

Bachelorarbeit

in der AG Marine Geophysik und Hydroakustik zu vergeben

Investigating the nature, internal architecture and formation of sedimentary mounds in Lake Ladoga (Russia) from high-resolution seismic reflection data.

In 2013, a seismic survey was carried out in Lake Ladoga using a mini-GI gun and a 32-channel streamer. In total, 1500 km of seismic lines were collected, covering almost the entire lake. The high-resolution of the seismic data allows us to document in detail the sedimentary processes that occurred in the lake during the preglacial and postglacial history. The most interesting features identified in the study area are the kilometer-scale, single or composite, sedimentary mounds (Figure 1). The internal architecture of the mounds suggests that they have been deformed at different degree, while few sediments remain preserved at the edge of some mounds and in sparse places.

The objectives of the Bachelor Thesis will be to (1) map the location and extent of these sedimentary mounds within the lake, (2) determine their dimension and establish a classification system (small to large), and (3) characterize the shape and the internal architecture of the mounds (single or composite, degree of deformation, etc.).

The Thesis is supposed to be written in English.

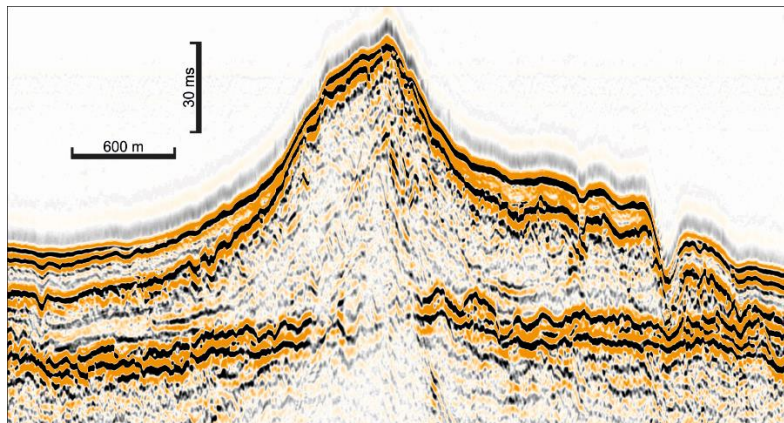


Figure 1: Sedimentary mound identified in Lake Ladoga.

Ideale Voraussetzungen:

- B.Sc. Physik des Erdsystems
- Kurs „Seismik“
- Kurs „Marine Geophysik“
- Geologische Grundlagen

Betreuer: Dr. Elodie Lebas, Prof. Sebastian Krastel

Start: ab sofort

Ansprechpartnerin (Englisch/Französisch/ein wenig Deutsch):

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