Paper Session:

1130 Advances and Challenges in Digital Elevation Models I (Overview)

is scheduled on Tuesday, 4/8/2014, from 8:00 AM - 9:40 AM in Room 30A, TCC, Fourth Floor

Sponsorship(s):
Coastal and Marine Specialty Group
Geomorphology Specialty Group
Spatial Analysis and Modeling Specialty Group

Organizer(s):
Barry Eakins - University of Colorado
Jeffrey J. Danielson - United States Geological Survey

Chair(s):
John Brock - USGS

Abstract(s):

8:00 AM Author(s): *James Hensleigh - Ecogeomorphology & Topographic Analysis Lab
Joe M. Wheaton - Utah State University
Philip Bailey - North Arrow Research
Chris Welcker - Idaho Power Company

Abstract Title: *Techniques for Robustly Developing Spatially Variable Uncertainty Models for Digital Elevation Models Using Fuzzy Inference Systems*

8:20 AM Author(s): *Ashton Shortridge, PhD - Michigan State University
Xue Li - Michigan State University
Joseph Messina, PhD - Michigan State University

Abstract Title: *Modeling uncertainty in global elevation data products*

8:40 AM Author(s): *Xue Li - Michigan State University
Ashton Shortridge - Michigan State University
Joseph Messina - Michigan State University

Abstract Title: *GroundBreaking: algorithm comparison for terrain anomaly detection*

9:00 AM Author(s): *Dean Gesch - U.S. Geological Survey

Abstract Title: *A National Inventory of Topographic Surface Changes: The Value of Enhanced Elevation Data for Change Analysis and Monitoring*

9:20 AM Author(s): *Barry W Eakins, PhD - University of Colorado
Pamela R Grothe, MS - Georgia Institute of Technology

Abstract Title: *Challenges in building coastal DEMs*

Session Description: Digital elevation models (DEMs) are a fundamental base layer for many applications, such as hydrologic and storm surge modeling, tsunami and sea-level rise modeling, ecosystems management and habitat research, coastal and marine

spatial planning, sediment-transport analysis, and hazard mitigation and community preparedness. We invite papers/illustrated papers on recent advances in DEMs, including new techniques for building or evaluating DEMs, and in challenges that DEMs pose to applications that require them. How can DEMs be improved to support better planning or research? What are the limitations of DEMs in how they are used? How does DEM uncertainty or inaccuracy impact results derived from their use?

New Query