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MODELLING ANAEROBIC OXIDATION OF METHANE IN MARINE SEDIMENTS -PRELIMINARY RESULTS

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The widespread process of anaerobic oxidation of methane (AOM) in marine environments is currently being investigated as part of the multi-national METROL project (Methane Flux Control in Ocean Margin Sediments). Using data collected from the project cruises to European continental margins, we have devised a bioenergetic-based understanding of AOM and modelled the methane sink using a diagenetic reactivetransport model. The ultimate role of the modelling studies is to underpin the main controls of methane flux to the oceans and the consequent impact on the global carbon cycle.