

SOCOM AMT28 POC

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Sample collection

Near-surface samples from SOCOM CTD stations were taken for POC/PON analysis. Volume filtered was 1-2 L, and filters used were GF/F 25 mm diameter. Filters were immediately stored at -80°C on the ship and in the lab. Samples were shipped and analyzed at the Aluwihare Laboratory at SIO/UCSD.

More information on the cruise are available at:

<https://socom.princeton.edu/content/shipboard-data-reports>

Analysis description

The POC and PON samples were acidified to get rid of inorganic carbon and nitrogen. A DOC/DON adsorption blank, to account for contamination and dissolved organic carbon (DOC) and nitrogen (DON), was taken during sampling by stacking two filters in the filtration funnels and filtering the sample as normal. The upper filter will be the total (dissolved and particulate) organic carbon and nitrogen sample and the bottom filter will be the DOC/DON adsorption blank. The organic carbon and nitrogen from the DOC/DON adsorption blank was removed from the concentration of the total filters to retrieve particulate organic carbon (POC) and nitrogen (PON). Their stated detection limit is 100 µg carbon.

Abbreviations

DOC: Dissolved Organic Carbon

DON: Dissolved Organic Nitrogen

POC: Particulate Organic Carbon

PON: Particulate Organic Nitrogen