

CROWD SOURCED BATHYMETRY INITIATIVE IN MALAYSIAN WATERS/ A JOINT GEBCO, SEA ID AND NATIONAL HYDROGRAPHIC CENTRE, MALAYSIA

Rochelle Wigley (University of New Hampshire); Norhizam Hassan and Ramli Mohd (National Hydrographic Center); Kenneth Himschoot and Andrew Schofield (SEA ID)



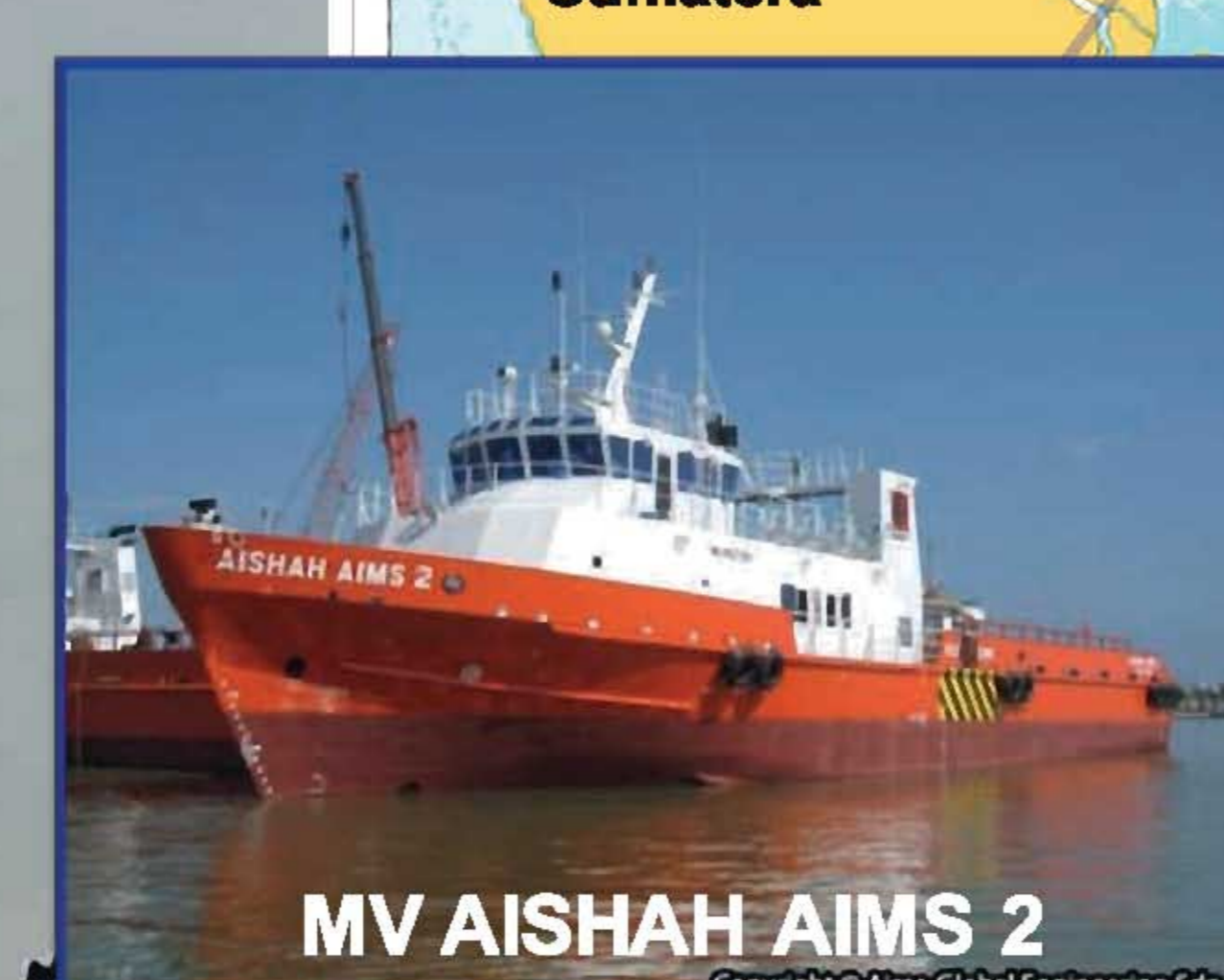
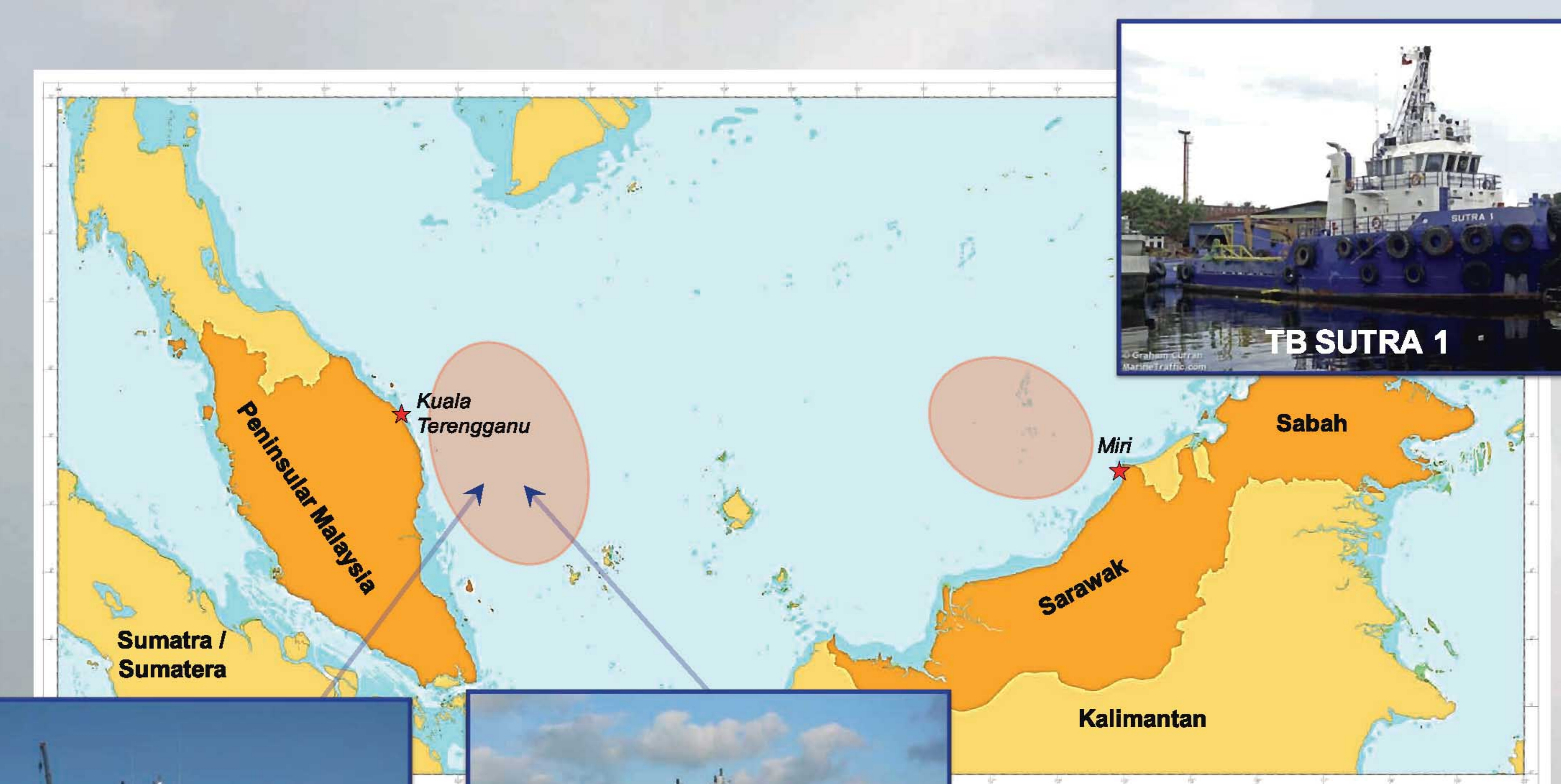
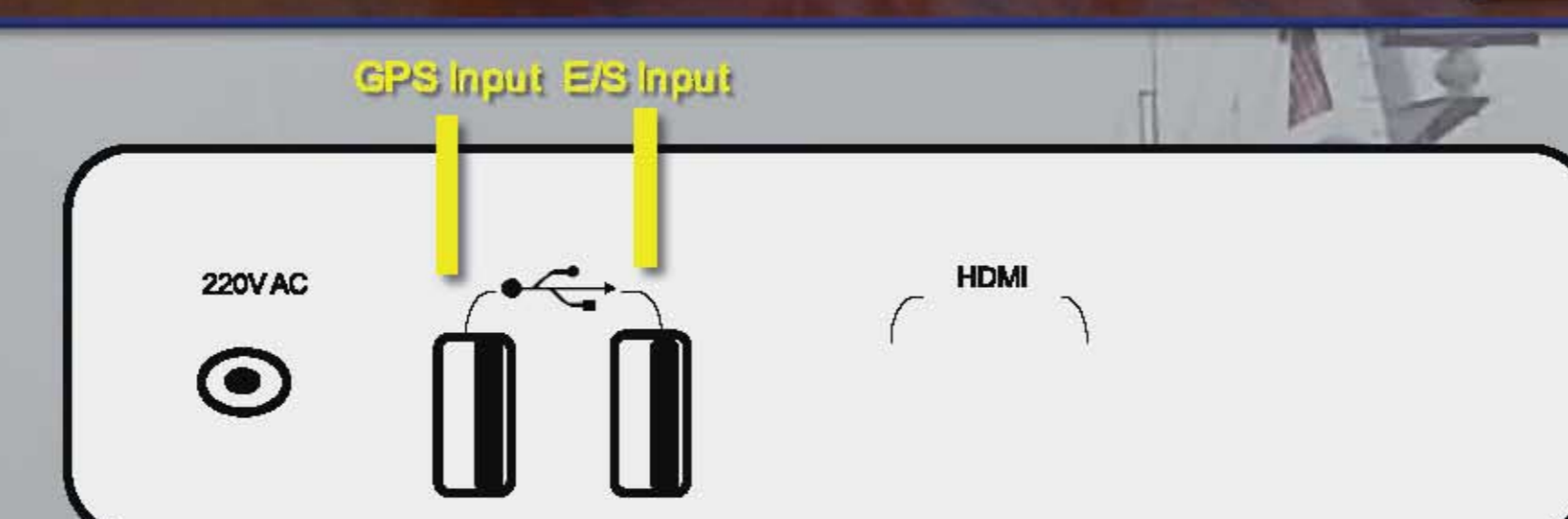
In order to expand the current IHO super yachting pilot project to include and test the Crowd Sourced Bathymetry (CSB) concept with a wider spectrum of mariners, a new pilot project was initiated off the coast of Malaysia. This pilot project included the installation of three SEA ID loggers on three different vessels that routinely travel over an area with MBES bathymetry coverage so that the resulting CSB data can be quality assessed in a controlled environment.

A core group of Nippon Foundation / GEBCO alumni from the National Hydrographic Centre of the Royal Malaysian Navy provided expertise to coordinate the project and assist with installation of equipment.

Malaysian waters were chosen for this project, due in part to the shallower water depths of 0 to 200m in the selected area, which may allow a better result for this proof of concept due to decreased overall depth ranges and depth logging capabilities of typical onboard echosounders in vessels of opportunity.

SEA ID LOGGER

- Stable clean 220 V AC power input - UPS is essential
- GPS and Digital echosounder with standard NMEA string output
- System set up for daily data download of ~200 kb data file
- Suitable location to mount 20 cm logger box
- Logger is believed to work up to 10 years.



The installation of logger were successfully carried on board all three vessels, MV Aishah AIMS 2, MV Aishah AIMS 3 in Kuala Terengganu on Peninsular Malaysia and TB SUTRA 1 in Miri, Sarawak. Installation was undertaken by Capt Andrew Schofield and Mr Kenneth Himschoot from Sea ID; and escorted and assisted by Lt Cdr Ramli Mohd RMN within the five days as per plan from 19th to 23rd January 2015.

ISSUES TO DATE:

- Vessels did not leave port as expected date due to both a fall-out from increased oil prices reducing survey time and then onset of bad weather
- No routine surveys for chartered vessel
- Change in data format recorded on logger
- Have to be in port to get new data (Difficult to get remote login access to troubleshoot)

LESSONS LEARNT:

- Some information on metadata and setup essential
- Need to simplify hardware for easier installation and data retrieval – not all vessels have technology of super-yachts
- Explore whether this technology can be adapted for fishing industry?
- Data must be made publically-available and exploring ways to do this through GEBCO and IHO-DCDB

Cabling

Checking Type of Port

Setup Cable Port

Checking Output String

Echo Sounder Port

Logger Configuration

Installed Logger

