

ACO 2016

A connected ocean

&

EuroGOOS

joint workshop programme

The challenge of
observation data integration

11-13 Oct 2016 - Brest, France

an international conference in the framework of the
10th edition of

SEA BREST-FRANCE
TECH WEEK

A connected ocean & EuroGOOS

joint workshop programme

all participants are invited to the

Sea Tech Week opening session

Tuesday October 11th, morning

► Le Quartz, "Grand Théâtre"

9:45	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
10:45	Round-table discussion "digital technologies in different marine science areas" <ul style="list-style-type: none">• Ocean characterization // Kate Moran, ONC• Security and safety // Jean-Guy Fontaine, NURC/NATO• Biology // A. Murat Eren, University of Chicago• Ocean Racing
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, near the coffee breaks.
- Invited talks are 30min, including questions.
- Contributed talks are 15min long+5min questions (= 20min sessions).

Tuesday October 11th, afternoon

► Le Quartz, "Petit Théâtre"

A Connected Ocean plenary session (joint with EuroGOOS)

14:00	Introduction of ACO // A.M. Treguier, R. Garelo
14:10	Big Data Meets Big Water: the Example of the AIS Ship Tracking Data // Stanley Matwin
14:40	Standards for interoperable marine sensors: technologies and adoption // Thomas O'Reilly
15:10	Addressing the grand technological challenges in ocean observation in Europe // Christoph Waldmann
15:40	Coffee break, poster session. Floor 2 mezzanine

16:00-18:00

Interoperable marine data: What is the Blue Growth potential?

16:00	EuroGOOS Marine Open Data in Europe: opportunities for industrial Blue Growth stakeholders // Vicente Fernandez , EuroGOOS
16:30	User Perspectives: François Batifoulier , Open Ocean, France Pieterjan Serruys , dotOcean, Belgium
17:00	Ifremer, France Atlantic data integration through EU AtlantOS project // Sylvie Pouliquen , Ifremer, France
17:30	Discussion. Moderator: Jan-Bart Calewaert , EMODnet

18:30 - 21:00

Welcome cocktail at "Plateau des Capucins", offered by Brest Métropole and Crédit Agricole Filière Mer.

Transportation by tramway

A CONNECTED OCEAN

Wednesday October 12th, morning

► Le Quartz, room n° 8

9:00-10:40

Big Data infrastructure and analytics in ocean science

Session chair: Stan Matwin, Dalhousie University, Canada

9:00 Linked Ocean Big Data: Exploring connections between marine data-sets in a Big Data world // **Adam Leadbetter**

9:20 Is deep learning relevant for ocean remote sensing data? A case study on satellite-derived SST data // **Ronan Fablet**

9:40 Using Big data for Good: deriving ocean data products that are useful to Society.
// **Benoit Pirene**

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

10:20 Coffee break, poster session. Floor 2 mezzanine

10:50 - 12:10

Multimodal synergies in ocean studies

Session chair: René Garello, Télécom Bretagne, France

10:50 IndexMed projects: new tools using the CIGESMED DataBase on Coralligenous for indexing, visualizing and data mining based on graphs
// **Romain David**

11:10 Measuring in water suspended particles by statistical learning of ocean colour satellite data with models of ocean currents // **Frédéric Jourdin**

11:30 New insights on the upper layer circulation in the Gulf of Guinea
// **Gaelle Herbert**

11:50 Synergies between along-track altimeter data and sea surface tracer fields using convolutional models: application to the reconstruction of mesoscale sea surface currents // **Ronan Fablet**

EUROGOOS SESSION

“The power of open-access interoperable marine data for the maritime sector: An untapped resource?”

Wednesday October 12th, morning

► Le Quartz, room n° 7

9:00-12:30

Session chair: Jonathan Williams, Marine South East, UK

Introduction to the workshop objectives // **Jonathan Williams**

Panel and open discussion: Industrial applications of open access marine data: How to maximize uptake? // **Jan-Bart Calewaert**, EMODnet // **François Batifoulouier**, Open Ocean // **Pieterjan Serruys**, dotOcean // **Vicente Fernandez**, EuroGOOS

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 // **Rogério Chumbinho**, 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? // **Jan-Bart Calewaert**, EMODnet // **Ayoze Castro**, Plocan // **Rogério Chumbinho**, SmartBay Ireland // **Dina Eparkhina**, EuroGOOS

Wednesday October 12th, afternoon

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

► Le Quartz, room n°7, 14:00 - 18:00

14:00	Convenors's introduction // Kenneth J. Foote , Woods Hole, USA
14:05	Various tools to stimulate interoperability in ocean monitoring as experienced by European Marine Research Infrastructures // Jean François Rolin
14:25	Sextant, a Marine Spatial Data Infrastructure: implementation of OGC protocols for the dissemination of marine data at Ifremer // Catherine Satra Le Bris
14:45	Standard-based middleware for marine sensor networks // Joaquin Del Rio
15:05	Toward networked automatic coastal observatories: architecture and applications of vision sensors // Hozì Bao Lam
15:25	Coffee break, poster session. Floor 2 mezzanine
15:40	Cross-Domain Observational Metadata for Environmental Sensing // Janet Fredericks
16:00	Sensor web enablement standard integrated services supporting observatory operators, from sensor purchase to data preservation and publication // Gilbert Maudire
16:20	Secure Data Communication Protocol for sub-sea cabled observatory // Fadi Obeid
16:40	Synchronization Experiences at Obsea UPC // Joaquin del Rio
17:00	PANEL DISCUSSION 1 Moderators: Eric Delory & Thomas O'Reilly Panel members: Joaquin del Rio, Jean-François Rolin, Catherine Satra Le Bris, Hozì Bao Lam, Fadi Obeid
17:30	PANEL DISCUSSION 2 Moderator: Sylvie Pouliquen Panel members: Janet Fredericks, Gilbert Maudire, Joaquin Del Rio

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

► Le Quartz, room n°8, 14:00 - 17:30
Session chair: Anne-Marie Treguier, IUEM, France

14:00	ADCP observations of migration patterns of zooplankton in the Cretan Sea // George Petihakis
14:30	Euro-Argo: a new European Research Infrastructure for climate change research and operational oceanography // Grigor Obolensky
14:50	Toward sustained and enhanced observations in the eastern tropical Atlantic based on the PIRATA network // Bernard Bourles
15:10	Automated techniques for studying phytoplankton dynamics in marine waters // Felipe Artigas
15:30	Coffee break, poster session. Floor 2 mezzanine
16:00	Automation for In Situ Multi-Stressor Biogeochemical Experiments // William Kirkwood
16:20	Analyzing seasonal, interannual and extreme climate variability in the caribbean sea upwelling system off colombia // Andrea Devis Morales
16:40	1,5 year of observations from the MELAX ocean-atmosphere mooring-observatory in the Senegalese coastal upwelling // Alban Lazar
17:00	ROUND TABLE Moderator: Richard Lampitt , long-term observation tasks of biological processes

For both sessions

17:40-19:00 POSTER viewing. Floor 2 mezzanine.

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

Contact: dominique.simon@univ-brest.fr

<http://aconnectedocean.sciencesconf.org/>

