

Ground hazards of urban region showing in archaeological site and historical records - Scope of the ground hazard archaeology-

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The newly propounded inter disciplinary between earth science and archaeology, the ground hazard archaeology, should be effective to discuss on the disaster in the urban region. The archaeological site of the underground in urban region is the cultural heritage but also the important records of disaster from beginning of some mega cities in Japan, i.e. Tokyo, Osaka, and Kyoto. The case study of the some ancient tomb mounds around Osaka and Kobe shows destructive power of the 1596 Keicho Fushimi earthquake, the typical inland large scale earthquake. The disaster induced by the huge scale off shore earthquake, the Nankai earthquake in 14th century, was recorded in the landslides of the ancient tomb mounds of Nara. The human activities at Medieval age around Kyoto, the largest city of Japan in that time, increased the risk of flood by the over use of surrounding mountain district. The fluvial sediments of 17th century found in archaeological site of Kyoto basin should be the evidence of the effect to the environment change by the human activities. The ground hazard archaeology provides the natural analogs of the future disaster in urban region. It should be one of new academic fields that integrate the humanities and science.