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An Evaluation of the Selected Tsunami Catalogs for the Eastern Mediterranean and its Connected Seas

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Eastern Mediterranean and its Connected Seas, including Aegean and Black Seas, is one of the regions where historical catastrophic tsunami events have been recorded. Catalogs are the primary source of information to refer in order to be able to correctly identify the tsunamigenic source regions and investigate the possible effects of these events. Reliable catalogs are of especially importance for all tsunami relevant studies, ranging from hazard assessment to numerical modeling. In this study, several sources (Soloviev, 2000; Ambraseys,2009; Altinok et al., 2011) accepted as reliable have been examined by performing a cross-comparison of the events parameters and macroseismic information in order to create a harmonized database for the Eastern Mediterranean (western boundary at 22° E – excluding Gulf of Corinth), Aegean Sea and Black Sea (excluding Marmara Sea.) The reliability of the tsunami occurrence has been defined as Unlikely (U), Questionable (Q), Probable (P) and Definite (D), where improbable events were removed. There are 139 events in the harmonized database, considerably higher than the individual sources referenced as a result of the harmonization. In the study, 41 events are defined as Definite, 27 events as Possible, 55 events as Questionable and 16 events as Unlikely. 44 events include contradicting information from selected source databases and some of them will be presented as case examples in order to assess the reliability of the catalog.