

Atlantic/Caribbean Historical Tsunami Database and Tsunami Travel Time Software Package

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Using the format and software earlier developed under the Historical Tsunami Database for the Pacific (HTDB/PAC) Project (Gusiakov, 2001), a comprehensive Historical Tsunami Database for the Atlantic (HTDB/ATL) with the Caribbean as one of sub-regions has been compiled as Task 5 of the Puerto Rico Tsunami Warning and Mitigation Program. The Task 5 sub-project is directed to improve the situation with catalogization of historical tsunamis in the Atlantic by means of organizing them in the form of a database containing all the meaningful historical tsunami data along with an additional reference information related to the tsunami problem. The database summarizes the long-term efforts of several research groups and individuals in collecting, refining and digitizing the tsunami observations in this area and represents the updated, revised and homogeneous data sets otherwise unavailable in digital domain. The geographical coverage of the database is a geographical area located within 60°S to 72°N and 100°W to 30°E including all the marginal Atlantic seas (but excluding the Mediterranean). The current version of the database contains the data on 263 tsunamigenic events occurred in the Atlantic from 60 B.C. to 2003. The database consists of the two main parts: the catalog of tsunamigenic events with their basic source parameters and the catalog of the observed run-up heights provided with the textual description of tsunami manifestation at each site. The full version of the database is distributed on a CD-ROM and is provided with a specially developed graphic shell built as geographic mapping subsystem for easy data retrieval, manipulation, visualization and handling. The graphic shell has the built-in option for fast calculation of the Tsunami Travel Time (TTT) charts for the Caribbean and Atlantic regions. A web-version of the database is available at <http://tsun.sccc.ru/htdbatl>