

Outreaching hydrology from space & Swot

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Hydrology from space is one of the rising remote sensing field of application, with huge issues - environmental, human, economic... - to take into account. Among the issues, there's also the question of explaining how to use those data to people not so used to remote sensing, why, how they are made, etc. -- in one word, outreaching hydrology from space. Some portals exist, such as the THEIA portal for land applications through which a number of space data dedicated to land applications (including hydrology) are available (<https://www.theia-land.fr/en>).

SWOT will be a cornerstone of hydrology from space, and will also be a completely new concept. Some pieces of explanations exists through JPL and through the CNES space technology training courses, but more will be done, with a major focus on hydrology, but not forgetting the ocean, and the complementarity with currents techniques, including nadir altimetry.

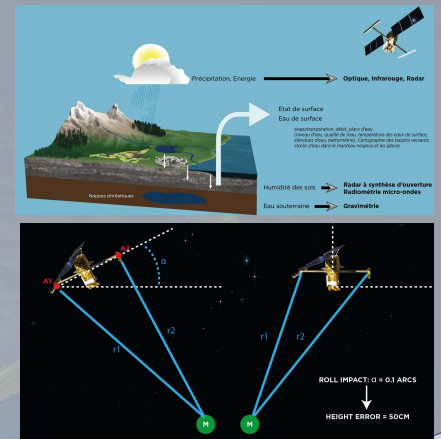
Teaching SWOT & hydrology from space

Swot will be a very new satellite, and also one among other hydrology satellites

- need to sketch the rationale of observing & monitoring land waters
- whole overview of Earth observation techniques which can be used for hydrology
- Stress the advantages / impacts / novelties of Swot
- explain how it will work, for different level of expertise; for oceans and coasts as well as hydrology
- simulation of the data, description of the products

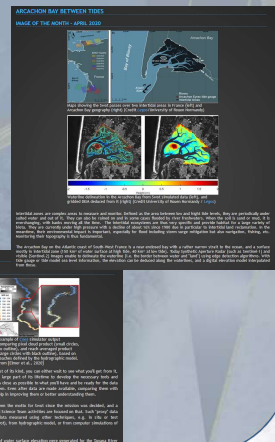
A series of ppt files, in English and French, aimed at university / engineering school / user level, and (soon) provided on Aviso+ web site

NB. CNES TTVS animations are already available on request (with an agreement to sign)



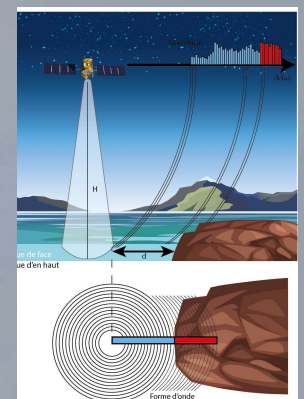
News & updates on the web

Aviso's "Images of the Month" for technical / scientific applications. Hydrology & ocean studies preparing for Swot.



Altimetry for hydrology

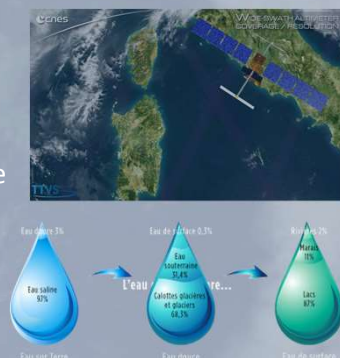
Series of slides, complementing the pdf document explaining altimetry for hydrology in English & French, to be published on Aviso web site end of 2020 (Swot being the aim of another ppt series, see above)



Swot for general public

What all this about? The finer details of Swot technique might be difficult to broach to a general public, but it can still be explained, and the whys and hows of the mission are of a definite interest for everybody on Earth.

We are trying to address this aim in another hardcopy issue.



Swot products

What will be the Swot products?: formats, parameters, resolution, latencies, ...

Users and would-be users need to really understand what they will have, at first on a broad sense.

