

# Daily Science Report

9/10/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

### Mon 10 Sep


Loaded all SIO and WHOI OBS equipment.  
All science party arrived and moved onto the vessel.  
Secure for sea.

## Daily Comment Summaries - Plan for Tomorrow

### Mon 10 Sep

Depart Honolulu harbor and make way to farthest NW area of the survey to perform acoustic rosette tests and begin deployment operations.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Mob Ashore	MB_MA	Mon 10. Sep 00:00	Mon 10. Sep 24:00	24.000
Mobilizing Ashore.				

## Timing Day By Day (Marcus G Langseth)

10-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4

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## MGL1806\_Shillington\_Hawaii

String Separation:	6 m	String length:	18 m		
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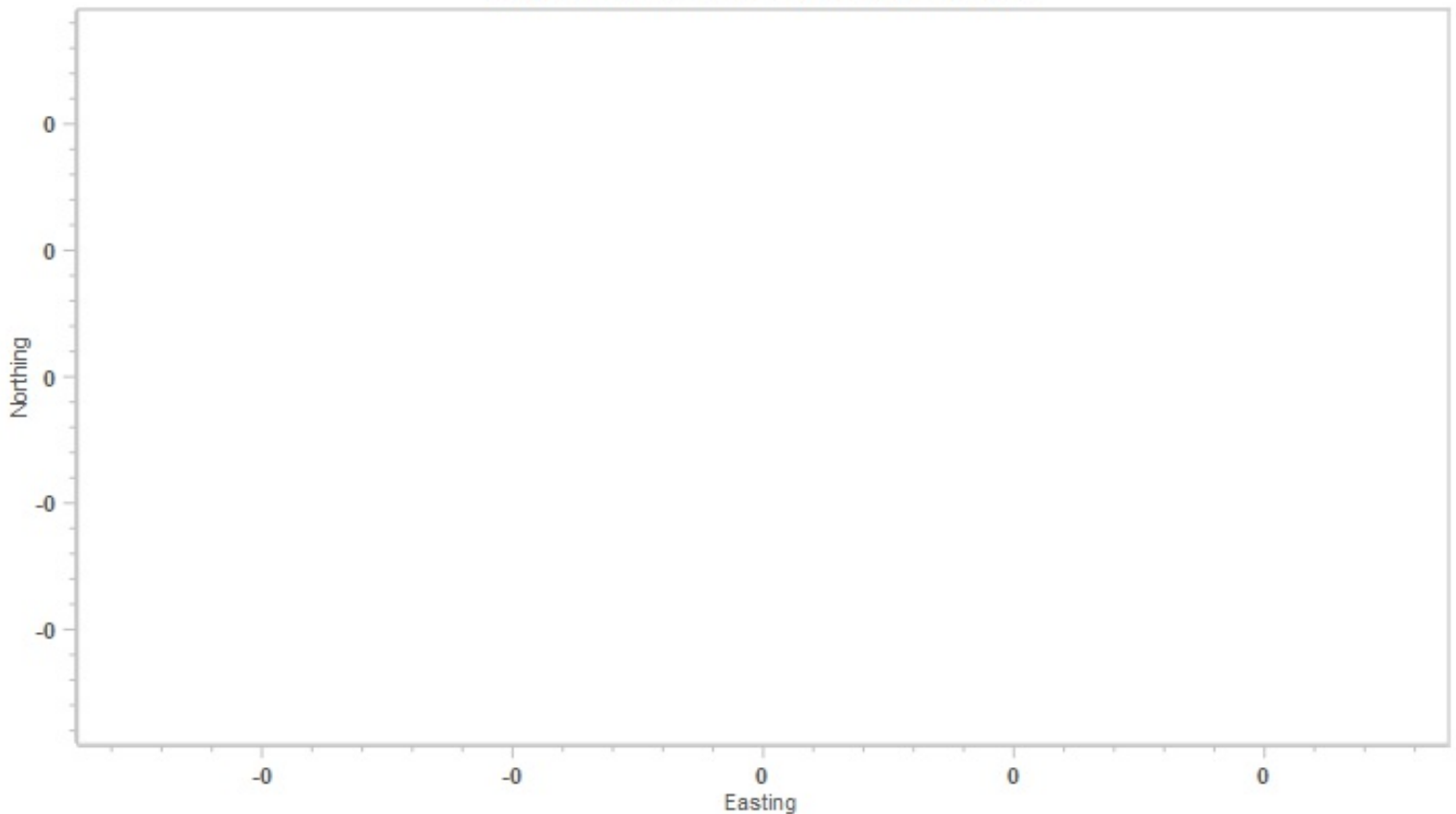
### Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

### Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

Accpt(9/10/2018 - 9/10/2018)MGL1806\_Shillington\_Hawaii



### Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 10 Sep

#### Navigation:

No Major Issues to Report

#### Information Technology (IT):

No Major Issues to Report

#### Acquisition (OBS):

No Major Issues to Report

#### Towing and Handling (Source):

No Major Issues to Report

#### General Purpose Science:

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Fri Sep 14 2018 04:10a.m.

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No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 10 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer  
Todd Jenvold L-DEO OMO Science Officer  
Tom Spoto L-DEO OMO Chief Source Mechanic  
Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

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<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 11 Sep


Began the day in Honolulu, departed 1400 UTC due to incoming hurricane, begin transit to north western most line for gear testing.

## Daily Comment Summaries - Plan for Tomorrow

Tue 11 Sep

Continue OBS deployments down OBS line 2

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Mob Ashore	MB_MA	Tue 11. Sep 00:00	Tue 11. Sep 14:00	14.000
Mobilising Ashore.				
 Transit to Prospect	MB_TT	Tue 11. Sep 14:00	Tue 11. Sep 24:00	10.000
In transit to prospect				

## Timing Day By Day (Marcus G Langseth)

11-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m

# Daily Science Report

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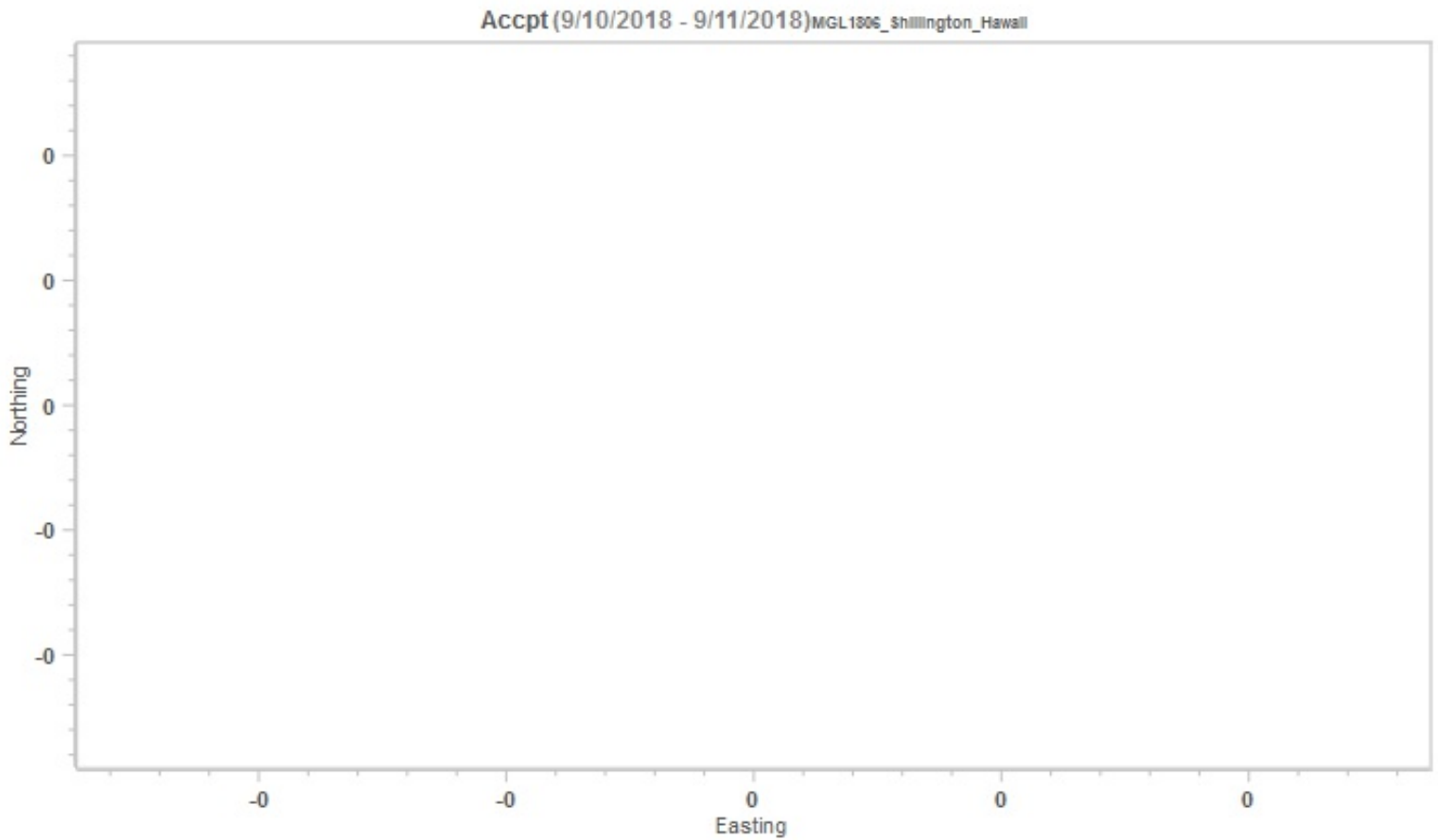
MGL1806_Shillington_Hawaii					
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00



## Daily Comment Summaries - Daily Comments On Status of Equipment

### Tue 11 Sep

**Navigation:**  
Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

**Information Technology (IT):**  
No Major Issues to Report

**Acquisition (OBS):**  
No Major Issues to Report

**Towing and Handling (Source):**

# Daily Science Report

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No Major Issues to Report

## General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 11 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer  
Todd Jensvold L-DEO OMO Science Officer  
Tom Spoto L-DEO OMO Chief Source Mechanic  
Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
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Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

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Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/12/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 12 Sep

Began the day in transit from Honolulu to an alternate acoustic rosette drop location near OBS site 235. Deployed OBS stations 235, 234, 233, 232, 231, 230, and 229.












## Daily Comment Summaries - Plan for Tomorrow

Wed 12 Sep

Continue OBS deployments down OBS line 2

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)










Category	Code	Start	End	Duration
 Transit to Prospect	MB_TT	Wed 12. Sep 00:00	Wed 12. Sep 09:31	9.517
Transit to acoustic rosette testing site				
 Deployment	MB_DP	Wed 12. Sep 09:31	Wed 12. Sep 12:21	2.833
Deploy acoustic rosette to 4000m using CTD winch and recover.				
 Testing	MB_TE	Wed 12. Sep 12:21	Wed 12. Sep 13:17	0.933
Testing SIO acoustic release units at 4000m				
 Deployment	MB_DP	Wed 12. Sep 13:17	Wed 12. Sep 15:04	1.783
Recovering Acoustic rosette				
 Reconfiguration	MB_RC	Wed 12. Sep 15:04	Wed 12. Sep 16:18	1.233
Secure acoustic rosette and rig first OBS for deployment				
 Deployment	MB_DP	Wed 12. Sep 16:18	Wed 12. Sep 16:23	0.083
Deploy OBS 235 Performed T5 xbt cast while on site.				
 Transit	SB_TRT	Wed 12. Sep 16:23	Wed 12. Sep 17:39	1.267
Transit to next station				
 Deployment	MB_DP	Wed 12. Sep 17:39	Wed 12. Sep 17:44	0.083
Deploy OBS 234				
 Transit	SB_TRT	Wed 12. Sep 17:44	Wed 12. Sep 18:55	1.183
Transit to next station				
 Deployment	MB_DP	Wed 12. Sep 18:55	Wed 12. Sep 19:00	0.083
Deploy OBS 233				
 Transit	SB_TRT	Wed 12. Sep 19:00	Wed 12. Sep 20:05	1.083
Transit to next station				

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Category	Code	Start	End	Duration
 Deployment	MB_DP	Wed 12. Sep 20:05	Wed 12. Sep 20:10	0.083
Deploy OBS 232				
 Transit	SB_TRT	Wed 12. Sep 20:10	Wed 12. Sep 21:25	1.250
Transit to next station				
 Deployment	MB_DP	Wed 12. Sep 21:25	Wed 12. Sep 21:30	0.083
Deploy OBS 231				
 Transit	SB_TRT	Wed 12. Sep 21:30	Wed 12. Sep 22:40	1.167
Transit to next station				
 Deployment	MB_DP	Wed 12. Sep 22:40	Wed 12. Sep 22:45	0.083
Deploy OBS 230				
 Transit	SB_TRT	Wed 12. Sep 22:45	Wed 12. Sep 23:55	1.167
Transit to next station				
 Deployment	MB_DP	Wed 12. Sep 23:55	Wed 12. Sep 24:00	0.083
Deploy OBS 229				

## Timing Day By Day (Marcus G Langseth)

12-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			



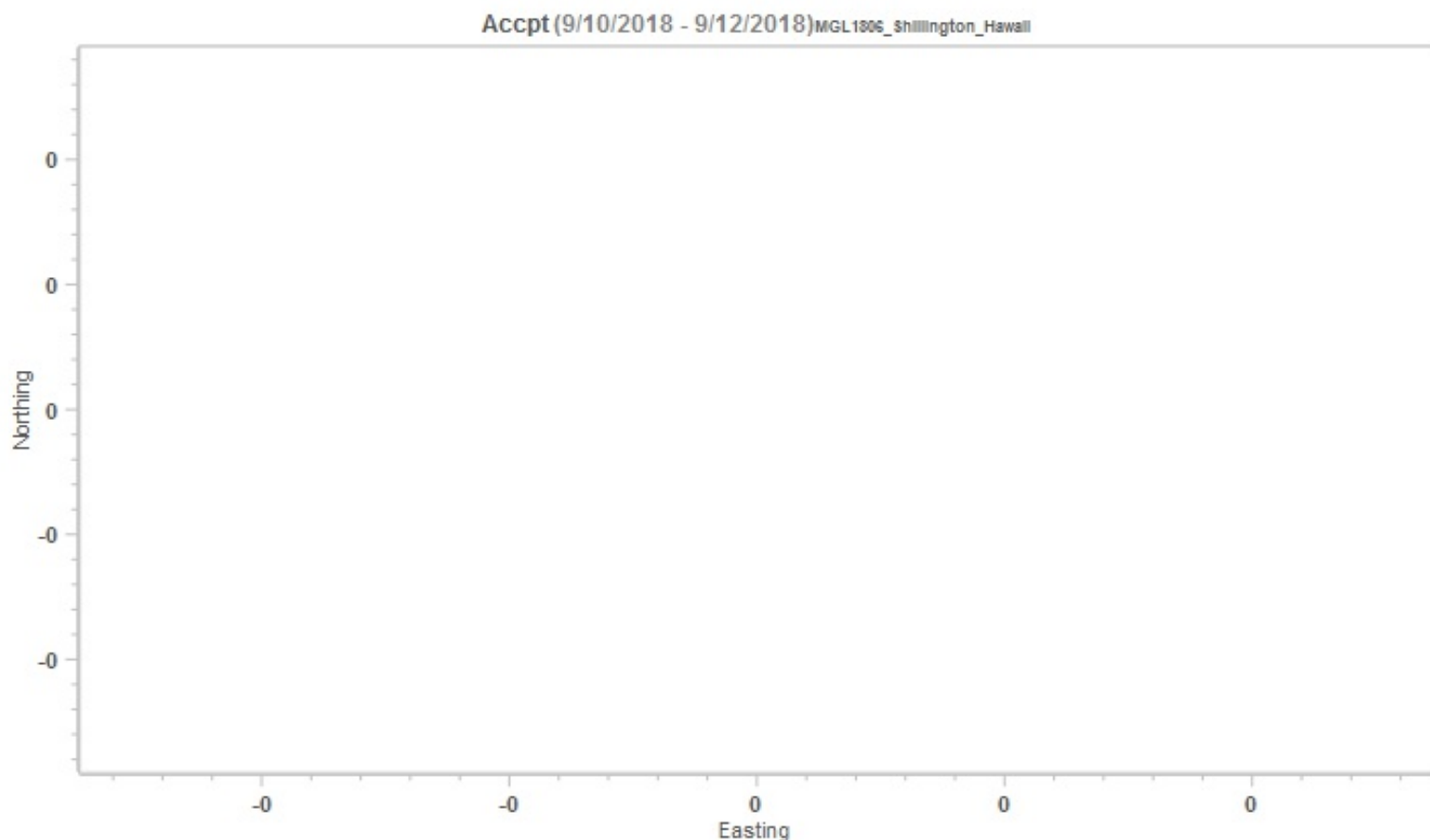
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**Production Totals** (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
<b>Combined</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 12 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 12 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

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9/12/2018

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Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

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Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
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Lori Cabrera RPS PSO

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Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/13/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 13 Sep

OBS operations were halted while a weather system pass through the area.  
OBS Stations 228, 227, 226, 225, 224, 223, 222, 221, 220, 219, 218, and 217 were deployed.

## Daily Comment Summaries - Plan for Tomorrow

Thu 13 Sep

Continue OBS deployments down OBS line 2

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
Transit	SB_TRT	Thu 13. Sep 00:00	Thu 13. Sep 00:15	0.250
Transit to next station				
Weather	SB_WX	Thu 13. Sep 00:15	Thu 13. Sep 09:25	9.167
Down for weather				
Deployment	MB_DP	Thu 13. Sep 09:25	Thu 13. Sep 09:30	0.083
Deploy OBS 228				
Transit	SB_TRT	Thu 13. Sep 09:30	Thu 13. Sep 10:45	1.250
Transit to next station				
Deployment	MB_DP	Thu 13. Sep 10:45	Thu 13. Sep 10:50	0.083
Deploy OBS 227				
Transit	SB_TRT	Thu 13. Sep 10:50	Thu 13. Sep 12:00	1.167
Transit to next station				
Deployment	MB_DP	Thu 13. Sep 12:00	Thu 13. Sep 12:05	0.083
Deploy OBS 225				
Transit	SB_TRT	Thu 13. Sep 12:05	Thu 13. Sep 13:15	1.167
Transit to next station				
Deployment	MB_DP	Thu 13. Sep 13:15	Thu 13. Sep 13:20	0.083
Deploy OBS 225				
Transit	SB_TRT	Thu 13. Sep 13:20	Thu 13. Sep 14:30	1.167
Transit to next station				
Deployment	MB_DP	Thu 13. Sep 14:30	Thu 13. Sep 14:35	0.083
Deploy OBS 224				
Transit	SB_TRT	Thu 13. Sep 14:35	Thu 13. Sep 15:45	1.167

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Category	Code	Start	End	Duration
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 15:45	Thu 13. Sep 15:50	0.083
Deploy OBS 223				
 Transit	SB_TRT	Thu 13. Sep 15:50	Thu 13. Sep 16:50	1.000
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 16:50	Thu 13. Sep 16:55	0.083
Deploy OBS 222				
 Transit	SB_TRT	Thu 13. Sep 16:55	Thu 13. Sep 18:00	1.083
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 18:00	Thu 13. Sep 18:05	0.083
Deploy OBS 221				
 Transit	SB_TRT	Thu 13. Sep 18:05	Thu 13. Sep 19:10	1.083
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 19:10	Thu 13. Sep 19:15	0.083
Deploy OBS 220				
 Transit	SB_TRT	Thu 13. Sep 19:15	Thu 13. Sep 20:20	1.083
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 20:20	Thu 13. Sep 20:25	0.083
Deploy OBS 219				
 Transit	SB_TRT	Thu 13. Sep 20:25	Thu 13. Sep 21:30	1.083
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 21:30	Thu 13. Sep 21:35	0.083
Deploy OBS 218				
 Transit	SB_TRT	Thu 13. Sep 21:35	Thu 13. Sep 22:40	1.083
Transit to next station				
 Deployment	MB_DP	Thu 13. Sep 22:40	Thu 13. Sep 22:45	0.083
Deploy OBS 217				
 Transit	SB_TRT	Thu 13. Sep 22:45	Thu 13. Sep 24:00	1.250
Transit to next station				

## Timing Day By Day (Marcus G Langseth)

13-Sep	Hours	%Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	%Percent
Total	0.000	

# Daily Science Report

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## Basic Project Details

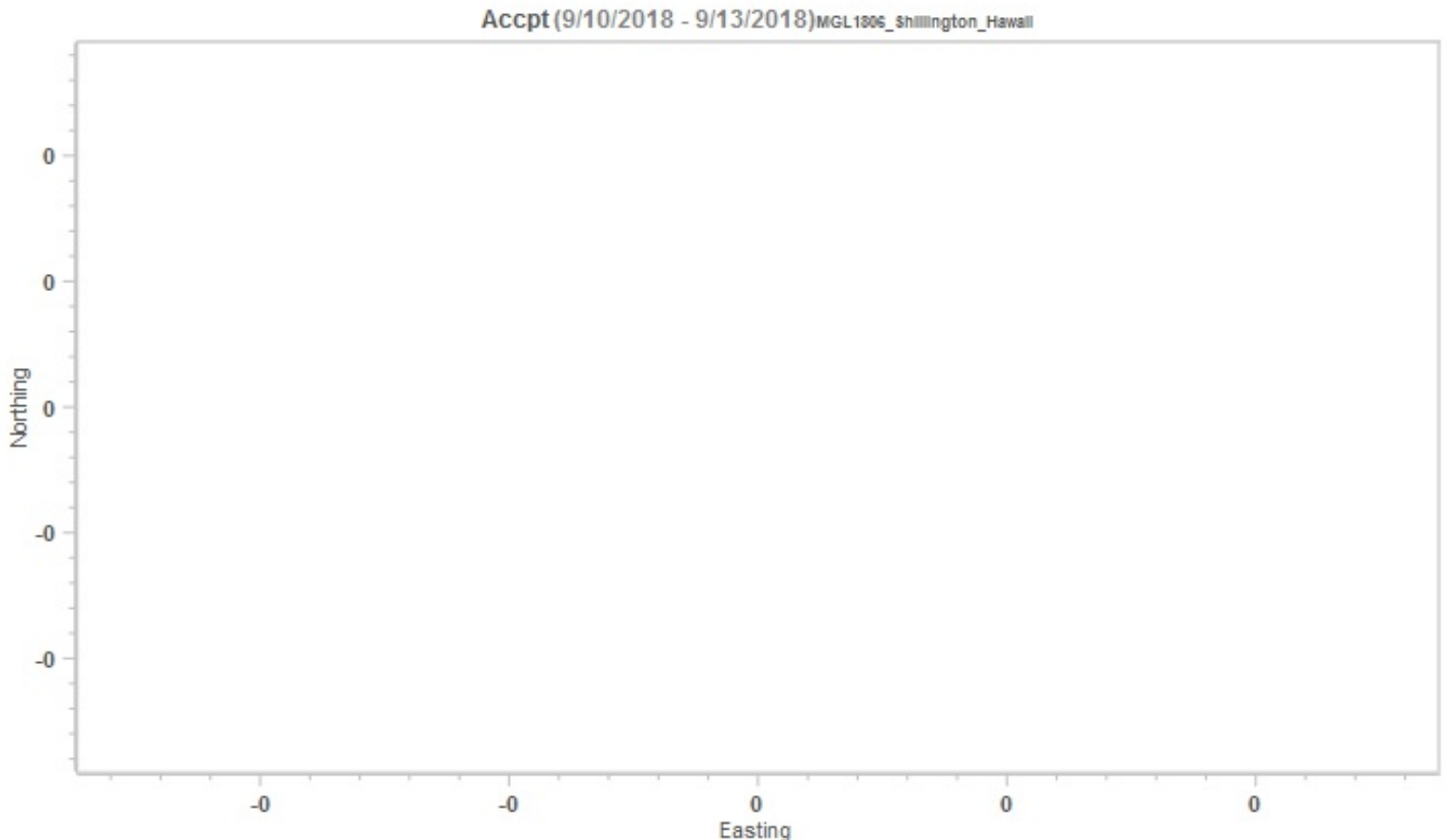
MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00



# Daily Science Report

9/13/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 13 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Thu 13 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

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Aarons, Ernest SIO OBS tech

Kane, Timothy WHOI OBS tech

McPeak, Sean SIO OBS tech

Perez, Jake SIO OBS tech

# Daily Science Report

9/14/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 14 Sep

Line 2 deployments were completed with units 216-201 being deployed.  
Performed an XBT cast.  
Underway to begin recovery of RAPID Instruments












## Daily Comment Summaries - Plan for Tomorrow

Fri 14 Sep

Begin recovery and refit of the RAPID OBS units.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)




Category	Code	Start	End	Duration
 Transit	SB_TRT	Fri 14. Sep 00:00	Fri 14. Sep 00:15	0.250
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 00:15	Fri 14. Sep 00:20	0.083
Deploy OBS 216				
 Transit	SB_TRT	Fri 14. Sep 00:20	Fri 14. Sep 01:30	1.167
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 01:30	Fri 14. Sep 01:35	0.083
Deploy OBS 215				
 Transit	SB_TRT	Fri 14. Sep 01:35	Fri 14. Sep 02:45	1.167
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 02:45	Fri 14. Sep 02:50	0.083
Deploy OBS 214				
 Transit	SB_TRT	Fri 14. Sep 02:50	Fri 14. Sep 04:00	1.167
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 04:00	Fri 14. Sep 04:05	0.083
Deploy OBS 213				
 Transit	SB_TRT	Fri 14. Sep 04:05	Fri 14. Sep 05:15	1.167
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 05:15	Fri 14. Sep 05:20	0.083
Deploy OBS 212				
 Transit	SB_TRT	Fri 14. Sep 05:20	Fri 14. Sep 06:30	1.167
Transit to next station				

# Daily Science Report

9/14/2018

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Category	Code	Start	End	Duration
 Deployment	MB_DP	Fri 14. Sep 06:30	Fri 14. Sep 06:35	0.083
Deploy OBS 211				
 Transit	SB_TRT	Fri 14. Sep 06:35	Fri 14. Sep 07:40	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 07:40	Fri 14. Sep 07:45	0.083
Deploy OBS 210				
 Transit	SB_TRT	Fri 14. Sep 07:45	Fri 14. Sep 08:50	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 08:50	Fri 14. Sep 08:55	0.083
Deploy OBS 209				
 Transit	SB_TRT	Fri 14. Sep 08:55	Fri 14. Sep 09:55	1.000
Transit to next deployment				
 Deployment	MB_DP	Fri 14. Sep 09:55	Fri 14. Sep 10:00	0.083
Deploy OBS 208				
 Transit	SB_TRT	Fri 14. Sep 10:00	Fri 14. Sep 11:05	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 11:05	Fri 14. Sep 11:10	0.083
Deploy OBS 207				
 Transit	SB_TRT	Fri 14. Sep 11:10	Fri 14. Sep 12:10	1.000
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 12:10	Fri 14. Sep 12:15	0.083
Deploy OBS 206				
 Transit	SB_TRT	Fri 14. Sep 12:15	Fri 14. Sep 13:20	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 13:20	Fri 14. Sep 13:25	0.083
Deploy OBS 205				
 Transit	SB_TRT	Fri 14. Sep 13:25	Fri 14. Sep 14:30	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 14:30	Fri 14. Sep 14:35	0.083
Deploy OBS 204				
 Transit	SB_TRT	Fri 14. Sep 14:35	Fri 14. Sep 15:40	1.083
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 15:40	Fri 14. Sep 15:45	0.083
Deploy OBS 203				
 Transit	SB_TRT	Fri 14. Sep 15:45	Fri 14. Sep 16:55	1.167
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 16:55	Fri 14. Sep 17:00	0.083
Deploy OBS 202				
 Transit	SB_TRT	Fri 14. Sep 17:00	Fri 14. Sep 18:00	1.000



# Daily Science Report

9/14/2018

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Category	Code	Start	End	Duration
Transit to next station				
 Deployment	MB_DP	Fri 14. Sep 18:00	Fri 14. Sep 18:05	0.083
Deploy OBS 201				
 Transit	SB_TRT	Fri 14. Sep 18:05	Fri 14. Sep 24:00	5.917
Underway to RAPID Site OBS A				

## Timing Day By Day (Marcus G Langseth)

14-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Acpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

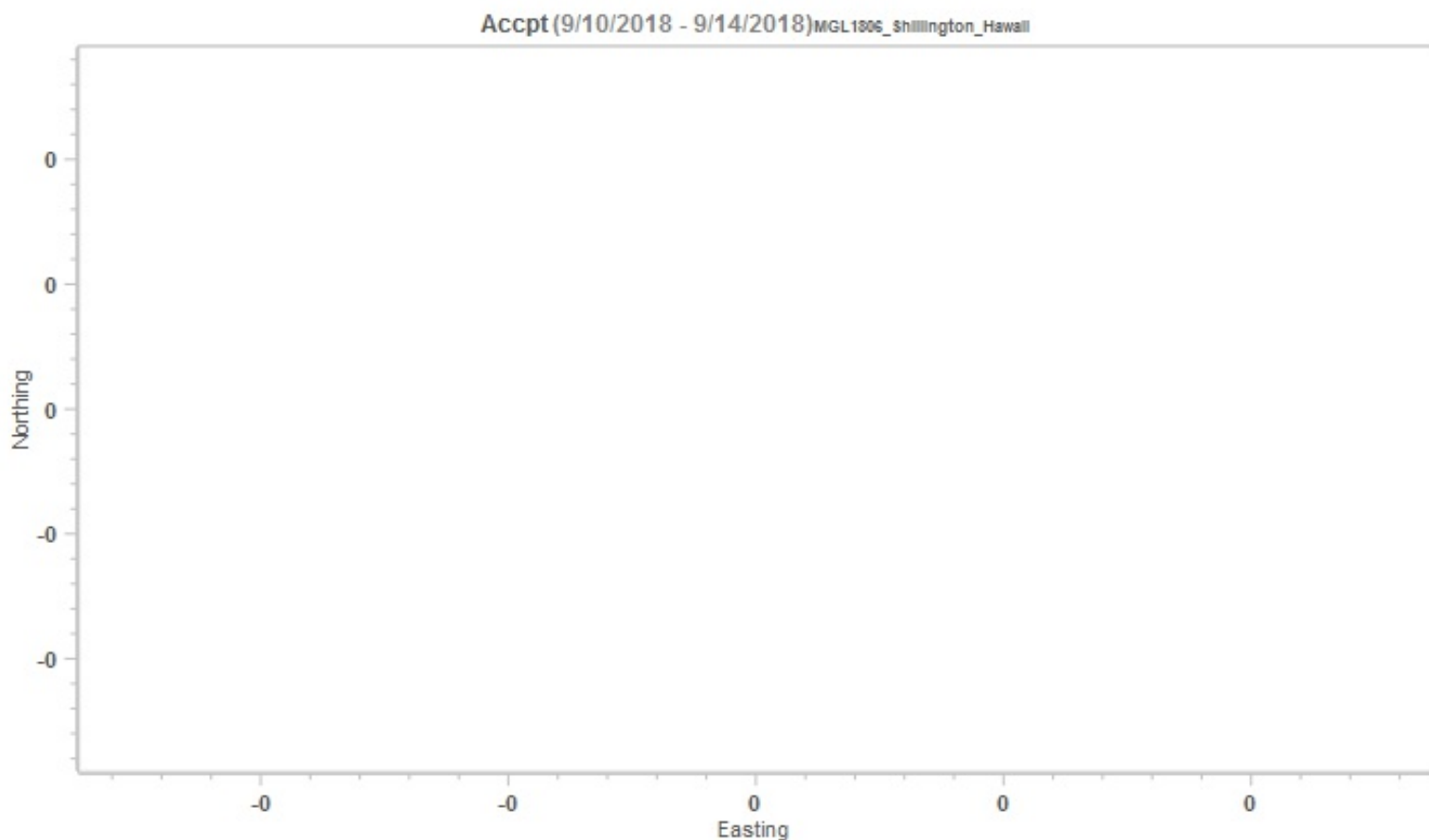
## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

# Daily Science Report

9/14/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 14 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 14 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/14/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/15/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 15 Sep

Most of the day was spent transiting to the RAPID deployments sites off Hawaii Island.  
Upon arrival, sonars secured and release command sent to first unit. By end of UTC day OBS Units A and B recovered.

## Daily Comment Summaries - Plan for Tomorrow

Sat 15 Sep

Continue recovering RAPID OBS units

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Transit	SB_TRT	Sat 15. Sep 00:00	Sat 15. Sep 19:15	19.250
Underway to RAPID Site OBS A				
 Deployment	MB_DP	Sat 15. Sep 19:15	Sat 15. Sep 20:20	1.083
Recovery of OBS A				
 Transit	SB_TRT	Sat 15. Sep 20:20	Sat 15. Sep 21:50	1.500
Underway to RAPID Site OBS B				
 Deployment	MB_DP	Sat 15. Sep 21:50	Sat 15. Sep 22:30	0.667
Recovery of OBS B				
 Transit	SB_TRT	Sat 15. Sep 22:30	Sat 15. Sep 23:37	1.117
Underway to RAPID Site OBS C				
 Deployment	MB_DP	Sat 15. Sep 23:37	Sat 15. Sep 24:00	0.383
Recovery of OBS C				

## Timing Day By Day (Marcus G Langseth)

15-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

# Daily Science Report

9/15/2018

Page 2

## Basic Project Details

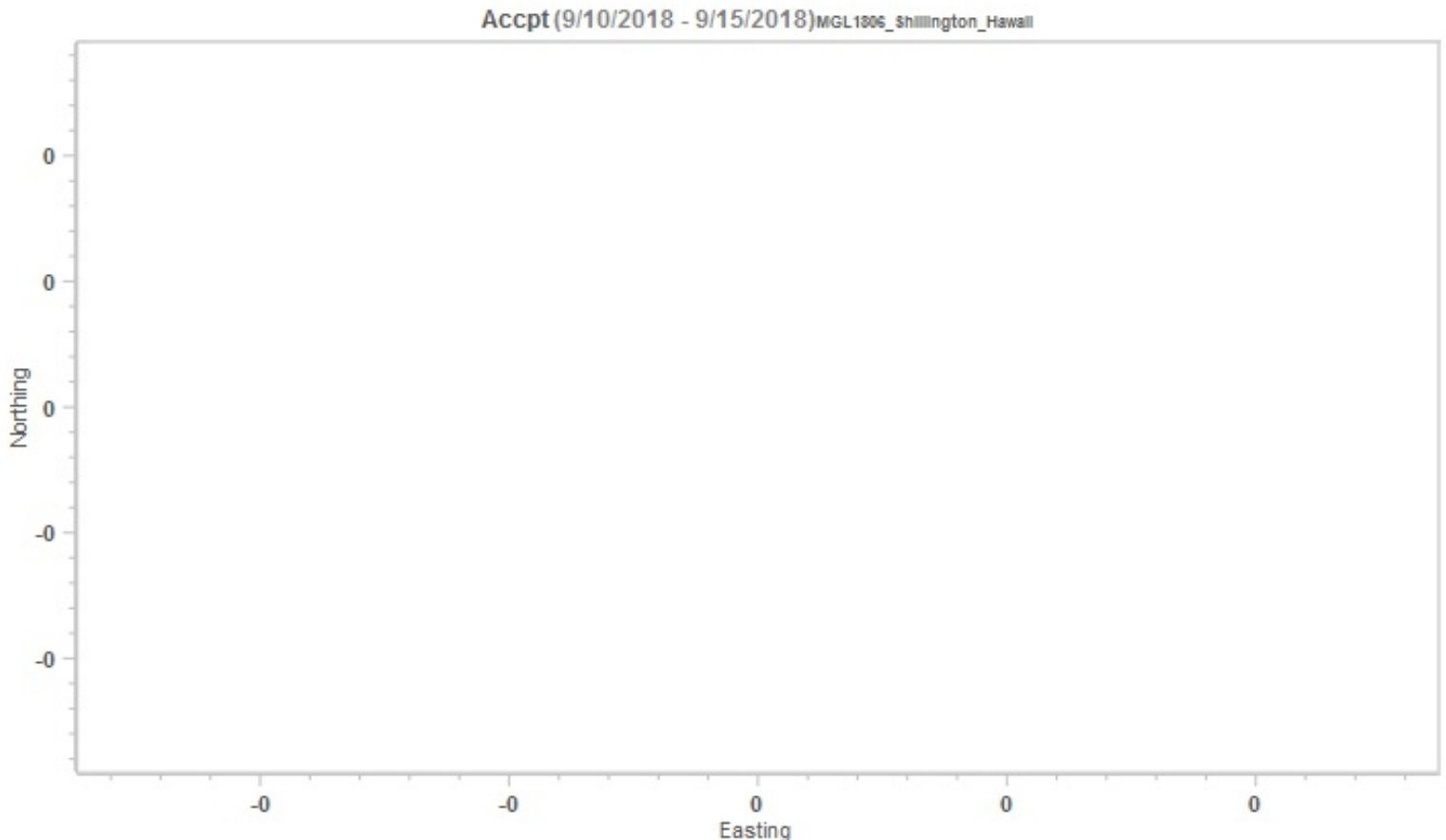
MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00



# Daily Science Report

9/15/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 15 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Failure of stowing chain on main deck caused a source cluster to fall to the deck. Non conformity report opened to investigate the cause and address corrective actions.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 15 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

Diana Maldonado RPS PSO

Bianca Mares RPS PSO

Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI

Watts, Anthony Oxford PI

Dunn, Robert University of Hawaii PI

Nakrong, Nina University of Hawaii Grad student

Lata, Charu University of Hawaii Grad student

Hart, Laney University of Washington Grad student

Rodriguez, Suyapa LSU Grad student

Sousa, Dan LDEO Grad student

Wei, Jingxuan TAMU Grad student

Wei, Xiaozhuo URI Grad student

Boulahanis, Bridgit LDEO Grad student

Aarons, Ernest SIO OBS tech

Kane, Timothy WHOI OBS tech

McPeak, Sean SIO OBS tech

Perez, Jake SIO OBS tech

# Daily Science Report

9/16/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sun 16 Sep

Spent the day recovering RAPID OBS units.  
No comm's to OBS J, multiple release commands sent during stops at the drop site with no success.  
RAPID OBS recovery finished 11/12 units recovered, depart area to second acoustic rosette test site.

## Daily Comment Summaries - Plan for Tomorrow

Sun 16 Sep

Plan to deploy acoustic rosette using CTD winch to test releases for line 1 OBS units.  
After rosette test is complete, operations will begin deploying from station 101 to the north east.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)




Category	Code	Start	End	Duration
 Deployment	MB_DP	Sun 16. Sep 00:00	Sun 16. Sep 01:20	1.333
Recovery of OBS C				
 Transit	SB_TRT	Sun 16. Sep 01:20	Sun 16. Sep 03:50	2.500
Underway to RAPID Site OBS D				
 Deployment	MB_DP	Sun 16. Sep 03:50	Sun 16. Sep 04:50	1.000
Recover OBS D				
 Transit	SB_TRT	Sun 16. Sep 04:50	Sun 16. Sep 05:40	0.833
Underway to RAPID Site OBS E				
 Deployment	MB_DP	Sun 16. Sep 05:40	Sun 16. Sep 06:50	1.167
Recover OBS E				
 Transit	SB_TRT	Sun 16. Sep 06:50	Sun 16. Sep 07:10	0.333
Underway to RAPID Site OBS F				
 Deployment	MB_DP	Sun 16. Sep 07:10	Sun 16. Sep 08:30	1.333
Recover OBS F				
 Transit	SB_TRT	Sun 16. Sep 08:30	Sun 16. Sep 08:50	0.333
Underway to RAPID Site OBS G				
 Deployment	MB_DP	Sun 16. Sep 08:50	Sun 16. Sep 10:25	1.583
Recover OBS G				
 Transit	SB_TRT	Sun 16. Sep 10:25	Sun 16. Sep 10:45	0.333
Underway to RAPID Site OBS H				
 Deployment	MB_DP	Sun 16. Sep 10:45	Sun 16. Sep 12:30	1.750
Recover OBS H				

# Daily Science Report

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Category	Code	Start	End	Duration
 Transit	SB_TRT	Sun 16. Sep 12:30	Sun 16. Sep 13:30	1.000
Underway to RAPID Site OBS I				
 Deployment	MB_DP	Sun 16. Sep 13:30	Sun 16. Sep 15:10	1.667
Recover OBS I				
 Transit	SB_TRT	Sun 16. Sep 15:10	Sun 16. Sep 16:25	1.250
Underway to RAPID Site OBS J				
 Deployment	MB_DP	Sun 16. Sep 16:25	Sun 16. Sep 18:15	1.833
Recovery of OBS J aborted, no communications to OBS.				
 Transit	SB_TRT	Sun 16. Sep 18:15	Sun 16. Sep 19:00	0.750
Underway to RAPID Site K				
 Deployment	MB_DP	Sun 16. Sep 19:00	Sun 16. Sep 20:00	1.000
Recover OBS K				
 Transit	SB_TRT	Sun 16. Sep 20:00	Sun 16. Sep 20:30	0.500
Underway to RAPID Site L				
 Deployment	MB_DP	Sun 16. Sep 20:30	Sun 16. Sep 21:00	0.500
Recover OBS L				
 Transit	SB_TRT	Sun 16. Sep 21:00	Sun 16. Sep 21:50	0.833
Returning to attempt recovery of OBS J				
 Deployment	MB_DP	Sun 16. Sep 21:50	Sun 16. Sep 22:50	1.000
More attempts made to recover OBS J, no comm's received, abort attempts and leave area.				
 Transit	SB_TRT	Sun 16. Sep 22:50	Sun 16. Sep 24:00	1.167
Underway to acoustic rosette test site #2				

## Timing Day By Day (Marcus G Langseth)

16-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m



# Daily Science Report

9/16/2018

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MGL1806_Shillington_Hawaii					
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

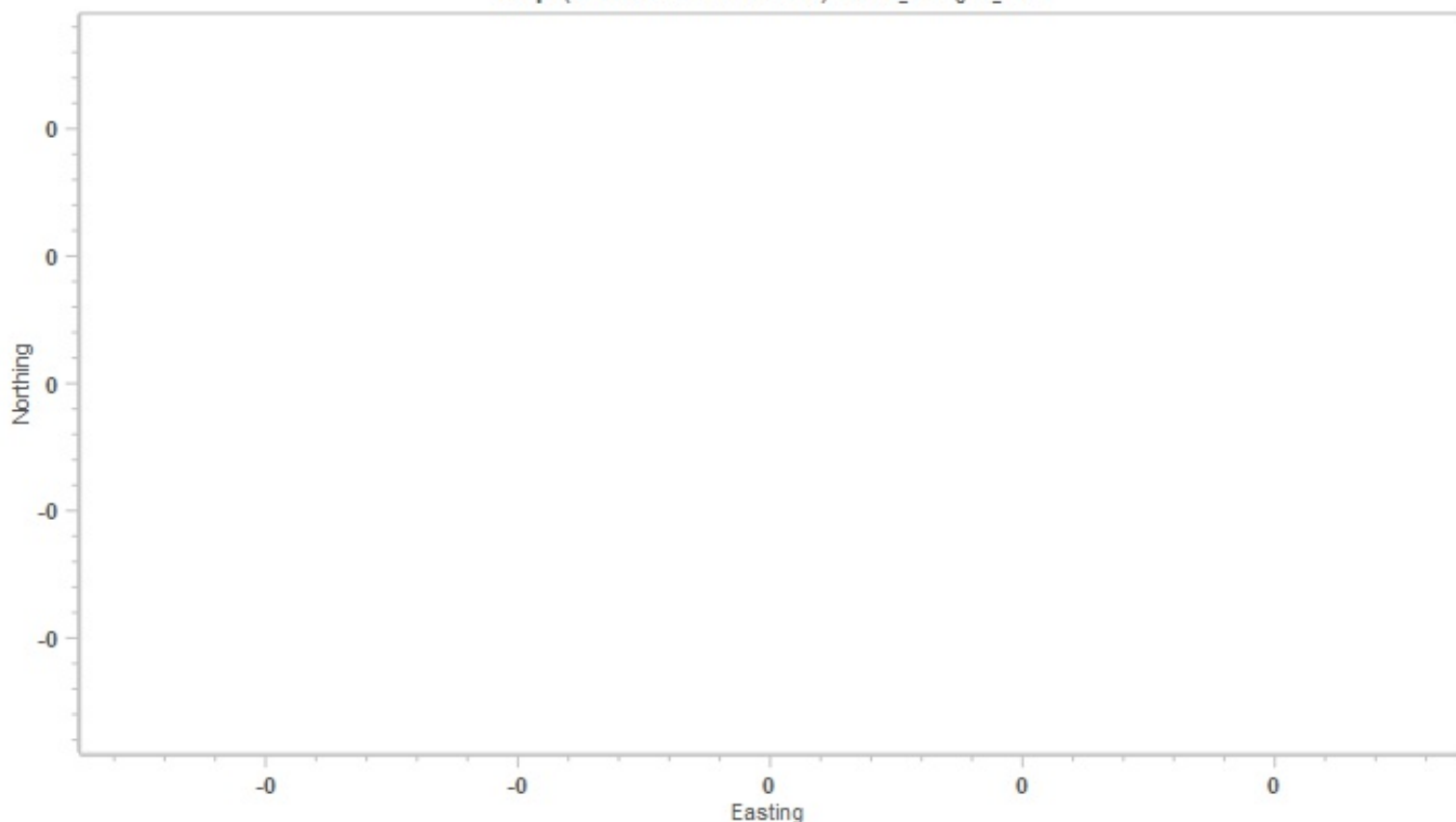
## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

Accpt(9/10/2018 - 9/16/2018)MGL1806\_Shillington\_Hawaii



## Daily Comment Summaries - Daily Comments On Status of Equipment

### Sun 16 Sep

#### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

#### Information Technology (IT):

No Major Issues to Report

#### Acquisition (OBS):

No Major Issues to Report

#### Towing and Handling (Source):

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Mon Sep 17 2018 02:05a.m.

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# Daily Science Report

9/16/2018

Page 4

Source stowing chains evaluated and replaced as necessary until new equipment can be sourced

## General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 16 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer  
Todd Jensvold L-DEO OMO Science Officer  
Tom Spoto L-DEO OMO Chief Source Mechanic  
Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/17/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Mon 17 Sep





Arrived at second acoustic rosette test site, near obs station 101. After testing was complete and CTD winch equipment was secured, began deployment of OBS line 1 at station 101.  
Vessel held man over board drill.

## Daily Comment Summaries - Plan for Tomorrow

Mon 17 Sep

Continue to deploy OBS units along line 1

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Transit	SB_TRT	Mon 17. Sep 00:00	Mon 17. Sep 16:00	16.000
Underway to acoustic rosette test site #2				
 Testing	MB_TE	Mon 17. Sep 16:00	Mon 17. Sep 19:50	3.833
Deploy acoustic rosette to 4000m using CTD winch and recover.				
 Transit	SB_TRT	Mon 17. Sep 19:50	Mon 17. Sep 20:30	0.667
Transit to next station				
 Deployment	MB_DP	Mon 17. Sep 20:30	Mon 17. Sep 20:35	0.083
Deploy OBS 101				
 Transit	SB_TRT	Mon 17. Sep 20:35	Mon 17. Sep 21:35	1.000
Transit to next station				
 Deployment	MB_DP	Mon 17. Sep 21:35	Mon 17. Sep 21:40	0.083
Deploy OBS 102				
 Transit	SB_TRT	Mon 17. Sep 21:40	Mon 17. Sep 22:40	1.000
Transit to next station				
 Deployment	MB_DP	Mon 17. Sep 22:40	Mon 17. Sep 22:45	0.083
Deploy OBS 103				
 Transit	SB_TRT	Mon 17. Sep 22:45	Mon 17. Sep 23:40	0.917
Transit to next station				
 Deployment	MB_DP	Mon 17. Sep 23:40	Mon 17. Sep 23:45	0.083
Deploy OBS 104				
 Transit	SB_TRT	Mon 17. Sep 23:45	Mon 17. Sep 24:00	0.250
Transit to next station				

# Daily Science Report

9/17/2018

Page 2

## Timing Day By Day (Marcus G Langseth)

17-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

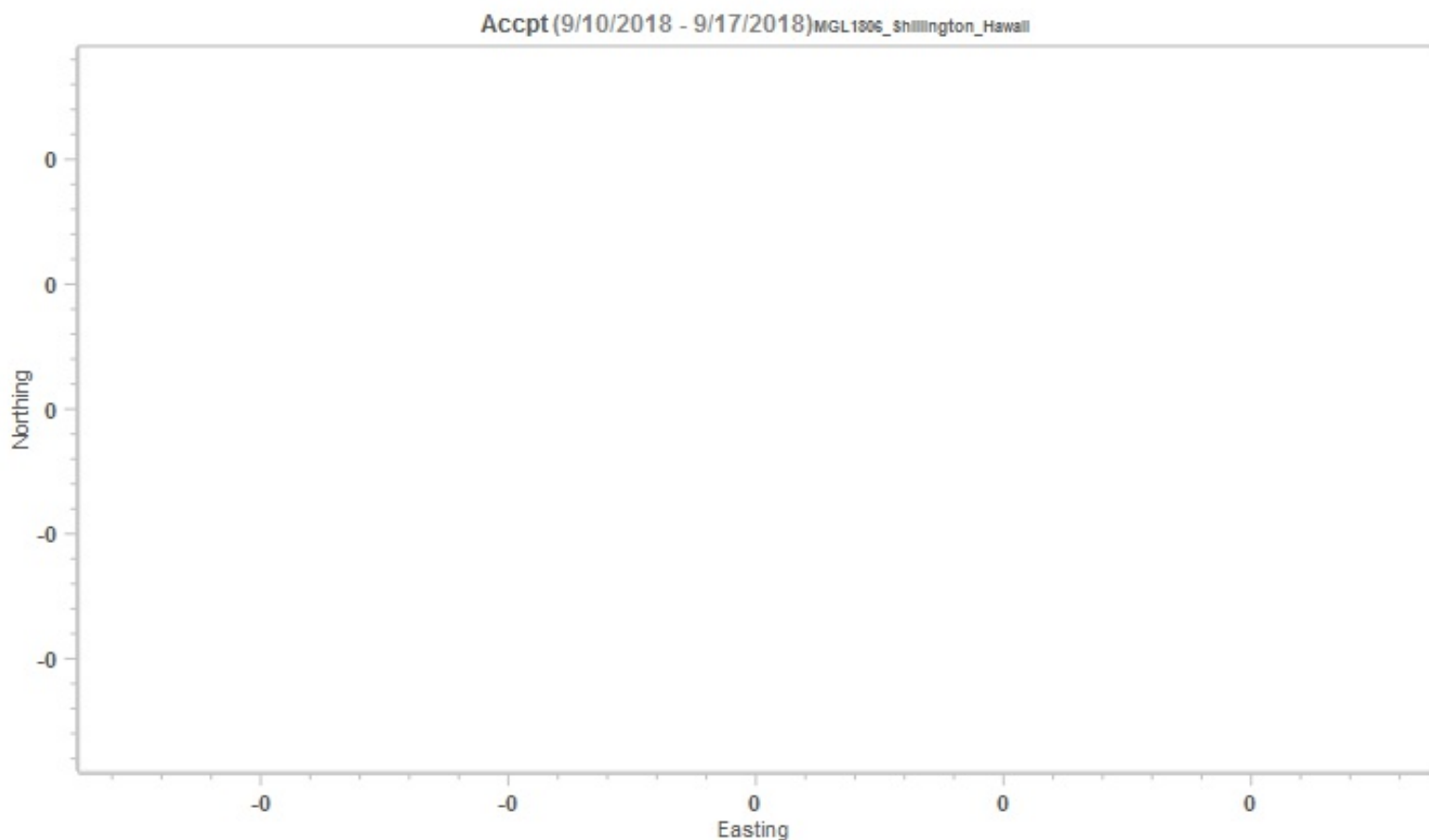
## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00

# Daily Science Report

9/17/2018

Page 3



## Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 17 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 17 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/17/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/18/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 18 Sep

The day was spent continuing to deploy OBS units down line 1 and preparing for streamer and source deployments. A deep area was found at the drop stations of OBS 125 and 126 that required moving of the remaining OBS stations to equalize separation.

## Daily Comment Summaries - Plan for Tomorrow

Tue 18 Sep

It is planned to finish the OBS deployments on line 1 then immediately turn into the seas to begin deploying streamer.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Transit	SB_TRT	Tue 18. Sep 00:00	Tue 18. Sep 00:35	0.583
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 00:35	Tue 18. Sep 00:40	0.083
Deploy OBS 105				
 Transit	SB_TRT	Tue 18. Sep 00:40	Tue 18. Sep 01:30	0.833
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 01:30	Tue 18. Sep 01:35	0.083
Deploy OBS 106				
 Transit	SB_TRT	Tue 18. Sep 01:35	Tue 18. Sep 02:25	0.833
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 02:25	Tue 18. Sep 02:30	0.083
Deploy OBS 107				
 Transit	SB_TRT	Tue 18. Sep 02:30	Tue 18. Sep 03:40	1.167
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 03:40	Tue 18. Sep 03:45	0.083
Deploy OBS 108				
 Transit	SB_TRT	Tue 18. Sep 03:45	Tue 18. Sep 04:35	0.833
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 04:35	Tue 18. Sep 04:40	0.083
Deploy OBS 109				
 Transit	SB_TRT	Tue 18. Sep 04:40	Tue 18. Sep 05:25	0.750
Transit to next station				

# Daily Science Report

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Category	Code	Start	End	Duration
 Deployment	MB_DP	Tue 18. Sep 05:25	Tue 18. Sep 05:30	0.083
Deploy OBS 110				
 Transit	SB_TRT	Tue 18. Sep 05:30	Tue 18. Sep 06:20	0.833
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 06:20	Tue 18. Sep 06:25	0.083
Deploy OBS 111				
 Transit	SB_TRT	Tue 18. Sep 06:25	Tue 18. Sep 07:20	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 07:20	Tue 18. Sep 07:25	0.083
Deploy OBS 112				
 Transit	SB_TRT	Tue 18. Sep 07:25	Tue 18. Sep 08:20	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 08:20	Tue 18. Sep 08:25	0.083
Deploy OBS 113				
 Transit	SB_TRT	Tue 18. Sep 08:25	Tue 18. Sep 09:10	0.750
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 09:10	Tue 18. Sep 09:15	0.083
Deploy OBS 114				
 Transit	SB_TRT	Tue 18. Sep 09:15	Tue 18. Sep 10:25	1.167
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 10:25	Tue 18. Sep 10:30	0.083
Deploy OBS 115				
 Transit	SB_TRT	Tue 18. Sep 10:30	Tue 18. Sep 11:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 11:25	Tue 18. Sep 11:30	0.083
Deploy OBS 116				
 Transit	SB_TRT	Tue 18. Sep 11:30	Tue 18. Sep 12:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 12:25	Tue 18. Sep 12:30	0.083
Deploy OBS 117				
 Transit	SB_TRT	Tue 18. Sep 12:30	Tue 18. Sep 13:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 13:25	Tue 18. Sep 13:30	0.083
Deploy OBS 118				
 Transit	SB_TRT	Tue 18. Sep 13:30	Tue 18. Sep 14:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 14:25	Tue 18. Sep 14:30	0.083
Deploy OBS 119				
 Transit	SB_TRT	Tue 18. Sep 14:30	Tue 18. Sep 15:25	0.917



# Daily Science Report

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Category	Code	Start	End	Duration
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 15:25	Tue 18. Sep 15:30	0.083
Deploy OBS 120				
 Transit	SB_TRT	Tue 18. Sep 15:30	Tue 18. Sep 16:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 16:25	Tue 18. Sep 16:30	0.083
Deploy OBS 121				
 Transit	SB_TRT	Tue 18. Sep 16:30	Tue 18. Sep 17:25	0.917
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 17:25	Tue 18. Sep 17:30	0.083
Deploy OBS 122				
 Transit	SB_TRT	Tue 18. Sep 17:30	Tue 18. Sep 18:30	1.000
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 18:30	Tue 18. Sep 18:35	0.083
Deploy OBS 123				
 Transit	SB_TRT	Tue 18. Sep 18:35	Tue 18. Sep 20:00	1.417
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 20:00	Tue 18. Sep 20:05	0.083
Deploy OBS 124				
 Transit	SB_TRT	Tue 18. Sep 20:05	Tue 18. Sep 22:35	2.500
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 22:35	Tue 18. Sep 22:40	0.083
Deploy OBS 125				
 Transit	SB_TRT	Tue 18. Sep 22:40	Tue 18. Sep 23:30	0.833
Transit to next station				
 Deployment	MB_DP	Tue 18. Sep 23:30	Tue 18. Sep 23:35	0.083
Deploy OBS 126				
 Transit	SB_TRT	Tue 18. Sep 23:35	Tue 18. Sep 24:00	0.417
Chargeable standby d/t being in Transit				

## Timing Day By Day (Marcus G Langseth)

18-Sep	Hours	%Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	%Percent
Total	0.000	

# Daily Science Report

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## Basic Project Details

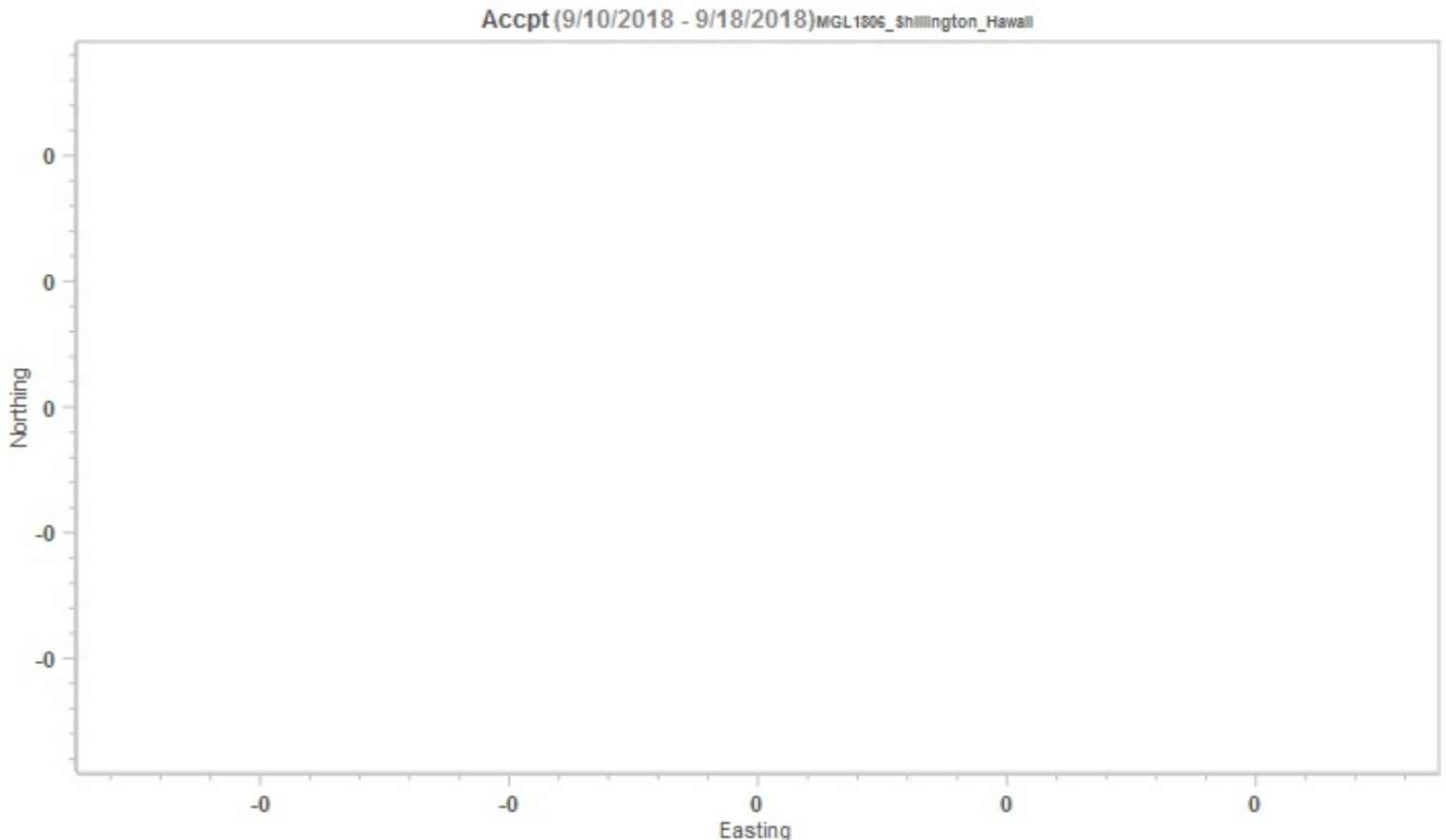
MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
Combined	0.00	0.00	0.00	0.00



# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 18 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 18 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

Diana Maldonado RPS PSO

Bianca Mares RPS PSO

Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI

Watts, Anthony Oxford PI

Dunn, Robert University of Hawaii PI

Nakrong, Nina University of Hawaii Grad student

Lata, Charu University of Hawaii Grad student

Hart, Laney University of Washington Grad student

Rodriguez, Suyapa LSU Grad student

Sousa, Dan LDEO Grad student

Wei, Jingxuan TAMU Grad student

Wei, Xiaozhuo URI Grad student

Boulahanis, Bridgit LDEO Grad student

Aarons, Ernest SIO OBS tech

Kane, Timothy WHOI OBS tech

McPeak, Sean SIO OBS tech

Perez, Jake SIO OBS tech

# Daily Science Report

9/19/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 19 Sep

Completed deployment of all OBS stations.

The vessel was then turned into the seas and began deploying the 15km streamer. During deployment there were multiples stops to check the streamer balance before progressing too far there were also some stoppages for troubleshooting of bird/acoustic communications lines with the installation of the sscu modules.

## Daily Comment Summaries - Plan for Tomorrow

Wed 19 Sep

It is planned to finish the OBS deployments on line 1 then immediately turn into the seas to begin deploying streamer.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
Transit	SB_TRT	Wed 19. Sep 00:00	Wed 19. Sep 00:35	0.583
Transit to next station				
Deployment	MB_DP	Wed 19. Sep 00:35	Wed 19. Sep 00:40	0.083
Deploy OBS 127				
Transit	SB_TRT	Wed 19. Sep 00:40	Wed 19. Sep 01:55	1.250
Transit to next station				
Deployment	MB_DP	Wed 19. Sep 01:55	Wed 19. Sep 02:00	0.083
Deploy OBS 128				
Transit	SB_TRT	Wed 19. Sep 02:00	Wed 19. Sep 03:30	1.500
Transit to next station				
Deployment	MB_DP	Wed 19. Sep 03:30	Wed 19. Sep 03:35	0.083
Deploy OBS 129				
Transit	SB_TRT	Wed 19. Sep 03:35	Wed 19. Sep 04:50	1.250
Transit to next station				
Deployment	MB_DP	Wed 19. Sep 04:50	Wed 19. Sep 04:55	0.083
Deploy OBS 130				
Transit	SB_TRT	Wed 19. Sep 04:55	Wed 19. Sep 05:50	0.917
Transit to next station				
Deployment	MB_DP	Wed 19. Sep 05:50	Wed 19. Sep 05:55	0.083
Deploy OBS 131				
Transit	SB_TRT	Wed 19. Sep 05:55	Wed 19. Sep 06:50	0.917
Transit to next station				

# Daily Science Report

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Category	Code	Start	End	Duration
 Deployment	MB_DP	Wed 19. Sep 06:50	Wed 19. Sep 06:55	0.083
Deploy OBS 132				
 Transit	SB_TRT	Wed 19. Sep 06:55	Wed 19. Sep 07:50	0.917
Transit to next station				
 Deployment	MB_DP	Wed 19. Sep 07:50	Wed 19. Sep 07:55	0.083
Deploy OBS 133				
 Transit	SB_TRT	Wed 19. Sep 07:55	Wed 19. Sep 08:50	0.917
Transit to next station				
 Deployment	MB_DP	Wed 19. Sep 08:50	Wed 19. Sep 08:55	0.083
Deploy OBS 134				
 Transit	SB_TRT	Wed 19. Sep 08:55	Wed 19. Sep 10:00	1.083
Transit to next station				
 Deployment	MB_DP	Wed 19. Sep 10:00	Wed 19. Sep 10:05	0.083
Deploy OBS 135				
 Deployment	MB_DP	Wed 19. Sep 10:05	Wed 19. Sep 24:00	13.917
Deploying streamer				

## Timing Day By Day (Marcus G Langseth)

19-Sep	Hours	% Percent
Day's Total	0.000	0.000

## Timing Breakdown Summary - Project (Marcus G Langseth)

Category	Hours	% Percent
Total	0.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

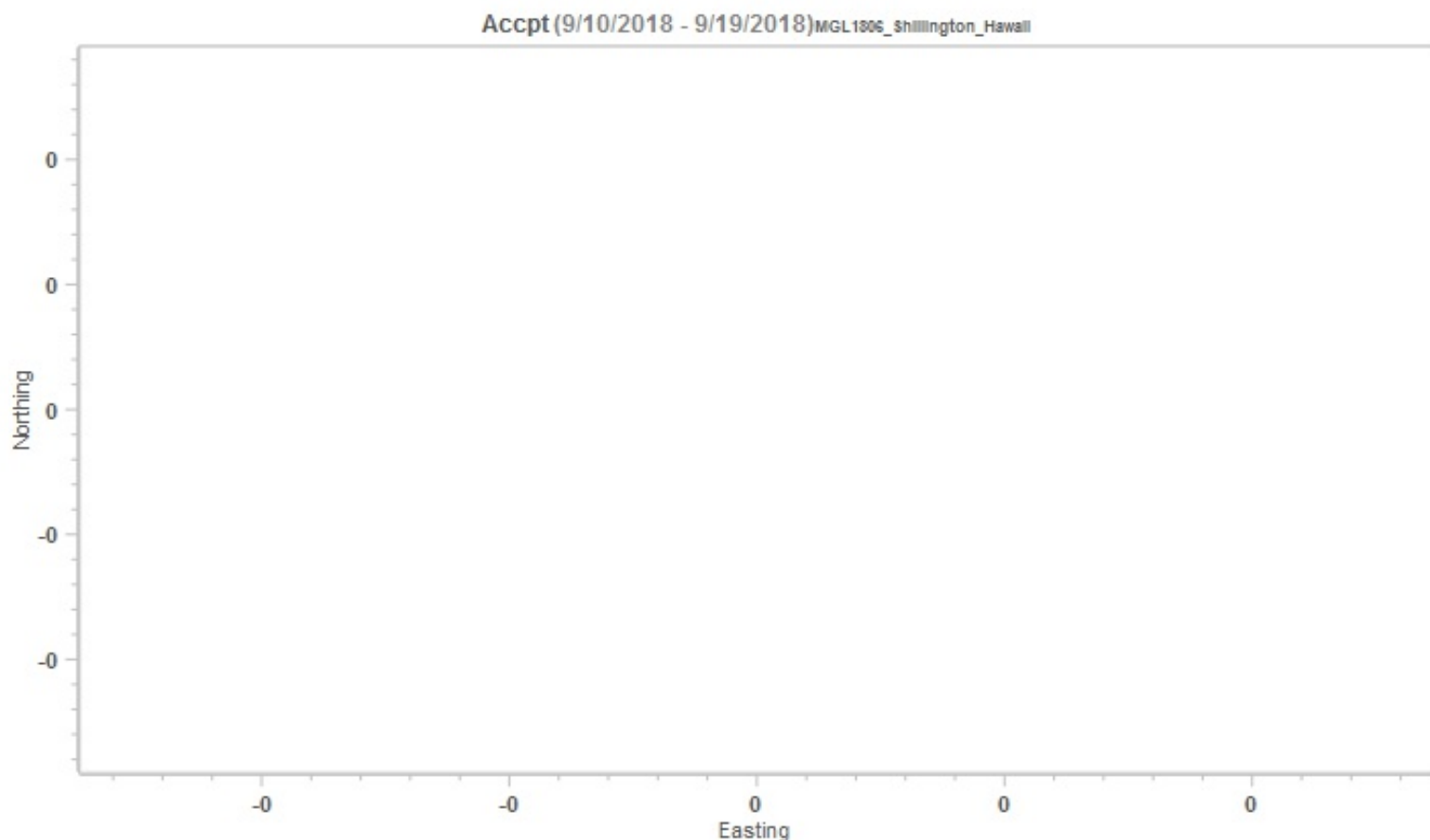
# Daily Science Report

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**Production Totals** (Chgd km) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	0.00	0.00
Infill	0.00	0.00	0.00	0.00
<b>Combined</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 19 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 19 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

# Daily Science Report

9/19/2018

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Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

## **PSO Staff On-board the Langseth**

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## **Science Party On-board the Langseth**

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/20/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>		<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 20 Sep

The vessel started the UTC day in streamer deployment, some troubleshooting was required due to bird lines dropouts after inserting SSCU's, eventually a good spacing of SSCU's was found. At the head of the streamer it was discovered that the HESA section was separating due to previous tension loads and required replacement before deployment could be completed. After streamer deployment the PAM streamer was deployed followed by the 4 source strings. After being cleared, ramp up of the source was commenced and upon completion string 4 comm's were having intermittent failures. String 4 was recovered and the GCM communicating with the last cluster on the string was replaced then the string was redeployed. Once redeployed, the vessel was directed to make final turns toward SOL OBS1. Long shot spacing caused multiple system startup issues, these issues were resolved before official preplot SOL. Continued in production through end of UTC day.










## Daily Comment Summaries - Plan for Tomorrow

Thu 20 Sep

Continue acquisition of MGL1806OB01

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Deployment	MB_DP	Thu 20. Sep 00:00	Thu 20. Sep 05:55	5.917
Deploying streamer				
 Deployment	MB_DP	Thu 20. Sep 05:55	Thu 20. Sep 07:59	2.067
Observing streamer balance fully deployed before continuing with other gear				
 Deployment	MB_DP	Thu 20. Sep 07:59	Thu 20. Sep 08:15	0.267
Deploy PAM				
 Transit	SB_TRT	Thu 20. Sep 08:15	Thu 20. Sep 09:27	1.200
Transit closer to line start before deploying source arrays				
 Deployment	MB_DP	Thu 20. Sep 09:27	Thu 20. Sep 12:20	2.883
Deploying source arrays 1-4				
 Tests	SB_TE	Thu 20. Sep 12:20	Thu 20. Sep 12:40	0.333
Soft start of arrays 1-4				
 Transit	SB_TRT	Thu 20. Sep 12:40	Thu 20. Sep 13:08	0.467
Transiting to start of line				
 Deployment	MB_DP	Thu 20. Sep 13:08	Thu 20. Sep 13:34	0.433
Recover string 4 due to intermittent comms with firing signals				
 Deployment	MB_DP	Thu 20. Sep 13:34	Thu 20. Sep 14:35	1.017



# Daily Science Report

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Category	Code	Start	End	Duration
GCM changed out of string 4 and redeployed				
 Transit	SB_TRT	Thu 20. Sep 14:35	Thu 20. Sep 17:25	2.833
Continue heading for SOL				
 Production Prime	AC_PP	Thu 20. Sep 17:25	Thu 20. Sep 24:00	6.583
Began acquiring data on line MGL1806OB01 @390m shot spacing for the OBS units				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

20-Sep	Hours	% Percent
<b>Acquisition</b>	<b>6.583</b>	<b>27.431</b>
Production Prime	6.583	27.431
<b>Chargeable Standby</b>	<b>4.833</b>	<b>20.139</b>
Tests	0.333	1.389
Transit	4.500	18.750
<b>Mobilisation</b>	<b>12.583</b>	<b>52.431</b>
Deployment	12.583	52.431
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>Mobilisation</b>	<b>116.767</b>	<b>44.230</b>
Deployment	53.250	20.170
Mob Ashore	38.000	14.394
Reconfiguration	1.233	0.467
Testing	4.767	1.806
Transit to Prospect	19.517	7.393
<b>Acquisition</b>	<b>6.583</b>	<b>2.494</b>
Production Prime	6.583	2.494
<b>Chargeable Standby</b>	<b>140.650</b>	<b>53.277</b>
Tests	0.333	0.126
Transit	131.150	49.678
Weather	9.167	3.472
<b>Total</b>	<b>264.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m

# Daily Science Report

9/20/2018

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## MGL1806\_Shillington\_Hawaii

### Source Details

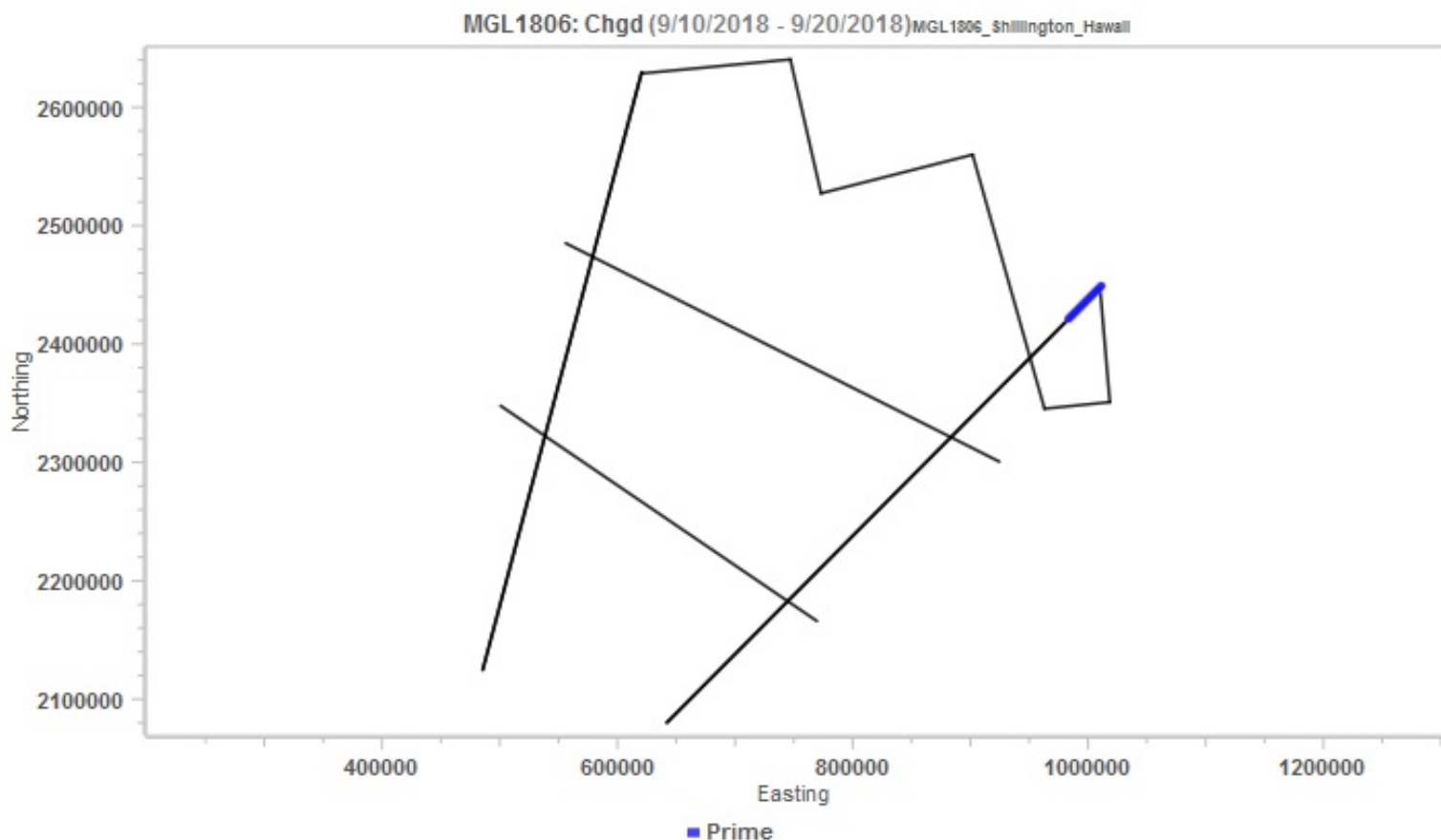
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

### Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

### Production Totals (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Accepted km	Day	Week	Month	Project
Prime	39.15	39.15	39.15	39.15
Combined	39.15	39.15	39.15	39.15



### Daily Comment Summaries - Daily Comments On Status of Equipment

#### Thu 20 Sep

#### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

#### Information Technology (IT):

No Major Issues to Report

#### Acquisition (OBS):

No Major Issues to Report

# Daily Science Report

9/20/2018

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## Towing and Handling (Source):

No Major Issues to Report

## General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Thu 20 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer  
Todd Jensvold L-DEO OMO Science Officer  
Tom Spoto L-DEO OMO Chief Source Mechanic  
Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
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Rodriguez, Suyapa LSU Grad student  
Souza, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/21/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 21 Sep




The vessel spent the day in production on line OBS01 acquiring at 390m shot point spacing ~3 minutes between shots. Early morning local time the PAM operator reported that the system had crashed and was not having luck bringing it back online. Upon approaching the maximum of 30 minutes without PAM monitoring after dark the source was secured while troubleshooting of the system continued. The PAM system was replaced with the spare unit and brought online, visual PSO's were then asked to the bridge to commence a night visual watch along with PAM monitoring before ramp up could begin. The vessel slowed as much as possible without losing streamer control throughout the process and once ramp up was complete sped back up to acquisition speed.

## Daily Comment Summaries - Plan for Tomorrow

Fri 21 Sep

Continue acquisition of MGL1806OB01

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Fri 21. Sep 00:00	Fri 21. Sep 13:04	13.067
Began acquiring data on line MGL1806OB01 @390m shot spacing for the OBS units				
 Cetacean	DT_CT	Fri 21. Sep 13:04	Fri 21. Sep 14:42	1.633
PAM System failure, source shut down				
 Production Prime	AC_PP	Fri 21. Sep 14:42	Fri 21. Sep 24:00	9.300

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

21-Sep	Hours	% Percent
<b>Acquisition</b>	<b>22.367</b>	<b>93.194</b>
Production Prime	22.367	93.194
<b>DownTime</b>	<b>1.633</b>	<b>6.806</b>
Cetacean	1.633	6.806
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.567</b>
Cetacean	1.633	0.567
<b>Mobilisation</b>	<b>116.767</b>	<b>40.544</b>
Deployment	53.250	18.490

# Daily Science Report

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Category	Hours	% Percent
Mob Ashore	38.000	13.194
Reconfiguration	1.233	0.428
Testing	4.767	1.655
Transit to Prospect	19.517	6.777
<b>Acquisition</b>	<b>28.950</b>	<b>10.052</b>
Production Prime	28.950	10.052
<b>Chargeable Standby</b>	<b>140.650</b>	<b>48.837</b>
Tests	0.333	0.116
Transit	131.150	45.538
Weather	9.167	3.183
<b>Total</b>	<b>288.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	01OBS	225.0	1750	5392	Prime	172.35	3.943	Part	Midnight
NTBP: 1750 - 3973 (not chgd)									
<b>Total</b>						<b>172.35</b>			

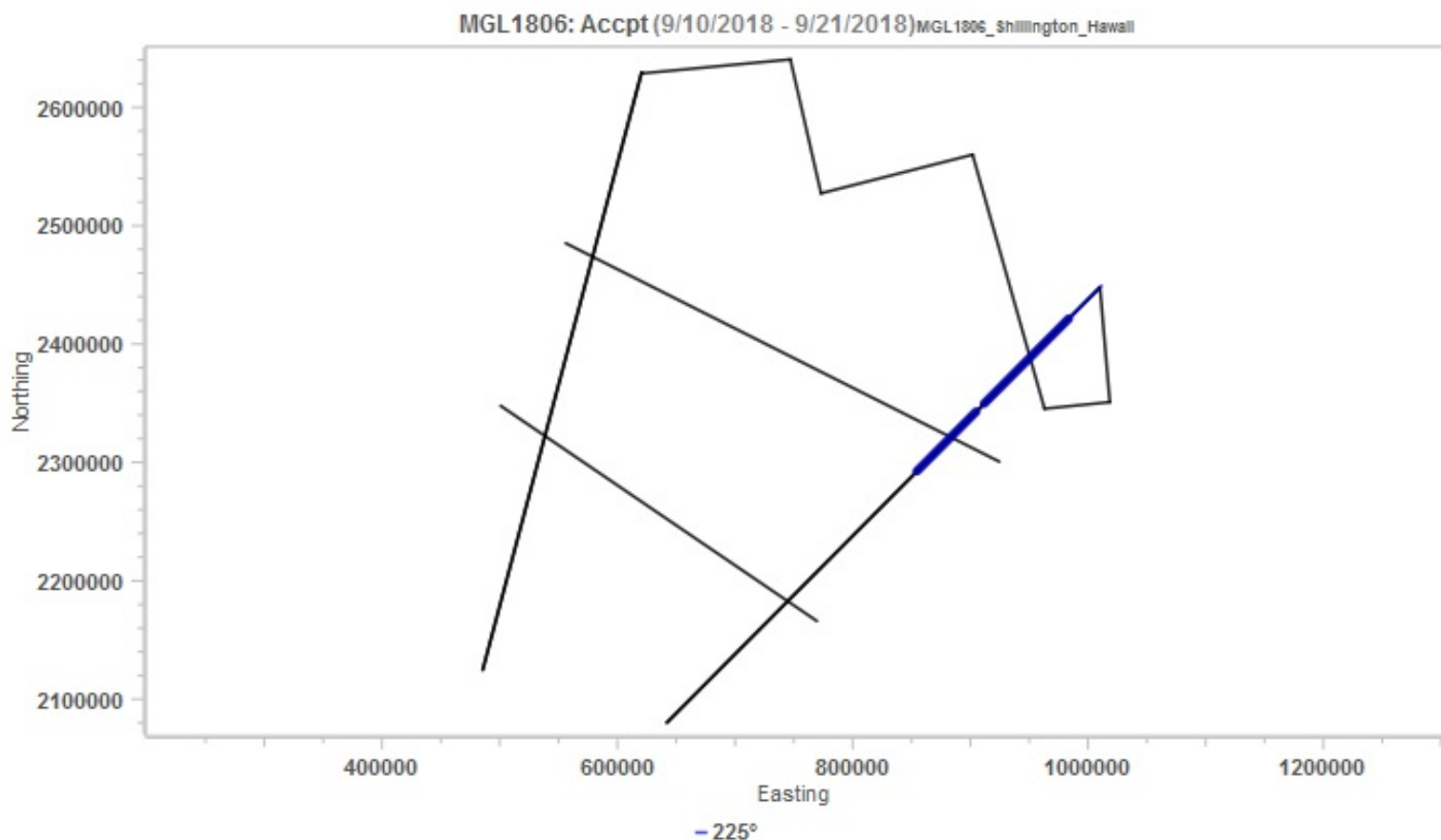
## Production Totals (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Accepted km	Day	Week	Month	Project
Prime	172.35	211.50	211.50	211.50
Infill	0.00	0.00	0.00	0.00
<b>Combined</b>	<b>172.35</b>	<b>211.50</b>	<b>211.50</b>	<b>211.50</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 21 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 21 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/22/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 22 Sep


The vessel spent the day in production on line OBS01 acquiring at 390m shot point spacing ~3 minutes between shots. Repairs made to previously failed PAM computer awaiting testing with system while on line change. An air leak has been detected on sub-array 1 but does not appear to be causing many issues and line will continue unless it worsens.

## Daily Comment Summaries - Plan for Tomorrow

Sat 22 Sep

It is planned to complete line OBS01 then make a tear drop line change returning on MCS01. During line change it is planned to perform source maintenance on strings 1 and 4.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Sat 22. Sep 00:00	Sat 22. Sep 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

22-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.524</b>
Cetacean	1.633	0.524
<b>Mobilisation</b>	<b>116.767</b>	<b>37.425</b>
Deployment	53.250	17.067
Mob Ashore	38.000	12.179
Reconfiguration	1.233	0.395
Testing	4.767	1.528
Transit to Prospect	19.517	6.255
<b>Acquisition</b>	<b>52.950</b>	<b>16.971</b>
Production Prime	52.950	16.971
<b>Chargeable Standby</b>	<b>140.650</b>	<b>45.080</b>
Tests	0.333	0.107



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Category	Hours	% Percent
Transit	131.150	42.035
Weather	9.167	2.938
<b>Total</b>	<b>312.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	01OBS	225.0	5393	8473	Prime	154.05	3.727	Part	Midnight
<b>Total</b>						<b>154.05</b>			

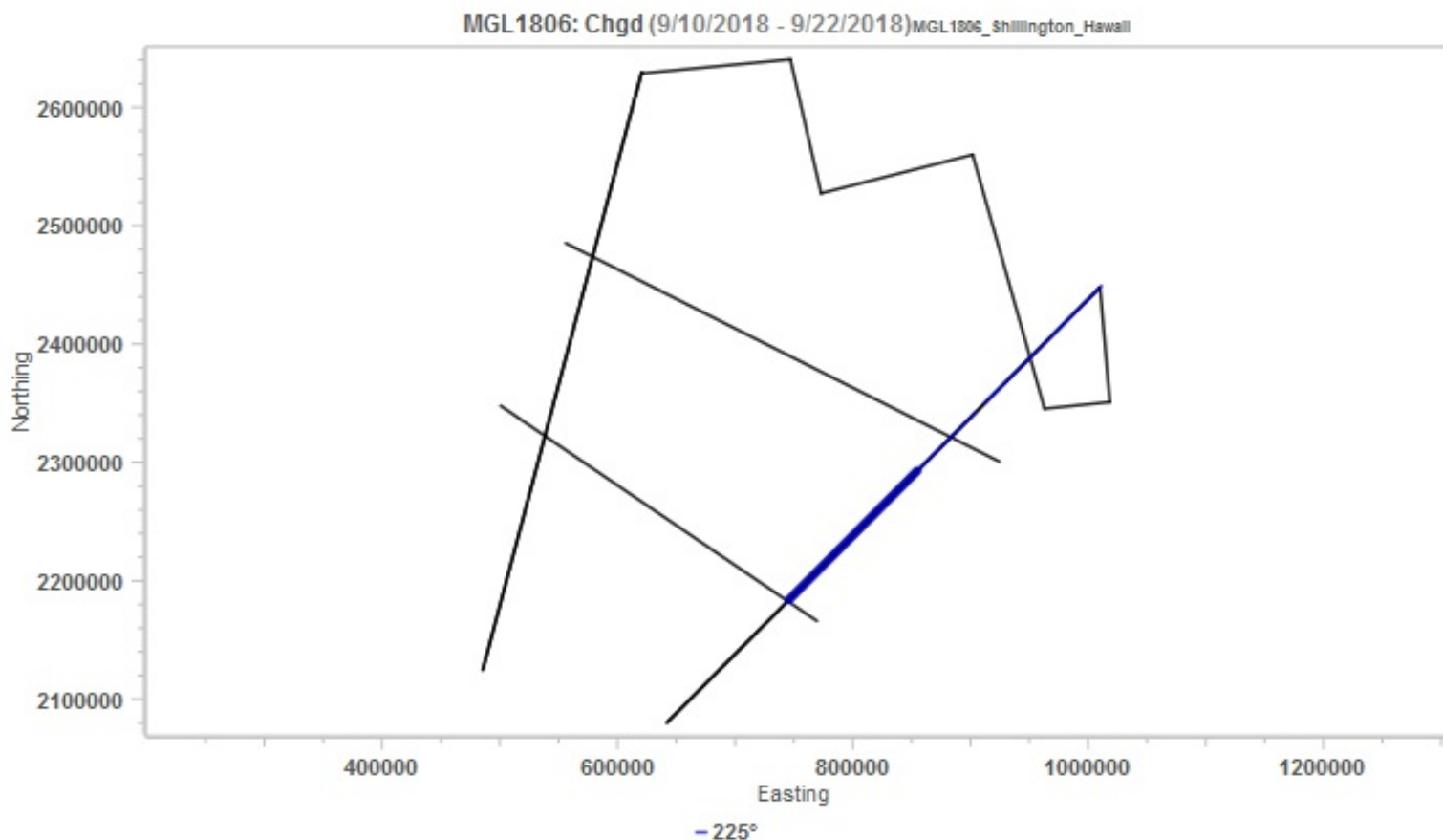
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	154.05	365.55	365.55	365.55
<b>Combined</b>	<b>154.05</b>	<b>365.55</b>	<b>365.55</b>	<b>365.55</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 22 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 22 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/23/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sun 23 Sep

Most of the UTC day was spent in production finishing line OB01. At end of line picked up source array 4 to troubleshoot comm error while on line change to MC01.

## Daily Comment Summaries - Plan for Tomorrow

Sun 23 Sep

Continue turning to line MC01 while performing source maintenance followed by beginning of acquisition.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
Production Prime	AC_PP	Sun 23. Sep 00:00	Sun 23. Sep 21:10	21.167
Prime Line Change	AC_PLC	Sun 23. Sep 21:10	Sun 23. Sep 24:00	2.833
Line change to MC01				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

23-Sep	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	2.833	11.806
Production Prime	21.167	88.194
Day's Total	24.000	100.000

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
DownTime	1.633	0.486
Cetacean	1.633	0.486
Mobilisation	116.767	34.752
Deployment	53.250	15.848
Mob Ashore	38.000	11.310
Reconfiguration	1.233	0.367
Testing	4.767	1.419
Transit to Prospect	19.517	5.809
Acquisition	76.950	22.902
Prime Line Change	2.833	0.843

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Category	Hours	% Percent
Production Prime	74.117	22.059
<b>Chargeable Standby</b>	<b>140.650</b>	<b>41.860</b>
Tests	0.333	0.099
Transit	131.150	39.033
Weather	9.167	2.728
<b>Total</b>	<b>336.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	01OBS	225.0	8474	11406	Prime	146.65	3.731	Complete	Complete
<b>Total</b>						<b>146.65</b>			

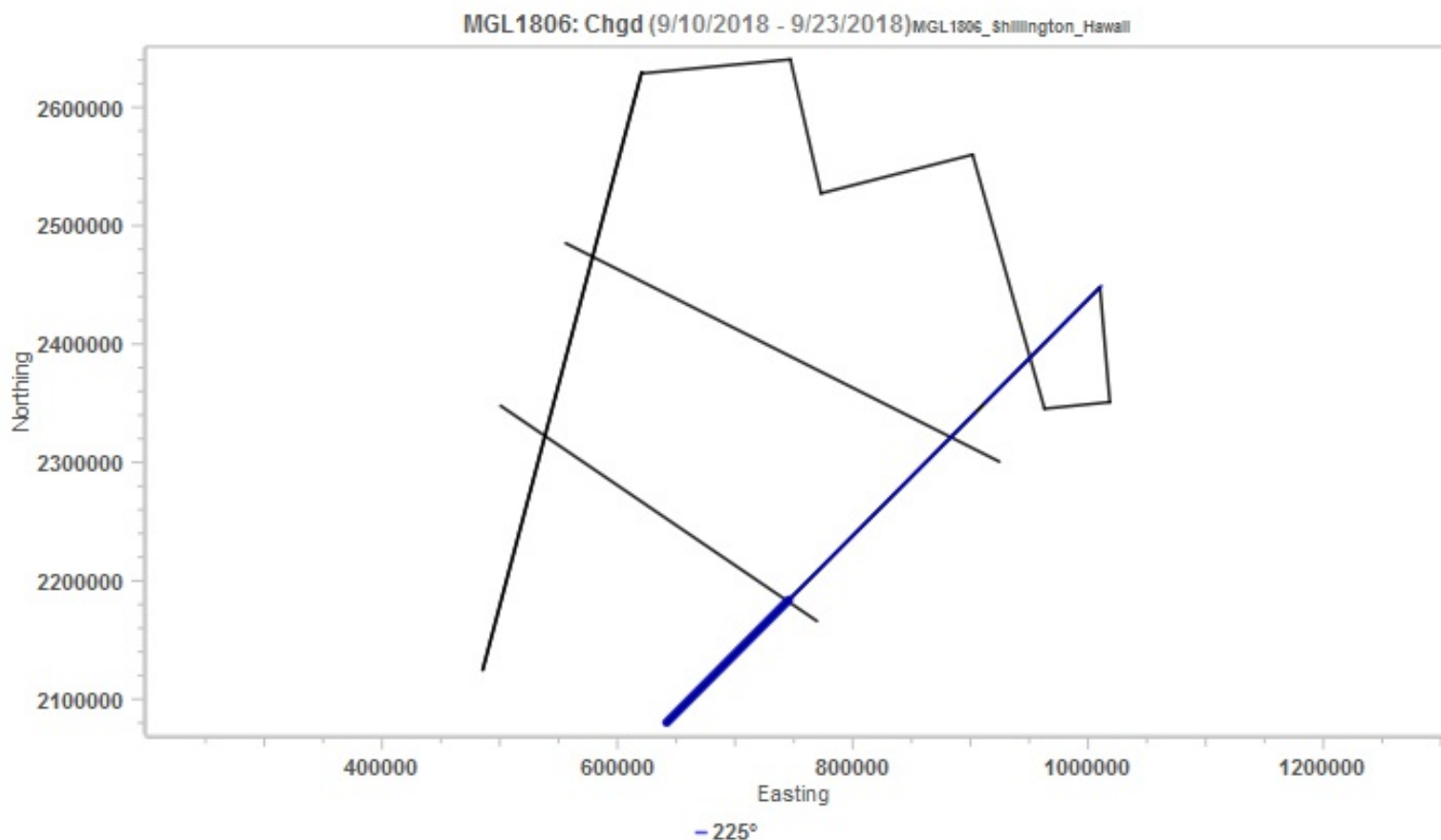
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	146.65	512.20	512.20	512.20
<b>Combined</b>	<b>146.65</b>	<b>512.20</b>	<b>512.20</b>	<b>512.20</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 23 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Air leak on array 1

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 23 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Mon 24 Sep



The beginning of the day was spent on line change turning around to line MC01. While on line change, maintenance was carried out on source arrays 1 and 4 to repair comm's issues and an air leak. The PAM streamer was also adjusted to tow further out and weights were added to tow deeper to improve detection quality.

## Daily Comment Summaries - Plan for Tomorrow

Mon 24 Sep

Continue acquiring line MC01

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Prime Line Change	AC_PLC	Mon 24. Sep 00:00	Mon 24. Sep 02:39	2.650
Line change to MC01				
 Production Prime	AC_PP	Mon 24. Sep 02:39	Mon 24. Sep 24:00	21.350
Air leak on string 3 required recovery and repair while online. Multiple source elements on string 2 are spared out until string can be recovered for repair on line change				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

24-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Line Change	2.650	11.042
Production Prime	21.350	88.958
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.454</b>
Cetacean	1.633	0.454
<b>Mobilisation</b>	<b>116.767</b>	<b>32.435</b>
Deployment	53.250	14.792
Mob Ashore	38.000	10.556
Reconfiguration	1.233	0.343
Testing	4.767	1.324
Transit to Prospect	19.517	5.421



# Daily Science Report

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Category	Hours	% Percent
<b>Acquisition</b>	<b>100.950</b>	<b>28.042</b>
Prime Line Change	5.483	1.523
Production Prime	95.467	26.519
<b>Chargeable Standby</b>	<b>140.650</b>	<b>39.069</b>
Tests	0.333	0.093
Transit	131.150	36.431
Weather	9.167	2.546
<b>Total</b>	<b>360.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
2	01MCS	45.0	887	4282	Prime	169.75	4.293	Part	Midnight
<b>Total</b>						<b>169.75</b>			

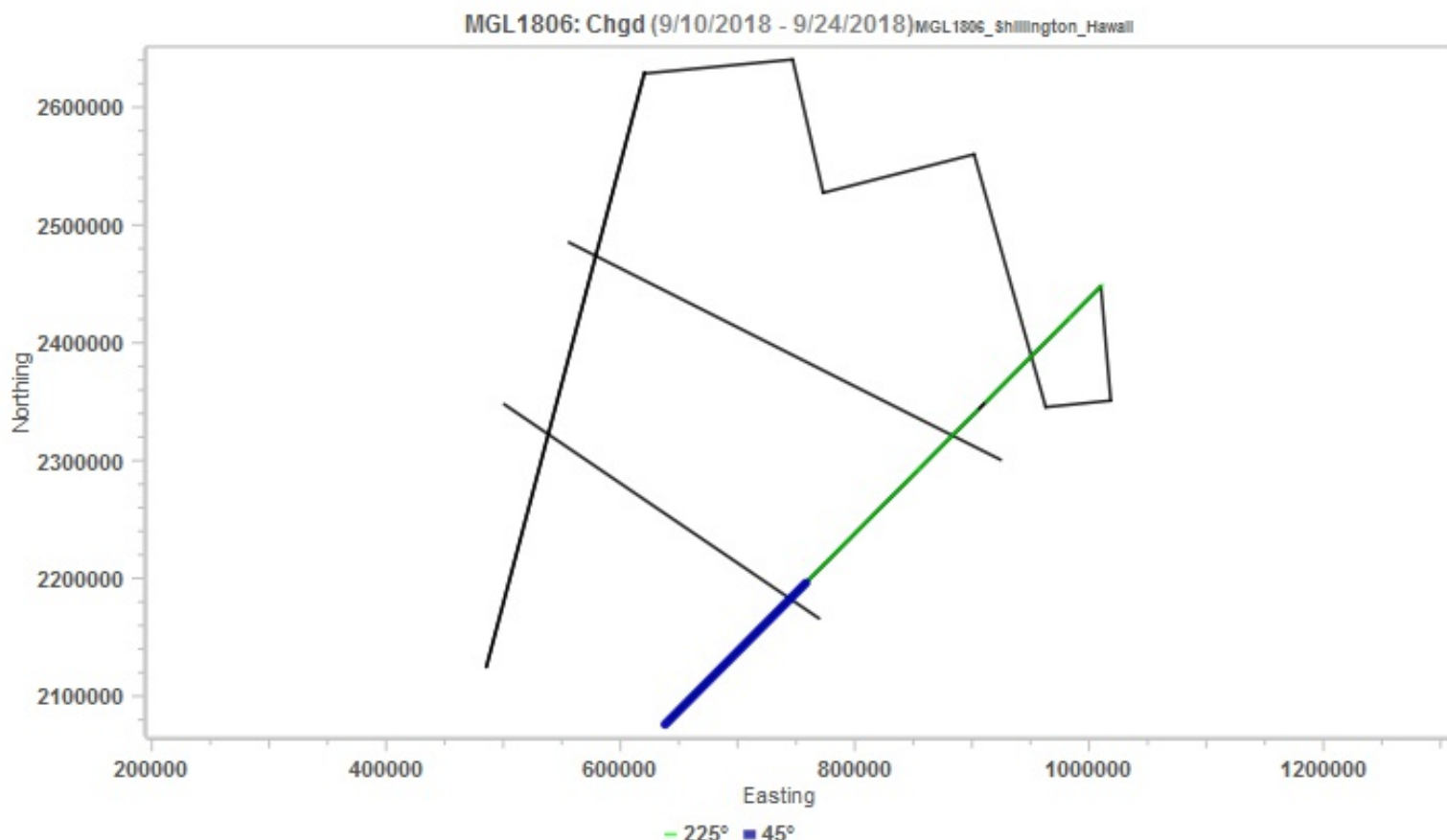
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	169.75	169.75	681.95	681.95
<b>Combined</b>	<b>169.75</b>	<b>169.75</b>	<b>681.95</b>	<b>681.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 24 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Suspected air leak on array 2 gun 1

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 24 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/24/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/25/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 25 Sep


Source array 3 suffered an air leak in the early morning local time hours that required recovery and repair, strings 1,2,and 4 continued firing while repairs were conducted. Failure was found to be a solenoid bolt broken off allowing the solenoid block to move. Digishot system rebooted itself unexpectedly multiple times causing a few 3-4 shot gaps, spare system is standing by for line change.

## Daily Comment Summaries - Plan for Tomorrow

Tue 25 Sep

Complete acquisition of line MC01 and turn to MC03. While on line change sub array 2 will be recovered for repairs of multiple elements and the source PC will be swapped to the spare machine.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Tue 25. Sep 00:00	Tue 25. Sep 24:00	24.000
Air leak on string 3 required recovery and repair while online. Multiple source elements on string 2 are spared out until string can be recovered for repair on line change				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

25-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.425</b>
Cetacean	1.633	0.425
<b>Mobilisation</b>	<b>116.767</b>	<b>30.408</b>
Deployment	53.250	13.867
Mob Ashore	38.000	9.896
Reconfiguration	1.233	0.321
Testing	4.767	1.241
Transit to Prospect	19.517	5.082
<b>Acquisition</b>	<b>124.950</b>	<b>32.539</b>
Prime Line Change	5.483	1.428

# Daily Science Report

9/25/2018

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Category	Hours	% Percent
Production Prime	119.467	31.111
<b>Chargeable Standby</b>	<b>140.650</b>	<b>36.628</b>
Tests	0.333	0.087
Transit	131.150	34.154
Weather	9.167	2.387
<b>Total</b>	<b>384.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
2	01MCS	45.0	4283	8175	Prime	194.65	4.339	Part	Midnight
<b>Total</b>						<b>194.65</b>			

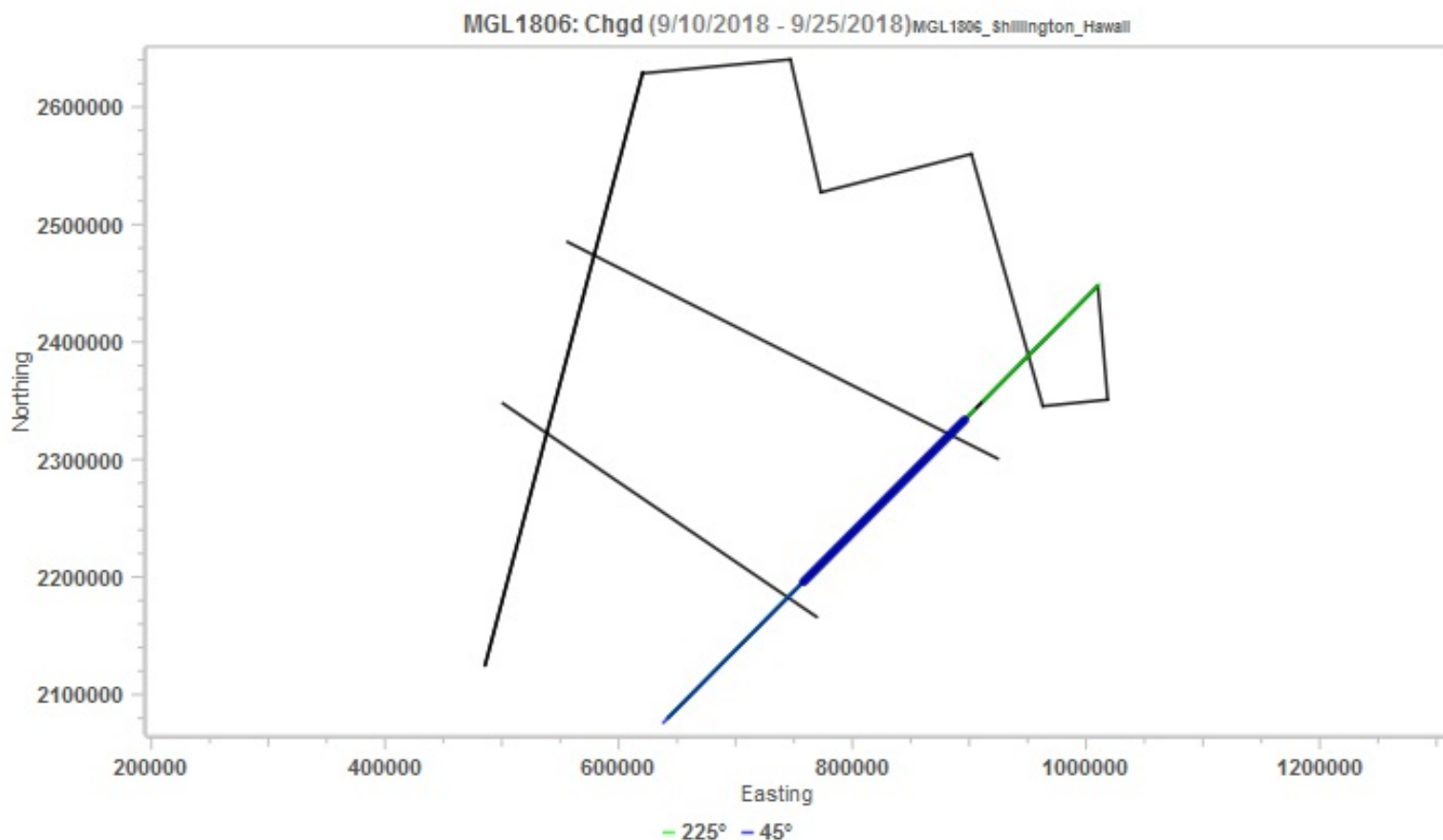
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	194.65	364.40	876.60	876.60
<b>Combined</b>	<b>194.65</b>	<b>364.40</b>	<b>876.60</b>	<b>876.60</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 25 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Source elements 2-1 and 2-9 not used due to issues awaiting line change for repair. Air leak array 3 gun 1 required recovery and repair

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 25 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/26/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 26 Sep




Source array #2 suffered a large air leak and had to be recovered online and repaired.  
Completed line MC01 and began turn to line MC03. The source controller PC was replaced during line change.  
PAM Hydrophone began having problems with one of its high frequency hydrophones, the hydrophone array was replaced during line change.

## Daily Comment Summaries - Plan for Tomorrow

Wed 26 Sep

Complete line MC03 followed by line change to MC04 then to MC05.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Wed 26. Sep 00:00	Wed 26. Sep 21:39	21.650
Air leak on string 3 required recovery and repair while online. Multiple source elements on string 2 are spared out until string can be recovered for repair on line change				
 Prime Line Change	AC_PLC	Wed 26. Sep 21:39	Wed 26. Sep 22:47	1.133
Line change to MC03				
 Production Prime	AC_PP	Wed 26. Sep 22:47	Wed 26. Sep 24:00	1.217

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

26-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Line Change	1.133	4.722
Production Prime	22.867	95.278
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.400</b>
Cetacean	1.633	0.400
<b>Mobilisation</b>	<b>116.767</b>	<b>28.619</b>
Deployment	53.250	13.051
Mob Ashore	38.000	9.314



# Daily Science Report

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Category	Hours	% Percent
Reconfiguration	1.233	0.302
Testing	4.767	1.168
Transit to Prospect	19.517	4.783
<b>Acquisition</b>	<b>148.950</b>	<b>36.507</b>
Prime Line Change	6.617	1.622
Production Prime	142.333	34.886
<b>Chargeable Standby</b>	<b>140.650</b>	<b>34.473</b>
Tests	0.333	0.082
Transit	131.150	32.145
Weather	9.167	2.247
<b>Total</b>	<b>408.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
2	01MCS	45.0	8176	11546	Prime	168.55	4.295	Complete	Complete
3	3FMCS	175.1	980	1178	Prime	0.00	4.394	Part	Midnight
<b>Total</b>						<b>168.55</b>			

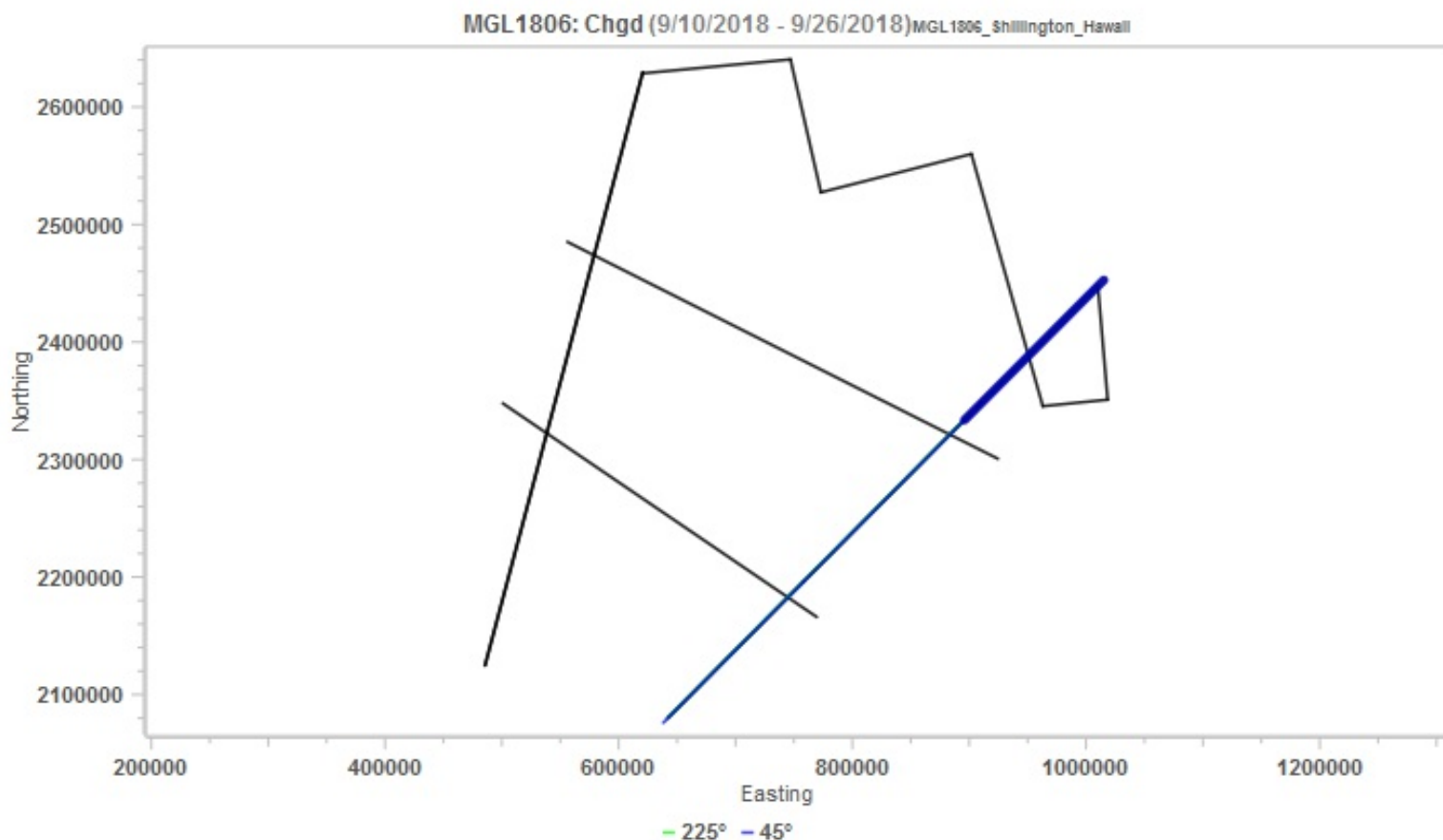
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	168.55	532.95	1045.15	1045.15
<b>Combined</b>	<b>168.55</b>	<b>532.95</b>	<b>1045.15</b>	<b>1045.15</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 26 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 26 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/26/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/27/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 27 Sep

The completed acquisition of line MC03 and also acquired MC04 before midnight UTC.  
During line change to MC04 source arrays 3 and 4 were secured and adjusted due to them becoming entangled.

## Daily Comment Summaries - Plan for Tomorrow

Thu 27 Sep

Complete line MC04 followed by line change to MC05 and continue through remainder of the day.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Thu 27. Sep 00:00	Thu 27. Sep 11:36	11.600
 Prime Line Change	AC_PLC	Thu 27. Sep 11:36	Thu 27. Sep 12:22	0.767
Nominal Prime line change.				
 Production Prime	AC_PP	Thu 27. Sep 12:22	Thu 27. Sep 23:42	11.333
 Prime Line Change	AC_PLC	Thu 27. Sep 23:42	Thu 27. Sep 23:58	0.267
Line change to MC05				
 Production Prime	AC_PP	Thu 27. Sep 23:58	Thu 27. Sep 24:00	0.033

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

27-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Line Change	1.033	4.306
Production Prime	22.967	95.694
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.378</b>
Cetacean	1.633	0.378
<b>Mobilisation</b>	<b>116.767</b>	<b>27.029</b>
Deployment	53.250	12.326
Mob Ashore	38.000	8.796

# Daily Science Report

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Category	Hours	% Percent
Reconfiguration	1.233	0.285
Testing	4.767	1.103
Transit to Prospect	19.517	4.518
<b>Acquisition</b>	<b>172.950</b>	<b>40.035</b>
Prime Line Change	7.650	1.771
Production Prime	165.300	38.264
<b>Chargeable Standby</b>	<b>140.650</b>	<b>32.558</b>
Tests	0.333	0.077
Transit	131.150	30.359
Weather	9.167	2.122
<b>Total</b>	<b>432.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
3	03MC	175.7	1179	3015	Prime	91.85	4.287	Complete	Complete
4	04MC	222.2	1103	2821	Prime	85.90	4.093	Complete	Complete
5	05MC	296.6	1043	1046	Prime	0.15	2.430	Part	Midnight
<b>Total</b>						<b>177.90</b>			

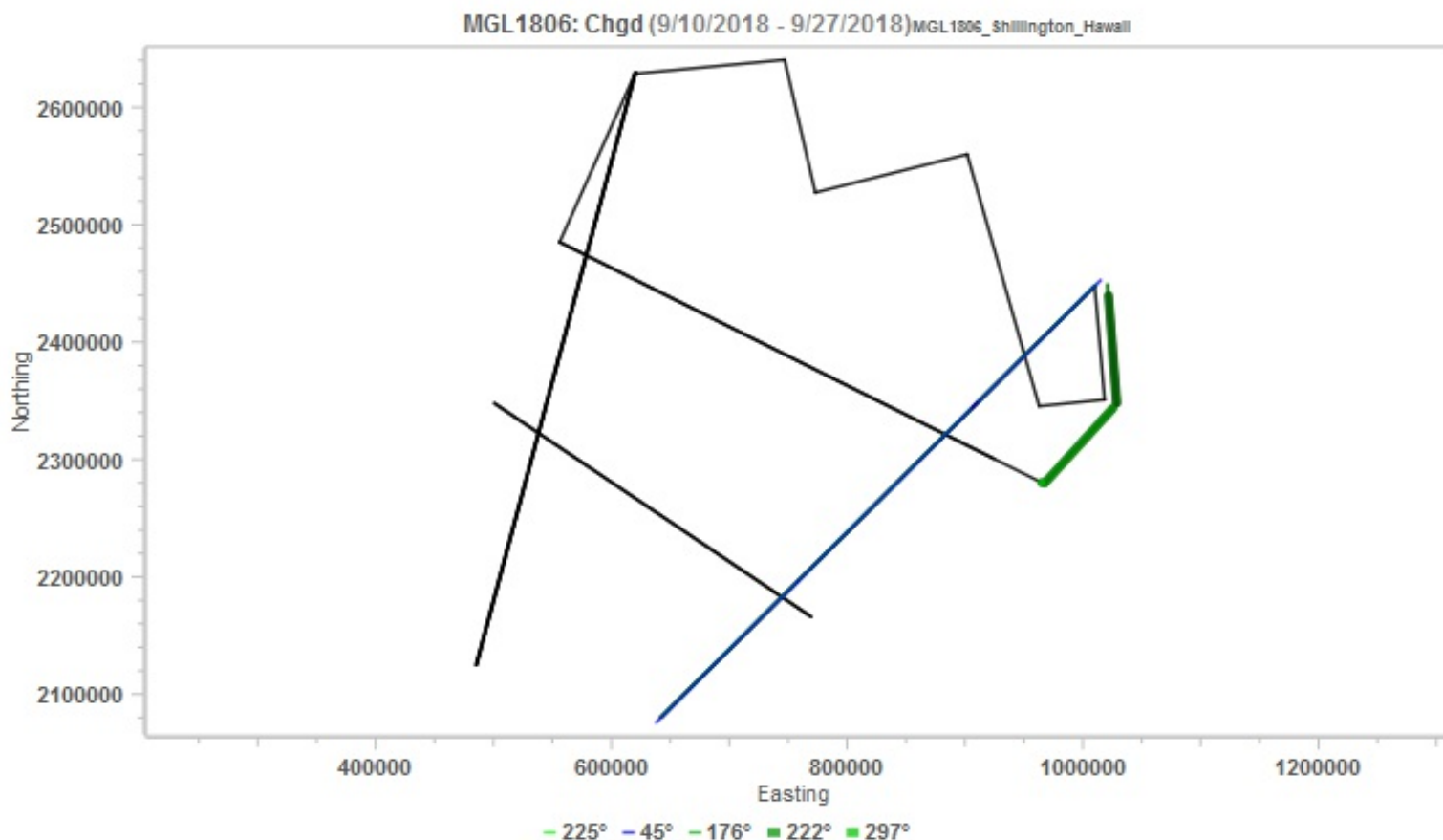
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	177.90	720.75	1232.95	1232.95
<b>Combined</b>	<b>177.90</b>	<b>720.75</b>	<b>1232.95</b>	<b>1232.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 27 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Thu 27 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/27/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/28/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 28 Sep


Line MC05 was begun shortly before UTC midnight and acquisition continued throughout end of day.

## Daily Comment Summaries - Plan for Tomorrow

Fri 28 Sep

Continue down line MC05.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Fri 28. Sep 00:00	Fri 28. Sep 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

28-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.358</b>
Cetacean	1.633	0.358
<b>Mobilisation</b>	<b>116.767</b>	<b>25.607</b>
Deployment	53.250	11.678
Mob Ashore	38.000	8.333
Reconfiguration	1.233	0.270
Testing	4.767	1.045
Transit to Prospect	19.517	4.280
<b>Acquisition</b>	<b>196.950</b>	<b>43.191</b>
Prime Line Change	7.650	1.678
Production Prime	189.300	41.513
<b>Chargeable Standby</b>	<b>140.650</b>	<b>30.844</b>
Tests	0.333	0.073
Transit	131.150	28.761
Weather	9.167	2.010



# Daily Science Report

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Category	Hours	% Percent
<b>Total</b>	456.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
5	05MC	296.6	1047	4840	Prime	189.70	4.265	Part	Midnight
<b>Total</b>						<b>189.70</b>			

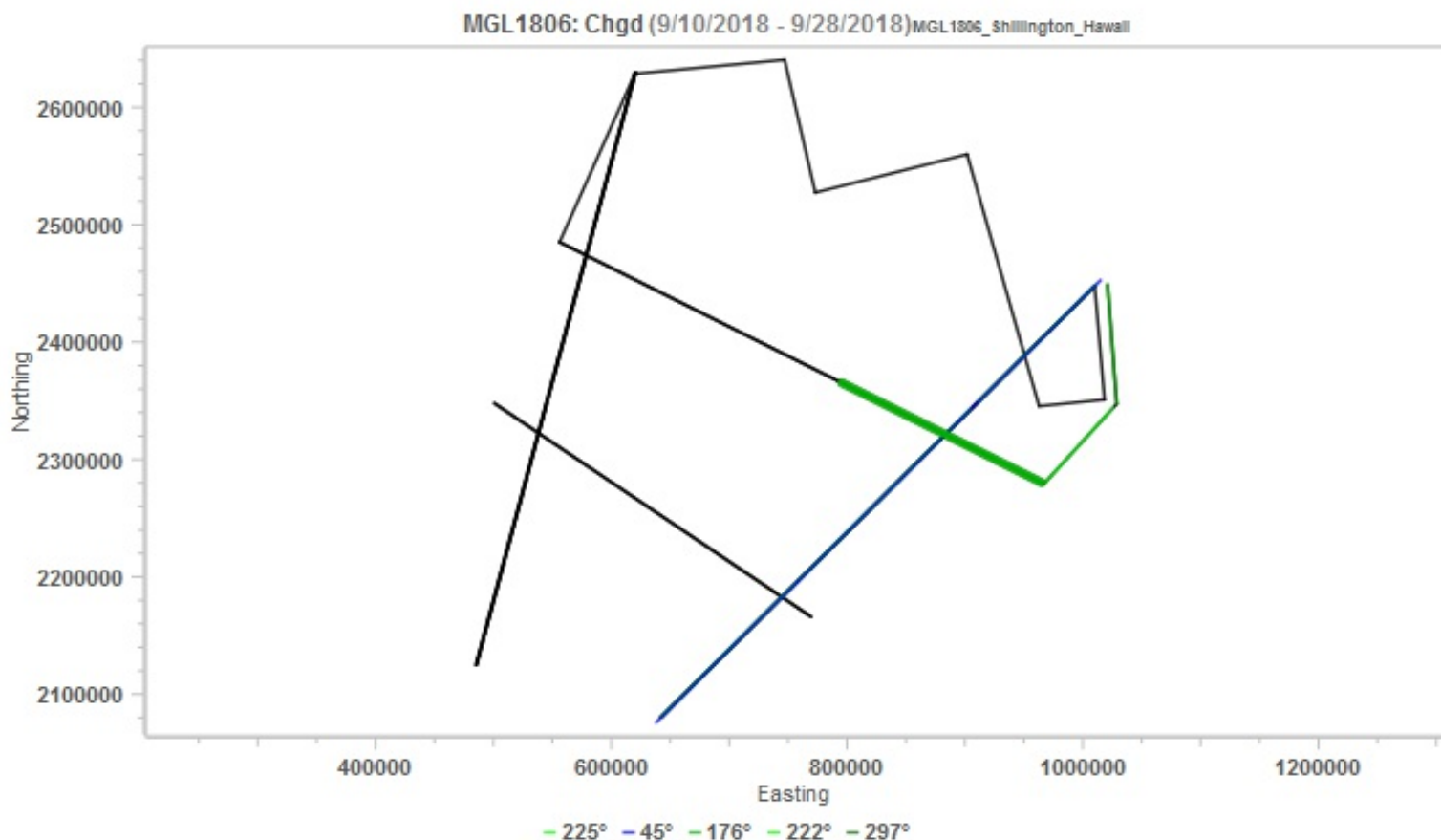
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	189.70	910.45	1422.65	1422.65
<b>Combined</b>	<b>189.70</b>	<b>910.45</b>	<b>1422.65</b>	<b>1422.65</b>

# Daily Science Report

9/28/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 28 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 28 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/28/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/29/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 29 Sep


Acquired data on line MC05 throughout entire UTC day.

## Daily Comment Summaries - Plan for Tomorrow

Sat 29 Sep

Plan to complete line MC05 early morning hours local time and begin a line change to join midway down the OBS2 line. Planned source maintenance during the long line change.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Sat 29. Sep 00:00	Sat 29. Sep 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

29-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.340</b>
Cetacean	1.633	0.340
<b>Mobilisation</b>	<b>116.767</b>	<b>24.326</b>
Deployment	53.250	11.094
Mob Ashore	38.000	7.917
Reconfiguration	1.233	0.257
Testing	4.767	0.993
Transit to Prospect	19.517	4.066
<b>Acquisition</b>	<b>220.950</b>	<b>46.031</b>
Prime Line Change	7.650	1.594
Production Prime	213.300	44.438
<b>Chargeable Standby</b>	<b>140.650</b>	<b>29.302</b>
Tests	0.333	0.069
Transit	131.150	27.323

# Daily Science Report

9/29/2018

Page 2

Category	Hours	% Percent
Weather	9.167	1.910
<b>Total</b>	<b>480.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
5	05MC	296.6	4841	8000	Prime	158.00	3.910	Part	Midnight
<b>Total</b>						<b>158.00</b>			

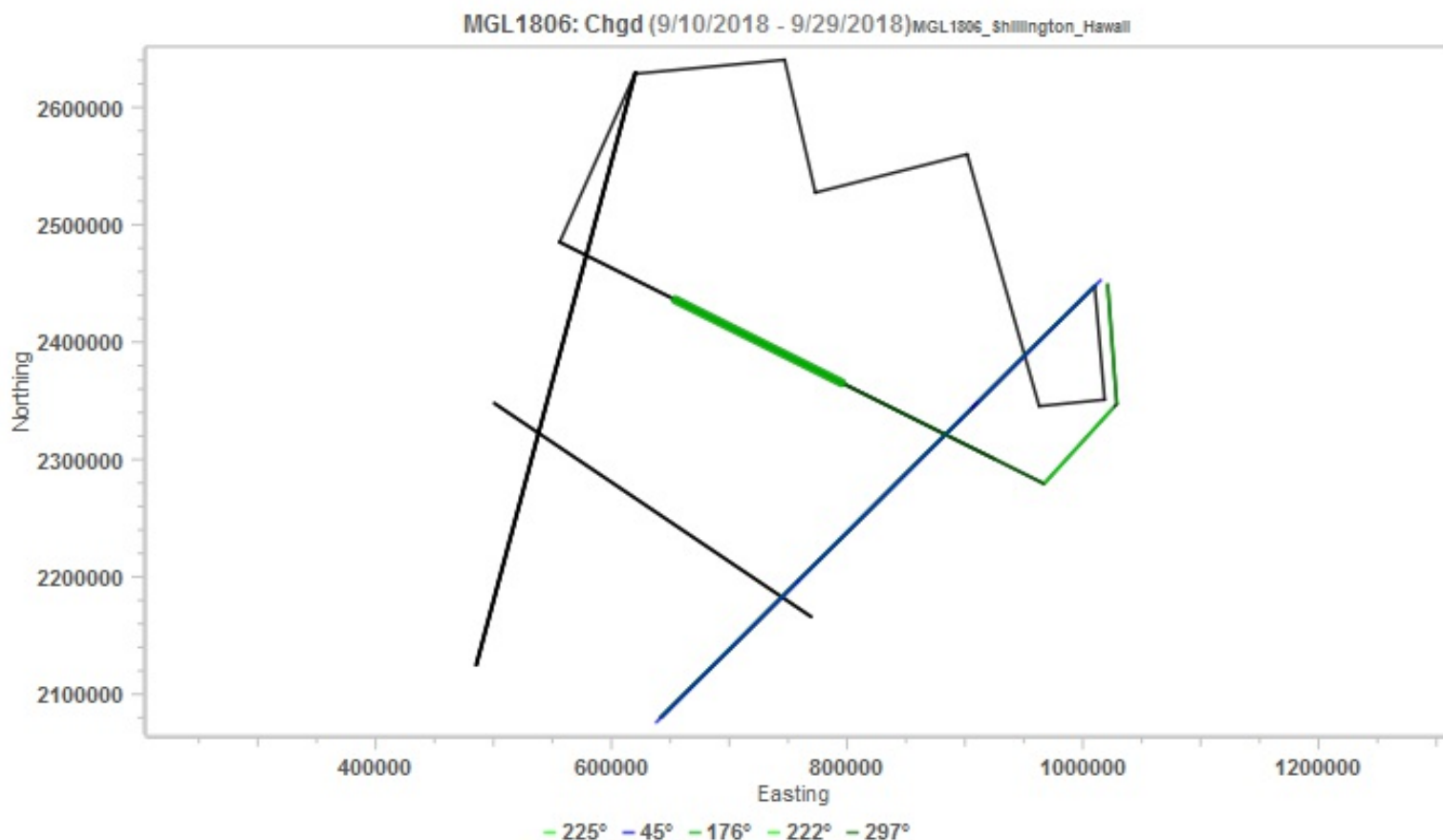
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	158.00	1068.45	1580.65	1580.65
<b>Combined</b>	<b>158.00</b>	<b>1068.45</b>	<b>1580.65</b>	<b>1580.65</b>

# Daily Science Report

9/29/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 29 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 29 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Sun Sep 30 2018 04:40a.m.

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# Daily Science Report

9/29/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

9/30/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sun 30 Sep

Completed acquisition of line MC05 and turned to line OB2S.  
During the line change source strings 2, 3, and 4 as well as the lead-in became entangled. Source strings were recovered and thoroughly checked requiring replacement of multiple air hoses and solenoid jumpers.

## Daily Comment Summaries - Plan for Tomorrow

Sun 30 Sep

Plan to complete line MC05 early morning hours local time and begin a line change to join midway down the OBS2 line.  
Planned source maintenance during the long line change.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Production Prime	AC_PP	Sun 30. Sep 00:00	Sun 30. Sep 11:00	11.000
Started midway down line to conserve time.				
 Prime Extended L/C	AC_PXL	Sun 30. Sep 11:00	Sun 30. Sep 22:18	11.300
Long line change to turn back and join mid-line OB2S				
 Production Prime	AC_PP	Sun 30. Sep 22:18	Sun 30. Sep 24:00	1.700

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

30-Sep	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Extended L/C	11.300	47.083
Production Prime	12.700	52.917
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.324</b>
Cetacean	1.633	0.324
<b>Mobilisation</b>	<b>116.767</b>	<b>23.168</b>
Deployment	53.250	10.565
Mob Ashore	38.000	7.540
Reconfiguration	1.233	0.245
Testing	4.767	0.946



# Daily Science Report

9/30/2018

Page 2

Category	Hours	% Percent
Transit to Prospect	19.517	3.872
<b>Acquisition</b>	<b>244.950</b>	<b>48.601</b>
Prime Extended L/C	11.300	2.242
Prime Line Change	7.650	1.518
Production Prime	226.000	44.841
<b>Chargeable Standby</b>	<b>140.650</b>	<b>27.907</b>
Tests	0.333	0.066
Transit	131.150	26.022
Weather	9.167	1.819
<b>Total</b>	<b>504.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
5	05MC	296.6	8001	10340	Prime	117.00	4.252	Complete	Complete
6	02OB	195.0	5112	5353	Prime	12.05	3.827	Part	Midnight
<b>Total</b>						<b>129.05</b>			

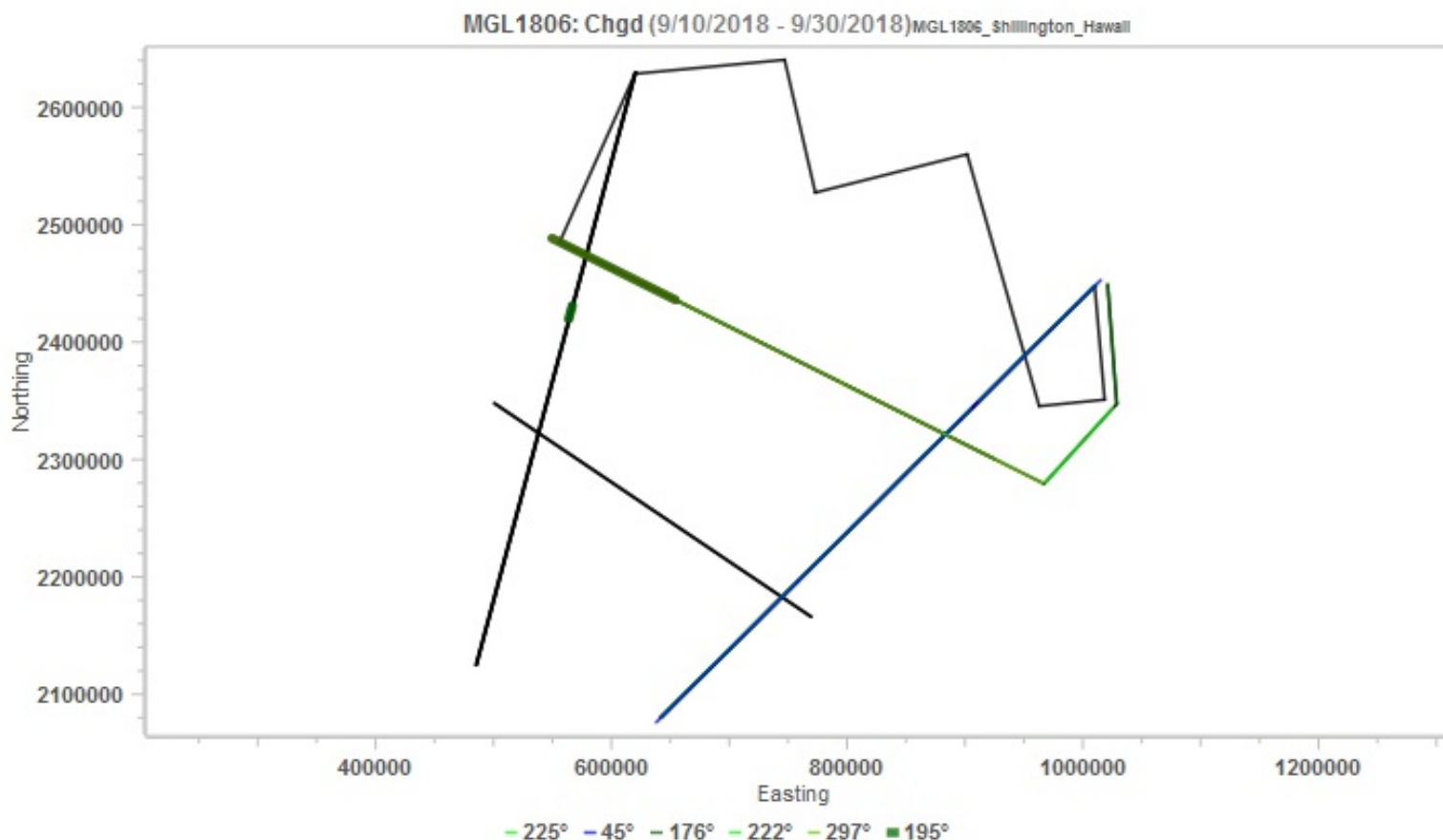
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	129.05	1197.50	1709.70	1709.70
<b>Combined</b>	<b>129.05</b>	<b>1197.50</b>	<b>1709.70</b>	<b>1709.70</b>

# Daily Science Report

9/30/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 30 Sep

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 30 Sep

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

9/30/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/1/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Mon 01 Oct

Spent the day acquiring line OB2S

## Daily Comment Summaries - Plan for Tomorrow

Mon 01 Oct

Plan to complete line OB2S morning local time then vessel will then make a line change to circle back and begin acquisition of line MC02 towards the north west.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Mon 1. Oct 00:00	Mon 1. Oct 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

1-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.309</b>
Cetacean	1.633	0.309
<b>Mobilisation</b>	<b>116.767</b>	<b>22.115</b>
Deployment	53.250	10.085
Mob Ashore	38.000	7.197
Reconfiguration	1.233	0.234
Testing	4.767	0.903
Transit to Prospect	19.517	3.696
<b>Acquisition</b>	<b>268.950</b>	<b>50.938</b>
Prime Extended L/C	11.300	2.140
Prime Line Change	7.650	1.449
Production Prime	250.000	47.348
<b>Chargeable Standby</b>	<b>140.650</b>	<b>26.638</b>
Tests	0.333	0.063

# Daily Science Report

10/1/2018

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Category	Hours	% Percent
Transit	131.150	24.839
Weather	9.167	1.736
<b>Total</b>	<b>528.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	02OB	195.0	5354	8902	Prime	177.45	3.981	Part	Midnight
<b>Total</b>						<b>177.45</b>			

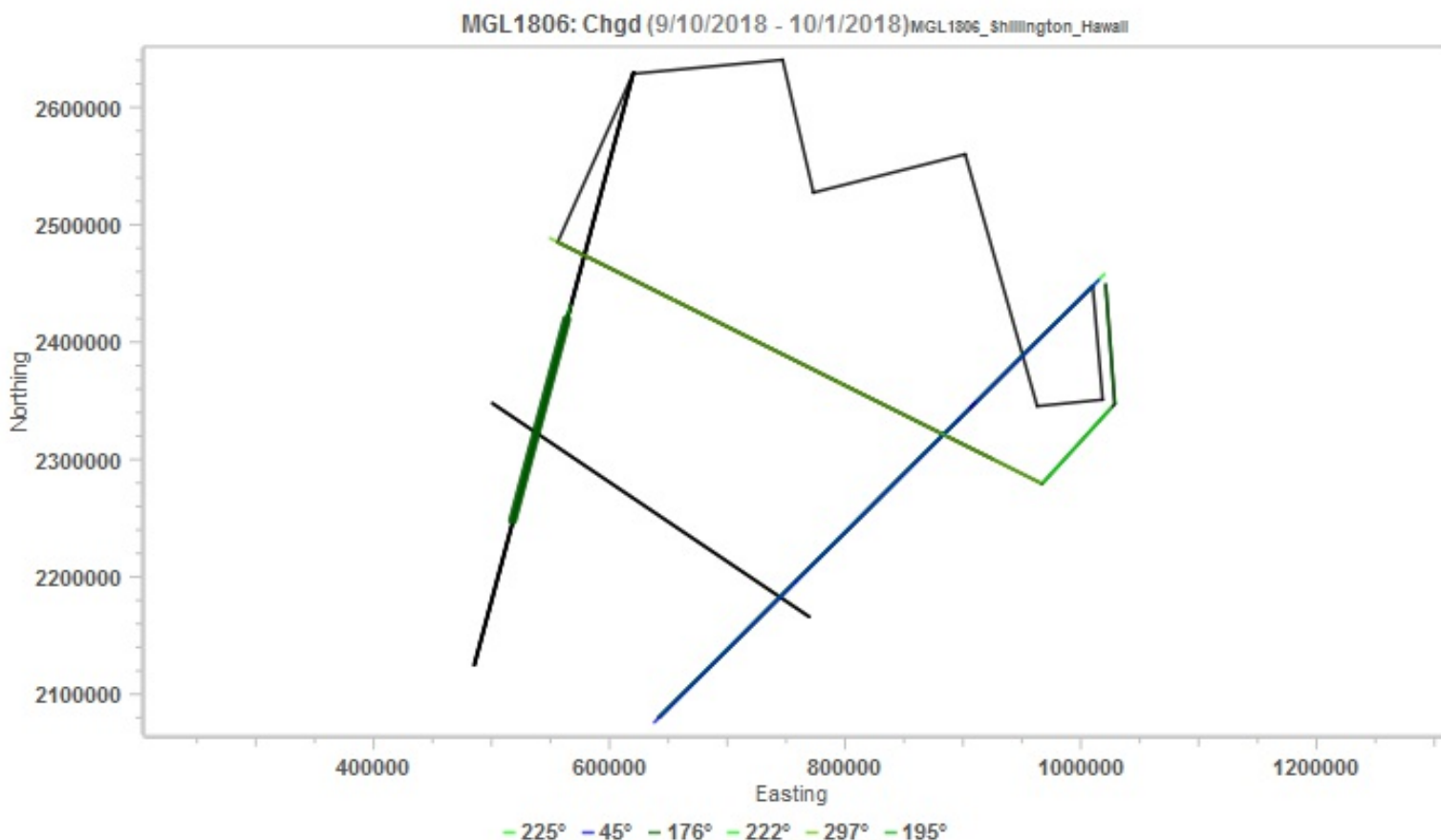
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	177.45	177.45	177.45	1899.45
<b>Combined</b>	<b>177.45</b>	<b>177.45</b>	<b>177.45</b>	<b>1899.45</b>

# Daily Science Report

10/1/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 01 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 01 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/1/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/2/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 02 Oct




Completed acquisition of line OB2S and made a large teardrop turn to return on line MC02. SEAL and Spectra reconfigured for MCS shot spacing and records.

## Daily Comment Summaries - Plan for Tomorrow

Tue 02 Oct

Plan to continue acquiring line MC02 throughout the next day.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Tue 2. Oct 00:00	Tue 2. Oct 15:56	15.933
 Prime Line Change	AC_PLC	Tue 2. Oct 15:56	Tue 2. Oct 20:34	4.633
Line change to MC02				
 Production Prime	AC_PP	Tue 2. Oct 20:34	Tue 2. Oct 24:00	3.433

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

2-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Line Change	4.633	19.306
Production Prime	19.367	80.694
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.296</b>
Cetacean	1.633	0.296
<b>Mobilisation</b>	<b>116.767</b>	<b>21.153</b>
Deployment	53.250	9.647
Mob Ashore	38.000	6.884
Reconfiguration	1.233	0.223
Testing	4.767	0.864
Transit to Prospect	19.517	3.536
<b>Acquisition</b>	<b>292.950</b>	<b>53.071</b>



# Daily Science Report

10/2/2018

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Category	Hours	% Percent
Prime Extended L/C	11.300	2.047
Prime Line Change	12.283	2.225
Production Prime	269.367	48.798
<b>Chargeable Standby</b>	<b>140.650</b>	<b>25.480</b>
Tests	0.333	0.060
Transit	131.150	23.759
Weather	9.167	1.661
<b>Total</b>	<b>552.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accept km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	02OB	195.0	8903	11461	Prime	127.95	4.117	Complete	Incomplete
7	02MC	15.0	942	1504	Prime	28.10	4.419	Part	Midnight
<b>Total</b>						<b>156.05</b>			

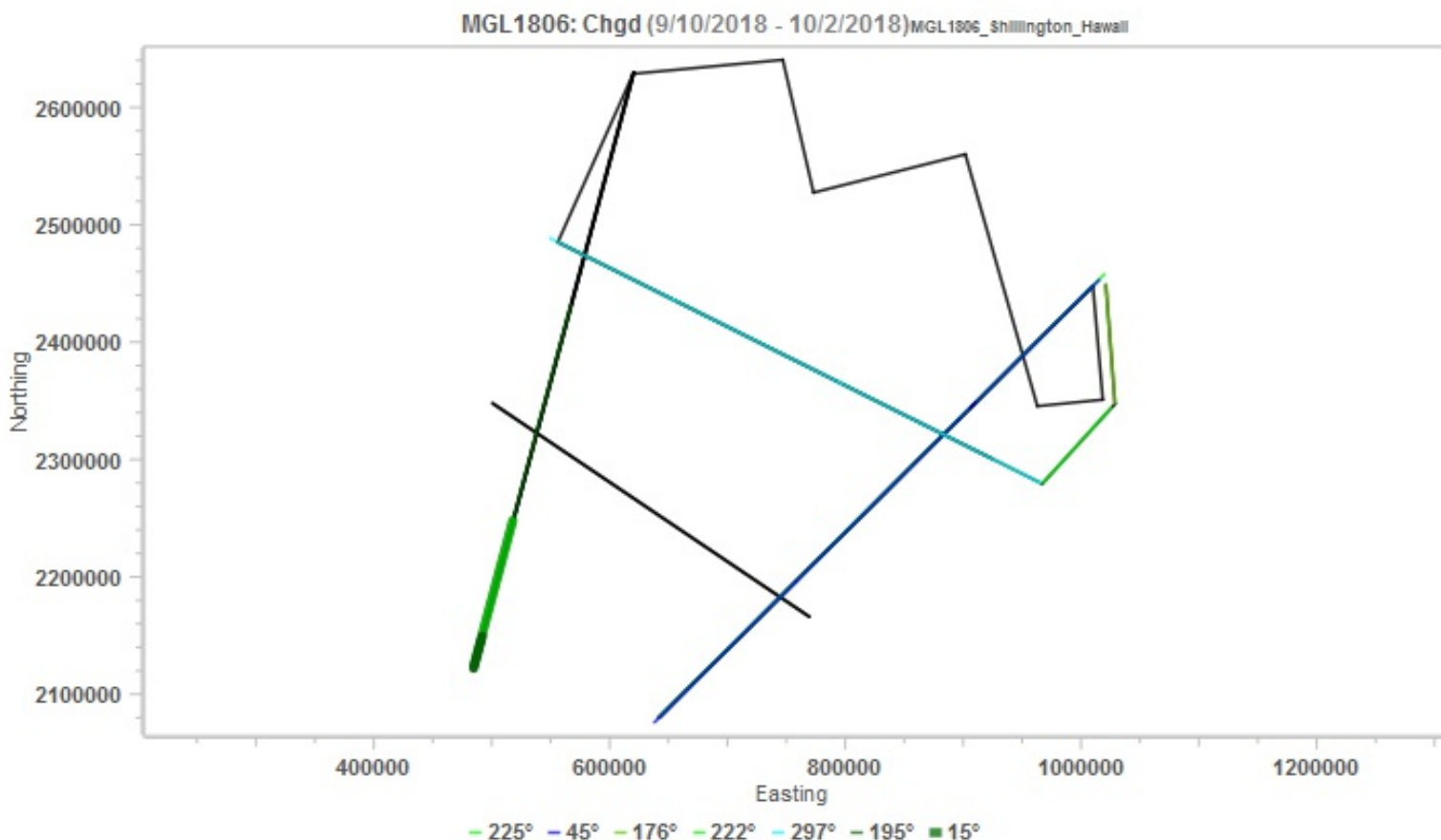
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	156.05	333.50	333.50	2055.50
<b>Combined</b>	<b>156.05</b>	<b>333.50</b>	<b>333.50</b>	<b>2055.50</b>

# Daily Science Report

10/2/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 02 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 02 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/2/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/3/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 03 Oct


Continued down line MC02. Digishot PC rebooted itself multiple times, it was discovered that the UPS supplying power to digishot PC was failing without warning, the PC was switched to a different UPS.

## Daily Comment Summaries - Plan for Tomorrow

Wed 03 Oct

Plan to continue acquiring line MC02 throughout the next day.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Wed 3. Oct 00:00	Wed 3. Oct 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

3-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.284</b>
Cetacean	1.633	0.284
<b>Mobilisation</b>	<b>116.767</b>	<b>20.272</b>
Deployment	53.250	9.245
Mob Ashore	38.000	6.597
Reconfiguration	1.233	0.214
Testing	4.767	0.828
Transit to Prospect	19.517	3.388
<b>Acquisition</b>	<b>316.950</b>	<b>55.026</b>
Prime Extended L/C	11.300	1.962
Prime Line Change	12.283	2.133
Production Prime	293.367	50.932
<b>Chargeable Standby</b>	<b>140.650</b>	<b>24.418</b>
Tests	0.333	0.058

# Daily Science Report

10/3/2018

Page 2

Category	Hours	% Percent
Transit	131.150	22.769
Weather	9.167	1.591
<b>Total</b>	<b>576.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	02MC	15.0	1505	5386	Prime	194.10	4.373	Part	Midnight
<b>Total</b>						<b>194.10</b>			

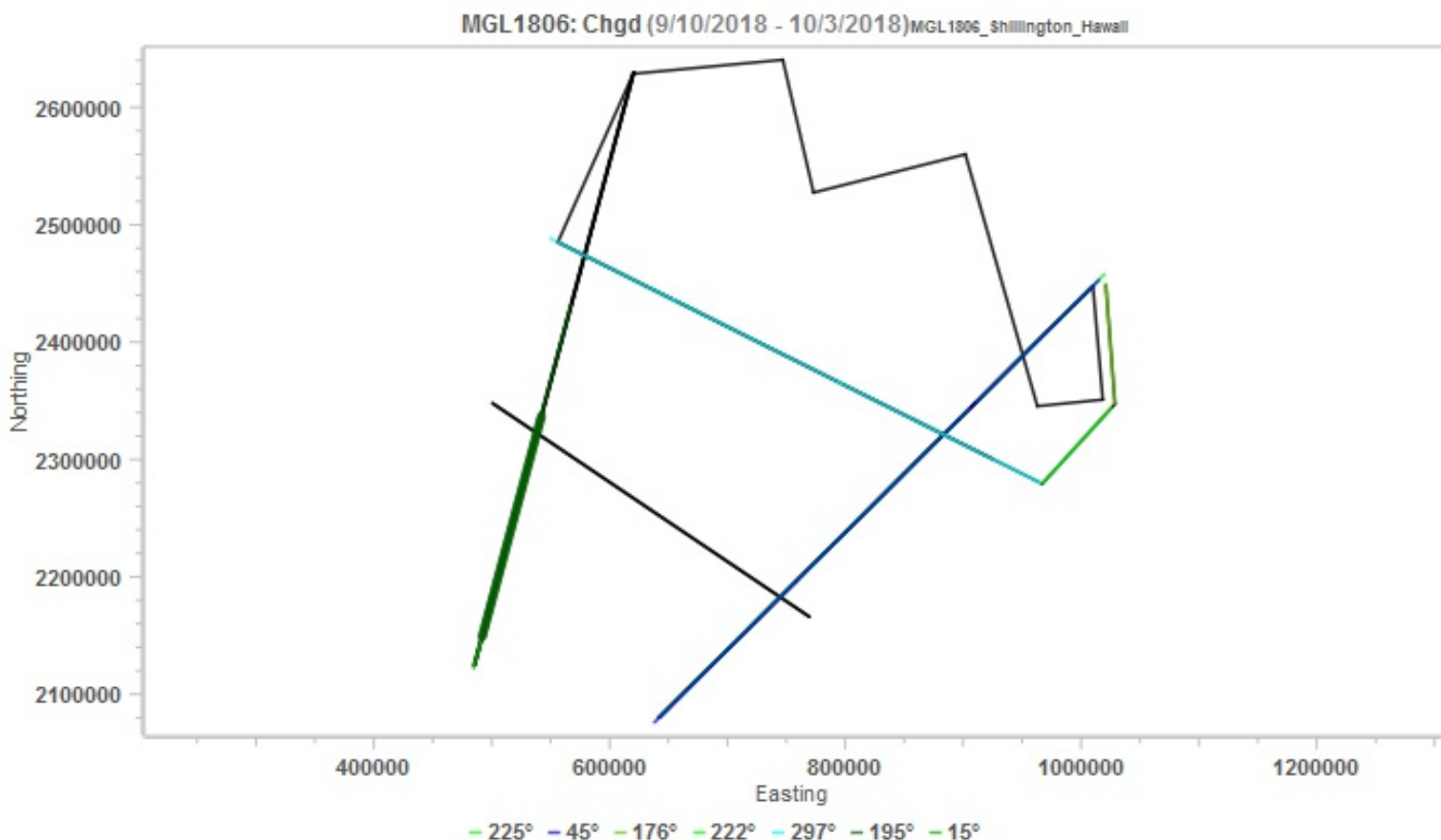
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	194.10	527.60	527.60	2249.60
<b>Combined</b>	<b>194.10</b>	<b>527.60</b>	<b>527.60</b>	<b>2249.60</b>

# Daily Science Report

10/3/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 03 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 03 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Thu Oct 4 2018 01:26a.m.

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# Daily Science Report

10/3/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/4/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 04 Oct


Continued down line MC02. The streamer safely passed the fish attraction buoy, noise emitted from the buoy was seen in the MCS record. Fishing gear caught on streamer at bird 14. The swells have picked up and are causing large amount of vessel roll.

## Daily Comment Summaries - Plan for Tomorrow

Thu 04 Oct

It is planned to complete line MC02 then turn around and acquire data on the northern portion of line OBS02 which will be identified as OB2N.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Thu 4. Oct 00:00	Thu 4. Oct 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

4-Oct	Hours	%Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	%Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.272</b>
Cetacean	1.633	0.272
<b>Mobilisation</b>	<b>116.767</b>	<b>19.461</b>
Deployment	53.250	8.875
Mob Ashore	38.000	6.333
Reconfiguration	1.233	0.206
Testing	4.767	0.794
Transit to Prospect	19.517	3.253
<b>Acquisition</b>	<b>340.950</b>	<b>56.825</b>
Prime Extended L/C	11.300	1.883
Prime Line Change	12.283	2.047
Production Prime	317.367	52.894
<b>Chargeable Standby</b>	<b>140.650</b>	<b>23.442</b>



# Daily Science Report

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Category	Hours	% Percent
Tests	0.333	0.056
Transit	131.150	21.858
Weather	9.167	1.528
<b>Total</b>	<b>600.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	02MC	15.0	5387	9249	Prime	193.15	4.360	Part	Midnight
<b>Total</b>						<b>193.15</b>			

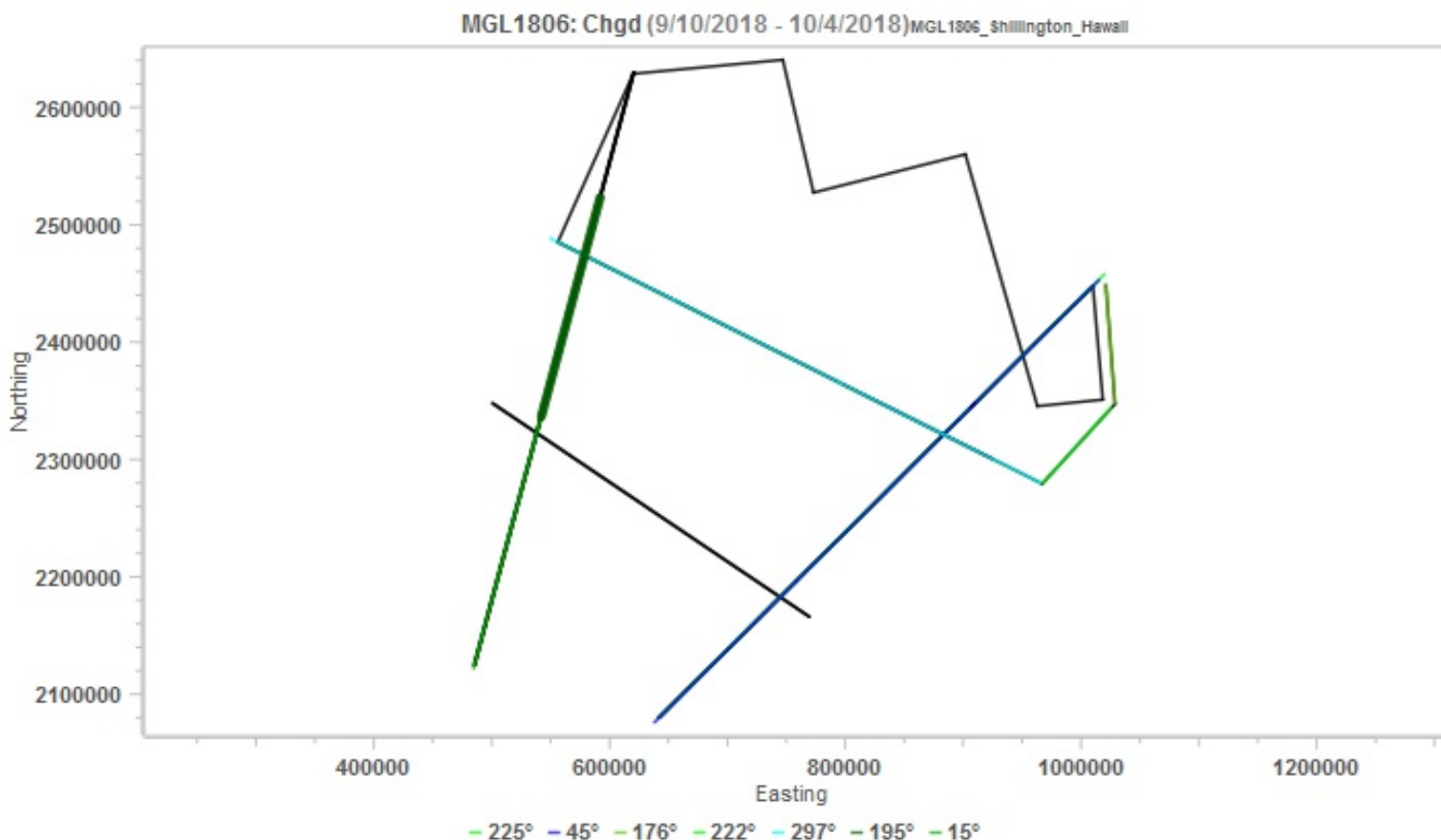
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	193.15	720.75	720.75	2442.75
<b>Combined</b>	<b>193.15</b>	<b>720.75</b>	<b>720.75</b>	<b>2442.75</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 04 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Thu 04 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/4/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/5/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 05 Oct


Poor weather is causing a large amount of vessel roll, also a strong head current is slowed production speed through the remainder of the line. Completed acquisition of line MCS02 and turned to line OB2N.

## Daily Comment Summaries - Plan for Tomorrow

Fri 05 Oct

It is planned to acquire OBS spacing data throughout the day on line OB2N. EOL planned early afternoon local time where the vessel will turn starboard and acquire a line of opportunity while setting up for line 7.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Fri 5. Oct 00:00	Fri 5. Oct 16:18	16.300
 Prime Line Change	AC_PLC	Fri 5. Oct 16:18	Fri 5. Oct 20:22	4.067
Line change to OB2N				
 Production Prime	AC_PP	Fri 5. Oct 20:22	Fri 5. Oct 24:00	3.633

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

5-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Prime Line Change	4.067	16.944
Production Prime	19.933	83.056
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.262</b>
Cetacean	1.633	0.262
<b>Mobilisation</b>	<b>116.767</b>	<b>18.713</b>
Deployment	53.250	8.534
Mob Ashore	38.000	6.090
Reconfiguration	1.233	0.198
Testing	4.767	0.764
Transit to Prospect	19.517	3.128

# Daily Science Report

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Category	Hours	% Percent
<b>Acquisition</b>	<b>364.950</b>	<b>58.486</b>
Prime Extended L/C	11.300	1.811
Prime Line Change	16.350	2.620
Production Prime	337.300	54.054
<b>Chargeable Standby</b>	<b>140.650</b>	<b>22.540</b>
Tests	0.333	0.053
Transit	131.150	21.018
Weather	9.167	1.469
<b>Total</b>	<b>624.000</b>	

## Basic Project Details

<b>MGL1806_Shillington_Hawaii</b>					
<b>General Details</b>					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
<b>Cable Details</b>					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
<b>Source Details</b>					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
7	02MC	15.0	9250	11606	Prime	117.85	4.251	Complete	Complete
8	02OB	195.0	931	1500	Prime	28.45	4.228	Part	Midnight
<b>Total</b>						<b>146.30</b>			

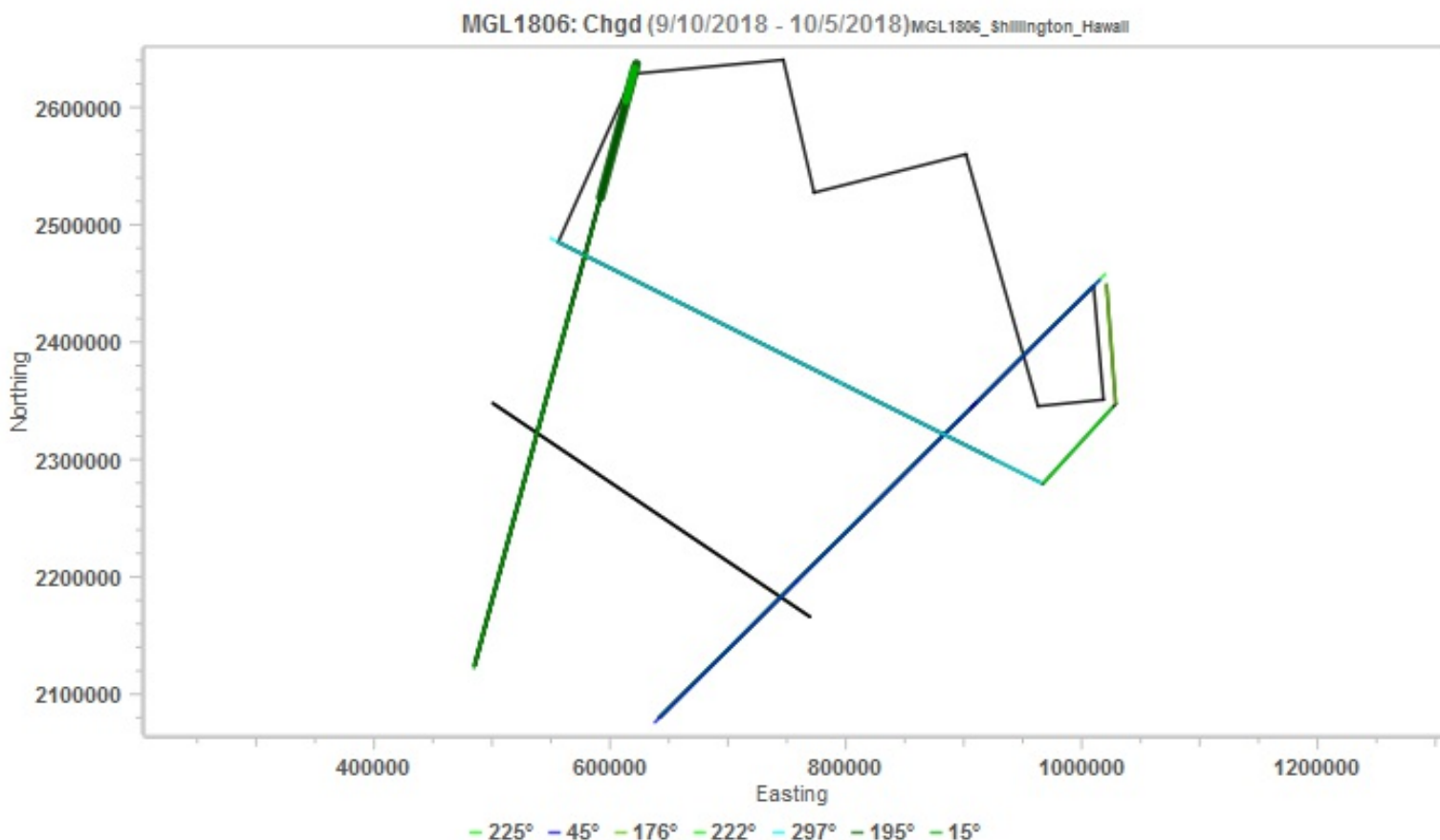
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	146.30	867.05	867.05	2589.05
<b>Combined</b>	<b>146.30</b>	<b>867.05</b>	<b>867.05</b>	<b>2589.05</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 05 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 05 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Sat Oct 6 2018 03:28a.m.

Page 3

# Daily Science Report

10/5/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/6/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 06 Oct


Spent the day acquiring data on line OB2N shortly after midnight UTC completed the line and turned starboard to a new line MC06.

## Daily Comment Summaries - Plan for Tomorrow

Sat 06 Oct

Acquire line MC06 and then turn to line MC07.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Sat 6. Oct 00:00	Sat 6. Oct 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

6-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.252</b>
Cetacean	1.633	0.252
<b>Mobilisation</b>	<b>116.767</b>	<b>18.020</b>
Deployment	53.250	8.218
Mob Ashore	38.000	5.864
Reconfiguration	1.233	0.190
Testing	4.767	0.736
Transit to Prospect	19.517	3.012
<b>Acquisition</b>	<b>388.950</b>	<b>60.023</b>
Prime Extended L/C	11.300	1.744
Prime Line Change	16.350	2.523
Production Prime	361.300	55.756
<b>Chargeable Standby</b>	<b>140.650</b>	<b>21.705</b>
Tests	0.333	0.051



# Daily Science Report

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Category	Hours	% Percent
Transit	131.150	20.239
Weather	9.167	1.415
<b>Total</b>	<b>648.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
8	02OB	195.0	1501	5143	Prime	182.15	4.115	Part	Midnight
<b>Total</b>						<b>182.15</b>			

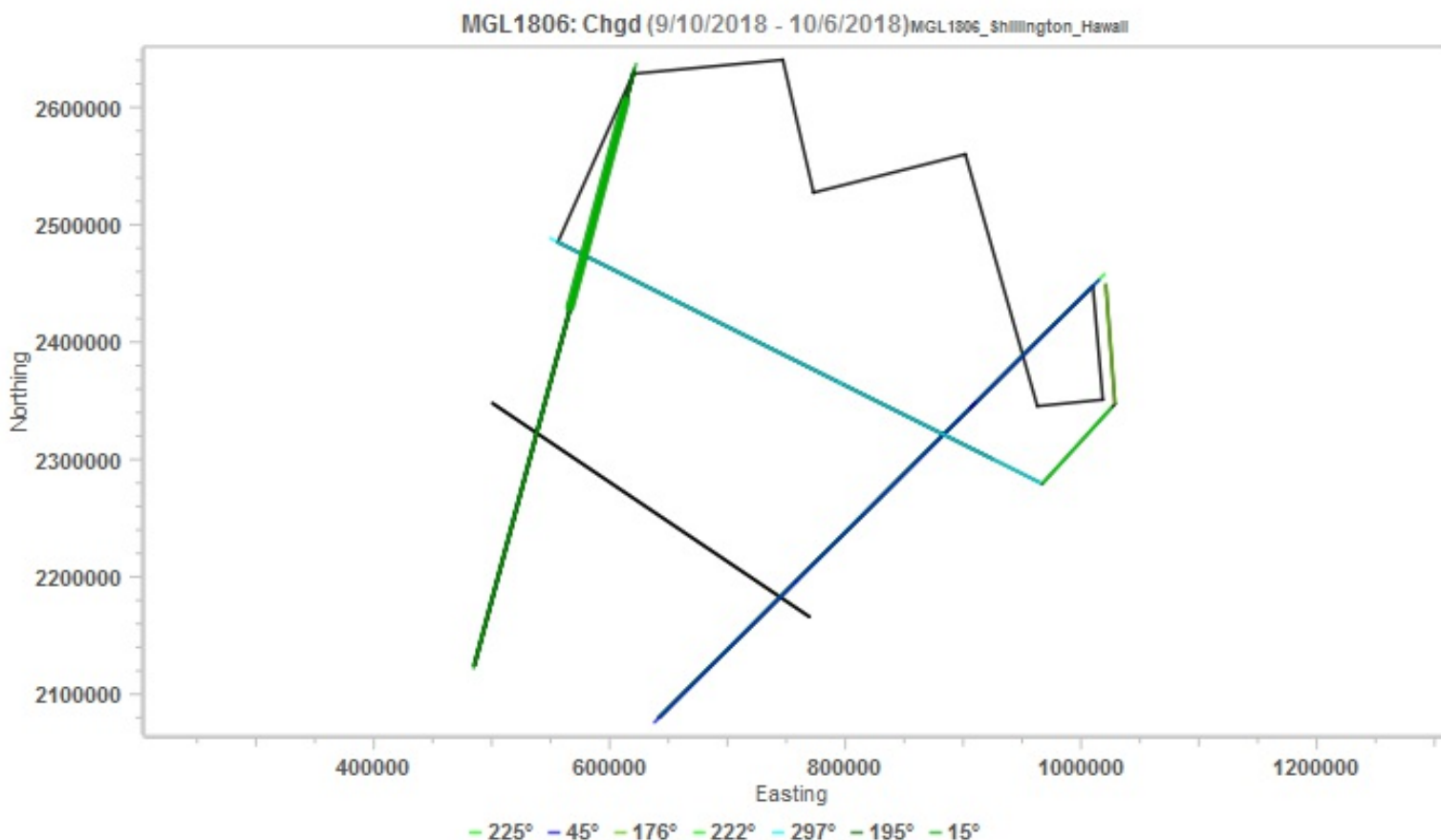
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	182.15	1049.20	1049.20	2771.20
<b>Combined</b>	<b>182.15</b>	<b>1049.20</b>	<b>1049.20</b>	<b>2771.20</b>

# Daily Science Report

10/6/2018

Page 3



## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 06 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 06 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Sun Oct 7 2018 12:13a.m.

Page 3

# Daily Science Report

10/6/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## **Science Party On-board the Langseth**

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/7/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sun 07 Oct

Completed line MC06 followed by a long line change to line MC07. Acquired MC07 through the end of the UTC day.

## Daily Comment Summaries - Plan for Tomorrow

Sun 07 Oct

Continue acquiring line MC07

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
Production Prime	AC_PP	Sun 7. Oct 00:00	Sun 7. Oct 01:23	1.383
Prime Line Change	AC_PLC	Sun 7. Oct 01:23	Sun 7. Oct 01:46	0.383
Line change to MC06				
Production Prime	AC_PP	Sun 7. Oct 01:46	Sun 7. Oct 11:07	9.350
Prime Line Change	AC_PLC	Sun 7. Oct 11:07	Sun 7. Oct 16:31	5.400
Line change to MC07				
Production Prime	AC_PP	Sun 7. Oct 16:31	Sun 7. Oct 24:00	7.483

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

7-Oct	Hours	% Percent
Acquisition	24.000	100.000
Prime Line Change	5.783	24.097
Production Prime	18.217	75.903
Day's Total	24.000	100.000

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
DownTime	1.633	0.243
Cetacean	1.633	0.243
Mobilisation	116.767	17.376
Deployment	53.250	7.924
Mob Ashore	38.000	5.655
Reconfiguration	1.233	0.184

# Daily Science Report

10/7/2018

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Category	Hours	% Percent
Testing	4.767	0.709
Transit to Prospect	19.517	2.904
<b>Acquisition</b>	<b>412.950</b>	<b>61.451</b>
Prime Extended L/C	11.300	1.682
Prime Line Change	22.133	3.294
Production Prime	379.517	56.476
<b>Chargeable Standby</b>	<b>140.650</b>	<b>20.930</b>
Tests	0.333	0.050
Transit	131.150	19.516
Weather	9.167	1.364
<b>Total</b>	<b>672.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
8	02OB	195.0	5144	5353	Prime	10.50	4.114	Complete	Complete
9	A6	237.7	1071	2527	Prime	72.80	4.204	Complete	Complete
10	07MC	124.1	1092	2300	Prime	60.40	4.358	Part	Midnight
<b>Total</b>						<b>143.70</b>			

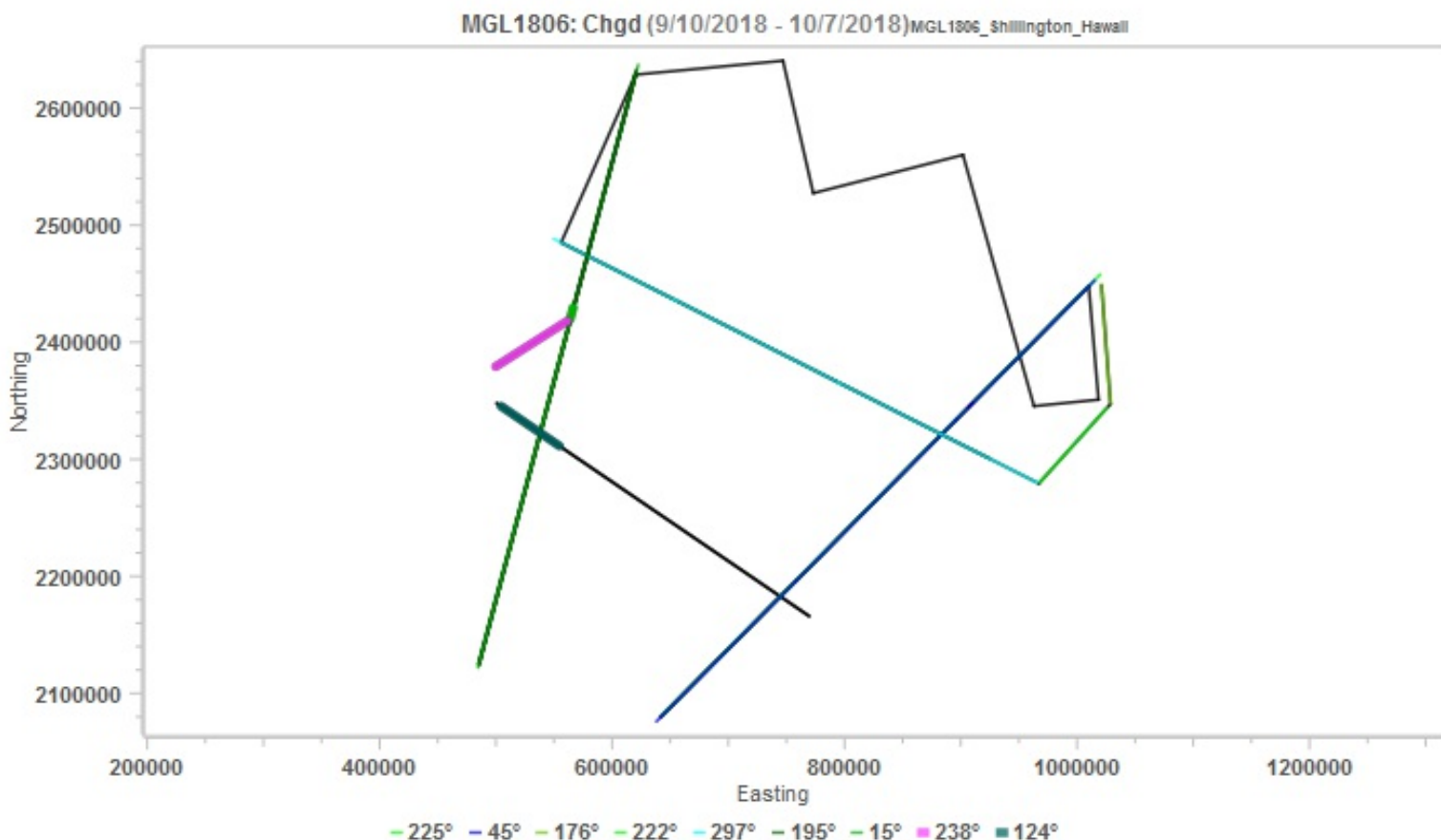
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	143.70	1192.90	1192.90	2914.90
<b>Combined</b>	<b>143.70</b>	<b>1192.90</b>	<b>1192.90</b>	<b>2914.90</b>

# Daily Science Report

10/7/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 07 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 07 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/7/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/8/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Mon 08 Oct


Spent the day acquiring line MC07. Streamer feathered away from charted buoy and no course changes were required.

## Daily Comment Summaries - Plan for Tomorrow

Mon 08 Oct

It is planned to complete acquisition of line MC07 and begin recovering towed equipment.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Mon 8. Oct 00:00	Mon 8. Oct 24:00	24.000

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

8-Oct	Hours	% Percent
<b>Acquisition</b>	<b>24.000</b>	<b>100.000</b>
Production Prime	24.000	100.000
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.235</b>
Cetacean	1.633	0.235
<b>Mobilisation</b>	<b>116.767</b>	<b>16.777</b>
Deployment	53.250	7.651
Mob Ashore	38.000	5.460
Reconfiguration	1.233	0.177
Testing	4.767	0.685
Transit to Prospect	19.517	2.804
<b>Acquisition</b>	<b>436.950</b>	<b>62.780</b>
Prime Extended L/C	11.300	1.624
Prime Line Change	22.133	3.180
Production Prime	403.517	57.977
<b>Chargeable Standby</b>	<b>140.650</b>	<b>20.208</b>
Tests	0.333	0.048
Transit	131.150	18.843



# Daily Science Report

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Category	Hours	% Percent
Weather	9.167	1.317
<b>Total</b>	<b>696.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
10	07MC	124.1	2301	5882	Prime	179.10	4.108	Part	Midnight
<b>Total</b>						<b>179.10</b>			

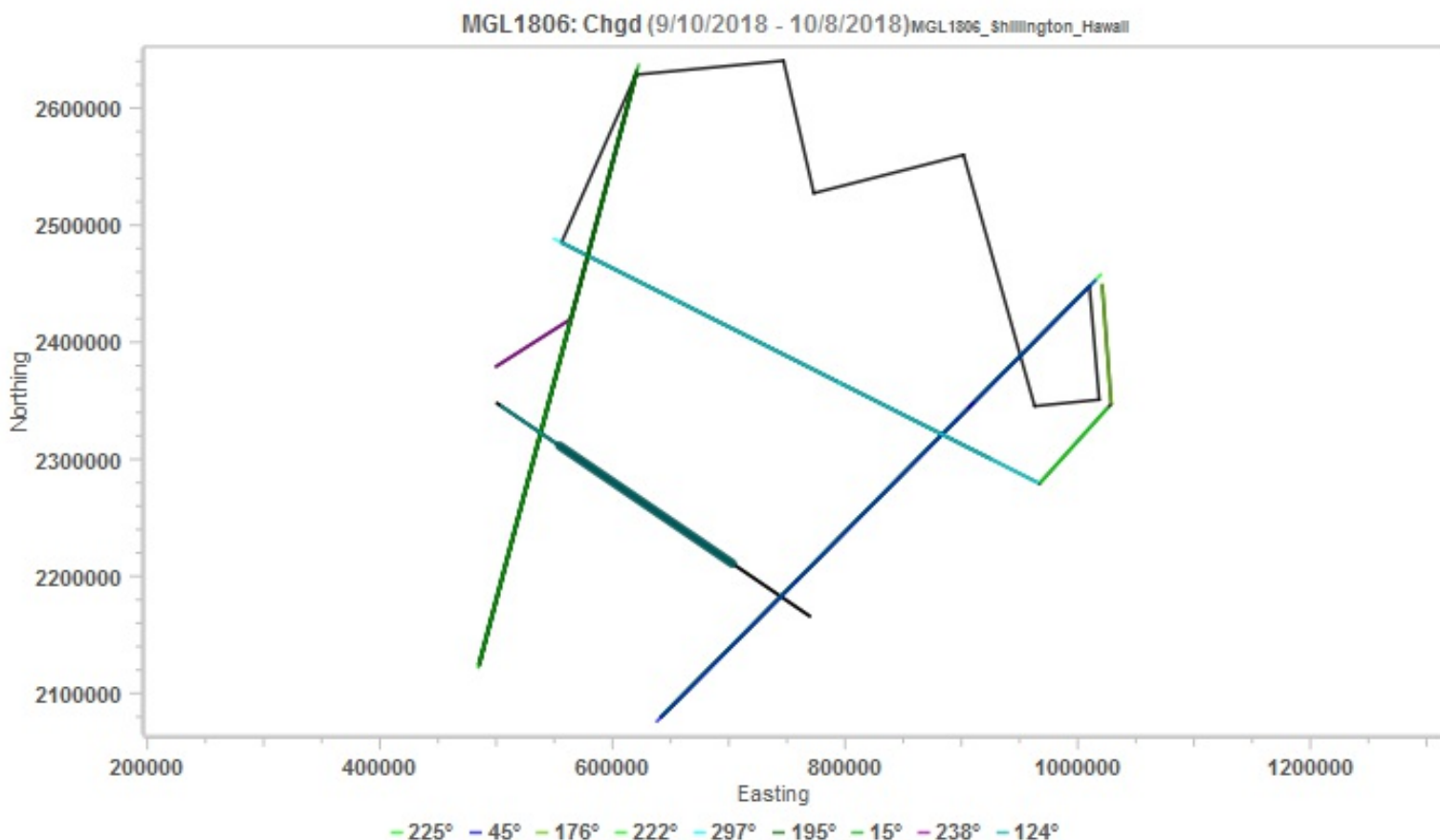
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	179.10	179.10	1372.00	3094.00
<b>Combined</b>	<b>179.10</b>	<b>179.10</b>	<b>1372.00</b>	<b>3094.00</b>

# Daily Science Report

10/8/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 08 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Failing UPS caused outages of Digishot PC

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

Multiple occurrences of sub arrays becoming entangled with each other or the lead-in.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 08 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Tue Oct 9 2018 12:48a.m.

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# Daily Science Report

10/8/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/9/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 09 Oct




Completed acquisition of line MC07, the line had to be cut short to allow enough time for recovery of the MCS and OBS equipment. After the line was complete the sources were secured and immediately began recovery. The sources, streamer, Magnetometer, and PAM were all recovered and secured by 21:20 UTC.

## Daily Comment Summaries - Plan for Tomorrow

Tue 09 Oct

Transit to OBS recovery sites.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Production Prime	AC_PP	Tue 9. Oct 00:00	Tue 9. Oct 10:30	10.500
 Recovery	DM_RC	Tue 9. Oct 10:30	Tue 9. Oct 21:20	10.833
Demobilizing: Begin with recovery of source, PAM, Mag, and streamer.				
 Transit	SB_TRT	Tue 9. Oct 21:20	Tue 9. Oct 24:00	2.667
Transit to OBS station 135 for recovery				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

9-Oct	Hours	% Percent
<b>Acquisition</b>	<b>10.500</b>	<b>43.750</b>
Production Prime	10.500	43.750
<b>Chargeable Standby</b>	<b>2.667</b>	<b>11.111</b>
Transit	2.667	11.111
<b>Demobilisation</b>	<b>10.833</b>	<b>45.139</b>
Recovery	10.833	45.139
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.227</b>
Cetacean	1.633	0.227
<b>Mobilisation</b>	<b>116.767</b>	<b>16.218</b>
Deployment	53.250	7.396
Mob Ashore	38.000	5.278

# Daily Science Report

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Category	Hours	% Percent
Reconfiguration	1.233	0.171
Testing	4.767	0.662
Transit to Prospect	19.517	2.711
<b>Acquisition</b>	<b>447.450</b>	<b>62.146</b>
Prime Extended L/C	11.300	1.569
Prime Line Change	22.133	3.074
Production Prime	414.017	57.502
<b>Demobilisation</b>	<b>10.833</b>	<b>1.505</b>
Recovery	10.833	1.505
<b>Chargeable Standby</b>	<b>143.317</b>	<b>19.905</b>
Tests	0.333	0.046
Transit	133.817	18.586
Weather	9.167	1.273
<b>Total</b>	<b>720.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
10	07MC	124.1	5883	7501	Prime	80.95	4.121	Complete	Complete
<b>Total</b>						<b>80.95</b>			

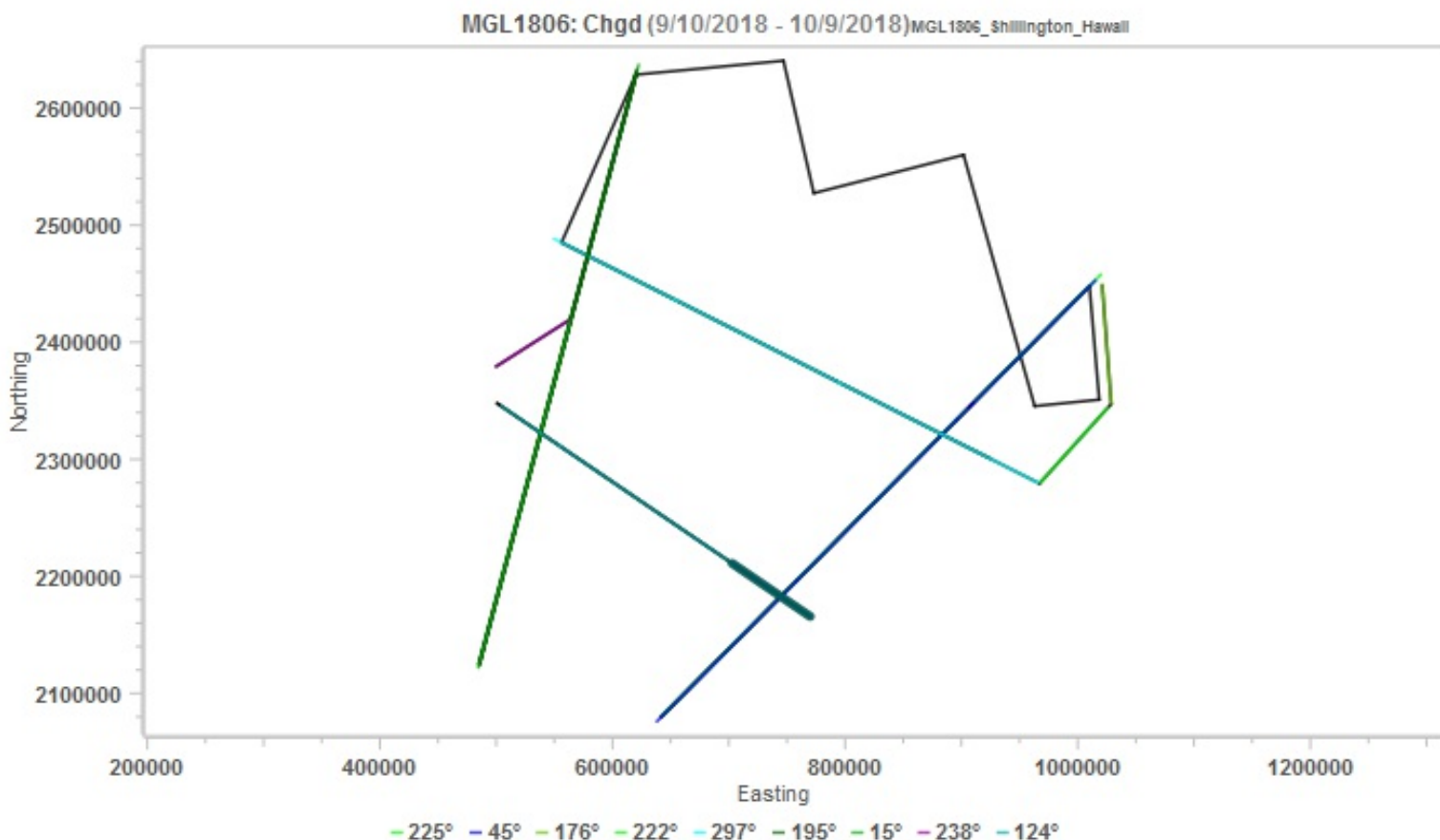
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	80.95	260.05	1452.95	3174.95
<b>Combined</b>	<b>80.95</b>	<b>260.05</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

10/9/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 09 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 09 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Wed Oct 10 2018 05:57a.m.

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# Daily Science Report

10/9/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/10/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 10 Oct





Completed transit to OBS site 135 and began recovery efforts. By the end of the UTC day, OBS 135 was on board and vessel was awaiting the surfacing of OBS 134.

## Daily Comment Summaries - Plan for Tomorrow

Wed 10 Oct

Continue recovering OBS units.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Transit	SB_TRT	Wed 10. Oct 00:00	Wed 10. Oct 20:15	20.250
Transit to next station				
 Recovery	DM_RC	Wed 10. Oct 20:15	Wed 10. Oct 22:12	1.950
Recover OBS station 135				
 Transit	SB_TRT	Wed 10. Oct 22:12	Wed 10. Oct 22:41	0.483
Transit to next station				
 Recovery	DM_RC	Wed 10. Oct 22:41	Wed 10. Oct 24:00	1.317
Recover OBS station 134				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

10-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>20.733</b>	<b>86.389</b>
Transit	20.733	86.389
<b>Demobilisation</b>	<b>3.267</b>	<b>13.611</b>
Recovery	3.267	13.611
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.220</b>
Cetacean	1.633	0.220
<b>Mobilisation</b>	<b>116.767</b>	<b>15.694</b>
Deployment	53.250	7.157
Mob Ashore	38.000	5.108



# Daily Science Report

10/10/2018

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Category	Hours	% Percent
Reconfiguration	1.233	0.166
Testing	4.767	0.641
Transit to Prospect	19.517	2.623
<b>Acquisition</b>	<b>447.450</b>	<b>60.141</b>
Prime Extended L/C	11.300	1.519
Prime Line Change	22.133	2.975
Production Prime	414.017	55.647
<b>Demobilisation</b>	<b>14.100</b>	<b>1.895</b>
Recovery	14.100	1.895
<b>Chargeable Standby</b>	<b>164.050</b>	<b>22.050</b>
Tests	0.333	0.045
Transit	154.550	20.773
Weather	9.167	1.232
<b>Total</b>	<b>744.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

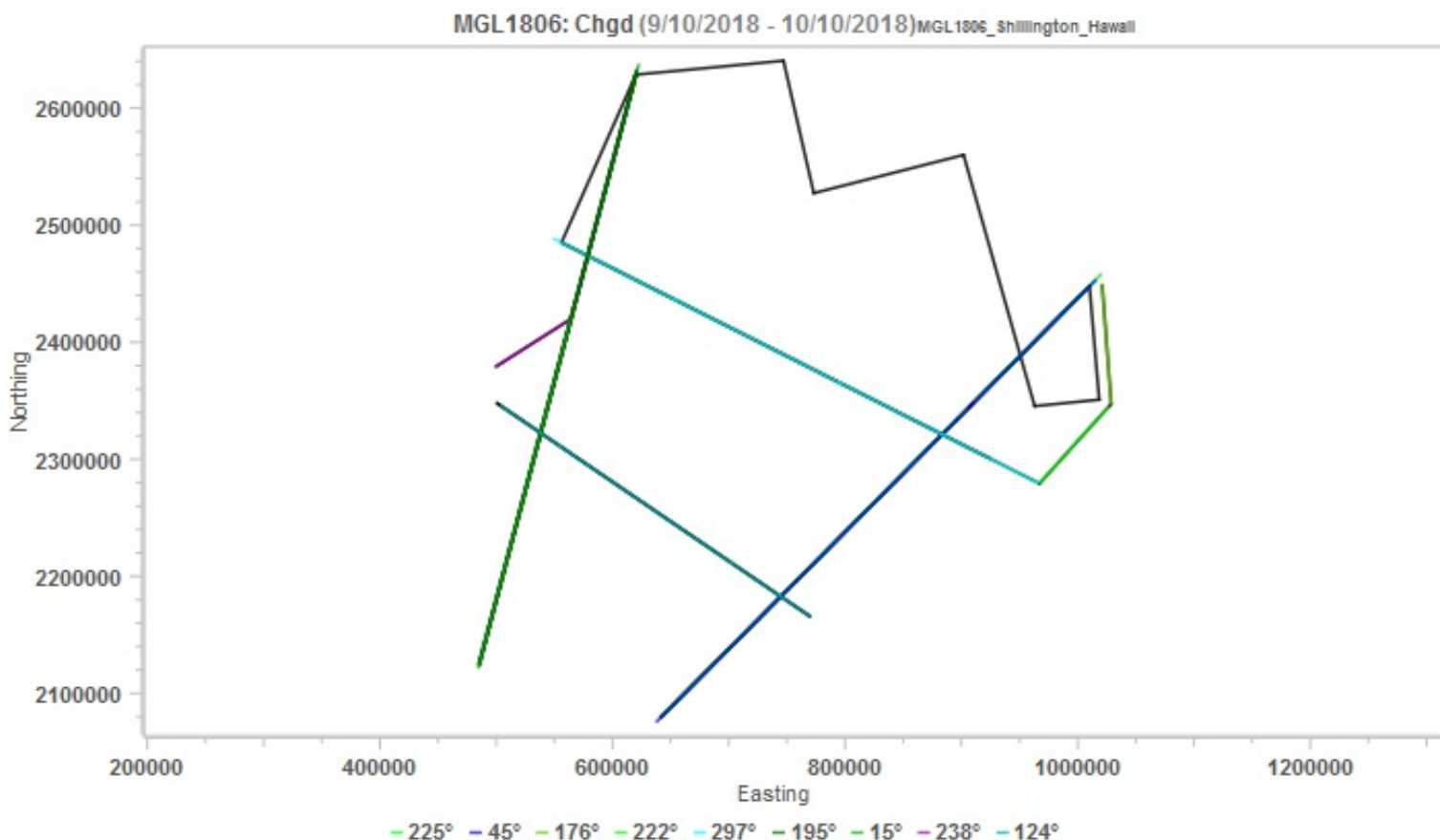
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	260.05	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>260.05</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

10/10/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 10 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 10 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/10/2018

Page 4

Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## **Science Party On-board the Langseth**

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
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Sousa, Dan LDEO Grad student  
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Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/11/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 11 Oct

Recovered 9 OBS stations throughout the UTC day. OBS unit 126 rose unexpectedly slowly and was found to be flooded upon retrieval.

## Daily Comment Summaries - Plan for Tomorrow

Thu 11 Oct

Continue recovering OBS units.

### Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Recovery	DM_RC	Thu 11. Oct 00:00	Thu 11. Oct 00:41	0.683
Recover OBS station 134				
 Transit	SB_TRT	Thu 11. Oct 00:41	Thu 11. Oct 01:35	0.900
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 01:35	Thu 11. Oct 03:39	2.067
Recover OBS station 133				
 Transit	SB_TRT	Thu 11. Oct 03:39	Thu 11. Oct 04:22	0.717
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 04:22	Thu 11. Oct 06:20	1.967
Recover OBS station 132				
 Transit	SB_TRT	Thu 11. Oct 06:20	Thu 11. Oct 07:04	0.733
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 07:04	Thu 11. Oct 09:01	1.950
Recover OBS station 131				
 Transit	SB_TRT	Thu 11. Oct 09:01	Thu 11. Oct 09:56	0.917
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 09:56	Thu 11. Oct 12:00	2.067
Recover OBS station 130				
 Transit	SB_TRT	Thu 11. Oct 12:00	Thu 11. Oct 12:37	0.617
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 12:37	Thu 11. Oct 14:33	1.933
Recover OBS station 129				
 Transit	SB_TRT	Thu 11. Oct 14:33	Thu 11. Oct 15:19	0.767

(UTC 00:00) UTC - Universal Time Coordinated





Generated on Fri Oct 12 2018 01:41a.m.

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# Daily Science Report

10/11/2018

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Category	Code	Start	End	Duration
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 15:19	Thu 11. Oct 17:22	2.050
Recover OBS station 128				
 Transit	SB_TRT	Thu 11. Oct 17:22	Thu 11. Oct 18:03	0.683
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 18:03	Thu 11. Oct 20:07	2.067
Recover OBS station 127				
 Transit	SB_TRT	Thu 11. Oct 20:07	Thu 11. Oct 20:45	0.633
Transit to next station				
 Recovery	DM_RC	Thu 11. Oct 20:45	Thu 11. Oct 23:15	2.500
Recover OBS station 126				
 Transit	SB_TRT	Thu 11. Oct 23:15	Thu 11. Oct 24:00	0.750
Transit to next station				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

11-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>6.717</b>	<b>27.986</b>
Transit	6.717	27.986
<b>Demobilisation</b>	<b>17.283</b>	<b>72.014</b>
Recovery	17.283	72.014
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.213</b>
Cetacean	1.633	0.213
<b>Mobilisation</b>	<b>116.767</b>	<b>15.204</b>
Deployment	53.250	6.934
Mob Ashore	38.000	4.948
Reconfiguration	1.233	0.161
Testing	4.767	0.621
Transit to Prospect	19.517	2.541
<b>Acquisition</b>	<b>447.450</b>	<b>58.262</b>
Prime Extended L/C	11.300	1.471
Prime Line Change	22.133	2.882
Production Prime	414.017	53.908
<b>Demobilisation</b>	<b>31.383</b>	<b>4.086</b>
Recovery	31.383	4.086
<b>Chargeable Standby</b>	<b>170.767</b>	<b>22.235</b>
Tests	0.333	0.043
Transit	161.267	20.998

# Daily Science Report

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Category	Hours	% Percent
Weather	9.167	1.194
<b>Total</b>	<b>768.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

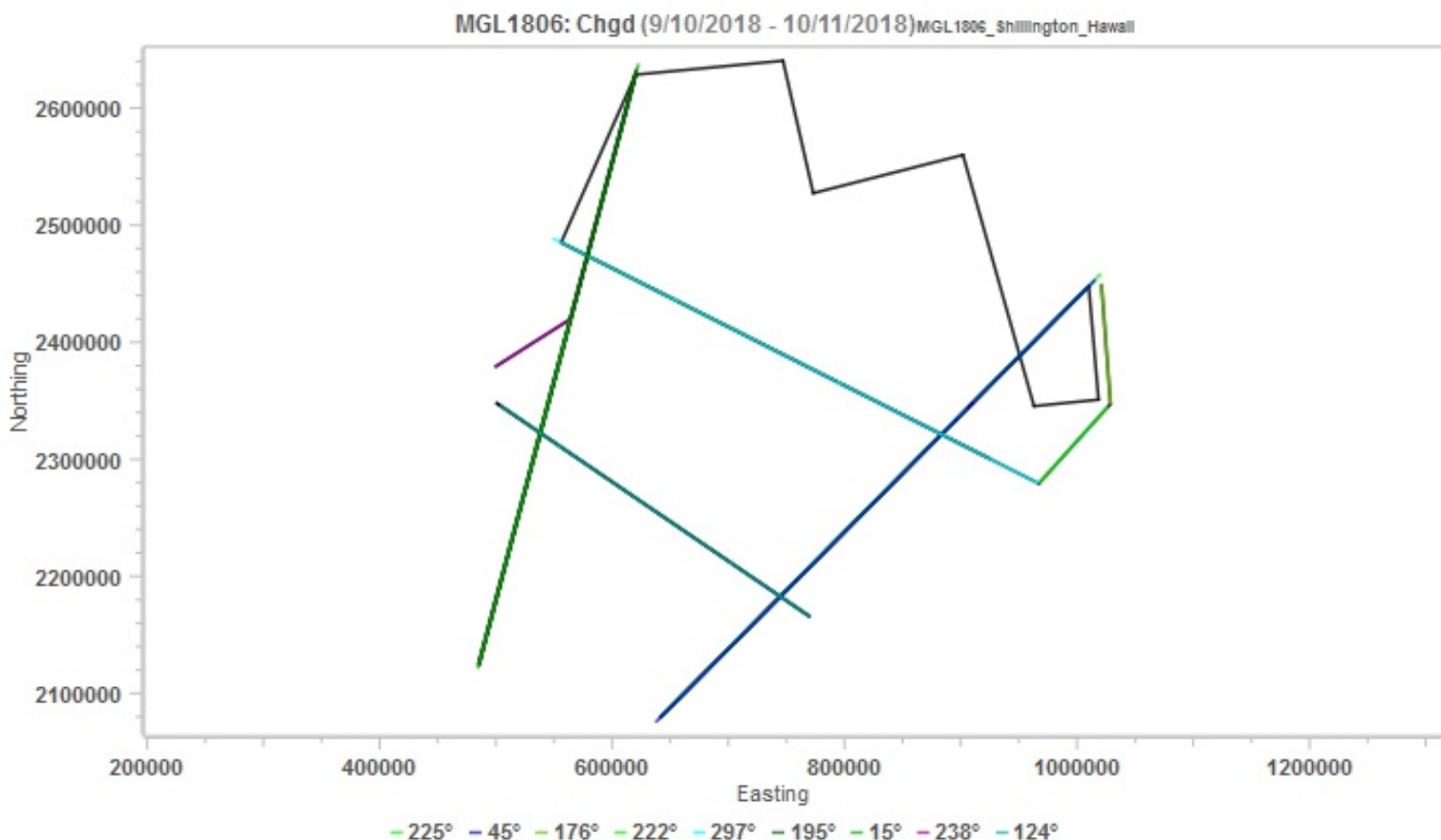
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	260.05	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>260.05</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 11 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Thu 11 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/11/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech



# Daily Science Report

10/12/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 12 Oct

Recovered 11 OBS units today, shallow waters at some of the stations resulted in shorter rise times.


## Daily Comment Summaries - Plan for Tomorrow

Fri 12 Oct

Continue recovering OBS units.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)














Category	Code	Start	End	Duration
 Transit	SB_TRT	Fri 12. Oct 00:00	Fri 12. Oct 00:24	0.400
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 00:24	Fri 12. Oct 02:16	1.867
Recover OBS station 125				
 Transit	SB_TRT	Fri 12. Oct 02:16	Fri 12. Oct 04:18	2.033
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 04:18	Fri 12. Oct 06:33	2.250
Recover OBS station 124				
 Transit	SB_TRT	Fri 12. Oct 06:33	Fri 12. Oct 07:09	0.600
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 07:09	Fri 12. Oct 08:59	1.833
Recover OBS station 123				
 Transit	SB_TRT	Fri 12. Oct 08:59	Fri 12. Oct 09:58	0.983
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 09:58	Fri 12. Oct 11:15	1.283
Recover OBS station 122				
 Transit	SB_TRT	Fri 12. Oct 11:15	Fri 12. Oct 12:12	0.950
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 12:12	Fri 12. Oct 13:08	0.933
Recover OBS station 121				
 Transit	SB_TRT	Fri 12. Oct 13:08	Fri 12. Oct 13:57	0.817
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 13:57	Fri 12. Oct 14:52	0.917
Recover OBS station 120				

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Category	Code	Start	End	Duration
 Transit	SB_TRT	Fri 12. Oct 14:52	Fri 12. Oct 15:48	0.933
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 15:48	Fri 12. Oct 16:54	1.100
Recover OBS station 119				
 Transit	SB_TRT	Fri 12. Oct 16:54	Fri 12. Oct 17:52	0.967
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 17:52	Fri 12. Oct 18:21	0.483
Recover OBS station 118				
 Transit	SB_TRT	Fri 12. Oct 18:21	Fri 12. Oct 19:06	0.750
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 19:06	Fri 12. Oct 19:46	0.667
Recover OBS station 117				
 Transit	SB_TRT	Fri 12. Oct 19:46	Fri 12. Oct 20:43	0.950
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 20:43	Fri 12. Oct 21:32	0.817
Recover OBS station 116				
 Transit	SB_TRT	Fri 12. Oct 21:32	Fri 12. Oct 22:29	0.950
Transit to next station				
 Recovery	DM_RC	Fri 12. Oct 22:29	Fri 12. Oct 23:16	0.783
Recover OBS station 115				
 Transit	SB_TRT	Fri 12. Oct 23:16	Fri 12. Oct 24:00	0.733
Transit to next station				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

12-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>11.067</b>	<b>46.111</b>
Transit	11.067	46.111
<b>Demobilisation</b>	<b>12.933</b>	<b>53.889</b>
Recovery	12.933	53.889
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.206</b>
Cetacean	1.633	0.206
<b>Mobilisation</b>	<b>116.767</b>	<b>14.743</b>
Deployment	53.250	6.723
Mob Ashore	38.000	4.798
Reconfiguration	1.233	0.156
Testing	4.767	0.602
Transit to Prospect	19.517	2.464

# Daily Science Report

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Category	Hours	% Percent
<b>Acquisition</b>	<b>447.450</b>	<b>56.496</b>
Prime Extended L/C	11.300	1.427
Prime Line Change	22.133	2.795
Production Prime	414.017	52.275
<b>Demobilisation</b>	<b>44.317</b>	<b>5.596</b>
Recovery	44.317	5.596
<b>Chargeable Standby</b>	<b>181.833</b>	<b>22.959</b>
Tests	0.333	0.042
Transit	172.333	21.759
Weather	9.167	1.157
<b>Total</b>	<b>792.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

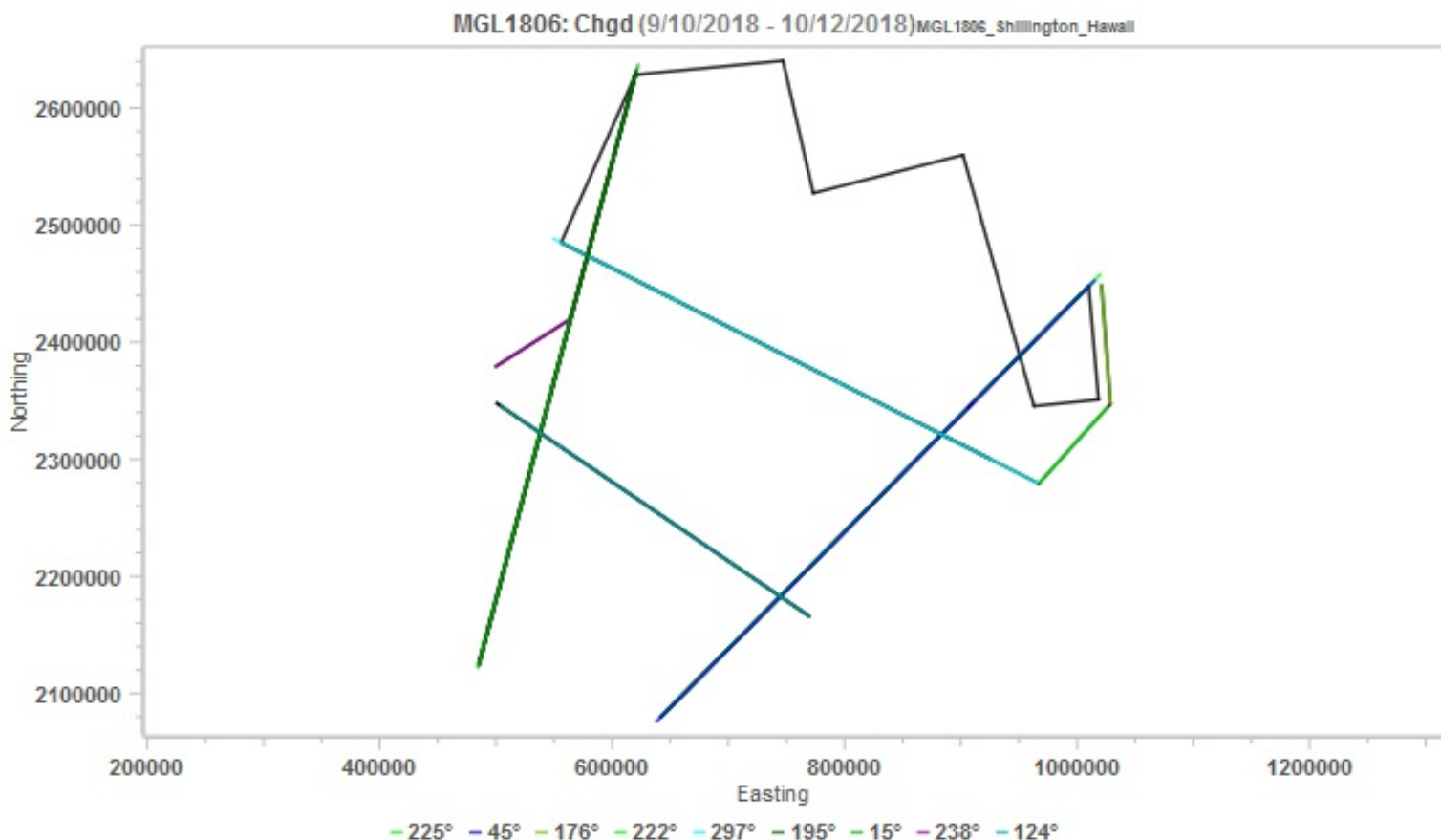
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	260.05	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>260.05</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 12 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 12 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/13/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 13 Oct

Recovered 10 OBS units today. Projected that near end of local day all units on line 1 will be recovered.


## Daily Comment Summaries - Plan for Tomorrow

Sat 13 Oct

It is expected to complete recovery of OBS units on line 1 and transit to line 2. While transiting the magnetometer will be deployed.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)












Category	Code	Start	End	Duration
 Transit	SB_TRT	Sat 13. Oct 00:00	Sat 13. Oct 00:17	0.283
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 00:17	Sat 13. Oct 01:08	0.850
Recover OBS station 114				
 Transit	SB_TRT	Sat 13. Oct 01:08	Sat 13. Oct 02:01	0.883
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 02:01	Sat 13. Oct 03:29	1.467
Recover OBS station 113				
 Transit	SB_TRT	Sat 13. Oct 03:29	Sat 13. Oct 04:20	0.850
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 04:20	Sat 13. Oct 06:10	1.833
Recover OBS station 112				
 Transit	SB_TRT	Sat 13. Oct 06:10	Sat 13. Oct 07:00	0.833
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 07:00	Sat 13. Oct 09:00	2.000
Recover OBS station 111				
 Transit	SB_TRT	Sat 13. Oct 09:00	Sat 13. Oct 09:53	0.883
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 09:53	Sat 13. Oct 11:34	1.683
Recover OBS station 110				
 Transit	SB_TRT	Sat 13. Oct 11:34	Sat 13. Oct 12:27	0.883
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 12:27	Sat 13. Oct 14:14	1.783

# Daily Science Report

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Category	Code	Start	End	Duration
Recover OBS station 109				
 Transit	SB_TRT	Sat 13. Oct 14:14	Sat 13. Oct 15:01	0.783
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 15:01	Sat 13. Oct 16:54	1.883
Recover OBS station 108				
 Transit	SB_TRT	Sat 13. Oct 16:54	Sat 13. Oct 17:41	0.783
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 17:41	Sat 13. Oct 18:43	1.033
Recover OBS station 107				
 Transit	SB_TRT	Sat 13. Oct 18:43	Sat 13. Oct 19:40	0.950
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 19:40	Sat 13. Oct 20:44	1.067
Recover OBS station 106				
 Transit	SB_TRT	Sat 13. Oct 20:44	Sat 13. Oct 21:37	0.883
Transit to next station				
 Recovery	DM_RC	Sat 13. Oct 21:37	Sat 13. Oct 23:04	1.450
Recover OBS station 105				
 Transit	SB_TRT	Sat 13. Oct 23:04	Sat 13. Oct 24:00	0.933
Transit to next station				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

13-Oct	Hours	%Percent
<b>Chargeable Standby</b>	<b>8.950</b>	<b>37.292</b>
Transit	8.950	37.292
<b>Demobilisation</b>	<b>15.050</b>	<b>62.708</b>
Recovery	15.050	62.708
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	%Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.200</b>
Cetacean	1.633	0.200
<b>Mobilisation</b>	<b>116.767</b>	<b>14.310</b>
Deployment	53.250	6.526
Mob Ashore	38.000	4.657
Reconfiguration	1.233	0.151
Testing	4.767	0.584
Transit to Prospect	19.517	2.392
<b>Acquisition</b>	<b>447.450</b>	<b>54.835</b>
Prime Extended L/C	11.300	1.385
Prime Line Change	22.133	2.712

# Daily Science Report

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Category	Hours	% Percent
Production Prime	414.017	50.737
<b>Demobilisation</b>	<b>59.367</b>	<b>7.275</b>
Recovery	59.367	7.275
<b>Chargeable Standby</b>	<b>190.783</b>	<b>23.380</b>
Tests	0.333	0.041
Transit	181.283	22.216
Weather	9.167	1.123
<b>Total</b>	<b>816.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

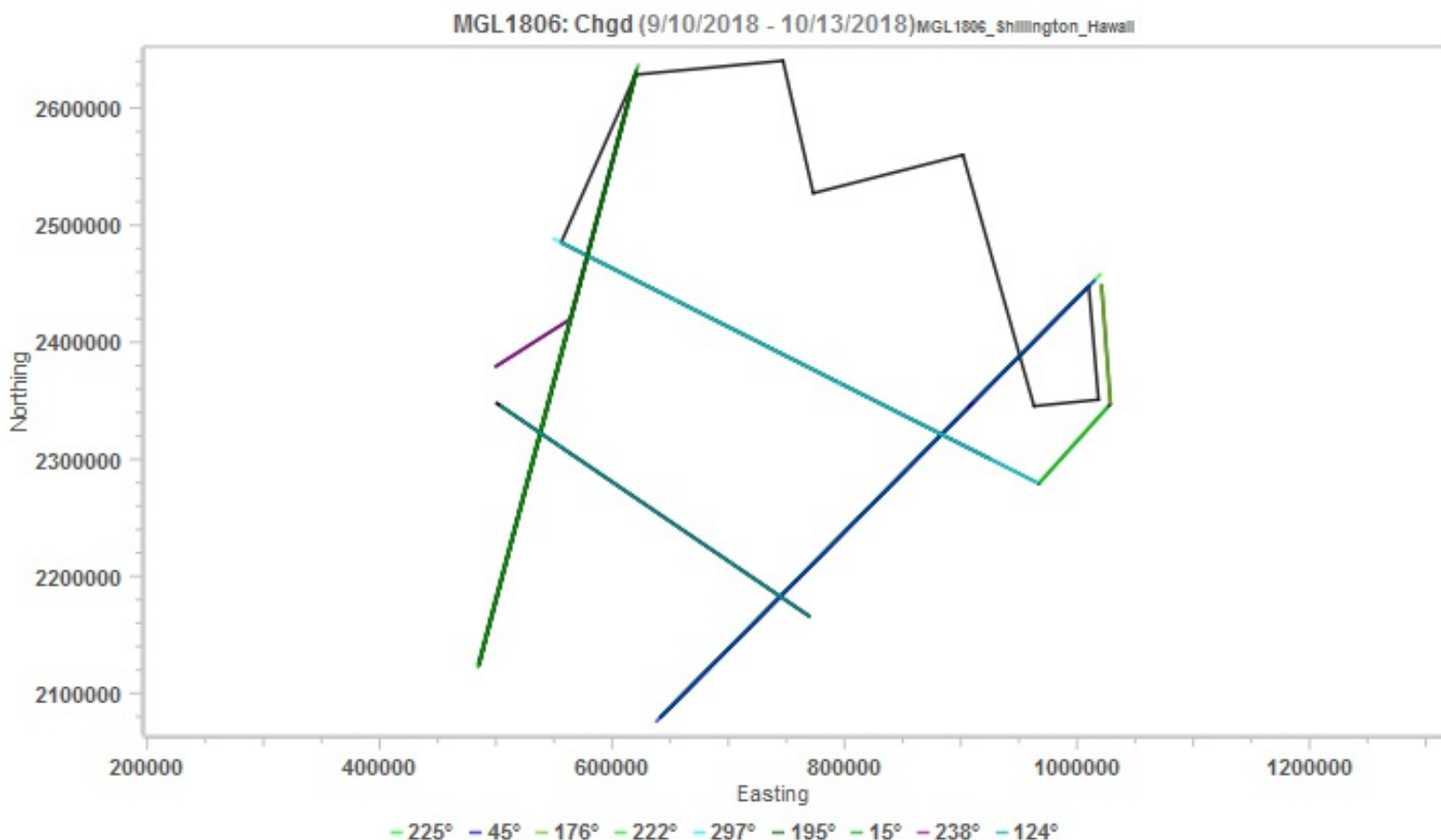
Charged km	Day	Week	Month	Project
Prime	0.00	260.05	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>260.05</b>	<b>1452.95</b>	<b>3174.95</b>



# Daily Science Report

10/13/2018

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 13 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 13 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

# Daily Science Report

10/13/2018

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
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Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/14/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sun 14 Oct

Recovered 7 OBS units today. The magnetometer was deployed during the transit from line 1 to 2 and was recovered prior to arrival at site 201.

## Daily Comment Summaries - Plan for Tomorrow

Sun 14 Oct

Continue OBS recovery on line 2.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)





Category	Code	Start	End	Duration
 Transit	SB_TRT	Sun 14. Oct 00:00	Sun 14. Oct 00:04	0.067
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 00:04	Sun 14. Oct 01:51	1.783
Recover OBS station 104				
 Transit	SB_TRT	Sun 14. Oct 01:51	Sun 14. Oct 02:41	0.833
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 02:41	Sun 14. Oct 04:17	1.600
Recover OBS station 103				
 Transit	SB_TRT	Sun 14. Oct 04:17	Sun 14. Oct 05:05	0.800
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 05:05	Sun 14. Oct 06:36	1.517
Recover OBS station 102				
 Transit	SB_TRT	Sun 14. Oct 06:36	Sun 14. Oct 07:23	0.783
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 07:23	Sun 14. Oct 09:22	1.983
Recover OBS station 101				
 Transit	SB_TRT	Sun 14. Oct 09:22	Sun 14. Oct 18:10	8.800
Long transit to site 201				
 Recovery	DM_RC	Sun 14. Oct 18:10	Sun 14. Oct 20:01	1.850
Recover OBS station 201				
 Transit	SB_TRT	Sun 14. Oct 20:01	Sun 14. Oct 20:46	0.750
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 20:46	Sun 14. Oct 22:32	1.767

# Daily Science Report

10/14/2018

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Category	Code	Start	End	Duration
Recover OBS station 202				
 Transit	SB_TRT	Sun 14. Oct 22:32	Sun 14. Oct 23:35	1.050
Transit to next station				
 Recovery	DM_RC	Sun 14. Oct 23:35	Sun 14. Oct 24:00	0.417
Recover OBS station 203				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

14-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>13.083</b>	<b>54.514</b>
Transit	13.083	54.514
<b>Demobilisation</b>	<b>10.917</b>	<b>45.486</b>
Recovery	10.917	45.486
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.194</b>
Cetacean	1.633	0.194
<b>Mobilisation</b>	<b>116.767</b>	<b>13.901</b>
Deployment	53.250	6.339
Mob Ashore	38.000	4.524
Reconfiguration	1.233	0.147
Testing	4.767	0.567
Transit to Prospect	19.517	2.323
<b>Acquisition</b>	<b>447.450</b>	<b>53.268</b>
Prime Extended L/C	11.300	1.345
Prime Line Change	22.133	2.635
Production Prime	414.017	49.288
<b>Demobilisation</b>	<b>70.283</b>	<b>8.367</b>
Recovery	70.283	8.367
<b>Chargeable Standby</b>	<b>203.867</b>	<b>24.270</b>
Tests	0.333	0.040
Transit	194.367	23.139
Weather	9.167	1.091
<b>Total</b>	<b>840.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		

# Daily Science Report

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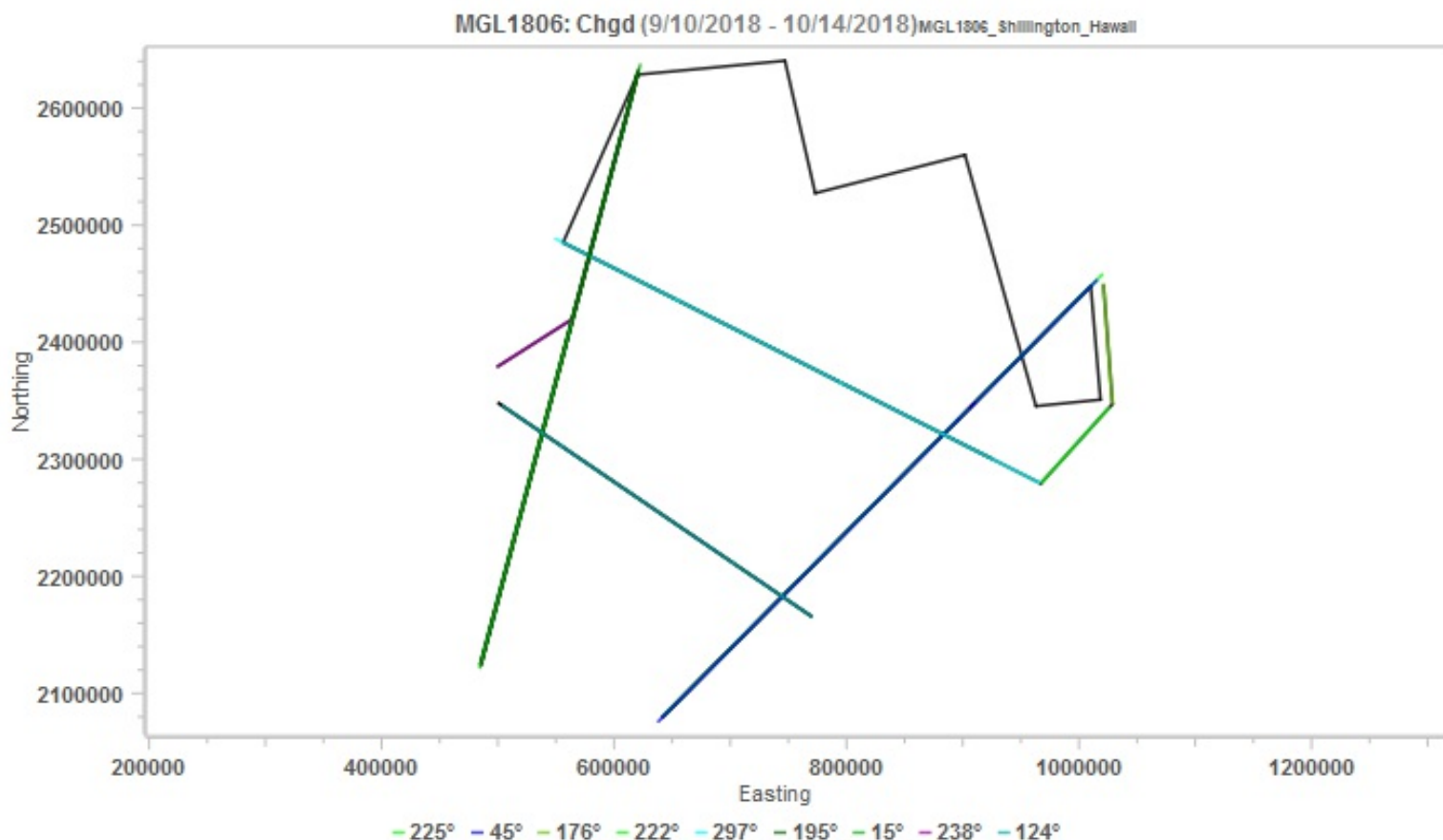
MGL1806_Shillington_Hawaii					
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	260.05	1452.95	3174.95
Combined	0.00	260.05	1452.95	3174.95



## Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 14 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Mon Oct 15 2018 12:09a.m.

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# Daily Science Report

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Meraki network multiple reboots during the day caused by firmware upgrades.

## Acquisition (OBS):

No Major Issues to Report

## Towing and Handling (Source):

No Major Issues to Report

## General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 14 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

Diana Maldonado RPS PSO

Bianca Mares RPS PSO

Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI

Watts, Anthony Oxford PI

Dunn, Robert University of Hawaii PI

Nakrong, Nina University of Hawaii Grad student

Lata, Charu University of Hawaii Grad student

Hart, Laney University of Washington Grad student

Rodriguez, Suyapa LSU Grad student

Sousa, Dan LDEO Grad student

Wei, Jingxuan TAMU Grad student

Wei, Xiaozhuo URI Grad student

Boulahanis, Bridgit LDEO Grad student

Aarons, Ernest SIO OBS tech

Kane, Timothy WHOI OBS tech

McPeak, Sean SIO OBS tech

Perez, Jake SIO OBS tech

# Daily Science Report

10/15/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Mon 15 Oct

The day was spent recovering OBS units, recovered 9 units today.

## Daily Comment Summaries - Plan for Tomorrow

Mon 15 Oct

Continue OBS recovery on line 2.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)









Category	Code	Start	End	Duration
Recovery	DM_RC	Mon 15. Oct 00:00	Mon 15. Oct 01:26	1.433
Recover OBS station 203				
Transit	SB_TRT	Mon 15. Oct 01:26	Mon 15. Oct 02:25	0.983
Transit to next station				
Recovery	DM_RC	Mon 15. Oct 02:25	Mon 15. Oct 04:25	2.000
Recover OBS station 204				
Transit	SB_TRT	Mon 15. Oct 04:25	Mon 15. Oct 05:15	0.833
Transit to next station				
Recovery	DM_RC	Mon 15. Oct 05:15	Mon 15. Oct 07:19	2.067
Recover OBS station 205				
Transit	SB_TRT	Mon 15. Oct 07:19	Mon 15. Oct 08:18	0.983
Transit to next station				
Recovery	DM_RC	Mon 15. Oct 08:18	Mon 15. Oct 10:06	1.800
Recover OBS station 206				
Transit	SB_TRT	Mon 15. Oct 10:06	Mon 15. Oct 10:59	0.883
Transit to next station				
Recovery	DM_RC	Mon 15. Oct 10:59	Mon 15. Oct 13:10	2.183
Recover OBS station 207				
Transit	SB_TRT	Mon 15. Oct 13:10	Mon 15. Oct 14:09	0.983
Transit to next station				
Recovery	DM_RC	Mon 15. Oct 14:09	Mon 15. Oct 15:42	1.550
Recover OBS station 208				
Transit	SB_TRT	Mon 15. Oct 15:42	Mon 15. Oct 16:33	0.850
Transit to next station				

# Daily Science Report

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Category	Code	Start	End	Duration
 Recovery	DM_RC	Mon 15. Oct 16:33	Mon 15. Oct 18:14	1.683
Recover OBS station 209				
 Transit	SB_TRT	Mon 15. Oct 18:14	Mon 15. Oct 19:06	0.867
Transit to next station				
 Recovery	DM_RC	Mon 15. Oct 19:06	Mon 15. Oct 20:44	1.633
Recover OBS station 210				
 Transit	SB_TRT	Mon 15. Oct 20:44	Mon 15. Oct 21:32	0.800
Transit to next station				
 Recovery	DM_RC	Mon 15. Oct 21:32	Mon 15. Oct 23:20	1.800
Recover OBS station 211				
 Transit	SB_TRT	Mon 15. Oct 23:20	Mon 15. Oct 24:00	0.667
Transit to next station				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

15-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>7.850</b>	<b>32.708</b>
Transit	7.850	32.708
<b>Demobilisation</b>	<b>16.150</b>	<b>67.292</b>
Recovery	16.150	67.292
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.189</b>
Cetacean	1.633	0.189
<b>Mobilisation</b>	<b>116.767</b>	<b>13.515</b>
Deployment	53.250	6.163
Mob Ashore	38.000	4.398
Reconfiguration	1.233	0.143
Testing	4.767	0.552
Transit to Prospect	19.517	2.259
<b>Acquisition</b>	<b>447.450</b>	<b>51.788</b>
Prime Extended L/C	11.300	1.308
Prime Line Change	22.133	2.562
Production Prime	414.017	47.919
<b>Demobilisation</b>	<b>86.433</b>	<b>10.004</b>
Recovery	86.433	10.004
<b>Chargeable Standby</b>	<b>211.717</b>	<b>24.504</b>
Tests	0.333	0.039
Transit	202.217	23.405
Weather	9.167	1.061



# Daily Science Report

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Category	Hours	% Percent
Total	864.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accept km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

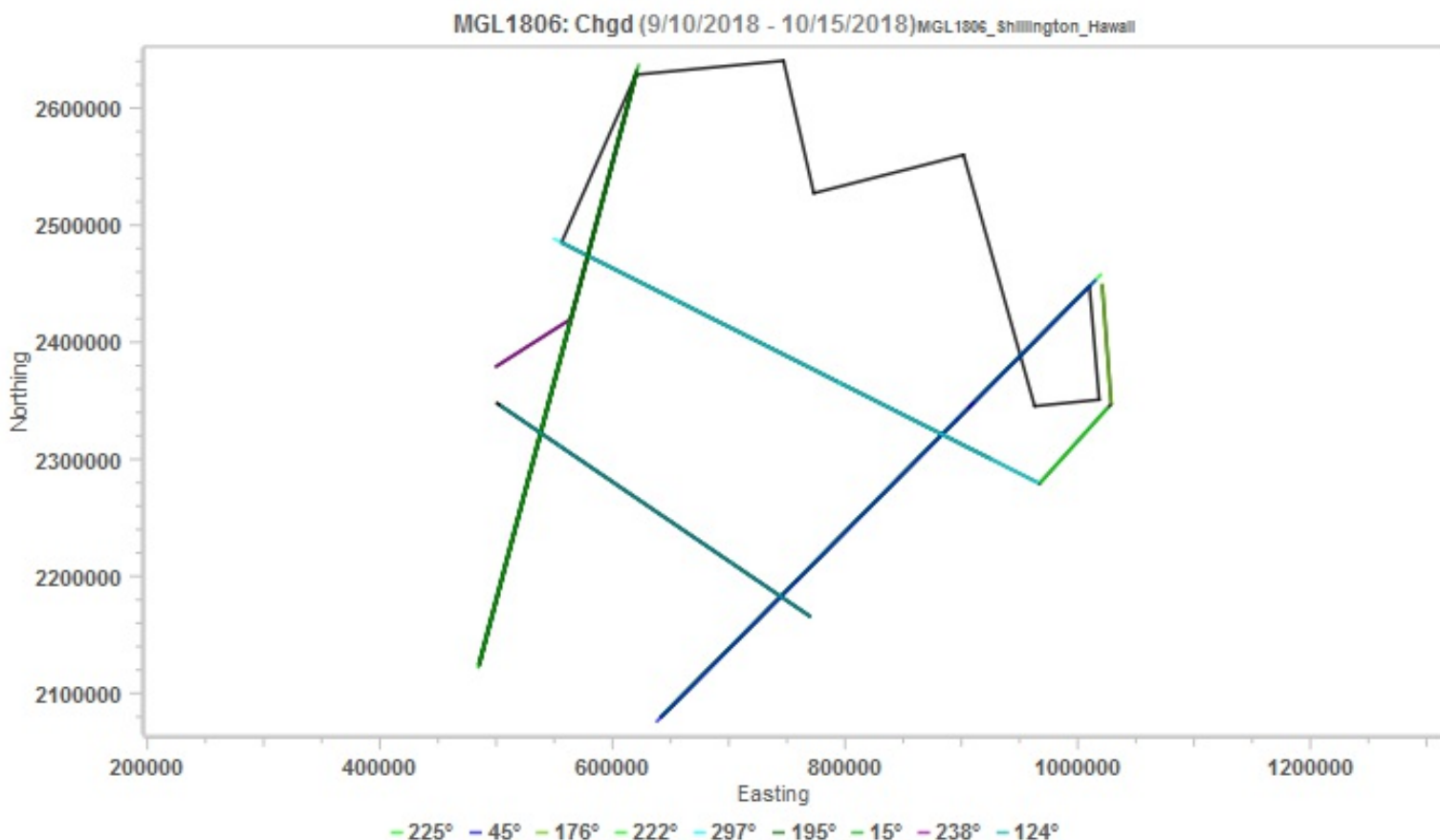
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	1452.95	3174.95
Combined	0.00	0.00	1452.95	3174.95

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 15 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Meraki network multiple reboots of system switches

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Mon 15 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Tue Oct 16 2018 12:54a.m.

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# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/16/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Tue 16 Oct

The day was spent recovering OBS units, recovered 10 units today and waiting on the 11th at end of UTC day.

## Daily Comment Summaries - Plan for Tomorrow

Tue 16 Oct

Continue OBS recovery on line 2.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Transit	SB_TRT	Tue 16. Oct 00:00	Tue 16. Oct 00:16	0.267
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 00:16	Tue 16. Oct 01:54	1.633
Recover OBS station 212				
 Transit	SB_TRT	Tue 16. Oct 01:54	Tue 16. Oct 02:57	1.050
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 02:57	Tue 16. Oct 04:51	1.900
Recover OBS station 213				
 Transit	SB_TRT	Tue 16. Oct 04:51	Tue 16. Oct 05:43	0.867
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 05:43	Tue 16. Oct 07:37	1.900
Recover OBS station 214				
 Transit	SB_TRT	Tue 16. Oct 07:37	Tue 16. Oct 08:34	0.950
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 08:34	Tue 16. Oct 10:25	1.850
Recover OBS station 215				
 Transit	SB_TRT	Tue 16. Oct 10:25	Tue 16. Oct 11:02	0.617
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 11:02	Tue 16. Oct 12:34	1.533
Recover OBS station 216				
 Transit	SB_TRT	Tue 16. Oct 12:34	Tue 16. Oct 13:24	0.833
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 13:24	Tue 16. Oct 14:31	1.117

# Daily Science Report

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Category	Code	Start	End	Duration
Recover OBS station 217				
 Transit	SB_TRT	Tue 16. Oct 14:31	Tue 16. Oct 15:25	0.900
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 15:25	Tue 16. Oct 16:52	1.450
Recover OBS station 218				
 Transit	SB_TRT	Tue 16. Oct 16:52	Tue 16. Oct 17:45	0.883
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 17:45	Tue 16. Oct 18:41	0.933
Recover OBS station 219				
 Transit	SB_TRT	Tue 16. Oct 18:41	Tue 16. Oct 19:28	0.783
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 19:28	Tue 16. Oct 20:38	1.167
Recover OBS station 220				
 Transit	SB_TRT	Tue 16. Oct 20:38	Tue 16. Oct 21:30	0.867
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 21:30	Tue 16. Oct 22:41	1.183
Recover OBS station 221				
 Transit	SB_TRT	Tue 16. Oct 22:41	Tue 16. Oct 23:44	1.050
Transit to next station				
 Recovery	DM_RC	Tue 16. Oct 23:44	Tue 16. Oct 24:00	0.267
Recover OBS station 222				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

16-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>9.067</b>	<b>37.778</b>
Transit	9.067	37.778
<b>Demobilisation</b>	<b>14.933</b>	<b>62.222</b>
Recovery	14.933	62.222
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.184</b>
Cetacean	1.633	0.184
<b>Mobilisation</b>	<b>116.767</b>	<b>13.149</b>
Deployment	53.250	5.997
Mob Ashore	38.000	4.279
Reconfiguration	1.233	0.139
Testing	4.767	0.537
Transit to Prospect	19.517	2.198
<b>Acquisition</b>	<b>447.450</b>	<b>50.389</b>

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Category	Hours	% Percent
Prime Extended L/C	11.300	1.273
Prime Line Change	22.133	2.492
Production Prime	414.017	46.623
<b>Demobilisation</b>	<b>101.367</b>	<b>11.415</b>
Recovery	101.367	11.415
<b>Chargeable Standby</b>	<b>220.783</b>	<b>24.863</b>
Tests	0.333	0.038
Transit	211.283	23.793
Weather	9.167	1.032
<b>Total</b>	<b>888.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

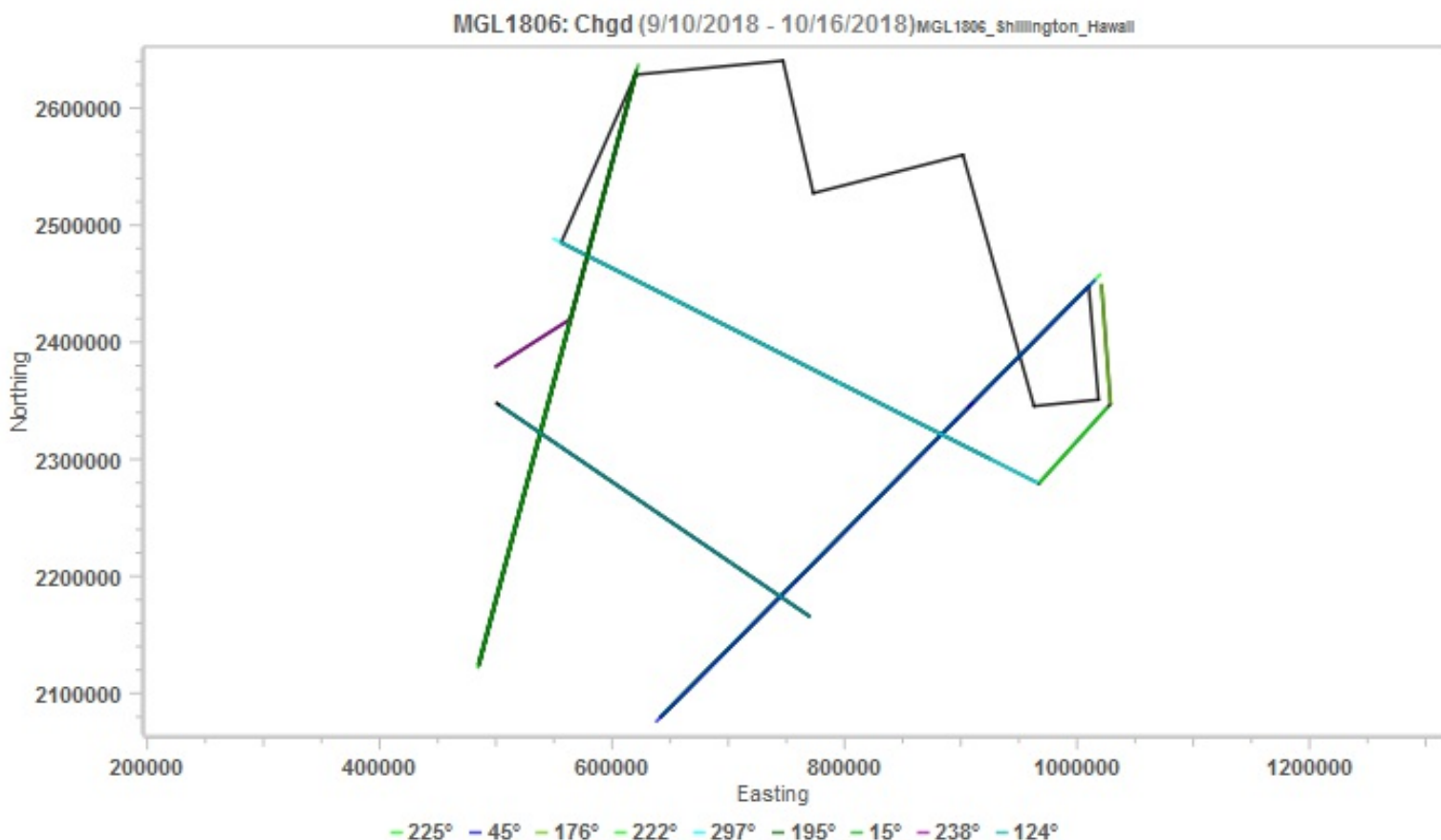
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>0.00</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 16 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Meraki network multiple reboots of system switches

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

A-Frame Winch was creeping and became knotted damaging the grease seals. The knot was freed and unit will be taken out of service at end of cruise.

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Tue 16 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

# Daily Science Report

10/16/2018

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Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## **Science Party On-board the Langseth**

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech



# Daily Science Report

10/17/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Wed 17 Oct

The day was spent recovering OBS units, recovered 9 units today, 5 remaining.













## Daily Comment Summaries - Plan for Tomorrow

Wed 17 Oct

Complete recovery of OBS units and transit to streamer deployment site to acquire MC08 line

### Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Recovery	DM_RC	Wed 17. Oct 00:00	Wed 17. Oct 01:29	1.483
Recover OBS station 222				
 Transit	SB_TRT	Wed 17. Oct 01:29	Wed 17. Oct 02:27	0.967
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 02:27	Wed 17. Oct 04:23	1.933
Recover OBS station 223				
 Transit	SB_TRT	Wed 17. Oct 04:23	Wed 17. Oct 05:22	0.983
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 05:22	Wed 17. Oct 07:09	1.783
Recover OBS station 224				
 Transit	SB_TRT	Wed 17. Oct 07:09	Wed 17. Oct 08:10	1.017
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 08:10	Wed 17. Oct 09:59	1.817
Recover OBS station 225				
 Transit	SB_TRT	Wed 17. Oct 09:59	Wed 17. Oct 11:05	1.100
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 11:05	Wed 17. Oct 12:55	1.833
Recover OBS station 226				
 Transit	SB_TRT	Wed 17. Oct 12:55	Wed 17. Oct 13:56	1.017
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 13:56	Wed 17. Oct 15:42	1.767
Recover OBS station 227				
 Transit	SB_TRT	Wed 17. Oct 15:42	Wed 17. Oct 16:40	0.967
Transit to next station				

(UTC 00:00) UTC - Universal Time Coordinated







Generated on Thu Oct 18 2018 05:27a.m.

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# Daily Science Report

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Category	Code	Start	End	Duration
 Recovery	DM_RC	Wed 17. Oct 16:40	Wed 17. Oct 18:32	1.867
Recover OBS station 228				
 Transit	SB_TRT	Wed 17. Oct 18:32	Wed 17. Oct 19:23	0.850
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 19:23	Wed 17. Oct 21:13	1.833
Recover OBS station 229				
 Transit	SB_TRT	Wed 17. Oct 21:13	Wed 17. Oct 22:12	0.983
Transit to next station				
 Recovery	DM_RC	Wed 17. Oct 22:12	Wed 17. Oct 23:54	1.700
Recover OBS station 230				
 Transit	SB_TRT	Wed 17. Oct 23:54	Wed 17. Oct 24:00	0.100
Transit to next station				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

17-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>7.983</b>	<b>33.264</b>
Transit	7.983	33.264
<b>Demobilisation</b>	<b>16.017</b>	<b>66.736</b>
Recovery	16.017	66.736
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.179</b>
Cetacean	1.633	0.179
<b>Mobilisation</b>	<b>116.767</b>	<b>12.803</b>
Deployment	53.250	5.839
Mob Ashore	38.000	4.167
Reconfiguration	1.233	0.135
Testing	4.767	0.523
Transit to Prospect	19.517	2.140
<b>Acquisition</b>	<b>447.450</b>	<b>49.062</b>
Prime Extended L/C	11.300	1.239
Prime Line Change	22.133	2.427
Production Prime	414.017	45.397
<b>Demobilisation</b>	<b>117.383</b>	<b>12.871</b>
Recovery	117.383	12.871
<b>Chargeable Standby</b>	<b>228.767</b>	<b>25.084</b>
Tests	0.333	0.037
Transit	219.267	24.042
Weather	9.167	1.005

# Daily Science Report

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Category	Hours	% Percent
<b>Total</b>	912.000	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

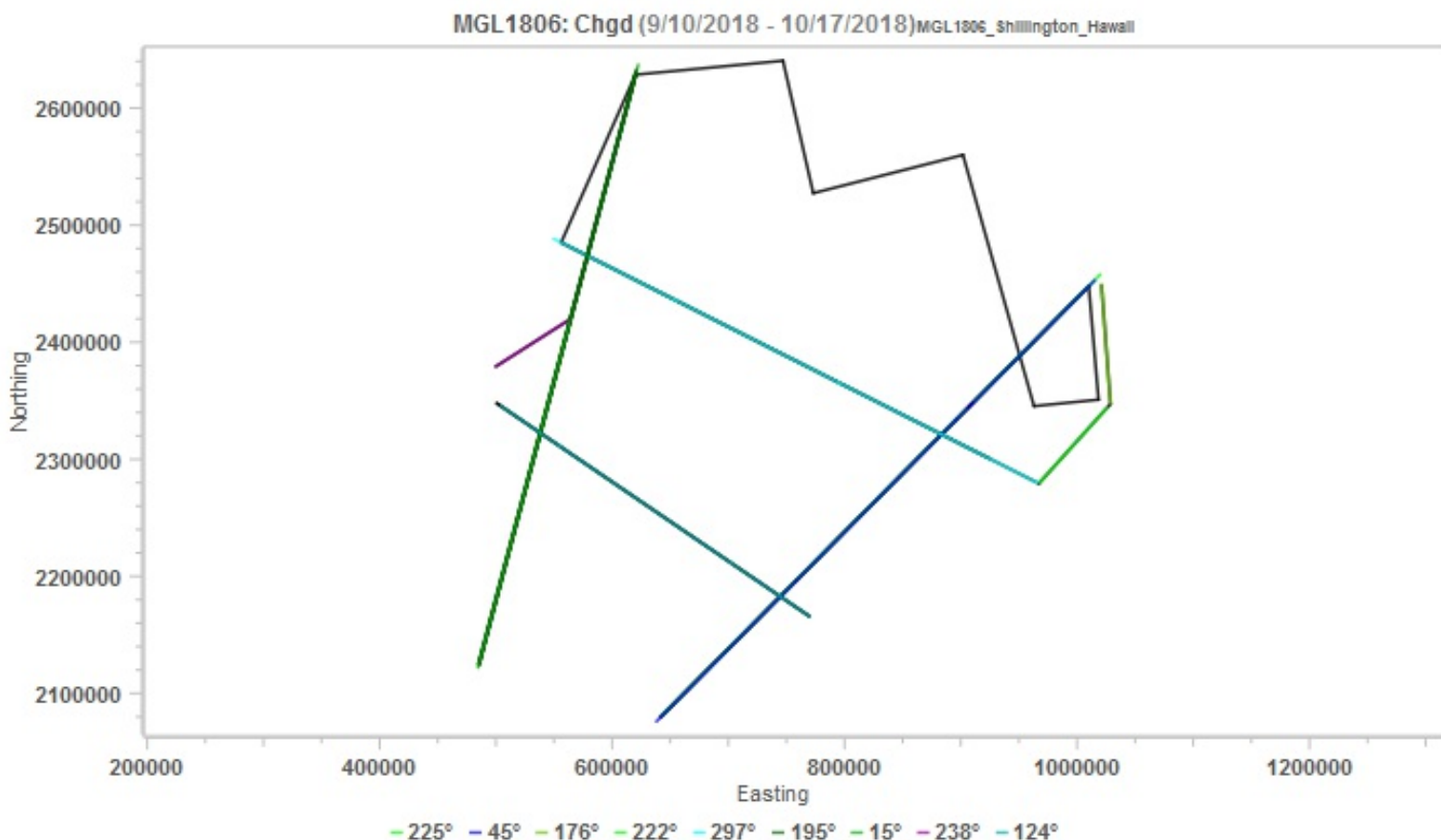
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	1452.95	3174.95
<b>Combined</b>	<b>0.00</b>	<b>0.00</b>	<b>1452.95</b>	<b>3174.95</b>

# Daily Science Report

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 17 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Meraki network multiple reboots of system switches

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Wed 17 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Thu Oct 18 2018 05:27a.m.

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# Daily Science Report

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/18/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Thu 18 Oct

The remaining OBS units from line 2 were recovered by 13:08UTC. After the deck was secured the vessel began transiting to line MC08. While on the transit the magnetometer was deployed. The vessel remained in transit for the remainder of the julian day.











## Daily Comment Summaries - Plan for Tomorrow

Thu 18 Oct

Complete recovery of OBS units and transit to streamer deployment site to acquire MC08 line

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Transit	SB_TRT	Thu 18. Oct 00:00	Thu 18. Oct 00:50	0.833
Transit to next station				
 Recovery	DM_RC	Thu 18. Oct 00:50	Thu 18. Oct 02:25	1.583
Recover OBS station 231				
 Transit	SB_TRT	Thu 18. Oct 02:25	Thu 18. Oct 03:17	0.867
Transit to next station				
 Recovery	DM_RC	Thu 18. Oct 03:17	Thu 18. Oct 05:02	1.750
Recover OBS station 232				
 Transit	SB_TRT	Thu 18. Oct 05:02	Thu 18. Oct 05:45	0.717
Transit to next station				
 Recovery	DM_RC	Thu 18. Oct 05:45	Thu 18. Oct 07:38	1.883
Recover OBS station 233				
 Transit	SB_TRT	Thu 18. Oct 07:38	Thu 18. Oct 08:42	1.067
Transit to next station				
 Recovery	DM_RC	Thu 18. Oct 08:42	Thu 18. Oct 10:30	1.800
Recover OBS station 234				
 Transit	SB_TRT	Thu 18. Oct 10:30	Thu 18. Oct 11:19	0.817
Transit to next station				
 Recovery	DM_RC	Thu 18. Oct 11:19	Thu 18. Oct 13:10	1.850
Recover OBS station 235				
 Transit	SB_TRT	Thu 18. Oct 13:10	Thu 18. Oct 24:00	10.833
Transit to line MC08				

# Daily Science Report

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## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

18-Oct	Hours	% Percent
<b>Chargeable Standby</b>	<b>15.133</b>	<b>63.056</b>
Transit	15.133	63.056
<b>Demobilisation</b>	<b>8.867</b>	<b>36.944</b>
Recovery	8.867	36.944
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.175</b>
Cetacean	1.633	0.175
<b>Mobilisation</b>	<b>116.767</b>	<b>12.475</b>
Deployment	53.250	5.689
Mob Ashore	38.000	4.060
Reconfiguration	1.233	0.132
Testing	4.767	0.509
Transit to Prospect	19.517	2.085
<b>Acquisition</b>	<b>447.450</b>	<b>47.804</b>
Prime Extended L/C	11.300	1.207
Prime Line Change	22.133	2.365
Production Prime	414.017	44.233
<b>Demobilisation</b>	<b>126.250</b>	<b>13.488</b>
Recovery	126.250	13.488
<b>Chargeable Standby</b>	<b>243.900</b>	<b>26.058</b>
Tests	0.333	0.036
Transit	234.400	25.043
Weather	9.167	0.979
<b>Total</b>	<b>936.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
<b>General Details</b>					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
<b>Cable Details</b>					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
<b>Source Details</b>					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4

# Daily Science Report

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## MGL1806\_Shillington\_Hawaii

String Separation: 6 m

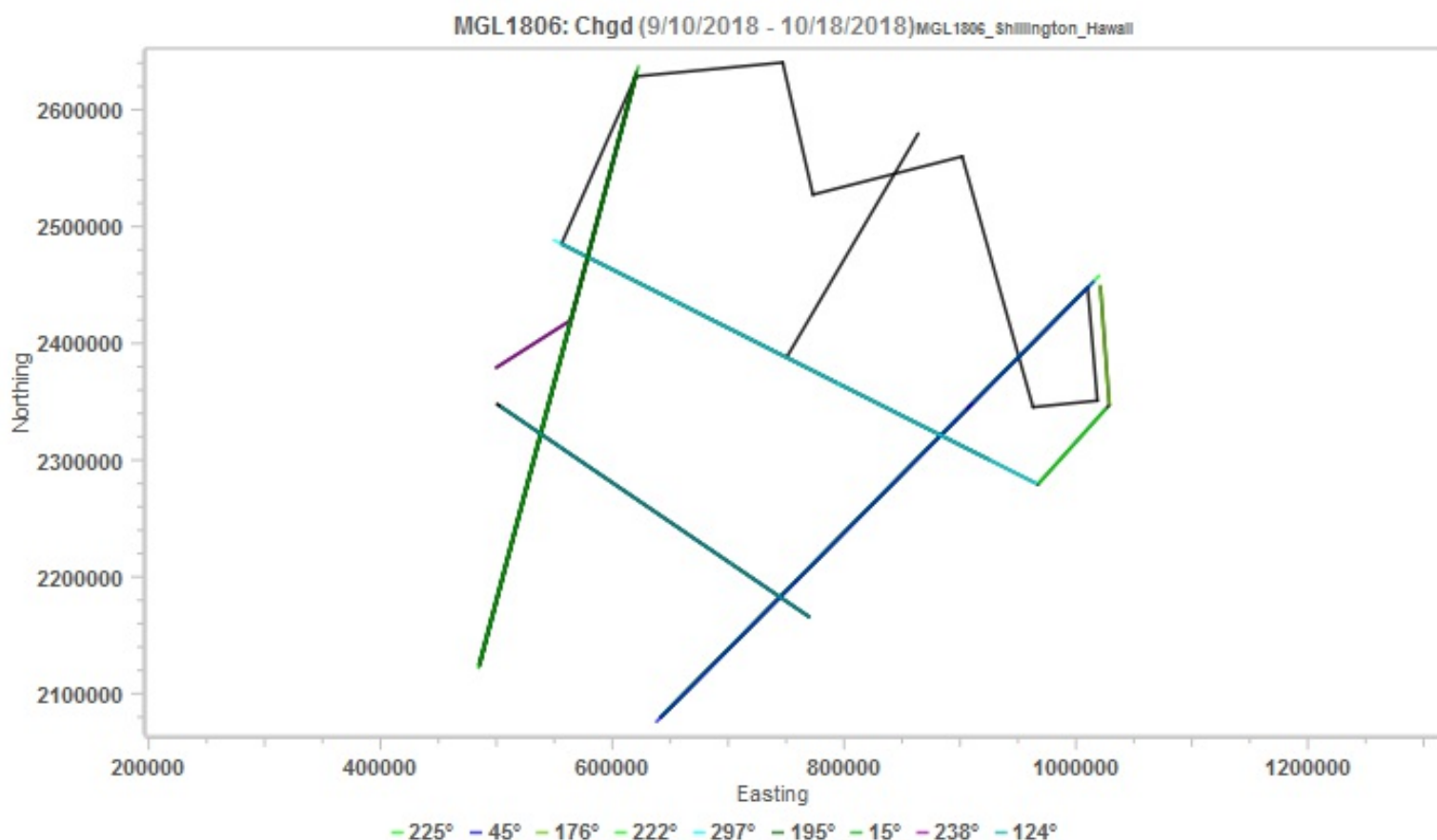
String length: 18 m

### Production Listing (Acpt km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0.00			

### Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	0.00	1452.95	3174.95
Combined	0.00	0.00	1452.95	3174.95



### Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 18 Oct

#### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

#### Information Technology (IT):

Meraki network multiple reboots of system switches

#### Acquisition (OBS):

No Major Issues to Report

#### Towing and Handling (Source):

No Major Issues to Report

#### General Purpose Science:

No Major Issues to Report



## Daily Comment Summaries - Personnel Onboard

Thu 18 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer  
Todd Jensvold L-DEO OMO Science Officer  
Tom Spoto L-DEO OMO Chief Source Mechanic  
Josh Kasinger L-DEO OMO Chief Source Mechanic  
Alan Thompson L-DEO OMO Marine Science Technician - Nav  
Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

### Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/19/2018

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Fri 19 Oct

All seismic equipment was deployed after arriving near the start of line MC08. Once cleared by PSO's the source was ramped up and vessel headed for line, remaining in production through the end of the julian day.








## Daily Comment Summaries - Plan for Tomorrow

Fri 19 Oct

Complete acquisition of line MC08 and recover all seismic equipment.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Transit	SB_TRT	Fri 19. Oct 00:00	Fri 19. Oct 02:08	2.133
Transit to line MC08				
 Deployment	MB_DP	Fri 19. Oct 02:08	Fri 19. Oct 05:45	3.617
Deployed streamer, 6300m active and no RVIM head stretch				
 Deployment	MB_DP	Fri 19. Oct 05:45	Fri 19. Oct 06:05	0.333
Deploy magnetometer and PAM				
 Deployment	MB_DP	Fri 19. Oct 06:05	Fri 19. Oct 07:28	1.383
Deploying source subarrays				
 Tests	SB_TE	Fri 19. Oct 07:28	Fri 19. Oct 08:19	0.850
After cleared by PSO's ramp up source				
 Transit	SB_TRT	Fri 19. Oct 08:19	Fri 19. Oct 11:24	3.083
Heading to start of line				
 Production Prime	AC_PP	Fri 19. Oct 11:24	Fri 19. Oct 24:00	12.600

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

19-Oct	Hours	% Percent
<b>Acquisition</b>	<b>12.600</b>	<b>52.500</b>
Production Prime	12.600	52.500
<b>Chargeable Standby</b>	<b>6.067</b>	<b>25.278</b>
Tests	0.850	3.542
Transit	5.217	21.736
<b>Mobilisation</b>	<b>5.333</b>	<b>22.222</b>
Deployment	5.333	22.222

# Daily Science Report

10/19/2018

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19-Oct	Hours	% Percent
Day's Total	24.000	100.000

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.170</b>
Cetacean	1.633	0.170
<b>Mobilisation</b>	<b>122.100</b>	<b>12.719</b>
Deployment	58.583	6.102
Mob Ashore	38.000	3.958
Reconfiguration	1.233	0.128
Testing	4.767	0.497
Transit to Prospect	19.517	2.033
<b>Acquisition</b>	<b>460.050</b>	<b>47.922</b>
Prime Extended L/C	11.300	1.177
Prime Line Change	22.133	2.306
Production Prime	426.617	44.439
<b>Demobilisation</b>	<b>126.250</b>	<b>13.151</b>
Recovery	126.250	13.151
<b>Chargeable Standby</b>	<b>249.967</b>	<b>26.038</b>
Tests	1.183	0.123
Transit	239.617	24.960
Weather	9.167	0.955
<b>Total</b>	<b>960.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accept km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
11	08	210.6	997	3086	Prime	104.45	4.476	Part	Midnight
<b>Total</b>						<b>104.45</b>			

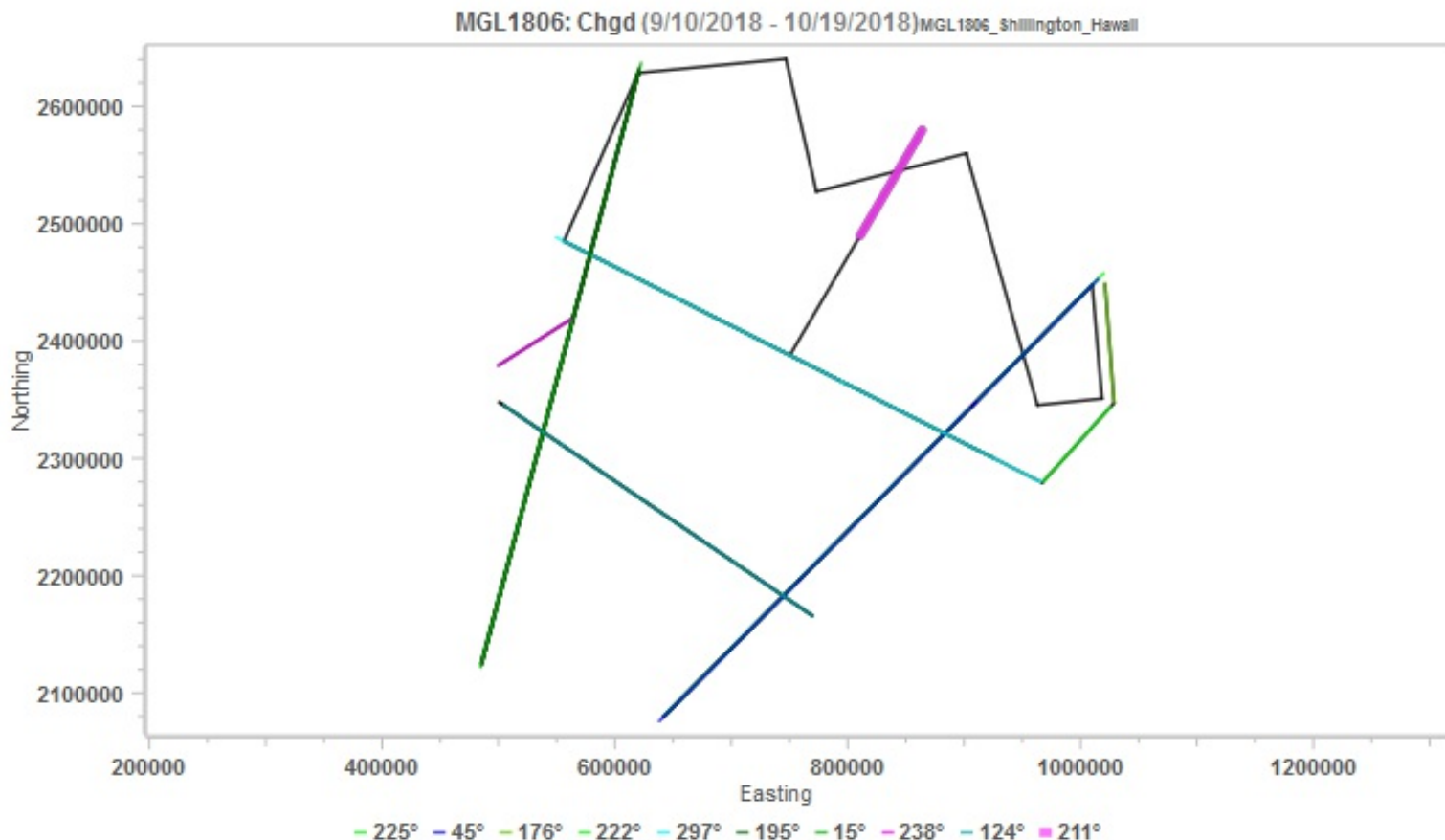
# Daily Science Report

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**Production Totals** (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	104.45	104.45	1557.40	3279.40
<b>Combined</b>	<b>104.45</b>	<b>104.45</b>	<b>1557.40</b>	<b>3279.40</b>



## Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 19 Oct

### Navigation:

Sporadic dropouts of receiver 1 on seapath 330, unit eventually recovers on its own.

### Information Technology (IT):

Meraki network multiple reboots of system switches

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Fri 19 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Sat Oct 20 2018 12:46a.m.

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# Daily Science Report

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Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

## **PSO Staff On-board the Langseth**

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## **Science Party On-board the Langseth**

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

10/20/2018

Page 1

<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary

Sat 20 Oct

Completed acquisition of line MC08 then recovered source, magnetometer, PAM, and streamer. After tailbuoy was secured, it was approved to perform a small magnetometer and sonar survey north of line MC05.







## Daily Comment Summaries - Plan for Tomorrow

Sat 20 Oct

After completion of the magnetometer and sonar track lines it is planned to make way for Honolulu port call.

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)



Category	Code	Start	End	Duration
 Production Prime	AC_PP	Sat 20. Oct 00:00	Sat 20. Oct 14:15	14.250
 Recovery	DM_RC	Sat 20. Oct 14:15	Sat 20. Oct 15:45	1.500
Recover gun strings				
 Recovery	DM_RC	Sat 20. Oct 15:45	Sat 20. Oct 15:57	0.200
Recover PAM and Magnetometer				
 Recovery	DM_RC	Sat 20. Oct 15:57	Sat 20. Oct 19:24	3.450
Recovering Streamer				
 Transit	SB_TRT	Sat 20. Oct 19:24	Sat 20. Oct 20:49	1.417
Begin transiting north				
 Deployment	MB_DP	Sat 20. Oct 20:49	Sat 20. Oct 24:00	3.183
Deploy Magnetometer and perform mini survey				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

20-Oct	Hours	% Percent
<b>Acquisition</b>	<b>14.250</b>	<b>59.375</b>
Production Prime	14.250	59.375
<b>Chargeable Standby</b>	<b>1.417</b>	<b>5.903</b>
Transit	1.417	5.903
<b>Demobilisation</b>	<b>5.150</b>	<b>21.458</b>
Recovery	5.150	21.458
<b>Mobilisation</b>	<b>3.183</b>	<b>13.264</b>
Deployment	3.183	13.264
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

# Daily Science Report

10/20/2018

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## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.166</b>
Cetacean	1.633	0.166
<b>Mobilisation</b>	<b>125.283</b>	<b>12.732</b>
Deployment	61.767	6.277
Mob Ashore	38.000	3.862
Reconfiguration	1.233	0.125
Testing	4.767	0.484
Transit to Prospect	19.517	1.983
<b>Acquisition</b>	<b>474.300</b>	<b>48.201</b>
Prime Extended L/C	11.300	1.148
Prime Line Change	22.133	2.249
Production Prime	440.867	44.804
<b>Demobilisation</b>	<b>131.400</b>	<b>13.354</b>
Recovery	131.400	13.354
<b>Chargeable Standby</b>	<b>251.383</b>	<b>25.547</b>
Tests	1.183	0.120
Transit	241.033	24.495
Weather	9.167	0.932
<b>Total</b>	<b>984.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accpt km by interval) - Prime: Sail Line, Infill: Full Fold

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
11	08	210.6	3087	5439	Prime	117.65	4.466	Complete	Complete
<b>Total</b>						<b>117.65</b>			

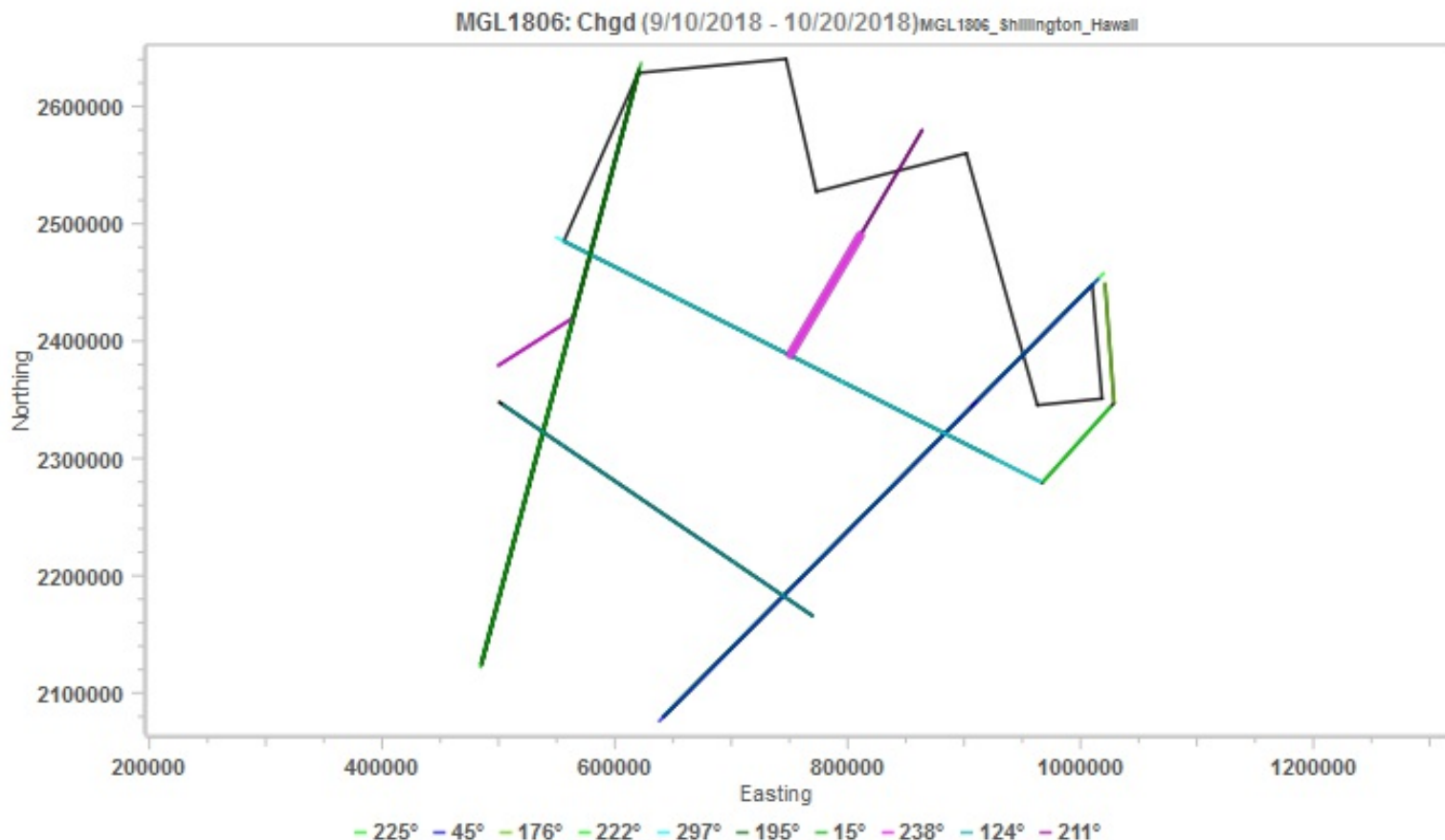
# Daily Science Report

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**Production Totals** (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	117.65	222.10	1675.05	3397.05
<b>Combined</b>	<b>117.65</b>	<b>222.10</b>	<b>1675.05</b>	<b>3397.05</b>



## Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 20 Oct

### Navigation:

No Major Issues to Report

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sat 20 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

(UTC 00:00) UTC - Universal Time Coordinated

Generated on Sun Oct 21 2018 02:28a.m.

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# Daily Science Report

10/20/2018

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Gilles Guerin L-DEO OMO Marine Science Technician - Obs  
Seis Keiser Contract Personnel Marine Science Technician (Source)  
Shaun Shaver Contract Personnel Marine Science Technician (Source)

## **PSO Staff On-board the Langseth**

Amanda Dubuque RPS Lead PSO  
Grace DeLeon RPS PAM / PSO  
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Lori Cabrera RPS PSO

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Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech

# Daily Science Report

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<b>Client:</b>	United States National Science Foundation	<b>Contractor:</b>	Lamont-Doherty Earth Observatory
<b>Job No:</b>	MGL1806	<b>Job No:</b>	MGL1806
<b>Block:</b>	MGL1806	<b>Vessel:</b>	Marcus G Langseth
<b>Client Contact:</b>	Donna Shillington	<b>Supervisor:</b>	Sean Higgins
<b>Consultancy:</b>		<b>Party Chiefs:</b>	Sean Higgins
<b>Job No:</b>		<b>Client Reps:</b>	Donna Shillington

## Daily Comment Summaries - Daily Summary





Sun 21 Oct

Arrived early morning local time at U-Hawaii dock pier 35. Once vessel was secured dockside, the vessel transferred to shore services, and offloading of SCRIPPS OBS's began. Post Cruise gravity tie was also performed. Final report for this cruise.

## Daily Comment Summaries - Plan for Tomorrow

Sun 21 Oct

## Timing Diary (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Code	Start	End	Duration
 Deployment	MB_DP	Sun 21. Oct 00:00	Sun 21. Oct 02:40	2.667
Deploy Magnetometer and perform mini survey				
 Recovery	DM_RC	Sun 21. Oct 02:40	Sun 21. Oct 02:48	0.133
Recover magnetometer, secure all sonars				
 Transit From Prospect	DM_TF	Sun 21. Oct 02:48	Sun 21. Oct 19:19	16.517
Transit back to Honolulu				
 Demob Ashore	DM_DA	Sun 21. Oct 19:19	Sun 21. Oct 24:00	4.683
Demobilising ashore.				

## Timing Day By Day (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

21-Oct	Hours	% Percent
<b>Demobilisation</b>	<b>21.333</b>	<b>88.889</b>
Demob Ashore	4.683	19.514
Recovery	0.133	0.556
Transit From Prospect	16.517	68.819
<b>Mobilisation</b>	<b>2.667</b>	<b>11.111</b>
Deployment	2.667	11.111
<b>Day's Total</b>	<b>24.000</b>	<b>100.000</b>

## Timing Breakdown Summary - Project (Marcus G Langseth, MGL1806\_Shillington\_Hawaii)

Category	Hours	% Percent
<b>DownTime</b>	<b>1.633</b>	<b>0.162</b>
Cetacean	1.633	0.162

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Category	Hours	% Percent
<b>Demobilisation</b>	<b>152.733</b>	<b>15.152</b>
Demob Ashore	4.683	0.465
Recovery	131.533	13.049
Transit From Prospect	16.517	1.639
<b>Mobilisation</b>	<b>127.950</b>	<b>12.693</b>
Deployment	64.433	6.392
Mob Ashore	38.000	3.770
Reconfiguration	1.233	0.122
Testing	4.767	0.473
Transit to Prospect	19.517	1.936
<b>Acquisition</b>	<b>474.300</b>	<b>47.054</b>
Prime Extended L/C	11.300	1.121
Prime Line Change	22.133	2.196
Production Prime	440.867	43.737
<b>Chargeable Standby</b>	<b>251.383</b>	<b>24.939</b>
Tests	1.183	0.117
Transit	241.033	23.912
Weather	9.167	0.909
<b>Total</b>	<b>1008.000</b>	

## Basic Project Details

MGL1806_Shillington_Hawaii					
General Details					
Record length:	18000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	225 m	Fold Coverage:	252		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000 m	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12 m
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	18 m		

## Production Listing (Accept km) - Prime: Sail Line, Infill: Full Fold

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
<b>Total</b>					<b>0.00</b>			

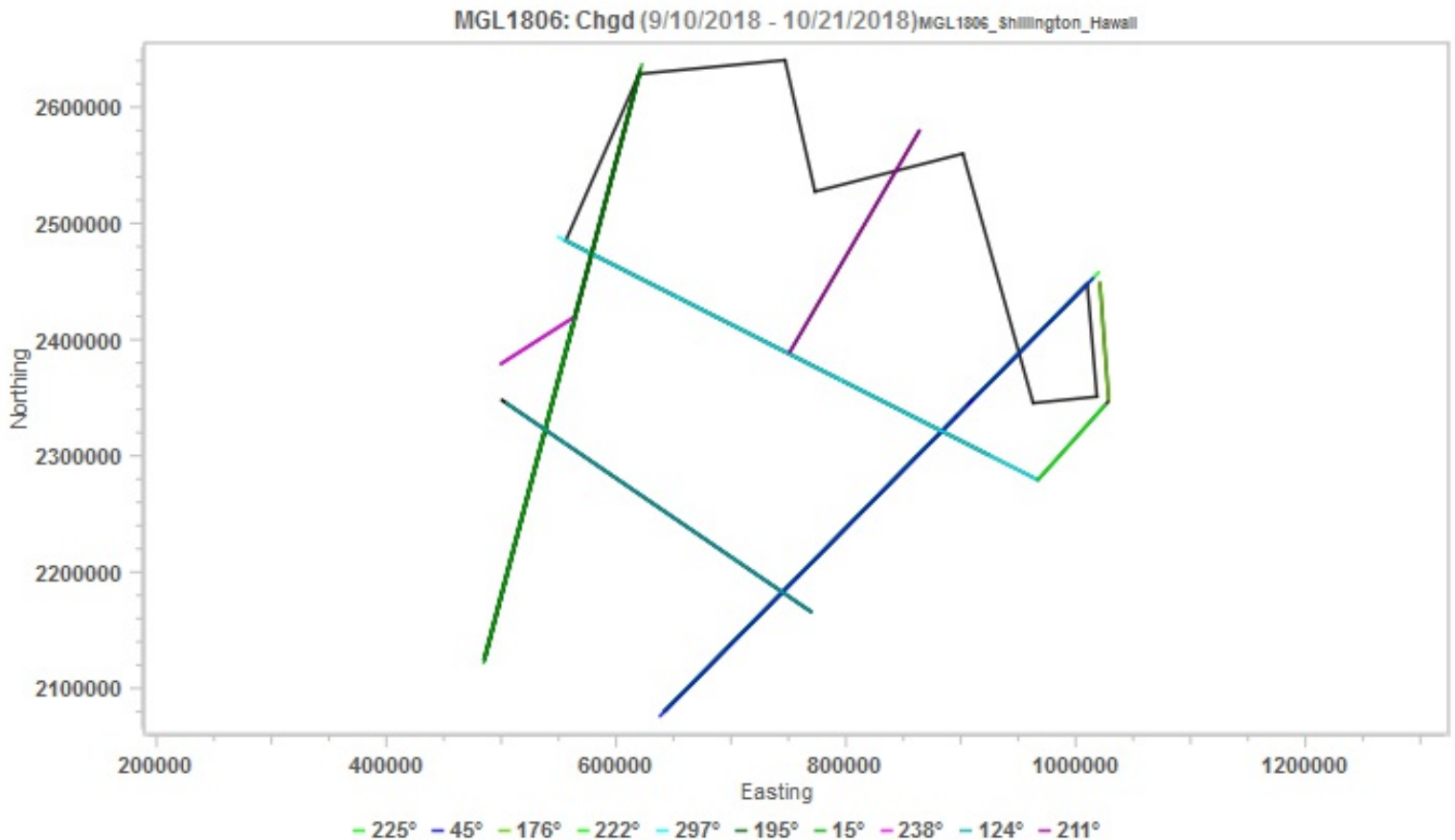
## Production Totals (Chgd km by interval) - Prime: Sail Line, Infill: Full Fold

Charged km	Day	Week	Month	Project
Prime	0.00	222.10	1675.05	3397.05
<b>Combined</b>	<b>0.00</b>	<b>222.10</b>	<b>1675.05</b>	<b>3397.05</b>

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## Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 21 Oct

### Navigation:

No Major Issues to Report

### Information Technology (IT):

No Major Issues to Report

### Acquisition (OBS):

No Major Issues to Report

### Towing and Handling (Source):

No Major Issues to Report

### General Purpose Science:

No Major Issues to Report

## Daily Comment Summaries - Personnel Onboard

Sun 21 Oct

### Technical Staff On-board the Langseth

David Martinson L-DEO OMO Chief Science Officer

Todd Jensvold L-DEO OMO Science Officer

Tom Spoto L-DEO OMO Chief Source Mechanic

Josh Kasinger L-DEO OMO Chief Source Mechanic

Alan Thompson L-DEO OMO Marine Science Technician - Nav

Gilles Guerin L-DEO OMO Marine Science Technician - Obs

Seis Keiser Contract Personnel Marine Science Technician (Source)

Shaun Shaver Contract Personnel Marine Science Technician (Source)

### PSO Staff On-board the Langseth

Amanda Dubuque RPS Lead PSO

Grace DeLeon RPS PAM / PSO

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Diana Maldonado RPS PSO  
Bianca Mares RPS PSO  
Lori Cabrera RPS PSO

## Science Party On-board the Langseth

Shillington, Donna LDEO PI  
Watts, Anthony Oxford PI  
Dunn, Robert University of Hawaii PI  
Nakrong, Nina University of Hawaii Grad student  
Lata, Charu University of Hawaii Grad student  
Hart, Laney University of Washington Grad student  
Rodriguez, Suyapa LSU Grad student  
Sousa, Dan LDEO Grad student  
Wei, Jingxuan TAMU Grad student  
Wei, Xiaozhuo URI Grad student  
Boulahanis, Bridgit LDEO Grad student  
Aarons, Ernest SIO OBS tech  
Kane, Timothy WHOI OBS tech  
McPeak, Sean SIO OBS tech  
Perez, Jake SIO OBS tech