


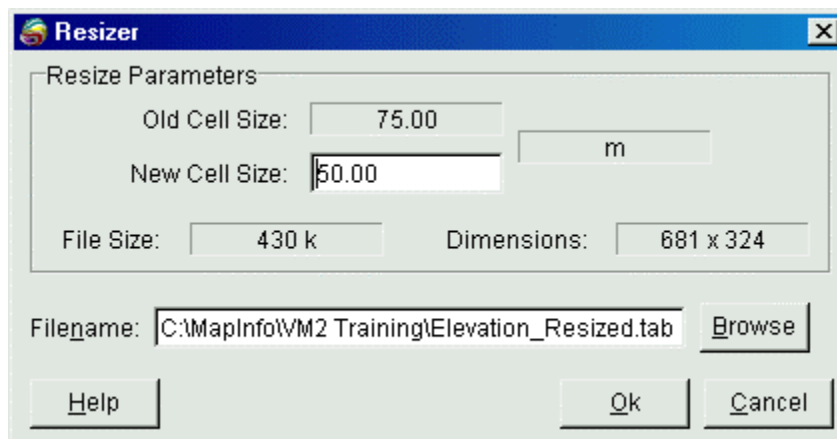
Grid Resizer

The resolution of any grid file can be adjusted either upward (decrease cell size) or downward (increase cell size) using the *Resizer* command. This utility is often required to reduce grid files in size and complexity in preparation for contour threading. While a very high resolution grid file is suitable for modeling and high quality output, it has been shown that a lower resolution version of the same file is adequate for the generation of contour lines or regions. When increasing the cell size of an existing grid, a new value must be interpolated for every cell in the new grid. Visualize the original smaller cell grid as a network of nodes that is being overlain by new network of more widely spaced nodes. The value at the new grid node is calculated using a bilinear interpolation (rectangular interpolation) of the four nearest nodes of the underlying, more closely-spaced grid.

The *Grid Resize* utility can also be used to reduce the cell size of an existing grid. Bear in mind that file size will increase yet no new data is being added to the grid, i.e., although the grid has a higher resolution, it has not become inherently more accurate. However, in terms of creating a less “notchy” appearing grid image, reducing the grid cell size will generate a more highly smoothed surface showing continuous gradient colour fill over the grid area. For an instructional lesson on *Grid Resizer* refer to Lesson 14 of the *Installation and Tutorials* manual.



- To access the *Grid Resize* dialogue, choose the  button from the *Grid Manager* dialogue and select the *Resizer* command from the drop-down menu.



- The **New Cell Size** edit box is used to enter a new cell size value. Note that the function will check to ensure that the new cell size is not so small as to result in greater than 216 cells per row or column in the new grid file. The function also checks to ensure that the new cell size is not so large as to result in less than one grid cell per row or column in the new file.
- Enter a new file name, or choose the default name, and select **OK** to proceed with file processing.