

Tsunamiites - their significance and problems

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The first purpose of tsunamiite studies is to contribute to the tsunami disaster prevention. Tsunamiites are the sedimentary records of tsunamis. Thus, the studies can attest the event times, places, up-rush heights and so on, of the tsunamis in historical and pre-historical ages, and give information to examine recurrent times of the tsunamis for the prediction of future tsunamis.

Secondary, the studies can provide very interesting information for the science of geohistory. They can give evidence about the catastrophic tsunami events caused by earthquakes, volcanic eruptions, submarine slumps, and meteor impacts, in geohistorical ages. Development of the studies of the geohistoric tsunami records may reveal the global periodic occurrence of violent and calm plume tectonism, and high frequent times of the meteorite impact which is affected by the cosmic circumstances of the earth.

The sedimentary features of the tsunamiites are various because of differing sedimentary environments, different causes of tsunami occurrence, and so on. In this point of view, high preservation potential of deep submarine tsunamiites is to be noted. However, the most difficult problem to study tsunamiites is the lack of good geophysical information about the tsunami wave and tsunami-induced current just above the sea bottom where the sediments are transported. Inter-disciplinary studies are demanded.