

CALL FOR PAPERS

Geological Society of America Annual Meeting

Denver, Colorado, 27-30 October 2013

Abstracts submission deadline: 6 August

<http://www.geosociety.org/meetings/2013/sessions/topical.asp>

T91. Geological and Geomorphological Applications of Digital Terrain Analysis

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Monitoring and quantification of rates of geomorphic processes requires repeated acquisition of accurate, high-resolution topographic information. The rapid growth in the availability of Digital Elevation Models (DEMs) such as the Shuttle Radar Topography Mission, TerraSAR-X Satellite Mission, ICESat and CryoSat missions, photogrammetric-derived DEMs from orbital imagery (ALOS, ASTER, SPOT) or from unmanned aerial vehicles (UAVs) and laser altimetry/scanning (LiDAR), provide a way to look at the topography of our planet with an unprecedented detail, often allowing the recognition of previously unknown features and the establishment of their spatial relationships.

Digital Terrain Analysis (DTA) provides the framework for terrain quantification, segmentation and classification, aiming at the recognition and simulation of geomorphic processes. Advances in

DTA have had impacts in areas such as hazard and risk assessment, geomorphologic process evaluation, morphotectonic interpretation, and geophysical data processing.

This session will provide an excellent opportunity to present and discuss recent advances in methods, algorithms, and applications of DTA to geology and geomorphology.

The 2013 GSA annual meeting takes place one week after the Geomorphometry2013 (<http://geomorphometry.org/2013>

) international conference in Nanjing, China; we expect this session at GSA to build on the momentum from the China conference and to extend and expand DTA discussions and networking between scientists in this rapid-growing field.

<http://community.geosociety.org/2013AnnualMeeting/Home>

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- Digital Terrain Analysis | GIS | Remote Sensing -