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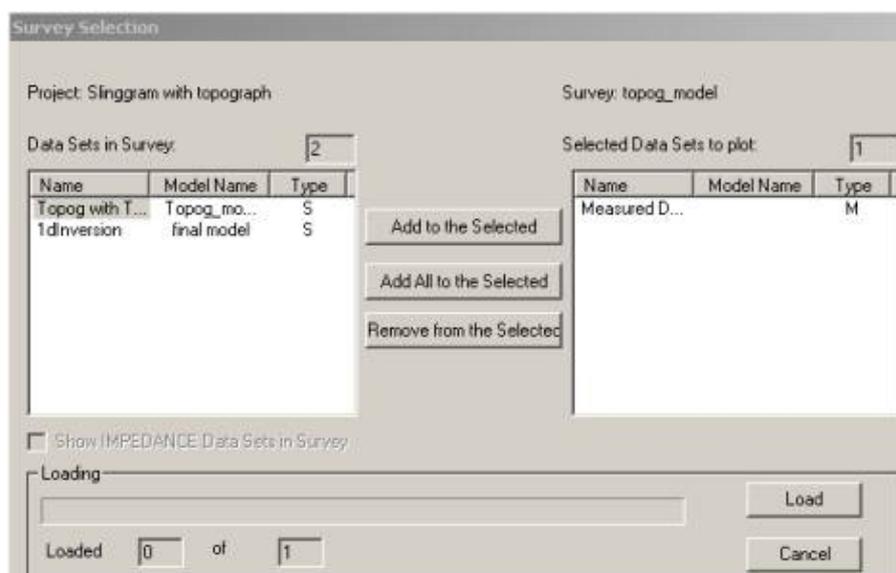
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MultiGrid Manual

MultiGrid

The MultiGrid tool is designed for comparison between various components of the same grid. It allows viewing of up to 4 grids at a time and is provided with an easy-to-use interface.

Click on the **MultiGrid** button  of EMIGMA's main toolbar. The **Survey Selection** dialog will appear:



If your survey contains only one data set, the latter will be loaded automatically; if it has two or more data sets:

- To view only the current data set, click **Load**
- To compare your current data set with some other data set in the same survey, select this other data set in the left table, click **Add to the Selected** and **Load**
- To compare your current data set with all the data sets available in your survey, click **Add All to the Selected** and **Load**
- To remove a data set from the **Selected Data Sets to plot** list, select it from the list and click the **Remove from the Selected** button

If your data set contains more than one grid, the most recent one will open. Click in any point of your grid to view its value and x and y coordinates.

Related Topics:

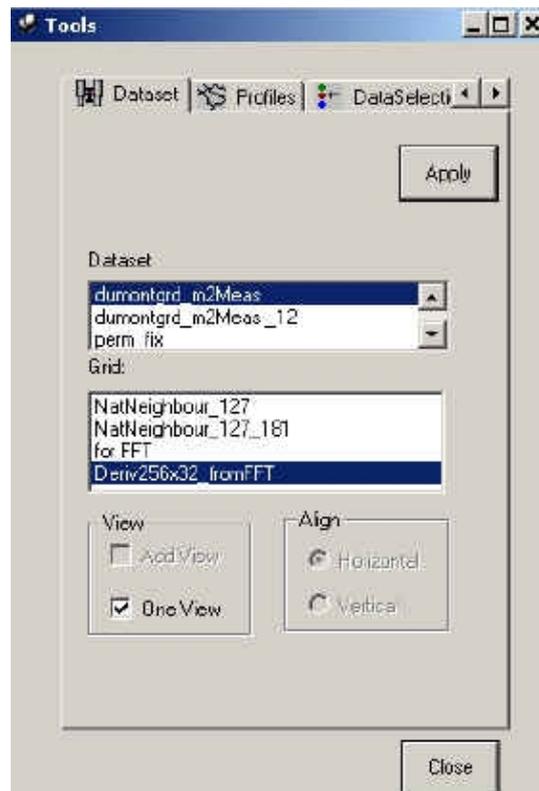
Switch between Grids	Display and Customize the Coordinate Grid
Display Multiple Grids at a Time	Display and Customize Grid Locations
Remove a Grid from the Multiple Grid Display	Load a Map Underlay
Compare Various Components of the Same Grid	Add and Customize Titles
Display and Customize Profiles	Switch to Proportional Axes
Switch between Profile Data and Grid Data	Zoom in and out
Specify the Draw Mode	Move a Grid
Display and Customize Contours	Hide a Grid
Display and Customize the Legend and Scale Rule	Print/Print Preview a Grid

Add Annotations to your Grid

Switch between grids

If your data set contains more than one grid, the most recent one will open. To switch to another grid:

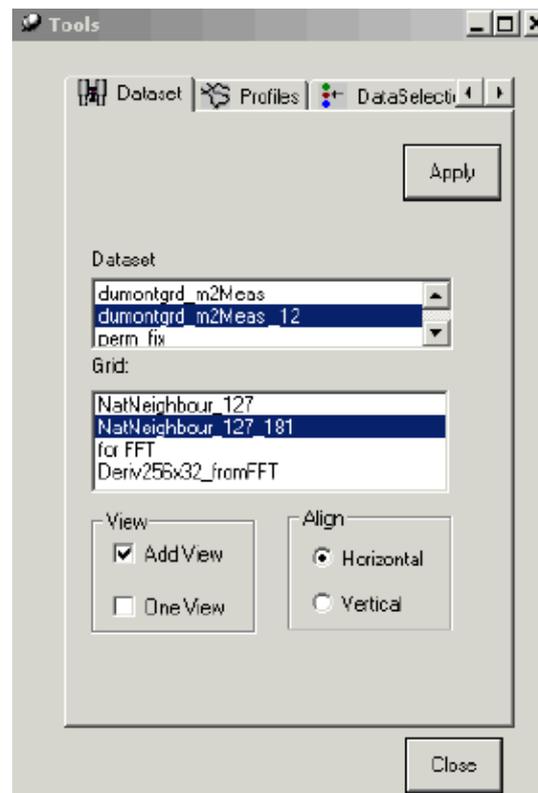
- Click the **Tools** button  on the **MultiGrid** toolbar to appear under EMIGMA's main toolbar or double-click anywhere in your grid. The **Tools** dialog will open. **Note.** You can pin the dialog by clicking on the pin in the left corner of its header



- Select a required grid from the **Grid** list on the **Dataset** tab and click **Apply**

Display multiple (up to 4) grids at a time

Click the **Tools** button  to open the respective dialog. Pin it, if necessary, by clicking on the pin in the left-hand corner of its header:



- On the **Dataset** tab, de-select the **One View** box in the **View** section. This will automatically activate and check the **Add View** box
- Choose between **Horizontal** and **Vertical** in the now active **Align** section to have your grids arranged horizontally or vertically

Note. To switch from one option to the other in the process of your work, right-click anywhere in your grid and select the required option from the popup menu to appear)

To view grids from the same data set:

- From the **Grid** list of the **Dataset** tab, select the grid you want to view in addition to the one displayed and click **Apply**
- Repeat this procedure, if necessary, to add a third and a fourth grid

To view grids from different data sets:

- From the **Dataset** list of the **Dataset** tab, select a required data set from the respective list
- Select the grid you want to view in addition to the one displayed and click **Apply**
- Repeat this procedure, if necessary, to add a third and a fourth grid

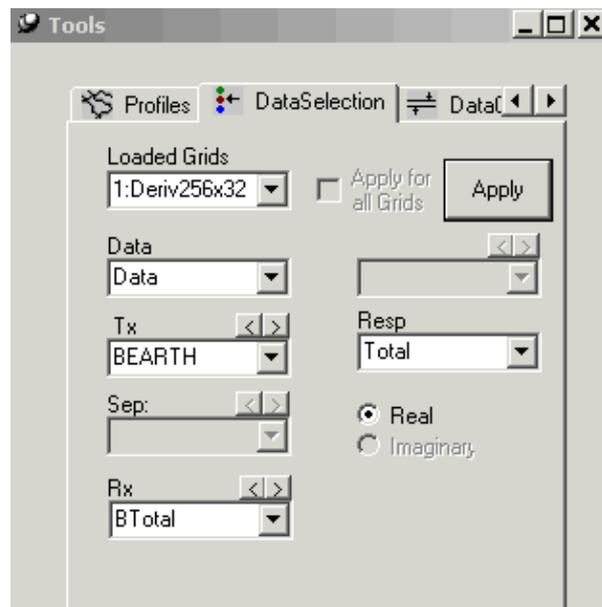
Note. To switch back to the single-grid presentation, go to the **Dataset** tab of the **Tools** dialog and select the **One View** box; this will bring up the grid that was loaded by default (i.e. the most recent) at the very beginning.

Remove a grid from the multiple grid display

- Select a required grid
- Right-click anywhere in the grid and select **Hide Grid** in the popup menu to appear
- To return the grid, see the procedure in **Display Multiple Grids at a Time**

Compare various components of the same grid

- Click the **Tools** button  to open the respective dialog. Pin it by clicking on the pin in the left-hand corner of its header
- On the **Dataset** tab, de-select the **One View** box in the **View** section. This will automatically activate and check the **Add View** box
- Choose between **Horizontal** and **Vertical** in the now active **Align** section to have your grids arranged horizontally or vertically
- Select the same grid to have its duplicate displayed
- If necessary, repeat this procedure two times more. You will have four similar grids displayed at a time
- Go to the **Data Selection** tab of the **Tools** dialog and select the first grid from the **Loaded Grids** dropdown list (*Note*. You can also select by clicking it on the screen):



- Select a required component you want to display from the dropdown lists below and click **Apply**
- Repeat the same procedure for three other grids

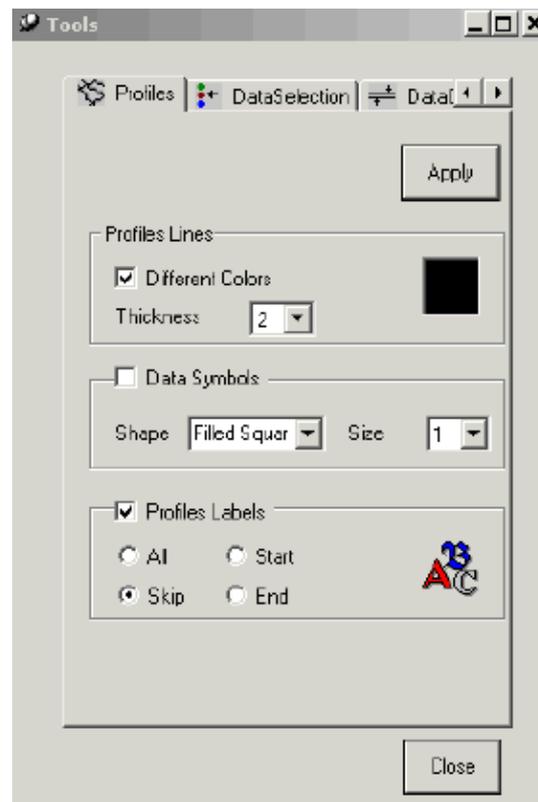
Note. To switch back to the single-grid presentation, go to the **Dataset** tab of the **Tools** dialog and select the **One View** box; this will bring up the grid that was loaded by default (i.e. the most recent) at the very beginning.

Display and customize profiles

- Click on the grid display you want to overlay with profiles
- Click on the **Show Profiles** button  on the **MultiGrid** toolbar

OR

- Right-click anywhere in your grid and choose **Show Profiles** from the popup menu to appear. The profiles will show over the selected grid
- Click on the **Tools** button  to open the respective dialog (pin it in the left-hand corner of the header) and go to the **Profiles** tab to customize the appearance of the profiles



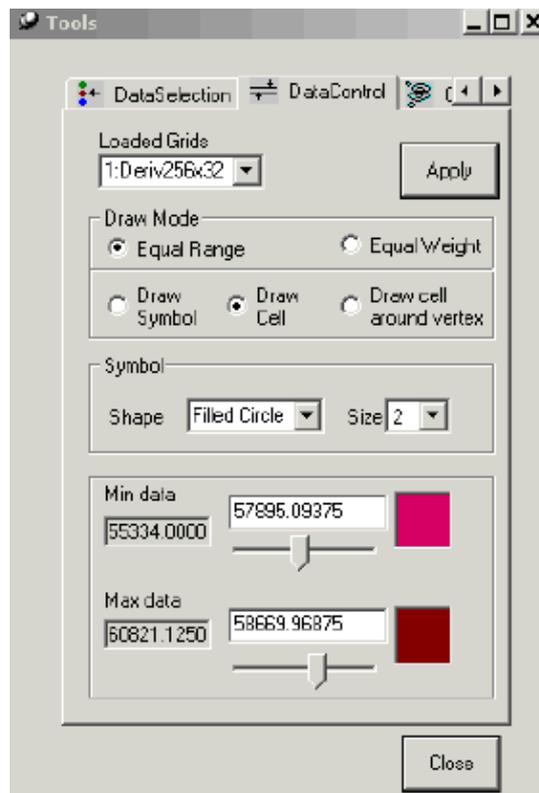
- In the **Profile Lines** section, click the color square to specify the color of the profiles using the standard color palette or check the **Different Colors** box to have all the profiles colored differently. Select the thickness of the profiles from the respective dropdown list
- Check the **Data Symbols** box to display the profiles as a set of locations (symbols), each having its own color. Select the shape and size of the symbols to be used from the respective dropdown lists
- Check the **Profile Labels** box to display the labels. Select one of the four options below: **Skip** will display labels on every second profile, **Start** only at the beginning of the profile, **End** at its end, **All** will display labels at both ends. Click the **ABC** icon to change the font.

Switch between Profile Data and Grid Data

When you click on a given point in your grid, you can see the x and y coordinates and the data value of this point. When profiles are toggled off, this information is automatically linked to a grid cell (accordingly, the **Point on Grid Data** button  of the **MultiGrid** toolbar is engaged). When profiles are toggled on, the **Point on Profile Data** button  becomes active and can be engaged to display profile-related data

Specify the draw mode

- Click the **Tools** button  to open the respective dialog. Pin it by clicking on the pin in the left-hand corner of the header and go to the **Data Control** tab



- Select a grid display to specify a draw mode for from the **Loaded Grids** dropdown list or just click on the display of this grid
- Select **Equal Range** to assign different colors to equal ranges independently of the number of points in each range. Select **Equal Weight** to assign different colors to different ranges covering the same number of points
- Select the way for the color to fill the cells (**Draw Symbol**, **Draw Cells**, **Draw Cell Around Vertex**)

Draw Symbol displays each grid cell as a set of four data (vertices) and assigns a certain color to each data dependently of its value. **Draw Cell** calculates the average of the data located in the vertices of a grid cell. The cell will be filled with a certain color assigned to the average value. **Draw Cell around Vertex** displays your grid as a set of cells drawn around each grid vertex and filled with a certain color assigned to the data value in the vertex

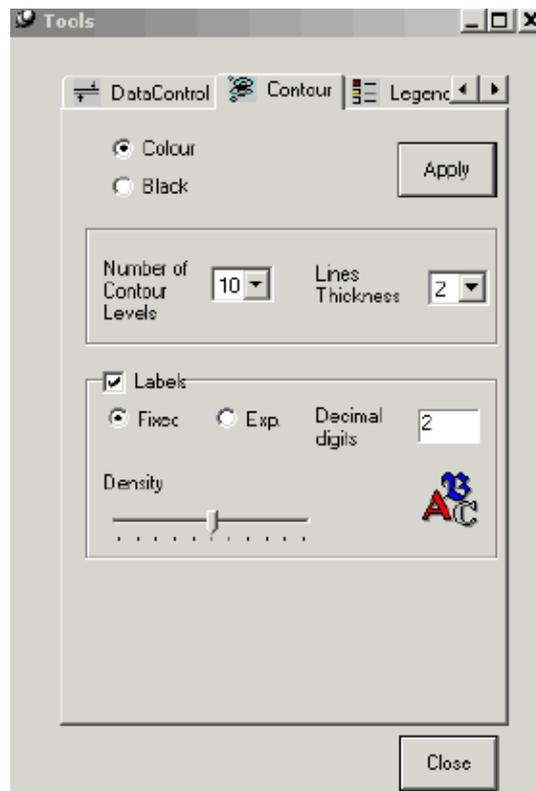
- If you select **Draw Symbol**, specify the shape and size of the symbols to be used in the **Symbol** section
- Specify the range of data to be displayed (75% of data are displayed by default) using the sliders to the right of the **Min Data** and **Max Data** fields that show the absolute minimums and maximums of your data. Or, type in these values manually. Click **Apply**
- Click on the colored squares to the right to open the standard Windows-style palette and to specify colors for the start and end of the data range

Display and customize contours

- Click in a required grid display
- Click the **Show Contour Lines** button  on the MultiGrid toolbar to toggle the contours on and off

OR

- Right-click anywhere in your grid and choose **Show Contour** from the popup menu to appear
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Contour** tab



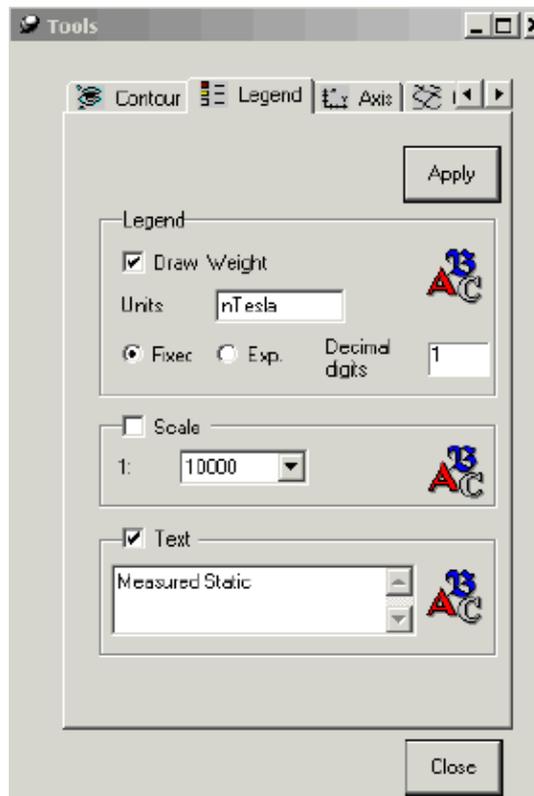
- Select between the **Black** and **Color** options to have your contours black or colored
- Select the number of contour levels from the respective dropdown list and the thickness of contour lines to be drawn from the respective list to the right
- Check the **Labels** box to activate the respective section and set the format of the contour labels (fixed or exponential, number of decimal digits). Click on the  symbol to specify the font and style of your label and use the **Density** slider to decrease or increase their number

Display and customize the legend and scale rule

- Click in a grid display
- Click the **Show Legend** button  on the **MultiGrid** toolbar

OR

- Right-click anywhere in your grid and choose **Show Legend** from the popup menu to appear. You will see the legend to the left of your grid
- The legend can be repositioned by dragging it with the mouse.
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Legend** tab



- Select the **Draw Weight** box to display the number of points corresponding to each color in the legend
- Specify the format (fixed or exponential), the number of decimal digits and the font () for the values in the legend
- Check the **Scale** box to authorize scale changes and bring up the scale rule
- Choose a required scale from the respective dropdown list and click **Apply** in the upper right-hand corner of the dialog (or click anywhere in your plot) to view the result. The scale rule will change accordingly

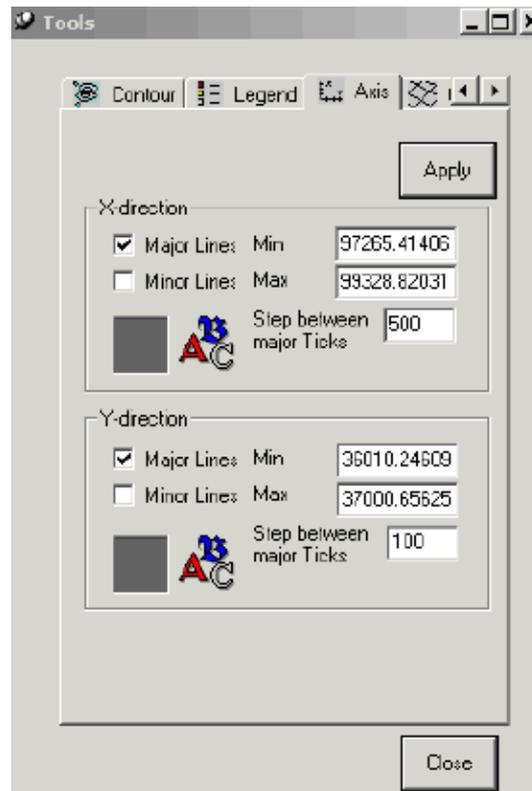
Add annotations to your grid

- Click in a required grid display
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Legend** tab
- Check the **Text** box to add a title or comments

Type in the field below, press **Ctrl+Enter** to insert a carriage return, click the  button to adjust the font and style of your labels and texts in the standard Windows-style **Font** dialog to appear

Display and customize the coordinate grid

- Click in a required grid display
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Axis** tab:



- Check the **Major Lines** and **Minor Lines** boxes in the **X-direction** and **Y-direction** sections to show the coordinate grid
- Adjust the minimum and maximum coordinates in the respective boxes to display the grid portion you are primarily interested in
- Change the step between major ticks in the respective boxes to increase or decrease the density of your coordinate grid
- Click the color square in the bottom left-hand corner of the sections to edit the color using the standard Windows-style palette to appear

Display and customize grid locations

- Click on a required grid display
- Click the **Show Grid Locations** button  on the **MultiGrid** toolbar to toggle grid locations on and off

OR

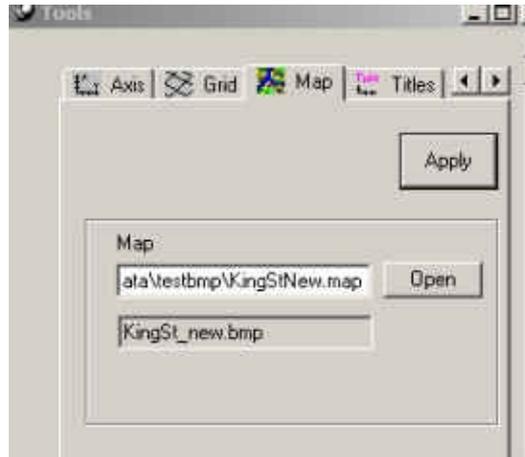
- Right-click anywhere in your grid and choose **Show Grid Locations** from the popup menu to appear
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Grid** tab:



- Select the grid line thickness from the respective dropdown list and click on the colored square on the right to open the standard color palette and to specify the color
- Change the density of your grid as needed both in the **X-direction** and **Y-direction** boxes in the **Skip Lines** section

Load a map underlay

- Click on a required grid display
- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Map** tab:



- Click the **Open** button to open the **Select a .map File** dialog, a standard Windows-style Open dialog. Select and load a required map

*This map is to be calibrated and saved as a text *.map file containing information on externals, internals, etc., and a bitmap (raster) file.*

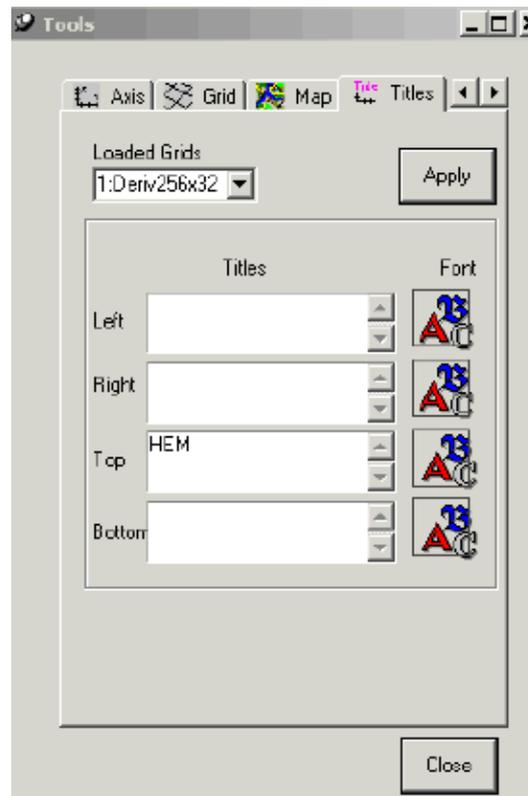
- To toggle the map underlay on and off, use the **Show map** button  on the **MultiGrid** toolbar

Add and customize titles

- Right-click anywhere in a required grid and choose **Show Titles** from the popup menu to appear

OR

- Open and pin the **Tools** dialog (the **Tools** button  on the MultiGrid toolbar) and go to the **Titles** tab:



- Select the grid you want to add a title to from the **Loaded Grid** dropdown list or just click on the grid display to select it
- Type in your title in the **Left**, **Right**, **Top** or **Bottom** fields wherever you want it to appear (or create several titles)
- Click on the **Font** button  to the right of each field to specify the format of your title

If your title is too big to fit in your display, diminish the grid area using the **Zoom Out** button  on the **MultiGrid** toolbar

- Click **Apply**

Switch to proportional axes

- Click on a required grid display
- Engage the **Show Proportionally** button  on the **MultiGrid** toolbar. Your grid axes will become of the same scale
- Disengage this button to return to the initial view

Note. If you have multiple grids displayed, all of them will be changed respectively

Zoom in and out

- Click on a required grid display
- To zoom in on the whole grid, click the **Zoom In** button  on the **MultiGrid** toolbar. Repeat it as many times as you need
- To zoom out, click on the **Zoom Out** button  as many times as needed
- To zoom in on a grid fragment, engage the **Zoom Selected** button . Click and drag to select a grid fragment to be magnified
- To return to the initial scale, click the **Home View** button 

Note. If you have multiple grids displayed, all of them will be zoomed in or out respectively, even if you apply this operation only to one of them

Move a grid

- Click the **Moving** button  on the **MultiGrid** toolbar
- Click and drag your grid in a desired direction
- To return your grid to its initial position, click the **Home View** button 

Hide a grid

- Click on a required grid display
- Click the **Show Grid Data** button  on the **MultiGrid** toolbar to toggle it off

OR

- Right-click anywhere in your grid and de-select **Show Grid Data** in the popup menu to appear
- To toggle the grid on again, use the same button on the toolbar or the same command from the popup menu

Print/print preview a grid

- Select **Print/File Print** and specify printing settings in the standard Windows-style dialog to appear

OR

- Select **Print/Print Preview**. Check the appearance of your grid/grids in the print preview window to open and click the **Print** button. Specify printing settings in the standard Windows-style dialog to appear