BATHYMETRIC MAPPING FOR SAFE NAVIGATION: A CASE STUDY OF PART OF LAGOS LAGOON

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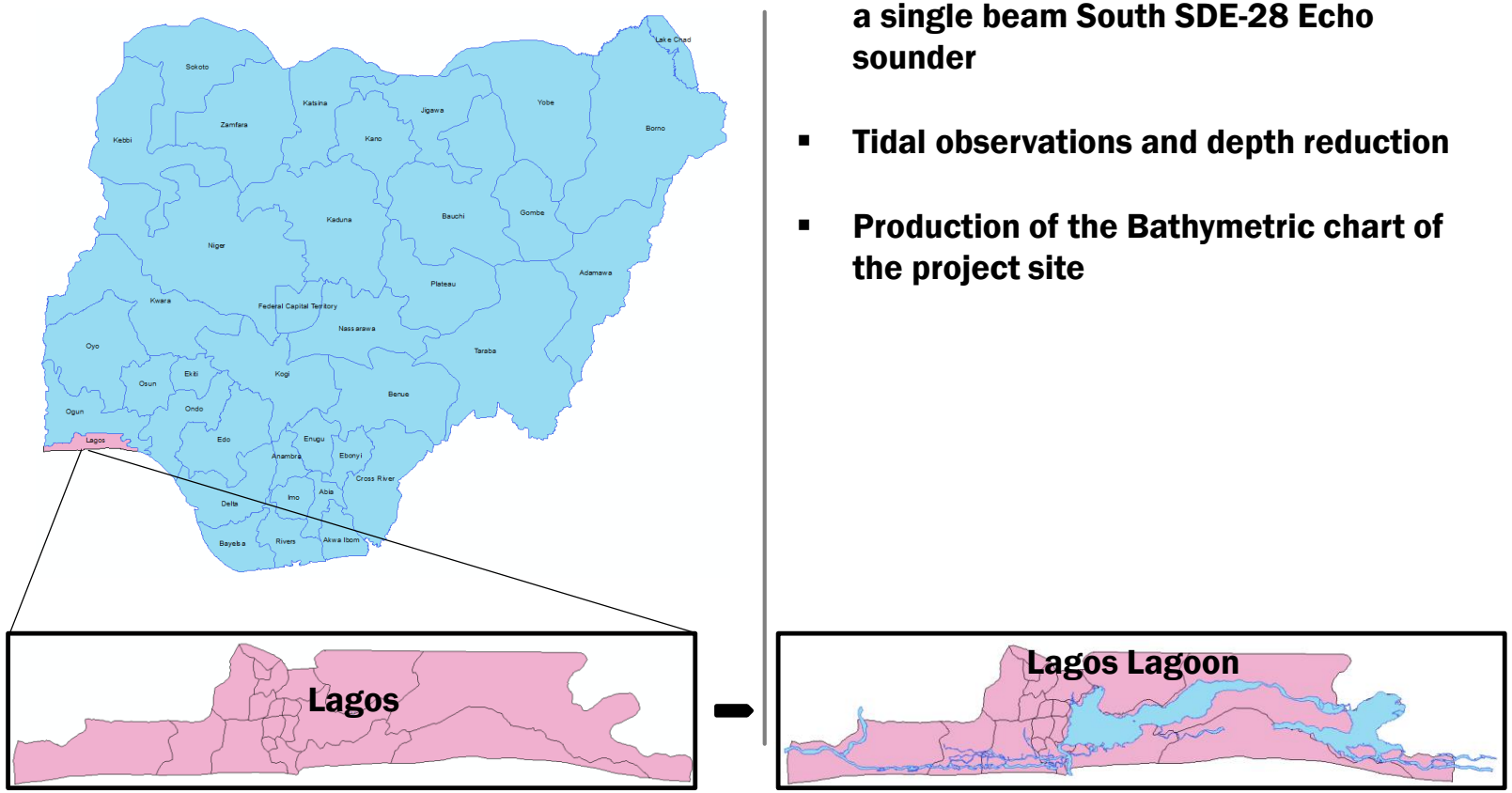
Where it began, African Waters?

Map of Nigeria showing Lagos



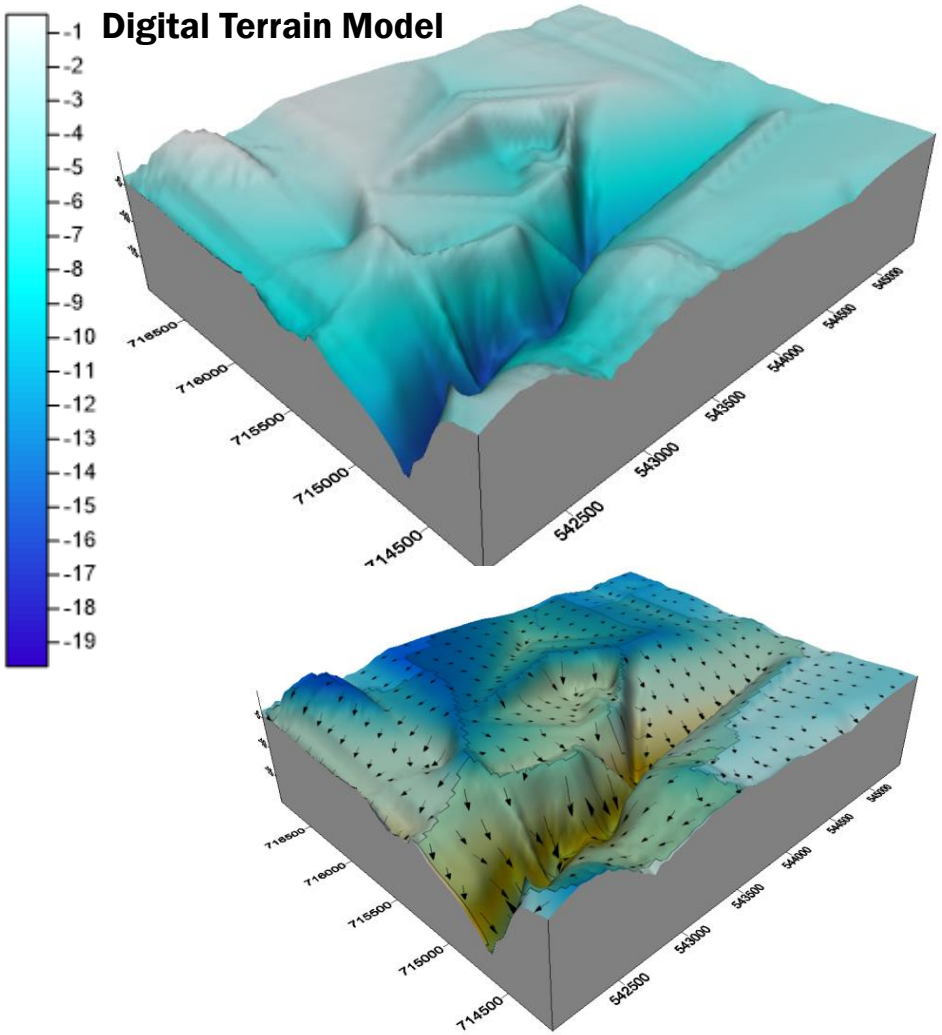
- **Depth measurement by sounding using a single beam South SDE-28 Echo sounder**
- **Tidal observations and depth reduction**
- **Production of the Bathymetric chart of the project site**

Set-up for Observation

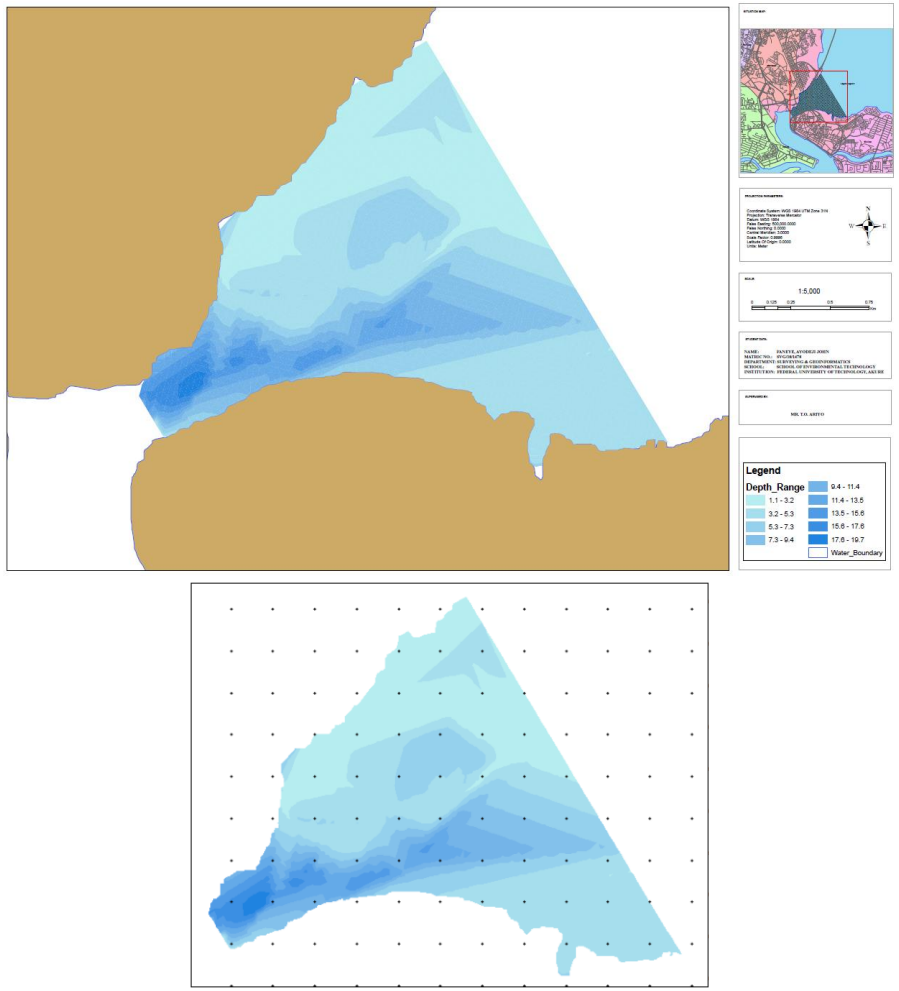
https://www.researchgate.net/publication/335587638_Bathymetric_Mapping_for_Safe_Navigation_A_Case_Study_of_Part_of_Lagos_Lagoon

Results

Digital Terrain Model



Triangulated Irregular Network



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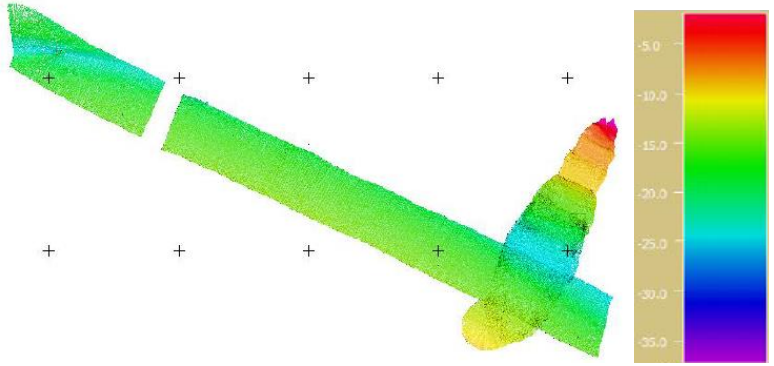
What about the European Waters?

- **RV Egidora expedition (Bathymetry of part of North Sea, Buesum Germany)**
  - **We used the R2 Sonic MBES**
  - **Beam width frequency of 700 kHz & 1024 soundings per ping**

RV Egidora

R2Sonic 2024

Result



What about the European Waters?

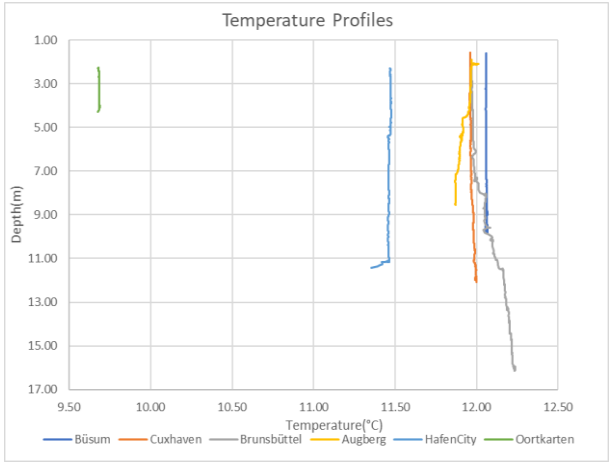
- **RV Ludwig Prandtl expedition (Hydrographic Data Acquisition North Sea – Hamburg, Germany)**
  - **CTD analysis using CTD 75M probe by Sea and Sun**

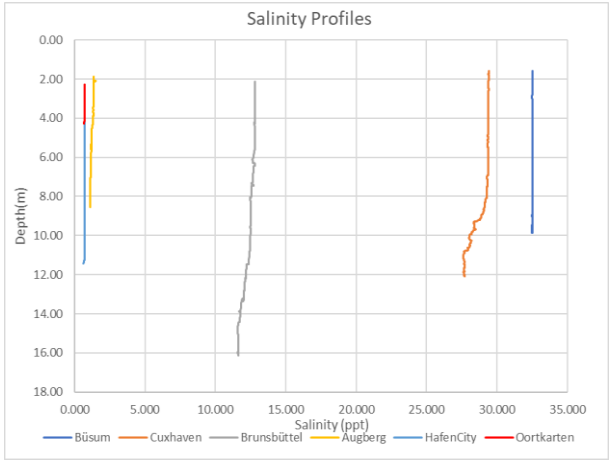
RV Ludwig Prandtl

Project area

CTD 75M Probe

Results





With the latest evolving technology, I am optimistic that Seabed 2030 is a win, we will Map the Gaps

HCU HafenCity Universität Hamburg

C A U Christian-Albrechts-Universität zu Kiel

Helmholtz-Zentrum Geesthacht
Centre for Materials and Coastal Research