



Preface of “Earthquake, volcanism, and physical oceanography”

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Sophisticated observatories onland, offshore, and via satellites allow us to collect a multitude of diverse physical parameters to help us better understand earthquake, volcanism, and physical oceanography. This volume is an attempt to show such integrated and interdisciplinary approaches using some state-of-the-art instrument and numerical simulation approaches. We believe that this body of research illustrates some of the historical strengths, recent developments, and some future directions in Marine Geophysical Research. Totally, eight manuscripts have been included in this volume. We have arranged the papers in this sequence: Earthquake scenario and seafloor instrument siting (Agata et al.); Nonlinear approach for modeling the coastal tsunami height (Yoshikawa et al.); Multi-stage volcanism (Casalbore

et al.); Satellite derived undersea sound speed structure (Yokota et al.); Interactions between El Nino and retreat of the Oyashio (Hasegawa et al.); Doppler current profiling of the deep western boundary current (Komaki et al.); an atypical large-meander path of Kuroshio (Nagano et al.); and Effects of internal wave on GNSS-Acoustic Positioning (Matsui et al.). We hope this volume can be a starting point to encourage further collaboration between marine geophysicists and many other fields so as to help us better understand our oceans, and the earth as a whole.

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