

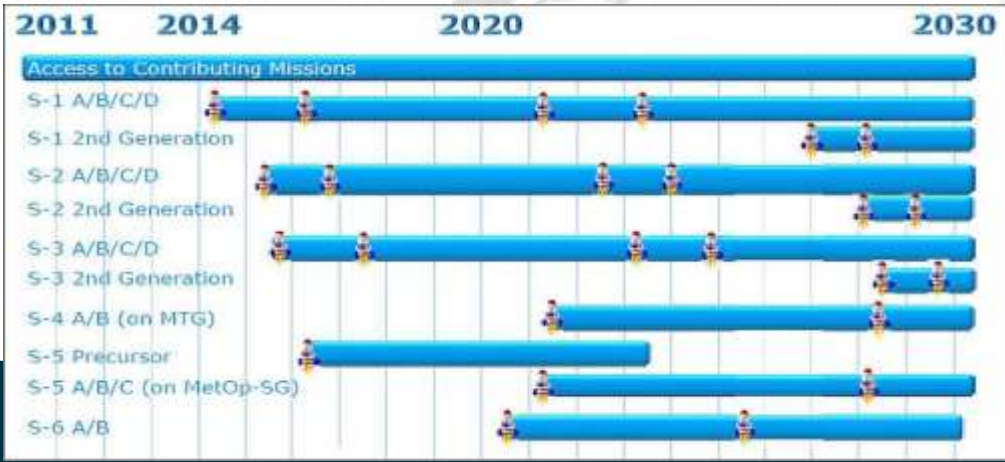
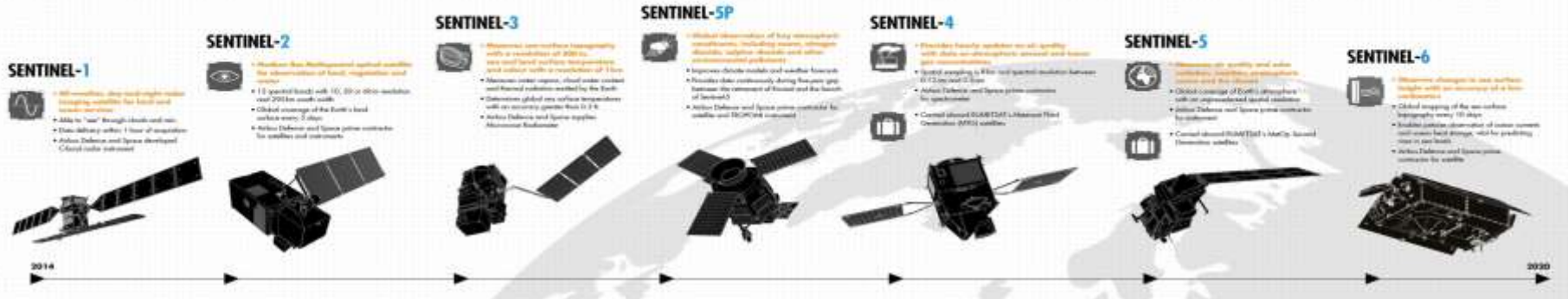


TERRA
SCOPE

COPERNICUS AND ITS SENTINELS

European Earth Observation Programme Copernicus: observing our planet for a safer world

- Green in 2025** will help protect the environment and support sustainable development
- 30** years of experience in Earth observation data
- 10** years of experience in Earth observation data
- Neutral** mission in the EU's 10th year programme
- Cost** flexibility: allowing for cost-effective and efficient operations
- Emergency Management**: provides early warning for natural disasters and helps in disaster relief operations
- Aerial Surface Monitoring**: management of agriculture, land use, and forests
- Marine Environmental Monitoring**: helps to understand the state of the oceans and supports marine management and protection
- Climate Change Monitoring**: helps to understand the impact of climate change and supports climate change mitigation and adaptation
- Earth's Atmosphere Monitoring**: helps to understand the state of the atmosphere and supports climate change mitigation and adaptation



Easy, open and free access until at least 2030





Your access to Sentinel satellites

- Download data and products
- View and explore
- Integrate data and products via webservice
- Upload your algorithm, download just the result



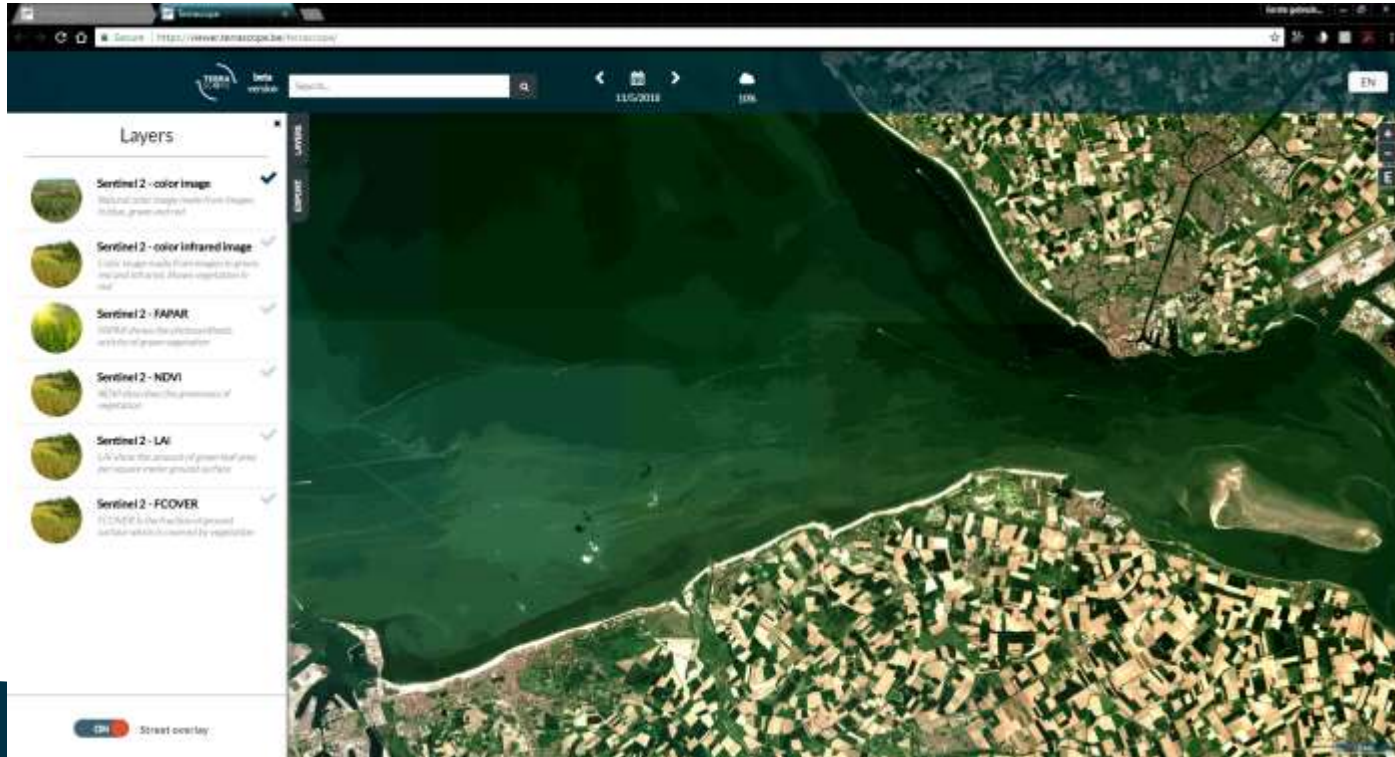


Downloading
FREE data
creates a **COST**,
so why do it?



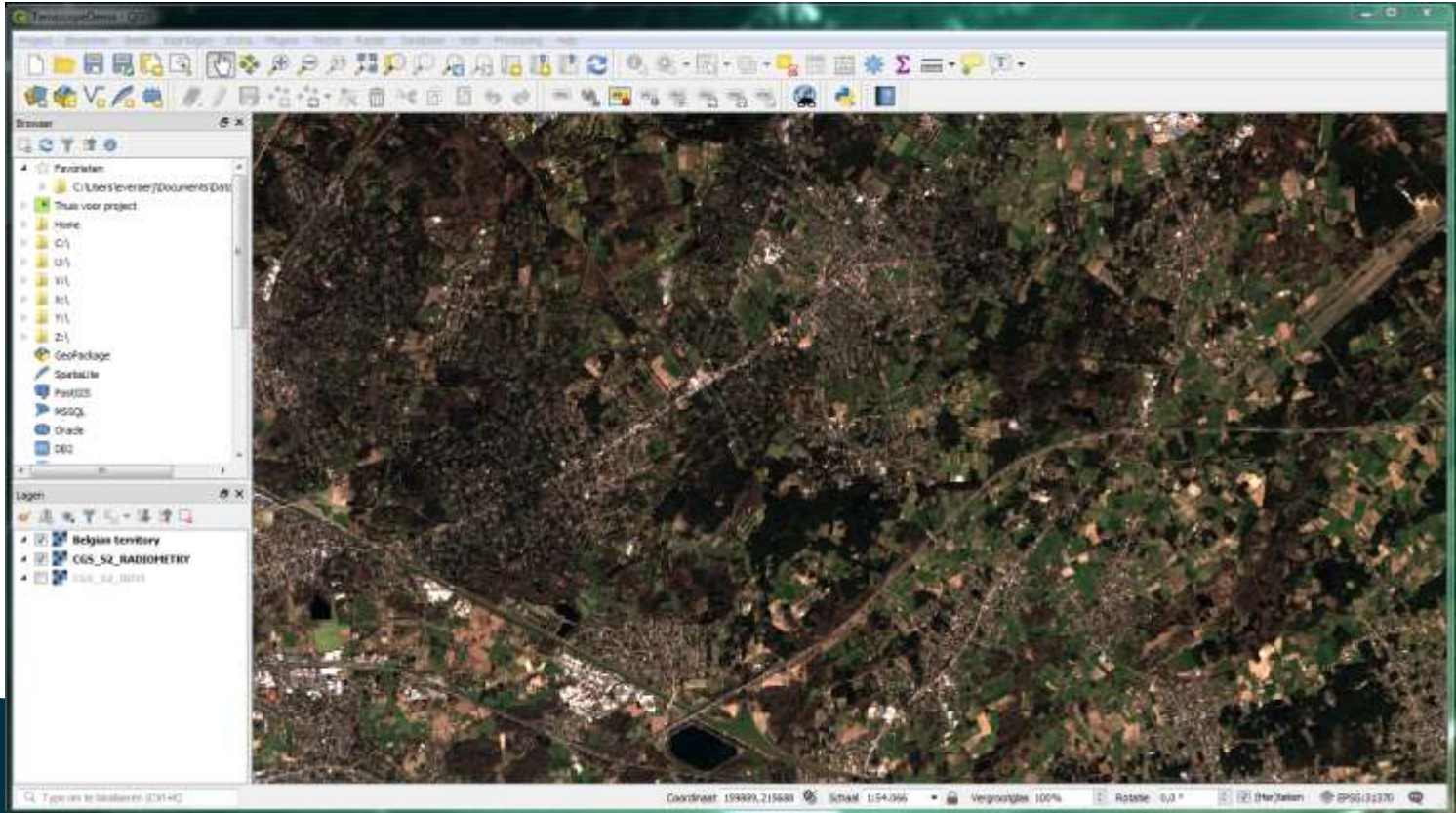


View and explore **NOW**





Build your own application via webservice **NOW**





Use Notebooks SOON

QuickstartExample

Secure https://notebooks.vgt.vito.be/user/jungen_everaerts/notebooks/Private/notebook-samples/QuickstartExample.ipynb

Jupyter QuickstartExample Last Checkpoint: 11 minutes ago (autosaved)

Control Panel Logout

File Edit View Insert Cell Kernel Widgets Help Python 2

CellToolbar

This notebook shows the MEP quickstart sample, which also exists as a non-notebook version at: <https://bitbucket.org/vitofan/python-spark-quickstart>

It shows how to use Spark (<http://spark.apache.org/>) for distributed processing on the PROBA-V Mission Exploration Platform. (<https://proba-v.mep.esa.int/>)

The sample intentionally implements a very simple computation: for each PROBA-V tile in a given bounding box and time range, a histogram is computed. The results are then summed and printed. Computation of the histograms runs in parallel.

First step: get file paths

A catalog API is available to easily retrieve paths to PROBA-V files: <http://readthedocs.org/projects/mep-catalog/en/>

```
In [1]: from catalogclient import catalog
cat=catalog.Catalog()
cat.get_producttypes()

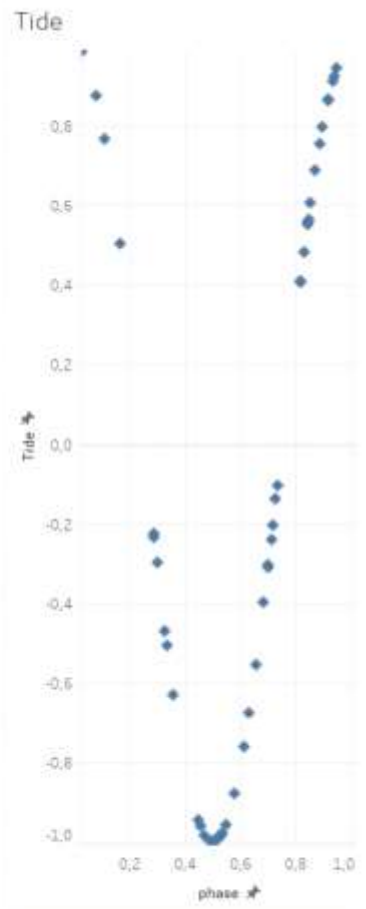
Out[1]: [u'BioPar_ALB_BHV_V1_Tiles',
u'BioPar_ALB_OHV_V1_Tiles',
u'BioPar_BA_V1_Tiles',
u'BioPar_DHP_Tiles',
u'BioPar_FAPAR_V1_Tiles',
u'BioPar_FAPAR_V1_Global',
u'BioPar_FAPAR_V2_Global',
u'BioPar_FCOVER_V1_Tiles',
u'BioPar_FCOVER_V1_Global',
u'BioPar_FCOVER_V2_Global',
u'BioPar_LAI_V1_Tiles',
u'BioPar_LAI_V1_Global',
u'BioPar_LAI_V2_Global',
u'BioPar_MDVI300_V1_Global',
u'BioPar_BA300_V1_Global',
u'BioPar_FCOVER300_V1_Global',
u'BioPar_FAPAR300_V1_Global',
u'BioPar_LAI300_V1_Global',
u'BioPar_MDVI_V1_Tiles',
u'BioPar_MDVI_V2_Tiles',
u'BioPar_MDVI_V2_Global',
u'BioPar_SMT']
```




Upload your algorithm, download the result **SOON**



Sentinel-2 timelapse @Zeebrugge



1 Apr 16 1 Jun 16 1 Aug 16 1 Oct 16 1 Dec 16 1 Feb 17 1 Apr 17 1 Jun 17 1 Aug 17 1 Oct 17 1 Dec 17 1 Feb 18 1 Apr 18

11 April 2016 to 6 April 2018

Sentinel-2 timelapse @Zeebrugge

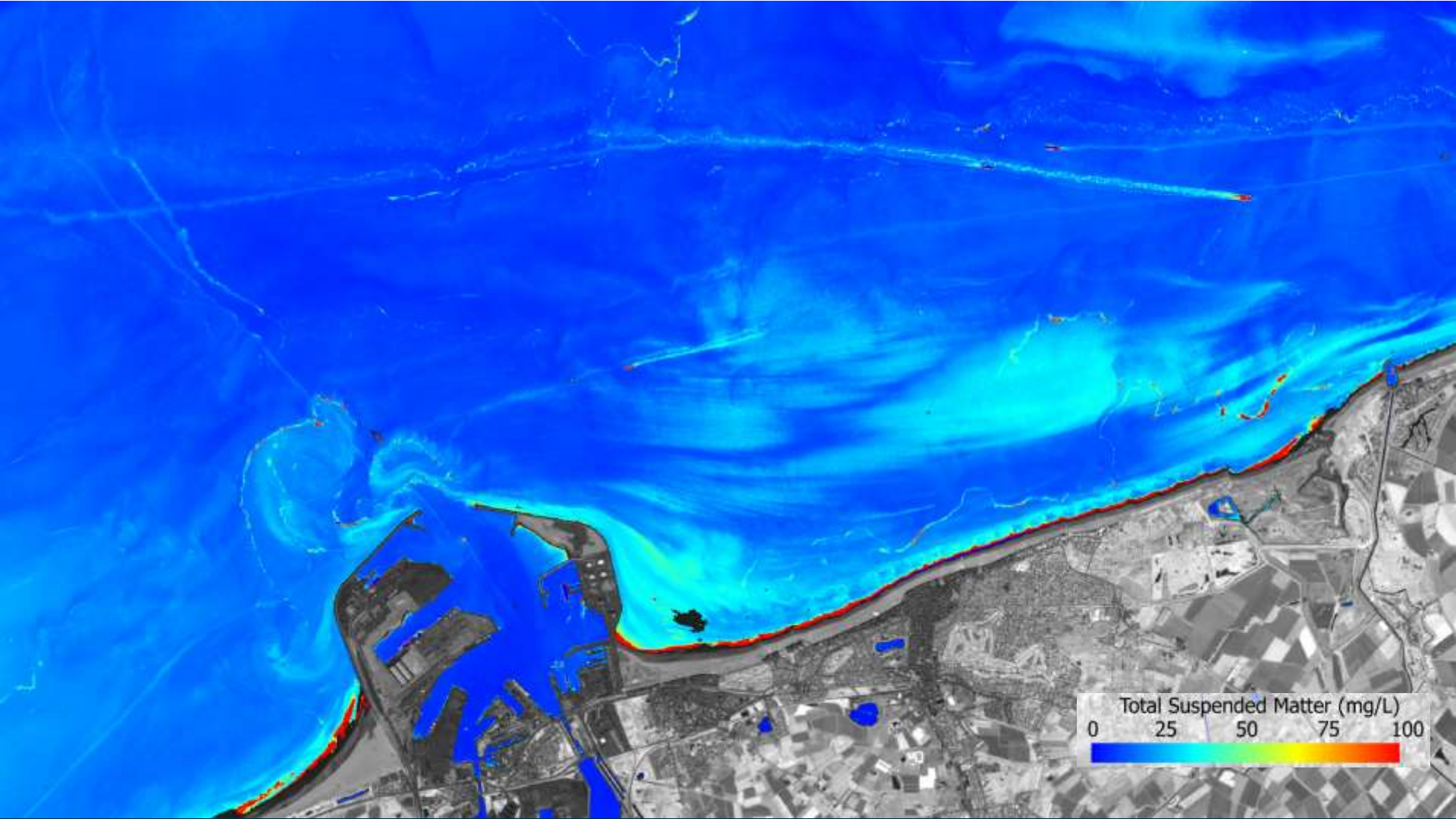


Tide



1 May 2016

1 Apr 16 1 Jun 16 1 Aug 16 1 Oct 16 1 Dec 16 1 Feb 17 1 Apr 17 1 Jun 17 1 Aug 17 1 Oct 17 1 Dec 17 1 Feb 18 1 Apr 18



Sentinel-2 timelapse @Zeebrugge



Tide



27 March 2017

1 Apr 16 1 Jun 16 1 Aug 16 1 Oct 16 1 Dec 16 1 Feb 17 1 Apr 17 1 Jun 17 1 Aug 17 1 Oct 17 1 Dec 17 1 Feb 18 1 Apr 18

