

Mn nodule field discovered in the EEZ around the Minami-torishima Island: occurrence and geochemistry of nodules

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The region which many manganese nodules are distributed with high density was discovered at approximately 300 km E of the Minami-torishima Island, where is in the exclusive economic zone (EEZ) around the Minami-torishima Island, by observation using submersible SHINKAI 6500 (dive #1207: observer is T.I.) during YK10-05 cruise of R/V Yokosuka, Japan Agency for Marine-Earth Science and Technology (JAMSTEC). A small seamount having 400 m height and 5 km in diameter situate at the region. Manganese nodules are broadly and densely distributed from the summit to northwest side of the seamount, and also the comparatively flat portion of a hillside. The region shows high acoustic reflectivity by survey using multi narrow beam. Such high reflectivity regions were also found in the other area of Minami-torishima Island EEZ. Then, these may also be the vast manganese nodule fields. In this report, we will present occurrence and geochemical compositions of manganese nodules collected by SHINKAI 6500 dive.

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