



Accessing and using the evolving OneArgo data stream

As implementation of OneArgo continues, the data stream is evolving to accommodate the BioGeoChemical (BGC) Argo and Deep Argo Missions, which include a suite of new BGC sensors as well as temperature and salinity profiles to full ocean depth, respectively. It is critical for Argo to share with the ocean prediction community how to access these data and how to understand and interpret the various parameters and associated timeliness and quality control, in order to make optimal use of the new data stream. Unlike CTDs, BGC sensors usually require initial adjustments to the data before they are used for scientific purposes. After this adjustment, typically between 6 - 8 weeks after deployment, it is possible to access good quality dissolved oxygen, nitrate, pH, chlorophyll, backscatter and incoming solar radiation data and their uncertainties in near-real time (often less than 12 hours). To facilitate use, BGC parameters measured by different sensors at different levels are merged into 'synthetic' profiles on the Argo GDACs. Quality Controlled dissolved oxygen data are already on the GTS, and nitrate, pH, chlorophyll and 700nm backscattering data will soon be available on the GTS in newly approved BUFR sequences for OneArgo data. Deep Argo floats deliver profiles of temperature, salinity, and sometimes dissolved oxygen with maximum depth in the range between 4000 and 6000 dbar depending on float type and location. For technical reasons, one of the Deep Argo float models currently records data during descent, which results in a ten day delay of delivery for the deep profile. This poster will explain how to identify descending profiles as well as the ones with dissolved oxygen data, which are currently measured during ascent, and thus available within 12 hours. It is important to note that the OneArgo dataset is a living dataset that changes over time and there is a requirement to regularly refresh your data to take advantage of revised data that have benefited from additional quality control. Guidelines will be shared on timing refresh rates in order to minimize errors and bias in your OneArgo data collection. The expansion of Argo into biogeochemical parameters and the full depth ocean in near real time has the potential to vastly improve ocean prediction as core Argo data have done over the past 20 years. The first step is understanding how to access and properly use the OneArgo datastream.

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