



The distribution of Trace Elements in the Stream Sediments from the Jijia River Basin

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Abstract

The aim of the present study is to assess the environmental quality in the Jijia Basin by use of stream sediment samples.

The study of the distribution of trace elements (Sc, V, Cr, Co, Ni, Cu, Zn, Rb, Sr, Y, Zr, Nb, Ba, Pb, Th and As) in the stream sediments from the Jijia Basin generally indicated that the environment is either unaffected or slightly affected. Local anomalies determined after defining the background and the threshold values are due to both anthropogenic factors and geogenic factors. A particular case is that of Ni, where over 75% of the data exceed the target value. However, the normal distribution of this element, as well as the high levels of Ni found in some soils from the studied area, suggest that we are dealing with a geogenically-enriched environment. The median values for most of the elements contents are close to those determined for European stream sediments.

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