

Active channel sediments in the Bengal Submarine Fan related to sea-level changes

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To understand the development of active channels in the Bengal Submarine Fan, we conducted a detailed bathymetric survey and sediment sampling during R/V Hakuho-Maru KH00-05 cruise. The erosional sediments were mainly deposited in the Bengal Fan at high sedimentation rate, providing a unique record of past climate variations and erosional fluxes, related to sea level changes. Our interpretations regarding the active channel-levee system based on high resolution swath bathymetric survey, 3.5 kHz profile record and sediments analyses. In this poster, a general description is presented on the morphology of active channel-levee system, and its sediments and sedimentation process.

To understand the development of active channel-levee system in the Bengal Fan, we conducted a detailed bathymetric survey using the SeaBeam 2120 system and 3.5 kHz profiler during leg.4 of R/V Hakuho-Maru KH00-05 cruise. Furthermore, fore piston core samples taken from the channels and its adjacent area will provide fundamental informations on the paleoclimate and sedimentary studies in this region. The erosional sediments were mainly deposited in the Bengal Submarine Fan at very high sedimentation rate, providing a unique record of past climate variations and erosional fluxes, related to sea level changes which are the major changes in the system through a glacial-interglacial cycle. Our interpretations regarding the active channel-levee system in the Bengal Submarine Fan based on high resolution swath bathymetric survey, 3.5 kHz profile record and core sediments analyses. In this poster, a general description is presented on the morphology of active channel-levee system, and its sediments and sedimentation process.