

Nippon Foundation – GEBCO – Seabed 2030

First Arctic, Antarctic & North Pacific Mapping Meeting
October 8–10 | Stockholm 2018

Recently acquired and forthcoming data

Michele Rebesco
OGS, Italy





OGS

is an internationally-oriented public research institute funded and monitored by the Italian Ministry of Education and Research

Its roots date back to the School of Astronomy and Navigation founded in Trieste by empress Maria Theresa of Austria in 1753





**Antarctic
mapping**

**OGS
Explora
2017
Antarctic
cruise**

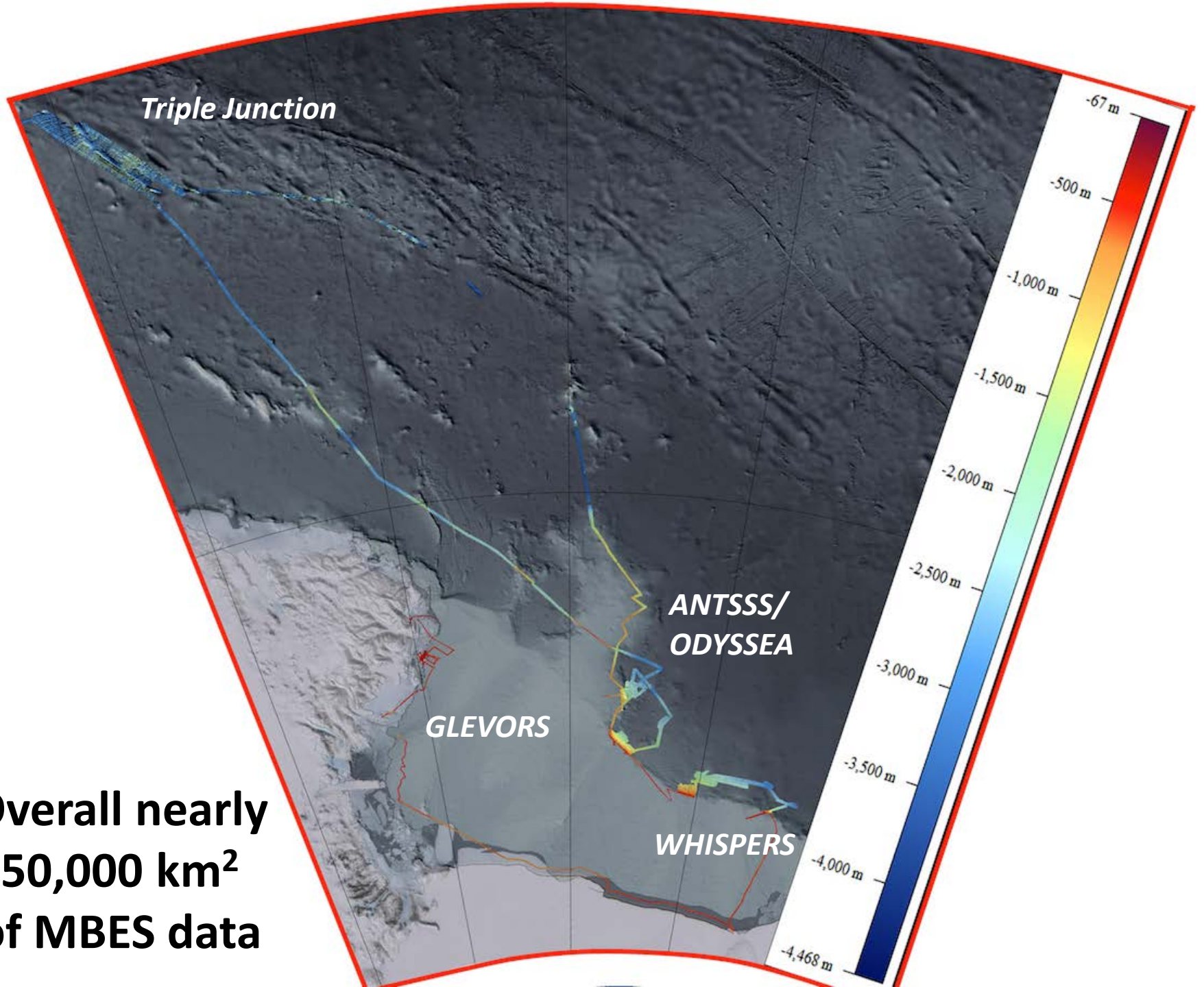
Triple Junction

*ANTSSS/
ODYSSEA*

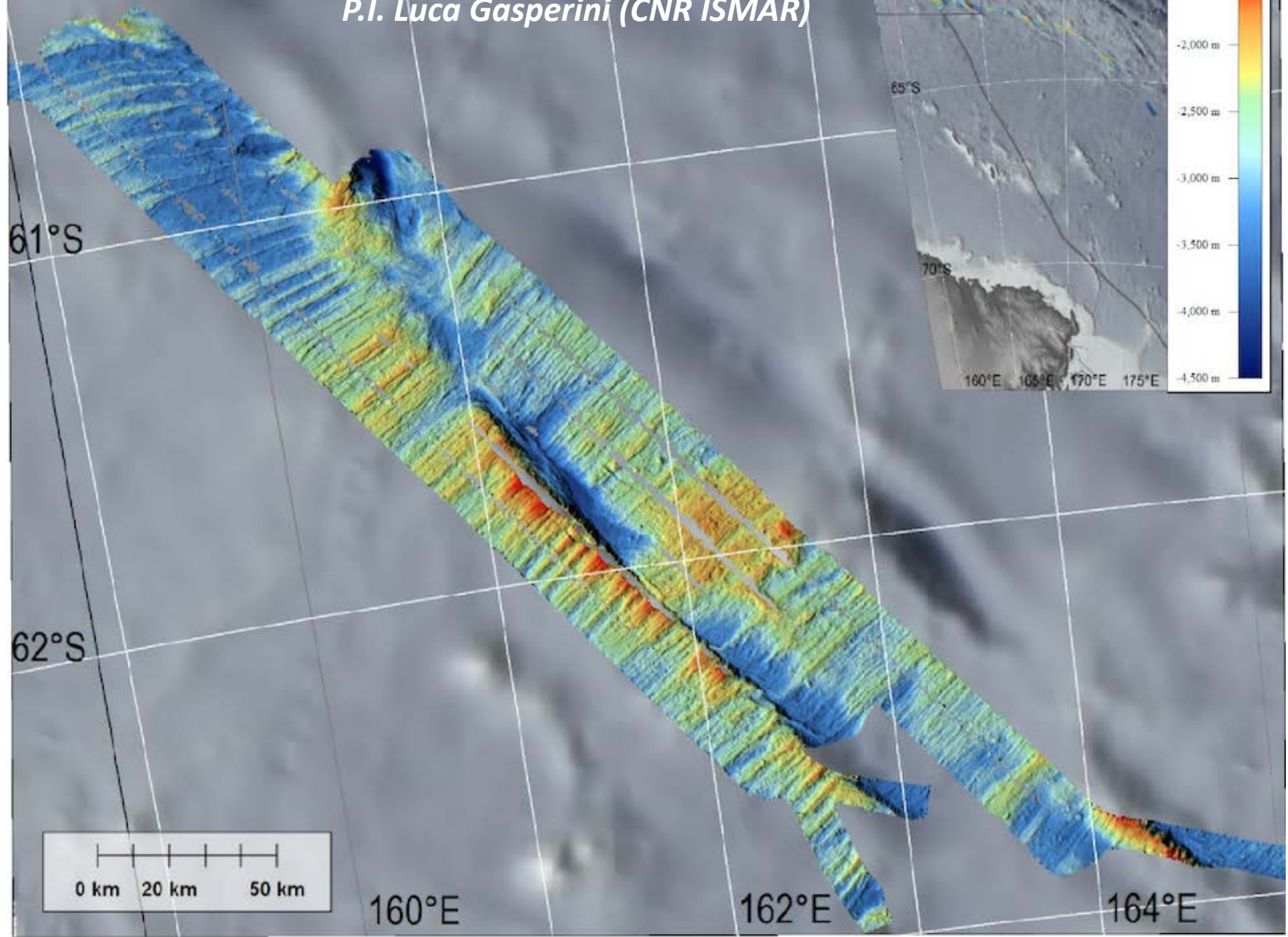
GLEVORS

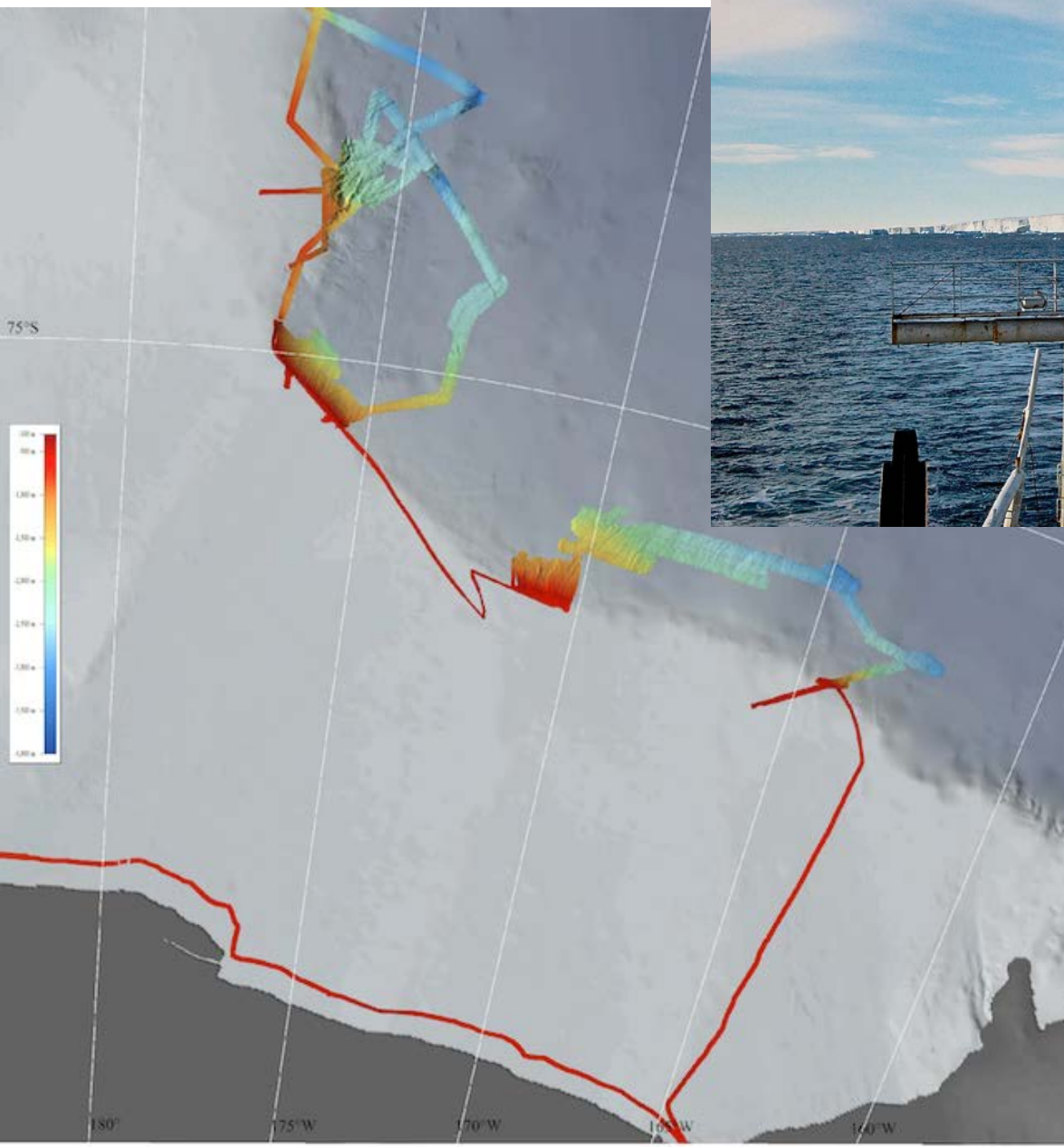
WHISPERS

**Overall nearly
50,000 km²
of MBES data**



*Triple Junction
PNRAproject
P.I. Luca Gasperini (CNR ISMAR)*





Virtually no sea ice!!!

even on the continental slope!!!!

(not only in the polynya)!

and very few icebergs!!

ANTSSS

Eurofleets2 projet

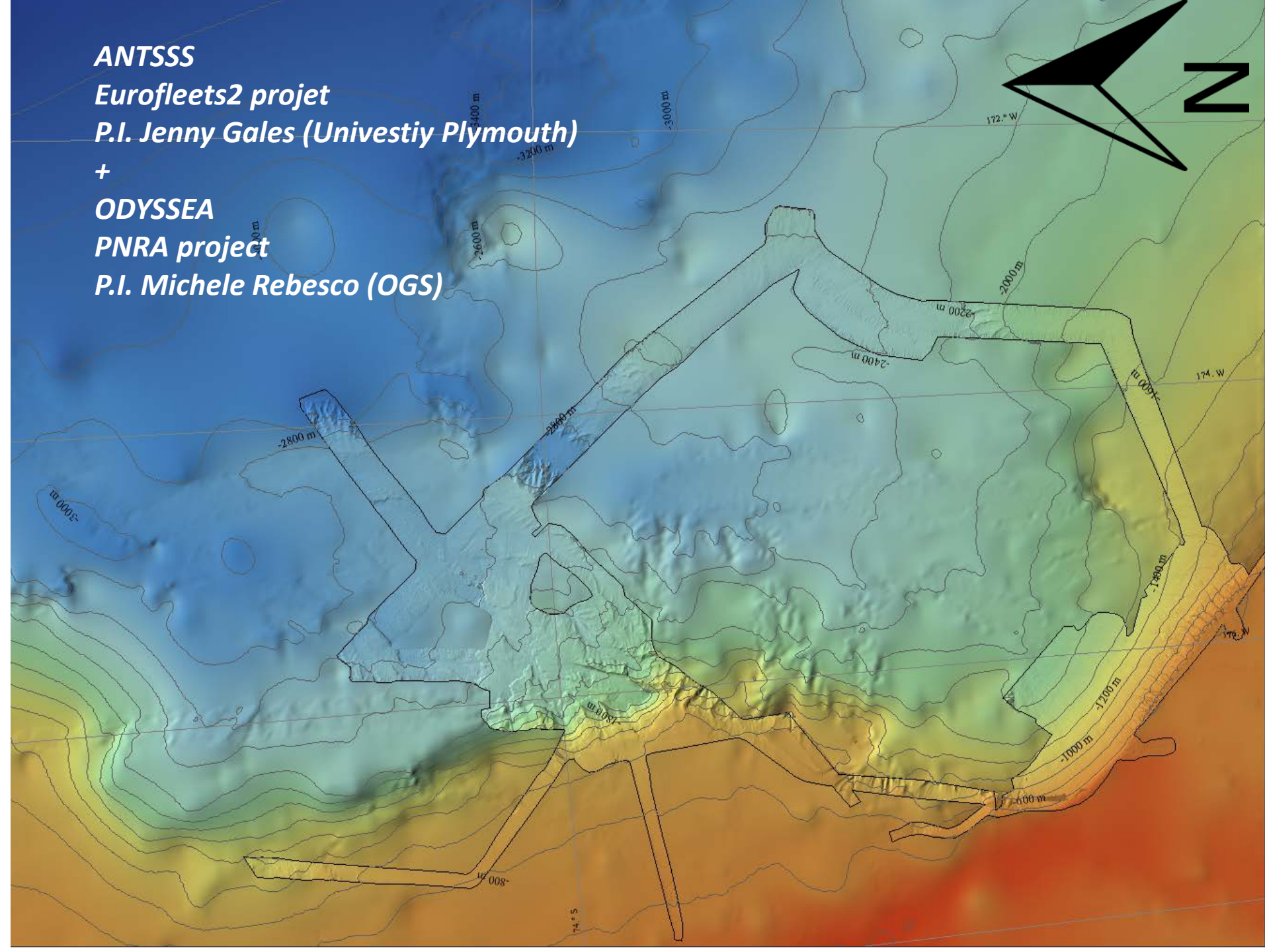
P.I. Jenny Gales (Univestiy Plymouth)

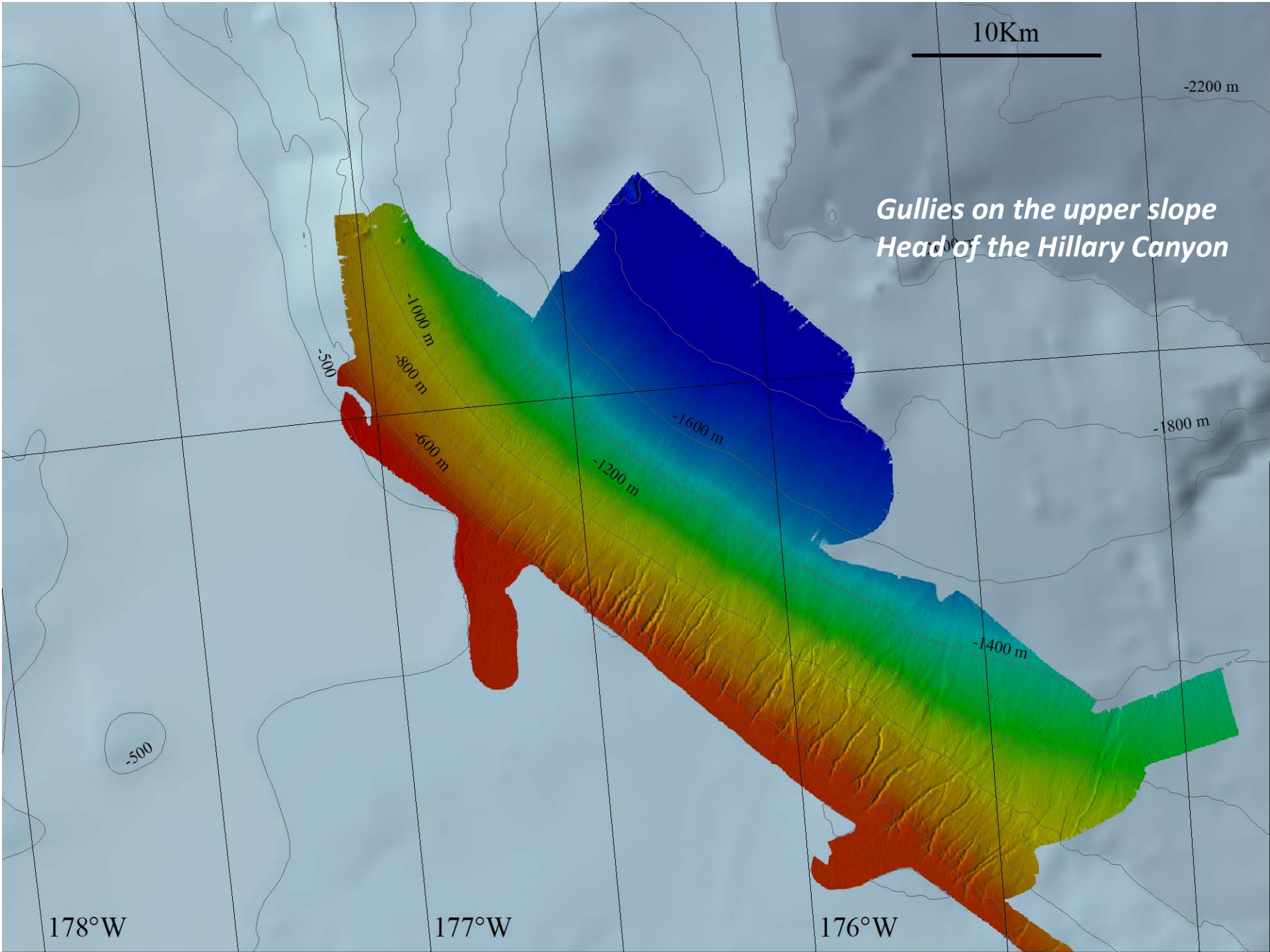
+

ODYSSEA

PNRA project

P.I. Michele Rebesco (OGS)





10Km

-2200 m

*Gullies on the upper slope
Head of the Hillary Canyon*

-1000 m

-800 m

-500

-600 m

-1600 m

-1200 m

-1800 m

-1400 m

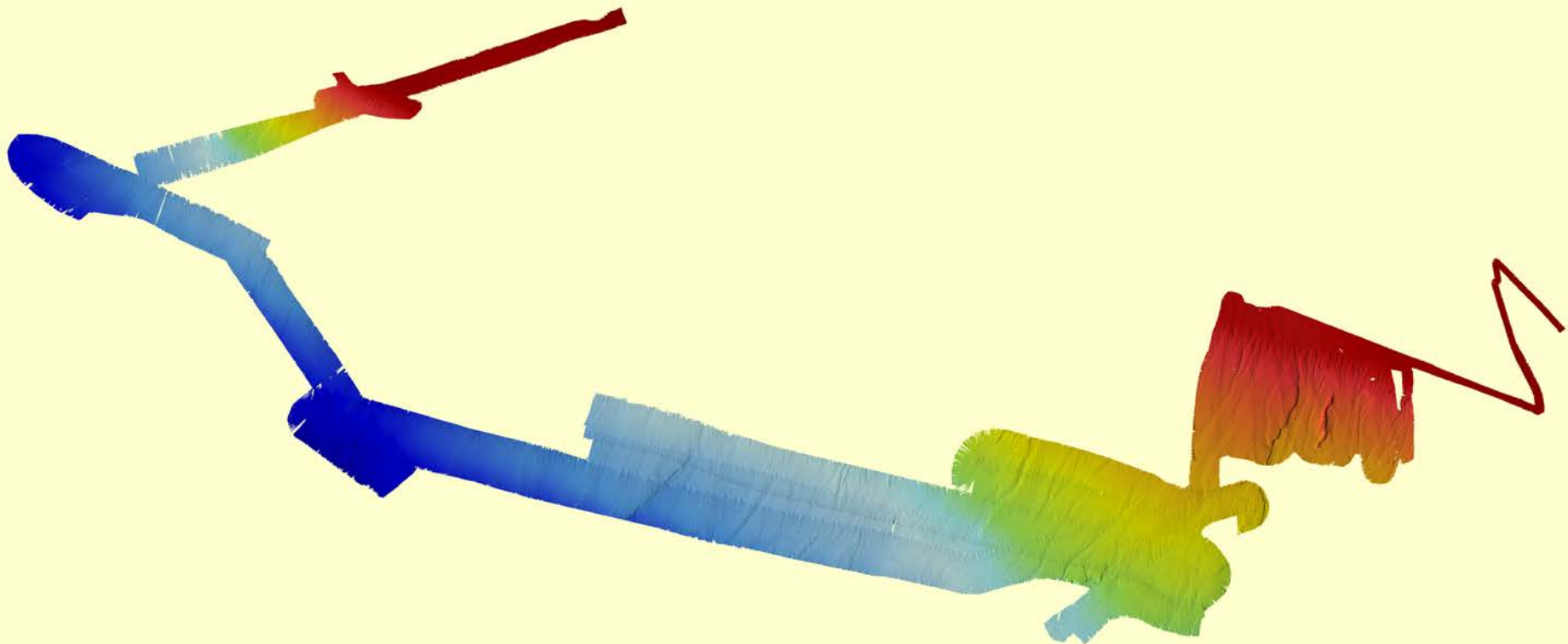
-500

178°W

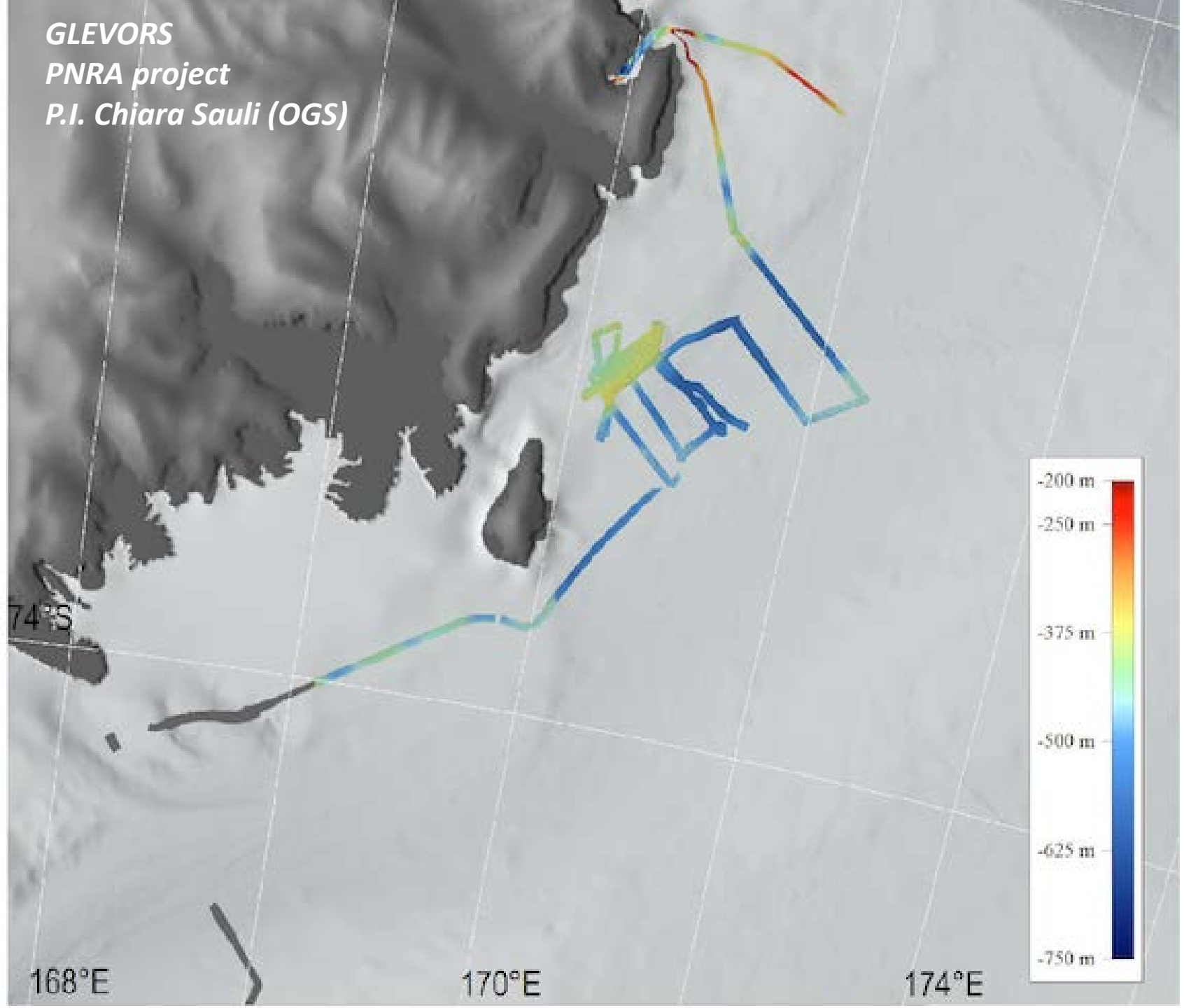
177°W

176°W

WHISPERS
PNRA project
P.I. Laura De Santis (OGS)



*GLEVORS
PNRA project
P.I. Chiara Sauli (OGS)*



IBCAO: Data already contributed (Several cruises):

SVAIS (Hesperides, PI Angelo Camerlenghi, Uni Barcelona)

CORIBAR (Merian, PI, Till Hanebuth, Uni Bremen)

EDIPO (OGS Explora, PI Andrea Caburlotto, OGS)

DEGLABAR (OGS Explora, PI José Luis Casamor, Uni Barcelona)

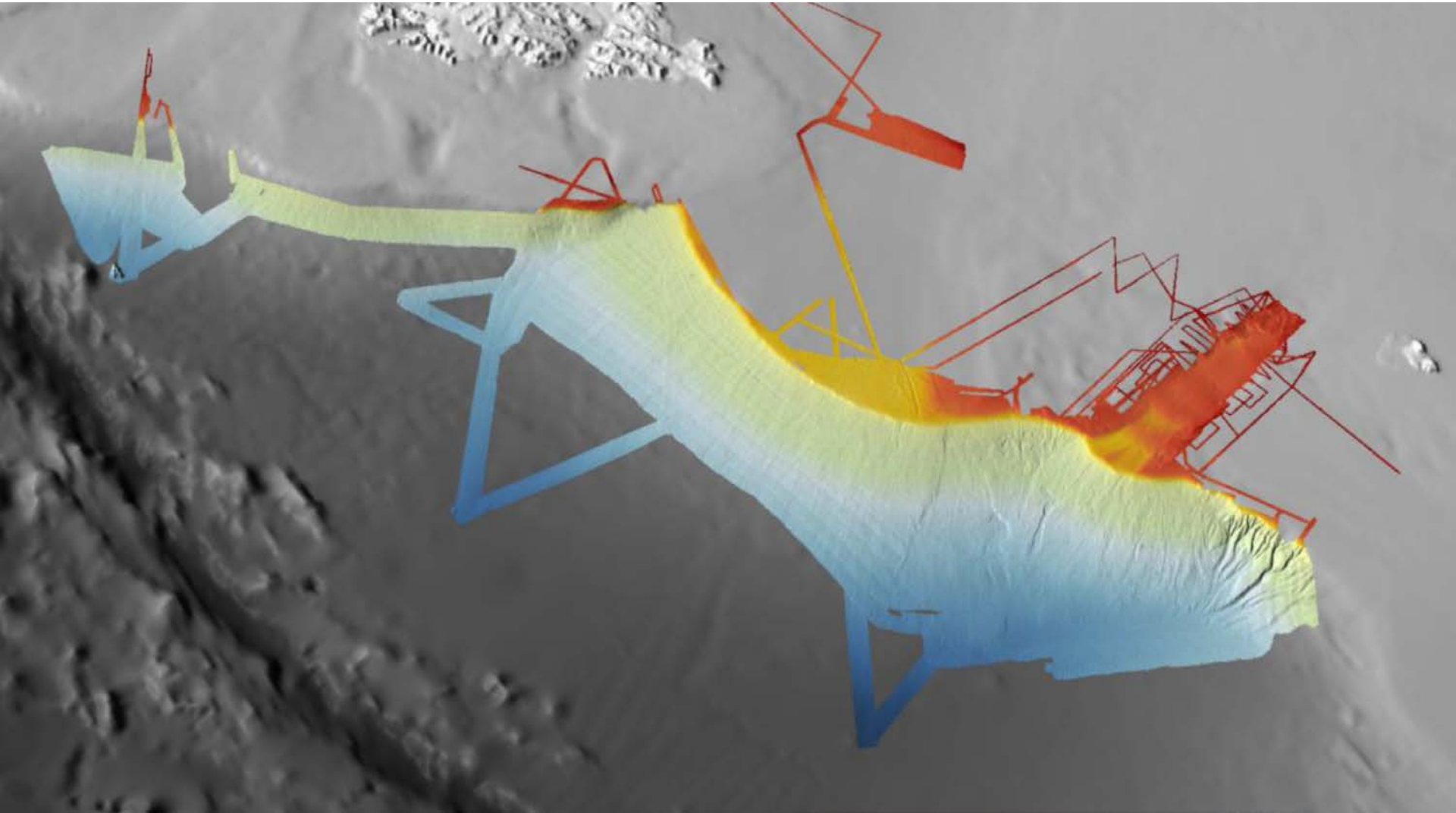
EGLACOM (OGS Explora, PI Michele Rebesco, OGS)

PREPARED (G.O.Sars, PI Renata Lucchi, OGS)

BURSTER (Polarstern, PI Renata Lucchi, OGS)

+ fostering the contribution of other international datasets (GlaciBar, Tromsø; Panorama, GEOMAR; HighNorth17, It. Hydrographic I.; ...)

Overall over 20,000 km²



forthcoming data ...or, better, future developments:

- 1) Forthcoming HighNorth cruises lead by Italian Hydrographic Institute)**
- 2) Beside the well-established Italian Antarctic program, now from this year Italy is starting a National Arctic Program;**
- 3) OGS got governmental funding for acquiring a high ice-class vessel/icebreaker for polar marine research and supply of the Antarctic base;**
- 4) Plan for building a new hydrographic vessel for the Italian Navy (NIOM) in support of the Italian research community, also in remote (Arctic) areas;**
- 5) ARICE (Arctic Research Icebreaker Consortium) EU H2020 project to provide shared access to 6 icebreakers. I personally submitted with other co-proponents here one proposal for surveying the Alaskan margin (Beaufort Sea);**
- 6) My colleague Renata Lucchi got a part-time professorship position at university of Tromsø = further OGS involvement in the Arctic...**

Thanks for your attention



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<http://www.ogs.trieste.it/en>

