

MARine Ecosystem Model Intercomparison Project (MAREMIP)

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Ocean biogeochemistry is strongly influenced by the specific activity of various types of plankton. In an effort to improve the representation of marine ecosystems, ocean biogeochemistry models have evolved to include a growing number of organisms aggregated according to their functionality into "Plankton Functional Types" (PFTs). Such models open up new and exciting avenues of research to explore interactions between marine ecosystems and climate change on various time scales. The "MARine Ecosystem Model Intercomparison Project" (MAREMIP) aims to foster the development of models based on PFTs in order to progress towards the resolution of important scientific questions; what are the impacts of global environmental changes on marine ecosystems, including climate change, ocean acidification and changes in nutrient input? Are there possible regime shifts associated with future environmental changes? What is the role of ecosystem structure and biodiversity for biogeochemical fluxes, marine resources and climate? In this talk, we show an overview of the MAREMIP activities and science highlights.

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