

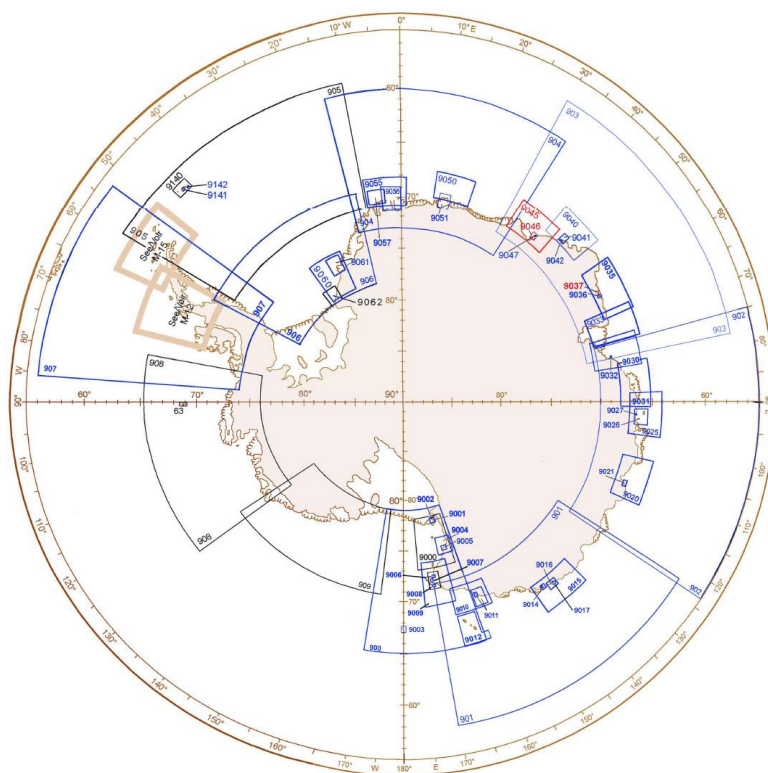


**Federal Maritime & Hydrographic Agency
and
Alfred Wegener Institute for Polar and Marine Research**

Germany
National Report

13th IHO Hydrographic Commission on Antarctica (HCA) Meeting
Cadiz, Spain, 3 - 5 December 2013

HCA13-08.5.1Ag



Surveys:

In 2013, during the expedition ANT-XXIX/3, 2013-01-20 to 03-19, RV POLARSTERN visited the Weddell Sea to collect Multibeam data, which can be utilized to further improve nautical charting in the area of INT 905.

Charts:

Since 1991 Germany took on the task to publish three navigation charts of the Weddell Sea. The charts due to be produced in a joint project by Federal Maritime and Hydrographic Agency (BSH) as national HO, and Alfred-Wegener Institute (AWI) which holds most of the bathymetric source data.

A project "CoolChart I" was launched to produce two INT papercharts and two electronic navigation charts. The results shown below:

Chart Number	INT 9055
Scale	1:500 000
Coordinates	68°20'S - 71°00'S, 10°30'W - 01°30'E
Title	Atka Iceport bis Trolltunga
Date	2009-08-01
ISBN Number	978-3-89871-951-3

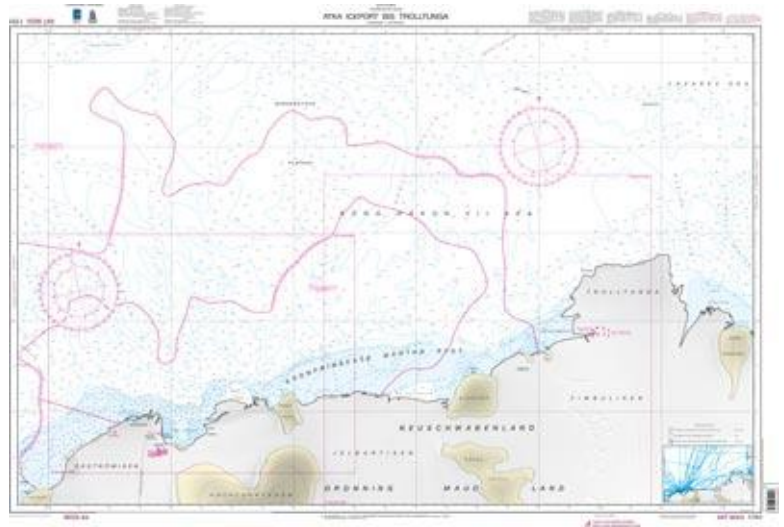


Chart Number	INT 9057
Scale	1:300 000
Coordinates	69°30'40"S - 70°50'S 10°00'W - 05°00'W
Title	Ansteuerung von Atka Iceport
Date	2009-08-01
ISBN Number	978-3-89871-952-0

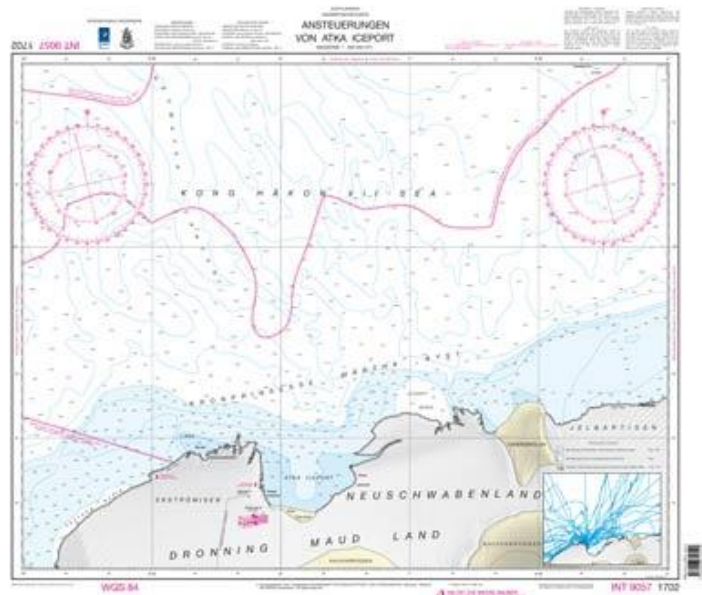


Chart Number DE260001
Scale 1:300 000
Coordinates 69°30'40"S - 70°50'S
10°00'W - 05°00'W
Title Atka Iceport to Trolltunga
Date 2009-08-01
Edition 1



Chart Number DE360010
Scale 1:300 000
Coordinates 69°30'40"S - 70°50'S
10°00'W - 05°00'W
Title Approaches to Atka Iceport
Date 2009-08-01
Edition 1



The outstanding paper chart INT 905 as well as the corresponding ENC are planned to be produced in a second project Cool Chart II. Cool Chart II will be again a joint project by the Federal Maritime and Hydrographic Agency (BSH) as national HO, and the Alfred Wegener Institute for Polar and Marine Research (AWI).

Since 1983 the RV POLARSTERN is visiting the Weddell Sea frequently and a huge dataset of swath bathymetry was recorded since. Furthermore a scientific bathymetric chart of the Weddell Sea was produced at AWI (AWI-BCWS). Experiences of its processing and data validation will be incorporated in the INT 905 chart as well.

Data evaluation and processing will be carried out at AWI following S-44 standards. The verification tests continued during the year 2013 and are in the final stages, an important milestone in this project. The editing of the paper chart and ENC will be finished at the BSH until Winter 2013/2014.

INT chart number	905
National chart number (DE)	1700
Title	Northern Weddell Sea
Title in national language	Weddellsee, nördlicher Teil
1st edition	Planned for 2014
Producer nation	Germany - Bundesamt für Seeschifffahrt und Hydrographie (BSH)
Bounding coordinates (W / E / S / N)	-59:00 / -11:00 / -71:00 / -59:10
Scale	1:2.000.000
Projection (EPSG)	WGS 84 / World Mercator (3395)
Latitude of true scale	66° 00' S
Vertical datum (EPSG)	Mean Sea Level (5100)
Navigational purpose (by means of IHO S-44)	1 – Overview
Matching scale ranges	200 NM / 96 NM for 1:3,000,000 to 1:1,500,000

Work packages put on project partners

AWI

- Post-processing of bathymetry data (multibeam data from RV "POLARSTERN") using CARIS HIPS following S-44 standards
- Requesting raw data from other hydrographic services and institutes
- Requesting existing charts within or adjacent to INT 905 for inclusion and adjustment
- Calculating the grid; deriving contour lines and soundings from grid using CARIS BaseEditor
- Extract coastline and grounding line from WVS and ADD5

- Undersea feature names from SCUFN (GEBCO) and the SCAR Composite Gazetteer of Antarctica (CGA); Names of the seas from IHO S-23
- Gathering names and positions of Antarctic research stations.

BSH

- Definition of sea ice limits
- Delivering of magnetic variation data (isogons)
- Creating the paper chart with cartographic layout using CARIS HPD
- Verification and validation of depth data
- Printing of the paper charts
- Disposition of ENCs and paper charts

(more information on <http://apps3.awi.de/eBathy/int905/int905.html>)

Contact

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