

Summary of investigation for submarine groundwater discharge in Suruga Bay

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Submarine groundwater discharge (SGD) in coastal area has been recognized as an important pathway from land to ocean. Suruga Bay is adjacent to the foot of Mt. Fuji where active groundwater flow system exist, and it could be occurred that large amount of groundwater directly discharges into the bay.

To evaluate SGD and groundwater flow system in the coastal area of Suruga Bay, some geophysical and geochemical surveys have been conducted from 2013 to 2015. Side scan sonar and sub bottom profiler was used to detect an anomaly of sonic wave at the bottom of sea. Flow direction and velocity around the coast were observed by the Acoustic Doppler Current Profiler. Distribution of radon and salinity in surface water was investigated by towing survey. Bottom water of the bay was also collected by using the Niskin sampler and analyzed for radon. This study attempts to combine each survey result and summarize the investigation of submarine groundwater discharge in Suruga Bay.

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