

DEL117 - Developing Delft3D-GeoTool to predict coastal evolution under sea-level rise

With the Delft3D-GeoTool (D3D-GT), the oil & gas, geothermal and drinking water industries can improve the performance of their reservoirs. By better understanding how the subsurface looks, they can e.g. increase extraction volumes or more sustainably manage the subsurface reservoirs.

Furthermore, D3D-GT can be used to study changes at the surface (bathymetry) and below surface (stratigraphy) sediment distributions in shallow marine /coastal systems.

In this project we will develop:

- Techniques for simulating century-scale sediment erosion, transport and deposition for a coastal setting under a rising sea level.
- Tools for applying Delft3D-GT output to improve statistical geological modelling workflows for various uses, such as fresh water availability.
- A case study to entice new users, growing the user community