

Main Map 2: Examples of changes in geomorphology following a glacial lake outburst flood, Zackenberg River, Northeast Greenland

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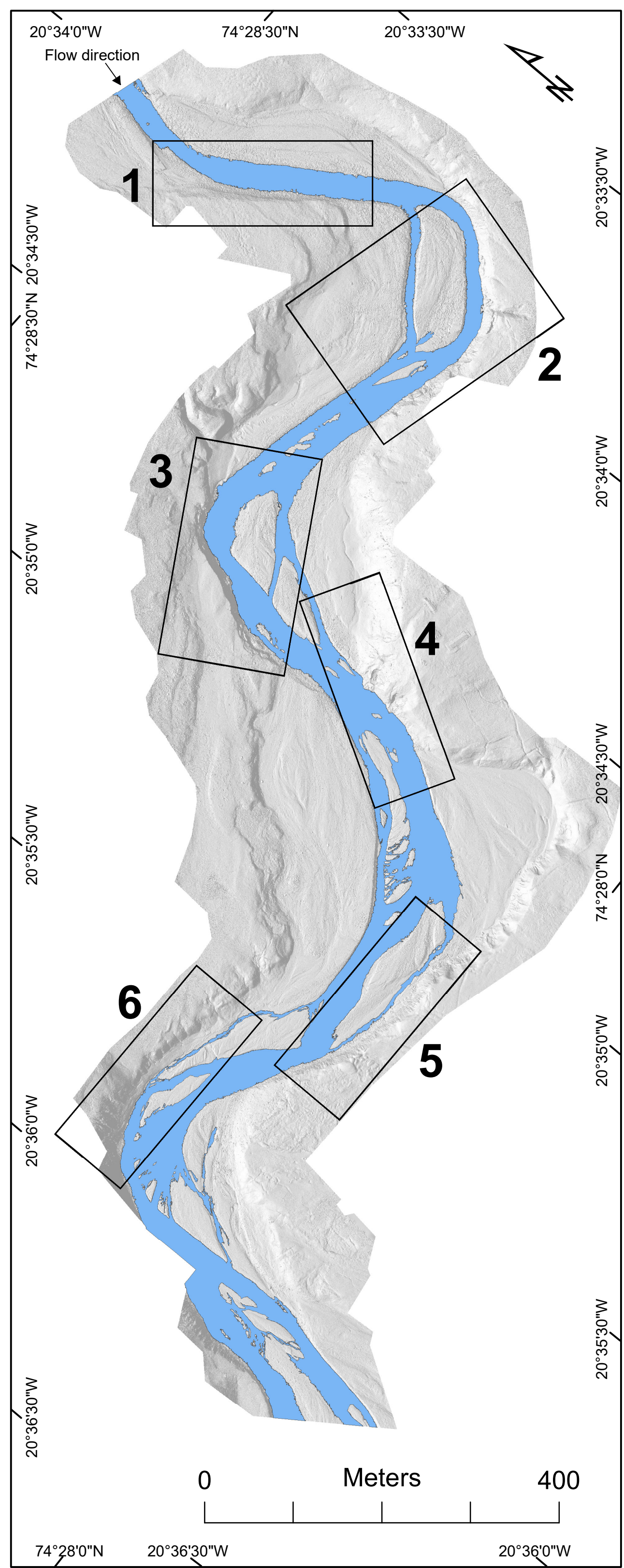
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5 August 2017 - before flood

8 August 2017 - after flood



Mass movement types

- Debris slide (Slump)
- Debris flow
- Debris fall
- Blockfall

River bank slope types

- Gentle slope ($>15^\circ$)
- Moderately steep slope ($15-35^\circ$)
- Steep slope ($35-90^\circ$)
- Undercut bank ($>90^\circ$)

Active fluvial scarp - location on 5 August 2017

Active fluvial scarp - location on 8 August 2017

Stable fluvial scarp

Old failure scar

Fluvial features

- Modern floodplain (gravel and sand deposits)
- Vegetated floodplain
- Relict fluvial terrace
- Alluvial fan
- Fresh fluvial deposit (zone of the flood)

Periglacial features

- Thermoerosional gully
- Solifluction lobe
- Ice wedges

Hydrological features

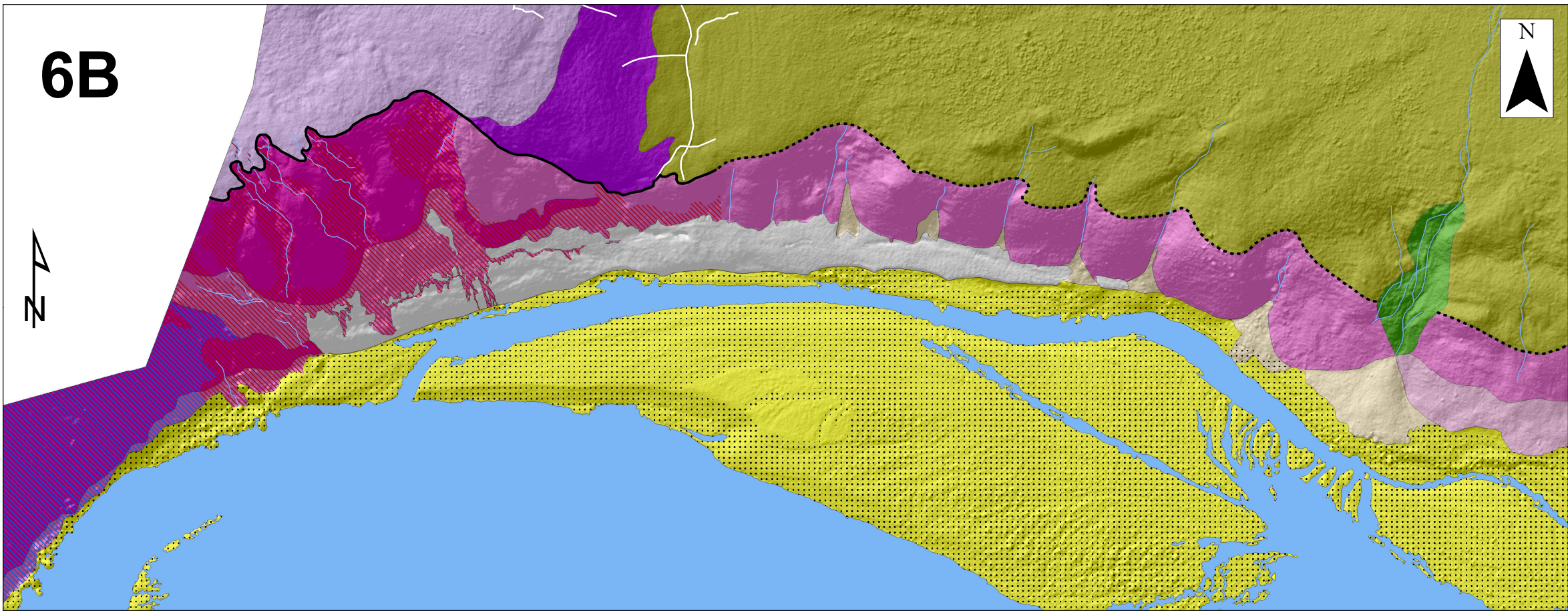
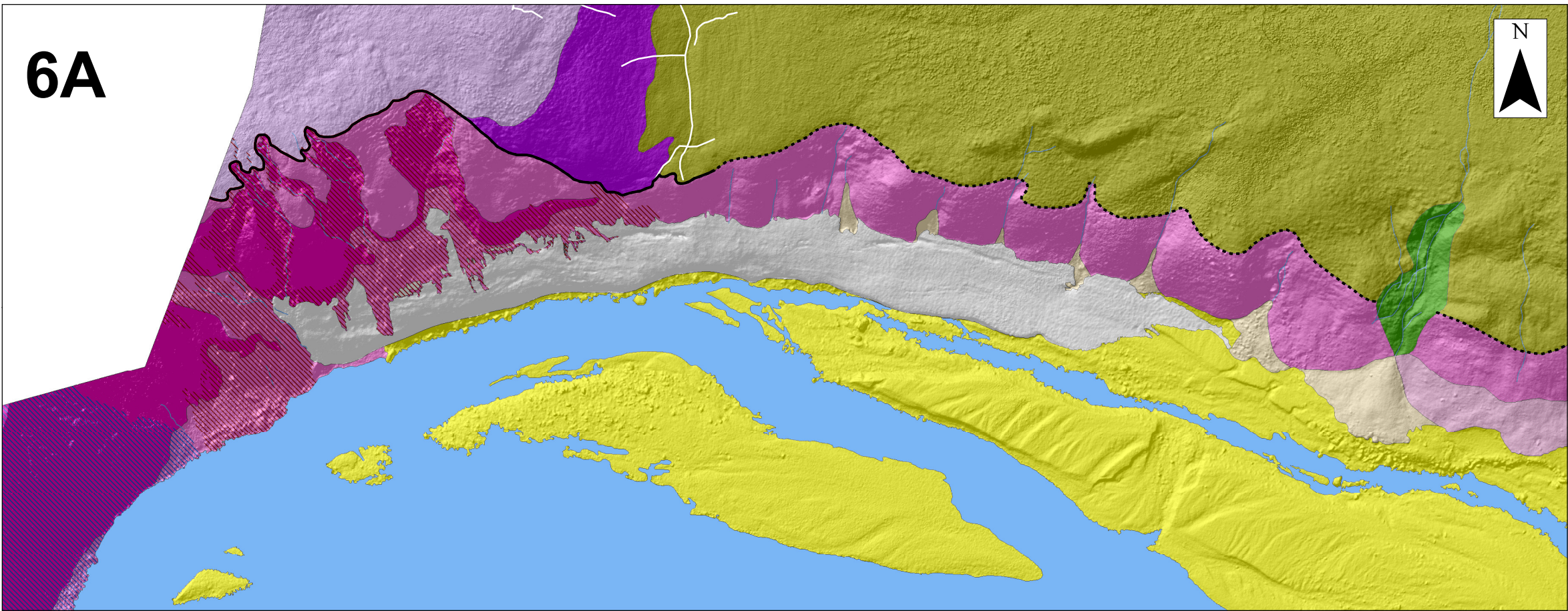
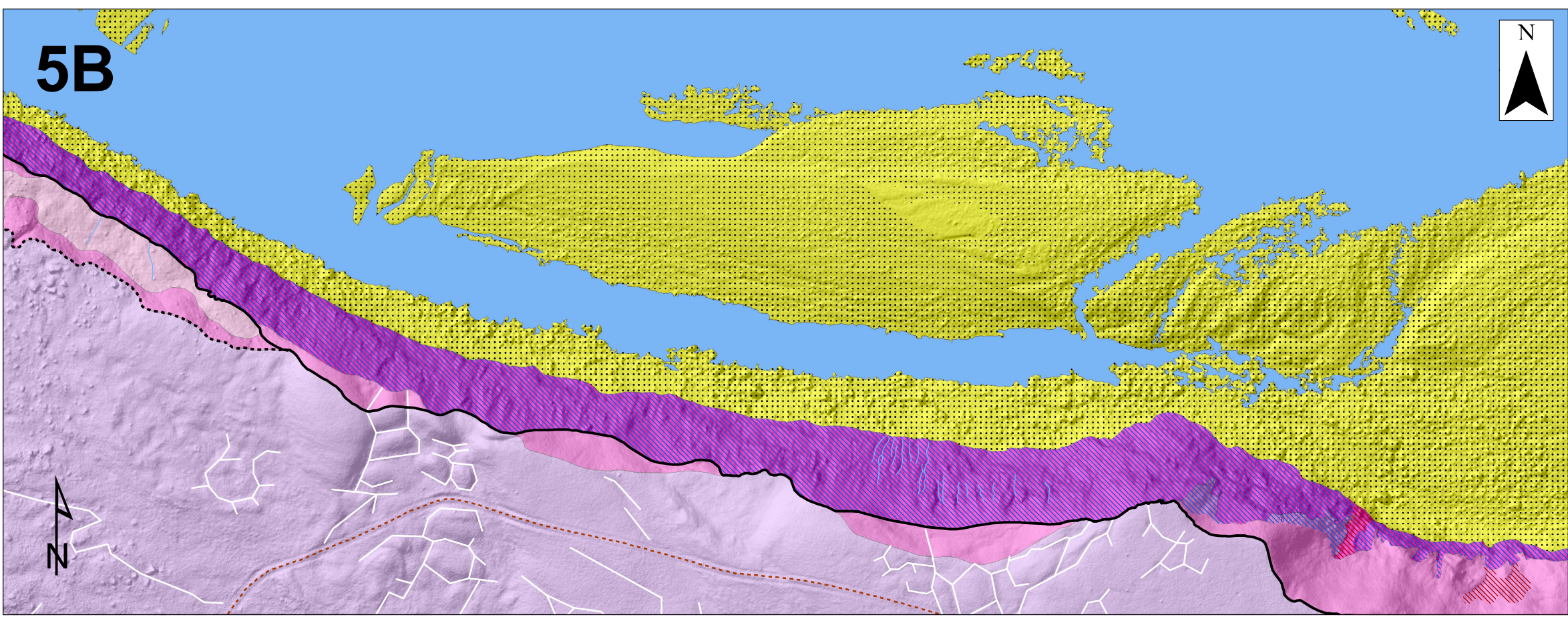
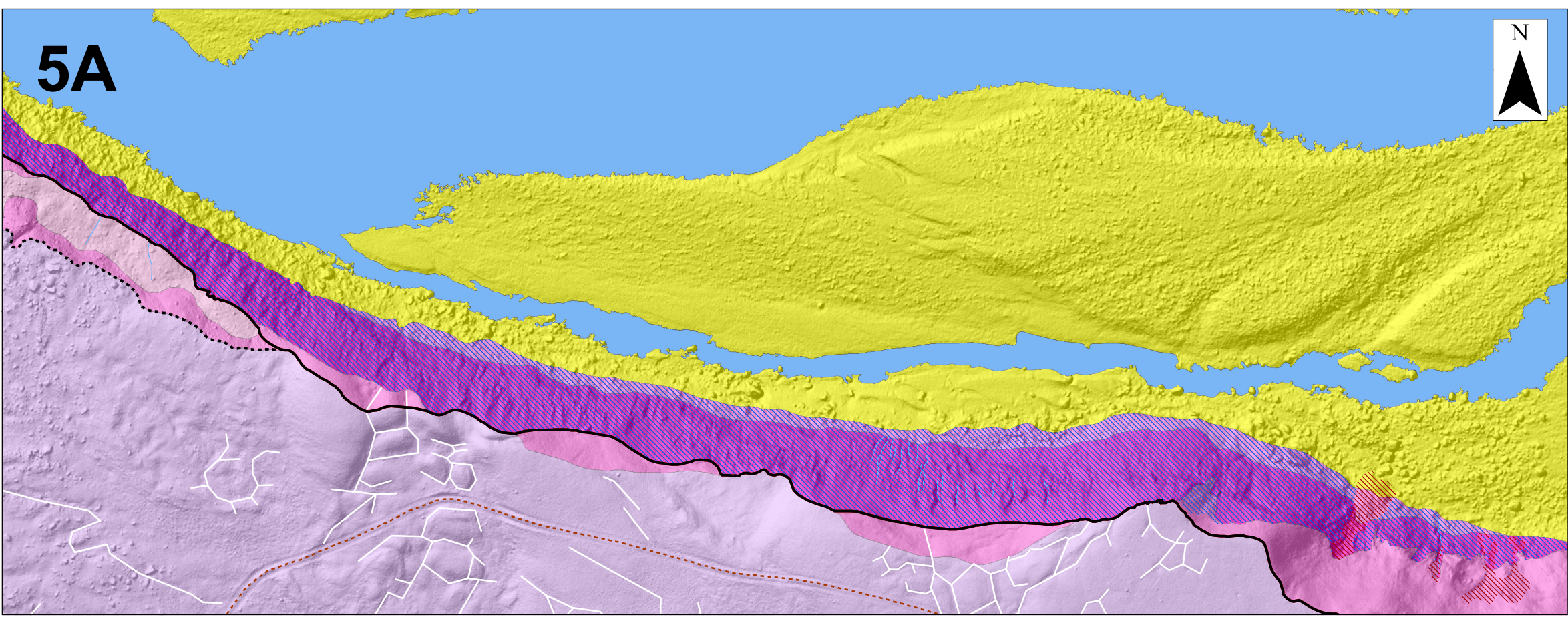
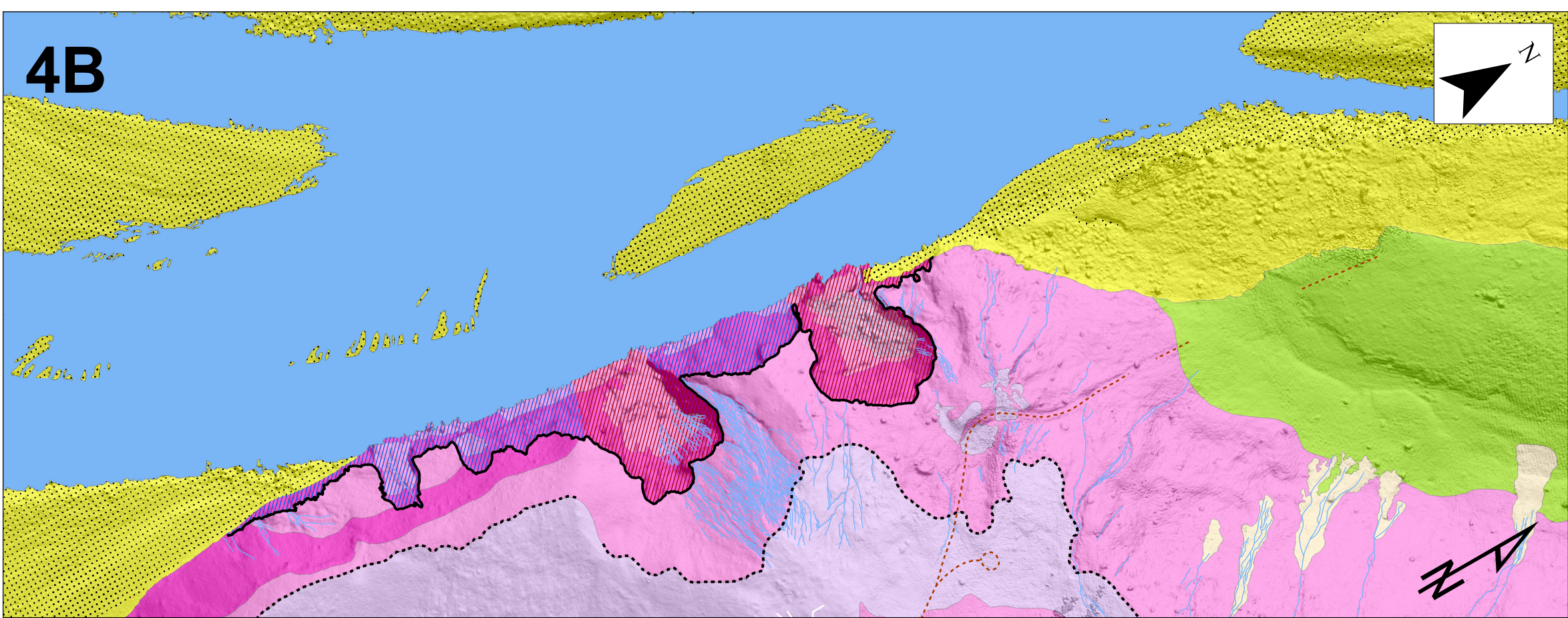
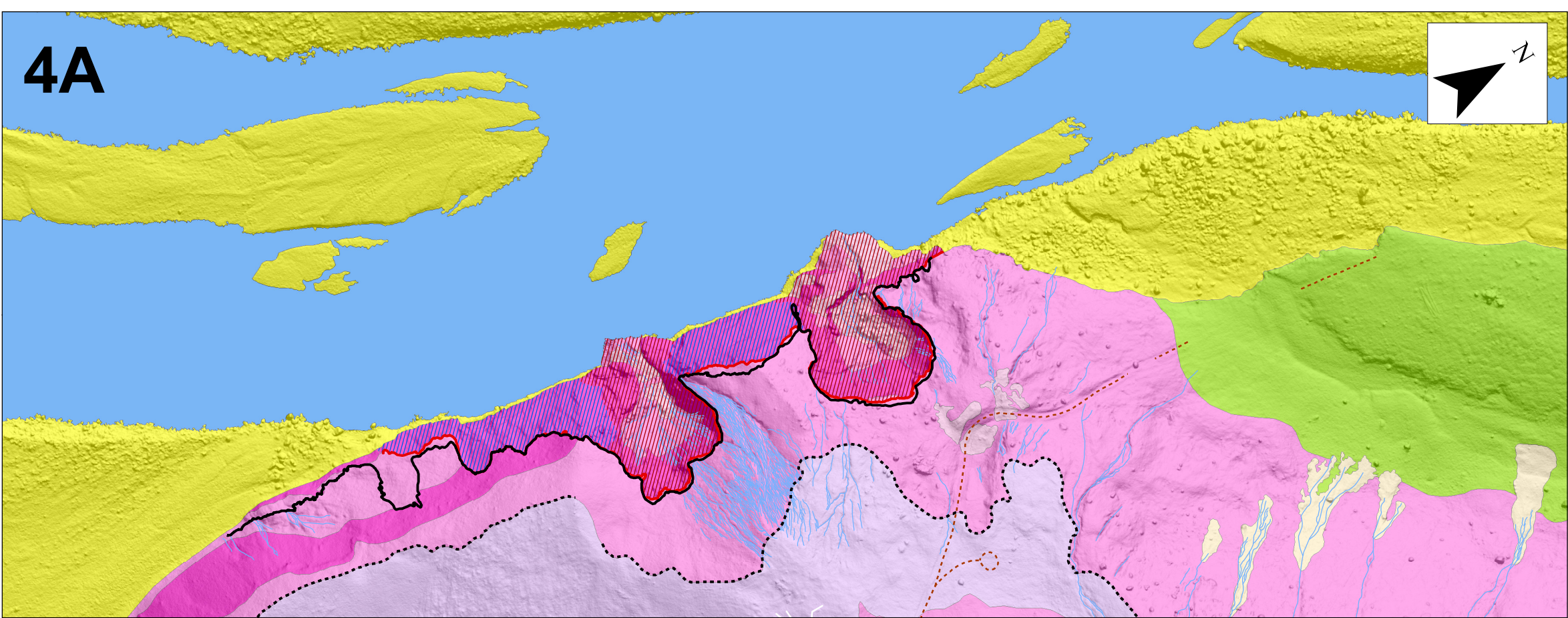
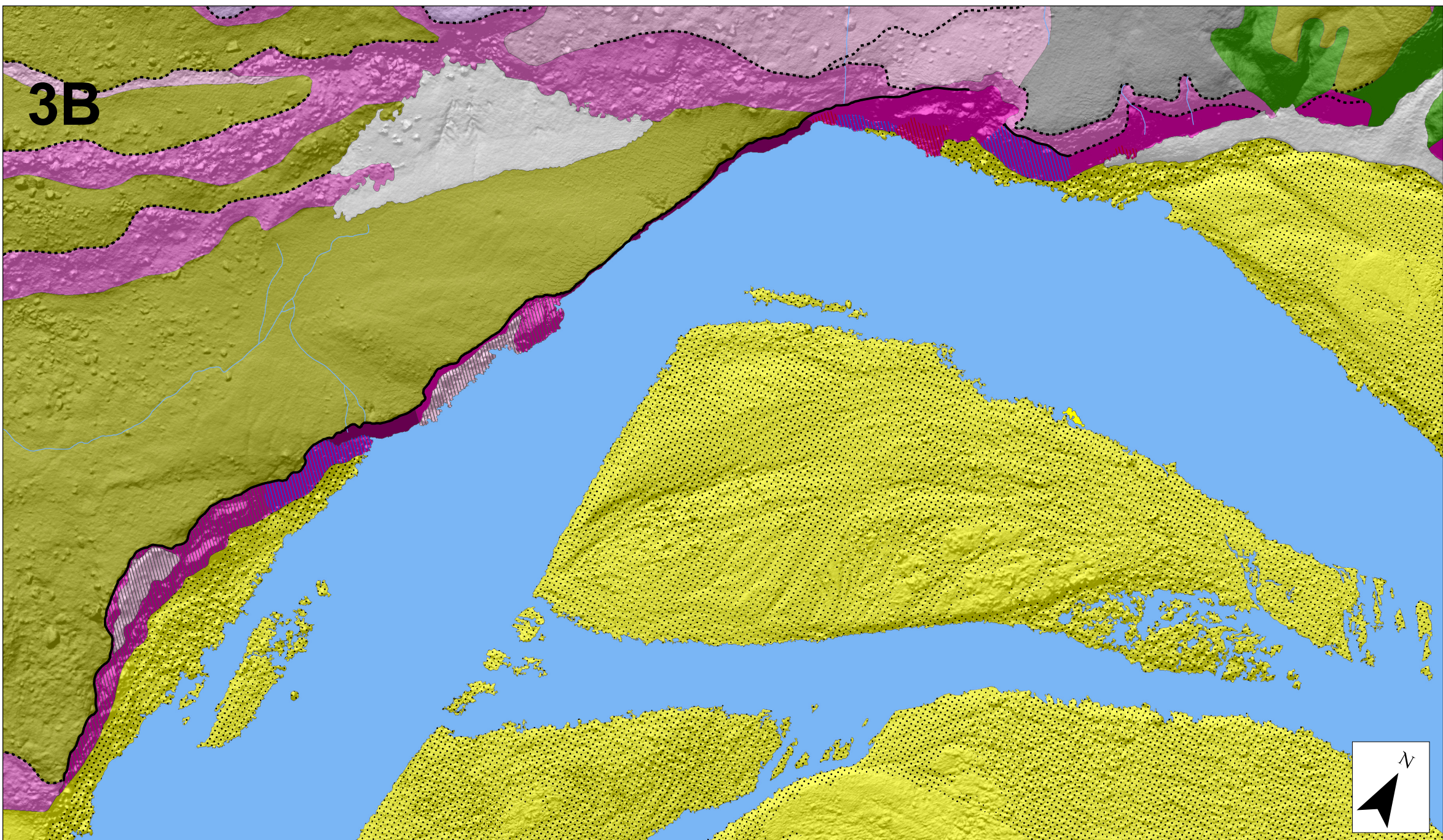
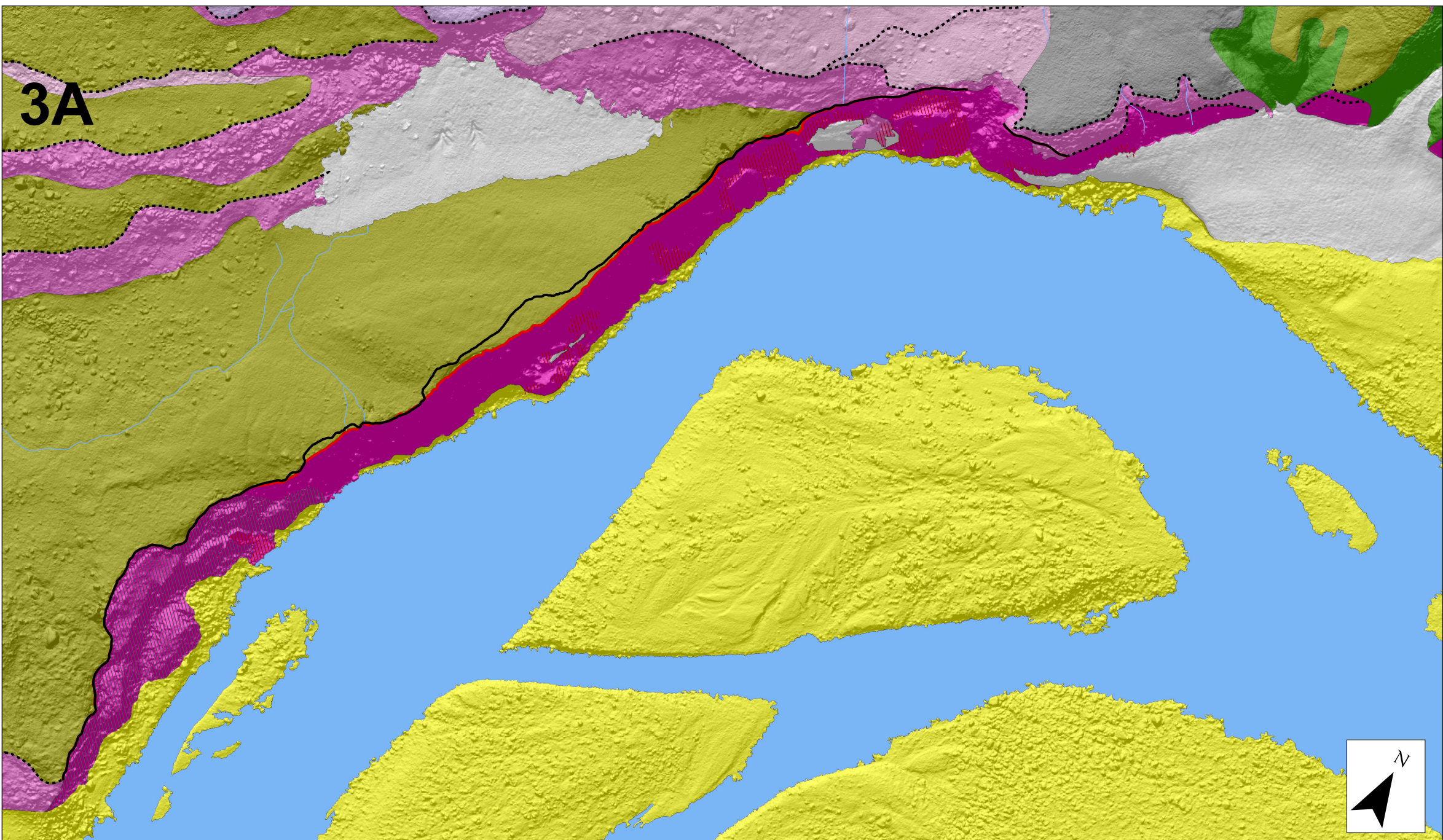
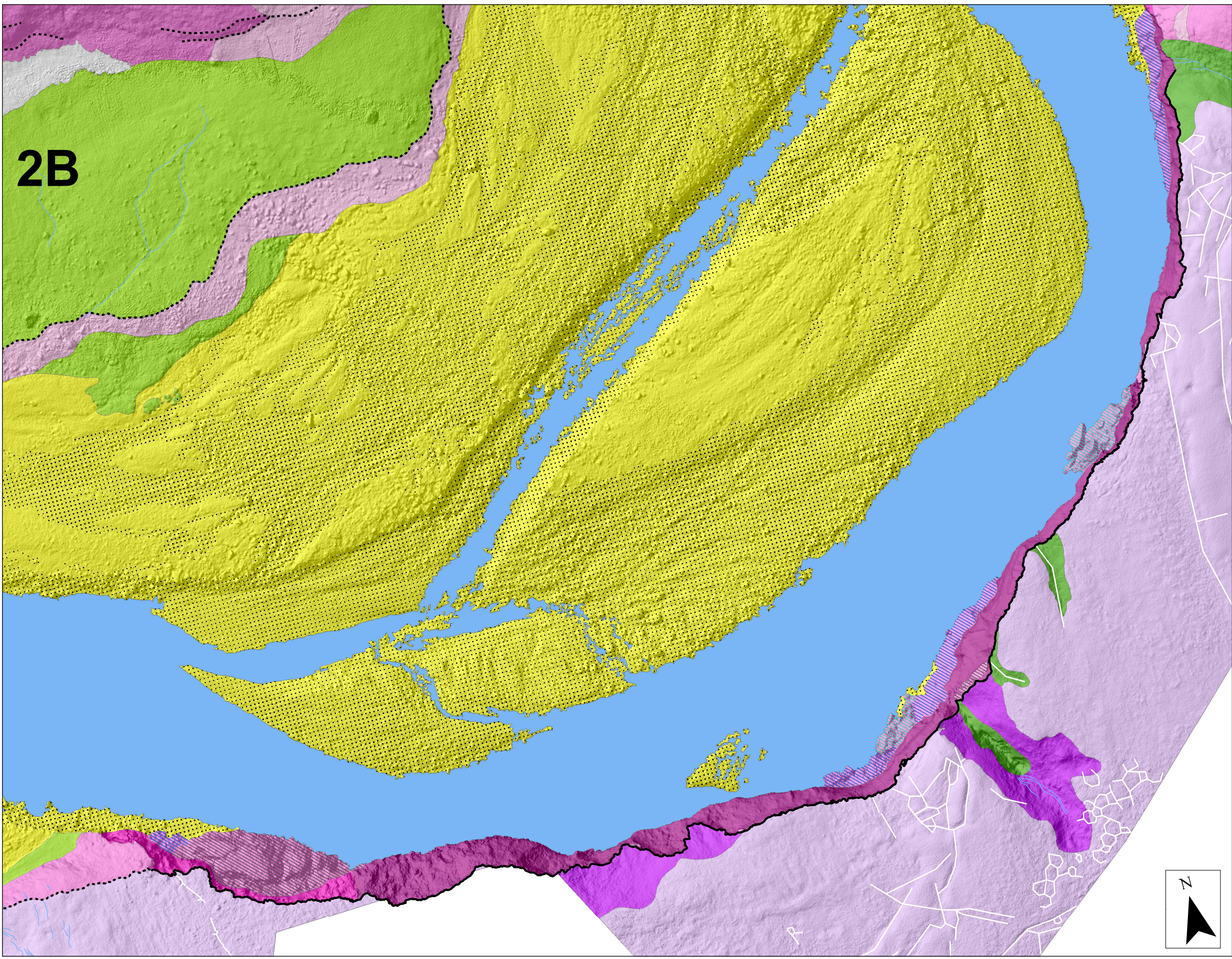
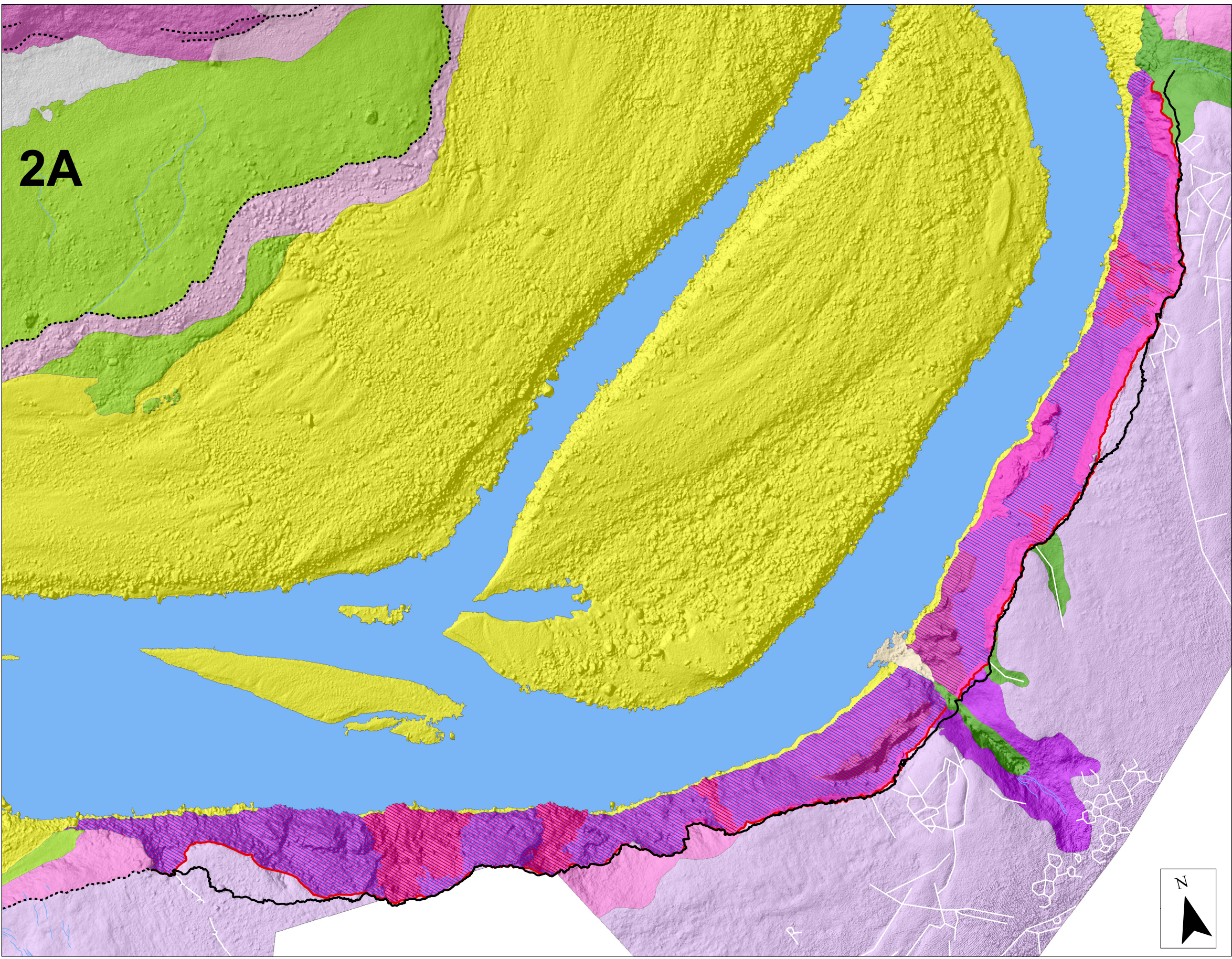
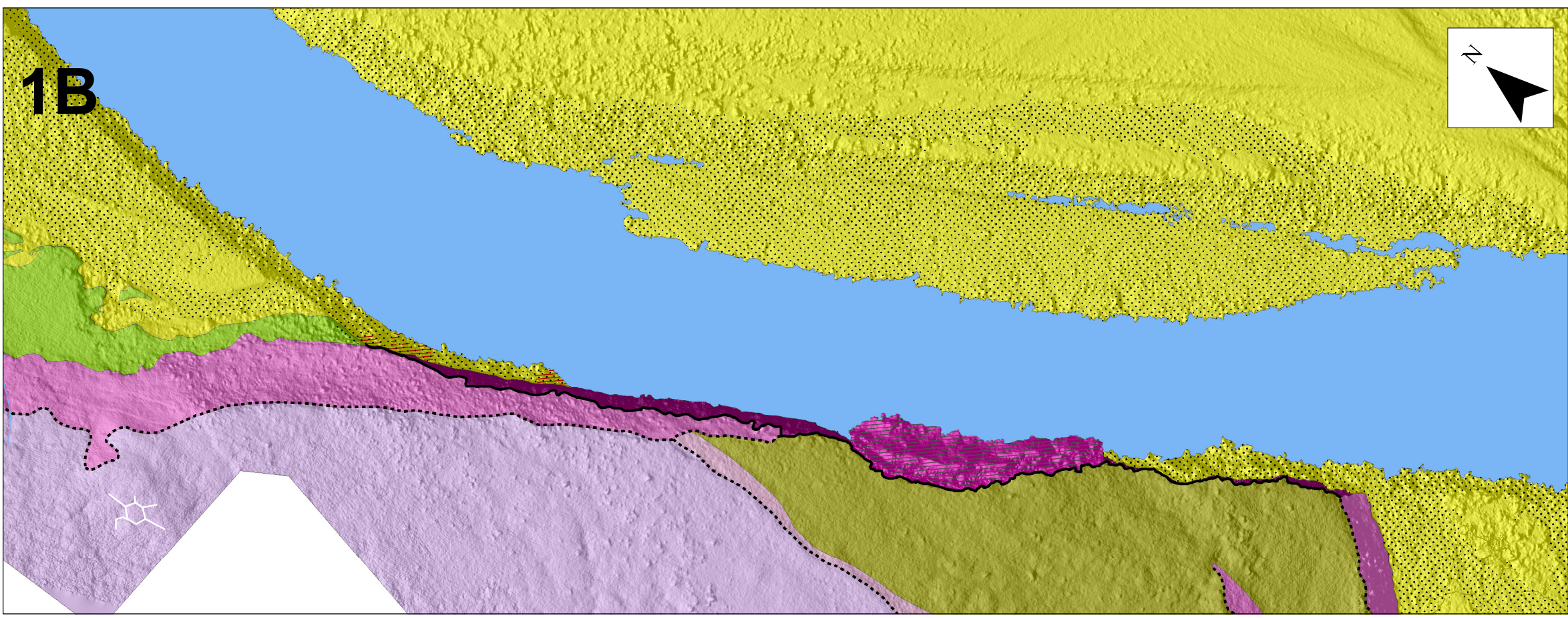
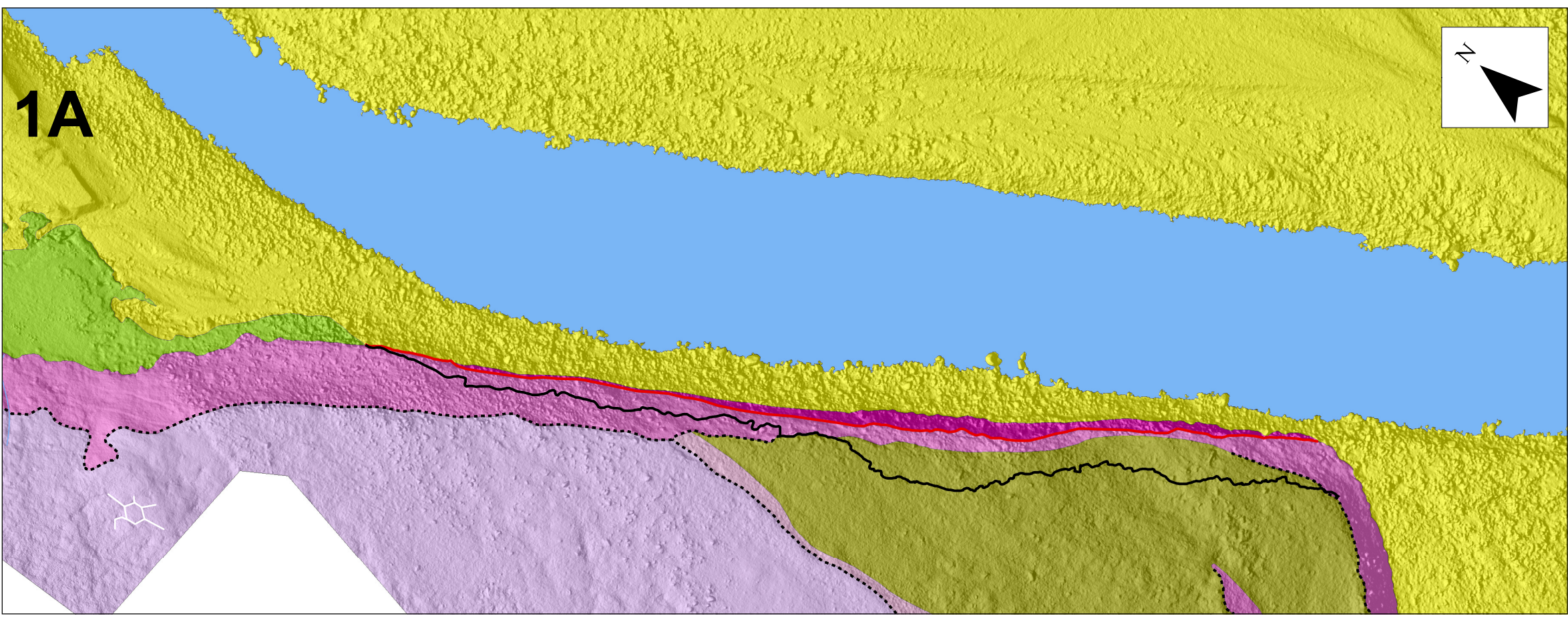
- Water
- Snow patch
- Drainage

Other features

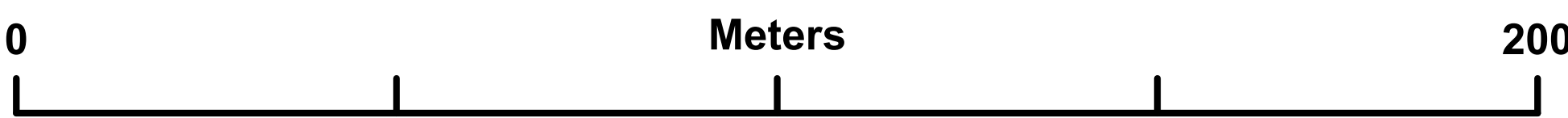
- Flat area and gentle slope (less than 15°)
- Moderately and steep slope (more than 15°)

Topographic elements

- 4x4 off-road trail



1:800
(when printed in A0)



Projection: UTM zone 27N / WGS 1984; Map based on an orthophoto and digital elevation model generated from Unmanned Airborne Vehicle photographs. Map to accompany paper: A.M. Tomczyk and M.W. Ewertowski: UAV-based remote sensing of immediate changes in geomorphology following a glacial lake outburst flood, Zackenberg River, Northeast Greenland.