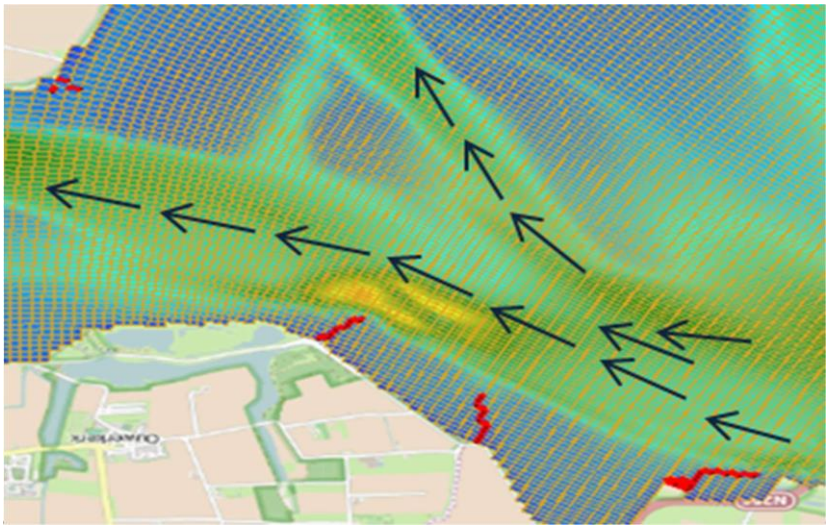
Simulation service 1. Hydraulic analysis with consideration of terrain with the use of Delft 3D FM (a multi-dimensional hydrodynamic simulation program)

We can predict periodic changes in water quality, wave movements, and tide levels, taking into account changes in flow due to complex terrain peculiar to meandering rivers, estuaries, and coastal rivers as basic data for structure construction plans.



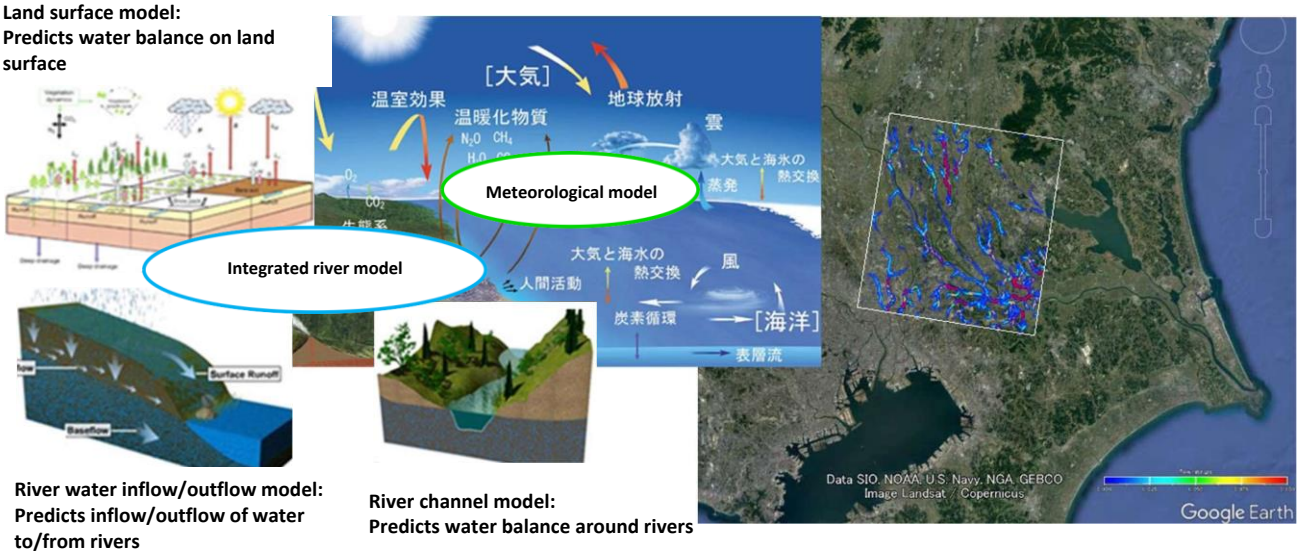
Simulated water flow with terrain effect: Prediction of distribution of salinity concentration in rivers

JANUS 日本エヌ・ユーエス株式会社

Simulation service 2. Flood analysis by integrated river simulation model by combination of meteorological model with the use of WRF-Hydro, (Weather Research and Forecasting Model Hydrological modeling system)

We can build a model that makes it possible to predict water disasters due to changes in the weather by simultaneously forecasting the weather and the water level and flow of rivers.

Land surface model:
Predicts water balance on land surface



River water inflow/outflow model:
Predicts inflow/outflow of water to/from rivers

River channel model:
Predicts water balance around rivers

JANUS 日本エヌ・ユーエス株式会社