

CNES EO Data Distribution Platform applied to SWOT applications

hydr  web.next



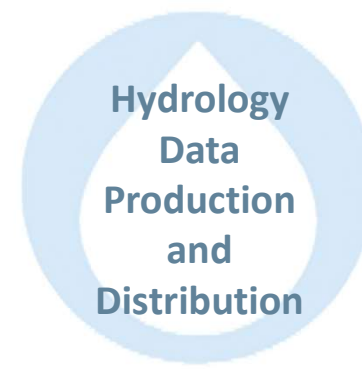
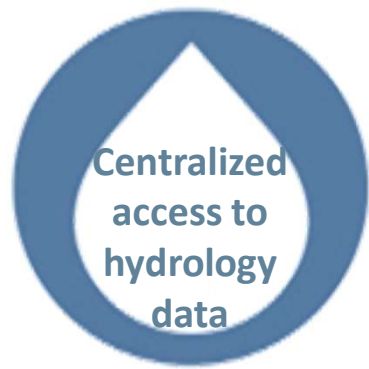
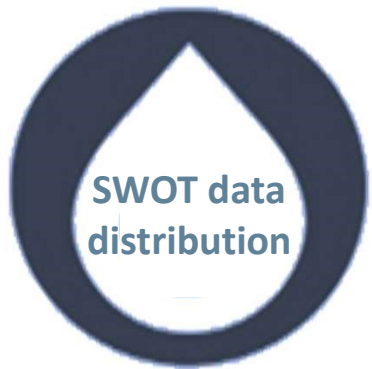
Foreword

hydr  web.next is an ambitious project initially dealing with **SWOT-HR and hydrology data distribution**

Very recently, we also started working on a **variant, dedicated to SWOT-LR and ocean altimetry data distribution**

The first SWOT-LR **user interviews** confirm that hydr  web.next will require marginal adaptations to cover ocean altimetry needs.
Contact us to participate @ hydroweb-ng@cnes.fr

hydrweb.next, an ambitious project



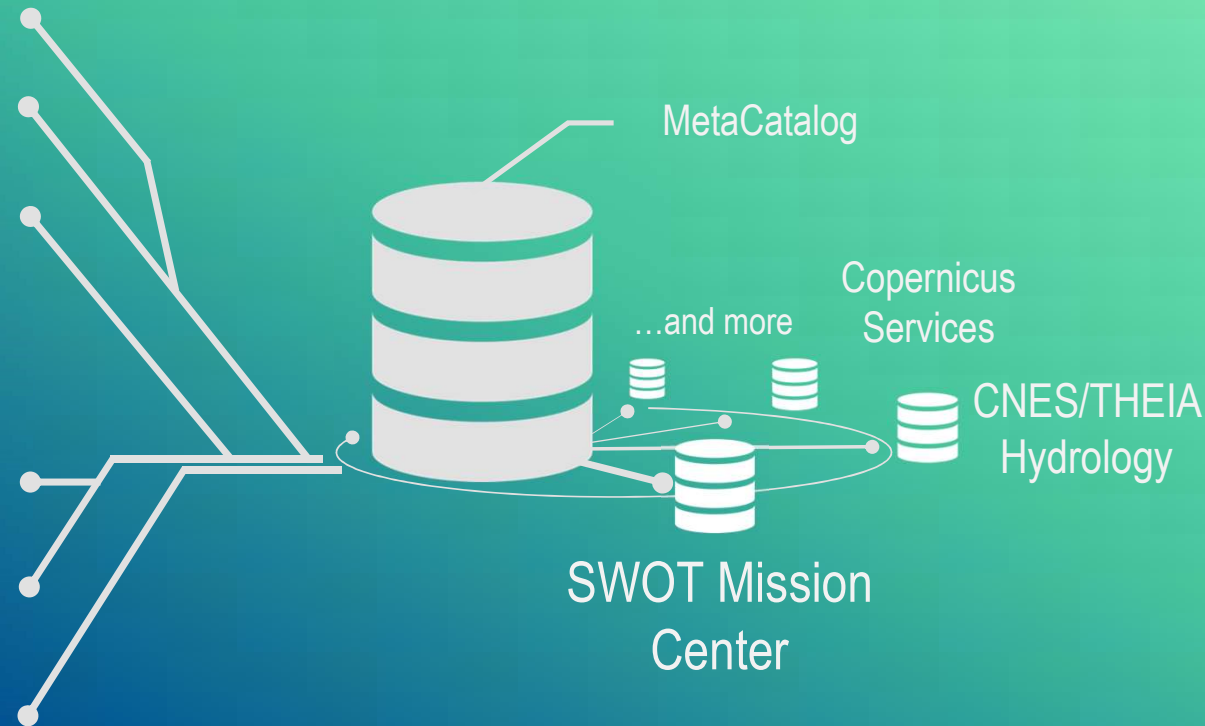
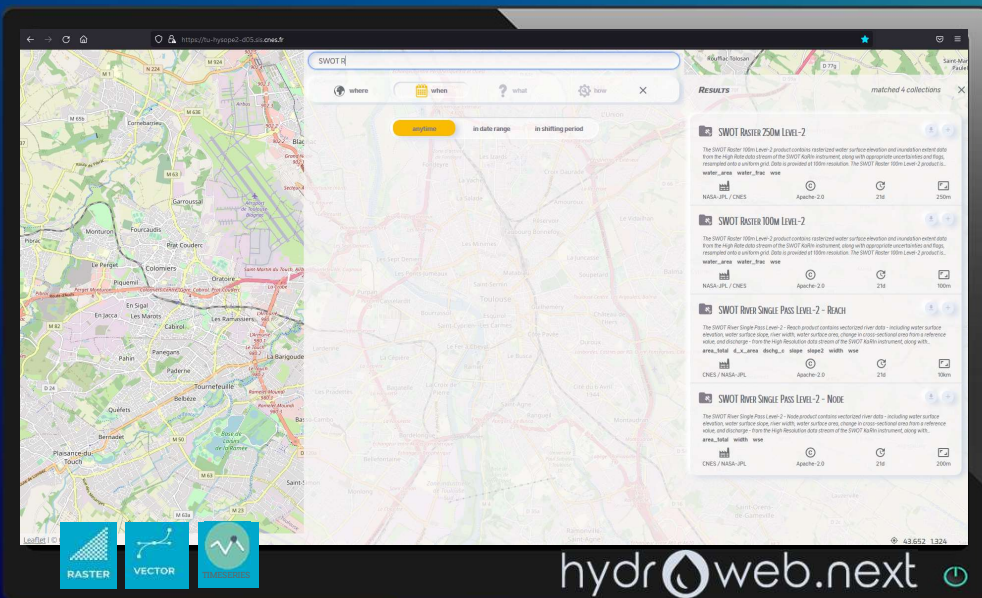
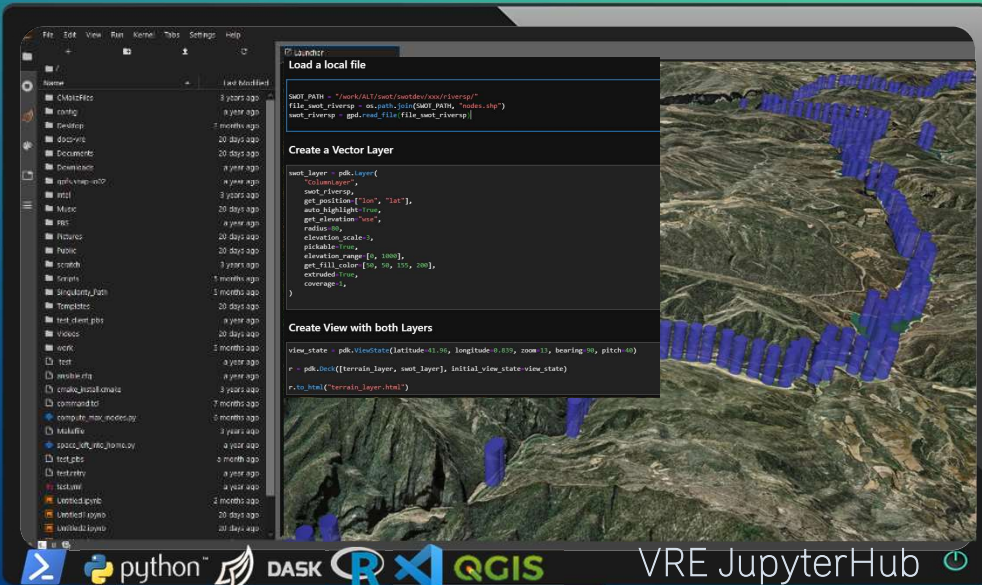
For SWOT CAL/VAL, experts, institutional, private and outreach

Bring your code next to the data and have access to free resources (computing, storage). Over 30 PB of satellite data available on line

Added value products generated and distributed with high standards and globally (Snow cover, water masks, water temperature, water quality, etc.)

25 user interviews, 5 user brainstorming, 10 user tests, demos and feedback ...

Useful, usable, used !



* snapshots of the virtual research environment (jupyterhub) & hydroweb.next

- Jupyterhub server on CNES HPC
- Python Notebook
- R Notebooks
- Dask
- Upload/Download
- Voilà Render
- noVNC Desktop
- QGIS
- Datacube optimized access
- Direct link to hydroweb.next

... and more nice features

- Simple search
- Advanced search
- Layers Management (Project)
- Zip http download
- Script download
- Raster Visualisation
- Vector Visualisation
- Timeseries Visualisation
- Export To QGIS
- Statistical Analyses
- On demand processing (SWOT Raster)

... and more nice features

- Customization internal metacatalog COTS
- STAC APIs for hydroweb.next
- Communication with supervision system
- SWOT Ingestion
- Ingestion of CNES/THEIA hydrology catalogs
- Ingestion of other hydrology catalogs

... and more nice features



... and more

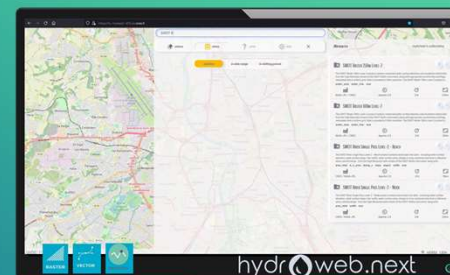
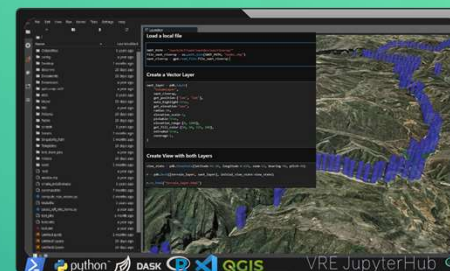
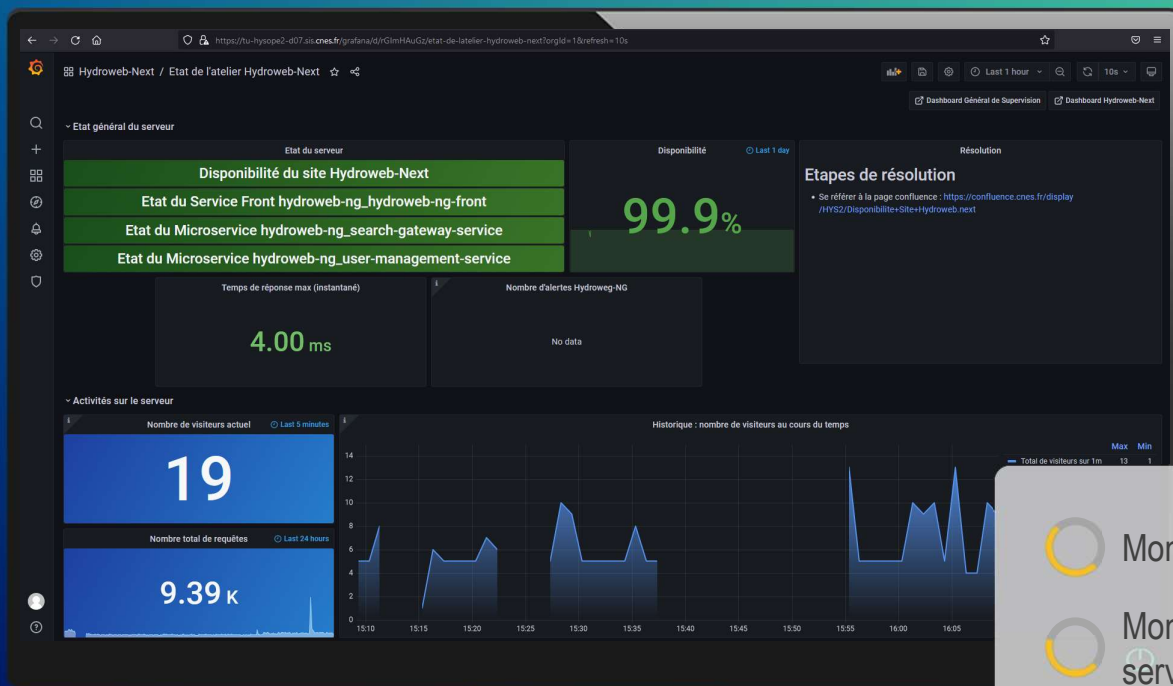
Copernicus Services

CNES/THEIA Hydrology

SWOT Mission Center

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Supervision



Monitor system health

Monitor system Service Level

Monitor metacatalog services

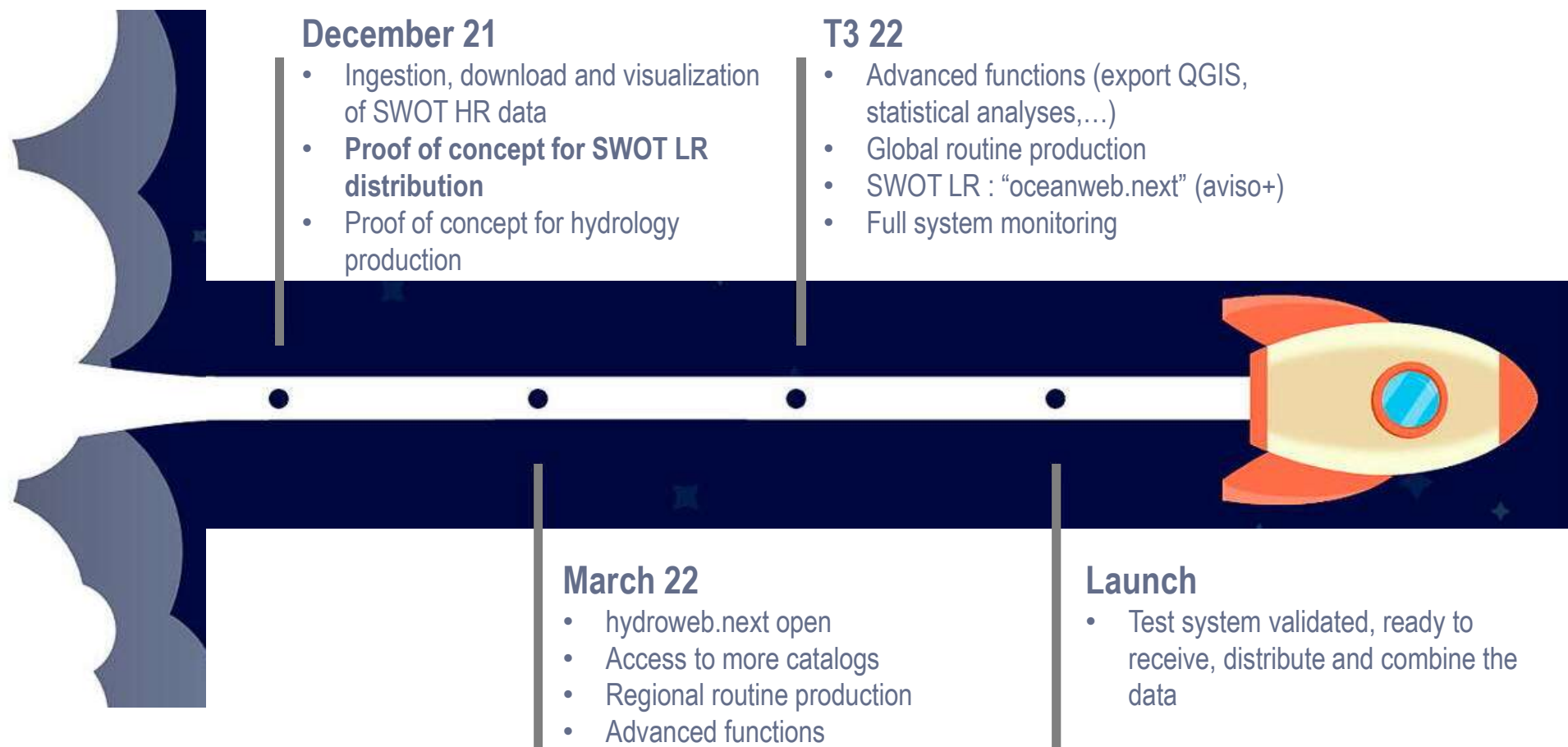
Notifications to operator

Monitor hydroweb.next services (download, authentication, search, thesaurus...etc)

Monitor IT infrastructure

... and more nice features

Where are we heading ? Our ambitions





hydrOweb.next



Thank you, Merci!

Help us specifying **your** distribution
portal (ocean and hydrology):

hydroweb-ng@cnes.fr