ID: Type: **Poster**

Hydroacoustic Observation of the Great 2011 Tohoku Earthquake

The great 2011 Tohoku Earthquake (Mw 9.0) occurred offshore of the east coast of Honshu, Japan on 11 March 2011, and strong T-waves generated by the event are recorded in the Hawaii hydroacoustic array operated by International Monitoring System. We examine the back-azimuths of the signals and spectral contents of the T-waves, and we compare them with the rupture models estimated from previous seismic studies. The results show that the complex rupture process probably causes the scattered back-azimuths and several local peaks. We also analyze T-waves of the Mw 7.7 normal-faulting aftershock. It shows unique envelope shape and frequency contents comparing with those of other thrust-faulting events. These differences would reflect the different source and excitation mechanism.

Primary author: YUN, Sukyoung (Korea Polar Research Institute)

Presenter: YUN, Sukyoung (Korea Polar Research Institute)

Track Classification: Theme 2: Events and Their Characterization