Topographic features of rift zones of the seamounts on the Pacific Plate

*Megumi Fujimoto[1], Masao Nakanishi[2]

1. Graduate School of Science and Engineering, Chiba University , 2. Department of Earth Sciences Graduate School of Science, Chiba University

Several volcanos on land have rift zones. A rift zone is an elongated topography made by intrusion or extrusion of magma. A volcano has usually two or three rift zones that elongate from the crest of the volcano. Several studies indicated that the angle between is about 120° (e.g., Wentworth and Macdonald, 1953; Carracedo, 1994).

Vogt and Smoot (1984) reported that there is a seamount of the Japanese seamounts that has more than three rift zones. However, few studies about rift zones of seamounts have been done because of lack of detailed bathymetric data. The spread of multibeam echo sounder has brought the increase of detailed bathymetric data of seamounts. We examined the topographic expression of seamounts on the Pacific Plate except for the seamounts studied by Vogt and Smoot (1984) using the multibeam data.

