Description of datasets for: Ground ice content predictions for the Northern Hemisphere permafrost region at 1-km resolution, version 1.1

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The dataset consists of four raster files (GeoTIFF format) at a 30 arc-second (~1 km) spatial resolution. The predictions are representative of pore and segregated ice contents in the topmost five meters of permafrost. Each raster is in the geographical WGS 1984 (ESRI: 4326) coordinate system.

Table of contents

1 Spatial predictions of volumetric ground ice content

The raster files represent the mean and standard deviation of predicted volumetric ground ice (VIC) content over 100 randomized distance-based model cross validations. Included are predictions from two statistical modelling techniques: generalized additive modelling (GAM) and generalized boosting method (GBM). Mean VIC is presented with 8-bit integer raster files. Standard deviation raster files have compressed 32-bit floating-point values.

File naming convention:

VIC_XXX_YYYY.tif: where XXX defines the used modelling method:

Abbreviation	Description
GAM	Generalized additive modelling
GBM	Generalized boosting method

and YYYY defines the statistic:

Abbreviation	Description
mean	Mean of 100 model realizations
sd	Standard deviation of 100 model realizations