

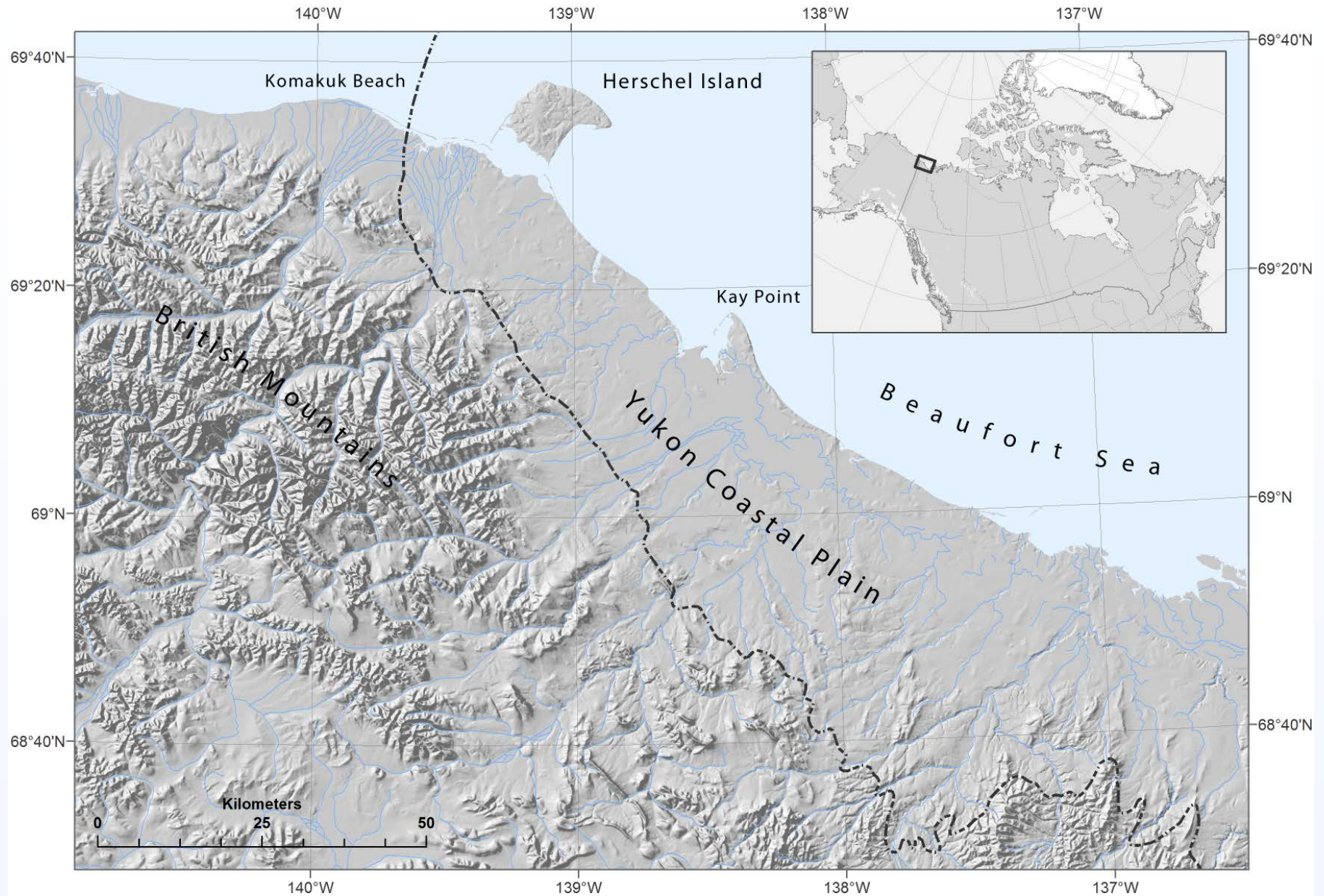
Organic carbon release by coastal erosion in the western Canadian Arctic

Jaroš Obu

Hugues Lantuit, Michael Fritz, Birgit Heim, Lutz Schirrmeister, Veit Helm and Juliane Wolter

DUE Permafrost 2014

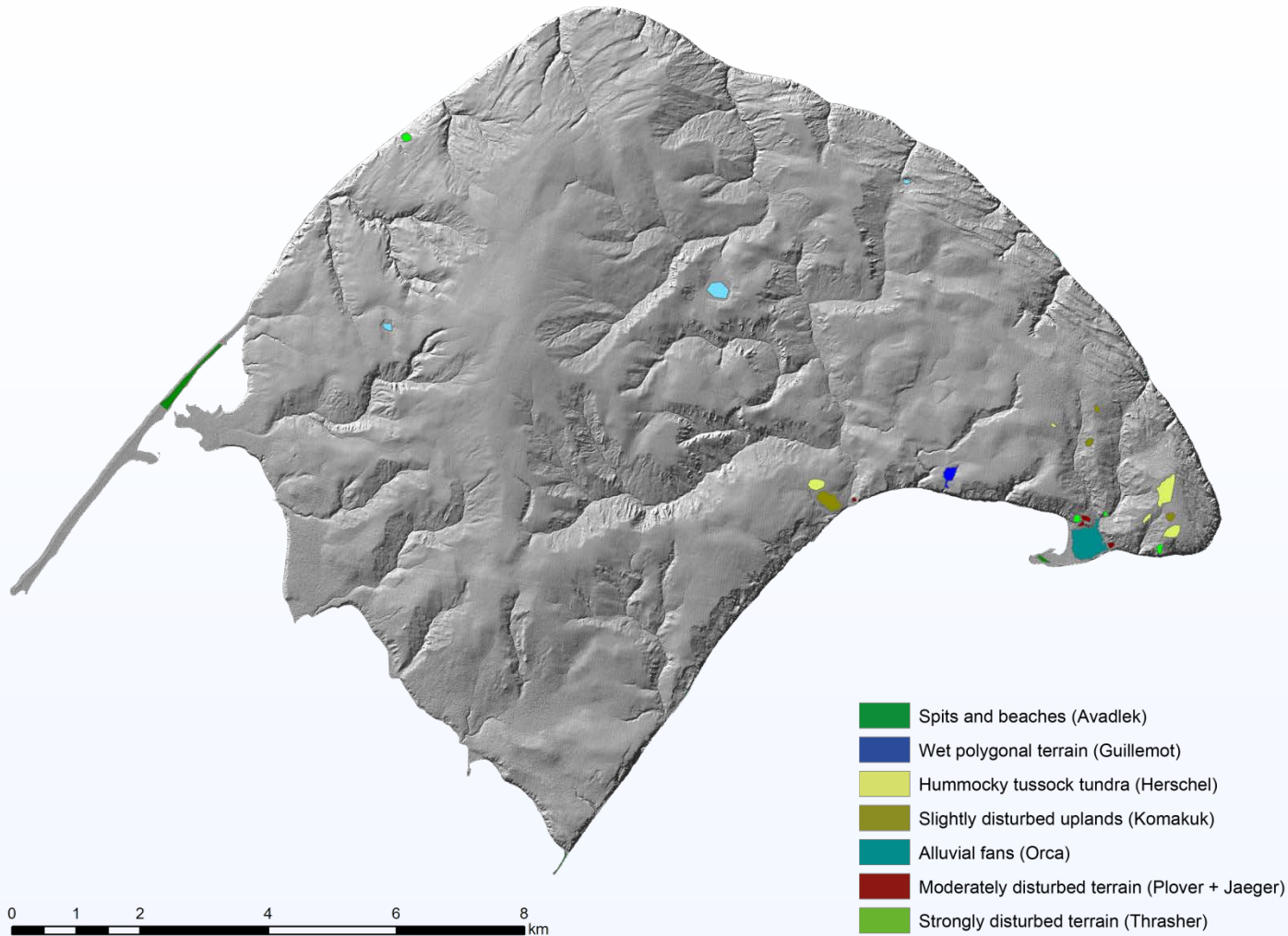
ESRIN, Frascati, 12th of February, 2014

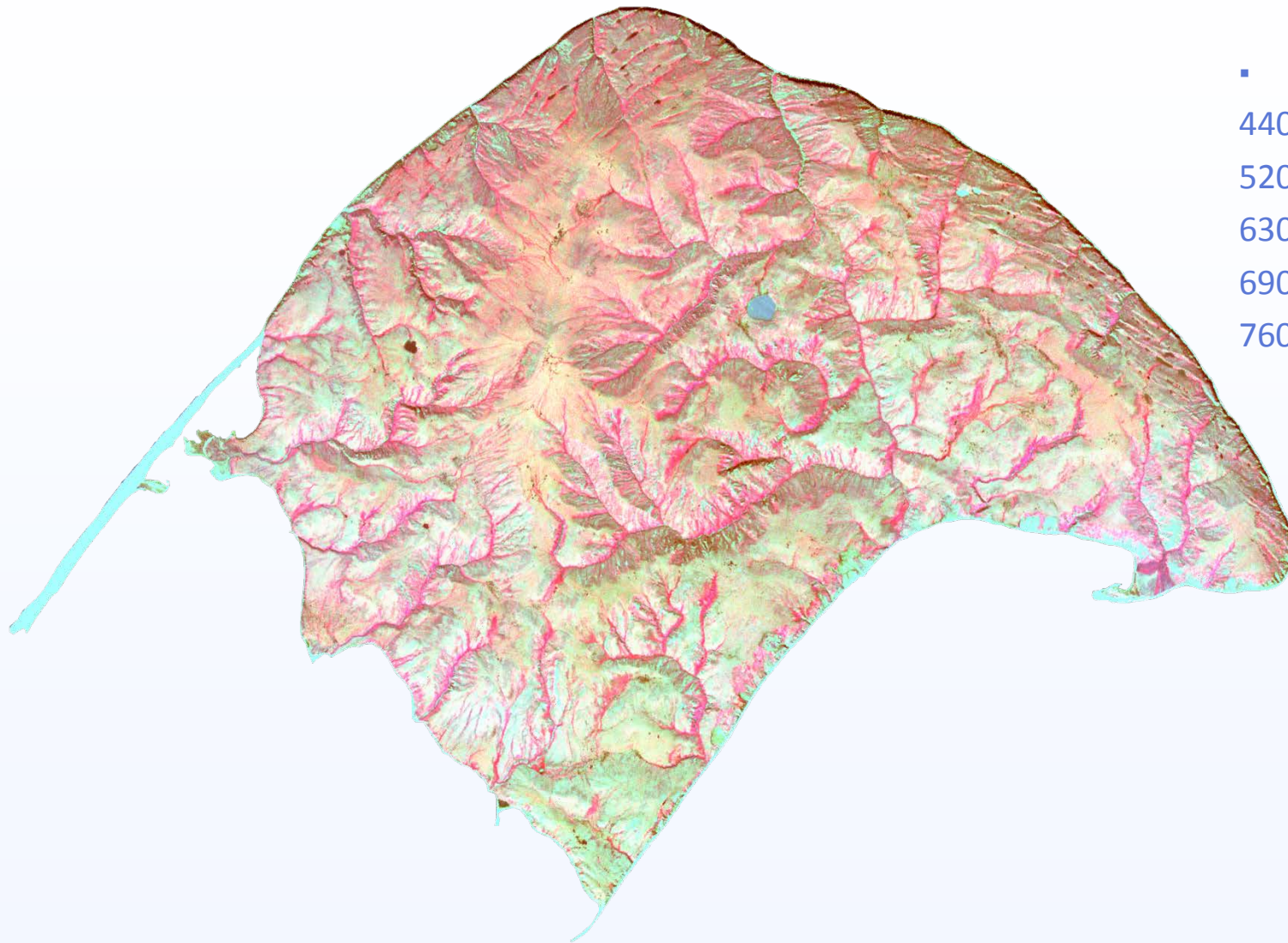


Upscaling point data to spatial units.

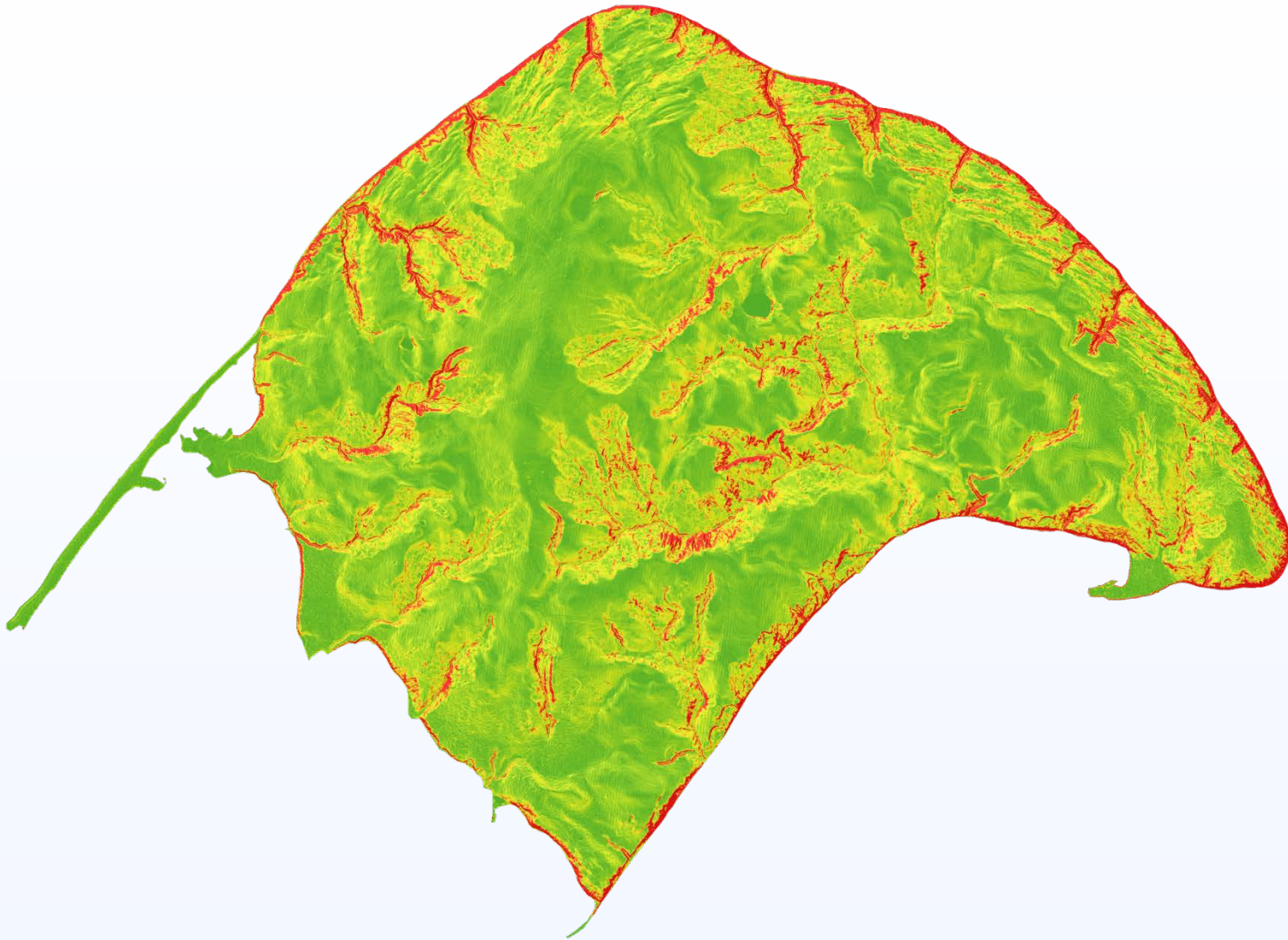
Upscaling of contents to ecological units.

- 21 training units

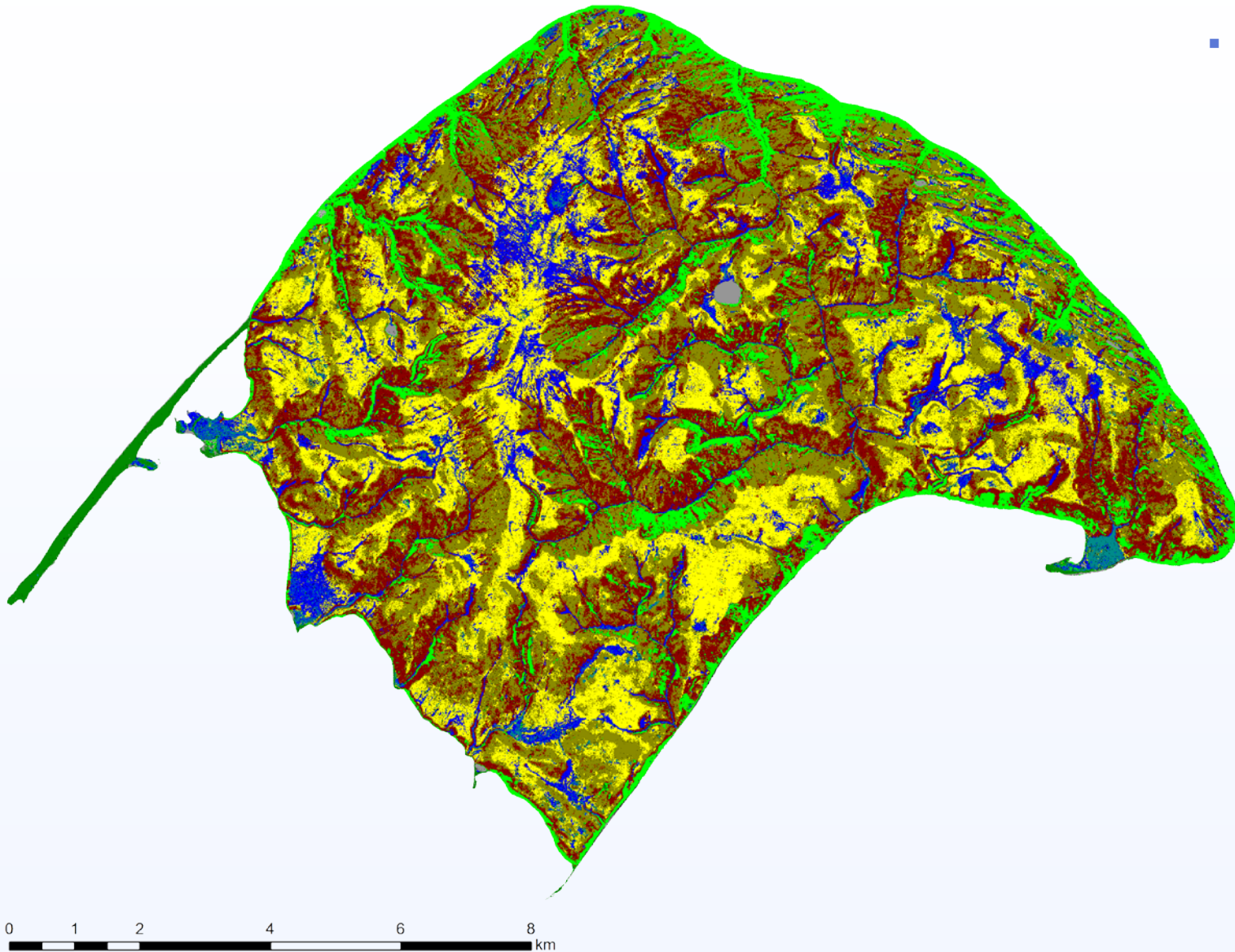




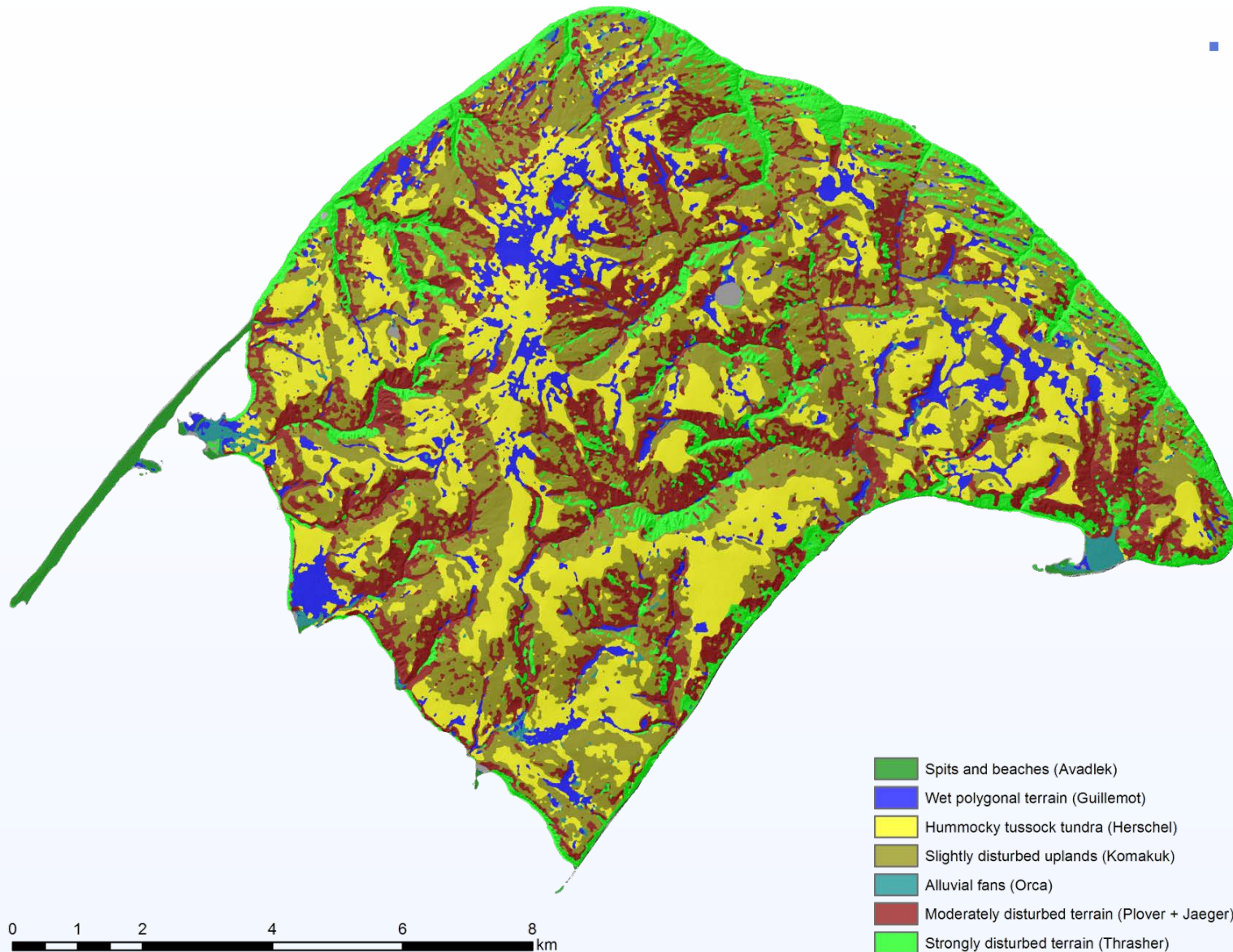
- Horizontal resolution 6,5 m
- 5 bands
440 – 510 nm (Blue)
520 – 590 nm (Green)
630 – 685 nm (Red)
690 – 730 nm (Red Edge)
760 – 850 nm (Near IR)



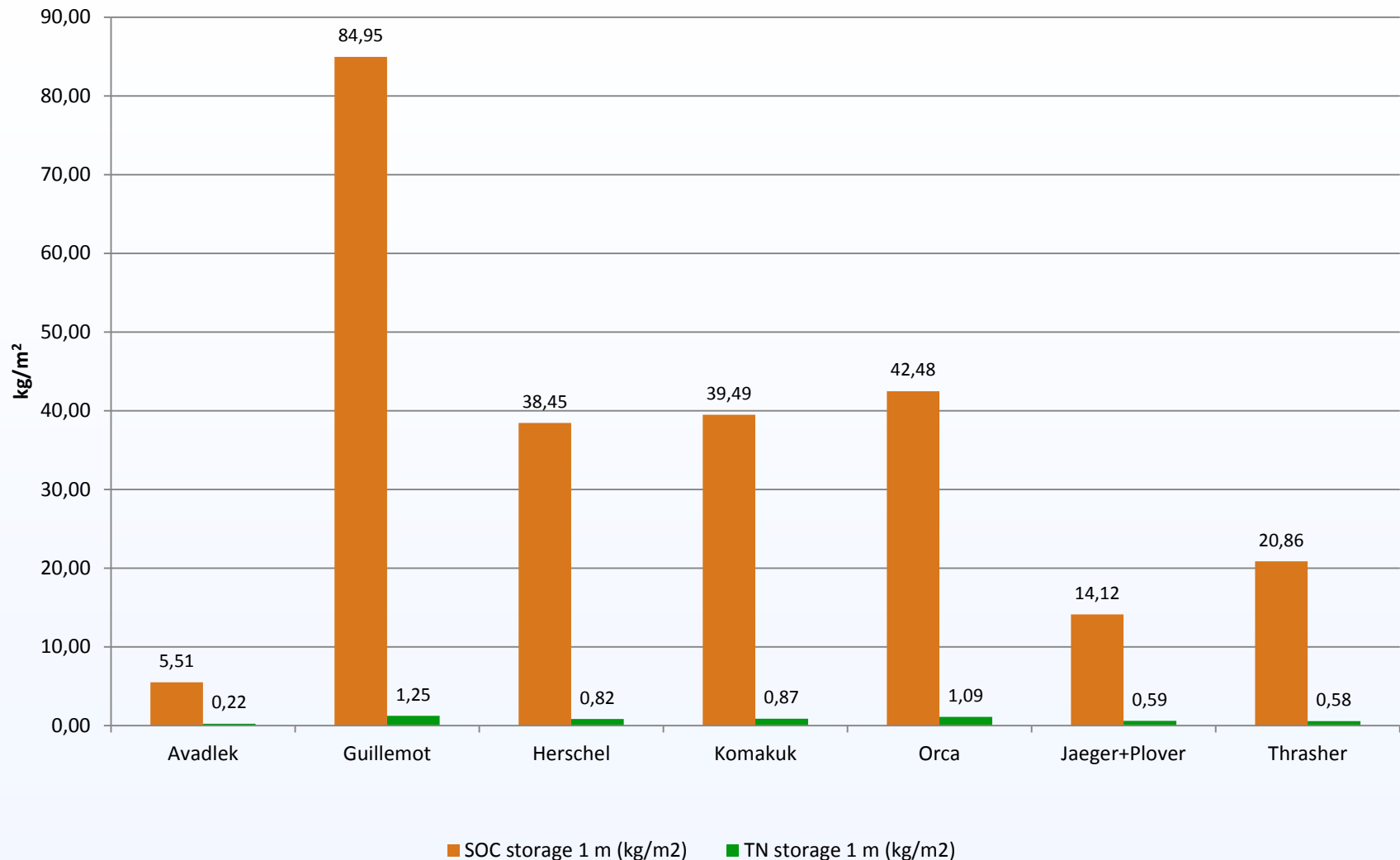
- 4 x 4 circle majority filter

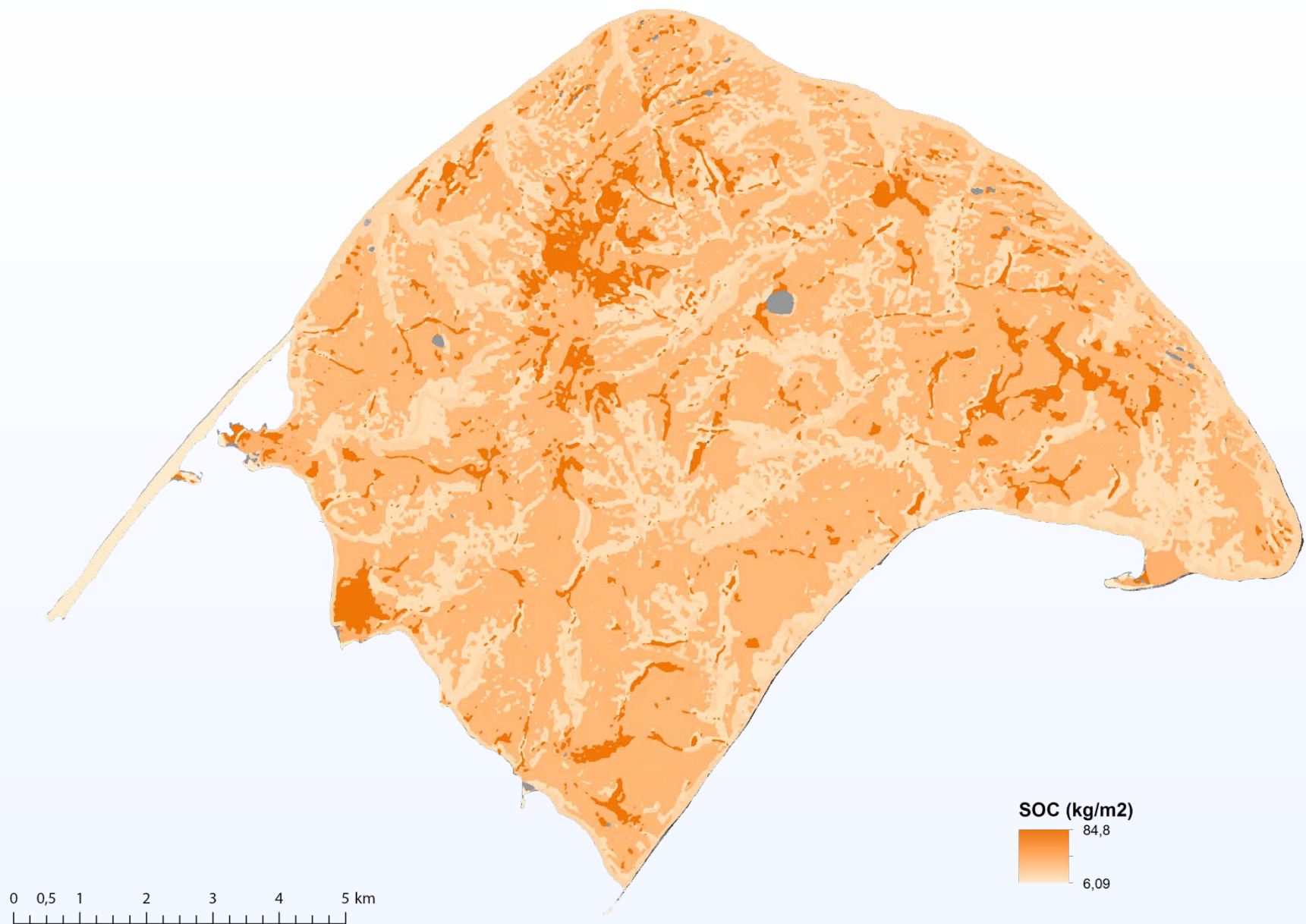


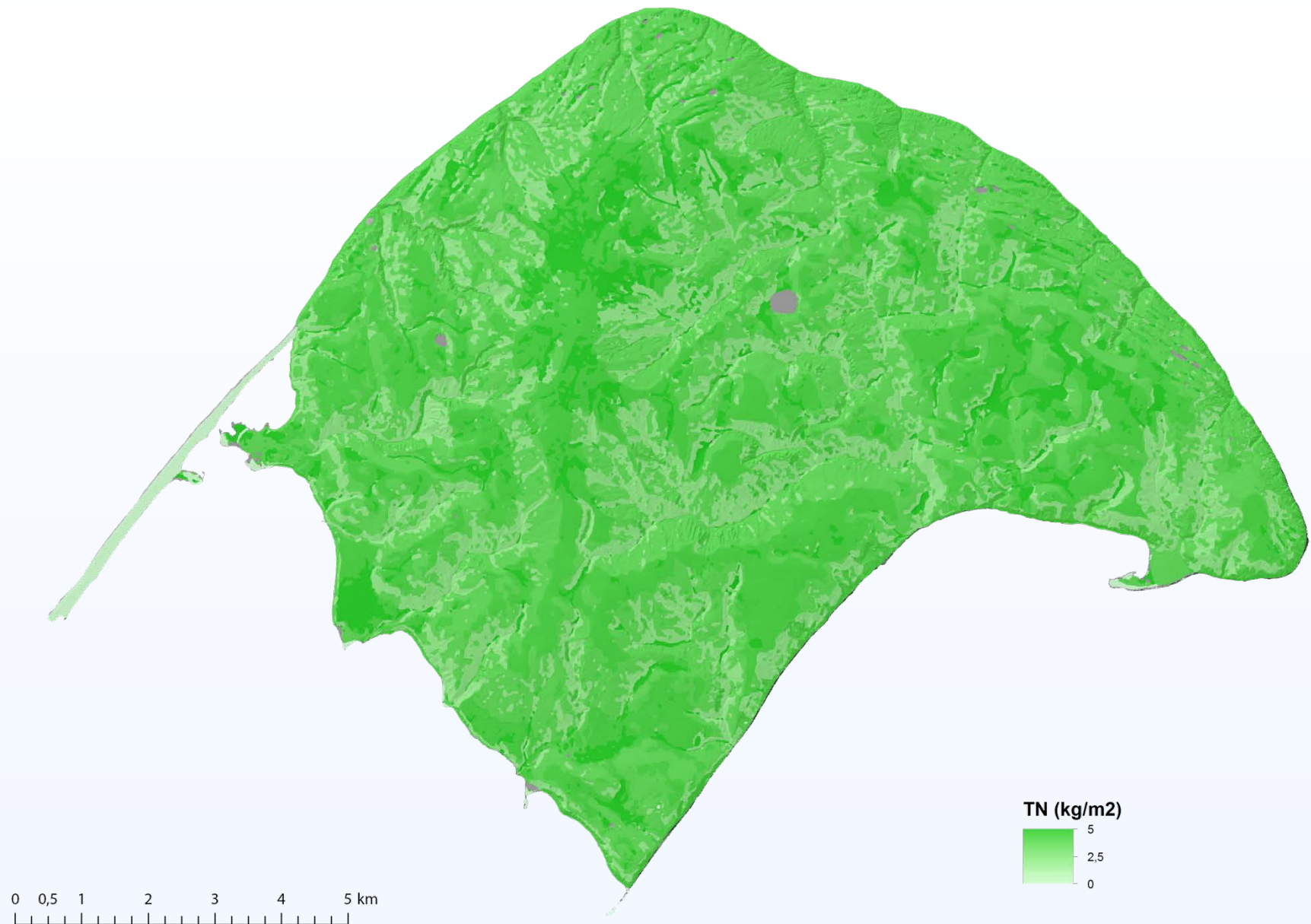
- 75 % agreement between ground truth points and classification



Soil organic carbon and total nitrogen storage in 1 meter



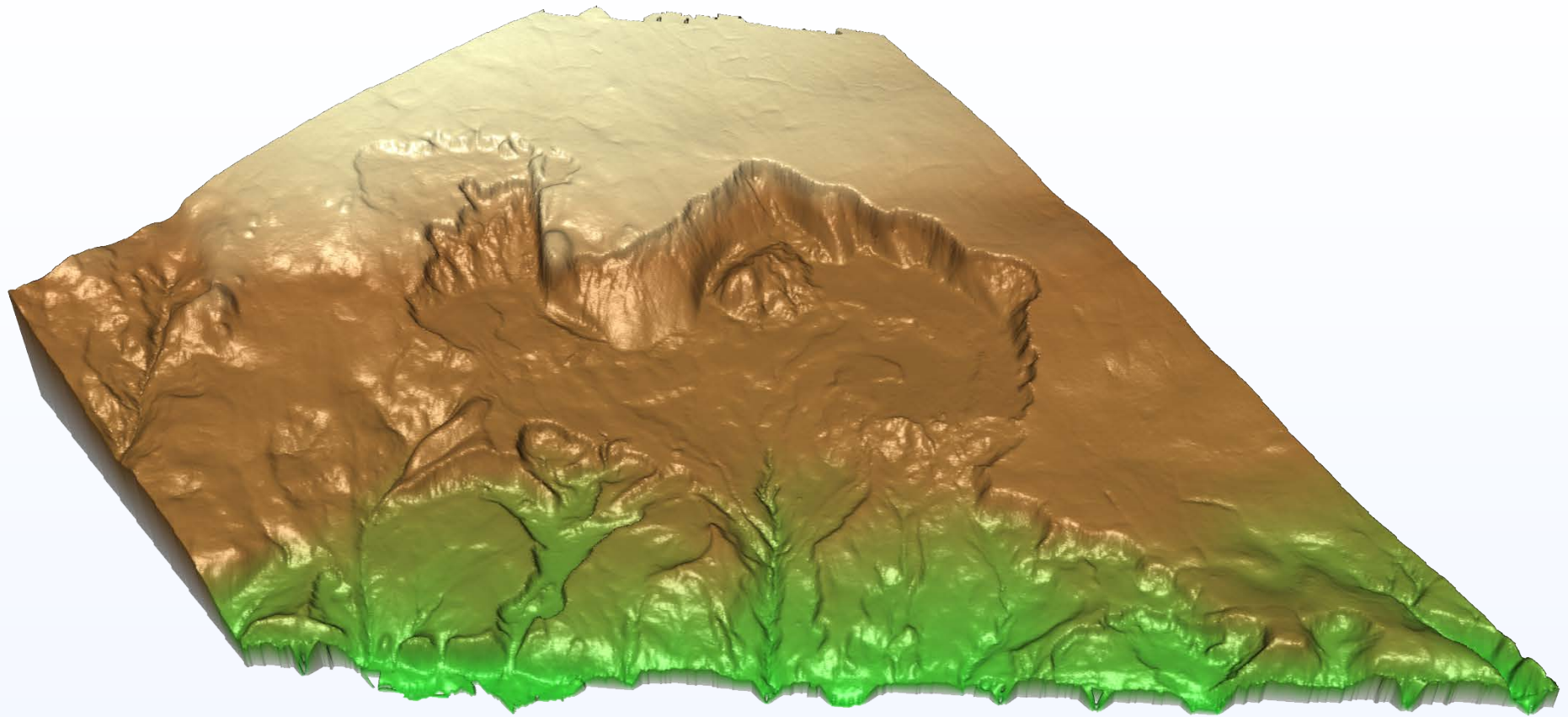


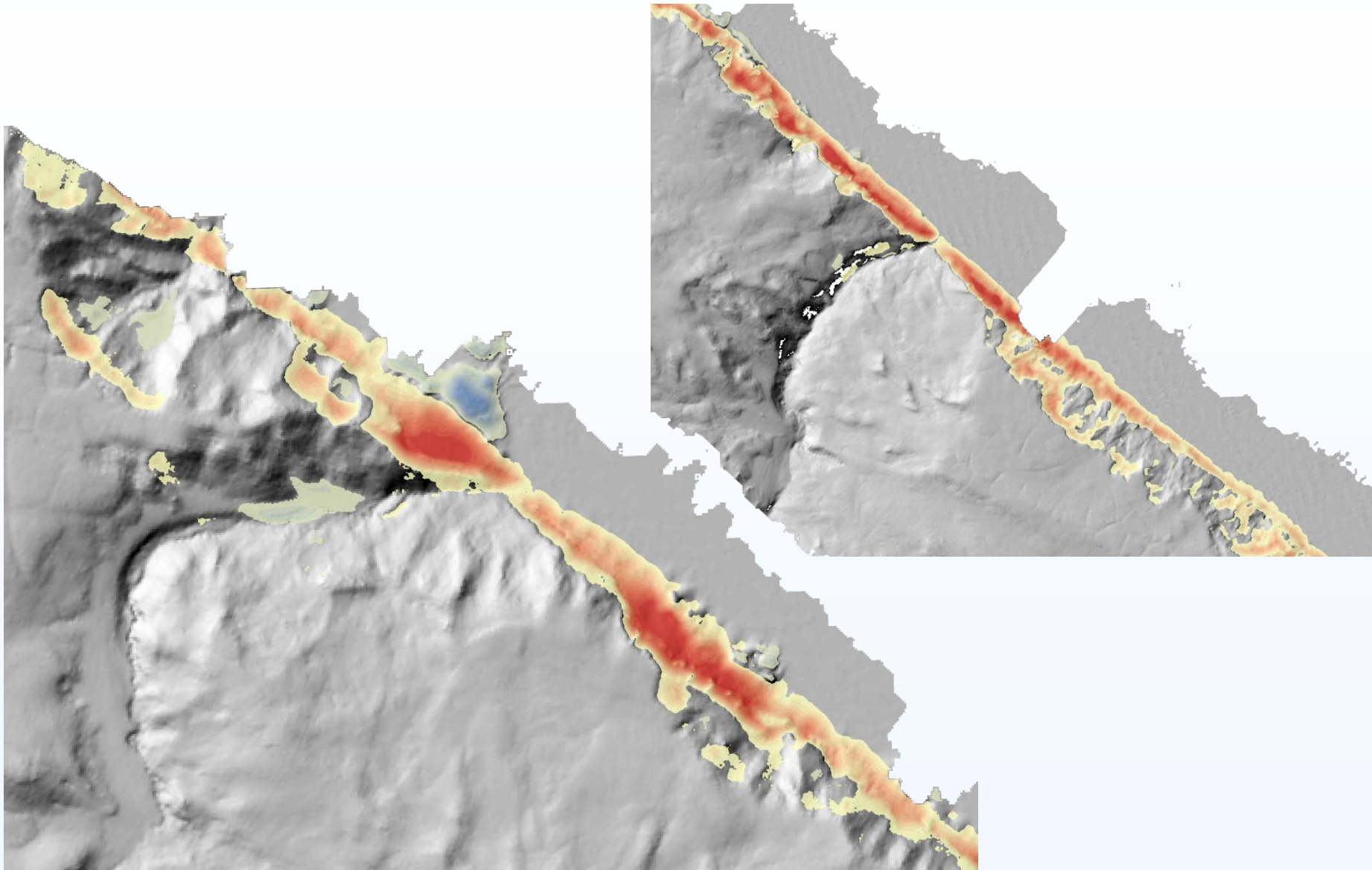


Compare two DEMs from consecutive years.









And where is permafrost?







An aerial photograph of a coastline. On the left, a green, grassy cliff meets the sea. The water is a deep blue, with a lighter, turquoise area near the shore. The text "Thank you for your attention" is overlaid in the center of the image.

Thank you for your attention