



The problem with coal-waste dumps inventory in Upper Silesian Coal Basin

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Coal-waste dumps are the side effect of coal mining, which has lasted in Poland for 250 years. They have negative influence on the landscape and the environment, and pollute soil, vegetation and groundwater. Their number, size and shape is changing over time, as new wastes have been produced and deposited changing their shape and enlarging their size. Moreover deposited wastes, especially overburned, are exploited for example road construction, also causing the shape and size change up to disappearing. Many databases and inventory systems were created in order to control these hazards, but some disadvantages prevent reliable statistics.

Three representative databases were analyzed according to their structure and type of waste dumps description, classification and visualization. The main problem is correct classification of dumps in terms of their name and type. An additional difficulty is the accurate quantitative description (area and capacity). A complex database was created as a result of comparison, verification of the information contained in existing databases and its supplementation based on separate documentation.

A variability analysis of coal-waste dumps over time is also included.

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