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**Structural/Stratigraphic Modelling of Wedge Top Basins in the Central Apennines**

In a wedge-top setting, the morphology of the growing structures can affect the facies distribution and consequently the reservoir quality of the turbidite systems. This relationship between tectonics and sedimentation can be a key to understanding petroleum systems in such settings, not only in terms of the timing of the structural phases and the reservoir quality, but also for the issues of seal integrity, migration pathways, and possible dismigration episodes. Structural forward modelling has been coupled with stratigraphic modelling in a test site situated in the Central Apennines, where foreland basin turbidites are an exploration target. Our studied zone is situated in the East of the Umbria-Marche Apennines, the synflexural and synkinematic series are where Messinian to Pliocene in age. Here, the series deposited in a flexural foreland setting have been progressively involved in thrusting, uplifted and eroded. The degree of confinement of the turbidite systems increased through time as the foreland basin was progressively segmented by growing structures. Structural forward modelling of a regional cross section was carried out, and during each stage of the model sediment was eroded from the thrust belt and redistributed according to numerical transport laws. This coupled modelling allowed us to iteratively correct and refine the structural interpretation of the seismic data. The modelling also led us to revise and update our a priori facies model based uniquely on seismic facies, in areas where no field or well control was available. This approach opens new perspectives for petroleum exporation in wedge top settings.