Special Issue

Innovative Approaches for Modeling and Monitoring of Gully Erosion

Message from the Guest Editors

Gully erosion is a process of removal of topsoil along concentrated overland flow channels by surface water runoff; it causes land degradation in many regions and under different environmental conditions. In recent years, new technologies have emerged allowing to obtain high-precision measures of gully features and soil losses. Moreover, advanced computer tools were developed and applied to modeling of gully occurrence at different scales. In this Special Issue, we would like to invite gully erosion studies that are carried out at a range of hillslope to watershed scales and employ innovative and cutting-edge approaches to measure, monitor, and model gully initiation, channel development, and sediment production. This issue will cover research using recent advancements in capturing and processing of tri-dimensional point clouds which allow precise reconstruction of gully erosion landforms and monitoring of gully expansion. Furthermore, studies employing novel techniques or improvements of existing computer modeling approaches for assessment of gully occurrence, headcut location, and soil losses are particularly welcome.

Guest Editors

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Earth journal is a publishing platform to promote discoveries related to the Earth and its components (atmosphere, oceans, land, cryosphere, biosphere, and humans). The journal serves as a publishing venue that views Earth from a holistic perspective and disseminates scientific papers with emphases on multidisciplinary approaches to understand the complexities and interactions occurring on a variety of spatial and temporal scales. Rapid turnaround time and full open access offer the opportunity to make research results immediately available to scientific communities and the general public.

Editor-in-Chief

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