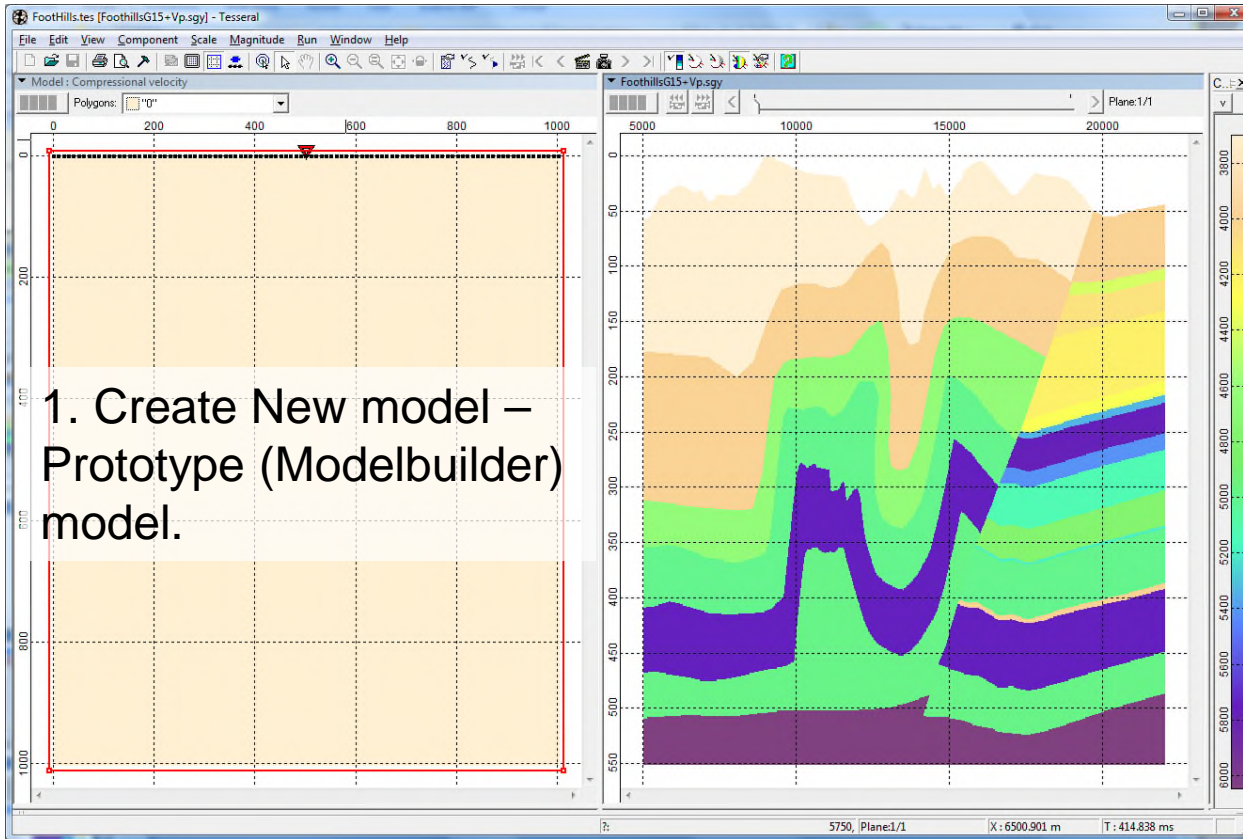


Modeling using Grid Model



www.tesselal-geo.com

How to import a model grid (SEG Y)



SegY Load Info

Assign values from SegY header for
horizontal ruler

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		

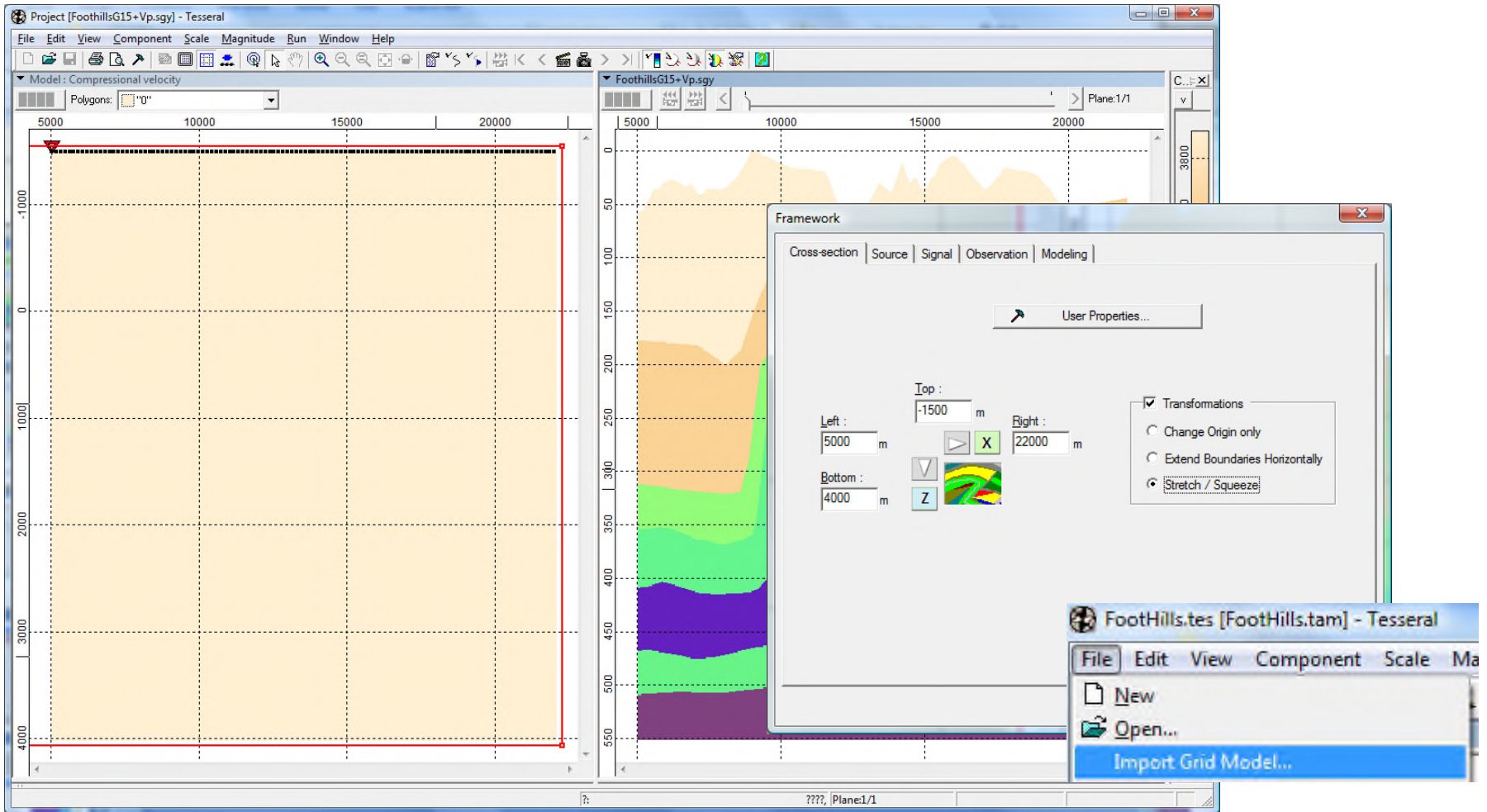
Header Offset: 0 Data Type: 4 byte (integer)

Scale factor: 1

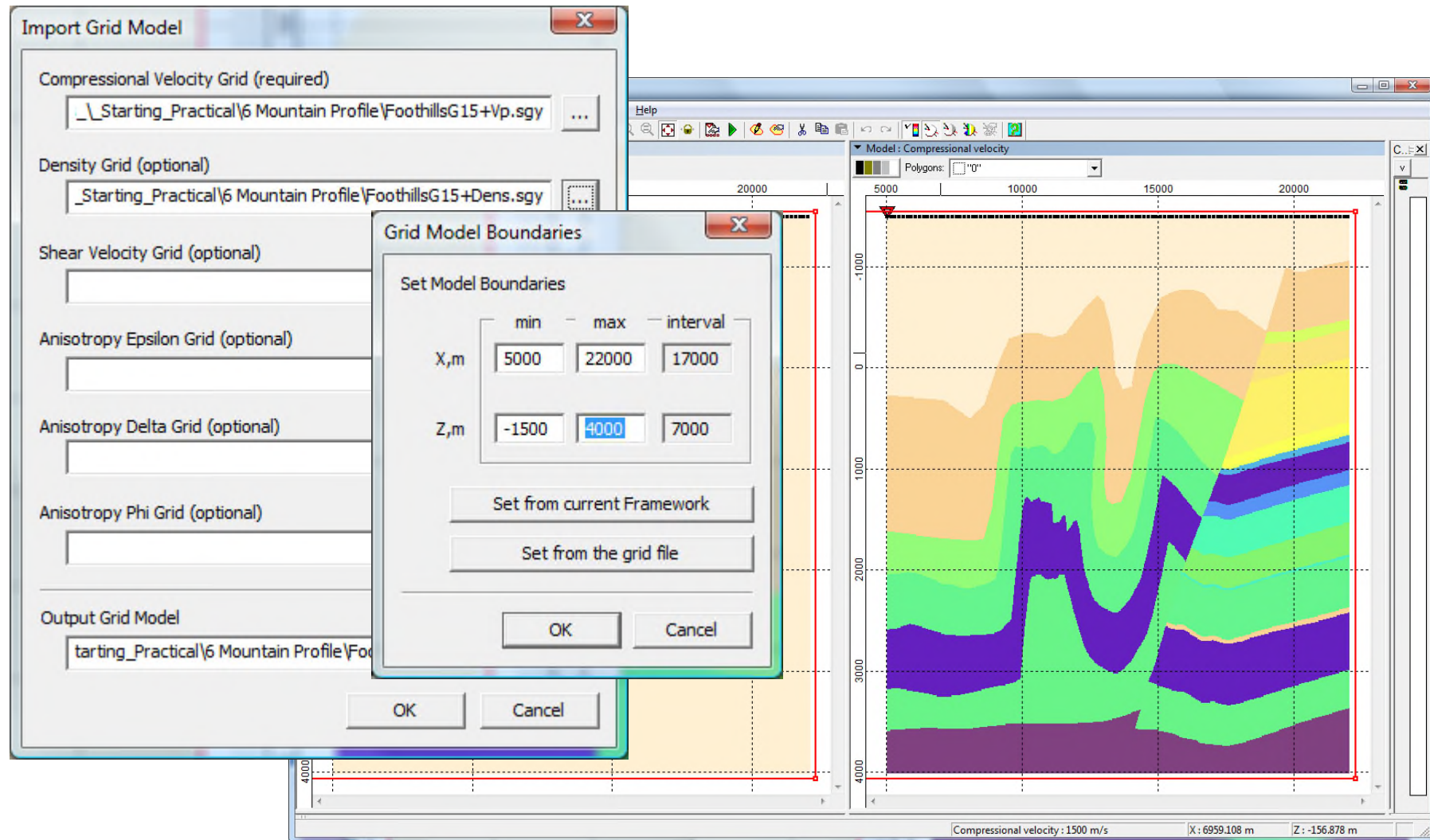
☐ Geographic Coordinates ☐ Use Distance from SP


OK Cancel

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 SEG Y grid.
And select *File/Import Grid model*

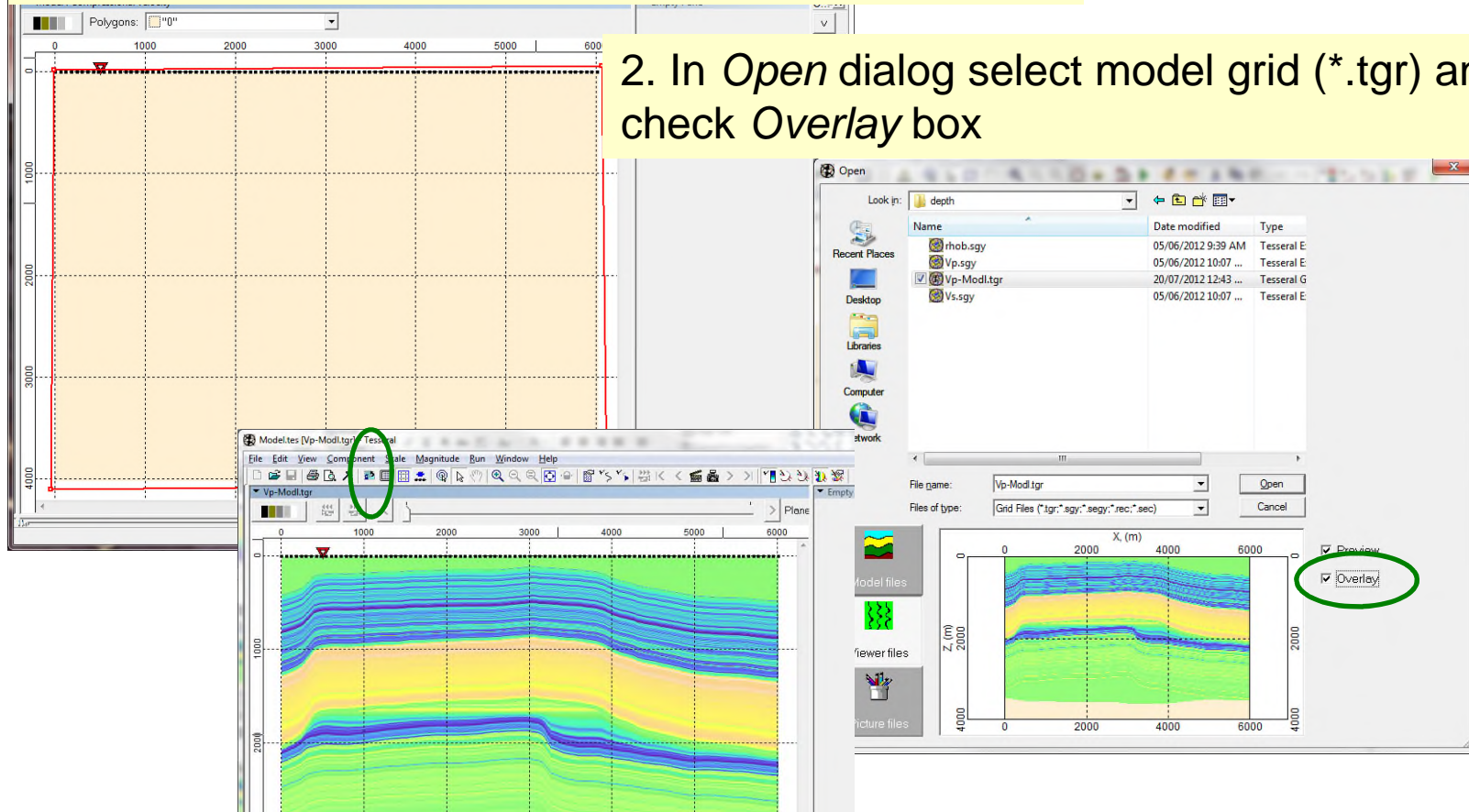


Select available model SEGY grids. Push OK button
 Adjust boundaries in *Grid Model Boundaries Dialog* (OK)
 Flip pictures using toolbar button  to have prototype model as upper image

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

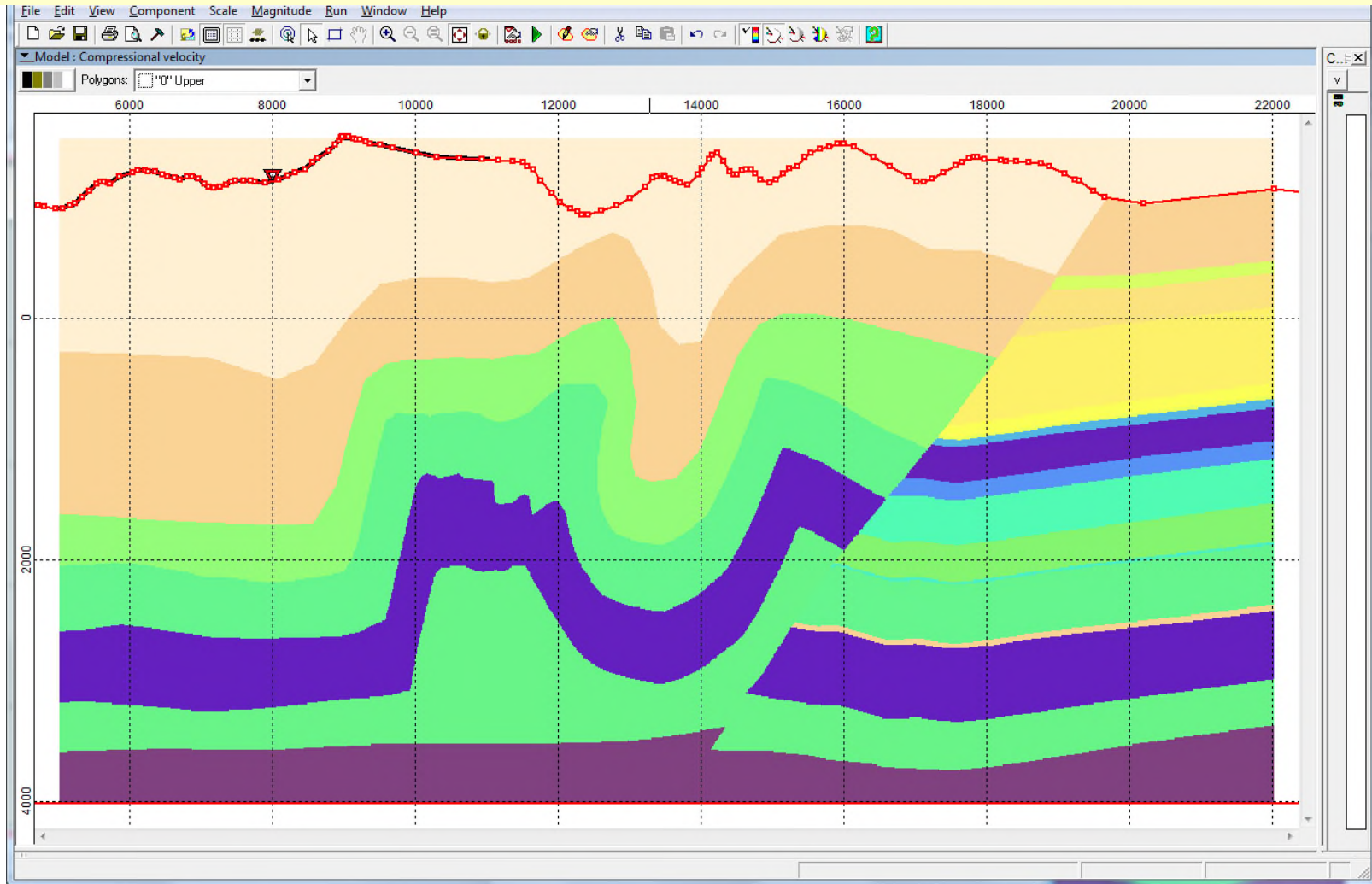
1. Activate panel with *Prototype (Modelbuilder)* model

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



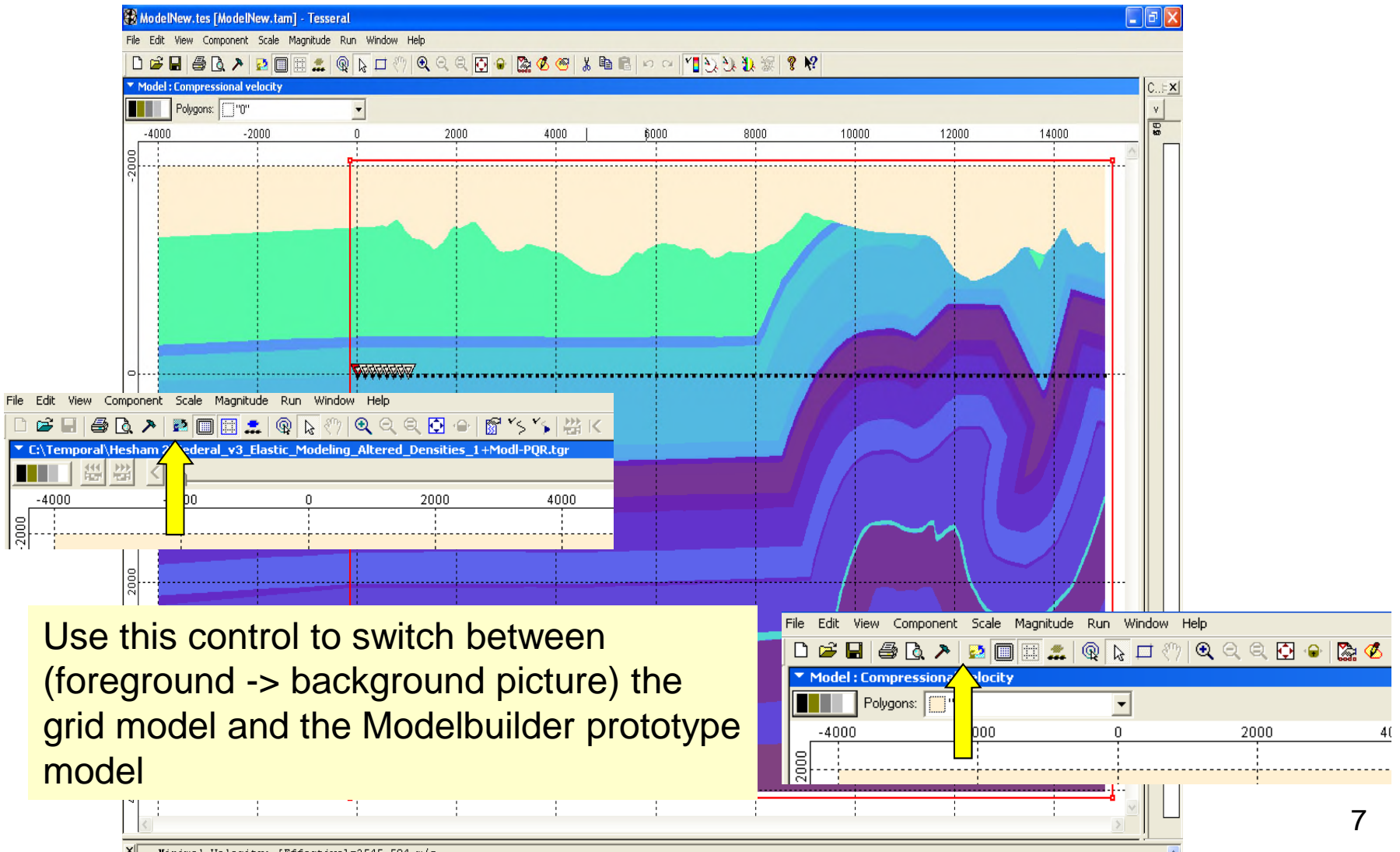
3. Opened grid (Viewer mode) is overlain over Modelbuilder model (Modelbuilder mode). Use *Flip Pictures* button to make Modelbuilder model upper (active).

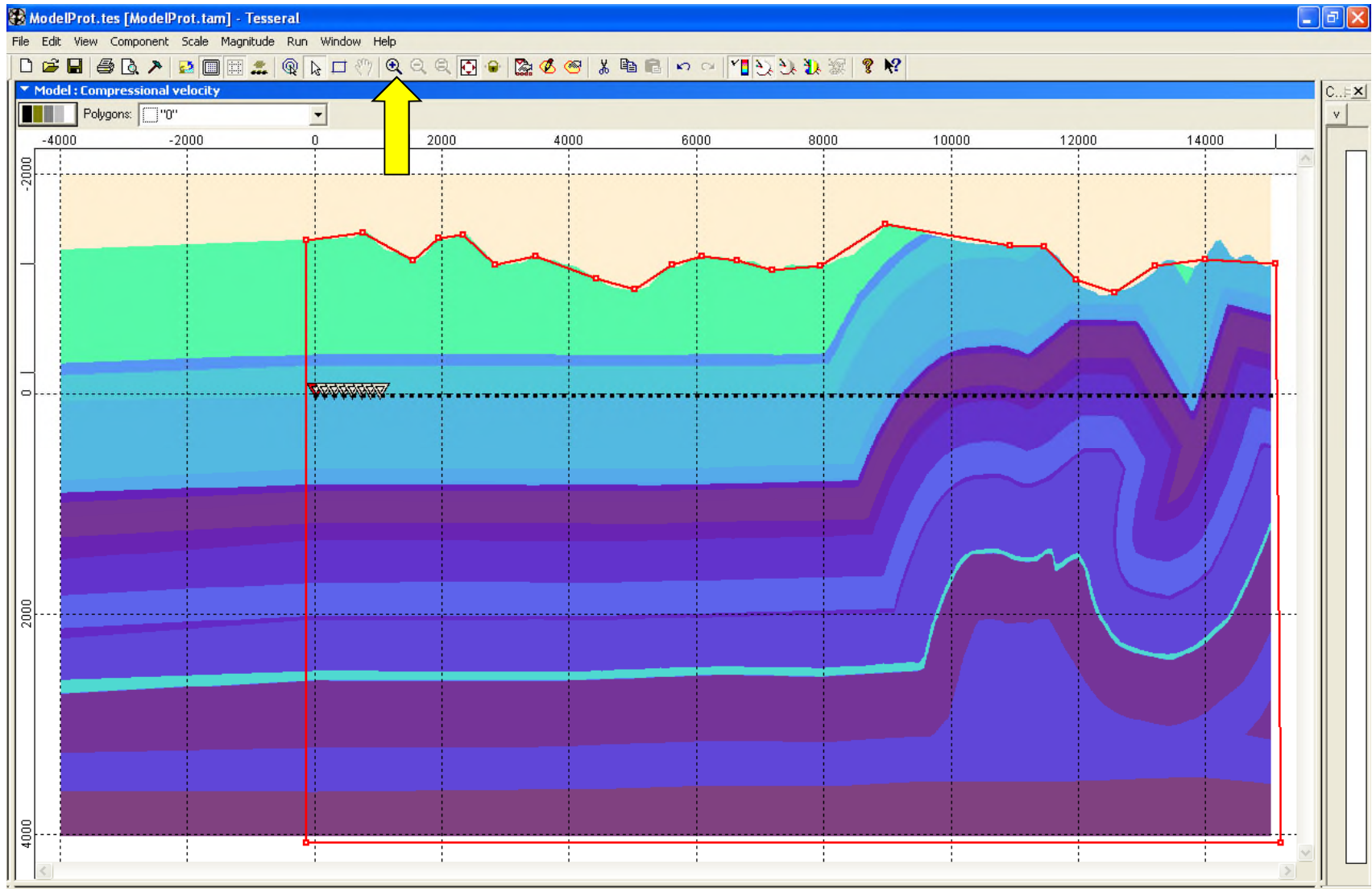
Adjust model prototype surface. It can be done manually or imported in text format.



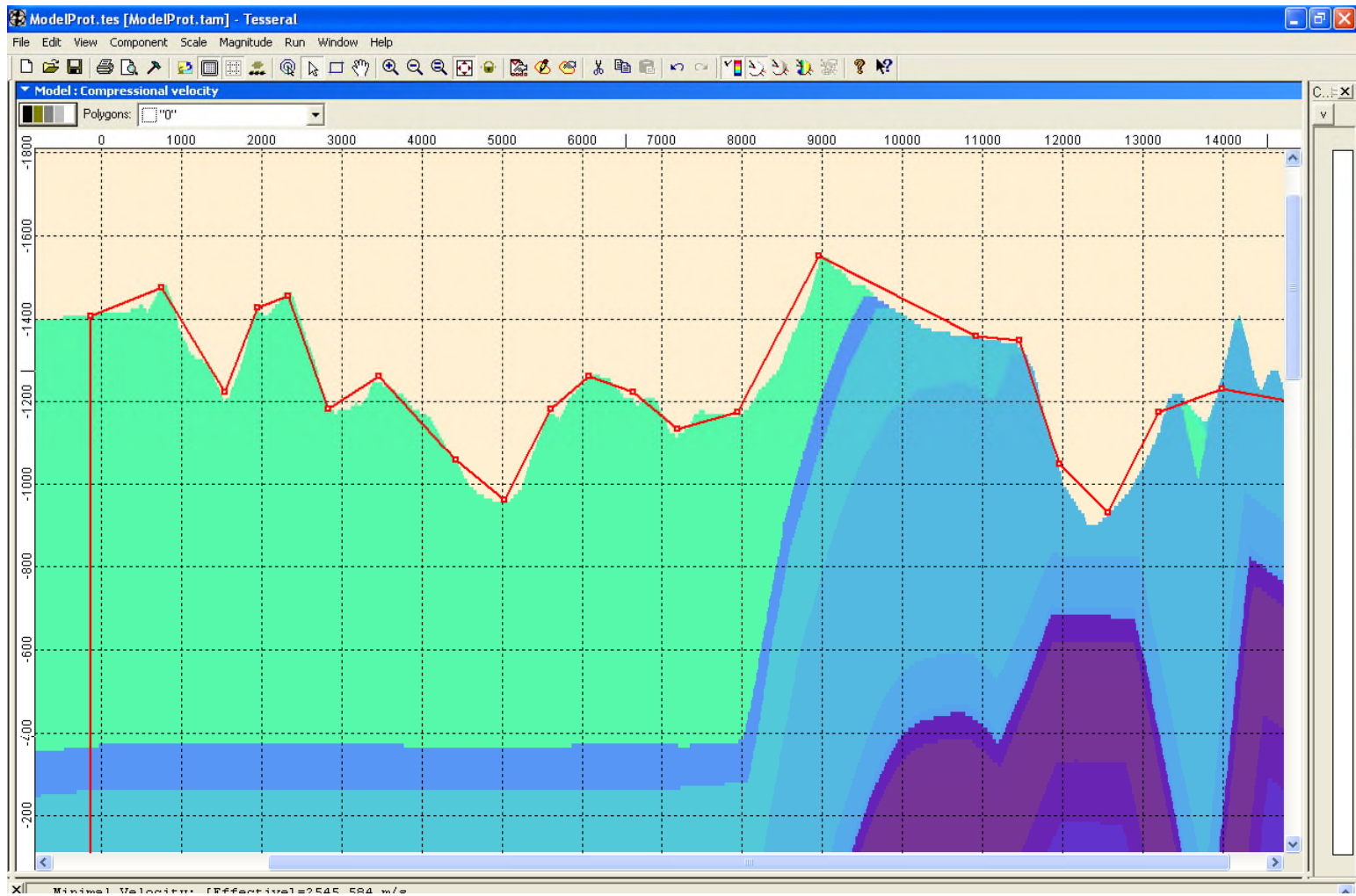
Proceed using modelbuilder options. For example, you can build over model grid other polygons...

Building prototype model for FWM calculation using imported model grid

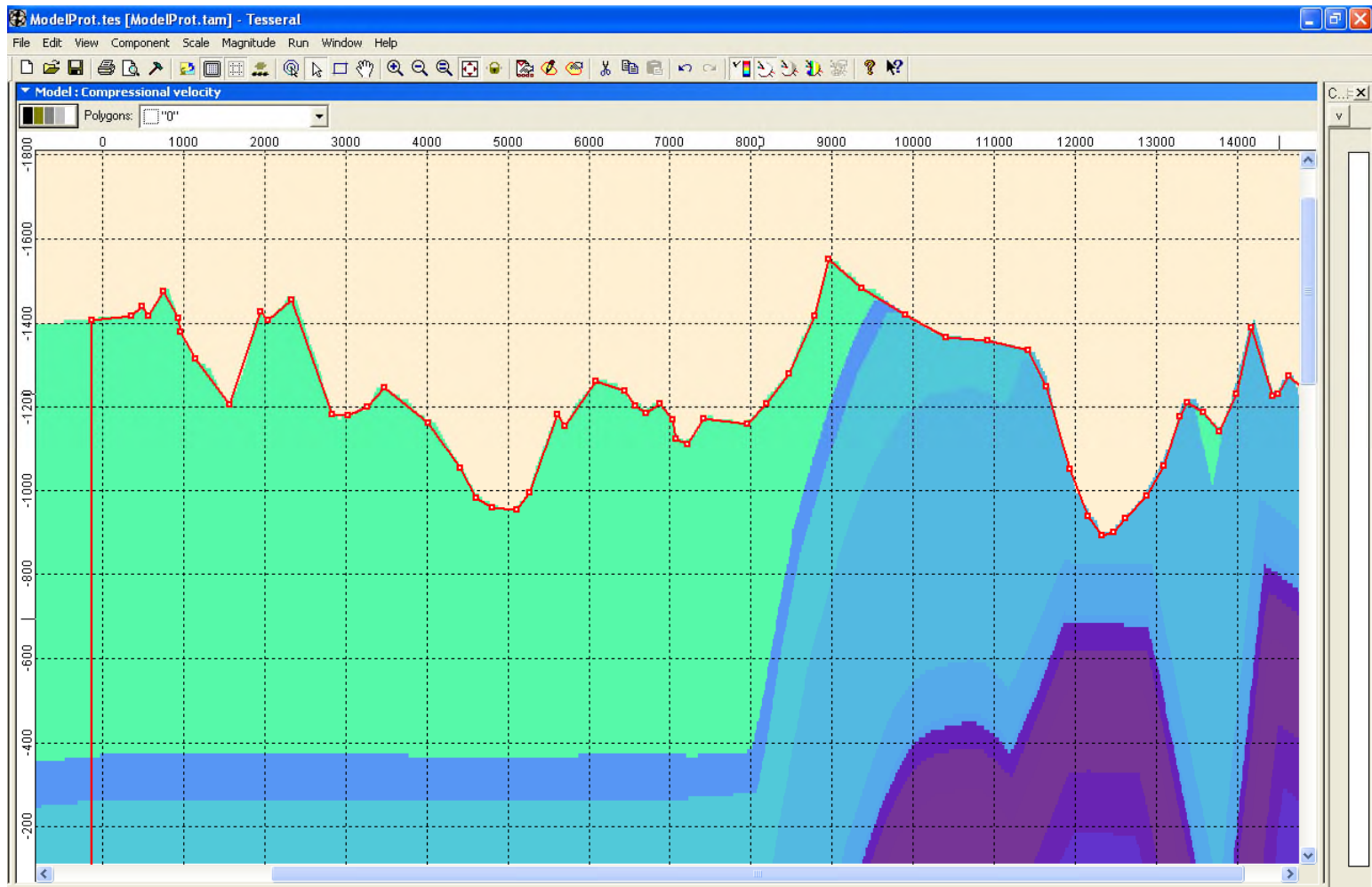




Roughly modify upper boundary of the Modelbuilder model to the grid model relief and then magnify upper part



Magnified upper part of the prototype Modelbuilder model



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

Framework

Cross-section | Source | Observation | Reflectors | Signal

☒ Point

☐ Free

☐ Cable Interval *Projected*

Default

☐ Number :

☐ Interval : m

Computation

Default

☒ Last :

☒ First :

☐ Surface

☐ Reflector

Max angle : deg

Parameters

Default

☐ Frequency : Hz

Mode:

Wavelet:

☐ Vertical Source

OK Cancel Help

Framework

Cross-section | Source | Observation | Reflectors | Signal

Receivers

Position

☐ Free

☐ Cable Interval *Projected*

☒ Move with source

Default

☒ From : m

☐ Io : m

☐ Interval : m

☐ Margin : m

Snapshots

☒ End Truncation

Every :

Time

Default

☐ Start : s

☐ Stop : s

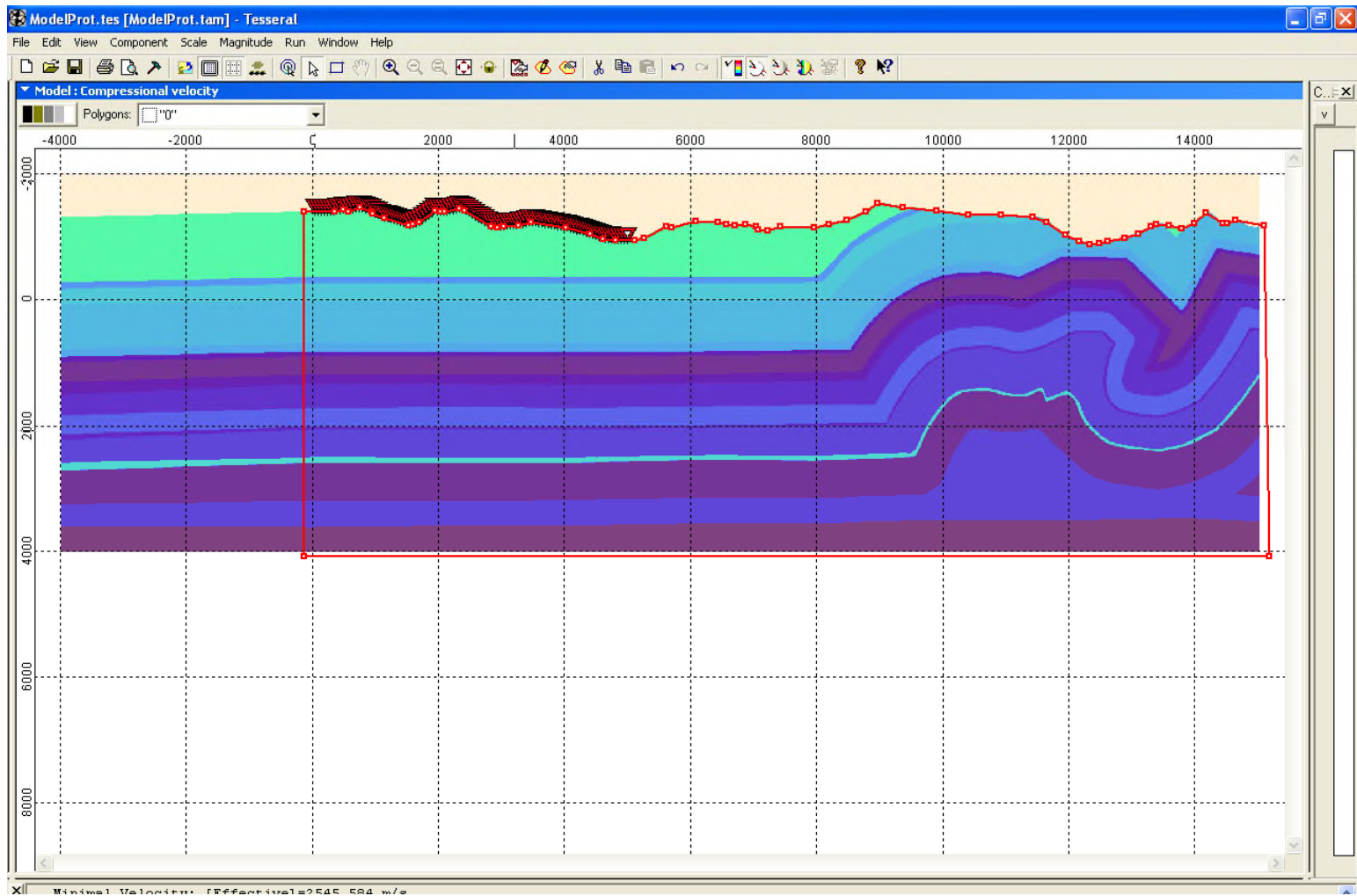
☐ Sample : s

☒ Start : s

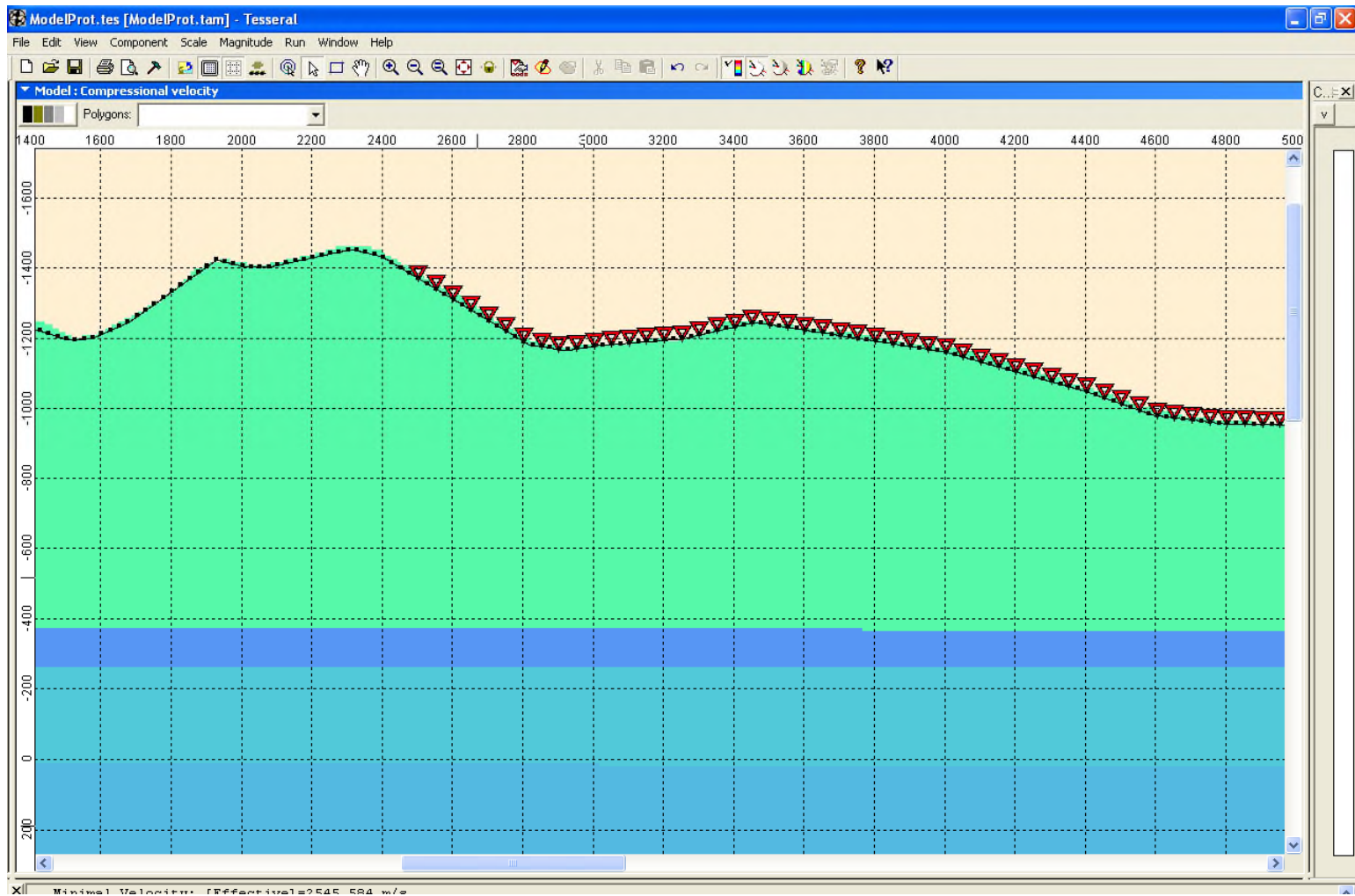
☐ Sample : s

OK Cancel Help

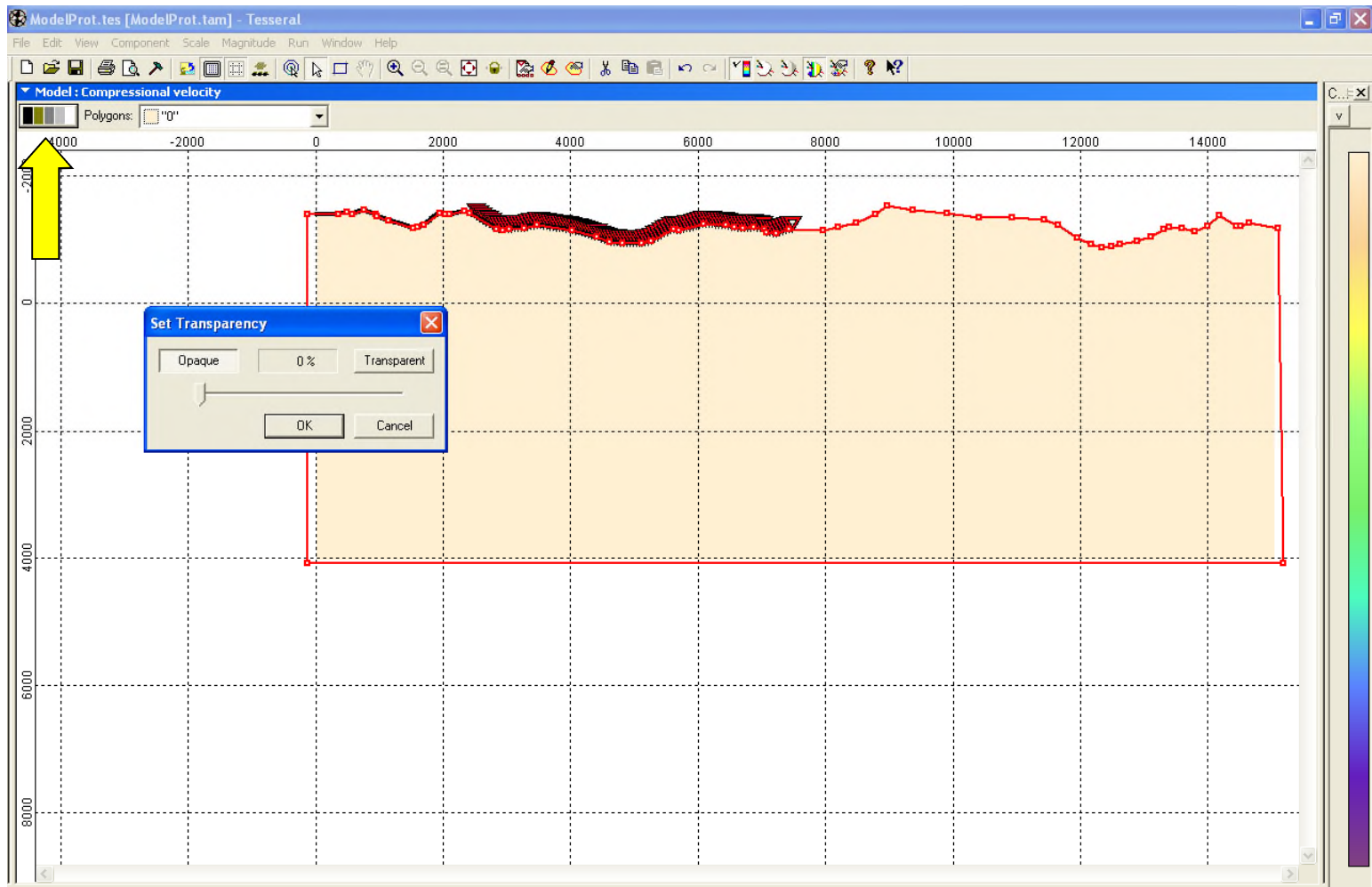
Use “Framework” dialog to enter survey parameters



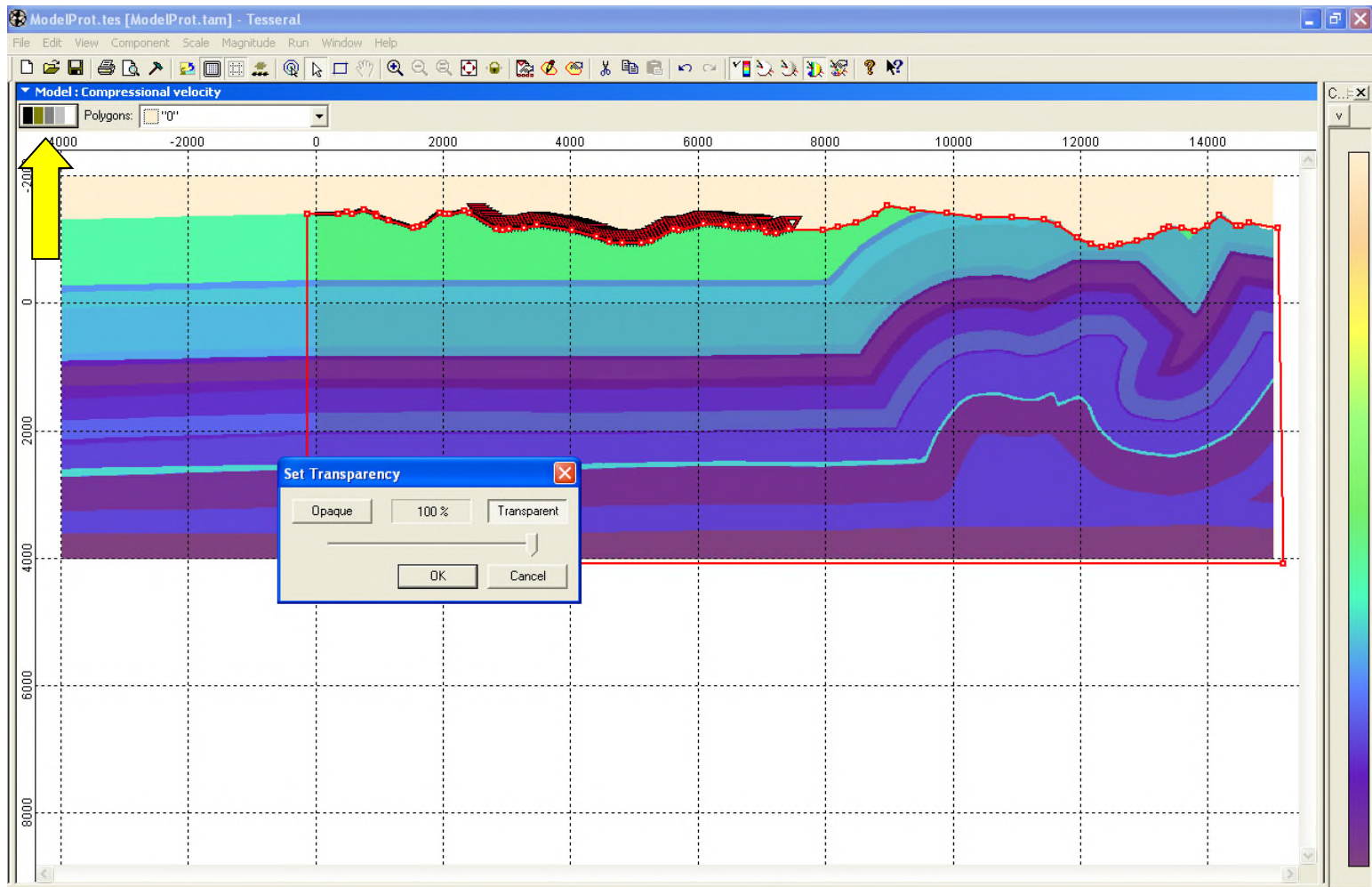
Move receiver line and source line upper the observation surface – they automatically adjust to the surface relief



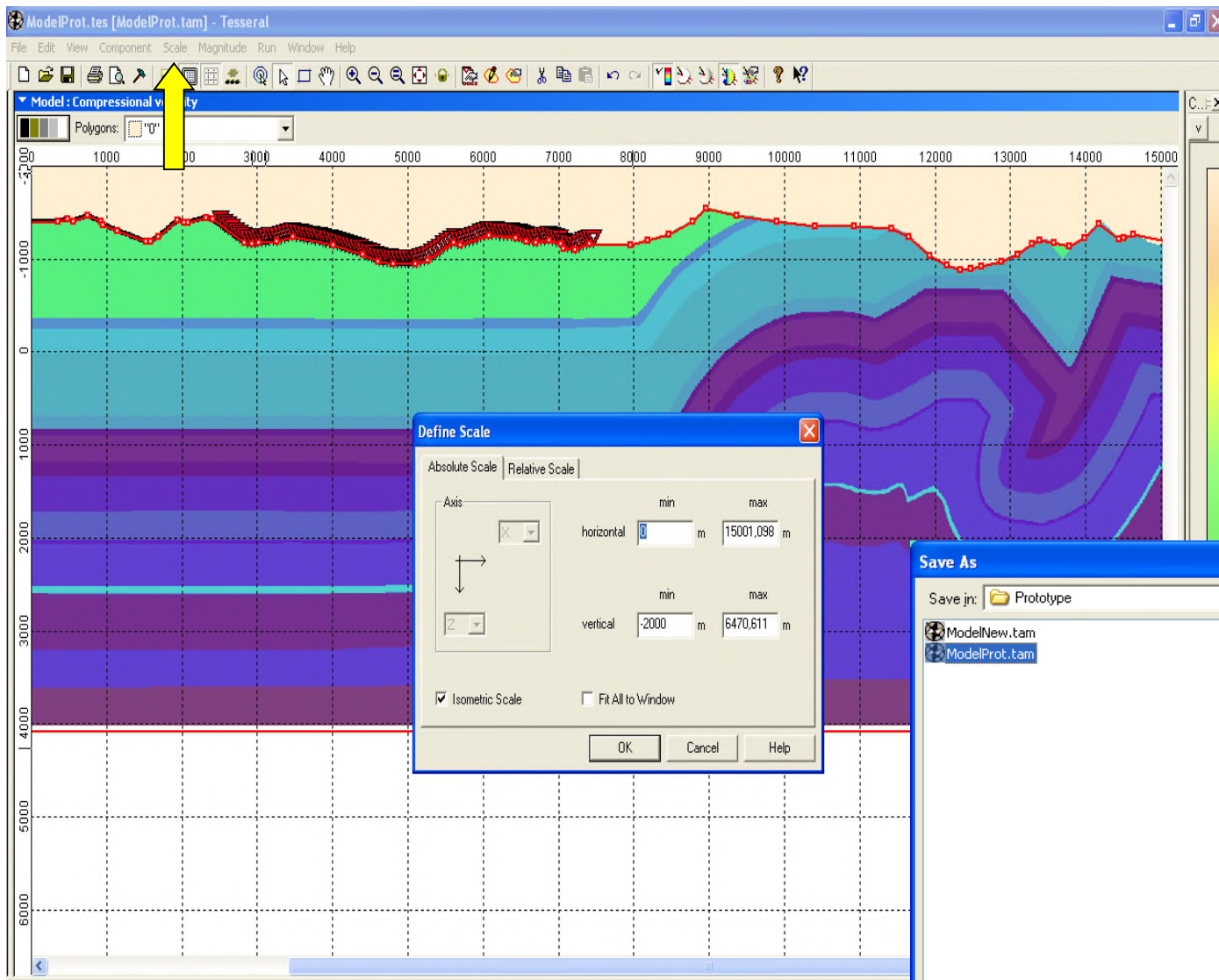
Magnify area where must be first source position and
move first source icon to its position (upper surface)
You also can more precisely set observation surface



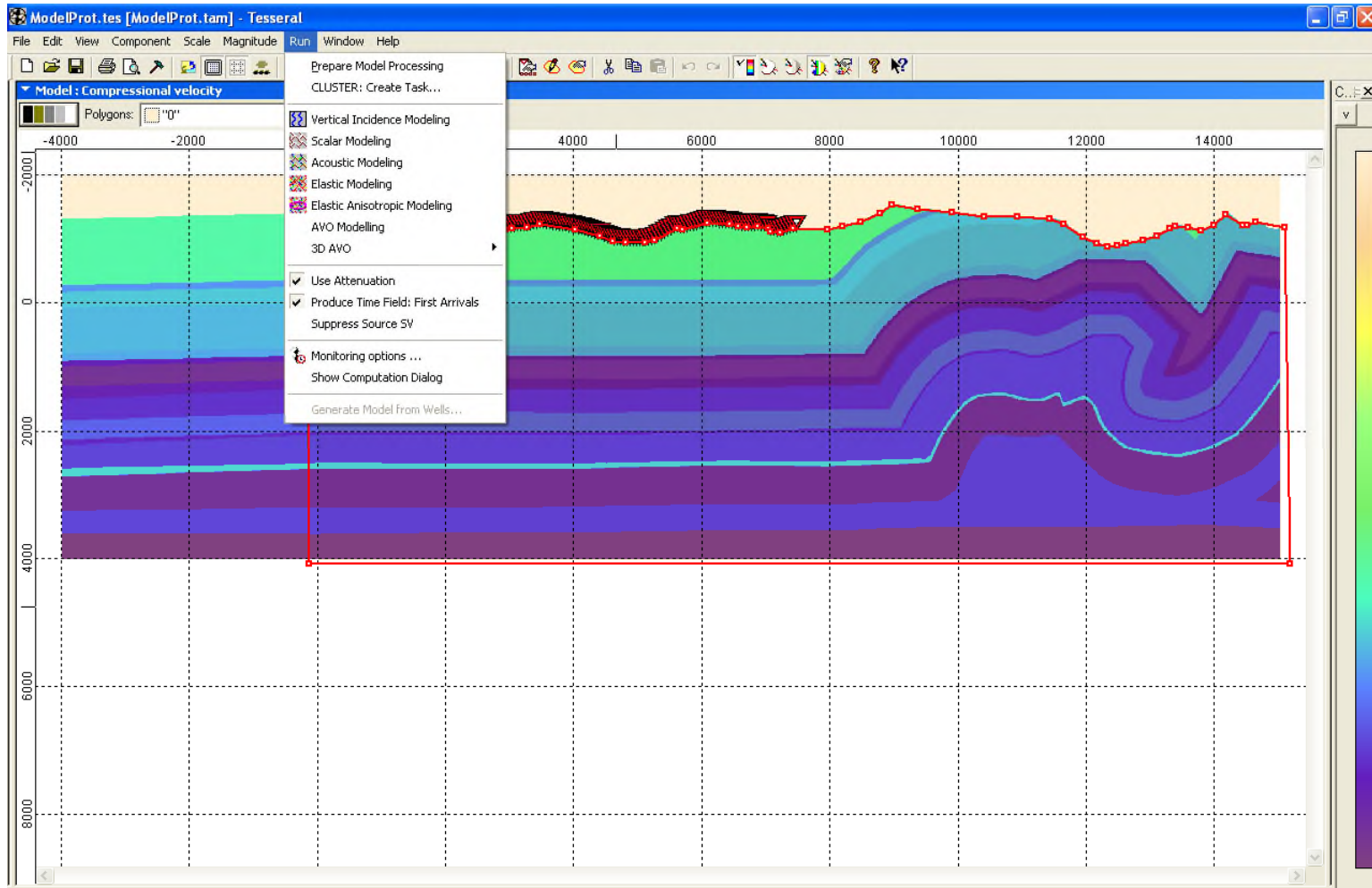
Use "Transparency"->"Opaque" button to see foreground picture only



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