

18th Conference of the IHO Hydrographic Commission on Antarctica

National Report (PERÚ)

Agenda item 07.2A



HYDROGRAPHIC OFFICE/SERVICE

International Hydrographic Organization

The mission of the Directorate of Hydrography and Navigation is to manage, operate and research the activities related to environmental sciences in the sea, river, lake and Antarctic field to contribute to national development, support and safety navigation, Naval Forces and mariners in general.

During this year we have completed 119 years of continuous work serving the Peruvian state and the national and international community.

DHN has been actively involved in campaigns and expeditions in Antarctica since 1988.



International Hydrographic Organization

OCEAN CIRCULATION RESEARCH AROUND THE SOUTH SHETLAND ISLANDS AND ELEPHANT ISLAND, AND ITS RELATION TO THE PERUVIAN COAST, EL NIÑO AND LA NIÑA.

SURVEY

Since 2018 to date. Peru has carried out three Antarctic campaigns, and the DHN has achieved with the "Circulation Research around the South Shetland islands, and its relation to the Peruvian coast, El Niño and La Niña" project.

Data collection has been greater than in the previous two years during our last campaign in 2021 - 2022. This will allow us to know the marine dynamics with greater spatial coverage, in the north area of the South Shetland Islands. The additional area is 37 400 km2





SURVEY

International Hydrographic Organization

60°S

61°S

62°S

63°S

As part of this project, this Directorate has collected the following oceanographic information:

- 1. Temperature profiles (up to1000 m)
- 2. Salinity profiles (up to 1000 m)
- 3. Oxygen profiles (up to 1000 m)
- 4. Water samples (10, 20, 30, 50, 75, 100, 150, 200, 300, 500, 700 and 1000 m depth)



Niskin Bottle Carousel (Rosette)







Interannual variability of thermal and haline structure

January 2020, the highest recorded with temperatures of 2.6°C above 50m lower salinity concentrations that would have shown water incursions from the

Salinity [psu]

100

80

34.6

34.4

34.2

33.8

33.6



SURVEY

International Hydrographic Organization

METEOROLOGICAL DATA SURVEY

Likewise, it collects meteorological information, through an automatic YOUNG station, located in the BAP "CARRASCO" Pressure

Wind speed and direction Air temperature, among others



YOUNG AUTOMATIC METEOROLOGICAL STATION





OTHER ACTIVITIES

International Hydrographic Organization

ORCA - INGEMMET OCEANOGRAPHIC CRUISE

Detection of underwater acoustic plumes between Deception Island and Bridgeman Island, in the Bransfield Strait, on board the BAP "CARRASCO".





PLANNED ACTIVITIES

International Hydrographic Organization

- Continue oceanographic research on ocean circulation around the South Shetland Islands and Elephant Island and its influence on El Niño and La Niña on the Peruvian coast.
- We invite the international scientific community to collaborate and participate with scientific projects in the next Antarctic Expedition on board the BAP "CARRASCO",
- Other oceanographic studies (Geologic seabed investigation, physical oceanography and more)









Peruvian National Report HCA-18

International Hydrographic Organization



HCA-18, Berlin, Germany (hybrid), 24 – 26 May 2022