

ISOS Course:

Acoustic Imaging of Sedimentary Features: Some Theory and Lots of Practice

April 14, 15 & 18, 2011

Prof. Dr. Kerstin Schrottke, Institute for Geosciences

Prof. Dr. Sebastian Krastel, IFM-GEOMAR

This 3-day course will introduce basic concepts and practical application of acoustic imaging techniques combined with sediment sampling. Erosion, transport and deposition of sediments in the oceans and coastal waters often result in complex structures of the seabed. Acoustic methods including swath bathymetry, sidescan sonar, and seismics provide unique, highly detailed insights in these features. Ground truthing of the acoustic data is achieved by sediment coring and grab sampling.

The first day of this course will provide a theoretical introduction in acoustic imaging and ground-truthing techniques. It will also be used for preparation of a cruise with the 'Research Vessel LITTORINA', where we will apply acoustic imaging techniques at sea. The field work will be complemented by corings and grab sampling for ground truthing of the acoustic data. Eventually, we will analyse the collected data.

The course is primarily aimed at PhD candidates interested in being able to collect and evaluate acoustic data but also for candidates from other disciplines wishing to gain an insight into key geological/acoustic methods.

Main aims of course:

- | Providing an overview of suitable acoustic methods for studying different types of marine sedimentary structures
- | Practical application and interpretation of acoustic data during a cruise with 'RV LITTORINA' to the Eckernförde Bay.

Venue: ISOS seminar room, Neufeldtstraße 10