Pierre Prandi

Satellite altimetry research engineer

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Work experience

2017–present **Oceanography R&D engineer**, *C.L.S*, France, `www.cls.fr/en/`.

- prototyping and implementing new algorithms for improved altimeter inter-calibration in preparation for future high resolution products,
- developing (algorithms and processing chains) the next generation of ice-covered sea level products at high latitudes for CMEMS sea level,
- investigating the benefits of machine learning techniques for altimeter data validation.

2017–present **HyDrones Data Officer**, *C.L.S*, France, `hydrones.cls.fr/en/`.

HyDrones is an innovative project aiming at designing a small altimeter for inland water monitoring using flying aerial UAVs

- writing and testing of all onboard software (C/C++),
- development of an operational post-processing chain for product delivery,

2012–2017 **Calibration & Validation engineer**, *CLS*, France.

- operational validation of SARAL/AltiKa satellite altimetry data, anomaly detection, error budget estimation,
- global mean sea level validation against in-situ data at climate scales, uncertainties evaluation for global and regional sea level trends.

Education

2009–2012 **PhD**, *Université Paul Sabatier*.

Sea surface height retrieval from satellite altimetry in the Arctic Ocean,

- building a multi-mission regional sea level dataset from along-trak data,
- extracting long-term ocean circulation variability features from this dataset.

2008–2009 **Master's Degree**, *Université Pierre et Marie Curie*, Ocean, Atmosphere, Climate and Remote Sensing.

- ocean and atmospheric circulation,
- climate dynamics.

2005–2008 **Engineering Degree**, *Ecole Centrale de Lyon*.

One of the top 10 French Engineering schools, admitted after competitive entrance examination.

- courses in maths (signal processing theory), physics,
- third year major in Ocean Engineering (ocean mechanical effects on coastal and offshore facilities) and computational fluid dynamics,

Skills

Programming

- Python including data processing libraries (numpy, scipy, pandas),
- working knowledge of C and C++,
- use of version control systems.

Communication

- lead author of peer-reviewed publications,
- ability to present in scientific meetings,
- writing technical notes and reports.

Languages

- native french speaker,
- advanced english level.