



# SPAIN's REPORT FOR THE HCA-2012





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# **Spanish Scientific Stations**

South Shetland Islands

Livingston Island – BAE "JUAN CARLOS I"

CAMP "CAMPAMENTO BYERS"

Decepción Island - BAE "GABRIEL DE CASTILLA"







# **Spanish Antarctic National Plan**

#### Main Tasks:

- Operation of Scientific Stations
- Carrying out scientific projects

These two main tasks demand hydrographic surveys

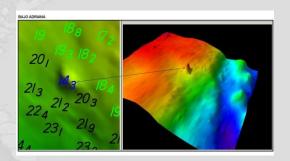




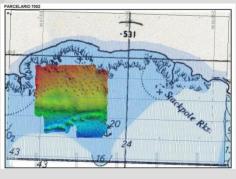


# National effort for new hydrographic surveys

In the years 2009 and 2010, opportunity hydrographic surveys were carried out.



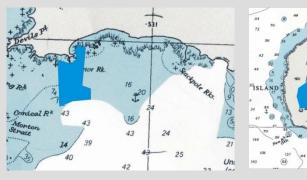
FEBRUARY 2009



BAYERS BAYE



JANUARY 2010



BAYERS DECEPCION





#### National effort for new hydrographic surveys

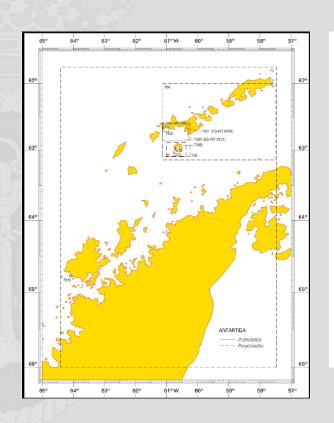
A new hydrographic campaign named "HIDROSHETLAND 2012" was carried out between January and February 2012. It focused on:

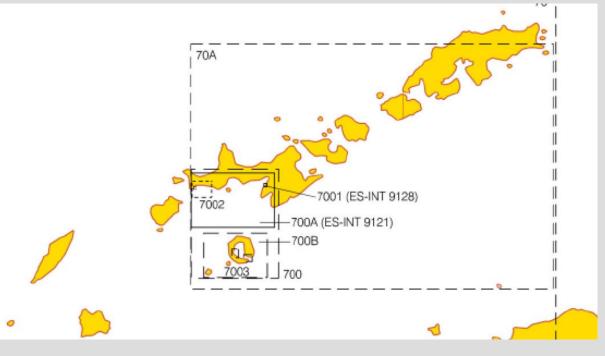
- Updating the existing bathymetry data in the vicinity of the Spanish scientific stations.
- -Updating the Spanish Chart Scheme in Antarctica, in particular INT 9121, and INT 9128.
- -Collaborating with several scientific research projects.
- -Obtaining soundings along Main Shipping Routes (MSR).





# Spanish nautical chart scheme in Antarctica



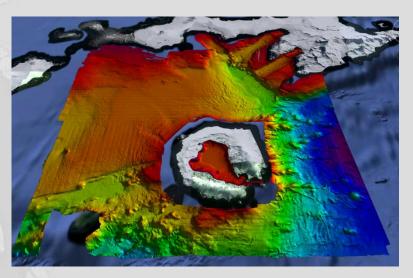


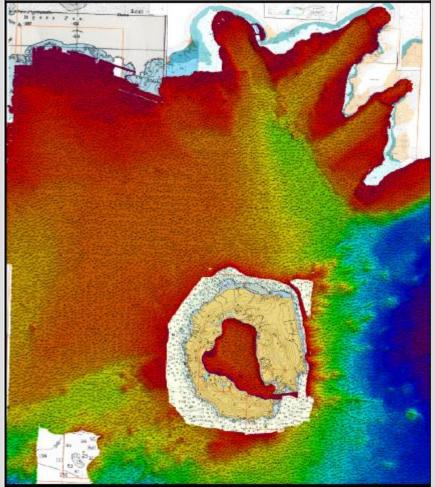




# **Survey "HIDROSHETLAND 2012" results**

Nearly 90% of the survey was sounded with multibeam echosounders



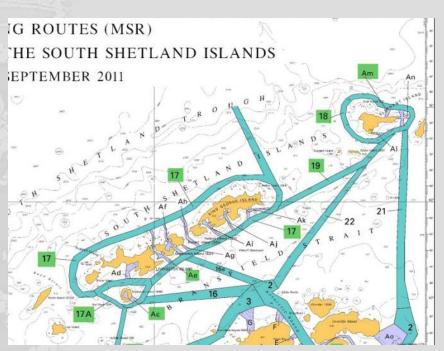


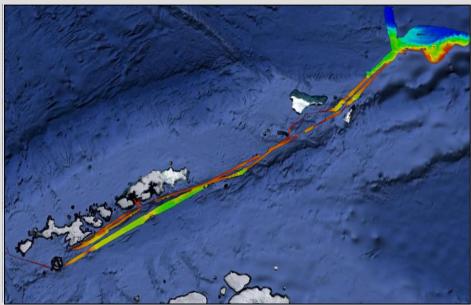




# **Survey "HIDROSHETLAND 2012" results**

Survey along an identified Main Shipping Route (MSR) between Livingston and Decepción Islands and Elephant Island









### **Survey "HIDROSHETLAND 2012" results**

Hydrographic Means used:

- -Spanish Navy Oceanographic Research Vessel "Hespérides".
- -Inflatable "zodiac" type boat, carrying very shallow water interferometric multibeam



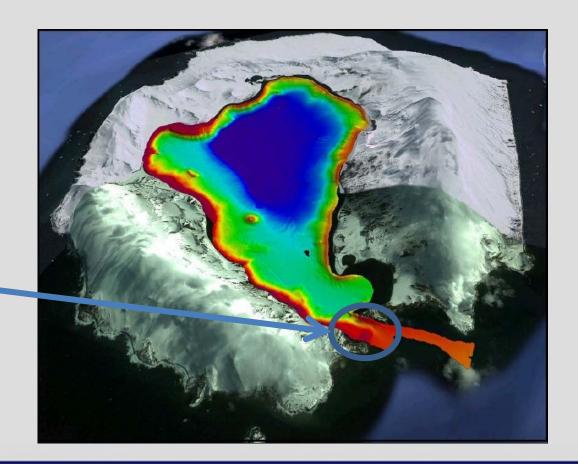






# **Survey "HIDROSHETLAND 2012" results**

Vessel and boat working together enabled good survey results like Foster Bay



Raven's Rock





# **Survey "HIDROSHETLAND 2012" results**

**Land Surveys** 









# **Survey "HIDROSHETLAND 2012" results**

Tide measurements









#### Miscellanea

- -UKHO some bathymetric data within Port Foster, Decepción Island, to IHM.
- The Geographical Information System (GIS) tool for Antarctica was used for survey planning purposes.

#### **Future Actions**

- -IHM will continue to support Spain's National Antarctic Plan.
- -IHM will continue to maintain the Spanish Antarctic chart scheme.
- IHM will continue to exchange data as needed with other HCA members.





# Thank you

