

PACE mission update

to the SAT on 11 December 2020

Mission

- Launch to be slipped 7-10 months from current plan of Mar 2023
 - Oct 2023 to Jan 2024
 - Still being evaluated
 - Final decision by HQ will not be until March-ish 2021

Ocean Color Instrument

- Engineering test unit (ETU) calibration campaign underway
 - Red spectrograph + SWIR detection assembly (SDA)
- SDA in thermal vacuum chamber, currently being pumped down
 - ETU at GSFC
 - Flight unit at vendor (SDL, Utah)
- Flight focal plane array (FPA) and data acquisition unit (DAU) assemblies continue to progress

Multi-angle polarimeters

- SPEXone
 - Calibration readiness review held last week (proceed to final calibration)
 - A pre-Pre-Ship Review (PSR) to be held in early Jan 2021
 - Instrument delivery in Feb 2021
 - Project working with SRON on video/outreach to showcase delivery
- HARP2
 - Coating of flight front lens completed; ready for assembly into front lens housing
 - ETU boards completed thermal vacuum; testing indicates current design can be used for flight with no further changes
 - Prism verification completed and ready for flight
 - Instrument delivery in Q4 of 2021

Spacecraft

- Propulsion team received & inspected flight thrusters
- Guidance, Navigation, & Control (GNC) team received & inspected the magnetometer, sun sensors, GPS, & inertial reference unit
- General assembly & integration continues to progress – power system electronics, transponders, etc.

Project Science + SDS

- Starting threshold data product generation & validation demonstration
 - OCI, heritage algorithms
 - Baselining throughput, computation requirements, file sizes
 - Provide foundation for moving to advanced algorithms (OCI + POL)
- Continuing OCI simulated data development
- Continuing OCI Level-1B calibration & geolocation software development, plus Level-1C code for OCI, SPEXone, and HARP2
- Algorithm & data product development, refinement, & evaluation
 - ZTT, AVW, Café, & SPEXone aerosols all initiated SDPS process

Applications

- Applications Capabilities Matrix (ACM) live
 - https://pace.oceansciences.org/app_matrix.htm
- Applications Workshop recordings online
 - https://pace.oceansciences.org/app_workshops.htm
- Ongoing interactions with EAs, SAT members, SBG, NOAA, others

Communications

- Social media rebranding ongoing
 - @NASAOcean on Facebook, Instagram, & Twitter; owned by OBPG/PACE
 - @NASAAtmosphere & others will also highlight PACE
- New content development ongoing
- Ideas & news welcome from the SAT
 - Sara (Communications Coordinator): sara.e.blumberg@nasa.gov
 - Annette (Web): avdecharon@gmail.com



happy holidays everyone

clouds, aerosols, Sun glint, wind, land, coastal ocean, open ocean ... what more could a SAT'er want?