

Toward 2001 Investigation of the submarine Haleakala rift zone

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Submarine Haleakala East Rift Zone extends 150km from Maui Island. Previous studies on Haleakala volcano have been limited in its subaerial part. Although Moor et al., (1990), Chen et al., (1991) investigated the submarine Haleakala rift zone with some dredged samples, detailed geology and petrology of the submarine rift are still unknown. In order to study the origin of the basaltic magma in Haleakala volcano comprehensive studies on its very large submarine rift are very important. We are planning to collect rock specimens from the Haleakala submarine rift during the 2001 JAMSTIC-Hawaii cruise. We have conducted reconnaissance sampling on the subaerial Haleakala volcano in Oct.2000, and petrology and geochemistry of the rocks samples have been studied

In order to study origin of basalt magma in Haleakala volcano, we will investigate the submarine Haleakala rift zone with JAMSTEC research ships in the summer of 2001. Submarine Haleakala rift is the largest among Hawaiian shields; extending 150km to the east and previous JAMSTEC Cruise has obtained its detailed bathymetry only in 1999. We have summarized previous studies on Haleakala. We also conducted preliminary sampling on the subaerial part of Haleakala and analyzed compositions of its basaltic rocks.

