

11/19/2024

Page 1

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Tue 19 Nov

Start of MGL 2411 - Chain

It was a busy first day of MGL 2411. Crew were arriving, shipments incoming and preparations on-board ongoing for a planned departure on either the night of the 20th or morning of the 21st.

The Science team were onboard during the day getting acquainted with the ship and checking in on the status of mobilization. The OBS team arrived in the afternoon and went right to work. The MGL deck team had already moved down the OBS instruments from the top deck so this was a big jump ahead. Four PSO's arrived in the afternoon and hit the deck running. The tower is already being setup along with the main lab. The source mechanics were busy on the main deck all day hanging the air guns. They are more than 70% installed at end of day. Down in the main lab the focus was on turning all the systems on and doing a function check after a long shipyard period. The gravity meter arrived late on the 18th, the team started first thing in the morning removing the meter from the transportation case and starting the install process. After several instrument checks, a land and gravity tie were done. The results look good. Both magnetometers arrived and are being made ready to deploy.

At end of day there are still a few outstanding items the vessel is waiting for.

- One PSO and One Technician, they will be arriving on the 1240 TAP flight from Lisbon
- 2 shipments that will also be arriving on the TAP flight.

Late in the day the port informed the team that the vessel needed to leave it's current berth by 1800 on the 20th as another vessel is coming in. As of right now the plan is to sail at that time, assuming the personnel and any critical shipments are on-board.

Daily Comment Summaries - Plan for Tomorrow

Tue 19 Nov

Continue with mobilization.

Sailing at 1800.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Mob Ashore	MB_MA	24.000
Mobilizing at the Port of Mindelo, Cape Verde				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

19-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	24.000	100.000

Category	Hours	% Percent
Total	24.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

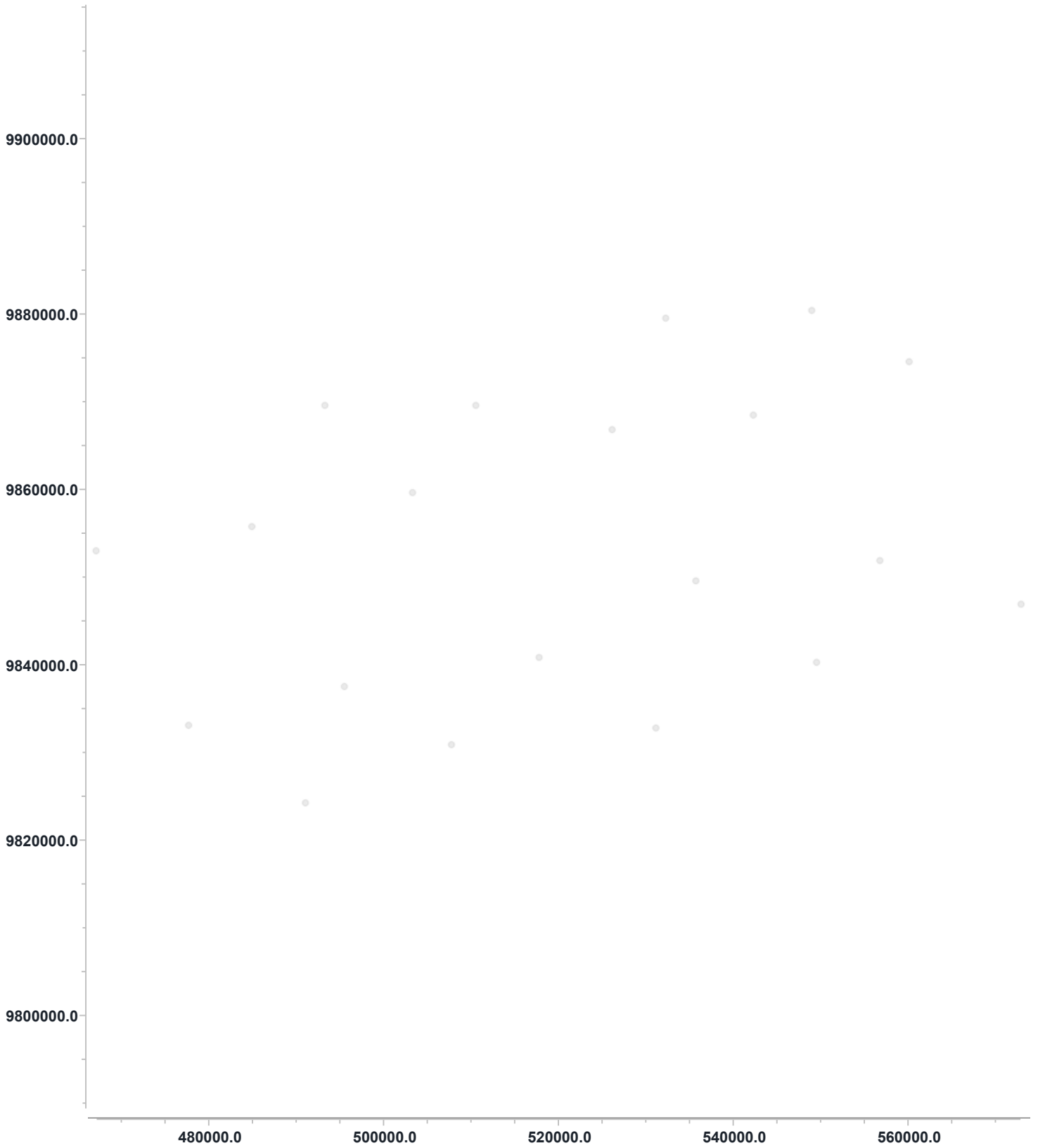
Production Totals (points)

Accepted	Day	Week	Month	Project

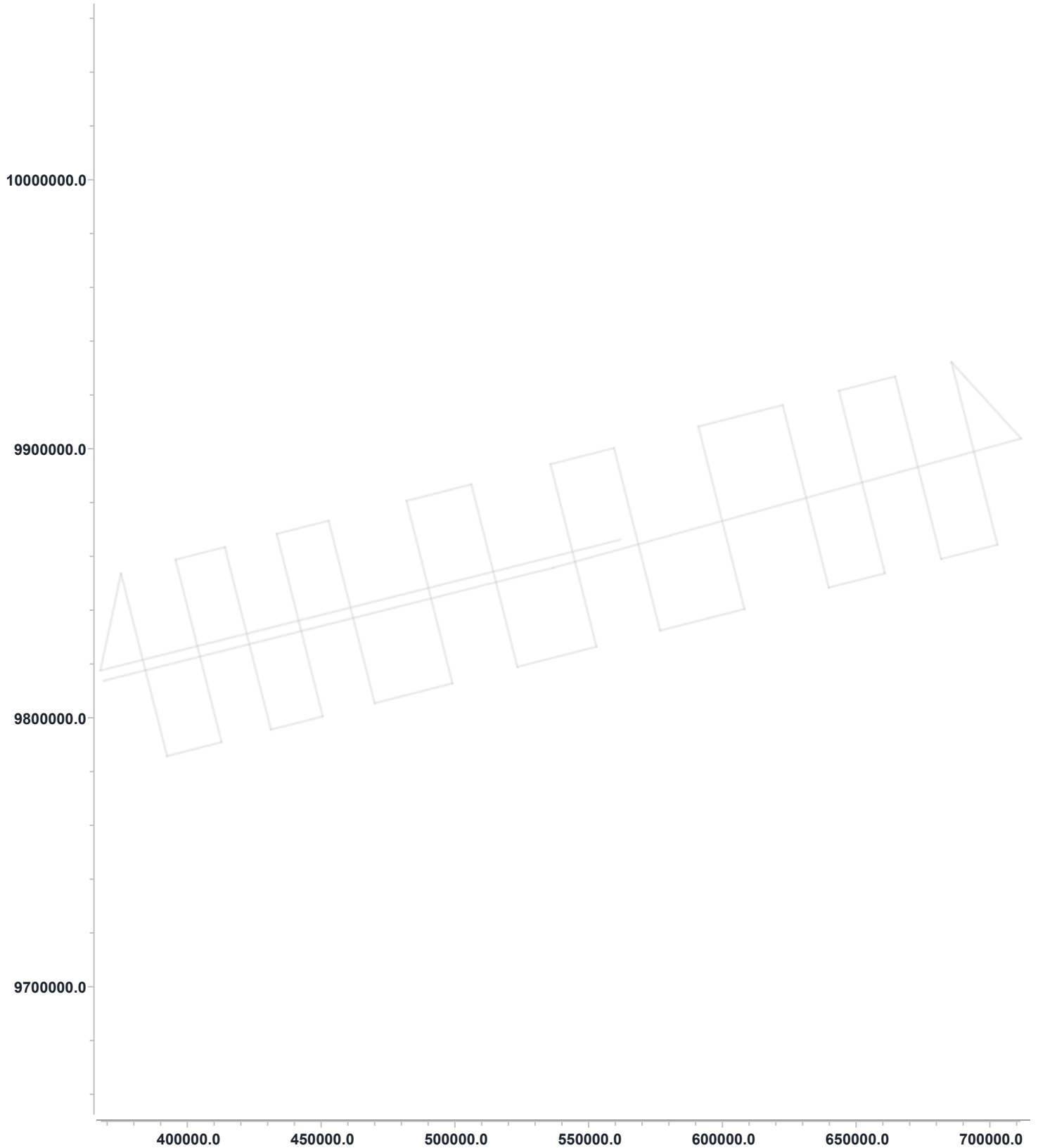
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/19/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/19/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 19 Nov

11/19/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 19 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Ana Alves - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Hanchao Jian - Scientist
- Mark Behn - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
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11/20/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Wed 20 Nov

A busy day mobilizing in Mindelo.
 Multiple gravity ties were done to check the health of the instrument.
 The system in the main lab were started up and configuration started.
 The OBS team were busy working with the deck crew to move instruments in to place and setting up the dry lab.
 PSO team had training on the PAM system, the PAM cable and winch were tested, and the tower was setup.
 The gunners had all hands on deck during the day handling air guns, hooking up the electrical lines and preparing the source for deployment.
 The engineers and deck crew were checking systems, securing gear, starting up the engines and ensuring the ship was ready to sail by 1800.
 The two remaining crew members joined after their flight landed at 1240. They went right from the transportation van to a vessel induction!
 By 1800 local, the lines were being thrown and the vessel was moving away from dock.
 At end of day the vessel was in transit for the work area.

Daily Comment Summaries - Plan for Tomorrow

Wed 20 Nov

Continue testing gear.
 Continue with main lab system configuration.
 Fire and abandon ship drill at 12:30.
 Start up meeting at 15:30.
 Continue transit to the work area.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	18:57	Mob Ashore	MB_MA	18.950
Mobilizing at the Port of Mindelo, Cape Verde				
18:57	24:00	Transit to Prospect	MB_TT	5.050
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

20-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Mob Ashore	18.950	78.958
Transit to Prospect	5.050	21.042
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	48.000	100.000
Transit to Prospect	5.050	10.521
Mob Ashore	42.950	89.479
Total	48.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

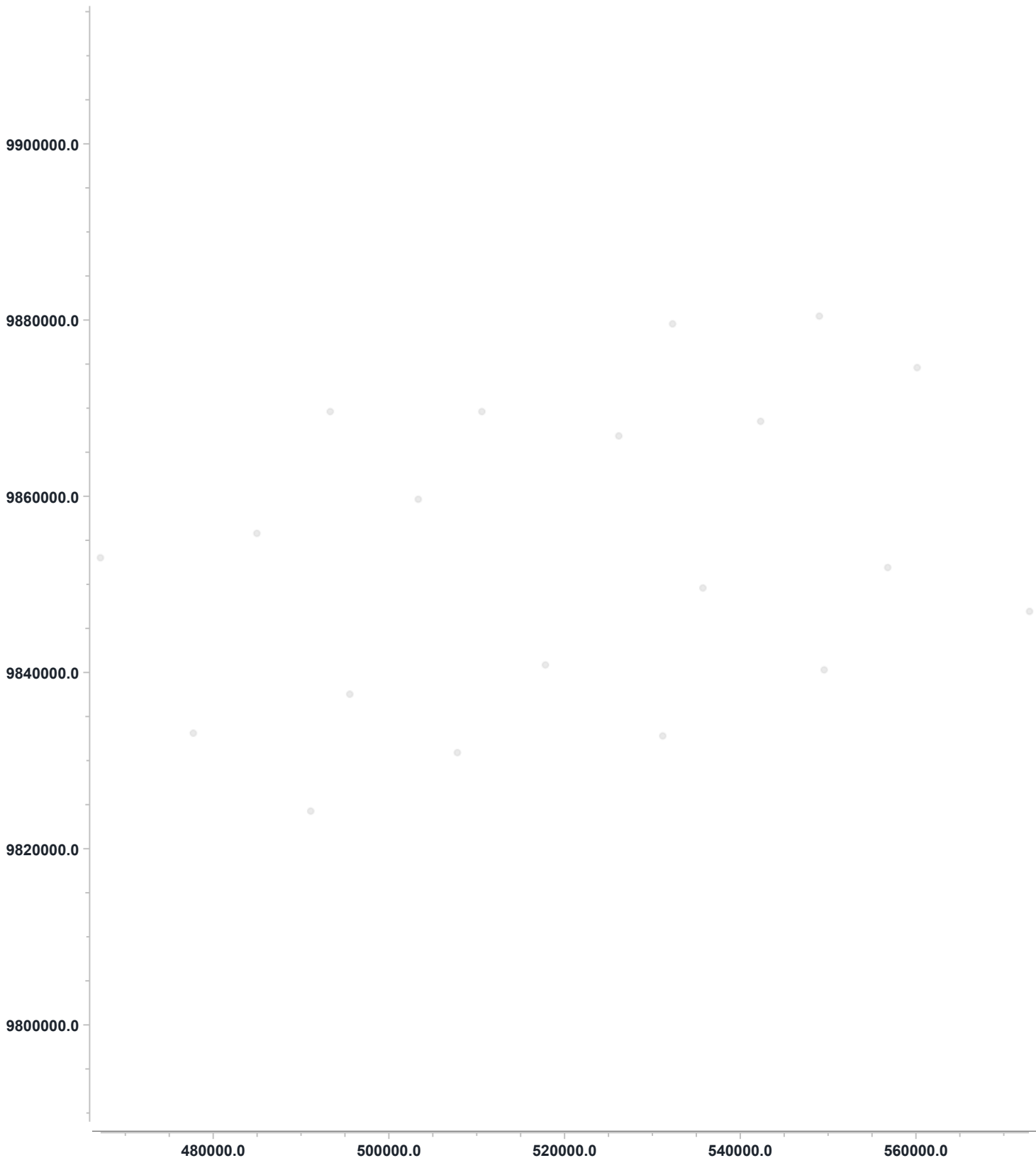
Production Totals (points)

Accepted	Day	Week	Month	Project

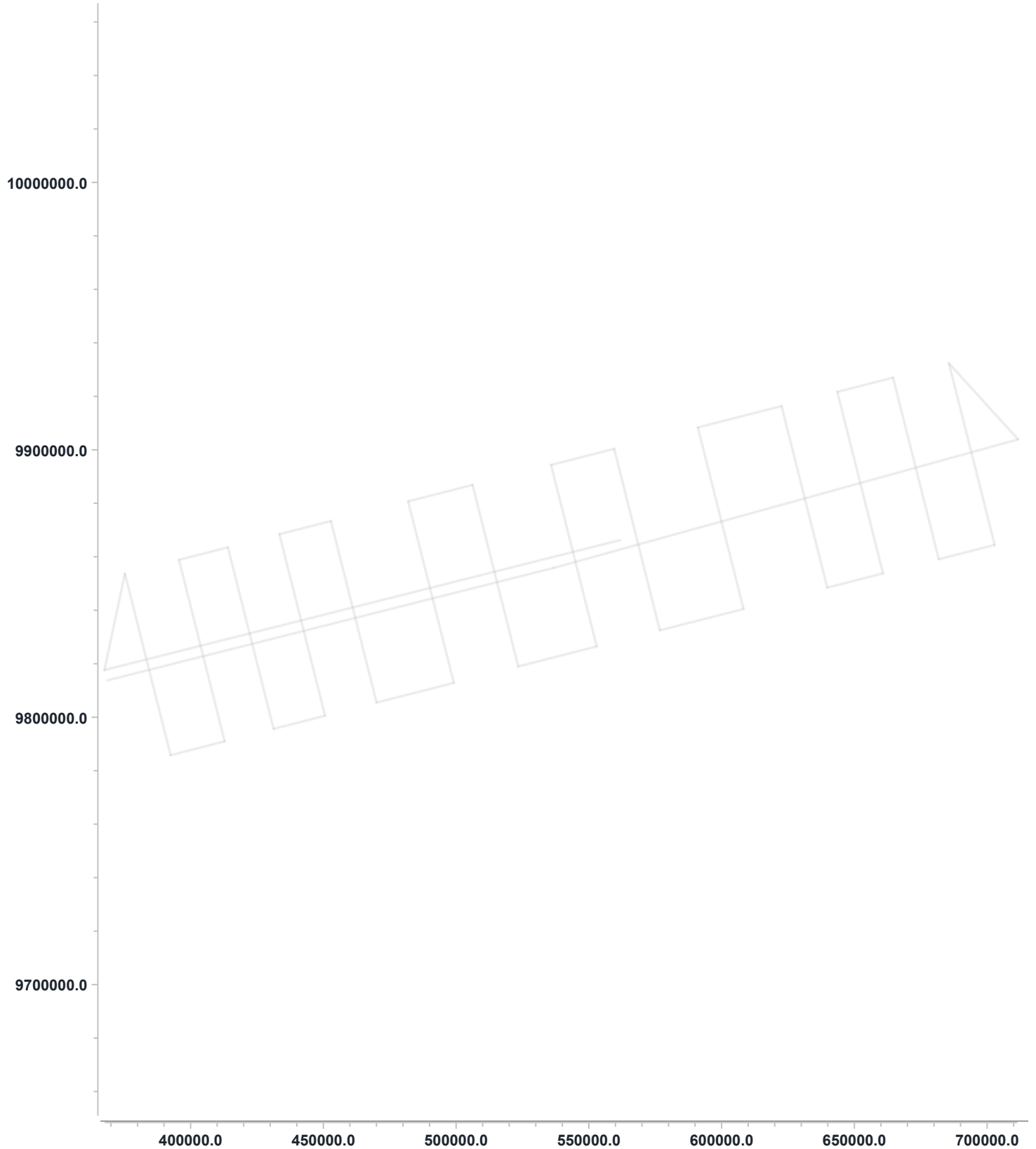
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/20/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/20/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 20 Nov

11/20/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 20 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO



Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Hanchao Jian - Scientist
- Mark Behn - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:10	16:10	 Vessel Induction Tours	Trng_VIT
HSE - Vessel Induction Tour			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Training	Trng	1	1	1	1	1.000	
 Vessel Induction Tours	VIT	1	1	1	1	1.000	

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Thu 21 Nov

The day started with the vessel transiting to the work area. The crew are starting to settle in to their cabins, work spaces and finding their way around the boat. A lot of small jobs are being completed by all departments in preparation for the first OBS deployment which is planned for early morning on the 26th. One of the high priority items the crew did today was the fire and abandon ship drill, which is done within 24 hours of leaving port. Today's drill was a simulated fire in the machine shop. The marine crew suited up in their fire fighting gear and went through all the stages of fighting a fire on-board a ship. Meanwhile the science team did a full muster. In the picture you can see our Chief Mate Dave providing training on how to launch the emergency life rafts.

The start of cruise ops meeting was held with the department/team leaders.

At end of day the vessel was transiting towards the work area.
ETA: Nov 26th ~0300



Daily Comment Summaries - Plan for Tomorrow

Thu 21 Nov

Continue transiting.
Meeting with the Office of Marine Operations to discuss any permitting questions.
Various jobs
Start to prepare the digibirds

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit to Prospect	MB_TT	24.000
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

21-Nov	Hours	% Percent
Mobilisation	24.000	100.000

11/21/2024

Page 2

21-Nov	Hours	% Percent
Transit to Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	72.000	100.000
Transit to Prospect	29.050	40.347
Mob Ashore	42.950	59.653
Total	72.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

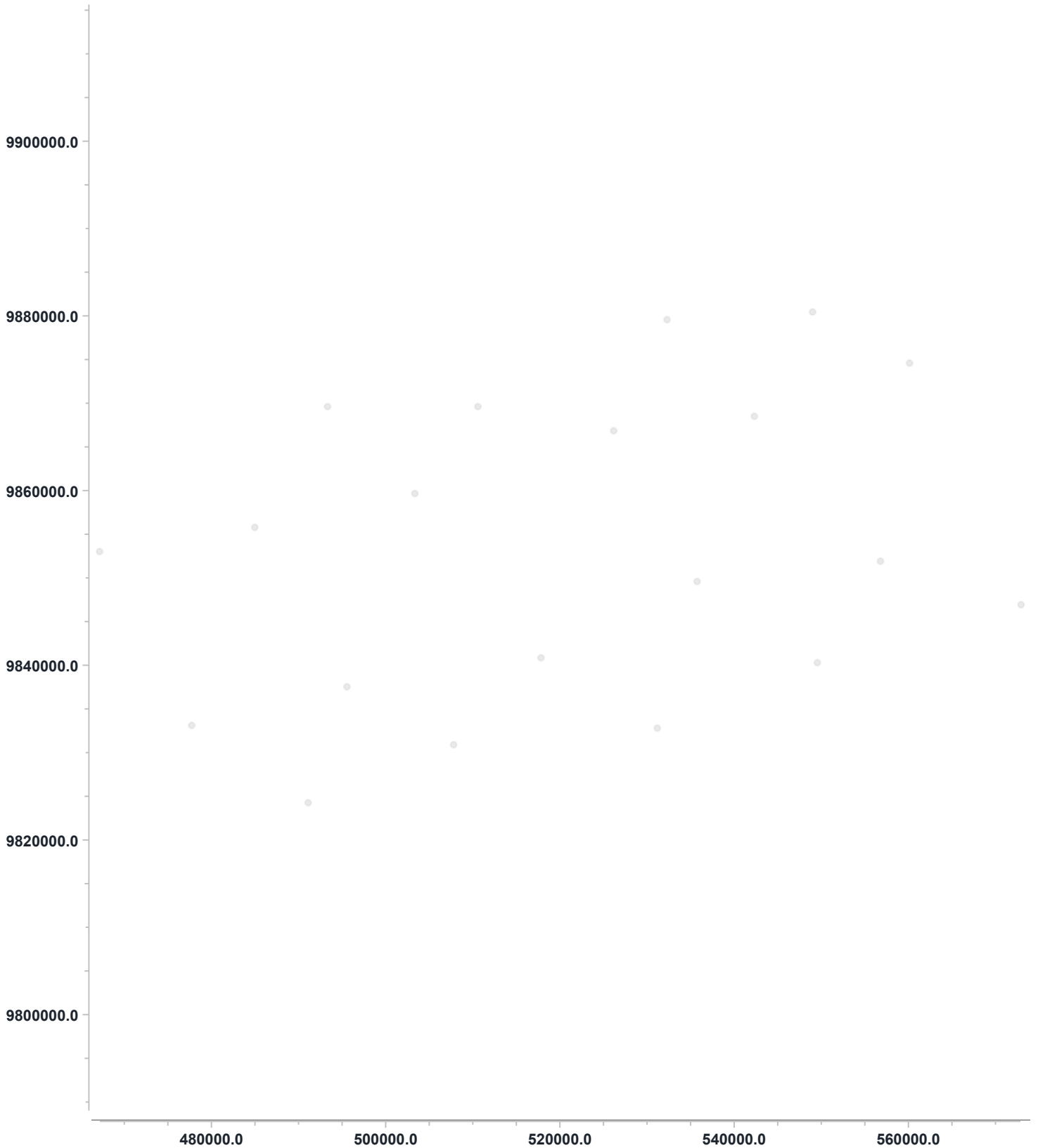
Production Totals (points)

Accepted	Day	Week	Month	Project

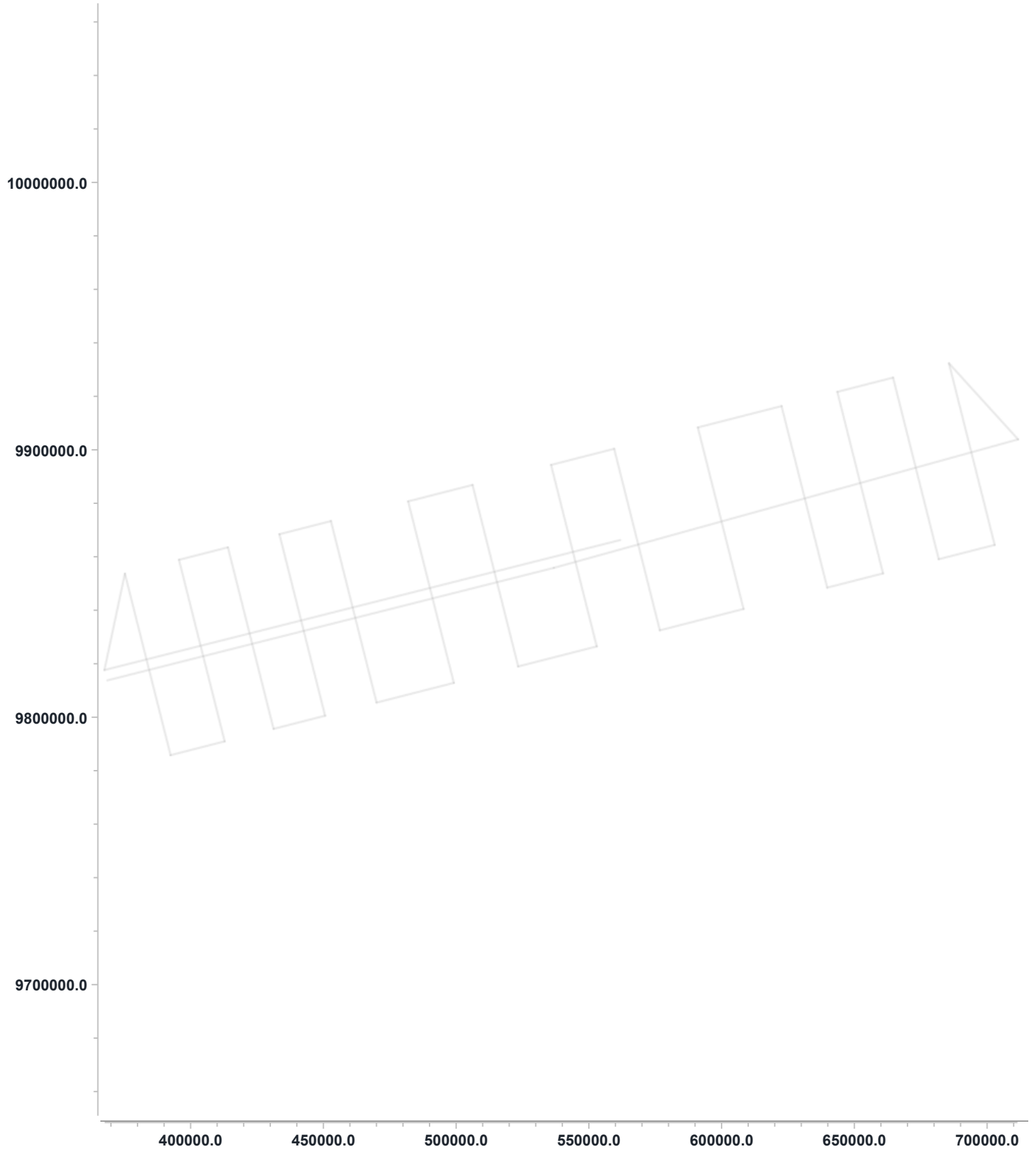
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/21/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/21/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 21 Nov

11/21/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 21 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Ana Alves - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Hanchao Jian - Scientist
- Mark Behn - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:05	13:05	Abandon Ship Drill	Drls_AS
HSE - Abandon Ship Drill			
13:05	14:05	Fire Drill	Drls_Fi
HSE - Fire Drill			
15:10	16:10	Start-up Meeting	Mtgs_StUp
HSE - Start-up Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	1	1	1	1	1.000	
Start-up Meeting	StUp	1	1	1	1	1.000	
Training	Trng	0	1	1	1	1.000	
Vessel Induction Tours	VIT	0	1	1	1	1.000	
Drills	Drls	2	2	2	2	2.000	
Abandon Ship Drill	AS	1	1	1	1	1.000	
Fire Drill	Fi	1	1	1	1	1.000	

11/22/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Fri 22 Nov

The day began with the vessel steadily transiting toward the work area—a process that’s both routine and full of activity. Life at sea means there’s always something to do!

Around the ship, various tasks kept the crew and science team busy. Most of the science team has settled in by now, though a few members are still finding their sea legs. With a little more time, everyone will be acclimated and ready to go.

After lunch, the team gathered for a call with the Office of Marine Operations to address questions about environmental permits. The Lead PSO (Protected Species Observer) is preparing additional information and will organize a training session for the techs and science team in the coming days.

As the day wrapped up, the vessel continued its transit toward the work area, with an ETA of November 26th at approximately 0155. Excitement is building as we get closer to starting our operations!

Daily Comment Summaries - Plan for Tomorrow

Fri 22 Nov

Continue transiting.
 Various jobs
 Start to prepare the digibirds

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit to Prospect	MB_TT	24.000
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

22-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Transit to Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	96.000	100.000
Transit to Prospect	53.050	55.260
Mob Ashore	42.950	44.740
Total	96.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		

MCS 15000m 50m

Cable Details

No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m

Source Details

No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

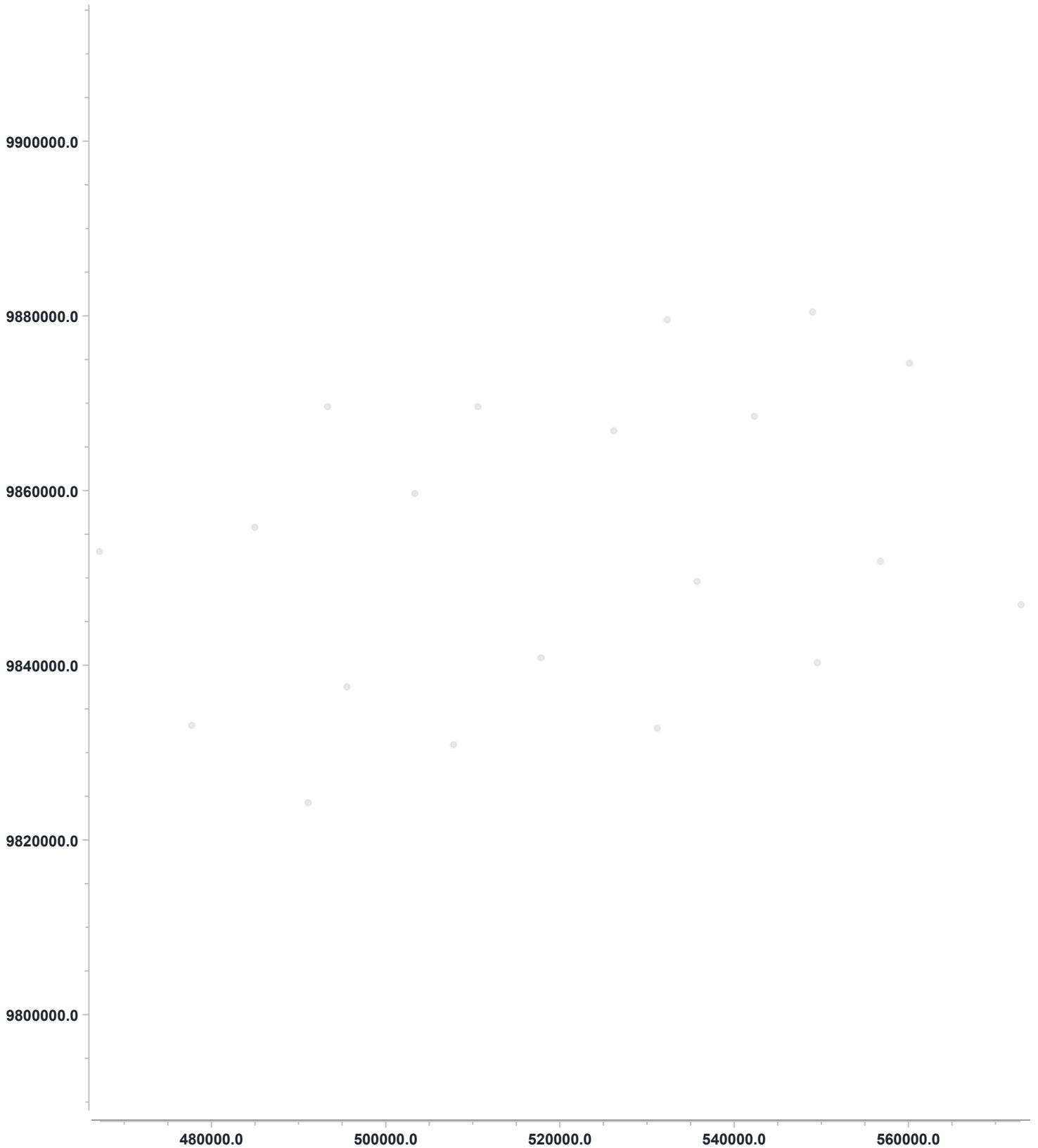
Production Totals (points)

Accepted	Day	Week	Month	Project

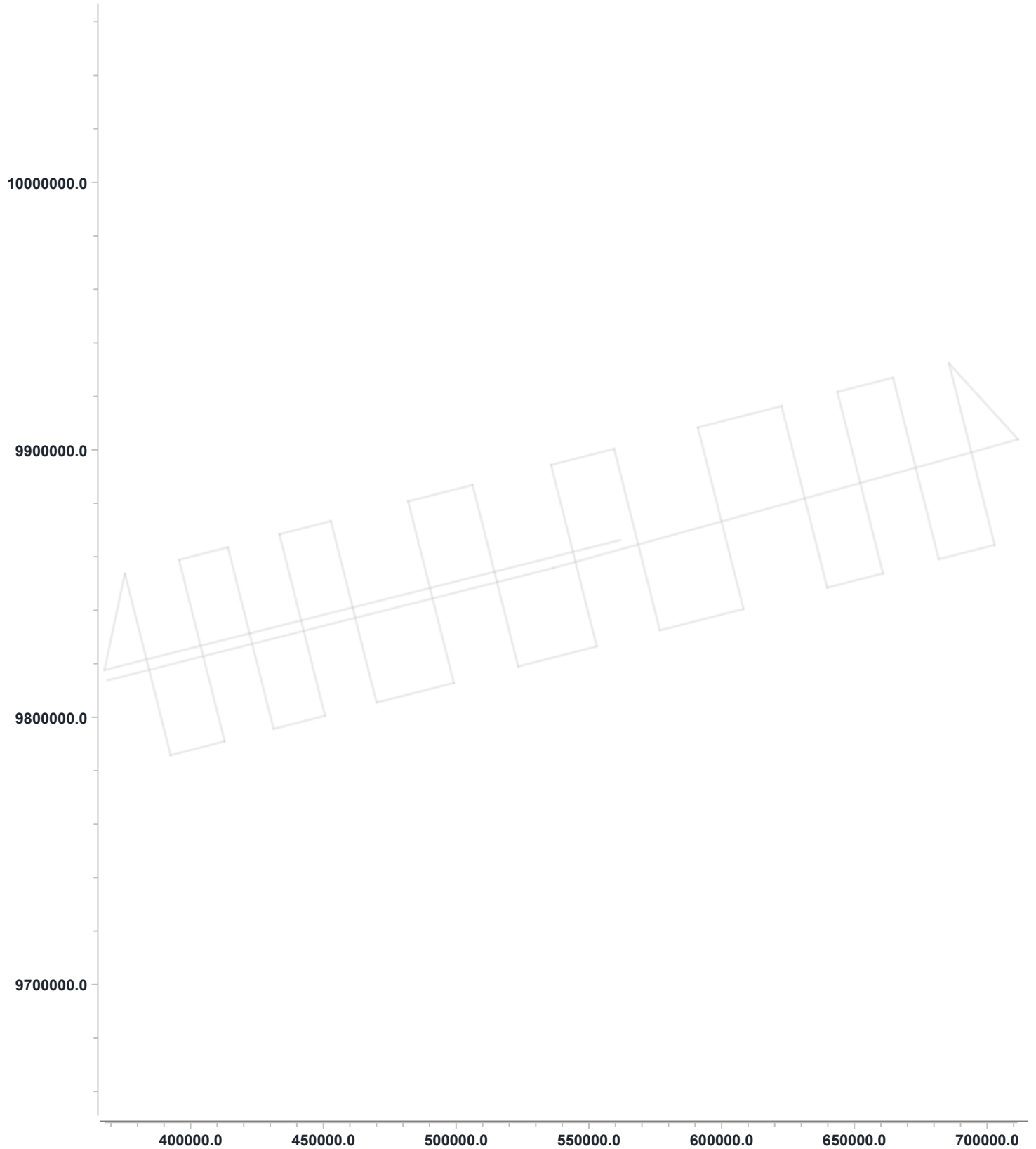
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/22/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/22/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 22 Nov

11/22/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 22 Nov

Technical Staff On-board the Langseth

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- Mark Behn - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
15:05	16:05	Start-up Meeting	Mtgs_StUp
HSE - Start-up Meeting for PSO/Permit Questions			






HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	1	2	2	2	2.000	
Start-up Meeting	StUp	1	2	2	2	2.000	

Daily Science Report

11/22/2024

Page 6

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Training	Trng	0	1	1	1	1.000	
 Vessel Induction Tours	VIT	0	1	1	1	1.000	
 Drills	Drls	0	2	2	2	2.000	
 Abandon Ship Drill	AS	0	1	1	1	1.000	
 Fire Drill	Fi	0	1	1	1	1.000	

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sat 23 Nov

A busy day of transiting.
The gun mechanics have been busy putting the gun work shop back together from shipyard and tweaking a few items on the arrays.
The preparation of the digibirds was started. 42 are done and ready to get wet.
The various monitors/tv we installed in the shipyard are starting to look good.

At end of day the vessel is transiting south.
ETA OBS 1: Nov 26th @ 0025

Daily Comment Summaries - Plan for Tomorrow

Sat 23 Nov

Continue transiting South
Finish the digibirds

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit to Prospect	MB_TT	24.000
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

23-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Transit to Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	120.000	100.000
Transit to Prospect	77.050	64.208
Mob Ashore	42.950	35.792
Total	120.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m

MCS 15000m 50m

Source Details

No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

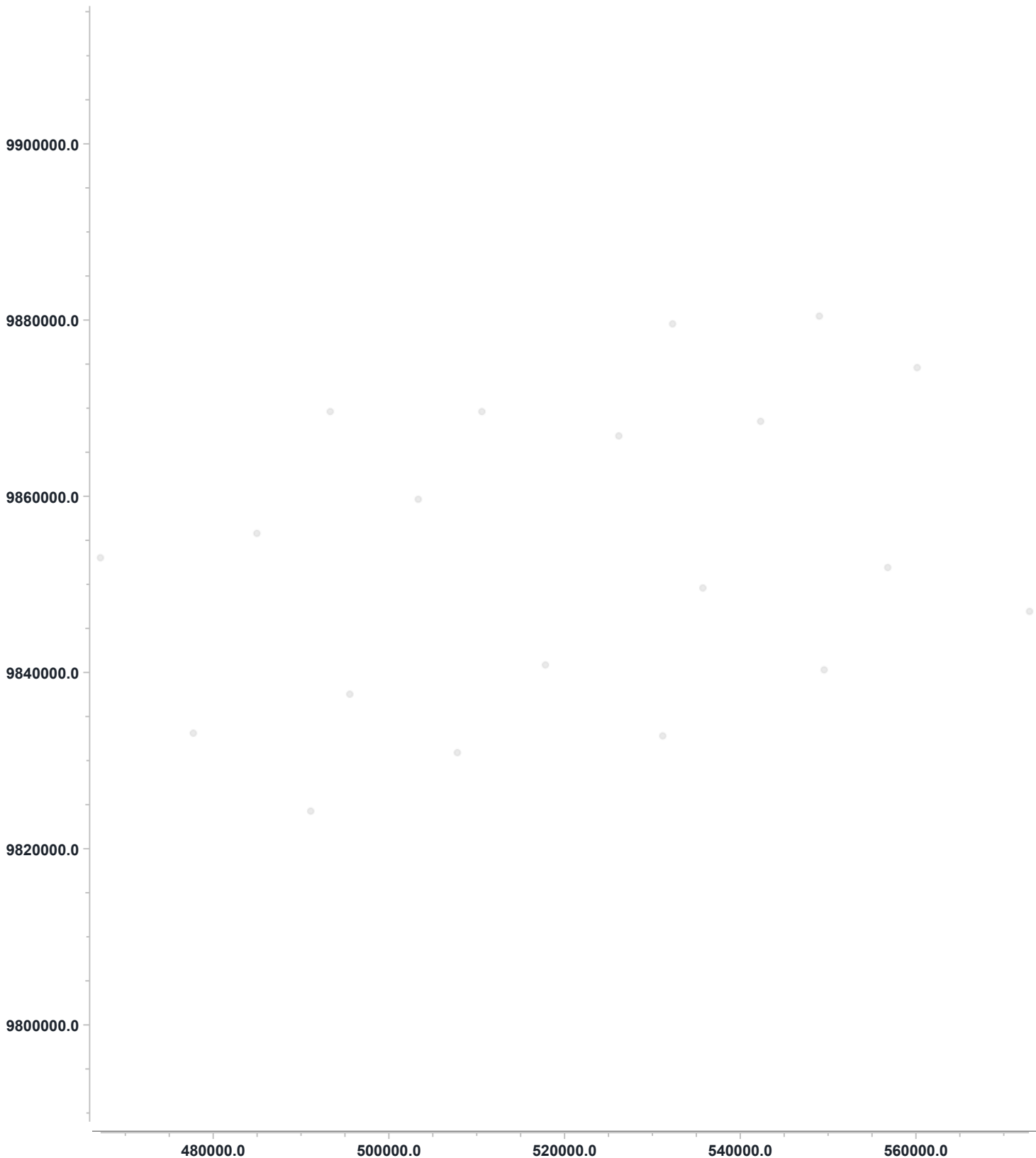
Production Totals (points)

Accepted	Day	Week	Month	Project

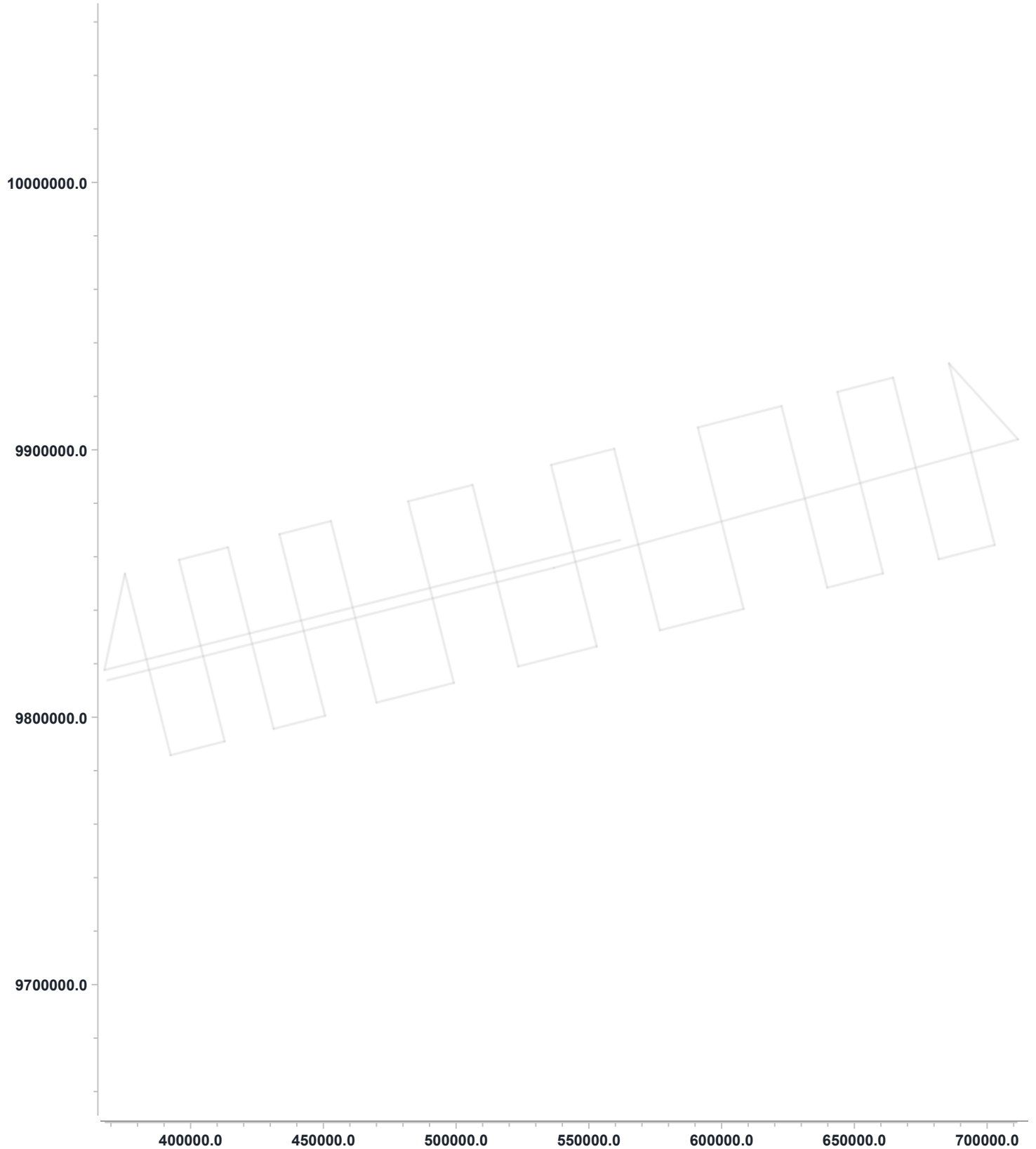
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/23/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/23/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 23 Nov

11/23/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 23 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Ana Alves - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Hanchao Jian - Scientist
- Mark Behn - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)




Start	End	Category	Code
-------	-----	----------	------

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	0	2	2	2	2.000	
Start-up Meeting	StUp	0	2	2	2	2.000	
Training	Trng	0	1	1	1	1.000	
Vessel Induction Tours	VIT	0	1	1	1	1.000	

11/23/2024

Page 6

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Drills	Drls	0	2	2	2	2.000	
 Abandon Ship Drill	AS	0	1	1	1	1.000	
 Fire Drill	Fi	0	1	1	1	1.000	

11/24/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sun 24 Nov

Transiting to the work area.
 Discussed a few points at the daily ops meeting today. The captain discussed the communications between the bridge and deck.
 Various odd jobs done in preparation for streamer deployment.

At end of day the vessel is transiting south.
 ETA OBS 1: Nov 25th @ 23:30

Daily Comment Summaries - Plan for Tomorrow

Sun 24 Nov

Continue transiting South

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit to Prospect	MB_TT	24.000
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

24-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Transit to Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	144.000	100.000
Mob Ashore	42.950	29.826
Transit to Prospect	101.050	70.174
Total	144.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12

11/24/2024

Page 2

MCS 15000m 50m

Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

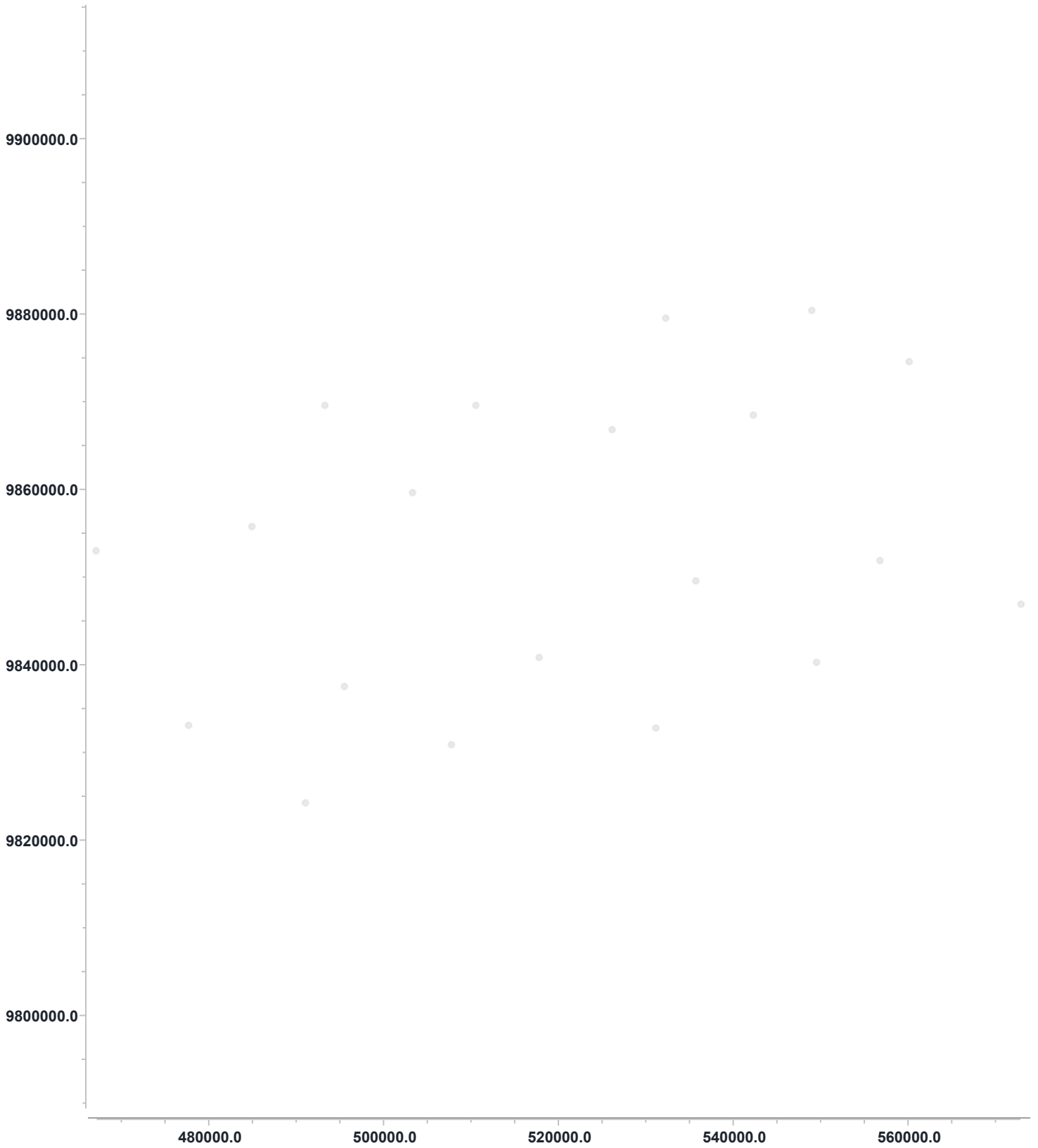
Production Totals (points)

Accepted	Day	Week	Month	Project

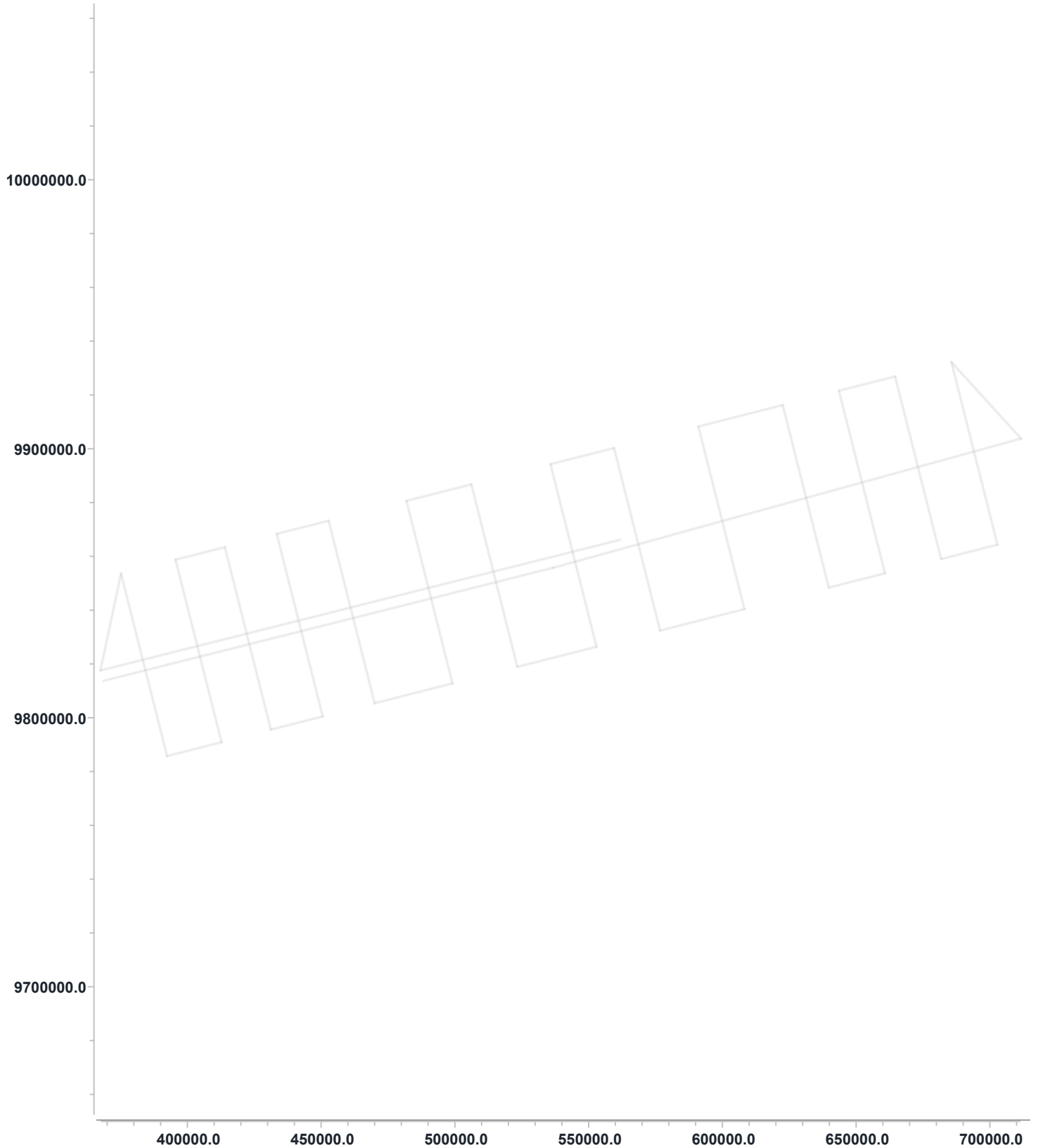
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/24/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/24/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 24 Nov

11/24/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 24 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:00	13:00	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			







HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	2	2	2	2.000	
Abandon Ship Drill	AS	0	1	1	1	1.000	

Daily Science Report

11/24/2024

Page 6

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	1	1	1	1.000	
 Meetings	Mtgs	1	3	3	3	3.000	
 Daily Ops Meeting	DOps	1	1	1	1	1.000	
 Start-up Meeting	StUp	0	2	2	2	2.000	
 Training	Trng	0	1	1	1	1.000	
 Vessel Induction Tours	VIT	0	1	1	1	1.000	

11/25/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Mon 25 Nov

Transiting to the work area all day.
 The crew had a security drill just after lunch.
 The science team mustered in the main lab and discussed the process for locking down the ship.
 Work is ongoing for streamer deployment.
 The first OBS is ready to deploy.
 The science team reviewed imputing data in to ELog.
 The vessel crossed the equator just after lunch.

At end of day the vessel is in the work area and transiting to OBS 1.
 ETA OBS 1: Nov 26th @ 0040

Daily Comment Summaries - Plan for Tomorrow

Mon 25 Nov

Deploy OBS 1-5
 Survey OBS's 1-5
 Deploy OBS 6&7

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit to Prospect	MB_TT	24.000
In transit to prospect, for mobilizing deployment.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

25-Nov	Hours	% Percent
Mobilisation	24.000	100.000
Transit to Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m)

Category	Hours	% Percent
Mobilisation	168.000	100.000
Mob Ashore	42.950	25.565
Transit to Prospect	125.050	74.435
Total	168.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					

MCS 15000m 50m					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

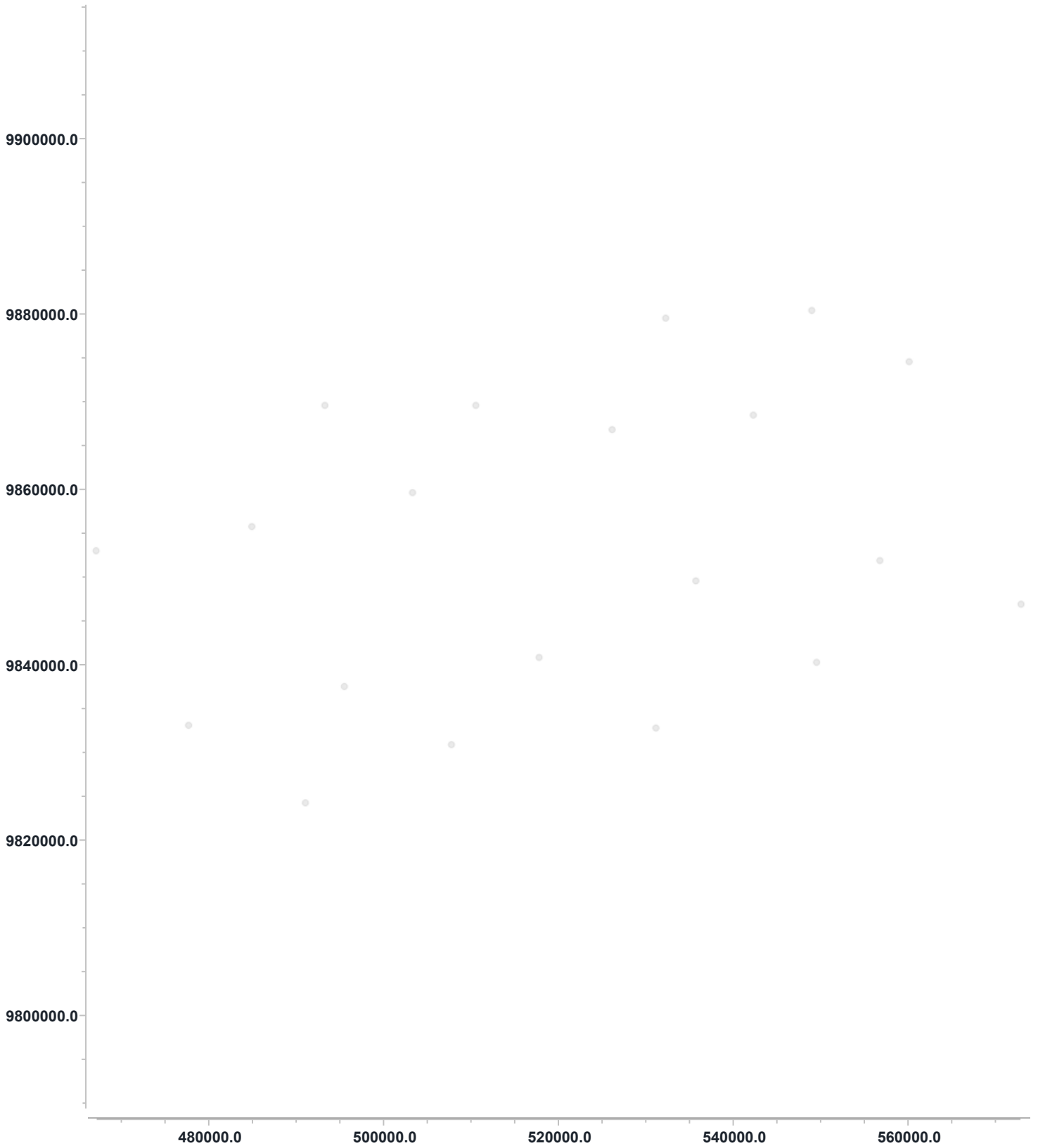
Production Totals (points)

Accepted	Day	Week	Month	Project

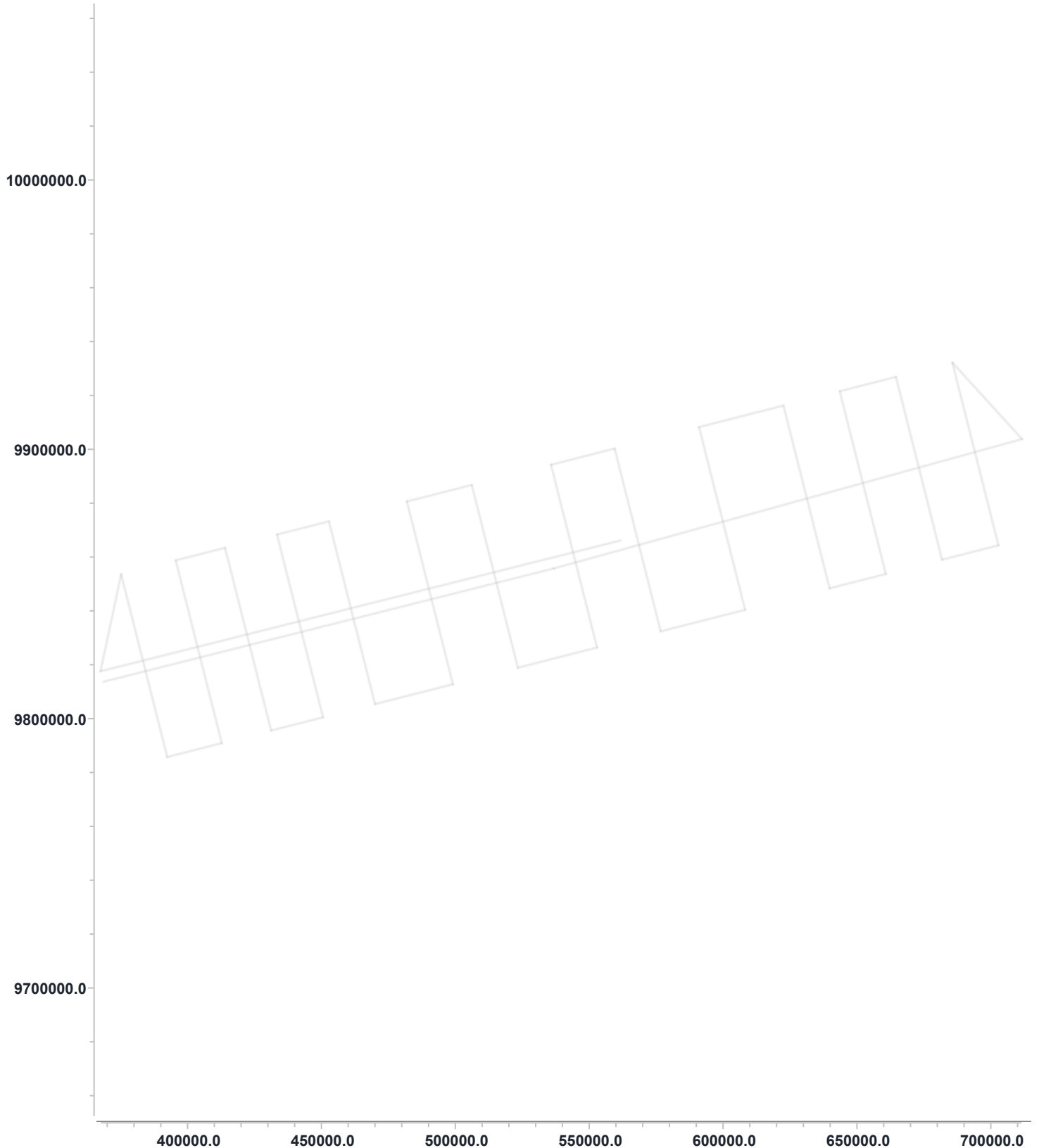
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/25/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/25/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 25 Nov

11/25/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 25 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

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- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO



Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)








Start	End	Category	Code
12:10	13:10	 Security Drill	Drls_Sec
HSE - Security Drill			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Drills	Drls	1	1	3	3	3.000	
 Abandon Ship Drill	AS	0	0	1	1	1.000	

11/25/2024

Page 6

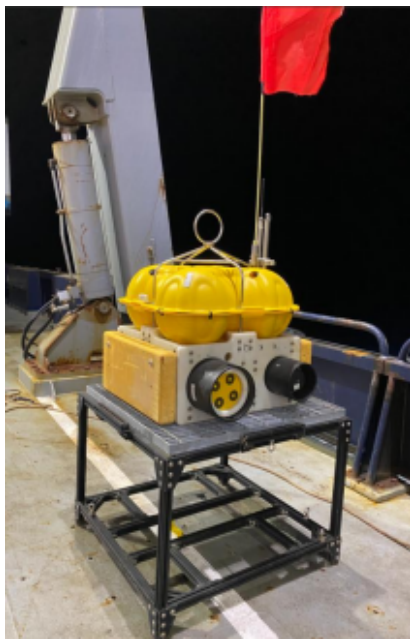
Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	1	1	1.000	
 Security Drill	Sec	1	1	1	1	1.000	
 Meetings	Mtgs	0	0	3	3	3.000	
 Daily Ops Meeting	DOps	0	0	1	1	1.000	
 Start-up Meeting	StUp	0	0	2	2	2.000	
 Training	Trng	0	0	1	1	1.000	
 Vessel Induction Tours	VIT	0	0	1	1	1.000	

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Tue 26 Nov

Just after midnight, the full team assembled on deck for the first deployment of the cruise. OBS 1 was successfully launched, sliding smoothly beneath the surface for its journey to the seafloor. The vessel subsequently deployed OBS 1 through 5 before transitioning to survey mode. The SIO team provided training to the science team on surveying procedures, after which they took a well-deserved rest. The vessel began surveying OBS 3 first, followed by OBS 1, 2, 4, and finally 5. Unfortunately, during the attempt to communicate with OBS 2, no signal was detected. Despite over 30 minutes of troubleshooting, the team was unable to establish contact with the instrument. Ultimately, the decision was made to move on. OBS 6 was deployed successfully, and as of midnight, the vessel is transiting to OBS 7, ready for the next deployment.



Daily Comment Summaries - Plan for Tomorrow

Tue 26 Nov

Continue with Surveying and OBS Deployment:
 Deploy OBS 7-10
 Survey OBS 6-10
 Deploy OBS 11-14

Timing Diary (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	01:45	Transit to Prospect	MB_TT	1.750
In transit to prospect, for mobilizing deployment.				
01:45	08:23	Deploy	AC_SM_De	6.633
Node Operation OBS 1 Deployment				

Start	End	Category	Code	Duration (hrs)
Node Operation OBS 2 Deployment Node Operation OBS 3 Deployment Node Operation OBS 4 Deployment Node Operation OBS 5 Deployment				
08:23	22:18	■ Receiver Survey	AC_RDR_FF_RS	13.917
Survey OBS 3 Survey OBS 1 OBS 2 would not communicate with the vessel, tried to ping for 30 mins. Never a response. Survey OBS 4 Survey OBS 5				
22:18	24:00	■ Deploy	AC_SM_De	1.700
Node Operation OBS 6 Deployment				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

26-Nov	Hours	% Percent
Acquisition	22.250	92.708
Receiver Deployment/Recovery	13.917	57.986
Free Fall OBS	13.917	57.986
Receiver Survey	13.917	57.986
Swath Move	8.333	34.722
Deploy	8.333	34.722
Mobilisation	1.750	7.292
Transit to Prospect	1.750	7.292
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
Acquisition	22.250	11.589
Receiver Deployment/Recovery	13.917	7.248
Free Fall OBS	13.917	7.248
Receiver Survey	13.917	7.248
Swath Move	8.333	4.340
Deploy	8.333	4.340
Mobilisation	169.750	88.411
Mob Ashore	42.950	22.370
Transit to Prospect	126.800	66.042
Total	192.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					

11/26/2024

Page 3

MCS 15000m 50m					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

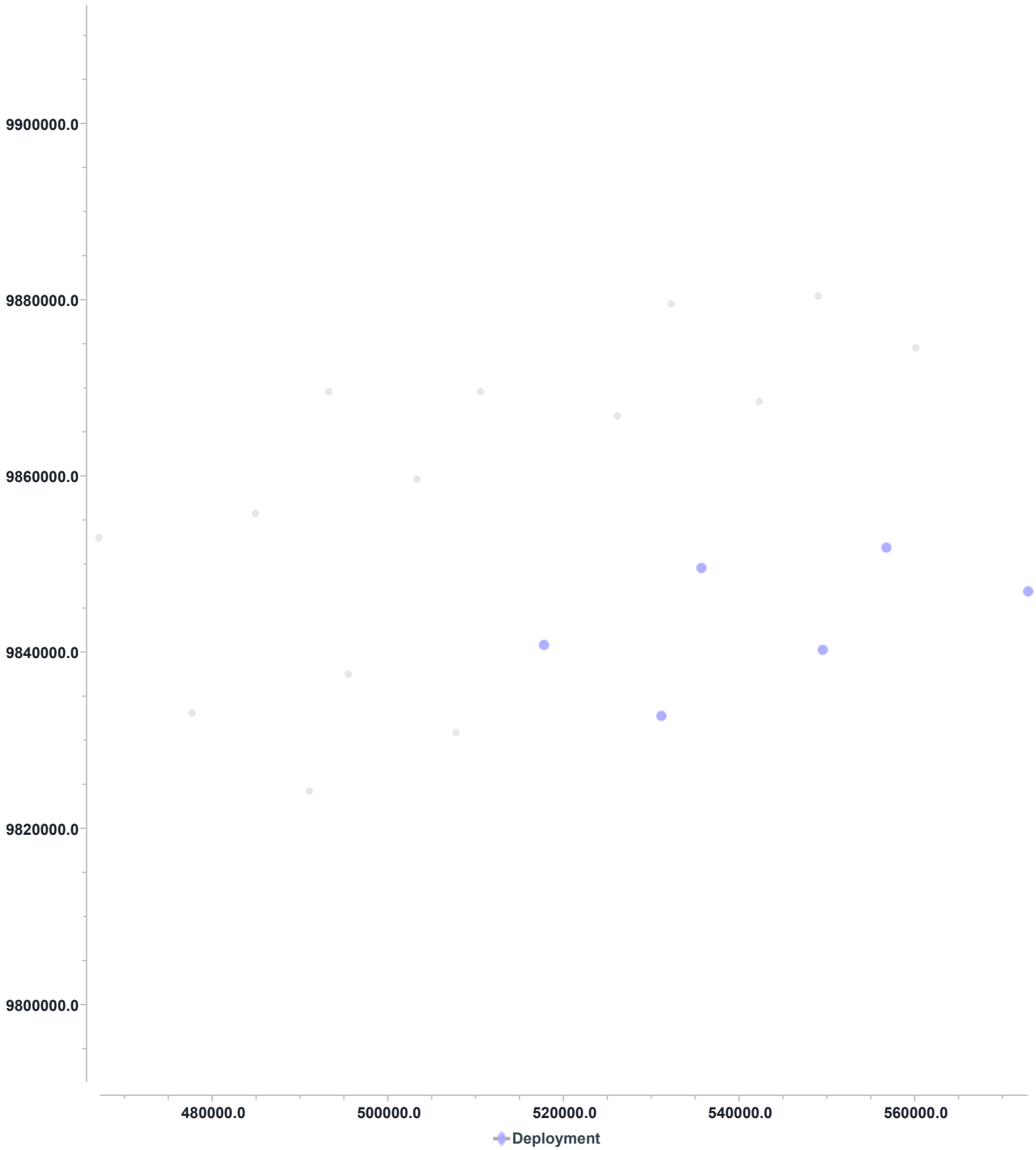
Production Totals (points)

Accepted	Day	Week	Month	Project

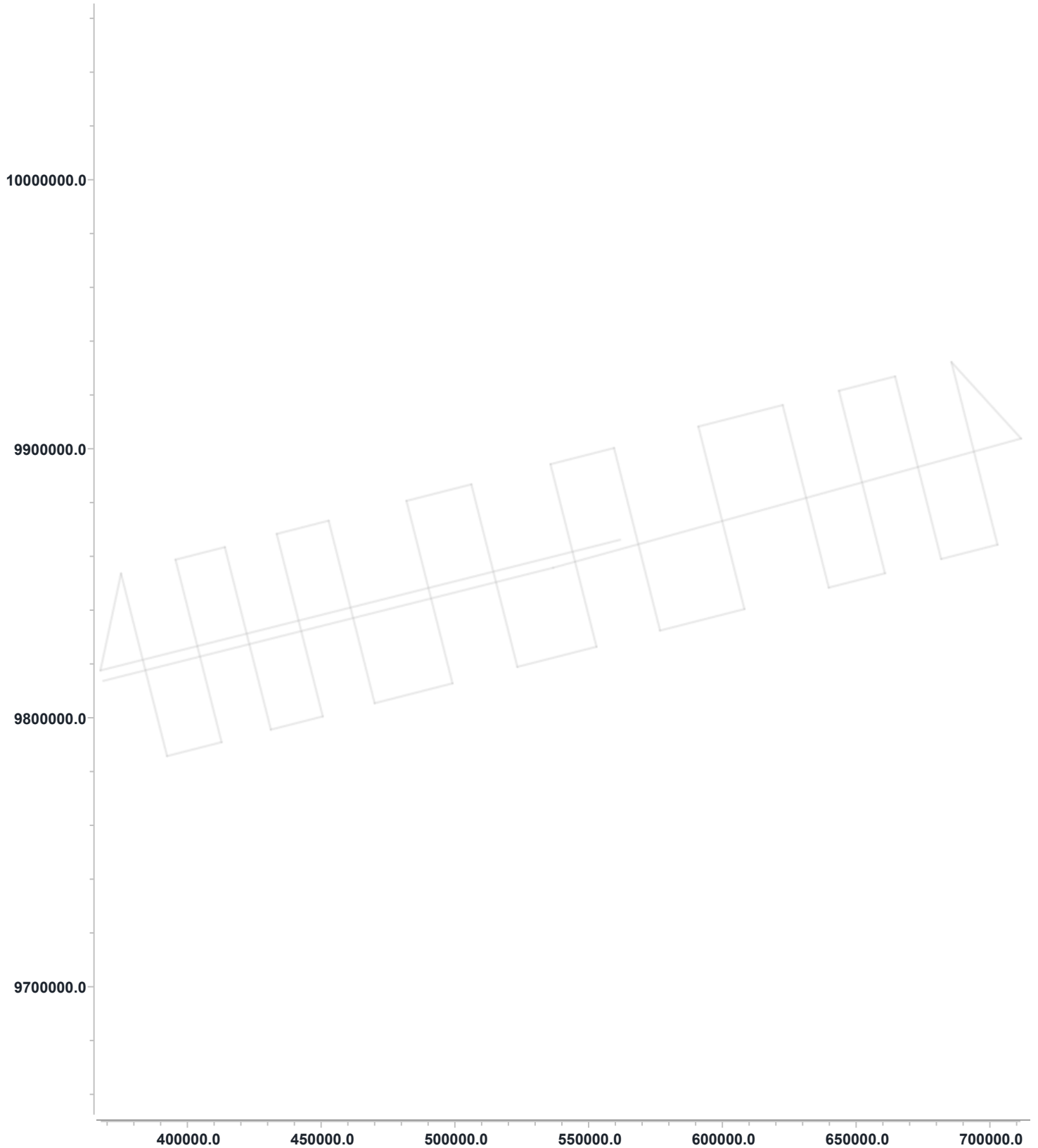
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/26/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/26/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 26 Nov

11/26/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 26 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
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- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			








HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	1	3	3	3.000	
Abandon Ship Drill	AS	0	0	1	1	1.000	

Daily Science Report

11/26/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	1	1	1.000	
 Security Drill	Sec	0	1	1	1	1.000	
 Meetings	Mtgs	1	1	4	4	4.000	
 Daily Ops Meeting	DOps	1	1	2	2	2.000	
 Start-up Meeting	StUp	0	0	2	2	2.000	
 Training	Trng	0	0	1	1	1.000	
 Vessel Induction Tours	VIT	0	0	1	1	1.000	

11/27/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Wed 27 Nov

The day began with the vessel approaching the drop location for OBS 7. Throughout the day, OBS 7 through 10 were successfully deployed, and the vessel initiated the surveying process for these instruments. All OBS units were able to communicate effectively during the survey operations.

At approximately 2100, OBS 11 was deployed, marking the start of another deployment phase.

Project timing remains on track, with streamer operations scheduled to begin before dinner on the 29th. Finalized streamer sheets and operational plans were distributed to the teams earlier today.

Daily Comment Summaries - Plan for Tomorrow

Wed 27 Nov

Continue with OBS drop and surveys.
 Training from Lead PSO in the main lab on mitigation measures.
 Training from tech department for sci team on the streamer deck.

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	05:20	Deploy	AC_SM_De	5.333
OBS 7 Deployment OBS 8 Deployment OBS 9 Deployment OBS 10 Deployment				
05:20	21:43	Receiver Survey	AC_RDR_FF_RS	16.383
Survey OBS 8 Survey OBS 6 Survey OBS 7 Survey OBS 9 Survey OBS 10				
21:43	24:00	Deploy	AC_SM_De	2.283
OBS 11 Deployment OBS 12 Deployment				

Timing Day by Day (Marcus G Langseth, OBS_Deployment)

27-Nov	Hours	% Percent
Acquisition	24.000	100.000
Receiver Deployment/Recovery	16.383	68.264
Free Fall OBS	16.383	68.264
Receiver Survey	16.383	68.264
Swath Move	7.617	31.736
Deploy	7.617	31.736
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
Acquisition	46.250	21.412
Receiver Deployment/Recovery	30.300	14.028
Free Fall OBS	30.300	14.028
Receiver Survey	30.300	14.028
Swath Move	15.950	7.384
Deploy	15.950	7.384
Mobilisation	169.750	78.588
Mob Ashore	42.950	19.884
Transit to Prospect	126.800	58.704
Total	216.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Acpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Acpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

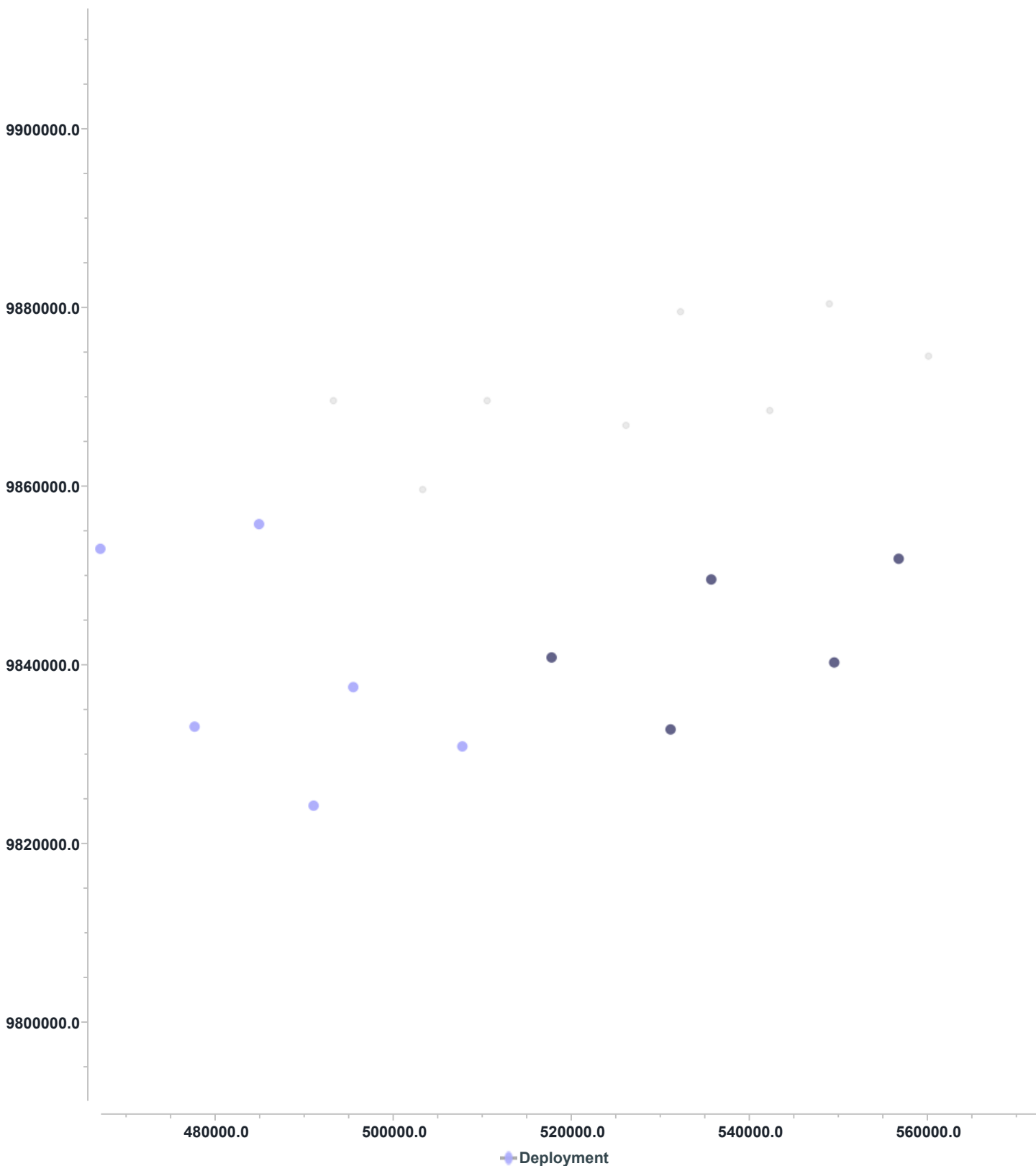
Production Totals (points)

Accepted	Day	Week	Month	Project

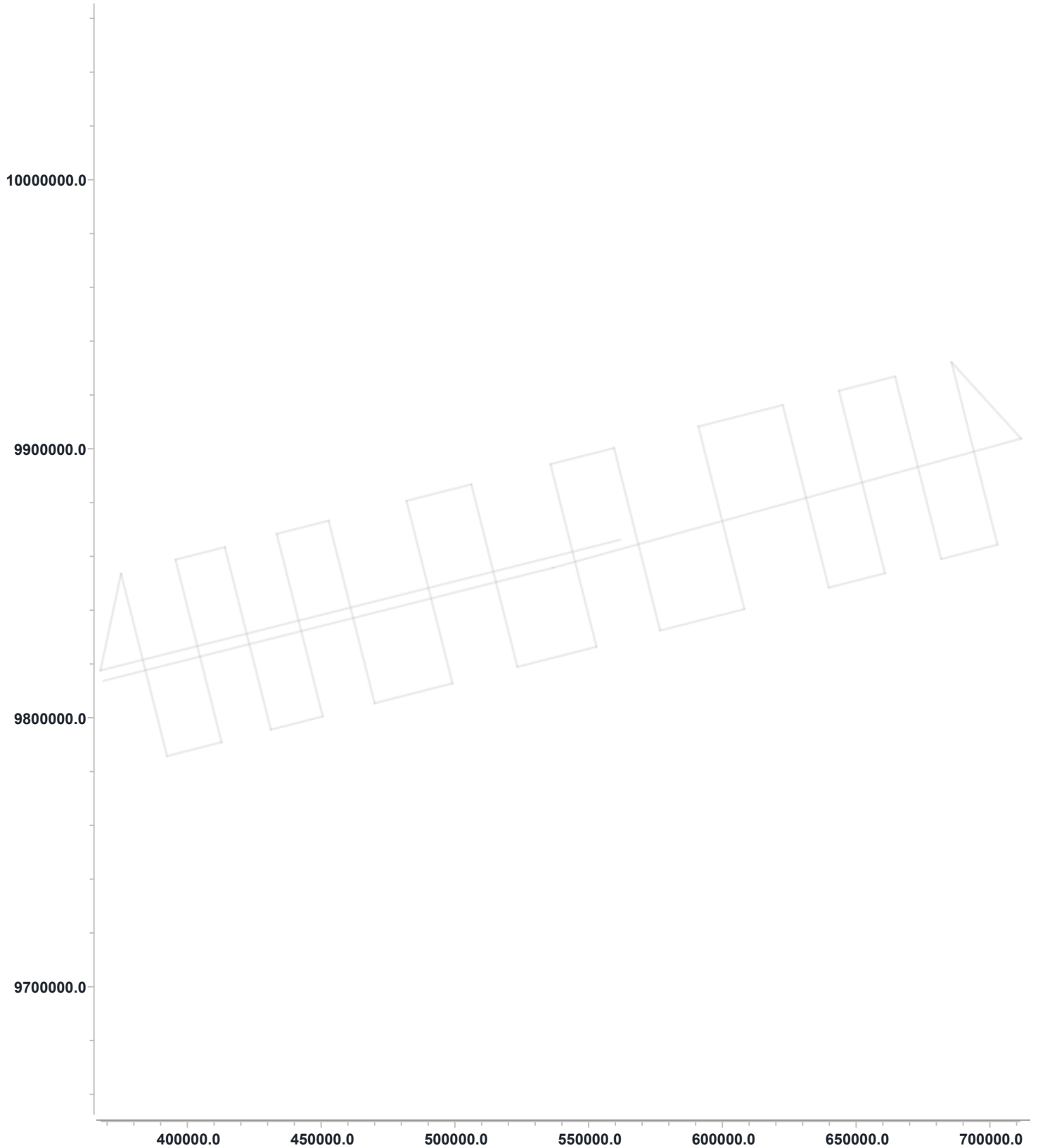
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/27/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/27/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 27 Nov

11/27/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 27 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:05	13:05	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Task, Hazard, Control	Re_Con_THC	5

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Drills	Drls	0	1	3	3	3.000	
 Abandon Ship Drill	AS	0	0	1	1	1.000	
 Fire Drill	Fi	0	0	1	1	1.000	
 Security Drill	Sec	0	1	1	1	1.000	
 Meetings	Mtgs	1	2	5	5	5.000	
 Daily Ops Meeting	DOps	1	2	3	3	3.000	
 Start-up Meeting	StUp	0	0	2	2	2.000	
 Reports	Re	5	7	7	7		
 Contractor	Con	5	7	7	7		
 Task, Hazard, Control	THC	5	7	7	7		
 Training	Trng	0	0	1	1	1.000	
 Vessel Induction Tours	VIT	0	0	1	1	1.000	

11/28/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Thu 28 Nov

Happy Thanksgiving!

The holiday was both festive and productive aboard the vessel.

Operations Summary:

OBS Deployed Today: 13 through 19

OBS Surveyed Today: 11 through 15

By the end of the day, the vessel was en route to OBS 20 for the final deployment of the cruise. Following this, the vessel will transition into surveying the last five OBS drops.

Looking Ahead:

ETA for Streamer Deployment: 1400 on November 29th

Great progress as we approach the next phase of the expedition!

Daily Comment Summaries - Plan for Tomorrow

Thu 28 Nov

Finish OBS deployments and Survey.
 Start with streamer deployment.

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	03:13	Deploy	AC_SM_De	3.217
OBS 13 Deployment OBS 14 Deployment OBS 15 Deployment				
03:13	18:02	Receiver Survey	AC_RDR_FF_RS	14.817
Survey OBS 11 Survey OBS 12 Survey OBS 13 Survey OBS 14 Survey OBS 15				
18:02	24:00	Deploy	AC_SM_De	5.967
OBS 16 Deployment OBS 17 Deployment OBS 18 Deployment OBS 19 Deployment				

Timing Day by Day (Marcus G Langseth, OBS_Deployment)

28-Nov	Hours	% Percent
Acquisition	24.000	100.000
Receiver Deployment/Recovery	14.817	61.736
Free Fall OBS	14.817	61.736
Receiver Survey	14.817	61.736
Swath Move	9.183	38.264

28-Nov	Hours	% Percent
Deploy	9.183	38.264
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
Acquisition	70.250	29.271
Receiver Deployment/Recovery	45.117	18.799
Free Fall OBS	45.117	18.799
Receiver Survey	45.117	18.799
Swath Move	25.133	10.472
Deploy	25.133	10.472
Mobilisation	169.750	70.729
Mob Ashore	42.950	17.896
Transit to Prospect	126.800	52.833
Total	240.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Accept Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

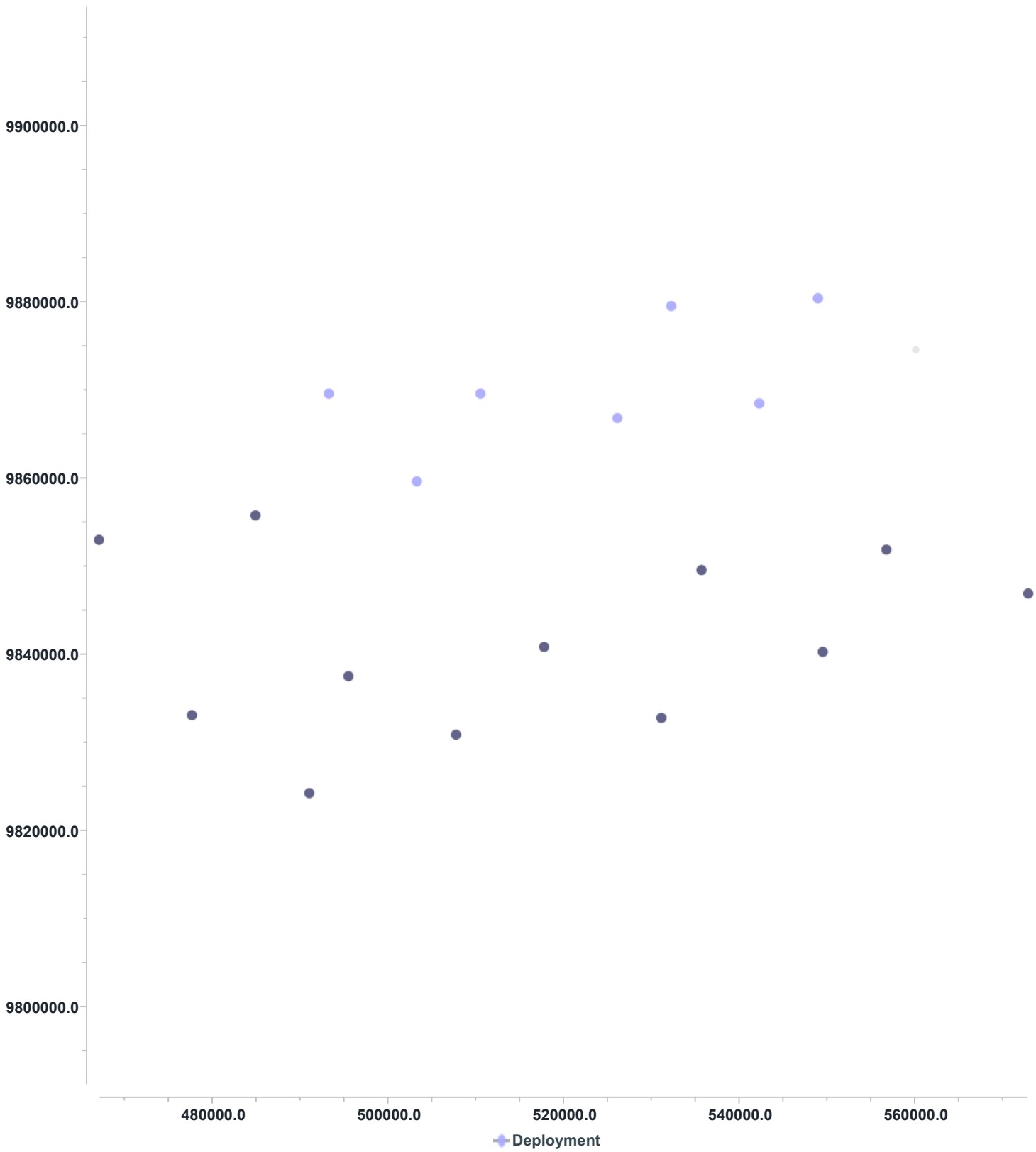
Production Totals (points)

Accepted	Day	Week	Month	Project

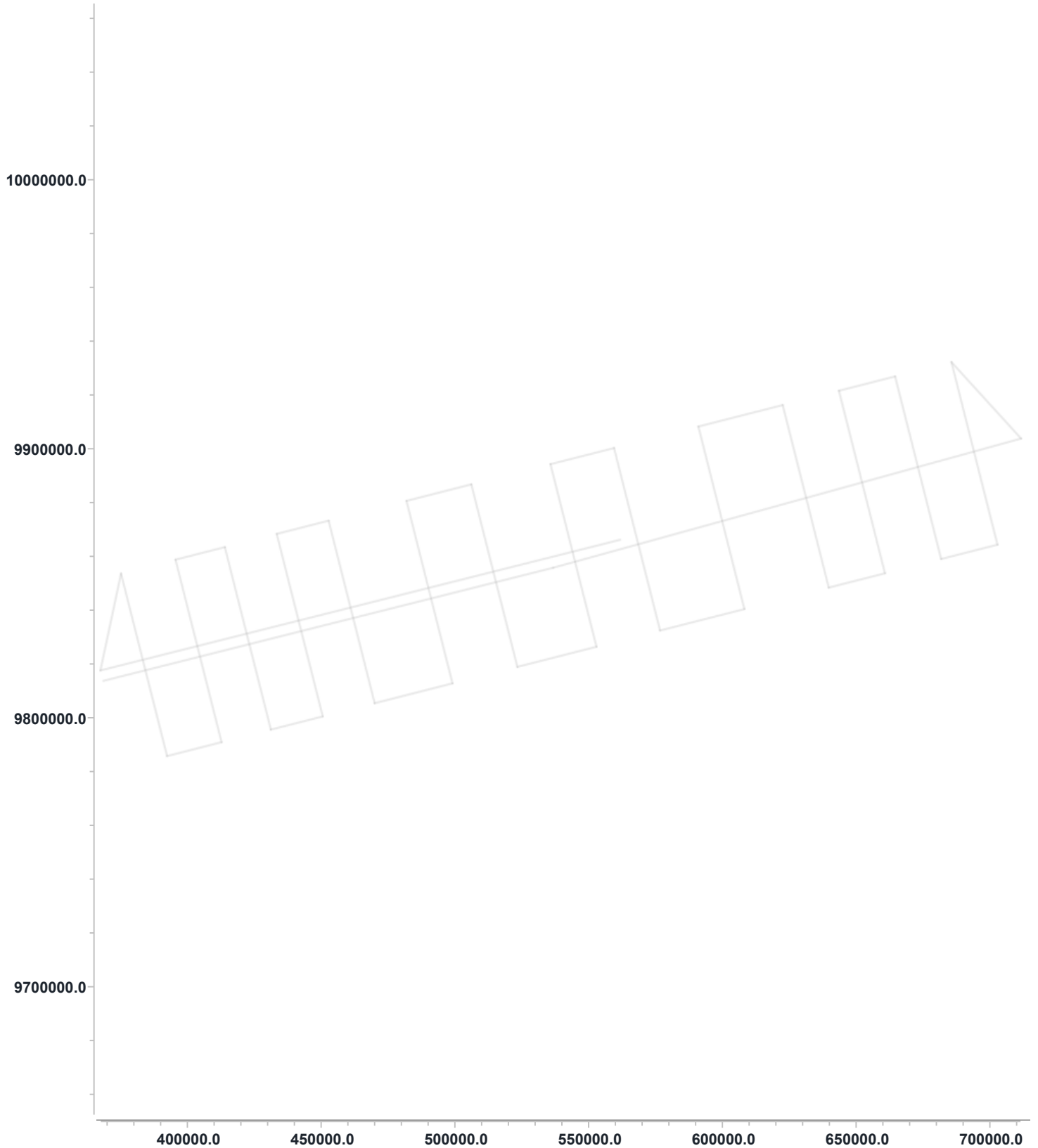
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/19/2024 - 11/28/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/28/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 28 Nov

11/28/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 28 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO














Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	 Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			
16:10	17:10	 Other Training	Trng_OT
HSE - Streamer Deck Training			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Drills	Drls	0	1	3	3	3.000	
 Abandon Ship Drill	AS	0	0	1	1	1.000	
 Fire Drill	Fi	0	0	1	1	1.000	
 Security Drill	Sec	0	1	1	1	1.000	
 Meetings	Mtgs	1	3	6	6	6.000	
 Daily Ops Meeting	DOps	1	3	4	4	4.000	
 Start-up Meeting	StUp	0	0	2	2	2.000	
 Training	Trng	1	1	2	2	2.000	
 Other Training	OT	1	1	1	1	1.000	
 Vessel Induction Tours	VIT	0	0	1	1	1.000	
 Reports	Re	0	7	7	7		
 Contractor	Con	0	7	7	7		
 Task, Hazard, Control	THC	0	7	7	7		

11/29/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Fri 29 Nov

The day began as the vessel entered the drop zone for OBS 20. Just after midnight, the final BOS of the survey was successfully deployed, marking the start of the last survey phase.

At approximately 1400, the science team completed the survey of OBS 20. The OBS deployment and survey operations were a success, thanks to excellent teamwork. Step 1 of the cruise is officially complete!

At ~1500, the tailbuoy was deployed smoothly, with good communications throughout the process. While the deployment is going well overall, some communication issues with digibirds on reel 3 were encountered, though this was the section scheduled for replacement.

By the end of the day, a streamer telemetry issue arose near Digibird 11, and the team is working to resolve problems with the 4DX external antenna. Troubleshooting is ongoing.

Status Summary:

OBS Deployment and Survey: Complete

Streamer Deployment: In Progress

Current Issues: Streamer Telemetry at Digibird 11 and 4DX antenna

Good progress overall as we move into the next phase of the cruise!

Daily Comment Summaries - Plan for Tomorrow

Fri 29 Nov

Continue with streamer and gun deployment.

Start line: SN

Timing Diary (Marcus G Langseth, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	00:15	Deploy	AC_SM_De	0.250
Node Operation Block:MGL 2411 - Chain 7 Line:20 Deployment				
00:15	14:32	Receiver Survey	AC_RDR_FF_RS	14.283
14:32	24:00	Streamer Deployment	SB_PO_STD	9.467
Chargeable Standby related to Planned Operations due to Streamer Deployment				

Timing Day by Day (Marcus G Langseth, OBS_Deployment)

29-Nov	Hours	% Percent
Acquisition	14.533	60.556
Receiver Deployment/Recovery	14.283	59.514
Free Fall OBS	14.283	59.514
Receiver Survey	14.283	59.514
Swath Move	0.250	1.042
Deploy	0.250	1.042
Chargeable Standby	9.467	39.444

11/29/2024

Page 2

29-Nov	Hours	% Percent
Planned Operations	9.467	39.444
Streamer Deployment	9.467	39.444
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
Acquisition	492.783	73.331
Receiver Deployment/Recovery	59.400	8.839
Free Fall OBS	59.400	8.839
Receiver Survey	59.400	8.839
Swath Move	433.383	64.492
Deploy	433.383	64.492
Mobilisation	169.750	25.260
Mob Ashore	42.950	6.391
Transit to Prospect	126.800	18.869
Chargeable Standby	9.467	1.409
Planned Operations	9.467	1.409
Streamer Deployment	9.467	1.409
Total	672.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

Production Totals (Acpt Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	0	0
Combined	0	0	0	0

Production Listing (Acct Main km) - Prime: Full Fold, Infill: Unknown

MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

Production Totals (points)

Accepted	Day	Week	Month	Project

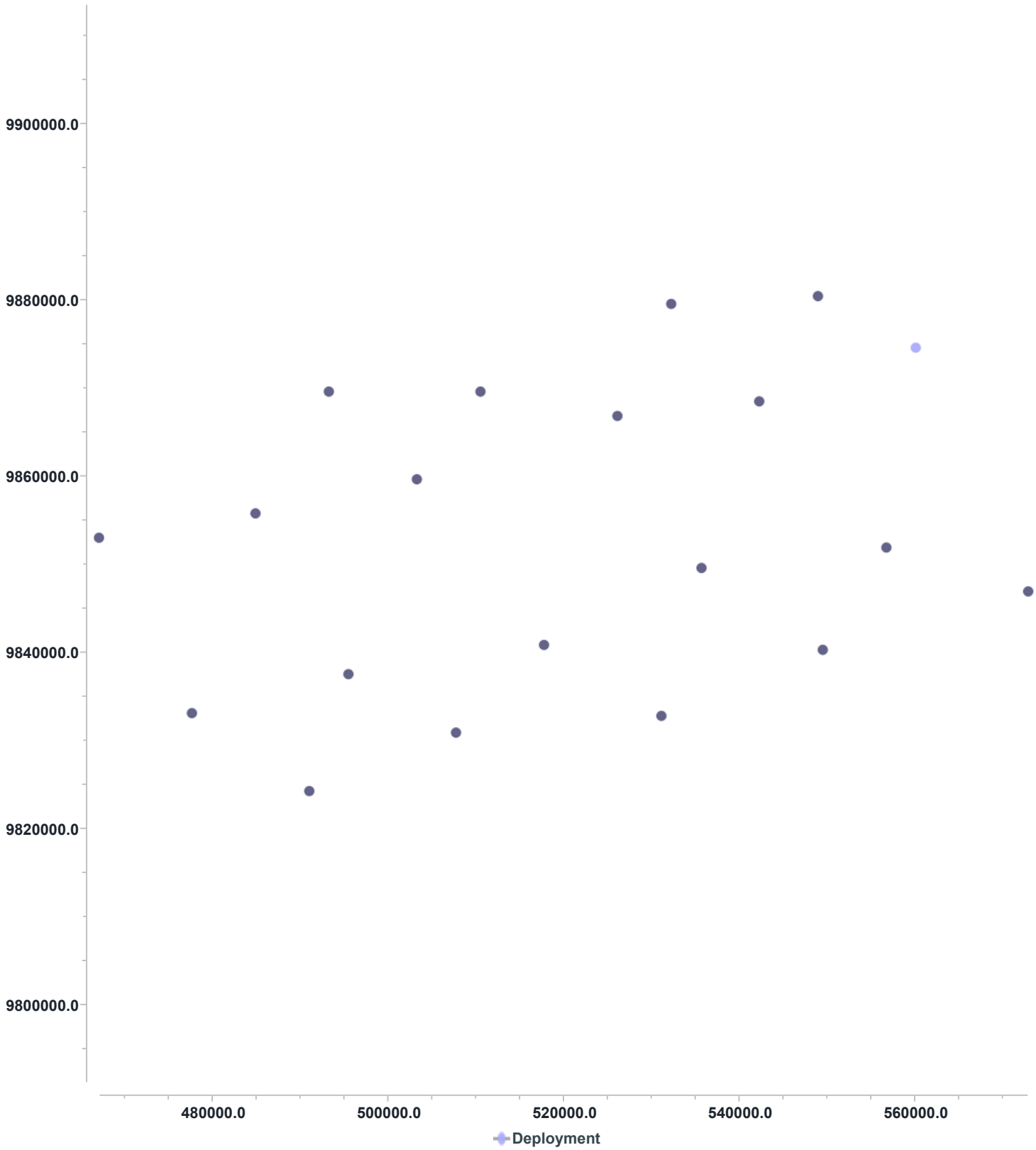
11/29/2024

Page 3

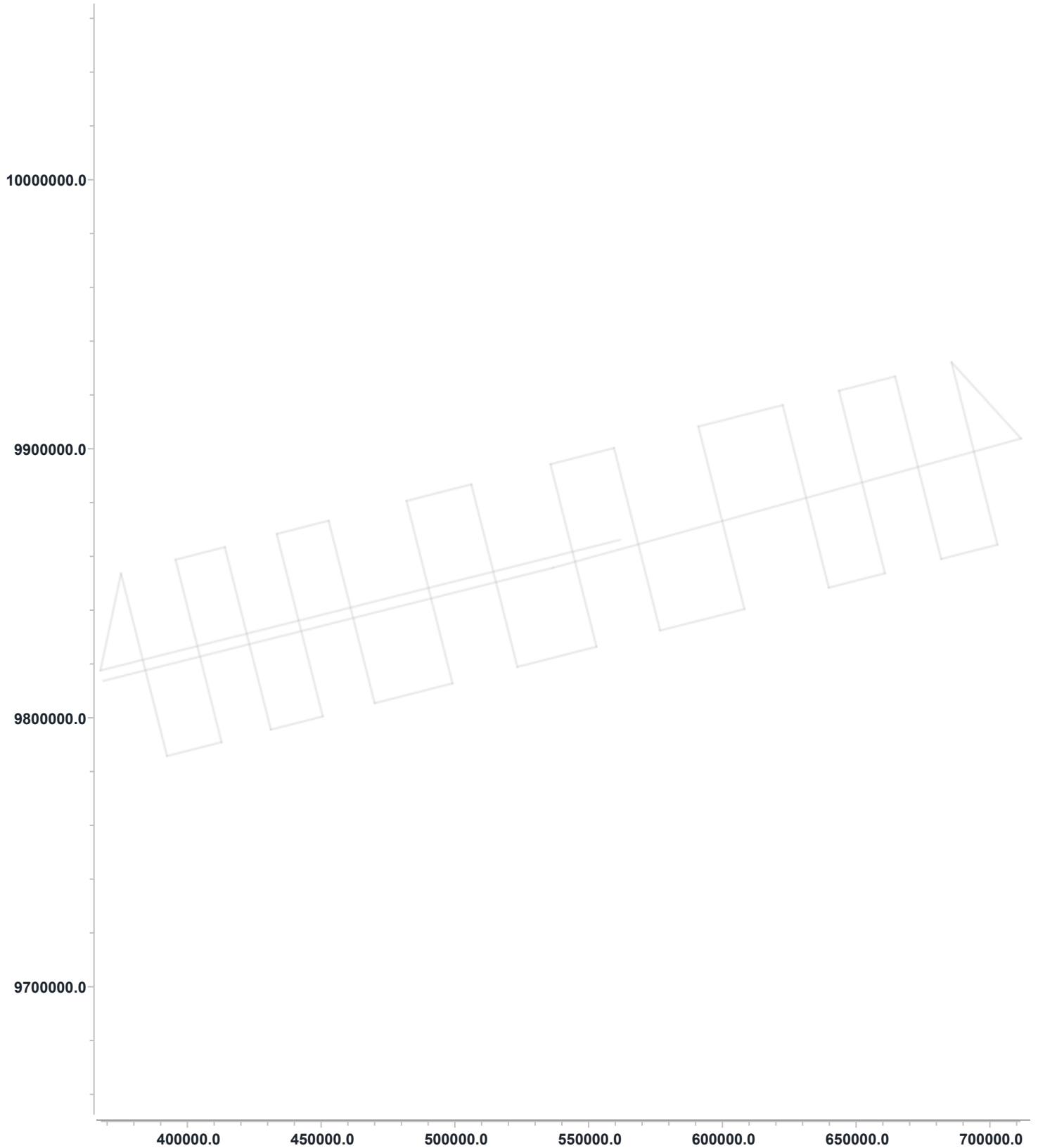
Production Listing (points)

Op	Line	FST	LST	Prod Type	Production	Ave Knots	Line Status
Total					0		

MGL 2411 - Chain
11/2/2024 - 11/29/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/2/2024 - 11/29/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 29 Nov

11/29/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 29 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

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- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:15	13:15	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Toolbox Meetings	Mtgs_Tbox	2
TBT - Streamer Deployment Day Shift		
TBT - Streamer Deployment Night Shift		

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	1	3	3	3.000	
Abandon Ship Drill	AS	0	0	1	1	1.000	
Fire Drill	Fi	0	0	1	1	1.000	
Security Drill	Sec	0	1	1	1	1.000	
Meetings	Mtgs	3	6	9	9	7.000	
Daily Ops Meeting	DOPs	1	4	5	5	5.000	
Start-up Meeting	StUp	0	0	2	2	2.000	
Toolbox Meetings	Tbox	2	2	2	2		
Training	Trng	0	1	2	2	2.000	
Other Training	OT	0	1	1	1	1.000	
Vessel Induction Tours	VIT	0	0	1	1	1.000	
Reports	Re	0	7	7	7		
Contractor	Con	0	7	7	7		
Task, Hazard, Control	THC	0	7	7	7		

11/30/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sat 30 Nov

The day started with the team trouble shooting a telemetry problem at the front of the streamer. Shortly after midnight the problem was solved and deployment resumed. The air guns were deployed shortly before lunch and the guns were fully ramped up. Acquisition started on line SN at 11:55. At end of day the vessel was on line SN heading west.

Daily Comment Summaries - Plan for Tomorrow

Sat 30 Nov

Continue with Line SN.

Timing Diary (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Start	End	Category	Code	Duration (hrs)
00:00	11:55	Streamers Deployment	SB_PO_STD	11.917
Chargeable Standby related to Planned Operations due to Streamer Deployment				
11:55	24:00	Prime	AC_PP	12.083
Seq: 1 SOL Seq 1 Line:SN Block:MGL 2411 - Chain FGSP:1001 Hdg:255.9° Prime MSP Seq 1 Line:SN Block:MGL 2411 - Chain LGSP:2947				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

30-Nov	Hours	% Percent
Acquisition	12.083	50.347
Prime	12.083	50.347
Chargeable Standby	11.917	49.653
Planned Operations	11.917	49.653
Streamers Deployment	11.917	49.653
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
Acquisition	96.867	33.634
Prime	12.083	4.196
Receiver Deployment/Recovery	59.400	20.625
Free Fall OBS	59.400	20.625
Receiver Survey	59.400	20.625
Swath Move	25.383	8.814
Deploy	25.383	8.814
Mobilisation	169.750	58.941
Mob Ashore	42.950	14.913

Category	Hours	% Percent
Transit to Prospect	126.800	44.028
Chargeable Standby	21.383	7.425
Planned Operations	21.383	7.425
Streamer Deployment	21.383	7.425
Total	288.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	97.30	97.30	97.30	97.30
Combined	97.30	97.30	97.30	97.30

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

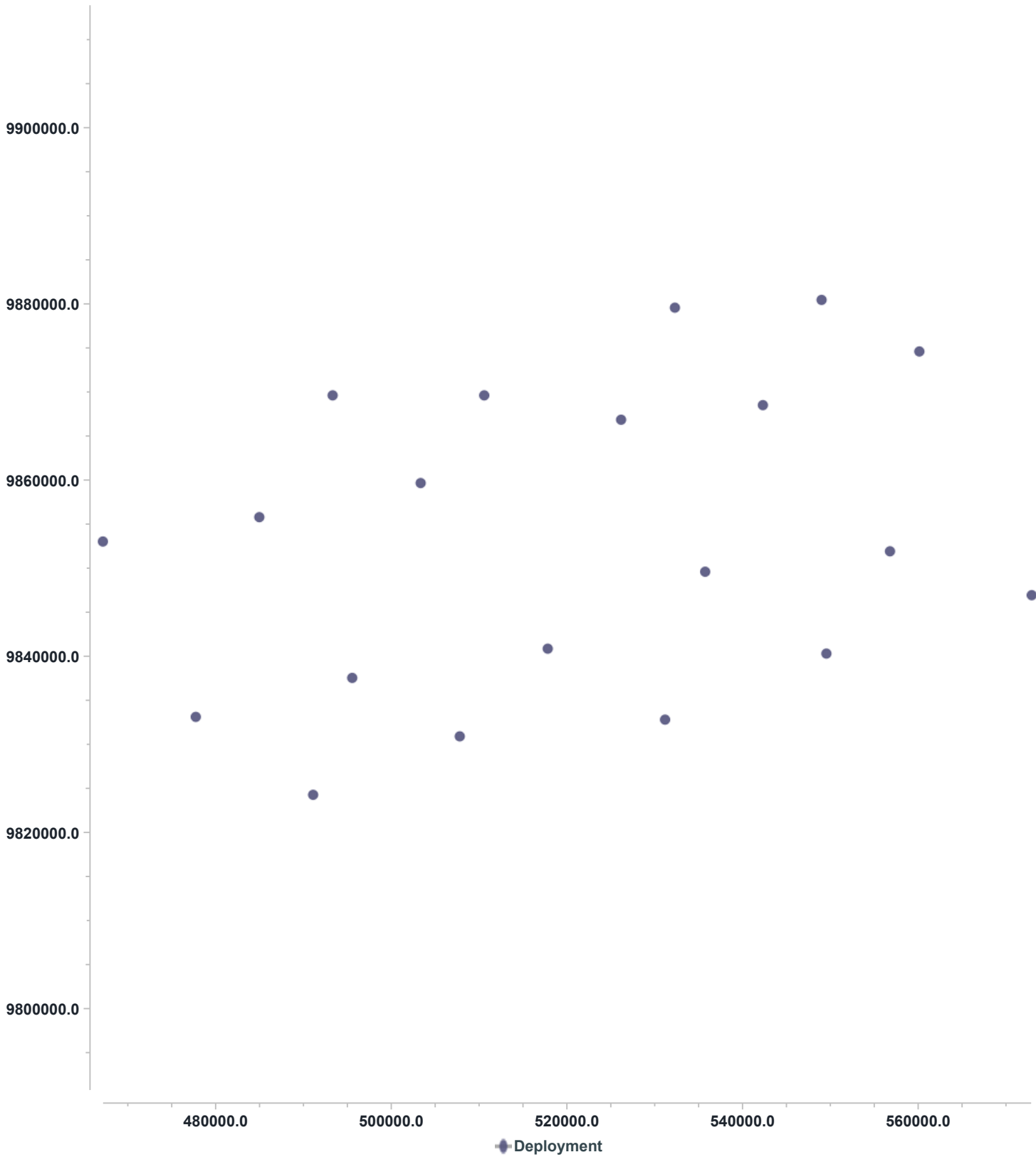
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	SN	255.9	1001	2947	Prime	97.30	4.348	Midnight	Part
Total						97.30			

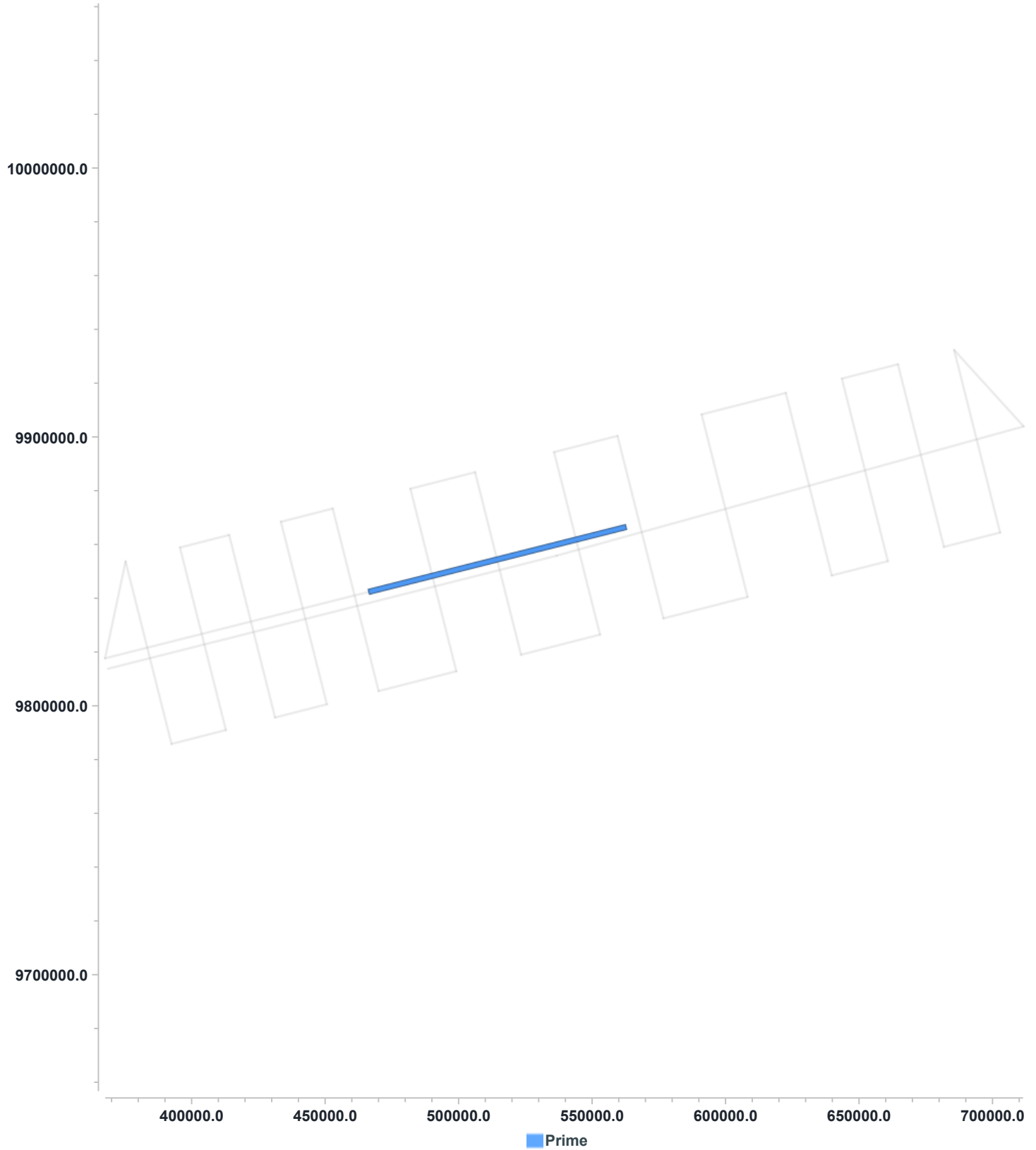
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	20	20	20

MGL 2411 - Chain
11/19/2024 - 11/30/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 11/30/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 30 Nov

11/30/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 30 Nov

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

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- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:00	13:00	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Task, Hazard, Control	Re_Con_THC	1
Equipment on PSO tower not secured		

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	1	3	3	3.000	
Abandon Ship Drill	AS	0	0	1	1	1.000	
Fire Drill	Fi	0	0	1	1	1.000	
Security Drill	Sec	0	1	1	1	1.000	
Meetings	Mtgs	1	7	10	10	8.000	
Daily Ops Meeting	DOps	1	5	6	6	6.000	
Start-up Meeting	StUp	0	0	2	2	2.000	
Toolbox Meetings	Tbox	0	2	2	2		
Training	Trng	0	1	2	2	2.000	
Other Training	OT	0	1	1	1	1.000	
Vessel Induction Tours	VIT	0	0	1	1	1.000	
Reports	Re	1	8	8	8		
Contractor	Con	1	8	8	8		
Task, Hazard, Control	THC	1	8	8	8		

12/1/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sun 01 Dec

The day started with the vessel on line SN acquiring MCS data.
 At 07:46 the line was ended due to an autofire on array 3.
 The vessel circled back to pick the array up and overlap the autofire data.
 The vessel was back on to line SN just after lunch.
 Array 3 gun 7 was disabled due to "no fires".
 At ~1700 array 2 was disabled due to an autofire, the array was recovered online, fixed and deployed again.
 At ~1900 line SN was completed and the vessel turned north towards the next line.
 At end of day the vessel was transiting towards the start of line D01.

Daily Comment Summaries - Plan for Tomorrow

Sun 01 Dec

Start line D01

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	07:26	Prime	AC_PP	7.433
Seq: 1 SOL Seq 1 Line:SN MGL 2411 - Chain FGSP:2948 Hdg:255.9° Prime EOL Seq 1 Line:SN MGL 2411 - Chain LGSP:4095 Complete				
07:26	13:03	Autofire	DT_SC_AF	5.617
13:03	18:55	Prime	AC_PP	5.867
Seq: 2 SOL Seq 2 Line:SN MGL 2411 - Chain FGSP:4096 Hdg:255.9° Prime EOL Seq 2 Line:SN MGL 2411 - Chain LGSP:5003 Complete SOL MGL2411002SNP2 - FGSP 4096 - 36 guns - 6600 in3				
18:55	24:00	Prime L/C	AC_PLC	5.083
Seq: 2 Line: SN Nominal Prime line change.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

1-Dec	Hours	% Percent
Acquisition	18.383	76.597
Prime	13.300	55.417
Prime L/C	5.083	21.181
DownTime	5.617	23.403
Source	5.617	23.403
Autofire	5.617	23.403
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	5.617	1.800
Source	5.617	1.800
Autofire	5.617	1.800
Acquisition	115.250	36.939
Prime	25.383	8.136
Prime L/C	5.083	1.629
Receiver Deployment/Recovery	59.400	19.038
Free Fall OBS	59.400	19.038
Receiver Survey	59.400	19.038
Swath Move	25.383	8.136
Deploy	25.383	8.136
Mobilisation	169.750	54.407
Mob Ashore	42.950	13.766
Transit to Prospect	126.800	40.641
Chargeable Standby	21.383	6.854
Planned Operations	21.383	6.854
Streamer Deployment	21.383	6.854
Total	312.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	102.75	200.05	102.75	200.05
Combined	102.75	200.05	102.75	200.05

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

MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
1	SN	255.9	2948	4095	Prime	57.40	4.280	Complete	Complete
2	SN	255.9	4096	5003	Prime	45.35	4.174	Complete	Complete
Total						102.75			

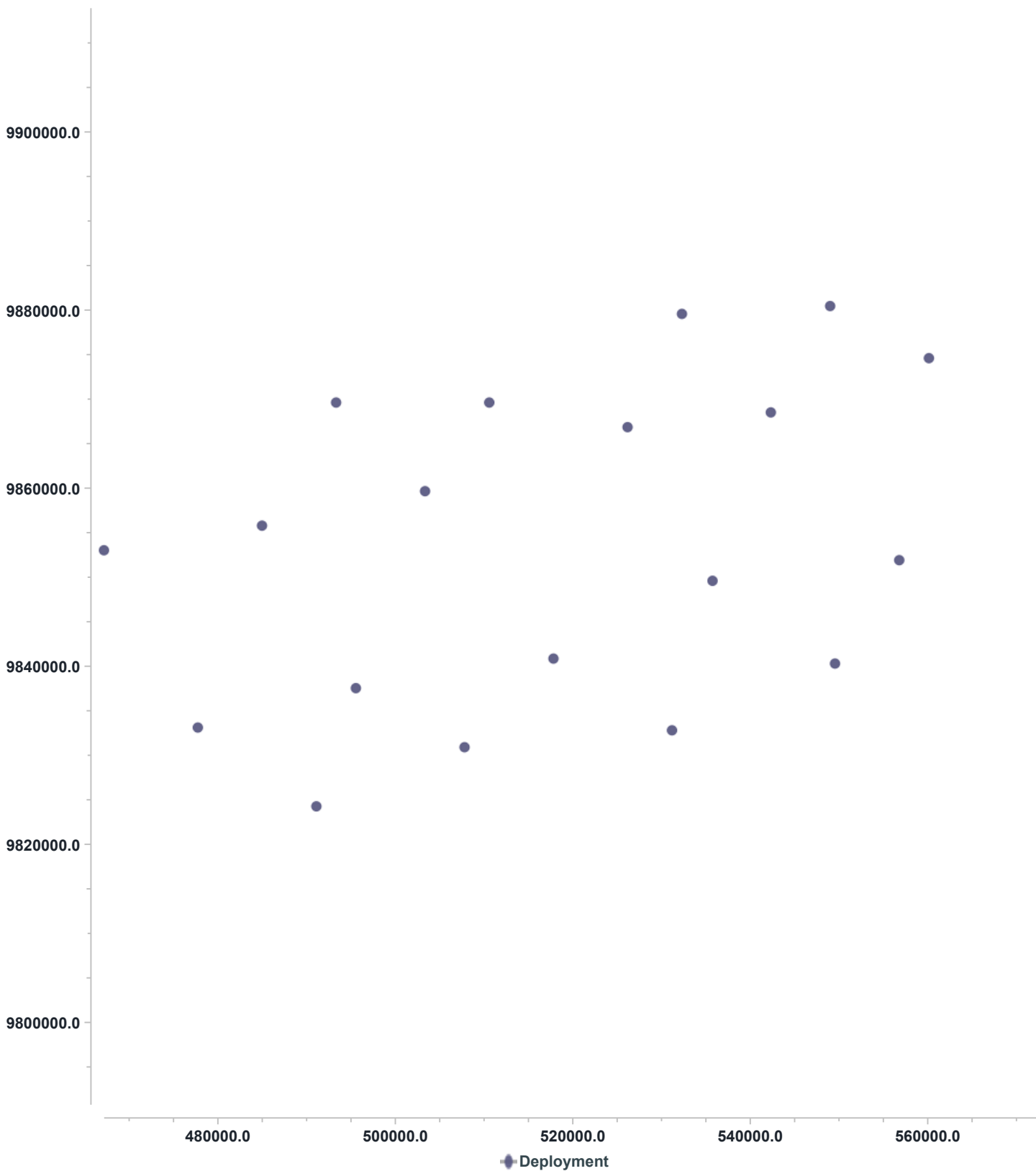
12/1/2024

Page 3

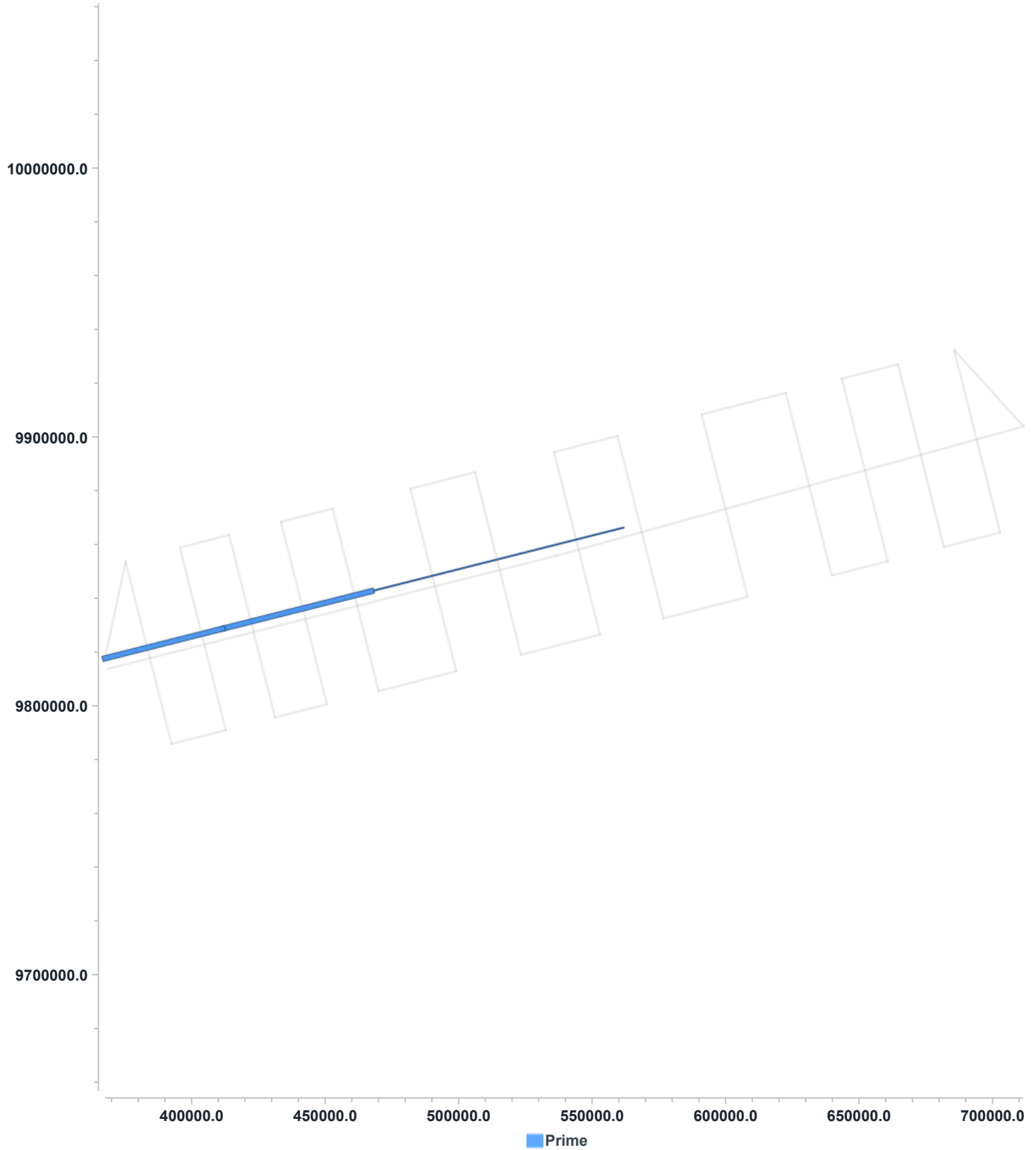
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	20	0	20

MGL 2411 - Chain
11/19/2024 - 12/1/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/1/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 01 Dec

12/1/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 01 Dec

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
 Josh Kasinger L-DEO OMO Chief Source Mechanic
 Brian Agee L-DEO OMO Source Mechanic
 Gilles Guerin - L-DEO OMO Observer
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 Peyton Dewaelsche - Scientist
 Evan Saltman - Scientist
 Alexandre Janin - Scientist
 Martin Rapa - OBS Engineer
 Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	1	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	1	0	1	1.000	

12/1/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	0	7	0	10	8.000	
Daily Ops Meeting	DOps	0	5	0	6	6.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	2	0	2		
Training	Trng	0	1	0	2	2.000	
Other Training	OT	0	1	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	0	8	0	8		
Contractor	Con	0	8	0	8		
Task, Hazard, Control	THC	0	8	0	8		

12/2/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Mon 02 Dec

Overview

Start of Day: The vessel was on the transit line from SN to D01.
 Data Acquisition: No data was acquired on the transit line.

Line D01 Operations

Start: Line D01 was initiated shortly after midnight.
 Telemetry Issue: A telemetry problem was detected approximately 3.5 km back on the streamer.
 Troubleshooting efforts included:
 - Power cycling the streamer.
 - Rebooting and power cycling rack-mounted equipment.
 - Despite efforts, the streamer failed four times within six hours.

Recovery and Repairs

Decision to Recover: The streamer was recovered to address the telemetry problem effectively.

Additional Repairs:

- Issues with the gun arrays were addressed.
 - Several problematic digibirds were repaired.

End of Day Status

The vessel completed the following tasks:
 - Recovered and fixed the streamer.
 - Redeployed the streamer.
 - One gun string remains to be deployed before resuming Line D01 operations.

Summary: Significant progress was made despite technical setbacks, with the vessel positioned to resume Line D01 shortly

Daily Comment Summaries - Plan for Tomorrow

Mon 02 Dec

Start line DO3

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	01:42	Prime L/C	AC_PLC	1.700
Seq: 0 Nominal Prime line change.				
01:42	07:08	Prime	AC_PP	5.433
Seq: 3 SOL Seq 3 Line:D01 FGSP:5100 Hdg:165.8° Prime EOL Seq 3 Line:D01 LGSP:5823 Incomplete MGL2411003D01P1				
07:08	24:00	Streamers	DT_ST	16.867
Downtime due to streamer telemetry. There is a loss in communications around Section 24.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

2-Dec	Hours	% Percent
Acquisition	7.133	29.722
Prime	5.433	22.639
Prime L/C	1.700	7.083
DownTime	16.867	70.278
Streamers	16.867	70.278
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	22.483	6.691
Source	5.617	1.672
Autofire	5.617	1.672
Streamers	16.867	5.020
Acquisition	122.383	36.424
Prime	30.817	9.172
Prime L/C	6.783	2.019
Receiver Deployment/Recovery	59.400	17.679
Free Fall OBS	59.400	17.679
Receiver Survey	59.400	17.679
Swath Move	25.383	7.555
Deploy	25.383	7.555
Mobilisation	169.750	50.521
Mob Ashore	42.950	12.783
Transit to Prospect	126.800	37.738
Chargeable Standby	21.383	6.364
Planned Operations	21.383	6.364
Streamer Deployment	21.383	6.364
Total	336.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

12/2/2024

Page 3

Accepted km	Day	Week	Month	Project
Prime	36.15	36.15	138.90	236.20
Combined	36.15	36.15	138.90	236.20

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

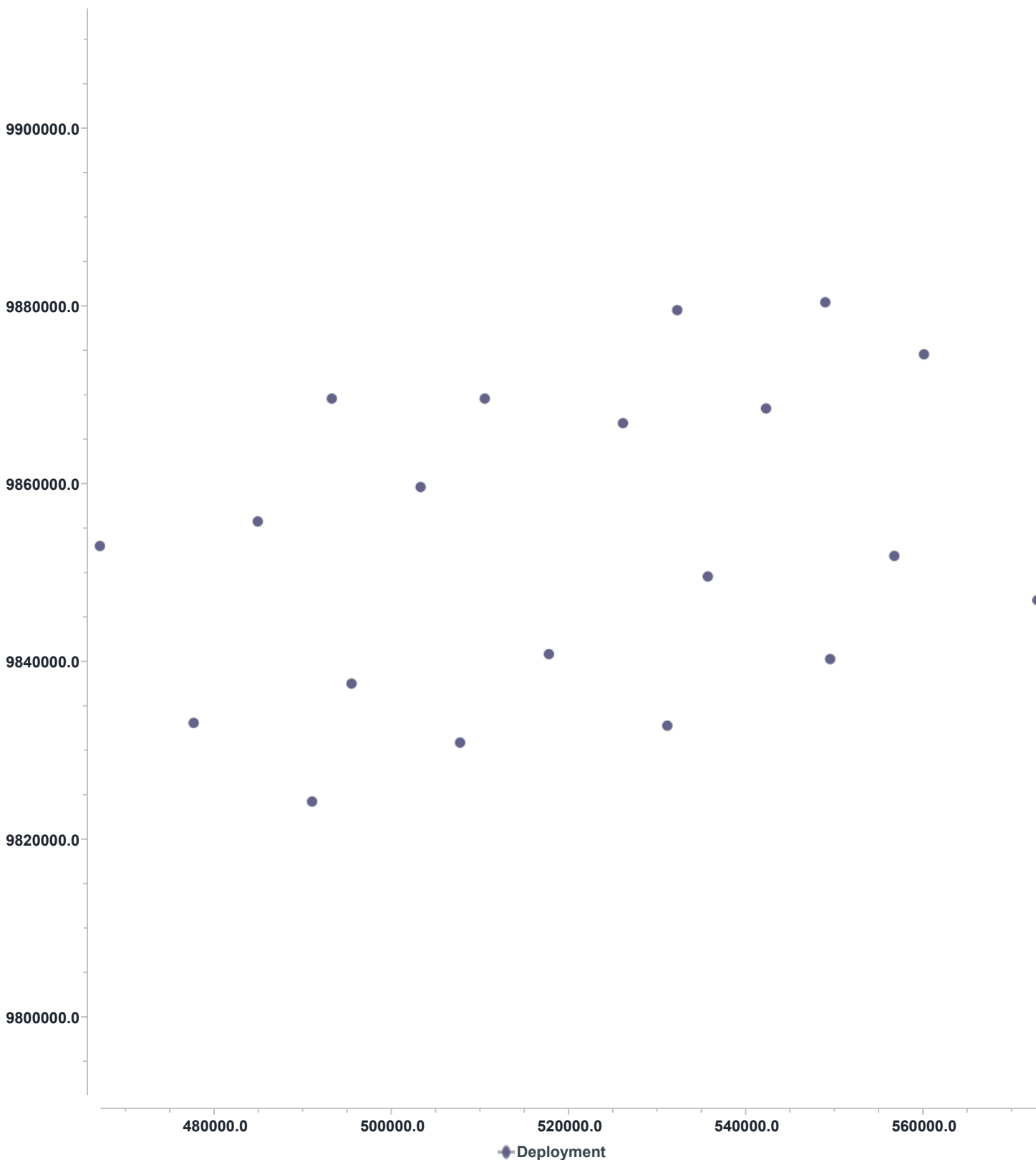
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
3	D01	165.8	1001	1724	Prime	36.15	3.593	Part	Incomplete
Total						36.15			

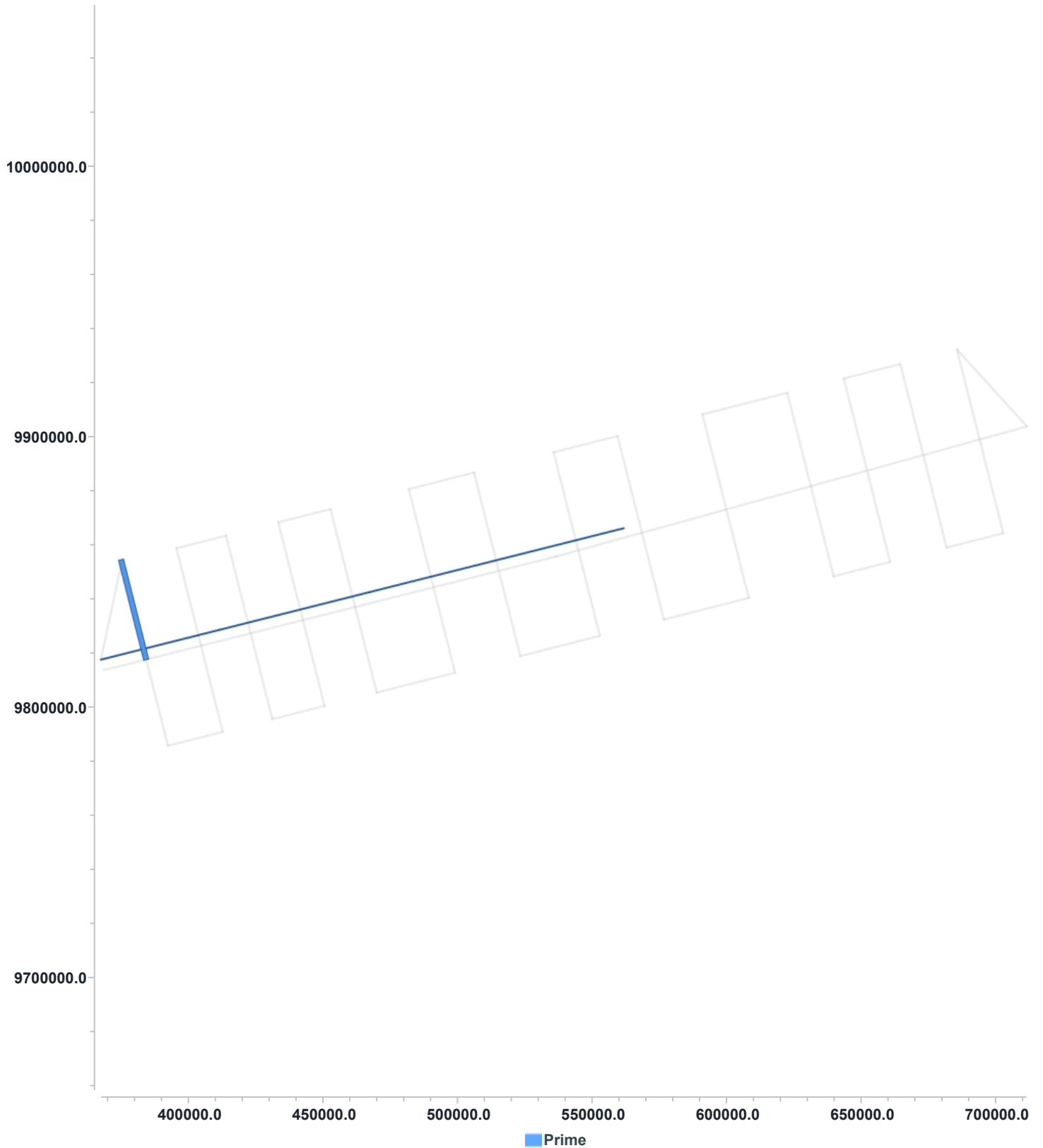
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/2/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/2/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 02 Dec

12/2/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 02 Dec

Technical Staff On-board the Langseth

Cody Bahlau L-DEO OMO Chief Science Officer
 Josh Kasinger L-DEO OMO Chief Source Mechanic
 Brian Agee L-DEO OMO Source Mechanic
 Gilles Guerin - L-DEO OMO Observer
 Riley Lopez - L-DEO OMO Observer
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 Peyton Dewaelsche - Scientist
 Evan Saltman - Scientist
 Alexandre Janin - Scientist
 Martin Rapa - OBS Engineer
 Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)













Start	End	Category	Code
12:15	13:15	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

12/2/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	1	1	11	9.000	
 Daily Ops Meeting	DOps	1	1	1	7	7.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	0	0	2		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	0	8		
 Contractor	Con	0	0	0	8		
 Task, Hazard, Control	THC	0	0	0	8		

12/3/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Tue 03 Dec

Overview

Start of Day: The vessel was completing source deployment and preparing to begin Line D03, heading north.

Line D03 Operations

Incident:

Midway through the line, an increase in tension on the streamer was observed, accompanied by the loss of communication with five digibirds at the tail of the streamer. Data review revealed the characteristic chevron pattern of a cable strike, likely caused by fishing gear entangling the tail of the streamer.

To mitigate risk, the vessel speed was reduced to maintain streamer tension within safe limits, and the line was completed.

Streamer Recovery and Incident Details

Recovery Operations:

The vessel entered full streamer recovery mode at the end of the line.

By 2200 local, the tail buoy (TB) was observed at the stern.

Damage Assessment:

One digibird was missing; the locking pin had been ripped out, and the carabiner on the lanyard was missing.

Several digibirds were detached from the collar and showed physical damage around the locking pin area.

A large Fish Aggregating Device (FAD) was attached to the TB, consisting of:

A large black float.

Some type of electronic component.

A significant net trailing behind the TB.

Actions Taken:

The vessel slowed to minimum steerage speed to prevent the net from entangling the propellers, with excellent communication maintained with the bridge.

Winches were used to maneuver the TB by 90 degrees, allowing an attempt to grapple the net and pull it up with a tugger.

Unfortunately, as the TB was swung into position, the buoy attached to the TB detached and drifted free.

While briefly secured with a boat hook, the buoy could not be retained, and the FAD drifted away from the TB.

Outcome:

The captain assessed the situation with spotlights and decided against recovery, as the net had sunk below the surface.

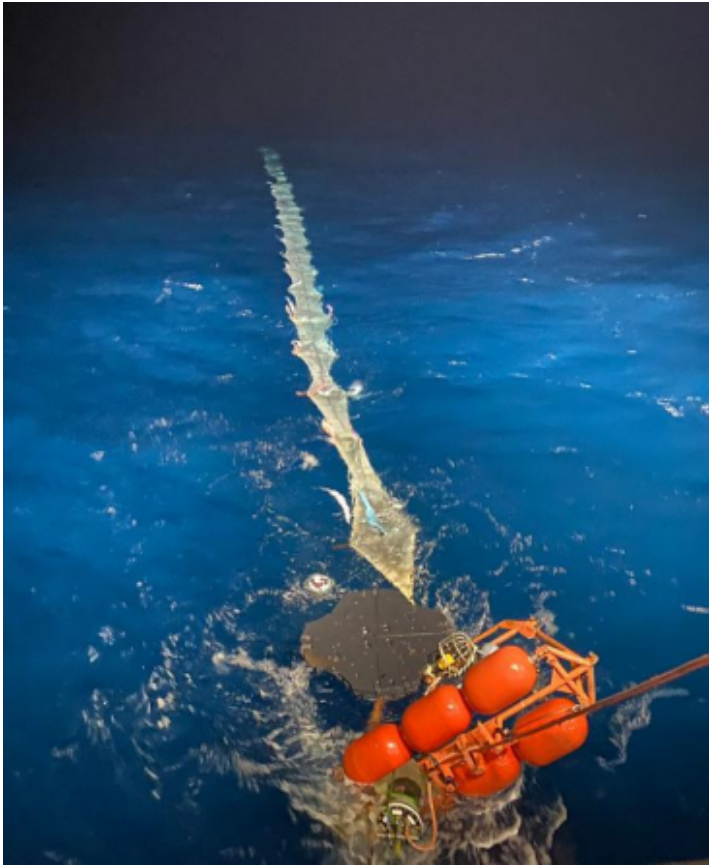
The vessel safely pulled away from the FAD.

Current Situation

End of Day:

The vessel transited 10 miles east to ensure safe distance from the FAD before beginning streamer deployment again.

Summary: Despite a challenging day with a cable strike and subsequent recovery efforts, the vessel managed to safely mitigate risks and prepare for resuming operations.



Daily Comment Summaries - Plan for Tomorrow

Tue 03 Dec

Deploy the streamer and guns and resume data acquisition

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	00:42	Streamers	DT_ST	0.700
Downtime due to streamer telemetry. There is a loss in communications around Section 24.				
00:42	12:13	Prime	AC_PP	11.517
Seq: 4 SOL Seq 4 Line:D03 FGSP:879 Hdg:345.8° Prime EOL Seq 4 Line:D03 LGSP:2541 Complete				
12:13	24:00	Fishing	SB_FS	11.783
Standby time due to fishing gear caught on the streamer				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

3-Dec	Hours	% Percent
Acquisition	11.517	47.986

3-Dec	Hours	% Percent
Prime	11.517	47.986
Chargeable Standby	11.783	49.097
Fishing	11.783	49.097
DownTime	0.700	2.917
Streamers	0.700	2.917
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	23.183	6.440
Source	5.617	1.560
Autofire	5.617	1.560
Streamers	17.567	4.880
Acquisition	133.900	37.194
Prime	42.333	11.759
Prime L/C	6.783	1.884
Receiver Deployment/Recovery	59.400	16.500
Free Fall OBS	59.400	16.500
Receiver Survey	59.400	16.500
Swath Move	25.383	7.051
Deploy	25.383	7.051
Chargeable Standby	33.167	9.213
Fishing	11.783	3.273
Planned Operations	21.383	5.940
Streamer Deployment	21.383	5.940
Mobilisation	169.750	47.153
Mob Ashore	42.950	11.931
Transit to Prospect	126.800	35.222
Total	360.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

12/3/2024

Page 4

Accepted km	Day	Week	Month	Project
Prime	83.10	119.25	222.00	319.30
Combined	83.10	119.25	222.00	319.30

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

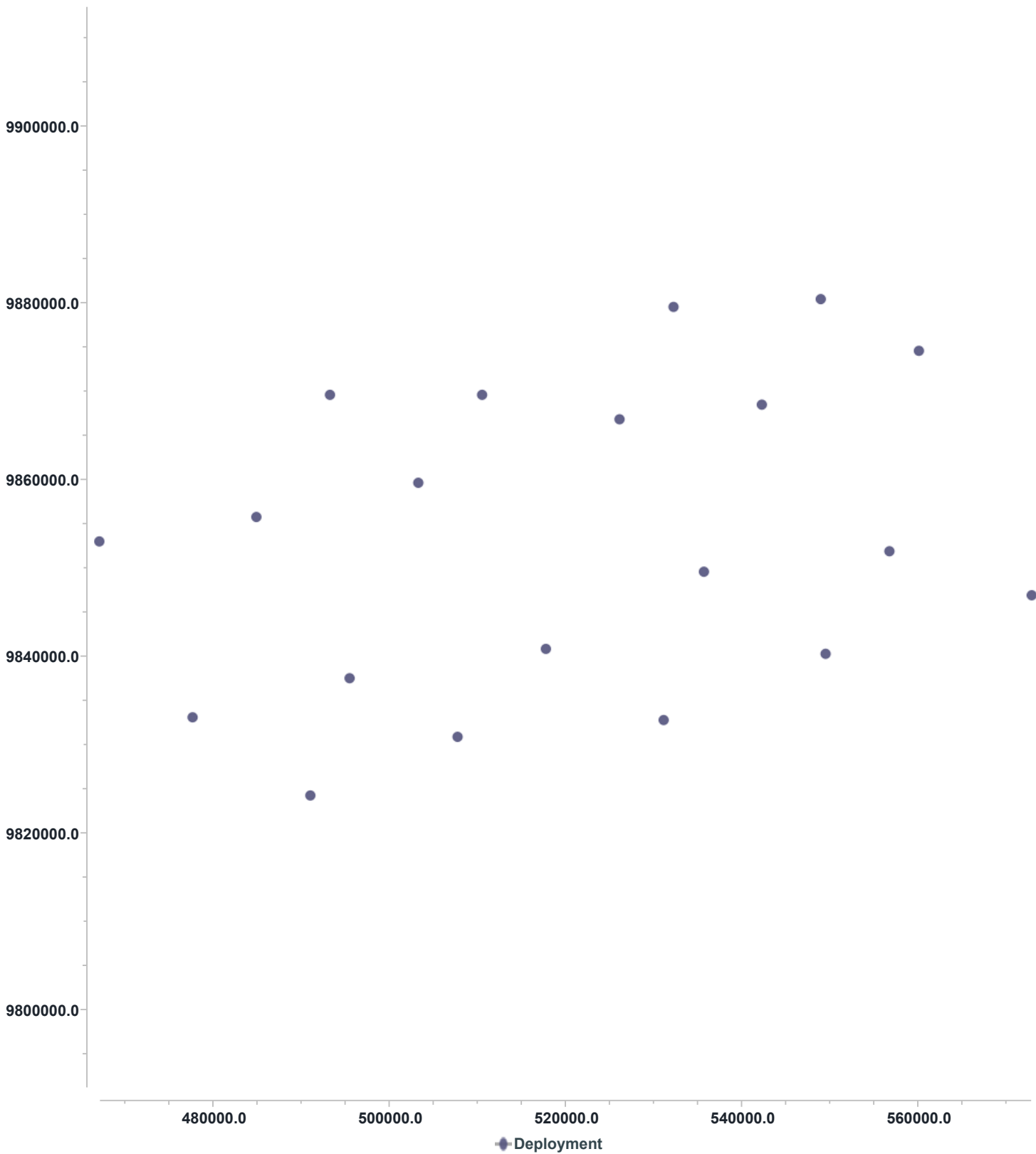
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
4	D03	345.8	879	2541	Prime	83.10	3.896	Complete	Complete
Total						83.10			

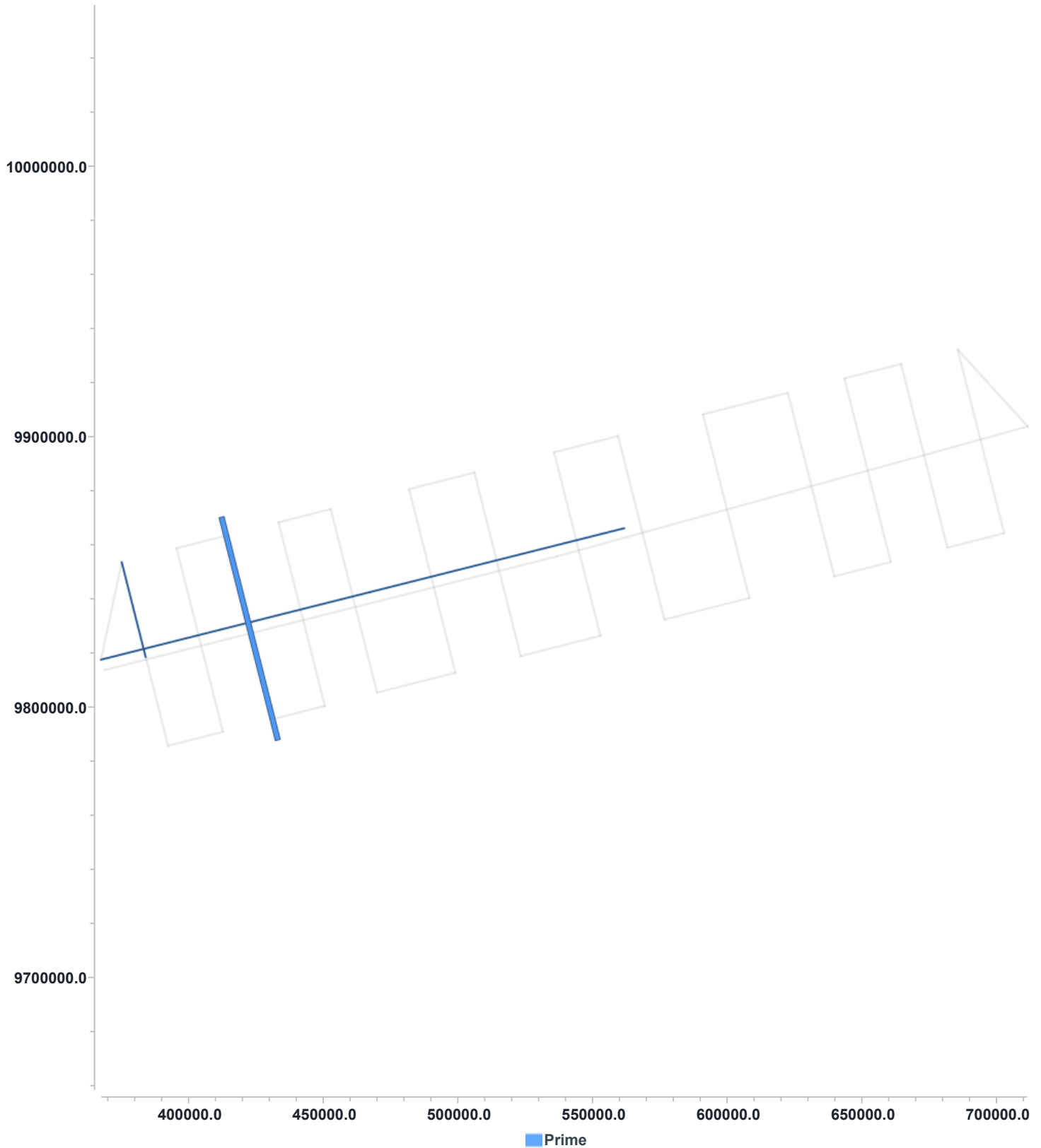
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/3/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/3/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 03 Dec

12/3/2024

Page 7

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 03 Dec

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- Islam Arif - Scientist
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- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:00	13:00	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Toolbox Meetings	Mtgs_Tbox	2

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	
Meetings	Mtgs	3	4	4	14	10.000	
Daily Ops Meeting	DOps	1	2	2	8	8.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	2	2	2	4		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	0	0	0	8		
Contractor	Con	0	0	0	8		
Task, Hazard, Control	THC	0	0	0	8		

12/4/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Wed 04 Dec

Overview

Start of Day: The vessel was deploying the streamer after transiting 10 nautical miles to the east.

Operations Summary

Streamer Deployment:

The streamer deployment began, and approximately 5 km had been deployed when the Chief Engineer reported an issue with the port main engine.

To conduct repairs, both main engines needed to be shut down.

The technical team began recovering the streamer to ensure all equipment was out of the water during the repair period.

Engine Repairs:

Repairs were completed just before breakfast, and the streamer deployment resumed.

Testing and Transition to Production:

The streamer was fully deployed and tested by 16:30.

A transit line was initiated, and the vessel resumed production mode.

Current Status

End of Day: The vessel was in production on prime line D05B.

Line coordinates for D05 were adjusted slightly to take advantage of the feathering conditions.

Summary: Despite a temporary halt for engine repairs, the team efficiently managed streamer operations, enabling a smooth transition back to production mode by the afternoon.

Daily Comment Summaries - Plan for Tomorrow

Wed 04 Dec

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	05:08	Fishing	SB_FS	5.133
Standby time due to fishing gear caught on the streamer				
05:08	08:27	Vessel	DT_VE	3.317
Downtime due to vessel - Main Engine Repairs				
08:27	16:31	Fishing	SB_FS	8.067
Chargeable standby due to fishing.				
16:31	21:04	Prime	AC_PP	4.550
Seq: 5 SOL Seq 5 Line:T4-5 FGSP:9070 Hdg:75.8° Prime EOL Seq 5 Line:T4-5 LGSP:9556 Complete				
21:04	21:10	Prime L/C	AC_PLC	0.100

12/4/2024

Page 2

Start	End	Category	Code	Duration (hrs)
Seq: 5 Line: T4-5 Nominal Prime line change.				
21:10	24:00	█ Prime	AC_PP	2.833
Seq: 6 SOL Seq 6 Line:D05B FGSP:978 Hdg:165.8° Prime MSP Seq 6 Line:D05B LGSP:1370				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

4-Dec	Hours	% Percent
Acquisition	7.483	31.181
Prime	7.383	30.764
Prime L/C	0.100	0.417
Chargeable Standby	13.200	55.000
Fishing	13.200	55.000
DownTime	3.317	13.819
Vessel	3.317	13.819
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	26.500	6.901
Source	5.617	1.463
Autofire	5.617	1.463
Streamers	17.567	4.575
Vessel	3.317	0.864
Acquisition	141.383	36.819
Prime	49.717	12.947
Prime L/C	6.883	1.793
Receiver Deployment/Recovery	59.400	15.469
Free Fall OBS	59.400	15.469
Receiver Survey	59.400	15.469
Swath Move	25.383	6.610
Deploy	25.383	6.610
Chargeable Standby	46.367	12.075
Fishing	24.983	6.506
Planned Operations	21.383	5.569
Streamer Deployment	21.383	5.569
Mobilisation	169.750	44.206
Mob Ashore	42.950	11.185
Transit to Prospect	126.800	33.021
Total	384.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m

MCS 15000m 50m					
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	43.90	163.15	265.90	363.20
Combined	43.90	163.15	265.90	363.20

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

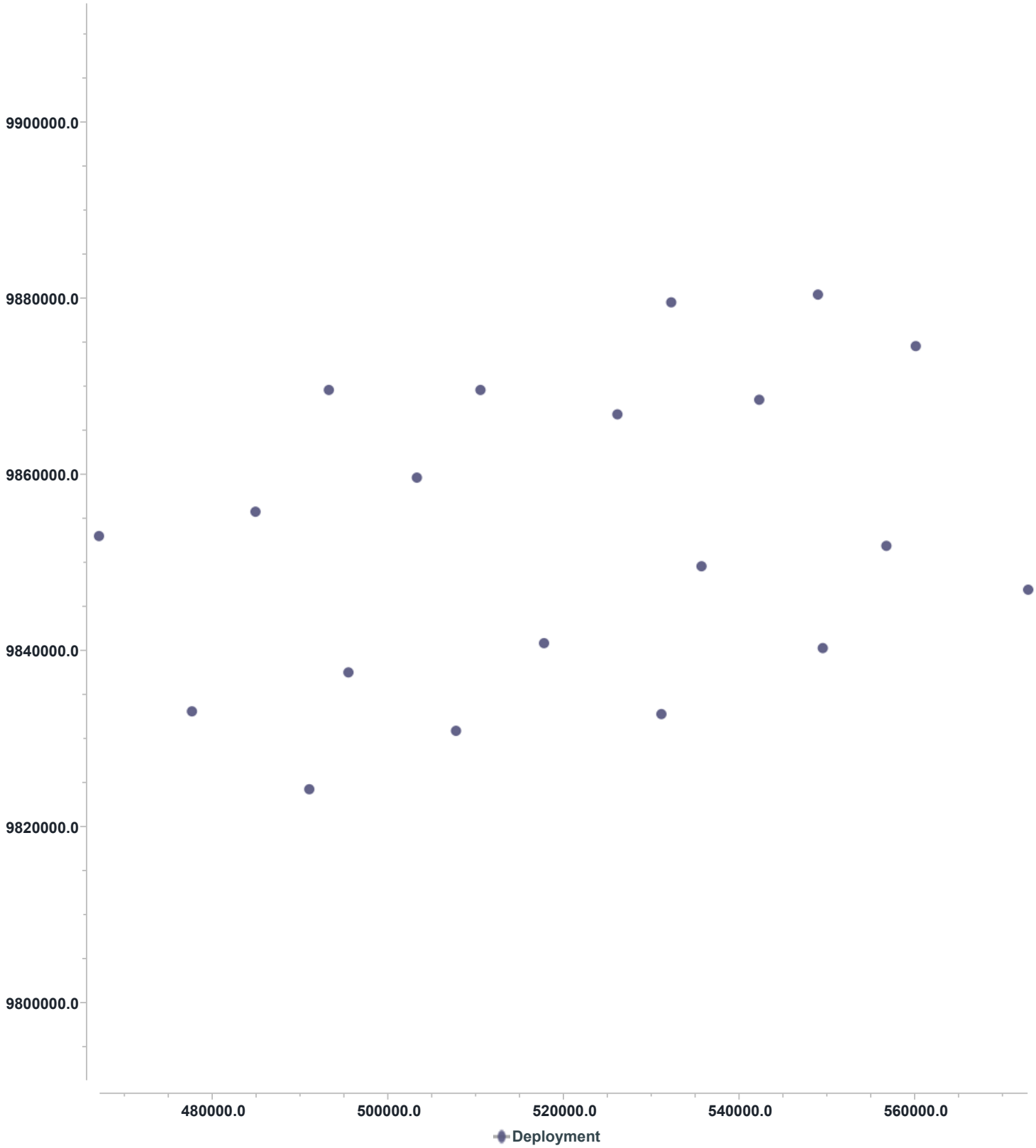
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
5	T4-5	97.1	1070	1556	Prime	24.30	2.884	Complete	Complete
6	D05B	165.8	978	1370	Prime	19.60	3.735	Midnight	Part
Total						43.90			

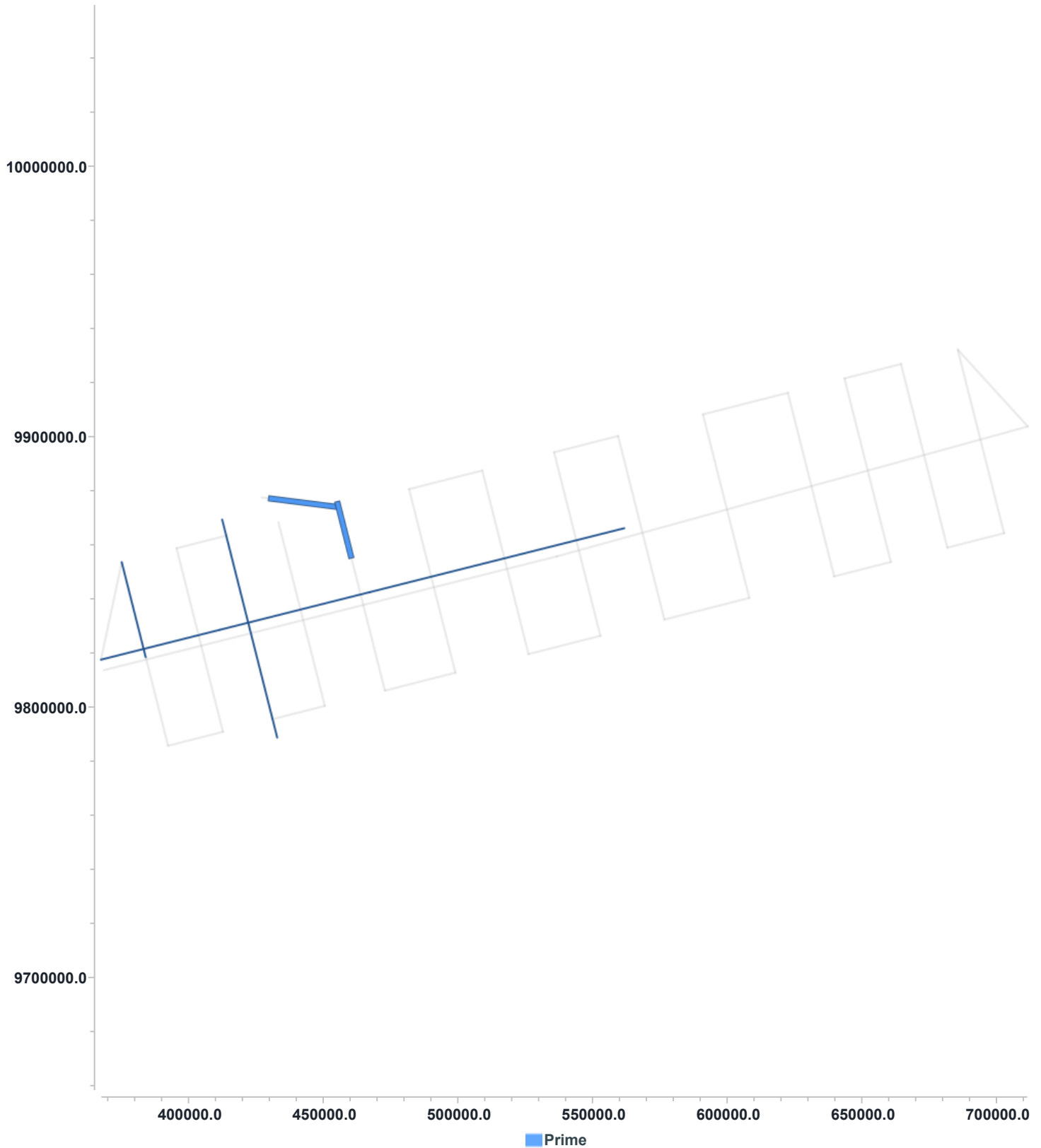
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/4/2024
OBS_Deployment



MGL 2411 - Chain: Acpt
11/19/2024 - 12/4/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 04 Dec

12/4/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 04 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	

12/4/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	0	4	4	14	10.000	
Daily Ops Meeting	DOps	0	2	2	8	8.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	2	2	4		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	0	0	0	8		
Contractor	Con	0	0	0	8		
Task, Hazard, Control	THC	0	0	0	8		

12/5/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Thu 05 Dec

A good day of production!
 The team was really looking forward to putting the streamer work behind us and just settling down to acquiring some good seismic data.
 Multiple lines were shot today with the hopes of many more to come.

Daily Comment Summaries - Plan for Tomorrow

Thu 05 Dec

Continue climbing the ladder as we work our way East.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	08:00	Prime	AC_PP	8.000
Seq: 6 SOL Seq 6 Line:D05B FGSP: 9977 Hdg:165.8° Prime EOL Seq 6 Line:D05B LGSP: 11541 Complete				
08:00	08:19	Prime L/C	AC_PLC	0.317
Seq: 6 Line: D05B Nominal Prime line change.				
08:19	12:27	Prime	AC_PP	4.133
Seq: 7 SOL Seq 7 Line:T5-6 FGSP: 12671 Hdg:75.8° Prime EOL Seq 7 Line:T5-6 LGSP: 13180 Complete				
12:27	12:36	Prime L/C	AC_PLC	0.150
Seq: 7 Line: T5-6 Nominal Prime line change.				
12:36	22:07	Prime	AC_PP	9.517
Seq: 8 SOL Seq 8 Line:D06 FGSP: 13390 Hdg:345.8° Prime EOL Seq 8 Line:D06 LGSP: 14884 Complete				
22:07	22:13	Prime L/C	AC_PLC	0.100
Seq: 8 Line: D06 Nominal Prime line change.				
22:13	24:00	Prime	AC_PP	1.783
Seq: 9 SOL Seq 9 Line:T6-7 FGSP: 15023 Hdg:75.8° Prime MSP Seq 9 Line:T6-7 LGSP: 15238 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

5-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	23.433	97.639
Prime L/C	0.567	2.361
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	26.500	6.495
Source	5.617	1.377
Autofire	5.617	1.377
Streamers	17.567	4.306
Vessel	3.317	0.813
Acquisition	165.383	40.535
Prime	73.150	17.929
Prime L/C	7.450	1.826
Receiver Deployment/Recovery	59.400	14.559
Free Fall OBS	59.400	14.559
Receiver Survey	59.400	14.559
Swath Move	25.383	6.221
Deploy	25.383	6.221
Chargeable Standby	46.367	11.364
Fishing	24.983	6.123
Planned Operations	21.383	5.241
Streamer Deployment	21.383	5.241
Mobilisation	169.750	41.605
Mob Ashore	42.950	10.527
Transit to Prospect	126.800	31.078
Total	408.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

12/5/2024

Page 3

Accepted km	Day	Week	Month	Project
Prime	169.45	332.60	435.35	532.65
Combined	169.45	332.60	435.35	532.65

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

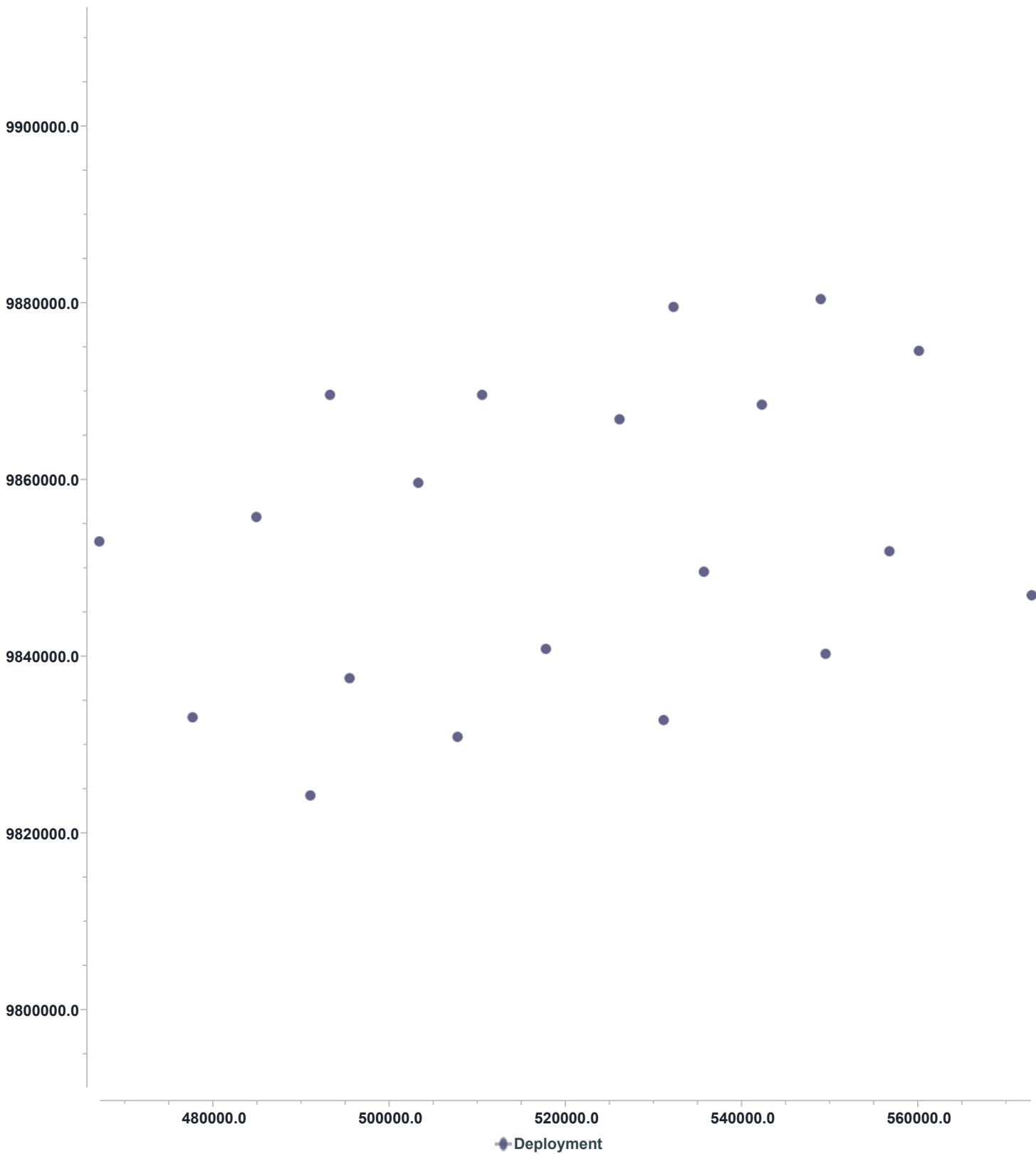
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
6	D05B	165.8	1371	2541	Prime	58.55	3.895	Complete	Complete
7	T5-6	75.8	1071	1580	Prime	25.45	3.325	Complete	Complete
8	D06	345.8	891	2385	Prime	74.70	4.238	Complete	Complete
9	T6-7	75.8	1024	1239	Prime	10.75	3.277	Midnight	Part
Total						169.45			

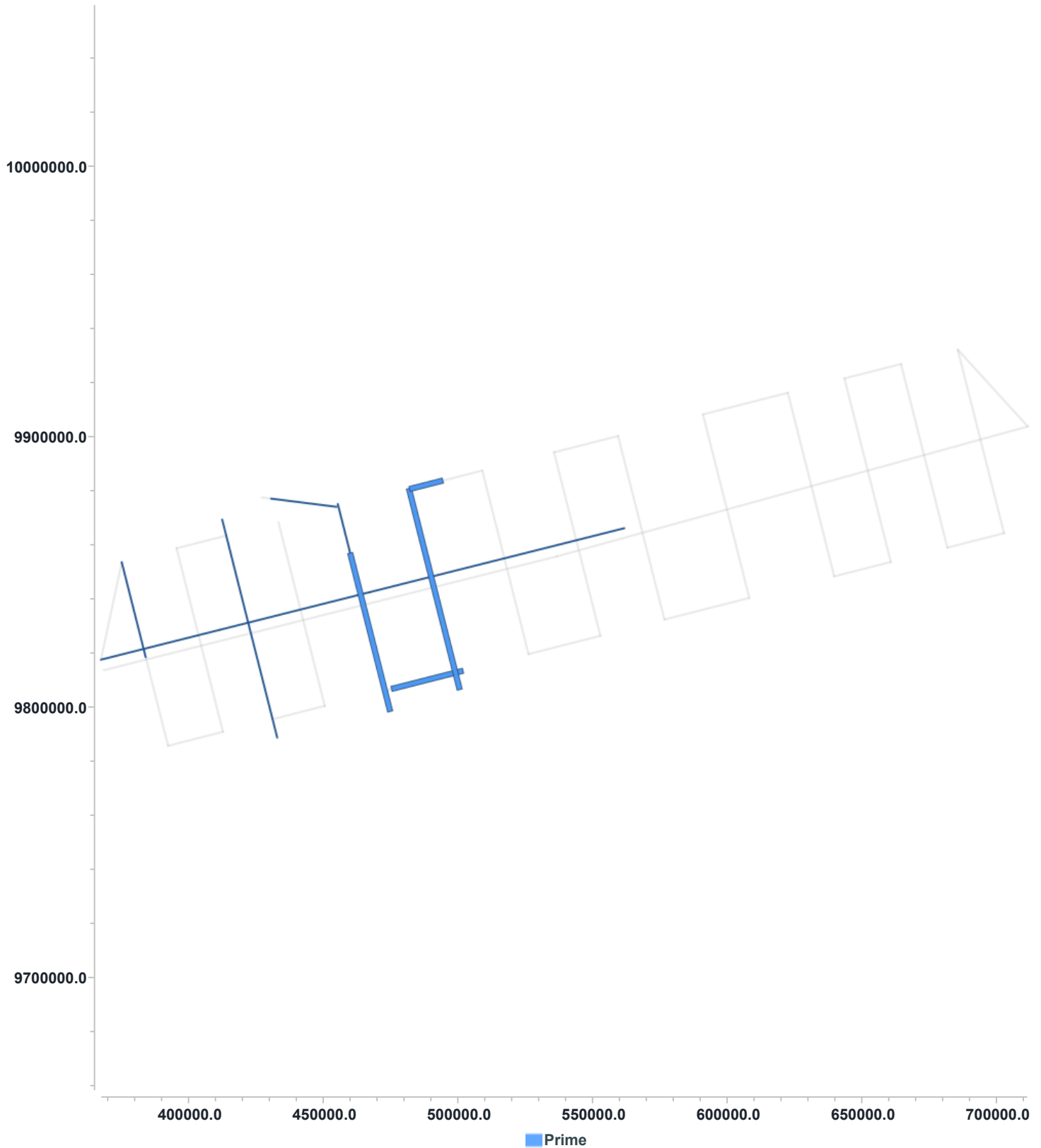
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/5/2024
OBS_Deployment



MGL 2411 - Chain: Acpt
11/19/2024 - 12/5/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 05 Dec

12/5/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 05 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:15	13:15	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Task, Hazard, Control	Re_Con_THC	4

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	
Meetings	Mtgs	1	6	6	16	12.000	
Daily Ops Meeting	DOps	1	4	4	10	10.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	2	2	4		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	4	11	11	19		
Contractor	Con	4	11	11	19		
Task, Hazard, Control	THC	4	11	11	19		

12/6/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Fri 06 Dec

Summary: A productive day with several lines successfully acquired. However, some challenges with data transmission and recording were encountered and addressed.

Details:

Production:

Several lines were acquired, marking good progress in data acquisition efforts.

Data Transmission Issues:

- Observed problems in data transmission linked to a bypassed telemetry fault towards the front of the streamer.
- The bypass causes data to loop back through the tail, resulting in a transmission path of over 25 km before reaching the recording system.
- This extended data path increases latency, leading to issues at higher speeds.

Recording Challenges:

- At a speed over ground (SOG) of 4 knots, data loss was observed in certain trace sections due to the recording system's inability to keep up.
- To address the issue:
The acquisition system was stopped to allow buffers to clear.
After a short pause (2 shots), the system was restarted, stabilizing the process.
- Maintaining an SOG of 3.8 knots or lower appears to resolve the issue.

Operational Notes:

- Planning for an upcoming port call has commenced.

Status at End of Day:

- The vessel was online and actively acquiring data.

Daily Comment Summaries - Plan for Tomorrow

Fri 06 Dec

Continue with data acquisition as we work our way East.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	02:31	Prime	AC_PP	2.517
Seq: 9 SOL Seq 9 Line:T6-7 FGSP: 15238 Hdg:75.8° Prime EOL Seq 9 Line:T6-7 LGSP: 15545 Complete				
02:31	02:44	Prime L/C	AC_PLC	0.217
Seq: 9 Line: T6-7 Nominal Prime line change.				
02:44	12:28	Prime	AC_PP	9.733
Seq: 10 SOL Seq 10 Line:D07B FGSP: 15641 Hdg:165.8° Prime				

Start	End	Category	Code	Duration (hrs)
EOL Seq 10 Line:D07B LGSP: 16977 Complete				
12:28	12:37	Prime L/C	AC_PLC	0.150
Seq: 10 Line: D07B Nominal Prime line change.				
12:37	16:38	Prime	AC_PP	4.017
Seq: 11 SOL Seq 11 Line:T7-8 FGSP: 17084 Hdg:75.8° Prime EOL Seq 11 Line:T7-8 LGSP: 17591 Complete				
16:38	16:43	Prime L/C	AC_PLC	0.083
Seq: 11 Line: T7-8 Nominal Prime line change.				
16:43	24:00	Prime	AC_PP	7.283
Seq: 12 SOL Seq 12 Line:D08 FGSP: 18019 FCSP:N/A Hdg:345.8° Prime MSP Seq 12 Line:D08 LGSP: 19039 LCSP:2040 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

6-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	23.550	98.125
Prime L/C	0.450	1.875
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	26.500	6.134
Source	5.617	1.300
Autofire	5.617	1.300
Streamers	17.567	4.066
Vessel	3.317	0.768
Acquisition	189.383	43.839
Prime	96.700	22.384
Prime L/C	7.900	1.829
Receiver Deployment/Recovery	59.400	13.750
Free Fall OBS	59.400	13.750
Receiver Survey	59.400	13.750
Swath Move	25.383	5.876
Deploy	25.383	5.876
Chargeable Standby	46.367	10.733
Fishing	24.983	5.783
Planned Operations	21.383	4.950
Streamer Deployment	21.383	4.950
Mobilisation	169.750	39.294
Mob Ashore	42.950	9.942
Transit to Prospect	126.800	29.352

12/6/2024

Page 3

Category	Hours	% Percent
Total	432.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	158.50	491.10	593.85	691.15
Combined	158.50	491.10	593.85	691.15

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

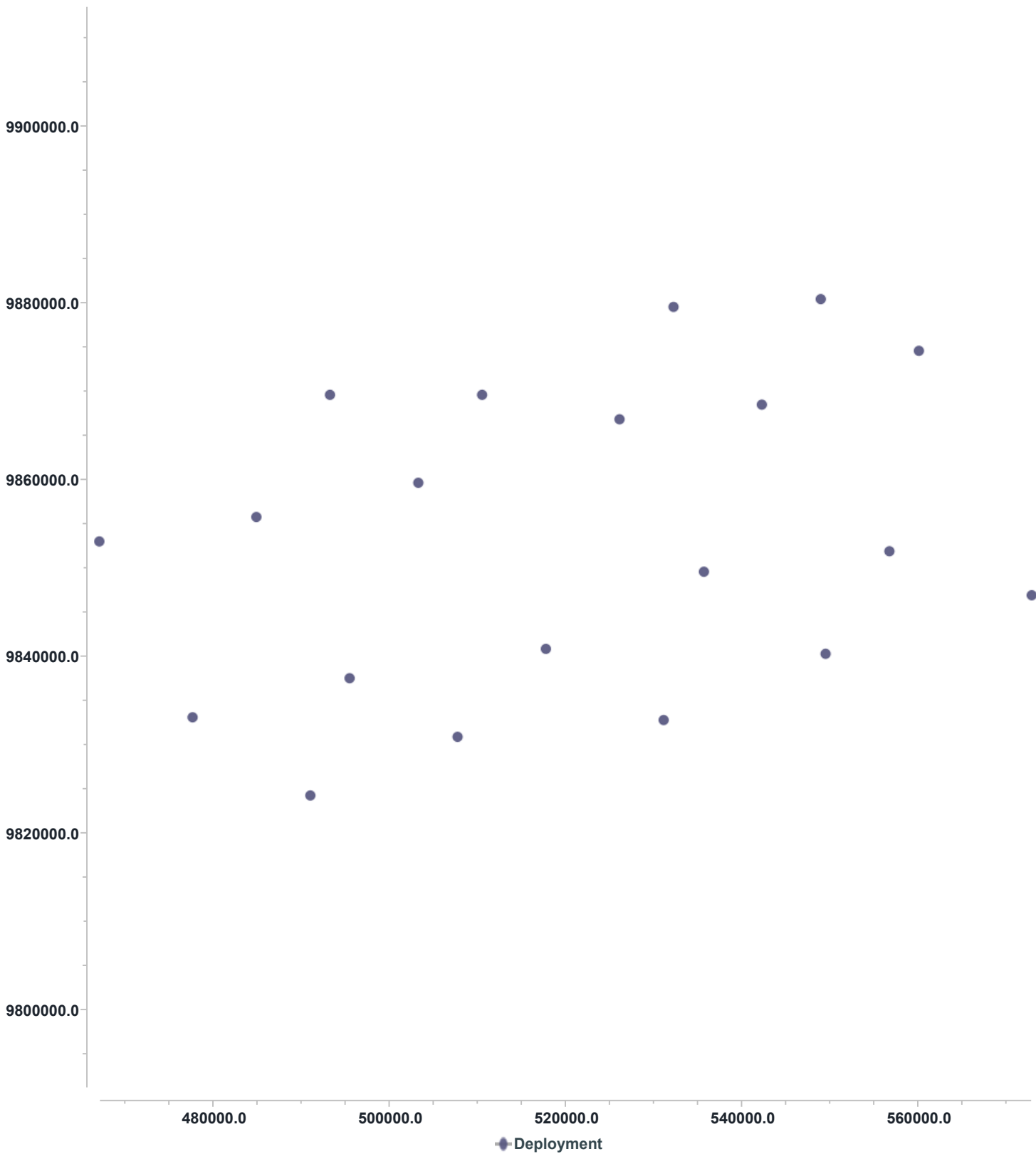
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
9	T6-7	75.8	1240	1546	Prime	15.35	3.277	Complete	Complete
10	D07B	165.8	1042	2378	Prime	66.80	3.706	Complete	Complete
11	T7-8	75.8	1085	1592	Prime	25.35	3.408	Complete	Complete
12	D08	345.8	1020	2040	Prime	51.00	3.781	Midnight	Part
Total						158.50			

Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

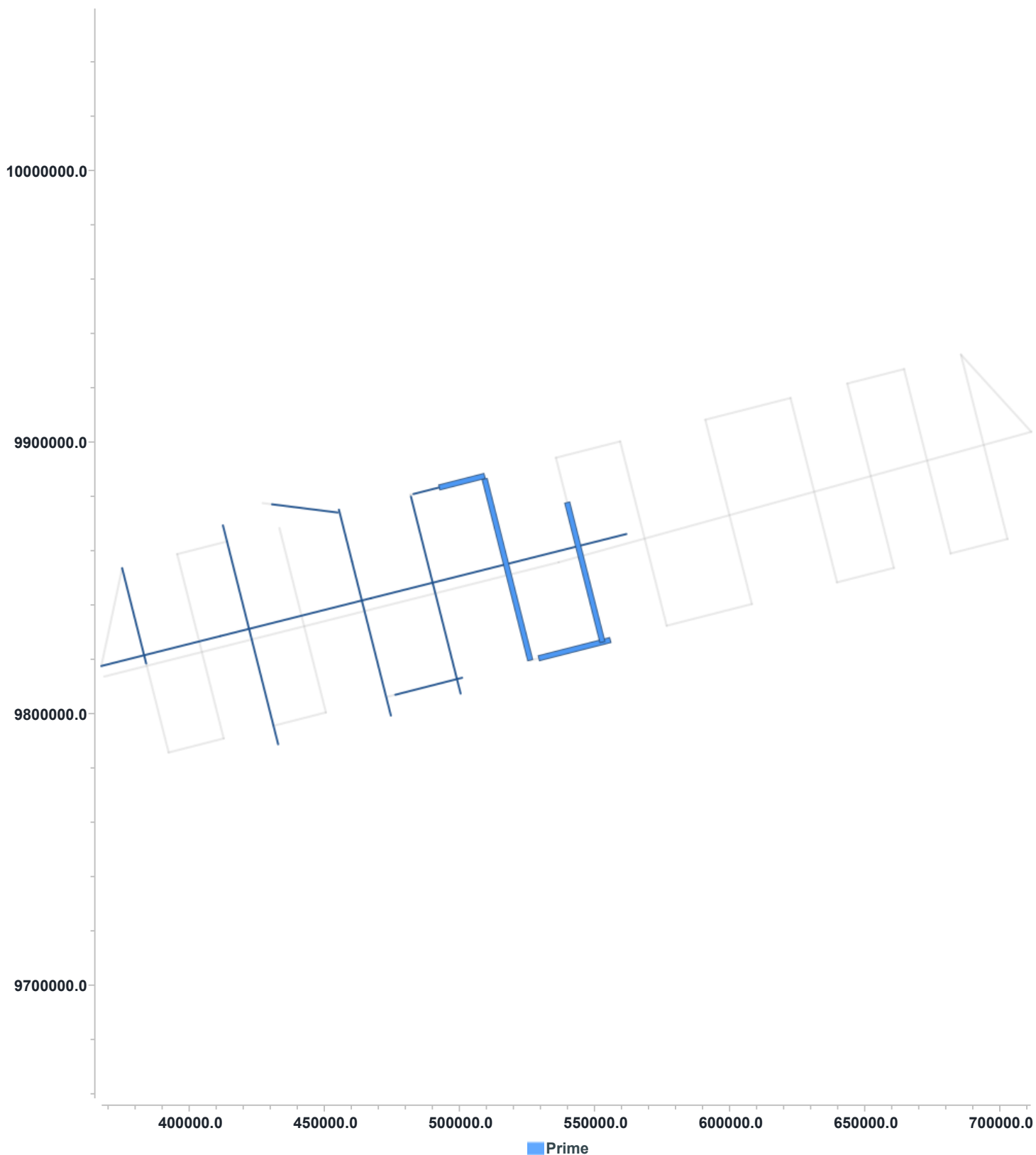
MGL 2411 - Chain
11/19/2024 - 12/6/2024
OBS_Deployment



MGL 2411 - Chain: Accpt

11/19/2024 - 12/6/2024

MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 06 Dec

12/6/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 06 Dec

Technical Staff On-board the Langseth

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 Josh Kasinger L-DEO OMO Chief Source Mechanic
 Brian Agee L-DEO OMO Source Mechanic
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 Elsy Olivares - RPS PSO

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 Jianhua Gong - Scientist
 Islam Arif - Scientist
 Peyton Dewaelsche - Scientist
 Evan Saltman - Scientist
 Alexandre Janin - Scientist
 Martin Rapa - OBS Engineer
 Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:00	13:00	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			













HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Daily Science Report

12/6/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	7	7	17	13.000	
 Daily Ops Meeting	DOps	1	5	5	11	11.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	2	4		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	11	11	19		
 Contractor	Con	0	11	11	19		
 Task, Hazard, Control	THC	0	11	11	19		

Start	End	Category	Code	Duration (hrs)
00:00	02:26	Prime	AC_PP	2.433
Seq: 12 SOL Seq 12 Line:D08 FGSP: 19039 Hdg:345.8° Prime EOL Seq 12 Line:D08 LGSP: 19370 Complete				
02:26	02:47	Prime L/C	AC_PLC	0.350
Seq: 12 Line: D08 Nominal Prime line change.				
02:47	06:10	Prime	AC_PP	3.383
Seq: 13 SOL Seq 13 Line:T8-9 FGSP: 19439 Hdg:75.8° Prime EOL Seq 13 Line:T8-9 LGSP: 19855 Complete				
06:10	06:26	Prime L/C	AC_PLC	0.267
Seq: 13 Line: T8-9 Nominal Prime line change.				
06:26	16:56	Prime	AC_PP	10.500
Seq: 14 SOL Seq 14 Line:D09 FGSP: 20018 Hdg:165.8° Prime EOL Seq 14 Line:D09 LGSP: 21382 Complete				
16:56	17:09	Prime L/C	AC_PLC	0.217
Seq: 14 Line: D09 Nominal Prime line change.				
17:09	22:10	Prime	AC_PP	5.017
Seq: 15 SOL Seq 15 Line:T9-10 FGSP: 21532 Hdg:75.8° Prime EOL Seq 15 Line:T9-10 LGSP: 22135 Complete				
22:10	22:15	Prime L/C	AC_PLC	0.083
Seq: 15 Line: T9-10 Nominal Prime line change.				
22:15	24:00	Prime	AC_PP	1.750
Seq: 16 SOL Seq 16 Line:D10 FGSP: 23024 Hdg:345.8° Prime MSP Seq 16 Line:D10 LGSP: 24375 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

7-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	23.083	96.181
Prime L/C	0.917	3.819
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	26.500	5.811
Source	5.617	1.232
Autofire	5.617	1.232

Category	Hours	% Percent
Streamers	17.567	3.852
Vessel	3.317	0.727
Acquisition	213.383	46.795
Prime	119.783	26.268
Prime L/C	8.817	1.933
Receiver Deployment/Recovery	59.400	13.026
Free Fall OBS	59.400	13.026
Receiver Survey	59.400	13.026
Swath Move	25.383	5.567
Deploy	25.383	5.567
Chargeable Standby	46.367	10.168
Fishing	24.983	5.479
Planned Operations	21.383	4.689
Streamer Deployment	21.383	4.689
Mobilisation	169.750	37.226
Mob Ashore	42.950	9.419
Transit to Prospect	126.800	27.807
Total	456.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	148.95	640.55	743.30	840.60
Combined	148.95	640.55	743.30	840.60

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

MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
12	D08	345.8	2041	2371	Prime	16.55	3.754	Complete	Complete
13	T8-9	75.8	1040	1456	Prime	20.80	3.320	Complete	Complete
14	D09	165.8	1001	2384	Prime	69.15	3.556	Complete	Complete
15	T9-10	75.8	1033	1636	Prime	30.15	3.245	Complete	Complete
16	D10	345.8	1025	1271	Prime	12.30	3.795	Midnight	Part

12/7/2024

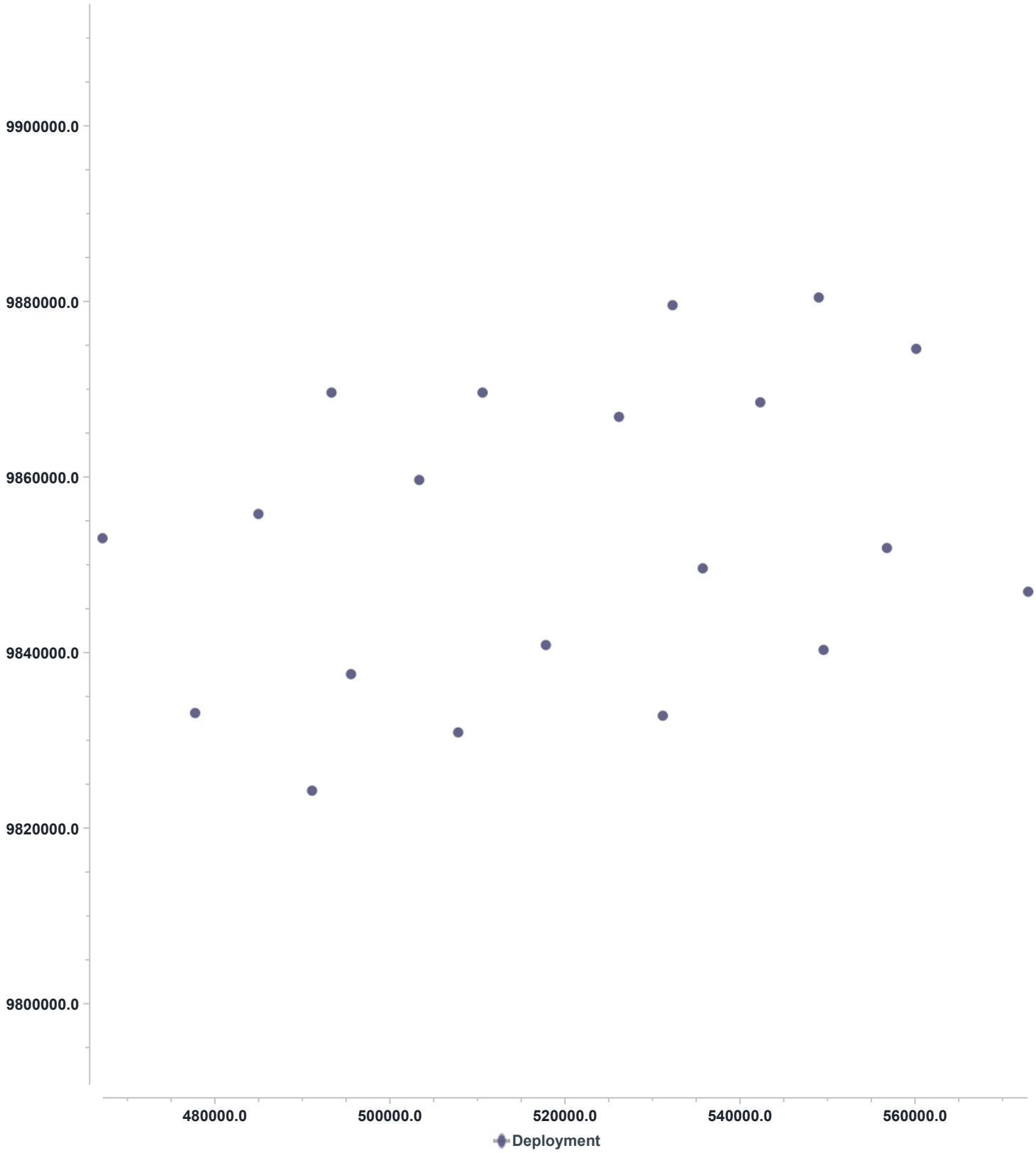
Page 4

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total						148.95			

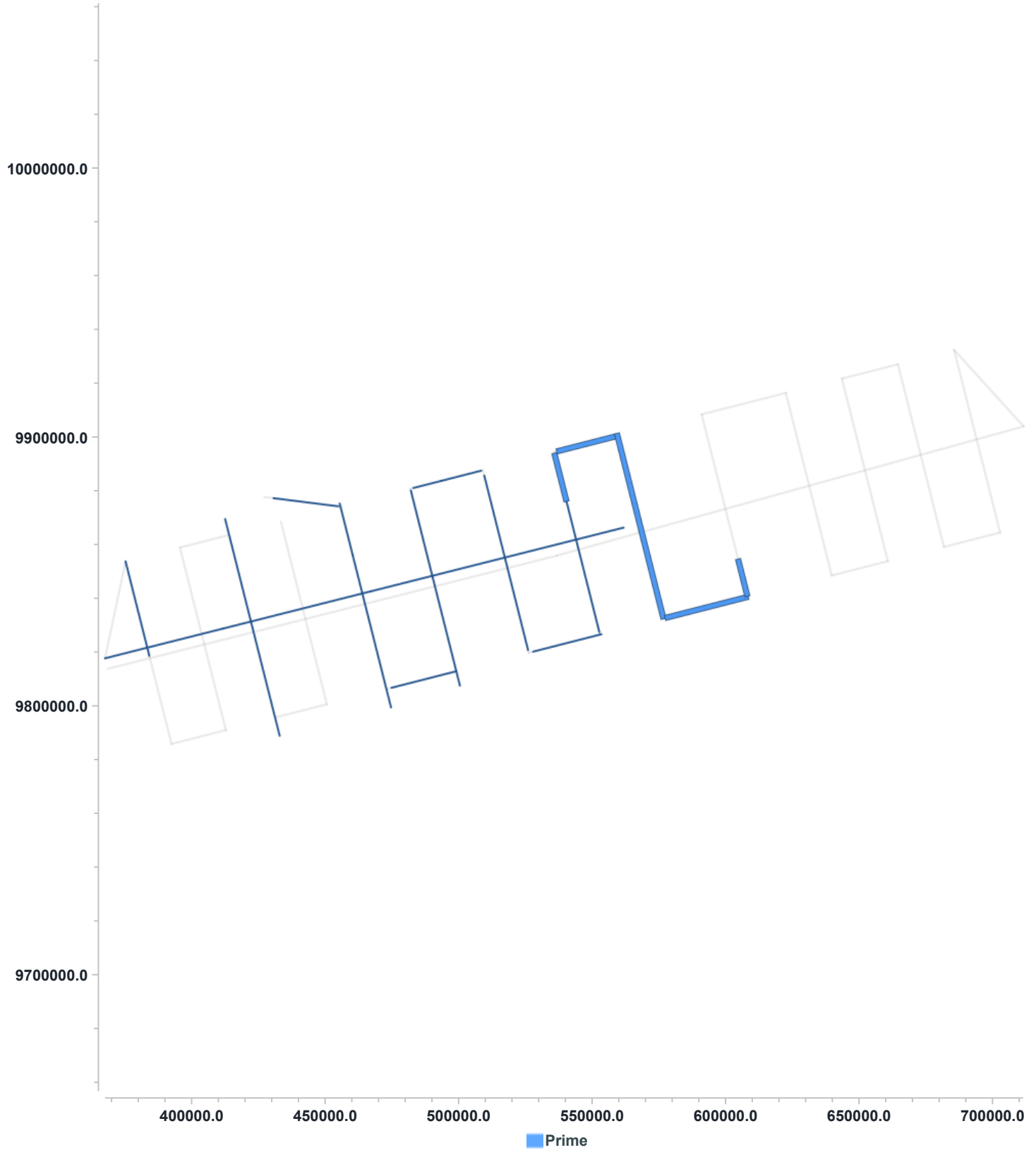
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/7/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/7/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 07 Dec

12/7/2024

Page 7

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 07 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

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- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

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- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)













Start	End	Category	Code
12:15	13:15	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

12/7/2024

Page 8

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	8	8	18	14.000	
 Daily Ops Meeting	DOps	1	6	6	12	12.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	2	4		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	11	11	19		
 Contractor	Con	0	11	11	19		
 Task, Hazard, Control	THC	0	11	11	19		

12/8/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sun 08 Dec

A productive day overall, with several lines successfully acquired.

Operations :

- Line change between D17 and D18 included a mid-line source shutdown to optimize survey kilometers.

Analysis:

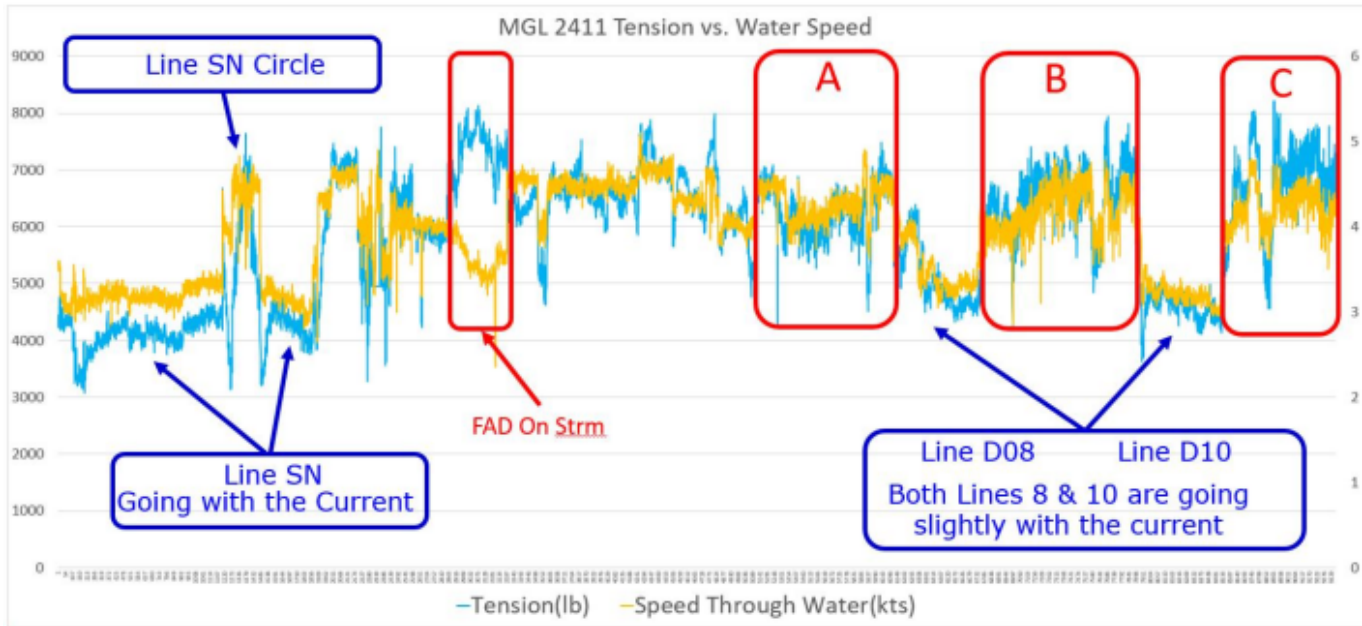
We analyzed the Tension vs. Water Speed data (refer to analysis below). Below are the key points and observations:

Observations:

- Specific points (A, B, and C) were selected for analysis as they correspond to similar water speeds, with the vessel traveling into the current.
- Lines D08 and D10 were highlighted as representative northbound lines where the vessel was pushed by the current.
- While it is still early to draw definitive conclusions, an emerging trend suggests increasing tension at consistent water speeds, potentially indicative of barnacle growth on the streamer.

Implications:

- Continued barnacle growth on the streamer could impact the safe operational window, requiring careful monitoring. This is particularly important when balancing vessel speed to maintain safe streamer tension.



Daily Comment Summaries - Plan for Tomorrow

Sun 08 Dec

Continue data acquisition.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	08:07	Prime	AC_PP	8.117
Seq: 16 SOL Seq 16 Line:D10 FGSP: 23270 Hdg:345.8° Prime EOL Seq 16 Line:D10 LGSP: 24375 Complete				
08:07	08:19	Prime Extended L/C	AC_PXL	0.200
Seq: 16 Extended Prime line change.				
08:19	11:20	Prime	AC_PP	3.017
Seq: 17 SOL Seq 17 Line:T10-11 FGSP: 25024 Hdg:75.8° Prime EOL Seq 17 Line:T10-11 LGSP: 25390 Complete				
11:20	13:17	Prime L/C	AC_PLC	1.950
Seq: 17 Line: T10-11 Nominal Prime line change.				
13:17	23:55	Prime	AC_PP	10.633
Seq: 18 SOL Seq 18 Line:D11 FGSP: 26013 Hdg:165.8° Prime EOL Seq 18 Line:D11 LGSP: 27385 Complete				
23:55	24:00	Prime L/C	AC_PLC	0.083
Seq: 18 Line: D11 Nominal Prime line change.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

8-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	21.767	90.694
Prime Extended L/C	0.200	0.833
Prime L/C	2.033	8.472
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	26.500	5.521
Source	5.617	1.170
Autofire	5.617	1.170
Streamers	17.567	3.660
Vessel	3.317	0.691
Acquisition	237.383	49.455
Prime	141.550	29.490
Prime Extended L/C	0.200	0.042
Prime L/C	10.850	2.260
Receiver Deployment/Recovery	59.400	12.375
Free Fall OBS	59.400	12.375
Receiver Survey	59.400	12.375
Swath Move	25.383	5.288

Category	Hours	% Percent
Deploy	25.383	5.288
Chargeable Standby	46.367	9.660
Fishing	24.983	5.205
Planned Operations	21.383	4.455
Streamer Deployment	21.383	4.455
Mobilisation	169.750	35.365
Mob Ashore	42.950	8.948
Transit to Prospect	126.800	26.417
Total	480.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	142.15	782.70	885.45	982.75
Combined	142.15	782.70	885.45	982.75

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

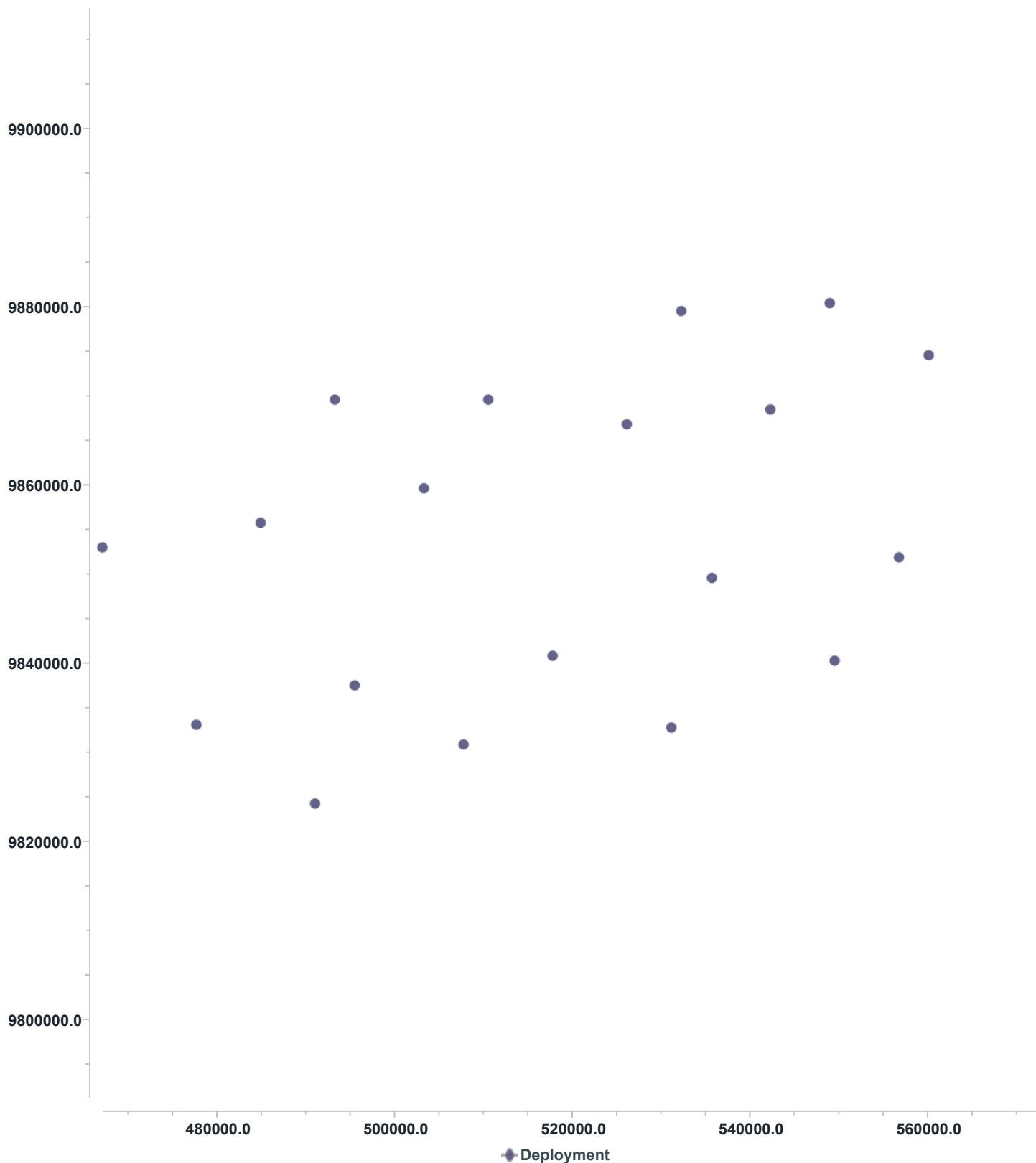
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
16	D10	345.8	1272	2376	Prime	55.25	3.697	Complete	Complete
17	T10-11	75.8	1025	1391	Prime	18.30	3.276	Complete	Complete
18	D11	165.8	1014	2386	Prime	68.60	3.483	Complete	Complete
Total						142.15			

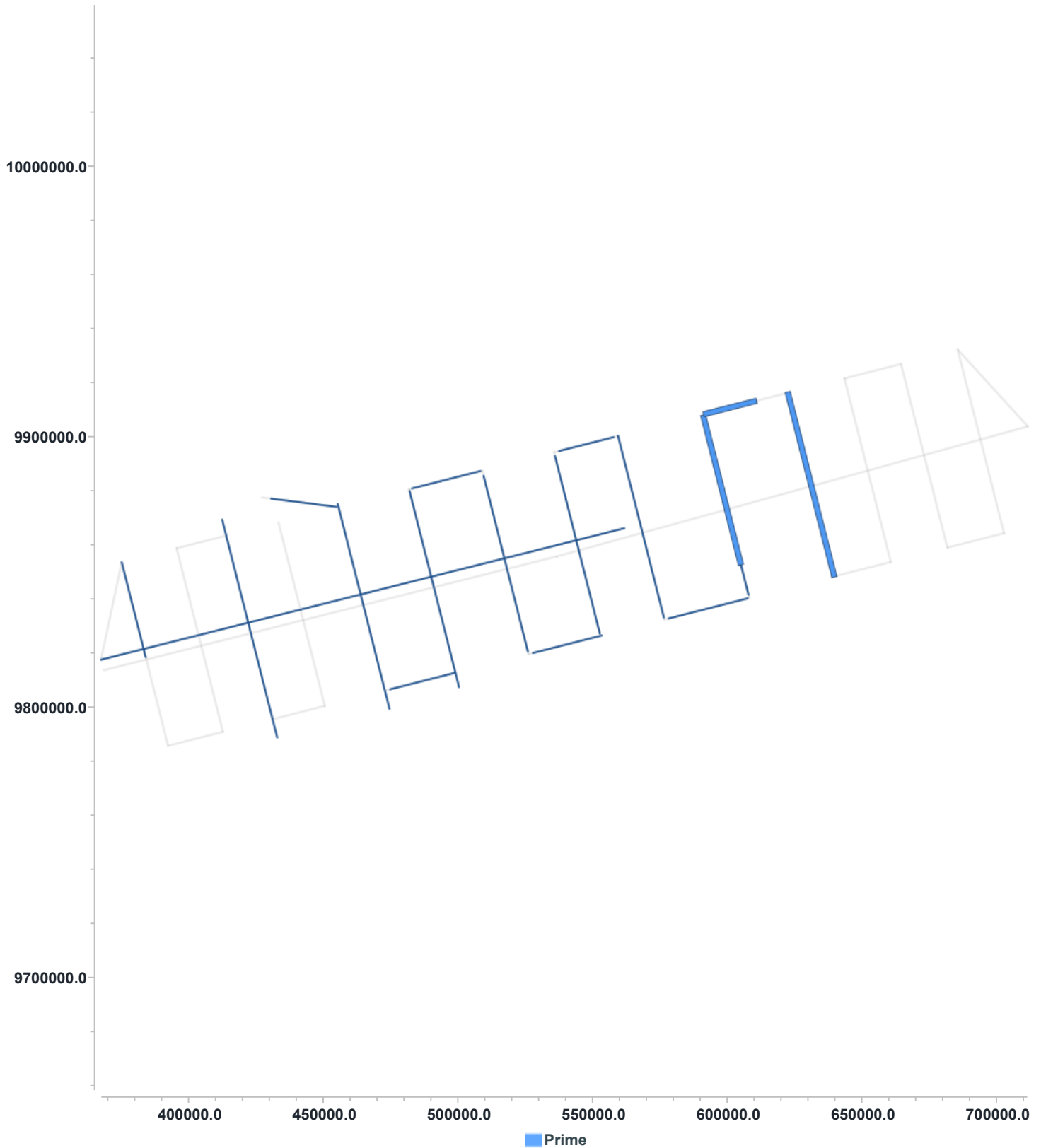
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/8/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/8/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 08 Dec

12/8/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 08 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:05	13:05	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Task, Hazard, Control	Re_Con_THC	1

HSE Event Period Totals - Project (Marcus G Langseth)

12/8/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	
Meetings	Mtgs	1	9	9	19	15.000	
Daily Ops Meeting	DOps	1	7	7	13	13.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	2	2	4		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	1	12	12	20		
Contractor	Con	1	12	12	20		
Task, Hazard, Control	THC	1	12	12	20		

12/9/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Mon 09 Dec

The day began with the vessel transitioning from Turn Line T11-12 and was marked by significant operational challenges due to engine failures. Recovery operations proceeded efficiently, and progress was made to restore survey capabilities.

Timeline of Events:

~02:40 UTC: During Turn Line T11-12, the port engine failed, followed shortly by the starboard engine. The vessel rapidly slowed and eventually came to a stop.

Impact on Gear:

- Loss of water speed caused the arrays to collapse and come together.
- The streamer sank to approximately 48 meters, triggering the Streamer Recovery Devices (SRDs). The SRD air bags deployed and brought the streamer to the surface.

~03:20 UTC: Forward propulsion was restored, and the vessel, in coordination with the main deck team, safely increased speed.

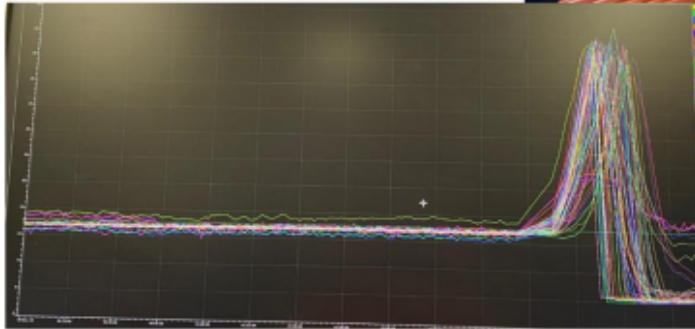
- Gun arrays were left stationary and naturally separated with minimal damage as vessel speed increased.

Recovery Operations:

- Confirmed SRD air bag deployment before initiating recovery of the source and streamer systems.
- 04:32 UTC: Source recovery began.
- 06:10 UTC: All source arrays were on deck.
- 08:35 UTC: Head float recovery completed.
- 15:47 UTC: Tailbuoy onboard for troubleshooting and engine maintenance.
- The Streamer was cleaned of barnacles on the way in.
- 17:08 UTC: Tailbuoy redeployed after completing engine repairs.
- 24:00 UTC: Head float re-entry in progress.

Observations and Key Notes:

1. Rapid deployment of SRDs effectively mitigated the risk of further damage to the streamer.
2. Coordination between the bridge and main deck team ensured a controlled increase in speed to safely manage the arrays and ensure nothing was caught in the props.
3. Minimal damage to the gun arrays was observed, demonstrating the effectiveness of leaving them stationary during recovery.



Daily Comment Summaries - Plan for Tomorrow

Mon 09 Dec

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	00:04	Prime L/C	AC_PLC	0.067
Seq: 18 Line: D11 Nominal Prime line change.				
00:04	02:41	Prime	AC_PP	2.617
Seq: 19 SOL Seq 19 Line:T11-12 FGSP: 28030 Hdg:75.8° Prime EOL Seq 19 Line:T11-12 LGSP: 28344 Incomplete				
02:41	24:00	Vessel	DT_VE	21.317
Downtime due to vessel - Engine failure and associated streamer recovery.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

9-Dec	Hours	% Percent
Acquisition	2.683	11.181
Prime	2.617	10.903
Prime L/C	0.067	0.278
DownTime	21.317	88.819
Vessel	21.317	88.819
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	47.817	9.487
Source	5.617	1.114
Autofire	5.617	1.114
Streamers	17.567	3.485
Vessel	24.633	4.888
Acquisition	240.067	47.632
Prime	144.167	28.604
Prime Extended L/C	0.200	0.040
Prime L/C	10.917	2.166
Receiver Deployment/Recovery	59.400	11.786
Free Fall OBS	59.400	11.786
Receiver Survey	59.400	11.786
Swath Move	25.383	5.036
Deploy	25.383	5.036
Chargeable Standby	46.367	9.200
Fishing	24.983	4.957

Category	Hours	% Percent
Planned Operations	21.383	4.243
Streamer Deployment	21.383	4.243
Mobilisation	169.750	33.681
Mob Ashore	42.950	8.522
Transit to Prospect	126.800	25.159
Total	504.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	15.70	15.70	901.15	998.45
Combined	15.70	15.70	901.15	998.45

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

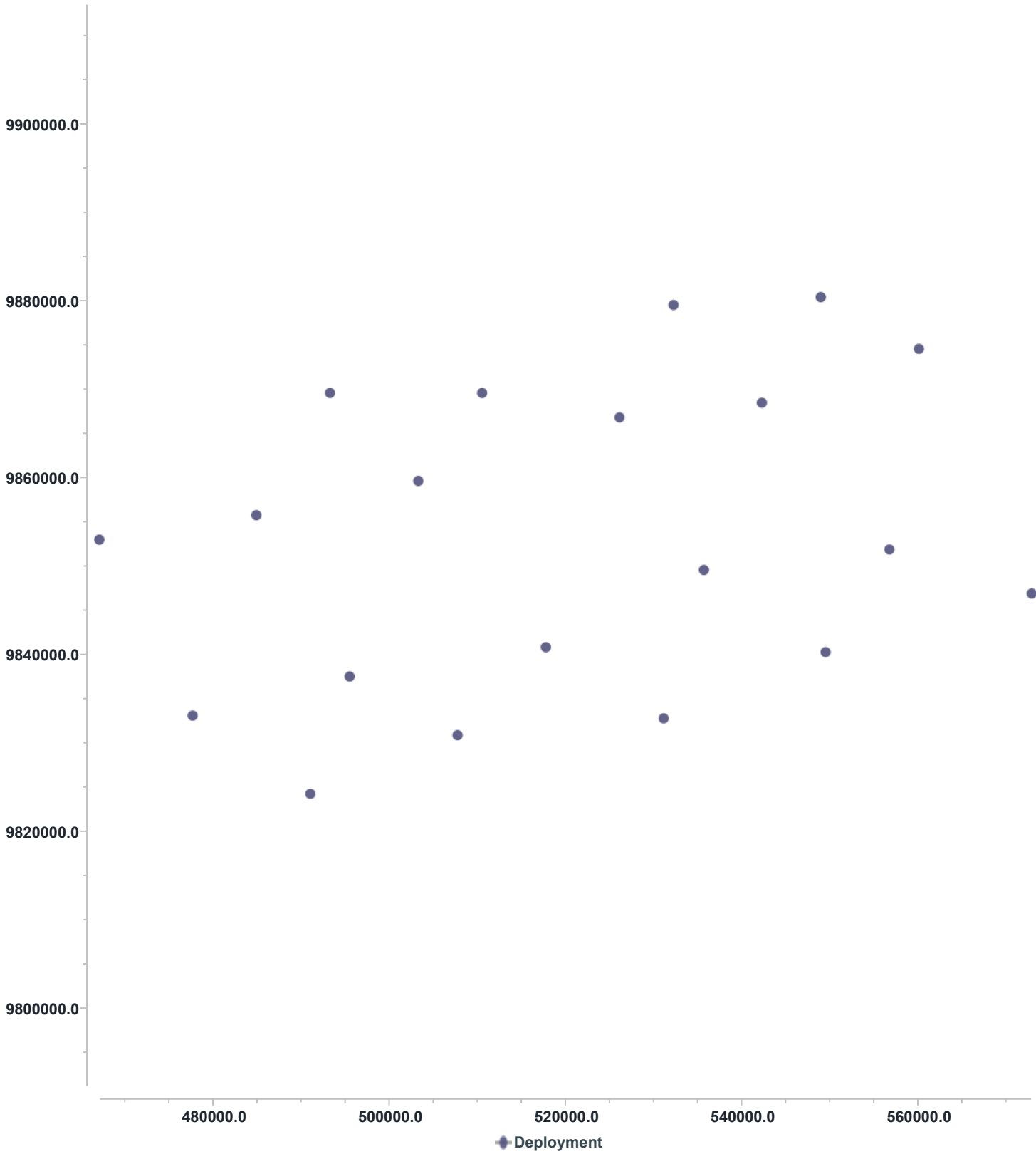
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
19	T11-12	75.8	1031	1345	Prime	15.70	3.240	Complete	Incomplete
Total						15.70			

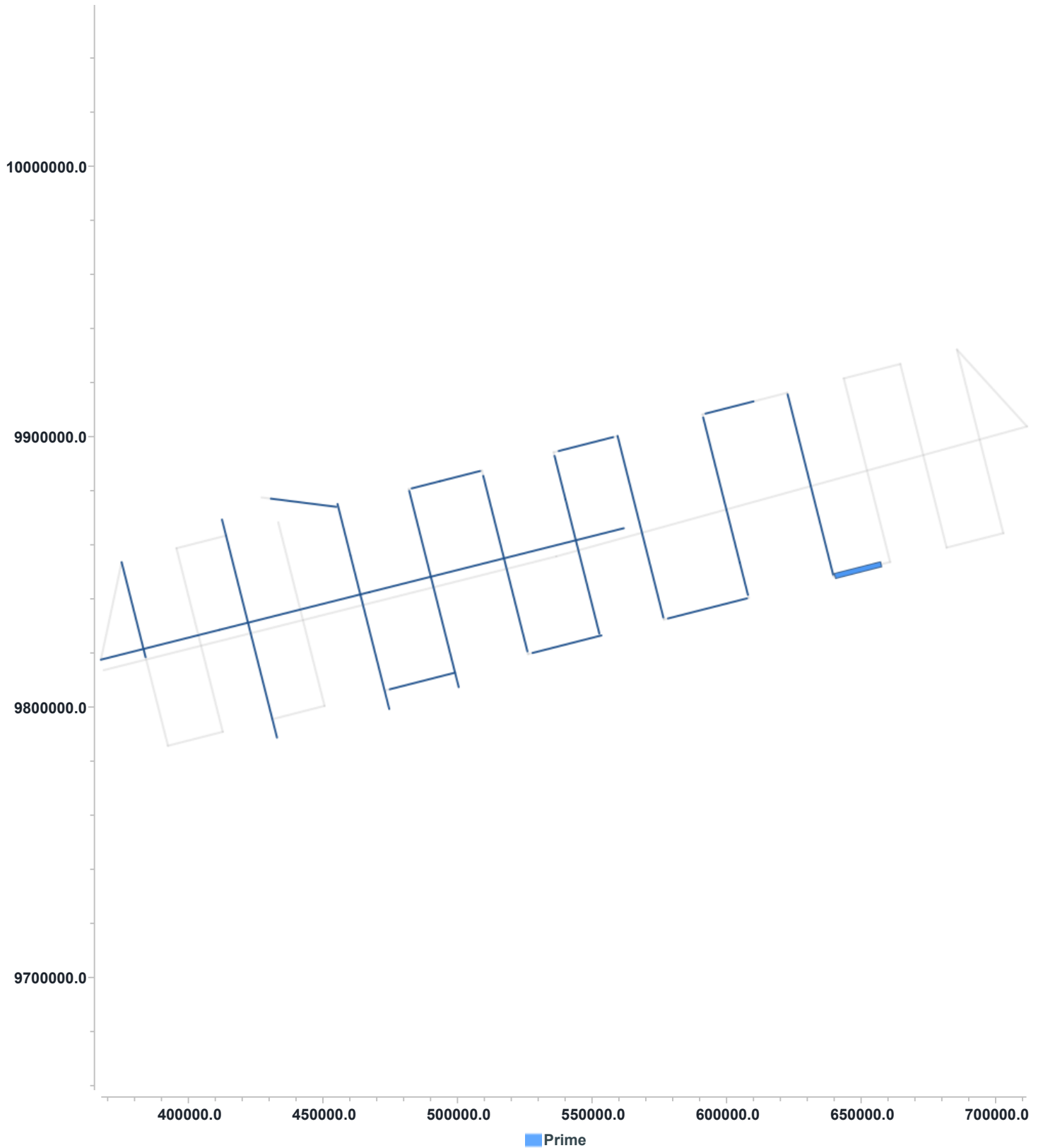
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/9/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/9/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 09 Dec

12/9/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 09 Dec

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- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)













Start	End	Category	Code
Daily Total Category		Code	Count
		Toolbox Meetings	Mtgs_Tbox
			2

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

12/9/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	2	2	11	21	15.000	
 Daily Ops Meeting	DOps	0	0	7	13	13.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	2	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Tue 10 Dec

The day began with successful deployment and testing of the source. Operations included acquisition on line D13, troubleshooting multiple systems, and preparation for upcoming priority lines D06 and D05B.

Operations:

Source Deployment:

- Successfully ramped up and tested at the start of the day.

Line D13 Acquisition:

- Acquisition started early as the vessel proceeded along line D13.
- Towards the end of the line, an autofire issue occurred on Array 3.
- The array was recovered and repaired during the line change to D12.

Updates and Issues:

New Acquisition Plan:

- A revised acquisition and timing plan was distributed to all team members.
- The team remains focused on completing the race track plan for lines D06 and D05B.

Magnetometer Issue:

- Abnormal data led to retrieval of the fish and replacement of the tow cable.
- After redeployment, the error code persists, but the raw data appears correct. Troubleshooting continues.

ORCA System Crash:

- A system process in ORCA crashed during the line change.
- After troubleshooting, ORCA is now fully operational.

End of Day Status:

- The vessel is heading south on Line D12.
- Acquisition will end early on D12, followed by a turn to starboard to proceed toward line SSE/SSW.

Daily Comment Summaries - Plan for Tomorrow

Tue 10 Dec

Finish acquisition on line D12.
Start acquisition on line SSE/SSW.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	04:41	■ Vessel	DT_VE	4.683
Downtime due to vessel - Engine failure and associated streamer recovery.				
04:41	17:20	■ Prime	AC_PP	12.650
Seq: 20 SOL Seq 20 Line:D13 FGSP: 29588 Hdg:345.8° Prime EOL Seq 20 Line:D13 LGSP: 31394 Complete				
17:20	17:58	■ Prime L/C	AC_PLC	0.633

Start	End	Category	Code	Duration (hrs)
Seq: 20 Line: D13 Nominal Prime line change.				
17:58	19:35	Prime	AC_PP	1.617
Seq: 21 SOL Seq 21 Line:T12-13 FGSP: 32157 Hdg:255.8° Prime EOL Seq 21 Line:T12-13 LGSP: 32423 Complete				
19:35	19:44	Prime L/C	AC_PLC	0.150
Seq: 21 Line: T12-13 Nominal Prime line change.				
19:44	24:00	Prime	AC_PP	4.267
Seq: 22 SOL Seq 22 Line:D12 FGSP: 33027 Hdg:165.8° Prime MSP Seq 22 Line:D12 LGSP: 33639 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

10-Dec	Hours	% Percent
Acquisition	19.317	80.486
Prime	18.533	77.222
Prime L/C	0.783	3.264
DownTime	4.683	19.514
Vessel	4.683	19.514
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	9.943
Source	5.617	1.064
Autofire	5.617	1.064
Streamers	17.567	3.327
Vessel	29.317	5.552
Acquisition	259.383	49.126
Prime	162.700	30.814
Prime Extended L/C	0.200	0.038
Prime L/C	11.700	2.216
Receiver Deployment/Recovery	59.400	11.250
Free Fall OBS	59.400	11.250
Receiver Survey	59.400	11.250
Swath Move	25.383	4.807
Deploy	25.383	4.807
Chargeable Standby	46.367	8.782
Fishing	24.983	4.732
Planned Operations	21.383	4.050
Streamer Deployment	21.383	4.050
Mobilisation	169.750	32.150
Mob Ashore	42.950	8.134

Category	Hours	% Percent
Transit to Prospect	126.800	24.015
Total	528.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	140.90	156.60	1042.05	1139.35
Combined	140.90	156.60	1042.05	1139.35

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

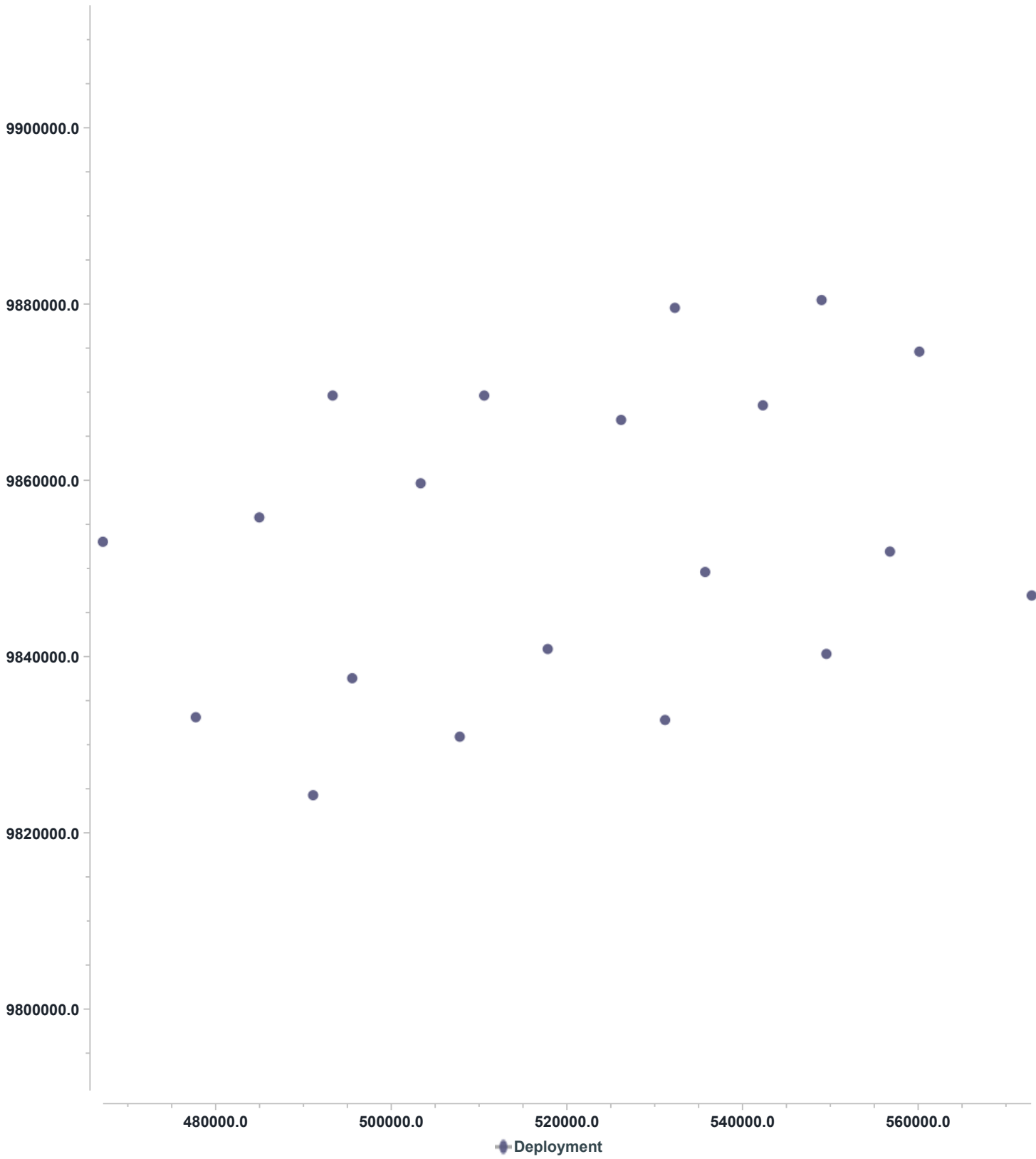
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
20	D13	345.8	2824	1007	Prime	90.85	3.878	Complete	Complete
21	T12-13	255.8	1277	1010	Prime	13.35	4.459	Complete	Complete
22	D12	165.8	2374	1640	Prime	36.70	4.644	Midnight	Part
Total						140.90			

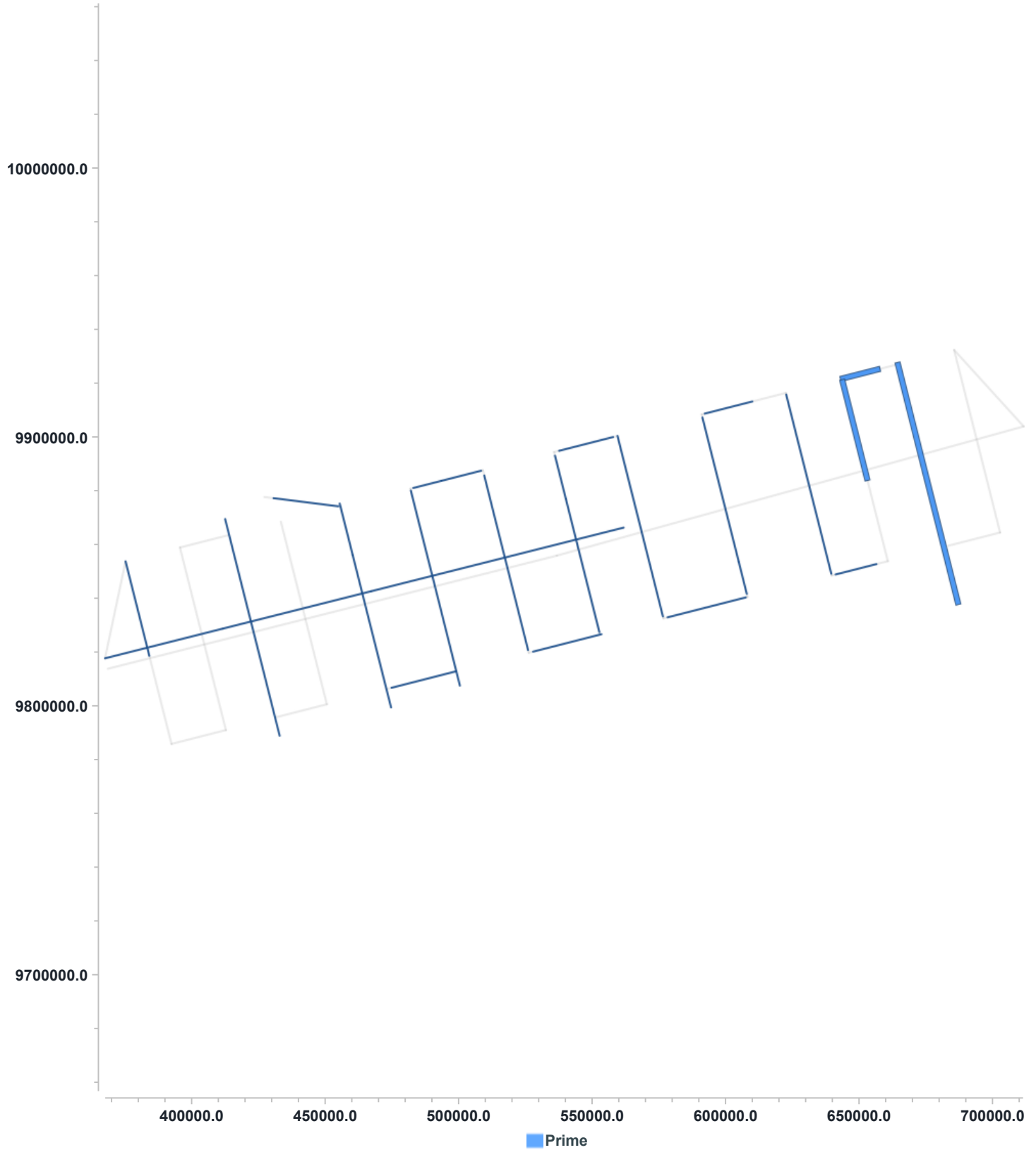
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/10/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/10/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 10 Dec

12/10/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 10 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	3	12	22	16.000	
 Daily Ops Meeting	DOps	1	1	8	14	14.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

12/11/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Wed 11 Dec

The vessel was acquiring data headed south on line D12 at the start of the day.
 At ~3:30 utc the vessel turned off of line early as per the latest plan to run up to SSE.
 This was after full fold coverage of the trench.
 Line SSE was started at ~7:00.
 Just before midnight there was an autofire on array 3 gun 8.
 The array was recovered and is on deck at midnight utc.
 Line SSE merged in to line SSW and at the end of day the vessel is acquiring data on line SSW.

Daily Comment Summaries - Plan for Tomorrow

Wed 11 Dec

Turn on to line D06 and start the race track.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	03:24	Prime	AC_PP	3.400
Seq: 22 SOL Seq 22 Line:D12 FGSP: 33027 Hdg:165.8° Prime EOL Seq 22 Line:D12 LGSP: 34141 Complete				
03:24	06:58	Prime L/C	AC_PLC	3.567
Seq: 22 Line: D12 Nominal Prime line change.				
06:58	20:57	Prime	AC_PP	13.983
Seq: 23 SOL Seq 23 Line:SSE FGSP: 36445 Hdg:254.6° Prime EOL Seq 23 Line:SSE LGSP: 38624 Complete				
20:57	21:01	Infill L/C	AC_ILC	0.067
Seq: 23 Nominal Infill line change.				
21:01	24:00	Prime	AC_PP	2.983
Seq: 24 SOL Seq 24 Line:SSW FGSP: 39010 Hdg:255.9° Prime MSP Seq 24 Line:SSW LGSP: 39468 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

11-Dec	Hours	% Percent
Acquisition	24.000	100.000
Infill L/C	0.067	0.278
Prime	20.367	84.861
Prime L/C	3.567	14.861
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	9.511
Source	5.617	1.018
Autofire	5.617	1.018
Streamers	17.567	3.182
Vessel	29.317	5.311
Acquisition	283.383	51.338
Infill L/C	0.067	0.012
Prime	183.067	33.164
Prime Extended L/C	0.200	0.036
Prime L/C	15.267	2.766
Receiver Deployment/Recovery	59.400	10.761
Free Fall OBS	59.400	10.761
Receiver Survey	59.400	10.761
Swath Move	25.383	4.598
Deploy	25.383	4.598
Chargeable Standby	46.367	8.400
Fishing	24.983	4.526
Planned Operations	21.383	3.874
Streamer Deployment	21.383	3.874
Mobilisation	169.750	30.752
Mob Ashore	42.950	7.781
Transit to Prospect	126.800	22.971
Total	552.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	150.85	307.45	1192.90	1290.20
Combined	150.85	307.45	1192.90	1290.20

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

MCS 15000m 50m

12/11/2024

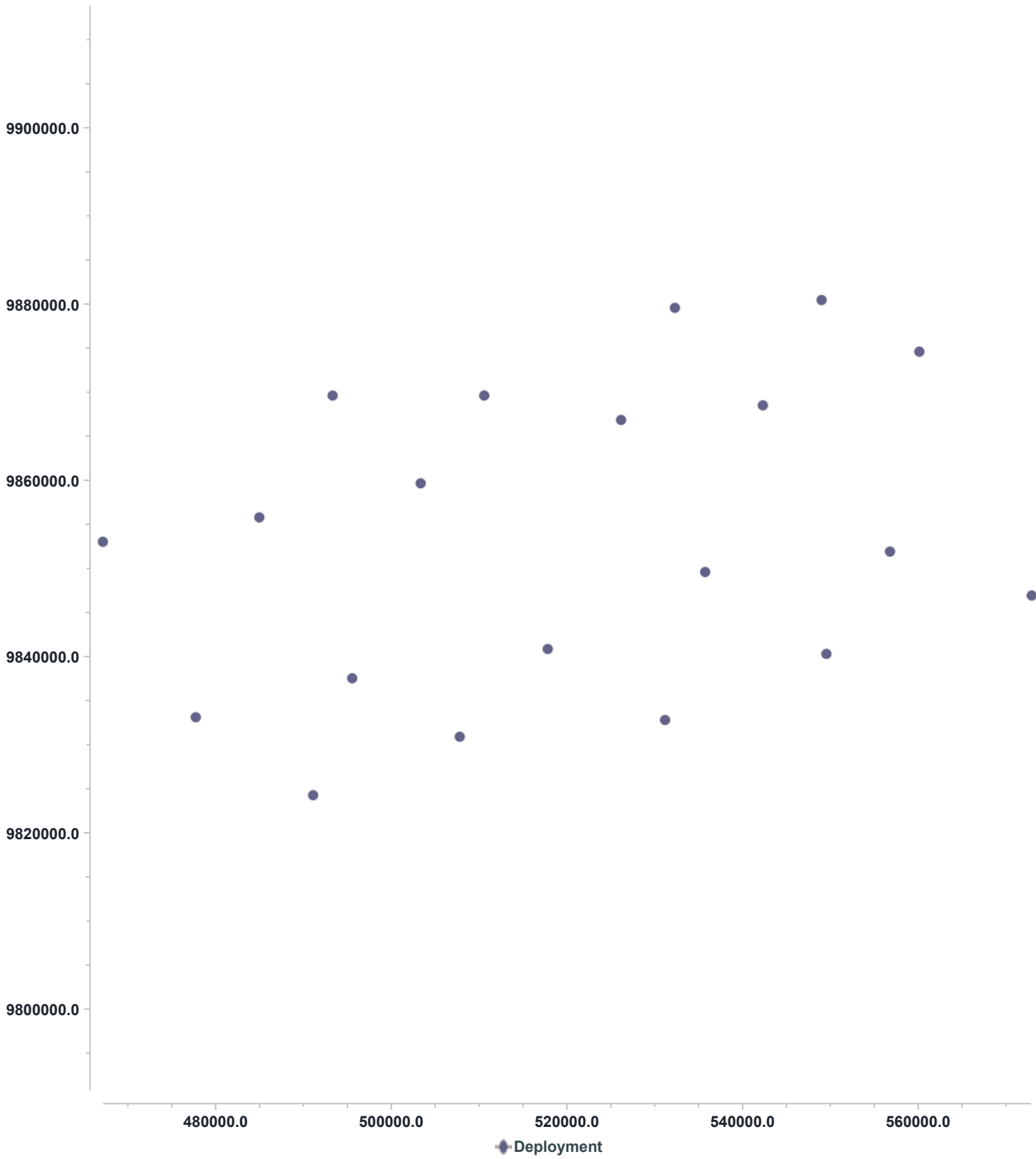
Page 3

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
22	D12	165.8	1639	1260	Prime	19.00	3.923	Complete	Complete
23	SSE	254.6	2446	4625	Prime	108.95	4.207	Complete	Complete
24	SSW	255.9	1011	1469	Prime	22.90	4.145	Midnight	Part
Total						150.85			

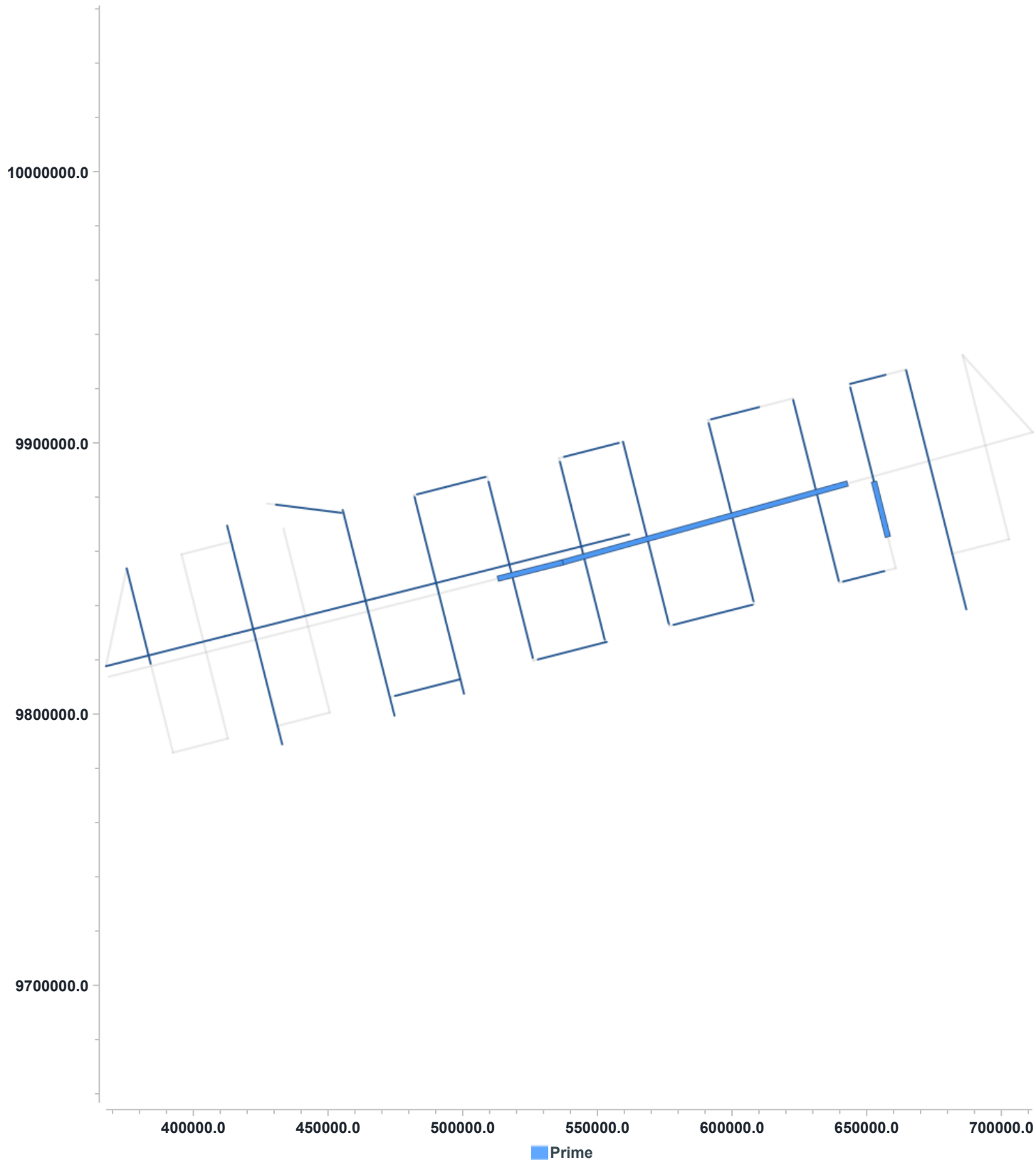
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/11/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/11/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 11 Dec

12/11/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 11 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
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- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	4	13	23	17.000	
 Daily Ops Meeting	DOps	1	2	9	15	15.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

12/12/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Thu 12 Dec

At the start of the day, the vessel successfully deployed Array 3 after fixing autofire . The deployment went smoothly, and the vessel reached full volume shortly after the day began.

Multiple lines were acquired today. The racetrack on lines D06 and D05B was initiated and was 75% complete by the end of the day.

During some turns, the vessel slowed to manage the gun arrays as they came together. By reducing speed and slightly adjusting the lead-in on the soft tow and the gun arrays on the hard tow, the arrays were separated by 1–2 meters.

By the end of the day, the vessel was acquiring data on the turn line at the northern ends of lines D05B and D06.

Daily Comment Summaries - Plan for Tomorrow

Thu 12 Dec

Finish turn line, Line D06 and start the new line T06-02.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)



Start	End	Category	Code	Duration (hrs)
00:00	02:46	Prime	AC_PP	2.767
Seq: 24 SOL Seq 24 Line:SSW FGSP: 39010 Hdg:255.9° Prime EOL Seq 24 Line:SSW LGSP: 39900 Complete				
02:46	03:03	Prime L/C	AC_PLC	0.283
Seq: 24 Line: SSW Nominal Prime line change.				
03:03	05:59	Prime	AC_PP	2.933
Seq: 25 SOL Seq 25 Line:D06 FGSP: 40773 Hdg:165.8° Prime EOL Seq 25 Line:D06 LGSP: 41375 Complete				
05:59	07:20	Prime L/C	AC_PLC	1.350
Seq: 25 Line: D06 Nominal Prime line change.				
07:20	10:18	Prime	AC_PP	2.967
Seq: 26 SOL Seq 26 Line:T5-6 FGSP: 42041 Hdg:255.8° Prime EOL Seq 26 Line:T5-6 LGSP: 42505 Complete				
10:18	10:30	Prime L/C	AC_PLC	0.200
Seq: 26 Line: T5-6P2 Nominal Prime line change.				
10:30	20:07	Prime	AC_PP	9.617

Start	End	Category	Code	Duration (hrs)
Seq: 27 SOL Seq 27 Line:D05B FGSP: 43028 Hdg:345.8° Prime EOL Seq 27 Line:D05B LGSP: 44384 Complete				
20:07	20:11	Prime L/C	AC_PLC	0.067
Seq: 27 Line: D05B Nominal Prime line change.				
20:11	24:00	Prime	AC_PP	3.817
Seq: 28 SOL Seq 28 Line:T5-6B FGSP: 45019 Hdg:75.8° Prime MSP Seq 28 Line:T5-6B LGSP: 45520 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

12-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	22.100	92.083
Prime L/C	1.900	7.917
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	9.115
Source	5.617	0.975
Autofire	5.617	0.975
Streamers	17.567	3.050
Vessel	29.317	5.090
Acquisition	307.383	53.365
Prime	205.167	35.619
Prime Extended L/C	0.200	0.035
Prime L/C	17.233	2.992
Receiver Deployment/Recovery	59.400	10.313
Free Fall OBS	59.400	10.313
Receiver Survey	59.400	10.313
Swath Move	25.383	4.407
Deploy	25.383	4.407
Chargeable Standby	46.367	8.050
Fishing	24.983	4.337
Planned Operations	21.383	3.712
Streamer Deployment	21.383	3.712
Mobilisation	169.750	29.470
Mob Ashore	42.950	7.457
Transit to Prospect	126.800	22.014
Total	576.000	

Basic Project Details

MCS 15000m 50m
General Details

MCS 15000m 50m					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	168.90	476.35	1361.80	1459.10
Combined	168.90	476.35	1361.80	1459.10

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

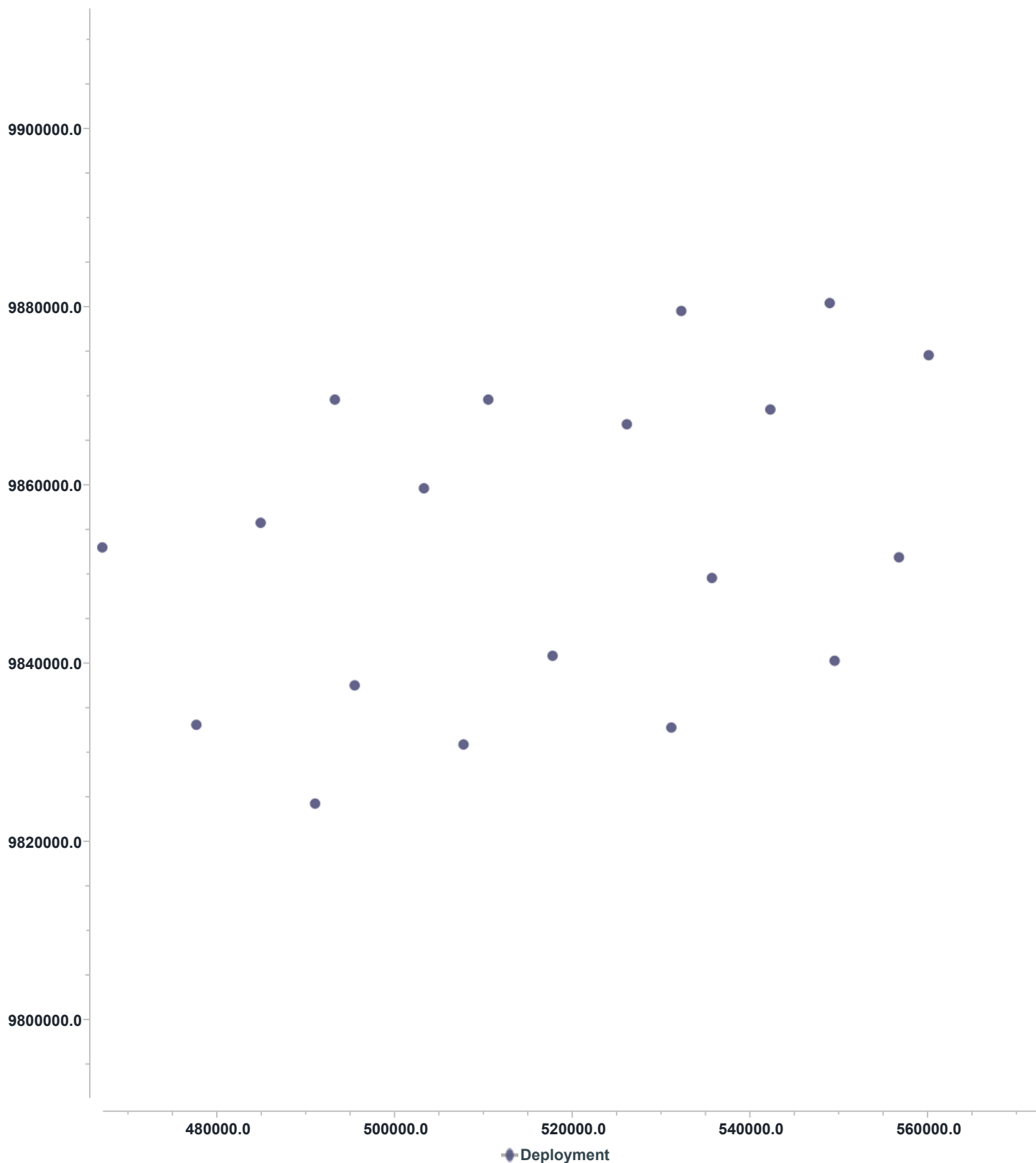
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
24	SSW	255.9	1470	1901	Prime	21.60	4.179	Complete	Complete
25	D06	165.8	1663	1025	Prime	31.90	5.872	Complete	Complete
26	T5-6P2	255.8	1501	1037	Prime	23.20	4.223	Complete	Complete
27	D05B	345.8	2373	1017	Prime	67.80	3.807	Complete	Complete
28	T5-6B	75.8	1020	1508	Prime	24.40	3.439	Midnight	Part
Total						168.90			

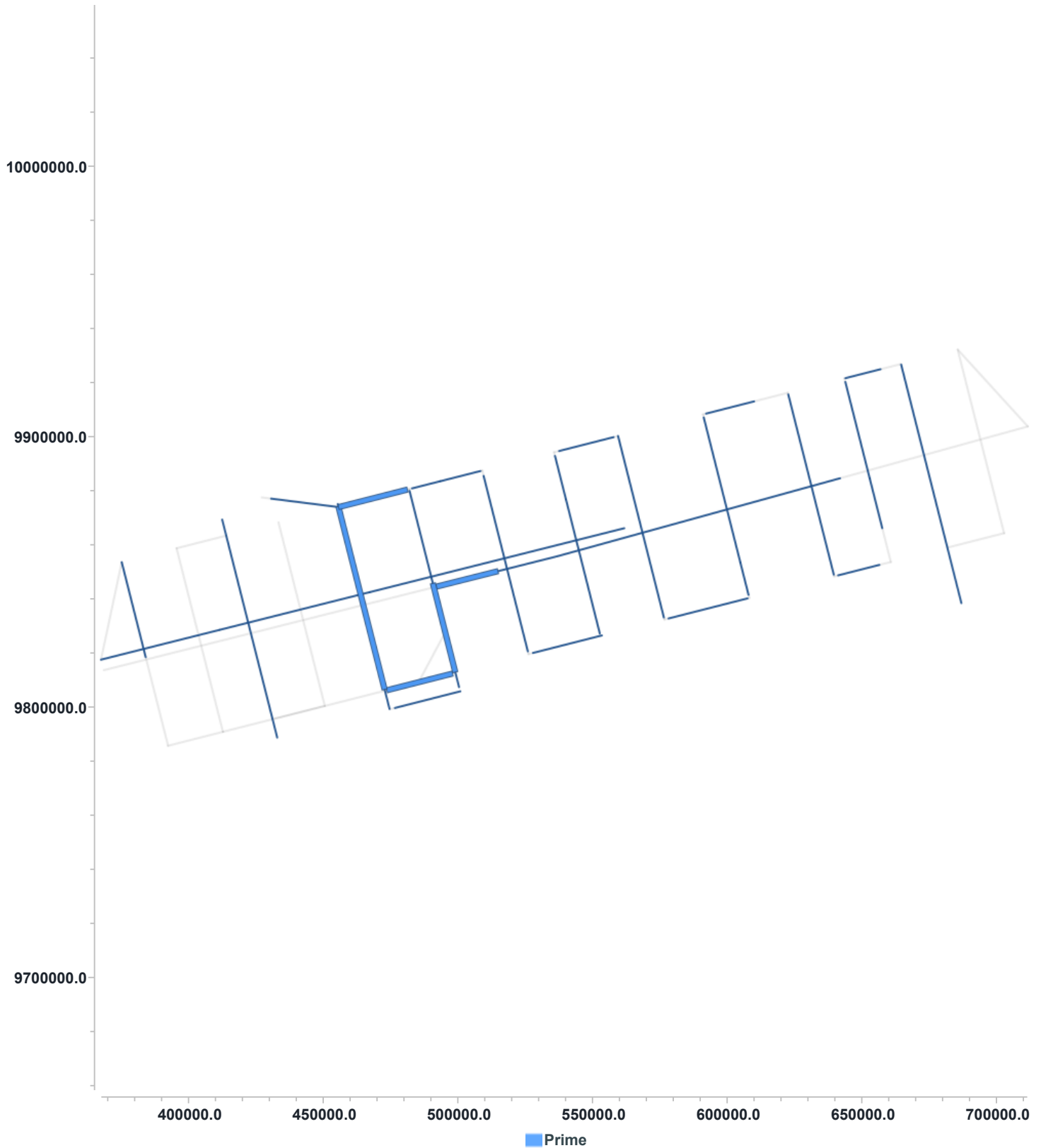
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/12/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/12/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Thu 12 Dec

12/12/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 12 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	5	14	24	18.000	
 Daily Ops Meeting	DOps	1	3	10	16	16.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Fri 13 Dec

A good day of production.
 Array 3 was recovered for an air leak on the transit line.
 The vessel completed the new line T6-2.
 A lot of work was done to prepare for the final recovery.
 At the end of day the vessel was headed north on line D02.

Daily Comment Summaries - Plan for Tomorrow

Fri 13 Dec

Finish line D02.
 Finish line T2-3
 Perform source test
 Recover the gear

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	00:07	Prime	AC_PP	0.117
Seq: 28 SOL Seq 28 Line:T5-6B Block:MGL 2411 - Chain FGSP:1509 Hdg:75.8° Prime EOL Seq 28 Line:T5-6B Block:MGL 2411 - Chain LGSP:1521 Complete				
00:07	00:11	Prime L/C	AC_PLC	0.067
Seq: 28 Line: T5-6B Nominal Prime line change.				
00:11	07:33	Prime	AC_PP	7.367
Seq: 29 SOL Seq 29 Line:D06 FGSP: 46016 Hdg:165.8° Prime EOL Seq 29 Line:D06 LGSP: 47107 Complete				
07:33	07:51	Prime L/C	AC_PLC	0.300
Seq: 29 Line: D06 Nominal Prime line change.				
07:51	20:40	Prime	AC_PP	12.817
Seq: 30 SOL Seq 30 Line:T06-02 FGSP: 48045 Hdg:208.2° Prime EOL Seq 30 Line:T06-02 LGSP: 49905 Complete				
20:40	20:43	Prime L/C	AC_PLC	0.050
Seq: 30 Line: T06-02 Nominal Prime line change.				
20:43	24:00	Prime	AC_PP	3.283
Seq: 31 SOL Seq 31 Line:D02 FGSP: 51026 Hdg:345.8° Prime				

Start	End	Category	Code	Duration (hrs)
MSP Seq 31 Line:D02 LGSP: 51505 Midnight				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

13-Dec	Hours	% Percent
Acquisition	24.000	100.000
Prime	23.583	98.264
Prime L/C	0.417	1.736
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	8.750
Source	5.617	0.936
Autofire	5.617	0.936
Streamers	17.567	2.928
Vessel	29.317	4.886
Acquisition	331.383	55.231
Prime	228.750	38.125
Prime Extended L/C	0.200	0.033
Prime L/C	17.650	2.942
Receiver Deployment/Recovery	59.400	9.900
Free Fall OBS	59.400	9.900
Receiver Survey	59.400	9.900
Swath Move	25.383	4.231
Deploy	25.383	4.231
Chargeable Standby	46.367	7.728
Fishing	24.983	4.164
Planned Operations	21.383	3.564
Streamer Deployment	21.383	3.564
Mobilisation	169.750	28.292
Mob Ashore	42.950	7.158
Transit to Prospect	126.800	21.133
Total	600.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

12/13/2024

Page 3

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	172.05	648.40	1533.85	1631.15
Combined	172.05	648.40	1533.85	1631.15

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

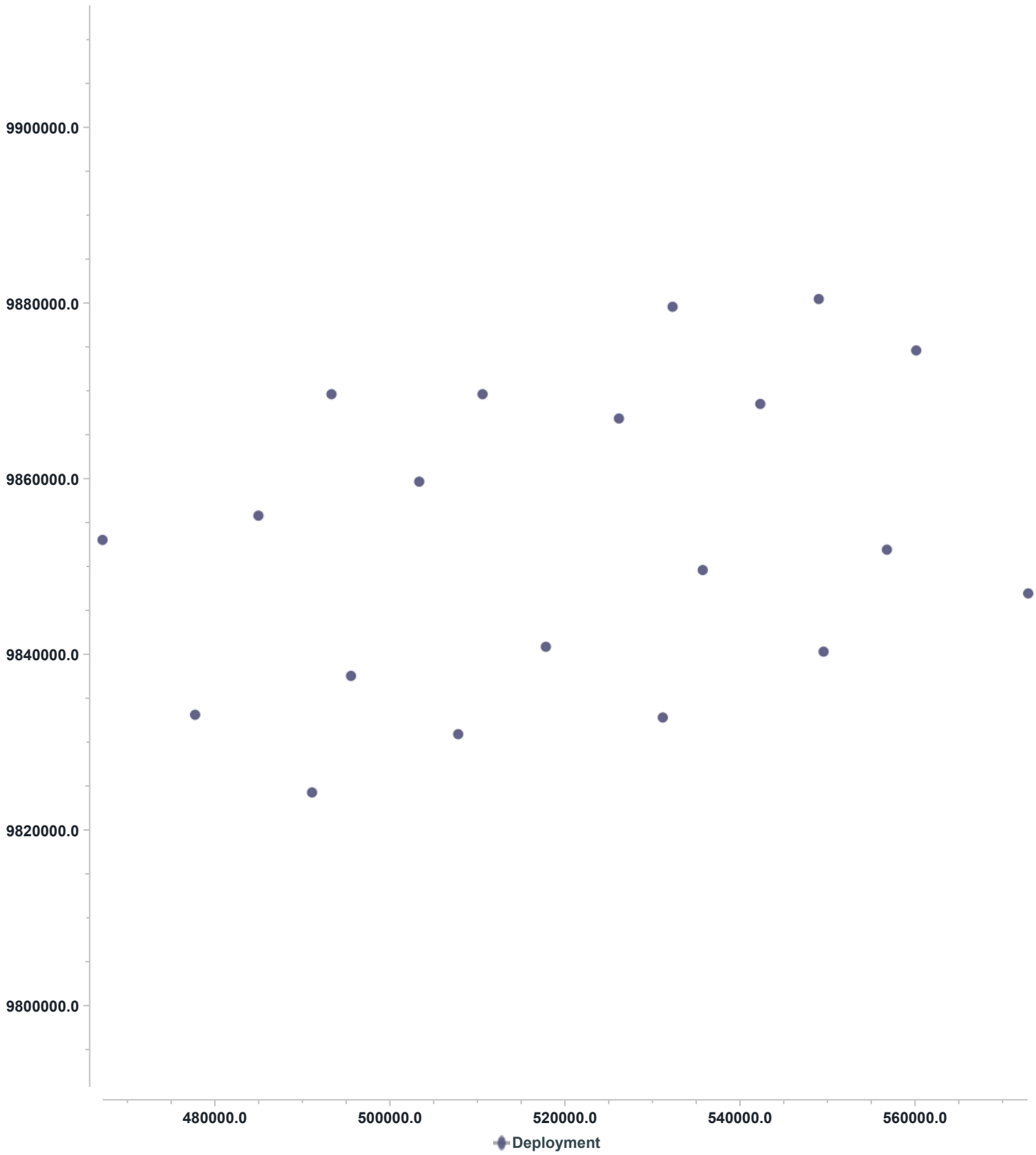
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
28	T5-6B	75.8	1509	1521	Prime	0.65	3.439	Complete	Complete
29	D06	165.8	2382	1293	Prime	54.45	3.991	Complete	Complete
30	T06-02	208.2	1046	2906	Prime	93.00	3.918	Complete	Complete
31	D02	345.8	1027	1506	Prime	23.95	3.939	Midnight	Part
Total						172.05			

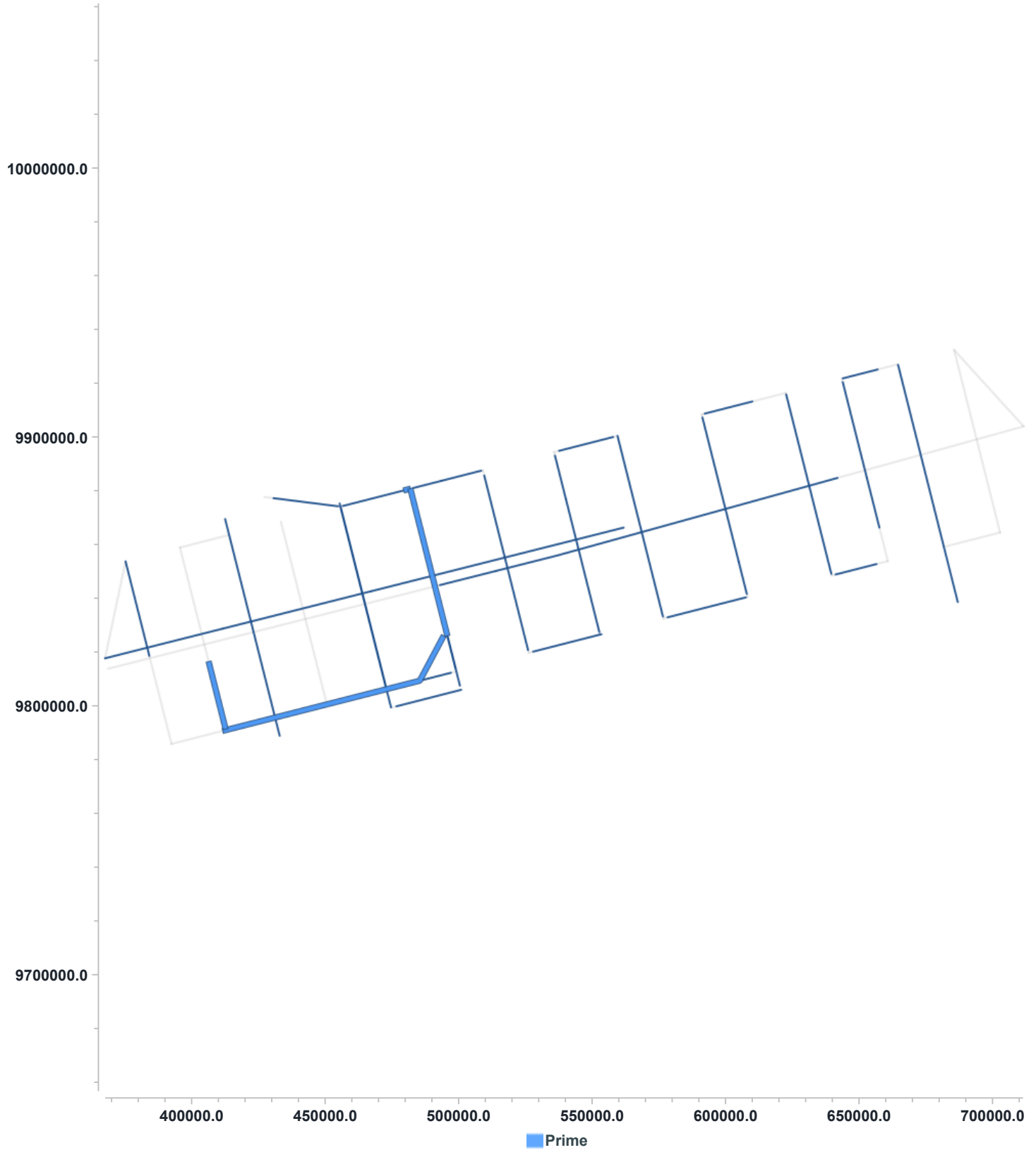
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/13/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/13/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Fri 13 Dec

12/13/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 13 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:15	13:15	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	6	15	25	19.000	
 Daily Ops Meeting	DOps	1	4	11	17	17.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

12/14/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sat 14 Dec

Start of Day:

The vessel began the day by completing line D02. Once this line was finished, the vessel transitioned to line T2-3, which was completed shortly after breakfast.

Midday Activities:

After completing line T2-3, an hour was dedicated to gun tests. During this time, the team focused on analyzing how different acquisition filters affect direct arrival times. A variety of guns were strategically fired to support the study.

Gear Recovery:

Gear recovery operations commenced just before 10:00 UTC. By 18:30, the tail buoy was safely onboard. The recovery process was carried out smoothly and efficiently.

End of Day:

At the close of the day, the vessel began its transit back to Cape Verde.

Notes:

- All operations proceeded as planned.
- No incidents or safety concerns were reported during the day's activities


Daily Comment Summaries - Plan for Tomorrow

Sat 14 Dec

Transit to Cape Verde

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	06:03	Prime	AC_PP	6.050
Seq: 31 SOL Seq 31 Line:D02 Block:MGL 2411 - Chain FGSP:1507 Hdg:345.8° Prime EOL Seq 31 Line:D02 Block:MGL 2411 - Chain LGSP:2376 Complete				
06:03	06:15	Prime L/C	AC_PLC	0.200
Seq: 31 Line: D02 Nominal Prime line change.				
06:15	09:01	Prime	AC_PP	2.767
Seq: 32 SOL Seq 32 Line:T2-3 Block:MGL 2411 - Chain FGSP:1024 Hdg:75.8° Prime EOL Seq 32 Line:T2-3 Block:MGL 2411 - Chain LGSP:1380 Complete				
09:01	09:56	Tests	SB_TE	0.917
Chargeable standby due to tests. Testing of different acquisition filters with various guns being fired at different intervals.				
09:56	18:34	Recovery	DM_RC	8.633
Demobilising offshore, recovering outboard equipment.				

Start	End	Category	Code	Duration (hrs)
18:34	24:00	 Transit From Prospect	DM_TF	5.433
Demobilising, In Transit from prospect for demobilisation ashore.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

14-Dec	Hours	% Percent
Acquisition	9.017	37.569
Prime	8.817	36.736
Prime L/C	0.200	0.833
Chargeable Standby	0.917	3.819
Tests	0.917	3.819
Demobilisation	14.067	58.611
Recovery	8.633	35.972
Transit From Prospect	5.433	22.639
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	8.413
Source	5.617	0.900
Autofire	5.617	0.900
Streamers	17.567	2.815
Vessel	29.317	4.698
Acquisition	340.400	54.551
Prime	237.567	38.072
Prime Extended L/C	0.200	0.032
Prime L/C	17.850	2.861
Receiver Deployment/Recovery	59.400	9.519
Free Fall OBS	59.400	9.519
Receiver Survey	59.400	9.519
Swath Move	25.383	4.068
Deploy	25.383	4.068
Chargeable Standby	47.283	7.577
Fishing	24.983	4.004
Planned Operations	21.383	3.427
Streamer Deployment	21.383	3.427
Tests	0.917	0.147
Mobilisation	169.750	27.204
Mob Ashore	42.950	6.883
Transit to Prospect	126.800	20.321
Demobilisation	14.067	2.254
Recovery	8.633	1.384
Transit From Prospect	5.433	0.871
Total	624.000	

Basic Project Details

MCS 15000m 50m

General Details

Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		

Cable Details

No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m

Source Details

No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	61.30	709.70	1595.15	1692.45
Combined	61.30	709.70	1595.15	1692.45

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

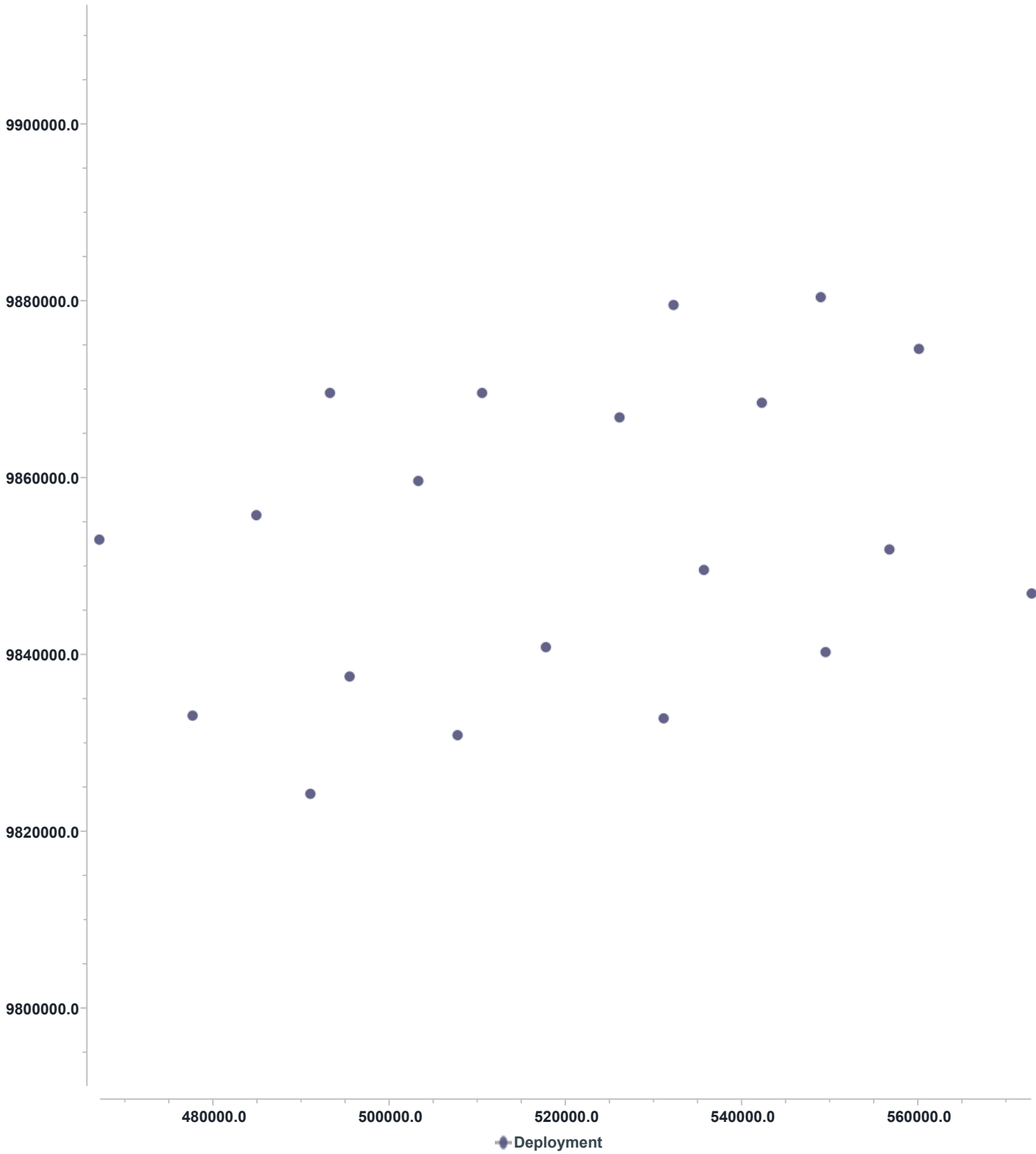
MCS 15000m 50m

Seq	Line	Heading	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
31	D02	345.8	1507	2376	Prime	43.50	3.902	Complete	Complete
32	T2-3	75.8	1024	1380	Prime	17.80	3.474	Complete	Complete
Total						61.30			

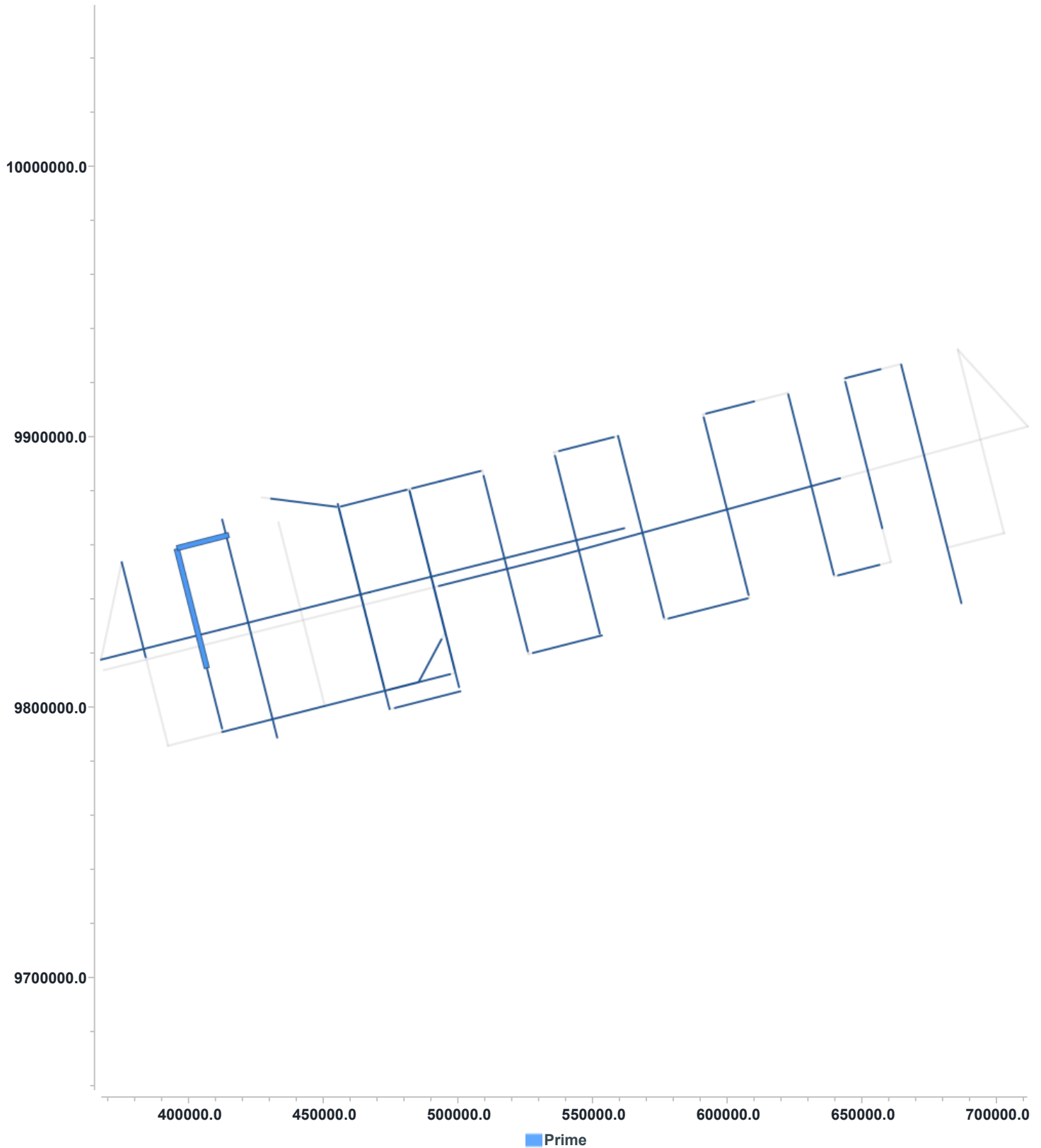
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/14/2024
OBS_Deployment



MGL 2411 - Chain: Acpt
11/19/2024 - 12/14/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sat 14 Dec

12/14/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 14 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

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- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	0	6	15	25	19.000	
Daily Ops Meeting	DOps	0	4	11	17	17.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	2	4	6		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	0	0	12	20		
Contractor	Con	0	0	12	20		
Task, Hazard, Control	THC	0	0	12	20		

12/15/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Sun 15 Dec

Vessel is transiting to Cape Verde.
 The teams are packing gear up.
 Performing post recovery maintenance and inventories.

Daily Comment Summaries - Plan for Tomorrow

Sun 15 Dec

Transit to Cape Verde

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit From Prospect	DM_TF	24.000
Demobilizing, In Transit from prospect for demobilization ashore.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

15-Dec	Hours	% Percent
Demobilisation	24.000	100.000
Transit From Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	8.102
Source	5.617	0.867
Autofire	5.617	0.867
Streamers	17.567	2.711
Vessel	29.317	4.524
Acquisition	340.400	52.531
Prime	237.567	36.662
Prime Extended L/C	0.200	0.031
Prime L/C	17.850	2.755
Receiver Deployment/Recovery	59.400	9.167
Free Fall OBS	59.400	9.167
Receiver Survey	59.400	9.167
Swath Move	25.383	3.917
Deploy	25.383	3.917
Chargeable Standby	47.283	7.297
Fishing	24.983	3.855

Category	Hours	% Percent
Planned Operations	21.383	3.300
Streamer Deployment	21.383	3.300
Tests	0.917	0.141
Mobilisation	169.750	26.196
Mob Ashore	42.950	6.628
Transit to Prospect	126.800	19.568
Demobilisation	38.067	5.874
Recovery	8.633	1.332
Transit From Prospect	29.433	4.542
Total	648.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	709.70	1595.15	1692.45
Combined	0	709.70	1595.15	1692.45

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

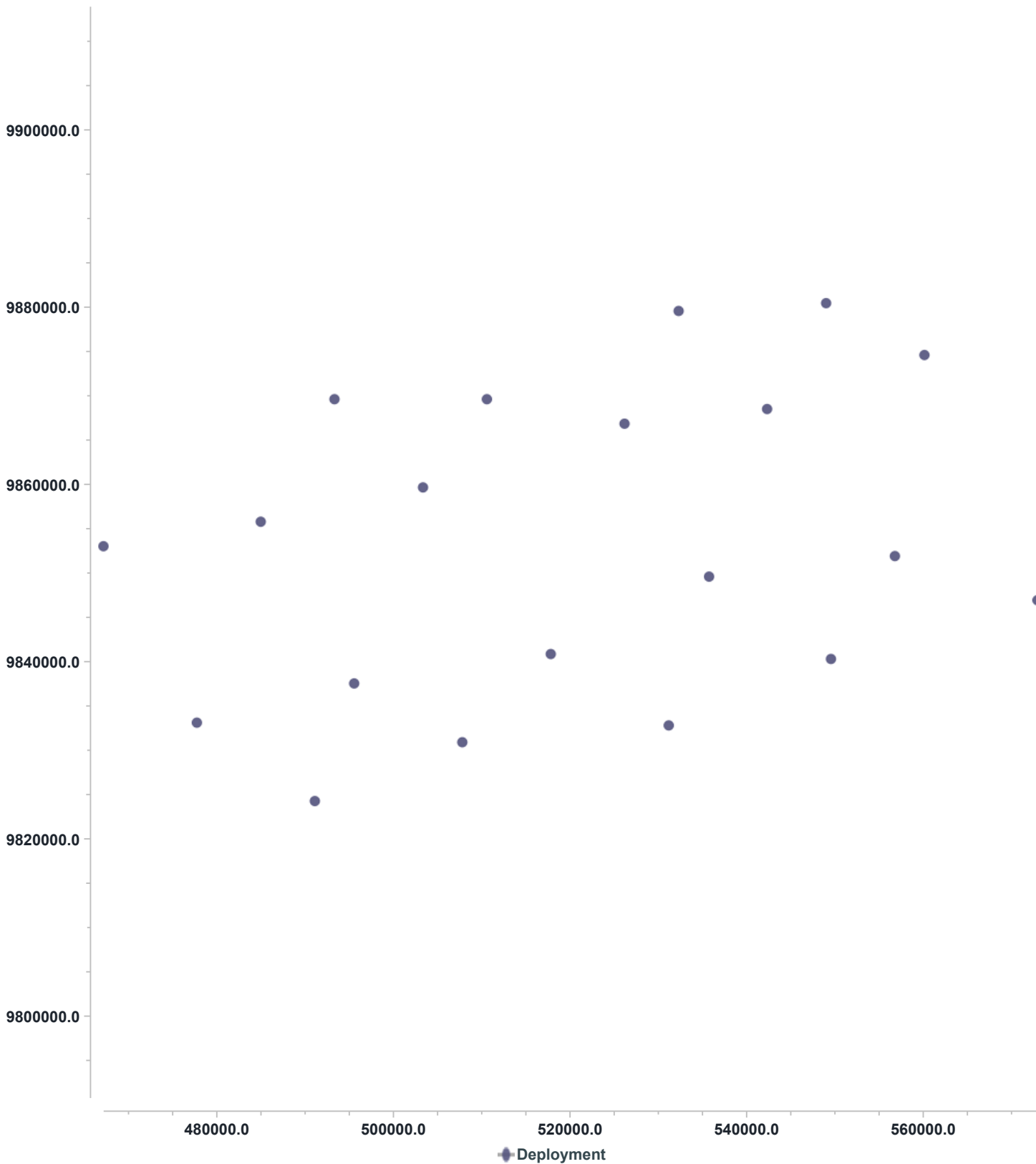
MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

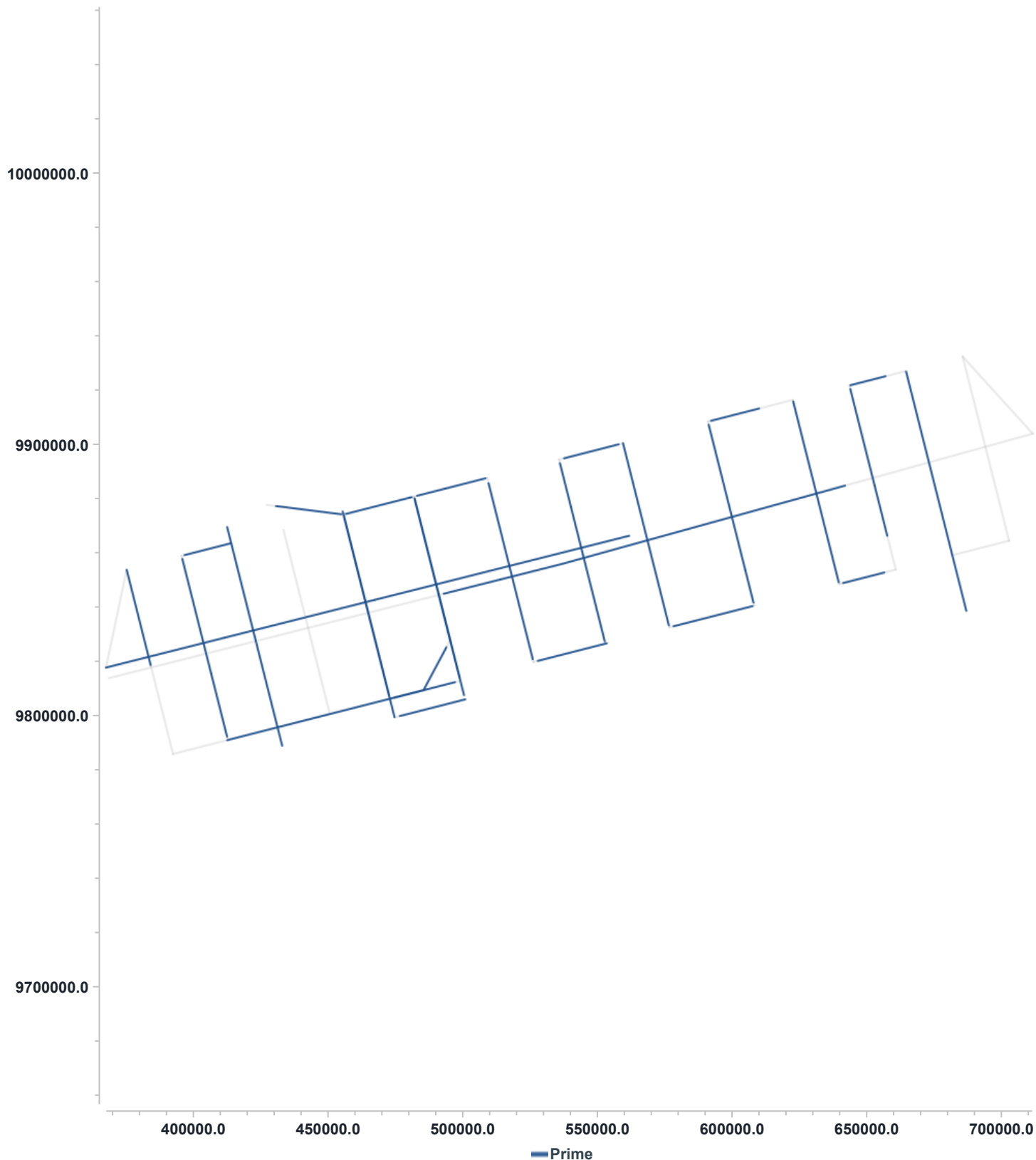
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/15/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/15/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Sun 15 Dec

12/15/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 15 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
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- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:10	13:10	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	7	16	26	20.000	
 Daily Ops Meeting	DOps	1	5	12	18	18.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	2	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	0	12	20		
 Contractor	Con	0	0	12	20		
 Task, Hazard, Control	THC	0	0	12	20		

Client:	Lamont-Doherty Earth Observatory	Contractor:	Lamont-Doherty Earth Observatory
Job No:	MGL2411	Job No:	MGL2411
Block:	MGL 2411 - Chain	Vessel:	Marcus G Langseth
Client Contact:		Supervisor:	
Consultancy:		Party Chiefs:	Cody Bahlau
Job No:		Client Reps:	Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Mon 16 Dec

A full day of transit.

Good ground speed as we head north.
The marine crew setup a picnic style BBQ at the muster station.
While we no longer have our grills, the galley staff stepped up and prepared a fantastic spread of picnic-style food.
Picnic tables were arranged, along with a bus station, a trash can, and a water jug to complete the setup.

The social agenda was filled with music, corn hole, and a crew picture to capture the moment.
It was a great way to celebrate the end of data acquisition on MGL 2411.



Daily Comment Summaries - Plan for Tomorrow

Mon 16 Dec

Full day of transiting.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit From Prospect	DM_TF	24.000

Demobilising, In Transit from prospect for demobilisation ashore.

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

16-Dec	Hours	% Percent
Demobilisation	24.000	100.000
Transit From Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	7.813
Source	5.617	0.836
Autofire	5.617	0.836
Streamers	17.567	2.614
Vessel	29.317	4.363
Acquisition	340.400	50.655
Prime	237.567	35.352
Prime Extended L/C	0.200	0.030
Prime L/C	17.850	2.656
Receiver Deployment/Recovery	59.400	8.839
Free Fall OBS	59.400	8.839
Receiver Survey	59.400	8.839
Swath Move	25.383	3.777
Deploy	25.383	3.777
Chargeable Standby	47.283	7.036
Fishing	24.983	3.718
Planned Operations	21.383	3.182
Streamer Deployment	21.383	3.182
Tests	0.917	0.136
Mobilisation	169.750	25.260
Mob Ashore	42.950	6.391
Transit to Prospect	126.800	18.869
Demobilisation	62.067	9.236
Recovery	8.633	1.285
Transit From Prospect	53.433	7.951
Total	672.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4

12/16/2024

Page 3

MCS 15000m 50m

String Separation:	6 m	String length:	0 m		
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Production Totals (Accpt Main km by interval) - Prime: Full Fold, Infill: Sail Line

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	1595.15	1692.45
Combined	0	0	1595.15	1692.45

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

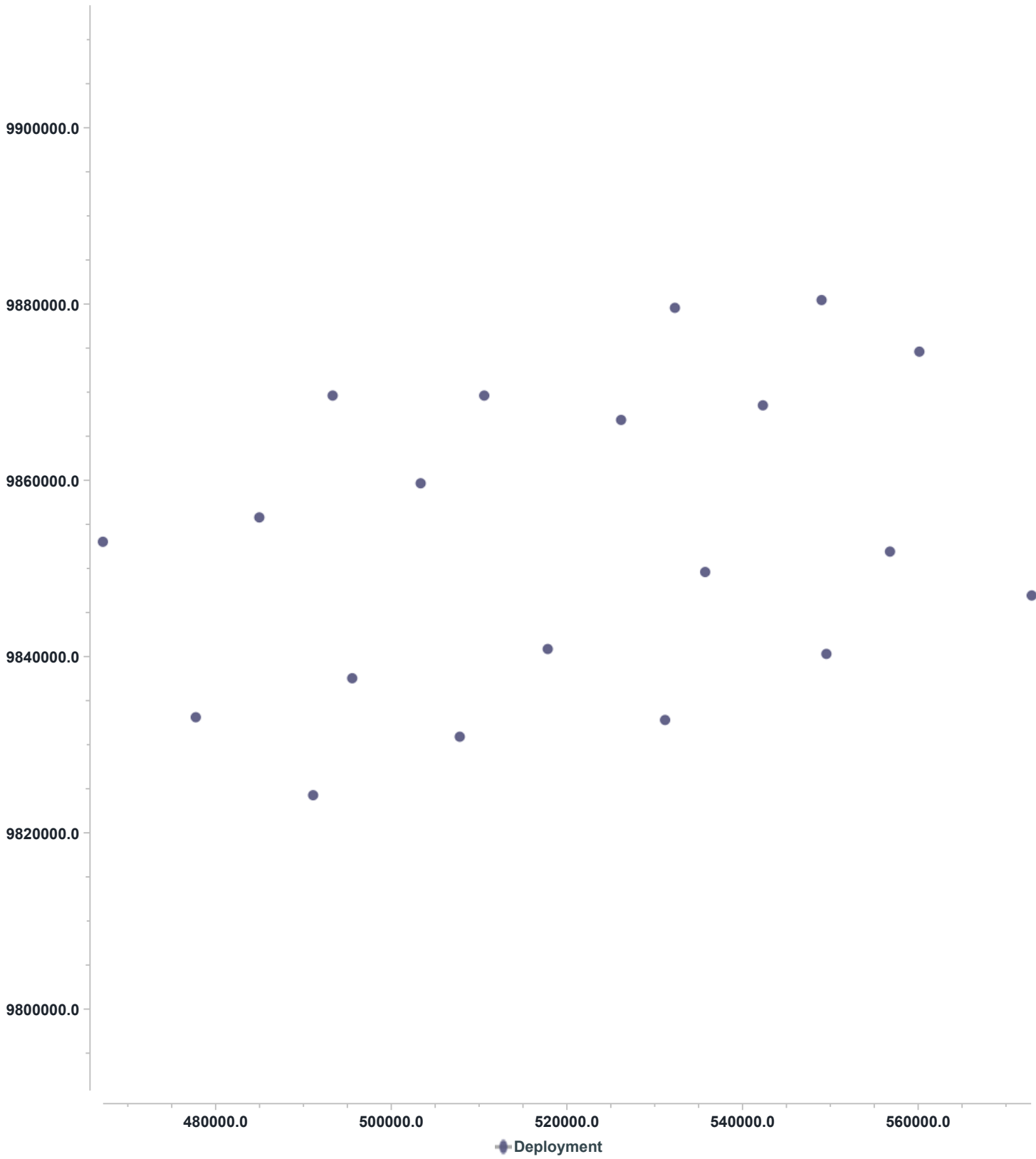
MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

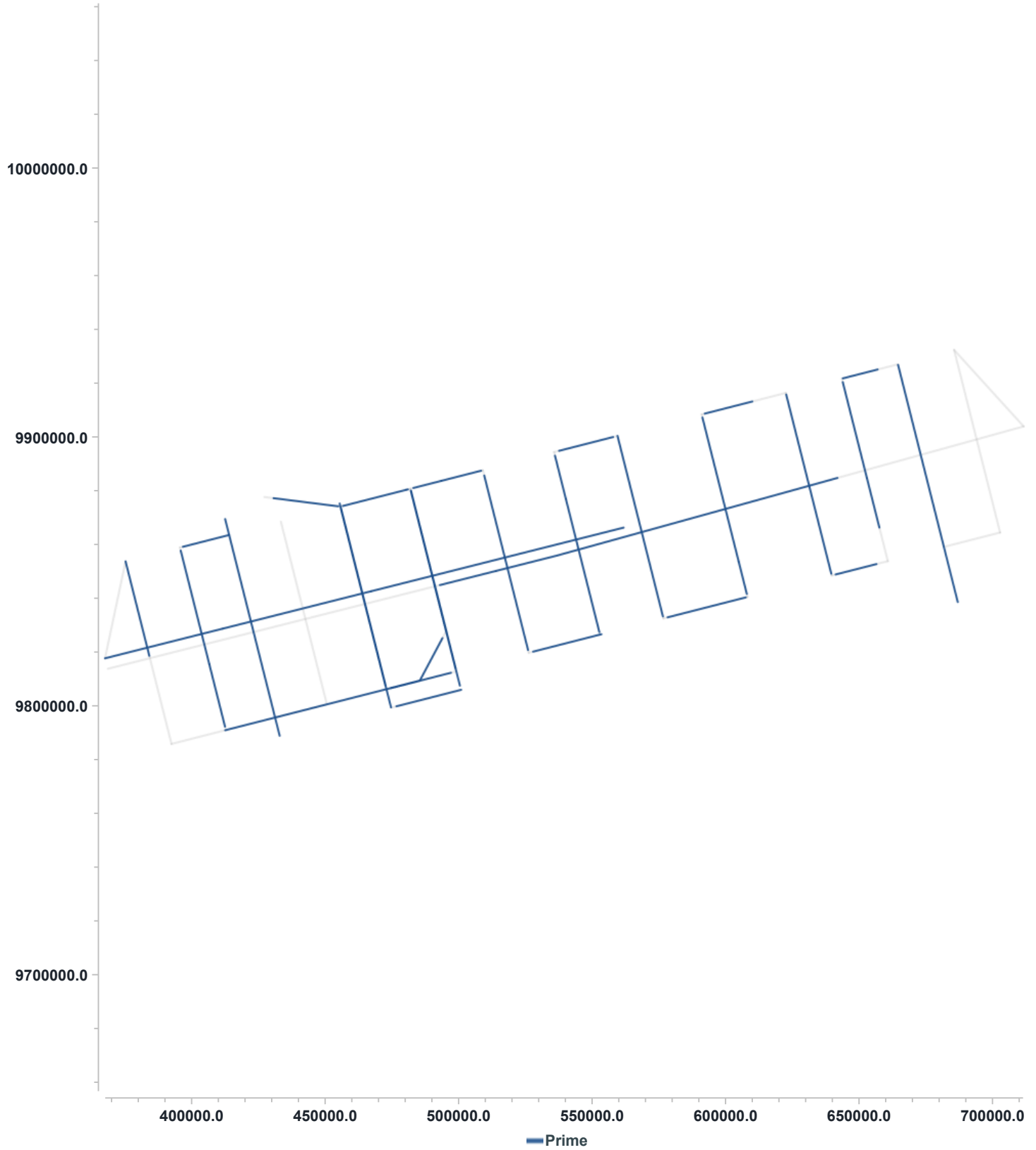
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/16/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/16/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Mon 16 Dec

12/16/2024

Page 6

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 16 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
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HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	

12/16/2024

Page 7

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Meetings	Mtgs	0	0	16	26	20.000	
Daily Ops Meeting	DOps	0	0	12	18	18.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	0	4	6		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	0	0	12	20		
Contractor	Con	0	0	12	20		
Task, Hazard, Control	THC	0	0	12	20		

12/17/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Tue 17 Dec

Transiting all day.
 ETA in to Cape Verde is after lunch on the 19th.
 We have seen good ground speed all day.

Daily Comment Summaries - Plan for Tomorrow

Tue 17 Dec

Transit to Cape Verde
 Arrive in to Mindelo after lunch.

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit From Prospect	DM_TF	24.000
Demobilizing, In Transit from prospect for demobilization ashore.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

17-Dec	Hours	% Percent
Demobilisation	24.000	100.000
Transit From Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	7.543
Source	5.617	0.807
Autofire	5.617	0.807
Streamers	17.567	2.524
Vessel	29.317	4.212
Acquisition	340.400	48.908
Prime	237.567	34.133
Prime Extended L/C	0.200	0.029
Prime L/C	17.850	2.565
Receiver Deployment/Recovery	59.400	8.534
Free Fall OBS	59.400	8.534
Receiver Survey	59.400	8.534
Swath Move	25.383	3.647
Deploy	25.383	3.647
Chargeable Standby	47.283	6.794
Fishing	24.983	3.590

Category	Hours	% Percent
Planned Operations	21.383	3.072
Streamer Deployment	21.383	3.072
Tests	0.917	0.132
Mobilisation	169.750	24.389
Mob Ashore	42.950	6.171
Transit to Prospect	126.800	18.218
Demobilisation	86.067	12.366
Recovery	8.633	1.240
Transit From Prospect	77.433	11.125
Total	696.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	1595.15	1692.45
Combined	0	0	1595.15	1692.45

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

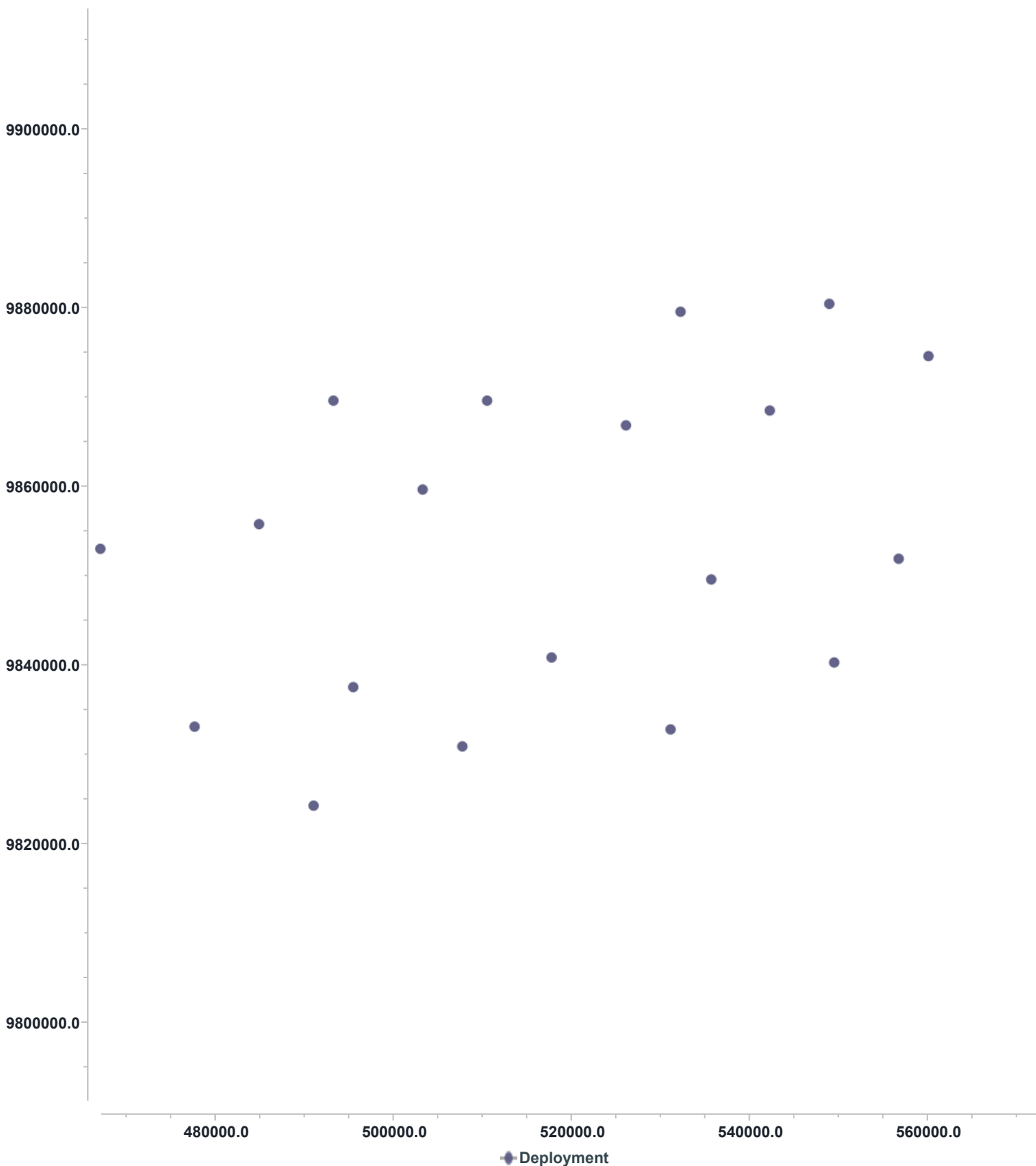
MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

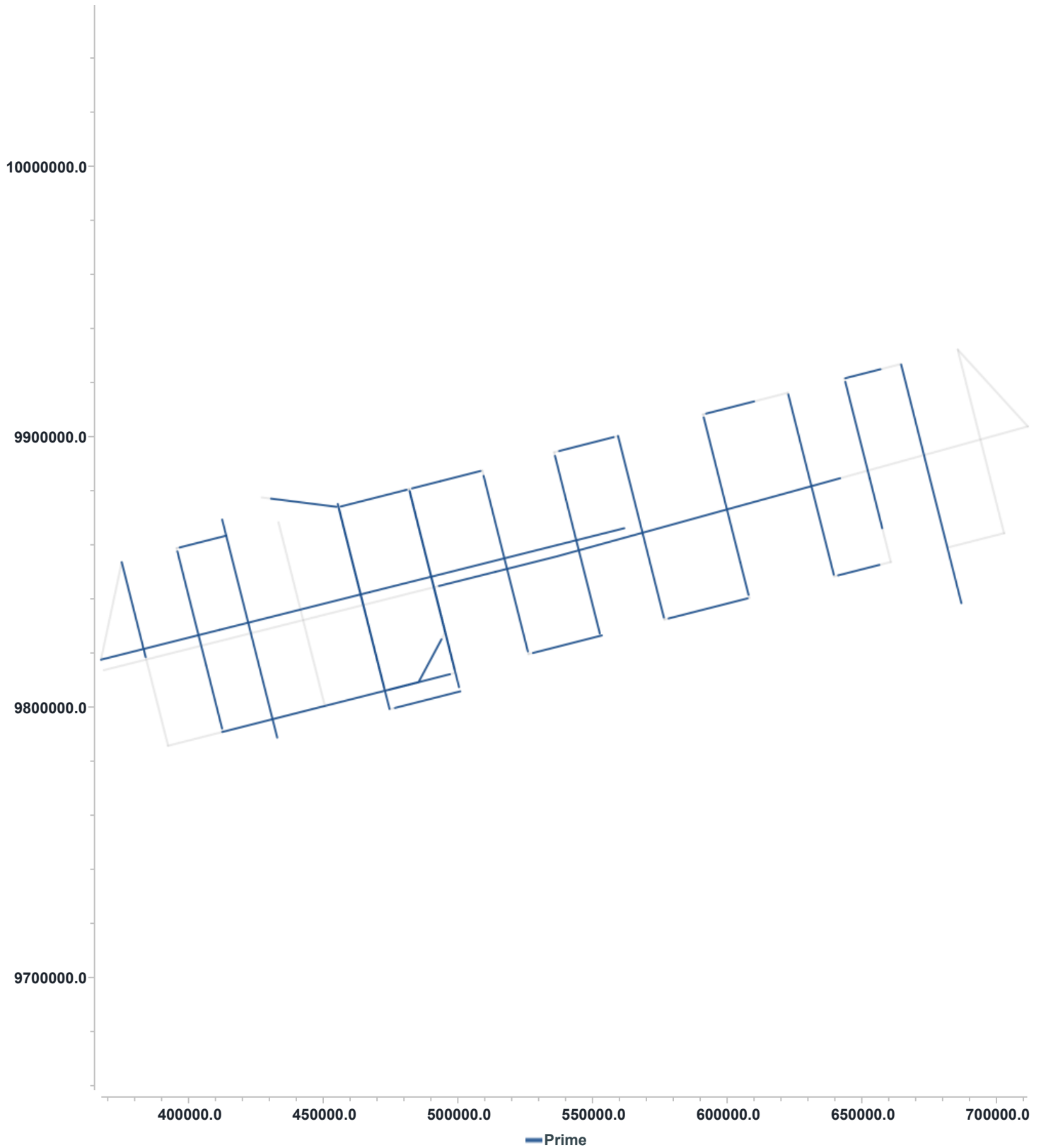
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/17/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/17/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Tue 17 Dec

12/17/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 17 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
- Andrew Van As - Contract Compressor Mechanic

PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth

- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:05	13:05	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

Daily Total Category	Code	Count
Task, Hazard, Control	Re_Con_THC	3

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	
Fire Drill	Fi	0	0	0	1	1.000	
Security Drill	Sec	0	0	0	1	1.000	
Meetings	Mtgs	1	2	19	29	23.000	
Daily Ops Meeting	DOps	1	2	15	21	21.000	
Start-up Meeting	StUp	0	0	0	2	2.000	
Toolbox Meetings	Tbox	0	0	4	6		
Training	Trng	0	0	0	2	2.000	
Other Training	OT	0	0	0	1	1.000	
Vessel Induction Tours	VIT	0	0	0	1	1.000	
Reports	Re	3	3	15	23		
Contractor	Con	3	3	15	23		
Task, Hazard, Control	THC	3	3	15	23		

12/18/2024

Page 1

Client: Lamont-Doherty Earth Observatory
Job No: MGL2411
Block: MGL 2411 - Chain
Client Contact:
Consultancy:
Job No:

Contractor: Lamont-Doherty Earth Observatory
Job No: MGL2411
Vessel: Marcus G Langseth
Supervisor:
Party Chiefs: Cody Bahlau
Client Reps: Daniel Lizarralde

Daily Comment Summaries - Daily Summary

Wed 18 Dec

Transiting all day.
 ETA in to Cape Verde is after lunch on the 19th.
 - Captain has confirmation from the port and they are ready for us.
 We have seen good ground speed all day.

Daily Comment Summaries - Plan for Tomorrow

Wed 18 Dec

Transit in the morning,
 ETA is ~1200.
 Tie up along side berth 4.
 Start of demobilization; crane ops, moving of gear etc

Timing Diary (Marcus G Langseth, MCS 15000m 50m)

Start	End	Category	Code	Duration (hrs)
00:00	24:00	Transit From Prospect	DM_TF	24.000
Demobilizing, In Transit from prospect for demobilization ashore.				

Timing Day by Day (Marcus G Langseth, MCS 15000m 50m)

18-Dec	Hours	% Percent
Demobilisation	24.000	100.000
Transit From Prospect	24.000	100.000
Day's Total	24.000	100.000

Timing Breakdown Summary - Project (Marcus G Langseth, MCS 15000m 50m, OBS_Deployment)

Category	Hours	% Percent
DownTime	52.500	7.292
Source	5.617	0.780
Autofire	5.617	0.780
Streamers	17.567	2.440
Vessel	29.317	4.072
Acquisition	340.400	47.278
Prime	237.567	32.995
Prime Extended L/C	0.200	0.028
Prime L/C	17.850	2.479
Receiver Deployment/Recovery	59.400	8.250
Free Fall OBS	59.400	8.250
Receiver Survey	59.400	8.250
Swath Move	25.383	3.525
Deploy	25.383	3.525

Category	Hours	% Percent
Chargeable Standby	47.283	6.567
Fishing	24.983	3.470
Planned Operations	21.383	2.970
Streamer Deployment	21.383	2.970
Tests	0.917	0.127
Mobilisation	169.750	23.576
Mob Ashore	42.950	5.965
Transit to Prospect	126.800	17.611
Demobilisation	110.067	15.287
Recovery	8.633	1.199
Transit From Prospect	101.433	14.088
Total	720.000	

Basic Project Details

MCS 15000m 50m					
General Details					
Record length:	20000 ms	Sample rate:	2 ms	Shotpoint interval:	50 m
CoS to CNG:	178 m	Fold Coverage:	0		
Cable Details					
No of Cables:	1	Chans Per Cable:	1200	Front Depth:	12 m
Tail Depth:	12 m	Length:	15000	Group interval:	12.5 m
Source Details					
No of Sources:	1	Total Volume:	6600 cu ins	Depth:	12
Pressure:	1950 PSI	Volume:	6600	Strings per source:	4
String Separation:	6 m	String length:	0 m		

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

MCS 15000m 50m

Accepted km	Day	Week	Month	Project
Prime	0	0	1595.15	1692.45
Combined	0	0	1595.15	1692.45

Production Listing (Accpt Main km) - Prime: Full Fold, Infill: Unknown

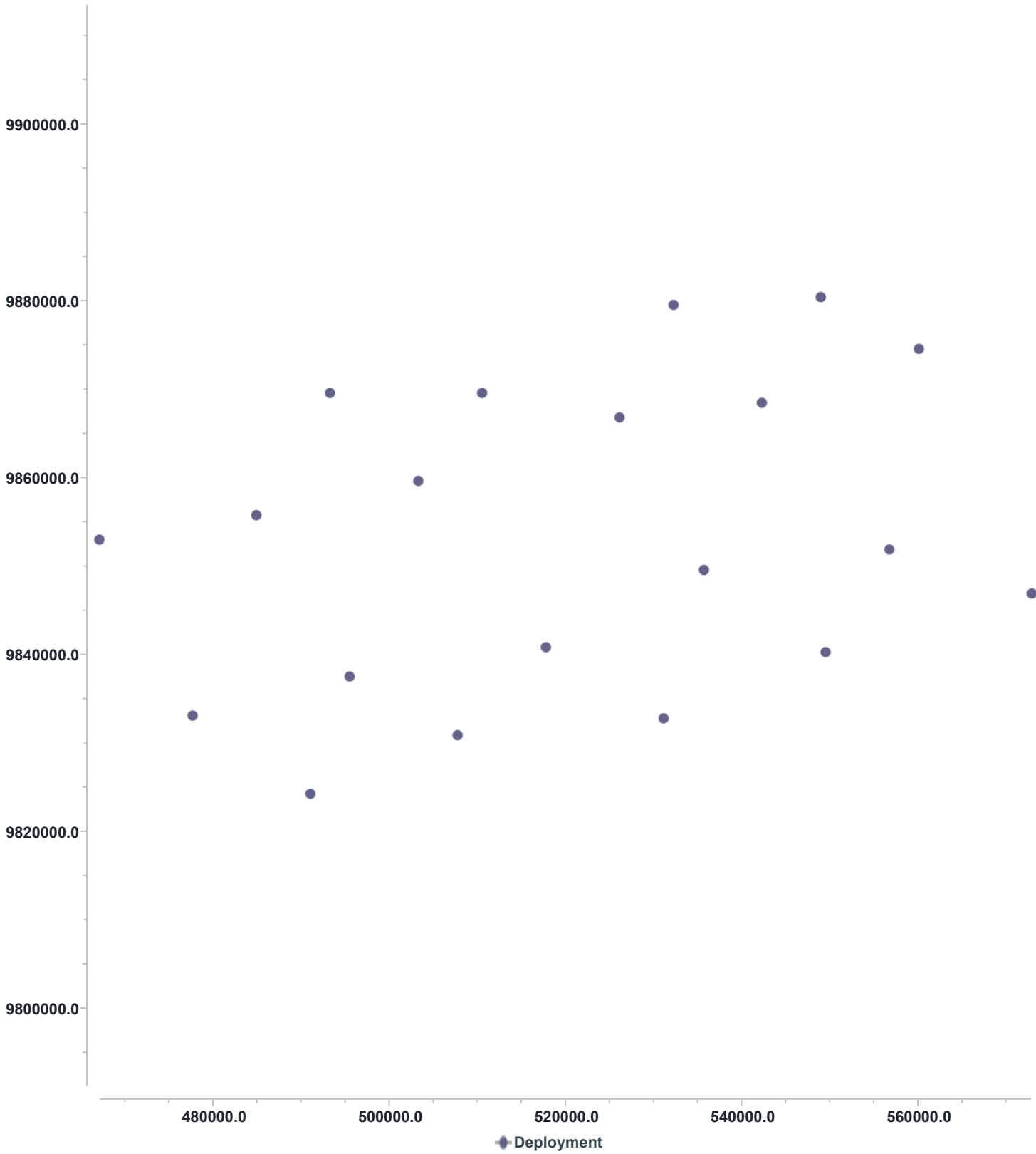
MCS 15000m 50m

Seq	Line	FGSP	LGSP	Prod Type	Production	Ave Knots	Seq Status	Line Status
Total					0			

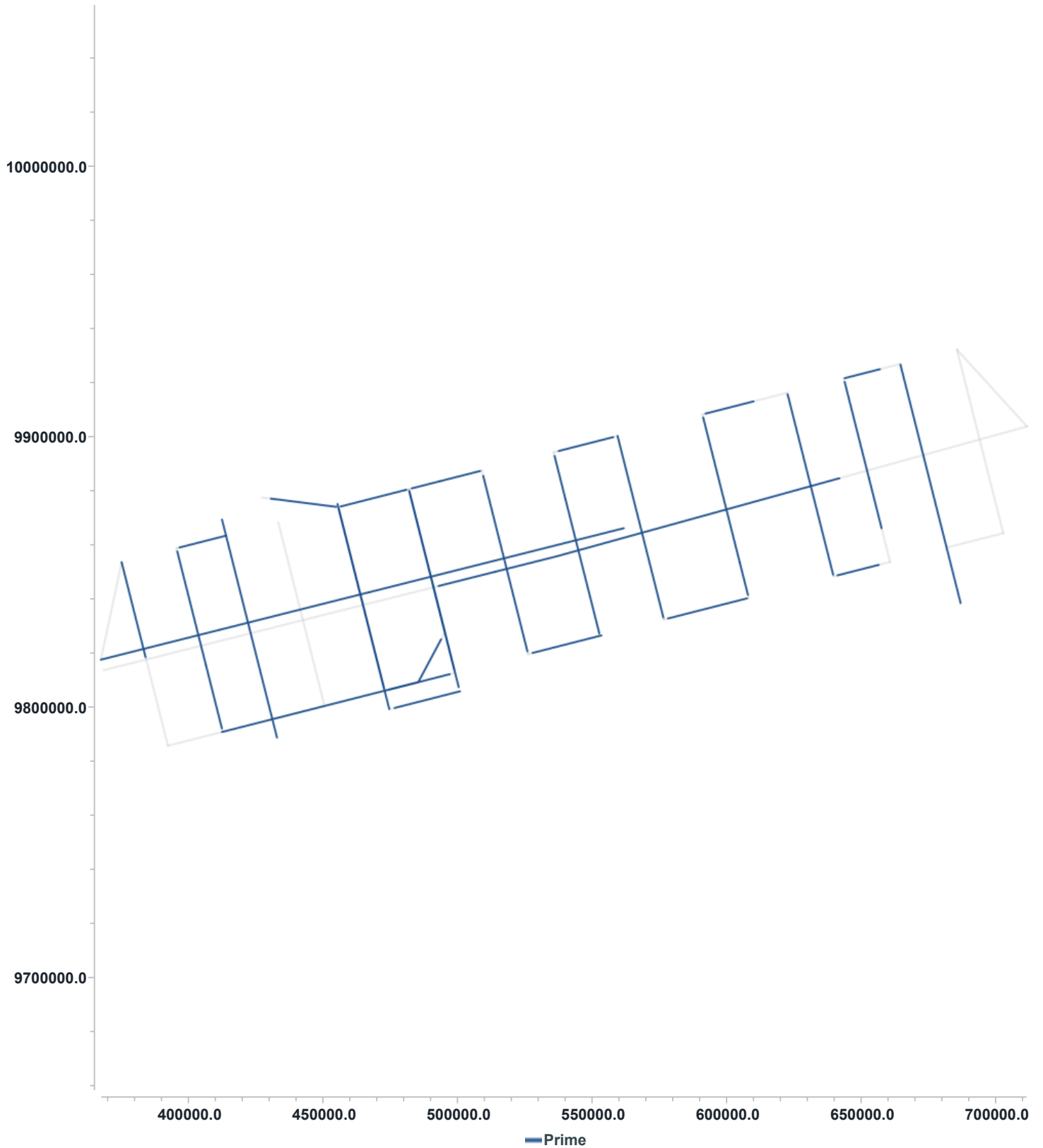
Production Totals (points)

Accepted	Day	Week	Month	Project
Deployment	0	0	0	20

MGL 2411 - Chain
11/19/2024 - 12/18/2024
OBS_Deployment



MGL 2411 - Chain: Accpt
11/19/2024 - 12/18/2024
MCS 15000m 50m



Daily Comment Summaries - Daily Comments On Status of Equipment

Wed 18 Dec

12/18/2024

Page 5

Navigation:

No Major Issues to Report

Information Technology (IT):

No Major Issues to Report

Acquisition (MCS):

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 18 Dec

Technical Staff On-board the Langseth

- Cody Bahlau L-DEO OMO Chief Science Officer
- Josh Kasinger L-DEO OMO Chief Source Mechanic
- Brian Agee L-DEO OMO Source Mechanic
- Gilles Guerin - L-DEO OMO Observer
- Riley Lopez - L-DEO OMO Observer
- Aaron Martin- L-DEO OMO Navigator
- Malcolm Moody - Contract Source Mechanic
- Dean Marshall - Contract Source Mechanic
- Joel Hitchcow - Contract Source Mechanic
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PSO Staff On-board the Langseth

- Amanda Dubuque - RPS Lead PSO
- Chelsea Twohy - RPS PSO
- Sirimavo Gonsalves - RPS PSO
- Jaisa Vedana - RPS PSO
- Elsy Olivares - RPS PSO

Science Party On-board the Langseth













- Daniel Lizarralde - PI
- Mark Behn - Co-PI
- Hanchao Jian - Scientist
- Jianhua Gong - Scientist
- Islam Arif - Scientist
- Peyton Dewaelsche - Scientist
- Evan Saltman - Scientist
- Alexandre Janin - Scientist
- Martin Rapa - OBS Engineer
- Don Elliot - OBS Technician

HSE Events Diary (Marcus G Langseth)

Start	End	Category	Code
12:05	13:05	Daily Ops Meeting	Mtgs_DOps
HSE - Daily HSE Operation Meeting			

HSE Event Period Totals - Project (Marcus G Langseth)

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
Drills	Drls	0	0	0	3	3.000	
Abandon Ship Drill	AS	0	0	0	1	1.000	

Category	Code	Day (num)	Week (num)	Month (num)	Project (num)	Proj Hours	Man Hours
 Fire Drill	Fi	0	0	0	1	1.000	
 Security Drill	Sec	0	0	0	1	1.000	
 Meetings	Mtgs	1	3	20	30	24.000	
 Daily Ops Meeting	DOps	1	3	16	22	22.000	
 Start-up Meeting	StUp	0	0	0	2	2.000	
 Toolbox Meetings	Tbox	0	0	4	6		
 Training	Trng	0	0	0	2	2.000	
 Other Training	OT	0	0	0	1	1.000	
 Vessel Induction Tours	VIT	0	0	0	1	1.000	
 Reports	Re	0	3	15	23		
 Contractor	Con	0	3	15	23		
 Task, Hazard, Control	THC	0	3	15	23		