



## **Comparison of coastal altimetry and tide gauge data along the west Iberian coast**

Susana Barbosa (1), Joana Fernandes (2), Clara Lazaro (2), Alexandra Nunes (3), Nelson Pires (2), and Paolo Cipollini (4)

(1) University of Lisbon, IDL, Lisboa, Portugal (sabarbosa@fc.ul.pt), (2) Universidade do Porto, Faculdade de Ciências, Portugal, (3) Instituto Politécnico do Porto, Instituto Superior de Engenharia, Portugal, (4) Ocean Observing and Climate, National Oceanography Centre, Southampton, U.K

Satellite altimetry is a fundamental component of ocean observation. Although devised for open ocean measurements, its extension to the coastal zone is rapidly evolving, enlarging the already large number of applications relying on satellite altimetry data. In this context the validation of coastal altimetry data is a fundamental activity. This work addresses the comparison of coastal altimetry data and in-situ tide gauge measurements along the west Iberian coast in the frame of project COASTALT. Along-track sea-level anomalies from ENVISAT are compared with concurrent measurements of relative sea-level heights at four tide gauges along the west Iberian coast. A wavelet analysis is performed for assessing the frequency-dependent relation between coastal sea-level variability as measured by altimetry and by tide gauges.