

The European Sea Level Service

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ESEAS Back Ground

The work was initiated in 1996 with the establishment of the COST action 40 “EOSS”.

ESEAS was formed as a pilot project in 2001 – supported by 18 countries in the 1st Call for Participation.

ESEAS was established as a permanent service in 2005.

Recently, in 2008 after reorganisation of the operational marine services in the frame of GMES, ESEAS and its objectives were revised.

ESEAS Objectives

ESEAS main objective is to provide

- a standardised access to quality-assured sea level data and information in Europe to a broad range of scientific and non-scientific users

and is based on

- national sea-level monitoring activities and data
- quality-assured high-level products derived from the tide gauges, GPS and satellite altimetry.

ESEAS is the regional implementation of GLOSS.

ESEAS institutional network:

Main components:

1. Governing Board (national representatives) and corresponding members (GLOSS, EUREF, EuroGOOS..)
2. Central Bureau
3. Technical Committee
4. Working groups

Members:

Hydrography / Oceanography and Geodesy
Operation and Research
In-situ and Space

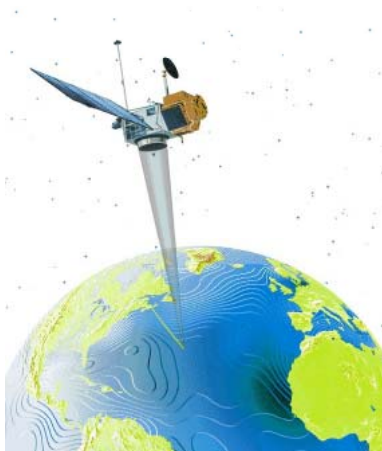
ESEAS network

Main components:

Red: Tide Gauges

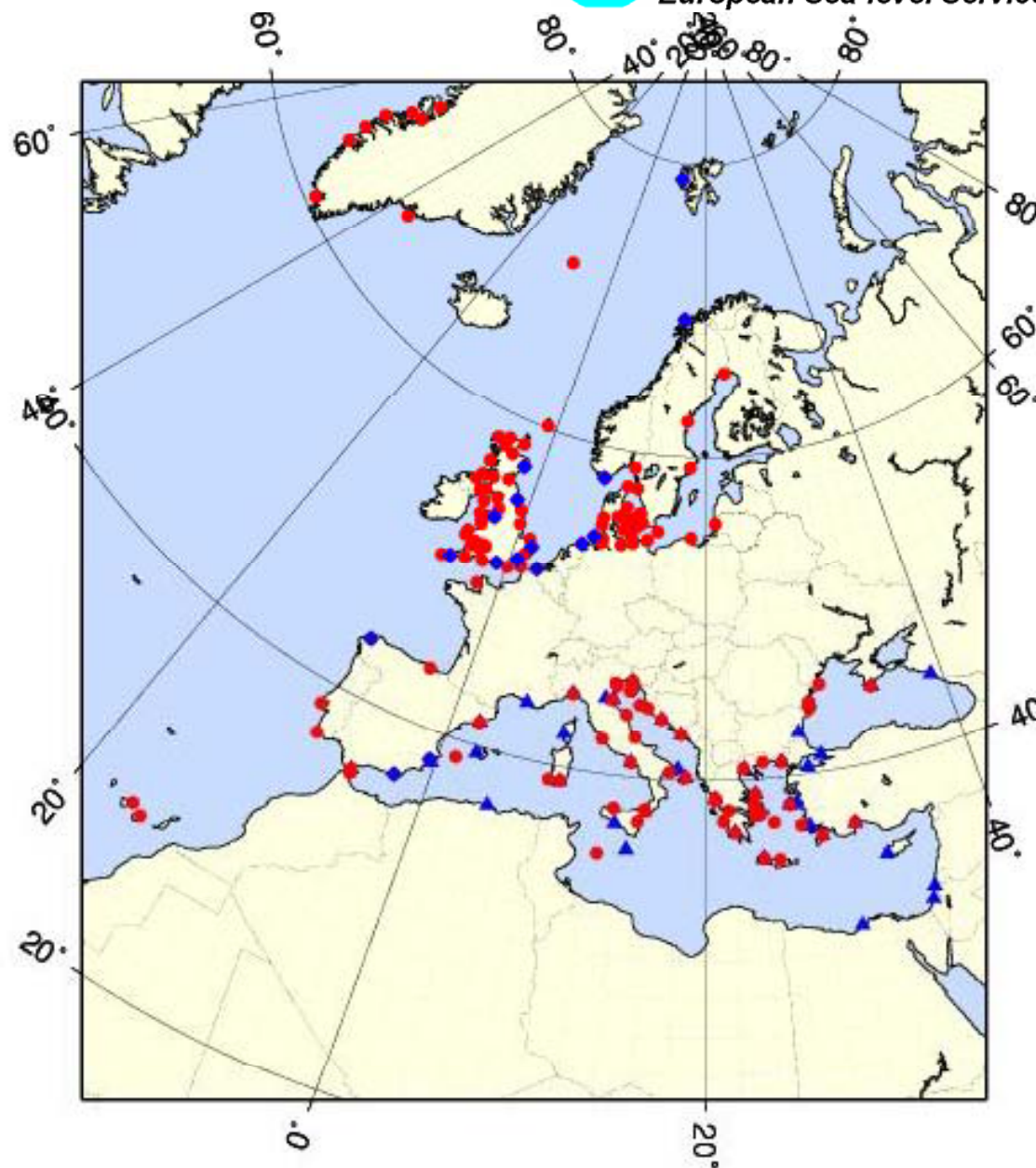
Blue: w/ GPS

Blue tri.: MedGLOSS



ESEAS

European Sea-level Service



ESEAS application network:

Main components:

1. TEC / Product coordinator
2. Supporting / operational centres
3. Analysis centres
4. Web site > users

Products:

Quality-assured sea level information to a broad range of users:

- Hourly and monthly means of relative sea levels
- Historic and current rates of change and long term trends and
- Crustal vertical motions

Status of ESEAS

ESEAS and its progress was supported through the ESEAS-RI FP-5 Research Infrastructure project:

- Develop institutional network
- Classification of the tide gauges
- Quality Control Routines
- Up-grade station network (new TGs and new CGPS installed)
- Web site – data portals

Status of ESEAS

2008+, as a network of excellence ESEAS will focus on:

- Providing knowledge related to sea level
- Supporting GLOSS
- Developing standards for data exchange and new stations
- Providing access to sea level data and GPS
- Hosting meetings
- Stimulating research

Based on collaboration with PSMSL, EUREF, and others.

Summary

ESEAS Geodetic aspects:

- Focus on GPS and vertical motions
- GB and TEC members from Geodetic institutions
- Geodetic analysis centres for GPS@TG data
- Standards for Geodetic control of tide gauges
- Data base coming up for GPS@TG data

EUREF is a corresponding member of ESEAS.