

# **OBDAAC Seasonal News and Updates**

Spring 2024



## PACE Mission Update

The NASA's Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission celebrated a successful launch on Feb. 8, 2024! All instruments have been brought online and final health and safety checks have completed. The mission officially entered its operations phase.

The scientific data is scheduled to be released to the public on April 11th, 2024.

# Spring Events

NASA Earthdata webinar: Keeping PACE: Introduction to PACE Mission, Products, and Data Discovery March 27, 2024

Online More Information

**PACE data release** April 11, 2024 Online

Openscapes Champions Cohort April 03-May 29, 2024 Online More Information

OBDAAC UWG Meeting May 29-30, 2024 NASA GSFC

## **Using Ocean Color Data**

Data tutorials offered by NASA's Ocean Biology Distributed Active Archive Center (OBDAAC) are carefully crafted to provide valuable users with comprehensive guidance and insights into the capabilities and applications of satellite-derived ocean color data.

These tutorials cover a range of topics, from basic concepts of ocean color remote sensing to advanced data processing techniques, making them beneficial to users with varying levels of expertise. Each tutorial provides step-by-step instructions and hands-on exercises, allowing users to learn at their own pace and gain practical experience working with ocean color data.



The focus on practicality and usability in each tutorial empowers users to harness the full potential of ocean color data for scientific research, environmental monitoring, and decision-making purposes. By providing access to these tutorials, OBDAAC aims to support and enhance the capabilities of the ocean color research community, fostering collaboration and innovation in the field of marine science.

#### **ATBDs on APT**

The OB.DAAC Chlorophyll Algorithm Theoretical Basis Document (ATBD) is now available online for viewing, citation, and download in the Earthdata Algorithm Publication Tool.



#### Data in the Cloud

PACE is the first cloud-native mission at OB.DAAC! Users will be access data via <u>NASA Earthdata</u> <u>Search Client</u>. Look for the cloud icon next to the collection to know whether it is a dataset that is in the cloud or on-premise at the data provider.



### **NASA Openscapes**

OBDAAC joined <u>NASA Openscapes</u> community to support users using data from NASA Earthdata served from the Distributed Active Archive Centers (DAACs) as we migrate workflows to the cloud.



### **PACE** Mission

#### Charting Earth's Future, One Plankton at a Time

The Plankton, Aerosol, Cloud, and ocean Ecosystem (PACE) mission represents a groundbreaking initiative in Earth observation, poised to revolutionize our understanding of marine ecosystems and atmospheric processes. Central to the mission's capabilities are three advanced sensors: the Ocean Color Instrument (OCI), the Hyper-Angular Rainbow Polarimeter (HARP2), and the Spectropolarimeter for Planetary Exploration (SPEXone).

Together, these sensors enable PACE to address a wide range of scientific objectives, from monitoring ocean health and biodiversity to investigating aerosol-cloud interactions and their impact on climate. Combining data from the three instruments enables PACE to provide a comprehensive view of Earth's oceans and atmosphere, offering unprecedented insights into key environmental processes and their interconnectedness. Through its observations, PACE facilitates advancements in climate modeling, weather forecasting, and environmental management, contributing to our ability to address pressing challenges such as climate change, air pollution, and ecosystem degradation.

In essence, the PACE mission represents a transformative leap forward in Earth observation capabilities, leveraging state-of-the-art sensors to unlock the secrets of our planet's interconnected systems. With its focus on understanding and protecting Earth's oceans and atmosphere, PACE paves the way for informed decision-making, sustainable resource management, and the preservation of global environmental health for generations to come.



**The blue marble from PACE rhos data** Credit: Daniel Knowles, NASA OB.DAAC



PACE launch on February 8, 2024 in Kennedy Space Flight Center Credit: NASA

#### Read more about PACE:

- PACE Website
- PACE News and Events

#### **PACE Data Access**

OB.DAAC provides a comprehensive collection of ocean color data within the NASA Earthdata Search tool.

Earthdata Search

The NASA Common Metadata Repository (CMR) API provides access to a wide range of Earth science data, including ocean color data curated by OB.DAAC.

#### ➡ <u>CMR API</u>

The NASA Ocean Color website offers multiple avenues for accessing ocean color data, providing users with a variety of options to suit their specific needs.

The "Data" section serves as a centralized hub where users can explore available datasets, OB.DAAC tools, and data resources related to ocean color research.

Ocean Color Website