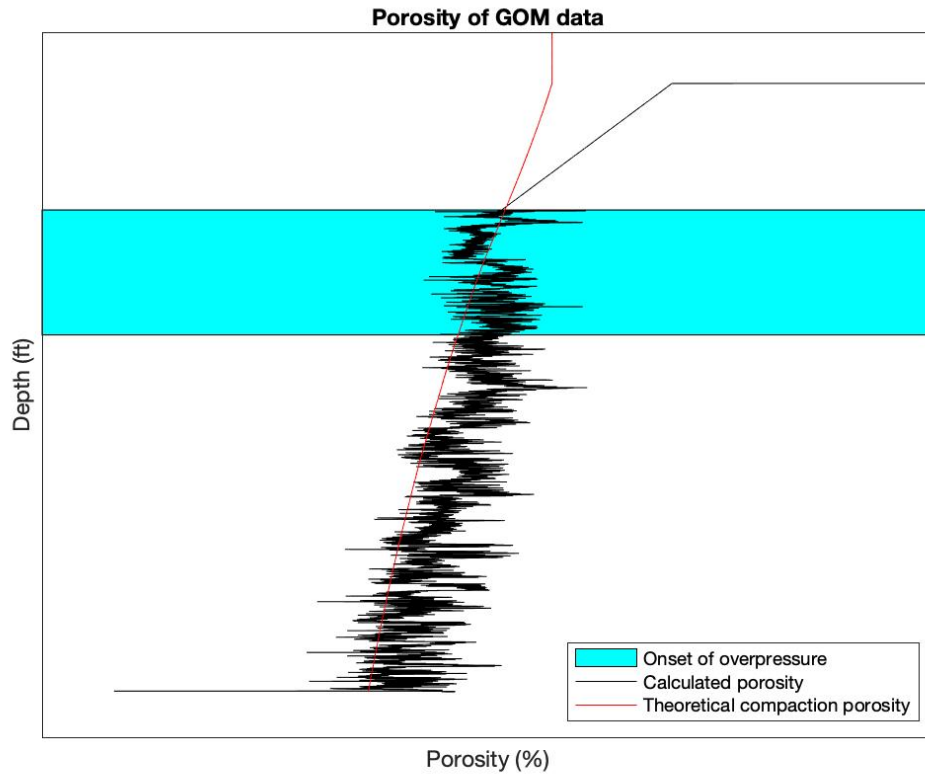I.   Estimate the depths of Gulf of Mexico overpressure

a. Plot porosity versus depth.

b. Use the parameters given to calculate a theoretical compaction trend.

c. Estimate the onset of overpressure.

Porosity of GOM data

Depth (ft)

Porosity (%)

Legend:
- Onset of overpressure
- Calculated porosity
- Theoretical compaction porosity

II.   Estimate the magnitude of Gulf of Mexico overpressure

a. Compute pore pressure using the calculated porosity data.

b. Estimate the magnitude of overpressure.

Magnitude of the calculated pore pressure

Depth (ft)

Stress / Pressure (psi)

Legend:
- Overburden Stress
- Hydrostatic Pressure
- Pore Pressure