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Landscape sensitivity in a dynamic environment

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Abstract

Landscape sensitivity at different scales and topics is presented in this study. Methodological approach composed most of this paper. According to the environmental records in the south eastern Asia, the environment change is highly related with five factors, such as scale of influence area, background of environment characters, magnitude and frequency of events, thresholds of occurring hazards and influence by time factor.

This paper tries to demonstrate above five points from historical and present data. It is found that landscape sensitivity is highly related to the degree of vulnerability of the land and the processes which put on the ground including human activities. The scale of sensitivity and evaluation of sensitivities is demonstrated in this paper by the data around east Asia.

The methods of classification are mainly from the analysis of environmental data and the records of hazards. From the trend of rainfall records, rainfall intensity and change of temperature, the magnitude and frequency of earthquake, dust storm, days of draught, number of hazards, there are many coincidence on these factors with landscape sensitivities.

In conclusion, the landscape sensitivities could be classified as four groups: physical stable, physical unstable, unstable, extremely unstable. This paper explain the difference.