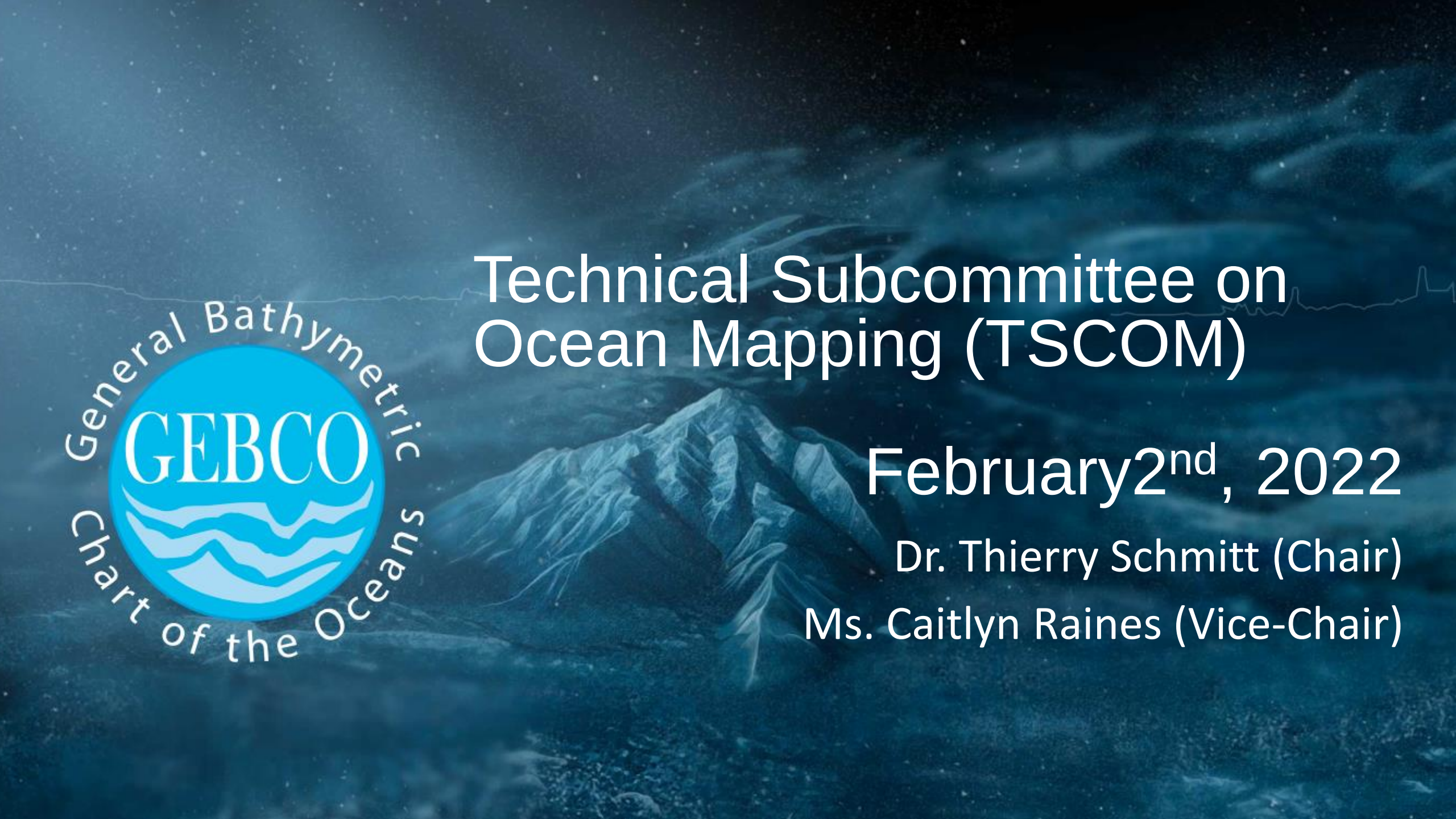


Technical Subcommittee on Ocean Mapping (TSCOM)

February 2nd, 2022

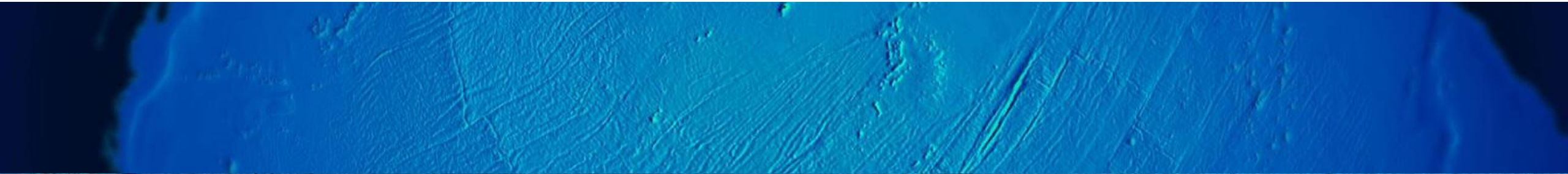
Dr. Thierry Schmitt (Chair)

Ms. Caitlyn Raines (Vice-Chair)

TSCOM

The Technical Sub-Committee on Ocean Mapping (TSCOM) was established in 2006 as part of the GEBCO program with the aim to:

- Provide ongoing advice to the GEBCO Guiding Committee and all associate groups and projects interested in the building and use of the GEBCO product.
- Serves the greater bathymetric, hydrographic, and maritime communities as authoritative source for technical expertise in seafloor mapping and forum for discussion on emerging technologies and applications of bathymetric and hydrographic data.



TSCOM Membership

(as of fall 2021)

- Chair, Thierry Schmitt (SHOM, FR)
- Vice Chair: Caitlyn Raines (Esri, USA)

Voting Members

- Wetherbee Dorshow (EarthAnalytics,USA)
- Federica Foglini (CNR, IT)
- Erin Heffron (Ocean Mapping Service, USA)
- Vicki Ferrini (LDEO, USA)
- Leonard Gomes (Marinha, BR)
- Tim Kearns (GLOS, US)
- Boele Kuipers (NHS, NO)
- Paul Johnson (CCOM, USA)
- Cisco Navidad (CSIRO, AU)
- Christie Reiser (NOAA, USA)
- Helen Snaith (BODC, UK)
- George Spoelstra (GGSgc, NL)
- Heather Stafford (NGA, US)
- Pauline Weatherall (BODC, UK)
- Mark Zimmerman (NOAA, USA)

Non-Voting Members

- Eunmi Chang (Seoul University, KO)
- Martin Jakobsson (SU, SE)
- Jennifer Jenks (NOAA, US)

General Bathymetric Chart of the Oceans
GEBCO
United Nations Educational, Scientific and Cultural Organization
Intergovernmental Oceanographic Commission

TSCOM workplan 2021-2022

GGC37/6/1/1/2

1.1. IHO-IOC GEBCO Technical Sub-Committee on Ocean Mapping (TSCOM) Work Plan 2021-2022

1.1 TSCOM Tasks

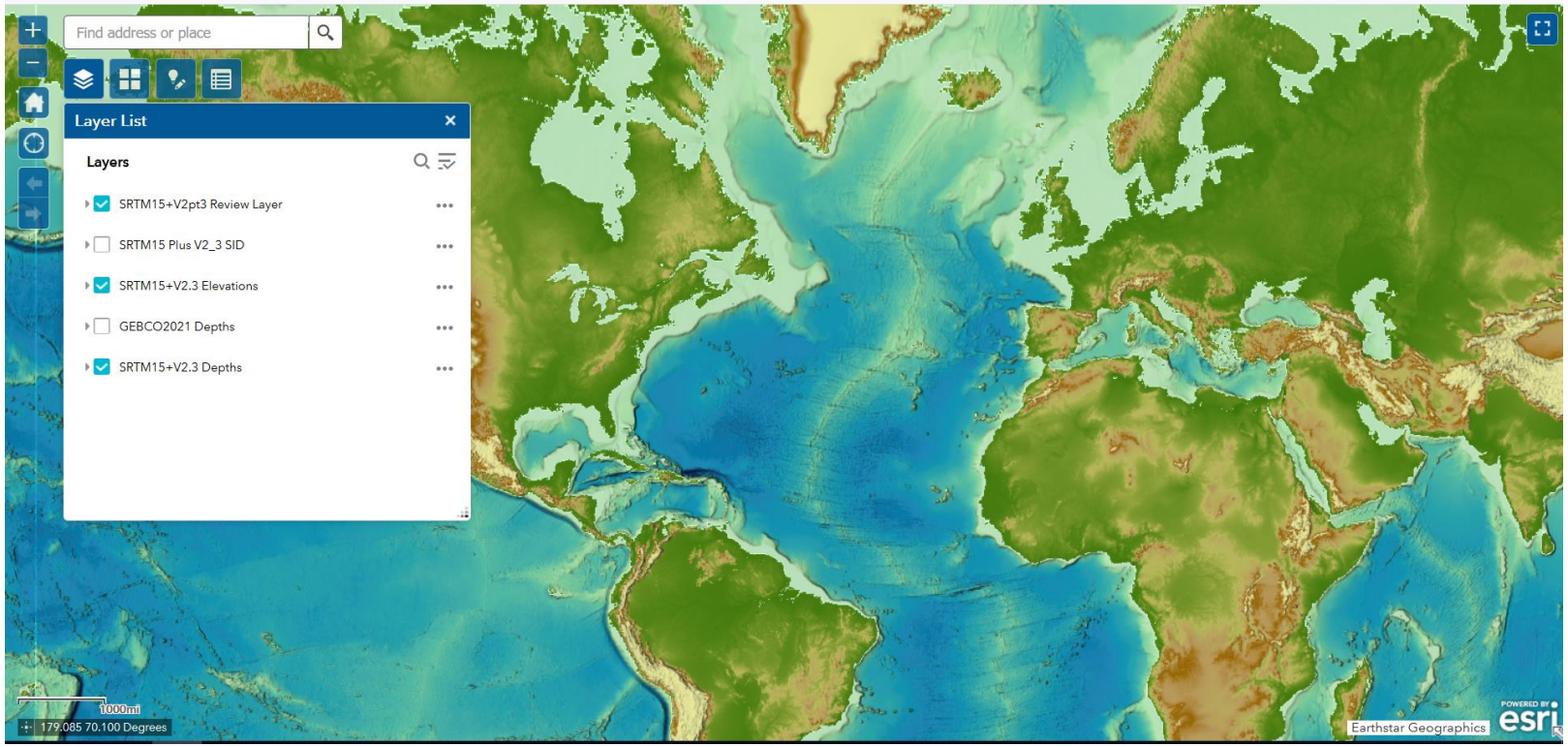
B	Ensure conduct of TSCOM meeting in 2021 (IHO Task 3.6.1)
C	Ensure effective operation of IHO DCDB (IHO Task 3.6.2)
D	Develop and maintain tools to facilitate the contribution of bathymetric data to the IHO DCDB (IHO Task 3.6.3)
E	Maintain IHO bathymetric publications (IHO Task 3.6.6) including: B-4, B-9, B-10 and B-11
F	Develop the on-line function of B-4 (Information concerning recent bathymetric data) (IHO Task 3.6.6)
G	Support SCOPE in its outreach and education about ocean mapping (IHO Task 3.6.7) by development and dissemination of IHO-IOC GEBCO products such as the Global Gridded Product and Printed World Map
H	Ensure IHO-IOC GEBCO Web site is kept current and updated regularly (IHO Task 3.6.8)
K	Provide technical support, advice, and review to Seabed 2030 Project Director, RDACCs and GDACC
L	Provide support and advice to developing and validating emerging technologies for compiling and disseminating bathymetry

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard	Funding Bid (€)	GGC Decision
B	Ensure conduct of TSCOM meeting	H	Report of TSCOM meeting to GGC	2021	2021	P	Chair TSCOM			
C	Ensure effective operation of IHO DCDB	H	Conduct review	Continuous		O	Director DCDB			
D1	Document dataflow processes	H	Cookbook instructional	Continuous		O	Chair TSCOM Director DCDB			

- Full workplan

SRTM15+

- STRM15+ used as base layer for GEBCO
- TSCOM review and provide feedback using the provided app



Metadata working group

Federica Foglini

- Objective: provide advice on metadata to be provided by the data producer
- Full review of the metadata schema (with comparison with existing initiative)
- Active collaboration with the CSBWG

2022 Action Items

➢Need feedback and implementation strategy

Cookbook Editorial Board

Christiane Reiser

- Objective: Managing the Cookbook publication
- Transition from Karen Marks
- Consolidating the members of the board
- Investigating epub and ad hoc software for the edition

2022 Action Items

➢Call for new chapter

➢New edition towards end 2022

GEBCO Website Working Group

Caitlyn Raines

- Migrated GEBCO website to new platform (drupal)
- WG established last year as a work item from the GEBCO annual meetings

2022 Action Items

- Review the needs and requirements for an GEBCO website governance standard to support the modernization and subsequent maintenance of the GEBCO website
- Develop a GEBCO governance policy as agreed upon by consensus within the committee.
- Conduct a review of the existing website content and identify and address any resulting issues.

DCDB Update

Jennifer Jencks

- Objective: Inventory of known bathymetric data
- Continuously gathering new datasets (or pointers to existing data)
- Include embargoed data
- Connected with regional mapping paterns
- Improved DCDB pipepline

2022 Action Items

- Dedicated workshops: DCDB Industry day and data contribution workshop (on the use and leveraging of web services)

Opportunistic mapping resources working group

Erin Heffron

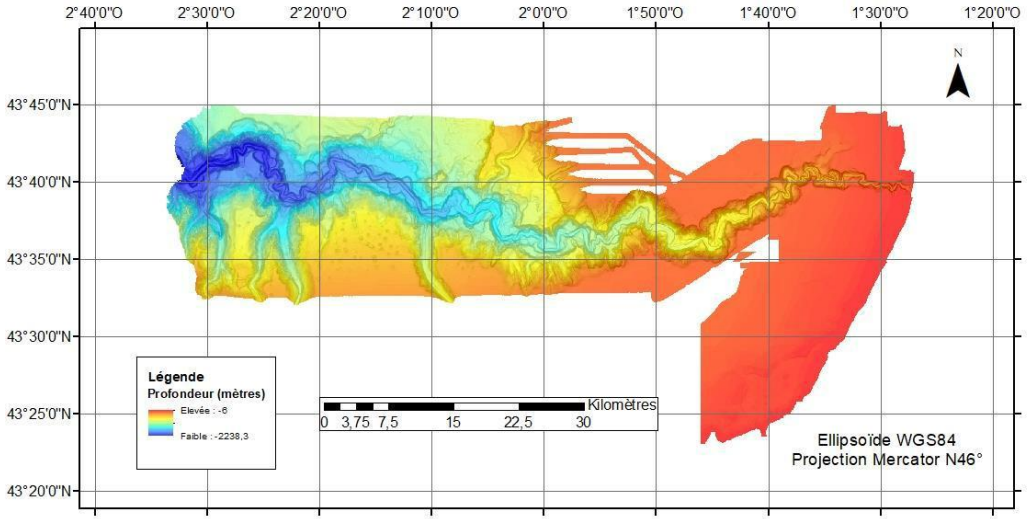
- Objective: To develop, test, and deliver resources that promote acquisition of seabed data by the seafloor mapping community in areas identified as gaps in the current coverage.
- Need a better understanding of what is mapped/unmapped
- Provide opportunistic mapping decision support tools

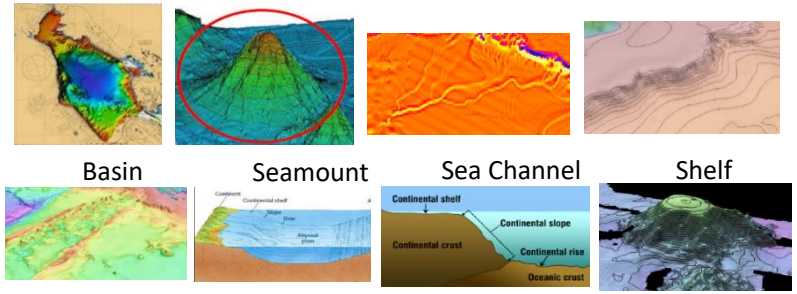
2022 Action Items

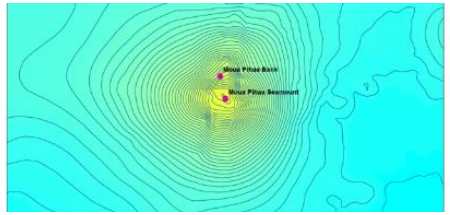
- Together with DCDB and TSCOM rep to take the subject related to webservices

Undersea Feature Detection Project (action initiated)

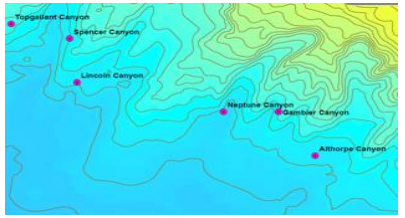
- Lead/requested by CHS (Anna Heindi, SCUFN member)



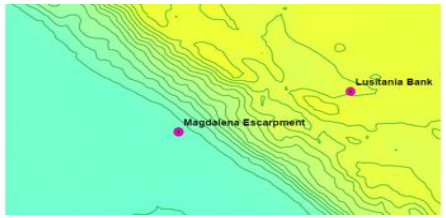




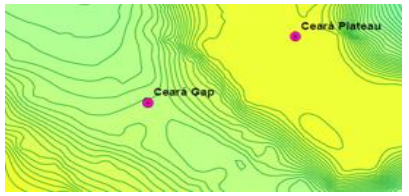
Closed Loop



Trend variation



Slope variation

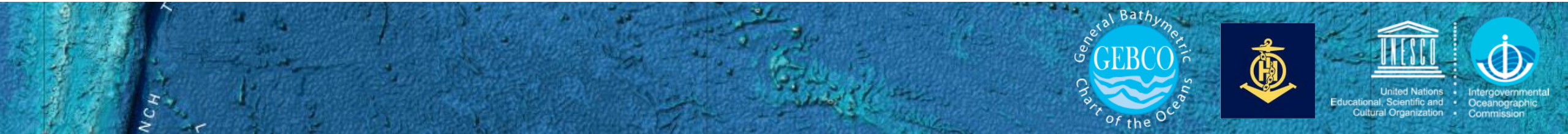


Negative Space

Contour Pattern Recognition

Using Deep Argo Float profiles as validation (action initiated)

- Objective: Check out grounding of Deep Argo Float vs known bathymetry from GEBCO
- Project at its early stage, exeprimenting (seeking internship candidates)



New TSCOM Chair & Vice-Chair