

# Short Course on

## Rock slope stability analyses

### From photogrammetric 3D models to stability assessment

The course addresses the following topics with real world cases from surface mining

- 3D model generation from aerial and terrestrial imagery
- Mapping geological structures from photogrammetric 3D models using interactive and automatic methods
- Rock mass parameters and stability assessment using 3D modelling techniques
- Integration of radar monitoring data
- Future of mining geotechnical digital twins: mapping – modelling – monitoring

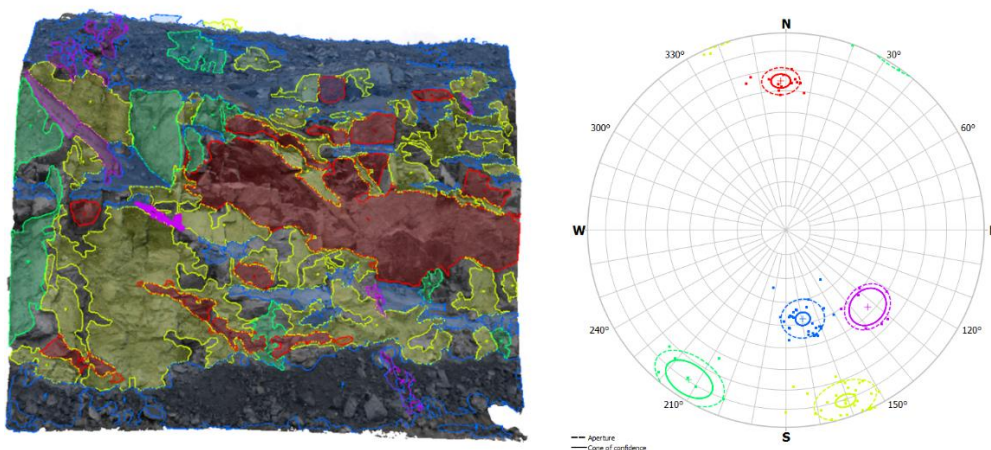


Figure 1: Automatic analysis of discontinuity areas (left) and automatic grouping into sets (right)

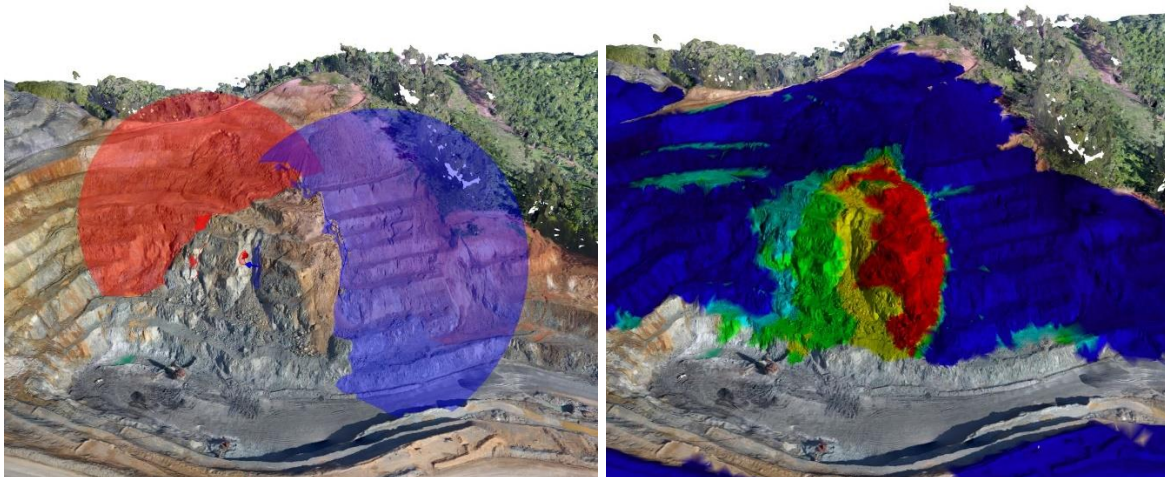


Figure 2: Detailed 3D model and mapped major structures including orientation information (left); Displacement data from radar combined with detailed 3D model (right)

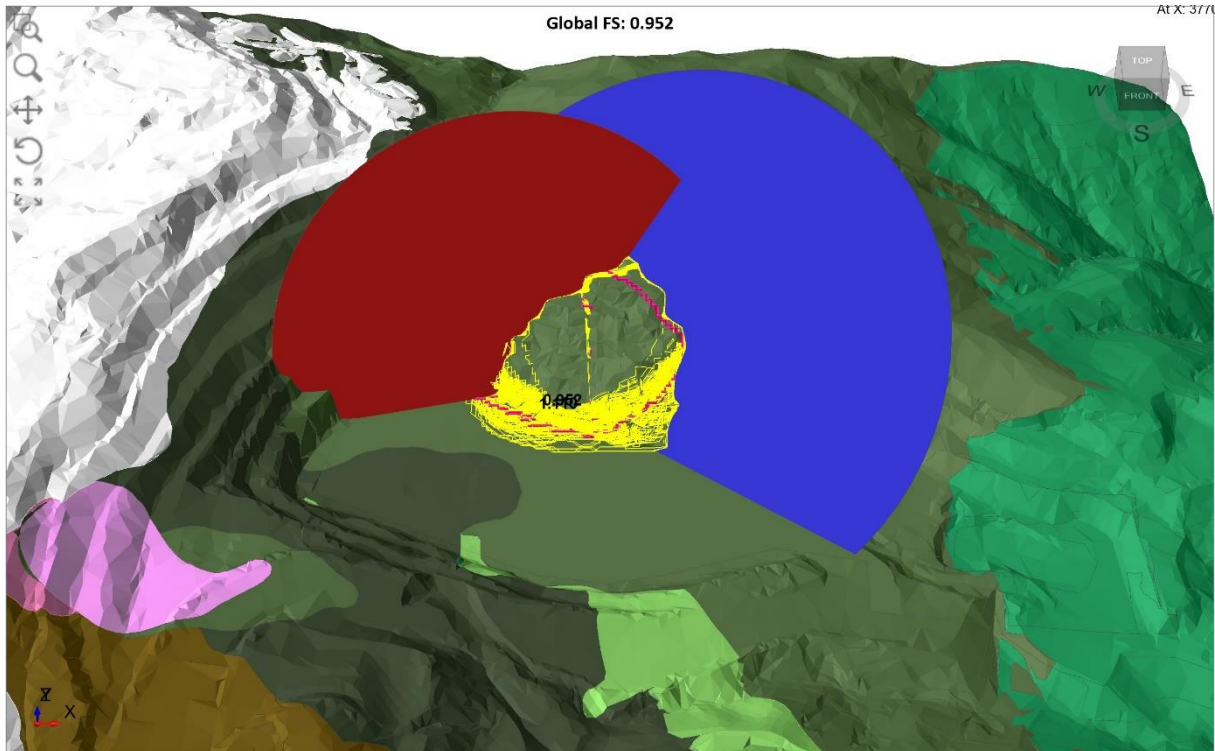


Figure 3: 3D model in limit equilibrium analysis software Slide3

Duration: half day

Presenters:

- Neil Bar, Gecko Geotechnics, St. Vincent and the Grenadines
- Andreas Gaich, 3GSM, Austria
- Markus Pötsch, 3GSM, Austria

