WATER

Blue infrastructure Ecology Environment Epidemiology Flooding Risk





Operational characterization of continental water resources and hydrological analysis

THE PRODUCT

- Surface time series
- Annual / multi-year occurrence
- Water level monitoring using spatial altimetry (including SWOT)
- Qualification of water surface/height relationships
- Volume variation
- Temporal monitoring of a river's elevation profile

GOALS

- Measure the impact of climate change on resource availability
- Provide knowledge of water resources essential for the implementation of public policies
- Anticipate the risk of drought and manage short-term crises
- Validate and complete in situ data

FOR WHO?

- Intergovernmental organization
- Government
- Community
- Water agency
- Basin manager
- Reservoir manager
- Science

CHARACTERISTICS

- Combined use of satellite images and spatial altimetry data
- Automated water surface detection algorithm (ExtractEO)
- Final products in the form of synthetic graphics (file or interface)
- Intermediate products in raster and vector format
- Local to national scale
- Main partners: CNES, CS Group, vorteX-io, Hydro Matters, CLS, Noveltis, LEGOS



REFERENCES

- France2030 Hydrologie spatiale
- SWOT Cal/Val

- ESA Climate Change Initiative Lakes
- ST3TART Sentinel-3 validation
- ESA Dragon

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