The history of soil erosion in the Chinese Loess Plateau

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With regard to the history of soil erosion in the Chinese Loess Plateau, historians and historical geographers have hypothesized that the anthropogenic destruction of vegetation accelerated soil erosion and increased the flood frequency in the North China Plain. In order to demonstrate this hypothesis, geologists or physical geographers have accumulated related data. However, the specific effect of human activities and climate change on soil erosion is still unclear. Therefore, this paper proposes to introduce landform division and to conduct case studies in each geomorphic region for solving the abovementioned problem. Further, the necessity of study on the historical development of landforms is emphasized since it is the basis of landform division. As a case study, this paper conducts temporal comparison between two satellite imageries on the Chinese Loess Plateau.

Keywords: history, soil erosion, Loess Plateau, remote sensing, geographical information system