

Discovery of AD 869 Jyogan Tsunami deposits and its significance

Daisuke Sugawara[1], Kouji Minoura[2], Tomohiro Iwashita[1]

[1] Earth Sci., Tohoku Univ., [2] Geology and Paleontology, Tohoku Univ

Possible traces of tsunamis represented by intercalations of well-sorted marine sands were discovered in coastal sequences of Sendai and Soma. The layers are overlain by grayish white tephra, dated at AD 870-934, and it can be concluded that the deposits were developed by the AD 869 Jyogan Tsunami. The wide distribution of sand layers shows the sedimentary event to have been produced by large submarine earthquakes of magnitude 8 or more. It may be possible that the tsunami was caused by a tsunami earthquake which occurred in the forearc region off the coast of the Sendai Bay.