

# African Great Lakes and Rivers Sub Working Group (AGL&RsWG) Annual Report

SAIHC 18 9-12<sup>th</sup> May 2022 Maputo, Mozambique

Presented by Nick Swadling, Interim Chair (Geographic Technical Lead- UKHO)

AGL&RsWG was established at SAICH17 as sub working group to ICCWG.

4 meetings so far with attendees from:

- Kenya
- Malawi
- Mozambique
- Tanzania
- Uganda
- Mozambique
- South Africa
- UK
- Invites have gone to Lake Victoria Basin Commission, PMAESA and Songwe River Basin Development Programme who we hope will join us at the next meeting

# ToRs agreed at 2<sup>nd</sup> meeting – Key highlights

- Promote hydrography in the African great lakes and rivers for the sustainable development and use of navigable inland waters
- Identify and review the status of hydrography, navigational products and MSI provision
- Consider users requirements for navigational products and services.
- Engage with external stakeholders to identify new data sources, requirements and potential funding opportunities.
- Create and maintain a digital catalogue of navigational products.
- Create and maintain a spatial database that contains an inventory of survey extents and meta data for the use of the working group, IHO and external agencies.
- Create and maintain a digital list of Aids to Navigation.
- Identify any capacity building requirements specific to African Lakes and Rivers.

# Themes of discussion so far:

- 1) Hydrography Audit
- 2) Existing charting & future Charting requirement
- 3) World Bank funded Surveys of Lake Victoria
- 4) MSDI – Marine Portal
- 5) MSI for Lakes and Rivers

Hydrography Audit template sent to members 29/10/21 with the aim of better understanding:

- Vessel / User types and numbers
- Existing charting - paper / ENC
- Cartographic & surveying resource
- Bathymetric surveys - existing / future plans
- MSI
- Capacity building requirements

AGL&R Sub WG Hydrography Audit Summary - Please complete the orange boxes with as much information as you require				
<b>Country:</b>				
<b>Lake:</b>				
<b>Last updated:</b>				
<b>Provided by:</b>				
<b>User needs</b>		<b>Comments</b>		
Please provide details of the main vessel types and users:				
How many large vessels operate on the lake?				
Do vessels use paper charts for primary navigation purpose?				
Are vessels fitted with ECDIS to use ENCS				
What do most local vessels use to navigate				
Do they use GPS for positioning:				
<b>Chart coverage (number of charts)</b>	<b>Passage planning (small scale)</b>	<b>Coastal (medium scale)</b>	<b>Port (large scale)</b>	
Modern paper chart				
Historical paper chart				
Raster chart				
ENC				
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (number of charts):				
Paper charts referenced to a satellite datum (number of charts):				
How many trained cartographic production staff are in your organisation				
Who produces your charts of the Lake				
What cartographic IT packages do you use:				
Do you require Cartographic production support, please provide details:				
<b>Please provide a separate graphical catalogue image showing paper chart</b>				
<b>Comments on charting coverage, status and cartographic production capa</b>				
<b>% coverage and status of bathymetric surveys</b>				
	<b>Multibeam (%)</b>	<b>Single beam (%)</b>	<b>Lead line (%)</b>	<b>No survey (%)</b>
0-50m				
50-200m				
What future bathymetric survey plans exist for the lake:				
When was the last bathymetric survey carried out:				
Do you have a survey vessel with a trained surveyor team:				
Do you hold digital copies of the surveys:				
Have you completed a review of your survey data holdings:				
Does the lake have local datum surveying bench marks:				
Does the lake have functioning water level gauges:				
Please provide a separate graphical image showing survey extent coverage of the lake				
Do you require assistance in evaluating survey needs and creating commercial tenders and specifications for surveys:				
<b>Comments on survey coverage, status and surv</b>				
<b>MSI &amp; Notices to Mariners</b>				
	<b>Yes/No</b>	<b>Comments on frequency of notice to mariners bulletin and radio warnings.</b>		
Printed notice to mariners bulletin				
Internet notice to mariners bulletin				
Local radio warning				

# Results of audit- So far we have received 2 Audit Summaries

## Key extracts include:

- Navigation is primarily on paper charts
- Modern charts available for some Lakes but only Historical charts for Lake Victoria.
- Limited numbers of larger vessels operate
- GPS used on larger vessels for positioning
- Cartographic Training requirement
- Cartographic software upgrades required
- Printing of charts can be problematic
- Nav Radio warning group – should be considered to be formed within AGL&RsWG
- Search & Rescue developments on Lake Victoria

# Existing charting & Future Charting requirement

THIS CHART IS NOT SUBJECT TO CORRECTION BY NOTICE TO MARINERS

**CENTRAL AFRICA**

## VICTORIA NYANZA (NORTHERN PORTION)

SURVEYED BY  
COMMANDER B. WHITEHOUSE, R.N., AND MR C.S. HUNTER,  
UGANDA RAILWAY SURVEYS, 1900-01.

*With additions and corrections to 1955.*

*All bearings are True (thus 126° etc) and are given from Seward.  
All heights are expressed in feet above the level of the lake.*

*For abbreviations see Admiralty Chart 5011.  
Natural Scale 293/1000 (Lat. 1° 15' S.)*

*The boundaries shown on this chart are approximate only.*

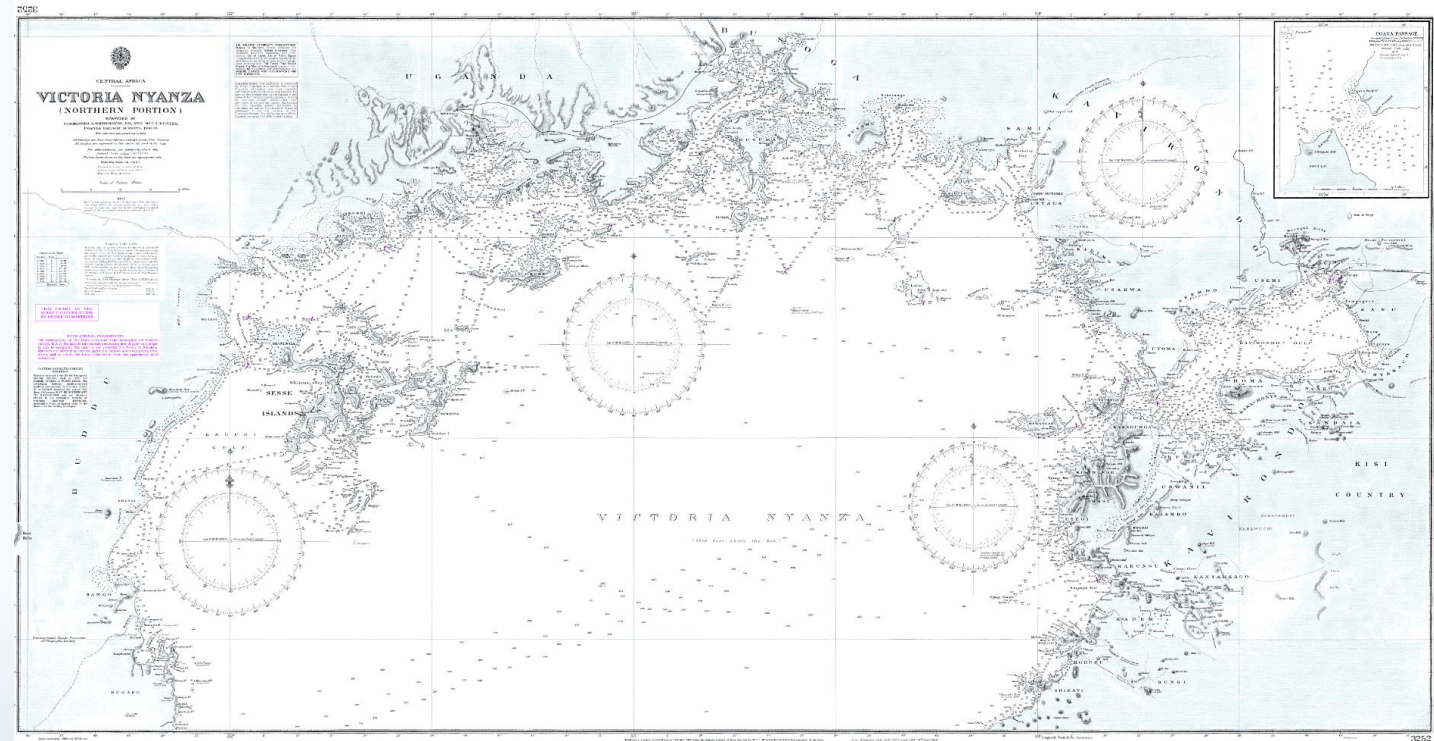
**SOUNDINGS IN FEET**

*Reduced to level of zero of Port Florence gauge, 3726.15 feet above Mean Low Water, Mombasa.*

Scale of Statute Miles

**NOTE**

*From latest determination of Kisumu (Port Florence) (see chart 3256), the South Latitudes on this chart should be reduced, and the North Latitudes increased about 12', the Longitudes should be reduced about 11'.*

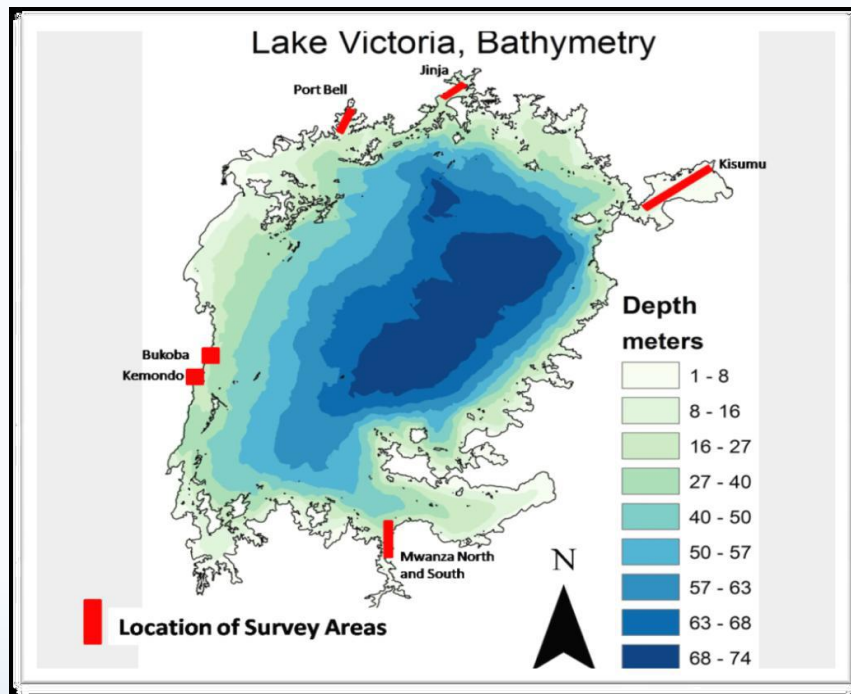




# World Bank Surveys

UKHO through AGL&RsWG has reached out to the World Bank and Royal Haskoning and has now received survey data for six ports on Lake Victoria

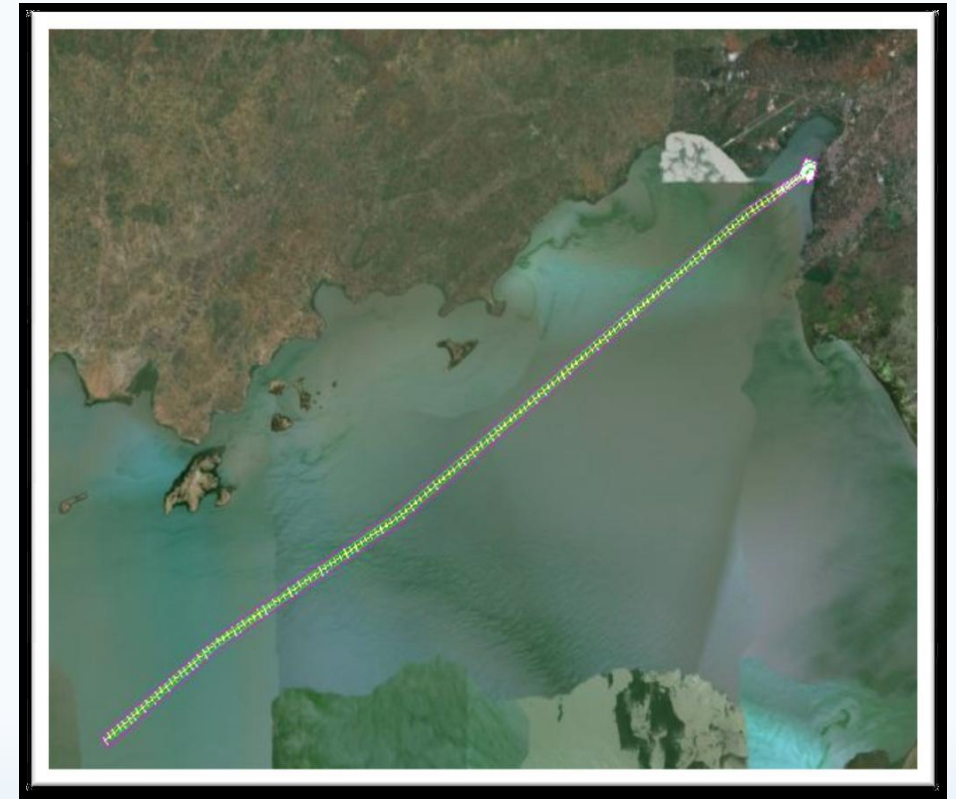
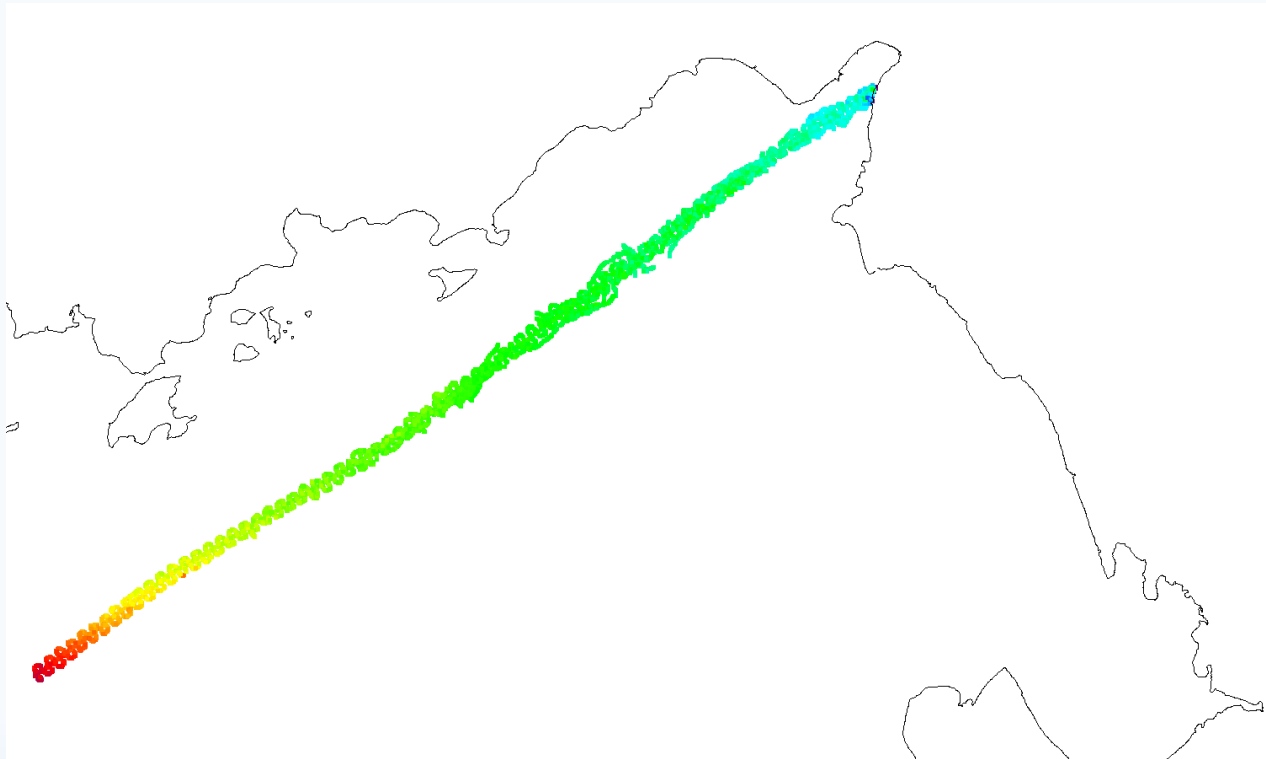
Surveys were funded by the World Bank and collected by Royal Haskoning in 2018



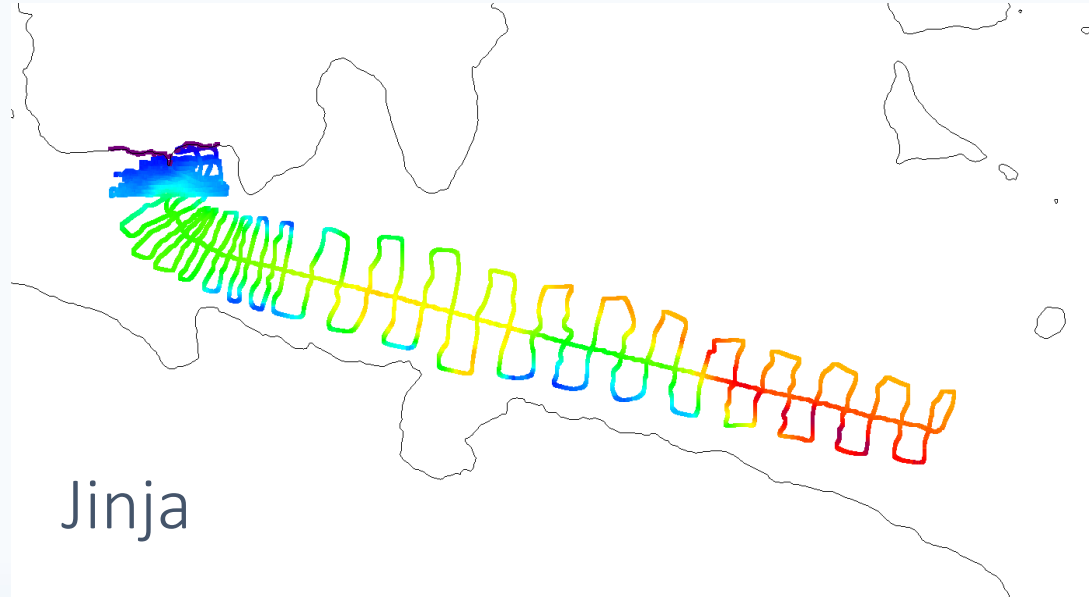
S/N	Name of Port	Area Type	Shipping Channel Dimension
1.	Mwanza North and Mwanza South Ports	Shipping Channel	13km by 250m wide
2.	Kemonondo Bay Port	Whole Bay- Surface area 13.5 km <sup>2</sup>	5km by 250m wide
3.	Bukoba Port	Port Area - Surface Area 6 km <sup>2</sup>	2km by 250m wide
4.	Port Bell	Shipping Channel	15km by 250m wide
5.	Jinja Port	Shipping Channel	7km by 250m wide
6.	Kisumu Port	Shipping Channel	35km by 250m wide



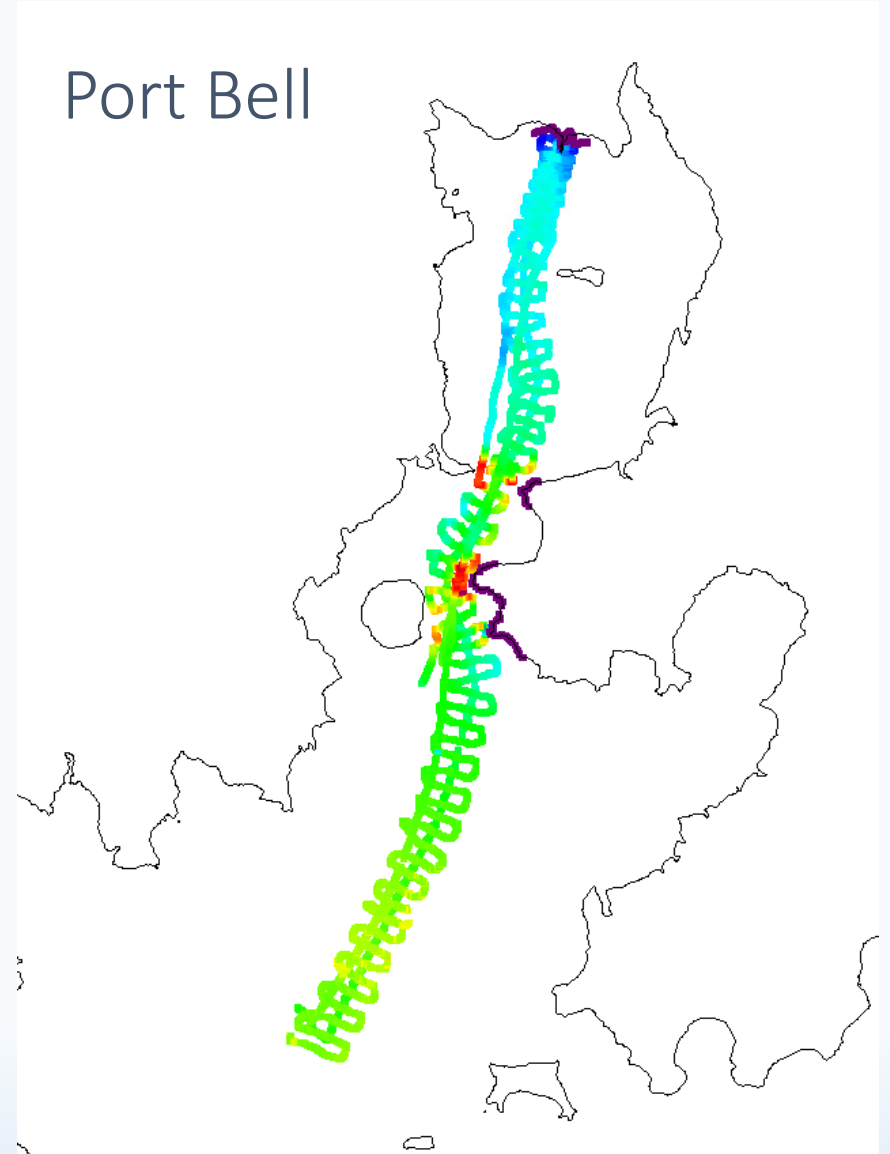
# Kenya - Kisumu



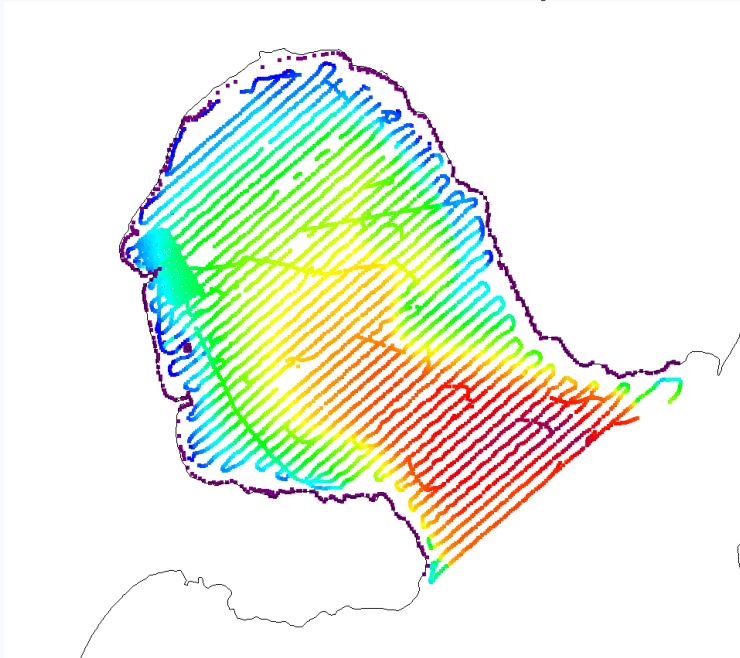
# Uganda



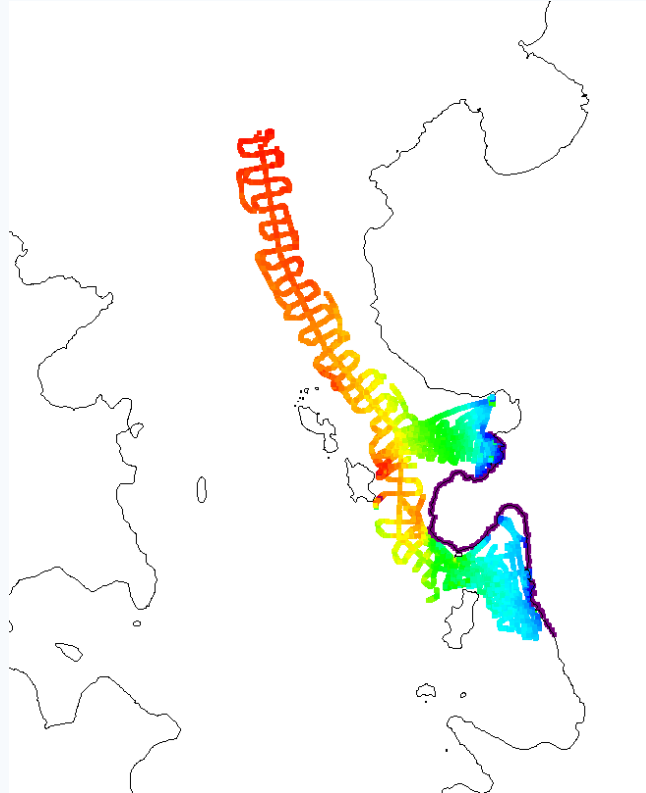
# Port Bell



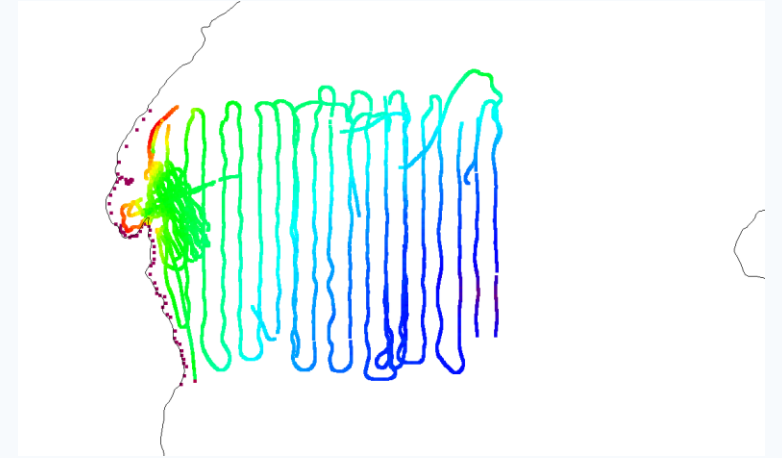
Kemondo Bay



Mwanza



Bukoba

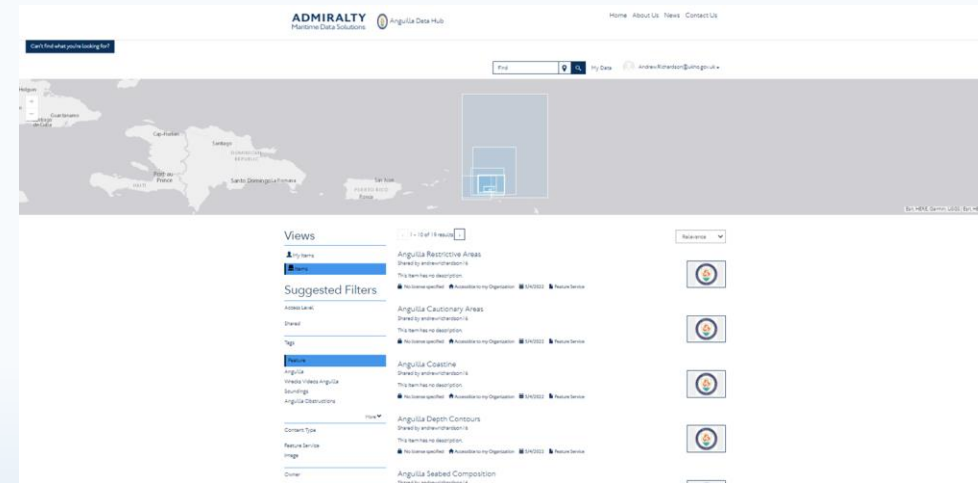
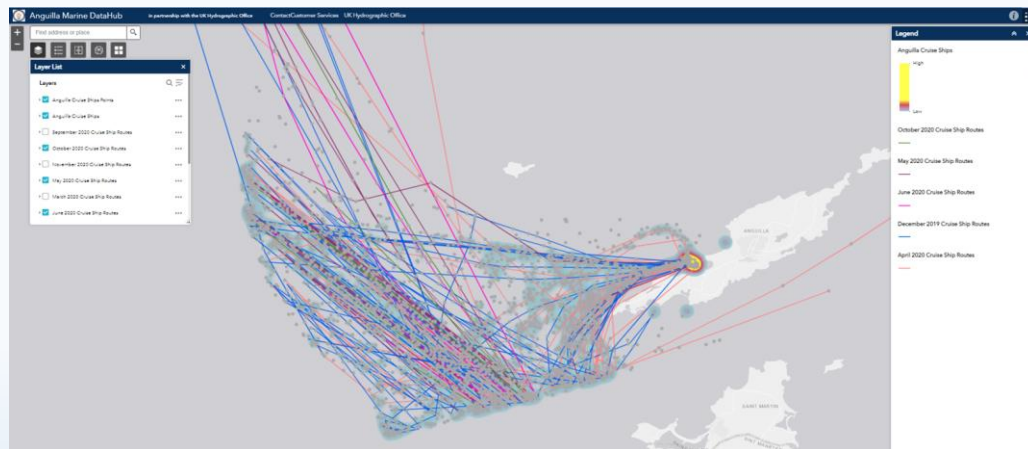
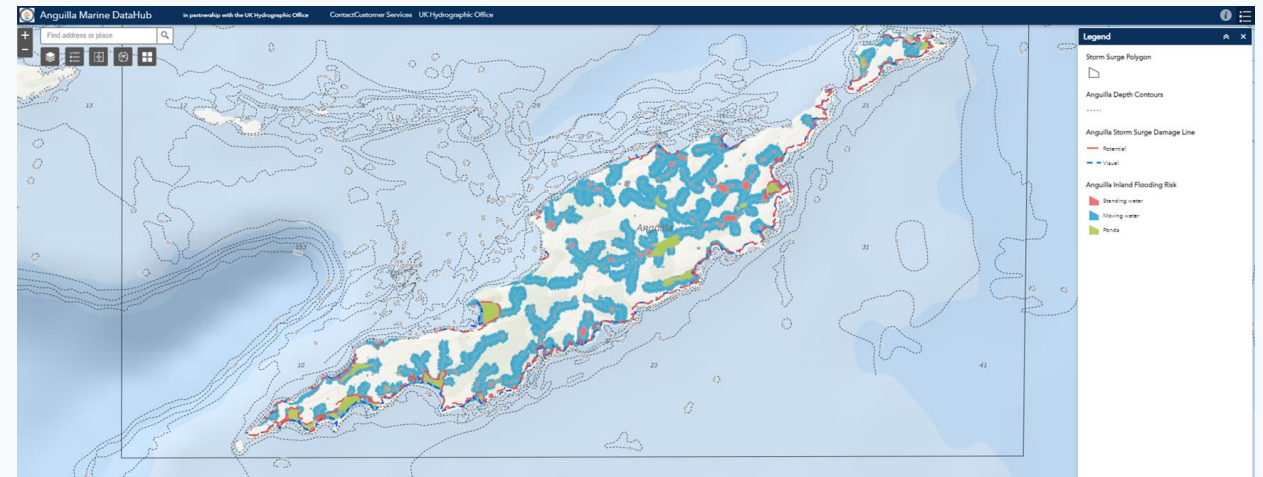
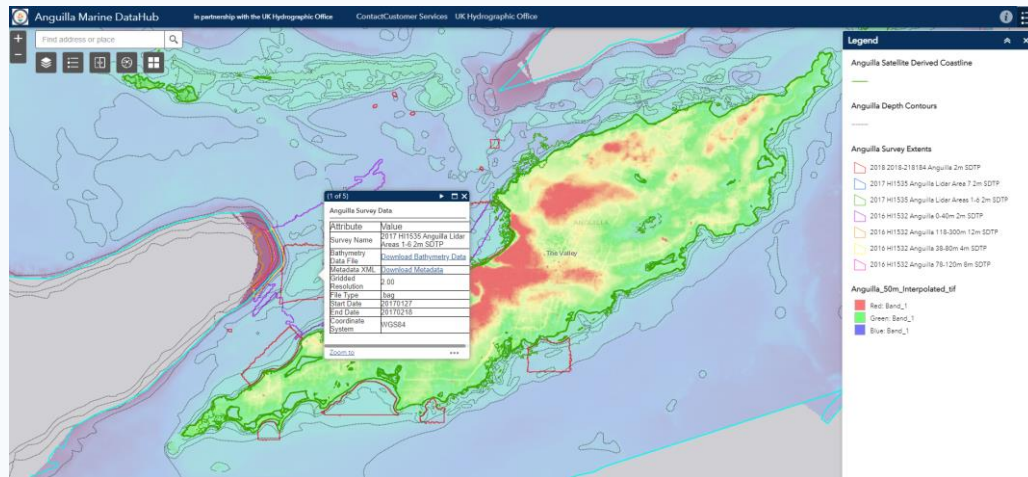


# Tanzania

# MSDI

- Tim Lewis has updated the group on UKHOs MSDI journey and introduced the idea of a data portal to support AGL&RsWG.
- CL 2/21 (1/11/2021) distributed to members regarding requirements for a data portal to support AGL&RsWG.
- Portal could support management of navigational safety and hydrography on the lakes.
- Support opportunities for new navigational products to be made by giving visibility of the requirement for new and existing data.
- Discussions around sharing of data between members and wider audiences.

# AGL&RsWG Data Portal discussions



# MSI

- Upcoming IHO funded MSI course, October 2022, location tbc
- Discussion with Chris Janus WNWWS Chair on options for Lakes MSI - due to technical VTC issues at the 4<sup>th</sup> meeting, Chris will be invited to the next meeting.
- Hand held 'App' option for lakes MSI

# Other business

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- Opportunity for Technical Working Group meeting at the lakes to share experience and opportunities
- Interim chair to write CL to members to discuss this opportunity.



# AGL&RsWG permanent Chair

- There were no nominations for permanent chair of the WG.
- Any members interested in becoming permanent chair to contact the secretary.

# Actions from 4th Meeting

No	Action	Due Date	Lead	Status
1	Members to provide comments and feedback to understand data portal requirements for the group as per letter sent by SAIHC MSDI Chair	4 March 2022	Members	
2	Members to complete African Great Lakes & Rivers audit including MSI	6 December 2021 Extend deadline to March 2022	Members	
3	Provide information on the SAIHC MSI funded course planned for mid-2022	January 2022	UK	
4	Members, through their respective organisations, to consider taking on the role as Chair of this African Great Lakes & Rivers Sub Working Group. Provide submission to Secretary	6 December 2021	Members	
5	Interim Chair to write letter to members to discuss and coordinate a Technical Working Group Meeting to Lakes		Interim Chair	
6	SAIHC Chair to write letter to Government bodies of members to encourage sharing of data to support safety of navigation		SAIHC Chair	