

A Connected Ocean Conference 2016

A Connected Ocean and EuroGOOS joint workshop programme, **Draft V5**

Note: all participants are invited to the

Sea Tech Week opening session,

Tuesday morning, October 11th, at Le Quartz "Grand Théâtre", 10:00-12:30.

09:45 – Welcome of attendees

10:00 – Short welcome speeches (by the mayor of Brest and a representative of Brittany region)

10:10 – Introduction of the main theme of Sea Tech Week “Ocean and Digital technologies”, by IEEE-OES, partner of Sea Tech Week // René Garelo

10:20 – Keynote on advances in digital technologies applied to marine science // Susan Avery (title to be confirmed)

10:45 – Round-table discussion “digital technologies in different marine science areas”

- Ocean characterization // Kate Moran, ONC (to be confirmed)
- Security and safety // Jean-Guy Fontaine, NURC/NATO
- Biology // A. Murat Eren, University of Chicago
- Ocean Racing // to be confirmed

11:45 – Presentation of expertise in marine sciences and technologies in Brittany, through the local cluster “Campus Mondial de la Mer”

This session will be moderated by a journalist (Anne Chevrel). A pinch of humor will be brought by Sébastien Chambres, member of the “Impro infini” improvisational theater company.

Notes to "A Connected Ocean" participants

Posters will be on display all day Tuesday-Wednesday, located near the coffee breaks.

Invited talks are 30min, including questions.

Contributed talks are 15min long+5min questions (= 20min slots).

Tuesday afternoon october 11th - A Connected Ocean plenary session (joint with EuroGOOS)

Le Quartz, Small Theater, 14:00-18:00

14:00 - 14:10 Introduction of ACO (A.M. Treguier, R. Garelo)

14:10- 14:40 Stanley Matwin, "Big Data Meets Big Water: the Example of the AIS Ship Tracking Data"

14:40- 15:10 - Thomas O'Reilly: Standards for interoperable marine sensors: technologies and adoption

15:10 - 15:40 - Christoph Waldmann "Addressing the grand technological challenges in ocean observation in Europe"

15:40 - 16:00: Coffee break

16:00-18:00 Interoperable marine data: What is the Blue Growth potential?

16:00-16:30 Patrick Gorringer, EuroGOOS Marine Open Data in Europe: opportunities for industrial Blue Growth stakeholders.

16:30- 17:00 Sylvie Pouliquen, Ifremer, France Atlantic data integration through EU AtlantOS project.

17:00-18:00 User Perspectives:

Renaud Laborbe, Executive Chairman, Open Ocean, France (TBC)

Director, dotOcean, Belgium (TBC)

Discussion. Moderator: Patrick Gorringer, EuroGOOS

18:30 – 21:00 (time to be confirmed): Welcome cocktail at “Plateau des Capucins” offered by Brest Métropole and Crédit Agricole Filière Mer. Transportation by tramway.

Wednesday morning October 12th

A Connected Ocean

Le Quartz, room number 8, 9:00 -12:30

9:00-10:40 : " Big Data infrastructure and analytics in ocean science"

9:00 Adrian Leadbetter : Linked Ocean Big Data: Exploring connections between marine datasets in a Big Data world

9:20 Aurélien Ducourneau : Is deep learning relevant for ocean remote sensing data? A case study on satellite-derived SST data.

9:40 Raza Abidi : E-Science Platform for Ocean Data and Knowledge management

10:00 Laurent Etienne : Sea Ice Navigation Risk Assessment in the Canadian Arctic

10:20 Romain David : IndexMed projects: new tools using the CIGESMED DataBase on Coralligenous for indexing, visualizing and data mining based on graphs

10:40-11:10 Coffee Break, poster viewing

11:10 - 12:30 : "Multimodal synergies in ocean studies"

11:10 Adrien Martin : Retrieving current vectors from squinted atisar: airborne demonstration and validation

11:30 Frédéric Jourdin : Measuring in water suspended particles by statistical learning of ocean colour satellite data with models of ocean currents

11:50 Gaelle Herbert : New insights on the upper layer circulation in the Gulf of Guinea

12:10 Ronan Fablet : Synergies between along-track altimeter data and sea surface tracer fields using convolutional models: application to the reconstruction of mesoscale sea surface currents

EuroGOOS session : "The power of open-access interoperable marine data for the maritime sector: An untapped resource?"

Le Quartz, room number 7, 9:00-12:30

Moderator: Jonathan Williams, Marine South East, UK

Introduction to the workshop objectives. Jonathan Williams, Marine South East, UK

Panel and open discussion: Industrial applications of open access marine data: How to maximize uptake?

Jan-Bart Calewaert, EMODnet

Patrick Gorringer, EuroGOOS

Dominique Obaton, Copernicus Marine Service TBC

Renaud Laborbe, Open Ocean TBC

TBD, dotOcean TBC

Breakouts

- How can publicly funded marine information sharing initiatives develop to meet industry user needs? What are the specific needs of SMEs?
- What are the bottlenecks to more efficient exploitation of marine observation and data resources by the private sector?
- How to target users effectively (do they know we are here?)

Breakout facilitators: Oonagh McMeel, Seascope Consultants, Ayoze Castro, Plocan, John Breslin, SmartBay Ireland

Networking and coffee

Reports from breakout facilitators

Panel and open discussion : What are the next steps to improve collaborations between public data initiatives and the private sector catalysing the conversion of information to innovation?

John Breslin, SmartBay Ireland

Ayoze Castro, Plocan, Spain

Patrick Gorringer, EuroGOOS

Jan-Bart Calewaert, Seascope Consultants/EMODnet

Dominique Obaton, Copernicus Marine Service TBC

Wednesday afternoon, october 12th

A Connected Ocean : parallel session, "Interoperability standards for the marine environment"

Le Quartz, room number 7, 14:00-18:00

14:00 Convenors's introduction, including ambitions for the session

14:05 Jean François Rolin : "Various tools to stimulate interoperability in ocean monitoring as experienced by European Marine Research Infrastructures "

14:25 Catherine Satra Le Bris : "Sextant, a Marine Spatial Data Infrastructure: implementation of OGC protocols for the dissemination of marine data at Ifremer"

14:45 Daniel Toma : Standard-based middleware for marine sensor networks

15:05 Hozi Bao Lam : "Toward networked automatic coastal observatories: architecture and applications of vision sensors "

15:25 Coffee break

- 15:40 Janet Fredericks : "Cross-Domain Observational Metadata for Environmental Sensing"
- 16:00 Thomas Loubrieu : "Sensor web enablement standard integrated services supporting observatory operators, from sensor purchase to data preservation and publication"
- 16:20 Fadi Obeid: "Secure Data Communication Protocol for sub-sea cabled observatory"
- 16:40 Joaquin del Rio : "Synchronization Experiences at Obsea UPC "

1700-17:30 PANEL DISCUSSION 1

Moderators: Eric Delory & Thomas O'Reilly

Panel members: Joaquin del Rio, Jean-François Rolin, Catherine Satra Le Bris, Hozi Bao Lam, Fadi Obeid

1730 - 18:00 PANEL DISCUSSION 2

Moderator: Sylvie Pouliquen

Panel members: Janet Fredericks, Thomas Loubrieu, Joaquin Del Rio

A Connected Ocean: parallel session, "Biological rates, upwelling: new autonomous approaches and integrated observations"

Le Quartz, room number 8, 14:00 - 17:30

- 14:00 George Petihakis : ADCP observations of migration patterns of zooplankton in the Cretan Sea
- 14:20 Frédéric Cyr : A new glider-mounted optical sensor of dissolved organic matter
- 14:40 Grigor Obolensky : Euro-Argo : a new European Research Infrastructure for climate change research and operational oceanography
- 15:00 Bernard Bourles : Toward sustained and enhanced observations in the eastern tropical Atlantic based on the PIRATA network.

15:20 - 15:40: Coffee break

- 15:40 Felipe Artigas : Automated techniques for studying phytoplankton dynamics in marine waters
- 16 :00 William Kirkwood : Automation for In Situ Multi-Stressor Biogeochemical Experiments
- 16:20 Alban Lazar : 1,5 year of observations from the MELAX ocean-atmosphere mooring-observatory in the Senegalese coastal upwelling.
- 16:40 Andrea Devis Morales : Analyzing seasonal, interannual and extreme climate variability in the caribbean sea upwelling system off colombia

16:40-17:30 : Round table. Moderator: Richard Lampitt, "long-term observation tasks of biological processes"

POSTER viewing 17:30-19:00

19:00 – 23:00 Social event at Le Quartz including Brittany buffet and concert of Bachar Mar Khalife.

"A connected Ocean" POSTERS

(reminder: submission of posters will be possible until the end of september)

Elodie Martinez : A novel approach dedicated to build a climate oceanographic observatory in the central South Pacific: THOT (Tahitian Ocean Time series).

Christophe Maes : On the stability and spatio-temporal variance distribution of salinity in the upper ocean.

Richard Lampitt : FixO3 Network Project: Integration, harmonisation, innovation

Alain Loussert : Maximization of the power of the ultra-wide band "UWB" signal sent to the human body while respecting the Federal Communications Commission "FCC" constraints

Tuyen Truong : Wireless network on coastal topologies: Parallel simulation of radio coverage on cellular systems

Ediang Okuku : Understanding of precipitation process along nigerian coast.

Ediang Okuku : Climate information and sustainable development: an overview in west africa coastal areas.