

What can floodplain deposits of one of the last colonized catchments in central Europe tell us about Late Holocene climate and land-use changes?

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The Bečva River catchment (eastern Czech Republic) was colonized more than one millennium later than other Central and Western European catchments and thus present uniquely long record of natural factors affecting morpho-sedimentary evolution. The anthropogenic activity superseded natural factors as late as during 12th century AD. Since the Outer Western Carpathians where the studied river originates are highly susceptible to erosion, its sub-mountainous floodplain is well developed, and its alluvial record well preserved. We used coring, geophysical sounding and lithological analysis of floodplain deposits supported by AMS dating to establish stages of Late Holocene floodplain evolution. We describe six stages from Late Atlantic up to the 20th century – during three stages accumulation prevails, incision prevails during two stages, and one stage is described as mixed. We successfully linked each morpho-sedimentary stage with major driving factor that changed in the catchment.