

Development of datasets and algorithms for hyperspectral IOP products from the PACE ocean color measurements

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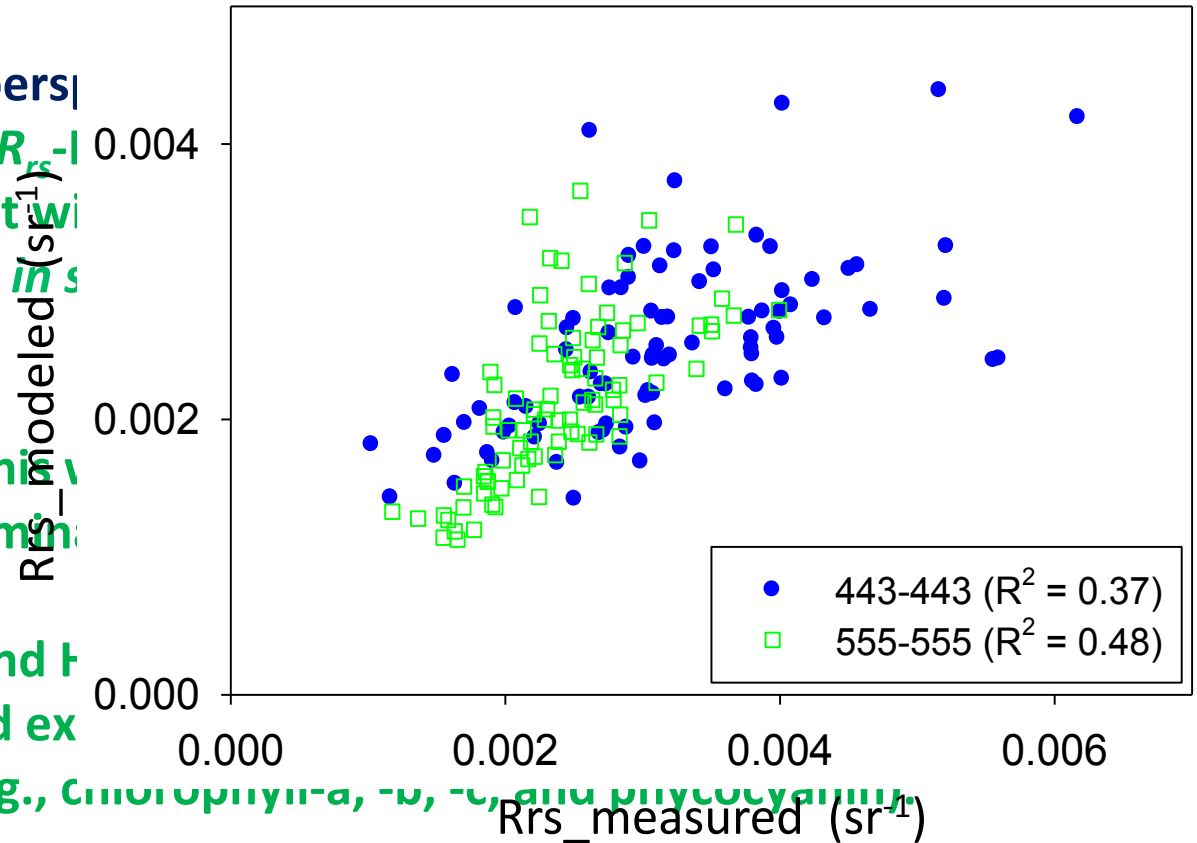
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Objectives:

a. Development of a hyperspectral (5 nm resolution) R_{rs} -1 particular, this dataset will be used to validate the modeled R_{rs} using in situ closure (HyRIDc).

b. Algorithm revision. This will include:
i) improve the determination of R_{rs} in water bodies,
ii) extend the QAA and H10 to UV (350-400 nm) and extract specific pigments (e.g., chlorophyll-a, -b, -c, and phycocyanin).



c. Test and evaluation of the revised algorithms with HICO measurements.

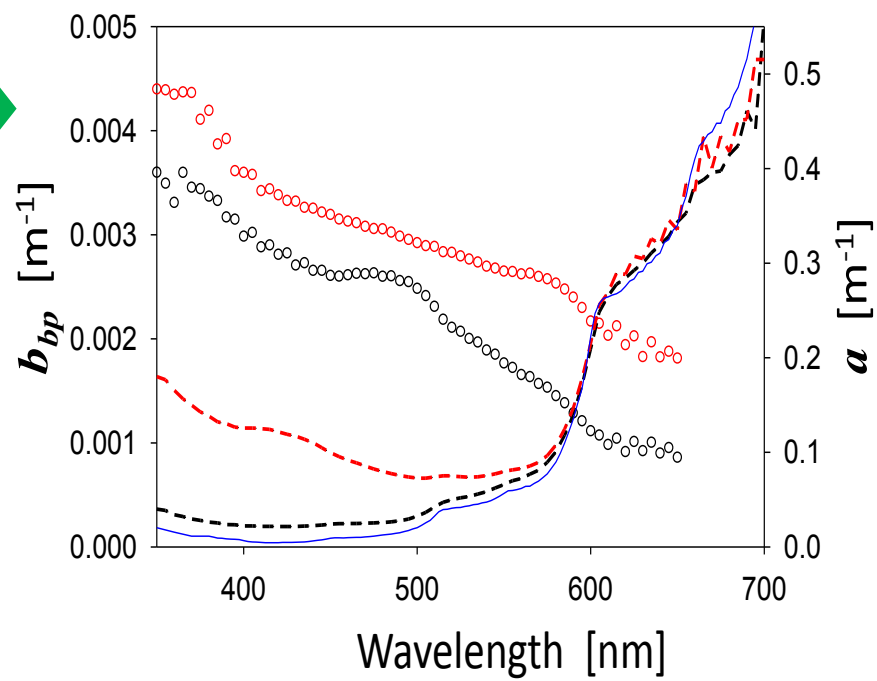
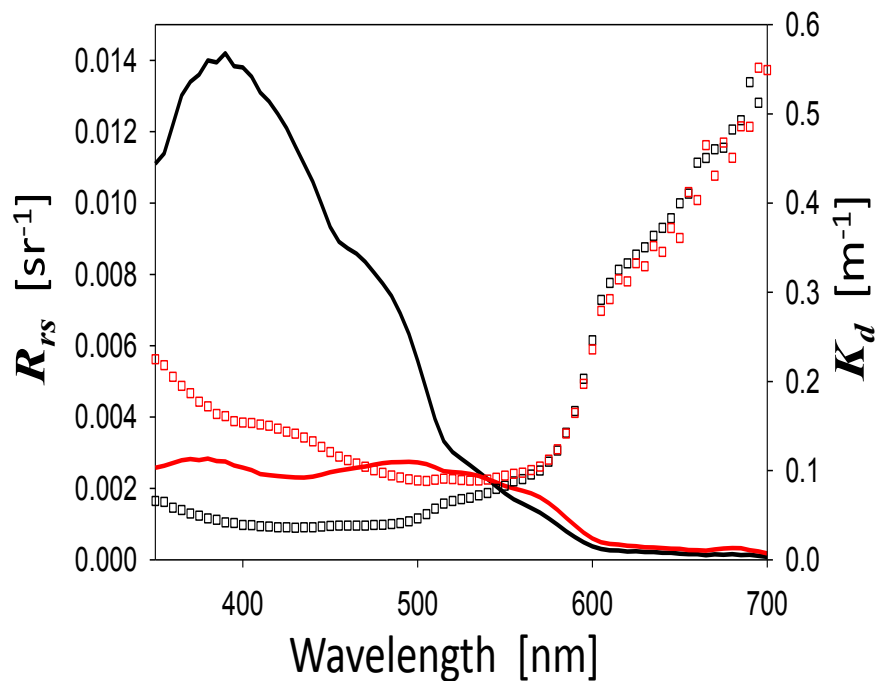
Results from these efforts will provide desired tools and knowledge, and contribute to "*consensus and community-endorsed paths forward for the PACE sensor(s)*".

Approach for HyRIDc :

$$R_{rs} = f(a \ \& \ b_b)$$

$$K_d = m_0 a + \nu b_b$$

(R_{rs}, K_d)  $(a \ \& \ b_b)$



Relevant recent results:

