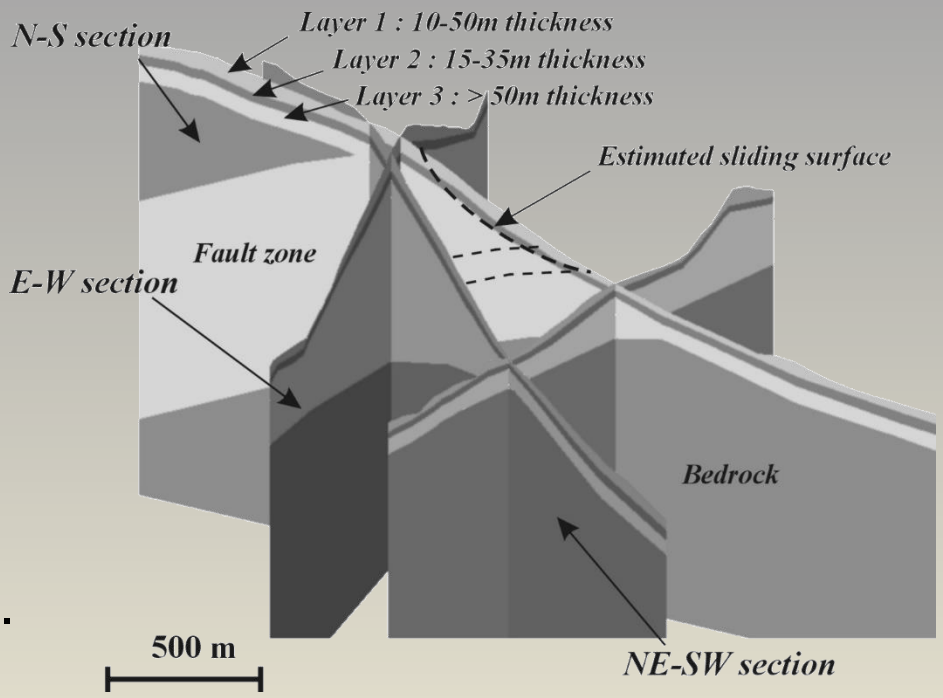
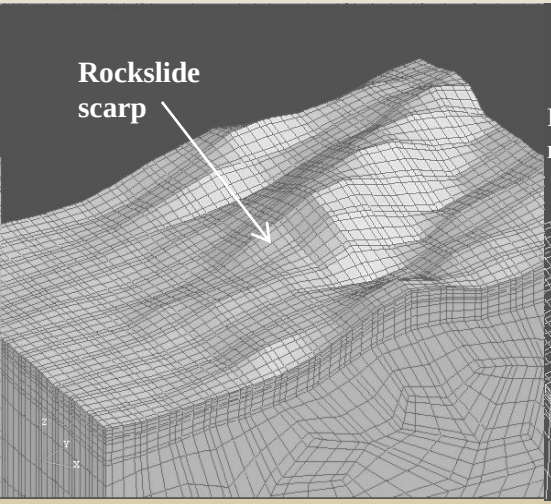
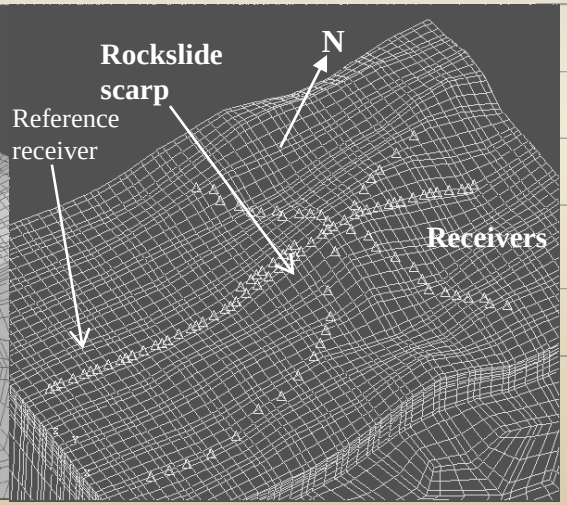
Examples of local complex expert models

- 2D FE-SE models based on sections across the Ananevo site.

- 3D SE model for central part of site.

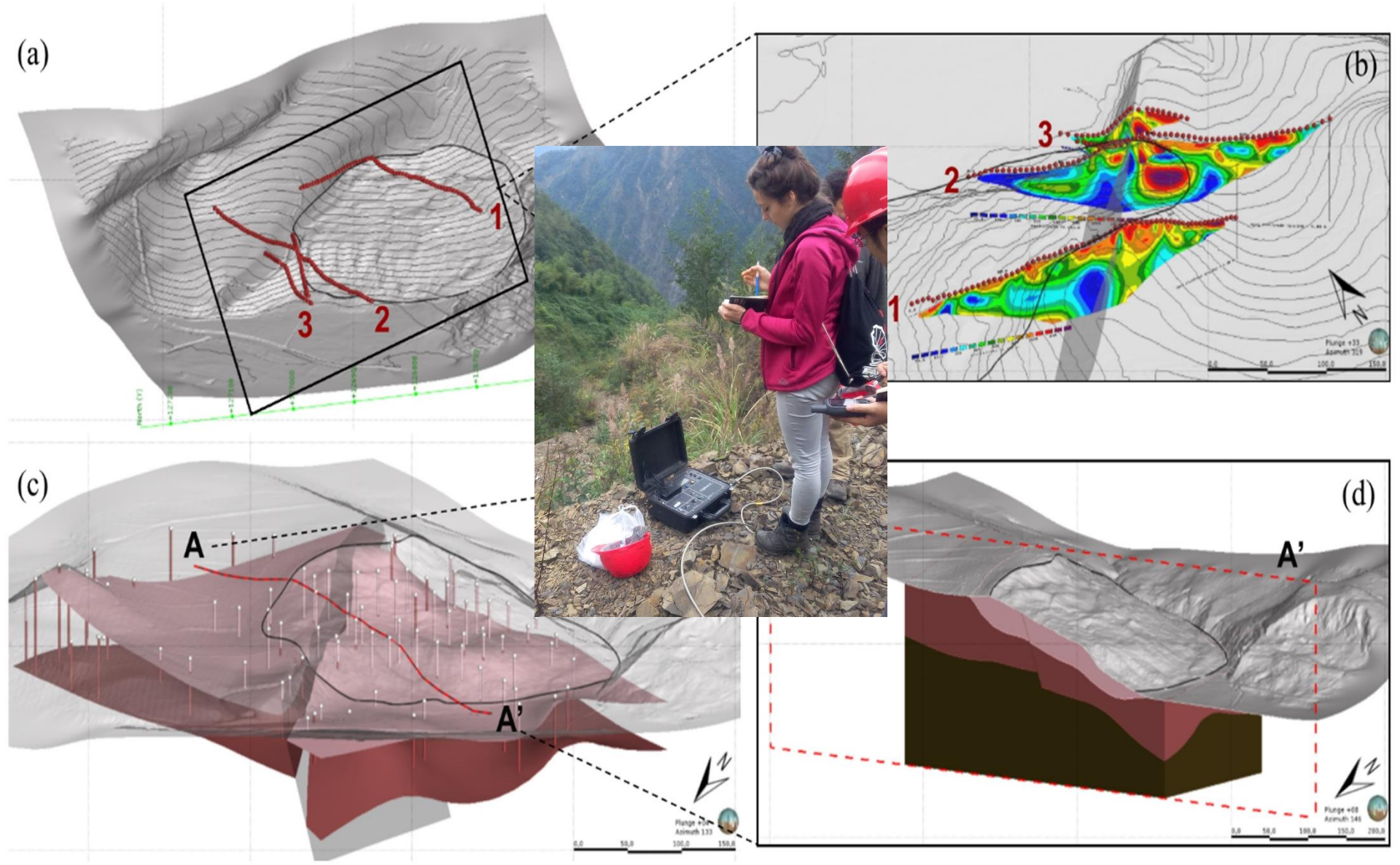






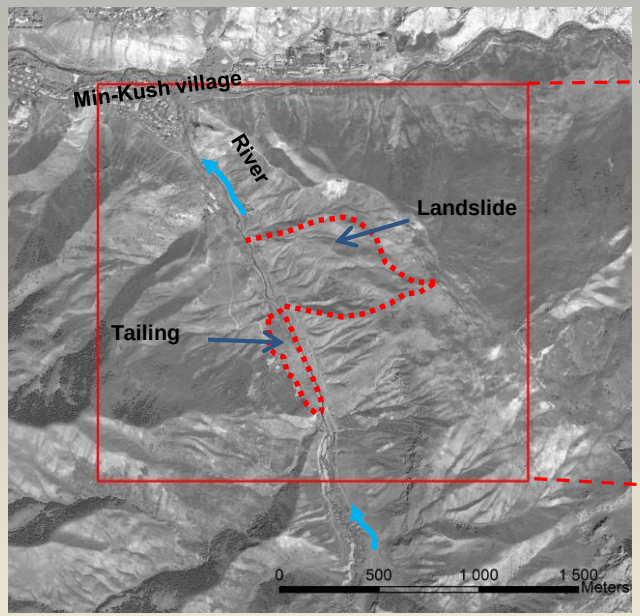
Layer	Vs (m/s)	Qs	Ed (Pa)	ν	Density
1	400	35	7.78e+08	0.33	1.80
2	910	150	4.29e+09	0.30	2.00
3 (+fault)	2180	400	2.81e+10	0.28	2.30
Bedrock	3470	600	7.95e+10	0.25	2.65

Examples of local complex expert models : required inputs : surface + subsurface

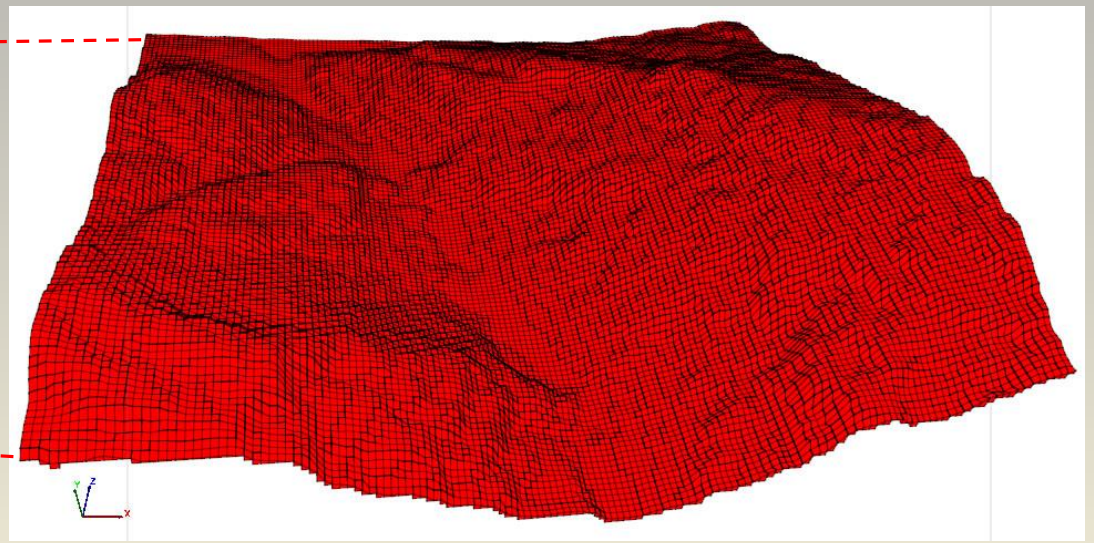


Examples of local complex expert models

The Minkush area: overview



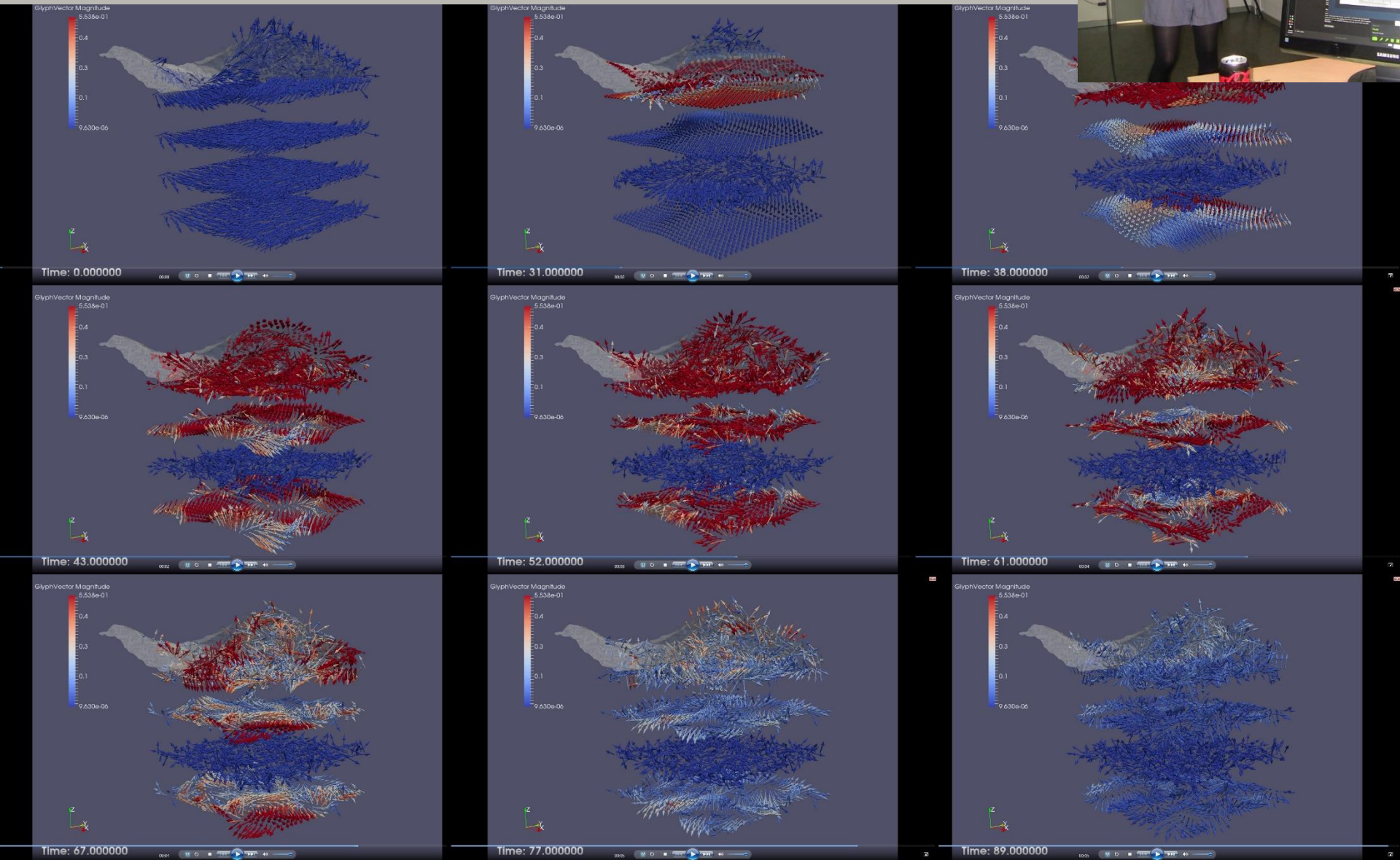
The surface of the FLAC3D model



Specifications of the 3D model:

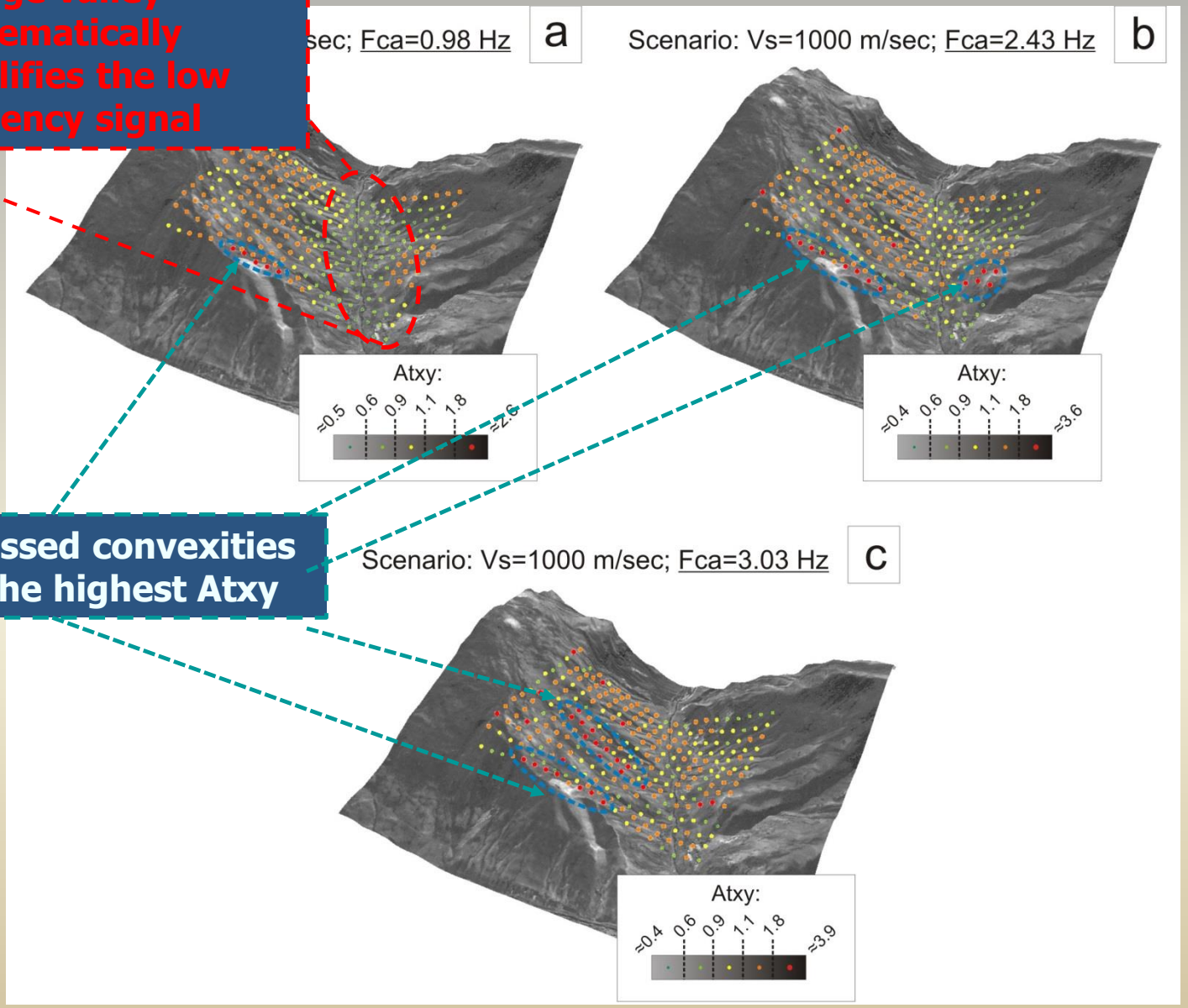
- **Horizontal dimensions: 2.0 x 2.0 km;**
- **Mean height: 1.8 km;**
- **Quadratic FD-zones (15 m) in the inner part of model;**
- **The surface is restored based on SPOT DEM;**
- **Degraded brick-shape FD-zones fully reproduce the original smoothness of surface.**

Examples of local complex expert models



Examples of local complex expert models

Large valley systematically deamplifies the low frequency signal



More expressed convexities produce the highest Atxy