A report from a community-lead spectral absorption workshop to update the NASA Inherent Optical Properties Protocol for measuring particle absorption

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The “NASA Ocean Optics Protocols for Satellite Ocean Color Validation” are community-vetted

protocols that were first synthesized as part of the Sensor Intercomparison and Merger for Biological and Interdisciplinary Studies (SIMBIOS). This standard set of protocols, when followed explicitly, provides community-wide measurement consistency and accuracy that are necessary for minimizing measurement and data processing errors in multi-mission satellite algorithm development and validation. The protocols are living documents with topics separated into different volumes so each could be revised independently as standards and technology improve over time. However, the last revision to the protocols was in 2003 and, as such, they are due for an update. One of the overarching goals of the NASA Ocean Ecology Laboratory Field Support Group (FSG) is the revision and distribution of community-vetted protocols for in situ data collection, processing and analysis. To this end, the NASA FSG hosted an absorption workshop June 11-13 2014 at NASA Goddard Space Flight Center, bringing together an international collaboration of spectral absorption experts. The workshop focused on spectral particle absorption and updating the protocols used to separate its phytoplankton and detrital spectral components. The ultimate deliverable will be a revised version of the Inherent Optical

Properties Protocol (IOP; Revision 4, Vol. IV, 2003) that includes both liquid and filter pad techniques for measuring spectral particle absorption. The revised protocol will be made publicly available upon completion.

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