

**Breakout Workshop:**

The Value of Ocean Color for the Benefit of Society:
status and change in water quality and ecosystems

Co-Chairs:

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Description:

How do we enhance the value of ocean color to applications for the benefit of society? While the world's oceans are characterized by their relative inaccessibility, satellite observations provide both focused and synoptic views of this expansive realm. Though we are arguably data rich, a challenge still remains to ease the conceptualization and synthesis of data for the purposes of user accessibility and decision making. In this session, we explore how to leverage new capabilities in technology and algorithm development, while simultaneously working to help provide end-users with actionable knowledge, not simply data. In the age of open science, advanced institutional capacity should be exploited to maximize data accessibility, increase visualization, and create tools to better help our communities learn from and connect with data streams that impact their lives. We intend to probe the workshop participants for stories of successes and failures in this endeavor, and establish priorities for increasing the widespread usability of information derived from ocean color and associated synergistic measurements.

Included in this session is increasing the science community's awareness of the barriers to using Earth observations (EO) for water quality monitoring at the state and local level. Invited speakers will present on their water quality activities and information needs to the audience of aquatic scientists. Presentations will be followed by interactive discussion enabling information exchange among assembled water quality users, EO scientists, and data providers.

The anticipated outcome of the session is a refined set of recommendations to space (and companion) agencies for providing data, information and knowledge from the perspective of the downstream applications communities, but which may also benefit from the interpretations of ocean color expert users and satellite scientists. With a clearer picture of user needs, agencies can allocate resources to optimize the value of space missions.

Objectives:

1. Increasing the science community's awareness of state and local user needs and barriers to Earth Observations for water quality monitoring.

2. To produce a refined set of recommendations to space (and companion) agencies for providing data, information and knowledge.

Key Questions

1. What are the challenges and proven successes in understanding and exploiting ocean color for their applications and decision making (e.g., indicator products vs data products?)
2. What do users expect for data interoperability, uncertainty reporting,
3. What current gaps exist within user needs? (e.g., desires for cross-platform blended observational capabilities? desires of water quality managers?)