

## The ocean as a source of N<sub>2</sub>O and CH<sub>4</sub>

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Understanding and quantifying ocean-atmosphere exchanges of the climate-relevant trace gases nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>) is important for understanding the global biogeochemical cycles of carbon and nitrogen in the context of ongoing global climate change. In my talk I will present recent results regarding the oceanic distributions, formation and consumption pathways, and oceanic emissions of N<sub>2</sub>O and CH<sub>4</sub>. Moreover, I will report on the activities of ongoing projects such as MEMENTO ('The Marine Methane and Nitrous Oxide database': [memento.geomar.de/de](http://memento.geomar.de/de)) and the SCOR WG#143 ('Dissolved N<sub>2</sub>O and CH<sub>4</sub> measurements – Working towards a global network of ocean time series measurements': [portal.geomar.de/de/web/scor-wg-143](http://portal.geomar.de/de/web/scor-wg-143)).