Geophysical Research Abstracts
Vol. 12, EGU2010-11494, 2010
EGU General Assembly 2010

The Eastern Mediterranean Altimeter Calibration Network - eMACnet

Erricos C. Pavlis (1), Keith Evans (1), P. Milas (2), B. Massinas (2), D. Paradissis (2), and X. Frantzis (3)

(1) UMBC and NASA Goddard 698, Goddard Earth Science and Technology Center, Baltimore, MD, United States (epavlis@umbc.edu, +1 410 4555868), (2) National Technical University of Athens (NTUA), Greece, (3) Technical University of Crete (TUC), Chania, Crete, Greece

The eastern Mediterranean altimeter calibration network (eMACnet) is the result of the expansion of ongoing collaborative efforts in the Aegean area over the past 10 years funded jointly by the EU, NASA, and regional governments. The initial efforts started with the collaboration with the Tech. Univ. of Crete at Chania, establishing stations on the island of Gavdos, south of Crete, and Kasteli, on northwest Crete. These two sites are located under the OSTM/JASON-2 ground-tracks (passes 018 and 109, and pass 018 respectively). Over the past two years our team expanded to include the Nation. Tech. Univ. of Athens (NTUA), the Hellenic Center for Marine Research (HCMR) and the Hellenic Navy Hydrographic Service (HNHS), in an attempt to obtain at a minimal cost data from existing facilities operated by these groups and future sites that are now being deployed. The primary purpose of the extended network is the calibration and validation of altimeter data from current (OSTM, Envisat) and future altimetric missions (SWOT). The location of some of our sites though is such that they are also of interest to tsunami warning network operators and we are thus modifying our communications systems to provide our observations in real-time from these sites to the relevant authorities (e.g. European Tsunami Warning System – ETWS). In the future, we will integrate observations from some of the HCMR sites that are open sea buoys, once we collaboratively instrument these with additional equipment (precision GPS) to allow their data to contribute to the calibration/validation efforts. In addition to an overview of the project, we will present initial results from the expanded network for the calibration of JASON-2 based on the latest release of GDRs (C).