



## **Present changes in water soil erosion hazard and the response to suspended sediment load in the Czech landscape**

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A noticeable change in water soil erosion hazard and an increase of extreme meteorological effects at the same time have marked the Czech landscape in the last twenty years. Formerly cultivated areas have been grassed or forested in mountain and sub mountain regions. Crop management has also been substantially changed. Longer and more frequently dry periods, more intensive local rainfalls and more gentle winter periods we can observe in the present climate development.

The aim of this contribution is to demonstrate the importance and spatial relationship between changes in water soil erosion hazard by way of example of model river basins in different areas of the Czech Republic. The field research, remote sensing data, GIS and model approaches (MEFEM- multicriteria erosion factors evaluation model, USLE, RUSLE, WaTEM/SEDEM, AnnAGNPS and SWAT) were used for erosion hazard assessment. The findings were comparing with the balance, regime and trends of suspended load. Research in the model Blišanka River basin, based on our fifteen-year monitoring of suspended load, can be considered as basic (Kliment et al. 2008, Langhammer et al. 2013).

KLIMENT, Z., KADLEC, J., LANGHAMMER, J., 2008. Evaluation of suspended load changes using AnnAGNPS and SWAT semi-empirical models. *Catena*, 73(3): 286-299.

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