

International Bathymetric Chart of the Indian Ocean

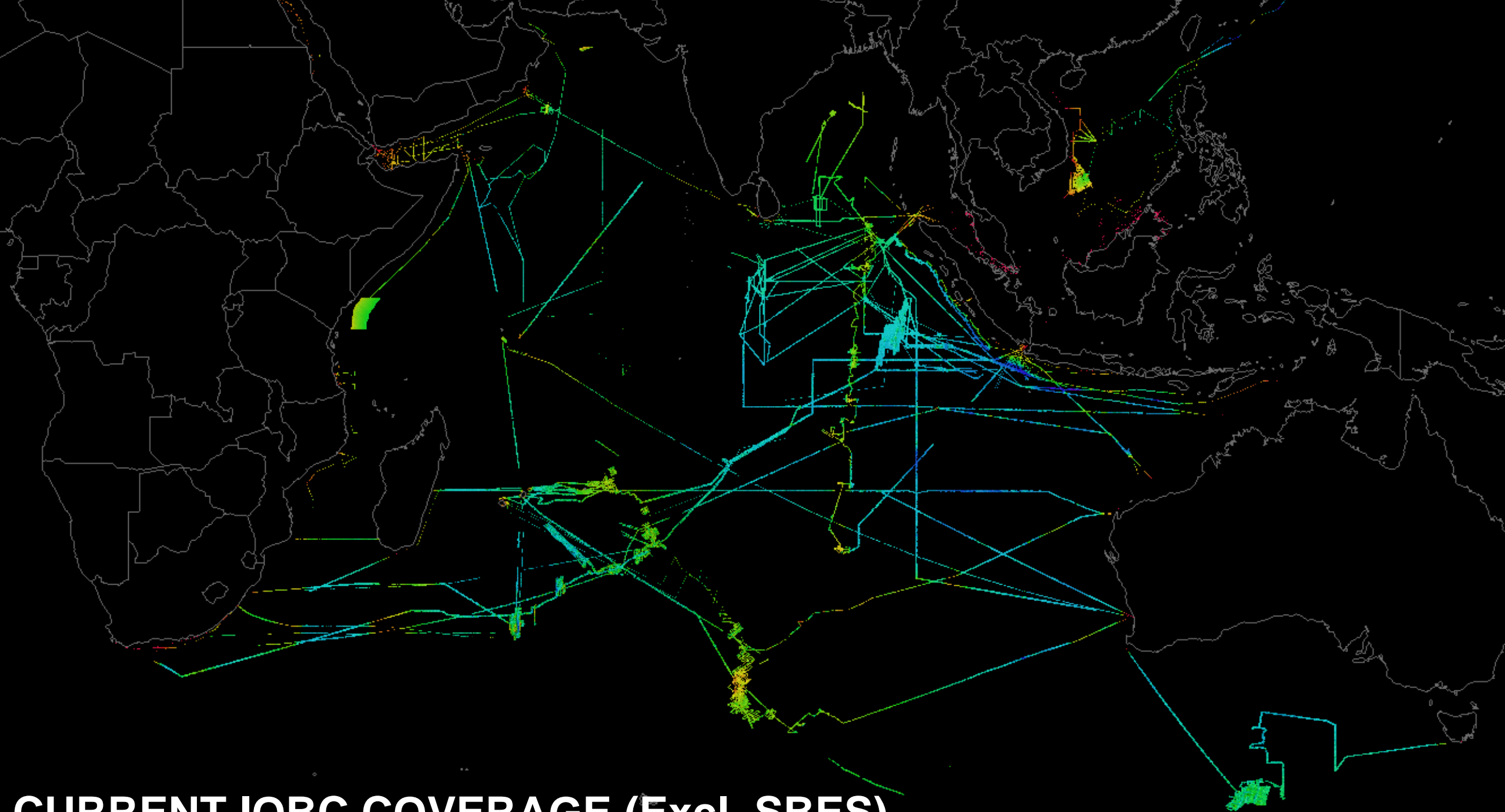
Dr Rochelle Wigley

Nippon Foundation / GEBCO projects,
Center for Coastal and Ocean Mapping

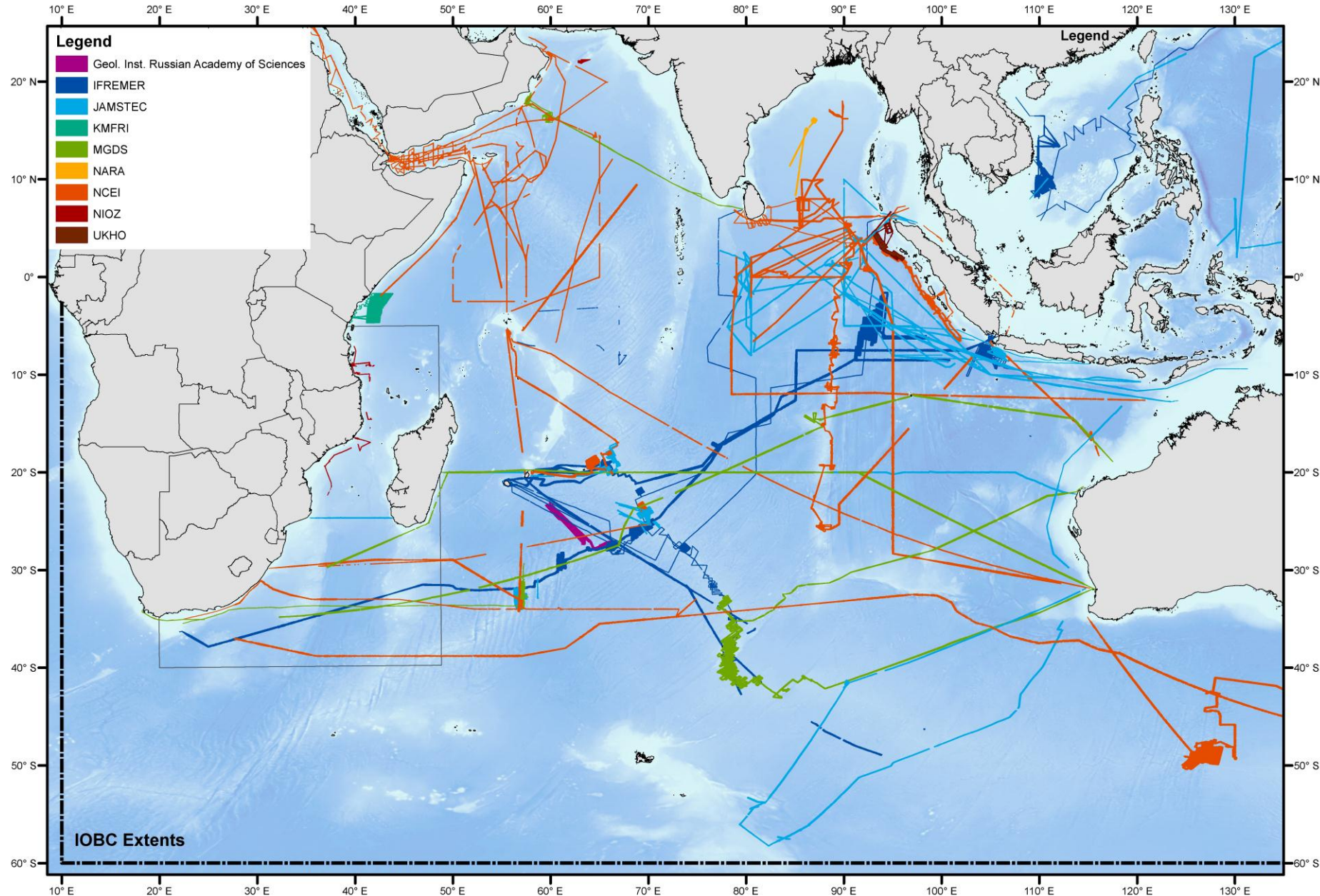
Presented by Dr Karolina Zwolak
Polish Naval Academy

Indian Ocean Bathymetric Compilation

- The aim of this multi-nation project is to assemble, collate, archive and publish a produce a new multi-resolution bathymetric map and grid of the Indian Ocean region using data from all available sources, utilizing the contacts generated through GEBCO scholars' network to access data
- Now 39 alumni from 16 different "Indian Ocean" coastal states
- Successful teaching tool for Nippon Foundation/GEBCO students
 - Variety of data set and contribution
 - Understanding of data processing
 - Networking and Skills



CURRENT IOBC COVERAGE (Excl. SBES)

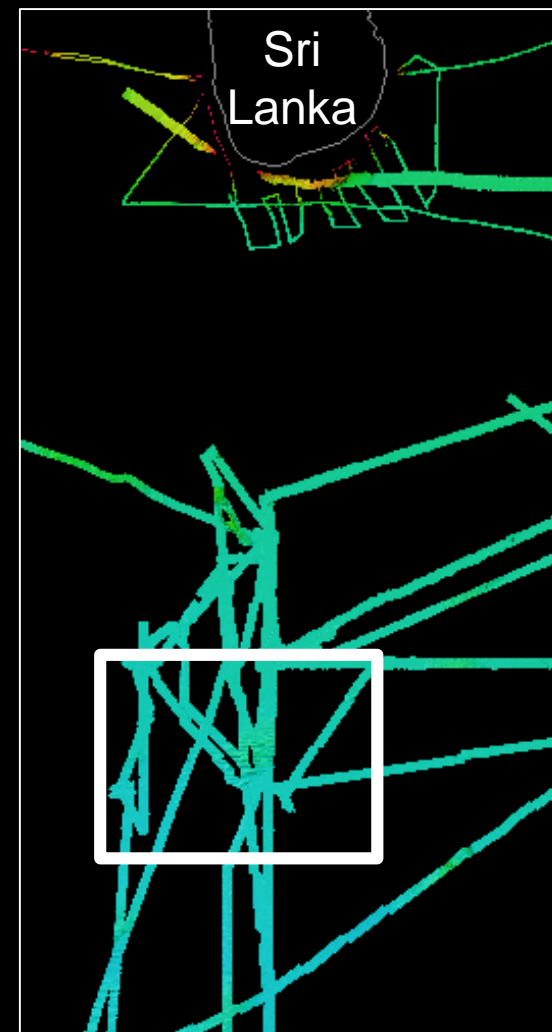
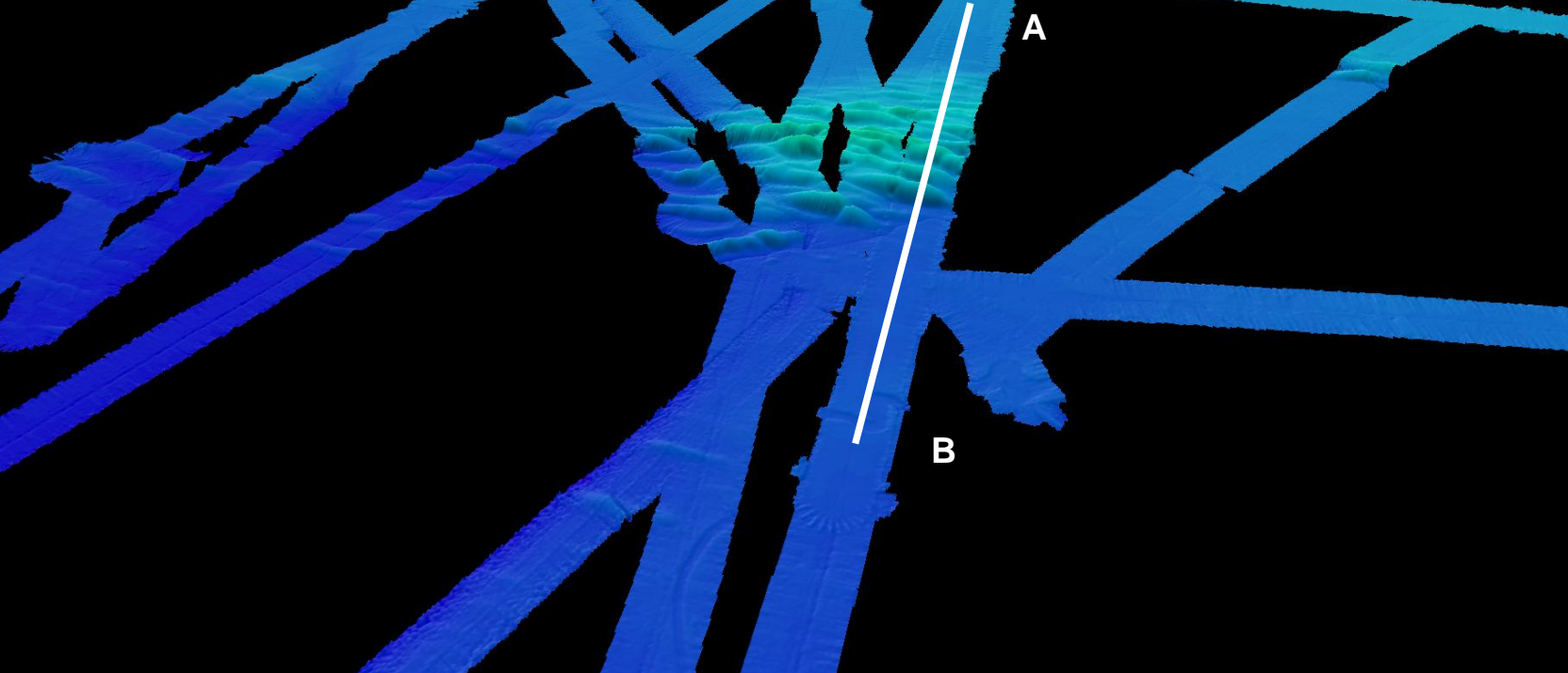


IOBC Sources

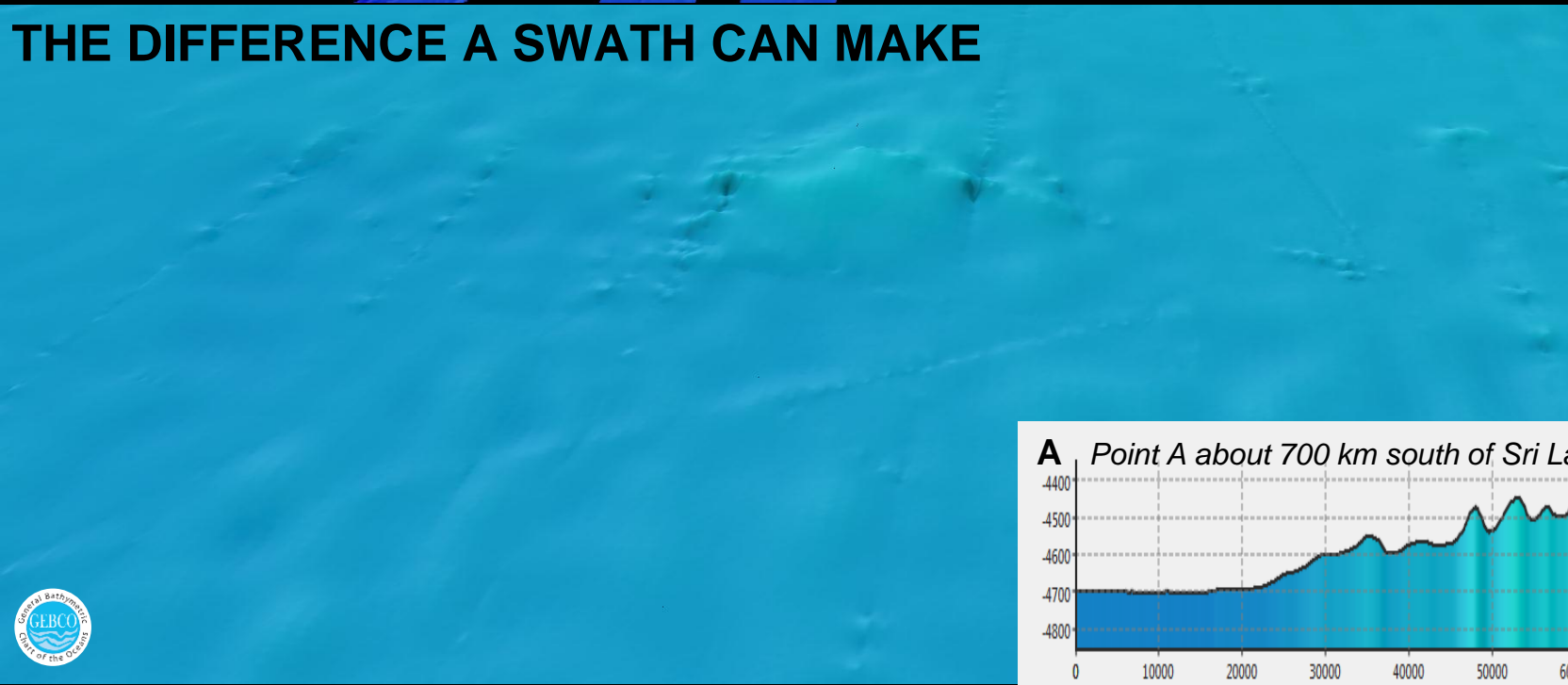
95 cruises from
9 different sources

Other metadata stored
in database includes:

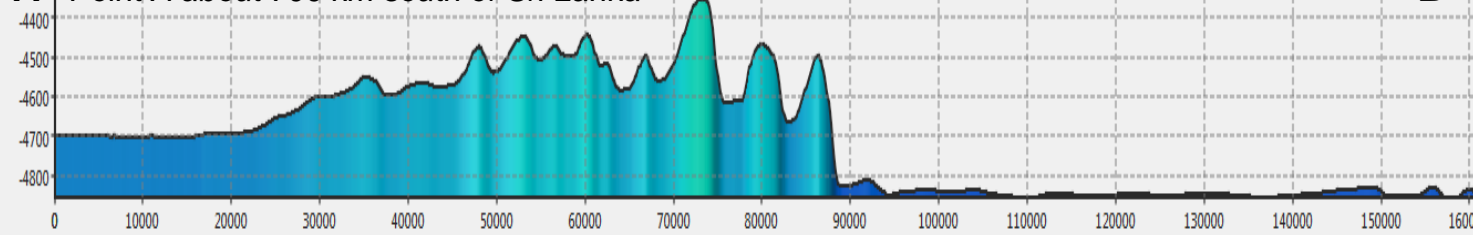
- Survey Name
- Year
- Vessel
- MBES
- Data quality



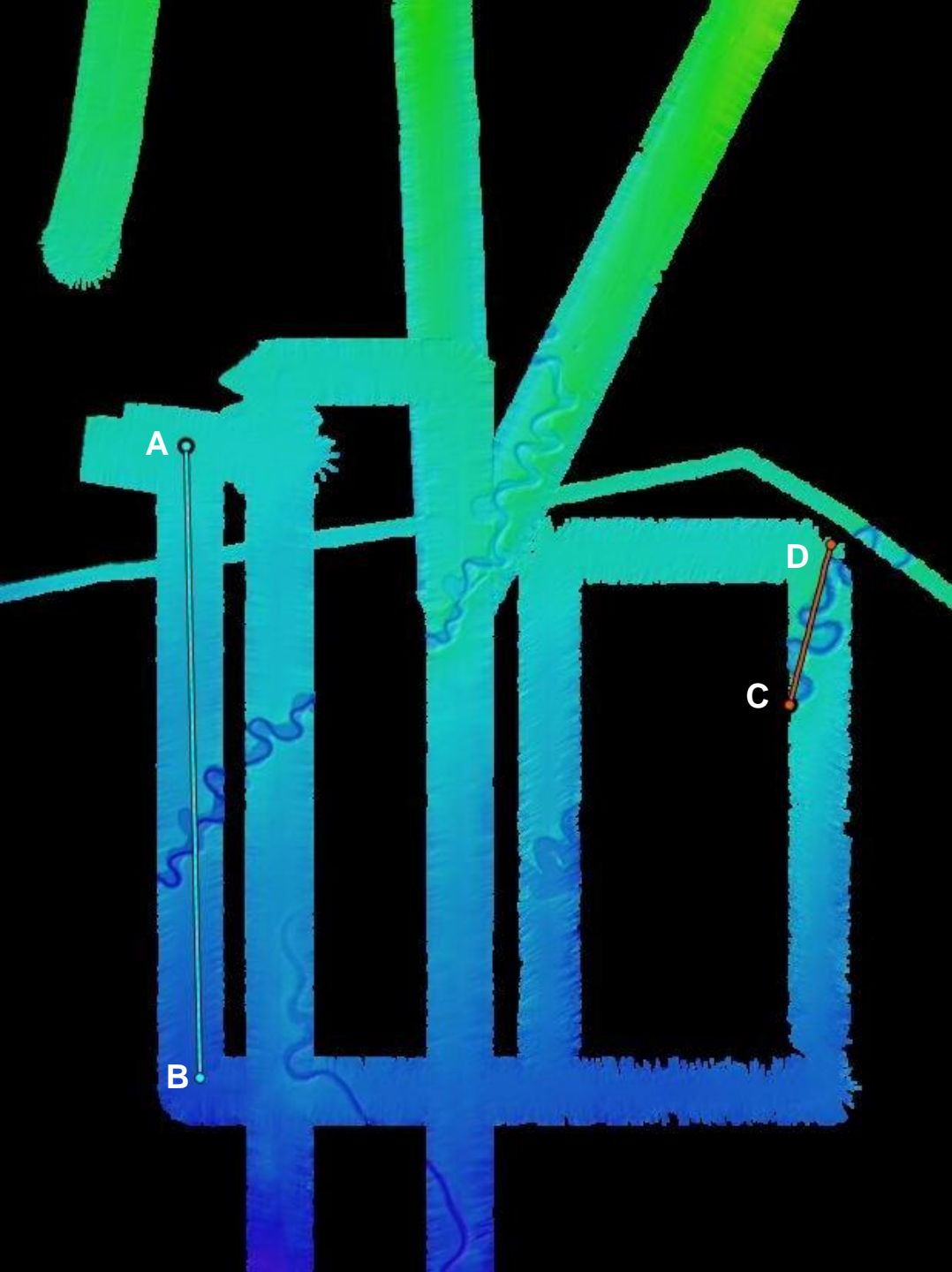
THE DIFFERENCE A SWATH CAN MAKE



A Point A about 700 km south of Sri Lanka



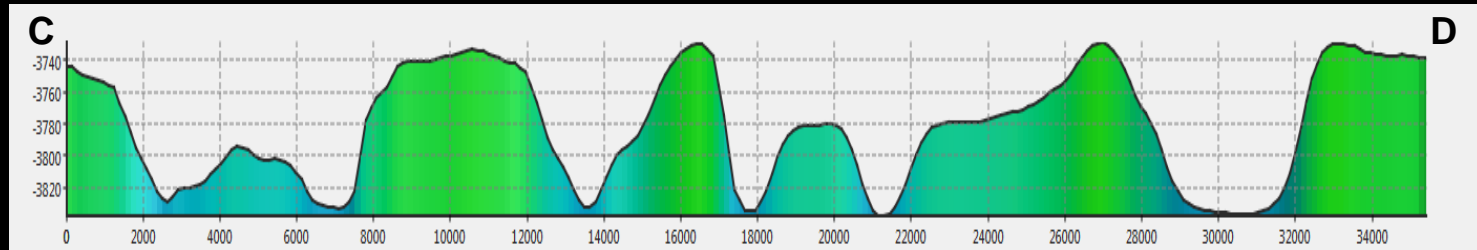
B



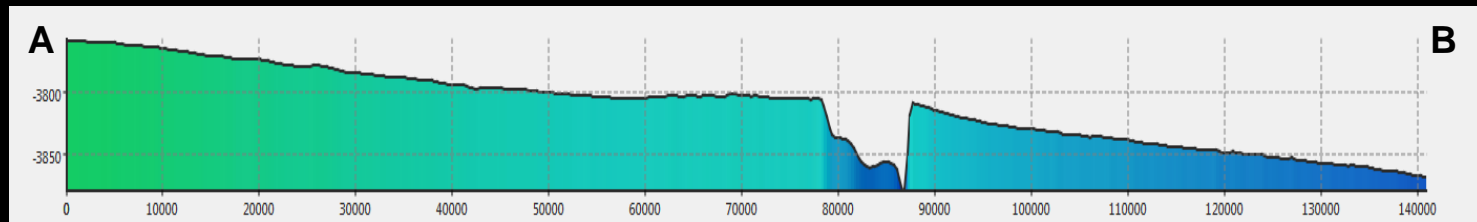
Essentially featureless seafloor – but channels recognizable once MBES swath overlain

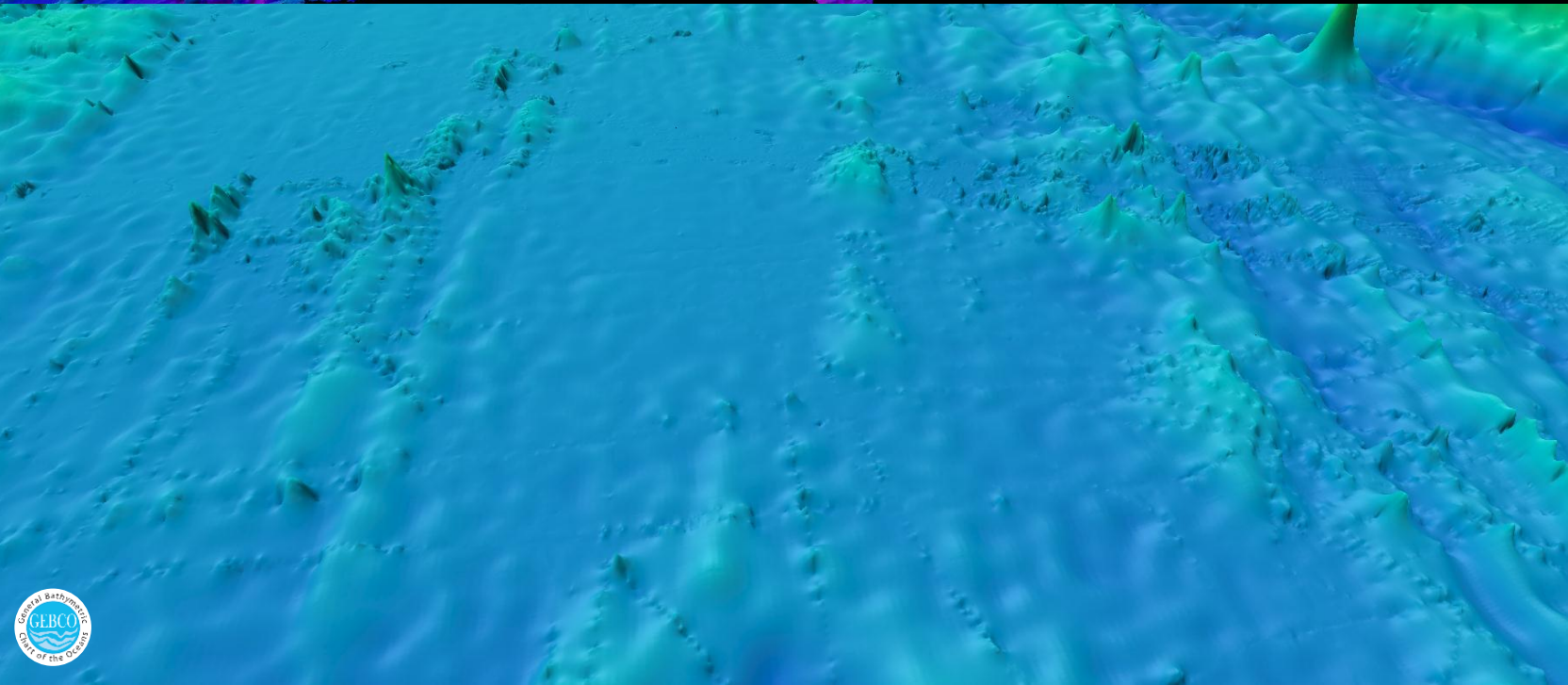
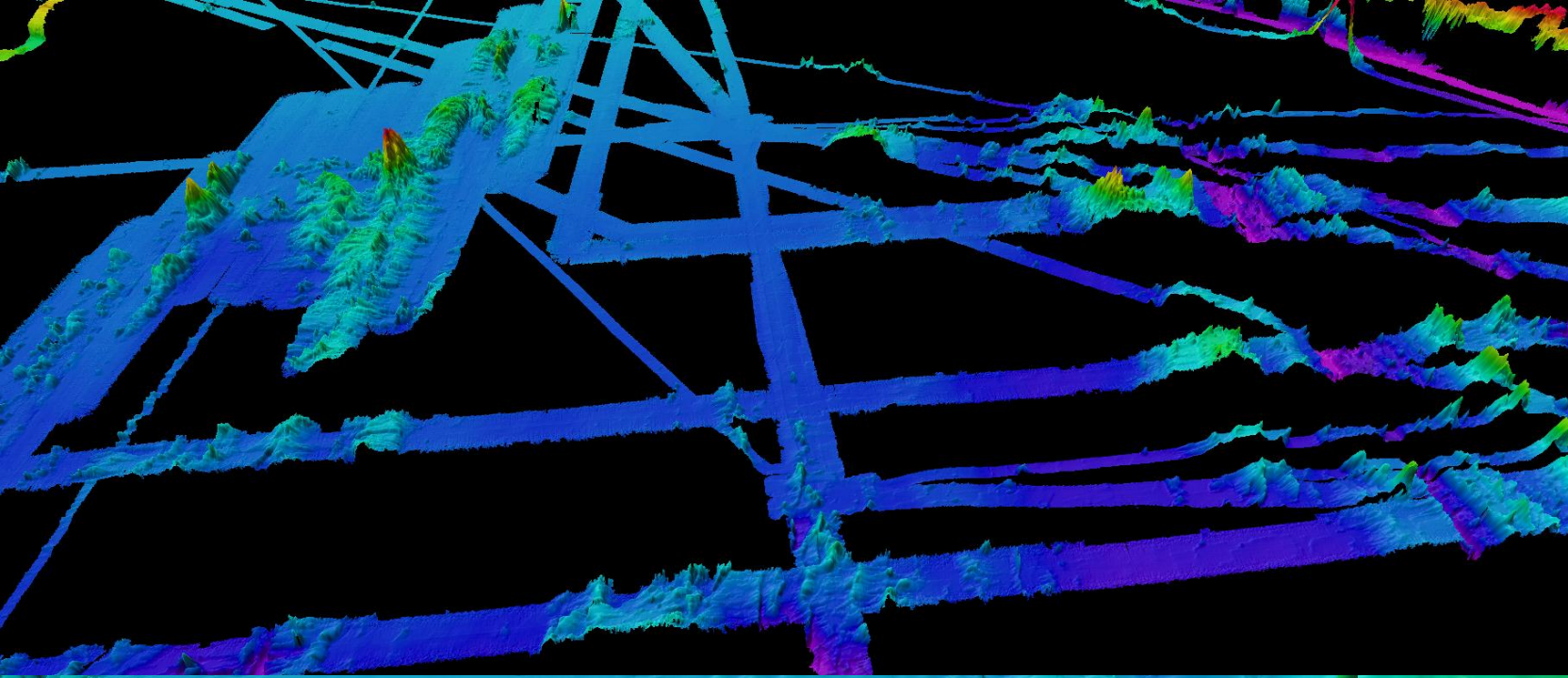


Cross section through deeply incised meandering channels – showing similar multiple phases or erosion with channels <90 m



Deeply incised channels at 3,800 m water depth – with up to 3 phases of incision. Essentially flat sea floor with slope of $< 0.05^\circ$ over 130 km N-S





Final example showing details emphasized in 250 m IOBC grid made up of both regional surveys and transects by different organizations.

IOBC group now working closely with the Atlantic and Indian Ocean RDACC

- A number of alumni are represented on this Regional Mapping Committee

