



Scientific aspects of the Tohoku earthquake and Fukushima nuclear accident

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We investigated the 2011 Tohoku earthquake, the accident of the Fukushima Daiichi nuclear power plant, and assessments conducted beforehand for earthquake and tsunami potential in the Pacific offshore region of the Tohoku District. The results of our investigation show that all the assessments failed to foresee the earthquake and its related tsunami, which was the main cause of the accident. Therefore, the disaster caused by the earthquake, and the accident were scientifically unforeseeable at the time. However, for a zone neighboring the reactors, a 2008 assessment showed tsunamis higher than the plant height. As a lesson learned from the accident, companies operating nuclear power plants should be prepared using even such assessment results for neighboring zones.