SENTINEL Hub

Building the Company Without Having an Exit in Mind

Grega Milcinski

Sinergise/Sentinel Hub

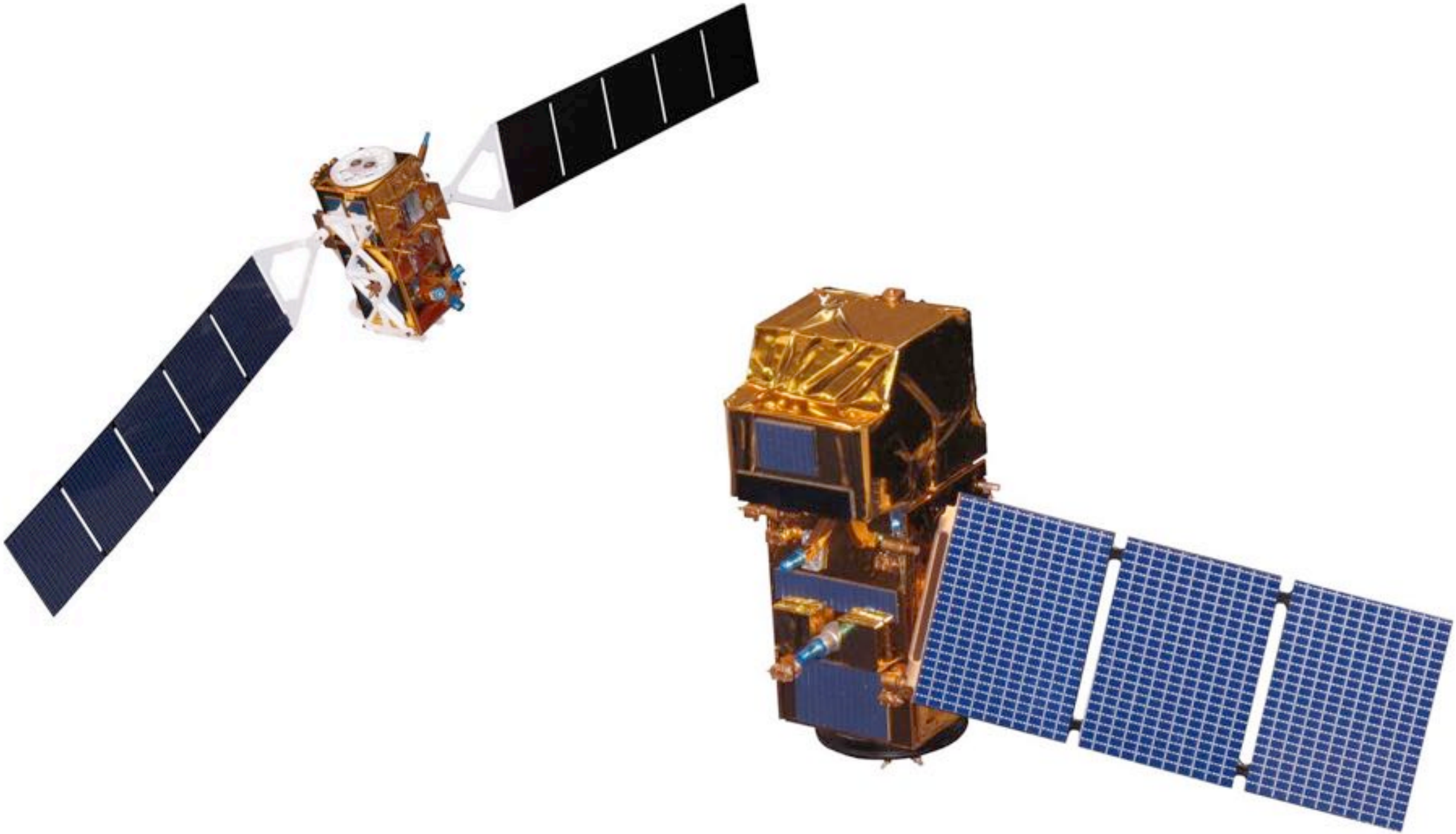
grega.milcinski@sinergise.com

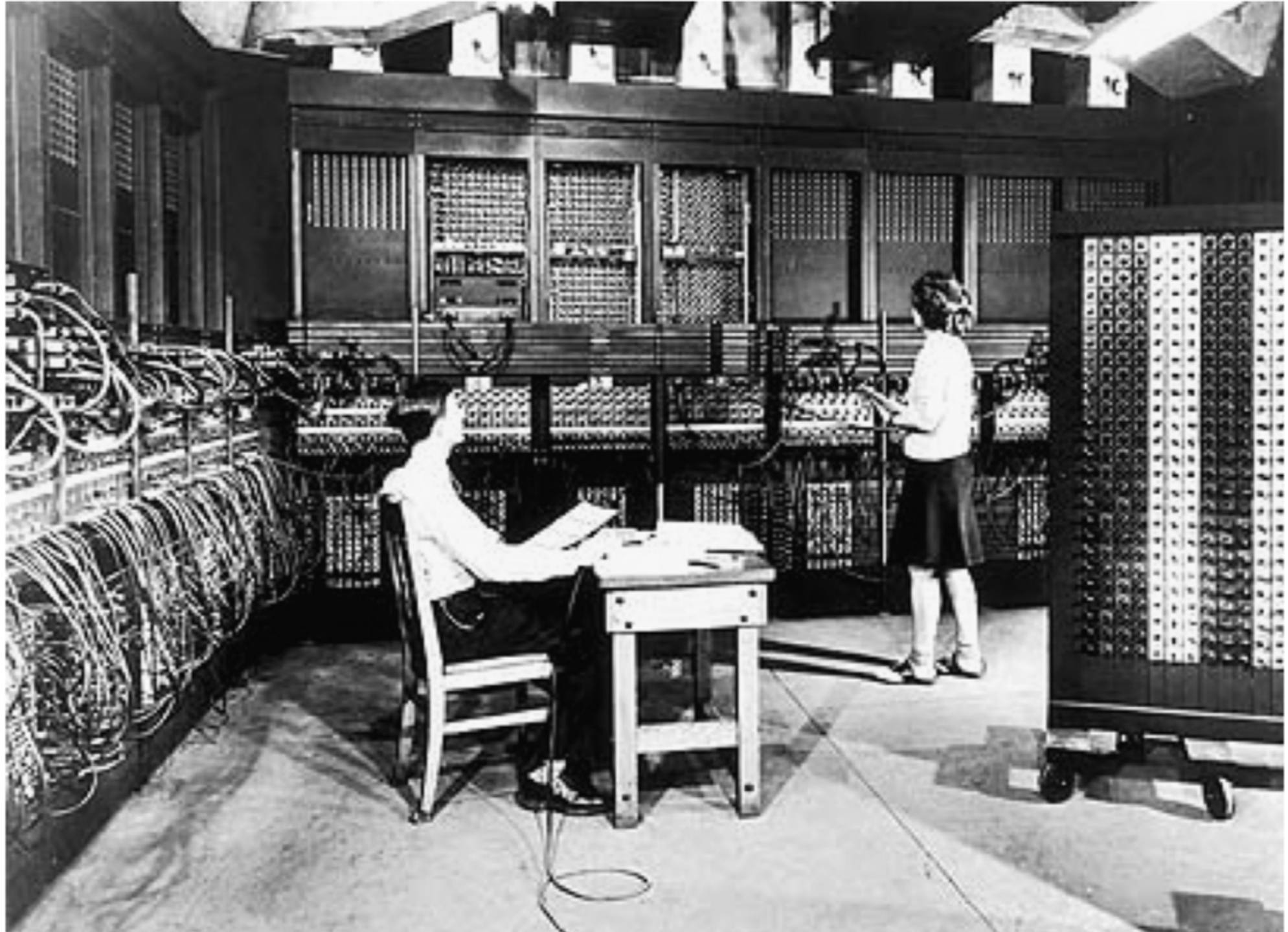
AIRBUS
DEFENCE & SPACE

Google

DigitalGlobe

planet.





Sentinel-2

earth observation | satellite imagery | gis | natural resource | sustainability | disaster response

Description

The Sentinel-2 mission is a land monitoring constellation of two satellites that provide high resolution optical imagery and provide continuity for the current SPOT and Landsat missions. The mission provides a global coverage of the Earth's land surface every 5 days, making the data of great use in on-going studies. L1C data are available from June 2015 globally. L2A data are available from April 2017 over wider Europe region, planned to be expanded globally in July 2018.

Update Frequency

New Sentinel data are added regularly, usually within few hours after they are available on Copernicus OpenHub.

License

Access to Sentinel data is free, full and open for the broad Regional, National, European and International user community. View Terms and Conditions.

Documentation

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

Managed By

Sinergise

Contact

https://forum.sentinel-hub.com/c/aws-sentinel

Usage Examples

- EO Browser by Sinergise

Resources on AWS

Description
Level 1C scenes and metadata, in Requester Pays S3 bucket

Resource type
S3 Bucket

Amazon Resource Name (ARN)
`arn:aws:s3:::sentinel-s2-l1c`

AWS Region
`eu-central-1`

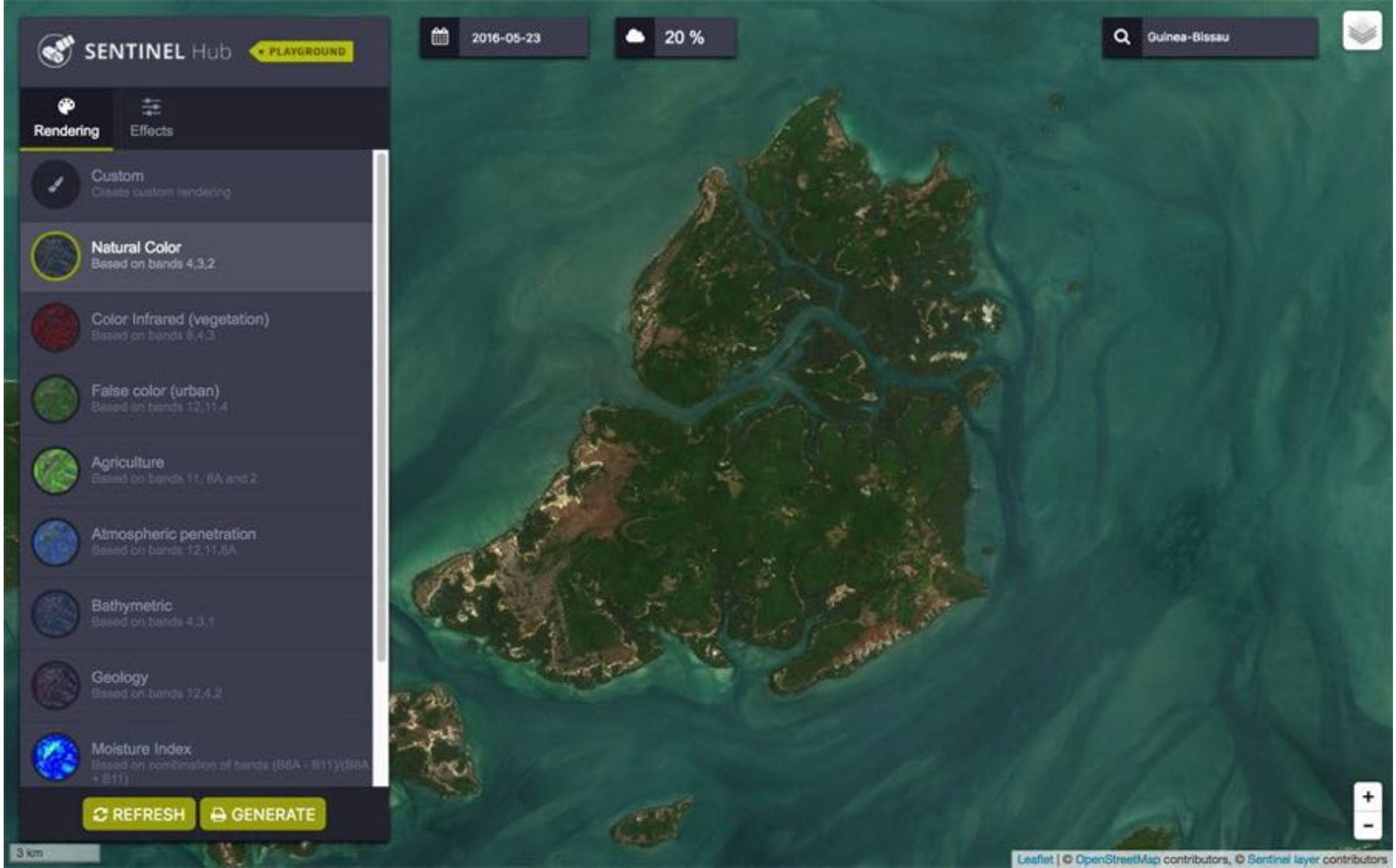
Description
S3 Inventory files for L1C

Resource type
S3 Bucket

Amazon Resource Name (ARN)
`arn:aws:s3:::sentinel-inventory/sentinel-s2-l1c`

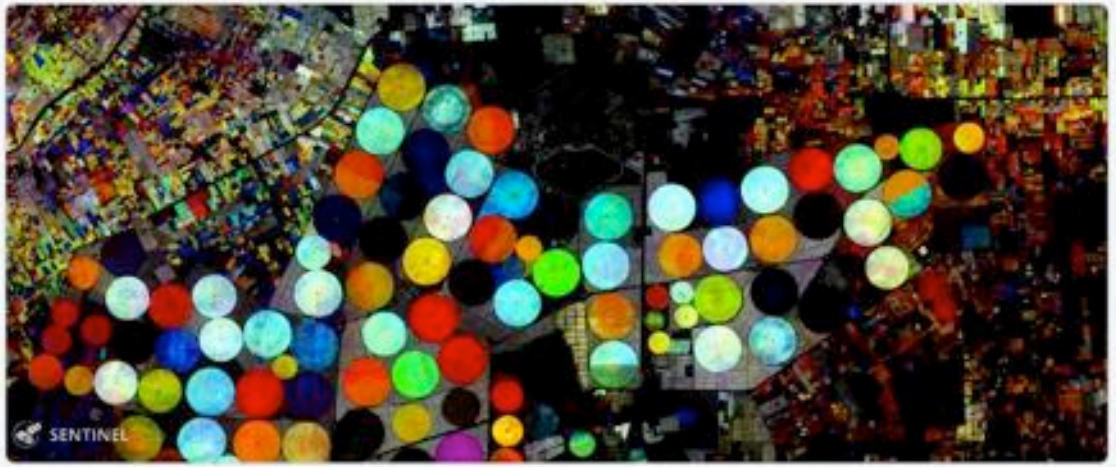
AWS Region
`eu-central-1`

Description
Level 2A scenes and metadata, in Requester Pays S3 bucket


SENTINEL Hub
PLAYGROUND
2016-05-23
20 %
Guinea-Bissau
Rendering
Effects
Custom
Create custom rendering
Natural Color
Based on bands 4,3,2
Color Infrared (vegetation)
Based on bands 8,4,3
False color (urban)
Based on bands 12,11,4
Agriculture
Based on bands 11, 8A and 2
Atmospheric penetration
Based on bands 12,11,8A
Bathymetric
Based on bands 4,3,1
Geology
Based on bands 12,4,2
Moisture Index
Based on combination of bands (B8A - B11)/(B8A + B11)
REFRESH
GENERATE
3 km
Leaflet | © OpenStreetMap contributors, © Sentinel layer contributors

HD @HarelDan · 24 Oct 2017

Tip: Blue field growing, Green fields maturing, Yellow Fields ripe, Red fields reaped/drying. Same place, 3 days ago apps.sentinel-hub.com/sentinel-playg…



4 5 20

Stef Lhermitte
@StefLhermitte

Following

Replying to @HarelDan @sentinel_hub and 4 others

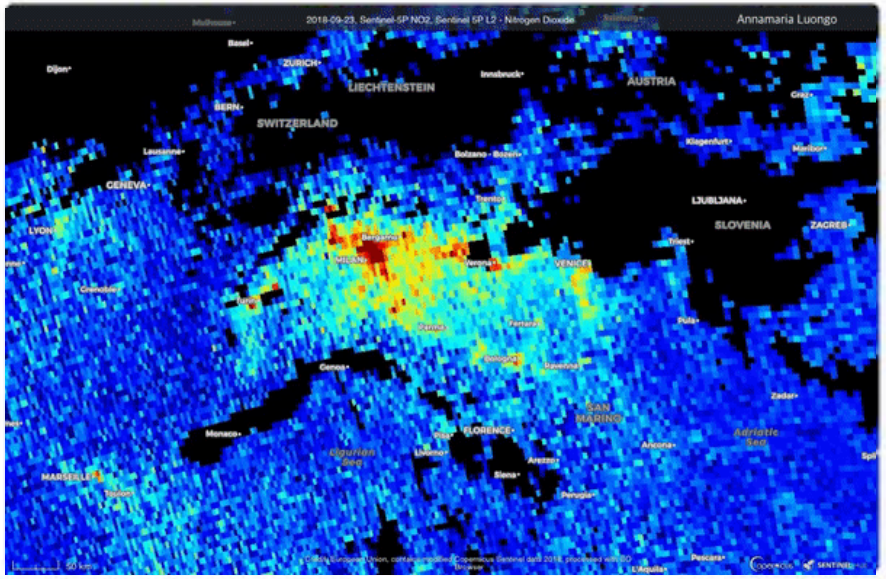
Wow! The moment even my mom can classify petabytes in seconds on her very old computer is getting closer. Just need to teach her Javascript

8:14 AM - 25 Oct 2017

1 Retweet **9** Likes

annamaria @annamaria_84 · Sep 27

The breath (polluted by #NO2) of the #Padana Plain, north of #Italy, from Sunday 23 September to Thursday 27 September 2018 (today). #Sentinel5p @CopernicusEU @sentinel_hub @minambienteIT @ISPRA_Press

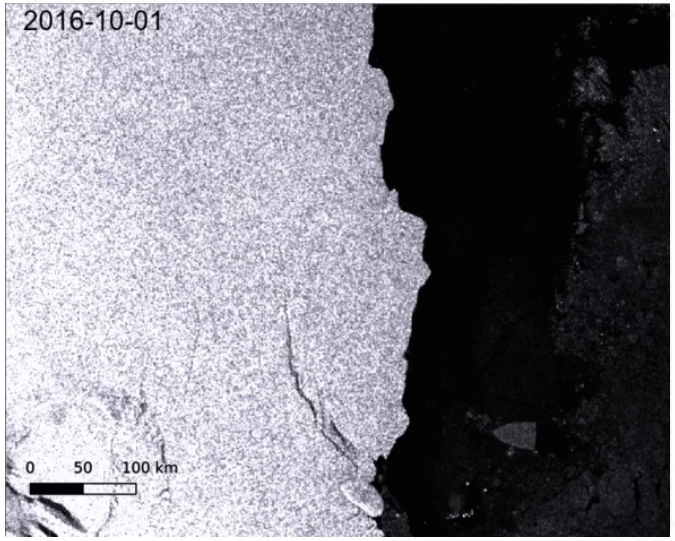


Simon Gascoin @sgascoin · Sep 18

#LarsenC The Movie 🎥 updated

Time lapse of 56 #Sentinel1 extra wide swath images since 2016-10-01.

Iceberg #A68 is leaving my bounding box!

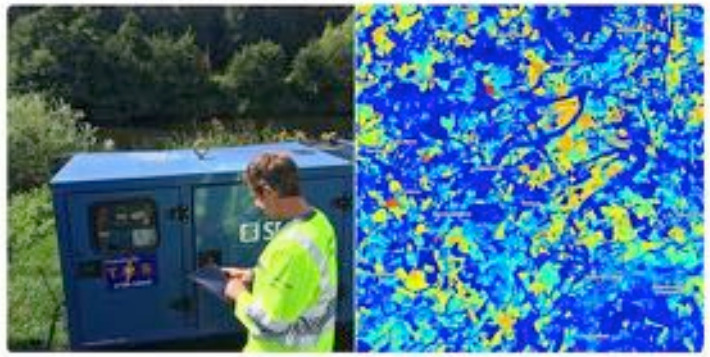


Dave Throup @DaveThroupEA · Aug 19

It might be Sunday morning but Environment Officers are on #waterpatrol along the #herefordshire Wye. Levels & flows still very low.

Visits targeted using latest @CopernicusEU @sentinel_hub imagery.

Checking pumps are legal & operating to licence conditions.



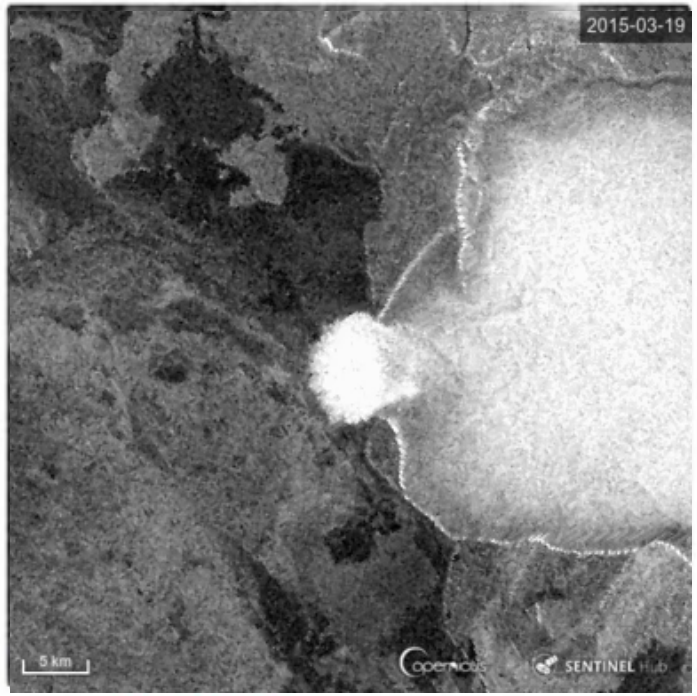
Simon Gascoin @sgascoin · Sep 24

New animation of Vavilov ice cap collapse, this time using #Sentinel1 @CopernicusEU radar (no issue with clouds or polar night)

"You can literally watch an ice cap gut itself in front of your eyes"

quote by @IceSheetMike, 2018

@vrushmd



Benjamin Strick @BenDoBrown · Sep 28

The birth of a drone base in Sahara's sandy plains at Dirkou, Niger.

Location: goo.gl/maps/bAwhXDbf....

More info: nytimes.com/2018/09/09/wor... @sentinel_hub @CopernicusEU

#drones #Niger

4 5

Zack Labe @ZLabe · Sep 14

Earth's art - runoff into Lake Turkana (Ethiopia/Kenya) located in Africa's Great Rift Valley. It is the 4th largest salt lake in the world and known for its greenish color ("Jade Sea").

[9 September 2018, Sentinel-2 satellite image]

You, ESA EarthObservation and Copernicus EU

1 23 59

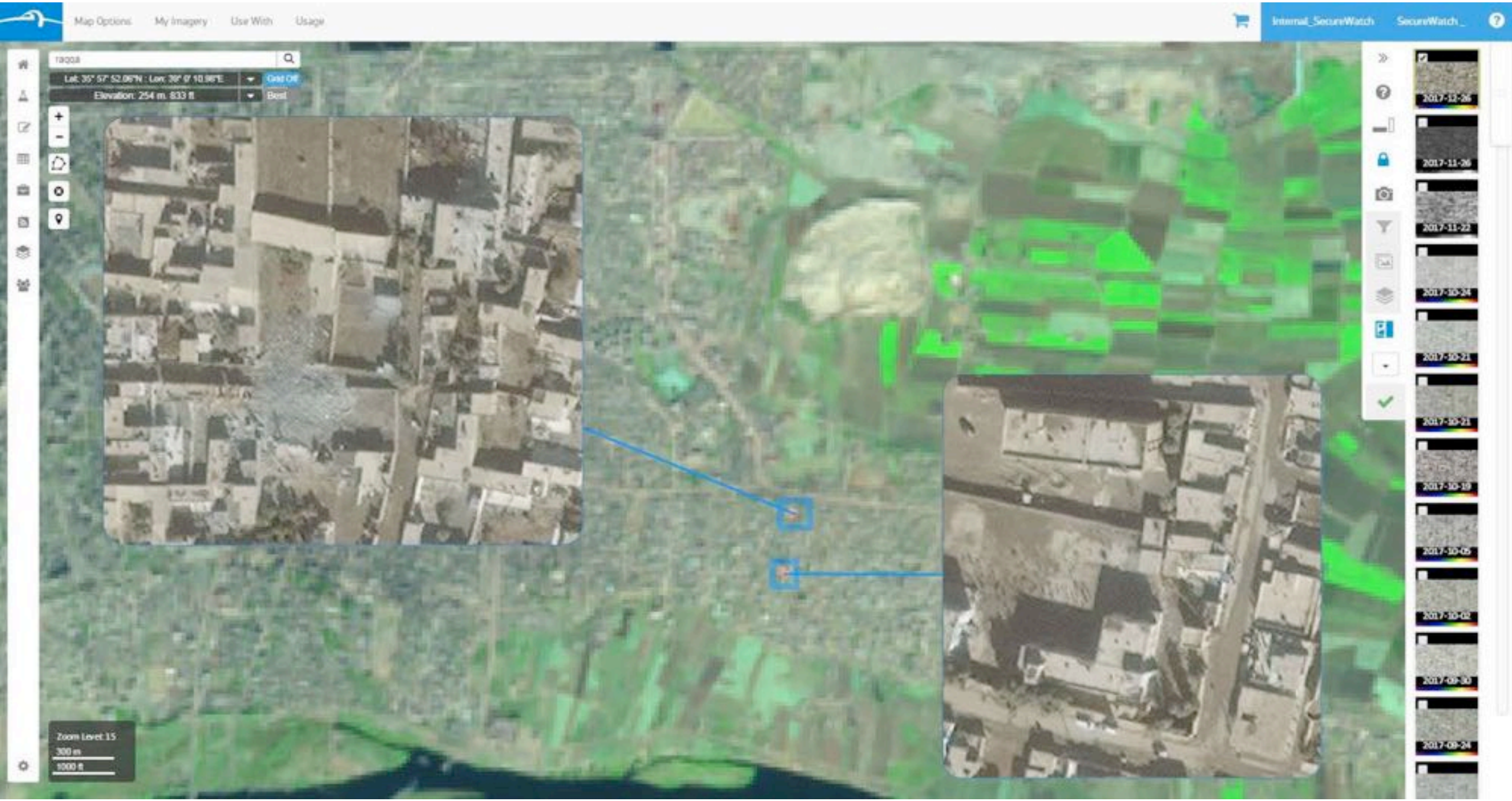
https://services.sentinel-hub.com/ogc/wcs/<INSTANCE>?SERVICE=WCS&REQUEST=GetCoverage
&COVERAGE=1_VV_ORTHORECTIFIED
&TIME=2018-07-17/2018-07-17
&BBOX=15.28815,107.07000,14.75496,106.09153
&RESX=20m&RESY=20m
&FORMAT=image/tiff&SRS=EPSG:4326

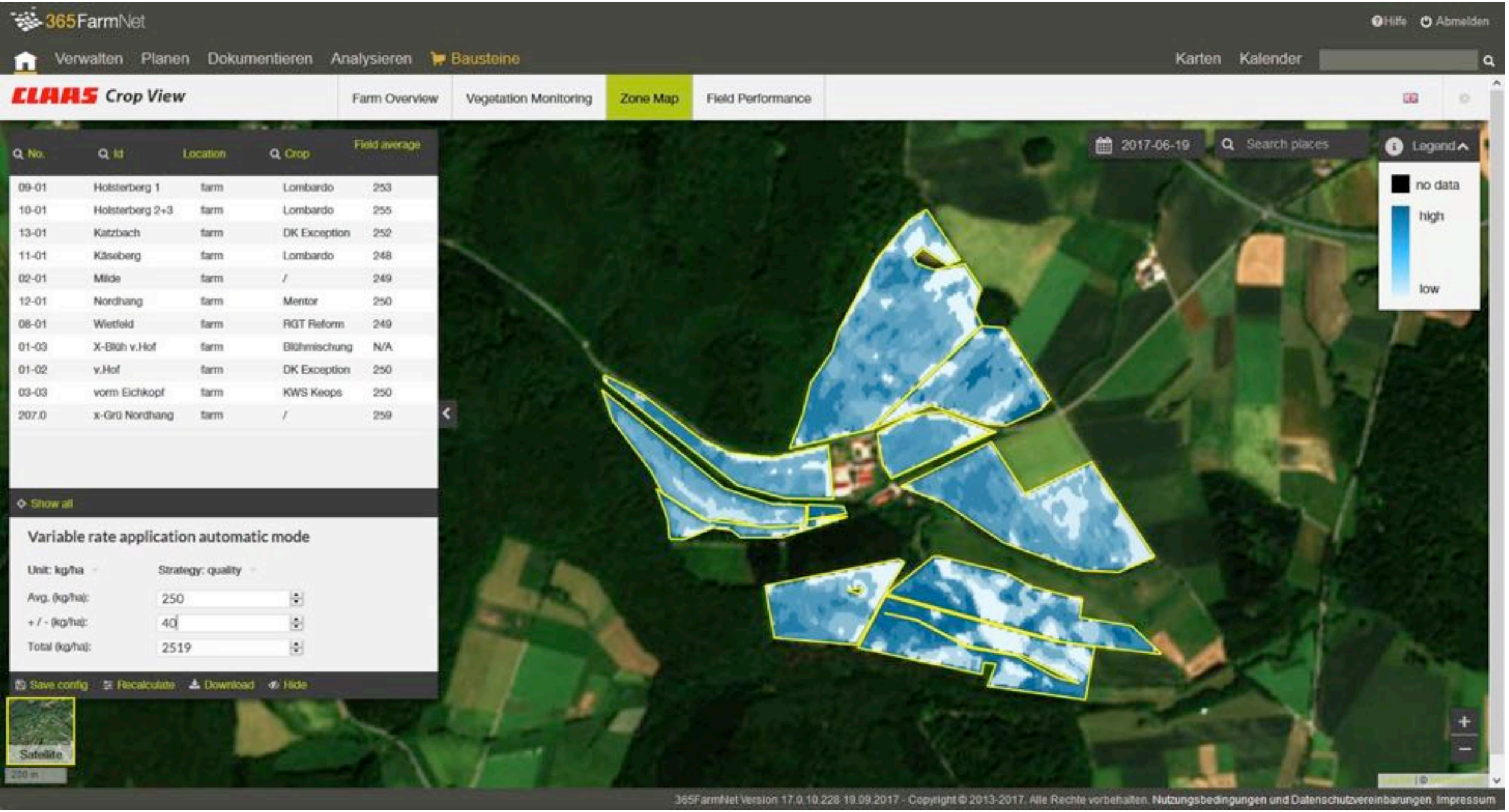
No worries about download, storage, decoding,
stitching scenes, reprojection, scaling, mosaicking,
meta-data parsing, backscatter calibration, orthorectification ...

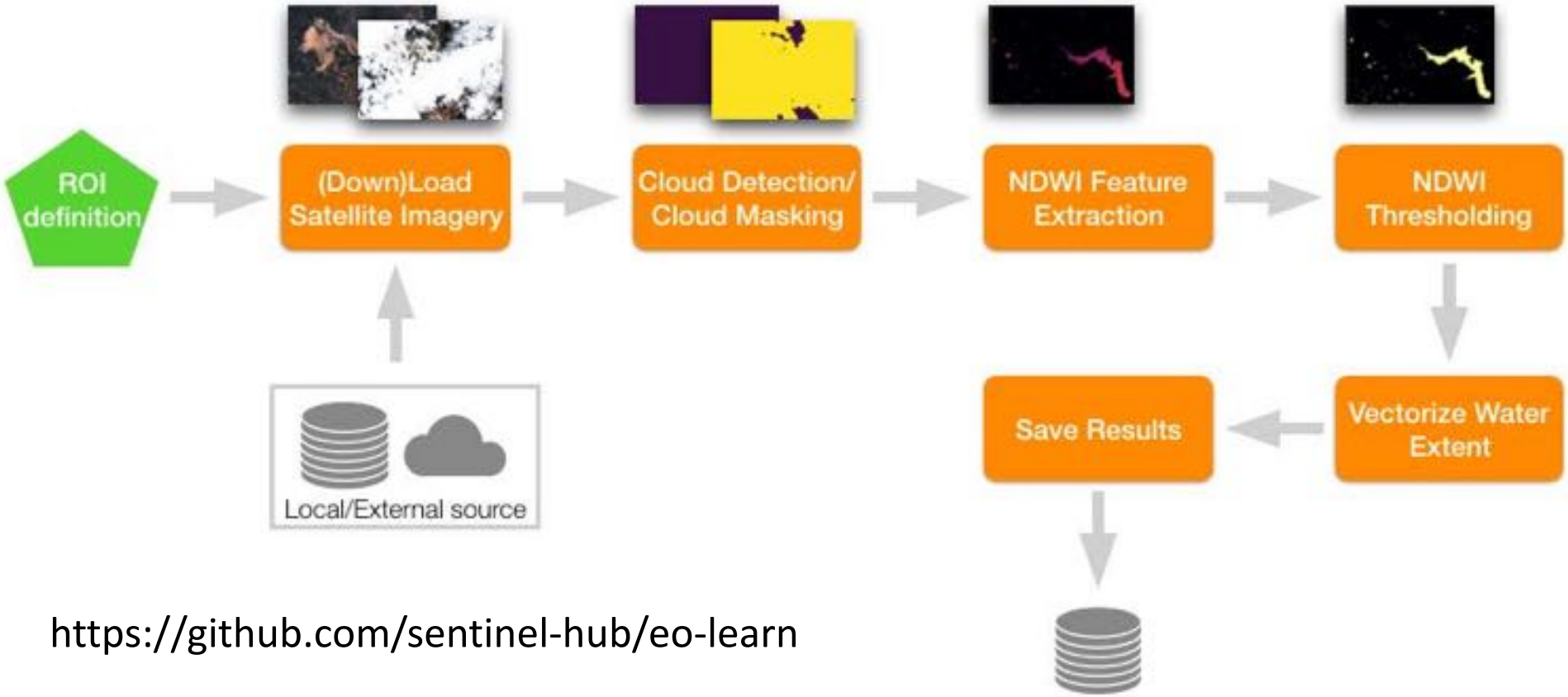
Sentinel Hub plans let you access all open datasets and full imagery archive.

Select duration: Annually (discount)

	GET STARTED	INDIVIDUAL NON-COMMERCIAL USE	INDIVIDUAL COMMERCIAL USE	APP DEVELOPERS & ENTERPRISE
Price	**0** €	**16.6** € / month (billed as **199 € / year,** VAT included)	**83.3** € / month (billed as **999 € / year,** without VAT)	from **500** € / month (Contact us)
Download analytical data with EO Browser	✔	✔	✔	✔
OGC standard WMS / WCS / WMTS / WFS		✔	✔	✔
API for advanced features		✔	✔	✔
Configuration utility tool		✔	✔	✔
Requests per minute		20	20	100 .. ∞
Non-commercial use	✔	✔	✔	✔
Commercial use			✔	✔


Map Options
My Imagery
Use With
Usage
Internal_SecureWatch
SecureWatch_
Grid Off
Best
Zoom Level: 15
300 m
1000 ft
2017-11-26
2017-11-26
2017-11-22
2017-10-24
2017-10-21
2017-10-21
2017-10-19
2017-10-05
2017-10-02
2017-09-30
2017-09-24


365FarmNet
Hilfe
Abmelden
Verwalten
Planen
Dokumentieren
Analysieren
Bausteine
Karten
Kalender
CLAAS Crop View
Farm Overview
Vegetation Monitoring
Zone Map
Field Performance
No.
Id
Location
Crop
Field average
09-01 Holsterberg 1 farm Lombardo 253
10-01 Holsterberg 2+3 farm Lombardo 255
13-01 Katzbach farm DK Exception 252
11-01 Käseberg farm Lombardo 248
02-01 Milde farm / 249
12-01 Nordhang farm Mentor 250
08-01 Wietfeld farm RGT Reform 249
01-03 X-Blüh v.Hof farm Blühmischung N/A
01-02 v.Hof farm DK Exception 250
03-03 vorm Eichkopf farm KWS Keops 250
207.0 x-Grü Nordhang farm / 259
Show all
Variable rate application automatic mode
Unit: kg/ha
Strategy: quality
Avg. (kg/ha): 250
+ / - (kg/ha): 40
Total (kg/ha): 2519
Save config
Recalculate
Download
Hide
2017-06-19
Search places
Legend
no data
high
low
Satellite
200 m
365FarmNet Version 17.0.10.228 19.09.2017 - Copyright © 2013-2017. Alle Rechte vorbehalten. Nutzungsbedingungen und Datenschutzvereinbarungen. Impressum

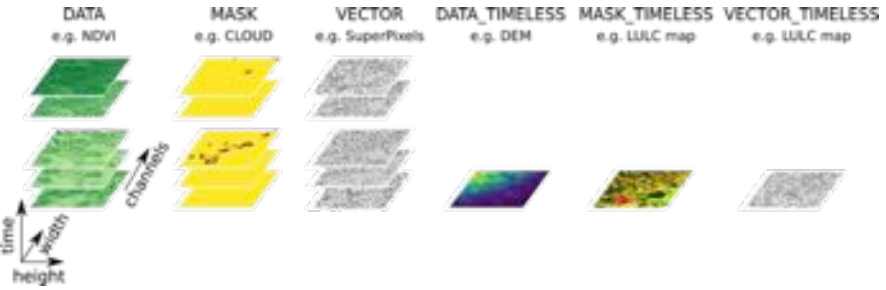


Φ-lab

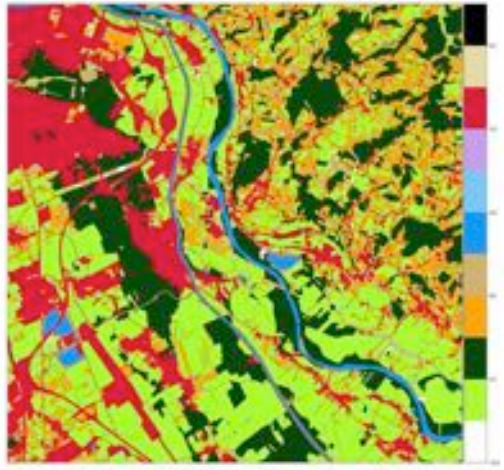
eo-learn

Funded by the H2020 Framework Programme of the European Union

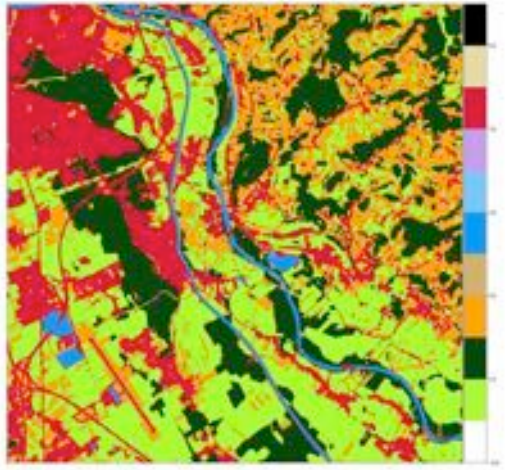
https://github.com/sentinel-hub/eo-learn



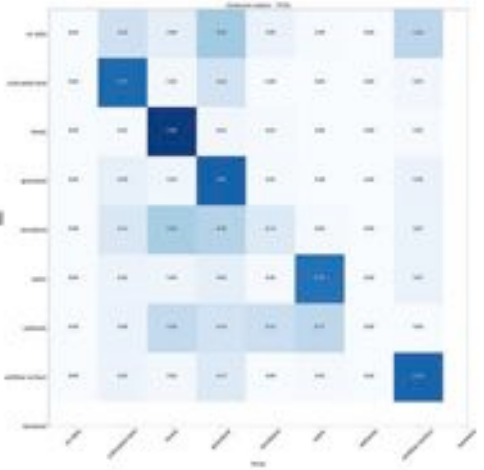
Ground truth



Predicted



Confusion Matrix



Simon Gascoin
@sgascoin

Following

Because of you @sentinel_hub my timeline is flooded by #Sentinel2 gifs! You just ruined my old-fashioned bash scripts! 😩😩😉😉

Ørjan H.H. Vøllestad @hoyd
Tromsø, Norway from last April up until today using #Sentinel2 satellite imagery. @CopernicusEU @sentinel_hub @VisitTromso

10:23 PM - 8 Apr 2018

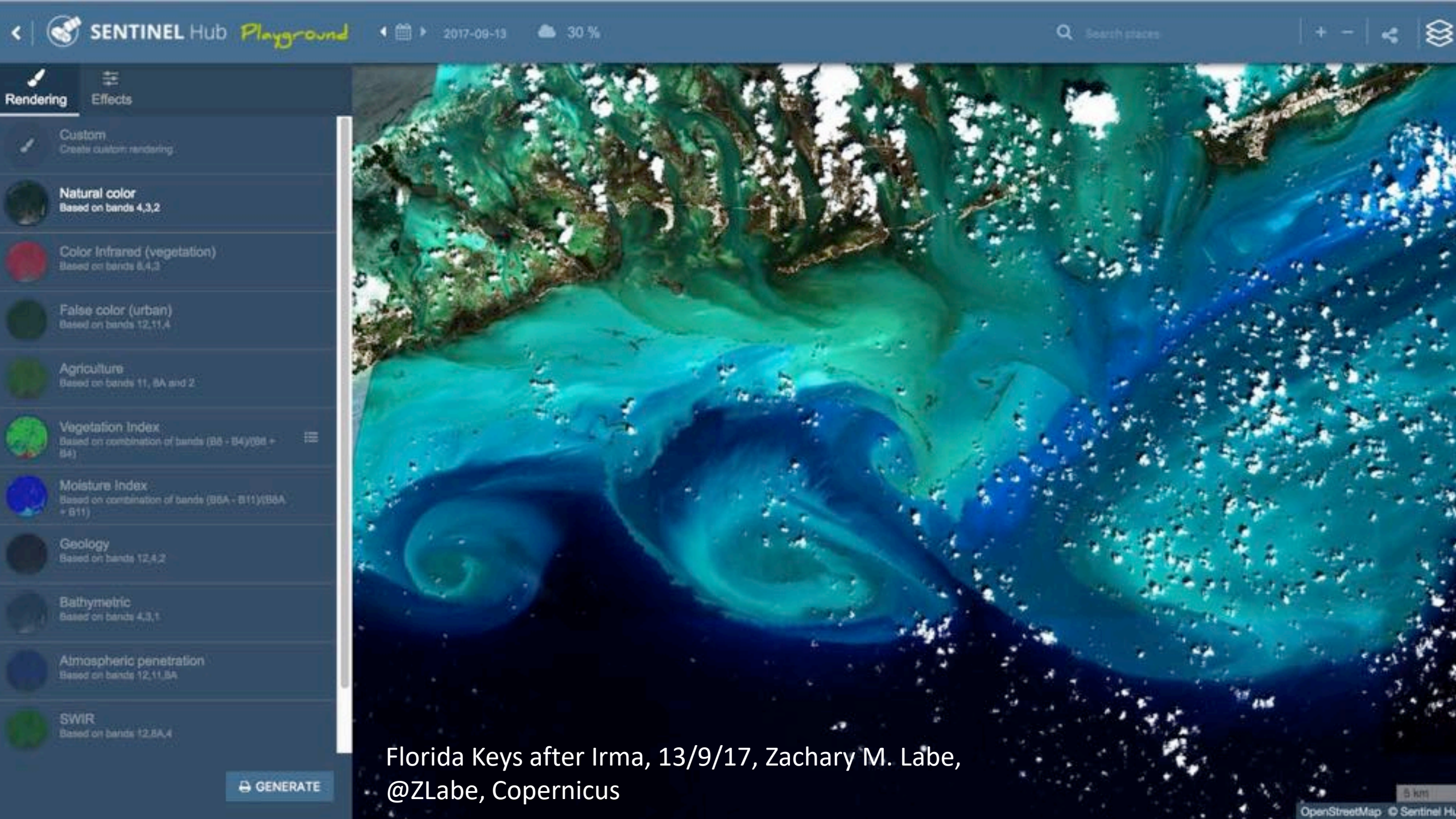
5 Retweets **19** Likes

Build the business, not the exit strategy.

Alternative sources of funding are available.

Focus.

Do not come here to sell, come to learn and to share.



Florida Keys after Irma, 13/9/17, Zachary M. Labe, @ZLabe, Copernicus