

Preface

This special issue of *Earth, Planets and Space* contains fifteen contributions related to the 3rd International Tsunami Field Symposium—Science, Technology, and Disaster Mitigation—, which was held at the Sakura Hall in the Tohoku University, Japan during April 10–11, 2010. Following the symposium, field trips were organized to Sendai on April 11, Sanriku coast during April 12–13, and Okinawa during April 14–16. At the field trips to Sendai and Sanriku coast, we visited to the historical and geological sites related with the AD869 Jōgan tsunami and AD1896 Meiji-Sanriku tsunami (plus AD1960 Chilean tsunami), respectively, and discussed the historical and pre-historical tsunamis in these sites as well as the tsunami disaster countermeasures. Unexpectedly, nearly one years later on March 11, 2011, these areas were fully devastated by the 2011 off the Pacific coast of Tohoku Earthquake ($M_w = 9$) and tsunami. The editors express their deep condolences to all those who have suffered as a result of this earthquake and tsunami.

In this issue, three papers (Kihara *et al.*, Li *et al.*, and Gusman *et al.*) discuss results from numerical modeling for the sediment transport. Eight papers (Mastronuzzi and Pignatelli, Szczuciński *et al.*, May *et al.*, Feldens *et al.*, Scicchitano *et al.*, Engel *et al.*, Goto *et al.*, and Sakuna *et al.*) discuss results from sedimentological studies of historical and pre-historical tsunamis to estimate their recurrence intervals and tsunami flow characteristics. Adityawan and Tanaka and Hanzawa *et al.* and Yoneyama *et al.* reported tsunami flow characteristics based on the numerical modeling from the coastal engineering point of views. Husrin *et al.* discusses experimental study on tsunami attenuation by mangrove forest. We believe these papers represent significant progress on the study of the tsunami science and engineering and will aid to the future disaster prevention plans.

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