

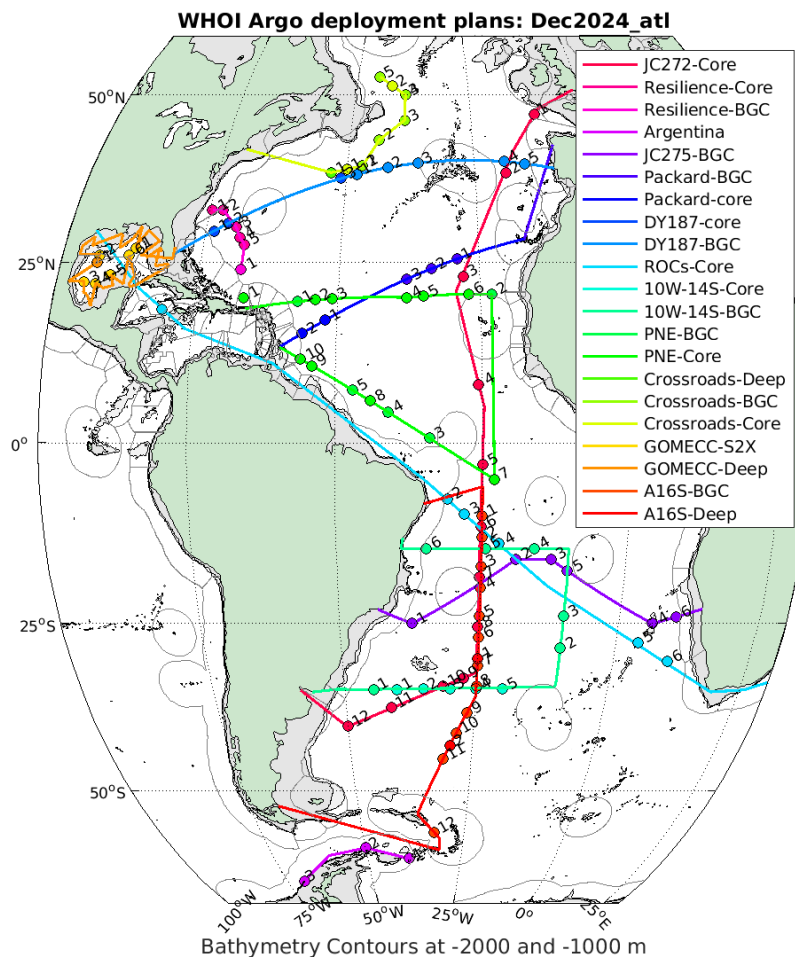
WHOI OneArgo Deployment Plans

December 2024

Updated plans and deployment manuals at <https://argo.whoi.edu/argo/deployment/>

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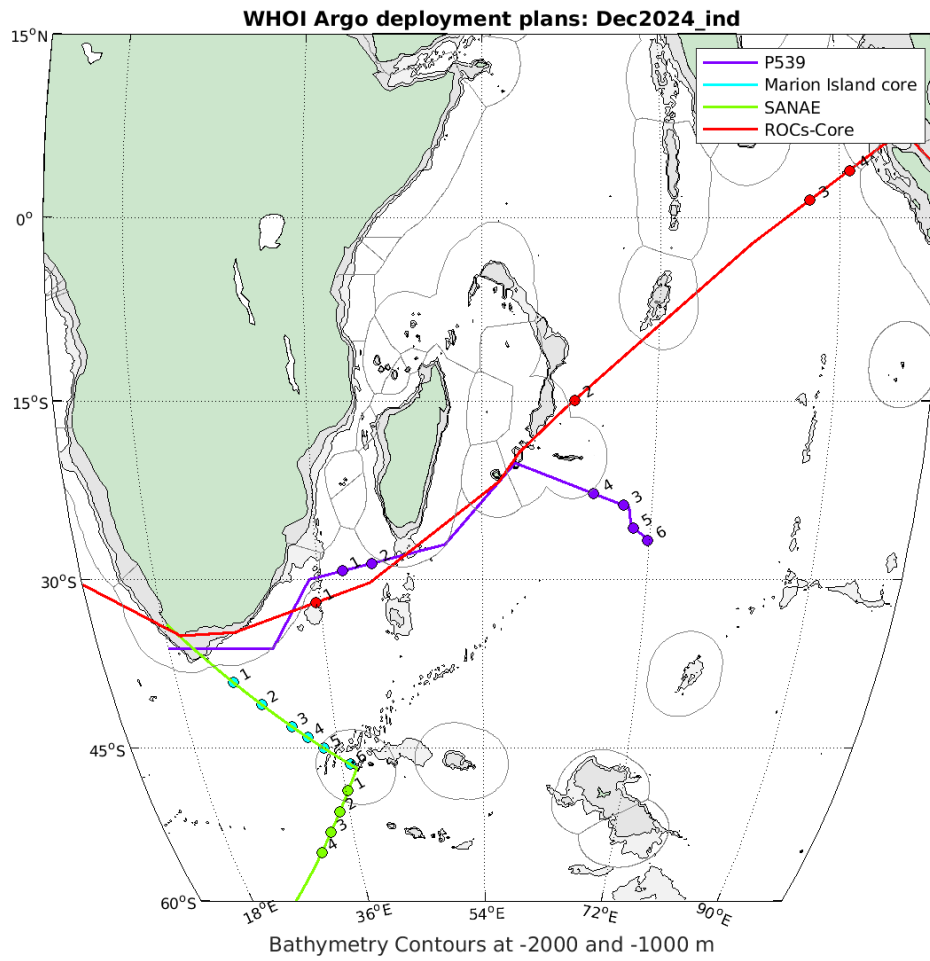
Atlantic Ocean



WHOI Argo:03-Dec-2024

Core : 45
BGC : 43
Deep : 6

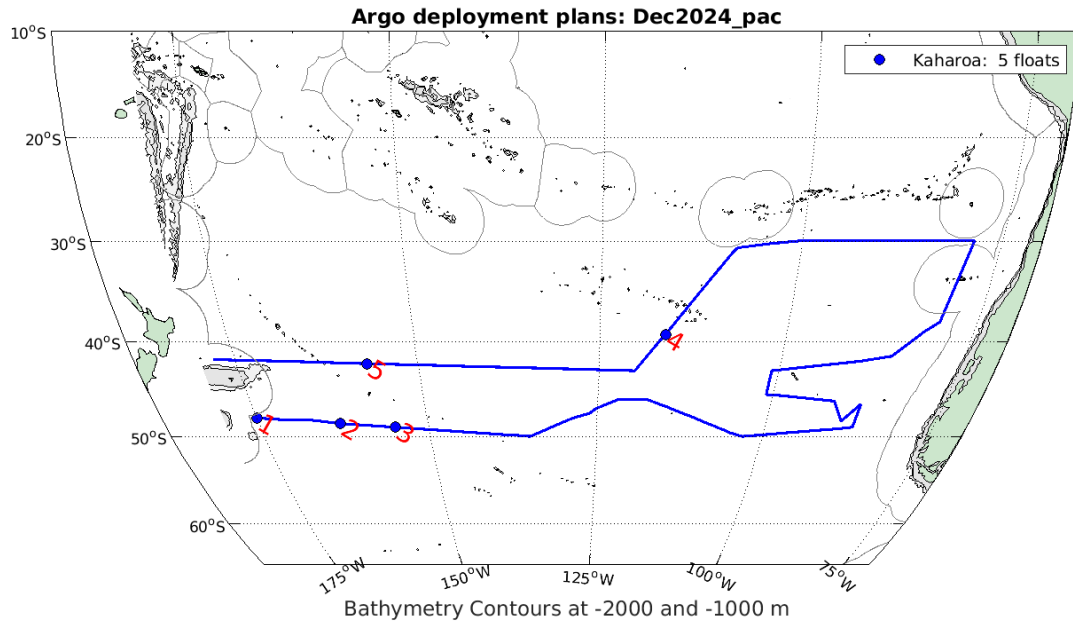
Indian/Southern Ocean



WHOI Argo:03-Dec-2024

Core : 20
BGC : 0
Deep: 0

Pacific Ocean



WHOI Argo:02-Dec-2024

Core : 0
BGC : 5
Deep: 0

In Motion

- *R/V Kaharoa II - Fall*
- *R/V Pelagia – P539*
- *RRS James Cook – JC272*
- *S/V Resilience*
- *S.A. Agulhas II – SANAE Cruise 2024*
- *Argentina*
- *RRS James Cook – JC275*
- *R/V Packard – Delivery Cruise 2024*

Planned

- *RRS Discovery – DY187*
- *MV Energos – ROCs*
- *S.A. Agulhas II – Marion Island Cruise 2025*
- *R/V Hesperides – 10W-14S*
- *R/V Brown – PNE 2025*
- *R/V Revelle – Crossroads*
- *R/V Brown – GOMECC*
- *R/V Brown – A16S*

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Float Inventory

Total: 125 Core: 65 BGC: 48 Deep: 6 S2X: 6

Loaded in Wellington, New Zealand on the R/V Kaharoa II for the Fall Cruise:

5 WHOI Navis BGC floats:

Serial numbers: 1645, 1646, 1648, 1650, 1651

Loaded in Cape Town, South Africa on the R/V Pelagia:

6 WHOI S2A floats:

Serial numbers: 7485, 7805, 7887, 7909, 7910, 7911

Loaded in Southampton, England on the RRS Cook for the JC272 Cruise:

9 WHOI S2A floats:

Serial numbers: 7794, 7898, 7900, 7922, 7923, 7940, 7966, 7967, 7972

1 WHOI Alto float:

Serial number: 11498

Loaded in Woods Hole on the S/V Resilience:

5 WHOI core floats:

Serial numbers: 7924, 7942, 7943, 7969, 7969

1 WHOI Navis BGC floats:

Serial numbers: 1564

Loaded in Cape Town, South Africa on the R/V S.A. Agulhas II:

4 WHOI S2A

Serial numbers: 7800, 7808, 7866, 7869

Shipped to the Argentine Naval Hydrography Service:

3 WHOI S2A floats:

Serial numbers: 7896, 7899, 7907

Loaded in Southampton, England on the RRS Cook for the JC275 Cruise:

6 WHOI Navis BGC floats:

Serial numbers: 1553, 1563, 1637, 1638, 1639, 1642

Loaded in Vigo, Spain on the R/V Packard for the Transit Cruise:

2 WHOI MRV Alto-RBR Core floats:
Serial numbers: 11336, 11337

3 WHOI Navis BGC floats:
Serial numbers: wn1539, wn1540, wn1541

To be loaded in Fort Everglades, FL on the RRS Discovery for the DY187 Cruise:

2 WHOI S2A floats:
Serial numbers: 7863, 7917

5 WHOI Navis BGC floats:
Serial numbers: 1584, 1585, 1640, 1641, 1643

To be loaded in Texas on an Energos ship for the ROCs Cruise:

10 WHOI core floats:
Serial numbers: TBD

To be loaded in Cape Town, South Africa on the R/V S.A. Agulhas II for the Marion Island Cruise:

6 WHOI Core floats:
Serial numbers: TBD

To be loaded in Montevideo, Uruguay on the R/V Hesperides:

5 WHOI core floats:
Serial numbers: TBD

6 WHOI Navis BGC floats:
Serial numbers: TBD

To be loaded in southeast USA on the R/V Brown for the PNE cruise:

10 WHOI core floats:
Serial numbers: TBD

5 WHOI BGC floats:
Serial numbers: TBD

To be loaded in Woods Hole on the R/V Revelle for the Crossroads cruise:

2 WHOI core floats:
Serial numbers: TBD

5 WHOI BGC floats:
Serial numbers: TBD

3 WHOI Deep floats:
Serial numbers: TBD

To be loaded in southeast USA on the R/V Brown for the GOMECC cruise:

6 WHOI S2X floats:
Serial numbers: TBD

1 WHOI Deep float:
Serial numbers: TBD

To be loaded in Miami on the R/V Brown for the A16S Cruise:

12 WHOI Navis BGC floats:
Serial numbers: TBD
2 WHOI Deep Solo floats:
Serial numbers: TBD

All floats are equivalent and interchangeable within Class. e.g. any WHOI S2a Core float is the same as other WHOI S2A Core floats so it doesn't matter which specific float is deployed at each location – whichever is available (of appropriate type) at the top of the stack is fine.

Deployment Reporting

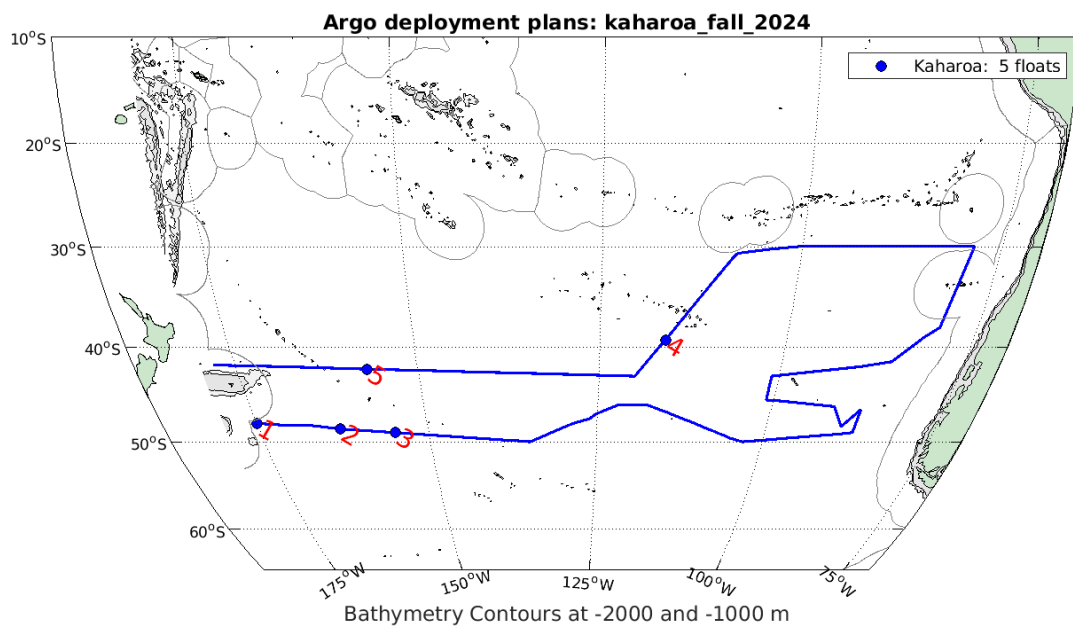
After Float deployment please report the following to deploymentinfo@whoi.edu

1. Float #
2. Deployment Location (latitude and longitude)
3. Deployment Time (GMT)
4. Any issues or problems with the deployment water release, tangled lines, etc.

R/V Kaharoa II Fall 2024 : underway

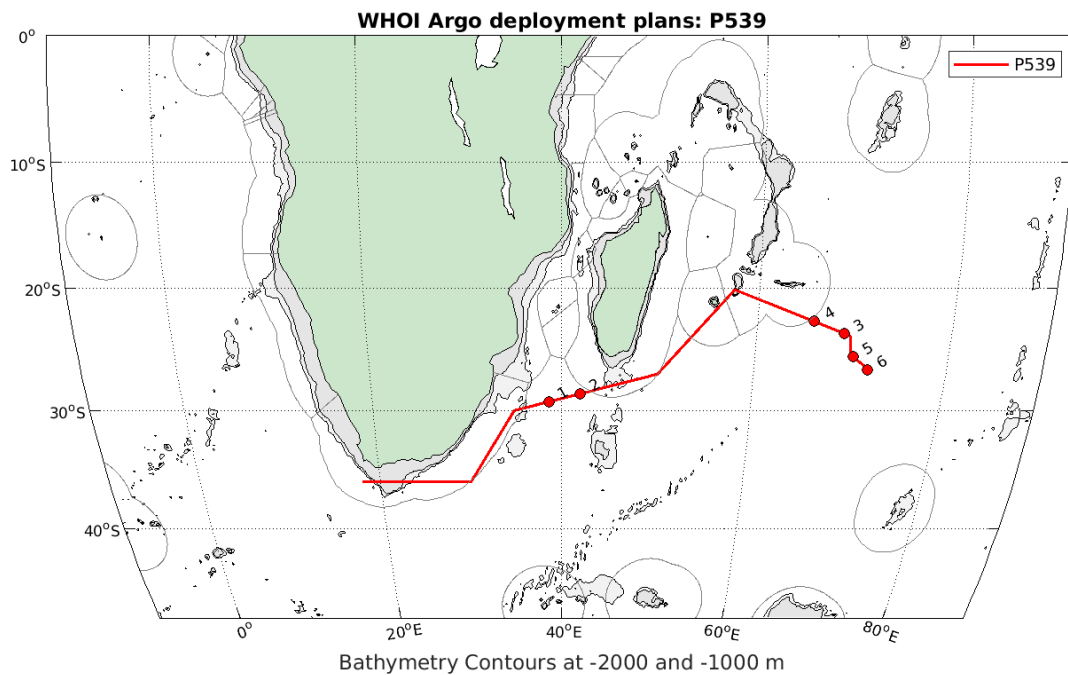
Index	Latitude	Longitude	Float Type	Comments
1	48.00° S	175.00° W	WHOI BGC	1645
2	48.60° S	163.00° W	WHOI BGC	1646
3	49.00° S	155.00° W	WHOI BGC	1648
4	39.25° S	116.25° W	WHOI BGC	1650
5	42.267° S	157.00° W	WHOI BGC	1651

Floats are part of a larger cruise out of New Zealand run by SIO.



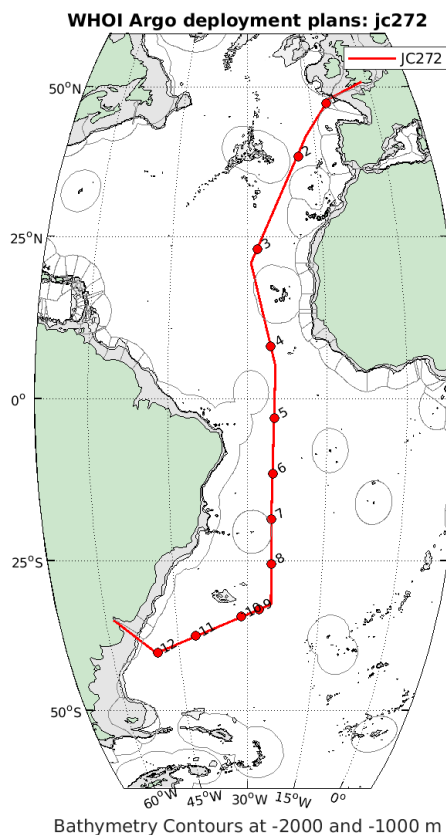
R/V Pelagia – P539 : underway

Index	Latitude	Longitude	Float Type	Comments
1	29.26° S	38.70° E	WHOI Core	Deploy by longitude and outside of EEZs.
2	28.60° S	41.99° E	WHOI Core	
3	23.68° S	68.97° E	WHOI Core	
4	22.70° S	65.80° E	WHOI Core	
5	25.59° S	70.15° E	WHOI Core	
6	26.68° S	71.78° E	WHOI Core	



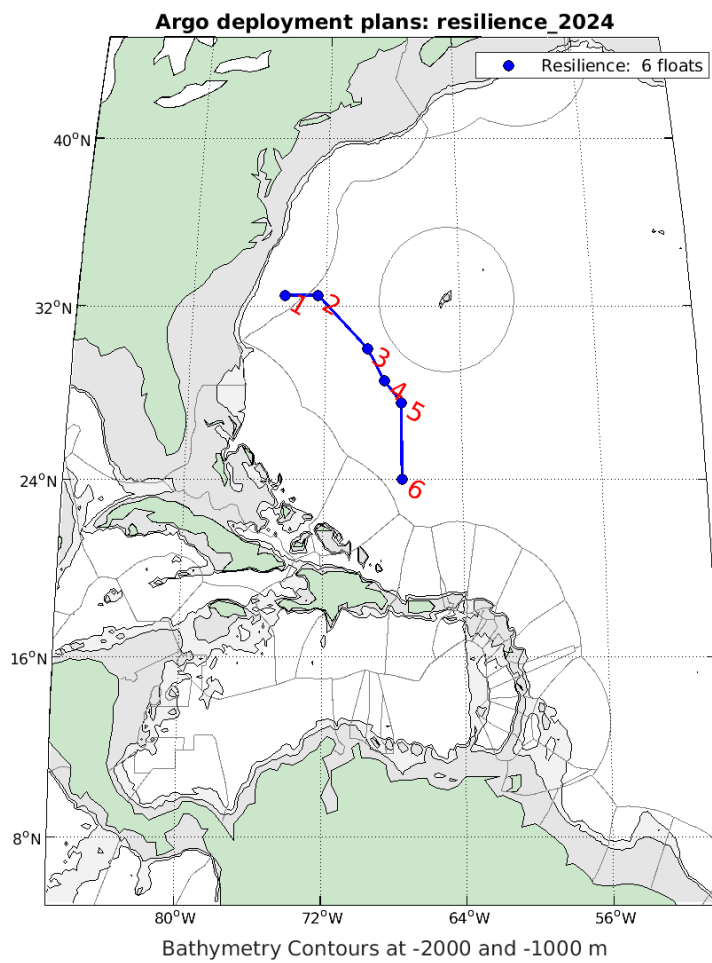
RRS Cook – JC272 : underway

Index	Latitude	Longitude	Float Type	Serial Number	Comments
1	47.0° N	11.23° W	WHOI Core	7794	Deploy by longitude and outside of EEZs.
2	38.0° N	18.90° W	WHOI Core	7898	
3	23.0° N	27.97° W	WHOI Core	7900	
4	08.0° N	25.60° W	WHOI Core	7922	
5	03.0° S	24.93° W	WHOI Core	7923	
6	11.5° S	25.17° W	WHOI Core	7940	
7	18.5° S	25.35° W	UK Core	8580	
8	25.5° S	25.22° W	UK Core	8581	
9	32.8° S	27.52° W	WHOI Core	7966	
10	34.0° S	31.26° W	WHOI Core	7967	
11	37.2° S	41.21° W	WHOI Core	7972	
12	40.0° S	49.93° W	WHOI Core	11498	



S/V Resilience 2024 : Dec 11, 2024

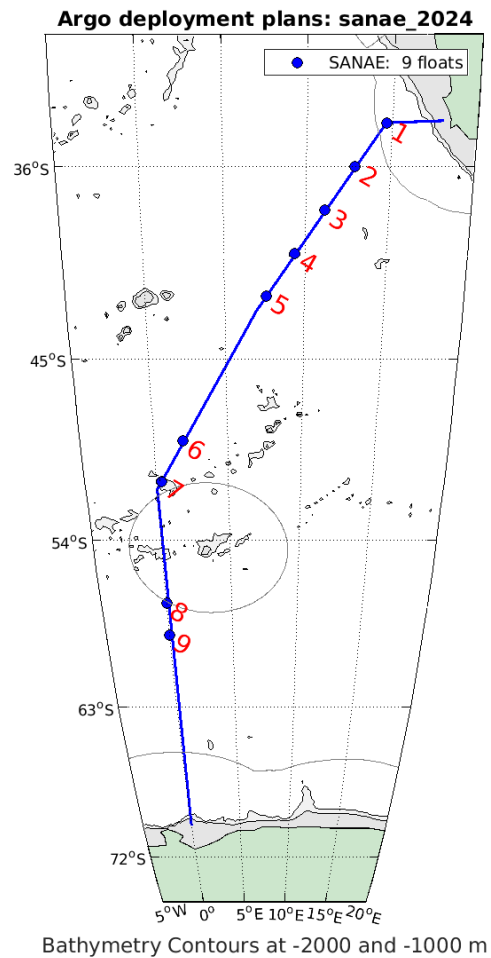
Index	Latitude	Longitude	Float Type	Comments
1	32.5° N	74.5° W	WHOI Core	
2	32.5° N	72.5° W	WHOI Core	
3	30.0° N	69.5° W	WHOI Core	
4	28.5° N	68.5° W	WHOI Core	
5	27.5° N	67.5° W	WHOI Core	
6	24.0° N	67.5° W	WHOI BGC	



WHOI Argo:26-Nov-2024

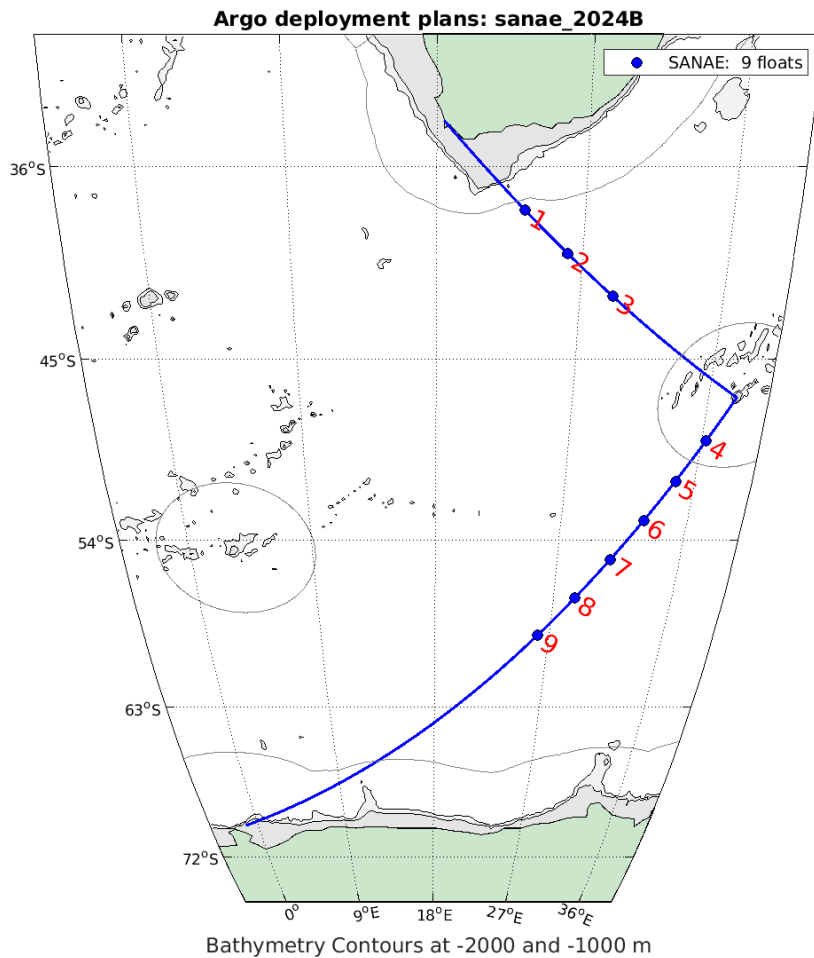
SANAE 2024 – Plan A : mid-Dec 2024

Index	Latitude	Longitude	Float Type	Serial #	Comments
1	-34	14.640	WHOI Core	7800	Please deploy by latitude and avoid Bouvet Island EEZ
2	-36	12.884	WHOI Core	7808	
3	-38	11.127	German Oxygen	AI2632_24DE001	
4	-40	9.371	German Oxygen	AI2632_24DE003	
5	-42	7.615	German Oxygen	AI2632_24DE004	
6	-49	1.948	WHOI Core	7866	
7	-51	0.345	WHOI Core	7869	
8	-57.3	0	UK Ice	10515	
9	-59	0	UK Ice	10516	



SANAE 2024 – Plan B : mid-Dec 2024

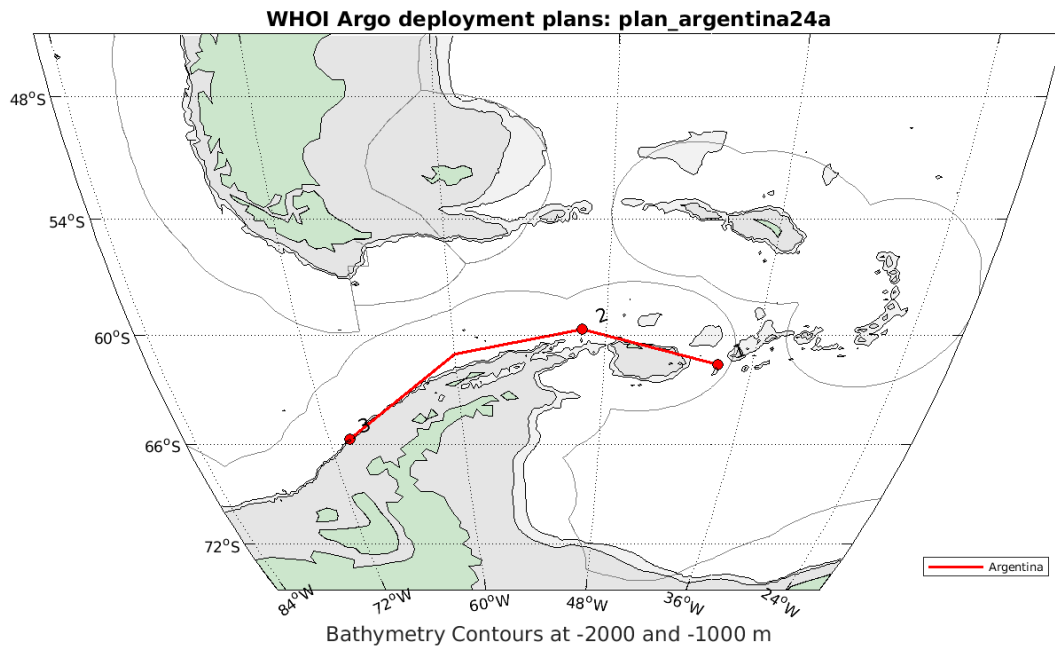
Index	Latitude	Longitude	Float Type	Serial #	Comments
1	-38	23.35	German Oxygen	AI2632_24DE001	Please deploy by latitude.
2	-40	26.06	German Oxygen	AI2632_24DE003	
3	-42	29.03	German Oxygen	AI2632_24DE004	
4	-49	36.30	WHOI Core	7800	
5	-51	34.69	WHOI Core	7808	
6	-53	32.90	WHOI Core	7866	
7	-55	30.90	WHOI Core	7869	
8	-57	2.68	UK Ice	10515	
9	-59	26.13	UK Ice	10516	



Argentine Naval Hydrography Service 2024 : Dec 10, 2024

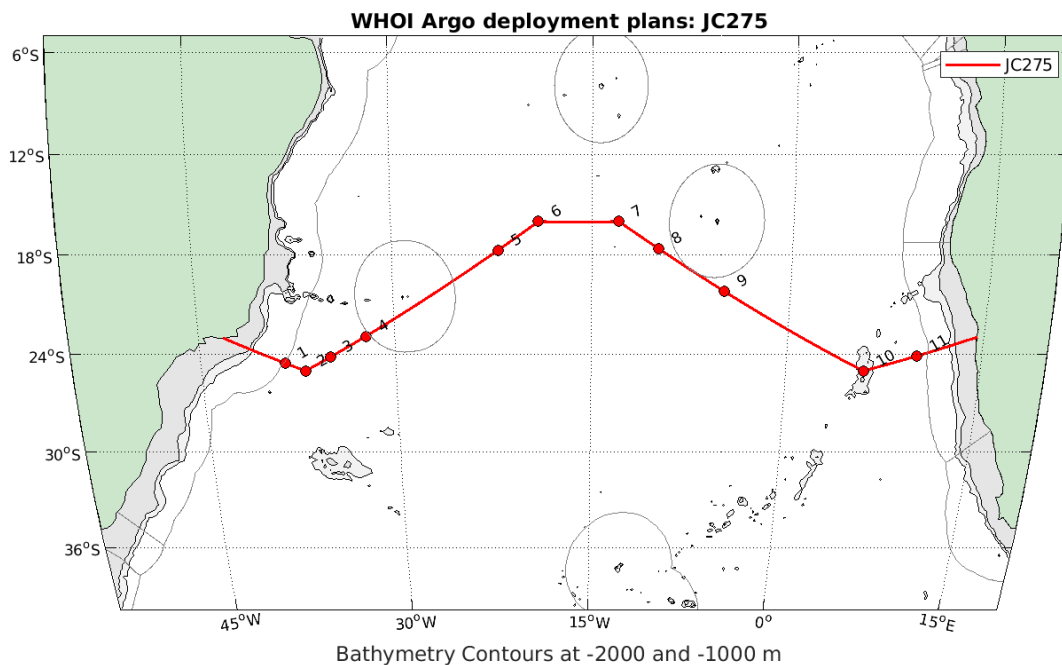
Index	Latitude	Longitude	Float Type	Comments
1	61° 34' 4.00"S	38° 21' 24.02"W	WHOI Core	7896
2	59° 40' 20.33"S	49° 50' 56.25"W	WHOI Core	7899
3	65° 41' 29.48"S	70° 7' 44.48"W	WHOI Core	7907

The Argentine Naval Hydrography Service is encouraged to deploy floats in the regions of most need.



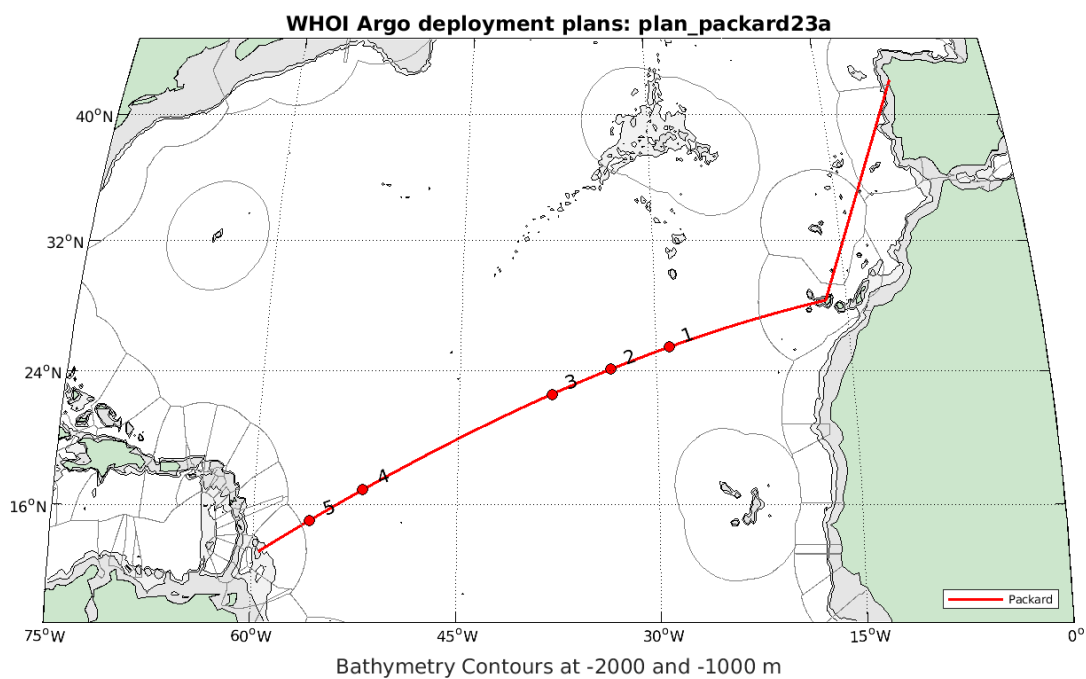
RRS Cook – JC275 : Feb 12, 2025

Index	Latitude	Longitude	Float Type	Comments
1	24.54° S	38.50° W	German core	
2	25.00° S	37.00° W	WHOI BGC	1563
3	24.15 S	35.00° W	UK core	10523
4	22.89° S	32.20° W	German core	
5	17.70° S	22.00° W	UK core	10522
6	16.00° S	19.00° W	WHOI BGC	1639
7	16.00° S	13.00° W	WHOI BGC	1638
8	17.63° S	10.00° W	WHOI BGC	1637
9	20.17° S	5.00° W	German core	
10	25.00° S	06.00° E	WHOI BGC	1553
11	24.10° S	10.00° E	WHOI BGC	1642



R/V Packard Delivery Cruise : Feb/Mar 2025

Index	Latitude	Longitude	Float Type	Float Number
1	25.430° N	29.0° W	WHOI BGC	
2	24.084° N	33.5° W	WHOI BGC	
3	22.574° N	38.0° W	WHOI BGC	
4	16.861° N	52.0° W	WHOI RBR Core	
5	15.012° N	55.9° W	WHOI RBR Core	



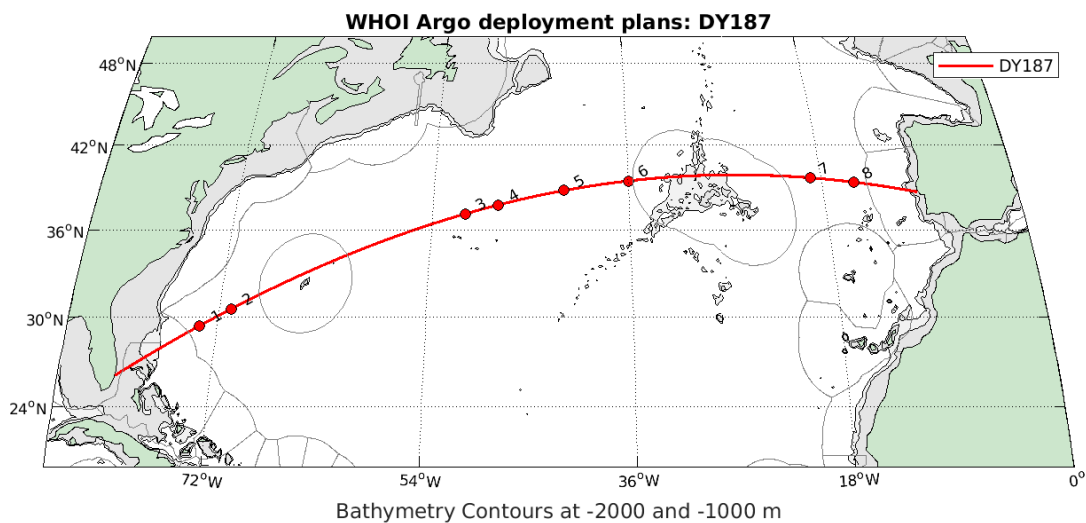
RRS Discovery Cruise – DY187 : Dec 21, 2024

Index	Latitude	Longitude	Float Type	Float Number	Comments
1	29.43° N	73.50° W	WHOI Core*		Deploy by longitude and outside of EEZs.
2	30.56° N	71.00° W	WHOI Core		
4	37.12° N	51.00° W	UK Core**	9631	
4	35.42° N	48.00° W	WHOI BGC***		
5	36.11° N	42.00° W	WHOI BGC		
6	36.50° N	36.00° W	WHOI BGC		
7	37.52° N	19.00° W	WHOI BGC		
8	36.11° N	15.00° W	WHOI BGC		

*WHOI Core – in cardboard boxes – all are ballasted the same and can be interchanged with other WHOI Core

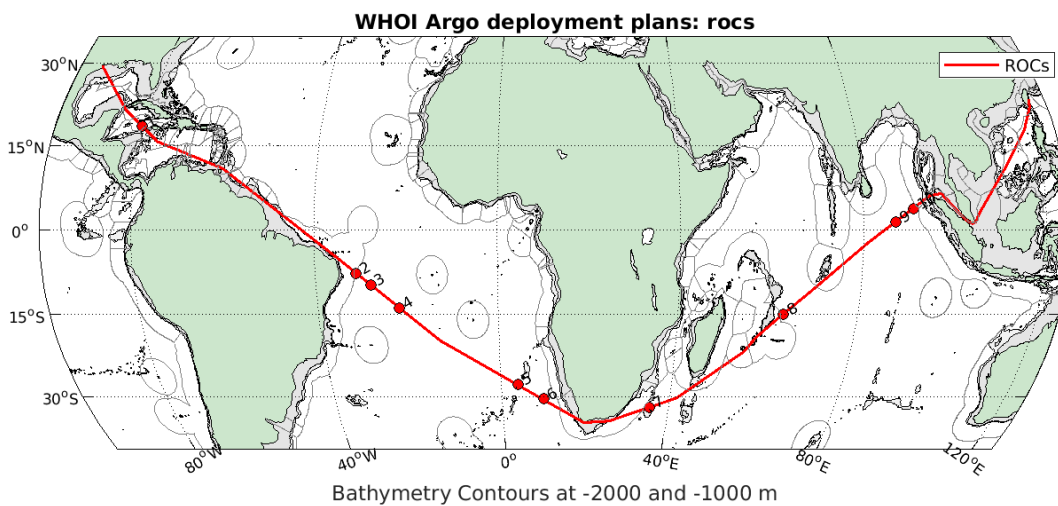
**UK Core – in a wooden crate #9631 specifically ballasted for this location

***WHOI BGC – in wooden crates – all are ballasted the same and can be interchanged with other WHOI BGC



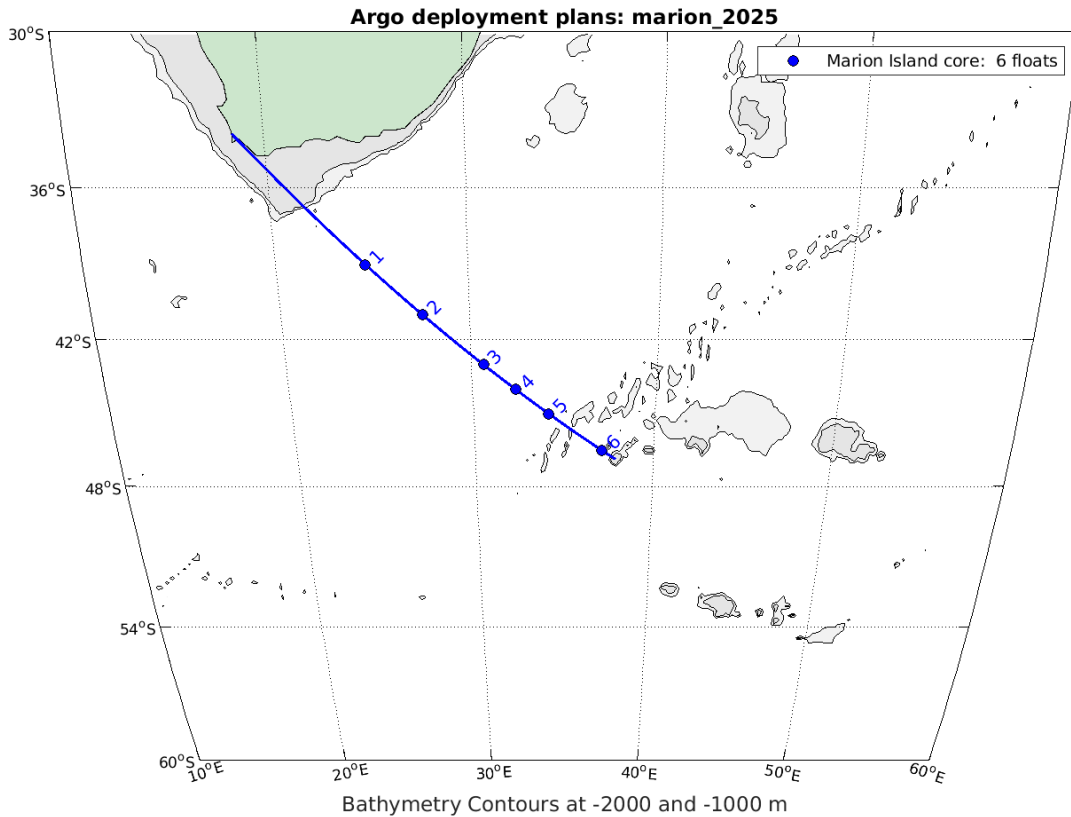
ROCs – Jan/Feb 2025

Index	Latitude	Longitude	Float Type	Comments
1	18.41° N	80.50° W	WHOI core	
2	7.70° S	31.00° W	WHOI core	
3	09.74 S	28.00° W	WHOI core	
4	13.83° S	22.00° W	WHOI core	
5	27.69° S	4.00° E	WHOI core	
6	30.44° S	10.00° E	WHOI core	
7	31.96° S	35.00° E	WHOI core	
8	14.94° S	63.50° E	WHOI core	
9	01.39° N	87.00° E	WHOI core	
10	03.81° N	91.00° E	WHOI core	



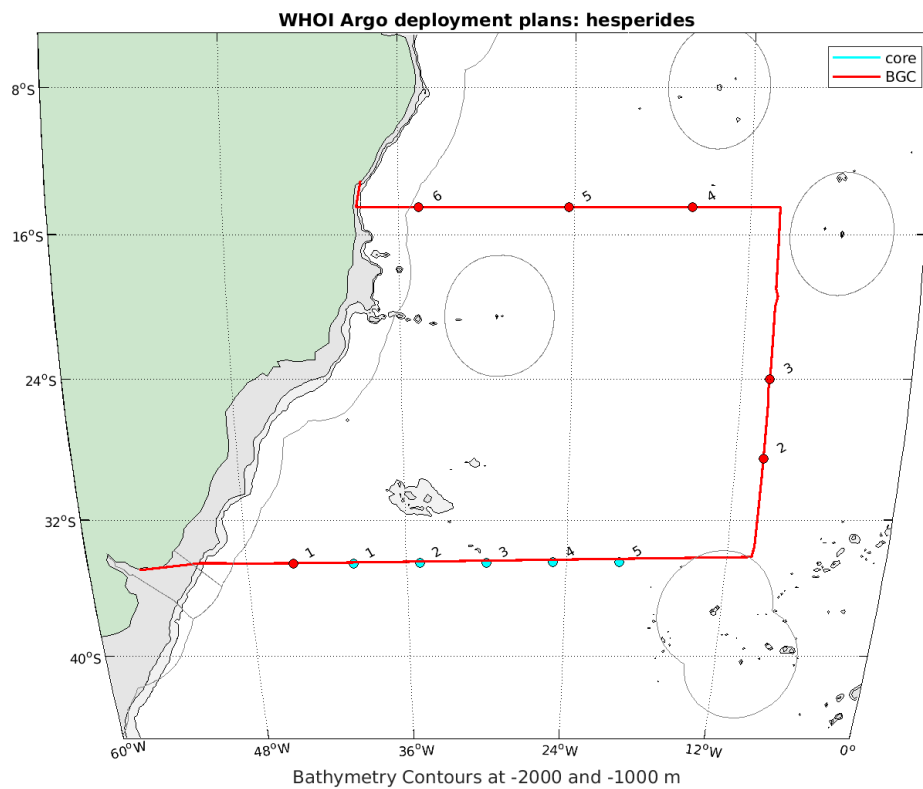
SA Agulhas II - Marion Island : April 2025

Index	Latitude	Longitude	Float Type	Comments
1	39.0° S	24.67° E	Core	Deploy by latitude.
2	41.0° S	27.51° E	Core	
3	43.0° S	30.64° E	Core	
4	44.0° S	32.34° E	Core	
5	45.0° S	34.14° E	Core	
6	46.5° S	37.09° E	Core	



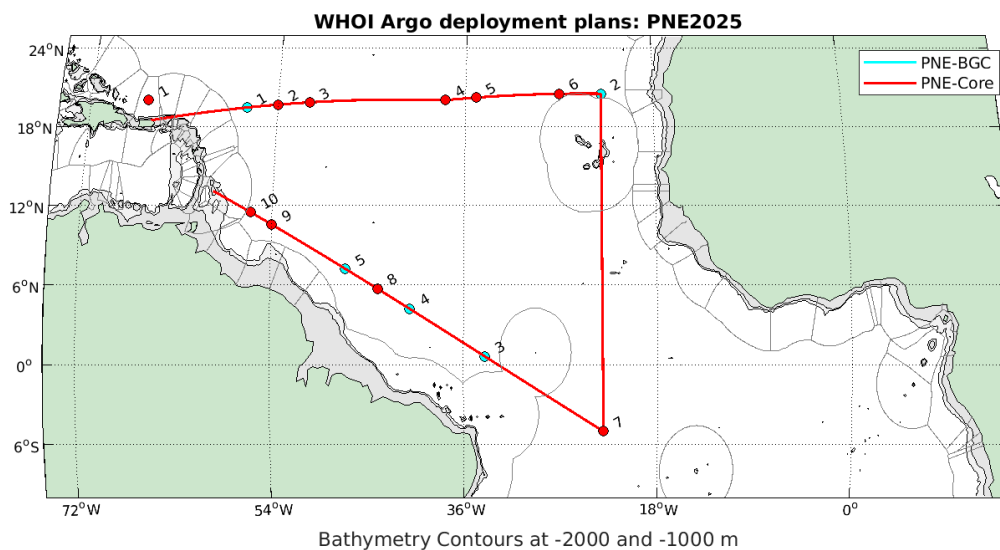
RV Hesperides - 10W-14S : April 8, 2025

Index	Latitude	Longitude	Float Type	Station
1	34.5° S	44.5° W	BGC	Last test cast
2	34.5° S	40.0° W	Core	n/a
3	34.48° S	35.0° W	Core	n/a
4	34.46° S	30.0° W	Core	n/a
5	34.44° S	25.0° W	Core	n/a
6	34.42° S	20.0° W	Core	n/a
7	28.5° S	10.0° W	BGC	12
8	24.0° S	10.0° W	BGC	20
9	14.5° S	16.0° W	BGC	49
10	14.5° S	24.4° W	BGC	63
11	14.5° S	34.6° W	BGC	80



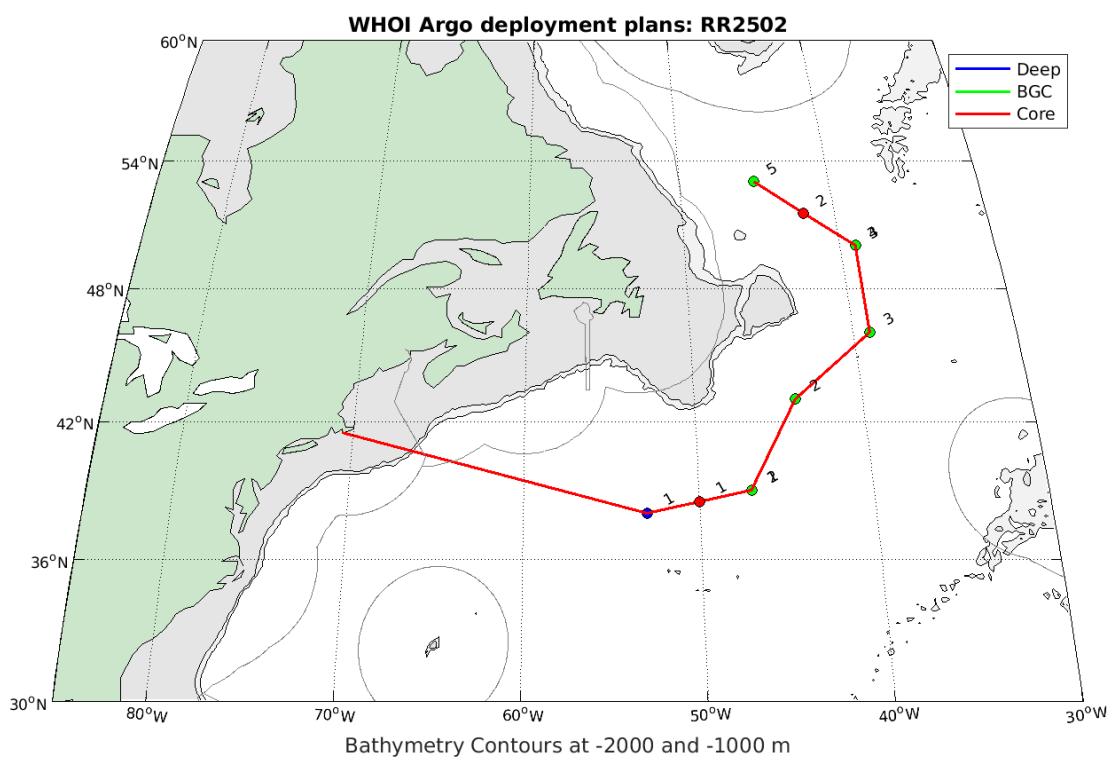
RV Brown - PNE2025 : Jun 8, 2025

Index	Latitude	Longitude	Float Type	Comments
1	20.0° N	66.5° W	Core	
2	19.4° N	57.0° W	BGC	
3	19.7° N	54.0° W	Core	
4	19.8° N	51.0° W	Core	
5	20.0° N	38.0° W	Core	
6	20.2° N	35.0° W	Core	
7	20.5° N	27.0° W	Core	
8	20.5° N	23.0° W	BGC	
9	5.0° S	23.0° W	Core	
10	0.62° N	34.0° W	BGC	
11	4.2° N	41.0° W	BGC	
12	5.7° N	44.0° W	Core	
13	7.2° N	47.0° W	BGC	
14	10.6° N	54.0° W	Core	
15	11.5° N	56.0° W	Core	



RV Revelle - RR2502 – Crossroads : May 9, 2025

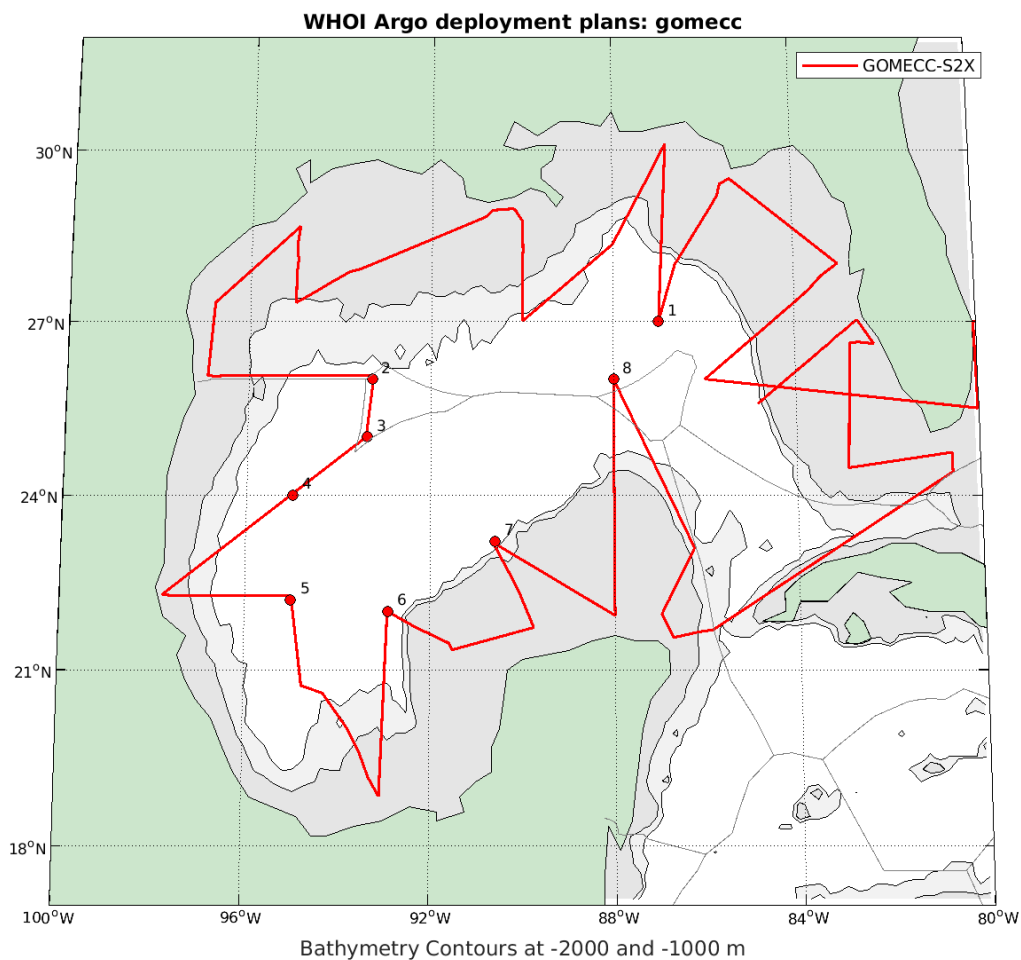
Index	Latitude	Longitude	Float Type	Comments
1	38.0° N	53.0° W	Deep	
2	38.5° N	50.0° W	Core	
3	39.0° N	47.0° W	Deep	
4	39.0° N	47.0° W	BGC	
5	43.0° N	44.0° W	BGC	
6	46.0° N	39.0° W	BGC	
7	50.0° N	39.0° W	Deep	
8	50.0° N	39.0° W	BGC	
9	51.5° N	42.0° W	Core	
10	53.0° N	45.0° W	BGC	



RV Brown - GOMECC : Aug/Sep 2025

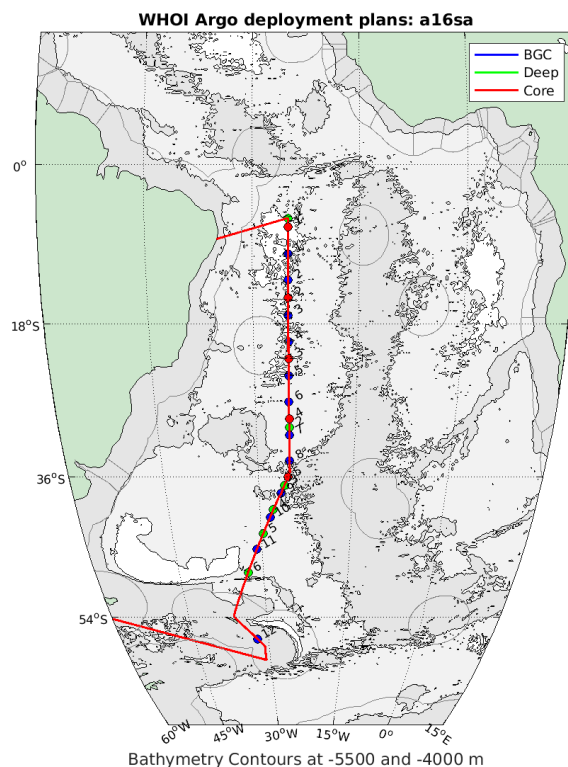
Index	Latitude	Longitude	Float Type	Comments
1**	27.0° N	87.0° W	S2X	
2	26.0° N	93.3° W	S2X	
3	25.0° N	93.4° W	Deep	
4**	24.0° N	95.0° W	S2X	Needs Mexican EEZ clearance
5	22.2° N	95.0° W	S2X	Needs Mexican EEZ clearance
6	22.0° N	92.9° W	S2X	Needs Mexican EEZ clearance
7	23.2° N	90.6° W	S2X	Needs Mexican EEZ clearance
8**	26.0° N	88.0° W	S2X	

**Only 2 of the 3 positions will have a float deployment.



RV Brown - A16S : Nov 2025

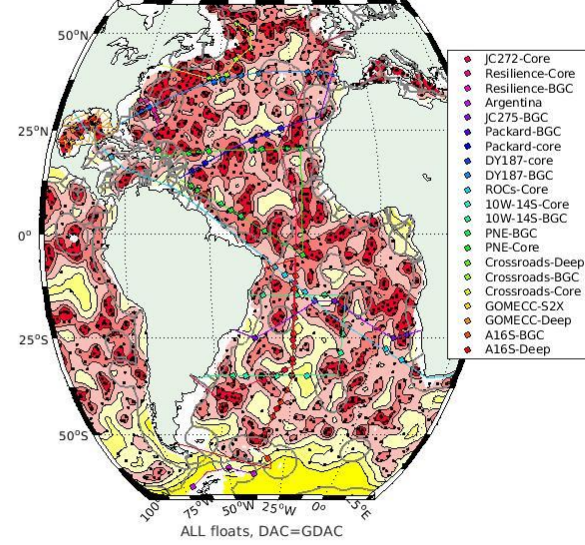
Index	Latitude	Longitude	Float Type	Comments
1	10.00° S	25.00° W	WHOI BGC	
2	13.00° S	25.00° W	WHOI BGC	
3	17.00° S	25.00° W	WHOI BGC	
4	20.00° S	25.00° W	WHOI BGC	
5	24.00° S	25.00° W	WHOI BGC	
6	27.00° S	25.00° W	WHOI BGC	
7	30.00° S	25.00° W	WHOI Deep	
8	31.00° S	25.00° W	WHOI BGC	
9	34.00° S	25.00° W	WHOI BGC	
10	38.00° S	26.44° W	WHOI BGC	
11	41.00° S	28.40° W	WHOI BGC	
12	43.00° S	29.64° W	WHOI Deep	
13	45.00° S	30.90° W	WHOI BGC	
14	57.00° S	32.29° W	WHOI BGC	



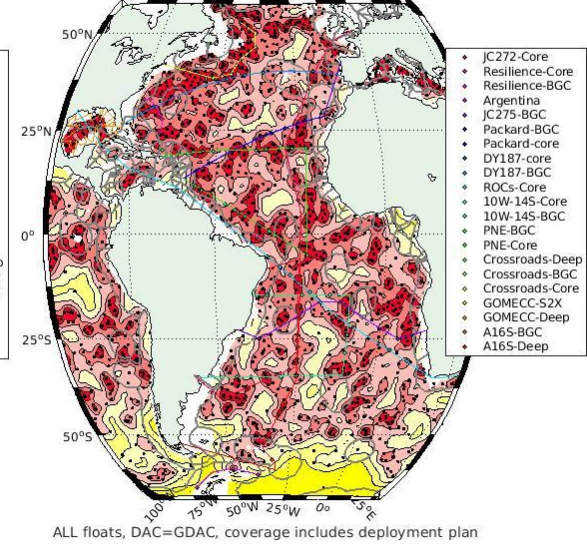
Atlantic Ocean Background/Supplemental Maps

All Floats (Coverage BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



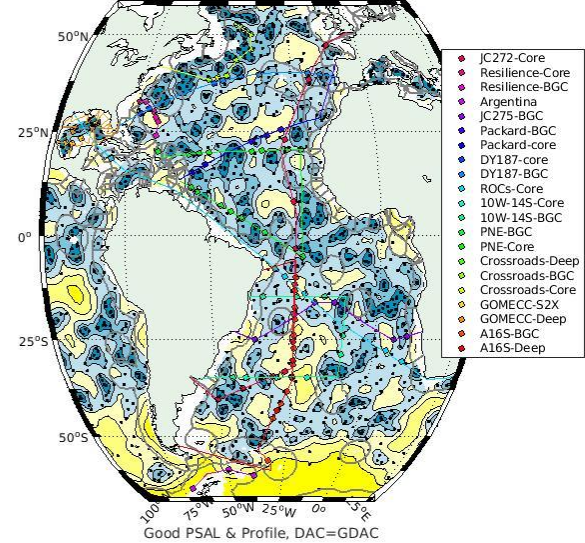
Argo deployment plans, overlay on coverage map: Dec2024_atl



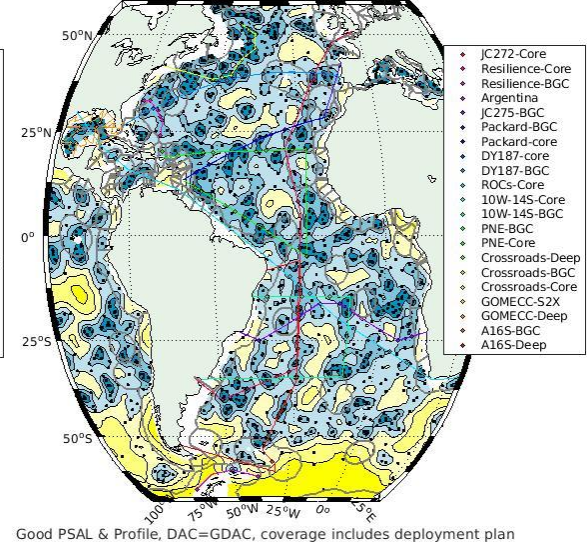
WHOI Argo:03-Dec-2024

Healthy (conductivity sensor) (Coverage BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



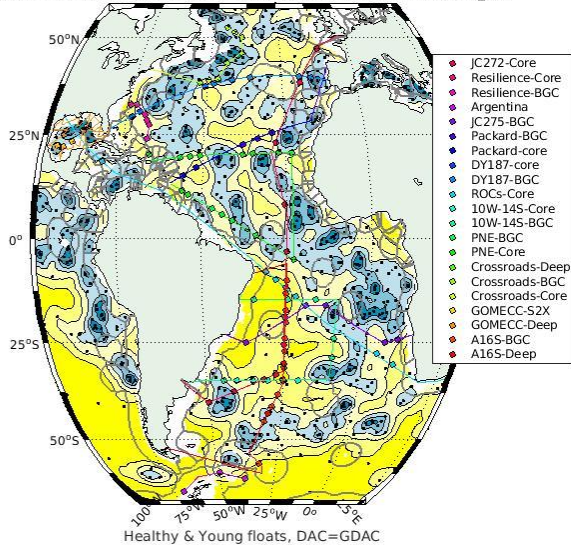
Argo deployment plans, overlay on coverage map: Dec2024_atl



WHOI Argo:03-Dec-2024

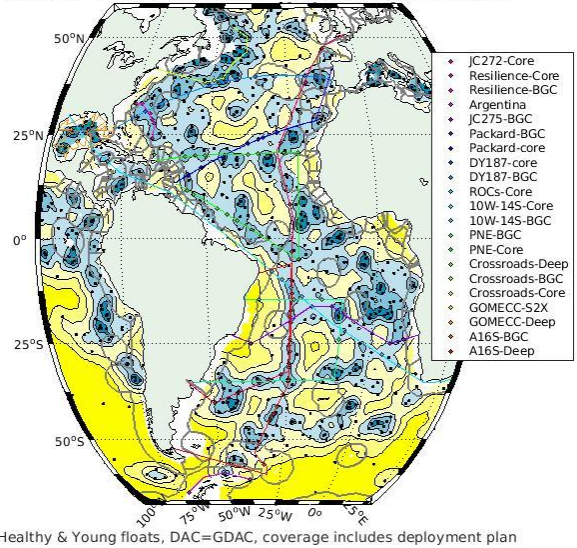
Healthy (conductivity sensor) & Young (Coverage BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



Healthy & Young floats, DAC=GDAC

Argo deployment plans, overlay on coverage map: Dec2024_atl

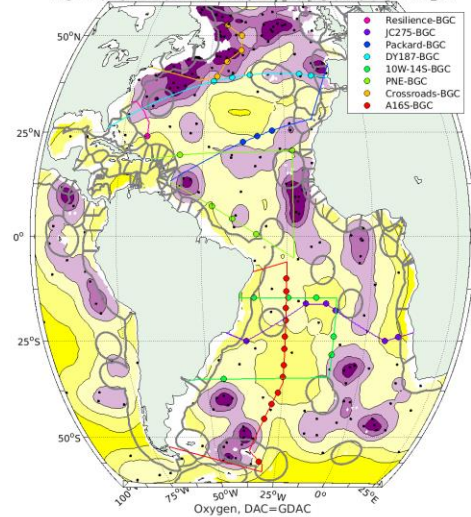


Healthy & Young floats, DAC=GDAC, coverage includes deployment plan

WHOI Argo:03-Dec-2024

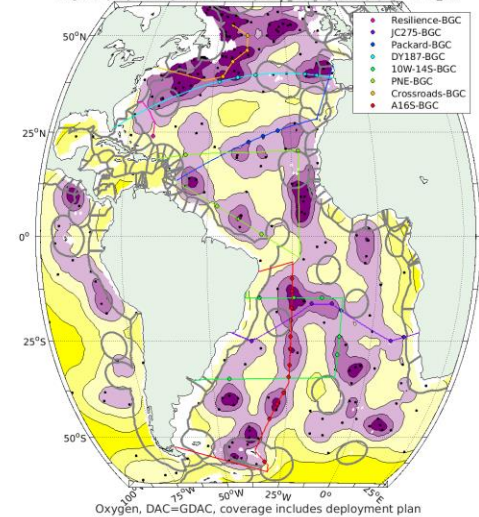
Oxygen (BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



Oxygen, DAC=GDAC

Argo deployment plans, overlay on coverage map: Dec2024_atl

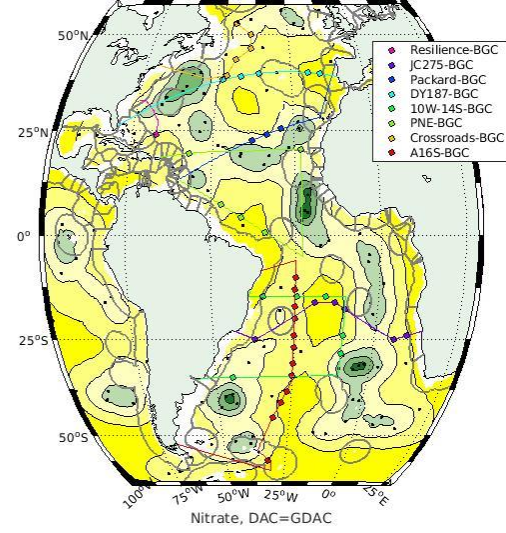


Oxygen, DAC=GDAC, coverage includes deployment plan

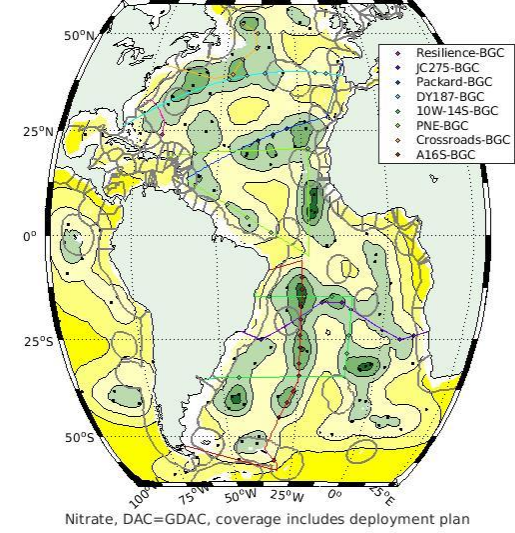
WHOI Argo:03-Dec-2024

Nitrate (BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



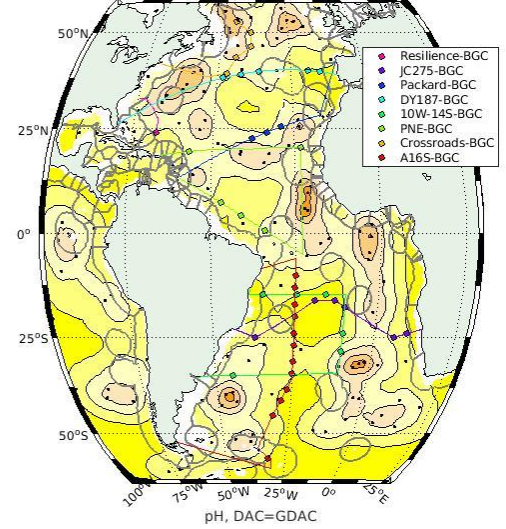
Argo deployment plans, overlay on coverage map: Dec2024_atl



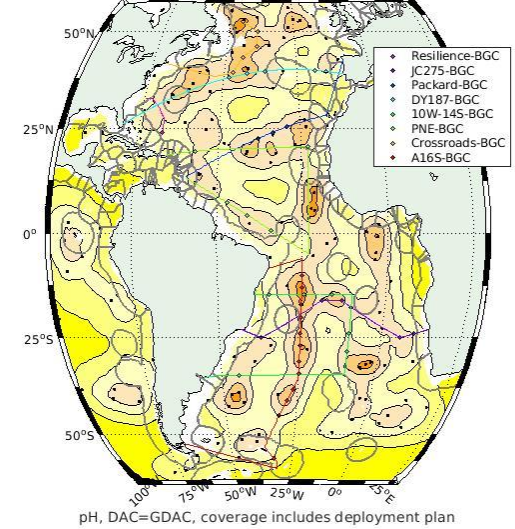
WHOI Argo.03-Dec-2024

pH (BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl



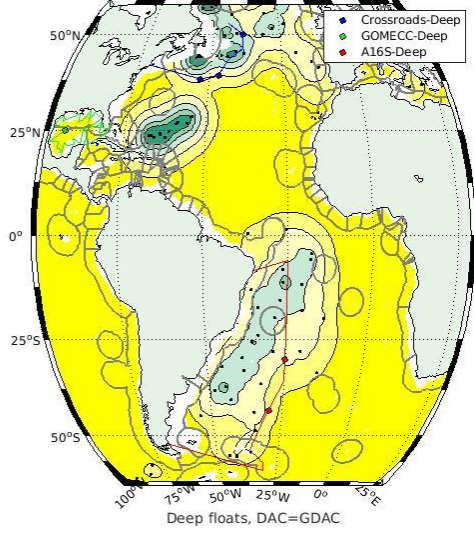
Argo deployment plans, overlay on coverage map: Dec2024_atl



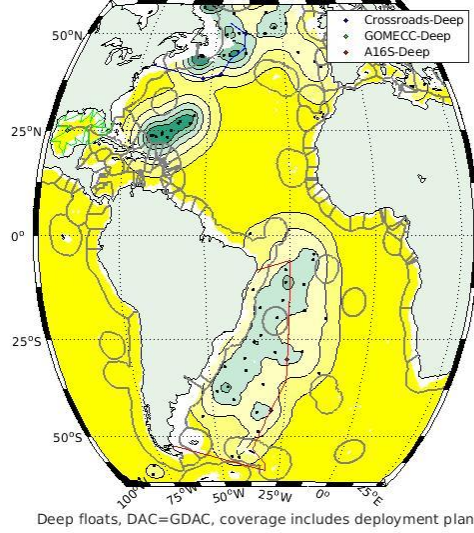
WHOI Argo.03-Dec-2024

Deep (BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_atl

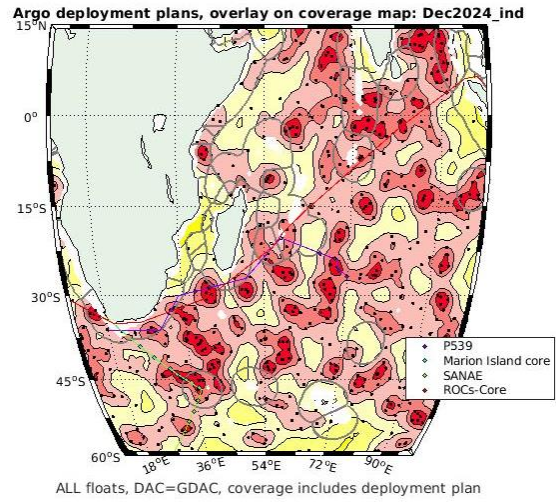
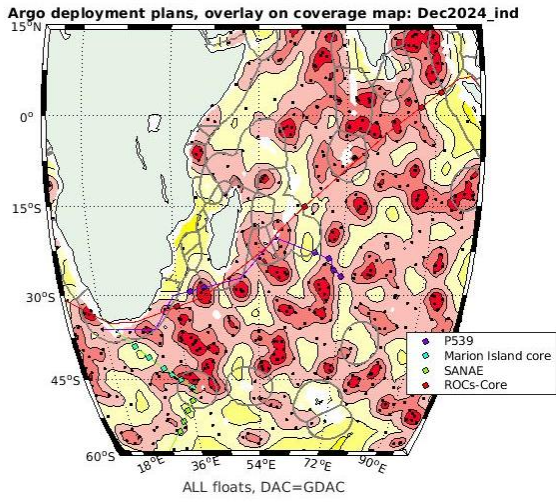


Argo deployment plans, overlay on coverage map: Dec2024_atl



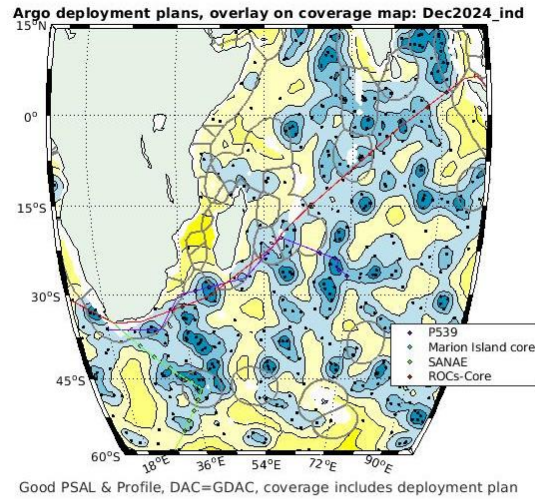
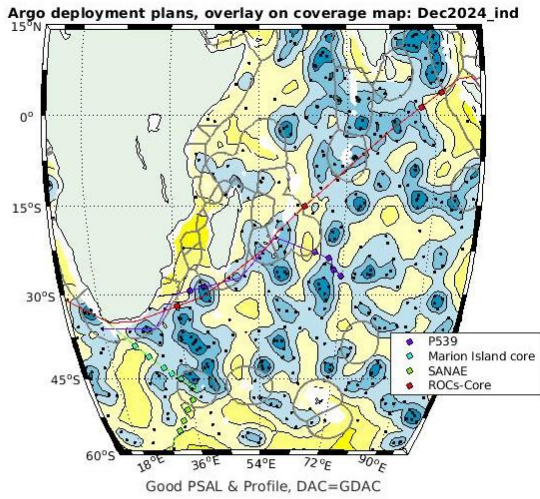
Indian/Southern Ocean Background/Supplemental Maps

All Floats (Coverage BEFORE/AFTER)



WHOI Argo:03-Dec-2024

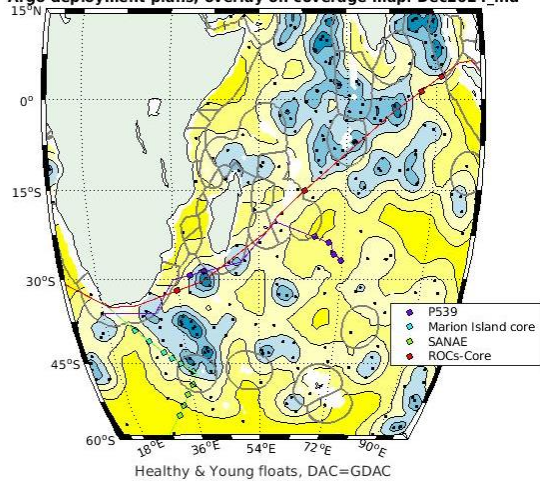
Healthy (conductivity sensor) (Coverage BEFORE/AFTER)



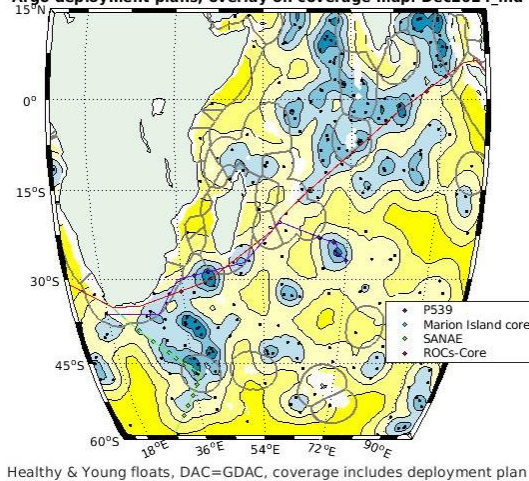
WHOI Argo:03-Dec-2024

Healthy (conductivity sensor) & Young (Coverage BEFORE/AFTER)

Argo deployment plans, overlay on coverage map: Dec2024_ind

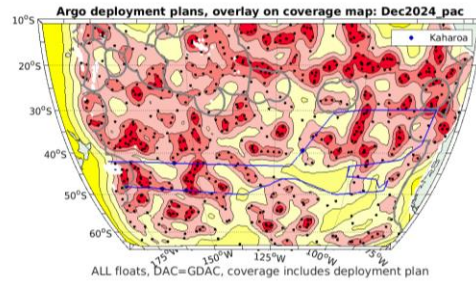
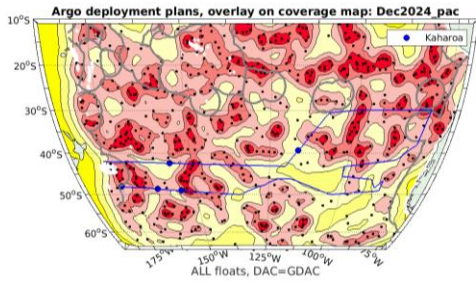


Argo deployment plans, overlay on coverage map: Dec2024_ind

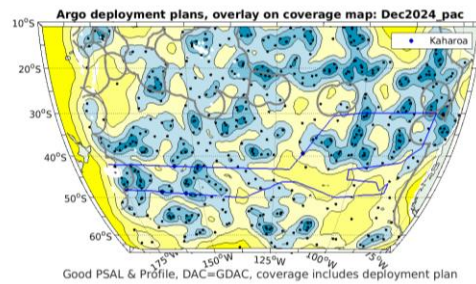
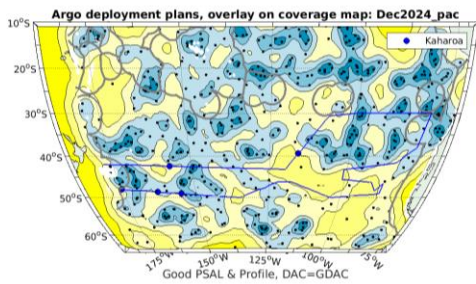


Pacific Ocean Background/Supplemental Maps

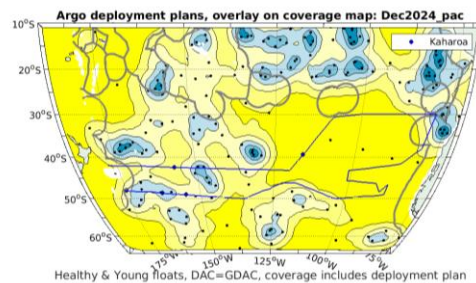
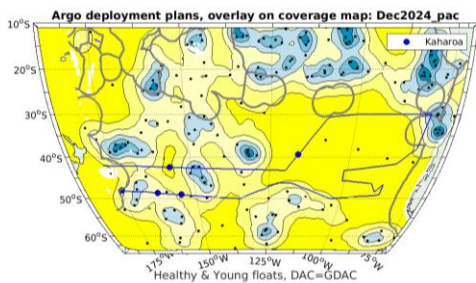
All Floats (Coverage BEFORE/AFTER)



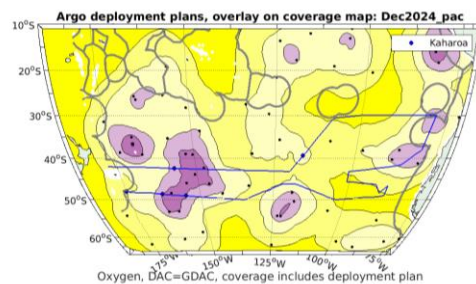
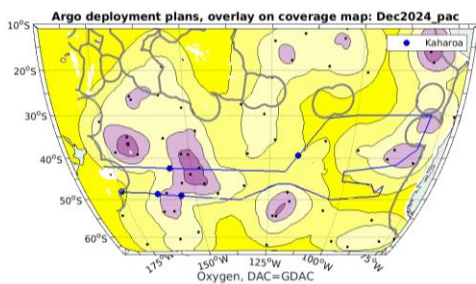
Healthy (conductivity sensor) (Coverage BEFORE/AFTER)



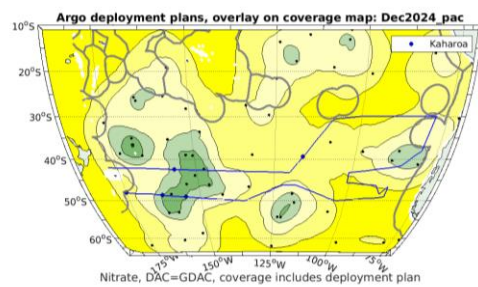
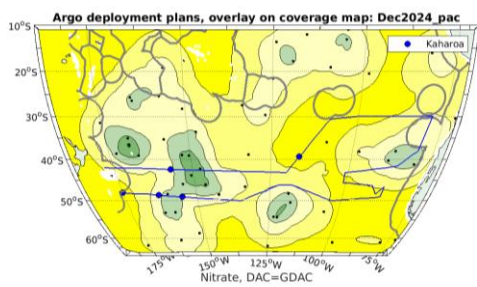
Healthy (conductivity sensor) & Young (Coverage BEFORE/AFTER)



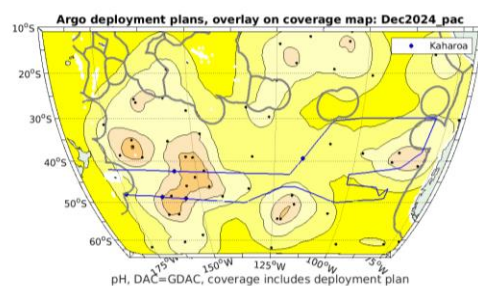
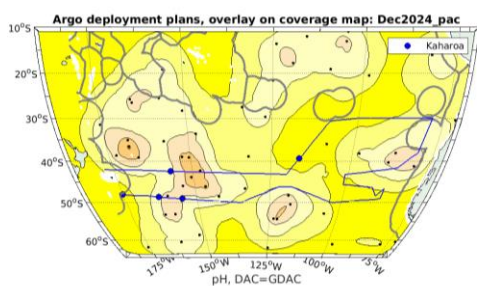
Oxygen (BEFORE/AFTER)



Nitrate (BEFORE/AFTER)



pH (BEFORE/AFTER)



Listing of all planned deployment locations

1,Karahoa,-48,185,1
2,Karahoa,-48.6,197,2
3,Karahoa,-49,205,3
4,Karahoa,-39.25,243.75,4
5,Karahoa,-42.267,203,5
6,Pelagia,-29.26,38.70,1
7,Pelagia,-28.60,41.99,2
8,Pelagia,-23.68,68.97,3
9,Pelagia,-22.70,65.80,4
10,Pelagia,-25.59,70.15,5
11,Pelagia,-26.68,71.78,6
12,JC272,23,-27.972,1
13,JC272,8,-25.602,2
14,JC272,-3,-24.933,3
15,JC272,-11.5,-25.166,4
16,JC272,-18.5,-25.346,5
17,JC272,-25.5,-25.218,6
18,JC272,-32.8,-27.522,7
19,JC272,-34,-31.256,8
20,JC272,-37.2,-41.215,9
21,JC272,-40,-49.928,10
22,Resileince,32.5,-74.5,1
23,Resileince,32.5,-72.5,2
24,Resileince,30.0,-69.5,3
25,Resileince,28.5,-6,58.5,4
26,Resileince,27.50,-67.5,5
27,Resileince,24.0,-67.5,6
28,SANAE,-49,36.3,1
29,SANAE,-51,34.69,2
30,SANAE,-53,32.9,3
31,SANAE,-55,30.91,4
32,Argentina,-61.57,-38.75,1
33,Argentina,-59.67,-49.85,2
34,Argentina,-65.69,-70.13,3
35,JC275-BGC,-21.851,-36,1
36,JC275-BGC,-14,-20,2
37,JC275-BGC,-14,-10,3
38,JC275-BGC,-18,-10,4
39,JC275-BGC,-18,-20,5
40,JC275-BGC,-22.024,8,6
41,Packard-BGC,25.43,-29,1
42,Packard-BGC,24.084,-33.5,2
43,Packard-BGC,22.574,-38,3
44,Packard-Core,16.861,-52,1
45,Packard-Core,15.012,-55.9,2
46,DY187 ,29.43,-73.5,1

47,DY187,30.56,-71,2
48,DY187, 35.42,-48,3
49,DY187, 36.11,-42,4
50,DY187,36.50,-36,5
51,DY187,37.52,-19,6
52,DY187,36.11,-15,7
53,ROCs,18.41,-80.5,1
54,ROCs,-7.7,-31,2
55,ROCs,-9.74,-28,3
56,ROCs,-13.83,-22,4
57,ROCs,-27.69,4,5
58,ROCs,-30.44,10,6
59,ROCs,-31.96,35,7
60,ROCs,-14.94,63.5,8
61,ROCs,1.39,87,9
62,ROCs,3.81,91,10
63,Marion Island,-39,24.67,1
64,Marion Island,-41,27.51,2
65,Marion Island,-43,30.64,3
66,Marion Island,-44,32.34,4
67,Marion Island,-45,34.14,5
68,Marion Island,-46.5,37.09,6
69,10W-14S,-34.5,-44.5,1
70,10W-14S,-34.5,-40,2
71,10W-14S,-34.48,-35,3
72,10W-14S,-34.46,-30,4
73,10W-14S,-34.44,-25,5
74,10W-14S,-34.42,-20,6
75,10W-14S,-28.5,-10,7
76,10W-14S,-24,-10,8
77,10W-14S,-14.5,-16,9
78,10W-14S,-14.5,-24.4,10
79,10W-14S,-14.5,-34.6,11
80,PNE,20,-66.5,1
81,PNE,19.4,-57,2
82,PNE,19.7,-54,3
83,PNE,19.8,-51,4
84,PNE,20,-38,5
85,PNE,20.2,-35,6
86,PNE,20.5,-27,7
87,PNE,20.5,-23,8
88,PNE,-5,-23,9
89,PNE,0.62,-34,10
90,PNE,4.2,-41,11
91,PNE,5.7,-44,12
92,PNE,7.2,-47,13
93,PNE,10.6,-54,14
94,PNE,11.5,-56,15

95,Crossroads,38,-53,1
96,Crossroads,38.5,-50,2
97,Crossroads,39,-47,3
98,Crossroads, 39,-47,4
99,Crossroads,543,-44,5
100,Crossroads,46,-39,6
101,Crossroads,50,-39,7
102,Crossroads,50,-39,8
103,Crossroads,51.5,-42,9
104,Crossroads,53,-45,10
105,GOMECC,27,-87,1
106,GOMECC,26,-93.3,2
107,GOMECC,25,-93.4,3
108,GOMECC,24,-95,4
109,GOMECC,22.2,-95,5
110,GOMECC,22,-92.9,6
111,GOMECC,23.2,-90.6,7
112,A16S-BGC,-10,-25,1
113,A16S-BGC,-13,-25,2
114,A16S-BGC,-17,-25,3
115,A16S-BGC,-20,-24.998,4
116,A16S-BGC,-24,-25,5
117,A16S-BGC,-27,-25,6
118,A16S-BGC,-31,-25,7
119,A16S-BGC,-34,-25,8
120,A16S-BGC,-38,-26.439,9
121,A16S-BGC,-41,-28.398,10
122,A16S-BGC,-45,-30.904,11
123,A16S-BGC,-57,-32.286,12
124,A16S-Deep,-30,-24.998,1
125,A16S-Deep,-43,-29.642,2