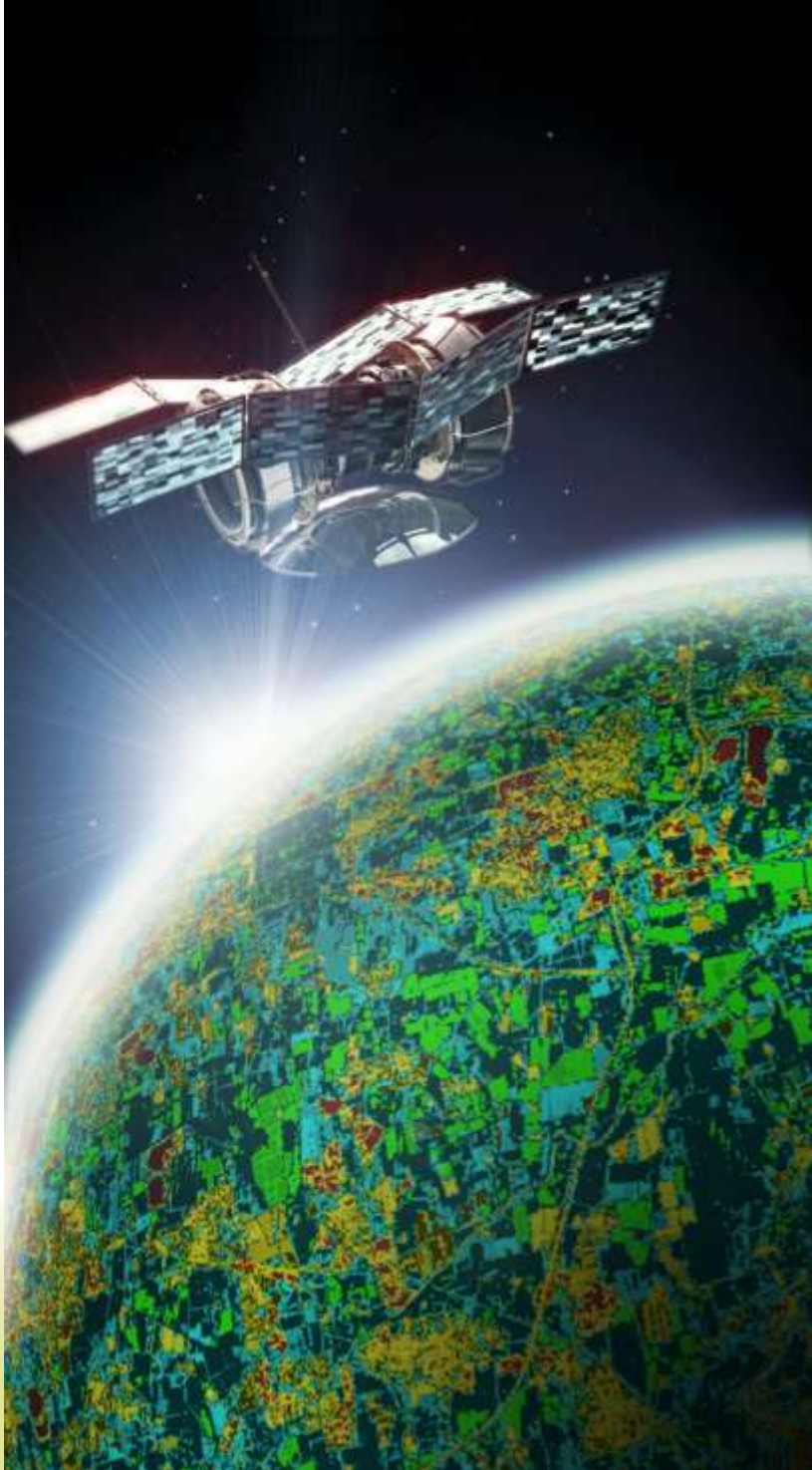
SINERGISE

Sentinel Hub

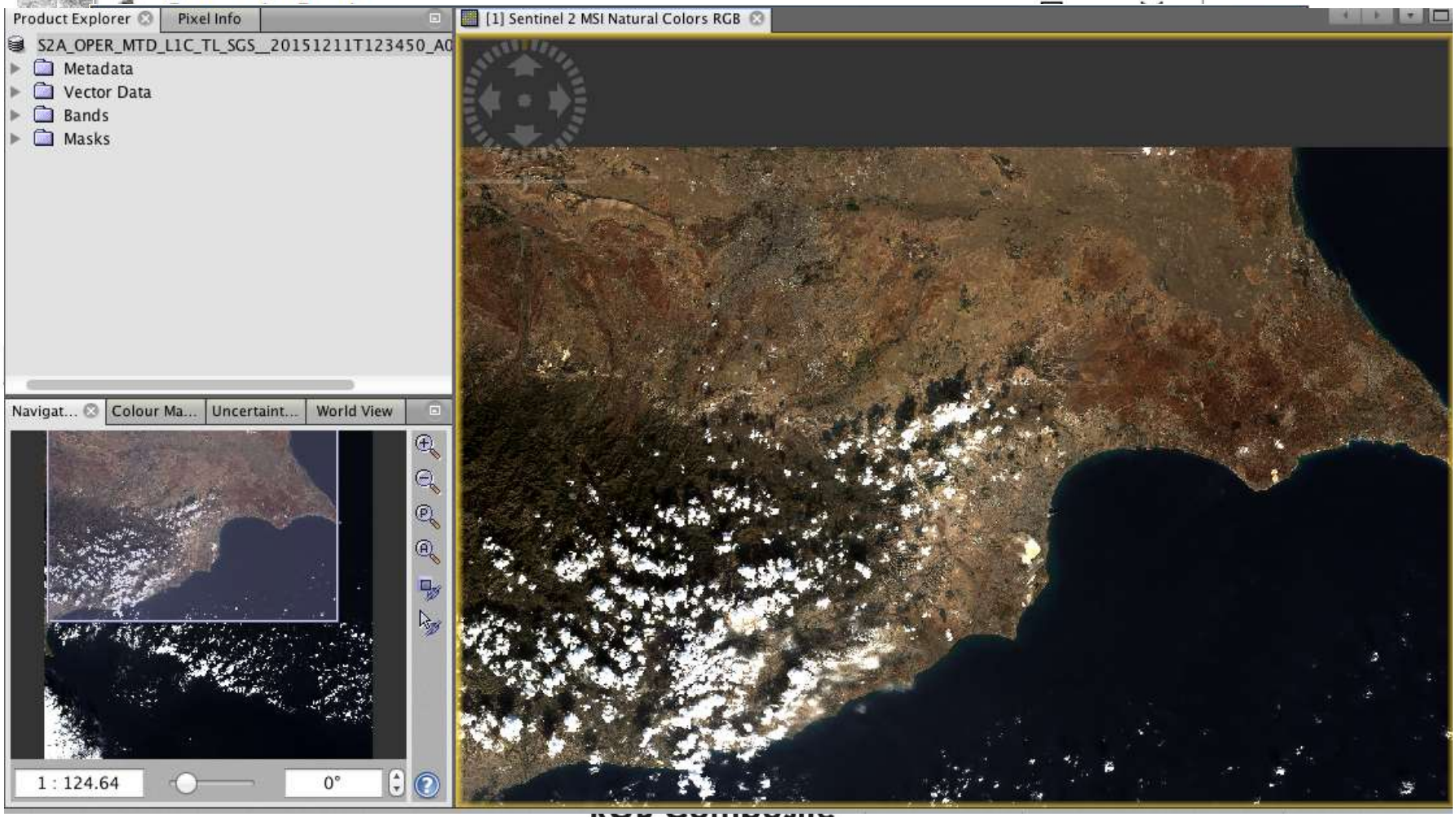
Sentinel-2 satellite imagery distribution service

Grega Milcinski, Sinergise, SPACE-SI

grega.milcinski@sinergise.com



Traditional ways of working with EO data



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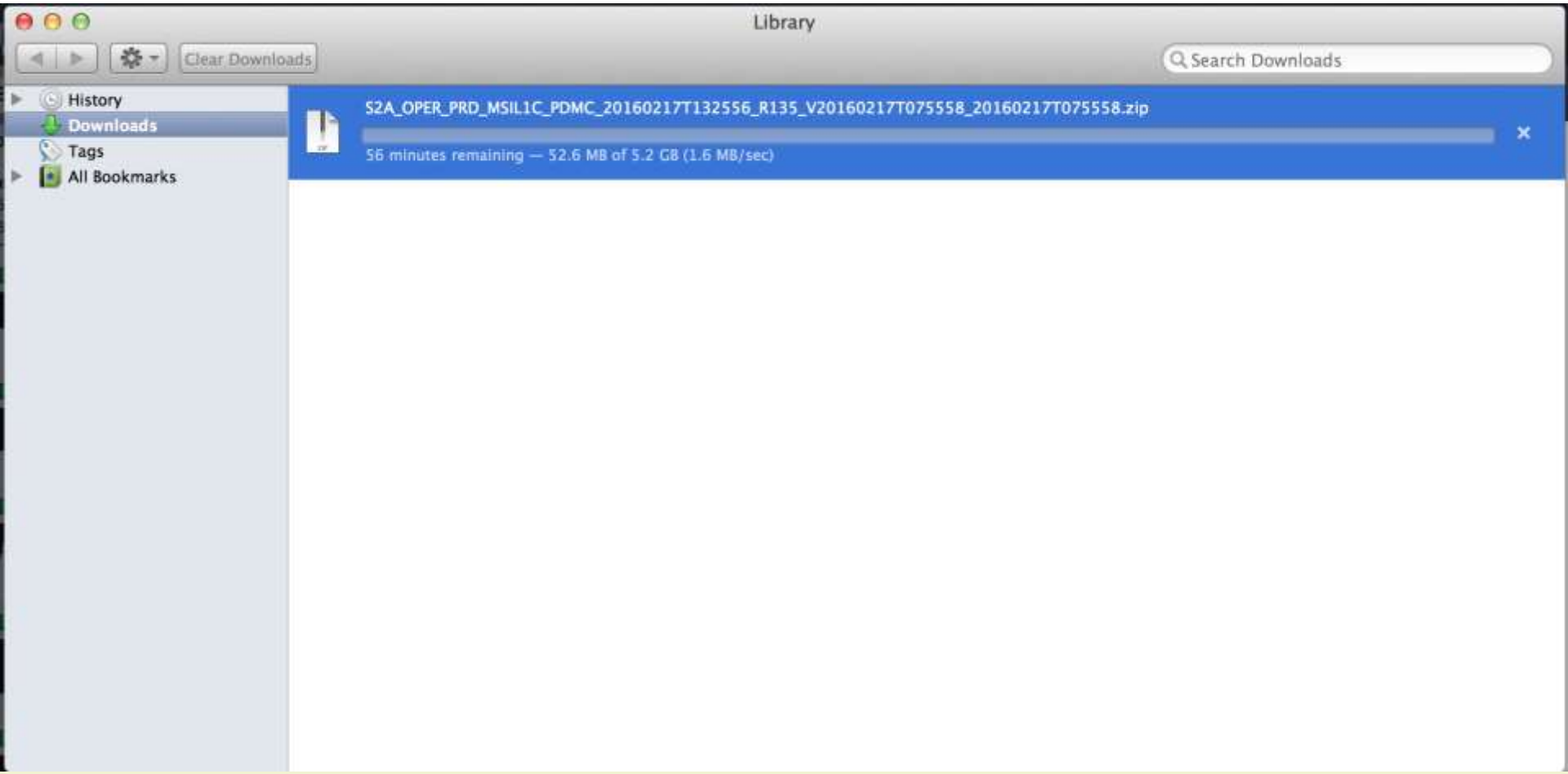
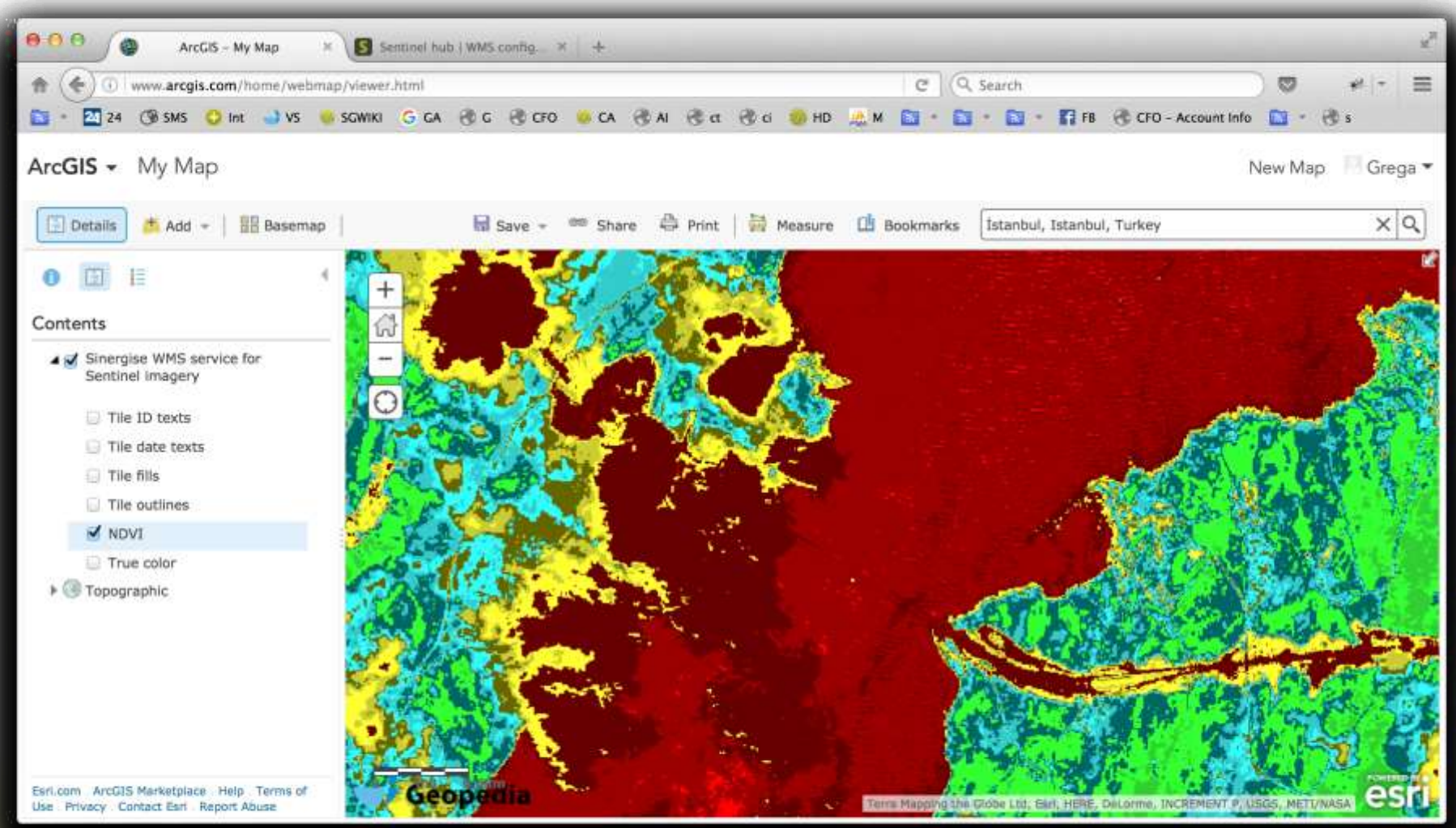
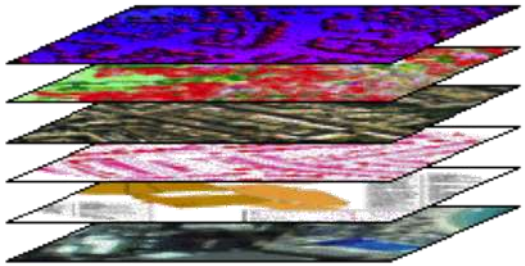


With Sentinel Hub



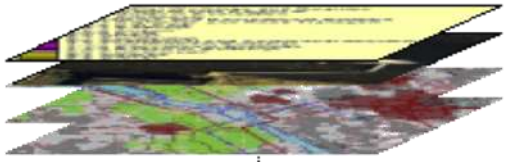
Earth observation platform

Open EO data - Sentinel-1, Sentinel-2, Landsat, etc.

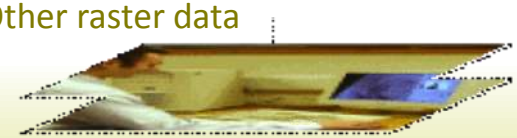


Commercial EO data – WorldWind, GeoEye,...

Aerial imagery (drone, plane)



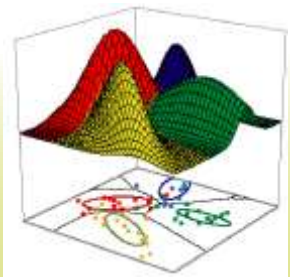
Other raster data



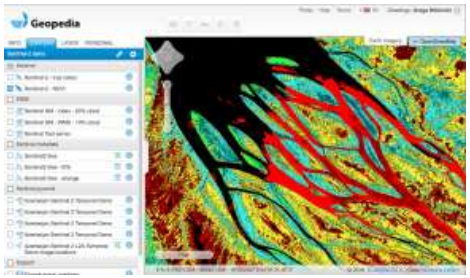
WMTS

WMS

API



Machine learning



Cloud GIS

Web applications

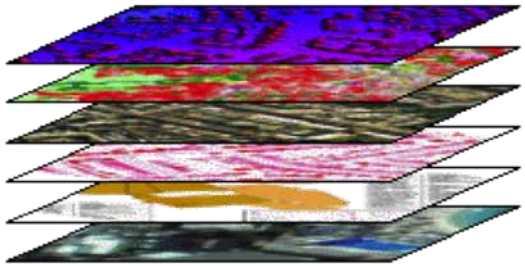
Open source GIS (QGIS, OpenJump,..)

ArcGIS ESRI

Commercial GIS applications

Earth observation platform

Open EO data - Sentinel-1, Sentinel-2, Landsat



Commercial EO data – WorldWind, GeoEye,...

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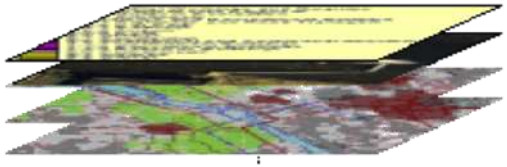

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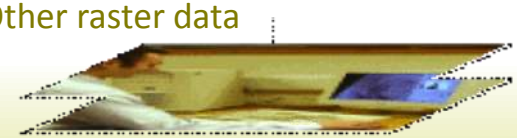
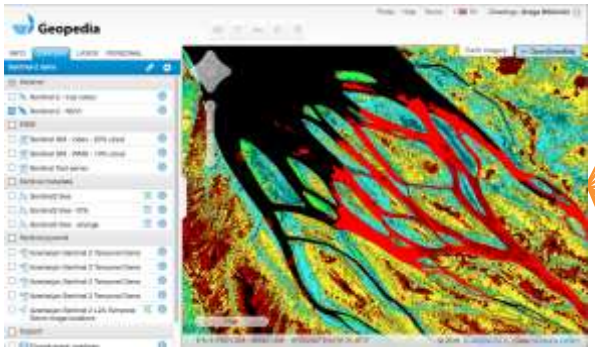


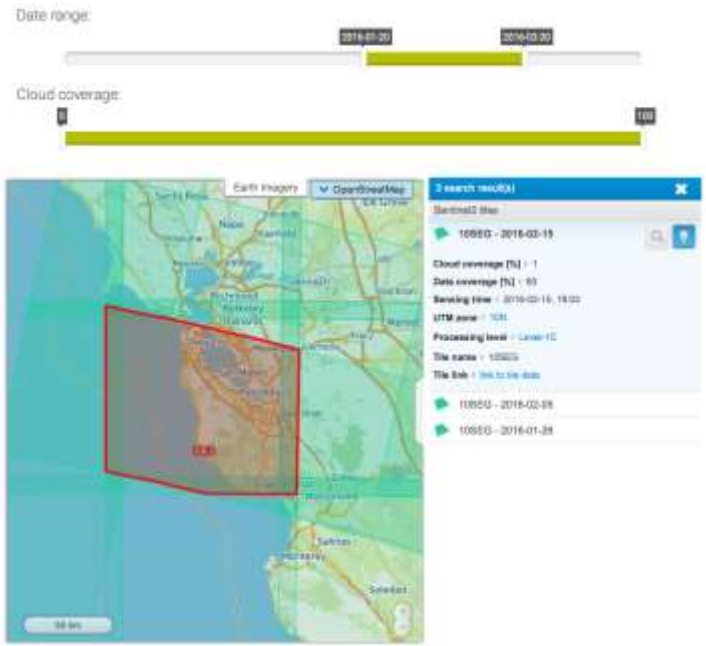


- Cadastre
- Disaster response
- Agriculture
- Defence
- Insurance
- Land Change
- Drought monitoring
- ...

Sentinel-2 on AWS

Sentinel-2 data is available for anyone to use via Amazon S3.

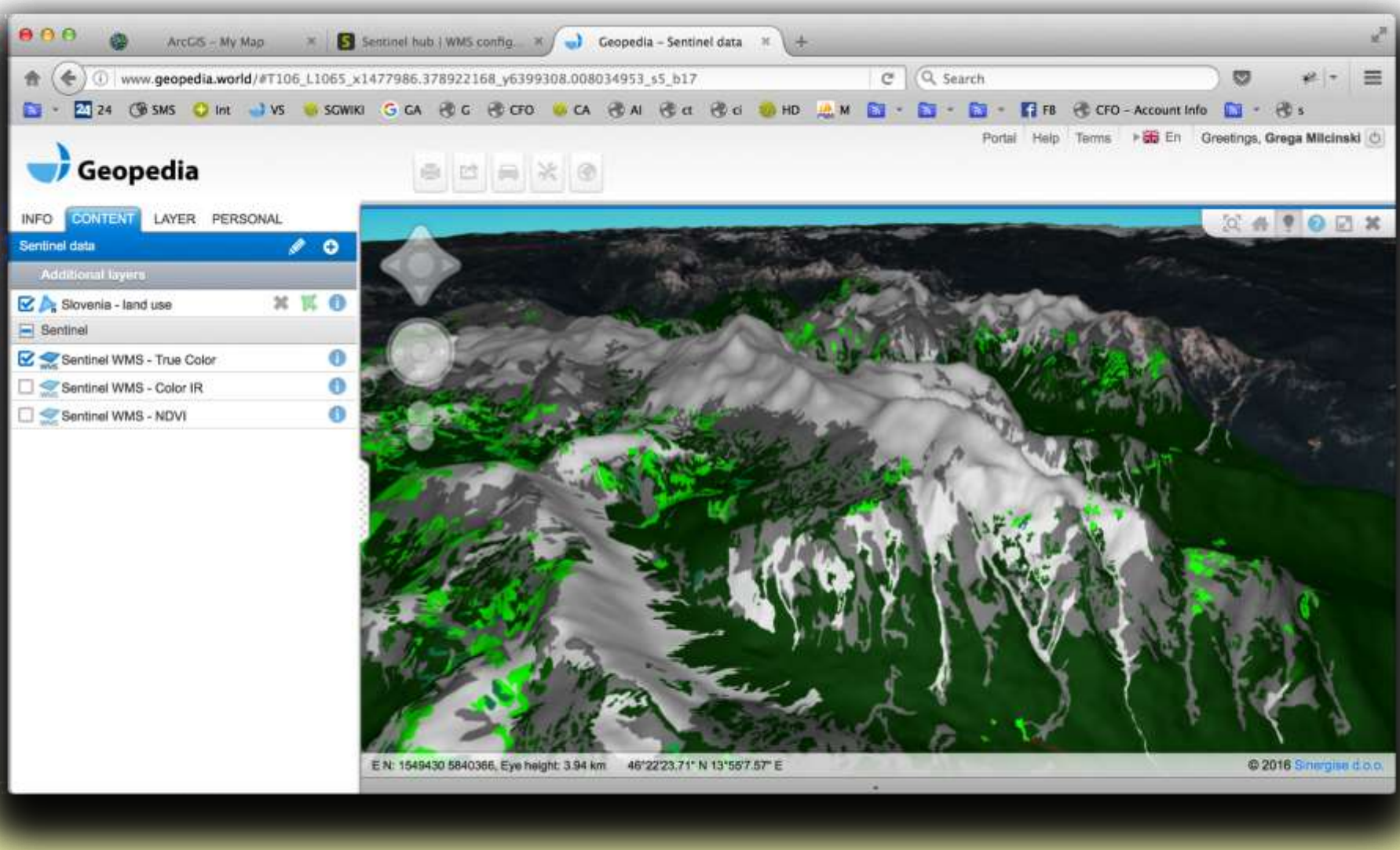
- s3://sentinel-pds
- http://sentinel-s2-l1c.s3-website.eu-central-1.amazonaws.com/



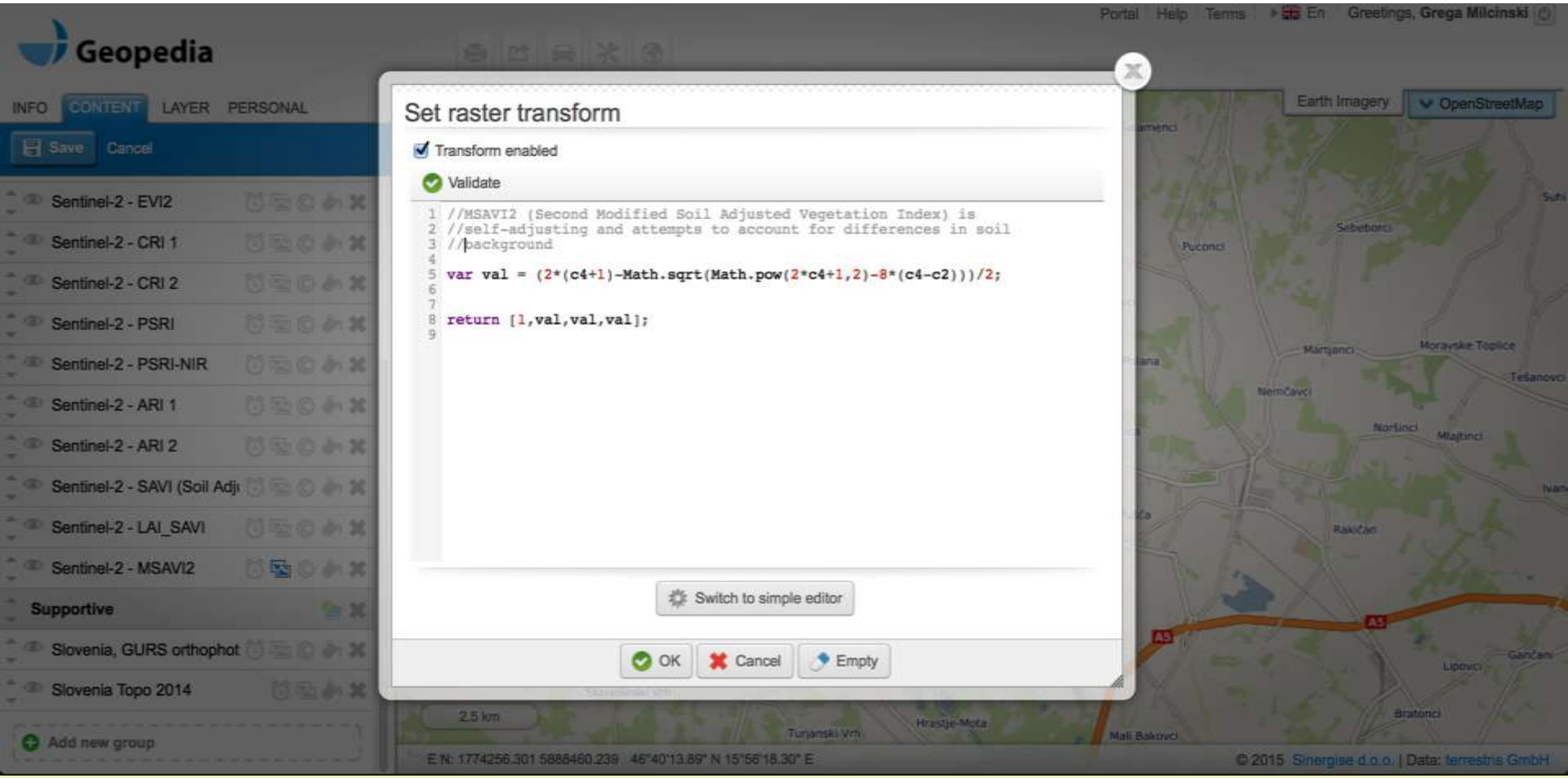
Real-time processing of S-2 data

- Area of interest is processed in 2-4 seconds after request comes
  - download necessary data, decompress, mosaic, composite, rendering, compression
  - exposed via OGC standard services (WMS, WCS, WMTS, etc.)
- No need for additional storage for processed data
- Flexible, easy to add new features
- Process only what is needed

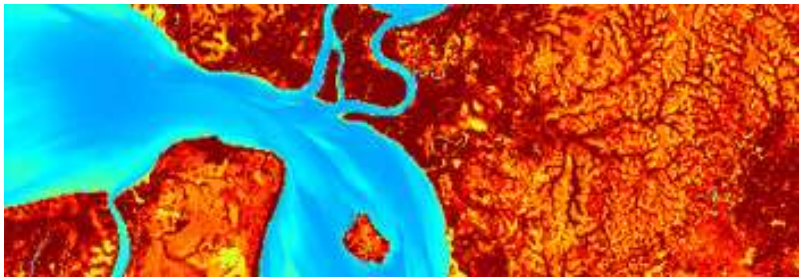
EO data within WebGIS

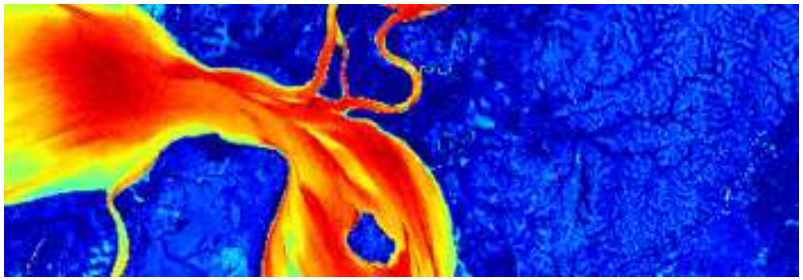
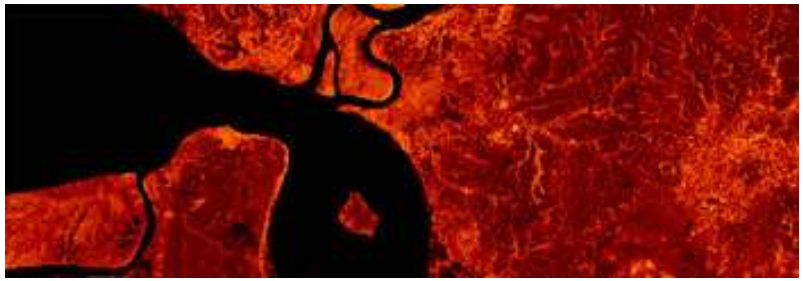
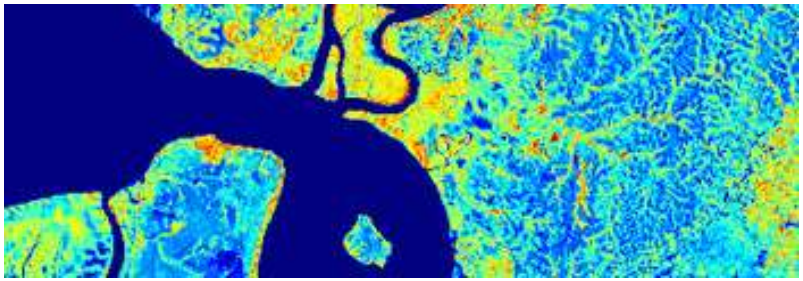
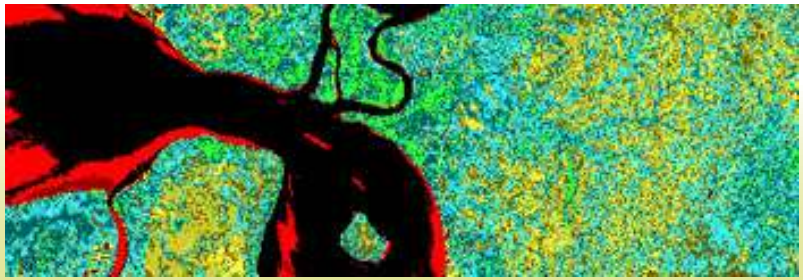
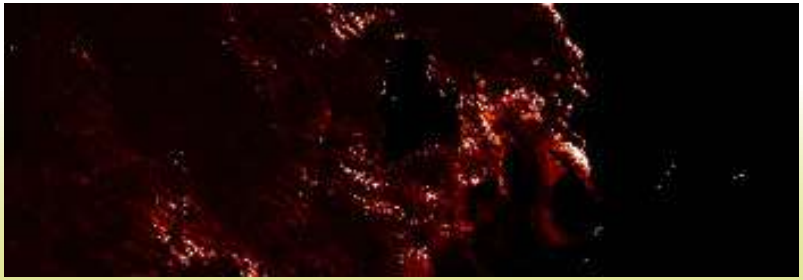


Added value services – EO products

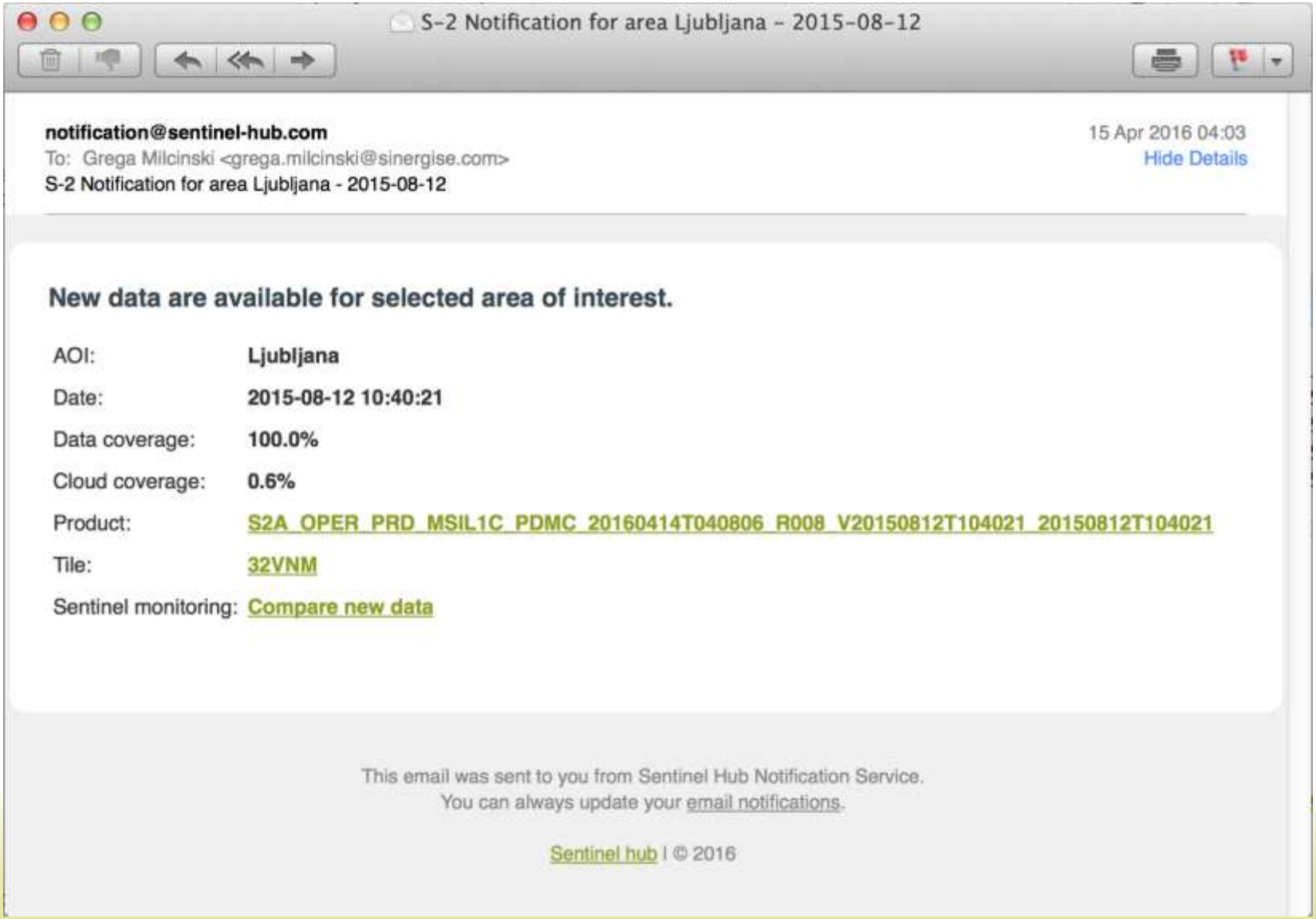


Added value services – EO products



Added value services – notifications


S-2 Notification for area Ljubljana - 2015-08-12

notification@sentinel-hub.com
To: Grega Milcinski <grega.milcinski@sinergise.com>
S-2 Notification for area Ljubljana - 2015-08-12

15 Apr 2016 04:03
Hide Details

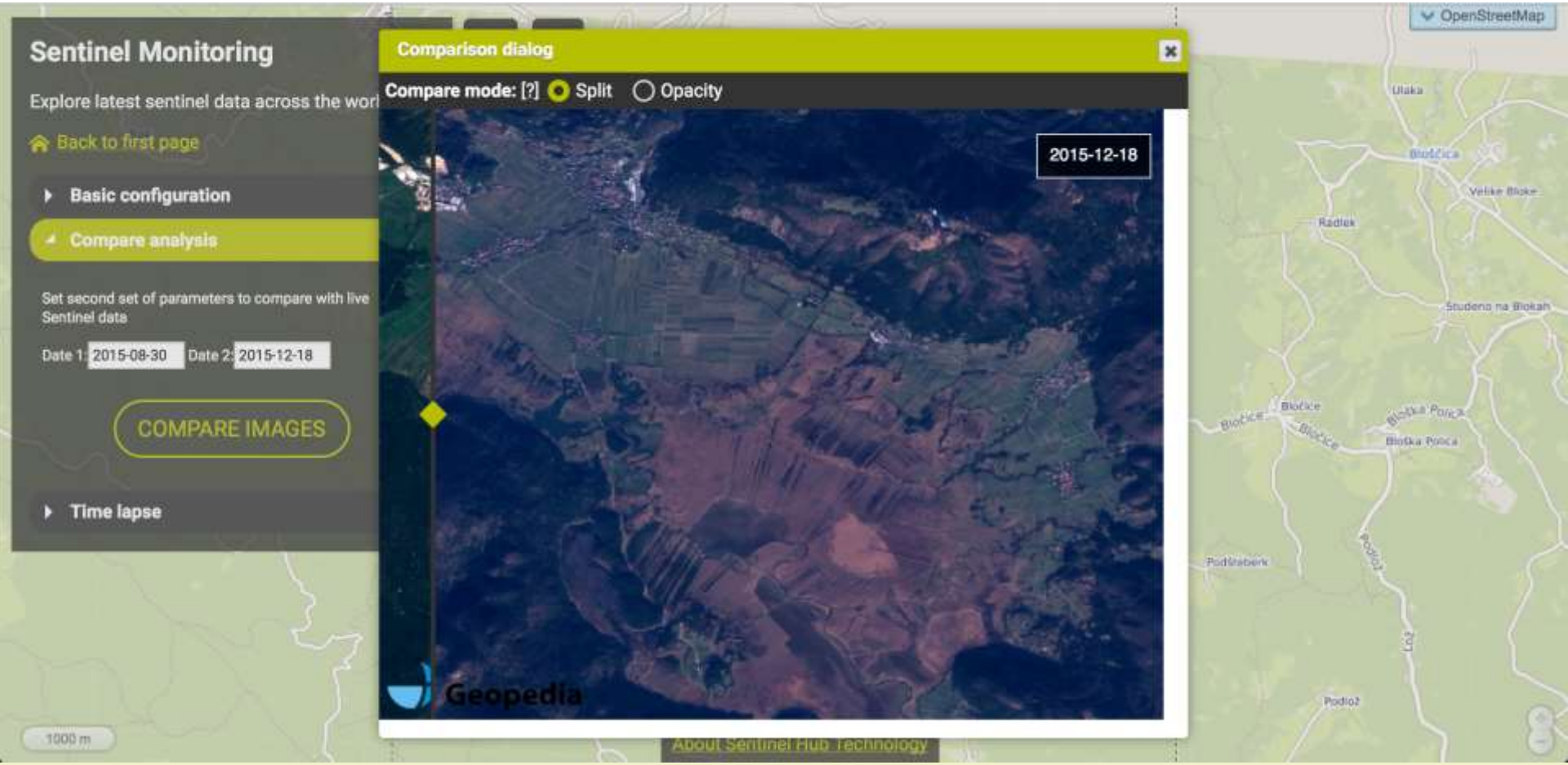
New data are available for selected area of interest.

AOI:	**Ljubljana**
Date:	**2015-08-12 10:40:21**
Data coverage:	**100.0%**
Cloud coverage:	**0.6%**
Product:	S2A_OPER_PRD_MSIL1C_PDMC_20160414T040806_R008_V20150812T104021_20150812T104021
Tile:	32VNM
Sentinel monitoring:	Compare new data

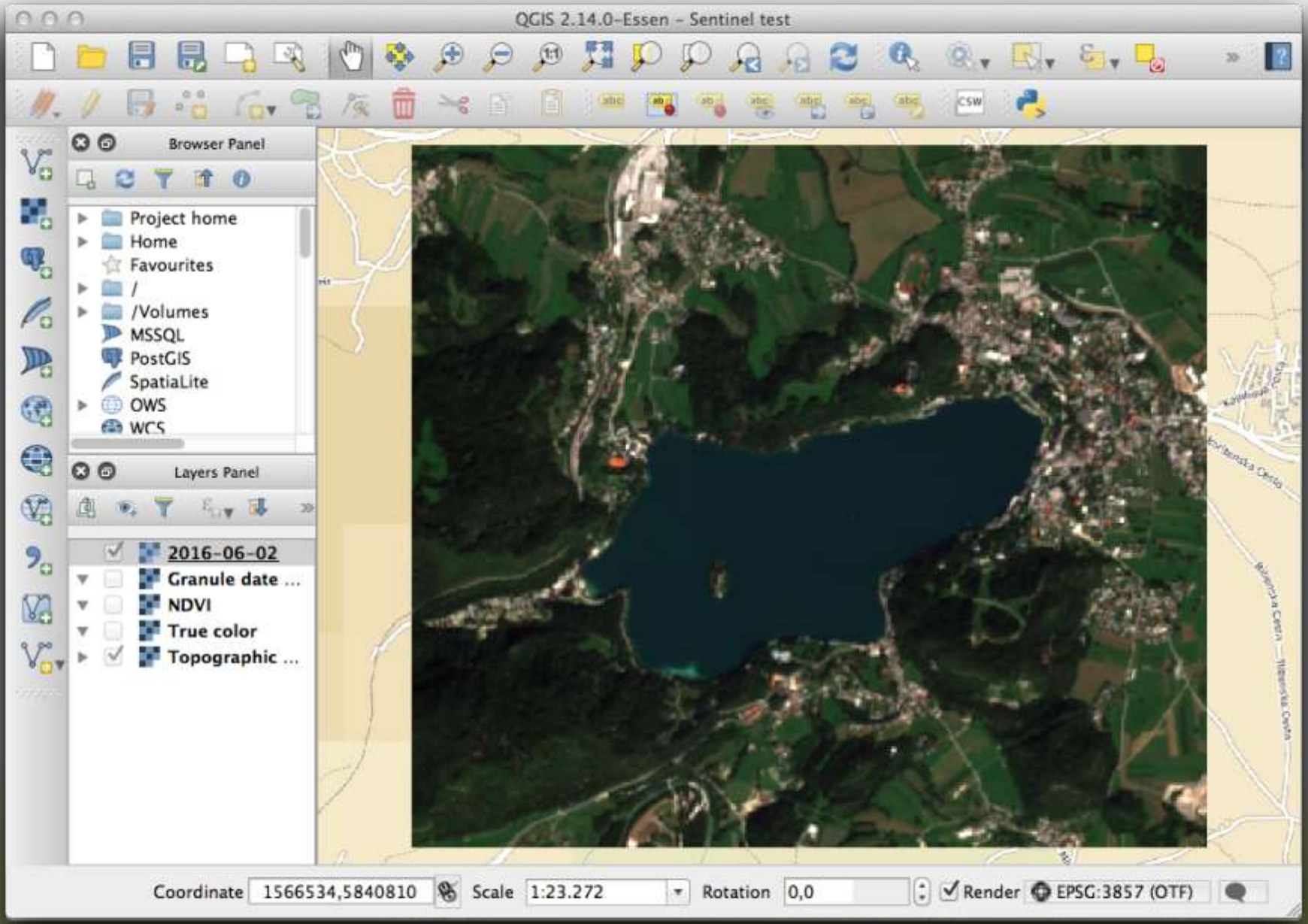
This email was sent to you from Sentinel Hub Notification Service.
You can always update your email notifications.

Sentinel hub | © 2016

Added value services – land change monitoring



Added value services – mosaic generator



Future plans

- Atmospheric correction (simplified)
- Cloud removal
- Download in SAFE format
- Deployment on IPT Poland
  - Addition of S-1 and S-3
  - Addition of Landsat

Conclusion

- Real-time processing of data
  - cost efficient, flexible
- Operational
- Commercial services

- More info
  - http://www.sentinel-hub.com/
  - goo.gl/BWSr1l (videos)