



Numerical Simulation of Flow, Sediment Transport and Geomorphology in Natural Rivers Using iRIC

Yasuyuki Shimizu (1) and Satomi Yamaguchi (2)

(1) Professor, Hokkaido University, Sapporo, Japan (yasu@eng.hokudai.ac.jp), (2) Associate Professor, CERl, Sapporo, Japan (c-kawamura@jr.hokkaido.co.jp)

The typical bed configuration of the Satsunai River, which meanders continually and is well known to have double-row bars and braided channels, can be observed in the channel.

In this study, numerical experiments with a full-scale channel were performed using iRIC software in order to reproduce the characteristics of bed deformation observed in the Satsunai River at that time.

The characteristics of bed deformation and braided streams observed in the river were found to be strongly affected by the meandering river channel.