

Exploratory Sampling of Submarine Groundwater Discharge in Taiwan

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There are many emerging reports that submarine groundwater discharge (SGD) may contribute much nutrients to the coastal zone. It has also been suggested that alkalinity generated on the continental shelves may be as important as those generated in the global open oceans. SGD may be an important source of alkalinity and carbon to the continental shelves but the current biogeochemical models do not properly include contributions from SGD because of the lack of data. In fact, SGD has not been measured in most coastal areas of the world. No such data have been published in Southeast Asia where rainfall is abundant and SGD is to be expected. Exploratory sampling of SGD at several sites in NE and SW Taiwan indicates that SGD may not be uncommon on an island where groundwater is generally overpumped.