



EurASc – CAS
in cooperation with IUEM-UBO
on-line Frontier Forum n°2 on
Progress in Ocean Science and Technology

28-29 September 2022

Wednesday 28 September 2022

Session 1 : opening session :

Beijing	Central Europe	
15:00 15:20	09:00 09:20	Paul Tréguer (IUEM-UBO, France, EurASC) and Jing Zhang (ECNU, CAS)

**Session 2 : Report on the EurASc – CAS WG : Ocean-based climate actions
Chairs : Paul Tréguer and Jing Zhang**

15:20 15 :50	09:20 09 :50	Jean-Pierre Gattuso (LOV, France, EurASc) and Nianzhi Jiao (Xiamen U., CAS) : « <i>Ocean-based climate actions : report</i>
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		<i>of the CAS-EurASc working group »</i>
15 :50 16 :20	09 :50 10 :20	General discussion : What's next ? Contributions of : -Françoise Gaill (CNRS) : the IPOS perspective -Julien Rochette (IDDRI) : update on the High Seas negotiations -...
<i>break</i>		

Session 3 : Big data management for ocean science and technology
Chairs : Lionel Guidi (on behalf of EurASc) and Huadong Guo (CAS)

16:50 17:10	10:50 11:10	Damien Eveillard (U. Nantes, France) : « <i>Using Artificial Intelligence to sail the Tara-omics datascope</i> »
17:10 17:30	11:10 11:30	Huadong Guo (International Research Center of Big Data for Sustainable Development Goals & Aerospace Information Research Institute): “ <i>CAS Earth Program: Big Data for SDG14 and Others</i> ”
17:30 17:50	11:30 11:50	Ketil Malde (U. Bergen, Norway) : « <i>Artificial Intelligence methods for fisheries management</i> »
17:50 18:10	11:50 12:10	Xiaofeng Li (Institute of Oceanology): “ <i>Coastal Zone Information Extraction from satellite images deep learning</i> ”
<i>break</i>		

18:10 18:50	12:30 12:50	Pierre Tandeo (IMT-Atlantique, France) : « <i>Big data & cloud computing for climate</i> »
18:50 19:10	12:50 13:10	Ge Chen (Qingdao National Laboratory for Marine Science and Technology) “ <i>Ocean Artificial Intelligence: A New Bridge From Data to Knowledge</i> ”

19:10 19:30	13:10 13:30	General discussion : contributions of Anya Waite and Mike Smit (Dalhousie U.), ...
break		

Thursday 29 October 2022

Beijing	Central Europe
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Session 4 : Digital Twin of the Ocean (DITTO) component of the Digital Earth Initiatives, Chairs : Martin Visbeck (EurASc) and Dake Chen (CAS)

15:00 15:20	09:00 09:20	Martin Visbeck (Geomar, Germany EurASc) : « <i>Digital Twins of the Ocean (DITTO) a global UN Ocean Decade Programme for Sustainable Development (2021-2020)</i> »
15:20 15:40	09:20 09:40	Dake Chen (Southern Marine Laboratory): “ <i>Digital Twin Ocean for Guangdong-Hong Kong-Macao Greater Bay Area</i> ”
15:40 16:00	09:40 10:00	Pierre Bahurel (Mercator Ocean International): “ <i>The European Digital Twin Ocean infrastructure, models and application</i> ”
16:00 16:20	10:00 10:20	Fei Chai (Second Institute of Oceanography): “ <i>Digital twin ocean and its applications for China coastal regions</i> ”
break		
16:50 17:10	10:50 11:10	Isabell Susa Pinto (CIMAR, Portugal) : « <i>Digital Twin opportunities in support of the Biodiversity Agenda</i> »
17:10 17:30	11:10 11:30	Fangli Qiao (First Institute of Oceanography): “ <i>The ocean model development and its support to digital twin</i> ”
17:30 17:50	11:30 11:50	General discussion : contribution of Ronan Fablet (IMT-Atlantique, France),...

S5 : The Global Coastal Ocean

Chairs : Nadia Pinardi (EurASc) and Nianzhi Jiao (CAS)

17:50 18:10	11:50 12:10	Nadia Pinardi (UNIBO, Italy, EurASc) « <i>The Global Coastal Ocean : the CoastPredict solution</i> »
18:10 18:30	12:10 12:30	Nianzhi Jiao (Xiamen University) : <i>“Ocean negative carbon emission : a United Nations ocean decade program”</i>
18:30 18:50	12:30 12:50	Joaquin Tintore (SOCIB, Spain) : <i>“Regional Digital twins : initial steps in the Western Mediterranean Sea, responding to science and society challenges from events to climate”</i>
18:50 19:10	12:50 13:10	Sanzhong Li (Ocean University of China) : <i>“Geological carbon pumps: from subduction zone to coastal ocean”</i>
<i>break</i>		
19:40 20:00	13:40 14:00	Lorenzo Mentaschi (UNIBO, Italy) : <i>“Extreme sea levels in a changing climate”</i>
20:00 20:20	14:00 14 :20	Yonglong Lv (Xiamen University) : <i>“Multiple pollutants stress the coastal ecosystem with climate and anthropogenic drivers”</i>
20:20 20:40	14 :20 14 :40	General discussion :

S6 : Final session : Conclusions & Perspectives

20:40 20:50	14 :40 14 :50	Paul Tréguer (IUEM-UBO, France, EurASc) and Jing Zhang (ECNU, CAS)
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