**Flagship: Modelling future deltaic systems**

Climate change is projected to increase both the frequency and severity of floods, storms, and droughts in deltaic areas, which is the interrelation between the coastal, riverine, and regional and urban water systems. This flagship focuses on improving the understanding of these systems and their

interactions, including the urbanized landscape and infrastructure, under climate change. The focus is on the integrated and interdisciplinary approach to combine data and modeling tools to create a framework to inform local authorities on the effects of climate change on specific events. This framework supports daily operations (real time, early warning) and long-term planning, under deep uncertainty.

**About Marieke Kootte**

Marieke graduated as an applied mathematician at the KTH University of Stockholm. She continued her PhD in Delft in the group of Numerical Analysis in the faculty of Electrical Engineering, Mathematics, and Computer Science, where she created an integrated modeling framework to simulate the flow of electrical power on transmission and distribution networks. She is currently an Assistant Professor in the group of Mathematical Physics in the same faculty. She is interested in modeling of local and regional environmental problems and often works on case studies provided by users in practice, particularly those arising from the effects of climate change.

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