

Scales and implications of submarine groundwater discharge: a hidden pathway from land to sea

Dr. Nils Moosdorf

Leibnitz Centre for Tropical Marine Research
ZMT, Bremen
Department of Biogeochemistry and Geology

Submarine groundwater discharge (SGD - here mostly the fresh fraction of SGD is addressed) has only recently been recognized as significant connection between land and sea. While it has been analyzed by a lot of local studies, it remains challenging to scale their results up to regional or even global scale due to the spatial and temporal variability of SGD. I show results of our fieldwork in Indonesia and Tahiti, on SGD-associated nutrient fluxes and ecosystem effects, as well as present methods to estimate SGD at regional to global scale and their results. Despite the limited total volume of SGD at global scale, the results highlight its local relevance as a water resource and as a solute pathway to coastal ecosystems. There, it should be considered in coastal management, and its implications on marine ecosystems need to be taken into account also for terrestrial land-use management.

Baltic TRANSCOAST Seminar

25.10.2017, 02:00-4:00 pm

University of Rostock

Baltic TRANSCOAST- Research Training Group - GRK 2000, funded by DFG

Venue: Albert-Einstein-Str. 21, 18059 Rostock, 1st Floor, R.113

www.baltic-transcoast.uni-rostock.de