

Basic Radar Altimetry Toolbox: Tools to use altimetry for hydrology

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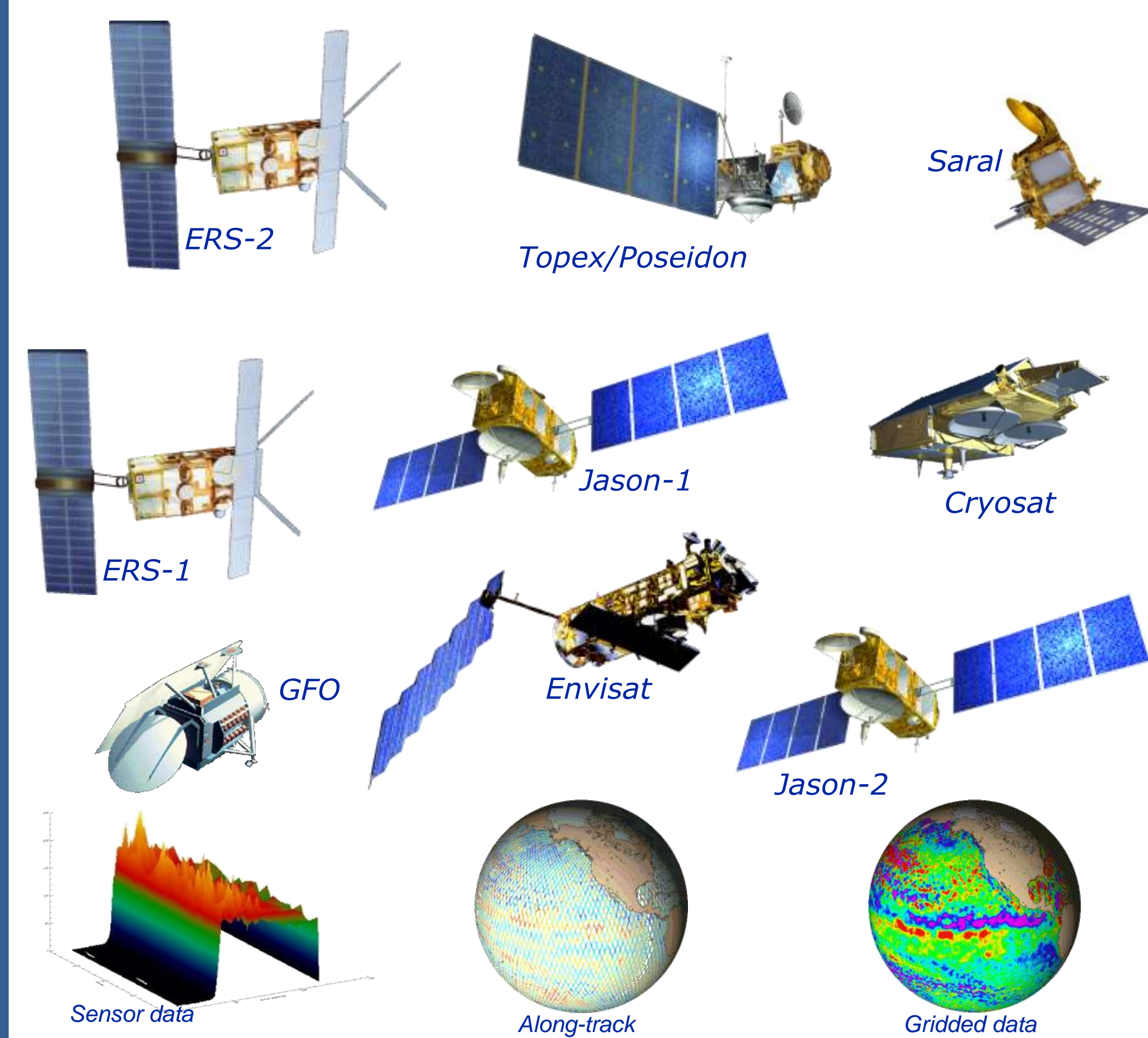
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A joint ESA-CNES project, to make easier the use of altimetry

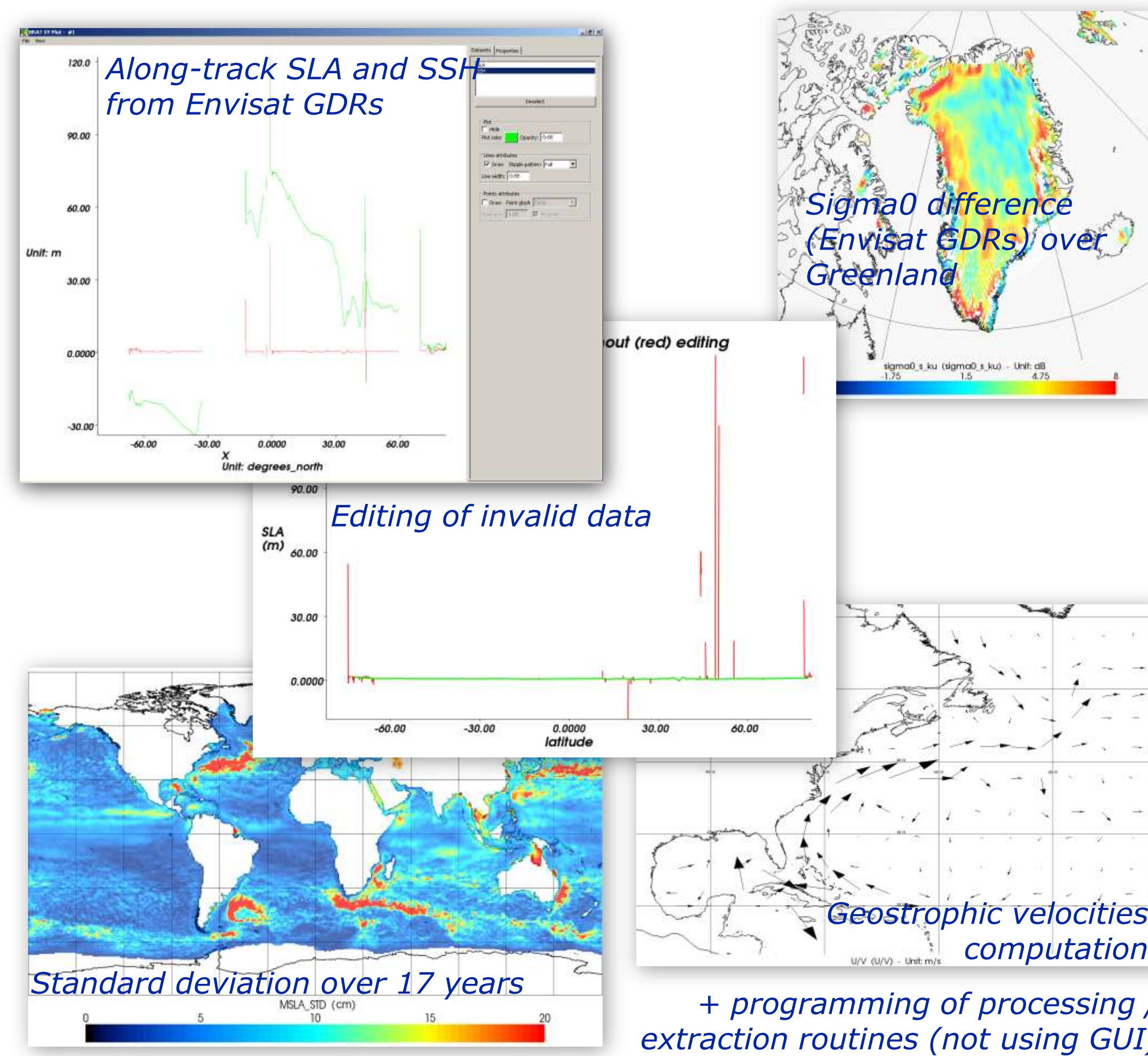
The Basic Radar Altimetry Toolbox is an "all-altimeter" collection of tools, tutorials and documents designed to facilitate the use of radar altimetry data, from most missions since 1991, for all applications.

read most distributed altimetry data



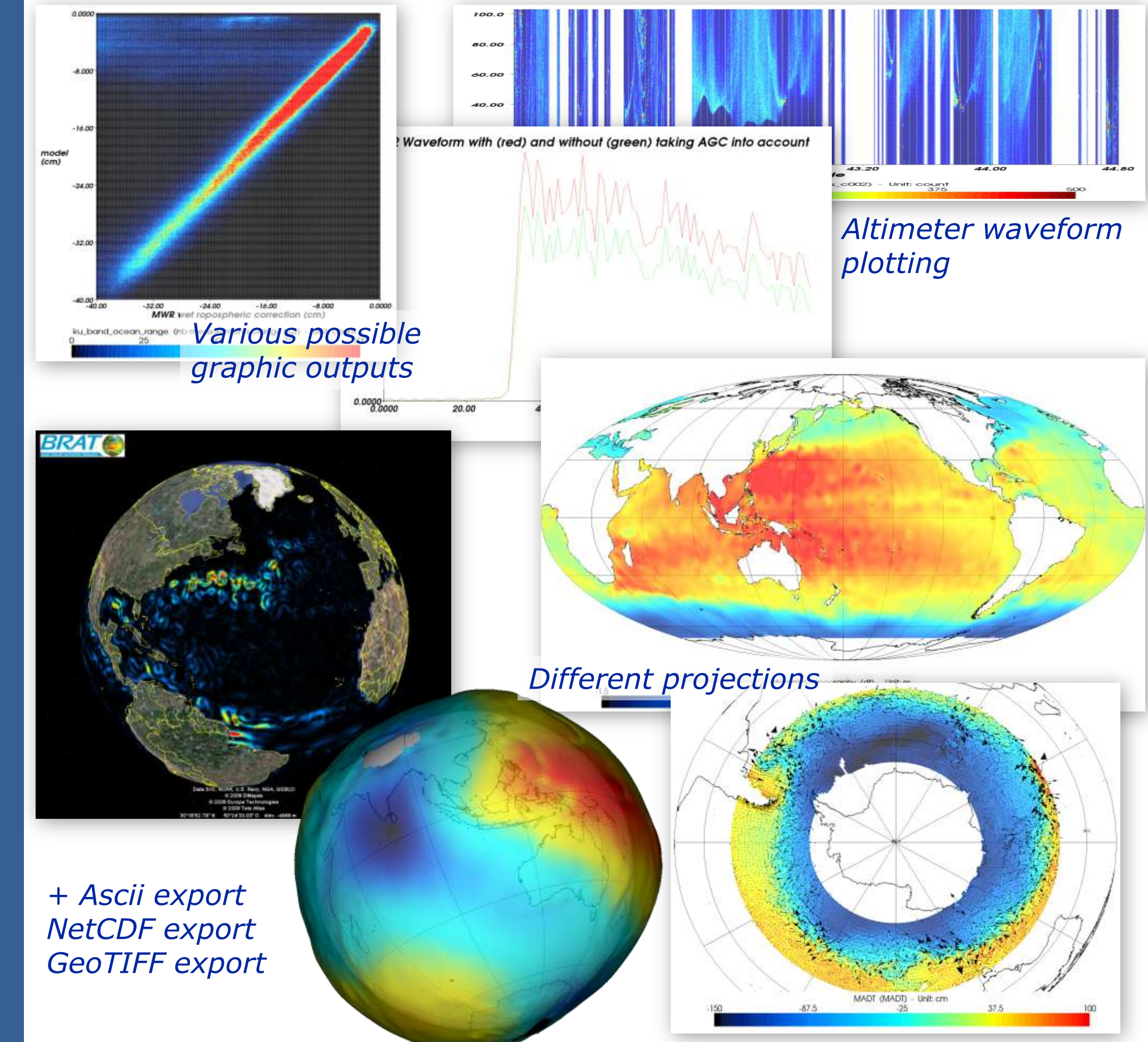
APIs, on-line command mode, graphical user interface

process & select data



APIs, on-line command mode, graphical user interface

visualize & export the results



APIs, graphical user interface

The Radar Altimetry Tutorial gives general information about altimetry, the techniques involved and their applications, as well as an overview of the missions. It also presents a series of data use cases, covering all uses of altimetry over ocean, cryosphere and land, showing the basic methods for some of the most frequent manners of using altimetry data.

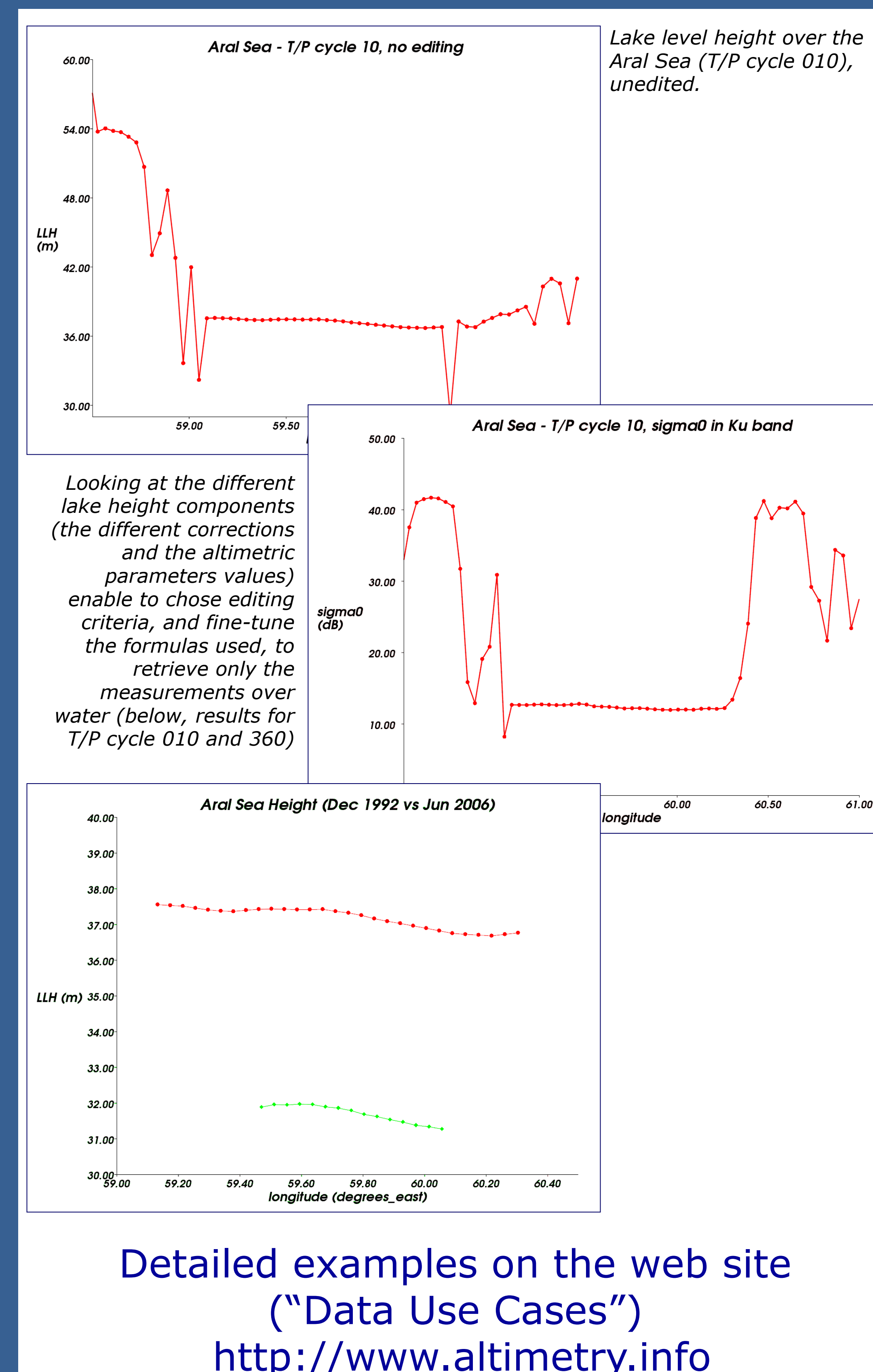
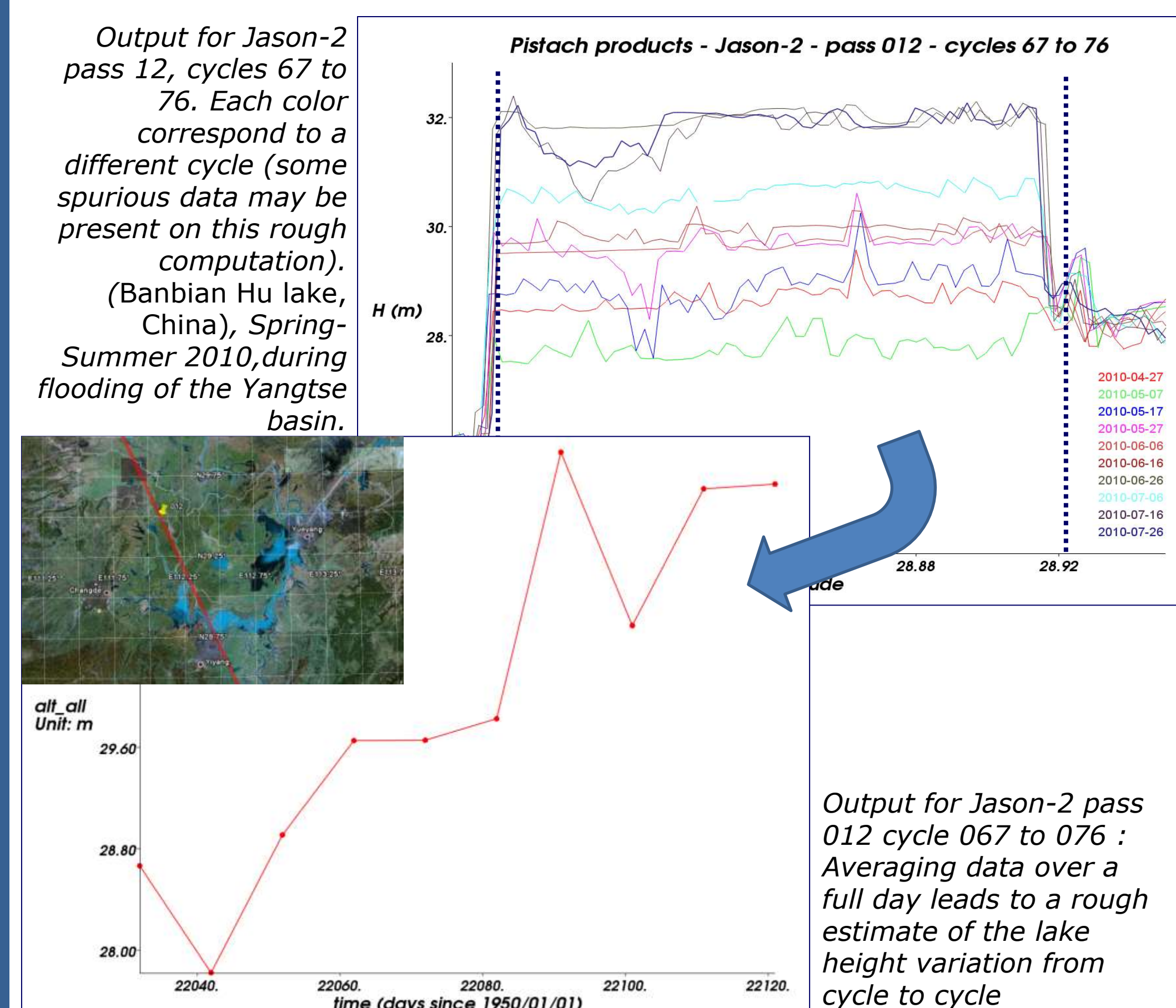
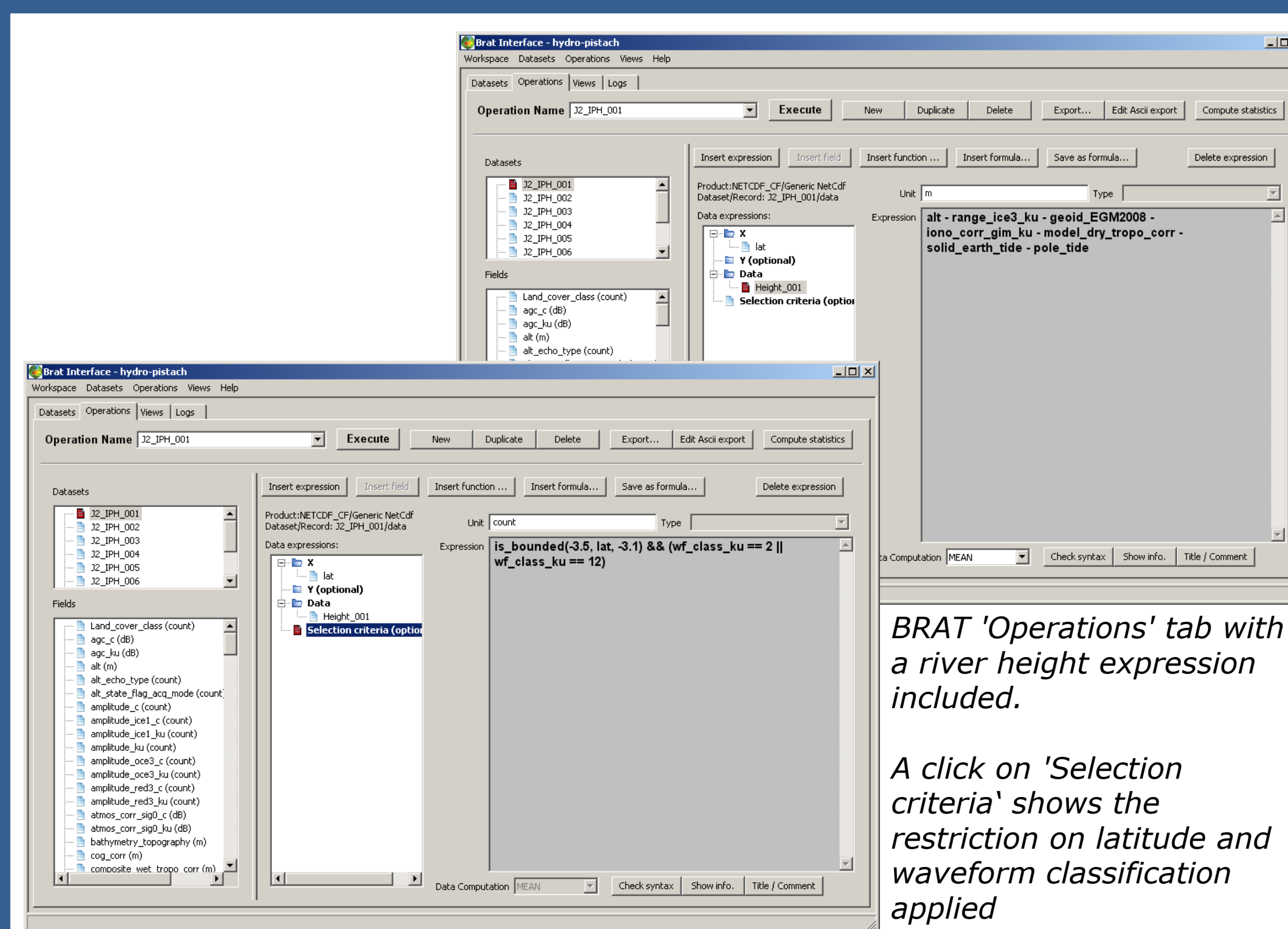
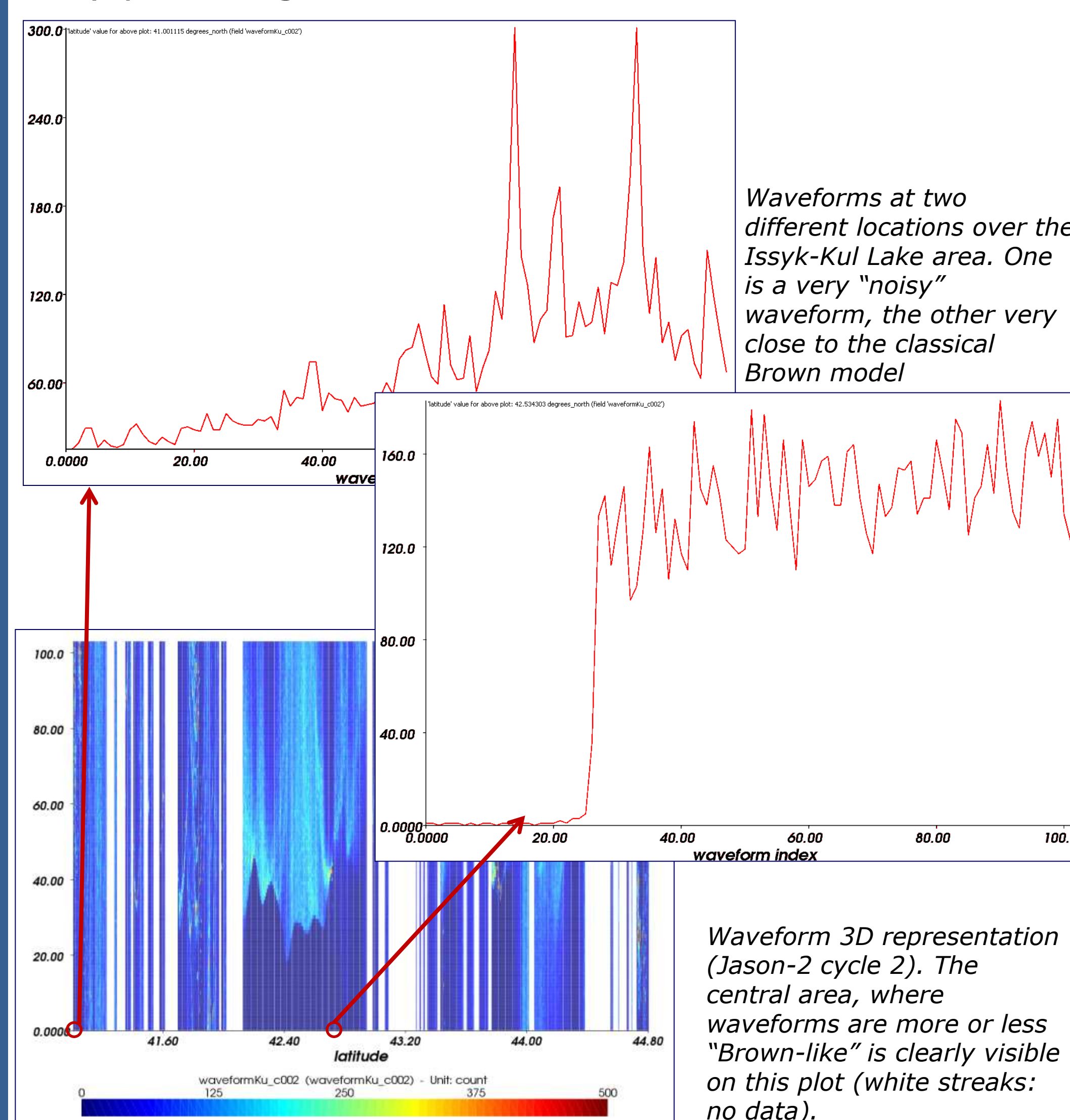
BRAT is developed under contract with ESA and CNES. <http://www.altimetry.info> and <http://earth.esa.int/brat/>

Data Use Cases: hydrology applications

Hydrology is one of the rising applications of altimetry. However, it is still mostly at the research level, with GDR or GDR-like data available. It also needs a very "local" processing / editing most of the time, with the corrections, thresholds and edited data choice mostly empirical.

The Basic Radar Altimetry Toolbox can help several ways:

- by reading high-level data (ESA River & Lake),
- by reading the GDR & also PISTACH data, and:
 - . extract from them the relevant variables,
 - . compute river/lake surface height,
 - . do systematic user-defined editing,
 - . plot the results,
 - . export the results in Ascii or NetCDF,
- by reading and plotting waveform data,
- by providing basic information and Data Use Cases.



Detailed examples on the web site
("Data Use Cases")
<http://www.altimetry.info>