

SOCCOM Gough Island POC

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Sample collection

Near-surface samples from SOCCOM CTD stations were taken for POC & PON analysis. 1-2 L of sample was filtered in the dark through glass fiber filter (GF/F) having a diameter of 25 mm. Filters were immediately stored in aluminium foil packages in a liquid nitrogen Dewar (-80 °C). Samples were shipped and analyzed at UCSB.

More information on the cruise are available at:

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

Analysis description

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).

All samples (including blanks) were acidified to get rid of inorganic carbon and nitrogen.

Analysis were performed Nov 7, 2017 by Georges Paradis (georges.paradis@ucsb.edu) following the method described at <http://msi.ucsb.edu/services/analytical-lab/chn-analysis>.

Abbreviations

DOC: Dissolved Organic Carbon

DON: Dissolved Organic Nitrogen

POC: Particulate Organic Carbon

PON: Particulate Organic Nitrogen