

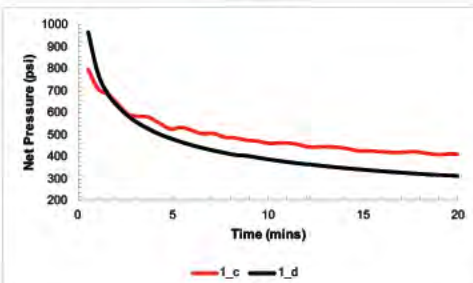
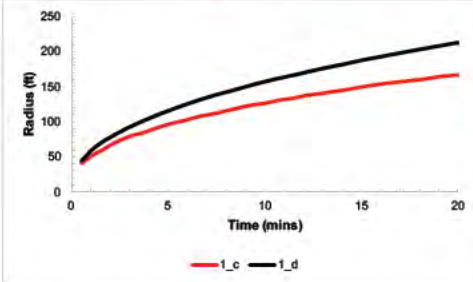
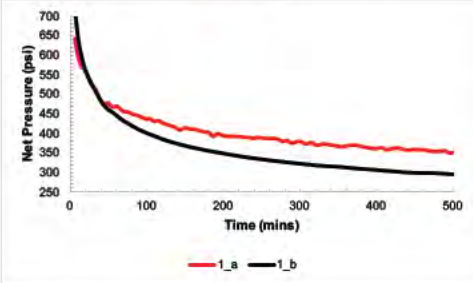
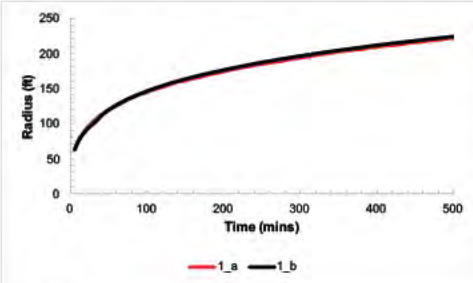


# Hydraulic Fracturing Model Benchmarking using simulators at UT Austin

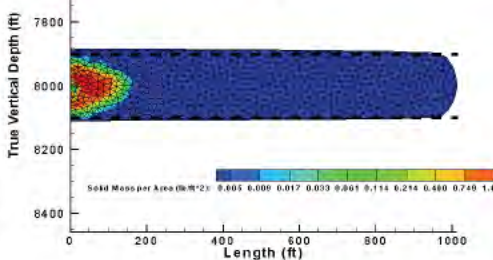
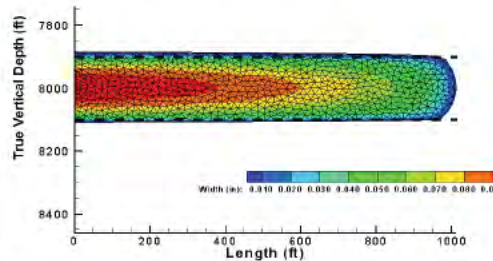
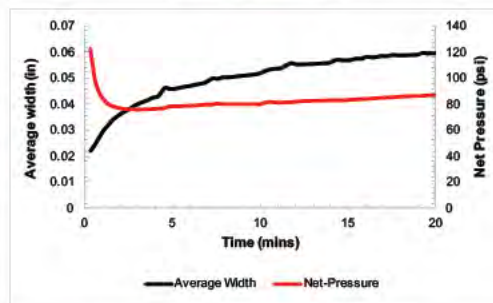
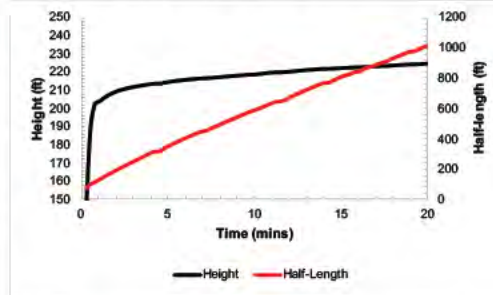


- Deepen Gala and Dr. Mukul M. Sharma

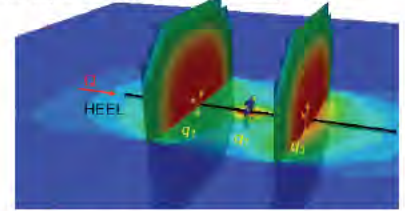
## Case 1 (Single Fracture in homogenous elastic media)



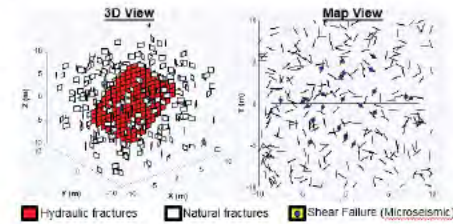
## Case 2 (Single Fracture in layered elastic formations)



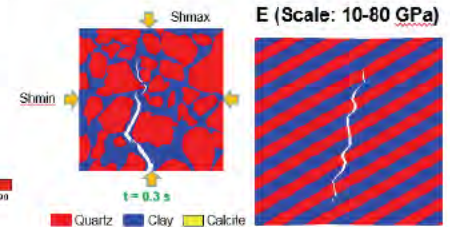
## Multi-Frac (FVM based, poroelastic, multiple non-planar fractures)



## Multi-Frac-NF (DDM based, multiple non-planar fractures with natural fractures)



## Peri-Frac (Peridynamics based, multiple non-planar fractures in heterogeneous reservoirs)



## Frac-Pack (FVM based, poro-elastoplastic, fully 3D)

