AP02

Keynote - Plate Tectonic Models and Regional Structural Frameworks - Bridging the Gap by Paleo-Stress Inferences in the Middle East Region

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SUMMARY

Generally subtle, but locally significant effects of tectonic activity recurrently interplayed with the global eustasy record across sectors of the Arabian shelf and its passive margin towards the Neo-Tethys Ocean. Plate-tectonic models are generally considered helpful and consulted, in order to improve regional structural frameworks of hydrocarbon plays in the Middle East region. The near-field, far-field, and remote effects of primary plate boundary forces should profoundly control the (re-) activation of (inherited) fault trends, critically affecting structural relays, tectono-stratigraphic trends, carbonate factories, and patterns of sediment dispersal or differential erosion. A set of simple inferences based on elementary concepts and assumptions concluded from the plate-tectonic models may help to assess regional-scale palaeo-stress conditions, to constrain structural framework models across the Middle East region.