



AAM Pty Ltd

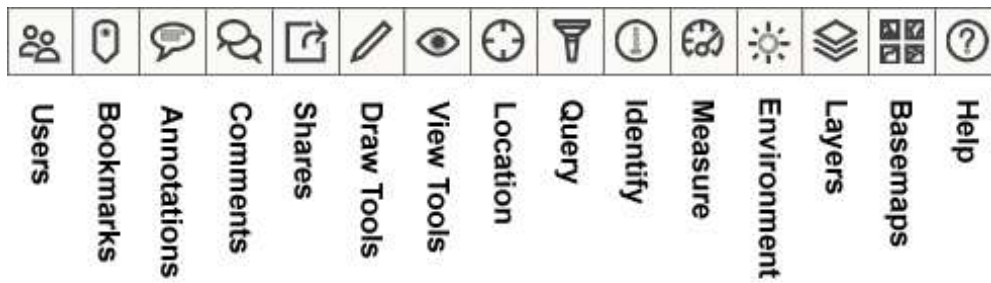
GEOCIRRUS 3D Viewer

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3D Viewer Functionality

The following sections outlines the 3D Viewer toolbar functionality:



NOTE

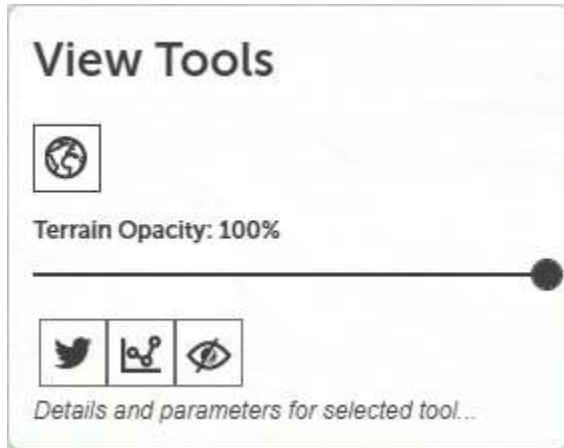
Not all functionality in this document may be available, availability is dependent on project requirements in addition to login status.

Some functionality is only available to logged in users. These are depicted as shown below.

Login Required

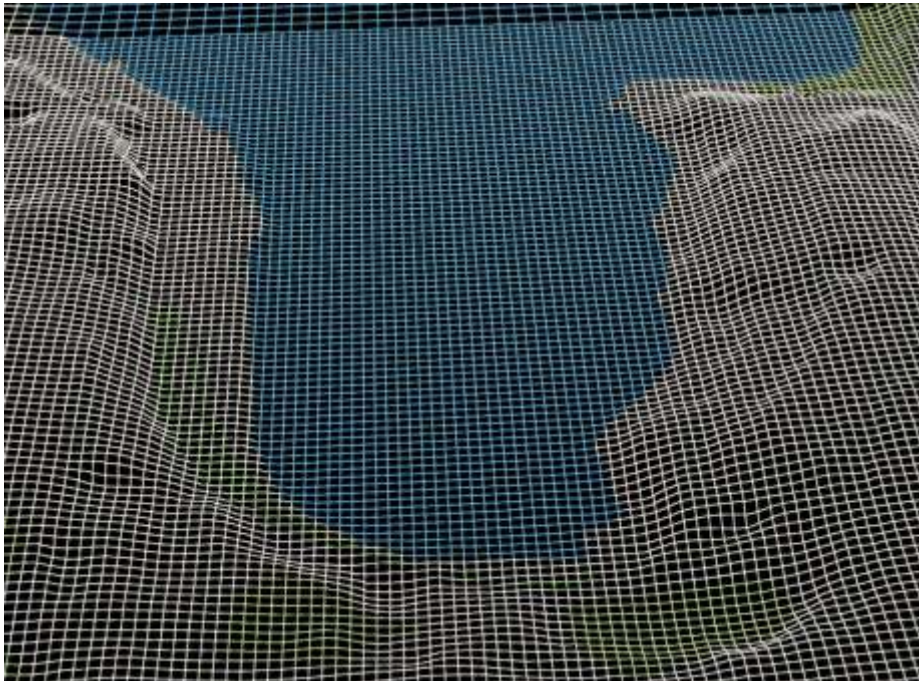
View Tools

The view tools are comprised of five view tools described below.



Wireframe

This tool toggles the terrain surface between regular and wireframe mode. Wireframe mode is useful in cases where slopes and gradients need to be displayed more explicitly or where imagery obscures slopes.

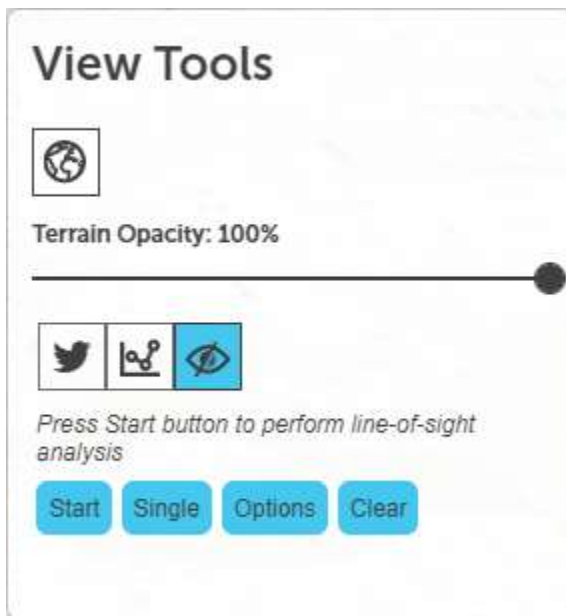


Profile

A profile can be drawn between two (or more) points by clicking on the map and then double clicking to complete it. The profile is overlaid at the bottom of the map window.



Line of Sight (LoS)

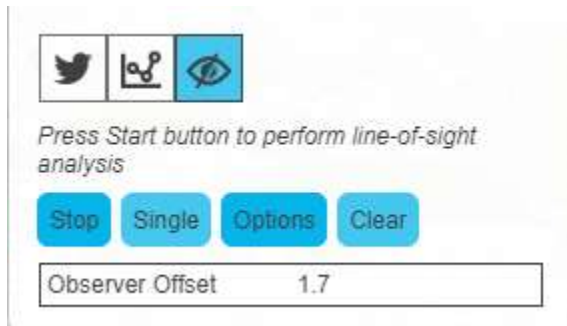


Allows the user to perform a single line or multi-line of sight analysis on the terrain from 1 point to another. Clicking on the Line of Sight button opens the options for the Line of Sight tool.

Start/Stop – Toggle between starting & stopping draw mode.

Single/Multi – Toggle between single line & multi line of sight modes. Toggling this will clear existing line of sight graphics in the scene.

Options



- Observer Offset – Vertical offset from mouse of initial position in Observer Offset Units.

Clear – Clears the current line of sight analysis & graphics drawn in the view.

To perform a Line of Sight analysis,

- Select Single or Multi line mode.
- If you want to modify the height above the 1st click, open options & adjust the Observer Offset accordingly.
- Hit Start button to enable draw mode. The cursor will turn into a crosshair. When in Multi-mode hit Stop to disable draw mode.
- click the left mouse button on a point in the view to select the observer point.
- Move the mouse to the target point & left click in the view to select the target point. A red sphere will be drawn where the click intersects with an object or the terrain.

The Red/Green line is the visibility from observer point to target point(s).

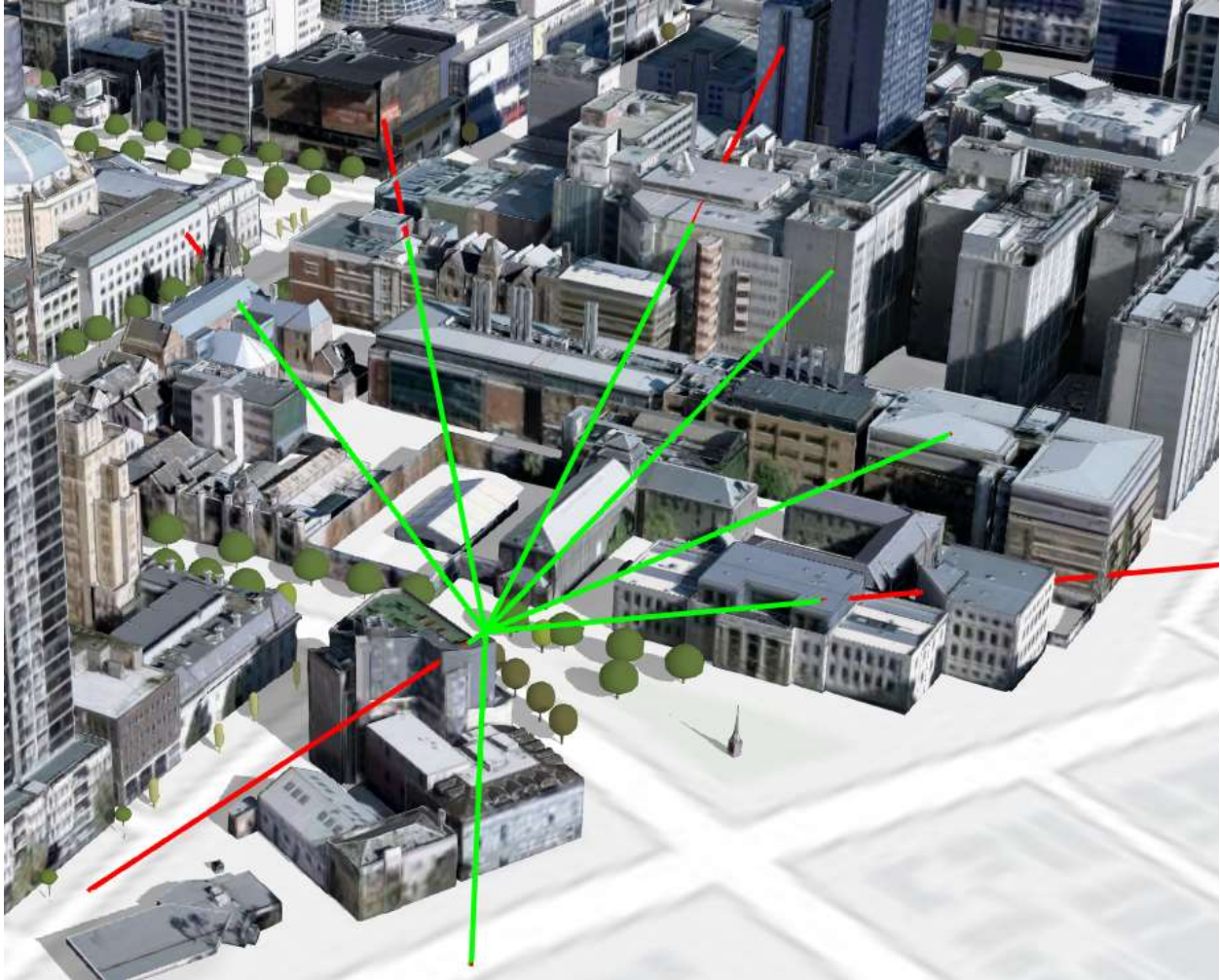
Red = not visible, Green = visible.

Single line of sight mode



The analysis then displays the results for the various components of the line of sight line. The length of the visible & non-visible portions of the line (in meters) as well as the total distance from observer to target points are displayed.

Multi line of sight



In Multi line of sight mode, a visibility line will be drawn from the Observer point to each target point you click on until you hit the Stop button. The results displayed are for the last line drawn.



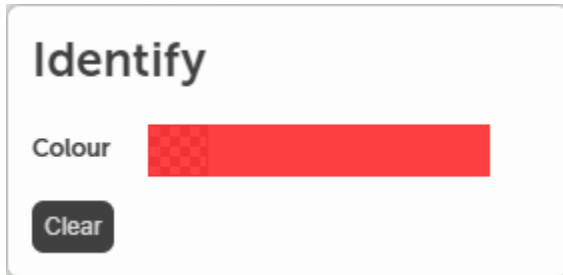
[Flight Tool](#)

Allows the user to perform a fly through of the scene. To start flying, click on a point in the scene.

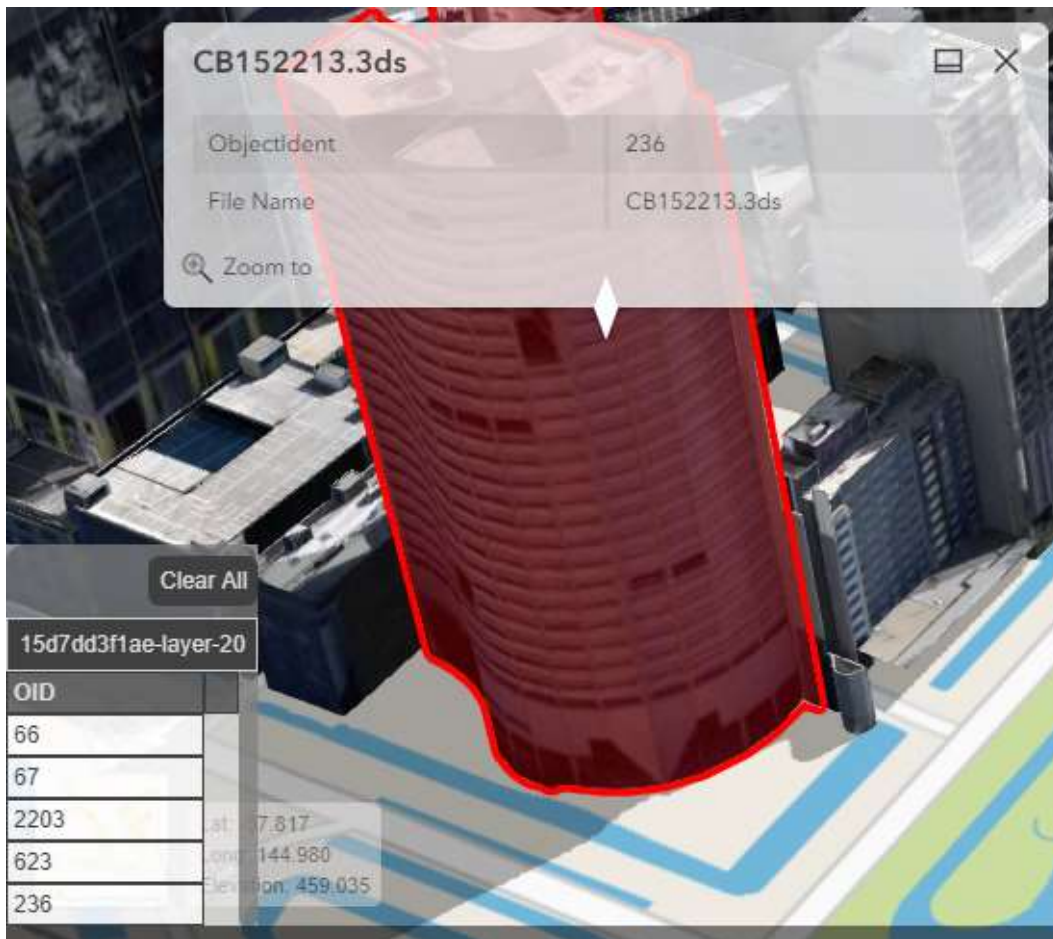
Move the mouse change your direction. (Left, right, up & down)

Identify

Allows users to select items in the map view and display attribute information. Options for selection colour and multi-selection are available.



To identify a feature, the user clicks on a feature in the map. A pop-up containing attribute data is displayed. Clicking the Clear button will unselect all identified features.





3D Measurement

Allows the 3D measuring of distance and area by interacting with the map. To activate the tool, click on the measuring mode you require.

Measuring modes:

- Linear: Turns on/off linear measure mode.
- Area: Turns on/off area measure mode.

3D Direct Line Measure Tool:

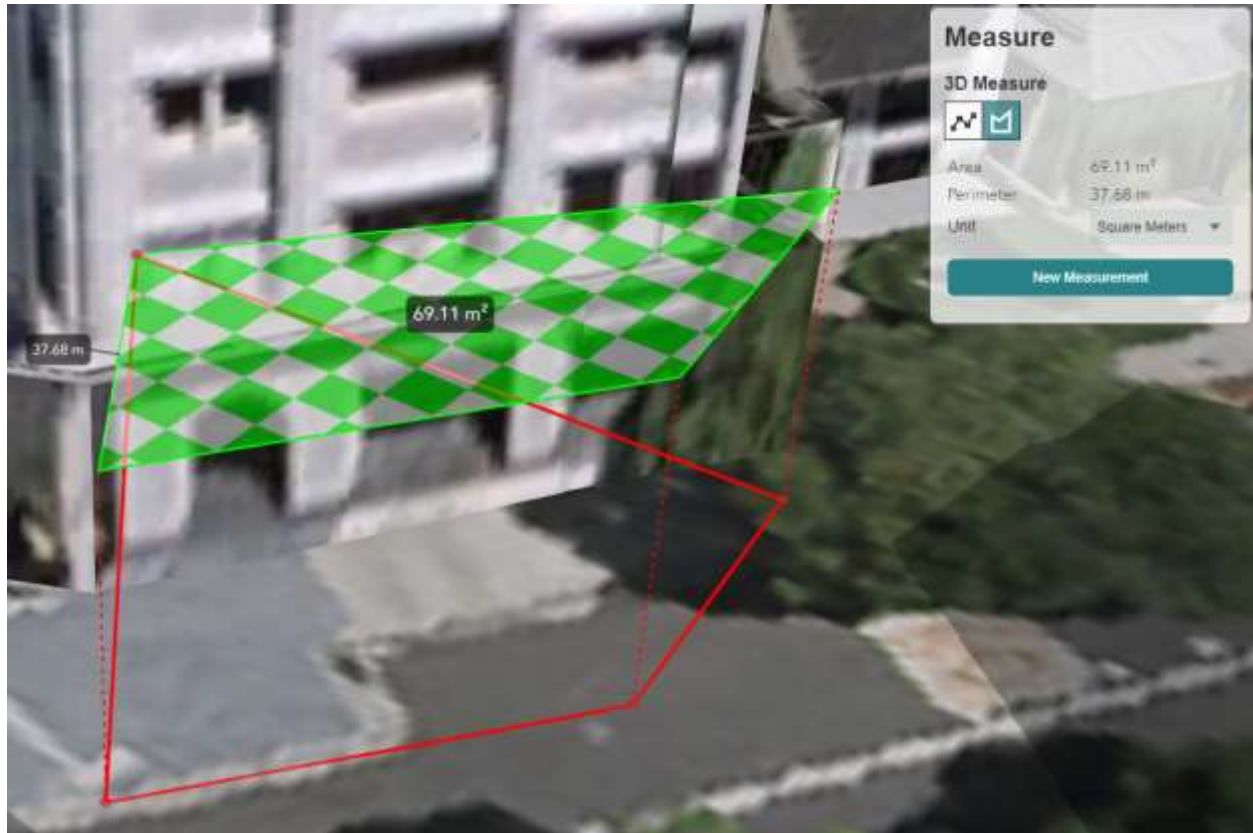


- Measures the direct distance between 2 points only. (red line)
- Supplies the horizontal & vertical components of the measure. (green lines)
- Convert the measures into your preferred units of measure by selection the units from the drop down list. Changing the units updates the values of an existing measure into the new units selected.

- Click “New Measure” to perform a new measurement, or click on the view to automatically start a new measure between 2 points.
- Hover your mouse over either end of the red line to display an anchor point, which you can click on & drag the anchor point to a new location. Release the mouse button to stop dragging.



3D Area Measure Tool:

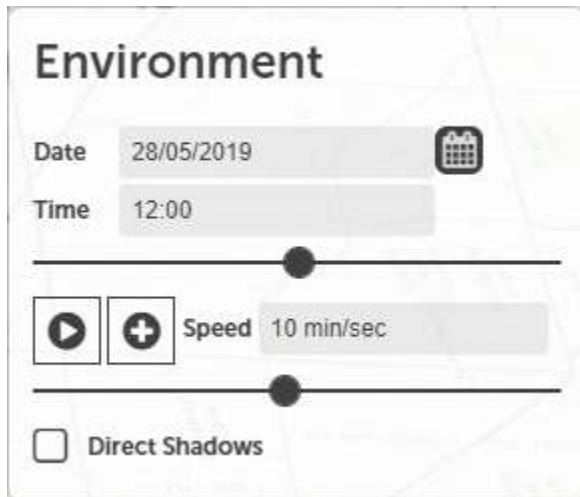


- Measures the area of the shape (green area) formed by the red lines.
- Measures the perimeter of the shape drawn. (green lines)
- Convert the measures into your preferred units of measure by selection the units from the drop-down list. Changing the units updates the values of an existing measure into the new units selected.
- Click "New Measure" to perform a new measurement or click on the view to automatically start a new area measure.
- Hover your mouse over either end of the red line to display an anchor point, which you can click on & drag the anchor point to a new location. Release the mouse button to stop dragging.



Environment

The environment tool allows the environment lighting to be controlled by setting the date and time.



To change the 3D scene lighting, drag the time-slider left or right to adjust the time of day. Changing the slider position will update the Time value above the slider. The default date is set to the users system date, the time defaults to 12:00PM..

Environment options:

- Direct shadows: by default, shadows are only cast by 3D models on the map. This option turns on shadows to cast on the terrain surface and surrounding models.

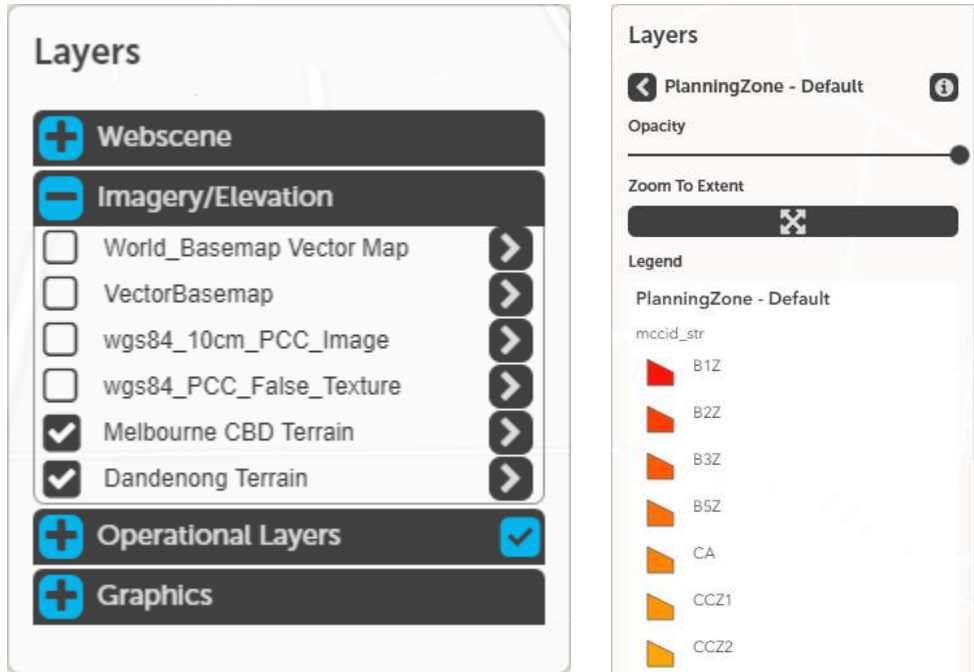
Notes.

- If the users is finding it hard to visualise the shadows, change the basemap to one of the lighter coloured images.



Layers

Map layers can be viewed and controlled via the Layers tool.



Functionality includes:

- Switch layers on/off
- Adjust layer opacity
- Zoom to layer extent
- View layer legend (if available)

Slides

Slides are a single click control for the layer and image data in a project.

Each slide contains information pertaining to:

- Layers visible
- A Basemap
- Environment settings (time of day/shadows)
- A Viewpoint to fly to

If slides are present the slides tab will appear above the status bar at the bottom/center of the viewer.



To open the slides tab, click on the tab called Slides. Up to three slides at a time will be shown. Users can select the left & right arrows to cycle through the available slides.



To Activate a slide, click on the thumbnail of the slide..

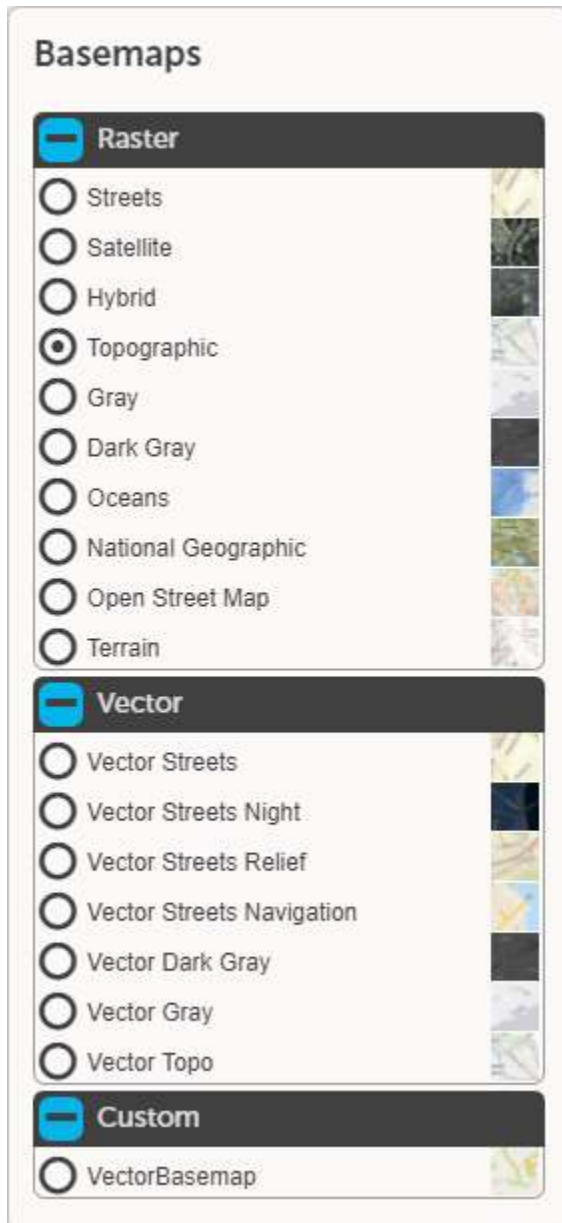


This will fly the user to the viewpoint defined in the slide. The active slide is highlighted.



Base Maps

This tool allows the user to switch between base maps. Available base maps will depend on the implementation.





Opens online help as a PDF document in a new browser tab.



Returns the user to the initial viewpoint on viewer load.



Toggles the navigation mode in the 3D viewer between Pan mode (default) & Rotate mode.



Zooms out one zoom step.



Zooms in one zoom step.



Heading display. Click on it to reset heading to 0 degrees.



Takes a screenshot of the current view. Save as screenshot.png in the Downloads folder.



Toggles the mouse navigation between 2d (Ortho view, pitch locked) & 3d (pitch unlocked).



Toggles the screen between full-screen mode and normal view mode.




Reset


Reset the view to the initial state on load. This includes basemap, layer visibility, environment & initial viewpoint.



Revolve Around Point

Rotates the view around a selected model in the view.

 The left button toggles the rotation of the camera rotation. The rotation can be turned off at any time by pressing the button again.

 The right button toggles the direction of the rotation in either a clockwise or counter-clockwise direction. The direction can be changed at any time.

If the user attempts to start the rotation without having selected a model in the view, a dialog will prompt them:




Once a model is selected, the camera will rotate around it in the direction specified. If you select another model in the view the view will center on the model & rotate in the currently selected direction.

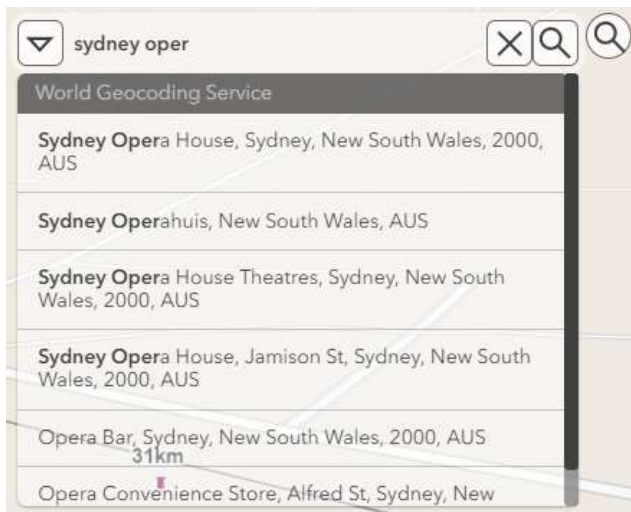
Search Widget

Allows the user to perform search operations on locator services and/or map/feature layers.

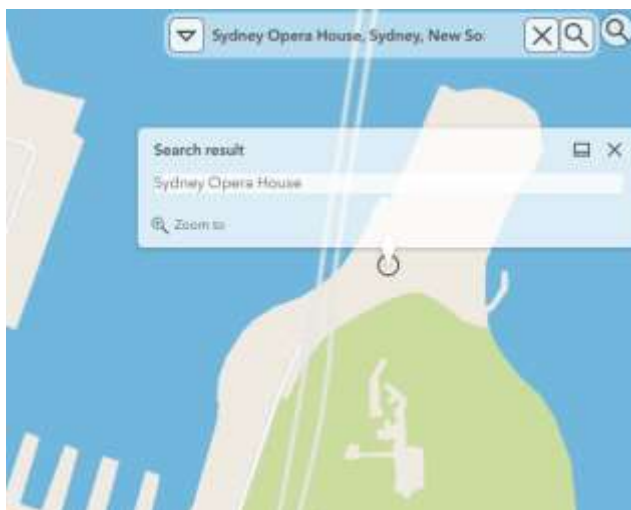
Note: By default, there is a world geocoder service attached to the search widget.

To use the search widget, click on the button with the magnifying glass icon . This will open the address bar. Just type in the address or feature you wish to search for & a dropdown will populate with the closest 6 matches based on the characters entered.

When your ideal choice is displayed in the list, click on the option in the dropdown list to fly to the location specified.

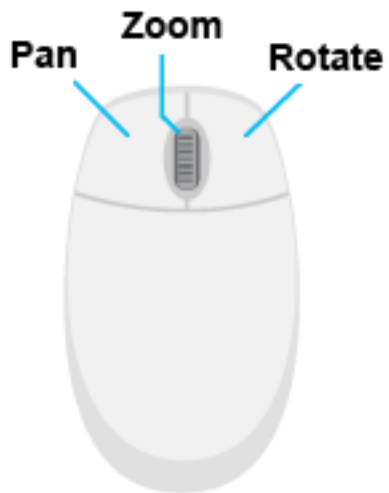


A popup box will be displayed at the location you selected.



Navigation

The default mouse navigation in the 3D viewer (Pan mode).



The alternative navigation mode (Rotate Mode)

