

For the very first time in Europe, the "GEO Blue Planet" Symposium is welcoming policy makers, entrepreneurs, developers and scientists striving to ensure sustainable oceans, to enable them to meet and learn from international experts in the field.

Toulouse is the 2018 European City of Science. The Symposium accredited as ESOF 2018 will take place from 4 to 6 July at the Pierre Baudis Conference Centre in Toulouse.



THE OCEANS, A COMMON RESOURCE IN DANGER



"Humanity depends on the Planet's oceans, on their temperature, chemistry, currents and life forms. How this vital resource is managed is also essential to mitigate the effects of climate change.

More than three billion people depend on marine and coastal biodiversity for their livelihoods. However, today we are seeing 30% of the world's fish stocks overexploited, which is well above the levels required for sustainable yields.

Oceans also absorb around 30% of the carbon dioxide released by human activity, while ocean acidification has increased by 26% since the beginning of the Industrial Revolution.

Marine pollution mainly due to land-based sources has reached alarming levels, with 13,000 pieces of plastic waste on average, littering every square kilometre of ocean."

United Nations Development Programme (UNDP)



Since the Paris agreement (COP21) in particular, oceans have gradually been given the importance they deserve on the agendas and in debates on the planet's environment. The challenges are global and so is the increasing awareness. For the first time ever, climate change, blue growth and plastic pollution have become key issues for scientists, policy-makers, institutions, entrepreneurs and environmentally concerned citizens.



▶ The 17 Sustainable Development Goals (SDGs) adopted by the 193 UN Member States came into effect in 2016 as a powerful global call to end poverty, protect the Planet and ensure that all human beings live in peace and prosperity by 2030. The 14th Goal is dedicated to oceans. The ten SDG14 targets include preventing and reducing marine pollution, sustainably managing and protecting marine and coastal ecosystems, reducing ocean acidification and ending illegal fishing and exhaustion of fish stocks.

SUSTAINABLE GEALS DEVELOPMENT GEALS





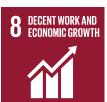




























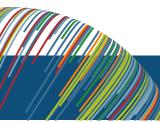




- ► The level of ambition generated by the 2017 **Our Ocean** Conference hosted by the European Union in Malta was unprecedented, with 433 tangible and measurable commitments, EUR 7.2 billion in financial pledges, and 2.5 million square kilometres set aside for additional Marine Protected Areas.
- ▶ In 2016, the OECD published its first report entitled "Ocean Economy 2030", which acted as a wake-up call for global policy makers. This report showed that the growth prospects for the blue economy exceed USD 1,500 billion per year while its potential for creating employment is equally huge.
- ► Today, more than **100 NGOs** worldwide are engaged in fighting plastic pollution in the oceans. Several expeditions such as Tara, 7ème Continent, SeaPlastics and eXXpedition are braving the waters to reveal the unseen to the general public to make a real difference.
- ▶ In April 2017, following an EU-wide consultation, the European Council adopted the following conclusions: "International ocean governance: an agenda for the future of our oceans, with a view to achieving a coherent cross-sectoral, rules-based international approach, as well as better coordination and cooperation between the internal and external aspects of the EU's ocean-related policies." This will help to ensure that oceans are safe, secure, conserved and sustainably used and managed.

The 4th GEO Blue Planet Symposium is part of this ongoing effort.

The GEO Blue Planet Initiative brings together international experts specialised in ocean information obtained through satellite observation, measurements at sea, and modelling, etc. The network's biennial forum is the GEO Blue Planet Symposium, whose goal is to bring together scientists, decision makers, institutions and the general public to demonstrate and increase awareness of the challenges facing us with regard to oceans and to show how these can be addressed through increased knowledge, observation and numerical modelling, and identify areas for improvement.



TOULOUSE HAS BEEN SELECTED TO HOST THE 4TH EDITION OF THE GEO BLUE PLANET SYMPOSIUM





9-14 JULY 2018

SHARING SCIENCE: TOWARDS NEW HORIZONS

Scheduled as part of the 8th Edition of the EuroScience Open Forum (ESOF), this event is hosted by the GEO Blue Planet Initiative, a unique network of scientists, international organisations, NGOs, universities and government agencies.

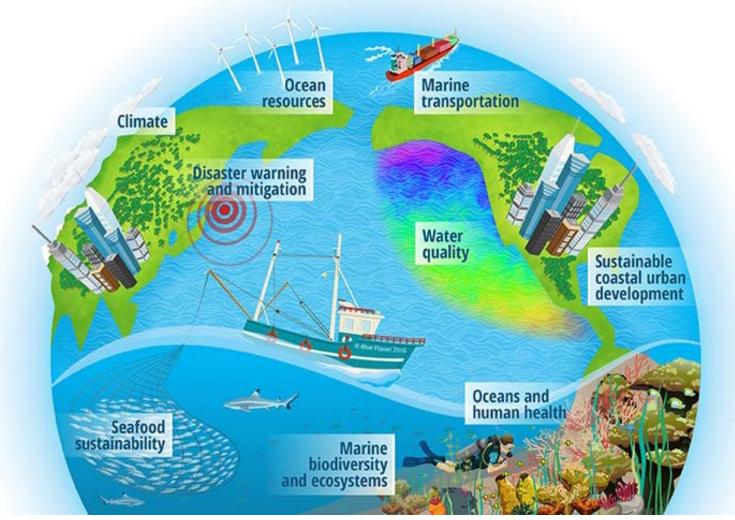
Since oceans have no borders, only strong international networks can provide solutions.



Mercator Ocean, a member of the GEO Blue Planet Initiative from the "Operational Oceanography" sector in the Greater Toulouse area has chosen to organise this event on the fringe of ESOF (EuroScience Open Forum) because it shares the same "Science for Societal Benefit" approach, but also because Toulouse is a key region for the space industry (home to leaders such as CNES, Thalès, and Airbus D&S), as well as for the development of downstream sub-sectors such as operational oceanography.



"Blue Planet: Oceans and Society is an initiative led by GEO (Group on Earth Observations), which promotes the sustainable development and use of ocean and coastal information to address current societal challenges," said Paul DiGiacomo, Vice-Chair of GEO Blue Planet and Chief of Satellite Oceanography at the United States' National Oceanic and Atmospheric Administration (NOAA). "Our symposia aim to bring together global actors involved in the sustainable development of oceans to take their needs into account and improve ocean information accordingly, in order to make useful decision-making tools for managing the climate, the economy and society."



«Ocean health, sustainable management, and blue growth are high on Europe's agenda. To address these challenges, several major European initiatives have been undertaken to improve ocean observation, monitoring and forecasting. The GEO Blue Planet Symposium will be a unique opportunity to share experiences and develop common approaches with our international partners» said Pierre-Yves Le Traon, a member of Blue Planet's Steering Committee and the Scientific Director of Mercator Océan.

Through this event, Mercator Océan will be confirming its brand new multinational governance established on 20 June and illustrating its leadership role in the international ocean monitoring community.



VIP SPEAKERS

For three days ocean experts will take it in turns to address audiences in the plenary auditorium of the Pierre Baudis Conference Centre, including:

Philippe Brunet, Director for Space Policy, Copernicus and Defence at the European Commission, at the Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (GROWTH).

Margaret Leinen, Director of Scripps Institution of Oceanography (USA)

Claire Jolly, DHead of unit in the Directorate for Science, Technology and Innovation at the OECD

Andreas Papaconstantinou, Head of Unit Ocean Governance, Law of the Sea, Arctic Policy

Rémi Gruet, CEO at Ocean Energy Europe (Brussels)

Phil Cruver, CEO at Catalina Sea Ranch (USA)

James Alix Michel, former President of the Republic of Seychelles and Executive Chairman of the James Michel Foundation

Peter Tuddenham, President and Executive Director of the College of Exploration (USA)

A FREE SYMPOSIUM FOR STUDENTS



This event is a **unique opportunity** to learn from international experts presenting the major **environmental challenges** faced by oceans and the important role that reliable and innovative observation systems and ocean models can play in addressing them.

The Symposium will feature as part of ESOF, a scientific event organised in 2018 by the Université Fédérale de Toulouse. Mercator Océan is inviting students to attend the symposium presentations for free.

The Friday afternoon session will also be free for the general public.

For half a day, speakers will explain how to help nonspecialists grasp the major ocean challenges and will show how science can help **raise general awareness**.

The programme also includes open discussions and a room with posters on the different topics explored during this three-day conference.







FURTHER INFORMATION

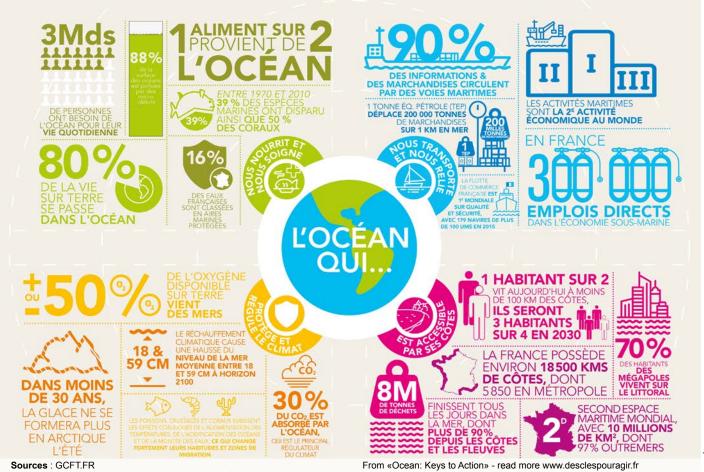
Oceans are the most important reservoir on the planet, covering nearly three quarters of the Earth's surface and are essential to its survival. Just as a person cannot live without a healthy heart and lungs, **the Earth cannot survive without healthy seas and oceans**. Oceans and seas function as the Earth's respiratory system, producing oxygen and absorbing carbon dioxide and waste. They are used for storage and absorb 30% of the world's carbon dioxide emissions while phytoplankton release 50% of the oxygen necessary for survival, helping to regulate the climate and temperature. Oceans and seas are also essential for economic development and employment:

KEY FIGURES:

- ▶ 90% of world trade is by sea.
- ▶ 95% of telecommunications transit via submarine cables.
- ▶ Fisheries and aquaculture provide 15% of the animal proteins consumed each year by 4.3 billion people.
- ▶ More than 30% of global oil and gas production is extracted from the ocean floor.
- ▶ 5% of the world's Gross Domestic Product (GDP) and 6% to 7% of global jobs are generated by coastal tourism.
- ▶ 13 out of 20 megalopolises are located in coastal areas.
- ▶ Tides, waves, offshore marine currents and winds are energy sources that can contribute significantly to low-carbon energy production in many coastal countries.

Satellite observations, measurements at sea and modelling of the oceans' physical state (currents, temperature, salinity, etc.), and biogeochemical state (microplankton, chlorophyll, dissolved oxygen and soon, pH/acidity), provide key information for:

- ▶ Research work on climate change—the climate results from ocean-atmosphere and other interactions— and the monitoring of Arctic sea ice and climatic events such as El Niño.
- ► Tackling pollution—the modelling of currents is necessary for simulating the drift of radioactive pollution (e.g. from Fukushima) or plastic debris.
- ▶ Indicators on the good ecological status of waters.
- ▶ Marine biodiversity protection 2018 is the Year of the Reef.
- ▶ Economic activities at sea, such as energy production, fishing, aquaculture, maritime transport and related activities such as insurance— for example, reliable forecasting of currents can save millions of euros of fuel expenses and reduce CO2 emission by tens of thousands of tonnes.
- And for future innovations relating to marine biotechnology, algae, pharmaceuticals and other areas.



ABOUT MERCATOR OCÉAN

Mercator Océan International is a privately owned non-profit-making company, providing a service in the public interest. Its scientific experts design, develop, operate and maintain state-of-the-art numerical modelling systems that can describe, analyse and forecast the status of oceans in 3D, on a continuous basis or in real time. The company is funded by nine major global players in operational oceanography: the Euro-Mediterranean Centre on Climate Change (CMCC, Centro Euro-Mediterraneo sui Cambiamenti Climatici), the French National Centre for Scientific Research (CNRS, Centre National de la Recherche Scientifique), the French Research Institute for Exploitation of the Sea (Ifremer, Institut Français de Recherche pour l'Exploitation de la Mer), the French Research Institute for Development (IRD, Institut de Recherche pour le Développement), the French meteorological office Météo-France, the UK Met Office, the US Nansen Environmental and Remote Sensing Centre (NERSC), the French Navy's Service for Hydrography and Oceanography (SHOM, Service hydrographique et océanographique de la marine française) and the Spanish ports' organisation, Puertos Del Estado.

Mercator Océan's activities range from R&D to operational systems, from expert forecasting to providing services to users throughout the world. The 13,000 global subscribers receiving its services include scientists, government agencies, industrial companies, service providers, and providers of scientific mediation and education. The company is based in Ramonville Saint-Agne near Toulouse.

In November 2014, Mercator Océan was officially delegated by the European Commission to set up the "Copernicus Marine Environment Monitoring Service" as part of Copernicus, the European Earth observation programme.



REVUE DE PRESSE (1/3)

2017 (The European Files I Blue growth strategy)

30 | THE EUROPEAN FILES | BLUE GROWTH STRATEGY

"From a few nascent ocean activities, new ocean-friendly industries will emerge"



Pierre BahurelCEO of Mercator Ocean

he ocean is full of surprises. It has been long known that the ocean covers 71% of the planet's surface. It has been more recently shown that the ocean plays an important role in climate regulation. And it is now becoming more and more obvious that the ocean will participate in the development of the next decade sustainable economy.

Until a few years ago, the oceans appeared to interest only a handful of specialists and small groups of experts dispersed around the world. Today, oceans are taking up an ever-increasing share of the public debate. The United Nations have organised the Ocean Conference in June 2017 with a relevant motto "Our Oceans, Our Future", the European Union will host the fourth "Our Ocean" conference in Malta on 5 and 6 October 2017 aiming at commitments to actions for safe, secure, clean and sustainably managed oceans. After its fascinating and informative report entitled "The Ocean Economy in 2030", the next OECD two-year project "The Ocean Economy and Innovation" will be undertaken through a series of expert workshops in October and November 2017.

Ocean now features on the agendas of major global forums, such as the COP21, COP22 climate change conferences and also G7's.

The European Union has actually the oceans on its policy agenda for a long time contributing to the increasingly vast scientific knowledge of our oceans, to marine

technology research and supporting decisionmakers to take adequate actions. Copernicus is one of the two European Union flagship program. It is the European Union Earth Observation program, including the oceans within the so-called Copernicus Marine Service. The latter innovative service covers all the world's oceans and provides open and free oceanic valuable information for downstream applications. The Copernicus Marine service is a real asset for boosting the EU Blue Growth agenda towards Sustainable Oceans: offshore energy, ports, fishing, aquaculture, transport, insurance sectors now benefit from free ocean products and information ranging from meteo-ocean conditions (temperature, ocean currents, surface wind and waves) to sea water quality information (turbidity, concentration in nutrients).

The Copernicus Marine Service is designed to serve many public, for commercial and scientific purposes including major EU policies such as the Marine Strategy Framework Directive, combating pollution, protection of marine species and their protected areas, maritime safety and routing, sustainable exploitation of ocean resources, marine energy resources and climate monitoring. It serves the needs of all Member States committed to sustainable oceans. Many concrete examples of the use of the Copernicus Marine Service are already available and showcased on its web portal. To name a few, flooding prevention along the Portuguese Coast, monitoring oil spills in the North Sea, supporting aquaculture farms in the Mediterranean Sea, monitoring met-ocean conditions around wind mills farms or monitoring nearshore bathing water quality, are applications where the Copernicus

Marine Service already makes a difference. Moreover, as a real user-driven service, the Copernicus Marine Service portfolio is regularly enriched by products expected by the markets, such as wave data launched in April 2017. Tomorrow, Ocean Monitoring Indicators will contribute even better to offshore industrial development.

The EU Copernicus Marine Service is opening the way for the development of the next decade sustainable ocean economy. The private sector, counting for about 20% of the service uptake and a few Copernicus Marine Service "champion users" in each EU Member states, has already grabbed this opportunity and will more and more strengthen the blue growth in the coming years.

The EU Copernicus Marine Service supports the development of a blue market in the different Member States. Considering the relevance of marine and maritime activities in the Maltese arena, the Copernicus Marine Service is organising an event on the 27th of June to meet and inform Maltese experts, national and regional users, in the private, public and scientific sectors, about its capabilities and its innovative services.

For more information on the Copernicus Marine Environment Monitoring Service please visit http://marine.copernicus.eu.

MARINE RESOURCES

WEATHER, CLIMATE & SEASONAL FORECASTING COASTAL

& MARINE
ENVIRONMENT

MARITIME SAFETY







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