

GEOMORPHOLOGY SESSION

Abdullah Akbaş, Uğur Doğan, Cengiz Yıldırım

Geomorphology is an interdisciplinary field of Earth sciences that investigates the origin, development, and evolution of landforms over time, with a particular emphasis on the interactions among climate, tectonics, lithology, and surface processes. Understanding geomorphological processes is essential not only for reconstructing the past evolution of Earth's surface but also for assessing ongoing environmental changes and natural hazards.

The Geomorphology Session at the Geological Congress of Türkiye aims to bring together research addressing geomorphological processes and landforms across diverse environments and temporal scales. The session welcomes contributions on fluvial geomorphology (drainage network development, fluvial erosion and deposition, river terraces, and landscape evolution), coastal geomorphology (shoreline changes, coastal erosion, delta evolution, and sea-level fluctuations), glacial and periglacial geomorphology (glaciation processes, glacial landforms, and paleoclimatic changes), karst geomorphology (dissolution processes, karst landforms, and cave systems), hillslope geomorphology (hillslope evolution, mass movements, landslides, and erosion), and tectonic geomorphology (active tectonic processes, fault-controlled landforms, tectonic uplift, and landscape evolution).

The session also covers Quaternary geomorphology, the impacts of climate change and human activities on landscape evolution, and geomorphological hazards. Contributions employing modern techniques, including remote sensing, unmanned aerial vehicles (UAVs), LiDAR, geographic information systems (GIS), geochronological dating, numerical modeling, and artificial intelligence/machine learning, are particularly encouraged.

The session seeks to provide a scientific platform for studies that integrate field observations with innovative analytical approaches, advance our understanding of geomorphological processes across different spatial and temporal scales, and promote interdisciplinary collaboration within the Earth sciences.