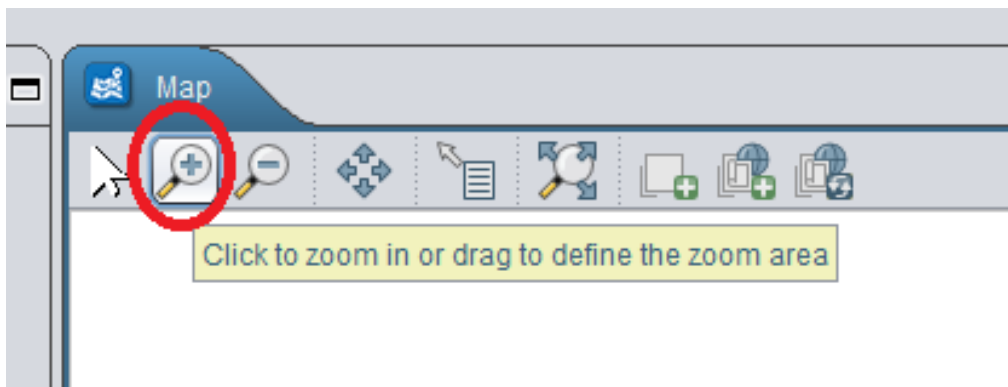
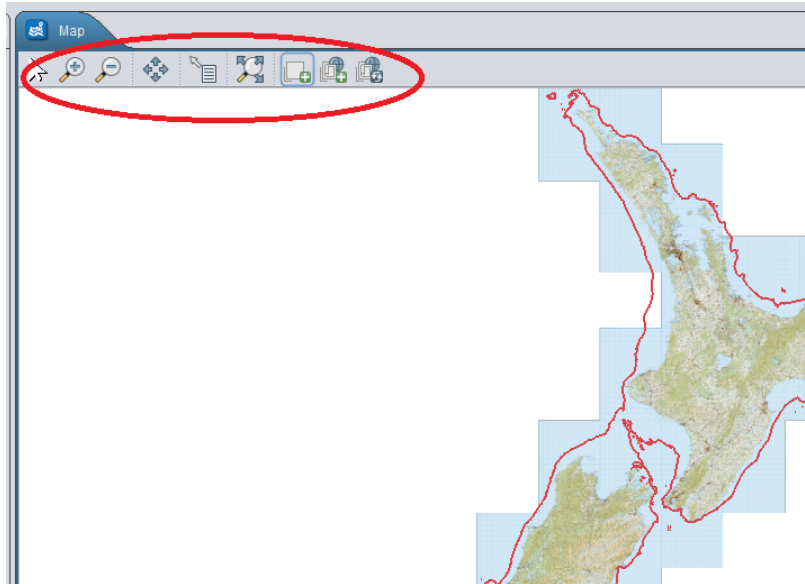


The two coordinate systems most often used for NZ are 27200 NZ Map Grid, and 2193 NZ Transverse Mercator.

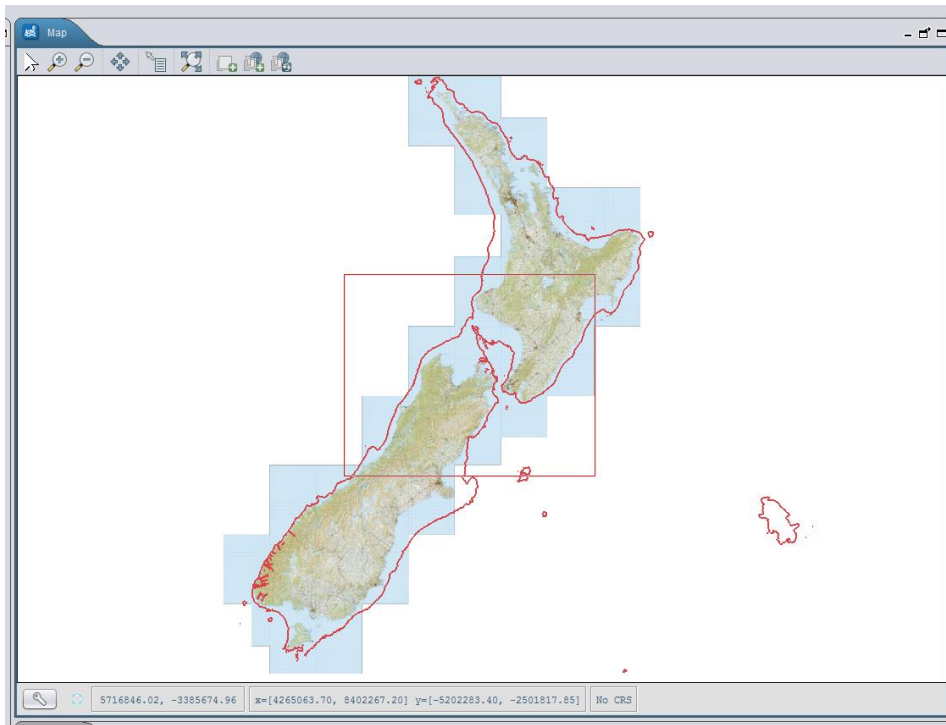
Zoom buttons

A close up of the Buttons on the Map Tab shows the Select, Zoom In, Zoom Out, Pan, Identify, Full Extent, Add Layer and Add WMS Layer buttons. Hovering the mouse over a button reveals the tool tip (information on the button function).

3.2.7



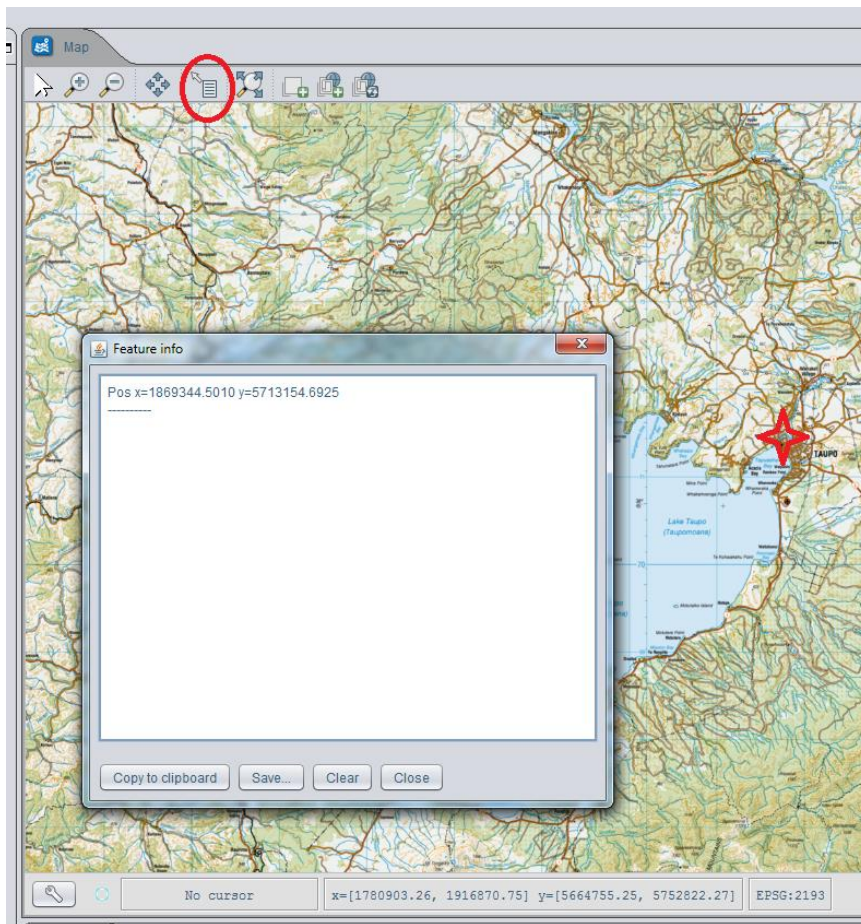
Click the Zoom In button and draw a rectangle. RS will zoom the view to fit the box. After selecting Zoom out, single clicks widen the view by about 50 percent.



Pan, Identify and Extent buttons

3.2 The Pan button enables the user to hold left click on the map and move the image in the panel. When the user releases the left mouse key the image is released.

When using the Identify function, click a point on the map to reveal information in a pop up box. Further options are available as buttons in this dialog box (e.g. Copy to clipboard, Save..., Clear and Close).



The Extent button widens the view to show all the data.

3.2.9 Refresh button

The refresh button attempts to restore the connection with the selected server. If the map times out or disappears, try clicking the refresh button.

The Layer, Symbology and Asset Exposure Tabs

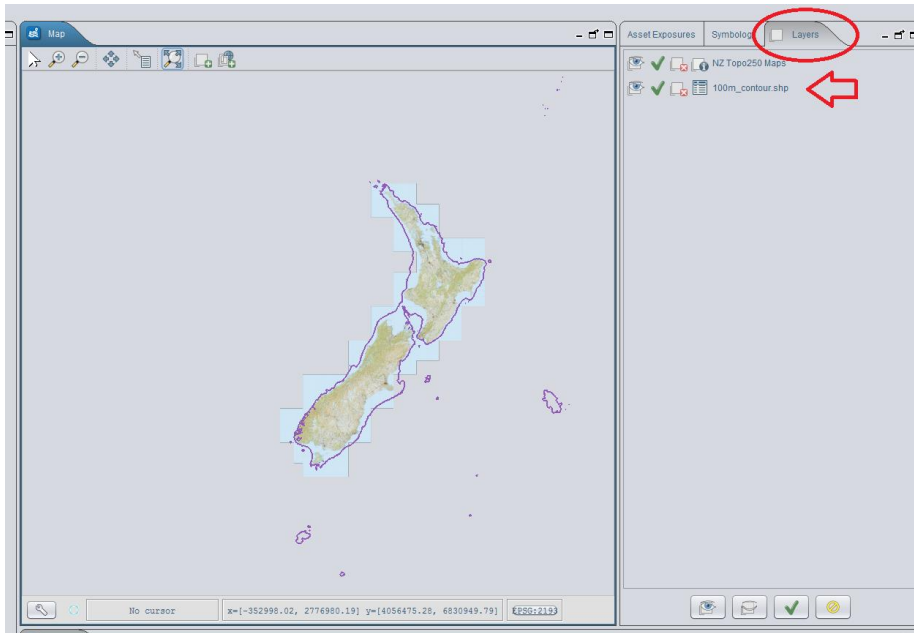
 Please make notes

layer Tab

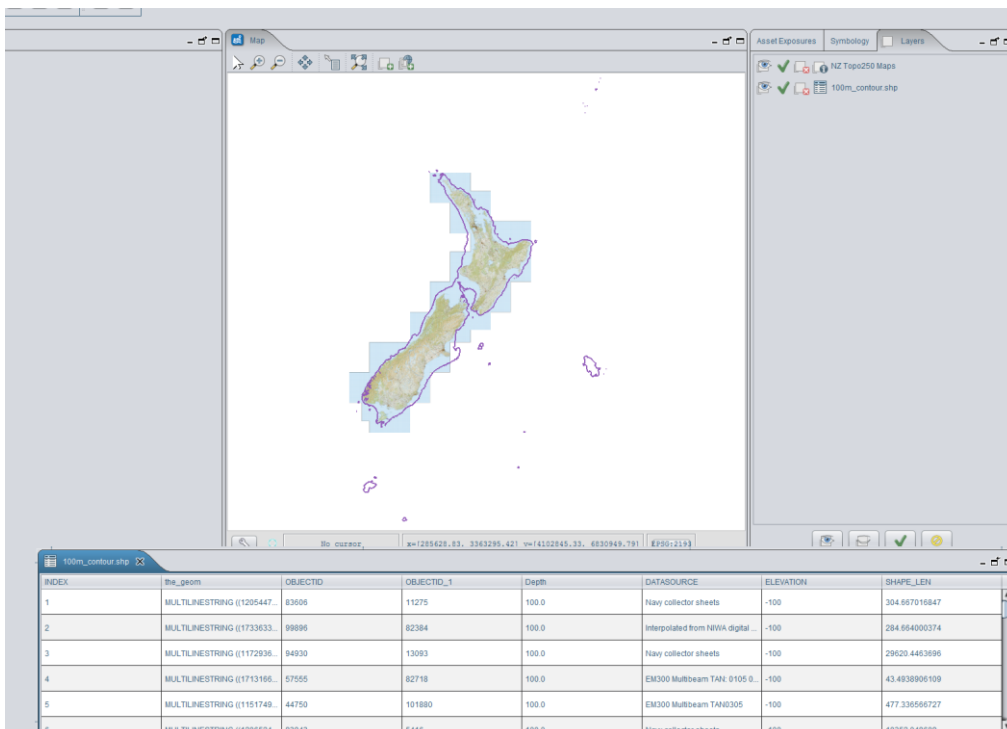
The Layer tab is located at the right of the RS Window.

- 3.3
- Beside the layer name are the icons for Visibility and Selection. These can be toggled on or off. The Remove Layer icon will delete the layer. View Table displays the fields and data for the layer.

3.3.1



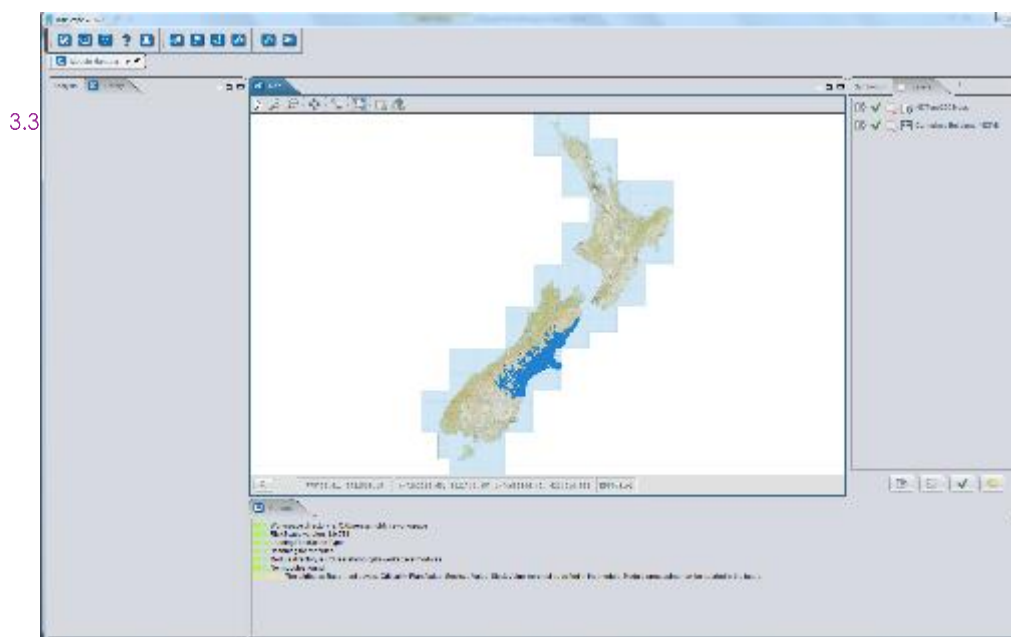
Click on the table icon to bring up the attributes table in the bottom docking area.



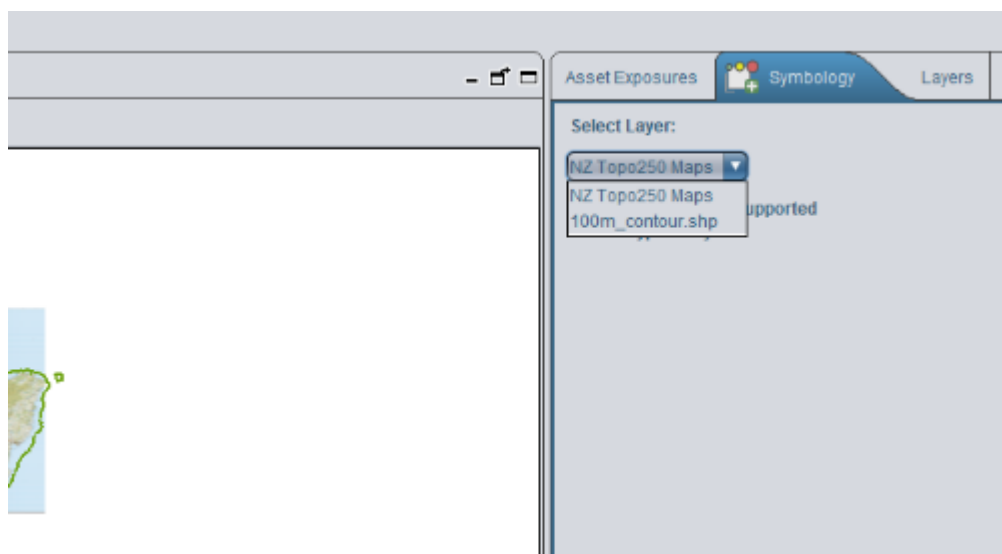
INDEX	the_geom	OBJECTID	OBJECTID_1	Depth	DATASOURCE	ELEVATION	SHAPE_LEN
1	MULTILINESTRING ((1205447...	83606	11275	100.0	Navy collector sheets	-100	304.667016847
2	MULTILINESTRING ((1733633...	99896	82384	100.0	Interpolated from NIWA digital...	-100	284.664000374
3	MULTILINESTRING ((1172936...	94930	13083	100.0	Navy collector sheets	-100	29620.4463696
4	MULTILINESTRING ((1713166...	57555	82718	100.0	EM300 Multibeam TAN: 0105 0...	-100	43.4938906109
5	MULTILINESTRING ((1151749...	44750	101880	100.0	EM300 Multibeam TAN0305	-100	477.336566727
6	MULTILINESTRING ((1306034...	01043	5416	100.0	Navy collector sheets	-100	10352.048608

Symbology Tab

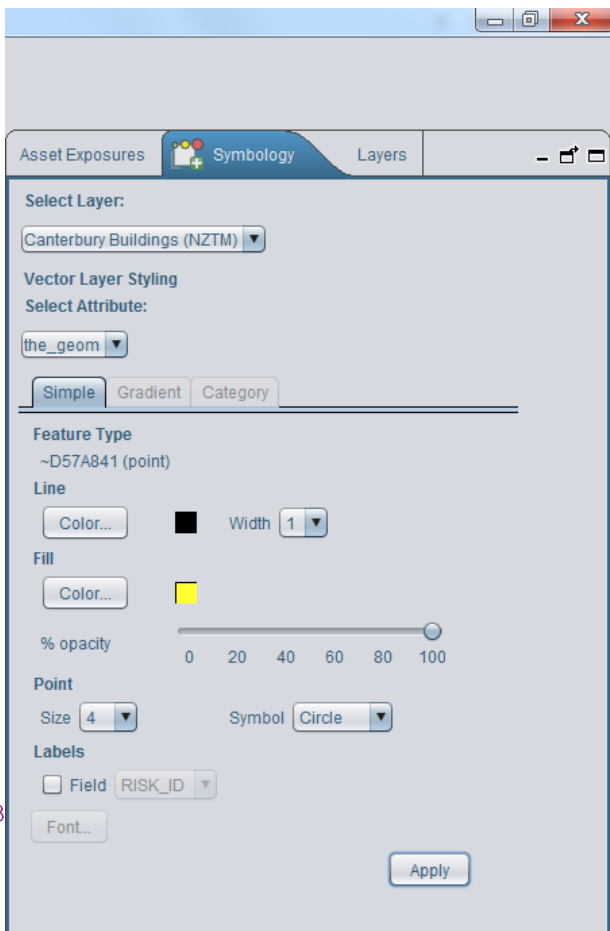
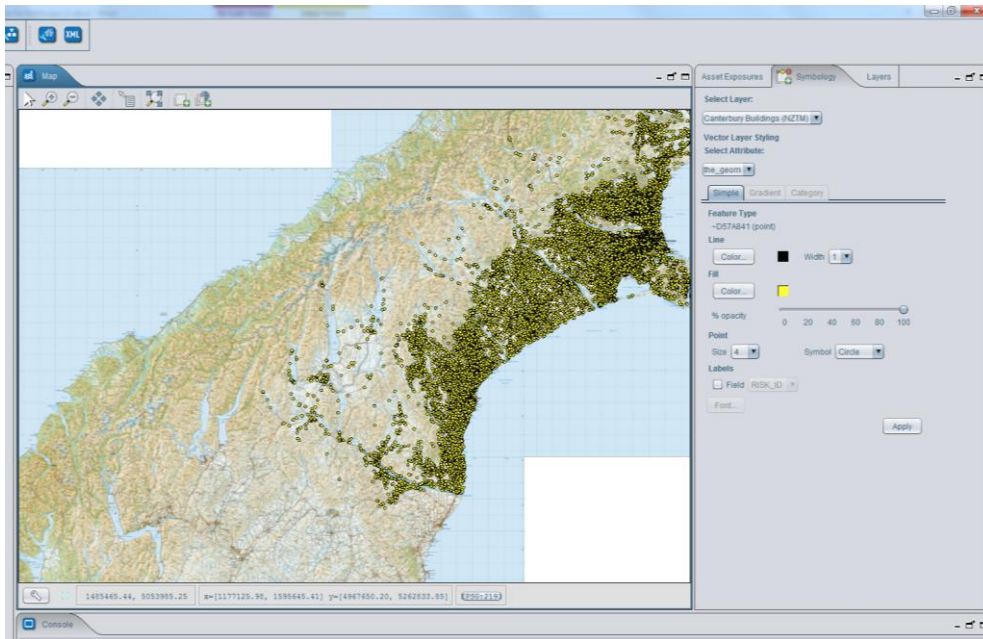
Download an Asset module. Preview the module and minimise or close module manager. Canterbury buildings was used in this example



Under Symbology tab, select the layer form the drop down menu



Adjust the colour and style settings in the Symbology tab on the right

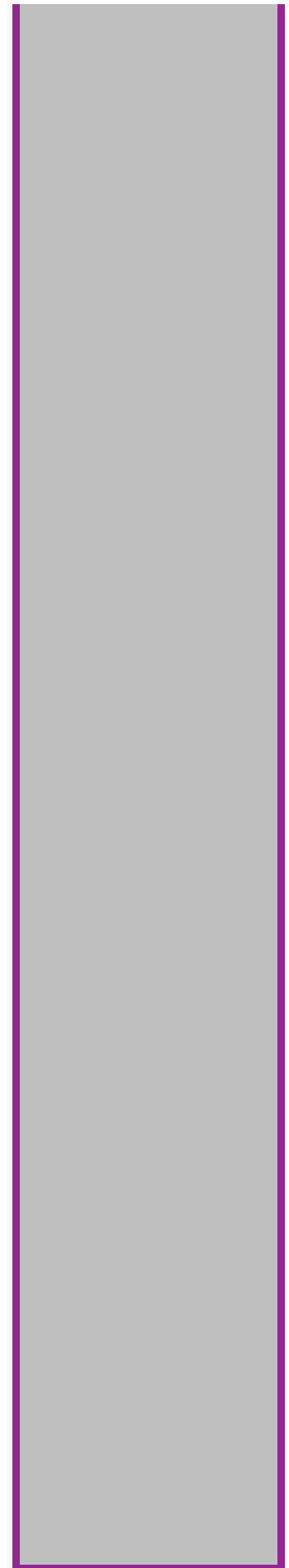
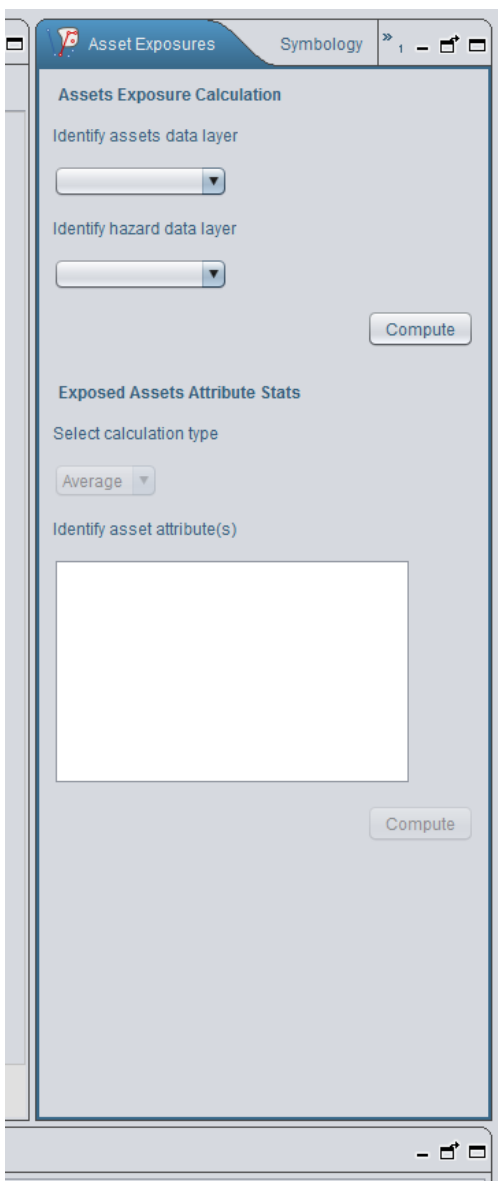
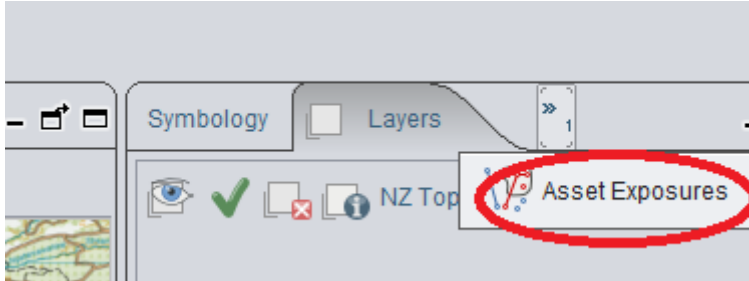


3.3

Asset Exposure Tab

The Asset Exposure Tab is on the RHS docking space near the Layers and Symbology Tabs and may be hidden.

Click the arrow to show the tab, Click the tab.



Analysis and Library Tabs



Please make notes

The Analysis Tab

3.4

3.4.1

The Library Tab

3.4.2

3.5 The Console Tab

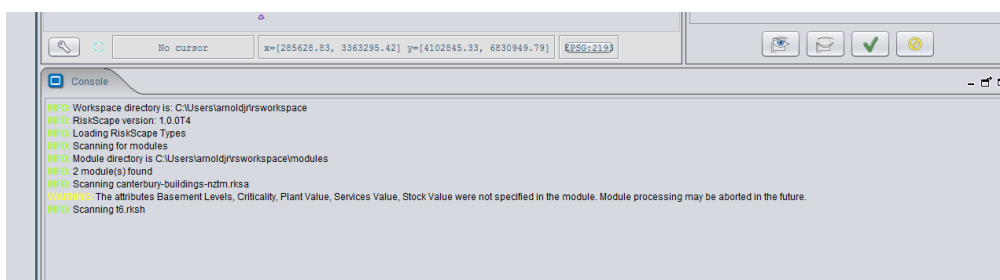


Please make notes

3.5.1

The Console

The console tab at the bottom of the RS window displays process messages and errors.



Layer, Symbology and Asset Exposure Tab Example

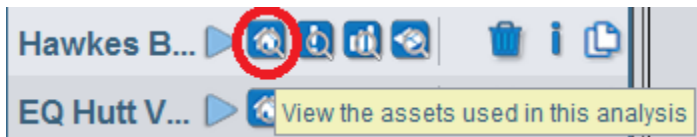
 Please make notes

Example using the Library, Layer, Symbology and Asset Exposure Tabs - Viewing Exposed Assets After a Risk Analysis

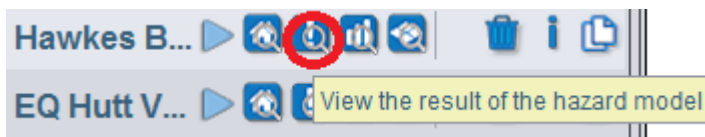
3.6

This example can be completed after an analysis has been run. See [tutorial 1](#) to run an analysis

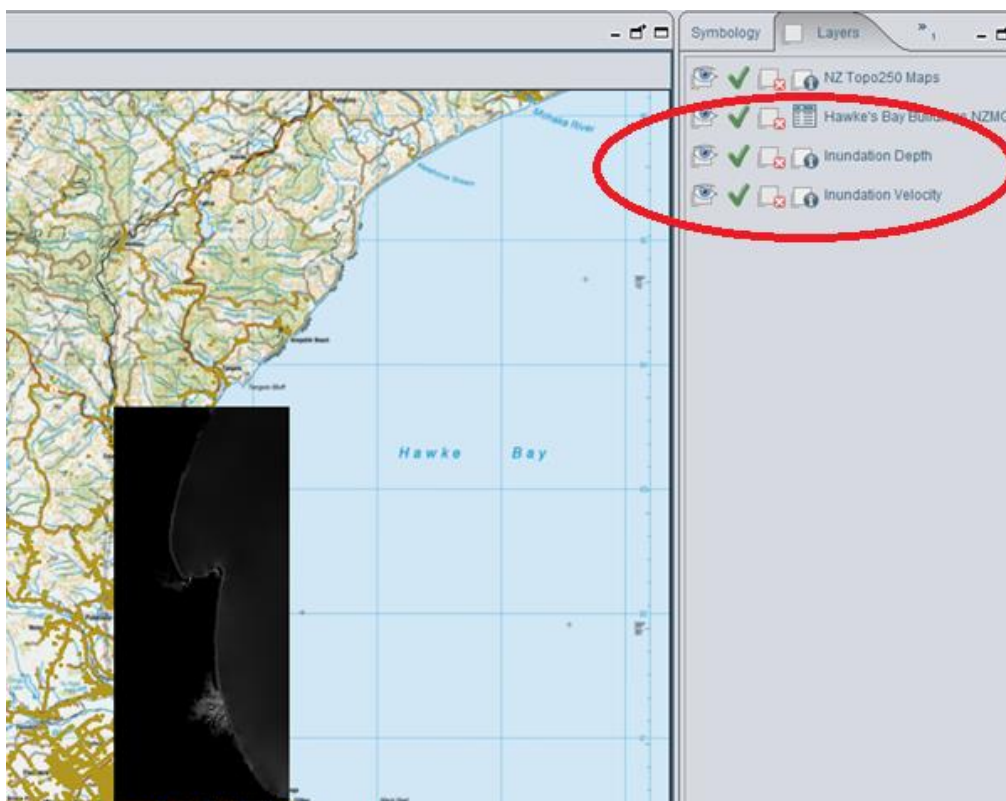
3.6.1 View the assets used in the analysis (from the Library Tab)



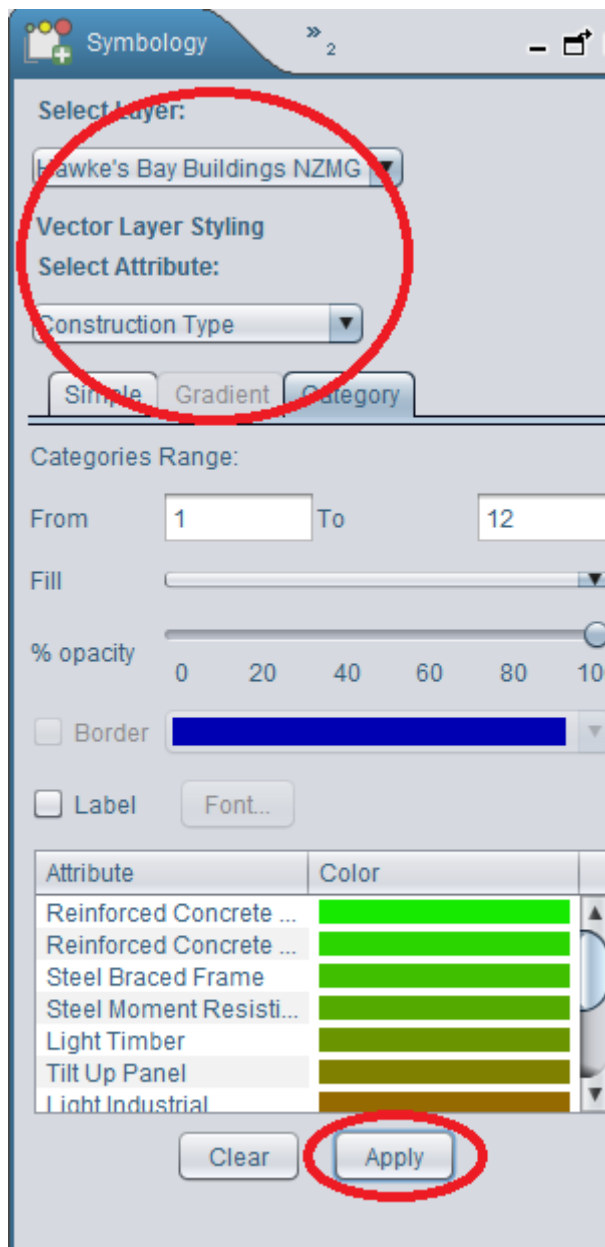
View the results of the hazard model (from the Library Tab)



The assets and hazard model used in the run will appear in the **Layers** tab.



Click on the Symbology tab.



In the Select Layer field, click on the assets used in your analysis run

Note: In this example the **Hawke's Bay Buildings NZMG** is the asset layer.

Click on Construction Type in the Select Attribute field,

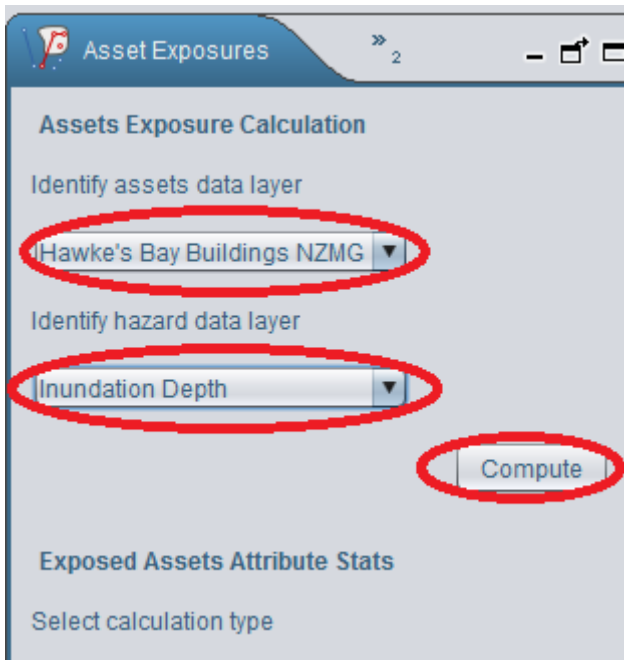
Click Apply.

The assets will be displayed on your map by type, distinguished using the legend/colour-bar.

Click on the Asset Exposures tab.

Select the asset layer in the associated dropdown menu

Note: in this example the **Hawke's Bay Buildings NZMG** is the asset layer.



Select the hazard layer in the associated dropdown menu

Note: in this example **Inundation Depth** is used).

Click Compute.

The exposed assets will be displayed on your map once the computation is finished.

