Paper Session:

1230 Advances and Challenges in Digital Elevation Models II (Coastal)

is scheduled on Tuesday, 4/8/2014, from 10:00 AM - 11:40 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):

10:00 AM Author(s): *Matthew Marsik, PhD - Independent Researcher, Vashon WA
Allison Bailey - SoundGIS, Seattle WA
H. Gary Greene, PhD - Tombolo Research Laboratory, Orcas Island, WA
John Aschoff - Tombolo Research Laboratory, Orcas Island, WA
Paul Dye - The Nature Conservancy, Seattle WA

Abstract Title: *Updating bathymetry data for benthic habitat mapping in Puget Sound, Washington*

10:20 AM Author(s): *Jeffrey J Danielson - United States Geological Survey
Dean J Tyler - United States Geological Survey
Daniel M Howard - Stinger Ghaffarian Technologies, Inc., Contractor to USGS EROS Center
John A Barras - United States Geological Survey
Gayla A Evans - United States Geological Survey
John C Brock - United States Geological Survey

Abstract Title: *Creation of a 3-Meter Topobathymetric Elevation Model for Southern Louisiana Using Improved Elevation Masking Techniques*

10:40 AM Author(s): *Gayla A. Evans - USGS
Jeffrey J Danielson - USGS
Dean J Tyler - USGS
John A Barras - USGS
John C Brock - USGS

Abstract Title: *Validation of the 3-Meter Topobathymetric Elevation Model for Southern Louisiana*

11:00 AM Author(s): *Haibin Su - Texas A&M University - Kingsville
Hongxing Liu - University of Cincinnati

Abstract Title: *Improving bathymetry mapping with multispectral imagery using Co-kriging interpolation method*

11:20 AM Author(s): *Amar Nayegandhi - Dewberry

Abstract Title: *Challenges in determining water surface in airborne LiDAR topobathymetry*

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