

SOCCOM PS117 POC

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October 21, 2019

Sample collection

Near-surface samples from SOCCOM 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 UC Davis stable isotope facility.

POC and PON wet blanks for stations 19, 21 and 54 were high and suspect. The samples from these stations were not reported.

More information on the cruise are available at:

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

Other names for this cruise: A12, ORCHESTRA

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 ug carbon.

Abbreviations

DOC: Dissolved Organic Carbon

DON: Dissolved Organic Nitrogen

POC: Particulate Organic Carbon

PON: Particulate Organic Nitrogen