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Uncertainty evaluated from tsunami simulation of Tohoku earthquake around Nuclear Power Stations among Different Tsunami

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After the 2011 Tohoku-Oki Earthquake, evaluating based on tsunami simulation approach becomes very important role for promoting tsunami disaster prevention measures against mega-thrust earthquakes. In considering tsunami disaster prevention measures based on the knowledge from tsunami simulation, it is important to carefully examine what kind of tsunami source model we use. In this presentation, we show the result of tsunami simulation of the 2011 Tohoku-Oki Earthquake around Fukushima Daiichi I Nuclear Power Plant and Fukushima Daini II Nuclear Power Plant in Fukushima Prefecture of Japan by using several tsunami source models, and show how different tsunami response could be in tsunami inundation process. The results show that for incoming tsunami onto inland region there are a fair amount of relative differences in maximum wave height and tsunami wave pressure. This suggests that there could be a false determination of promoting tsunami disaster prevention measures against mega-thrust earthquakes, depending on tsunami source model one choose. On the basis of this topic of tsunami evaluation and its uncertainty, we also suggest our viewpoint on how disaster prevention measure and earth science should be related.

(References)
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