



A new insight on the decreasing sea level trend over the Ionian basin in the last decades

F. Criado-Aldeanueva (1), J. Del Rio-Vera (2), J. Soto-Navarro (1), J. Garcia-Lafuente (1), A. Sanchez-Roman (1), J.C. Sanchez-Garrido (1), L. Carracedo (1), J. Delgado (1), and J.M. Vargas (1)

(1) Physical Oceanography Group, Department of Applied Physics II, University of Málaga, Spain
(fcaldeanueva@ctima.uma.es), (2) Mission Planning and User Services Office ESRIN/European Space Agency, Rome, Italy

Altimetry measurements over the Ionian region and tide gauge records along the southern Italian coasts have been combined to present a new insight on the decreasing trend over the Ionian basin in the last decades. The historically reported decreasing trend should be better understood as an abrupt sea level drop in 1998 probably linked to changes in the surface circulation in the Ionian basin induced by the Eastern Mediterranean Transient, which changed from anticyclonic to cyclonic about March 1998. From then onwards, a rising rate of 7.9 ± 0.9 mm/year is observed over the basin in correspondence with the positive trend observed elsewhere in the Mediterranean Sea.