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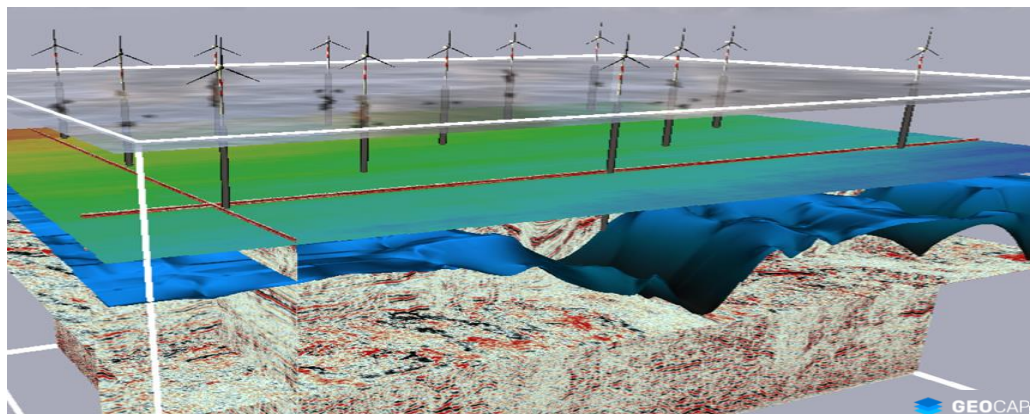


Call for abstracts – Deadline 31st May 2024

Ground modelling for offshore wind developments

21-22nd November 2024

The Geological Society, Burlington House, Piccadilly, London



Offshore wind is fast becoming a major source of clean energy around the world and is projected to grow 10-fold from 2022 to 2050. All developments require a reliable and fit-for-purpose integrated ground model to help mitigate risks, design suitable anchor and/or foundation types and determine the most appropriate cable routes, burial and method for cable/foundation installation in a cost-effective and safe way.

High-frequency and high-amplitude sea-level changes during the Pleistocene have left substrates offshore with high spatial and temporal variability, which are further complicated in high latitude regions by direct glacial action, which can lead to juxtaposition of very variable soil components including boulders, stiff clays, loose sands and peat. The geotechnical properties of offshore soils can thus be very complex and need to be captured with high confidence and at high resolution before designing wind turbines, substations, energy islands and subsea power cables. It is vital for ground modelling to identify any features that pose a hazards to developments such as; channels, boulders, steep dips, glacial tectonics, shallow gas, liquefaction-prone soils, mass flows and man-made submarine structures.

Ground models incorporate basic geotechnical data to extremely complex, integrated geophysical and geotechnical 3D property models. The resulting ground models allow the data to be put into geological context to understand sub-meter to kilometer-scale geological complexities and geohazards and to better inform engineering design.

This conference aims to bring together geoscientists and engineers interested and engaged in the geological, geophysical and geotechnical characterisation and modelling of the upper few hundred metres of the subsurface in glaciated and non-glaciated terrains. Experiences of geohazards, oceanographic investigations and conceptual, statistical and deterministic modelling welcome.

For further information and to submit abstracts:

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