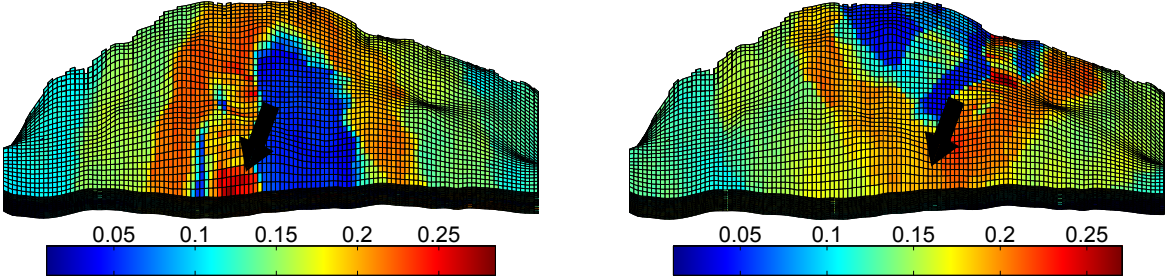

(a) Up-dip progradation.

(b) Down-dip progration.

Figure 3: Progradation dip direction shown by porosity for a case with one lobe. Arrows point to injection locations in the flank. Up-dip proragdation (left) contains heterogenities in the form of high contrast channels surronded by poor quality rocks. The injectivity in this case can be dramatically good or bad, depending on the well location. On the other hand, down-dip progradation (right) provides a lower contrast in the flank that can be low rock quality in general with low injection quality.

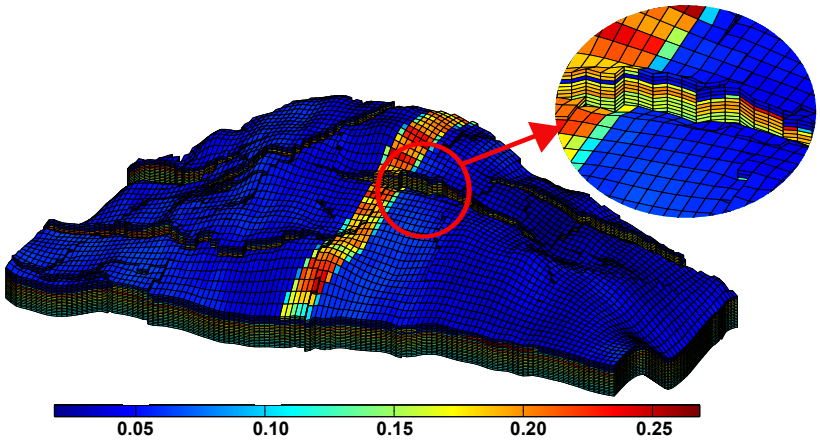

Figure 4: Faults connect layers with different rock types. Porosity is shown ion the grid. Across the fault, layers with low pore volume and permeability (the latter is not shown here) sit next to high pore volume and permeability layers.