PERSYS – WEBGIS-BASED PERMAFROST DATA VISUALISATION SYSTEM
FOR ESA GLOBPERMAFROST

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ESA GlobPermafrost (www.globpermafrost.info) provides a remote sensing data service for permafrost research and applications. This service comprises data product generation for various regions and spatial scales as well as specific infrastructures for visualisation and access to datasets.

PerSys is the open access geospatial information system for dissemination and visualisation of remote sensing data derived within the ESA GlobPermafrost project. The data products are visualised in the PerSys WebGIS and are described and searchable in the PerSys Data Catalogue. The PerSys Data Catalogue is a core component of the Arctic Permafrost Geospatial Centre (APGC), set up within ERC PETA-CARB at AWI¹.

The visualization employs the AWI WebGIS infrastructure maps@awi (http://maps.awi.de), relying on OGC-standardized Web Mapping/Feature Services (WMS, WFS).

The WebGIS supports the project specific visualisation of raster and vector data products such as land cover, Landsat multispectral index trends, InSAR-based land surface deformations, rock glacier velocities, and permafrost model outputs.

The WebGIS projects are adapted to the products specific spatial scales, e.g. the Arctic WebGIS visualizes Circum-Artic products as well as other large-scale data products. Rock-glacier data products of higher spatial resolution are visualized on regional scale in the WebGIS projects Alps, Andes and Central Asia.

PerSys is accessible via the GlobPermafrost project webpage.