

## MESO AMERICAN - CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)

18th Meeting 27 November - 2 December 2017 (Varadero, Cuba)



# National Report by COLOMBIA



# Capacity Building activities since last meeting

#### Undersea features



#### Aids to Navigation Level 1





On Colombia 2018. MSDI 2019. Validation ENC IC-ENC 2020. AtoN level 1







# Capacity Building activities since last meeting

**On Colombia** 



simulation by oil spills

#### Submarine archaeologist



# **Cooperation with other RHCs**

On other CHR

2017Bathydata base in PeruSatellite images in ArgentinaSurveys RTK in BrazilData management in Uruguay



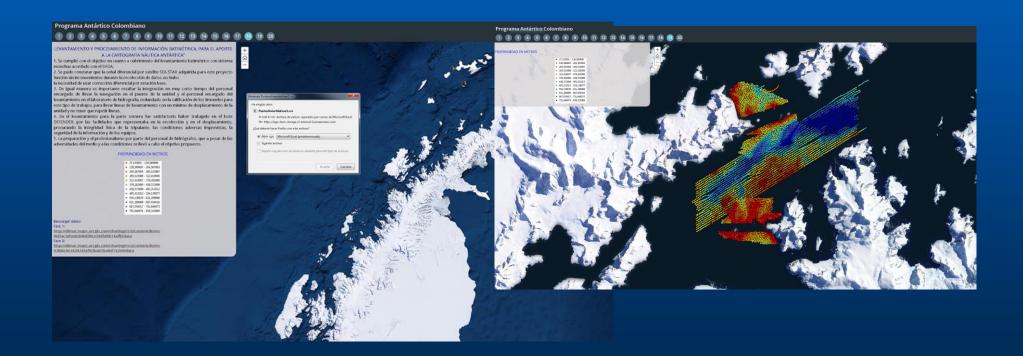


# **Cooperation with other RHCs**

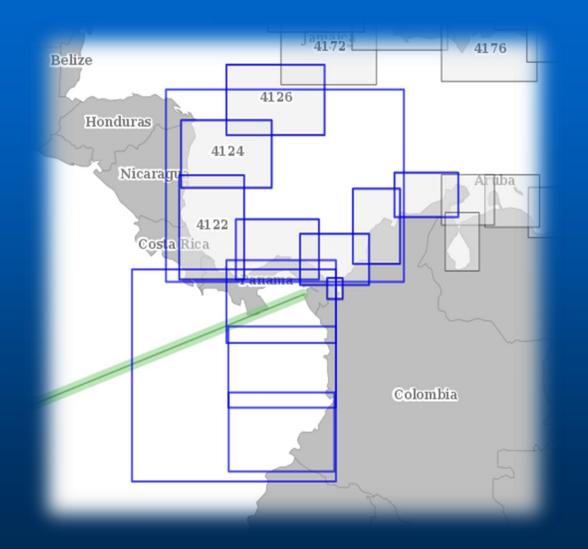
+ Cooperation CHR

SEPHC.	Chairman
CHA.	Third expedition 2017-2018

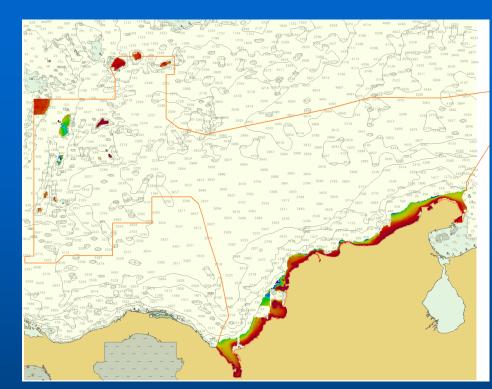
#### http://dimar.maps.arcgis.com/apps/MapSeries/index.html?appid=4587ab3618ec425497db95d045f10e77

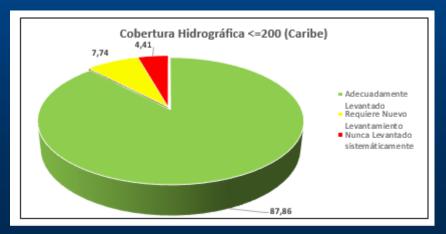


### Status at the IHO INToGIS

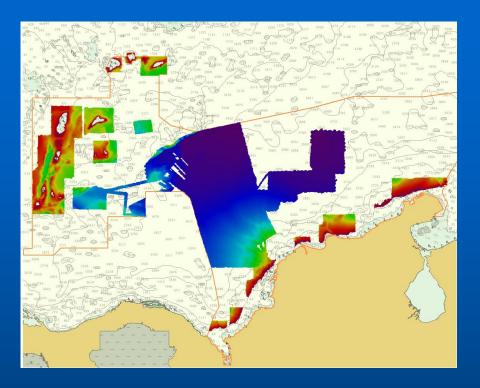


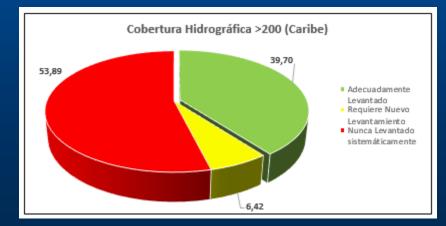
Cartas INT. Publicadas y actualizadas 13: 9 Caribe, 4 Pacífico

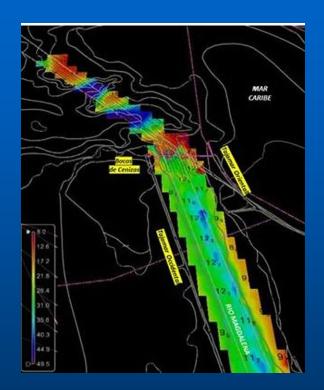




## C-55 September 2017

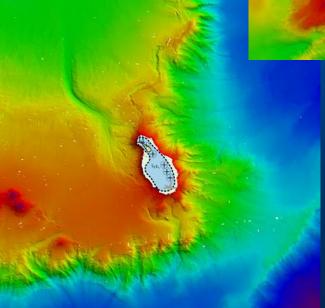


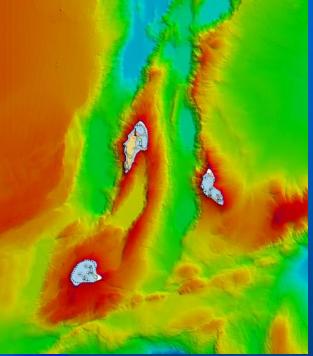




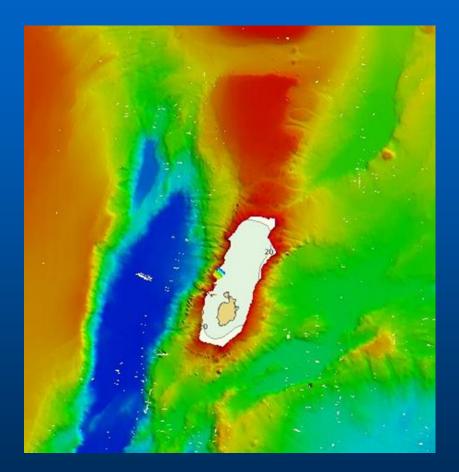
253. Río Magdalena.

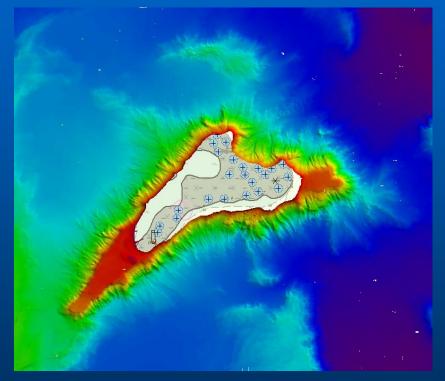
201. San Andrés.





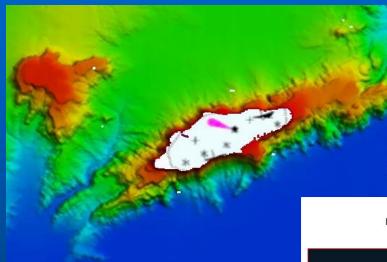
#### 211. Isla Cayo Roncador.





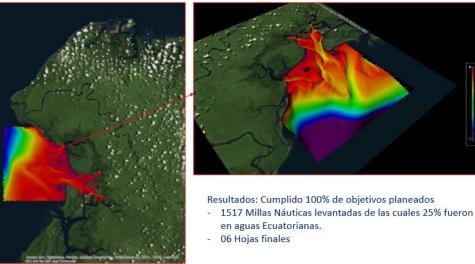
213. Cayo Serrana.

415. Islas de Providencia y Santa Catalina.



418 Aproximación Isla Cayos de Bajo Nuevo.

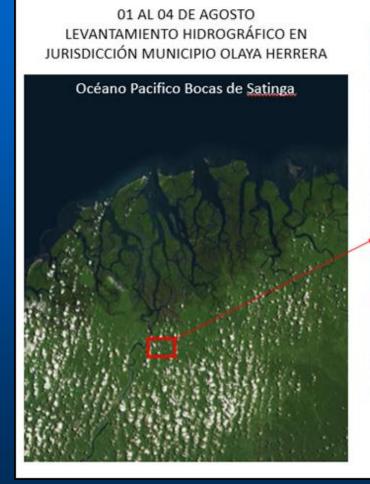
20 DE MARZO AL 25 DE ABRIL LEVANTAMIENTO HIDROGRÁFICO BINACIONAL CARTA 146 – DESEMBOCADURA RIO MATAJE



146. Río Mataje.



153. Bahía y Puerto de Buenaventura



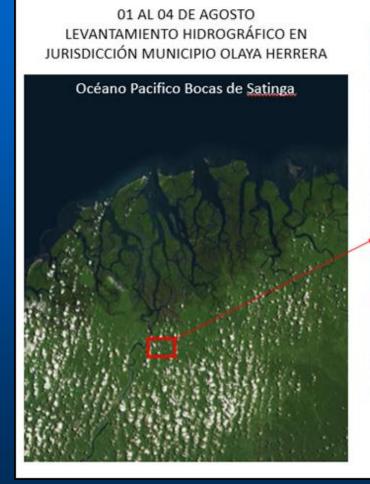
Área Levantada en Apoyo al Municipio Olaya Herrera



**Resultados:** 

- Total: 7.6 km lineales del rio fueron levantados
- Análisis comportamiento mareográfico
- 01 Plano final en elaboración

Apoyo Municipio Olaya Herrera



Área Levantada en Apoyo al Municipio Olaya Herrera



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Apoyo Municipio Olaya Herrera



La Antártida. Bahía de Cierva Cove

## **Risk assessment studies**





#### Estudio de evaluación de riesgos



Sistema de detección y monitoreo de Tsunami

#### **Risk assessment studies**



Monitoring Tsunami

Centro principal Sede Central

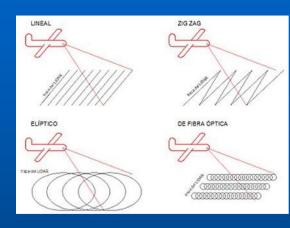


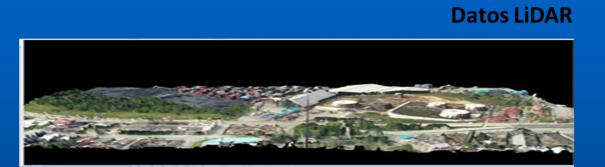
Centro respaldo CIOH Pacífico

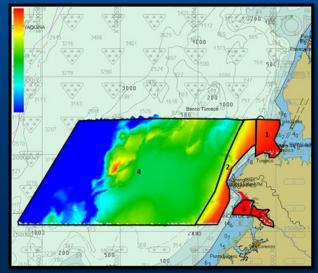


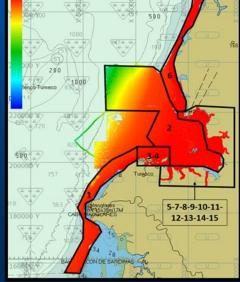
Centro respaldo CIOH Caribe

### **Risk assessment studies**









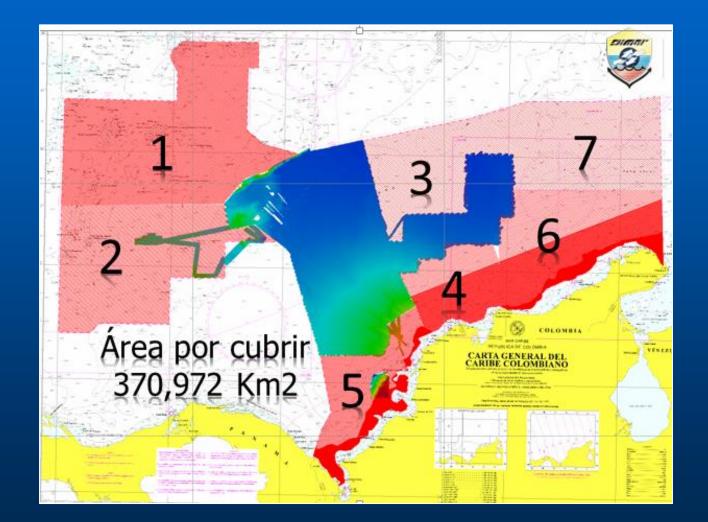
### MSDI status and developments



16 ENCs Available by WMS

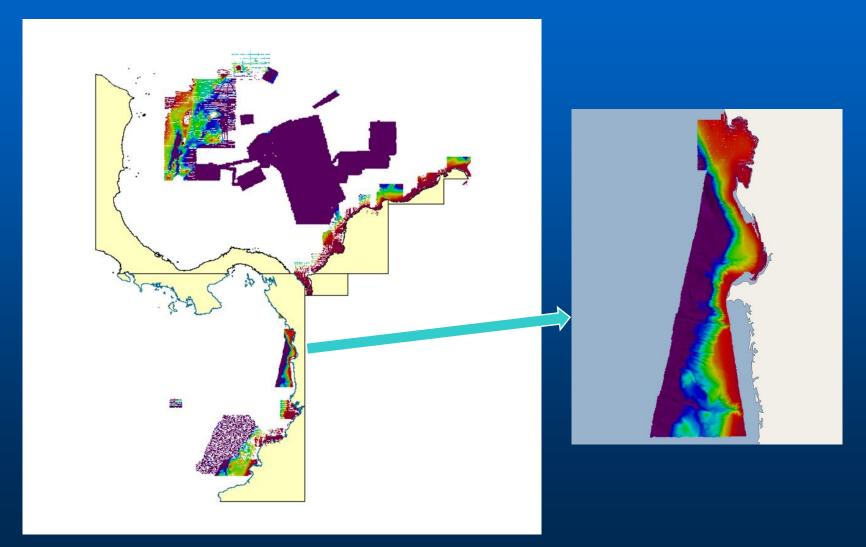


## Areas surveyed



## Areas surveyed

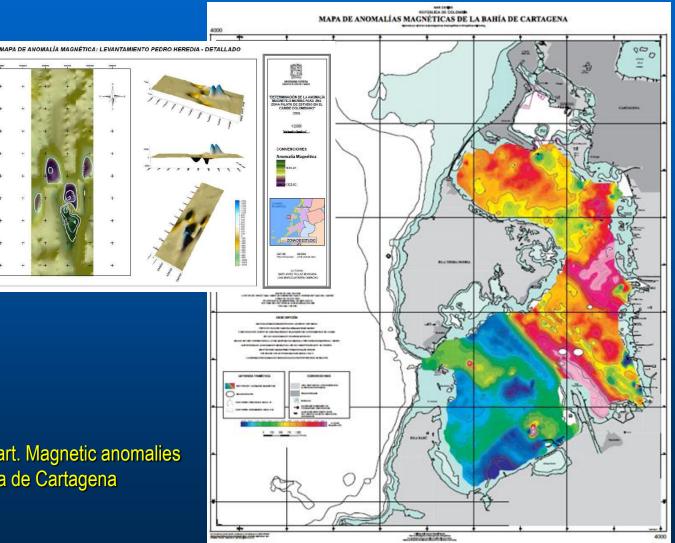
#### Pacífico colombiano



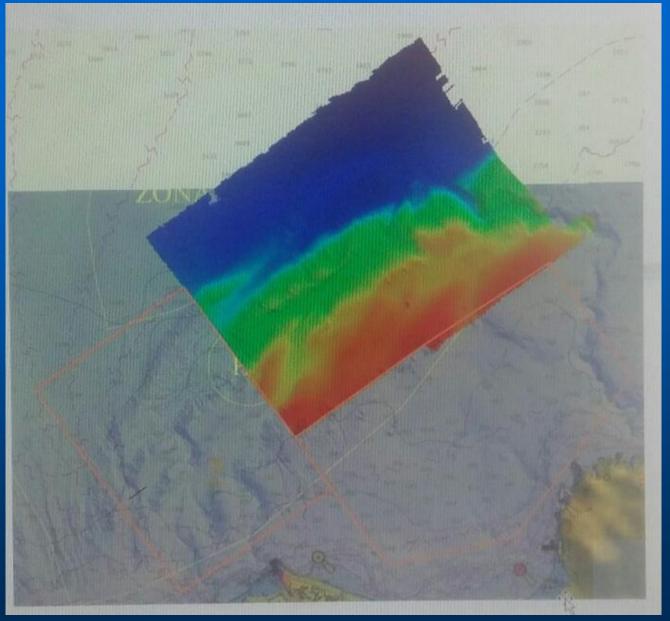
## Main achievements



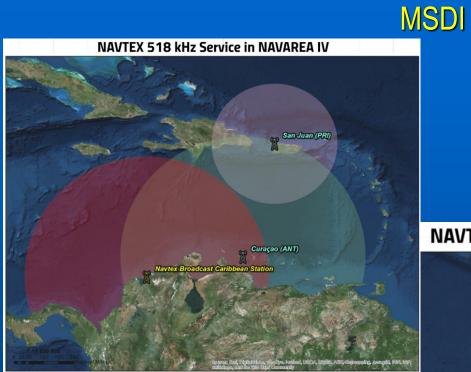
#### Thematic Chart. Magnetic anomalies Bahía de Cartagena



# Main achievements

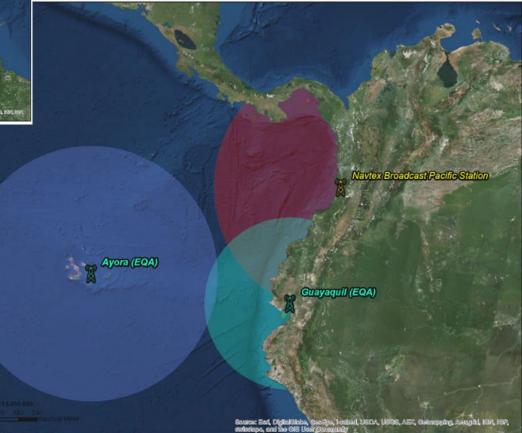


Searching the landslide undersea



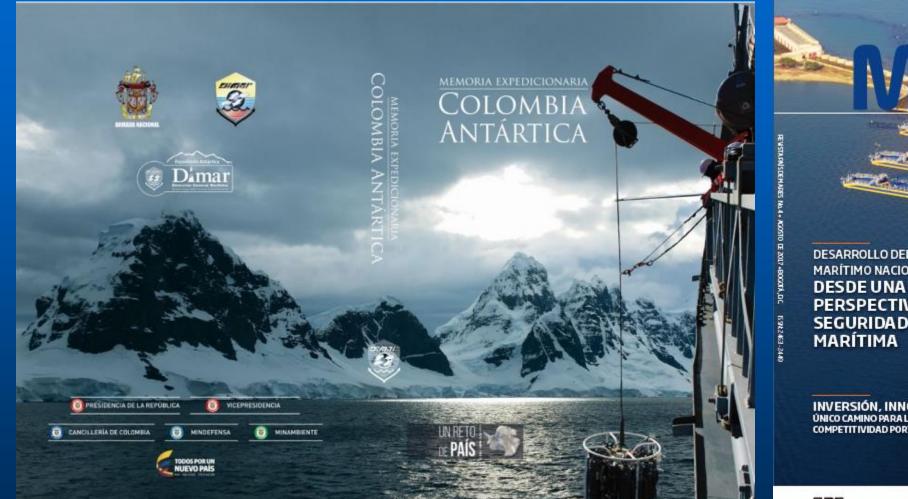
#### NAVTEX stations

#### NAVTEX 518 kHz Service in NAVAREA XII - XVI





#### Nautical publications



DESARROLLO DEL TERRITORIO MARÍTIMO NACIONAL PERSPECTIVA DE SEGURIDAD INTEGRAL MARÍTIMA

INVERSIÓN, INNOVACIÓN ÚNICO CAMINO PARA LA COMPETITIVIDAD PORTUARIA





## Actions required of MACHC:

Continue working in Capacity Building with the IHO support

Support to Panamá in his hydrographic development

Continue the cooperation with NOAA

The HS of Colombia in charge of the Center for Oceanographic and Hydrographic Research of the Caribbean under the Direction of the Maritime General Directorate and in conjunction with the Oceanographic and Hydrographic Research Center of the Pacific will continue to increase the Hydrography nationally and internationally in order to seek to meet the objectives of the International Hydrographic Organization and the International Maritime Organization and all other national and global organizations that seek to preserve the environment.