

Progress Related to Global Deep Ocean Observing

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A history of deep-ocean exploration and observation led to the concept for the Deep-Ocean Observing Strategy (DOOS), under the auspices of the Global Ocean Observing System (GOOS) and in alignment with the Framework for Ocean Observing (FOO), through the consideration of Essential Ocean Variables (EOVs). This session will discuss the scientific need for globally integrated deep-ocean observing, its status, and key scientific questions and societal mandates driving observing requirements. Opportunities for new and expanded synergies among deep-ocean stakeholders will be a focus.

Primary among emerging activities will be an ongoing commitment to address deep-ocean-relevant EOVs, to mature existing observing platforms and networks, to improve standardization of- and access to deep ocean observing data and derived products. DOOS is also dedicated to the facilitation of partnerships, collaborations, and capacity building across observing communities; including exploration endeavors, major global modelling groups, seafloor mapping, and the private sector.

Future deep-ocean observing will benefit from improved integration across disciplines and sectors, achieved through demonstration projects, and facilitated through reuse and repurposing of existing deep-sea data. The Townhall will highlight examples of, and seek input related to, existing and emerging deep-sea observing methods and technologies, noting key challenges associated with data use, preservation, standardization, and accessibility.