

## Regional tectonics versus global climate – impact on stratigraphy of the Central Paratethys?

Piller W.E\*.<sup>1</sup>, Harzhauser M.<sup>2</sup>, Mandic O.<sup>2</sup>, Kranner M.<sup>1-2</sup>, Strauss P.<sup>3</sup> & Siedl W.<sup>3</sup>

<sup>1</sup> University of Graz, Austria. <sup>2</sup> Natural History Museum Vienna, Austria. <sup>3</sup> OMV Exploration & Production GmbH, Vienna, Austria.

Corresponding author email: [werner.piller@uni-graz.at](mailto:werner.piller@uni-graz.at)

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The Paratethys is an Oligocene – Neogene semi-enclosed, epicontinental basin with highly variable connections to the Mediterranean, Indopacific and North Sea through time. The differentiation between the importance of tectonic movements versus expression of global sea level fluctuations is an ongoing discussion in interpreting depositional architecture of sedimentary basins and regional stratigraphy and its correlation with global chronostratigraphy. Large surface or subsurface outcrops, unconformity bound sedimentary bodies observable over a relevant distance, a detailed paleoecological analysis and a tight stratigraphic corset are the prerequisites for any attempt to evaluate the ratio between these mechanisms. Due to their highly active tectonic environment, the Central Paratethyan basins are exceptionally challenging targets to approach this problem. Herein we present the Vienna Basin, one of the best-studied pull-apart basins in the world with a major hydrocarbon reservoir. The Vienna basin also acts as an exemplary case to check for fits and misfits of the stratigraphic record with global climate and 3<sup>rd</sup> order sea level changes, based on new 3D-seismic surveys of the up to 6000 m thick Neogene basin fill coupled with an in-depth revision and reassessment of lithostratigraphy and biostratigraphic data from numerous wells in its central and northern parts. Especially the change of the tectonic regime, from piggy-back basins with halfgraben formation towards a pull-apart mechanism around the early/middle Miocene boundary is the pivotal point to compare the depositional regimes and their response to global climate change.