



Figure 1: Geological modeling in the SAIGUP realizations contains six facies that represent a shallow-marine system.

Table 2: Geological modeling parameters

Parameter	Value
Model dimensions	3 km \times 9 km \times 80 m
Geological grid resolution	80 \times 240 \times 80
Simulation grid resolution	40 \times 120 \times 20
Simulation grid resolution	40 \times 120 \times 20
Average of lateral permeability	181 mD
Average of Vertical permeability	26.8 mD
Average of porosity	0.145

Table 3: Marker codes used in the result plots. The code level corresponds to levels in Figure 2.

Code	Description	Code level	Feature level
Thickness	Fault	thin/medium/thick	unfaulted/open/close
Shape	Lobosity	square/circle/diamond	flat/one-lobe/two-lobe
Size	Barriers	small/medium/large	10% / 50% / 90%
Color	Aggradation	blue/green/red	low/medium/high
Case no. counting	Progradation	first half/second half	up-dip / down-dip