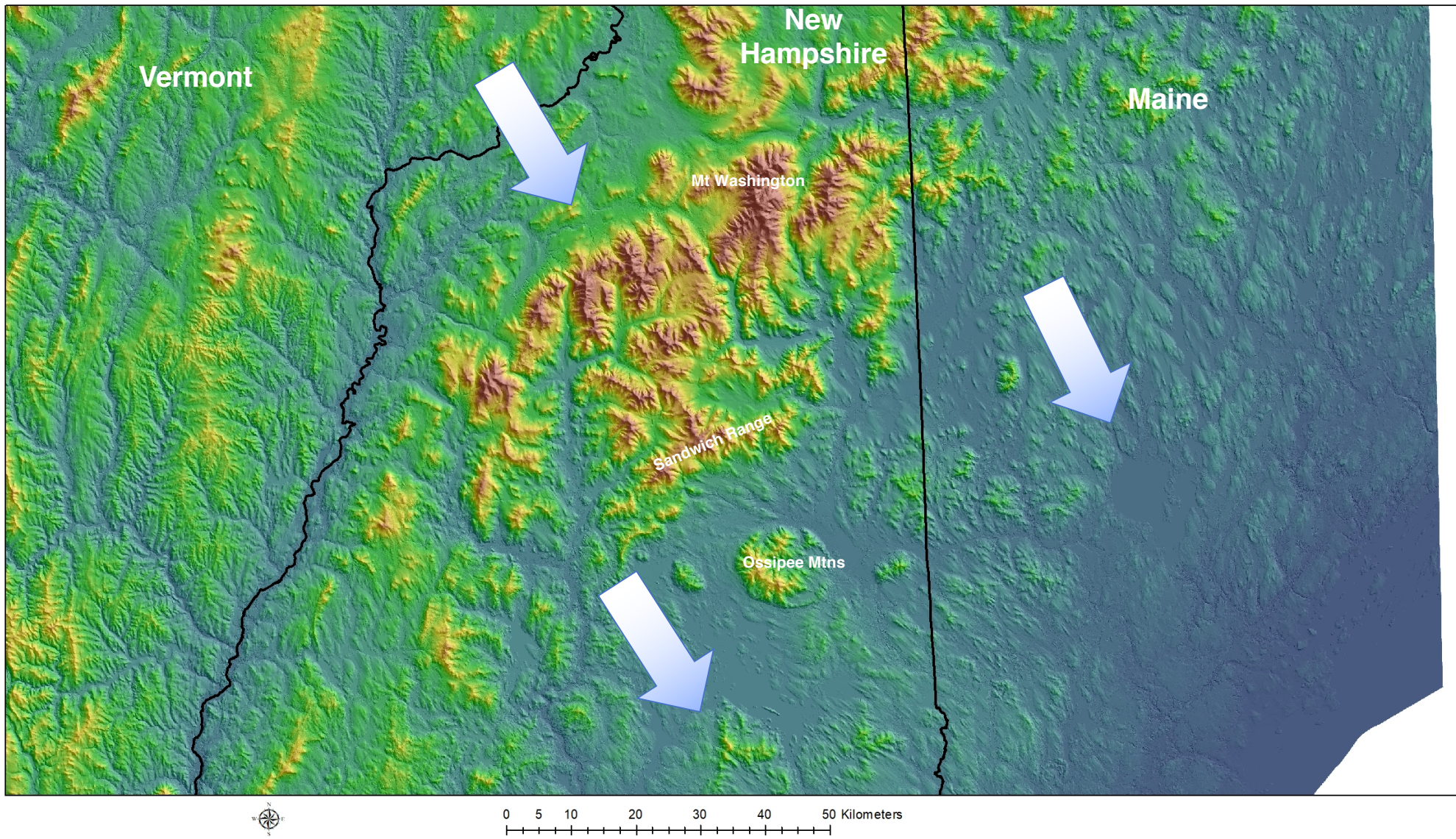
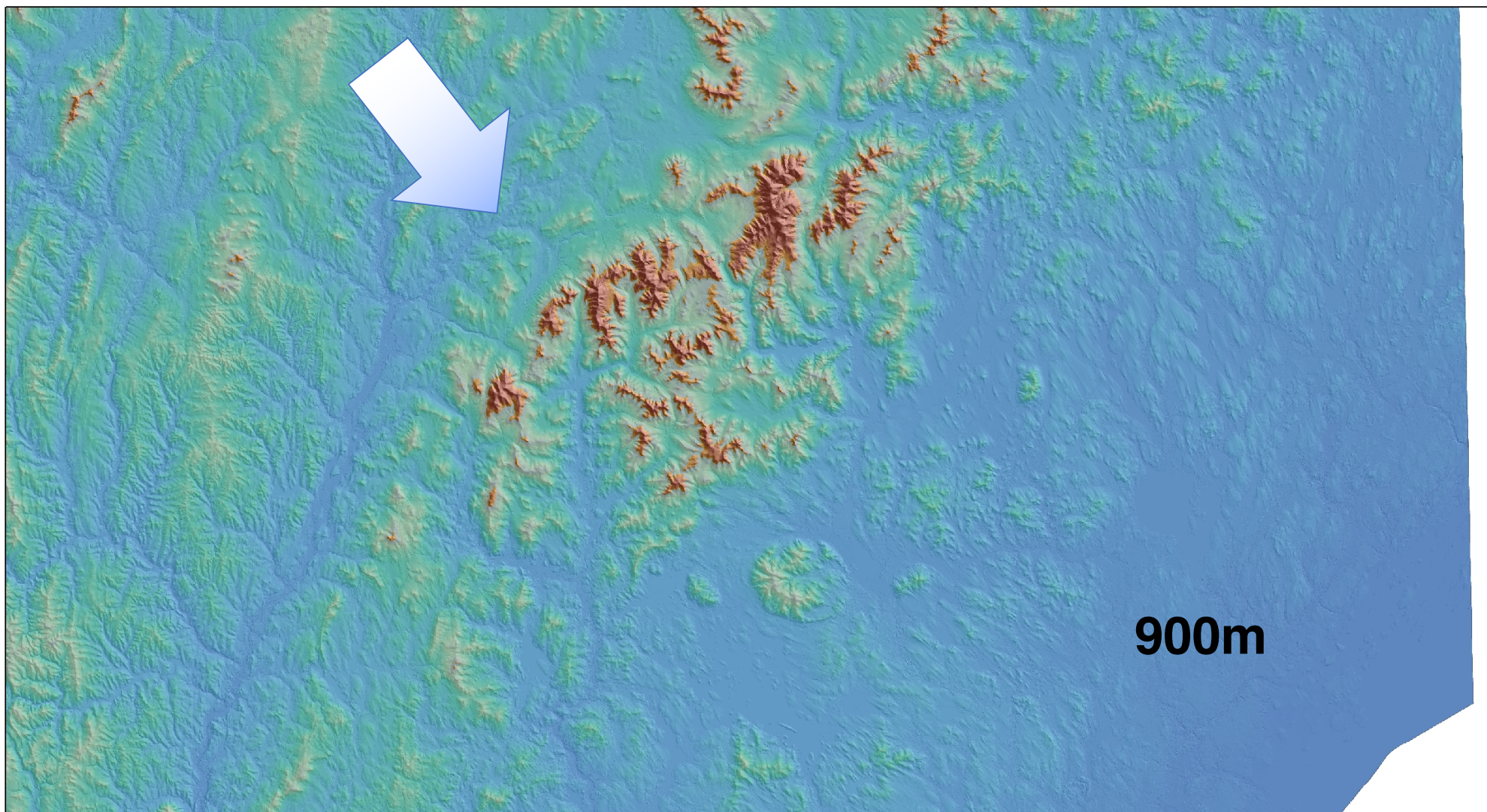




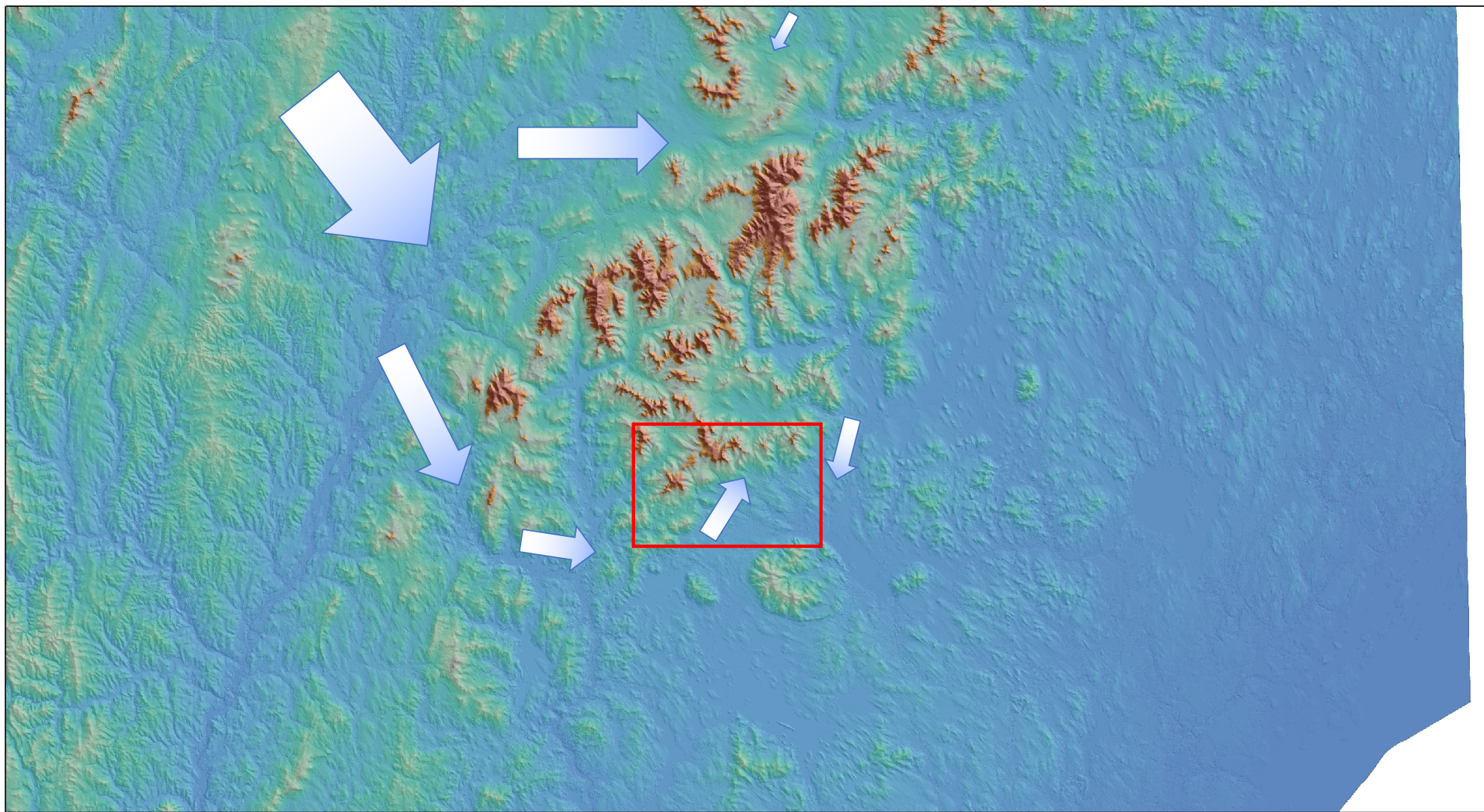
Evidence for Northeast Flowing Ice in the Lee of the Sandwich Range, New Hampshire

**Robert M. Newton
Department of Geosciences
Smith College, Northampton MA**





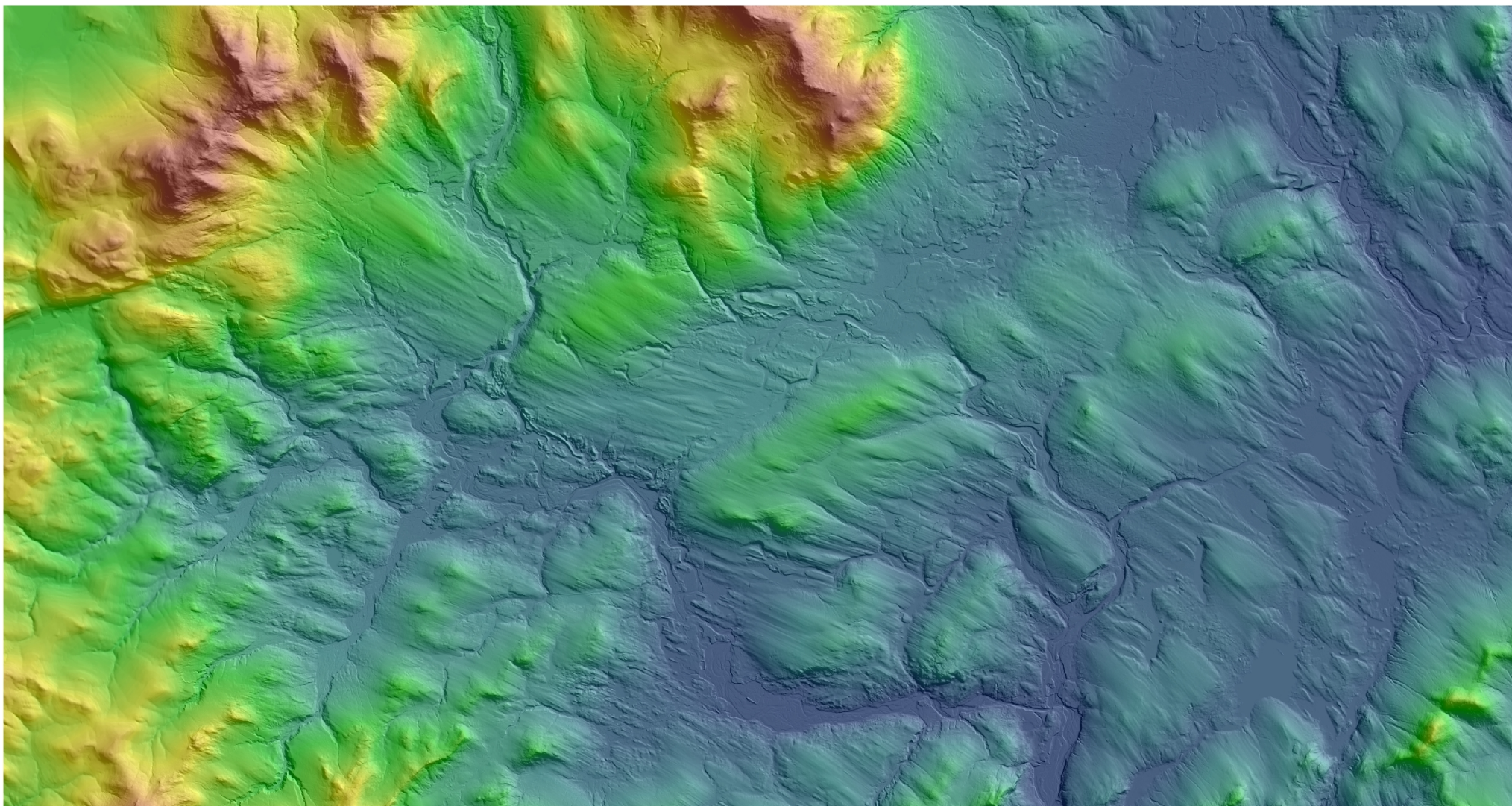
0 5 10 20 30 40 50 Kilometers



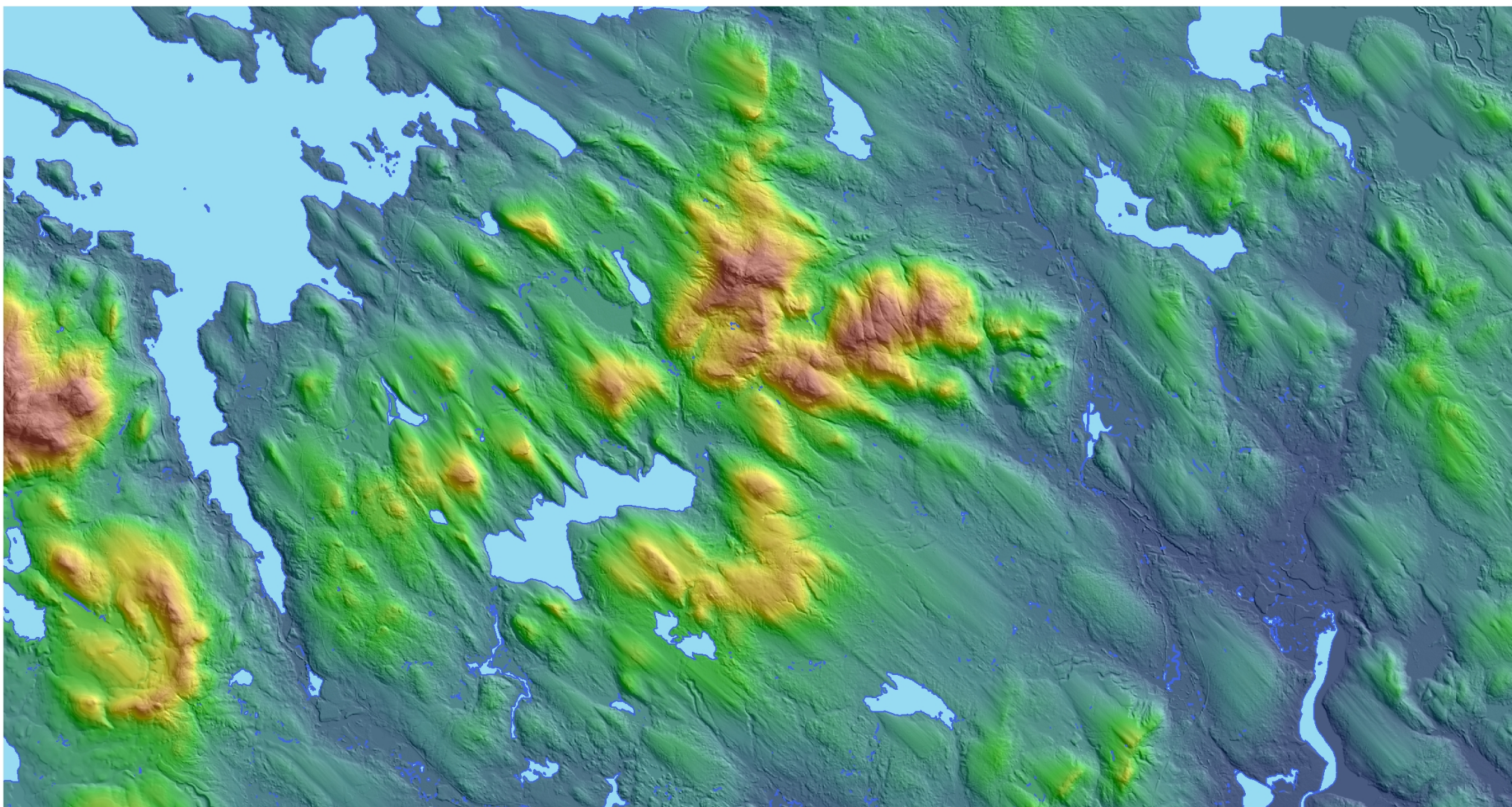
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How do we determine ice flow direction?

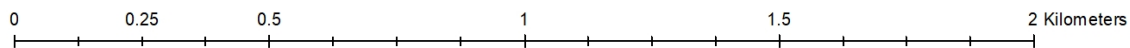
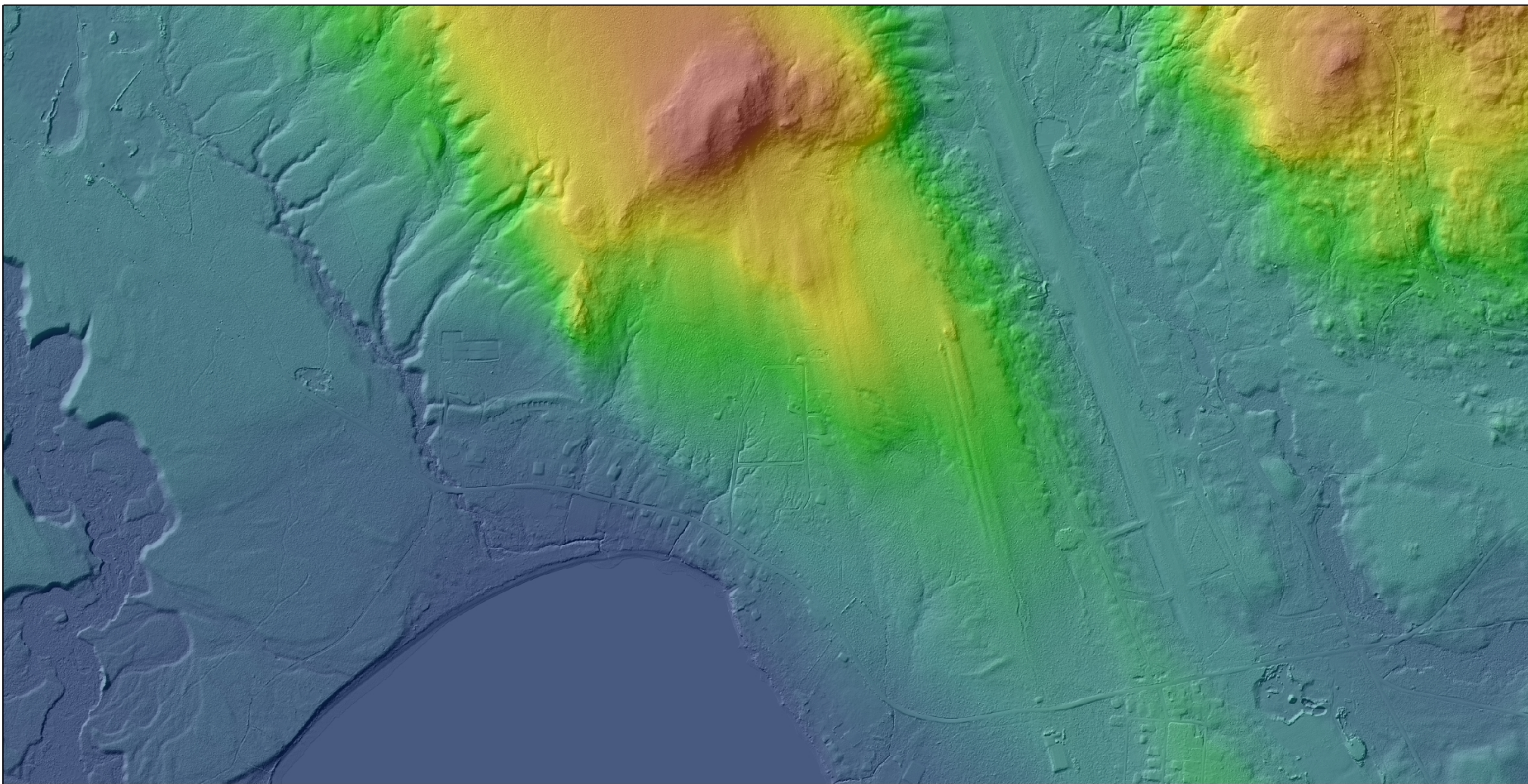
- **Striations – limited exposures – local influence**
- **Large Linear features – drumlin, flutes etc.**
- **Digital Elevation Models (DEM's)**
 - **DEM (10m) and LiDAR based DEM (1m)**
 - **Proper use of hillshading is critical**
NE, NW, Slope, Cluster Hillshade, Multi Directional
Oblique Weighted Hillshade (MDOW, Terrain Tools).

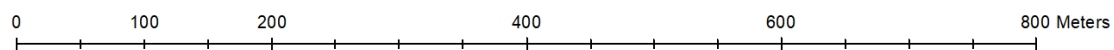
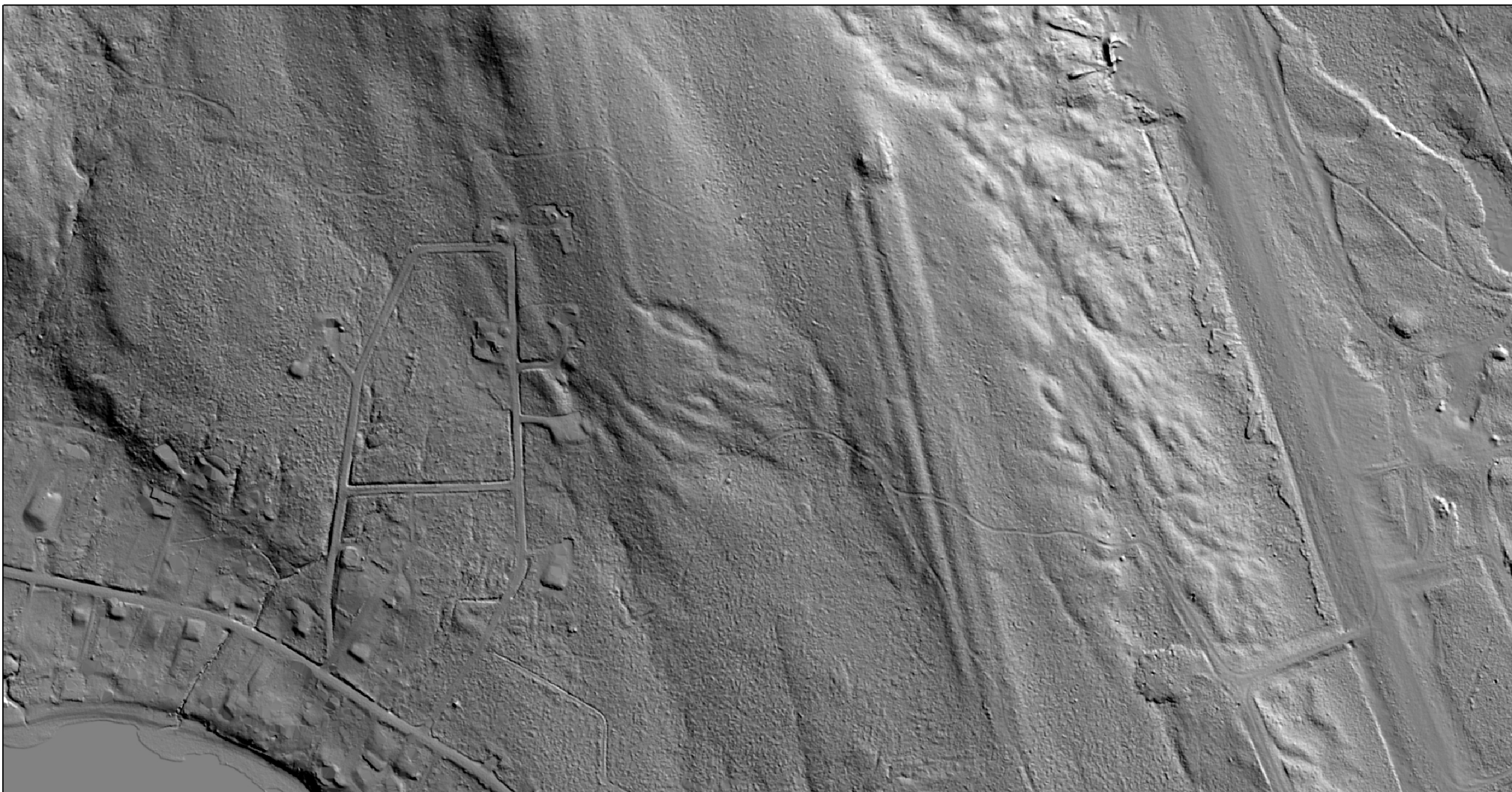


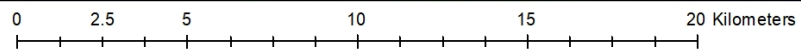
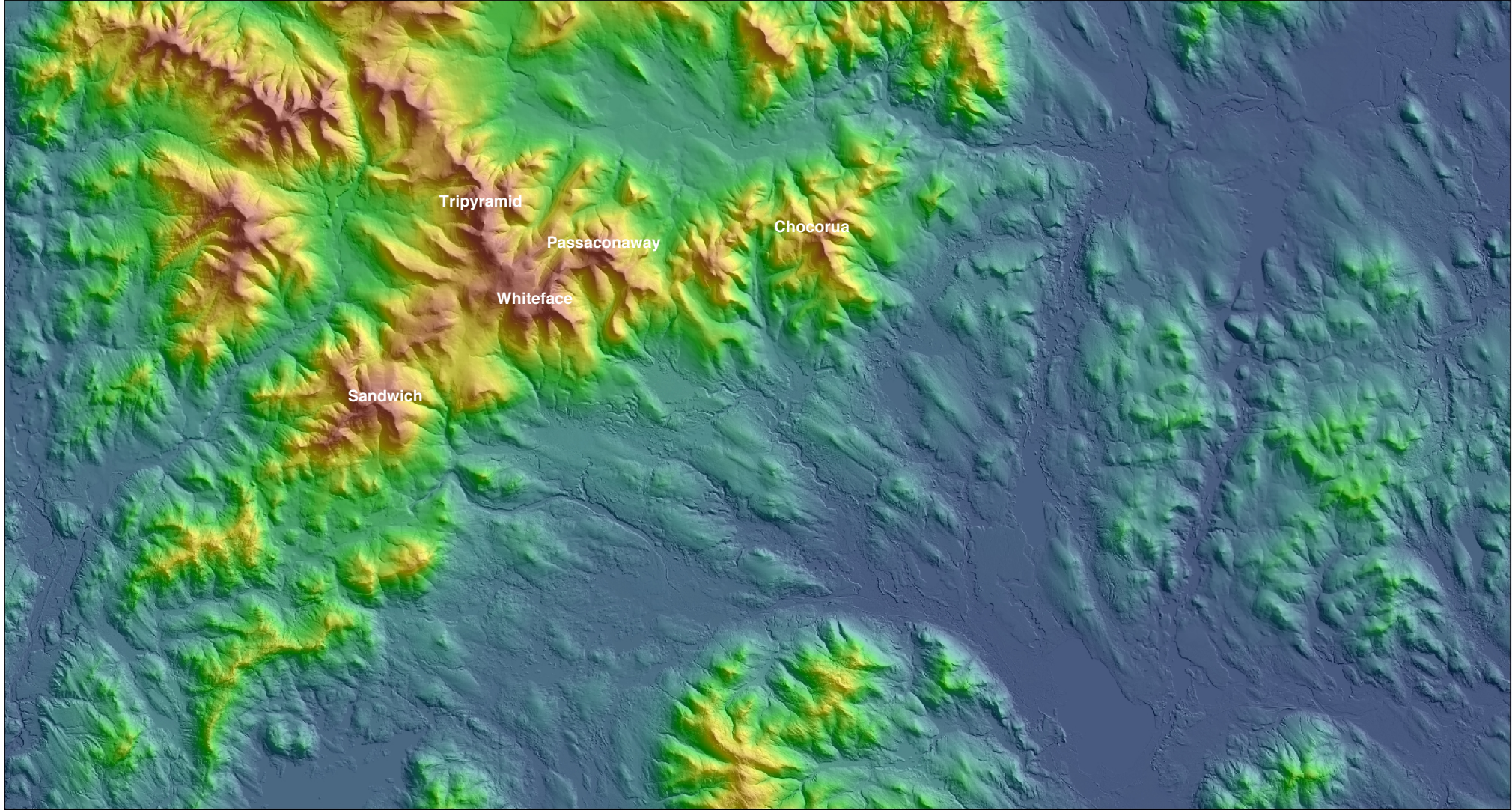
0 1 2 4 6 8 10 Kilometers

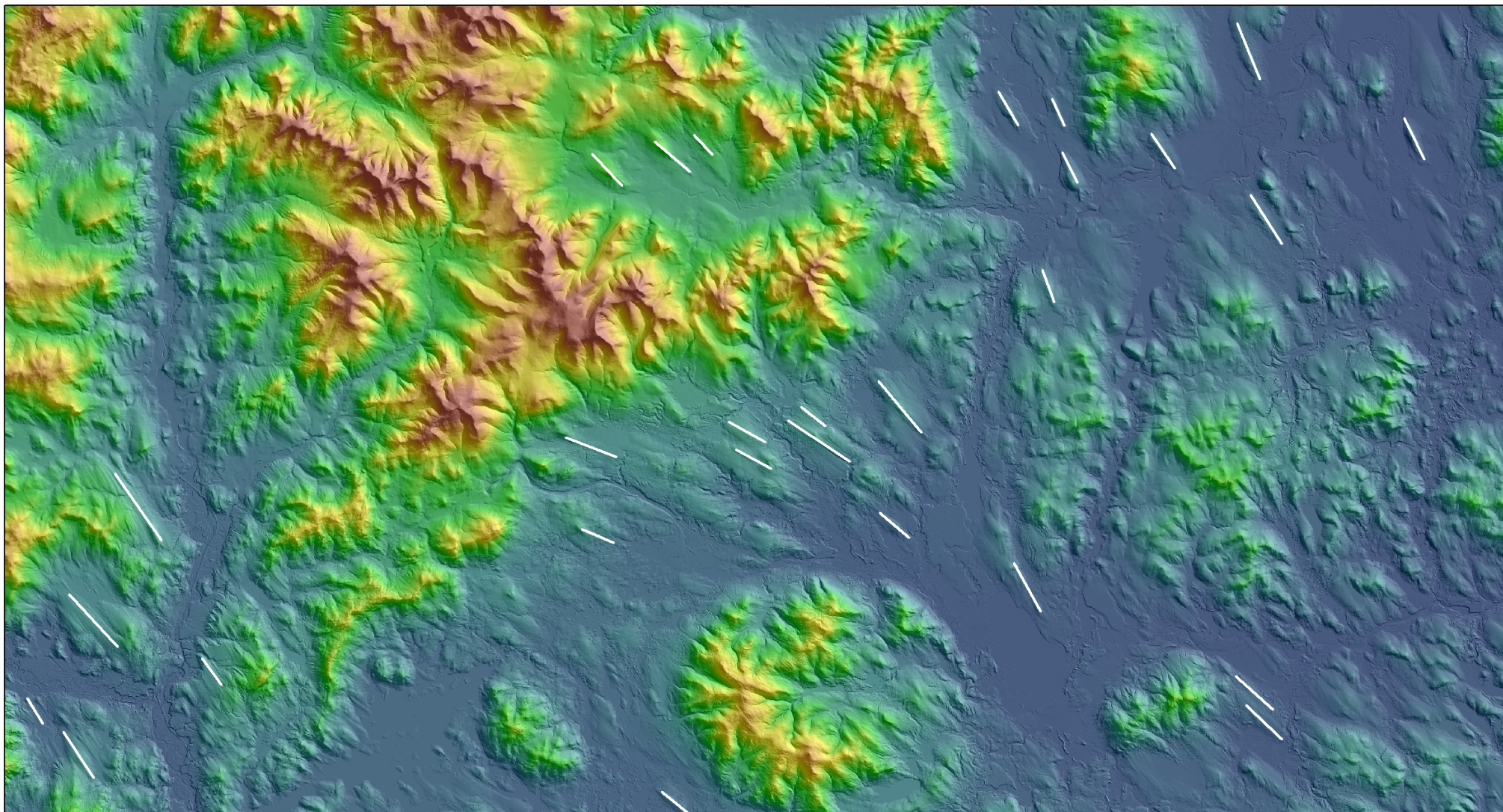


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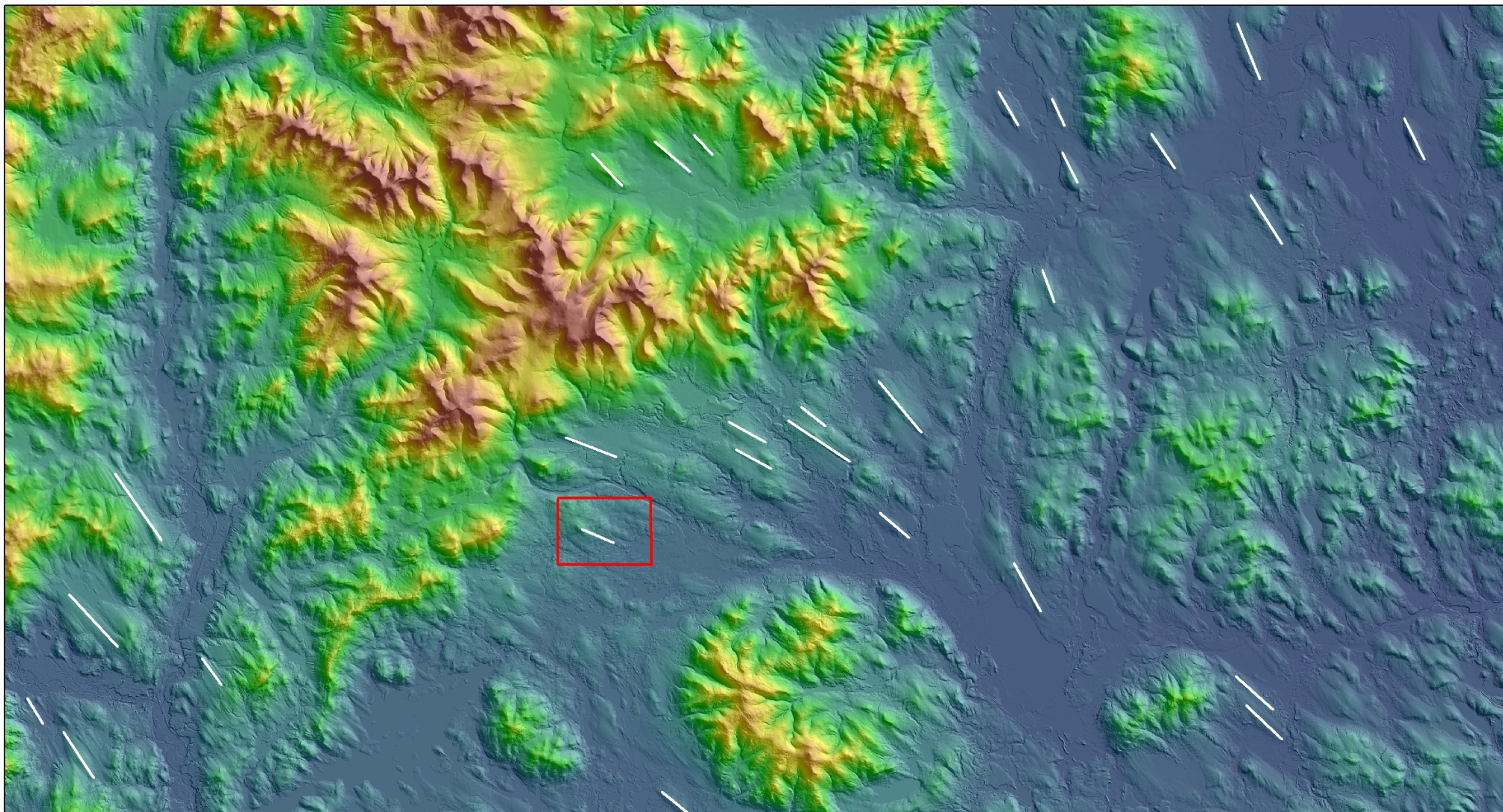




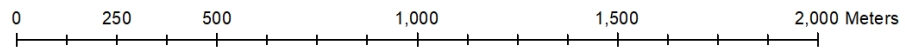
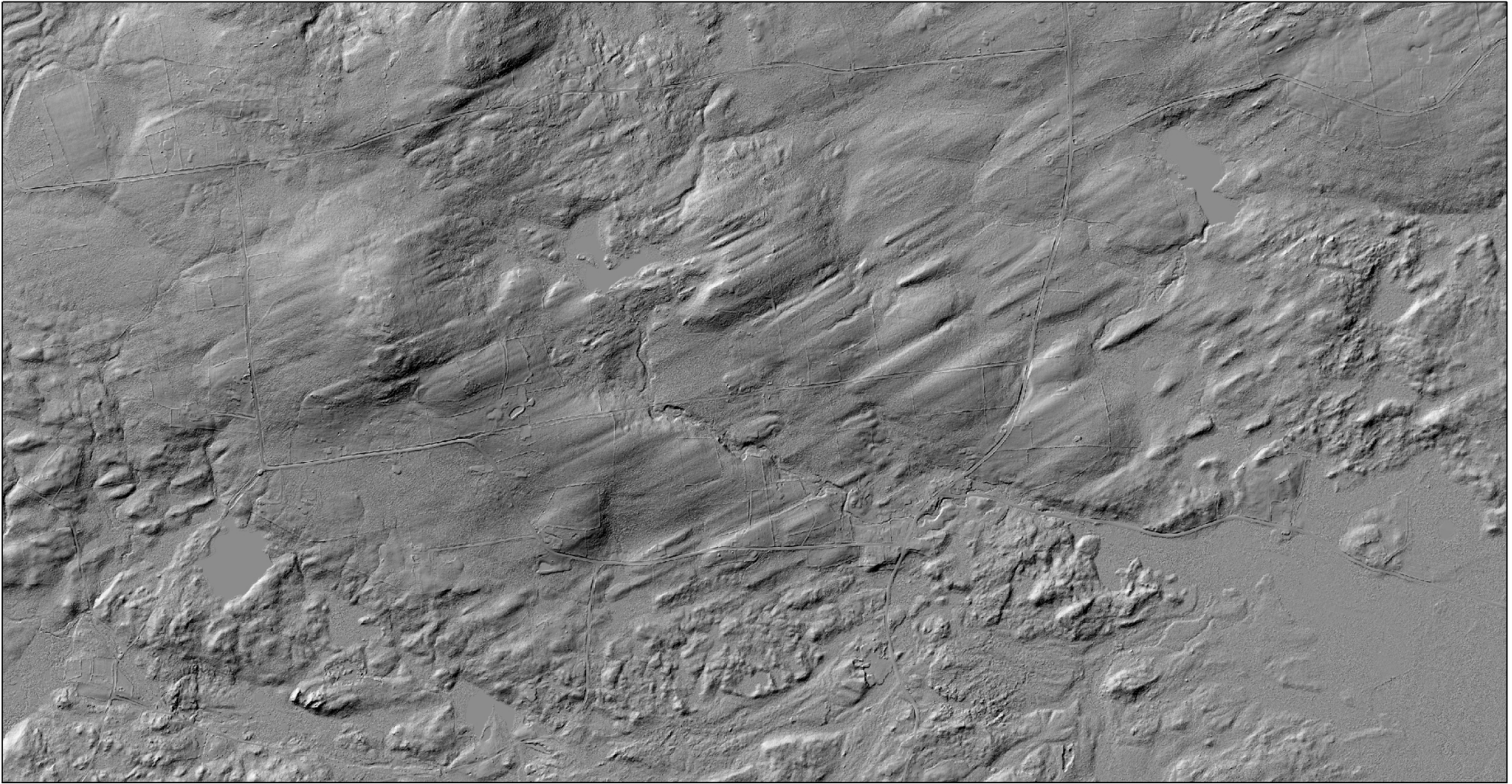


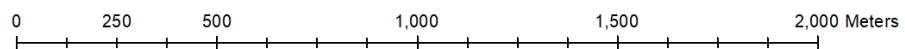
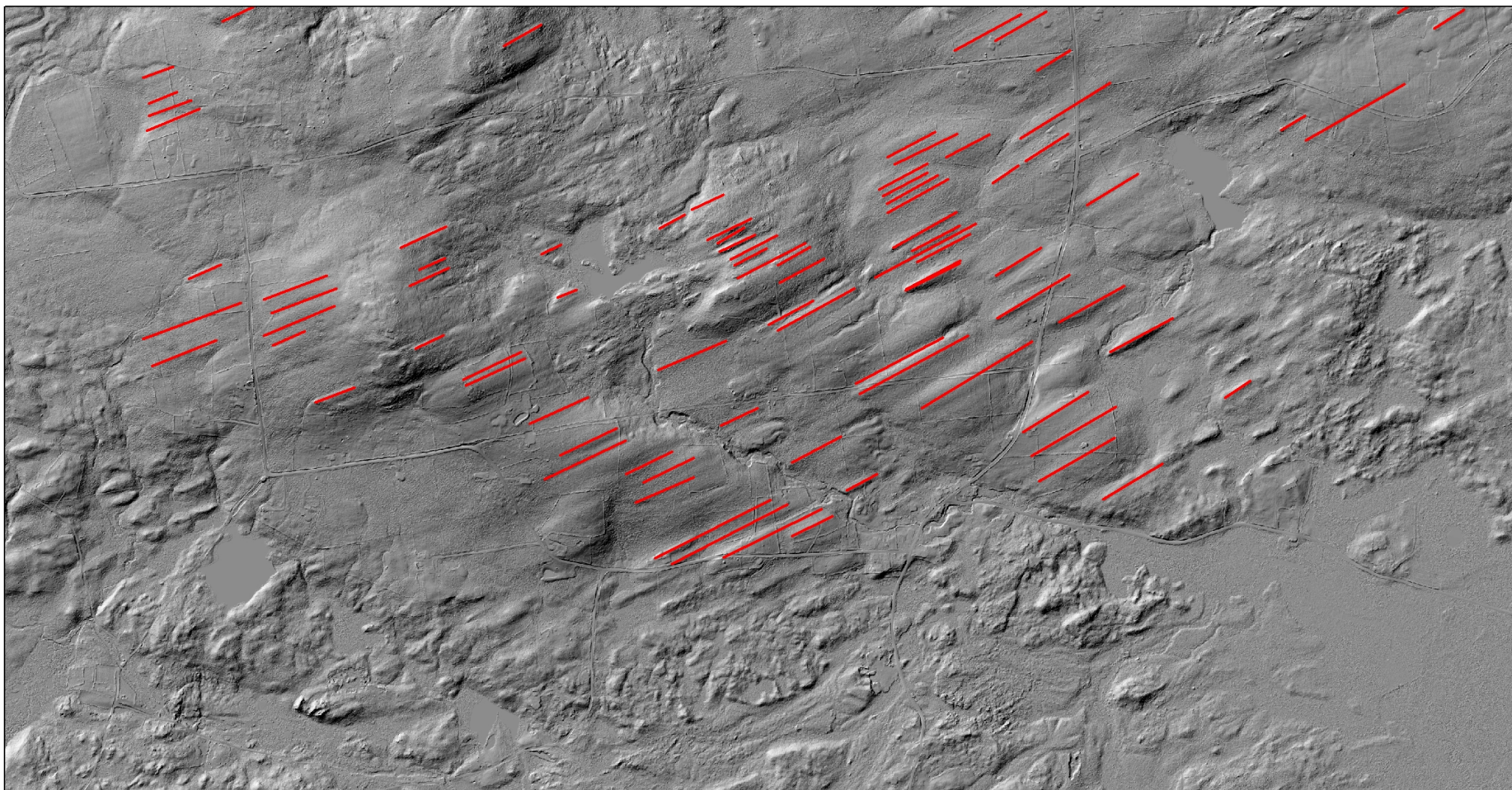


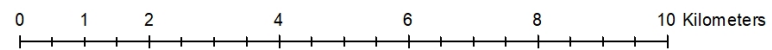
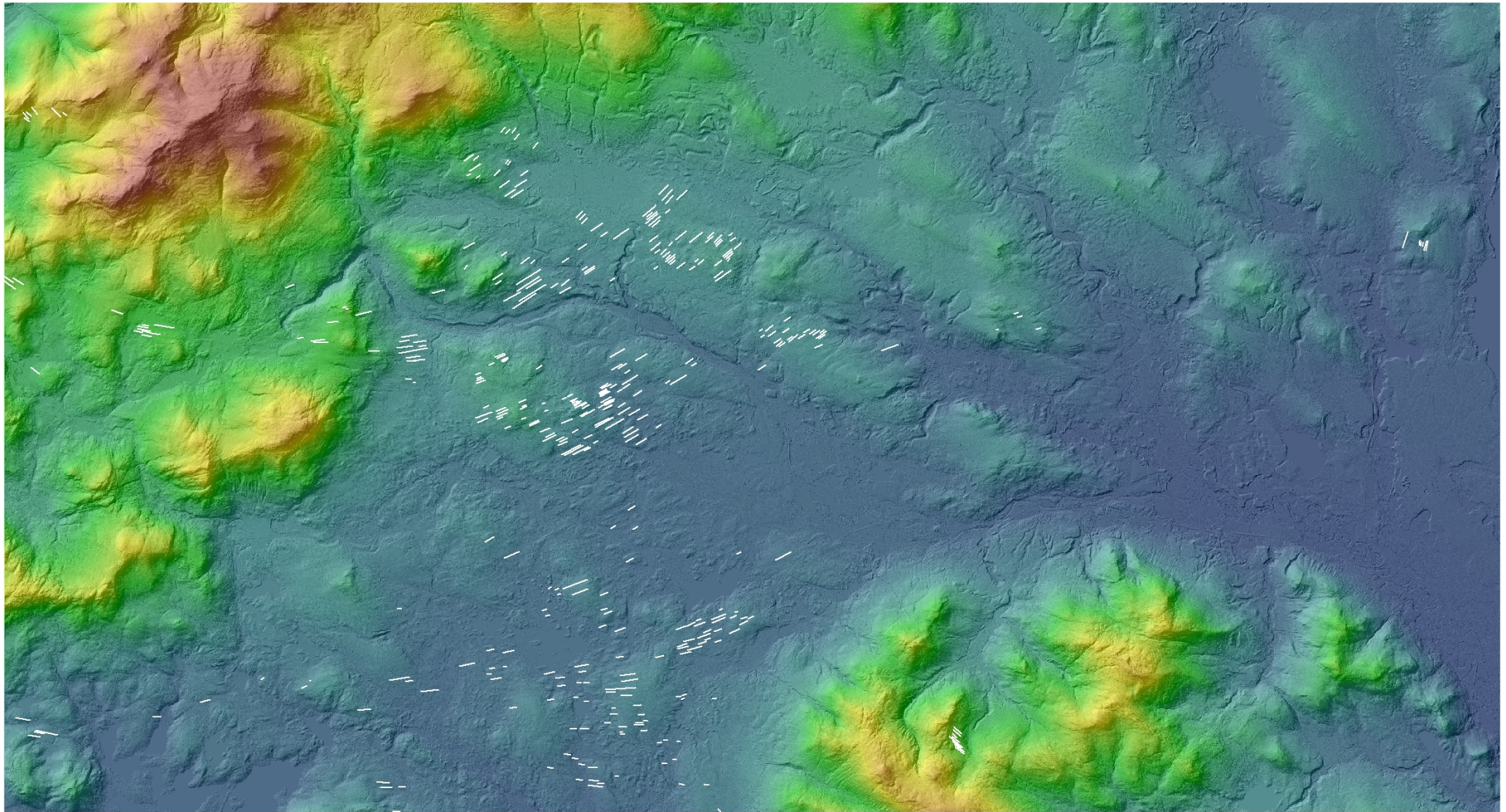
0 2.5 5 10 15 20 Kilometers

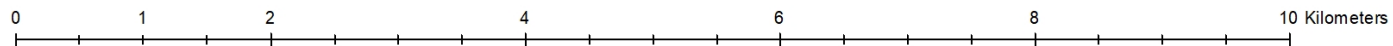
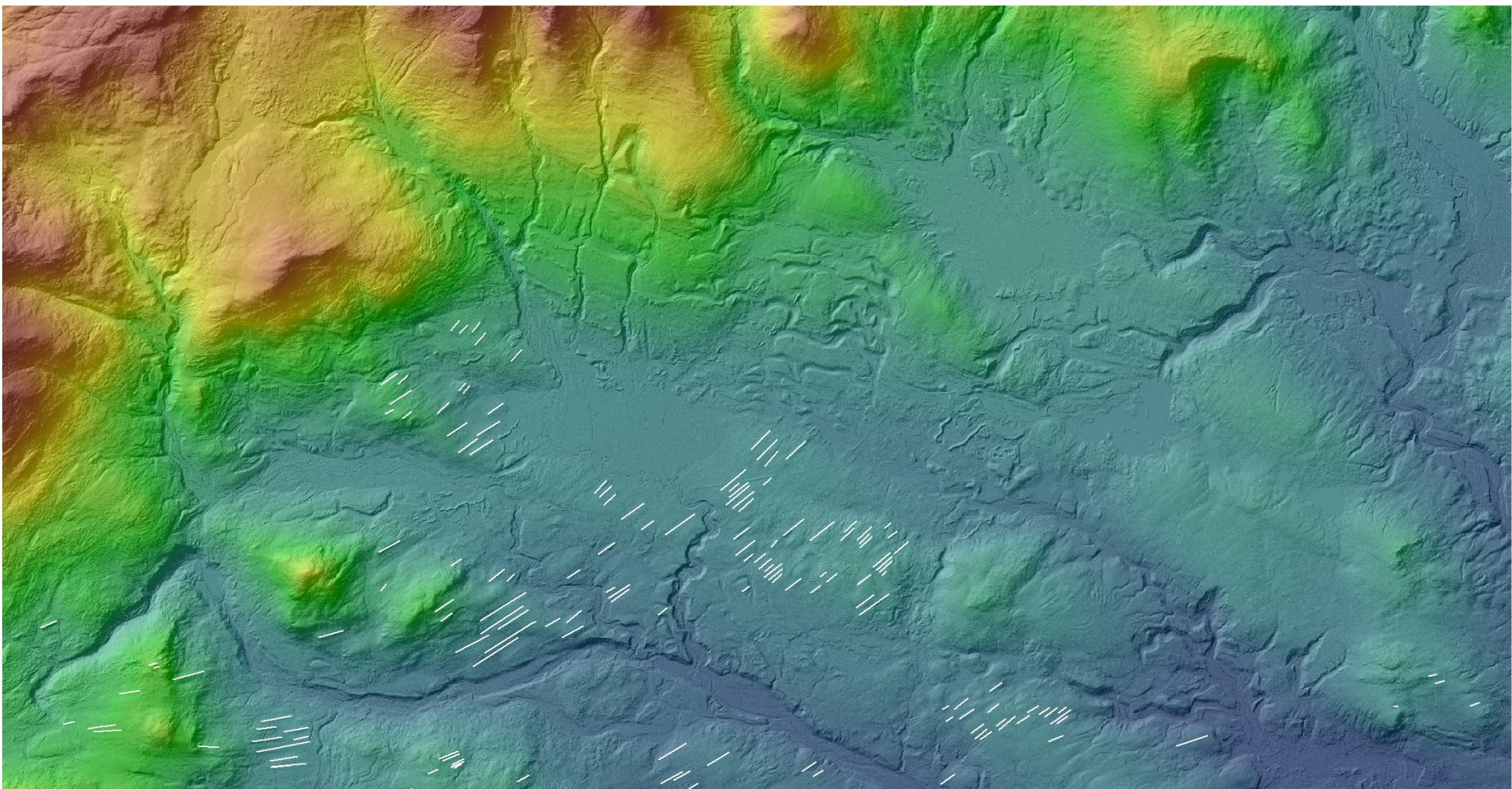


0 2.5 5 10 15 20 Kilometers

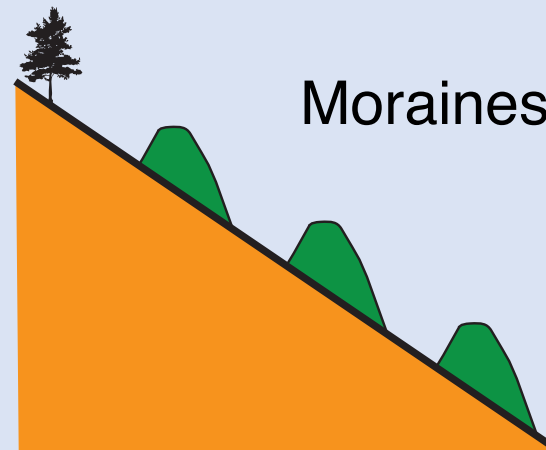
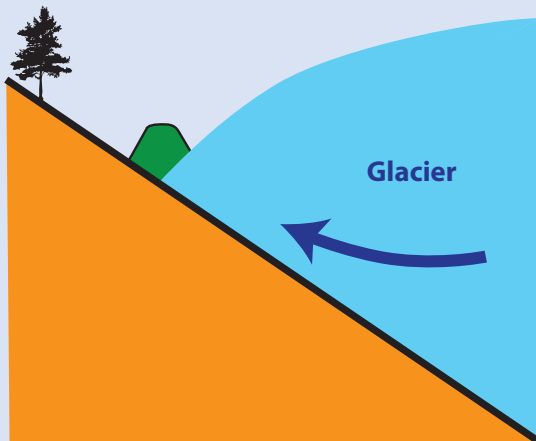
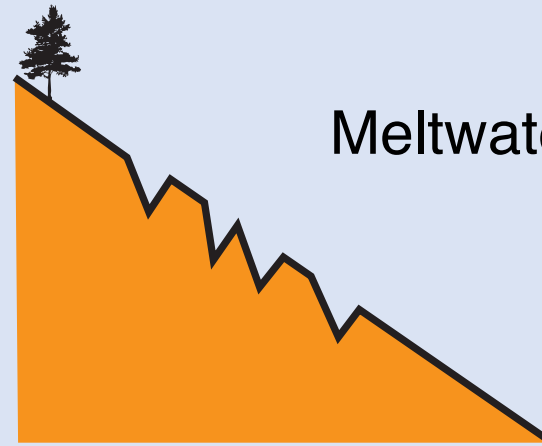
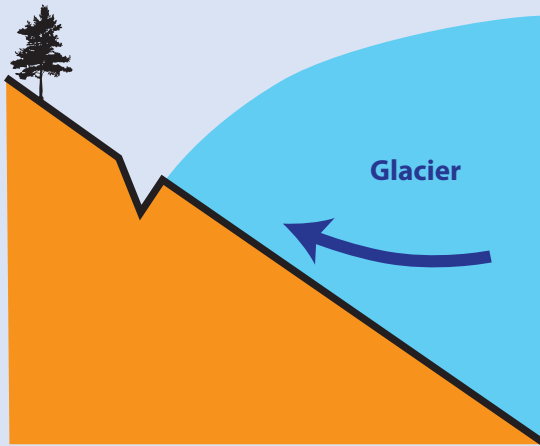




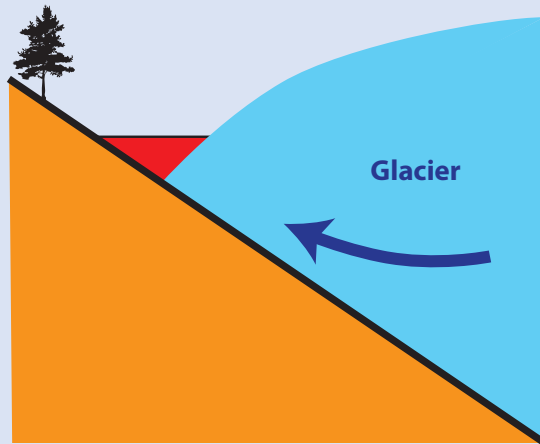




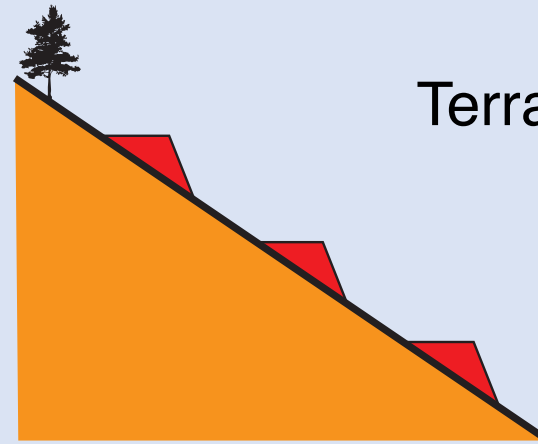
Ice Margin Features



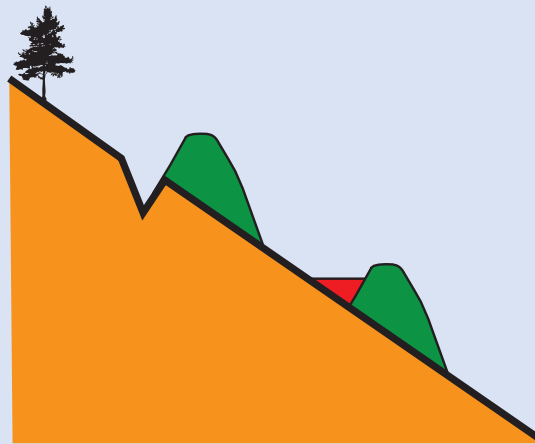
Ice Margin Features



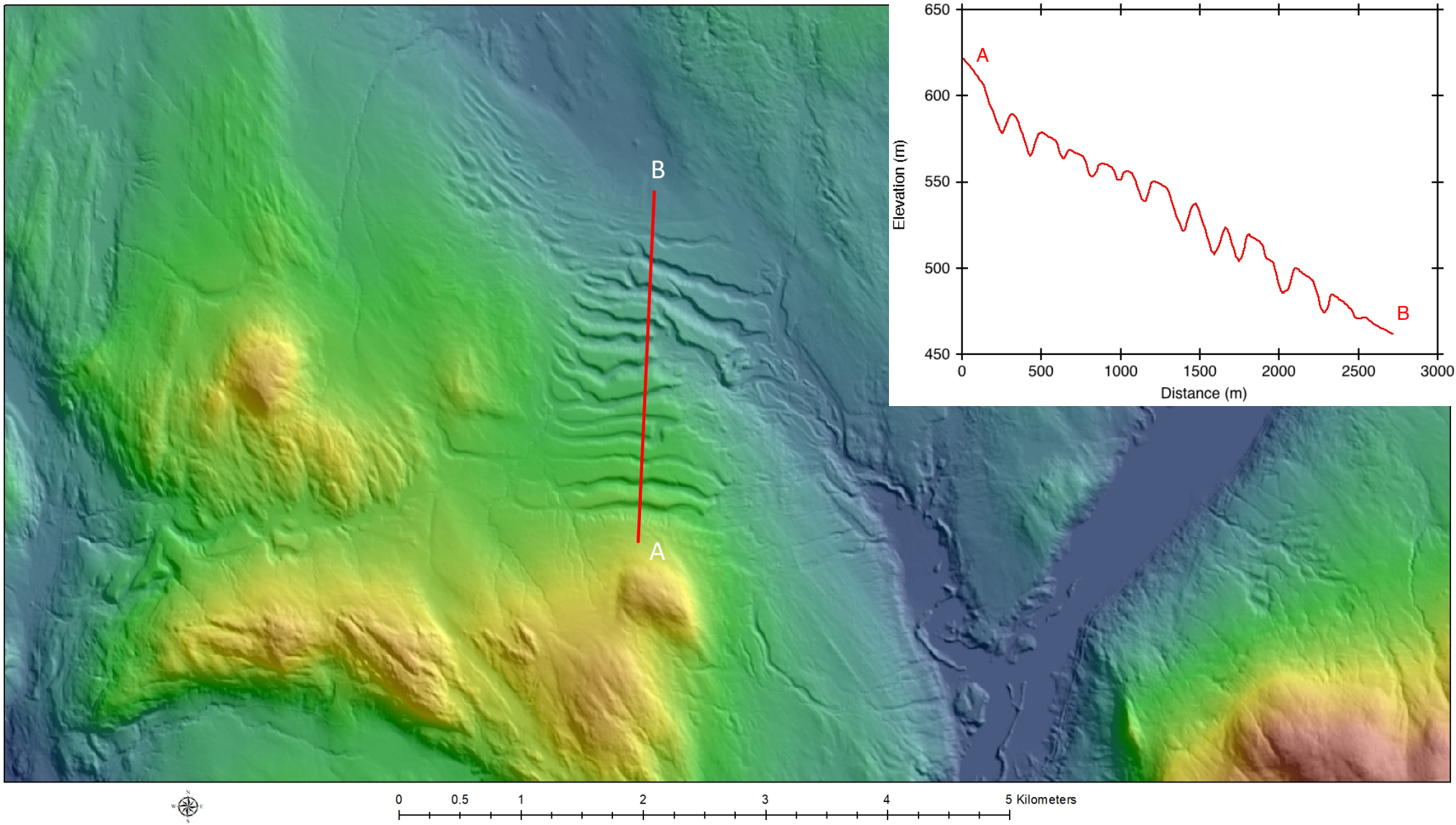
Glacier

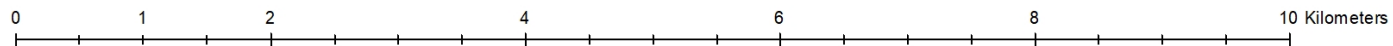
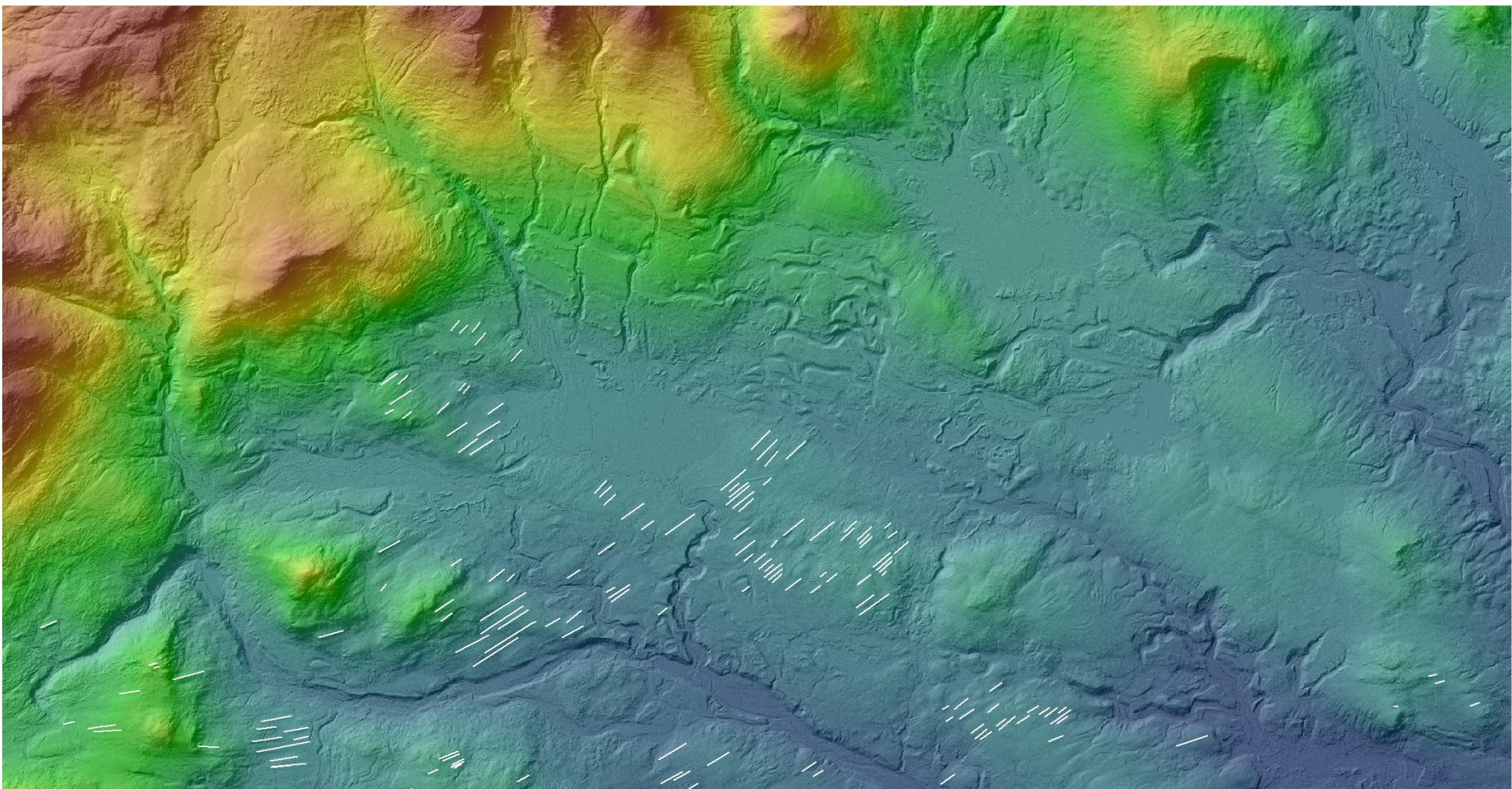


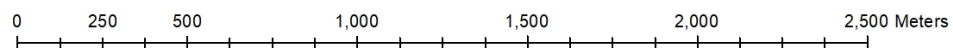
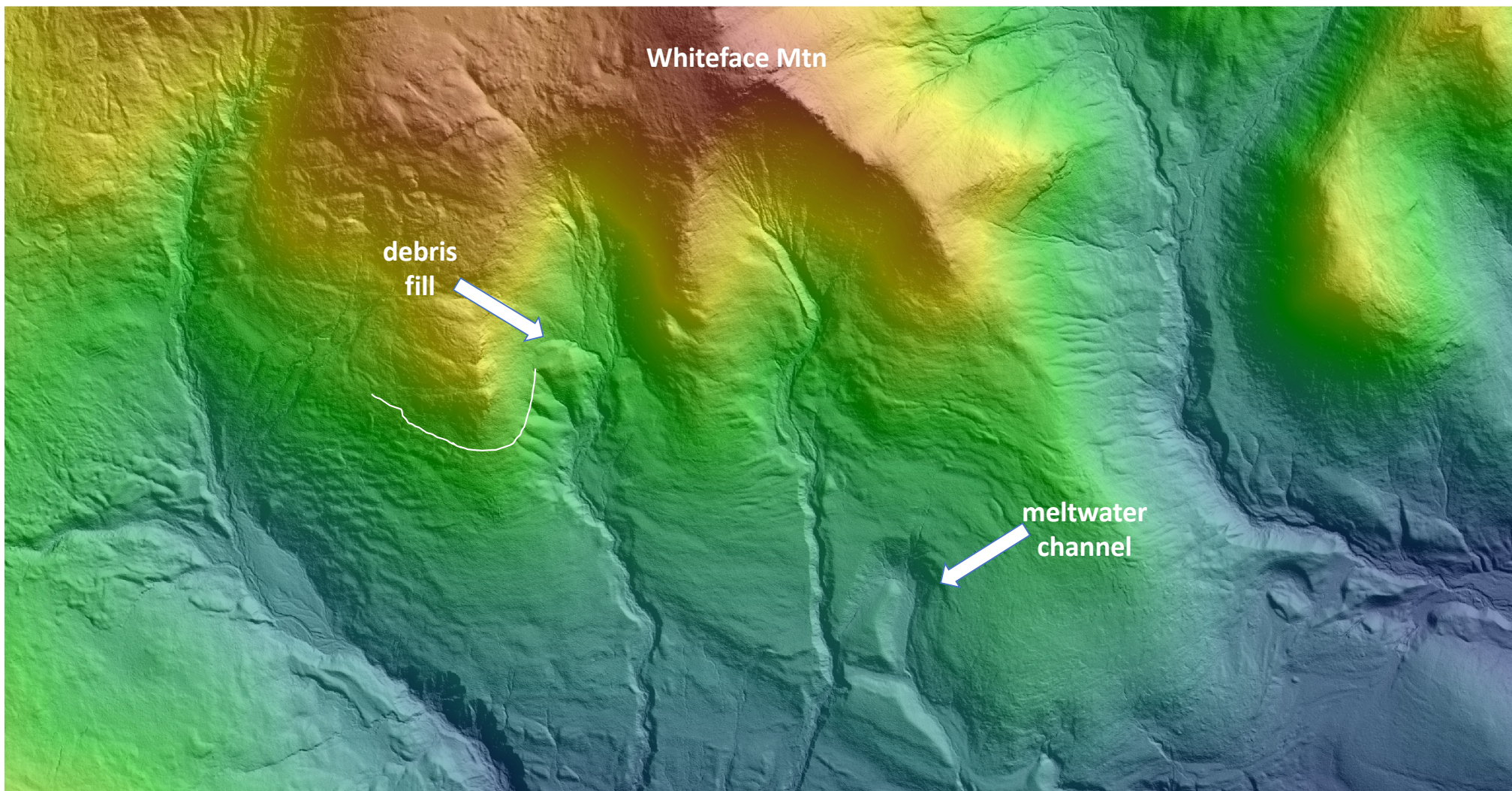
Terraces

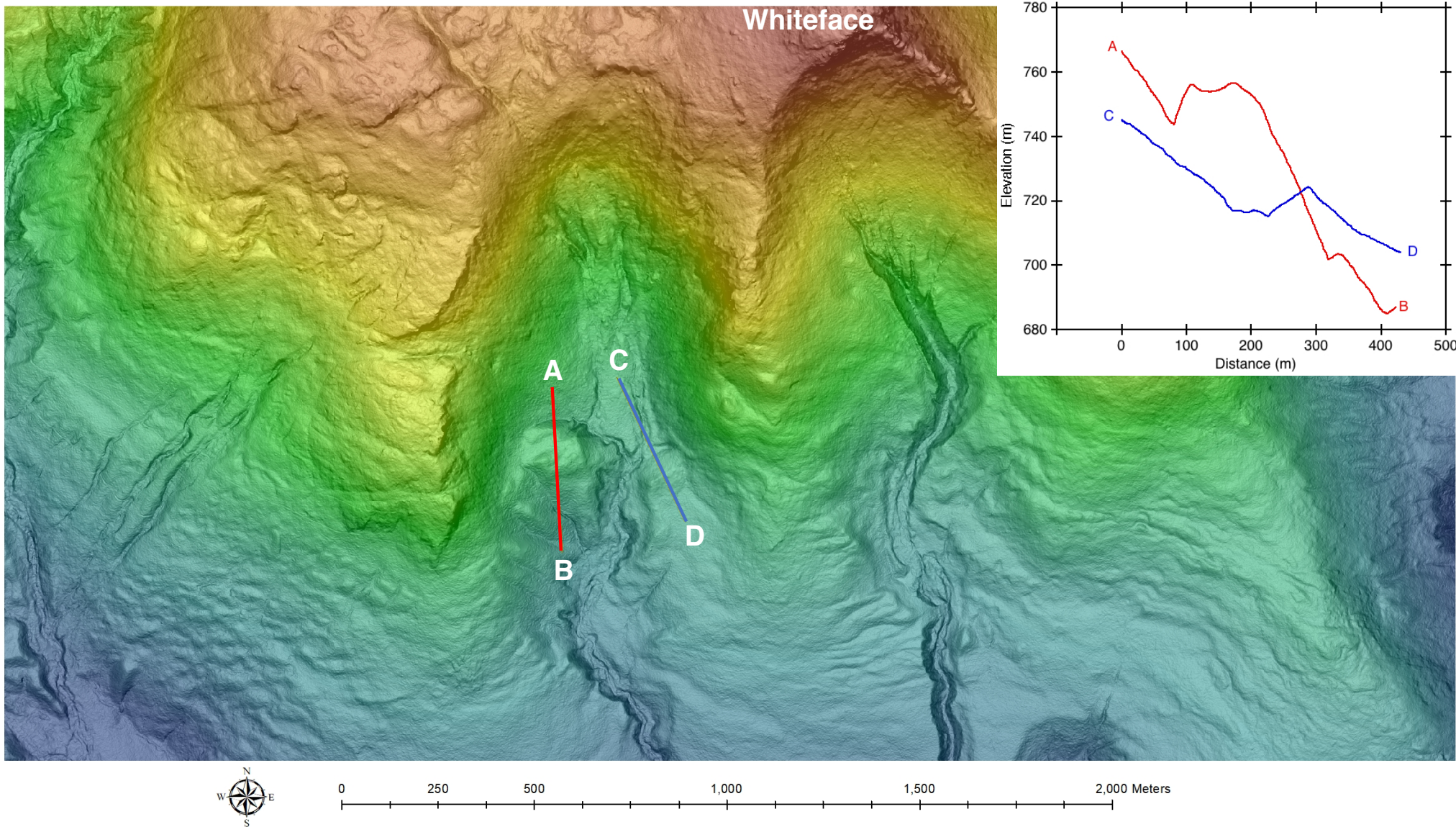


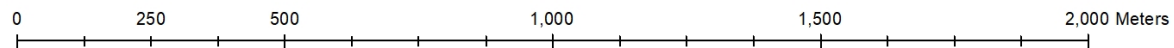
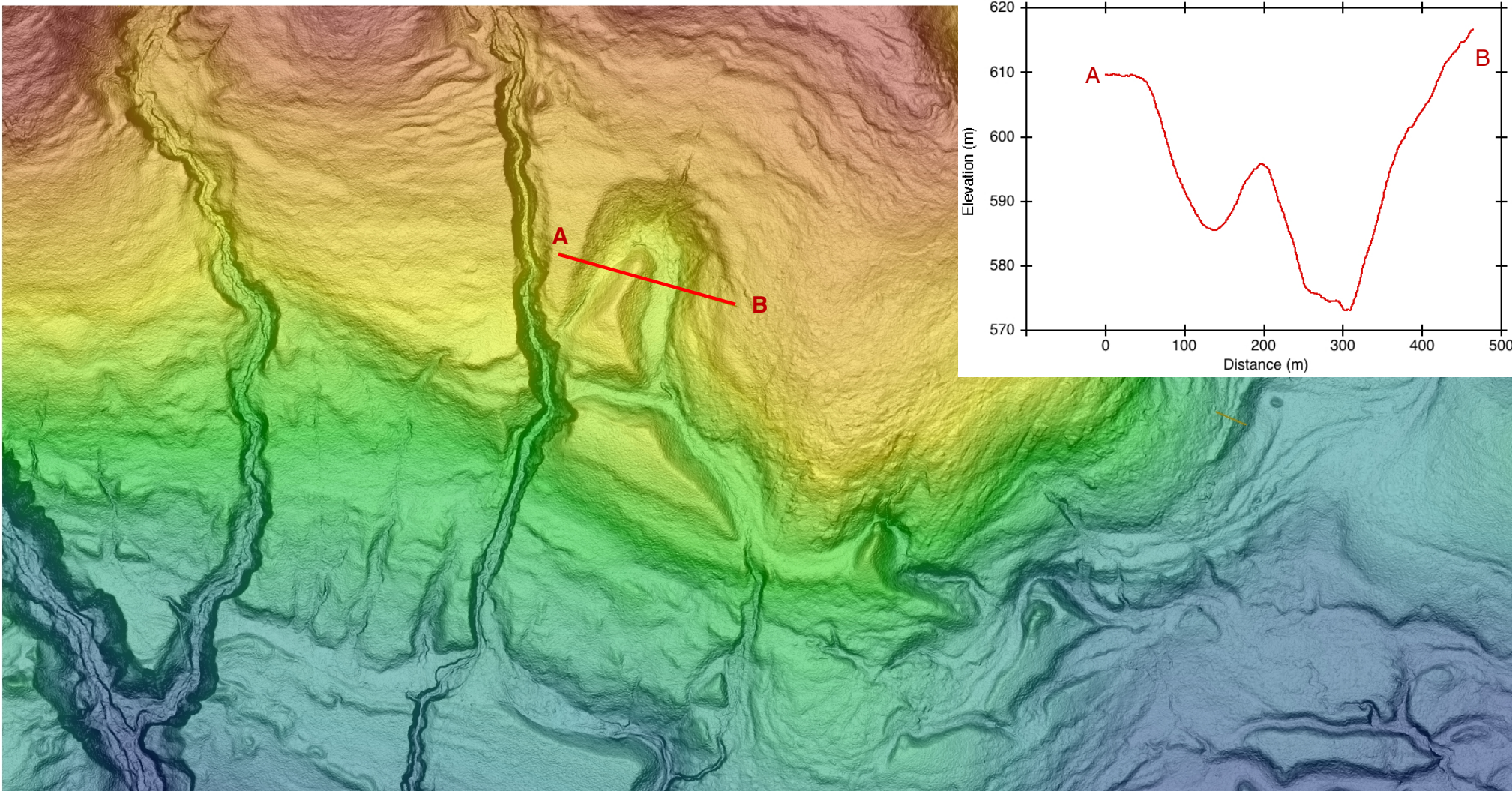
All 3 mixed together

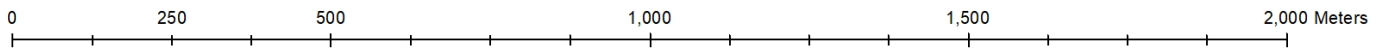
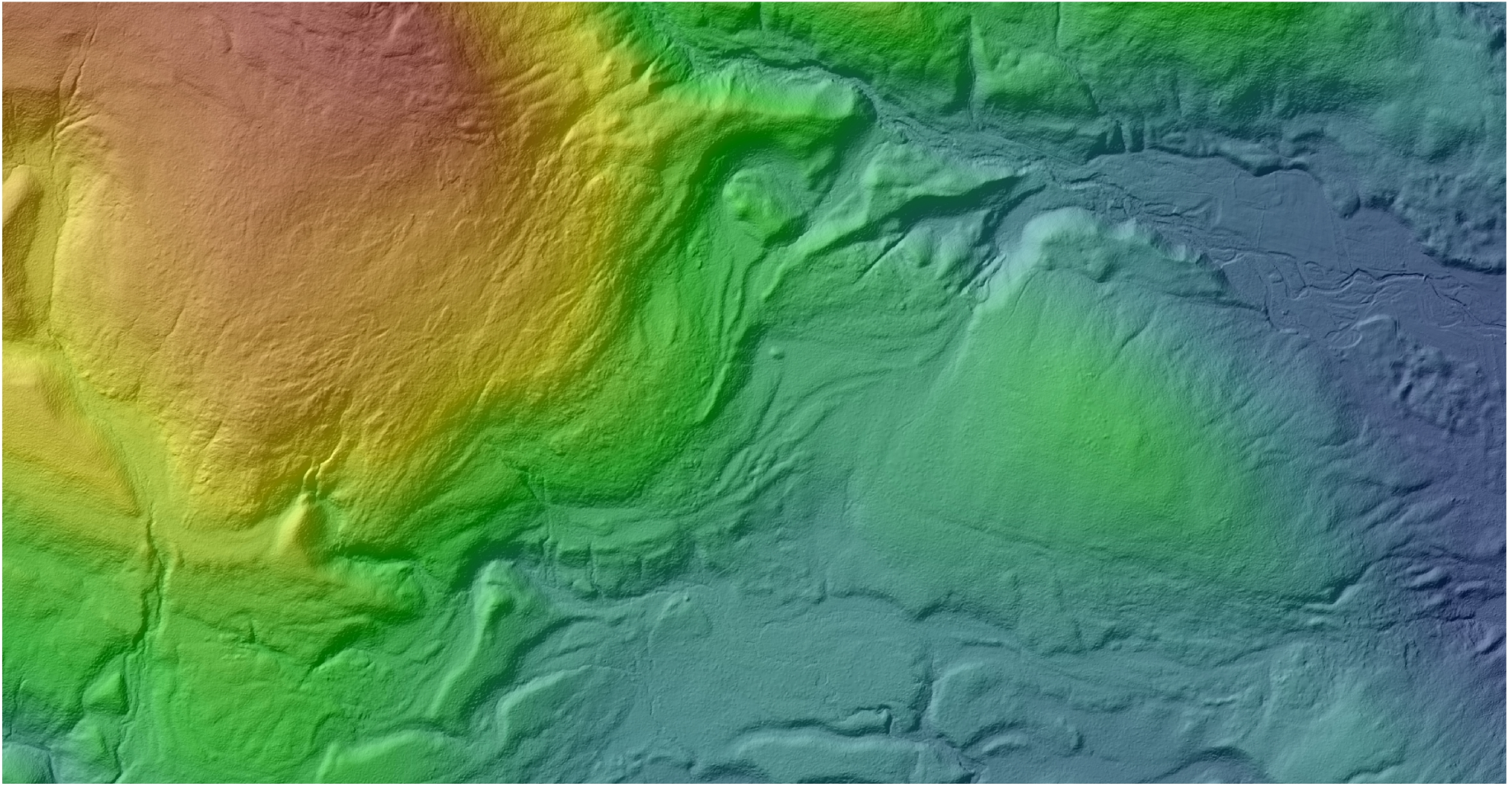


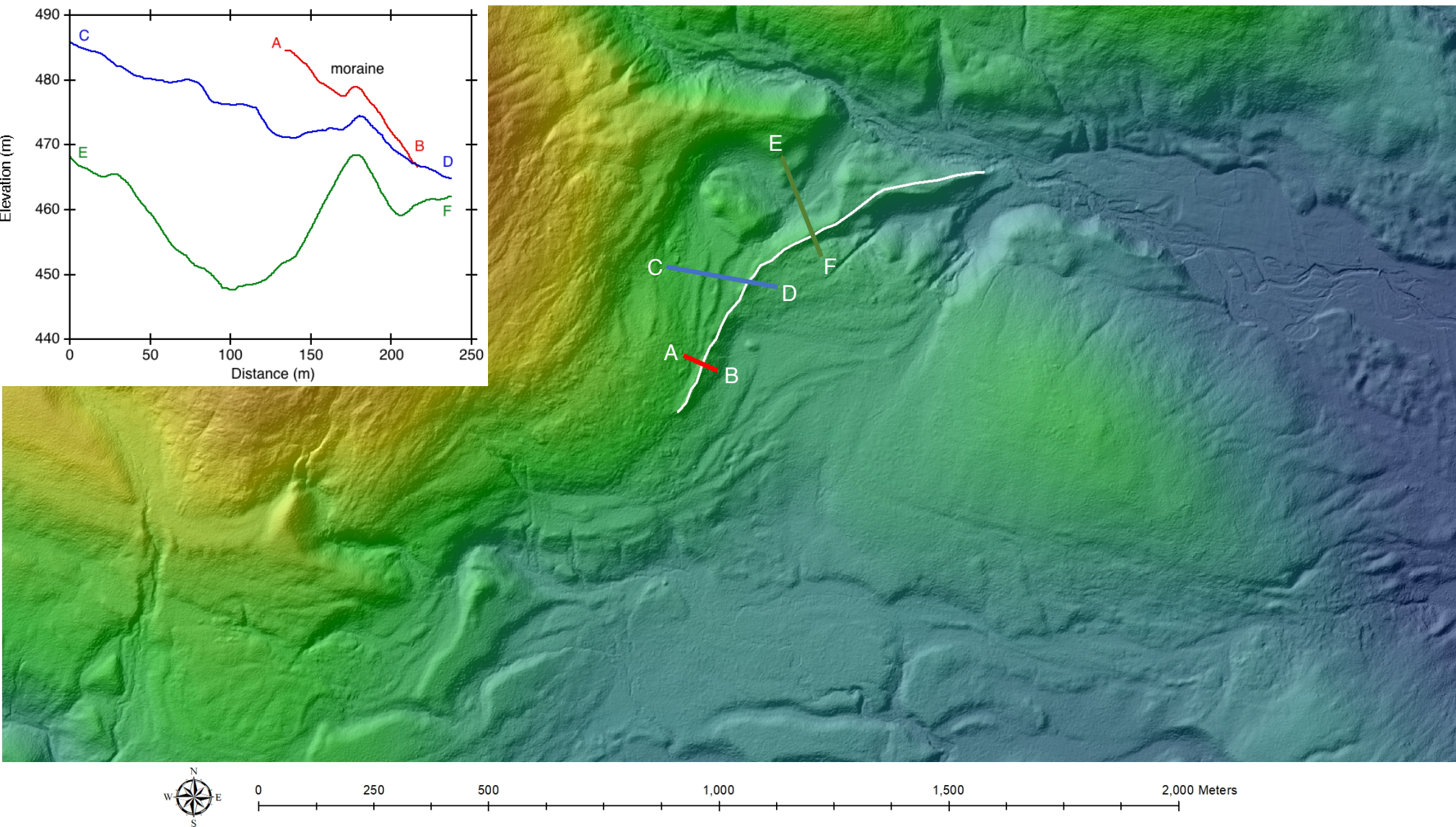
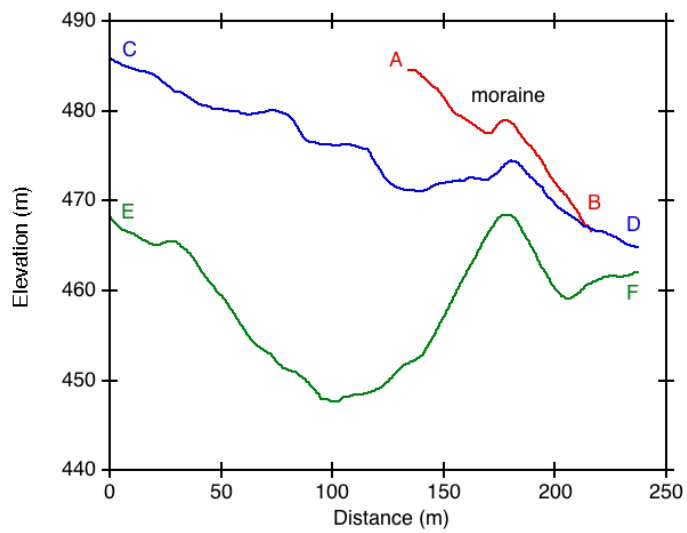


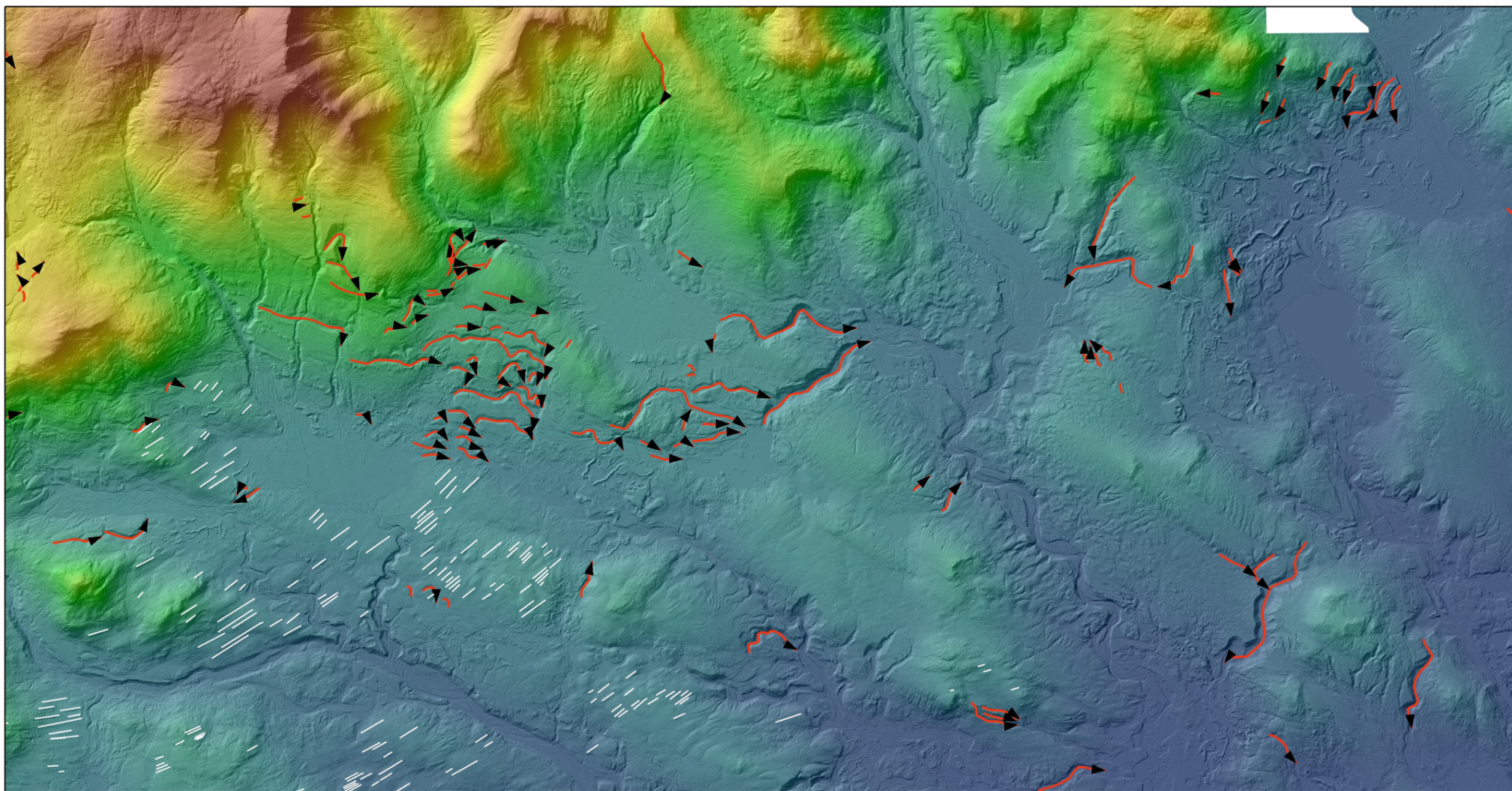




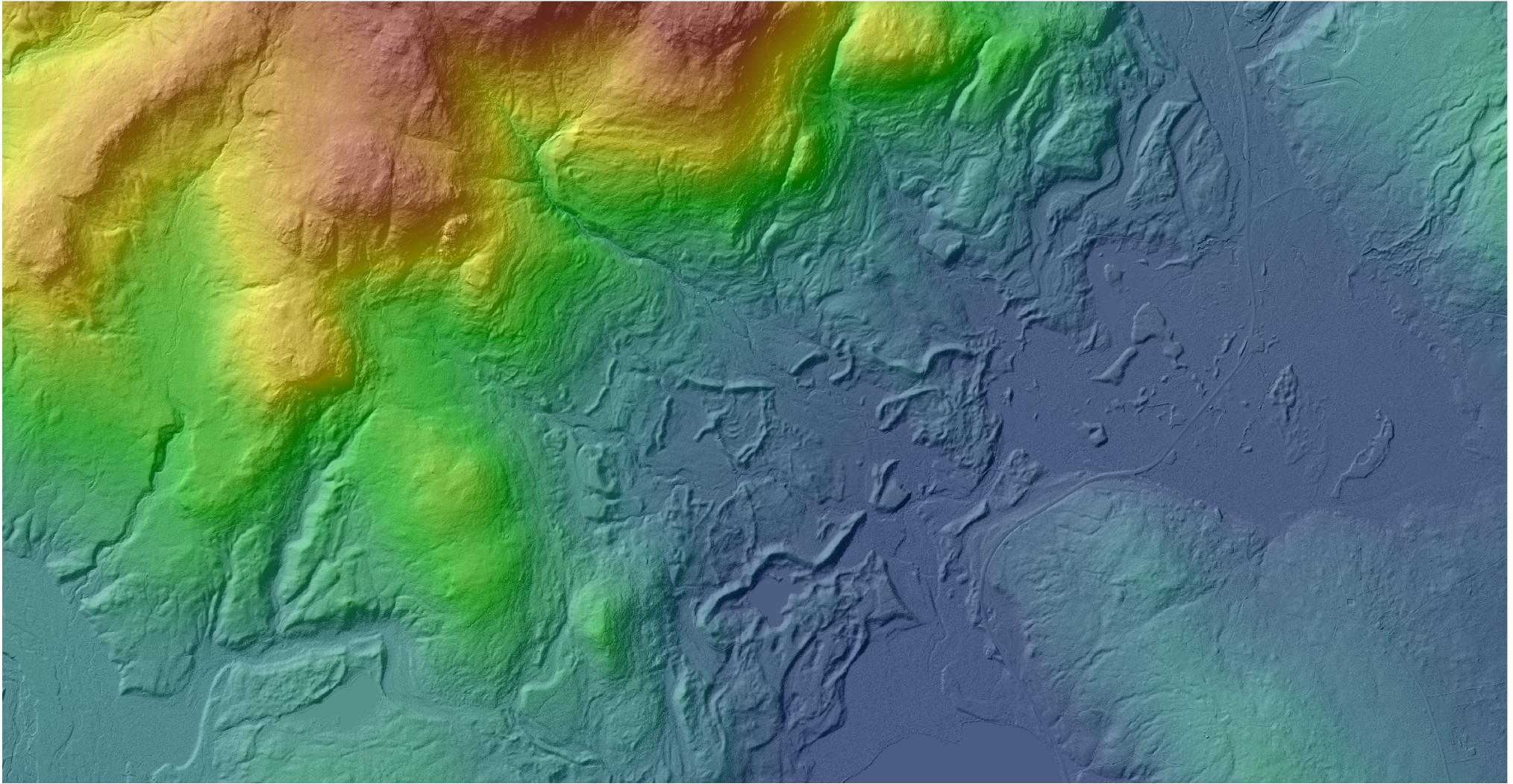




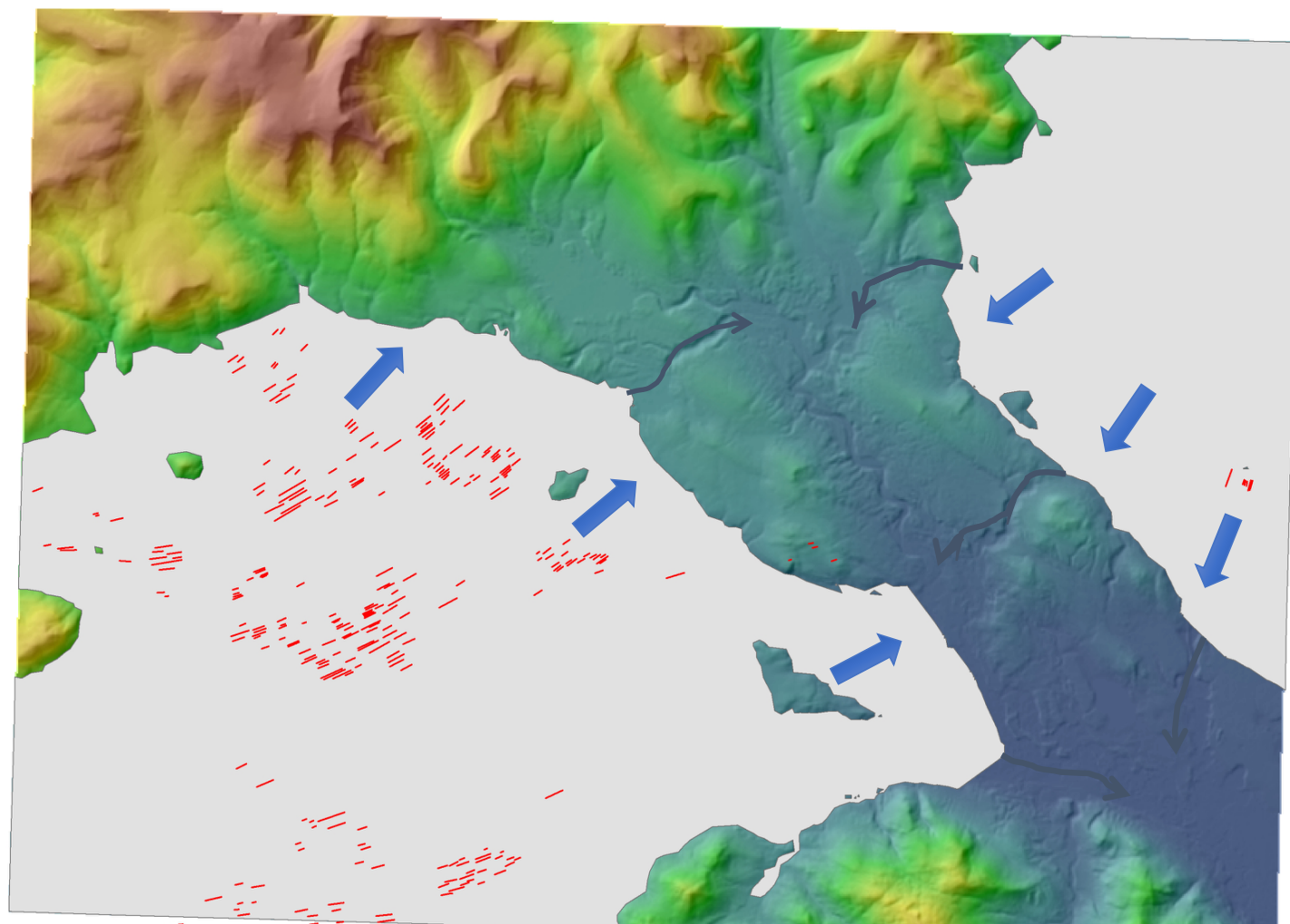




0 0.5 1 2 3 4 5 Kilometers



0 250 500 1,000 1,500 2,000 Meters



0 1 2 4 Miles

Questions?

