

IHO Hydrographic Commission on Antarctica (HCA)

National Report of the
Republic of Korea

Korea Hydrographic and Oceanographic Agency (KHOA)



Survey and charting progress in Antarctica since HCA-14 (June 2016)

- New charts produced (INT, national, ENC):
 - ✓ 1:10,000, 1: 25,000 Chart and band 5 ENC from the survey in 2017~2019
- Areas surveyed
 - ✓ Multibeam surveys - conducted near the Jang Bogo Station during 2018 and 2019 seasons.
- Risk assessment studies: Nothing to report
- Impact of Polar Code on your activities: Nothing to report

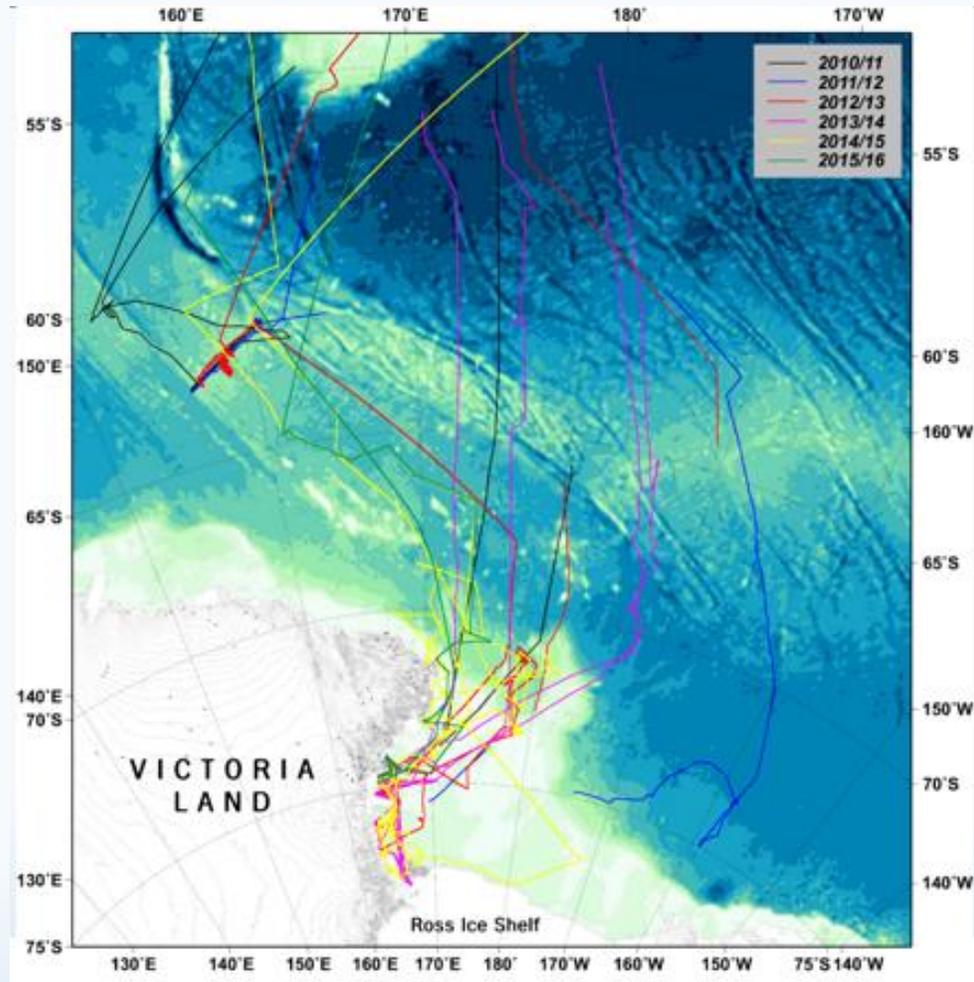


Status of Relations with Other Organizations

- Scientific and polar institutes
 - ✓ KOPRI (Korea Polar Research Institute)
KHOA conducted hydrographic surveys in Antarctica using KOPRI's icebreaker *Araon*
- Hydrographic data received from other organizations
 - ✓ NGII (National Geographic Information Institute, KR)
- Hydrographic data provided to other primary charting authorities and/or GEBCO
 - ✓ KOPRI provided GEBCO with bathymetric data from 2009 to 2019 in 2019



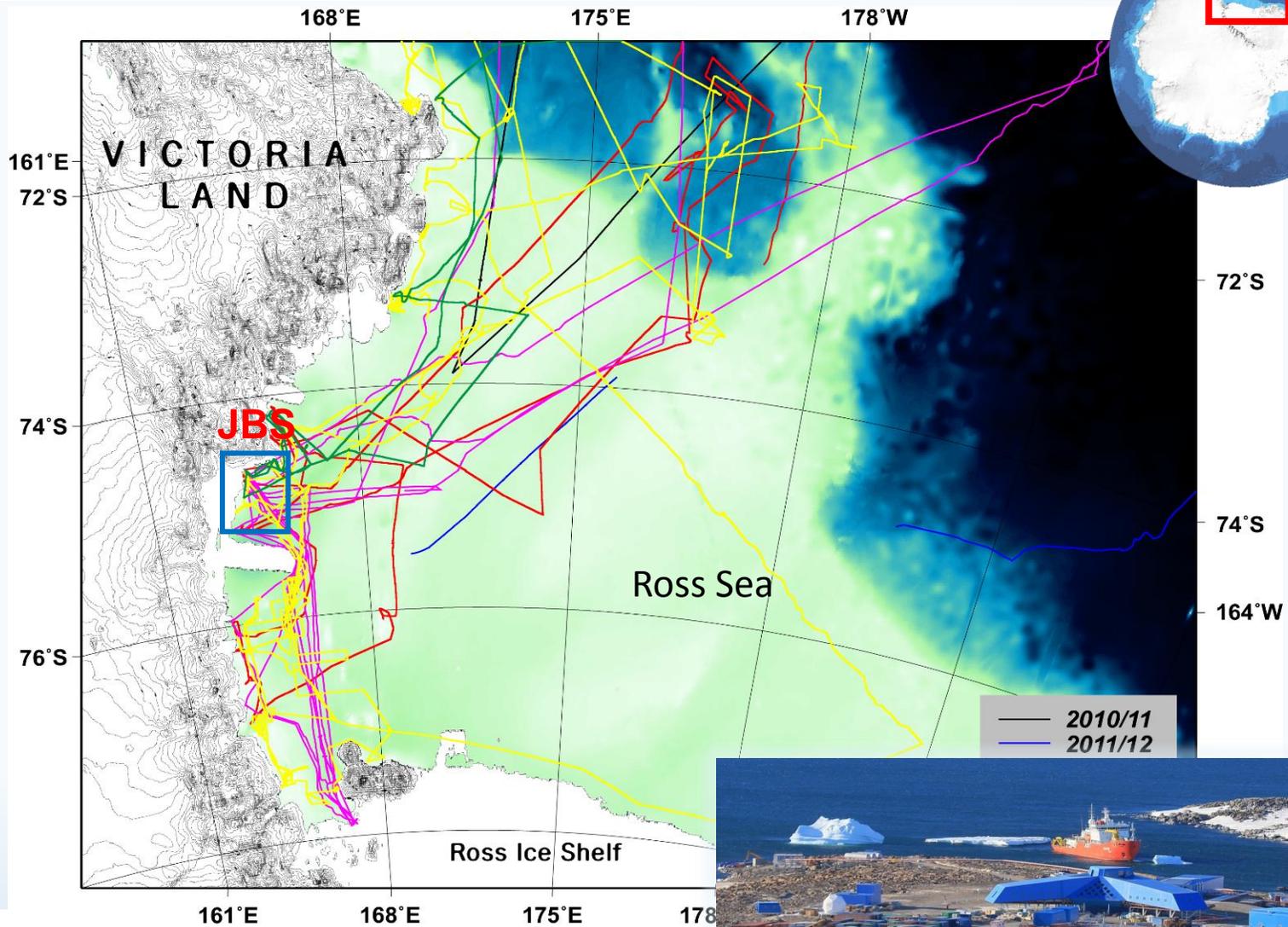
Antarctic Ocean (2011–2015)



Year	Track (km)
2010/11	6,940
2011/12	6,060
2012/13	8,950
2013/14	10,090
2014/15	11,500
2015/16	3,200



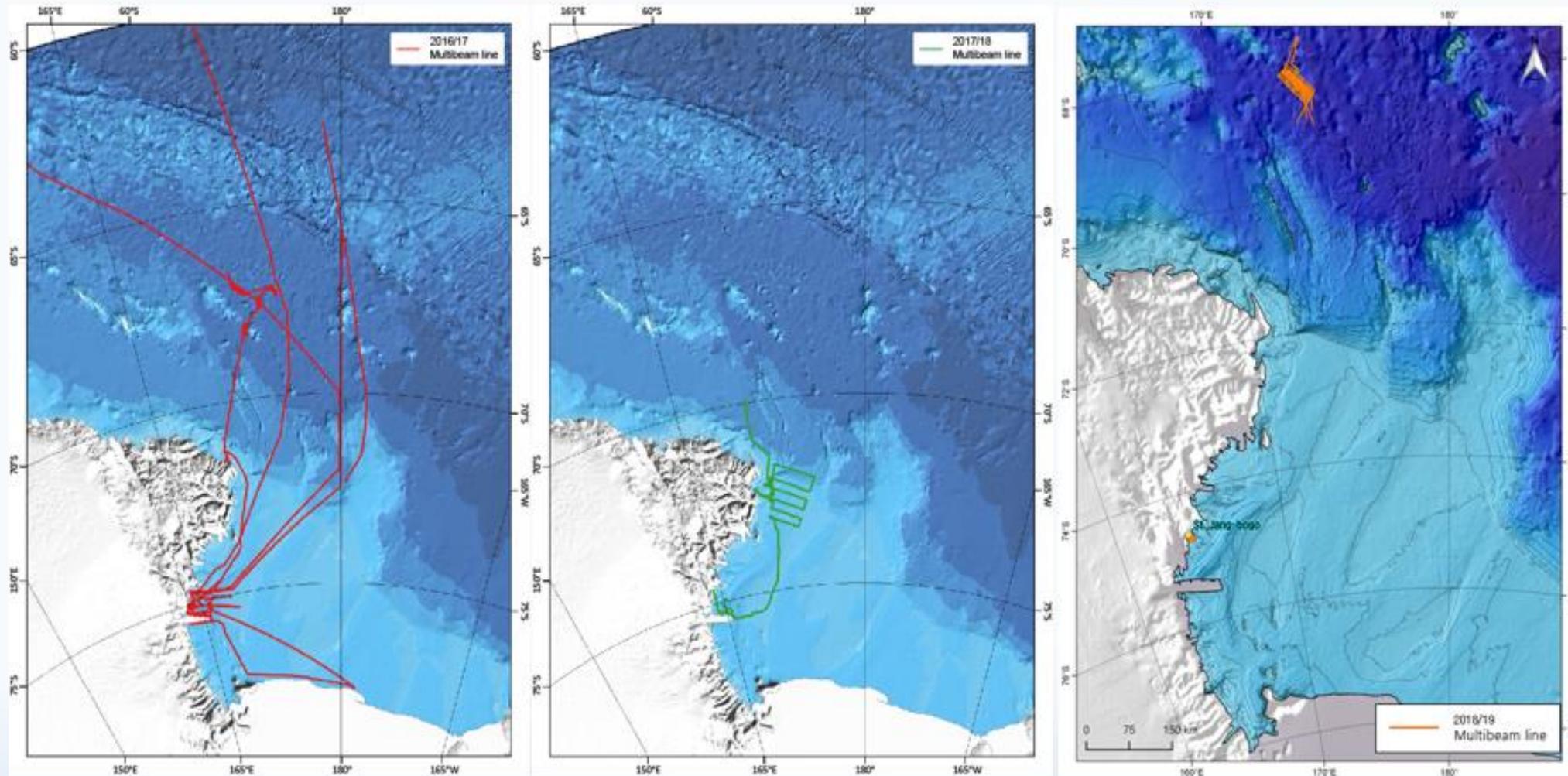
Ross Sea (2011-2015)



JBS: Jang Bogo Station : 2014~



Bathymetric data acquisitions in Antarctica from 2016 to 2019



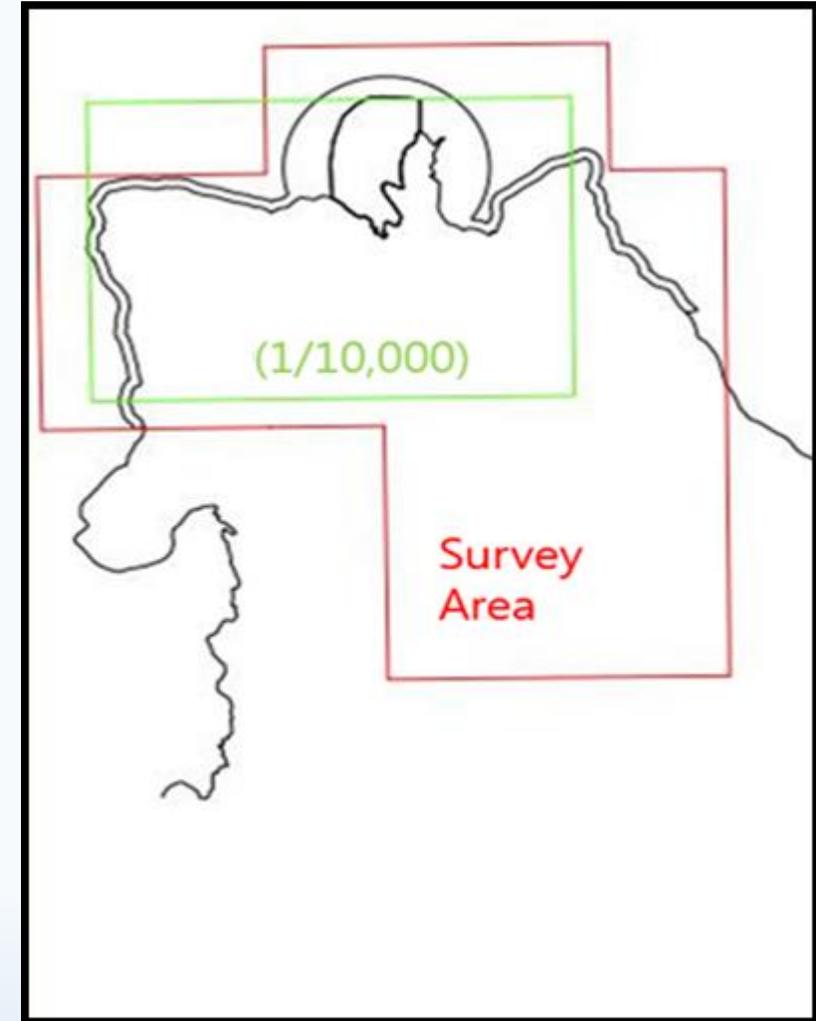
KHOA's Antarctic survey (video)



Planned Activities

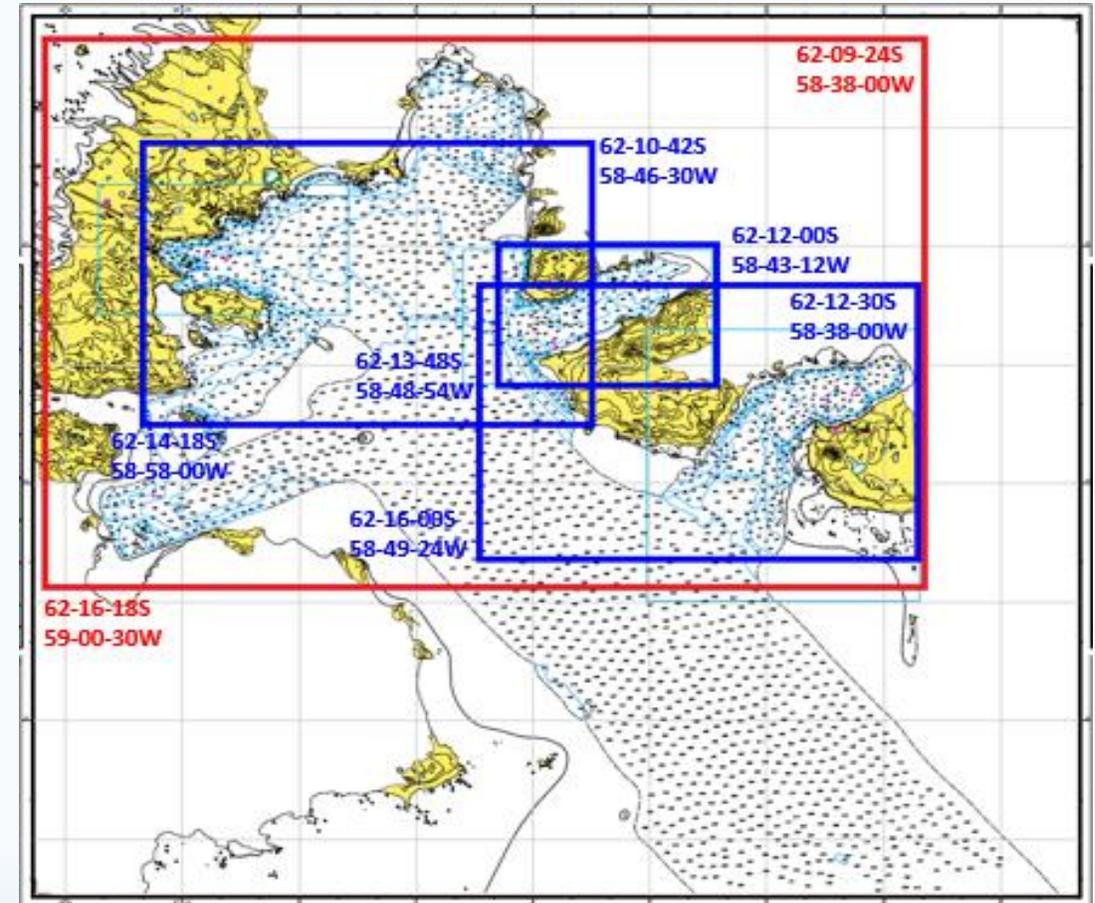
- New charts

- ✓ 1:10,000 INT Chart 9501 in 2019 near the Jang Bogo Station (74-37.4S, 164-12E, Terra Nova Bay, Northern Victoria Land)
- ✓ (lower left) 74-40-10S, 164-02-00E
(upper right) 74-36-38S, 164-21-00E



Planned Activities

- New charts
 - ✓ Planning on survey projects near the King Sejong Station
(62-13S, 58-47W, King George Island)
 - ✓ Publishing four national paper charts in 2023 near the King Sejong Station
(one of 1:20,000 & two of 1:10,000 & one of 1:5,000)
 - ✓ Band 5 ENC in the considered area



Particular issues that may require HCA consideration

- Application of autonomous vehicles near the Jang Bogo and King Sejong Station
For more efficient time use and the safety of hydrographers during the surveys in Antarctica, KHOA launched semi-autonomous vehicles in 2017-2019 survey(the Jang Bogo Station) and will use it in 2019-2023(or 2021) survey(the King Sejong Station)



Drones - Photography survey, coastlines



Unmanned surface vehicle – Multibeam survey



Thank you!

- www.khoa.go.kr/polar

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