

Data Sharing Tools for the Southern Ocean Observing System

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The Southern Ocean Observing System (SOOS) faces many of the same data challenges as research communities in other parts of the globe. To better understand the processes at play in the Southern Ocean, we need to collate datasets that are currently scattered across the world's data repositories. In addition, the size and remoteness of the Southern Ocean means that international cooperation in collecting observations is particularly important. At SOOS, we are developing a number of data sharing projects to bridge the existing gaps in collaboration and data sharing infrastructures.

In this poster, we will share our experiences in developing DueSouth: A Database of Upcoming Expeditions to the Southern Ocean - a publicly editable spatial database of voyage and project plans. We will also present SOOSmap, which publishes well-curated circumpolar datasets for users to explore and download. Finally, we will discuss plans to federate searching for individual datasets across the world's data repositories.

Collectively, these developments provide a comprehensive suite of tools for collaboration, from field planning, through data sharing and discovery, to collating the data so that it can be used to identify gaps in ocean observations that can inform the design of the next generation of ocean observing projects. These SOOS data initiatives may be of interest to our colleagues facing similar challenges in other geographic regions and scientific disciplines.