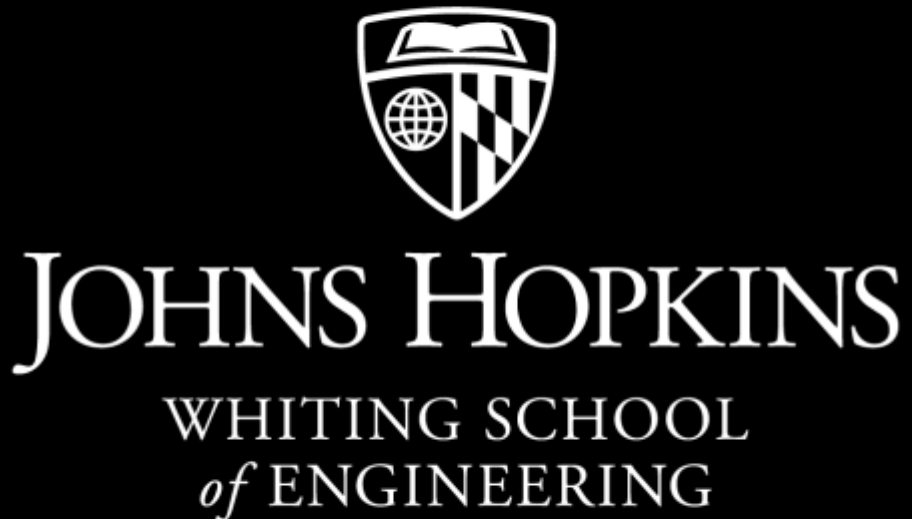

JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING


WOODS HOLE OCEANOGRAPHIC INSTITUTION
1930

Sentry Operations on R/V Atlantic Explorer Leg 1823
Aug 22-Sep 1, 2018

Sentry Operations on R/V Atlantic Explorer Leg 1823

Mob:	Aug 19-21, 2018, St. George's
Departure:	Aug 22, 2018, St. George's
Arrival:	Aug 31, 2018, St. George's
Demob:	Sep 01, 2018, St. George's
Master:	Captain George Gunther
Ops Site:	Bowditch Seamount, 25 NM NE of Bermuda

Sentry Team At Sea:

- Zac Berkowitz - Sentry Expedition Leader
- Justin Fujii
- Ian Vaughn, Ph.D.
- Jennifer Vaccaro
- Manyu Belani
- Andrew Cole

Sentry Team on Shore:

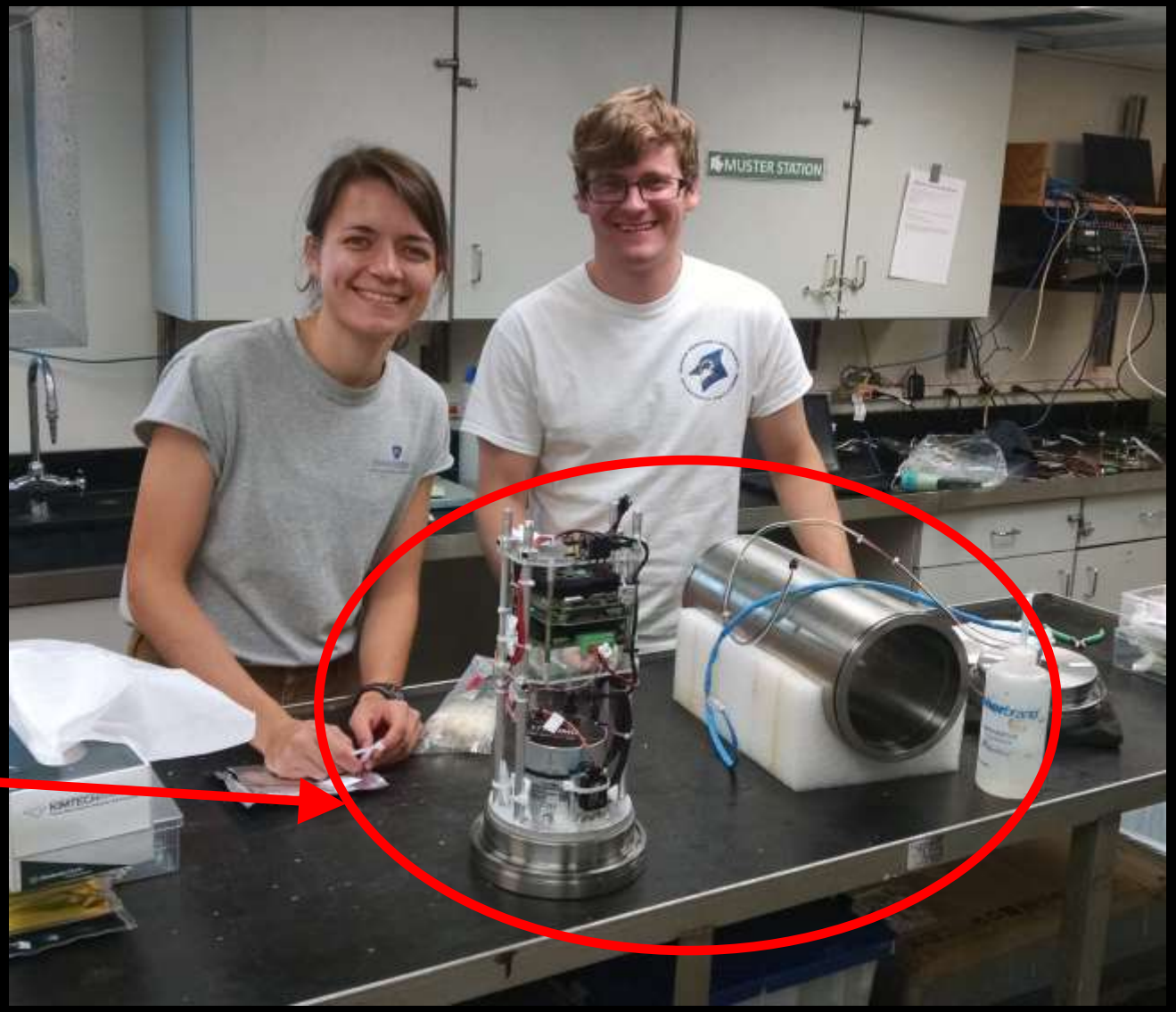
- Sean Kelley (including Mob in Bermuda)
- Masako Tomanaga, PhD, Field Ops Coordinator
- Kevin P. Kavanagh, Field Ops Asst. Coordinator

Summary:

- Engineering cruise to test two new PI-provided navigation instruments in PI-provided housings.
- Installed two PI-provided instruments during mob. Sentry team provided electrical and data (Ethernet) interfaces, mechanical interfaces, wet cabling, and software support from Sentry control system. All the science-provided gear was installed on the vehicle within ~24 hrs. This included removal of ~50 kg gear and required removal of some Sentry sensors and equipment that was not necessary for the operations.
- Sentry software team real-time bi-directional acoustic telemetry of PI-Provided instruments between instruments and ship.
- Pis shared bottom-time on most dives.
- 10 Sentry dives in 10 days. The vehicle worked flawlessly and the cruise didn't lose a single dive for any reason. As a solo-Sentry cruise, the vehicle was diving a large fraction of time at sea.
- R/V Atlantic Explorer officers, crew, and shore-side support outstanding.

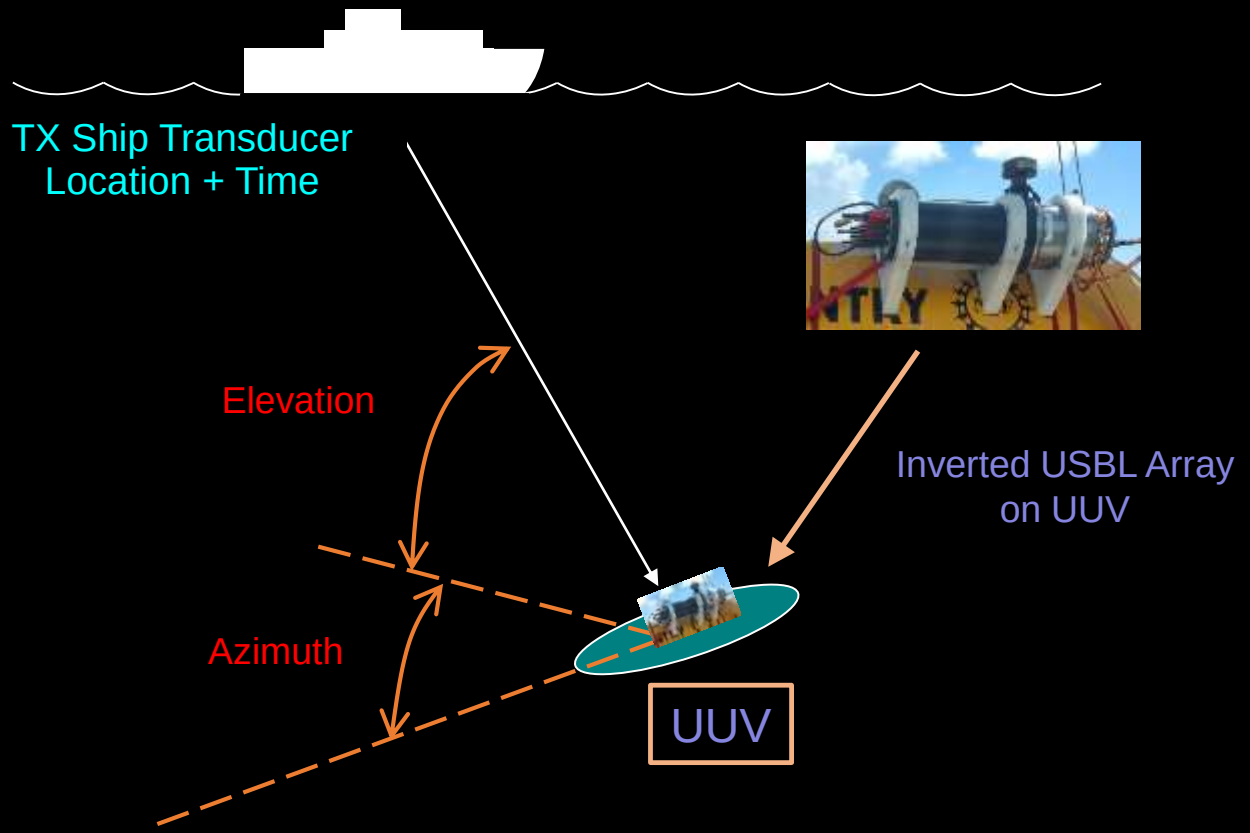
Sentry Operations on R/V Atlantic Explorer Leg 1823

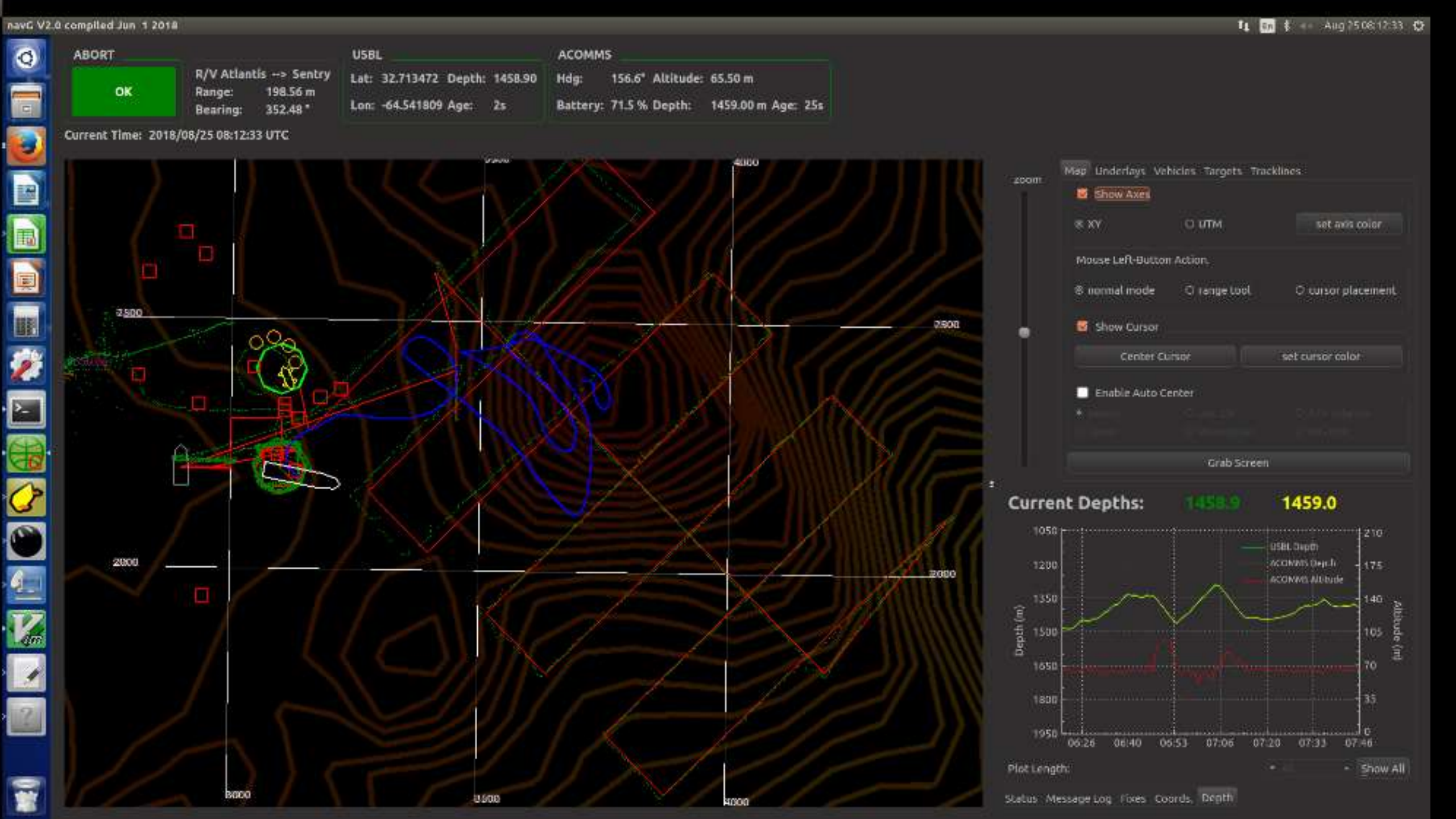
PI: Louis Whitcomb, NSF OCE 1435818, Development of a Low-Cost True-North Seeking Fiber Optic Gyrocompass and Integrated Doppler Navigation System for Precision Navigation of Underwater Vehicles for Ocean Science



Sentry Operations on R/V Atlantic Explorer Leg 1823

PI: James Kinsey, NSF OCE 1634298,
Collaborative Research: Persistent Presence in the Ocean Interior: Developing a Low-power, Autonomous System for Geo-referenced Navigation




navG V2.0 compiled Jun 1 2018
Aug 25 08:12:33
ABORT
OK
R/V Atlantis --> Sentry
Range: 198.56 m
Bearing: 352.48 °
USBL
Lat: 32.713472 Depth: 1458.90
Lon: -64.541809 Age: 2s
ACOMMS
Hdg: 156.6° Altitude: 65.50 m
Battery: 71.5 % Depth: 1459.00 m Age: 25s
Current Time: 2018/08/25 08:12:33 UTC
2500
2800
2000
3000
3500
4000
zoom
Map
Underlays
Vehicles
Targets
Tracklines
Show Axes
XY
UTM
set axis color
Mouse Left-Button Action:
normal mode
range tool
cursor placement
Show Cursor
Center Cursor
set cursor color
Enable Auto Center
Grab Screen
Current Depths:
1458.9
1459.0
USBL Depth
ACOMMS Depth
ACOMMS Altitude
Depth (m)
Altitude (m)
1050
1200
1350
1500
1650
1800
1950
210
175
140
105
70
35
0
06:26
06:40
06:53
07:06
07:20
07:33
07:46
Plot Length:
Show All
Status
Message Log
Fixes
Coords
Depth

Combined Sentry Bathy, Bowditch Seamount