



Editorial

Holocene Palaeotsunami Landfalls and Neotectonic Dynamics in the Western and Southern Peloponnese (Greece)

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In a seismo-tectonic context, the Peloponnese belongs to the most active regions of the world. Especially the coastlines reflect this enormous dynamic of the Peloponnesian crustal block. It is known since many decades that marine terraces, at least from the early Pleistocene onwards, have been strongly uplifted. In the northeastern Peloponnese in the environs of Corinth, for example, the oldest marine terraces reach elevations of more than 1,000 m above present sea level (KERAUDREN & SOREL 1987). Extraordinarily high rates of crust uplift are also reported from the western Peloponnese (PAPANIKOLAOU et al. 2007, PARCHARIDIS et al. 2009), locally associated to gypsum updoming (KOWALCZYK & WINTER 1979, MARIOLAKOS et al. 1991). The effects of crust uplift and seismic events on the late Quaternary coastal evolution were recognized early and have been widely discussed (KELLETTAT 1974, KELLETTAT et al. 1976, MAROUKIAN et al. 2000).

Moreover, the western and southern Peloponnesian coasts are exposed to Europe's most active seismo-tectonic zone, namely the Hellenic Trench system. There, the African lithospheric plate is being subducted underneath the Aegean microplate by rates of up to 50 mm/a related to a very high seismic activity. Tsunamis, seismo-tectonically initiated along active faults in the Ionian Sea, are well known to have repeatedly affected the coasts of the western and southern Peloponnese (e.g. PAPADOPOULOS et al. 2014). The Peloponnese itself is one of the key regions for which accounts attest devastating effects of historical tsunami events, for example, the ones that occurred on 21 July 365 AD and in 1303 AD in the eastern Mediterranean (KELLETTAT et al. 2013). For the first one mentioned, it was Ammianus Marcellinus, a Roman historian, who gave such detailed and vivid descriptions of the catastrophic tsunami waves, the casualties and the destruction (VÖTT & MAY 2009), that the similarities with the Boxing Day tsunami 2004 in southeast Asia, known from video reports, are more than obvious.

It is a matter of fact that the world's longest and most detailed catalogues on palaeotsunami events that occurred during historical times focus the eastern Mediterranean, namely the Ionian Islands, the Peloponnese and Crete (SOLOVIEV et al. 2000, AMBRASEYS 2009, HADLER et al. 2012, PAPADOPOULOS et al. 2014). However, geomorphological traces and sedimentary evidence of such palaeotsunami events have, so far, been rare (e.g. VÖTT et al. 2013). Palaeotsunami science, however, has developed quickly during the past years, so that it was a matter of time that the number of reports on tsunami landfalls during (pre-)history would strongly increase.

Supplementary Issue 59/4 of the *Zeitschrift für Geomorphologie* contains a number of geomorphological studies that were conducted along the coasts of the western and southern Peloponnese in search of palaeotsunami signatures in the local sedimentary record. Another major