

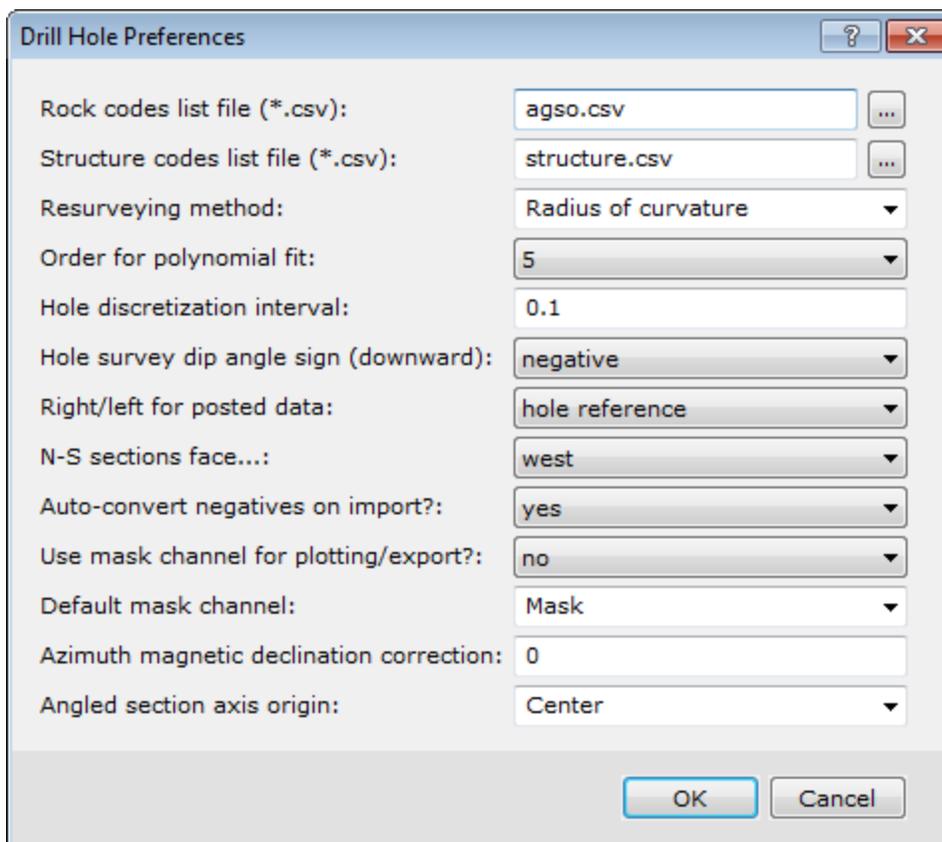
## Target for ArcGIS Drillhole Preferences

Drillhole preferences are global variables, and remain set for a given installation of Target for ArcGIS. This means they remain the same for different data sets and Target for ArcGIS projects. The values are stored inside the user's geosettings.meta file.

This *Target for ArcGIS Drillhole Preferences* How-To Guide demonstrates how to set the drillhole preferences and also includes a detailed description of each of the drillhole preferences available.

### To Set Drillhole Preferences

1. On the *Target Drillhole* toolbar, select *Target Project* and then select **Select Preferences**. The *Drill Hole Preferences* dialog appears.



You can use this dialog to set the specified global variables as shown in the chart below:

<b>Rock codes list file (*.csv)</b>	Two rock codes data files ( asgo.csv and rockcode.csv ) are provided, and can be found in the C:\ProgramFiles(x86)\Geosoft\ArcGIS\csv folder. You can specify one of these files or your own standard rock codes list file (in CSV format). If you generate your own CSV files these should be stored in the C:\Program Files(x86)\Geosoft\ArcGIS\user\csv folder.
<b>Structure codes list file (*.csv)</b>	One structure codes data file ( structcodes.csv ) is provided, and can be found in the C:\Program Files(x86)\Geosoft\ArcGIS\data directory. You can specify one of these files or your own structure codes list file (in CSV format). If you generate your own CSV files these should be stored in the C:\Program Files(x86)\Geosoft\ArcGIS\user\csv folder.
<b>Resurveying method</b>	<p>Resurveying is the mathematical process whereby a series of measurements of dip and azimuth taken at depths down a borehole are converted into (X, Y, Z) coordinates.</p> <p>Two methods are currently available:</p> <p>Radius of Curvature method is the original resurveying method used in previous versions of Target for ArcGIS. It synthesizes the trace as a collection of circular segments, each starting and ending at a single (dip, azimuth, depth) location.</p> <p>Polynomial Fit method models the traces as the polynomial of a given order which best fits the set of (dip, azimuth, depth) values. The higher the order specified, the better the fit, with a trade-off in the overall smoothness of the hole trace.</p>
<b>Order for polynomial fit</b>	This parameter is used for the Polynomial Fit resurveying method, described above. The order of the polynomial is reduced to no greater than the number of (dip, azimuth, depth) values, and a maximum of 20. The larger this number, the more accurately the dip and azimuth are matched at each surveyed hole depth. The smaller the number, the smoother the final hole trace.
<b>Hole discretization interval</b>	The resurveying process calculates the hole location at a spacing determined by this interval. This interval also determines the accuracy of intersection and cut-off points, such as when a hole leaves or enters the current view "slice", and also averaging functions used when plotting graphs of data down the holes.
<b>Hole survey dip angle sign (downward)</b>	<p>Target for ArcGIS has always used the convention that dip is negative downward, so that vertically downward is <math>-90.0</math>.</p> <p>Normally, though, vertically down is <math>+90</math> degrees, and selecting the "positive" setting will cause Target for ArcGIS to interpret all dip values in a Target for ArcGIS database in this manner. This simplifies the import of data from other packages or formats where dips are positive downward. This convention is applied at plotting time, so if all your holes go "up" instead of "down" change this convention to correct things.</p>
<b>Right/left for posted data</b>	<p>Use the dropdown list to select the method for posting data on a map. Two methods are currently available:</p> <p>Hole reference , the side on which data is plotted is decided with reference to the direction of the hole. If you turn the map so that the collar is "up" and the hole runs down, then left and right are as viewed at that time.</p> <p>Map reference , Target for ArcGIS looks at the orientation of the hole on the current map,</p>

	and adjusts the plotting side accordingly. This is done with reference to the collar orientation, so cases where a hole plots nearly horizontally in a map can give somewhat unpredictable results.
<b>N-S Sections face....</b>	<p>Use the dropdown list to select the direction N-S sections face. By default, N-S sections are defined with an azimuth of 0 degrees, facing west; so that South is to the left and North is to the right, and the northing value increases from left to right.</p> <p>Traditionally, N-S sections have been defined with an azimuth of 180 degrees, facing east; so that North is to the left, South is to the right, and the northing value decreases from left to right.</p>
<b>Auto-convert negatives on Import?</b>	If Yes , all values in channels set to be ASSAY type are scanned on import, and those values less than zero are replaced by positive values one-half the size (e.g. values are multiplied by -0.5).
<b>Use mask channel for plotting/export?</b>	<p>If a default mask channel is specified (see note below), then you may use enable the usage of the mask channel to select and deselect individual data points when plotting data, or exporting data to a file</p> <p> <i>As of v5.1.3, the initial values in the mask channel are set to 1, so all points are automatically selected upon import of data. Previous to v5.1.3, these values were initialized to dummy "", so they must be re-set manually to 1 in order for your data to be selected once you enable the use of the mask channel. Failure to set any values to 1 may result in errors such as the inability to determine the range of selected data (since no data is selected).</i></p>
<b>Default mask channel</b>	<p>If a mask channel is specified, and if the use of a mask channel is enabled (above), then only those data values where the corresponding mask value is not a dummy "" will be used for plotting, or when exporting data.</p> <p>(NOTE: that "0", although logically a "NO", is treated as a non-dummy, so the data remains selected. Only the dummy "" can be used to mask out data. Values can be set to dummy by selecting them in the database, then pressing the space bar.)</p> <p>When plotting, those points or intervals which are "masked out" will not appear, nor will depth ticks appear for these values.</p> <p>If no mask channel is specified, no masking occurs, even if the "use mask channel" value is set to "yes".</p> <p>The default mask channel has its "Class" set to "MASK", and so is recognized inside Target for ArcGIS as a valid mask channel. Only the "Mask" channel or those channels with "MASK" class are listed in the dropdown box.</p>
<b>Azimuth magnetic declination correction</b>	Many downhole surveys are conducted with a Kodak-Eastman survey device, which records the azimuth in relation to a magnetic compass bearing. In this case the azimuth values recorded in the collar table and dip-azimuth survey databases do not give the "true" azimuth measured relative to north. This value will be added to the collar table and survey database azimuth values before the resurveying of holes for plotting in plans, sections etc.

	<p>For instance, if magnetic north is 10 degrees west of true north, and the stored azimuth values are given relative to this value, put the value "-10" as the correction. An azimuth of 10° will then be corrected to 0° (true north) before the hole is re-surveyed. In effect, holes are rotated around the collar position by the correction angle.</p>
<p><b>Angled section axis origin</b></p>	<p>When creating grids for E-W or N-S sections, the section's "X" axis aligns with the Easting and Northing, respectively. For an angled section, however, there is no absolute reference to go by. The view origin is important to know if you wish to import gridded data (for instance) into the view, since the grid's X-axis origin will plot on the section view's X-axis origin. To correctly centre the grid, it may be necessary to alter the grid's X-axis origin location to correspond to the section's X-axis origin.</p> <p>The angled section view's "X" axis origin is set to one of the following choices, Centre (default) and Left edge (start of section).</p>

 For more information on Target for ArcGIS Preferences, click the **Help** button on the Drill Hole Preferences dialog.

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