

Climatic changes and deep-sea biodiversity

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It is increasingly better understood that the deep sea is not immune from climatic changes despite its remoteness. Time series studies have revealed that climatic changes have affected distribution, abundance, and various aspects of biodiversity of deep-sea organisms. Yet, our understanding on climate sensitivity of deep-sea ecosystem and biodiversity remains insufficient. It is urgent to better understand deep-sea climate sensitivity, given the increasing climate footprint and exploitation of deep-sea resources (fishing, extraction of minerals and hydrocarbons), since synergistic effects of climate change and resource exploitation on biodiversity, ecological functions and services are a growing concern in deep-sea conservation and stewardship. This session aims to showcase recent progress on climate change and deep-sea biodiversity relationships and welcomes contributions from broad areas including but not limited to observations, monitoring, new technologies, modelling, experiments of past, present and future deep-sea organisms and their biomass, life-history traits, distributions, connectivity, adaptation, diversity, functions, and services under changing climates of contemporary and paleo time scales. Ambitious contributions pursuing conservation implementation and/or aspects of ecological functions and services under climate change are particularly welcomed. --end of the proposal text--

Note: This is a DOSI Climate session