

Sediments and gas hydrates recovered at off Naoetsu, southern part of the Sea of Japan.

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Marine sediments and many natural gas hydrate samples were collected by piston core sampler at off Naoetsu, southern part of the Sea of Japan, during KY05-08 Cruise (Aug 2005) with R/V KAIYO. In this area, many mounds, pockmarks and gas plumes were observed in previous cruises, and 'seafloor natural gas hydrates' were observed and recovered first time around Japan.

16 piston core and 3 gravity core sampling were conducted and total 67.14m length marine sediments were recovered from 14 piston core and 2 gravity core sampling. Gas hydrate samples were collected from just below seafloor at 4 sites in the 'Umitaka Ridge' (Awabi-structure) and 1 site in the Joetsu knoll (Buri-structure), and it is first hydrate samples at the Joetsu knoll region. Maximum thickness of hydrate bearing layer are 2.6m or more. Massive, nodular and disseminated hydrates and soupy layer were observed in the sediments. Many hydrates are accompanied with carbonate nodules and crusts, and H₂S.