Development of the high-accuracy topography data for land hydrodynamic modelling

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Surface water dynamics can be described by relatively-simple governing equations, and it is not so difficult to construct a conveptual model. However, if we target to simulate the surface water dynamics of the actual world, high-accuracy topography datasets are required as boundary conditions. In developed countries such as Japan, a high-precision airborne DEM is often available, but for most of the world spaceborne DEM (with non-negligible errors) is usually the only available source. Datasets on hydrography and under-water topography are usually not available in many parts of the world. In this presentation, latest works on high-accuracy topography data development in U-Tokyo will be introduced.

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