

## Characteristics of Hf isotopic composition of basalts from northwestern part of the West Philippine Basin

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We report Hf isotope data of basalts from the West Philippine Basin (WPB). In the western part of WPB near to the Ryukyu trench, the Okinawa-Luzon Fracture Zone (OLFZ) exists, extending in the NE-SW direction. Shirahashi (2007, master's thesis of Univ. Ryukyus) reported that basaltic basement rock around the OLFZ have Sr-Nd-Pb isotopic composition similar to those of the isotopic Indian Ocean MORBs. In this study we analyzed the Hf isotope ratio of the same samples reported by Shirahashi (2007). All samples plot within the range of the Indian Ocean MORBs in eHf - eNd diagram, suggesting that they have Hf isotopic characteristic of the Indian Ocean MORB type. In addition, it has been suggested that Hf isotope ratios of other (and younger) back arc basin basalts in the Philippine Sea plate show Indian Ocean MORB type. This suggests that asthenosphere with the isotopic characteristic of Indian Ocean MORB type has involved since early stage of the the formation of the Philippine Sea plate.