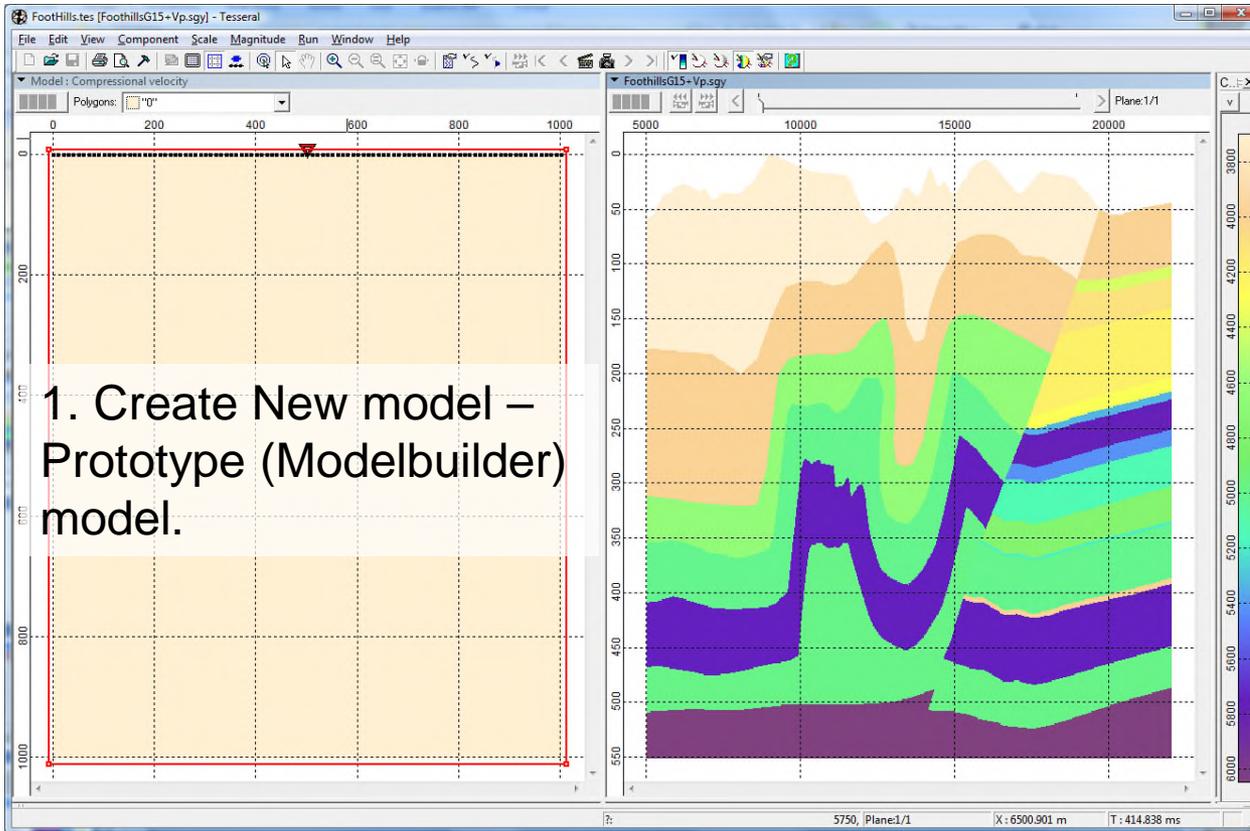


# Modeling using Grid Model



[www.tesselal-geo.com](http://www.tesselal-geo.com)

# How to import a model grid (SEG Y)

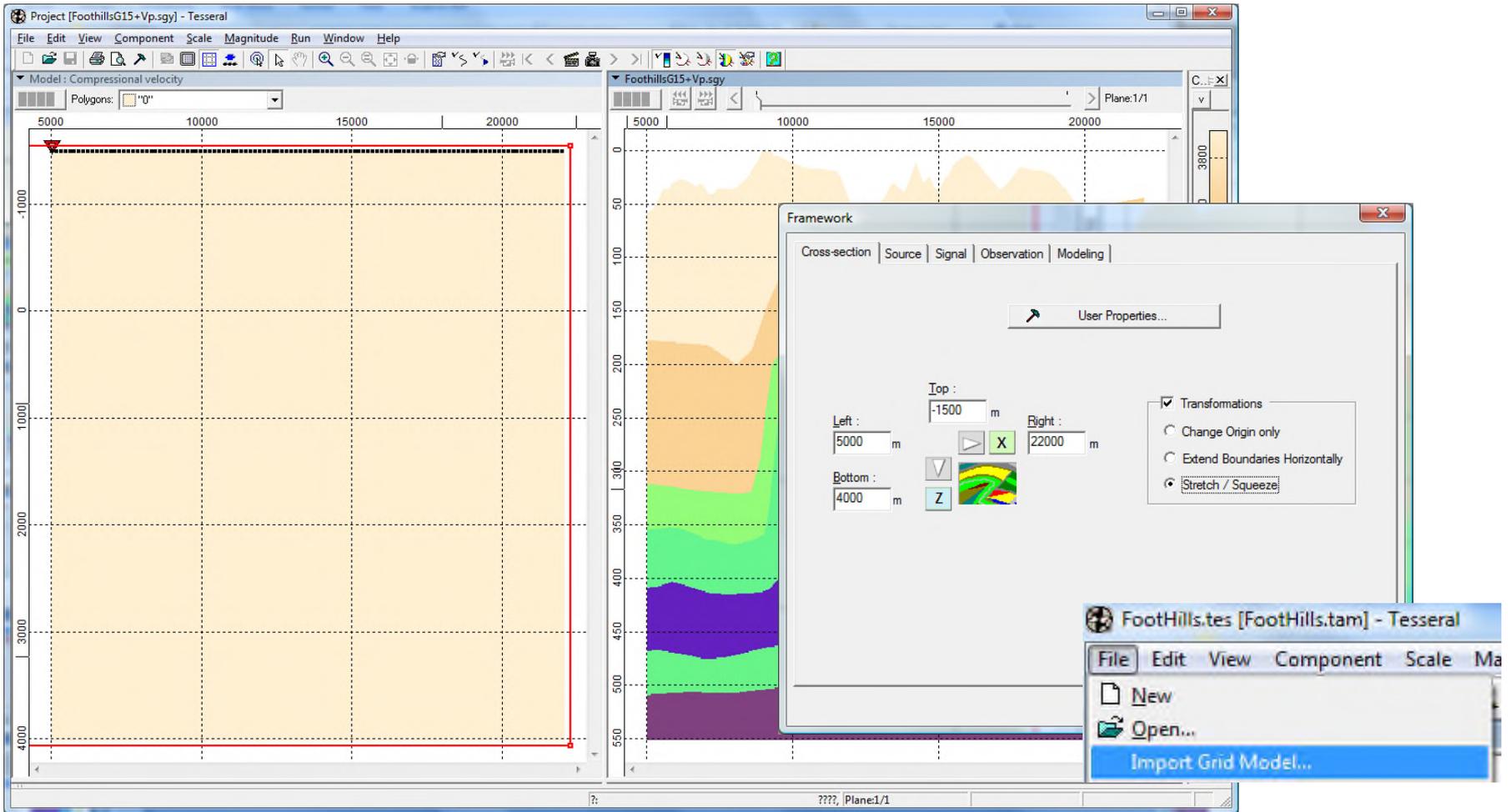


The 'SegY Load Info' dialog box is shown, with the 'horizontal ruler' selected in the 'Assign values from SegY header for' dropdown. The dialog contains a table with the following data:

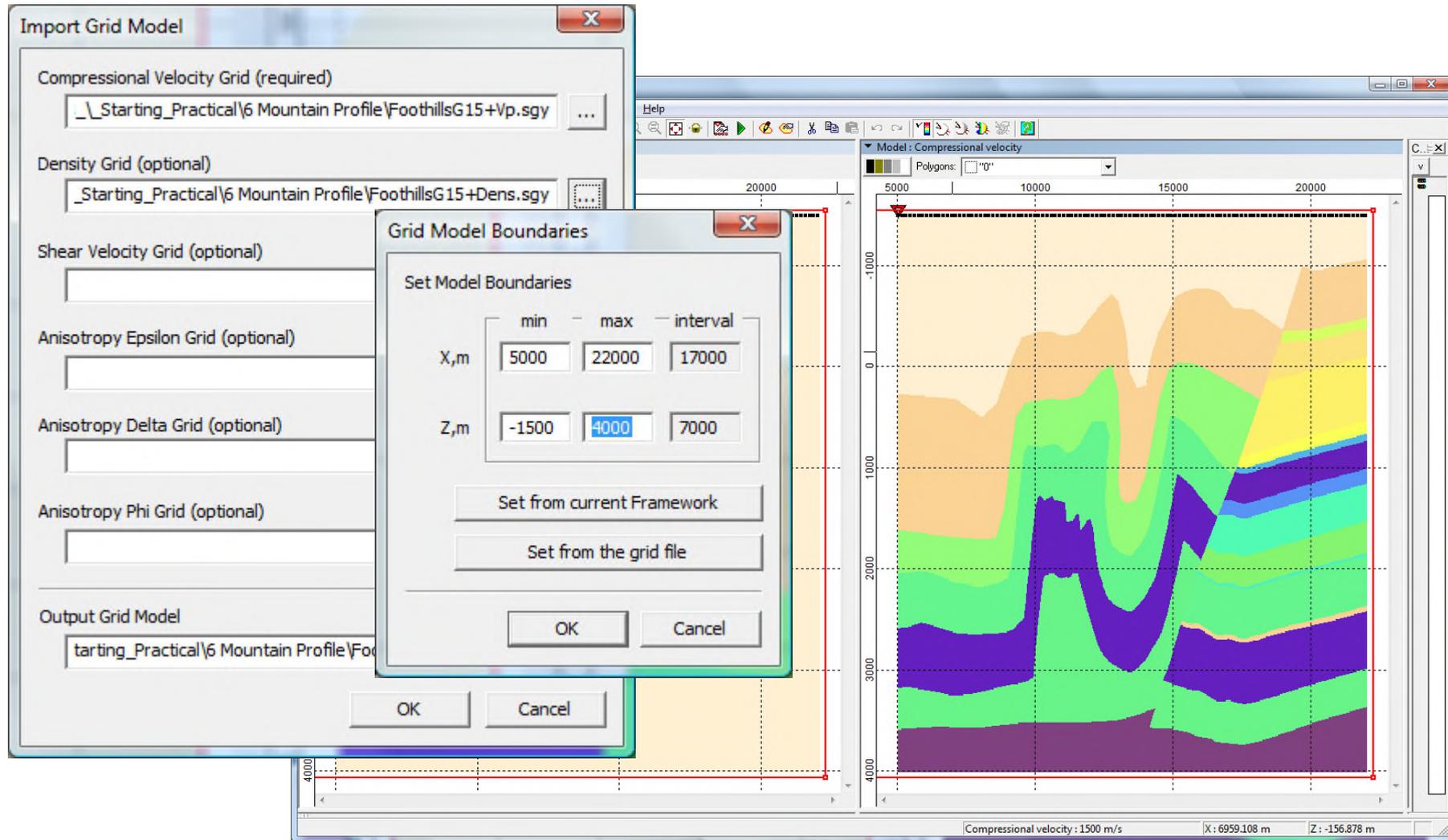
Name in Header	min	max
Trace X	5000.000	22000.000
Trace Y	0.000	0.000
Distance from SP	5000.000	22000.000
Source X	0.000	5000.000
Source Y	0.000	0.000
Group X	5000.000	22000.000
Group Y	0.000	0.000
Energy Source (SP)	1.000	1.000
CDP number (CMP)	1.000	1701.000
Shot (or stacked) number	1.000	1.000
User defined...		
Not set		

Below the table, the 'Header Offset' is set to 0, and the 'Data Type' is set to '4 byte (integer)'. There are checkboxes for 'Geographic Coordinates' and 'Use Distance from SP', both of which are currently unchecked. 'OK' and 'Cancel' buttons are at the bottom.

2. Activate panel, call “Open” dialog, push button “Viewer files”, find folder with the model grid files (here, in SEG Y format) to be imported into Tesserat package, select first file and push “Open” button. Initially “SegY Load Info” dialog is produced – click “OK” button.



Adjust prototype model area taking into account data from SEGYY grid.  
 And select *File/Import Grid model*



Select available model SEGY grids. Push OK button

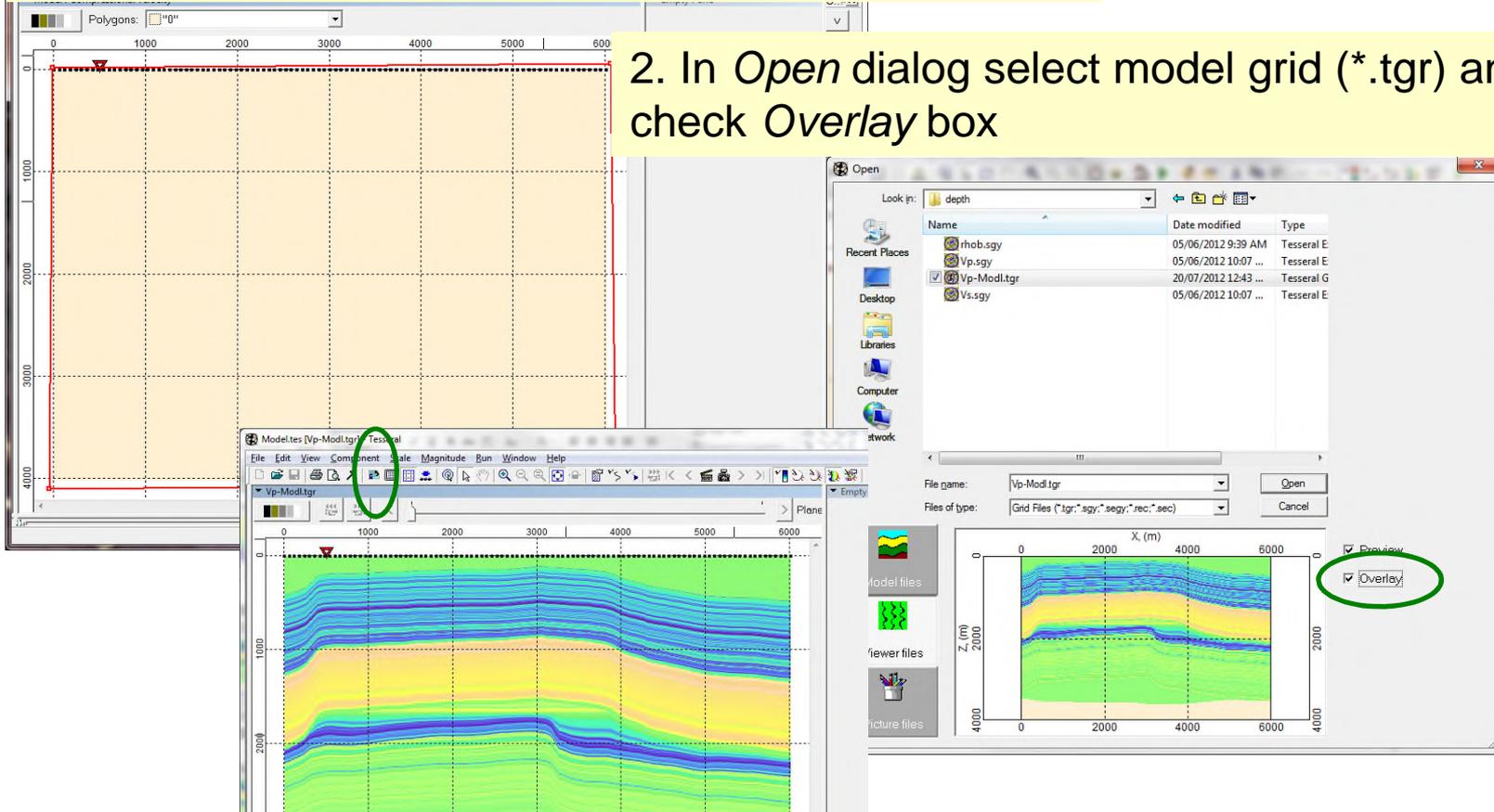
Adjust boundaries in *Grid Model Boundaries Dialog* (OK)

Flip pictures using toolbar button  to have prototype model as upper image

In case if you already have model grid in internal format (\*.tgr, converted from source grid(s)):

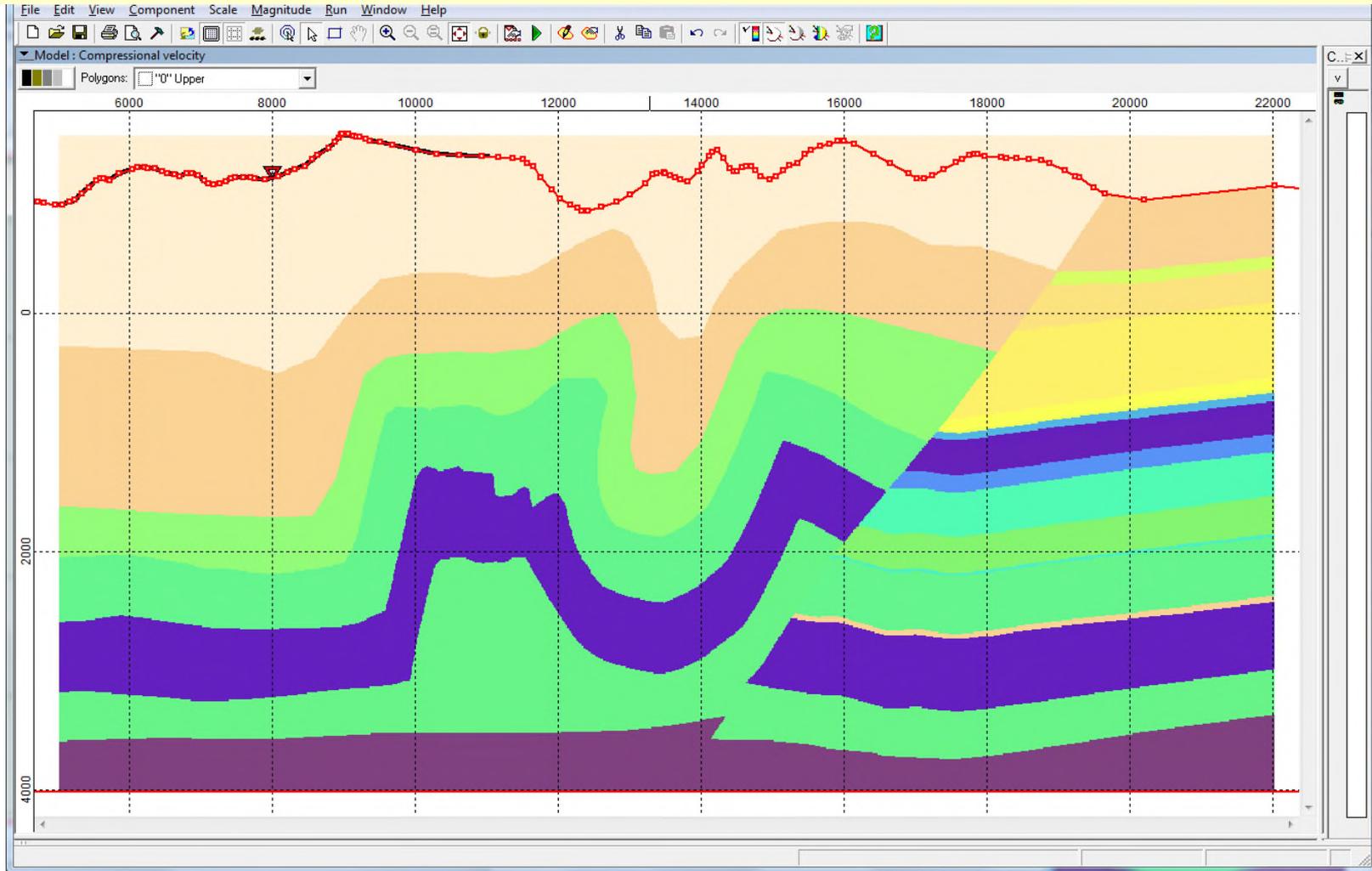
1. Activate panel with *Prototype (Modelbuilder)* model

2. In *Open* dialog select model grid (\*.tgr) and check *Overlay* box



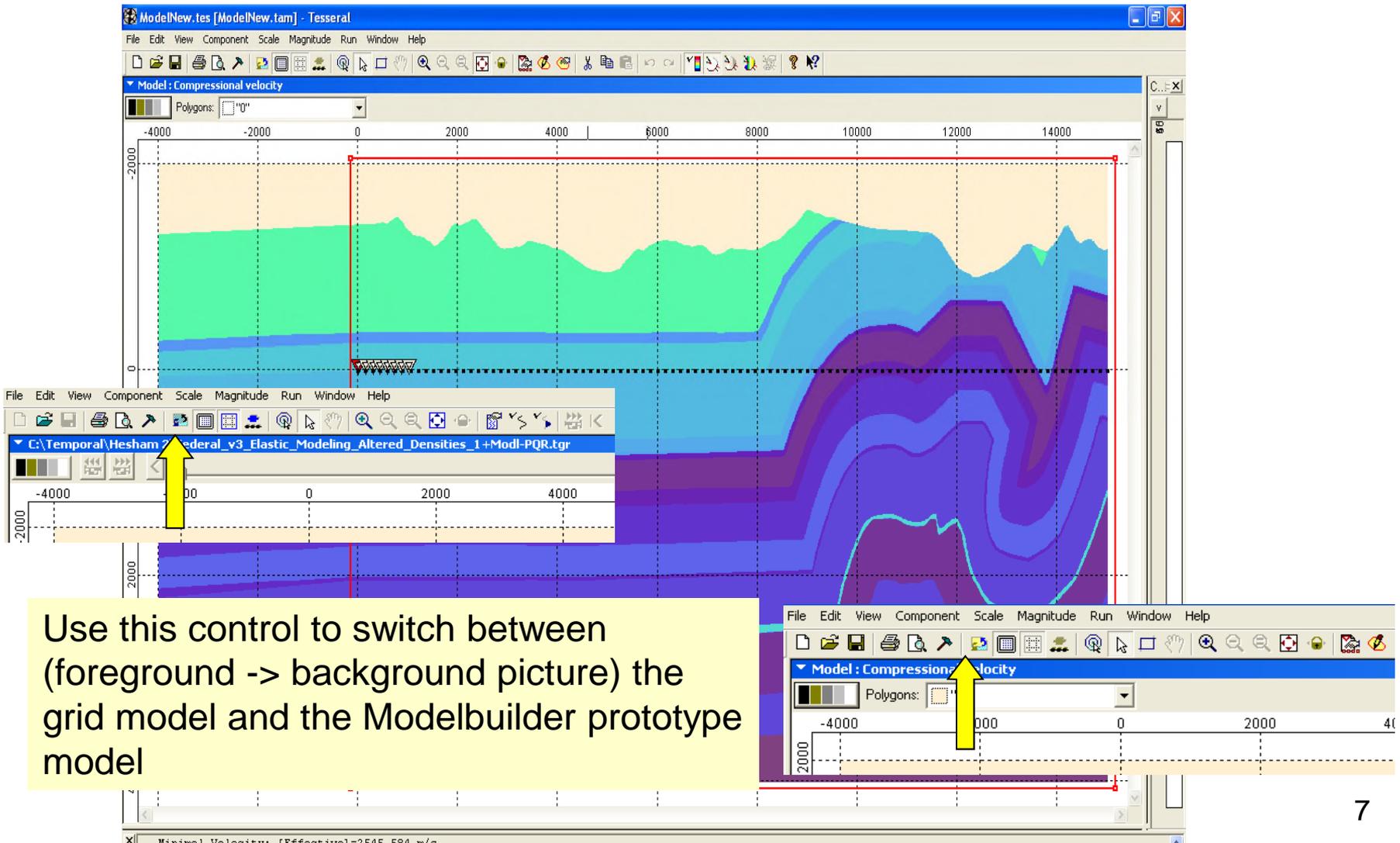
3. Opened grid (Viewer mode) is overlain over Modelbuilder model (Modelbuilder mode). Use *Flip Pictures* button to make Modelbuilder model upper (active).

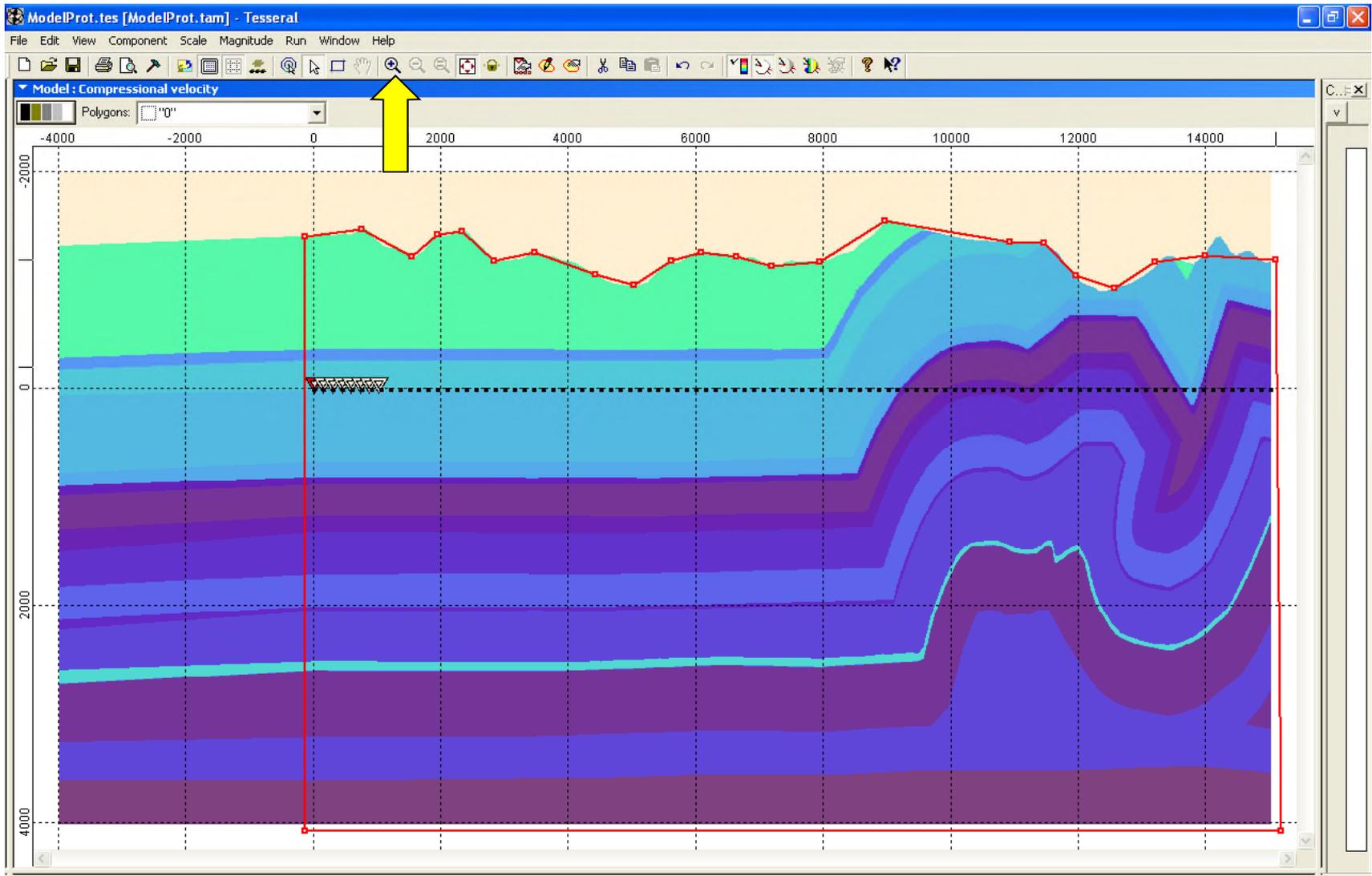
Adjust model prototype surface. It can be done manually or imported in text format.



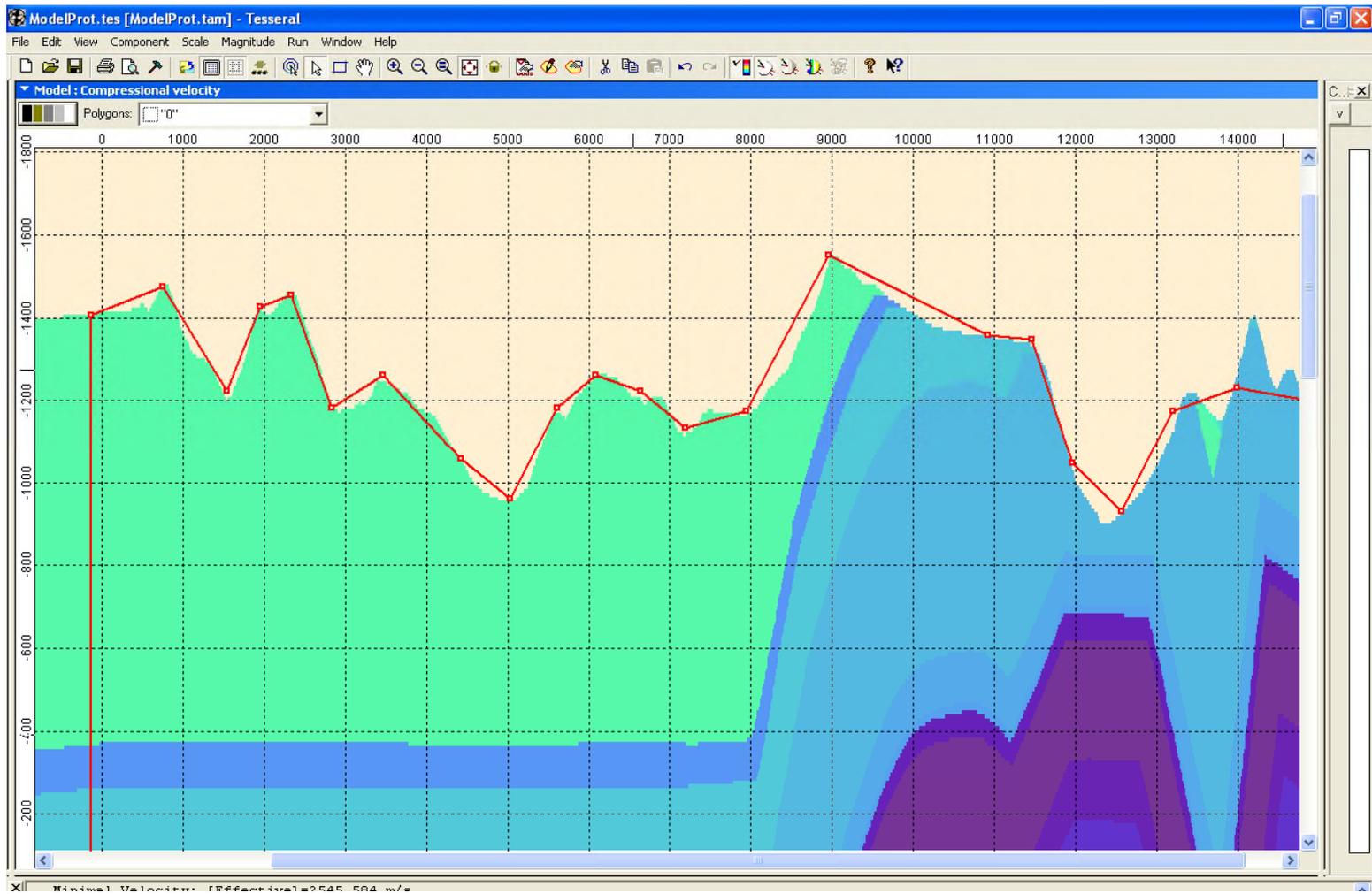
Proceed using modelbuilder options. For example, you can build over model grid other polygons...

# Building prototype model for FWM calculation using imported model grid

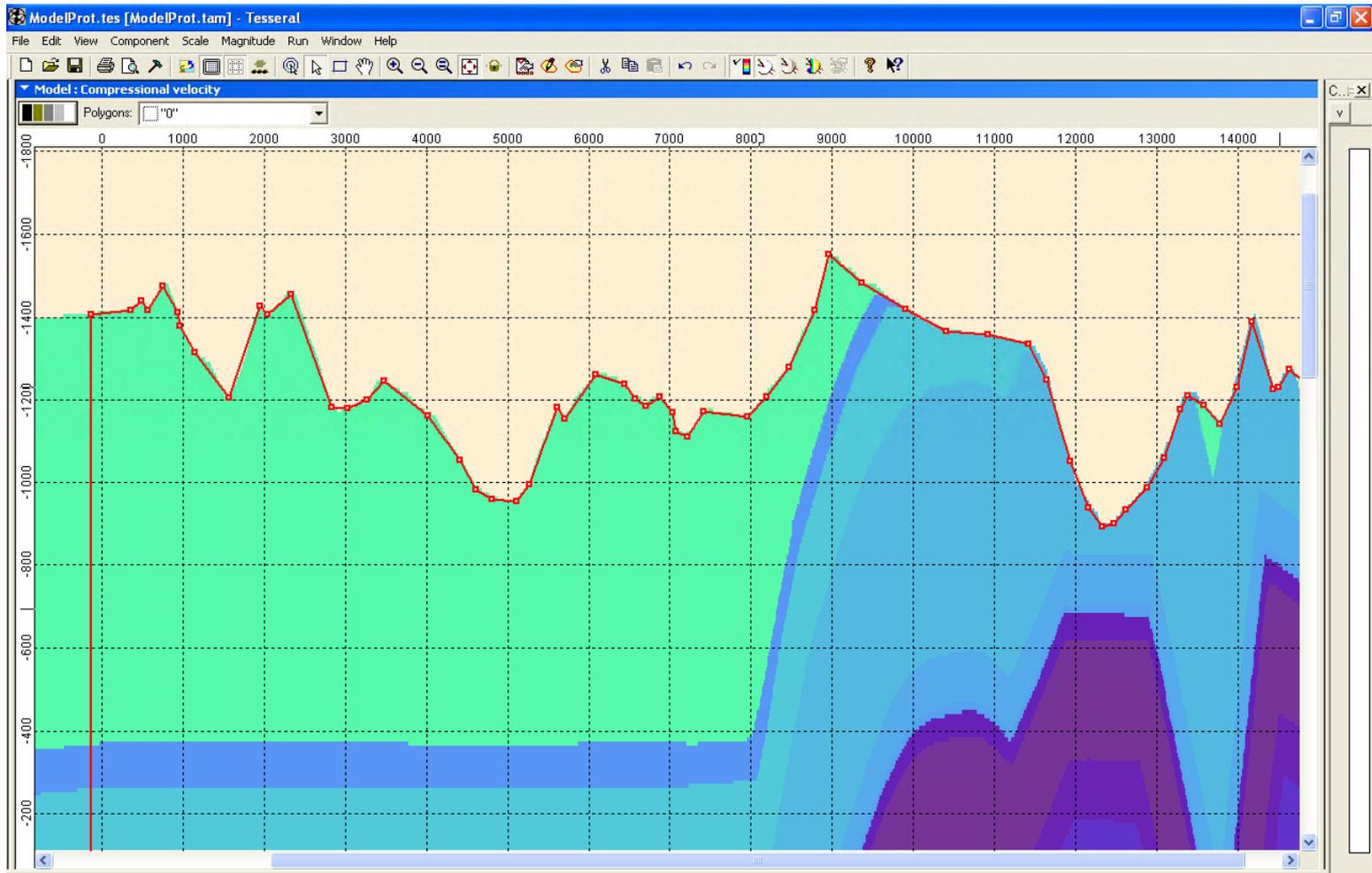




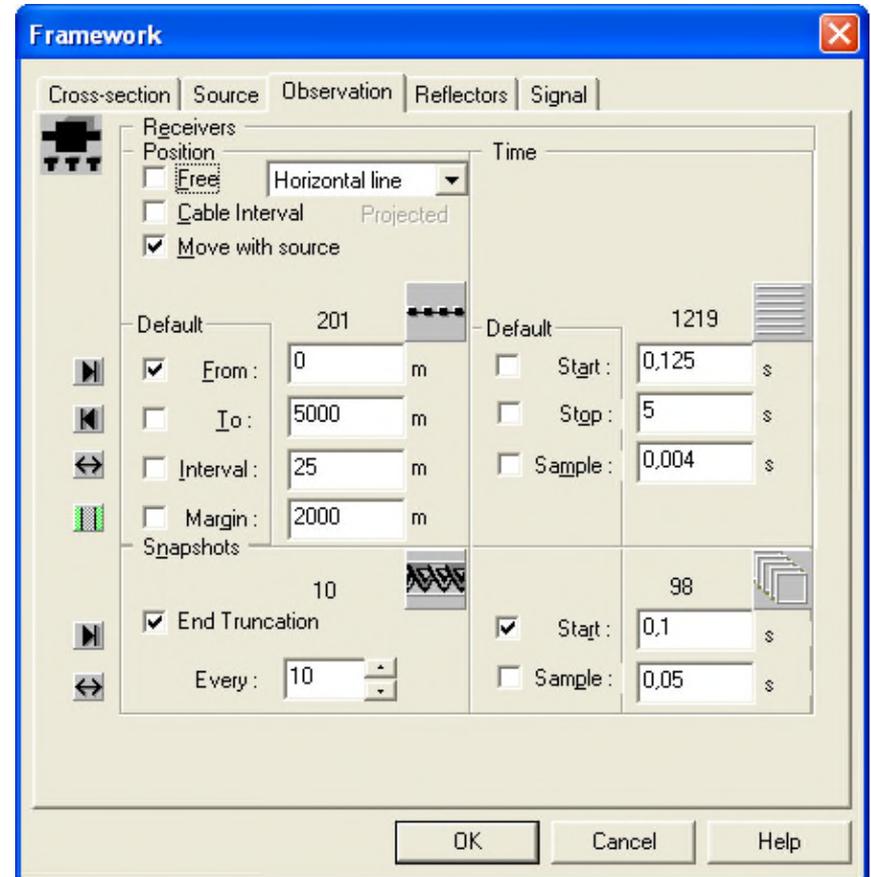
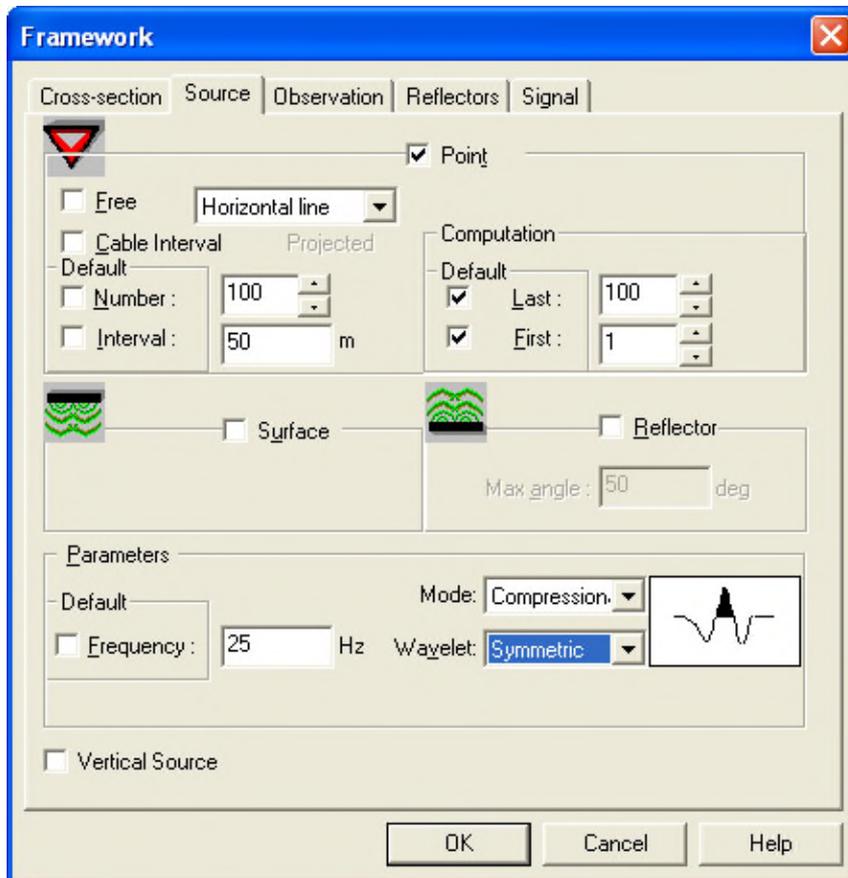
Roughly modify upper boundary of the Modelbuilder model to the grid model relief and then magnify upper part



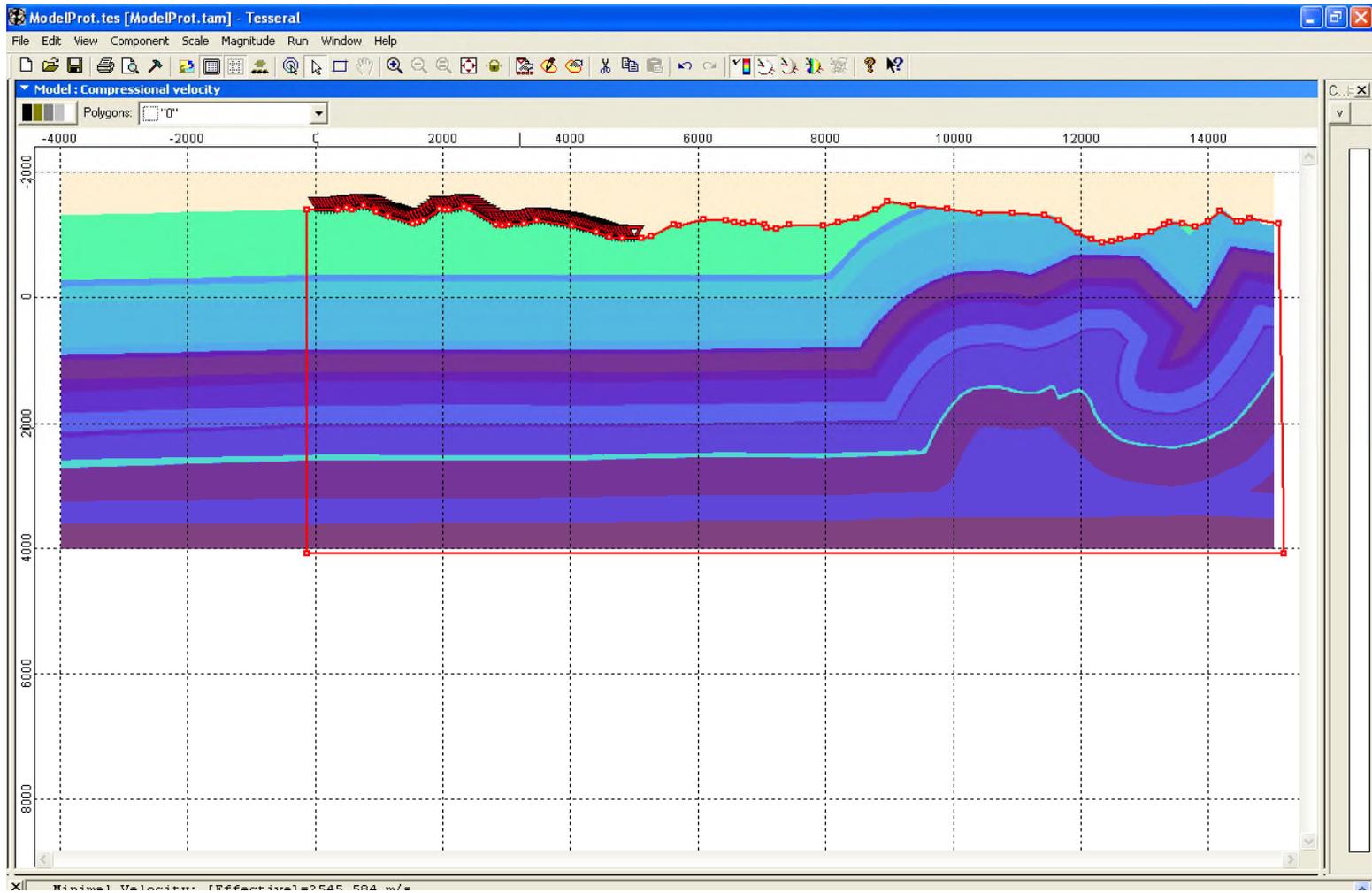
Magnified upper part of the prototype Modelbuilder model



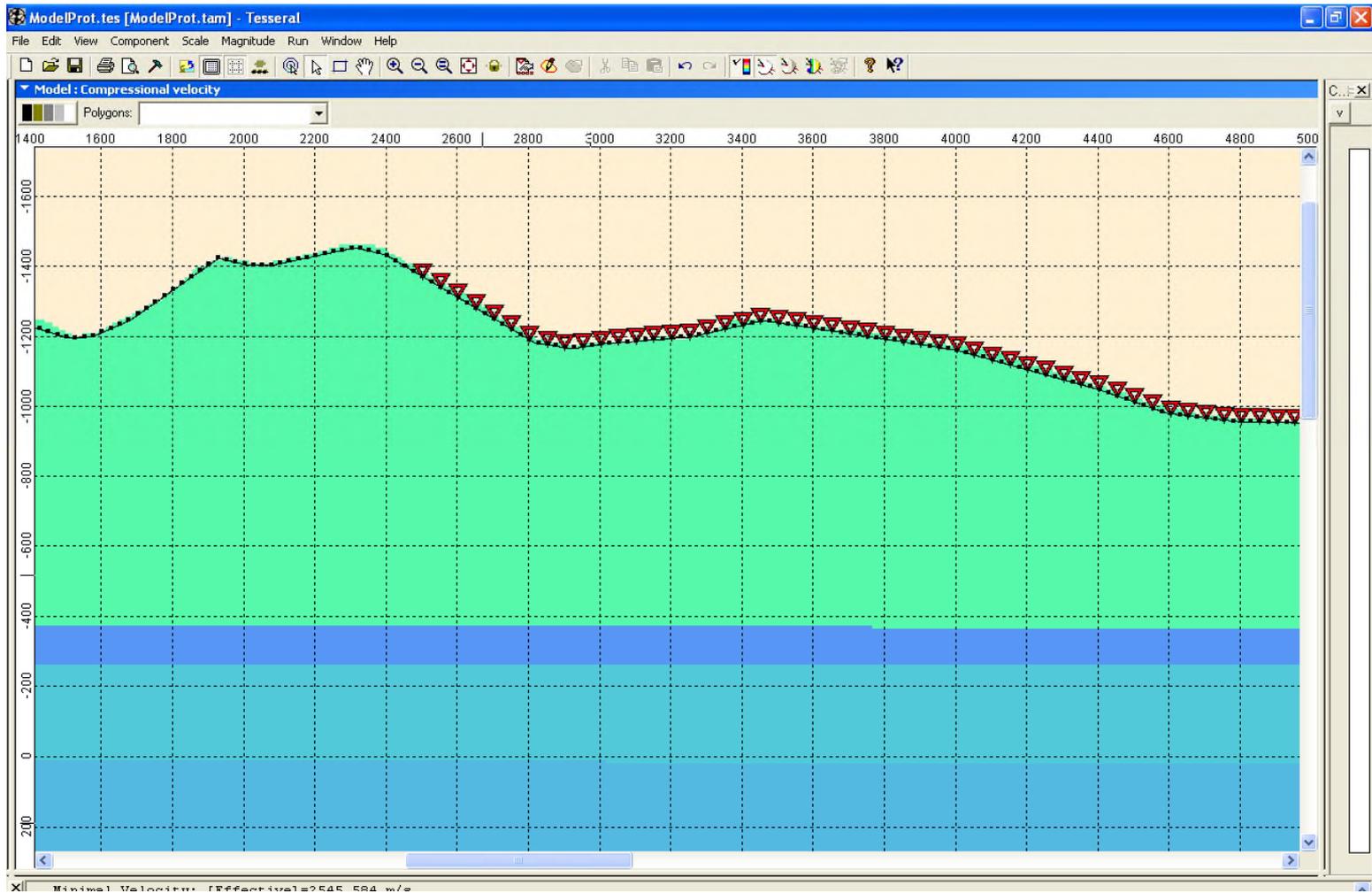
Modify upper boundary of the Modelbuilder model to the grid model relief



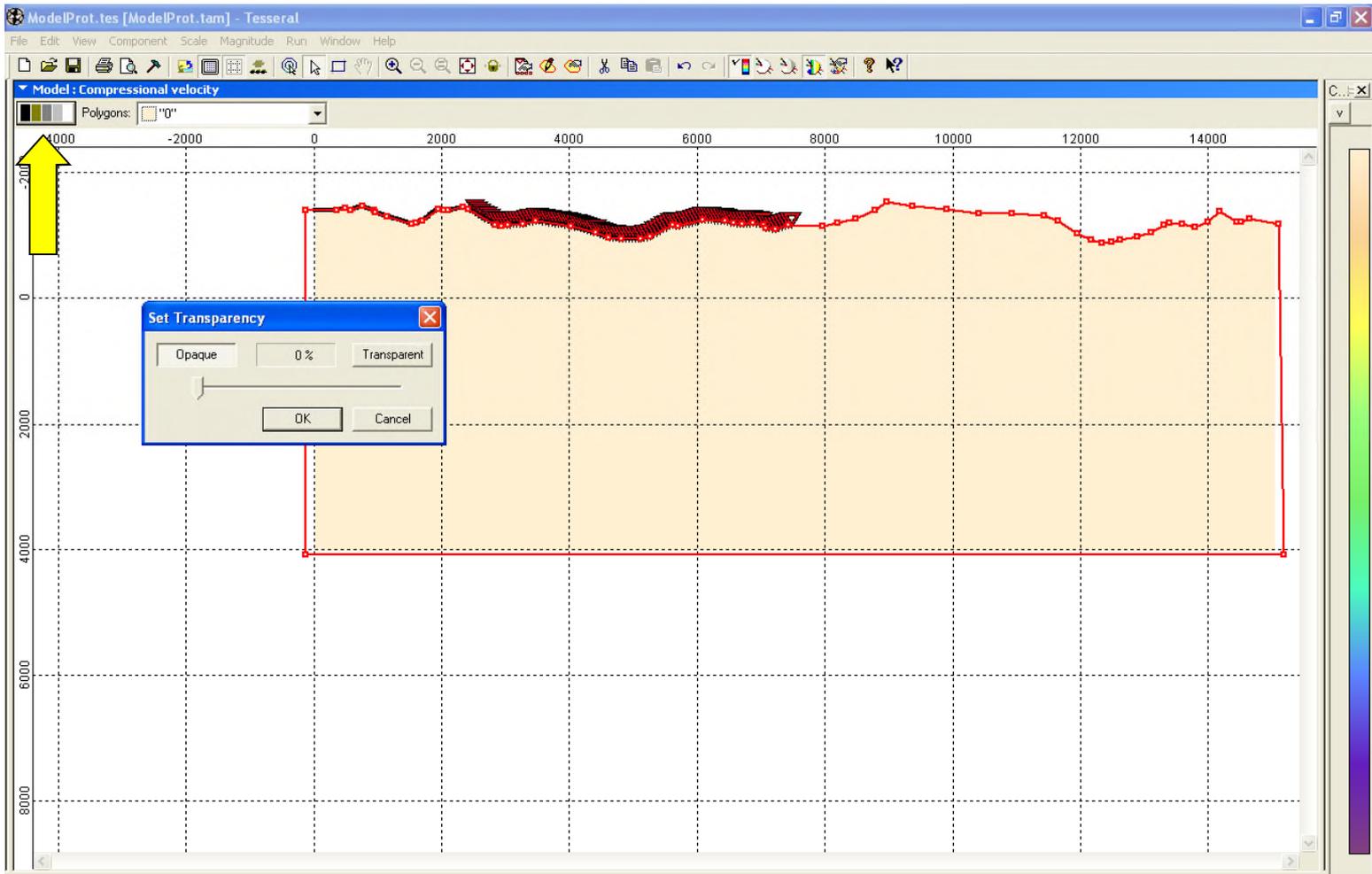
Use “Framework” dialog to enter survey parameters



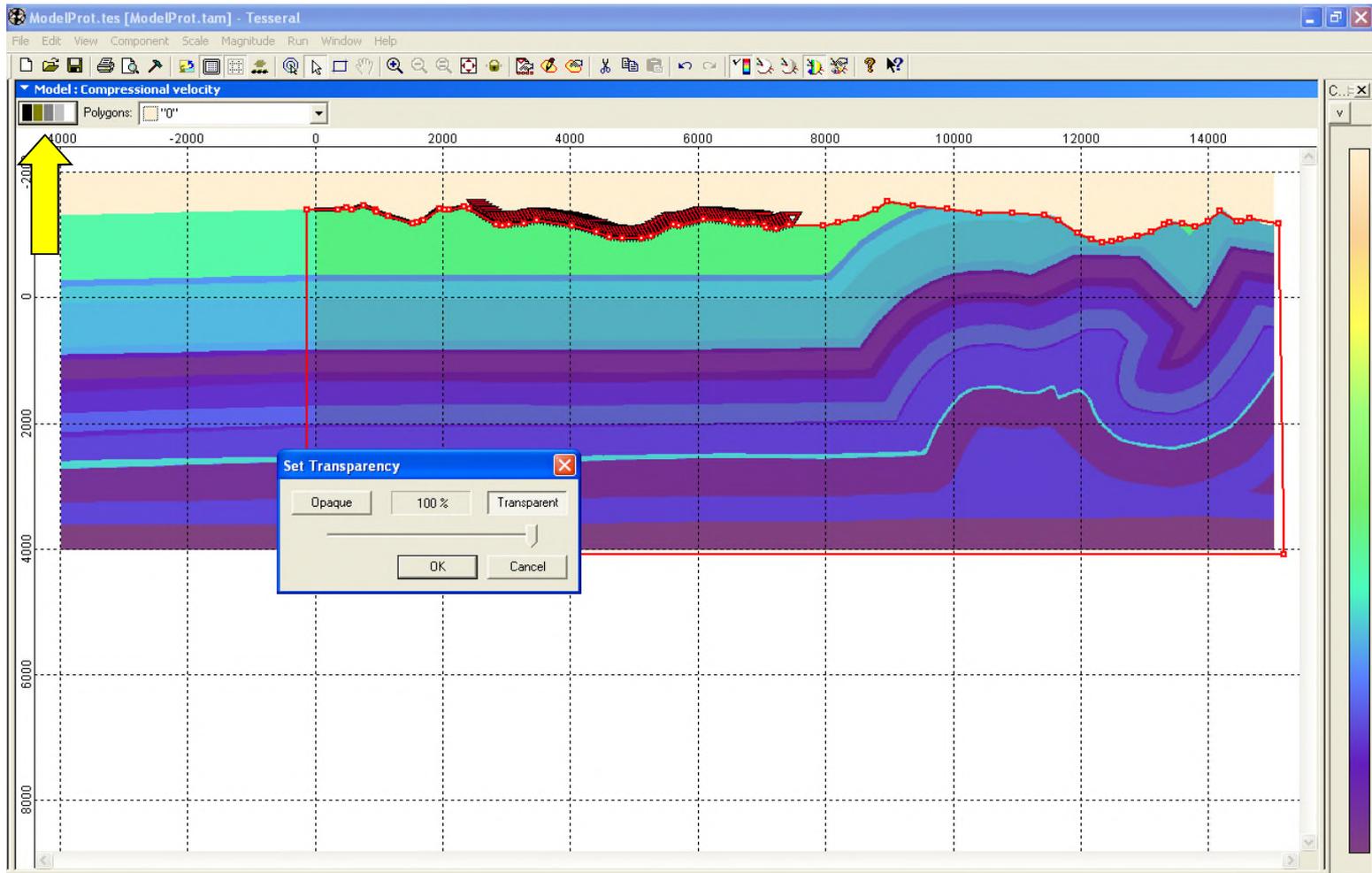
Move receiver line and source line upper the observation surface – they automatically adjust to the surface relief



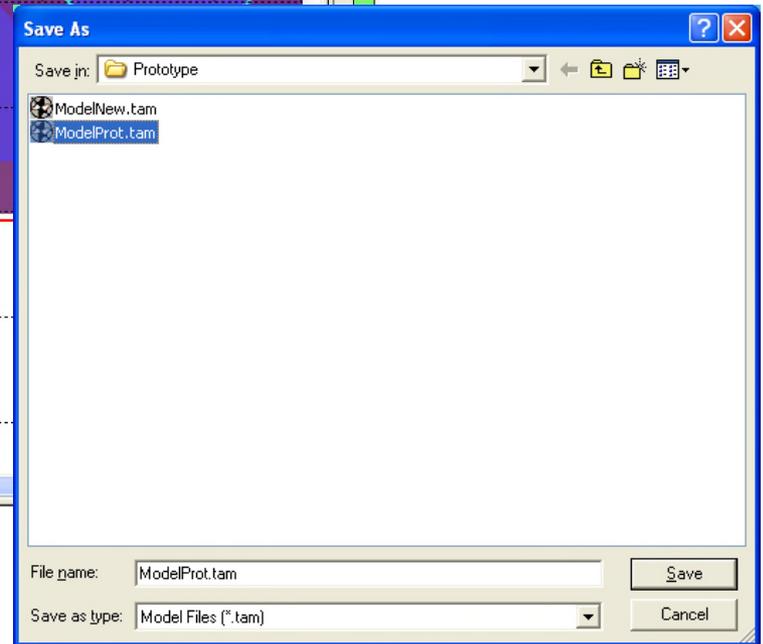
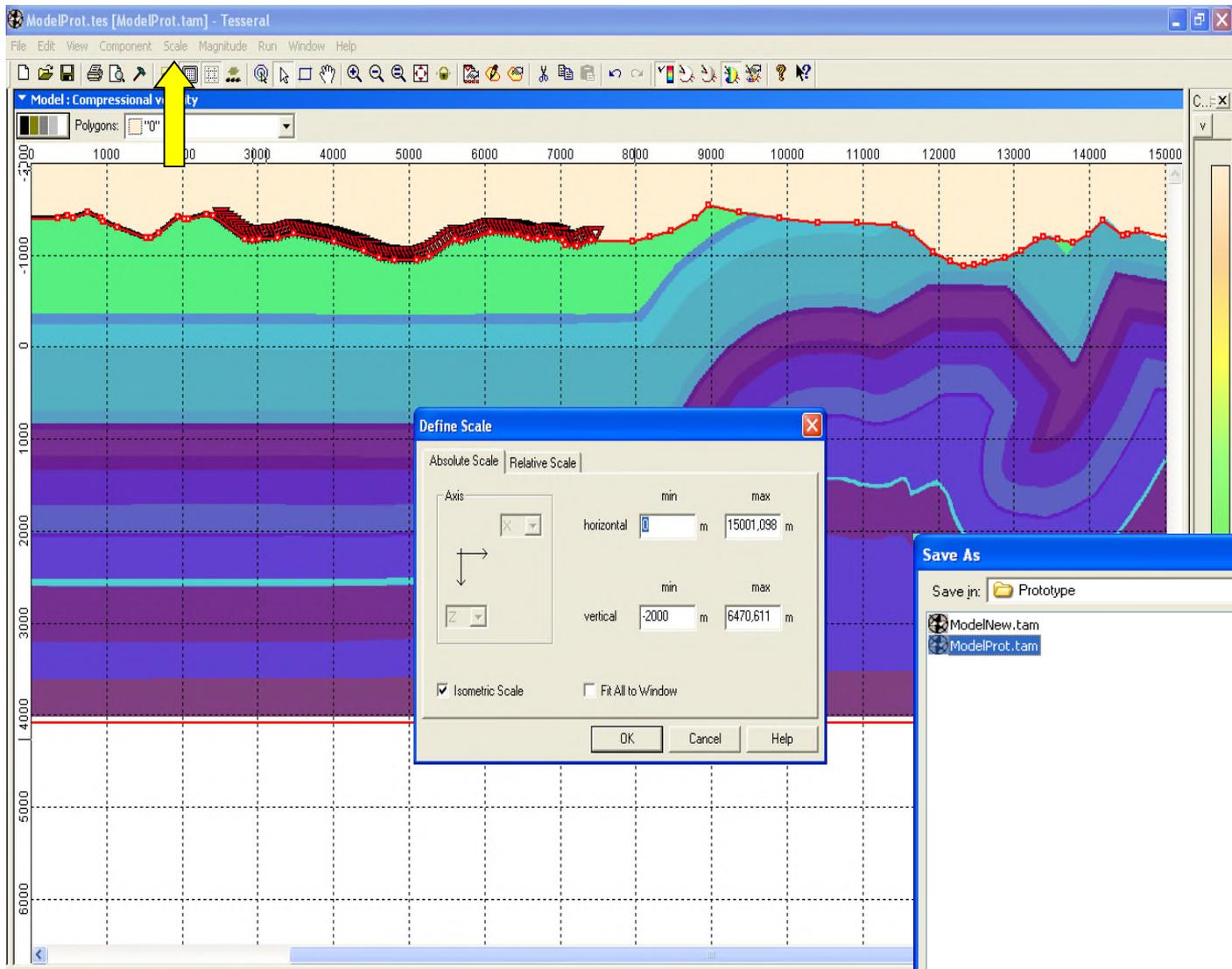
Magnify area where must be first source position and  
 move first source icon to its position (upper surface)  
 You also can more precisely set observation surface



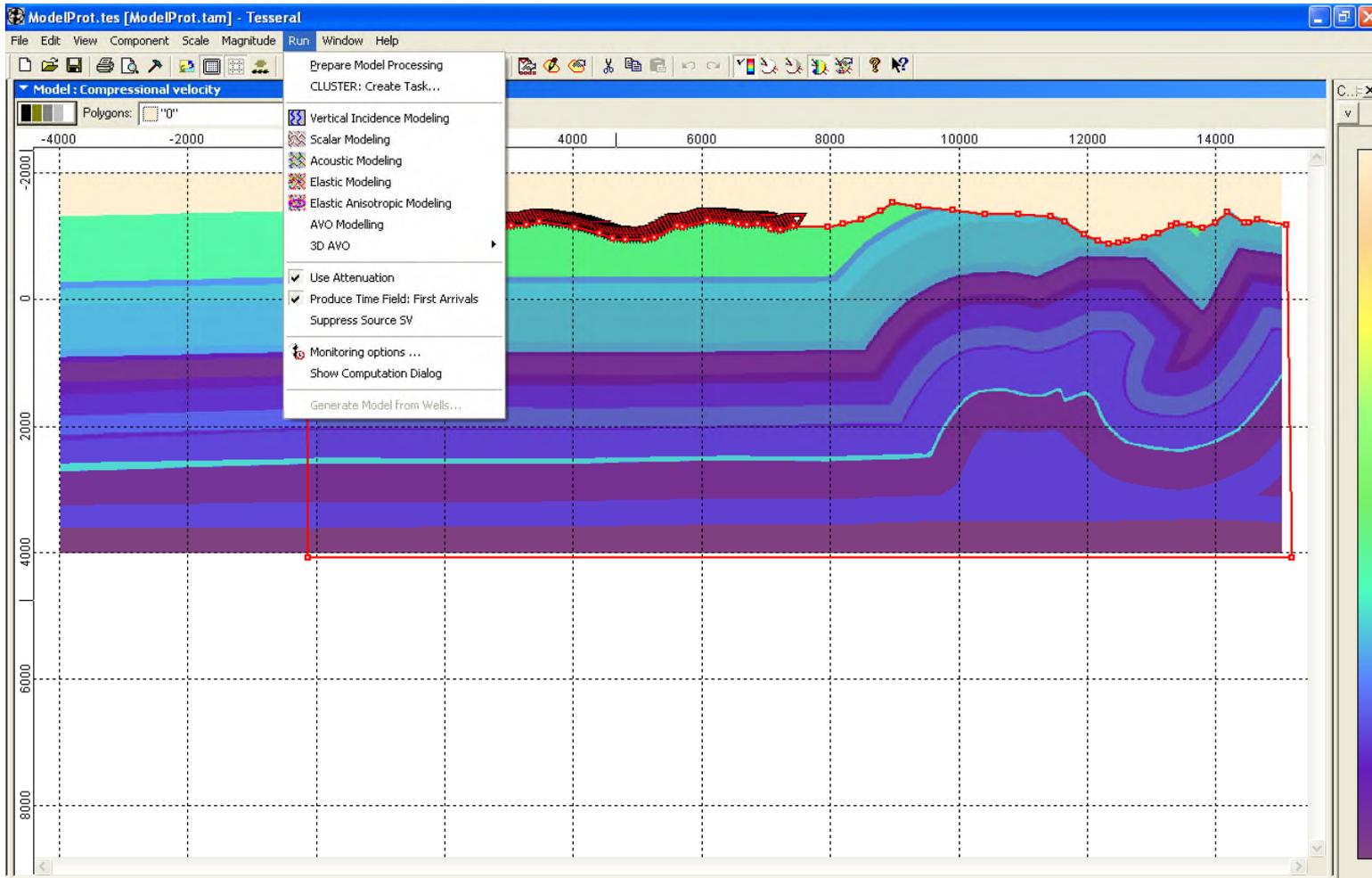
Use "Transparency"->"Opaque" button to see foreground picture only



Use “Transparency”->”Transparent” button (or intermediate slider position) to see foreground and background pictures



You can adjust scale of image to prototype model rectangle.  
 Save ready for calculations model.



You are ready for calculations with the model grid

End of Presentation