

# Westmorland Geological Society

## Glaciation of the North Sea Basin

Prof Mads Huuse, University of Manchester

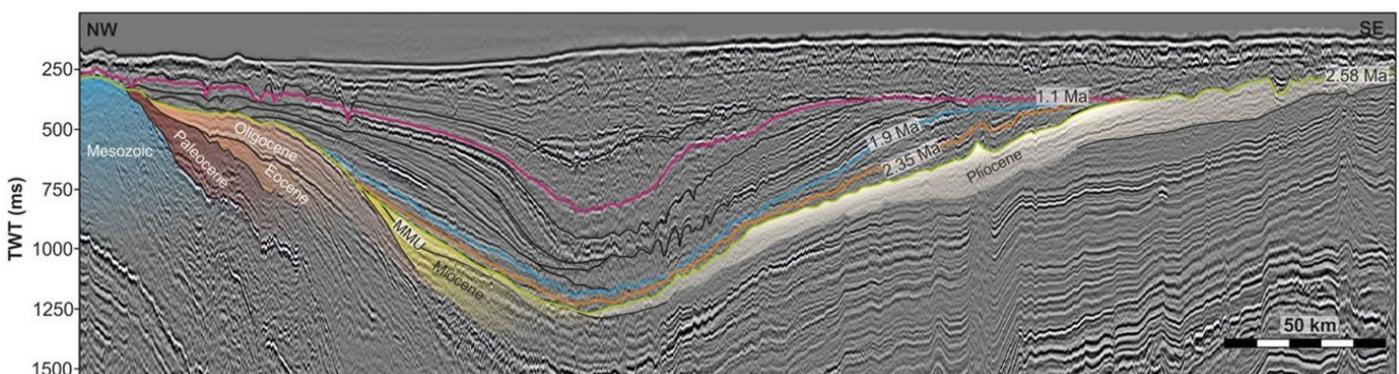
Wednesday 18 November 2020 - 19.30 start

email [westmorlandgeolsoc@gmail.com](mailto:westmorlandgeolsoc@gmail.com) to register

Since the end of the Eocene, Earth's climate has largely been in an 'ice house' state with glaciation on the poles and varying intensity of glaciation at lower latitudes, as far south as the Isles of Scilly during the late Pleistocene. The study of glacial deposits in NW Europe is centuries old and Darwin famously recognised erratics and landforms as caused by extensive glaciations. Despite intense scrutiny of the glacial record onshore over the past centuries, the knowledge of glaciation history beyond the last 3 glaciations (> 0.5 Ma) is extremely sparse, leaving many unknowns and apparently conflicting pieces of evidence, pitting researchers and country-scale records against each other. This talk will set the glacial record straight by drawing on the expanded, dated and well-imaged offshore record.

The imprints of glaciation reveal that the North Sea and surrounding landmasses were repeatedly glaciated from the onset of the Pleistocene at 2.5 Ma. This is revolutionary when compared with glacial histories and stories based on onshore records, which (we now know) only represents the last 20% of the Quaternary glacial history.

The work on the North Sea glacial record has been done through numerous PhD projects, industry and academic collaborations without which the early Pleistocene would still be just 'overburden' to the North Sea oil, gas and carbon storage resources.



*Lamb et al. 2018: Journal of the Geological Society 175, 275-290.*

Mads Huuse is Professor of Geophysics at The University of Manchester. He leads an active research group of over 10 PhDs using seismic data to study the fill, palaeo-environments and fluid flow in sedimentary basins around the world. About half his published work concerns the North Sea Cenozoic, with particular emphasis on glacial geology and fluid flow. His published papers, many of which led by PhDs and post docs working on glacial records, can be found here: <https://tinyurl.com/mhuuse2020>