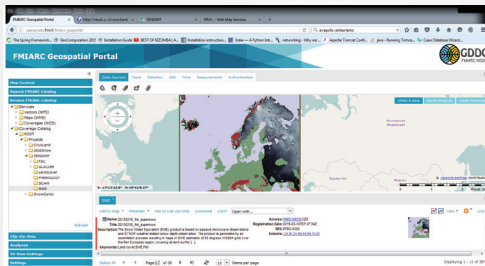


## Products Access

SEN3APP products can be downloaded using

- FMIARC-GeoPortal  
<http://saana.nsd.c.fmi.fi/fmiarc-geoportal>



- CryoLand GeoPortal  
<http://neso1.cryoland.enveo.at/cryoclient>
- FTP services
- Web Coverage Service (WCS)
- Web Map Service (WMS)
- Drop box
- HTTP



## Contact Us

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<http://sen3app.fmi.fi>

## SEN3APP Partners



From Satellite Data  
 Reception to Processing  
 lines and Services for End Users

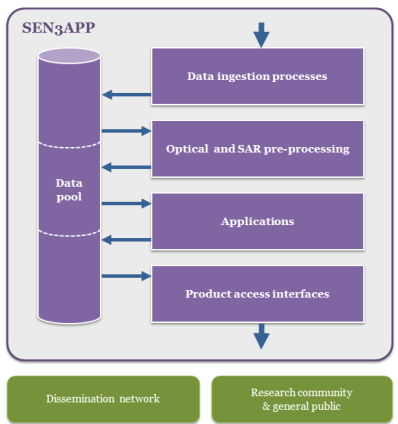
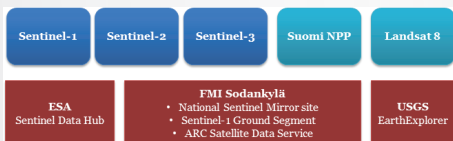


# SEN3APP



## Overview

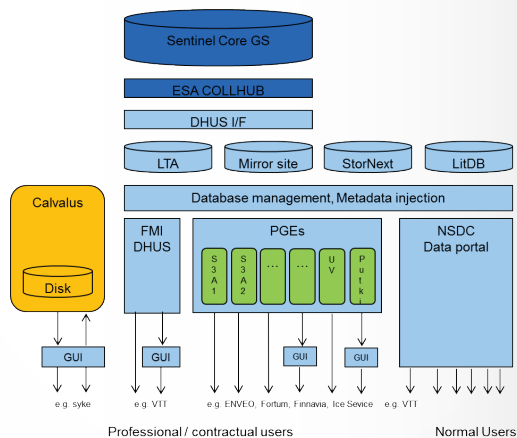
- SEN3APP project addresses the topic of continuous and accurate monitoring of snow, glaciers, lake ice, soil (frost) and land cover/forest changes in the Earth's cryosphere, and in the boreal forest zone.
- SEN3APP project is concerned with the development, implementation, operationalization and validation of Copernicus Sentinel data processing lines for cryospheric (terrestrial) and land cover/phenology applications.
- The processing lines utilize SAR and medium/high resolution optical/IR-range data from Sentinels-1, -2 and -3.
- Operational capabilities of the Finnish Meteorological Institute (FMI) Sodankylä National Satellite Data Center are applied to host part of the infrastructure and also complete processing lines.



## The SEN3APP system

The SEN3APP system was developed. The system is

- capable of ingesting the extremely high-volume data of the Sentinel-1, -2 and -3 satellites provided by the Ground Segment interfaces,
- process the data to create value added products and services,



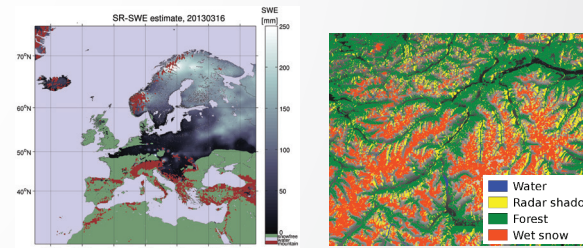
- integrate the products and services with data from other external sources, and offer both the raw and the processed data to users, via an accessible user interface and standard-based data interfaces, which provide intelligent search mechanisms and allow ordering of customized products and services

## SEN3APP products

SEN3APP demonstrates eleven products in the following categories (1) Land cover and phenology (2) Snow (3) Glaciers (4) Lake ice.

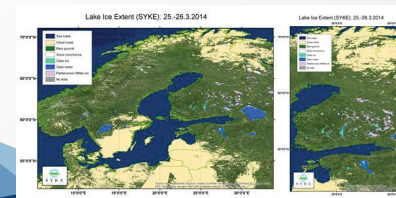
- Agricultural monitoring
- Phenology
- Fractional Snow Cover extent (FSC) for Northern Hemisphere
- Pan-European Snow water Equivalent
- Extended baltic sea drainage basin direct FSC
- Regional wet snow cover
- Regional and pan-european FSC
- Glacier outlines
- Ice velocity
- Glacier ice velocity
- Snow and ice areas on glaciers
- Lake ice extent

## Some example products



Pan European SWE

Wet Snow Covered Area



Lake Ice Extent