

## Numerical modeling of sedimentary process of central part of the Tokyo Lowland

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Numerical modeling of sedimentary process of central Tokyo Lowland is presented. Tokyo Lowland consists of Holocene deposits up to 70 m, which buried incised valley formed during the last glacial maximum. Stratigraphic simulation model SedFlux is used to reconstruct the sedimentary architecture of the area, based on paleo morphology estimated from field surveys and on synthetic sediment supply from paleo Tonegawa. SedFlux simulates sediment transport by hypopycnal plume from the river mouth, and reworking of sea floor deposits by storm waves. These processes, in addition to shift of the position of the river mouth due to sea level change and delta progradation, are combined to predict the final sedimentary strata, and the results show good agreements with the field data. Calibration of the existing sea level curve in this area is attempted by finding the conditions to provide the best match between the model predictions and the field data.