



Hydrographic Commission on Antarctica

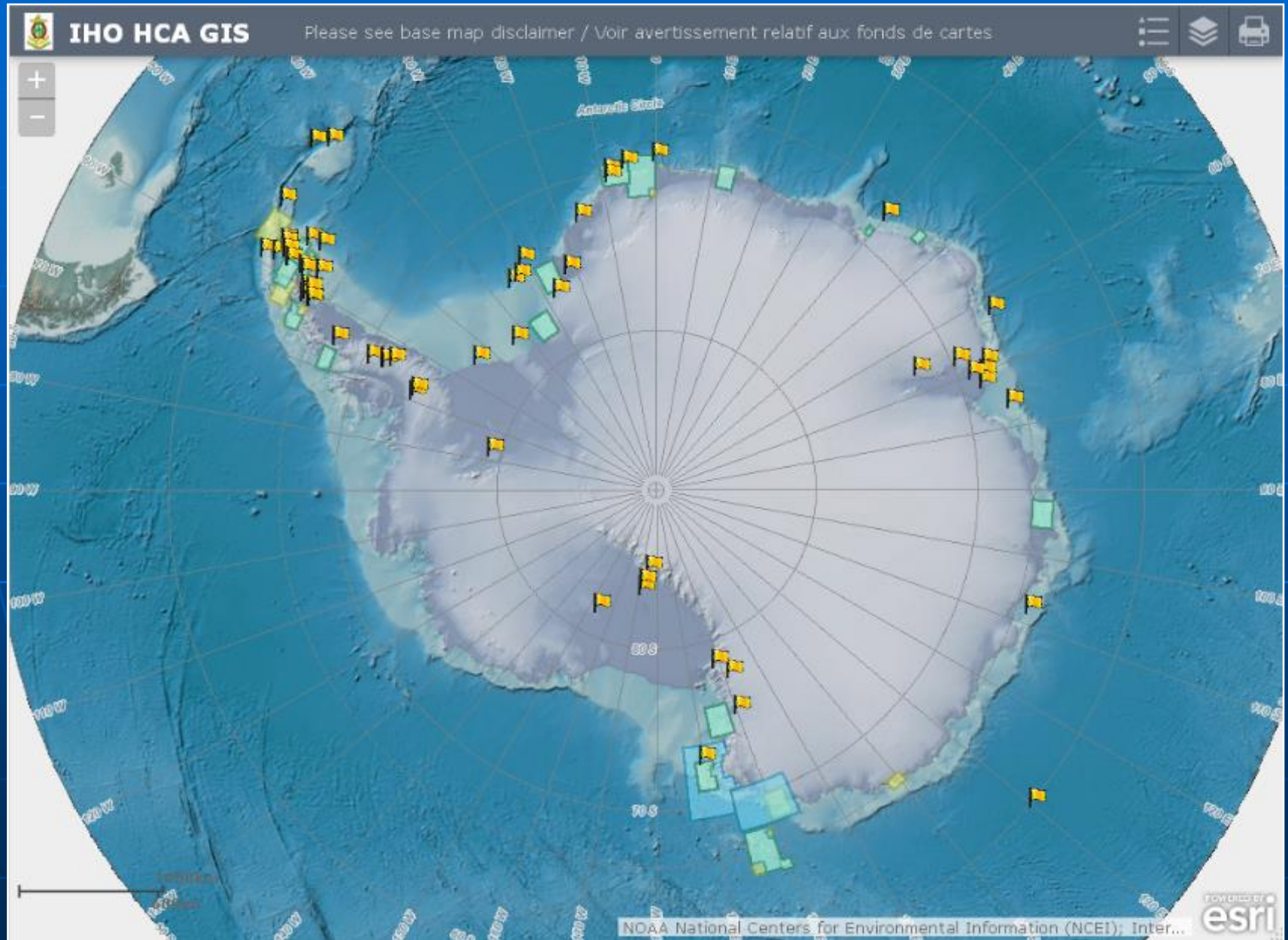
14th Conference - Tromsø, Norway

28 - 30 June 2016

Status Report on C-55 Database and IHO HCA GIS for Antarctica

Agenda item 09.2

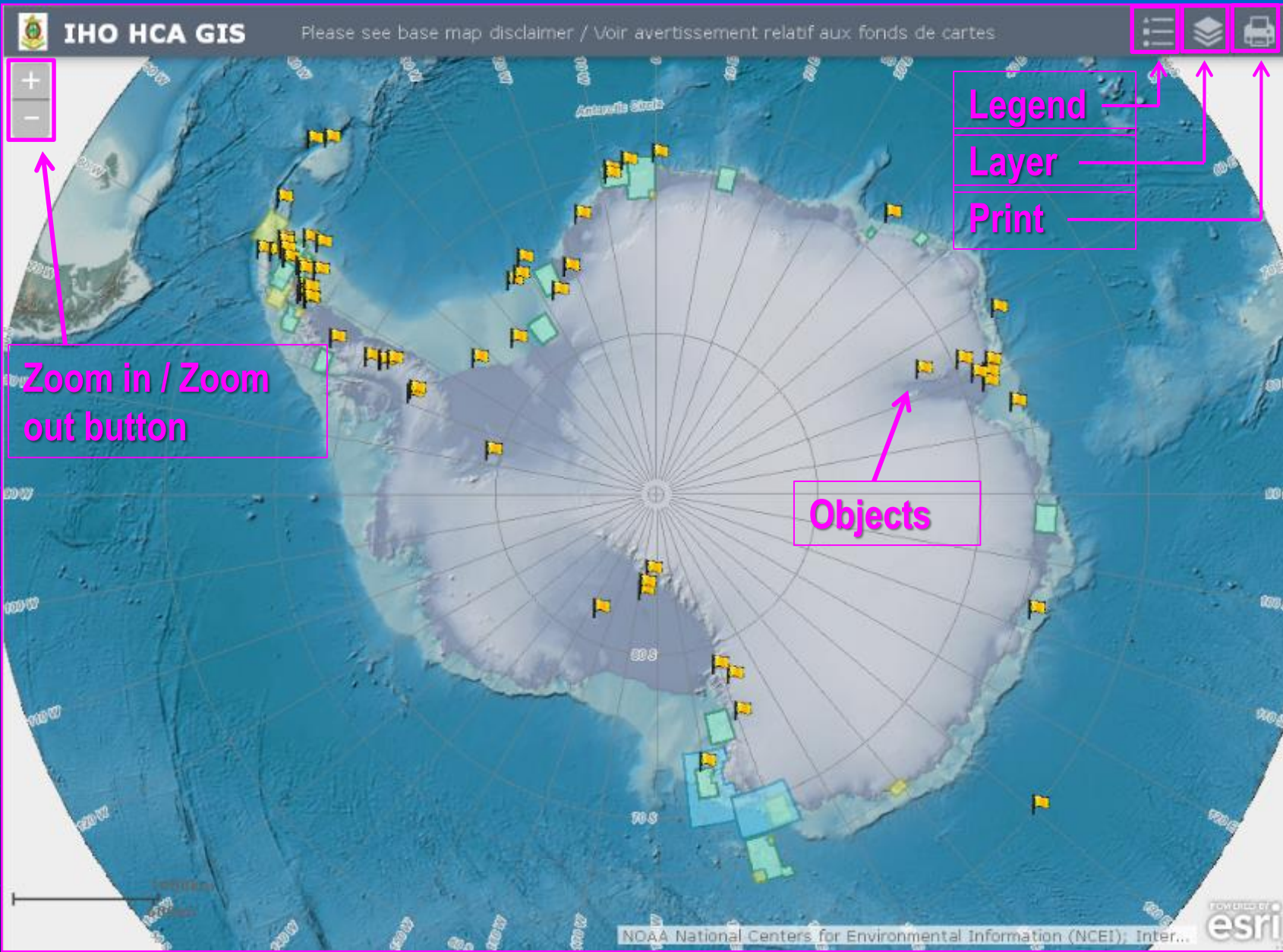
IHO HCA GIS



What is the HCA GIS ?

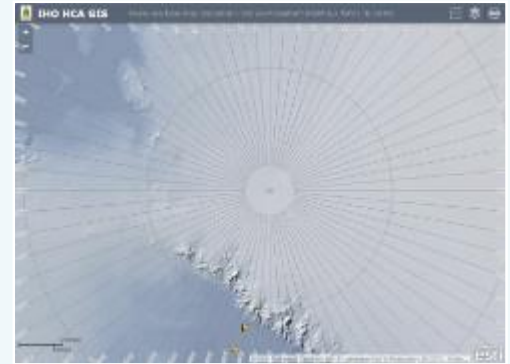
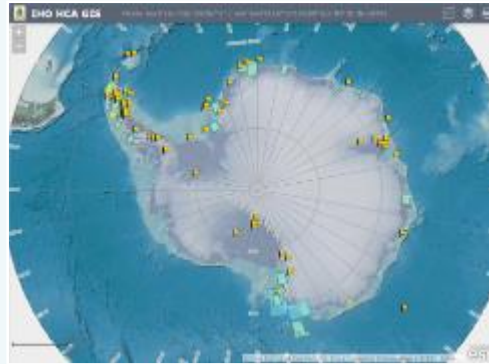
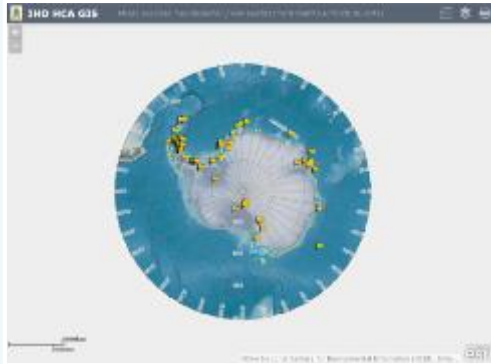
- a Geographic Information System (GIS)
 - visual display of chart areas, undersea features, location of research stations, etc
- now provided as an ArcGIS Online web application
 - smoother magnification / reduction and panning
 - more information compared to old HCA GIS
- access via <http://www.iho.int/gis/antarctic.gis.html>

Functions of IHO HCA GIS



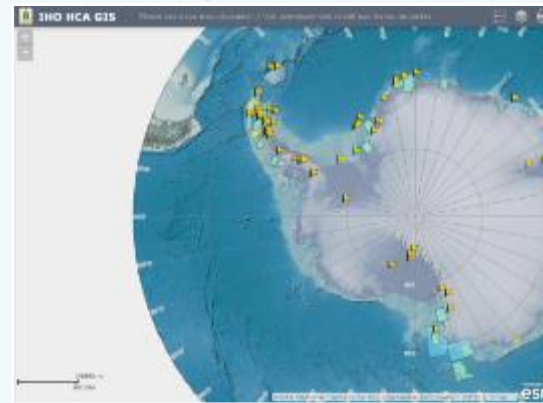
Magnify / reduce the map

Click zoom-in / zoom-out button  or use mouse wheel.



Pan the map

Left click on the map, and drag in any direction you want to pan.



Show legend

Click legend button.

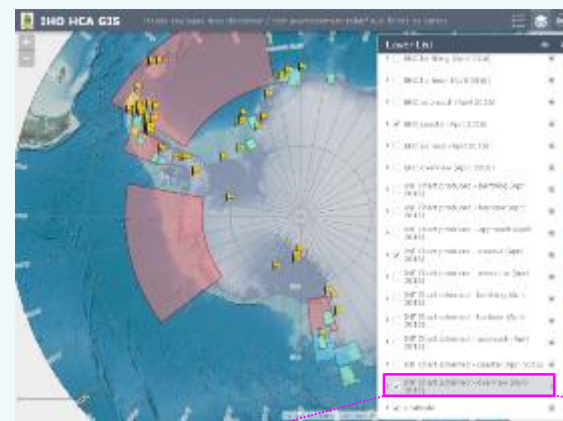
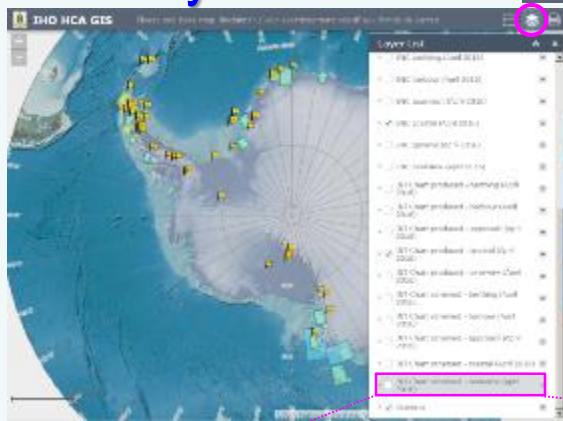


Turn on / off layers

Click layer list button



and check / uncheck checkboxes.

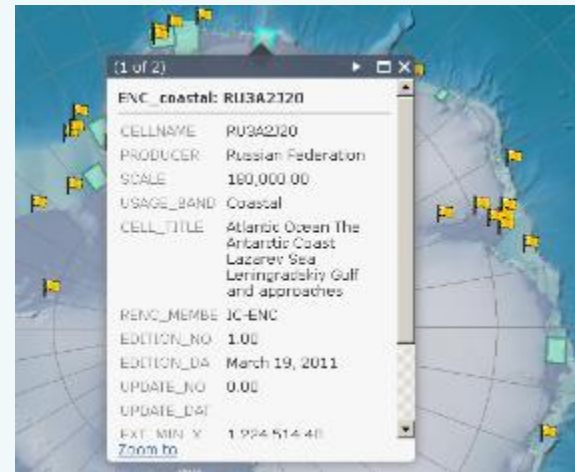
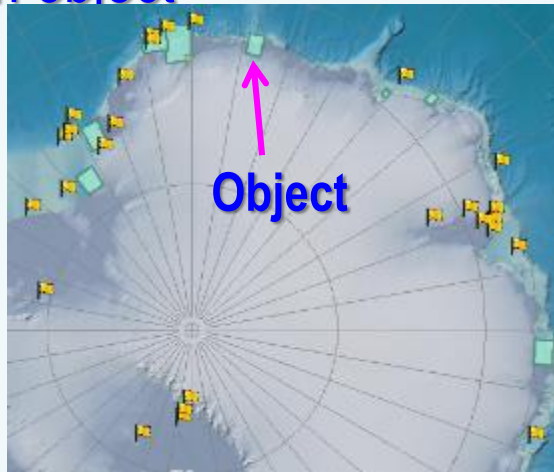


INT Chart schemed - overview (April 2016)

INT Chart schemed - overview (April 2016)

Display object information

Click an object



Save images

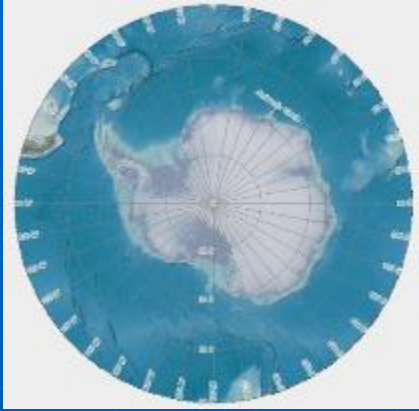
Click Print button



, choose format and then click "Print"

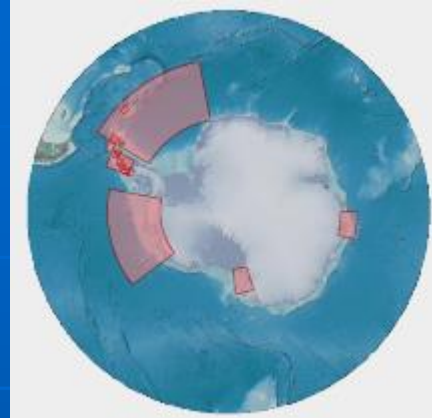


HCA GIS data set



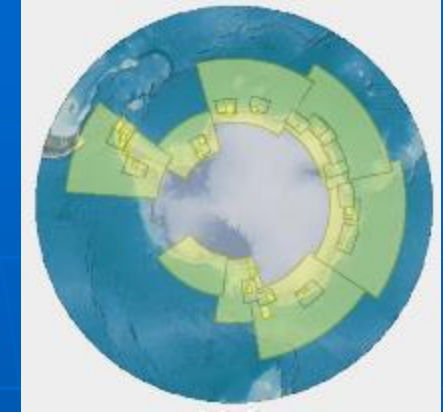
Antarctic basemap

Provided by NOAA based on IBSCO and GEBCO bathymetry data.

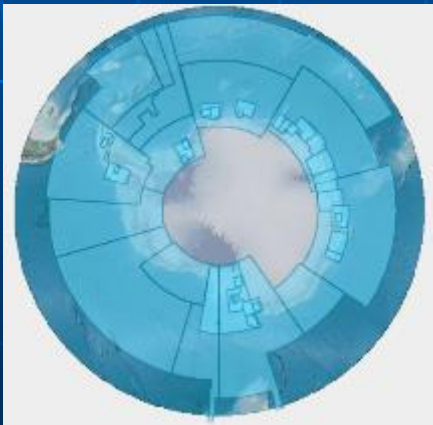


Schemed INT charts

Imported from INT Chart Web Catalogue, IHO (Updated every month)

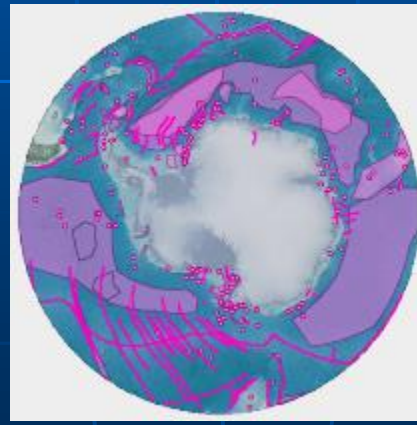


Produced INT charts



ENCs

Imported from ENC Catalogue, IHO (Updated every month)



Undersea features

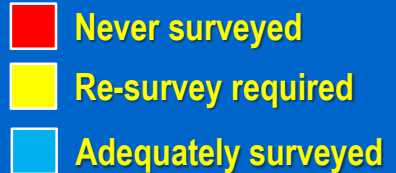
Imported from GEBCO Gazetteer, NOAA



Survey data

Imported from the HCA data set in December 2013

Hydrographic Surveying in Region M

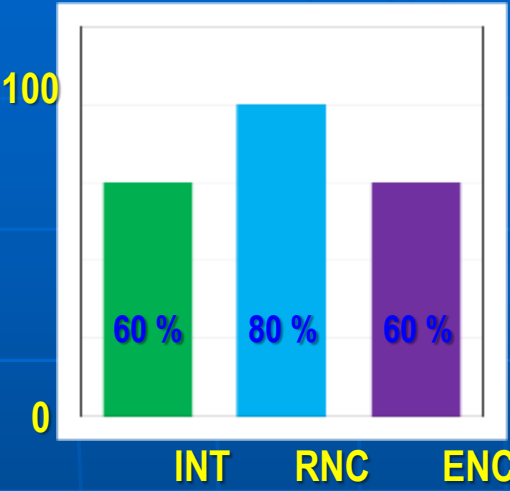


	Depth < 200 m	Depth > 200 m		Depth < 200 m	Depth > 200 m
Antarctic Peninsula Nov. 2006			New Zealand - Ross Sea Region Mar. 2014		
Antarctica excluding Peninsula Nov. 2006			Norway - Antarctica, included I's Island Dec. 2015		
Argentina Region M Oct. 2016	N/A		Norway - Peter I Øy Dec. 2012	N/A	
France - Terre Adelie Sep. 2015			UK - S Orkney and S Shetland Islands Jan. 2010		

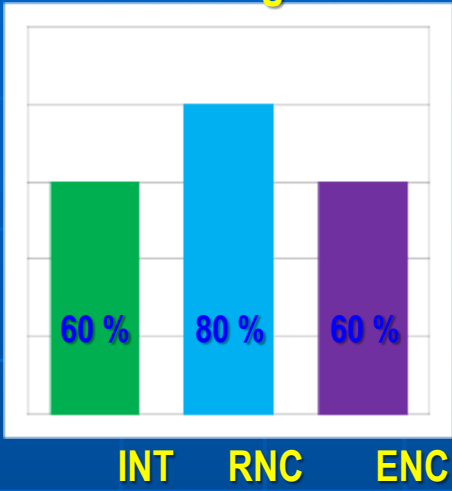
Chart Coverage in Region M

Offshore passage

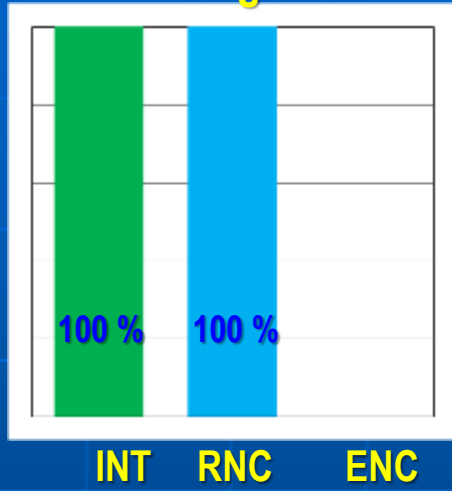
Antarctic Peninsula



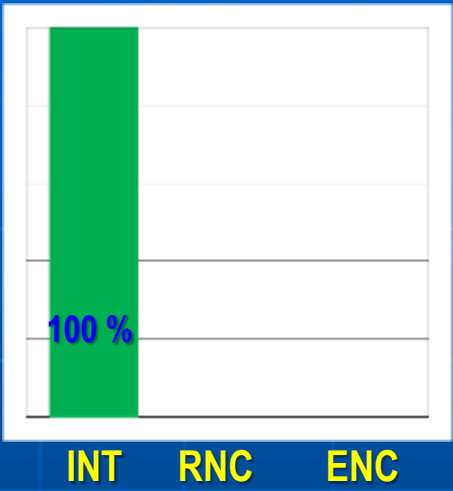
Antarctica excluding Peninsula



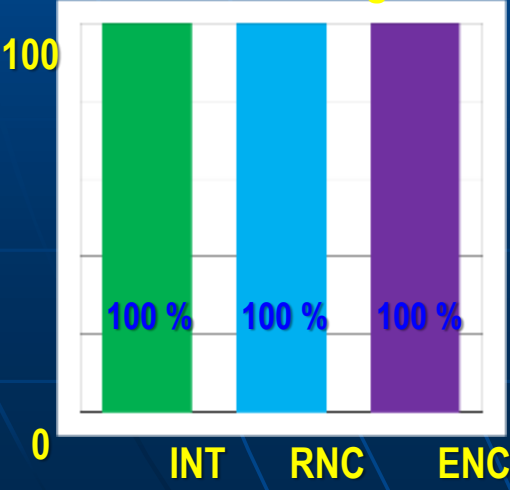
Argentina Region M



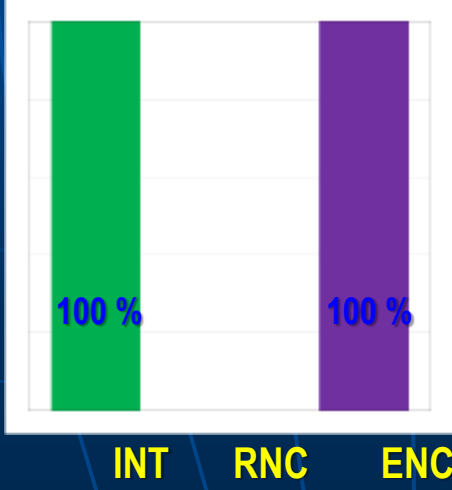
France - Terre Adelie



New Zealand - Ross Sea Region



Norway - Antarctica, included I's Island



Norway - Peter I Øy



UK - S Orkney and S Shetland Islands

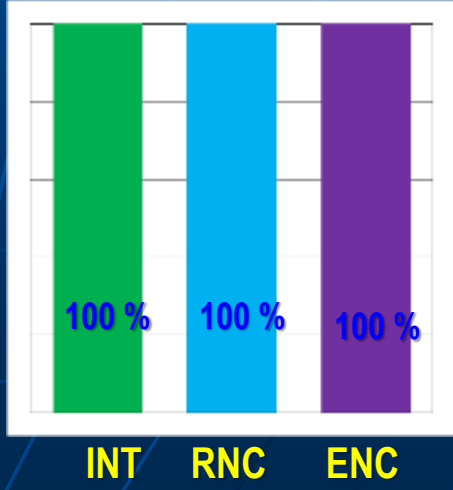
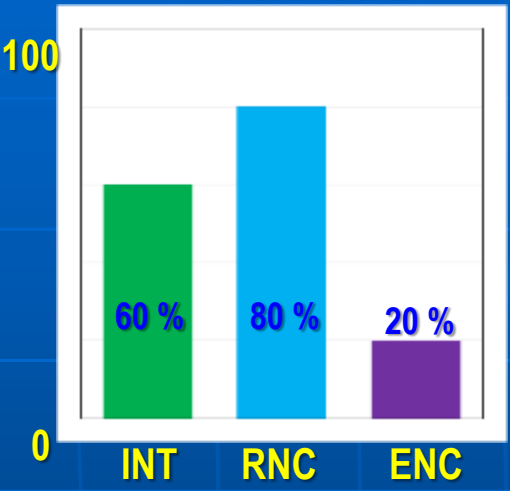


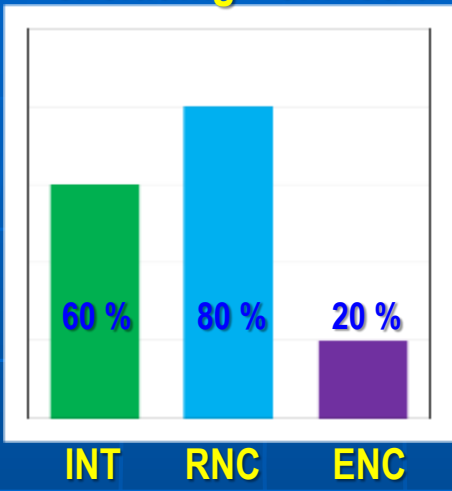
Chart Coverage in Region M

Landfall and coastal passage

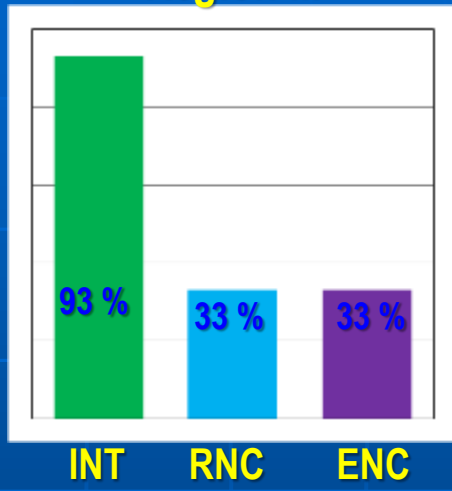
Antarctic Peninsula



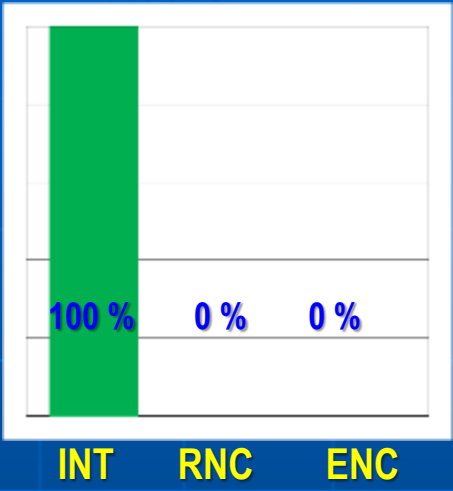
Antarctica excluding Peninsula



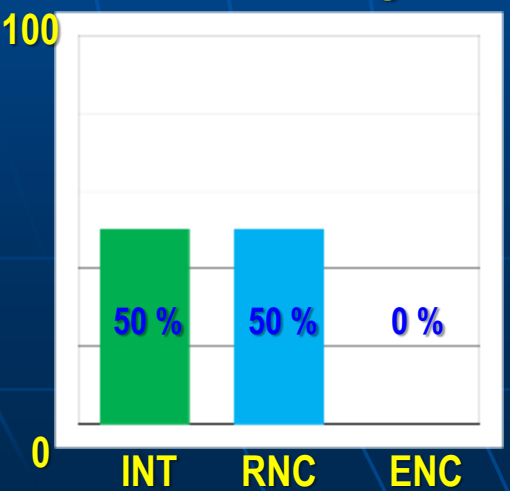
Argentina Region M



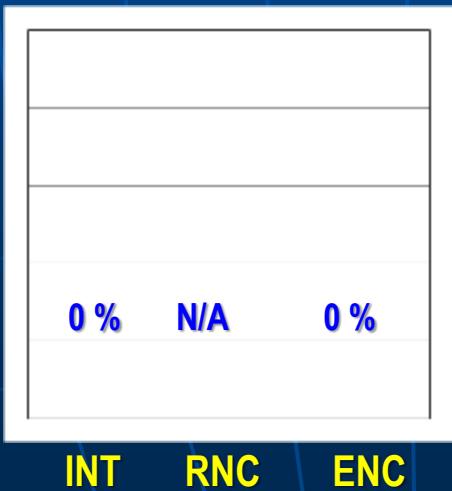
France - Terre Adelie



New Zealand – Ross Sea Region



Norway - Antarctica, included I's Island



Norway - Peter I Øy



UK - S Orkney and S Shetland Islands

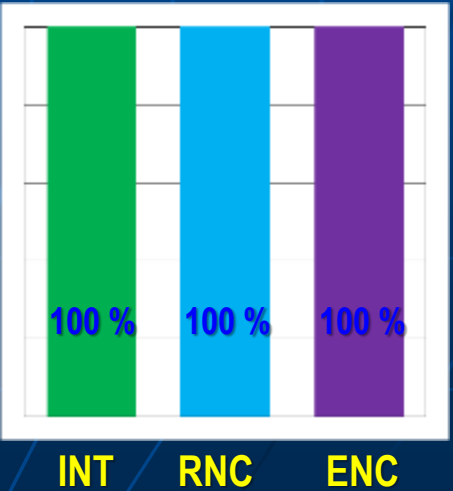
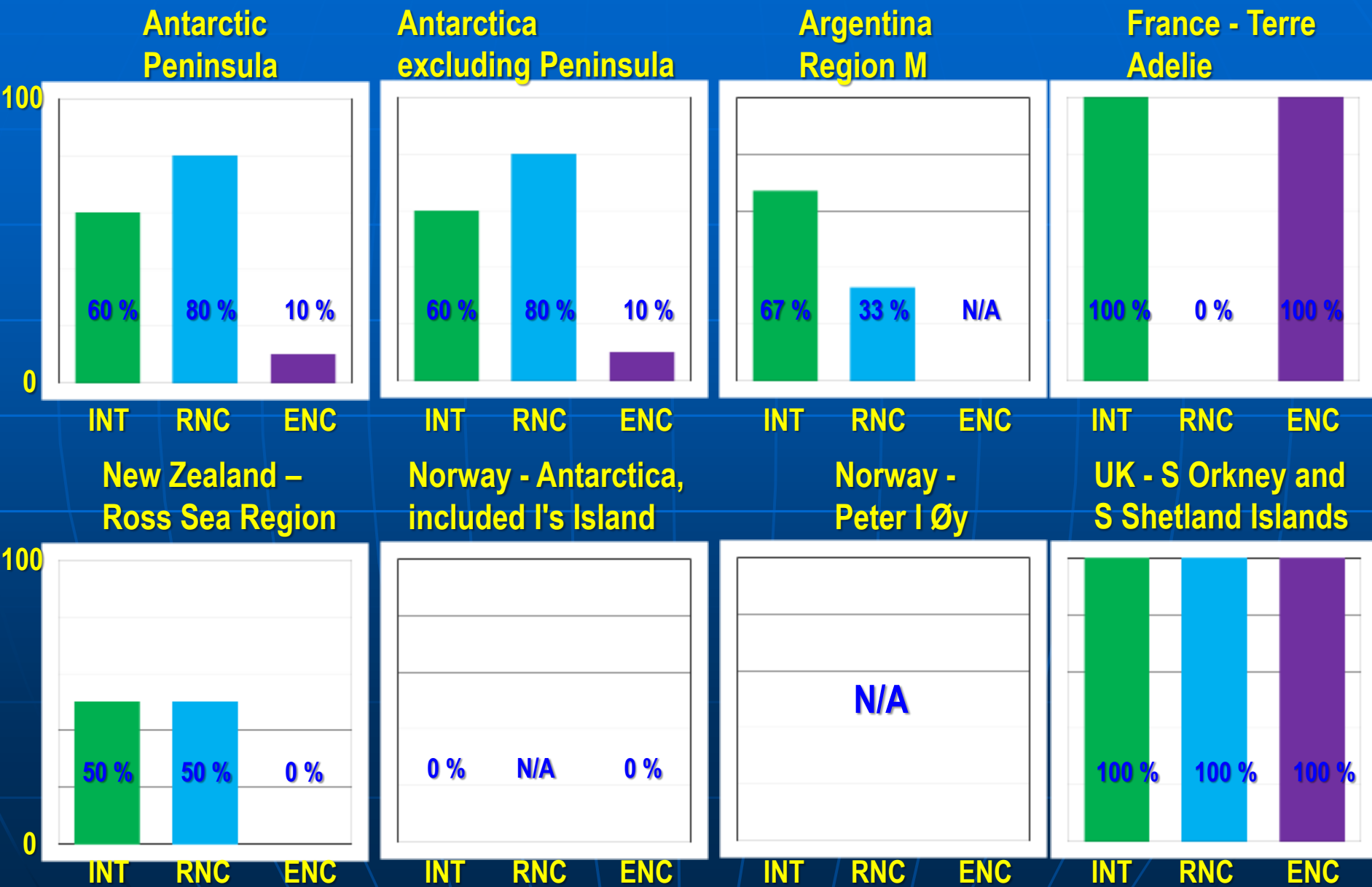


Chart Coverage in Region M

Approaches and ports



Marine Safety Information in Region M

	Antarctic Peninsula	Antarctica excluding Peninsula	Argentina Region M	France - Terre Adelie
Local warning	N/A	N/A	N/A	YES
Coastal warning	N/A	N/A	N/A	YES
NAVAREA warning	N/A	N/A	N/A	YES
Ports/Harbour info	N/A	N/A	N/A	YES

	New Zealand – Ross Sea Region	Norway – Antarctica, included I's Island	Norway - Peter I Øy	UK - S Orkney and S Shetland Islands
Local warning	NO	N/A	N/A	N/A
Coastal warning	NO	N/A	N/A	YES
NAVAREA warning	YES	N/A	N/A	YES
Ports/Harbour info	NO	N/A	N/A	YES

GMDSS in Region M

	Antarctic Peninsula	Antarctica excluding Peninsula	Argentina Region M	France - Terre Adelie
Master plan	N/A	N/A	N/A	YES
A1 area	N/A	N/A	N/A	NO
A2 area	N/A	N/A	N/A	NO
A3 area	N/A	N/A	N/A	YES
NAVTEX	N/A	N/A	N/A	NO
Safety NET	YES	YES	N/A	YES

	New Zealand – Ross Sea Region	Norway – Antarctica, included I's Island	Norway - Peter I Øy	UK - S Orkney and S Shetland Islands
Master plan	NO	N/A	N/A	NO
A1 area	NO	N/A	N/A	NO
A2 area	NO	N/A	N/A	NO
A3 area	NO	N/A	N/A	NO
NAVTEX	NO	N/A	N/A	NO
Safety NET	YES	N/A	YES	YES

Proposed actions and considerations for HCA

- ✦ **Note** the report
- ✦ **Provide** update for C-55 for Antarctica
- ✦ **Assess** existing HCA GIS layers and then **consider** requirements for withdrawing/keeping/extending HCA GIS layers and ways/means to maintain them
- ✦ **Consider** links between HCA GIS and other existing geospatial portals