

“COASTALT” an ESA Ocean Coastal Zone Product Development study

Jérôme Benveniste (ESA) and the
COASTALT Team

Presented at the Coastal Altimetry Workshop
February 5-7, 2008
Silver Spring, Maryland, USA

Coastal Zone Product Study

- ESA has just launched an 18-month research and development activity.
 - Consortium lead by NOCS, with CNR-IBF/Pisa, NERC/POL, Uni/Cadiz, Starlab
- In coordination with CNES which has launched a parallel study in France, named PISTACH.
 - Consortium lead by CLS

Coastal Zone Product Study

- This activity will lead to the definition, specification and development of a new pulse-limited radar altimetry coastal zone product.
- This product is destined to become operationally processed, including the reprocessing of all the ESA Radar Altimetry archive (ERS-1, ERS-2, ENVISAT) and the exploitation of CryoSat over the oceanic coastal zone, followed by Sentinel-3.

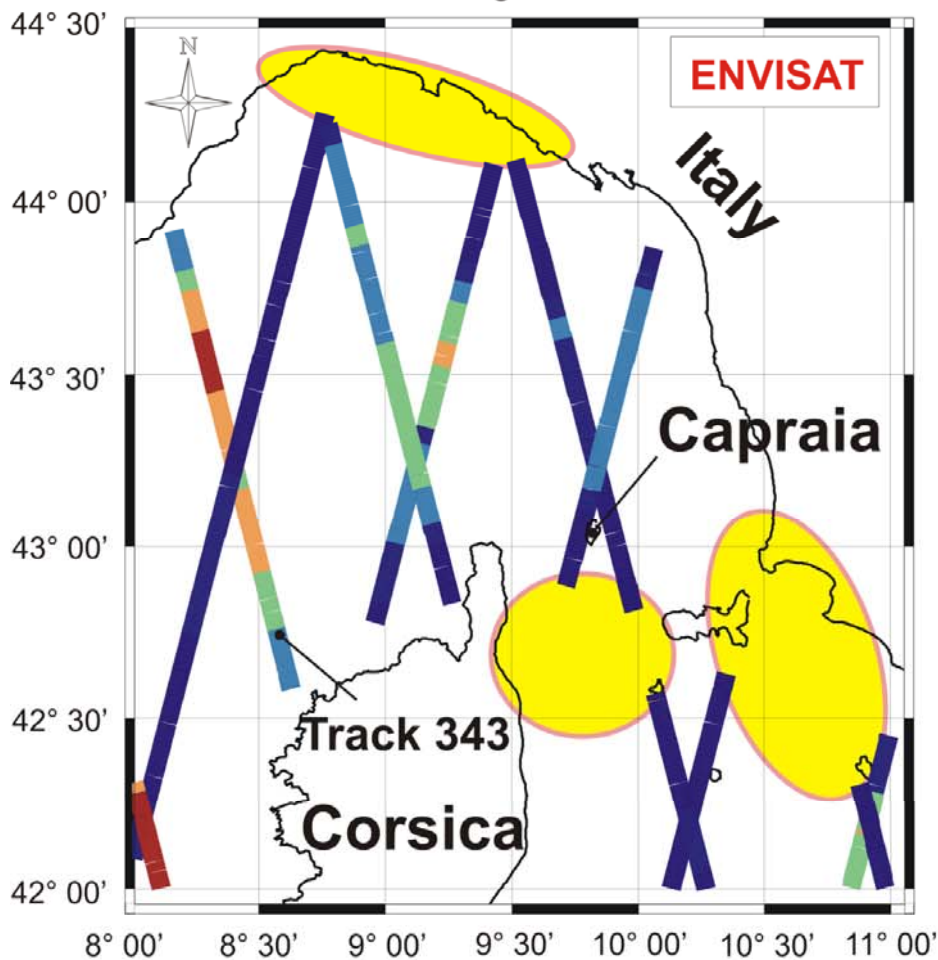
Coastal Zone Product Study

This development is broken articulated into 6 work packages, which will cover the definition of:

- 1) users needs in terms of pulse-limited radar altimetry product,
- 2) improvement of corrections,
- 3) development of ad-hoc retracking model and processor prototyping,
- 4) specification of Level 2 output coastal product format and contents, and a product user handbook,
- 5) validation and performance assessment,
- 6) outreach.

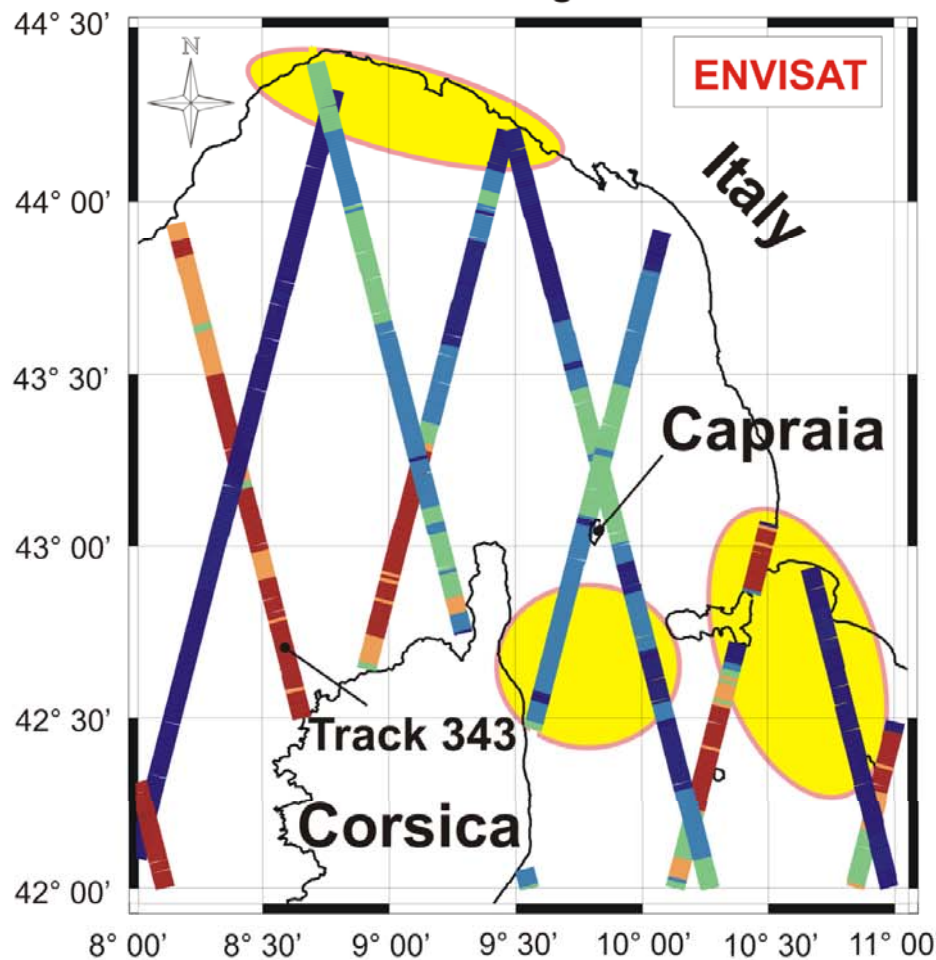
Coastal Zone Product Study

AVISO - Regional Product



a)

ALTICORE - Regional Product



b)

N° of valid measurements over 23 cycles



The Coastal Altimetry SWT

- open to all parties interested in coastal altimetry
- a **discussion forum** for technical issues,
- an **independent review body** for some of the new algorithms/techniques;
- an **incubator for future initiatives** in the field of coastal altimetry
- **Complements OSTST**
 - Ideally should have joint meetings

First COASTALT workshop

- From workplan should be month 9 of Project - October 2008
- Suggest to have it 5-7 Nov 2008, attached to Nice OSTST + GODAE/ARGO/IDS (10-15 Nov)

Capacity Building in Coastal Altimetry

- GOOS Africa has shown keen interest in coastal applications of altimetry
- UK Royal Society-sponsored ALTICORE-Africa Project meeting in Cape Town - 21-25 April
 - NOCS and ESA staff will attend and promote ALTICORE, COASTALT, PISTACH and Coastal SWT