

# Submarine groundwater discharge at the tidal zone in the Seto Inland Sea

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In this study, the purpose is to clarify the details of the submarine groundwater discharge of the tidal zone by the observation in large tidal fluctuation area. The study areas are Ikuchijima and Miyajima which the precipitation differs. We examined the groundwater flow and seawater contribution by using the piezometer method and sampling the water. In this study, it was clarified that the process of submarine groundwater discharge in the tidal zone at the Seto Inland Sea differs by the groundwater potential. When the groundwater potential is small, net groundwater discharges while mixing to the recirculated seawater and the mixing rate is influenced to the tide. When it is large, recirculated seawater does not mix to net groundwater.