

PACE

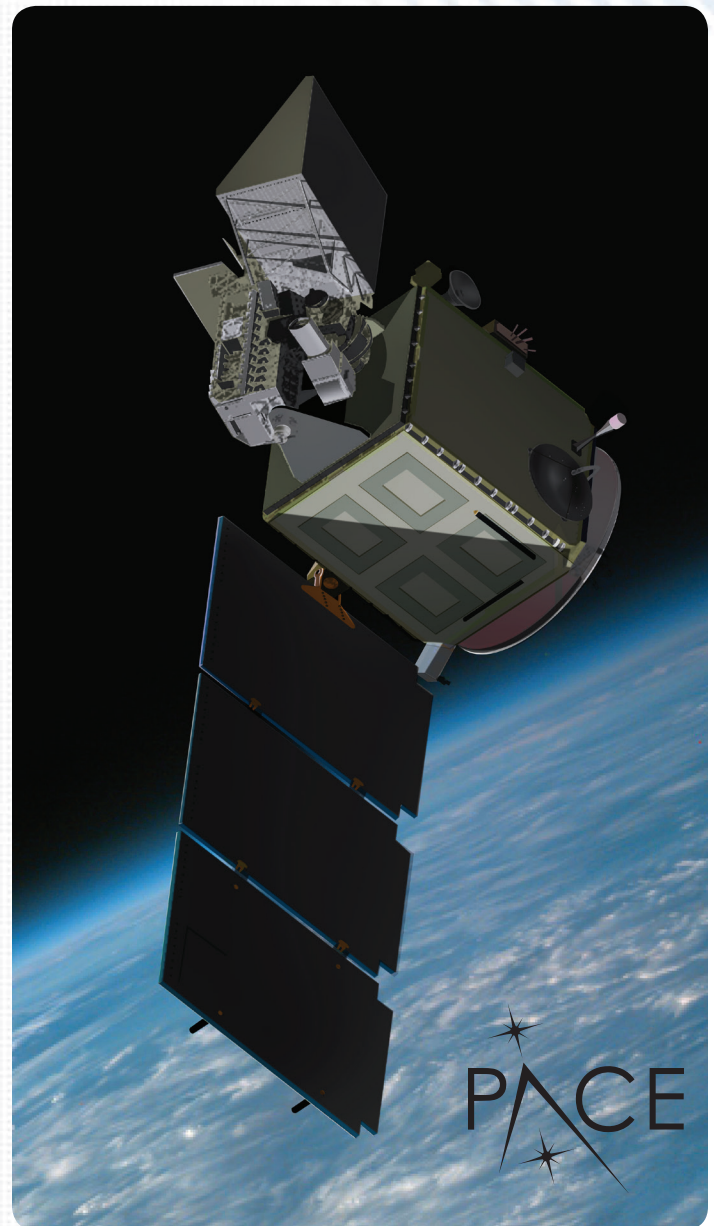
PLANKTON, AEROSOL, CLOUD, OCEAN ECOSYSTEM

The purpose of NASA's Plankton, Aerosol, Cloud, ocean Ecosystem mission is to further ocean health assessment by measuring the distribution of phytoplankton, tiny plants, and algae. PACE will also measure atmospheric variables that affect our climate and air quality.

The Goddard Space Flight Center (GSFC) is responsible for the spacecraft design and fabrication, as well as the scientific instrumentation. The PACE science instruments include: **1)** the Ocean Color Instrument (OCI) spectrometer designed to measure sunlight interaction with particles in seawater over a hyperspectral range extending from 350nm to 865nm with multispectral infrared channels extending from 940nm out to 2260nm, and **2)** a Multi-angle Polarimeter radiometer designed to measure sunlight polarization to determine how it is affected by clouds, aerosols, and the ocean.

The Space Dynamics Laboratory (SDL) is proud to participate on the PACE team. SDL's primary role is to design, fabricate, and test the SWIR AFT-optics and detectors for the OCI instrument.

SDL has extensive experience flying space-qualified cameras, optical sensors, and electronics, including the Wide-field Infrared Survey Explorer instrument, the OCAMS camera suite for the Origins Spectral Interpretation Resource Identification Security Regolith Explorer (OSIRIS-REx) mission, and the FUV and MIGHTI CCD detectors on the Ionospheric Connection Explorer (ICON).



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