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What makes shale-based systems unique from salt systems? 3.2. Mechanics of shale movement; Overview; Driving force: Fluid pressures; Sediment strength in shale décollements; 3.3. Shale emplacement and form; Overview; Mobile shale forms and stratigraphic relationships; Detachment folds; Diapir onlap; Diapir top drape or rollover rims; Radial faults and tilted fault blocks; Erosional truncation and associated unconformity traps; Anticlinal development through subsidence; 3.4. Shale and regional tectonics; Shale in regional tectonics; 3.5. Conclusions; References

Chapter 4: The Red Sea and Gulf of Aden basins 4.1. Introduction; 4.2. Afar; African margin; Neoproterozoic basement; Pre-rift sequence; Oligocene plume volcanism; Syn-rift Miocene volcanism; Pliocene-Pleistocene volcanism; Quaternary geology and neotectonics; Arabian margin; Precambrian basement; Pre-rift sequence; Pre-rift Oligocene plume volcanism; End Oligocene to Miocene syn-rift; Syn-drift Pliocene-Pleistocene sediments; Quaternary geology and neotectonics; 4.3. Gulf of Aden; Pre-rift setting; Basement and Paleozoic-Mesozoic cratonal strata; Mesozoic rifting; Cenozoic pre-rift strata Oligocene-Miocene continental rifting Rift initiation; Syn- to post-rift deposition; Miocene initiation of seafloor spreading; Propagation of seafloor spreading to the Gulf of Tadjoura; 4.4. Red Sea; Pre-rift setting; Neoproterozoic basement lithologies and structure; Structures related to the evolution of Neotethys; Pre-rift stratigraphy and proto-Red Sea embayments; Syn-rift evolution; Rift initiation; Main rift subsidence; Onset of Aqaba-Levant transform boundary; Mid-ocean spreading and drift phase evolution; Quaternary geology and neotectonics; 4.5. Plate scale considerations 4.6. Discussion

Sommario/riassunto

Expert petroleum geologists David Roberts and Albert Bally bring you *Regional Geology and Tectonics: Phanerozoic Passive Margins, Cratonic Basins and Global Tectonic Maps*, volume three in a three-volume series covering Phanerozoic regional geology and tectonics. Its key focus is on both volcanic and non-volcanic passive margins, and the importance of salt and shale driven by sedimentary tectonics to their evolution. Recent innovative research on such critical locations as Iberia, Newfoundland, China, and the North Sea are incorporated to provide practical real-world case studies
