

Monday, December 12, 2011

Westchase Hilton • 9999 Westheimer
Social Hour 5:30–6:30 p.m.
Dinner 6:30–7:30 p.m.

Cost: \$28 Preregistered members; \$35 non-members & walk-ups

To guarantee a seat, you must pre-register on the HGS website and pre-pay with a credit card.

Pre-registration without payment will not be accepted.

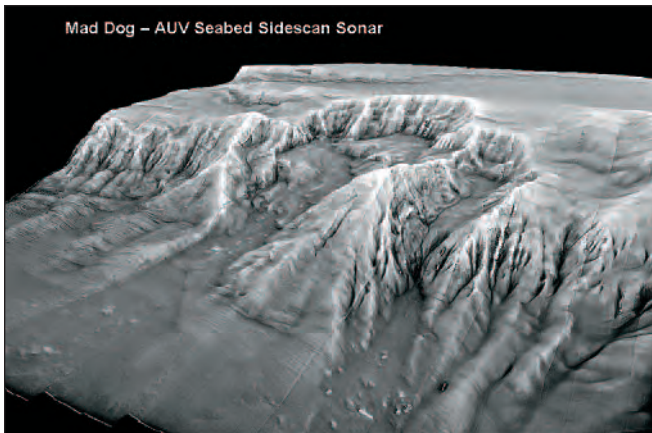
You may still walk up and pay at the door, if extra seats are available.

HGS General Dinner Meeting

James A. Thomson
BP America

HGS General Dinner Meeting

Deepwater Sedimentological Features as Shown in High-resolution Data Donated to Universities, Gulf of Mexico



presentation will include a fly-through of datasets in 3D space to illustrate observed sedimentological features and implied processes that are analogous with ancient deepwater conditions.

In a project sponsored by BP's Upstream Innovation Board, these datasets have recently been donated to a group of geoscience departments at North American universities. The schools are using the high-resolution deepwater data in research projects and in teaching activities. This will lead to the development of specialized expertise in the students with research results available to improve the understanding of geotechnical, geological, and engineering concepts in deepwater areas. Datasets were donated by BP and co-owners BHPBilliton, Chevron, ExxonMobil, and Shell. ■

Multiple sedimentological features have been identified in high-resolution seabed data collected in deepwater portions of the Gulf of Mexico. These features show deepwater depositional and erosional processes indicative of strong erosive bottom currents, abundant sediment sources, episodic seafloor failures, and deposition of coarse sediments far from the shoreline. The features are seen on high-resolution datasets collected over a multi-year period, primarily at production facility sites being cleared of seabed and shallow hazards.

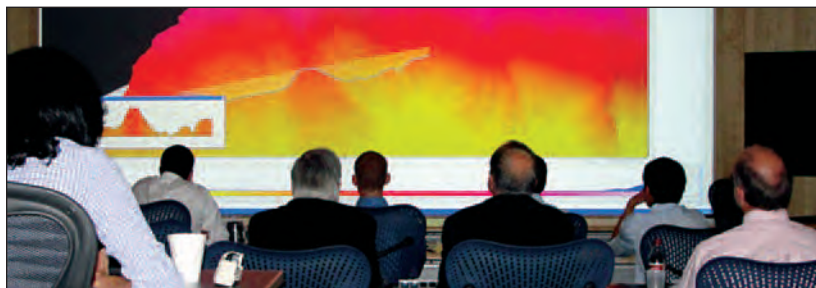
The three data types examined are multibeam echosounder (MBES) for detailed bathymetric mapping, sidescan sonar for seabed imaging, and subbottom profiler for analysis of shallow marine sedimentary layers. These data were gathered using an autonomous underwater vehicle (AUV) which provides co-located digital datasets for visualization and interpretation. This

Biographical Sketch

MR. JAMES A. THOMSON is Senior Geohazards Specialist for BP in Houston, Texas, USA. In this role he has responsibility for clearance of seafloor and shallow drilling hazards for BP deepwater projects primarily in the Gulf of Mexico. He has worked in a range of marine basins globally, including offshore Angola, Canadian Arctic, Caribbean Sea offshore Colombia, and Vietnam. Projects typically range from geohazards evaluation of new entry areas through hazards clearance for drilling and production facilities, export pipelines, and post-abandonment activities.



At the BP-Chevron Drilling Training Alliance, Thomson teaches the Shallow Water Flow module in the Deepwater Drilling course. He also lectures at the GSH-HGS Geoscience Day for new energy industry employees. Prior to joining BP in 1997, he held positions as a geoscientist in the geohazards, environmental, and petroleum exploration businesses.



University students and faculty review deepwater data

Thomson holds an M.S. degree from Syracuse University (geology) and a B.S. degree from SUNY College of Environmental Science and Forestry.