

## **An eyewitness account of tsunami effect from a geologist of Geological Survey of India at Visakhapatnam coast, Andhra Pradesh, India**

“Earth tremor occurred at Visakhapatnam around 06-30 hrs on 26.12.2004. Enquiries prove that the persons those who were in horizontal position felt more the effect of tremor than those who were in vertical position. Movement of cots, chairs and mild window rattling are commonly experienced by the residents. .... According to them (fishermen), the water level within the fishing harbour raised approximately to 3.0m above msl around 9-30 hrs. .... the trawlers and boats moved within the fishing harbour limit without any control... I noticed the evidence of overflow of sea water above the jetty level. Fishes of various sizes were found strewn everywhere within the fishing harbour.

I entered into the fishing harbour and reached R.V.Samudra Kaustubh (GSI Vessel) to enquire about the safety of the vessel and personnel. By this time I witnessed the second cycle of water level rise and it touched the jetty level but did not overflow like the first time. Within about ten minutes the water level reached the record lower level of **about 2.5m below msl. Consequently, R.V.Samudra Kaustubh almost touched the ground at jetty no. 5.** The bridge of the vessel came to the level of jetty around 11.00 hrs. While observing this, about 1m height wall of water gushed into the fishing harbour and raised the water level to about 2.5m which made R.V.Samudra Kaustubh to float. Similar rise and fall of water levels were observed three times till 11.30 hrs. Reportedly, after 14-30 hrs the magnitude of water fluctuation and frequency reduced.

As per tide gauge record collected from Visakhapatnam Port Trust for 26.12.2004, the tidal wave reached a **maximum level of 2.3m above msl at 09.25 hrs** and reached a **minimum level of 2.7m below msl at 11.30 hrs** with intervening seven fluctuations at 10 to 15 minute intervals. The tidal wave again reached a maximum level of 2.06m at 12.00 hrs and minimum level of 2.90 m at 12.15 hrs. The magnitude and frequency of fluctuations reduced after 15.00 hrs.”

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