



How can we transfer scientific knowledge to citizens? : Case studies from huge earthquake and tsunami researches

Hiroshi Kitazato (1), Akihiro Kijima (2), Kazuhiro Kogure (3), and Katsunori Fujikura (4)

(1) Tokyo University of Marine Science and Technology, Tokyo, Japan (kitazato@jamstec.go.jp), (2) Tohoku University, Miyagi, Japan (a-kijima@m.tohoku.ac.jp), (3) AORI, The University of Tokyo, Chiba, Japan (kogure@aori.u-tokyo.ac.jp), (4) Japan Agency for Marine-Earth Science and Technology, Yokosuka, Japan (fujikura@jamstec.go.jp)

On March 11, 2011, huge earthquake and tsunamis took place coastal regions of Northeast Japan. Coastal infrastructure collapsed due to high waves of tsunamis. Marine ecosystems were also strongly disturbed by the earthquakes and tsunamis. TEAMS (Tohoku Ecosystem-Associated Marine Sciences) has started for monitoring recovering process of marine ecosystems. The project continues ten years. First five years are mainly monitored recovery process, then we should transfer our knowledge to fishermen and citizens for restoration of fishery and social systems. But, how can we actually transfer our knowledge from science to citizens? This is new experience for us.

Socio-technology constructs a “high quality risk communication” model how scientific knowledge or technologies from scientific communities to citizens. They are progressing as follows, “observation, measurements and data”, → “modeling and synthesis” → “information process” → “delivery to society” → “take action in society”. These steps show detailed transition from inter-disciplinarity to trans-disciplinarity in science and technology.

In our presentation, we plan to show a couple of case studies that are going forward from science to society.