Japan Geoscience Union Meeting 2015
(May 24th - 28th at Makuhari, Chiba, Japan)
©2015. Japan Geoscience Union. All Rights Reserved.

AHW27-25 会場:301B 時間:5 月 24 日 17:00-17:15

沿岸藻場分布域における地下水流出の評価
Evaluation of groundwater discharge in a seagrass meadow of coastal area

齋藤 光代[1*] ; 小野寺 真一[2] ; 古森 旭[1] ; 大久保 賢治[1] ; 有冨 大樹[2] ; 金 広哲[2] ; 丸山 豊[2]
SAITO, Mitsuyo[1*] ; ONODERA, Shin-ichi[2] ; KOMORI, Asahi[1] ; OKUBO, Kenji[1] ; ARITOMI, Daiki[2] ; JIN, Guangzhe[2] ; MARUYAMA, Yutaka[2]

[1] 岡山大, [2] 広島大・院
[1]Okayama Univ., [2]Grad. Hiroshima Univ.

Previous studies have pointed that submarine groundwater discharge (SGD) is one of the important pathways for nutrients to the coastal environment. Nevertheless, its effect on coastal ecosystems such as seagrass meadows is not well examined. In the present study, we aimed to evaluate the groundwater discharge in a seagrass meadow of coastal Seto Inland Sea, western Japan.

In summer periods, the types of eelgrass and green algae covered from the coastline to about 100 m offshore in the study area. Distributions of salinity and radon (^{222}Rn) in seawater and pore water suggest that SGD occurs near the coastline with spatial and temporal variations. The coverage of seagrass meadow tends to increase in the area characterized by lower salinity and higher concentrations of radon and nutrients in the pore water. It suggests the possibility of that SGD effects on the seagrass meadow in the study area.

∗This research is financially supported by the MEXT Grant-in-Aid for Science and Technology Human Resource Development, Program to Disseminate and Secure the Tenure Track System (Okayama University) and Grants-in-Aid for Scientific Research (A) (No. 25241028, Shin-ichi Onodera).