Table 2-1. *Summary of NAAMES Level 1 Mission Requirements*

Baseline Mission Requirements	Threshold Mission Requirements
a. Conduct ***four*** field campaigns between 2015 and 2019 in the plankton bloom-forming region of the North Atlantic.	a. Conduct ***two*** field campaigns between 2015 and 2019 in the plankton bloom-forming region of the North Atlantic.
b. Acquire science data on plankton stocks and rate processes and biogenic aerosols from ship-based and aircraft measurements during each field campaign.	b. Same as baseline.
c. Acquire in situ autonomous science data on plankton properties using optical instruments on profiling floats deployed during each field campaign.	c. Acquire in situ autonomous science data on plankton properties using optical instruments on profiling floats ***provided solely through non-NAAMES floats deployed as part of the international BioArgo consortium.***
d. Measure plankton properties (see Table 3-2 for a summary of the NAAMES targeted Ocean Ecosystem Measurements) during the four primary ecosystem states of the annual cycle (Fig. 1-2), with each of the four campaigns targeting a specific ecosystem state.	d. Same as baseline, ***but extend duration of each campaign and target two ecosystem states during each deployment***.
e. Sample above-water aerosols and in-water aerosol precursors during the four primary ecosystem states of the annual cycle (Fig. 1-2), with each of the four campaigns targeting a specific ecosystem state. (See Table 3-3 below for a summary of the NAAMES targeted Aerosol-Related Measurements).	e. Same as baseline.
f. Measure plankton, aerosol, and cloud properties at different locations to assess spatial variability during the four primary ecosystem states of the annual cycle (Fig. 1-2). (See Table 3-1 below for a summary of the NAAMES targeted Airborne Remote Sensing Measurements.)	f. Same as baseline, ***except without the 4STAR aircraft instrument***.
g. Use satellite observations to assess spatial and temporal variability in plankton and aerosol properties across the subarctic Atlantic basin	g. Same as baseline.
h. Compare contemporary ocean ecosystem and aerosol model results to NAAMES ship, aircraft, and autonomous measurement data and satellite remote sensing data.	h. Same as baseline.
i. Record, validate, publish, and deliver science data and calibrated geophysical data products to the science community. Archive data on NASA DAAC.	i. Same as baseline.