

Large tsunami remote observations from high altitude using the induced magnetic field of tsunami.

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On The 2011 off the Pacific coast of Tohoku Earthquake, massive tsunamis more than 10m attacked it in the wide range of Ibaraki from Aomori coast area. The tsunami warnings were not only sufficient but also no observation result of the tsunami, it was a big problem. The other side, at the Chichijima geomagnetic observation point had observed the tsunami induced magnetic field

As a result of example analysis for a past tsunami on Chichijima islands, the signal of the induced magnetic field was able to detect almost more than 1m tsunamis. The observation of the tsunami by the tsunami induced field has a weak point that sensitivity and a point of S/N ratio, but has a characteristic of the remote observation unlike the observation by tide gauges. If a geomagnetism sensor was installed in the hill of the Sanriku coast as a huge tsunami meter, they endured a massive tsunami and might continue observation without being destroyed.

We introduce the wave pattern of the prospective induced field of the tsunami and some character, if a sort of electromagnetic huge tsunami meter had been installed in the Sanriku coast.

Keywords: tsunami, Huge tsunami meter, induced magnetic effect