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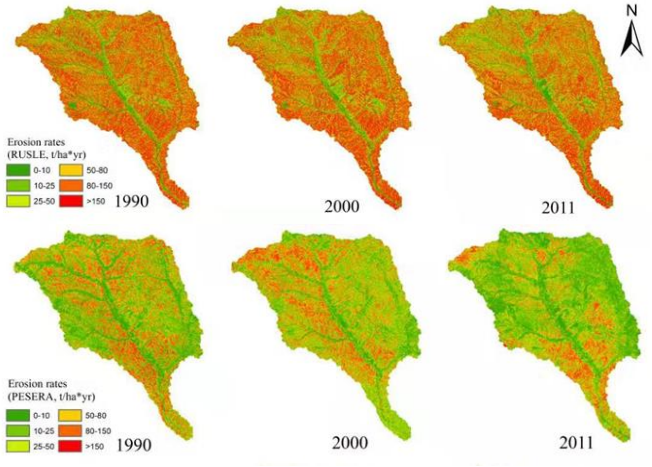
Mean erosion rates of the Huangfuchuan catchment were modelled to increase under the 1990-2000 LUCC and decrease under the 2000-2011 LUCC. Sandy land and scrubland were found to suffer from most severe erosion. RUSLE predictions (generally closer to sediment yield measurements) were higher than PESERA results for most area. RUSLE and PESERA results were not linearly correlated, possibly due to differences in their underlying principles and their sensitivity to crucial parameters. PESERA needs to better account for steep slope erosion processes, while RUSLE needs improvement in vegetation effect description.



Soil erosion rates assessed by RUSLE and PESERA for a Chinese Loess Plateau catchment under land-cover changes

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