

A new research field after the 2011 Tohoku earthquake and tsunami

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The Tohoku region in Japan was hit by a gigantic earthquake of M=9.0 subsequently followed by a huge tsunami which occurred off the Pacific ocean. Both of them have caused huge damage on the eastern coast of Japan, having a huge inundation area more than 500km² with the attack of destructive wave forces. There are several issues why this tragedy occurred, and what unrecognized factors contributed to the high vulnerability of the area, and how the risk at each region in the future earthquake and tsunami.

The damage actual situation of the East Japan great earthquake disaster and the study base formation of practical disaster prevention studies based on the lesson are big problems and develop the situation of the damage, a future evaluation, prediction from elucidation of a giant earthquake and the outbreak mechanism of the tsunami and must record a then lesson to earthquake disaster archives. Furthermore, study such as the ways of the disaster prevention that stood on improvement of the trust of the risk evaluation, the construction of support studies, cooperation with the disaster medicine, the history culture will be necessary to prepare for domestic and foreign disasters.

In natural disaster scientific research, I arrest prior measures, the outbreak of the disaster, influence of the damage, urgent correspondence, restoration, revival, forehandedness with a series of disaster cycles and elucidate the phenomenon in each process, and it is necessary to make the lesson generalization, unification. Social incorporate result of the natural disaster scientific research that assumed knowledge and the world provided from the research in the East Japan great earthquake disaster, the action to reconstruction contracts a field and a human being, society is smart and copes for a disaster cycle to become complicated and systematizes study to build society system keeping a lesson alive through hardship as "practical disaster prevention studies", and a wound wants to form the scientific value.

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