Source size of the 2004 Indian Ocean Tsunami estimated from periods of tide gauge records

Kuniaki Abe[1]

[1] Niigata Junior College, Nippon Dental Univ

We analyzed tide gauge records of the 2004 Indian Ocean Tsunami. Arrival time, level of initial rise, polarity and period of the initial wave, and the most dominant period in first 6 hours having a starting time at the origin time were estimated from 20 records observed along the Indian Ocean and the Pacific Ocean. Relations between these parameters and azimuth angle of the station to the epicenter were discussed. Sizes of the source were estimated from periods of the initial rise. Thus the size of 1200 km in length and 110 km in width was obtained. Spectra of the tide gauge records observed at these stations did not conflict with theoretical ones calculated from formula by Yamashita and Sato(1974) using the obtained parameters.

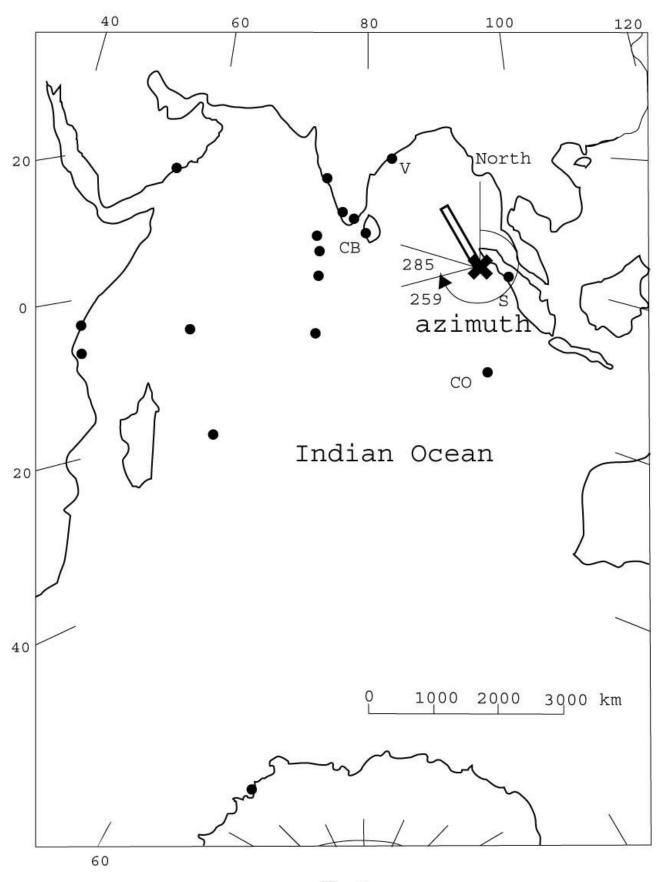


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