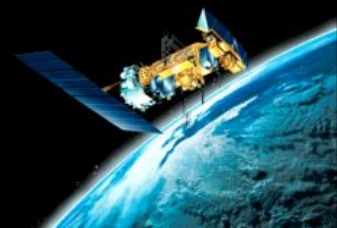
The EUMETSAT Network of Satellite Application Facilities

NWC SAF
Support to Nowcasting and Very Short Range Forecasting

SMHI

Pytroll supporting the NWCSAF

Adam Dybbroe



2020 Nowcasting SAF User Workshop, Madrid, Wed 11/3

Pytroll?

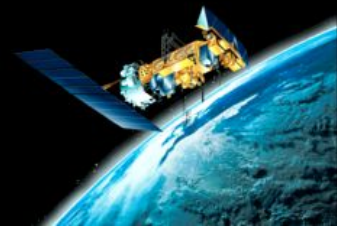
- Pytroll is an easy to use, modular, free and open source python framework for the processing of earth observation satellite data
- Both for 24/7 production and research
- More than 100 contributors worldwide
- Code on github, pypi and conda-forge

http://pytroll.org/

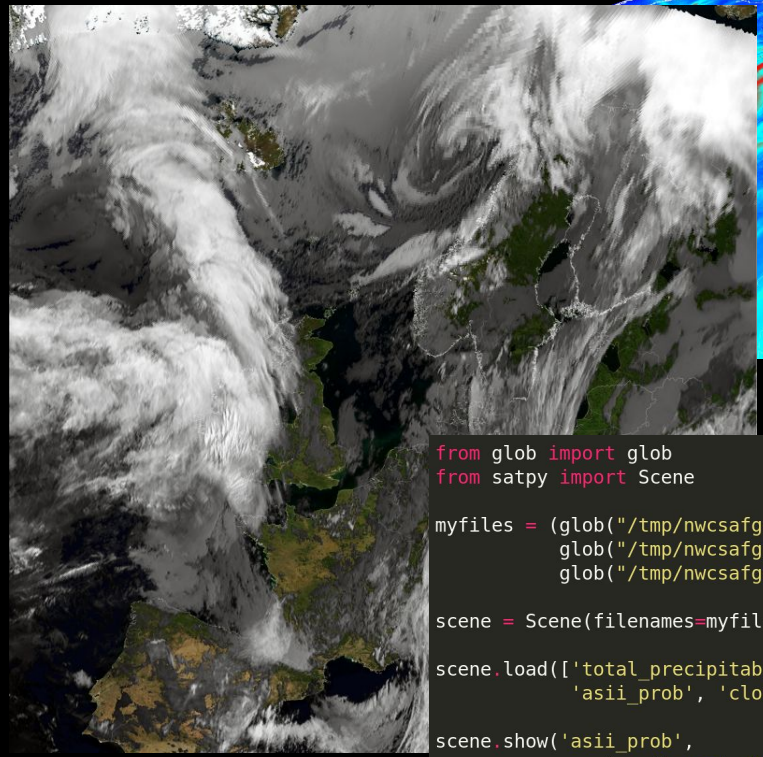
This presentation?

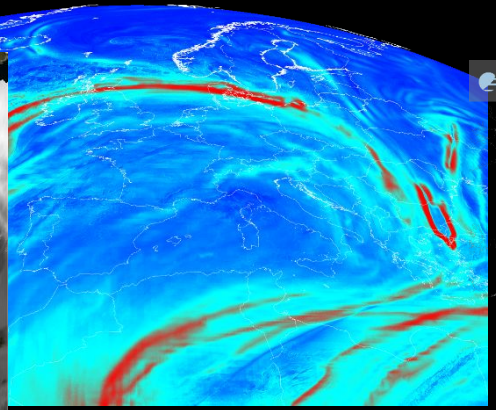
- This presentation was prepared as two Jupyter notebooks giving examples on how some of the Pytroll modules can be used to support the reading, processing and visualisation of the NWCSAF products
- The notebooks can be reached via the Pytroll web site or directly here:

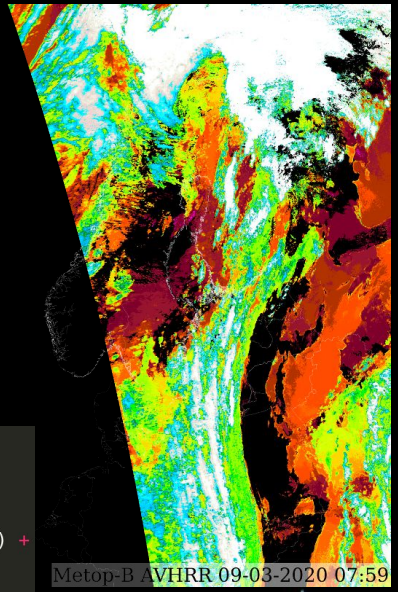
https://nbviewer.jupyter.org/github/pytroll/pytroll-examples



Examples...








```
from glob import glob
from satpy import Scene

myfiles = (glob("/tmp/nwcsafgeo/export_archive/iSHAI/*20170112T090000Z.nc") +
           glob("/tmp/nwcsafgeo/export_archive/ASII/S_NWC_ASII-TF*20170112T090000Z.nc") +
           glob("/tmp/nwcsafgeo/export_archive/CMIC/S_NWC_CMIC*20170112T090000Z.nc"))

scene = Scene(filenames=myfiles, reader='nwcsaf-geo')

scene.load(['total_precipitable_water', 'showalter_index', 'lifted_index',
            'asii_prob', 'cloud_liquid_water_path', 'cloud_top_phase'])

scene.show('asii_prob',
           overlay={'coast_dir': '/tmp/shapes/', 'color': 'white'})
```