

## Stratigraphy of Deep-sea Sediments From Piston Cores Adjacent to the Hawaiian Islands

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A series of piston coring was performed in the adjacent area of Hawaii islands by R/V KAIREI, JAMSTEC in the summer of 2001. Long-distance volcanoclastic sediment transport generated by Hawaiian submarine landslides has been suggested by several previous studies. Stratigraphical, sedimentological, and geochemical studies on the cores obtained by systematic sampling will make to understand for origins and ages of volcanoclastics emplacement to the ocean-floor. Nine new cores were collected from the north of Oahu, the southwest and south of Hawaii Island, the south of Oahu. The major lithology is brown pelagic clay with abundant volcanic sand layers. Off Hawaiian Arch of the north of Oahu, pelagic clay with distinct thick volcanic sand layer was recovered. The thick sand should be related to Nuuanu landslide, which debris avalanches were derived from Oahu Island. In the north of Haleakala rift, the alternation of brown colored clay and volcanic sand layer were obtained. Haleakala rift and Kohala slump are possible origins for these frequent occurrences of volcanic sand. In the south of Hawaii Island, we recovered alternations of volcanic sand and pelagic clay. The previous study suggested that volcanoclastic material in this area were derived from the Kilauea and older volcanoes of Hawaii Island. The obtained cores will provide stratigraphic information for volcanic history of Hawaii Island. Two piston cores were obtained in the front of Waianae Landslide. The lithology of cores shows that themuch volcanoclastics are interbedded in the upper sequence, and the massive clay in the lower. After measurement of remanent magnetization of sediments, we recognized clear polarity shifts of B-M boundary in 80-200 cm from surface in several cores, suggesting slow sedimentation rate as few mm /kyy. We found that sometimes Jaramillo event show unclear signal in inclination and declination profiles. This might be related to slow sedimentation rate. A continuous nanofossil age from the core obtained from Tascloosa Seamount agree with the age model constructed by paleomagnetic method.