

TROPICAL ATMOSPHERE-OCEAN (TAO) PROGRAM  
FINAL CRUISE REPORT  
RB-16-02

Area: Equatorial Pacific: 9°N 140°W to 5°S 140°W and 8°S 125°W to 8°N 125°W

Itinerary:

RB-16-02            DEP    *February 16, 2016, Honolulu, HI*  
                          ARR    *March 18, 2016, San Diego, CA*

**CRUISE DESCRIPTION**

The Tropical Atmosphere Ocean (TAO) array consists of 63 buoys utilizing a taut line mooring configuration used to mount data collection sensors for climate research purposes. Eight buoys are serviced by JAMSTEC and the remaining 55 buoys from 95°W longitude to 165°E longitude are serviced by National Data Buoy Center (NDBC). Repair and maintenance of the buoys is performed by NDBC contracted personnel on an annual basis utilizing the NOAA Ships and other contract vessels.

**NDBC Points of Contact**

NDBC Operations Branch Chief	NDBC Operations Manager
Steve Cucullu	Jeff Jenner
National Data Buoy Center	National Data Buoy Center
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TAO Cruise Objective and Plan:

The objective of this cruise was the maintenance of the TAO Array along the 140°W and 125°W meridians. Drifting DART Station 32413 was recovered during this cruise.

The scientific complement for the cruise embarked at Honolulu, HI on February 15, 2016. The ship departed on February 16, 2016 and conducted operations as listed in Section 2.1. The ship arrived at San Diego, CA on March 18, 2016.

## 1.0 PERSONNEL

### 1.1 CRUISE LEAD AND PARTICIPATING SCIENTISTS:

Cruise Lead: William Thompson.

Participating Scientists:

Name	Gender	Nationality	Affiliation
William Thompson	M	US	NOAA/NDBC
Stefan Becerra	M	US	NOAA/NDBC
Jim Turner	M	US	NOAA/NDBC
Robert Taylor	M	US	NOAA/NDBC
Mathew Winterkorn	M	US	NOAA/NDBC

## 2.0 OPERATIONS

### 2.1 TAO Data Recovery Summary

Mooring Operations conducted are shown in the tables below. The following provides details on the data recovery efforts for the buoys serviced. All noted times in this summary report are Coordinated Universal Time (UTC):

### Cruise Summary

<b>Buoy Site:</b> 9N 140W Refresh	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> DM121A
<b>Deployed Location:</b> 09-00.023N/140-15.473W	<b>Deployed Date:</b> 3/18/2015
<b>Recovered Location:</b> 09-0.28N/140-15.9W	<b>Recovered Date:</b> 2/22/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> None	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 9N 140W Refresh	<b>Mooring Depth:</b> 5143M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM163A
<b>Deployed Location:</b> 08-57.73N/140-09.97W	<b>Deployed Date:</b> 2/22/2016

<b>Pre-Deployment On Deck Instrument Failures:</b> None
<b>Sensors/Equipment Lost at Sea:</b> None
<b>Sensors Damaged During Deployment:</b> None
<b>General Comments:</b> Routine Deployment

<b>Buoy Site:</b> 5N 140W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM122A	
<b>Deployed Location:</b> 05-01.82N/139-58.75W		<b>Deployed Date:</b> 3/20/2015	
<b>Recovered Location:</b> 05-01.06N/139-59.28W		<b>Recovered Date:</b> 2/23/2016	
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged/Fouled:</b> None			
<b>Fishing/Vandalism:</b> None			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
SST/ SSC	7/9/15	Spiked, Zeroed	

<b>Buoy Site:</b> 5N 140W Refresh		<b>Mooring Depth:</b> 4475M	
<b>Mooring Operation:</b> Deployment		<b>Mooring ID#:</b> DM164A	
<b>Deployed Location:</b> 05-00.83N/139-58.5W		<b>Deployed Date:</b> 2/24/2016	
<b>Pre-Deployment On Deck Instrument Failures:</b> None			
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged During Deployment:</b> None			
<b>General Comments:</b> None			

<b>Buoy Site:</b> 2N 140W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM123A	
<b>Deployed Location:</b> 01-58.8N/140-01.7W		<b>Deployed Date:</b> 3/22/2015	
<b>Recovered Location:</b> 01-58.53N/140-02.1W		<b>Recovered Date:</b> 2/25/2016	
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged/Fouled:</b> SSC, T180 fouled			
<b>Fishing/Vandalism:</b> Long line on Nilspin and nylon.			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
P500	3/25/15	Erratic then missing	Errors: No Comms

<b>Buoy Site:</b> 2N 140W Refresh	<b>Mooring Depth:</b> 4415M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM165A
<b>Deployed Location:</b> 01-58.42N/140-01.97W	<b>Deployed Date:</b> 2/25/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 0 140W Refresh Flux/CO2			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM124A	
<b>Deployed Location:</b> 00-01.56N/139-55.95W		<b>Deployed Date:</b> 3/23/2015	
<b>Recovered Location:</b> 00-01.0N/139 57.5W		<b>Recovered Date:</b> 2/26/2016	
<b>Sensors/Equipment Lost at Sea:</b> Tower missing along with all MET sensors			
<b>Sensors Damaged/Fouled:</b> SSC, TC5 fouled.			
<b>Fishing/Vandalism:</b> Heavy fishing line from bridle down to 140m. Signs of fishing boat being tied off to Buoy.			
<b>General Comments:</b> Entire upper mast and components disassembled from buoy with no hardware left. No sign of forced removal. CO2 equipment still intact in canisters, but wiring and hoses were destroyed.			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
Tube	10/20/15	No xmits	Tower LAS

<b>Buoy Site:</b> 0 140W Refresh Flux/CO2	<b>Mooring Depth:</b> 4355M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM166A
<b>Deployed Location:</b> 00-01.88N/139-58.2W	<b>Deployed Date:</b> 2/27/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> Mooring line failure	
<b>General Comments:</b> Short wave and long wave radiation Spares were used. Mooring line failed on deployment, diagnosed and repair in the morning.	

<b>Buoy Site:</b> 0 140W Refresh	<b>Mooring Depth:</b> 4355M
<b>Mooring Operation:</b> Repair	<b>Mooring ID#:</b> DM166B
<b>Repair Location:</b> 00-01.88N/139-58.2W	<b>Repair Date:</b> 2/27/2016
<b>General Comments:</b> Lifted the buoy onto the fantail for diagnosis and discovered Nilspin electrical wire was smashed between Nilspin head and top section plate creating a grounded wire. Wire was repaired with CTD termination compound.	

<b>Buoy Site:</b> 0 140W ADCP	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> CA019
<b>Deployed Location:</b> 00-01.995N/140-01.748W	<b>Deployed Date:</b> 3/23/2015
<b>Recovered Location:</b> 00-04.4N/140-02.3W	<b>Recovered Date:</b> 2/27/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> None	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 0 140W ADCP	<b>Mooring Depth:</b> 4318M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> CA020
<b>Deployed Location:</b> 00-02.09N/140-01.910W	<b>Deployed Date:</b> 2/27/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> Eliminated nylon below the float with field splice of HMPE in order to reduce the stretch of the mooring.	

<b>Buoy Site:</b> 2S 140W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM125A	
<b>Deployed Location:</b> 02-01.66S/140-01.09W		<b>Deployed Date:</b> 3/24/2015	
<b>Recovered Location:</b> 01-02.33S/140-01.99W		<b>Recovered Date:</b> 2/28/2016	
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged/Fouled:</b> AT/RH housing missing, T20 fouled.			
<b>Fishing/Vandalism:</b> None			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
AT/ RH	2/26/16	Data erratic	Corrosion
SSC	7/8/15	Low, erratic	Fouled?

<b>Buoy Site:</b> 2S 140W Refresh	<b>Mooring Depth:</b> 4332M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM167A
<b>Deployed Location:</b> 02-02.66S/140-01.52W	<b>Deployed Date:</b> 2/28/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> Routine deployment.	

<b>Buoy Site:</b> 5S 140W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM126A	
<b>Deployed Location:</b> 05-00.9S/139 55.1W		<b>Deployed Date:</b> 3/26/2015	
<b>Recovered Location:</b> 05-00.5S/139.55.56W		<b>Recovered Date:</b> 2/29/2016	
<b>Sensors/Equipment Lost at Sea:</b> Anemometer, acoustic release.			
<b>Sensors Damaged/Fouled:</b> None			
<b>Fishing/Vandalism:</b> None			
<b>General Comments:</b> The acoustic release did not respond. Mooring was cut after removing instruments.			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
Anemometer	7/10/15	Drops, Zeros out	Stanchion missing

<b>Buoy Site:</b> 5S 140W Refresh		<b>Mooring Depth:</b> 4361M	
<b>Mooring Operation:</b> Deployment		<b>Mooring ID#:</b> DM168A	
<b>Deployed Location:</b> 05-00.13S/139 54.95W		<b>Deployed Date:</b> 3/1/2016	
<b>Pre-Deployment On Deck Instrument Failures:</b> None			
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged During Deployment:</b> None			
<b>General Comments:</b> None			

<b>Buoy Site:</b> 8S 125W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM120A	
<b>Deployed Location:</b> 07-59.04S/124 59.22W		<b>Deployed Date:</b> 3/12/2015	
<b>Recovered Location:</b> 07-59.01S/124-58.86W		<b>Recovered Date:</b> 3/4/2016	
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged/Fouled:</b> SSC, T20 fouled			
<b>Fishing/Vandalism:</b> None			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
SSC	9/8/15	Low, erratic	Fouled

<b>Buoy Site:</b> 8S 125W Refresh		<b>Mooring Depth:</b> 4515M	
<b>Mooring Operation:</b> Deployment		<b>Mooring ID#:</b> DM169A	
<b>Deployed Location:</b> 07-58.58S/125 58.77W		<b>Deployed Date:</b> 3/4/2016	
<b>Pre-Deployment On Deck Instrument Failures:</b> None			

<b>Sensors/Equipment Lost at Sea:</b> None
<b>Sensors Damaged During Deployment:</b> None
<b>General Comments:</b> None

<b>Buoy Site:</b> 5S 125W Refresh	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> DM119A
<b>Deployed Location:</b> 05-01.685S/124-56.31W	<b>Deployed Date:</b> 3/11/2015
<b>Recovered Location:</b> 05-01.25S/124-56.5W	<b>Recovered Date:</b> 3/5/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> None	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 5S 125W Refresh	<b>Mooring Depth:</b> 4546M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM170A
<b>Deployed Location:</b> 04-59.2S/124 57.2W	<b>Deployed Date:</b> 3/5/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> Routine deployment.	

<b>Buoy Site:</b> 2S 125W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM118A	
<b>Deployed Location:</b> 02-04.25S/124-55.97W		<b>Deployed Date:</b> 3/10/2015	
<b>Recovered Location:</b> 02-03.82S/124-56.79W		<b>Recovered Date:</b> 3/6/2016	
<b>Sensors/Equipment Lost at Sea:</b> Anemometer			
<b>Sensors Damaged/Fouled:</b> SSC fouled			
<b>Fishing/Vandalism:</b> Fishing line on Nilspin at 20m.			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
Anemometer	2/8/16	Erratic -> Zero'd out	Stanchion broke off
SST	6/3/15	Low, spiking	Fouled

<b>Buoy Site:</b> 2S 125W Refresh	<b>Mooring Depth:</b> 4665M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM171A
<b>Deployed Location:</b> 02-05.35S/124 57.7W	<b>Deployed Date:</b> 3/7/2016

<b>Pre-Deployment On Deck Instrument Failures:</b> None
<b>Sensors/Equipment Lost at Sea:</b> None
<b>Sensors Damaged During Deployment:</b> None
<b>General Comments:</b> Routine deployment

<b>Buoy Site:</b> 0 125W Refresh	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> DM117A
<b>Deployed Location:</b> 00-11.08S/124-22.85W	<b>Deployed Date:</b> 3/9/2015
<b>Recovered Location:</b> 00-10.18S/124-24.78W	<b>Recovered Date:</b> 3/7/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> None	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 0 125W Refresh	<b>Mooring Depth:</b> 4431M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM172A
<b>Deployed Location:</b> 00-10.75S/124-32.48W	<b>Deployed Date:</b> 3/7/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 2N 125W Refresh			
<b>Mooring Operation:</b> Recovery		<b>Mooring ID#:</b> DM116A	
<b>Deployed Location:</b> 01-57.54N/125-05.18W		<b>Deployed Date:</b> 3/8/2015	
<b>Recovered Location:</b> 01-57.1N/125-5.46W		<b>Recovered Date:</b> 3/8/2016	
<b>Sensors/Equipment Lost at Sea:</b> None			
<b>Sensors Damaged/Fouled:</b> None			
<b>Fishing/Vandalism:</b> None			
<b>General Comments:</b> None			
<b>Site Sensor Failures</b>	<b>Date Data Flagged</b>	<b>Why Data Flagged</b>	<b>Field Service Observations</b>
Tube	3/5/16	No xmits	
RH	1/2/16	Data too High	

<b>Buoy Site:</b> 2N 125W Refresh	<b>Mooring Depth:</b> 4714M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM173A
<b>Deployed Location:</b> 01-88.08N/125-04.5W	<b>Deployed Date:</b> 3/8/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 5N 125W Refresh	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> DM115A
<b>Deployed Location:</b> 05-04.7N/124 57.3W	<b>Deployed Date:</b> 3/6/2015
<b>Recovered Location:</b> 05-04.7N/124-57.6W	<b>Recovered Date:</b> 3/9/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> None	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 5N 125W Refresh	<b>Mooring Depth:</b> 4409M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM174A
<b>Deployed Location:</b> 05-04.6N/124-58.4W	<b>Deployed Date:</b> 3/10/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 8N 125W Refresh	
<b>Mooring Operation:</b> Recovery	<b>Mooring ID#:</b> DM114A
<b>Deployed Location:</b> 08-02.169N/125-00.576W	<b>Deployed Date:</b> 3/5/2015
<b>Recovered Location:</b> 08-02.71N/125-00.67W	<b>Recovered Date:</b> 3/11/2016
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged/Fouled:</b> SSC fouled	
<b>Fishing/Vandalism:</b> None	
<b>General Comments:</b> None	

<b>Buoy Site:</b> 8N 125W Refresh	<b>Mooring Depth:</b> 4668M
<b>Mooring Operation:</b> Deployment	<b>Mooring ID#:</b> DM175A
<b>Deployed Location:</b> 08-01.7N/125-00.67W	<b>Deployed Date:</b> 3/11/2016
<b>Pre-Deployment On Deck Instrument Failures:</b> None	
<b>Sensors/Equipment Lost at Sea:</b> None	
<b>Sensors Damaged During Deployment:</b> None	
<b>General Comments:</b> None	

## 2.2 *CTD Casts Completed*

A Sea-Bird 911plus CTD with dual temperature and conductivity sensors was provided by the OMAO. Temperature and conductivity sensors are calibrated yearly at Sea-Bird and sent in for diagnostics as necessary.

The following outlines the CTD casts completed during the cruise:

<b>CTD Operations</b>				
<b>Coordinates LAT/LONG</b>		<b>Date</b>	<b>Cast #</b>	<b>Comments</b>
09 00.73 N	140 14.85 W	2/22/2016	RB1602-001	3000 m
07 59.96 N	140 06.97 W	2/23/2016	RB1602-002	1000 m
07 00.05 N	140 03.79 W	2/23/2016	RB1602-003	1000 m
05 59.85 N	140 00.60 W	2/23/2016	RB1602-004	1000 m
05 01.81 N	139 58.43 W	2/24/2016	RB1602-005	1000 m
04 00.06 N	139 59.16 W	2/24/2016	RB1602-006	1000 m
02 59.99 N	140 00.52 W	2/24/2016	RB1602-007	1000 m
01 58.64 N	140 01.10 W	2/24/2016	RB1602-008	1000 m
00 59.94 N	139 59.18 W	2/26/2016	RB1602-009	1000 m
00 00.00 S	139 57.24 W	2/26/2016	RB1602-010	3000 m
00 01.97 N	139 57.91 W	2/27/2016	RB1602-011	1000 m
00 59.94 S	140 01.67 W	2/28/2016	RB1602-012	1000 m
02 02.53 S	140 00.09 W	2/28/2016	RB1602-013	1000 m
03 00.06 S	139 59.45 W	2/29/2016	RB1602-014	1000 m
04 00.00 S	139 57.26 W	2/29/2016	RB1602-015	1000 m
04 59.20 S	139 54.22 W	3/01/2016	RB1602-016	3000 m
07 58.02 S	124 58.63 W	3/04/2016	RB1602-017	3000 m
07 00.04 S	124 58.25 W	3/05/2016	RB1602-018	1000 m
05 59.98 S	124 57.21 W	3/05/2016	RB1602-019	1000 m
04 59.52 S	124 55.86 W	3/05/2016	RB1602-020	1000 m
04 00.04 S	124 56.21 W	3/06/2016	RB1602-021	1000 m
03 00.08 S	124 56.22 W	3/06/2016	RB1602-022	1000 m
02 05.13 S	124 55.77 W	3/07/2016	RB1602-023	1000 m

00 59.97 S	124 38.17 W	3/07/2016	RB1602-024	1000 m
00 10.75 S	124 30.36 W	3/07/2016	RB1602-025	3000 m
01 00.00 N	124 50.07 W	3/08/2016	RB1602-026	1000 m
01 58.57 N	125 02.88 W	3/08/2016	RB1602-027	1000 m
02 59.90 N	125 02.16 W	3/09/2016	RB1602-028	1000 m
04 00.06 N	124 59.13 W	3/09/2016	RB1602-029	1000 m
05 05.43 N	124 56.99 W	3/10/2016	RB1602-030	1000 m
05 59.98 N	124 57.58 W	3/10/2016	RB1602-031	1000 m
06 59.98 N	124 11.92 W	3/10/2016	RB1602-032	1000 m
08 02.26 N	124 58.92 W	3/11/2016	RB1602-033	3000 m

### 2.3 Ancillary Science Projects Completed on the Cruise

The following outlines the ancillary science work performed in conjunction with the TAO operations on the cruise:

#### Pacific Marine Environmental Laboratory (PMEL) Argo Profiling CTD Floats

Five (5) Argo floats were scheduled for deployment on this cruise. All Argo Float deployments were completed as scheduled.

Questions concerning ARGO Floats should be directed to:

Gregory Johnson, NOAA/PMEL  
 Tel: (206) 526-6806  
 E-mail: [pmel\\_floats@noaa.gov](mailto:pmel_floats@noaa.gov)

or

Elizabeth Steffen, NOAA/PMEL  
 Tel: (206) 526-6747  
 E-mail: [pmel\\_floats@noaa.gov](mailto:pmel_floats@noaa.gov)

The following outlines the Argo floats deployed during the cruise:

<b>ARGO Floats</b>				
<b>Coordinates LAT/LONG</b>		<b>Date</b>	<b>SN#</b>	<b>Comments</b>
03 59.04N	139 59.15W	2/24/2016	504	None
06 35.22S	132 01.09W	3/02/2016	471	None
03 58.64S	124 56.20W	3/06/2016	541	None
05 04.92N	124 58.61W	3/10/2016	542	None
08 01.92N	125 00.67W	3/11/2016	505	None

#### Atlantic Oceanographic and Meteorological Laboratory (AMOL) Surface Drifting Floats

Ten (10) AOML Surface Drifters were scheduled for deployment on this cruise. All AOML Surface Drifter deployments were completed as scheduled.

Questions concerning AOML Surface Drifters should be directed to:

Shaun Dolk, NOAA/AOML  
Global Drifter Center,  
Tel: (305) 361-4546  
Fax: (305) 361-4436  
E-mail: [shaun.dolk@noaa.gov](mailto:shaun.dolk@noaa.gov)

The following outlines the AOML Drifting floats deployed during this cruise:

<b>AOML Floats</b>				
<b>Coordinates LAT/LONG</b>		<b>Date</b>	<b>SN#</b>	<b>Comments</b>
04 59.9399N	139 59.6400W	2/24/2016	145907	5N 140W
02 58.1113N	140 00.5635W	2/24/2016	145886 & 145554	3N 140W
0001.3644N	14002.1695W	2/28/2016	145551 & 145896	0 140W
03 09.3208S	139 59.0837W	2/29/2016	145547 & 145884	3S 140W
04 59.4178S	139 54.4053W	3/01/2016	145552	5S 140W
04 57.0317S	124 56.7461W	3/06/2016	145940	5S 125W
02 58.5280S	124 56.2571W	3/06/2016	145935 & 145917	3S 125W
00 09.3982S	124 32.6434W	3/08/2016	145910 & 145911	0 125W
03 01.0523N	125 02.0468W	3/09/2016	145918 & 145912	3N 125W
05 04.9230N	124 58.6190W	3/10/2016	145908	5N 125W