MagellanPlus Workshop

11 - 13th January 2023, Belfast, Northern Ireland.

CenoStore: late Cenozoic palaeo-climate of NW Europe and implications for subsurface CO_2 containment

The aim of the CenoStore project is to recover the highest resolution late Pliocene and Early Pleistocene record of the climatic and palaeo-environmental evolution of northern Europe, capturing the onset of Quaternary and the mid Pleistocene transition in a partially glaciated mid-latitude setting.

The purpose of this workshop is to gather stakeholders from different North Sea member states and introduce the CenoStore project. The aim is to facilitate development of international collaborations that reflect and utilise the wide range of geological expertise and scientific research that takes place in the North Sea Basin, to provide the most up-to-date knowledge of the late Cenozoic in the North Sea.

Existing and new drill sites and operational issues will be discussed, as well as refinement of the scientific hypotheses that will underpin a full IODP mission-specific platform (MSP) North Sea drilling proposal.

We therefore invite all scientists from different geological backgrounds (e.g. chronology, palaeontology, sedimentology) and at different career stages (e.g. PhDs and post-docs to senior academics and industry professionals), interested in the late Cenozoic palaeo-climate record of the North Sea Basin, to join us in Belfast!

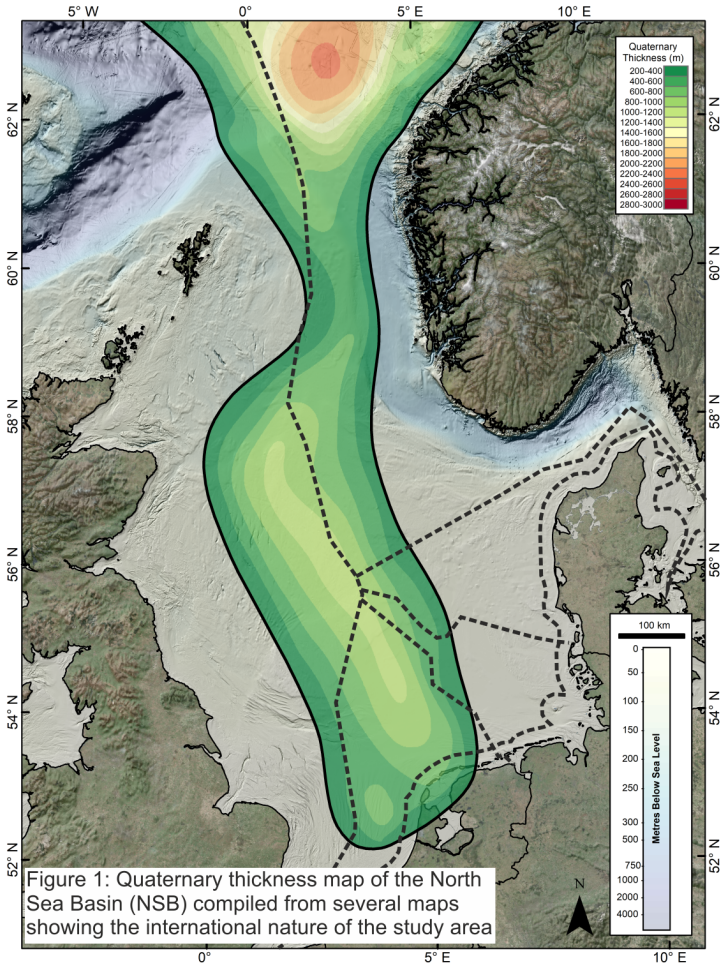

Figure 1: Quaternary thickness map of the North Sea Basin (NSB) compiled from several maps showing the international nature of the study area

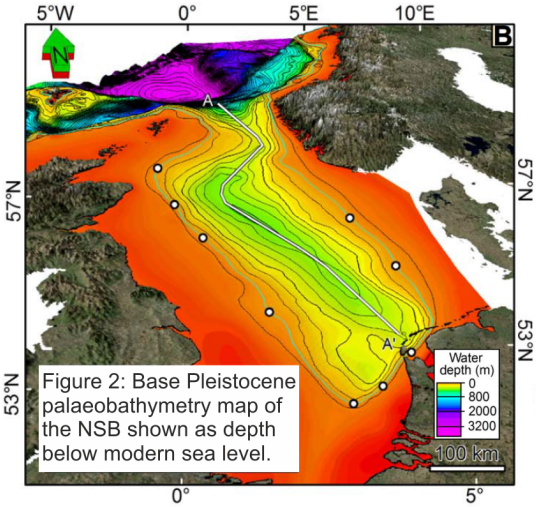

Figure 2: Base Pleistocene palaeobathymetry map of the NSB shown as depth below modern sea level.

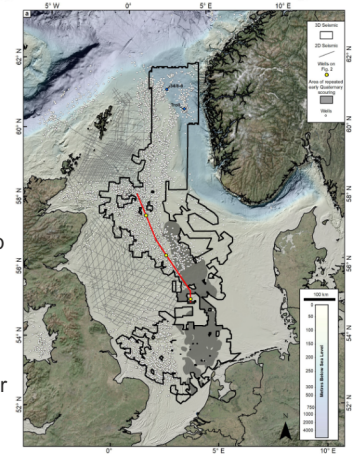

Figure 3: Bathymetric map of northwest Europe study area including the locations of seismic and well data available for the CenoStore project

Preliminary Workshop Programme

Icebreaker	**10/01/23**
19:00 - 21:00	Icebreaker and welcome event at Queen's University Belfast
Day 1	**11/01/23**
09:00	Welcome of delegates and introduction to the goals of the workshop
09:30	Presentation of the CenoStore Project aims and objectives
10:00	**Session 1**: late Cenozoic climates and connections; keynote and delegate contributions
12:00	Lunch Break
13:00	**Session 2**: late Cenozoic geology of the North Sea; keynote and delegate contributions
15:00	Coffee Break
15:30	Break-out groups discussing climatic priorities and relationship with the geology
16:30 - 17:00	Results from break-out groups
Day 2	**12/01/23**
09:00	Welcome coffee
09:30	Presentation of preliminary sites from the CenoStore team
10:30	**Session 3**: Drill site targets and geohazards; keynote and delegate contributions
12:00	Lunch Break
13:00	IODP Representative presenting on the IODP process
14:00	Break-out groups discussing possible drill site locations and refinement
15:00	Coffee Break
15:30	Break-out groups discussing possible drill site locations and refinement
16:30 - 17:00	Results from break-out groups
20:00 - 22:00	Workshop dinner for participants
Day 3	**13/01/23**
09:00	Welcome coffee
09:30	Break-out groups discussing potential contributions and support from member states
12:00	Lunch Break
13:00	Break-out groups discussing drill site and proposal hypotheses/preparation
15:00	Coffee Break
15:30 - 16:30	Synthesis and outcome of workshop

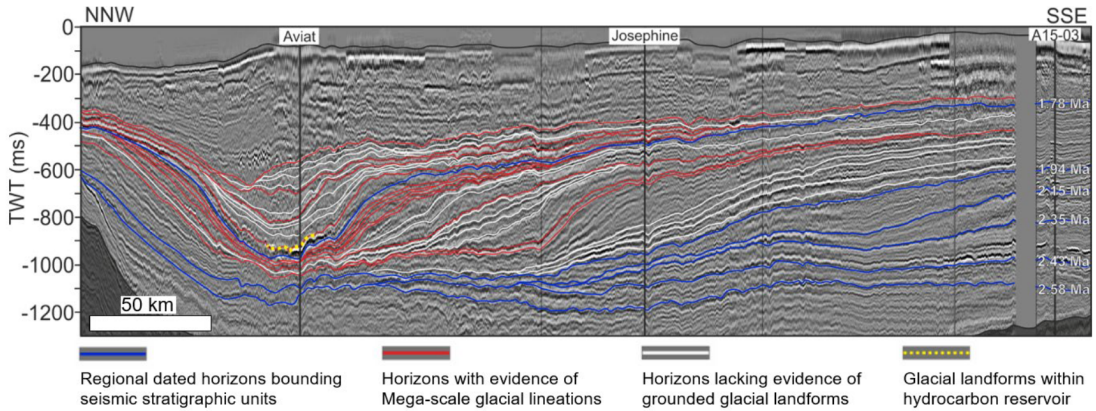

Figure 4: Seismic profile along axis of the Central North Sea Basin (red line location shown in fig. 3) showing offset stacked Pleistocene clinoform infill

The workshop will be hosted by Queen's University, Belfast, Northern Ireland from 11th - 13th January 2023.

We expect a workshop size of 25 - 30 participants and have secured support for accommodation. Travel support is limited and will be preferentially dedicated to early-career researchers. The workshop also expects to facilitate virtual participation.

To apply, please provide a brief statement of interest and a 1-2 page CV to: georgina.heldreich@manchester.ac.uk and A.Newton@qub.ac.uk

Also indicate if you would like to give an oral (10-15 mins) or poster presentation in one of the sessions.

Deadline for applications is 30th September 2022.

Organising committee:

Andrew Newton (QUB), Mads Huuse (UoM), Heather Stewart (BGS), Margaret Stewart (BGS), Georgina Heldreich (UoM), Ian Kane (UoM), Freek Busschers (TNO)