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**Evolution of the Taimyr Peninsula (Arctic Siberia) and the Implications for Surrounding Hydrocarbon Basins**

The Taimyr Peninsula lies on the Arctic margin of Siberia, and is cored by a fold-and-thrust belt that exposes rocks from Proterozoic to Cretaceous age. Taimyr is surrounded by proven and potential hydrocarbon basins (West Siberian Basin, Yenisey-Khatanga Trough, Kara Sea, Laptev Sea) and contains vital information with which to understand the evolution of these basins since Late Paleozoic time. However, the timing and nature of deformation throughout Taimyr has been the subject of much debate, and even the ages of major continental collision events are controversial. This presentation reports the results of new structural, stratigraphic, paleomagnetic and geochronological investigations aimed at resolving the uncertainties.

New data collected during field expeditions in southern and central Taimyr has led to a radical reassessment of existing models. A widespread phase of Triassic magmatism is recognised, which was followed by regionally significant episode of partitioned transpression. Both these events substantially post-date the onset of sedimentation in adjacent hydrocarbon basins, and therefore have important implications for sediment dispersal, basin structuring and thermal histories. We propose that the phase of transpression is linked to the initiation of the Arctic Ocean, and predict that it may have affected substantial areas of adjacent shelf. In the southeast of Taimyr, a post mid-Cretaceous folding event is also apparent. We interpret this to represent more localised inversion effects along the landward continuation of an Arctic Ocean transform fault.