Datasets of novel optical remote sensing products on snow, vegetation and gas flaring mapping in selected sites:
Visible Near Infrared (VNIR) airborne and simulated EnMAP satellite hyperspectral imagery of Toolik Lake, Alaska

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Advancements of optical sensors in recent years (e.g. Sentinel-2, PRISMA, upcoming EnMAP) will increase both the spatial and spectral resolution of optical remote sensing imagery facilitating the use of narrowband indices and the entire spectral feature space of the electromagnetic spectrum. These new advanced systems can provide additional information to better capture and characterize vegetation properties and the complex changes occurring in terrestrial Arctic ecosystems. This Visible Near Infrared airborne database is one of the few hyperspectral acquisitions with corresponding ground-based validation datasets of Arctic tundra vegetation.

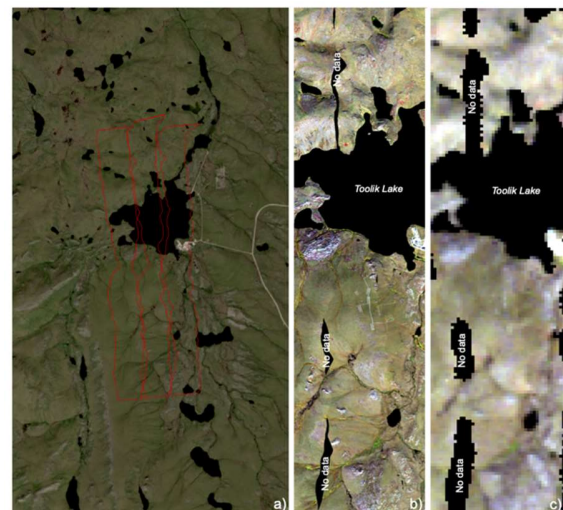Dataset, metadata, and Technical Report available at: http://dataservices.gfz-potsdam.de/enmap/doi:10.2312/enmap.2020.001

Figure 1. *a) Footprint of the three flight lines that make up the hyperspectral acquisitions; b) True-colour composite of airborne AisaEAGLE imagery; c) True-colour composite of simulated EnMAP satellite imagery*