Argo Pacific Deployment Meeting

1/25/24

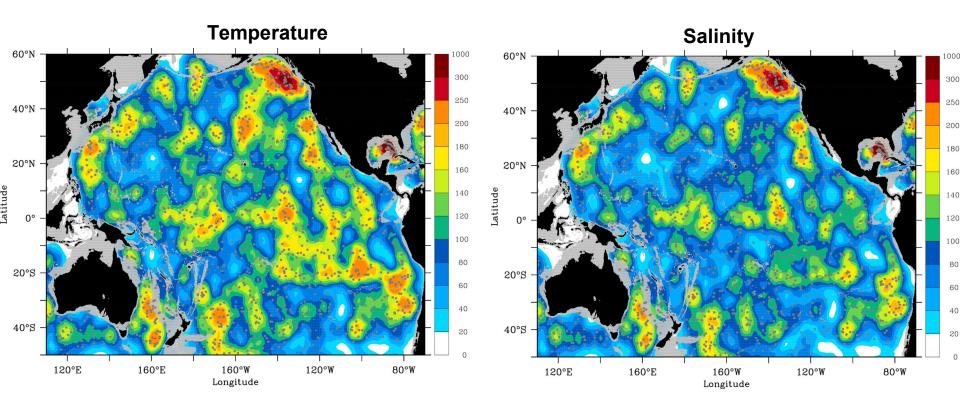
Agenda

- Logistics (2 min)
- Pacific Ocean: current Argo coverage and projected future coverage (5 min)
- Upcoming deployment plans : please share upcoming deployment plans and needs
- Open discussion

Logistics

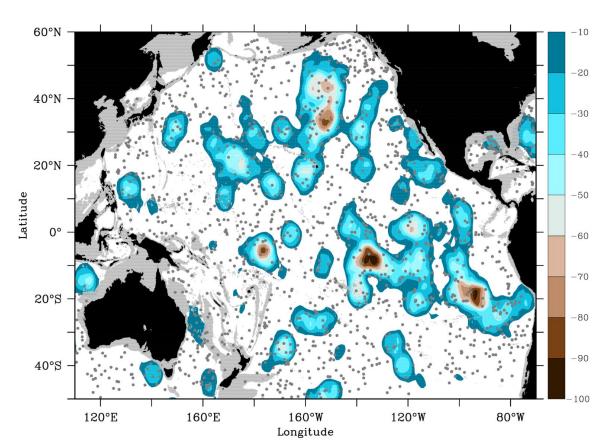
- Zoom: https://ucsd.zoom.us/j/92500920559
- Google Drive:
 - https://drive.google.com/drive/folders/109P3aCqCjGk3bvFjonjZ-ZsOSaCenz8L?usp=sharing
- Email list of Pacific committee members:
 - https://docs.google.com/spreadsheets/d/1WLVhS1Pra_JrRYAfkg9BTmWyn4RZLCwq-6VdFzm5fV4/edit?usp=sharing
- Next meeting: Wednesday July 10th at 2pm PT

Pacific Current Coverage

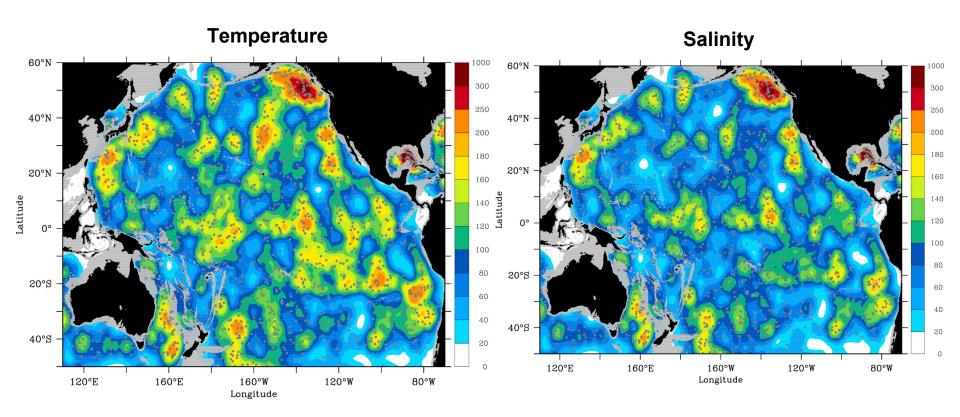


(From John Gillson)

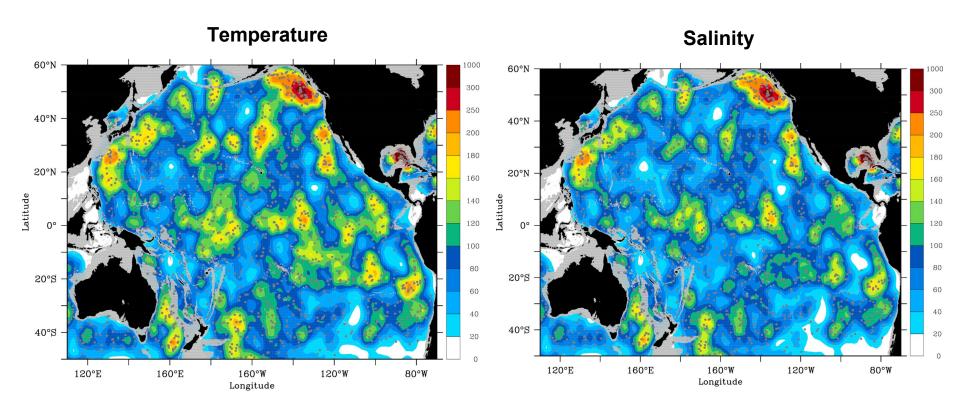
Float density - Grey list density



Predicted Pacific Current Coverage (+1 year)



Predicted Pacific Current Coverage (+2 year)

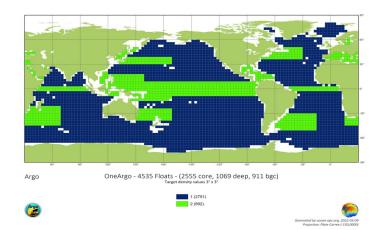


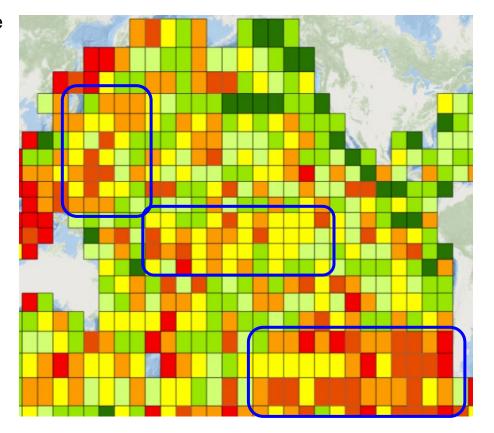
Predicted Pacific Current Coverage (considering age and plan)

Here we consider the OneArgo target (double density), the grey listed floats, the age of the float and the deployment plans.

Like the above there are places of priority:

- North West Boundary region
- Tropical pacific
- South East Pacific





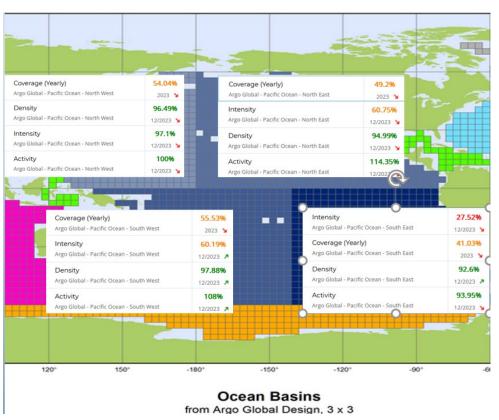
Current status of Argo implementation in the Pacific

Note that here we consider the coverage target is 100% while the max target is 70%.

Implementation for T/S is pretty good in the Pacific.

Intensity in the South East Pacific is really low.

Karahoa II should impact intensity in the North East and South West



Focus on South East Pacific

Cruise name: MR24-07 Leg.1

POC (Institution): K. Kimoto (JAMSTEC)

Details

- Ship: Mirai
- Cruise dates: 2 29 October 2024
- Departure/arrival ports:
 Dutch Harbor (USA) / Shimizu (Japan)
- Number of floats: 2
- Float types: BGC
- Looking for additional floats? No
- Other information (including EEZ):

Observation in the EEZ of the USA

Map (if available)



Cruise name: MR24-07 Leg.2

POC (Institution): M. Honda (JAMSTEC)

Details

Ship: Mirai

Cruise dates: 4 – 17 November 2024

Departure/arrival ports:Shimizu / Shimizu (Japan)

Number of floats: 2

Float types: BGC

Looking for additional floats?
 Further float deployment possible

Other information (including EEZ):

Map (if available)



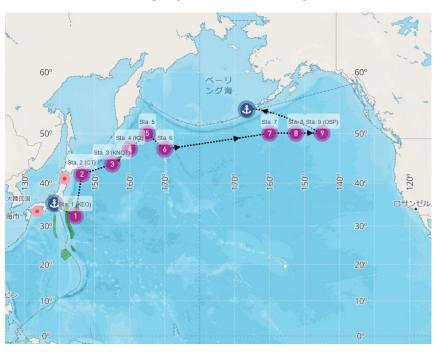
Cruise name: MR25-XX

POC (Institution): T. Fujiki (JAMSTEC)

Details

- Ship: Mirai
- Cruise dates: Jun July 2025
- Departure/arrival ports:
 Shimizu (Japan) / Dutch Harbor (USA)
- Number of floats: 6
- Float types: BGC
- Looking for additional floats?
 Further float deployment possible
- Other information (including EEZ):

Map (if available)

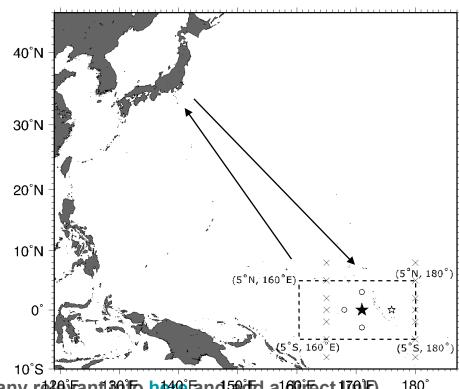


- Ship: Mirai (JAMSTEC)
- Cruise dates: January February 2025
- Departure/arrival ports:
 Shimizu (Japan) –Shimizu (Japan)
- Number of floats: 2-4 (JAMSTEC)
- Float types: Core or BGC
- Looking for additional floats?

No. We have concerns about taking long times for various permissions such as MSR application.

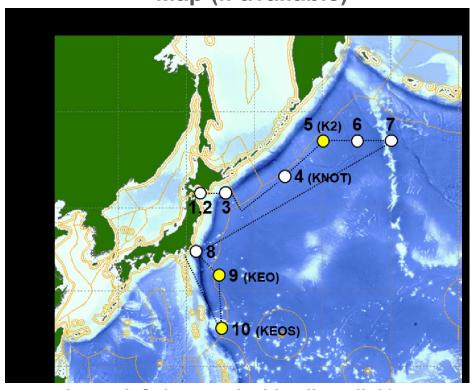
• Other information (including EEZ): The Republic of Nauru, the Republic of Kiribati, the Marshall Islands, Tuvalu, the republic of Palau, The Federated States of Micronesia, the Republic of the Philippines, and USA

Map (if available)



- Ship: Mirai
- Cruise dates: October –
 November 2024
- Departure/arrival ports:
 Sekinehama-Shimizu (Japan)
 - Other cruise details:
- Number of floats: Not determined
- Float types: Core or BGC or Deep
- Looking for additional floats? No.
- Other information (including EEZ):
 No

Map (if available)

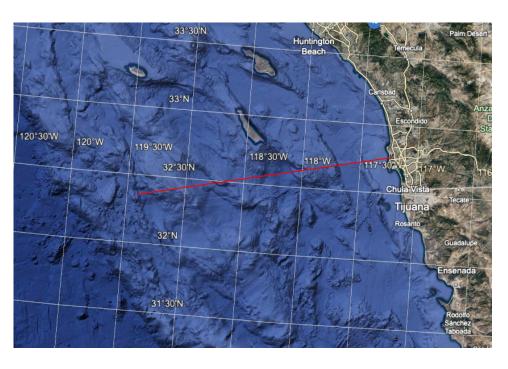


Cruise name: BGC SOLO test POC (SIO): John Gilson

Details

- Ship: Beyster
- Cruise dates: Jan 29th
- Departure/arrival ports
 - o San Diego-San Diego
- Number of floats:1
- Float types:MRV BGC SOLO
- Looking for additional floats?
- Other information (including EEZ):

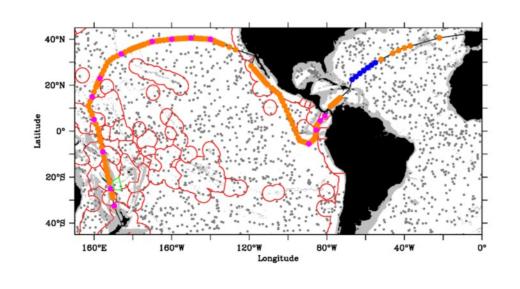
Map



POC (SIO): John Gilson

Details

- Ship: (New) Kaharoa
- Cruise dates: March May
- Leg 1: Vigo- San Diego (March 1-April 4th;35 days)
 - o 65 floats(54core, 7 deep, 4BGC)
- Leg 2: San Diego (end of April-June; 35 days)
 - o 88 floats(77core, 11 BGC)
- Looking for additional floats?
- Other information (including EEZ):

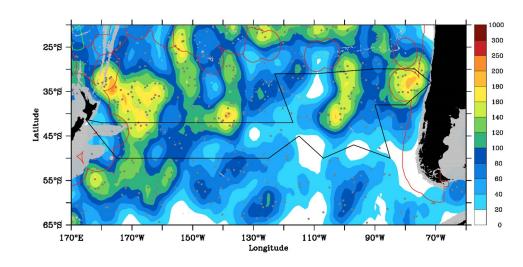


Full plan here: https://drive.google.com/file/d/1HmvlwCZuibaN2o_5ZPP6gqCIDBWml1ZO/view?usp=drive_link

Cruise name: Kaharoa Nov 24 POC (SIO): John Gilson

Tentative Cruise in S. Pacific

- Ship: Kaharoa
- Cruise dates: TBD, late november (30 days)
- Departure/arrival ports: NZ-Chile-NZ
- Number of floats: TBD
- Float types: TBD, BGC
- Looking for additional floats? TBD
- Other information (including EEZ):



Cruise name: Template

POC: Fiona Carse

Details

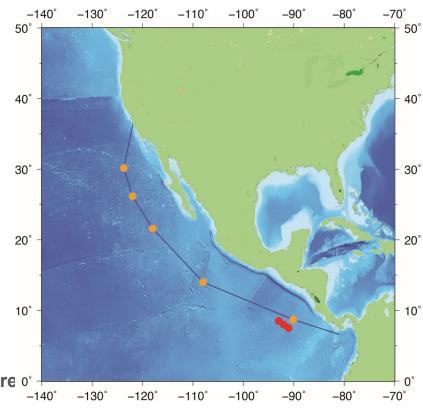
- Ship: Commandant Charcot
- Cruise dates:
- Departure/arrival ports
 - Other cruise details: Heading to NZ
- Number of floats: 1 core floats
- Looking for additional floats?
- Other information: Can deploy anywhere in red box. Will deploy as far south in red-ist area unless advised otherwise.

Map (if available)



- Ship: Packard Delivery Cruise
- Cruise dates: April 7 -
- Departure/arrival ports Vigo,
 Spain / Monterey, California
 - Other cruise details:
- Number of floats: 8 in Pacific
- Float types: 5 GO-BGC (orange),
 3 German O2 (red)
- Looking for additional floats? TBD
- Other information (including EEZ): (none requested)

Map (if available)



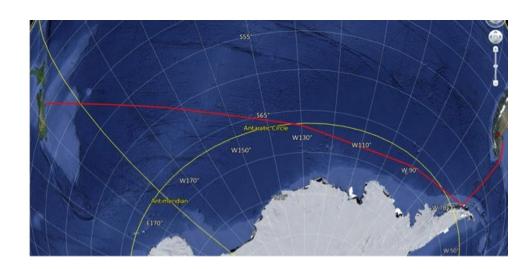
Link to additional information: (Optional, can place any re 0°

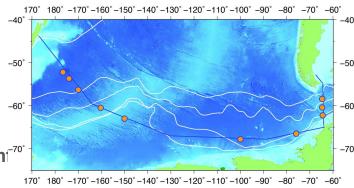
Cruise name: NBP24-04

POC (SIO): L. Talley/M. Miller (GO-BGC)

Details

- Ship: NB Palmer 24-04
- Cruise dates: April 11 May 6
- Departure/arrival ports Lyttelton,
 New Zealand Punta Arenas, Chile
 - Other cruise details: likely stop at Palmer Station
- Number of floats: 10
- Float types: 1-2 SOCCOM, rest GO-BGC
- Looking for additional floats? Yes
- Other information (including EEZ): (none requested)

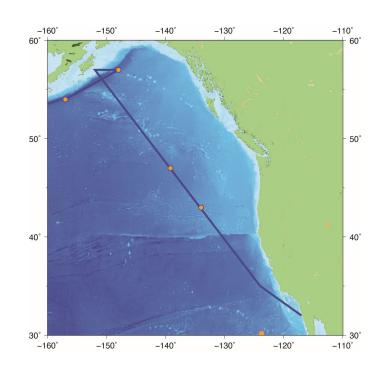




Link to additional information: (Optional, can place any relevant in 70°

- Ship: Atlantis
- Cruise dates: May 4 June 7
- Departure/arrival ports: San Diego to Kodiak, Alaska
 - Other cruise details: transit, then cruise
- Number of floats: 4-6
- Float types: 4 GO-BGC, 1-2
 PMEL (not shown on map)
- Looking for additional floats?
- Other information (including EEZ): no EEZs

Map (if available)

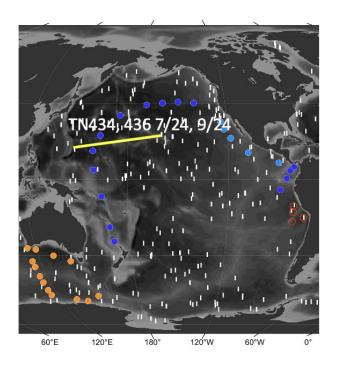


Cruise name: TN433, TN434/TN436 POC (SIO): L. Talley/M. Miller (GO-BGC)

Details

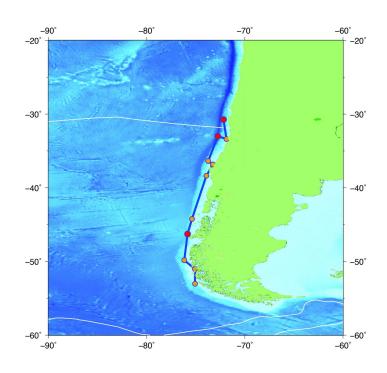
- Ship: Thompson
- Cruise dates: TN433:June 18-July 7 / TN434: July 12-Aug.1/ TN436: Sept 27 -Oct 10
- Departure/arrival ports Goa, India -Guam / Guam - Honolulu / Honolulu -Guam
 - Other cruise details: TN433, 436 are transits
- Number of floats: TBD
- Float types: GO-BGC
- Looking for additional floats?
- Other information (including EEZ): no EEZ deployments. Likely eliminates use of TN433

Map (if available)



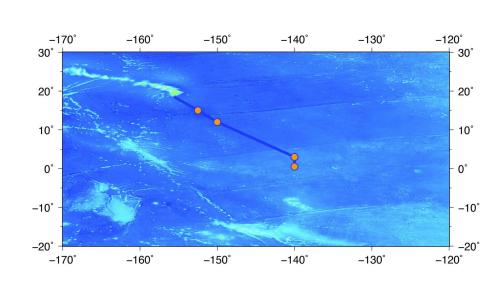
- Ship: Falkor (too)
- Cruise dates: October 13 -November 6
- Departure/arrival ports:
 Talcahuano to Puerto Montt, Chile
 - Other cruise details: load Seattle
 ~April 29, July 29
- Number of floats: 4 (red locations)
- Float types: GO-BGC
- Looking for additional floats?
- Other information (including EEZ): ship requesting Chile EEZ

Map (if available)



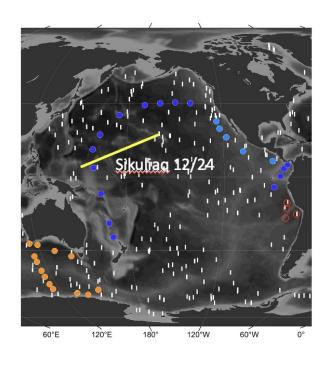
- Ship: Sikuliaq
- Cruise dates: November 1 December 3
- Departure/arrival ports: Honolulu RT
 Other cruise details: PO mooring cruise
- Number of floats: 4+
- Float types: GO-BGC (UW and SIO)
- Looking for additional floats? TBD
- Other information (including EEZ):

Map (if available)



- Ship: Sikuliaq
- Cruise dates: Dec. 9 Jan. 4 2025
- Departure/arrival ports Honolulu -Pohnpei
 - Other cruise details: MGG cruise
- Number of floats: TBD
- Float types: GO-BGC
- Looking for additional floats?
- Other information (including EEZ): no EEZ deployments

Map (if available)



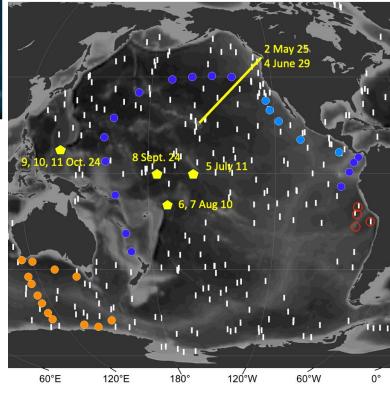
Cruise name: Nautilus 2024 POC (SIO): L. Talley/M. Miller (GO-BGC)

Details

- Ship: EV Nautilus
- Cruise dates: July Nov
- Departure/arrival ports: Sidney BC, Honolulu, Jarvis Island, American Samoa, Palau
 - Other cruise details:
- Number of floats:
- Float types: GO-BGC
- Looking for additional floats?
- Other information (including EEZ):

LOI due Feb. 1, 2024



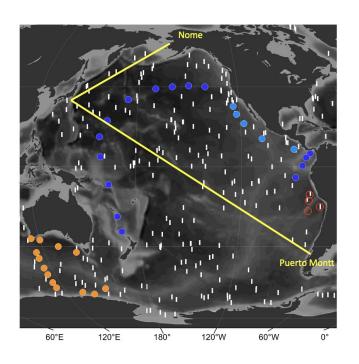


Cruise name: Lindblad 2024 POC (SIO): L. Talley/M. Miller (GO-BGC)

Details

- Ship: NatGeo Resolution
- Cruise dates: Aug 13 Sept 1 / Sept 27 - Oct 27
- Departure/arrival ports: Nome,
 Alaska Tokyo / Tokyo Puerto
 Montt, Chile
 - Other cruise details:
- Number of floats:
- Float types: GO-BGC
- Looking for additional floats?
- Other information (including EEZ):

Map (if available)



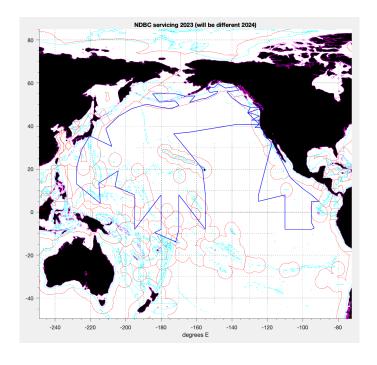
POC (Institution): E. Steffen (PMEL)

Details

- Ship: TBD (Blue Fin and/or Point Nemo)
- Cruise dates: Approx Feb 24-Oct 31
- Departure/arrival ports: Seattle
 - Other cruise details:
- Number of floats: 10+
- Float types: Core Navis, ALTO, S2A, possibly BGC from Seattle
- Looking for additional floats?
- Other information (including EEZ):

Other ports likely to include Honolulu, Dutch Harbor, Apia, Anacortes, Yokohama, Guam (all except Seattle TBD)

Map (prior year, TBD this year)

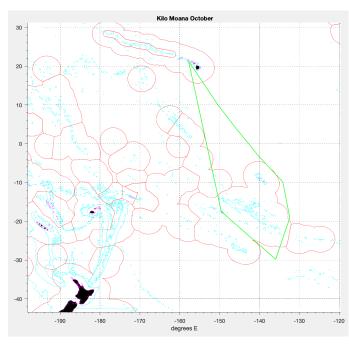


POC (Institution): E. Steffen (PMEL)

Details

- Ship: Kilo Moana
- Cruise dates: 10/21
- Departure/arrival ports: Honolulu
 - Other cruise details:
- Number of floats: 10
- Float types: Core Navis, ALTO, S2A
- Looking for additional floats?
- Other information (including EEZ):





Cruise name: Heritage Expeditions

POC (Institution): Tourism vessel

Details

- Ship: Heritage Expeditions (tourism cruise ship)
- Cruise dates: several (see <u>here</u>)
- Departure/arrival ports: NZ, Japan, Australia, some S. Pacific Islands (and summer trips to the Ross Sea and Antarctic Islands)
 - Other cruise details: Argo Australia to deploy the first two floats with them in April, near Papua New Guinea
- Number of floats: 2 (cyan dots)
- Float types: 1 MRV with RBR CTD and 1 APF11 (buddy)
- Looking for additional floats? Maybe
- Other information (including EEZ):

Map (if available)



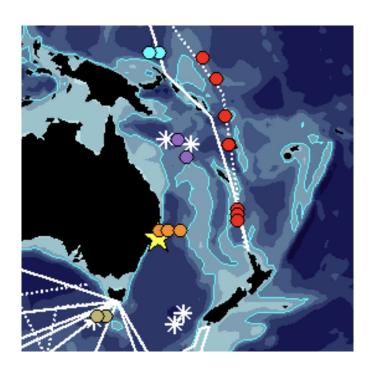
Link to additional information: direct link

Cruise name: RV Investigator, RVI2024_v04 POC (Institution): CSIRO

Details

- Ship: RVI Investigator
- Cruise dates: Jun 2024
- Departure/arrival ports Hobart, Brisbane
 - Other cruise details: deployment in the East Australian Current
- Number of floats:4 (orange dots & yellow star)
- Float types: 3 core NKE + 1 BGC NKE
- Looking for additional floats? No
- Other information (including EEZ):

Map (larger & updated map here)



Link to additional information: (RV Investigator 2024-2025 plans here)

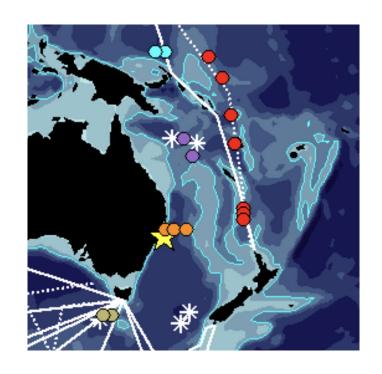
Cruise name: Australia's Bureau of Meteorology Tsunami buoys servicing voyage

POC (Institution): BOM

Details

- Ship: TBD
- Cruise dates: Nov 2024 (tentative)
- Departure/arrival ports TBD (NE Australia)
- Number of floats: 2 (purple dots)
- Float types: core NKEs
- Looking for additional floats? No
- Other information (including EEZ):

Map (larger & updated map here)



Chat text

Steffen to Everyone (Jan 24, 2024, 5:24 AM):SE Pacific is the Falkor Too's work area for early 2025, isn't it?

Lynne Talley to Everyone (Jan 24, 2024, 5:24 AM): Late 2024. They will be very coastal. I've put a slide in showing what we might do, but only a few locations deep enough.

Steffen to Everyone (Jan 24, 2024, 5:25 AM): Yes in 2024 coastal, but I thought 2025 was off the coast

Melissa Miller to Everyone (Jan 24, 2024, 5:26 AM): They're in the SW Atlantic in 2025 : Falkor long-term map is here https://schmidtocean.org/apply/

Steffen to Everyone (Jan 24, 2024, 5:27 AM) Ah...thanks. Stian was mixed up then.

Lynne Talley to Everyone (Jan 24, 2024, 5:27 AM) looks like they are crossing Drake Psg to west Antarctic peninsula in very early 2025, then into the SW Atlantic

Steffen to Everyone (Jan 24, 2024, 5:35 AM): Indian, but Thompson going from Freemantle to Goa in April

Deb West-Mack to Everyone (Jan 24, 2024, 5:38 AM): WHOI plans to deploy 3 core floats on the Thompson transit Freemantle to Goa

Issues to bring up at AST

- 1) EEZ issues in the pacific no more PAC agreement
- 2) South west pacific converge = growing hole. Not enough ships of opportunity
- 3) S. Pacific in general: coverage is dependent on one ship (Kaharoa).

Cruise name: Template

POC (Institution):

Details

Map (if available)

- Ship:
- Cruise dates:
- Departure/arrival ports
 - Other cruise details:
- Number of floats:
- Float types:
- Looking for additional floats?
- Other information (including EEZ):

Cruise name: Template

POC (Institution):

Details

Map (if available)

- Ship:
- Cruise dates:
- Departure/arrival ports
 - Other cruise details:
- Number of floats:
- Float types:
- Looking for additional floats?
- Other information (including EEZ):