

## **1.5-P50. WHY THE 8.6 M ACEH EARTHQUAKE AT APRIL 11, 2012 DOES NOT CAUSE A TSUNAMI AND CASUALTIES SIGNIFICANTLY ?**

Beyond of a view historical tsunamis in the western part Sumatra as ; Aceh tsunami December 26, 2004 and Aceh tsunami April 11, 2012 have given several questions for the majority the common people. This study aims to analyze the shape and location of ocean bottom earthquake source as the cause of the tsunami wave propagation , by performing a cross section in the study area bathymetry maps. Using the equation by Coppersmith through the equation obtained until the resulting output of the vertical deformation fault , the structure of bathymetry and tsunami run- up . The resulting conclusion , that in the case of the Aceh tsunami in 2012 in the form of bathymetry on western Sumatra trench inhibits propagation of tsunami run- up to the maximum tsunami wave as it passes through the subduction zone is 3.5 m , and 0.8 - 1.5 8 m when it reaches the coast , with zero tsunami victims . While in the case of Aceh earthquake December 26, 2004 tsunami in the subduction zone of 12 m and 27-33 m when it reaches the coastline with the dead and missing reached 544 064 inhabitants.

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