Orfeus EPOS UNESCO
2018 Annual Observatory Coordination Meeting and Workshop

Institute of Geodynamics
National Observatory of Athens
November 12 – 14, 2018 Athens – Greece

The Corinth Gulf RASMON-CORSSA strong-motion network, data and web portal

I. Kassaras[(1)], Z. Roumelioti[(2)], P. Papadimitriou[(1)], N. Voulgaris[(1)], V. Kouskouna[(1)], G. Kaviris[(1)], O.-J. Ktenidou[(3)], K. Pavlou[(1)], V. Sakkas[(1)], G. Sakkas[(1)], V. Kapetanidis[(1)], D. Diagourtas[(4)], N. Sakellariou[(1)], P. Argyrakis[(1)], K. Pitilakis[(2)] & K. Makropoulos[(1)]

[(1)] *National and Kapodistrian University of Athens, Department of Geophysics-Geothermics, 15784, Panepistimioupoli - Zografou, Athens, Greece*
[(2)] *Aristotle University of Thessaloniki, Department of Civil Engineering, 54124, Thessaloniki, Greece*
[(3)] *National Observatory of Athens, Geodynamics Institute, 11810 Athens, Greece*
[(4)] *Satways Ltd, Ch. Lada 3, Halandri, Athens 15233*

The Gulf of Corinth (Central Greece) is among the most active tectonic rifts worldwide. This is evidenced by the high level of seismicity, the intense E-W trending normal faulting and the high extension rate in a N-S direction. Destructive earthquakes, such as the Heliki event in 373 BC, have occurred since the antiquity. Intense seismicity has also occurred during the instrumental era, with the most recent strong event being the Ms=6.2 1995 Aigion earthquake. In this work, we present the RASMON and CORSSA accelerometric arrays installed across the Gulf of Corinth by the National and Kapodistrian University of Athens (NKUA) and collaborative institutes in the frame of EU and national projects. Accelerometers were first installed in 1991 and through continuous upgrades and maintenance remain in operation to date, having recorded several thousands of high-quality acceleration time-series of local and regional earthquakes. Nowadays, the accelerometric network comprises eleven (11) three-component instruments (RASMON) and a 15-component vertical array (CORSSA) operating in trigger mode. Six stations located on the southern shore of the Gulf are online via a MOXA serial-to-TCP/IP converter. Recently, NKUA has undertaken an upgrade task of the arrays in the frame of the HELPOS project, the national analog to the EU-wide EPOS project. Upgrade includes conversion of the serial Etna/K2 Kinemetrics instruments into SeedLink servers using Raspberry PIs. Therefore, via Earthworm software, tunneling to NKUA and NTP timing will be plausible. To this aim, tests are currently implemented yielding promising perspective.