# Supplementary Materials

# Uncertainty analysis of the storage efficiency factor for $CO_2$ saline resource estimation

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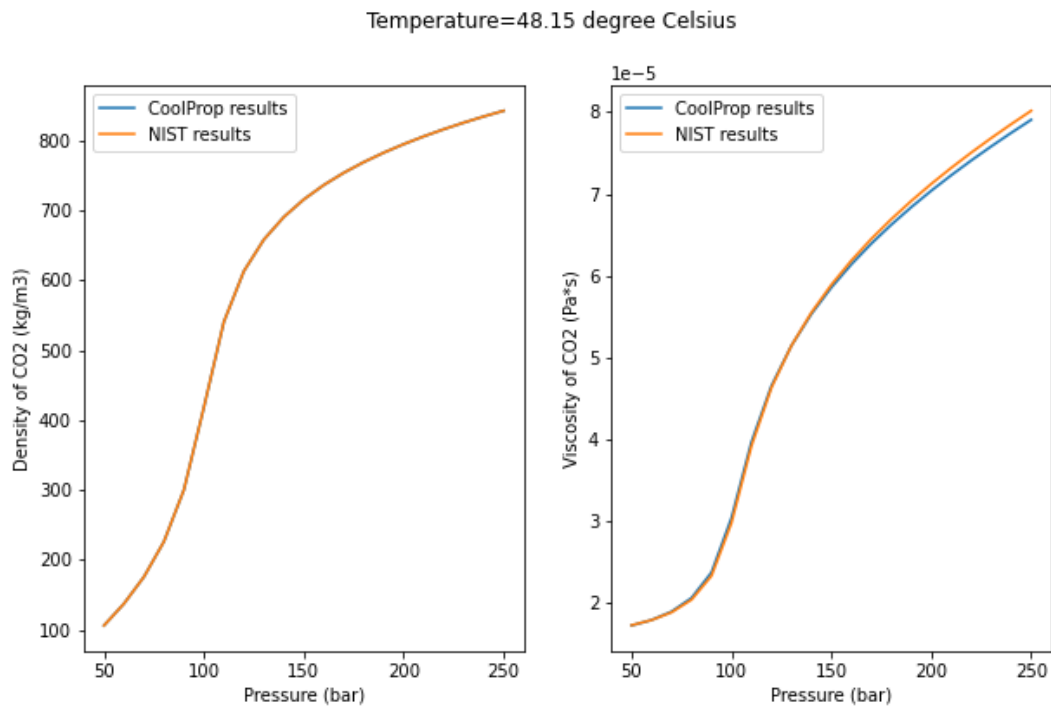
Temperature=48.15 degree Celsius



Figure S1. A comparison of the estimated $CO_2$ properties a) the density in kg/m$^3$ and b) the viscosity in Pa*s at pressure ranging from 50 bar to 250 bar and at temperature of 48.15 ºC using the CoolProp package and the NIST website.
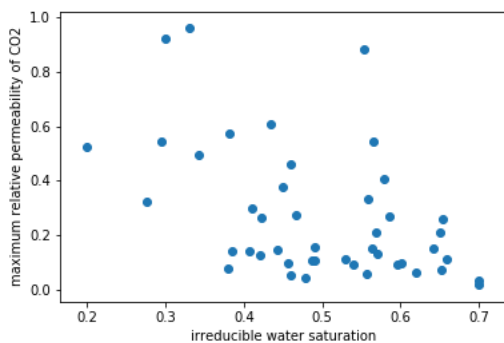


Figure S2. A scatter plot of the physical experimental measurements of the maximum relative permeability of $CO_2$ and the irreducible water saturation reported in (Burnside & Naylor, 2014; Crandall et al., 2019).
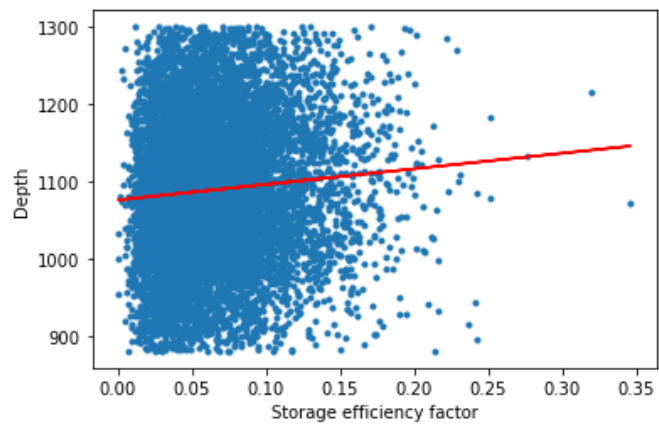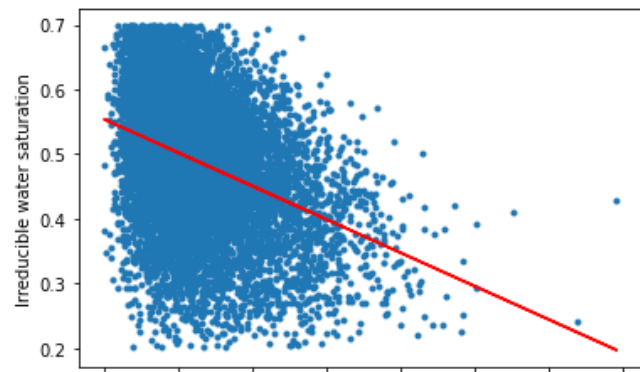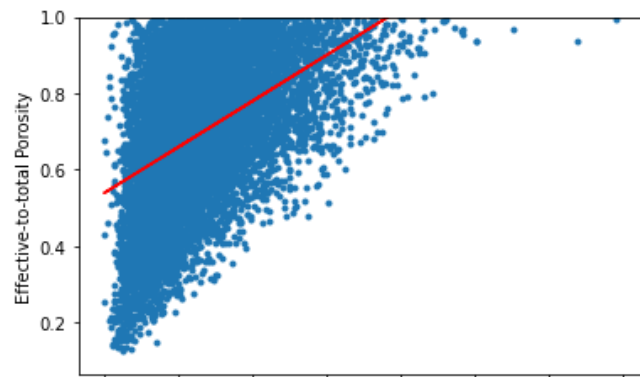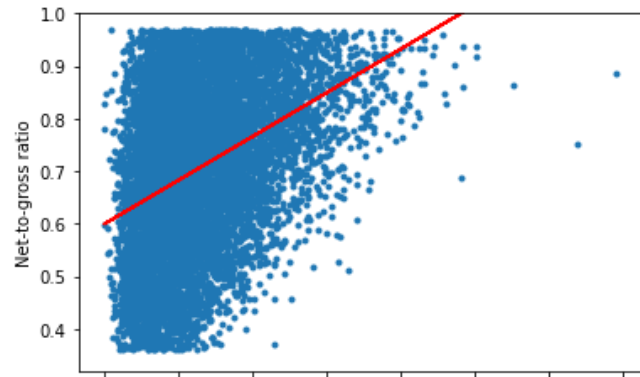
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Figure S3. Scatter plots of the storage efficiency factor, calculated in the 10,000 Monte Carlo simulation runs, against the generated net-to-gross ratio, effective-to-total porosity, irreducible water saturation and depth values for the Sognefjord formation in the 10,000 independent scenarios.