

SOCCOM IN2015_V01 SOTS POC

Nils Haëntjens¹, Emmanuel Boss¹, and Lynne Talley²

¹University of Maine, ²Scripps Institution of Oceanography

March 1, 2018

Sample collection

Near-surface samples from SOCCOM CTD stations were taken for POC/PON analysis. Volume filtered varied from 1 to 2 L to achieve maximum loading without blockage. Filters used were GF/F 25 mm diameter.

More information on the cruise are available at:

<https://soccom.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).

Analysis were performed by Dr Thomas Rodemann at the Central Science Laboratory, University of Tasmania, using a Thermo Finnigan EA 1112 Series Flash Elemental Analyser, following the method described at:

<http://www.utas.edu.au/research/central-science-laboratory/facilities/elemental-analyser>

Abbreviations

DOC: Dissolved Organic Carbon

DON: Dissolved Organic Nitrogen

POC: Particulate Organic Carbon

PON: Particulate Organic Nitrogen