

## Plume observation in hydrothermal fields using multi-beam sonar

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Multi-beam sonar (EM122) onboard “YOKOSUKA” and “KAIMEI” is capable of measuring precise submarine topography and obtaining water column data. It can be used to measure plumes discharged underwater, and to analyze the data. This function is used to measure seeping plumes in hydrothermal sea area. The author examined the acoustic data (Volume Backscattering Strength=SV) analysis to figure out if it is possible to distinguish the components of the plumes.

Keywords: MultibeamSONAR, Plume, Volume Back scattering Strength

