proba-v
mep

BRING THE USERS CLOSER TO THE DATA

VIRTUAL RESEARCH ENVIRONMENT

PROBA-V's Mission Exploitation Platform (MEP) complements the PROBA-V user segment by offering an operational Exploitation Platform on the data and derived products to bring the users closer to the data. The MEP offers multiple online applications, such as:

- **Geo Viewer** where you can view PROBA-V data in full-resolution
- **Time Series Viewer** to explore the PROBA-V time series for specific regions or single pixels
- **Notebooks** to create and share documents that contain live code, equations, visualizations, etc.
- **N-daily compositor** to generate composites for a chosen number of days (N), selected bands, etc.
- **Virtual Research Environment** with access to the PROBA-V and SPOT-VEGETATION data archive, and a powerful set of tools (e.g. SNAP toolbox, GRASS GIS, QGIS) or to develop and test applications (R, Python, Java and C++)

POWERFUL SET OF TOOLS ON THE CLOUD

Researchers and developers can request a Virtual Research Environment (VRE) with access to the complete PROBA-V and SPOT-VEGETATION data archive, and derived vegetation indices.

DATA

Direct access to the full PROBA-V and SPOT-VEGETATION data archive.

PROCESSING

A large processing cluster for parallel processing to reduce processing time.

TOOLS

A powerful set of tools to work with the data, e.g. SNAP Toolbox, GRASS, GIS, QGIS.

DEVELOP

Support for Python, R, Java, C++ to develop and test your applications.

ENVIRONMENT

Possibility to install your own tools and download additional data.

PROBA-V-MEP.ESA.INT/VRE

SAVE TIME ON YOUR PROCESSING

A nice example of how you can save time on your processing using the PROBA-V MEP. Within the Copernicus Global Land Service we process all available PROBA-V 100 m data to create land cover maps for Africa (in development).
The metrics extraction needs +5000 CPU-hours for whole Africa and was processed on the MEP with 517 executers in 22 hours. That's 99.6% time saving!

False color composite showing the biomass density, derived from PROBA-V 100 m. The darker the more biomass.

Copernicus
Europe's eyes on Earth

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NOTEBOOKS

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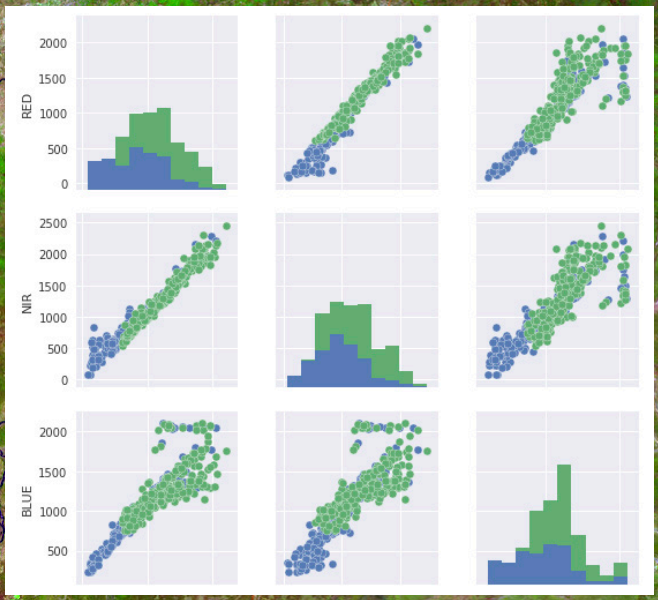
PROBA-V MEP NOTEBOOKS

Have you ever read a paper showing nice graphs, without giving a clear explanation on how they were produced? Or do you want to share your code and results with your colleagues easily? Then you should use the PROBA-V MEP Notebooks web application. It offers a solution for all these problems, because it combines a browser based interactive programming environment with the power of our Hadoop processing cluster, connected to the full PROBA-V data archive.

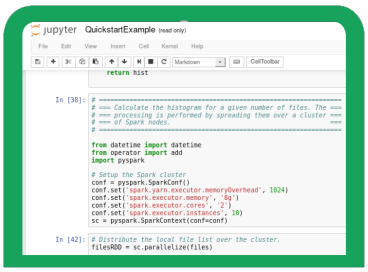


WRITE YOUR CODE

Write your own code and share it with your colleagues, whereby explaining what you do

SHARE EXPERIENCES

Work in a team on one Notebook and build on each other's input



FAST PROCESSING

Process fast on our cluster and see the results immediately

DATA ARCHIVE

Use the complete PROBA-V, SPOT-VEGETATION archive and derived vegetation indices, representing a time series of 18 years of data.

PROBA-V-MEP.ESA.INT/NOTEBOOKS