



## **Channel changes of Moldova River in relation with system sediment - water changes, in the last century**

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Moldova River is located in the east part of Eastern Carpathians, being tributary of the Siret River, one of the biggest from Romania. Is 205 km long river with discharge of about 32.8 m<sup>3</sup>/s (Roman hydrometric station), and drainage basin of 4316 km<sup>2</sup>.

In order to understand the river's adjustments, we have analyzed the channel planform behaviour and the controlling factors from a cause-effect perspective. On this line, we accorded main importance to water-sediment system and it's variability in the last 60 years.

In this study we have used four sets of topographic maps, with scales ranging between 1910 and 2005, covering a period of nearly 100 years and also instrumental measurements of discharge from 3 hydrometric stations along the river, covering the last six decades.

The morphological changes of river channel bed were put in relation with the changes of the water-sediment system in the analysed period by us. In the factor's category that are controlling these changes, we tried to distinguish the role of human factor. Thus, based on the combination of the obtained data, we have found that the response of the Moldova sediment system to anthropic forcing seems to be subsequent to the natural one.