

Figure 1: Facies variations for a selected fine model, with colors corresponding to different rock types. The upper-left plot shows a perspective view of the actual grid, whereas the rock types have been mapped to a uniform grid for a better visualization to the upper right. The lower plot shows a histogram of the logarithm of the lateral permeability (unit: cP m<sup>3</sup>/day/bar).

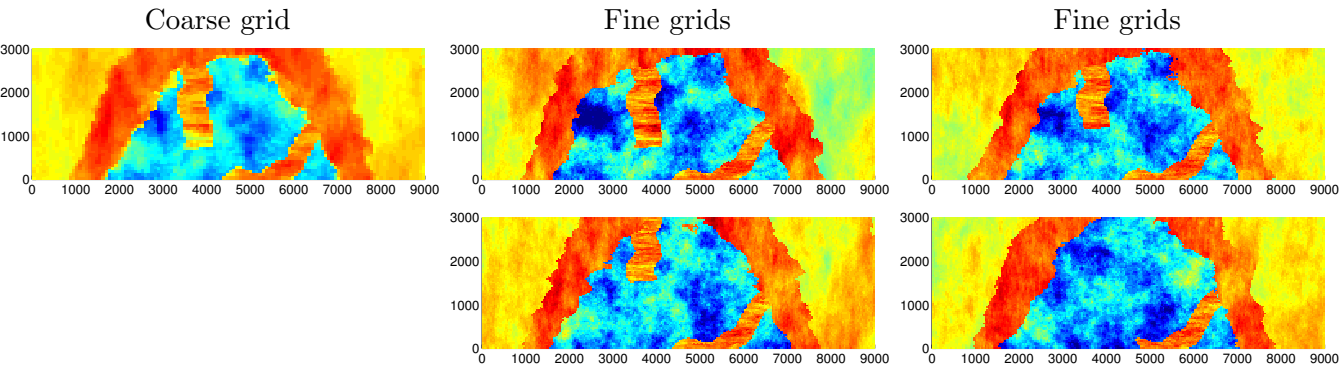


Figure 2: Top view of the logarithm of the lateral permeability plotted for the first four layers of the fine grid versus their representative layer in the coarse grid.

Table 1: Specifications for the fine and coarse grids used in the SAIGUP modeling process.

Parameter	Fine scale	Coarse scale
Grid spacing ( $x$ -direction)	37.5 m	75 m
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Grid spacing ( $x$ -direction)	1 m	4 m
Total number of cells	1,500,000	96,000
Number of active cells	1,500,000	79,000
Lateral extent ( $x$ -direction)	6 km	6 km
Lateral extent ( $y$ -direction)	9 km	9 km
Vertical extent ( $z$ -direction)	80 m	80 m