

B202-007

Room: 202

Time: May 22 10:45-11:00

Methane dissociation flux from the seafloor massive methane hydrate found at off Joetsu region, eastern Japan Sea

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Large methane plumes have been observed in the water column at off Joetsu region in the eastern margin of Japan Sea, as well as a number of large pockmarks, mounds, and hydrate deposits on the seafloor. In this study, dissociation flux of methane from the seafloor massive methane hydrate have been determined from the 3 dimensional distribution of the methane plume in the sea water column around the area. Besides, origin of methane have been clarified by sampling massive methane hydrate on seafloor using ROV Hyper-Dolphin, JAMSTEC.