

SOCCOM AU1603 K-Axis HPLC

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Sample collection

Near-surface samples from SOCCOM CTD stations were taken for HPLC analysis. Clean transfer from the niskins (<210 µm to remove zooplankton) to a closed dedicated filtration rig. The samples were size fractionated in: total and <20 µm. 20% of the filter area was removed for biogenic silica digest. Volume filtered varied from 1 to 2 L, the choice being dependent on CTD transmissometer and underway CO₂ data to achieve maximum loading without blockage. Filters used were GF/F 13 mm diameter.

More information on the cruise are available at:

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

Analysis method

Analysis was performed by Karen Westwood (karen.westwood@aad.gov.au) at the Australian Antarctic Division following the methods of Wright et al. 2010.

Reference

Simon W. Wright, Rick L. van den Enden, Imojen Pearce, Andrew T. Davidson, Fiona J. Scott, Karen J. Westwood. Phytoplankton community structure and stocks in the Southern Ocean (30–80°E) determined by CHEMTAX analysis of HPLC pigment signatures, *Deep Sea Research Part II: Topical Studies in Oceanography*, Volume 57, Issues 9–10, 2010, Pages 758-778, ISSN 0967-0645, <https://doi.org/10.1016/j.dsr2.2009.06.015>.