



THE EASTERN MEDITERRANEAN ALTIMETER CALIBRATION NETWORK – eMACnet

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The eastern Mediterranean Altimeter Calibration network—eMACnet, is the result of successful collaborative efforts in the Aegean area since the early 2000's. Originally initiated with the Gavdos permanent absolute calibration facility and over the past five years with a second site at Kasteli, Crete, Greece, both of these sites in collaboration with a local team from the Tech. Univ. of Crete. Over the past three years our team expanded to include the Nation. Tech. Univ. of Athens (NTUA), in an attempt to obtain at a minimal cost data from existing facilities and future sites, of which six are now deployed and operating, a seventh one to be deployed in early 2011 and more sites planned for the near future. The primary purpose of the extended network is the calibration and validation of altimeter data from current and future ocean altimeter missions. The location of some of our sites though is selected in such a way that they are also of interest to tsunami warning network operators. We thus intend to eventually provide all of our observations in near real-time from these sites to the European Tsunami Warning System (ETWS). At present, the KASTELI site in western Crete (a float tide gauge co-located with a radar gauge for calibration and back-up), is delivering 1-minute sampled data every 15 minutes via EUMETSAT's EUMETCAST system. Four more tide gauges are in operation at the sites of PALEKASTRO, eastern Crete (with CGRS), MANI-KARAVOSTASI, in southern Peloponnese, EMPORIO, Chios, and THASOS, in Northern Aegean. An additional system along with a CGRS receiver will be deployed at KYMI, north of Athens on the island of EVIA, followed by another site slightly north of that, on mainland Greece, pending negotiations with local authorities. This Aegean-wide network samples at the moment the following OSTM tracks, some of them in more than one location: 18, 33, 94, 109, and 185. We will present an overview of the project and results from the expanded network based on the latest release of IGDRs and our plans for supporting the future altimeter missions of JASON-3, JASON-CS and SWOT.