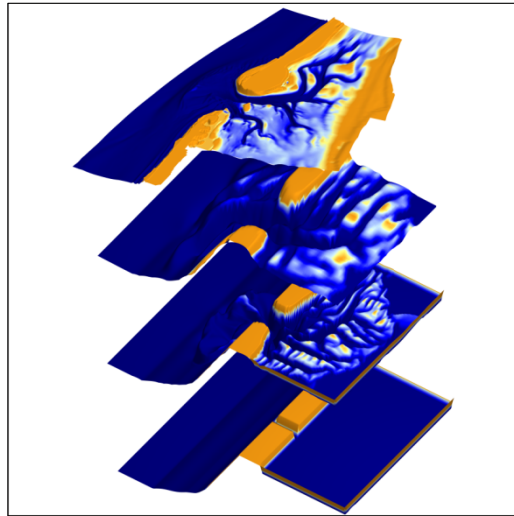


Modelling long-term morphodynamic evolution of coastal systems



Coastal systems (e.g. tidal inlets/basins) are rich in bio-diversity and socio-economic activities. The continued existence and/or growth of these environmental systems are under threat due to climate driven impacts (e.g. Sea Level Rise, SLR) and anthropogenic effects. A clear understanding of the potential responding morphological evolution of these systems is therefore of utmost importance to implement effective and efficient coastal management strategies. Present talk describes a novel approach to qualitatively investigate the long-term morphological response of a large tidal inlet/basin system to future sea level rise based on the Dutch Wadden Sea area (the Netherlands) and a real-world case of an anthropogenic effect from Germany using the state-of-the-art Delft3D numerical modelling suite.