Proceedings of the 10 th Workshop "Seabed Acoustics", Presentation P04:

Ultrasound measuring system for sediment layer classification, monitoring of dredging operations and dredge material processing

Norbert Greiser
CSG Messtechnik, Germany

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Ultrasound Measuring System for Sediment Layer Classification, Monitoring of Dredging Operations and Dredge Material Processing

Norbert Greiser

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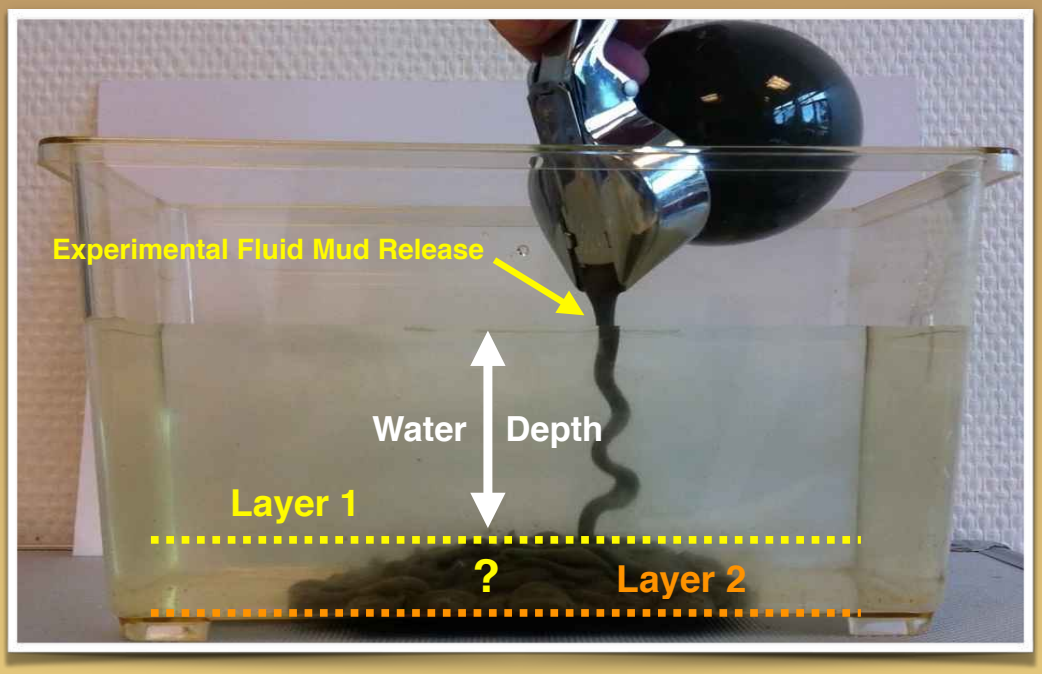
Sediment Layer Classification
Suspension, Fluid Mud or Solid ?



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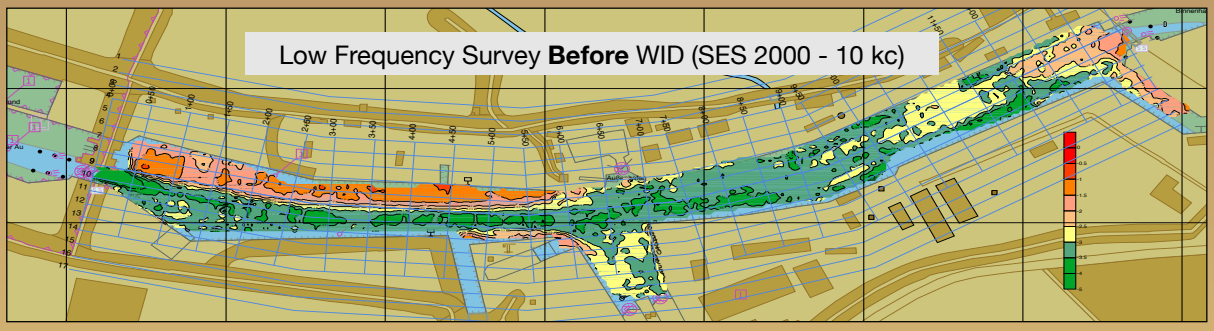
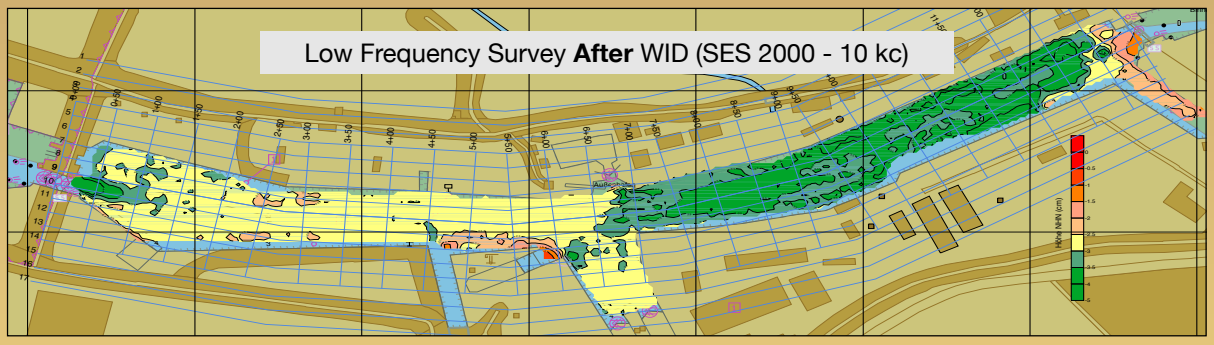
Sediment Layer Classification
Port of Husum: Interpretation of Dredging Results





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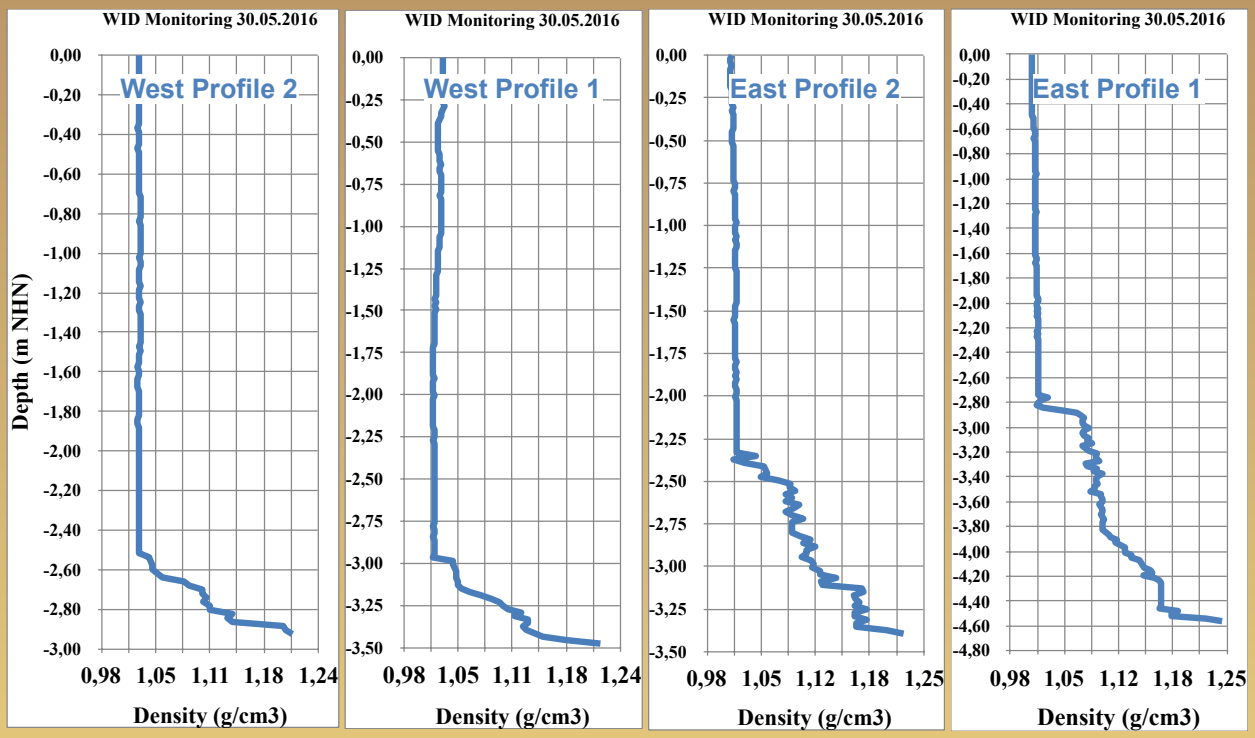
Sediment Layer Classification

Port of Husum: Density Profiles Show the Difference



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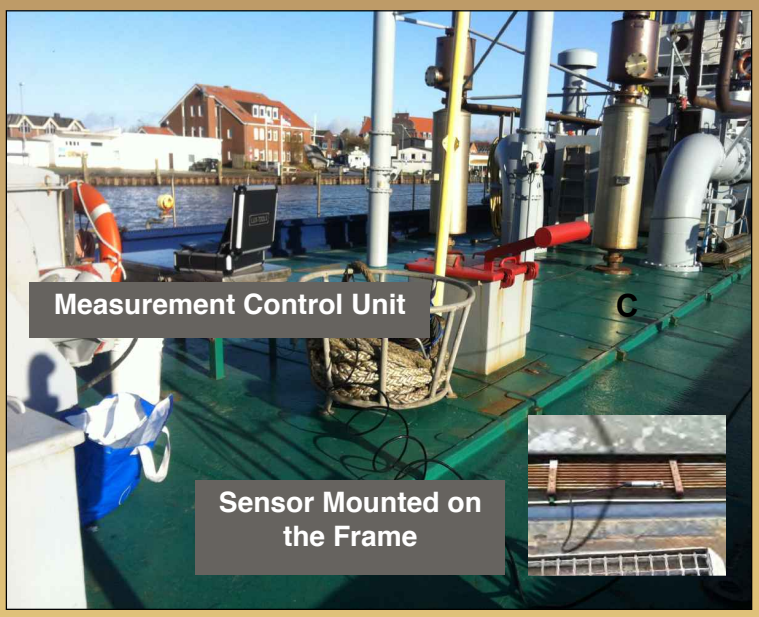
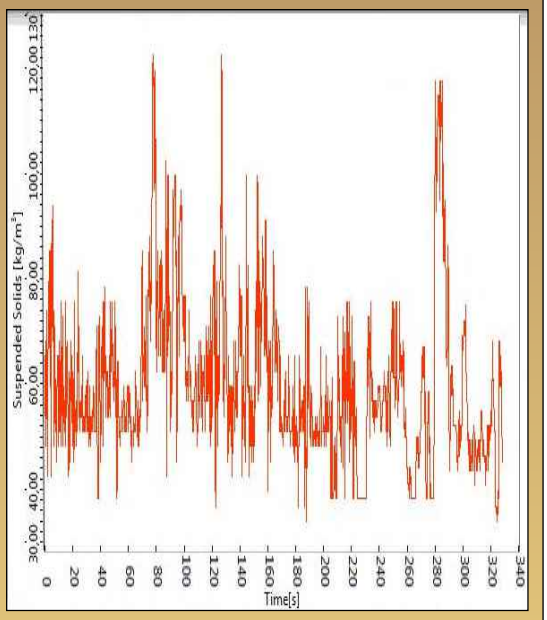
Dredging Operation Control

How Much Sediment is Resuspended ?





Survey example: WID Dredge AKKE at Port of Husum (Germany)

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Dredging Operation Control

Sediment Concentration / Water Content ?

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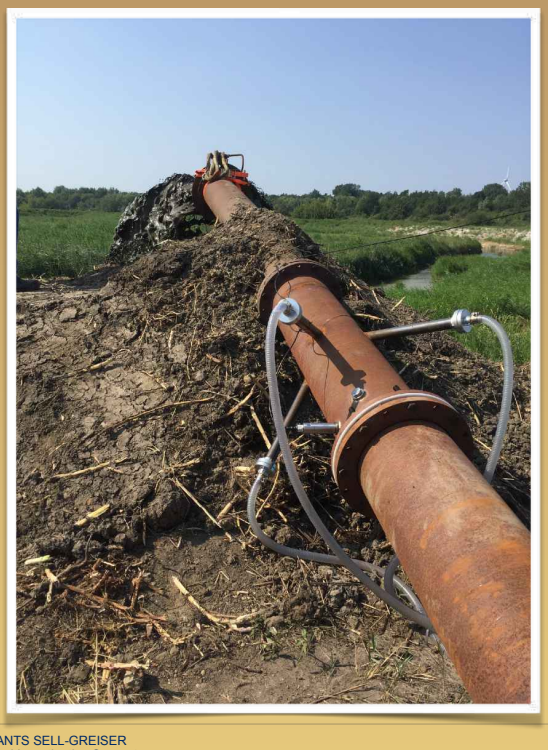
Mud Processing with Flocculants

Settling Acceleration at Dumping Sites



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Mud Processing with Flocculants

Quick Filling and Dewatering in Geotubes

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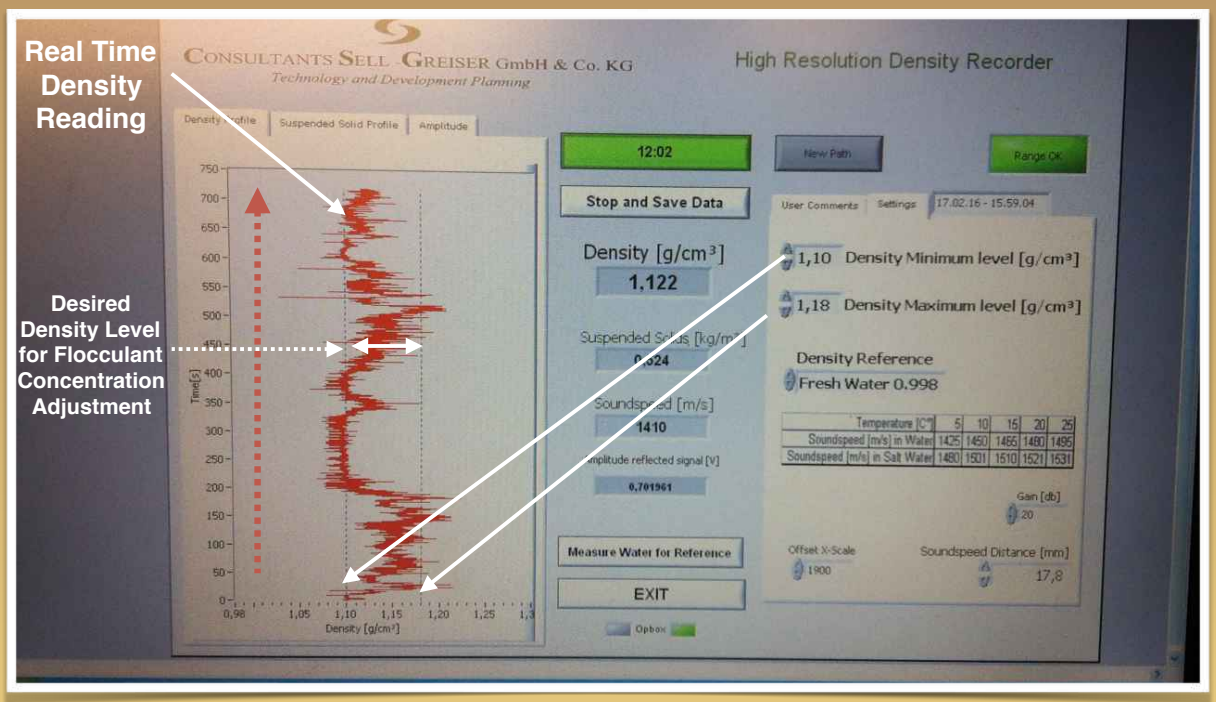
Real-Time Mud Processing Control

Adjustment of Dredge Material Concentration



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PROBES AND SENSORS FOR NUMEROUS APPLICATIONS
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Transport Recording
Industry Applications
Lab Version
Parameterizing
Visualising
Recognizing Changes
Process Optimization and Control
Diagnostic Tools
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