## Study on benthos from seafloor image using autonomous underwater robot

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We navigate autonomous underwater vehicles at altitudes of 2 m and 8 m, take photograph the ocean floor images, and make mosaicking to provide wide-area image mapping of the ocean floor. From the image, we can extract the benthos and investigate the their distribution. We will grasp the whole of the ecosystem from environmental information obtained from the ocean bottom topography and images. We present data including time change such as ecology of hydrothermal activity area and ecology of hydrate zone, and show new observation method using autonomous underwater vehicles.

Keywords: Benthos, Autonomous Underwater Vehicle, photograph