R/V M.G. Langseth **MGL2201**
April 4 – 27, 2027, Newport OR

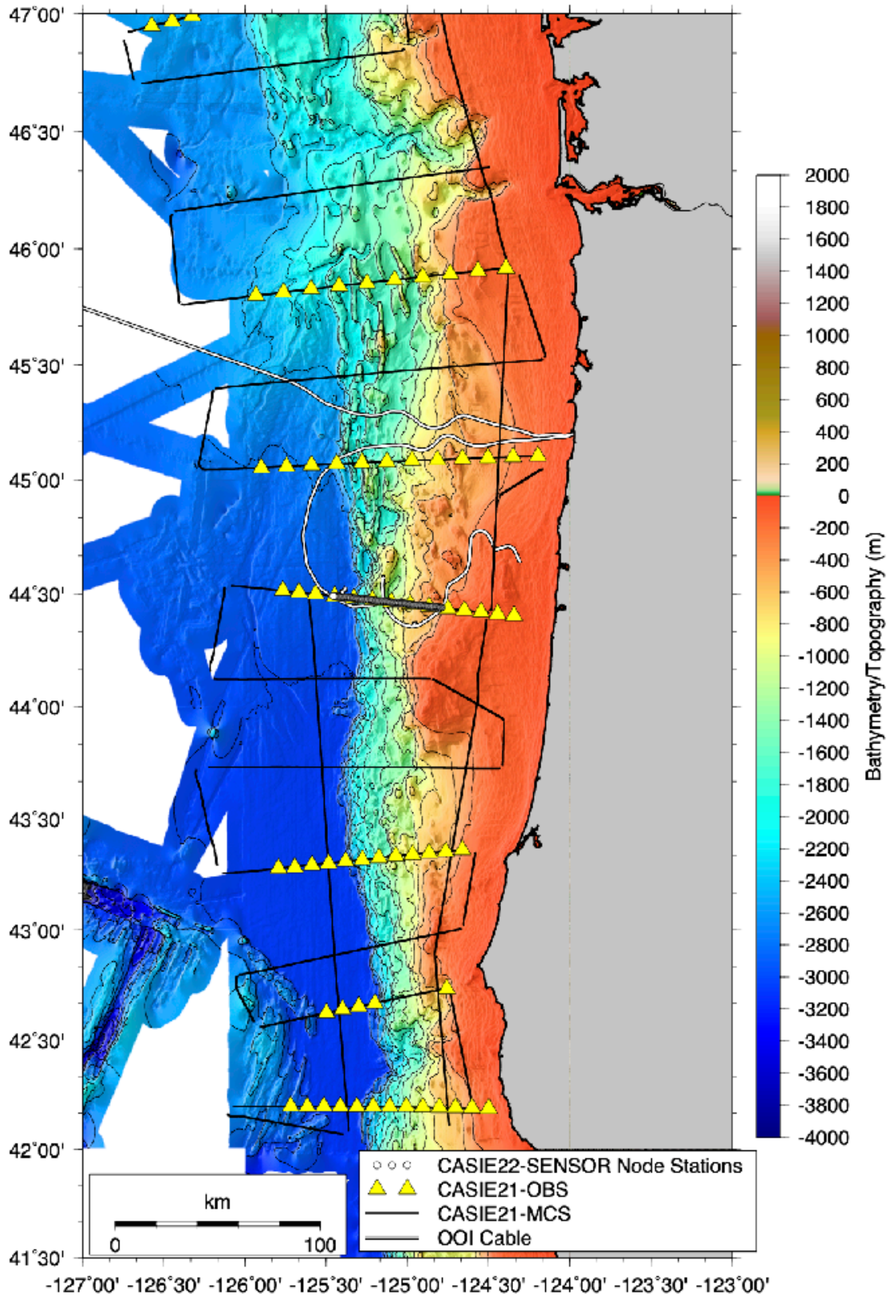
CASIE22
CAscadia **S**eismic **I**maging **E**xperiment

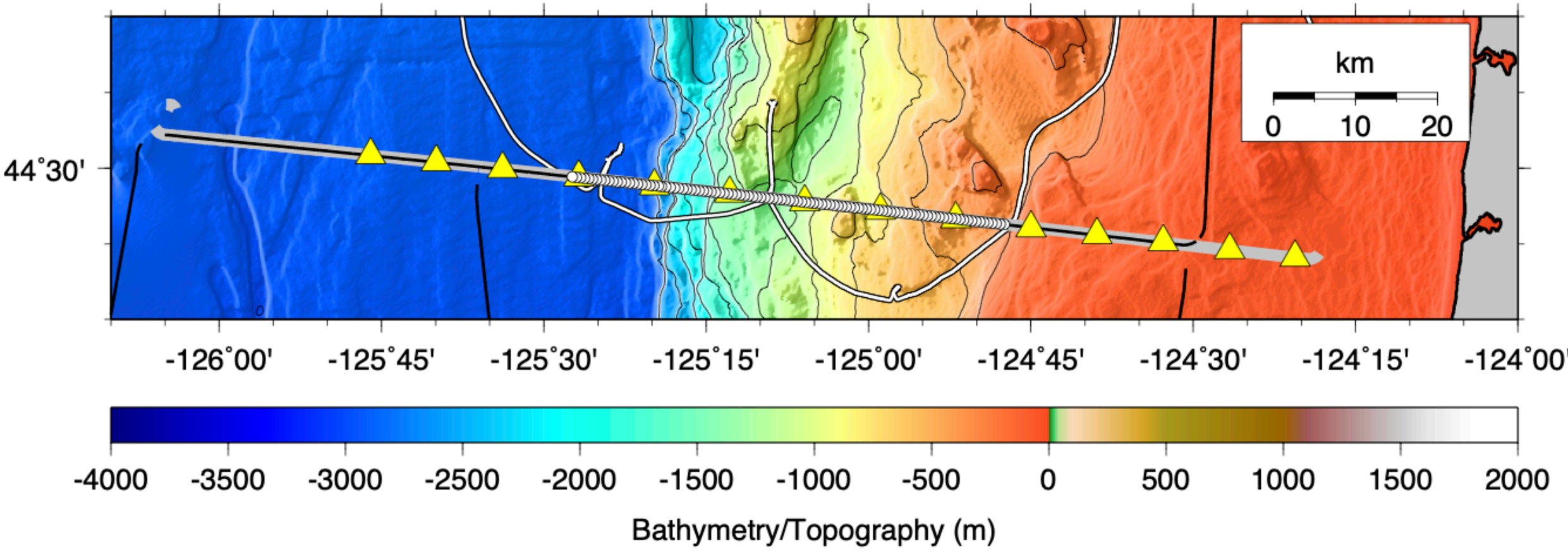
SENSOR
SEafloor **N**odal **S**eismic arrays off **OR**egon

ROV	*Science*
1200-0000	
Jesse Doren	Dan Lizarralde
Tym Catterson	Bailey Fluegel
Erik Hodges	
0000-1200	
Paul Sanacore	J. Pablo Canales
Rudy Schlepp	Hanchao Jian
Kevin Vezzani	

Survey	
1200-0000	George Loy
0000-1200	Albert Genther

Node deployment: April 9-16
Airgun Activities: April 16-18
Node Recoveries: April 18-24




km
0
10
20
44˚30'
-126˚00'
-125˚45'
-125˚30'
-125˚15'
-125˚00'
-124˚45'
-124˚30'
-124˚15'
-124˚00'
-4000
-3500
-3000
-2500
-2000
-1500
-1000
-500
0
500
1000
1500
2000
Bathymetry/Topography (m)
CASIE22-SENSOR Node Stations
CASIE22-SENSOR PD13 Shots
CASIE21-OBS
CASIE21-MCS
OOI Cable

Node Deployments

Dive #	Start Date Time [UTC]	Start Lat (dec. degrees)	Start Long (dec. degrees)	Start Depth (m)	End Date Time [UTC]	End Lat (dec. degrees)	End Long (dec. degrees)	End Depth (m)	Duration [hours]	# of Nodes Carried	OBX Station #s
2	Wed 13 Apr 2022 01:03:36 +0000	44.490807	-125.455637	2903	Wed 13 Apr 2022 12:23:16 +0000	44.487378	-125.418545	2905.3	11.3	7	280-286
3	Wed 13 Apr 2022 13:00:21 +0000	44.487003	-125.411975	2909.7	Wed 13 Apr 2022 22:03:01 +0000	44.48403	-125.374053	2907	9.1	7	273-279
4	Wed 13 Apr 2022 22:36:12 +0000	44.483637	-125.3678	2906	Thu 14 Apr 2022 08:23:01 +0000	44.480178	-125.32356	2609.5	10.8	8	265-272
5	Thu 14 Apr 2022 08:47:54 +0000	44.479832	-125.318452	2676.5	Thu 14 Apr 2022 18:00:00 +0000	44.476878	-125.2736	1979.9	10.2	8	257-264
6	Thu 14 Apr 2022 19:04:08 +0000	44.475827	-125.266603	1928.8	Fri 15 Apr 2022 01:58:10 +0000	44.472505	-125.22234	1454.8	6.9	8	249-256
7	Fri 15 Apr 2022 02:21:50 +0000	44.471972	-125.216048	1411.9	Fri 15 Apr 2022 09:24:10 +0000	44.468053	-125.165492	1280.7	7.1	9	240-248
8	Fri 15 Apr 2022 09:46:09 +0000	44.467548	-125.159187	1286.4	Fri 15 Apr 2022 16:25:17 +0000	44.463622	-125.1091	1226.6	7.7	9	231-239
9	Fri 15 Apr 2022 16:56:16 +0000	44.463122	-125.102862	1201.8	Fri 15 Apr 2022 22:29:50 +0000	44.459168	-125.052903	832.2	6.6	9	222-230
10	Fri 15 Apr 2022 22:52:03 +0000	44.458683	-125.046675	785.3	Sat 16 Apr 2022 04:40:16 +0000	44.45478	-124.9967	867.7	6.8	9	213-221
11	Sat 16 Apr 2022 05:08:32 +0000	44.45424	-124.990457	849	Sat 16 Apr 2022 10:08:04 +0000	44.45025	-124.94051	562	5	9	204-212
12	Sat 16 Apr 2022 10:41:46 +0000	44.449587	-124.934937	560.7	Sat 16 Apr 2022 15:16:00 +0000	44.445468	-124.884545	382.3	5.6	9	195-203
13	Sat 16 Apr 2022 15:41:20 +0000	44.445045	-124.878103	364.3	Sat 16 Apr 2022 19:22:00 +0000	44.441033	-124.828188	360.3	4.7	9	186-194
14	Sat 16 Apr 2022 19:45:08 +0000	44.440538	-124.821938	355.1	Sat 16 Apr 2022 23:08:30 +0000	44.438093	-124.790715	315.8	4.4	6	180-185

Node Recoveries

Dive #	Start Date Time [UTC]	Start Lat (dec. degrees)	Start Long (dec. degrees)	Start Depth (m)	End Date Time [UTC]	End Lat (dec. degrees)	End Long (dec. degrees)	End Depth (m)	Duration [hours]	# of Nodes Carried	OBX Station #s
15	Mon 18 Apr 2022 20:47:02 +0000	44.490327	-125.455935	2902.6	Tue 19 Apr 2022 09:20:00 +0000	44.48712	-125.409395	2910.7	12.5	8	279-286
16	Tue 19 Apr 2022 09:50:07 +0000	44.486862	-125.405775	2908.1	Tue 19 Apr 2022 19:44:02 +0000	44.482818	-125.35578	2906.8	9.9	9	270-278
17	Tue 19 Apr 2022 20:14:49 +0000	44.482372	-125.349283	2903.2	Wed 20 Apr 2022 07:43:04 +0000	44.478118	-125.292122	2112.4	11.5	10	260-269
18	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED	ABORTED
19	Fri 22 Apr 2022 08:00:59 +0000	44.477918	-125.285978	2047.3	Fri 22 Apr 2022 16:30:48 +0000	44.473033	-125.229352	1593.9	8.5	9	251-259
20	Fri 22 Apr 2022 17:26:11 +0000	44.473053	-125.229388	1513.4	Sat 23 Apr 2022 01:02:35 +0000	44.4691	-125.178025	1251.1	7.6	9	242-250
21	Sat 23 Apr 2022 01:34:20 +0000	44.468578	-125.17171	1265	Sat 23 Apr 2022 08:29:12 +0000	44.464443	-125.1198	1285.2	6.9	9	233-241
22	Sat 23 Apr 2022 09:03:48 +0000	44.463973	-125.115468	1248.9	Sat 23 Apr 2022 14:22:23 +0000	44.460095	-125.064365	907.7	5.3	9	224-232
23	Sat 23 Apr 2022 15:00:09 +0000	44.46001	-125.059308	873.7	Sat 23 Apr 2022 19:52:07 +0000	44.455692	-125.009787	818.5	4.9	9	215-223
24	Sat 23 Apr 2022 20:19:19 +0000	44.455273	-125.003685	879.4	Sun 24 Apr 2022 01:25:04 +0000	44.45122	-124.953573	643.6	5.1	9	206-214
25	Sun 24 Apr 2022 01:49:29 +0000	44.450757	-124.947338	578.1	Sun 24 Apr 2022 06:08:04 +0000	44.446745	-124.897607	392	4.3	9	197-205
26	Sun 24 Apr 2022 06:32:53 +0000	44.446233	-124.891215	394.9	Sun 24 Apr 2022 10:16:54 +0000	44.44214	-124.841098	373.9	3.7	9	188-196
27	Sun 24 Apr 2022 10:42:47 +0000	44.441618	-124.835068	367	Sun 24 Apr 2022 13:47:42 +0000	44.438105	-124.791408	316.6	3.1	8	180-187

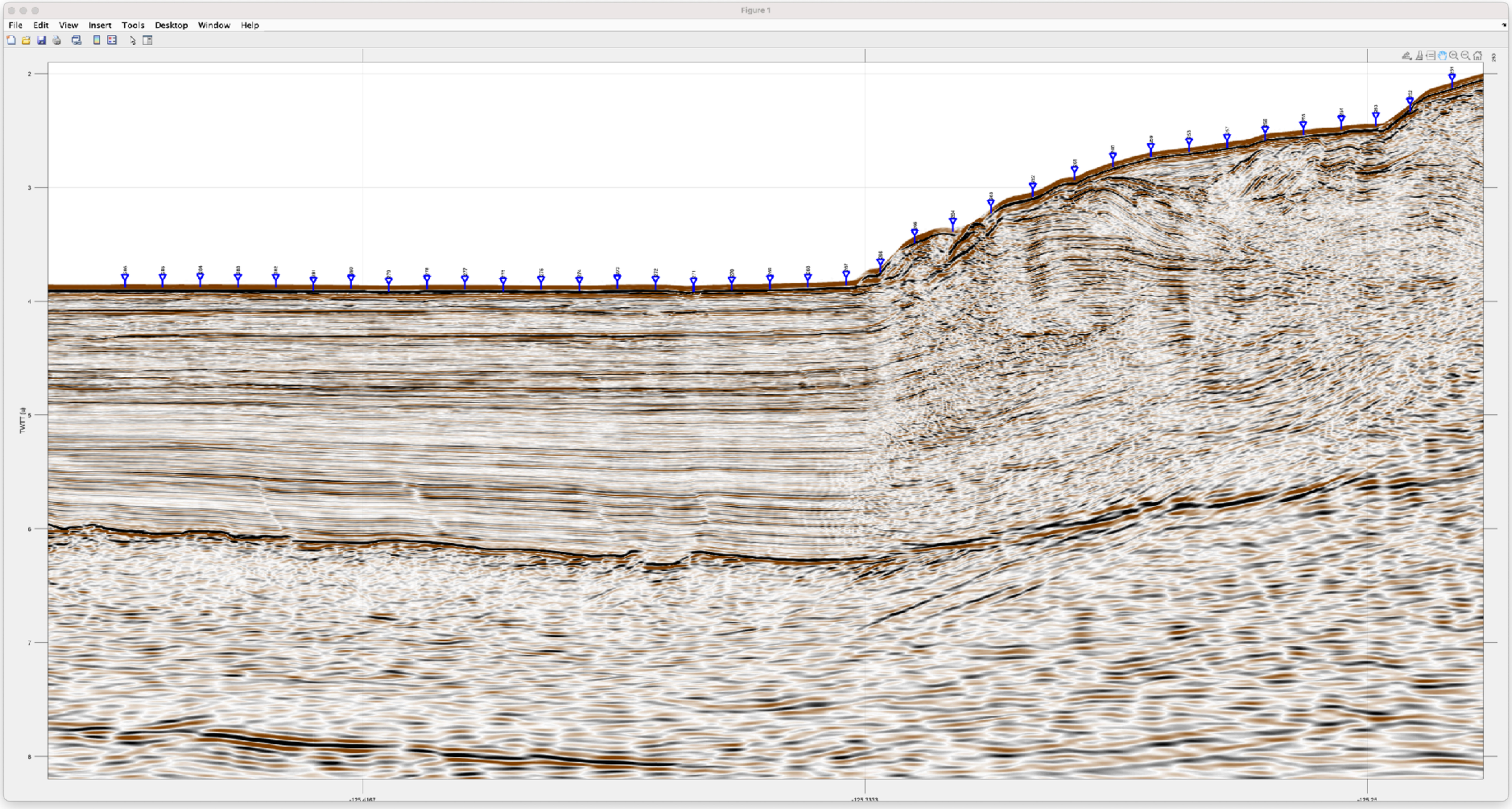


Figure 1
File Edit View Insert Tools Desktop Window Help
TWT (s)
2
3
4
5
6
7
8

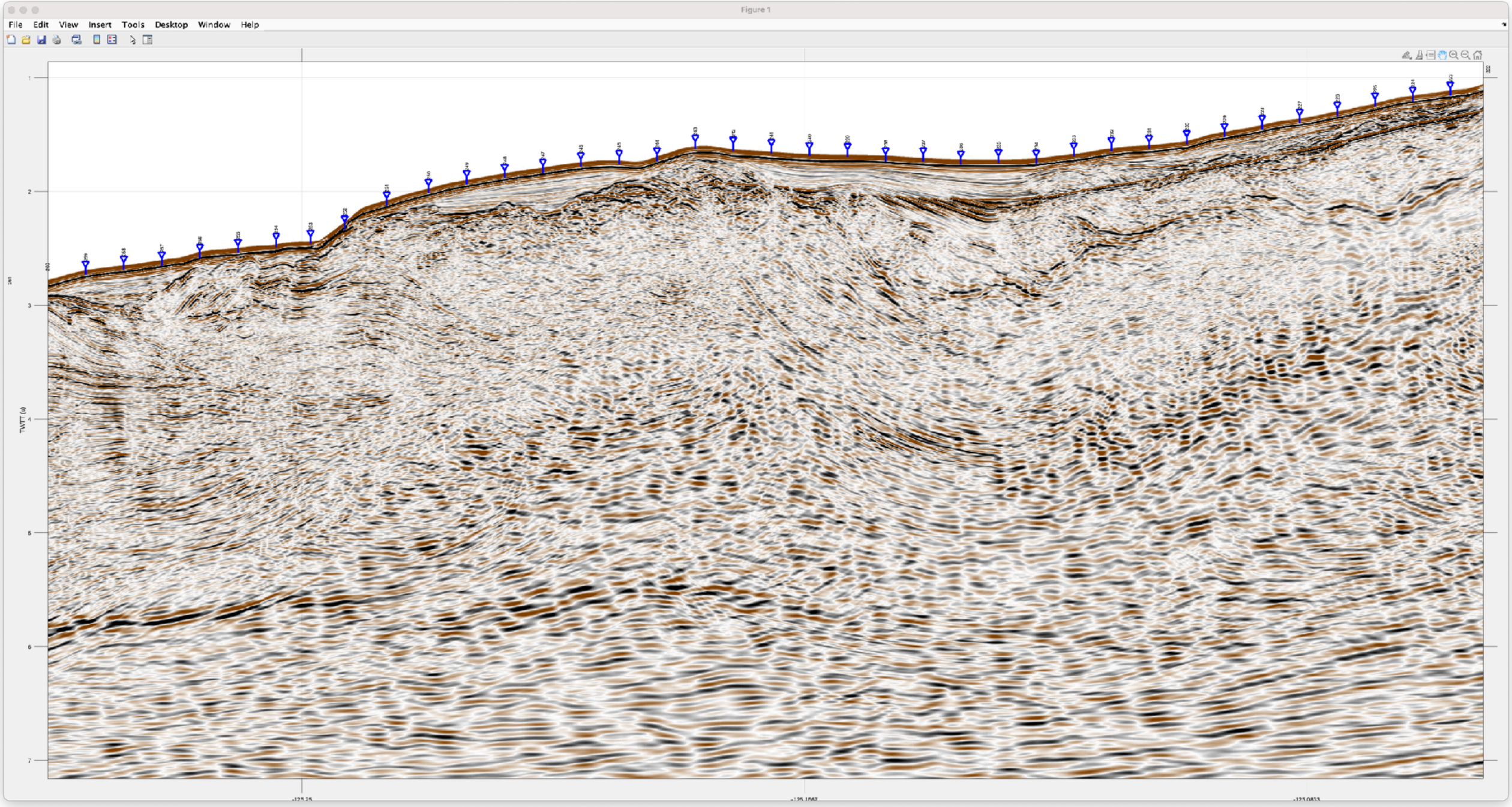
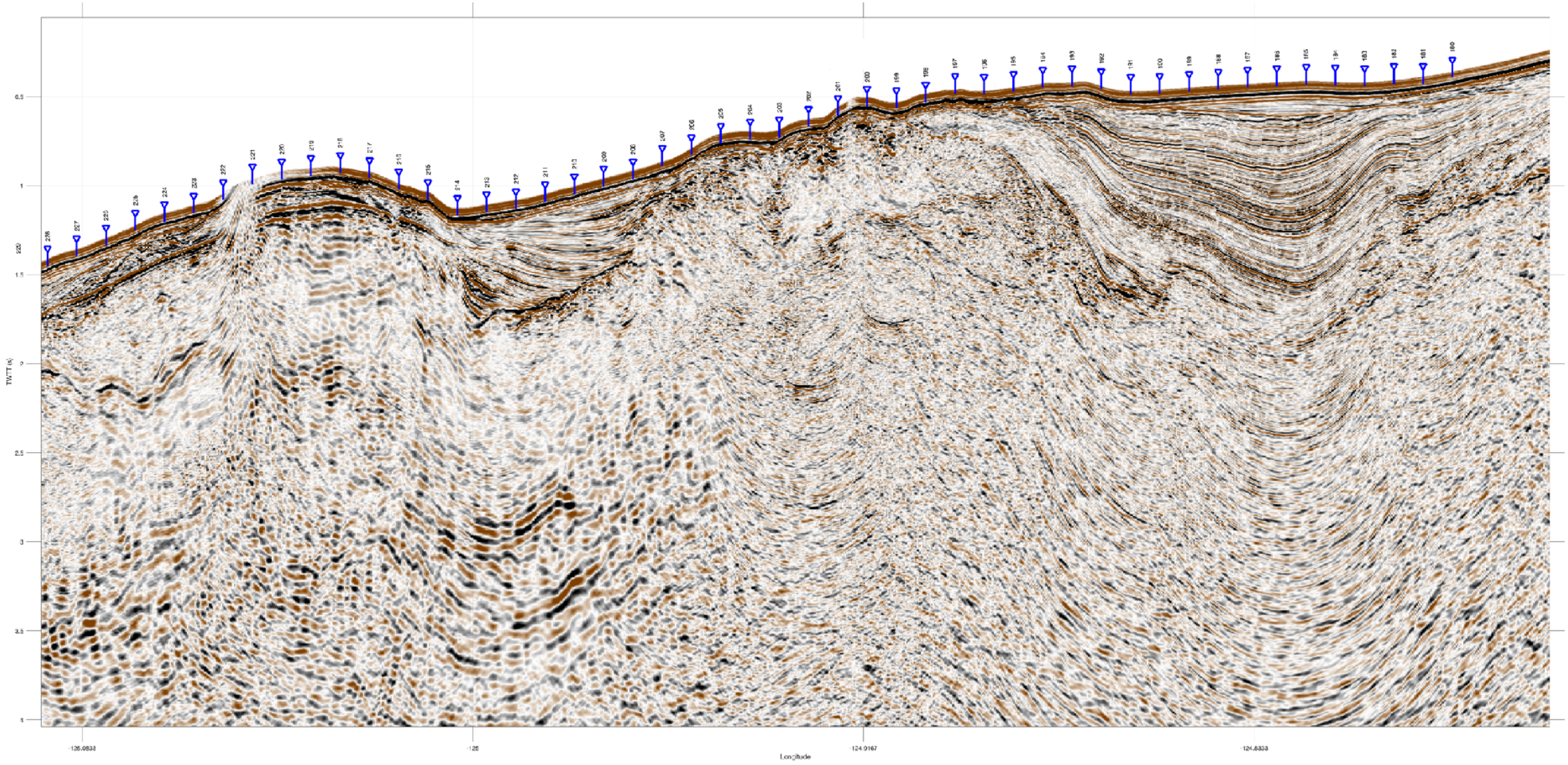


Figure 1
File Edit View Insert Tools Desktop Window Help
TWT (s)
1
2
3
4
5
6
7

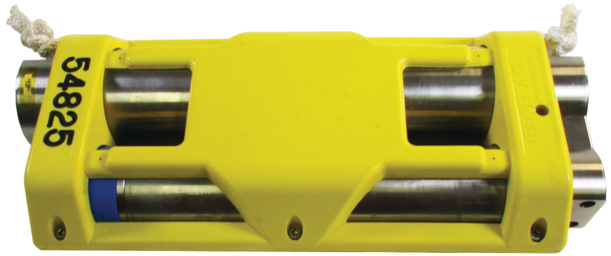

TWTT (s)
0.5
1
1.5
2
2.5
3
3.5
4
-126.0833
-126
-124.9167
-124.8333
Longitude

Node Van

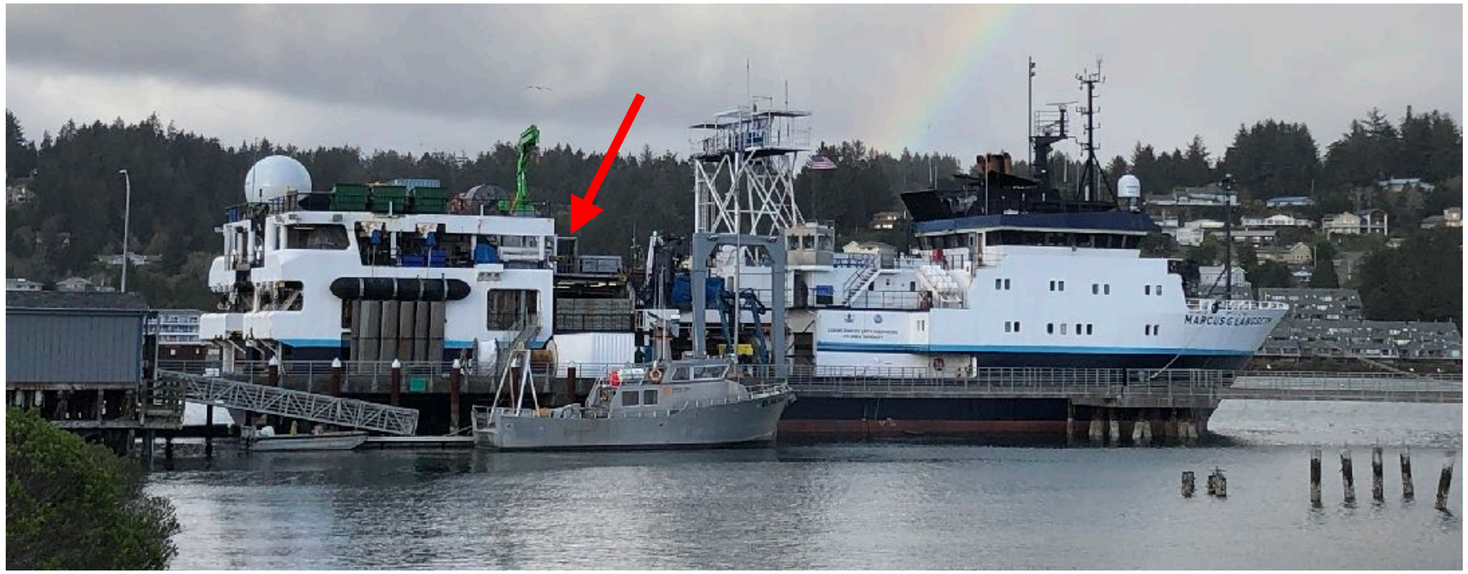
GEOSPACE® Technologies

OBX2-90

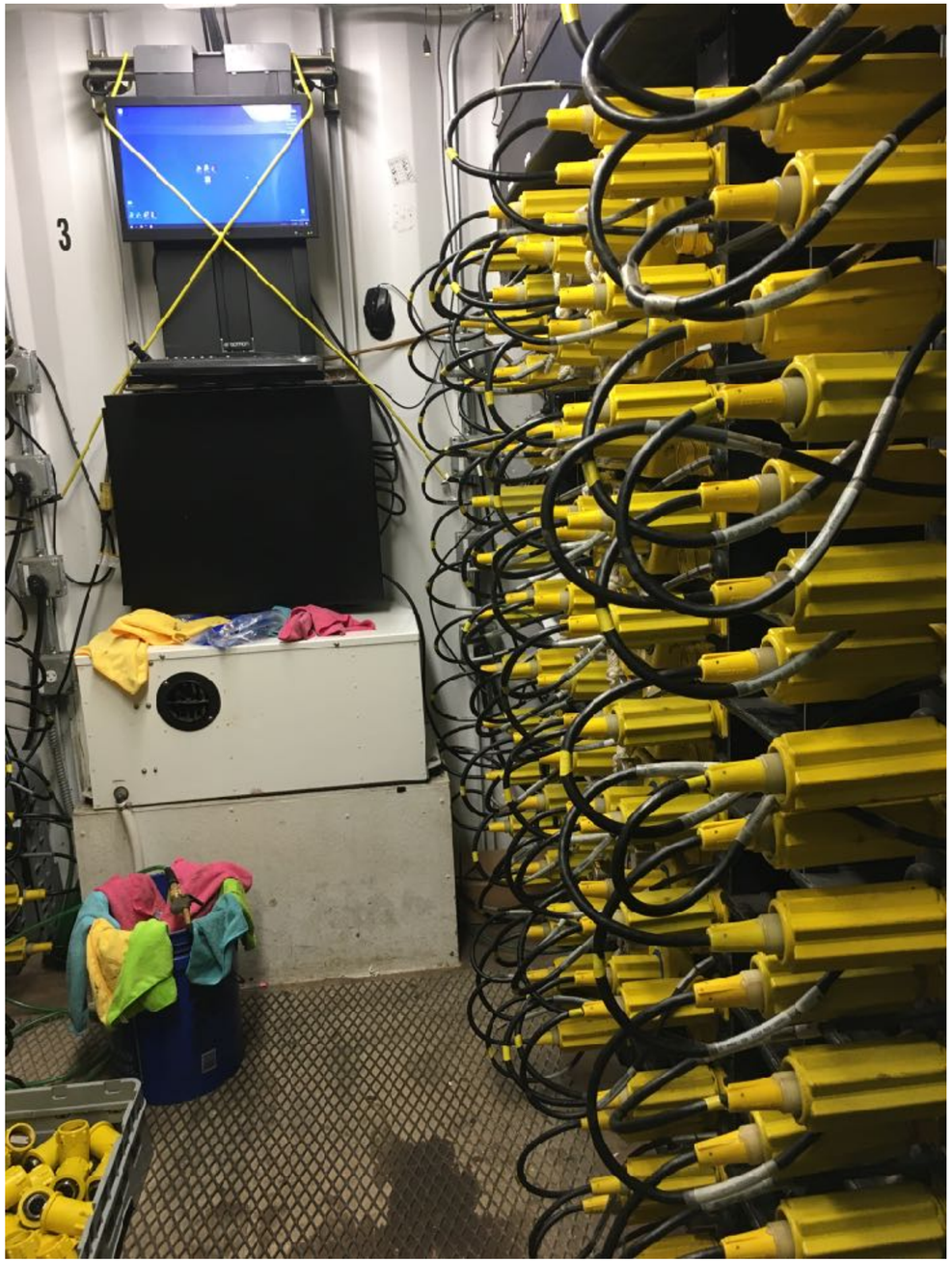
OCEAN BOTTOM RECORDER



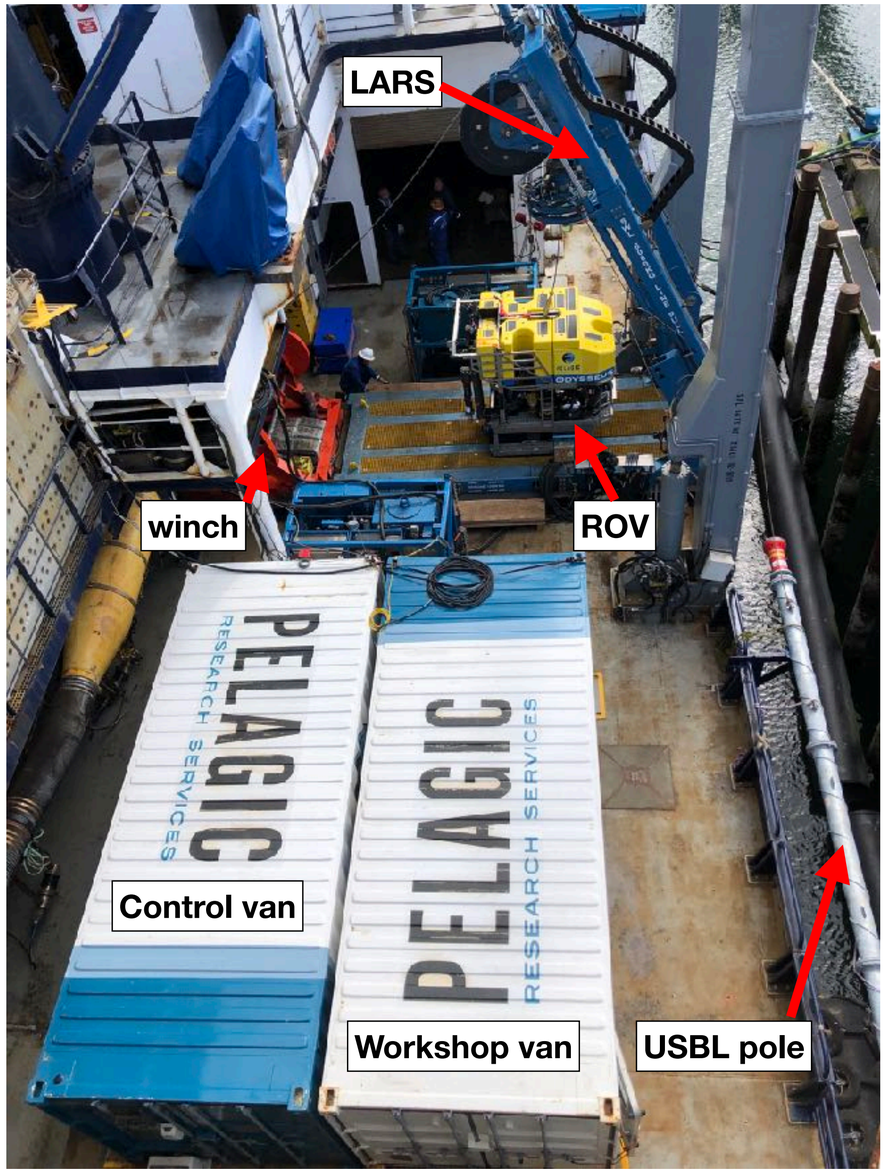
- Continuous cable-free 4C autonomous recording
- Battery module: 90 days operation
- Built-in full resolution test generator
- Solid-state flash memory: 16 GB per channel
- CSAC clock
- Built-in heading sensor



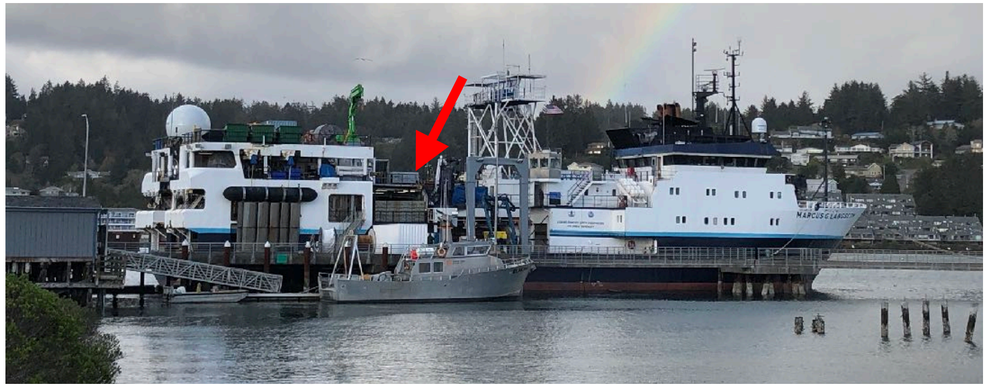
Node Van



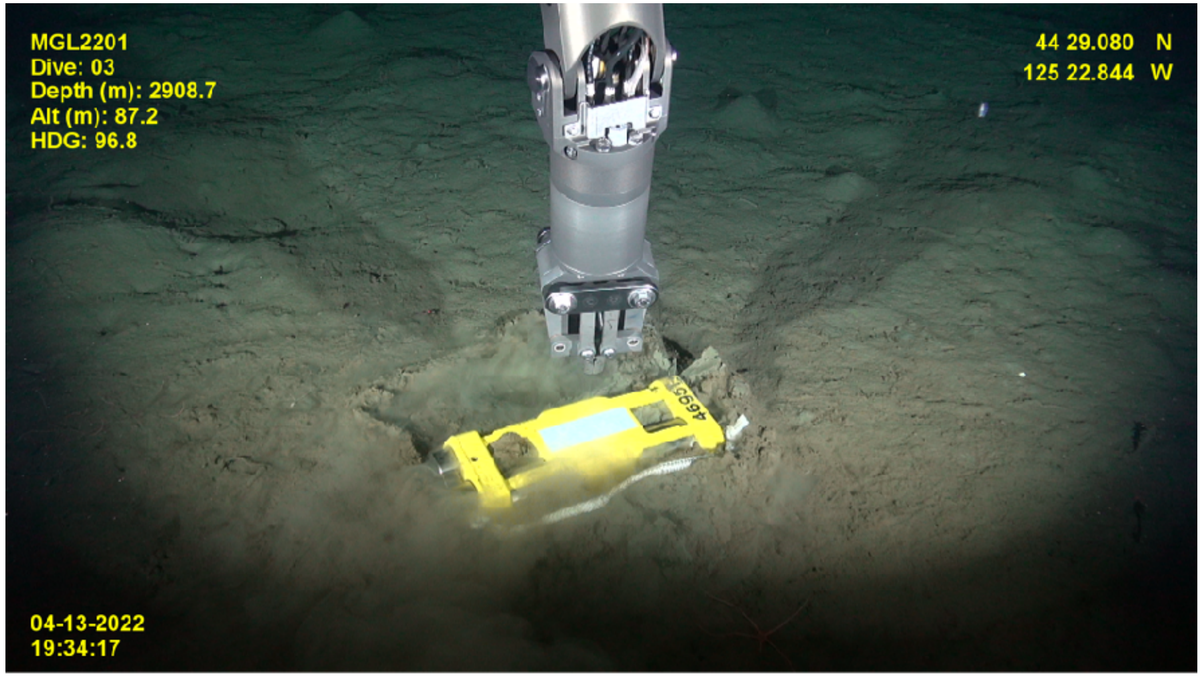
ROV System

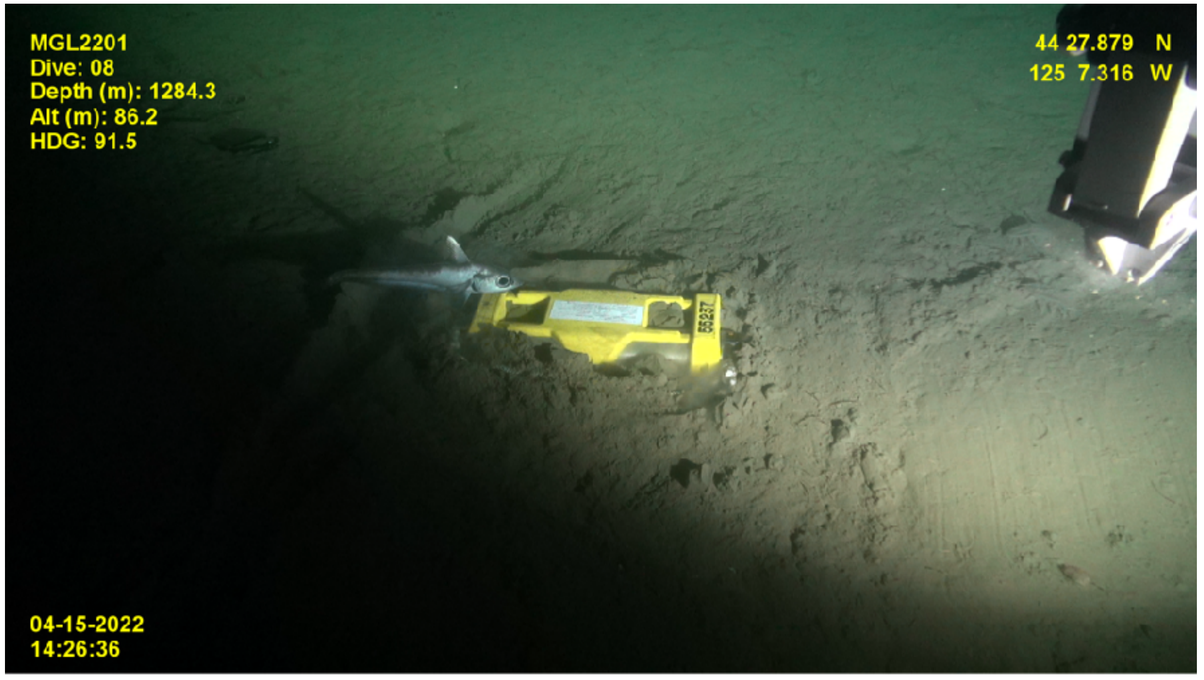

LARS
winch
ROV
PELAGIC
RESEARCH SERVICES
Control van
PELAGIC
RESEARCH SERVICES
Workshop van
USBL pole

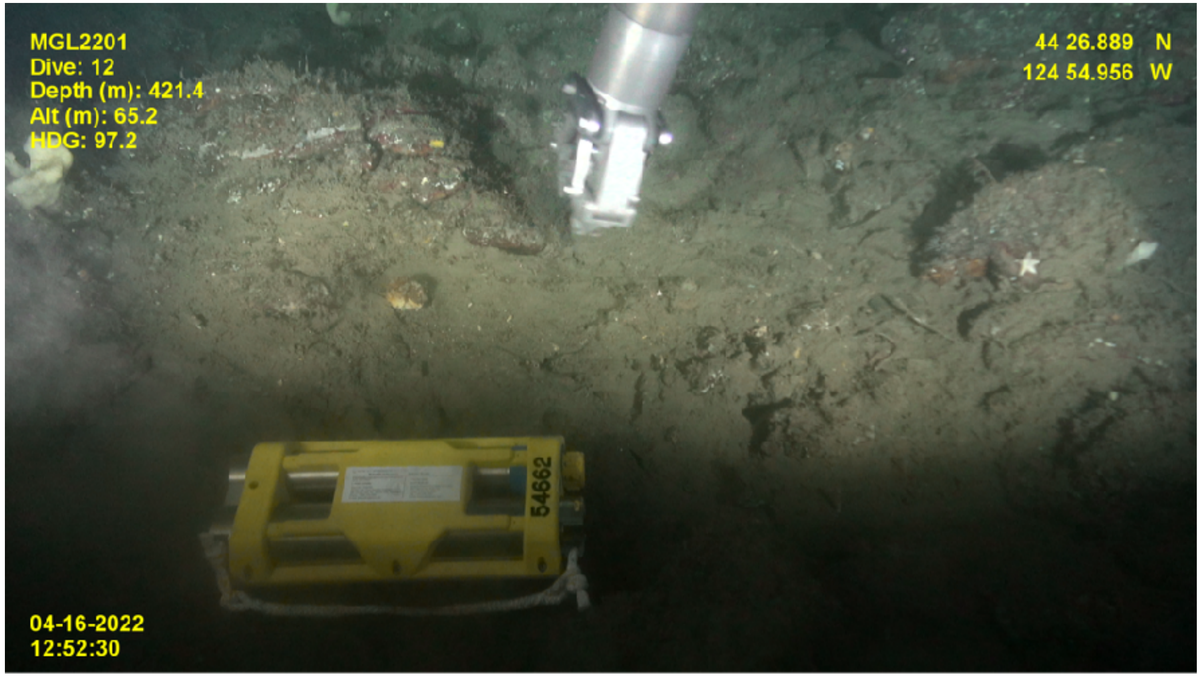

PELAGIC
ODYSSEUS

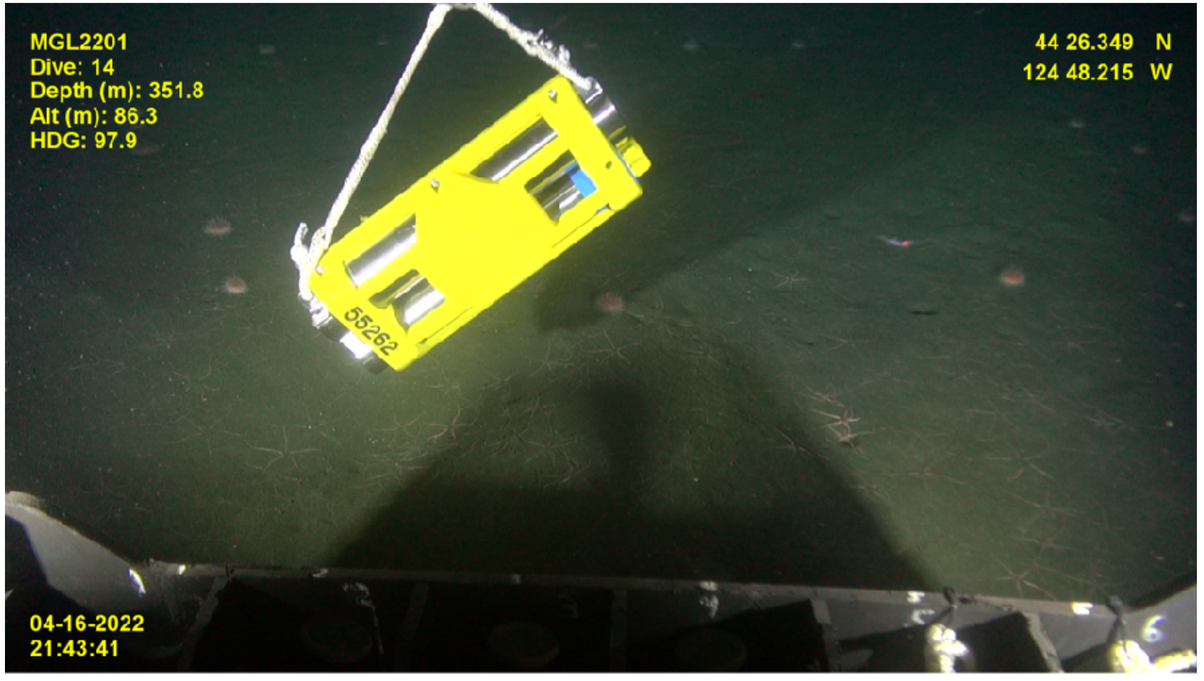


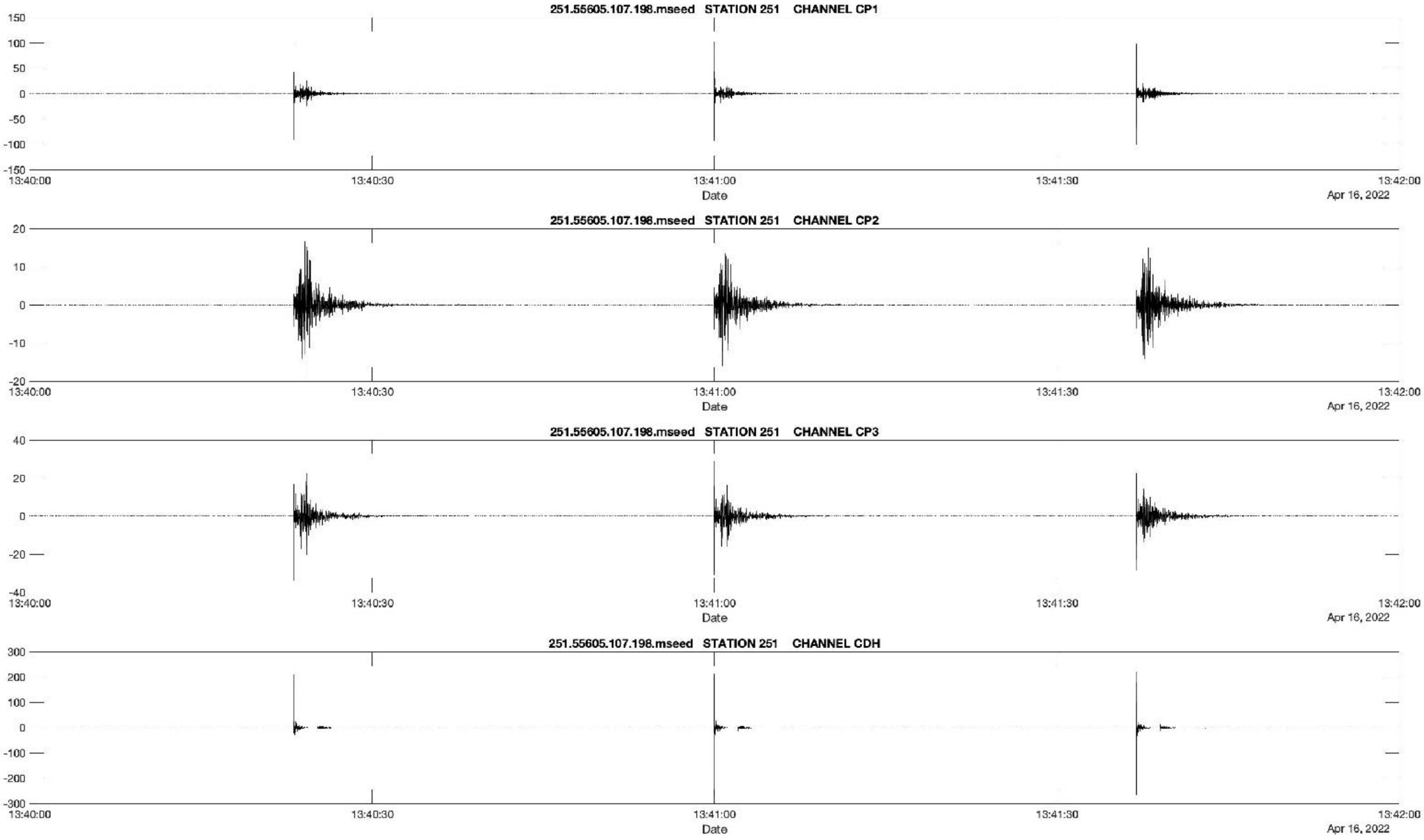

10805031
WACKER
NEUSON
United
Rentals
800-UR-RENTS
G50
38 kW

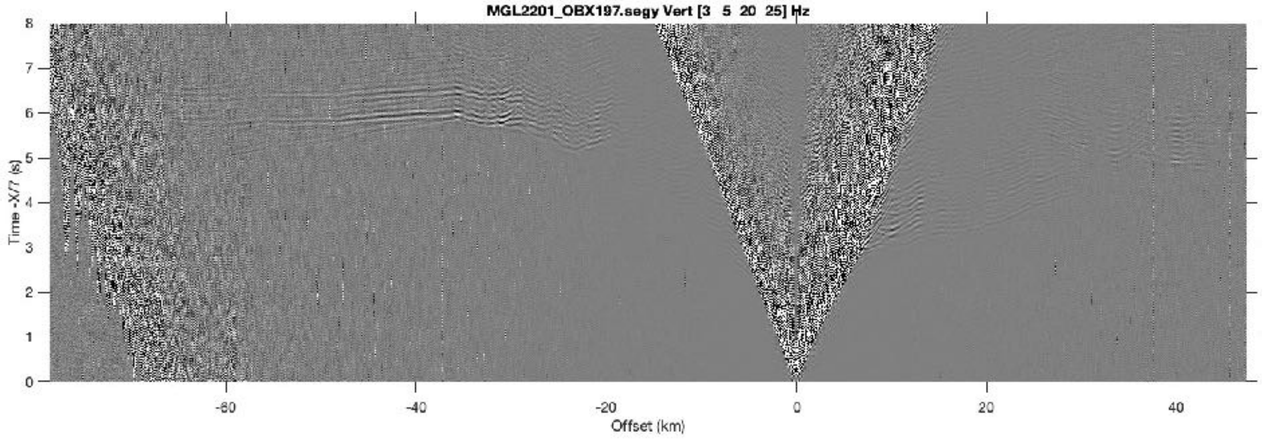

MGL2201
Dive: 03
Depth (m): 2908.7
Alt (m): 87.2
HDG: 96.8
44 29.080 N
125 22.844 W
04-13-2022
19:34:17

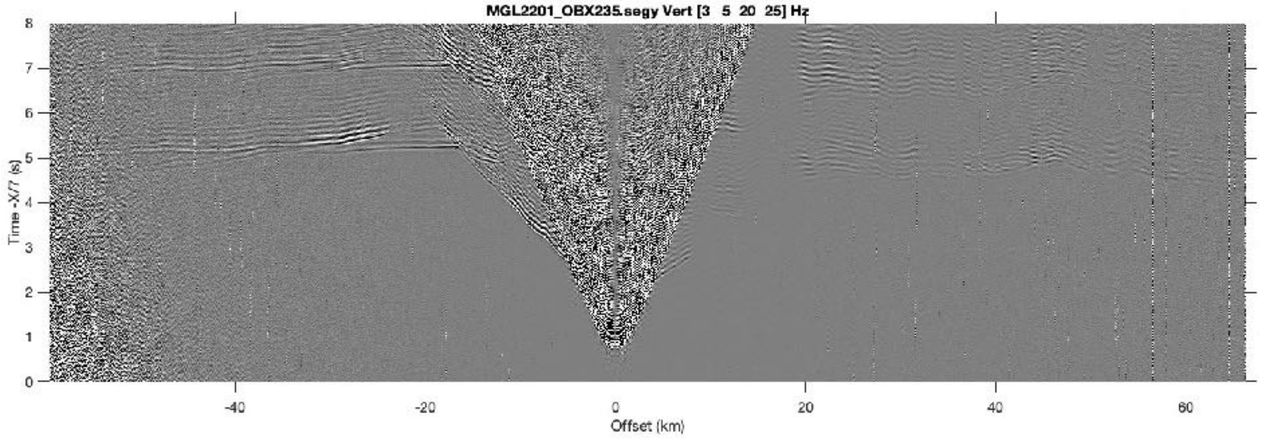

MGL2201
Dive: 08
Depth (m): 1284.3
Alt (m): 86.2
HDG: 91.5
44 27.879 N
125 7.316 W
04-15-2022
14:26:36

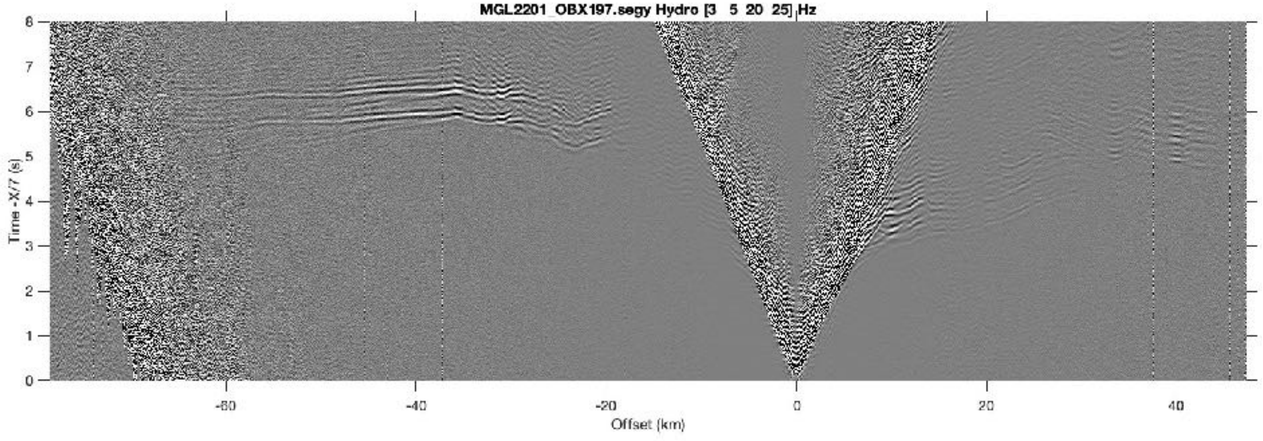

MGL2201
Dive: 12
Depth (m): 421.4
Alt (m): 65.2
HDG: 97.2
44 26.889 N
124 54.956 W
54662
04-16-2022
12:52:30

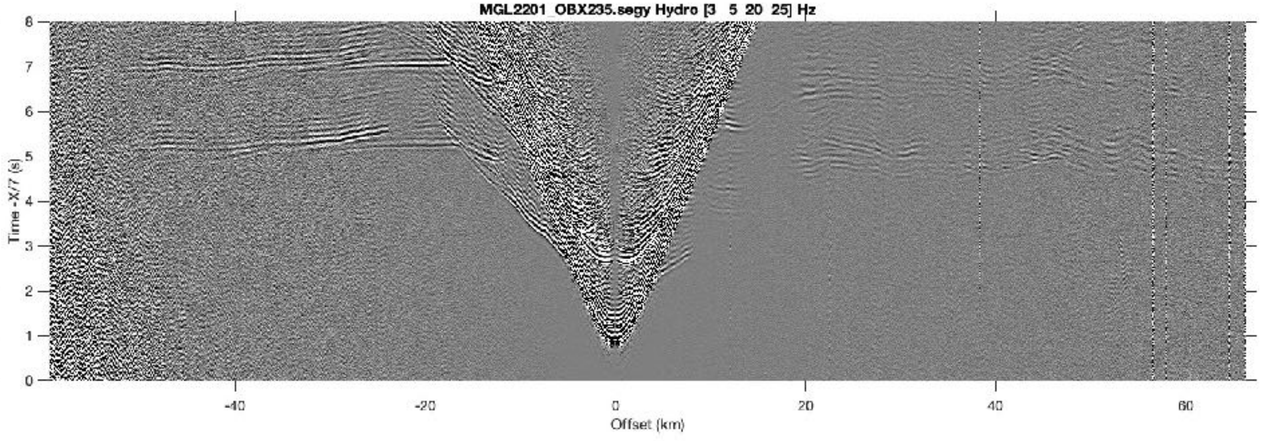

MGL2201
Dive: 14
Depth (m): 351.8
Alt (m): 86.3
HDG: 97.9
44 26.349 N
124 48.215 W
55262
04-16-2022
21:43:41

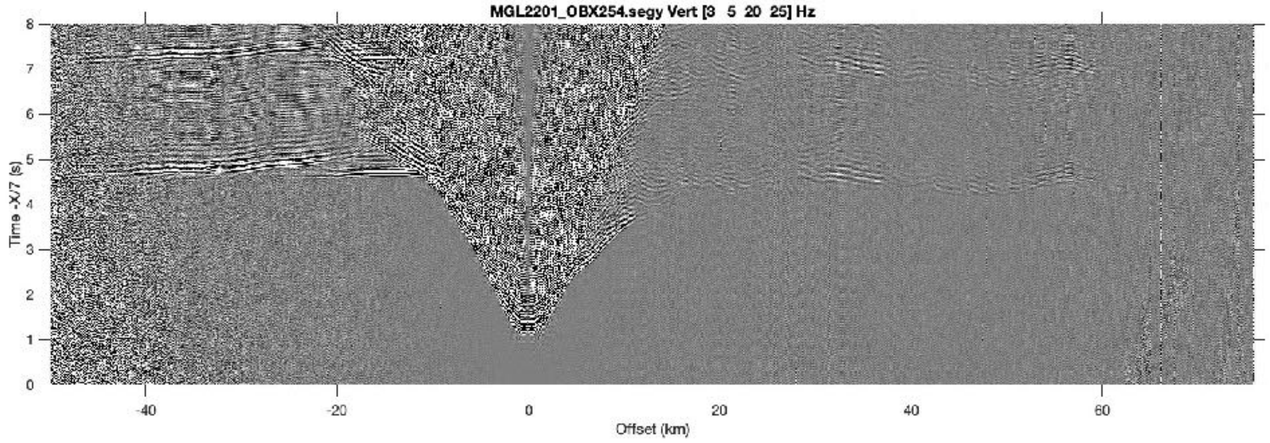

251.55605.107.198.mseed STATION 251 CHANNEL CP1
150
100
50
0
-50
-100
-150
13:40:00
13:40:30
13:41:00
13:41:30
13:42:00
Date
Apr 16, 2022
251.55605.107.198.mseed STATION 251 CHANNEL CP2
20
10
0
-10
-20
13:40:00
13:40:30
13:41:00
13:41:30
13:42:00
Date
Apr 16, 2022
251.55605.107.198.mseed STATION 251 CHANNEL CP3
40
20
0
-20
-40
13:40:00
13:40:30
13:41:00
13:41:30
13:42:00
Date
Apr 16, 2022
251.55605.107.198.mseed STATION 251 CHANNEL CDH
300
200
100
0
-100
-200
-300
13:40:00
13:40:30
13:41:00
13:41:30
13:42:00
Date
Apr 16, 2022

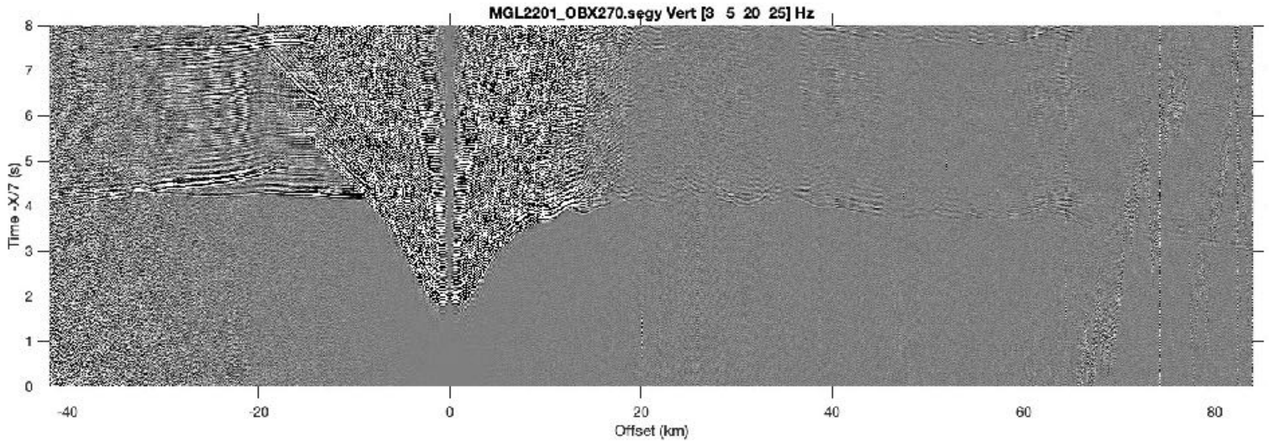

MGL2201_OBX197.segy Vert [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)

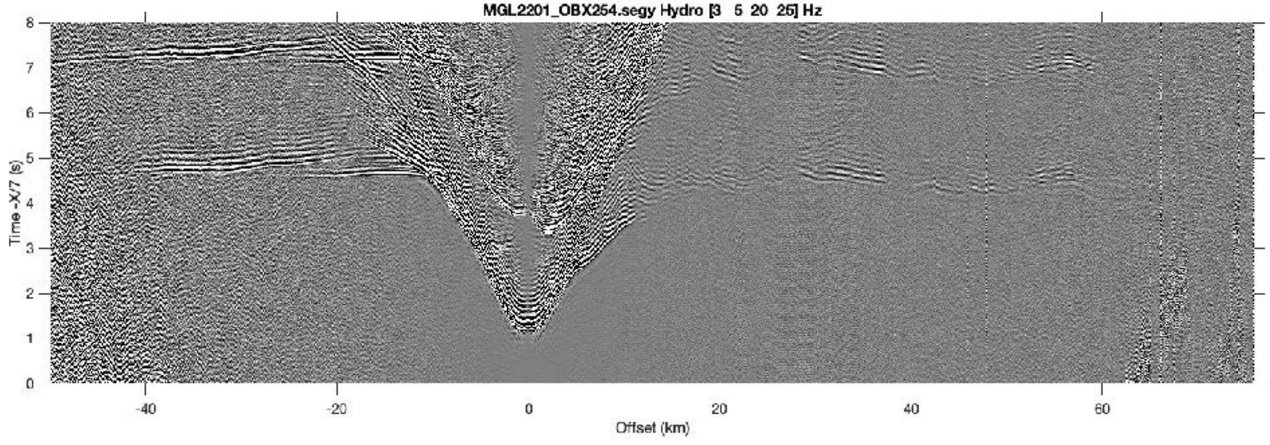

MGL2201_OBX235.segy Vert [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)

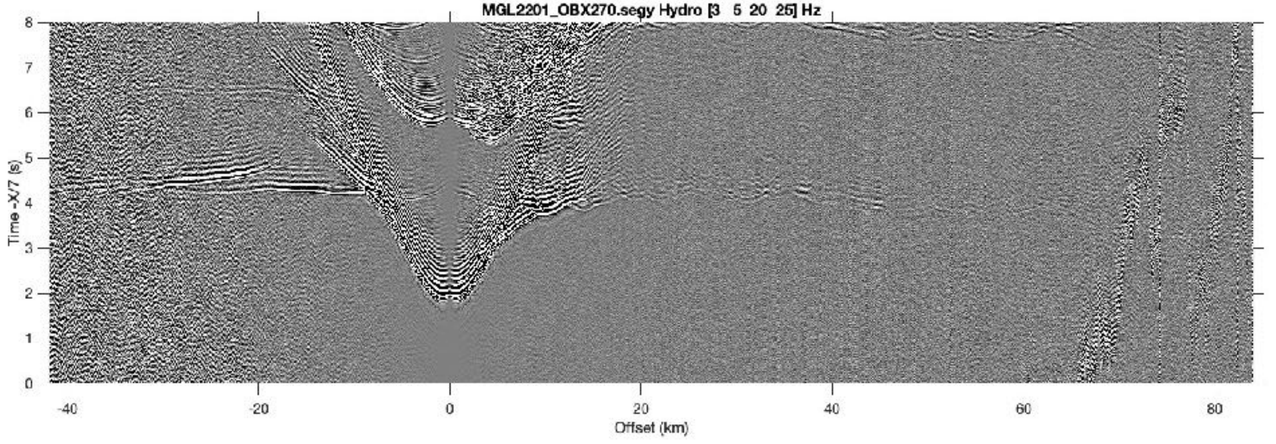

MGL2201_OBX197.segy Hydro [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)

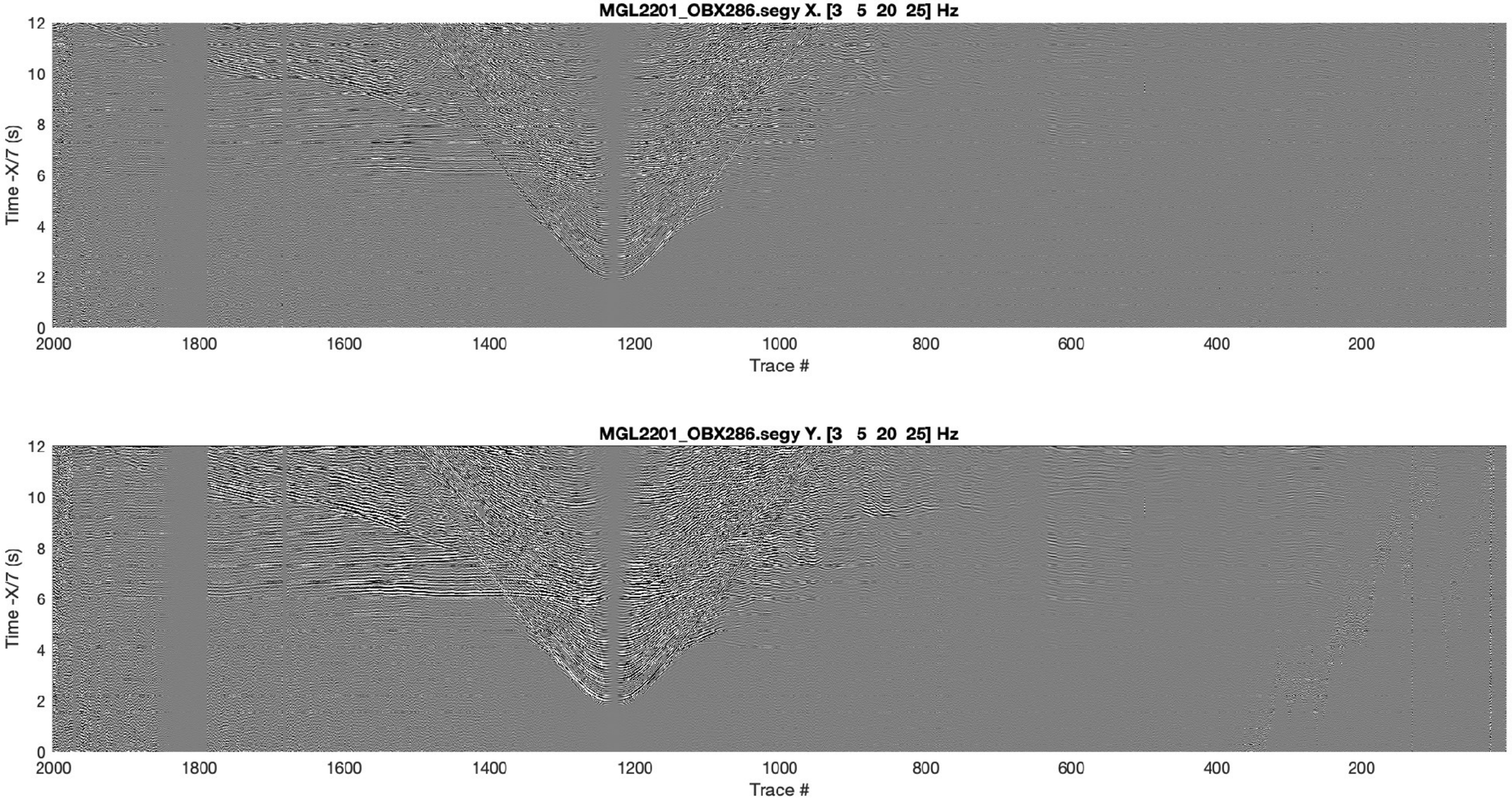

MGL2201_OBX235.segy Hydro [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)


MGL2201_OBX254.segy Vert [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)


MGL2201_OBX270.segy Vert [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)


MGL2201_OBX254.segy Hydro [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)


MGL2201_OBX270.segy Hydro [3 5 20 25] Hz
Time -X/7 (s)
Offset (km)


MGL2201_OBX286.segy X. [3 5 20 25] Hz
Time -X/7 (s)
0
2
4
6
8
10
12
2000
1800
1600
1400
1200
1000
800
600
400
200
Trace #
MGL2201_OBX286.segy Y. [3 5 20 25] Hz
Time -X/7 (s)
0
2
4
6
8
10
12
2000
1800
1600
1400
1200
1000
800
600
400
200
Trace #