

**Poster Session
HGS Dinner Meeting
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***The Variable Age of Decollement
Surfaces in the Gulf Coast
of Texas and Louisiana***

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Over the past five years, improvements in 2-D and 3-D seismic resolution and the availability of new well data in the Gulf of Mexico have led to changes in previous interpretational concepts. The enhancement of deeper seismic in some areas shows evidence for regional decollements, which divide the Tertiary-Quaternary sediments into separate structural realms. Where horizontal salt bodies exist these decollements correlate to the base, and there is evidence for both extensional and compressional faults. In the absence of salt, decollements occur in ductile shales.

The age of the surfaces varies from Pleistocene downdip (Sigabee Scarp) to late Eocene onshore and is seismically defined by a variety of common visual seismic signatures that can be integrated into well control.

For many years interpretational concepts along the Gulf Coast and out across the Gulf of Mexico shelf were dominated by shifting depocenters, large extensional listric growth faults, and vertically injected piercement domes rooted in the Jurassic Lemon Salt. Reevaluation of salt injection features based on 180,000 miles of 2-D regional seismic data and integration of 10 to 12 key wells has focused greater emphasis on the relationships between salt and decollement surfaces, horizontal salt injection, and weld zones.