GEBCO-NF XPRIZE

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WHAT IS XPRIZE

XPRIZE is a non-profit organization that designs and manages competitions intended to encourage innovative technological development to benefit mankind

XPRIZE believes that solutions to unanswered questions and challenges will be achieved by:

- tapping into that spirit of competition

- providing motivation drives the challenge leading to breakthroughs and solutions

Shell OCEAN DISCOVERY XPRIZE®

$7 million global competition to push the boundaries of ocean technologies by creating solutions that advance the AUTONOMY, scale, speed, depths and resolution of ocean exploration.

Solution must be launched from shore or air, with restricted human intervention

Entries will have limited time to explore the competition area to produce:

1. high resolution bathymetric map
2. images of a specified object
3. identify archaeological, biological or geological features

Shell Ocean Discovery XPRIZE challenges:

	ROUND 1 (Aug-Sept 2017)	Round 2 (Sept 2018)
Water Depth	2,000 m	4,000 m
Area Mapped	100 km²	250 km²
Time	16 hours	24 hours
Resolution	5 m horizontal and 0.5 m vertical	
Imaging	Find & image a given item	Find & image a given item
Additional Features	Identify and image 5 features at any depth	Identify and image 10 features at any depth
Map Accuracy	Pass/Fail vs Statistical Accuracy relative to Baseline Map	

RESTRICTIONS:
1) Equipment will be deployed from a shore location close to the designated area
2) All components must fit within a standard shipping container (8 X 8.5 X 40 ft)
3) Data Processing and delivering of all Products within 48 hours

The momentum to enter a team for the XPRIZE challenge a direct result of the NF-GEBCO Forum for Future Ocean Floor Mapping held in Monaco
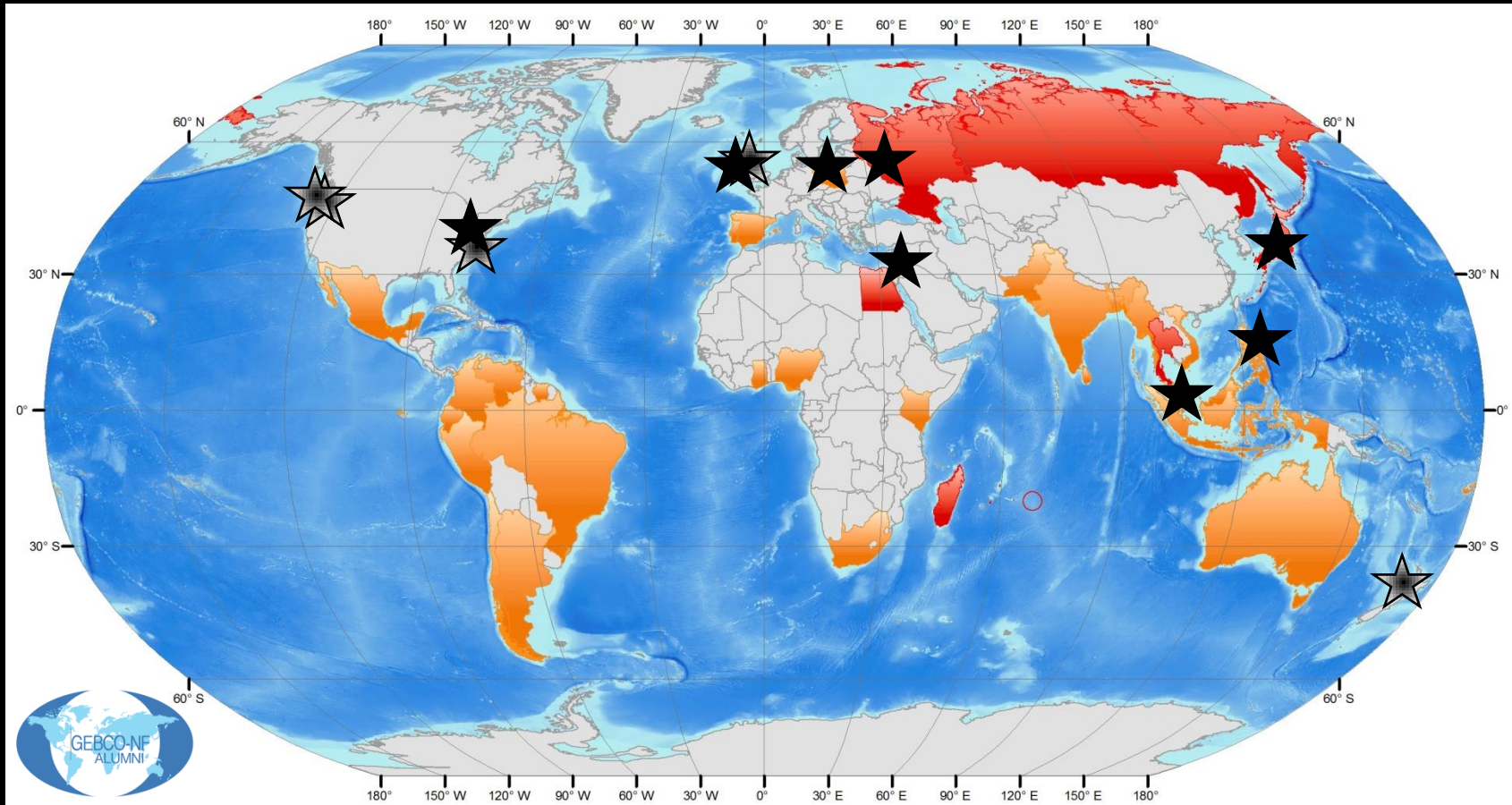
Inspired b:
1) Quote from Jyotika Virmani of XPRIZE:
"NF-GEBCO training program is probably the most-successful unknown capacity-building global initiative

2) Mr Sasakawa announced the formation of an Alumni Association and this will be a first project by this group

GEBCO-NF XPRIZE
alumni team

STRENGTHS   * extraordinary group with global diversity
* combine unique technical and academic skill set
* passion for exploring and understanding the world's oceans

NEIL TINMOUTH
Lankelma LTD, UK (South Africa)

ADVISORS:

KAROLINE ZWOLAK (CHORZEWSKA)
Polish Navy

ROBIN FALCONER

YULIA ZARAYSKAYA
Geological Institute, Russian Academy of Science

Bob Anderson

HADAR SADE
Israel National Bathymetric Survey

BEN SIMPSON
Hushcraft Ltd, UK

HADAR SADE
Japanese Hydrographic Office

TIMOTHY KEARNS
Ocean Aero, USA

AZMI ROSEDEE
Malaysian Navy Hydrographic Office

VICKI FERRINI
Lamont–Doherty Earth Observatory,
Columbia University, USA

Jaya Roperez
NAMRIA, Philippines

Rochelle Wigley
University of New Hampshire, USA (South Africa)

GEBCO-NF team objectives

- Ongoing career development and training of Alumni

- Strengthening of Alumni networks
  - Amongst alumni of different years
  - Within GEBCO community
  - Build and develop contacts amongst industry leaders
  - Work with other teams developing technology of the future

- Gain understanding of cutting-edge technologies

Our Plan

Facilitate various industry experts and leaders to integrate already existing technology in order to overcome the challenges

EM2040
interferometric synthetic aperture sonar bathymetry
interferometric side scan bathymetry