

Figure 9: Residually trapped volumes for linear (left) and quadratic (right) relative permeabilities. Cases on the red lines have the same values at the end of injection and end of simulation.

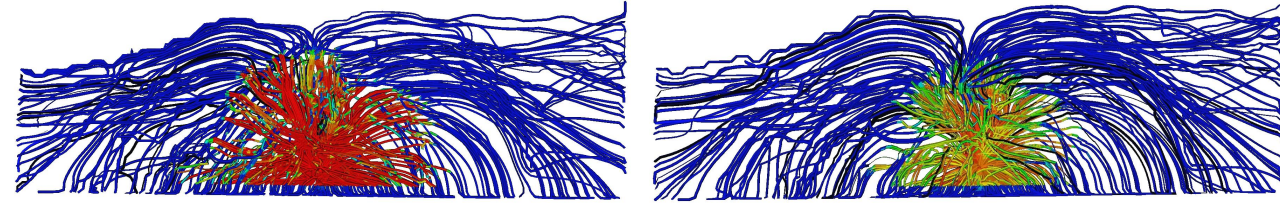


Figure 10: Top view of  $\text{CO}_2$  saturation plotted on streamlines for linear relative permeabilities (left) and quadratic permeabilities (right). Red color corresponds to the mobile  $\text{CO}_2$  and blue represents the water phase.

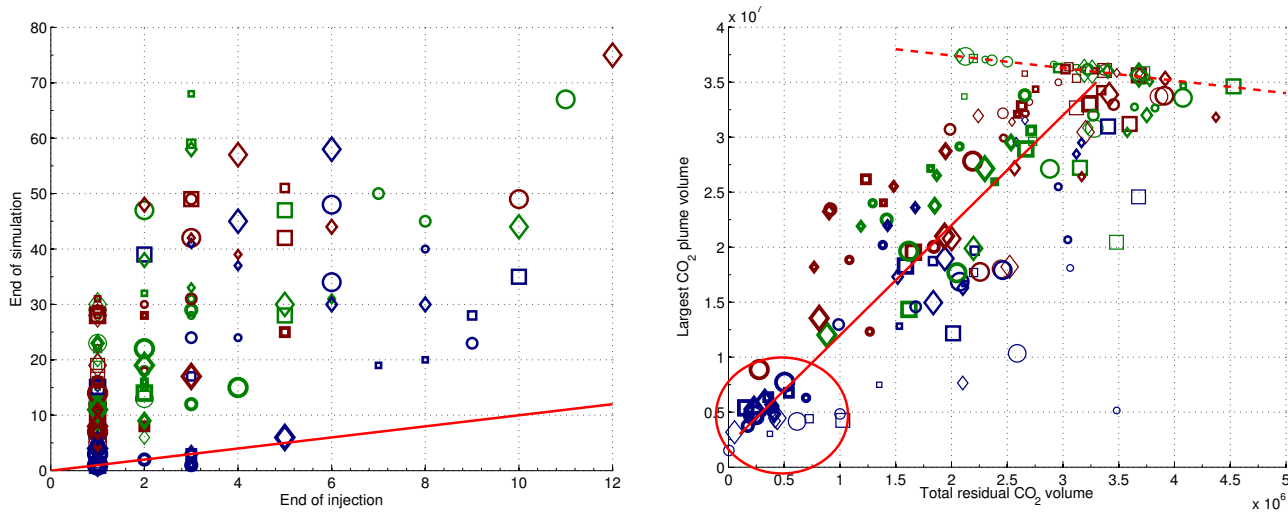


Figure 11: The cross-plot to the left shows the number of  $\text{CO}_2$  plumes at the end of simulation versus the number of plumes at the end of injection for linear relative permeability function. The right plot shows the volume of the largest  $\text{CO}_2$  plume versus the volume of residual  $\text{CO}_2$  at the end of simulation.