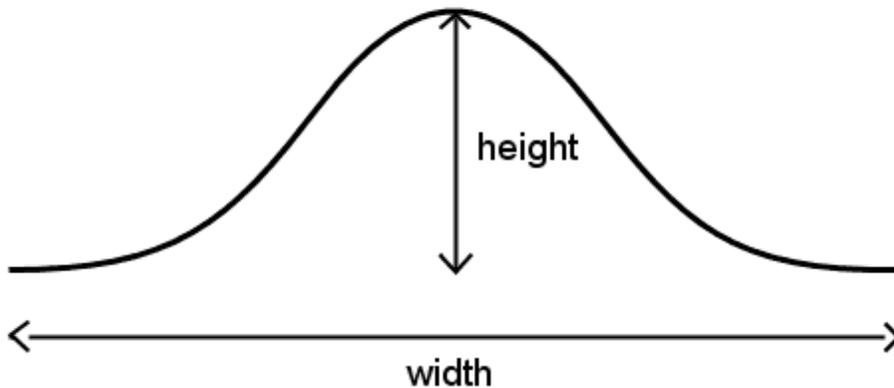


Interactive Grid Editing in GM-SYS 3D Modelling

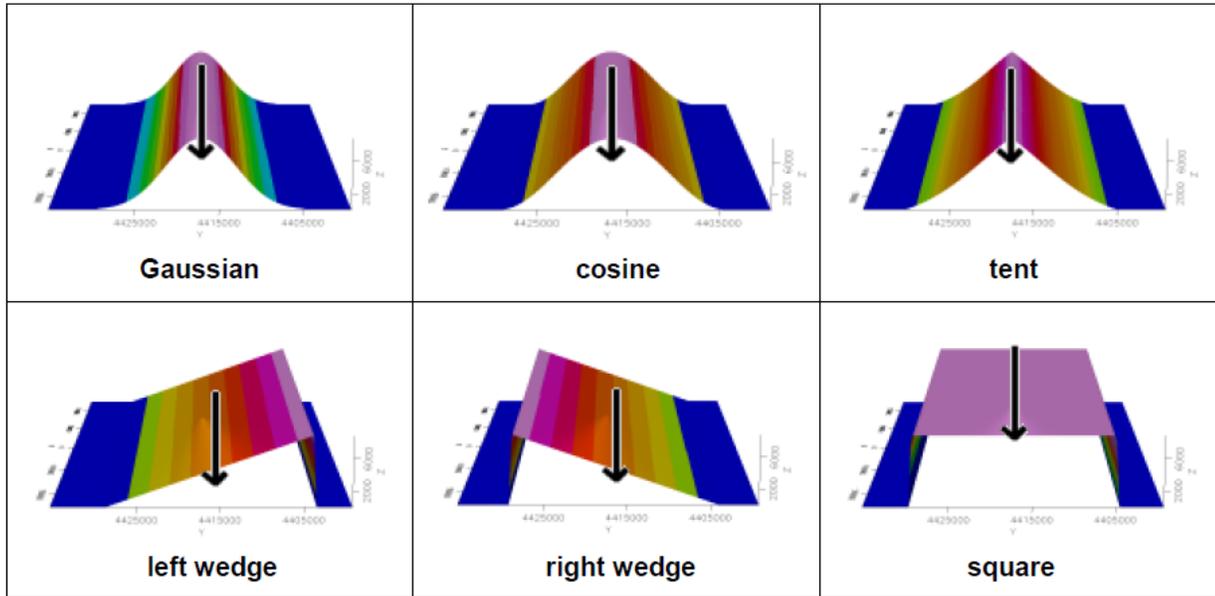
GM-SYS 3D provides two tools for interactively changing grid values. One tool changes grid values in a fixed width on both sides of a polyline path (Path Edit). The other tool changes grid values inside a user-defined polygon (Poly Edit). Both tools automatically redraw the maps and offer a one-step “undo” capability.

Editing a Grid Along Polyline

The **Edit Grid Along Polyline** function allows you to change the value of a grid along a digitised path. You must specify the maximum amount of change, the width at which the change rolls off to zero, and the roll-off method.



For roll-off method, you may choose from one of six tool shapes, shown below, or select a "constant" value to fill the area. You may use a polygon file to clip the effective area of the Path Edit function.



Clipping options:

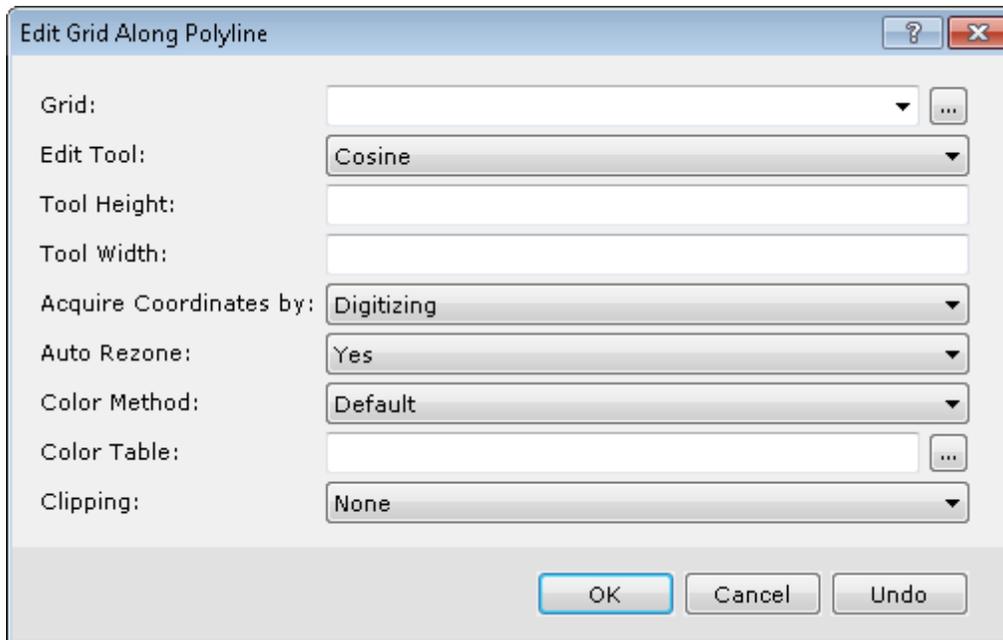
- > None
- > Existing polygon
- > Digitise polygon

We recommend that you have the grid displayed in the current map prior to initiating this procedure.

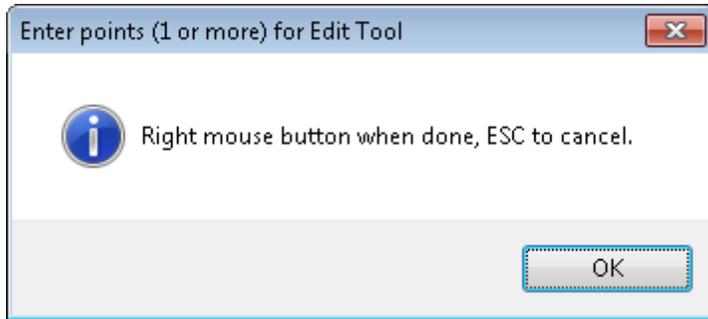
💡 *There is a single undo level. Simply re-run the GX and click **Undo**.*

To Edit a Grid Along a Polyline by Digitizing

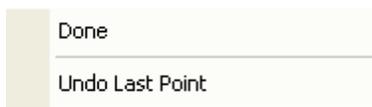
1. On the *GM-SYS 3D Tools* menu, select **Grid Editing**.
2. Select **Edit Grid Along Polyline**. The *Edit Grid Along Polyline* dialog appears.



3. From the drop-down list, select the name of a valid Geosoft floating point **Grid** to edit. Note that this grid need not be displayed on the map being used to define the modified area(s). Alternately you can browse to the grid.
4. From the drop-down **Edit Tool** list, select one of 7 options that determine the shape to be used.
5. Enter the *Tool Height* in grid units.
6. Enter the *Tool Width* in ground units, as specified in the Data view of the map. All tools except "square-wave" and "constant" taper to zero at this width.
7. Select Yes or No to **Auto Rezone**. If yes, new grid statistics are generated after the edit and the grid rezoned using the colour method and colour table selected below. If no, the map is redrawn using the old statistics.
8. Select to **Acquire Coordinates by** either Digitizing or Manual Input.
9. Select the **Color Method**: *Default, Linear, Normal, Equal Area, Shade or Log-Linear*.
10. Select a *Color Table*. (TBL, ZON, AGG or ITR assumed)
11. From the drop-down list, select **Clipping** options. This limits the lateral extent of the grid modifications by digitising a polygon, using an existing polygon, or none. If digitising or using an existing polygon, you will define the polygon parameters in an additional dialog.
12. Click **OK**. An information box appears asking you to *Enter points (1 or more) for Edit Tool*.



13. Click **OK**.
14. Select your points using left-mouse click(s).
15. When complete, **right-click**. A pop-up menu appears.



16. Click **Done**. The Path Edit GX modifies the grid and redraws the map to reflect the changes. If the grid is displayed in the 3D map, it will be updated there as well.

Editing a Grid Inside Polygon

The **Edit Grid Inside Polygon** function replaces the area inside an existing polygon in one of three ways:

- Calculating a 0 to 3rd-order polynomial surface
- Calculating a minimum curvature surface
- Applying an expression



*There is a single undo level. Simply re-run the GX and click **Undo**.*

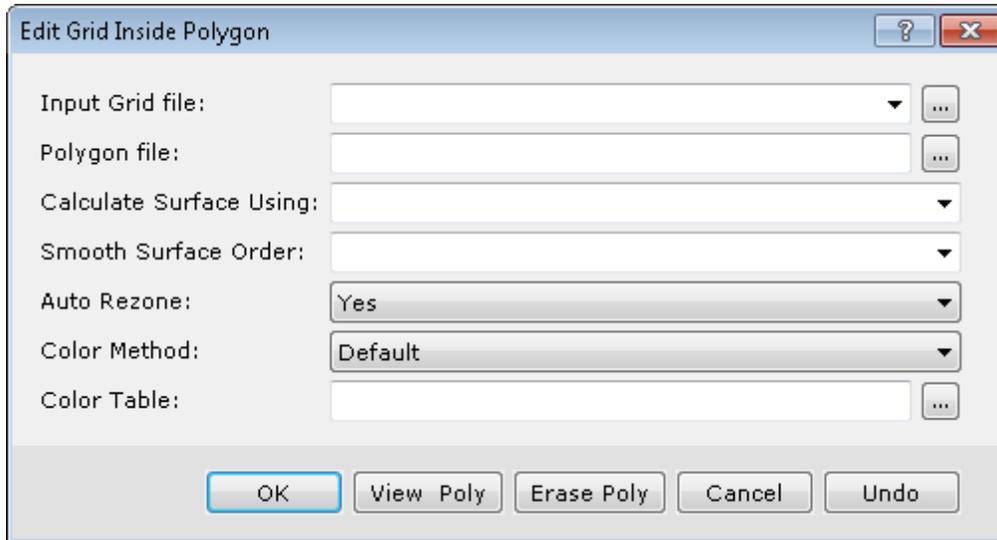
The calculated polynomial surface may be based on all points or edge points only. Selecting “All” will utilize all points within the polygon. The minimum curvature surface is calculated to fit to the area surrounding the polygon. The expression can be any valid Geosoft expression involving up to six grids or a Geosoft expression file.



You must create the polygon before invoking the Edit Grid Inside Polygon dialog.

To Edit a Grid Inside a Polygon

1. On the *GM-SYS 3D Tools* menu, select **Grid Editing**.
2. Select **Edit Grid Inside Polygon**. The *Edit Grid Inside Polygon* dialog appears.



3. From the drop-down list, select the **Input Grid file** to be edited. Alternately, you can browse to the file.
4. Browse to an existing *Polygon file* that overlaps a portion of the grid to be masked.
5. From the drop-down list, select the **Calculate Surface** method: *EDGE*, *ALL*, *EXPRESSION* or *MIN CURVE*. The default is *EDGE*.
6. From the drop-down list, select the **Smooth Surface Order**. The data within the polygon will be smoothed to a surface of this order: 0 to 3. (Not used in the *EXPRESSION* mode)
7. Select whether to **Auto Rezone**. If yes, new grid statistics are generated after the edit and the grid rezoned using the colour method and colour table selected below. If no, the map is redrawn using the old statistics.
8. Select the **Color Method**: *Default*, *Linear*, *Normal*, *Equal Area*, *Shade* or *Log-Linear*.
9. Select a *Color Table*. (TBL, ZON, AGG or ITR assumed).
10. Click **OK** to complete the editing and redraw the map.

How-To Guide Publication Date: 06/08/2013

Copyright 2013 Geosoft Inc. All rights reserved.