



Some peculiarities of using paleotsunami data for creation of tsunami recurrence function

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All the tsunami data used for creation of tsunami recurrence function can be divided into two classes. The first class contains mostly data from tsunami catalogues related to tsunami height reached by tsunami at elected point. Indicators of maximal height reached by tsunami are: There are marine-origin objects, sea grass, debris, sediments, floating garbage deposition, horizontal boundaries of discolored vegetation killed or damaged by saltwater, or boundary of vegetation put by water current [1]. All these objects moved or deformed or discolored by tsunami are light and most of them are locating on the slope.

Main indicators of paleotsunami are sand deposits in peat areas near the sandy beaches. Fresh sand deposits can be found on the slope and consider it as the indicator of maximal tsunami run-up but its position is not stable because of the rain and/or snow. Sand deposits can be preserved in flat peat areas.

Each deposit layer means that its height over the ocean level was exceeded by tsunami. Level position of heavy subjects moved by tsunami like big stones and heavy logs should be taken into account similar.

Some tsunami recurrence functions for Kamchatka and Southern Kuril coasts were created using historical and paleotsunami data.

[1] POST-TSUNAMI SURVEY FIELD GUIDE. IOC/UNESCO Manuals and Guides, 37, 1998.