



ESTHub

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Motivation

- Easy access to Copernicus data:
 - √less users,
 - √ faster data download,
 - ✓ stable connection.
- •Boost the use of remote sensing data amongst Estonian public institutions and private comapnies.
- Be part of the regional cooperation.
- Reduce investments in hardware.

Collaborative agreement with ESA



Estonia

13.09.2016

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Estonia and ESA have signed a Technic
Arrangement for the Sentinel data acces
cooperation in September 2016. Enterprise E
plans to set-up a national Sentinel data mirro

Read the Technical Arrangement

What is ESTHub?

- Centralised national data hub for downloading, processing and distributing Copernicus data.
- Users can view and freely download satellite data (registration is required).
- Limited access to processing capability for public institutions and private companies who develope services for public institutions.
- Bring processing where the data is not the other way around.

ESTHub project

- 430 000 euros from European Union European Regional Development Fund;
- Procurement proceedure is ongoing;
 - ✓ Hardware for data storage and processing;
 - ✓ Software solution for data dissemination and processing.
- Hopefully up and running in the mid 2018

Data in ESTHub

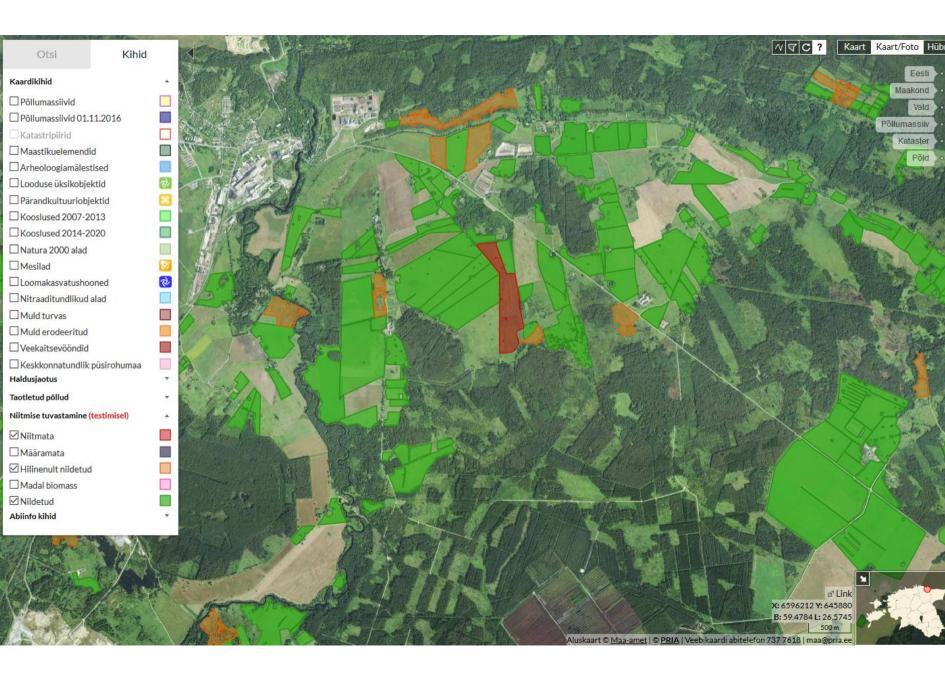
- Sentinel 1, 2, 3, 4, 5, 5P and 6 data:
 - ✓ S1 and S2 about 200 km from border,
 - √ S3 Baltic Sea and surrounding area.
- Landsat 8 data (about 200 km from border).
- Additional datasets used in processing (lidar, DTM, DSM, weather radar data etc).
- Temporarily hold data all over the world for 2 weeks (if needed).

Hardware

- Processing servers that can hold up to 320 TB of data;
- Cluster on VM servers that service the software and users VMs;
- Data storage for dublication of data and storing products from S2 (400 TB):
 - √ RGB composite;
 - √ False color image composite
 - ✓ NDVI composite

Software

- DHuS for browsing and downloading data.
- SNAP functionalities;
- QGIS, SAGA-GIS, FMASK, Python (programmes can be added if needed – open source).



ESTHub user(s)

 Using Sentinel 1 and 2 in forestry (clear-cut areas, tree species)

Sentinel 1 for ice service

(Estonian sea coast and Lake Peipsi)







Monitoring peat fields with Sentinel 1





Thank You!

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