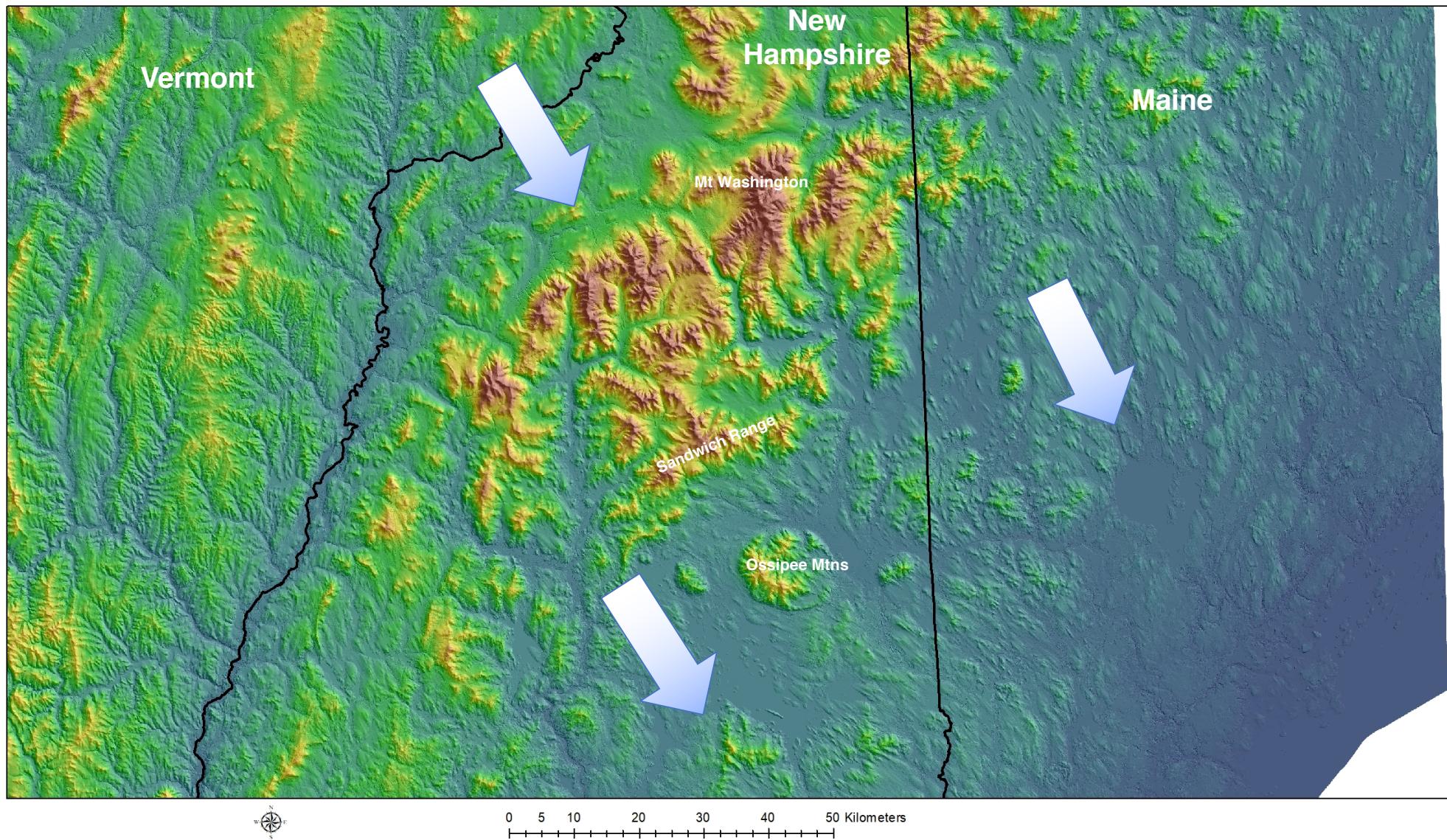
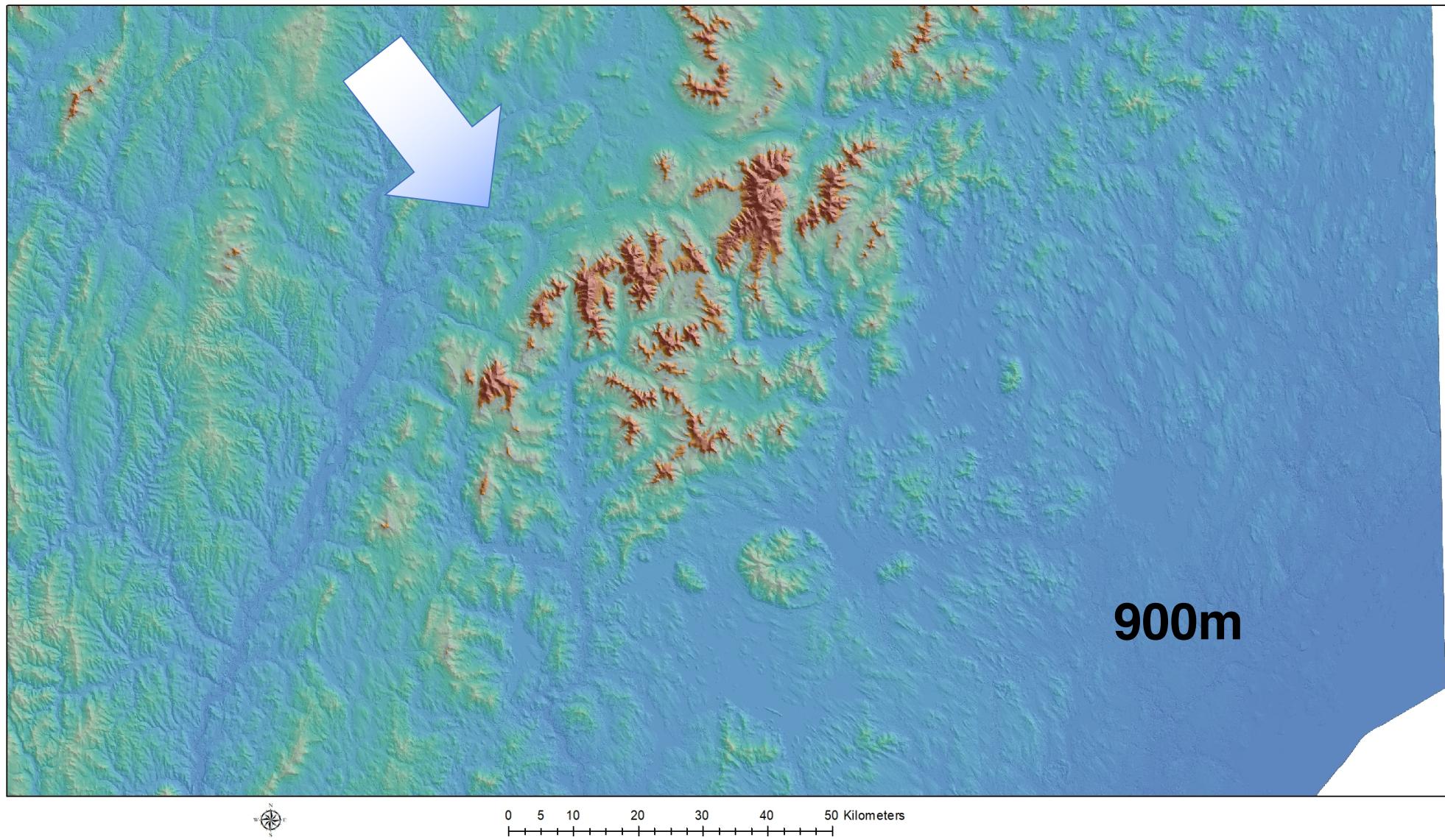
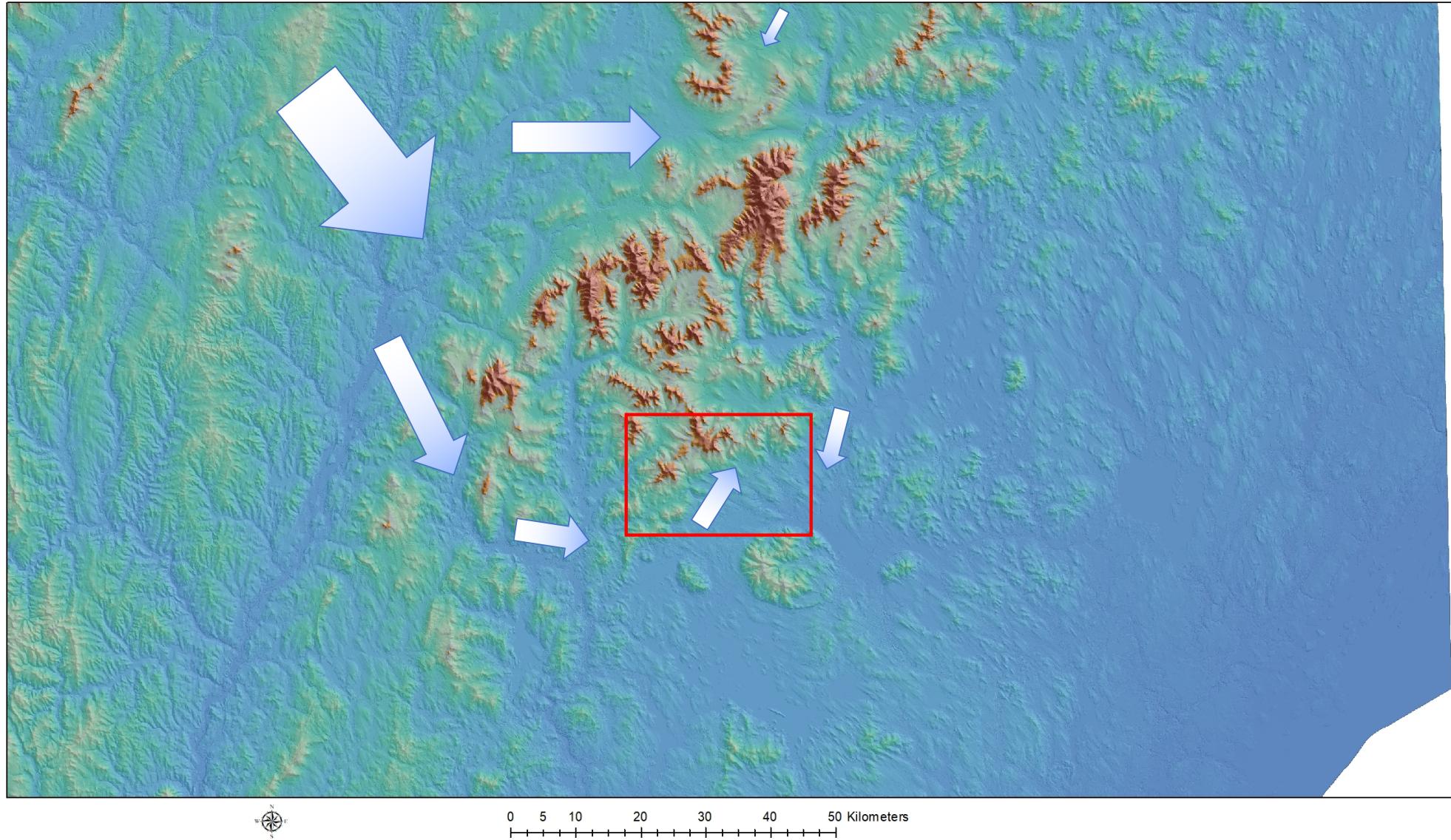


# **Evidence for Northeast Flowing Ice in the Lee of the Sandwich Range, New Hampshire**

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

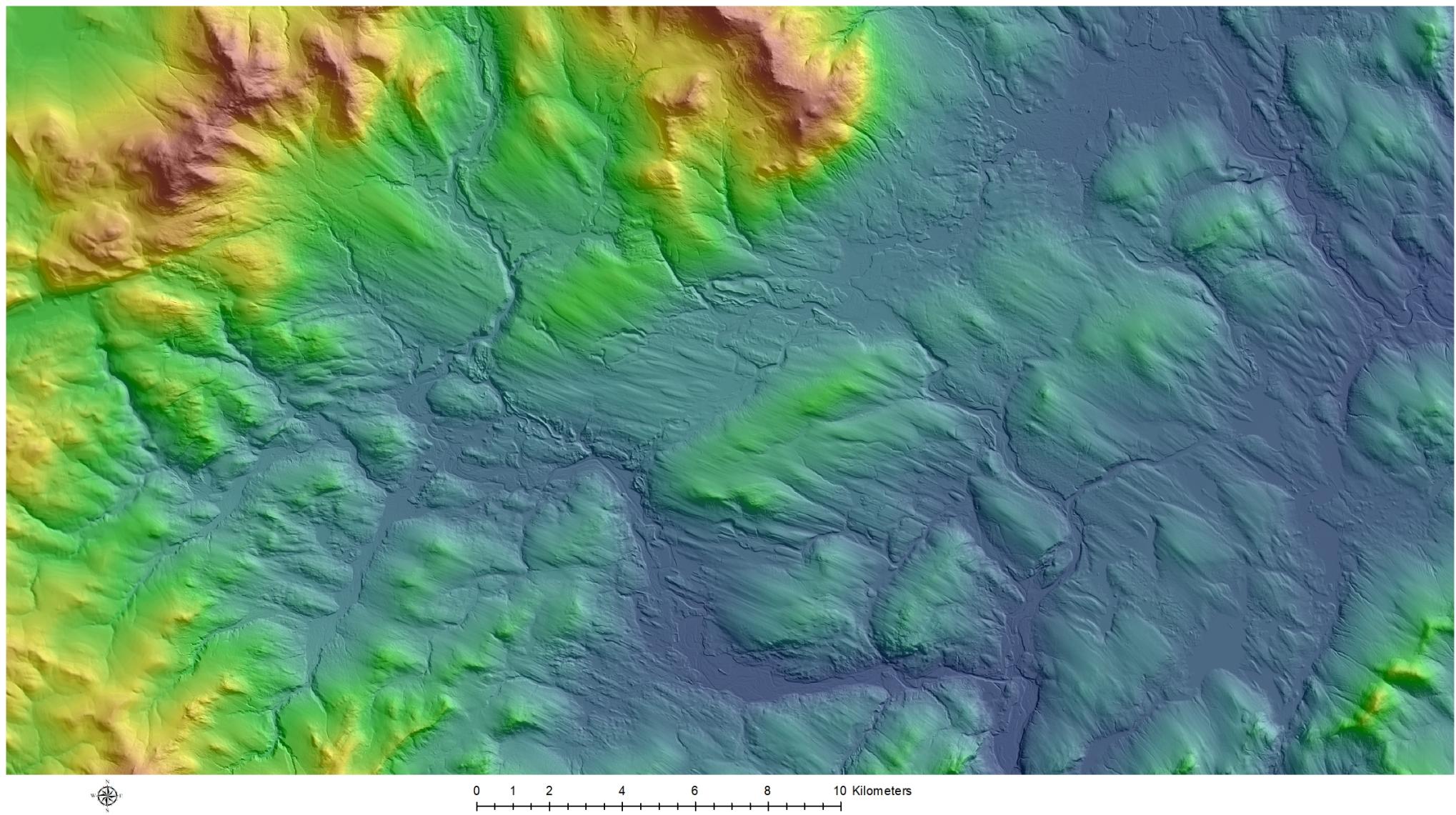


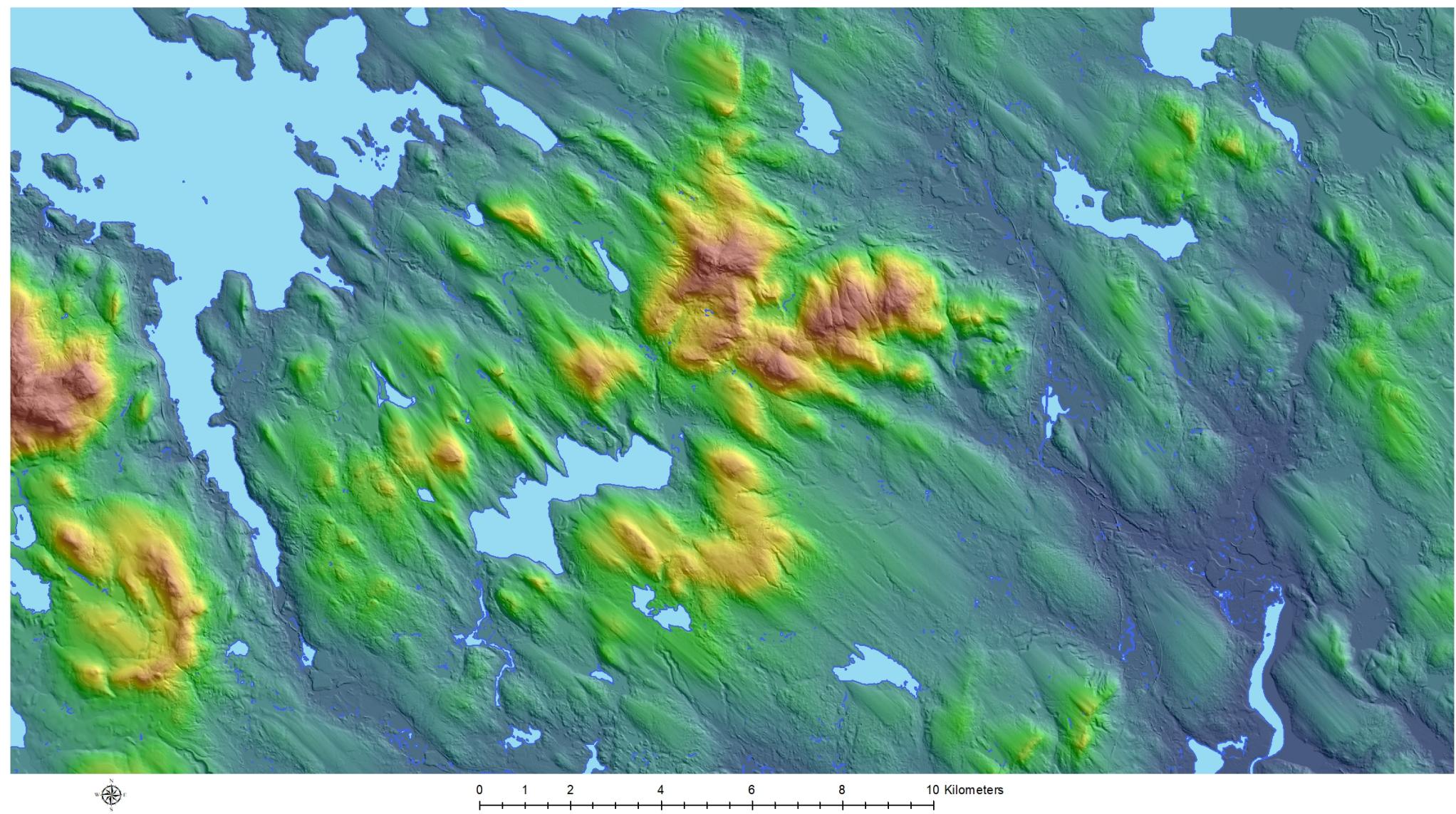


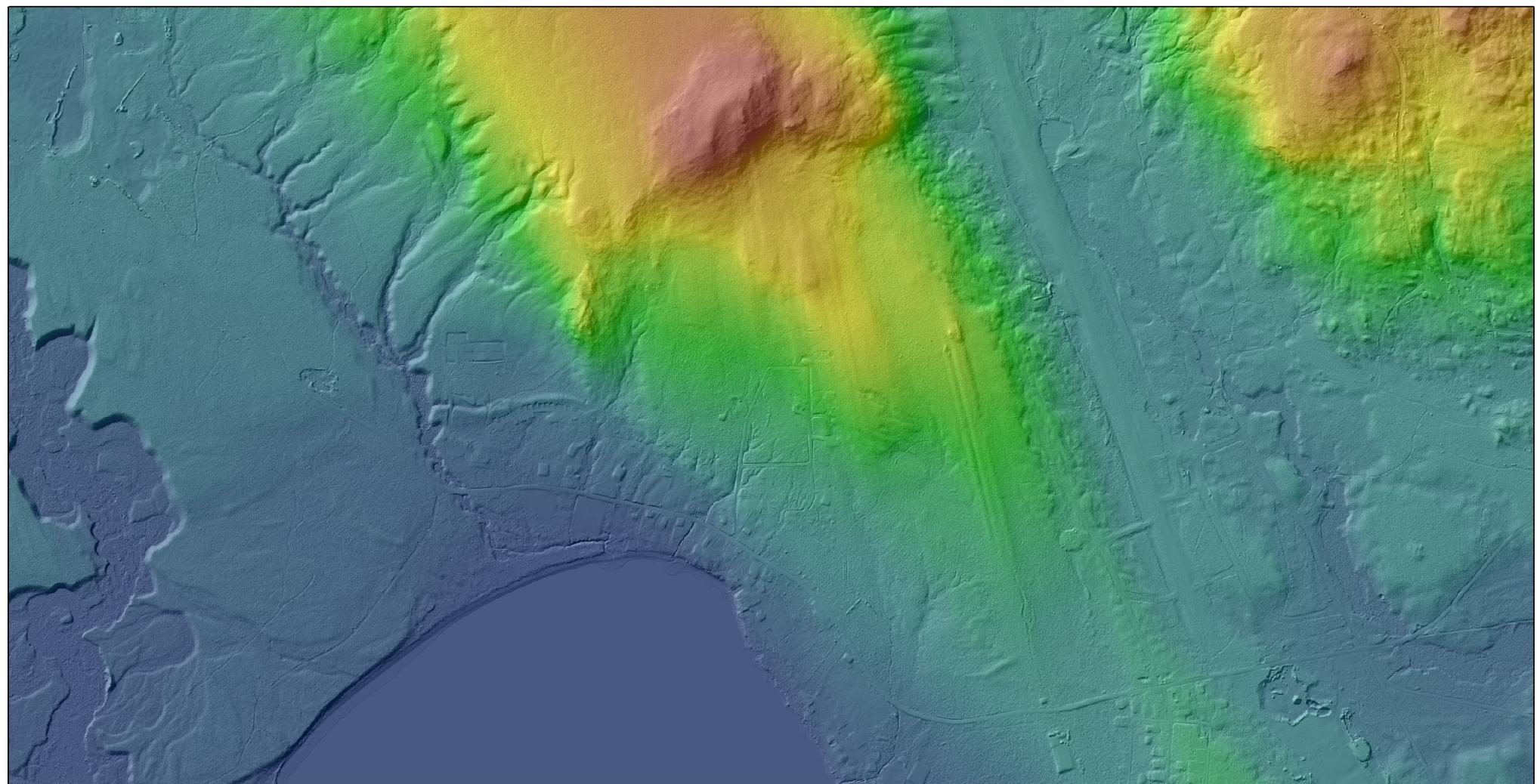


# How do we determine ice flow direction?

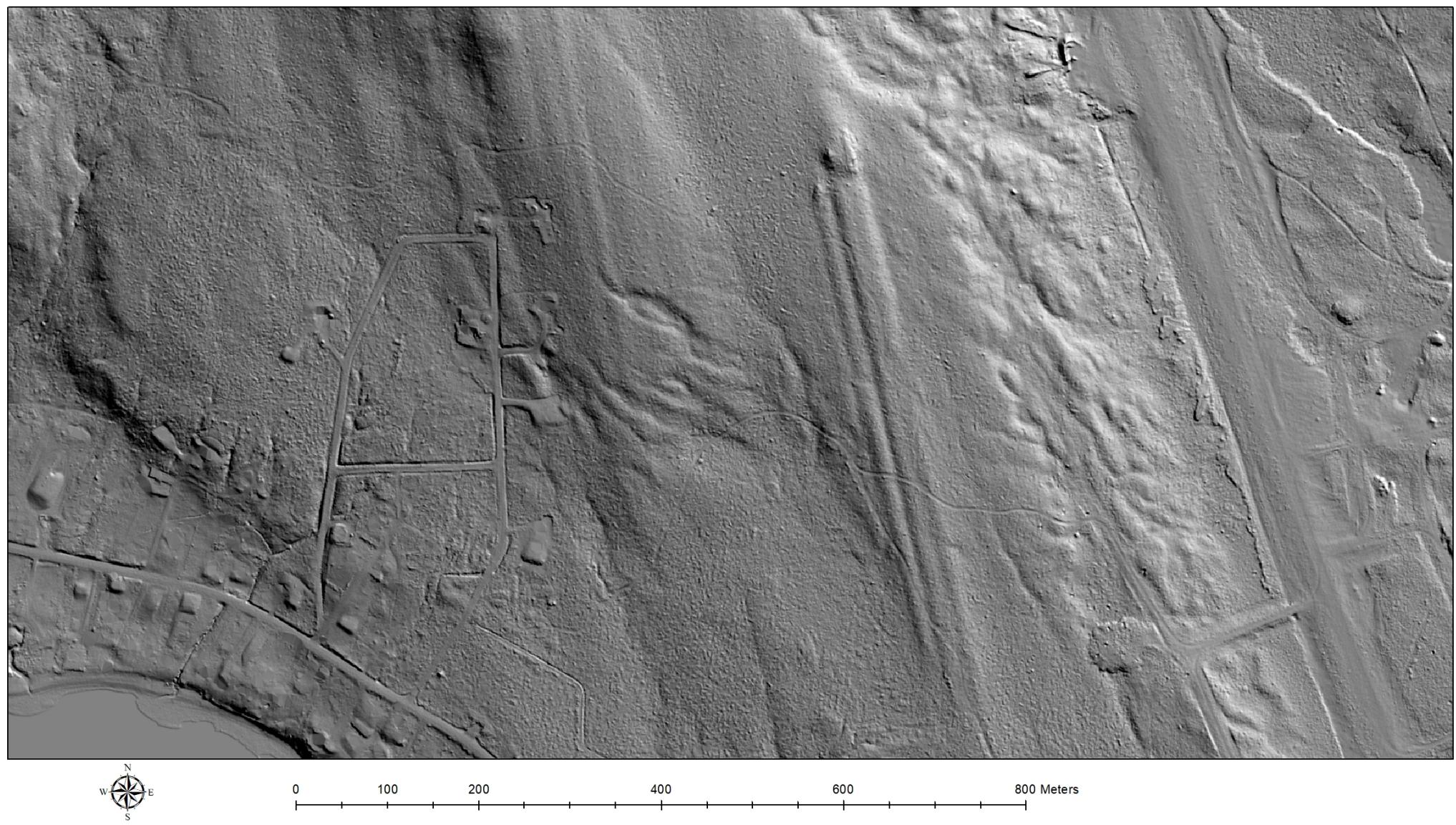
- **Striations – limited exposures – local influence**
- **Large Linear features – drumlin, flutes etc.**
- **Digital Elevation Models (DEM's)**
  - **DEM (10m) and LiDAR based DEM (1m)**
  - **Proper use of hillshading is critical**  
**NE, NW, Slope, Cluster Hillshade, Multi Directional Oblique Weighted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

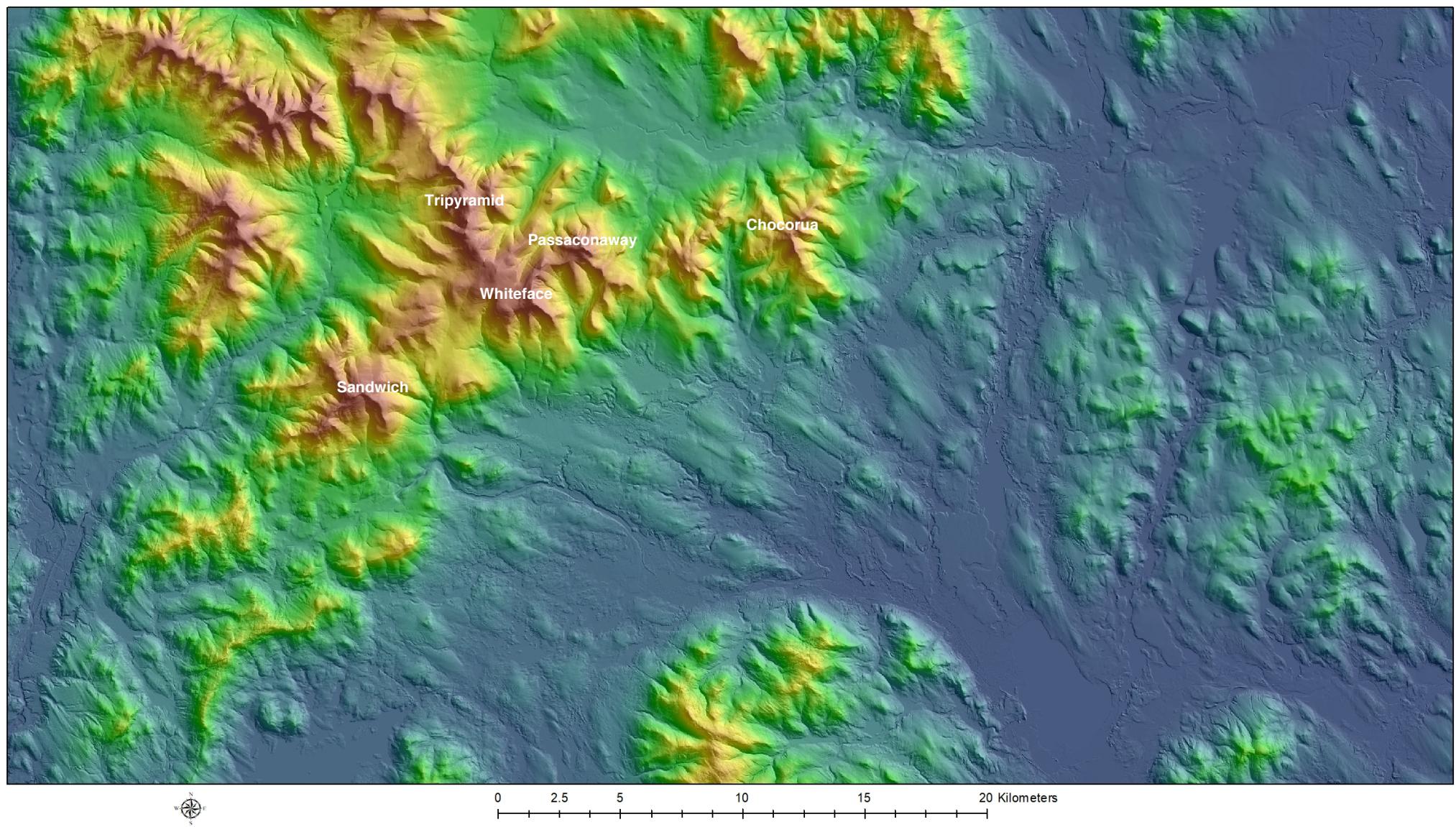


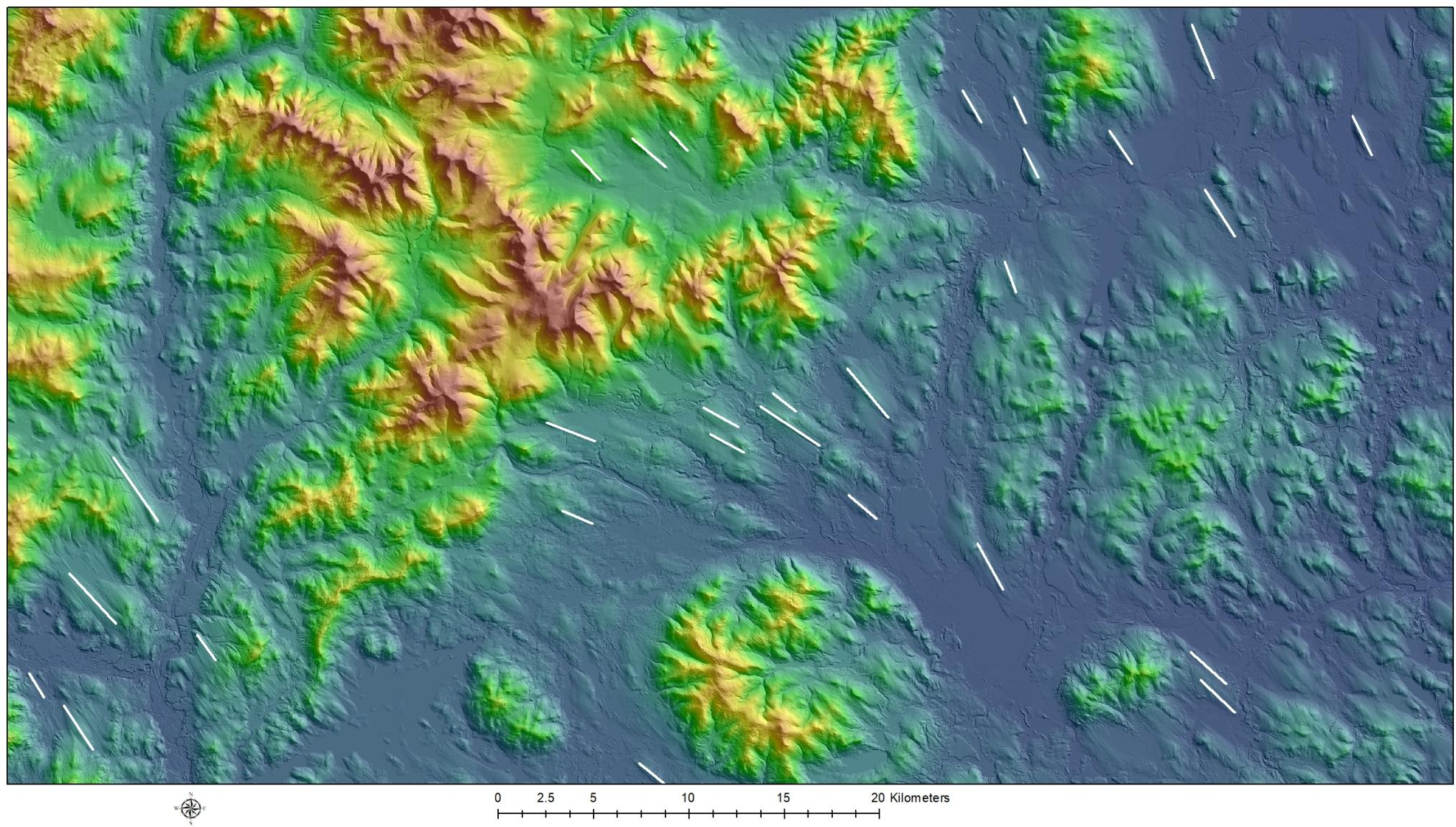




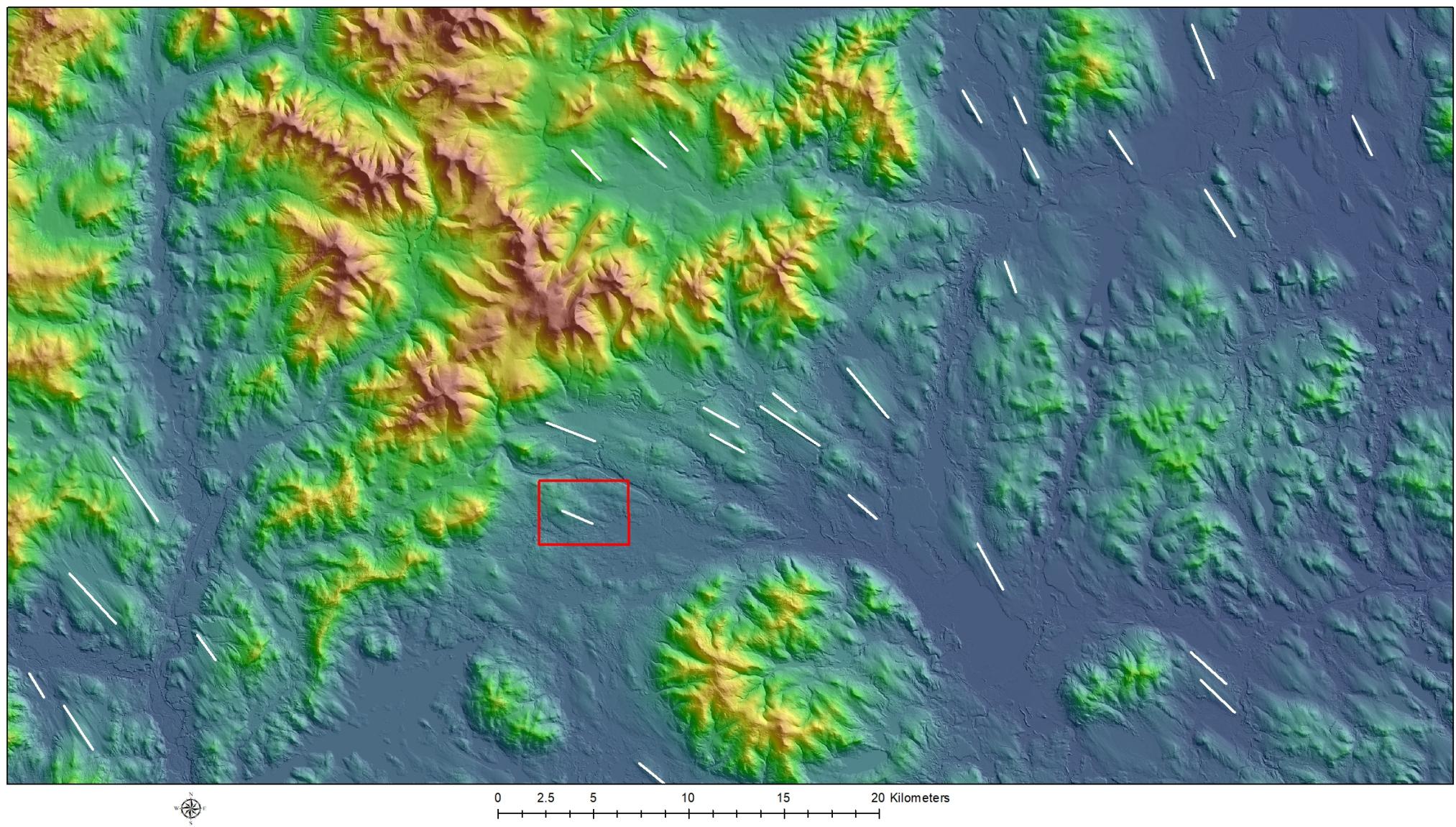
0      0.25      0.5      1      1.5      2 Kilometers



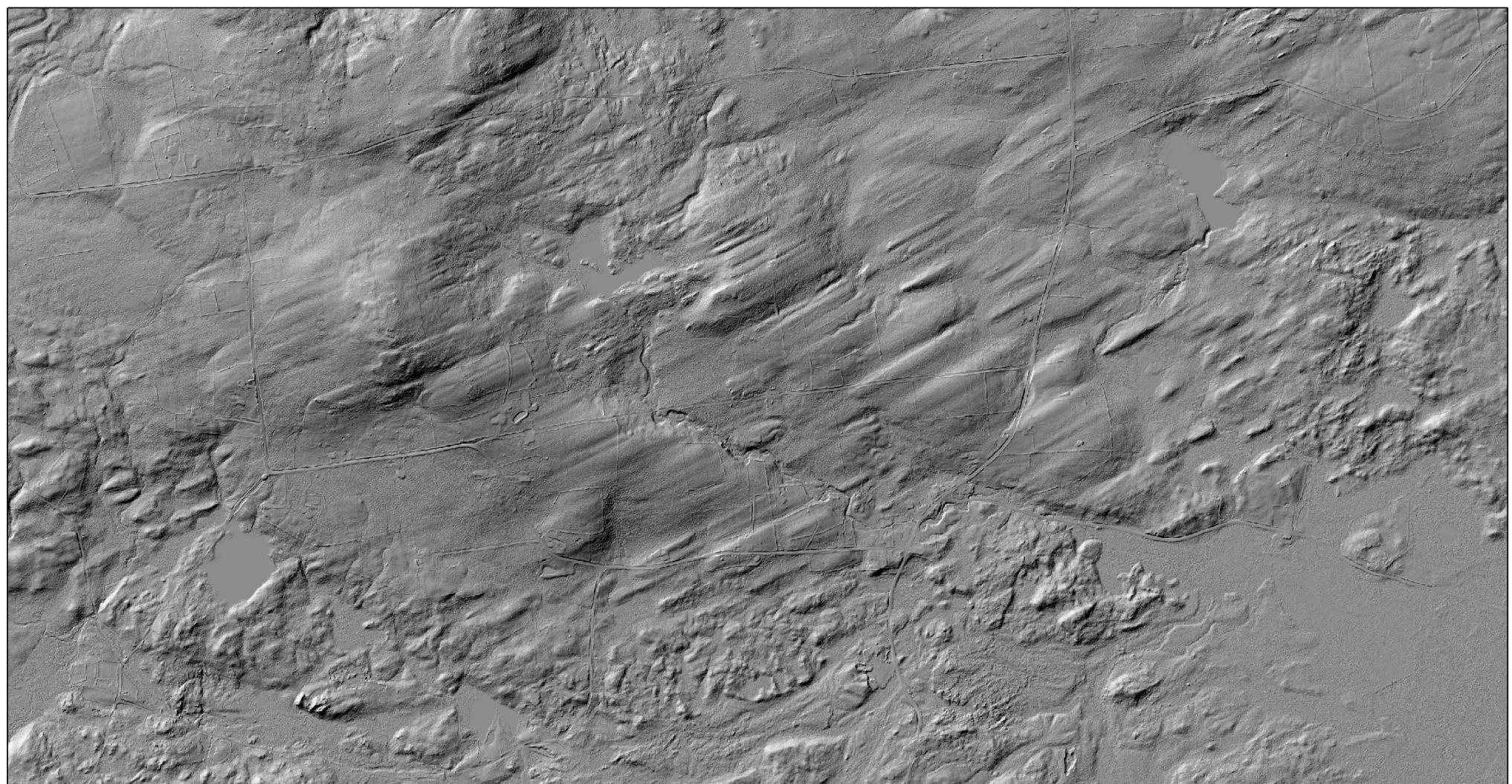




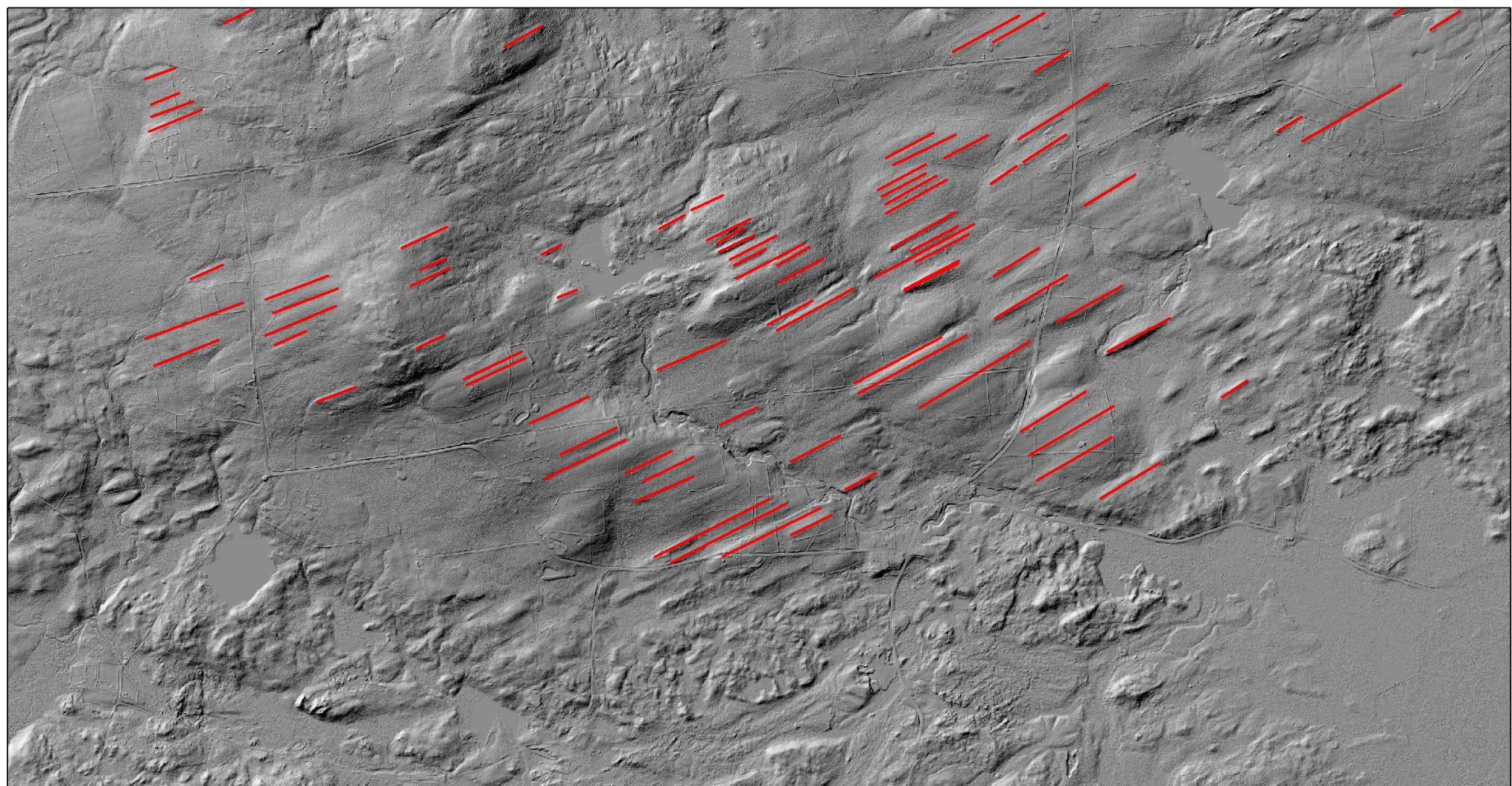
0 2.5 5 10 15 20 Kilometers



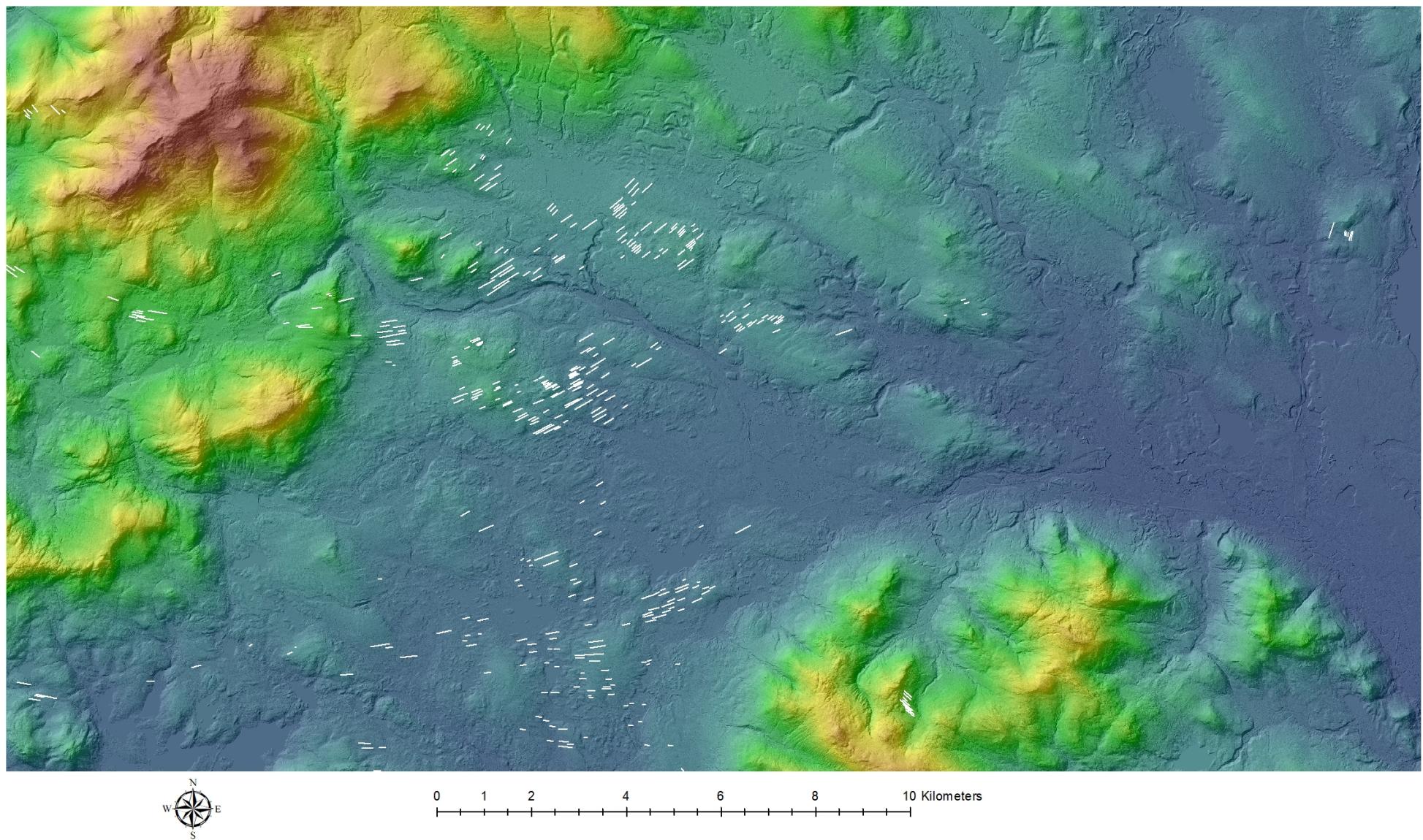
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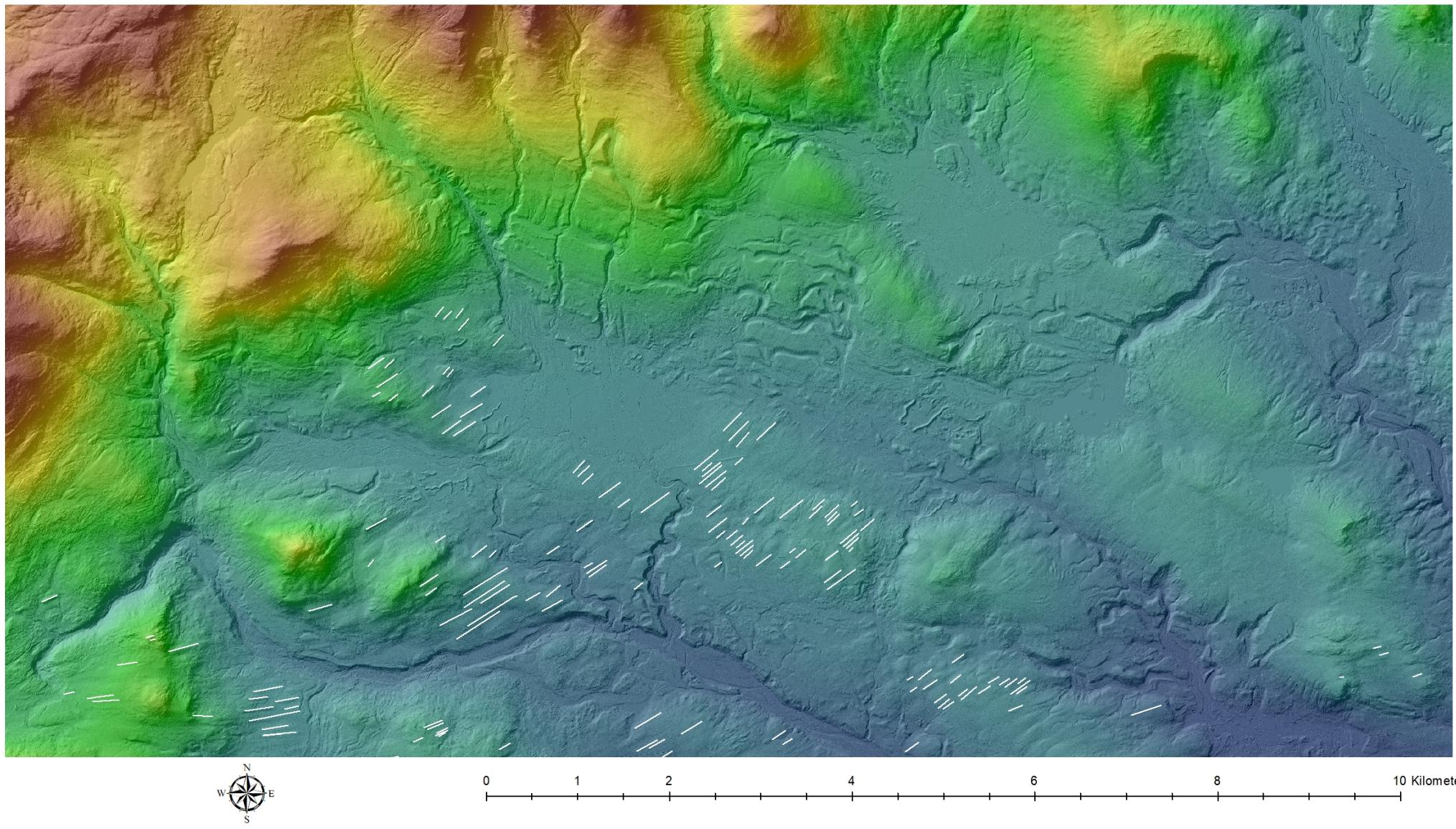
0    250    500    1,000    1,500    2,000 Meters



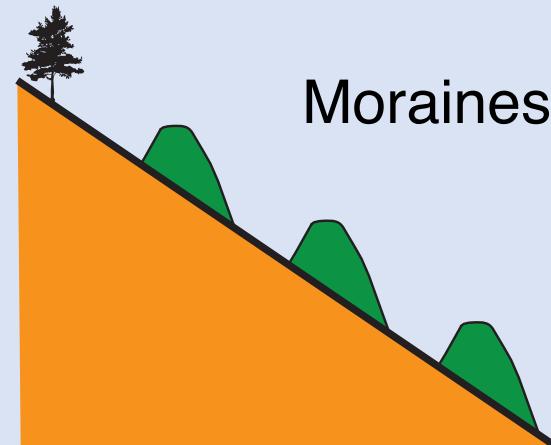
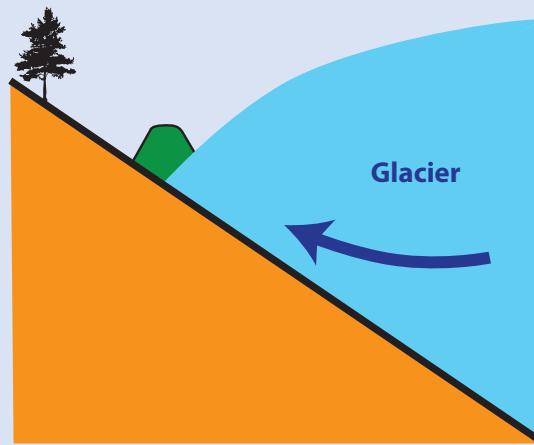
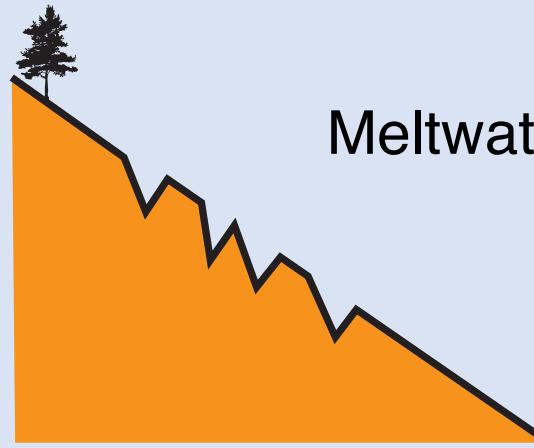
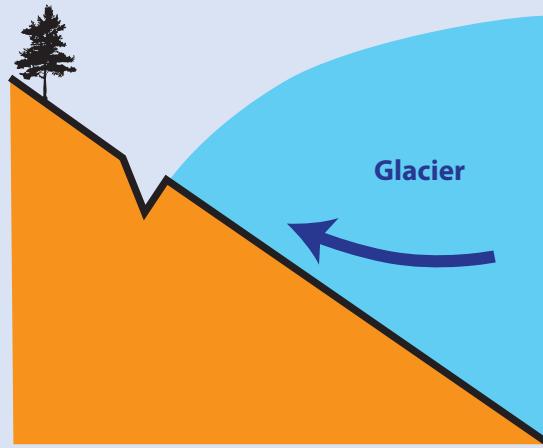
0 250 500 1,000 1,500 2,000 Meters



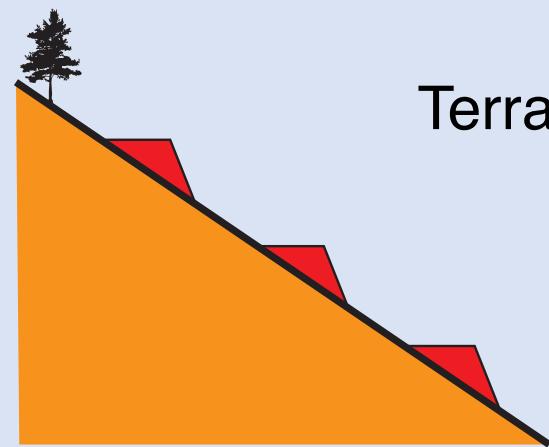
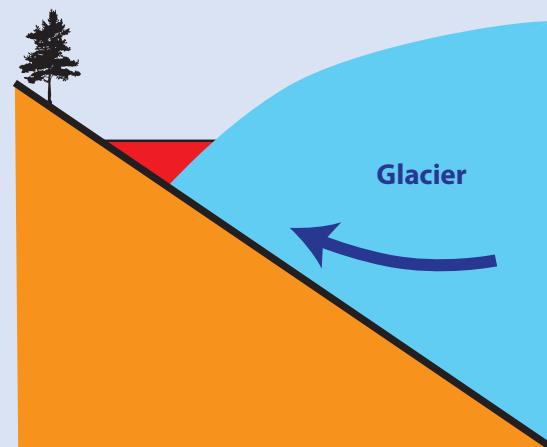
0 1 2 4 6 8  
10 Kilometers



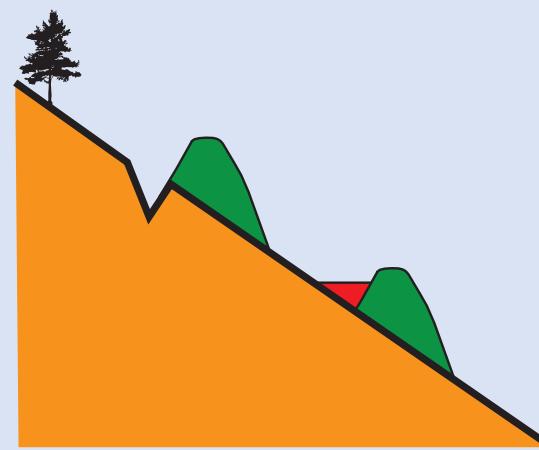
# Ice Margin Features



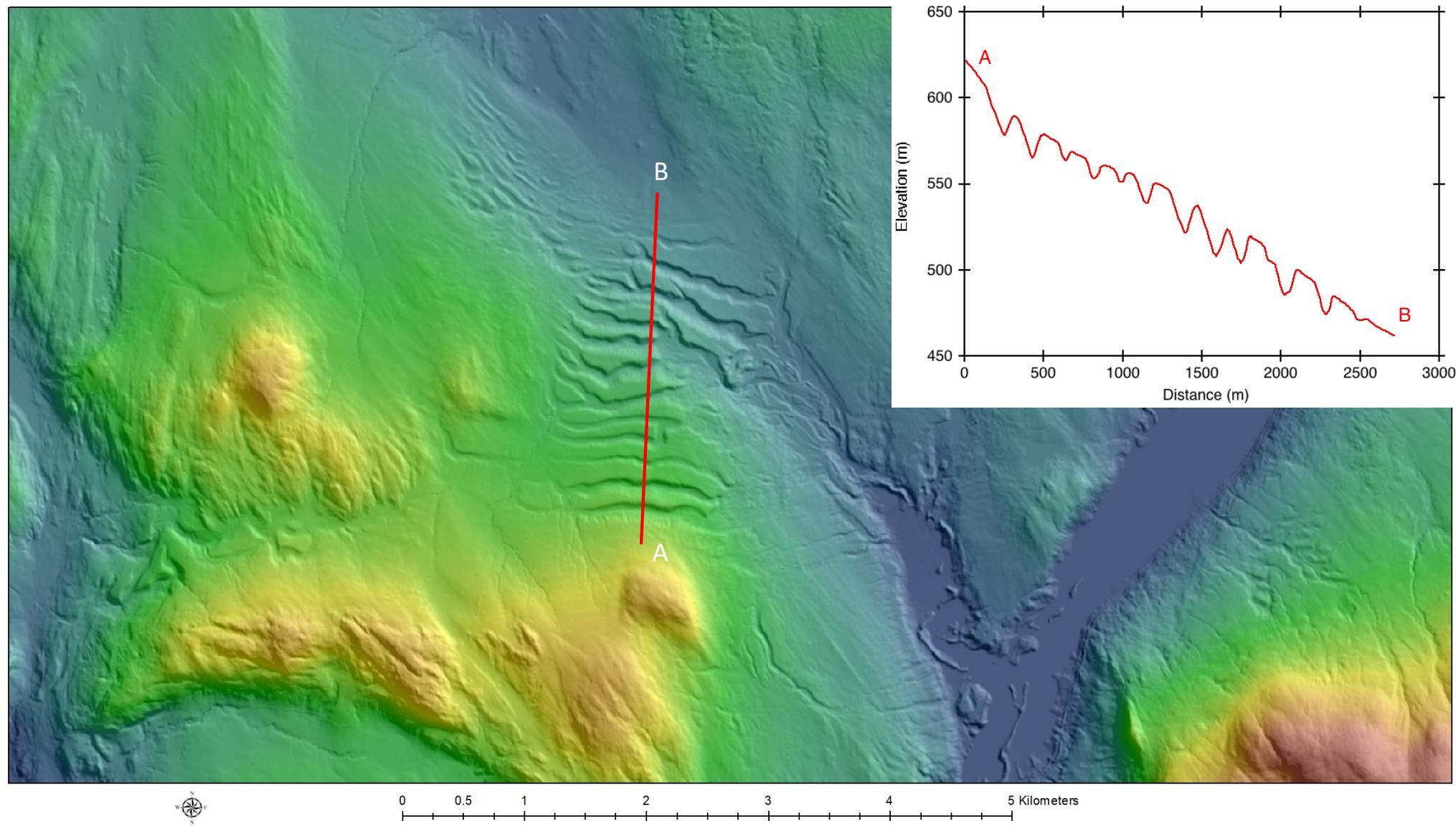
# Ice Margin Features

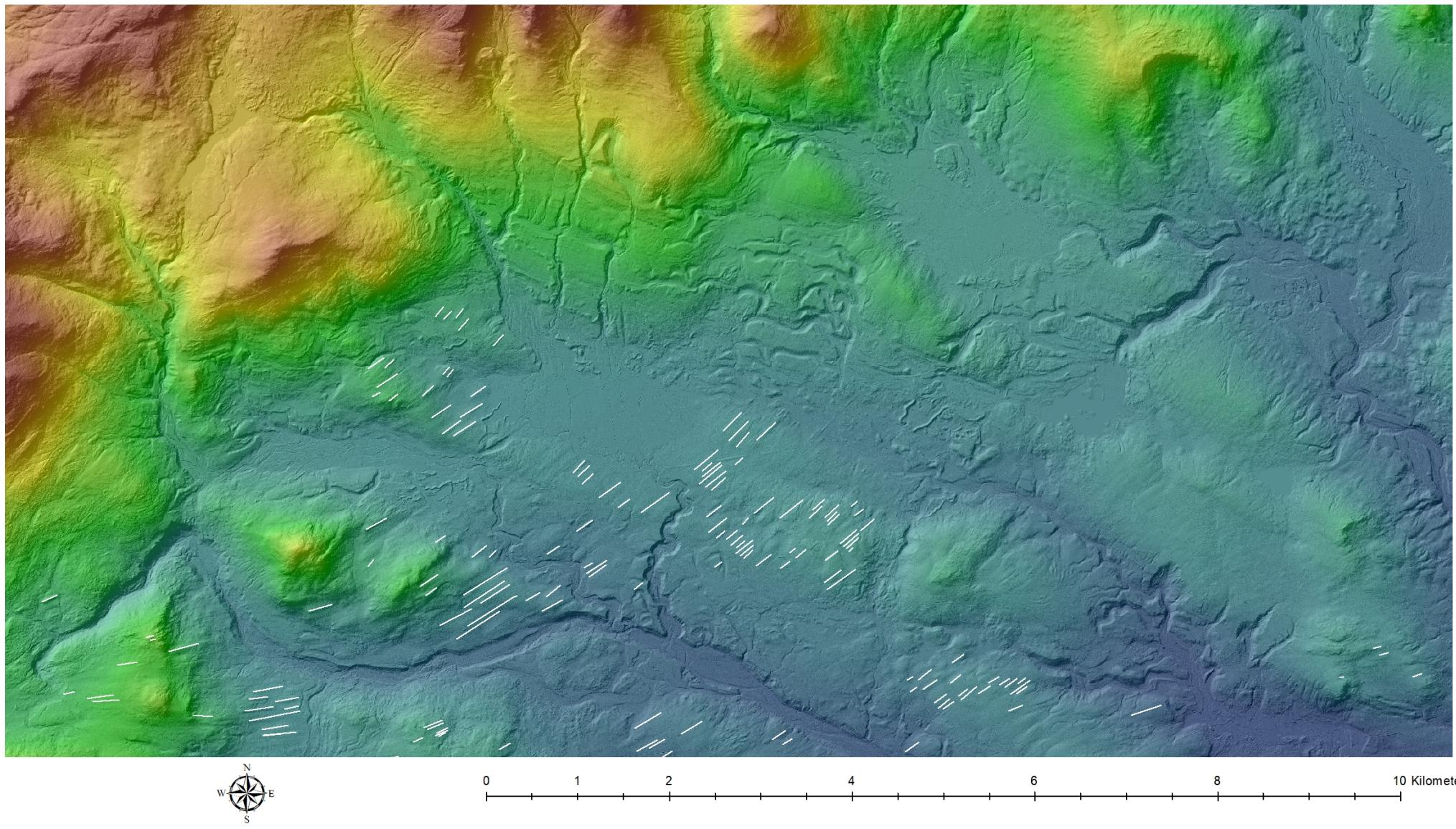


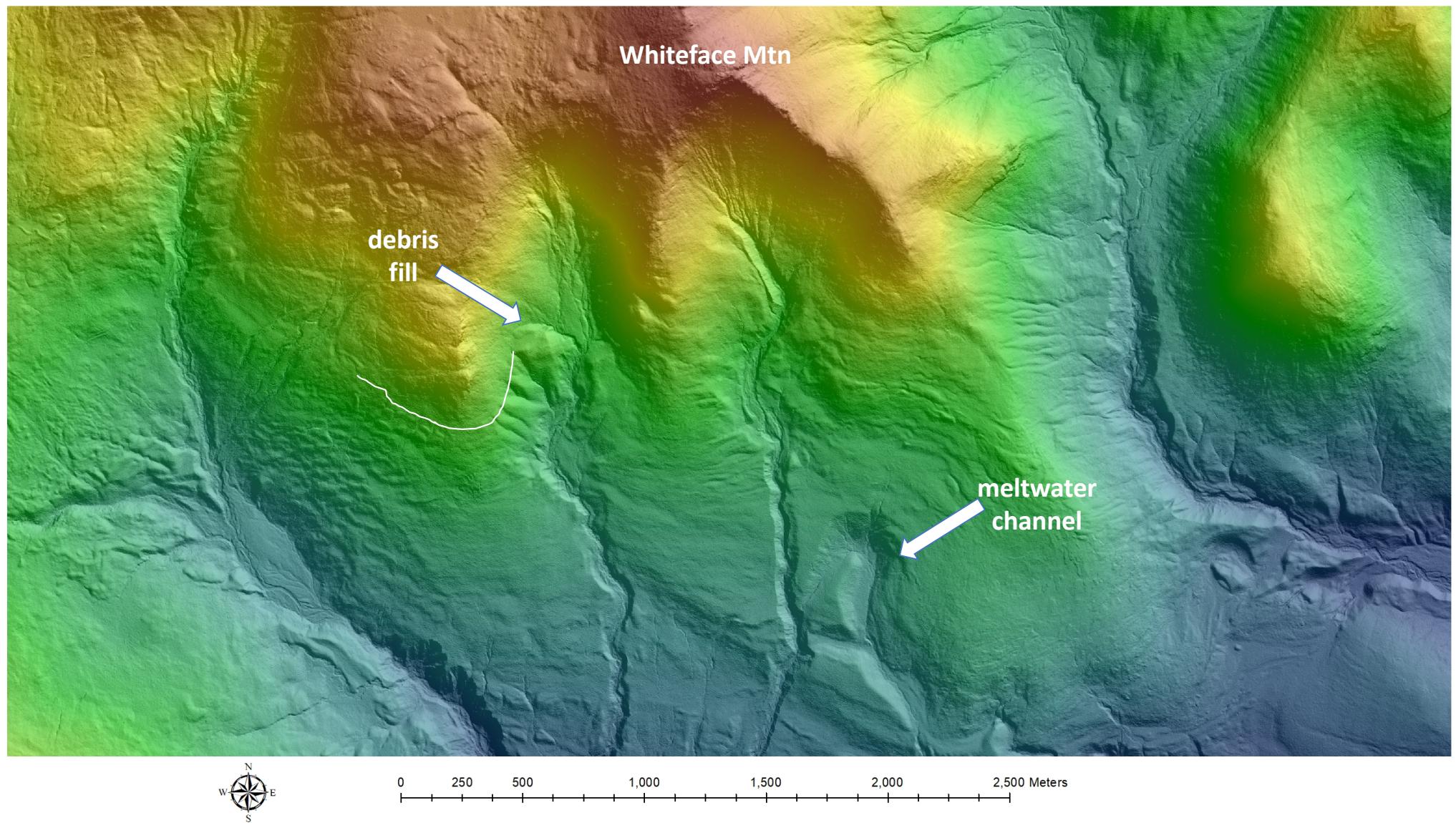
Terraces

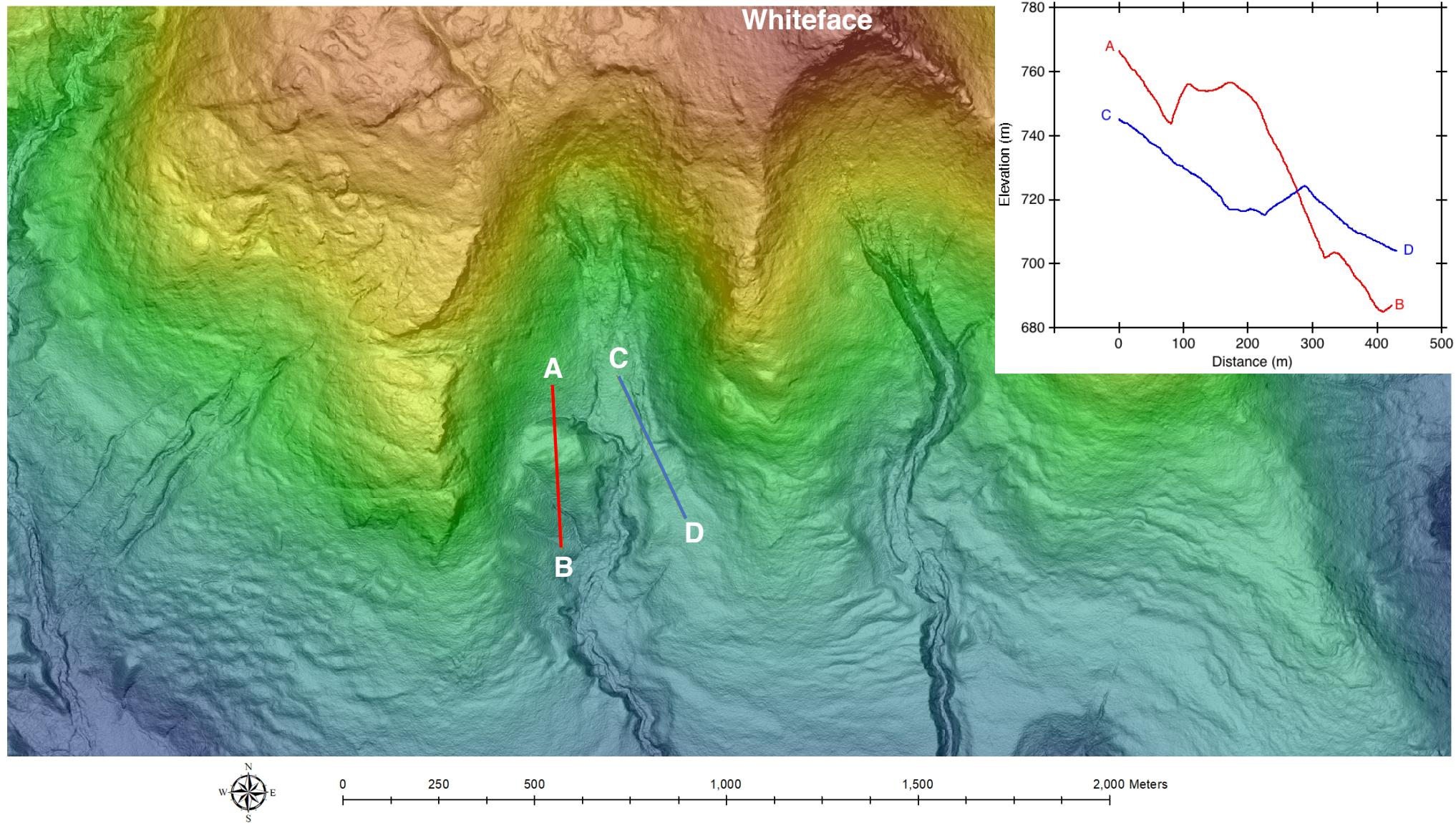


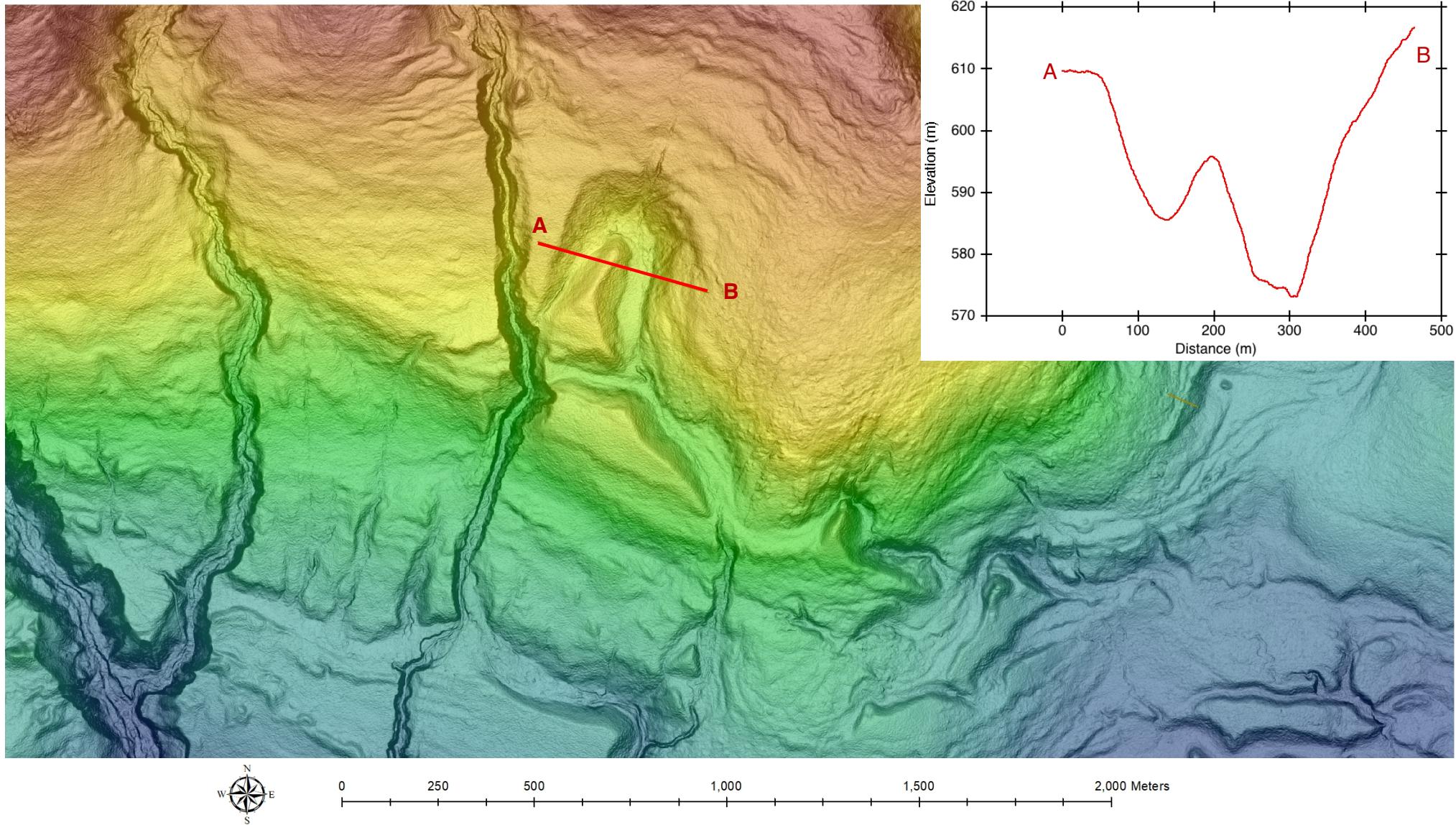
All 3 mixed together

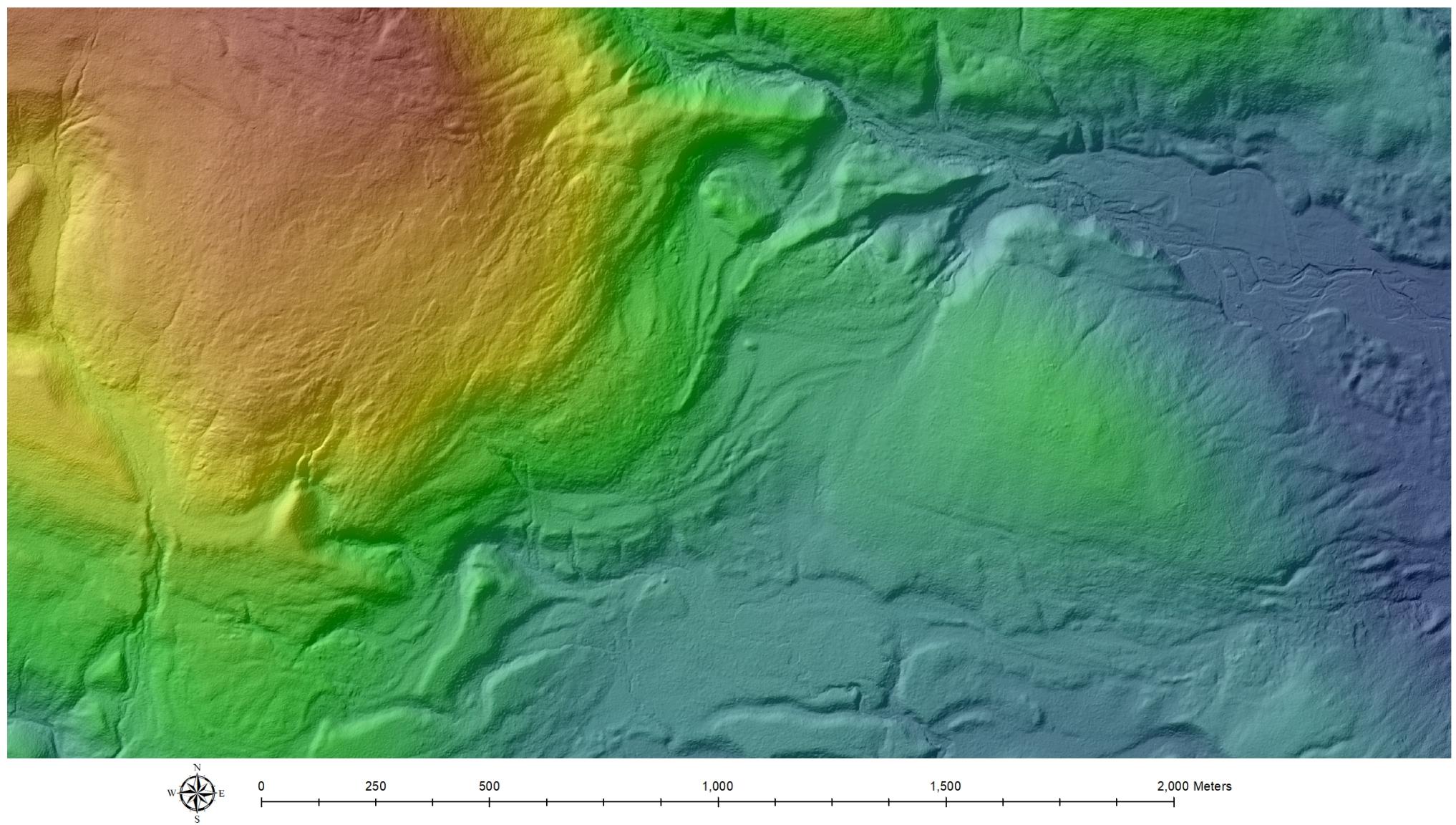




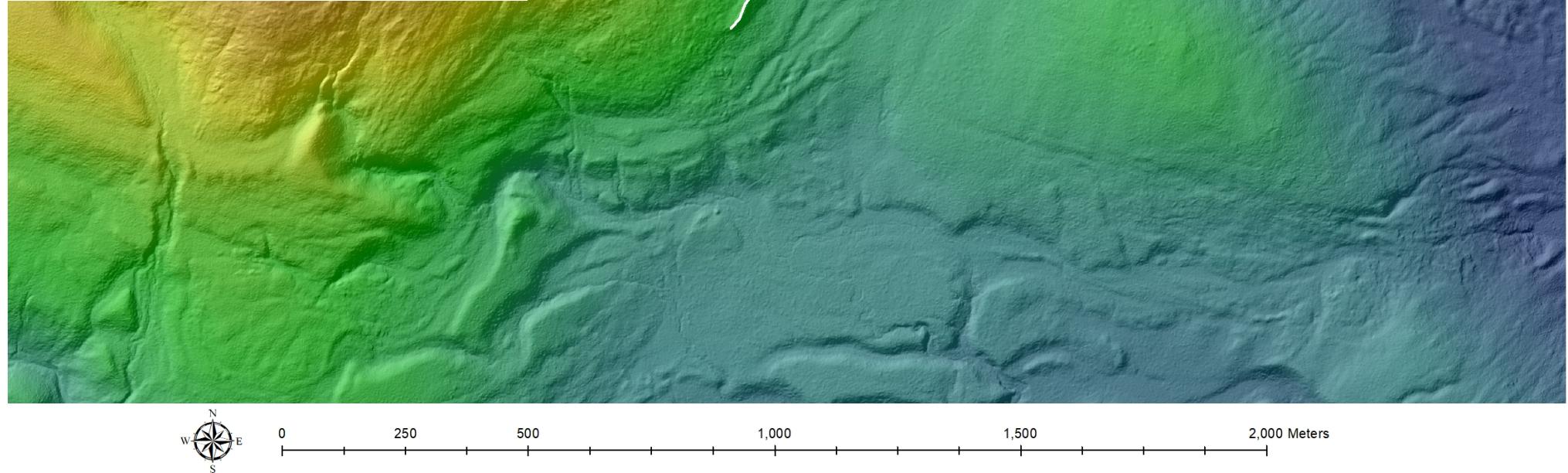
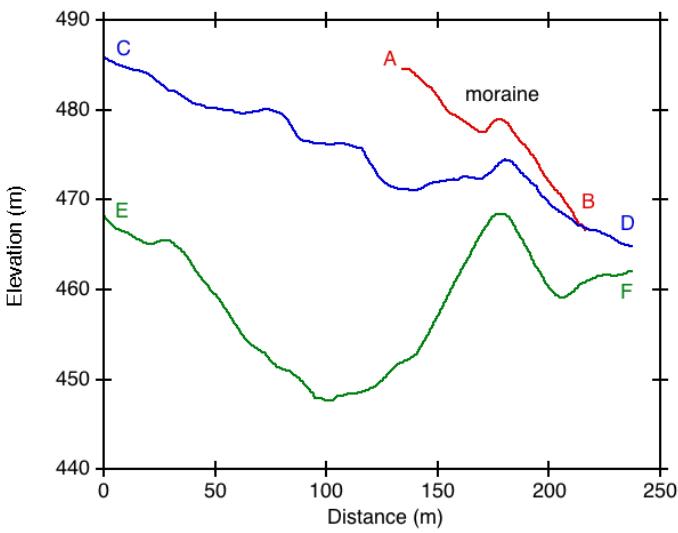


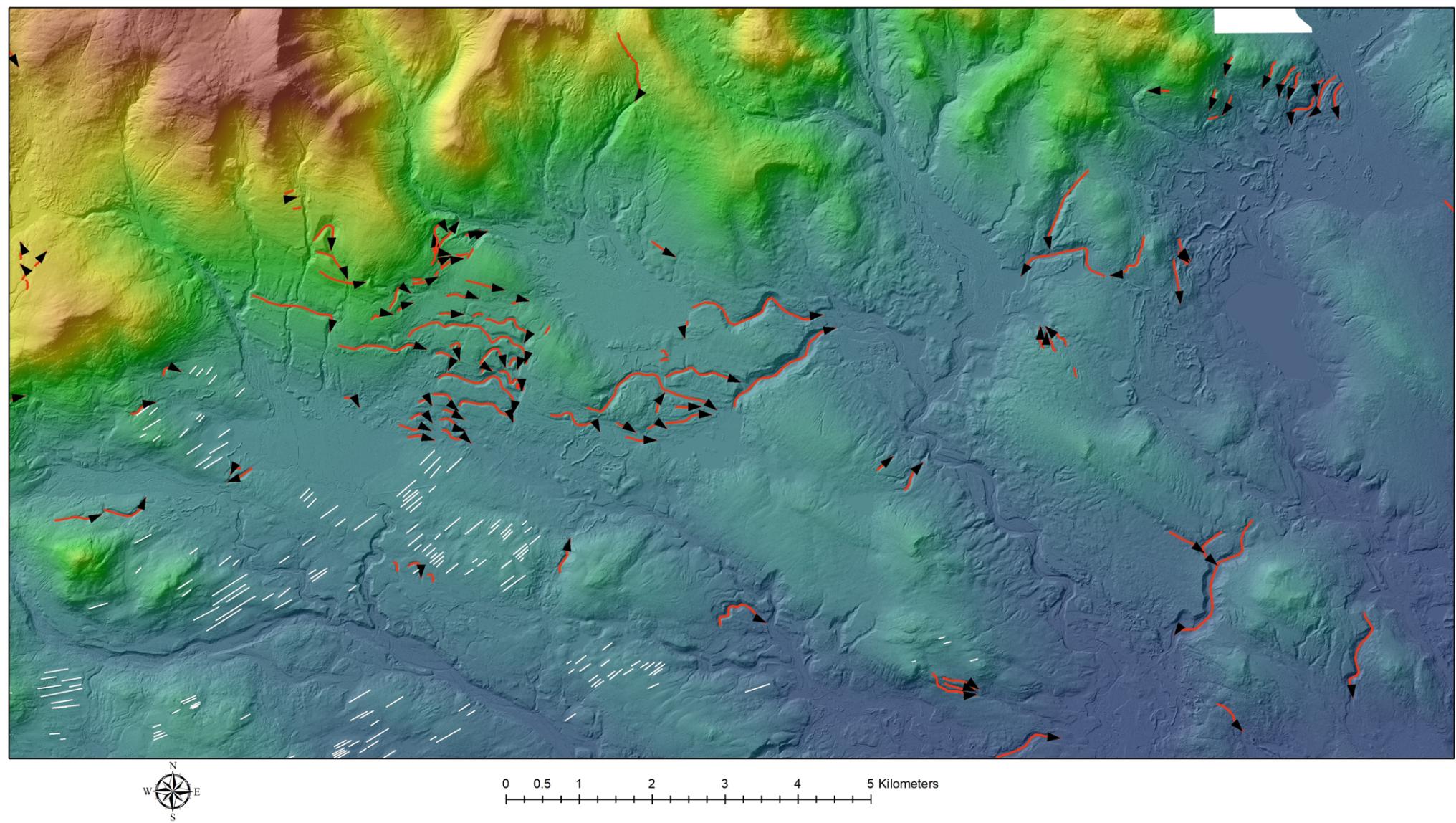


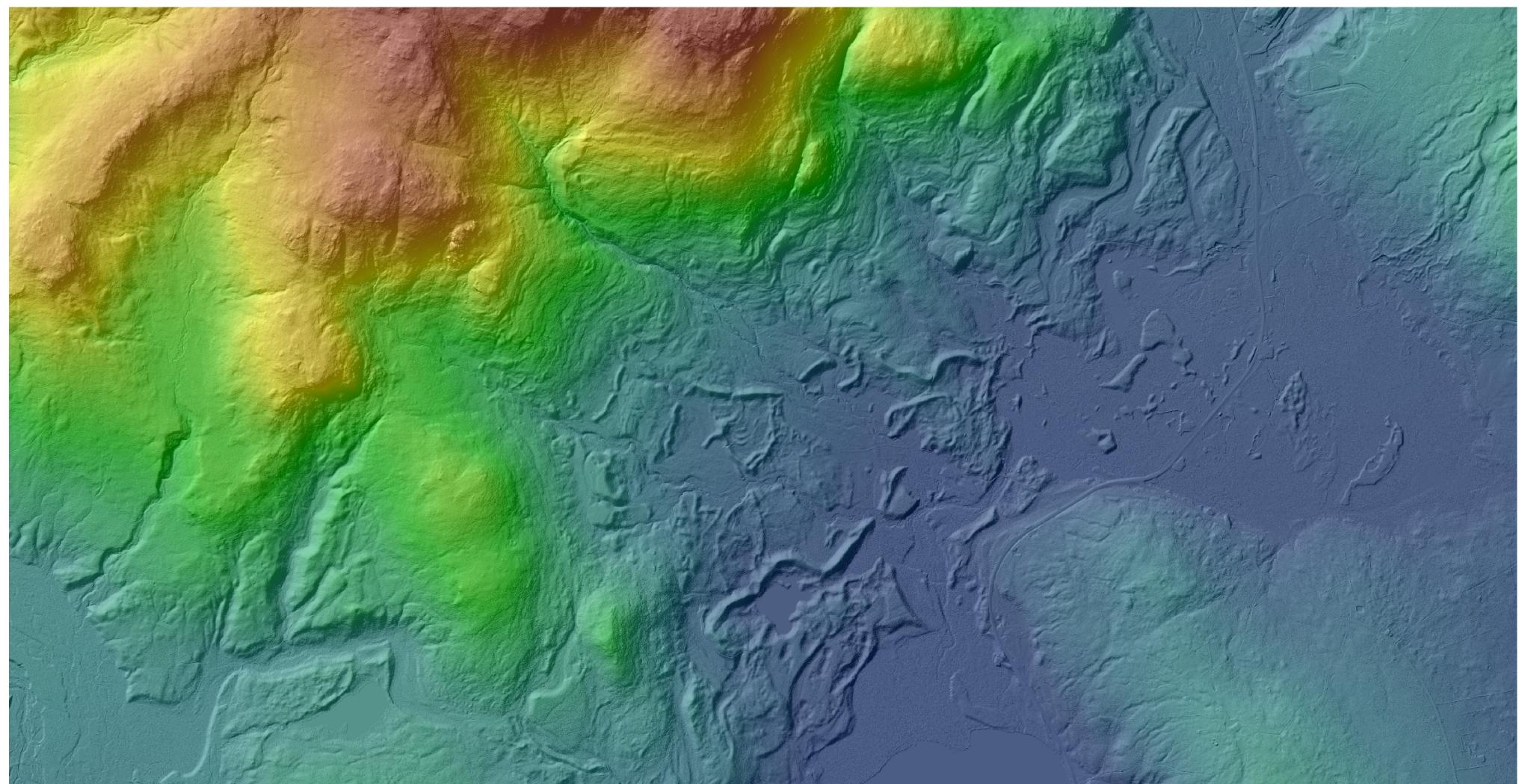




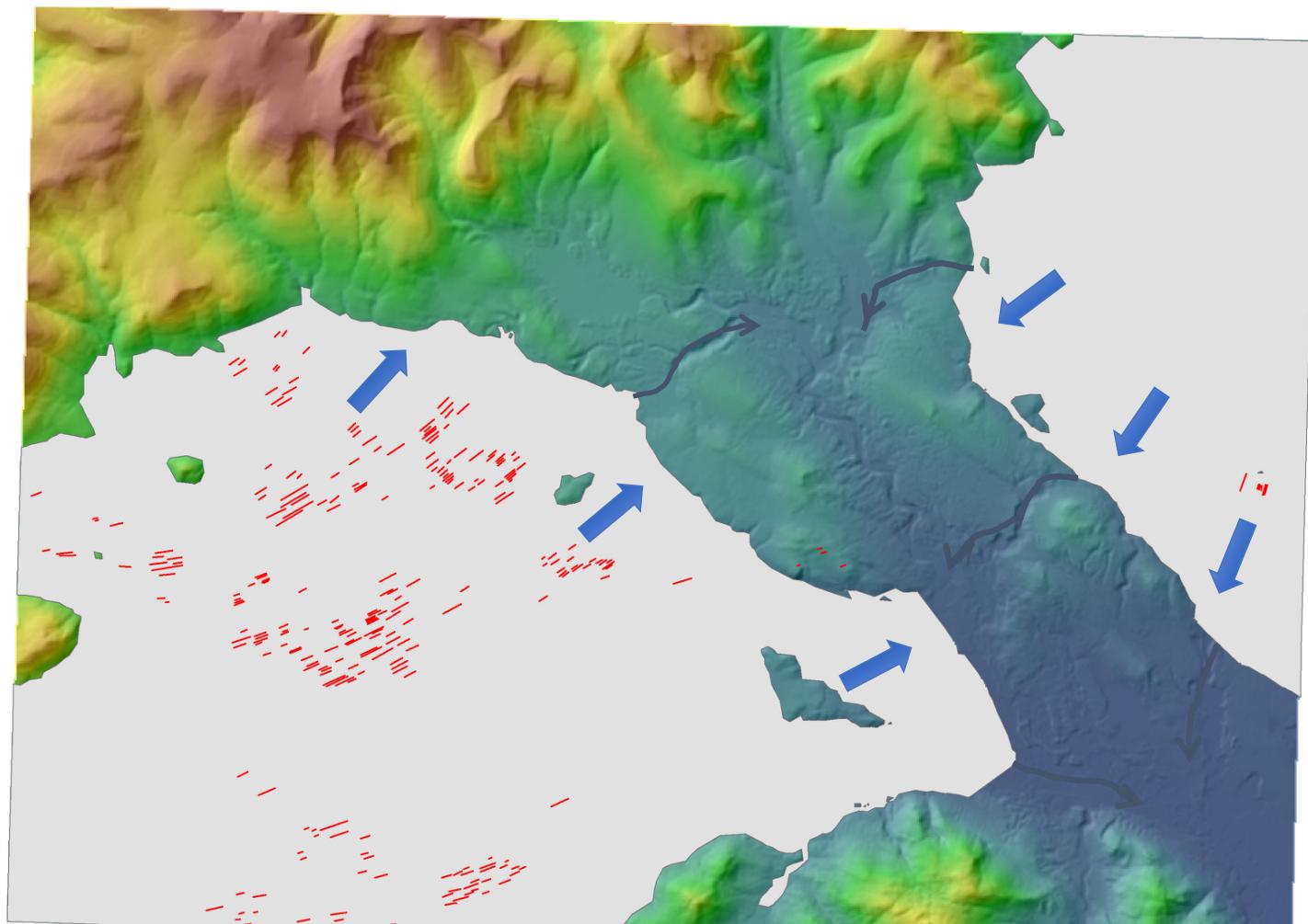
0      250      500      1,000      1,500      2,000 Meters







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



0 1 2 4 Miles

A wide-angle photograph of a sunset over a calm body of water. The sky is filled with vibrant orange, red, and yellow hues, with wispy clouds scattered across it. In the distance, a range of mountains is visible as dark silhouettes against the bright sky. The water in the foreground reflects the warm colors of the sunset, creating a peaceful and serene atmosphere.

# Questions?