

The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES)

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The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) is an interdisciplinary investigation to improve understanding of Earth's ocean ecosystem-aerosol-cloud system. Specific overarching science objectives for NAAMES are to (1) characterize plankton ecosystem properties during primary phases of the annual cycle and their dependence on environmental forcings, (2) determine how these phases interact to recreate each year the conditions for an annual plankton bloom, and (3) resolve how remote marine aerosols and boundary layer clouds are influenced by plankton ecosystems. Four NAAMES field campaigns were conducted in the western subarctic Atlantic between November 2015 and April 2018, with each campaign targeting specific seasonal events in the annual plankton cycle. A broad diversity of measurements were collected during each campaign, including ship, aircraft, autonomous float and drifter, and satellite observations. This presentation will provide an overview of NAAMES, its experimental design, measurements, and early results.