



Basic Radar Altimetry Toolbox, use for interactive teaching sessions

V. Rosmorduc (1), J. Benveniste (2), S. Niejmeier (3), and N. Picot (4)

(1) CLS, Aviso, Ramonville StAgne, France (vinca.rosmorduc@cls.fr), (2) ESA/ESRIN, Frascati, Italy, (3) Science & Technology, Delft, The Netherlands, (4) CNES, Toulouse, France

The Basic Radar Altimetry Toolbox is an “all-altimeter” collection of tools, tutorials and documents designed to facilitate the use of radar altimetry data. Such an integrated approach and view is vital not only for assessing the current status of what altimeter products offers, but also to show the system and consistency with the past. It has been available (<http://www.altimetry.info>) from April 2007, and had been demonstrated since about six months before that, including during training courses and scientific meetings. Quite a large number of people downloaded it. Users’ feedbacks, developments in altimetry, and practice, show that some new interesting features could be added.

It is able

- to read most distributed radar altimetry data, from ERS-1 & 2, Topex/Poseidon, Geosat Follow-on, Jason-1, Envisat, Jason-2, and the future Cryosat mission,
- to perform some processing, data editing and statistic,
- and to visualize the results.

Version 2 has just been developed, with, among other things, improved easiness-of-use of the graphical user interface, pre-selection of data files before computation (to speed it), additional visualization features such as waveform viewing or geo-localized output images. A release for Mac OS is also made.

As part of the Toolbox, a Radar Altimetry Tutorial gives general information about altimetry, the technique involved and its applications, as well as an overview of past present and future missions, including information on how to access data and additional software and documentation. 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. It is available at <http://www.altimetry.info>

People teaching oceanography and remote sensing are interested in practical courses. The presentation will stress the use and possibility of use of the Basic Radar Altimetry Toolbox in such interactive teaching sessions.