

Seismic interpretation for methane hydrate at the Daini Atsumi Knoll ,in the Nankai Trough.

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To assess methane hydrate resources considered to be developed in the Nankai Trough, from Tokai-oki to Kumanonada, various geophysical and geological data were acquired. For example, high resolution 2D seismic data was obtained in 2001, 3D seismic data was acquired in 2002 and 16 wells with LWD (Logging While Drilling) measurement were drilled in 2004.

BSR (Bottom Simulating Reflector) was considered to have an important role for the said assessment, therefore, the seismic interpretation focused on the delineation of BSR. The drilling of test wells, however, suggests the following works are necessary for the detailed and precise assessment of methane hydrate resources;

- A.Presumption of distribution for porous sand layers necessary for accumulation and formation of methane hydrates,
- B.Identification of high-velocity zone suggesting the existence of hydrates evidenced by the drilling of said wells,
- C.Delineation of properties for the hydrate layers through analysis of various seismic attributes,

An outline of 3D seismic interpretation to predict the distribution of sand bodies is introduced here taking some example in the Daini Atsumi Knoll where 3D survey was conducted.

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