



Tohoku Earthquake-associated Marine Sciences: the research project for the Great East Japan Earthquake on March 11, 2011

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At 2:46 pm on March 11, 2011, a huge earthquake (M 9.0) occurred off the Pacific coast of Tohoku Region, Japan. The subsequent Tsunamis hit the coasts and seriously damaged fishing villages and towns in the area. Tohoku Region faces Northwestern Pacific where is one of the most productive oceans on the Earth. Then, what happened to the marine ecosystems in the Tohoku Region? What happened to the fishery bioresources? What is the mechanism to sustain high productivity in the Region? Is the ecosystem restoring after 4 years? What is required for the recovery of fisheries in the area? In order to answer these questions, the 10 years research project, TEAMS (Tohoku Ecosystem-Associated Marine Sciences) was launched in January 2012 funded by MEXT (Ministry of Education, Culture, Sports, Science and Technology, Japan) to conduct comprehensive research on the area. Tohoku University (TU), Atmosphere and Ocean Research Institute, the University of Tokyo (AORIUT), Japan Agency for Marine-Earth Science and Technology (JAMSTEC), and 25 other institutions are conducting research for this project in close association with local government and fishery people. Currently, approximately 400 people (200 scientists, 160 students and others) covering physical, chemical, biological, and geological sciences including modeling take part in the project from all over Japan. MEXT also supports TEAMS by constructing R/V Shinsei Maru in 2013 for the oceanic investigations in the region. In this report, the overview of the ecosystem before and after the disaster, major findings and challenges of TEAMS will be described.