



Hydrographic Commission on Antarctica

National Report by

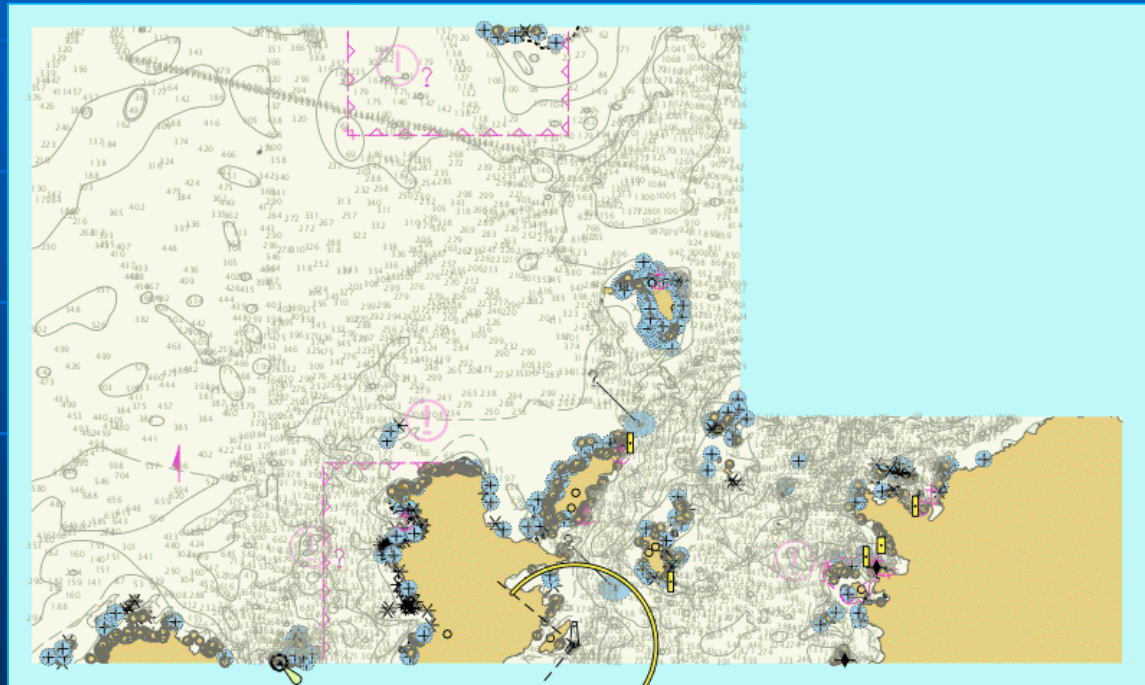
ARGENTINA



Survey and charting progress in Antarctica since last meeting (December 2013)

- ✦ new charts produced (INT, national, ENC)

AR307240 “Archipiélago de Palmer – De Isla Trinidad a Isla Amberes”,
Published in 26-01-2015



AR307240		Boundaries	Scales
“Archipiélago de Palmer – De Isla Trinidad a Isla Amberes”	North Latitude	63°20.0'S	1:180.000
	South Latitude	64°18.05'S	
	West Longitude	63°49.5'W	
	East Longitude	60°07.0'W	



Survey and charting progress in Antarctica since last meeting (December 2013)

- ✦ areas surveyed

- Islas Orcadas (INT 9140)

- ✦ - Geodetic points for:

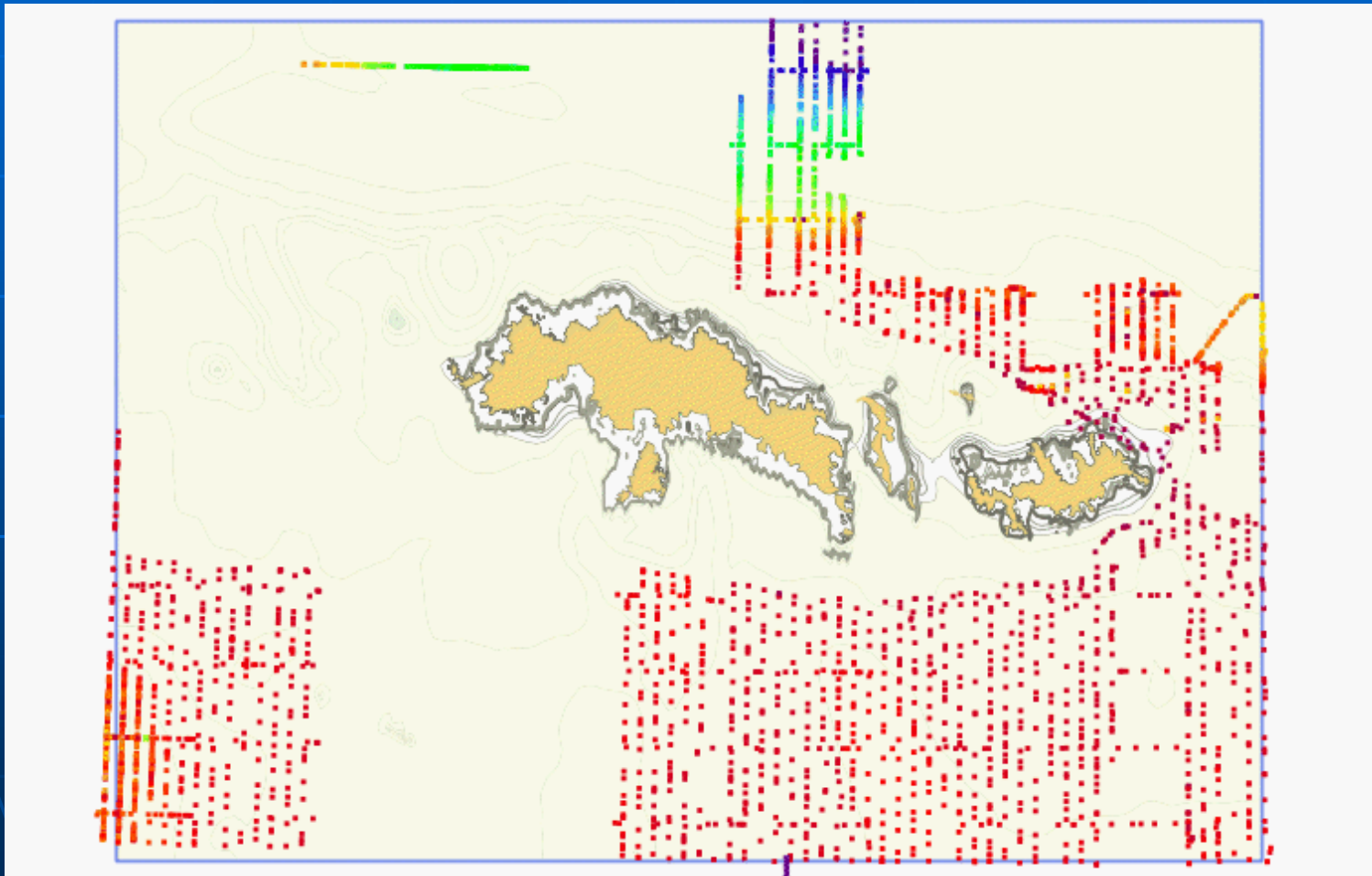
- INT 9101 – Península Trinidad – Base Esperanza.

- INT 9111 – Bahía Margarita – Base San Martín.

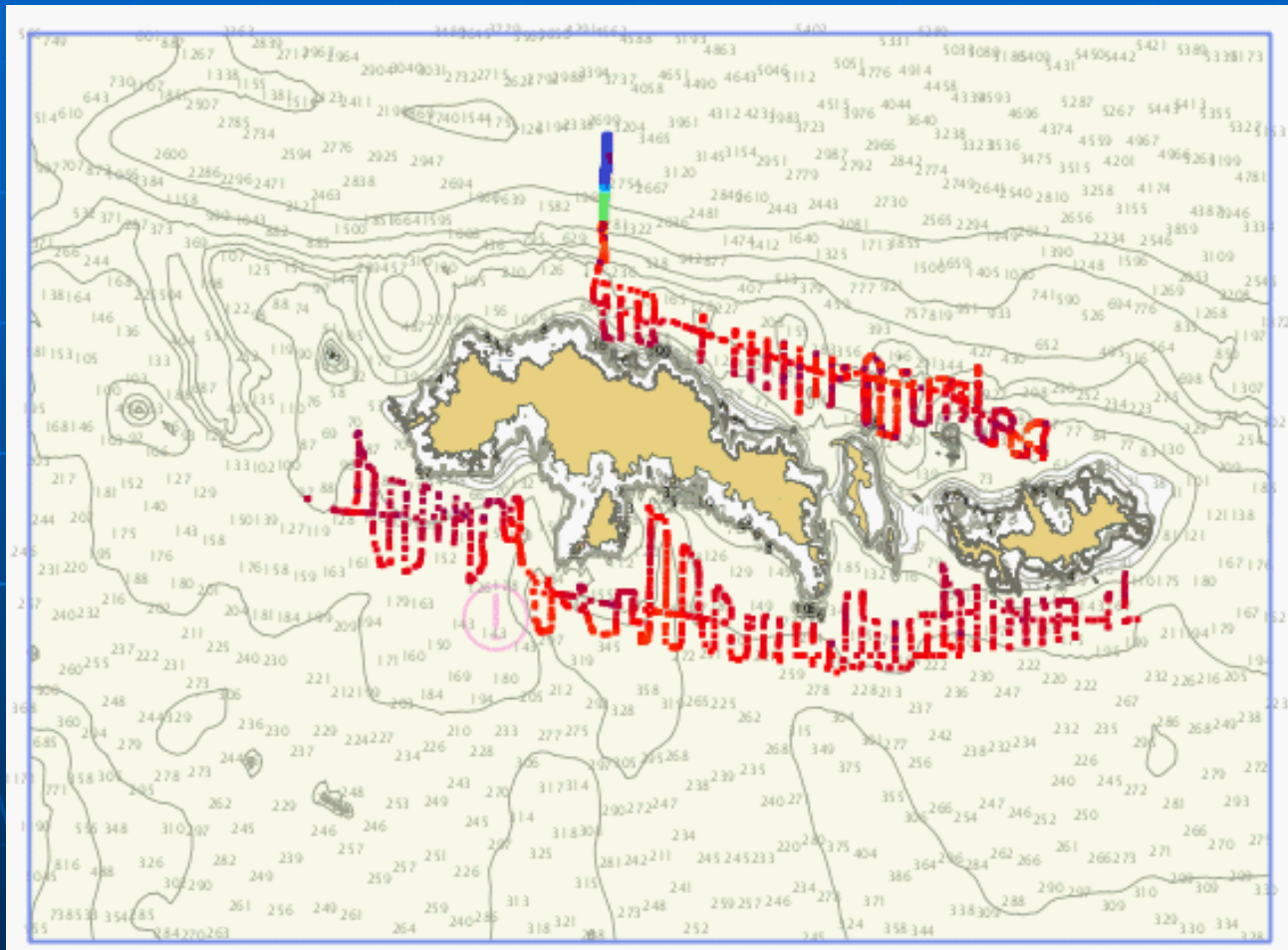
- INT 9170 – Islas Shetland del Sur y Mar de la Flota.



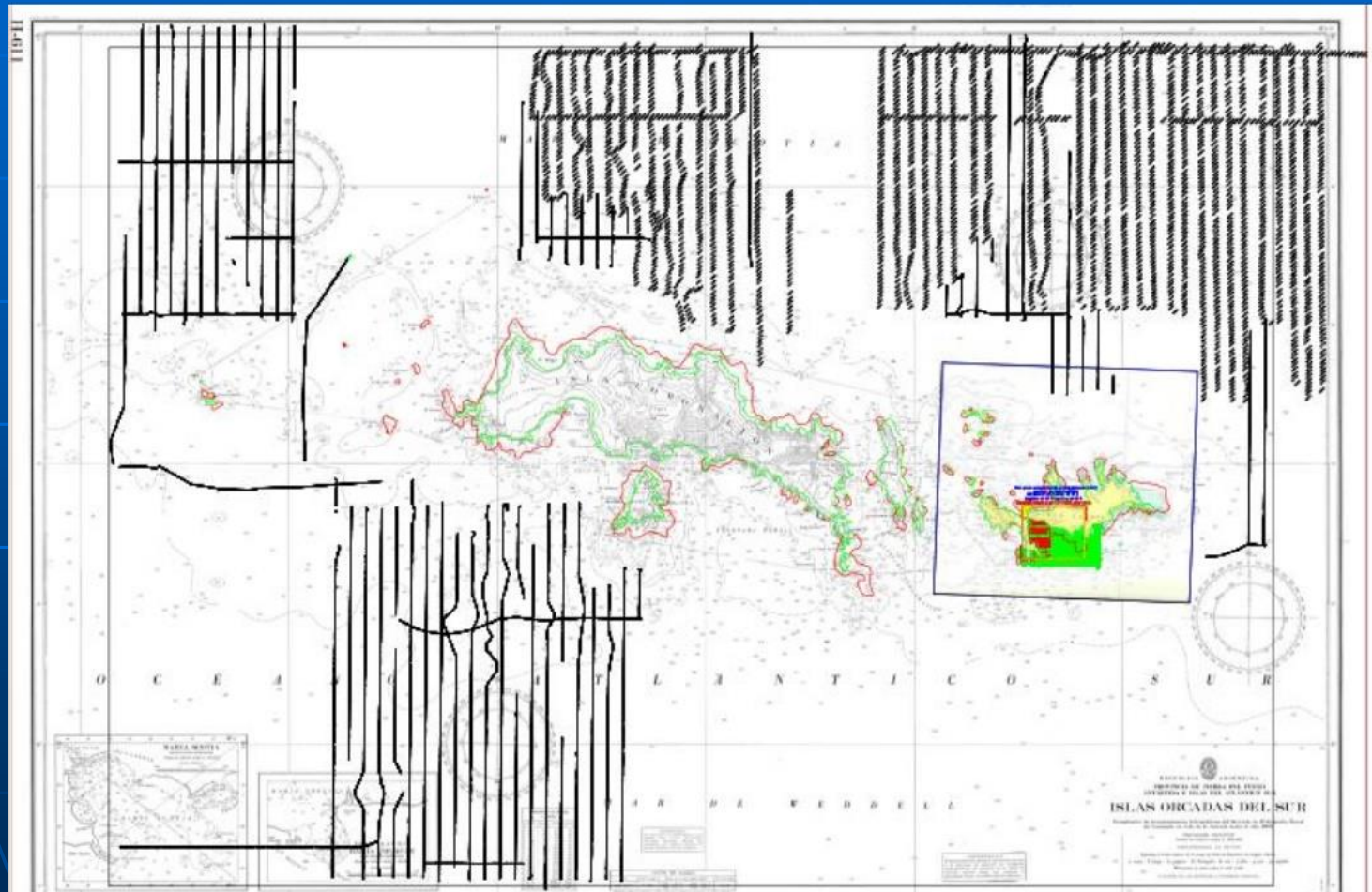
2016



2014

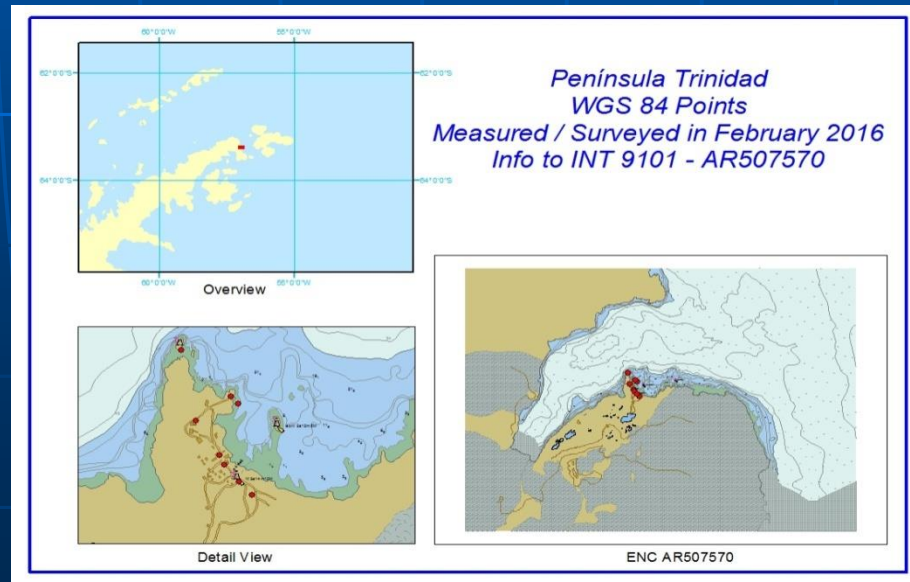


Pre 2014



Geodetic points

- ✦ INT 9101 – Península Trinidad – Base Esperanza. 8 (eight) WGS84 points and coast line were measured.
- ✦ INT 9111 – Bahía Margarita – Base San Martín. 5 (five) WGS84 points and coast line were measured.
- ✦ INT 9170 – Islas Shetland del Sur y Mar de la Flota. 3 (three) WGS84 points and coast line were measured in Caleta Potter – Base Carlini.

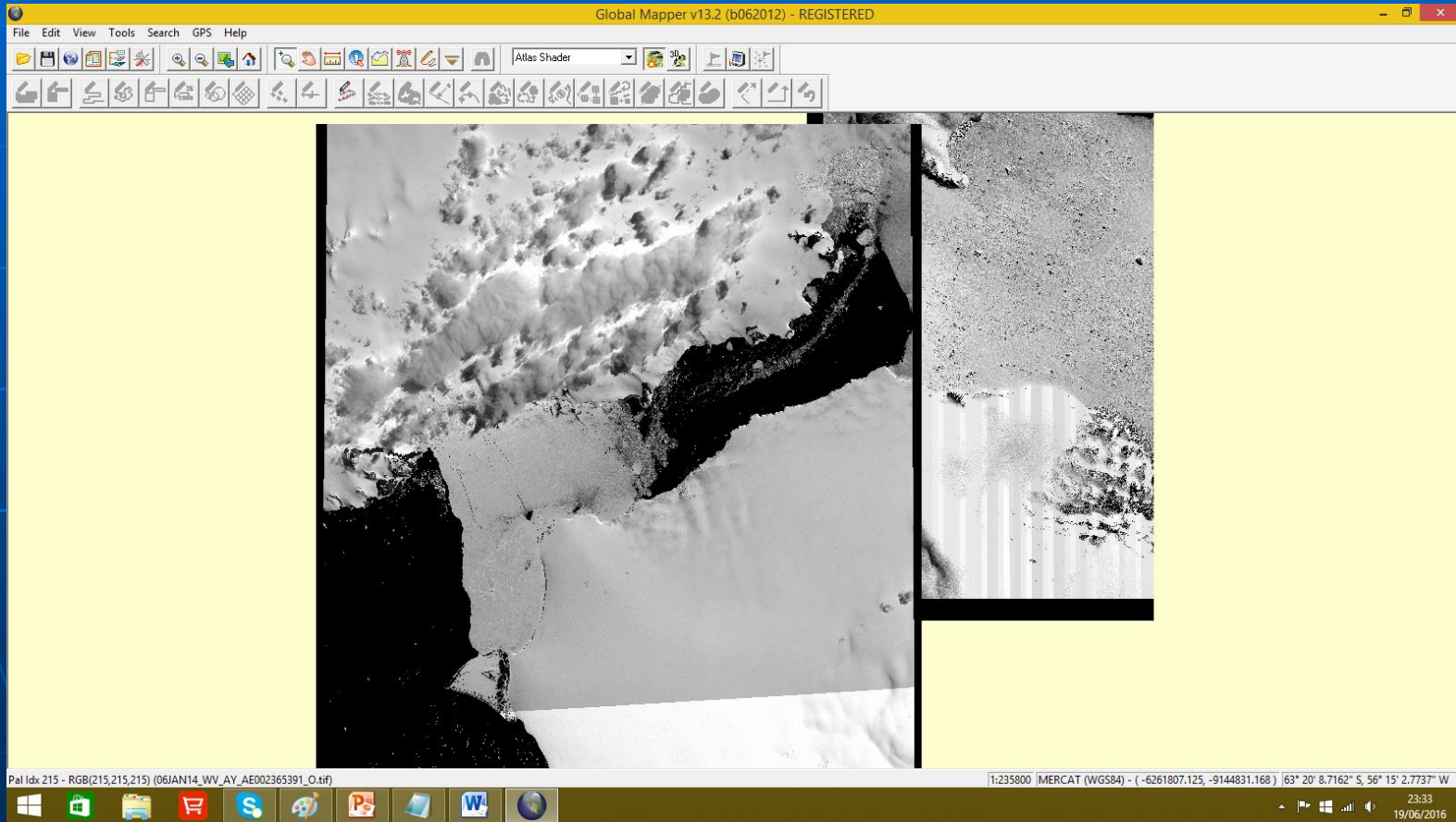


Status of Relations with Other Organizations

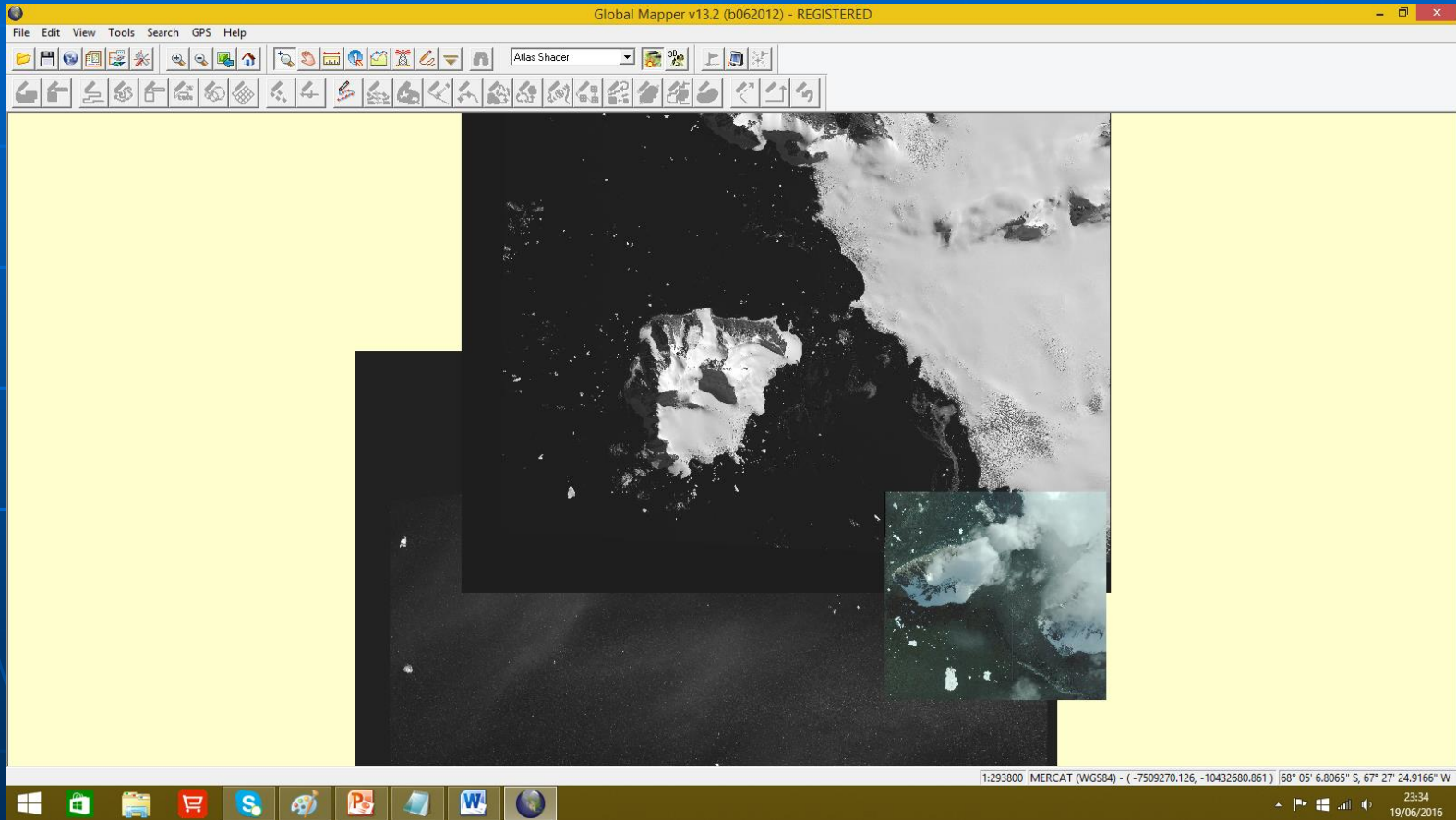
- ✦ scientific and polar institutes
- ✦ NGA (US) orthorectified mosaics for INT charts
 - 9101 Peninsula Trinidad
 - 9111 Bahia Margarita
 - 9115 Active Sound
 - 9140 Islas Orcadas
- ✦ INSTITUTO GEOGRAFICO NACIONAL (IGN)
- ✦ And INSTITUTO ANTARTICO ARGENTINO (IAA)



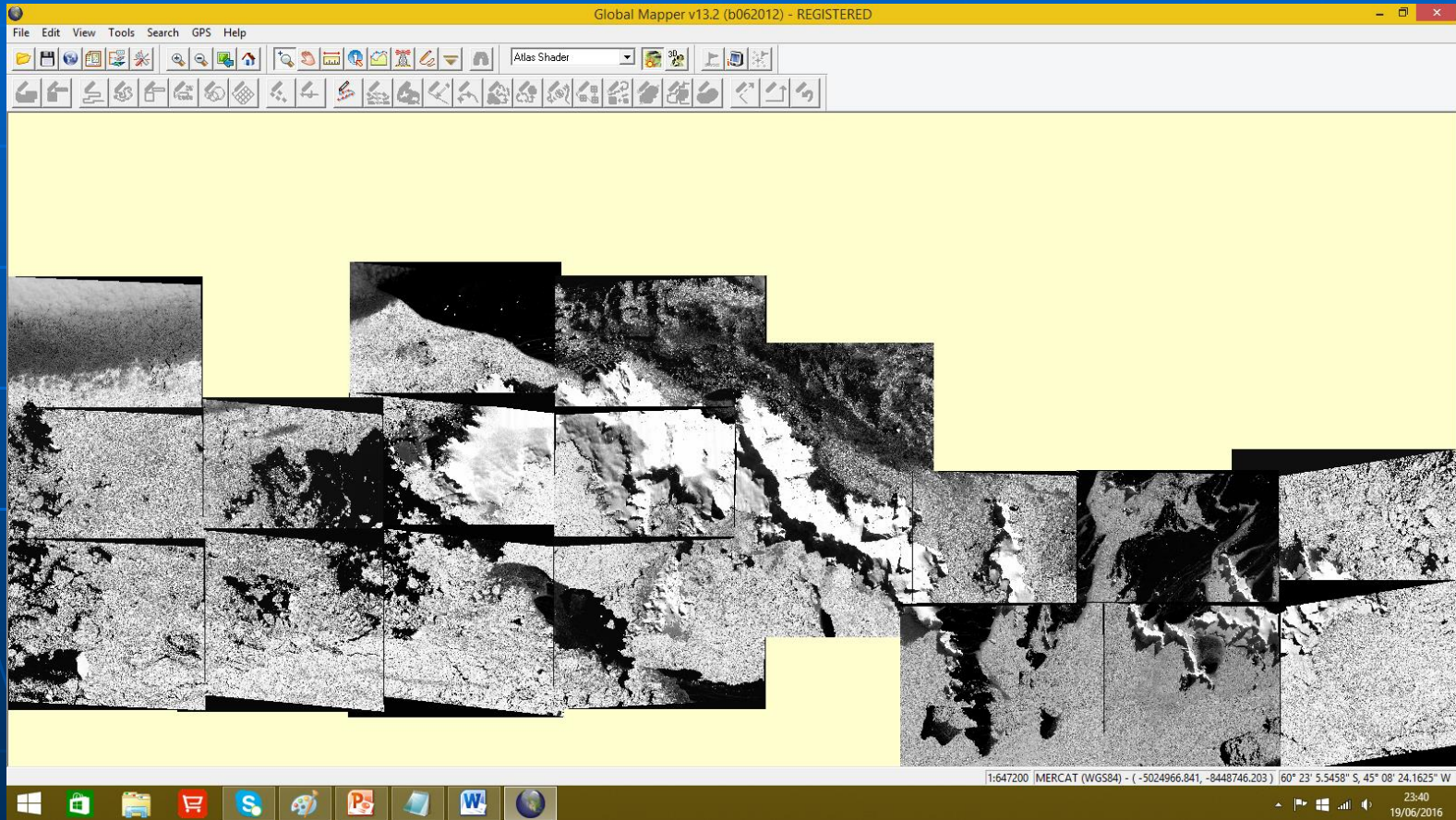
INT 9115 Active Sound



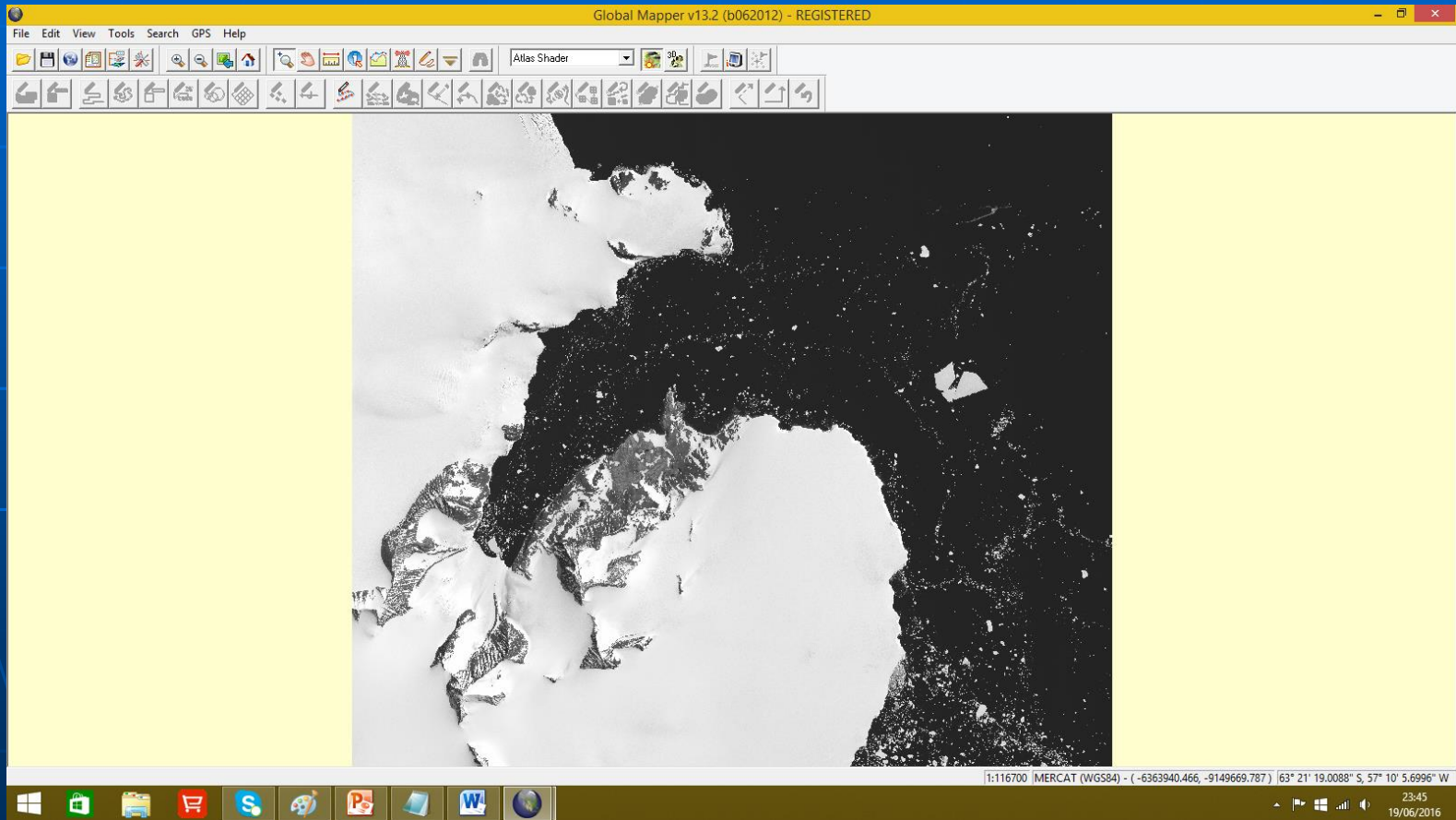
INT 9111 Bahia Margarita



INT 9140 Islas Orcadas



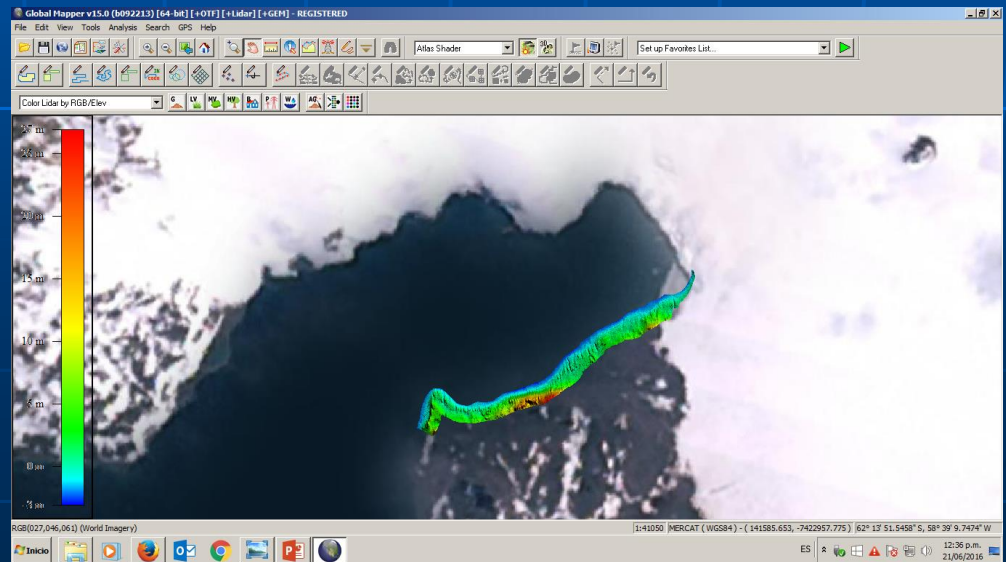
INT 9101 Peninsula Trinidad



Status of Relations with Other Organizations

- ✦ scientific and polar institutes
- ✦ INSTITUTO GEOGRAFICO NACIONAL (IGN) and INSTITUTO ANTARTICO ARGENTINO (IAA) Geodesy and topography in places of common interest

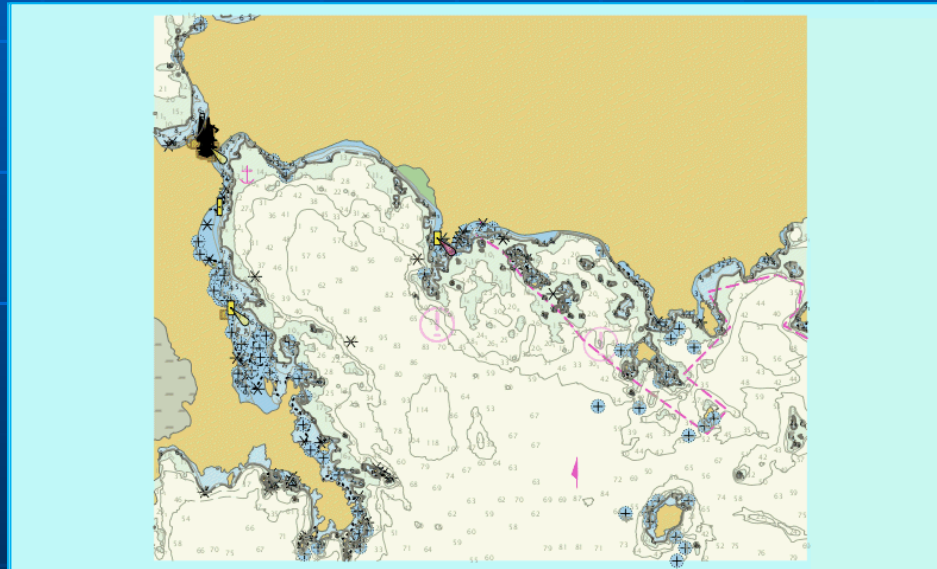
E.g. Potter Cove
Coastal DTM



Planned Activities for 2016-17

✦ new charts

- AR506510 “Bahía Scotia”, in production. Expected to be submitted to IC-ENC during July 2016. (from INT 9142)



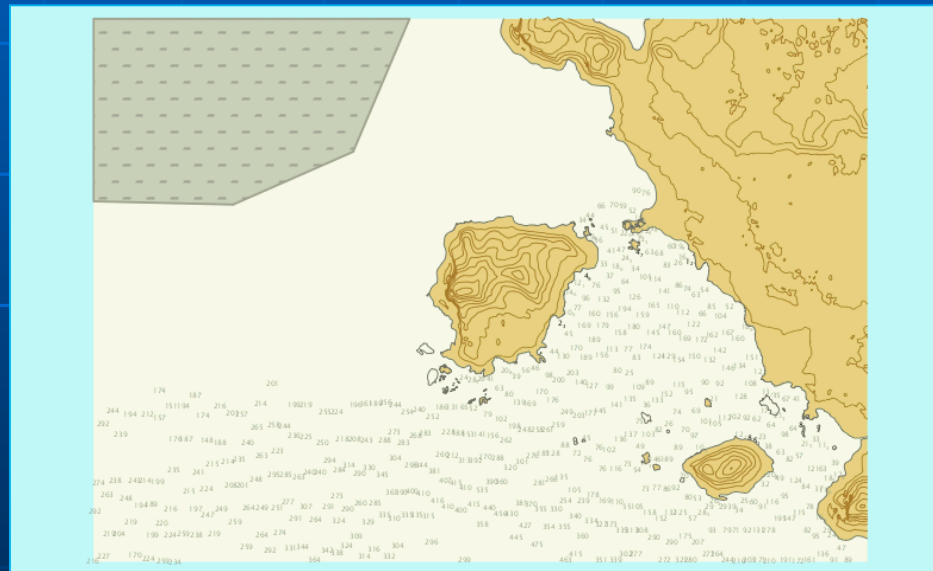
AR506510		Boundaries	Scales
“Bahía Scotia”	North Latitude	60°43.40'S	1:12.000
	South Latitude	60°47.10'S	
	West Longitude	44°45.00'W	
	East Longitude	44°36.00'W	



Planned Activities for 2016-17

✦ new charts

- AR407910 And INT 9111 “Bahía Margarita - Base San Martín”, in production. For 2017



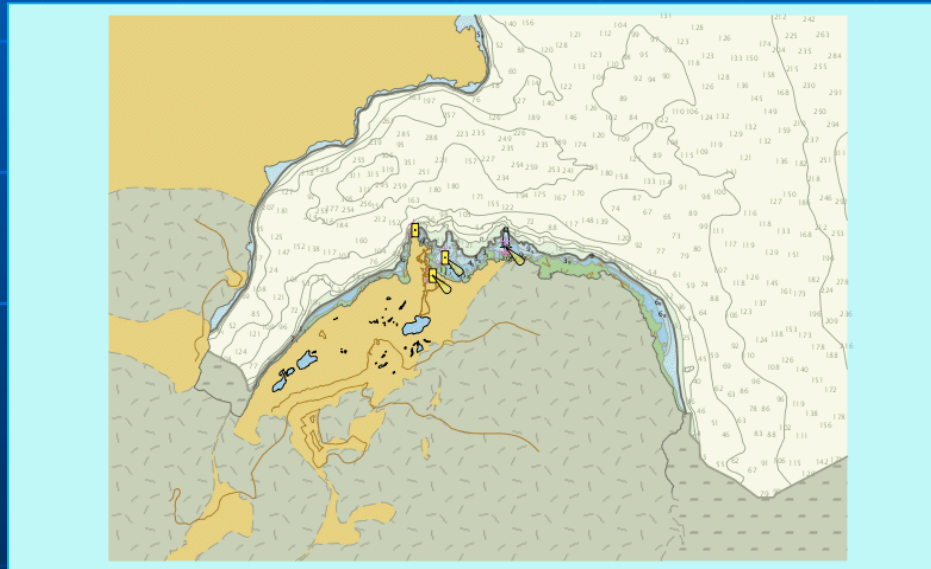
AR407910		Boundaries	Scales
“Bahía Margarita - Base San Martín”	North Latitude	68°04.00’S	1:22.000
	South Latitude	68°14.00’S	
	West Longitude	67°33.00’W	
	East Longitude	66°55.00’W	



Planned Activities for 2016-17

✦ new charts

- AR407570 and INT 9101 “Península Trinidad - Base Esperanza”, in production. For 2017



AR407570		Boundaries(*)	Scales
“Península Trinidad - Base Esperanza”	North Latitude	63°21.36’S	1:8.000
	South Latitude	63°25.30’S	
	West Longitude	57°05.00’W	
	East Longitude	56°53.00’W	

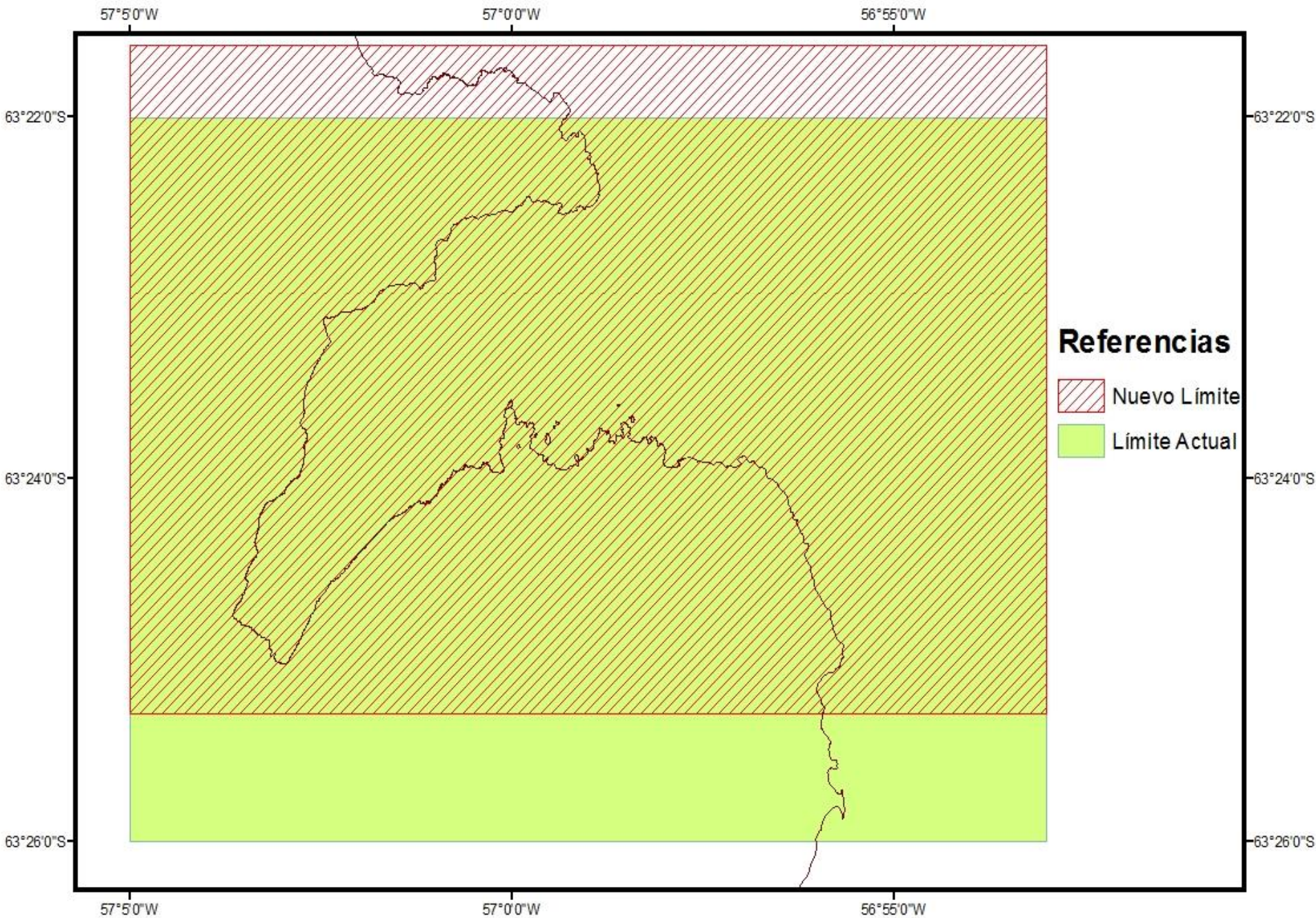


INT 9101 proposal for change of limits

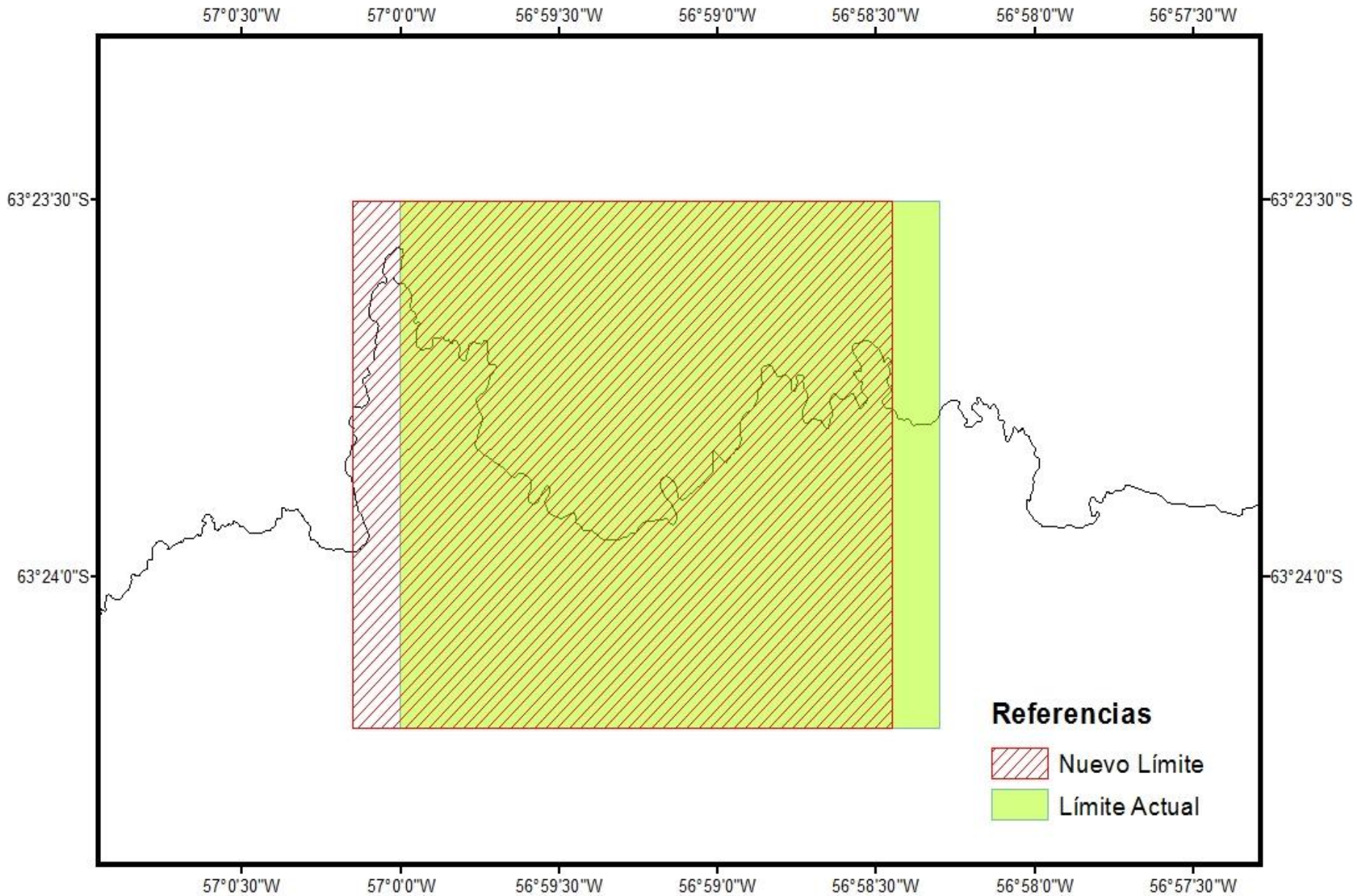
	Established limits		Proposed limits	
Chart title	Península Trinidad			
Scale	1:10.000			
Limit (NE)	63°22.00'S	56°35.00'W	63°21.6'S	56°35.00'W
Limit (SW)	63°26.00'S	57°05.00'W	63°25.3'S	57°05.00'W
Plan title	Base Esperanza – Caleta Choza			
Scale	1:5.000			
Limit (NE)	63°23.50'S	56°58.30'W	63°23.50'S	56°58.45'W
Limit (SW)	63°24.20'S	56°58.30'W	63°24.20'S	57°00.15'W



Límites INT9101 / H-757 "Península Trinidad"



Límites INT 9101 / H-757 Cuarterón "Caleta Choza"

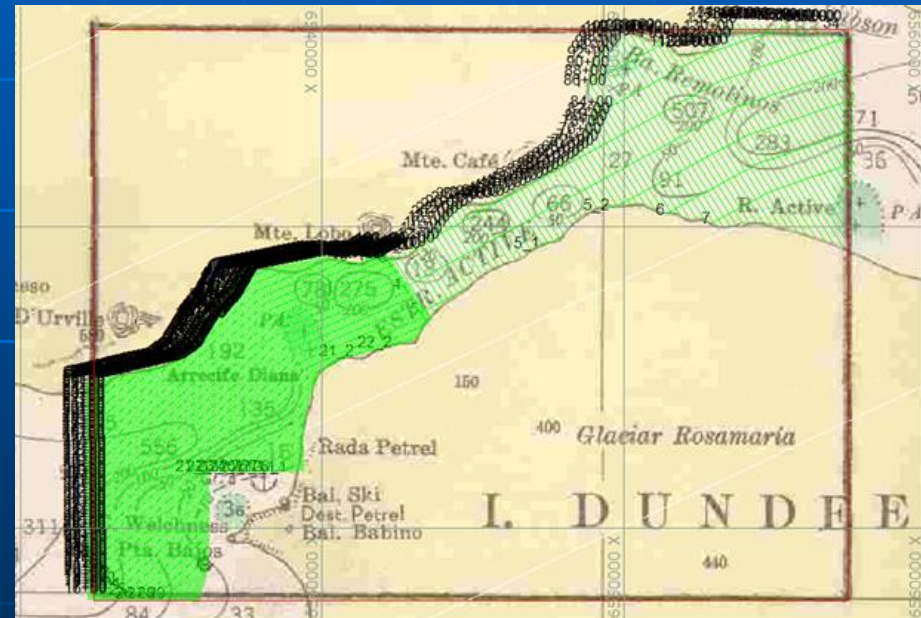
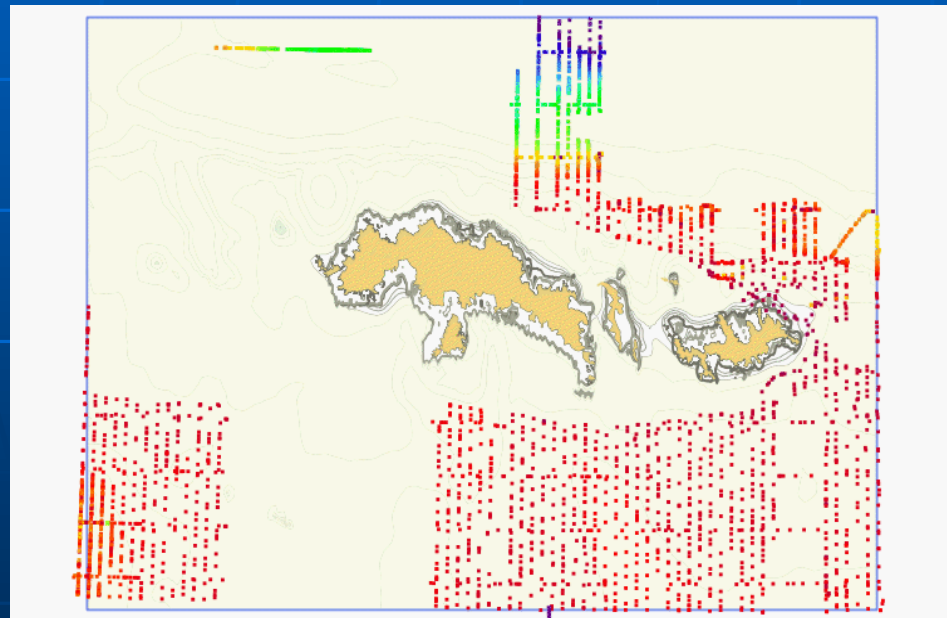


Planned Activities for 2016-17

✦ new surveys

INT 9140 Islas Orcadas

INT 9115. Active Sound



ARA Puerto Deseado



4 Neftegaz Class Ships



ARA Austral (Ex Sonne)



NEW PUBLICATIONS & UPDATES and MSI

✦ Permanent update of publications :

- H – 205 Derrotero Argentino Parte V. “Antártida y Archipiélagos Subantárticos Argentinos y Suplemento” (Sailing Directions Part V. Antarctica. H-205).
- H – 213 Faro y Señales Marítimas Parte III. “Tierra del Fuego, canales e islas adyacentes, Islas Malvinas y Antártida Argentina y Suplemento” (List of lights and Maritime Signals Part III H-213)

✦ MSI

- Structure in accordance with the area assigned by IMO (NAVAREA VI).
- Transmissions made through Safety NET – INMARSAT – “C” at a pre established schedule.
- Navigational warnings with ice edges and plotting of drifting icebergs, broadcasted through Safety NET (INMARSAT).



Capacity building

Course in Antarctic Navigation

Course	Date	Support	Participants / Officers
XXV th Course on Antarctic Navigation	25 th August to 6 th September 2014	"Dirección de Educación Naval" of the Argentine Navy	<ul style="list-style-type: none"> • Argentina Navy (20) • Foreign Navies: <ul style="list-style-type: none"> Brasil (1) Perú (1) Belgium (1) Chile (2) Italy (1) India (1) Panamá (1) Ecuador (1) Canadá (1) • Merchant Navy (4) • Argentine Coast Guard (4) • listeners / other participants (4)
XXVI th Course on Antarctic Navigation	24 th August to 4 th September 2015	"Dirección de Educación Naval" of the Argentine Navy	<ul style="list-style-type: none"> • Argentina Navy (25) • Foreign Navies: <ul style="list-style-type: none"> España (1) Perú (2) Chile (2) Italy (1) India (1) Uruguay (1) • Merchant Navy (3) • Argentine Coast Guard (4) • listeners / other participants (1)



Any other matters of relevance to HCA

Ice Charts

- ✦ from analysis and visual interpretation of satellite images of high resolution of SENTINEL-1, RADARSAT-2 satellites, COSMO-SkyMed, AQUA-TERRA-MODIS and MODIS.
- ✦ The updates of these charts are made according to the availability of satellite images in the portals Internet providers such information.
- ✦ Encoded with WMO standards

SEA ICE COVERAGE MIOS

- ✦ Encoding and distribution of S-57 Sea Ice Coverage MIO will be next step an distribution is expected for next southern summer.

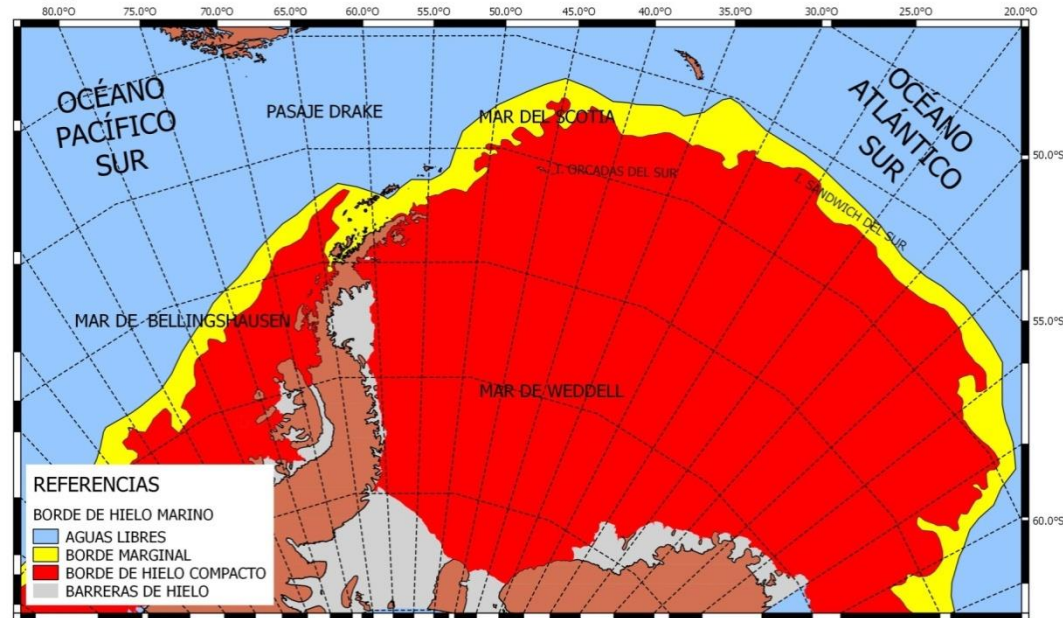


Ice Charts

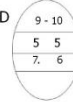
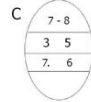
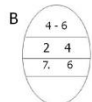
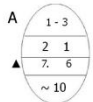
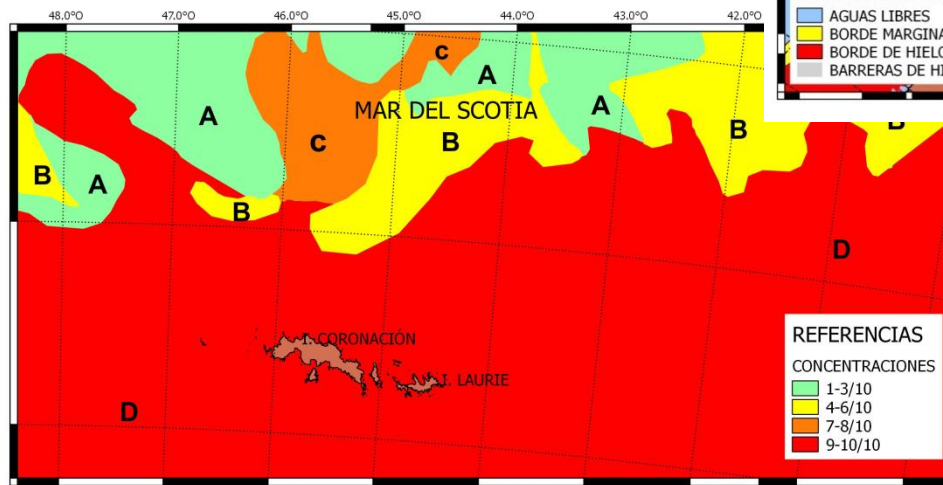
Sea Ice border & MIOs



DEPARTAMENTO METEOROLOGÍA
 CARTA DE BORDE DE HIELO MARINO
 FECHA DE ANÁLISIS: 13/06/2016



DEPARTAMENTO METEOROLOGÍA
 CARTA DE HIELO
 ZONA 2: Islas Orcadas del Sur y adyacencias
 FECHA DE ANÁLISIS: 24/05/2016



SHN – ARGENTINA's New product: outcome of the Forecasting Model for Sea Ice Concentration.

Forecasting model based on the results of Principal Component Analysis applied to the monthly anomalies series of Sea Ice, from which are obtained temporal patterns, valid in some regions of Antarctica, assuming the importance on determining the sea regions around Antarctica that will have Sea Ice Anomalies.

Forecasting model output is improved with Perceptron (an artificial neuronal network dedicated to the images recognition). It is been implemented through the anomalies fields of temperature and pressure associated to the anomalies spatial patterns of SI concentration. The obtained results, so far, are presented as encouraging.

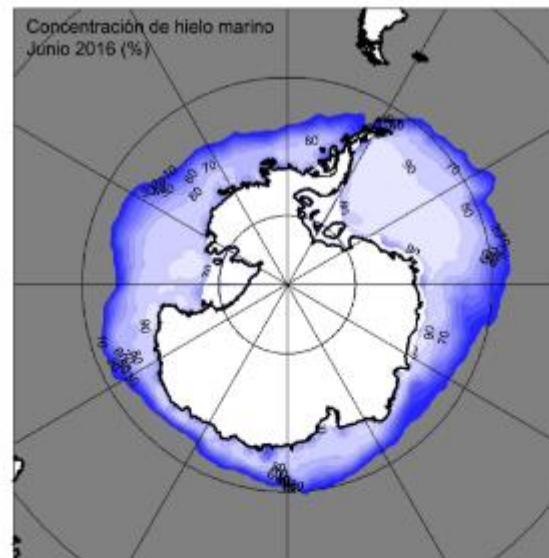
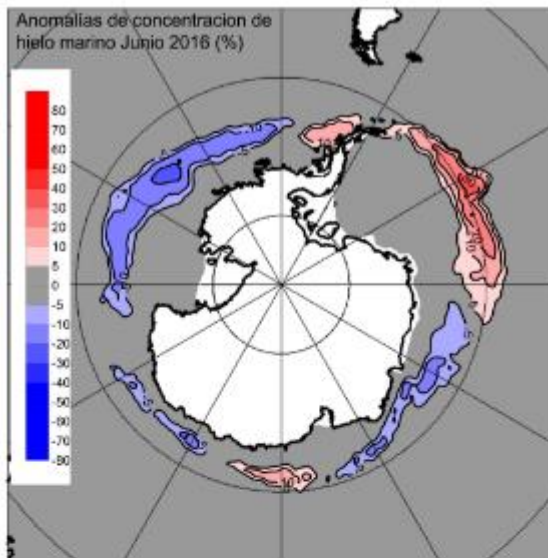
To access the model output: <http://www.hidro.gov.ar/smara/sb/sb.asp>

A short description of the model: <http://www.hidro.gov.ar/smara/sb/sb.asp>



POC: asscardilli@hidro.gov.ar

JUNIO



* Variables Atmosféricas (Ver)

JULIO

