

Breakout Workshop #4

Remote Sensing of Inland and Coastal Waters: Current Status, Challenges, Research Priorities, and End-User Engagement

COMMUNITY DISCUSSION - 2

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Co-Chairs:

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Q2. Bio-Optical Modeling

Q2A. What is the best approach for applying algorithms to lakes?

- ❖ Lake-specific algorithms?
- ❖ Global algorithms?
- ❖ Water-type specific algorithms?

Q2. Bio-Optical Modeling

Q2B. What is the optical diversity of inland water systems and scale of variation in Inherent Optical Properties (representativeness of datasets)? Has this been captured?

- ❖ How do AC and BGC retrieval algorithms perform under different conditions and what are their limits?
- ❖ Challenges moving forward to globally applicable algorithms

Q2. Bio-Optical Modeling

Q2C. Commonalities and differences in optical properties between inland and coastal waters

- ❖ Is there demand for a continuum of water quality products (source to sink)?

Q2. Bio-Optical Modeling

Q2D. How do we go forward with extreme environments?

- ❖ Validation of cyanobacteria flags required
- ❖ Dedicated algorithms to preserve high quality retrievals from normal ('non-extreme') environments

Q2. Bio-Optical Modeling

Q2E. What water products do we need and how do these map onto existing and forthcoming capability (algorithm and platform)?

- ❖ How mature are the current in-water and atmospheric correction algorithms over inland and near-shore waters (need for new algorithms)?
- ❖ Do we have the data sets to test these ideas?