

Oceanic lithosphere, slab, and mantle wedge in the Taiwan region and one-OBS seismology

The understanding of the deep structure of the oceanic region surrounding Taiwan has been hindered by the lack of a broadband observation capability on the sea. However, 2008 sees a notable progress as the IES BB OBS program is marching into its 3rd year since the first deployment in 2006. Despite the number of BB OBSs is terribly limited, a few problems have been unraveled based on the critical constraints from, in some cases, even a single OBS. In this talk, I will focus on examples of how “one-OBS” seismology has been performed to change our views on the oceanic lithosphere and mantle wedge in the vicinity of Taiwan.