



# THE SLOOP PROJECT : PREPARING THE NEW GENERATION OF ALTIMETRY PRODUCTS FOR OPEN OCEAN

Y. Faugère, MH Rio, G. Dibarboure, I. Pujol, V. Rosmorduc, P. Thibaut, L. Amarouche, E. Obligis,  
M. Ablain, L. Carrere, F. Lefevre, P. Schaeffer, N. Tran, C. Dufau, S. Labroue - CLS  
M. Lux, J. Donadille, G. Jan, G. Moreaux, J. Helbert - Noveltis  
N. Picot - CNES

Contact [yfaugere@cls.fr](mailto:yfaugere@cls.fr)

## Project presentation

Since the launch of the first altimeters the accuracy of the altimetry data has continuously increased thanks to the improvement of both the technology of the instruments and the on-ground processing. These improvements allowed the apparition of various applications. About a thousand teams (in 2007) now use the altimetry products around the world for geodesy, oceanic circulation, model, wind/waves applications ...

One of the main contributors to the success of altimetry, the French Space Agency (CNES), decided this year to fund a new project in order to prepare the new generation of altimetry products for open ocean. The project, started in September 2008 and will end in 2010. The first phase is the analysis of the users needs and the subsequent redefinition of the product content in terms of content, resolution and data distribution. In a second phase, all the potential improvements of the altimetry processing chains will be analysed.

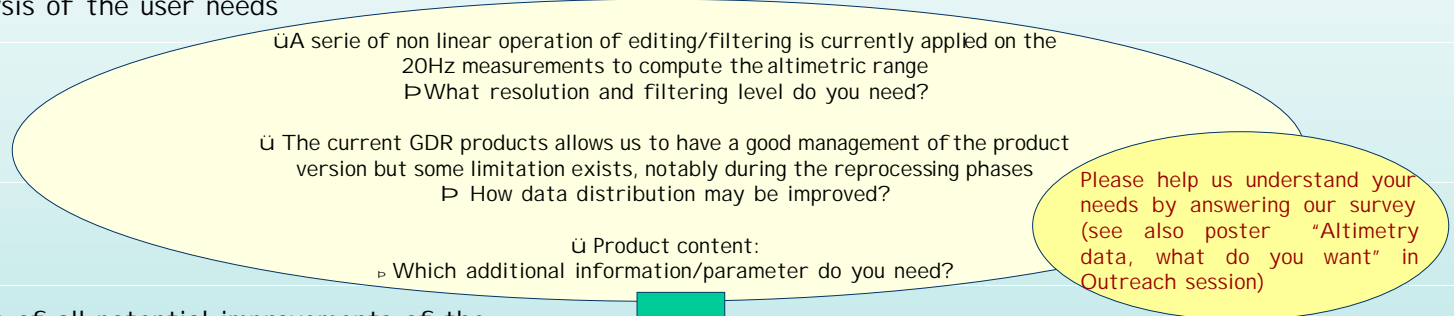
This project is a good opportunity to have a consistent approach for the general improvement of the current altimetry processing. It is also a good opportunity to reinforce the collaboration between the altimetry product development teams and the final users, which is essential to have optimal products, suitable for all kind of applications.

## Consortium

A consortium composed of CLS, Noveltis and expert support laboratories will be in charge of this project on behalf of CNES.

The experts associated with this project are :  
LEGOS laboratory, AER, TêSA laboratory (ENSEEIH), IFREMER, LOCEAN, University of New Hampshire, IMEDEA, METEO-FRANCE, Mercator Ocean, SHOM, GRGS laboratory

## Reanalysis of the user needs



## Analysis of all potential improvements of the altimetry components

This includes the development of new retracking algorithms, the update of geophysical corrections based on recent models and algorithms, and the computation of new reference surfaces (Mean Sea Surface, Mean Dynamic topography). A specific study will also be dedicated on the quantification of the errors of altimetry measurements.

