Beaufort Construction Group

Beaufort Cable Supply

Cable Burial Assessment Study

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Cable Burial Assessment Study	**P675-2000-CEC-RE-P-003**	**B**

Cecon Contracting as
Nedre Vollgate 1
0158 Oslo, Norway

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1 INTRODUCTION

BEAUFORT CONSTRUCTION GROUP has awarded CECON CONTRACTING AS a contract for the supply & installation of a fibre optic cable system from Newgale, Wales to Kilmore Quay, Ireland, a total length of 160 km.

The project is planned to mobilise and operate offshore in 2026.

The scope of work is:

- Project management and engineering ○ Design a cable route based on survey & environmental information, and permit restrictions
    - Operational Permitting
    - Prepare installation methods and devices
    - Design sea-fastening.

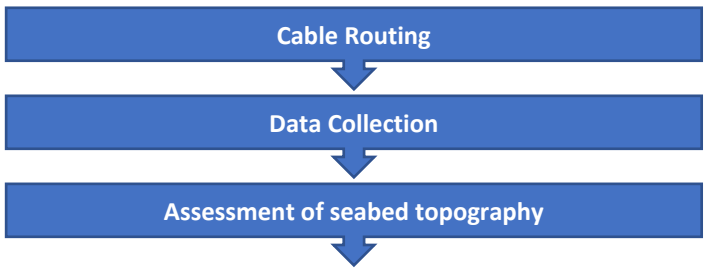
- Procure a submarine fibre optic cable based on a standard, proven and certified design
- Loading, storage & transportation of the cable
- Installation and burial of the submarine cable
- Terrestrial cable procurement and installation
- Procurement and installation or dry station equipment
- Shore end splicing and testing
- End-to-end testing
- Offloading of excess and spare plant

1.1 PURPOSE AND SCOPE OF DOCUMENT

This document provides an assessment of the conditions for cable burial along the route, using both publicly available data and data obtained through project specific survey campaigns. The results of this report are a range of burial depths that may be achieved along the route given the present seabed conditions

1.2 METHODOLOGY

Figure 1 illustrates the CBRA process flow, thus the steps taken to specify the DoL. Once the inputs have been collated as Cable Burial Risk Assessment Ref /1/, the DoL is successively specified based on the outcome of the iterative probabilistic process and the acceptable risk.



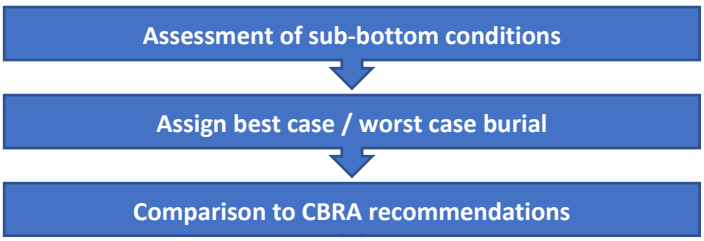


Figure 1 – CBRA process flow

This document assesses the potential of achieving the nominal target depth of lowering of 1.5m (with option to 2m) in the various soil conditions and topography along the route. This also allows the estimated worst case and best case burial to be compared against the the per meter threat assessment in the CBRA, to estimate the frequency of cable damage for each burial case..

1.3 ROUTE DESCRIPTION

The Beaufort Cable System will be installed between Newgale, Wales and Kilmore Quay.

The submarine fibre optic cable route is approximately 160 km long with a water depth varying from 0 to 115m.

Each cable extremity will be pulled into beach manholes through shore end horizontally drilled ducts (HDD). Splices will take place in the beach manholes.

Terrestrial cables will be blown through ducts linking each beach manhole to a cable landing station, where the cable system will be fitted with cable termination equipment.

1.4 REFERENCES

Ref	Document No	Document Title
Ref /1/	P668-2000-CEC-RE-P-002	Norfest Burial Risk Assessment
Ref /2/	DNV RP-0360	Subsea power cables in shallow water
Ref /3/	DNV RP-F107	Risk Assessment of Pipeline Protection
Ref /4/	DNV ST-F101	Submarine Pipeline Systems
Ref /5/	201/22/680	Beaufort Subsea Cable Route Survey (Fugro)
Ref /6/	GRM001-FAC-02	Shallow Geotechnical Investigation – Irish Sea Cables (Green Rebel Geotech)
Ref /7/	GR-GEO-REP-23G03	Processing Report – Tuskar Cable Route (Green Rebel 2023)
Ref /8/	G20014	FIELD REPORT, Hydrographic and Geophysical Survey, Kilmore Quay (Geomara 2021)
Ref /9/	GR-GEO-REP-24G01	Processing Report, MDM – Beaufort Cable Route
Ref /10/	F254747	SDB and SFC Summary for AWS Wales Project

The KP system used for the analysis is based on 2D grid lengths in UTM30. The system KP0 point is the beach manhole at Kilmore Quay. The following RPL revision is used for the analysis:

Table 1 - RPL revisions

Name	Date	2D Grid Length
Beaufort PSR02	07-Mar-2025	160.292 km

1.5 DEFINITIONS AND ABBREVIATIONS

AIS	Automated Identification Systems
BMH	Beach ManHole
CBRA	Cable Burial Risk Assessment
CPT	Cone Penetration Test
DNV	Det Norske Veritas
DoC	Depth of cover
DoL	Depth of Lowering (below mean seabed level)
DWT	Dead Weight Tonnage
GIS	Geographical Information System
hp	Horsepower
IMO	International Maritime Organisation
kg	Kilogram
km	Kilometre
KP	Kilometre Post
LAT	Lowest Astronomical Tide
m	Metre
MB	Multibeam profiler
MBES	Multibeam Echo Sounder
MMSI	Maritime Mobile Service Identities
MSBL	Mean Seabed Level
NGU	Geological Survey of Norway
nm	Nautical Mile
PLSE	Pre-Laid Shore End
RPL	Route Position List
SBP	Sub Bottom profiler
SOLAS	IMO Safety of Life at Sea Code
SS	SideScan Sonar
Su	Undrained Shear Strength
t	Tonne
ToP	Top of Product
TTD	Target Trench Depth

2 CONCLUSION AND RECOMENDATIONS

Jet trenching with Capjet is found to achieve a nominal 1.5m target depth of lowering for 54% of the route in worst case, and 91% of the route in best case. There are 3 main drivers to reduced burial.

1. Shallow Bedrock in the area outside Kilmore Quay to KP15
2. A reflector of hardground assumed glacial till and of unknown cementation.
3. Boulder fields which will likely include subsurface boulders.

Head slopes and side slopes along the route are within operating limitations of the jetting system.

The majority of the route segment identified for the enhanced burial option should be possible to trench to 2m, however this segment of the route also includes some boulder fields and subcropping hardground/till which will likely contain isolated subsurface boulders.

The lack of a ground truth model in the UK sector has made the burial assessment difficult to perform in this region, and leads to a high degree of uncertainty. Consideration could be given to commissioning a re-interpretation of the sub bottom data in this region, using the CPT and VC data where available.

Similarly, off Kilmore Quay where horizon data is not available, it is difficult to determine the sediment cover over rock. If sufficient sediment cover exists for jetting, it may be worth revisiting the free-lay in this region.

Headline results are shown in Table 2. These show that in worst case 51% of the route can be buried to 1.5m, best case 91%. Similarly, in worst case 21% of the route may be surface laid, and in best case only 6%.

Table 2 - Headline Results

Burial Depth	Burial Worst Case	Burial Best Case
0.0m	21%	6%
0.5m	20%	2%
1.0m	8%	2%
1.5m	51%	91%

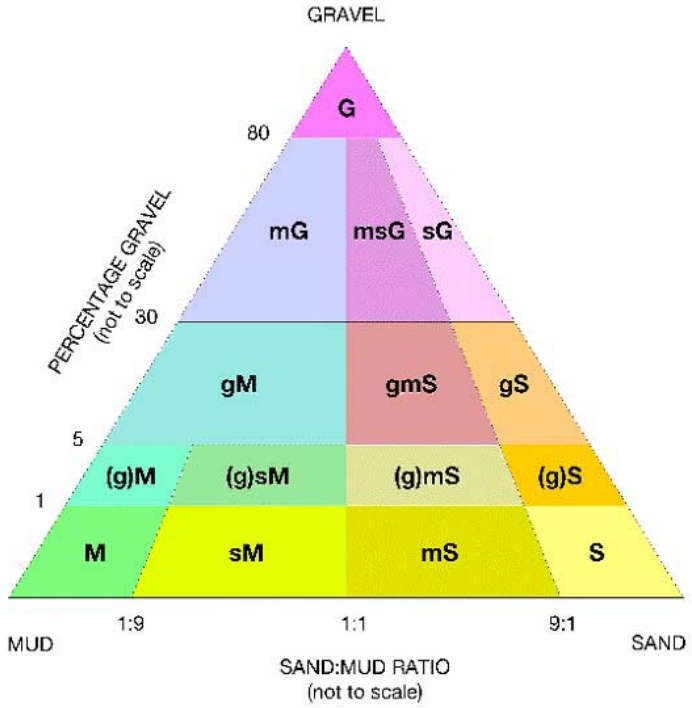
3 PUBLIC DATA

A number of publicly available data sources are used for further verification of the surface sediment along the route.

3.1 BGS

The British Geological Survey is a partly publicly funded body aimed at advancing geoscientific knowledge of the United Kingdom landmass and it's continental shelf.

The provide a seabed sediments dataset at 1:250 000 scale. Classification uses a modified Folk classification scheme



3.2 INFOMAR

Infomar is a joint funded programme between the Geological Survey Ireland and the Marine Institute, providing survey data of the Irish Marine Territory. They provide a dataset showing seabed classification which is split into the following categories:

- Rock
- Coarse Sediment
- Mixed Sediment
- Sand
- Mud to muddy sand
- Unclassified

4 SURVEY

A number of survey campaigns have been conducted over the route. The below summary table gives an overview of coverage based on the latest RPL

4.1 HYRDOGRAPHIC AND GEOPHYSICAL SURVEY KILMORE QUAY

This survey was conducted by Geomara, for MacMahon to assist the planning of the Tuskar sub-sea cable route to Wales. The survey covered a 320 m wide corridor from the shore west of Kilmore Quay, extending south-south-east to the 12 nautical mile limit, with a secondary corridor diverging south-west. Utilizing the survey vessel Fastnet Pelican, the team employed multibeam echosounder (MBES), sub-bottom profiler (SBP), side-scan sonar (SSS), and marine magnetometer to map bathymetry, subsurface geology, and seabed features. Operations from November 29 to December 4, 2020, faced marginal weather but achieved comprehensive data collection across four survey blocks, with depths ranging from 8.5 m to 67.5 m (LAT).

The survey revealed varied seabed conditions critical for cable trenching. Blocks 1 and 2 are dominated by sandy substrates with sand wave/dune structures (0.35–2.2 m high), transitioning to rockier, consolidated substrates in Blocks 3 and 4, featuring rocky outcrops (up to 3.5 m relief) and NE-SW striations. SBP data identified bedded sands in Blocks 1 and 2, with consolidated reflectors (likely bedrock) in Blocks 3 and 4, possibly from the Kilmore Quay Group or Killag Formation. Magnetic anomalies (130 total) and SSS contacts (mostly rocks/boulders, some fishing gear) correlate with rocky areas, with no archaeological features noted

- Performed by: Geomara
- Commissioner: MacMahon
- Type: Geophysical
- Area: Ireland TW
- Corridor: 320m
- Dates: 29 November 2020 – 4 December 2020
- Vessel: Fastnet Pelican
- Report: G20014
- Cecon Comments:
    - Missing horizon data. Single line sub bottom reflector shown in alignment charts.

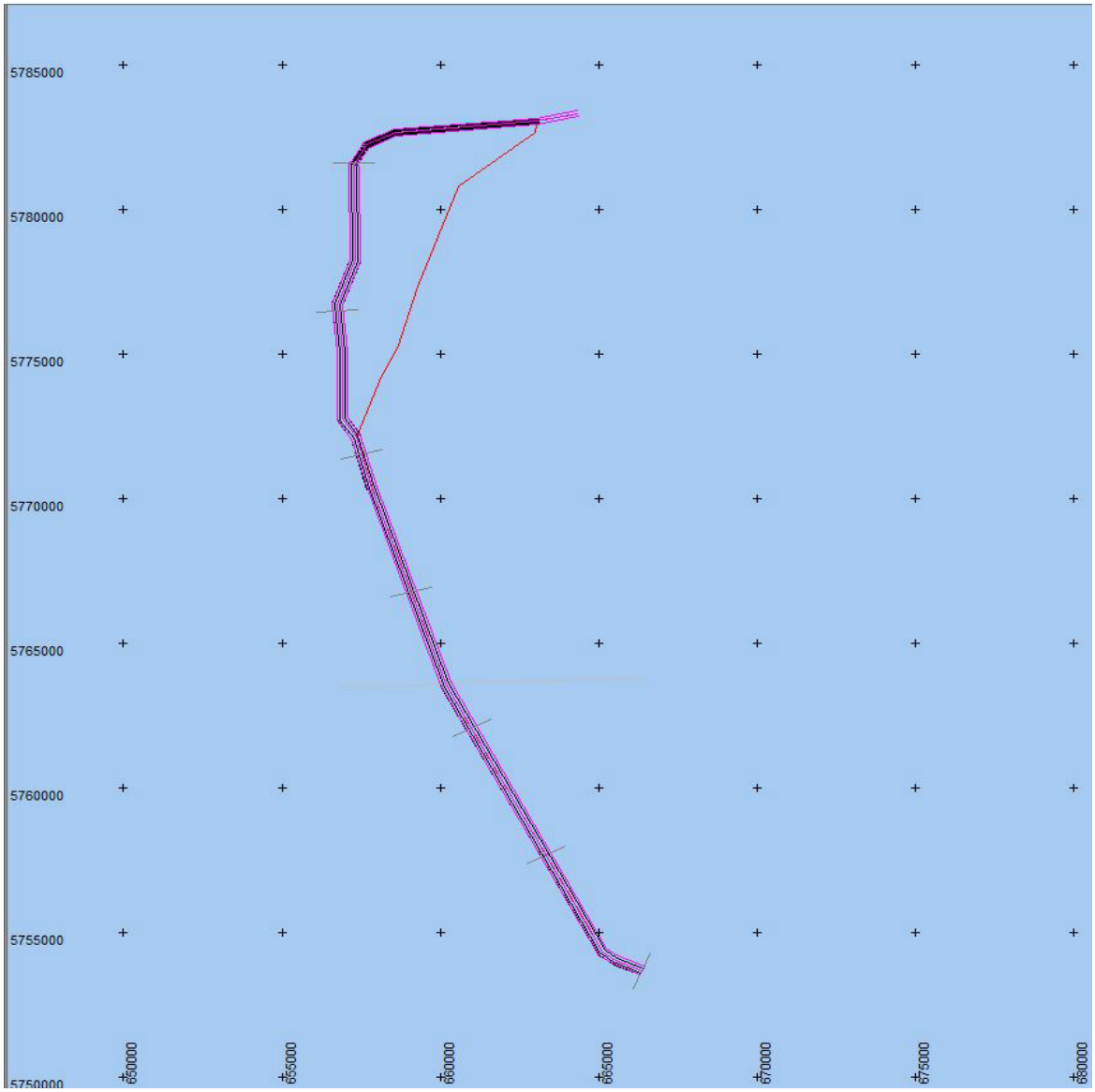


Figure 2 - Geomara Survey Extent

4.2 BEAUFORT ROUTE SEGMENT 1 BU TO BMH KILMORE QUAY

The Beaufort Subsea Cable Route Survey performed by Fugro Germany Marine GmbH for Amazon Web Services and Vodafone, documented the geophysical and geotechnical survey for Segment 1 of the Beaufort subsea cable system, spanning 145.135 km from the Branch Unit (BU) to the Beach Manhole (BMH) at Kilmore Quay, Ireland. Conducted between April 23–29, 2022, using the MV Fugro Supporter for offshore areas and utilizing the existing results from the Geomara survey above, the survey employed multibeam echosounder (MBES), sub-bottom profiler (SBP), side-scan sonar (SSS), and cone penetration tests (CPTs) to assess bathymetry, subsurface geology, and seabed conditions. This report includes a burial assessment from the BU to the Irish Territorial Waters.

- Performed by: Fugro
- Commissioner: AWS and Vondafone
- Type: Geophysical and Geotechnical
- Area: Ireland EEZ
- Corridor: 500m
- Dates: 23 April 2022 – 27 April 2022 (Geophysical)
  27 April 2022 – 29 April 2022 (Geotechnical)
- Vessel: Fugro Supporter
- Report: Beaufort Subsea Cable Route Survey
- Notes:
  - Included a reinterpretation of survey performed at 4.1. Horizon data request and received for the EEZ. Missing horizons for TW and backscatter for EEZ

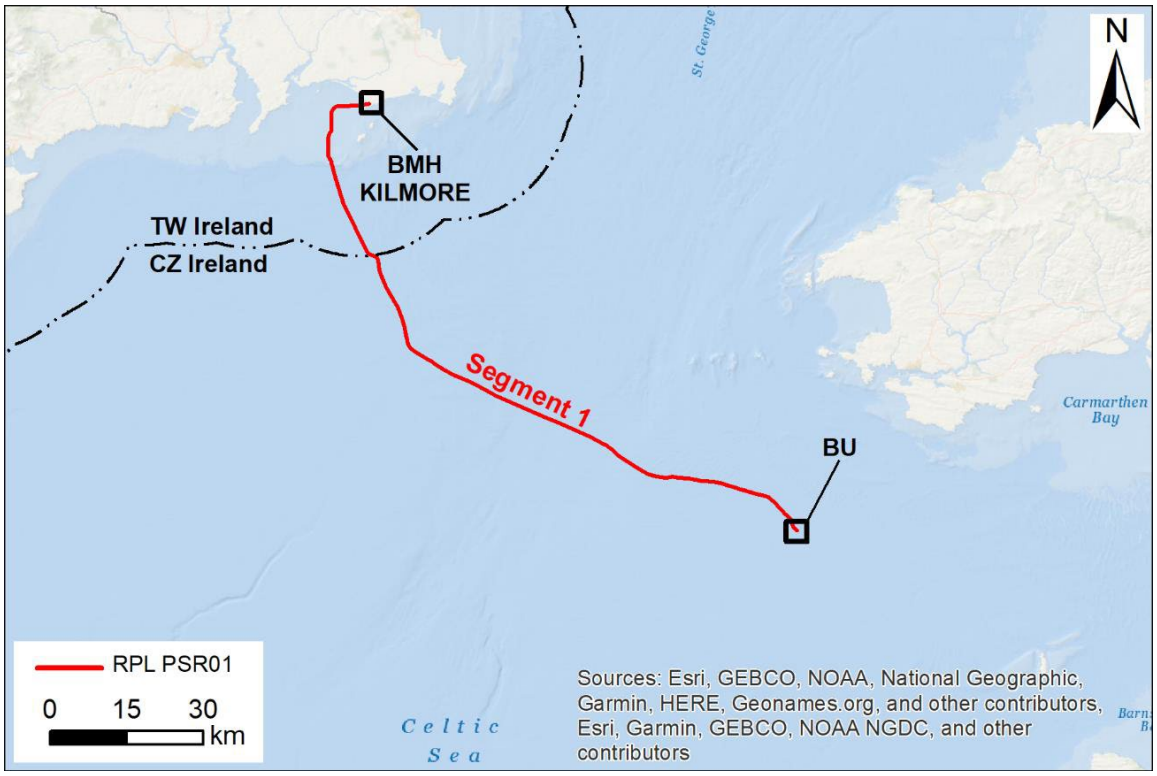


Figure 3 - Fugro Survey Extent

4.3 TUSKAR CABLE ROUTE

The Tuskar route survey by Green Rebel Ltd, prepared for McMahon Design and Management Ltd in January 2024, documents a reconnaissance-grade geophysical and hydrographic survey for the Tuskar subsea cable route in the South Irish Sea, spanning from Pembrokeshire, Wales, to Ireland's 12 nautical mile boundary southeast of Wexford. Conducted from August 6 to September 15, 2023, using the vessels Roman Rebel and Lady Kathleen, the survey acquired multibeam echosounder (MBES), sub-bottom profiler (SBP), side-scan sonar (SSS), and magnetometer data over 88.08 km², covering 1231 km of survey lines.

- Performed by: Green Rebel
- Commissioner: MacMahon
- Type: Geophysical
- Area: UK EEZ, UK TW, IRE EEZ
- Corridor: Unknown
- Dates: 6 August 2023, 15 September 2023
- Vessel: MV Roman Rebel, Lady Kathleen
- Report: GR-GEO-REP-23G03_MDM_Tuskar_Proc_Report_REV_1_
- Notes:
    - Horizon data has not been reinterpreted following geotechnical survey.

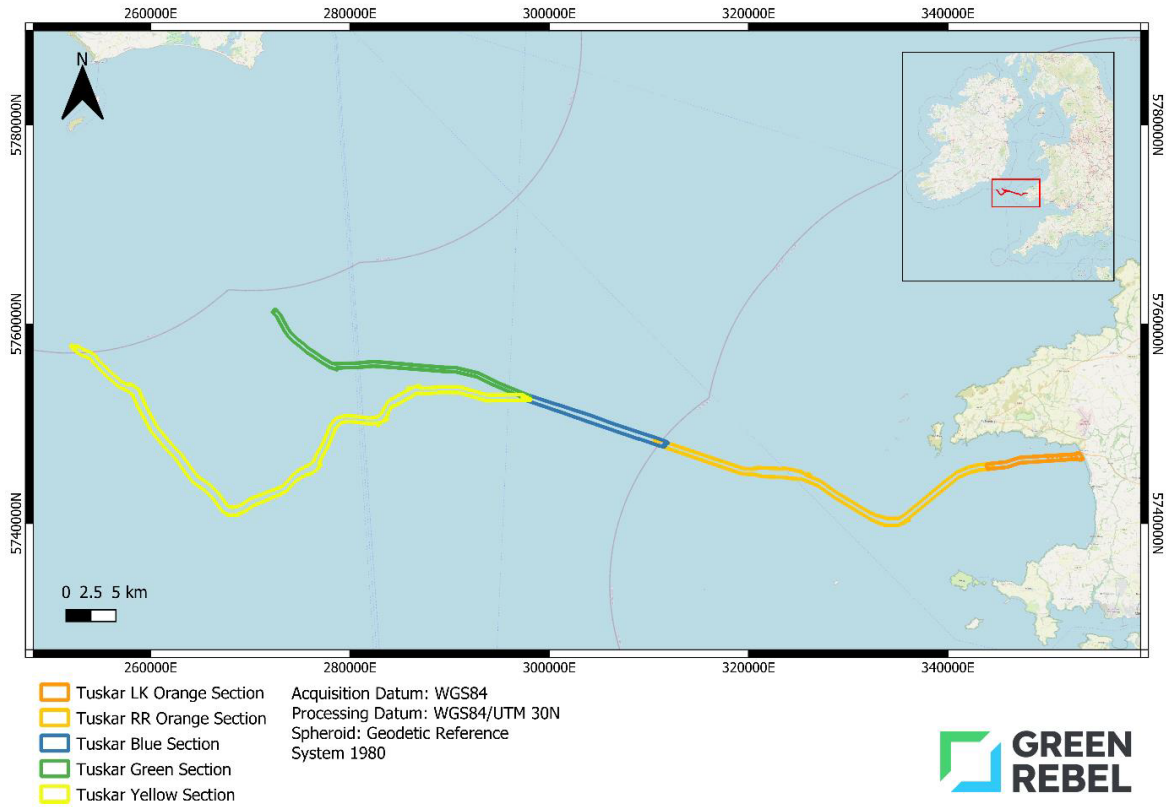


Figure 4 - Green Rebel 2023 Survey Extent

4.4 BEAUFORT CABLE ROUTE SURVEY

The GR-GEO-REP-24G01 Beaufort Processing and Interpretation Report by Green Rebel Ltd, prepared for McMahon Design and Management Ltd in November 2024, documents a geophysical and hydrographic survey for the Beaufort subsea cable route in the Irish Sea, spanning from the Welsh coast to Ireland's territorial waters near Wexford. Conducted from July 1 to July 16, 2024, using the MV Glomar Vantage, the survey acquired multibeam echosounder (MBES), sub-bottom profiler (SBP), side-scan sonar (SSS), and magnetometer data over 95.8 km² to map geohazards, develop a ground model, and inform Cable Burial Risk Assessment (CBRA).

- Performed by: Green Rebel
- Commissioner: MacMahon
- Type: Geophysical
- Area: Ireland EEZ, UK EEZ
- Corridor: 500m
- Dates: 1 July 2024 – 16 July 2024
- Vessel: Unkown
- Report: Beaufort Subsea Cable Route Survey
- Notes:
    - Horizon data has not been reinterpreted following geotechnical survey.

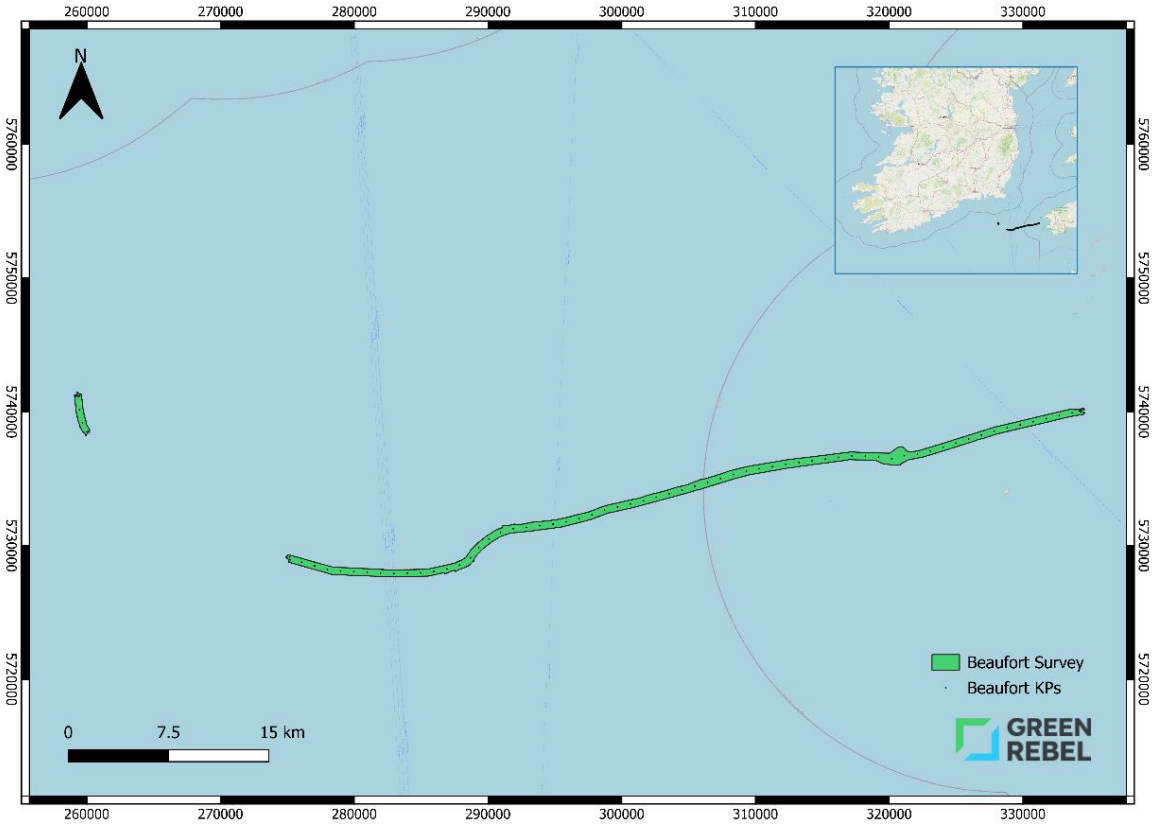


Figure 5 - Green Rebel 2024 Extent

4.5 SHALLOW GEOTECHNICAL INVESTIGATION

A shallow geotechnical investigation for the Irish Sea Cables project was executed by Bluefield on behalf of Green Rebel Maritime. The project area is located in the Irish and Celtic seas with the geotechnical investigation being split across three cable routes between Ireland and Wales as shown in Figure 2-1. Two cable routes extend from Dublin to north-west Wales, with the third route extending between Cork to southwest Wales. Water depth across the investigated area ranged from approximately 5 m to 156 m LAT.

The project was performed over a total of 40 days between 23-Jul and 01-Sep 2024.

Critically, there was no reinterpretation of the geophysical data following the geotechnical survey. No ground truth model exists outside of the Fugro survey data.

- Performed by: Green Rebel
- Commissioner: MacMahon
- Type: GeoTechnical
- Area: Ireland TW, UK EEZ, UK TW
- Corridor: N/A
- Dates: 23 July 2024 – 01 September 2024
- Vessel: Glomar Vantage
- Report: Beaufort Subsea Cable Route Survey
- Notes:
    - No re-interpretation of the geophysical data following geotechnical survey.

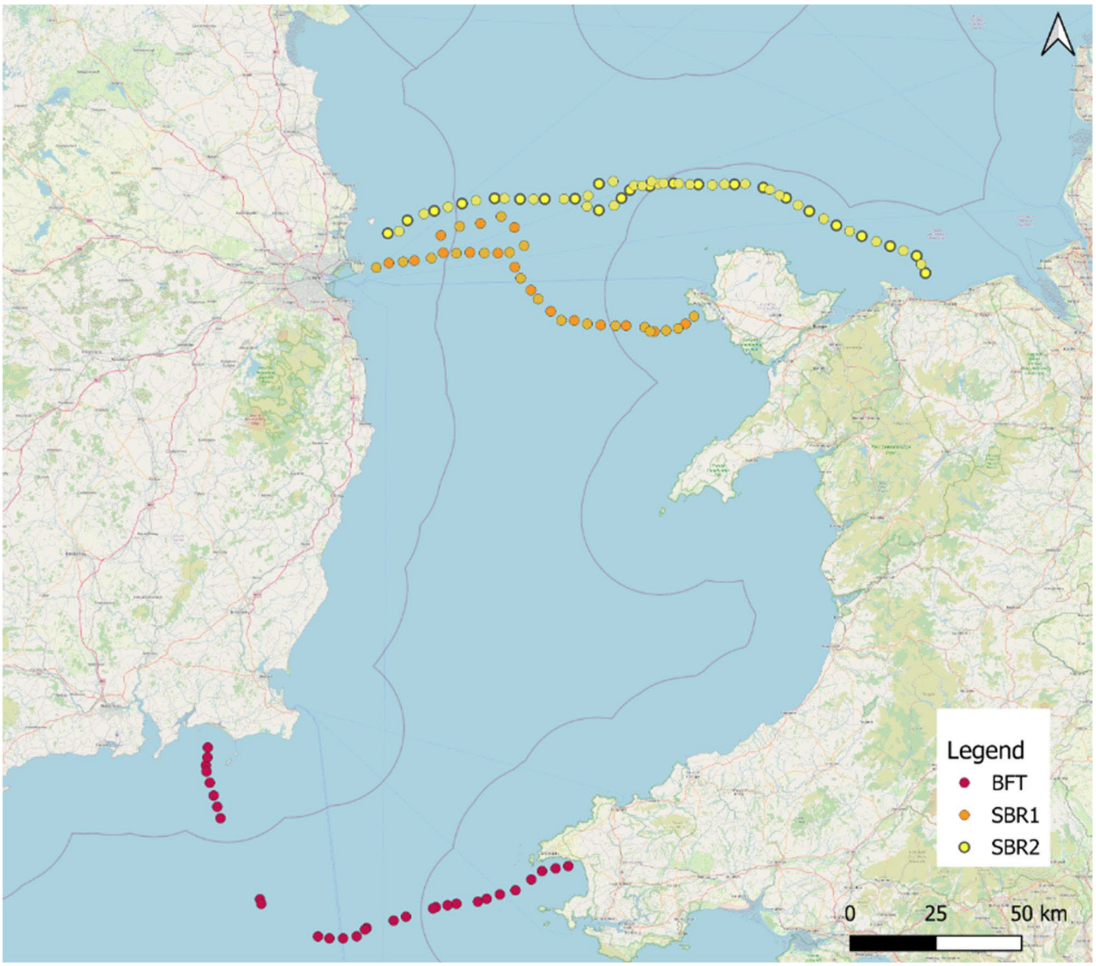


Figure 6 - Geotechnical Survey Extent

5 SUBBOTTOM INTEPRETATION

Sub-bottom survey was done in 3 separate campaigns. Here, we look at the horizon classification and attempt to consolidate the results combined with the geotechnical survey data. It is found that H10, H6 and Hardground reflectors are likely the same, and represent glacial till.

5.1 GREEN REBEL – TUSKAR ROUTE SURVEY 2023

East of the site, obtained using the Lady Kathleen vessel. It is not clear if H7 here is the same as H7 from the 2024 survey. If so, there is an inconsistency in the interpretation

Seismic Stratigraphy AOI - East

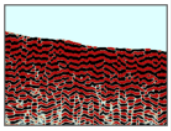
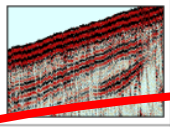
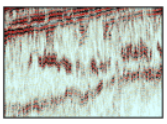
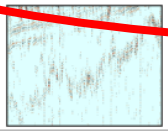
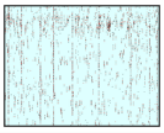
Seismic Unit	Seismic reflection pattern (UHRS)	Horizons	Reflection Continuity	Amplitude	Reflection configuration	Termination	Geological Description
Seabed					Parallel		Heterogenous marine sediments
		H1 (Seafloor)	Continuous	Very high amplitude			
SU1					Parallel	Onlap	Planer bedded muds
		H7	Dis-Continuous	Moderate to high amplitude			
SU2					Chaotic/ Transparent	Occasionally Truncated	Massive and weakly stratified muds and sands
		H8	Dis-Continuous	Low to moderate amplitude			
SU3					Transparent	-	Sand
		H9	Dis-Continuous	Low amplitude			
SU4					Transparent	-	Unknown

Figure 7 - Horizons, 2023 East

West of the site, acquired using Roman Rebel Vessel we have the following horizons and their interpretation.

Seismic Stratigraphy AOI - West

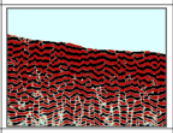
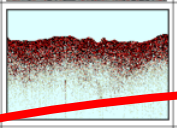
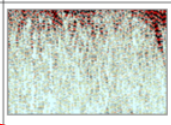
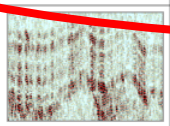
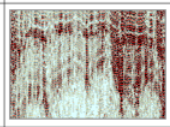
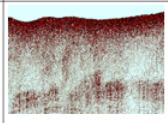
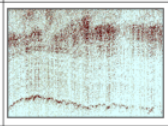
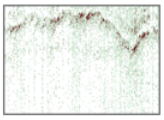
Seismic Unit	Seismic reflection pattern (UHRS)	Horizons	Reflection Continuity	Amplitude	Reflection configuration	Termination	Geological Description
Seabed		H1 (Seafloor)	Continuous	Very high amplitude	Parallel		Heterogenous marine sediments
SU5		H10	Dis-continuous	High amplitude	Parallel/ Transparent	Onlap	Massive sands
SU6		H11	Dis-continuous	Low to moderate amplitude	Transparent	-	Massive sands
SU7		H12	Dis-Continuous	Moderate to high amplitude	Subparallel/ Wavy	Onlap	Stratified muds and sands
SU8		H13	Dis-Continuous	Low to moderate amplitude	Subparallel to Massive	Onlap	Stratified sands and muds
SU9		H14	Dis-Continuous	Moderate to high amplitude	Transparent	-	Massive sand
SU10		H15	Dis-Continuous	Moderate to high amplitude	Parallel	Onlap	Stratified sands and muds
SU11					Transparent	Truncated	-

Figure 8 - Horizons, 2023, West

Horizon H10 is best visible around KP138-149. Here several CPT and vibrocores were taken. CPTs encountered a thin, very hard layer of sand likely cemented (relative density >100%). The vibrocores was not able to penetrate the layer. Based on these findings, it is proposed that the H10 layer should also be classified as glacial till.

This H10 layer also aligns well with the H6 layer from the 2024 survey where they meet at KP138

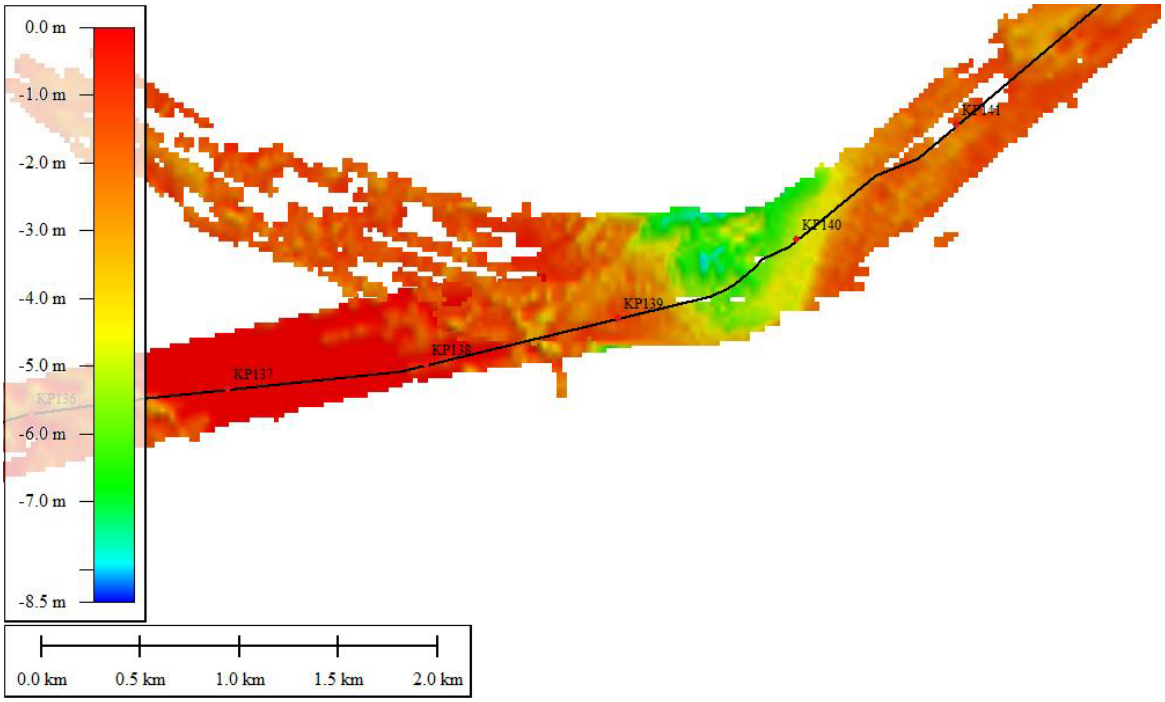


Figure 9 - H6 H10 Overlap

The same overlap can be seen at KP40, between H10 and Hardground.

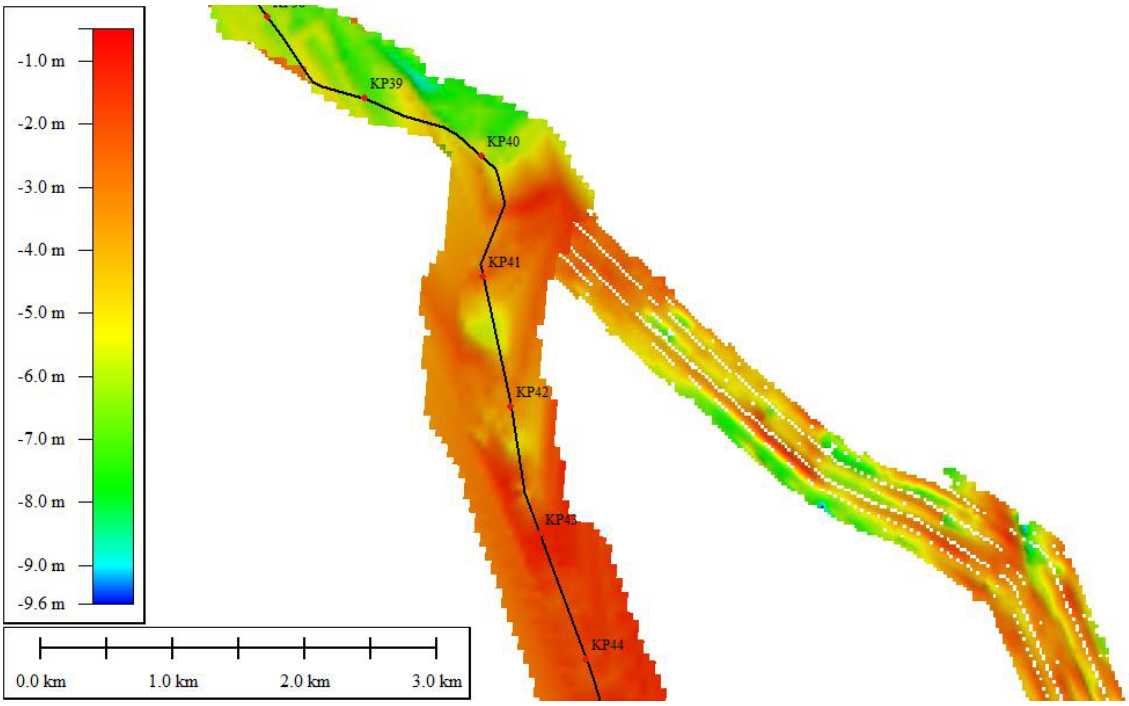


Figure 10 - H10 Hardground Overlap

5.2 BEAUFORT ROUTE SURVEY – GREEN REBEL 2024

Green Rebel returned for another survey in 2024. Key reflectors are H4 which show the transition to reworked till and H6 which show the transition to Glacial Till

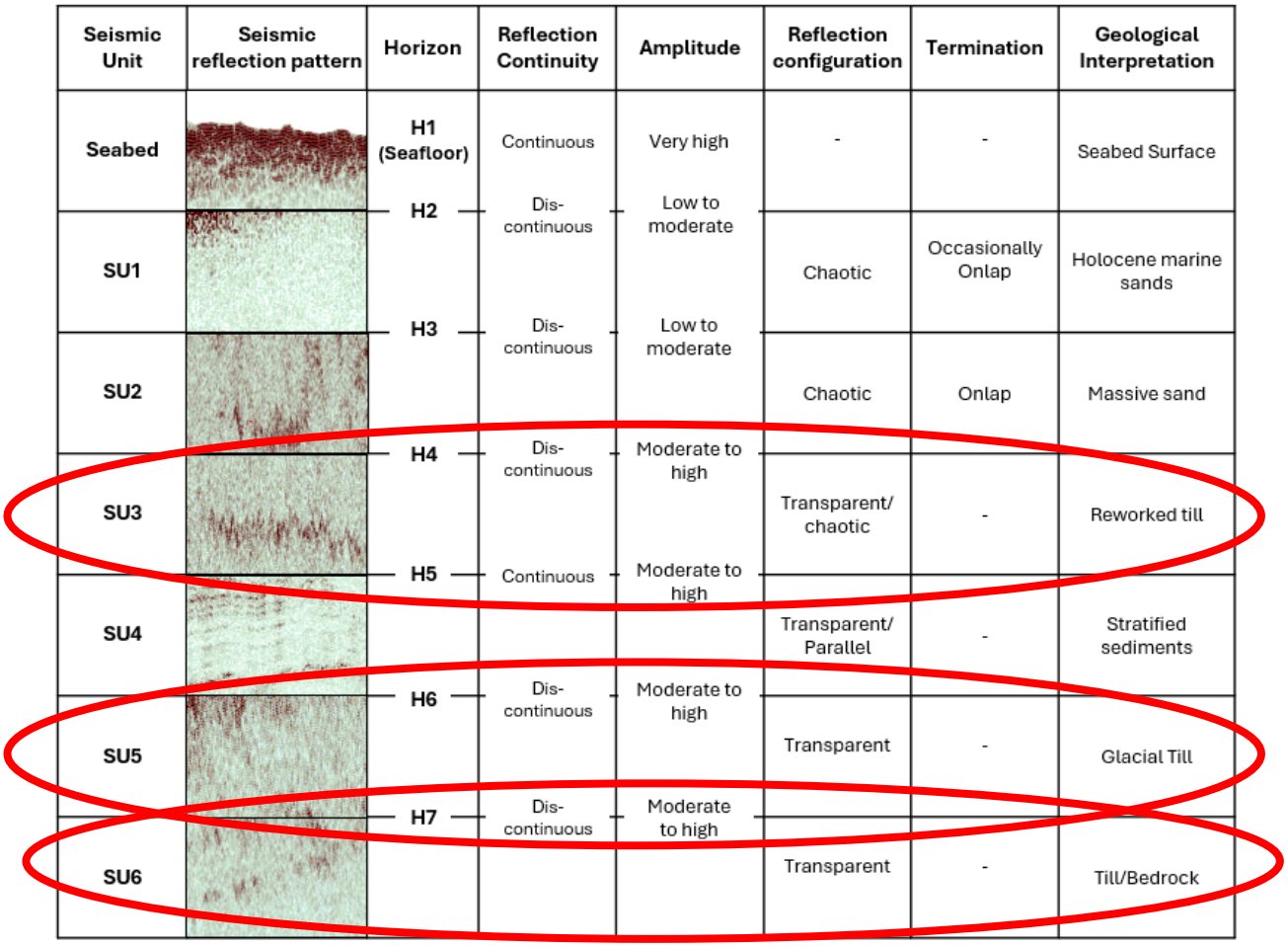


Figure 11 - Horizons, 2024

5.3 FUGRO HORIZONS 2022

Details of the Fugro horizons and their intepretation are not provided in the report, but it is understood that the primary concern is the Hardground Horizon which was not penetrated by the CPT.

5.4 SUBBOTTOM SUMMARY

The following critical reflectors govern burial over much of the route. As the hardground is unrestrained over much of the route, the extend of burial through this layer is difficult to predict.

Table 3 - Reinterpreted Horizons

Survey	Horizon	Revised Interpretation
Green Rebel 2023	H10	Hardground (Glacial Till)
Green Rebel 2024	H6	Hardground (Glacial Till)
Fugro	HARDGROUND	Hardground (Glacial Till)
Green Rebel 2023	H7	Bedrock/Till

6 BARRIERS TO TARGET BURIAL

6.1 BEDROCK

Numerous areas of bedrock are identified at outside of Kilmore Quay. Interestingly, a number of the Green Rebel CPT's seem to have been able to get into this layer. CPT 21A-A for example reached a depth of 2.72m, despite Fugro classifying the sediment as 0.5m of sand over bedrock. This suggests that the bedrock is a type of weak rock or cemented sand. Regardless, burial will be limited in this area. Due to the shallow veneer of sediment over much of this bedrock area, around 10km of the route is proposed to be free laid. It is thought that any jetting activity would remove what sediment layer is present, leaving the cable more exposed that if it was allowed to settle on the sediment layer.

No horizons are available in this area.

6.2 HARDGROUND / GLACIAL TILL

The seabed along the cable route between Kilmore Quay and Newgale was largely shaped by the British Irish Ice Sheet the Irish Sea Ice Stream (Irish Sea Glacier). This was a critical component during the last glacial maximum around 27,000 -19,000 years ago, and deposited till, boulder fields and other glacial landforms in the area.

The ISIS was a fast-flowing, marine-based ice stream within the BIIS, channeling ice south through the Irish Sea Basin from source regions in western Scotland (e.g., Highlands), northwest Ireland (e.g., Donegal), and the Irish Midlands. Unlike a traditional glacier, an ice stream is a dynamic corridor of rapid ice flow (1–2 km/year) within a larger ice sheet, driven by a low-gradient bed, marine lubrication, and subglacial sediment deformation.

During the last glacial maximum the sea level was around 120m lower than today. Ice thickness is estimated at several hundred meters near the Celtic sea margin.

On retreat around around 19,000 years ago, the channel flooded. Currents and waves re-worked the surface sediments, exposing boulders and consolidating till.

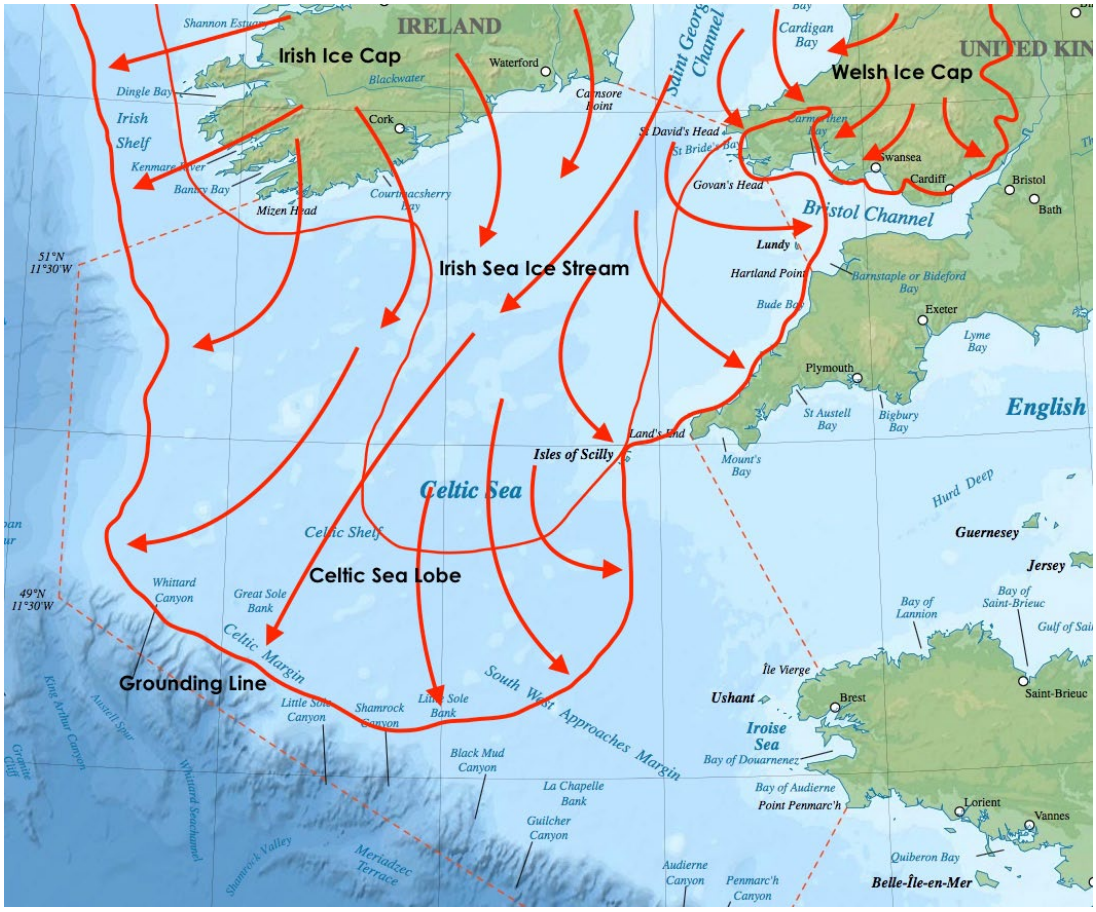


Figure 12 - Irish Sea Ice Stream

Glacial till is a heterogeneous sediment deposited directly by glaciers, characterized by a poorly sorted mixture of particle sizes ranging from clay to boulders. It typically consists of a matrix of fine-grained material (clay, silt, sand) with embedded coarser clasts (gravel, cobbles, boulders). Due to its glacial origin, till is often dense, compact, and variably cemented, with properties that significantly influence its suitability for cable burial using jet trenching.

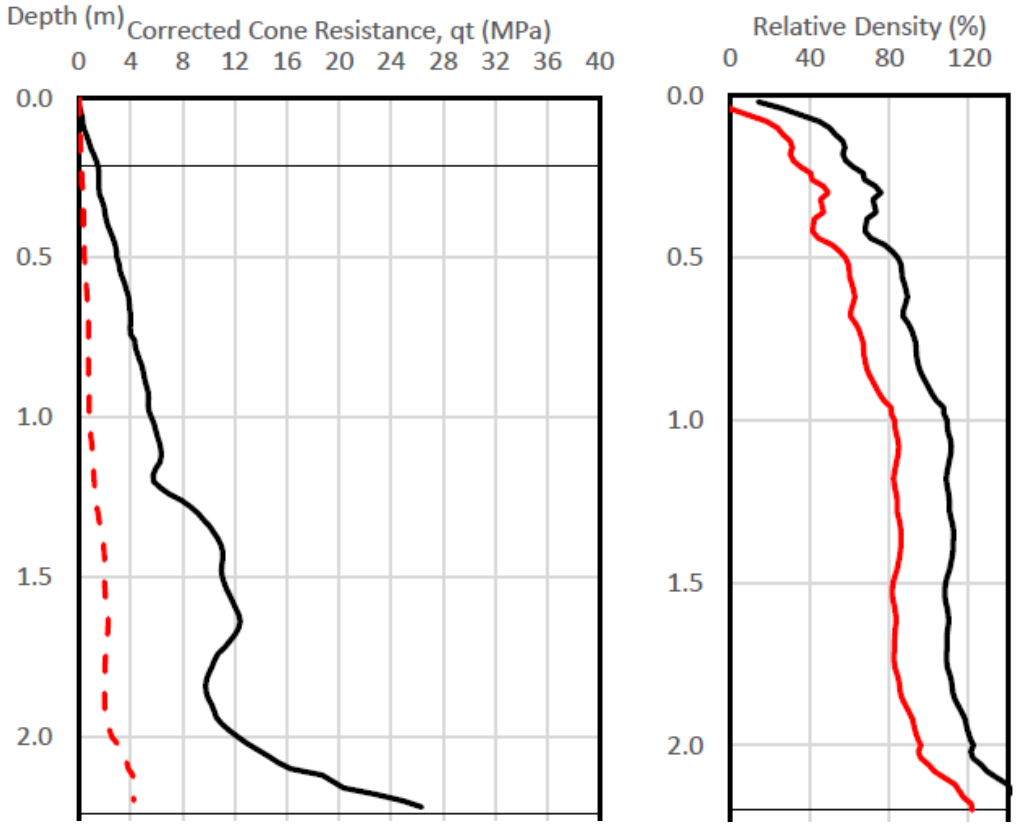
Glacial till can range from unconsolidated to partially or fully cemented. Cementation occurs due to post-depositional processes, such as precipitation of minerals (e.g., calcium carbonate, iron oxides) or compaction under glacial loading. Cemented till is resistant to erosion by jet trenching, as the binding agents increase cohesion and reduce the sediment's susceptibility to fluidization. Strongly cemented till may behave like weak rock, requiring mechanical cutting rather than jetting.

Till is identified by Fugro as a hardground reflector, and CPTs in the area are recorded as having the maximum reaction force exceeded. No cores are taken through the till layer, so we only have CPTs to interpret. Several cores report cobble at the base which supports the glacial till interpretation.

The Fugro survey used a Neptune 3000 CPT, with a maximum push force of 1 tonne (10kN). Green Rebel on the other hand used a Roson ST 100kN, allowing deeper penetration into the hard layer.

Both Green Rebel and Fugro CPTs in the area of this hardground reflector exhibit rapidly increasing cone resistance, and tests which were stopped due to hard soils. The soil type is identified as sand which in turn yields no shear strength results. Relative density exceeding 100% suggests this may be an erroneous classification.

We can nonetheless estimate shear strength based on cone end resistance, and determine if there is likely to be cementation. For example where the Green Rebel CPTs are exceeding 20MPa cone resistance. From CPT BFT_24G01_CPT_15A_A in 69m of water around KP 57:



We can calculate shear strength

$$S_u = \frac{qt - \sigma v0}{Nk}$$

Total Vertical Stress:

$$\sigma v0 = 1.9 \cdot 9.81 \cdot 2.2 + 1 \cdot 9.81 \cdot 69 = 0.75MPa$$

Shear strength is then:

$$S_u = \frac{20 - 0.7}{15} = 1.3MPa$$

This strongly suggests cementation in the till which will limit burial through the layer.

This handground layer of likely cemented glacial till is present within the target burial depth over several sections of the route as evidenced by the sub bottom profiling, CPT and VC results.

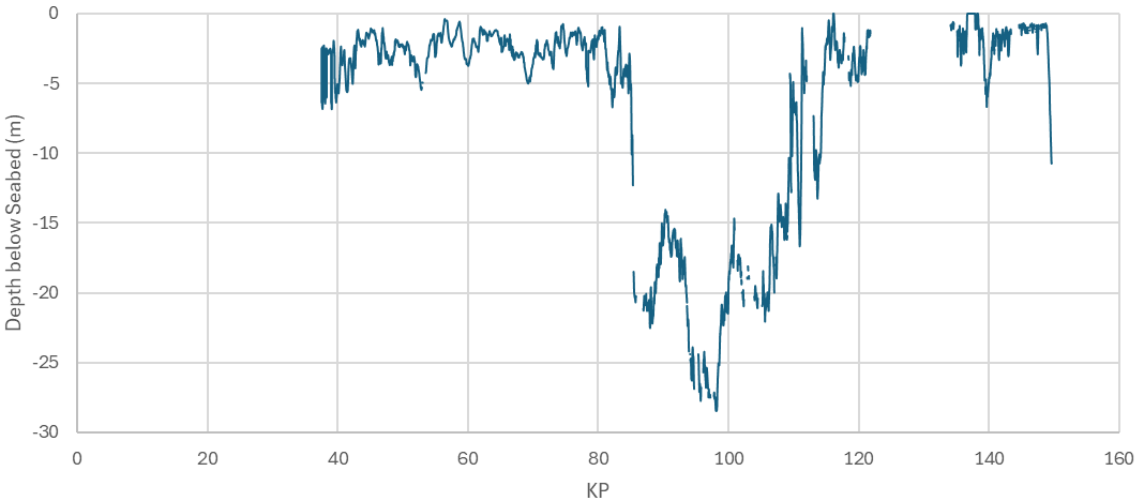


Figure 13 - Hardground/Till Reflector

6.3 BOULDER FIELDS

Subsea boulder fields, characterized by sediment particles exceeding 256 mm in diameter, often accompany cobbles (64–256 mm) and are prevalent in glaciated regions due to glacial transport and deposition. These fields form through direct glacial deposition in till, glaciofluvial reworking in outwash plains, moraine accumulation, or ice-rafted dropstones.

Boulders typically range from 0.3 to 2 m, occasionally reaching 5–10 m, and are often embedded in a till matrix of dense or cemented sand.

Subsurface boulders, undetected by SBP due to limited resolution, contribute to high resistance, as evidenced by CPT refusal in some of the boulder fields present along the route. These clasts increase the risk of shallow burial and equipment damage

6.4 SEABED TOPOGRAPHY

Topography of the route is generally mild. Whilst there areas with sandwaves, the slopes are not deemed to be so extreme as to cause an issue for Capjet.

6.5 CABLE CROSSINGS

Cable crossings pose a barrier to reaching target burial as the owners of existing assets will likely place restrictions on the burial over the asset, combined with a buffer zone either side. For the purposes of this report the Cecon preferred crossing methodology has been used. A buffer of 5m either side of the cable is used, with a reduced burial target within this buffer.

Crossings identified along the route, along with whether their position has been confirmed are detailed below.

Figure 14 - Cable Crossings

Name	KP
ESAT - To be removed	1.573
Celtic - Not Found - Database Position	15.649
Solas - As Found MAG	17.606
UK-Ireland Crossing 1 - Not Found - Database Position	22.114
Ireland-UK Seg A - As Found MAG	40.782
Greenlink - As Found MBES	57.889
Ireland-UK Seg A - As Found MAG	64.820
Hibernia Seg D - As Found MAG	73.397
Greenlink - As Found MBES	91.145
UK Ireland Crossing 2 - Not Found - Database Position	103.934

7 BURIAL SUMMARY

7.1 IRELAND 12NM (KP0-KP40)

The first 15 km of the route is dominated by outcropping rock and boulder fields in shallow water <30m deep, with very limited possibility of burial. Routing has been optimised to stay on a thin veneer of sand where possible, but any jetting activity in this area would likely remove what little sediment exists rather than provide additional protection to the cable.

From around KP15 conditions improve, with a modest sediment layer over bedrock or hardground and with only isolated boulders. A section of shallow sediment cover over hardground around KP18.5-21.5 may lead to reduced burial depending on the level of cementation in the lower layer, but should be attempted.

7.2 IRELAND EEZ (KP40-KP77)

The route segment in Ireland between 12nm line and EEX boundary is governed by a reflector of hardground, most probably defined as glacial till. No cores were taken through this hardground, and all CPT's failed to penetrate due to the lighter CPT carried by fugro during the survey. As the level of cementation is unknown this leads to the area of greatest uncertainty on the burial depth that may be achieved.

7.3 UK EEZ (KP77-KP108)

Generally good burial throughout in sandy sediments. Hardground reflector is present below target burial depth. Little boulders.

7.4 UK 12NM (KP108-KP160)

The hardground reflector appears closer to surface and boulder density is high. Numerous boulder fields to be navigated. Whilst routing has been optimised for surface boulders, it is likely that additional boulders exist below the surface which leads to uncertainty in the burial depth. Chaotic reflector data, with several locations where reflectors may be surfacing.

Within St Brides Bay the conditions improve, and burial to 2m should be feasible in the areas of highest anchoring activity.

APPENDIX A – BURIAL ASSESSMENT TABLE

Beaufort Cable System, - PSR02 KP0@Kilmore Quay

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
1	0	0.114	0.114	HDD		0	0	0	0	None	0	Existing HDD
2	0.114	1.357	1.243	Cast Iron, Inshore Trencher, SHALLOW WATER TRENCHER		0.5	1	0.5	1	Inshore	1	200m of cast iron installed from punch out. Inshore trencher.
3	1.357	1.9	0.543		Probable < 1.0 m SAND overlying subcropping ROCK with megaripples	0	1	0	1	Inshore	1	Expected moderate burial with inshore trencher.
4	1.9	10.459	8.559		Veneer of SAND overlying outcropping ROCK with numerous boulders	0	0	0	0	Free-Lay	0	Proposed freelay due to thin veneer of sand over bedrock and numerous boulders
5	10.459	12.138	1.679	Boulder Field	Probable < 0.5 m SAND overlying subcropping ROCK	0	0.5	0	0.5	Capjet	1	Expected shallow burial to bedrock layer with Capjet from KP 10.459. Rock swords. Sonar on GW to avoid boulders where possible.
6	12.138	12.25	0.112		Probable 0.5 - 1.0 m SAND overlying subcropping ROCK with patches of coarse SAND with megaripples	0.5	1	0.5	1	Capjet	1	Expected shallow burial to bedrock layer with Capjet
7	12.25	12.726	0.476	Boulder Field	Probable 0.5 - 1.0 m SAND overlying subcropping ROCK with patches of coarse SAND with megaripples	0	1	0	1	Capjet	1	Expected shallow burial to bedrock layer with Capjet. Rock swords. Sonar on GW to avoid boulders where possible.
8	12.726	12.941	0.215		Probable 0.5 - 1.0 m SAND overlying subcropping ROCK with patches of coarse SAND with megaripples	0.5	1	0.5	1	Capjet	1	Expected shallow burial to bedrock layer with Capjet
9	12.941	14.006	1.065		Probable < 0.5 m SAND overlying subcropping ROCK with patches of SAND with megaripples	0	0.5	0	0.5	Capjet	1	Expected shallow burial to bedrock layer with Capjet. Rock swords. Sonar on GW to avoid boulders where possible.
10	14.006	14.239	0.233	Boulder Field	Probable 0.5 - 1.0 m SAND overlying subcropping ROCK	0	1	0	1	Capjet	1	Expected shallow burial to bedrock layer with Capjet
11	14.239	14.496	0.257		Probable 0.5 - 1.0 m SAND overlying subcropping ROCK	0.5	1	0.5	1	Capjet	1	Expected modetate burial to bedrock layer with Capjet
12	14.496	14.825	0.329		Outcropping ROCK	0	0	0	0	Capjet	1	Free-lay within natural crevice. Sword Change
13	14.825	14.897	0.072	Boulder Field	Probable 0.5 - 1.5 m SAND overlying subcropping ROCK	0	1.5	0	1.5	Capjet	1.5	Sonar on GW to avoid boulders where possible. Shallow Bedrock
14	14.897	15.229	0.332		Probable 0.5 - 1.5 m SAND overlying subcropping ROCK	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow Bedrock
15	15.229	17.6	2.371		Probable > 2.0 m SAND	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
16	17.6	17.612	0.012	IS FO CROSSING	Probable > 2.0 m SAND	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
17	17.612	18.171	0.559		Probable > 2.0 m SAND	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
18	18.171	18.217	0.046		Probable 1.0 - 2.0 m SAND overlying subcropping HARDGROUND	1	1.5	1	1.5	Capjet	1.5	First instance of hardground reflector. The strength of the underlying hardground is poorly constrained, and it is possible that the swords may penetrate somewhat, even if the GC/CPT did not penetrate. In addition owing to the spatial variability of the top of hardground, the thickness of surficial layer may be locally deeper than reported from the CPTs close to this area. If 1.5m swords cannot penetrate hardground, consider change to 1m swords for such areas.
19	18.217	18.587	0.37		Probable 0.5 - 1.0 m SAND overlying subcropping HARDGROUND	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
20	18.587	21.38	2.793		Probable veneer of SAND overlying outcropping HARDGROUND with megaripples	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
21	21.38	21.683	0.303		Probable 0.5 - 1.0 m SAND overlying subcropping HARDGROUND with megaripples	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
22	21.683	22.109	0.426		Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
23	22.109	22.12	0.011	IS FO CROSSING	Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
24	22.12	40.777	18.657		Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
25	40.777	40.788	0.011	IS FO CROSSING	> 2.0 m medium dense to dense SAND with megaripples and sandwaves	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
26	40.788	41.718	0.93		> 2.0 m medium dense to dense SAND with megaripples and sandwaves	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
27	41.718	46.037	4.319		1.0 - 2.0 m medium dense to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
28	46.037	54.233	8.196		0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
29	54.233	54.832	0.599		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
30	54.832	55.264	0.432		0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
31	55.264	56.241	0.977		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
32	56.241	56.289	0.048		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
33	56.289	56.825	0.536		Veneer to 0.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
34	56.825	56.916	0.091		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacial TILL)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
35	56.916	57.885	0.969		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacial TILL)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
36	57.885	57.895	0.01	POSSIBLE ADDITIONAL PROECTION PENDING CROSSING AGREEMENT	1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
37	57.895	58.345	0.45		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
38	58.345	58.898	0.553		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
39	58.898	59.174	0.276		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
40	59.174	64.815	5.641		0.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
41	64.815	64.826	0.011	IS FO CROSSING	0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
42	64.826	72.234	7.408		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
43	72.234	72.43	0.196		Veneer to 0.5 m very loose to dense SAND with megaripples and ribbons over subcropping HARDGROUND (very dense to cemented SAND)	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
44	72.43	72.473	0.043		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
45	72.473	73.114	0.641		Veneer to 0.5 m very loose to dense SAND with megaripples and ribbons over subcropping HARDGROUND (very dense to cemented SAND)	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
46	73.114	73.393	0.279		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
47	73.393	73.403	0.01	IS FO CROSSING	1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
48	73.403	74.26	0.857		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
49	74.26	74.847	0.587		0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
50	74.847	75.514	0.667		1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense to cemented SAND)	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
51	75.514	76.57	1.056		0.5 - 1.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacial TILL)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
52	76.57	76.705	0.135		Veneer of very loose to dense SAND over outcropping HARDGROUND (very dense to cemented SAND)	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
53	76.705	77.322	0.617		0.5 - 2.0 m very loose to medium dense SAND over subcropping HARDGROUND (very dense to cemented SAND)	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
54	77.322	80.091	2.769		> 2.0 m very loose to medium dense SAND with megaripples	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
55	80.091	80.9	0.809	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
56	80.9	80.964	0.064		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
57	80.964	81.024	0.06	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
58	81.024	83.24	2.216		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
59	83.24	83.29	0.05	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
60	83.29	83.295	0.005	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
61	83.295	83.348	0.053	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
62	83.348	91.14	7.792		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
63	91.14	91.151	0.011	POSSIBLE ADDITIONAL PROECTION PENDING CROSSING AGREEMENT	Medium Sediment	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
64	91.151	103.93	12.779		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
65	103.93	103.94	0.01	IS FO Crossing	Medium Sediment	0	0.5	0	0.5	Capjet	1.5	Burial at crossing pending outcome of crossing agreement discussions
66	103.94	108.975	5.035		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
67	108.975	109.258	0.283	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
68	109.258	110.173	0.915		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
69	110.173	111.322	1.149	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
70	111.322	111.324	0.002		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
71	111.324	111.354	0.03	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
72	111.354	112.139	0.785		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
73	112.139	113.036	0.897	Possible Surfacing Reflector H6	Coarse Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
74	113.036	113.208	0.172		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
75	113.208	113.523	0.315	Boulder Field	Coarse Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
76	113.523	113.642	0.119		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
77	113.642	113.688	0.046	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
78	113.688	114.358	0.67		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
79	114.358	115.183	0.825	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
80	115.183	115.322	0.139		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
81	115.322	115.345	0.023	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
82	115.345	115.389	0.044	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
83	115.389	115.691	0.302	Shallow Reflector H6 (Hardground/Till), Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Shallow hardground Reflector. Use sonar on GW to avoid surface boulders as practical.
84	115.691	115.777	0.086		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
85	115.777	116.91	1.133	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
86	116.91	116.988	0.078		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
87	116.988	117.116	0.128	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
88	117.116	118.465	1.349		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
89	118.465	118.891	0.426	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
90	118.891	118.977	0.086		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
91	118.977	119.906	0.929	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
92	119.906	120.067	0.161		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
93	120.067	120.251	0.184	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
94	120.251	120.536	0.285		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
95	120.536	122.948	2.412	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
96	122.948	126.428	3.48		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
97	126.428	126.624	0.196	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
98	126.624	126.747	0.123		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
99	126.747	126.853	0.106	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
100	126.853	127.872	1.019		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
101	127.872	128.292	0.42	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
102	128.292	128.604	0.312		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
103	128.604	131.277	2.673	Boulder Field	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
104	131.277	133.181	1.904		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
105	133.181	133.239	0.058	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
106	133.239	133.347	0.108		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
107	133.347	133.352	0.005	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
108	133.352	133.806	0.454		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
109	133.806	134.197	0.391	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
110	134.197	134.263	0.066		Medium Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
111	134.263	134.567	0.304	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
112	134.567	134.588	0.021		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
113	134.588	134.646	0.058	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
114	134.646	135.299	0.653		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
115	135.299	135.606	0.307	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
116	135.606	135.856	0.25		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
117	135.856	135.989	0.133	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
118	135.989	136.244	0.255		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
119	136.244	136.413	0.169	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
120	136.413	136.488	0.075		Fine Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
121	136.488	136.597	0.109	Boulder Field	Fine Sediment	0	1.5	0	1.5	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
122	136.597	136.627	0.03	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
123	136.627	136.666	0.039	Shallow Reflector H6 (Hardground/Till)	Fine Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
124	136.666	137.931	1.265	Shallow Reflector H6 (Hardground/Till)	Medium Sediment	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
125	137.931	137.932	0.001	Shallow Reflector H6 (Hardground/Till)	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
126	137.932	137.942	0.01		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
127	137.942	138.139	0.197	Shallow Reflector H6 (Hardground/Till)	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
128	138.139	138.376	0.237	Shallow Reflector H6 (Hardground/Till)	Coarse Sediment	0	1.5	0	1.5	Capjet	1.5	Shallow hardground reflector.
129	138.376	138.427	0.051	Shallow Reflector H6 (Hardground/Till)	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
130	138.427	138.477	0.05	Shallow Reflector H6 (Hardground/Till)	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
131	138.477	138.627	0.15		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
132	138.627	138.679	0.052	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
133	138.679	138.813	0.134	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
134	138.813	138.859	0.046	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
135	138.859	138.961	0.102	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
136	138.961	139.057	0.096	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
137	139.057	140.65	1.593	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
138	140.65	140.664	0.014	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
139	140.664	141.096	0.432	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
140	141.096	141.097	0.001	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
141	141.097	141.131	0.034	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
142	141.131	141.216	0.085	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
143	141.216	141.259	0.043		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
144	141.259	141.391	0.132	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
145	141.391	142.037	0.646	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
146	142.037	142.251	0.214	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
147	142.251	142.586	0.335	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
148	142.586	142.667	0.081	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
149	142.667	142.688	0.021	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
150	142.688	142.779	0.091	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
151	142.779	142.809	0.03	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
152	142.809	142.882	0.073	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
153	142.882	143.181	0.299	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
154	143.181	143.417	0.236	Shallow Reflector H10	Coarse Sediment	1	1.5	1	1.5	Capjet	1.5	Shallow hardground reflector.
155	143.417	144.006	0.589		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
156	144.006	144.044	0.038	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
157	144.044	144.125	0.081		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
158	144.125	144.323	0.198	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
159	144.323	144.6	0.277		Coarse Sediment	1.5	1.5	1.5	1.5	Capjet	1.5	Expected good burial
160	144.6	144.643	0.043	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	1.5	Capjet	1.5	Shallow hardground reflector.
161	144.643	144.747	0.104	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
162	144.747	144.794	0.047		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
163	144.794	144.796	0.002	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	2	Capjet	1.5	Expected good burial
164	144.796	144.822	0.026	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
165	144.822	144.991	0.169	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
166	144.991	145.057	0.066		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
167	145.057	145.115	0.058	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
168	145.115	145.154	0.039	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
169	145.154	145.185	0.031	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
170	145.185	145.228	0.043	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
171	145.228	145.513	0.285	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
172	145.513	145.548	0.035		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
173	145.548	145.579	0.031	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
174	145.579	145.871	0.292	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
175	145.871	145.885	0.014	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
176	145.885	146.177	0.292	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
177	146.177	146.2	0.023	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
178	146.2	146.201	0.001	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
179	146.201	146.204	0.003	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	2	Capjet	1.5	Expected good burial, though shallow reflector may preclude reaching 2m burial option.
180	146.204	146.248	0.044		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
181	146.248	146.271	0.023	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
182	146.271	146.281	0.01		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial

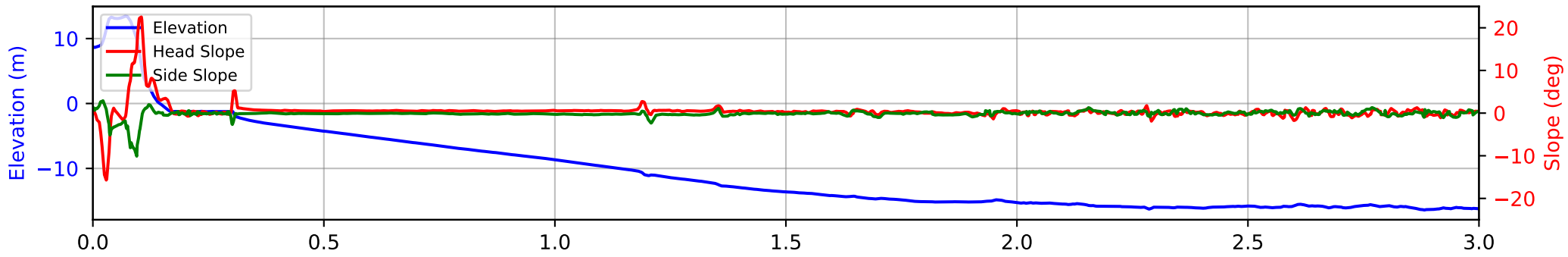
Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
183	146.281	146.306	0.025	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
184	146.306	146.323	0.017		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
185	146.323	146.326	0.003	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
186	146.326	146.474	0.148	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
187	146.474	146.477	0.003	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
188	146.477	146.504	0.027		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
189	146.504	146.634	0.13	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
190	146.634	146.666	0.032	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
191	146.666	146.783	0.117	Shallow Reflector H10, Boulder Field	Coarse Sediment	0	1.5	0	2	Capjet	1.5	Shallow hardground Reflector. Use sonar on GW to avoid surface boulders as practical.
192	146.783	146.792	0.009	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
193	146.792	146.868	0.076	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
194	146.868	146.906	0.038	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
195	146.906	147.074	0.168	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
196	147.074	147.076	0.002		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
197	147.076	147.121	0.045	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
198	147.121	147.152	0.031		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
199	147.152	147.175	0.023	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
200	147.175	147.318	0.143	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
201	147.318	147.369	0.051	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
202	147.369	147.394	0.025	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
203	147.394	147.417	0.023		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
204	147.417	147.495	0.078	Boulder Field	Coarse Sediment	0	1.5	0	2	Capjet	1.5	Use sonar on GW to avoid surface boulders as practical.
205	147.495	147.584	0.089		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
206	147.584	147.61	0.026	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
207	147.61	147.651	0.041	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
208	147.651	147.869	0.218	Shallow Reflector H10, Boulder Field	Coarse Sediment	0	1.5	0	2	Capjet	1.5	Shallow hardground Reflector. Use sonar on GW to avoid surface boulders as practical.
209	147.869	148.065	0.196	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
210	148.065	148.114	0.049		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
211	148.114	148.163	0.049	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
212	148.163	148.801	0.638	Shallow Reflector H10, Boulder Field	Coarse Sediment	0	1.5	0	2	Capjet	1.5	Shallow hardground Reflector. Use sonar on GW to avoid surface boulders as practical.
213	148.801	148.905	0.104	Shallow Reflector H10	Coarse Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.
214	148.905	149.003	0.098	Shallow Reflector H10	Coarse Sediment	1	1.5	1	2	Capjet	1.5	Shallow hardground reflector.
215	149.003	149.051	0.048	Shallow Reflector H10	Coarse Sediment	1.5	1.5	1.5	2	Capjet	1.5	Expected good burial, though shallow reflector may preclude reaching 2m burial option.
216	149.051	157.685	8.634		Coarse Sediment	1.5	1.5	2	2	Capjet	1.5	Expected good burial
217	157.685	159.449	1.764	Shallow Reflector H7 (Till/Bedrock)	Fine Sediment	0.5	1.5	0.5	2	Capjet	1.5	Shallow hardground reflector.

Segment	KP From	KP To	Segment Length	Notes	Sediment	Burial Worst Case	Burial Best Case	Optional Worst Case	Optional Best Case	Trencher	Swords Proposed	Comment
218	159.449	159.705	0.256	Inshore Trencher, Shallow Reflector H8 Possibly Bedrock	Fine Sediment	1	1.5	1	2	Inshore	1.5	Shallow hardground reflector.
219	159.705	160.16	0.455	Inshore Trencher		1.5	1.5	2	2	Inshore	1.5	200m cast iron fitted from end of HDD
220	160.16	160.292	0.132	HDD		0	0	0	0	None	1.5	HDD

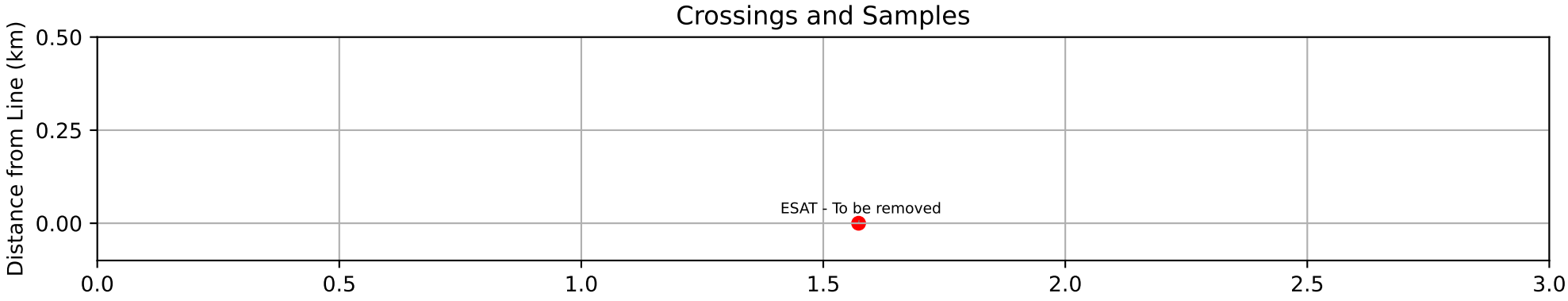
APPENDIX B – DETAILED CHARTS

Detailed BAS results in 3km segments

Seabed Elevation and Slopes

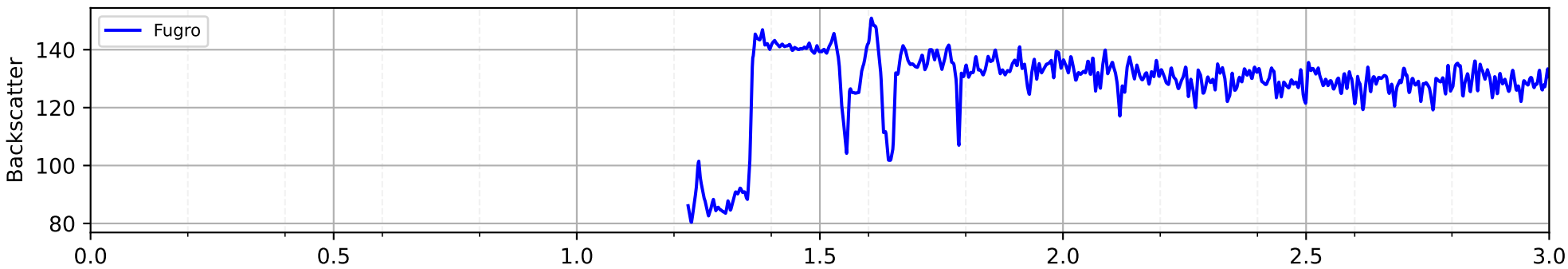


Crossings and Samples

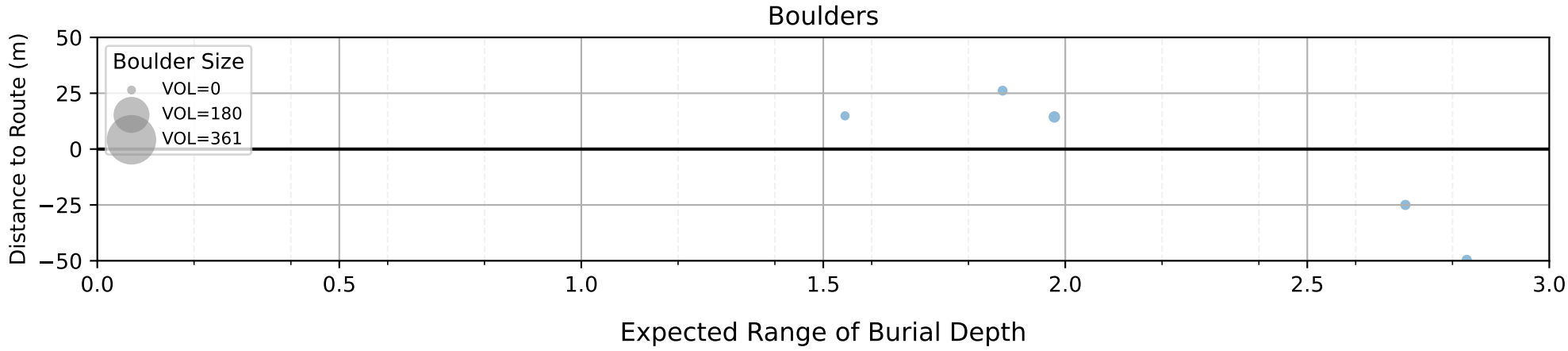


Horizons

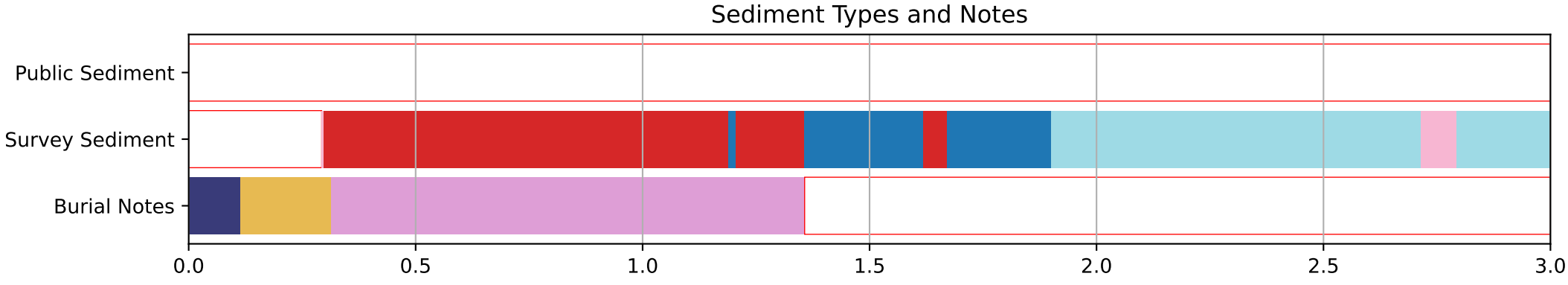
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- No Data

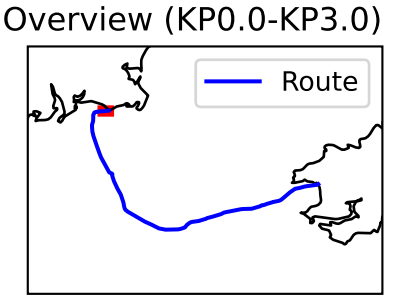
Burial Notes

- HDD
- Cast Iron, Inshore Trencher, SHALLOW WATER TRENCHER
- Inshore Trencher, SHALLOW WATER TRENCHER
- No Data

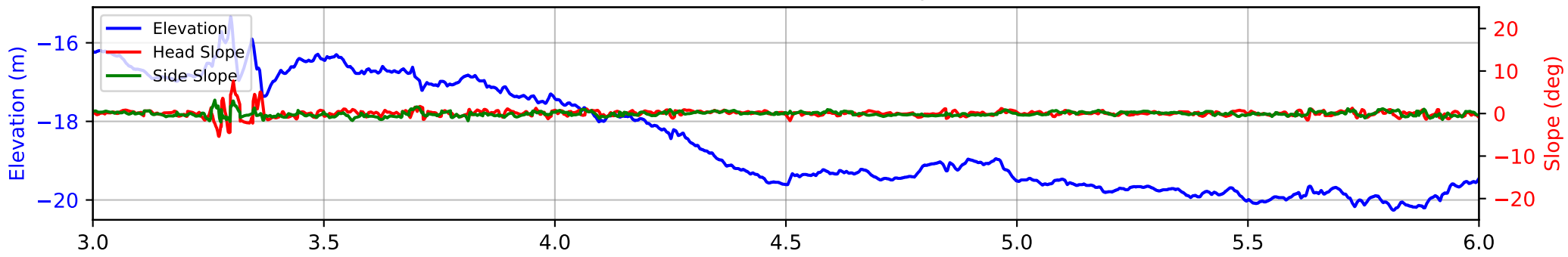
Survey Sediment

- No Data
- Outcropping ROCK
- Probable < 1.0 m SAND overlying subcropping ROCK
- Probable < 1.0 m SAND overlying subcropping ROCK with megaripples
- Veneer of SAND overlying outcropping ROCK with numerous boulders

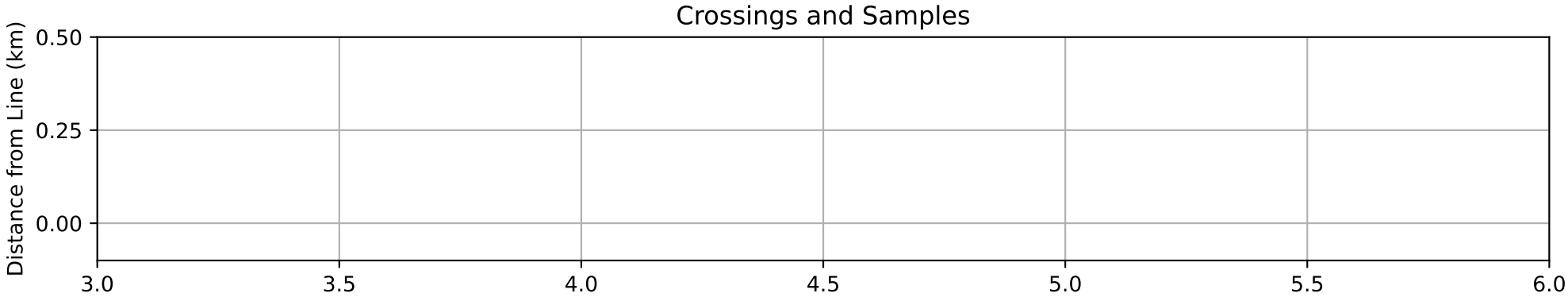
Overview (KP0.0-KP3.0)



Seabed Elevation and Slopes

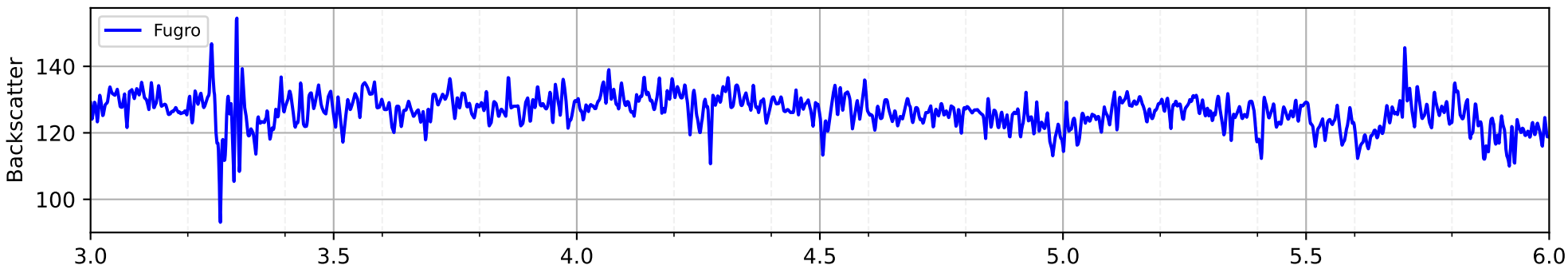


Crossings and Samples

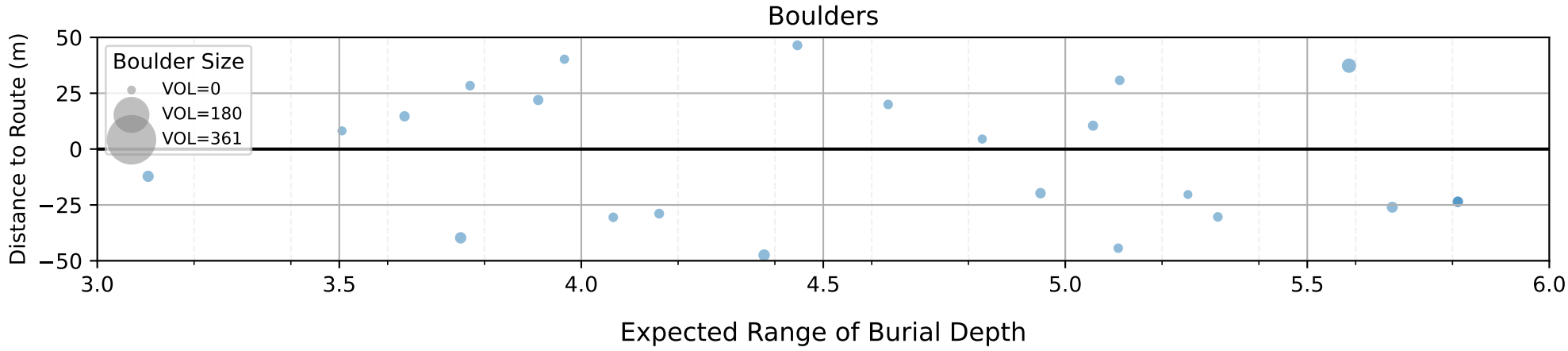


Horizons

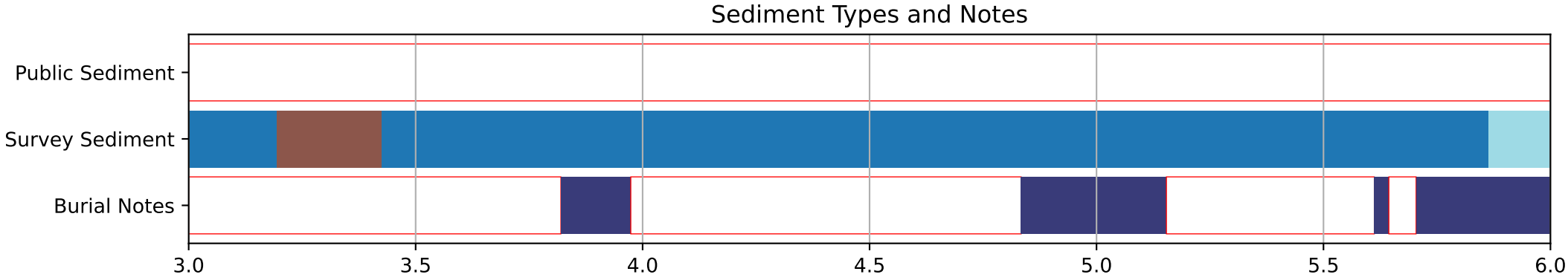
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- No Data

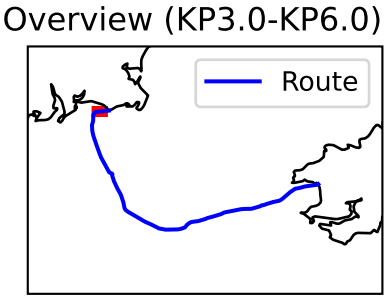
Burial Notes

- No Data
- Boulder Field

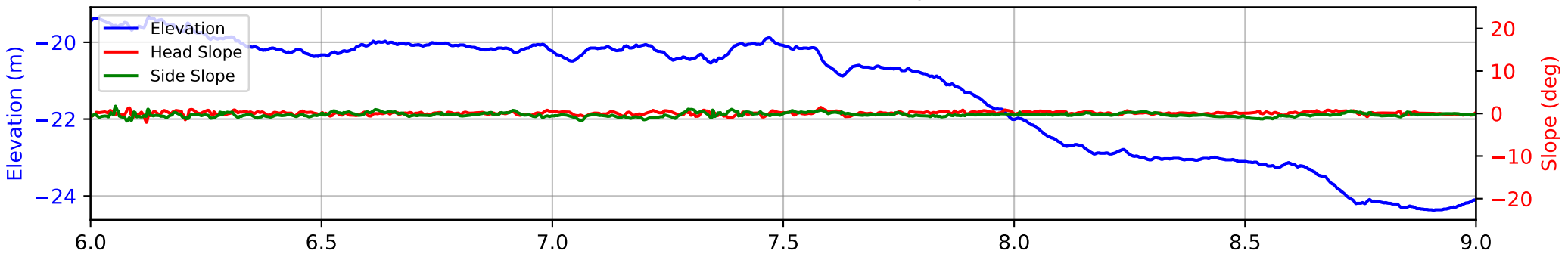
Survey Sediment

- Veneer of SAND overlying outcropping ROCK with numerous boulders
- Outcropping ROCK
- Outcropping ROCK with numerous boulders

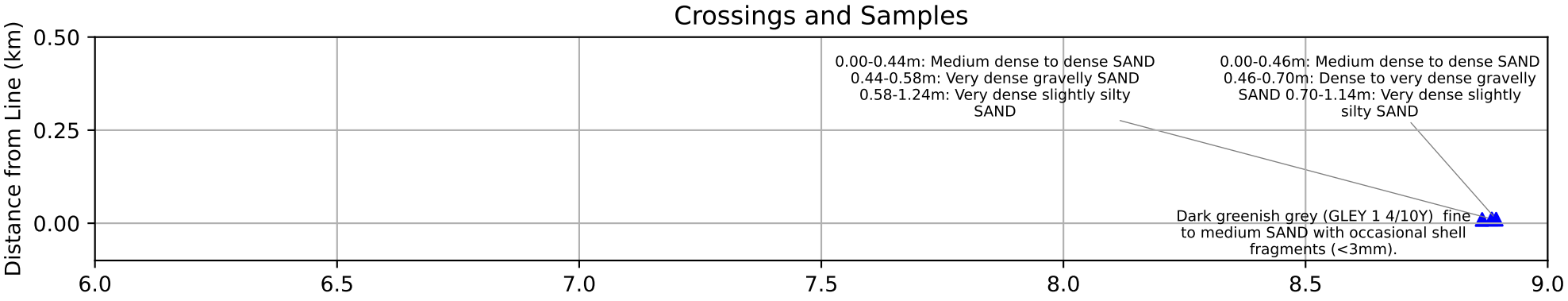
Overview (KP3.0-KP6.0)



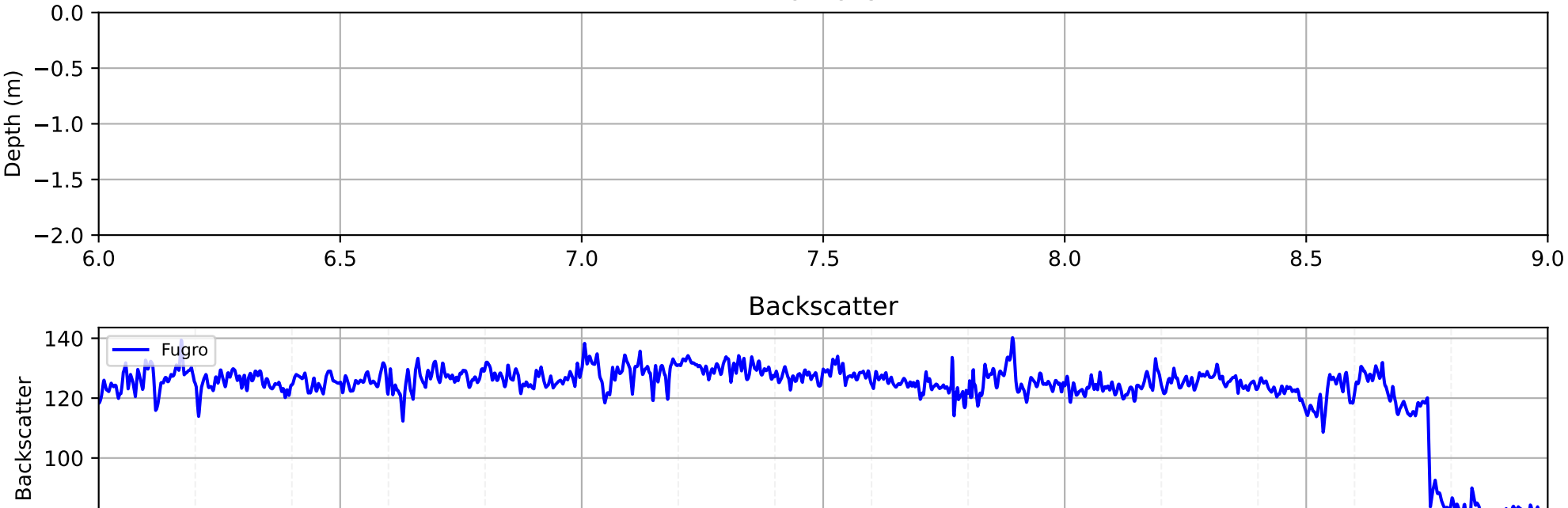
Seabed Elevation and Slopes



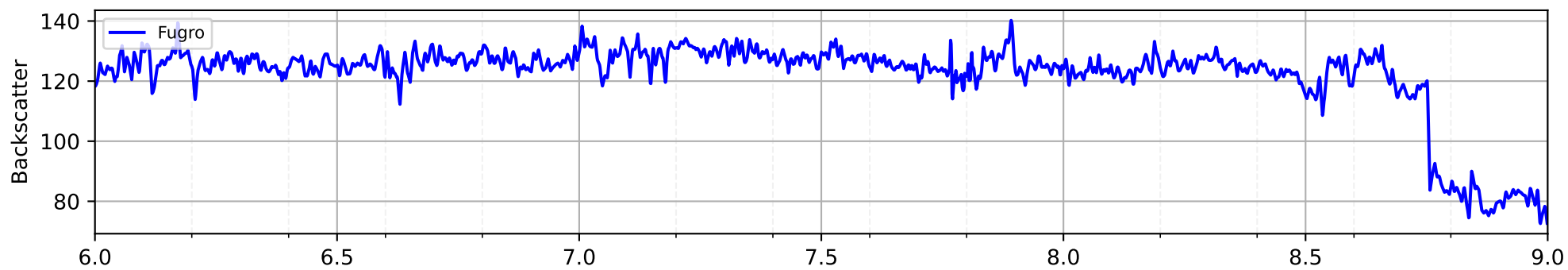
Crossings and Samples



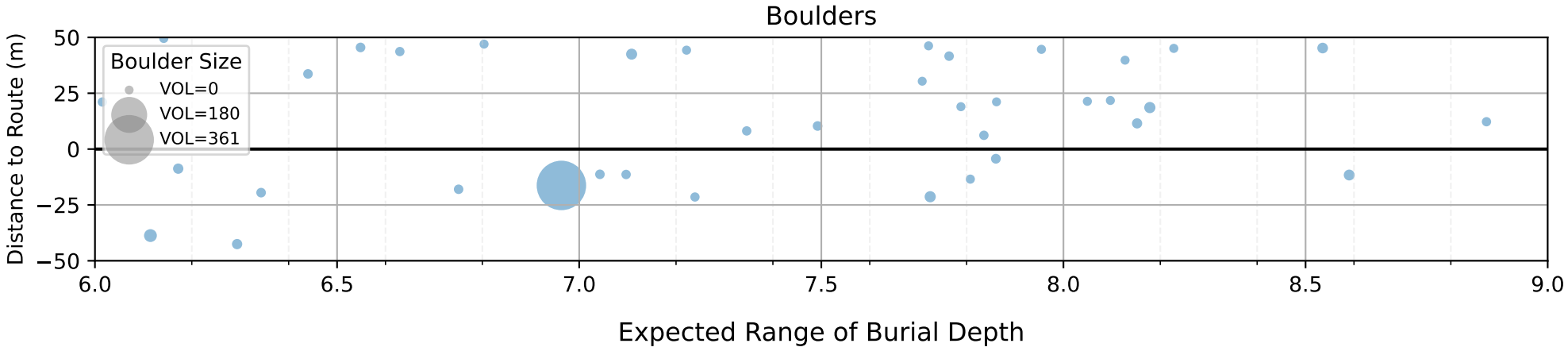
Horizons

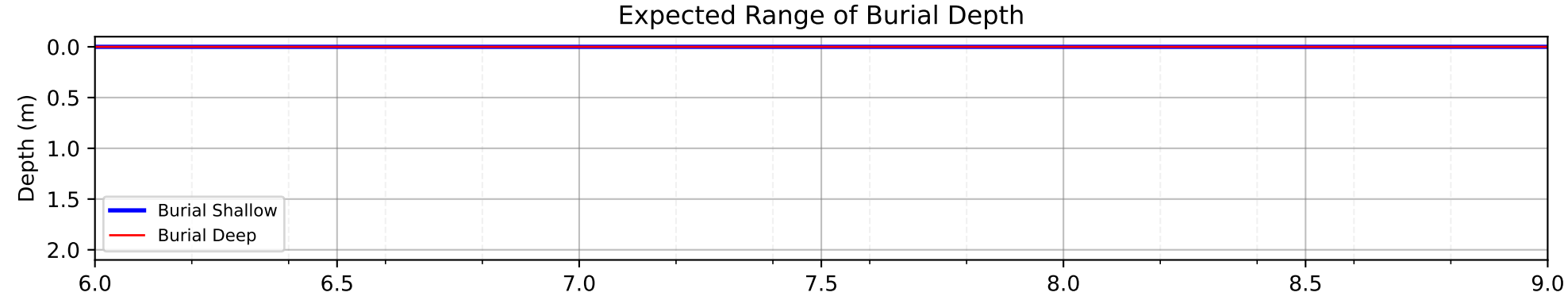


Backscatter

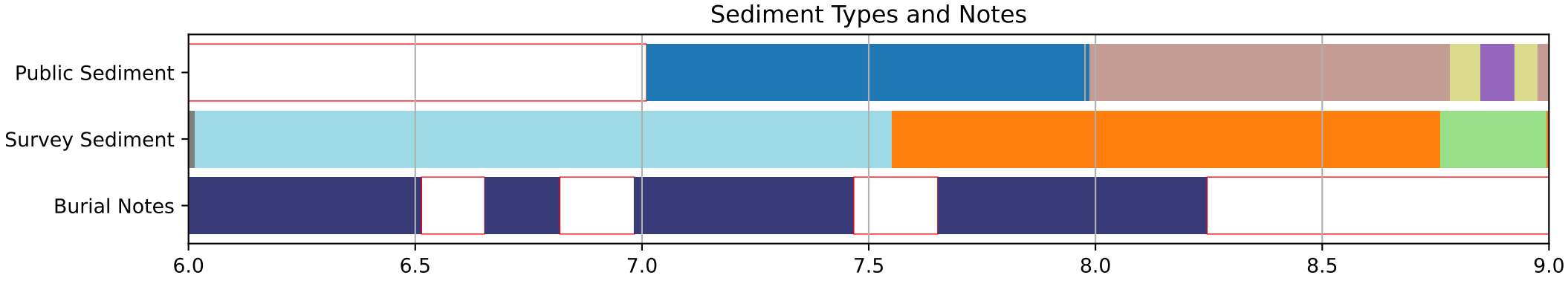


Boulders





Sediment Types and Notes



Public Sediment

- No Data
- SAND
- Coarse-grained sediment
- Sand
- Rock

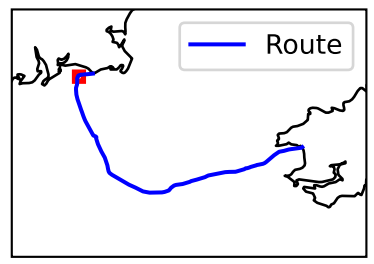
Survey Sediment

- Outcropping ROCK with numerous boulders
- Veneer of SAND overlying outcropping ROCK with numerous boulders
- Probable < 0.5 m SAND overlying subcropping ROCK with megaripples
- Probable < 0.5 m SAND overlying subcropping ROCK

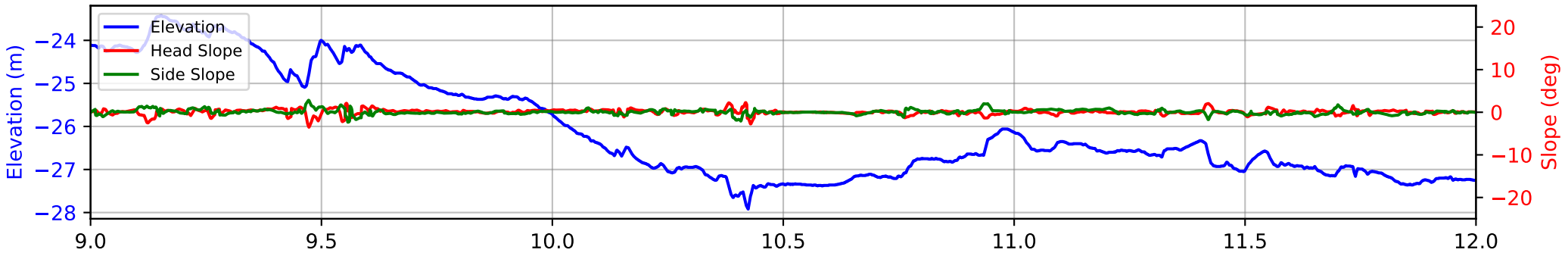
Burial Notes

- Boulder Field
- No Data

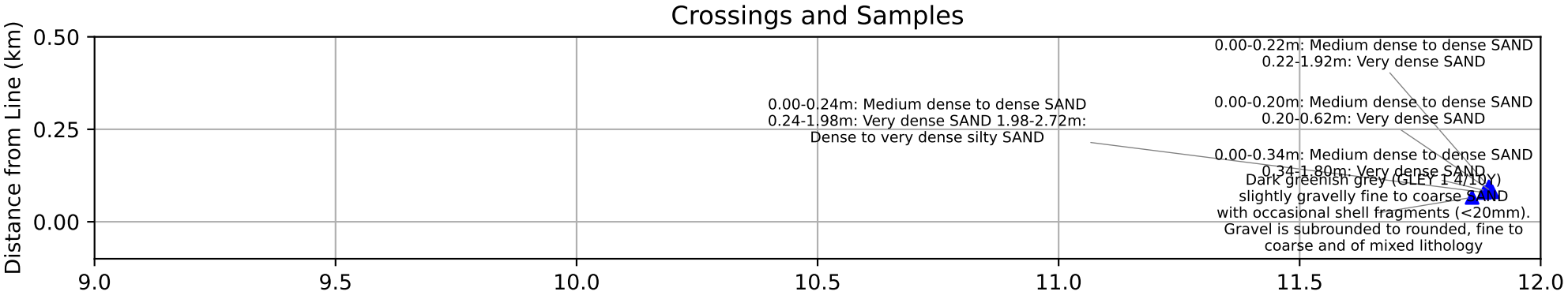
Overview (KP6.0-KP9.0)



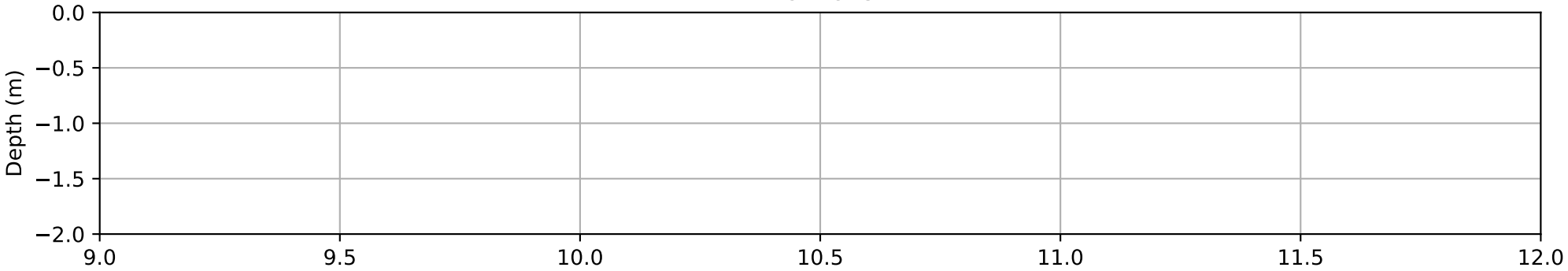
Seabed Elevation and Slopes



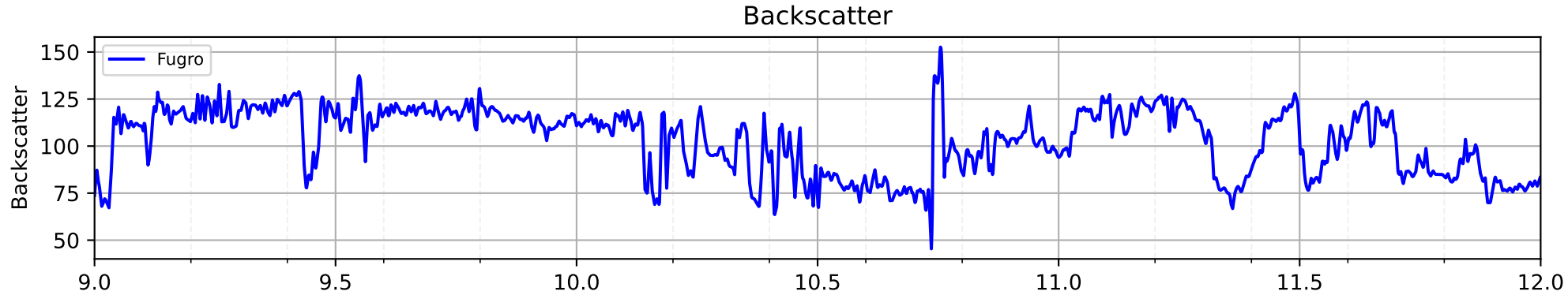
Crossings and Samples



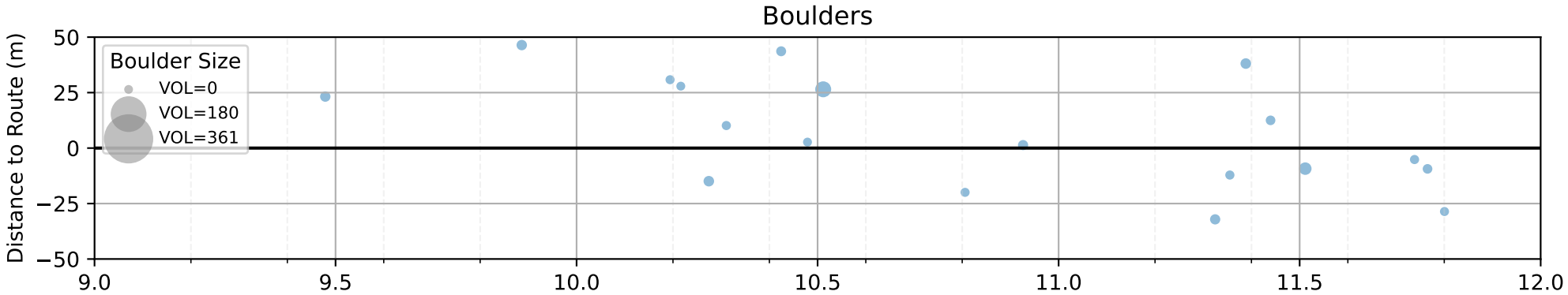
Horizons



Backscatter

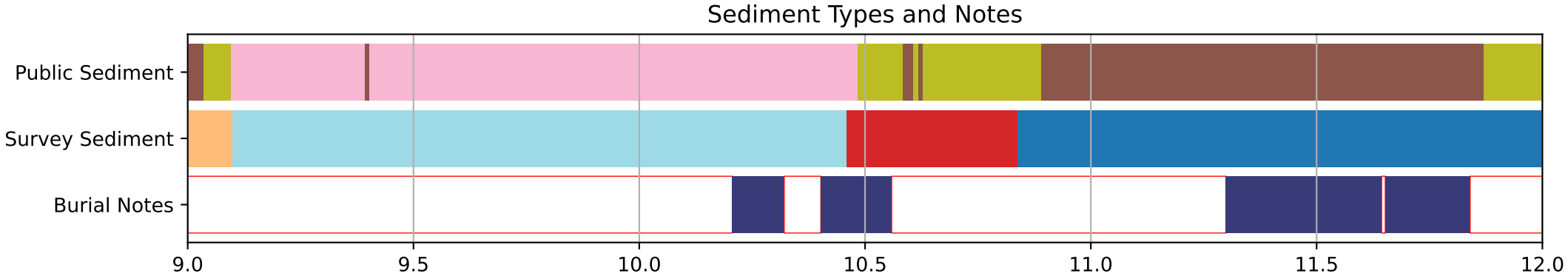


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- Coarse-grained sediment
- Sand
- Rock

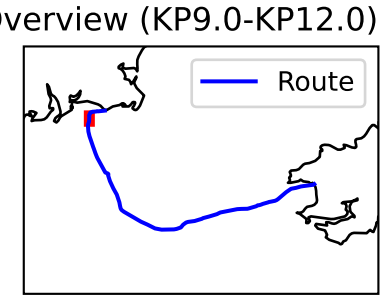
Burial Notes

- No Data
- Boulder Field

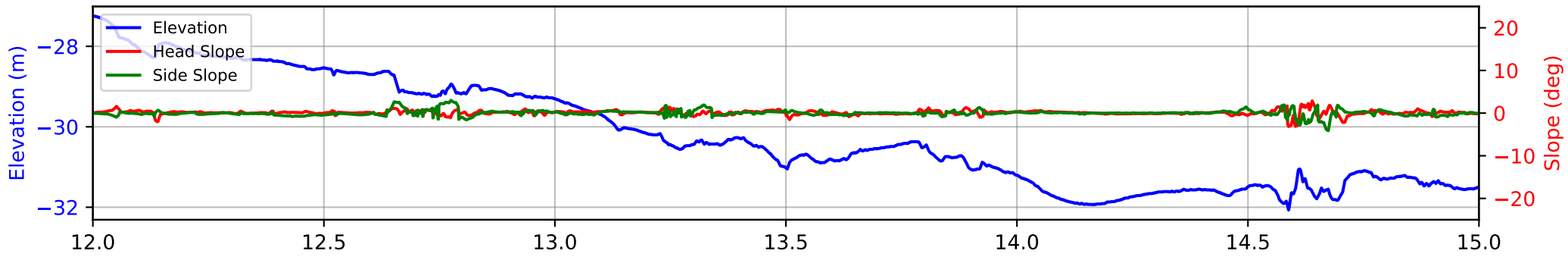
Survey Sediment

- Probable < 0.5 m SAND overlying subcropping ROCK with megaripples
- Veneer of SAND overlying outcropping ROCK with numerous boulders
- Probable < 0.5 m SAND overlying subcropping ROCK
- Probable < 0.5 m SAND overlying subcropping ROCK with patches of SAND with megaripples

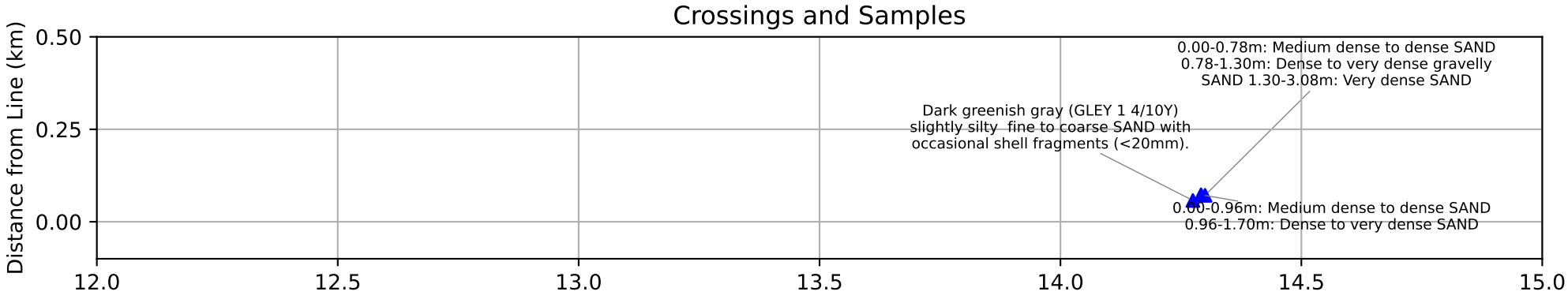
Overview (KP9.0-KP12.0)



Seabed Elevation and Slopes

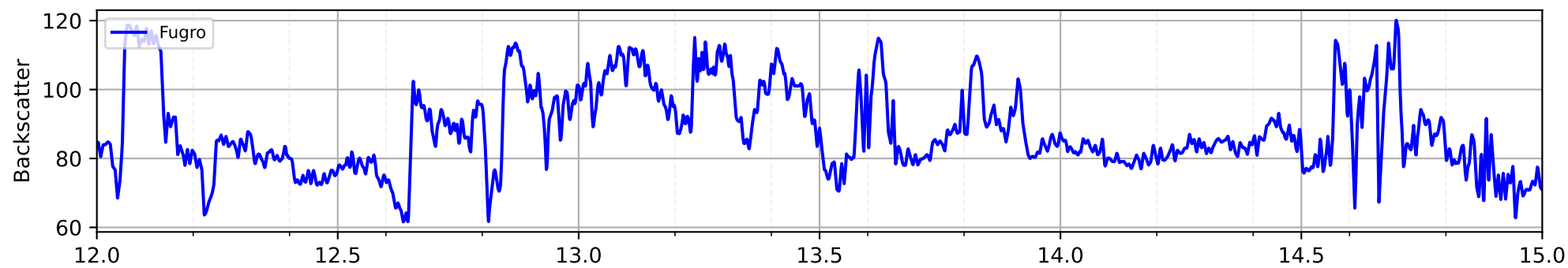


Crossings and Samples

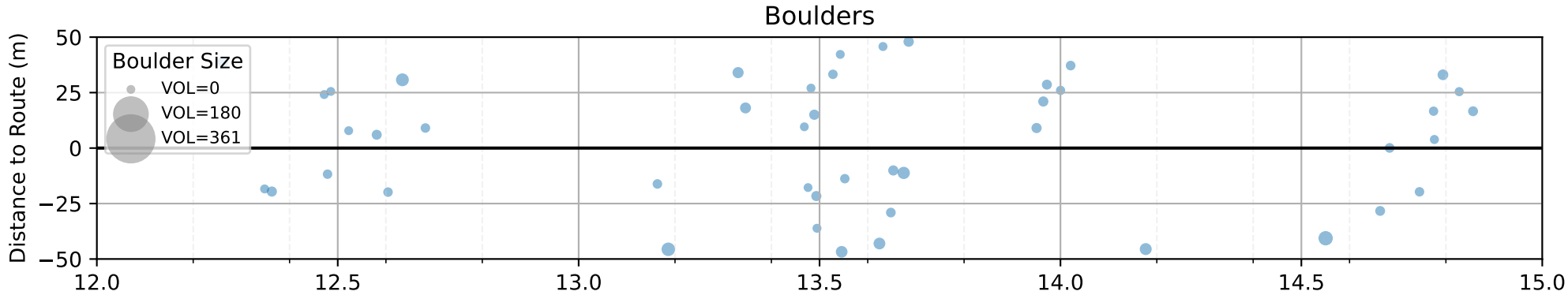


Horizons

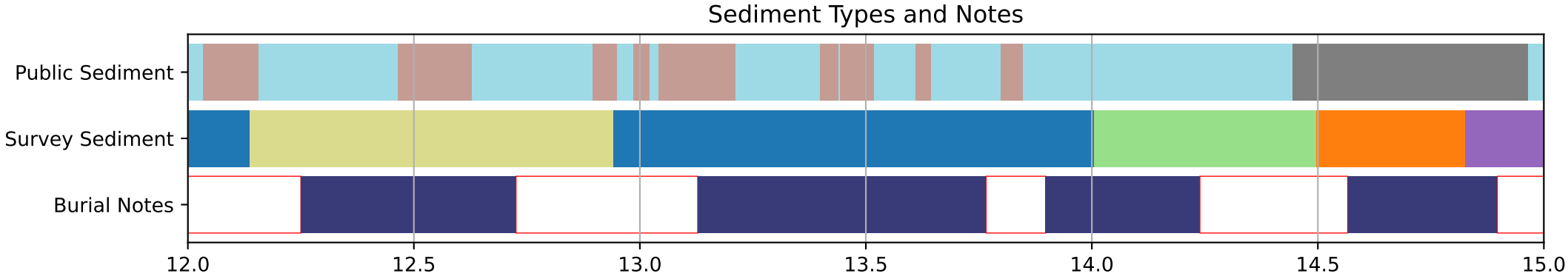
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- Sand
- Coarse-grained sediment
- Rock

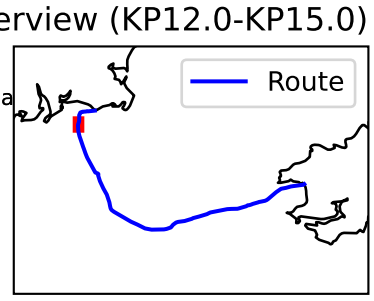
Burial Notes

- No Data
- Boulder Field

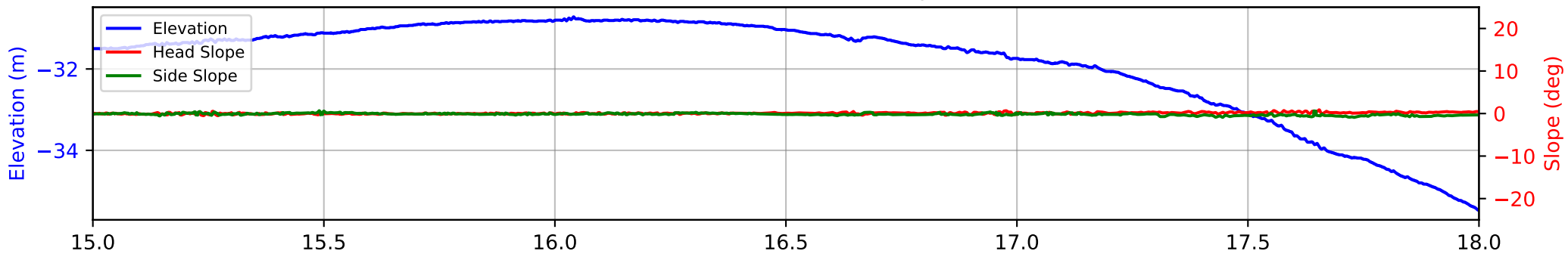
Survey Sediment

- Probable < 0.5 m SAND overlying subcropping ROCK with patches of SAND with megaripples
- Probable 0.5 - 1.0 m SAND overlying subcropping ROCK with patches of coarse SAND with mega
- Probable 0.5 - 1.0 m SAND overlying subcropping ROCK
- Outcropping ROCK
- Probable 0.5 - 1.5 m SAND overlying subcropping ROCK

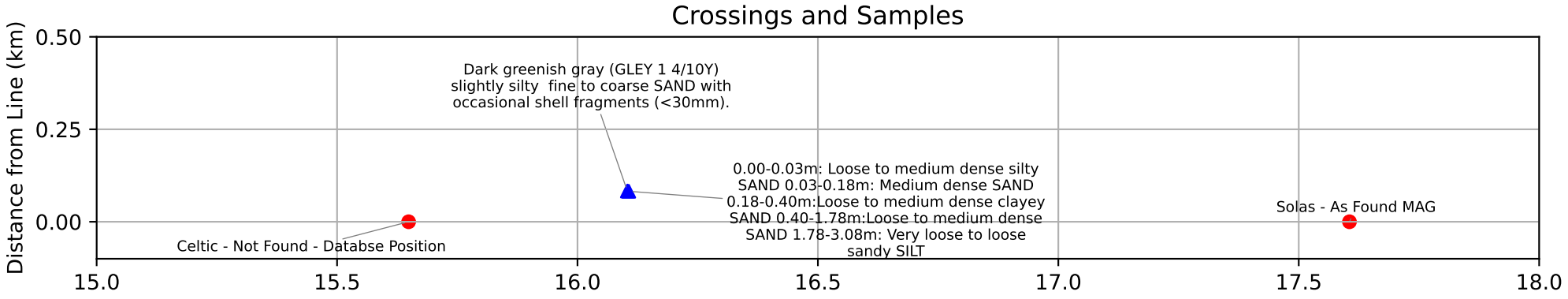
Overview (KP12.0-KP15.0)



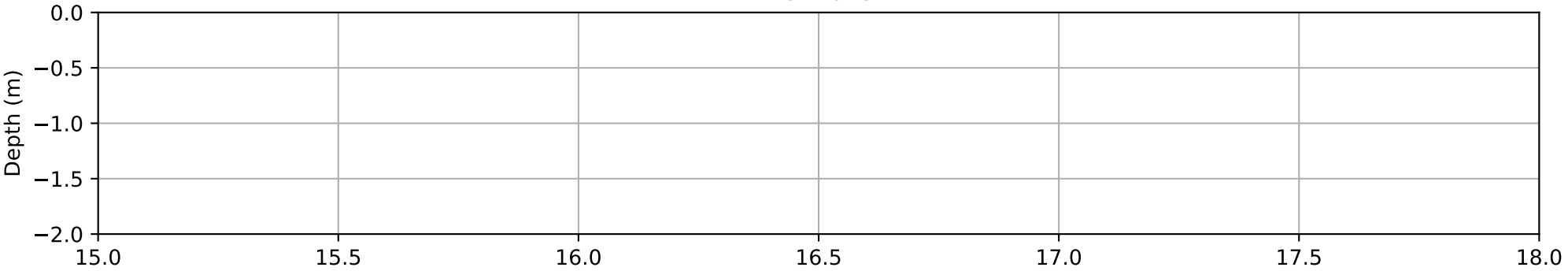
Seabed Elevation and Slopes



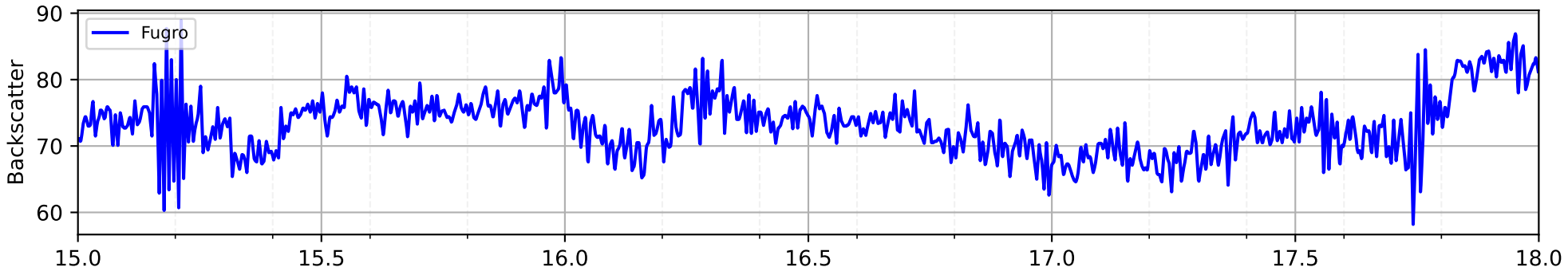
Crossings and Samples



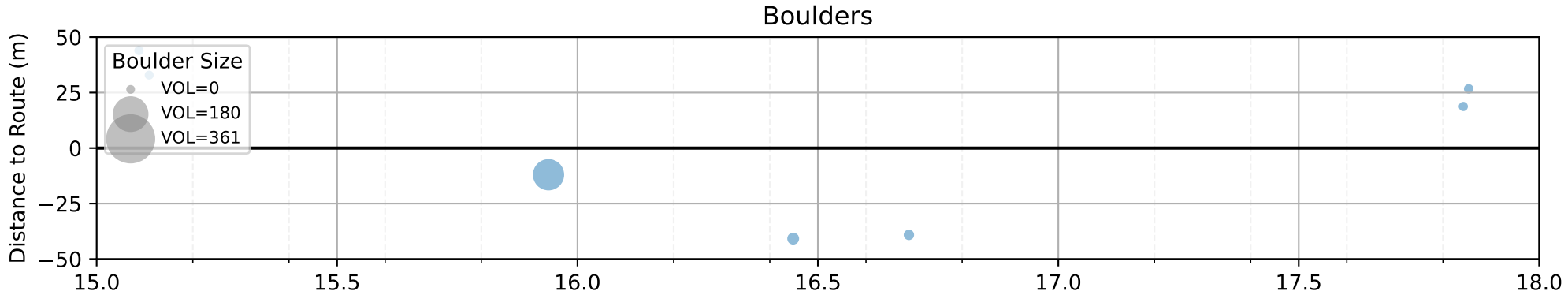
Horizons



Backscatter

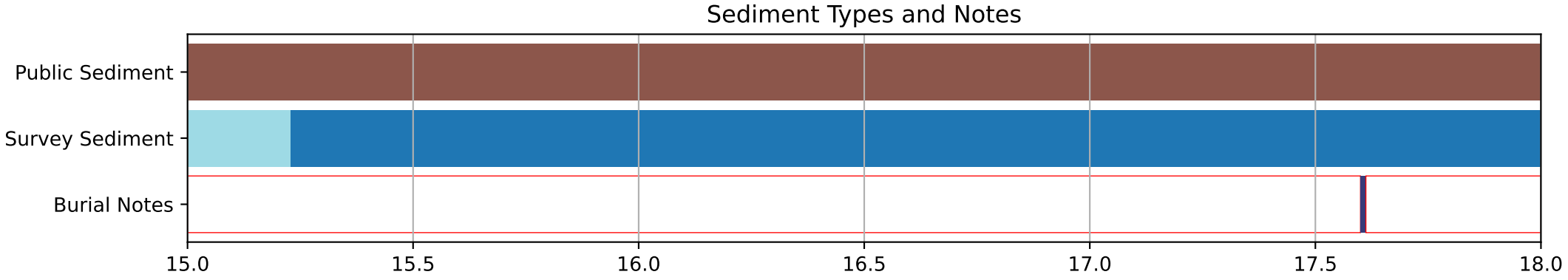


Boulders



Expected Range of Burial Depth

Sediment Types and Notes

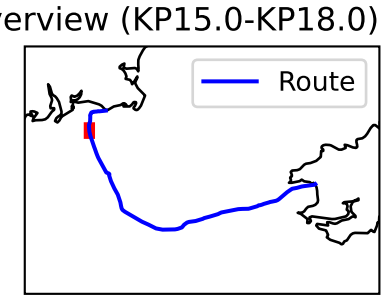


Public Sediment
- Sand

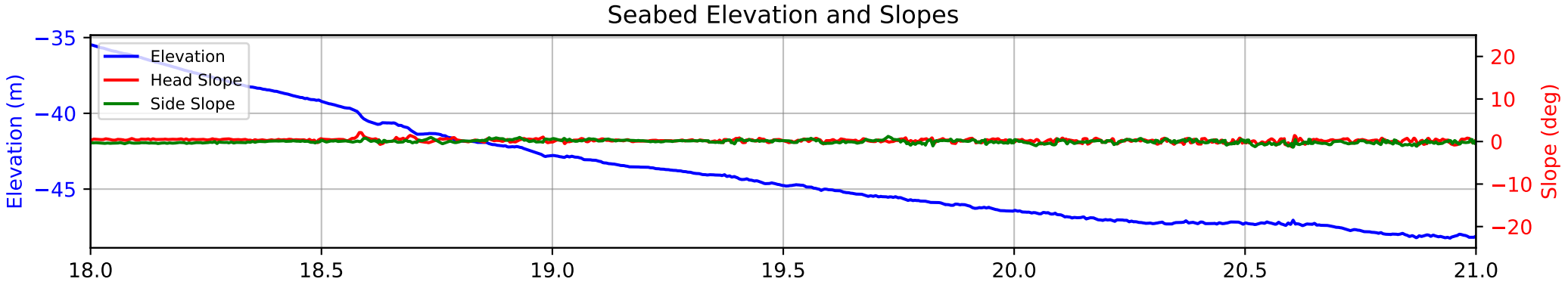
Burial Notes
- No Data
- IS FO CROSSING

Survey Sediment
- Probable 0.5 - 1.5 m SAND overlying subcropping ROCK
- Probable > 2.0 m SAND

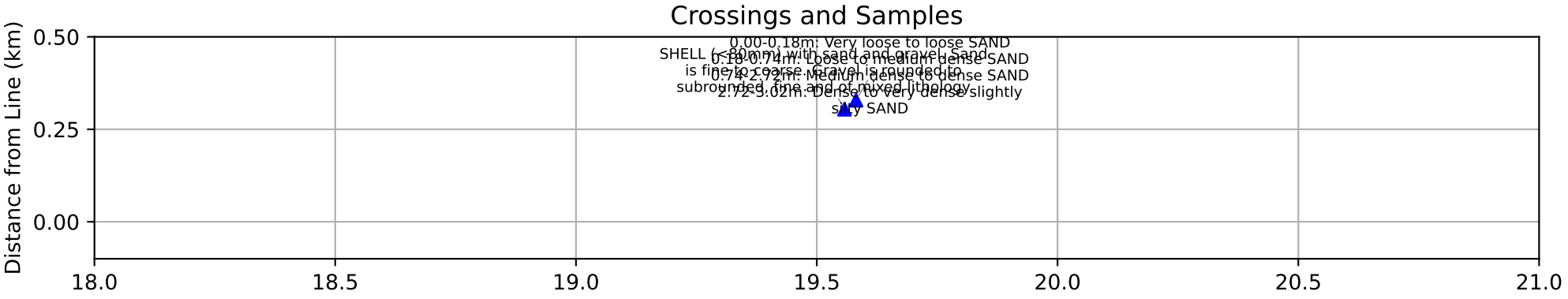
Overview (KP15.0-KP18.0)



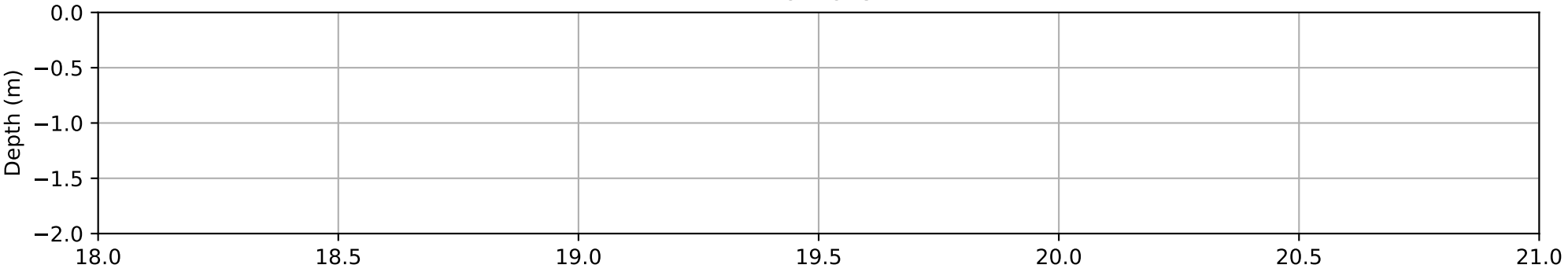
Seabed Elevation and Slopes



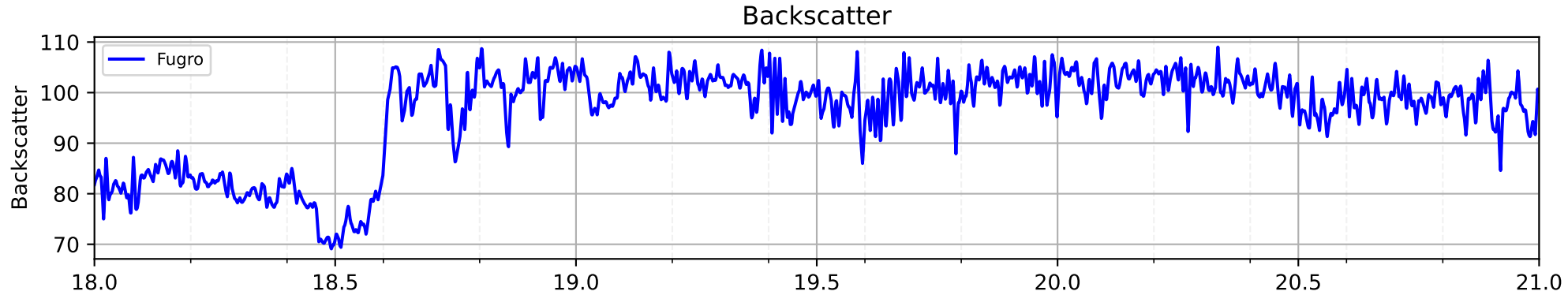
Crossings and Samples



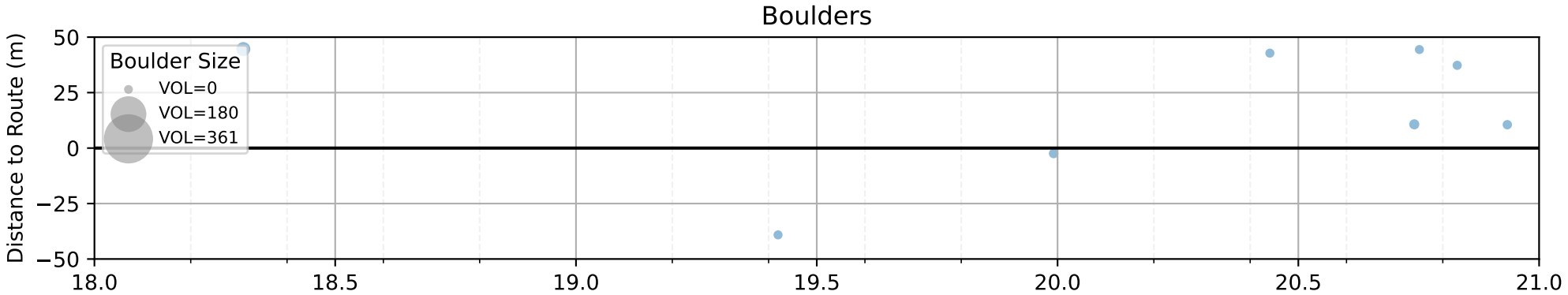
Horizons



Backscatter

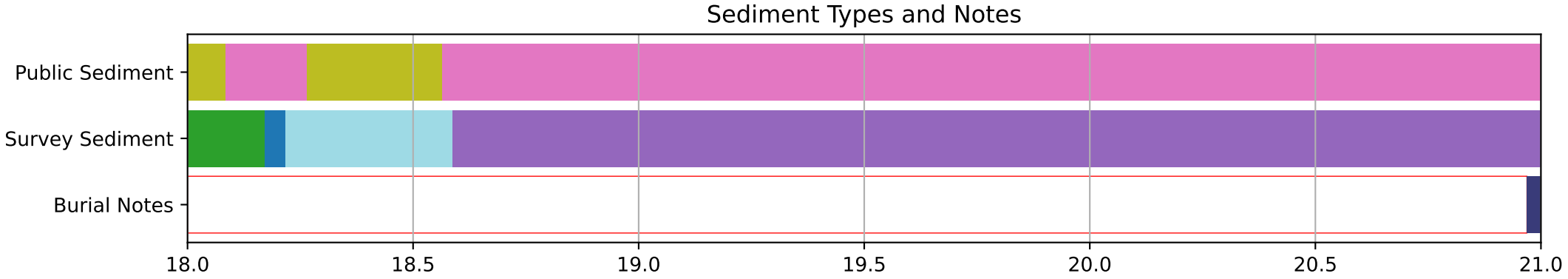


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- Sand
- Coarse-grained sediment

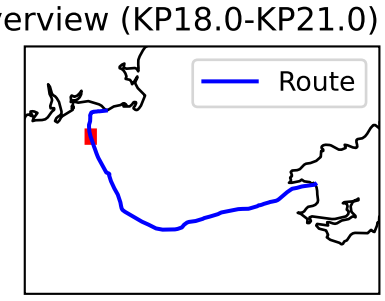
Burial Notes

- No Data
- Boulder Field

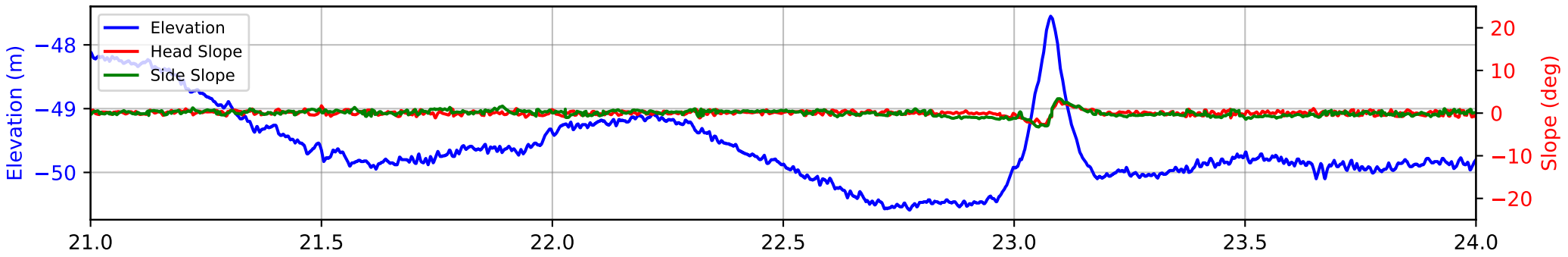
Survey Sediment

- Probable > 2.0 m SAND
- Probable 1.0 - 2.0 m SAND overlying subcropping HARDGROUND
- Probable 0.5 - 1.0 m SAND overlying subcropping HARDGROUND
- Probable veneer of SAND overlying outcropping HARDGROUND with megaripples

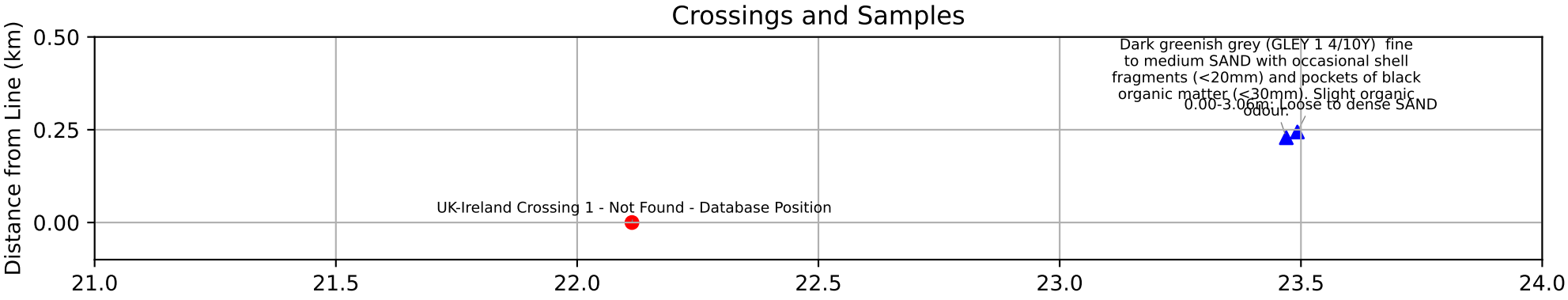
Overview (KP18.0-KP21.0)



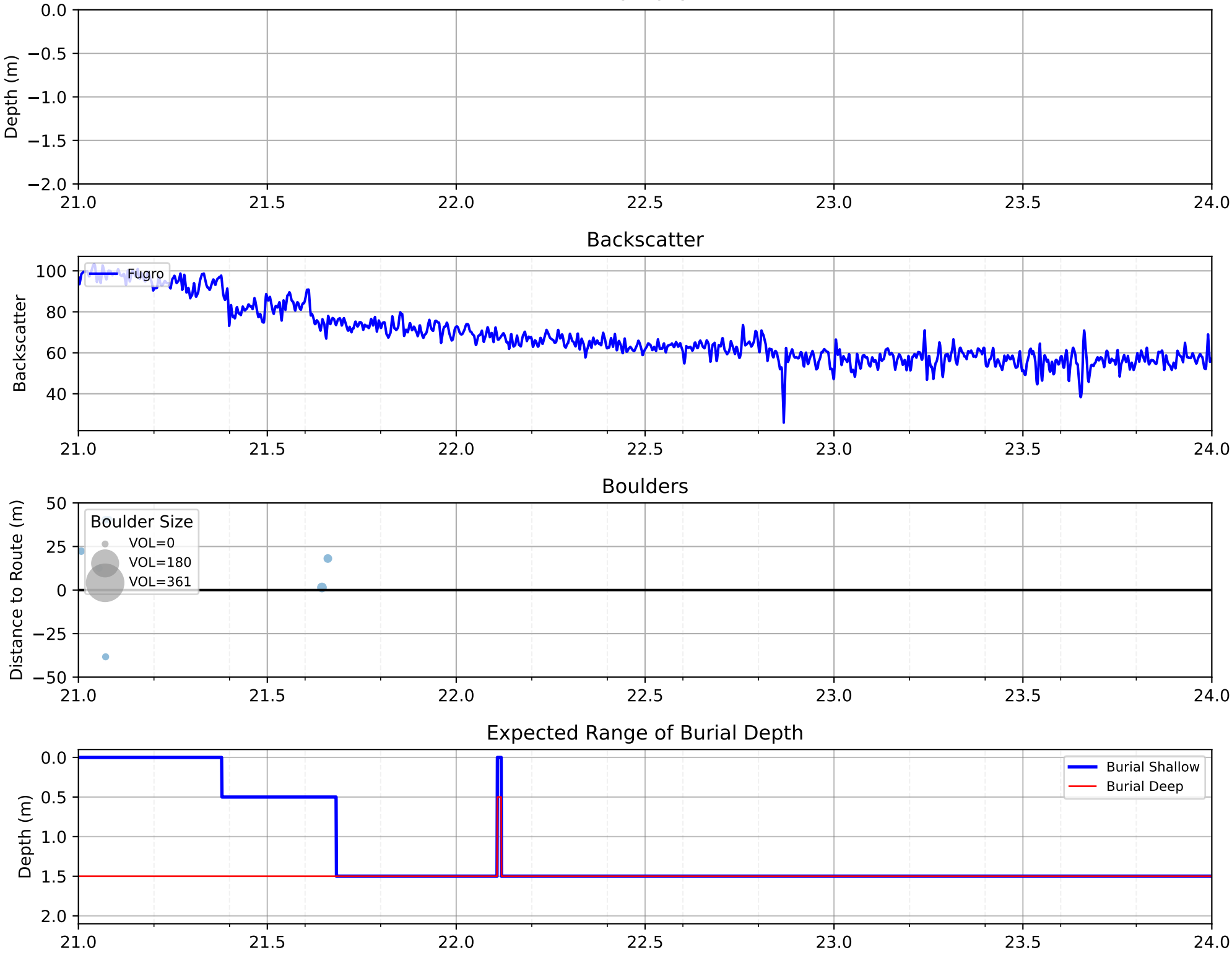
Seabed Elevation and Slopes



Crossings and Samples



Horizons

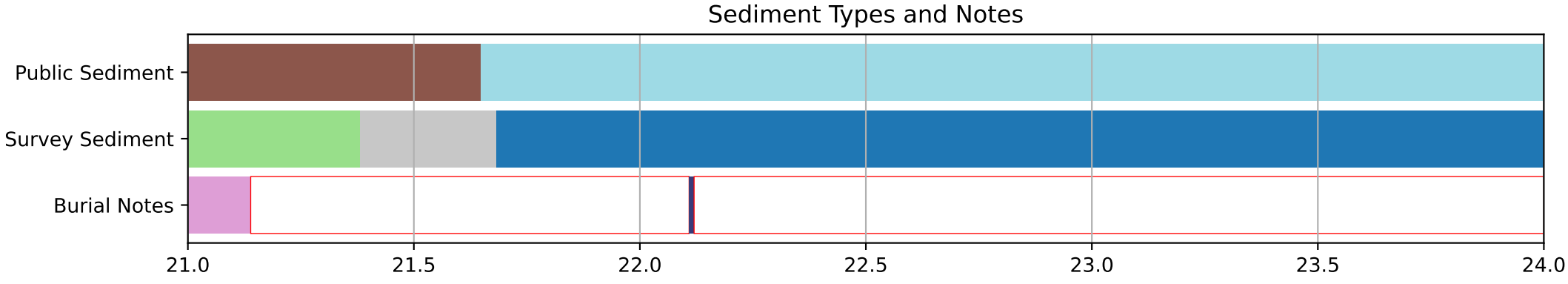


Backscatter

Boulders

Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- Coarse-grained sediment
- Sand

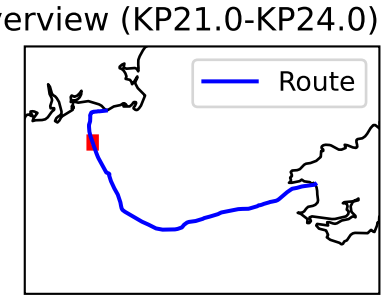
Burial Notes

- Boulder Field
- No Data
- IS FO CROSSING

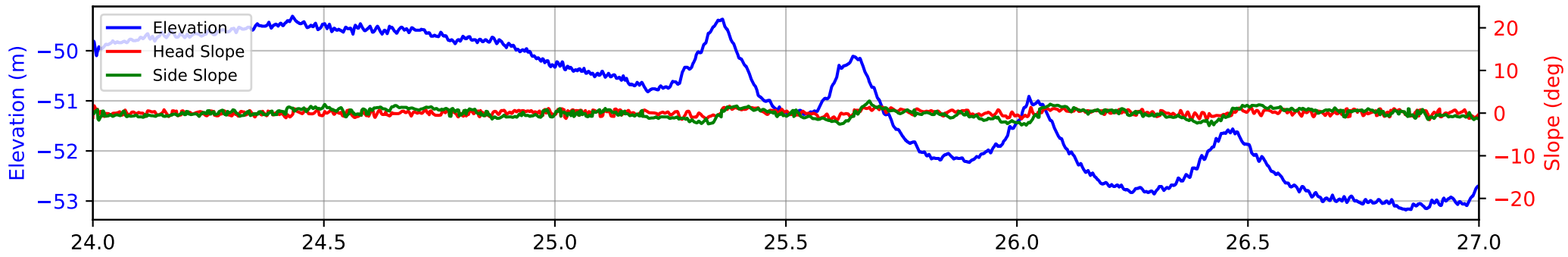
Survey Sediment

- Probable veneer of SAND overlying outcropping HARDGROUND with megaripples
- Probable 0.5 - 1.0 m SAND overlying subcropping HARDGROUND with megaripples
- Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves

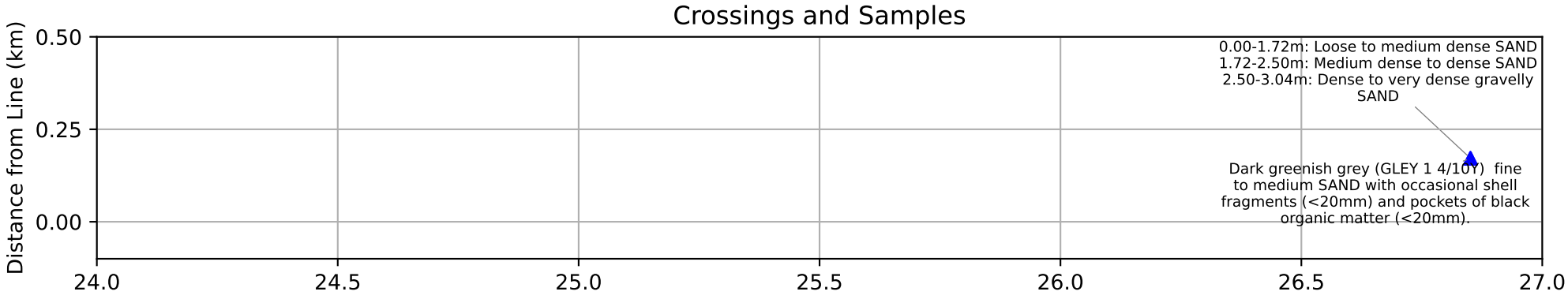
Overview (KP21.0-KP24.0)



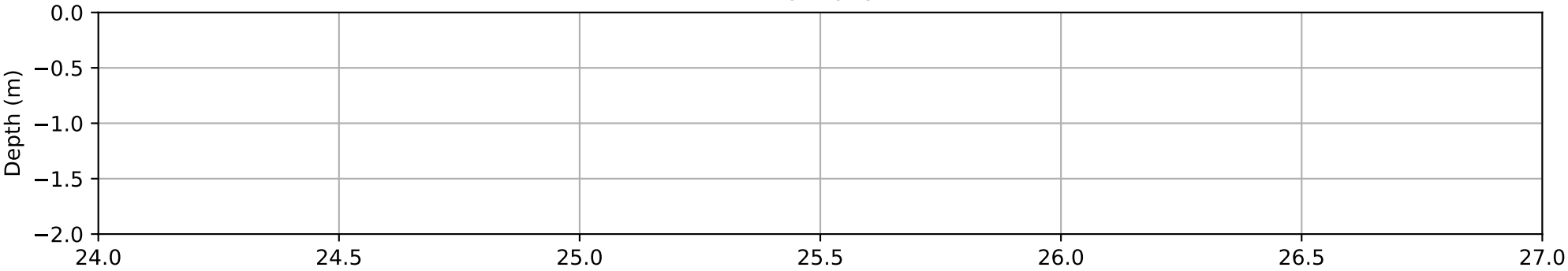
Seabed Elevation and Slopes



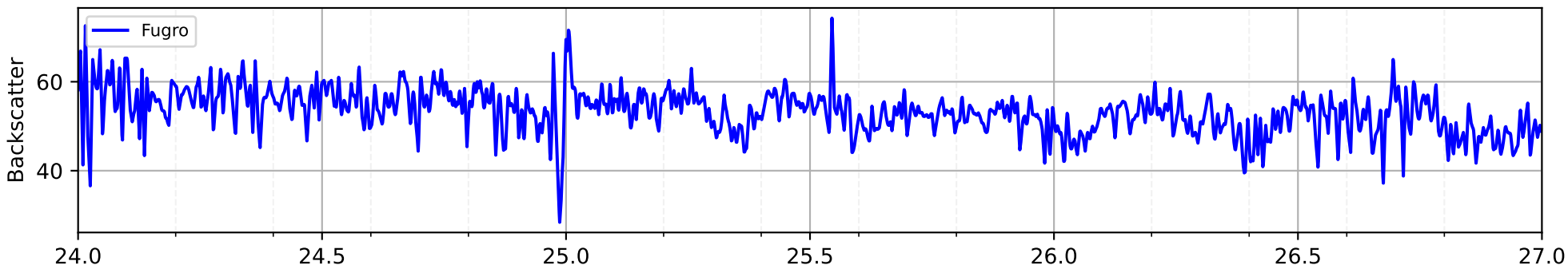
Crossings and Samples



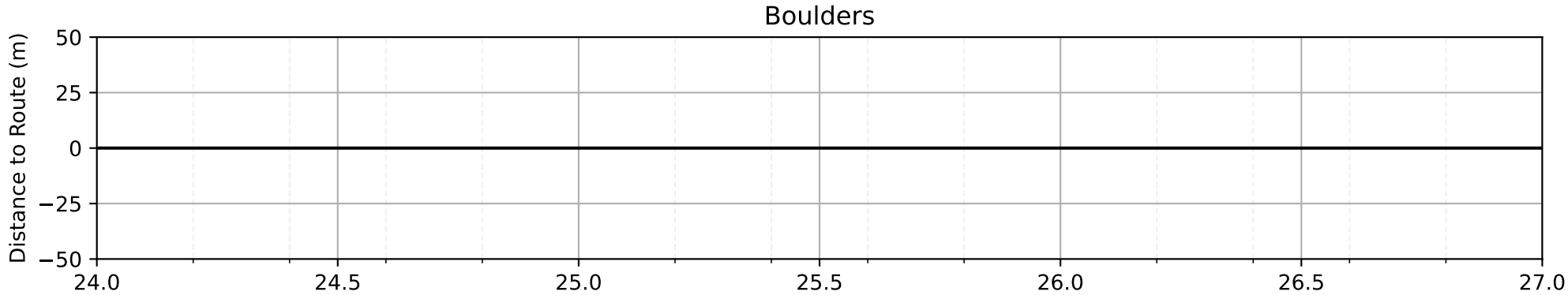
Horizons



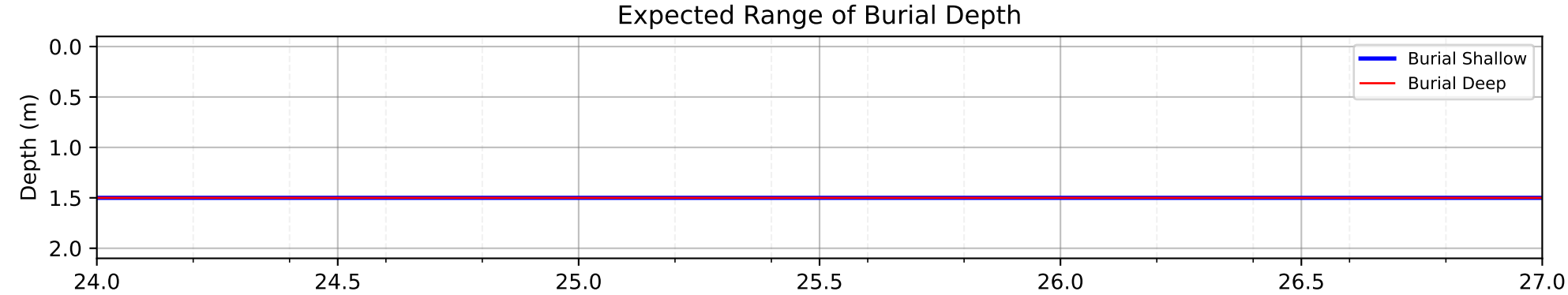
Backscatter



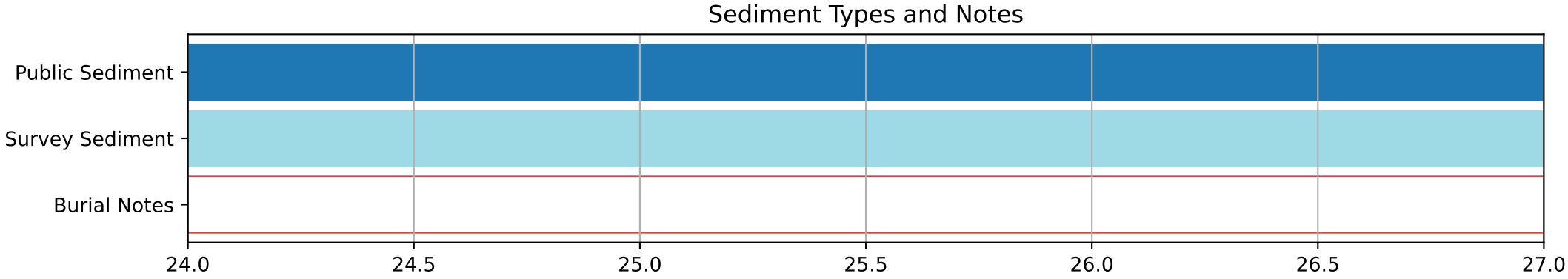
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

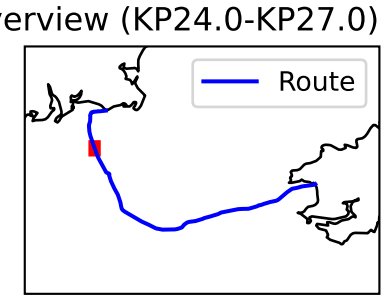
Survey Sediment

Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves

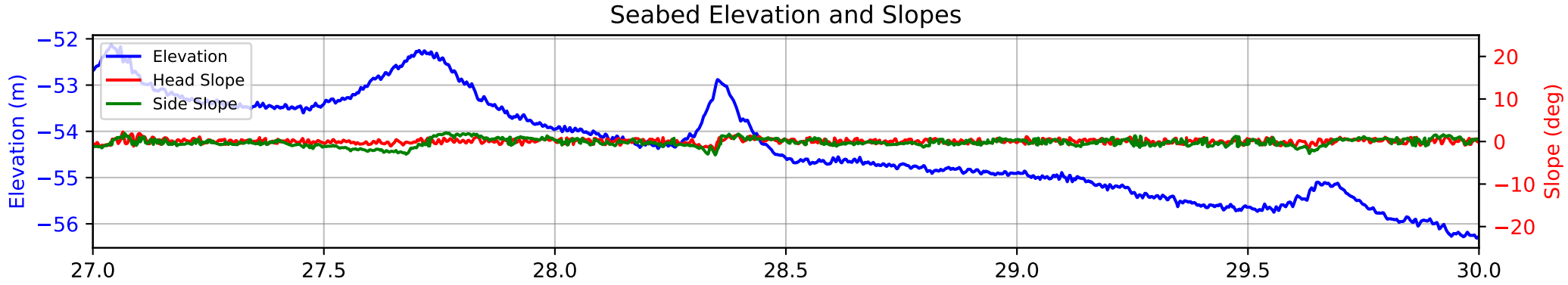
Burial Notes

No Data

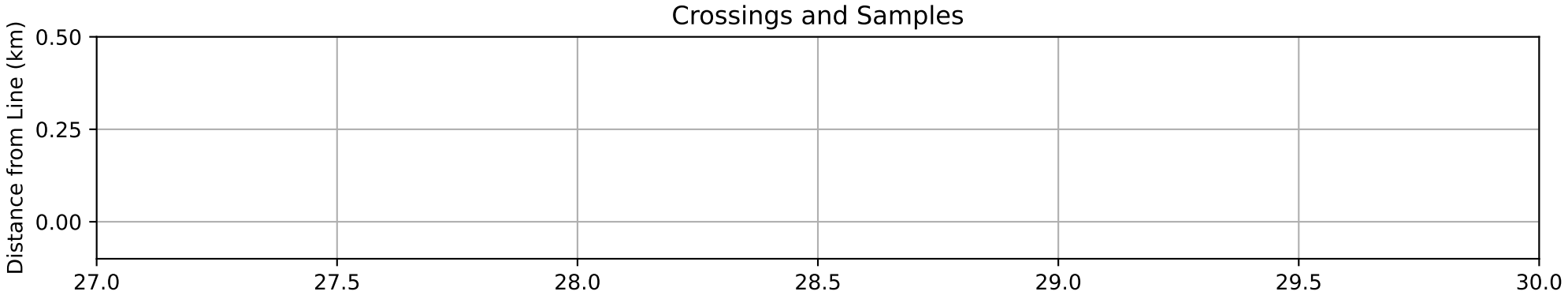
Overview (KP24.0-KP27.0)



Seabed Elevation and Slopes

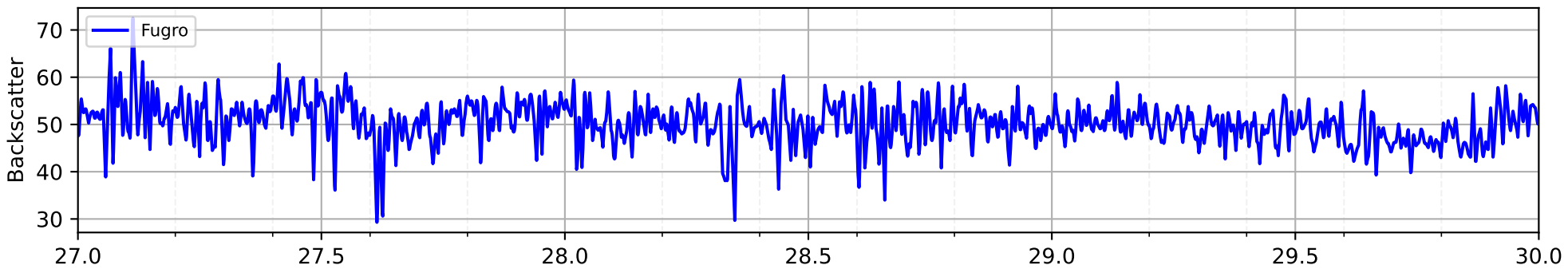


Crossings and Samples

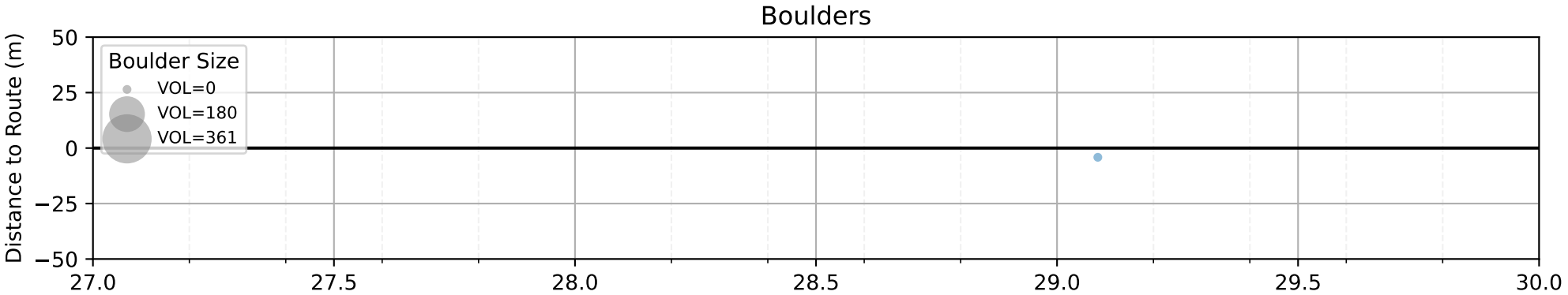


Horizons

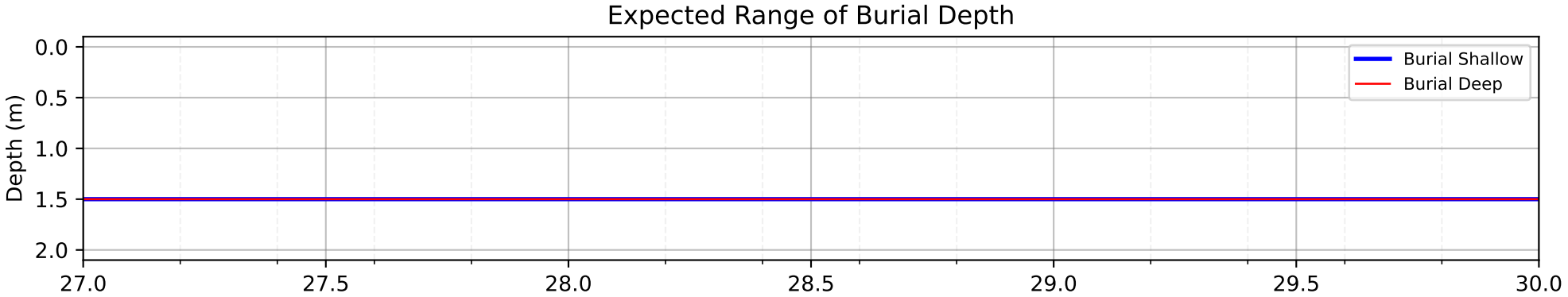
Backscatter



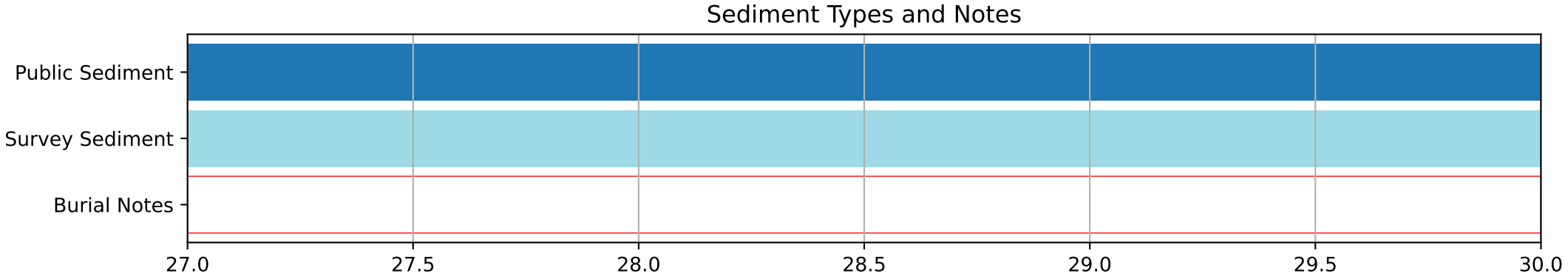
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

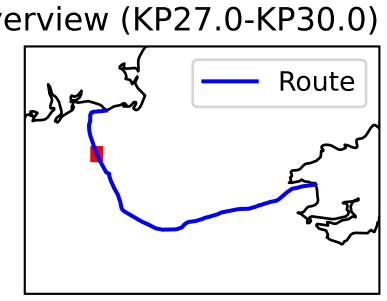
Survey Sediment

Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves

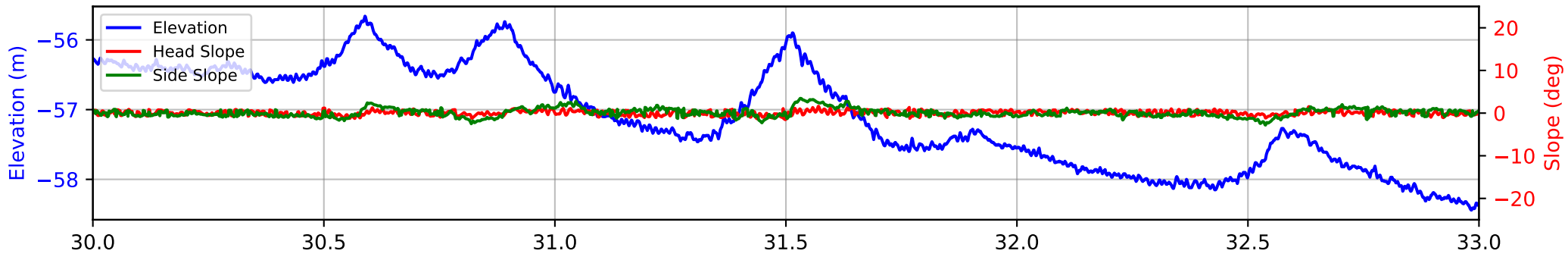
Burial Notes

No Data

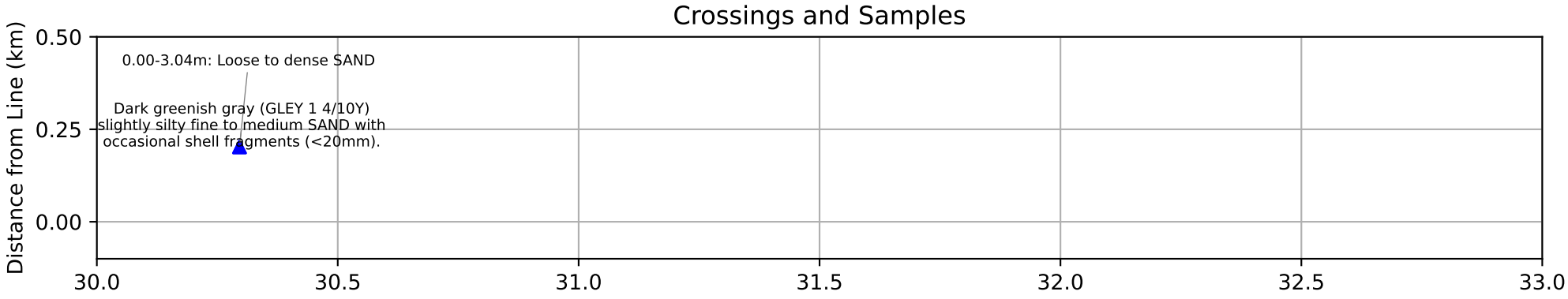
Overview (KP27.0-KP30.0)



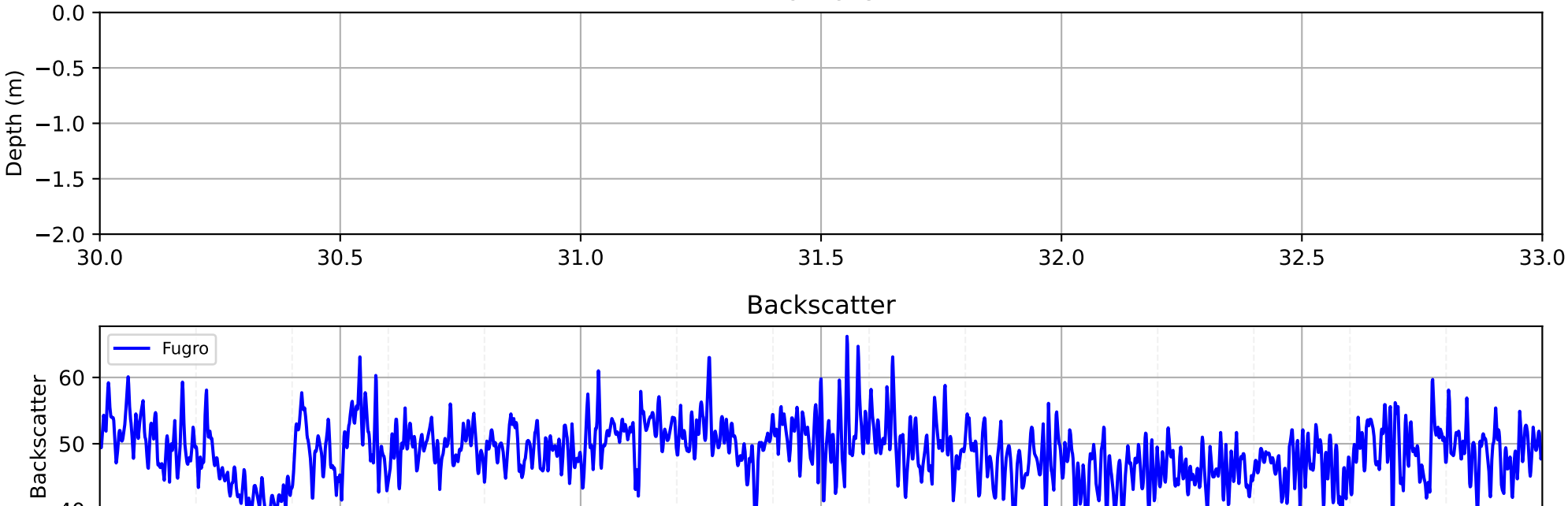
Seabed Elevation and Slopes



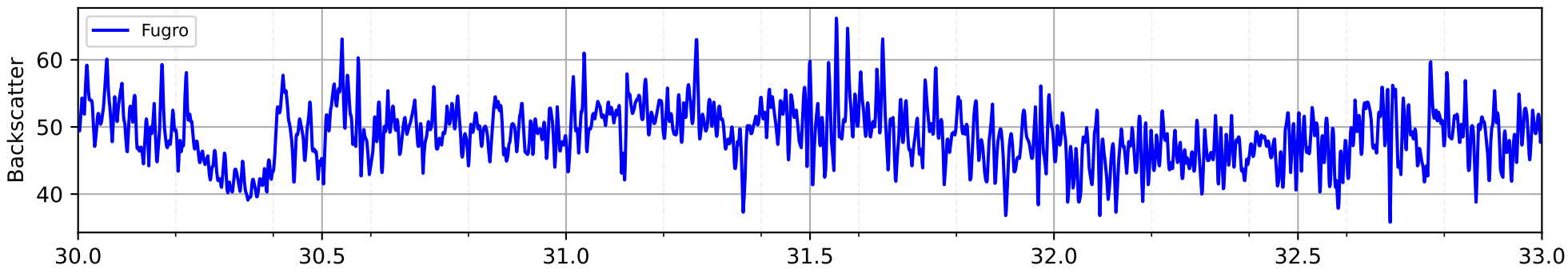
Crossings and Samples



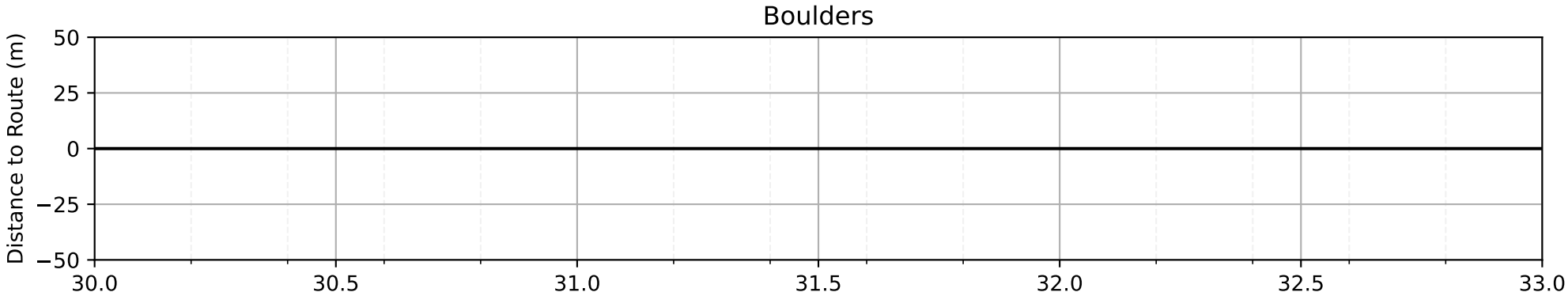
Horizons



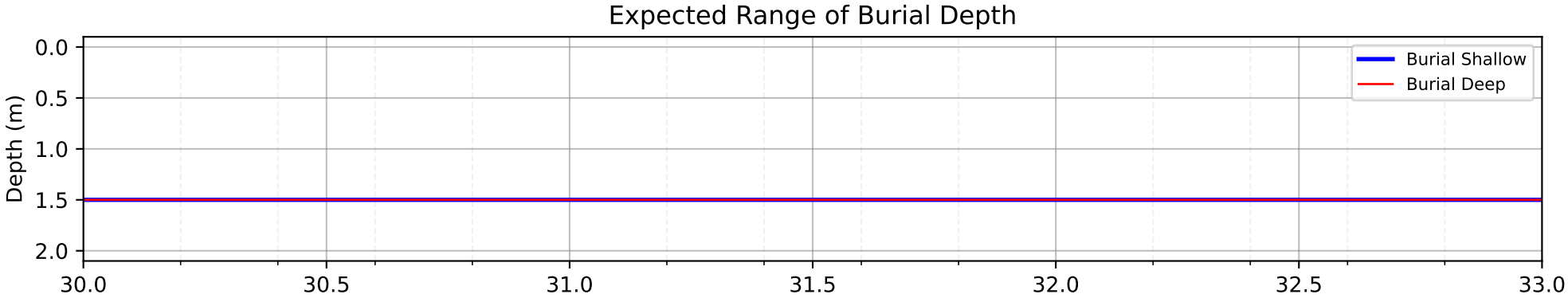
Backscatter



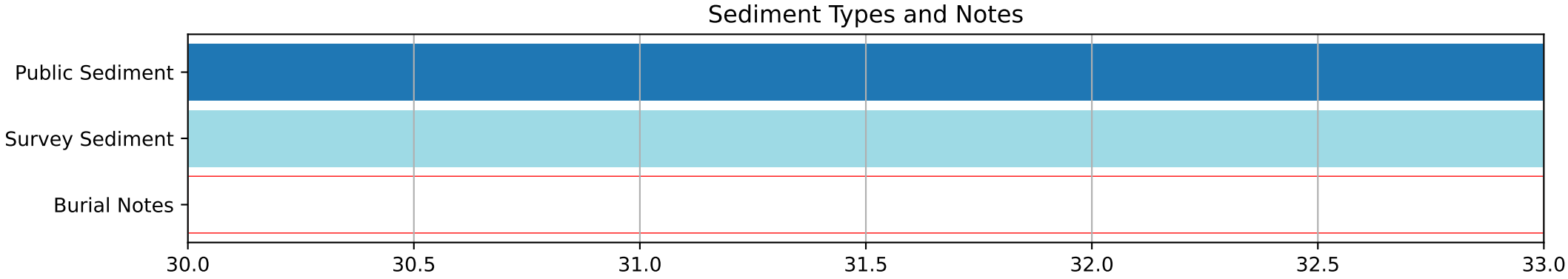
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

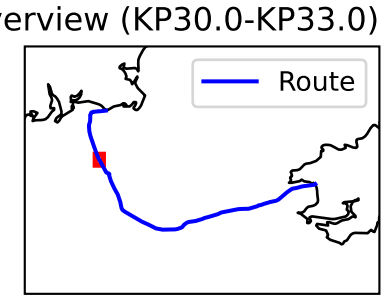
Survey Sediment

Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves

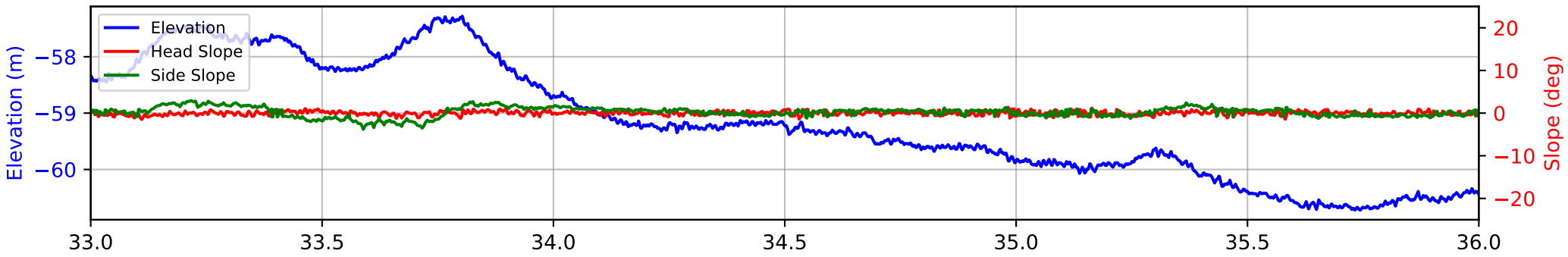
Burial Notes

No Data

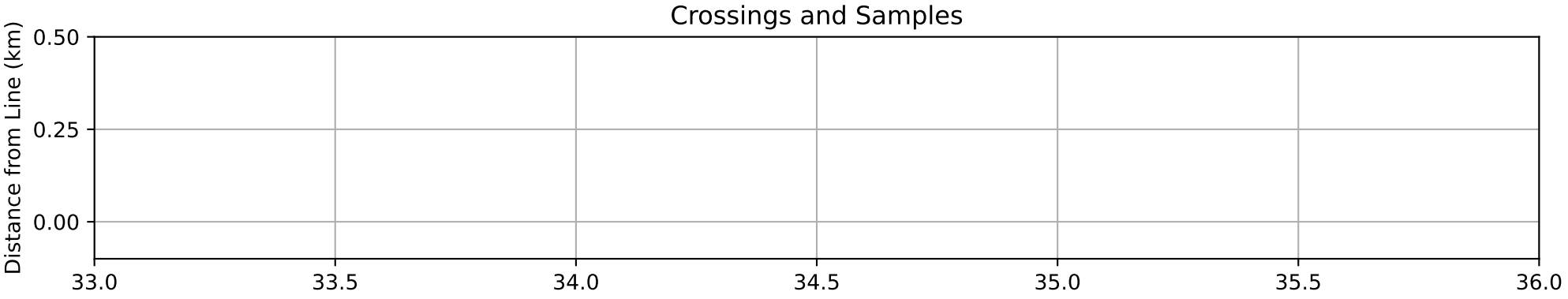
Overview (KP30.0-KP33.0)



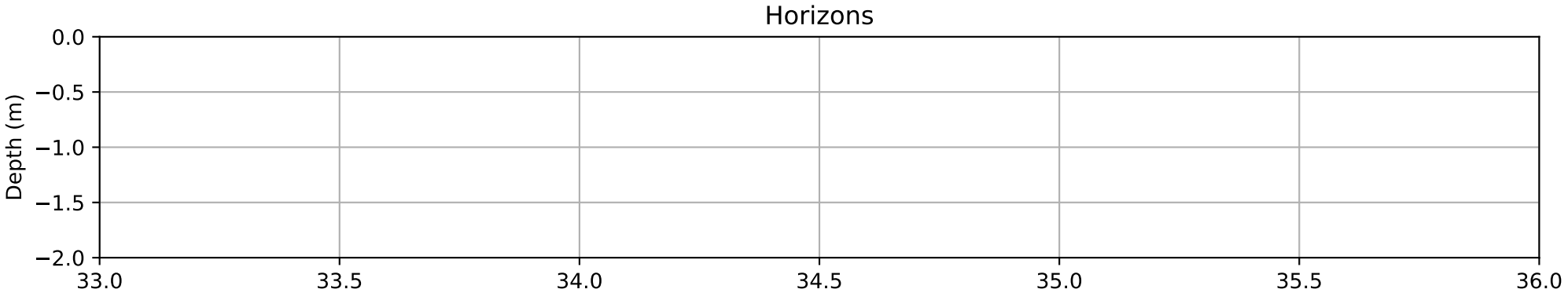
Seabed Elevation and Slopes



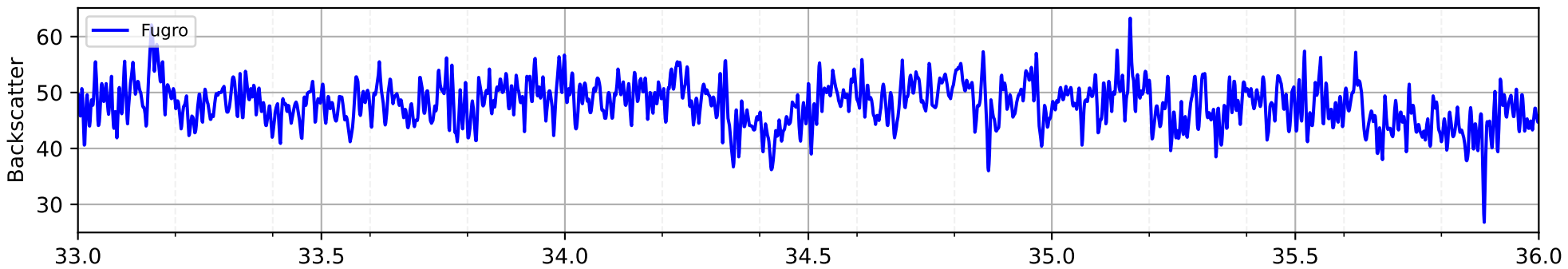
Crossings and Samples



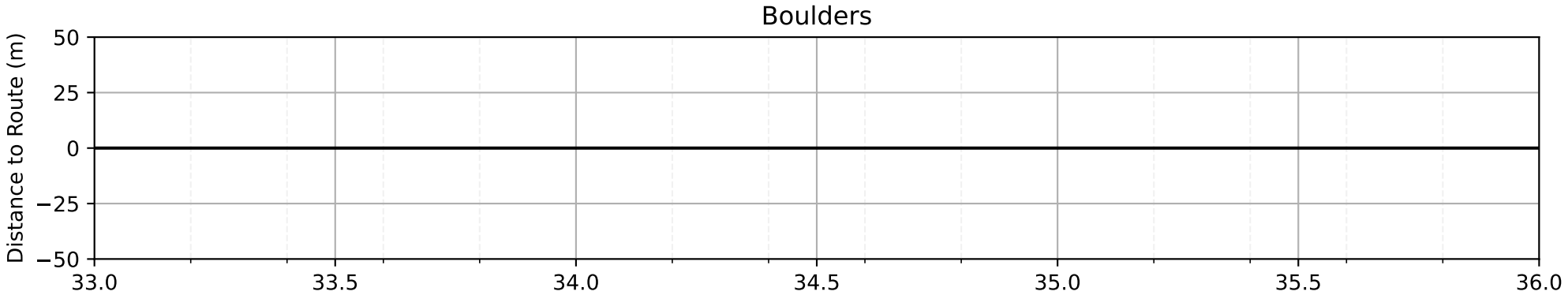
Horizons



Backscatter

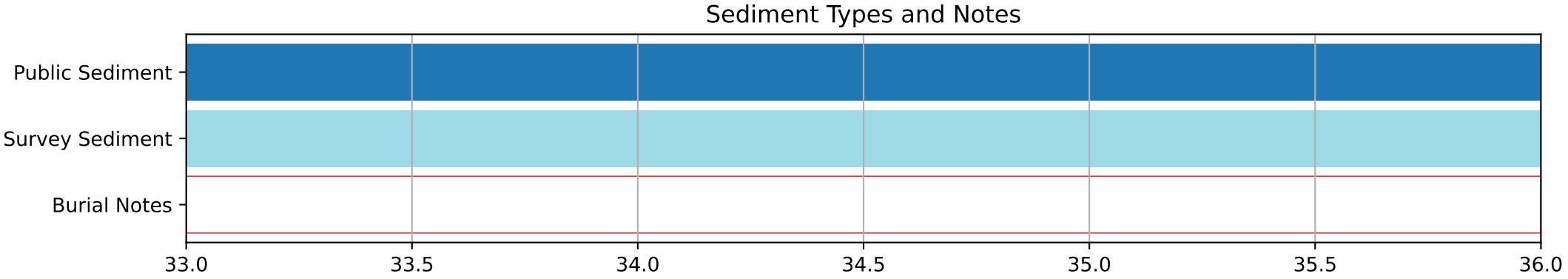


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

Sand

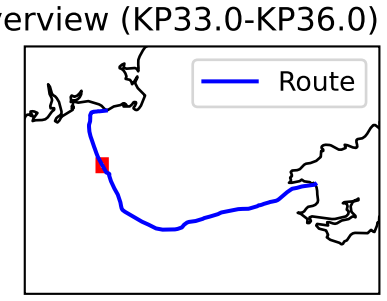
Survey Sediment

Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves

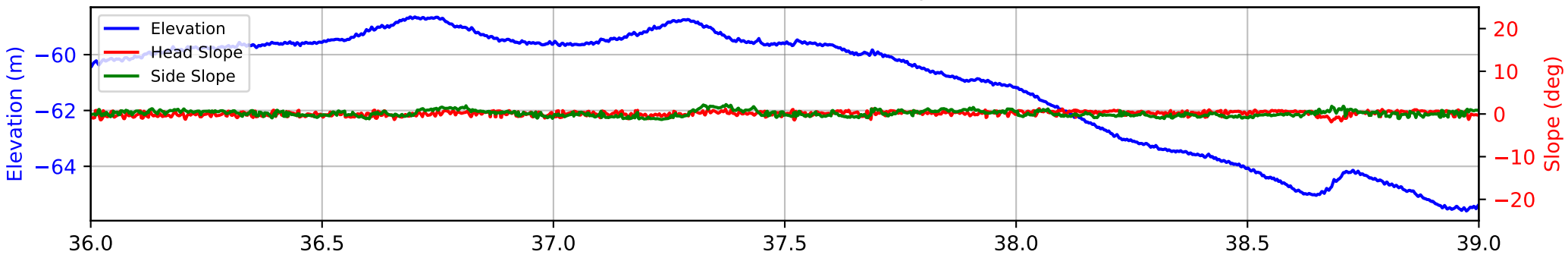
Burial Notes

No Data

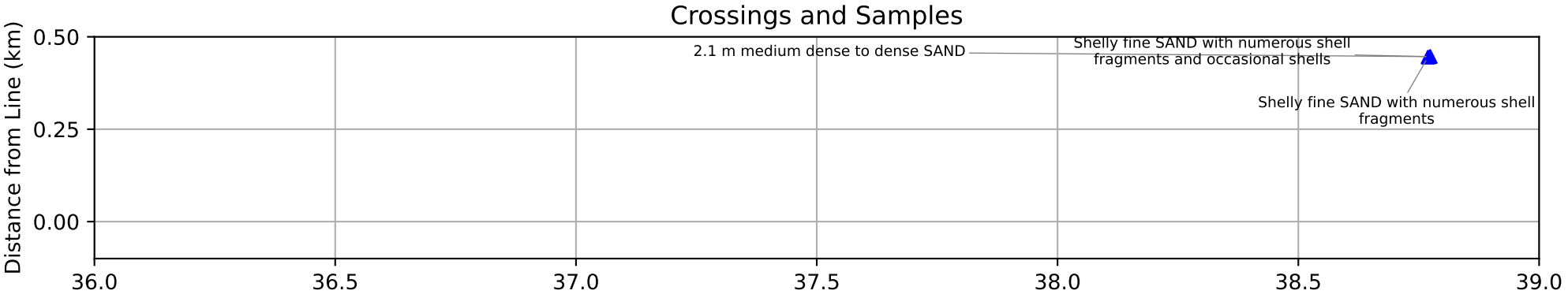
Overview (KP33.0-KP36.0)



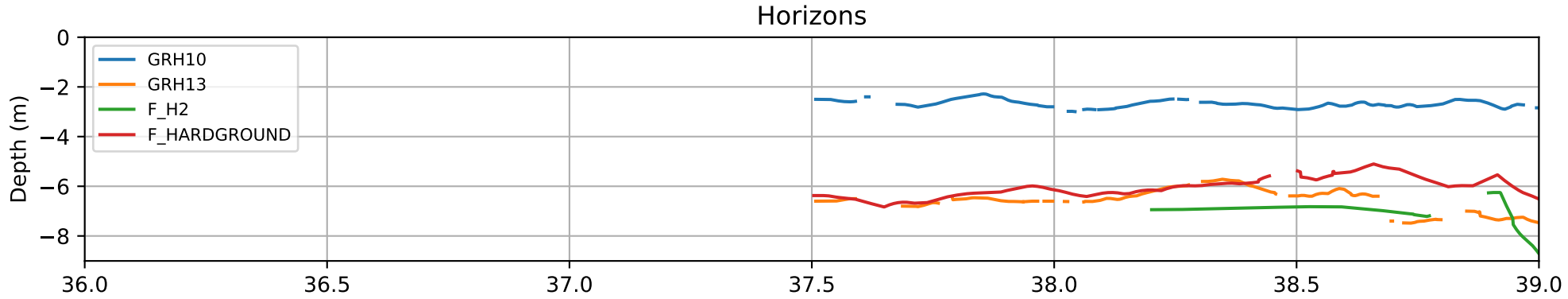
Seabed Elevation and Slopes



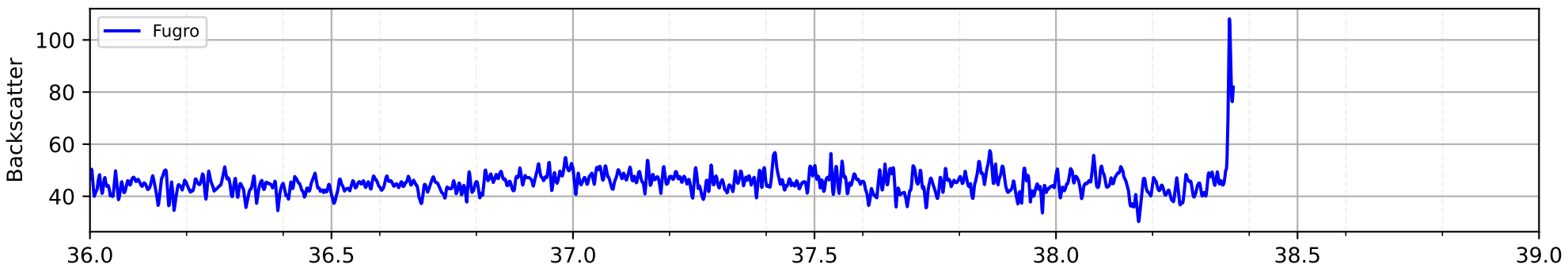
Crossings and Samples



Horizons



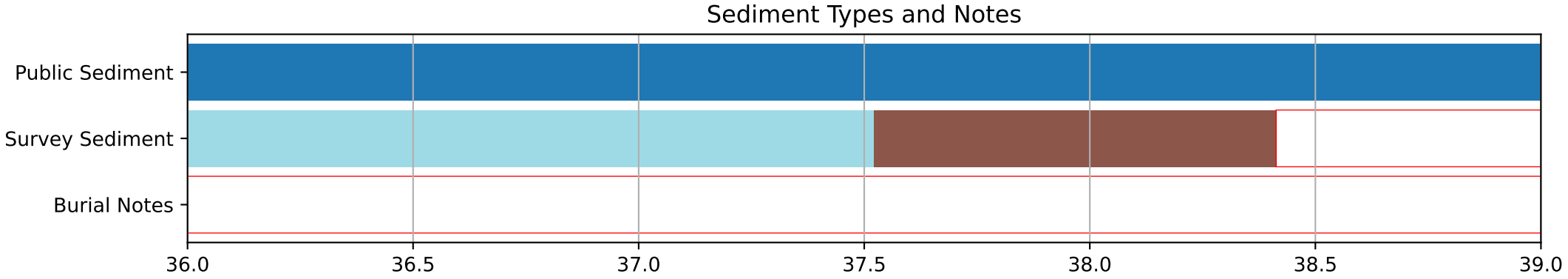
Backscatter



Boulders

Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- Sand

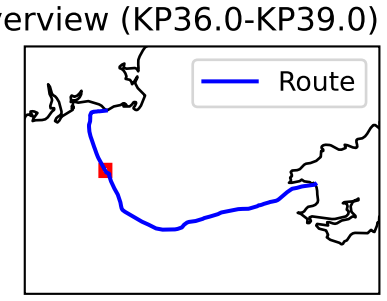
Burial Notes

- No Data

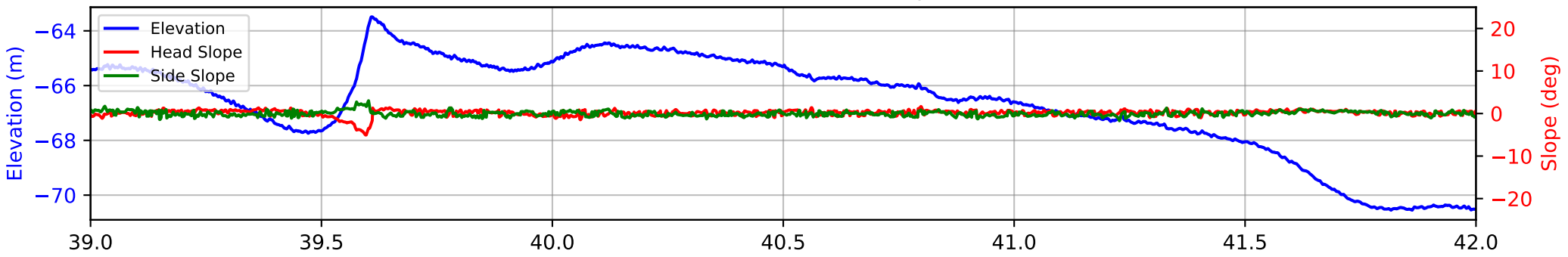
Survey Sediment

- Probable > 2.0 m medium dense to dense SAND with megaripples and sandwaves
- > 2.0 m medium dense to dense SAND with megaripples and sandwaves
- No Data

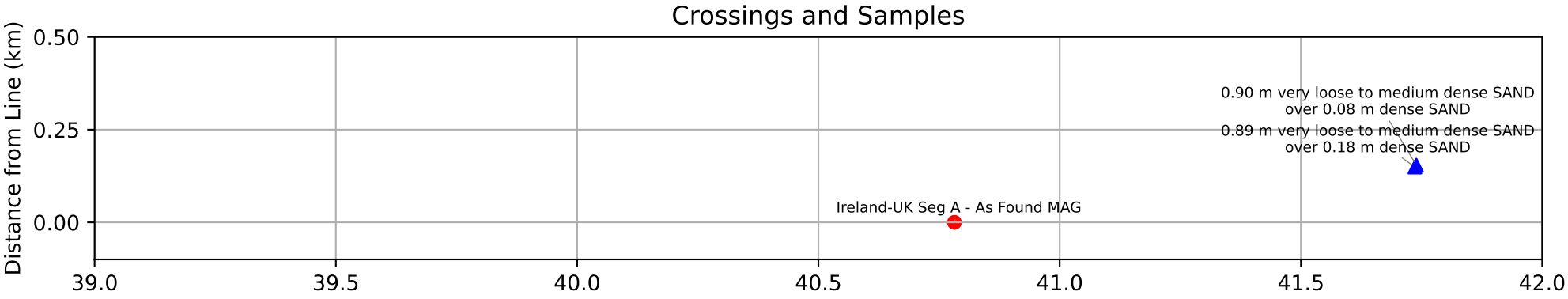
Overview (KP36.0-KP39.0)



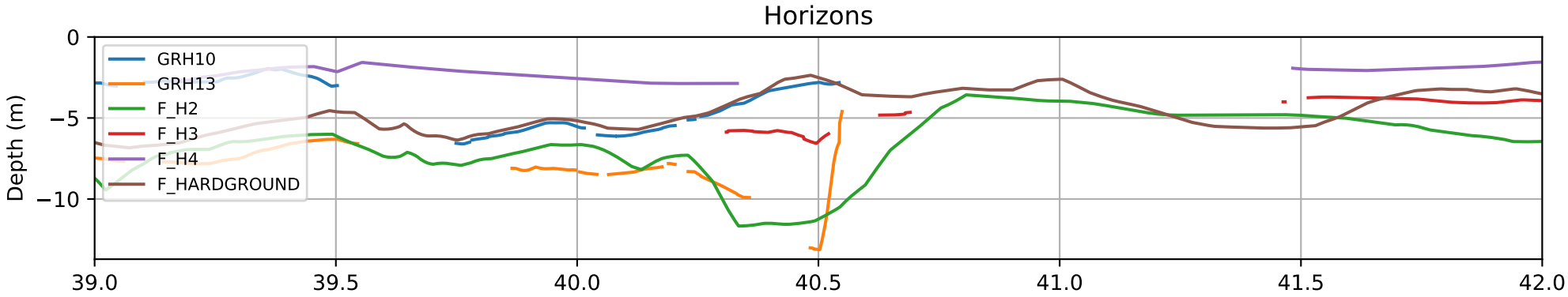
Seabed Elevation and Slopes



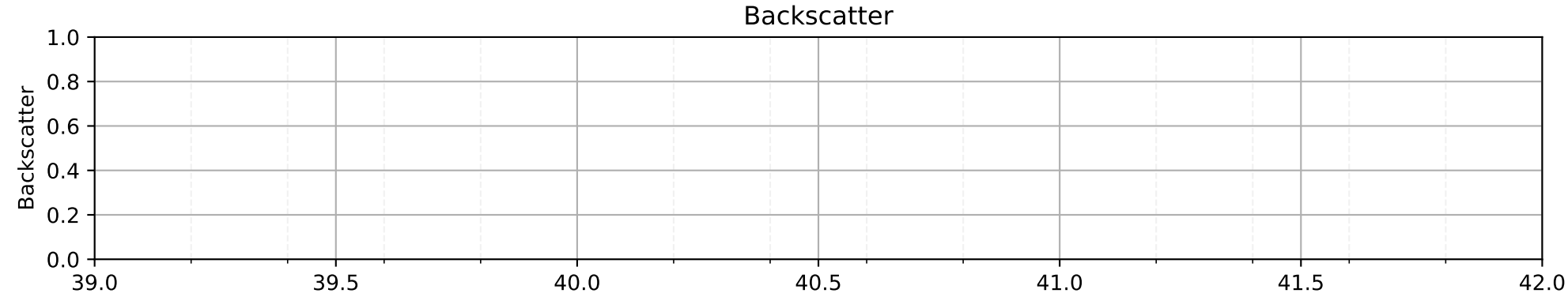
Crossings and Samples



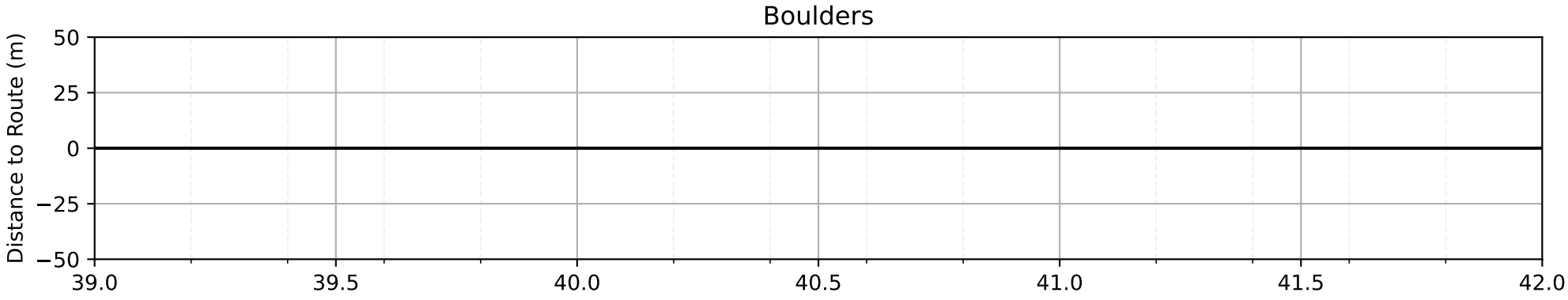
Horizons



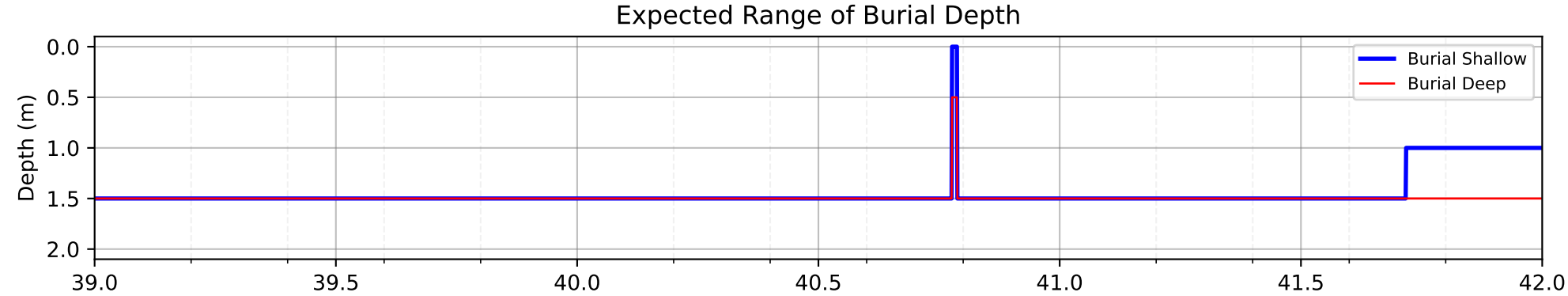
Backscatter



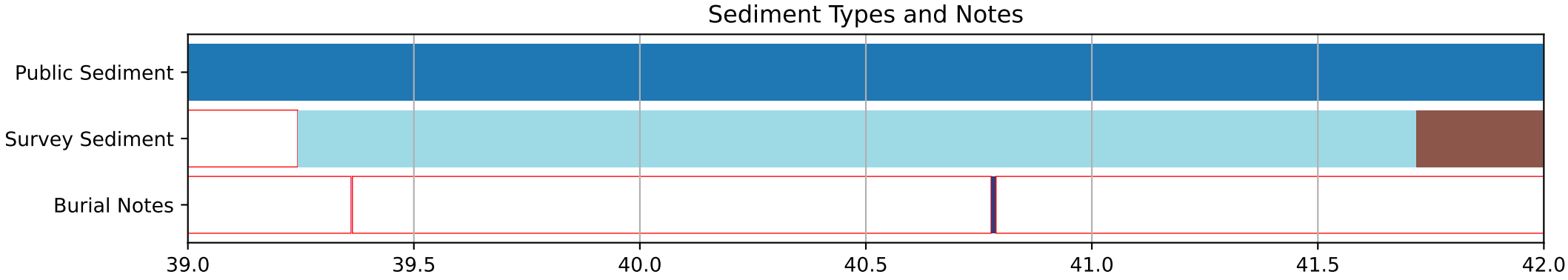
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

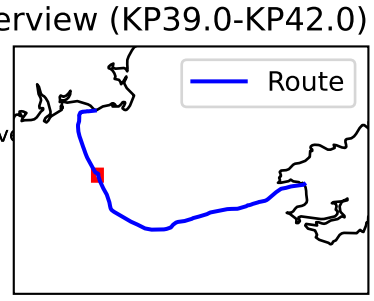


Public Sediment
- Sand

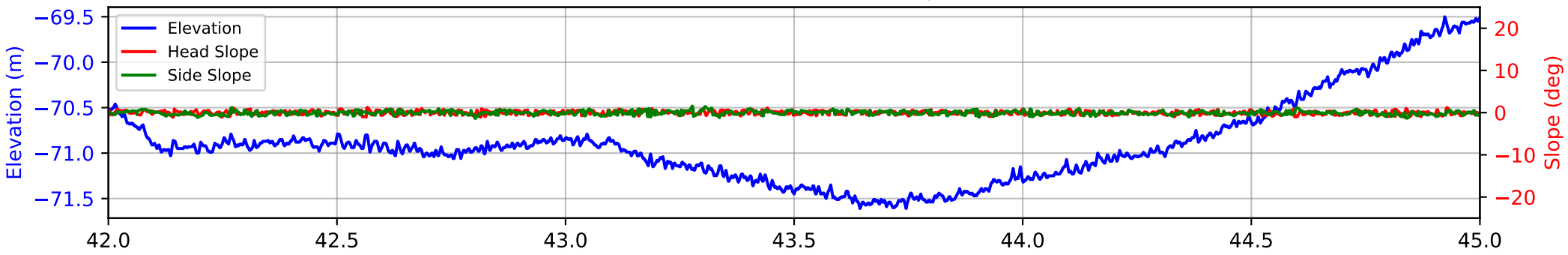
Burial Notes
- No Data
- Shallow Reflector H10
- IS FO CROSSING

Survey Sediment
- No Data
- > 2.0 m medium dense to dense SAND with megaripples and sandwaves
- 1.0 - 2.0 m medium dense to dense SAND with megaripples over subcropping HARDGROUND (v

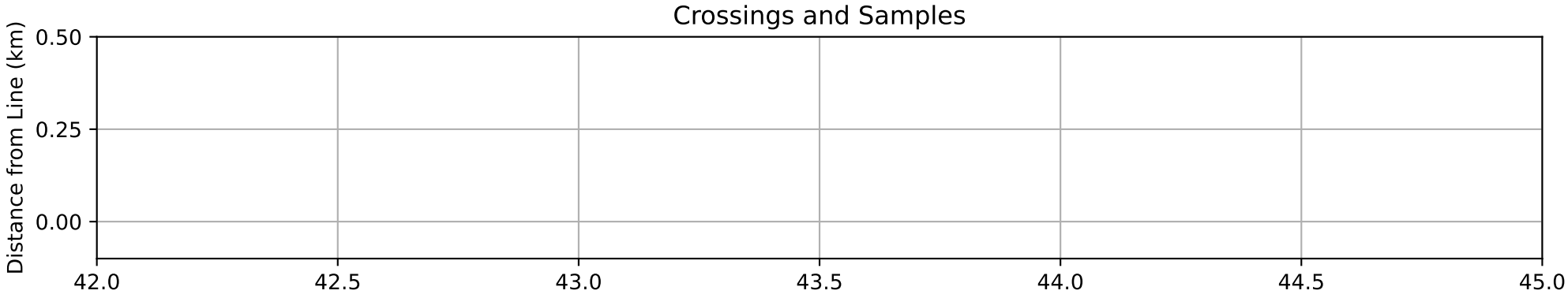
Overview (KP39.0-KP42.0)



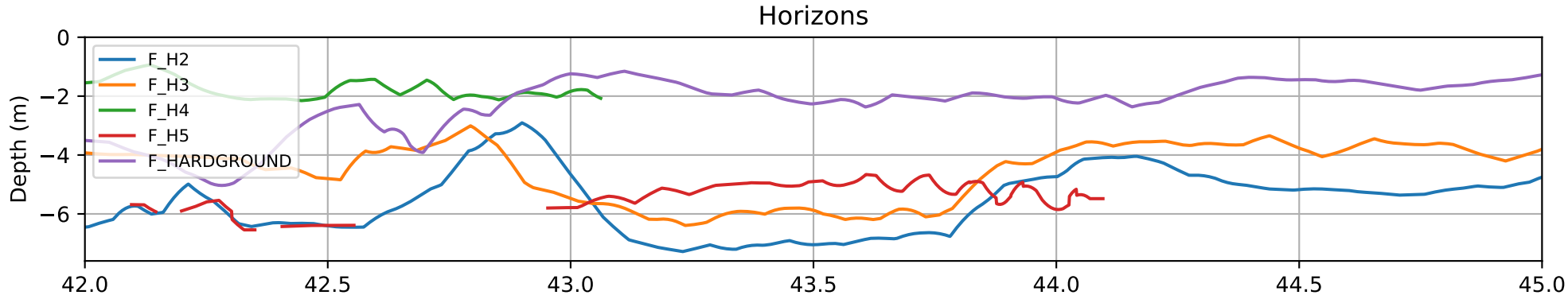
Seabed Elevation and Slopes



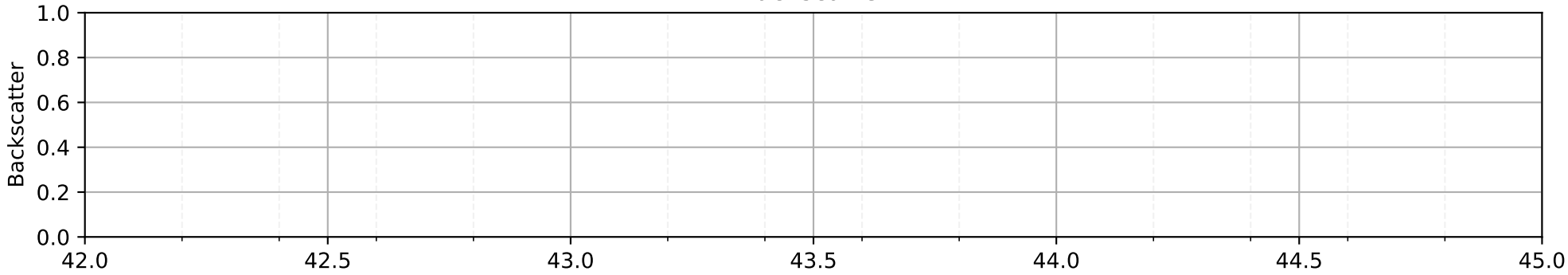
Crossings and Samples



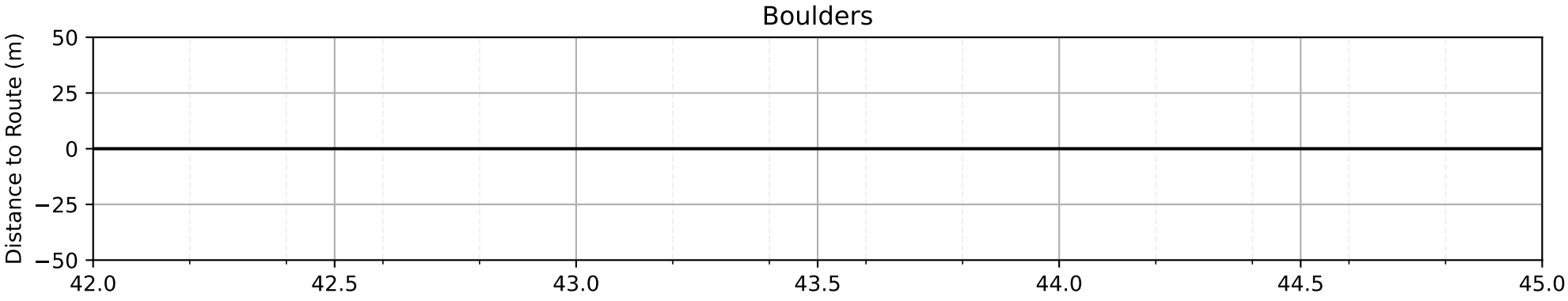
Horizons



Backscatter

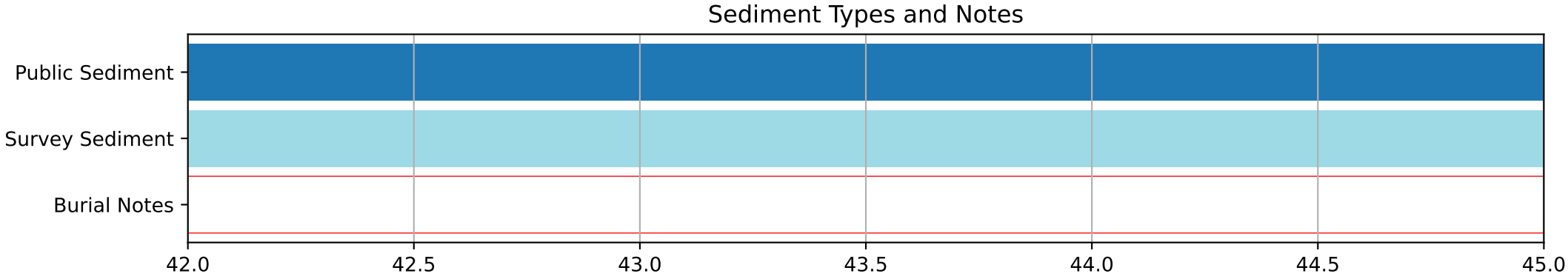


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

Sand

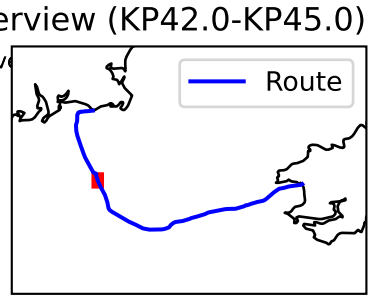
Survey Sediment

1.0 - 2.0 m medium dense to dense SAND with megaripples over subcropping HARDGROUND (v

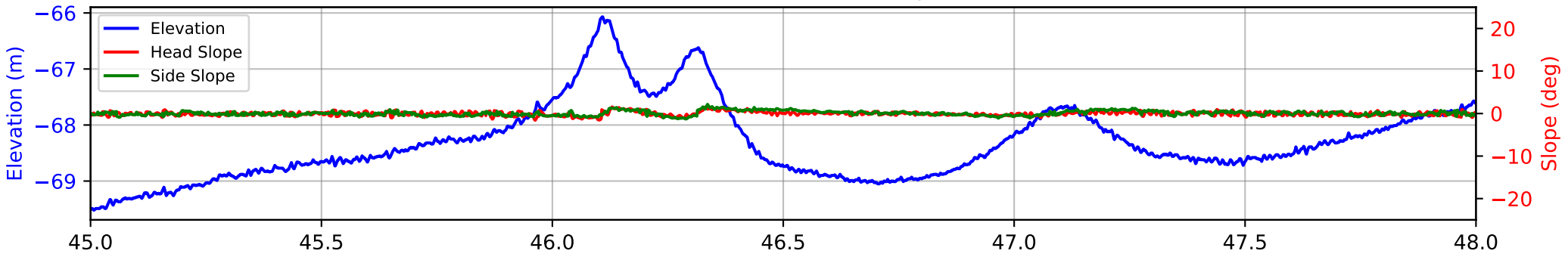
Burial Notes

No Data

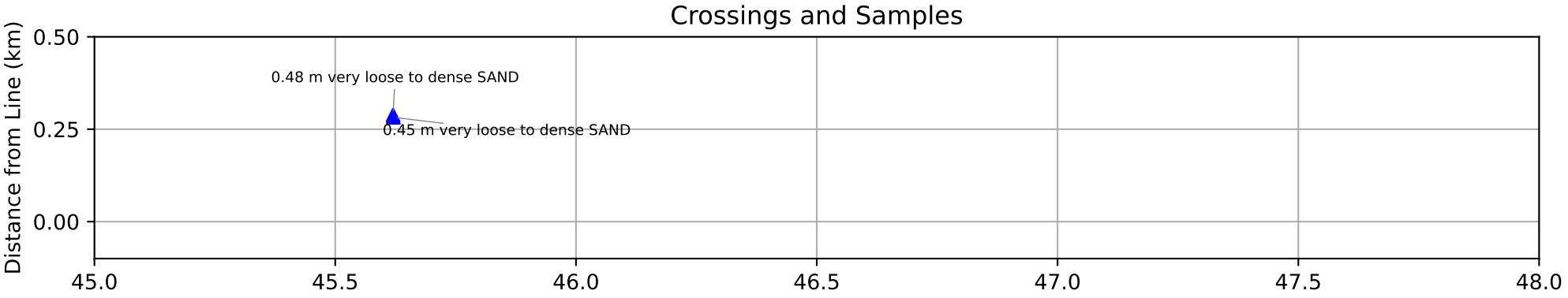
Overview (KP42.0-KP45.0)



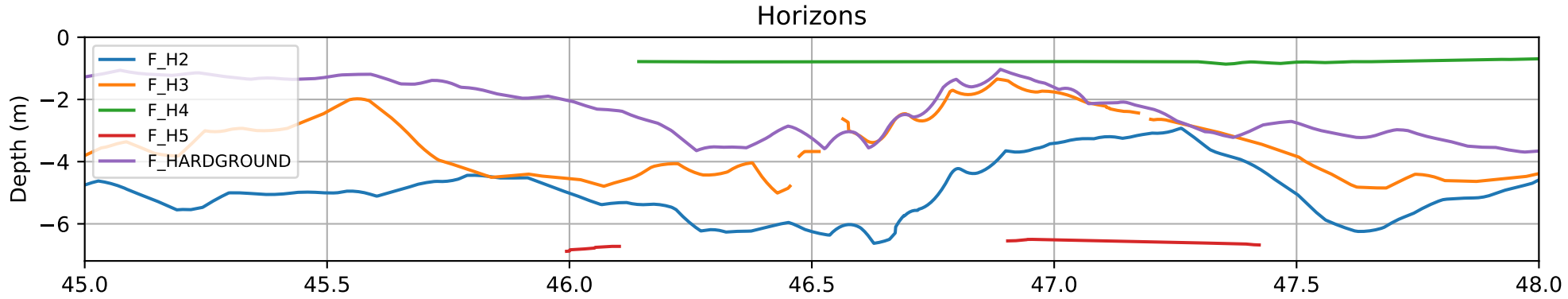
Seabed Elevation and Slopes



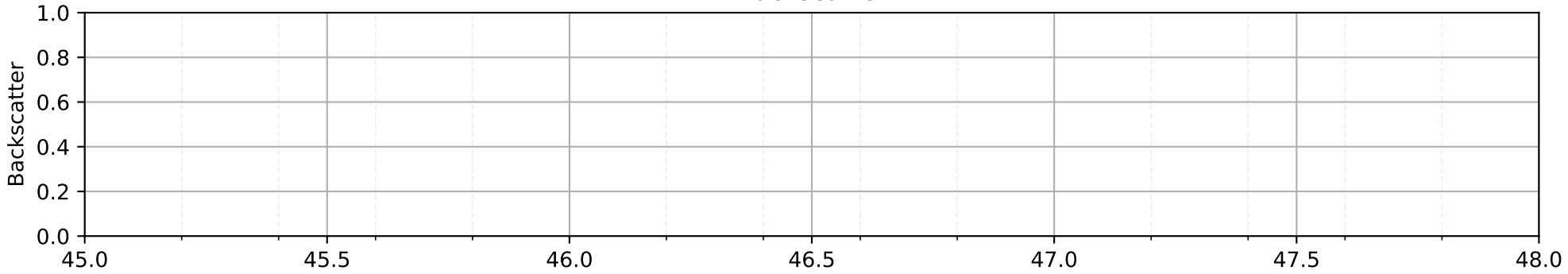
Crossings and Samples



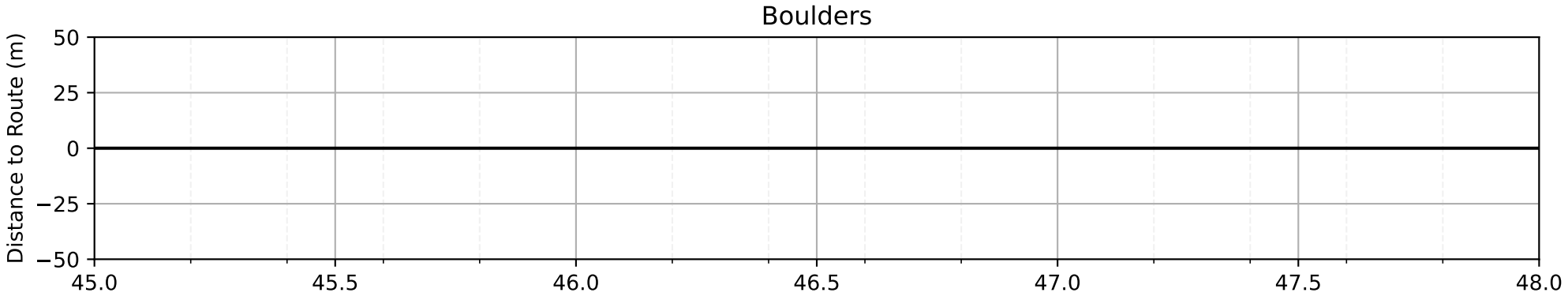
Horizons



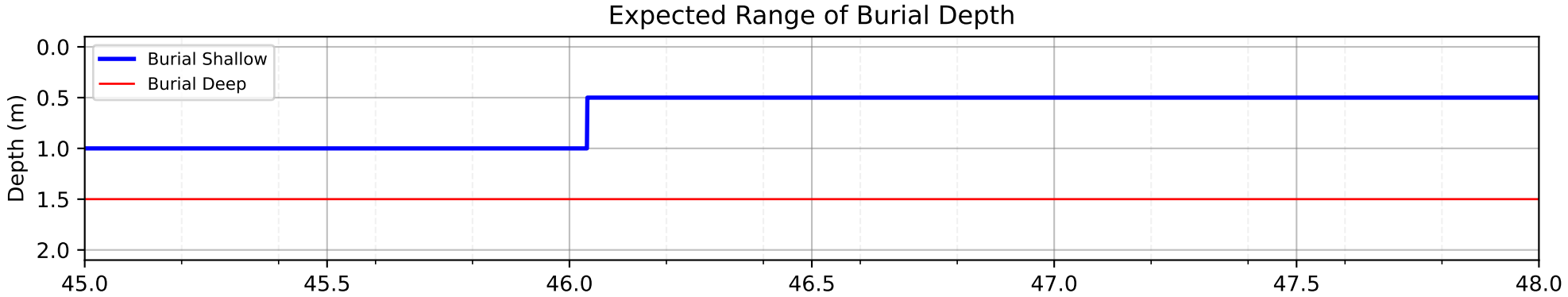
Backscatter



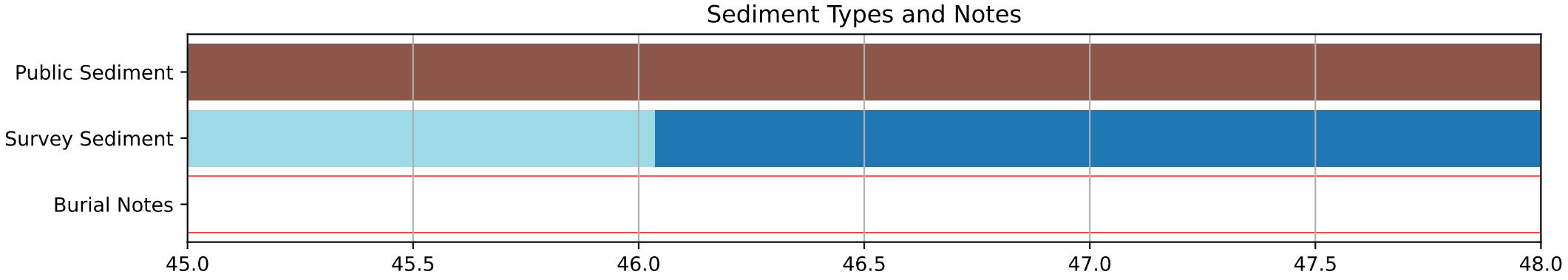
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

Burial Notes

No Data

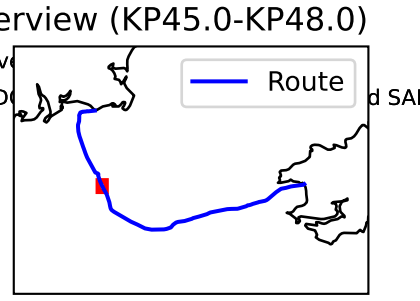
Survey Sediment

1.0 - 2.0 m medium dense to dense SAND with megaripples over subcropping HARDGROUND (v

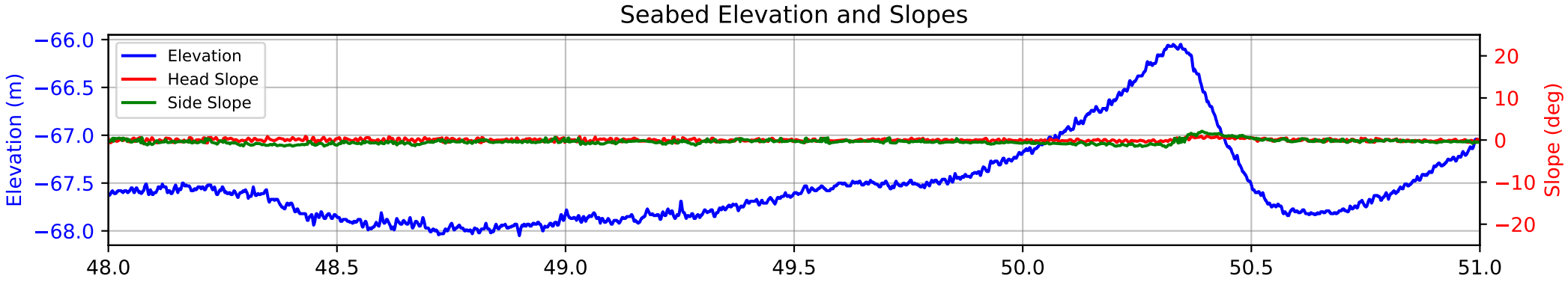
0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARD

d SAND)

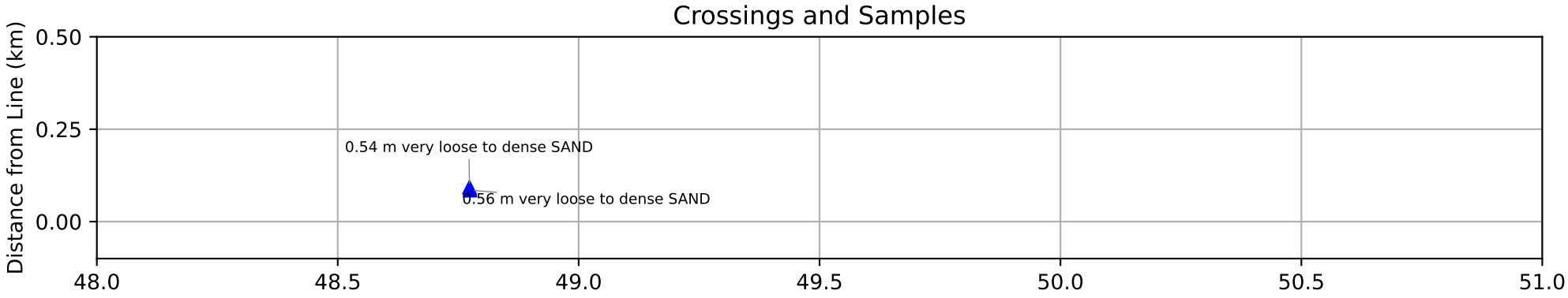
Overview (KP45.0-KP48.0)



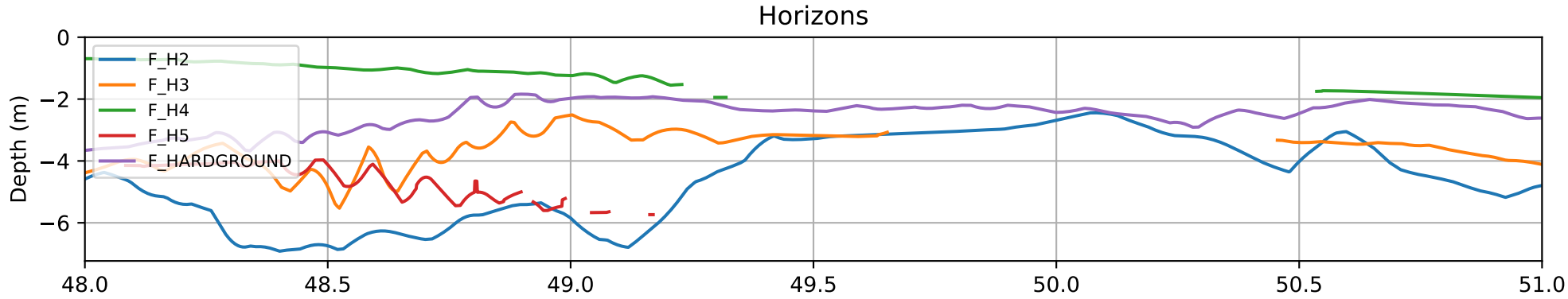
Seabed Elevation and Slopes



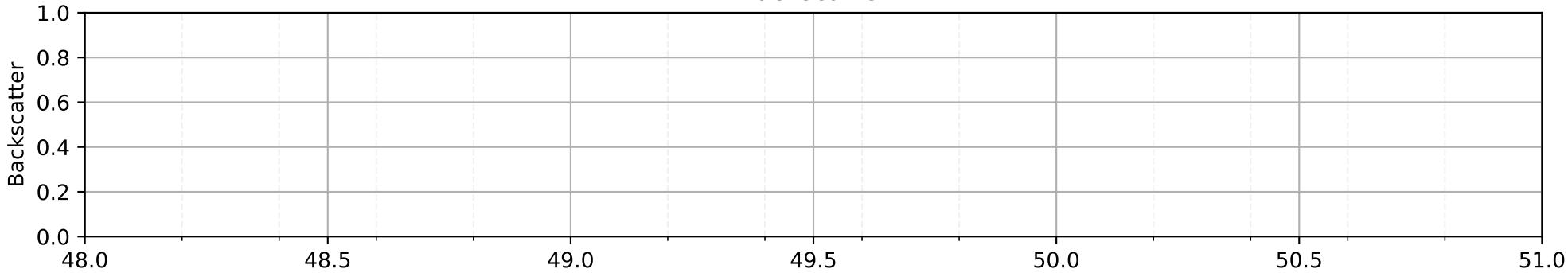
Crossings and Samples



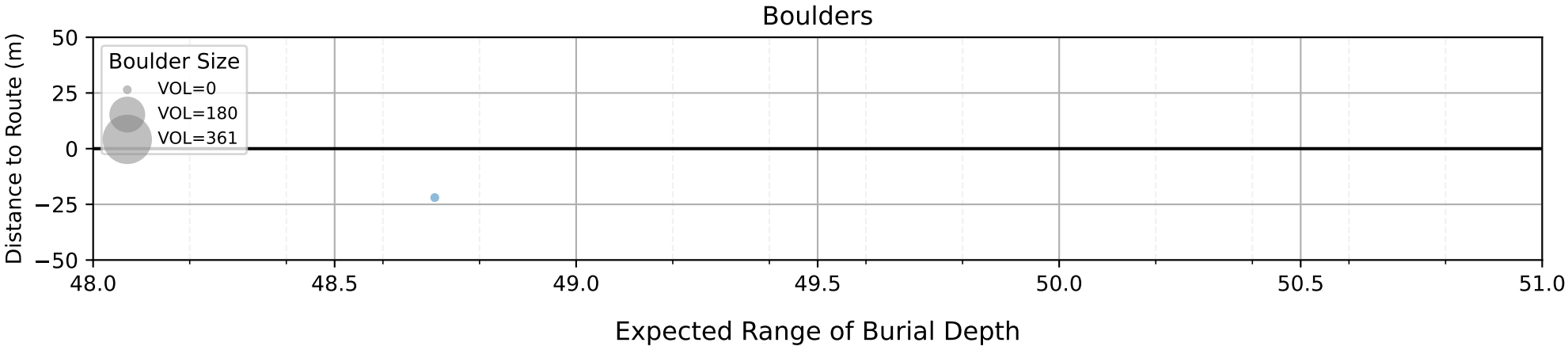
Horizons



Backscatter

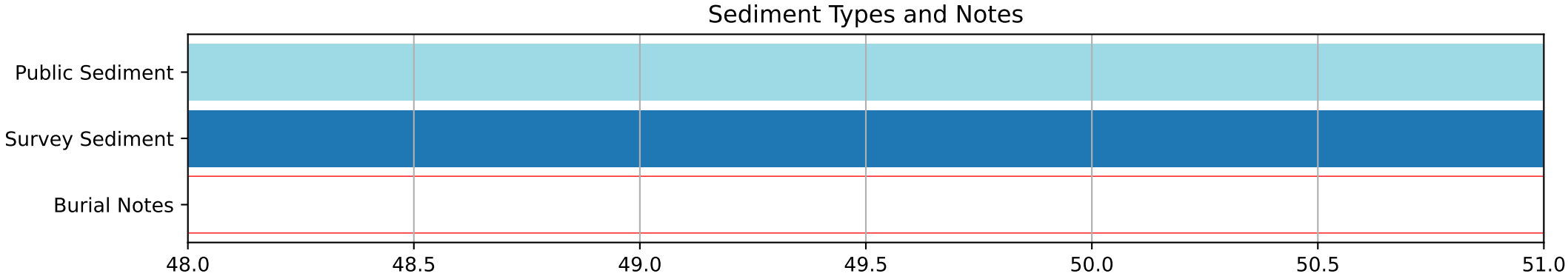


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

Sand

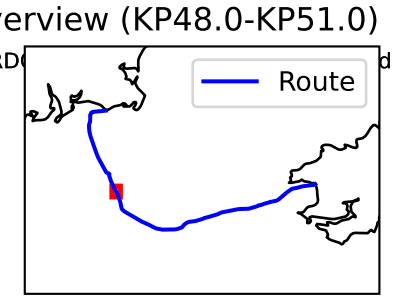
Survey Sediment

0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARD(d SAND)

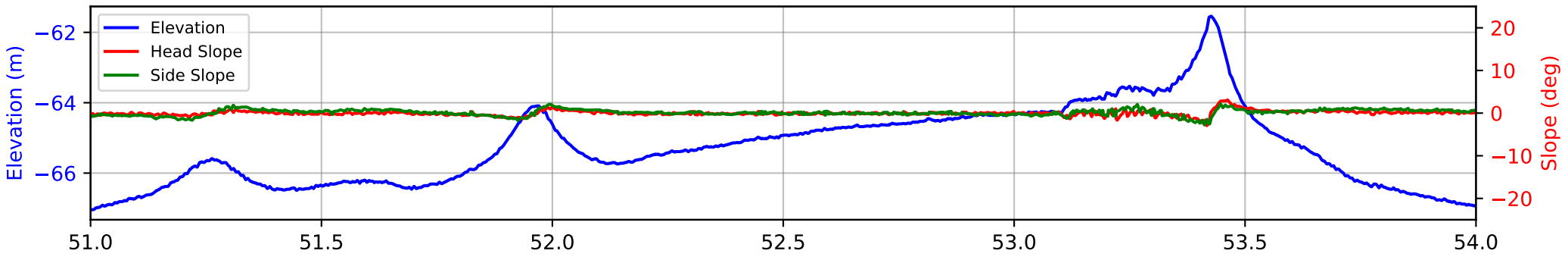
Burial Notes

No Data

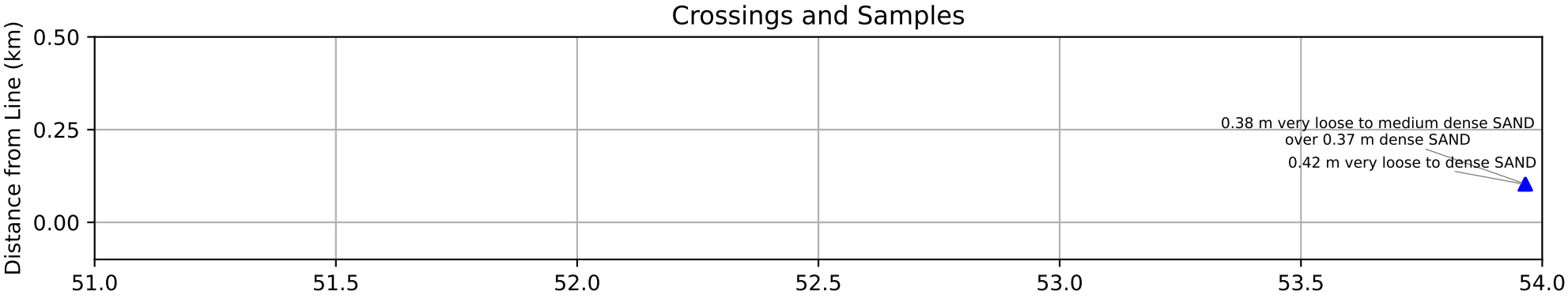
Overview (KP48.0-KP51.0)



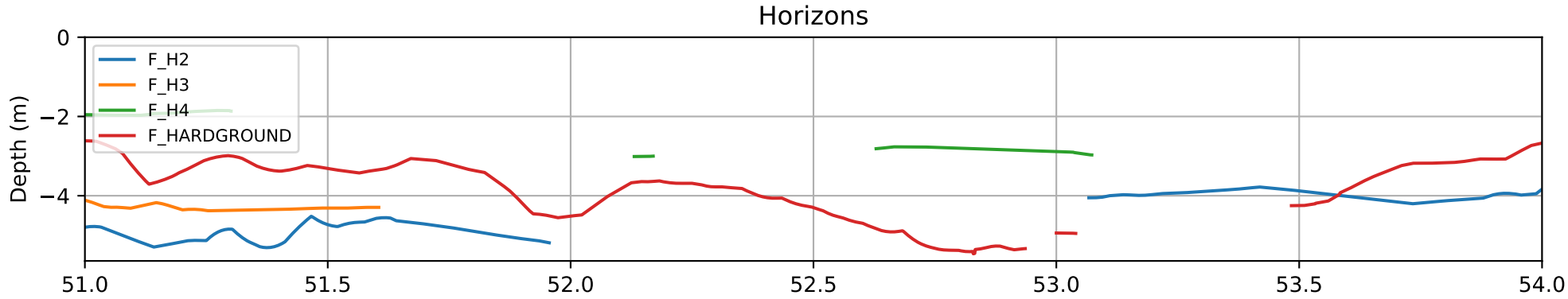
Seabed Elevation and Slopes



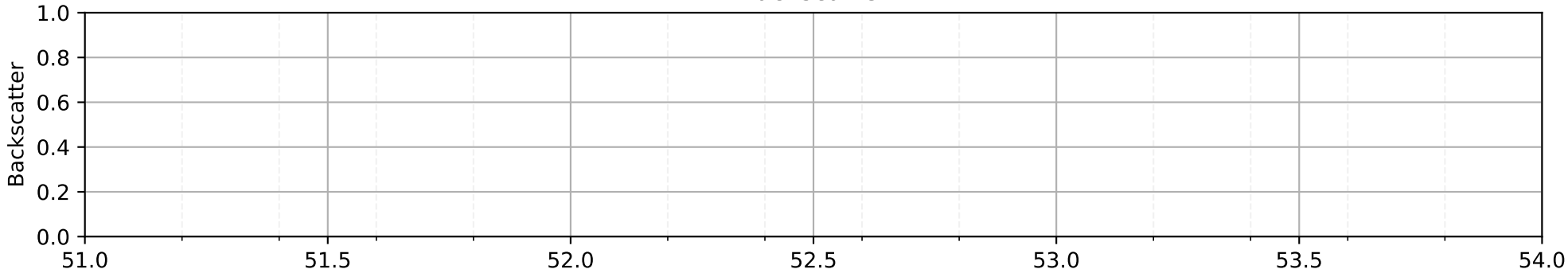
Crossings and Samples



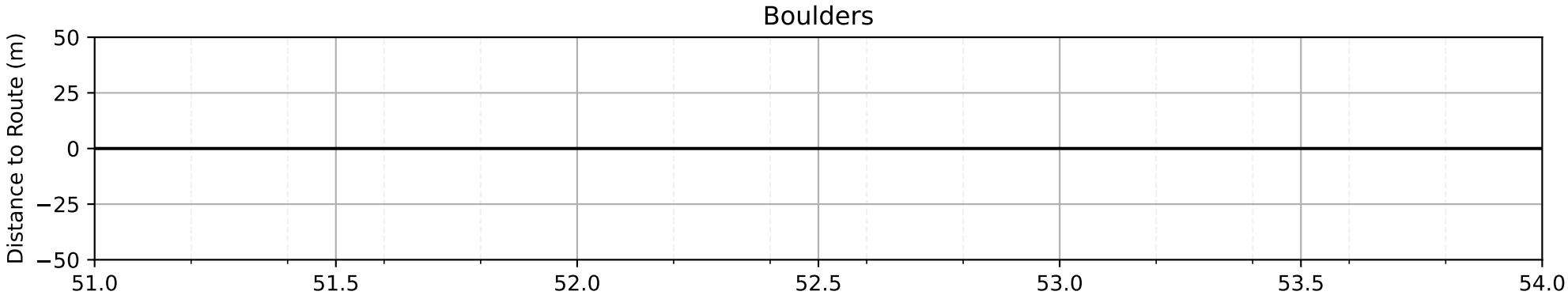
Horizons



Backscatter

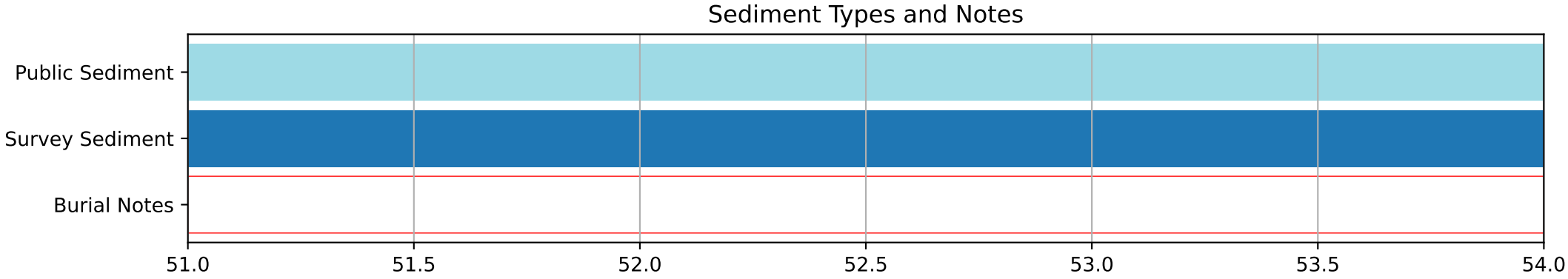


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

Sand

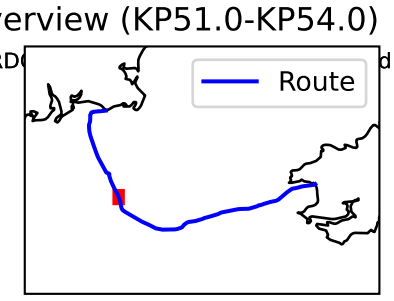
Survey Sediment

0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARD(d SAND)

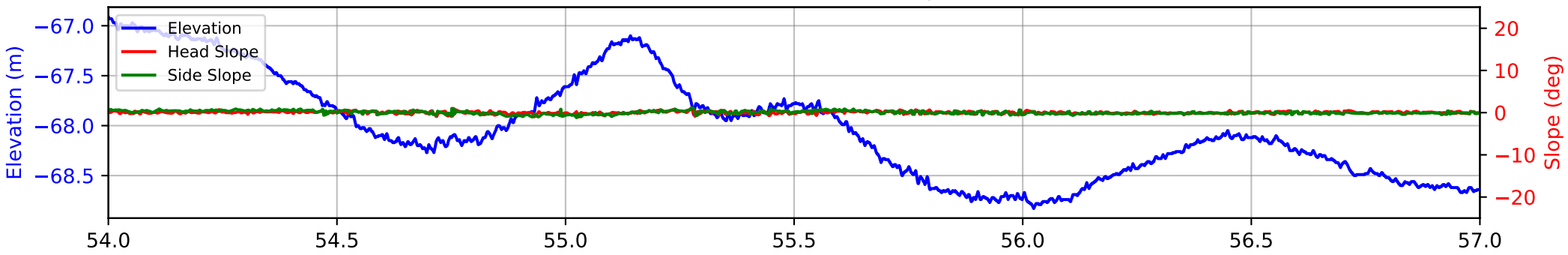
Burial Notes

No Data

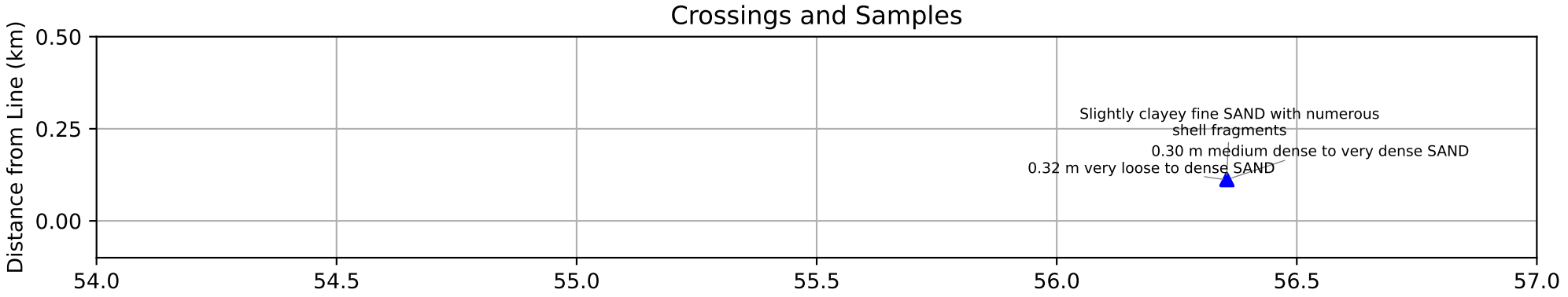
Overview (KP51.0-KP54.0)



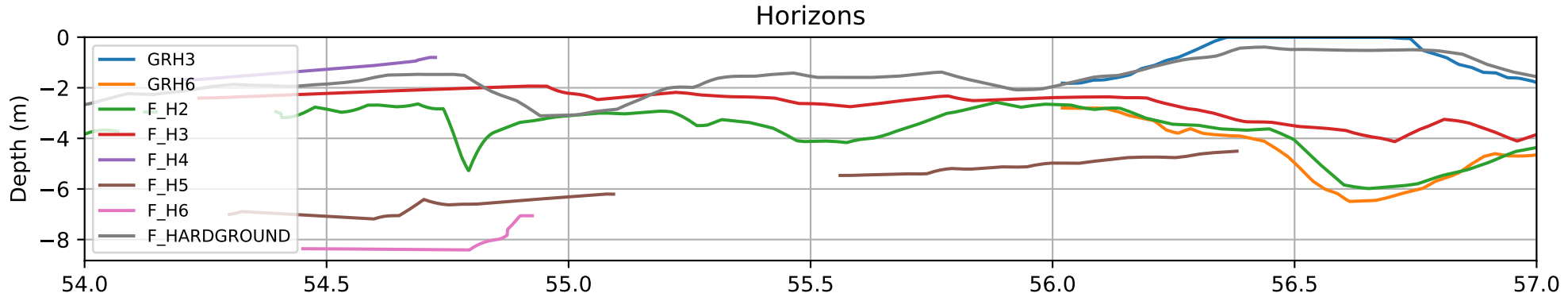
Seabed Elevation and Slopes



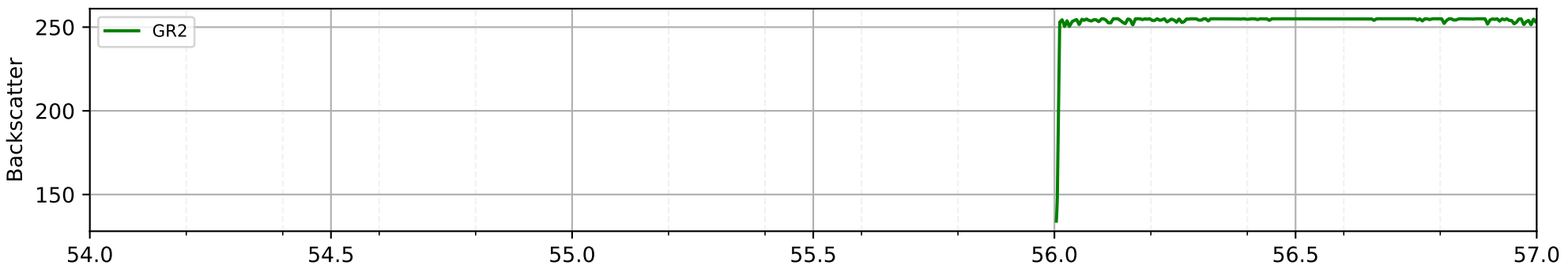
Crossings and Samples



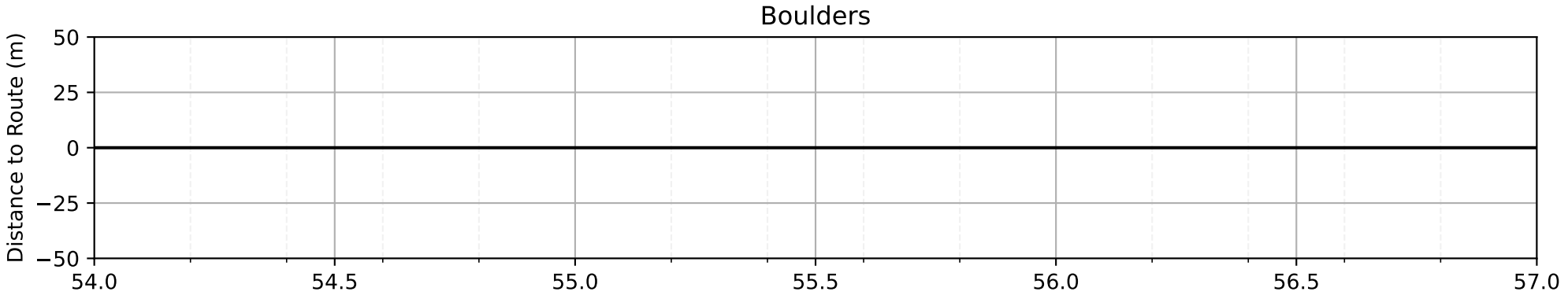
Horizons



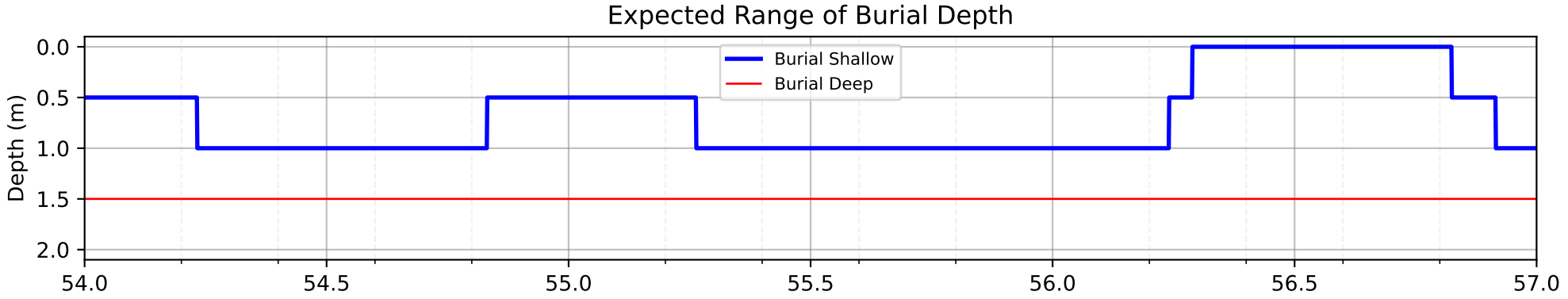
Backscatter



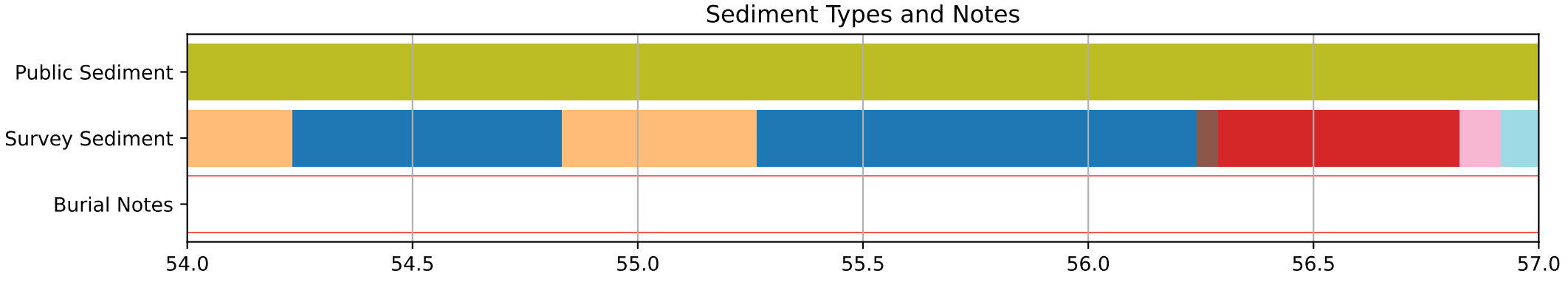
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

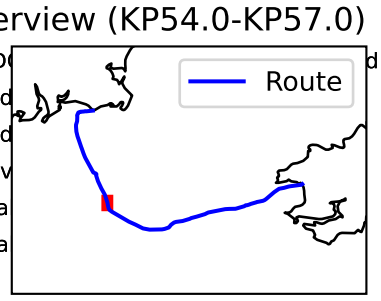
Burial Notes

No Data

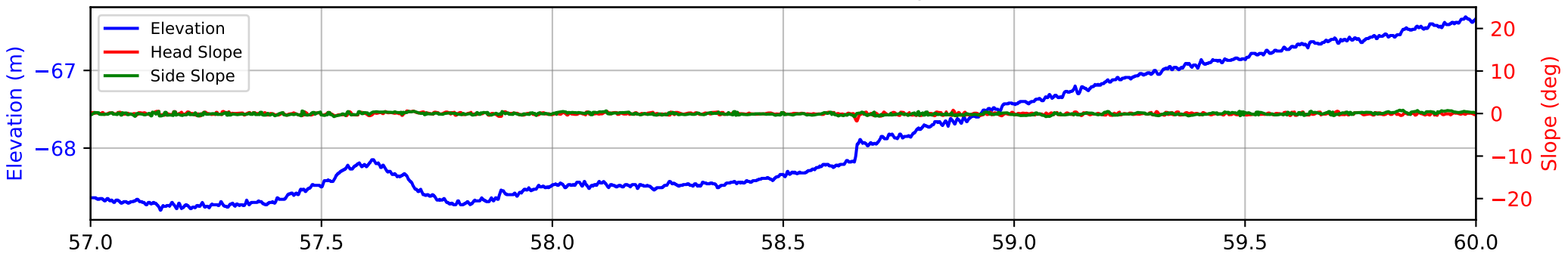
Survey Sediment

- 0.5 - 1.0 m very loose to dense SAND with megaripples and sandwaves over subcropping HARD(d SAND)
- 1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d
- Veneer to 0.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (v
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacia
- 1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacia

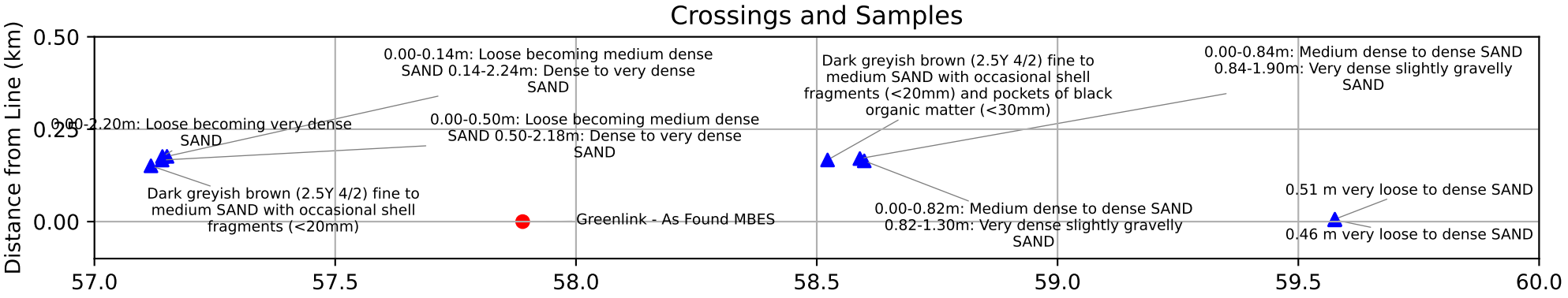
Overview (KP54.0-KP57.0)



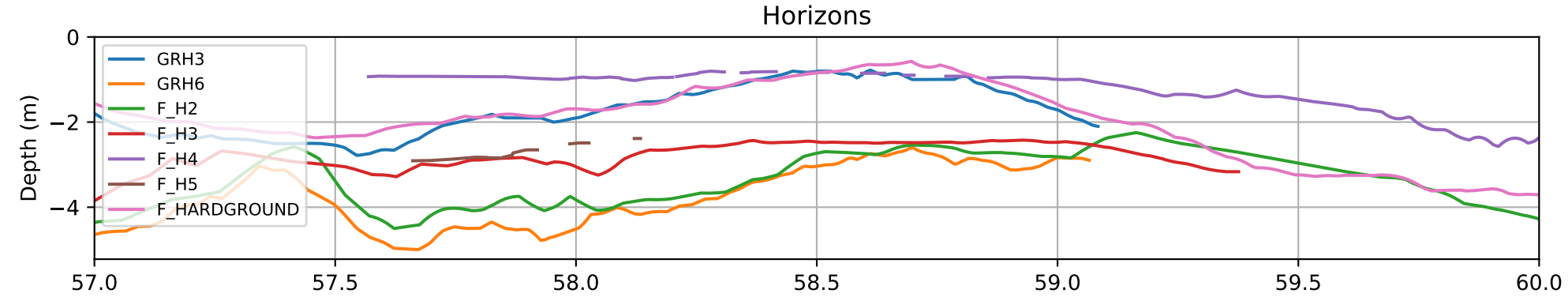
Seabed Elevation and Slopes



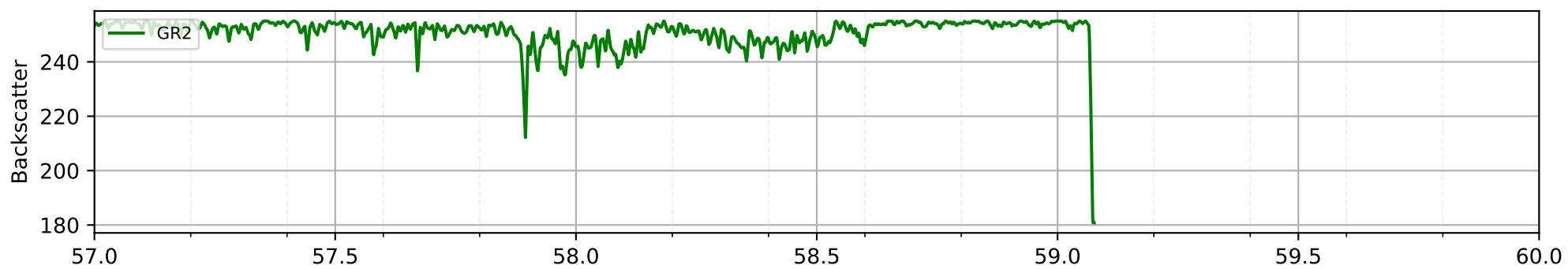
Crossings and Samples



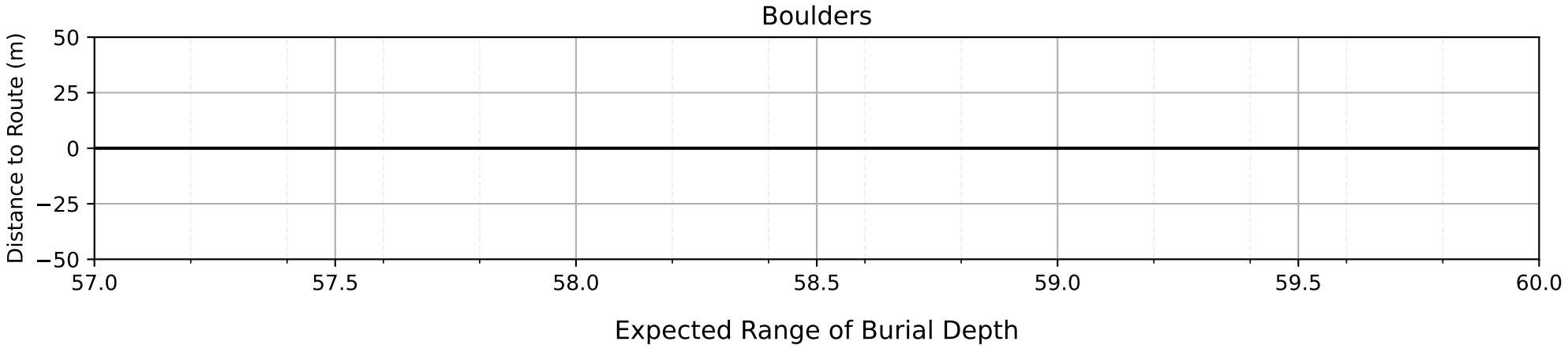
Horizons

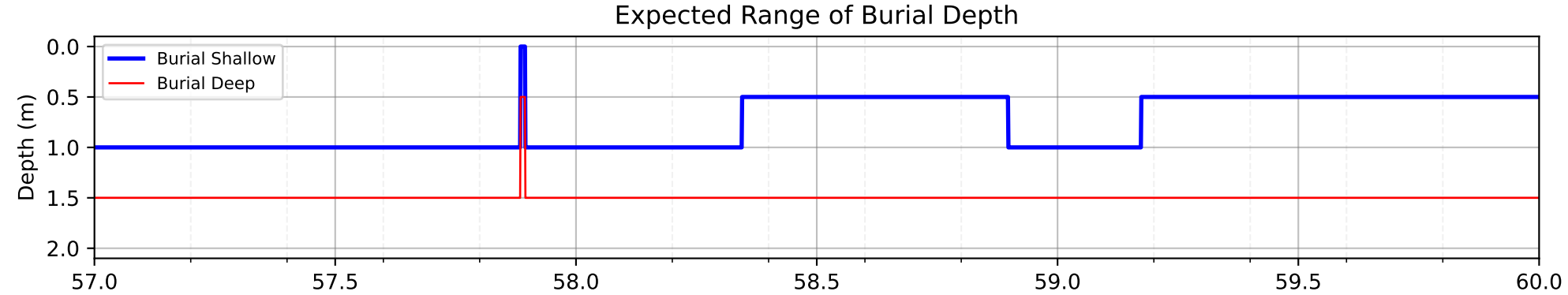


Backscatter

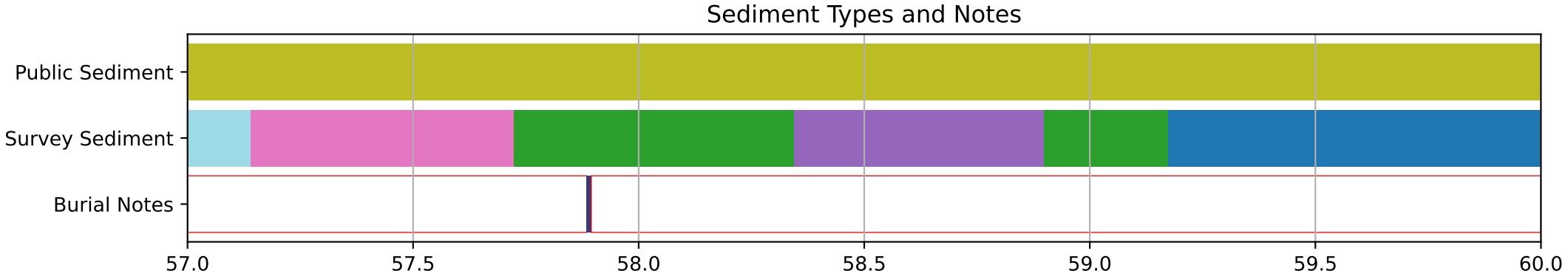


Boulders





Sediment Types and Notes



Public Sediment

- Sand

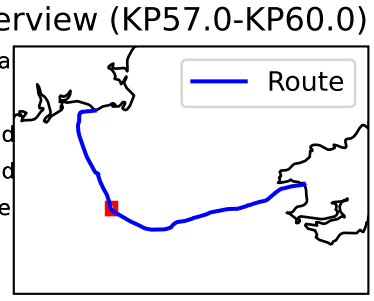
Burial Notes

- No Data
- POSSIBLE ADDITIONAL PROECTI… PENDING CROSSING AGREEMENT

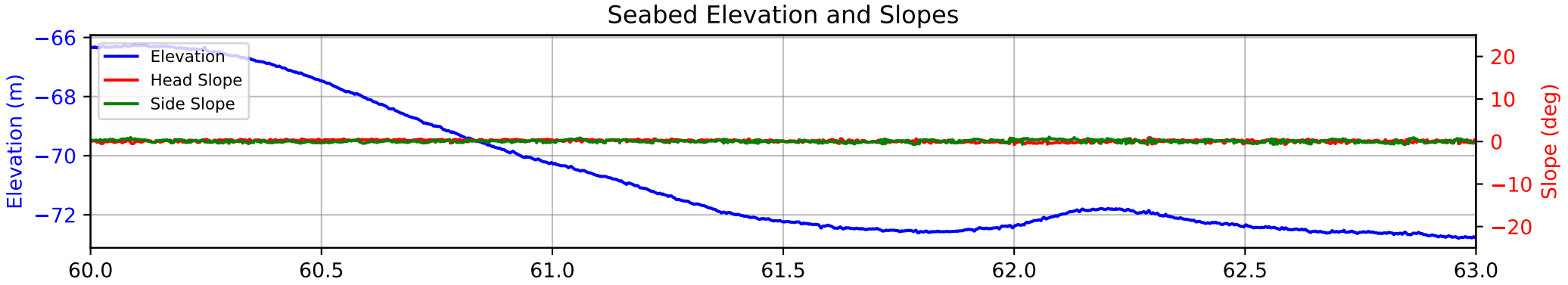
Survey Sediment

- 1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacia…
- > 2.0 m very loose to dense SAND with megaripples
- 1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d…
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d…
- 0.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense…

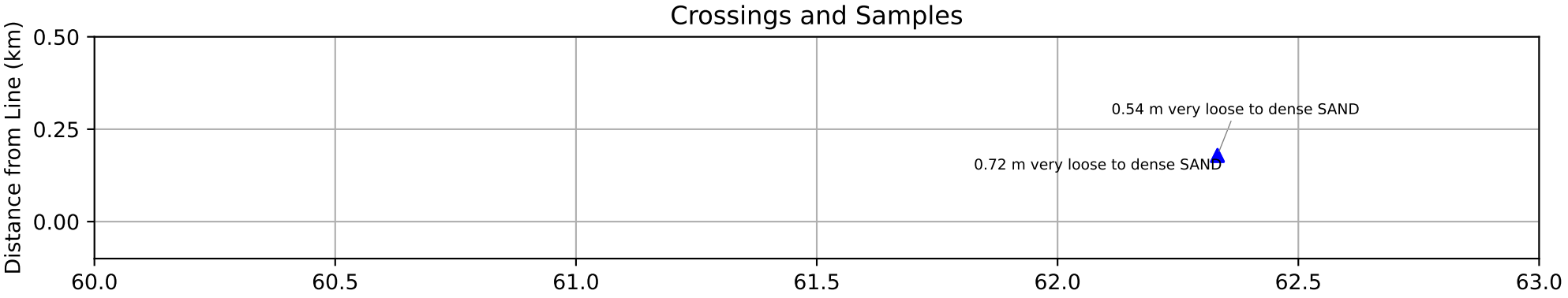
Overview (KP57.0-KP60.0)



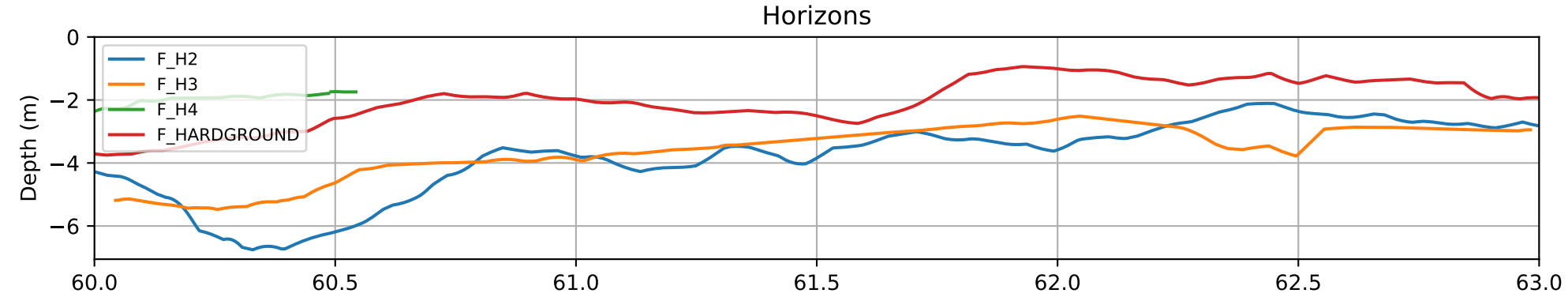
Seabed Elevation and Slopes



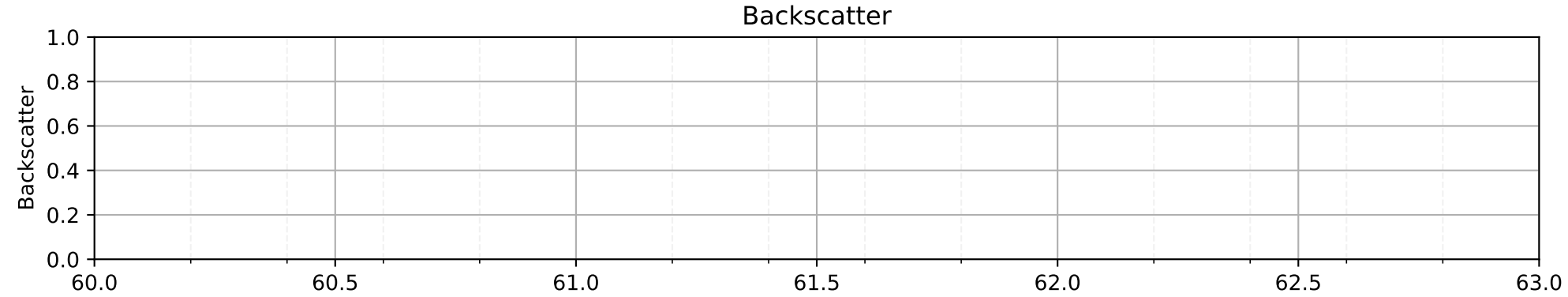
Crossings and Samples



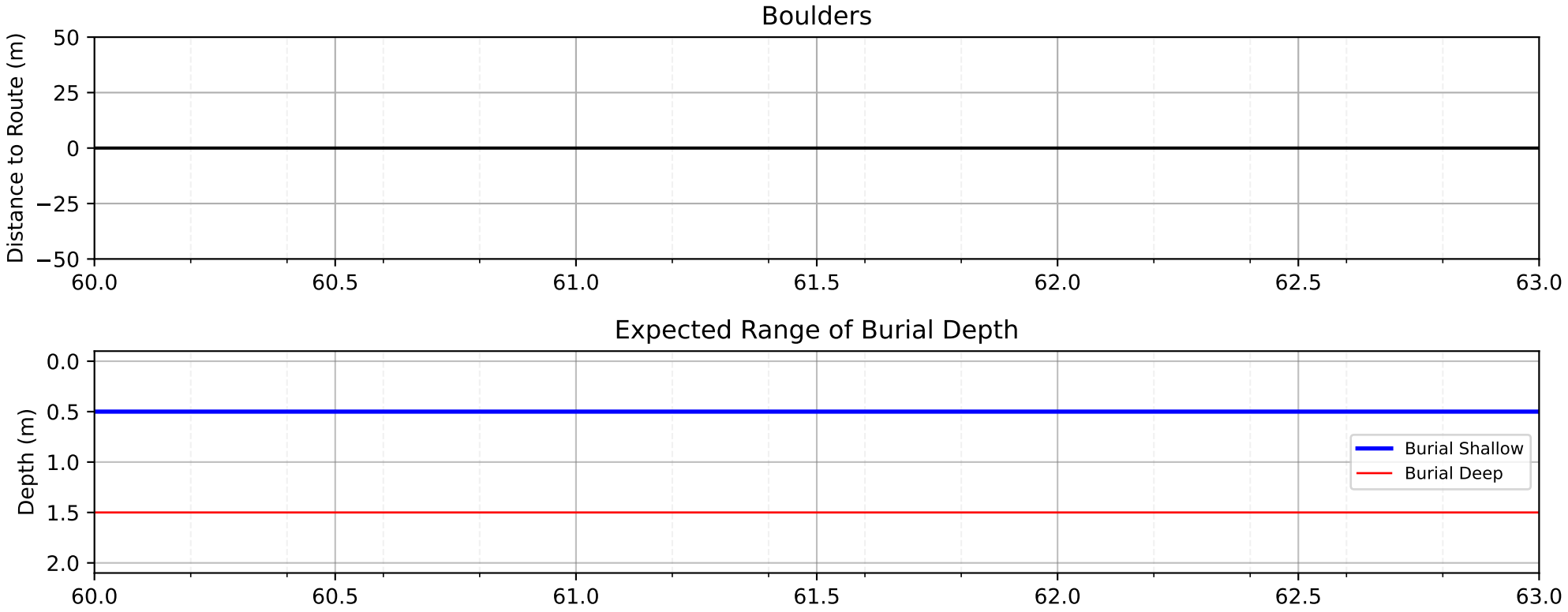
Horizons



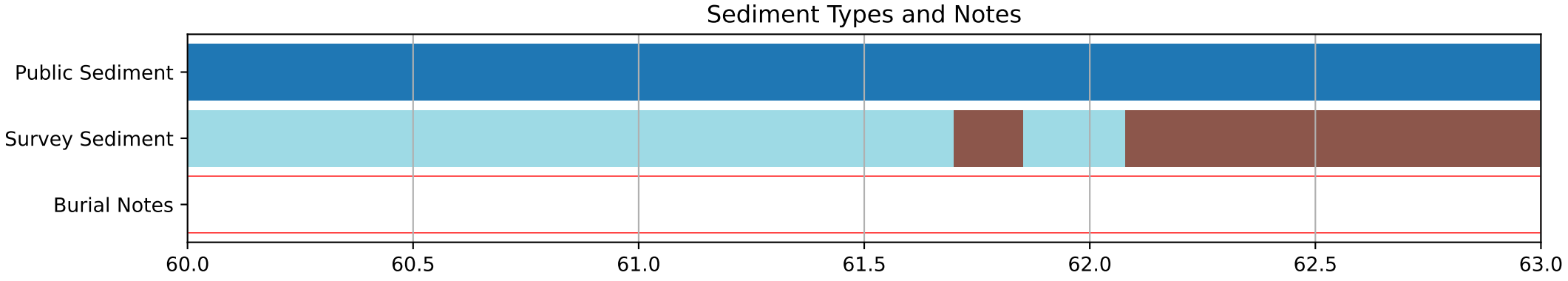
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- Sand

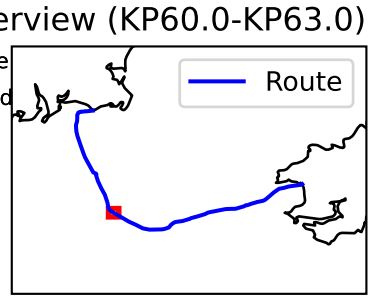
Burial Notes

- No Data

Survey Sediment

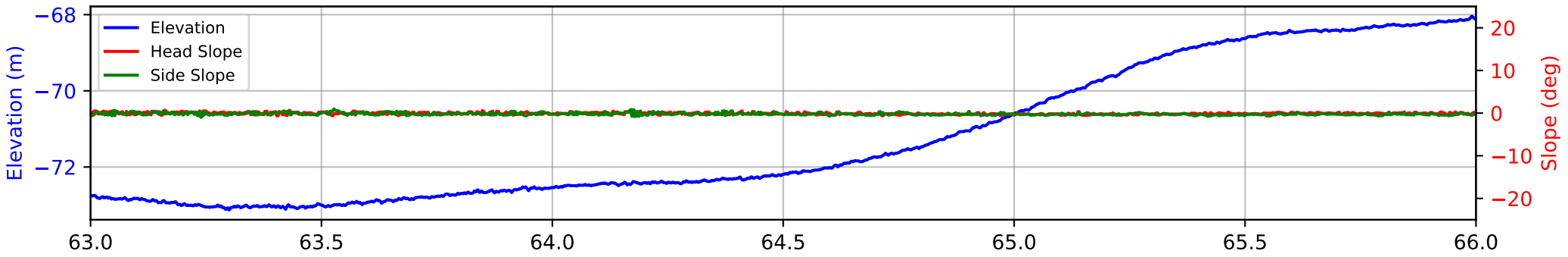
- 0.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very dense
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d

Overview (KP60.0-KP63.0)

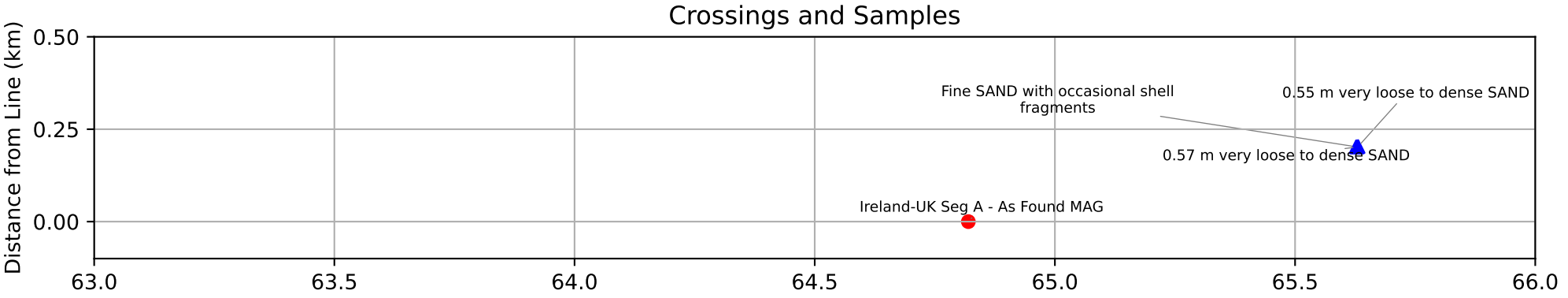


Expected Range of Burial Depth

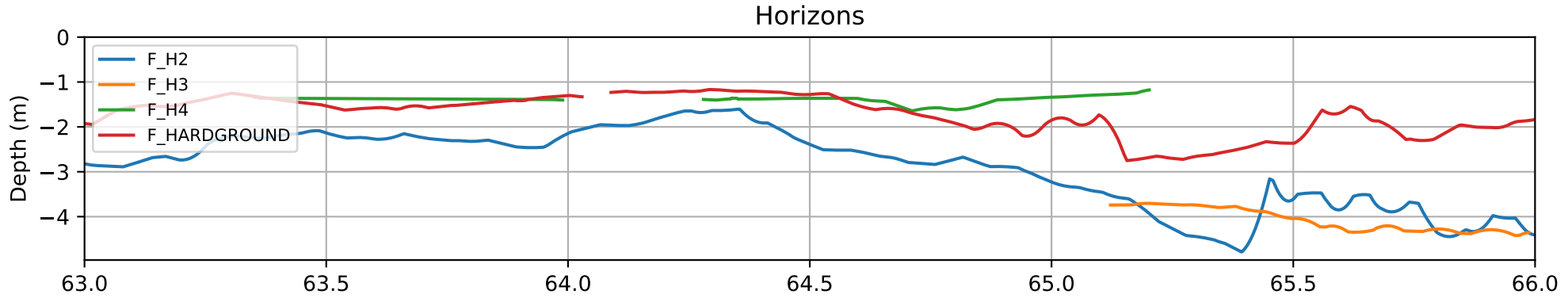
Seabed Elevation and Slopes



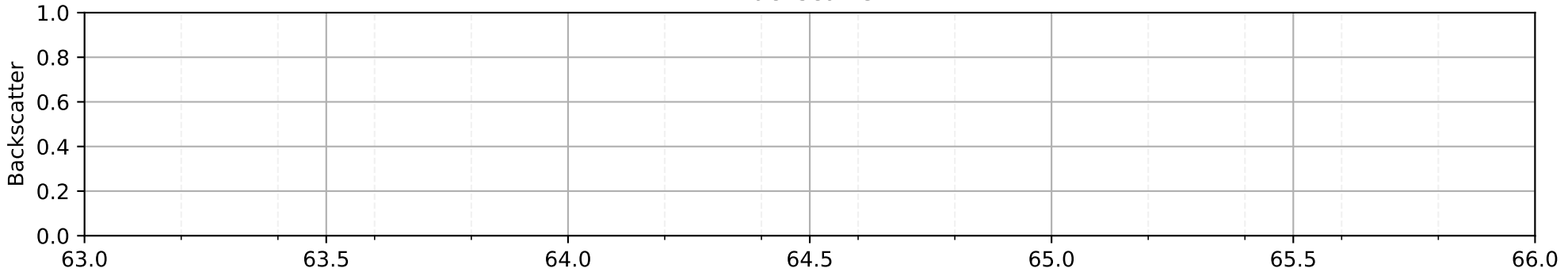
Crossings and Samples



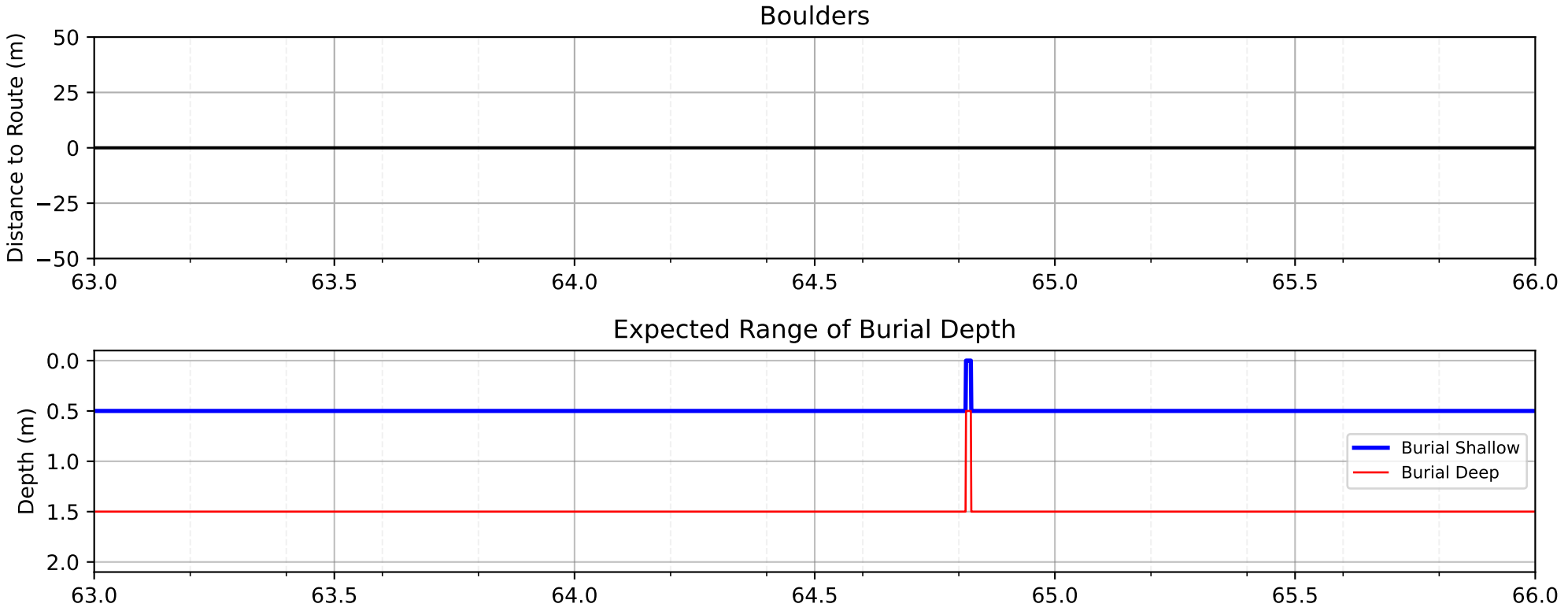
Horizons



Backscatter

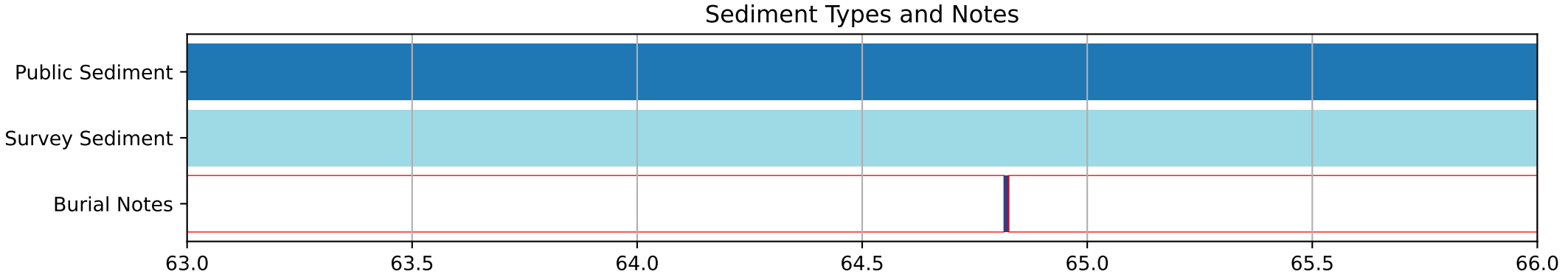


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

Sand

Survey Sediment

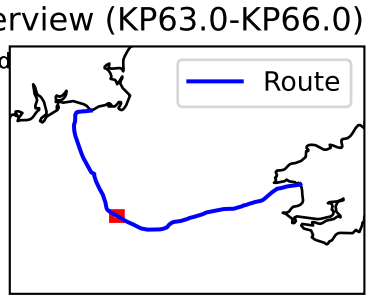
0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d

Burial Notes

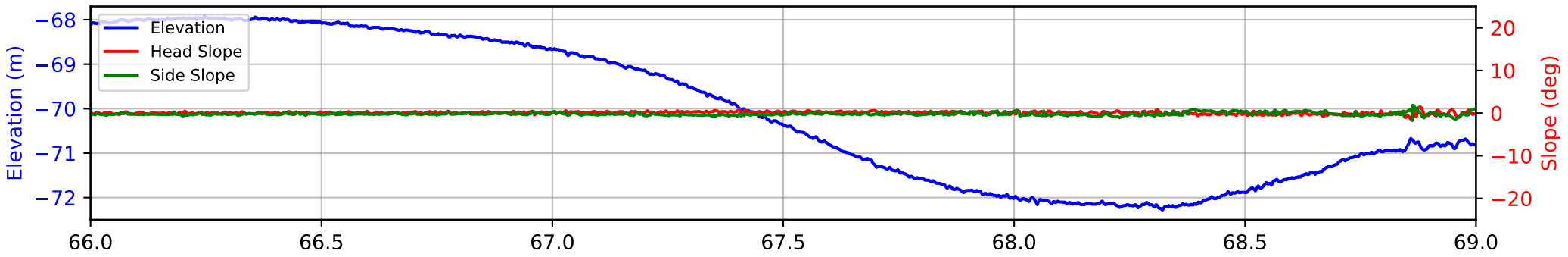
No Data

IS FO CROSSING

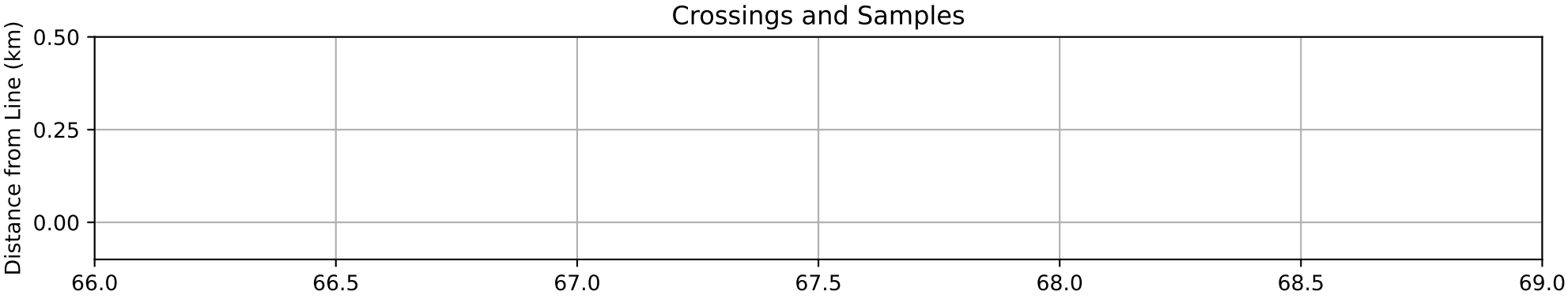
Overview (KP63.0-KP66.0)



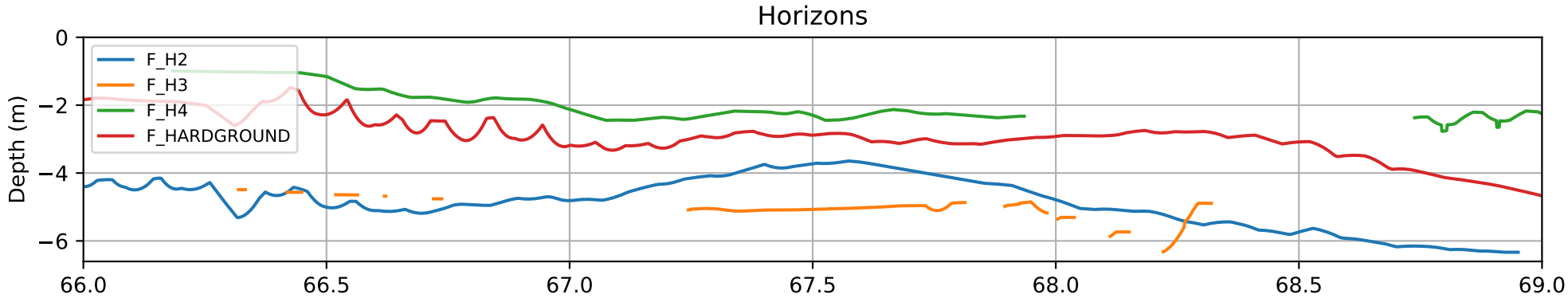
Seabed Elevation and Slopes



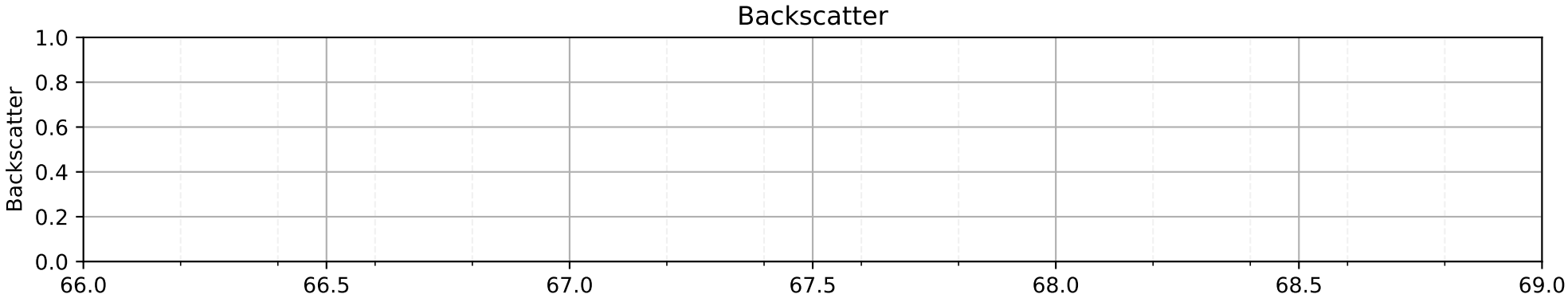
Crossings and Samples



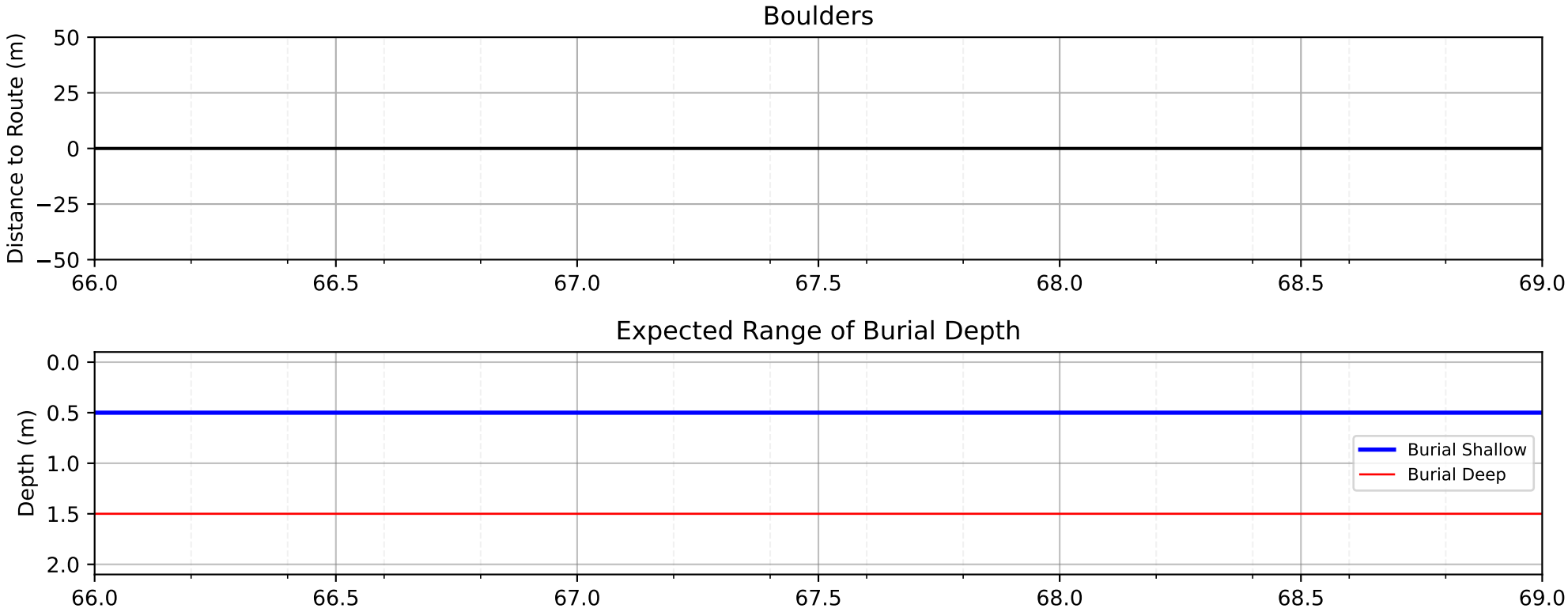
Horizons



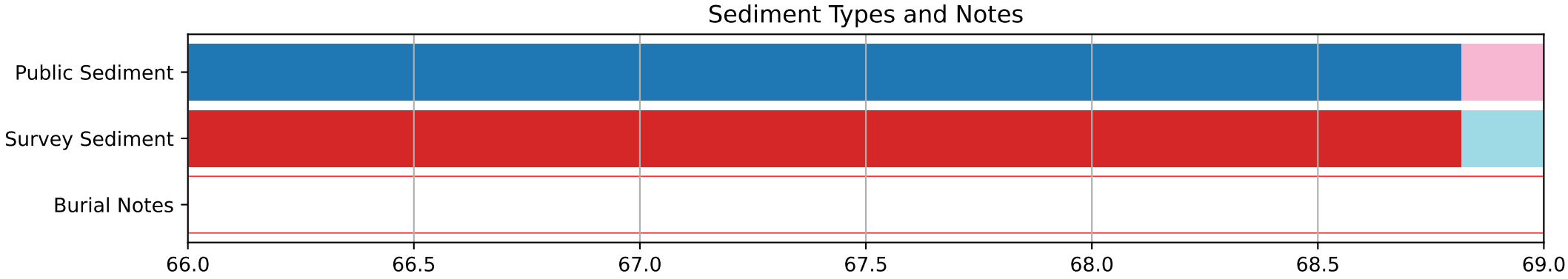
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- Sand
- Coarse-grained sediment

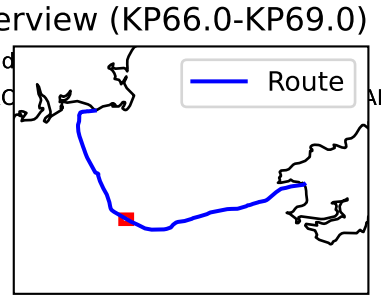
Survey Sediment

- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d
- 0.5 - 1.0 m very loose to dense SAND with megaripples and ribbons over subcropping HARDGRO

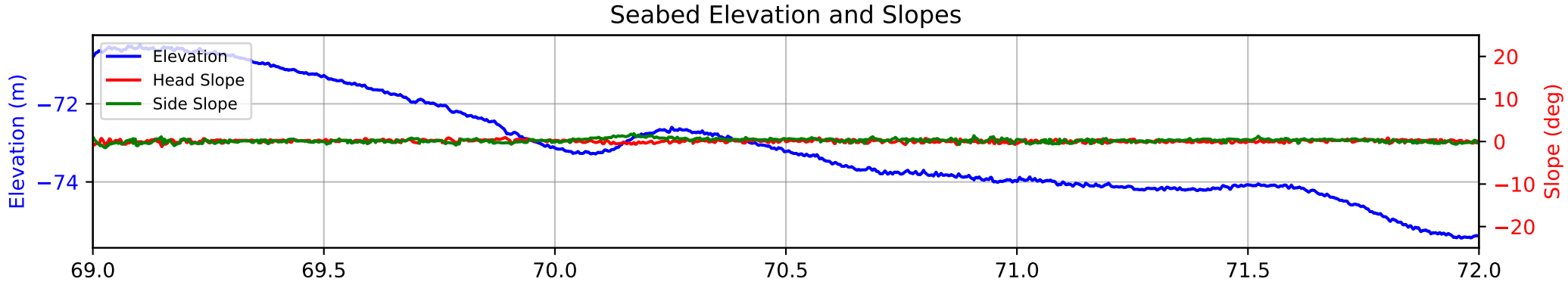
Burial Notes

- No Data

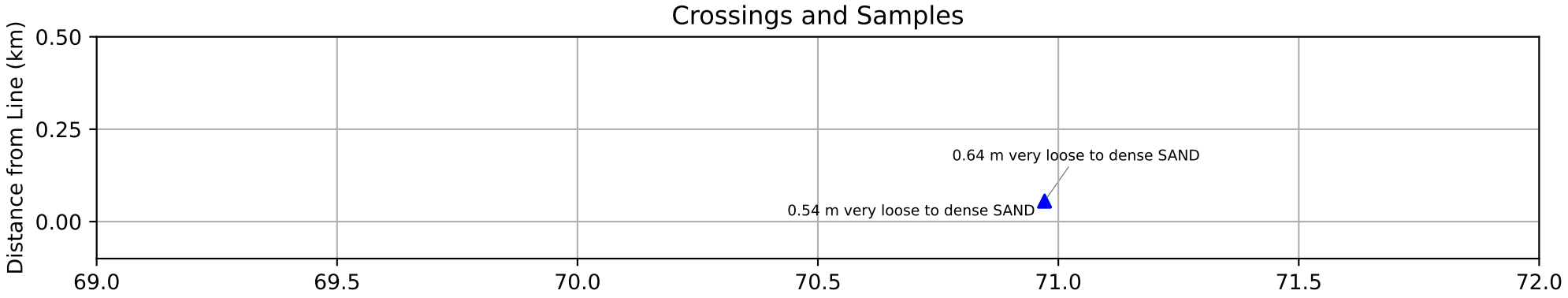
Overview (KP66.0-KP69.0)



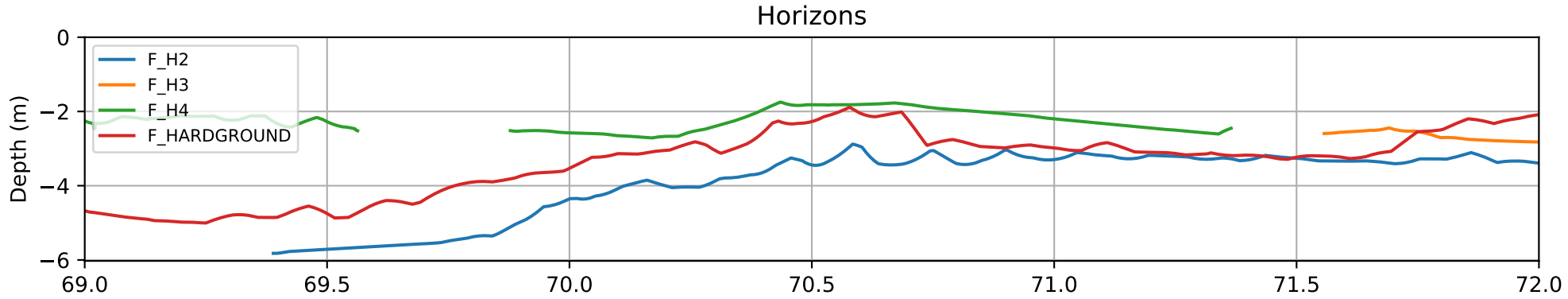
Seabed Elevation and Slopes



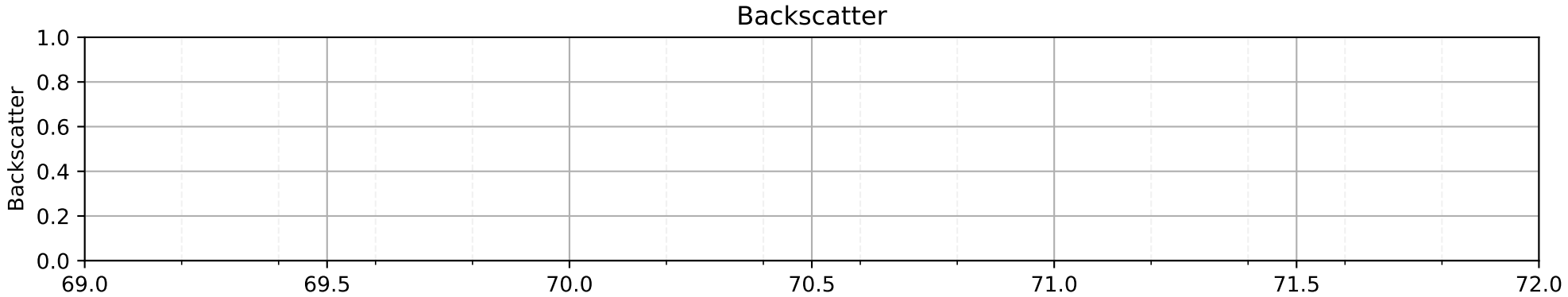
Crossings and Samples



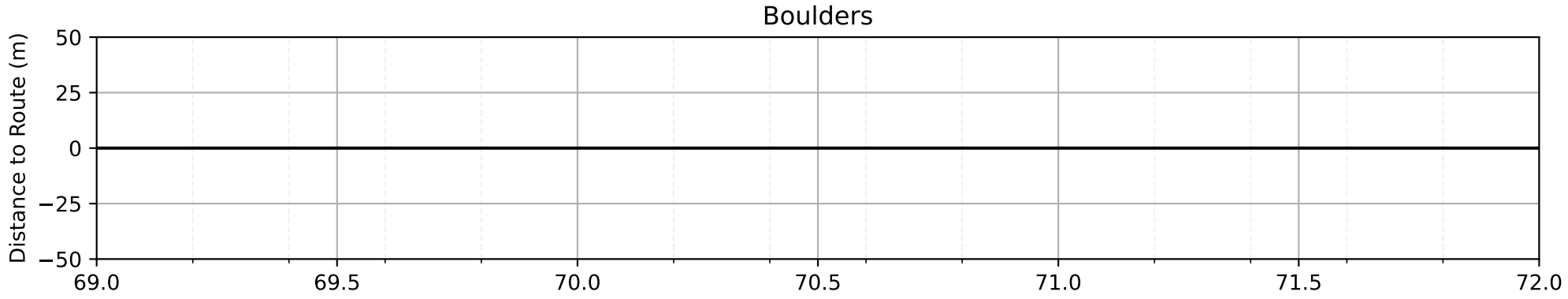
Horizons



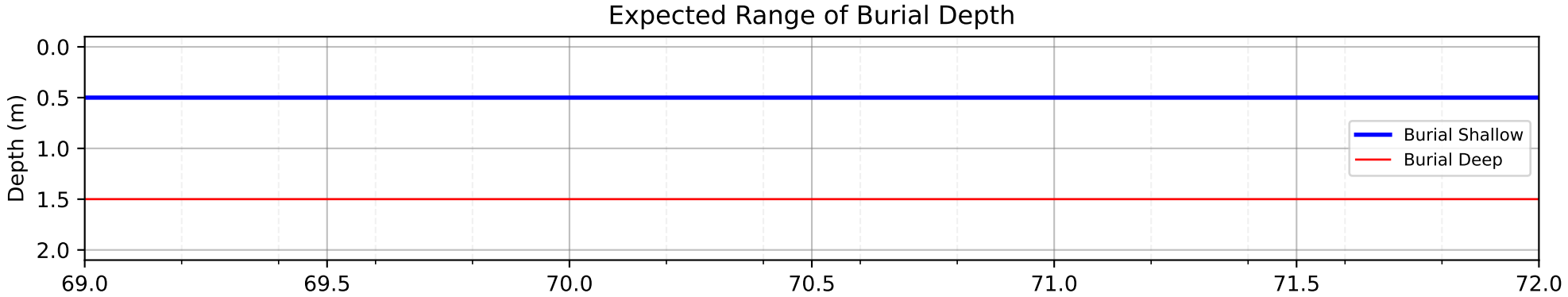
Backscatter



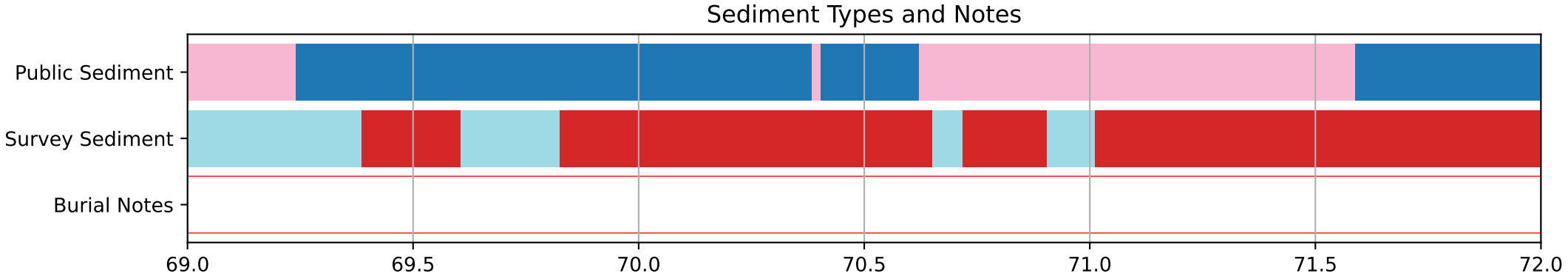
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- Coarse-grained sediment
- Sand

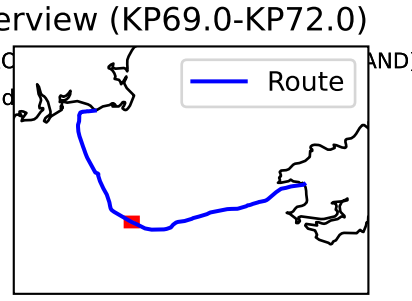
Survey Sediment

- 0.5 - 1.0 m very loose to dense SAND with megaripples and ribbons over subcropping HARDGRO…ND)
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d…

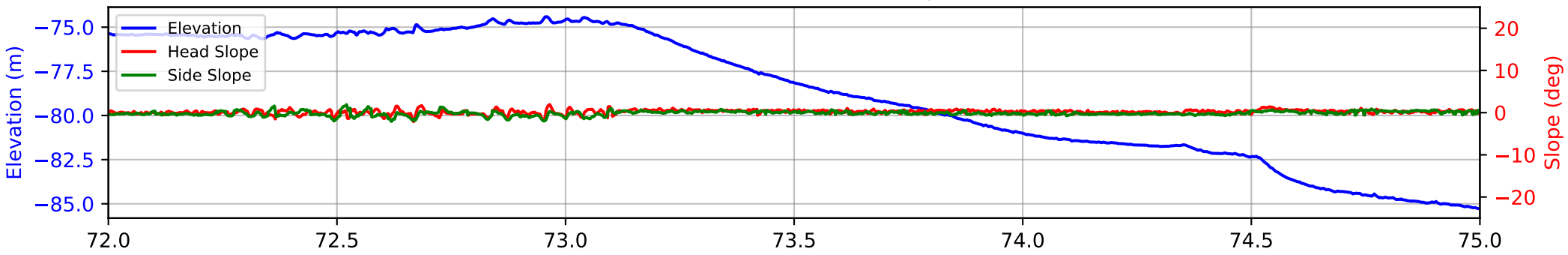
Burial Notes

- No Data

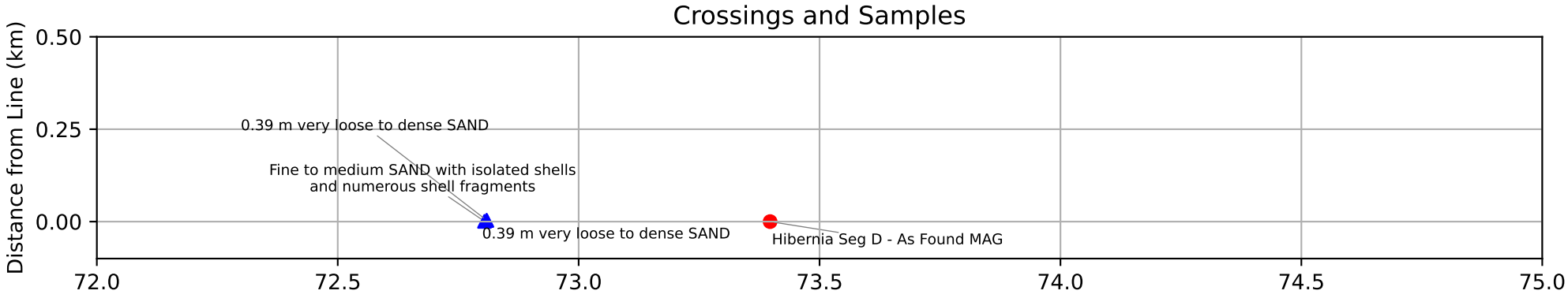
Overview (KP69.0-KP72.0)



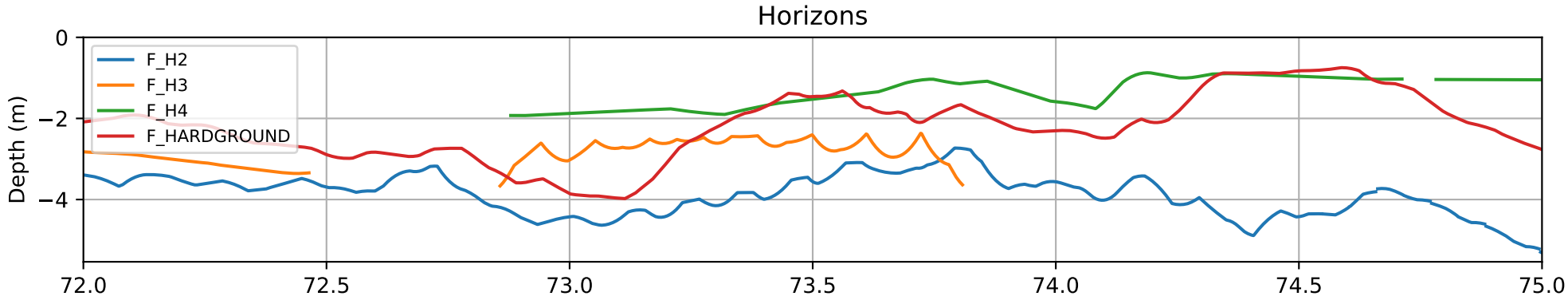
Seabed Elevation and Slopes



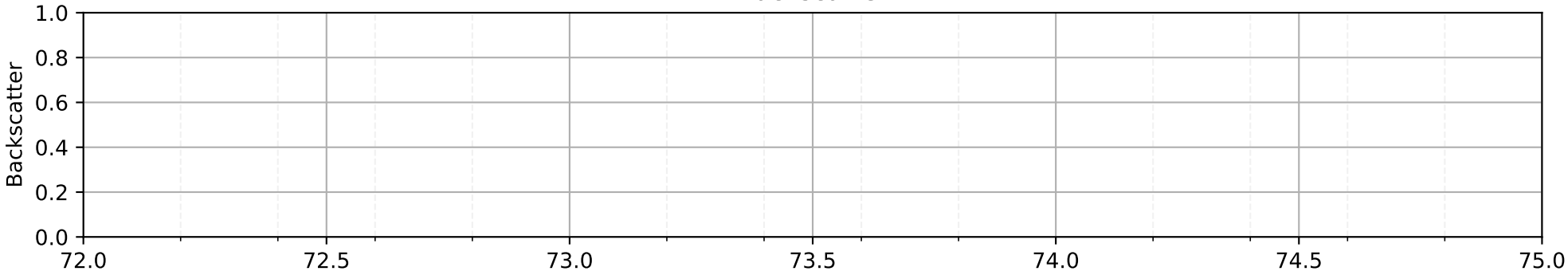
Crossings and Samples



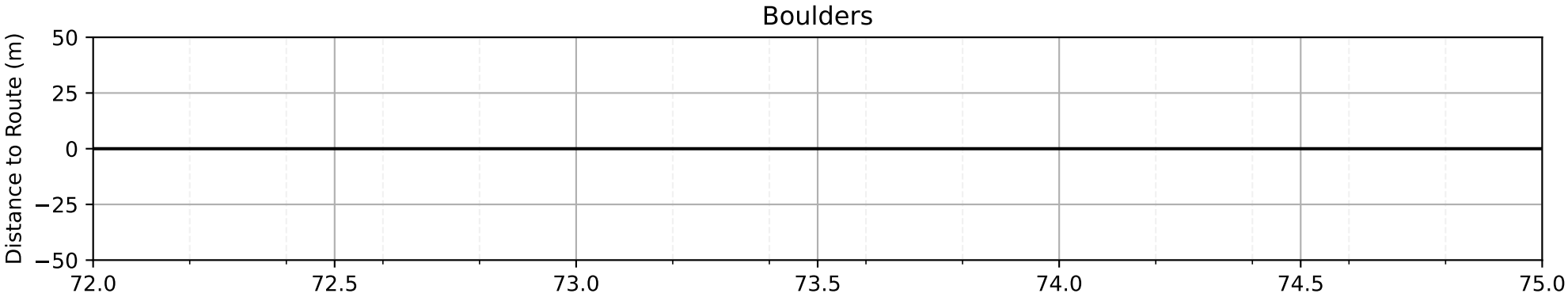
Horizons



Backscatter

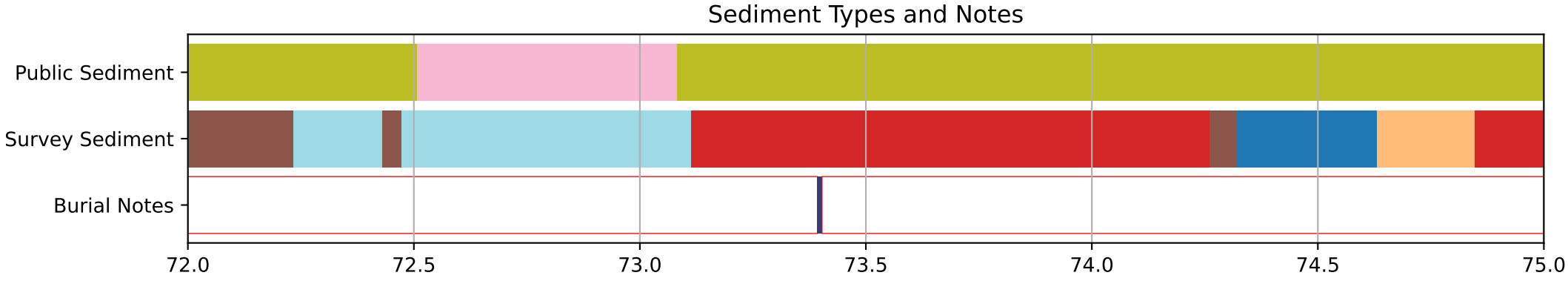


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- Sand
- Coarse-grained sediment

Burial Notes

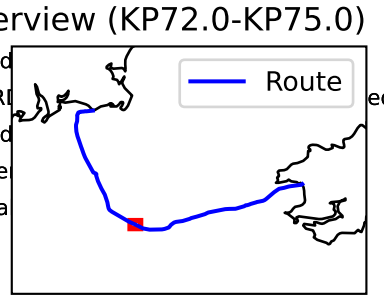
- No Data
- IS FO CROSSING

Survey Sediment

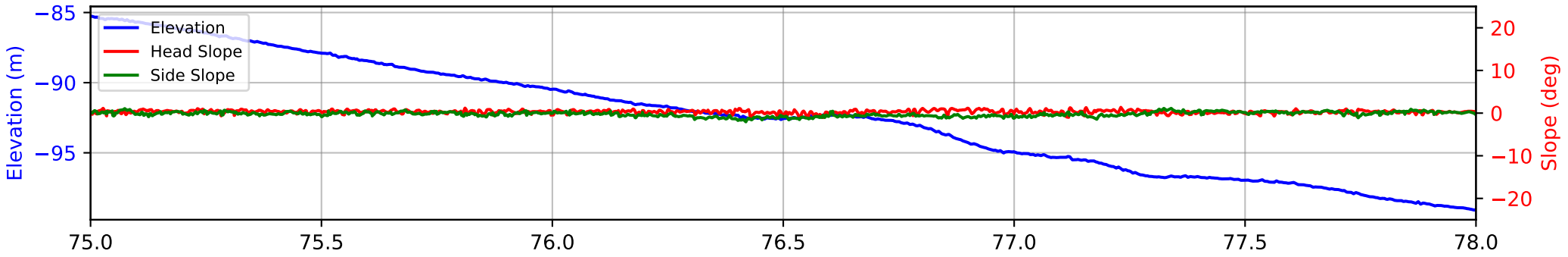
- 0.5 - 1.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d
- Veneer to 0.5 m very loose to dense SAND with megaripples and ribbons over subcropping HARD
- 1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d
- Veneer of very loose to dense SAND with megaripples over outcropping HARDGROUND (very de
- 0.5 - 1.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacia

ed SAND)

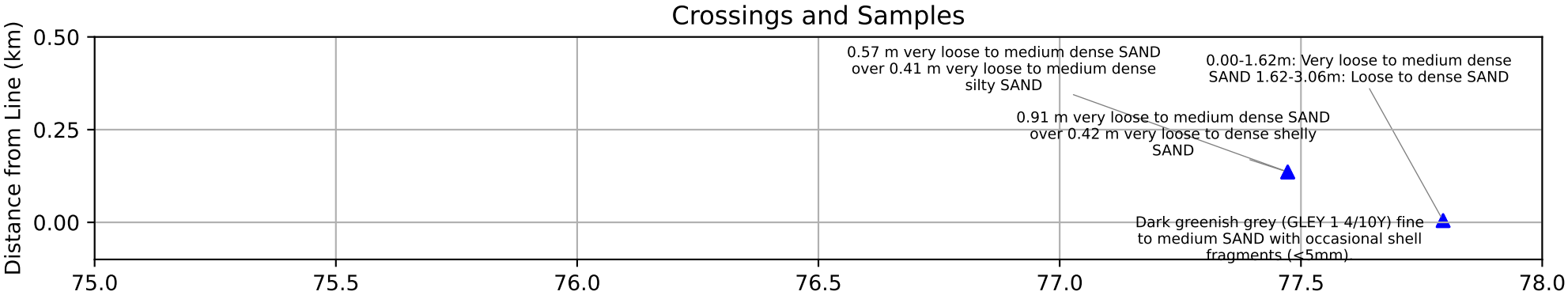
Overview (KP72.0-KP75.0)



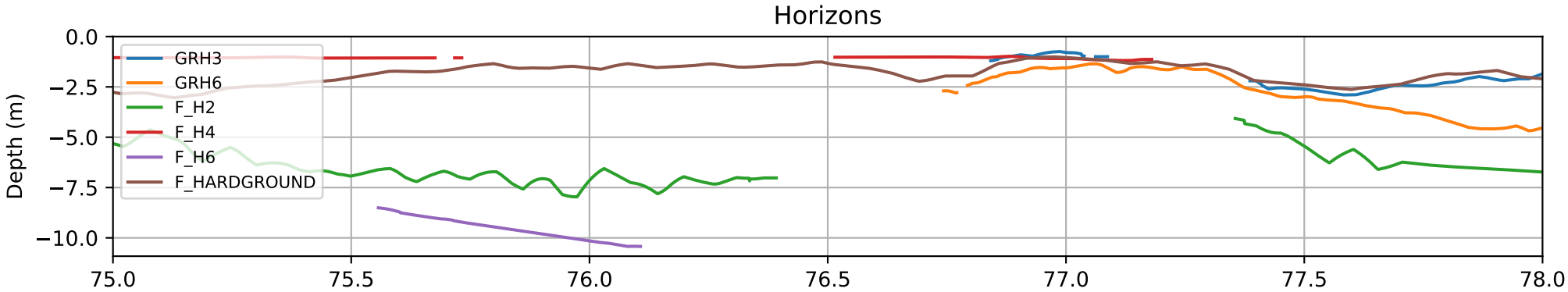
Seabed Elevation and Slopes



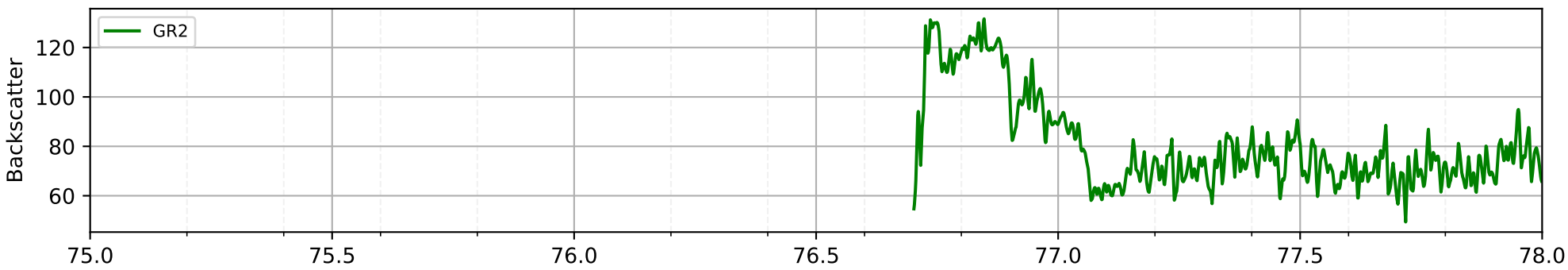
Crossings and Samples



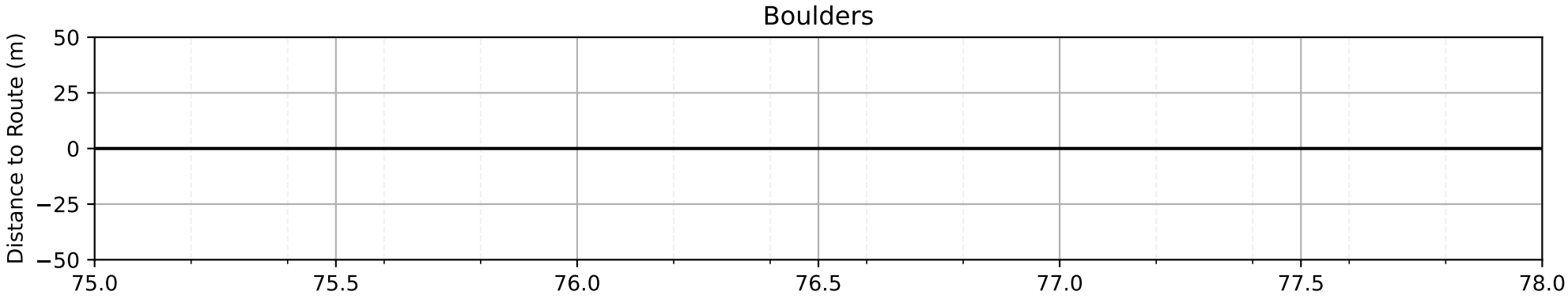
Horizons



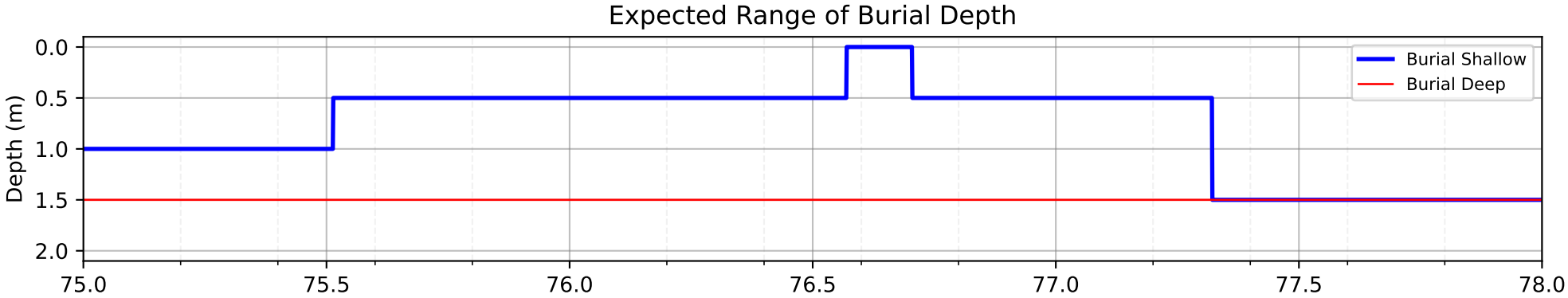
Backscatter



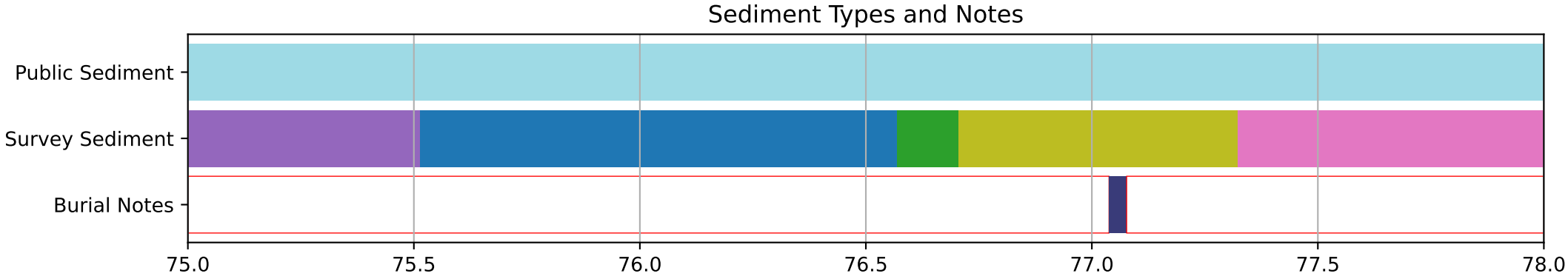
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

Sand

Burial Notes

No Data

Shallow Reflector H6 (Hardgrou… Thin)

Survey Sediment

1.0 - 2.0 m very loose to dense SAND with megaripples over subcropping HARDGROUND (very d…

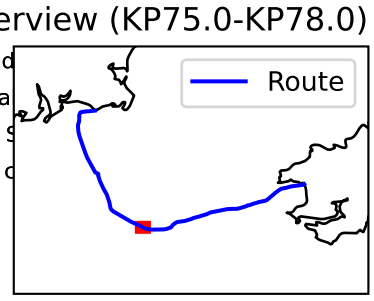
0.5 - 1.5 m very loose to dense SAND with megaripples over subcropping HARDGROUND (glacia…

Veneer of very loose to dense SAND over outcropping HARDGROUND (very dense to cemented S…

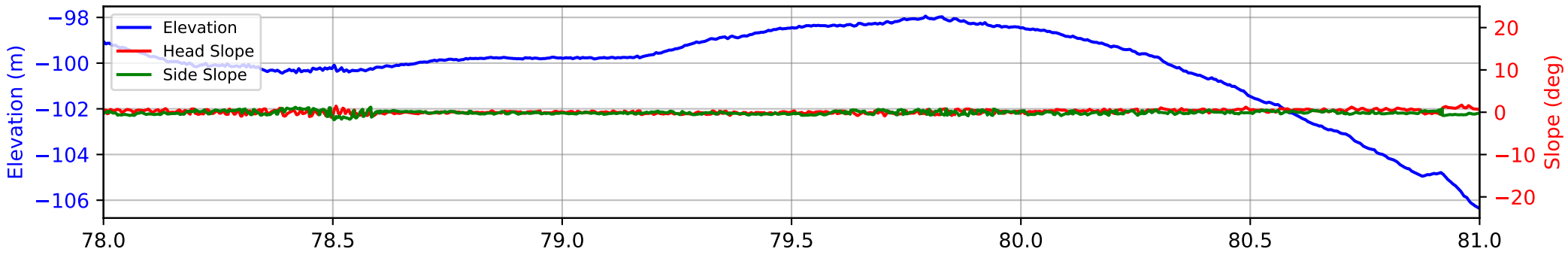
0.5 - 2.0 m very loose to medium dense SAND over subcropping HARDGROUND (very dense to c…

> 2.0 m very loose to medium dense SAND with megaripples

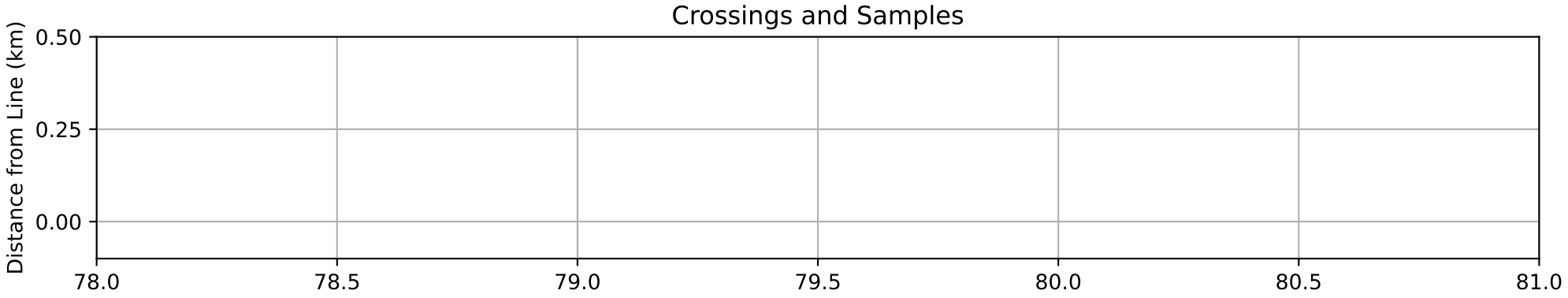
Overview (KP75.0-KP78.0)



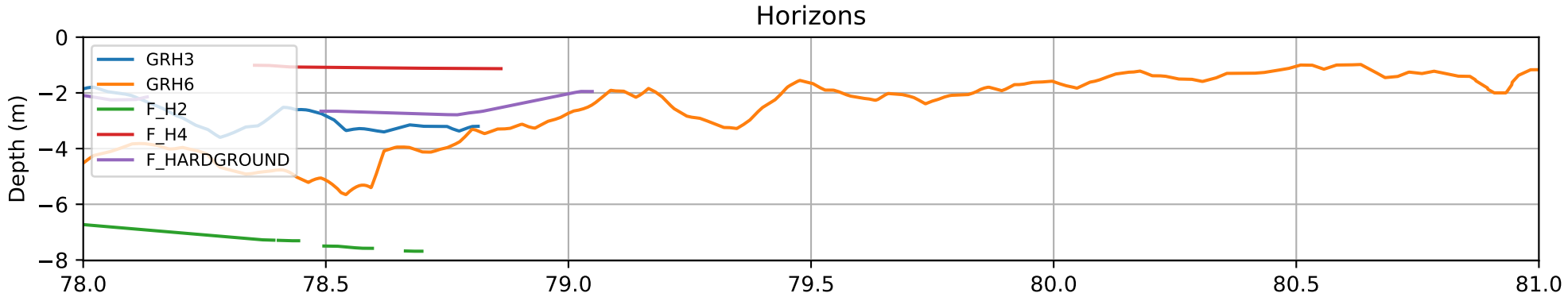
Seabed Elevation and Slopes



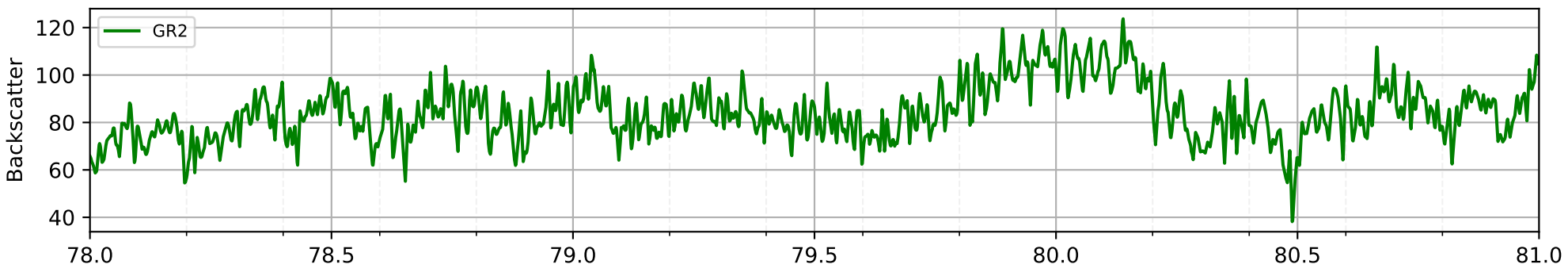
Crossings and Samples



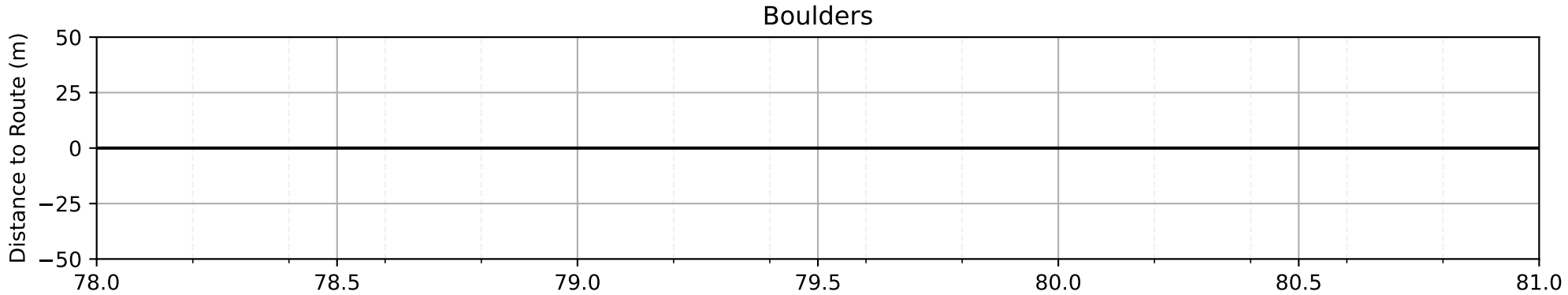
Horizons



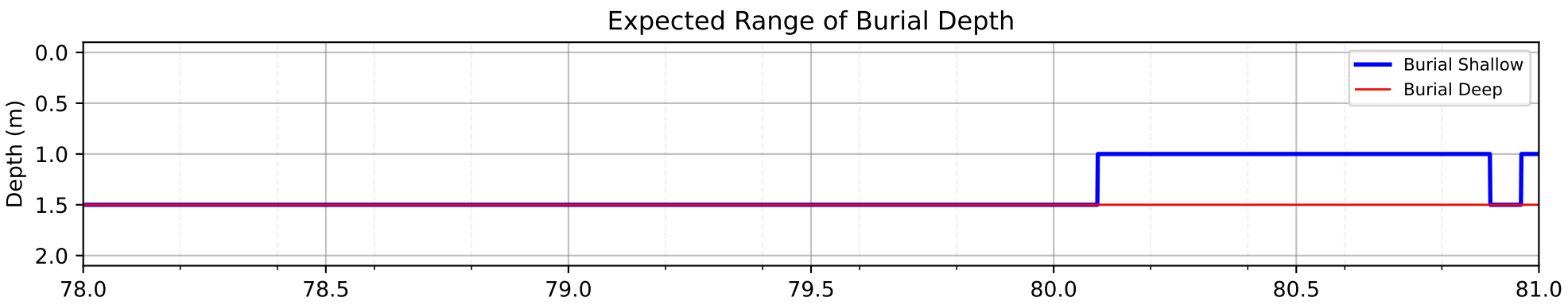
Backscatter



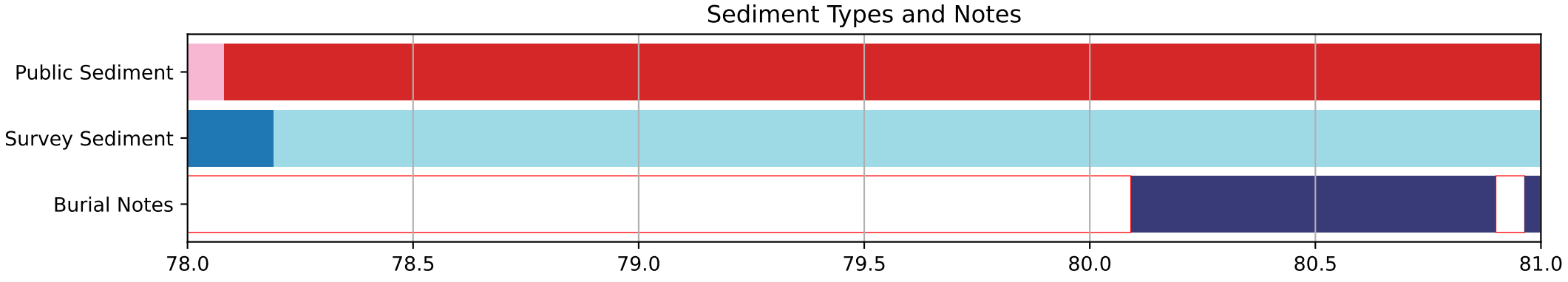
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- Sand
- SAND

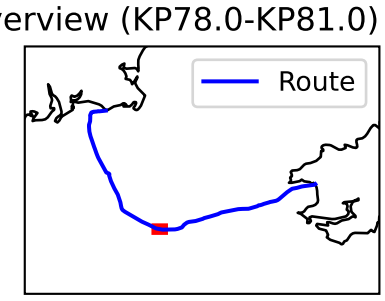
Survey Sediment

- > 2.0 m very loose to medium dense SAND with megaripples
- Medium Sediment

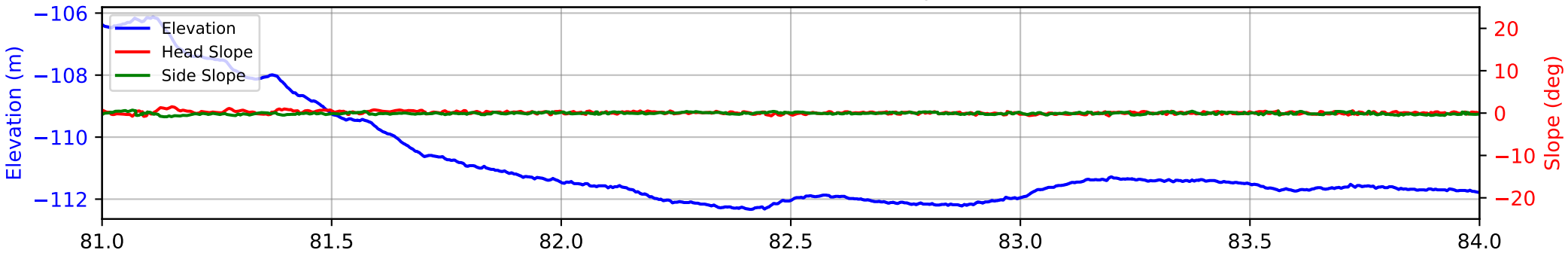
Burial Notes

- No Data
- Shallow Reflector H6 (Hardground/Till)

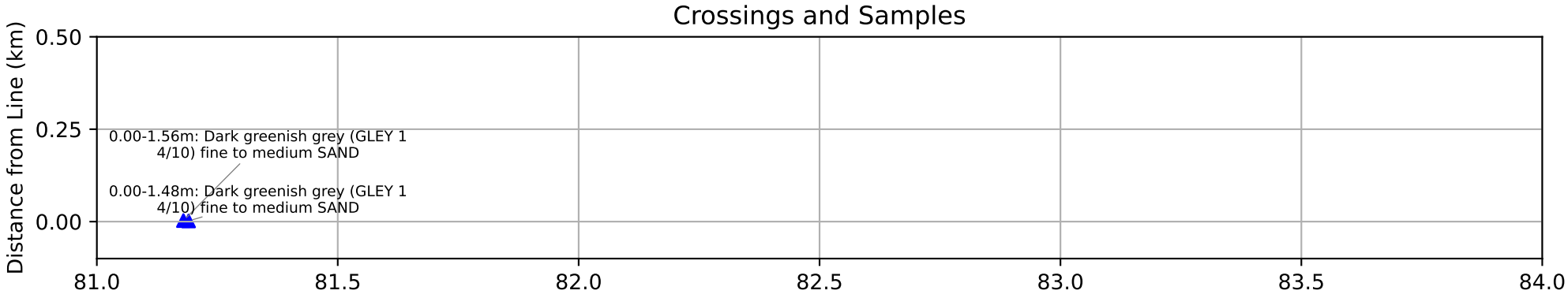
Overview (KP78.0-KP81.0)



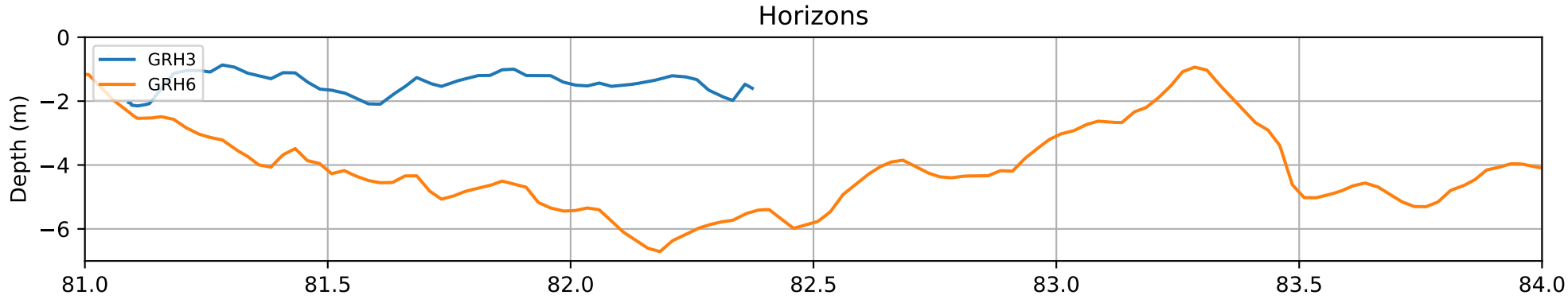
Seabed Elevation and Slopes



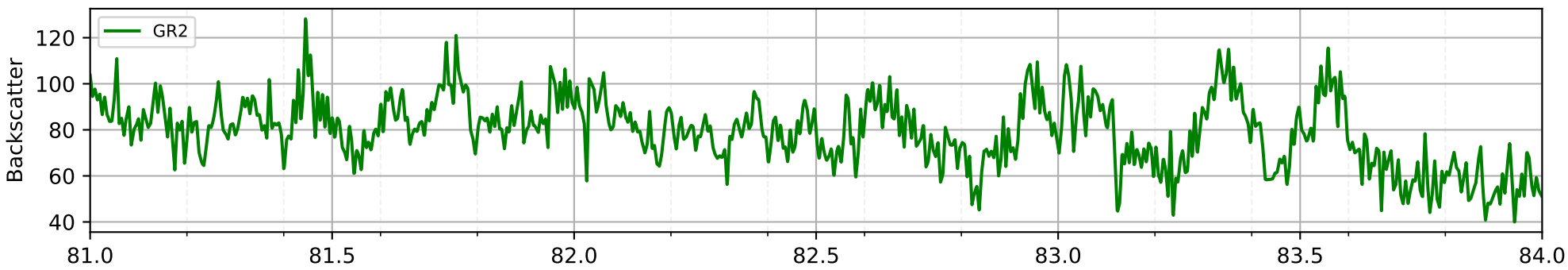
Crossings and Samples



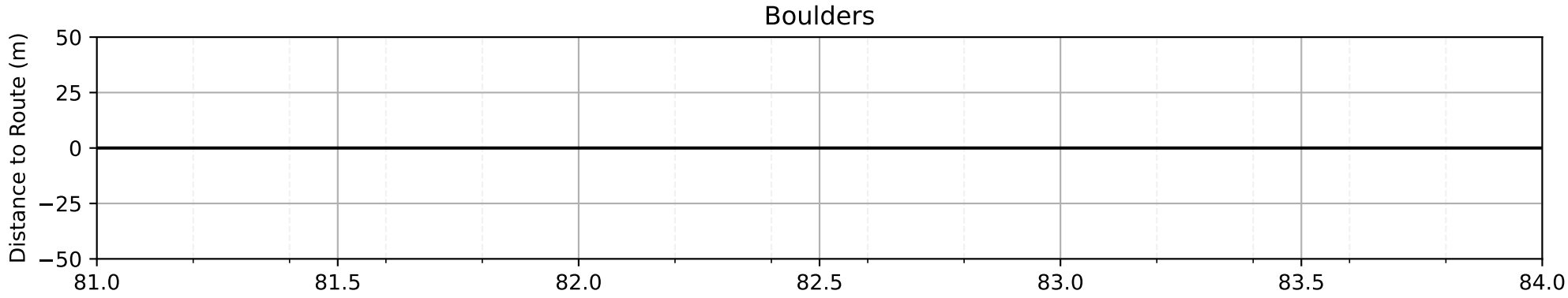
Horizons



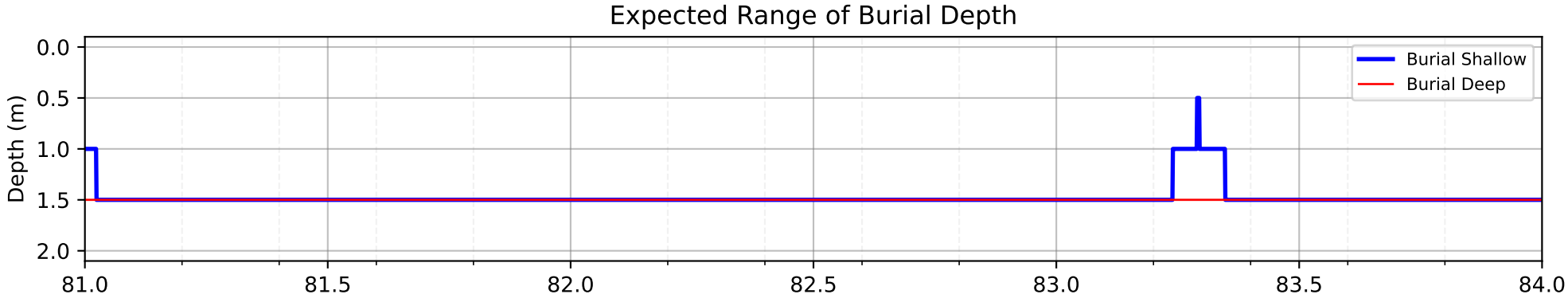
Backscatter



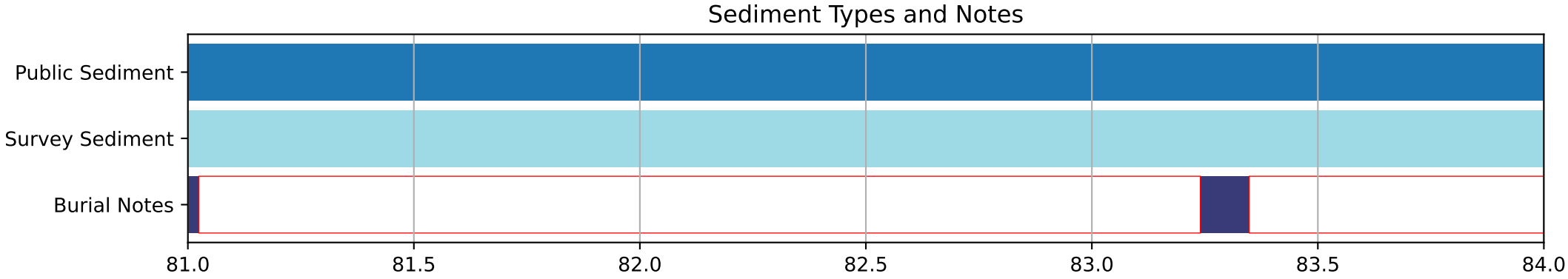
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- SAND

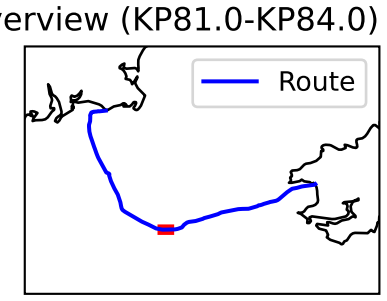
Survey Sediment

- Medium Sediment

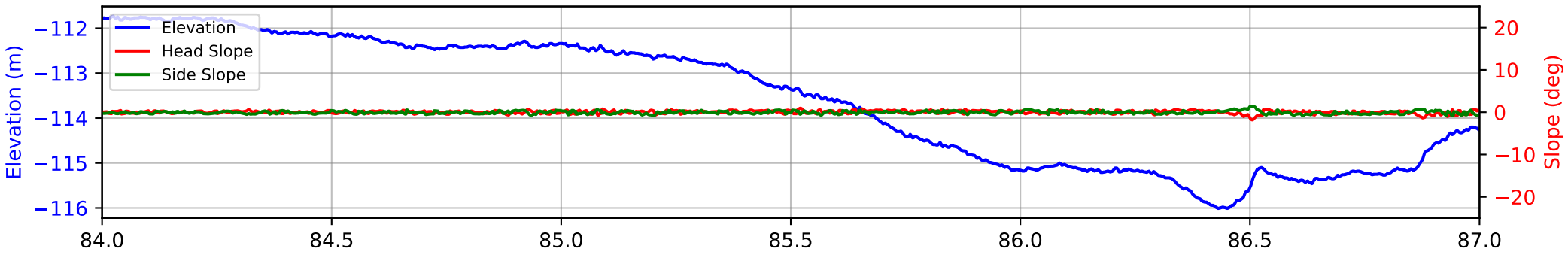
Burial Notes

- Shallow Reflector H6 (Hardground/Till)
- No Data

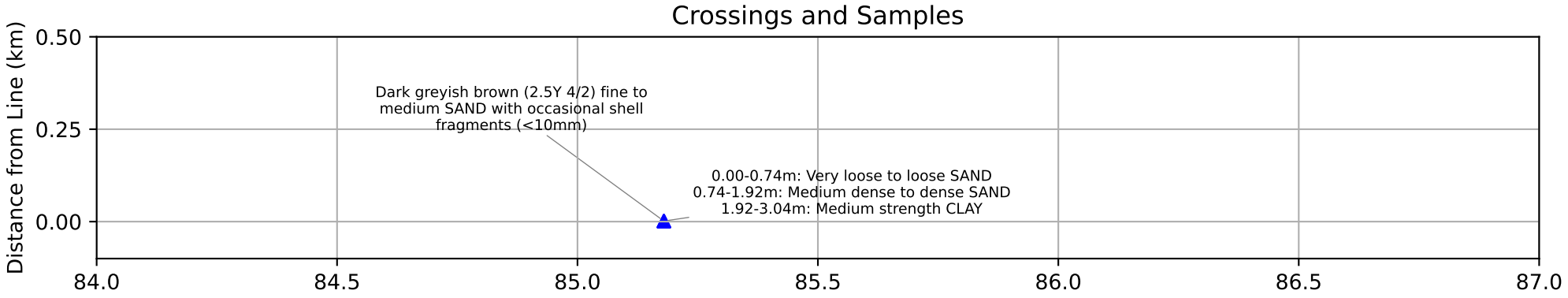
Overview (KP81.0-KP84.0)



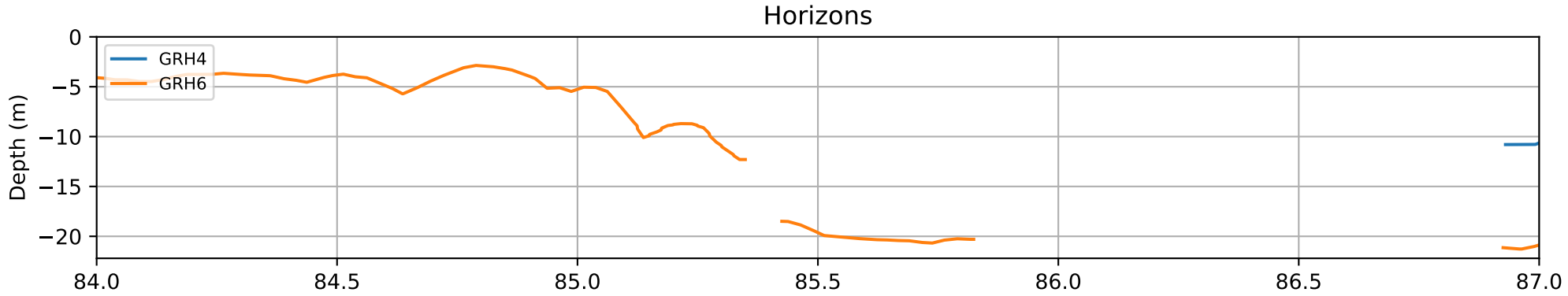
Seabed Elevation and Slopes



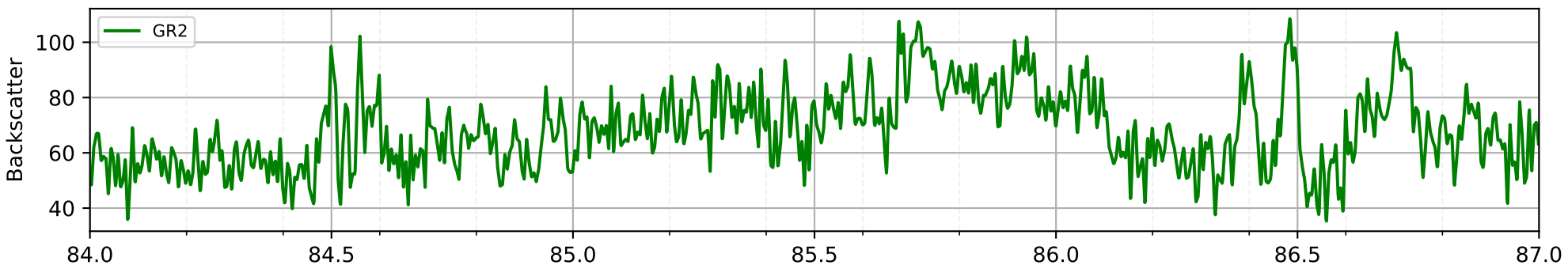
Crossings and Samples



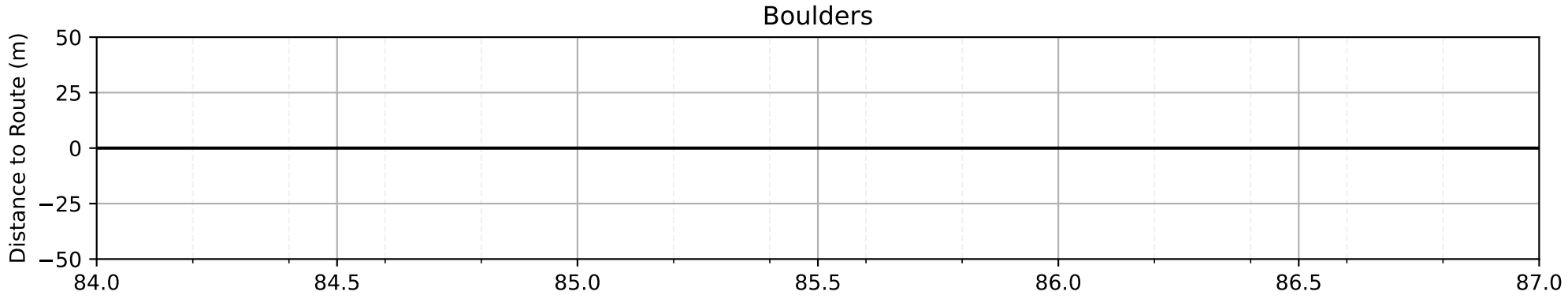
Horizons



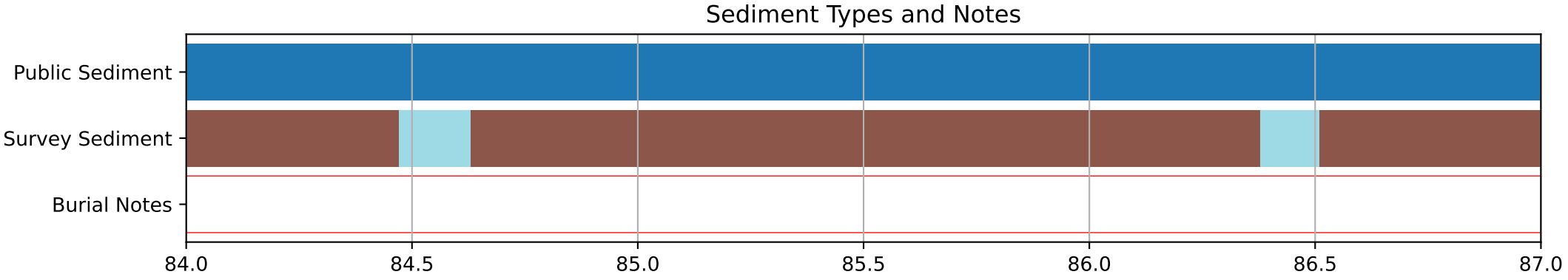
Backscatter



Boulders



Sediment Types and Notes

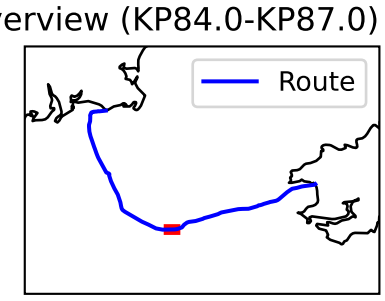


Public Sediment
- SAND

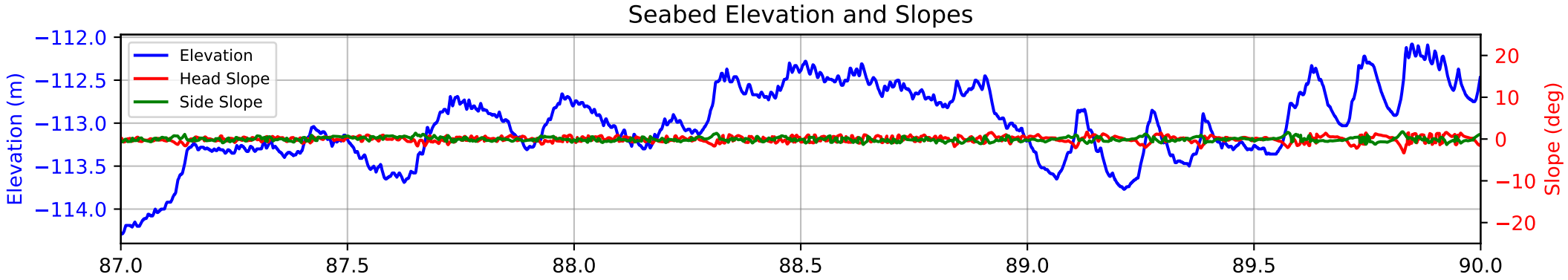
Survey Sediment
- Medium Sediment
- Coarse Sediment

Burial Notes
- No Data

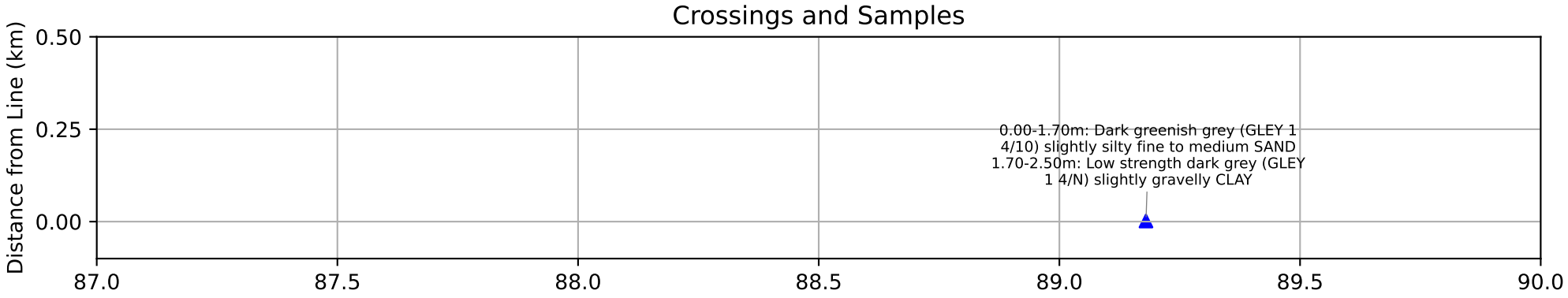
Overview (KP84.0-KP87.0)



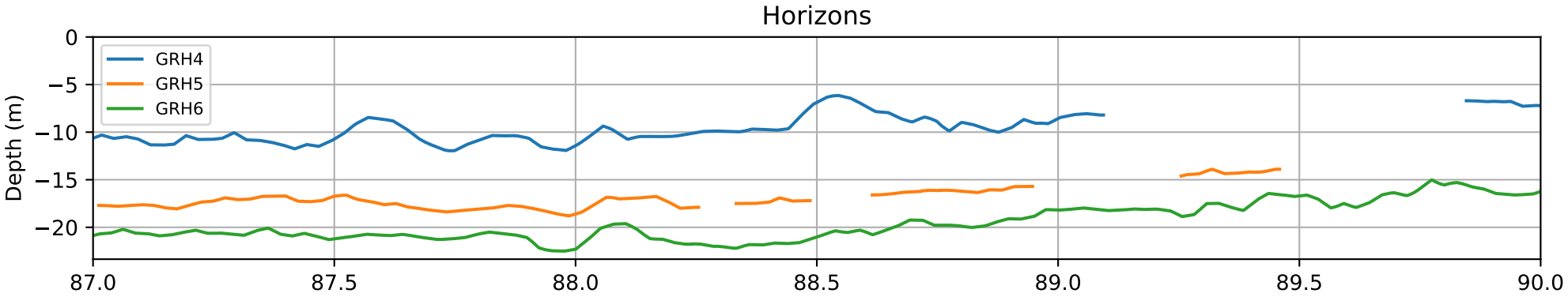
Seabed Elevation and Slopes



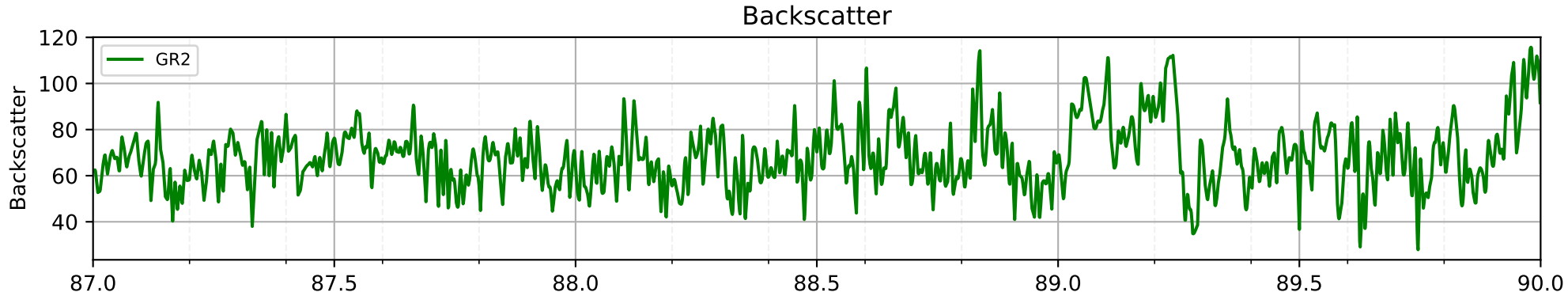
Crossings and Samples



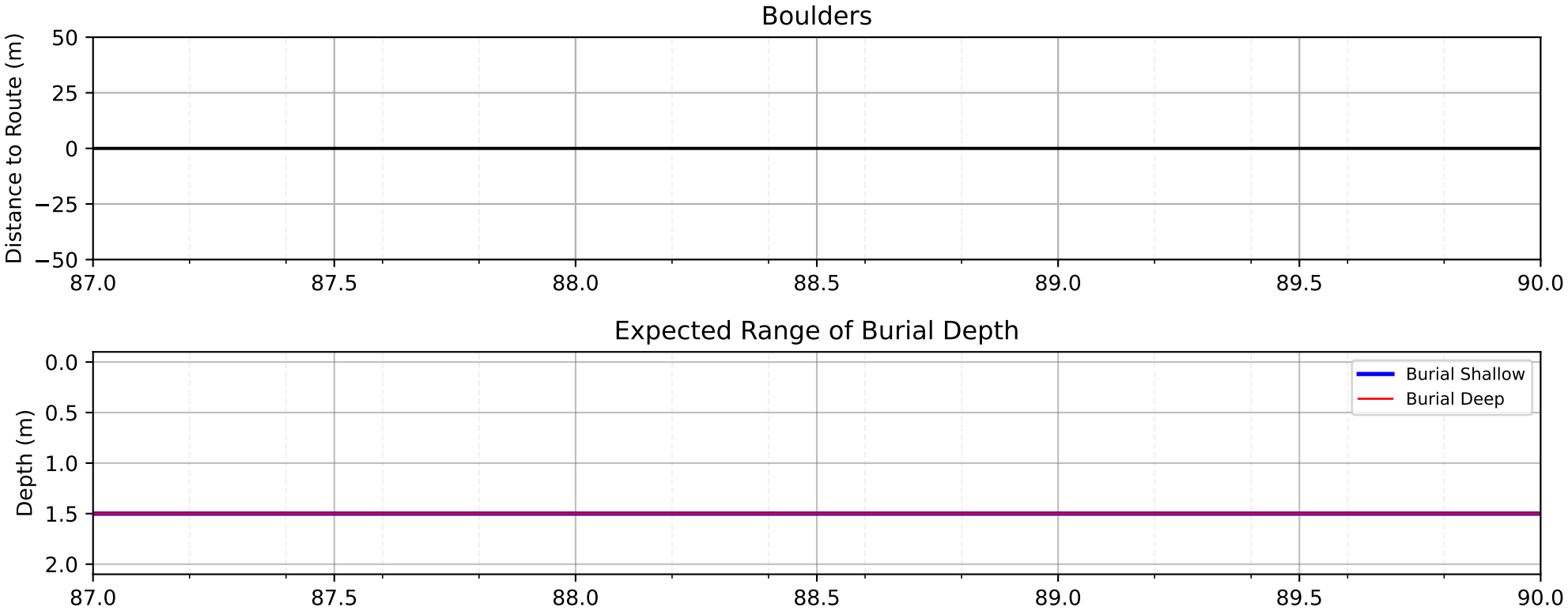
Horizons



Backscatter

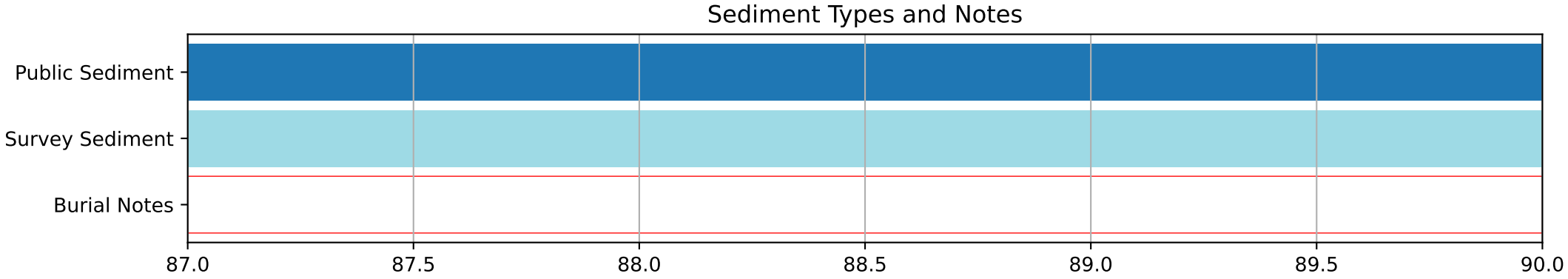


Boulders



Expected Range of Burial Depth

Sediment Types and Notes

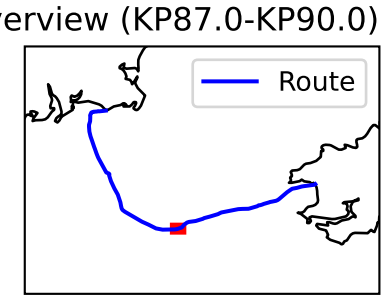


Public Sediment
- SAND

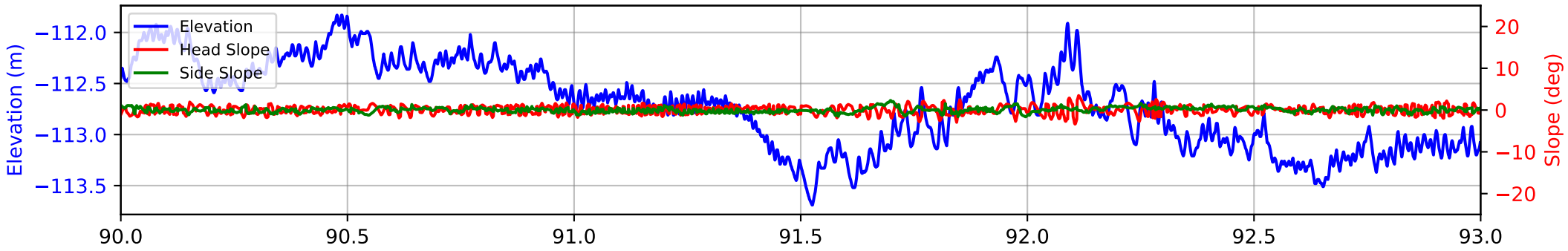
Survey Sediment
- Medium Sediment

Burial Notes
- No Data

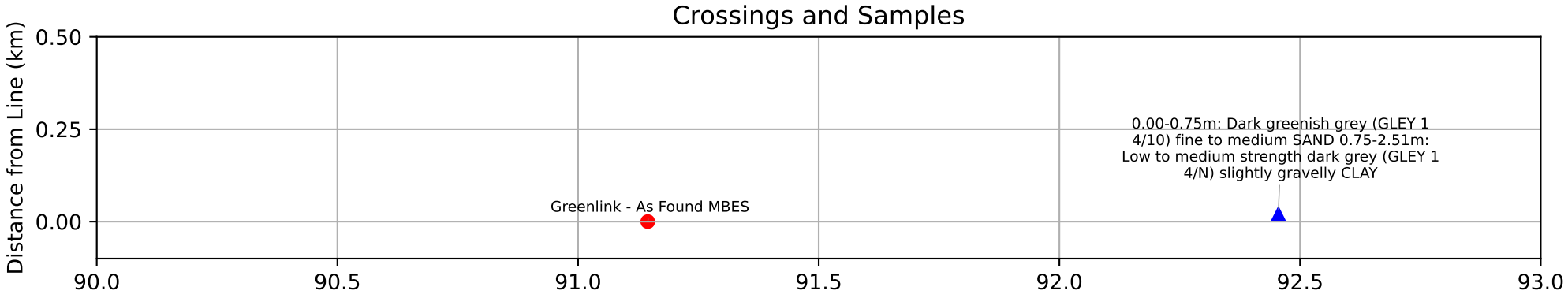
Overview (KP87.0-KP90.0)



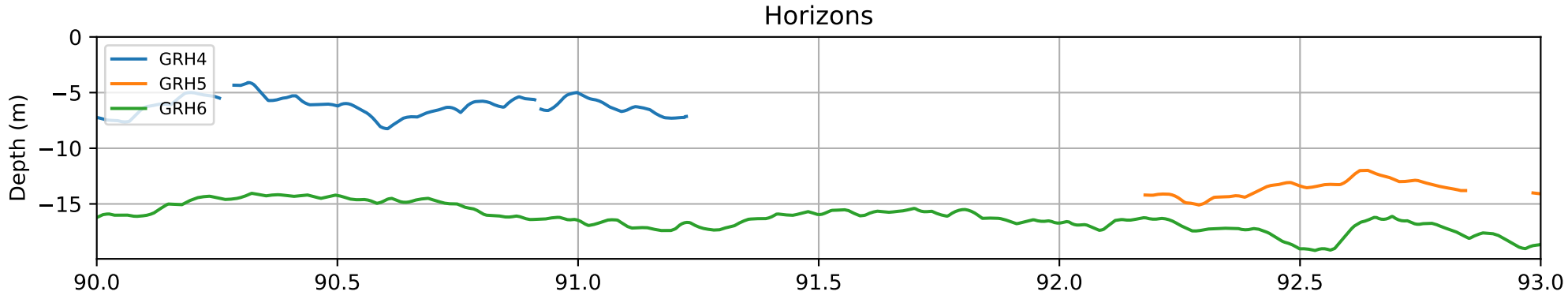
Seabed Elevation and Slopes



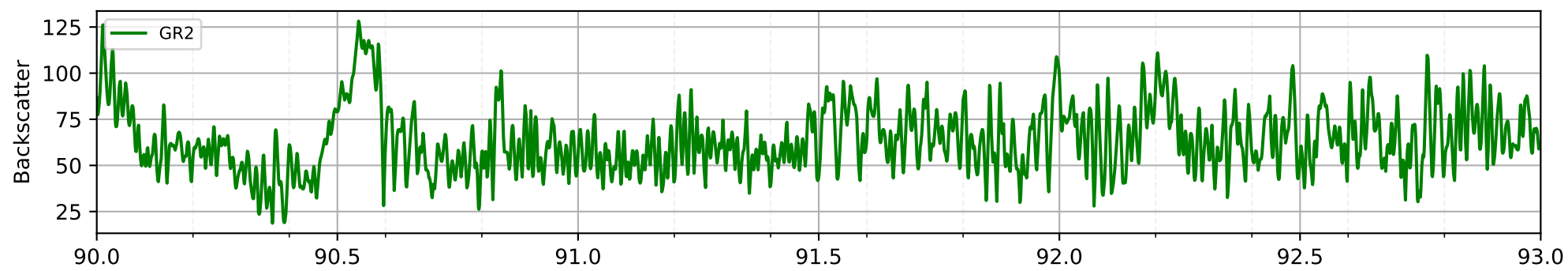
Crossings and Samples



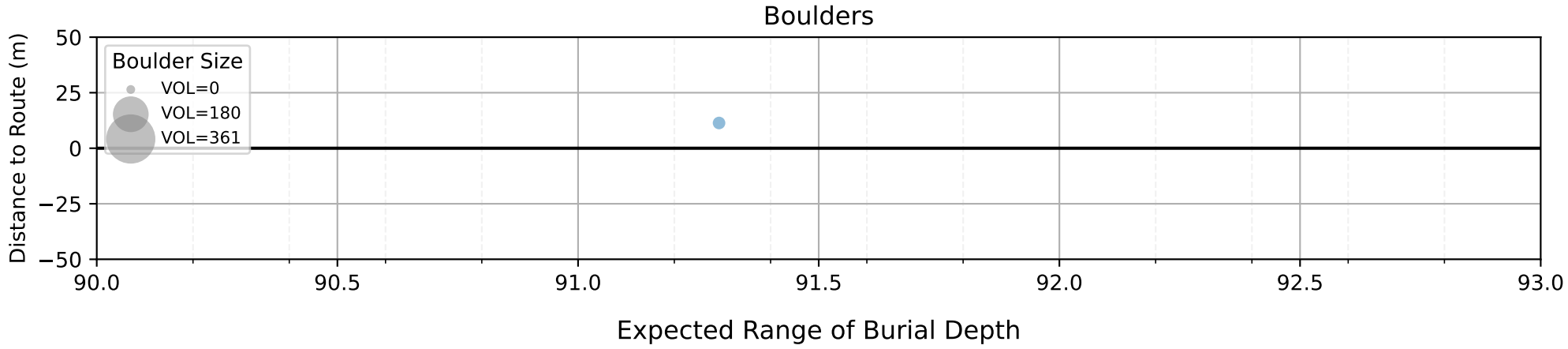
Horizons

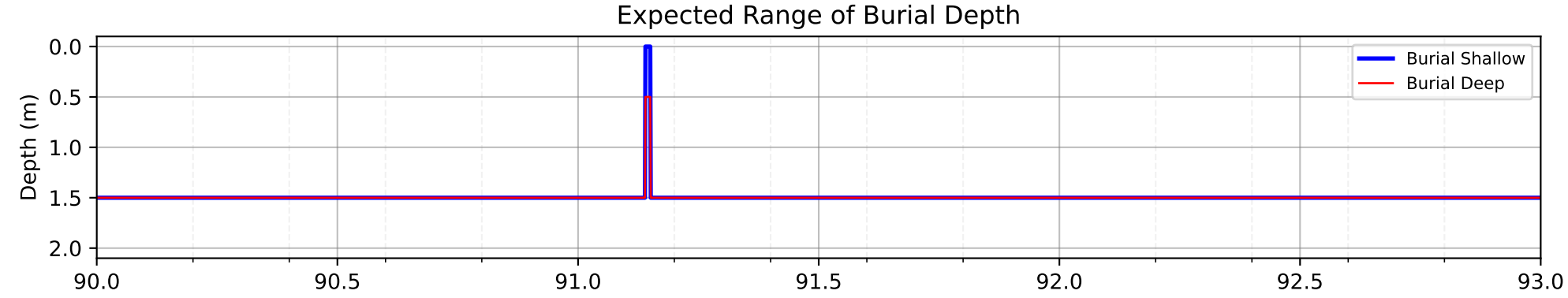


Backscatter

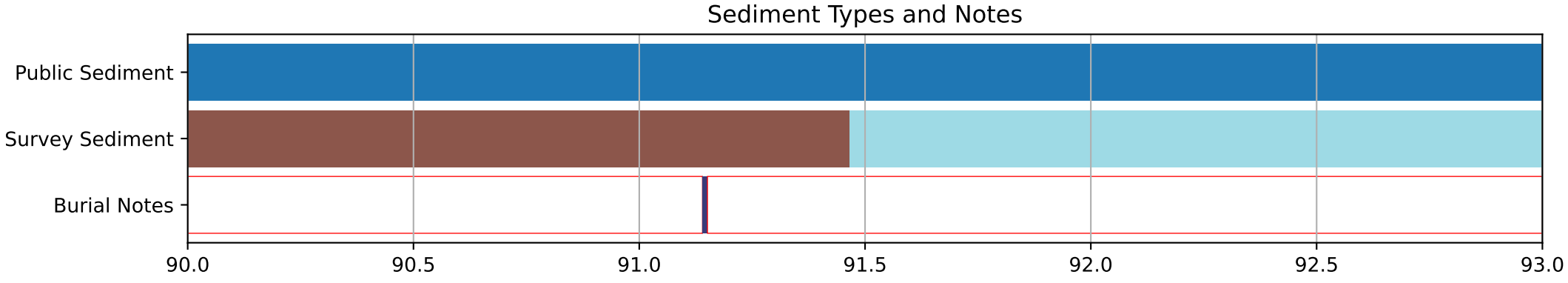


Boulders





Sediment Types and Notes

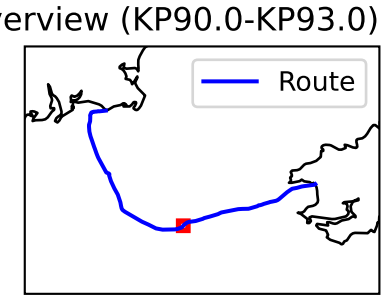


Public Sediment
- SAND

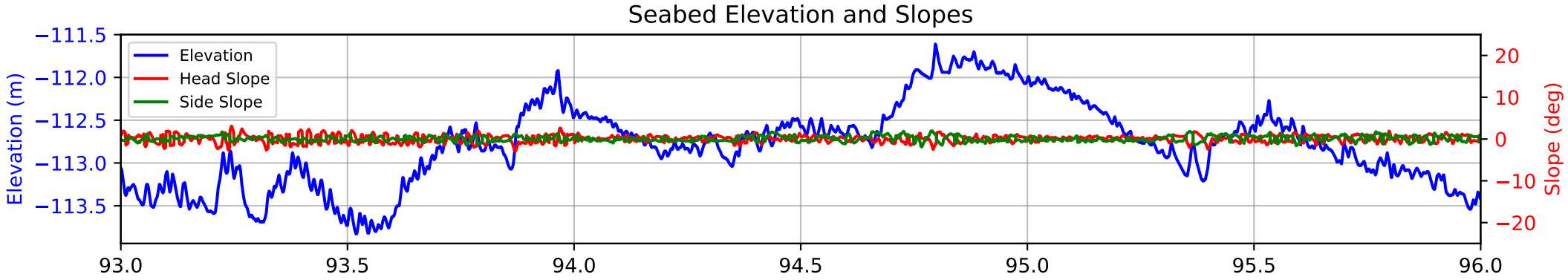
Survey Sediment
- Medium Sediment
- Coarse Sediment

Burial Notes
- No Data
- POSSIBLE ADDITIONAL PROECTION PENDING CROSSING AGREEMENT

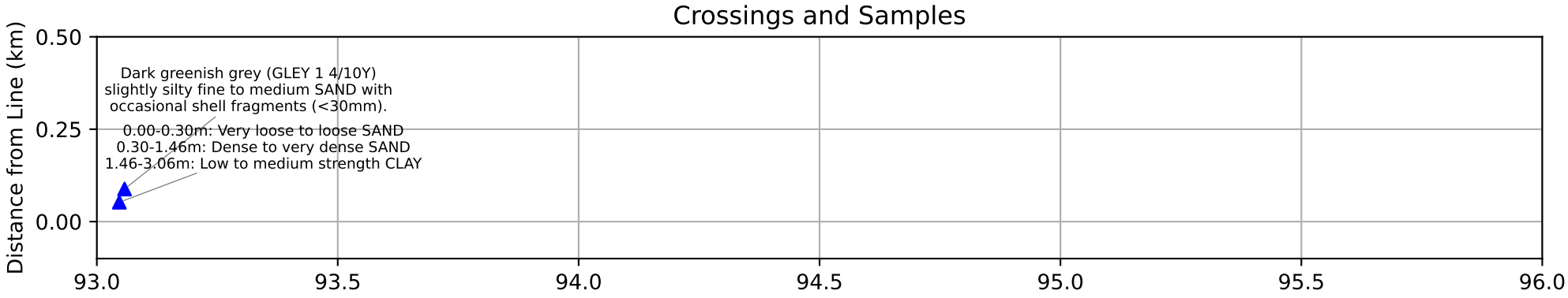
Overview (KP90.0-KP93.0)



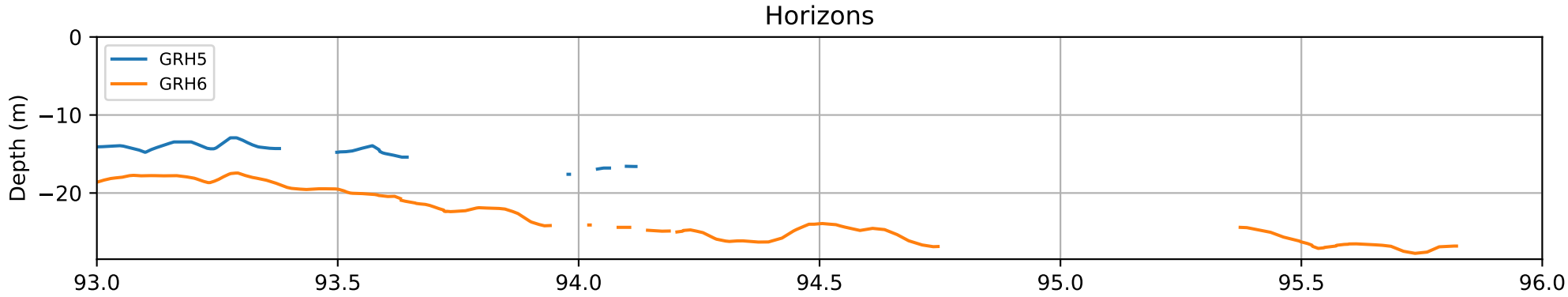
Seabed Elevation and Slopes



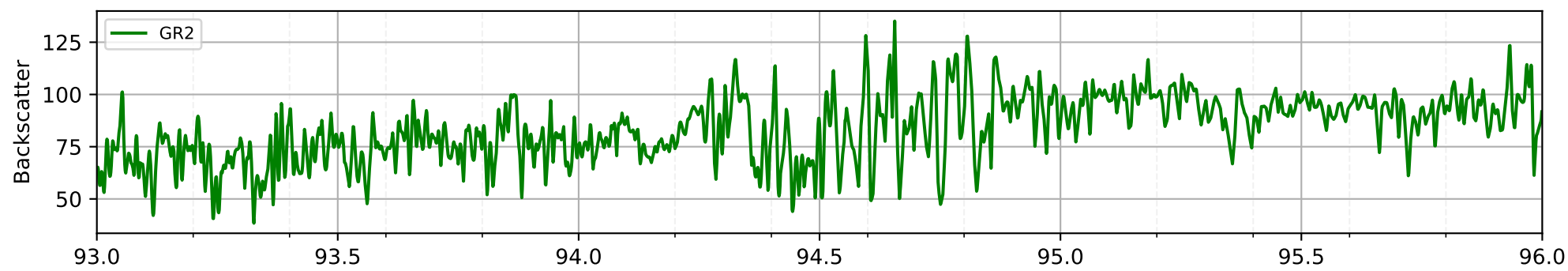
Crossings and Samples



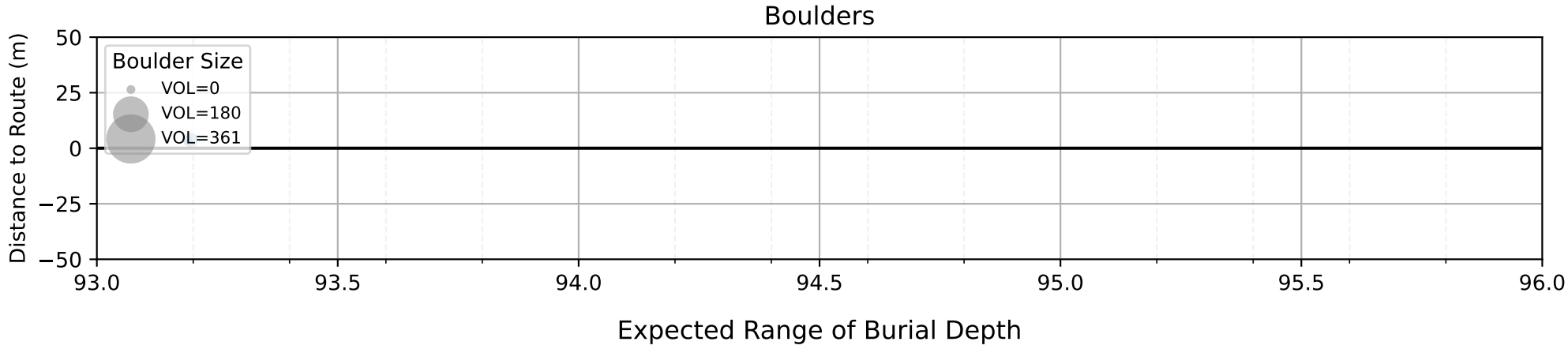
Horizons



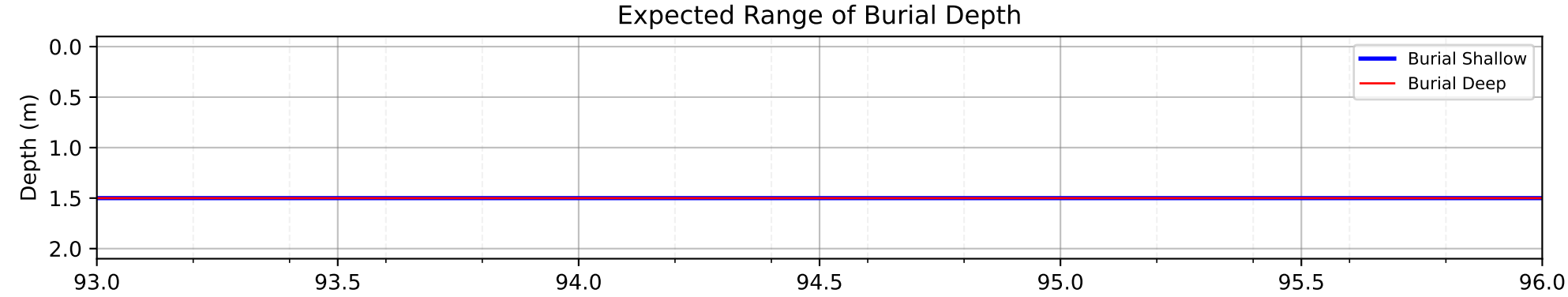
Backscatter



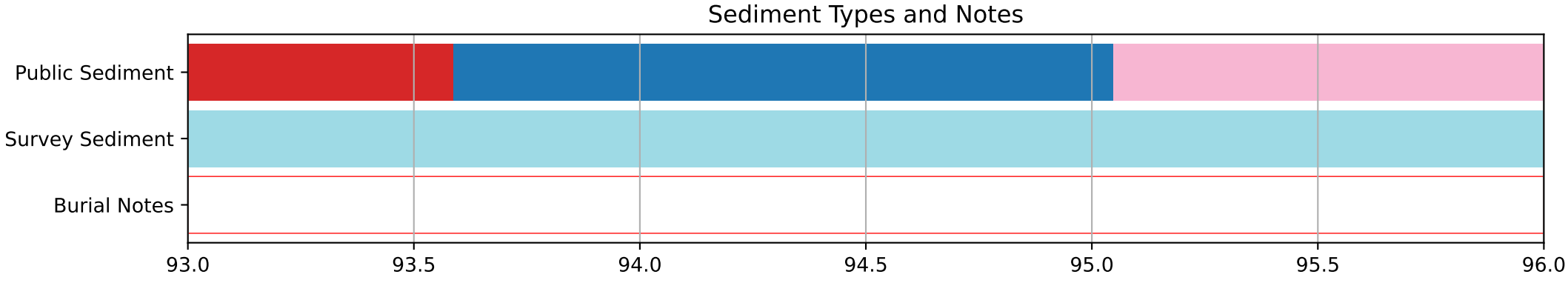
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- SAND
- SLIGHTLY GRAVELLY SAND
- GRAVELLY SAND

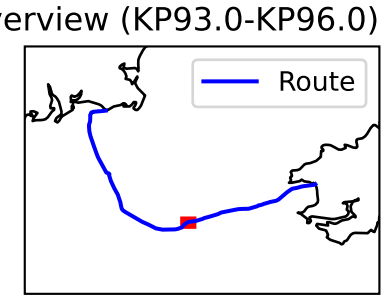
Survey Sediment

- Coarse Sediment

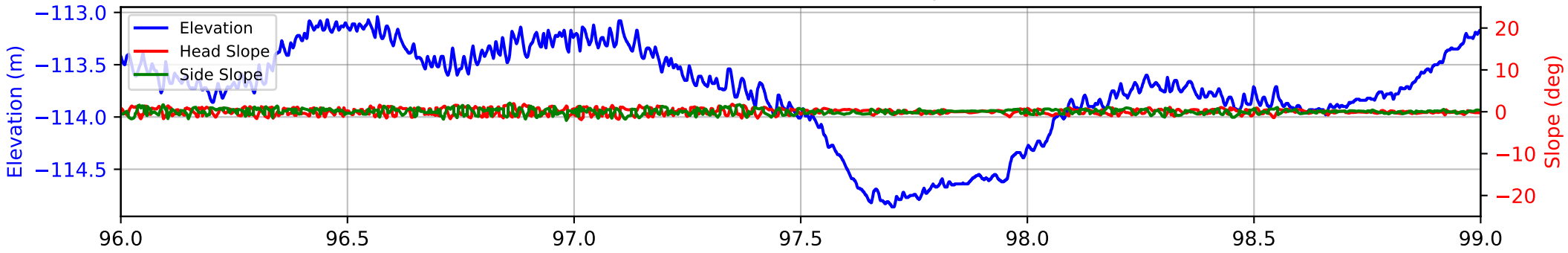
Burial Notes

- No Data

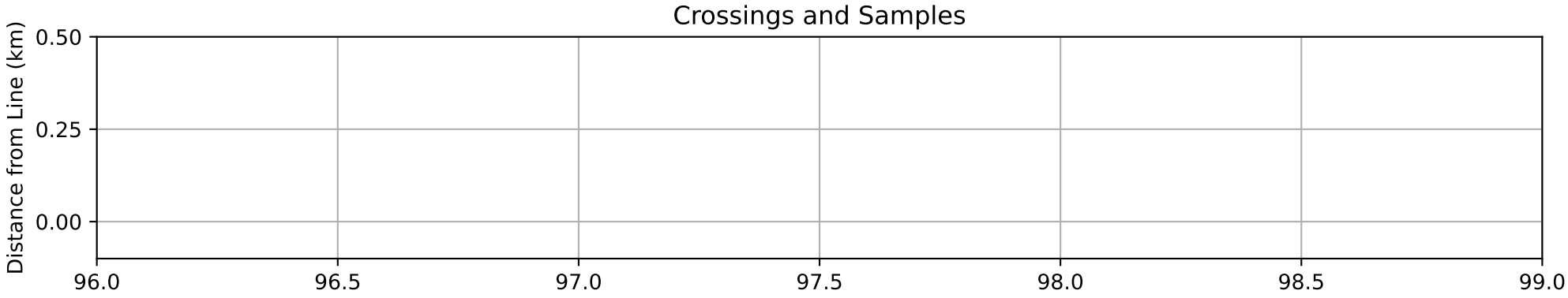
Overview (KP93.0-KP96.0)



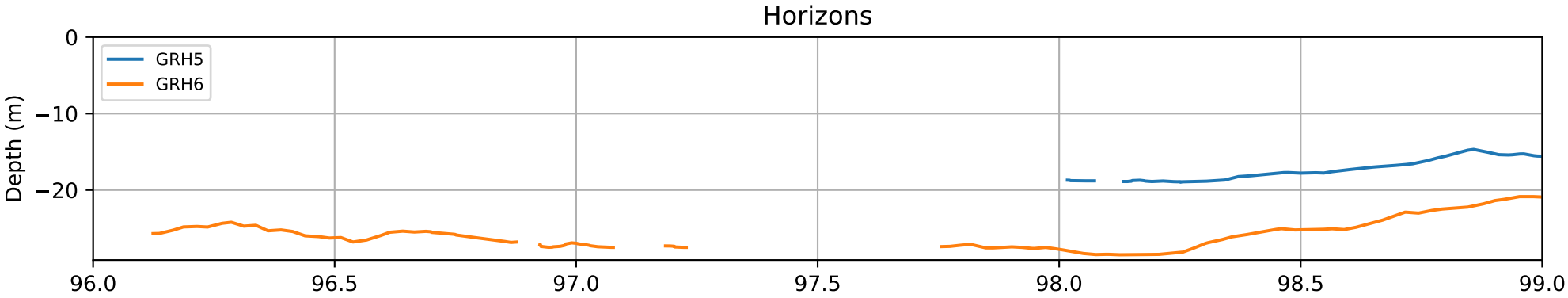
Seabed Elevation and Slopes



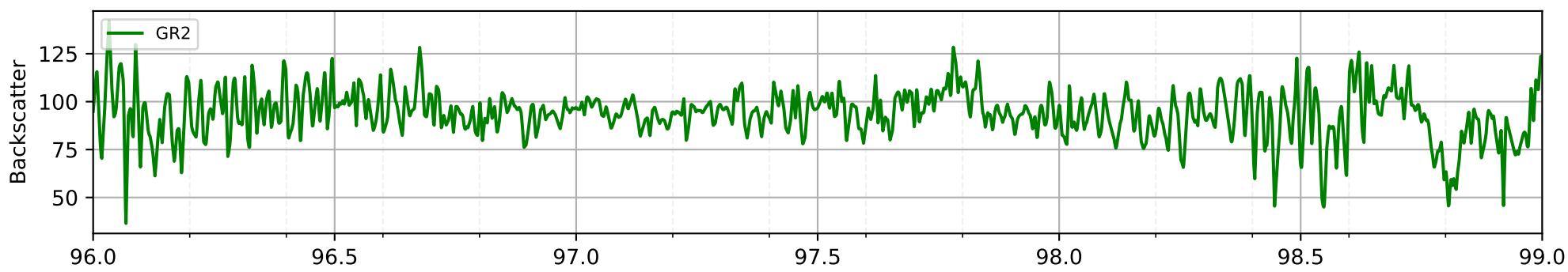
Crossings and Samples



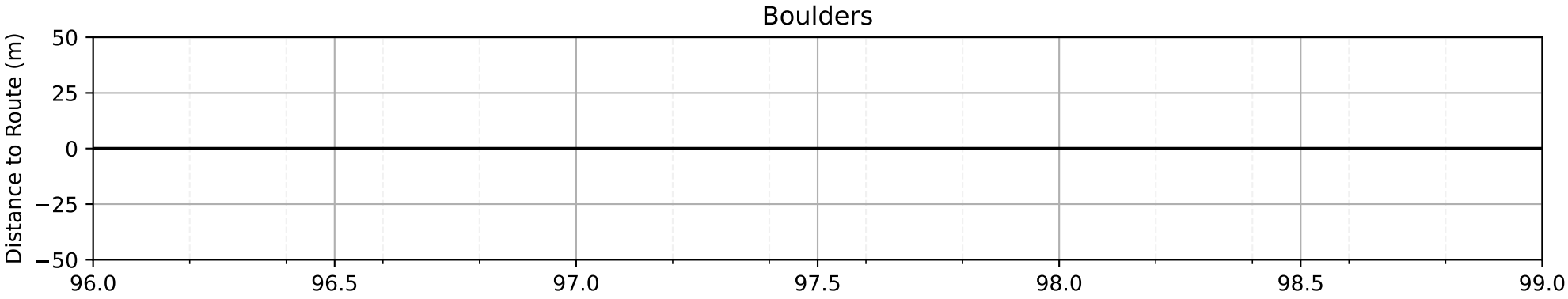
Horizons



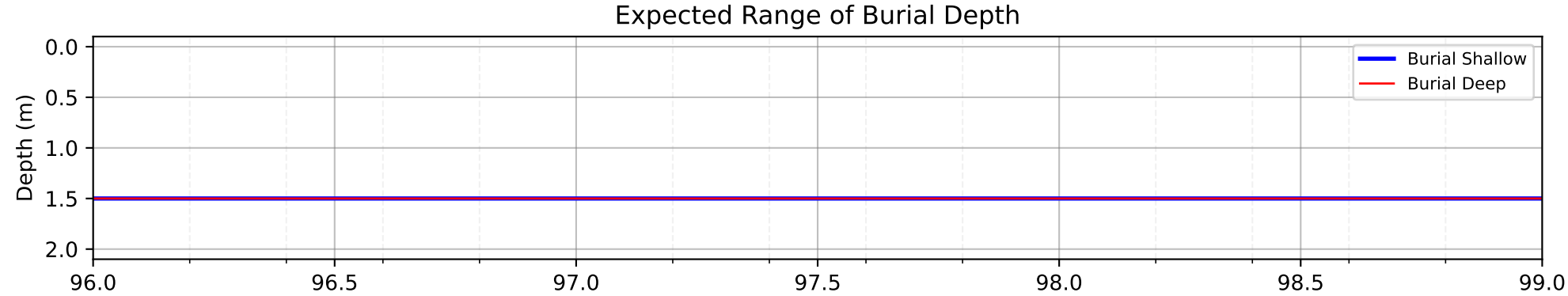
Backscatter



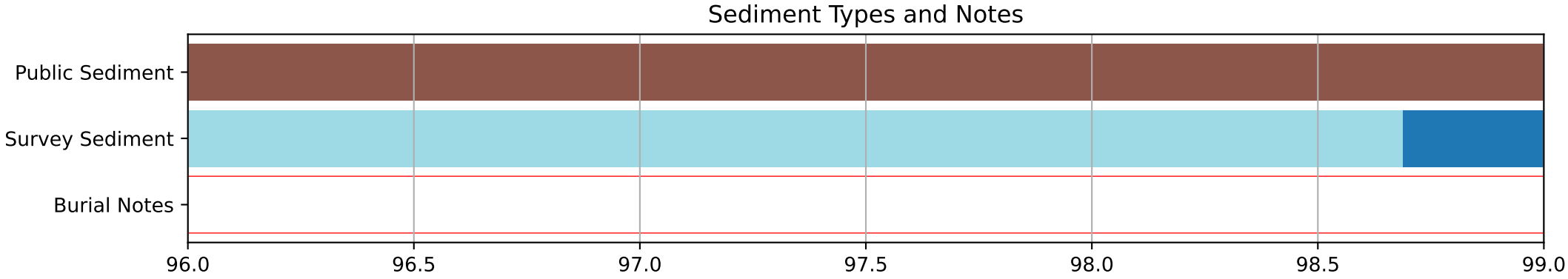
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

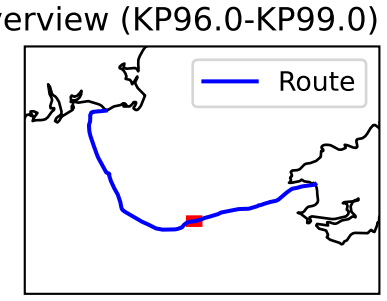


Public Sediment
- GRAVELLY SAND

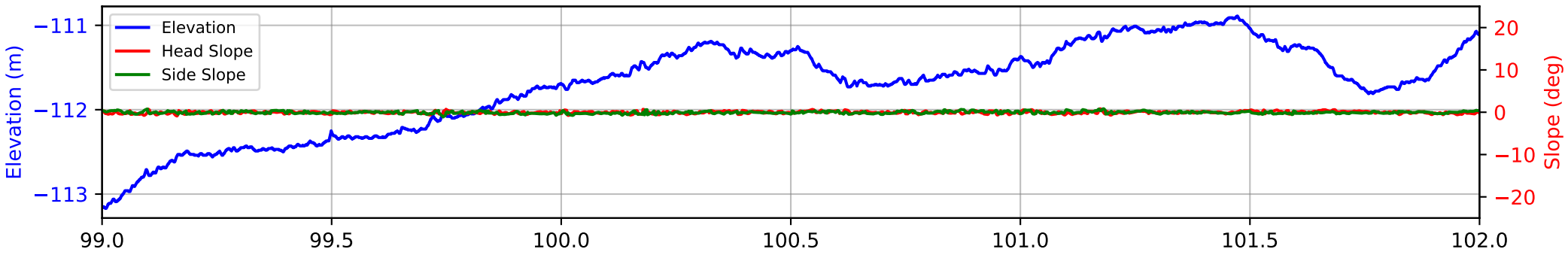
Survey Sediment
- Coarse Sediment
- Medium Sediment

Burial Notes
- No Data

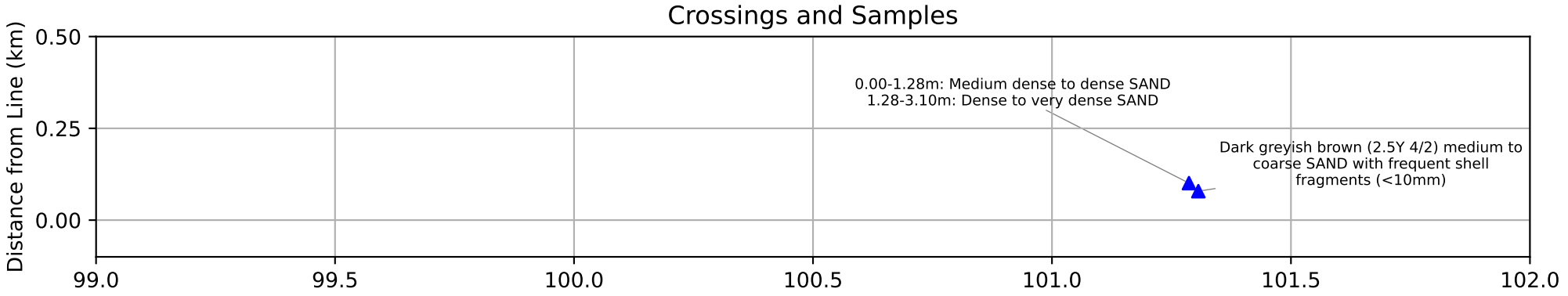
Overview (KP96.0-KP99.0)



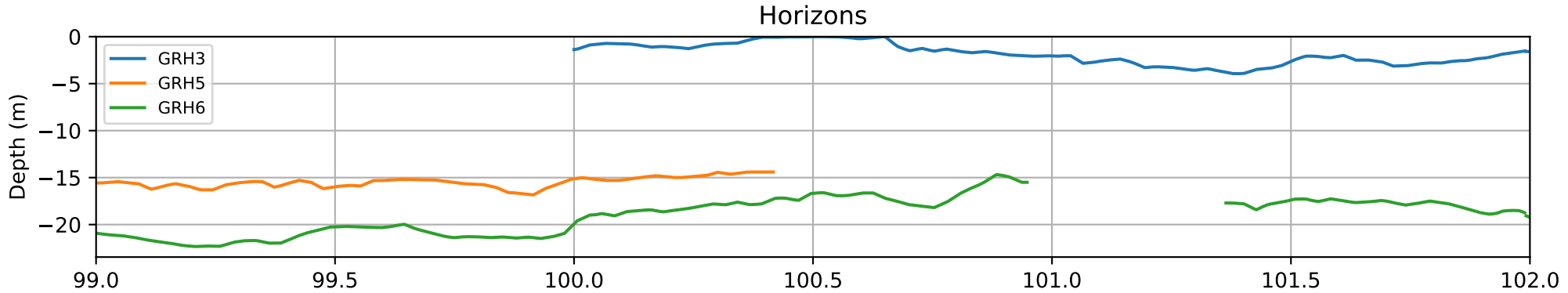
Seabed Elevation and Slopes



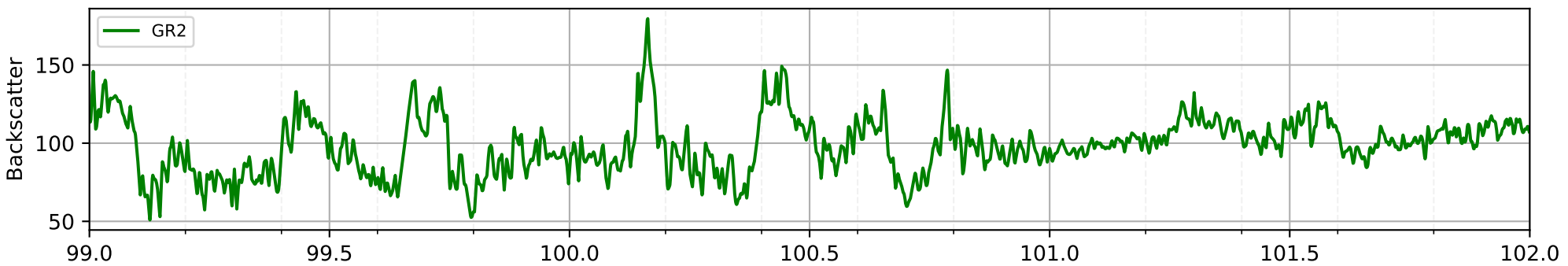
Crossings and Samples



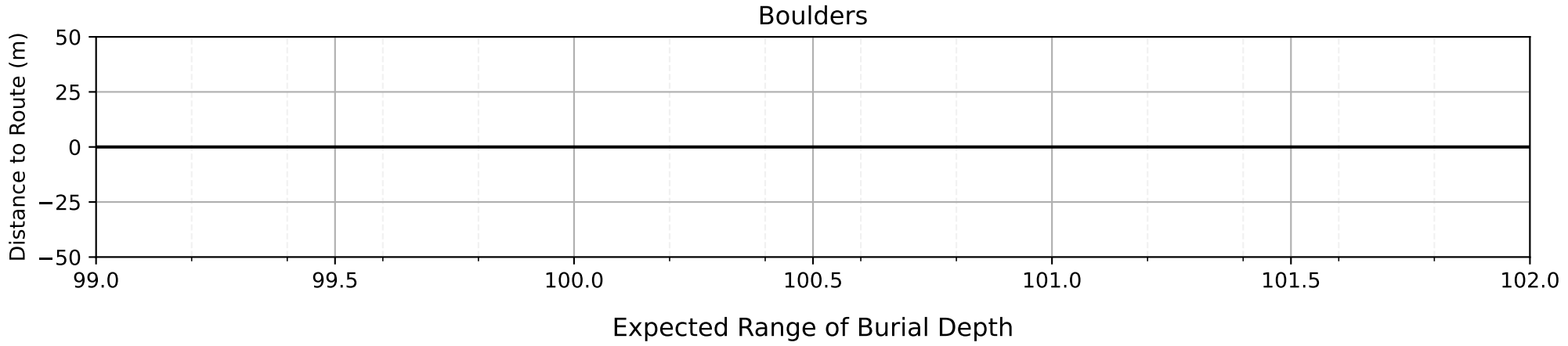
Horizons



Backscatter

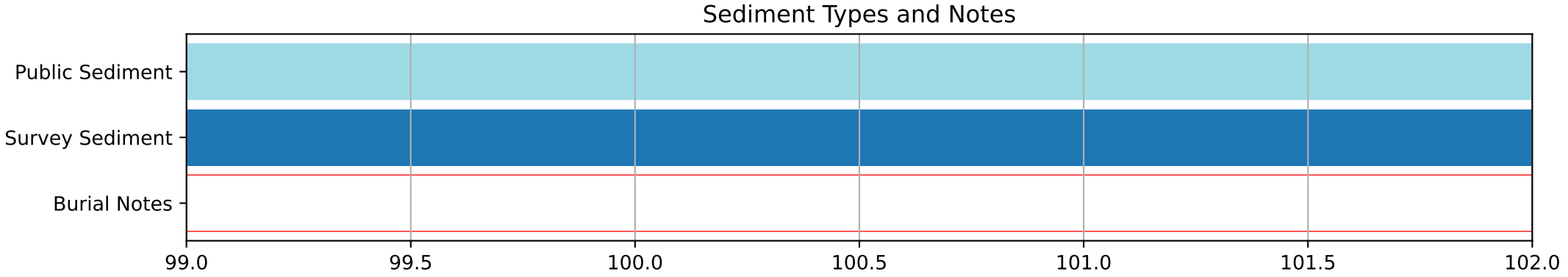


Boulders



Expected Range of Burial Depth

Sediment Types and Notes

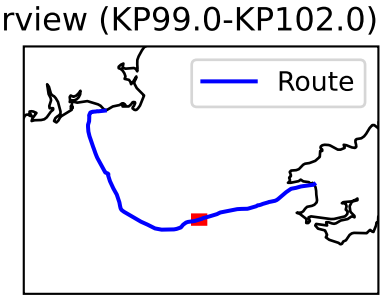


Public Sediment
GRAVELLY SAND

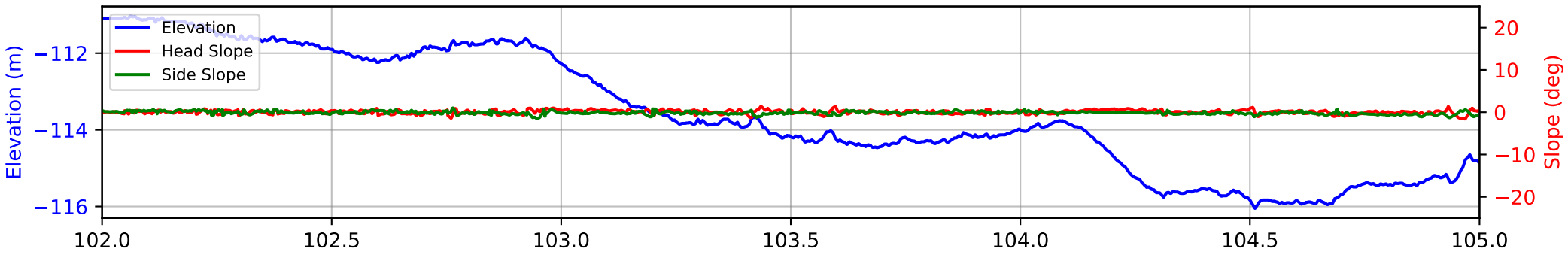
Survey Sediment
Medium Sediment

Burial Notes
No Data

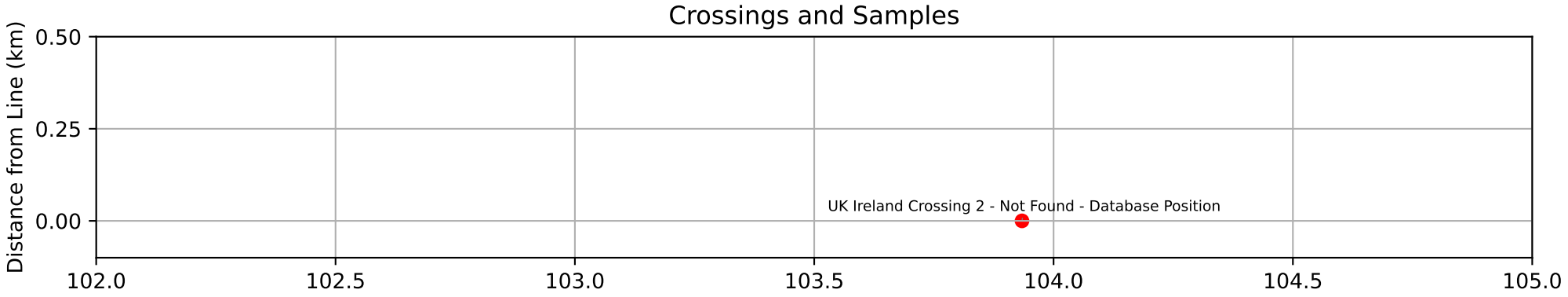
Overview (KP99.0-KP102.0)



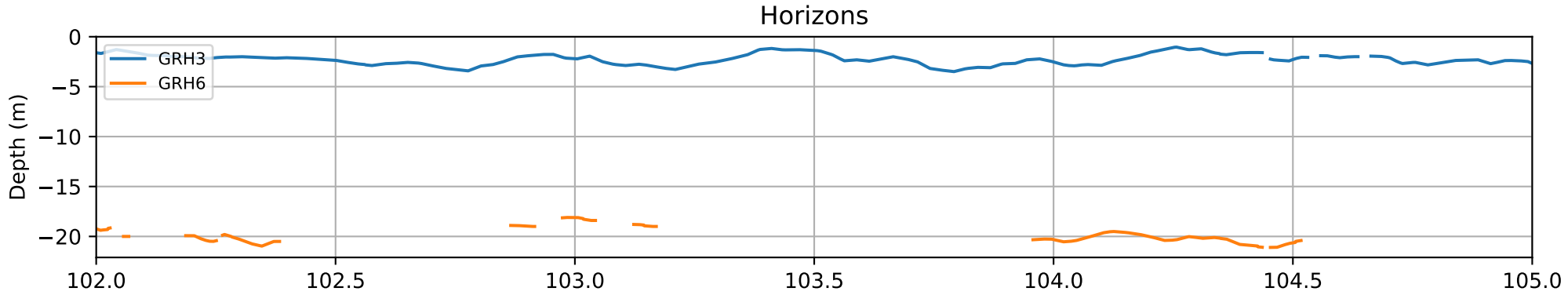
Seabed Elevation and Slopes



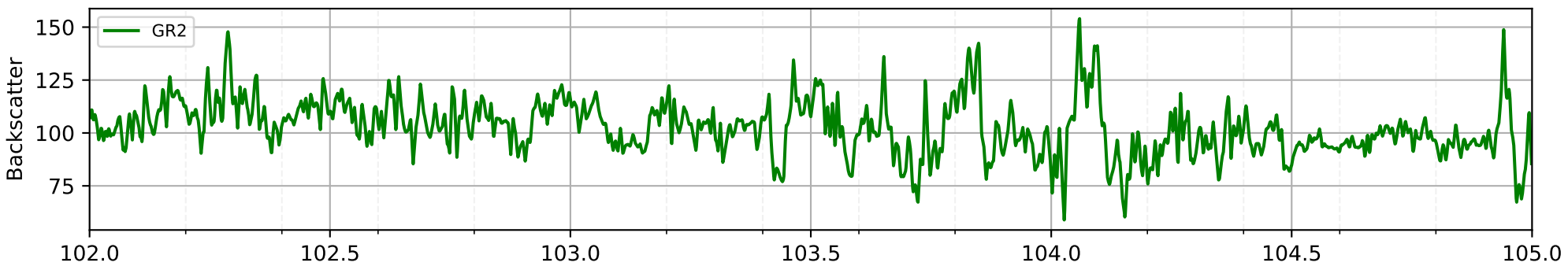
Crossings and Samples



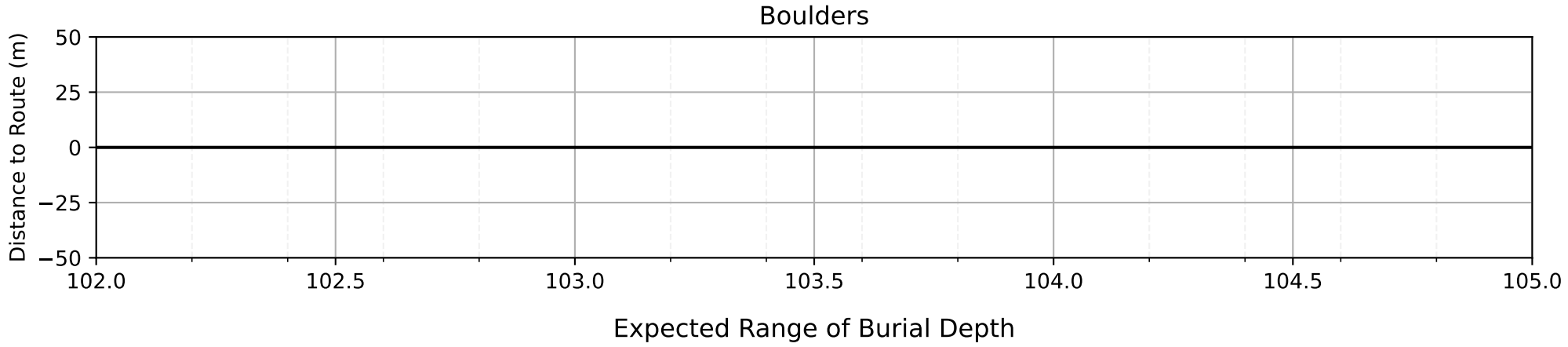
Horizons



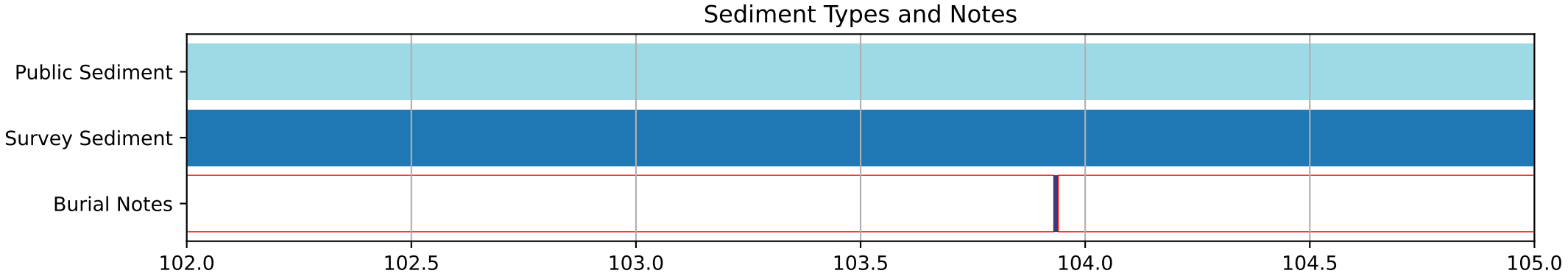
Backscatter



Boulders



Sediment Types and Notes

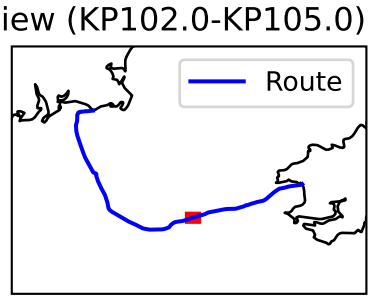


Public Sediment
- GRAVELLY SAND

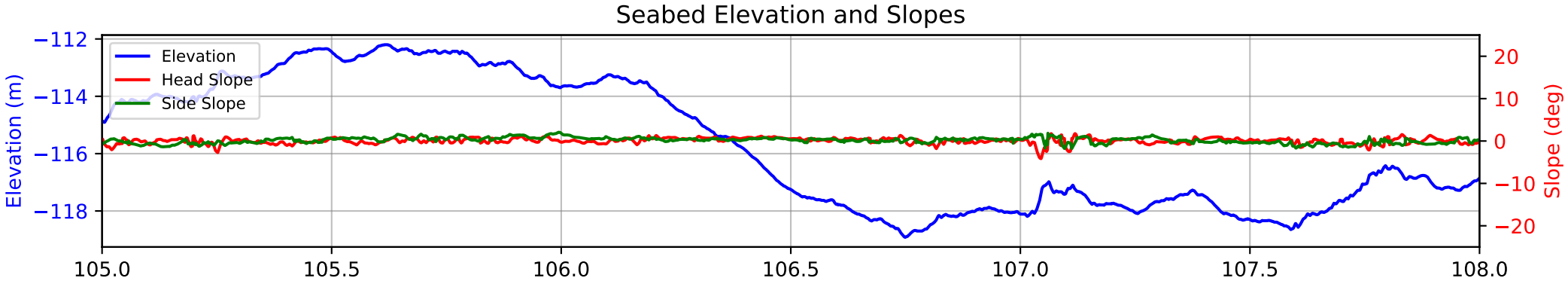
Survey Sediment
- Medium Sediment

Burial Notes
- No Data
- IS FO Crossing

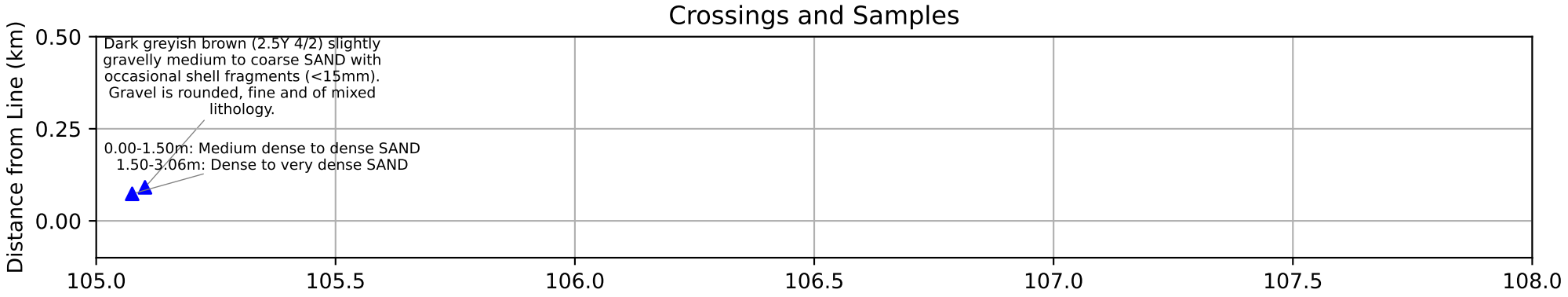
Overview (KP102.0-KP105.0)



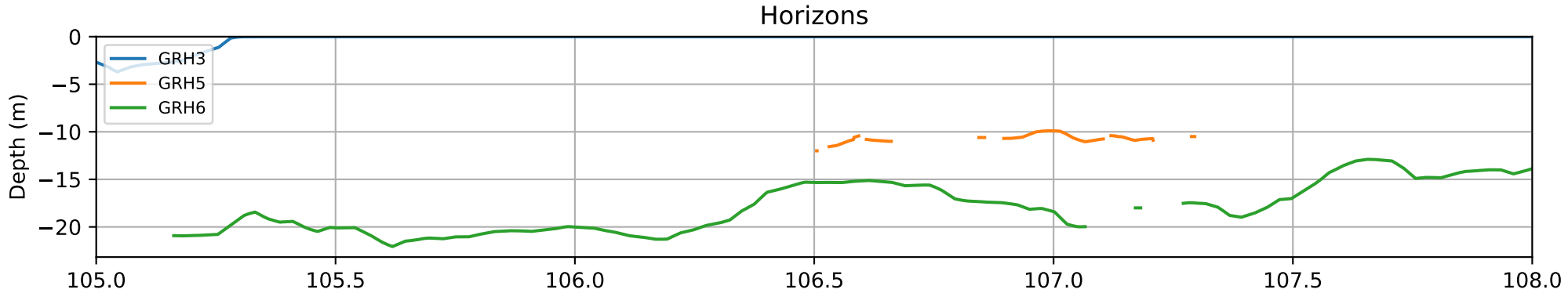
Seabed Elevation and Slopes



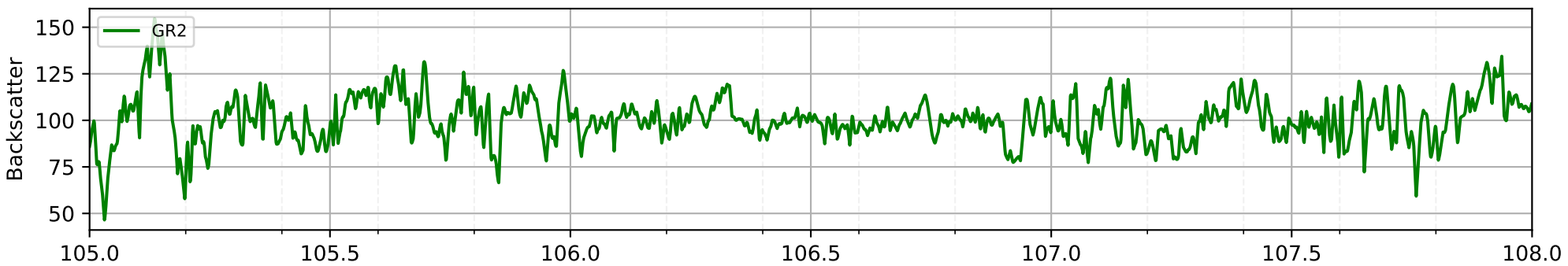
Crossings and Samples



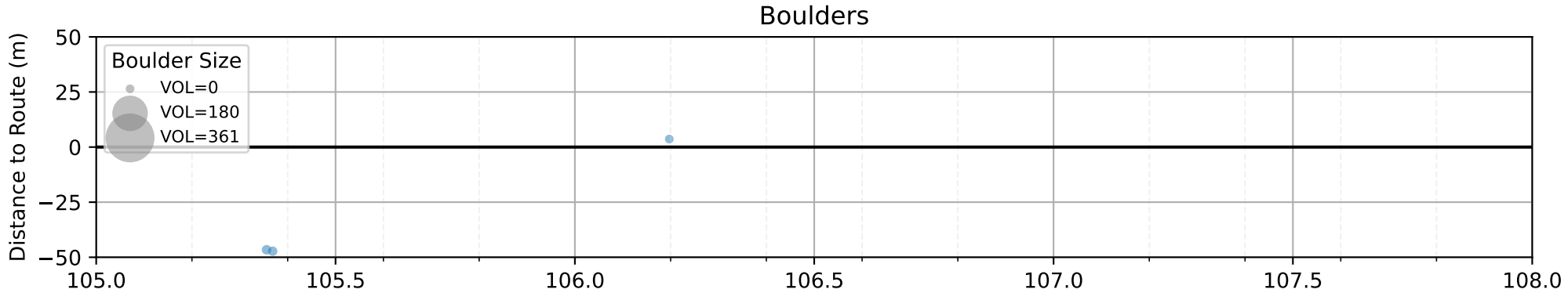
Horizons



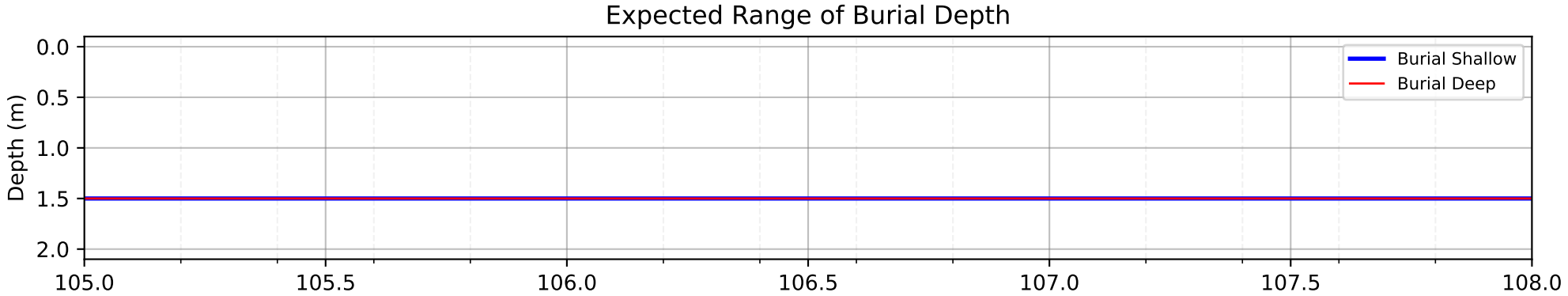
Backscatter



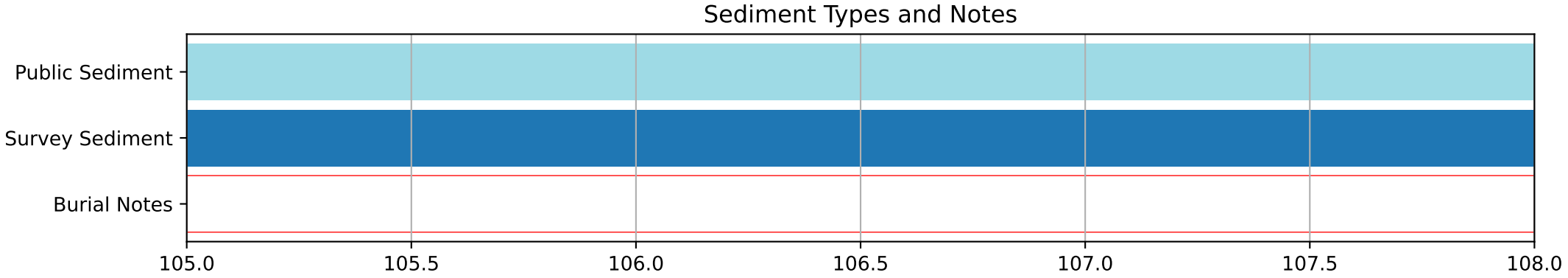
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

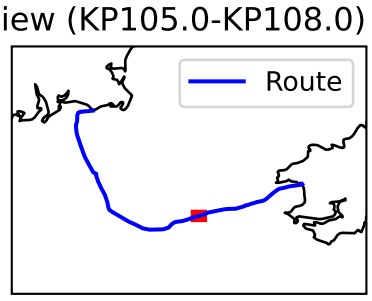


Public Sediment
GRAVELLY SAND

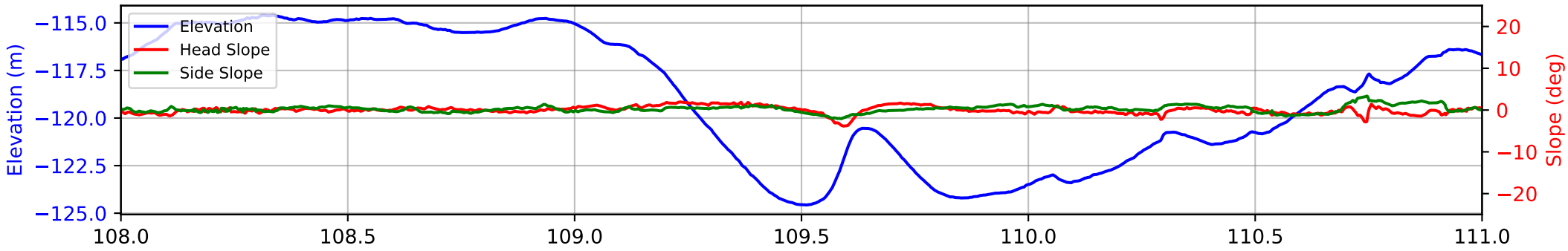
Survey Sediment
Medium Sediment

Burial Notes
No Data

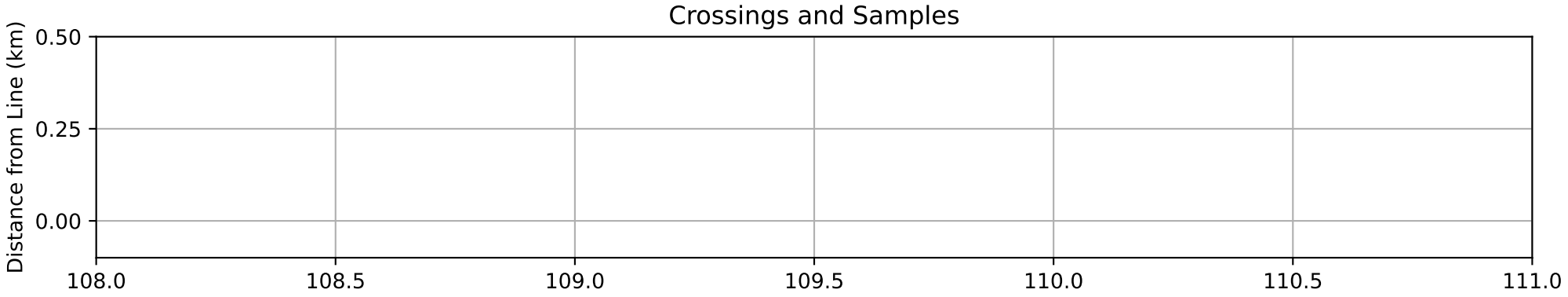
Overview (KP105.0-KP108.0)



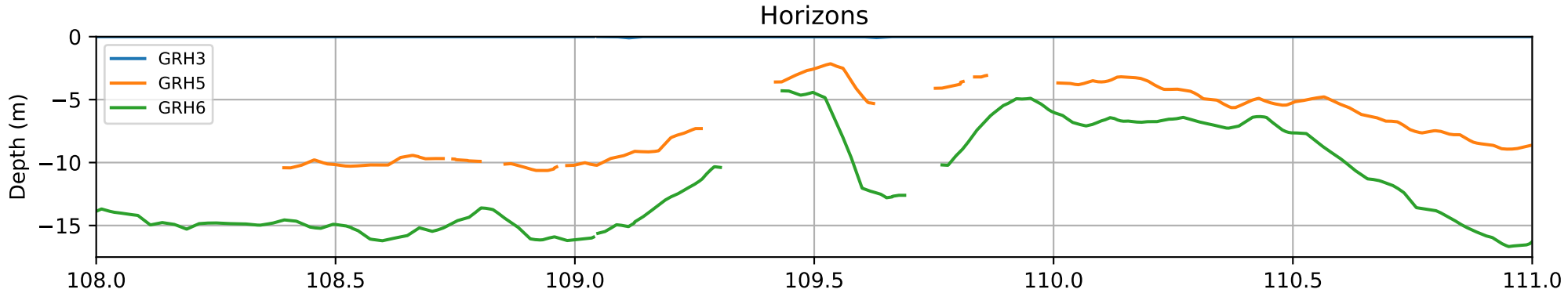
Seabed Elevation and Slopes



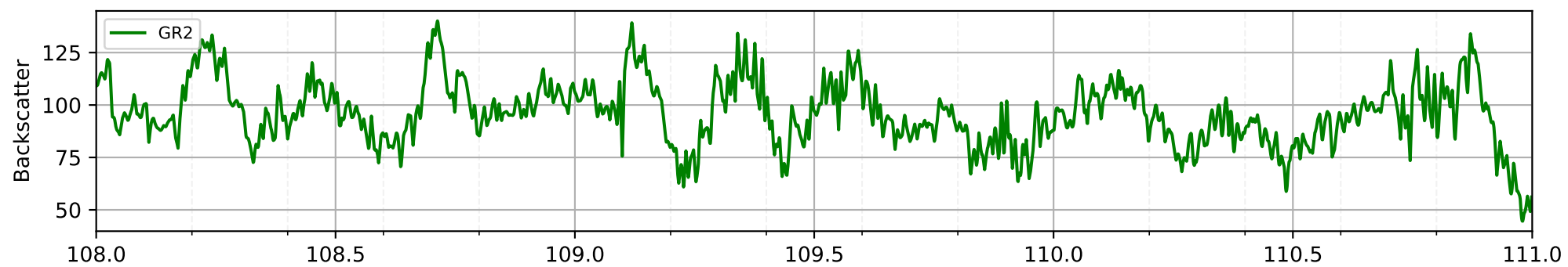
Crossings and Samples



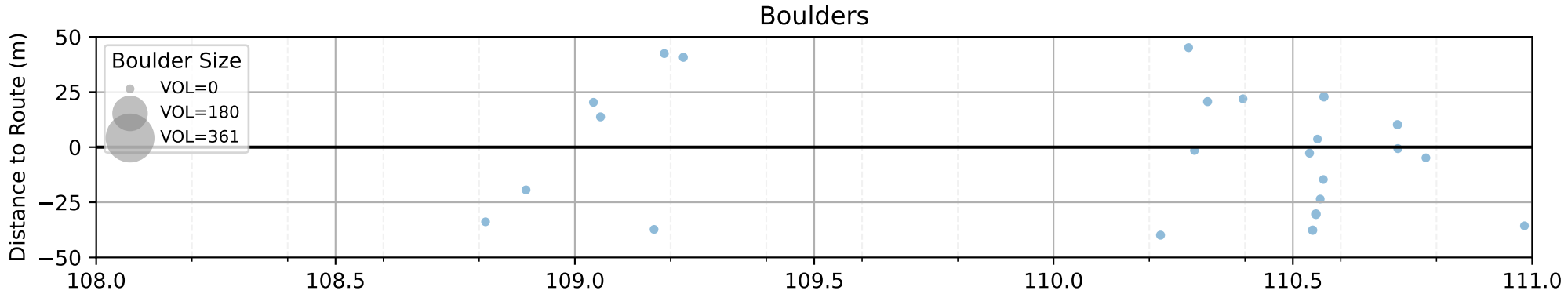
Horizons



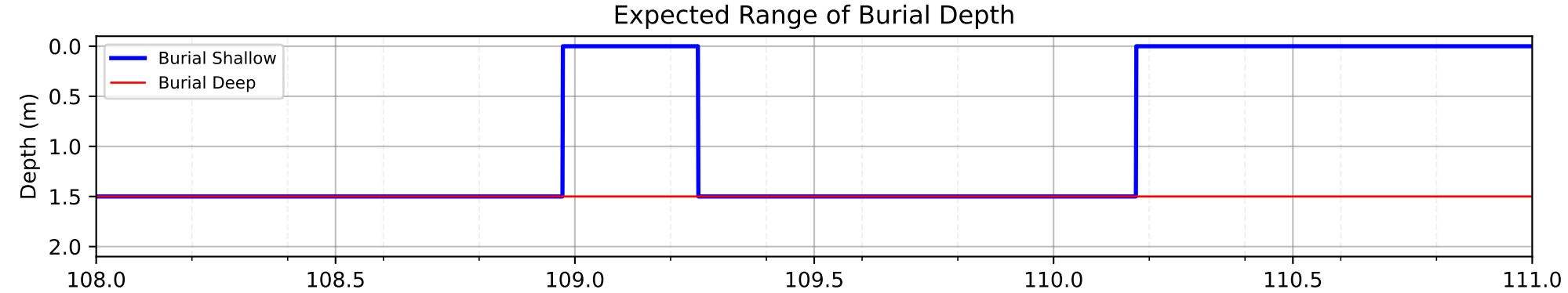
Backscatter



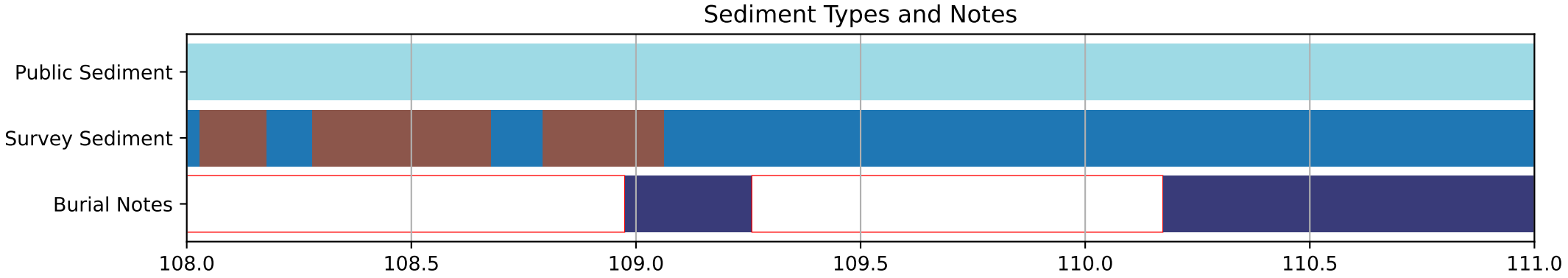
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

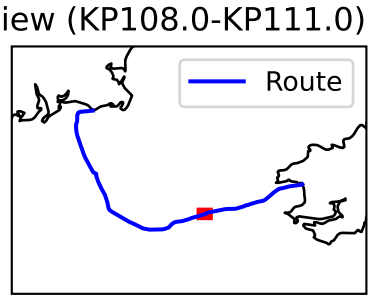


Public Sediment
- GRAVELLY SAND

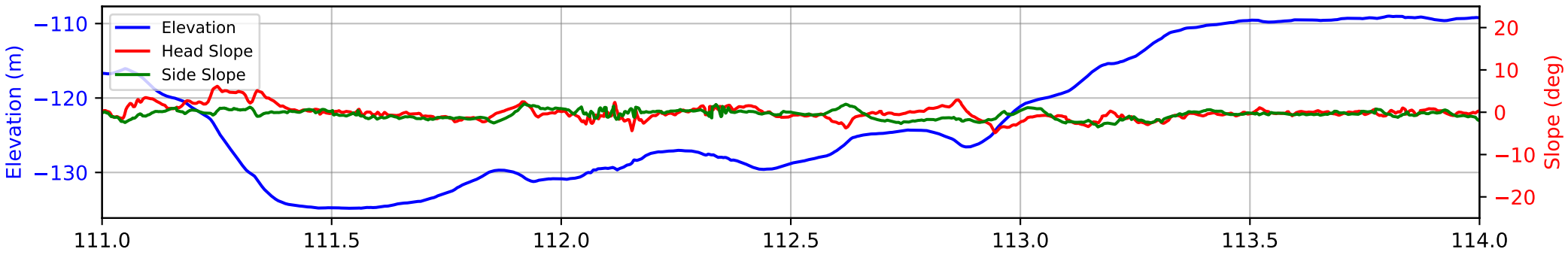
Survey Sediment
- Medium Sediment
- Fine Sediment

Burial Notes
- No Data
- Boulder Field

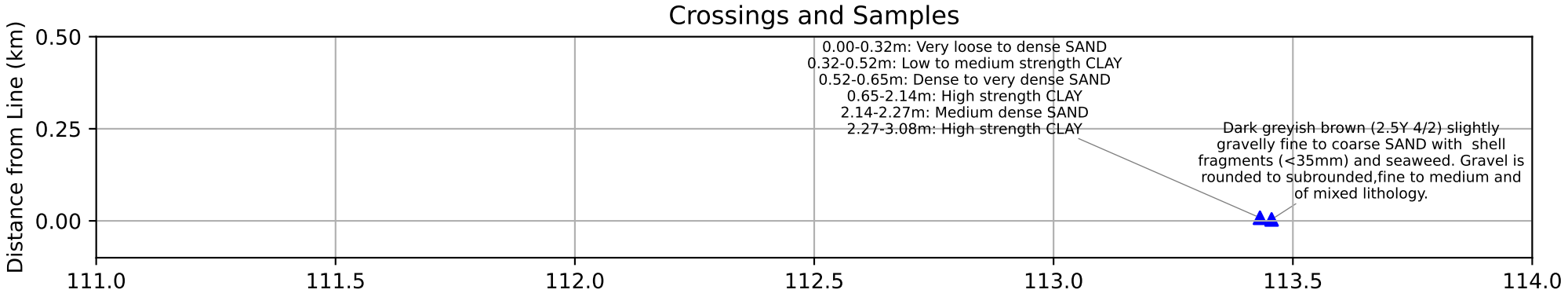
Overview (KP108.0-KP111.0)



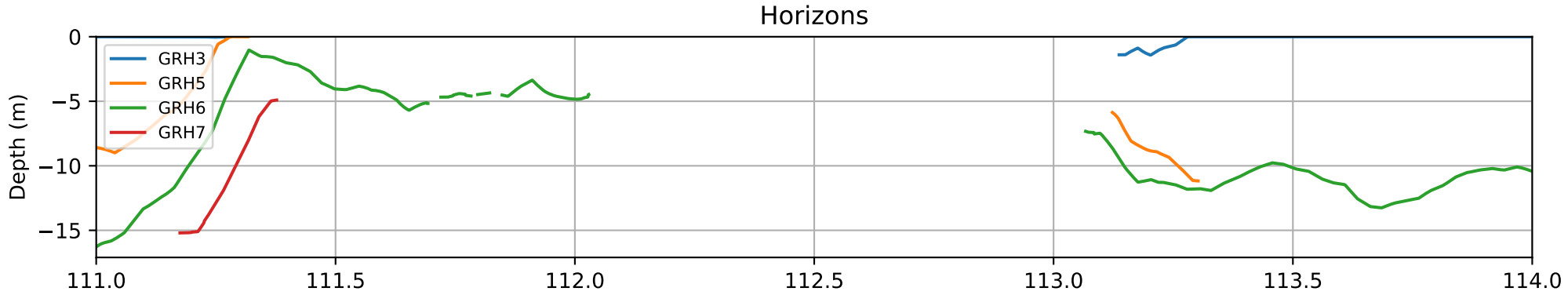
Seabed Elevation and Slopes



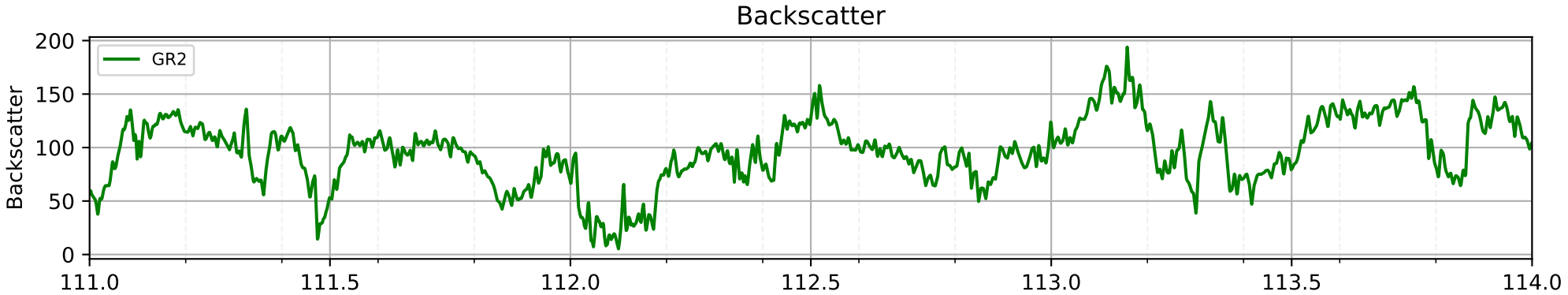
Crossings and Samples



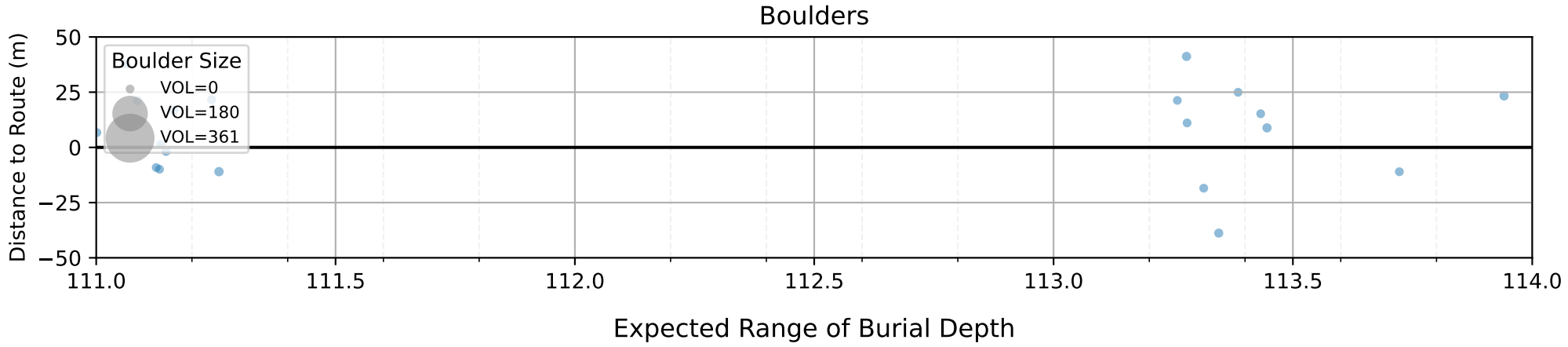
Horizons

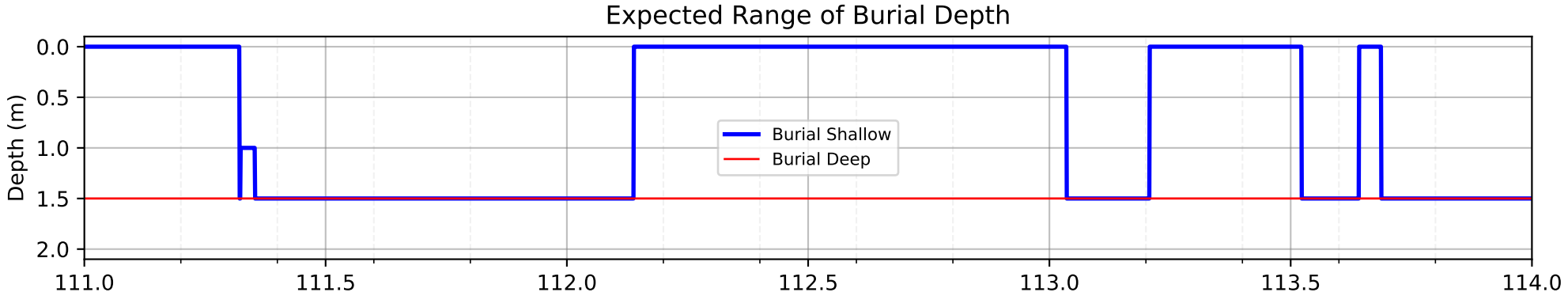


Backscatter

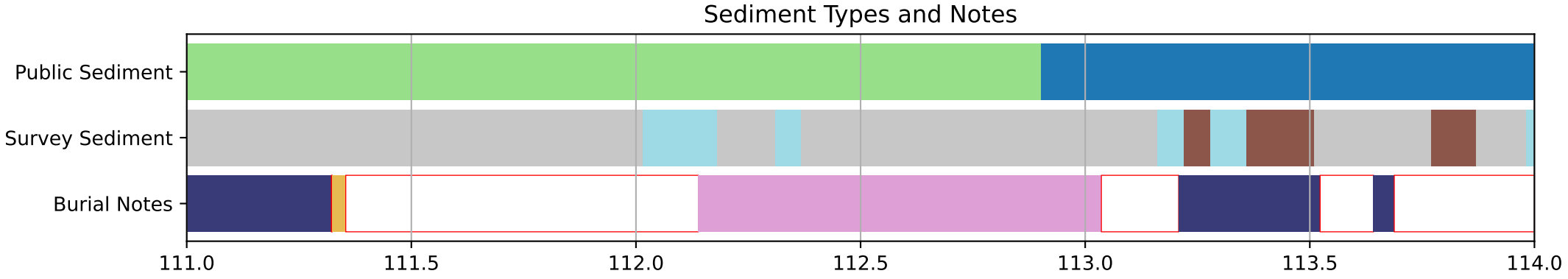


Boulders





Sediment Types and Notes

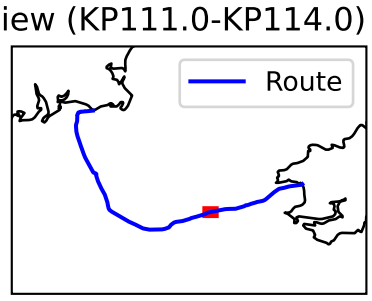


Public Sediment
- GRAVELLY SAND
- SANDY GRAVEL

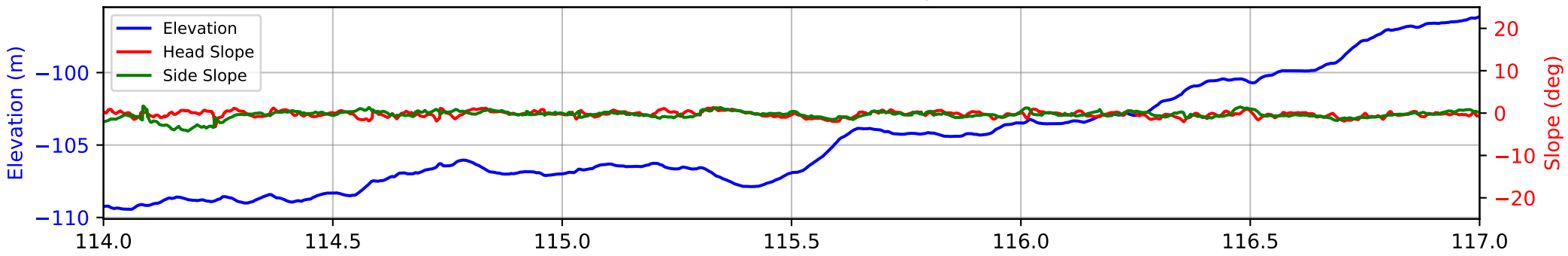
Survey Sediment
- Medium Sediment
- Coarse Sediment
- Fine Sediment

Burial Notes
- Boulder Field
- No Data
- Shallow Reflector H6 (Hardground/Till)
- Possible Surfacing Reflector H6

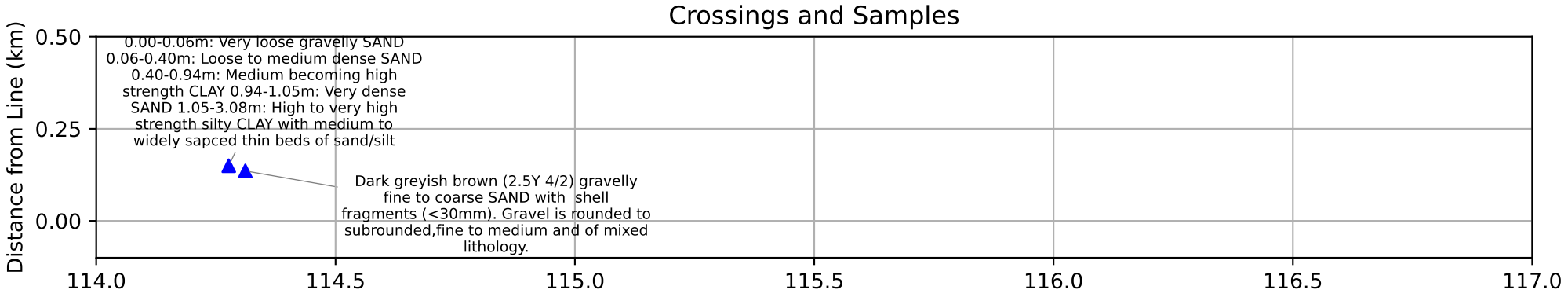
Overview (KP111.0-KP114.0)



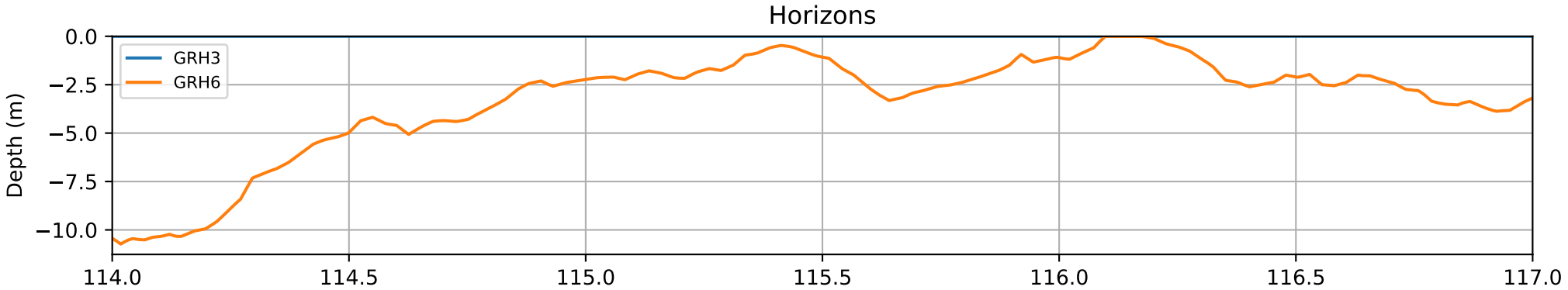
Seabed Elevation and Slopes



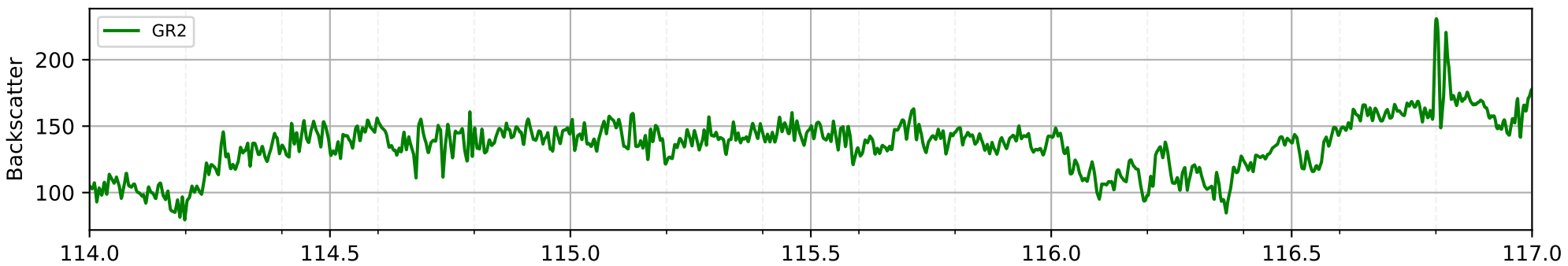
Crossings and Samples



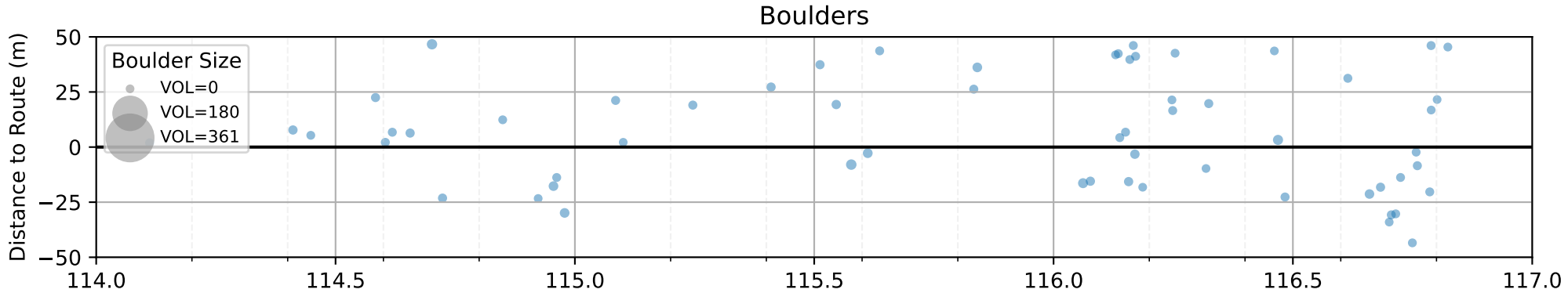
Horizons



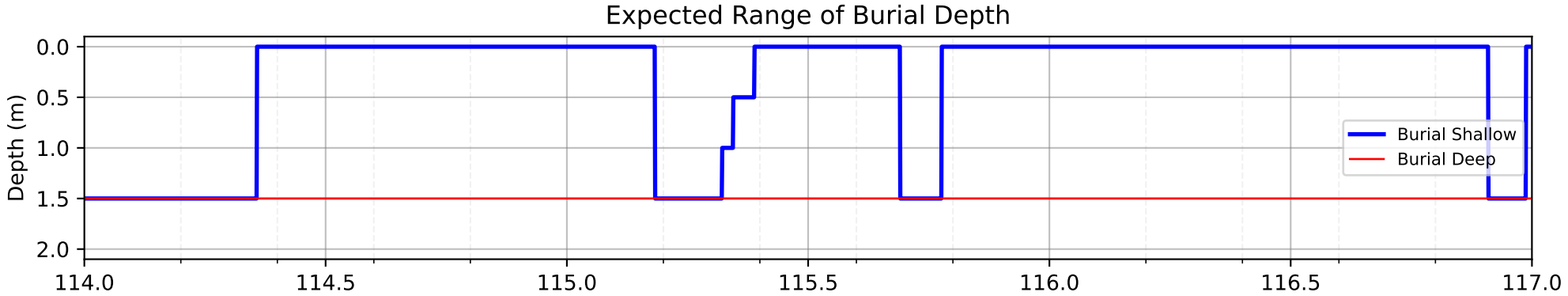
Backscatter



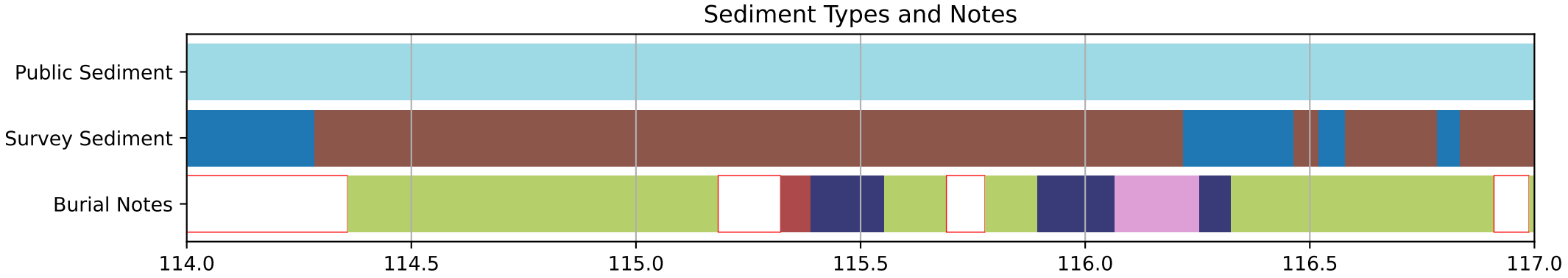
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- SANDY GRAVEL

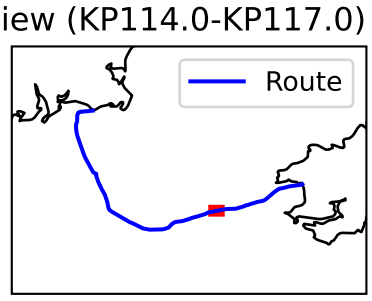
Survey Sediment

- Coarse Sediment
- Medium Sediment

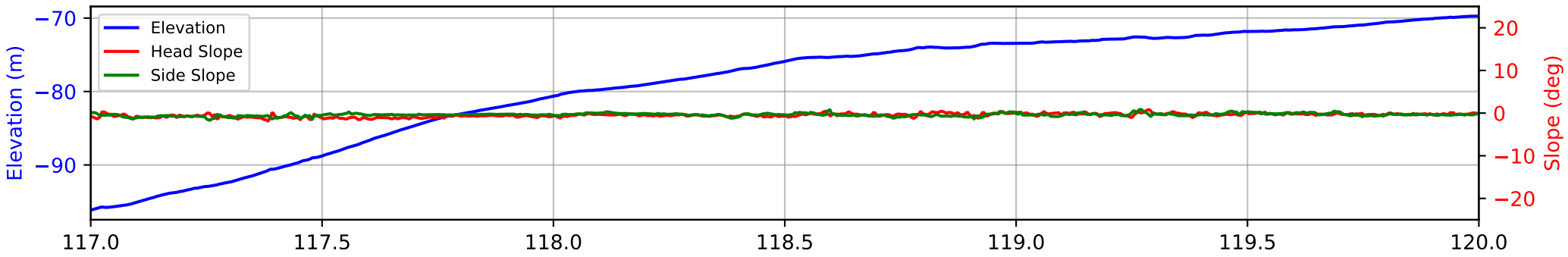
Burial Notes

- No Data
- Boulder Field
- Shallow Reflector H6 (Hardground/Till)
- Shallow Reflector H6 (Hardground/Till), Boulder Field
- Boulder Field, Shallow Reflector H6 (Hardground/Till)

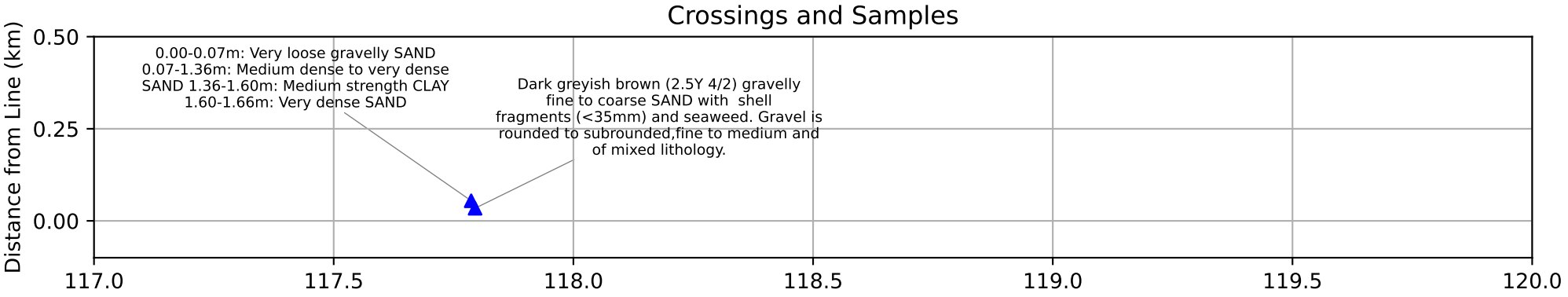
Overview (KP114.0-KP117.0)



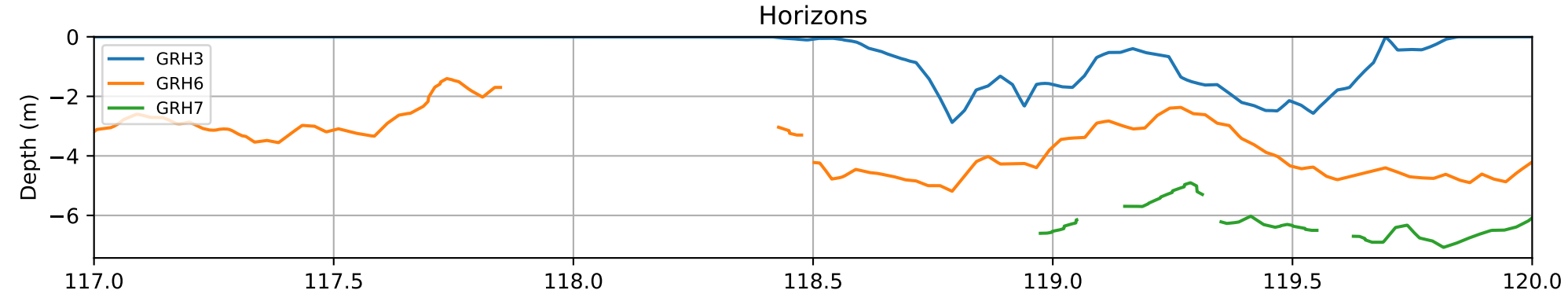
Seabed Elevation and Slopes



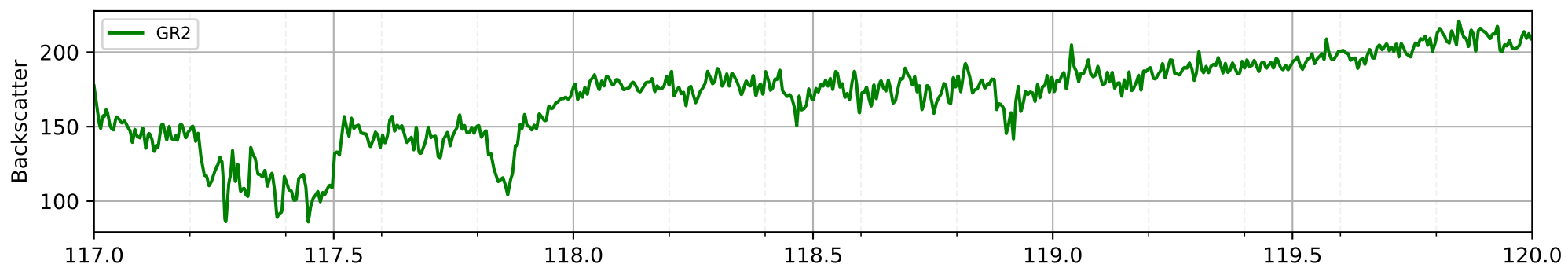
Crossings and Samples



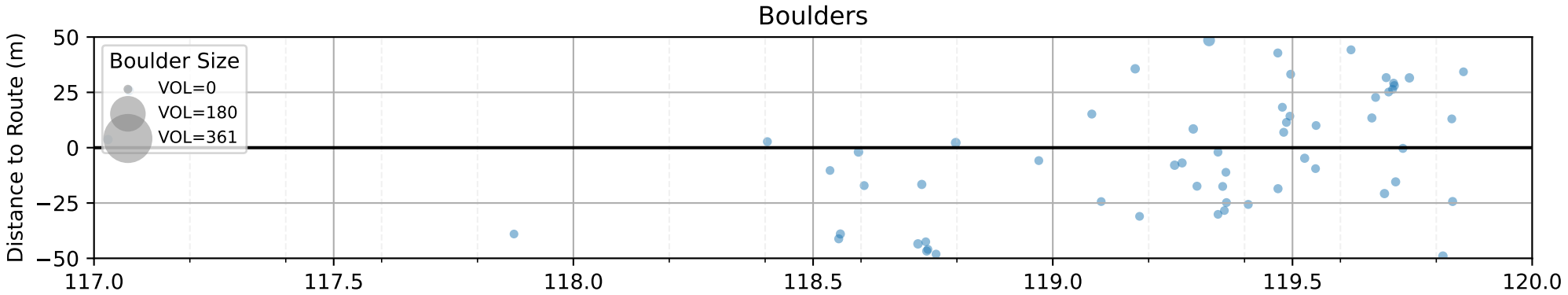
Horizons

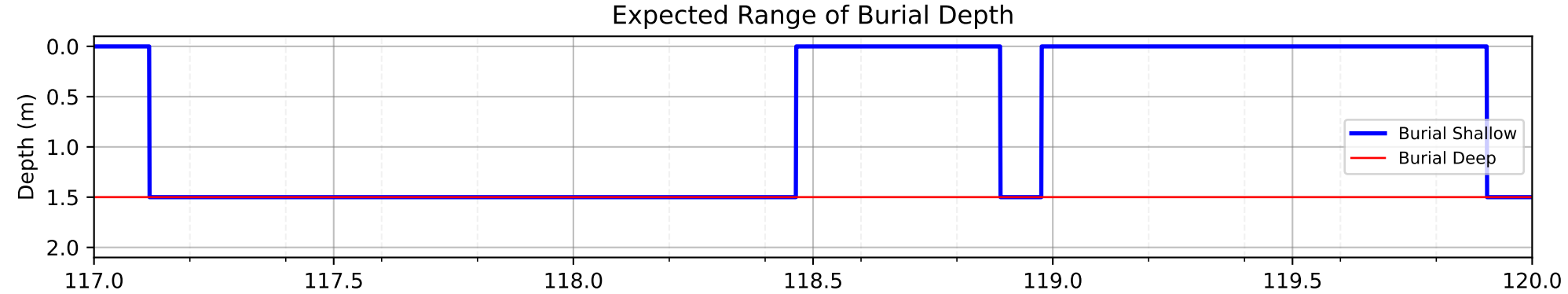


Backscatter

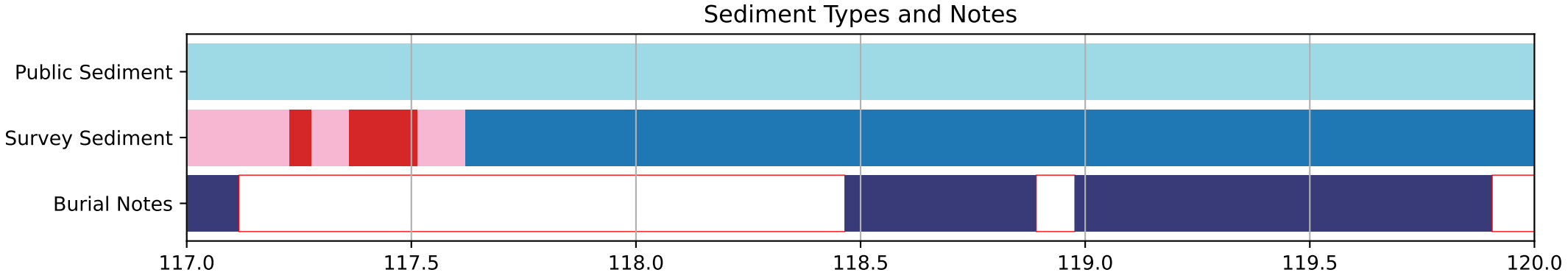


Boulders





Sediment Types and Notes

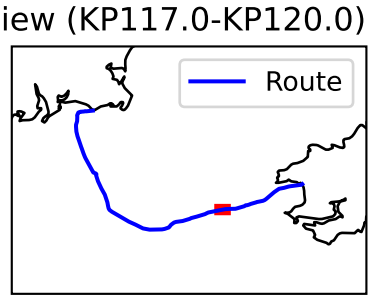


Public Sediment
- SANDY GRAVEL

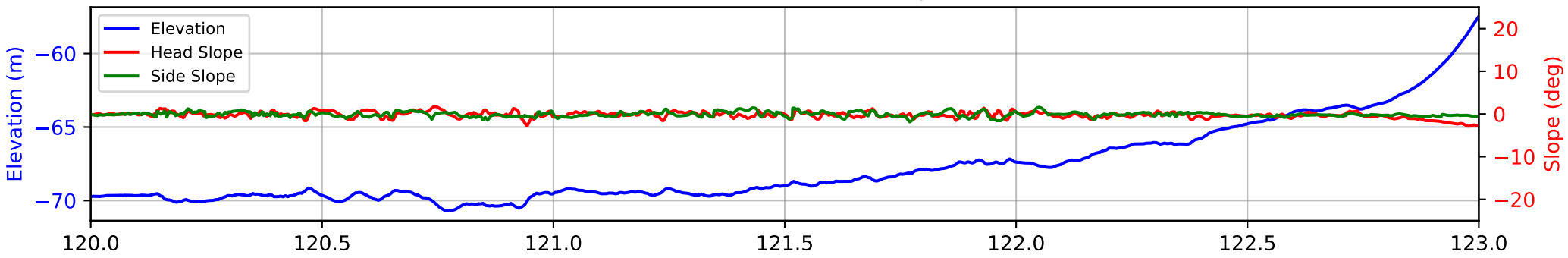
Survey Sediment
- Medium Sediment
- Coarse Sediment
- Fine Sediment

Burial Notes
- Boulder Field
- No Data

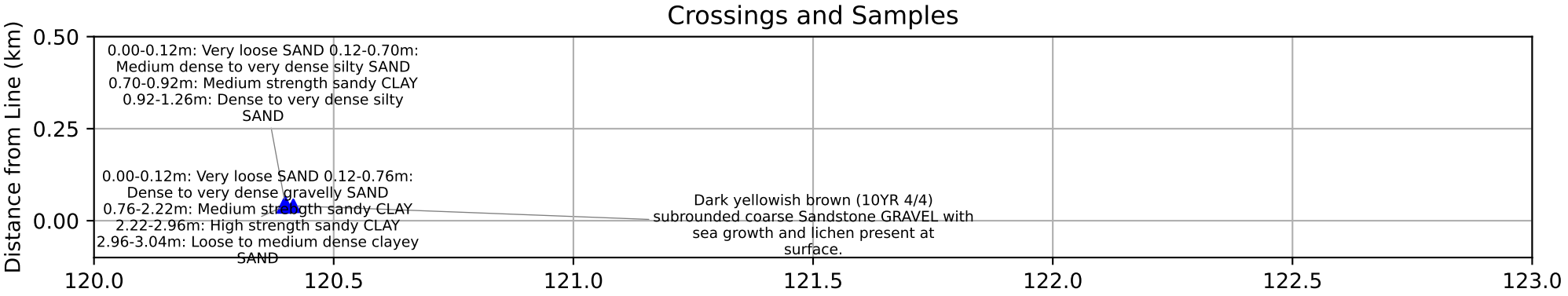
Overview (KP117.0-KP120.0)



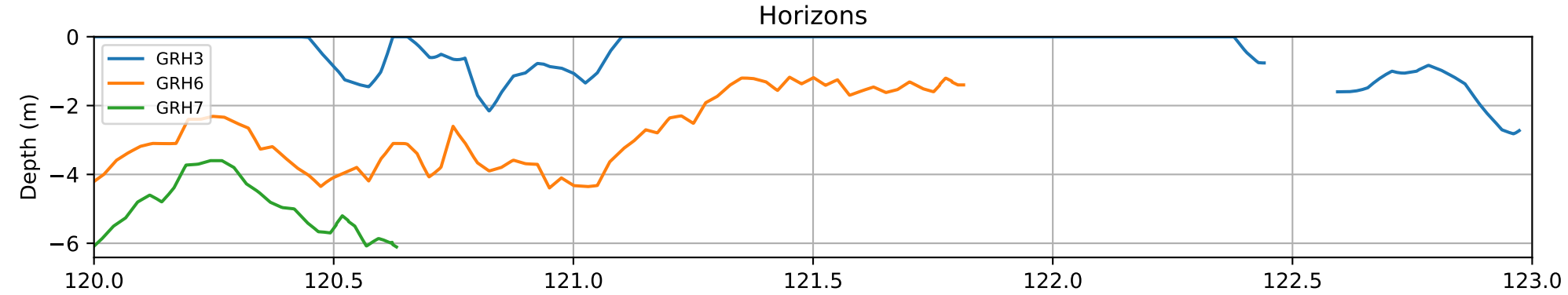
Seabed Elevation and Slopes



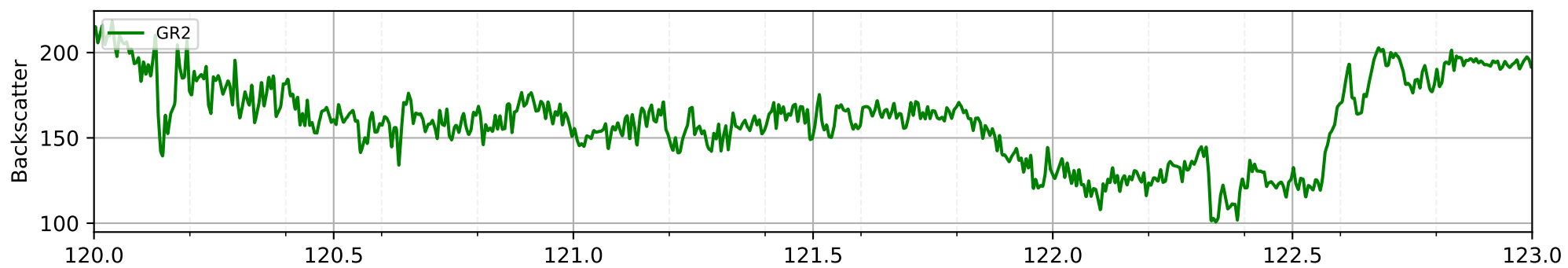
Crossings and Samples



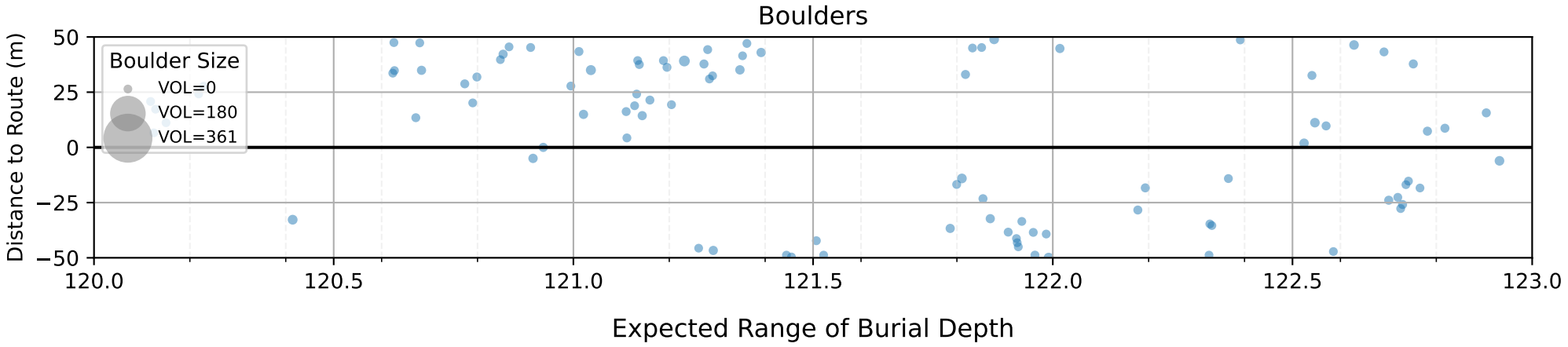
Horizons

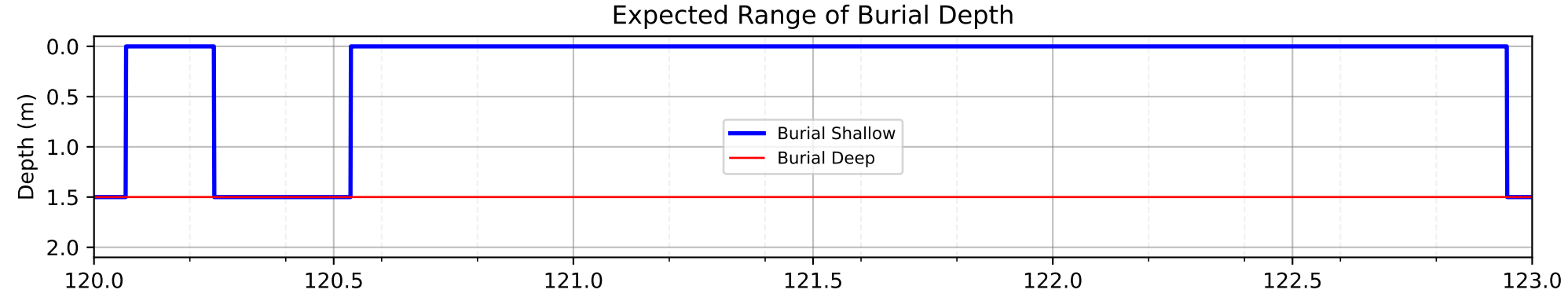


Backscatter

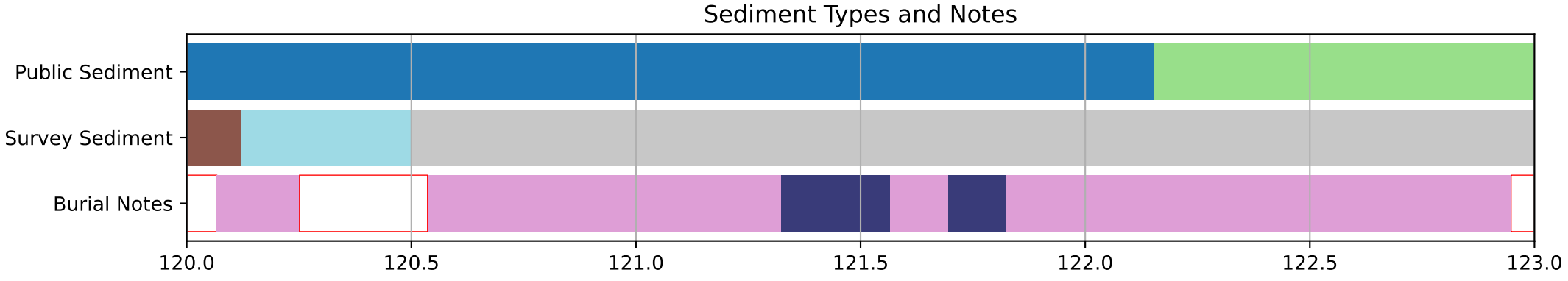


Boulders





Sediment Types and Notes



Public Sediment

- SANDY GRAVEL
- GRAVELLY SAND

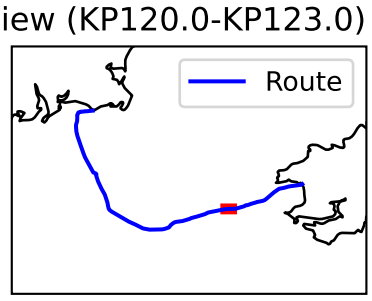
Survey Sediment

- Fine Sediment
- Coarse Sediment
- Medium Sediment

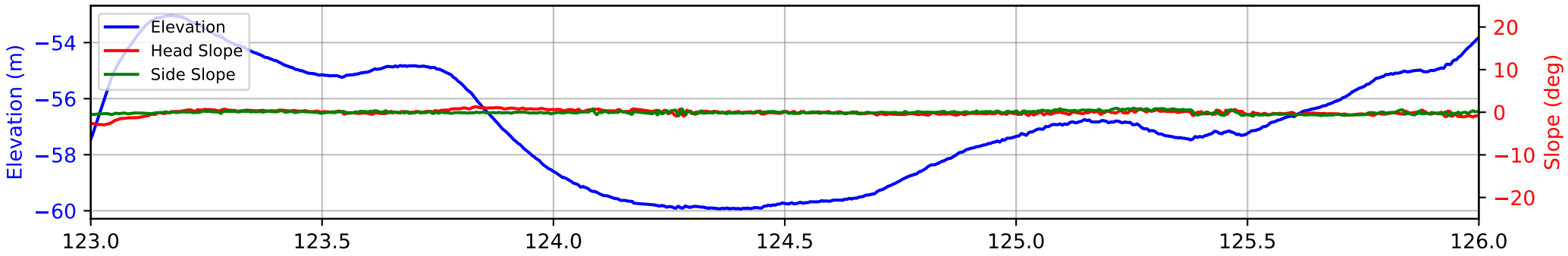
Burial Notes

- No Data
- Boulder Field
- Shallow Reflector H6 (Hardground/Till), Boulder Field

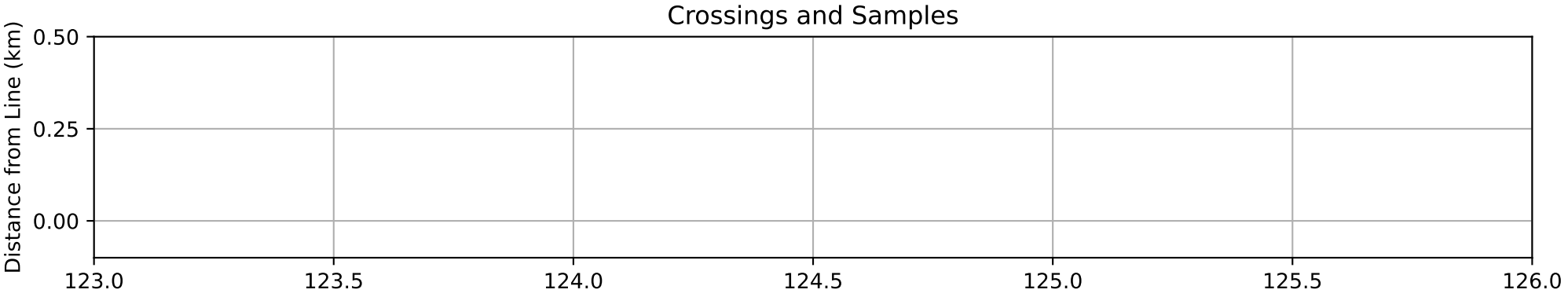
Overview (KP120.0-KP123.0)



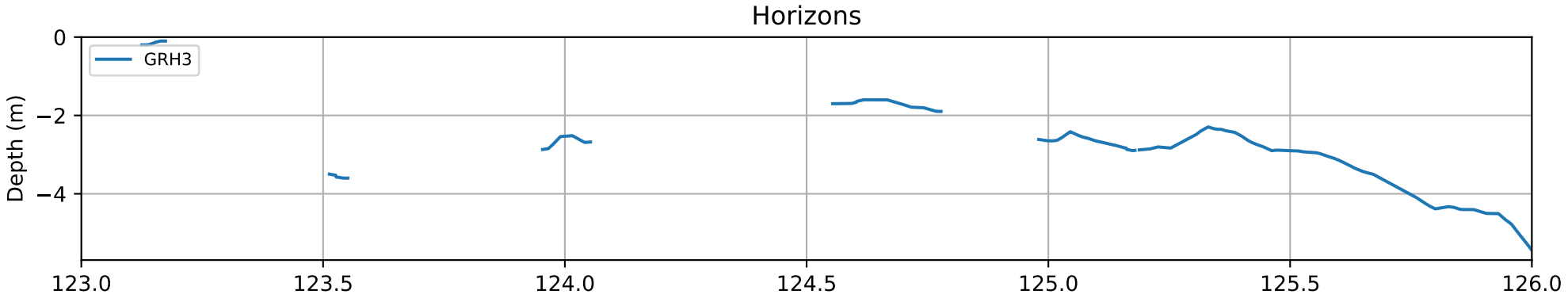
Seabed Elevation and Slopes



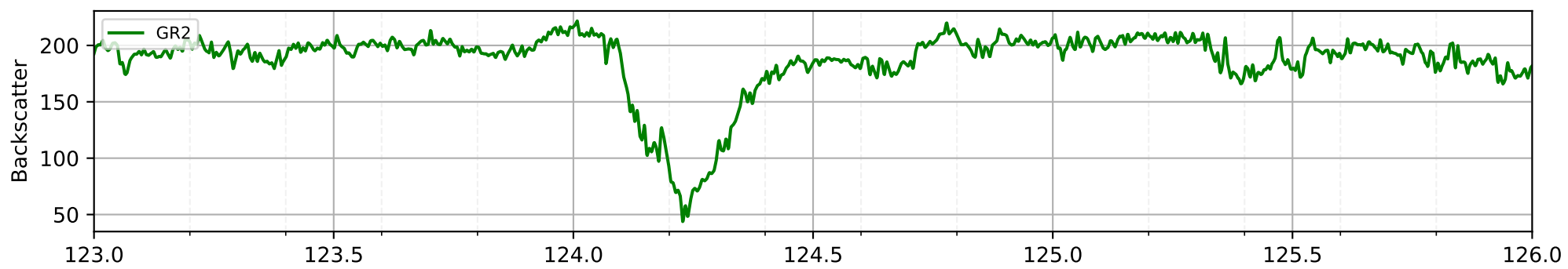
Crossings and Samples



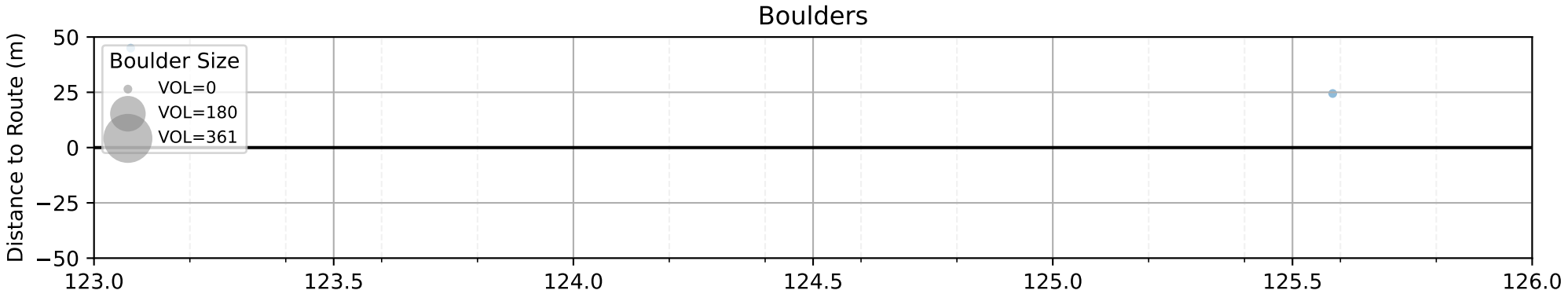
Horizons



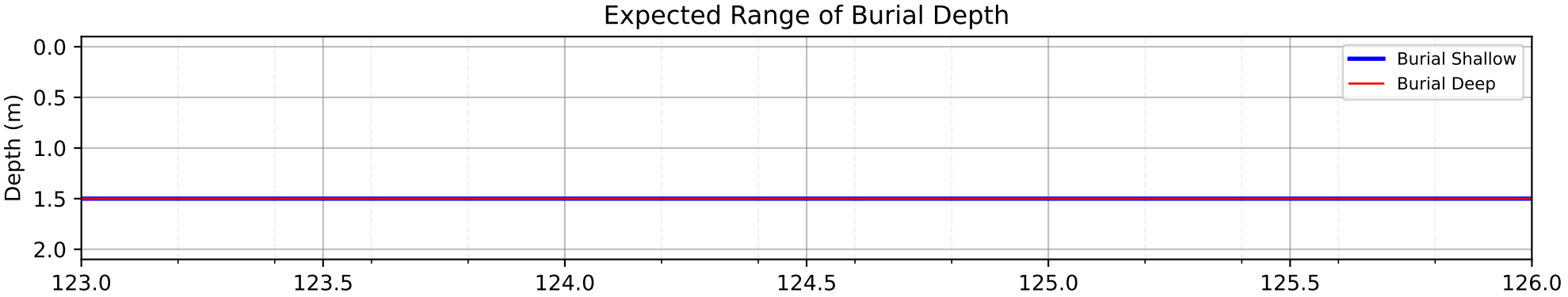
Backscatter



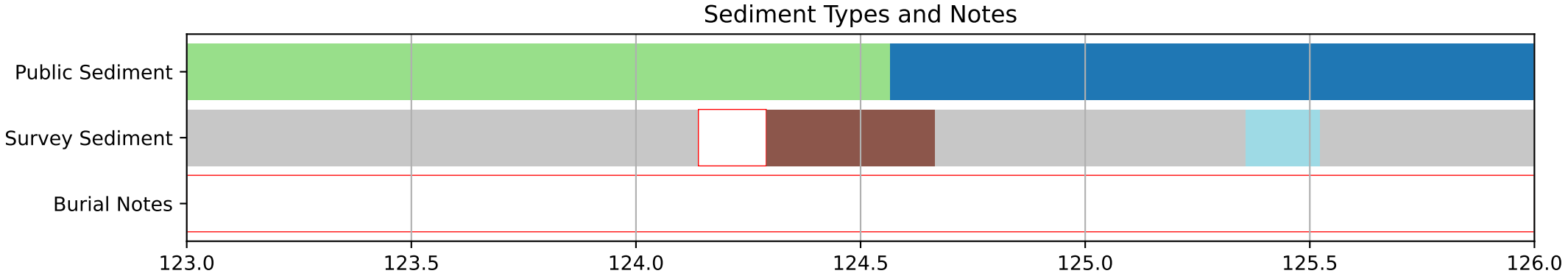
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

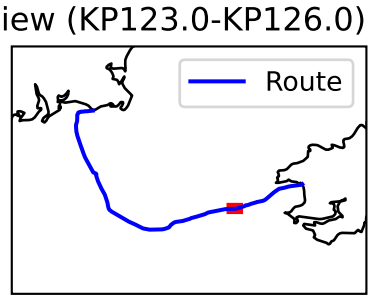


Public Sediment
- GRAVELLY SAND
- SANDY GRAVEL

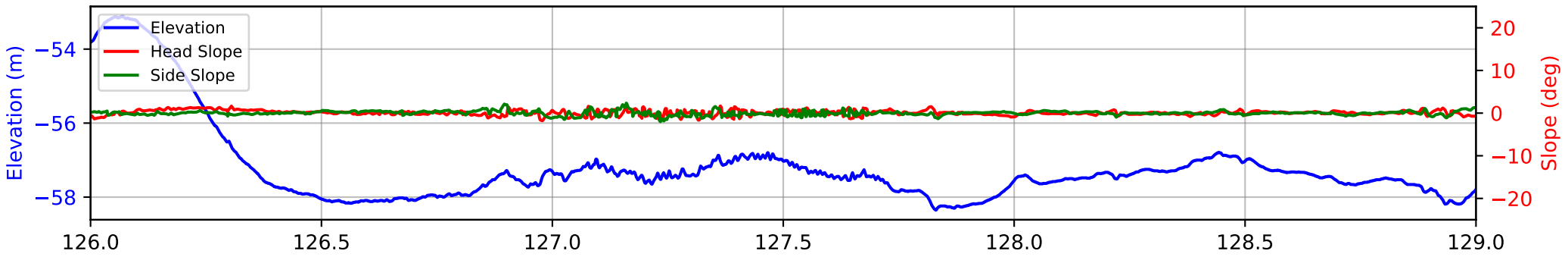
Burial Notes
- No Data

Survey Sediment
- Medium Sediment
- No Data
- Fine Sediment
- Coarse Sediment

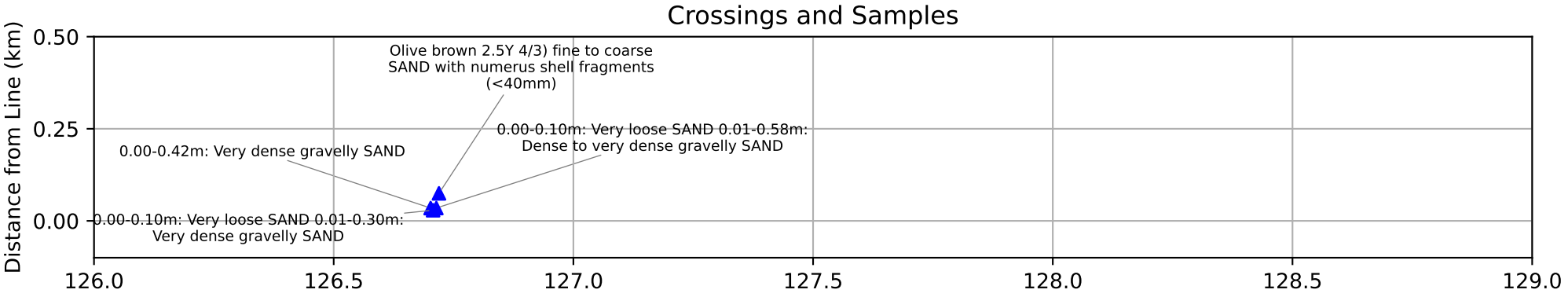
Overview (KP123.0-KP126.0)



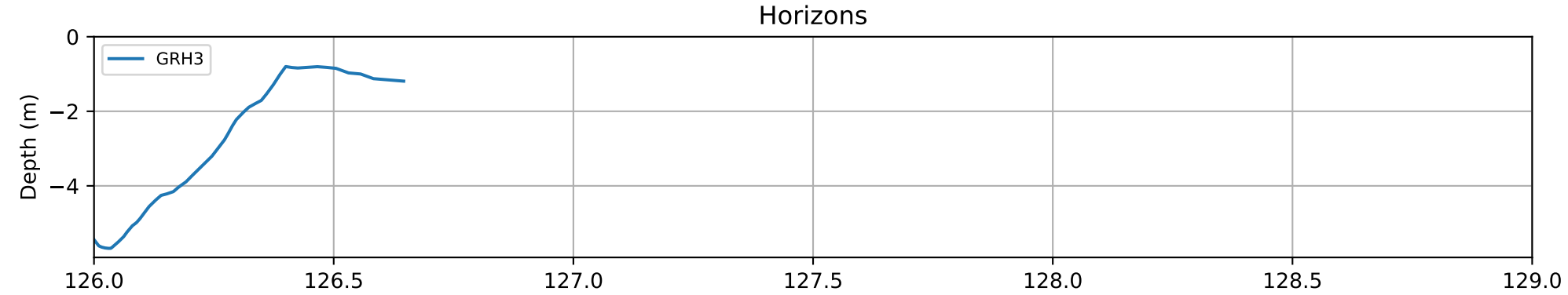
Seabed Elevation and Slopes



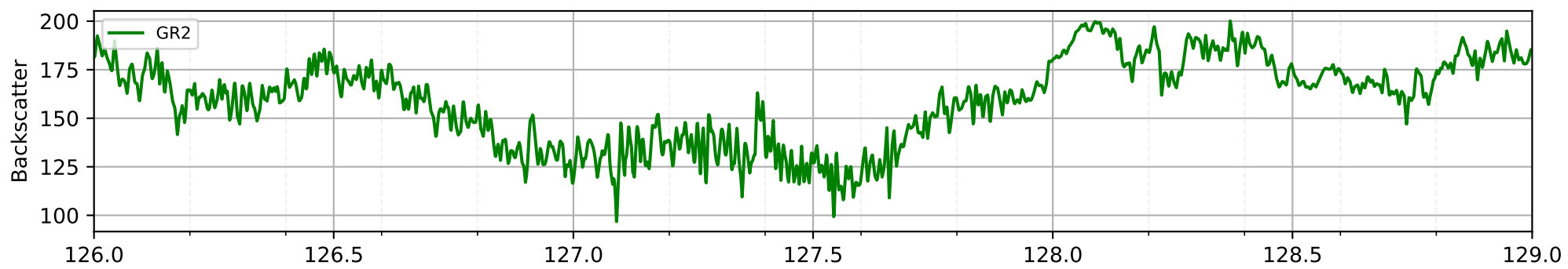
Crossings and Samples



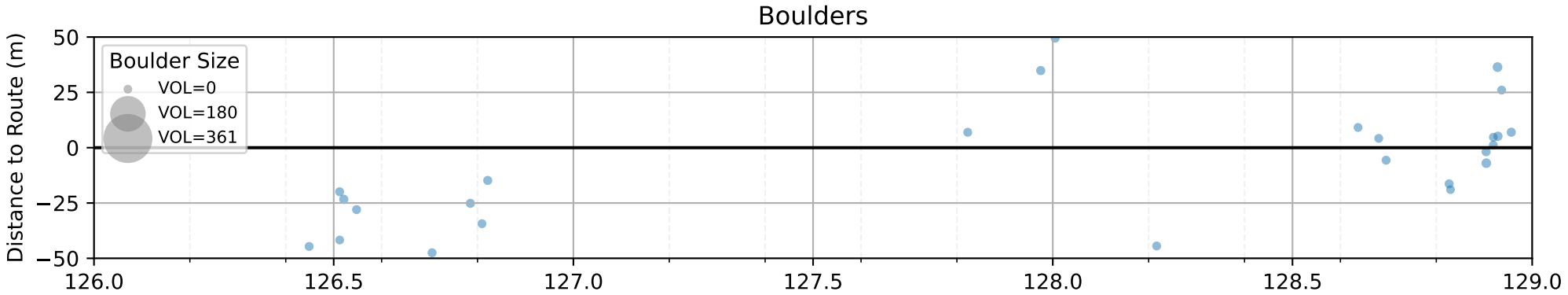
Horizons



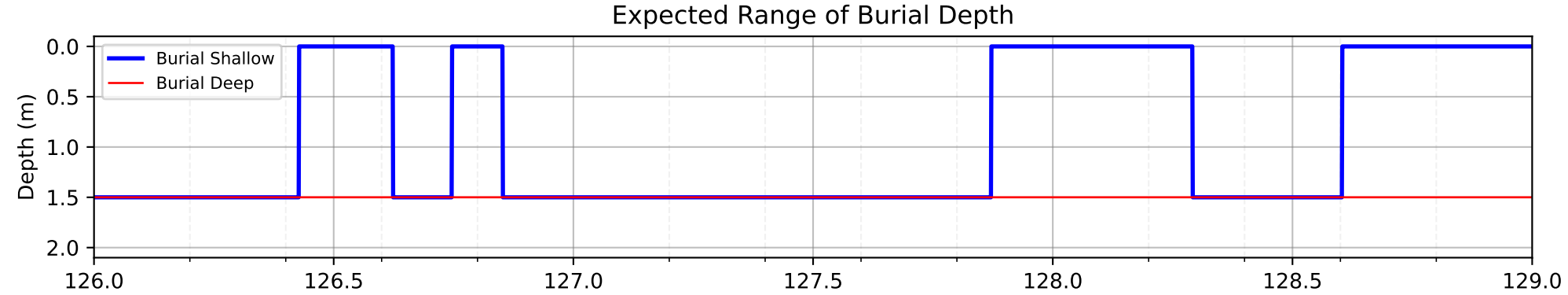
Backscatter



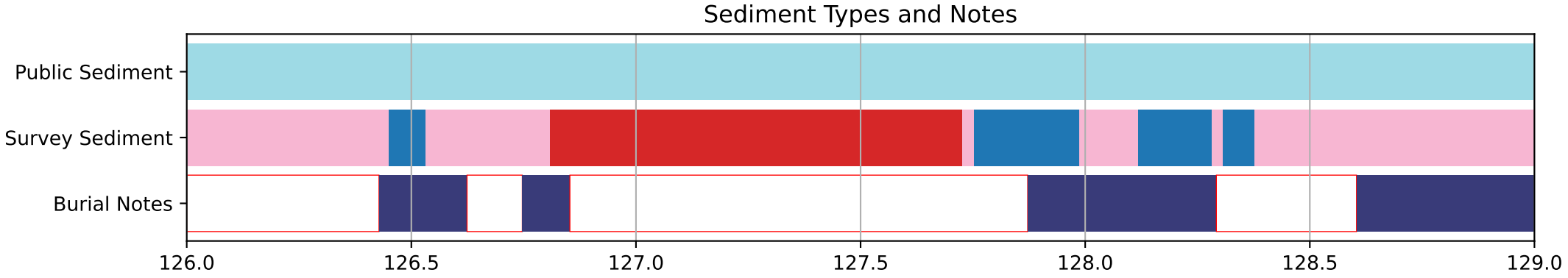
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- SANDY GRAVEL

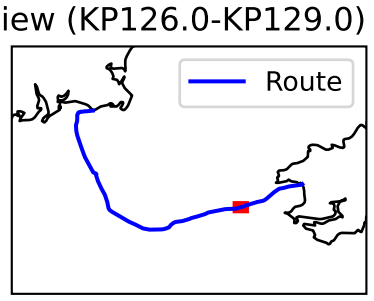
Burial Notes

- No Data
- Boulder Field

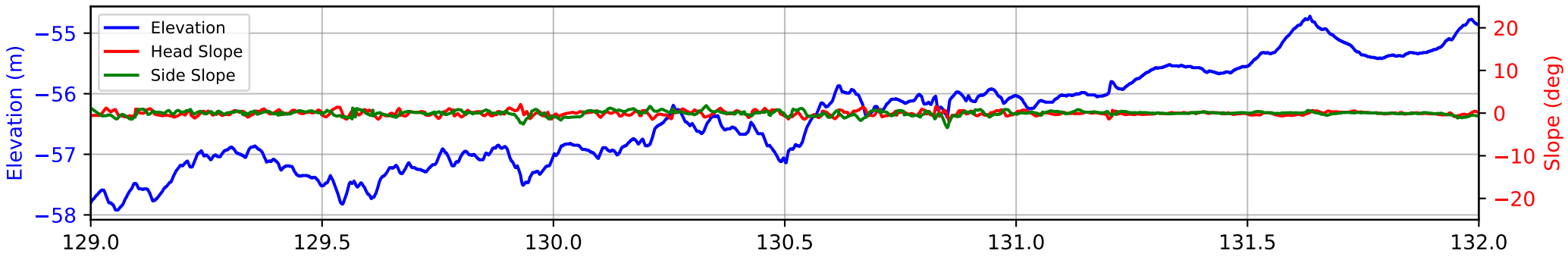
Survey Sediment

- Medium Sediment
- Fine Sediment
- Coarse Sediment

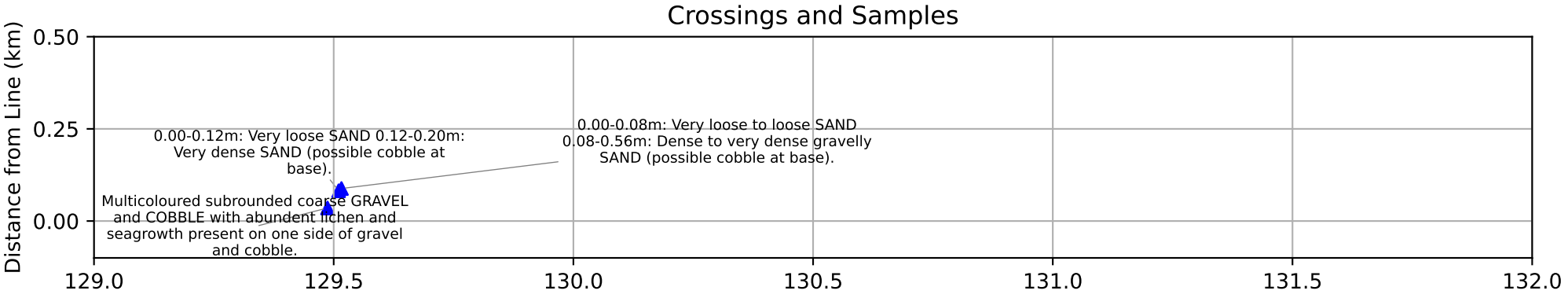
Overview (KP126.0-KP129.0)



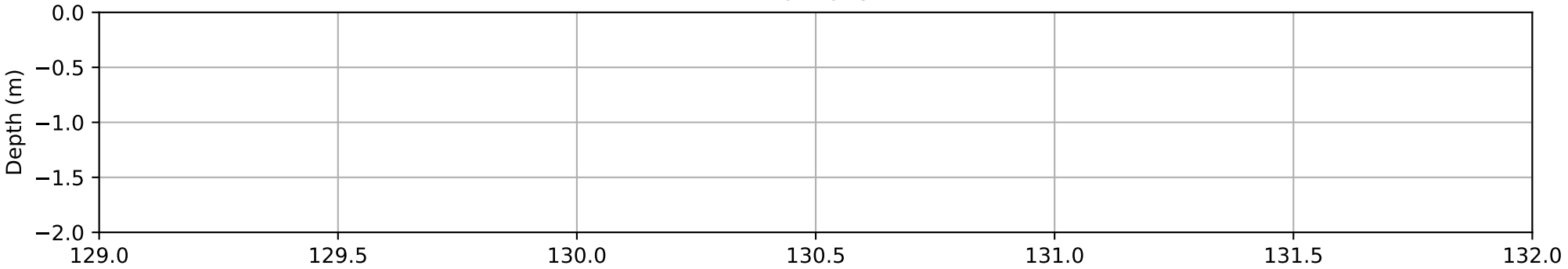
Seabed Elevation and Slopes



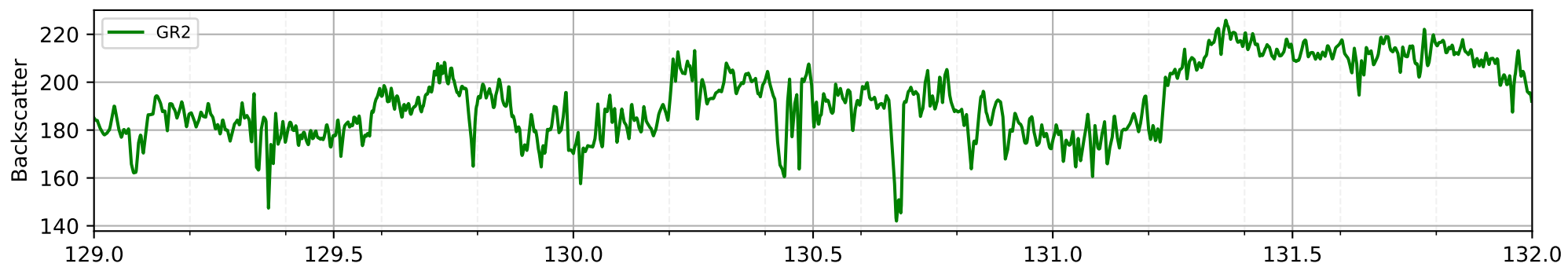
Crossings and Samples



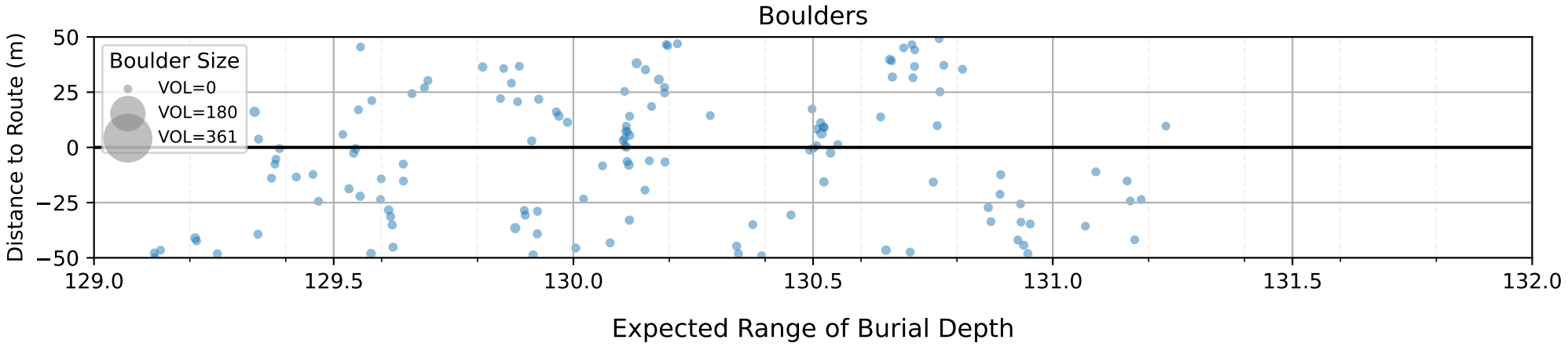
Horizons



Backscatter

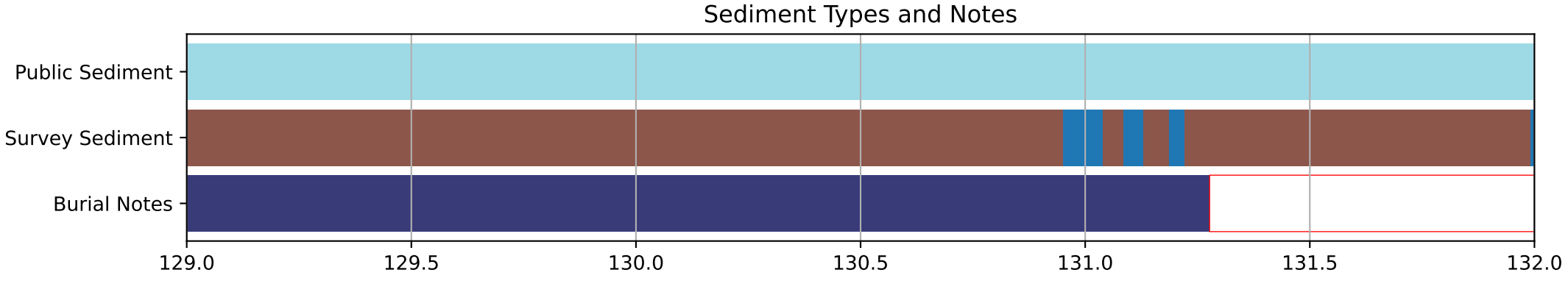


Boulders



Expected Range of Burial Depth

Sediment Types and Notes

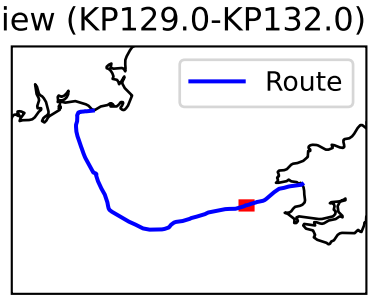


Public Sediment
- SANDY GRAVEL

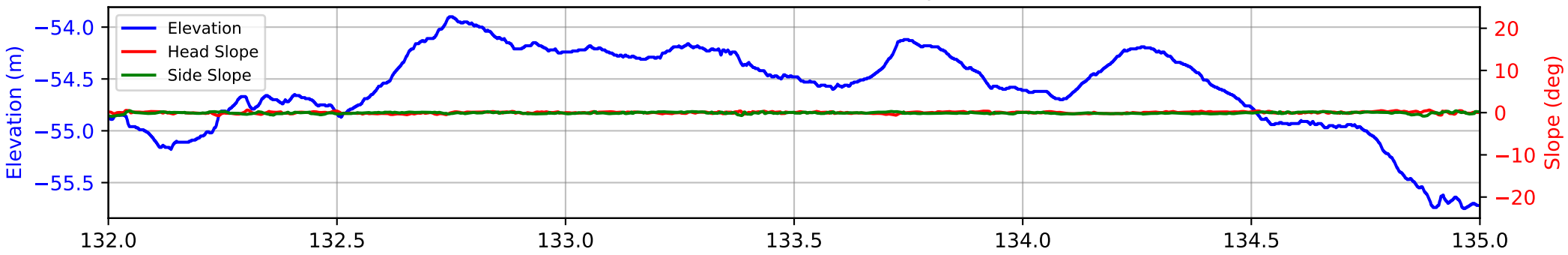
Survey Sediment
- Medium Sediment
- Fine Sediment

Burial Notes
- Boulder Field
- No Data

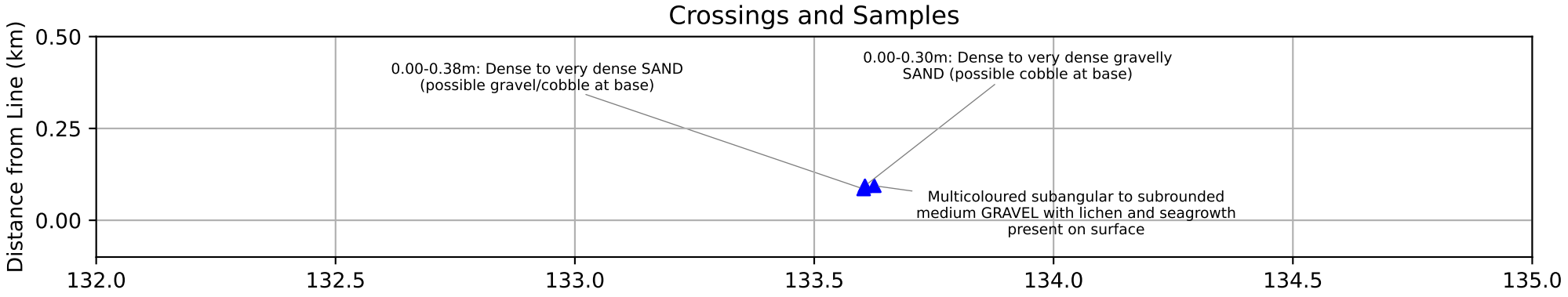
Overview (KP129.0-KP132.0)



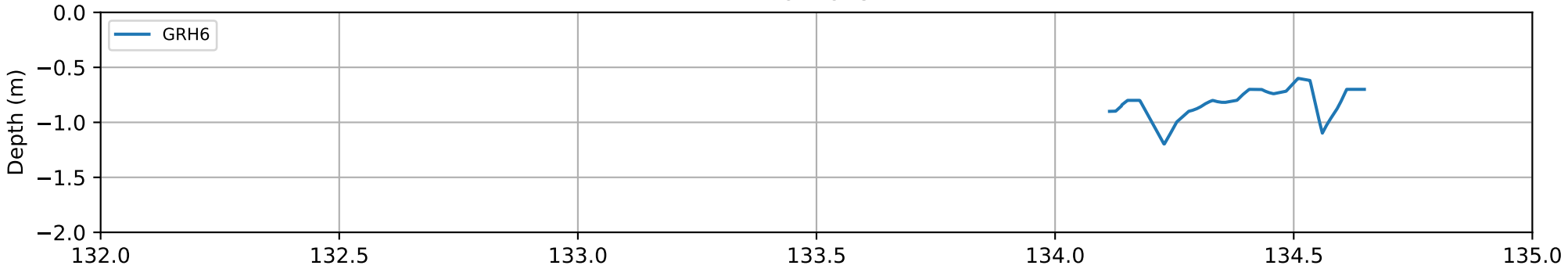
Seabed Elevation and Slopes



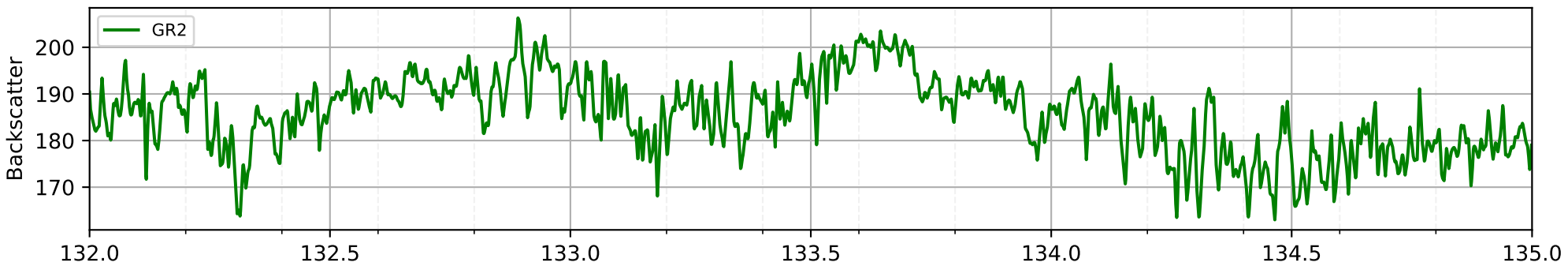
Crossings and Samples



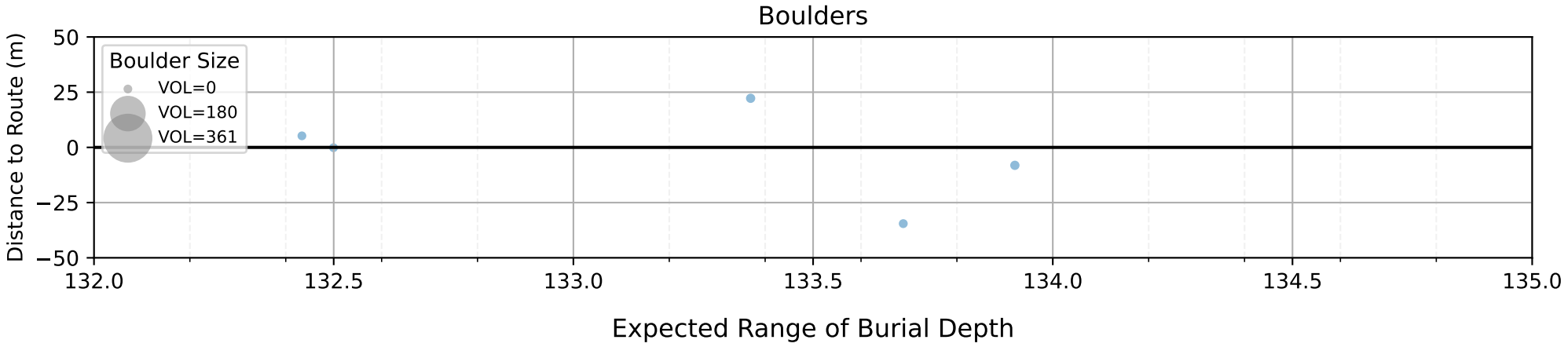
Horizons

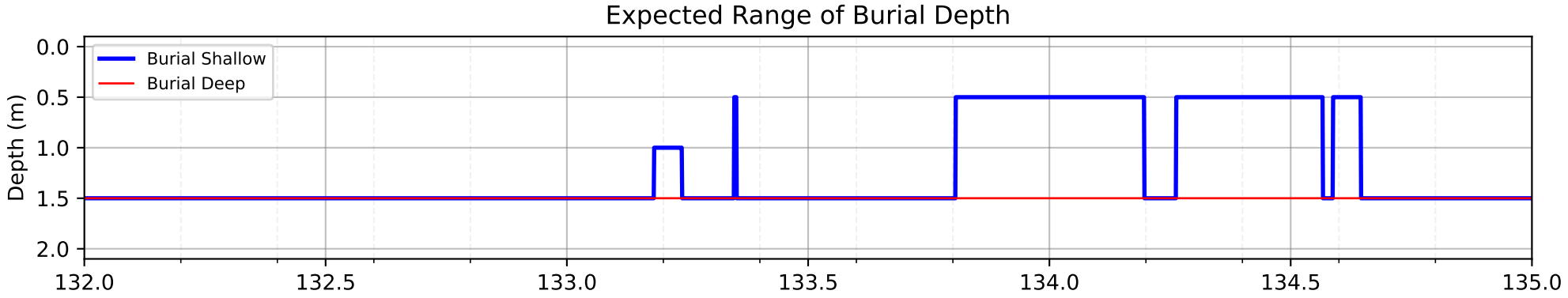


Backscatter

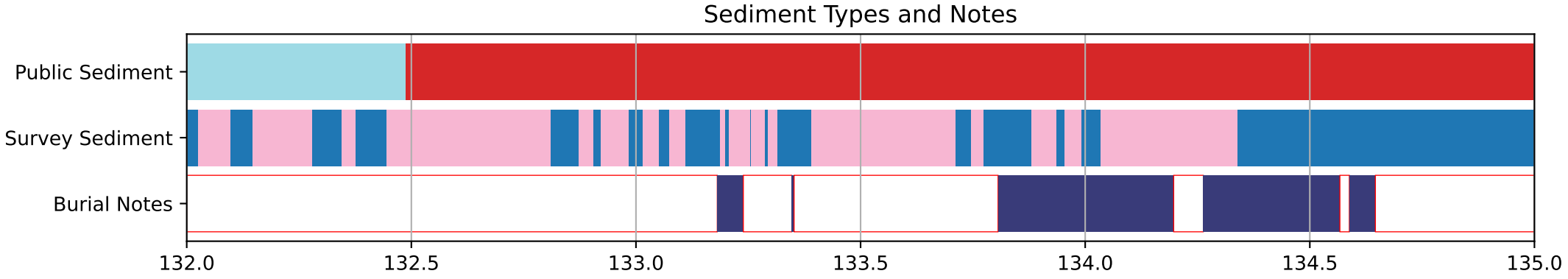


Boulders





Sediment Types and Notes

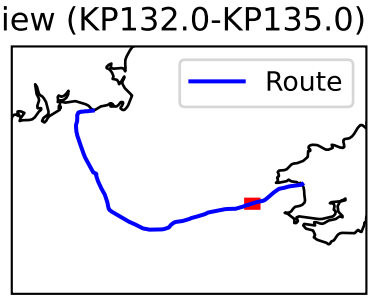


Public Sediment
- SANDY GRAVEL
- GRAVEL

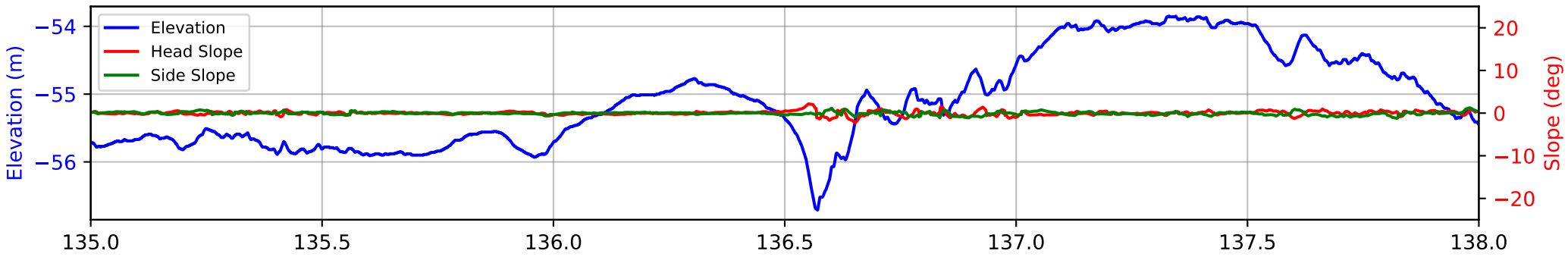
Survey Sediment
- Fine Sediment
- Medium Sediment

Burial Notes
- No Data
- Shallow Reflector H6 (Hardground/Till)

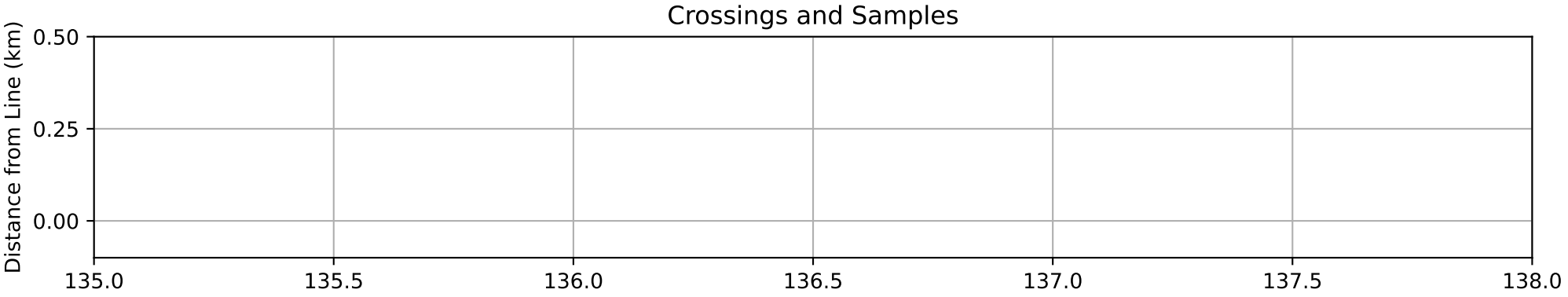
Overview (KP132.0-KP135.0)



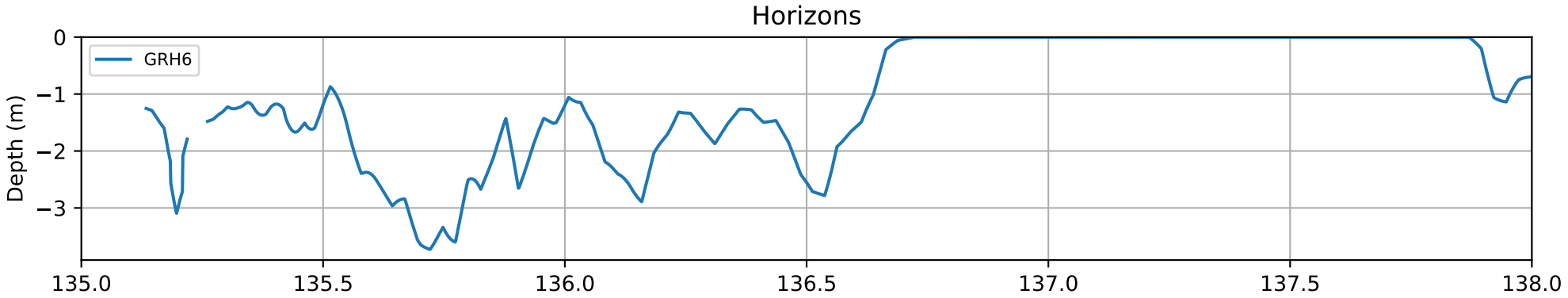
Seabed Elevation and Slopes



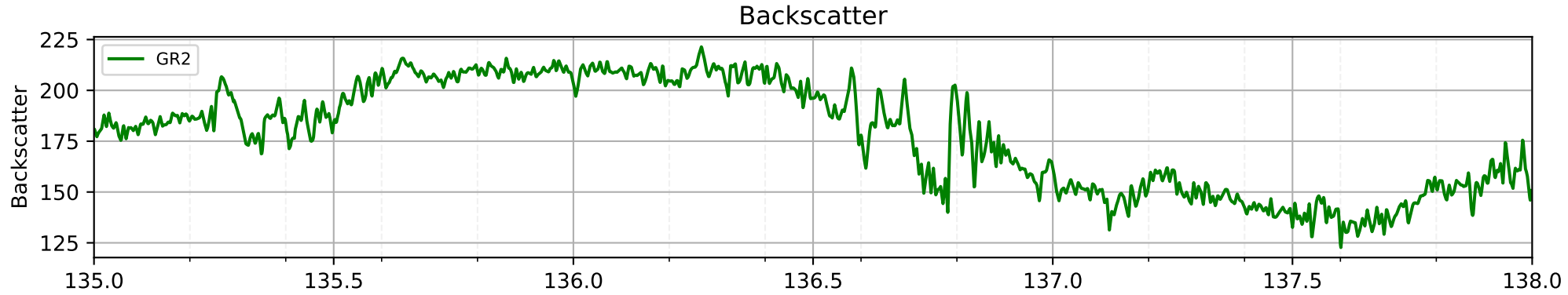
Crossings and Samples



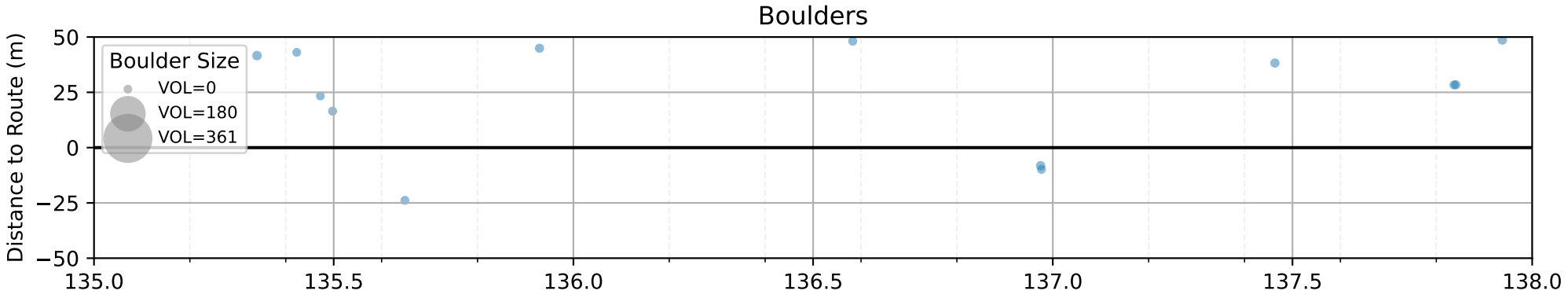
Horizons

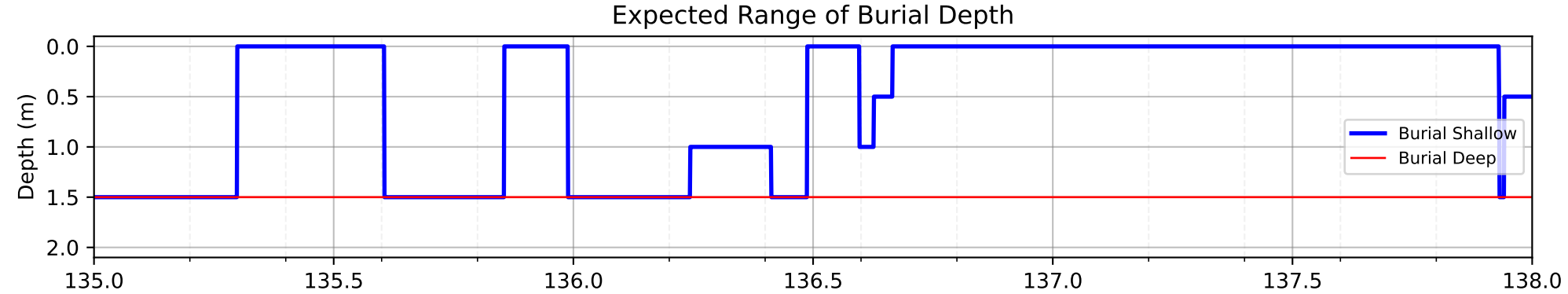


Backscatter

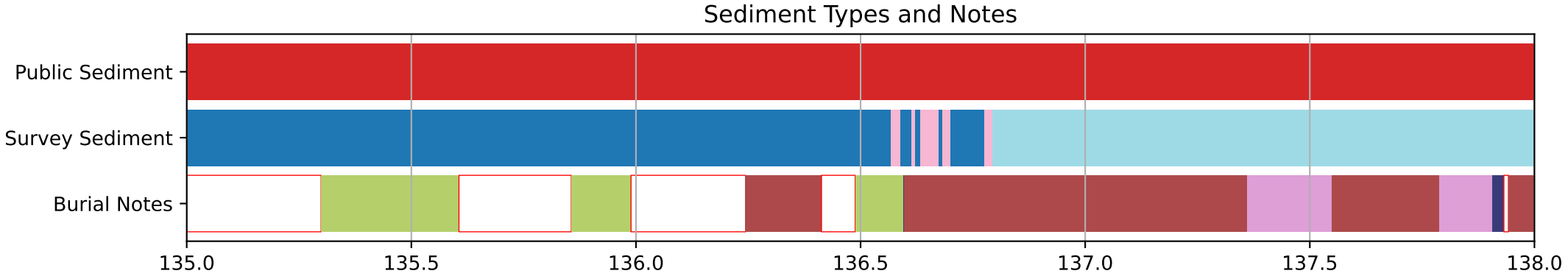


Boulders





Sediment Types and Notes

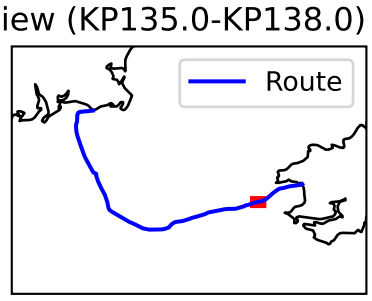


Public Sediment
- GRAVEL

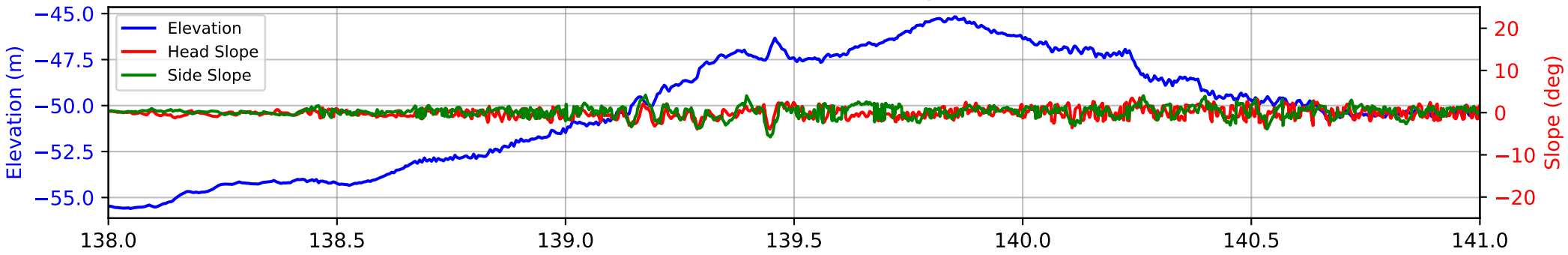
Survey Sediment
- Fine Sediment
- Medium Sediment
- Coarse Sediment

Burial Notes
- No Data
- Boulder Field
- Shallow Reflector H6 (Hardground/Till)
- Shallow Reflector H6 (Hardground/Till), Boulder Field
- Boulder Field, Shallow Reflector H6 (Hardground/Till)

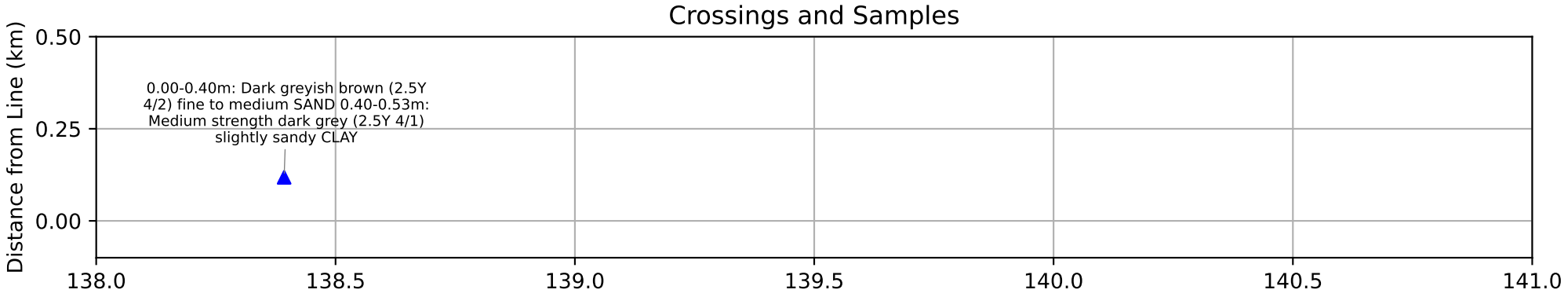
Overview (KP135.0-KP138.0)



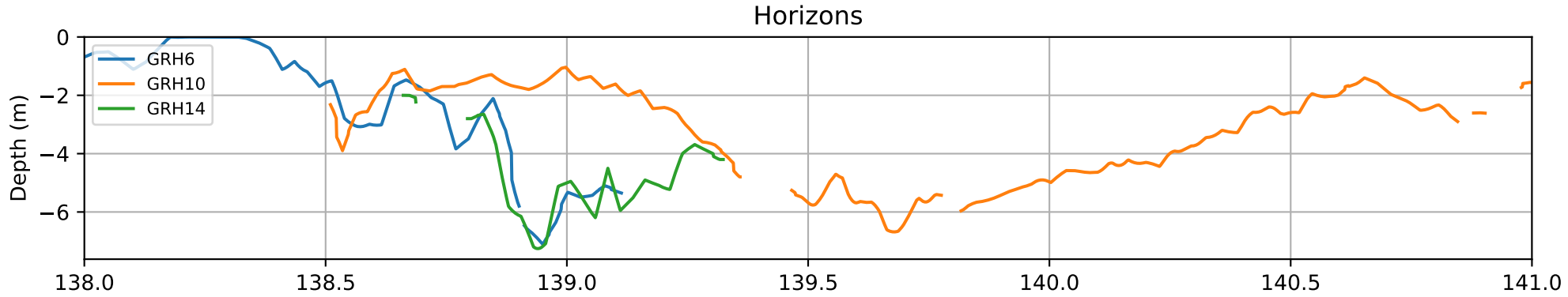
Seabed Elevation and Slopes



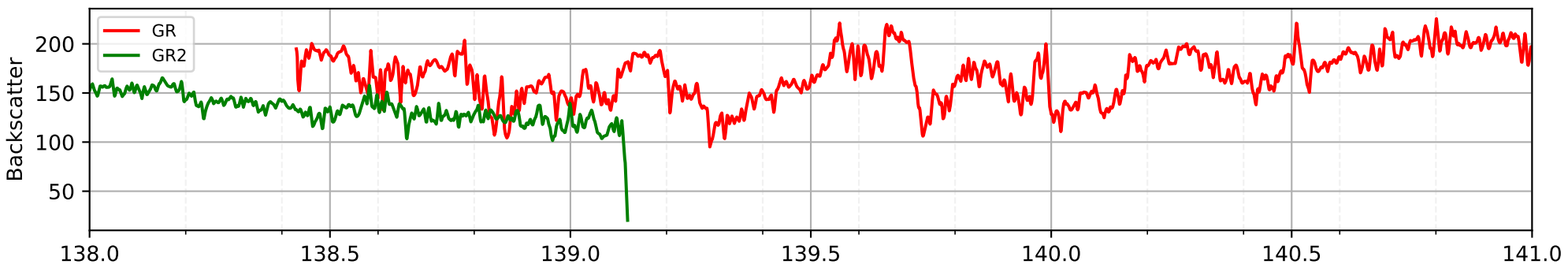
Crossings and Samples



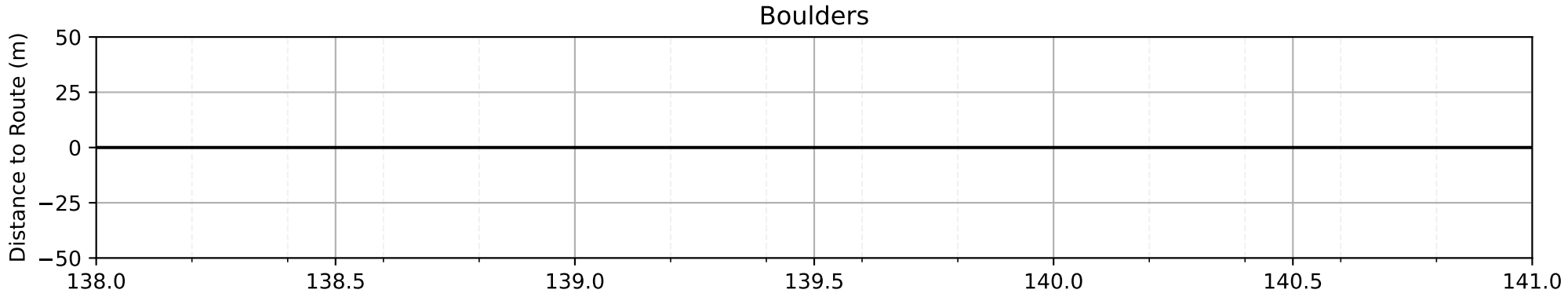
Horizons



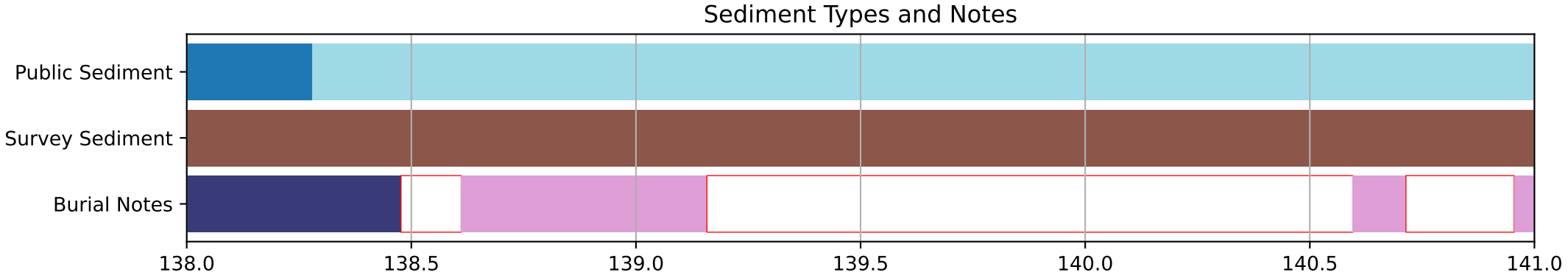
Backscatter



Boulders



Sediment Types and Notes



Public Sediment

- GRAVEL
- SANDY GRAVEL

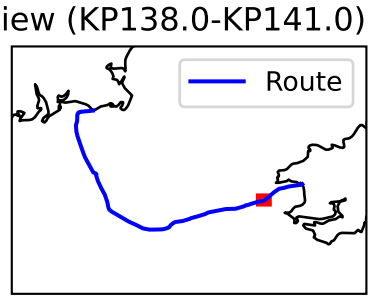
Survey Sediment

- Coarse Sediment

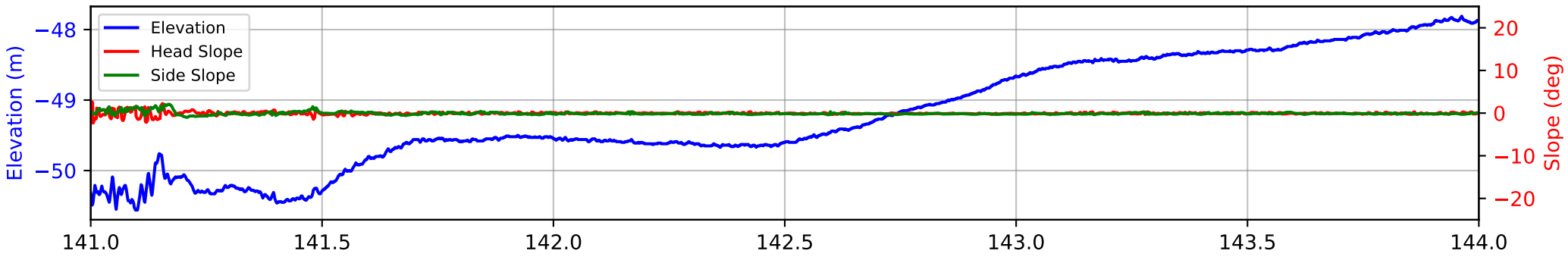
Burial Notes

- Shallow Reflector H6 (Hardground/Till)
- No Data
- Shallow Reflector H10

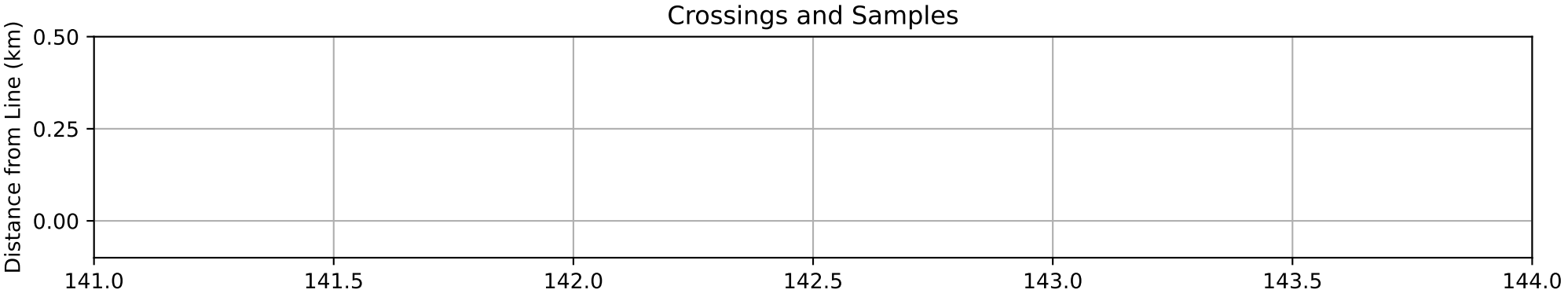
Overview (KP138.0-KP141.0)



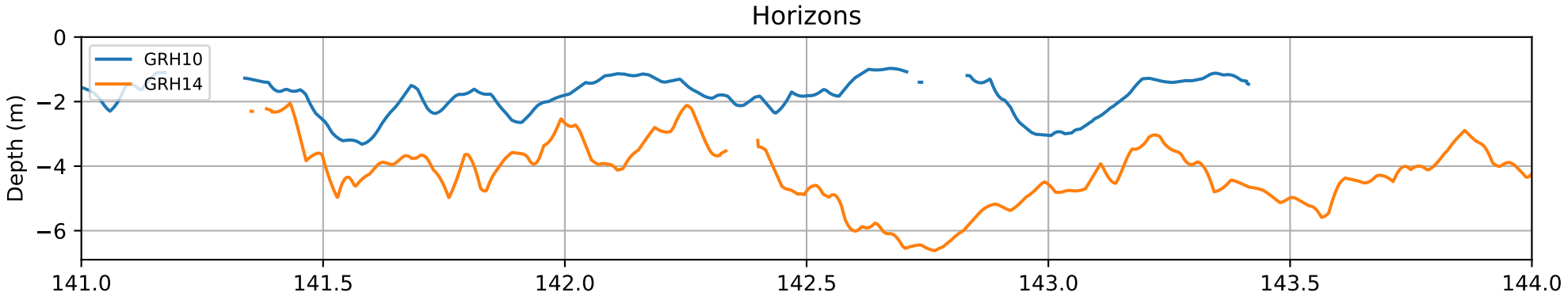
Seabed Elevation and Slopes



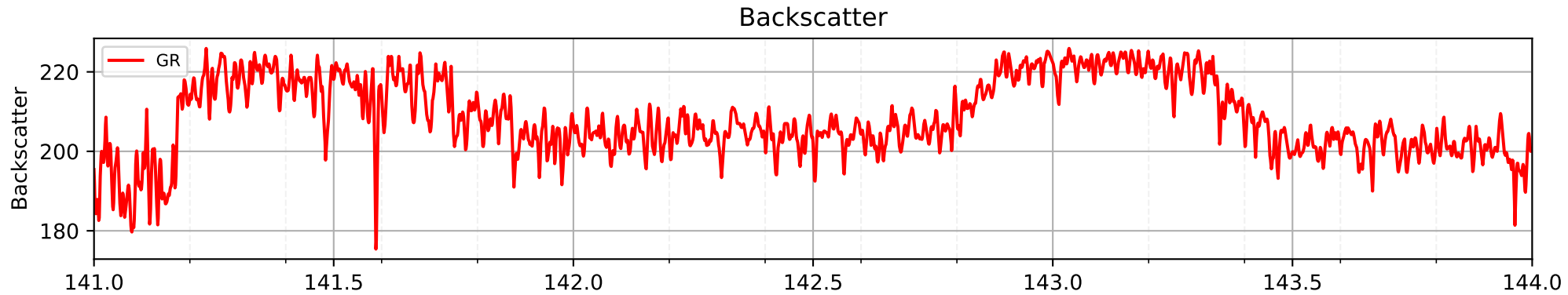
Crossings and Samples



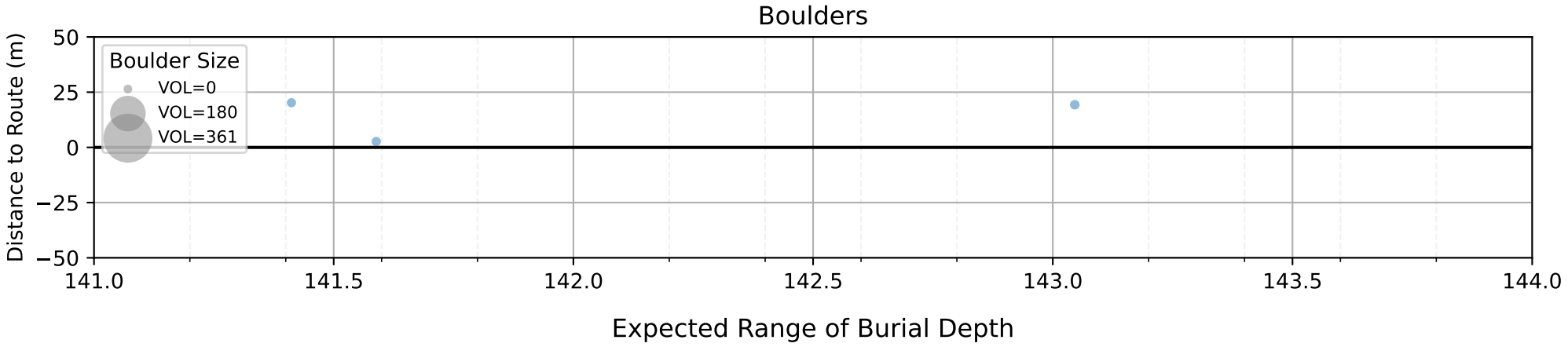
Horizons



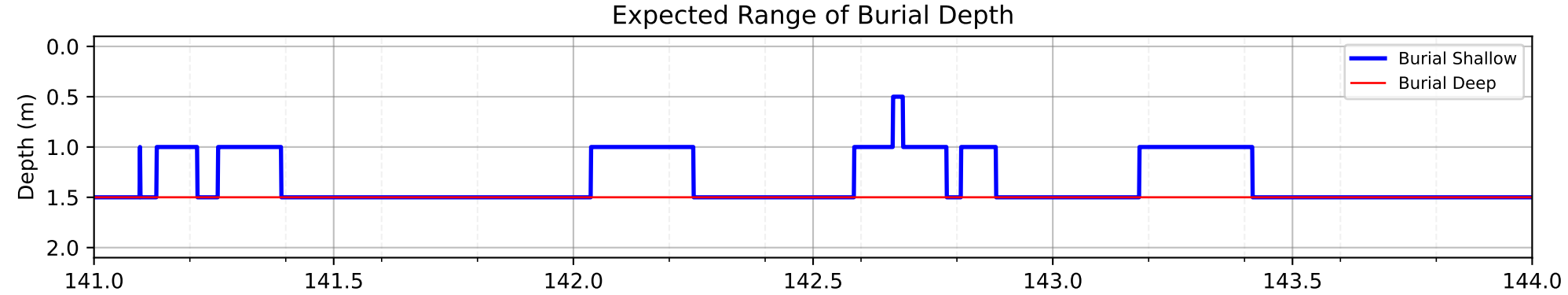
Backscatter



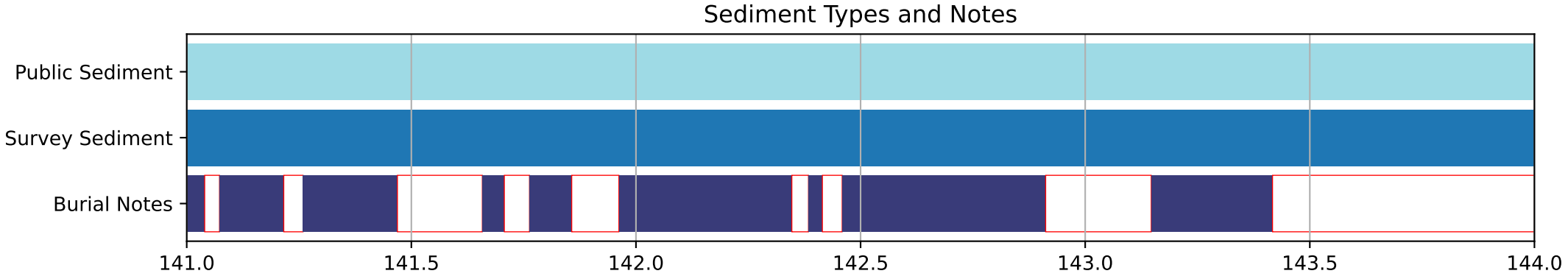
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

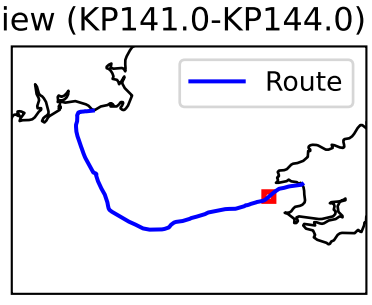


Public Sediment
- SANDY GRAVEL

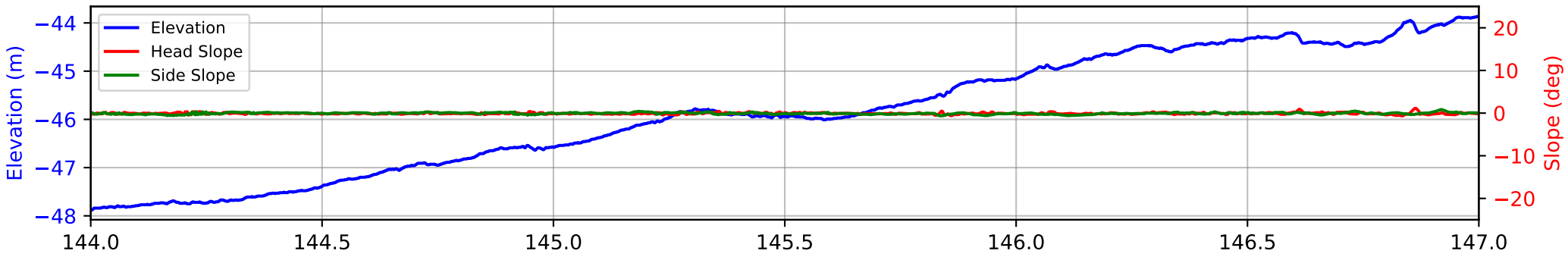
Survey Sediment
- Coarse Sediment

Burial Notes
- Shallow Reflector H10
- No Data

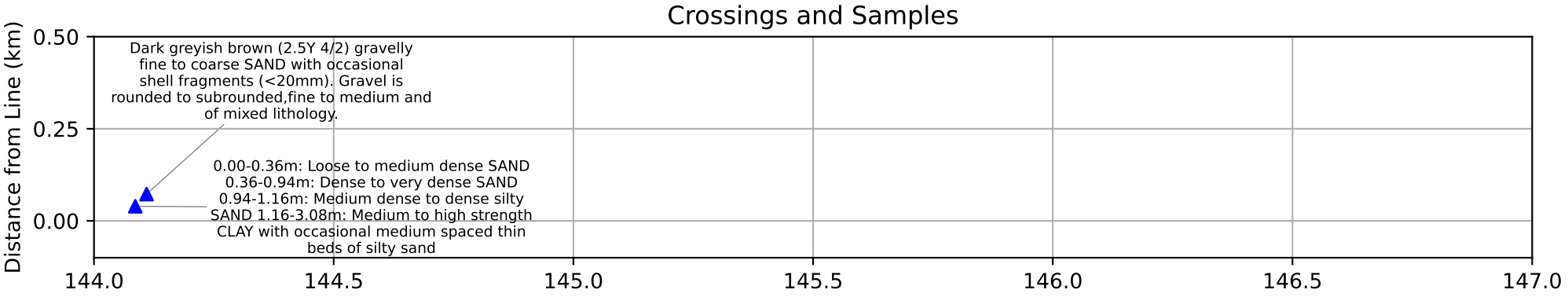
Overview (KP141.0-KP144.0)



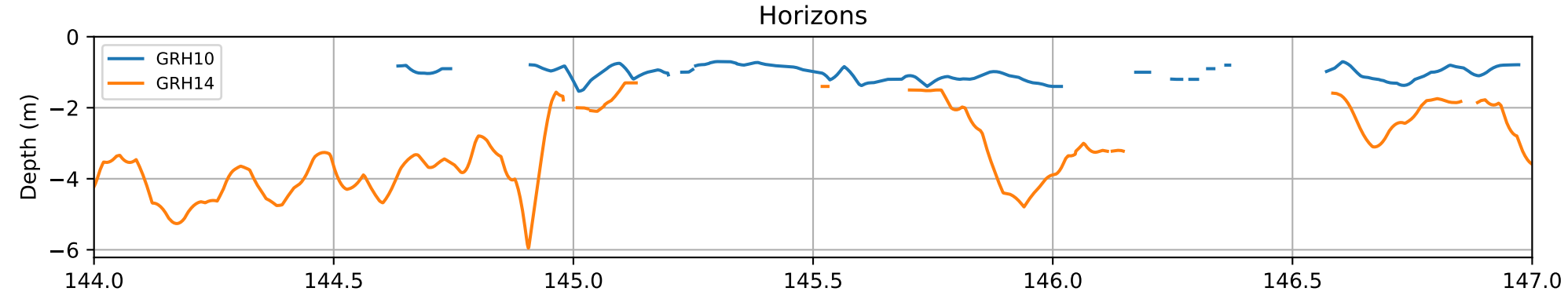
Seabed Elevation and Slopes



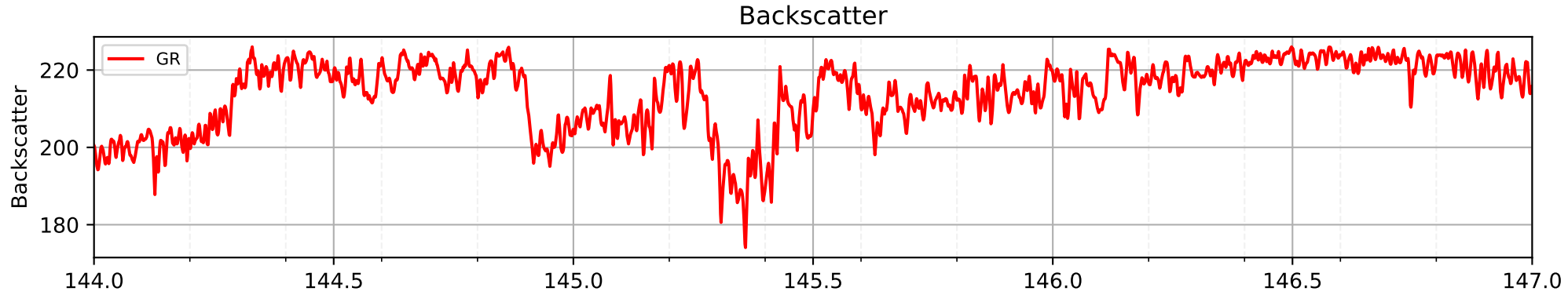
Crossings and Samples



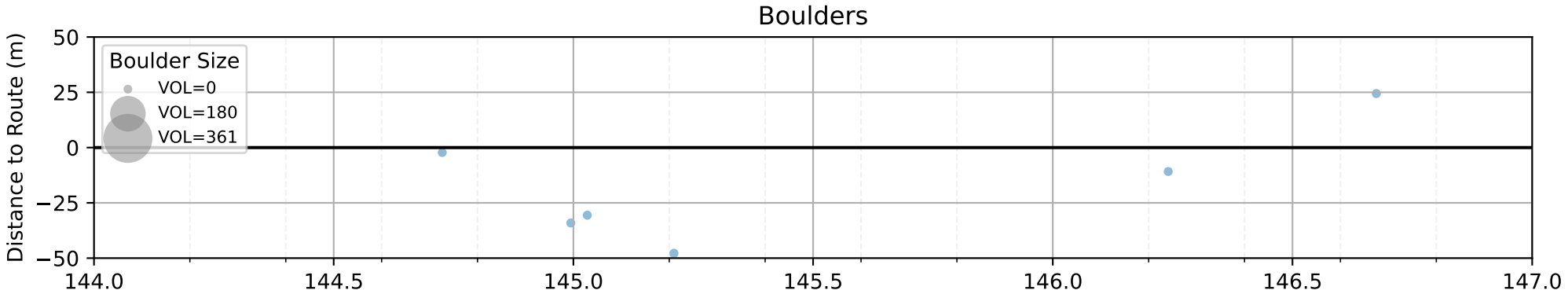
Horizons



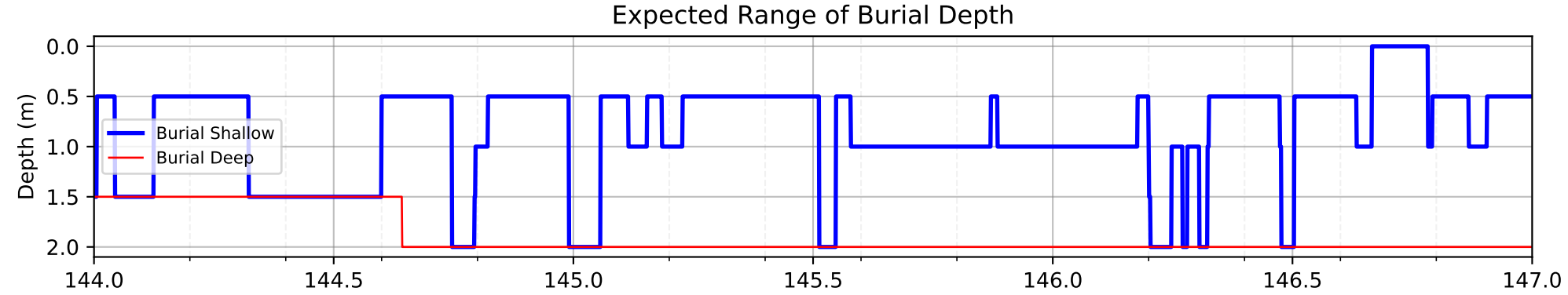
Backscatter



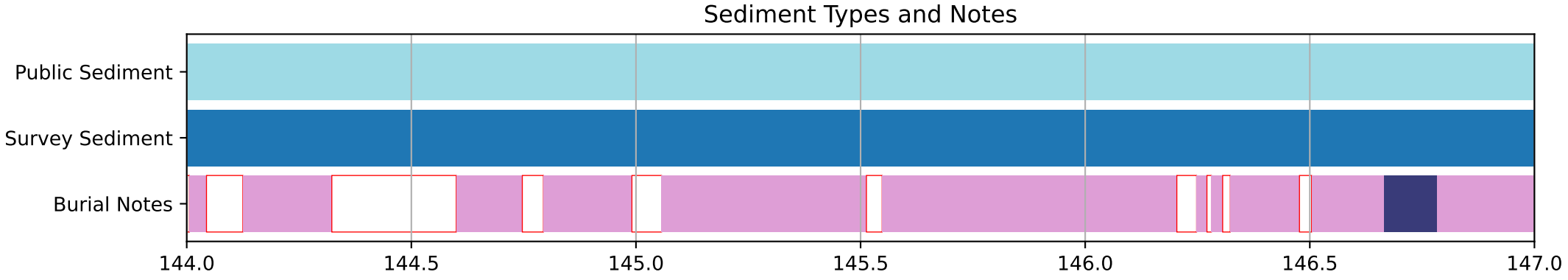
Boulders



Expected Range of Burial Depth



Sediment Types and Notes

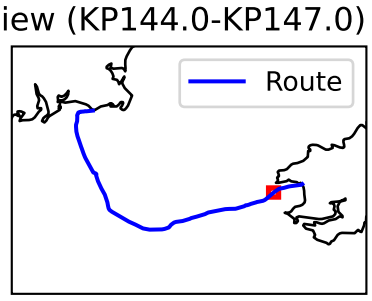


Public Sediment
- SANDY GRAVEL

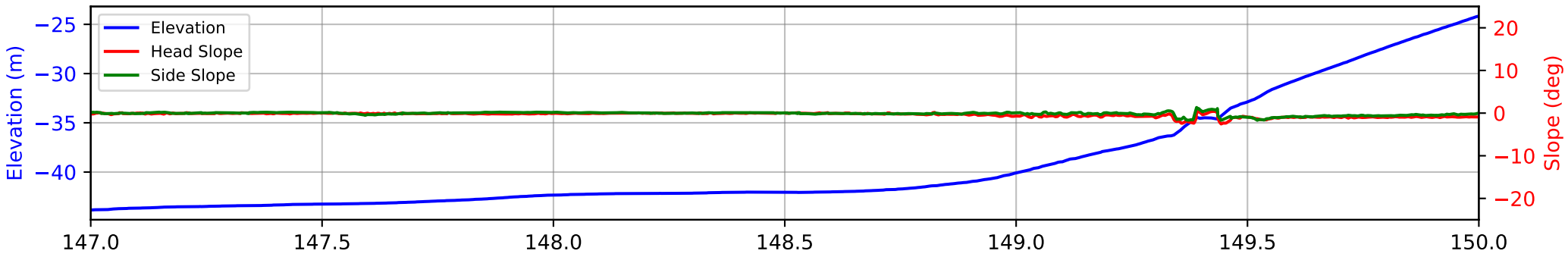
Survey Sediment
- Coarse Sediment

Burial Notes
- No Data
- Shallow Reflector H10
- Shallow Reflector H10, Boulder Field

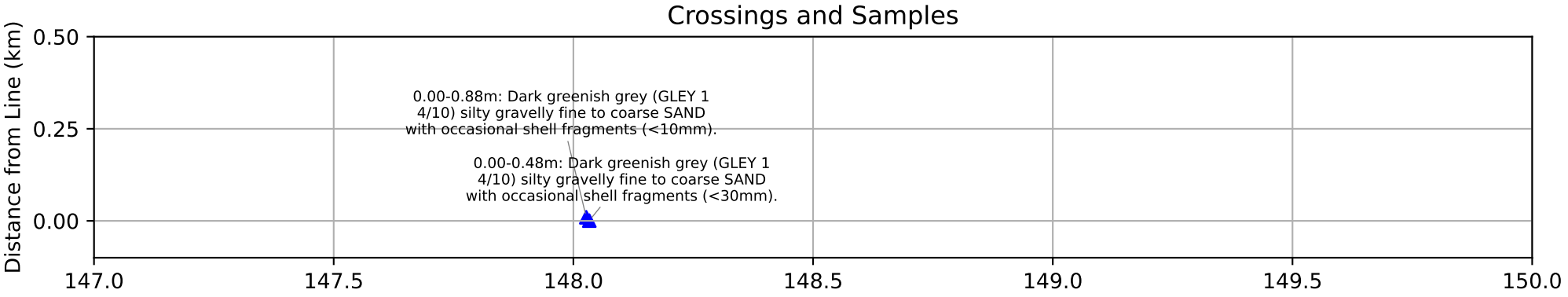
Overview (KP144.0-KP147.0)



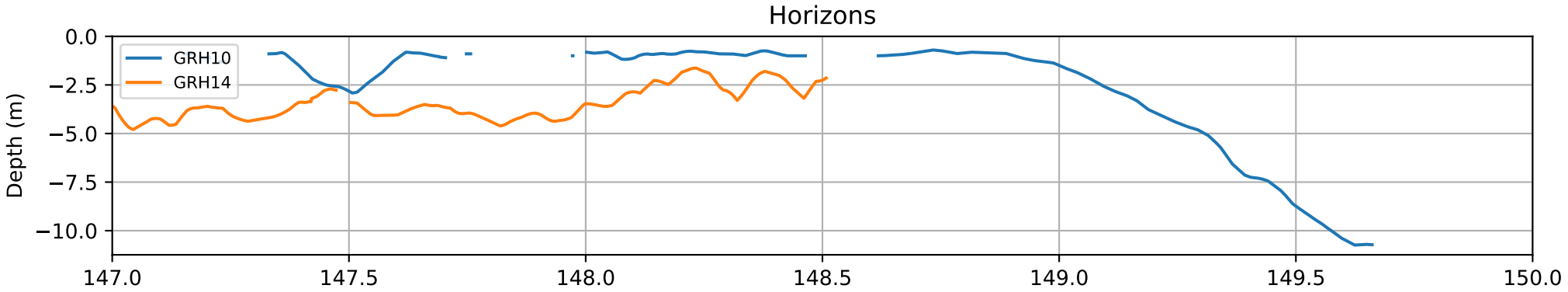
Seabed Elevation and Slopes



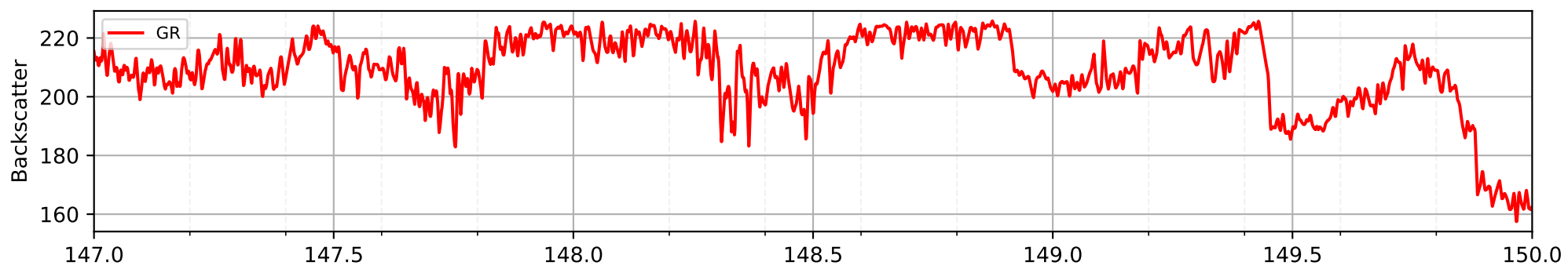
Crossings and Samples



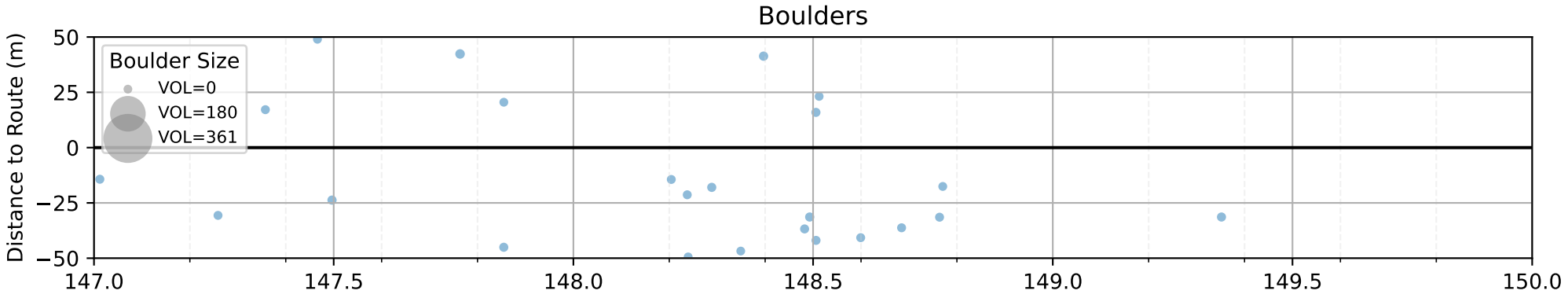
Horizons

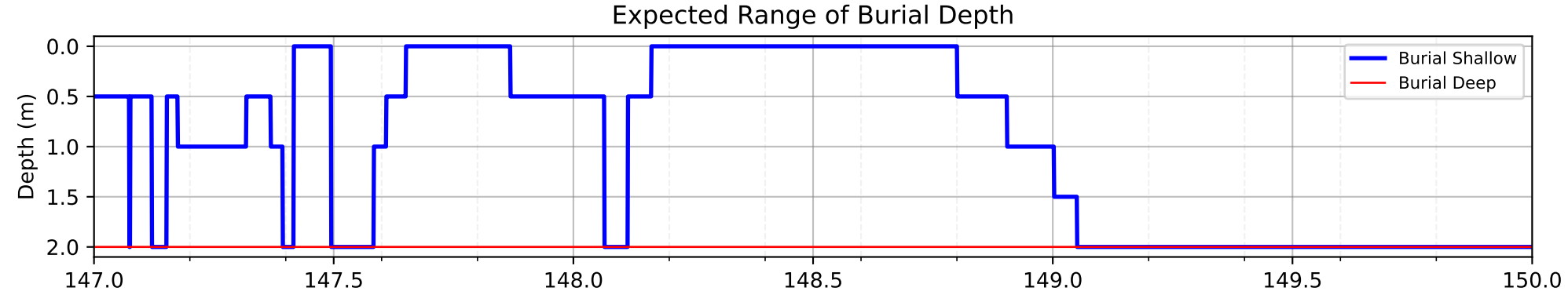


Backscatter

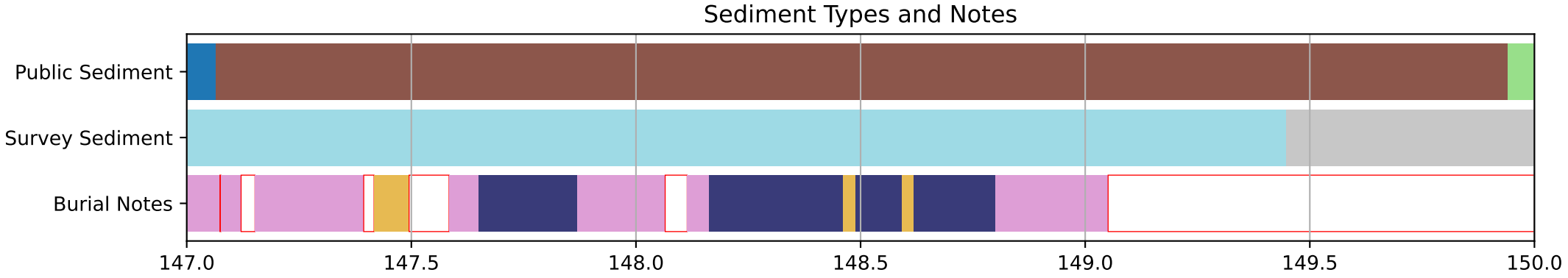


Boulders





Sediment Types and Notes



Public Sediment

- SANDY GRAVEL
- GRAVELLY SAND
- SLIGHTLY GRAVELLY SAND

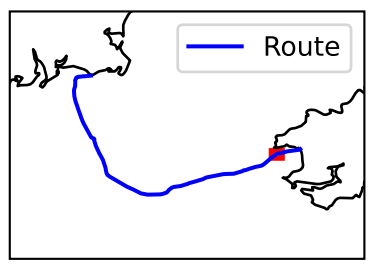
Survey Sediment

- Coarse Sediment
- Fine Sediment

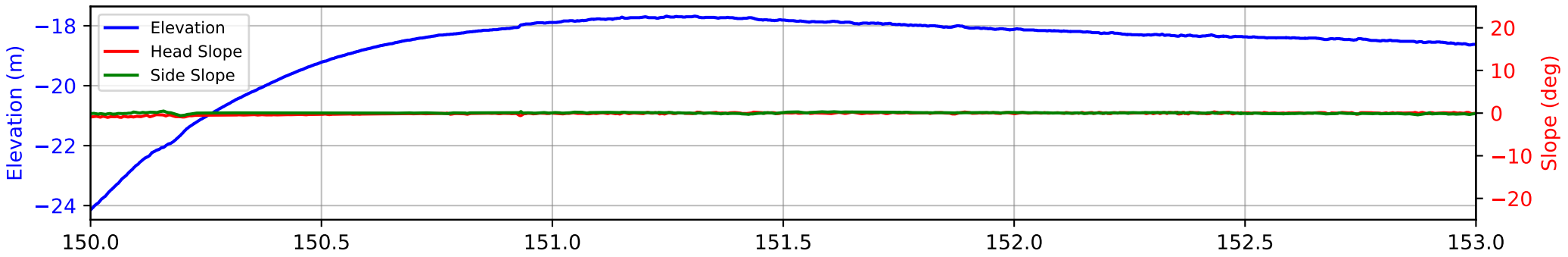
Burial Notes

- Shallow Reflector H10
- No Data
- Boulder Field
- Shallow Reflector H10, Boulder Field

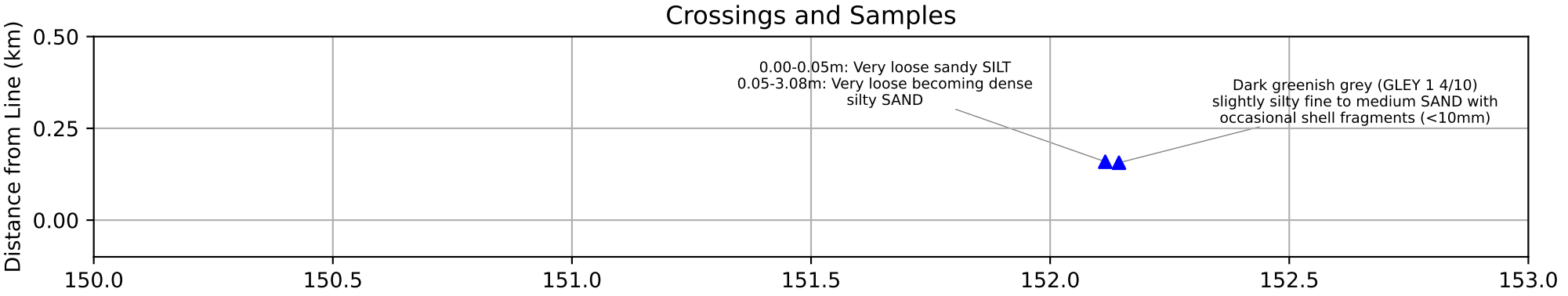
Overview (KP147.0-KP150.0)



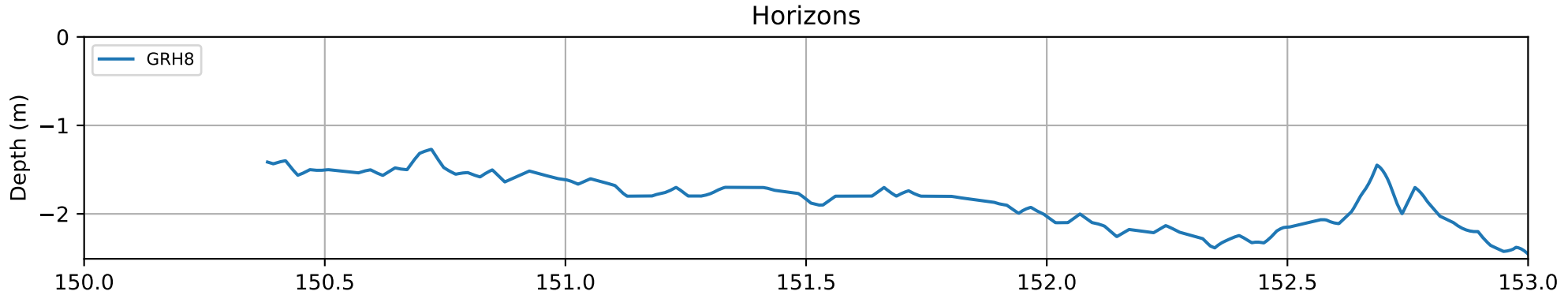
Seabed Elevation and Slopes



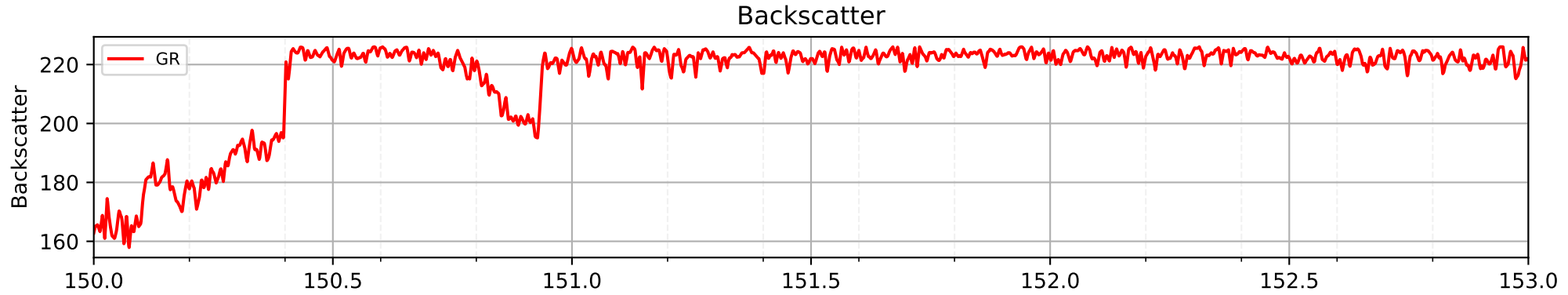
Crossings and Samples



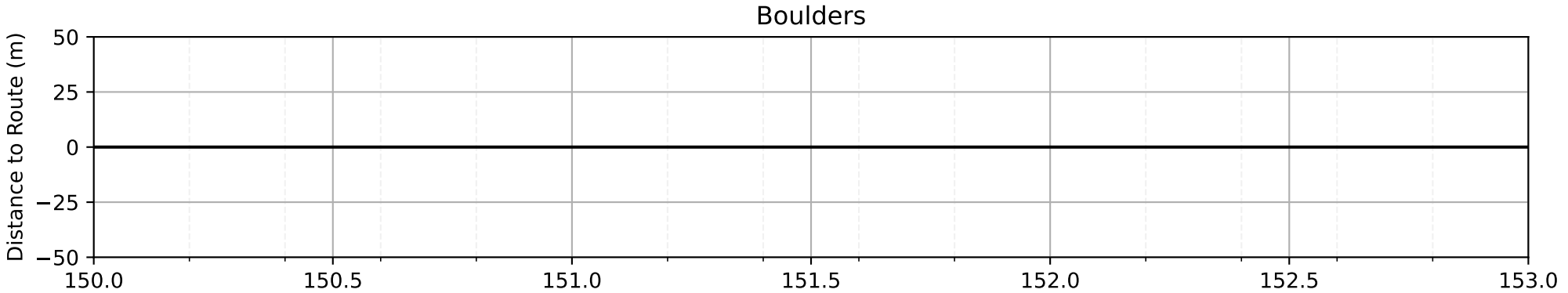
Horizons



Backscatter

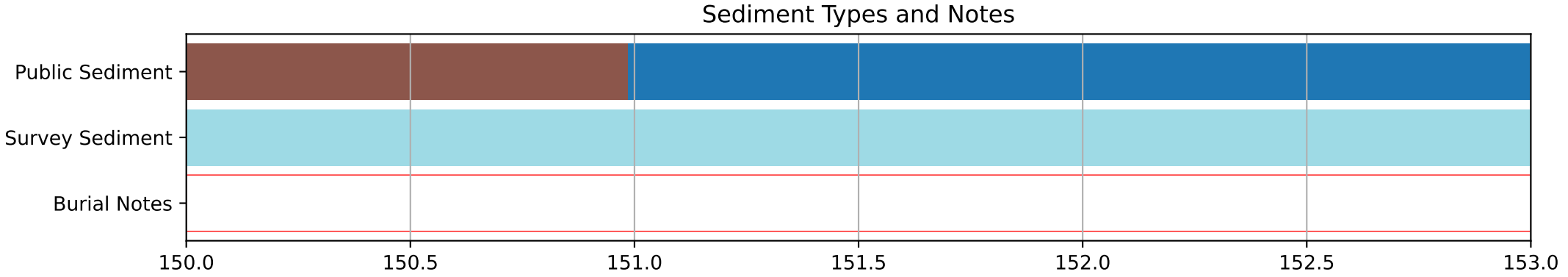


Boulders



Expected Range of Burial Depth

Sediment Types and Notes



Public Sediment

- SLIGHTLY GRAVELLY SAND
- SAND

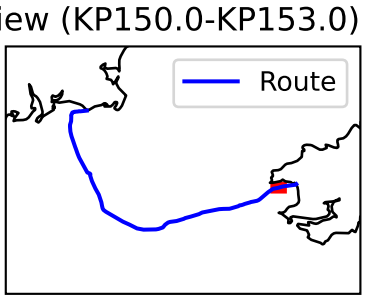
Survey Sediment

- Fine Sediment

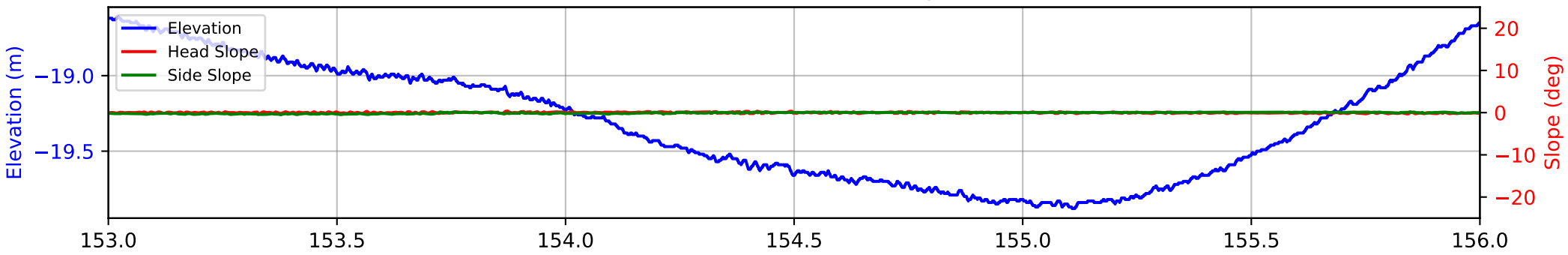
Burial Notes

- No Data

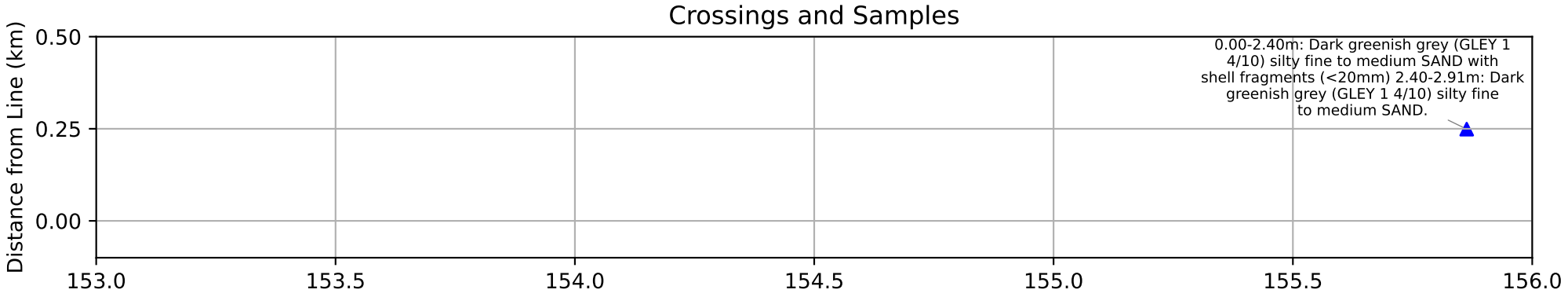
Overview (KP150.0-KP153.0)



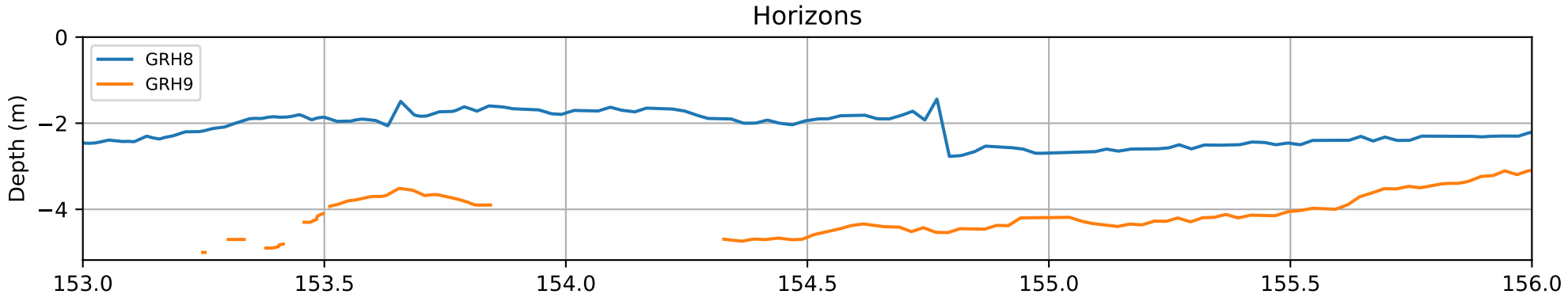
Seabed Elevation and Slopes



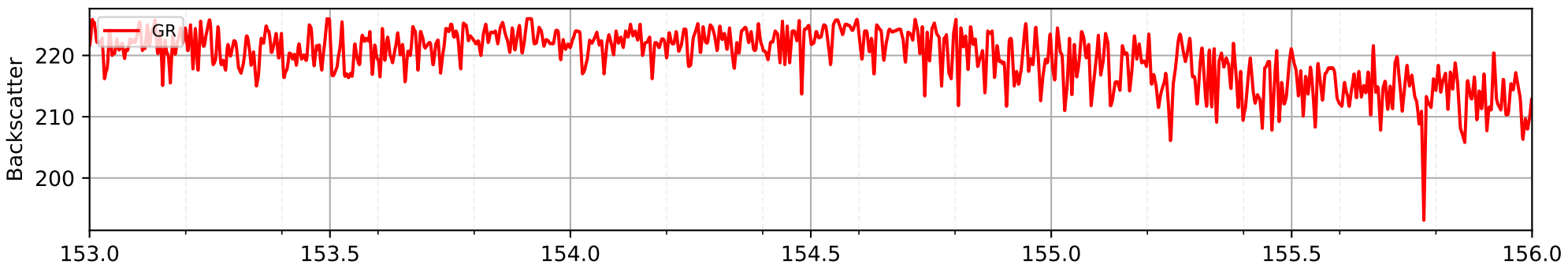
Crossings and Samples



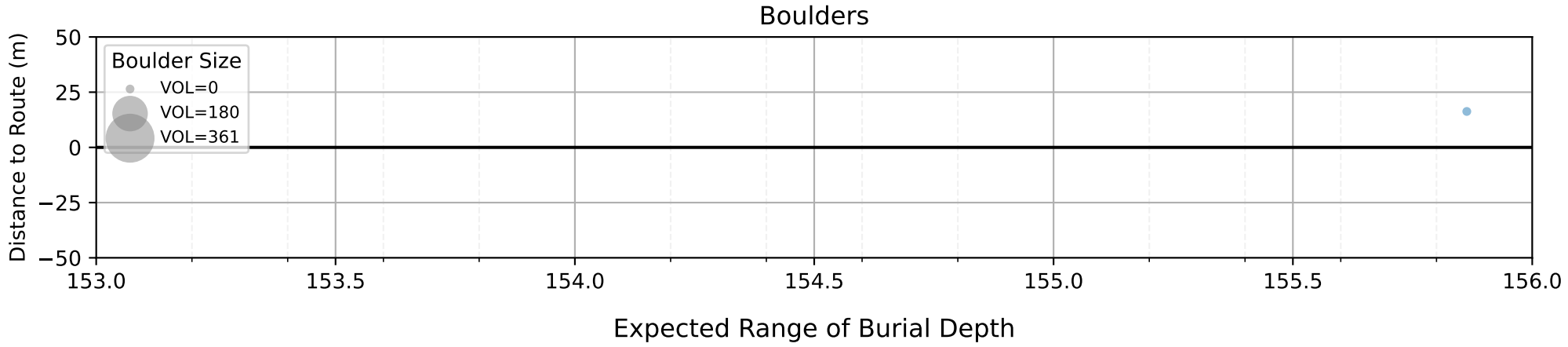
Horizons



Backscatter



Boulders



Sediment Types and Notes

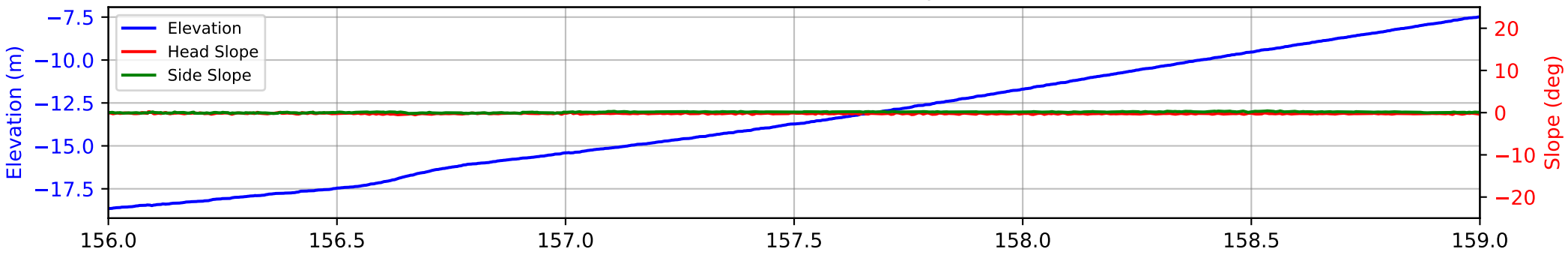
Public Sediment
- SAND
- MUDDY SAND

Survey Sediment
- Fine Sediment

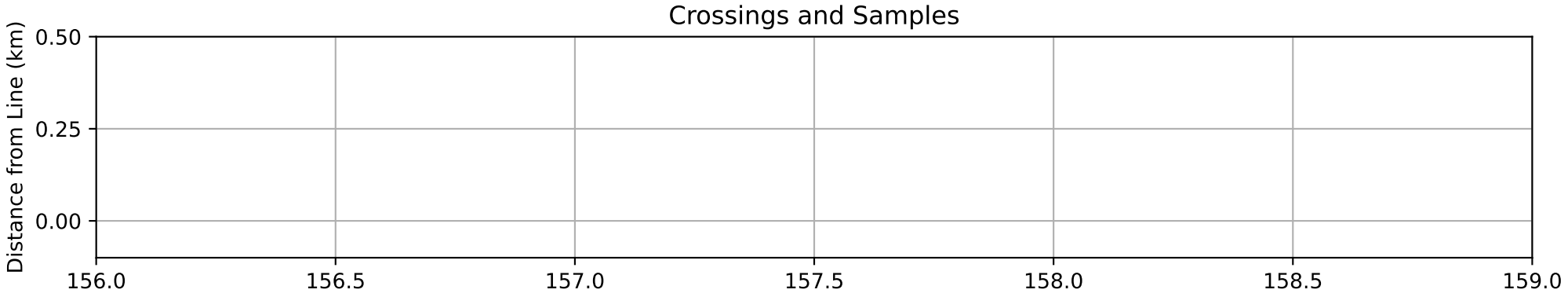
Burial Notes
- No Data

Overview (KP153.0-KP156.0)

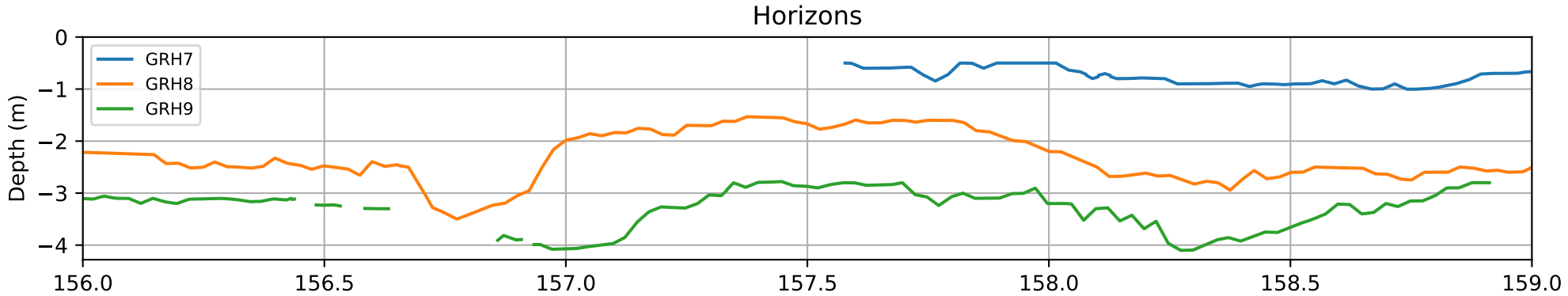
Seabed Elevation and Slopes



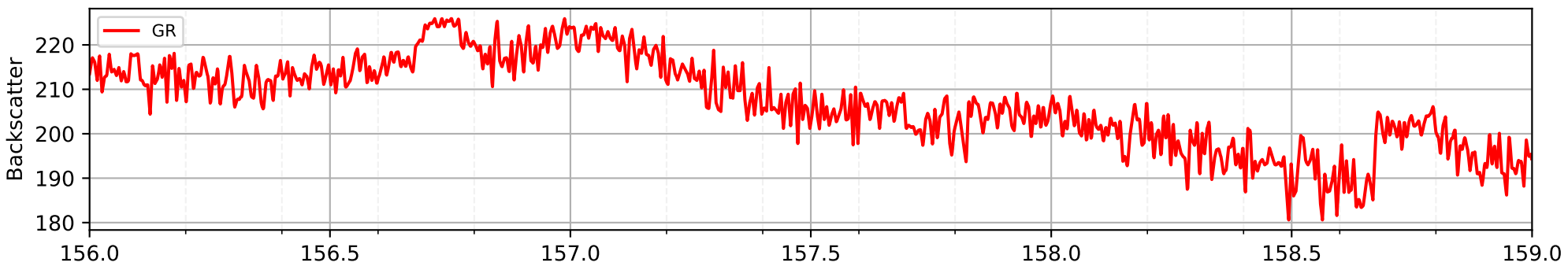
Crossings and Samples



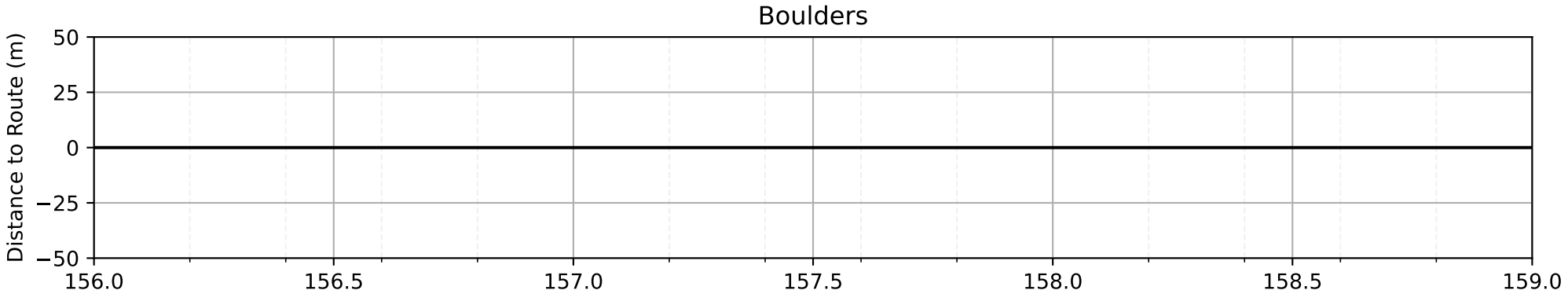
Horizons



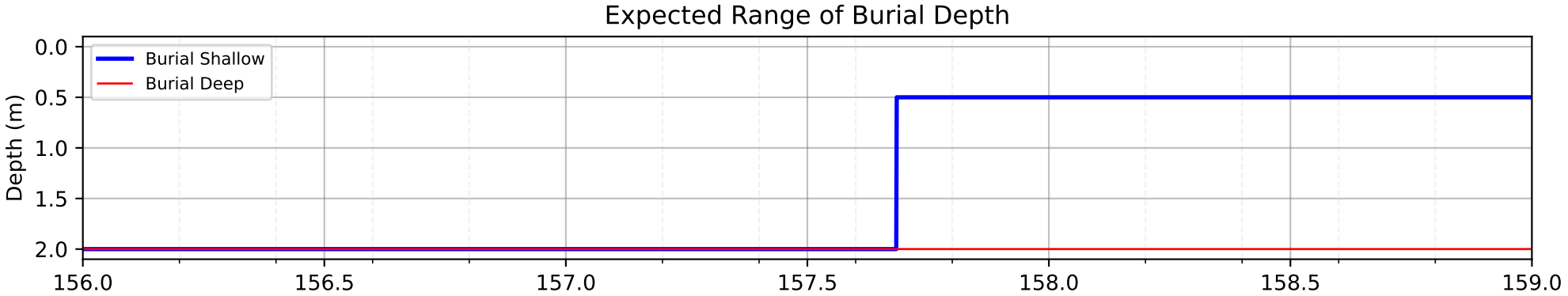
Backscatter



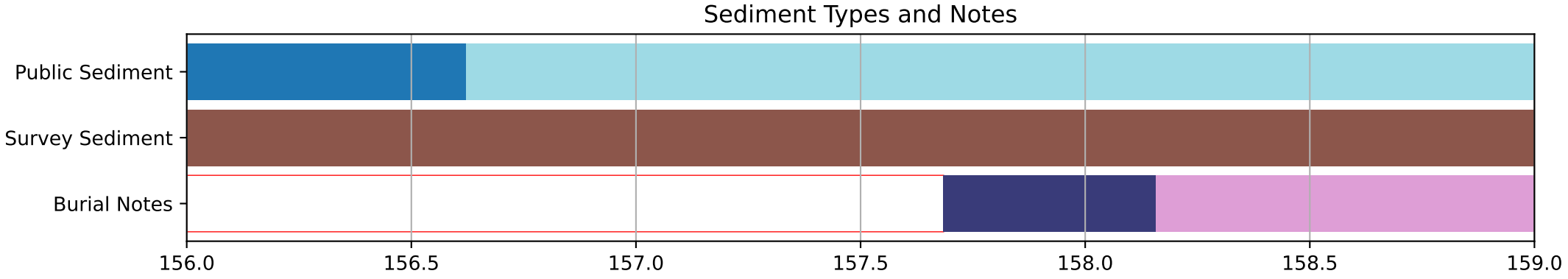
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- MUDDY SAND
- SAND

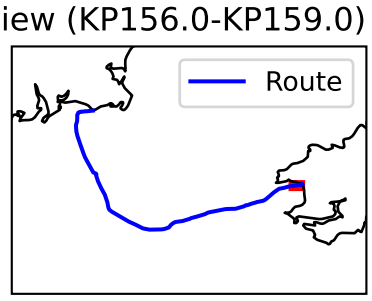
Survey Sediment

- Fine Sediment

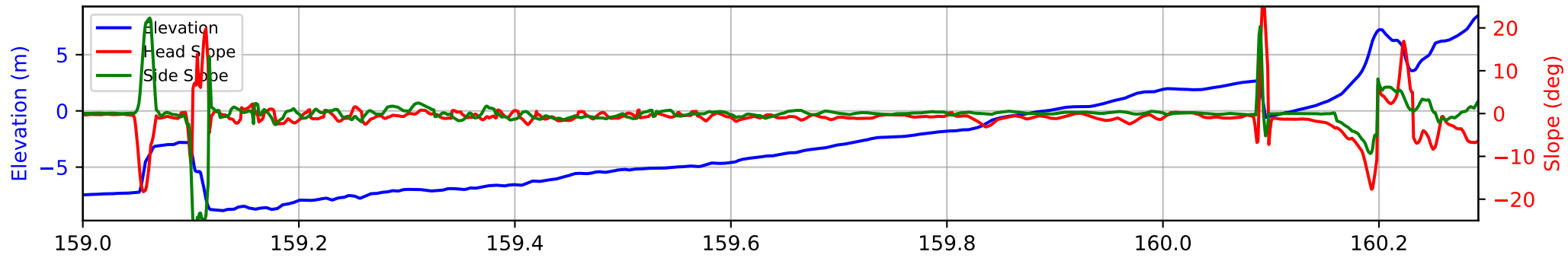
Burial Notes

- No Data
- Shallow Reflector H7 (Till/Bedrock)
- Inshore Trencher, Shallow Reflector H7 (Till/Bedrock)

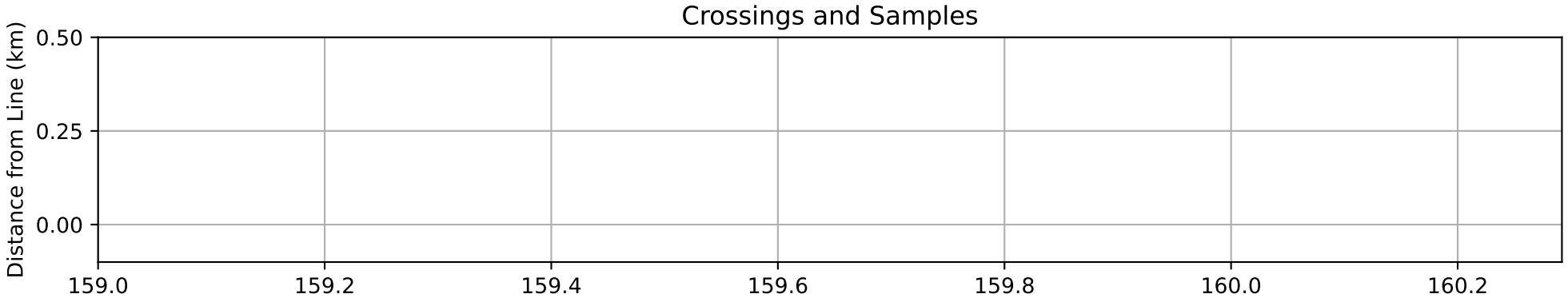
Overview (KP156.0-KP159.0)



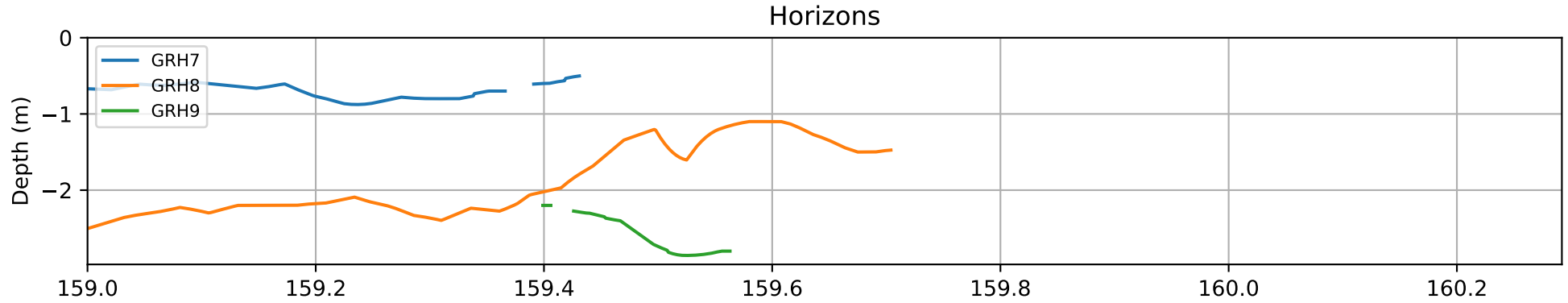
Seabed Elevation and Slopes



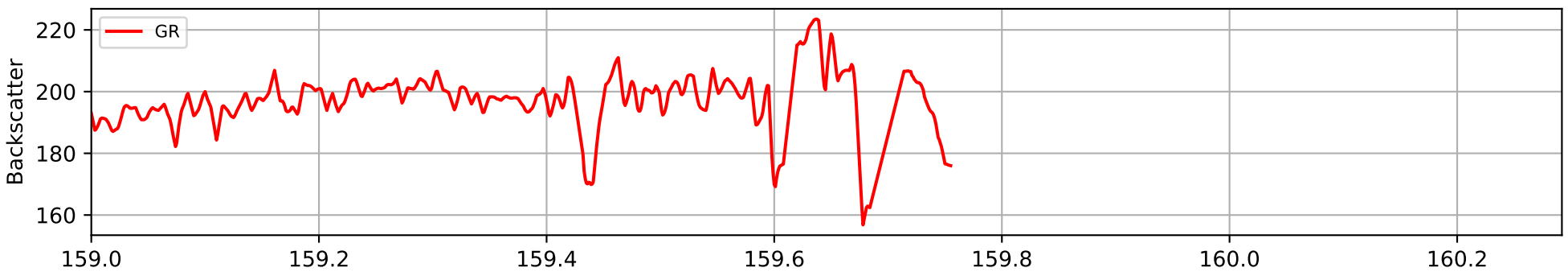
Crossings and Samples



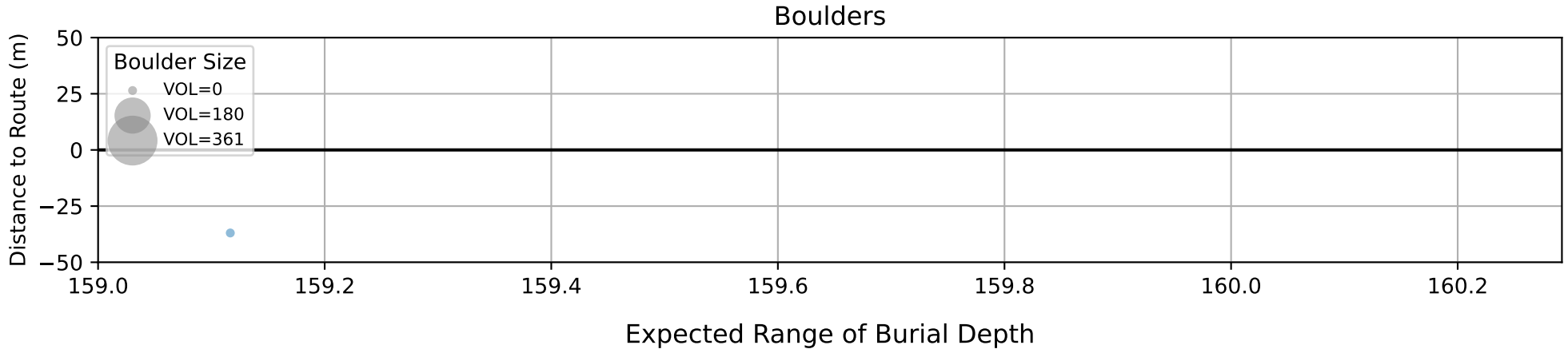
Horizons



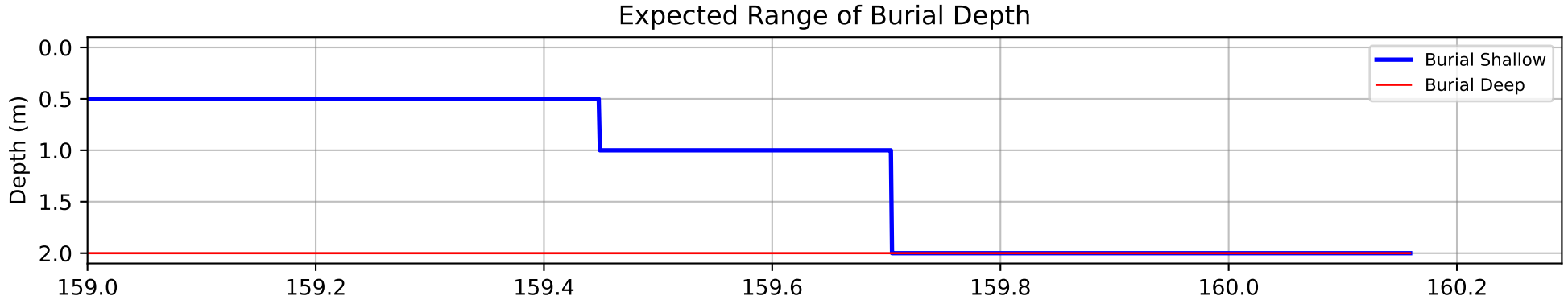
Backscatter



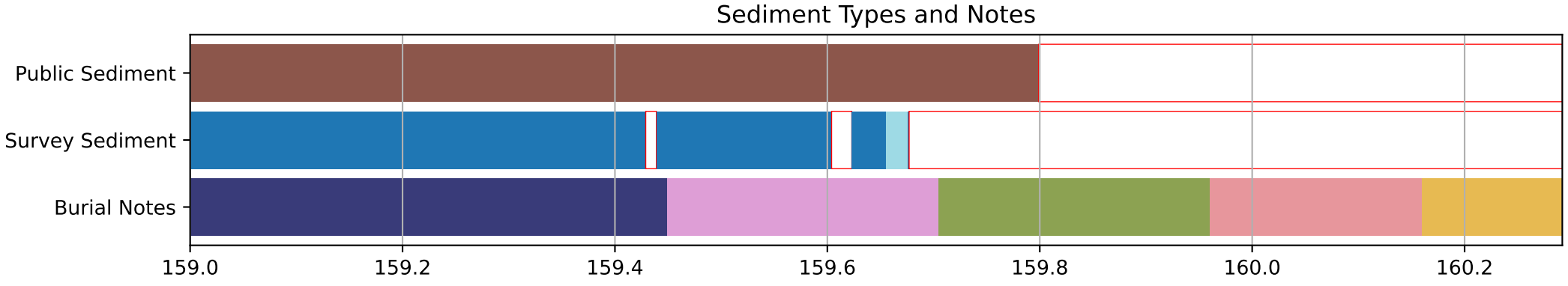
Boulders



Expected Range of Burial Depth



Sediment Types and Notes



Public Sediment

- SAND
- No Data

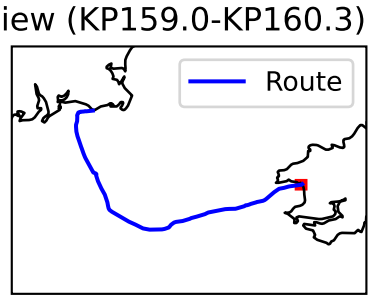
Survey Sediment

- No Data
- Fine Sediment
- Coarse Sediment

Burial Notes

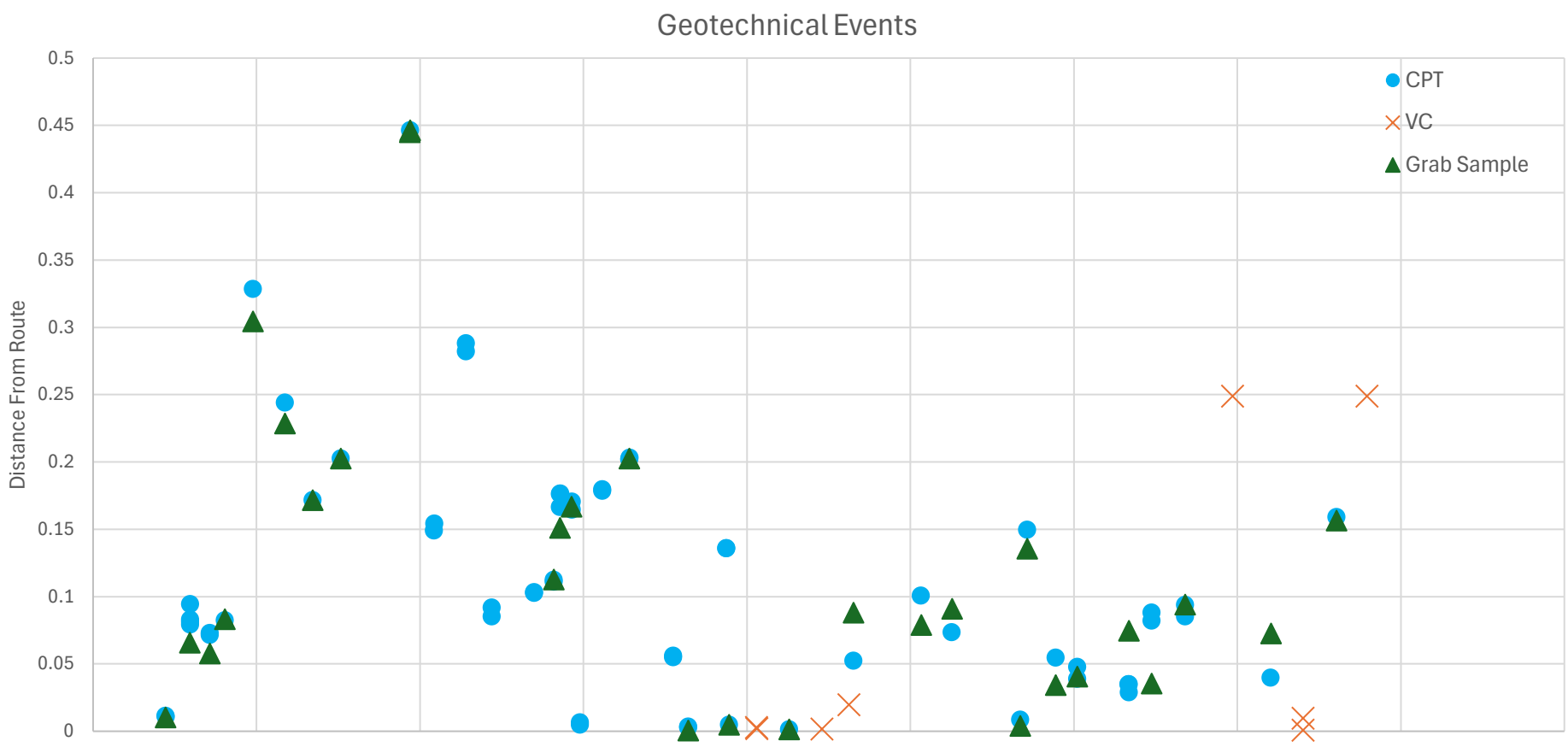
- Inshore Trencher, Shallow Reflector H7 (Till/Bedrock)
- Inshore Trencher, Shallow Reflector H8 Possibly Bedrock
- Inshore Trencher
- Cast Iron, Inshore Trencher
- HDD

Overview (KP159.0-KP160.3)



APPENDIX C – GEOTECHNICAL SUMMARY

Chart and table showing location of geotechnical surveys along the route.



KP	Type	ID	Desc
8.865	Grab	BFT_24G01_GS_20A	Dark greenish grey (GLEY 1 4/10Y) fine to medium SAND with occasional shell fragments (<3mm).
8.885	CPT	BFT_24G01_CPT_20A	0.00-0.44m: Medium dense to dense SAND\n0.44-0.58m: Very dense gravelly SAND\n0.58-1.24m: Very dense slightly silty
8.894	CPT	BFT_24G01_CPT_20A_A	0.00-0.46m: Medium dense to dense SAND\n0.46-0.70m: Dense to very dense gravelly SAND\n0.70-1.14m: Very dense
11.858	Grab	BFT_24G01_GS_21A	Dark greenish grey (GLEY 1 4/10Y) slightly gravelly fine to coarse SAND with occasional shell fragments (<20mm). Gravel is
11.883	CPT	BFT_24G01_CPT_21A_C	0.00-0.24m: Medium dense to dense SAND\n0.24-1.98m: Very dense SAND\n1.98-2.72m: Dense to very dense silty SAND
11.889	CPT	BFT_24G01_CPT_21A	0.00-0.34m: Medium dense to dense SAND\n0.34-1.80m: Very dense SAND
11.893	CPT	BFT_24G01_CPT_21A_B	0.00-0.22m: Medium dense to dense SAND\n0.22-1.92m: Very dense SAND
11.900	CPT	BFT_24G01_CPT_21A_A	0.00-0.20m: Medium dense to dense SAND\n0.20-0.62m: Very dense SAND
14.275	Grab	BFT_24G01_GS_19A	Dark greenish gray (GLEY 1 4/10Y) slightly silty fine to coarse SAND with occasional shell fragments (<20mm).
14.292	CPT	BFT_24G01_CPT_19A	0.00-0.96m: Medium dense to dense SAND\n0.96-1.70m: Dense to very dense SAND
14.300	CPT	BFT_24G01_CPT_19A_A	0.00-0.78m: Medium dense to dense SAND\n0.78-1.30m: Dense to very dense gravelly SAND\n1.30-3.08m: Very dense
16.104	Grab	BFT_24G01_GS_18A	Dark greenish gray (GLEY 1 4/10Y) slightly silty fine to coarse SAND with occasional shell fragments (<30mm).
16.107	CPT	BFT_24G01_CPT_18A	0.00-0.03m: Loose to medium dense silty SAND\n0.03-0.18m: Medium dense SAND\n0.18-0.40m:Loose to medium dense
19.557	Grab	BFT_24G01_GS_17A	SHELL (<80mm) with sand and gravel. Sand is fine to coarse. Gravel is rounded to subrounded, fine and of mixed lithology
19.582	CPT	BFT_24G01_CPT_17A	0.00-0.18m: Very loose to loose SAND\n0.18-0.74m: Loose to medium dense SAND\n0.74-2.72m: Medium dense to dense
23.470	Grab	BFT_24G01_GS_22A	Dark greenish grey (GLEY 1 4/10Y) fine to medium SAND with occasional shell fragments (<20mm) and pockets of black
23.493	CPT	BFT_24G01_CPT_22A	0.00-3.06m: Loose to dense SAND
26.851	CPT	BFT_24G01_CPT_24A	0.00-1.72m: Loose to medium dense SAND\n1.72-2.50m: Medium dense to dense SAND\n2.50-3.04m: Dense to very dense
26.851	Grab	BFT_24G01_GS_24A	Dark greenish grey (GLEY 1 4/10Y) fine to medium SAND with occasional shell fragments (<20mm) and pockets of black
30.296	CPT	BFT_24G01_CPT_23A	0.00-3.04m: Loose to dense SAND
30.296	Grab	BFT_24G01_GS_23A	Dark greenish gray (GLEY 1 4/10Y) slightly silty fine to medium SAND with occasional shell fragments (<20mm).
38.769	Grab	S1-S-GS01	Shelly fine SAND with numerous shell fragments
38.774	CPT	S1-S-CP01	2.1 m medium dense to dense SAND
38.774	Grab	S1-S-GS02	Shelly fine SAND with numerous shell fragments and occasional shells
41.736	CPT	S1-S-CP02A	0.89 m very loose to medium dense SAND over 0.18 m dense SAND
41.739	CPT	S1-S-CP02	0.90 m very loose to medium dense SAND over 0.08 m dense SAND
45.620	CPT	S1-S-CP03A	0.48 m very loose to dense SAND
45.621	CPT	S1-S-CP03	0.45 m very loose to dense SAND
48.773	CPT	S1-S-CP04A	0.54 m very loose to dense SAND
48.775	CPT	S1-S-CP04	0.56 m very loose to dense SAND
53.964	CPT	S1-S-CP05A	0.42 m very loose to dense SAND
53.966	CPT	S1-S-CP05	0.38 m very loose to medium dense SAND over 0.37 m dense SAND
56.354	Grab	S1-S-GS03	Slightly clayey fine SAND with numerous shell fragments
56.355	CPT	S1-S-CP06A	0.32 m very loose to dense SAND
56.355	CPT	S1-S-CP06	0.30 m medium dense to very dense SAND
57.117	Grab	BFT_24G01_GS_15A	Dark greyish brown (2.5Y 4/2) fine to medium SAND with occasional shell fragments (<20mm)

KP	Type	ID	Desc
57.141	CPT	BFT_24G01_CPT_15A_B	0.00-0.50m: Loose becoming medium dense SAND\n0.50-2.18m: Dense to very dense SAND
57.141	CPT	BFT_24G01_CPT_15A	0.00-2.20m: Loose becoming very dense SAND
57.151	CPT	BFT_24G01_CPT_15A_A	0.00-0.14m: Loose becoming medium dense SAND\n0.14-2.24m: Dense to very dense SAND
58.522	Grab	BFT_24G01_GS_16A	Dark greyish brown (2.5Y 4/2) fine to medium SAND with occasional shell fragments (<20mm) and pockets of black organic matter (<30mm)
58.590	CPT	BFT_24G01_CPT_16A_A	0.00-0.84m: Medium dense to dense SAND\n0.84-1.90m: Very dense slightly gravelly SAND
58.599	CPT	BFT_24G01_CPT_16A	0.00-0.82m: Medium dense to dense SAND\n0.82-1.30m: Very dense slightly gravelly SAND
59.576	CPT	S1-S-CP07	0.46 m very loose to dense SAND
59.576	CPT	S1-S-CP07A	0.51 m very loose to dense SAND
62.332	CPT	S1-S-CP08A	0.72 m very loose to dense SAND
62.332	CPT	S1-S-CP08	0.54 m very loose to dense SAND
65.627	Grab	S1-S-GS04	Fine SAND with occasional shell fragments
65.629	CPT	S1-S-CP09	0.57 m very loose to dense SAND
65.631	CPT	S1-S-CP09A	0.55 m very loose to dense SAND
70.971	CPT	S1-S-CP10	0.54 m very loose to dense SAND
70.972	CPT	S1-S-CP10A	0.64 m very loose to dense SAND
72.805	Grab	S1-S-GS05	Fine to medium SAND with isolated shells and numerous shell fragments
72.809	CPT	S1-S-CP11A	0.39 m very loose to dense SAND
72.809	CPT	S1-S-CP11	0.39 m very loose to dense SAND
77.472	CPT	S1-S-CP12	0.91 m very loose to medium dense SAND over 0.42 m very loose to dense shelly SAND
77.473	CPT	S1-S-CP12A	0.57 m very loose to medium dense SAND over 0.41 m very loose to medium dense silty SAND
77.795	CPT	BFT_24G01_CPT_14A	0.00-1.62m: Very loose to medium dense SAND\n1.62-3.06m: Loose to dense SAND
77.795	Grab	BFT_24G01_GS_14A	Dark greenish grey (GLEY 1 4/10Y) fine to medium SAND with occasional shell fragments (<5mm).
81.180	Core	BFT_24G01_VC_A5	0.00-1.56m: Dark greenish grey (GLEY 1 4/10) fine to medium SAND
81.190	Core	BFT_24G01_VC_A5_A	0.00-1.48m: Dark greenish grey (GLEY 1 4/10) fine to medium SAND
85.180	CPT	BFT_24G01_CPT_13A	0.00-0.74m: Very loose to loose SAND\n0.74-1.92m: Medium dense to dense SAND\n1.92-3.04m: Medium strength CLAY
85.180	Grab	BFT_24G01_GS_13A	Dark greyish brown (2.5Y 4/2) fine to medium SAND with occasional shell fragments (<10mm)
89.180	Core	BFT_24G01_VC_A4	0.00-1.70m: Dark greenish grey (GLEY 1 4/10) slightly silty fine to medium SAND\n1.70-2.50m: Low strength dark grey (GLEY 1 4/N) slightly gravelly CLAY
92.455	Core	BFT_24G01_VC_A6	0.00-0.75m: Dark greenish grey (GLEY 1 4/10) fine to medium SAND\n0.75-2.51m: Low to medium strength dark grey (GLEY 1 4/N) slightly gravelly CLAY
93.047	CPT	BFT_24G01_CPT_12A	0.00-0.30m: Very loose to loose SAND\n0.30-1.46m: Dense to very dense SAND\n1.46-3.06m: Low to medium strength CLAY
93.058	Grab	BFT_24G01_GS_12A	Dark greenish grey (GLEY 1 4/10Y) slightly silty fine to medium SAND with occasional shell fragments (<30mm).
101.287	CPT	BFT_24G01_CPT_11A	0.00-1.28m: Medium dense to dense SAND\n1.28-3.10m: Dense to very dense SAND
101.306	Grab	BFT_24G01_GS_11A	Dark greyish brown (2.5Y 4/2) medium to coarse SAND with frequent shell fragments (<10mm)
105.075	CPT	BFT_24G01_CPT_10A	0.00-1.50m: Medium dense to dense SAND\n1.50-3.06m: Dense to very dense SAND
105.102	Grab	BFT_24G01_GS_10A	Dark greyish brown (2.5Y 4/2) slightly gravelly medium to coarse SAND with occasional shell fragments (<15mm). Gravel is rounded, fine and of mixed lithology.
113.431	CPT	BFT_24G01_CPT_9A	0.00-0.32m: Very loose to dense SAND\n0.32-0.52m: Low to medium strength CLAY\n0.52-0.65m: Dense to very dense SAND\n0.65-2.14m: High strength CLAY\n2.14-2.27m: Medium dense SAND\n2.27-3.08m: High strength CLAY
113.456	Grab	BFT_24G01_GS_9A	Dark greyish brown (2.5Y 4/2) slightly gravelly fine to coarse SAND with shell fragments (<35mm) and seaweed. Gravel is rounded to subrounded,fine to medium and of mixed lithology.
114.277	CPT	BFT_24G01_CPT_8A	0.00-0.06m: Very loose gravelly SAND\n0.06-0.40m: Loose to medium dense SAND\n0.40-0.94m: Medium becoming high strength CLAY\n0.94-1.05m: Very dense SAND\n1.05-3.08m: High to very high strength silty CLAY with medium to widely sapced thin beds of sand/silt
114.312	Grab	BFT_24G01_GS_8A	Dark greyish brown (2.5Y 4/2) gravelly fine to coarse SAND with shell fragments (<30mm). Gravel is rounded to subrounded,fine to medium and of mixed lithology.
117.787	CPT	BFT_24G01_CPT_7A	0.00-0.07m: Very loose gravelly SAND\n0.07-1.36m: Medium dense to very dense SAND\n1.36-1.60m: Medium strength CLAY\n1.60-1.66m: Very dense SAND
117.795	Grab	BFT_24G01_GS_7A	Dark greyish brown (2.5Y 4/2) gravelly fine to coarse SAND with shell fragments (<35mm) and seaweed. Gravel is rounded to subrounded,fine to medium and of mixed lithology.
120.396	CPT	BFT_24G01_CPT_6A_A	0.00-0.12m: Very loose SAND\n0.12-0.76m: Dense to very dense gravelly SAND\n0.76-2.22m: Medium strebgth sandy CLAY\n2.22-2.96m: High strength sandy CLAY\n2.96-3.04m: Loose to medium dense clayey SAND
120.399	CPT	BFT_24G01_CPT_6A	0.00-0.12m: Very loose SAND\n0.12-0.70m: Medium dense to very dense silty SAND\n0.70-0.92m: Medium strength sandy CLAY\n0.92-1.26m: Dense to very dense silty SAND
120.416	Grab	BFT_24G01_GS_6A	Dark yellowish brown (10YR 4/4) subrounded coarse Sandstone GRAVEL with sea growth and lichen present at surface.

KP	Type	ID	Desc
126.702	CPT	BFT_24G01_CPT_5A_A	0.00-0.42m: Very dense gravelly SAND
126.707	CPT	BFT_24G01_CPT_5A	0.00-0.10m: Very loose SAND\n0.01-0.30m: Very dense gravelly SAND
126.714	CPT	BFT_24G01_CPT_5A_B	0.00-0.10m: Very loose SAND\n0.01-0.58m: Dense to very dense gravelly SAND
126.720	Grab	BFT_24G01_GS_5A	Olive brown 2.5Y 4/3) fine to coarse SAND with numerus shell fragments (<40mm)
129.487	Grab	BFT_24G01_GS_4A	Multicoloured subrounded coarse GRAVEL and COBBLE with abundent lichen and seagrowth present on one side of gravel and cobble.
129.510	CPT	BFT_24G01_CPT_4A_A	0.00-0.12m: Very loose SAND\n0.12-0.20m: Very dense SAND (possible cobble at base).
129.516	CPT	BFT_24G01_CPT_4A	0.00-0.08m: Very loose to loose SAND\n0.08-0.56m: Dense to very dense gravelly SAND (possible cobble at base).
133.603	CPT	BFT_24G01_CPT_3A_A	0.00-0.38m: Dense to very dense SAND (possible gravel/cobble at base)
133.606	CPT	BFT_24G01_CPT_3A	0.00-0.30m: Dense to very dense gravelly SAND (possible cobble at base)
133.626	Grab	BFT_24G01_GS_3A	Multicoloured subangular to subrounded medium GRAVEL with lichen and seagrowth present on surface
138.393	Core	BFT_24G01_VC_3A	0.00-0.40m: Dark greyish brown (2.5Y 4/2) fine to medium SAND\n0.40-0.53m: Medium strength dark grey (2.5Y 4/1) slightly sandy CLAY
144.086	CPT	BFT_24G01_CPT_2A	0.00-0.36m: Loose to medium dense SAND\n0.36-0.94m: Dense to very dense SAND\n0.94-1.16m: Medium dense to dense silty SAND\n1.16-3.08m: Medium to high strength CLAY with occasional medium spaced thin beds of silty sand
144.110	Grab	BFT_24G01_GS_2A	Dark greyish brown (2.5Y 4/2) gravelly fine to coarse SAND with occasional shell fragments (<20mm). Gravel is rounded to subrounded,fine to medium and of mixed lithology.
148.027	Core	BFT_24G01_VC_2A_A	0.00-0.88m: Dark greenish grey (GLEY 1 4/10) silty gravelly fine to coarse SAND with occasional shell fragments (<10mm).
148.033	Core	BFT_24G01_VC_2A	0.00-0.48m: Dark greenish grey (GLEY 1 4/10) silty gravelly fine to coarse SAND with occasional shell fragments (<30mm).
152.115	CPT	BFT_24G01_CPT_1A	0.00-0.05m: Very loose sandy SILT\n0.05-3.08m: Very loose becoming dense silty SAND
152.144	Grab	BFT_24G01_GS_1A	Dark greenish grey (GLEY 1 4/10) slightly silty fine to medium SAND with occasional shell fragments (<10mm)\n
155.863	Core	BFT_24G01_VC_1A	0.00-2.40m: Dark greenish grey (GLEY 1 4/10) silty fine to medium SAND with shell fragments (<20mm)\n2.40-2.91m: Dark greenish grey (GLEY 1 4/10) silty fine to medium SAND.

APPENDIX D – GEOTECHNICAL RESULTS

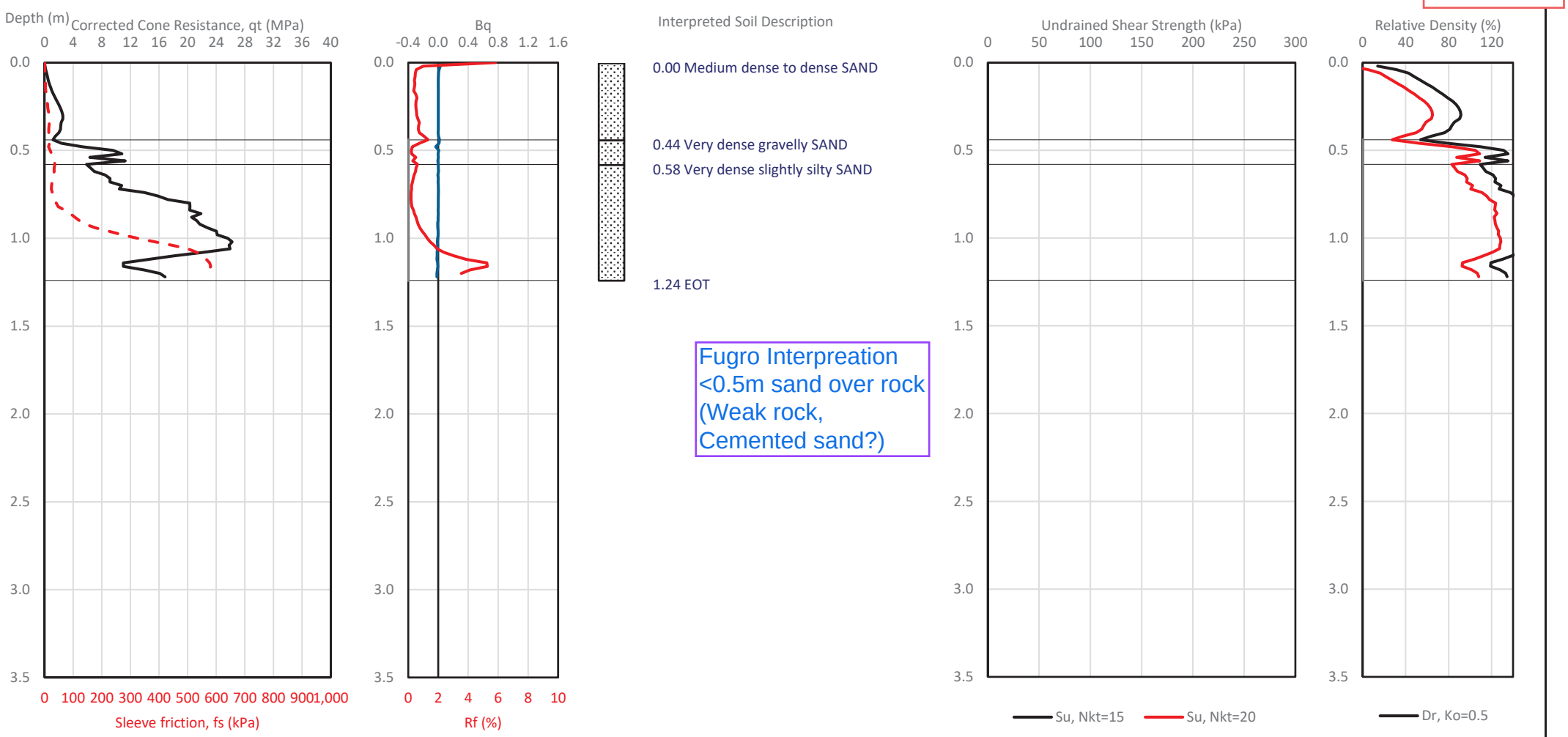
67 Pages showing CPT and VC results along the route. KPs from Kilmore Quay are in Blue. Includes notes on expected burial and features at each survey location.

Bluefield Geoservices

Bluefield Geoservices
www.bluefieldgeo.com

Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP8.885
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2**	
				No. **0A**	KP151.408



Fugro Interpreation
<0.5m sand over rock
(Weak rock,
Cemented sand?)

CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.24 m	Pitch/Roll:	0.4 °
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	1.2 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	246,691.7 m
UTM 30°N	Northing:	5,784,773.1 m
	Water Depth:	24.2 m

Test Remarks & Observations:

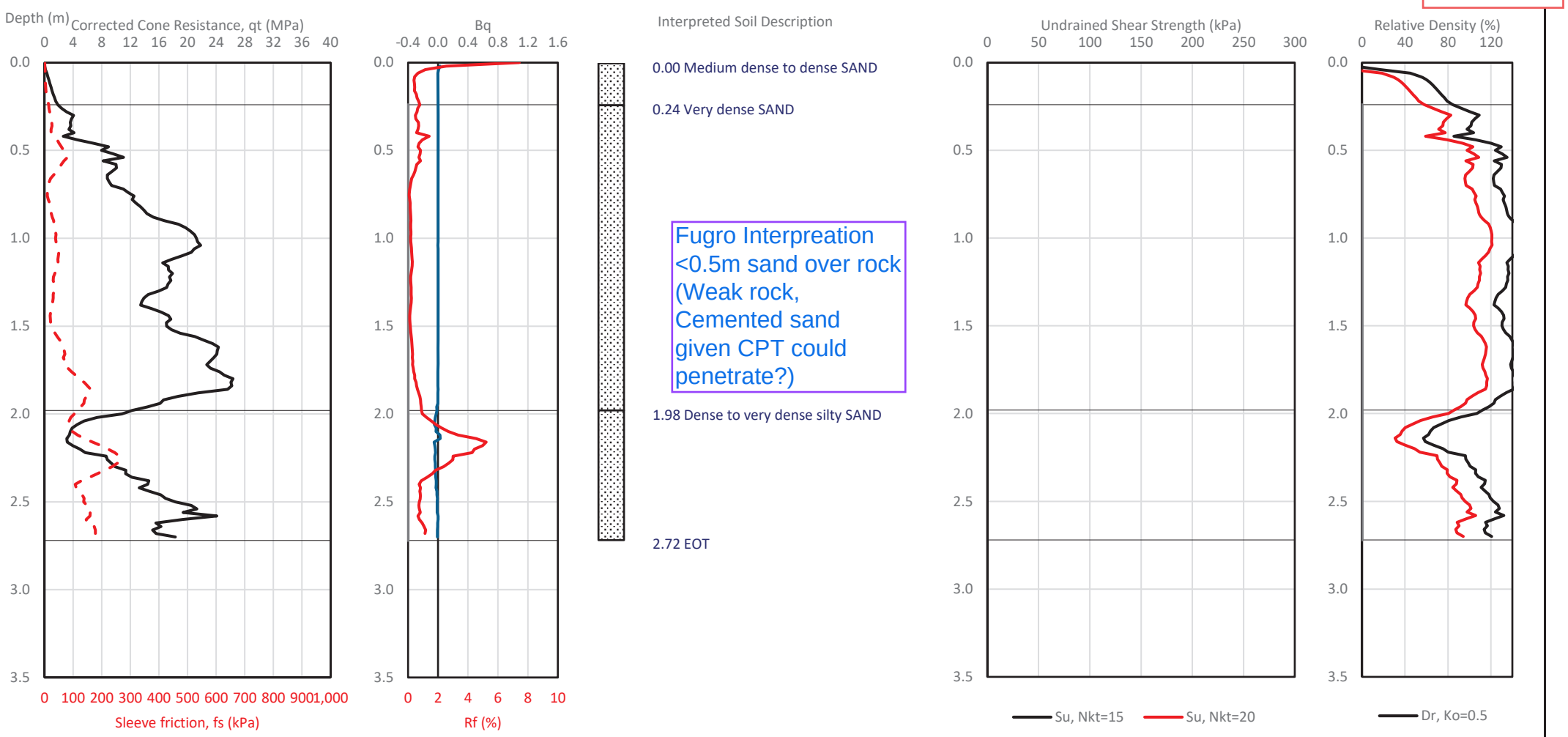
Prepared:	Checked:	Approved:
RWO	DNO	JED

Bluefield Geoservices

Bluefield Geoservices
www.bluefieldgeo.com

Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP11.883
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2** No. **1A_(** KP148.410



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	2.72 m	Pitch/Roll:	0.5 °
Vehicle:	N/A	Cone S/N:	190549	Max. Cone Tilt:	1.7 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	246,464.6 m
UTM 30°N	Northing:	5,781,959.0 m
	Water Depth:	27.1 m

Test Remarks & Observations:
Client agreed to use of cone 190549 which previuosly was taken out of service due to class 3 readings on tip.

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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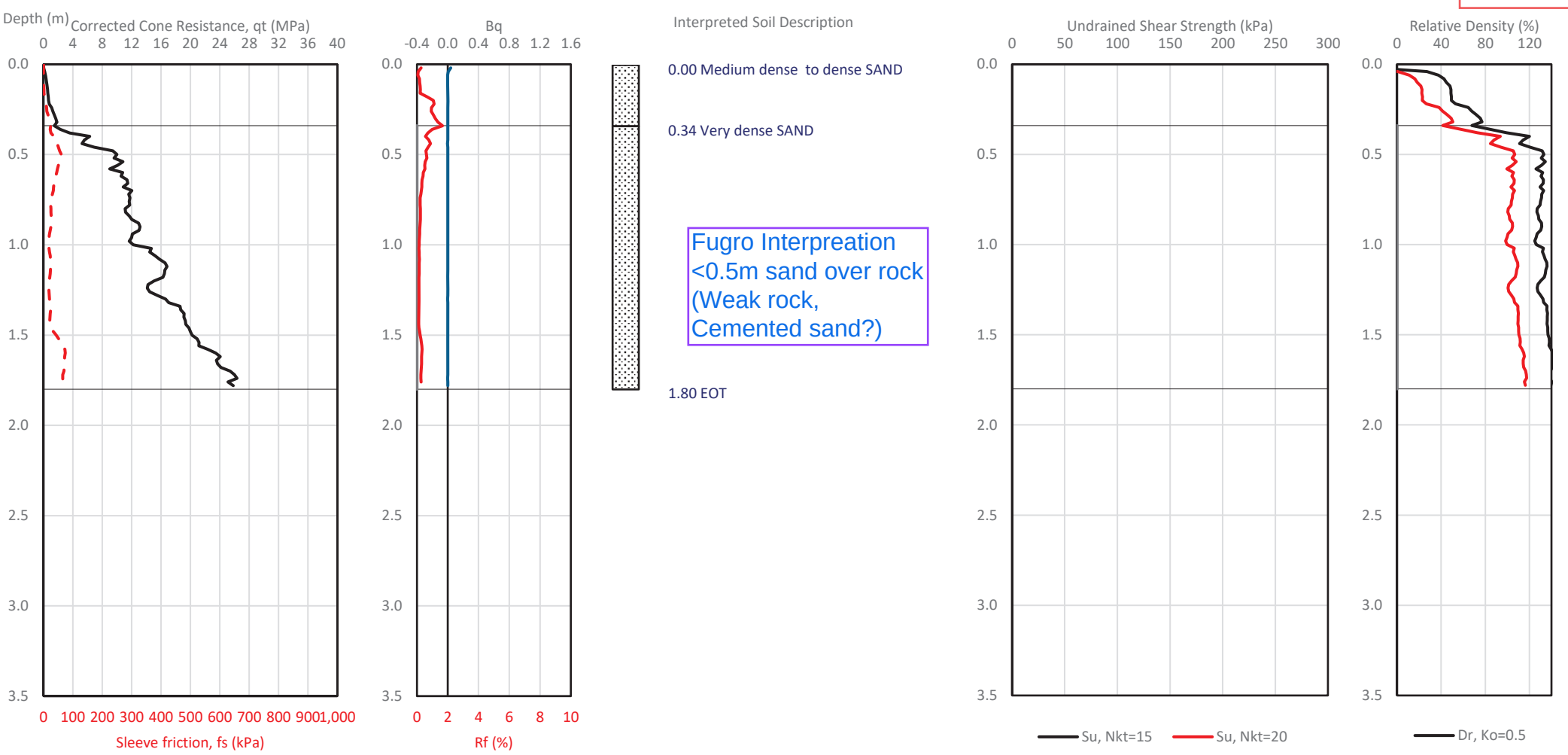
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP11.889
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2**	
				No. **1A**	KP148.403



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.80 m	Pitch/Roll:	-0.2 °
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	2.9 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	246,459.4 m
UTM 30°N	Northing:	5,781,953.6 m
	Water Depth:	27.0 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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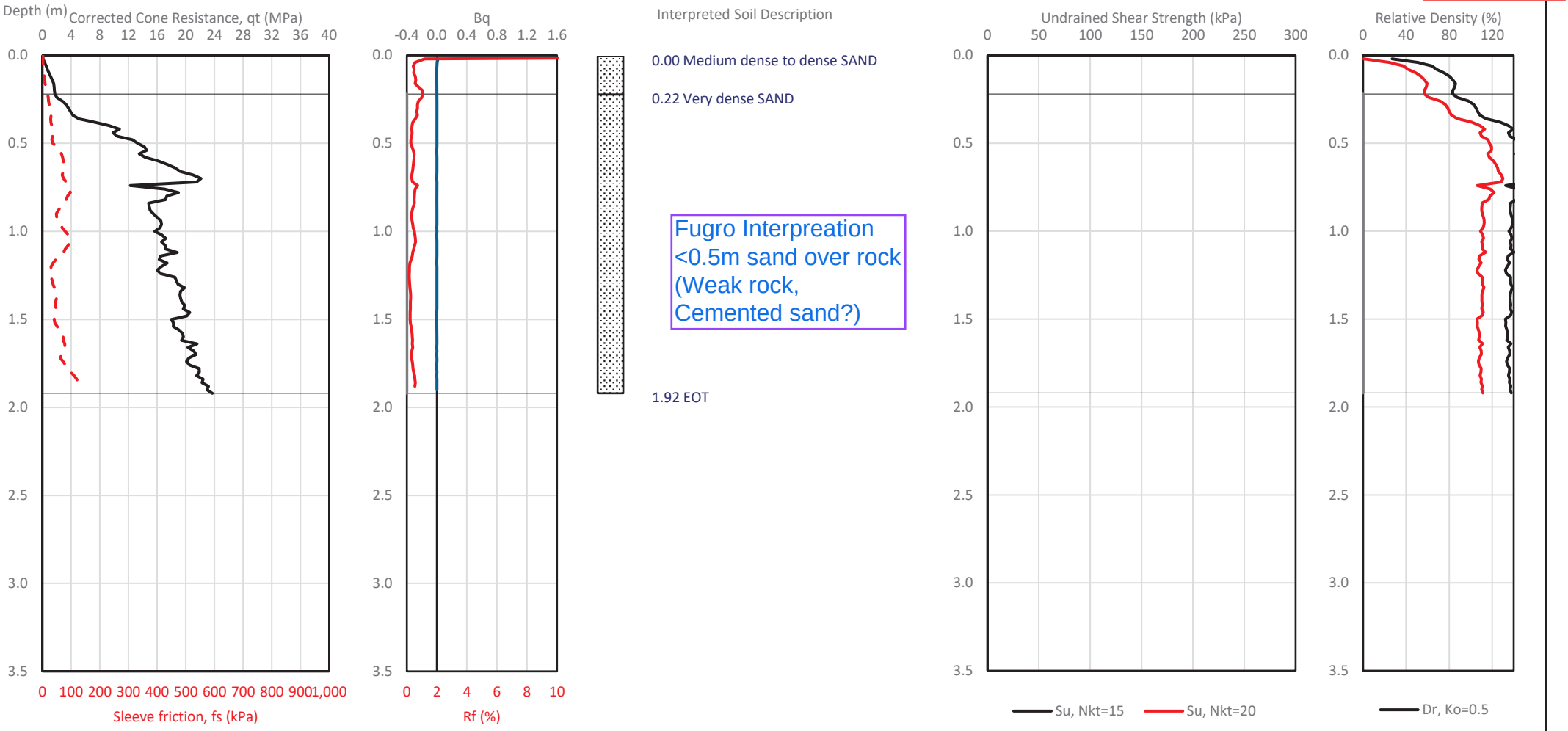
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP11.893
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2** No. **1A_** KP148.400



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.92 m	Geodetic Parameters:	Easting: 246,447.4 m
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	2.6 °	UTM 30°N	Northing: 5,781,953.2 m
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						Water Depth: 27.0 mLAT

Test Remarks & Observations:
Lost communication with cone during push. Rod snapped and cone lost in seabed - no post test offsets available.
Unusable data has been trimmed off the base of test.

Prepared:	Checked:	Approved:
DNO	RWO	JED

Cone Penetration Test Results - Derived Data

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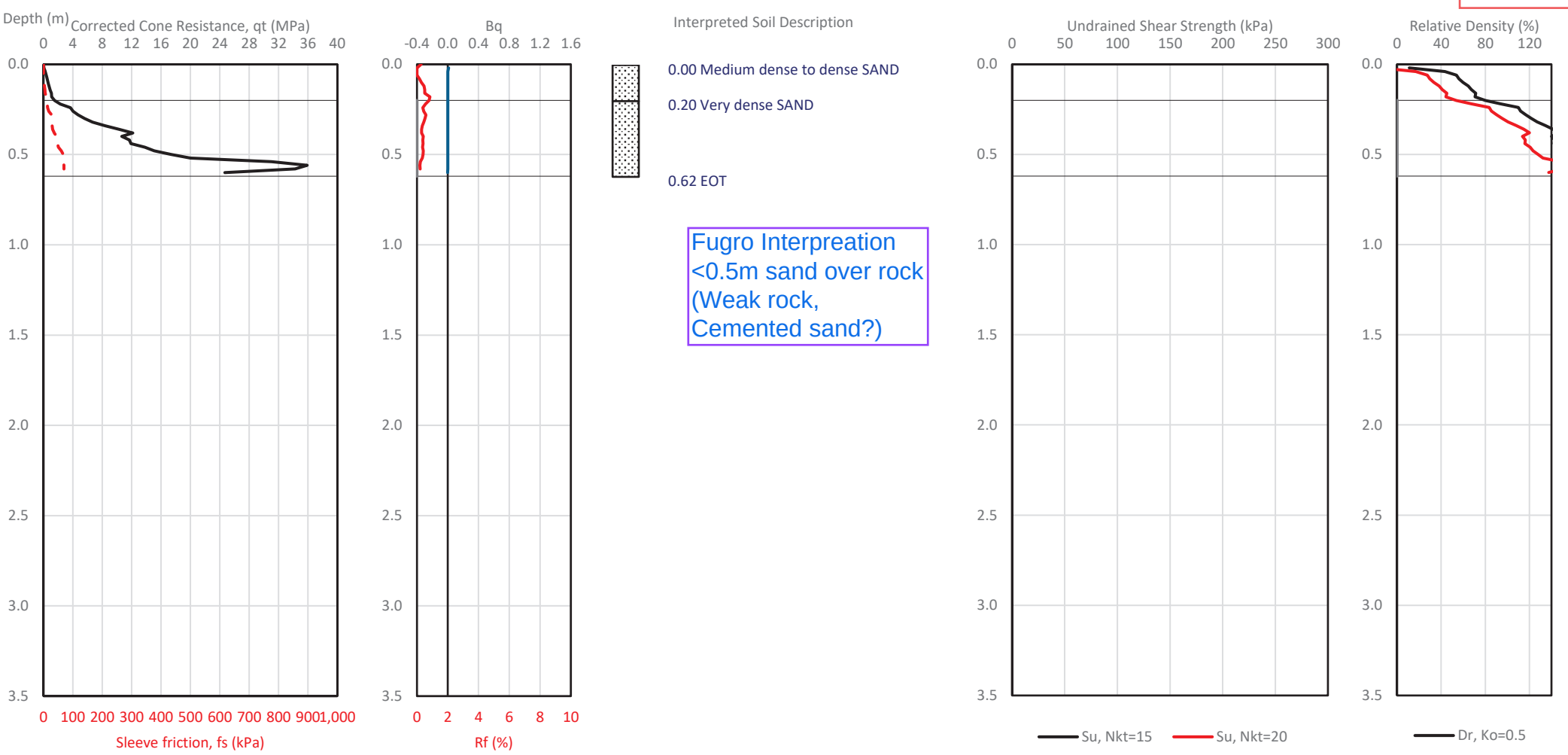
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP11.900
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2** No. **1A_** KP148.403



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.62 m	Pitch/Roll:	-0.2 °
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	5.4 °		
Test Termination:	E: Test stopped on rapid rise of cone inclination						

Geodetic Parameters:	Easting:	246,458.7 m
UTM 30°N	Northing:	5,781,942.8 m
	Water Depth:	27.1 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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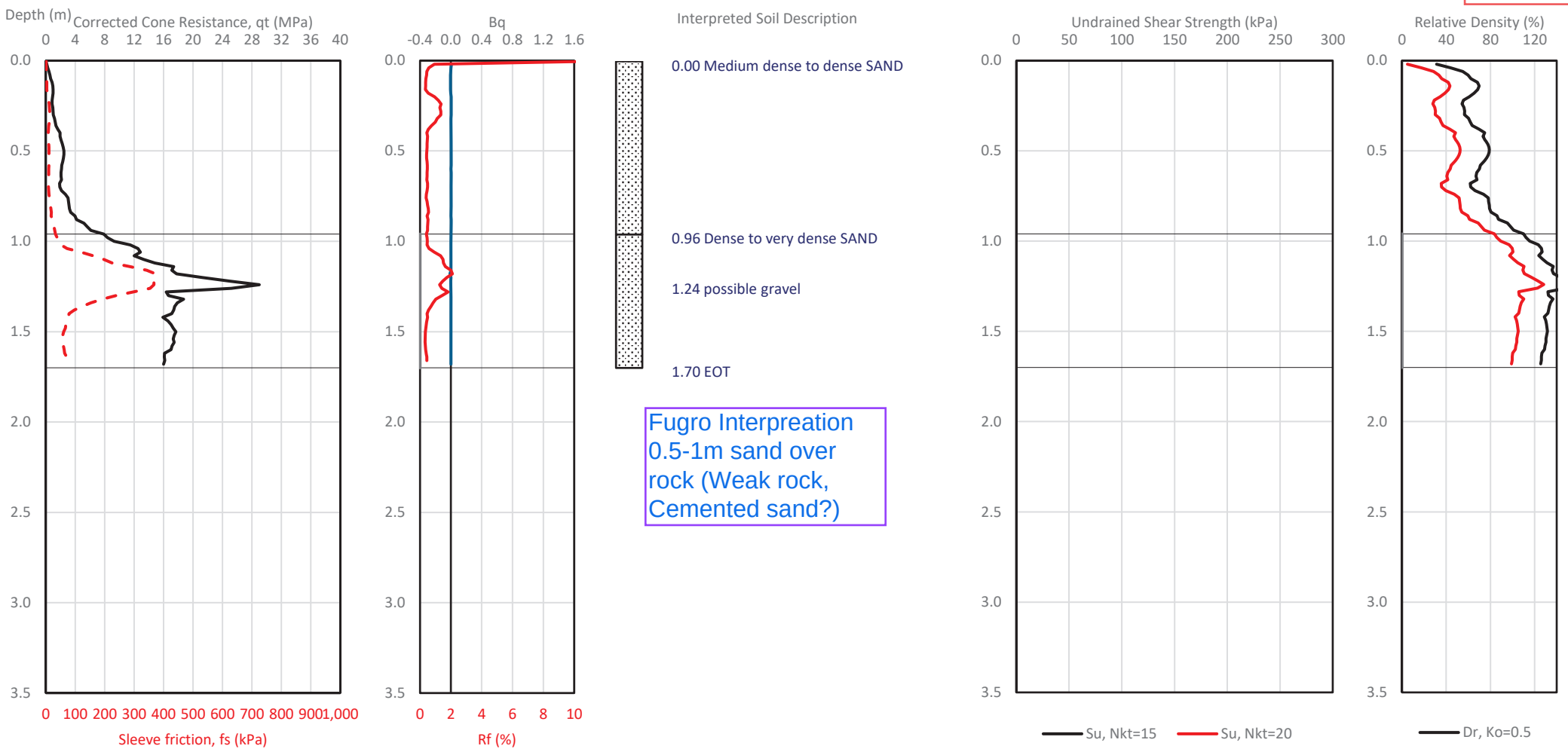
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP14.292
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **9A**	KP146.000



Fugro Interpreation
0.5-1m sand over rock (Weak rock, Cemented sand?)

CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.70 m	Pitch/Roll:	0.3 °
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	4.0 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	245,862.1 m
UTM 30°N	Northing:	5,779,692.6 m
	Water Depth:	31.6 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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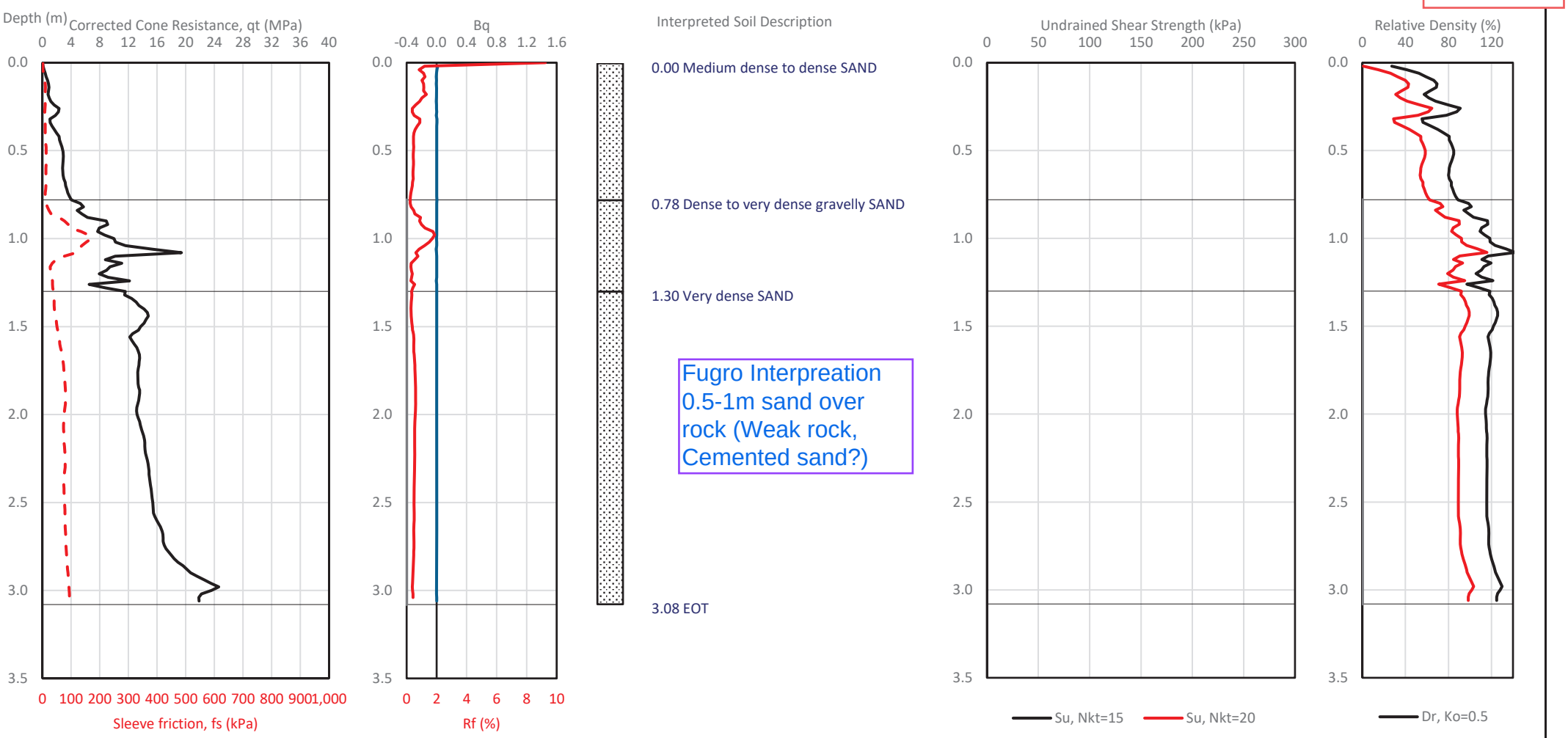
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP14.300
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 10-Aug 2024	Test : **BFT_24G01_CPT_1** No. **9A_** KP145.992



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	0.3 °	Geodetic Parameters:	Easting: 245,863.1 m
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	2.2 °			UTM 30°N	Northing: 5,779,683.9 m
Test Termination:	A: Target penetration achieved								Water Depth: 31.6 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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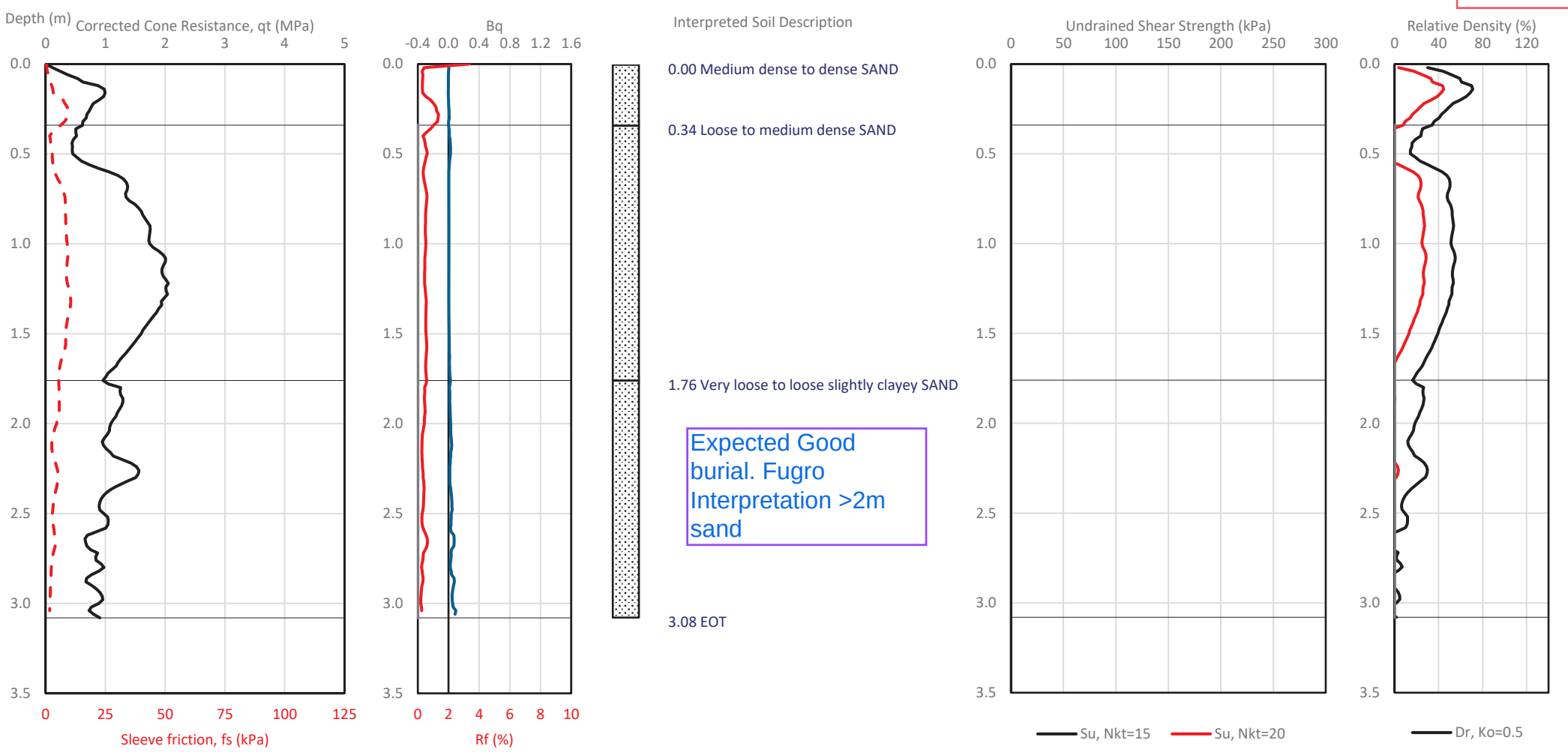
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP16.107
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 10-Aug 2024	Test : **BFT_24G01_CPT_1** No. **8A** KP1144.186



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	0.1 °
Vehicle:	N/A	Cone S/N:	240214	Max. Cone Tilt:	3.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	245,987.0 m
UTM 30°N	Northing:	5,777,901.6 m
	Water Depth:	30.9 m

Test Remarks & Observations:
NOTE: 5MPa scale used for Cone Resistance due to soft nature of soils

Prepared:	Checked:	Approved:
DNO	RWO	JED

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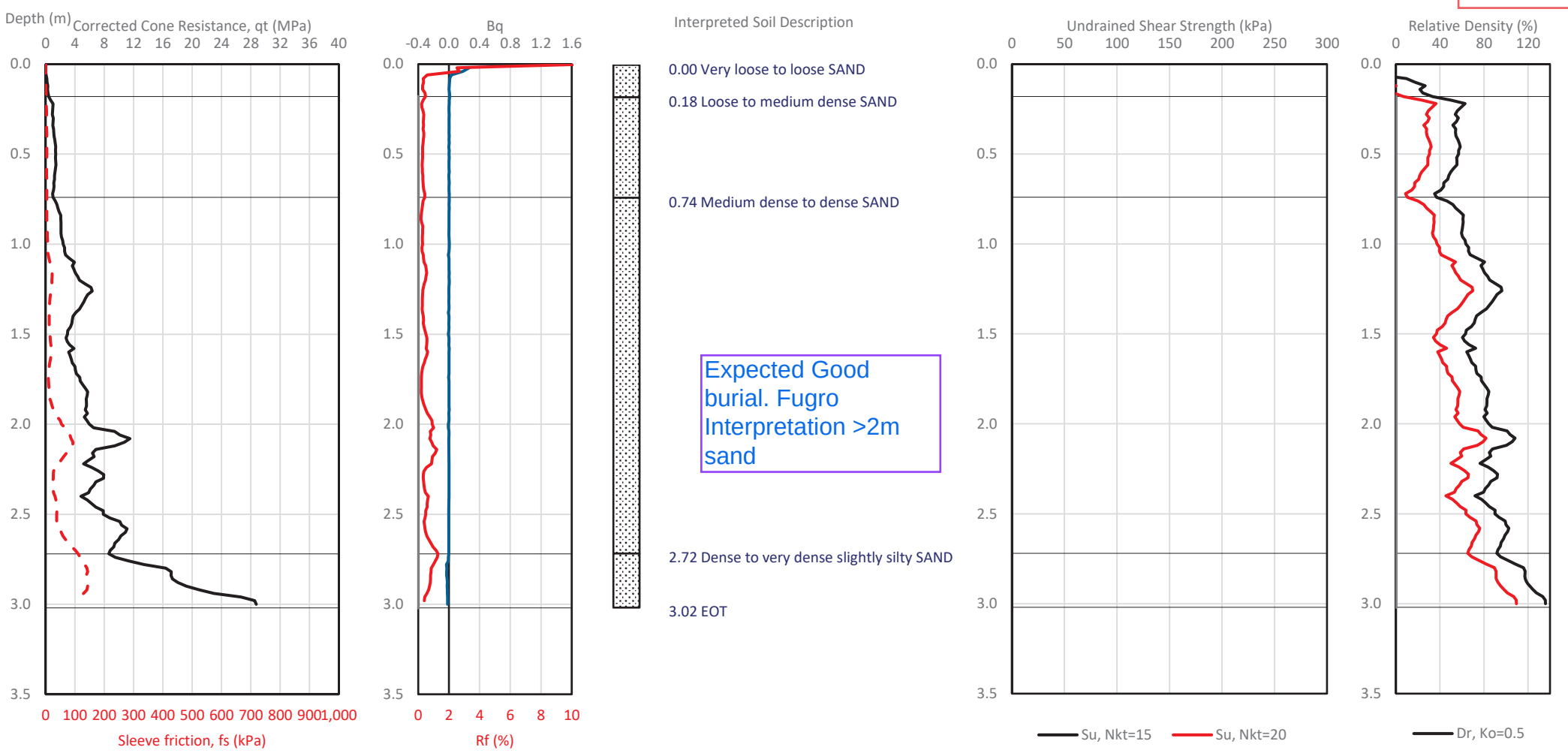
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP19.582
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **7A**	KP140.711



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.02 m	Pitch/Roll:	-0.1 °
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	2.7 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	246,773.3 m
UTM 30°N	Northing:	5,774,616.4 m
	Water Depth:	44.0 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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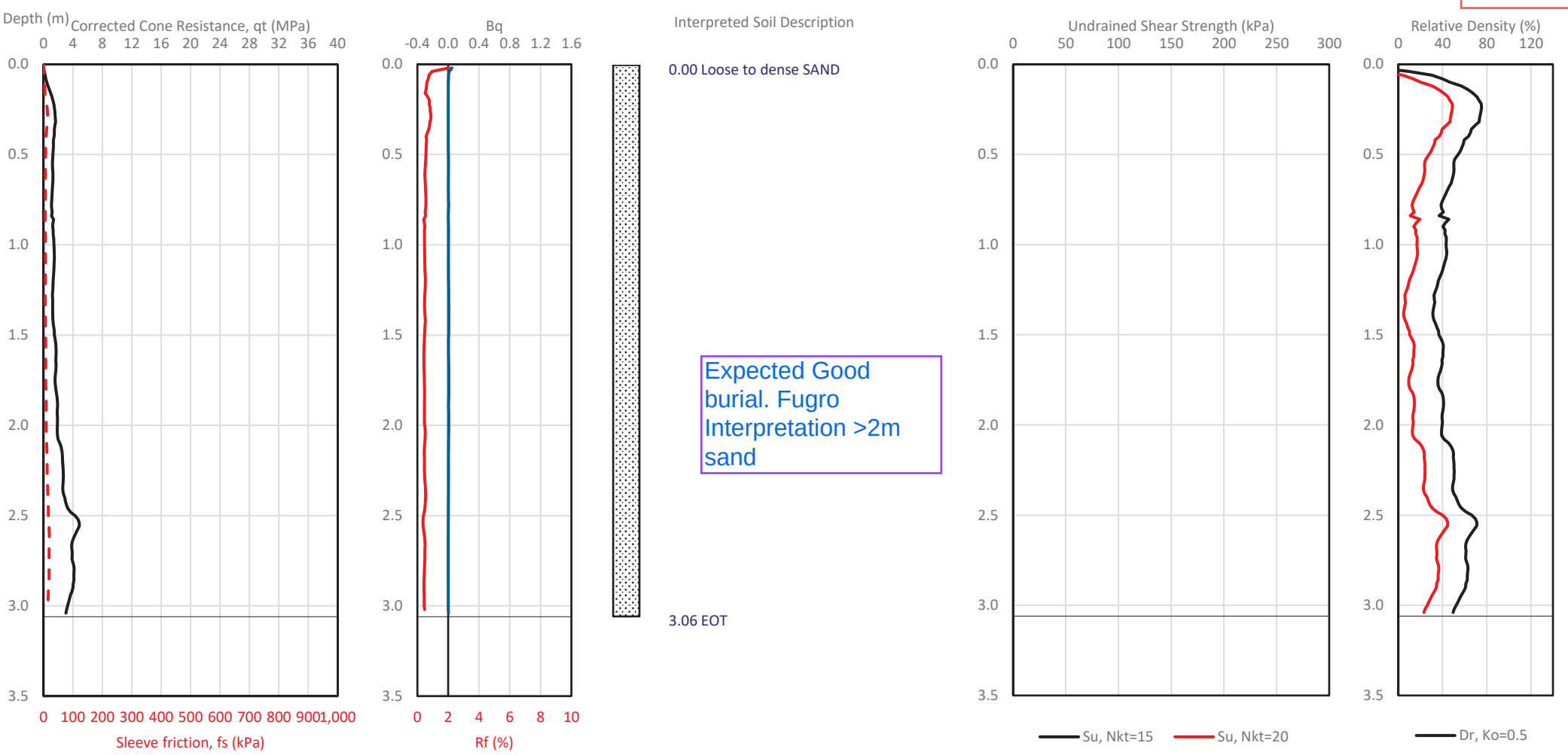
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP23.493
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2**	
				No. **2A**	KP136.800



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.06 m	Pitch/Roll:	-2.6 °
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	1.6 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	247,684.9 m
UTM 30°N	Northing:	5,770,885.2 m
	Water Depth:	50.4 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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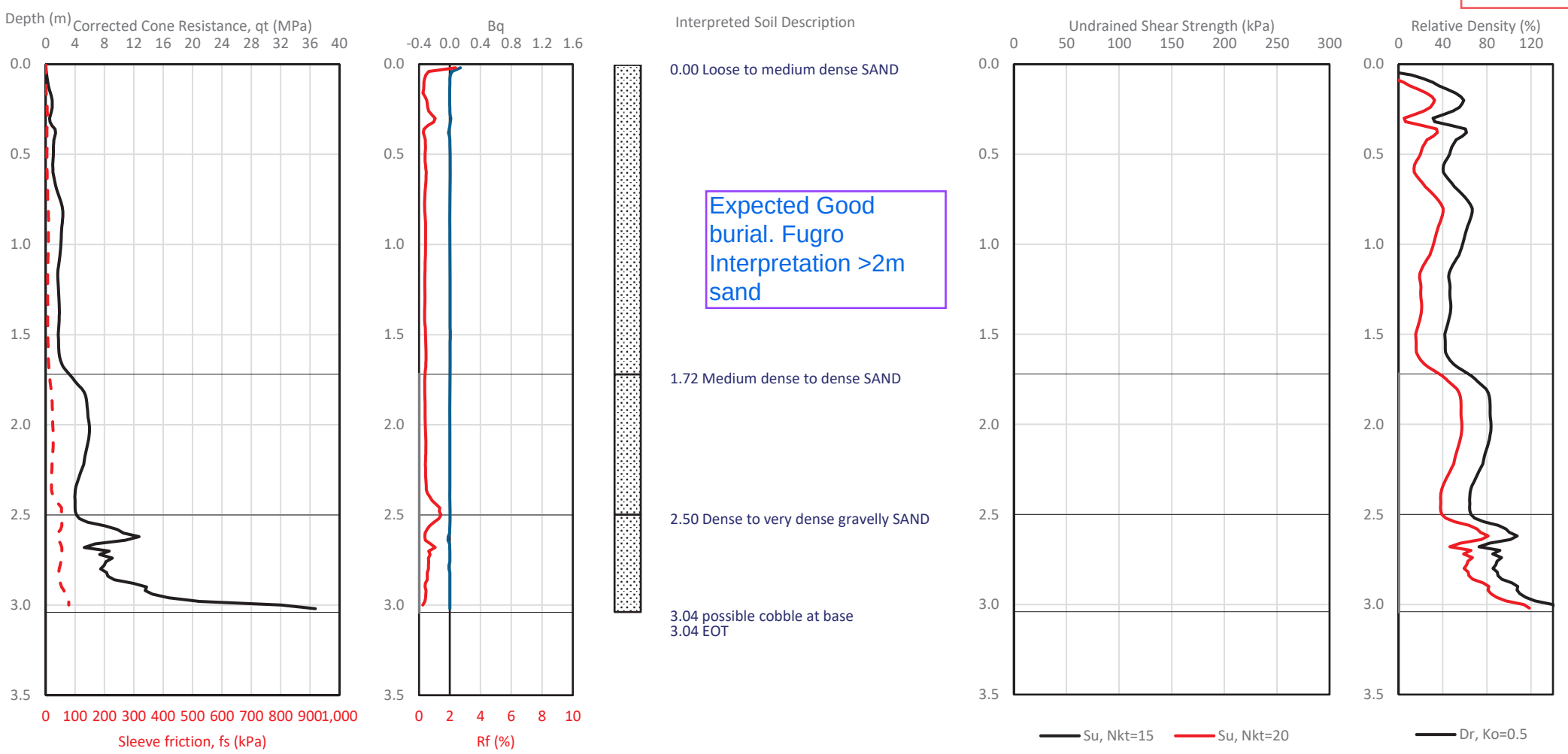
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP26.851
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2**	
				No. **4A**	KP133.441



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.04 m	Pitch/Roll:	-1.6 °
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	2.1 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	248,557.7 m
UTM 30°N	Northing:	5,767,610.7 m
	Water Depth:	52.8 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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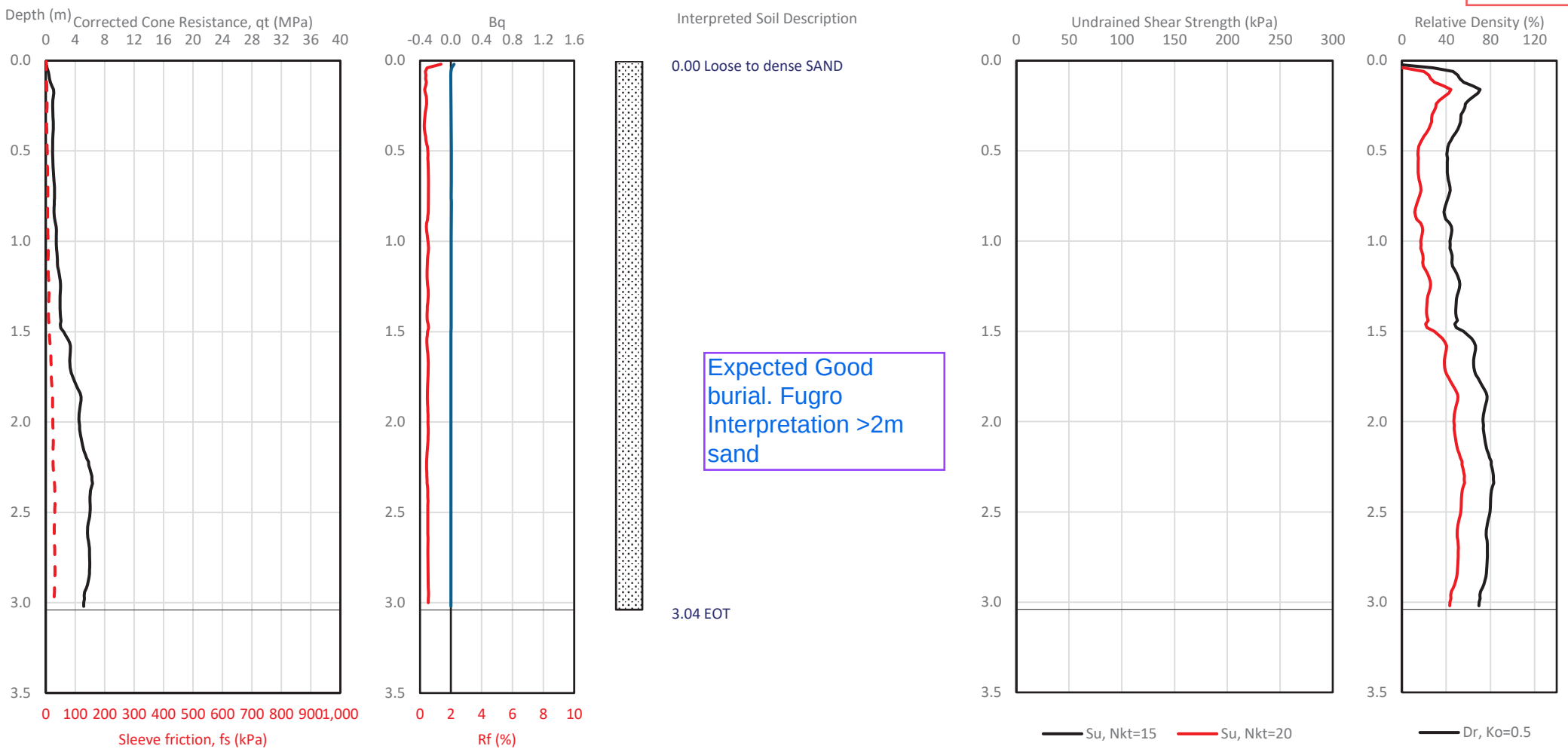
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP30.296
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 10-Aug 2024	Test : **BFT_24G01_CPT_2**	KP129.996
				No. **3A**	



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.04 m	Pitch/Roll:	0.4 °	Geodetic Parameters:	Easting: 249,324.4 m
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	0.7 °			UTM 30°N	Northing: 5,764,280.4 m
Test Termination:	A: Target penetration achieved								Water Depth: 56.4 m

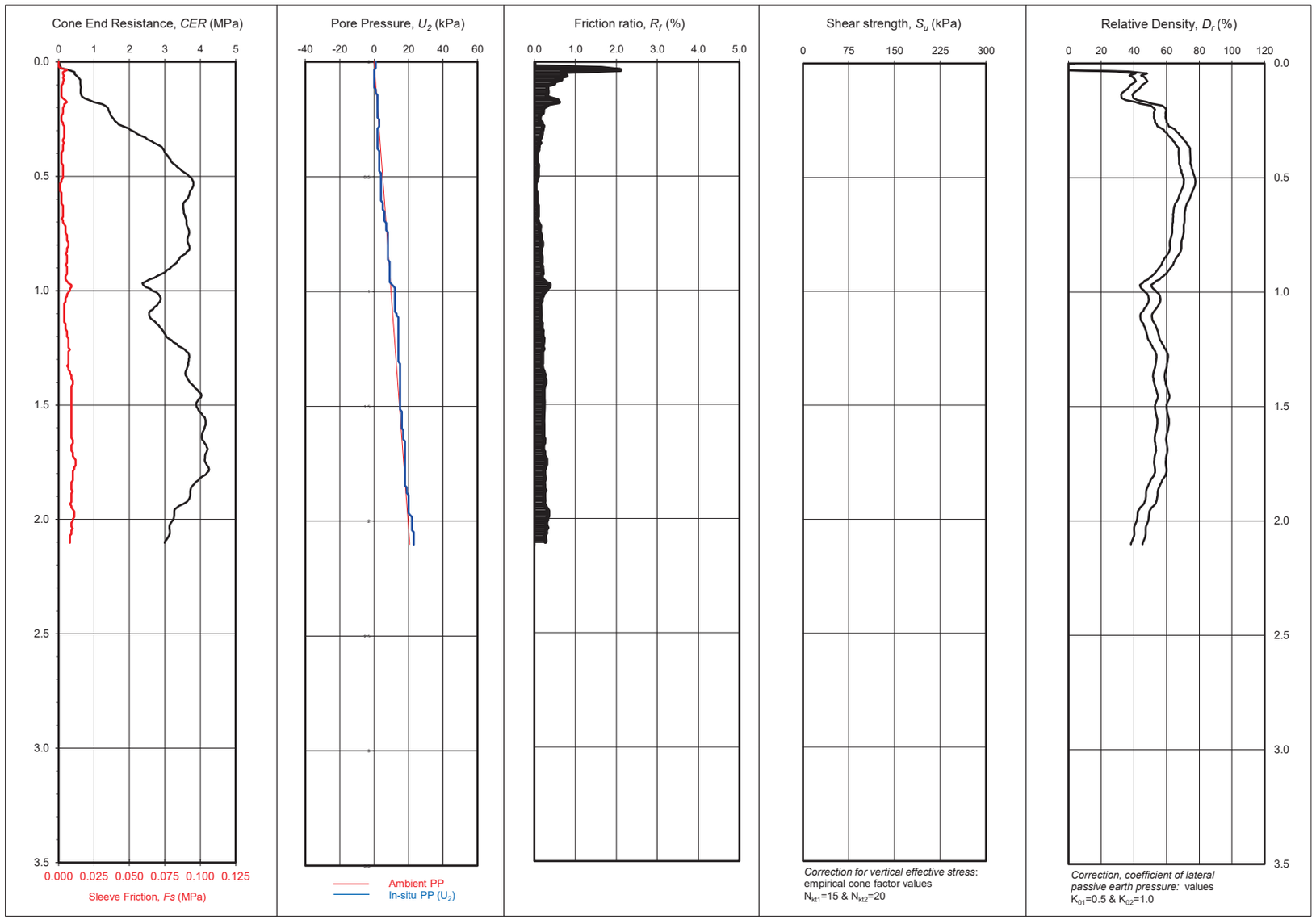
Test Remarks & Observations:	Prepared:	Checked:	Approved:
	RWO	DNO	JED

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 54.6919' N	006° 35.1279' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	63		KP38.774
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP01**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP121.519
Comments:	Depth Achieved		Base Inclination (X Y) - degrees	0	0	

Soil Depth [m]	Estimated Soil Type	Legend
	Medium dense to dense SAND	
2.10	*End of CPT.* *Test depth achieved.*	

Expected Good burial. Fugro Interpretation >2m sand



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP01

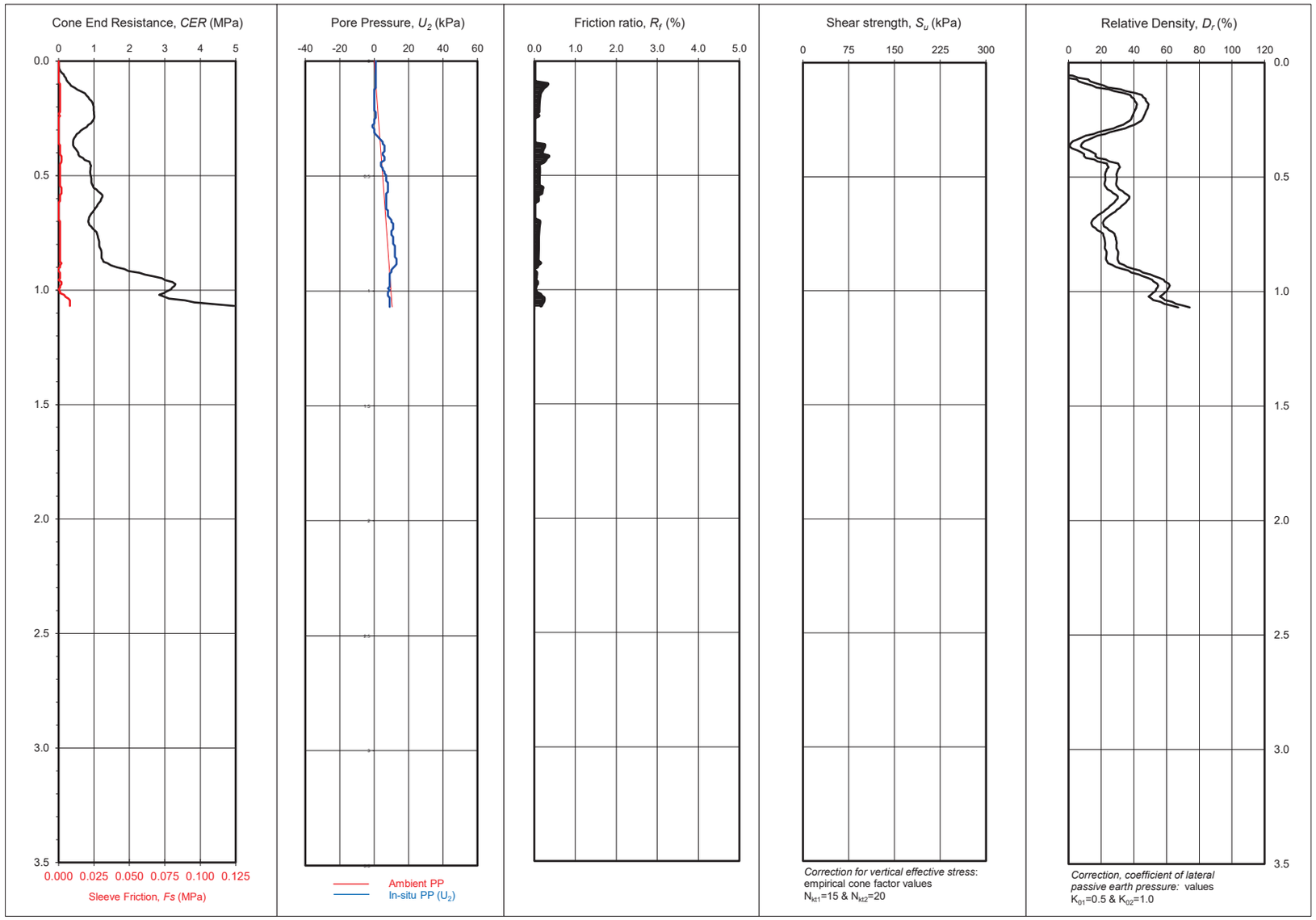
Raw Data Filename : S1-S-CP10001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 53.3249' N	006° 34.1505' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	71		KP41.736
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP02A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP118.556
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	2	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to medium dense SAND	
0.89	Dense SAND	
1.07	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 1-2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP02A

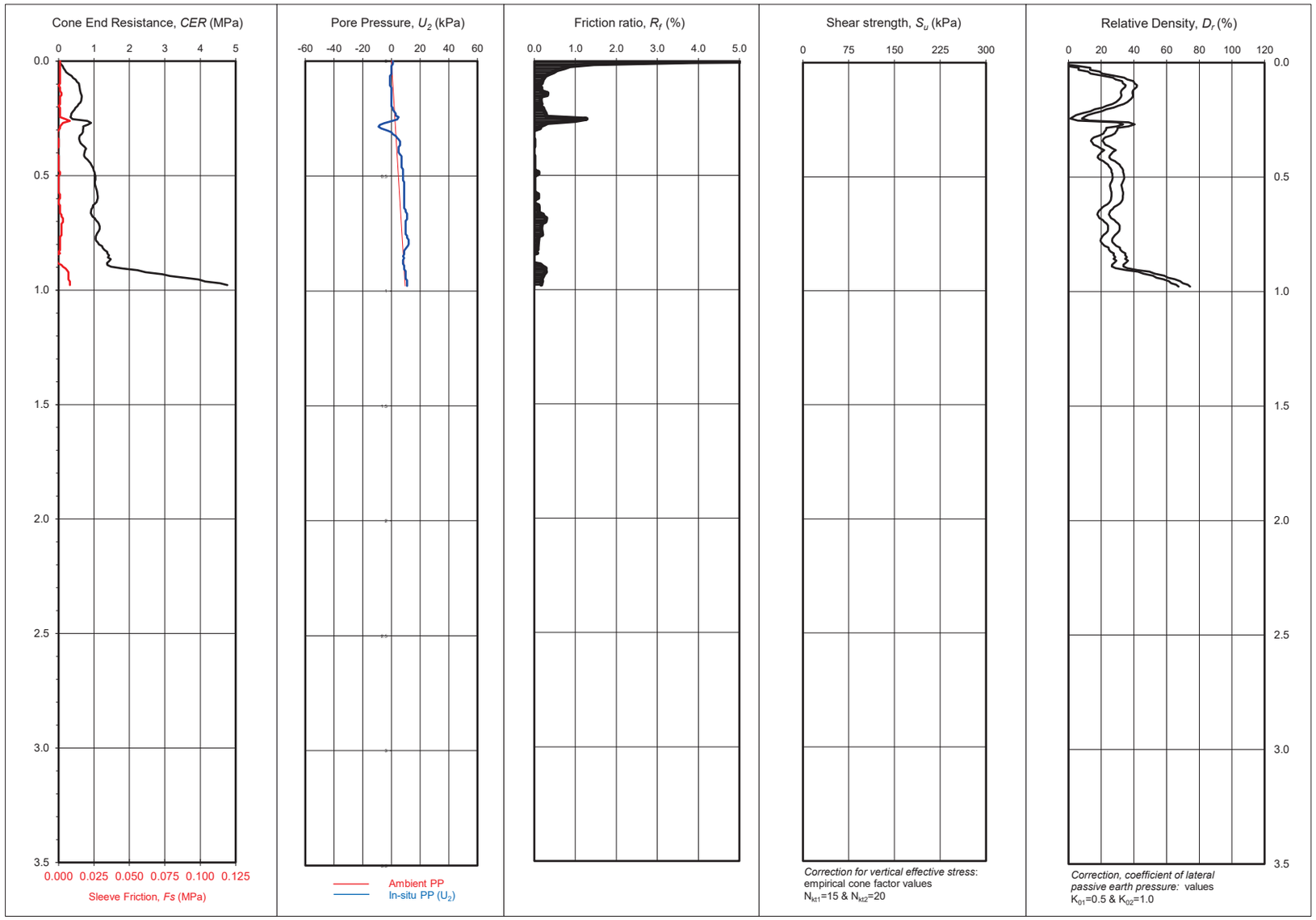
Raw Data Filename : S1-S-CP20002.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 53.3226' N	006° 34.1542' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	71		KP41.739
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP02**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP118.553
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	1	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to medium dense SAND	
0.90	Dense SAND	
0.98	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 1-2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP02

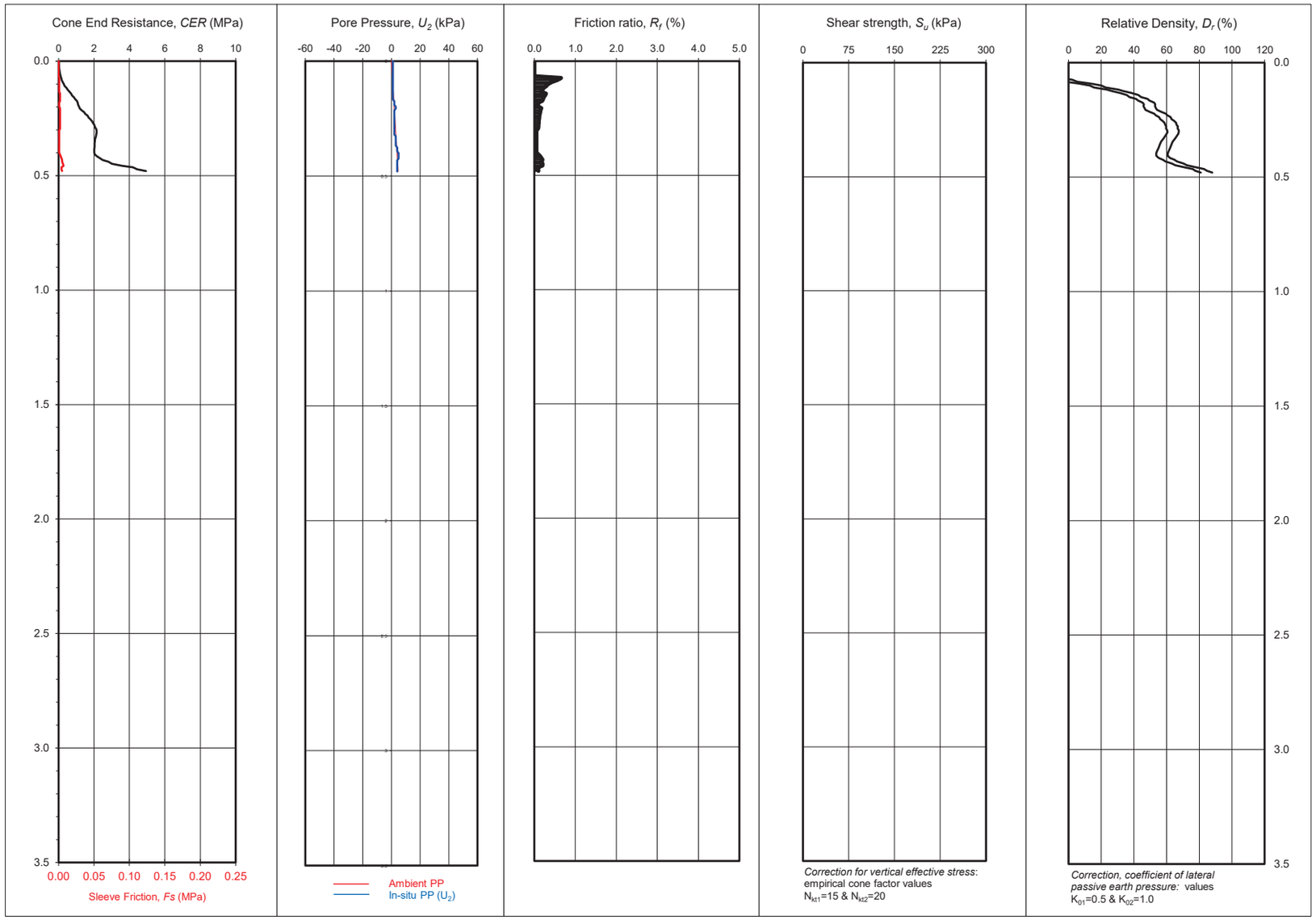
Raw Data Filename : S1-S-CP20001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 51.4803' N	006° 32.6451' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	69		KP45.620
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP03A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP114.672
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	-3	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.48	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 1-2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP03A

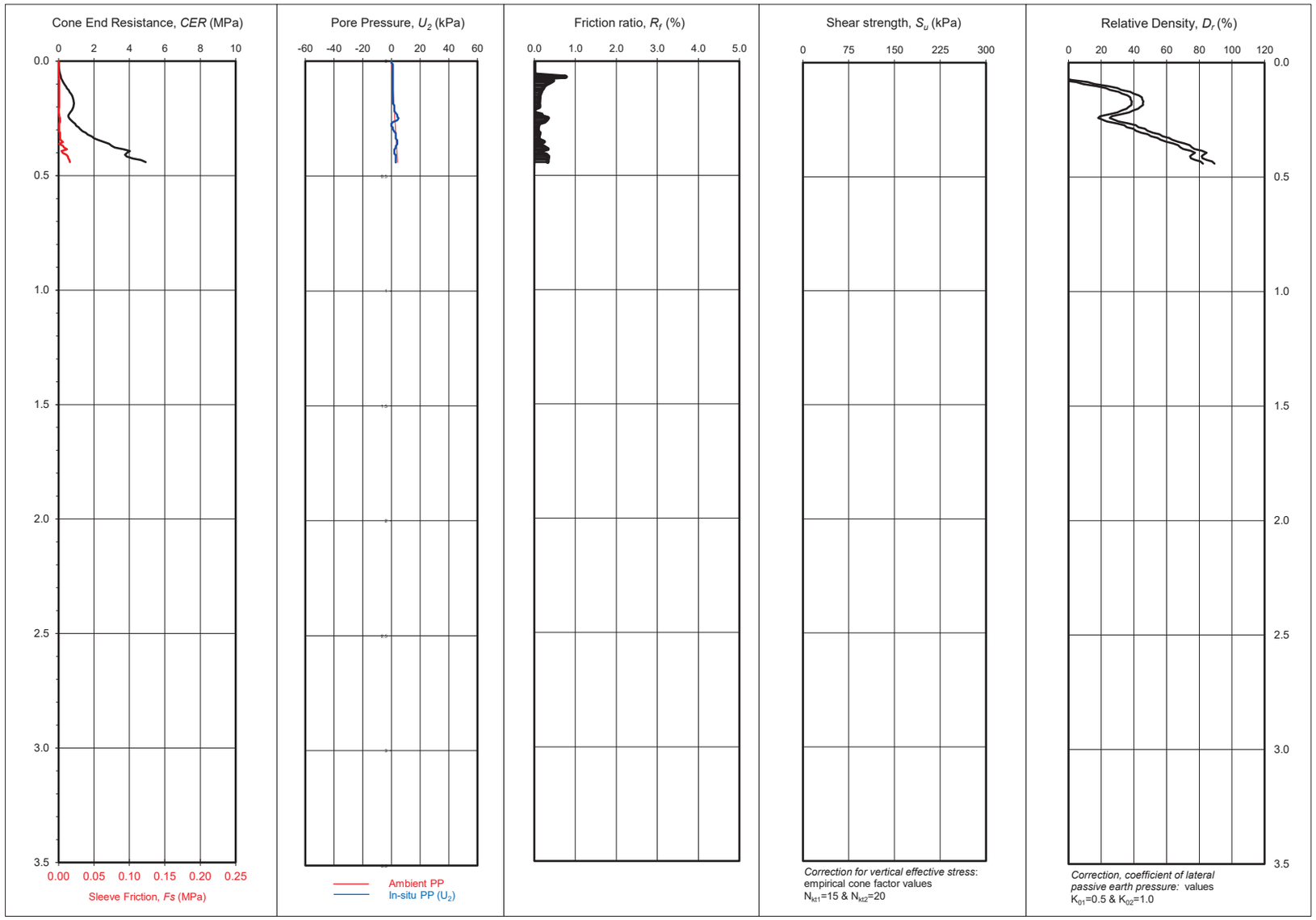
Raw Data Filename : S1-S-CP30002.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 51.4782' N	006° 32.6490' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	69		KP45.621
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP03**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP114.671
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	1	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.45	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 1-2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP03

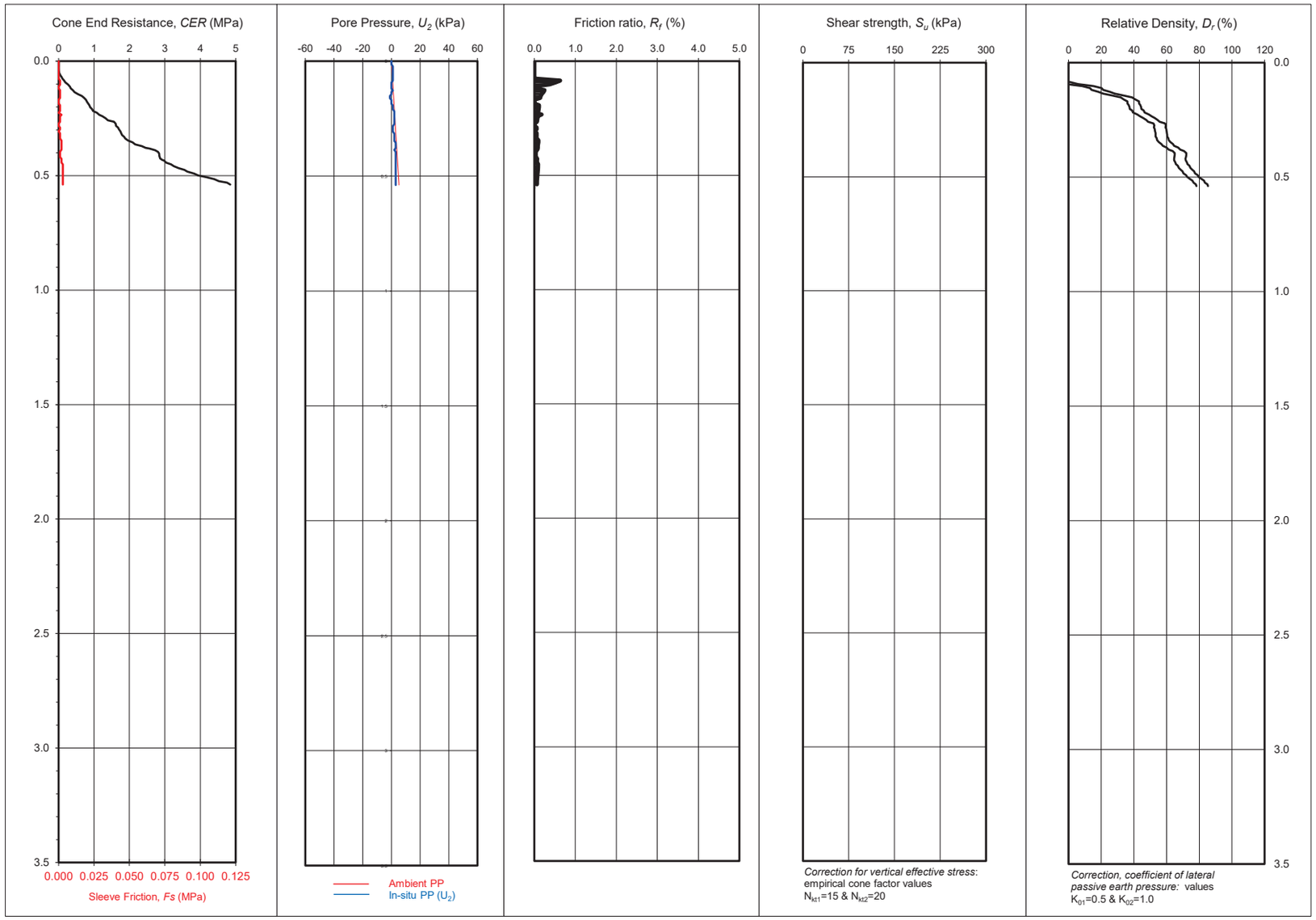
Raw Data Filename : S1-S-CP30001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 49.9359' N	006° 31.4933' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	68		KP48.773
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP04A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP111.518
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	0	2	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.54	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 0.5-1m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP04A

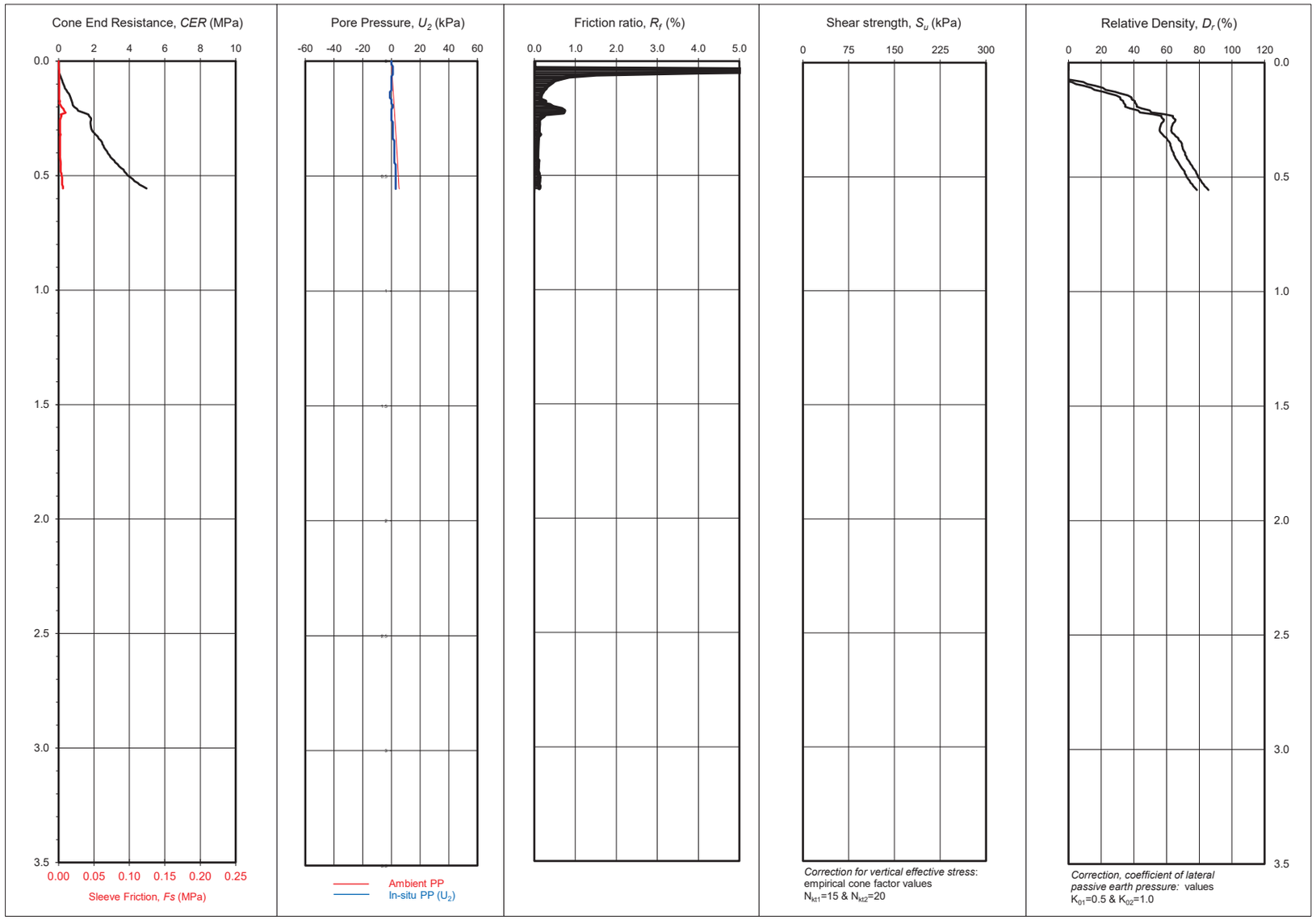
Raw Data Filename : S1-S-CP40002.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 49.9336' N	006° 31.4978' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	68		KP48.775
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP04**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP111.518
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	0	2	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.56	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 0.5-1m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken in area of megaripples and sandwaves.

CPT Number:

S1-S-CP04

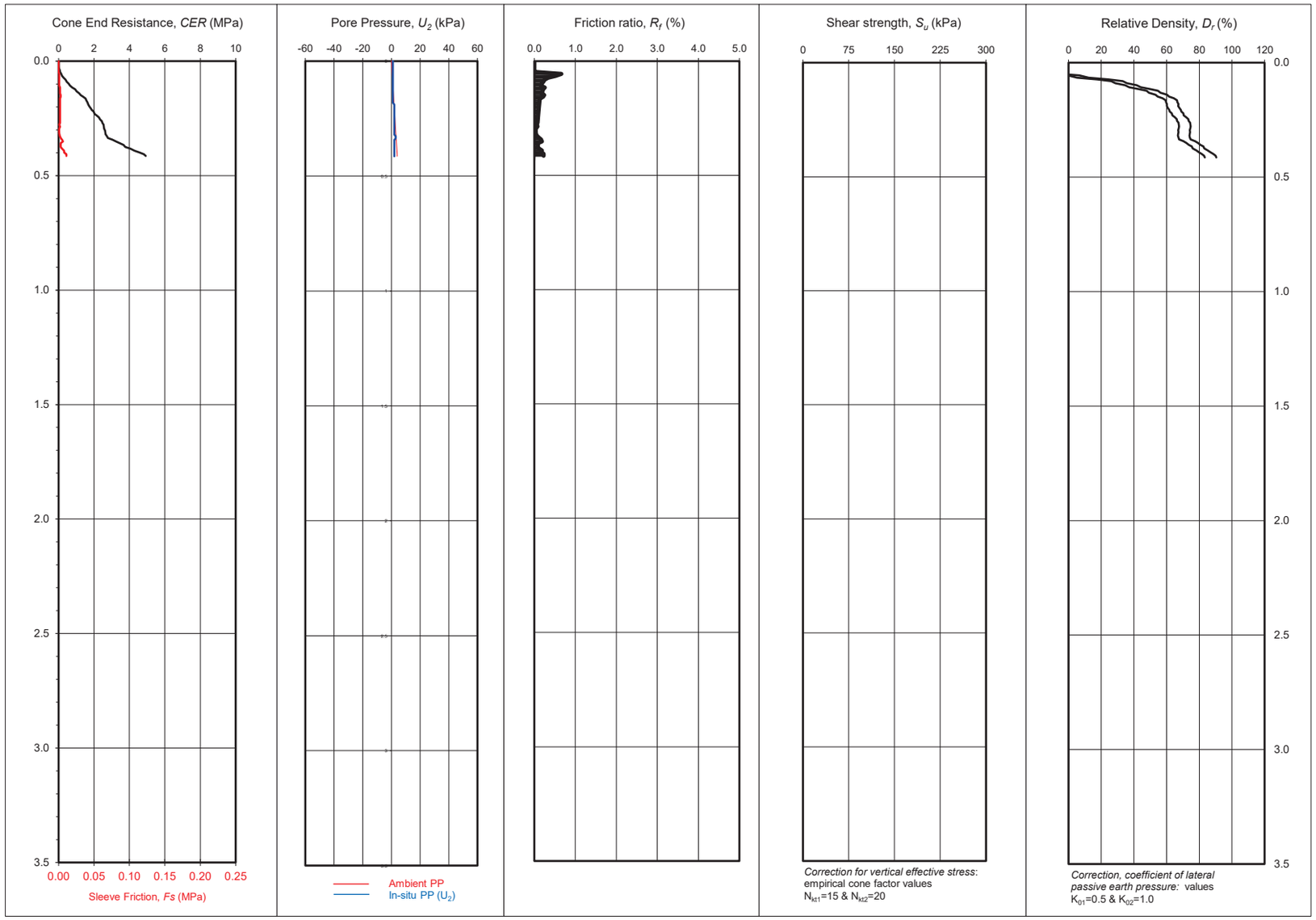
Raw Data Filename : S1-S-CP40001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 47.3625' N	006° 29.8946' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	67		KP53.964
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP05A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP106.328
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	1	0	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.42	*End of CPT.* *Stopped by hard layer.*	

Expected moderate burial. Fugro Interpretation 0.5-1m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on gently rolling seabed with megaripples.

CPT Number:

S1-S-CP05A

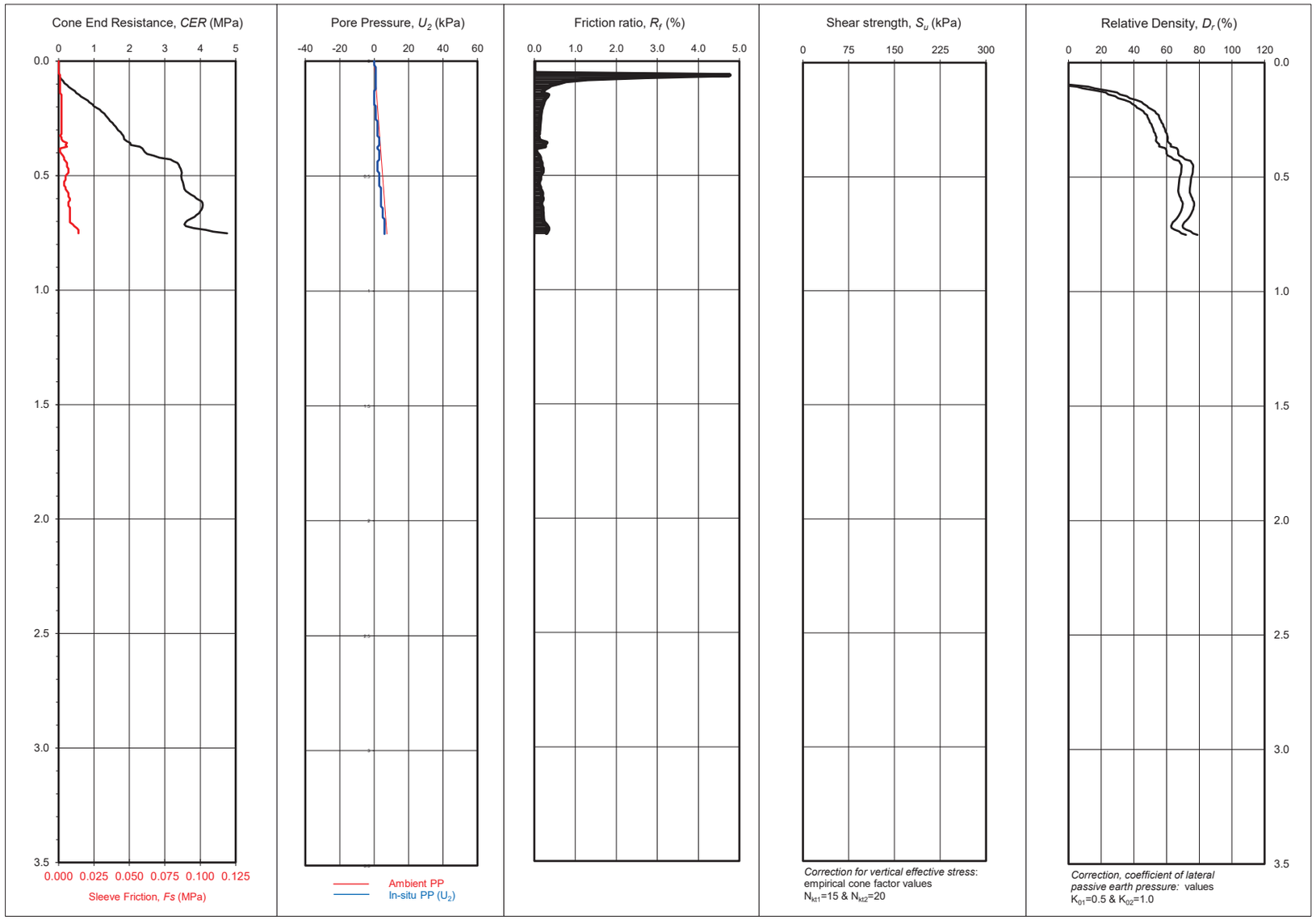
Raw Data Filename : S1-S-CP5_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 47.3614' N	006° 29.8945' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	67		KP53.966
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP05**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP106.326
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-2	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to medium dense SAND	
0.38	Dense SAND	
0.75	*End of CPT.* *Stopped by hard layer.*	

Expected shallow burial. Fugro Interpretation veneer sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on gently rolling seabed with megaripples.

CPT Number:

S1-S-CP05

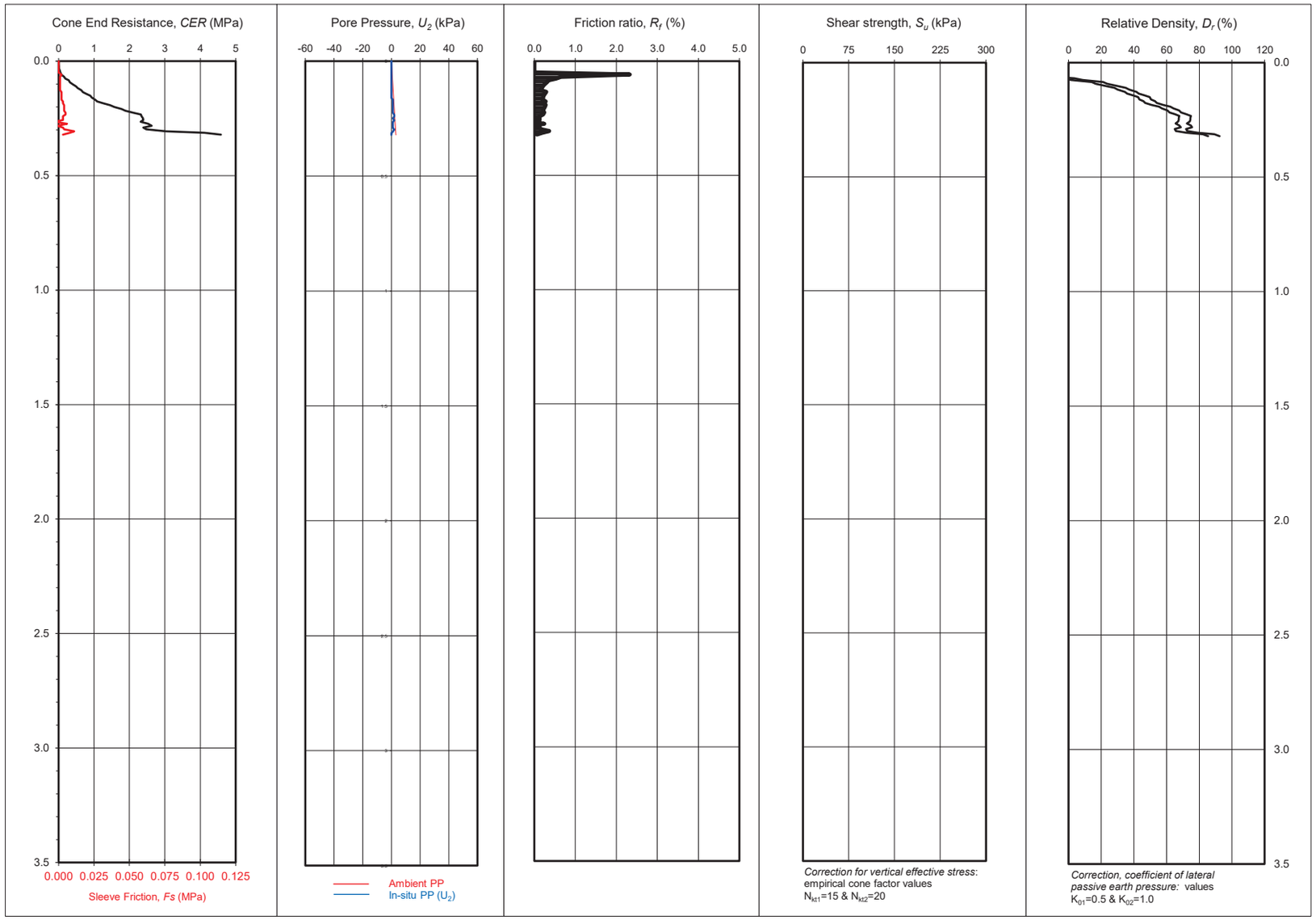
Raw Data Filename : S1-S-CP50001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 46.1509' N	006° 29.1836' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	68		KP56.355
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP06A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP103.937
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	1	

Soil Depth [m]	Estimated Soil Type	Legend
0.32	Very loose to dense SAND	
	End of CPT. *Stopped by hard layer.*	

Expected shallow burial. Fugro Interpretation veneer sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP06A

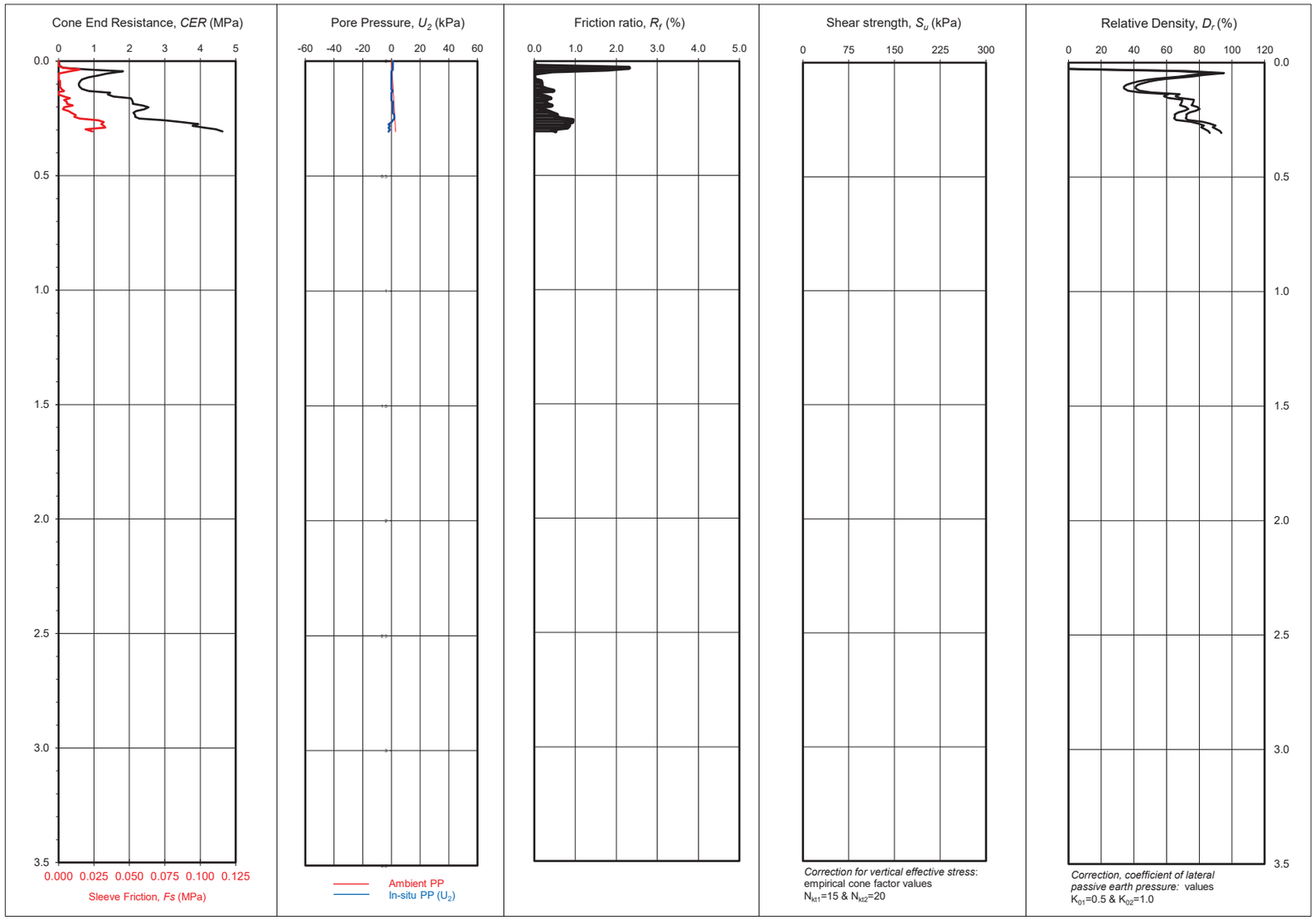
Raw Data Filename : S1-S-CP6_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 46.1509' N	006° 29.1836' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	68		KP56.355
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP06**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP103.937
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Medium dense to very dense SAND	
0.30	*End of CPT.* *Stopped by hard layer.*	

Expected shallow burial. Fugro Interpretation veneer sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP06

Raw Data Filename : S1-S-CP60001.cdf

Bluefield Geoservices

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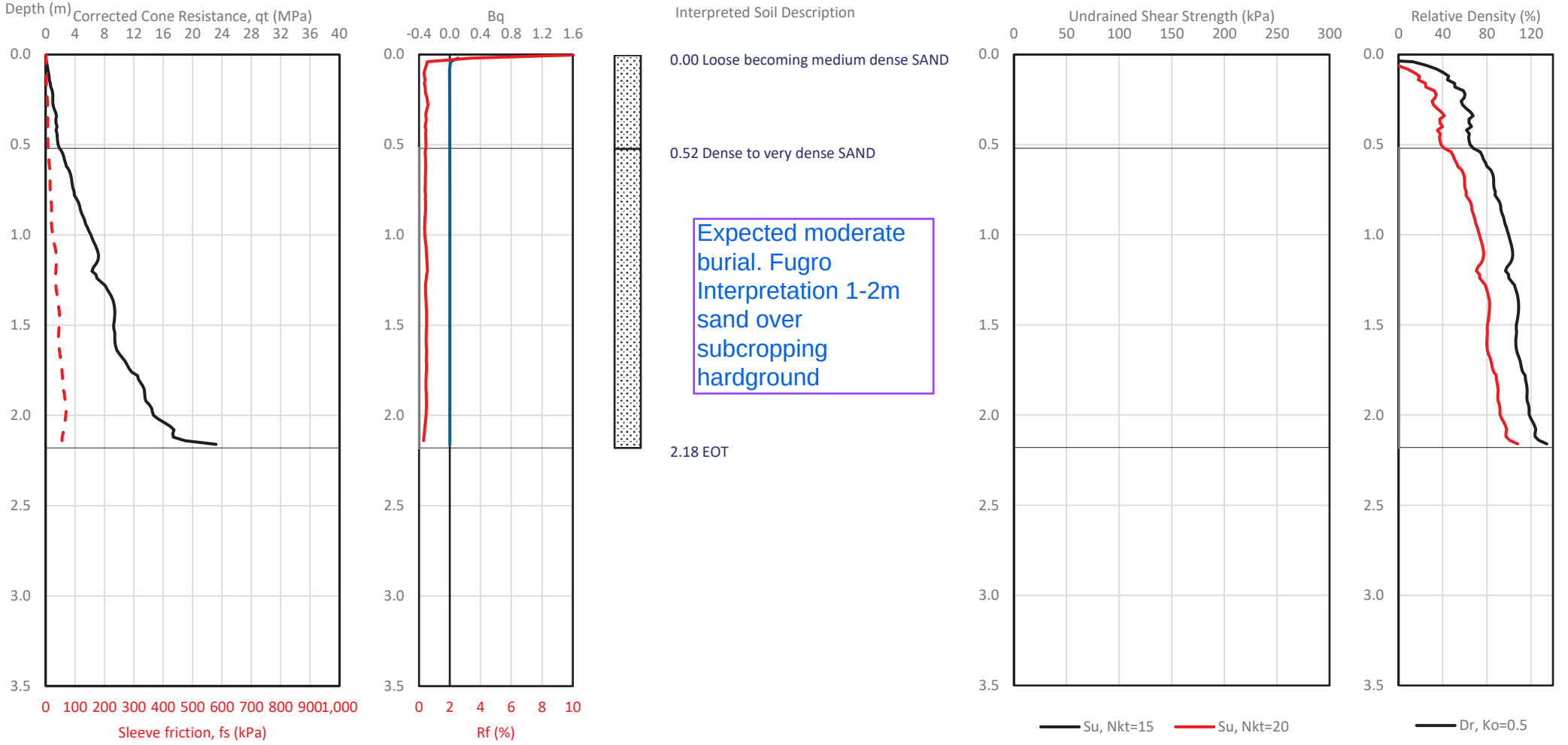
Cone Penetration Test Results - Derived Data

KP57.141

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP103.152
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1**	No. **5A_B**



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	2.18 m	Pitch/Roll:	-3.0 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.8 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	259,594.7 m
UTM 30°N	Northing:	5,740,332.2 m
	Water Depth:	69.0 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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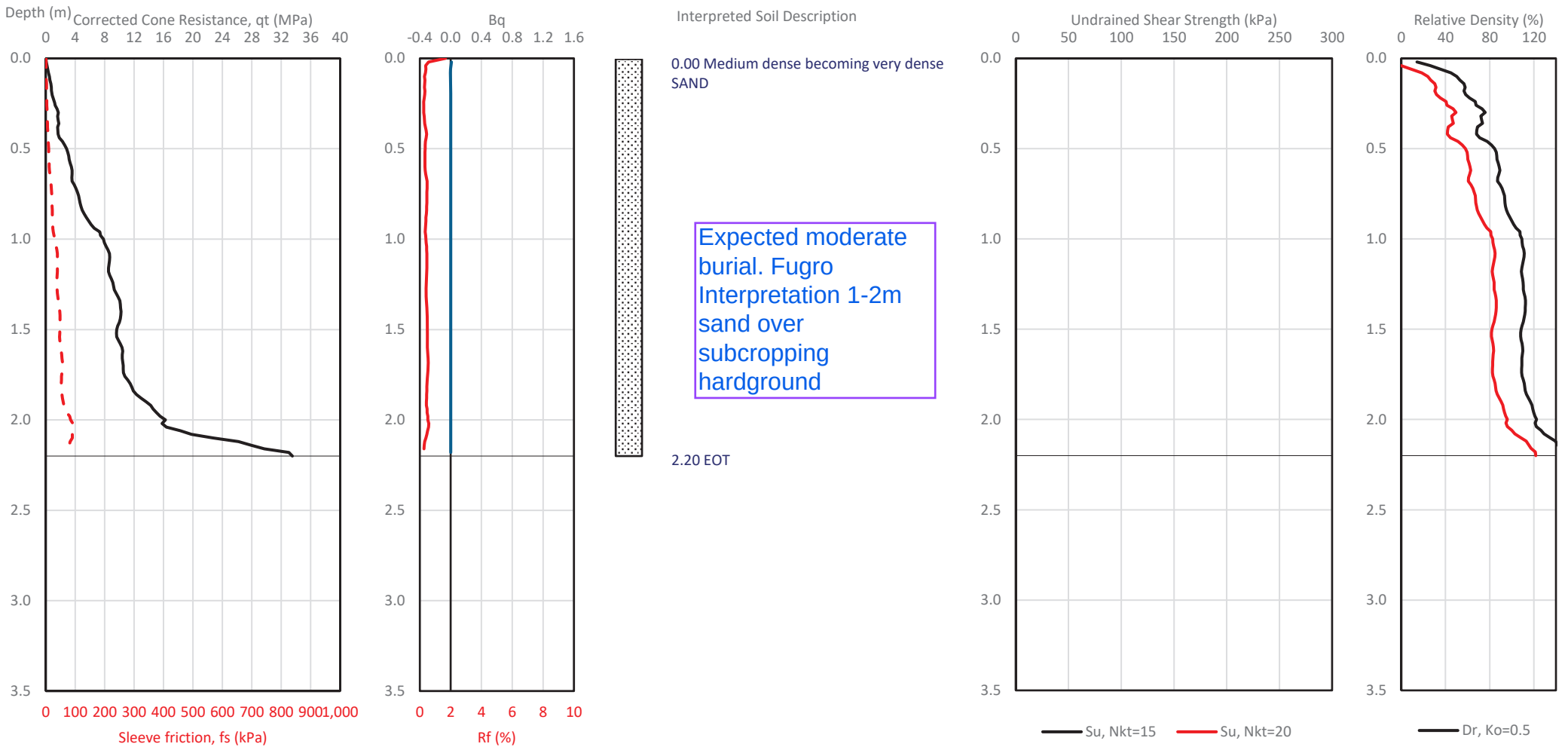
Cone Penetration Test Results - Derived Data

KP57.141

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP103.151
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 11-Aug 2024	Test : **BFT_25G01_CPT_1**	No. **5A**



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	2.20 m	Geodetic Parameters:	Easting: 259,604.3 m
Vehicle:	N/A	Cone S/N:	240215	Max. Cone Tilt:	0.7 °	UTM 30°N	Northing: 5,740,332.0 m
Test Termination:	I: Equipment malfunction						Water Depth: 69.1 mLAT

Test Remarks & Observations:
Lost communication with cone after push. Rod snapped and cone lost in seabed - no post test offsets available.
Unusable data has been trimmed off the base of test.

Prepared:	Checked:	Approved:
DNO	RWO	JED

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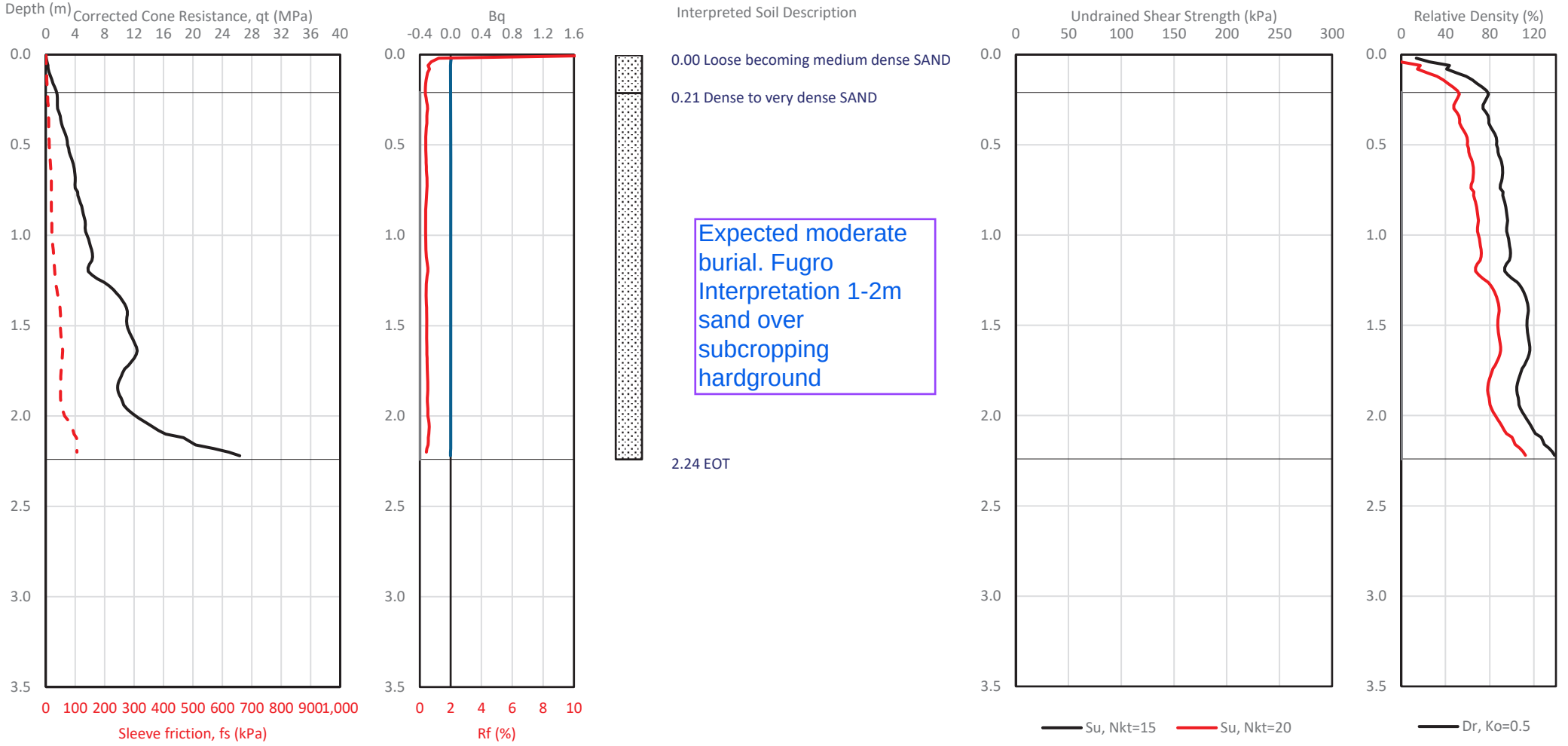
Cone Penetration Test Results - Derived Data

KP57.151

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP103.141
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1**	No. **5A_A**



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	2.24 m	Pitch/Roll:	1.4 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.6 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	259,605.3 m
UTM 30°N	Northing:	5,740,322.5 m
	Water Depth:	69.0 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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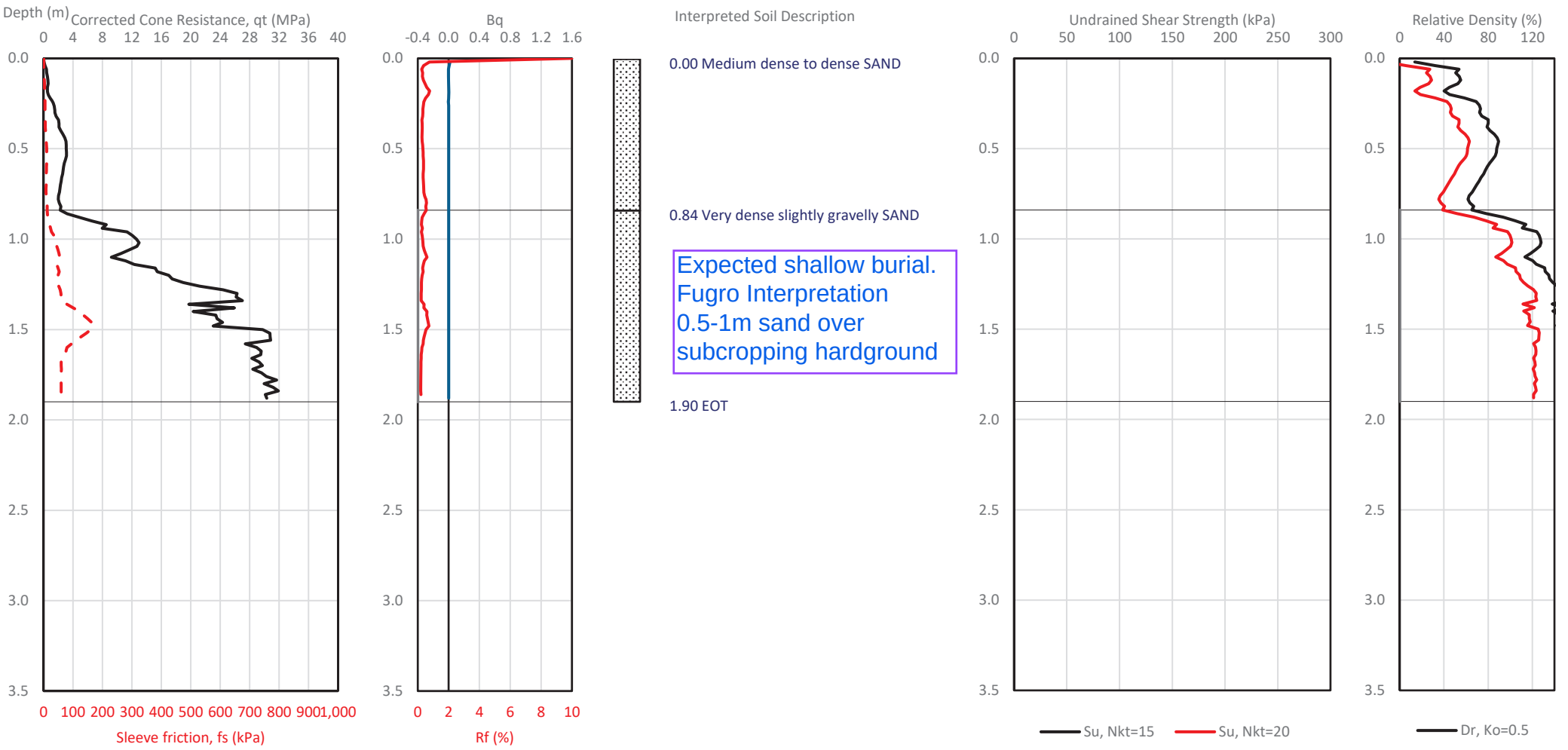
Cone Penetration Test Results - Derived Data

KP58.590

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP101.703
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1** No. **6A_A**



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.90 m	Pitch/Roll:	-0.2 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	1.9 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	
UTM 30°N	
Easting:	259,909.8 m
Northing:	5,739,001.3 m
Water Depth:	68.4 m

Test Remarks & Observations:
Total load sensor not functional during the test. Push was stopped by operator when base frame inclination reached 3 degrees

Prepared:	Checked:	Approved:
RWO	DNO	JED

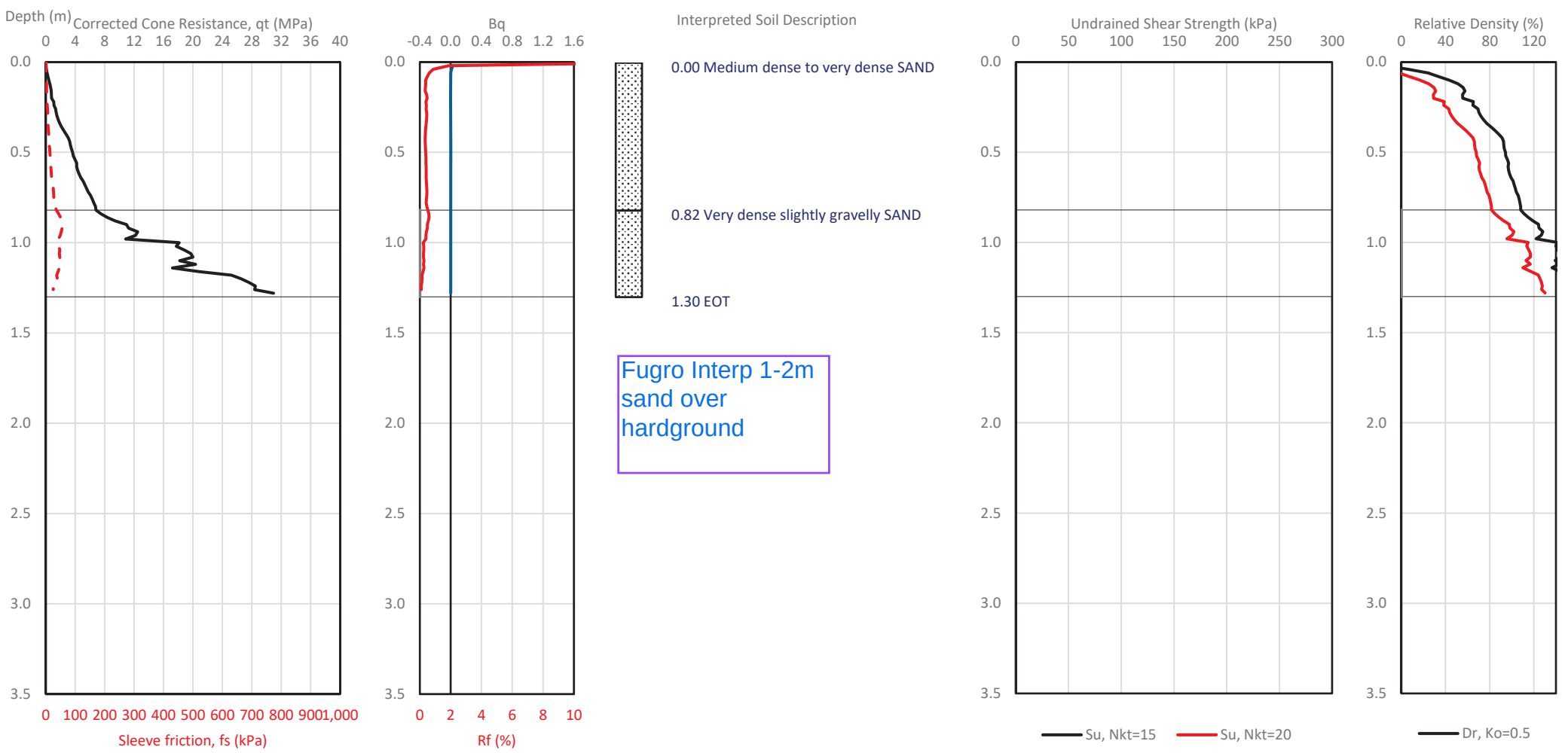
Bluefield Geoservices

Bluefield Geoservices
www.bluefieldgeo.com

Cone Penetration Test Results - Derived Data

KP58.599

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP101.694
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1** No. **6A**



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.30 m	Pitch/Roll:	-0.3 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.9 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	259,909.0 m
UTM 30°N	Northing:	5,738,990.3 m
	Water Depth:	68.4 mLAT

Test Remarks & Observations:

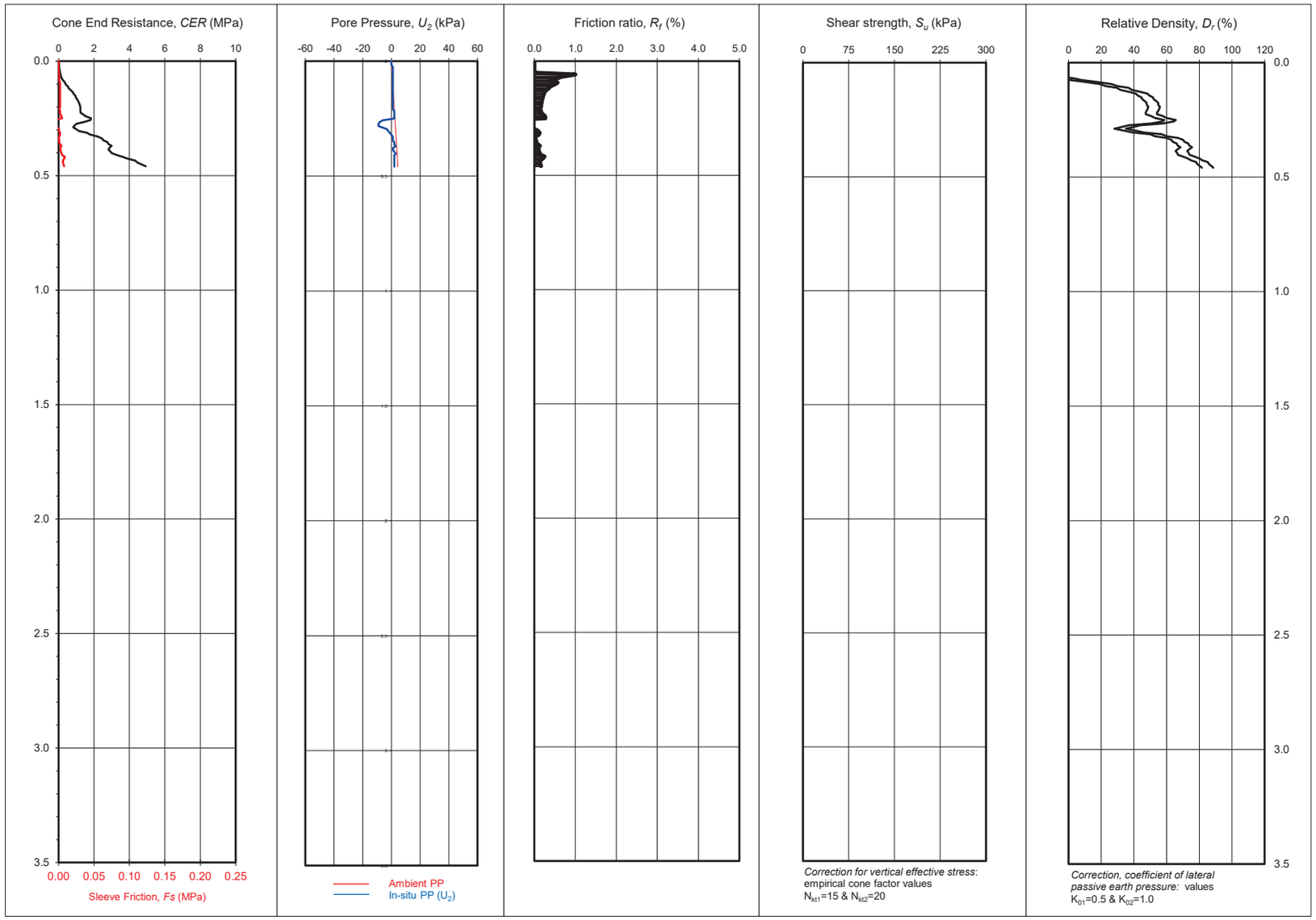
Prepared:	Checked:	Approved:
RWO	DNO	JED

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 44.5895' N	006° 28.2511' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	66		KP59.576
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP07**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP100.717
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	0	-1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.46	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp 0.5 sand over hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP07

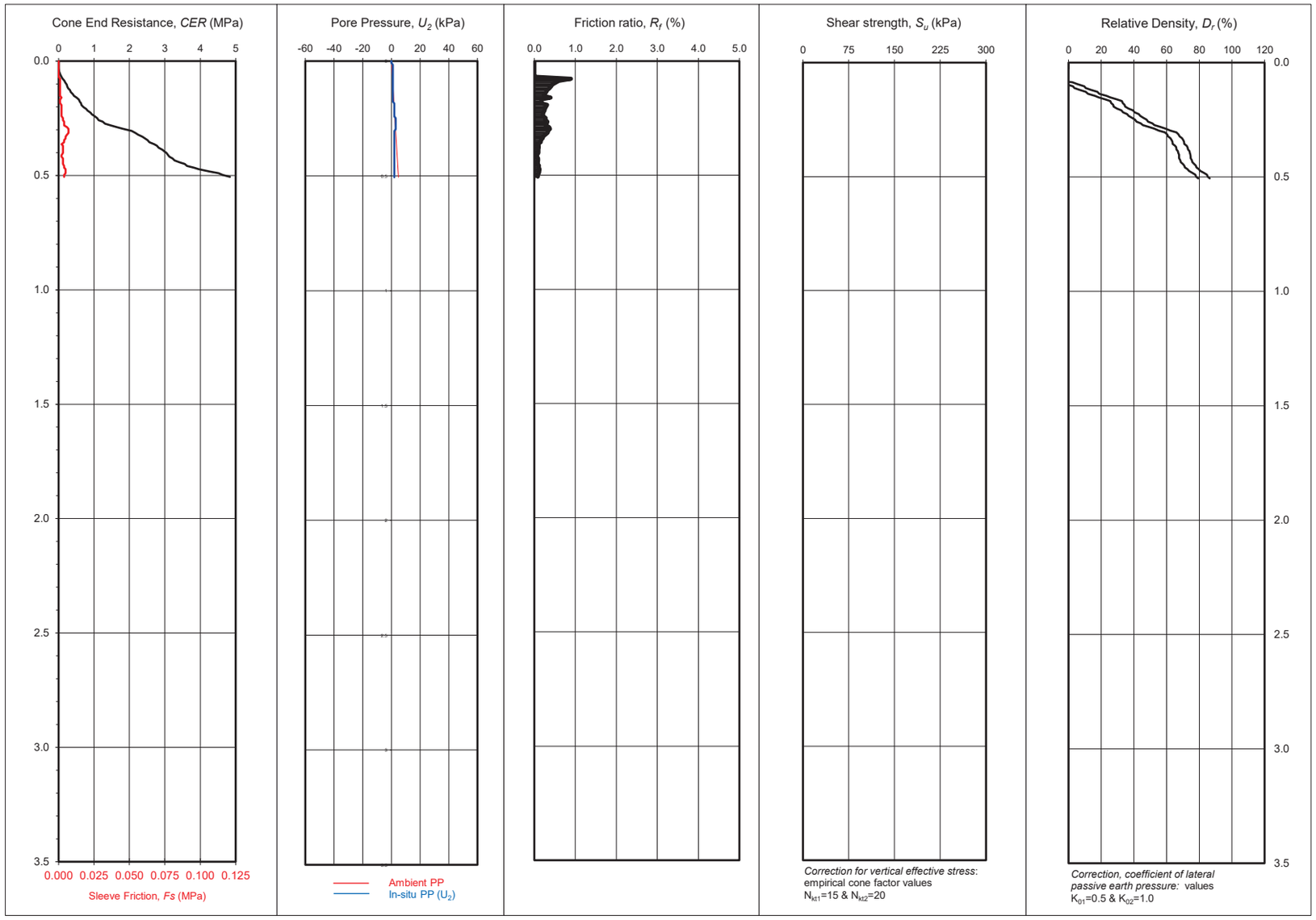
Raw Data Filename : S1-S-CP70001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 44.5885' N	006° 28.2518' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	66		KP59.576
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP07A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP100.716
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.51	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp 0.5 sand over hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP07A

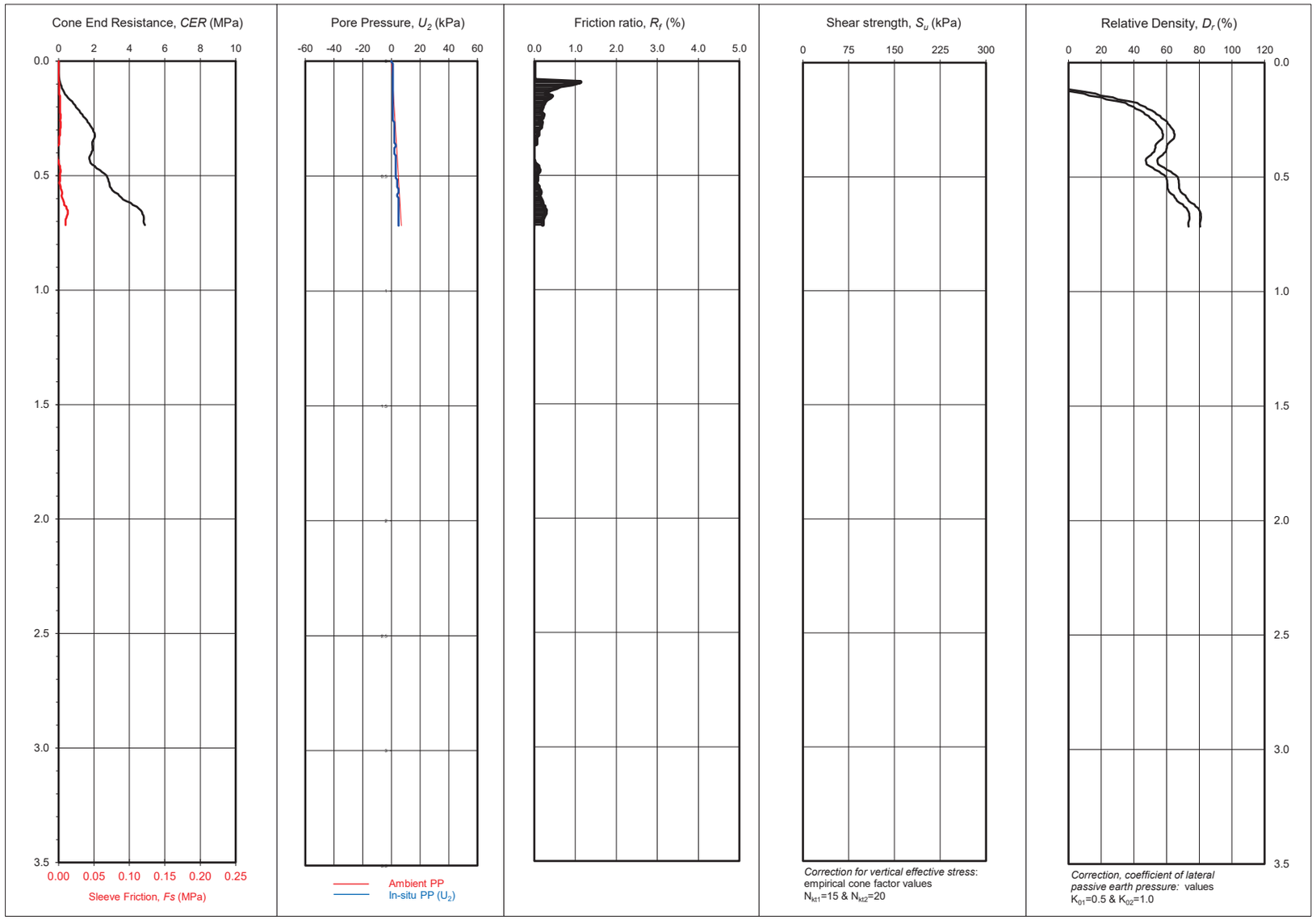
Raw Data Filename : S1-S-CP7_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 43.8721' N	006° 26.1559' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	71		KP62.322
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP08A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	1	1	KP97.960

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.72	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP08A

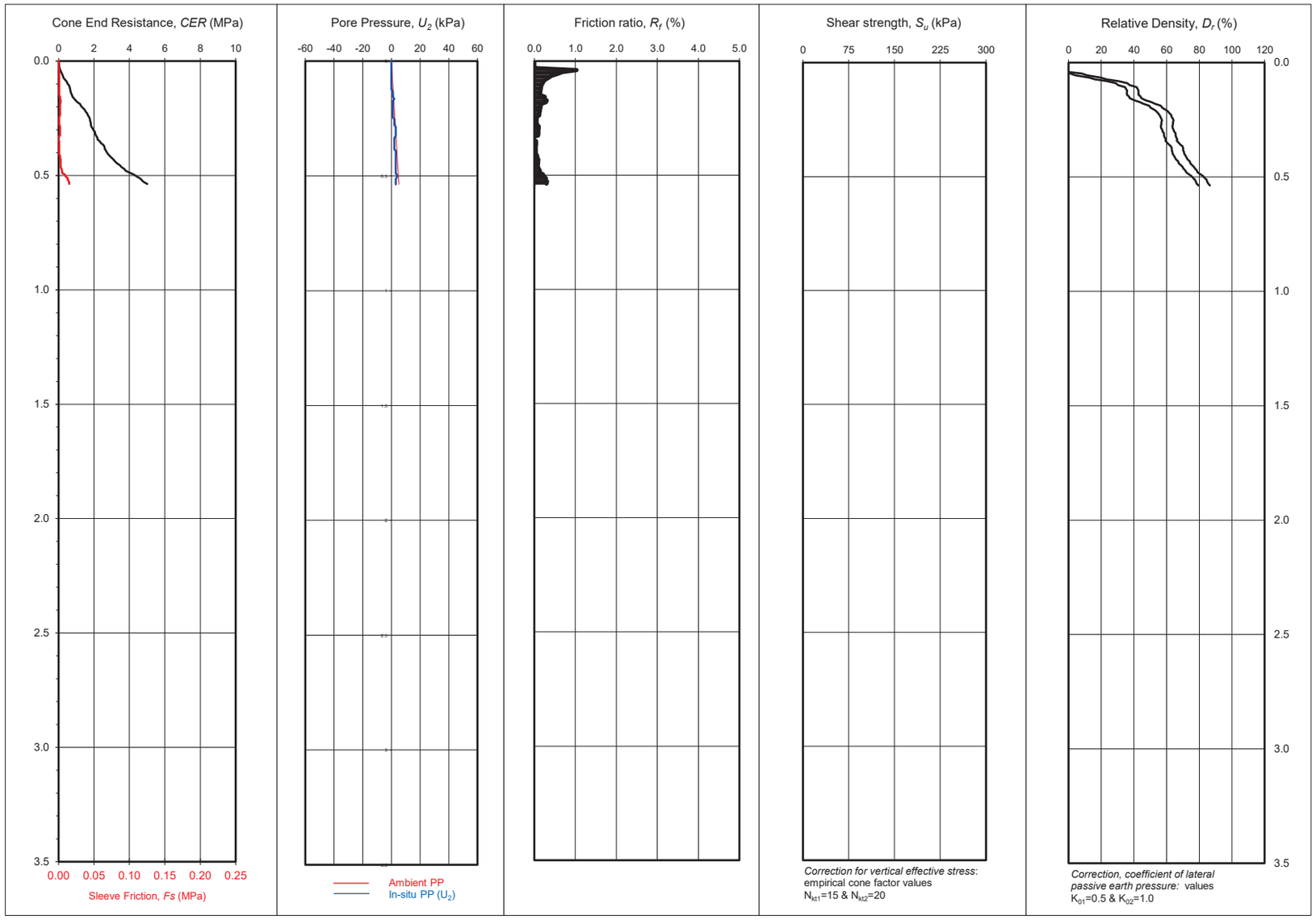
Raw Data Filename : S1-S-CP8_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 43.8727' N	006° 26.1552' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	71		KP62.332
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP08**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-3	1	KP97.960

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.54	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP08

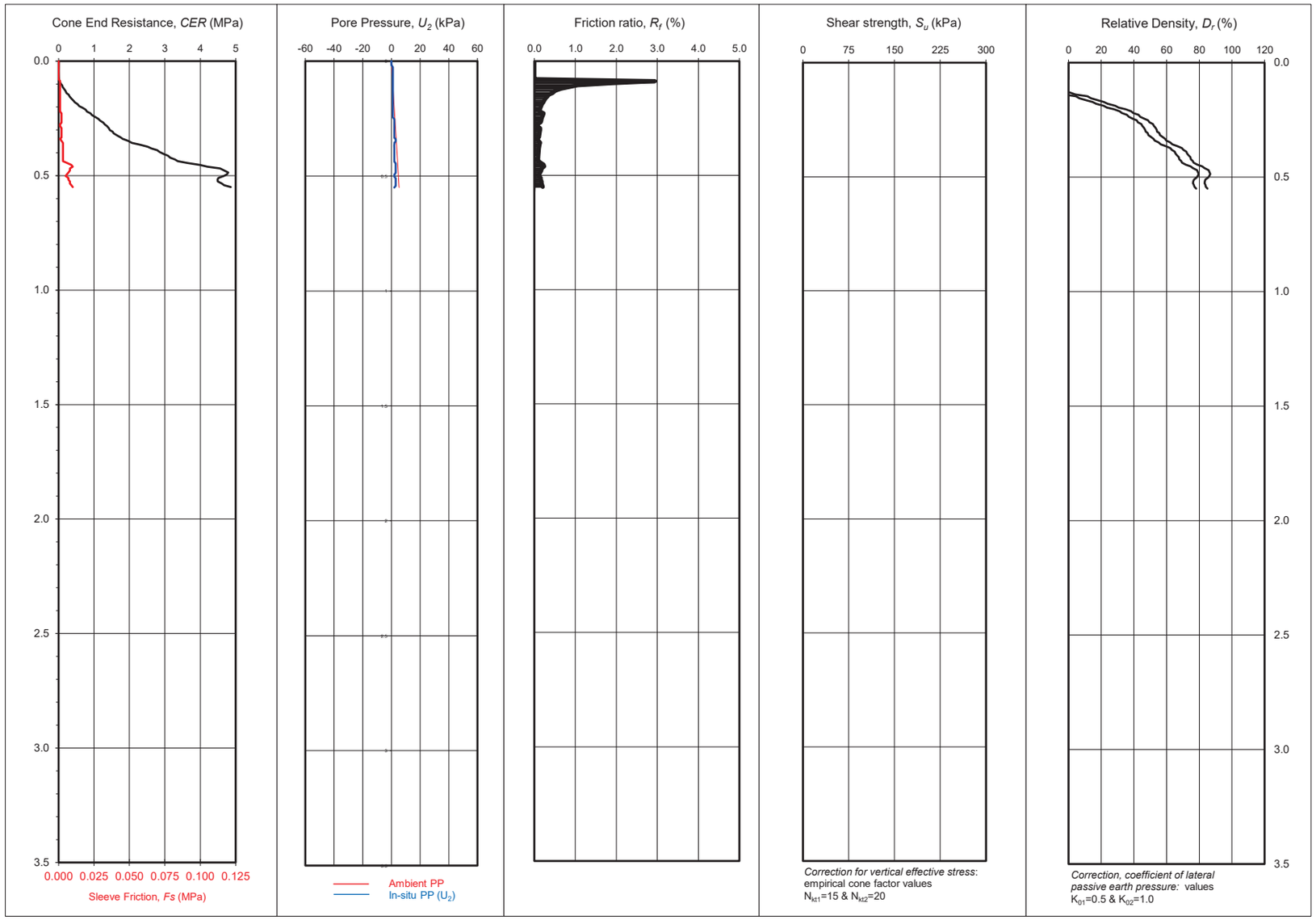
Raw Data Filename : S1-S-CP80001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 42.9424' N	006° 23.7139' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	67		KP65.629
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP09**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-3	0	KP94.663

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.57	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP09

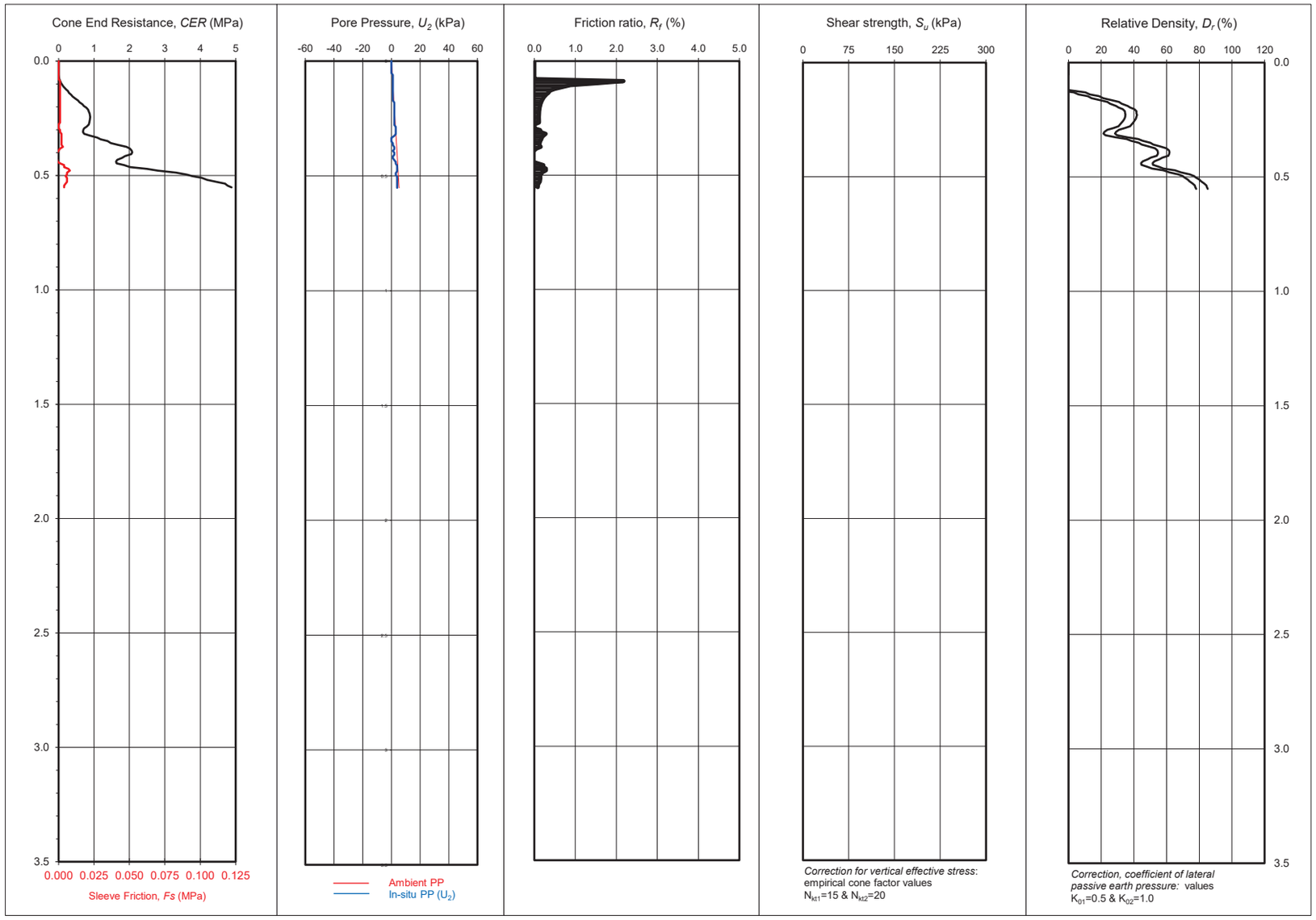
Raw Data Filename : S1-S-CP90001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 42.9422' N	006° 23.7119' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	67		KP65.631
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP09A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP94.661
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-2	1	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.55	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat seabed with megaripples.

CPT Number:

S1-S-CP09A

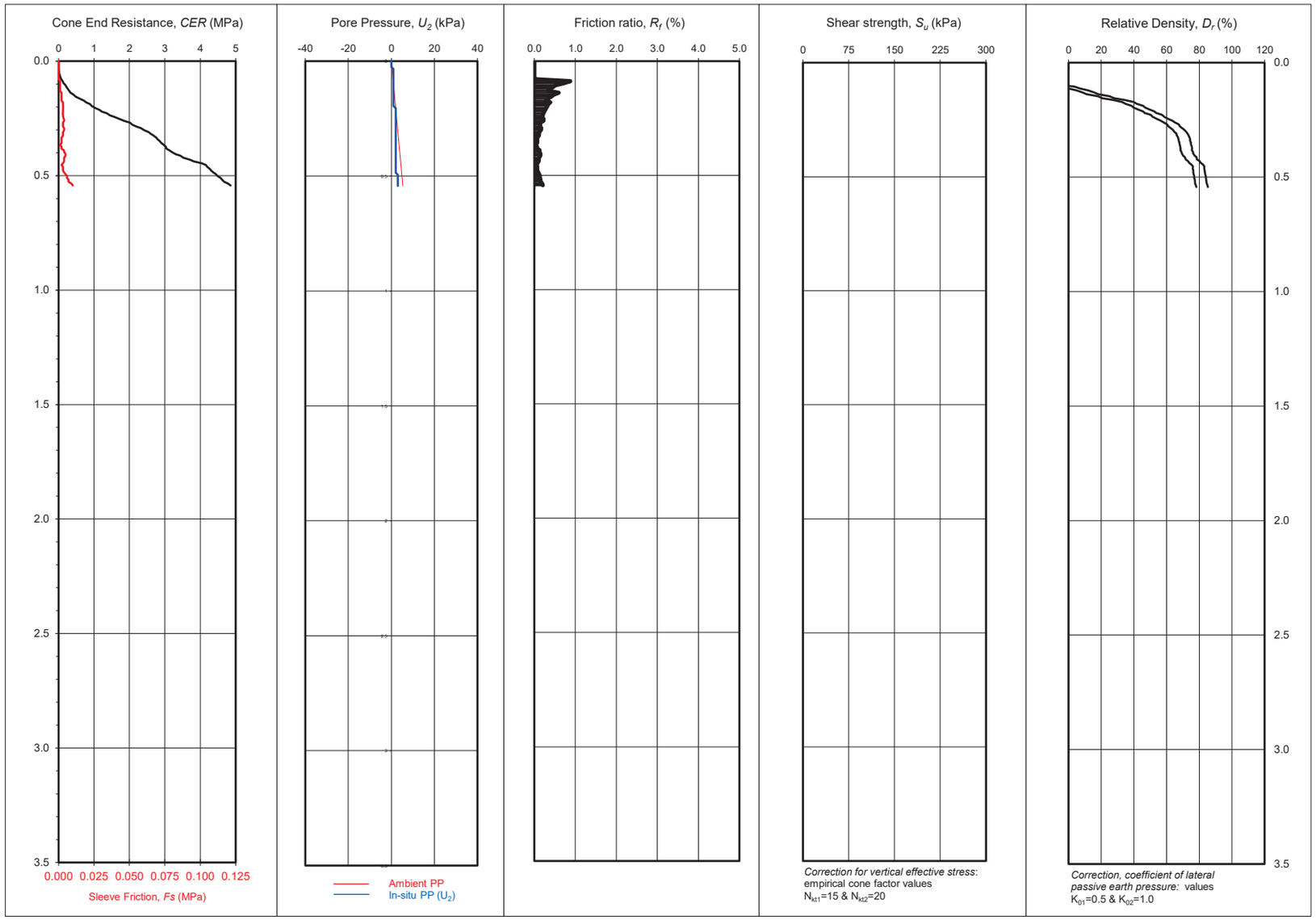
Raw Data Filename : S1-S-CP9_A0001.rdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 41.5502' N	006° 19.6894' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	74		KP70.971
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP10**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	1	1	KP89.321

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.54	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on seabed with current striations and megaripples.

CPT Number:

S1-S-CP10

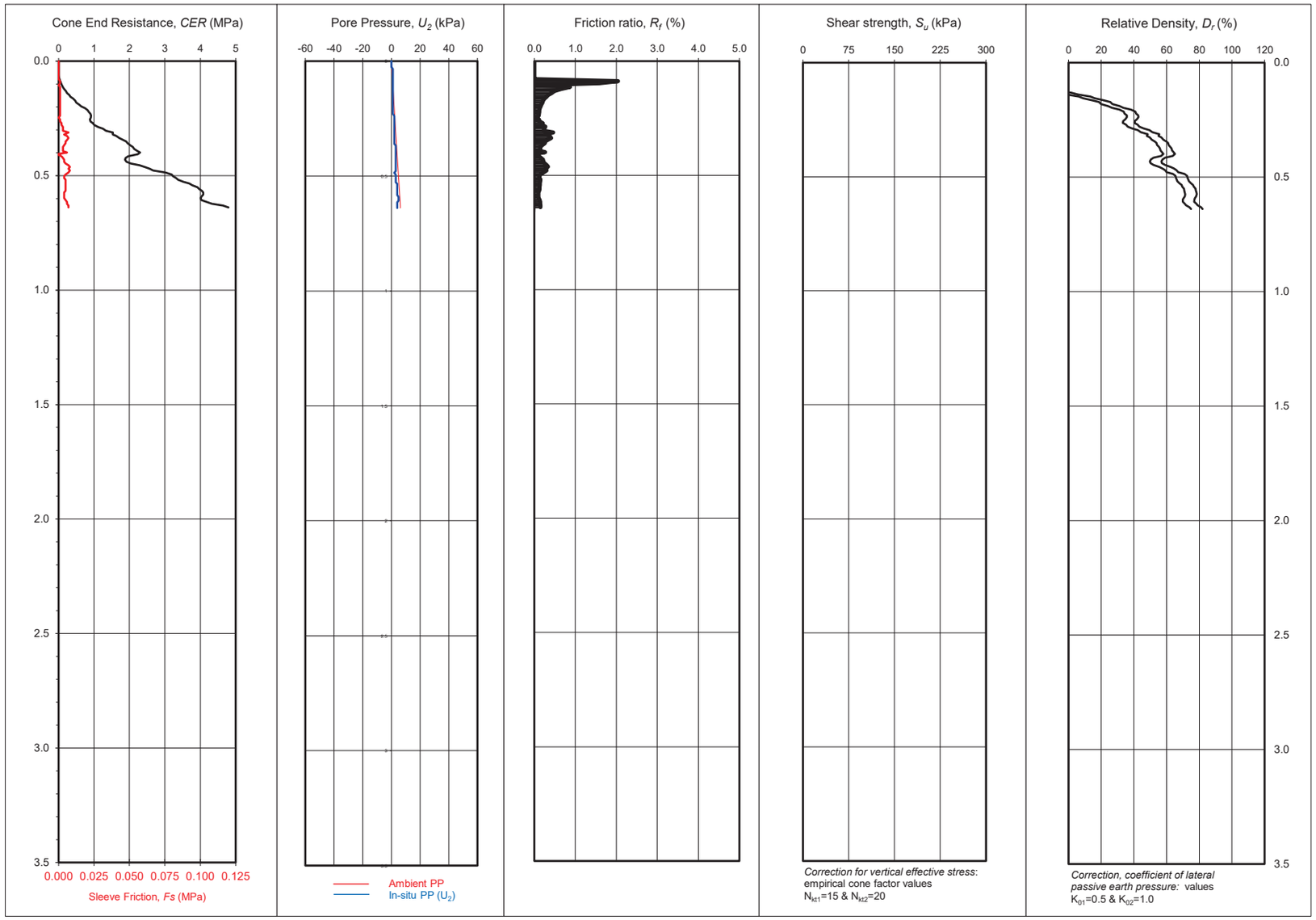
Raw Data Filename : S1-S-CP100001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 41.5506' N	006° 19.6885' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	72		KP70.972
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP10A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-2	2	KP89.321

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.64	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on seabed with current striations and megaripples.

CPT Number:

S1-S-CP10A

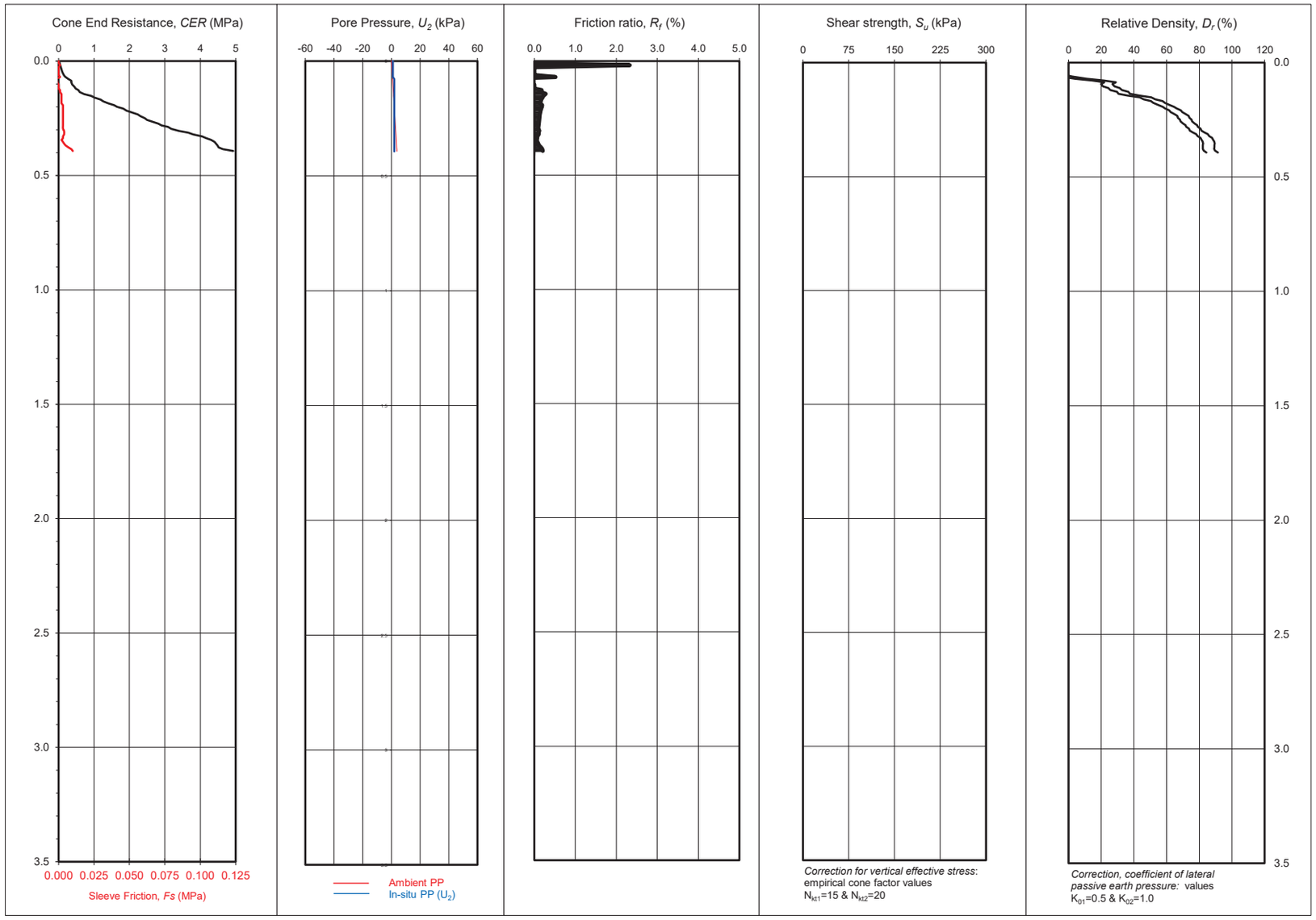
Raw Data Filename : S1-S-CP10_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 41.1292' N	006° 18.2458' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	73		KP72.809
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP11**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	0	KP87.483

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.39	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on seabed with current striations and megaripples.

CPT Number:

S1-S-CP11

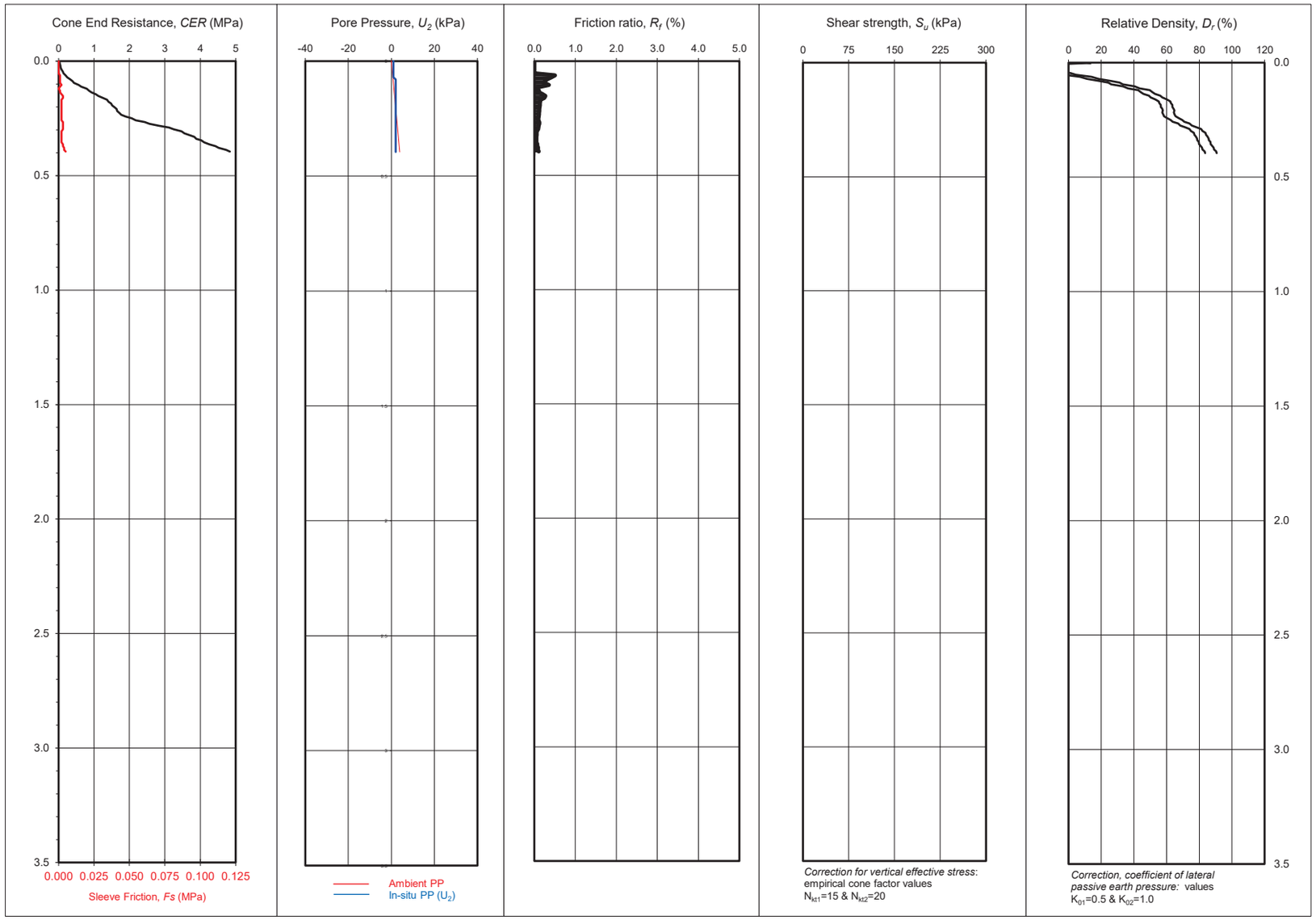
Raw Data Filename : S1-S-CP110001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 41.1295' N	006° 18.2455' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	73		KP72.809
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP11A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	0	KP87.483

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to dense SAND	
0.39	*End of CPT.* *Stopped by hard layer.*	

Fugro Interp
0.5-1m sand over
hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on seabed with current striations and megaripples.

CPT Number:

S1-S-CP11A

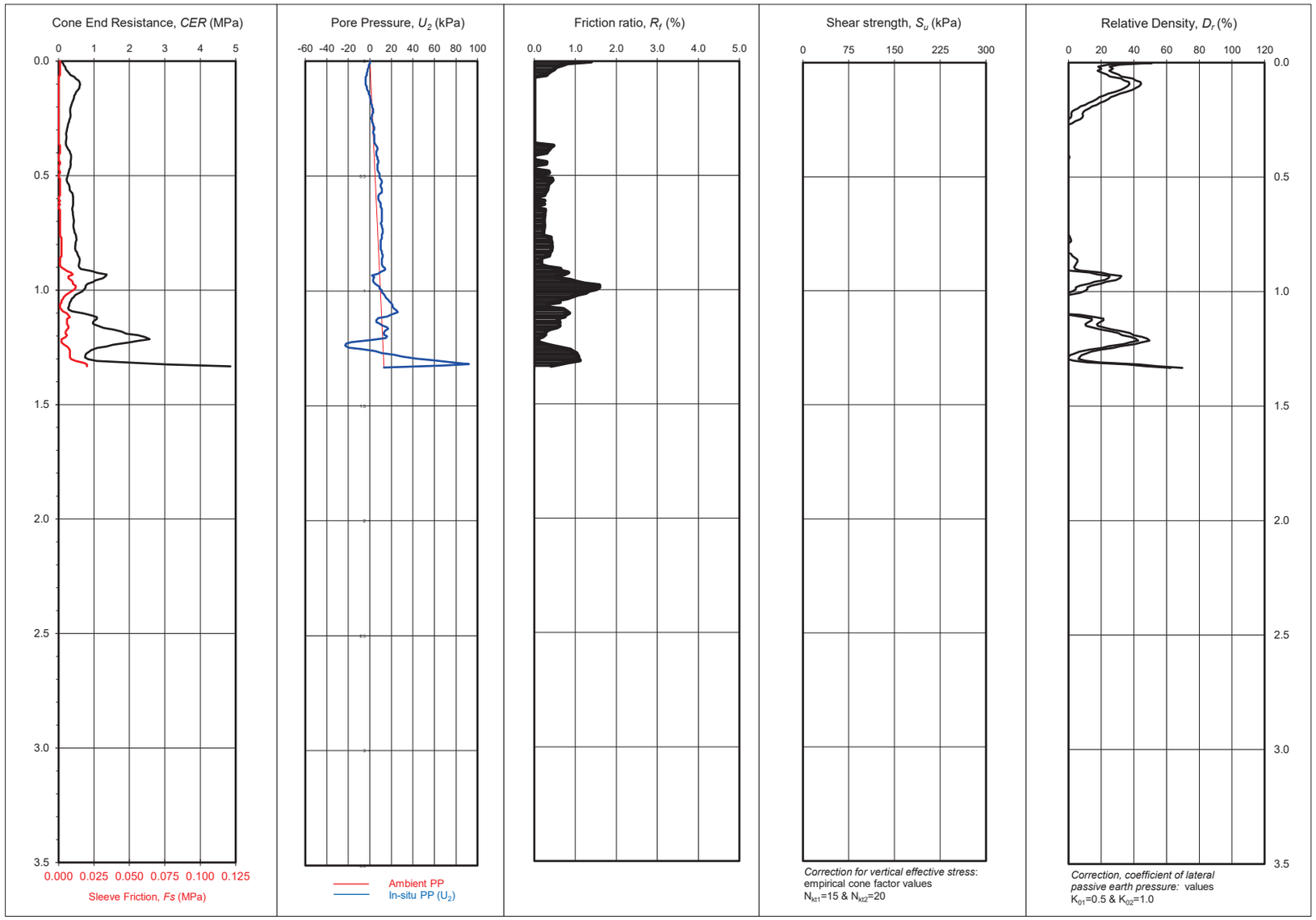
Raw Data Filename : S1-S-CP11_A0001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 39.8925' N	006° 14.6994' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	96		KP77.472
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP12**
Area	Celtic Sea		Cone Number/Size	574	2cm2	
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	0	KP82.820

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to medium dense SAND	
0.91	Very loose to dense shelly SAND	
1.33	*End of CPT.* *Stopped by hard layer.*	

Expected good burial.
Fugro Interpretation
>2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat and featureless seabed.

CPT Number:

S1-S-CP12

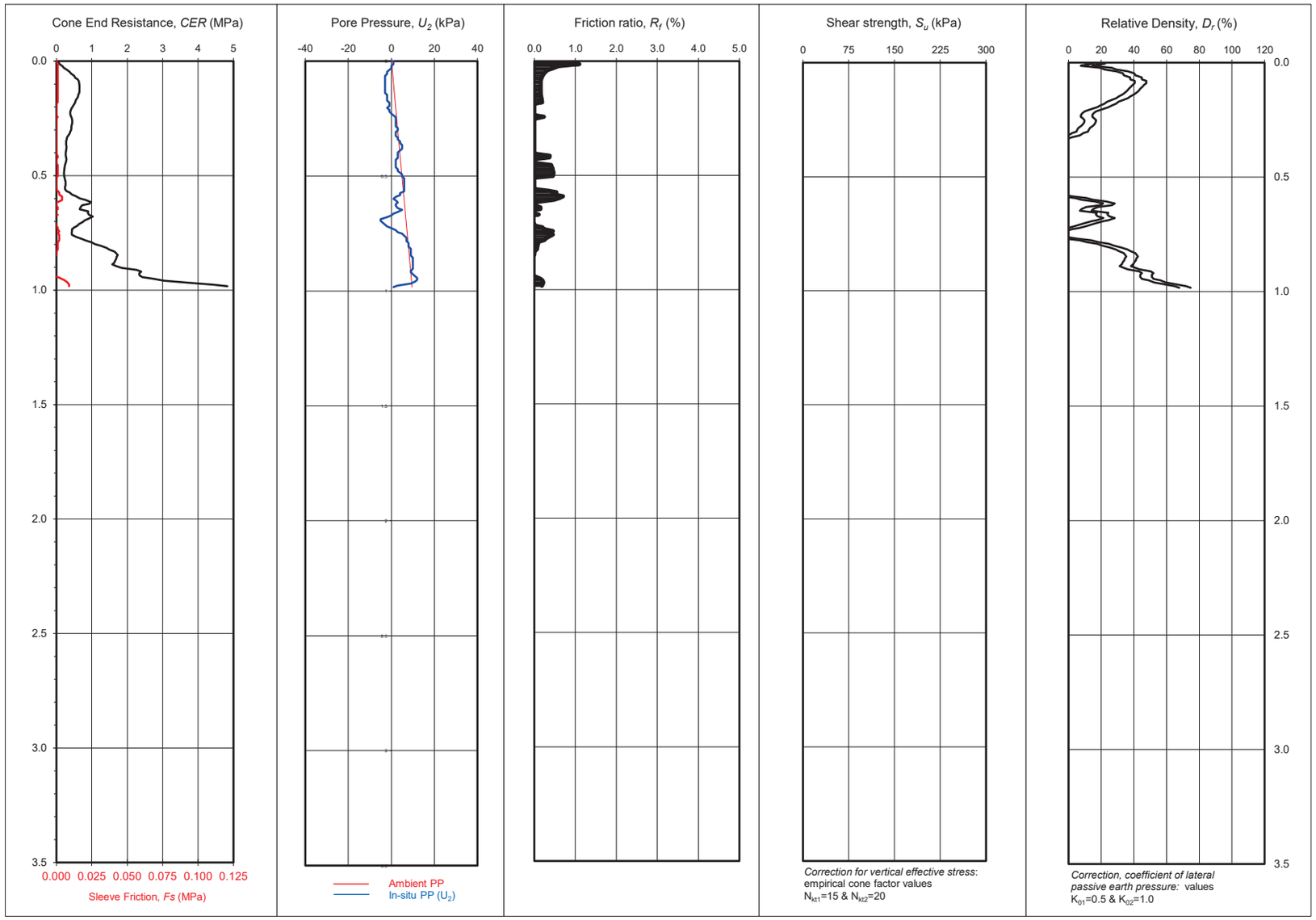
Raw Data Filename : S1-S-CP120001.cdf

CONE PENETRATION TEST RESULTS

Contract No.	201-22-680	Project Title	Coordinates	51° 39.8925' N	006° 14.6994' W	CPT Number:
Vessel	Fugro Supporter	**Marine Cable Route Survey**	Water Depth(m) - uncorrected	96		KP77.473
Client	Amazon Web Services and Vodafone	**Beaufort Subsea Cable**	Date of Test (dd/mm/yyyy)	29/04/2022		**S1-S-CP12A**
Area	Celtic Sea		Cone Number/Size	574	2cm2	KP82.819
Comments:	Stopped by hard layer		Base Inclination (X Y) - degrees	-1	0	

Soil Depth [m]	Estimated Soil Type	Legend
	Very loose to medium dense SAND	
0.57	Very loose to medium dense silty SAND	
0.98	*End of CPT.* *Stopped by hard layer.*	

Expected good burial.
Fugro Interpretation
>2m sand over subcropping hardground



Relative Density (%)		Shear Strength (kPa)	
Very Loose	<15%	Very Soft	<20kPa
Loose	15-35%	Soft	20-40kPa
Medium Dense	35-65%	Firm	40-75kPa
Dense	65-85%	Stiff	75-150kPa
Very Dense	85-100%	Very Stiff	150-300kPa
Cemented	>100%	Hard	>300kPa

Interpretation Comments:

Taken on flat and featureless seabed.

CPT Number:

S1-S-CP12A

Raw Data Filename : S1-S-CP12_A0001.cdf

Cone Penetration Test Results - Derived Data

Bluefield Geoservices
Bluefield Geoservices
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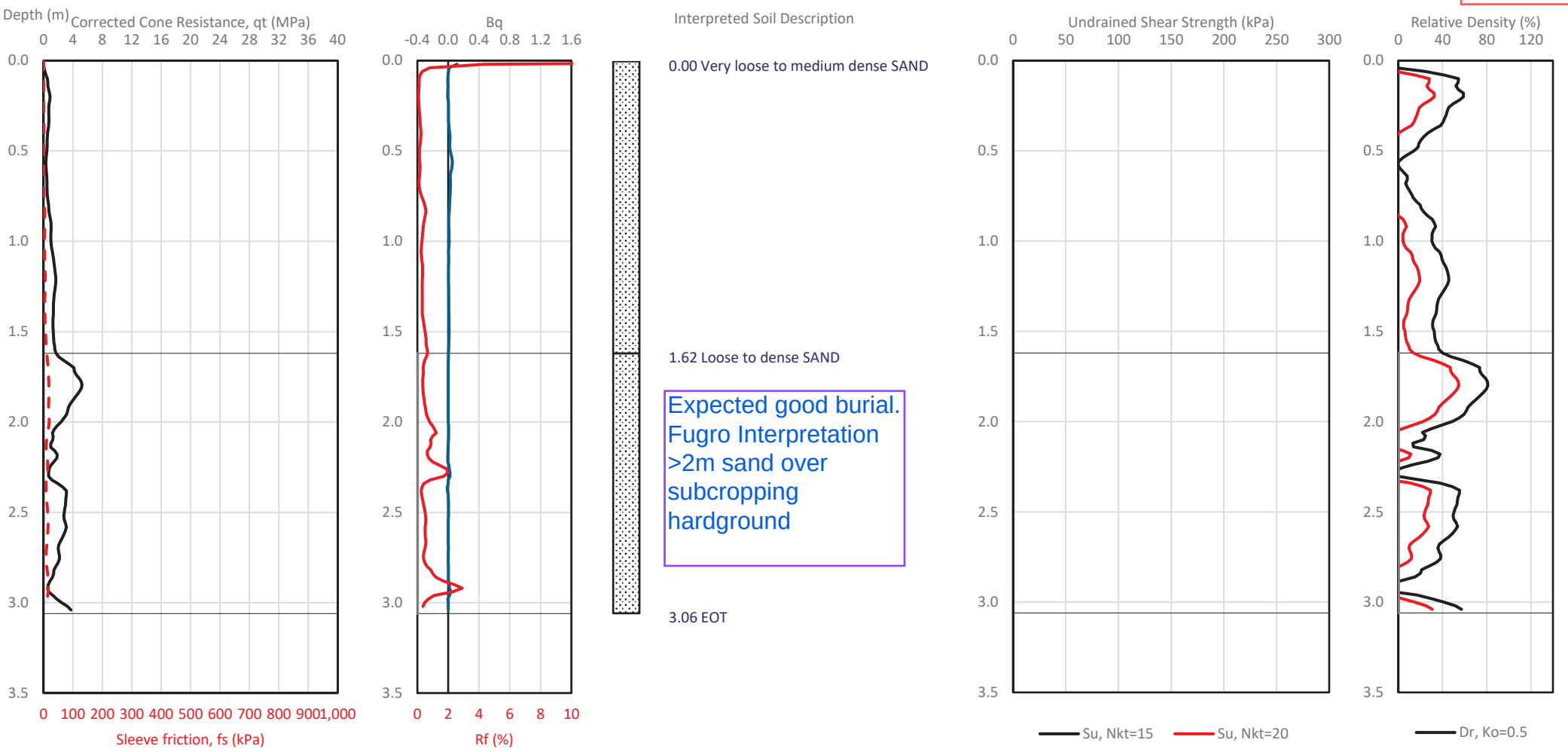
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP77.795
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1** No. **4A** KP82.498



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.06 m	Pitch/Roll:	-0.2 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	275,943.5 m
UTM 30°N	Northing:	5,728,791.3 m
	Water Depth:	98.5 mLAT

Test Remarks & Observations:
NOTE: 10MPa scale used for Cone End Resistance due to soft nature of soils

Prepared:	Checked:	Approved:
RWO	DNO	JED

VC Geotechnical Log

Bluefield Geoservices
Bluefield Geoservices
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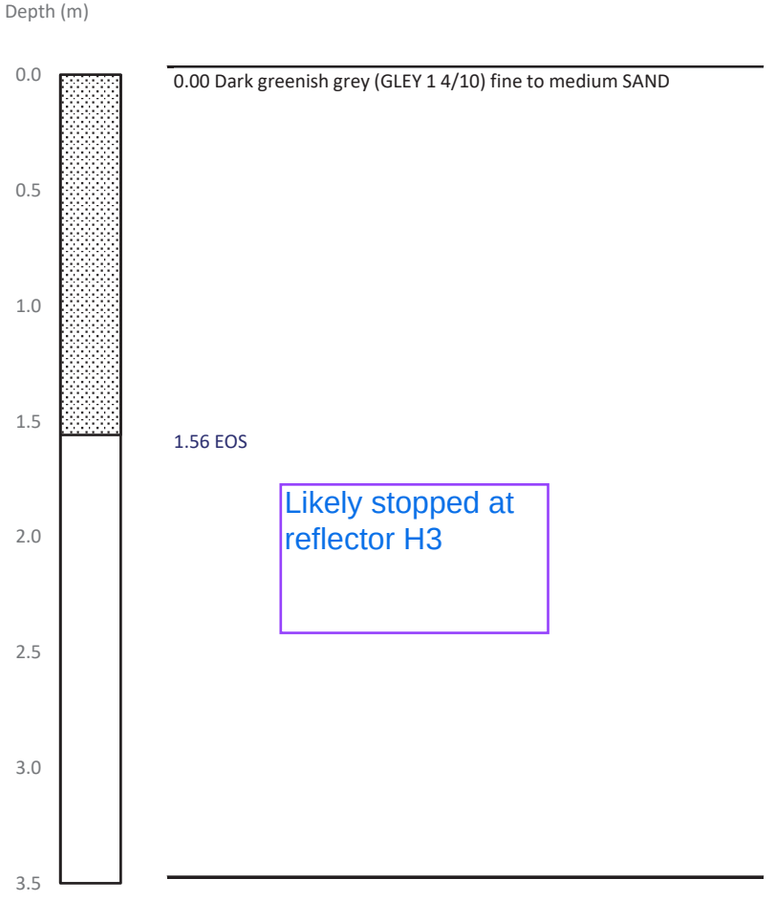
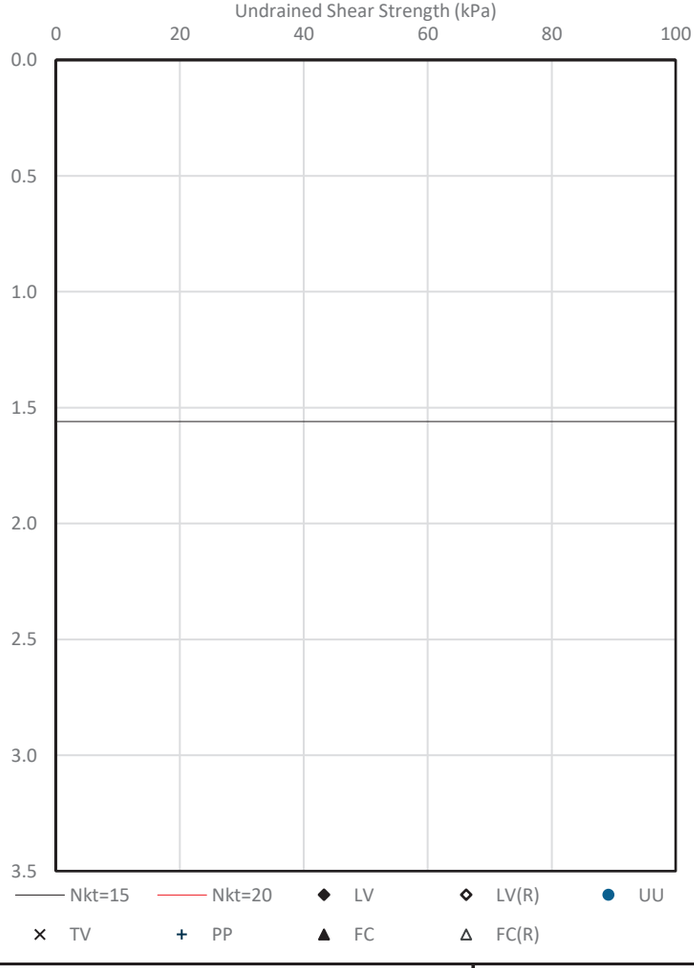
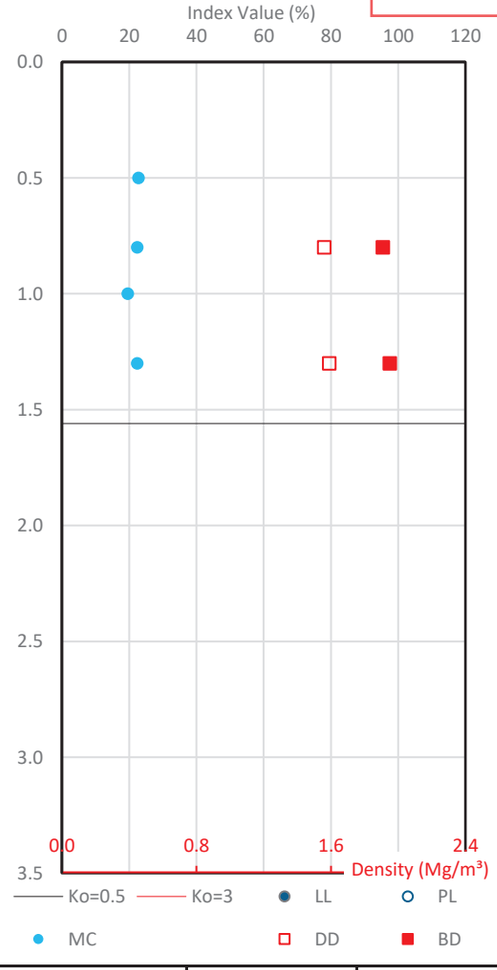
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**			Client: Green Rebel	KP81.180
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 29-Aug 2024	Test : No. **BFT_24G01_VC_A5**

KP82.498



Likely stopped at reflector H3





Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	279,235.8 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,728,082.3 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 1.56 m				Water Depth:	107.2 mLAT
Test Remarks & Observations: Max current during test: 2A Vibration Time: 120sec			Prepared: DNO	Checked: RWO	Approved: JED

VC Geotechnical Log

Bluefield Geoservices
Bluefield Geoservices
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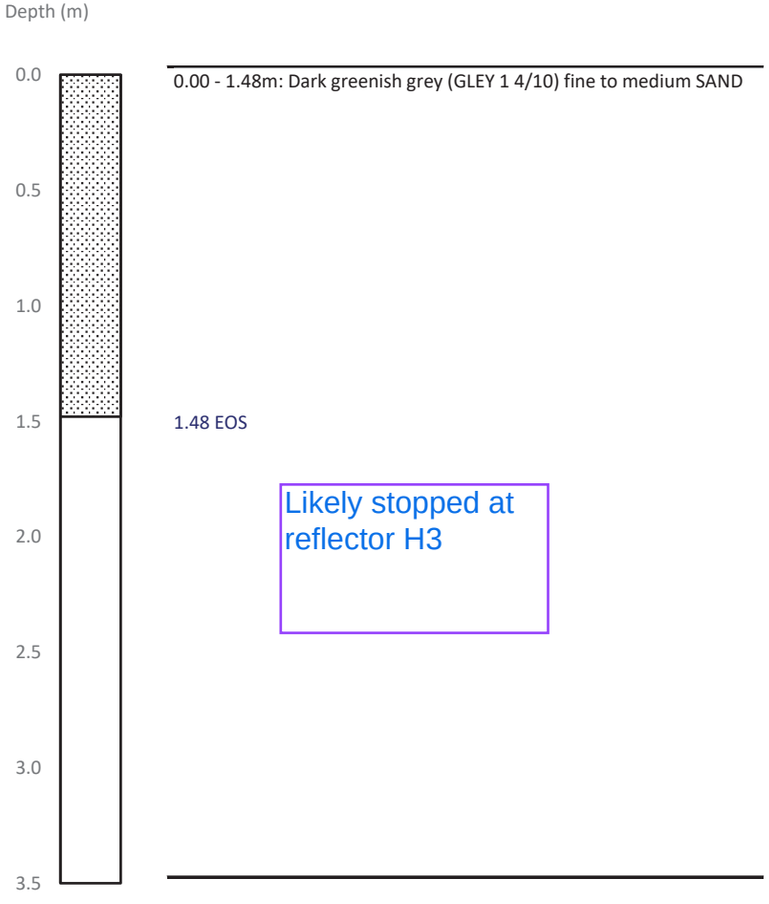
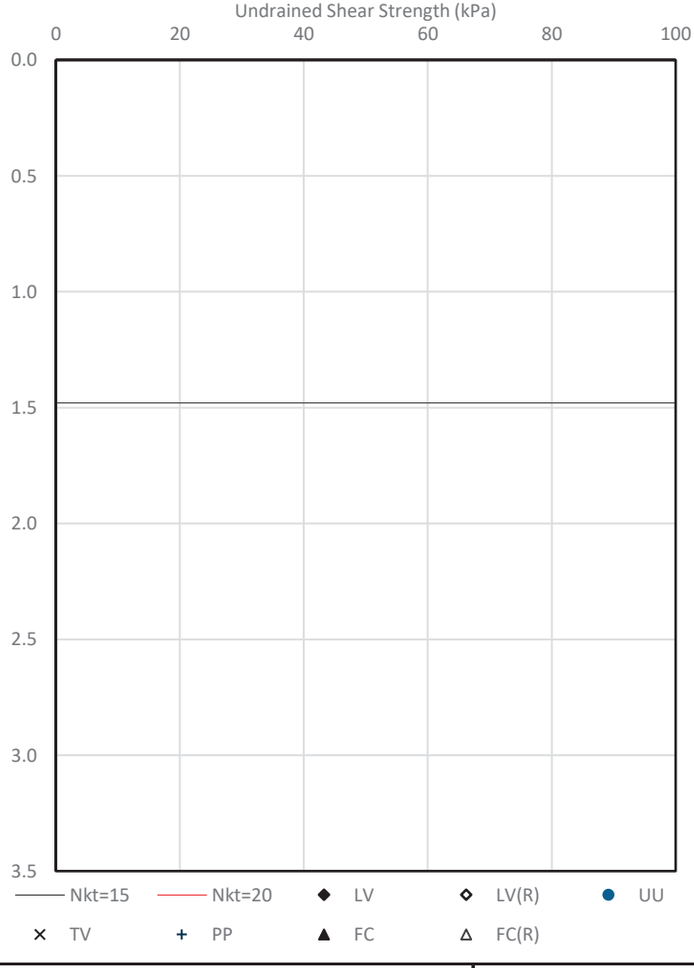
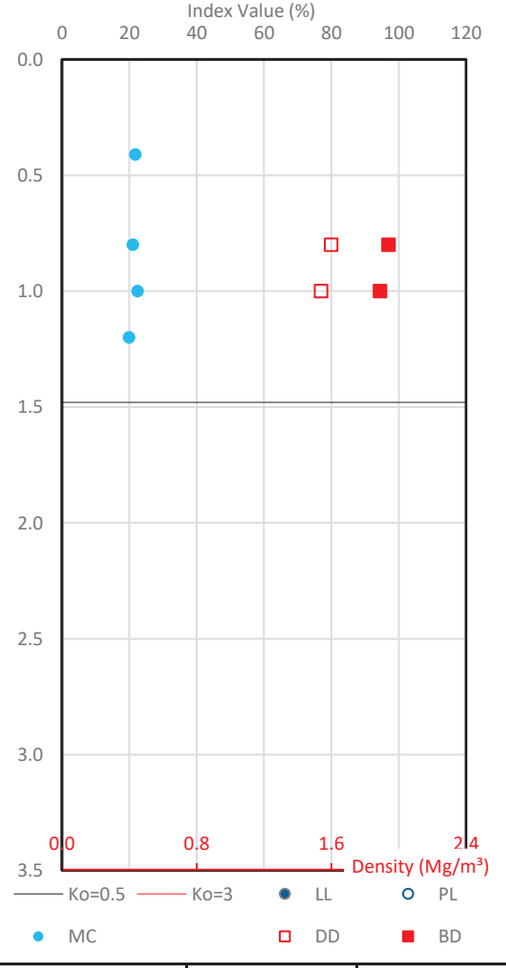
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP81.190
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 29-Aug 2024	Test : No. **BFT_24G01_VC_A5_A**	





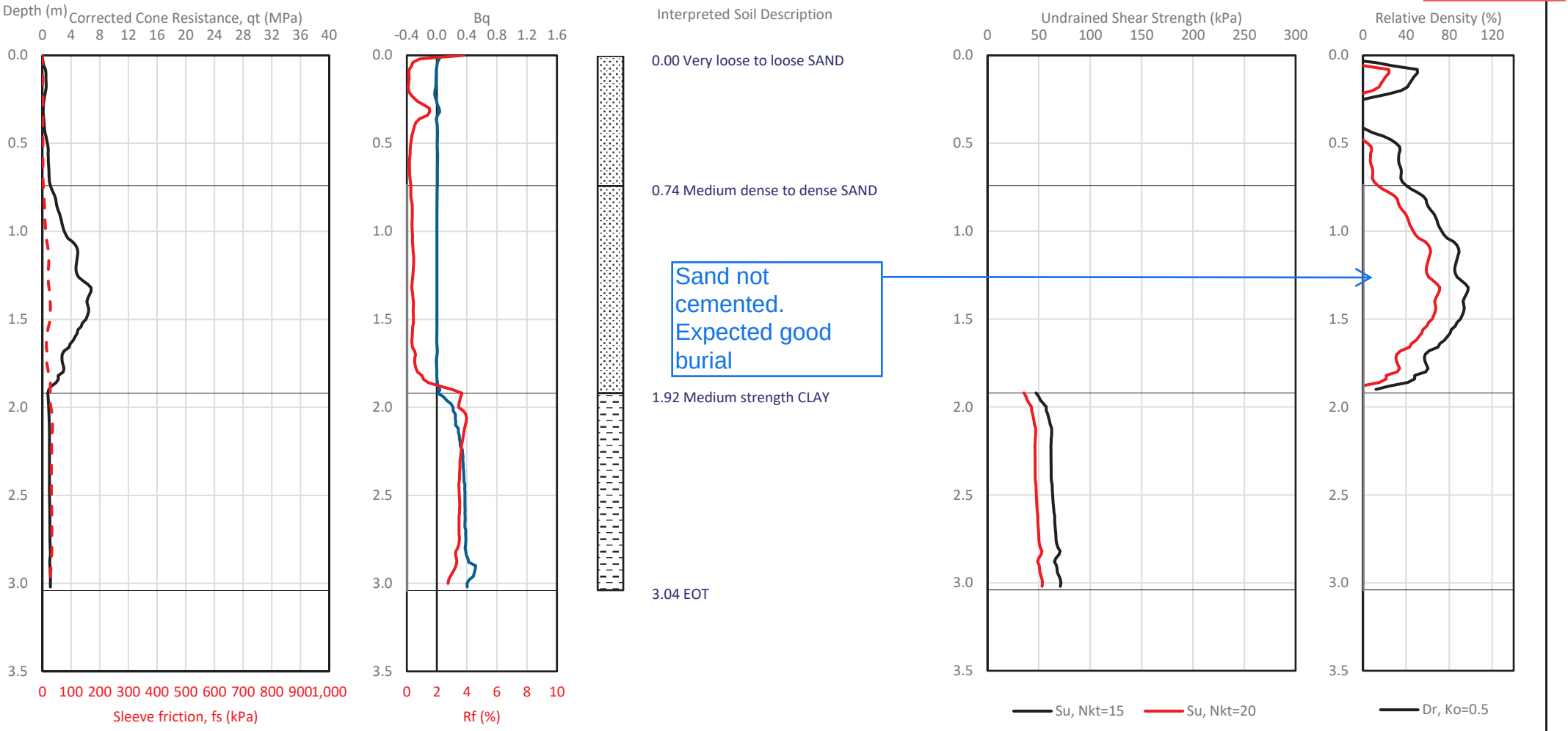


Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	279,246.5 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,728,081.0 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 1.48 m				Water Depth:	107.4 mLAT
Test Remarks & Observations: Max current during test: 2A Vibration Time: 150sec			Prepared: DNO	Checked: RWO	Approved: JED

Cone Penetration Test Results - Derived Data

Bluefield Geoservices
Bluefield Geoservices
www.bluefieldgeo.com

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP85.180
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **3A**	KP75.112



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.04 m	Pitch/Roll:	-0.3 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.5 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	283,231.6 m
UTM 30°N	Northing:	5,727,914.5 m
	Water Depth:	112.6 m

Test Remarks & Observations:
NOTE: 10MPa scale used for Cone Resistance plot due to soft nature of soils

Prepared:	Checked:	Approved:
RWO	DNO	JED

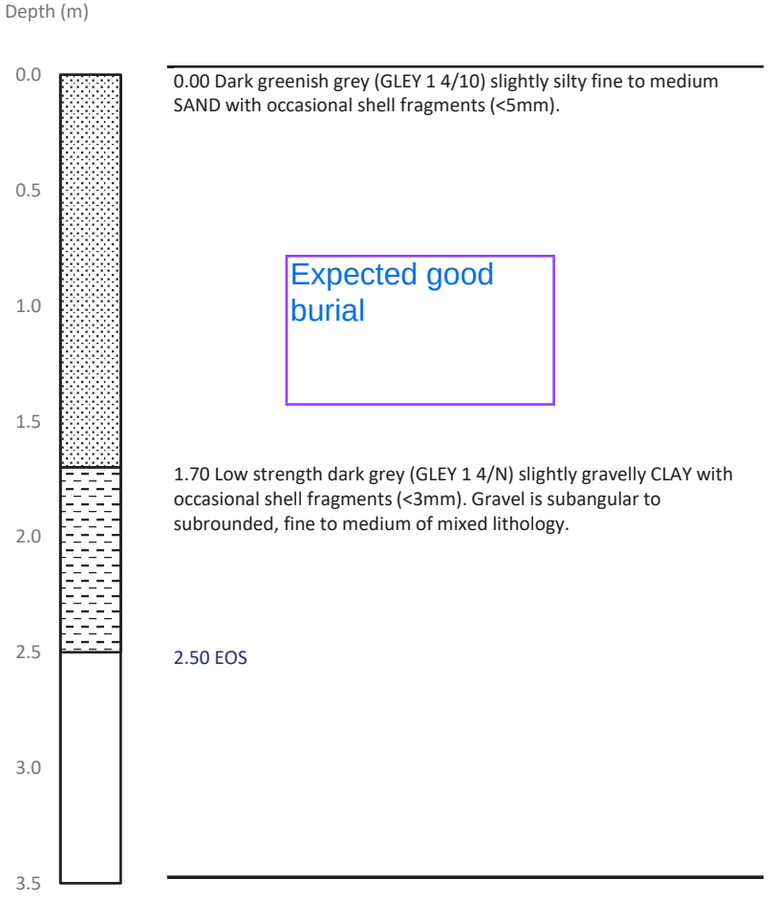
VC Geotechnical Log

KP89.180

Bluefield Geoservices
Bluefield Geoservices
www.bluefieldgeo.com

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	BFT-24G01_VC_A4
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 28-Aug 2024	Test : No. **lab sum**

KP71.112

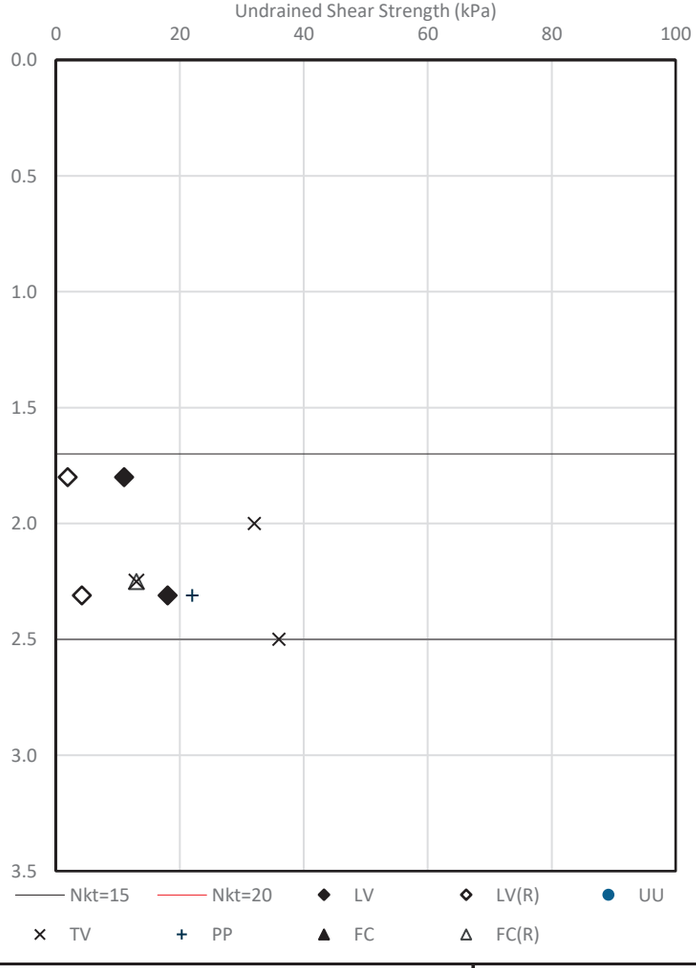


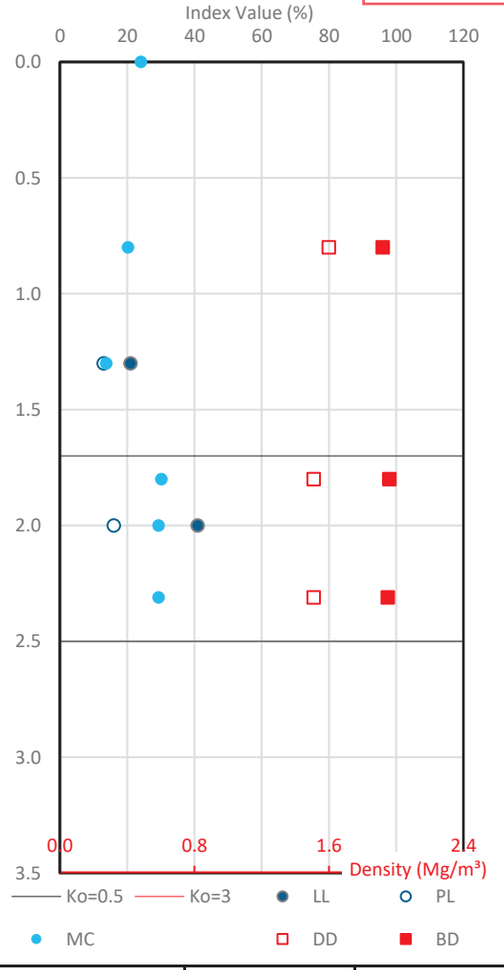
0.00 Dark greenish grey (GLEY 1 4/10) slightly silty fine to medium SAND with occasional shell fragments (<5mm).

Expected good burial

1.70 Low strength dark grey (GLEY 1 4/N) slightly gravelly CLAY with occasional shell fragments (<3mm). Gravel is subangular to subrounded, fine to medium of mixed lithology.

2.50 EOS





Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	287,189.7 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,728,343.0 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 2.50 m				Water Depth:	113.6 mLAT

Test Remarks & Observations: Max current during test: 2A Vibration Time: 120sec
Inverted catcher.
Some sediment found on base plate upon recovery.

Prepared:	Checked:	Approved:
RWO	DNO	JED

VC Geotechnical Log

Bluefield Geoservices
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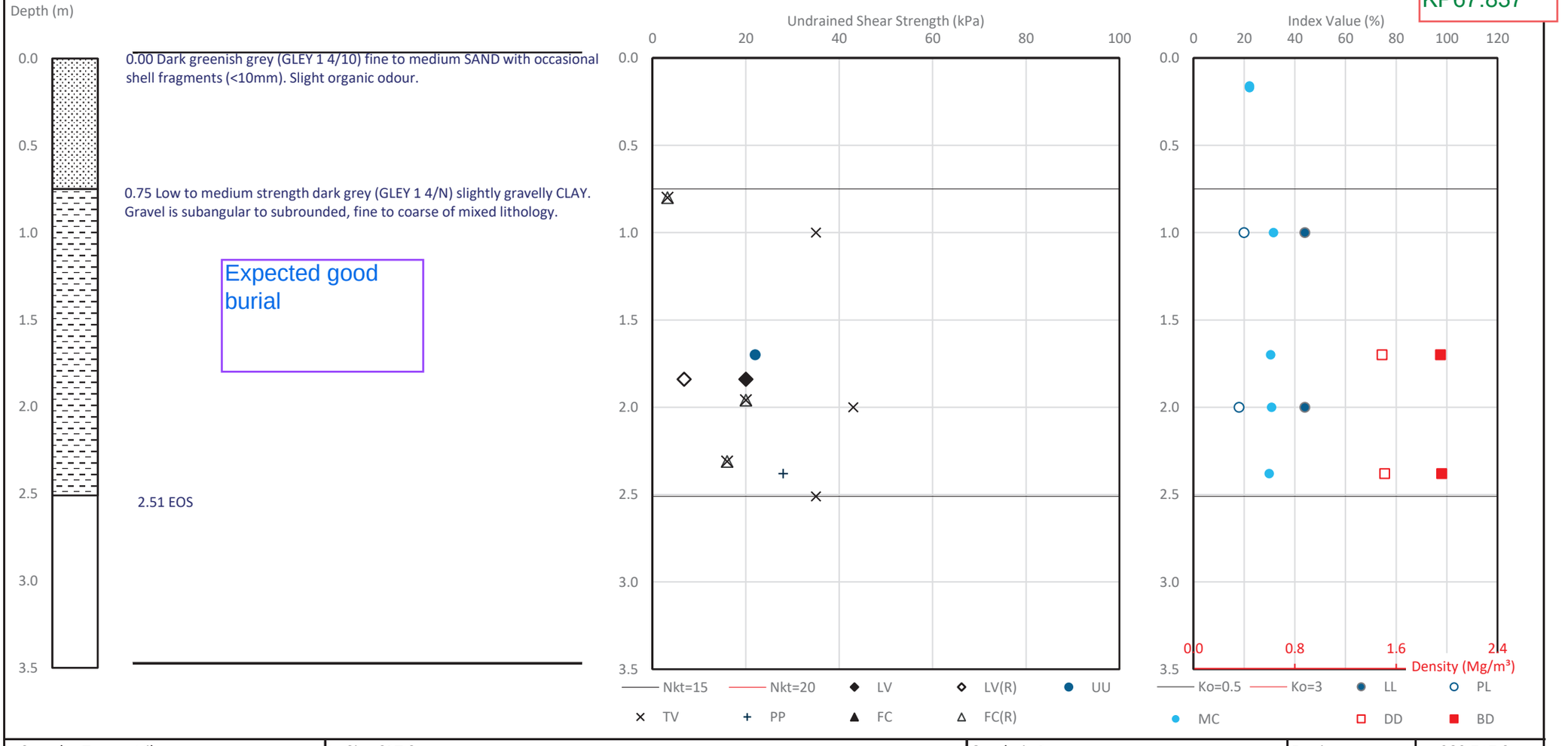
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP92.455
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 28-Aug 2024	Test : No. **BFT_24G01_VC_A6**	KP67.837



Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	289,717.3 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,730,239.0 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 2.51 m				Water Depth:	112.9 m

Test Remarks & Observations: Max current during test: 2A Vibration Time: 120sec
Clay smear approx 0.5m up barrel. Inverted core catcher upon recovery.
Slight disturbance at base of sample due to catcher extraction possibly resulting in lower strength readings.

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

Bluefield Geoservices
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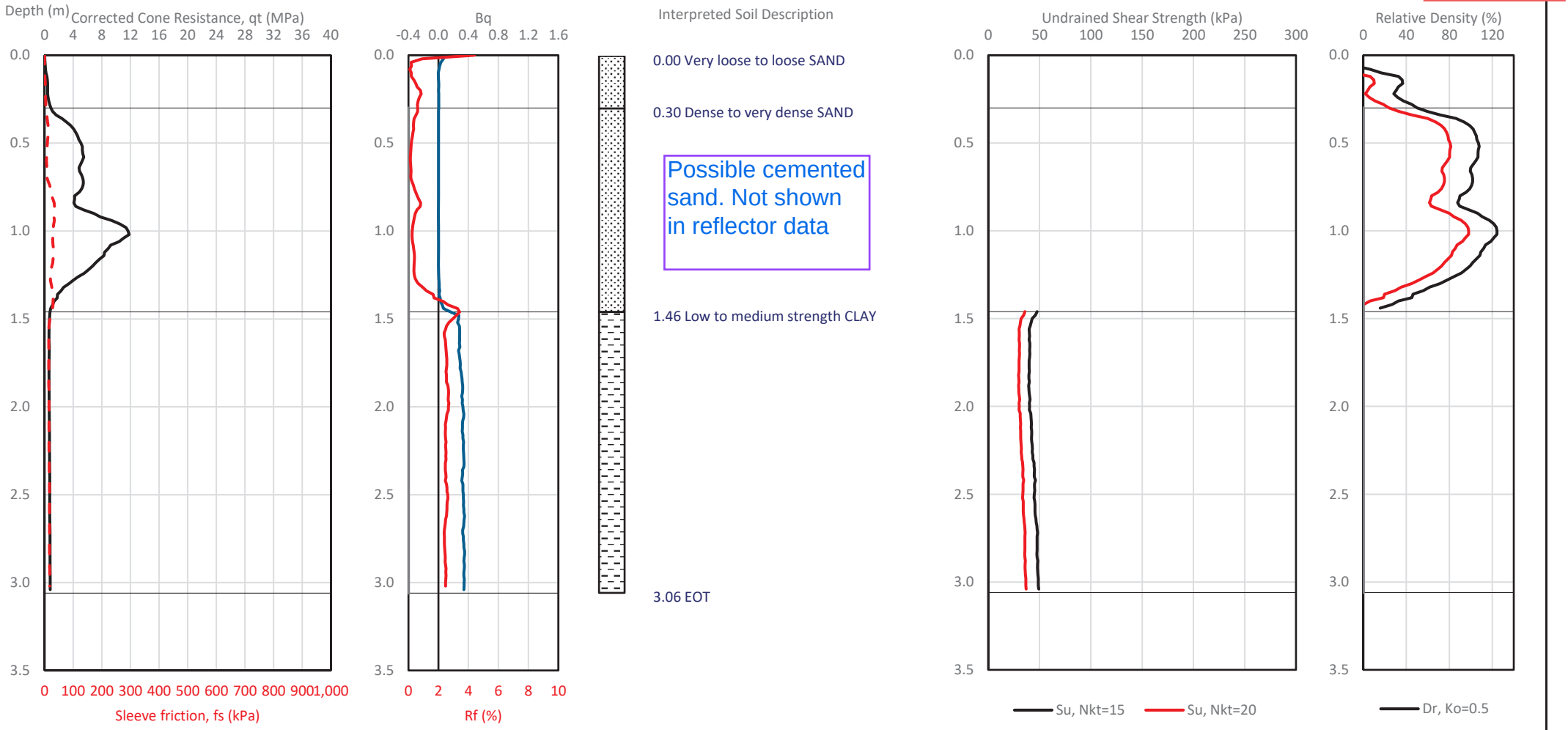
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP93.047
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 11-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **2A**	KP67.235



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.06 m	Pitch/Roll:	1.0 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	0.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	290,177.2 m
UTM 30°N	Northing:	5,730,618.8 m
	Water Depth:	113.3 mLAT

Test Remarks & Observations:

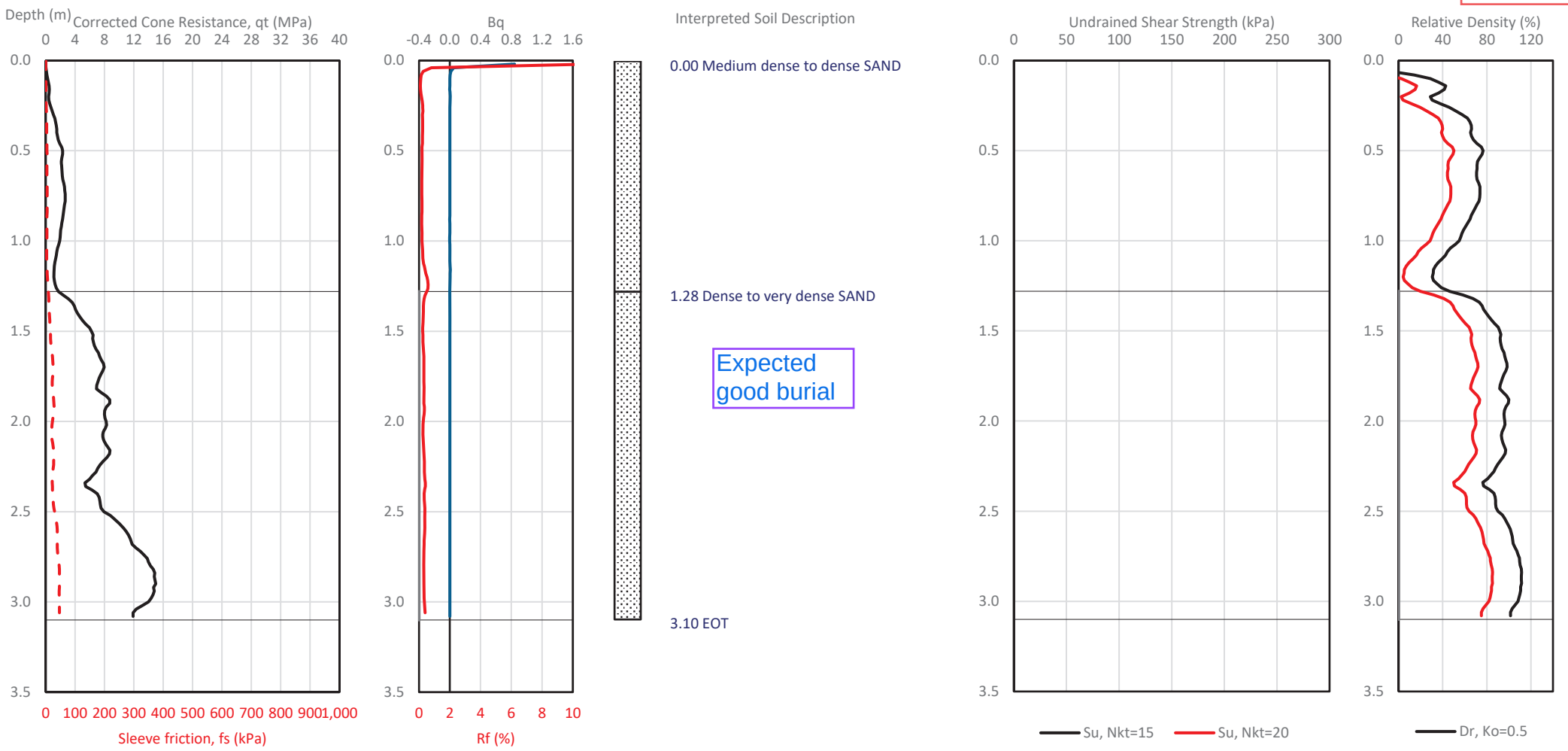
Prepared:	Checked:	Approved:
RWO	DNO	JED

Bluefield Geoservices

Bluefield Geoservices
www.bluefieldgeo.com

Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP101.287
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 28-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **1A**	KP59.006



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.10 m	Pitch/Roll:	0.2 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	298,126.0 m
UTM 30°N	Northing:	5,732,460.8 m
	Water Depth:	111.2 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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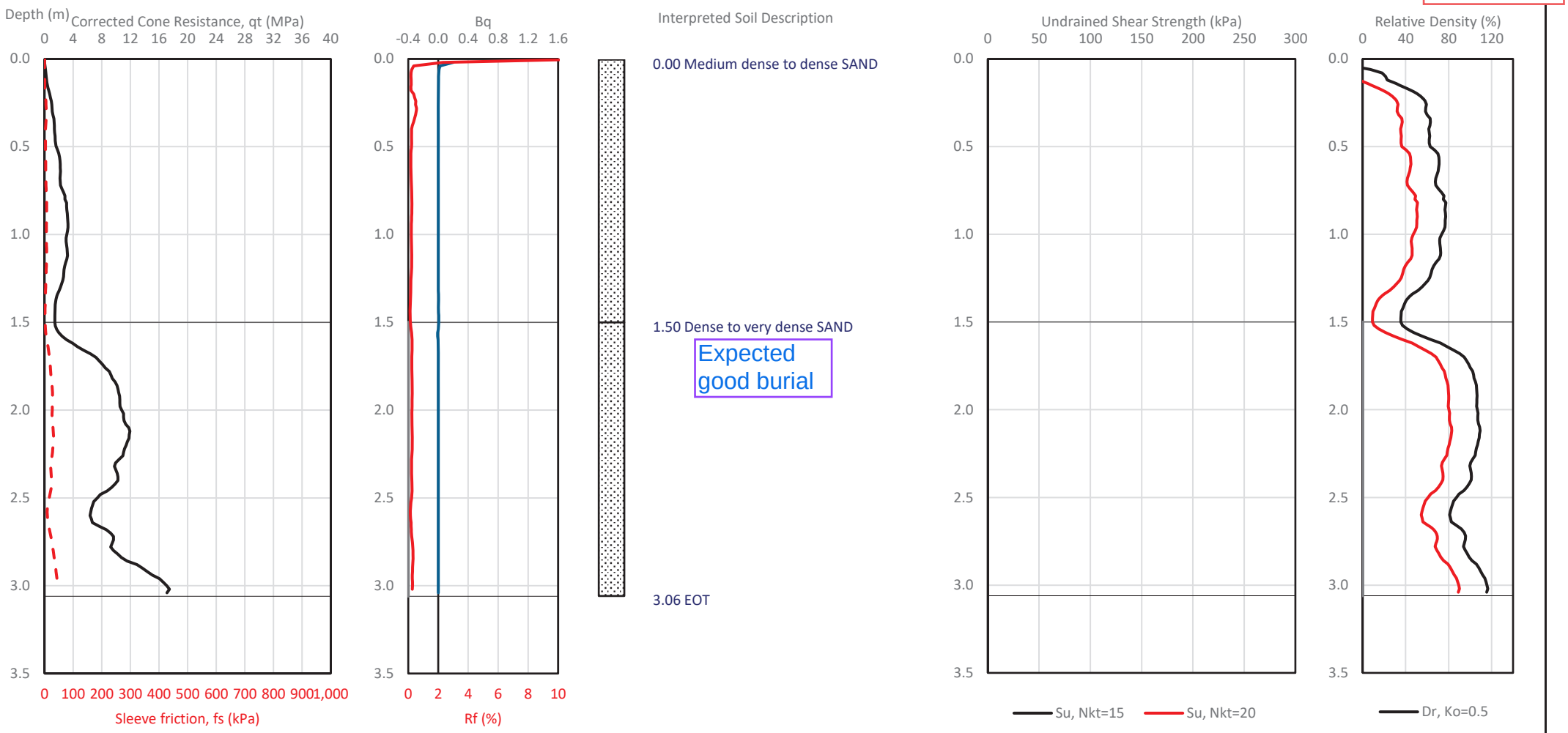
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP105.075
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 28-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **0A**	KP55.217



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.06 m	Pitch/Roll:	-0.1 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.8 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	301,721.0 m
UTM 30°N	Northing:	5,733,424.5 m
	Water Depth:	114.8 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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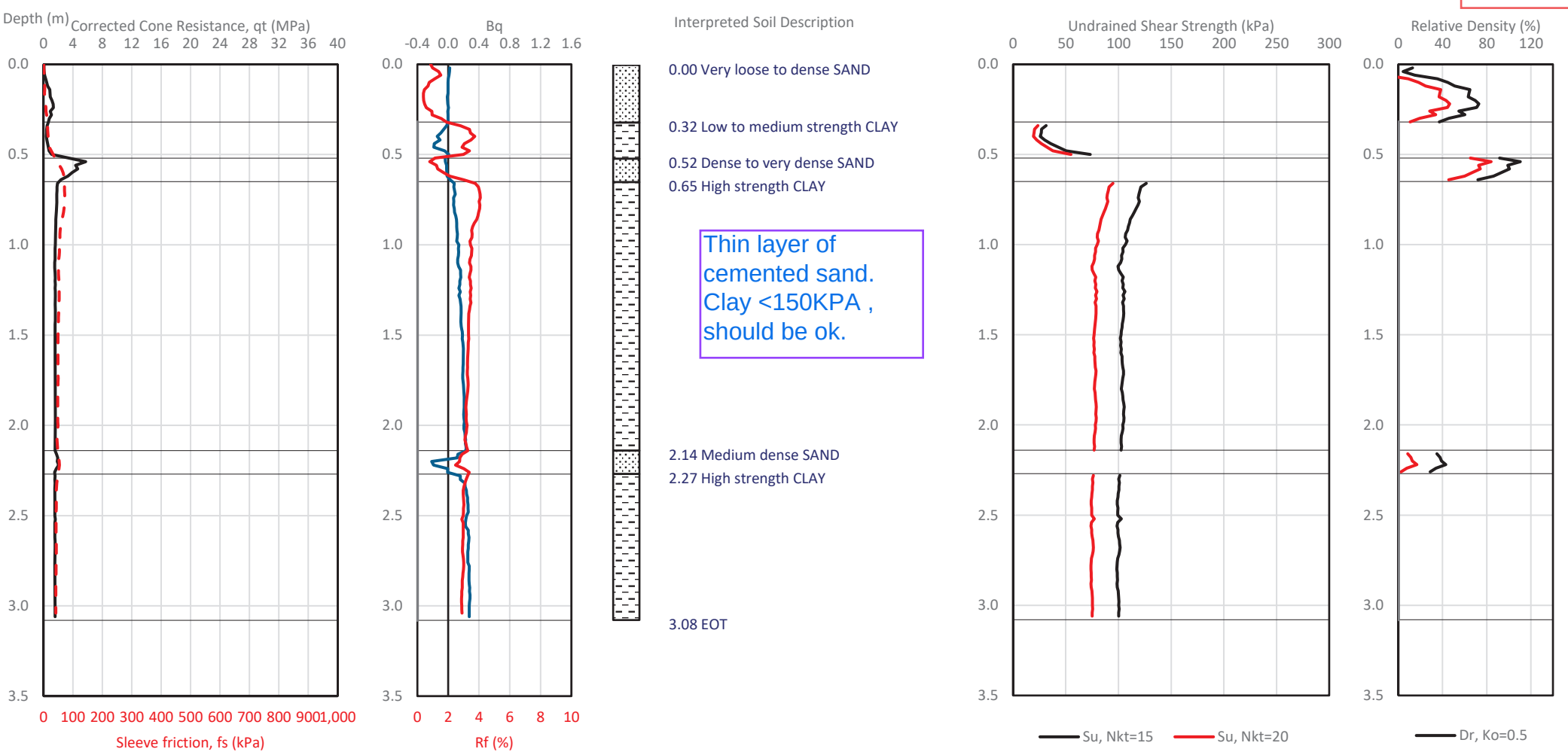
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP113.431
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 28-Aug 2024	Test : **BFT_24G01_CPT_9**	
				No. **A**	KP46.861



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	0.2 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	0.8 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	309,691.6 m
UTM 30°N	Northing:	5,735,527.9 m
	Water Depth:	110.1 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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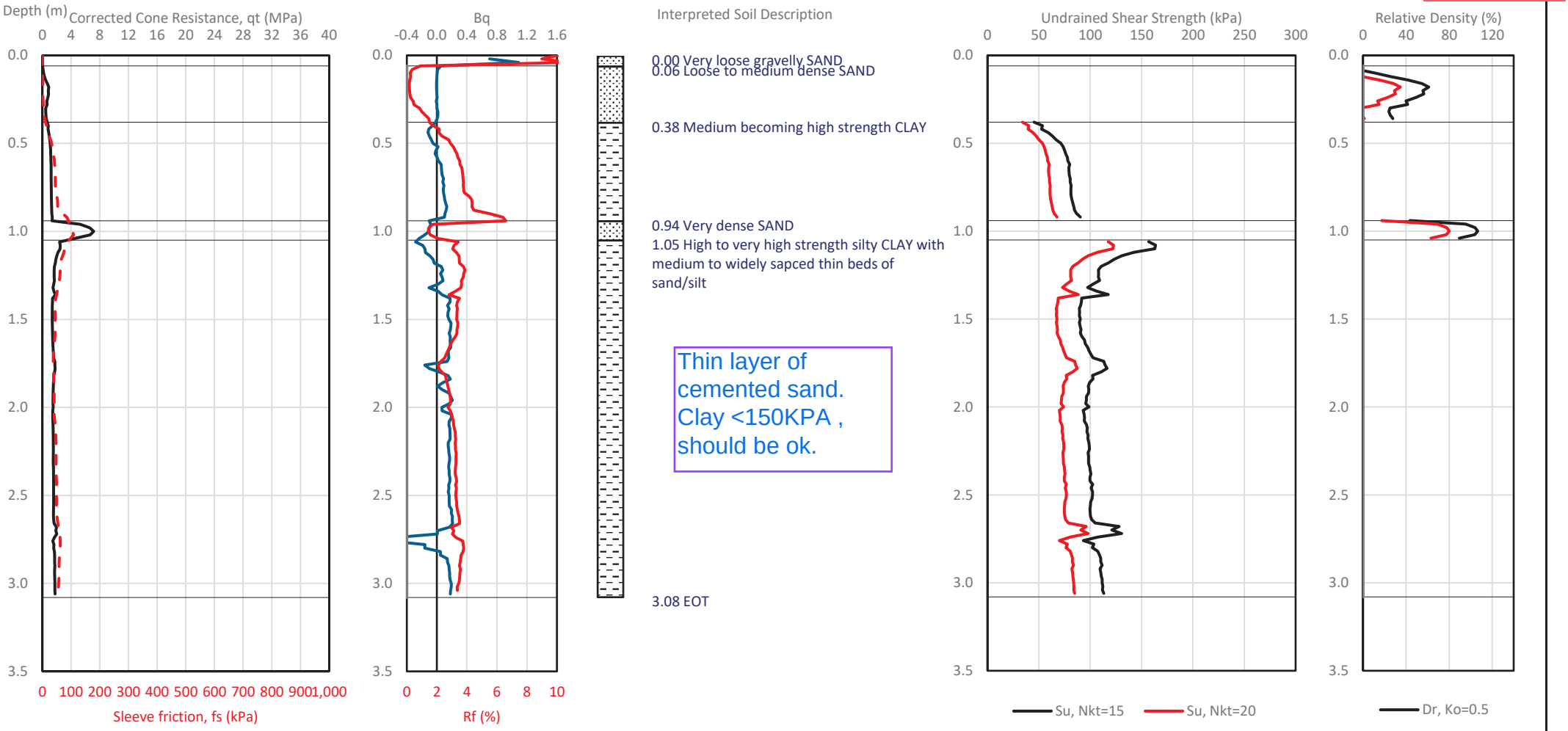
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP114.277
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 28-Aug 2024	Test : **BFT_24G01_CPT_8** No. **A** KP46.015



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	0.0 °
Vehicle:	N/A	Cone S/N:	240216	Max. Cone Tilt:	1.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	310,505.9 m
UTM 30°N	Northing:	5,735,844.5 m
	Water Depth:	109.1 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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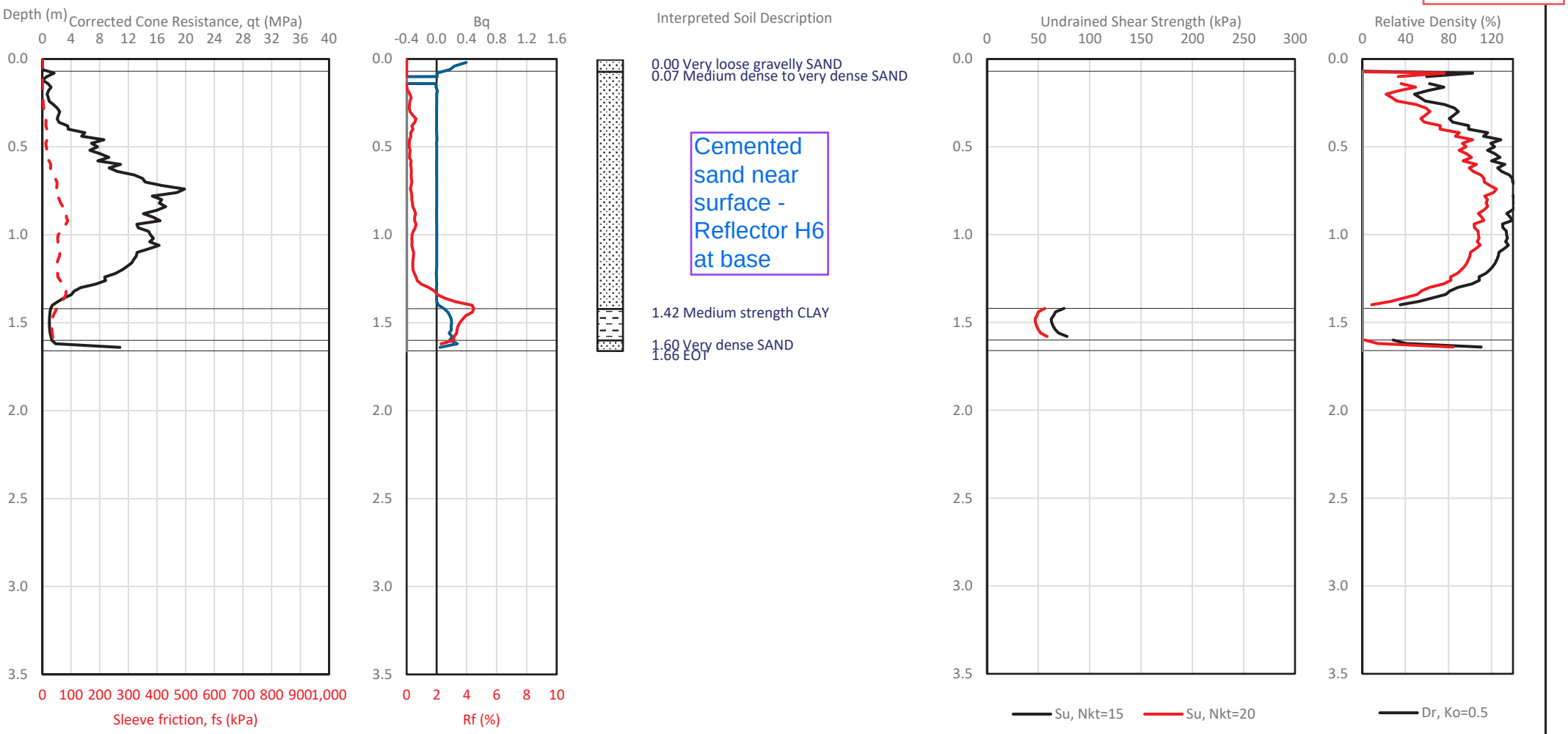
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP117.787
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 28-Aug 2024	Test : No. **BFT_24G01_CPT_7 A**	KP42.505



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.66 m	Pitch/Roll:	-1.2 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	2.2 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	313,945.2 m
UTM 30°N	Northing:	5,736,293.4 m
	Water Depth:	82.8 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

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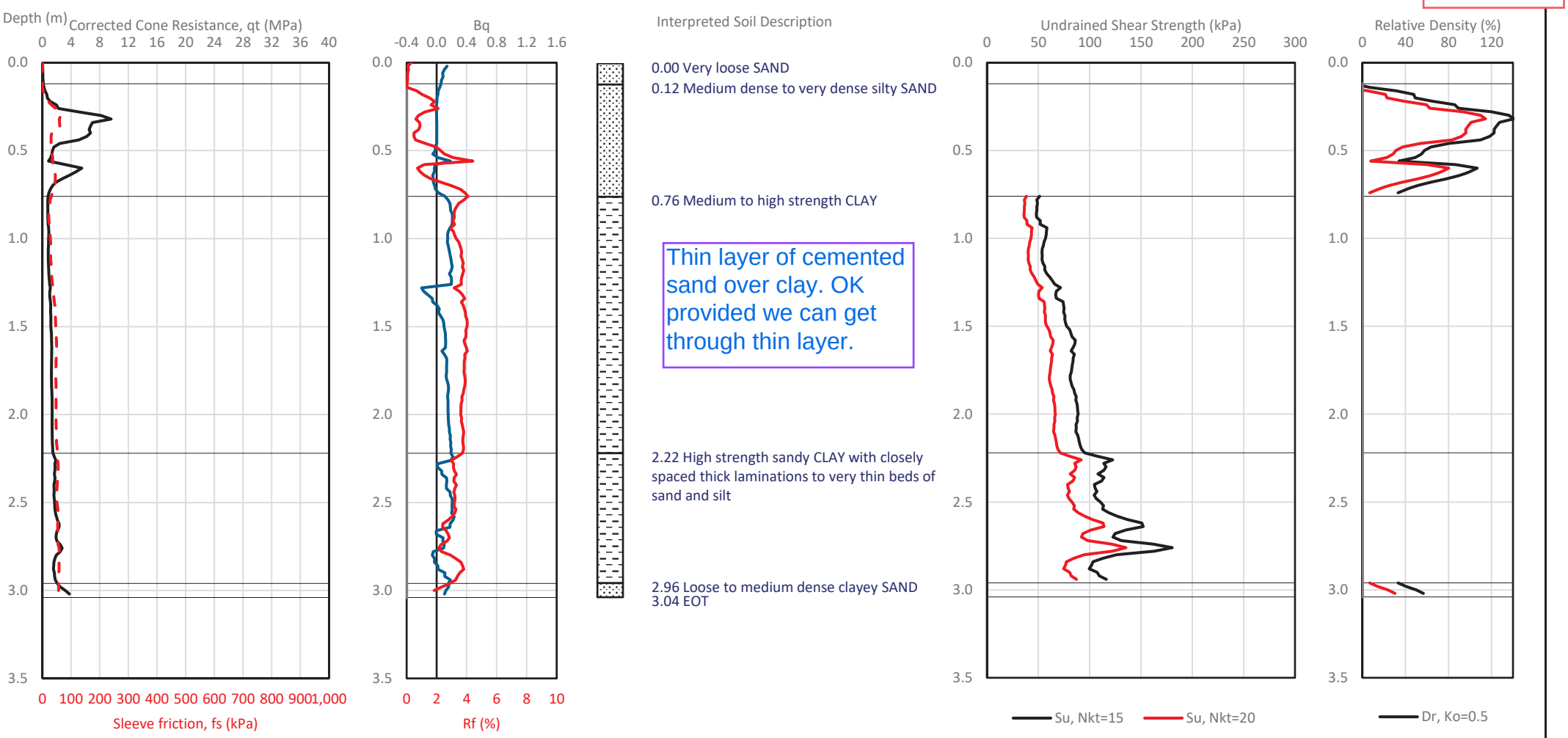
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP120.396
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 12-Aug 2024	Test : **BFT_24G01_CPT_6** No. **A_A** KP39.896



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.04 m	Pitch/Roll:	-0.2 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	1.3 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	316,533.6 m
UTM 30°N	Northing:	5,736,635.6 m
	Water Depth:	69.6 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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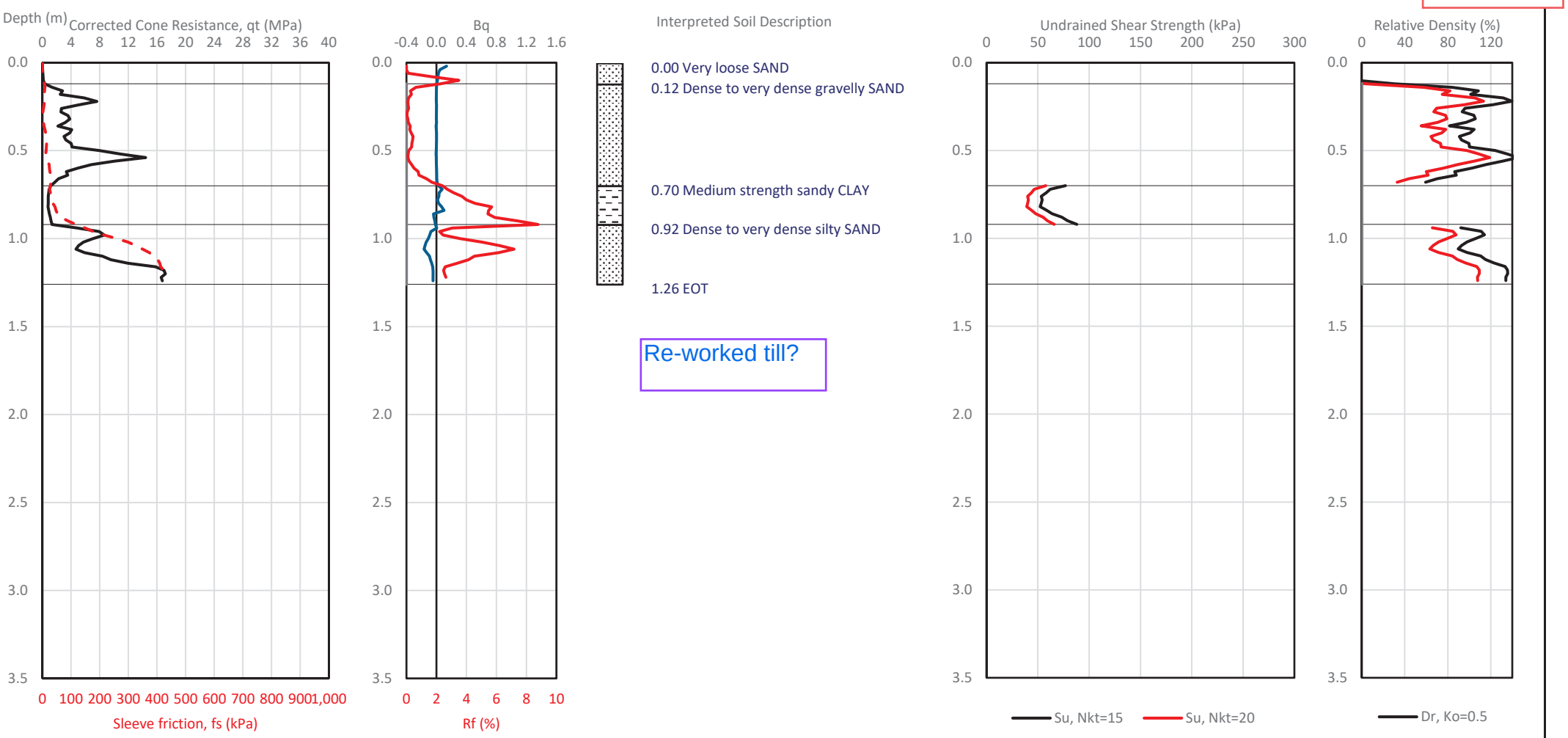
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP120.399
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 12-Aug 2024	Test : **BFT_24G01_CPT_6**	
				No. **A**	KP39.893



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	1.26 m	Pitch/Roll:	3.1 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	1.9 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	316,535.4 m
UTM 30°N	Northing:	5,736,644.7 m
	Water Depth:	69.5 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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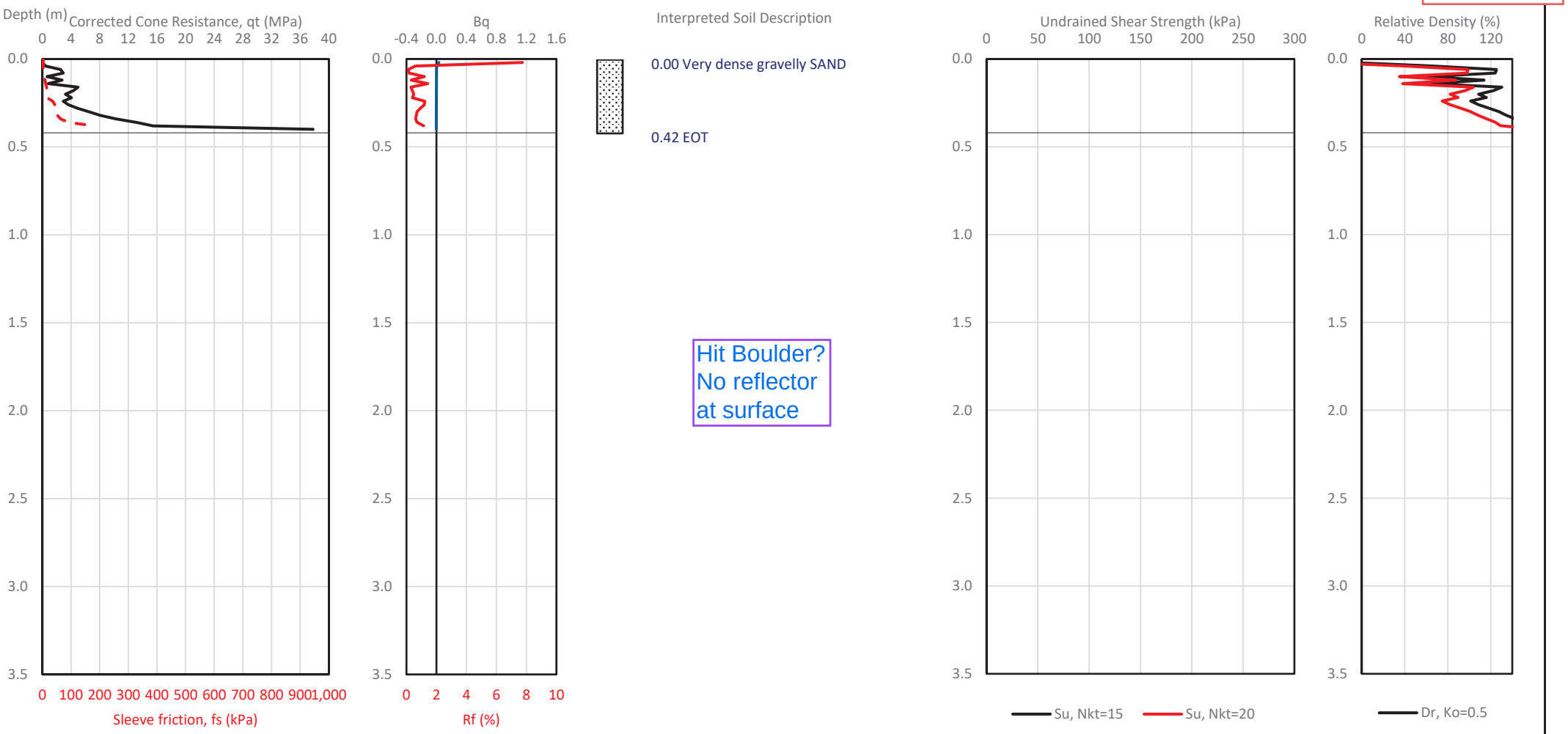
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP126.702
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 12-Aug 2024	Test : **BFT_24G01_CPT_5**	
				No. **A_A**	KP33.590



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.42 m	Pitch/Roll:	-2.0 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	2.8 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	322,764.5 m
UTM 30°N	Northing:	5,737,000.7 m
	Water Depth:	58.0 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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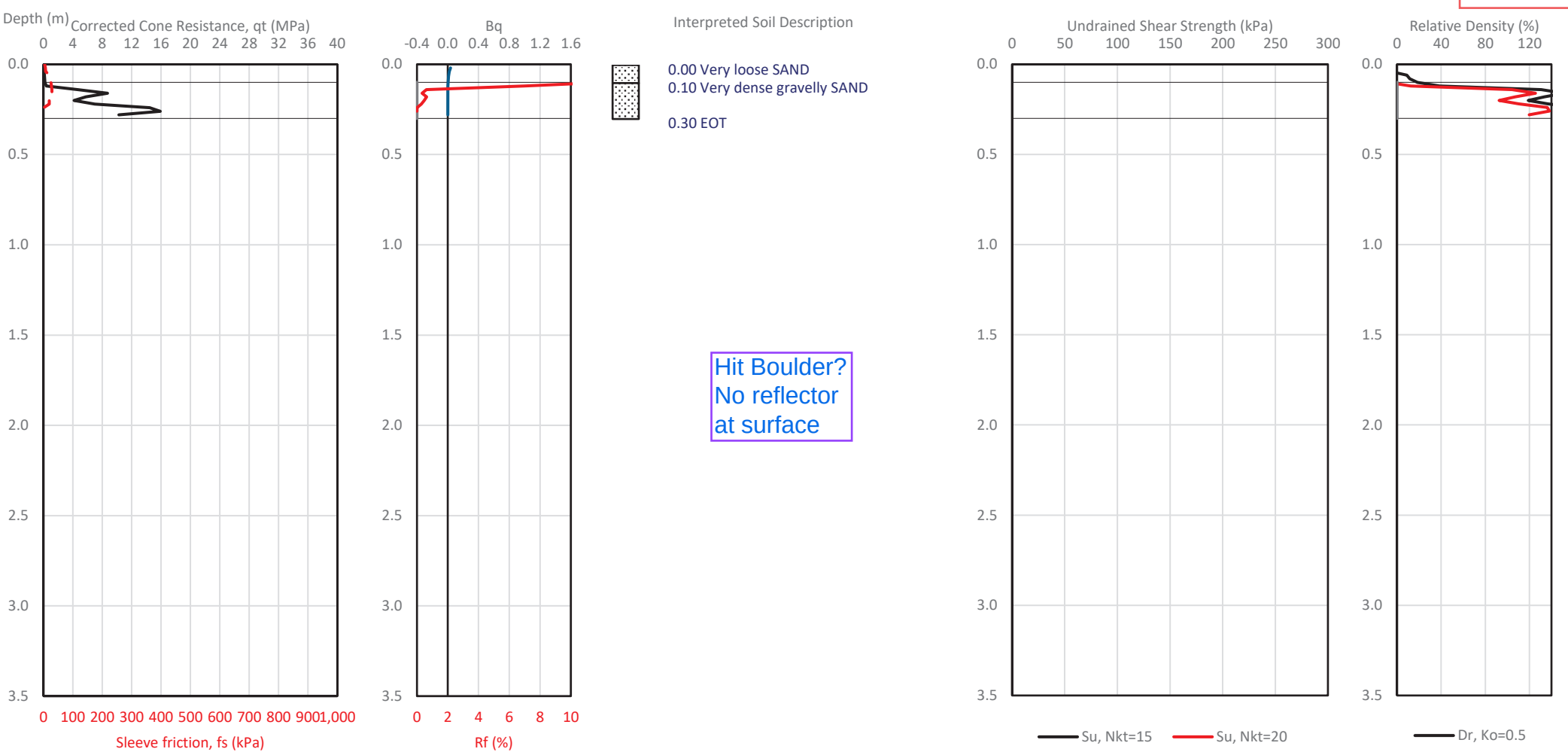
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP126.707
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 12-Aug 2024	Test : **BFT_24G01_CPT_5**	
				No. **A**	KP33.585



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.30 m	Pitch/Roll:	1.0 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	4.8 °		
Test Termination:	E: Test stopped on rapid rise of cone inclination						

Geodetic Parameters:	Easting:	322,767.8 m
UTM 30°N	Northing:	5,737,007.5 m
	Water Depth:	57.9 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

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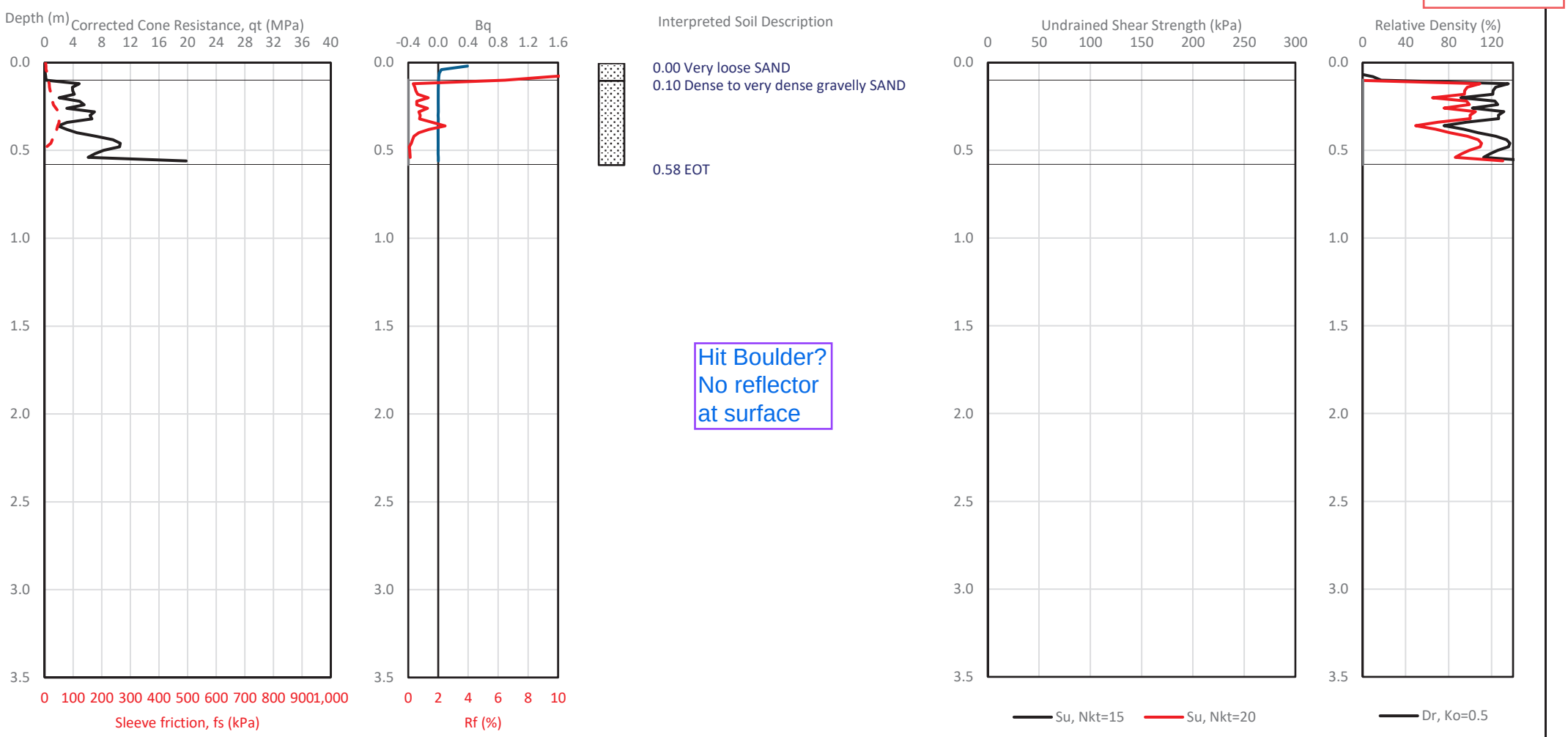
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**			Client: Green Rebel	KP126.714
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 12-Aug 2024	Test : **BFT_24G01_CPT_5** No. **A_B** KP33.578



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.58 m	Pitch/Roll:	-1.4 °
Vehicle:	N/A	Cone S/N:	190543	Max. Cone Tilt:	2.3 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	322,775.9 m
UTM 30°N	Northing:	5,737,003.4 m
	Water Depth:	58.0 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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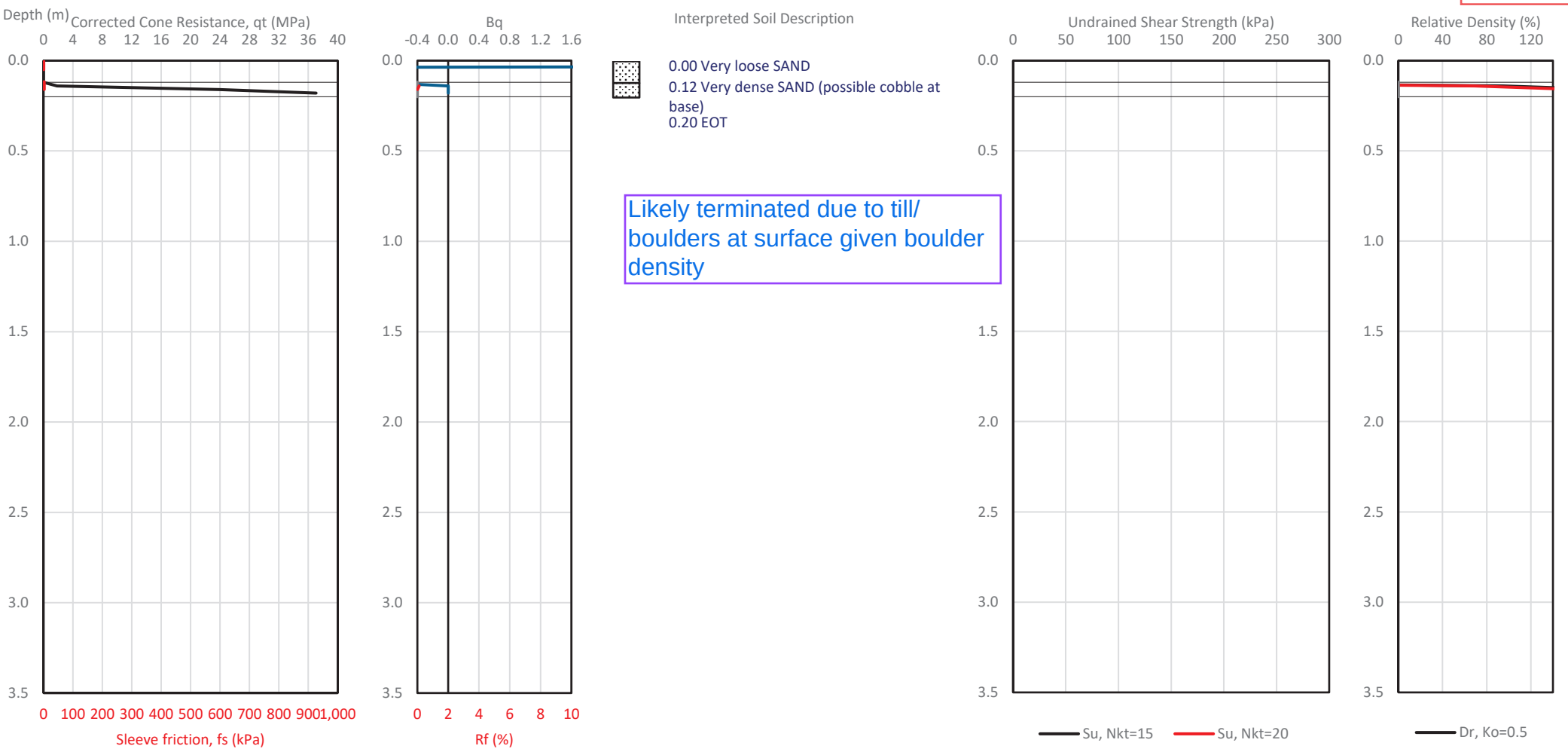
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP129.510
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 26-Aug 2024	Test : No. **BFT_24G01_CPT_4 A_A**	KP30.782



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.20 m	Pitch/Roll:	1.0 °
Vehicle:	N/A	Cone S/N:	190541	Max. Cone Tilt:	3.3 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	325,371.7 m
UTM 30°N	Northing:	5,737,764.2 m
	Water Depth:	57.3 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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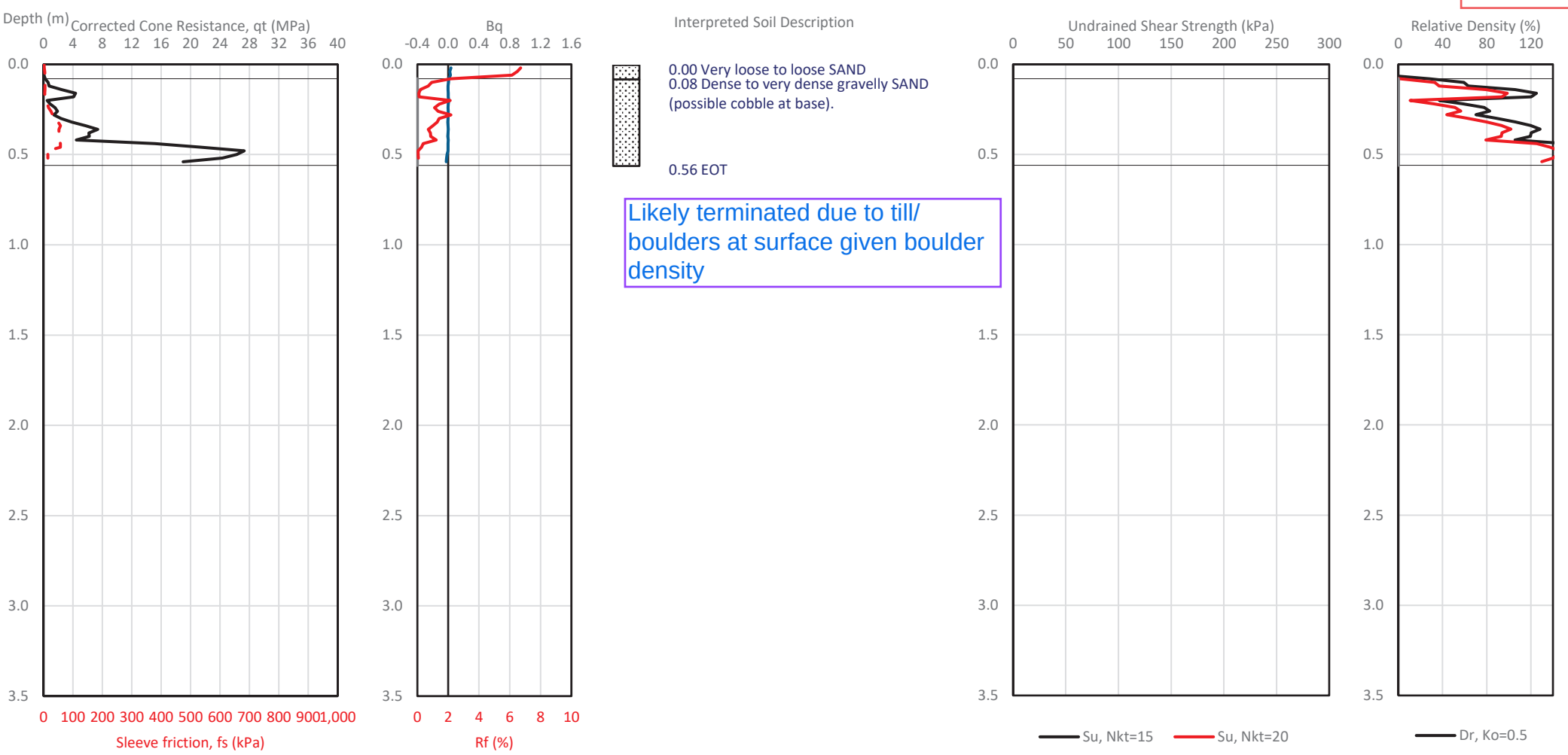
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP129.516
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 26-Aug 2024	Test : No. **BFT_24G01_CPT_4 A**	KP30.776



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.56 m	Pitch/Roll:	0.8 °
Vehicle:	N/A	Cone S/N:	190541	Max. Cone Tilt:	4.6 °		
Test Termination:	E: Test stopped on rapid rise of cone inclination						

Geodetic Parameters:	Easting:	325,371.2 m
UTM 30°N	Northing:	5,737,772.3 m
	Water Depth:	57.3 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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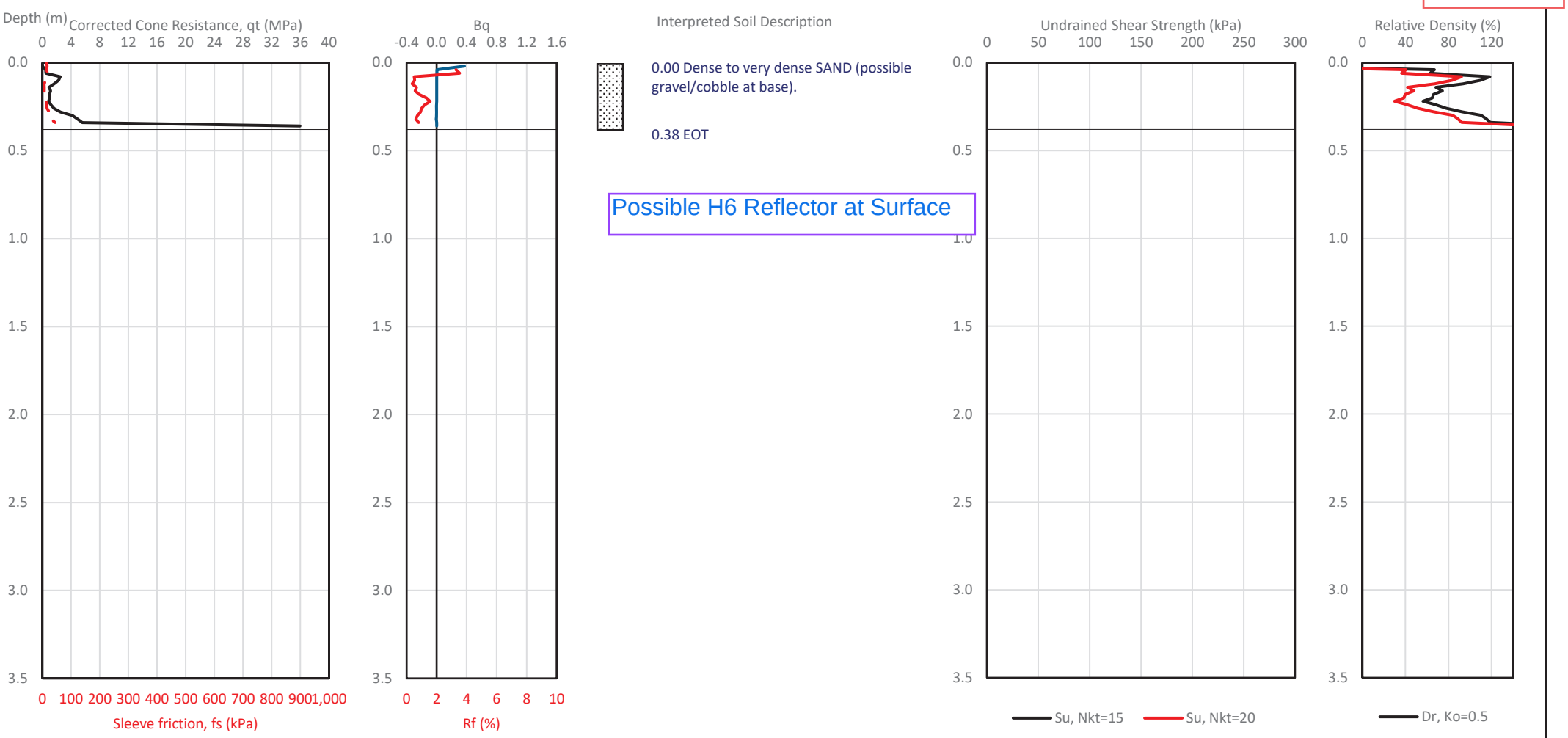
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP133.603
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 26-Aug 2024	Test : No. **BFT_24G01_CPT_3 A_A**	KP26.689



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.38 m	Pitch/Roll:	0.3 °
Vehicle:	N/A	Cone S/N:	190541	Max. Cone Tilt:	2.0 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	329,208.7 m
UTM 30°N	Northing:	5,738,879.6 m
	Water Depth:	54.4 m

Test Remarks & Observations:
No further retest required by client

Prepared:	Checked:	Approved:
RWO	DNO	JED

Cone Penetration Test Results - Derived Data

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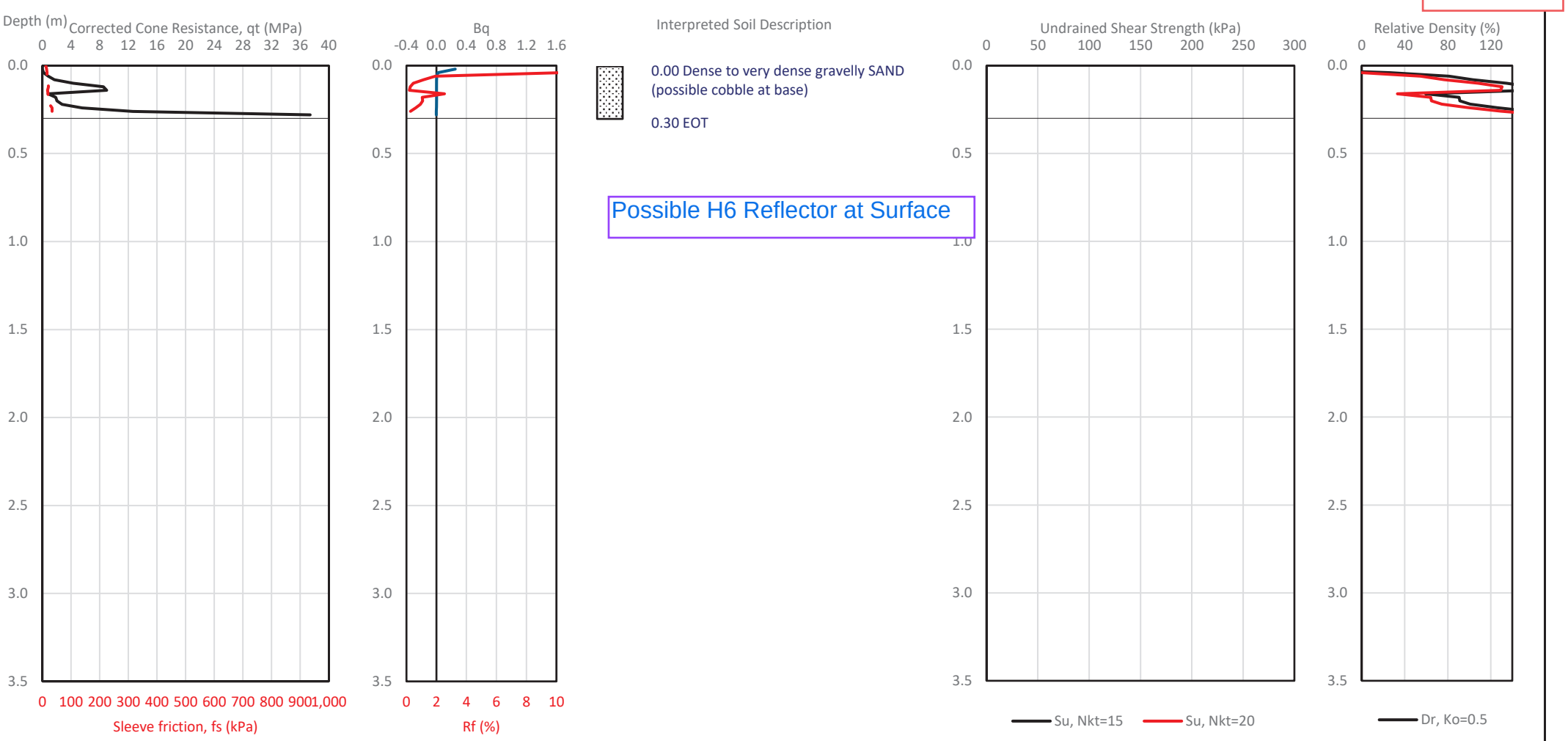
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP133.606
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 26-Aug 2024	Test : **BFT_24G01_CPT_3**	
				No. **A**	KP26.686



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	0.30 m	Pitch/Roll:	1.9 °
Vehicle:	N/A	Cone S/N:	190541	Max. Cone Tilt:	4.0 °		
Test Termination:	B: Max reaction force exceeded (lifting off seabed)						

Geodetic Parameters:	Easting:	329,209.7 m
UTM 30°N	Northing:	5,738,888.7 m
	Water Depth:	54.4 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

VC Geotechnical Log

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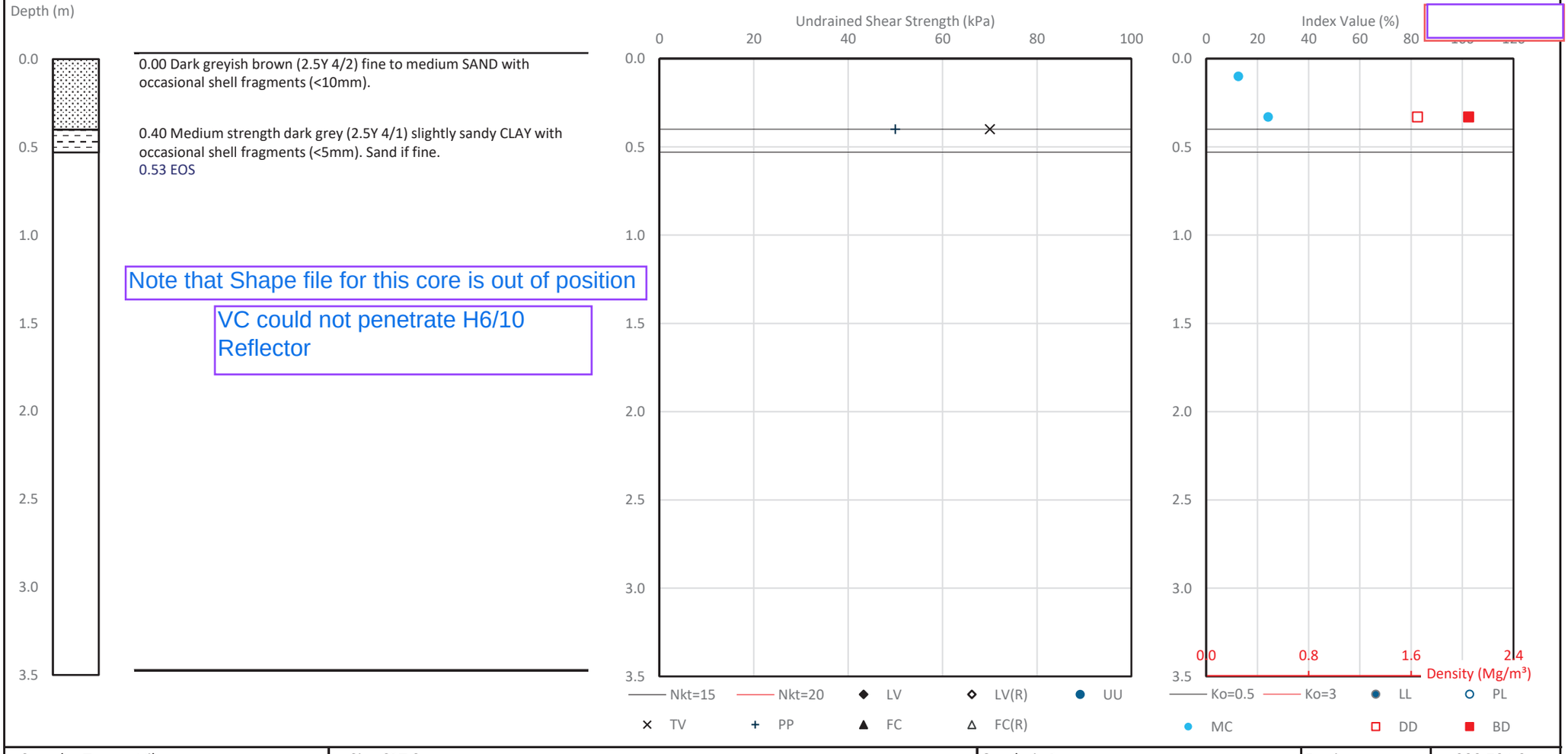
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP138.393
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 26-Aug 2024	Test : No. **BFT_24G01_VC_3A**



Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	333,794.0 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,739,929.0 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 0.53 m				Water Depth:	54.2 mLAT

Test Remarks & Observations: Max current during test: 2A Vibration Time: 100sec
VC landed out of 5m target area due to subsurface currents - position accepted by client

Prepared:	Checked:	Approved:
RWO	DNO	JED

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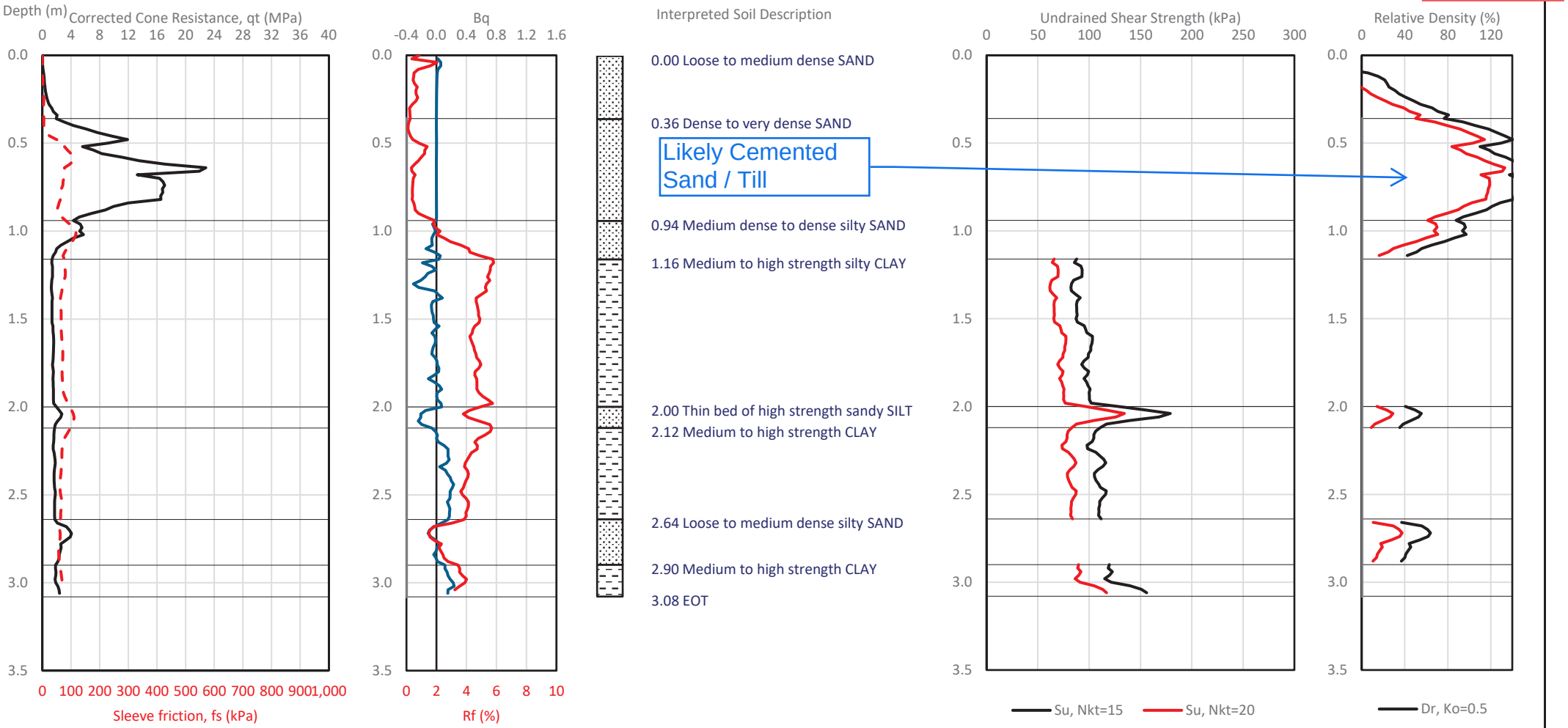
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP144.086
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001		Date: 24-Aug 2024	Test : **BFT_24G01_CPT_2** No. **A** KP16.206



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	-0.9 °
Vehicle:	N/A	Cone S/N:	190521	Max. Cone Tilt:	3.8 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	338,495.2 m
UTM 30°N	Northing:	5,742,893.6 m
	Water Depth:	47.7 m

Test Remarks & Observations:

Prepared:	Checked:	Approved:
RWO	DNO	JED

VC Geotechnical Log

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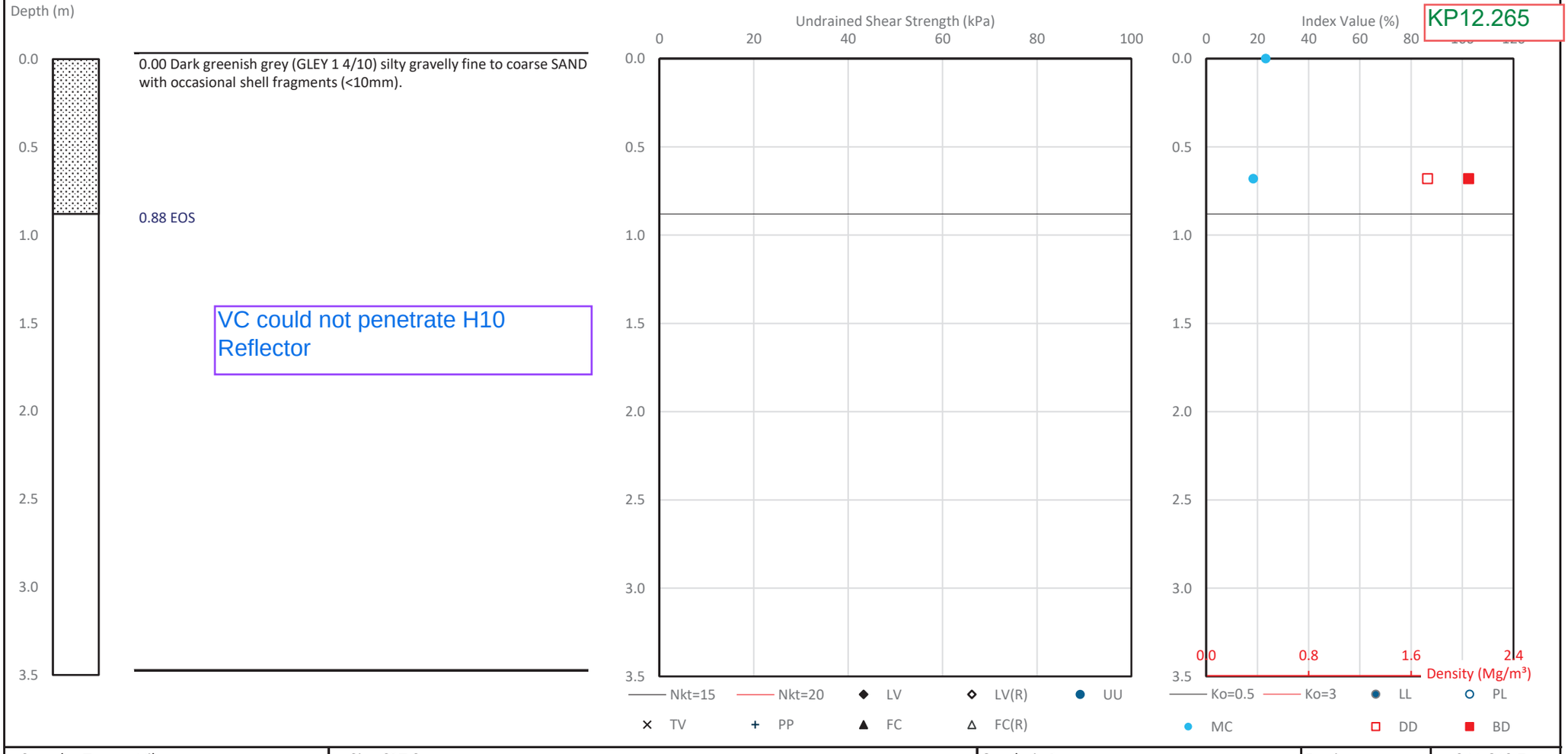
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP148.027
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 24-Aug 2024	Test : No. **BFT_24G01_VC_2A _A**	



Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	341,649.7 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,745,210.2 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 0.88 m				Water Depth:	42.3 m
Test Remarks & Observations: Max current during test: 2A Vibration Time: 120sec			Prepared: RWO	Checked: DNO	Approved: JED

VC Geotechnical Log

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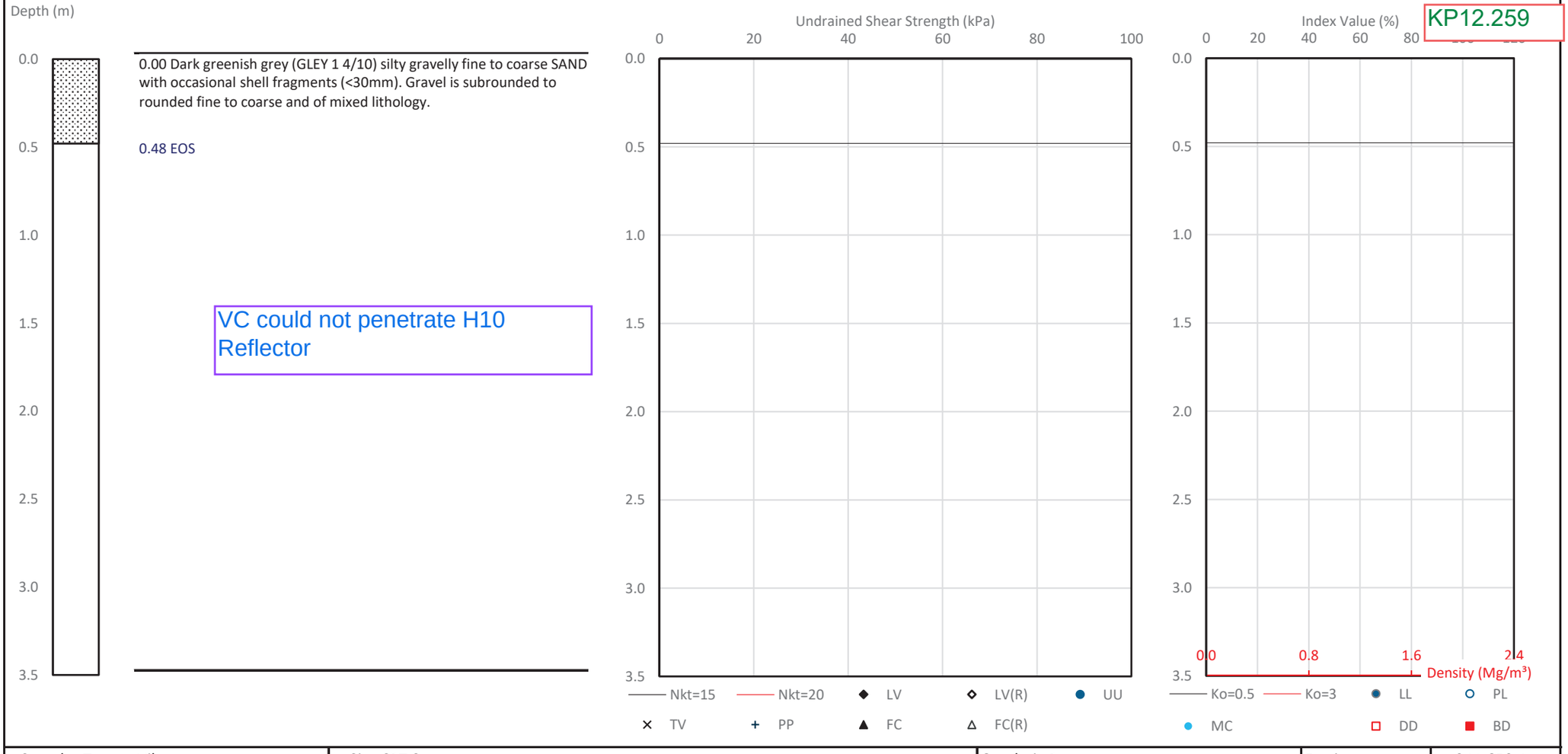
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**			Client: Green Rebel	KP148.033
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 24-Aug 2024	Test : No. **BFT_24G01_VC_2A**



Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	341,650.4 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,745,221.2 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 0.48 m				Water Depth:	42.3 m
Test Remarks & Observations: Max current during test: 2A Vibration Time: 100sec			Prepared: RWO	Checked: DNO	Approved: JED

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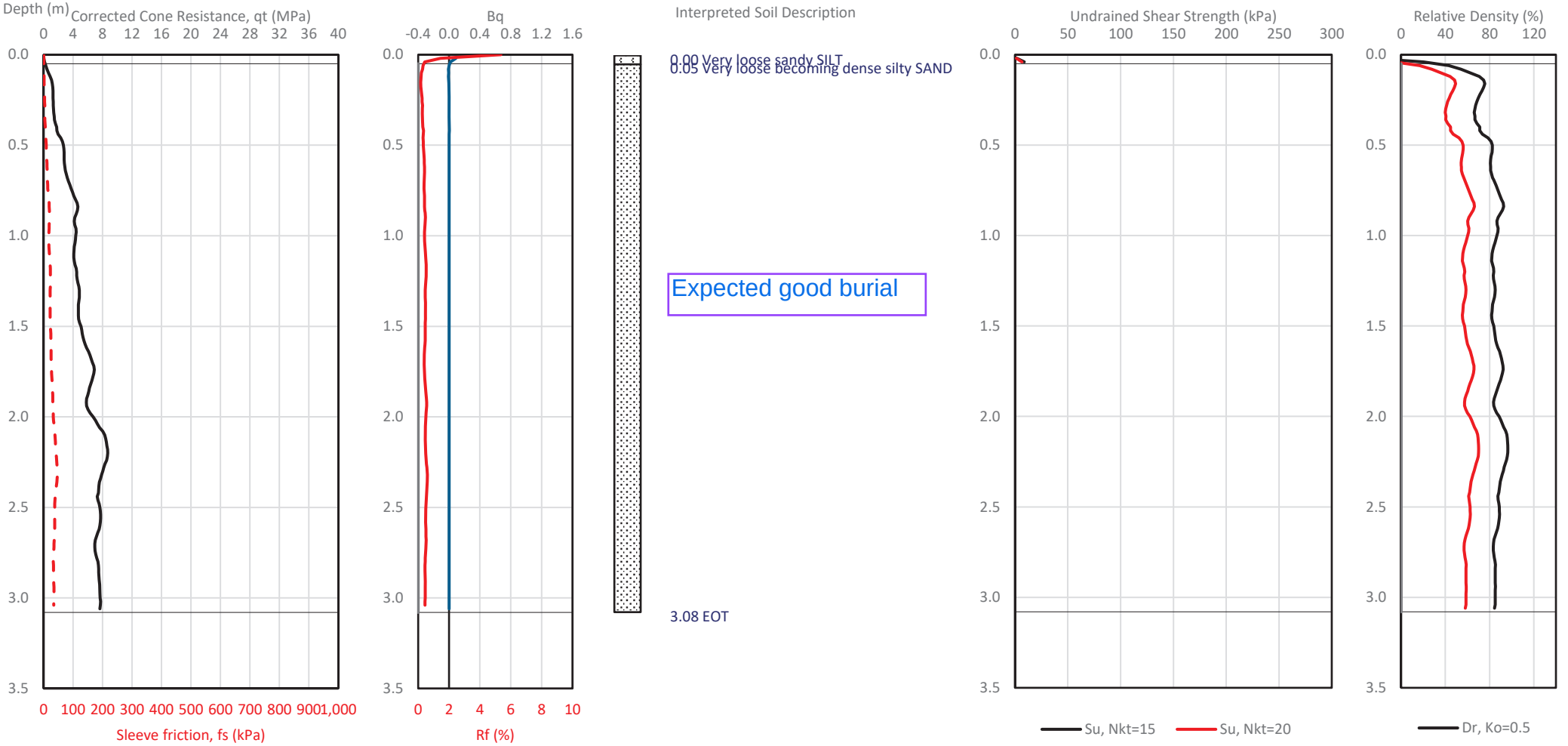
Cone Penetration Test Results - Derived Data

Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**				Client: Green Rebel	KP152.115
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 24-Aug 2024	Test : **BFT_24G01_CPT_1**	
				No. **A**	KP8.148



CPT System:	100 kN ROSON ST	Cone Area:	10 cm²	Final Pen.:	3.08 m	Pitch/Roll:	0.6 °
Vehicle:	N/A	Cone S/N:	190521	Max. Cone Tilt:	0.4 °		
Test Termination:	A: Target penetration achieved						

Geodetic Parameters:	Easting:	345,639.5 m
UTM 30°N	Northing:	5,745,881.4 m
	Water Depth:	18.5 mLAT

Test Remarks & Observations:

Prepared:	Checked:	Approved:
DNO	RWO	JED

VC Geotechnical Log

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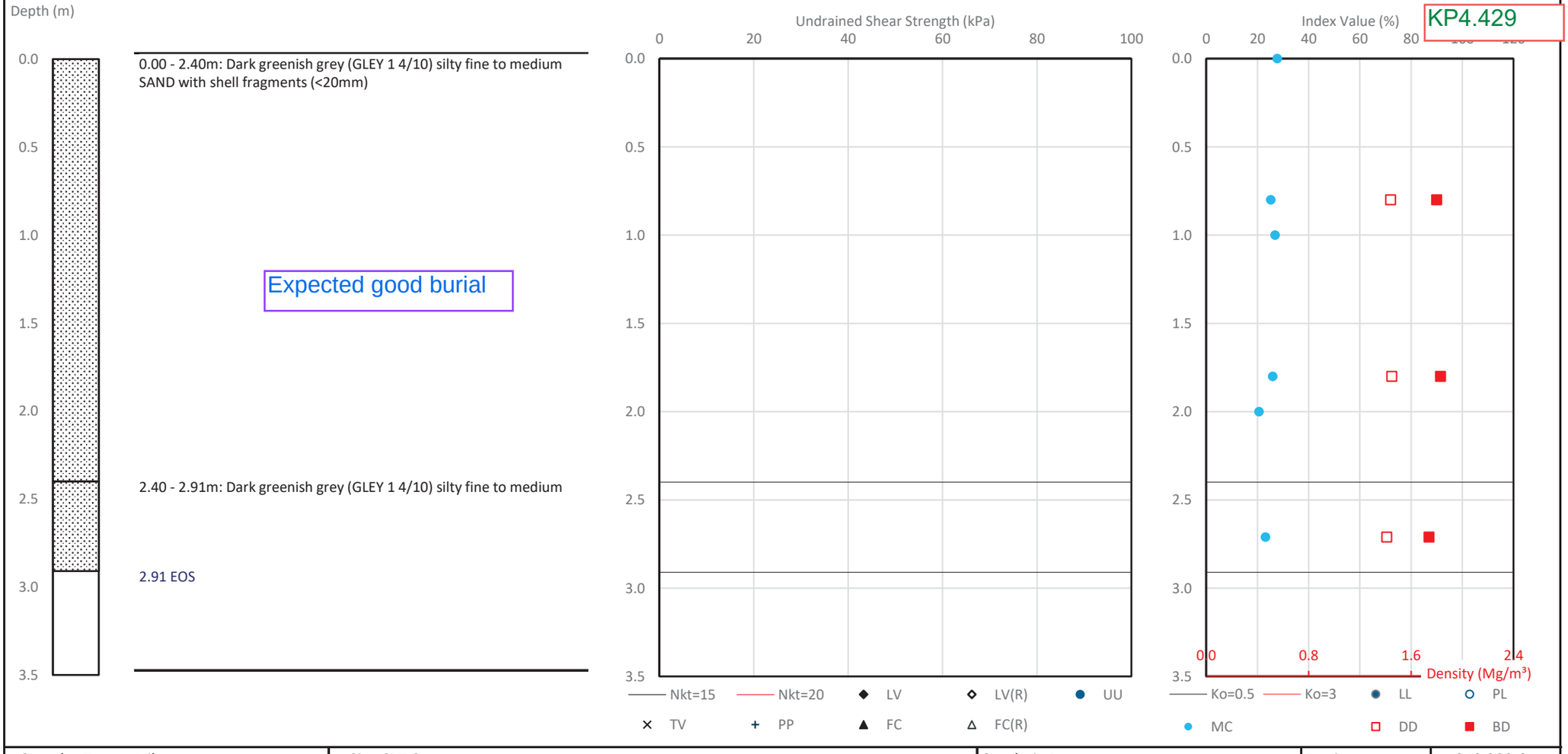
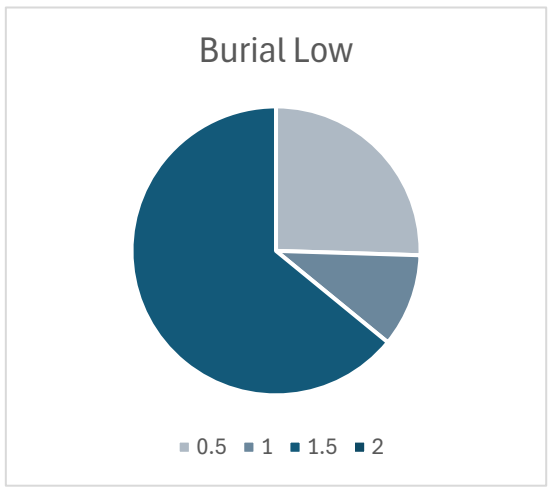
Project Name: **Shallow Geotechnical Investigations - Irish Sea Cables**			Client: Green Rebel	KP155.863
Site: **Irish Sea**	Client : Ref. 24G01	Bluefield : Ref. GRM001	Date: 24-Aug 2024	Test : No. **BFT_24G01_VC_1A**

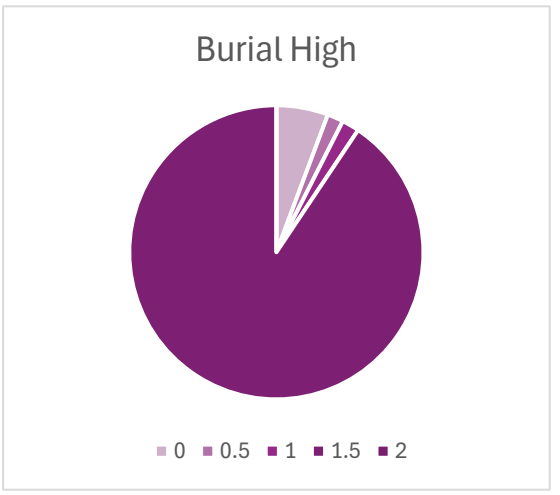


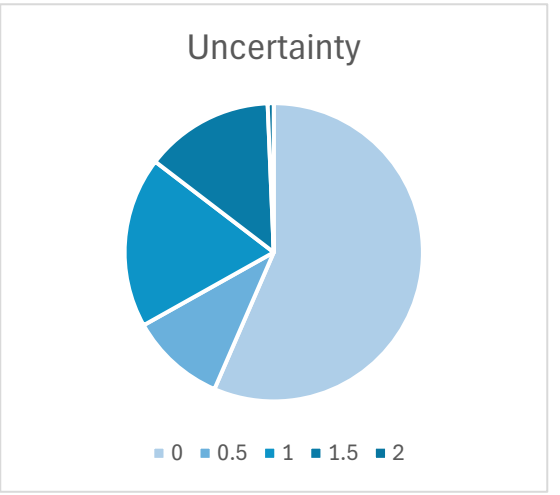
Sampler Type: Vibrocore	In Situ CPT System:		Geodetic Parameters:	Easting:	349,300.6 m
Sampler Dims: 3m / 100mm	CPT Cone:	Co-located CPT Test No.:	UTM 30°N	Northing:	5,746,424.2 m
Sample Recovery: Target pen. 3.00 m, Actual pen. N /A, Recovery 2.91 m				Water Depth:	19.5 mLAT
Test Remarks & Observations: Max current during test: 2A Vibration Time: 120sec			Prepared: DNO	Checked: RWO	Approved: JED

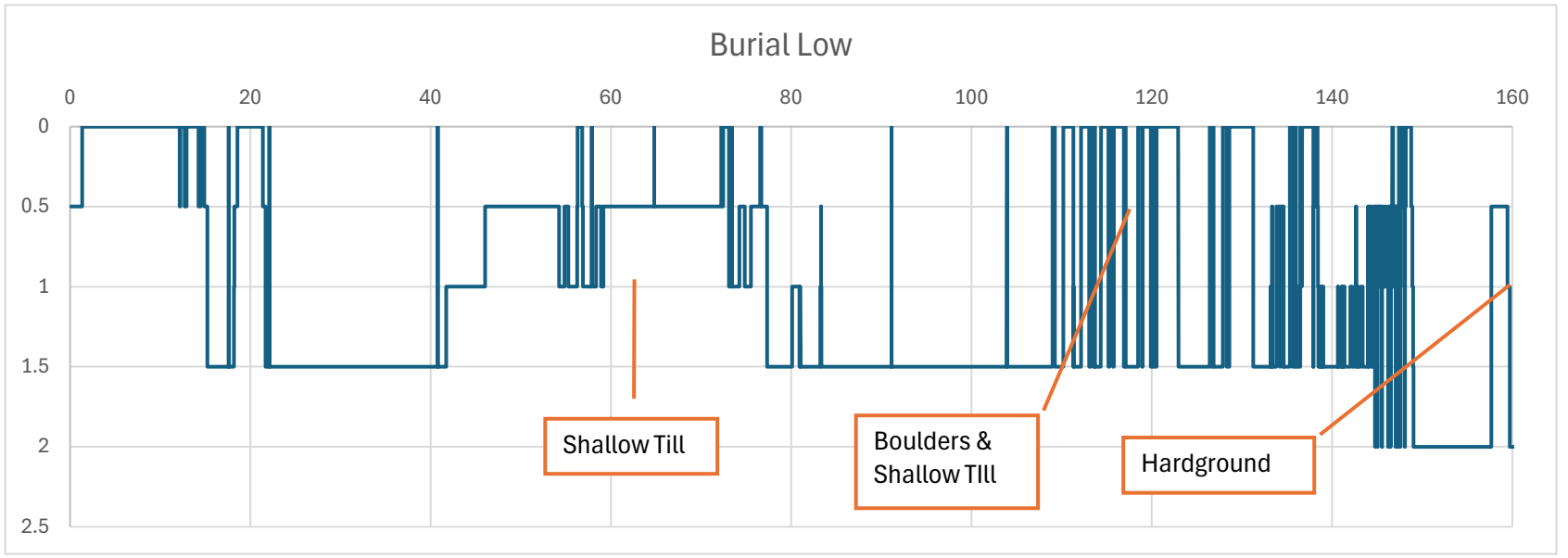
APPENDIX E – SUMMARY CHARTS

Charts showing best case, worst case burial along the route and uncertainty.

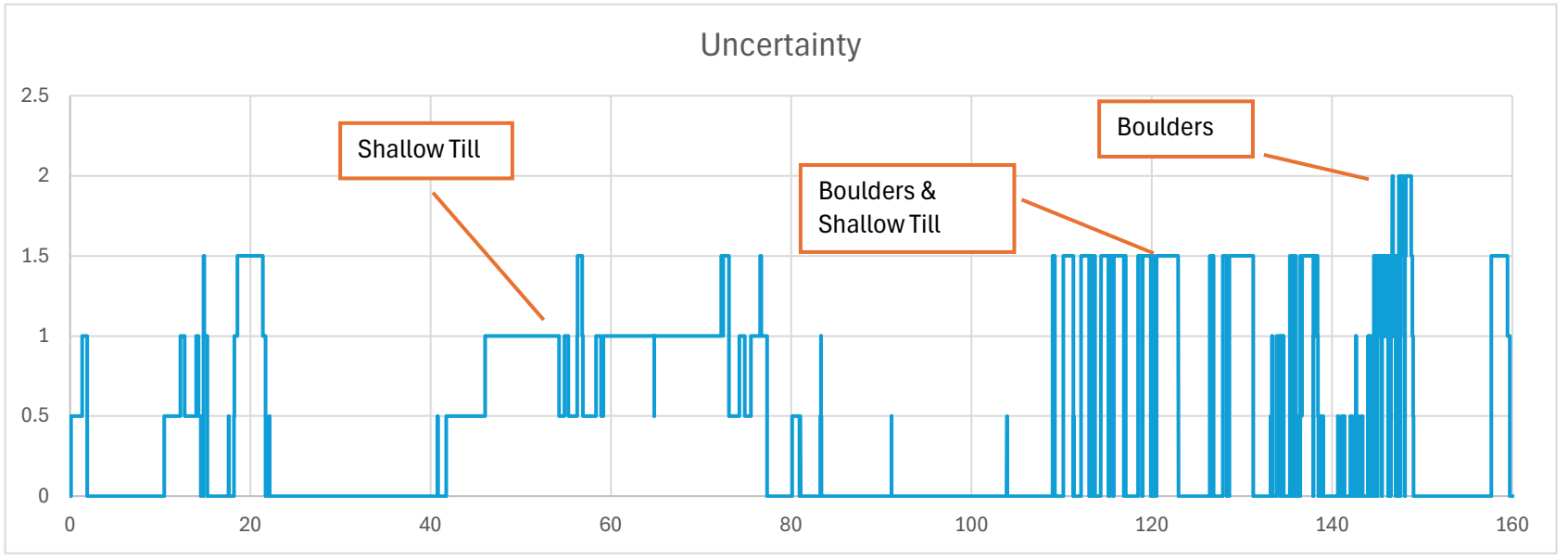

Burial Low
0.5
1
1.5
2


Burial High
0
0.5
1
1.5
2


Uncertainty
0
0.5
1
1.5
2


Burial Low
0
20
40
60
80
100
120
140
160
0
0.5
1
1.5
2
2.5
Shallow Till
Boulders &
Shallow TIll
Hardground


Burial High
0
20
40
60
80
100
120
140
160
0
0.5
1
1.5
2
2.5
Bedrock close to surface
Cable Crossings
2m Option


Uncertainty
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
160
Shallow Till
Boulders &
Shallow Till
Boulders