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The ASTARTE Paleotsunami and Mass Transport Deposits data bases – web-based references for tsunami and submarine landslide research around Europe

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EU project ASTARTE aims at developing a higher level of tsunami hazard assessment in the North East Atlantic, Mediterranean and Connected seas (NEAM) region by a combination of field work, experimental work, numerical modeling and technical development. The project is a cooperative work of 26 institutes from 16 countries and links together the description of past tsunamigenic events, the identification and characterization of tsunami sources, the calculation of the impact of such events, and the development of adequate resilience and risks mitigation strategies (www.astarte.eu).

Within ASTARTE two web-based data bases on Paleotsunami and Mass Transport Deposits in the NEAM areas were created with the purpose to be the future information repositories for tsunami research in Europe. The aim is to integrate every existing official scientific reports and peer reviewed papers on these topics and update on new entries every 6-12 months, hosting information and detailed data, that are crucial e.g for tsunami modeling. A relational database managed by ArcGIS for Desktop 10.x software has been implemented.

One of the final goals of the project is the public sharing of the archived datasets through a web-based map service that will allow visualizing, querying, analyzing, and interpreting all datasets. The interactive map service will be hosted by ArcGIS Online and will deploy the cloud capabilities of the portal. Any interested users will be able to access the online GIS resources through any Internet browser or specific apps that run on desktop machines, smartphones, or tablets and will be able to use the analytical tools, key tasks, and workflows of the service. We will present the data bases structure and topics as well as their ArcGIS Online version. The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 603839 (Project ASTARTE - Assessment, Strategy and Risk Reduction for Tsunamis in Europe).