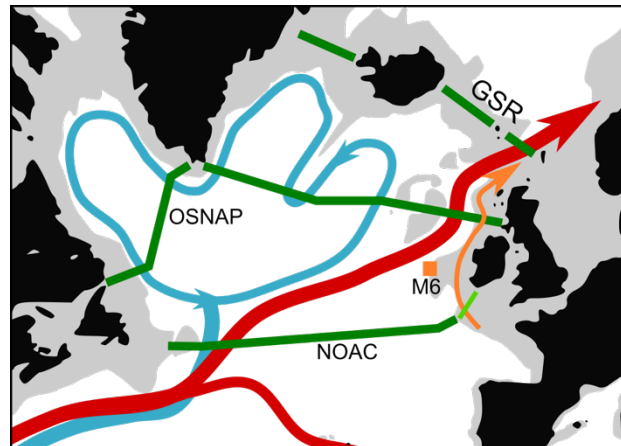


Workshop on Subpolar North Atlantic Eastern Boundary

Venue: Hudson Beare Building, King's Buildings, Edinburgh University, EH9 3DW

Date: 14th October 2019 (preceding Blue-Action Annual meeting) at 11.00

Workshop Dinner: Howies, 29 Waterloo Place, Edinburgh at 19.30



The eastern boundary of the subpolar North Atlantic has shown some striking changes in recent years, with the freshest ever salinities recorded in locations and cooler than average temperatures. Whether these changes are part of a cycle of Atlantic oscillations or the first indications of a long-term change in the supply of heat and salt to the subpolar gyre is hotly debated.

The eastern subpolar gyre is a region where ocean circulation is better observed now than ever before, with the Greenland-Scotland Ridge (GSR), OSNAP, and NOAC mooring arrays, the latter soon to be extended onto the Irish shelf as part of the EirOOS project.

This workshop will promote closer collaboration between the groups making (especially moored) observations along the eastern boundary of the subpolar North Atlantic. As a clustering activity between European funded Blue-Action, Atlas and others and with extended funding for NOAC and OSNAP recently secured, the recently funded A4 project in Ireland, new announcements of opportunity associated with OSNAP in the UK, this workshop is timely and hopefully fruitful.

Workshop Goals

The two aims of the workshop are:

1. Descriptions of in-situ observing systems, for co-ordination of observing and analysis
2. Framing the scientific questions of societal relevance (in the region)

We hope to identify two papers that we could collaborate on as a group going forward.



Blue-Action and Atlas have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements No 727852 (Blue-Action) and No 678760 (ATLAS).

We will aim to build an agenda for the afternoon based on feedback from the group (rather than prescribing it). At this stage, we are soliciting broad ideas/questions that we can build on. Such as:

What are the competing roles of air-sea interaction and ocean circulation in the changing eastern subpolar gyre?

How might climatic change in the subpolar gyre be transmitted to the European shelf (either through the shelf-edge current or sea level)?

How can improved understanding of individual currents (such as the shelf edge current and Norwegian current) improve and refine decadal climate predictions?

What are the challenges in modelling this region, including modelling of narrow jets and shallow topography?

Proposed agenda:

11.00-13.00:

10 mins: Welcome (Gerard)

Motivation for workshop

20 mins: NOAC, Martin Moritz

Estimates of the European Slope Current

Including plans for AMOC estimate at 47N

Future plans

20 mins: OSNAP-E, Stuart Cunningham (or another)

Recent results

Future plans

20 mins: FSC/GSR, (MSS)

A basinwide total timeseries from the GSR

Future plans and challenges

13.00-14.00:

Break for discussion/lunch.

14.00-17.00:

Talks: TBA

1730-1900:

Future plans

Workshop networking Dinner (Booked at Howies:

<https://www.howies.uk.com/venues/howies-waterloo-place/>) for 19.30



Attendees:

SAMS: *Stuart Cunningham, Alan Fox, Neil Fraser, Clare Johnson, Kristan Burmeister*

BSH: Martin Moritz

Maynooth University: *Gerard McCarthy, Levke Caesar, Samuel Diabaté, André Düsterhus*

NUI Galway: Martin White

NOC: *Penny Holliday (remote), Ben Moat*

University of Southampton: Bob Marsh, Matt Clarke

Irish MI: Caroline Cusack, Tomas Dubrowski, Alan Berry

Marine Science Scotland: *Bee Berx (or a.n. other)*

Faroese Marine Research Institute: *Karin Margretha Larsen*

Blue-Action: *Chiara Bearzotti*

ATLAS: Julia Eighteen

*italics indicate Blue-Action partners

