

ALTICORE

Motivations

Altimeter-derived information on sea level and sea state would be extremely important for resolving the **complex dynamics** of the **coastal ocean**.

Satellite altimetry was not originally conceived with the coastal ocean in mind.

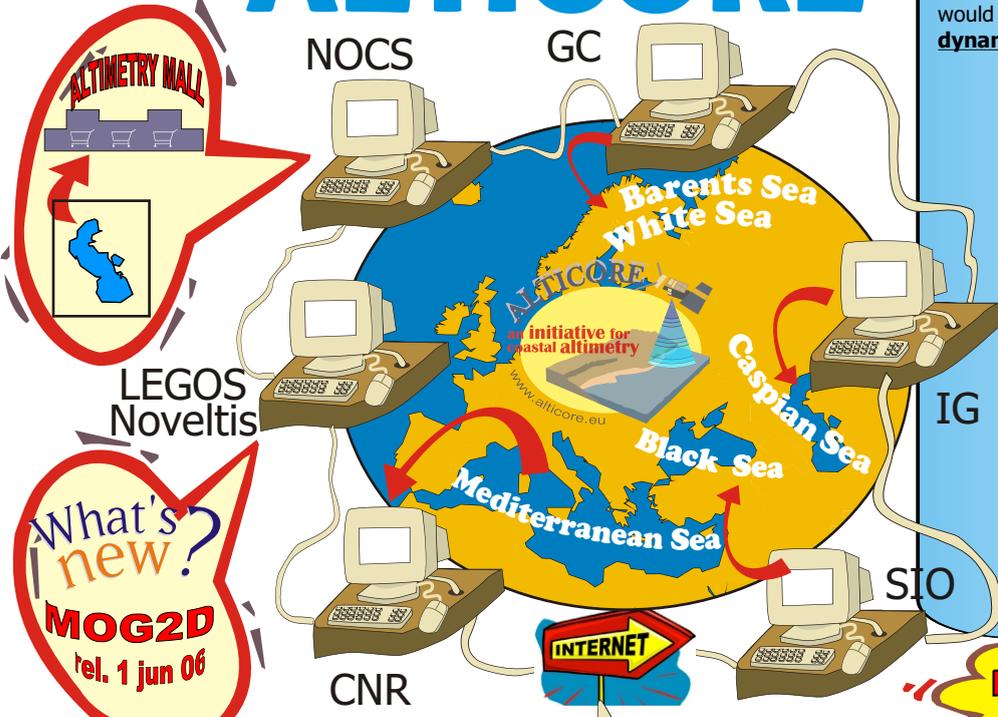
BUT future missions (AltiKa and CryoSat-2) promise much improved nearshore capabilities.

➔ A current priority is to analyze the existing, under-exploited, 15-year global archive of coastal altimeter data to draw recommendations for those missions.

There are intrinsic difficulties in processing and interpretation of the data e.g.: proximity of land, control of seabed, rapid variations due to tides and atmospheric effects.

BUT there are unexploited possibilities such as higher along track data rates and multi-altimetry scenarios that need to be explored.

➔ There is a need to access and manipulate data from multiple sources, many of which undergo regular revision and enhancement.

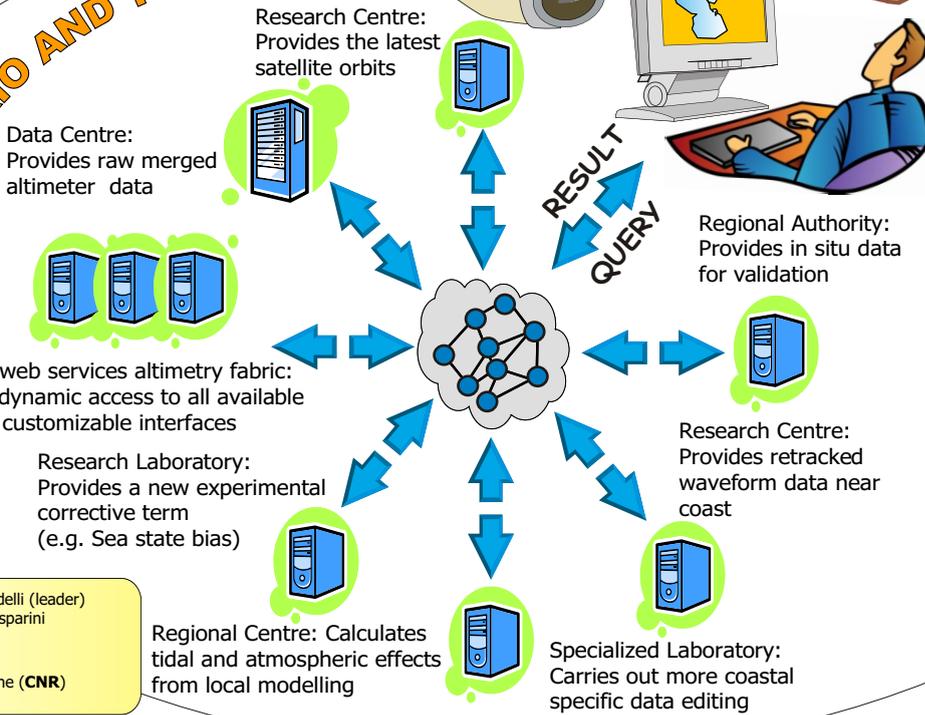


Example: Caspian Sea

Q1: Can I get a map of sea level variability?

Q2: Is sea level rising or falling?

THE SCENARIO AND THE ACTORS



Objectives

To build up capacity for **provision of altimeter-based information in support of coastal ocean studies** in some European Seas

- To revisit the existing 15-year archive
- To identify knowledge gaps
- To research new processing strategies
- To develop new local modelling of specific corrections

To implement more effective and reliable methods of data exchange, such as **Web services- and Grid-compliant** data management infrastructures.

- To ensure long-term continuity and interoperability.
- To contribute to improved cooperation between Europe and Eastern countries and enhance networking of capacity.

Contact

Dr. Stefano Vignudelli
Coordinator
Consiglio Nazionale delle Ricerche (CNR)
Istituto di Biofisica
Area Ricerca CNR San Cataldo
56127 Pisa, Italy
Phone: +39 (0) 50 3152804
Fax: +39 (0) 50 3152760.
e-mail: vignudelli@pi.ibf.cnr.it

Consortium

Stefano Vignudelli (leader)
Gian Pietro Gasparini
Carlo Galli
Egisto Lazzoni
Consiglio Nazionale delle Ricerche (CNR)
Pisa, Italy

Helen M. Snaith (leader)
Paolo Cipollini
Fabio Venuti
National Oceanography Centre, Southampton
Southampton (NOCS)
Southampton, United Kingdom

Florent Lyard (leader)
Jean François Cretaux
Florence Birol
Jérôme Bouffard
Laboratoire d'Études en Géophysique et Océanographie Spatiale (LEGOS)
Toulouse, France

Noveltis - Laurent Roblou
Noveltis Sa
Ramonville-Saint-Agne, France

Andrey Kostianoy (leader)
Anna Ginzburg
Nickolay Sheremet
Elena Kuzmina
P. P. Shirshov Institute of Oceanology (SIO)
Moscow, Russia

Sergey Lebedev (leader)
Alexander Sirota
Dmitry Medvedev
Svetlana Khlebnikova
Geophysical Center (GC)
Moscow, Russia

Ramiz Mamedov (leader)
Khasiyat Ismatova
Amir Alyev
Tural Nabyev
Institute of Geography (IG)
Center for Caspian Sea Problems
Baku, Azerbaijan

