

2017 International Ocean Colour Science Meeting

Monday 15 May 2017

- 08:30–12:30** **Plenary Session** **Auditorium I**
08:30 - 08:45 Welcoming address (*Stewart Bernard/Cara Wilson - IOCCG, Alain Ratier - EUMETSAT, Craig Donlon on behalf of Josef Aschbacher - ESA*)
08:45 – 09:30 **Keynote 1:** Imaging Earth’s ocean gardens (*Paula Bontempi, NASA*)
- 09:30 – 12:30** **Copernicus Session** (*Chair: Mark Dowell, EC-JRC*)
09:30 – 09:45 Introduction to Copernicus Programme (*Richard Gilmore, EC*)
09:45 – 10:00 OCR using Copernicus Sentinel-2 and status of Sentinel-3B (*Craig Donlon, ESA*)
10:00 – 10:15 OCR using Copernicus Sentinel-3 (*Ewa Kwiatkowska/EUMETSAT*)
- 10:15 – 10:45** **Coffee Break**
10:45 - 11:15 OC climate and carbon in CCI and Copernicus Programmes (*Shubha Sathyendranth, PML*)
11:15 – 11:30 Sentinel applications: fisheries and aquaculture (*Vanda Brotas, Univ. Lisboa*)
11:30– 11:45 Sentinel applications: monitoring harmful algal blooms (*Blake Schaeffer, EPA*)
11:45– 12:00 Sentinel applications: monitoring water quality in Africa (*Mark Matthews, Cyanolakes*)
12:00– 12:15 Sentinel OCR data access and dissemination (*S. Mecklenburg/ESA, H. Wilson/EUMETSAT*)
12:15– 12:30 Activities/plans for cal/val of the Sentinels for OCR (*Ewa Kwiatkowska, EUMETSAT*)
- 12:30 – 14:15** **Lunch Break** (Room 1: CMEMS operational use of Sentinel OCR data, *Rosalia Santoleri /CNR, Italy*)
- 14:15 – 17:00** **Breakout Workshops 1, 2 & 3**

Auditorium I Breakout Workshop 1	Auditorium II Breakout Workshop 2	Auditorium III Breakout Workshop 3
Hyperspectral Remote Sensing (<i>Ryan Vandermeulen, Kevin Turpie</i>)	<i>Trichodesmium</i> Detection from Space (<i>Cecile Dupouy, Ajit Subramaniam, Lachlan McKinna</i>)	Vicarious Calibration (<i>Constant Mazeran, Christophe Lerebourg, Sean Bailey</i>)
14:15–14:23 Introduction (<i>S. Craig</i>)	14:15-14:25 Introduction	14:15-14:25 On-going SVC activities (<i>C. Mazeran, C. Lerebourg, S. Bailey</i>)
14:25–14:33 Phytoplankton diversity (<i>Astrid Bracher</i>)	14:25-14:45 BGC modelling (<i>Stephanie Dutkiewicz</i>)	14:25–14:35 HYPERNAV concept (<i>Andrew Barnard</i>)
14:35–14:43 Hyperspectral applications (<i>Heidi Dierssen</i>)	14:45-14:55 <i>Trichodesmium</i> abundance (<i>Sara Rivero-Calle</i>)	14:35–14:45 HARPOONS concept (<i>Sean Bailey</i>)
14:45–15:10 Discussion	14:55-15:25 Discussion	14:45–14:55 MOBY-NET concept (<i>Kenneth Voss</i>)
15:10–15:18 Atmospheric correction (<i>Francois Steinmetz</i>)	15:25-15:45 Break	14:55–15:05 BOUSSOLE concept (<i>David Antoine</i>)
15:20–15:28 Atmospheric correction of HICO data (<i>Amir Ibrahim</i>)	15:45-15:55 IOP/AOP overview (<i>Cecile Dupouy, Lachlan McKinna</i>)	15:05-16:00 High level requirements
15:30 – 15:55 Discussion	15:55-16:05 Passive RS (<i>L. McKinna</i>)	16:00-16:30 Operational requirements
15:55 – 16:13 Feasibility study for hyperspectral sensor (<i>Arnold Dekker</i>)	16:05-16:15 Freshwater blooms (<i>Ronghua Ma</i>)	16:30-17:00 Recommendations
16:15 – 16:40 Open discussion	16:15-16:25 Hyperspectral atmospheric correction (<i>Amir Ibrahim</i>)	
16:40 – 17:00 Final discussion	16:25-17:00 Discussion	

17:00 – 18:45 **Poster Session I**

19:00 - 20:30 **Ice Breaker at Pavilhão de Portugal**

Tuesday 16 May 2017

08:30–12:00	Plenary Session	Auditorium I
	08:30 - 09:15	Keynote 2: Dawn of satellite Lidar in oceanography (<i>Mike Behrenfeld</i>)
09:15–10:00	Space Agency Presentations (<i>Chair: Heidi Dierssen</i>)	
	09:15 - 09:30	CNES support to ocean colour science (<i>Anne Lifermann</i>)
	09:30 – 09:45	CSA update (<i>Martin Bergeron</i>)
	09:45 – 10:00	Update on JAXA GCOM-C (<i>Hiroshi Murakami</i>)
10:00 – 10:30	Coffee Break	
10:30- 12:00	Plenary Breakout Workshop Reports, Keynote 3 (<i>Chair: Andrew Tyler</i>)	
	10:30 – 10:45	Breakout workshop report: "Hyperspectral Remote Sensing"
	10:45 – 11:00	Breakout workshop report: " <i>Trichodesmium</i> Detection from Space"
	11:00 – 11:15	Breakout workshop report: "Vicarious Calibration"
	11:10 – 12:00	Keynote 3: High resolution (1-30m) optical remote sensing of processes in coastal and inland waters - new opportunities (<i>Kevin Ruddick</i>)
12:00 – 14:00	Lunch Break	<i>(In Memoriam: Chuck Trees, Motoaki Kishino, Tiffany Moisan, Bob Barnes)</i> <i>(IOCCG Task Force on Satellite Sensor Calibration - Room 1)</i>
14:00 – 16:45	Breakout Workshops 4, 5 & 6	

Auditorium I Breakout Workshop 4	Auditorium II Breakout Workshop 5	Auditorium III Breakout Workshop 6
Remote Sensing of Inland and Coastal Waters (<i>Wes Moses, Quinten Vanhellemont</i>)	Ocean Colour Algorithms for Southern Ocean (<i>Maria Vernet, Mati Kahru, David Antoine</i>)	Active Remote Sensing for Ocean Colour (<i>C. Jamet, J. Churnside, C. Hostetler</i>)
14:00–14:05 Introduction (<i>P. DiGiacomo</i>)	14:00–14:05 Welcome (<i>Maria Vernet</i>)	14:00–14:20 Introduction (<i>Cedric Jamet</i>)
14:05–14:25 Atmos. correction (<i>N. Pahlevan</i>) (<i>Nima Pahlevan</i>)	14:05-14:20 Southern Ocean chl algorithm (<i>Mati Kahru, B. Greg Mitchell</i>)	14:20–14:40 Airborne ocean profiling lidar (<i>James Churnside</i>)
14:25–14:45 Discussion	14:20-14:35 Southern ocean algorithms using Bio-Argo (<i>Emmanuel Boss</i>)	14:40–15:00 Space-borne ocean lidar (<i>Chris Hostetler</i>)
14:45–15:00 Water types (<i>Tim Moore</i>)	14:35-14:50 Backscatter: bubbles, coccolithophores etc. (<i>Heidi Dierssen</i>)	15:00–16:00 Discussion
15:00-15:15 Selection of Algorithms (<i>Evangelos Spyarakos</i>)	14:50-15:05 Panel discussion	16:00–16:45 Recommendations
15:15–15:35 Discussion	15:05-15:35 Speed talks	
15:35–15:45 Sensors (<i>Wes Moses</i>)	15:35-16:45 General discussion	
15:45 – 16:00 Discussion		
16:05–16:15 EU Water Service (<i>Carsten Brockmann</i>)		
16:15 – 16:30 AquaWatch (<i>Steve Greb</i>)		
16:30-16:45 Discussion		

16:45 – 17:45	NOAA OC Session: Science, Research & Applications from VIIRS (<i>Chair: Paul DiGiacomo</i>)
	16:45 to 17:00 Ocean colour at NOAA overview; MSL12, VIIRS, other sensors (<i>Menghua Wang</i>)
	17:00 to 17:10 OCView - monitoring tool demonstration (<i>Karlis Mikelsons</i>)
	17:10 to 17:20 Distribution - NOAA CoastWatch/OceanWatch (<i>Veronica Lance</i>)
	17:20 to 17:30 Example users, applications (NOAA and external) (<i>Cara Wilson</i>)
	17:30 to 17:45 User engagement discussion (<i>Paul DiGiacomo, Cara Wilson</i>)
17:45 - 19:30	Poster Session 2
18:30 - 19:30	AquaWatch Town Hall (Room 1)

Wednesday 17 May 2017

08:30–12:00	Plenary Session	Auditorium I
	08:30 - 09:15	Keynote 4: Resetting the baseline for phytoplankton <i>in situ</i> measurements (<i>Heidi Sosik</i>)
09:15–10:15	Space Agency Presentations (<i>Chair: Laura Lorenzoni</i>)	
	09:15 - 09:30	Korean geostationary ocean colour missions, GOCI and GOCI-II (<i>Seongick Cho</i>)
	09:30 – 09:45	CONAE: Missions and initiatives for coasts and oceans (<i>Sandra Torrusio</i>)
	09:45 – 10:00	ISRO: Ocean colour activities in India (<i>Prakash Chauhan</i>)
	10:00 – 10:15	Update on Chinese ocean colour satellite missions (<i>Zhihua Mao</i>)
10:15 – 10:45	Coffee Break	
10:45 - 12:15	Plenary Breakout Workshop Reports, Keynote 5 (<i>Chair: David Antoine</i>)	
	10:45 – 11:00	Breakout workshop report: "RS of Inland and Coastal Waters"
	11:00 – 11:15	Breakout workshop report: "Ocean Colour Algorithms for the Southern Ocean"
	11:15 – 11:30	Breakout workshop report: "Active Remote Sensing for Ocean Colour"
	11:30 – 12:15	Keynote 5: Research and applications of ocean colour radiometry in the very turbid waters of the Río de la Plata river (Argentina) (<i>Ana Dogliotti</i>)
12:15 – 14:00	Lunch Break	
14:00 – 16:45	Breakout Workshops 7, 8 & 9	

Auditorium I Breakout Workshop 7	Auditorium II Breakout Workshop 8	Auditorium III Breakout Workshop 9
Multiwater Algorithms and Performance (<i>Ewa Kwiatkowska, Bridget Seegers</i>)	Protocols for Water-Leaving Radiance and Other Parameters (<i>K. Voss, G. Zibordi, K. Ruddick, Z.Lee</i>)	Carbon in Ocean Colour (<i>Shubha Sathyendranath, François Montagner</i>)
14:00–14:05 Introduction	14:00–14:20 Review of above-water protocols (<i>Ken Voss</i>)	14:00–14:10 Introduction (<i>François Montagner</i>)
14:05–14:15 User requirements (<i>Stewart Bernard</i>)	14:20–15:15 Open discussion	14:10–14:25 POC and phytoplankton carbon (<i>Hayley Evers-King</i>)
14:17–14:27 Atmospheric correction methods (<i>Menghua Wang</i>)	15:15–15:30 Break	14:25–14:40 Dissolved carbon in the ocean (<i>Jamie Shutler</i>)
14:29–14:39 Bio-optical algorithms (<i>Daniel Odermatt</i>)	15:30–15:50 Review of in-water protocols (<i>Emmanuel Boss</i>)	14:40–14:55 A modeller's perspective (<i>Cecile Rousseaux</i>)
14:41–14:51 Algorithm performance (<i>Thomas Jackson</i>)	15:50–16:45 Open discussion	14:55–15:10 Carbon in coastal waters (<i>Hubert Loisel</i>)
14:53 – 15:03 Algorithm assessment (<i>Rick Stumpf</i>)		15:10–16:45 Discussion
15:05 – 15:20 Break		
15:20 – 16:30 Open discussion		
16:30 – 16:45 Recommendations		

16:45 – 18:30 **Poster Session 3**

18:45 **Bus transportation**

19:00 - 21:00 **Dinner at Pátio da Galé**

2017 International Ocean Colour Science Meeting

Thursday 18 May 2017

08:30–17:30	Plenary Session	Auditorium I
08:30 - 09:15	Keynote 6: Lake Colour/Environment Remote Sensing in China (<i>Ronghua Ma</i>)	
09:15–12:15	NASA OCRT Session (<i>Chairs: Paula Bontempi, Laura Lorenzoni</i>)	
09:15 - 09:45	Program update, export processes, community Q&A (<i>Paula Bontempi</i>)	
09:45 – 10:00	Ocean biology and biogeochemistry advanced planning (<i>Heidi Dierssen</i>)	
10:00 – 10:15	Coffee Break	
10:15 – 10:45	NASA OBPg/satellite ocean colour update (<i>Bryan Franz</i>)	
10:45 – 11:00	SeaBASS updates (<i>Chris Proctor</i>)	
11:00 – 11:15	PACE mission (<i>Antonio Mannino</i>)	
11:15 – 11:30	PACE science team (<i>Emmanuel Boss</i>)	
11:30 - 11:45	North Atlantic Aerosols and Marine Ecosystems (NAAMES) (<i>Mike Behrenfeld</i>)	
11:45 - 12:00	Ship-Aircraft Bio-Optical Research (SABOR) results (<i>Alex Gilerson</i>)	
12:00 - 12:15	Quality assuring remote sensing reflectance spectrally (<i>Zhongping Lee</i>)	
12:15 - 12:20	Wrap-Up (<i>Paula Bontempi</i>)	
12:20 – 14:00	Lunch Break	
14:00 - 15:30	Plenary Breakout Workshop Reports, Keynote 5 (<i>Chair: Cara Wilson</i>)	
14:00 - 14:15	Breakout workshop report: "Multiwater Algorithms and Performance"	
14:15 - 14:30	Breakout workshop report: "Protocols for Water-Leaving Radiance "	
14:30 - 14:45	Breakout workshop report: "Carbon in Ocean Colour"	
14:45 - 15:30	Keynote 7: Continuity of Ocean Color Radiometry Data: Operations= Research + Applications + Services + Users (<i>Paul DiGiacomo</i>)	
15:30– 16:00	Coffee break	
16:00 – 17:30	Q & A Session: Ocean Colour Community and Space Agencies	

Friday 19 May 2017

Training Courses at the Instituto Português do Mar e da Atmosfera (IPMA)

Rua C do Aeroporto, 1749-077 Lisbon

1. Copernicus Data: 09:30 - 14:15
2. SeaDAS Training: 09:15 - 12:20