



Results from the MEDLFLOOD project: MEDiterranean sea-level change and projection for future FLOODing

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For over four decades, the Mediterranean Sea (with its small tidal ranges and relatively low-energy storms which favour the preservation of coastal sea-level markers) has been the theatre for several studies related to field-measurements of past sea levels using RSL markers.

In the Mediterranean, different types of source data have been used to reconstruct RSLs including biological, sedimentological, geomorphological and archaeological. Much greater amounts of published data exists and such literature, still rapidly growing, has led to the obvious consequence of fragmented information. As such, data are only occasionally reviewed with reference to specific location, but not as a whole, since there has never been a concerted effort to compile this into an organic, yet central database which could then be analysed on a truly 'Mediterranean scale'.

The main aim of the MEDFLOOD project, sponsored by INQUA is to create a comprehensive, coherent, spatially explicit and updatable database containing Holocene and MIS 5.5 RSL data available in literature for the Mediterranean basin. The database, coupled with considerations on vertical land movements due to tectonics, volcanic and isostatic effects, will create an enhanced platform for evidence-supported projections of future sea level which can in turn be used to supplement coastal-flooding models and maps, as well as a key baseline resource for prospecting for submerged prehistory in the region.

In this work we present the beta version of the database and the methods we used to build it, alongside with the results of the first analyses on Mediterranean relative sea level markers.