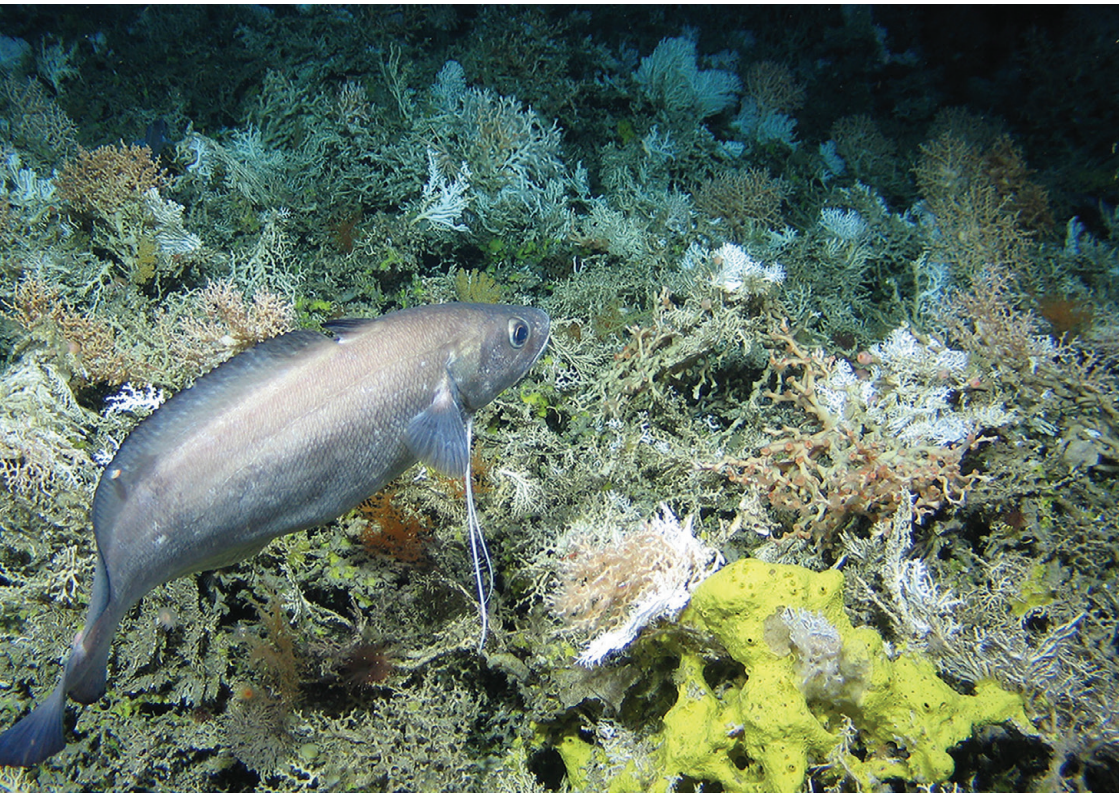
iAtlantic

INTEGRATED ASSESSMENT OF ATLANTIC MARINE ECOSYSTEMS IN SPACE AND TIME



An integrated assessment of Atlantic marine ecosystems in space and time

A health check for Atlantic ecosystems

iAtlantic is designed to assess the status and health of deep- and open-ocean ecosystems across the whole Atlantic basin. By creating correctly scaled and standardised marine observation frameworks that integrate measurements from different disciplines, ecosystem status can be properly assessed against a backdrop of multiple stressors and global change. Ultimately, iAtlantic aims to predict where and when potentially synergistic effects of global change and multiple stressors will occur, and determine what implications these will have for society, economy and ocean health.

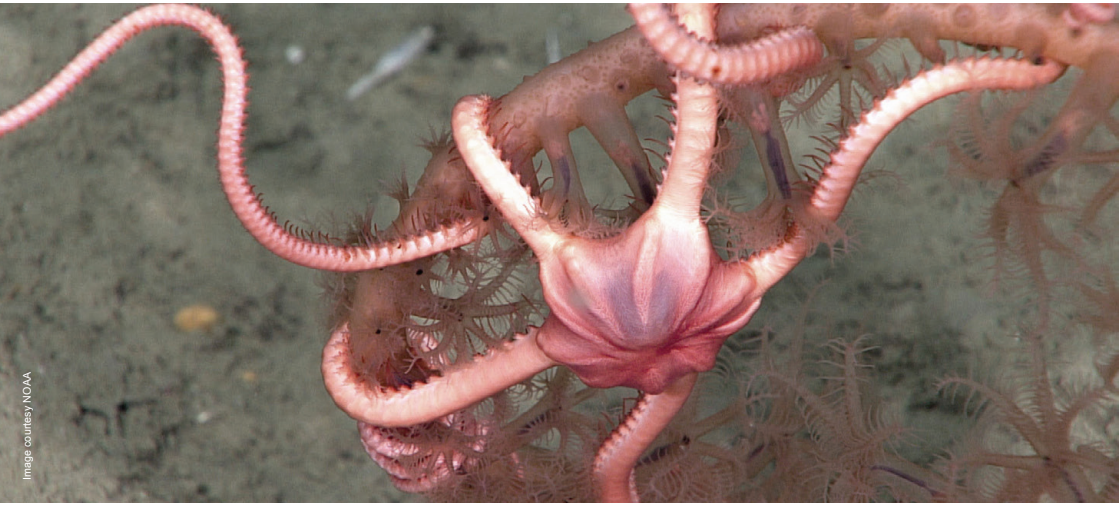


Image courtesy NOAA

iAtlantic key objectives

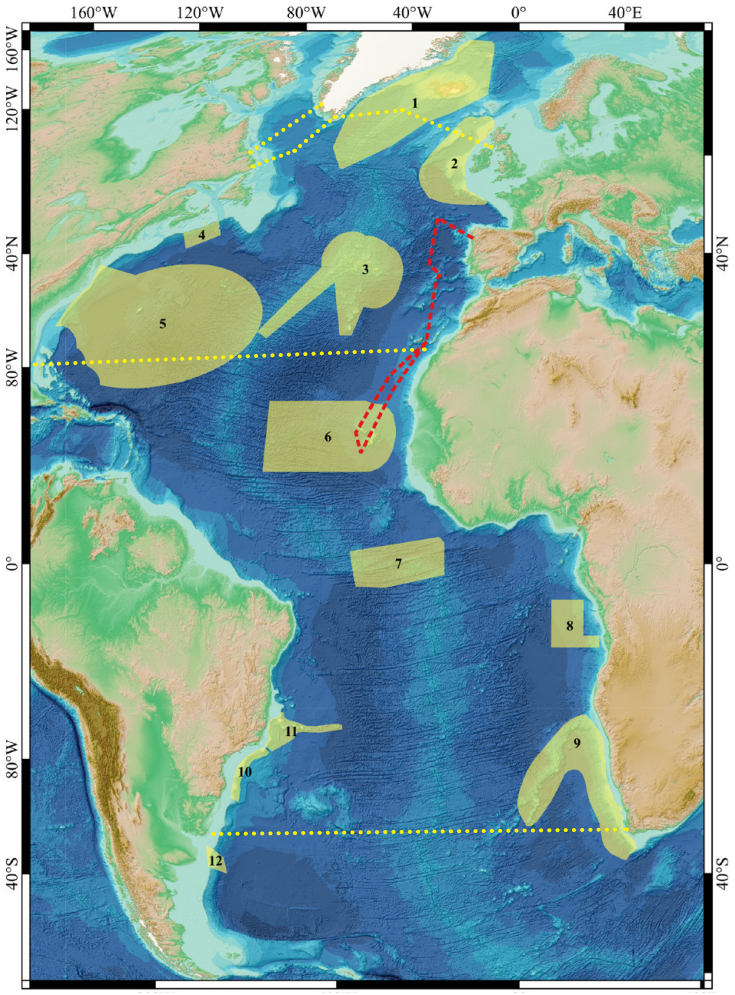
iAtlantic will assess the risks and vulnerabilities of deep- and open-ocean Atlantic ecosystems to climate change and other stressors to identify where and when improved management measures are most needed to maintain ocean health. iAtlantic will:

- **Align and standardise ocean observing** in the north and south Atlantic to enable short, medium and long-term assessments of Atlantic Ocean circulation;
- Map deep and open-ocean Atlantic ecosystems at **local, regional and basin scales**;
- Assess the **stability, vulnerability and tipping points** of these ecosystems in relation to a range of stressors;
- Build and enhance **human and technological capacities** for cost-effective cooperation and planning across the Atlantic;
- Work with industry, regulatory and governmental stakeholders to use this knowledge in support of a **sustainable Blue Economy**.

iAtlantic's expedition programme

iAtlantic focuses its data collection efforts on 12 key areas of the ocean, using innovative approaches to scale up observations taken at local and regional levels to address questions at ocean basin scale. More than 30 research expeditions, including at least one flagship demonstrator mission, will provide vital data to help identify the ecosystems most at risk from environmental change in the deep and open ocean.


Image courtesy C Pearce/NOC



iAtlantic study areas:

(1) Subpolar MAR open-ocean ecosystem off Iceland

(2) Abyssal plain and deep-sea coral banks from the Rockall Trough to the Porcupine Abyssal Plain

(3) Deep-sea coral and hydrothermal vent ecosystems, central MAR

(4) Deep-sea canyons and open-ocean ecosystem, NW Atlantic

(5) Subtropical open-ocean ecosystem of the Sargasso Sea

(6) Eastern tropical North Atlantic, Cabo Verde

(7) Equatorial deep/open ocean fracture zones

(8) Continental slope, margin and cold seep ecosystems - Angola to the Congo Lobe

(9) Abyssal plains and deep-sea ridge ecosystems of the Benguela Current from the Walvis Ridge to South Africa

(10) Deep-sea continental slope, banks and cold seep ecosystems off Brazil

(11) Vitória-Trindade Seamount Chain off Brazil

(12) Deep-sea coral banks in the Malvinas Upwelling Current off Argentina.

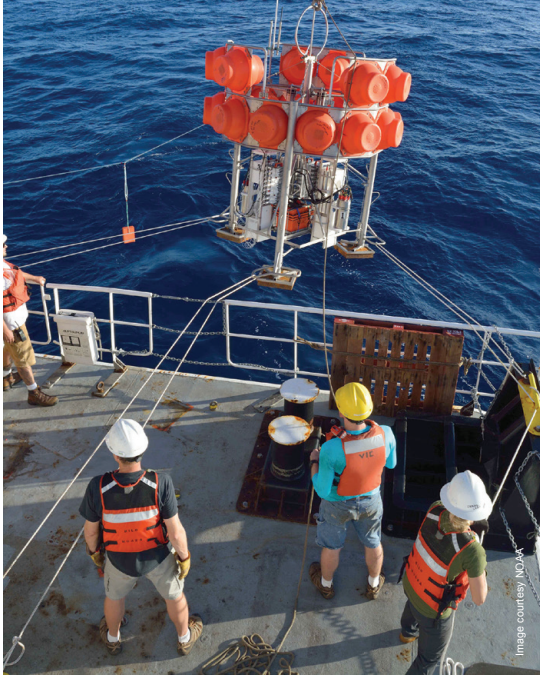
3 iAtlantic study areas

Flagship demonstrator expedition route

Major oceanographic mooring arrays

Capacity building and knowledge transfer

iAtlantic places capacity building at the core of its mission. Alongside the recruitment of a significant cohort of early career researchers who collectively form the community of **iAtlantic Fellows**, an extensive capacity building programme will optimise the learning opportunities provided by the project's many scientific activities. This programme includes hands-on capacity building at sea, instrumentation and technology transfer, analytical techniques and data interpretation, mentoring programme, and the transfer of knowledge to the wider stakeholder community and policy makers.



iAtlantic key facts

- Project full title: An Integrated Assessment of Atlantic Marine Ecosystems in Space and Time (iAtlantic)
- Funded under the EU's All Atlantic Ocean Research Alliance Flagship (call H2020-BG-2018-2020)
- 33 partners from Europe, Brazil, South Africa, Argentina, Canada and the USA, complemented by a wider network of associated partners
- Project duration 4 years, starting June 2019
- EU funding volume of € 10.65M
- Coordinated by University of Edinburgh, Scotland, UK

Find out more:

www.iatlantic.eu

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