

# **Sensing Coal legacies: A comparative analysis of the Jiu Valley and Boone-Raleigh County mining regions using satellite images**

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*In Appalachia and South Carpathia, a long tradition of coal exploitation has left deep traces in the environment and the socio-economic profile of (former) mining towns. The present study set out from the question of how coal legacies are reflected in satellite images of the Jiu Valley, and the Boone and Raleigh counties in West Virginia. To this end, we used remote sensing techniques to analyze the urban and environmental developments in these regions on the basis of two snapshots taken in 1986 and 2019. Our results suggest that, even if the coal mining techniques used, the national political regimes, and the topography of the land differ to a great extent, in the studied regions there exist similar patterns of socio-economic decline and environmental transformation, which are discussed in the paper.*

**Keywords:** coal mining, remote sensing, mountaintop removal, land cover classification.

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