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The Last Interglacial Sea Level database for the Western Mediterranean

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An open access database containing raw data of Last Interglacial sea-level proxies for the Western Mediterranean has been compiled by reviewing hundreds of original published papers in accordance with the WALIS template (<https://warmcoasts.eu/world-atlas.html>). WALIS allows collecting both the relative sea-level (RSL) indicators and ages data in a standardized format. Ca. 360 sea-level index points for the coasts of Spain, France, Italy, Albania, Algeria and Morocco have been included in the database. The sea-level index points of the database are related to ca. 350 samples dated by a wide range of dating techniques, e.g., U-series, Amino Acid Racemization, Luminescence (TI/OSL) and Electron Spin Resonance methods or chronostratigraphically correlated to marine deposits bearing *P. latus* and “Senegalese fauna”. In fact, for some areas of the Mediterranean Sea, the “Senegalese fauna” is indicative of the MIS 5e.

Among the eleven types of sea-level indicators of our database, the majority of them are represented by marine terraces, beach deposits (or beachrocks), and tidal notches. Whenever the relationship between the RSL indicators and the former sea-level could not be quantified, such indicators have been considered as marine or terrestrial limiting points. An indirect age of the tidal notches has been provided by correlation with the nearby dated deposit. In the case no precise elevation information has been reported by the Authors, the elevation error of RSL datapoints has been reassessed in the 20 % of the elevation value, more a 5% if the sea-level datum was lacking in the scientific papers we have reviewed. Overall, the quality of each RSL datapoints and the associated age have been ranked in a 0 to 5 scale score according to Rovere et al., (2020).

References

Rovere, A., Ryan, D., Murray-Wallace, C., Simms, A., Vacchi, M., Dutton, A., Gowan, E., 2020. Descriptions of database fields for the World Atlas of Last Interglacial Shorelines (WALIS) (Version 1,0). Zenodo. <https://doi.org/http://doi.org/10.5281/zenodo.3961544>