

Target for ArcGIS Section Maps

A key requirement for geologists and geochemists who are evaluating and presenting drillhole data is the ability to select various combinations of drillholes for optimal visualization and plotting.

This *Target for ArcGIS Section Maps* How-To Guide provides a comprehensive set of options for selecting drillholes and creating a Section map.

The basic methods for selecting drillholes for sections are listed below.

Selecting Drillholes for Sections

- ▶ *Selecting (or Deselecting) All Drillholes*: Enables quick development of master plan maps or resetting of drillholes prior to making new selections.
- ▶ *Selecting Drillholes by Name*: Enables batch selection of multiple drillholes with systematic drillhole identifiers. Requires standard drillhole naming scheme for identifying related holes. For information on Name Mask parameters, click the **Help** button on the *Select holes by name* dialog.
- ▶ *Selecting Drillholes via a Selection Tool*: Enables interactive selection of single or multiple holes using a dialog that displays a plan view of the drillhole project. This tool enables you to view **all holes**, **selected holes** and holes including **full traces** or **labels**.
- ▶ *Selecting Drillholes from List*: Enables single or multiple hole selection from a list.

Selecting/Deselecting All Drillholes

There are a number of methods available in the Target for ArcGIS system to select drillholes. In these examples, we will show how to select and deselect all the drillholes in your project.

To Select All Drillholes

1. On the *Target Drillhole* toolbar, select *Selection* and then select **Select all holes**.
All the drillholes in your drillhole project will be selected.

To Deselect All Drillholes

1. On the *Target Drillhole* toolbar, select *Selection* and then select **Deselect all holes**.
All the drillholes in your drillhole project will be deselected.

Selecting Drillholes by Name (or Mask)

There are a variety of methods available in the Target for ArcGIS system to select the drillholes. In this example, we will show how to select drillholes by name (wild-card characters allowed).

To Select Drillholes by Name

1. On the *Target Drillhole* toolbar, select *Selection* and then select **Select holes by name**.
The *Select holes by name* dialog appears.
2. In the *Name mask* (* and ? accepted) box, specify the hole(s) and using the *Select or de-select* dropdown list, specify if you want to select or de-select the data.

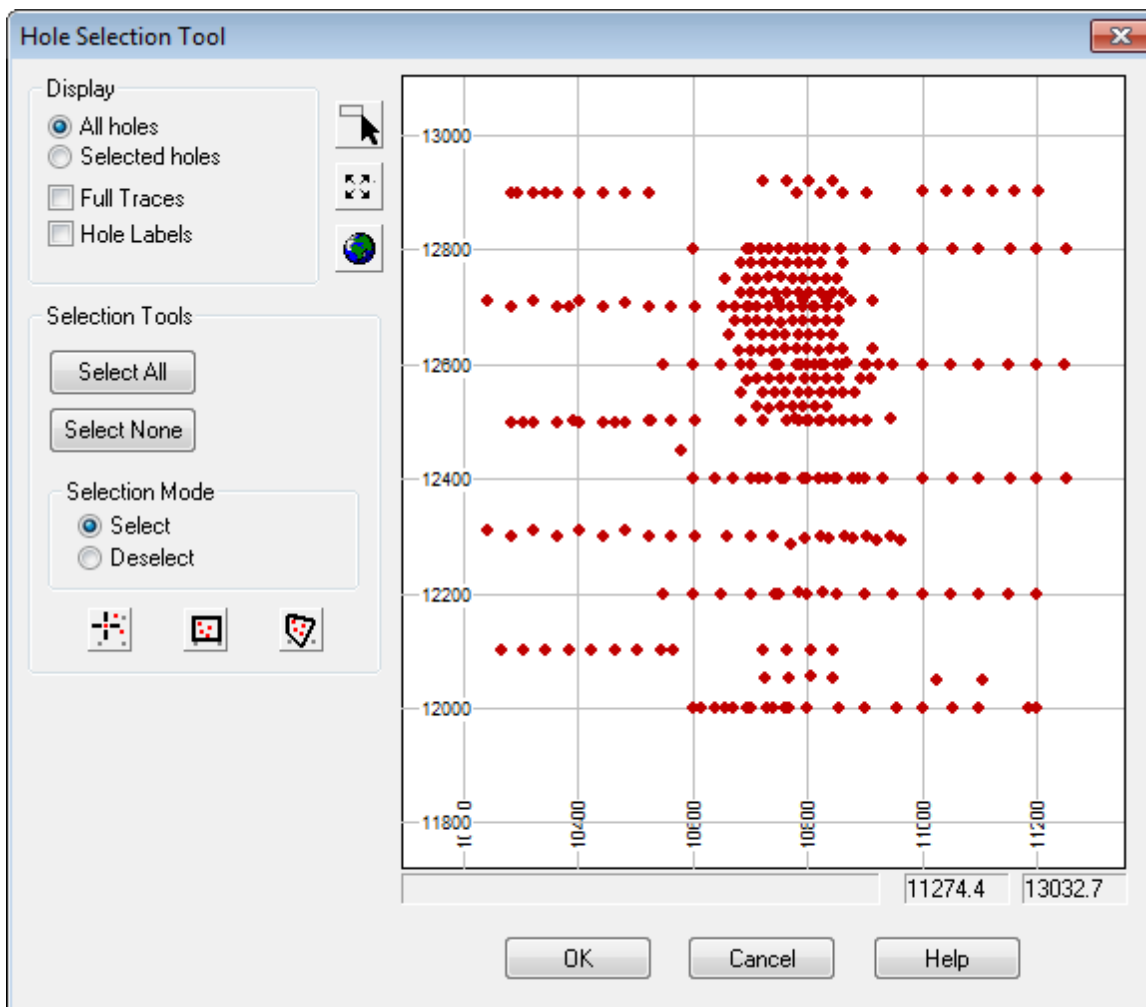
- From the **Overwrite or append** dropdown list select **Overwrite** to update the selection state of every hole, based on whether the hole name matches the name mask. Select **Append** and only holes matching the input mask will have their selection state altered, enabling this tool to be used in a cumulative mode.
- Click **OK** to select drillholes by name.

Selecting Drillholes using the Hole Selection Tool

The Hole Selection Tool enables interactive selection of single or multiple drillholes using a dialog that displays a plan view of the drillhole project. This tool enables you to view "all holes", "selected holes" and also provides the option to view drillhole traces and drillhole labels.







To Select Drillholes Using the Selection Tool

- On the *Target Drillhole* toolbar, select **Selection** and then select **Selection**.
The *Hole Selection Tool* appears.



- Using this tool you can select to display *All holes* or *Selected holes*. You can also choose to display your hole

selection with traces and/or labels via the **Full Traces** or **Hole Labels** check boxes.

3. The drill hole plan view extent can be modified using the **Zoom In** button () , the **Zoom Out** button () and the **Zoom Data Extents** button () .
4. Using the Selection Tools you can click the **Select All** or **Select None** buttons, or depending on the *Selection Mode* you can **Select/Deselect single holes** () , **Select/Deselect using rectangle tool** () or **Select/Deselect using polygon tool** () .

Selecting Drillholes from a List

There are a variety of methods available in the Target for ArcGIS system to select drillholes for processing. The *Select Holes from List* tool enables you to select/deselect individual or all drillholes to process.

To Select Drillholes by List

1. On the *Target Drillhole* toolbar, select *Selection* and then select **From list**.
The *Select holes from list* dialog appears.
2. The drillholes on the left side of the dialog are not selected and the drillholes on the right are selected.
3. Using the arrow buttons select or deselect the drillholes as needed.
4. Click **OK** to select the drillholes and exit the dialog.

Creating a Section Map


Section maps provide cross sectional views of drillhole traces, co-ordinates, reference grids, assay values and geological units. In the Target for ArcGIS system, section maps represent an important tool that enables you to display drillhole traces to help establish subsurface drilling coverage and visualize the geology and related geochemistry beneath the surface.

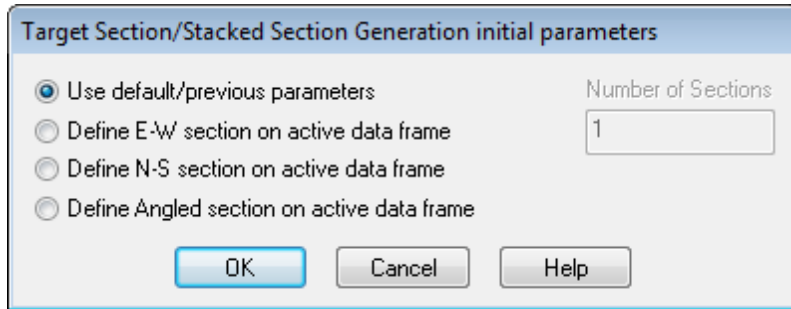
You can also plot stacked sections, which enables multiple sections to be plotted to the same map.

 *Before you can start creating your section maps you first must select the drillholes you want to view in your section.*

The Target for ArcGIS Section map options are provided in easy-to-use tab dialogs, enabling quick access to all the settings from a single dialog. The dialog includes sensible defaults; enabling easy creation of drillhole Section maps.

To Create a Section Map

1. On the *Target Drillhole* toolbar, click the **Plot Section** icon ().
The *Target Section/Stacked Section Generation initial parameters* dialog appears.

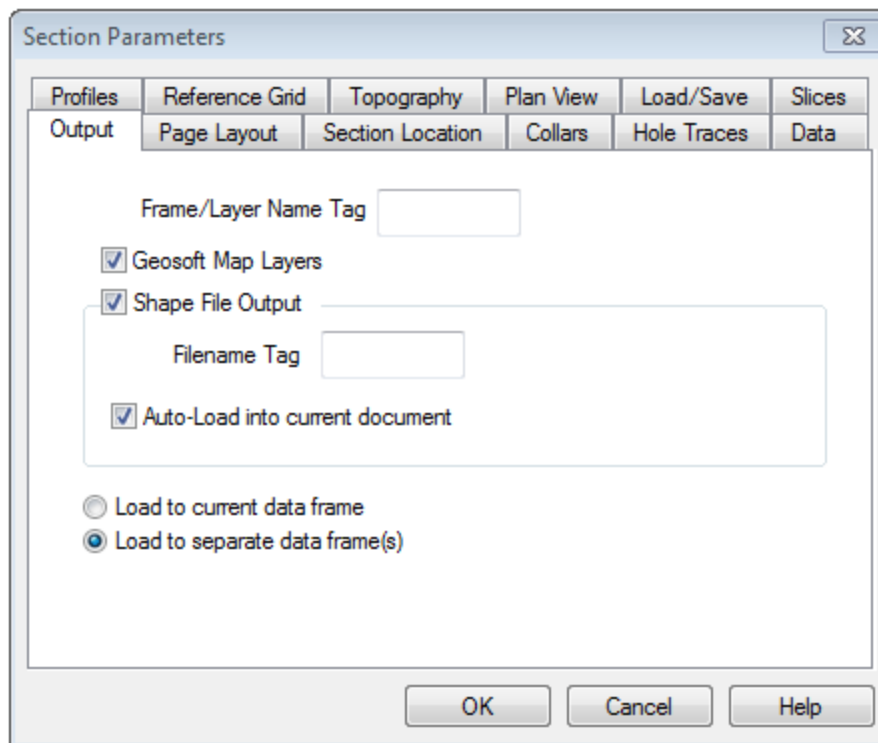


2. Select the initial plotting extents for the section plot.
3. Click **OK** to continue.



! *If you select Define E-W (N-S or Angled) section on active data frame, you will notice that the Number of Selections box is enabled. Specify the number of section plots to create (each section will be plotted to a separate map). You will also notice that your cursor changes as you move over the data frame window (E-W*

, N-S  or Angled , using this tool, select the area of interest.

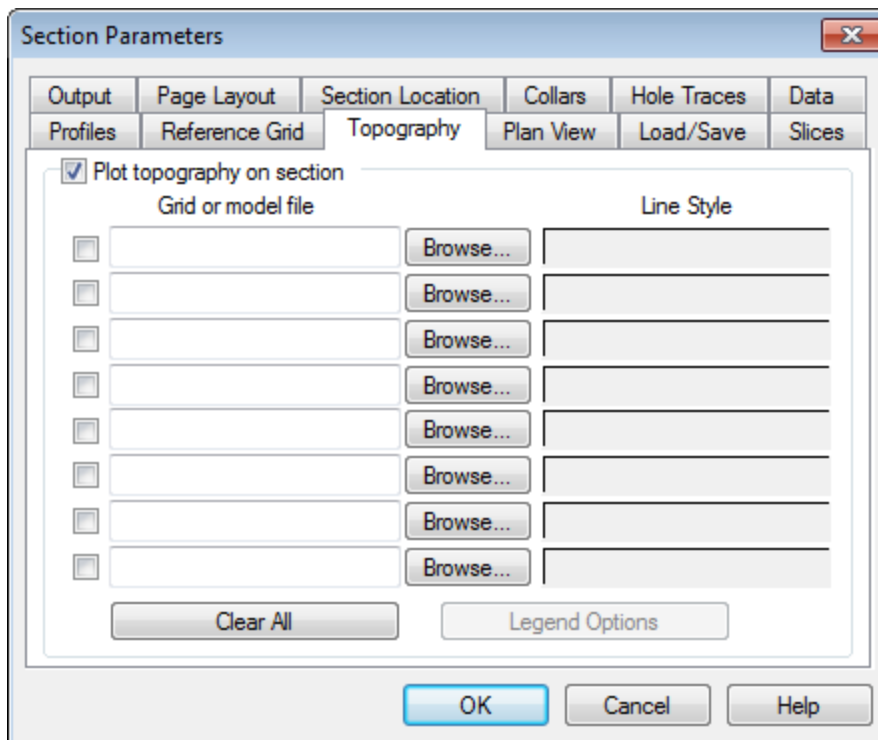
4. The *Output* tab of the *Section Parameters* dialog appears.



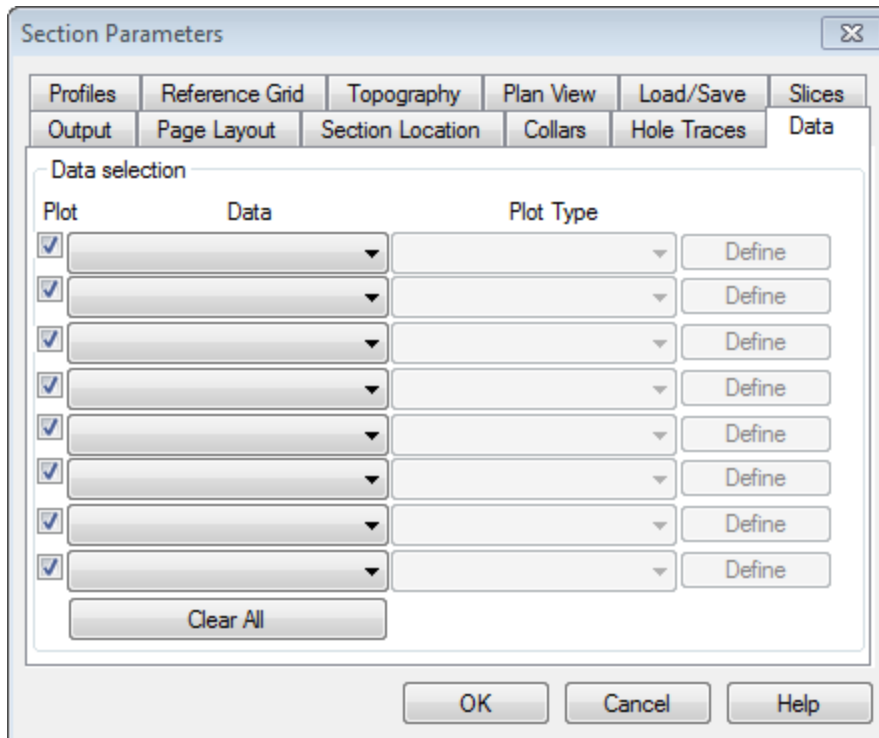
5. Select the File output, *Geosoft Map Layer*, *Shape File* or both (but at least one must be checked).
6. To specify the section location parameters, select the *Section Location* tab.
7. Select the *Location and Orientation*, *Section Azimuth* and *Vertical Extent* parameters, or accept the default values.

-  If you select multiple sections each section will be displayed in individual maps. To plot multiple sections on a single map, see the *Stacked Sections* option.
-  You can edit the location coordinates either by specifying the values in the *Easting Ref* or *Northing Ref* boxes or by clicking the **Define** button to interactively select the location coordinates from the plan map.

8. To plot a topography profile across the section, select the *Topography* tab and select the **Plot topography** box to enable the topography parameters.



9. Using the *Browse* button, locate and select the topography grid file to use to calculate the topographic profile across the section.
10. To plot data along the hole traces in the section, select the *Data* tab.



The Plot boxes enable/disable the Data selection dropdown list. This is a convenient way to select or de-select individual data plots, without clearing or re-selecting the data from the Data lists.

- Using the **Data** dropdown lists, select the data channels available in the current Target for ArcGIS project you want to plot.



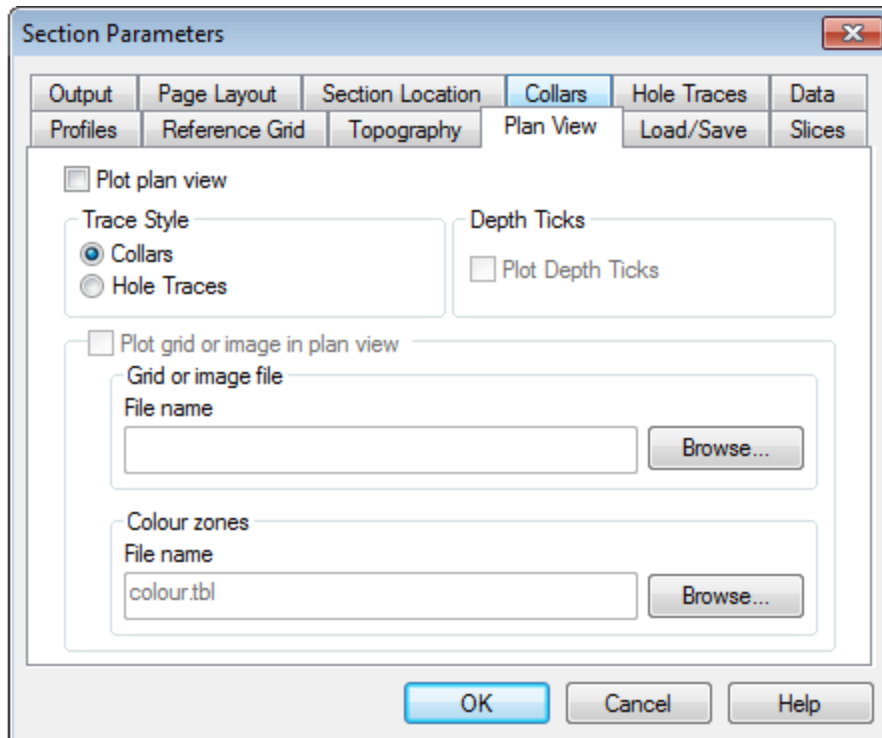
The selections combine the name of the channel, along with the identifier for the project database in which the channel is found.

- Using the **Plot Type** dropdown lists, select the plotting type for the data previously selected.

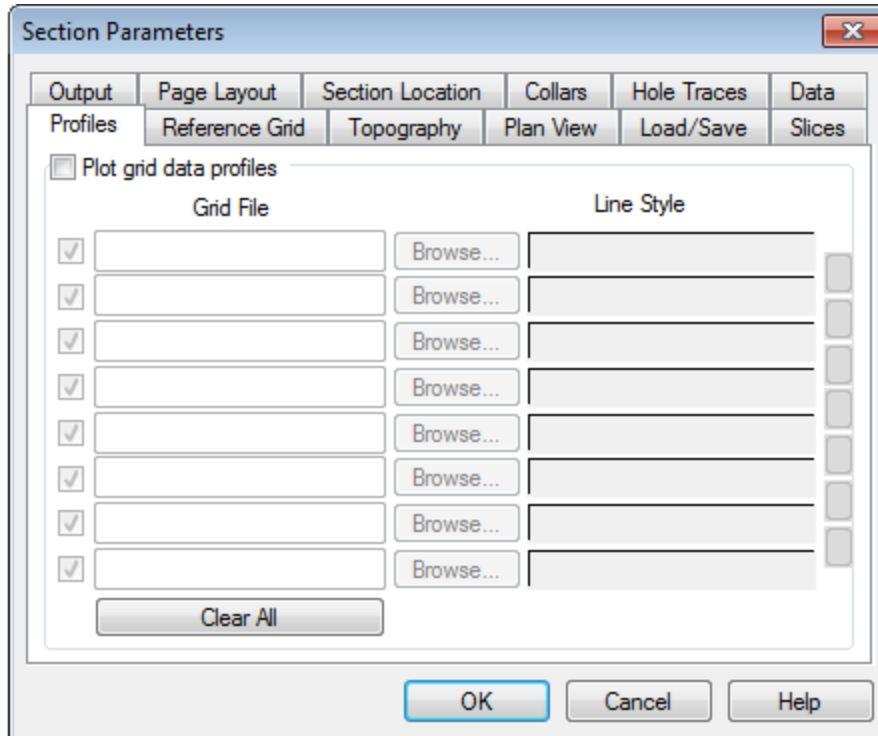


Plot Types displayed are based on the data type of the selected Data. Numeric channel selections include Bar plot, Grid: Kriging, Grid: Min curvature, Numeric bands, Post values, and Profile. String or text channel selections include Comments, Post text, Rock code patterns, and Text bands.

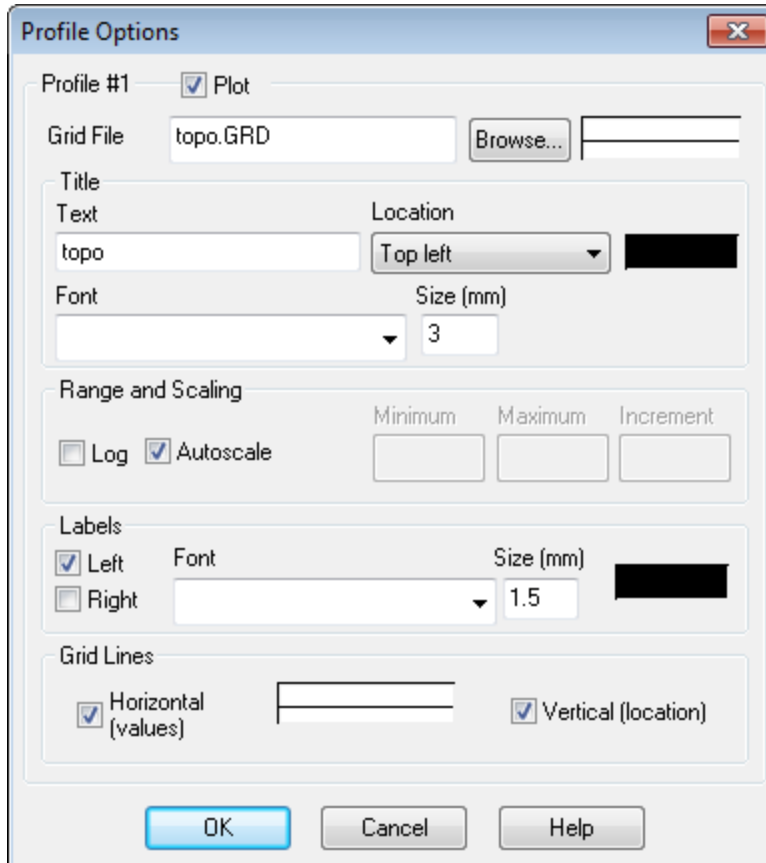
- To specify the plan map window parameters, select the *Plan View* tab.



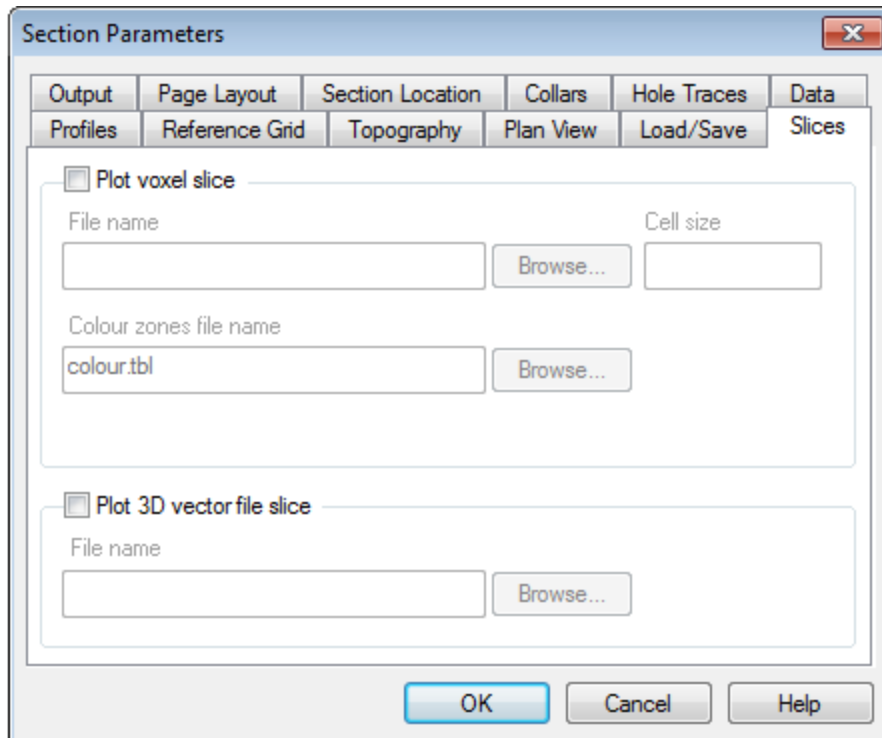
14. To enable the plotting of a grid in the plan view window, select the **Plot grid or image in plan view** box. Using the *Browse* button, locate and select the grid file to display.
15. To specify the profile window parameters, select the *Profiles* tab.



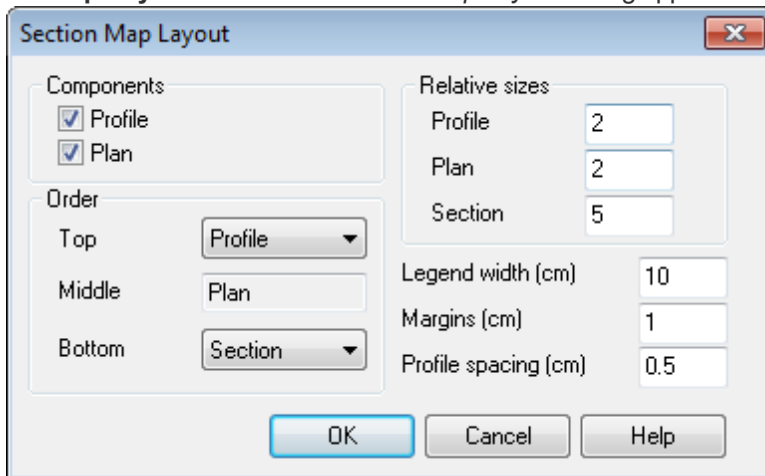
16. To enable the plotting of the data profiles, select the **Plot grid data profiles** box.
17. To enable the plotting of a profile window, select the **Profile** box to the left of the *Grid File* field.
18. Using the *Browse* button, locate and select the grid file to use to calculate the profile across the section.
19. Select inside the **Line Style** box to display the *Profile Options* dialog.



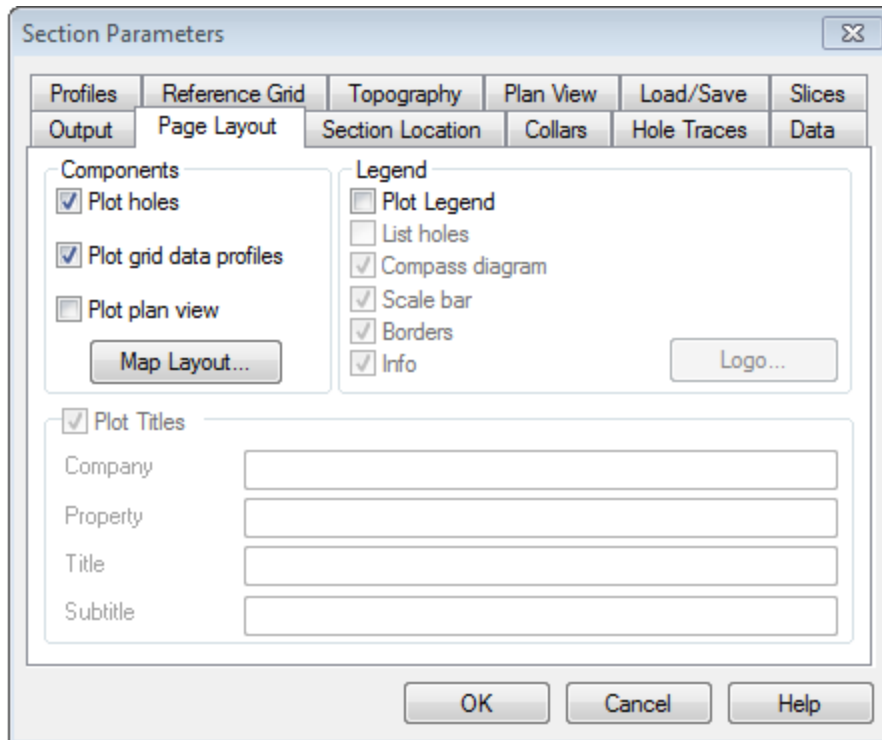
20. Use this dialog to specify the profile parameters and modify the grid lines.
21. Click **OK** when finished to return to the Section Parameters dialog.
22. To specify voxel slices for the section map, select the *Slices* tab.




23. To enable the plotting of the voxel slices, select the **Plot voxel slices** box. Use the *Browse* button to locate the voxel *File name*. You can specify the *Cell size* or leave this to the intelligent default.
24. To enable the plotting of a 3D vector file slice, select the **Plot 3D vector file slice** box and use the *Browse* button to locate the *File name*.
25. To specify the page layout of the section plot, select the *Page Layout* tab. To specify the section map layout, click the **Map Layout** button. The *Section Map Layout* dialog appears.



26. This dialog enables you to specify the layout of your section map. To accept the layout and return to the *Page Layout* tab, click the **OK** button.



27. Select your *Legend* parameters and specify the *Titles* text.
28. Click the **OK** button on the *Section Parameters* dialog. The section map is displayed.

 *There are many additional section-plotting options that enable you to include other parameters. As you become more familiar with the system, we recommend that you experiment with the other options to create a custom map of your own.*

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