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Newquay and The Gannel MCZ 2017 Survey Report

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Foreword

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

Following designation, Natural England started a baseline monitoring programme across all marine protected areas.

This report was commissioned as part of an inshore benthic marine survey of the Newquay and The Gannel MCZ.

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Natural England Project Manager – Mike Fraser, Senior Specialist
Mike.Fraser@naturalengland.org.uk

Contractor - Tom Lord, Environment Agency

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Further information
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Newquay and The Gannel MCZ 2017 Survey Report

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Newquay and The Gannel MCZ 2017 Survey Report

Author: Tom Lord

Produced by:

Environment Agency
Estuarine and Coastal Monitoring & Assessment Service
Kingfisher House
Orton Goldhay
Peterborough
Cambridgeshire
PE2 5ZR

Email: enquiries@environment-agency.gov.uk
Website: www.environment-agency.gov.uk

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M. Curtis	Cefas Benthic Ecologist
B. Green	Natural England/Environment Agency Marine Ecology Technical Specialist
C. Miller	Natural England/Environment Agency Marine Ecology Technical Specialist
C. Trundle	Cornwall Inshore Fisheries and Conservation Authority Conservation and Research Manager

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1. Introduction

The Marine and Coastal Access Act 2009 requires the UK Government to create an ecologically coherent network of Marine Conservation Zones (MCZs) in British waters. MCZs will exist alongside other Marine Protected Areas (MPAs), including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs) and Ramsar sites to help conserve marine biodiversity, in particular habitats and species of European and national importance.

Through Defra, and with written advice from the Statutory Nature Conservation Bodies* (SNCBs), four regional projects were established to identify potential MCZs within the UK's Exclusive Economic Zone (EEZ). These projects were called Net Gain (North Sea), Balanced Seas (South East waters), Finding Sanctuary (South West waters) and the Irish Sea Conservation Zones (Irish Sea) (see http://jncc.defra.gov.uk/mczmap accessed 23rd November 2017). They combined stakeholder consultation with existing scientific data to propose recommended MCZs (rMCZ) in their region that would contribute to the MCZ network. The four projects reported in September 2011, each producing a 'final recommendations' report, which contained Site Assessment Documents (SADs) for each of the rMCZs. Following a report review by an independent scientific advisory panel, a programme of habitat verification surveys was commissioned by Defra to strengthen the scientific evidence base for some of the rMCZs. During the next two years, the programme was coordinated by Cefas and involved a range of service providers from both the public and private sector. The SNCBs considered the additional evidence and sent final site recommendations to the Environment Minister for formal designation.

On the 21st November 2013, the UK Government announced the designation of the first 27 MCZs (Tranche 1). A further 23 MCZs were designated in the second tranche on the 17th January 2016 (Tranche 2), which included the Newquay and The Gannel MCZ. The site has been created to protect important intertidal and seabed habitats, as well as fish spawning and nursery grounds.

Following designation, Natural England started a baseline monitoring programme across all Tranche 1 and 2 MCZs, specifically targeting the features present both inside and outside each site boundary. The initial datasets gathered will be used to inform future monitoring and management of the sites.

*Natural England and the Joint Nature Conservation Committee (JNCC)

1.1 Survey Aim and Objectives

Overall Survey Aim

To undertake a survey of the designated subtidal Broadscale Habitat features of the Newquay and The Gannel MCZ in order to obtain improved evidence, potentially ascribe condition and provide a baseline dataset, which can then be used to detect change over time and support future monitoring.

Survey objectives

- To undertake a survey of selected designated features (as listed in Table 1) based on a BACI (Before-After-Control-Impact) monitoring survey design, to provide information on Broadscale Habitat distribution across the site.

- To provide incidental records of the designated species of conservation interest that inhabit the site, within the confines of the survey approach and platform utilised. It should be noted that this was a secondary objective of the survey.

1.2 Newquay and The Gannel MCZ Survey Team

The Newquay and The Gannel MCZ benthic grabbing survey occurred between the 2nd April and 25th May 2017 and the drop down video (DDV) survey between 14th and 24th August 2017. The survey team comprised of a collaboration of marine monitoring specialists from the Environment Agency, Cornwall Inshore Fisheries and Conservation Authority (IFCA) and APEM Ltd. The coastal survey vessel (CSV) *Severn Guardian*, staffed and operated by Briggs Marine (Figure 1, Annex 7.1) was used to conduct the survey work reported here.

Figure 1. Coastal survey vessel *Severn Guardian*, operated by Briggs Marine.

1.3 Site Description

The Newquay and The Gannel MCZ is located along the North Cornwall coast in the South West of England (Figure 2). Stretching from Kelsey Head West of Crantock Beach, to Trevelgue Head at Porth Beach, with a total area of 9 km^2 (DEFRA, 2016a). The site includes The Gannel estuary as far as the tidal limit (near the A3075 road bridge) (Lieberknecht et al., 2011). This MCZ is recognised as an area of high productivity and for its ecological function as a nursery area for juvenile fish (DEFRA, 2016a). The coastal Water Framework Directive (WFD) water body 'Lands End to Trevose Head' overlaps the MCZ boundary.

Thirteen Broadscale Habitats (BSH), one habitat Feature of Conservation Importance (FOCI) and one species FOCI have been protected under the MCZ designation order and are presented in Table 1 alongside the prescribed general management approach (GMA).

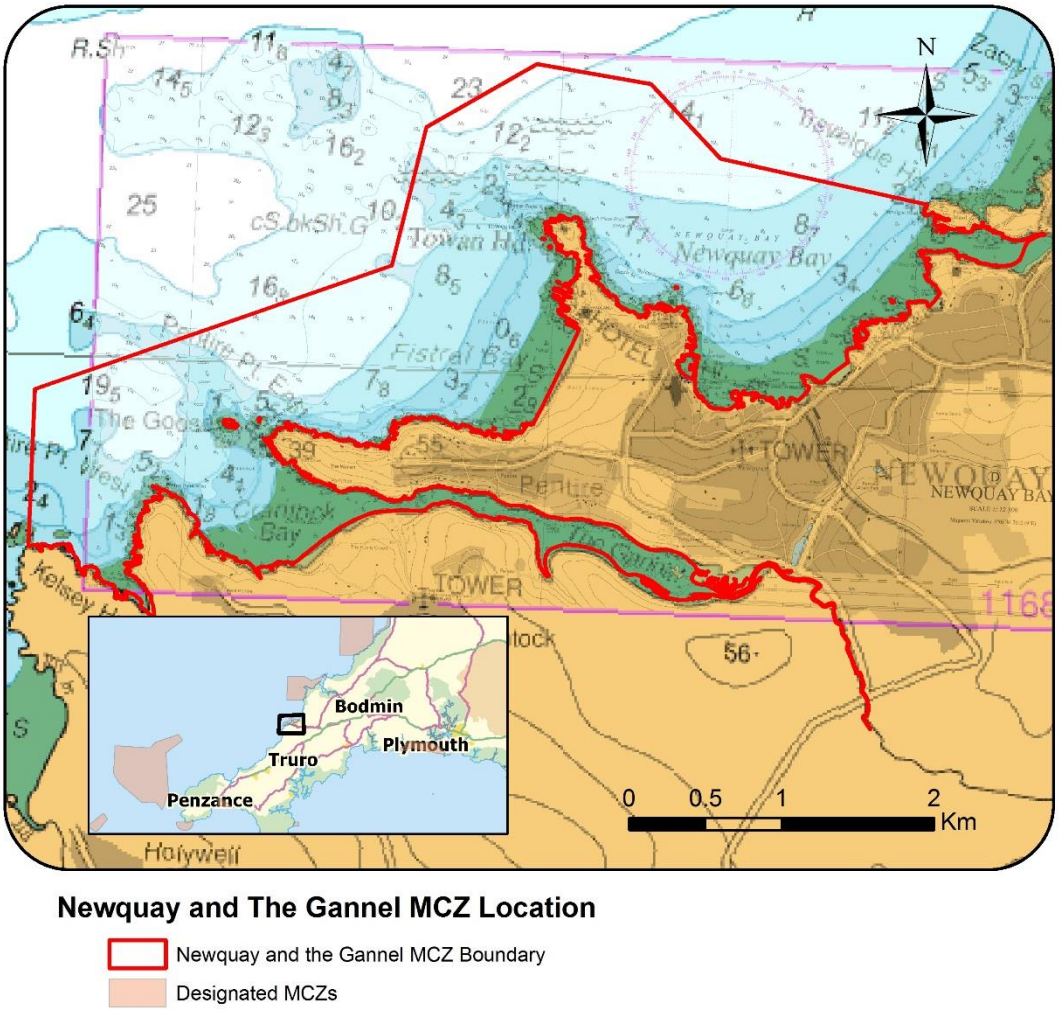


Figure 2. Location of the Newquay and The Gannel Marine Conservation Zone (MCZ) in the context of other MCZs in the Southwest of England.

Table 1. Protected features within the Newquay and The Gannel MCZ. The monitoring survey will focus on those features indicated by grey shading. (GMA = General Management Approach, Maintain = Maintain in favourable condition) (DEFRA, 2016a).

Feature type	Features Present	Designated	GMA
Broadscale Habitat (BSH)	'A4.1 High energy circalittoral rock'	✓	Maintain
	'A3.1 High energy infralittoral rock'	✓	Maintain
	'A1.1 High energy intertidal rock'	✓	Maintain
	'A2.1 Intertidal coarse sediment'	✓	Maintain
	'A2.4 Intertidal mixed sediments'	✓	Maintain
	'A2.3 Intertidal mud'	✓	Maintain
	'A2.2 Intertidal sand and muddy sand'	✓	Maintain
	'A1.3 Low energy intertidal rock'	✓	Maintain
	'A3.2 Moderate energy infralittoral rock'	✓	Maintain
	'A1.2 Moderate energy intertidal rock'	✓	Maintain
	'A5.1 Subtidal coarse sediment'	✓	Maintain
	'A5.2 Subtidal sand'	✓	Maintain
	'A2.5 Coastal saltmarshes and saline reedbeds'	✓	Maintain
Habitat Feature of Conservation Importance (FOCI)	Estuarine rocky habitats	✓	Maintain
Species Feature of Conservation Importance (FOCI)	Giant goby (*Gobius cobitis*)	✓	Maintain

1.4 Geological and Biological Context

This MCZ protects a high variety of intertidal and subtidal habitats (Table 1), from the rocky headlands of Towan Head and Pentire Point East & West, to the exposed beaches of Crantock and Fistral, and the more sheltered Gannel estuary with its saltmarsh and intertidal mud (DEFRA, 2016b).

The sheltered intertidal sediments and coastal saltmarsh within the Gannel Estuary are important habitats in terms of ecological productivity, providing a nursery area for juvenile fish (DEFRA, 2016a; Lieberknecht et. al., 2011). The intertidal sandy beaches and rocky shore habitats are important for a range of plants and animal species including the rare Giant goby (*Gobius cobitis*). Subtidal rocks and sediment in deeper water away from the coastline also provide a diverse habitat containing branching sponges, anemones, sea squirts and macroalgae (DEFRA, 2016a).

Detailed site information can be found in the 'Newquay and The Gannel MCZ Factsheet' (DEFRA, 2016a) and section 11.3.40 of Lieberknecht et al.'s (2011) Finding Sanctuary Final Recommendations Report.

2. Survey Design and Methods

2.1 Survey Design and Planning Phase

Sampling station selection was based on the Broadscale Habitat map (Le Bas, 2015) generated from the 2013 verification survey (Arnold and Godsell, 2014). Within the MCZ boundary, stations were chosen through a combination of random selection and re-sampling of the 2013 sample locations (NWQG03, 4, 6, 7, 8, 13, 14, 21, 25, 27, 36). Outside the boundary, drop down video (DDV) and grab stations were selected based on bathymetry and nautical charts due to a lack of historical data. Stations were placed as far west as Holywell Bay and east as Watergate Bay and not below 25 m depth (as marked on the Admiralty Chart) in order sample within the same depth range as the stations inside the MCZ boundary.

Across the survey area, a total of 60 camera stations and 76 grab stations (Figure 3) were chosen using a 'Before-After-Control-Impact' (BACI) sampling strategy to provide point records of the Broadscale Habitat present. Twenty-two grab stations within the MCZ boundary were also selected to be sampled with both Day and mini-Hamon Grab for infauna and particle size analysis (PSA) as part of a comparison study. This was because the collection of sandy sediment in the area proved challenging using the Hamon Grab in 2013. The team wanted to test if the Day Grab was more effective whilst ensuring data comparisons with the historical survey data could still be undertaken. Eight stations, four inside and four outside the MCZ boundary, were also selected for sediment contaminant analysis (heavy metals, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, and tributyltin).

The number of stations for 'A5.2 Subtidal sand' (grabbing) and 'A3.2 Moderate energy infralittoral rock' (DDV) features were calculated using power analysis. Additional stations were also included to sample 'A5.1 Subtidal Coarse Sediment' and 'A3.1 High energy infralittoral rock' identified in video still images captured in 2013.

Marine specialists from the Environment Agency and Natural England reviewed the plan. The following hazards were identified from the UKHO Admiralty charts: shallow water depths and underwater obstructions. Sampling stations were relocated to avoid these hazards as far as possible.

A 'Notification of an exempt activity form' to cover the removal of sediment (samples) was submitted to the Marine Management Organisation prior to the survey being carried out.

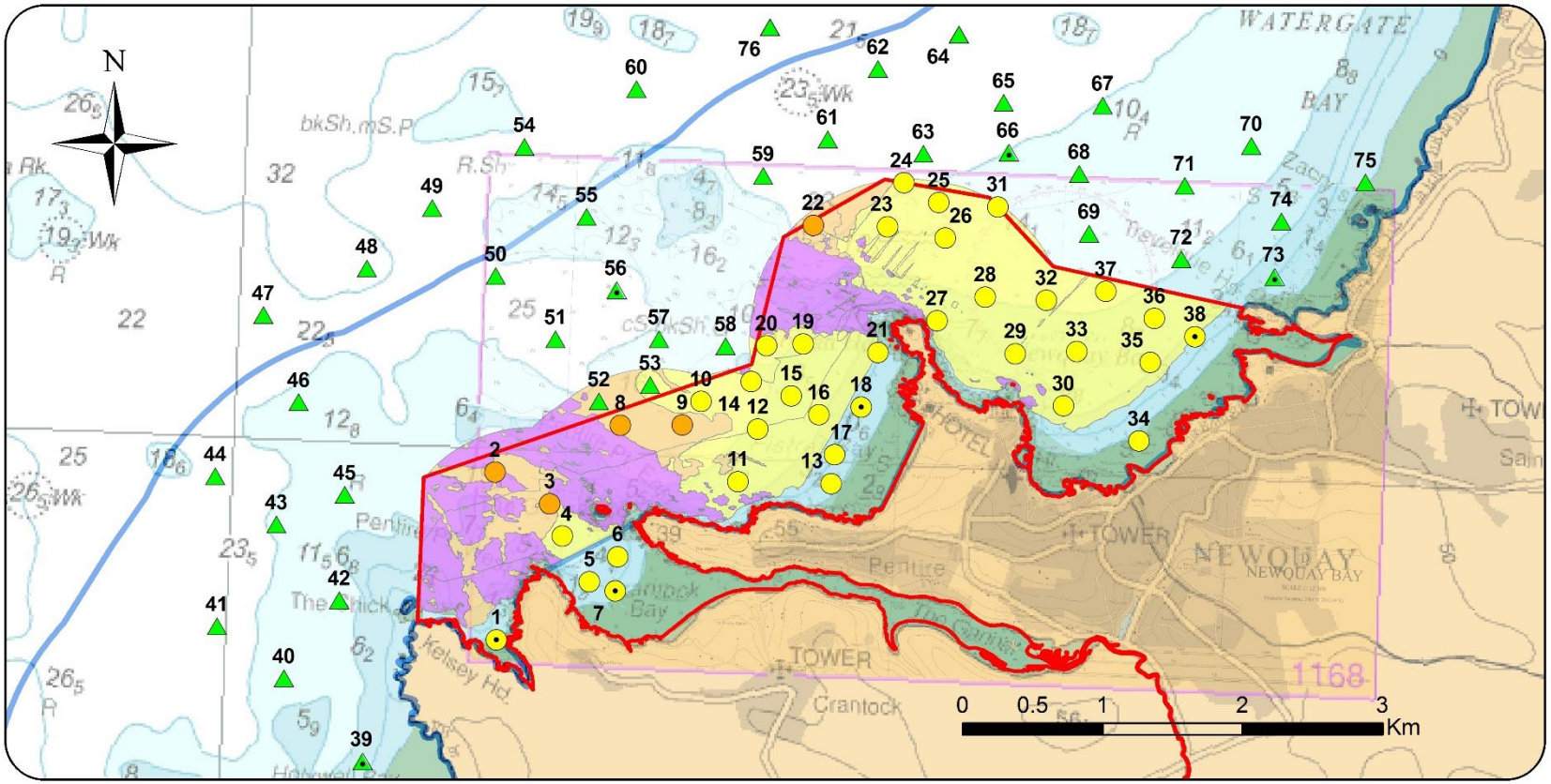


Figure 3. Newquay and The Gannel MCZ 2017 Survey - Indicative Grab Stations. Mapped over the 2013 Interpreted Broadscale Habitat Map (Le Bas, 2015).

2.2 Sample Collection Methodology

2.2.1 Broadscale Habitat Groundtruthing

Day Grab

A Day Grab (Figure 4), with a sampling area of 0.1 m^2 was deployed from the stern gantry of the survey vessel to recover sediment from the seabed as described in the Environment Agency Water Framework Directive (WFD) operational instructions 104_10 (2012) and 009_07 (2014). Sampling positions were recorded (fixed), using Hydropro data acquisition software, when the gear contacted the seabed. The mid-point of the vessel's stern gantry was used as the default offset for position fixing (see Annex 7.2.1 for further details).

The EA WFD sampling methodology required two similar samples; the first was used to obtain a fauna sample (minimum depth of 5 cm in sand habitat and 7 cm in mud habitat) and the second solely to obtain a sub-sample for particle size analysis. The sample was also inspected for a Redox Potential Discontinuity (RPD) or 'black layer'. If present, the depth below the surface was recorded. The faunal sample was then processed, by washing over a sieve (1 mm mesh for subtidal, 0.5 mm mesh for intertidal). The retained material was photographed on the sieve and preserved in a buffered 4 % formaldehyde solution for transfer ashore to a specialist laboratory for analysis. Further grab attempts were made to acquire a second sample containing similar material to the first (grabs with dissimilar material were discarded). A full depth-integrated core of sediment (approx. volume of 500 ml) was taken from the second sample for particle size analysis.

Mini-Hamon Grab

A mini-Hamon Grab (
Figure 5), with a sampling area of 0.1 m^2, was deployed from the stern gantry of the vessel to collect sediment from the seabed, as described by Ware and Kenny (2011). Sampling positions were recorded (fixed), using Hydropro data acquisition software, when the gear contacted the seabed, with the mid-point of the vessel's stern gantry being used as the default offset for position fixing (see Annex 7.2.1 for further details).

Once recovered, the sample was emptied into a suitable container, photographed, and the sample volume measured. A minimum of three attempts was made at each station to obtain a valid grab sample before the station was abandoned. A sample volume of 5 litres was required to qualify as a valid sample. Samples of < 5 litres were ordinarily discarded. However, when it was difficult to obtain a valid sample, a sample with < 5 litres of material was retained at the discretion of the lead scientist, if it was deemed representative of the habitat. For valid samples, a small scoop was used to remove a sub-sample (approx. 0.5 litre) of sediment for particle size analysis (PSA). The remaining sample was washed over a 1 mm (for coastal) or a 0.5 mm (for estuarine) sieve to retain the faunal fraction (
Figure 5), photographed and preserved with a buffered 4 % formaldehyde solution for transfer ashore to a specialist laboratory for analysis.

If the volume of sediment collected was insufficient for faunal analysis in each grab attempt made at a particular station, a photograph was taken and, if possible, material removed for PSA. The station was then abandoned.

At eight stations, additional grabs were collected to retrieve material for contaminant analyses following the methodology detailed in the Environment Agency operational instruction 10_01 (2007). Surface scrapes (i.e. the recently deposited sediment) were removed from each grab to a maximum depth of 1 cm (avoiding the anoxic layer). A metal scoop was used to collect

material for organic contaminant analyses and a plastic scoop for heavy metals. The remaining material was then discarded. The top 1 cm was used, as this provides a record of the most recent contaminant levels deposited in the sediment. All samples were stored frozen at -20°C after collection.

Figure 4. Day Grab being deployed from the stern of the vessel.

Figure 5. Mini-Hamon Grab (left), and equipment for sieving benthic fauna samples (right).

2.2.2 Habitat Characterisation and *In-situ* Benthic Epifauna Identification

Drop video camera equipment (Annex 7.2.2) was deployed in accordance with the MESH 'recommended operating guidelines (ROG) for underwater video and photographic imaging techniques' (Coggan et al., 2007). A Seabug camera system was deployed from the stern of the survey vessel, as shown in Figure 6. Real time navigation data acquisition and manual position fixing when the gear contacted the seabed was captured via Trimble® HYDRO*pro*™ software and logged by the survey officer. The mid-point of the vessel's stern gantry was used as the default offset for position fixing (see Annex 7.2.1 for further details). Video files and digital still images were transmitted via the sea cable to be captured and saved directly to a computer in the survey cabin. The video footage was annotated with time and position using a GPS (SIMRAD MX512 DGPS) referenced video overlay (uncorrected position data). Images of the seabed were captured approximately every 10 to 15 metres over a distance of > 150 metres. Extra photographs were taken in heterogeneous areas of BSH and if particular habitat/species FOCI were observed. If a BSH habitat boundary was detected towards the end of a tow, the camera deployment was extended to confirm the change. The drop frame depth was controlled via a winch operator receiving instructions from the survey cabin. For further deployment details please see the 'EA underwater video procedure_version 2.2' in Annex 7.3.

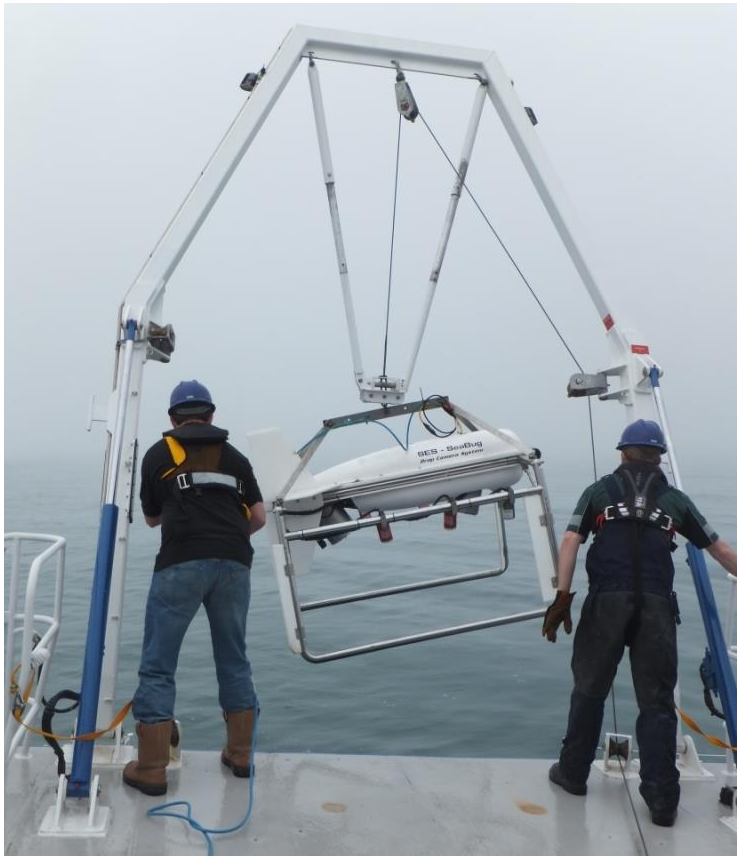


Figure 6. Seabug drop camera system being deployed from the stern of the coastal survey vessel.

During each drop camera deployment, a member of the survey team continuously monitored the real-time video feed, recording general station notes, habitat information and fauna observations (please see Annex 7.5 for a worked example of the video logsheet).

3. Survey Narrative

The Newquay and The Gannel 2017 MCZ survey was carried out between the 2nd April and the 24th August, 2017.

Environment Agency survey personnel mobilised to the survey vessel *Severn Guardian*, berthed in Padstow Harbour, on the 2nd April 2017. Following a safety induction, the vessel departed Padstow Harbour at 07:28 UTC. Visibility was good, with northerly winds and a slight sea-state. Twenty-two stations were sampled successfully with the Day Grab. In the absence of mud at the station marked for contaminants analysis, NWQG038, no material was retained. Once able to consult with a member of the survey planning team, a surface scrape was taken from sandy material for sediment contaminant analysis at NWQG020. Following a safety briefing on the morning of the 3rd April, the vessel departed Padstow Harbour at 07:15 UTC to conduct sampling operations within Newquay Bay. Benthic sampling with the Day Grab commenced at 08:50 UTC. Visibility was good with a slight to moderate sea-state and south to south-westerly winds. Nine stations provided viable samples suitable for both faunal and particle size analyses and at four of these stations material was retained for sediment contaminants analyses. An additional three stations, successfully sampled the previous day, were revisited for contaminants sample collection. Salinity measurements were recorded above the seabed at each of these stations. The sampling gear was then changed to the mini-Hamon (MHM) Grab and a further eight stations were sampled. Samples taken with the MHM Grab inside the MCZ boundary yielded several discards due to the fine sediment.
Strong winds meant the survey vessel remained alongside in Padstow Harbour the following day waiting on the weather. With no immediate break in the weather, survey operations were halted on 4th April 2017 until more favourable conditions were forecast. Samples were removed from the vessel and survey personnel demobilized.

Favourable winds and a slight sea state, allowed survey operations to recommence on the 4th May. Survey personnel mobilised to *Severn Guardian* and following a safety briefing, departed Padstow Harbour at 10:45 UTC. Survey operations started at 12:11 UTC with nineteen stations providing viable samples suitable for both infauna and particle size analyses using the Day Grab. NWQG076 yielded < 4 cm depth of sediment in the grab, so only a PSA sample was taken. Numerous failed attempts occurred outside the MCZ boundary due to the presence of rock. In order to obtain sublittoral sand samples for the BACI design, new sites were selected in locations where the Broadscale Habitat ('A5.2 Subtidal sand') was expected to the east in Watergate Bay. Following a further safety briefing the following day, Severn Guardian departed Padstow Harbour at 11:45 UTC, when the tidal gates had opened. Twenty-six stations were successfully sampled using the Day Grab, providing viable samples suitable for both infauna and particle size analyses.

Gale force winds halted survey operations and benthic sampling did not recommence until 24th May. Survey personnel mobilised on the morning of the 24th and *Severn Guardian* departed Padstow Harbour at 04:00 UTC. There was a slight to moderate sea state and with easterly winds. After a safety induction, the survey operations commenced at 05:45. Using the mini-Hamon Grab, a total of twenty-three sites were sampled successfully for biota and PSA and a further five sites were sampled for PSA only.

Environment Agency personnel mobilised on the 14th August 2017 to begin the drop down video (DDV) survey, however equipment issues with the hired video system resulted in the survey being cancelled until new equipment was available.

On the morning of 22nd August 2017, Environment Agency Marine Monitoring Officers mobilised to Padstow Harbour to take delivery of a Sea Bug camera system on the CSV

Severn Guardian. At 07:10 UTC the *Severn Guardian* departed Padstow Harbour to commence survey operations. Visibility was moderate to good with a force 4-5 south-easterly wind and slight to moderate sea state. The camera was set up en route arriving at the first station at 08:27 UTC. In total 26 stations were completed, eight of which were hindered by the presence of static fishing gear. This resulted in the DDV transect being relocated in order to avoid the pots at NWQG16, NWQG22, NWQG23, NWQG31 and NWQG32. At NWQG34 the survey transect was shortened due to fishing gear observed in the live video feed. NWQG05 and NWQG06 were visited, but not attempted due to the density of fishing gear in the area. The following day, with a weather forecast of slight to moderate sea state, good visibility and a south-westerly force 4 to 5 wind, *Severn Guardian* departed Padstow Harbour at 06:15 UTC. Twenty six stations were sampled, static fishing gear prevented access to eight stations (NWQG01, NWQG05, NWQG06, NWQG08, NWQG10, NWQG12, NWQG24, NWQG28).

At 08:20 UTC on the morning of 24th August 2017, *Severn Guardian* departed Padstow Harbour. Twenty seven stations were sampled, two of which (NWQG10 and NWQG28) were relocated due to fishing gear preventing access. It was not possible to survey at six stations due to static fishing gear preventing access to the planned sample stations.

Between the 2nd April and the 25th May 2017, the Newquay and the Gannel MCZ grabbing survey took five 'on-task' days to complete. Between 14th August and 24th August 2017, the DDV survey took three 'on-task' days to complete.

A detailed progress report for each survey day can be found in Annex 7.6.

4. Results

4.1 Seabed Images

Video footage and digital photographs of the seabed were collected for Broadscale Habitat characterisation at 54 stations, 30 outside the Newquay and The Gannel MCZ boundary and 24 inside the MCZ boundary (Figure 7).

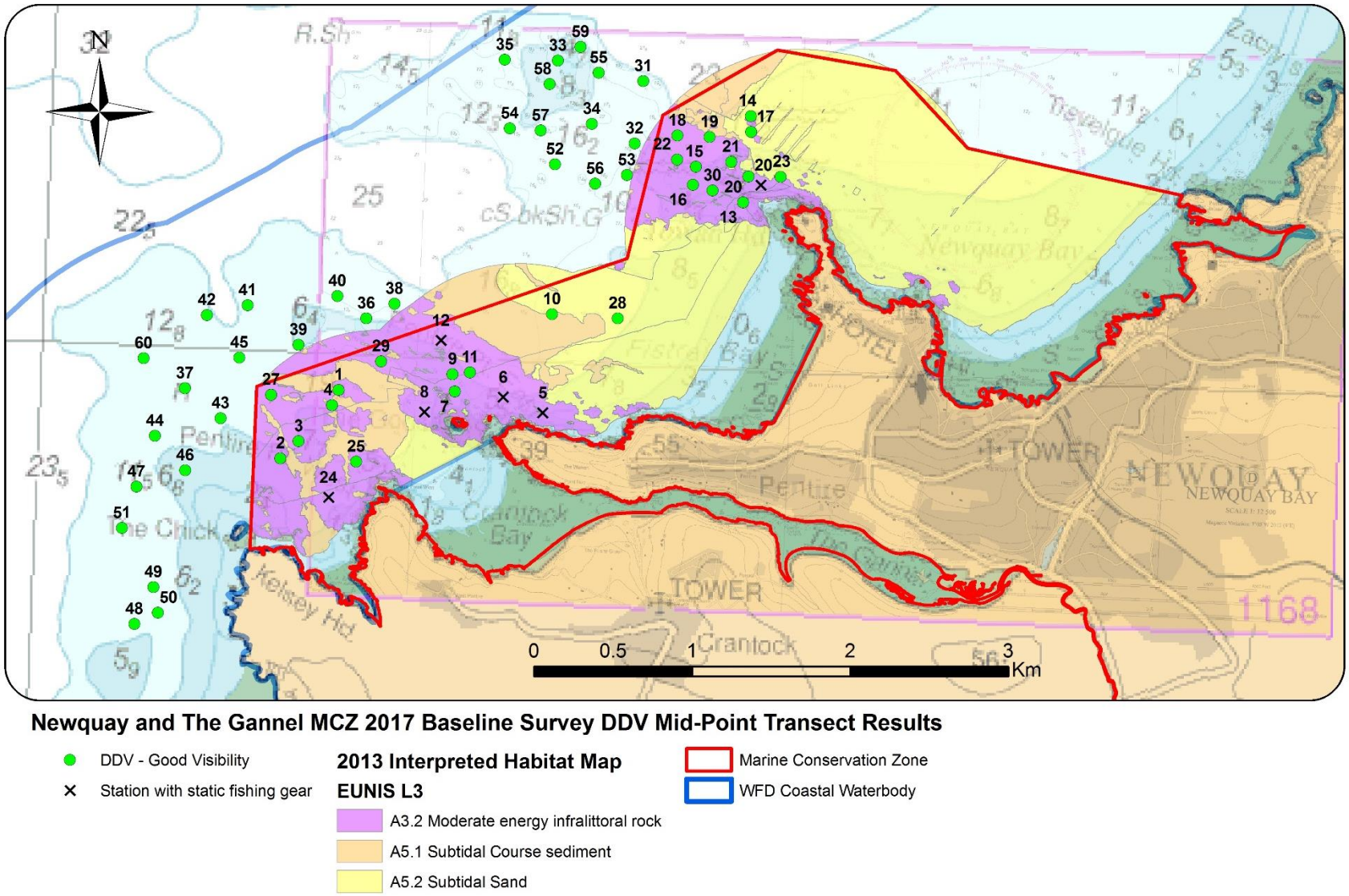


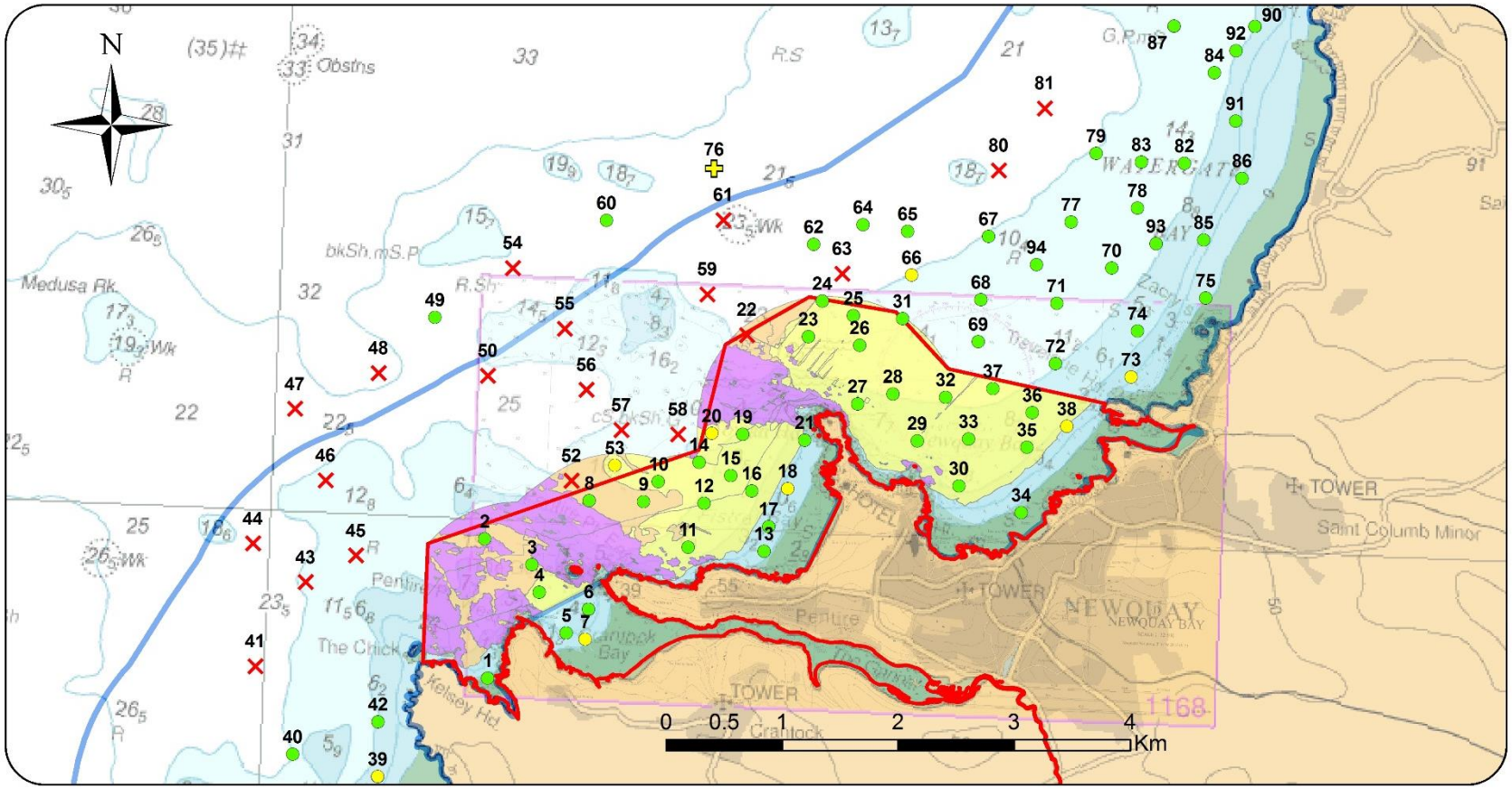
Figure 7. Newquay and the Gannel MCZ 2017 Survey - DDV Transect Mid-Points displayed over the 2013 Interpreted Broadscale Habitat Map (Le Bas, 2015).

4.2 Sediment Samples

Viable grab samples for both infauna and particle size analyses were collected at 70 stations, using a Day Grab (Figure 8). At NWQG45, the quantity of sediment collected was only sufficient for particle size analysis. Twenty of the stations selected for ground truthing yielded discards due to insufficient sediment quantity. Eight stations were successfully sampled for sediment contaminant analysis. Using a mini-Hamon Grab for the comparison study, 31 of the 70 stations were also sampled for infauna and PSA analysis (Figure 9). At five stations, the quantity of sediment collected was only sufficient for particle size analysis and one station yielded an insufficient volume of sediment for sample analyses. The samples were photographed before and after the on-board processing phase.

4.3 Evidence of Anthropogenic Impacts

A plastic bag was observed in DDV footage at NWQG35, and a fishing pot line (active) was observed in the DDV footage at NWQG34.



Newquay and The Gannel MCZ 2017 Baseline Survey Day Grab Results

Sediment Use

- Biota + PSA
- Biota + PSA + Contaminants
- PSA Only
- Discard

2013 Interpreted Habitat Map

EUNIS L3

- A3.2 Moderate energy infralittoral rock
- A5.1 Subtidal Course sediment
- A5.2 Subtidal Sand

- Marine Conservation Zone
- WFD Coastal Waterbody

Figure 8. Newquay and The Gannel MCZ 2017 Survey - Day Grab Stations displayed over the 2013 Interpreted Broadscale Habitat map (Le Bas, 2015).

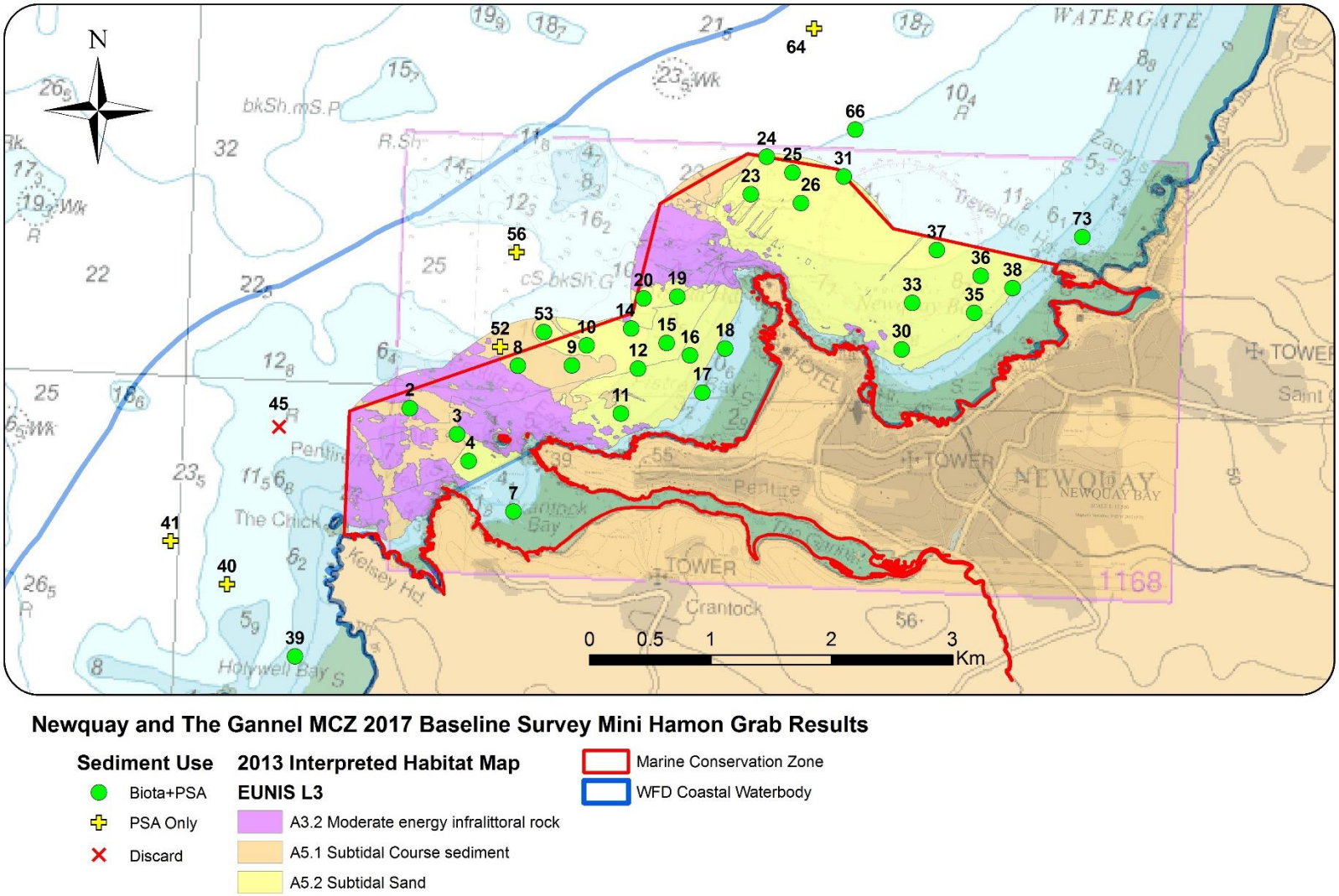


Figure 9. Newquay and The Gannel MCZ 2017 Survey - mini-Hamon Grab stations displayed over the 2013 Interpreted Broadscale Habitat Map (Le Bas, 2015). Stations shown were also sampled with a Day Grab.

5. References

Arnold, K. and Godsell, N. (2014). Newquay and The Gannel rMCZ Survey Report. Environment Agency. March 2014.

Coggan, R., Mitchell, A., White, J. and Golding, N. (2007). Recommended operating guidelines (ROG) for underwater video and photographic imaging techniques. Mapping European Seabed Habitats (MESH) video working group report v.11.2 [online]. Available from: http://www.emodnet-seabedhabitats.eu/PDF/GMHM3_video_ROG.pdf, [Accessed 23/11/2017].

Environment Agency. (2007). Sediment sampling in water for chemical and particle size analyses. Operational Instruction 10_01 (internal document). Environment Agency, Bristol, UK.

Environment Agency (2012). Water Framework Directive (WFD) sampling of macrobenthic invertebrates in Transitional and Coastal Waters. Operational Instruction 104_10 (internal document). Environment Agency, Bristol, UK.

Environment Agency (2014). Sampling and processing marine benthic invertebrates. Operational Instruction 009_07 (internal document). Environment Agency, Bristol, UK.

Department for Environment and Rural Affairs (Defra) (2016a). Newquay and the Gannel Marine Conservation Zone – Factsheet. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492387/mcz-newquay-gannel-factsheet.pdf [Accessed 23/11/2017].

Department for Environment and Rural Affairs (Defra) (2016b). Newquay and the Gannel Marine Conservation Zone – Feature Map. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492386/mcz-newquay-gannel-feature-map.pdf [Accessed 23/11//2017].

Le Bas, T. (2015). Report No 26. Title: Newquay and The Gannel rMCZ Post-survey Site Report Defra. http://randd.defra.gov.uk/Document.aspx?Document=12845_NewquayandTheGannel_rMCZ_summary_site_report_v7.pdf. [Accessed 23/11/2017].

Lieberknecht, L.M., Hooper, T.E.J., Mullier, T.M., Murphy, A., Neilly, M., Carr, H., Haines, R., Lewin, S. and Hughes, E. (2011). Finding Sanctuary final report and recommendations. A report submitted by the Finding Sanctuary stakeholder project to Defra, the Joint Nature Conservation Committee, and Natural England. Available from: http://webarchive.nationalarchives.gov.uk/20120502152639/http://www.finding-sanctuary.org/ [Accessed 23/11/2017, 13:16].

Ware, S.J. and Kenny, A.J. (2011). Guidelines for the Conduct of Benthic Studies at Marine Aggregate Extraction Sites (2nd Edition). Marine Aggregate Levy Sustainability Fund, 80 pp.

6. General List of Abbreviations

BSH	Broadscale Habitat
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CHP	Civil Hydrography Programme
CS	Camera Sledge
CSV	Coastal Survey Vessel
DC	Drop Video Camera
Defra	Department for Environment, Food and Rural Affairs
DG	Day Grab
EA	Environment Agency
ECMAS	Estuarine and Coastal Monitoring & Assessment Service
EEZ	Exclusive Economic Zone
ENG	Ecological Network Guidance
FOCI	Features Of Conservation Importance
IFCA	Inshore Fisheries and Conservation Authority
MCZ	Marine Conservation Zone
MESH	Mapping European Seabed Habitats
MHM	mini-Hamon Grab
mSNCI	marine Sites of Nature Conservation Importance
PSA	Particle Size Analysis
REC	Regional Environmental Characterisation
rMCZ	recommended Marine Conservation Zone
RSG	Regional Stakeholder Group
SAC	Special Area of Conservation
SAD	Site Assessment Document
SNCB	Statutory Nature Conservation Body
SOP	Standard Operating Procedure
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UTC	Coordinated Universal Time

7. Annexes

7.1 Coastal Survey Vessel General Information

Severn Guardian

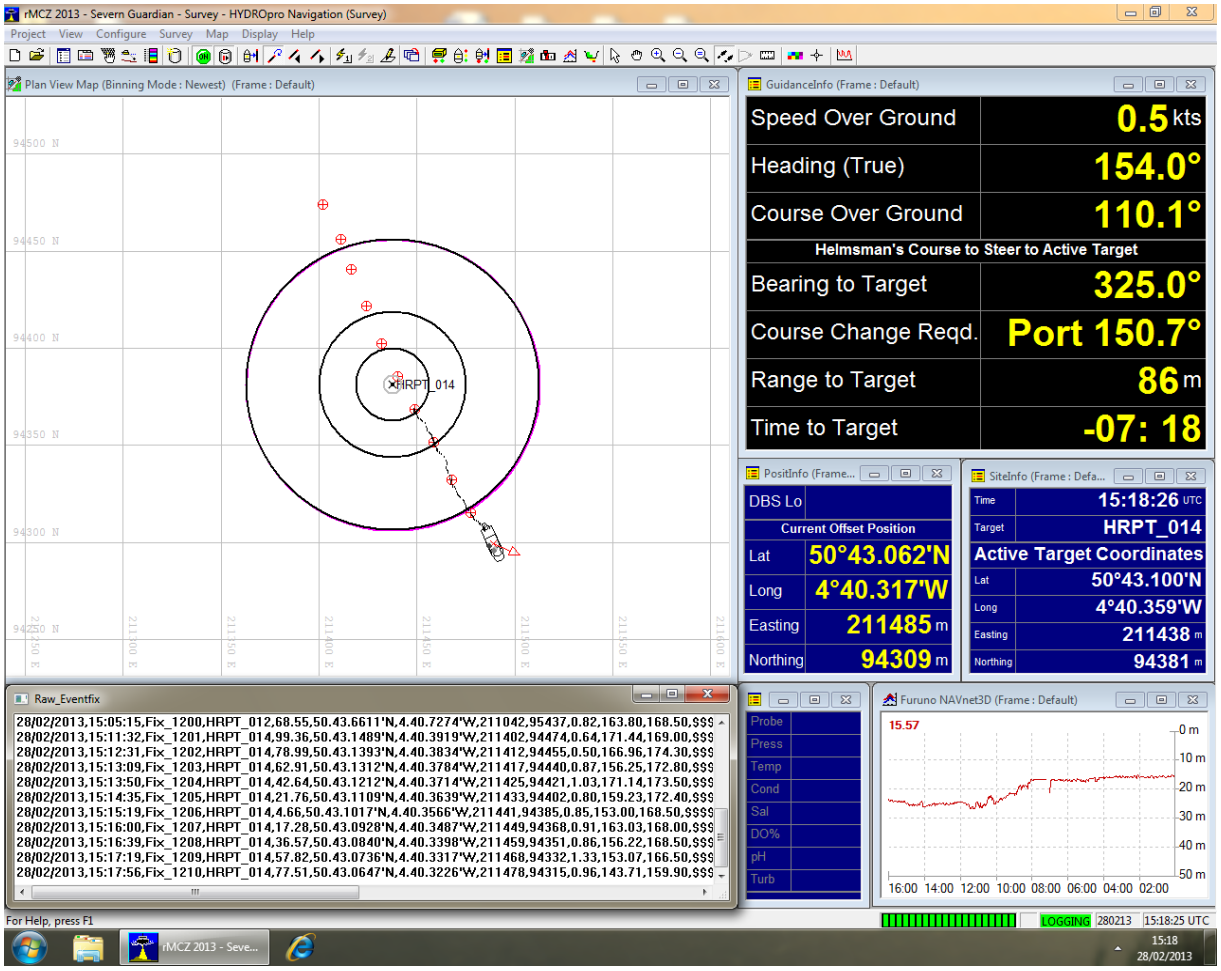
General Information
Length: 18.3 m
Beam: 6.3 m
Draft (baseline): 1.15 m
Draught (skegs): 2.2 m
Displacement (light ship): 22 T
Displacement (full load): 30 T
Service Speed: 16 knots
Maximum Speed: 18 knots

Main Equipment
Main Engines: 2 x Volvo D9-MH 261 bkW @ 2200 rpm. Twin Disc MGX-5075 integral vee-drive
Crew: 7
Scientific Officers: Up to 10
Accommodation: 3 x twin cabins and mess
Data network to share information around vessel
Wet lab/bench for processing water, sediment and ecology samples
Fridge/freezer for sample storage
Dry lab space for two computers and data processing
Large aft deck working area
A frame – 2 T SWL
Double Independent Drum Trawl Winch – 2 T SWL
Hydraulic crane

7.2 Survey Equipment

7.2.1 Navigation and Positioning

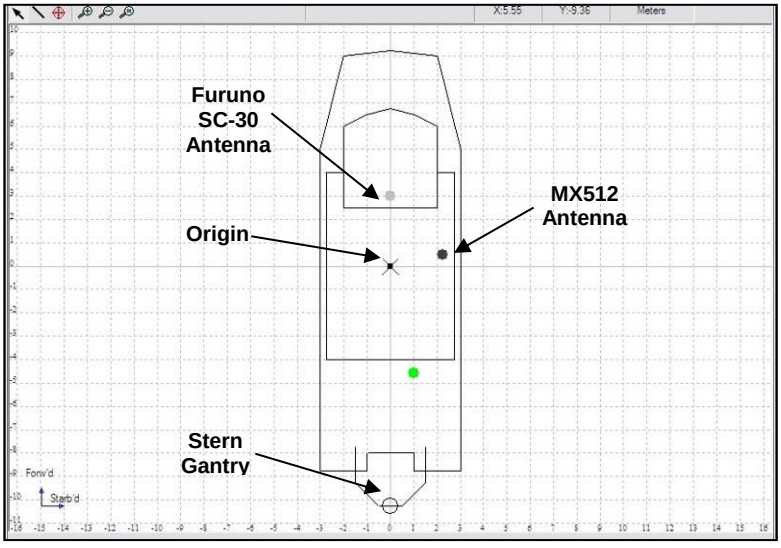
Trimble® HYDRO*pro*™ software is utilised for real-time navigation and survey data acquisition.



Trimble® HYDRO*pro*™ software screen grab displaying real-time navigation and survey data acquisition for a MCZ drop camera survey line.

Navigational and survey equipment offsets on the Coastal Survey Vessel *Severn Guardian* (Environment Agency Estuarine and Coastal Monitoring & Assessment Service).

NMEA Device	Make/Model	Offset Name	Offset (m)		
			X (Starb'd)	Y (Forw'd)	Z +ve (Up)
Gyrocompass	*Simrad Robertson RGC50*	*n/a*	*-*	*-*	*-*
Navigation Echosounder	*Furuno DFF1, 525ST-MSD transducer*	*n/a*	*-*	*-*	*-*
Survey Echosounder	*Kongsberg EA400*	*n/a*	*-*	*-*	*-*
Origin	*n/a*	*Origin*	*0.0*	*0.0*	*0.0*
Navigation GPS (Secondary)	*Furuno SC-30 DGPS*	*Furuno SC-30 Antenna*	*0.0*	*3.0*	*0.0*
Survey GPS (Primary)	*SIMRAD MX512 DGPS*	*MX512 Antenna*	*2.25*	*0.5*	*0.0*
n/a	*n/a*	*Sediment Grab (Stern Gantry)*	*0.0*	*-10.25*	*0.0*



Trimble® HYDROpro™ vessel editor screen showing survey equipment offsets from the origin (Environment Agency Estuarine and Coastal Monitoring & Assessment Service).

7.2.2 Seabug Drop Camera System

CAMERA DEPLOYMENT FRAME

Dimensions: 1.3 x 1.4 x 1.3 meters
Weight: 122 kg without electronics
Materials: 316 stainless steel/GRP

Dimensions: 230mm x 200mm dia.
Weight: 13kg Front panel status display
Power input: 24V DC
Resolution: 14.7 megapixels

Digital Interface: Ethernet
Video: PAL/NTSC via network
Stills Resolution: 320 x 240 to 4416 x 3312
ISO Sensitivity: 80 to 1600 Auto/Manual
Zoom: 5 x Optical 4 x digital
Compression Modes: JPEG/RAW

SES DIGITAL FLASH

Dimensions: 230 mm x 150 mm Diameter
Weight: 7.6 kg
Depth Rating: 2000 meters

SES 15W UNDERWATER LAMP MULTIPORT DTS SUBSEA UNIT

Dimensions: 110 mm x 70 mm Diameter
Weight: 1 kg
Depth Rating: 2000 meters
Power Input: 24V DC

Unit supplied by Sonar Equipment Services (SES) Ltd.
Web: www.sonar-equipment.com [Accessed 19/02/2014]

Camera settings variable depending on underwater visibility and ambient light levels

7.3 EA underwater video procedure_version 2.2 (Seabug System)

The procedure outlined below has developed through a series of discussions involving the Environment Agency, Cefas and Natural England. Due to the heterogeneous nature of the inshore coastal seabed habitat, strong tidal streams, various underwater hazards and no dynamic positioning system, a flexible approach is recommended for the underwater video camera deployment. The procedure must be used in accordance with the MESH 'recommended operating guidelines (ROG) for underwater video and photographic imaging techniques' (Coggan et al., 2007).

Important points to remember:

- **Select stern gantry offset in Hydropro**
- **Synchronise all survey equipment (camera, laptops, etc.) with primary survey GPS time (UTC).**
- **Ensure the correct date, station code, STN number, time and position are displayed on the video overlay.**

Example:

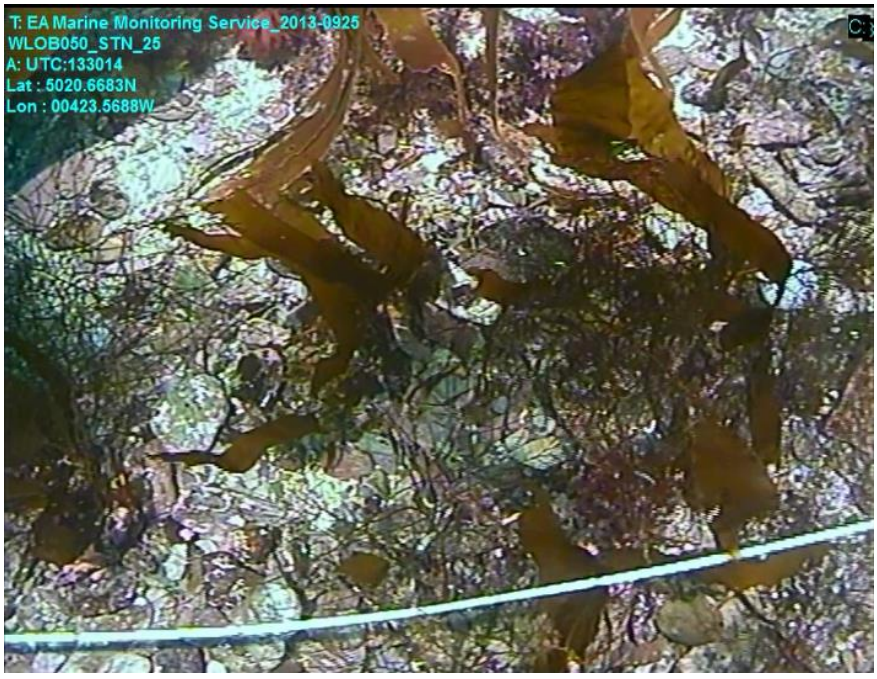
EA Marine Monitoring Service_2013-0925

WLOB050_STN_25 *(annotate if station has been attempted on a previous occasion)*

UTC: 133014 (*real time feed from survey GPS*)

Lat: 5020.6683N (*real time feed from survey GPS*)

Lon: 00423.5688W (*real time feed from survey GPS*)



- **Alter the stills prefix to the correct station code.**

Example:

PBSR096_STN_? *(? = sequential 'STN or event' number expressed as an integer i.e. no leading zeros – refer to previous survey period for starting number)*

The Seabug software will then automatically add '_01, _02,_03.....' as the stills are captured – you may need to adjust the number of leading zeros.

Final stills code format saved to the laptop:

PBSR096_STN_12_01

PBSR096_STN_12_02

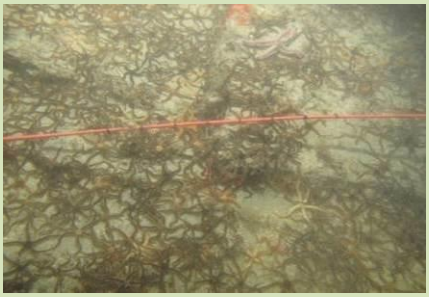
PBSR096_STN_12_03

- **The field of view scale bar/laser points should be set up/calibrated prior to the survey commencing. Laser pointers are ineffective in moderate/poor visibility conditions; a rope with a visible scale will be required as a replacement**
- **Set the image resolution to Large Normal (14.7 Mega Pixels, 18 sec upload time)**
- **Check the camera settings are appropriate for the conditions; the LED lights are on if required and ensure the video is recording throughout the deployment.**

- **If a Broadscale Habitat (BSH) boundary is detected extend the deployment to gather as much information on habitat extent as possible.**
- **Take extra stills if habitat/species FOCI are observed – note these in the survey log.**
- **If possible, work a downhill seabed profile to avoid slack cable during deployment.**
- **Beware of sudden depth changes when surveying rocky areas.**
- **Abandon the station if survey conditions are hazardous.**

Video Camera Type	Survey Conditions	Deployment
Drop down	Good visibility	*Deploy camera initially working across the Hydropro 75 m radius target area, as shown in the diagram below. Hover/rest camera above/on the seabed; take a still every 15 m. If tide/wind conditions do not allow a survey line to be followed across the bull ring, use the outer circle as a guide to ensure a distance of 150 m is covered (minimum) nearby.
	Poor visibility	Hover/rest camera above/on the seabed, take a still every 15 m. If the visibility is very poor, retrieve the equipment after taking 3-4 stills.

7.4 Underwater Visibility Scale

Example image	Scale	Definition
	Excellent	clear, sharp images - no suspended particulate matter
	Good	seabed features and epifauna clearly discernible
	Moderate	seabed features discernible - epifauna difficult to discern
	Poor	both seabed features and epifauna difficult to discern, low confidence in preliminary habitat assessment
	Very Poor	no seabed features or epifauna visible

7.5 MCZ Video logsheet

MCZ Video Logsheet (v1)

Station data

Contract Code: _____ Vessel: SEVERN GUARDIAN Date: 22/08/2017

MCZ Name: NEWQUAY AND THE GANNEL Station Code: NWQG11

Nav-Log filename: CH 2017-0822 SG Sampling Gear: DROP CAMERA Water Depth: 17.07 m

Cable Out: _____ (metres). Speed Over Ground (SOG): 0.97 (knots)

Notes on Station:
(including any times & adjustments to Cable Out)

Position Reference Point: STERN GANTRY

Sample data

Digital Video Tape label: _____

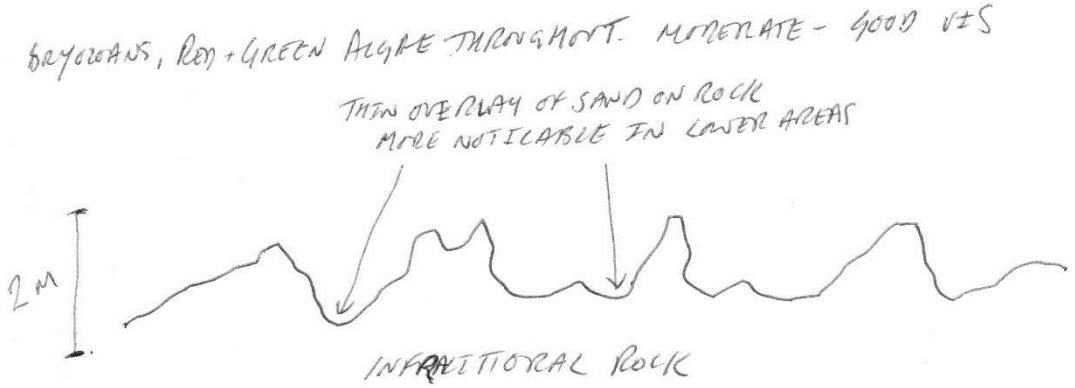
Filename on Hard-Drive: NWQG-2FGLS0817_GT11_STN-172_A1

No. of camera stills: 18 Stills folder name: NWQG-2FGLS0817-GT11-STN-172

	GPS Time hh:mm		Fix No	Position in Lat/Long (WGS84)	DV tape counter Mins	Secs
Start of Video (SOV)	15	26	4747	50 ° 24.9687 N; 5 ° 07.7618 W/E	26	46
End of Video (EOV)	15	33	4765	50 ° 24.9039 N; 5 ° 07.6761 W/E	33	45

Visual / Video notes: (ground-type, terrain, visibility, species, FOCI, sketch of transect)

BOULDERS, RED + GREEN ALGAE THROUGHOUT. MODERATE - GOOD VIS



Broad-scale habitats observed

Infralittoral Rock		Circalittoral Rock		Sediment habitats		Others	
high energy		high energy		subtidal mixed		macrophyte dominated sed's	
mod.energy	X	mod.energy		subtidal coarse			
low energy		low energy		subtidal mud		biogenic reef	
				subtidal sand		deep-sea bed	

Completed by: T. LORD Checked by: _____ Entered by: T. LORD

7.6 Daily Progress Reports

DAILY PROGRESS REPORT 1
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 1	Location: Newquay and the Gannel
Date: 02/04/2017	

Safety

	Today	To Date
Safety Drills/Induction	2	0
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
06:45	07:10	Mobilisation	
07:10	07:28	Safety Drills	Vessel safety induction
07:28	09:05	Passage	
09:05	09:10	Safety Drills	Toolbox talk – grab work
09:10	09:35	Day Grab	1 biota sample collected
09:35	11:05	Equipment failure	Deck hose stopped working – fixed by crew
10:05	17:20	Day Grab	Completed 22 sites
17:20	18:40	Passage	
18:40	19:20	Fix samples	
19:20	19:30	Demob	

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)		Variable 1 or 2 , Northerly	
Sea state		Slight	
Swell (m)		1 – 1.35 m	
Visibility		Good	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
Day Grab Hamon Grab	31 76	22 0	9 76	

Weather forecast for the next 24 hours

Sea State: Variable, becoming southwest, 3 or 4, increasing 5 or 6, moderate. Visibility: good.

Planned operation for the next 24 hours

Grab remaining day grab sites, switch to Hamon grab and continue with operations

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 2
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 2	Location: Newquay and the Gannel
Date: 03/04/2017	

Circulate to:

EA	Luke Martina	Luke.Martina@environment–agency.gov.uk
EA	Ben Green	Ben.Green@environment-agency.gov.uk
EA	Clare Miller	Clare.Miller@environment-agency.gov.uk

Safety

	Today	To Date
Safety Drills/Induction	1	2
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
07:00	07:30	Mobilisation	
07:30	08:15	Safety Drills	Toolbox talk
08:15	09:50	Passage	
09:50	14:06	Day Grab	Completed 9 sites, plus contaminants sites outside the MCZ
14:06	15:20	Change Gear	Change over from Day Grab to Hamon Grab
15:20	18:00	Hamon Grab	Completed 8 sites
18:00	19:15	Passage	
19:15	19:45	Fix Samples	
19:45	20:15	Demob	

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)		Variable 3 or 4 at first in Bristol Channel, otherwise southerly or southwesterly, veering northerly or northwesterly, 4 or 5, occasionally 6 in west.	
Sea state		Moderate or rough, occasionally very rough in southwest.	
Swell (m)		1 – 1.5 m	
Visibility		Moderate or poor, occasionally good.	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed	Remaining Sites	Remarks

		Today		
Day Grab Hamon Grab	31 76	9 8	0 68	Completed Day Grabbing and all contaminants sampling

Weather forecast for the next 24 hours

Sea State: Northerly or northwesterly 3 or 4, occasionally 5 at first. Moderate or rough, occasionally very rough at first in southwest. Visibility: Good.

Planned operation for the next 24 hours

Downweathered

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

Staff on board

Survey Role	Company	Name
Scientist In Charge (SIC)	Environment Agency	Katie Arnold
Survey Team Member	Environment Agency	Ed Stevens
Survey Team Member	Environment Agency	Tom Holland
Survey Team Member	Briggs Marine	Nick O'Sullivan

DAILY PROGRESS REPORT 3
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 3	Location: Newquay and the Gannel
Date: 04/04/2017	

Safety

	Today	To Date
Safety Drills/Induction	0	2
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
09:30	10:00	Mobilisation	K. Arnold
10:00	12:00	Demob	T. Holland
10:00	16:00	Post survey tasks	Pack up PSA and contaminant samples to be taken to Exeter. Send biota samples off with the courier to Brampton. Complete survey logs and sample submission form.
16:00	16:30	Demob	K. Arnold

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)			
Sea state			

Swell (m)			
Visibility			
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
Day Grab Hamon Grab	31 76	0 0	0 68	

Weather forecast for the next 24 hours

n/a

Planned operation for the next 24 hours

Survey postponed until further notice

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 4
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 4	Location: Newquay and the Gannel
Date: 04/05/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	3
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
10:00	10:30	Mobilisation	K. Arnold & Annie Jenkins
10:30	11:45	Safety Drills and waiting on gates	
11:45	13:10	Passage	
13:11	17:00	Day Grab	
17:00	17:30	Break	
17:30	20:30	Day Grab	Lots of failed attempts outside the MCZ due to site being either on rock or the sediment being too coarse.
20:30	22:10	Passage	Post survey data processing
22:10	22:30	Fix samples	
22:30	23:00	Demob	K. Arnold, Annie Jenkins and Alison Tamkin

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)		East or northeast 5 or 6, occasionally 4 at first, then increasing 7 at times later.	
Sea state		Slight or moderate, becoming rough at times later in the southwest	
Swell (m)			
Visibility		Good	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
Day Grab Hamon Grab	76 31	19 0	26 23	10 inside MCZ, 16 outside MCZ

Weather forecast for the next 24 hours

Wind: East or northeast 5 to 7, occasionally 4 later. Sea state: Slight or moderate, occasionally rough until later in the southwest. Visibility: Good, occasionally moderate later near Lands End.

Planned operation for the next 24 hours

Continue with Day Grab

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 5
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 5	Location: Newquay and the Gannel
Date: 05/05/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	4
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
11:15	11:45	Mobilisation	K. Arnold and Alison Tamkin
11:45	12:45	Safety Drills and waiting on gates	
12:45	14:20	Passage	
14:20	20:30	Day Grab	
20:30	22:00	Passage	

22:00	22:30	Fix samples	
22:30	23:30	Post processing	Data processing and waiting on tide to tie up against wall
23:30	00:00	Demob	K. Arnold and Alison Tamkin

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)		East or northeast 5 to 7, occasionally 4 later.	
Sea state		Slight or moderate, occasionally rough until later in the southwest.	
Swell (m)			
Visibility		Good, occasionally moderate later near Lands End.	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
Day Grab Hamon Grab	76 31	26 0	0 23	

Weather forecast for the next 24 hours

Wind: East 5 or 7, occasionally gale 8 at first near Lands End, backing north 3 or 4 later. Sea state: Moderate or rough at first in southwest, otherwise slight or moderate, becoming smooth later in east. Visibility: Mainly good.

Planned operation for the next 24 hours

Demob and halt operations – wait for more favourable weather and tides to complete the Hamon grabbing.

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 6
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 6	Location: Newquay and the Gannel
Date: 05/24/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	5
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
04:30	04:45	Mobilisation	K. Arnold, Tom Holland, Tom Lord, Amy Boaden
05:00	06:35	Passage	
06:35	06:45	Safety Drill	
06:45	13:51	Hamon Grab	
14:00	15:40	Passage	
17:00	17:30	Fix samples	
17:30	18:00	Post processing	Data processing
18:00	18:30	Demob	K. Arnold, Tom Holland, Tom Lord, Amy Boaden

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)		Variable 3 or less, becoming 3 or 4 later.	
Sea state		Slight or moderate	
Swell (m)			
Visibility		Moderate or good, occasionally very poor	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
Day Grab Hamon Grab	76 54	0 23	0 0	Extra 5 sites sampled for PSA only

Weather forecast for the next 24 hours

Wind: East 3 or 4, veering southeast 4 or 5. Sea state: Slight or moderate. Visibility: Moderate or good, occasionally very poor at first.

Planned operation for the next 24 hours

Demob, CSV passage to Neyland

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 7
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 7	Location: Newquay and the Gannel
Date: 14/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	0	5
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
06:00	07:50	MOB	Amy Boaden, Katie Arnold
07:50	9:30	Cable swap and test. Survey prep	K. Arnold, Tom Lord, Amy Boaden
09:30	11:00	Test equipment – trouble shooting	Camera system fault, tested all cables to camera but no solution found. .
11:00	11:45	Pack camera equipment for courier	Equipment to be returned to STR
14:00	15:30	Demob	K. Arnold, Amy Boaden
16:30	21:00	Demob	Tom Lord

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)	Westerly or southwesterly 4 or 5, occasionally 6 in west, veering westerly 3 or 4 later		
Sea state	Slight, occasionally moderate until later.		
Swell (m)	0.7		
Visibility	Good, occasionally moderate until later		
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
DDV	60	0	60	

Weather forecast for the next 24 hours

Westerly backing southwesterly later, 3 or 4, then backing southerly 4 or 5. Slight occasionally moderate later in west. Showers until later. Good.

Planned operation for the next 24 hours

waiting for Sea Spyder and next suitable tides and weather

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 8
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 8	Location: Newquay and the Gannel
Date: 21/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	0	5
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
13:00	19:30	MOB	Katie Arnold , Tom Holland Tom Lord MOB to *Severn Guardian* in Padstow

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)			
Sea state			
Swell (m)			
Visibility			
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
DDV	60		60	

Weather forecast for the next 24 hours

Planned operation for the next 24 hours

Load Sea Bug camera in the morning, set up and start DDV survey

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 9
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 9	Location: Newquay and the Gannel
Date: 22/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	6
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
06:30	07:00	MOB	Katie Arnold , Tom Holland
07:10	08:10	Camera arrival and set up	K. Arnold, Tom Lord, Tom Holland
08:10	09:25	Passage	Camera set up on route
09:27	16:45	Camera survey	Using Sea Bug Camera 26 stations sampled, fishing gear hindered sampling. 23 infralittoral rock. 23 & 57 surveyed twice in order to find suitable habitat.
16:45	18:30	passage	Back up data, data tasks

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)	Southeasterly, veering southwesterly later, 4 or 5, occasionally 6 at first in far south.	Southeast veering west, 4 or 5, decreasing 3 at times	
Sea state	Slight or moderate, occasionally smooth in north	Slight, occasionally moderate in south	
Swell (m)	0.8 (Perranporth waverider)	1.02 (Perranporth waverider)	
Visibility	Moderate or poor, occasionally very poor	Good occasionally poor for a time	
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
DDV	60	26	34	23 infralittoral rock

Weather forecast for the next 24 hours

West or southwest 4 or 5. Slight or moderate. Showers. Good

Planned operation for the next 24 hours

Continue with survey following day

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 10
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 10	Location: Newquay and the Gannel
Date: 23/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	7
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
05:30	06:10	MOB	Tom Holland, Candice Cameron
06:10	06:45	Passage	
06:45	16:00	Survey	Using Sea Bug Camera. 26 stations sampled all infralittoral. Fishing gear prevented access to 8 stations. Limited infralittoral habitat caused spacing issues with relocation of sites
16:00	17:40	Passage	
18:00	18:30	demob	Tom Holland, Candice Cameron

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)	West southwest 4 or 5		Southeast veering west, 4 or 5, decreasing 3 at times
Sea state	Slight or moderate,		Slight or moderate
Swell (m)	0.9 (Perranporth waverider)		1.1 (Perranporth waverider)
Visibility	good		Good
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks
DDV	60	1	(25 + 8) 33	5 of which had to be moved due to wrong habitat. 25 sites done on inadequate resolution (Medium Normal 5MP) 8 sites not sampled due to fishing gear.

Weather forecast for the next 24 hours

West or southwest becoming variable, 2 or 3, increasing 4 at times. Slight, occasionally moderate at first. Fair. Good

Planned operation for the next 24 hours

Continue survey operations. Review sampled station locations in order to find space for the relocation of 8 sites not sampled due to fishing gear.

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 11
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 11	Location: Newquay and the Gannel
Date: 24/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	1	8
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
07:30	08:10	MOB	Katie Arnold , Candice Cameron
08:10	09:25	Passage	
09:25	17:25	Camera survey	Using Sea Bug Camera 27 stations sampled, 25 infralittoral, 2 sand. Fishing gear prevented finding suitable habitat for further infralittoral camera survey stations.
17:25	19:00	passage	Back up data, data tasks, pack away Sea Bug camera kit.

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)	West or southwest 3 or 4, becoming variable 2 or 3 later		
Sea state	Slight, occasionally moderate at first near St Davids Head		
Swell (m)	1.1		
Visibility	Fair. Good		
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks

DDV	60	27	6	25 infralittoral rock, 2 sand

Weather forecast for the next 24 hours

Southwest, backing south, 3 or 4, then becoming variable 2 or 3 later. Smooth or slight. Fair. Good.

Planned operation for the next 24 hours

Pack camera ready for collection. Offload camera 7am 25th Sept. demob

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

DAILY PROGRESS REPORT 12
Environment Agency Estuarine and Coastal Monitoring and Assessment Service

Vessel: *Severn Guardian*	Project: Newquay and the Gannel MCZ Survey
Daily Progress Report No. 12	Location: Newquay and the Gannel
Date: 25/08/2017	

Safety

	Today	To Date
Safety Drills/Induction	0	8
Additional comments:		

Summary of operations 0000-2400

Time BST (start)	Time BST (end)	Type	Comments
07:15	08:30	Unload camera	
08:00	15:45	Passage	J Steele, M Roach
11:00	17:00	demob	K Arnold, T Lord, C Cameron

Weather

Weather and sea conditions	06:00	1200	1800
Wind (mph)	Southwest, backing south, 3 or 4, then becoming variable 2 or 3 later		
Sea state	Smooth or slight		
Swell (m)			
Visibility	Good.		
Observation Station:			

Overall Progress Groundtruthing Samples

Action	Sites Total	Sites Completed Today	Remaining Sites	Remarks

DDV	60		6	

Weather forecast for the next 24 hours

Planned operation for the next 24 hours

Agreed Changes to Scope/Survey operation priorities

n/a

Comments

n/a

7.7 Survey Metadata

7.7.1 Grab Survey

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
02/04/2017	09:11	NWQG66	50.43699	-5.09035	1	4038	NO DEPTH	-	-	DG
02/04/2017	09:21	NWQG66	50.43679	-5.09006	1	4039	26.87	-	-	DG
02/04/2017	09:24	NWQG66	50.43697	-5.09018	1	4040	27.17	-	-	DG
02/04/2017	09:35	NWQG38	50.42556	-5.07052	2	4041	26.67	6.0	BIOTA	DG
02/04/2017	11:06	NWQG38	50.42550	-5.07084	2	4042	11.07	5.0	PSA	DG
02/04/2017	11:17	NWQG35	50.42363	-5.07519	3	4043	10.77	4.5	PSA	DG
02/04/2017	11:23	NWQG35	50.42379	-5.07530	3	4044	10.17	5.5	BIOTA	DG
02/04/2017	11:33	NWQG30	50.42082	-5.08360	4	4045	9.9	4.0	PSA	DG
02/04/2017	11:42	NWQG30	50.42056	-5.08335	4	4046	9.87	6.0	BIOTA	DG
02/04/2017	11:52	NWQG33	50.42425	-5.08242	5	4047	12.87	6.0	BIOTA	DG
02/04/2017	11:57	NWQG33	50.42418	-5.08257	5	4048	12.47	5.5	PSA	DG
02/04/2017	12:04	NWQG36	50.42659	-5.07480	6	4049	12.27	4.7	PSA	DG
02/04/2017	12:09	NWQG36	50.42645	-5.07502	6	4050	11.97	4.5	DISCARD	DG
02/04/2017	12:14	NWQG36	50.42642	-5.07500	6	4051	11.87	4.5	DISCARD	DG
02/04/2017	12:18	NWQG36	50.42649	-5.07482	6	4052	12.37	5.7	BIOTA	DG
02/04/2017	12:30	NWQG73	50.42949	-5.06325	7	4053	5.97	4.5	PSA	DG
02/04/2017	12:37	NWQG73	50.42960	-5.06290	7	4054	5.57	3.8	DISCARD	DG
02/04/2017	12:40	NWQG73	50.42957	-5.06297	7	4055	6.27	5.0	BIOTA	DG
02/04/2017	12:51	NWQG37	50.42825	-5.07975	8	4056	13.87	4.5	PSA	DG
02/04/2017	12:56	NWQG37	50.42822	-5.07971	8	4057	13.67	5.5	BIOTA	DG
02/04/2017	13:09	NWQG66	50.43679	-5.09012	9	4058	22.77	6.0	BIOTA - DISCARDED	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
02/04/2017	13:15	NWQG66	50.43685	-5.09006	9	4059	22.97	-	-	DG
02/04/2017	13:18	NWQG66	50.43678	-5.09013	9	4060	22.67	5.5	BIOTA	DG
02/04/2017	13:23	NWQG66	50.43681	-5.09023	9	4061	22.67	6.0	PSA	DG
02/04/2017	13:32	NWQG31	50.43337	-5.09104	10	4062	17.87	6.0	BIOTA	DG
02/04/2017	13:36	NWQG31	50.43338	-5.09096	10	4063	17.97	5.7	PSA	DG
02/04/2017	13:43	NWQG26	50.43117	-5.09611	11	4064	16.17	6.0	BIOTA	DG
02/04/2017	13:50	NWQG26	50.43126	-5.09633	11	4065	16.67	6.5	PSA	DG
02/04/2017	13:58	NWQG23	50.43167	-5.10237	12	4066	17.97	6.2	BIOTA	DG
02/04/2017	14:03	NWQG23	50.43195	-5.10197	12	4067	18.97	6.0	PSA	DG
02/04/2017	14:10	NWQG25	50.43343	-5.09701	13	4068	19.27	7.0	BIOTA	DG
02/04/2017	14:16	NWQG25	50.43340	-5.09701	13	4069	20.17	6.0	PSA	DG
02/04/2017	14:23	NWQG24	50.43447	-5.10087	14	4070	23.47	7.0	BIOTA	DG
02/04/2017	14:29	NWQG24	50.43470	-5.10040	14	4071	23.27	11.0	PSA	DG
02/04/2017	14:46	NWQG15	50.42064	-5.11083	15	4072	9.97	4.0	PSA	DG
02/04/2017	14:53	NWQG15	50.42063	-5.11107	15	4073	10.77	4.5	BIOTA	DG
02/04/2017	15:00	NWQG19	50.42401	-5.10996	16	4074	11.77	4.0	PSA	DG
02/04/2017	15:04	NWQG19	50.42390	-5.10987	16	4075	11.37	5.0	BIOTA	DG
02/04/2017	15:10	NWQG20	50.42387	-5.11359	17	4076	13.97	5.0	BIOTA	DG
02/04/2017	15:15	NWQG20	50.42369	-5.11381	17	4077	13.77	7.0	PSA & CHEM	DG
02/04/2017	15:25	NWQG20	50.42384	-5.11375	17	4078	14.17	-	-	DG
02/04/2017	15:28	NWQG20	50.42388	-5.11366	17	4079	13.87	-	CHEM	DG
02/04/2017	15:30	NWQG20_WQ	50.42363	-5.11363	17	4080	13.27	-	-	DG
02/04/2017	15:35	NWQG14	50.42157	-5.11502	18	4081	13.47	5.0	BIOTA	DG
02/04/2017	15:40	NWQG14	50.42141	-5.11501	18	4082	12.87	4.0	PSA	DG
02/04/2017	15:48	NWQG12	50.41851	-5.11413	19	4083	11.47	3.5	DISCARD	DG
02/04/2017	15:51	NWQG12	50.41840	-5.11420	19	4084	11.77	5.0	BIOTA	DG
02/04/2017	15:56	NWQG12	50.41829	-5.11425	19	4085	11.27	4.0	PSA	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
02/04/2017	16:04	NWQG10	50.42000	-5.12008	20	4086	15.67	3.5	DISCARD	DG
02/04/2017	16:07	NWQG10	50.41993	-5.11989	20	4087	15.57	4.9	BIOTA	DG
02/04/2017	16:13	NWQG10	50.42025	-5.11998	20	4088	15.97	4.5	PSA	DG
02/04/2017	16:20	NWQG09	50.41833	-5.12156	21	4089	16.37	11.0	BIOTA	DG
02/04/2017	16:25	NWQG09	50.41860	-5.12163	21	4090	15.67	10.5	PSA	DG
02/04/2017	16:32	NWQG08	50.41823	-5.12816	22	4091	21.87	6.0	BIOTA	DG
02/04/2017	16:38	NWQG08	50.41821	-5.12831	22	4092	22.27	-	-	DG
02/04/2017	16:40	NWQG08	50.41829	-5.12825	22	4093	21.67	0.5	DISCARD	DG
02/04/2017	16:45	NWQG08	50.41825	-5.12819	22	4094	21.97	-	DISCARD	DG
02/04/2017	16:49	NWQG08	50.41822	-5.12794	22	4095	21.77	7.0	PSA	DG
02/04/2017	16:59	NWQG11	50.41494	-5.11610	23	4096	9.67	4.7	PSA	DG
02/04/2017	17:05	NWQG11	50.41493	-5.11589	23	4097	9.27	5.0	BIOTA	DG
03/04/2017	09:56	NWQG18	50.41980	-5.10409	24	4098	7.57	6.0	Biota	DG
03/04/2017	10:00	NWQG18	50.42021	-5.10395	24	4099	7.87	8.5	PSA	DG
03/04/2017	10:08	NWQG18	50.41984	-5.10378	24	4100	6.97	6.0	Contaminents	DG
03/04/2017	10:15	NWQG18	50.41988	-5.10409	24	4101	7.37	6.0	Contaminents	DG
03/04/2017	10:16	Idronaut Reading	50.42006	-5.10382	24	4102	7.47	-	-	DG
03/04/2017	10:21	NWQG13	50.41488	-5.10665	25	4103	5.97	6.0	Biota	DG
03/04/2017	10:24	NWQG13	50.41512	-5.10638	25	4104	5.97	6.0	PSA	DG
03/04/2017	10:37	NWQG07	50.40746	-5.12795	26	4105	4.47	5.5	Biota	DG
03/04/2017	10:42	NWQG07	50.40748	-5.12782	26	4106	4.07	6.0	PSA+Contaminents	DG
03/04/2017	10:47	NWQG07	50.40749	-5.12793	26	4107	4.47	5.0	Contaminents	DG
03/04/2017	10:48	Idronaut Reading	50.40769	-5.12766	26	4108	4.57	-	-	DG
03/04/2017	10:55	NWQG04	50.41098	-5.13377	27	4109	15.87	5.0	Biota	DG
03/04/2017	11:00	NWQG04	50.41097	-5.13356	27	4110	15.77	5.5	PSA	DG
03/04/2017	11:08	NWQG03	50.41310	-5.13480	28	4111	20.17	10.0	Biota	DG
03/04/2017	11:13	NWQG03	50.41306	-5.13501	28	4112	20.17	6.0	PSA	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
03/04/2017	11:19	NWQG02	50.41502	-5.14086	29	4113	25.07	3.0	Discard	DG
03/04/2017	11:24	NWQG02	50.41491	-5.14066	29	4114	24.17	11.5	Biota	DG
03/04/2017	11:29	NWQG02	50.41494	-5.14043	29	4115	25.17	11.0	PSA	DG
03/04/2017	11:43	NWQG39	50.39587	-5.15283	30	4116	12.47	-	Discard	DG
03/04/2017	11:45	NWQG39	50.39616	-5.15241	30	4117	12.77	6.0	Biota	DG
03/04/2017	11:50	NWQG39	50.39581	-5.15259	30	4118	12.67	7.0	PSA+Contaminents	DG
03/04/2017	11:57	NWQG39	50.39592	-5.15255	30	4119	12.37	8.0	Contaminents	DG
03/04/2017	11:58	Idronaut Reading	50.39624	-5.15261	30	4120	12.77	-	-	DG
03/04/2017	12:20	NWQG16	50.41941	-5.10784	31	4121	9.87	4.5	PSA	DG
03/04/2017	12:24	NWQG16	50.41951	-5.10846	31	4122	10.27	5.0	Biota	DG
03/04/2017	12:43	NWQG73	50.42942	-5.06316	32	4123	6.87	5.5	Contaminents	DG
03/04/2017	12:45	Idronaut Reading	50.42969	-5.06268	32	4124	6.87	-	-	DG
03/04/2017	12:51	NWQG38	50.42533	-5.07079	33	4125	8.17	-	Contaminents	DG
03/04/2017	12:52	Idronaut Reading	50.42557	-5.07059	33	4126	8.27	-	-	DG
03/04/2017	13:04	NWQG66	50.43683	-5.09059	34	4127	26.07	6.5	Contaminents	DG
03/04/2017	13:11	Idronaut Reading	50.43662	-5.09048	34	4129	24.07	-	-	DG
03/04/2017	13:23	NWQG56	50.42681	-5.12909	35	4130	26.07	0.5	Discard	DG
03/04/2017	13:30	NWQG56	50.42689	-5.12923	35	4131	26.17	-	Discard	DG
03/04/2017	13:37	NWQG56	50.42720	-5.13846	35	4132	29.47	-	Empty	DG
03/04/2017	13:43	NWQG56	50.42520	-5.12706	35	4133	24.37	-	Discard	DG
03/04/2017	13:49	NWQG53	50.42107	-5.12521	36	4134	20.27	6.0	Biota	DG
03/04/2017	13:55	NWQG53	50.42101	-5.12533	36	4135	19.47	6.0	PSA+Contaminents	DG
03/04/2017	13:58	Idronaut Reading	50.42161	-5.12501	36	4136	20.97	-	-	DG
03/04/2017	14:02	NWQG53	50.42076	-5.12535	36	4137	19.17	5.5	Contaminents	DG
03/04/2017	15:26	NWQG30	50.42065	-5.08364	37	4138	7.67	3.2	Biota+PSA	MHM
03/04/2017	15:36	NWQG33	50.42414	-5.08262	38	4139	10.47	3.0	Biota+PSA	MHM
03/04/2017	15:44	NWQG37	50.42815	-5.08003	39	4140	12.87	2.0	Biota+PSA	MHM

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
03/04/2017	15:57	NWQG36	50.42637	-5.07481	40	4141	10.57	3.0	Biota+PSA	MHM
03/04/2017	16:06	NWQG35	50.42359	-5.07538	41	4142	7.57	2.0	Biota+PSA	MHM
03/04/2017	16:16	NWQG38	50.42557	-5.07102	42	4143	6.57	2.0	Biota+PSA	MHM
03/04/2017	16:28	NWQG31	50.43333	-5.09120	43	4144	17.47	2.0	Biota+PSA	MHM
03/04/2017	16:37	NWQG25	50.43348	-5.09718	44	4145	20.07	2.0	Discard	MHM
03/04/2017	16:45	NWQG25	50.43336	-5.09732	44	4146	20.97	2.2	Discard	MHM
03/04/2017	16:55	NWQG25	50.43346	-5.09718	44	4147	19.87	2.5	Biota+PSA	MHM
03/04/2017	17:04	NWQG31	50.43319	-5.09096	45	4148	17.37	1.7	Discard	MHM
03/04/2017	17:10	NWQG31	50.43329	-5.09141	45	4149	19.57	1.8	Discard	MHM
03/04/2017	17:24	NWQG15	50.42048	-5.11108	46	4150	11.47	1.5	Discard	MHM
03/04/2017	17:39	NWQG37	50.42809	-5.07982	47	4151	13.47	2.0	Discard	MHM
03/04/2017	17:44	NWQG37	50.42814	-5.08029	47	4152	13.27	1.8	Discard	MHM
03/04/2017	17:51	NWQG35	50.42365	-5.07510	48	4153	8.97	1.8	Discard	MHM
03/04/2017	17:54	NWQG35	50.42367	-5.07547	48	4154	9.07	1.8	Discard	MHM
04/05/2017	12:11	NWQG74	50.43316	-5.06244	49	4198	12.47	5.0	Biota	DG
04/05/2017	12:18	NWQG74	50.43314	-5.06242	49	4199	11.97	6.0	PSA	DG
04/05/2017	12:25	NWQG71	50.43504	-5.07235	50	4200	14.57	5.0	Biota	DG
04/05/2017	12:30	NWQG71	50.43518	-5.07219	50	4201	14.87	5.0	PSA	DG
04/05/2017	12:37	NWQG70	50.43796	-5.06588	51	4202	16.57	7.5	Biota	DG
04/05/2017	12:41	NWQG70	50.43798	-5.06568	51	4203	16.77	6.0	PSA	DG
04/05/2017	12:49	NWQG67	50.44004	-5.08099	52	4204	20.07	8.0	Biota	DG
04/05/2017	12:54	NWQG67	50.44026	-5.08071	52	4205	20.17	7.0	PSA	DG
04/05/2017	13:00	NWQG65	50.44014	-5.09086	53	4206	26.57	6.0	Biota	DG
04/05/2017	13:06	NWQG65	50.43995	-5.09059	53	4207	28.37	1.0	Discard	DG
04/05/2017	13:10	NWQG65	50.44012	-5.09071	53	4208	26.47	6.0	PSA	DG
04/05/2017	13:17	NWQG64	50.44434	-5.09540	54	4209	28.47	0.5	Discard	DG
04/05/2017	13:22	NWQG64	50.44431	-5.09556	54	4210	28.17	6.0	Discard	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
04/05/2017	13:28	NWQG64	50.44051	-5.09629	55	4211	28.27	5.5	Biota	DG
04/05/2017	13:33	NWQG64	50.44047	-5.09641	55	4212	27.47	5.0	PSA	DG
04/05/2017	13:39	NWQG62	50.44189	-5.10365	56	4213	27.37	-	Did not fire	DG
04/05/2017	13:43	NWQG62	50.44189	-5.10361	56	4214	25.17	1.0	Discard	DG
04/05/2017	13:49	NWQG62	50.43885	-5.10221	57	4215	28.97	5.0	Biota	DG
04/05/2017	13:55	NWQG62	50.43884	-5.10211	57	4216	29.27	5.5	PSA	DG
04/05/2017	14:02	NWQG61	50.43709	-5.10840	58	4217	29.37	1.0	Discard	DG
04/05/2017	14:06	NWQG61	50.43725	-5.10839	58	4218	30.77	-	Discard	DG
04/05/2017	14:11	NWQG61	50.44043	-5.11332	58	4219	30.77	-	Discard	DG
04/05/2017	14:18	NWQG59	50.43462	-5.11489	59	4220	27.67		Discard	DG
04/05/2017	14:21	NWQG59	50.43481	-5.11469	59	4221	29.17	0.1	Discard	DG
04/05/2017	14:32	NWQG22	50.43160	-5.10986	60	4222	24.97	-	Discard	DG
04/05/2017	14:37	NWQG22	50.43152	-5.10938	60	4223	25.17	-	Discard	DG
04/05/2017	14:41	NWQG22	50.43175	-5.10953	60	4224	22.57	-	Discard	DG
04/05/2017	14:51	NWQG76	50.44434	-5.11466	61	4225	27.47	3.5	PSA	DG
04/05/2017	14:56	NWQG76	50.44417	-5.11443	61	4226	27.57	-	Empty	DG
04/05/2017	15:01	NWQG76	50.44421	-5.11475	61	4227	32.27	-	Discard	DG
04/05/2017	15:06	NWQG76	50.44433	-5.11460	61	4228	28.77	-	Empty	DG
04/05/2017	15:14	NWQG60	50.44003	-5.12749	62	4229	24.37	-	Biota	DG
04/05/2017	15:19	NWQG60	50.43998	-5.12791	62	4230	25.07	-	PSA	DG
04/05/2017	15:28	NWQG54	50.43589	-5.13909	63	4231	28.47	0.5	Discard	DG
04/05/2017	15:33	NWQG54	50.43601	-5.13866	63	4232	29.27	-	Did not fire	DG
04/05/2017	15:38	NWQG54	50.43582	-5.13910	63	4233	29.57	-	Discard	DG
04/05/2017	15:43	NWQG49	50.43170	-5.14810	64	4234	28.77	-	Misfire	DG
04/05/2017	15:48	NWQG49	50.43194	-5.14782	64	4235	27.97	6.0	Biota	DG
04/05/2017	15:55	NWQG49	50.43141	-5.14800	64	4236	31.37	7.0	PSA	DG
04/05/2017	16:34	NWQG48	50.42760	-5.15467	65	4237	30.97	-	Discard	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
04/05/2017	16:38	NWQG48	50.42774	-5.15410	65	4238	33.67	-	Discard	DG
04/05/2017	16:42	NWQG48	50.42742	-5.15440	65	4239	33.17	-	Misfire	DG
04/05/2017	16:47	NWQG47	50.42437	-5.16438	66	4240	33.67	-	Discard	DG
04/05/2017	16:52	NWQG47	50.42439	-5.16408	66	4241	31.17	-	Misfire	DG
04/05/2017	16:56	NWQG47	50.42430	-5.16410	66	4242	30.27	-	Discard	DG
04/05/2017	17:04	NWQG44	50.41379	-5.16877	67	4243	27.47	-	Discard	DG
04/05/2017	17:11	NWQG46	50.41894	-5.16027	68	4244	20.87	-	Discard	DG
04/05/2017	17:21	NWQG50	50.42757	-5.14112	69	4245	26.67	-	Did not fire	DG
04/05/2017	17:24	NWQG50	50.42746	-5.14099	69	4246	26.27	-	Misfire	DG
04/05/2017	17:30	NWQG55	50.43156	-5.13225	70	4247	18.67	-	Did not fire	DG
04/05/2017	17:34	NWQG55	50.43150	-5.13203	70	4248	17.27	-	Empty	DG
04/05/2017	17:45	NWQG63	50.43664	-5.09860	71	4249	24.57	-	Discard	DG
04/05/2017	17:54	NWQG68	50.43509	-5.08161	72	4250	16.37	5.0	Biota	DG
04/05/2017	17:58	NWQG68	50.43515	-5.08170	72	4251	17.57	5.5	PSA	DG
04/05/2017	18:04	NWQG69	50.43184	-5.08171	73	4252	14.27	5.0	Biota	DG
04/05/2017	18:09	NWQG69	50.43190	-5.08152	73	4253	14.17	5.0	PSA	DG
04/05/2017	18:24	NWQG57	50.42379	-5.12464	74	4254	24.17	-	Discard	DG
04/05/2017	18:29	NWQG58	50.42365	-5.11775	75	4255	7.77	-	Discard	DG
04/05/2017	18:36	NWQG52	50.41971	-5.13044	76	4256	14.87	6.0	Discard	DG
04/05/2017	18:46	NWQG45	50.41296	-5.15558	77	4257	21.57	-	Did not fire	DG
04/05/2017	18:48	NWQG45	50.41320	-5.15622	77	4258	19.47	6.0	Discard	DG
04/05/2017	18:53	NWQG43	50.41096	-5.16218	78	4259	20.07	-	Discard	DG
04/05/2017	18:59	NWQG41	50.40427	-5.16785	79	4260	23.87	6.0	Discard	DG
04/05/2017	19:05	NWQG40	50.40130	-5.16060	80	4261	16.87	-	Did not fire	DG
04/05/2017	19:06	NWQG40	50.40155	-5.16061	80	4262	17.27	6.0	Discard	DG
04/05/2017	19:13	NWQG40	50.39760	-5.16283	81	4263	17.27	7.0	Biota	DG
04/05/2017	19:18	NWQG40	50.39750	-5.16266	81	4264	17.37	6.0	PSA	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
04/05/2017	19:25	NWQG42	50.40039	-5.15267	82	4265	10.97	5.5	Biota	DG
04/05/2017	19:30	NWQG42	50.40036	-5.15256	82	4266	10.37	5.5	PSA	DG
05/05/2017	13:29	NWQG34	50.41862	-5.07551	83	4267	3.97	10.0	Discard	DG
05/05/2017	13:34	NWQG34	50.41871	-5.07563	83	4268	4.17	7.0	Biota	DG
05/05/2017	13:39	NWQG34	50.41868	-5.07584	83	4269	4.17	7.0	PSA	DG
05/05/2017	13:48	NWQG29	50.42392	-5.08862	84	4270	9.17	5.0	Biota	DG
05/05/2017	13:53	NWQG29	50.42393	-5.08848	84	4271	10.37	6.0	PSA	DG
05/05/2017	13:58	NWQG32	50.42756	-5.08596	85	4272	8.07	4.5	PSA	DG
05/05/2017	14:03	NWQG32	50.42741	-5.08542	85	4273	8.87	5.0	Biota	DG
05/05/2017	14:08	NWQG28	50.42757	-5.09196	86	4274	7.17	4.0	PSA	DG
05/05/2017	14:12	NWQG28	50.42750	-5.09181	86	4275	8.47	6.0	Biota	DG
05/05/2017	14:18	NWQG27	50.42659	-5.09603	87	4276	6.07	6.0	Biota	DG
05/05/2017	14:22	NWQG27	50.42643	-5.09574	87	4277	10.97	6.5	PSA	DG
05/05/2017	14:31	NWQG21	50.42361	-5.10229	88	4278	7.67	6.0	Biota	DG
05/05/2017	14:35	NWQG21	50.42366	-5.10230	88	4279	7.27	7.0	PSA	DG
05/05/2017	14:42	NWQG17	50.41681	-5.10622	89	4280	6.67	6.0	Biota	DG
05/05/2017	14:46	NWQG17	50.41689	-5.10623	89	4281	6.67	7.0	PSA	DG
05/05/2017	14:58	NWQG06	50.40981	-5.12766	90	4282	7.97	7.0	Biota	DG
05/05/2017	15:03	NWQG06	50.40970	-5.12748	90	4283	7.87	7.0	PSA	DG
05/05/2017	15:08	NWQG05	50.40791	-5.13028	91	4284	6.67	7.0	Biota	DG
05/05/2017	15:13	NWQG05	50.40807	-5.13034	91	4285	7.47	7.0	PSA	DG
05/05/2017	15:26	NWQG01	50.40415	-5.13960	92	4286	3.27	10.0	Biota	DG
05/05/2017	15:29	NWQG01	50.40413	-5.13937	92	4287	2.87	9.0	PSA	DG
05/05/2017	15:51	NWQG94	50.40390	-5.15993	93	4288	12.67	-	Discard	DG
05/05/2017	15:55	NWQG94	50.40381	-5.15969	93	4289	14.27	-	Discard	DG
05/05/2017	16:27	NWQG72	50.43037	-5.07222	94	4290	12.47	5.5	Biota	DG
05/05/2017	16:31	NWQG72	50.43028	-5.07223	94	4291	12.57	5.0	PSA	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
05/05/2017	16:41	NWQG75	50.43595	-5.05431	95	4292	4.37	7.0	Biota	DG
05/05/2017	16:45	NWQG75	50.43589	-5.05435	95	4293	4.07	7.0	PSA	DG
05/05/2017	16:51	NWQG85	50.44043	-5.05482	96	4294	6.07	6.0	Biota	DG
05/05/2017	16:56	NWQG85	50.44040	-5.05498	96	4295	7.77	6.5	PSA	DG
05/05/2017	17:01	NWQG78	50.44269	-5.06305	97	4296	9.77	5.0	Biota	DG
05/05/2017	17:06	NWQG78	50.44268	-5.06274	97	4297	10.17	5.5	PSA	DG
05/05/2017	17:12	NWQG77	50.44137	-5.07166	98	4298	9.87	5.0	PSA	DG
05/05/2017	17:18	NWQG77	50.44139	-5.07102	98	4299	9.77	5.0	Biota	DG
05/05/2017	17:26	NWQG80	50.44516	-5.08013	99	4300	8.37	-	Discard	DG
05/05/2017	17:32	NWQG79	50.44679	-5.06833	100	4301	6.97	5.5	Biota	DG
05/05/2017	17:37	NWQG79	50.44673	-5.06854	100	4302	9.17	5.5	PSA	DG
05/05/2017	17:44	NWQG81	50.45013	-5.07485	101	4303	17.97	-	Empty	DG
05/05/2017	17:50	NWQG83	50.45303	-5.06563	102	4304	24.77	-	Empty	DG
05/05/2017	17:55	NWQG83	50.45063	-5.06202	103	4305	9.77	-	Empty	DG
05/05/2017	18:01	NWQG83	50.44627	-5.06281	104	4306	9.37	6.5	Biota	DG
05/05/2017	18:05	NWQG83	50.44639	-5.06267	104	4307	6.27	6.5	PSA	DG
05/05/2017	18:10	NWQG82	50.44632	-5.05758	105	4308	10.87	6.5	Biota	DG
05/05/2017	18:14	NWQG82	50.44627	-5.05751	105	4309	10.07	6.5	PSA	DG
05/05/2017	18:20	NWQG86	50.44533	-5.05050	106	4310	5.17	8.0	Biota	DG
05/05/2017	18:24	NWQG86	50.44532	-5.05044	106	4311	5.07	8.0	PSA	DG
05/05/2017	18:27	NWQG91	50.44976	-5.05157	107	4312	10.27	7.0	Biota	DG
05/05/2017	18:32	NWQG91	50.44972	-5.05157	107	4313	9.77	6.0	PSA	DG
05/05/2017	18:36	NWQG84	50.45342	-5.05437	108	4314	9.27	6.5	Biota	DG
05/05/2017	18:40	NWQG84	50.45338	-5.05448	108	4315	9.47	6.0	PSA	DG
05/05/2017	18:45	NWQG92	50.45519	-5.05185	109	4316	9.87	5.0	Biota	DG
05/05/2017	18:49	NWQG92	50.45518	-5.05196	109	4317	11.07	6.5	PSA	DG
05/05/2017	18:53	NWQG90	50.45715	-5.04967	110	4318	11.37	6.0	Biota	DG

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
05/05/2017	18:56	NWQG90	50.45700	-5.04986	110	4319	5.37	6.0	PSA	DG
05/05/2017	19:00	NWQG87	50.45693	-5.05950	111	4320	19.57	5.5	Biota	DG
05/05/2017	19:05	NWQG87	50.45685	-5.05920	111	4321	14.17	6.0	PSA	DG
05/05/2017	19:15	NWQG93	50.43999	-5.06061	112	4322	9.57	5.5	Biota	DG
05/05/2017	19:19	NWQG93	50.44000	-5.06059	112	4323	9.97	5.5	PSA	DG
05/05/2017	19:25	NWQG94	50.43803	-5.07519	113	4324	10.57	4.0	PSA	DG
05/05/2017	19:30	NWQG94	50.43799	-5.07503	113	4325	9.57	6.0	Biota	DG
24/05/2017	05:50	NWQG07	50.40741	-5.12797	114	4489	3.37	5.5	BIOTA & PSA	MHM
24/05/2017	05:59	NWQG04	50.41101	-5.13343	115	4490	14.57	3.0	BIOTA & PSA	MHM
24/05/2017	06:08	NWQG03	50.41299	-5.13489	116	4491	18.47	6.0	BIOTA & PSA	MHM
24/05/2017	06:16	NWQG02	50.41488	-5.14039	117	4492	23.77	-	DISCARD	MHM
24/05/2017	06:20	NWQG02	50.41492	-5.14053	117	4493	23.77	2.0	DISCARD	MHM
24/05/2017	06:26	NWQG02	50.41476	-5.14053	117	4494	23.47	5.5	BIOTA & PSA	MHM
24/05/2017	06:43	NWQG39	50.39595	-5.15263	118	4495	11.37	3.5	BIOTA & PSA	MHM
24/05/2017	06:50	NWQG40	50.40113	-5.16091	119	4496	21.27	-	DISCARD	MHM
24/05/2017	06:53	NWQG40	50.40125	-5.16089	119	4497	19.17	-	DISCARD	MHM
24/05/2017	07:31	NWQG40	50.40110	-5.16090	119	4498	20.37	4.0	PSA	MHM
24/05/2017	07:39	NWQG41	50.40434	-5.16768	120	4499	30.37	-	DISCARD	MHM
24/05/2017	07:43	NWQG41	50.40414	-5.16765	120	4500	30.27	2.5	PSA	MHM
24/05/2017	07:53	NWQG45	50.41297	-5.15564	121	4501	21.97	-	EMPTY	MHM
24/05/2017	07:56	NWQG45	50.41303	-5.15516	121	4502	21.17	-	EMPTY	MHM
24/05/2017	07:59	NWQG45	50.41283	-5.15567	121	4503	21.57	-	EMPTY	MHM
24/05/2017	08:12	NWQG52	50.41961	-5.13034	122	4504	21.97	4.0	PSA	MHM
24/05/2017	08:16	NWQG08	50.41827	-5.12817	123	4505	21.47	5.0	BIOTA & PSA	MHM
24/05/2017	08:22	NWQG09	50.41845	-5.12190	124	4506	16.17	7.0	BIOTA & PSA	MHM
24/05/2017	08:28	NWQG10	50.42000	-5.12028	125	4507	15.67	3.0	BIOTA & PSA	MHM
24/05/2017	08:37	NWQG12	50.41842	-5.11418	126	4508	11.37	3.0	BIOTA & PSA	MHM

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN number	HYDROpro fix no.	Water depth (m)	Sed depth in grab or tub (cm)	Sediment use	Grab
24/05/2017	08:46	NWQG11	50.41502	-5.11597	127	4509	8.37	3.5	BIOTA & PSA	MHM
24/05/2017	08:59	NWQG15	50.42052	-5.11113	128	4510	9.87	2.0	DISCARD	MHM
24/05/2017	09:04	NWQG15	50.42041	-5.11097	128	4511	9.67	3.0	BIOTA & PSA	MHM
24/05/2017	09:12	NWQG14	50.42138	-5.11516	129	4512	13.07	3.5	BIOTA & PSA	MHM
24/05/2017	09:20	NWQG20	50.42366	-5.11366	130	4513	12.97	2.0	DISCARD	MHM
24/05/2017	09:28	NWQG20	50.42366	-5.11389	130	4514	13.17	3.5	BIOTA & PSA	MHM
24/05/2017	09:37	NWQG19	50.42408	-5.11003	131	4515	11.07	2.0	DISCARD	MHM
24/05/2017	09:43	NWQG19	50.42409	-5.10996	131	4516	11.17	2.0	DISCARD	MHM
24/05/2017	09:47	NWQG19	50.42389	-5.10996	131	4517	11.07	2.2	BIOTA & PSA	MHM
24/05/2017	10:04	NWQG56	50.42695	-5.12913	132	4518	23.47	-	EMPTY	MHM
24/05/2017	10:07	NWQG56	50.42668	-5.12884	132	4519	22.97	0.5	PSA	MHM
24/05/2017	10:19	NWQG53	50.42085	-5.12531	133	4520	17.47	3.5	BIOTA & PSA	MHM
24/05/2017	10:45	NWQG64	50.44421	-5.09534	134	4521	26.87	3.0	PSA	MHM
24/05/2017	10:59	NWQG66	50.43685	-5.09010	135	4522	21.47	3.0	BIOTA & PSA	MHM
24/05/2017	11:15	NWQG26	50.43122	-5.09603	136	4523	15.67	4.0	BIOTA & PSA	MHM
24/05/2017	11:22	NWQG23	50.43172	-5.10191	137	4524	18.27	3.5	BIOTA & PSA	MHM
24/05/2017	11:32	NWQG24	50.43456	-5.10027	138	MISSED FIX	22.87	4.5	BIOTA & PSA	MHM
24/05/2017	11:54	NWQG73	50.42958	-5.06319	139	4525	5.17	5.0	BIOTA & PSA	MHM
24/05/2017	12:35	NWQG16	50.41957	-5.10822	140	4526	8.97	4.0	BIOTA & PSA	MHM
24/05/2017	12:41	NWQG17	50.41685	-5.10659	141	4527	5.37	5.5	BIOTA & PSA	MHM
24/05/2017	12:51	NWQG18	50.42017	-5.10417	142	4528	4.97	4.0	BIOTA & PSA	MHM

7.7.2 DDV Survey

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	08:27	NWQG23	50.42760	-5.10033	143	4372	NWQG_2FGL50817_GT23_STN_143_A1_01	COULDN'T GET CLOSER TO STATION	13.97	1.55
22/08/2017	08:28	NWQG23	50.42773	-5.10064	143	4373	NWQG_2FGL50817_GT23_STN_143_A1_02		13.67	1.93
22/08/2017	08:28	NWQG23	50.42785	-5.10108	143	4374	NWQG_2FGL50817_GT23_STN_143_A1_03		13.67	1.95
22/08/2017	08:29	NWQG23	50.42797	-5.10156	143	4375	NWQG_2FGL50817_GT23_STN_143_A1_04		13.67	2.03
22/08/2017	08:30	NWQG23	50.42810	-5.10196	143	4376	NWQG_2FGL50817_GT23_STN_143_A1_05		13.57	2.16
22/08/2017	08:30	NWQG23	50.42825	-5.10240	143	4377	NWQG_2FGL50817_GT23_STN_143_A1_06	ONLY 6 STILLS DUE TO NO INFRALITTORAL ROCK	13.87	1.97
22/08/2017	08:38	NWQG20	50.42727	-5.10315	144	4378	NWQG_2FGL50817_GT20_STN_144_A1_01	REEF PREVENTED GETTING ON STATION	12.97	1.51
22/08/2017	08:38	NWQG20	50.42735	-5.10365	144	4379	NWQG_2FGL50817_GT20_STN_144_A1_02		11.07	1.69
22/08/2017	08:39	NWQG20	50.42742	-5.10412	144	4380	NWQG_2FGL50817_GT20_STN_144_A1_03		12.77	1.80
22/08/2017	08:40	NWQG20	50.42749	-5.10462	144	4381	NWQG_2FGL50817_GT20_STN_144_A1_04		10.17	1.95
22/08/2017	08:40	NWQG20	50.42757	-5.10528	144	4382	NWQG_2FGL50817_GT20_STN_144_A1_05		9.07	2.00
22/08/2017	08:41	NWQG20	50.42769	-5.10607	144	4383	NWQG_2FGL50817_GT20_STN_144_A1_06		10.37	2.02
22/08/2017	08:42	NWQG20	50.42774	-5.10675	144	4384	NWQG_2FGL50817_GT20_STN_144_A1_07		13.07	2.17
22/08/2017	08:43	NWQG20	50.42779	-5.10735	144	4385		NO STILL RECORDED CAMERA FROZE	12.97	1.95
22/08/2017	08:44	NWQG20	50.42786	-5.10820	144	4386		CAMERA FROZE AND SHUT DOWN	15.27	2.02
22/08/2017	08:53	NWQG13	50.42614	-5.10519	145	4387	NWQG_2FGL50817_GT13_STN_145_A1_01		8.37	3.90
22/08/2017	08:54	NWQG13	50.42617	-5.10537	145	4388	NWQG_2FGL50817_GT13_STN_145_A1_02		6.97	1.13
22/08/2017	08:55	NWQG13	50.42616	-5.10560	145	4389	NWQG_2FGL50817_GT13_STN_145_A1_03		6.87	3.08
22/08/2017	08:56	NWQG13	50.42607	-5.10541	145	4390	NWQG_2FGL50817_GT13_STN_145_A1_04		8.47	1.02
22/08/2017	08:57	NWQG13	50.42600	-5.10529	145	4391	NWQG_2FGL50817_GT13_STN_145_A1_05		8.17	0.56
22/08/2017	08:57	NWQG13	50.42604	-5.10518	145	4392	NWQG_2FGL50817_GT13_STN_145_A1_06		7.87	1.04
22/08/2017	08:58	NWQG13	50.42601	-5.10508	145	4393	NWQG_2FGL50817_GT13_STN_145_A1_07		7.77	0.89

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	08:58	NWQG13	50.42601	-5.10498	145	4394	NWQG_2FGL50817_GT13_STN_145_A1_08		9.17	0.64
22/08/2017	08:58	NWQG13	50.42597	-5.10488	145	4395	NWQG_2FGL50817_GT13_STN_145_A1_09		8.47	1.02
22/08/2017	08:59	NWQG13	50.42603	-5.10473	145	4396	NWQG_2FGL50817_GT13_STN_145_A1_10		7.47	0.68
22/08/2017	09:00	NWQG13	50.42606	-5.10458	145	4397	NWQG_2FGL50817_GT13_STN_145_A1_11		8.17	0.64
22/08/2017	09:01	NWQG13	50.42611	-5.10440	145	4398	NWQG_2FGL50817_GT13_STN_145_A1_12		7.07	0.94
22/08/2017	09:01	NWQG13	50.42625	-5.10435	145	4399	NWQG_2FGL50817_GT13_STN_145_A1_13		7.57	0.97
22/08/2017	09:02	NWQG13	50.42642	-5.10444	145	4400	NWQG_2FGL50817_GT13_STN_145_A1_14		6.87	1.61
22/08/2017	09:02	NWQG13	50.42653	-5.10467	145	4401	NWQG_2FGL50817_GT13_STN_145_A1_15		6.37	1.50
22/08/2017	09:03	NWQG13	50.42657	-5.10500	145	4402	NWQG_2FGL50817_GT13_STN_145_A1_16		6.77	1.64
22/08/2017	09:03	NWQG13	50.42659	-5.10531	145	4403	NWQG_2FGL50817_GT13_STN_145_A1_17	Change photo names and video	7.27	1.53
22/08/2017	09:08	NWQG30	50.42661	-5.10855	146	4404	NWQG_2FGL50817_GT30_STN_146_A1_01		10.57	0.74
22/08/2017	09:09	NWQG30	50.42658	-5.10843	146	4405	NWQG_2FGL50817_GT30_STN_146_A1_02		9.67	0.81
22/08/2017	09:09	NWQG30	50.42675	-5.10835	146	4406	NWQG_2FGL50817_GT30_STN_146_A1_03		11.17	1.46
22/08/2017	09:10	NWQG30	50.42659	-5.10839	146	4407	NWQG_2FGL50817_GT30_STN_146_A1_04		11.07	2.15
22/08/2017	09:10	NWQG30	50.42665	-5.10828	146	4408	NWQG_2FGL50817_GT30_STN_146_A1_05		10.87	0.58
22/08/2017	09:11	NWQG30	50.42665	-5.10813	146	4409	NWQG_2FGL50817_GT30_STN_146_A1_06		12.07	0.60
22/08/2017	09:11	NWQG30	50.42659	-5.10801	146	4410	NWQG_2FGL50817_GT30_STN_146_A1_07		11.17	0.72
22/08/2017	09:12	NWQG30	50.42662	-5.10775	146	4411	NWQG_2FGL50817_GT30_STN_146_A1_08		11.47	0.85
22/08/2017	09:13	NWQG30	50.42663	-5.10758	146	4412	NWQG_2FGL50817_GT30_STN_146_A1_09		9.97	0.68
22/08/2017	09:13	NWQG30	50.42663	-5.10738	146	4413	NWQG_2FGL50817_GT30_STN_146_A1_10		10.87	0.85
22/08/2017	09:14	NWQG30	50.42670	-5.10720	146	4414	NWQG_2FGL50817_GT30_STN_146_A1_11		11.27	0.78
22/08/2017	09:15	NWQG30	50.42660	-5.10702	146	4415	NWQG_2FGL50817_GT30_STN_146_A1_12		9.87	0.60
22/08/2017	09:15	NWQG30	50.42649	-5.10696	146	4416	NWQG_2FGL50817_GT30_STN_146_A1_13		7.87	1.02
22/08/2017	09:16	NWQG30	50.42649	-5.10679	146	4417	NWQG_2FGL50817_GT30_STN_146_A1_14		11.47	1.13
22/08/2017	09:16	NWQG30	50.42673	-5.10693	146	4418	NWQG_2FGL50817_GT30_STN_146_A1_15		10.97	1.77
22/08/2017	09:21	NWQG15	50.42788	-5.11013	147	4419	NWQG_2FGL50817_GT15_STN_147_A1_01		15.87	1.36

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	09:22	NWQG15	50.42786	-5.11001	147	4420	NWQG_2FGL50817_GT15_STN_147_A1_02		14.37	0.35
22/08/2017	09:22	NWQG15	50.42800	-5.10998	147	4421	NWQG_2FGL50817_GT15_STN_147_A1_03		14.67	0.42
22/08/2017	09:23	NWQG15	50.42794	-5.10984	147	4422	NWQG_2FGL50817_GT15_STN_147_A1_04		15.87	0.93
22/08/2017	09:23	NWQG15	50.42782	-5.10983	147	4423	NWQG_2FGL50817_GT15_STN_147_A1_05		15.17	0.78
22/08/2017	09:24	NWQG15	50.42783	-5.10965	147	4424	NWQG_2FGL50817_GT15_STN_147_A1_06		15.97	0.49
22/08/2017	09:25	NWQG15	50.42794	-5.10950	147	4425	NWQG_2FGL50817_GT15_STN_147_A1_07		13.97	1.53
22/08/2017	09:26	NWQG15	50.42793	-5.10932	147	4426	NWQG_2FGL50817_GT15_STN_147_A1_08		14.07	0.57
22/08/2017	09:26	NWQG15	50.42795	-5.10915	147	4427	NWQG_2FGL50817_GT15_STN_147_A1_09		16.47	0.64
22/08/2017	09:27	NWQG15	50.42805	-5.10901	147	4428	NWQG_2FGL50817_GT15_STN_147_A1_10		17.17	1.05
22/08/2017	09:28	NWQG15	50.42806	-5.10879	147	4429	NWQG_2FGL50817_GT15_STN_147_A1_11		15.97	0.78
22/08/2017	09:28	NWQG15	50.42801	-5.10865	147	4430	NWQG_2FGL50817_GT15_STN_147_A1_12		15.07	0.62
22/08/2017	09:29	NWQG15	50.42805	-5.10851	147	4431	NWQG_2FGL50817_GT15_STN_147_A1_13		15.47	0.41
22/08/2017	09:30	NWQG15	50.42804	-5.10844	147	4432	NWQG_2FGL50817_GT15_STN_147_A1_14		15.17	2.00
22/08/2017	09:30	NWQG15	50.42820	-5.10833	147	4433	NWQG_2FGL50817_GT15_STN_147_A1_15		14.27	2.17
22/08/2017	09:52	NWQG16	50.42684	-5.11068	148	4434	NWQG_2FGL50817_GT16_STN_148_A1_01	FISHING GEAR ON STATION - TAKEN AT NEAREST LOCATION. PROBLEMS WITH ONE OF THE CAMERA LIGHTS - ONLY 5 LIGHTS WORKING FROM NOW ON	11.97	0.37
22/08/2017	09:53	NWQG16	50.42683	-5.11047	148	4435	NWQG_2FGL50817_GT16_STN_148_A1_02		10.77	1.54
22/08/2017	09:53	NWQG16	50.42682	-5.11028	148	4436	NWQG_2FGL50817_GT16_STN_148_A1_03		11.97	0.56
22/08/2017	09:54	NWQG16	50.42693	-5.11012	148	4437	NWQG_2FGL50817_GT16_STN_148_A1_04		13.17	0.68
22/08/2017	09:55	NWQG16	50.42688	-5.11001	148	4438	NWQG_2FGL50817_GT16_STN_148_A1_05		12.67	0.71
22/08/2017	09:55	NWQG16	50.42683	-5.10989	148	4439	NWQG_2FGL50817_GT16_STN_148_A1_06		12.87	0.68
22/08/2017	09:56	NWQG16	50.42685	-5.10968	148	4440	NWQG_2FGL50817_GT16_STN_148_A1_07		12.97	0.95
22/08/2017	09:56	NWQG16	50.42689	-5.10950	148	4441	NWQG_2FGL50817_GT16_STN_148_A1_08		12.27	0.85
22/08/2017	09:57	NWQG16	50.42690	-5.10936	148	4442	NWQG_2FGL50817_GT16_STN_148_A1_09		11.67	0.63

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	09:57	NWQG16	50.42692	-5.10907	148	4443	NWQG_2FGL50817_GT16_STN_148_A1_10		11.07	0.71
22/08/2017	09:58	NWQG16	50.42690	-5.10898	148	4444	NWQG_2FGL50817_GT16_STN_148_A1_11		10.67	0.60
22/08/2017	09:58	NWQG16	50.42700	-5.10889	148	4445	NWQG_2FGL50817_GT16_STN_148_A1_12		9.97	0.33
22/08/2017	09:59	NWQG16	50.42693	-5.10880	148	4446	NWQG_2FGL50817_GT16_STN_148_A1_13		9.97	0.75
22/08/2017	10:00	NWQG16	50.42700	-5.10855	148	4447	NWQG_2FGL50817_GT16_STN_148_A1_14		10.67	0.76
22/08/2017	10:00	NWQG16	50.42706	-5.10844	148	4448	NWQG_2FGL50817_GT16_STN_148_A1_15		11.07	0.54
22/08/2017	10:06	NWQG22	50.42822	-5.11144	149	4449	NWQG_2FGL50817_GT22_STN_149_A1_01	STRING OF FISHING POTS ON STATION	16.47	0.64
22/08/2017	10:07	NWQG22	50.42824	-5.11132	149	4450	NWQG_2FGL50817_GT22_STN_149_A1_02		15.67	0.37
22/08/2017	10:07	NWQG22	50.42826	-5.11122	149	4451	NWQG_2FGL50817_GT22_STN_149_A1_03	STERN OF VESSEL JUMPED IN HYDROPRO	16.97	0.38
22/08/2017	10:08	NWQG22	50.42847	-5.11119	149	4452	NWQG_2FGL50817_GT22_STN_149_A1_04		16.87	4.13
22/08/2017	10:08	NWQG22	50.42841	-5.11120	149	4453	NWQG_2FGL50817_GT22_STN_149_A1_05		16.67	0.81
22/08/2017	10:09	NWQG22	50.42834	-5.11121	149	4454	NWQG_2FGL50817_GT22_STN_149_A1_06		16.87	1.01
22/08/2017	10:09	NWQG22	50.42828	-5.11112	149	4455	NWQG_2FGL50817_GT22_STN_149_A1_07		16.17	0.71
22/08/2017	10:10	NWQG22	50.42829	-5.11100	149	4456	NWQG_2FGL50817_GT22_STN_149_A1_08		16.37	0.80
22/08/2017	10:10	NWQG22	50.42832	-5.11091	149	4457	NWQG_2FGL50817_GT22_STN_149_A1_09		16.97	0.63
22/08/2017	10:11	NWQG22	50.42833	-5.11083	149	4458	NWQG_2FGL50817_GT22_STN_149_A1_10		17.07	0.52
22/08/2017	10:11	NWQG22	50.42835	-5.11071	149	4459	NWQG_2FGL50817_GT22_STN_149_A1_11		17.17	1.01
22/08/2017	10:12	NWQG22	50.42841	-5.11070	149	4460	NWQG_2FGL50817_GT22_STN_149_A1_12		17.27	0.92
22/08/2017	10:12	NWQG22	50.42850	-5.11070	149	4461	NWQG_2FGL50817_GT22_STN_149_A1_13		17.97	0.96
22/08/2017	10:13	NWQG22	50.42855	-5.11060	149	4462	NWQG_2FGL50817_GT22_STN_149_A1_14		17.27	0.54
22/08/2017	10:13	NWQG22	50.42855	-5.11038	149	4463	NWQG_2FGL50817_GT22_STN_149_A1_15		16.87	0.60
22/08/2017	10:23	NWQG18	50.42982	-5.11157	150	4464	NWQG_2FGL50817_GT18_STN_150_A1_01	PROBLEM WITH VIDEO SIGNAL- TROUBLESHOOTING. CHANGED ANGLE OF VIDEO CAMERA	19.67	0.37
22/08/2017	10:24	NWQG18	50.42988	-5.11147	150	4465	NWQG_2FGL50817_GT18_STN_150_A1_02		20.97	1.37

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22/08/2017	10:24	NWQG18	50.42985	-5.11142	150	4466	NWQG_2FGL50817_GT18_STN_150_A1_03		20.67	0.32
22/08/2017	10:25	NWQG18	50.42988	-5.11127	150	4467	NWQG_2FGL50817_GT18_STN_150_A1_04		20.57	0.51
22/08/2017	10:25	NWQG18	50.42984	-5.11120	150	4468	NWQG_2FGL50817_GT18_STN_150_A1_05		20.17	0.51
22/08/2017	10:26	NWQG18	50.42981	-5.11121	150	4469	NWQG_2FGL50817_GT18_STN_150_A1_06		19.57	1.10
22/08/2017	10:26	NWQG18	50.42978	-5.11113	150	4470	NWQG_2FGL50817_GT18_STN_150_A1_07		19.67	0.60
22/08/2017	10:27	NWQG18	50.42965	-5.11108	150	4471	NWQG_2FGL50817_GT18_STN_150_A1_08		19.27	2.47
22/08/2017	10:28	NWQG18	50.42971	-5.11097	150	4472	NWQG_2FGL50817_GT18_STN_150_A1_09		20.57	1.14
22/08/2017	10:28	NWQG18	50.42976	-5.11088	150	4473	NWQG_2FGL50817_GT18_STN_150_A1_10		20.37	0.42
22/08/2017	10:29	NWQG18	50.42983	-5.11081	150	4474	NWQG_2FGL50817_GT18_STN_150_A1_11		20.97	0.58
22/08/2017	10:29	NWQG18	50.42982	-5.11066	150	4475	NWQG_2FGL50817_GT18_STN_150_A1_12		20.37	0.70
22/08/2017	10:30	NWQG18	50.42978	-5.11063	150	4476	NWQG_2FGL50817_GT18_STN_150_A1_13		20.17	1.47
22/08/2017	10:30	NWQG18	50.42971	-5.11055	150	4477	NWQG_2FGL50817_GT18_STN_150_A1_14		19.87	0.56
22/08/2017	10:31	NWQG18	50.42972	-5.11041	150	4478	NWQG_2FGL50817_GT18_STN_150_A1_15		20.27	1.11
22/08/2017	10:34	NWQG19	50.42971	-5.10895	151	4479	NWQG_2FGL50817_GT19_STN_151_A1_01		18.97	0.45
22/08/2017	10:35	NWQG19	50.42966	-5.10890	151	4480	NWQG_2FGL50817_GT19_STN_151_A1_02		17.97	0.54
22/08/2017	10:35	NWQG19	50.42966	-5.10877	151	4481	NWQG_2FGL50817_GT19_STN_151_A1_03		18.17	0.64
22/08/2017	10:36	NWQG19	50.42968	-5.10860	151	4482	NWQG_2FGL50817_GT19_STN_151_A1_04		18.47	0.81
22/08/2017	10:36	NWQG19	50.42971	-5.10845	151	4483	NWQG_2FGL50817_GT19_STN_151_A1_05		18.47	0.43
22/08/2017	10:37	NWQG19	50.42963	-5.10843	151	4484	NWQG_2FGL50817_GT19_STN_151_A1_06		18.17	0.69
22/08/2017	10:37	NWQG19	50.42963	-5.10830	151	4485	NWQG_2FGL50817_GT19_STN_151_A1_07		17.97	0.80
22/08/2017	10:38	NWQG19	50.42965	-5.10820	151	4486	NWQG_2FGL50817_GT19_STN_151_A1_08		17.97	0.60
22/08/2017	10:38	NWQG19	50.42963	-5.10808	151	4487	NWQG_2FGL50817_GT19_STN_151_A1_09		17.87	0.76
22/08/2017	10:39	NWQG19	50.42960	-5.10797	151	4488	NWQG_2FGL50817_GT19_STN_151_A1_10		17.37	0.61
22/08/2017	10:39	NWQG19	50.42961	-5.10784	151	4489	NWQG_2FGL50817_GT19_STN_151_A1_11		18.77	0.76
22/08/2017	10:40	NWQG19	50.42966	-5.10770	151	4490	NWQG_2FGL50817_GT19_STN_151_A1_12		18.47	0.83
22/08/2017	10:40	NWQG19	50.42963	-5.10761	151	4491	NWQG_2FGL50817_GT19_STN_151_A1_13		18.37	0.88

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22/08/2017	10:41	NWQG19	50.42966	-5.10753	151	4492	NWQG_2FGL50817_GT19_STN_151_A1_14		18.07	0.66
22/08/2017	10:42	NWQG19	50.42963	-5.10741	151	4493	NWQG_2FGL50817_GT19_STN_151_A1_15		18.67	1.04
22/08/2017	10:49	NWQG17	50.43008	-5.10469	152	4494	NWQG_2FGL50817_GT17_STN_152_A1_01		16.37	0.46
22/08/2017	10:49	NWQG17	50.43008	-5.10461	152	4495	NWQG_2FGL50817_GT17_STN_152_A1_02		16.07	0.95
22/08/2017	10:50	NWQG17	50.43002	-5.10454	152	4496	NWQG_2FGL50817_GT17_STN_152_A1_03		15.87	0.65
22/08/2017	10:50	NWQG17	50.43013	-5.10431	152	4497	NWQG_2FGL50817_GT17_STN_152_A1_04		15.17	3.88
22/08/2017	10:51	NWQG17	50.43001	-5.10435	152	4498	NWQG_2FGL50817_GT17_STN_152_A1_05	ONLY 5 FIXES/PHOTOS DUE TO NO INFRALITTORAL ROCK	15.97	1.07
22/08/2017	10:56	NWQG21	50.42842	-5.10712	153	4499	NWQG_2FGL50817_GT21_STN_153_A1_01		11.97	1.03
22/08/2017	10:57	NWQG21	50.42841	-5.10688	153	4500	NWQG_2FGL50817_GT21_STN_153_A1_02		12.27	0.98
22/08/2017	10:58	NWQG21	50.42847	-5.10668	153	4501	NWQG_2FGL50817_GT21_STN_153_A1_03		11.07	0.73
22/08/2017	10:59	NWQG21	50.42842	-5.10658	153	4502	NWQG_2FGL50817_GT21_STN_153_A1_04		10.87	0.54
22/08/2017	10:59	NWQG21	50.42839	-5.10651	153	4503	NWQG_2FGL50817_GT21_STN_153_A1_05		10.87	0.49
22/08/2017	11:00	NWQG21	50.42836	-5.10647	153	4504	NWQG_2FGL50817_GT21_STN_153_A1_06		11.77	0.40
22/08/2017	11:00	NWQG21	50.42830	-5.10639	153	4505	NWQG_2FGL50817_GT21_STN_153_A1_07		11.97	0.54
22/08/2017	11:01	NWQG21	50.42827	-5.10620	153	4506	NWQG_2FGL50817_GT21_STN_153_A1_08		11.47	0.72
22/08/2017	11:02	NWQG21	50.42820	-5.10607	153	4507	NWQG_2FGL50817_GT21_STN_153_A1_09		11.17	0.80
22/08/2017	11:02	NWQG21	50.42807	-5.10583	153	4508	NWQG_2FGL50817_GT21_STN_153_A1_10		10.87	0.98
22/08/2017	11:03	NWQG21	50.42796	-5.10569	153	4509	NWQG_2FGL50817_GT21_STN_153_A1_11		10.67	0.38
22/08/2017	11:04	NWQG21	50.42803	-5.10556	153	4510	NWQG_2FGL50817_GT21_STN_153_A1_12		10.77	0.50
22/08/2017	11:05	NWQG21	50.42787	-5.10569	153	4511	NWQG_2FGL50817_GT21_STN_153_A1_13		8.87	1.09
22/08/2017	11:06	NWQG21	50.42785	-5.10594	153	4512	NWQG_2FGL50817_GT21_STN_153_A1_14		8.77	1.04
22/08/2017	11:06	NWQG21	50.42786	-5.10609	153	4513	NWQG_2FGL50817_GT21_STN_153_A1_15	FISHING GEAR CLOSE TO STATION	7.57	1.12
22/08/2017	11:07	NWQG21	50.42789	-5.10638	153	4514	NWQG_2FGL50817_GT21_STN_153_A1_16		8.67	1.22
22/08/2017	11:07	NWQG21	50.42793	-5.10657	153	4515	NWQG_2FGL50817_GT21_STN_153_A1_17		10.57	1.25
22/08/2017	11:11	NWQG23 A2	50.42733	-5.10283	154	4516	NWQG_2FGL50817_GT23_STN_154_A2_01		8.97	1.21

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22/08/2017	11:12	NWQG23 A2	50.42736	-5.10255	154	4517	NWQG_2FGL50817_GT23_STN_154_A2_02		9.57	1.21
22/08/2017	11:12	NWQG23 A2	50.42740	-5.10243	154	4518	NWQG_2FGL50817_GT23_STN_154_A2_03		9.77	1.01
22/08/2017	11:12	NWQG23 A2	50.42750	-5.10224	154	4519	NWQG_2FGL50817_GT23_STN_154_A2_04		9.87	1.27
22/08/2017	11:13	NWQG23 A2	50.42753	-5.10211	154	4520	NWQG_2FGL50817_GT23_STN_154_A2_05		9.47	0.90
22/08/2017	11:13	NWQG23 A2	50.42752	-5.10201	154	4521	NWQG_2FGL50817_GT23_STN_154_A2_06		10.27	0.66
22/08/2017	11:13	NWQG23 A2	50.42755	-5.10188	154	4522	NWQG_2FGL50817_GT23_STN_154_A2_07		10.17	1.07
22/08/2017	11:14	NWQG23 A2	50.42754	-5.10176	154	4523	NWQG_2FGL50817_GT23_STN_154_A2_08		10.37	0.86
22/08/2017	11:14	NWQG23 A2	50.42757	-5.10153	154	4524	NWQG_2FGL50817_GT23_STN_154_A2_09		10.27	1.03
22/08/2017	11:15	NWQG23 A2	50.42755	-5.10135	154	4525	NWQG_2FGL50817_GT23_STN_154_A2_10		10.37	0.98
22/08/2017	11:15	NWQG23 A2	50.42752	-5.10126	154	4526	NWQG_2FGL50817_GT23_STN_154_A2_11		10.27	0.68
22/08/2017	11:15	NWQG23 A2	50.42754	-5.10114	154	4527	NWQG_2FGL50817_GT23_STN_154_A2_12		10.47	1.16
22/08/2017	11:16	NWQG23 A2	50.42757	-5.10094	154	4528	NWQG_2FGL50817_GT23_STN_154_A2_13		10.17	0.78
22/08/2017	11:16	NWQG23 A2	50.42756	-5.10070	154	4529	NWQG_2FGL50817_GT23_STN_154_A2_14		10.17	0.91
22/08/2017	11:17	NWQG23 A2	50.42756	-5.10045	154	4530	NWQG_2FGL50817_GT23_STN_154_A2_15		10.47	0.97
22/08/2017	11:18	NWQG23 A2	50.42757	-5.10009	154	4531	NWQG_2FGL50817_GT23_STN_154_A2_16		10.07	0.56
22/08/2017	11:19	NWQG23 A2	50.42762	-5.09986	154	4532	NWQG_2FGL50817_GT23_STN_154_A2_17		10.77	0.89
22/08/2017	11:54	NWQG56	50.42697	-5.11883	155	4533	NWQG_2FGL50817_GT56_STN_155_A1_01		20.07	0.50
22/08/2017	11:55	NWQG56	50.42696	-5.11865	155	4534	NWQG_2FGL50817_GT56_STN_155_A1_02		19.97	0.78
22/08/2017	11:56	NWQG56	50.42698	-5.11849	155	4535	NWQG_2FGL50817_GT56_STN_155_A1_03		20.17	0.77
22/08/2017	11:56	NWQG56	50.42696	-5.11836	155	4536	NWQG_2FGL50817_GT56_STN_155_A1_04		20.17	0.91
22/08/2017	11:56	NWQG56	50.42691	-5.11824	155	4537	NWQG_2FGL50817_GT56_STN_155_A1_05		19.97	0.70
22/08/2017	11:57	NWQG56	50.42679	-5.11832	155	4538	NWQG_2FGL50817_GT56_STN_155_A1_06		19.27	1.11
22/08/2017	11:57	NWQG56	50.42671	-5.11835	155	4539	NWQG_2FGL50817_GT56_STN_155_A1_07		19.97	0.75
22/08/2017	11:58	NWQG56	50.42672	-5.11821	155	4540	NWQG_2FGL50817_GT56_STN_155_A1_08		19.47	0.90
22/08/2017	11:58	NWQG56	50.42677	-5.11807	155	4541	NWQG_2FGL50817_GT56_STN_155_A1_09		19.07	1.12
22/08/2017	11:58	NWQG56	50.42679	-5.11792	155	4542	NWQG_2FGL50817_GT56_STN_155_A1_10		19.67	1.09

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	11:59	NWQG56	50.42671	-5.11781	155	4543	NWQG_2FGL50817_GT56_STN_155_A1_11		18.77	0.87
22/08/2017	11:59	NWQG56	50.42667	-5.11769	155	4544	NWQG_2FGL50817_GT56_STN_155_A1_12		17.97	1.02
22/08/2017	11:59	NWQG56	50.42665	-5.11757	155	4545	NWQG_2FGL50817_GT56_STN_155_A1_13		18.47	0.97
22/08/2017	12:00	NWQG56	50.42664	-5.11733	155	4546	NWQG_2FGL50817_GT56_STN_155_A1_14		17.17	1.12
22/08/2017	12:01	NWQG56	50.42675	-5.11700	155	4547	NWQG_2FGL50817_GT56_STN_155_A1_15		18.27	1.46
22/08/2017	12:04	NWQG53	50.42748	-5.11611	156	4548	NWQG_2FGL50817_GT53_STN_156_A1_01		17.87	1.13
22/08/2017	12:04	NWQG53	50.42756	-5.11601	156	4549	NWQG_2FGL50817_GT53_STN_156_A1_02		17.77	1.07
22/08/2017	12:05	NWQG53	50.42759	-5.11587	156	4550	NWQG_2FGL50817_GT53_STN_156_A1_03		17.37	0.65
22/08/2017	12:05	NWQG53	50.42754	-5.11584	156	4551	NWQG_2FGL50817_GT53_STN_156_A1_04		16.77	0.54
22/08/2017	12:06	NWQG53	50.42746	-5.11579	156	4552	NWQG_2FGL50817_GT53_STN_156_A1_05		15.27	0.92
22/08/2017	12:06	NWQG53	50.42737	-5.11562	156	4553	NWQG_2FGL50817_GT53_STN_156_A1_06		14.57	0.95
22/08/2017	12:07	NWQG53	50.42736	-5.11547	156	4554	NWQG_2FGL50817_GT53_STN_156_A1_07		14.67	0.82
22/08/2017	12:07	NWQG53	50.42729	-5.11543	156	4555	NWQG_2FGL50817_GT53_STN_156_A1_08		14.07	0.80
22/08/2017	12:07	NWQG53	50.42720	-5.11540	156	4556	NWQG_2FGL50817_GT53_STN_156_A1_09		12.67	0.92
22/08/2017	12:08	NWQG53	50.42714	-5.11495	156	4557	NWQG_2FGL50817_GT53_STN_156_A1_10		14.47	1.27
22/08/2017	12:09	NWQG53	50.42711	-5.11484	156	4558	NWQG_2FGL50817_GT53_STN_156_A1_11		15.17	0.71
22/08/2017	12:09	NWQG53	50.42705	-5.11471	156	4559	NWQG_2FGL50817_GT53_STN_156_A1_12		14.37	0.83
22/08/2017	12:10	NWQG53	50.42696	-5.11464	156	4560	NWQG_2FGL50817_GT53_STN_156_A1_13		14.97	1.03
22/08/2017	12:10	NWQG53	50.42683	-5.11458	156	4561	NWQG_2FGL50817_GT53_STN_156_A1_14		15.47	1.29
22/08/2017	12:10	NWQG53	50.42673	-5.11452	156	4562	NWQG_2FGL50817_GT53_STN_156_A1_15		15.57	1.08
22/08/2017	12:16	NWQG52	50.42789	-5.12281	157	4563	NWQG_2FGL50817_GT52_STN_157_A1_01		17.67	0.94
22/08/2017	12:17	NWQG52	50.42784	-5.12272	157	4564	NWQG_2FGL50817_GT52_STN_157_A1_02		19.27	0.50
22/08/2017	12:17	NWQG52	50.42781	-5.12259	157	4565	NWQG_2FGL50817_GT52_STN_157_A1_03		18.17	0.73
22/08/2017	12:18	NWQG52	50.42778	-5.12244	157	4566	NWQG_2FGL50817_GT52_STN_157_A1_04		18.97	0.93
22/08/2017	12:18	NWQG52	50.42773	-5.12229	157	4567	NWQG_2FGL50817_GT52_STN_157_A1_05		19.27	1.19
22/08/2017	12:19	NWQG52	50.42770	-5.12216	157	4568	NWQG_2FGL50817_GT52_STN_157_A1_06		19.57	0.87

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	12:19	NWQG52	50.42772	-5.12197	157	4569	NWQG_2FGL50817_GT52_STN_157_A1_07		19.57	1.32
22/08/2017	12:19	NWQG52	50.42772	-5.12186	157	4570	NWQG_2FGL50817_GT52_STN_157_A1_08		20.07	0.86
22/08/2017	12:20	NWQG52	50.42773	-5.12177	157	4571	NWQG_2FGL50817_GT52_STN_157_A1_09		19.97	0.41
22/08/2017	12:20	NWQG52	50.42778	-5.12169	157	4572	NWQG_2FGL50817_GT52_STN_157_A1_10		19.37	0.88
22/08/2017	12:20	NWQG52	50.42782	-5.12153	157	4573	NWQG_2FGL50817_GT52_STN_157_A1_11		20.07	1.01
22/08/2017	12:21	NWQG52	50.42780	-5.12144	157	4574	NWQG_2FGL50817_GT52_STN_157_A1_12		19.77	0.60
22/08/2017	12:21	NWQG52	50.42776	-5.12134	157	4575	NWQG_2FGL50817_GT52_STN_157_A1_13		20.47	0.75
22/08/2017	12:21	NWQG52	50.42772	-5.12126	157	4576	NWQG_2FGL50817_GT52_STN_157_A1_14		19.17	0.79
22/08/2017	12:22	NWQG52	50.42764	-5.12115	157	4577	NWQG_2FGL50817_GT52_STN_157_A1_15		19.47	0.95
22/08/2017	12:28	NWQG54	50.42972	-5.12701	158	4578	NWQG_2FGL50817_GT54_STN_158_A1_01		20.77	1.28
22/08/2017	12:28	NWQG54	50.42972	-5.12686	158	4579	NWQG_2FGL50817_GT54_STN_158_A1_02		20.17	1.00
22/08/2017	12:28	NWQG54	50.42970	-5.12673	158	4580	NWQG_2FGL50817_GT54_STN_158_A1_03		19.97	1.13
22/08/2017	12:29	NWQG54	50.42964	-5.12660	158	4581	NWQG_2FGL50817_GT54_STN_158_A1_04		20.67	1.22
22/08/2017	12:29	NWQG54	50.42963	-5.12643	158	4582	NWQG_2FGL50817_GT54_STN_158_A1_05		18.57	1.23
22/08/2017	12:29	NWQG54	50.42963	-5.12631	158	4583	NWQG_2FGL50817_GT54_STN_158_A1_06		20.17	1.11
22/08/2017	12:30	NWQG54	50.42965	-5.12615	158	4584	NWQG_2FGL50817_GT54_STN_158_A1_07		20.37	1.11
22/08/2017	12:30	NWQG54	50.42965	-5.12601	158	4585	NWQG_2FGL50817_GT54_STN_158_A1_08		20.07	1.13
22/08/2017	12:30	NWQG54	50.42964	-5.12584	158	4586	NWQG_2FGL50817_GT54_STN_158_A1_09		21.07	1.08
22/08/2017	12:31	NWQG54	50.42962	-5.12571	158	4587	NWQG_2FGL50817_GT54_STN_158_A1_10		21.87	0.84
22/08/2017	12:31	NWQG54	50.42961	-5.12559	158	4588	NWQG_2FGL50817_GT54_STN_158_A1_11		21.67	0.72
22/08/2017	12:31	NWQG54	50.42961	-5.12550	158	4589	NWQG_2FGL50817_GT54_STN_158_A1_12		20.67	0.86
22/08/2017	12:32	NWQG54	50.42962	-5.12535	158	4590	NWQG_2FGL50817_GT54_STN_158_A1_13		20.37	0.95
22/08/2017	12:32	NWQG54	50.42958	-5.12513	158	4591	NWQG_2FGL50817_GT54_STN_158_A1_14		19.77	0.84
22/08/2017	12:33	NWQG54	50.42958	-5.12499	158	4592	NWQG_2FGL50817_GT54_STN_158_A1_15		19.27	0.85
22/08/2017	12:38	NWQG35	50.43339	-5.12751	159	4593	NWQG_2FGL50817_GT35_STN_159_A1_01		17.57	0.60
22/08/2017	12:38	NWQG35	50.43343	-5.12740	159	4594	NWQG_2FGL50817_GT35_STN_159_A1_02		17.87	1.02

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22/08/2017	12:38	NWQG35	50.43344	-5.12727	159	4595	NWQG_2FGL50817_GT35_STN_159_A1_03		18.67	0.85
22/08/2017	12:39	NWQG35	50.43343	-5.12718	159	4596	NWQG_2FGL50817_GT35_STN_159_A1_04		17.87	0.70
22/08/2017	12:39	NWQG35	50.43343	-5.12707	159	4597	NWQG_2FGL50817_GT35_STN_159_A1_05	PLASTIC BAG OBSERVED BETWEEN STATIONS	17.07	0.75
22/08/2017	12:40	NWQG35	50.43344	-5.12694	159	4598	NWQG_2FGL50817_GT35_STN_159_A1_06		16.97	0.74
22/08/2017	12:40	NWQG35	50.43349	-5.12681	159	4599	NWQG_2FGL50817_GT35_STN_159_A1_07		17.67	1.10
22/08/2017	12:40	NWQG35	50.43354	-5.12672	159	4600	NWQG_2FGL50817_GT35_STN_159_A1_08		18.67	0.66
22/08/2017	12:41	NWQG35	50.43362	-5.12657	159	4601	NWQG_2FGL50817_GT35_STN_159_A1_09		18.87	1.06
22/08/2017	12:41	NWQG35	50.43360	-5.12646	159	4602	NWQG_2FGL50817_GT35_STN_159_A1_10		17.17	0.82
22/08/2017	12:42	NWQG35	50.43360	-5.12630	159	4603	NWQG_2FGL50817_GT35_STN_159_A1_11		17.57	1.14
22/08/2017	12:42	NWQG35	50.43354	-5.12622	159	4604	NWQG_2FGL50817_GT35_STN_159_A1_12		15.27	0.74
22/08/2017	12:42	NWQG35	50.43347	-5.12613	159	4605	NWQG_2FGL50817_GT35_STN_159_A1_13		16.87	0.83
22/08/2017	12:43	NWQG35	50.43342	-5.12601	159	4606	NWQG_2FGL50817_GT35_STN_159_A1_14		17.77	0.92
22/08/2017	12:43	NWQG35	50.43340	-5.12586	159	4607	NWQG_2FGL50817_GT35_STN_159_A1_15		17.77	0.82
22/08/2017	12:46	NWQG58	50.43156	-5.12341	160	4608	NWQG_2FGL50817_GT58_STN_160_A1_01		15.97	1.17
22/08/2017	12:47	NWQG58	50.43162	-5.12322	160	4609	NWQG_2FGL50817_GT58_STN_160_A1_02		14.87	1.40
22/08/2017	12:47	NWQG58	50.43176	-5.12301	160	4610	NWQG_2FGL50817_GT58_STN_160_A1_03		13.57	1.31
22/08/2017	12:48	NWQG58	50.43187	-5.12289	160	4611	NWQG_2FGL50817_GT58_STN_160_A1_04		15.37	1.27
22/08/2017	12:48	NWQG58	50.43198	-5.12281	160	4612	NWQG_2FGL50817_GT58_STN_160_A1_05		15.17	1.44
22/08/2017	12:48	NWQG58	50.43212	-5.12272	160	4613	NWQG_2FGL50817_GT58_STN_160_A1_06		15.17	1.37
22/08/2017	12:49	NWQG58	50.43227	-5.12263	160	4614	NWQG_2FGL50817_GT58_STN_160_A1_07		15.17	1.34
22/08/2017	12:49	NWQG58	50.43234	-5.12245	160	4615	NWQG_2FGL50817_GT58_STN_160_A1_08		15.27	1.44
22/08/2017	12:49	NWQG58	50.43236	-5.12235	160	4616	NWQG_2FGL50817_GT58_STN_160_A1_09		14.77	0.76
22/08/2017	12:50	NWQG58	50.43232	-5.12230	160	4617	NWQG_2FGL50817_GT58_STN_160_A1_10		13.67	0.57
22/08/2017	12:50	NWQG58	50.43226	-5.12231	160	4618	NWQG_2FGL50817_GT58_STN_160_A1_11		14.17	0.73
22/08/2017	12:50	NWQG58	50.43221	-5.12225	160	4619	NWQG_2FGL50817_GT58_STN_160_A1_12		14.97	0.76
22/08/2017	12:51	NWQG58	50.43215	-5.12219	160	4620	NWQG_2FGL50817_GT58_STN_160_A1_13		14.57	0.75

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	12:51	NWQG58	50.43213	-5.12204	160	4621	NWQG_2FGL50817_GT58_STN_160_A1_14		14.57	0.89
22/08/2017	12:52	NWQG58	50.43212	-5.12191	160	4622	NWQG_2FGL50817_GT58_STN_160_A1_15		14.37	0.95
22/08/2017	12:56	NWQG34	50.43011	-5.11915	161	4623	NWQG_2FGL50817_GT34_STN_161_A1_01		21.07	0.27
22/08/2017	12:56	NWQG34	50.43011	-5.11919	161	4624	NWQG_2FGL50817_GT34_STN_161_A1_02		20.77	0.19
22/08/2017	12:57	NWQG34	50.4301	-5.11925	161	4625	NWQG_2FGL50817_GT34_STN_161_A1_03		20.87	0.35
22/08/2017	12:58	NWQG34	50.43012	-5.11909	161	4626	NWQG_2FGL50817_GT34_STN_161_A1_04		21.27	0.59
22/08/2017	12:58	NWQG34	50.43010	-5.11902	161	4627	NWQG_2FGL50817_GT34_STN_161_A1_05		21.37	0.58
22/08/2017	12:58	NWQG34	50.43006	-5.11893	161	4628	NWQG_2FGL50817_GT34_STN_161_A1_06		20.97	0.91
22/08/2017	12:59	NWQG34	50.43011	-5.11873	161	4629	NWQG_2FGL50817_GT34_STN_161_A1_07		20.87	1.53
22/08/2017	12:59	NWQG34	50.43017	-5.11859	161	4630	NWQG_2FGL50817_GT34_STN_161_A1_08		20.27	1.38
22/08/2017	12:59	NWQG34	50.43020	-5.11844	161	4631	NWQG_2FGL50817_GT34_STN_161_A1_09		20.77	0.68
22/08/2017	13:00	NWQG34	50.43019	-5.11826	161	4632	NWQG_2FGL50817_GT34_STN_161_A1_10		21.07	1.14
22/08/2017	13:00	NWQG34	50.43015	-5.11816	161	4633	NWQG_2FGL50817_GT34_STN_161_A1_11		21.37	0.82
22/08/2017	13:01	NWQG34	50.43010	-5.11809	161	4634	NWQG_2FGL50817_GT34_STN_161_A1_12		21.97	0.57
22/08/2017	13:01	NWQG34	50.43007	-5.11797	161	4635	NWQG_2FGL50817_GT34_STN_161_A1_13		21.37	1.34
22/08/2017	13:01	NWQG34	50.42999	-5.11791	161	4636	NWQG_2FGL50817_GT34_STN_161_A1_14	ONLY 14 FIXES/PHOTOS DUE TO FISHING LINE/POT VISIBLE ON VIDEO CAMERA	21.67	0.98
22/08/2017	13:05	NWQG32	50.42926	-5.11542	162	4637	NWQG_2FGL50817_GT32_STN_162_A1_01		20.97	0.59
22/08/2017	13:06	NWQG32	50.42923	-5.11534	162	4638	NWQG_2FGL50817_GT32_STN_162_A1_02		21.17	0.57
22/08/2017	13:06	NWQG32	50.42921	-5.11518	162	4639	NWQG_2FGL50817_GT32_STN_162_A1_03		20.77	1.15
22/08/2017	13:07	NWQG32	50.42920	-5.11494	162	4640	NWQG_2FGL50817_GT32_STN_162_A1_04		20.27	1.04
22/08/2017	13:07	NWQG32	50.42918	-5.11489	162	4641	NWQG_2FGL50817_GT32_STN_162_A1_05		19.77	0.24
22/08/2017	13:07	NWQG32	50.42916	-5.11488	162	4642	NWQG_2FGL50817_GT32_STN_162_A1_06		19.77	0.00
22/08/2017	13:08	NWQG32	50.42913	-5.11487	162	4643	NWQG_2FGL50817_GT32_STN_162_A1_07		19.97	0.38
22/08/2017	13:08	NWQG32	50.42909	-5.11485	162	4644	NWQG_2FGL50817_GT32_STN_162_A1_08		19.97	0.38

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	13:09	NWQG32	50.42917	-5.11470	162	4645	NWQG_2FGL50817_GT32_STN_162_A1_09		19.77	1.52
22/08/2017	13:09	NWQG32	50.42929	-5.11462	162	4646	NWQG_2FGL50817_GT32_STN_162_A1_10		19.87	1.58
22/08/2017	13:09	NWQG32	50.42944	-5.11453	162	4647	NWQG_2FGL50817_GT32_STN_162_A1_11		20.97	1.63
22/08/2017	13:10	NWQG32	50.42959	-5.11449	162	4648	NWQG_2FGL50817_GT32_STN_162_A1_12	FISHING POTS IN AREA - AWAY FROM STATION	19.27	1.42
22/08/2017	13:10	NWQG32	50.42974	-5.11450	162	4649	NWQG_2FGL50817_GT32_STN_162_A1_13		20.57	1.22
22/08/2017	13:10	NWQG32	50.42983	-5.11452	162	4650	NWQG_2FGL50817_GT32_STN_162_A1_14		20.87	0.83
22/08/2017	13:11	NWQG32	50.42993	-5.11459	162	4651	NWQG_2FGL50817_GT32_STN_162_A1_15		22.17	1.35
22/08/2017	13:17	NWQG14	50.43185	-5.10918	163	4652	NWQG_2FGL50817_GT14_STN_163_A1_01		23.27	1.29
22/08/2017	13:18	NWQG14	50.43190	-5.10898	163	4653	NWQG_2FGL50817_GT14_STN_163_A1_02		24.27	0.80
22/08/2017	13:18	NWQG14	50.43196	-5.10875	163	4654	NWQG_2FGL50817_GT14_STN_163_A1_03		24.27	1.23
22/08/2017	13:19	NWQG14	50.43203	-5.10852	163	4655	NWQG_2FGL50817_GT14_STN_163_A1_04		24.67	1.36
22/08/2017	13:19	NWQG14	50.43214	-5.10828	163	4656	NWQG_2FGL50817_GT14_STN_163_A1_05	ONLY 5 FIXES/PHOTOS DUE TO NO INFRALITTORAL ROCK	23.97	1.42
22/08/2017	13:25	NWQG14 A2	50.43093	-5.10915	164	4657	NWQG_2FGL50817_GT14_STN_164_A2_01	A2	23.47	0.32
22/08/2017	13:27	NWQG14 A2	50.43087	-5.10899	164	4658	NWQG_2FGL50817_GT14_STN_164_A2_02	A2	23.07	1.13
22/08/2017	13:27	NWQG14 A2	50.43089	-5.10865	164	4659	NWQG_2FGL50817_GT14_STN_164_A2_03	A2	22.97	0.97
22/08/2017	13:28	NWQG14 A2	50.43086	-5.10842	164	4660	NWQG_2FGL50817_GT14_STN_164_A2_04	A2	22.47	1.33
22/08/2017	13:29	NWQG14 A2	50.43080	-5.10811	164	4661	NWQG_2FGL50817_GT14_STN_164_A2_05	A2. ONLY 5 FIXES/PHOTOS DUE TO NO INFRALITTORAL ROCK	23.47	0.99
22/08/2017	13:39	NWQG14 A3	50.43107	-5.10489	165	4662	NWQG_2FGL50817_GT14_STN_165_A3_01	A3	20.27	0.66
22/08/2017	13:40	NWQG14 A3	50.43097	-5.10476	165	4663	NWQG_2FGL50817_GT14_STN_165_A3_02	A3	18.07	0.68
22/08/2017	13:40	NWQG14 A3	50.43093	-5.10462	165	4664	NWQG_2FGL50817_GT14_STN_165_A3_03	A3	17.27	0.73
22/08/2017	13:41	NWQG14 A3	50.43092	-5.10448	165	4665	NWQG_2FGL50817_GT14_STN_165_A3_04	A3	18.37	0.57
22/08/2017	13:42	NWQG14 A3	50.43090	-5.10435	165	4666	NWQG_2FGL50817_GT14_STN_165_A3_05	A3	19.67	0.45
22/08/2017	13:42	NWQG14 A3	50.43085	-5.10427	165	4667	NWQG_2FGL50817_GT14_STN_165_A3_06	A3	18.77	0.61

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	13:43	NWQG14 A3	50.43076	-5.10416	165	4668	NWQG_2FGL50817_GT14_STN_165_A3_07	A3. ONLY 5 FIXES/PHOTOS DUE TO NO INFRALITTORAL ROCK	17.67	0.73
22/08/2017	13:49	NWQG57	50.43415	-5.11274	166	4669	NWQG_2FGL50817_GT57_STN_166_A1_01		26.37	1.37
22/08/2017	13:50	NWQG57	50.43412	-5.11252	166	4670	NWQG_2FGL50817_GT57_STN_166_A1_02		26.27	0.76
22/08/2017	13:50	NWQG57	50.43415	-5.11235	166	4671	NWQG_2FGL50817_GT57_STN_166_A1_03		26.47	0.89
22/08/2017	13:51	NWQG57	50.43411	-5.11220	166	4672	NWQG_2FGL50817_GT57_STN_166_A1_04		26.17	1.05
22/08/2017	13:51	NWQG57	50.43408	-5.11193	166	4673	NWQG_2FGL50817_GT57_STN_166_A1_05	ONLY 5 FIXES/PHOTOS DUE TO NO INFRALITTORAL ROCK	26.57	1.52
22/08/2017	14:01	NWQG59	50.43467	-5.12139	167	4674	NWQG_2FGL50817_GT59_STN_167_A1_01		17.27	1.19
22/08/2017	14:01	NWQG59	50.43459	-5.12119	167	4675	NWQG_2FGL50817_GT59_STN_167_A1_02		16.17	1.06
22/08/2017	14:02	NWQG59	50.43454	-5.12102	167	4676	NWQG_2FGL50817_GT59_STN_167_A1_03		13.77	0.54
22/08/2017	14:02	NWQG59	50.43456	-5.12091	167	4677	NWQG_2FGL50817_GT59_STN_167_A1_04		13.37	0.22
22/08/2017	14:03	NWQG59	50.43446	-5.12091	167	4678	NWQG_2FGL50817_GT59_STN_167_A1_05		12.77	0.78
22/08/2017	14:04	NWQG59	50.43440	-5.12070	167	4679	NWQG_2FGL50817_GT59_STN_167_A1_06		11.97	1.60
22/08/2017	14:04	NWQG59	50.43441	-5.12034	167	4680	NWQG_2FGL50817_GT59_STN_167_A1_07		13.17	1.87
22/08/2017	14:04	NWQG59	50.43445	-5.12001	167	4681	NWQG_2FGL50817_GT59_STN_167_A1_08		12.17	1.79
22/08/2017	14:05	NWQG59	50.43441	-5.11974	167	4682	NWQG_2FGL50817_GT59_STN_167_A1_09		19.27	0.55
22/08/2017	14:06	NWQG59	50.43433	-5.11966	167	4683	NWQG_2FGL50817_GT59_STN_167_A1_10		18.87	0.85
22/08/2017	14:06	NWQG59	50.43424	-5.11947	167	4684	NWQG_2FGL50817_GT59_STN_167_A1_11		20.07	1.07
22/08/2017	14:06	NWQG59	50.43415	-5.11945	167	4685	NWQG_2FGL50817_GT59_STN_167_A1_12		20.37	0.84
22/08/2017	14:07	NWQG59	50.43406	-5.11941	167	4686	NWQG_2FGL50817_GT59_STN_167_A1_13		20.37	0.81
22/08/2017	14:07	NWQG59	50.43394	-5.11934	167	4687	NWQG_2FGL50817_GT59_STN_167_A1_14		19.67	1.04
22/08/2017	14:08	NWQG59	50.43384	-5.11932	167	4688	NWQG_2FGL50817_GT59_STN_167_A1_15		17.87	0.83
22/08/2017	14:10	NWQG55	50.43350	-5.11886	168	4689	NWQG_2FGL50817_GT55_STN_168_A1_01		20.77	1.50
22/08/2017	14:10	NWQG55	50.43342	-5.11872	168	4690	NWQG_2FGL50817_GT55_STN_168_A1_02		21.57	1.09
22/08/2017	14:11	NWQG55	50.43334	-5.11861	168	4691	NWQG_2FGL50817_GT55_STN_168_A1_03		21.27	1.05

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22/08/2017	14:11	NWQG55	50.43325	-5.11853	168	4692	NWQG_2FGL50817_GT55_STN_168_A1_04		22.57	0.78
22/08/2017	14:11	NWQG55	50.43317	-5.11848	168	4693	NWQG_2FGL50817_GT55_STN_168_A1_05		23.97	0.78
22/08/2017	14:12	NWQG55	50.43310	-5.11843	168	4694	NWQG_2FGL50817_GT55_STN_168_A1_06		25.37	0.82
22/08/2017	14:12	NWQG55	50.43302	-5.11831	168	4695	NWQG_2FGL50817_GT55_STN_168_A1_07		25.67	1.02
22/08/2017	14:13	NWQG55	50.43305	-5.11807	168	4696	NWQG_2FGL50817_GT55_STN_168_A1_08		23.97	1.70
22/08/2017	14:13	NWQG55	50.43314	-5.11782	168	4697	NWQG_2FGL50817_GT55_STN_168_A1_09		24.87	1.86
22/08/2017	14:13	NWQG55	50.43325	-5.11755	168	4698	NWQG_2FGL50817_GT55_STN_168_A1_10		24.47	2.00
22/08/2017	14:14	NWQG55	50.43331	-5.11728	168	4699	NWQG_2FGL50817_GT55_STN_168_A1_11		25.27	2.02
22/08/2017	14:14	NWQG55	50.43331	-5.11708	168	4700	NWQG_2FGL50817_GT55_STN_168_A1_12		26.07	1.14
22/08/2017	14:15	NWQG55	50.43326	-5.11697	168	4701	NWQG_2FGL50817_GT55_STN_168_A1_13		26.27	0.65
22/08/2017	14:16	NWQG55	50.43322	-5.11676	168	4702	NWQG_2FGL50817_GT55_STN_168_A1_14		25.87	0.39
22/08/2017	14:16	NWQG55	50.43319	-5.11668	168	4703	NWQG_2FGL50817_GT55_STN_168_A1_15	POT LINE CAUGHT AROUND SEABUG BETWEEN STATIONS	25.17	0.32
22/08/2017	14:28	NWQG31	50.43200	-5.11539	169	4704	NWQG_2FGL50817_GT31_STN_169_A1_01		25.47	1.90
22/08/2017	14:28	NWQG31	50.43215	-5.11505	169	4705	NWQG_2FGL50817_GT31_STN_169_A1_02	FAST CURRENT DRIFT	25.77	2.28
22/08/2017	14:29	NWQG31	50.43231	-5.11465	169	4706	NWQG_2FGL50817_GT31_STN_169_A1_03		25.87	2.14
22/08/2017	14:29	NWQG31	50.43241	-5.11450	169	4707	NWQG_2FGL50817_GT31_STN_169_A1_04		25.17	1.43
22/08/2017	14:29	NWQG31	50.43255	-5.11436	169	4708	NWQG_2FGL50817_GT31_STN_169_A1_05		25.07	1.60
22/08/2017	14:30	NWQG31	50.43267	-5.11430	169	4709	NWQG_2FGL50817_GT31_STN_169_A1_06		25.77	1.26
22/08/2017	14:30	NWQG31	50.43285	-5.11430	169	4710	NWQG_2FGL50817_GT31_STN_169_A1_07		25.97	1.56
22/08/2017	14:30	NWQG31	50.43296	-5.11432	169	4711	NWQG_2FGL50817_GT31_STN_169_A1_08		25.47	1.56
22/08/2017	14:31	NWQG31	50.43310	-5.11433	169	4712	NWQG_2FGL50817_GT31_STN_169_A1_09		25.67	1.21
22/08/2017	14:31	NWQG31	50.43321	-5.11433	169	4713	NWQG_2FGL50817_GT31_STN_169_A1_10		24.87	1.19
22/08/2017	14:31	NWQG31	50.43333	-5.11433	169	4714	NWQG_2FGL50817_GT31_STN_169_A1_11		26.07	1.43
22/08/2017	14:32	NWQG31	50.43348	-5.11436	169	4715	NWQG_2FGL50817_GT31_STN_169_A1_12		24.27	1.43
22/08/2017	14:32	NWQG31	50.43363	-5.11441	169	4716	NWQG_2FGL50817_GT31_STN_169_A1_13	ONLY 13 FIXES/PHOTOS DUE TO VESSEL	26.17	1.63

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
								DRIFTING BACK OVER SEABUG DUE TO CURRENT		
22/08/2017	14:43	NWQG33	50.43386	-5.12319	170	4717	NWQG_2FGL50817_GT33_STN_170_A1_01	STATION MOVED FROM ORIGINAL POSITION DUE TO LOOKING FOR SHALLOWER WATER DEPTH	19.97	0.89
22/08/2017	14:44	NWQG33	50.43383	-5.12293	170	4718	NWQG_2FGL50817_GT33_STN_170_A1_02		21.57	1.49
22/08/2017	14:44	NWQG33	50.43382	-5.12279	170	4719	NWQG_2FGL50817_GT33_STN_170_A1_03		19.77	1.20
22/08/2017	14:44	NWQG33	50.43382	-5.12257	170	4720	NWQG_2FGL50817_GT33_STN_170_A1_04		20.57	0.60
22/08/2017	14:45	NWQG33	50.43375	-5.12242	170	4721	NWQG_2FGL50817_GT33_STN_170_A1_05		20.87	1.28
22/08/2017	14:45	NWQG33	50.43369	-5.12227	170	4722	NWQG_2FGL50817_GT33_STN_170_A1_06		21.07	1.11
22/08/2017	14:46	NWQG33	50.43365	-5.12211	170	4723	NWQG_2FGL50817_GT33_STN_170_A1_07		18.97	1.32
22/08/2017	14:46	NWQG33	50.43362	-5.12198	170	4724	NWQG_2FGL50817_GT33_STN_170_A1_08		15.87	0.93
22/08/2017	14:46	NWQG33	50.43360	-5.12182	170	4725	NWQG_2FGL50817_GT33_STN_170_A1_09		14.77	1.39
22/08/2017	14:46	NWQG33	50.43359	-5.12161	170	4726	NWQG_2FGL50817_GT33_STN_170_A1_10		16.17	1.39
22/08/2017	14:47	NWQG33	50.43354	-5.12147	170	4727	NWQG_2FGL50817_GT33_STN_170_A1_11		15.37	1.01
22/08/2017	14:47	NWQG33	50.43350	-5.12133	170	4728	NWQG_2FGL50817_GT33_STN_170_A1_12		14.97	1.33
22/08/2017	14:47	NWQG33	50.43348	-5.12106	170	4729	NWQG_2FGL50817_GT33_STN_170_A1_13		14.67	1.70
22/08/2017	14:48	NWQG33	50.43342	-5.12083	170	4730	NWQG_2FGL50817_GT33_STN_170_A1_14		14.07	1.41
22/08/2017	14:48	NWQG33	50.43336	-5.12066	170	4731	NWQG_2FGL50817_GT33_STN_170_A1_15		14.47	1.52
22/08/2017	15:00	NWQG57 A2	50.42960	-5.12121	171	4732	NWQG_2FGL50817_GT57_STN_171_A2_01	A2. STATION MOVED FROM ORIGINAL POSITION	23.47	2.22
22/08/2017	15:00	NWQG57 A2	50.42963	-5.12085	171	4733	NWQG_2FGL50817_GT57_STN_171_A2_02		23.97	1.74
22/08/2017	15:01	NWQG57 A2	50.42964	-5.12068	171	4734	NWQG_2FGL50817_GT57_STN_171_A2_03		22.97	1.28
22/08/2017	15:01	NWQG57 A2	50.42965	-5.12056	171	4735	NWQG_2FGL50817_GT57_STN_171_A2_04		22.37	1.14
22/08/2017	15:01	NWQG57 A2	50.42974	-5.1203	171	4736	NWQG_2FGL50817_GT57_STN_171_A2_05		21.87	2.44
22/08/2017	15:02	NWQG57 A2	50.42987	-5.12008	171	4737	NWQG_2FGL50817_GT57_STN_171_A2_06		23.37	2.41

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22/08/2017	15:08	NWQG57 A2	50.42958	-5.12346	171	4738	NWQG_2FGL50817_GT57_STN_171_A2_07	DRIFTED CLOSE TO STATION 34. PICKUP SEABUG AND REPOSITION TO WEST	22.57	1.83
22/08/2017	15:08	NWQG57 A2	50.42961	-5.12325	171	4739	NWQG_2FGL50817_GT57_STN_171_A2_08		22.17	1.89
22/08/2017	15:08	NWQG57 A2	50.42971	-5.12294	171	4740	NWQG_2FGL50817_GT57_STN_171_A2_09		21.77	2.52
22/08/2017	15:09	NWQG57 A2	50.42979	-5.12261	171	4741	NWQG_2FGL50817_GT57_STN_171_A2_10		20.97	2.12
22/08/2017	15:09	NWQG57 A2	50.42984	-5.12231	171	4742	NWQG_2FGL50817_GT57_STN_171_A2_11		21.17	2.27
22/08/2017	15:09	NWQG57 A2	50.42987	-5.12205	171	4743	NWQG_2FGL50817_GT57_STN_171_A2_12		21.67	2.06
22/08/2017	15:10	NWQG57 A2	50.42989	-5.12173	171	4744	NWQG_2FGL50817_GT57_STN_171_A2_13		22.07	2.25
22/08/2017	15:10	NWQG57 A2	50.42990	-5.12148	171	4745	NWQG_2FGL50817_GT57_STN_171_A2_14		20.77	2.08
22/08/2017	15:11	NWQG57 A2	50.42987	-5.12119	171	4746	NWQG_2FGL50817_GT57_STN_171_A2_15		21.47	1.70
22/08/2017	15:26	NWQG11	50.41615	-5.12936	172	4747	NWQG_2FGL50817_GT11_STN_172_A1_01	FISHING GEAR AROUND NWQG05&06	17.07	0.97
22/08/2017	15:27	NWQG11	50.41609	-5.12929	172	4748	NWQG_2FGL50817_GT11_STN_172_A1_02		17.17	0.72
22/08/2017	15:27	NWQG11	50.41607	-5.12916	172	4749	NWQG_2FGL50817_GT11_STN_172_A1_03		17.77	0.61
22/08/2017	15:27	NWQG11	50.41602	-5.12903	172	4750		EXTRA FIX	18.27	0.92
22/08/2017	15:28	NWQG11	50.41602	-5.12902	172	4751	NWQG_2FGL50817_GT11_STN_172_A1_04		17.37	0.77
22/08/2017	15:28	NWQG11	50.41594	-5.12896	172	4752	NWQG_2FGL50817_GT11_STN_172_A1_05		17.47	0.68
22/08/2017	15:28	NWQG11	50.41587	-5.12895	172	4753	NWQG_2FGL50817_GT11_STN_172_A1_06		17.57	0.71
22/08/2017	15:29	NWQG11	50.41581	-5.12888	172	4754	NWQG_2FGL50817_GT11_STN_172_A1_07		16.97	0.81
22/08/2017	15:29	NWQG11	50.41570	-5.12865	172	4755	NWQG_2FGL50817_GT11_STN_172_A1_08		17.37	0.97
22/08/2017	15:30	NWQG11	50.41566	-5.12849	172	4756	NWQG_2FGL50817_GT11_STN_172_A1_09		16.87	1.02
22/08/2017	15:30	NWQG11	50.41570	-5.12828	172	4757	NWQG_2FGL50817_GT11_STN_172_A1_10	EXTRA STILLS TAKEN	17.27	1.29
22/08/2017	15:30	NWQG11	50.41568	-5.12816	172	4758	NWQG_2FGL50817_GT11_STN_172_A1_11		17.47	0.63
22/08/2017	15:31	NWQG11	50.41557	-5.12818	172	4759	NWQG_2FGL50817_GT11_STN_172_A1_12		16.57	1.15
22/08/2017	15:31	NWQG11	50.41545	-5.12819	172	4760	NWQG_2FGL50817_GT11_STN_172_A1_13		17.47	1.14
22/08/2017	15:32	NWQG11	50.41534	-5.12815	172	4761	NWQG_2FGL50817_GT11_STN_172_A1_14		17.17	0.98

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
22/08/2017	15:32	NWQG11	50.41530	-5.12808	172	4762	NWQG_2FGL50817_GT11_STN_172_A1_15		16.87	0.67
22/08/2017	15:32	NWQG11	50.41525	-5.12804	172	4763	NWQG_2FGL50817_GT11_STN_172_A1_16		16.37	0.84
22/08/2017	15:33	NWQG11	50.41516	-5.12797	172	4764	NWQG_2FGL50817_GT11_STN_172_A1_17		17.27	1.00
22/08/2017	15:33	NWQG11	50.41507	-5.12793	172	4765	NWQG_2FGL50817_GT11_STN_172_A1_18		17.07	0.81
23/08/2017	13:23	NWQG48	50.40130	-5.15963	199	5193	NWQG_2FGL50817_GT48_STN_199_A1_01		15.57	0.86
23/08/2017	13:24	NWQG48	50.40135	-5.15945	199	5194	NWQG_2FGL50817_GT48_STN_199_A1_02		16.47	1.48
23/08/2017	13:24	NWQG48	50.40137	-5.15924	199	5195	NWQG_2FGL50817_GT48_STN_199_A1_03		16.57	1.51
23/08/2017	13:24	NWQG48	50.40139	-5.15904	199	5196	NWQG_2FGL50817_GT48_STN_199_A1_04		14.97	1.55
23/08/2017	13:25	NWQG48	50.40141	-5.15883	199	5197	NWQG_2FGL50817_GT48_STN_199_A1_05		15.17	1.55
23/08/2017	13:25	NWQG48	50.40143	-5.15862	199	5198	NWQG_2FGL50817_GT48_STN_199_A1_06		15.37	1.63
23/08/2017	13:25	NWQG48	50.40144	-5.15838	199	5199	NWQG_2FGL50817_GT48_STN_199_A1_07		15.47	1.62
23/08/2017	13:26	NWQG48	50.40146	-5.15817	199	5200	NWQG_2FGL50817_GT48_STN_199_A1_08		14.27	1.48
23/08/2017	13:26	NWQG48	50.40148	-5.15795	199	5201	NWQG_2FGL50817_GT48_STN_199_A1_09		13.17	1.59
23/08/2017	13:26	NWQG48	50.40149	-5.15773	199	5202	NWQG_2FGL50817_GT48_STN_199_A1_10		13.07	1.61
23/08/2017	13:27	NWQG48	50.40151	-5.15749	199	5203	NWQG_2FGL50817_GT48_STN_199_A1_11		13.37	1.74
23/08/2017	13:27	NWQG48	50.40153	-5.15727	199	5204	NWQG_2FGL50817_GT48_STN_199_A1_12		13.57	1.63
23/08/2017	13:27	NWQG48	50.40155	-5.15705	199	5205	NWQG_2FGL50817_GT48_STN_199_A1_13		13.47	1.63
23/08/2017	13:28	NWQG48	50.40156	-5.15681	199	5206	NWQG_2FGL50817_GT48_STN_199_A1_14		12.67	1.73
23/08/2017	13:28	NWQG48	50.40157	-5.15656	199	5207	NWQG_2FGL50817_GT48_STN_199_A1_15		13.07	1.69
23/08/2017	13:41	NWQG01	50.41519	-5.14224	200	5208	NWQG_2FGL50817_GT01_STN_200_A1_01		21.17	2.22
23/08/2017	13:42	NWQG01	50.41515	-5.14180	200	5209	NWQG_2FGL50817_GT01_STN_200_A1_02		21.27	1.88
23/08/2017	13:42	NWQG01	50.41515	-5.14142	200	5210	NWQG_2FGL50817_GT01_STN_200_A1_03		20.87	1.95
23/08/2017	13:42	NWQG01	50.41513	-5.14112	200	5211	NWQG_2FGL50817_GT01_STN_200_A1_04	ONLY 4 PHOTOS/FIXES TAKEN DUE TO SAND	21.27	2.22
23/08/2017	13:50	NWQG01 A2	50.41424	-5.14384	201	5212	NWQG_2FGL50817_GT01_STN_201_A2_01	A2 DUE TO SAND IN A1. NO PHOTO	19.27	1.62
23/08/2017	13:50	NWQG01 A2	50.41427	-5.14355	201	5213		A2 NO PHOTO	21.37	1.78

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
23/08/2017	13:51	NWQG01 A2	50.41426	-5.14330	201	5214	NWQG_2FGL50817_GT01_STN_201_A2_02		21.27	1.57
23/08/2017	13:52	NWQG01 A2	50.41431	-5.14167	201	5215	NWQG_2FGL50817_GT01_STN_201_A2_03		20.37	2.18
23/08/2017	13:53	NWQG01 A2	50.41433	-5.14135	201	5216	NWQG_2FGL50817_GT01_STN_201_A2_04		20.47	2.16
23/08/2017	13:53	NWQG01 A2	50.41435	-5.14105	201	5217	NWQG_2FGL50817_GT01_STN_201_A2_05		19.37	2.26
23/08/2017	13:53	NWQG01 A2	50.41436	-5.14076	201	5218	NWQG_2FGL50817_GT01_STN_201_A2_06		19.07	2.18
23/08/2017	13:54	NWQG01 A2	50.41438	-5.14050	201	5219	NWQG_2FGL50817_GT01_STN_201_A2_07		17.77	2.23
23/08/2017	13:54	NWQG01 A2	50.41439	-5.14025	201	5220	NWQG_2FGL50817_GT01_STN_201_A2_08		17.57	2.00
23/08/2017	13:54	NWQG01 A2	50.41440	-5.14000	201	5221	NWQG_2FGL50817_GT01_STN_201_A2_09		17.27	1.87
23/08/2017	13:55	NWQG01 A2	50.41441	-5.13972	201	5222	NWQG_2FGL50817_GT01_STN_201_A2_10		17.97	1.78
23/08/2017	13:55	NWQG01 A2	50.41441	-5.13948	201	5223	NWQG_2FGL50817_GT01_STN_201_A2_11		17.77	1.79
23/08/2017	13:55	NWQG01 A2	50.41441	-5.13917	201	5224	NWQG_2FGL50817_GT01_STN_201_A2_12		16.47	2.02
23/08/2017	13:56	NWQG01 A2	50.41441	-5.13897	201	5225	NWQG_2FGL50817_GT01_STN_201_A2_13		16.57	1.98
23/08/2017	13:56	NWQG01 A2	50.41441	-5.13872	201	5226	NWQG_2FGL50817_GT01_STN_201_A2_14		16.07	1.89
23/08/2017	13:56	NWQG01 A2	50.41442	-5.13845	201	5227	NWQG_2FGL50817_GT01_STN_201_A2_15		15.87	1.97
23/08/2017	13:57	NWQG01 A2	50.41444	-5.13797	201	5228	NWQG_2FGL50817_GT01_STN_201_A2_16		19.07	1.65
24/08/2017	08:53	NWQG50_A3	50.40143	-5.15668	202	4766	NWQG_2FGL50817_GT50_STN_202_A3_01		16.57	1.41
24/08/2017	08:53	NWQG50_A3	50.40139	-5.15646	202	4767	NWQG_2FGL50817_GT50_STN_202_A3_02	DELAYED PHOTO	17.97	1.17
24/08/2017	08:54	NWQG50_A3	50.40136	-5.15611	202	4768	NWQG_2FGL50817_GT50_STN_202_A3_03		18.67	1.33
24/08/2017	08:54	NWQG50_A3	50.40132	-5.15584	202	4769	NWQG_2FGL50817_GT50_STN_202_A3_04		17.87	1.42
24/08/2017	08:55	NWQG50_A3	50.40129	-5.15566	202	4770	NWQG_2FGL50817_GT50_STN_202_A3_05		18.67	1.37
24/08/2017	08:55	NWQG50_A3	50.40131	-5.15548	202	4771	NWQG_2FGL50817_GT50_STN_202_A3_06		18.57	1.35
24/08/2017	08:55	NWQG50_A3	50.40130	-5.15530	202	4772	NWQG_2FGL50817_GT50_STN_202_A3_07		19.97	1.36
24/08/2017	08:56	NWQG50_A3	50.40131	-5.15511	202	4773	NWQG_2FGL50817_GT50_STN_202_A3_08		18.77	1.25
24/08/2017	08:56	NWQG50_A3	50.40132	-5.15493	202	4774	NWQG_2FGL50817_GT50_STN_202_A3_09		19.67	1.30
24/08/2017	08:56	NWQG50_A3	50.40132	-5.15476	202	4775	NWQG_2FGL50817_GT50_STN_202_A3_10		19.47	1.27
24/08/2017	08:57	NWQG50_A3	50.40133	-5.15460	202	4776	NWQG_2FGL50817_GT50_STN_202_A3_11		18.87	1.02

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24/08/2017	08:57	NWQG50_A3	50.40134	-5.15445	202	4777	NWQG_2FGL50817_GT50_STN_202_A3_12	FISHING GEAR	18.67	1.22
24/08/2017	09:04	NWQG48_A2	50.40061	-5.15937	203	4778	NWQG_2FGL50817_GT48_STN_203_A2_01		18.97	1.60
24/08/2017	09:04	NWQG48_A2	50.40060	-5.15907	203	4779	NWQG_2FGL50817_GT48_STN_203_A2_02		18.07	1.68
24/08/2017	09:05	NWQG48_A2	50.40059	-5.15883	203	4780	NWQG_2FGL50817_GT48_STN_203_A2_03		17.57	1.59
24/08/2017	09:05	NWQG48_A2	50.40057	-5.15856	203	4781	NWQG_2FGL50817_GT48_STN_203_A2_04		16.87	1.56
24/08/2017	09:05	NWQG48_A2	50.40057	-5.15831	203	4782	NWQG_2FGL50817_GT48_STN_203_A2_05		16.17	1.50
24/08/2017	09:06	NWQG48_A2	50.40058	-5.15803	203	4783	NWQG_2FGL50817_GT48_STN_203_A2_06		15.77	1.85
24/08/2017	09:06	NWQG48_A2	50.40060	-5.15780	203	4784	NWQG_2FGL50817_GT48_STN_203_A2_07		16.37	1.41
24/08/2017	09:07	NWQG48_A2	50.40061	-5.15753	203	4785	NWQG_2FGL50817_GT48_STN_203_A2_08		16.97	1.70
24/08/2017	09:07	NWQG48_A2	50.40063	-5.15731	203	4786	NWQG_2FGL50817_GT48_STN_203_A2_09		16.37	1.39
24/08/2017	09:07	NWQG48_A2	50.40065	-5.15713	203	4787	NWQG_2FGL50817_GT48_STN_203_A2_10		16.37	1.47
24/08/2017	09:07	NWQG48_A2	50.40065	-5.15694	203	4788	NWQG_2FGL50817_GT48_STN_203_A2_11		16.67	1.42
24/08/2017	09:08	NWQG48_A2	50.40065	-5.15675	203	4789	NWQG_2FGL50817_GT48_STN_203_A2_12		16.57	1.44
24/08/2017	09:08	NWQG48_A2	50.40067	-5.15652	203	4790	NWQG_2FGL50817_GT48_STN_203_A2_13		17.17	1.57
24/08/2017	09:09	NWQG48_A2	50.40070	-5.15624	203	4791	NWQG_2FGL50817_GT48_STN_203_A2_14		17.37	1.73
24/08/2017	09:09	NWQG48_A2	50.40072	-5.15599	203	4792	NWQG_2FGL50817_GT48_STN_203_A2_15		17.37	1.69
24/08/2017	09:09	NWQG48_A2	50.40074	-5.15577	203	4793	NWQG_2FGL50817_GT48_STN_203_A2_16		17.87	1.64
24/08/2017	09:10	NWQG48_A2	50.40075	-5.15554	203	4794	NWQG_2FGL50817_GT48_STN_203_A2_17		18.17	1.63
24/08/2017	09:17	NWQG51_A2	50.40590	-5.16001	204	4795	NWQG_2FGL50817_GT51_STN_204_A2_01		24.17	0.88
24/08/2017	09:18	NWQG51_A2	50.40593	-5.15989	204	4796	NWQG_2FGL50817_GT51_STN_204_A2_02		24.37	1.28
24/08/2017	09:18	NWQG51_A2	50.40596	-5.15974	204	4797	NWQG_2FGL50817_GT51_STN_204_A2_03		23.47	0.71
24/08/2017	09:19	NWQG51_A2	50.40593	-5.15958	204	4798	NWQG_2FGL50817_GT51_STN_204_A2_04		22.97	0.58
24/08/2017	09:19	NWQG51_A2	50.40603	-5.15944	204	4799	NWQG_2FGL50817_GT51_STN_204_A2_05		22.27	1.05
24/08/2017	09:20	NWQG51_A2	50.40602	-5.15928	204	4800	NWQG_2FGL50817_GT51_STN_204_A2_06		22.17	0.97
24/08/2017	09:20	NWQG51_A2	50.40604	-5.15913	204	4801	NWQG_2FGL50817_GT51_STN_204_A2_07		21.97	0.92
24/08/2017	09:21	NWQG51_A2	50.40603	-5.15900	204	4802	NWQG_2FGL50817_GT51_STN_204_A2_08		22.37	0.68

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24/08/2017	09:21	NWQG51_A2	50.40607	-5.15890	204	4803	NWQG_2FGL50817_GT51_STN_204_A2_09		21.57	0.84
24/08/2017	09:21	NWQG51_A2	50.40607	-5.15880	204	4804	NWQG_2FGL50817_GT51_STN_204_A2_10		21.87	0.66
24/08/2017	09:22	NWQG51_A2	50.40607	-5.15871	204	4805	NWQG_2FGL50817_GT51_STN_204_A2_11		21.17	0.60
24/08/2017	09:22	NWQG51_A2	50.40607	-5.15859	204	4806	NWQG_2FGL50817_GT51_STN_204_A2_12		21.47	0.86
24/08/2017	09:22	NWQG51_A2	50.40613	-5.15849	204	4807	NWQG_2FGL50817_GT51_STN_204_A2_13		21.77	0.67
24/08/2017	09:23	NWQG51_A2	50.40616	-5.15838	204	4808	NWQG_2FGL50817_GT51_STN_204_A2_14		21.47	0.59
24/08/2017	09:23	NWQG51_A2	50.40617	-5.15829	204	4809	NWQG_2FGL50817_GT51_STN_204_A2_15		21.27	0.78
24/08/2017	09:24	NWQG51_A2	50.40620	-5.15817	204	4810	NWQG_2FGL50817_GT51_STN_204_A2_16		21.47	0.79
24/08/2017	09:24	NWQG51_A2	50.40617	-5.15804	204	4811	NWQG_2FGL50817_GT51_STN_204_A2_17		20.67	0.69
24/08/2017	09:25	NWQG51_A2	50.40621	-5.15784	204	4812	NWQG_2FGL50817_GT51_STN_204_A2_18		20.77	0.66
24/08/2017	09:32	NWQG47_A2	50.40839	-5.15833	205	4813	NWQG_2FGL50817_GT47_STN_205_A2_01		19.57	0.77
24/08/2017	09:32	NWQG47_A2	50.40831	-5.15831	205	4814	NWQG_2FGL50817_GT47_STN_205_A2_02		19.07	1.22
24/08/2017	09:32	NWQG47_A2	50.40831	-5.15822	205	4815	NWQG_2FGL50817_GT47_STN_205_A2_03		20.07	1.65
24/08/2017	09:33	NWQG47_A2	50.40839	-5.15815	205	4816	NWQG_2FGL50817_GT47_STN_205_A2_04		20.77	0.84
24/08/2017	09:34	NWQG47_A2	50.40845	-5.15801	205	4817	NWQG_2FGL50817_GT47_STN_205_A2_05		20.67	0.73
24/08/2017	09:34	NWQG47_A2	50.40839	-5.15798	205	4818	NWQG_2FGL50817_GT47_STN_205_A2_06		22.07	3.31
24/08/2017	09:34	NWQG47_A2	50.40847	-5.15786	205	4819	NWQG_2FGL50817_GT47_STN_205_A2_07		20.67	1.12
24/08/2017	09:35	NWQG47_A2	50.40841	-5.15785	205	4820	NWQG_2FGL50817_GT47_STN_205_A2_08		20.07	0.61
24/08/2017	09:35	NWQG47_A2	50.40840	-5.15773	205	4821	NWQG_2FGL50817_GT47_STN_205_A2_09		20.77	0.95
24/08/2017	09:36	NWQG47_A2	50.40838	-5.15760	205	4822	NWQG_2FGL50817_GT47_STN_205_A2_10		20.17	1.06
24/08/2017	09:36	NWQG47_A2	50.40847	-5.15745	205	4823	NWQG_2FGL50817_GT47_STN_205_A2_11		20.87	0.90
24/08/2017	09:37	NWQG47_A2	50.40850	-5.15737	205	4824	NWQG_2FGL50817_GT47_STN_205_A2_12		20.37	0.51
24/08/2017	09:37	NWQG47_A2	50.40860	-5.15721	205	4825	NWQG_2FGL50817_GT47_STN_205_A2_13		19.87	1.16
24/08/2017	09:38	NWQG47_A2	50.40866	-5.15706	205	4826	NWQG_2FGL50817_GT47_STN_205_A2_14		18.97	1.20
24/08/2017	09:38	NWQG47_A2	50.40858	-5.15694	205	4827	NWQG_2FGL50817_GT47_STN_205_A2_15		18.77	0.78
24/08/2017	09:39	NWQG47_A2	50.40856	-5.15676	205	4828	NWQG_2FGL50817_GT47_STN_205_A2_16		18.57	0.79

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	09:46	NWQG46_A2	50.40929	-5.15445	206	4829	NWQG_2FGL50817_GT46_STN_206_A2_01		12.87	1.24
24/08/2017	09:47	NWQG46_A2	50.40930	-5.15438	206	4830	NWQG_2FGL50817_GT46_STN_206_A2_02		13.67	1.11
24/08/2017	09:47	NWQG46_A2	50.40929	-5.15428	206	4831	NWQG_2FGL50817_GT46_STN_206_A2_03		14.67	1.44
24/08/2017	09:48	NWQG46_A2	50.40931	-5.15416	206	4832	NWQG_2FGL50817_GT46_STN_206_A2_04		14.07	0.42
24/08/2017	09:48	NWQG46_A2	50.40930	-5.15398	206	4833	NWQG_2FGL50817_GT46_STN_206_A2_05		13.97	0.89
24/08/2017	09:49	NWQG46_A2	50.40946	-5.15386	206	4834	NWQG_2FGL50817_GT46_STN_206_A2_06		13.97	0.40
24/08/2017	09:49	NWQG46_A2	50.40939	-5.15370	206	4835	NWQG_2FGL50817_GT46_STN_206_A2_07		13.67	0.95
24/08/2017	09:50	NWQG46_A2	50.40946	-5.15358	206	4836	NWQG_2FGL50817_GT46_STN_206_A2_08		13.87	1.83
24/08/2017	09:51	NWQG46_A2	50.40939	-5.15339	206	4837	NWQG_2FGL50817_GT46_STN_206_A2_09		13.07	0.94
24/08/2017	09:51	NWQG46_A2	50.40944	-5.15317	206	4838	NWQG_2FGL50817_GT46_STN_206_A2_10		13.67	0.81
24/08/2017	09:52	NWQG46_A2	50.40954	-5.15308	206	4839	NWQG_2FGL50817_GT46_STN_206_A2_11		13.87	0.97
24/08/2017	09:52	NWQG46_A2	50.40958	-5.15293	206	4840	NWQG_2FGL50817_GT46_STN_206_A2_12		13.47	0.94
24/08/2017	09:53	NWQG46_A2	50.40959	-5.15276	206	4841	NWQG_2FGL50817_GT46_STN_206_A2_13		13.97	0.83
24/08/2017	09:54	NWQG46_A2	50.40952	-5.15265	206	4842	NWQG_2FGL50817_GT46_STN_206_A2_14		13.27	0.89
24/08/2017	09:54	NWQG46_A2	50.40945	-5.15249	206	4843	NWQG_2FGL50817_GT46_STN_206_A2_15		11.97	0.60
24/08/2017	09:55	NWQG46_A2	50.40942	-5.15242	206	4844	NWQG_2FGL50817_GT46_STN_206_A2_16		13.37	0.41
24/08/2017	09:55	NWQG46_A2	50.40950	-5.15231	206	4845	NWQG_2FGL50817_GT46_STN_206_A2_17		13.37	0.80
24/08/2017	10:02	NWQG44_A2	50.41112	-5.15728	207	4846	NWQG_2FGL50817_GT44_STN_207_A2_01		21.07	0.47
24/08/2017	10:02	NWQG44_A2	50.41123	-5.15721	207	4847	NWQG_2FGL50817_GT44_STN_207_A2_02		21.77	0.62
24/08/2017	10:03	NWQG44_A2	50.41122	-5.15705	207	4848	NWQG_2FGL50817_GT44_STN_207_A2_03		21.57	1.03
24/08/2017	10:04	NWQG44_A2	50.41130	-5.15690	207	4849	NWQG_2FGL50817_GT44_STN_207_A2_04		21.57	1.40
24/08/2017	10:04	NWQG44_A2	50.41135	-5.15674	207	4850	NWQG_2FGL50817_GT44_STN_207_A2_05		20.97	1.39
24/08/2017	10:05	NWQG44_A2	50.41139	-5.15653	207	4851	NWQG_2FGL50817_GT44_STN_207_A2_06		20.57	1.00
24/08/2017	10:05	NWQG44_A2	50.41133	-5.15642	207	4852	NWQG_2FGL50817_GT44_STN_207_A2_07		19.47	0.10
24/08/2017	10:06	NWQG44_A2	50.41142	-5.15630	207	4853	NWQG_2FGL50817_GT44_STN_207_A2_08		19.77	1.25
24/08/2017	10:06	NWQG44_A2	50.41150	-5.15613	207	4854	NWQG_2FGL50817_GT44_STN_207_A2_09		16.57	1.21

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	10:07	NWQG44_A2	50.41154	-5.1559	207	4855	NWQG_2FGL50817_GT44_STN_207_A2_10		17.77	1.06
24/08/2017	10:07	NWQG44_A2	50.41158	-5.15572	207	4856	NWQG_2FGL50817_GT44_STN_207_A2_11		17.77	1.42
24/08/2017	10:07	NWQG44_A2	50.41157	-5.15560	207	4857	NWQG_2FGL50817_GT44_STN_207_A2_12		19.07	0.73
24/08/2017	10:08	NWQG44_A2	50.41157	-5.15548	207	4858	NWQG_2FGL50817_GT44_STN_207_A2_13		18.47	0.82
24/08/2017	10:08	NWQG44_A2	50.41157	-5.15525	207	4859	NWQG_2FGL50817_GT44_STN_207_A2_14		18.67	1.18
24/08/2017	10:09	NWQG44_A2	50.41161	-5.15511	207	4860	NWQG_2FGL50817_GT44_STN_207_A2_15		18.87	1.75
24/08/2017	10:17	NWQG43_A2	50.41235	-5.15140	208	4861	NWQG_2FGL50817_GT43_STN_208_A2_01		17.37	0.47
24/08/2017	10:17	NWQG43_A2	50.41238	-5.15118	208	4862	NWQG_2FGL50817_GT43_STN_208_A2_02		17.07	1.27
24/08/2017	10:18	NWQG43_A2	50.41238	-5.15106	208	4863	NWQG_2FGL50817_GT43_STN_208_A2_03		18.07	0.81
24/08/2017	10:18	NWQG43_A2	50.41248	-5.15097	208	4864	NWQG_2FGL50817_GT43_STN_208_A2_04		16.77	1.52
24/08/2017	10:19	NWQG43_A2	50.41249	-5.15083	208	4865	NWQG_2FGL50817_GT43_STN_208_A2_05		16.57	0.97
24/08/2017	10:19	NWQG43_A2	50.41248	-5.15068	208	4866	NWQG_2FGL50817_GT43_STN_208_A2_06		15.57	0.68
24/08/2017	10:19	NWQG43_A2	50.41249	-5.15062	208	4867	NWQG_2FGL50817_GT43_STN_208_A2_07		15.97	1.03
24/08/2017	10:20	NWQG43_A2	50.41252	-5.15047	208	4868	NWQG_2FGL50817_GT43_STN_208_A2_08		15.97	0.71
24/08/2017	10:20	NWQG43_A2	50.41250	-5.15034	208	4869	NWQG_2FGL50817_GT43_STN_208_A2_09		16.27	1.01
24/08/2017	10:21	NWQG43_A2	50.41243	-5.15005	208	4870	NWQG_2FGL50817_GT43_STN_208_A2_10		17.57	1.40
24/08/2017	10:21	NWQG43_A2	50.41248	-5.14989	208	4871	NWQG_2FGL50817_GT43_STN_208_A2_11		15.97	0.83
24/08/2017	10:21	NWQG43_A2	50.41248	-5.14980	208	4872	NWQG_2FGL50817_GT43_STN_208_A2_12		16.17	0.33
24/08/2017	10:22	NWQG43_A2	50.41238	-5.14955	208	4873	NWQG_2FGL50817_GT43_STN_208_A2_13		16.77	1.76
24/08/2017	10:22	NWQG43_A2	50.41235	-5.14941	208	4874	NWQG_2FGL50817_GT43_STN_208_A2_14		16.17	0.89
24/08/2017	10:23	NWQG43_A2	50.41238	-5.14923	208	4875	NWQG_2FGL50817_GT43_STN_208_A2_15		16.57	1.10
24/08/2017	10:52	NWQG37_A2	50.41401	-5.15477	209	4876	NWQG_2FGL50817_GT37_STN_209_A2_01		19.47	0.61
24/08/2017	10:52	NWQG37_A2	50.41404	-5.15467	209	4877	NWQG_2FGL50817_GT37_STN_209_A2_02		17.37	0.83
24/08/2017	10:53	NWQG37_A2	50.41406	-5.15456	209	4878	NWQG_2FGL50817_GT37_STN_209_A2_03		17.17	0.75
24/08/2017	10:53	NWQG37_A2	50.41415	-5.15440	209	4879	NWQG_2FGL50817_GT37_STN_209_A2_04		18.07	0.85
24/08/2017	10:54	NWQG37_A2	50.41412	-5.15424	209	4880	NWQG_2FGL50817_GT37_STN_209_A2_05		18.67	1.19

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24/08/2017	10:54	NWQG37_A2	50.41401	-5.15409	209	4881	NWQG_2FGL50817_GT37_STN_209_A2_06		19.97	1.22
24/08/2017	10:55	NWQG37_A2	50.41411	-5.15391	209	4882	NWQG_2FGL50817_GT37_STN_209_A2_07		19.87	1.41
24/08/2017	10:55	NWQG37_A2	50.41410	-5.15370	209	4883	NWQG_2FGL50817_GT37_STN_209_A2_08		18.67	1.17
24/08/2017	10:55	NWQG37_A2	50.41409	-5.15359	209	4884	NWQG_2FGL50817_GT37_STN_209_A2_09		18.67	0.71
24/08/2017	10:56	NWQG37_A2	50.41411	-5.15350	209	4885	NWQG_2FGL50817_GT37_STN_209_A2_10		18.67	0.77
24/08/2017	10:56	NWQG37_A2	50.41413	-5.15336	209	4886	NWQG_2FGL50817_GT37_STN_209_A2_11		18.37	0.78
24/08/2017	10:57	NWQG37_A2	50.41417	-5.15316	209	4887	NWQG_2FGL50817_GT37_STN_209_A2_12		18.07	1.16
24/08/2017	10:57	NWQG37_A2	50.41415	-5.15302	209	4888	NWQG_2FGL50817_GT37_STN_209_A2_13		17.77	0.69
24/08/2017	10:58	NWQG37_A2	50.41420	-5.15292	209	4889	NWQG_2FGL50817_GT37_STN_209_A2_14		17.57	0.70
24/08/2017	10:58	NWQG37_A2	50.41419	-5.15274	209	4890	NWQG_2FGL50817_GT37_STN_209_A2_15		17.67	0.82
24/08/2017	11:04	NWQG60_A2	50.41572	-5.15845	210	4891	NWQG_2FGL50817_GT60_STN_210_A2_01		21.67	0.91
24/08/2017	11:05	NWQG60_A2	50.41574	-5.15833	210	4892	NWQG_2FGL50817_GT60_STN_210_A2_02		21.27	0.48
24/08/2017	11:05	NWQG60_A2	50.41576	-5.15824	210	4893	NWQG_2FGL50817_GT60_STN_210_A2_03		20.47	0.56
24/08/2017	11:06	NWQG60_A2	50.41575	-5.15808	210	4894	NWQG_2FGL50817_GT60_STN_210_A2_04		20.47	1.29
24/08/2017	11:07	NWQG60_A2	50.41581	-5.15793	210	4895	NWQG_2FGL50817_GT60_STN_210_A2_05		20.47	1.04
24/08/2017	11:07	NWQG60_A2	50.41579	-5.15774	210	4896	NWQG_2FGL50817_GT60_STN_210_A2_06		22.17	0.76
24/08/2017	11:07	NWQG60_A2	50.41573	-5.15770	210	4897	NWQG_2FGL50817_GT60_STN_210_A2_07		21.57	0.59
24/08/2017	11:08	NWQG60_A2	50.41571	-5.15759	210	4898	NWQG_2FGL50817_GT60_STN_210_A2_08		21.27	0.83
24/08/2017	11:09	NWQG60_A2	50.41576	-5.1573	210	4899	NWQG_2FGL50817_GT60_STN_210_A2_09		21.67	1.38
24/08/2017	11:09	NWQG60_A2	50.41578	-5.15718	210	4900	NWQG_2FGL50817_GT60_STN_210_A2_10		20.67	0.96
24/08/2017	11:09	NWQG60_A2	50.41578	-5.15709	210	4901	NWQG_2FGL50817_GT60_STN_210_A2_11		20.27	0.69
24/08/2017	11:10	NWQG60_A2	50.41577	-5.15697	210	4902	NWQG_2FGL50817_GT60_STN_210_A2_12		20.07	0.84
24/08/2017	11:10	NWQG60_A2	50.41574	-5.15687	210	4903	NWQG_2FGL50817_GT60_STN_210_A2_13		19.77	0.75
24/08/2017	11:11	NWQG60_A2	50.41577	-5.15671	210	4904	NWQG_2FGL50817_GT60_STN_210_A2_14		18.47	0.69
24/08/2017	11:11	NWQG60_A2	50.41573	-5.15657	210	4905	NWQG_2FGL50817_GT60_STN_210_A2_15		17.57	0.68
24/08/2017	11:16	NWQG42_A2	50.41841	-5.15302	211	4906	NWQG_2FGL50817_GT42_STN_211_A2_01		20.37	0.84

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24/08/2017	11:17	NWQG42_A2	50.41837	-5.15298	211	4907	NWQG_2FGL50817_GT42_STN_211_A2_02		20.47	0.23
24/08/2017	11:17	NWQG42_A2	50.41832	-5.15280	211	4908	NWQG_2FGL50817_GT42_STN_211_A2_03		19.57	1.07
24/08/2017	11:18	NWQG42_A2	50.41840	-5.15264	211	4909	NWQG_2FGL50817_GT42_STN_211_A2_04		19.47	1.26
24/08/2017	11:18	NWQG42_A2	50.41838	-5.15244	211	4910	NWQG_2FGL50817_GT42_STN_211_A2_05		19.67	1.18
24/08/2017	11:18	NWQG42_A2	50.41838	-5.15232	211	4911	NWQG_2FGL50817_GT42_STN_211_A2_06		20.47	0.85
24/08/2017	11:19	NWQG42_A2	50.41833	-5.15224	211	4912	NWQG_2FGL50817_GT42_STN_211_A2_07		20.47	0.45
24/08/2017	11:19	NWQG42_A2	50.41837	-5.15207	211	4913	NWQG_2FGL50817_GT42_STN_211_A2_08		20.47	1.17
24/08/2017	11:20	NWQG42_A2	50.41839	-5.15196	211	4914	NWQG_2FGL50817_GT42_STN_211_A2_09		20.27	0.74
24/08/2017	11:20	NWQG42_A2	50.41840	-5.15186	211	4915	NWQG_2FGL50817_GT42_STN_211_A2_10		20.87	0.97
24/08/2017	11:20	NWQG42_A2	50.41844	-5.15171	211	4916	NWQG_2FGL50817_GT42_STN_211_A2_11		20.87	1.24
24/08/2017	11:21	NWQG42_A2	50.41843	-5.15158	211	4917	NWQG_2FGL50817_GT42_STN_211_A2_12		20.77	0.78
24/08/2017	11:21	NWQG42_A2	50.41842	-5.15141	211	4918	NWQG_2FGL50817_GT42_STN_211_A2_13		21.37	0.72
24/08/2017	11:22	NWQG42_A2	50.41837	-5.15119	211	4919	NWQG_2FGL50817_GT42_STN_211_A2_14		21.37	0.95
24/08/2017	11:22	NWQG42_A2	50.41834	-5.15103	211	4920	NWQG_2FGL50817_GT42_STN_211_A2_15		22.07	1.12
24/08/2017	11:30	NWQG41_A2	50.41928	-5.14923	212	4921	NWQG_2FGL50817_GT41_STN_212_A2_01		21.57	0.94
24/08/2017	11:30	NWQG41_A2	50.41922	-5.14913	212	4922	NWQG_2FGL50817_GT41_STN_212_A2_02		21.87	0.89
24/08/2017	11:31	NWQG41_A2	50.41917	-5.14905	212	4923	NWQG_2FGL50817_GT41_STN_212_A2_03		22.27	1.04
24/08/2017	11:31	NWQG41_A2	50.41912	-5.14893	212	4924	NWQG_2FGL50817_GT41_STN_212_A2_04		21.37	0.76
24/08/2017	11:32	NWQG41_A2	50.41908	-5.14884	212	4925	NWQG_2FGL50817_GT41_STN_212_A2_05		22.47	0.86
24/08/2017	11:32	NWQG41_A2	50.41901	-5.14878	212	4926	NWQG_2FGL50817_GT41_STN_212_A2_06		22.67	1.05
24/08/2017	11:32	NWQG41_A2	50.41898	-5.14864	212	4927	NWQG_2FGL50817_GT41_STN_212_A2_07		21.57	0.96
24/08/2017	11:33	NWQG41_A2	50.41894	-5.14848	212	4928	NWQG_2FGL50817_GT41_STN_212_A2_08		20.47	1.14
24/08/2017	11:33	NWQG41_A2	50.41887	-5.14837	212	4929	NWQG_2FGL50817_GT41_STN_212_A2_09		21.47	1.04
24/08/2017	11:34	NWQG41_A2	50.41880	-5.14825	212	4930	NWQG_2FGL50817_GT41_STN_212_A2_10		21.67	1.19
24/08/2017	11:34	NWQG41_A2	50.41870	-5.14816	212	4931	NWQG_2FGL50817_GT41_STN_212_A2_11		21.97	0.92
24/08/2017	11:34	NWQG41_A2	50.41864	-5.14807	212	4932	NWQG_2FGL50817_GT41_STN_212_A2_12		21.57	0.85

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24/08/2017	11:35	NWQG41_A2	50.41859	-5.14796	212	4933	NWQG_2FGL50817_GT41_STN_212_A2_13		21.37	1.01
24/08/2017	11:35	NWQG41_A2	50.41854	-5.14785	212	4934	NWQG_2FGL50817_GT41_STN_212_A2_14		20.77	1.00
24/08/2017	11:35	NWQG41_A2	50.41850	-5.14771	212	4935	NWQG_2FGL50817_GT41_STN_212_A2_15		20.17	1.08
24/08/2017	11:40	NWQG39_A2	50.41725	-5.14458	213	4936	NWQG_2FGL50817_GT39_STN_213_A2_01		12.77	1.26
24/08/2017	11:40	NWQG39_A2	50.41719	-5.14445	213	4937	NWQG_2FGL50817_GT39_STN_213_A2_02		12.97	1.17
24/08/2017	11:40	NWQG39_A2	50.41714	-5.14437	213	4938	NWQG_2FGL50817_GT39_STN_213_A2_03		14.57	1.24
24/08/2017	11:41	NWQG39_A2	50.41708	-5.14425	213	4939	NWQG_2FGL50817_GT39_STN_213_A2_04		13.47	1.04
24/08/2017	11:41	NWQG39_A2	50.41700	-5.14412	213	4940	NWQG_2FGL50817_GT39_STN_213_A2_05		15.97	0.96
24/08/2017	11:41	NWQG39_A2	50.41692	-5.14407	213	4941	NWQG_2FGL50817_GT39_STN_213_A2_06		15.77	0.90
24/08/2017	11:42	NWQG39_A2	50.41685	-5.14400	213	4942	NWQG_2FGL50817_GT39_STN_213_A2_07		16.57	0.86
24/08/2017	11:42	NWQG39_A2	50.41680	-5.14386	213	4943	NWQG_2FGL50817_GT39_STN_213_A2_08		15.87	1.03
24/08/2017	11:42	NWQG39_A2	50.41676	-5.14375	213	4944	NWQG_2FGL50817_GT39_STN_213_A2_09		16.07	0.95
24/08/2017	11:43	NWQG39_A2	50.41665	-5.14361	213	4945	NWQG_2FGL50817_GT39_STN_213_A2_10		16.37	0.99
24/08/2017	11:43	NWQG39_A2	50.41660	-5.14353	213	4946	NWQG_2FGL50817_GT39_STN_213_A2_11		15.97	0.96
24/08/2017	11:43	NWQG39_A2	50.41654	-5.14341	213	4947	NWQG_2FGL50817_GT39_STN_213_A2_12		16.77	1.04
24/08/2017	11:44	NWQG39_A2	50.41647	-5.14331	213	4948	NWQG_2FGL50817_GT39_STN_213_A2_13		16.47	0.84
24/08/2017	11:44	NWQG39_A2	50.41643	-5.14318	213	4949	NWQG_2FGL50817_GT39_STN_213_A2_14		16.37	1.09
24/08/2017	11:45	NWQG39_A2	50.41638	-5.14304	213	4950	NWQG_2FGL50817_GT39_STN_213_A2_15		16.37	1.00
24/08/2017	11:51	NWQG45_A2	50.41615	-5.15013	214	4951	NWQG_2FGL50817_GT45_STN_214_A2_01		16.67	1.06
24/08/2017	11:51	NWQG45_A2	50.41613	-5.14988	214	4952	NWQG_2FGL50817_GT45_STN_214_A2_02		18.17	1.24
24/08/2017	11:52	NWQG45_A2	50.41612	-5.14970	214	4953	NWQG_2FGL50817_GT45_STN_214_A2_03		19.27	1.30
24/08/2017	11:52	NWQG45_A2	50.41606	-5.14954	214	4954	NWQG_2FGL50817_GT45_STN_214_A2_04		18.47	1.31
24/08/2017	11:52	NWQG45_A2	50.41604	-5.14937	214	4955	NWQG_2FGL50817_GT45_STN_214_A2_05		18.07	1.11
24/08/2017	11:53	NWQG45_A2	50.41601	-5.14927	214	4956	NWQG_2FGL50817_GT45_STN_214_A2_06		17.47	0.81
24/08/2017	11:53	NWQG45_A2	50.41599	-5.14921	214	4957	NWQG_2FGL50817_GT45_STN_214_A2_07		17.57	0.88
24/08/2017	11:53	NWQG45_A2	50.41594	-5.14913	214	4958	NWQG_2FGL50817_GT45_STN_214_A2_08		17.97	0.79

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	11:54	NWQG45_A2	50.41590	-5.14902	214	4959	NWQG_2FGL50817_GT45_STN_214_A2_09		18.37	0.93
24/08/2017	11:54	NWQG45_A2	50.41584	-5.14894	214	4960	NWQG_2FGL50817_GT45_STN_214_A2_10		18.07	1.31
24/08/2017	11:54	NWQG45_A2	50.41579	-5.14881	214	4961	NWQG_2FGL50817_GT45_STN_214_A2_11		20.97	1.09
24/08/2017	11:55	NWQG45_A2	50.41574	-5.14861	214	4962	NWQG_2FGL50817_GT45_STN_214_A2_12		23.37	1.18
24/08/2017	11:55	NWQG45_A2	50.41573	-5.14835	214	4963	NWQG_2FGL50817_GT45_STN_214_A2_13		24.57	1.43
24/08/2017	11:56	NWQG45_A2	50.41573	-5.14820	214	4964	NWQG_2FGL50817_GT45_STN_214_A2_14		24.17	1.61
24/08/2017	11:56	NWQG45_A2	50.41572	-5.14806	214	4965	NWQG_2FGL50817_GT45_STN_214_A2_15		24.57	1.46
24/08/2017	12:02	NWQG27_A4	50.41417	-5.14706	215	4966	NWQG_2FGL50817_GT27_STN_215_A4_01		18.77	1.21
24/08/2017	12:03	NWQG27_A4	50.41413	-5.14694	215	4967	NWQG_2FGL50817_GT27_STN_215_A4_02		18.37	1.10
24/08/2017	12:03	NWQG27_A4	50.41412	-5.14675	215	4968	NWQG_2FGL50817_GT27_STN_215_A4_03		17.87	1.10
24/08/2017	12:03	NWQG27_A4	50.41410	-5.14663	215	4969	NWQG_2FGL50817_GT27_STN_215_A4_04		17.57	1.40
24/08/2017	12:04	NWQG27_A4	50.41405	-5.14648	215	4970	NWQG_2FGL50817_GT27_STN_215_A4_05		17.17	1.15
24/08/2017	12:04	NWQG27_A4	50.41399	-5.14636	215	4971	NWQG_2FGL50817_GT27_STN_215_A4_06		17.47	0.64
24/08/2017	12:04	NWQG27_A4	50.41397	-5.14623	215	4972	NWQG_2FGL50817_GT27_STN_215_A4_07		17.37	0.80
24/08/2017	12:05	NWQG27_A4	50.41396	-5.14605	215	4973	NWQG_2FGL50817_GT27_STN_215_A4_08		17.07	1.26
24/08/2017	12:05	NWQG27_A4	50.41391	-5.14591	215	4974	NWQG_2FGL50817_GT27_STN_215_A4_09		16.97	1.24
24/08/2017	12:05	NWQG27_A4	50.41383	-5.14572	215	4975	NWQG_2FGL50817_GT27_STN_215_A4_10		14.97	1.25
24/08/2017	12:06	NWQG27_A4	50.41378	-5.14562	215	4976	NWQG_2FGL50817_GT27_STN_215_A4_11		16.17	1.10
24/08/2017	12:06	NWQG27_A4	50.41372	-5.14549	215	4977	NWQG_2FGL50817_GT27_STN_215_A4_12		15.57	1.11
24/08/2017	12:06	NWQG27_A4	50.41364	-5.14531	215	4978	NWQG_2FGL50817_GT27_STN_215_A4_13		15.57	1.18
24/08/2017	12:07	NWQG27_A4	50.41356	-5.14519	215	4979	NWQG_2FGL50817_GT27_STN_215_A4_14		15.87	1.17
24/08/2017	12:07	NWQG27_A4	50.41349	-5.14503	215	4980	NWQG_2FGL50817_GT27_STN_215_A4_15		15.07	1.11
24/08/2017	12:12	NWQG02_A2	50.41055	-5.14598	216	4981	NWQG_2FGL50817_GT02_STN_216_A2_01		12.07	0.88
24/08/2017	12:13	NWQG02_A2	50.41051	-5.14581	216	4982	NWQG_2FGL50817_GT02_STN_216_A2_02		12.57	1.22
24/08/2017	12:13	NWQG02_A2	50.41050	-5.14567	216	4983	NWQG_2FGL50817_GT02_STN_216_A2_03		11.87	1.14
24/08/2017	12:14	NWQG02_A2	50.41045	-5.14554	216	4984	NWQG_2FGL50817_GT02_STN_216_A2_04		11.97	1.07

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	12:14	NWQG02_A2	50.41040	-5.14540	216	4985	NWQG_2FGL50817_GT02_STN_216_A2_05		10.57	0.96
24/08/2017	12:14	NWQG02_A2	50.41039	-5.14528	216	4986	NWQG_2FGL50817_GT02_STN_216_A2_06		11.27	0.99
24/08/2017	12:15	NWQG02_A2	50.41037	-5.14515	216	4987	NWQG_2FGL50817_GT02_STN_216_A2_07		11.57	1.10
24/08/2017	12:15	NWQG02_A2	50.41034	-5.14502	216	4988	NWQG_2FGL50817_GT02_STN_216_A2_08		12.57	1.21
24/08/2017	12:15	NWQG02_A2	50.41034	-5.14485	216	4989	NWQG_2FGL50817_GT02_STN_216_A2_09		12.67	1.33
24/08/2017	12:16	NWQG02_A2	50.41033	-5.14467	216	4990	NWQG_2FGL50817_GT02_STN_216_A2_10		14.27	1.39
24/08/2017	12:16	NWQG02_A2	50.41031	-5.14449	216	4991	NWQG_2FGL50817_GT02_STN_216_A2_11		14.67	1.35
24/08/2017	12:16	NWQG02_A2	50.41027	-5.14430	216	4992	NWQG_2FGL50817_GT02_STN_216_A2_12		14.57	1.26
24/08/2017	12:16	NWQG02_A2	50.41022	-5.14419	216	4993	NWQG_2FGL50817_GT02_STN_216_A2_13		14.57	1.07
24/08/2017	12:17	NWQG02_A2	50.41019	-5.14404	216	4994	NWQG_2FGL50817_GT02_STN_216_A2_14		14.67	1.18
24/08/2017	12:17	NWQG02_A2	50.41015	-5.14393	216	4995	NWQG_2FGL50817_GT02_STN_216_A2_15		14.67	1.20
24/08/2017	12:23	NWQG03_A2	50.41145	-5.14478	217	4996	NWQG_2FGL50817_GT03_STN_217_A2_01		15.97	1.22
24/08/2017	12:24	NWQG03_A2	50.41143	-5.14451	217	4997	NWQG_2FGL50817_GT03_STN_217_A2_02		14.67	1.24
24/08/2017	12:24	NWQG03_A2	50.41140	-5.14438	217	4998	NWQG_2FGL50817_GT03_STN_217_A2_03		12.77	1.18
24/08/2017	12:24	NWQG03_A2	50.41137	-5.14424	217	4999	NWQG_2FGL50817_GT03_STN_217_A2_04		12.57	1.20
24/08/2017	12:25	NWQG03_A2	50.41138	-5.14403	217	5000	NWQG_2FGL50817_GT03_STN_217_A2_05		13.17	1.33
24/08/2017	12:25	NWQG03_A2	50.41139	-5.14382	217	5001	NWQG_2FGL50817_GT03_STN_217_A2_06		13.57	1.33
24/08/2017	12:25	NWQG03_A2	50.41138	-5.14363	217	5002	NWQG_2FGL50817_GT03_STN_217_A2_07		13.87	1.35
24/08/2017	12:26	NWQG03_A2	50.41138	-5.14344	217	5003	NWQG_2FGL50817_GT03_STN_217_A2_08		12.87	1.24
24/08/2017	12:26	NWQG03_A2	50.41140	-5.14326	217	5004	NWQG_2FGL50817_GT03_STN_217_A2_09		13.07	1.41
24/08/2017	12:26	NWQG03_A2	50.41140	-5.14309	217	5005	NWQG_2FGL50817_GT03_STN_217_A2_10		13.27	1.28
24/08/2017	12:27	NWQG03_A2	50.41137	-5.14292	217	5006	NWQG_2FGL50817_GT03_STN_217_A2_11		13.37	1.36
24/08/2017	12:27	NWQG03_A2	50.41135	-5.14273	217	5007	NWQG_2FGL50817_GT03_STN_217_A2_12		12.87	1.33
24/08/2017	12:27	NWQG03_A2	50.41131	-5.14254	217	5008	NWQG_2FGL50817_GT03_STN_217_A2_13		12.17	1.53
24/08/2017	12:28	NWQG03_A2	50.41127	-5.14237	217	5009	NWQG_2FGL50817_GT03_STN_217_A2_14		10.77	1.41
24/08/2017	12:28	NWQG03_A2	50.41125	-5.14221	217	5010	NWQG_2FGL50817_GT03_STN_217_A2_15		11.17	1.19

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24/08/2017	12:34	NWQG25_A2	50.41047	-5.13972	218	5011	NWQG_2FGL50817_GT25_STN_218_A2_01	OFF STATION DUE TO FISHING GEAR	13.67	1.00
24/08/2017	12:34	NWQG25_A2	50.41043	-5.13955	218	5012	NWQG_2FGL50817_GT25_STN_218_A2_02		13.87	1.23
24/08/2017	12:34	NWQG25_A2	50.41041	-5.13935	218	5013	NWQG_2FGL50817_GT25_STN_218_A2_03		14.27	1.42
24/08/2017	12:35	NWQG25_A2	50.41037	-5.13915	218	5014	NWQG_2FGL50817_GT25_STN_218_A2_04		14.27	1.41
24/08/2017	12:35	NWQG25_A2	50.41035	-5.13891	218	5015	NWQG_2FGL50817_GT25_STN_218_A2_05		13.77	1.51
24/08/2017	12:35	NWQG25_A2	50.41034	-5.13867	218	5016	NWQG_2FGL50817_GT25_STN_218_A2_06		13.37	1.52
24/08/2017	12:36	NWQG25_A2	50.41035	-5.13843	218	5017	NWQG_2FGL50817_GT25_STN_218_A2_07		13.27	1.57
24/08/2017	12:36	NWQG25_A2	50.41036	-5.13826	218	5018	NWQG_2FGL50817_GT25_STN_218_A2_08		11.97	1.44
24/08/2017	12:36	NWQG25_A2	50.41037	-5.13806	218	5019	NWQG_2FGL50817_GT25_STN_218_A2_09		11.87	1.74
24/08/2017	12:36	NWQG25_A2	50.41040	-5.13790	218	5020	NWQG_2FGL50817_GT25_STN_218_A2_10		11.37	1.69
24/08/2017	12:37	NWQG25_A2	50.41042	-5.13770	218	5021	NWQG_2FGL50817_GT25_STN_218_A2_11		11.87	1.59
24/08/2017	12:37	NWQG25_A2	50.41045	-5.13748	218	5022	NWQG_2FGL50817_GT25_STN_218_A2_12		11.87	1.71
24/08/2017	12:37	NWQG25_A2	50.41047	-5.13732	218	5023	NWQG_2FGL50817_GT25_STN_218_A2_13		9.87	1.61
24/08/2017	12:37	NWQG25_A2	50.41051	-5.13720	218	5024	NWQG_2FGL50817_GT25_STN_218_A2_14		8.17	1.59
24/08/2017	12:38	NWQG25_A2	50.41053	-5.13703	218	5025	NWQG_2FGL50817_GT25_STN_218_A2_15		10.27	1.52
24/08/2017	13:11	NWQG07_A2	50.41446	-5.13103	219	5026	NWQG_2FGL50817_GT07_STN_219_A2_01	no depth	10.17	1.03
24/08/2017	13:11	NWQG07_A2	50.41448	-5.13087	219	5027	NWQG_2FGL50817_GT07_STN_219_A2_02	no depth	10.77	1.09
24/08/2017	13:11	NWQG07_A2	50.41449	-5.13072	219	5028	NWQG_2FGL50817_GT07_STN_219_A2_03		11.17	1.12
24/08/2017	13:12	NWQG07_A2	50.41451	-5.13051	219	5029	NWQG_2FGL50817_GT07_STN_219_A2_04		10.27	1.40
24/08/2017	13:12	NWQG07_A2	50.41454	-5.13032	219	5030	NWQG_2FGL50817_GT07_STN_219_A2_05		10.77	1.35
24/08/2017	13:12	NWQG07_A2	50.41457	-5.13014	219	5031	NWQG_2FGL50817_GT07_STN_219_A2_06		11.47	1.40
24/08/2017	13:13	NWQG07_A2	50.41458	-5.12991	219	5032	NWQG_2FGL50817_GT07_STN_219_A2_07		12.07	1.59
24/08/2017	13:13	NWQG07_A2	50.41459	-5.12964	219	5033	NWQG_2FGL50817_GT07_STN_219_A2_08		11.97	1.76
24/08/2017	13:13	NWQG07_A2	50.41457	-5.12942	219	5034	NWQG_2FGL50817_GT07_STN_219_A2_09		11.77	1.70
24/08/2017	13:14	NWQG07_A2	50.41456	-5.12919	219	5035	NWQG_2FGL50817_GT07_STN_219_A2_10		11.87	1.78
24/08/2017	13:14	NWQG07_A2	50.41456	-5.12893	219	5036	NWQG_2FGL50817_GT07_STN_219_A2_11		11.87	1.70

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	13:14	NWQG07_A2	50.41455	-5.12874	219	5037	NWQG_2FGL50817_GT07_STN_219_A2_12		11.87	1.36
24/08/2017	13:15	NWQG07_A2	50.41457	-5.12848	219	5038	NWQG_2FGL50817_GT07_STN_219_A2_13		12.27	1.43
24/08/2017	13:15	NWQG07_A2	50.41457	-5.12830	219	5039	NWQG_2FGL50817_GT07_STN_219_A2_14		12.57	1.49
24/08/2017	13:15	NWQG07_A2	50.41456	-5.12811	219	5040	NWQG_2FGL50817_GT07_STN_219_A2_15	CLOSE TO FISHING GEAR AND ROCKS	12.67	1.37
24/08/2017	13:22	NWQG09_A2	50.41561	-5.13160	220	5041	NWQG_2FGL50817_GT09_STN_220_A2_01		11.97	1.84
24/08/2017	13:23	NWQG09_A2	50.41561	-5.13141	220	5042	NWQG_2FGL50817_GT09_STN_220_A2_02		12.87	1.43
24/08/2017	13:23	NWQG09_A2	50.41560	-5.13120	220	5043	NWQG_2FGL50817_GT09_STN_220_A2_03		10.77	1.57
24/08/2017	13:23	NWQG09_A2	50.41560	-5.13100	220	5044	NWQG_2FGL50817_GT09_STN_220_A2_04		12.27	1.39
24/08/2017	13:24	NWQG09_A2	50.41559	-5.13077	220	5045	NWQG_2FGL50817_GT09_STN_220_A2_05		11.67	1.45
24/08/2017	13:24	NWQG09_A2	50.41558	-5.13056	220	5046	NWQG_2FGL50817_GT09_STN_220_A2_06		11.67	1.62
24/08/2017	13:24	NWQG09_A2	50.41557	-5.13038	220	5047	NWQG_2FGL50817_GT09_STN_220_A2_07		11.17	1.54
24/08/2017	13:25	NWQG09_A2	50.41556	-5.13021	220	5048	NWQG_2FGL50817_GT09_STN_220_A2_08		11.37	1.51
24/08/2017	13:25	NWQG09_A2	50.41554	-5.12997	220	5049	NWQG_2FGL50817_GT09_STN_220_A2_09		11.77	1.61
24/08/2017	13:25	NWQG09_A2	50.41551	-5.12975	220	5050	NWQG_2FGL50817_GT09_STN_220_A2_10		13.37	1.54
24/08/2017	13:25	NWQG09_A2	50.41549	-5.12958	220	5051	NWQG_2FGL50817_GT09_STN_220_A2_11		12.27	1.46
24/08/2017	13:26	NWQG09_A2	50.41549	-5.12944	220	5052	NWQG_2FGL50817_GT09_STN_220_A2_12		12.97	1.36
24/08/2017	13:26	NWQG09_A2	50.41547	-5.12928	220	5053	NWQG_2FGL50817_GT09_STN_220_A2_13		12.97	1.49
24/08/2017	13:26	NWQG09_A2	50.41547	-5.12910	220	5054	NWQG_2FGL50817_GT09_STN_220_A2_14		13.47	1.67
24/08/2017	13:27	NWQG09_A2	50.41549	-5.12888	220	5055	NWQG_2FGL50817_GT09_STN_220_A2_15		12.57	1.78
24/08/2017	13:27	NWQG09_A2	50.41549	-5.12868	220	5056	NWQG_2FGL50817_GT09_STN_220_A2_16		13.67	1.85
24/08/2017	13:27	NWQG09_A2	50.41550	-5.12849	220	5057	NWQG_2FGL50817_GT09_STN_220_A2_17		12.57	1.47
24/08/2017	13:35	NWQG38_A3	50.41943	-5.13661	221	5058	NWQG_2FGL50817_GT38_STN_221_A3_01		18.27	1.81
24/08/2017	13:35	NWQG38_A3	50.41943	-5.13629	221	5059	NWQG_2FGL50817_GT38_STN_221_A3_02		17.37	1.52
24/08/2017	13:35	NWQG38_A3	50.41944	-5.13615	221	5060	NWQG_2FGL50817_GT38_STN_221_A3_03		17.77	1.27
24/08/2017	13:36	NWQG38_A3	50.41943	-5.13599	221	5061	NWQG_2FGL50817_GT38_STN_221_A3_04		18.27	1.45
24/08/2017	13:36	NWQG38_A3	50.41942	-5.13585	221	5062	NWQG_2FGL50817_GT38_STN_221_A3_05		18.37	1.16

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	13:36	NWQG38_A3	50.41942	-5.13573	221	5063	NWQG_2FGL50817_GT38_STN_221_A3_06		18.07	0.95
24/08/2017	13:36	NWQG38_A3	50.41941	-5.13560	221	5064	NWQG_2FGL50817_GT38_STN_221_A3_07		18.67	1.21
24/08/2017	13:37	NWQG38_A3	50.41940	-5.13543	221	5065	NWQG_2FGL50817_GT38_STN_221_A3_08		18.07	1.35
24/08/2017	13:37	NWQG38_A3	50.41940	-5.13522	221	5066	NWQG_2FGL50817_GT38_STN_221_A3_09		18.27	1.46
24/08/2017	13:37	NWQG38_A3	50.41940	-5.13504	221	5067	NWQG_2FGL50817_GT38_STN_221_A3_10		18.47	1.45
24/08/2017	13:38	NWQG38_A3	50.41938	-5.13481	221	5068	NWQG_2FGL50817_GT38_STN_221_A3_11		18.67	1.43
24/08/2017	13:38	NWQG38_A3	50.41937	-5.13464	221	5069	NWQG_2FGL50817_GT38_STN_221_A3_12		19.67	1.52
24/08/2017	13:38	NWQG38_A3	50.41935	-5.13445	221	5070	NWQG_2FGL50817_GT38_STN_221_A3_13		18.87	1.40
24/08/2017	13:39	NWQG38_A3	50.41935	-5.13424	221	5071	NWQG_2FGL50817_GT38_STN_221_A3_14		19.07	1.49
24/08/2017	13:39	NWQG38_A3	50.41934	-5.13407	221	5072	NWQG_2FGL50817_GT38_STN_221_A3_15		19.17	1.54
24/08/2017	13:46	NWQG40_A2	50.41977	-5.14166	222	5073	NWQG_2FGL50817_GT40_STN_222_A2_01		14.87	1.13
24/08/2017	13:46	NWQG40_A2	50.41977	-5.14149	222	5074	NWQG_2FGL50817_GT40_STN_222_A2_02		15.97	1.05
24/08/2017	13:47	NWQG40_A2	50.41975	-5.14135	222	5075	NWQG_2FGL50817_GT40_STN_222_A2_03		16.37	1.06
24/08/2017	13:47	NWQG40_A2	50.41973	-5.14115	222	5076	NWQG_2FGL50817_GT40_STN_222_A2_04		17.07	1.14
24/08/2017	13:48	NWQG40_A2	50.41972	-5.14100	222	5077	NWQG_2FGL50817_GT40_STN_222_A2_05		16.97	1.03
24/08/2017	13:48	NWQG40_A2	50.41971	-5.14083	222	5078	NWQG_2FGL50817_GT40_STN_222_A2_06		16.87	1.19
24/08/2017	13:48	NWQG40_A2	50.41971	-5.14069	222	5079	NWQG_2FGL50817_GT40_STN_222_A2_07		17.37	1.29
24/08/2017	13:48	NWQG40_A2	50.41969	-5.14049	222	5080	NWQG_2FGL50817_GT40_STN_222_A2_08		17.37	1.45
24/08/2017	13:49	NWQG40_A2	50.41967	-5.14029	222	5081	NWQG_2FGL50817_GT40_STN_222_A2_09		18.07	1.31
24/08/2017	13:49	NWQG40_A2	50.41965	-5.14008	222	5082	NWQG_2FGL50817_GT40_STN_222_A2_10		18.87	1.44
24/08/2017	13:50	NWQG40_A2	50.41960	-5.13989	222	5083	NWQG_2FGL50817_GT40_STN_222_A2_11		18.27	1.41
24/08/2017	13:50	NWQG40_A2	50.41958	-5.13966	222	5084	NWQG_2FGL50817_GT40_STN_222_A2_12		19.37	1.58
24/08/2017	13:50	NWQG40_A2	50.41956	-5.13948	222	5085	NWQG_2FGL50817_GT40_STN_222_A2_13		19.07	1.25
24/08/2017	13:50	NWQG40_A2	50.41953	-5.13934	222	5086	NWQG_2FGL50817_GT40_STN_222_A2_14		19.07	1.43
24/08/2017	13:51	NWQG40_A2	50.41951	-5.13916	222	5087	NWQG_2FGL50817_GT40_STN_222_A2_15		19.07	1.37
24/08/2017	13:55	NWQG36_A2	50.41861	-5.13935	223	5088	NWQG_2FGL50817_GT36_STN_223_A2_01		12.17	1.47

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	13:55	NWQG36_A2	50.41858	-5.13908	223	5089	NWQG_2FGL50817_GT36_STN_223_A2_02		13.67	1.42
24/08/2017	13:56	NWQG36_A2	50.41856	-5.13889	223	5090	NWQG_2FGL50817_GT36_STN_223_A2_03		13.07	1.55
24/08/2017	13:56	NWQG36_A2	50.41856	-5.13872	223	5091	NWQG_2FGL50817_GT36_STN_223_A2_04		14.47	1.54
24/08/2017	13:56	NWQG36_A2	50.41855	-5.13849	223	5092	NWQG_2FGL50817_GT36_STN_223_A2_05		15.77	1.59
24/08/2017	13:57	NWQG36_A2	50.41854	-5.13827	223	5093	NWQG_2FGL50817_GT36_STN_223_A2_06		14.87	1.39
24/08/2017	13:57	NWQG36_A2	50.41852	-5.13807	223	5094	NWQG_2FGL50817_GT36_STN_223_A2_07		15.07	1.71
24/08/2017	13:57	NWQG36_A2	50.41850	-5.13792	223	5095	NWQG_2FGL50817_GT36_STN_223_A2_08		14.67	1.28
24/08/2017	13:57	NWQG36_A2	50.41848	-5.13775	223	5096	NWQG_2FGL50817_GT36_STN_223_A2_09		14.37	1.42
24/08/2017	13:58	NWQG36_A2	50.41846	-5.1376	223	5097	NWQG_2FGL50817_GT36_STN_223_A2_10		13.77	1.42
24/08/2017	13:58	NWQG36_A2	50.41845	-5.13744	223	5098	NWQG_2FGL50817_GT36_STN_223_A2_11		14.37	1.47
24/08/2017	13:58	NWQG36_A2	50.41842	-5.13718	223	5099	NWQG_2FGL50817_GT36_STN_223_A2_12		13.37	1.40
24/08/2017	13:59	NWQG36_A2	50.41841	-5.13691	223	5100	NWQG_2FGL50817_GT36_STN_223_A2_13		13.67	1.40
24/08/2017	13:59	NWQG36_A2	50.4184	-5.13674	223	5101	NWQG_2FGL50817_GT36_STN_223_A2_14		13.07	1.51
24/08/2017	13:59	NWQG36_A2	50.41837	-5.1365	223	5102	NWQG_2FGL50817_GT36_STN_223_A2_15		12.87	1.58
24/08/2017	14:05	NWQG29_A3	50.41619	-5.13732	224	5103	NWQG_2FGL50817_GT29_STN_224_A3_01		16.77	1.78
24/08/2017	14:06	NWQG29_A3	50.41614	-5.13712	224	5104		NO PHOTO	17.17	1.55
24/08/2017	14:06	NWQG29_A3	50.41612	-5.13689	224	5105	NWQG_2FGL50817_GT29_STN_224_A3_02		16.27	1.31
24/08/2017	14:06	NWQG29_A3	50.41611	-5.13673	224	5106	NWQG_2FGL50817_GT29_STN_224_A3_03		15.87	1.34
24/08/2017	14:07	NWQG29_A3	50.41611	-5.13657	224	5107	NWQG_2FGL50817_GT29_STN_224_A3_04		18.27	1.36
24/08/2017	14:07	NWQG29_A3	50.41614	-5.13633	224	5108	NWQG_2FGL50817_GT29_STN_224_A3_05		16.27	1.47
24/08/2017	14:07	NWQG29_A3	50.41618	-5.13613	224	5109	NWQG_2FGL50817_GT29_STN_224_A3_06		16.37	1.51
24/08/2017	14:08	NWQG29_A3	50.41624	-5.13588	224	5110	NWQG_2FGL50817_GT29_STN_224_A3_07		15.97	1.90
24/08/2017	14:08	NWQG29_A3	50.41629	-5.13563	224	5111	NWQG_2FGL50817_GT29_STN_224_A3_08		15.57	1.67
24/08/2017	14:08	NWQG29_A3	50.41635	-5.13534	224	5112	NWQG_2FGL50817_GT29_STN_224_A3_09		15.47	2.03
24/08/2017	14:09	NWQG29_A3	50.4164	-5.13511	224	5113	NWQG_2FGL50817_GT29_STN_224_A3_10	DELAYED PHOTO, CAMERA SOFTWARE	15.57	1.82

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
								CRASHED, COSE TO FISHING GEAR		
24/08/2017	14:24	NWQG49_A2	50.40261	-5.15763	225	5114	NWQG_2FGL50817_GT49_STN_225_A2_01	STILL MEDIUM RESOLUTION	13.67	1.38
24/08/2017	14:24	NWQG49_A2	50.40264	-5.15737	225	5115	NWQG_2FGL50817_GT49_STN_225_A2_02		13.67	1.46
24/08/2017	14:25	NWQG49_A2	50.40268	-5.15707	225	5116	NWQG_2FGL50817_GT49_STN_225_A2_03		14.87	1.55
24/08/2017	14:25	NWQG49_A2	50.40271	-5.15678	225	5117	NWQG_2FGL50817_GT49_STN_225_A2_04		14.47	1.44
24/08/2017	14:26	NWQG49_A2	50.40271	-5.15661	225	5118	NWQG_2FGL50817_GT49_STN_225_A2_05		14.77	1.42
24/08/2017	14:26	NWQG49_A2	50.40272	-5.15643	225	5119	NWQG_2FGL50817_GT49_STN_225_A2_06		14.97	1.42
24/08/2017	14:26	NWQG49_A2	50.40274	-5.15617	225	5120	NWQG_2FGL50817_GT49_STN_225_A2_07		16.27	1.54
24/08/2017	14:27	NWQG49_A2	50.40274	-5.15596	225	5121	NWQG_2FGL50817_GT49_STN_225_A2_08		16.67	1.32
24/08/2017	14:27	NWQG49_A2	50.40274	-5.15579	225	5122	NWQG_2FGL50817_GT49_STN_225_A2_09		16.47	1.34
24/08/2017	14:27	NWQG49_A2	50.40275	-5.15557	225	5123	NWQG_2FGL50817_GT49_STN_225_A2_10		16.87	1.47
24/08/2017	14:28	NWQG49_A2	50.40277	-5.15532	225	5124	NWQG_2FGL50817_GT49_STN_225_A2_11		17.17	1.62
24/08/2017	14:28	NWQG49_A2	50.40277	-5.15513	225	5125	NWQG_2FGL50817_GT49_STN_225_A2_12		16.87	1.41
24/08/2017	14:28	NWQG49_A2	50.40279	-5.15491	225	5126	NWQG_2FGL50817_GT49_STN_225_A2_13		16.47	1.49
24/08/2017	14:29	NWQG49_A2	50.40279	-5.15466	225	5127	NWQG_2FGL50817_GT49_STN_225_A2_14		16.07	1.37
24/08/2017	14:29	NWQG49_A2	50.40281	-5.15449	225	5128	NWQG_2FGL50817_GT49_STN_225_A2_15		15.17	1.37
24/08/2017	14:29	NWQG49_A2	50.40283	-5.15429	225	5129	NWQG_2FGL50817_GT49_STN_225_A2_16		13.97	1.49
24/08/2017	14:30	NWQG49_A2	50.40284	-5.15413	225	5130	NWQG_2FGL50817_GT49_STN_225_A2_17		13.27	1.20
24/08/2017	14:42	NWQG04_A2	50.41351	-5.14219	226	5131	NWQG_2FGL50817_GT04_STN_226_A2_01		15.37	1.53
24/08/2017	14:43	NWQG04_A2	50.41348	-5.14190	226	5132	NWQG_2FGL50817_GT04_STN_226_A2_02		15.47	1.69
24/08/2017	14:43	NWQG04_A2	50.41347	-5.14174	226	5133	NWQG_2FGL50817_GT04_STN_226_A2_03		16.87	1.62
24/08/2017	14:43	NWQG04_A2	50.41349	-5.1415	226	5134	NWQG_2FGL50817_GT04_STN_226_A2_04		16.47	1.54
24/08/2017	14:44	NWQG04_A2	50.41350	-5.14127	226	5135	NWQG_2FGL50817_GT04_STN_226_A2_05		16.87	1.53
24/08/2017	14:44	NWQG04_A2	50.41352	-5.14107	226	5136	NWQG_2FGL50817_GT04_STN_226_A2_06		16.77	1.42
24/08/2017	14:44	NWQG04_A2	50.41351	-5.14078	226	5137	NWQG_2FGL50817_GT04_STN_226_A2_07		17.37	1.73

Date	Time UTC	Station Code	Latitude (decimal degrees)	Longitude (decimal degrees)	Cefas STN No.	HYDRO pro fix No.	Still Label	Notes	Water depth (m)	SOG (knots)
24/08/2017	14:45	NWQG04_A2	50.41351	-5.14054	226	5138	NWQG_2FGL50817_GT04_STN_226_A2_08		17.37	1.69
24/08/2017	14:45	NWQG04_A2	50.41352	-5.14031	226	5139	NWQG_2FGL50817_GT04_STN_226_A2_09		17.67	1.65
24/08/2017	14:45	NWQG04_A2	50.41355	-5.14010	226	5140	NWQG_2FGL50817_GT04_STN_226_A2_10		17.77	1.54
24/08/2017	14:46	NWQG04_A2	50.41357	-5.13985	226	5141	NWQG_2FGL50817_GT04_STN_226_A2_11		17.37	1.54
24/08/2017	14:46	NWQG04_A2	50.41358	-5.13960	226	5142	NWQG_2FGL50817_GT04_STN_226_A2_12		17.57	1.65
24/08/2017	14:47	NWQG04_A2	50.41360	-5.13934	226	5143	NWQG_2FGL50817_GT04_STN_226_A2_13		17.67	1.55
24/08/2017	14:47	NWQG04_A2	50.41362	-5.13909	226	5144	NWQG_2FGL50817_GT04_STN_226_A2_14	RECOVERED DUE TO FISHING GEAR	17.57	1.35
24/08/2017	16:07	NWQG10_A1	50.4192	-5.12205	227	5145	NWQG_2FGL50817_GT10_STN_227_A1_01	COVERED ALL INFRALITTORAL HABITAT WITHIN MCZ, NO FURTHER SPACE FOR DROPPING CAMERA DUE TO FISHING GEAR.	18.77	2.4
24/08/2017	16:08	NWQG10_A1	50.41920	-5.12181	227	5146	NWQG_2FGL50817_GT10_STN_227_A1_02		18.87	2.04
24/08/2017	16:08	NWQG10_A1	50.41920	-5.12157	227	5147	NWQG_2FGL50817_GT10_STN_227_A1_03		18.17	1.90
24/08/2017	16:08	NWQG10_A1	50.41920	-5.12136	227	5148	NWQG_2FGL50817_GT10_STN_227_A1_04		18.37	1.90
24/08/2017	16:08	NWQG10_A1	50.41920	-5.12114	227	5149	NWQG_2FGL50817_GT10_STN_227_A1_05		18.07	1.90
24/08/2017	16:12	NWQG28_A1	50.41914	-5.11616	228	5150	NWQG_2FGL50817_GT28_STN_228_A1_01		15.97	2.28
24/08/2017	16:12	NWQG28_A1	50.41914	-5.11589	228	5151	NWQG_2FGL50817_GT28_STN_228_A1_02		15.47	2.19
24/08/2017	16:12	NWQG28_A1	50.41913	-5.11569	228	5152	NWQG_2FGL50817_GT28_STN_228_A1_03		15.37	2.04
24/08/2017	16:13	NWQG28_A1	50.41911	-5.11549	228	5153	NWQG_2FGL50817_GT28_STN_228_A1_04		15.07	1.89
24/08/2017	16:13	NWQG28_A1	50.41910	-5.11529	228	5154	NWQG_2FGL50817_GT28_STN_228_A1_05		15.27	1.69

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