



ECOSYSTEM DYNAMICS AND CLIMATE CHANGE: APPLICATIONS OF OCEAN COLOUR DATA

Co-Chairs: Cara Wilson (NOAA/NMFS) and Paul DiGiacomo (NOAA/NES-DIS)

The three invited talks were designed to give an overview of the applications of ocean colour data over the full suite of timescales – retrospective analyses, near real-time monitoring, and, forecasting and predictions – relative to ecosystem dynamics and climate change.

Our overarching goal is to apply scientific knowledge and lessons learned from ocean colour radiometry data to improve ecological assessments, monitoring and forecasts along all of these timescales.

Specific questions:

1. What are the gaps/issues in our scientific knowledge, and/or underpinning observing system and modeling capabilities, relative to the above goal.
2. Are there specific challenges or obstacles that affect our ability to address these specific gaps and issues? How can/should these be addressed? By whom?
3. What are the key priorities relative to addressing these gaps and challenges?
4. What are some success stories that we can use to better promote the utility of ocean colour, and the need to sustain but more so improve our existing/planned OCR capabilities?

- 08:45-09:15** **What can we say about long-term changes in the ocean ecosystem as observed from space?**
David Antoine (LOV)
- 09:15-09:45** **What have we learned about harmful algal blooms from ocean colour data?**
Raphael Kudela (U. California, Santa Cruz)
- 09:45-10:15** **What are the challenges and opportunities for using ocean colour data for ecological forecasting?**
Marion Gehlen (LSCE/IPSL)
- 10:15-12:00** **Discussion, moderated by the co-chairs**