



## European sea level service - research infrastructure

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The European Sea-Level Service (ESEAS) as an international collaboration of organizations in 21 countries has developed into a major research infrastructure for all aspects related to sea-level. One of the objectives of ESEAS is to provide standardized quality control of and access to a considerable fraction of the European tide gauge data set. The European Sea Level Service - Research Infrastructure (ESEAS-RI) project was established by the ESEAS to support the research infrastructure of the ESEAS and facilitate full exploitation of existing and future European sea level observations. This project is supported by the European Commission under the contract number EVR1-2001-00042 and aims at providing a database for research on an European scale of sea level trends and variability as input for coastal management and research in coastal dynamics processes.

The primary scientific objective of the project has been to study sea level variations at inter-annual to century time scales and to quantify potential future changes in mean sea level.

The result of The ESEAS-RI project are new regionally consistent data sets of parameters related to sea level. In particular, this include empirical models of decadal to inter-decadal sea level variations, relative sea level trends, variability of extreme sea levels, vertical crustal movement at coastal sites, and absolute gravity changes. The resulting multi-purpose data sets has been used in the frame of the project as well as being made available for other researchers through the ESEAS.

The primary technological objective of the ESEAS-RI project has been to support

the ESEAS research infrastructure and to facilitate the international co-ordination, the upgrading of the network of observing sites and the standardisation of the network, the operational routines, the databases and the quality-control.

The results of ESEAS-RI will be presented.