## Workshop on the Validation of Satellite-derived Optical and Water Quality Parameters for Coastal and Inland Waters 7-9 June 2022

## **Program**

Tuesday 7 June		
08:30-09:00	Registration	
09:00-09:15	Welcome – Brad Pierce, Director, Space Science and Engineering Center Logistics – Steve Greb	
09:15-09:30	Defining Scope of Validation Activities and Workshop, Leads – Steve Greb and Colleen Mouw	
09:30-10:15	Review and Assessment of Current Validation Efforts, Lead – Steve Greb  Menghua Wang, NOAA  Juan Ignacio Gossn, EUMETSAT  Arnold Dekker, Australian AquaWatch	
10:15-10:45	Coffee and Tea Break	
10:45-12:00	Future Validation Needs of User Groups / Target Levels for Uncertainties, Lead – Wilson Salls  Presentations, followed by Panel Discussion:  Emily Smail, NOAA / U Maryland / GEO AquaWatch Agency and Public Needs / Confidence Level in Applications Dulcinea Avouris, UC Merced Research and Science Needs Jeremy Werdell, NASA Goddard Space Flight Center New Mission Needs Philipp Saile, Federal Inst. of Hydrology, Germany	
12:00-13:00	Lunch Guest speaker: <b>Richard Lathrop</b> , Center for Limnology, UW-Madison, History of Madison Lakes	

13:00-14:00	Field Measurements, Lead – Giuseppe Zibordi  Priority optical, biogeochemical & ancillary quantities Instrumentation Radiometry protocols Calibration (implying traceability) & characterization Quality assurance & quality control Uncertainties	
14:00-15:00	Breakout Session I  A Step Toward Standardization of Measurements. Finalization of recommendations for minimum/compulsory:  Field measurements; Instruments specifications and requirements; Instruments calibration and characterization; Measurement protocols and data processing; Quality assurance of measurements and quality control of products; Uncertainty estimate; Inter-calibrations and inter-comparisons.  And time permitting on:  Generic field measurement requirements; Requirements for matchups construction; Revision/update and translation of current protocols.	
15:00-15:30	Coffee and Tea Break	
15:30-16:30	Report-outs, Discussions, and Recommendations	
16:30-17:30	Possible Instrument Demo, Pontoon Boats	
18:00-20:00	Outdoor Picnic Mixer	
Wednesday 8 June		
08:30-09:00	Coffee and Tea Break, Daily Check-in, Agenda Repair	

	Laboratory Measurements, Lead – Bridget Seegers
	Topics:
09:00- 10:00	Instrumentation Calibration Standardization of methods Quality assurance, quality control and processing Priority variables, minimum/desired essential optical and biogeochemical parameters Uncertainty
	Speakers:
	Joaquin Chaves, NASA Ocean Ecology Lab, Lessons Learned from Experience Coordinating Protocols Joan Albert Sánchez Cabeza, ICML, Universidad Nacional Autónoma de México (UNAM), REMARCO Network Lachlan McKinna, Go2Q, Impacts of Measurement Uncertainty
10:00-10:30	Coffee and Tea Break
10:30-11:30	Breakout II  Priority variables How to ensure lab protocol standardization Quality control/assurance: How? Who? Uncertainty considerations
11:30-12:00	Report-out, Discussion, Recommendations
12:00-13:00	Lunch
13:00-14:00	Walking tour of nearby native American effigy mounds
14:00-15:00	Global Databases, Lead – Nima Pahlevan  Current archives Data quality assessment Accessibility Product specification / uncertainties Data formats Metadata

	Speakers:  Philipp Saile, UN/Federal Institute of Hydrology, Germany, GEMStat Adam Varley, University of Stirling, LIMNADES Violeta S. Calzado, NASA GSFC Ocean Ecology Lab/UMBC, NOMAD/SeaBASS Daniel Gurlin, GEO AquaWatch, GLORIA	
15:00-15:30	Ice Cream Social	
15:30- 16:30	Breakout III	
16:30-17:30	Report-out, Discussion, Recommendations	
17:30	Dinner on your own	
Thursday 9 June		
08:30-09:30	Working Towards a Global Validation Network, Lead – Colleen Mouw  Scope Political and institutional barriers Network coordination	
	Support and funding	
09:30-10:00		
09:30-10:00 10:00-11:00	Support and funding	
	Support and funding  Coffee and Tea Break	
10:00-11:00	Support and funding  Coffee and Tea Break  Breakout Session IV	
10:00-11:00 11:00-12:00	Support and funding  Coffee and Tea Break  Breakout Session IV  Report-out, Discussion, Recommendations	