

Earthquake damage's aerial photos by U.S. Forces in the last period of the Pacific War

Ryoichi Kojiroi[1]; Hiroshi Une[1]; Hiroyuki Hasegawa[1]; Yasuhiro Suzuki[2]; Masayoshi Kobayashi[3]; Nobuo Nagai[4]

[1] GSI; [2] Nagoya Univ.; [3] Second Research Dept., Japan Map Center; [4] none

During the Pacific War, U.S. Forces had taken reconnaissance aerial photos over main parts of Japan in order to ascertain effects of their operations. Especially, reconnaissance planes flew from Guam or Saipan since 1944 frequently. The quality of those aerial photos are worse than present ones slightly, but we can read geographical features and various objects well. Those aerial photos are open to the public by the National Archives and Records Administration (NARA).

The authors investigated those photos from a view point whether we could read earthquake damage caused especially from Tonankai Earthquake (M7.9: Dec. 7, 1944). As a result we found damage from a large Tsunami caused by this earthquake on aerial photos of Owase area, Mie Prefecture (dated Dec.10, 1944). We looked carefully into the photos and recognized on one of the photos that there was floating wreckage around the mouth of Owase bay which was considered to be washed away by this tsunami.

We also found an aerial photo(dated Jul.5,1945) of Handa city, Aichi Prefecture on which sand volcanoes associated with earthquake liquefaction, were read. Those sand volcanoes were considered to be caused by Tonankai Earthquake or Mikawa Earthquake(M6.8:Jan.13,1945).

Reference

Kojiroi R, Kobayashi M, Nagai N, Suzuki Y (2006): Tsunami damage's aerial photo; finding new material regarding 1944 Tonankai Earthquake, Journal of Japan Society of Photogrammetry and Remote Sensing, Vol.45, No.6, p69-72, in Japanese.