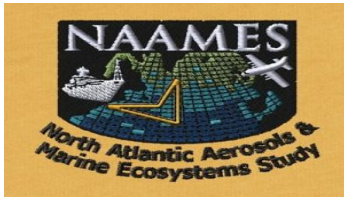


NAAMES Mission

14th April, 2018



In a first, NASA is conducting a study of the world's largest phytoplankton bloom in the North Atlantic, named the North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) mission, to see how the tiny sea critters influence the climate in every season.

- It is the first research mission to conduct an integrated study of all four distinct phases of the world's largest phytoplankton bloom.

About NAAMES Mission:

- The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) is an interdisciplinary investigation resolving key processes controlling marine ecosystems and aerosols that are essential to our understanding of Earth system function and future change.
- NAAMES is funded by the NASA Earth Venture Suborbital Program and is the first EV-S mission focused on studying the coupled ocean ecosystem and atmosphere.
- NAAMES consists of four, combined ship and aircraft field campaigns that are each aligned to a specific event in the annual plankton lifecycle.

Scientific objectives:

The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) studies the world's largest plankton bloom and how it gives rise to small organic particles that leave the ocean and end up in the atmosphere, ultimately influencing clouds and climate.

Background:

The North Atlantic plankton bloom is among the most conspicuous biological events annually recorded by satellite ocean color measurements, yet even fundamental controls on the bloom's magnitude and interannual variability are controversial. The bloom climax is one event within an annual plankton cycle that essentially oscillates between a decreasing-biomass phase beginning in the summer and an increasing-biomass phase beginning in Winter-Spring and ending with the bloom climax in Spring.

Significance of the mission:

NAAMES is a five year investigation to resolve key processes controlling ocean system function, their influences on atmospheric aerosols and clouds and their implications for climate. Observations obtained during four, targeted ship and aircraft measurement campaigns, combined with the continuous satellite and in situ ocean sensor records, will enable improved predictive capabilities of Earth system processes and will inform ocean management and assessment of ecosystem change.

To be looked in UPSC Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology.