Similarity among the animal communities associated with hydrothermal vents and methane seeps around Japan

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More than 50 deep-sea vent and seep animal communities have been discovered in the relatively narrow area around Japan. In the present study, to recognize the pattern of similarity among those communities, Jaccard's similarity coefficient was calculated for each paired communities and placed with multidimentional scaling (MDS). The communities associated with the vents and seeps in the Izu-Bonin Arc, the Okinawa Trough, Sagami Bay, SUruga Bay, Ryukyu Trench and the shallower area of the Nankai Trough (depth range: 270 - 2180 m) were roughly aggregated, and the other communities located in Japan Trench (depth range: 5343 - 7434 m) and the deeper area of the Nankai Trough (depth range: 2500 - 4800 m) were separately placed. The depth may be one of the major factor to distinguish chemosynthetic animal communities around Japan rather than the tectonic settings.