



Hindcast of Dynamic Processes of the Ocean and Coastal Areas of Europe

HIPOCAS

Final HIPOCAS Workshop

in association with 29th International Conference on Coastal Engineering (ICCE 2004)

Laboratorio Nacional de Engenharia Civil, Avenida Brasil, Lisboa

19th September 2004

Objectives

The objective of the project was to obtain a 44-year (1958-01) hindcast of wind, wave, sea-level and current climatology for European waters and coastal seas for application in coastal and environmental decision processes. Specific studies were made for the North Sea, North East Atlantic, Mediterranean Sea, Black Sea and Baltic Sea.

Atmospheric Data

The global atmospheric re-analysis carried out by NCEP and NCAR was used as a starting point for limited area models. The NCEP global data set and the new technique developed to obtain small scale analyses from the global re-analyses were used to produce a data set of homogeneous and high-resolution atmospheric data.

Sea-level, Current and Wave Data

The atmospheric data was used to force state-of-the-art wave models (WAM) and ocean circulation models (HAMSOM, M3D_UG and TELEMAC) in regional areas around Europe so as to produce climatic information on waves, sea levels, and currents in a very large extend of the European coast.

Remote Sensed Data

The available satellite data, including wind, wave and sea-level data, was collected and calibrated for the same areas with available measurements and will be used to be compared with the hindcast results, so as to yield some uncertainty measures related to the data.

Validation and Synthesis of the Data

All available measured data was used to verify the hindcast in order to assess the quality of the numerical data being produced. A Climatological Atlas was produced displaying the spatial and temporal variability of relevant statistics of the data considered in the study.

Registration

The registration should be done on the web address http://www.mar.ist.utl.pt/hipocas/workshop_registration.aspx. The registration fee of €60 will be collected on site and includes coffee break, lunch and documentation.

Programme

09h00	Registration and Coffee
10h15	Overview of the HIPOCAS Project <i>Carlos Guedes Soares, IST</i>
10h30	Met-Ocean Hindcasts and Results for the North Sea <i>Ralf Weisse, GKSS</i>
11h00	Coffee Break
11h30	Atmospheric and Wave Hindcast for the Irish Sea <i>N.L. Vijaykumar, UCC</i>
12h00	Met-Ocean Hindcasts for the North East Atlantic <i>Carlos Guedes Soares, IST</i>
12h30	Reanalysis for the Mediterranean Sea, <i>Juan Carlos Carretero, EPPE</i>
13h00	Lunch
14h30	Wave Hindcast for the Eastern Mediterranean Sea <i>Svetlana Musič, ICoD</i>
15h00	Wave Hindcast for the Black Sea <i>Zhivelina Cherneva, IO-BAS</i>
15h30	Long-term Changes in the sea level, waves and currents climate in the Baltic Sea <i>Jan Jedrasik, IOUG, Barbara Paplinska-Swerpel, IH-PAS</i>
16h00	Coffee Break
16h30	Remote Sensed Data of European Waters <i>Hafedh Hajji, MM</i>
17h00	HIPOCAS Climatology Atlas <i>Carlos Guedes Soares, IST</i>
17h15	General Discussion
	Close of Workshop

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