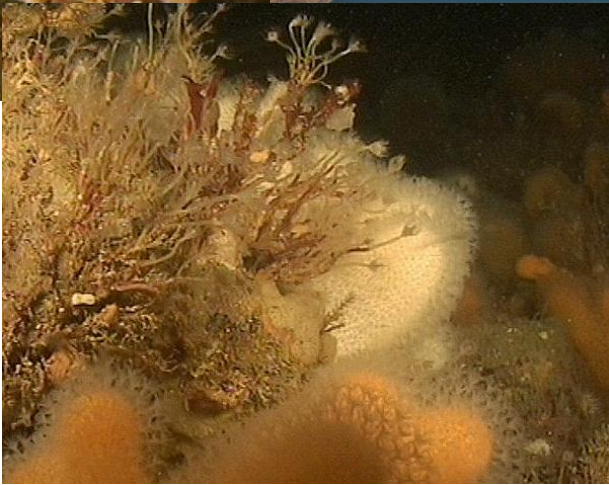


# **VIDEO SURVEY FOR THE SOUND OF ISLAY CABLE ROUTE**

## **REPORT**

**Christine Howson and Tom Mercer**

**2012**



Video Survey for the Sound of Islay Cable Route.

**Client**

**ScottishPower Renewables**

**Contractor**

**Aquatic Survey & Monitoring Ltd.**

Rowangate  
5 Whitfield Brow  
Bollihope  
Frosterley  
Co. Durham  
DL13 2SZ

**Primary Author**

Christine Howson  
Tel. +44 1875 613256



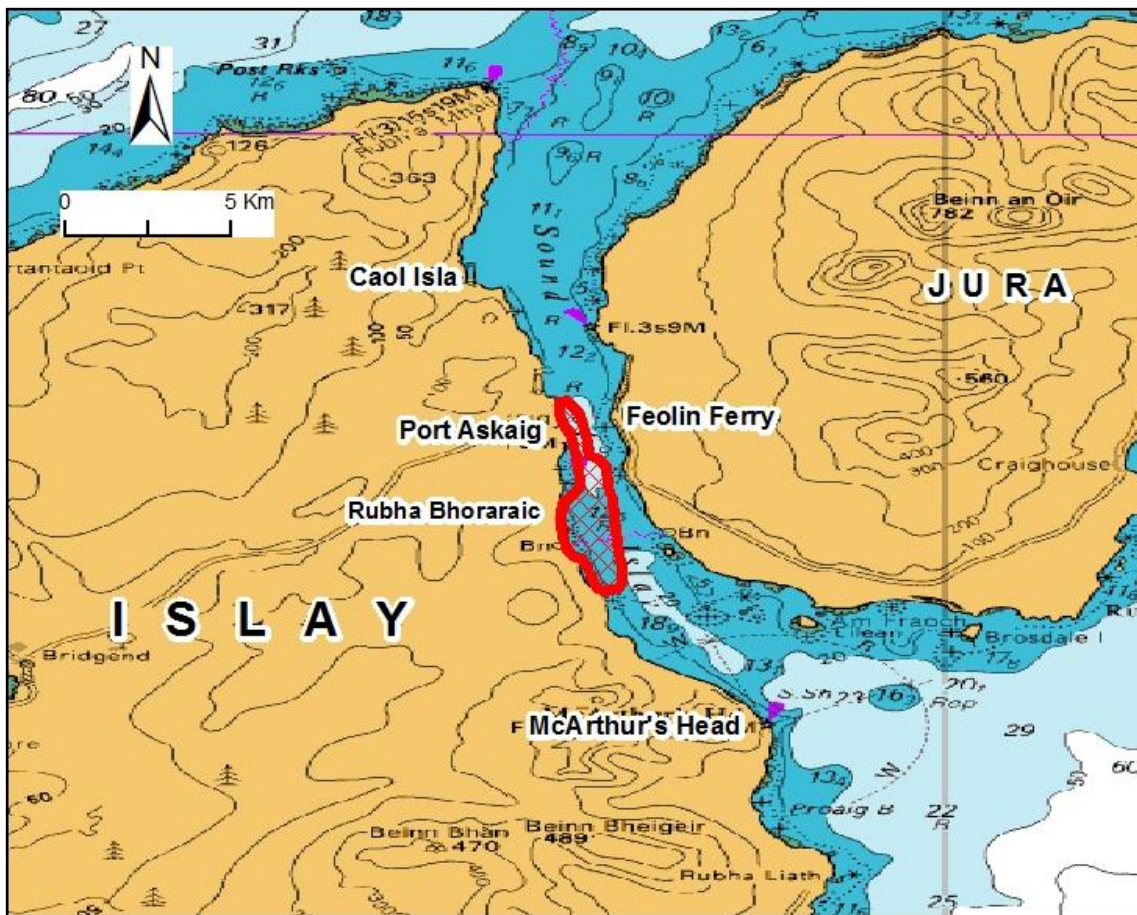
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# 1 INTRODUCTION

The strong tides that run through the Sound of Islay, the narrow rocky channel separating Islay from Jura, make it an attractive location for tidal energy turbines. The possibility of a tidal power installation has been under consideration for some years and a number of surveys have been carried out for various stages of the project. Aquatic Survey and Monitoring Ltd (ASML) were contracted in 2011 by ScottishPower Renewables to carry out a further survey of the seabed in the area proposed for cable routes ([Figure 1](#)). This report presents the results of the video survey which was carried out during December 2011 and March 2012.

**Figure 1** General location. Survey area lies within red line



## 2 METHODS

### 2.1 Environmental conditions

The Sound of Islay runs for approximately 21 km from north west to south east but is only 1.4 km wide at its narrowest point at Port Askaig. The configuration of the Sound means that it is scoured by tides of up to 5 knots but it is very sheltered from wave action, unless winds are from the north west or south east. The deepest part of the central channel, an area of 50 to 60 m depth, extends from the narrow point at Port Askaig south for about 1.5 km. The seabed in the main, steep-sided channel is predominantly rock, boulder or cobble with some sediment in shallow embayments along the channel sides.

## 2.2 Survey strategy

Two separate areas were identified for survey ([Figure 2](#)). The main focus was the central channel from the headland of Carraig Mòr south to the bay north of Rubha an t-Salainn (Survey Area South), with a smaller area in the immediate vicinity of Port Askaig and the harbour (Survey Area North).

**Figure 2** Planned survey area with respect to turbine locations.

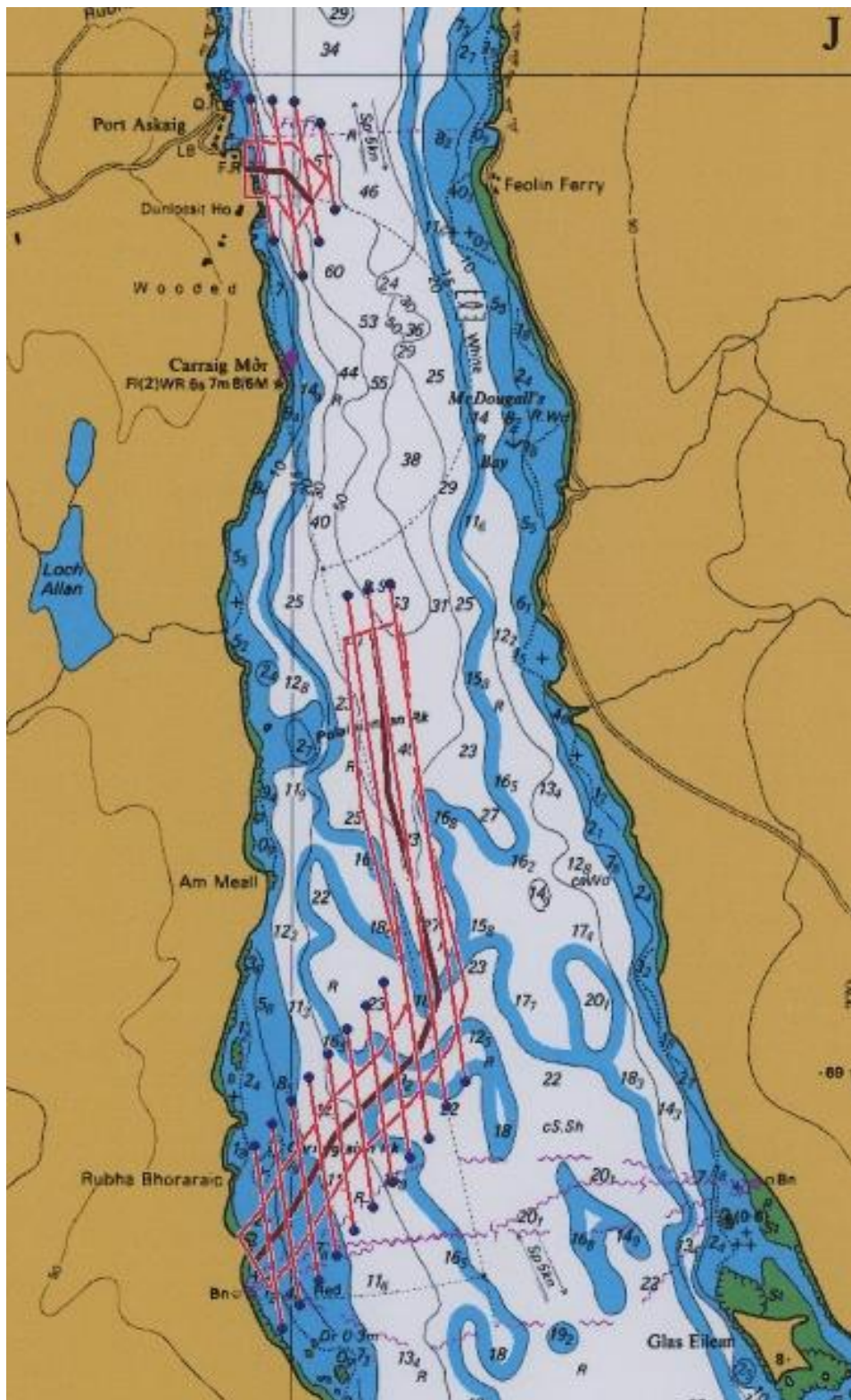


[Figure 3](#) shows the proposed survey transects running north to south, aligned with the direction of tidal flow, across the two potential cable routes. The east-west spacing of the transects was approximately 75 m, with the shallowest being in the kelp zone of the sublittoral at approximately 5 m bcd. The plan was to allow the camera to drift along each of this series of transects. It was intended that each tow would be at least 200 m in length so that the width of the potential cable corridor would be covered. The camera would generally be allowed to drift along the seabed for between 3 and 5 minutes to achieve this. Where the camera needed to cover the greater lengths in the northern section of Survey Area South, this would be achieved either by longer tows with the video, or by a series of short drops that together would make up the coverage shown on [Figure 3](#).

The main aim of this exercise was to identify the biotopes along each transect in accordance with Procedural Guideline 3-5 (Davies *et al.* 2001) of the JNCC's Marine Monitoring Handbook. It was expected that the environmental conditions prevailing during the survey would determine to a large extent the exact duration and coverage of each drop. If the tide was particularly strong, the camera might only be kept on the seabed until it was judged that there was enough footage to identify the biotopes present. If the seabed substratum was mixed, the tows would generally be longer within the safe limits of the operating conditions.



**Figure 3** Survey plan for the Sound of Islay. The red lines with blue spots show the proposed video transects.



## 2.3 Field methods

Field work was carried out over two periods of neap tides, 5<sup>th</sup> December 2011 and 15<sup>th</sup> – 17<sup>th</sup> March 2012 by Tom Mercer and Christine Howson of ASML and Colin Campbell of Campbell Marine Contracts. The survey was based at Port Askaig using the RIB Shannick ([Plate 1](#)). Problems with the power supply to the camera system during the first mobilisation during December 2011 meant that the survey had to be curtailed and rescheduled for spring 2012.

Whilst the camera was deployed on the seabed, one surveyor made hand-written records of the station code, GPS locations (start and end), waypoint numbers, drop times and brief notes of the visible habitat, species and any other notable features. A second surveyor controlled the umbilical for the camera on the seabed.

**Plate 1**      *The survey vessel RIB Shannick moored at Port Askaig and leaving at dusk*



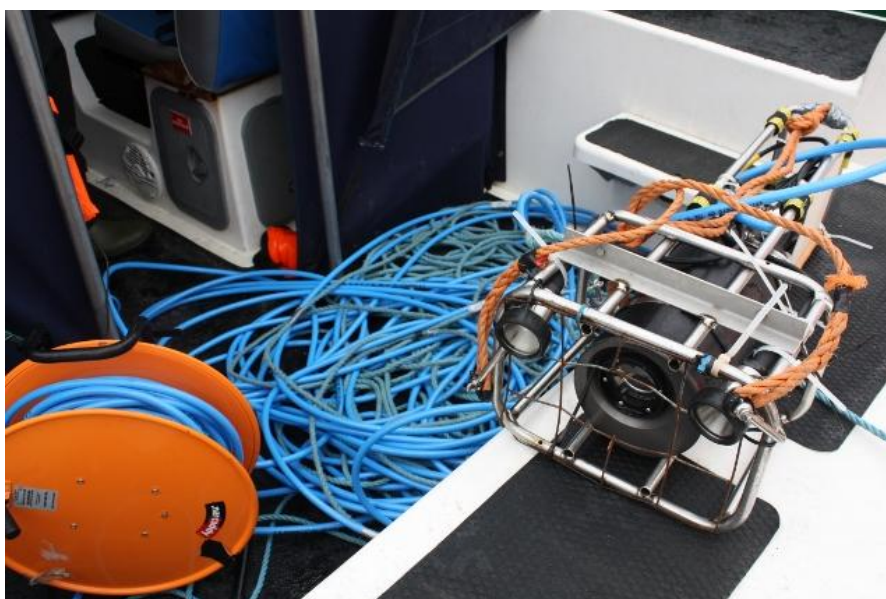
## 2.4 Equipment

The ASML video system is a Sony HDRXR200VE digital video camera in an aluminium housing rated to 130 m ([Plate 2](#)). The use of a 110 m multi-core umbilical allows the system (camera and lights) to be controlled from the surface. The camera itself films the seabed from a position resting on the bottom, if conditions allow, or drifting just above the seabed with the person controlling the cable lifting the camera when obstructions appear on the surface screen. The digital video footage was relayed to the surface via the umbilical where it was viewed and recorded on a Sony mini digital VCR (GV-D1000E). The surface control box provided the remote control facilities over the camera, the surface video recorder and the lights. The lights were powered by an independent surface 110 v system generator.

A back up video system was hired from Seatronics in Aberdeen for the March 2012 survey but was not deployed.

Position fixing and depth recording were carried out by Colin Campbell using a Garmin GPSMAP 551s fitted with a Garmin 50/200 kHz dual frequency transom mount transducer (depth), and an external Garmin GPS antenna, model GA29 (position). Positions were recorded to WGS 84 datum.

**Plate 2** ASML video equipment on the deck of the RIB Shannick



## 2.5 Data handling and analysis

Following the survey, the videos were reviewed by Christine Howson, listing the species present and making notes on the habitat visible. A number of screen grabs were taken from the videos to help with species recognition. Biotopes were assigned to each tow or section of tow using the Marine Habitat Classification Version 04.05 (Connor *et al.* 2004). Excel spreadsheets were compiled and the information was displayed using the GIS package ArcGis. The original video recordings will be lodged with ScottishPower Renewables along with a copy of the ArcGis project and Excel data spreadsheets. All depths have been corrected to chart datum.

## 3 RESULTS

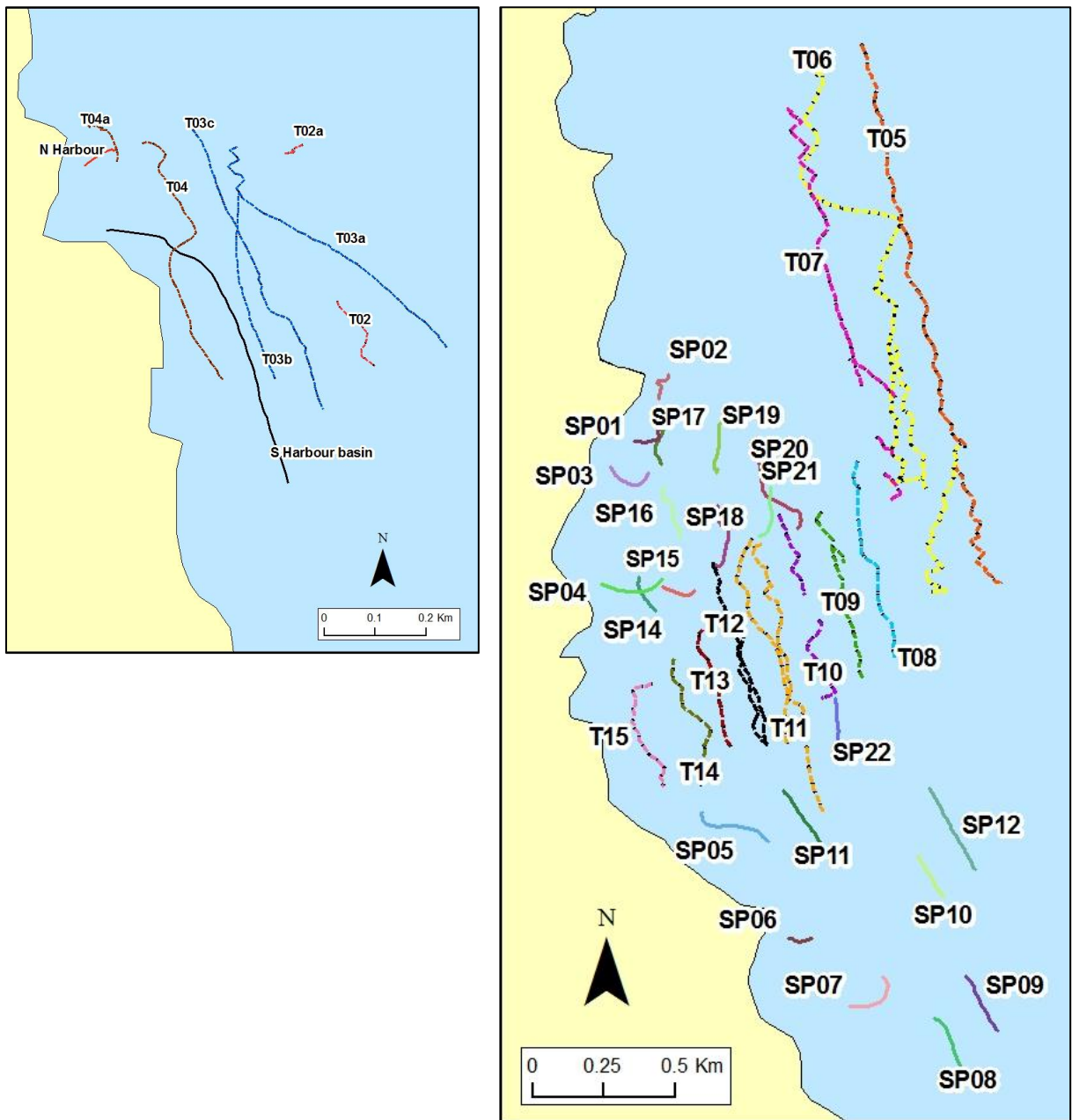
Eleven video transects were recorded covering Survey Area South with 22 additional shorter transects or spots covering the bay where the cable would come ashore (Figure 4). Five transects were recorded covering Survey Area North, including two to survey the harbour area (Figure 4). The transects ranged in length from 35 m to 1,599 m and altogether a linear distance of approximately 19 km of seabed was surveyed.

During the first mobilization in December 2011, a maerl bed was found in the area where the southern cable route would come ashore. As this is a Priority Marine Feature (PMF) additional drops to those originally planned were carried out in March 2012 to determine the extent of the maerl. These are the 22 short tows (SP01 – SP22).

Biotopes were assigned to all the video data points and these are listed in [Appendix 1](#) with a predictive map of their distribution in [Figure 5](#). [Table 1](#) lists the 12 major biotopes recorded with their approximate area of coverage; brief descriptions of these are given in [Table 2](#) with a representative screen grab where a suitable one was available. Species recorded from the video and screen grabs are listed in Appendix 2, but the inherent difficulty of identifying many species from the video footage can be a problem when assigning biotopes.



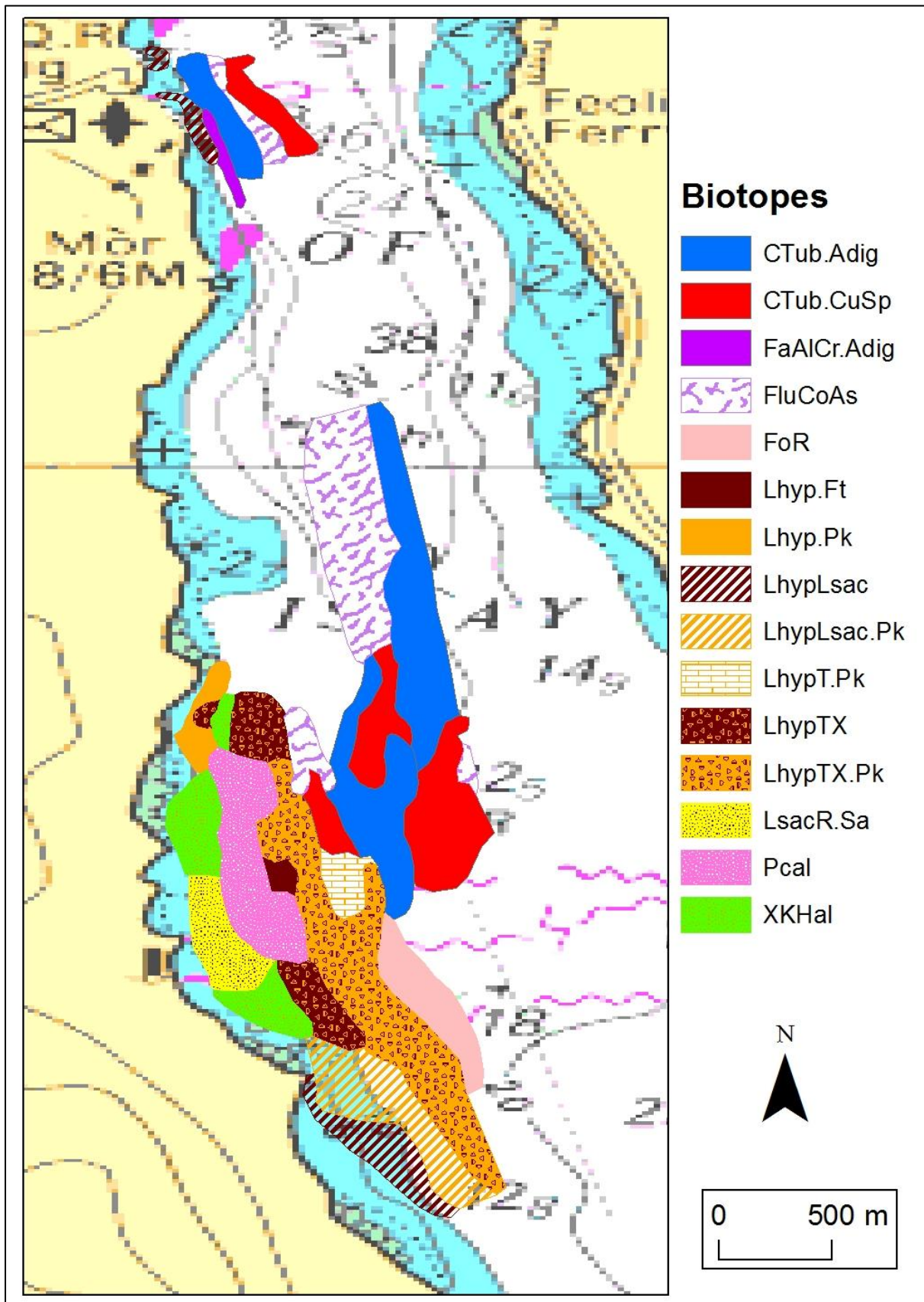
**Figure 4** Location of video transects. (Colours for clarity, with no significance)




**Table 1** Major biotopes recorded from the video with their approximate area of coverage

<b>Biotope</b>	<b>Area (km<sup>2</sup>)</b>
IR.MIR.KR.LhypTX ( incl. Pk)	0.334
CR.HCR.FaT.CTub.Adig	0.311
CR.HCR.XFa.FluCoAs	0.226
CR.HCR.FaT.CTub.CuSp	0.204
IR.LIR.K.LhypLsac ( incl. Pk)	0.193
SS.SMp.Mrl.Pcal	0.129
IR.HIR.KSed.XKHal	0.096
IR.HIR.KFaR.FoR	0.069
SS.SMp.KSwSS.LsacR.Sa	0.058
IR.MIR.KR.Lhyp (.Ft & .Pk)	0.035
IR.MIR.KR.LhypT.Pk	0.027
CR.MCR.EcCr.FaAlCr.Adig	0.012


**Figure 5** Predictive biotope map drawn from all data points






**Table 2** Biotopes recorded in the Sound of Islay. See [Figure 5](#) for their distribution.

Biotope Code	Biotope Title	Brief description	Photograph
CR.HCR.FaT.CTub.CuSp	<p data-bbox="568 357 891 485"><i>Tubularia indivisa</i> and cushion sponges on tide-swept turbid circalittoral bedrock</p> <p data-bbox="568 517 891 724">This biotope dominated the circalittoral rock platforms in the strongest tidal streams. <i>Alcyonium digitatum</i> was present but in lower abundances than in the CTub.Adig biotope.</p> <p data-bbox="568 756 891 788">Depth range: 18 – 54 m</p>	<p data-bbox="927 357 1451 517">Circalittoral bedrock and boulders in the centre of the channel with some coarse shell gravel patches and cobbles. The rock was ridged in places with scoured cobbles at the base of the ridges.</p> <p data-bbox="927 549 1451 1034">Rock heavily encrusted with a rich scour-tolerant fauna. Dominant and highly characteristic species included <i>Tubularia indivisa</i>, <i>Balanus</i> sp., abundant <i>Urticina felina</i>, <i>Abietinaria abietina</i>, <i>Sertularia argentea</i>, <i>Hydrallmania falcata</i>, <i>Sagartia elegans</i>, extensive cushions of sponges including <i>Halichondria panicea</i> and <i>Myxilla</i> sp.. Hydroids, and particularly <i>T. indivisa</i>, were frequently seen growing through the sponge. There were patches of foliose red algae on shallower sections of this biotope. <i>Crossaster papposus</i>, <i>Asterias rubens</i>, <i>Henricia</i> sp., <i>Cancer pagurus</i> all frequent. Numerous other ascidians, anemones, sponges, hydroids &amp; bryozoans present.</p>	




Biotope Code	Biotope Title	Brief description	Photograph
CR.HCR.FaT.CTub.Adig	<p><i>Alcyonium digitatum</i> with dense <i>Tubularia indivisa</i> and anemones on strongly tide-swept circalittoral rock</p>	<p>Irregular, rugged bedrock, boulders and cobble with some coarse shell gravel patches.</p> <p>Rock heavily encrusted with a rich scour-tolerant fauna. Dominant species include <i>Alcyonium digitatum</i>, <i>Tubularia indivisa</i>, <i>Balanus sp.</i>, <i>Urticina felina</i>, cushion sponges such as <i>Hymeniacidon perleve</i> and <i>Myxilla incrustans</i>, <i>Sagartia elegans</i>, <i>Flustra foliacea</i>, <i>Abietinaria abietina</i>, <i>Sertularia argentea</i>, <i>Hydrallmania falcata</i>. Patches of foliose red algae on shallower sections of biotope. <i>Asterias rubens</i>, <i>Henricia sp.</i>, <i>Cancer pagurus</i>, <i>Crossaster papposus</i> all frequent. Numerous other ascidians, anemones, sponges, hydroids &amp; bryozoans present.</p>	


Biotope Code	Biotope Title	Brief description	Photograph
CR.HCR.XFa.FluCoAs	<p data-bbox="568 320 891 443"><i>Flustra foliacea</i> and colonial ascidians on tide-swept moderately wave-exposed circalittoral rock</p> <p data-bbox="568 475 891 778">This biotope is a mixture of scoured mobile cobbles with little fauna and more stable cobbles mixed with gravel supporting a rich fauna. It was difficult to separate these two variants spatially and so they have been grouped into one species rich biotope.</p> <p data-bbox="568 810 891 842">Depth range: 20 - 56 m</p>	<p data-bbox="927 320 1451 379">Scoured cobble and shell gravel with some boulders and small amounts of bedrock.</p> <p data-bbox="927 411 1451 687">Scoured cobbles are dominated by <i>Flustra foliacea</i>, <i>Pomatoceros</i> sp. and coralline algal crusts. Other species present in varying abundances include <i>Alcyonium digitatum</i>, <i>Tubularia indivisa</i>, <i>Sertularia argentea</i>, <i>Nemertesia</i> spp., bryozoan turf with <i>Crisia</i> sp., <i>Echinus esculentus</i>, <i>Asterias rubens</i>, sponge/ascidian crusts, <i>Urticina felina</i> (common).</p>	

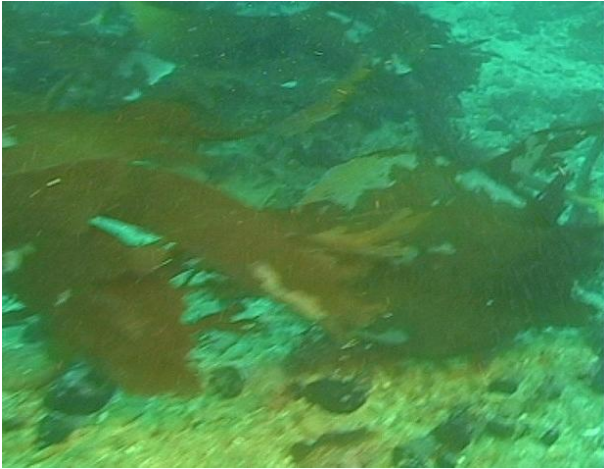

Biotope Code	Biotope Title	Brief description	Photograph
CR.MCR.EcCr.FaAlCr.Adig	<p data-bbox="568 284 875 432"><i>Alcyonium digitatum</i>, <i>Pomatoceros triqueter</i>, algal and bryozoan crusts on wave-exposed circalittoral rock</p> <p data-bbox="568 469 875 587">This occurred in a narrow strip on the steep channel side just south of Port Askaig.</p> <p data-bbox="568 624 846 651">Depth range: 22 - 27 m</p>	<p data-bbox="927 284 1435 368">Bedrock and boulders with <i>Alcyonium digitatum</i>, <i>Echinus esculentus</i>, algal crusts, <i>Pomatoceros</i> sp. and <i>Balanus crenatus</i>.</p> <p data-bbox="927 405 1435 523">Relatively low diversity compared to other areas dominated by <i>A. digitatum</i>, with a higher abundance of <i>E. Esculentus</i> than elsewhere.</p>	
IR.HIR.KFaR.FoR	<p data-bbox="568 842 875 927">Foliose red seaweeds on exposed lower infralittoral rock</p> <p data-bbox="568 963 875 1209">It was difficult to distinguish individual species from the video and photographs. This biotope was seen in the southern part of the survey area, as a zone below the deeper edge of the kelp park.</p> <p data-bbox="568 1246 792 1273">Depth range: 15 m</p>	<p data-bbox="927 842 1435 927">Bedrock and boulders with dense foliose red algae mixed in with hydroid, bryozoan and sponge turf.</p>	





Biotope Code	Biotope Title	Brief description	Photograph
IR.HIR.KSed.XKHal	<p><i>Halidrys siliquosa</i> and mixed kelps on tide-swept infralittoral rock with coarse sediment</p> <p>This biotope was found in patches in the embayment in the south of the area, around the edges of the maerl bed.</p> <p>Depth range: 3 - 11 m</p>	<p>Sand and gravel with pebbles, cobbles and occasional small boulders. These supported <i>Halidrys siliquosa</i>, <i>Laminaria saccharina</i> and <i>Laminaria hyperborea</i> with <i>Desmarestia aculeata</i> and scour-tolerant algae, particularly <i>Dilsea carnosa</i>, <i>Furcellaria/Polyides</i>, <i>Ahnfeltia plicata</i>, <i>Dictyota dichotoma</i> and <i>Ulva lactuca</i>.</p>	



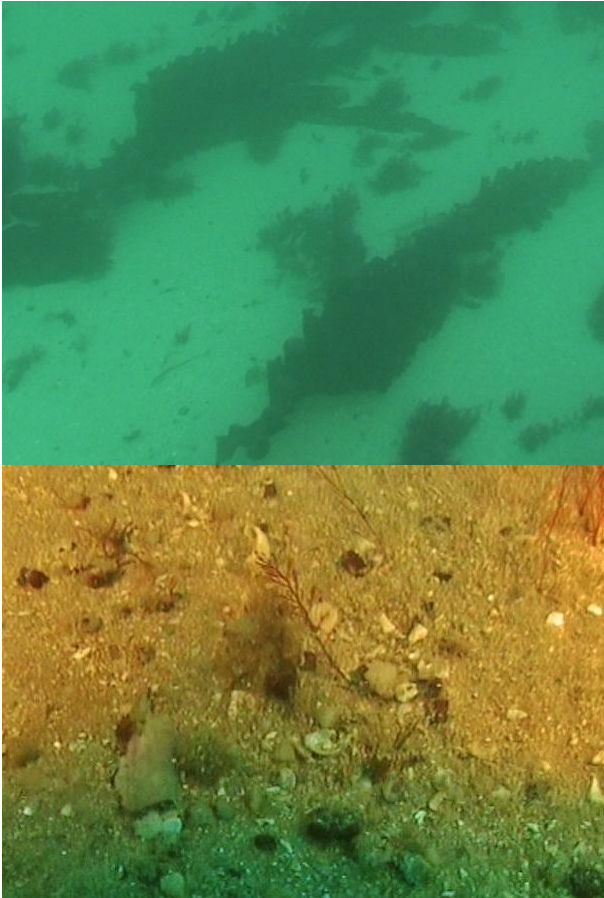
Biotope Code	Biotope Title	Brief description	Photograph
IR.MIR.KR.LhypT.Pk	<p data-bbox="566 280 891 344"><i>Laminaria hyperborea</i> on tide-swept, infralittoral rock</p> <p data-bbox="566 376 891 496">This was found on a small area of bedrock below tide-swept kelp forest on mixed substrata.</p> <p data-bbox="566 528 891 560">Depth range: 15 – 18 m</p>	<p data-bbox="925 280 1435 368">Bedrock, boulder and cobble with <i>Laminaria hyperborea</i>, <i>Echinus esculentus</i>, red algae and <i>Flustra foliacea</i>.</p>	

Biotope Code	Biotope Title	Brief description	Photograph
IR.MIR.KR.LhypTX	<p data-bbox="568 280 869 368"><i>Laminaria hyperborea</i> on tide-swept, infralittoral mixed substrata.</p> <p data-bbox="568 405 898 679">There were long stretches of cobble and mixed sediment along the sides of the channel supporting <i>Laminaria hyperborea</i>, mostly as park. Small areas of more stable bedrock and boulder were classed as LhypT rather than LhypTX</p> <p data-bbox="568 711 860 743">Depth range: 9.5 – 19 m</p>	<p data-bbox="927 280 1402 344">Cobble, pebble, gravel and occasional boulders with maerl fragments in places.</p> <p data-bbox="927 376 1464 552">This scoured mixed cobble and sediment supported small <i>Laminaria hyperborea</i> plants with foliose red algae including <i>Callophyllis laciniata</i>, <i>Dictyota dichotoma</i>, coralline crusts, <i>Sertularia argentea</i>, <i>Echinus esculentus</i> and <i>Crossaster papposus</i>.</p> <p data-bbox="927 592 1420 647">Difficult to take screen grabs in tide-swept conditions with kelp.</p>	
IR.MIR.KR.Lhyp	<p data-bbox="568 775 882 895"><i>Laminaria hyperborea</i> and foliose red seaweeds on moderately exposed infralittoral rock</p> <p data-bbox="568 927 887 1142"><i>L. hyperborea</i> forest (Lhyp.Ft) and park (Lhyp.Pk) were found on small areas of more stable rock inshore of the more tide-swept mixed substrata with kelp.</p> <p data-bbox="568 1174 842 1206">Depth range: 10 - 17 m</p>	<p data-bbox="927 775 1384 863">Boulders, cobbles and pebbles with <i>Laminaria hyperborea</i>. Coralline crusts common.</p> <p data-bbox="927 895 1447 1078">Species recorded included <i>Laminaria hyperborea</i>, <i>Desmarestia aculeata</i>, coralline crusts, <i>Delesseria sanguinea</i>, <i>Bonnemaisonia asparagoides</i>, <i>Cancer pagurus</i>, <i>Echinus esculentus</i> and <i>Gibbula cineraria</i>.</p>	

Biotope Code	Biotope Title	Brief description	Photograph
IR.LIR.K.LhypLsac	<p data-bbox="568 284 882 400">Mixed <i>Laminaria hyperborea</i> and <i>Laminaria saccharina</i> on sheltered infralittoral rock</p> <p data-bbox="568 437 898 740">Kelp forests with a mixture <i>L. hyperborea</i> and <i>L. saccharina</i> were found inshore in the southern part of the survey area and in the harbour basins in the northern section. In the more sheltered harbour basins the kelp plants were cape form.</p> <p data-bbox="568 777 831 804">Depth range: 3 - 14 m</p>	<p data-bbox="927 284 1458 368">Bedrock, boulders, cobbles and pebbles with some patches of sand. Silty in the harbour basins.</p> <p data-bbox="927 405 1458 715">Forest and park of <i>Laminaria hyperborea</i> and <i>Laminaria saccharina</i> with some <i>Halidrys siliquosa</i> and <i>Desmarestia viridis</i> and an understory of foliose algae including <i>Dilsea carnosa</i>, <i>Delesseria sanguinea</i> and <i>Ulva</i> sp. Cobbles were covered with coralline crusts. Other species present included <i>Gibbula cineraria</i>, <i>Asterias rubens</i>, <i>Hya araneus</i>, <i>Echinus esculentus</i> and ascidians on kelp stipes.</p>	

Biotope Code	Biotope Title	Brief description	Photograph
SS.SMp.Mrl.Pcal	<p data-bbox="568 284 898 371"><i>Phymatolithon calcareum</i> maerl beds in infralittoral clean gravel or coarse sand</p> <p data-bbox="568 456 875 544">A maerl bed extends for approximately 1 km in the bay of Rhubha Bhoraraic.</p> <p data-bbox="568 579 831 608">Depth range: 6 - 11 m</p>	<p data-bbox="925 284 1447 435">Level seabed of maerl <i>Phymatolithon calcareum</i>, cobble, pebble and occasional boulders with scattered kelp plants. Maerl was dense in some places, mixed in varying quantities with cobbles in others.</p> <p data-bbox="925 472 1447 775">Several species of kelp and large brown algae present including <i>Laminaria hyperborea</i>, <i>Laminaria saccharina</i>, <i>Saccorhiza polyschides</i>, <i>Halidrys siliquosa</i>. Cobbles are covered with coralline crusts and <i>Pomatoceros</i> sp. Other species include <i>Sagartia elegans</i>, <i>Membranipora membranacea</i>, <i>Electra pilosa</i>, <i>Gibbula magus</i>, <i>Echinus esculentus</i>, <i>Dilsea carnosus</i>, other foliose algae.</p>	



Biotope Code	Biotope Title	Brief description	Photograph
SS.SMp.KSwSS.LsacR.Sa	<p><i>Laminaria saccharina</i> and filamentous red algae on infralittoral sand</p> <p>This biotope was found in shallow water (c. 1.5 to 6 m bcd) inshore of the maerl bed. It also occurred in places as a sub-biotope or mosaic with maerl but this has been mapped as Pcal.</p> <p>Depth range: 1.5 – 11 m</p>	<p>Level seabed of flocculent mud and sand with pebbles and shell gravel fragments. Occasional boulders and cobbles.</p> <p>Large plants of <i>Laminaria saccharina</i> with <i>Arenicola marina</i>, foliose algae, <i>Ulva</i> sp.. Larger stones supported rare <i>Laminaria hyperborea</i> and <i>Halidrys siliquosa</i> plants.</p>	

## 4 DESCRIPTION OF THE AREA

### 4.1 Habitat

The Sound of Islay is approximately 1.4 km wide at its narrowest point at Port Askaig, the northern limit of the survey area. The deepest part of the central channel, an area of 50 to 60 m depth, extends from this narrow point south for about 1.5 km, and this deep basin is the proposed location of the tidal turbines. There is a narrow, shallow shelf along both sides of much of the Sound, with the seabed dropping steeply to the deeper central channel. The shelf is broader in embayments such as that where the cable may come ashore.

The seabed over most of the central survey area where the current speeds are highest consisted of rugged bedrock and boulders interspersed with areas of rounded, mobile cobbles, many of which were very bare. A number of low ridges were apparent on the video; these had large numbers of crevices, fissures and small overhangs, providing a variety of microhabitats for the fauna. This seabed topography in the centre of the Sound, where the current speeds are greatest (up to 5 knots), can be expected to create localised areas of shelter behind and below the rock ridges whereas the tops of the ridges are exposed to the strongest currents.

The shallower shelf at the southern edge of the survey area was out of the very fastest tidal streams. This shelf consisted primarily of coarse sand and gravel with cobbles and boulders, with a large area of maerl. Close inshore there was an area of finer sand. The seabed in the vicinity of the harbour at Port Askaig consisted of silty mixed cobbles, boulders and sediment with some harbour debris apparent.

### 4.2 Biotopes

The communities present in the area are all characteristic of current swept sounds. Bedrock was the largest habitat by area within the Sound and was heavily encrusted with low-lying fauna. Particular species were patchy in their distribution, which was probably an effect of localised variation in current strength. Three major circalittoral biotopes were identified: CR.HCR.FaT.CTub.CuSp; CR.HCR.FaT.CTub.Adig; CR.HCR.XFa.FluCoAs. There was considerable overlap in their distribution and features, with similar species present in each but in differing abundance. They were separated on gross features. FaT.CTub.CuSp was dominated by cushion sponges and hydroids whilst *Alcyonium digitatum* was particularly abundant in FaT.CTub.Adig. XFa.FluCoAs was found predominantly on cobbles.

In the areas of strongest current, such as the higher parts of the ridges, the hydroids *Tubularia indivisa*, *Sertularia argentea* and *Abietinaria abietina* and cushion sponges including *Halichondria panicea*, *Esperiopsis fucorum* and *Myxilla* sp. were abundant, with hydroids often growing through the sponges ([Plate 3](#)). Dead men's fingers *Alcyonium digitatum* were present but in low abundance whereas in places the dahlia anemone *Urticina felina* was superabundant ([Plate 4](#)). These current-swept bedrock communities appeared to have a rich associated fauna of anemones (*Sagartia elegans*, *Actinothoe sphyrodeta*), hydroids including *Hydrallmania falcata* and *Halecium* spp., the barnacle *Balanus crenatus*, other sponges such as *Pachymatisma johnstonia*, ascidians which could not be identified from the video and bryozoans notably *Flustra foliacea* and *Alcyonidium diaphanum*. Mobile species included the dog whelk *Nucella lapillus*, often seen in deeper tidal rapids, the edible crab *Cancer pagurus* and the starfish *Henricia* sp. and *Asterias rubens*.

Vertical faces with fissures and overhangs greatly increased the diversity of the bedrock and it was clear that there were additional ascidians, sponges, bryozoans and anemones on these. Although only a small number of species could be identified from the video, it was felt

that these bedrock communities were very diverse. These communities were classified as CR.HCR.FaT.CTub.CuSp “*Tubularia indivisa* and cushion sponges on tide-swept turbid circalittoral bedrock” as they closely fitted the description of this biotope in Connor *et al.* (2004).

**Plate 3** *Sponges Esperiopsis fucorum and Myxilla sp. with Tubularia indivisa, Alcyonium digitatum, anemones and other hydroids (FaT.CTub.CuSp)*



**Plate 4** *Urticina felina with Tubularia indivisa at a bedrock-cobble junction (FaT.CTub.CuSp)*



In the areas where *Alcyonium digitatum* was abundant, the rock was more broken and the biotope was classified as CR.HCR.FaT.CTub.Adig “*Alcyonium digitatum* with dense *Tubularia indivisa* and anemones on strongly tide-swept circalittoral rock” (Plates [5](#) & [6](#)). The current speed in these areas may have been slightly less than in the areas where FaT.CTub.CuSp dominated. Dead men’s fingers *Alcyonium digitatum* was far more



abundant in this habitat, and the rock surface lacked the extensive cushions of sponges but the community was otherwise similar to that seen in the FaT.CTub.CuSp biotope. Hydroids such as *Tubularia indivisa*, *Nemertesia* spp., *Abietinaria abietina* and *Sertularia argentea* were common as were anemones *Sagartia elegans*, *Actinothoe sphyrodeta* and *Urticina felina*. [Plate 7](#) illustrates the overlap with the CuSp biotope. A small area of a less diverse *A. digitatum* biotope (FaAlCr.Adig) was found on steep rock along the channel side south of Port Askaig.

**Plate 5** *Alcyonium digitatum*, *Tubularia indivisa* and sponge or ascidian mat with sparse red algae (FaT.CTub.Adig.)



**Plate 6** Boulders with *Balanus crenatus* scars, *Alcyonium digitatum*, *Tubularia indivisa*, *Myxilla* sp, *Sagartia elegans* and *Alcyonidium diaphanum* (FaT.CTub.Adig)





**Plate 7**

*Irregular bedrock with Alcyonium digitatum, Flustra foliacea, Hydrallmania falcata, Sagartia elegans and sponge/hydroid/bryozoan turf (FaT.CTub.Adig).*



Smooth, rounded mixed boulders and cobbles with pockets of coarse gravel had sediment scoured communities with the bryozoan *Flustra foliacea* dominant and hydroid/bryozoan turf abundant. Other species were similar to those found in the other rocky biotopes in the area ([Plate 8](#)). These were classed as CR.HCR.XFa.FluCoAs “*Flustra foliacea* and colonial ascidians on tide-swept moderately wave-exposed circalittoral rock”. Ascidian crusts were not conspicuous but the community was generally too diverse and tide-swept to warrant classification as any other *Flustra* biotope. However there were stretches of the seabed with very clean cobbles with little fauna ([Plate 9](#)); these created a mosaic with the *Flustra* biotope, also a cobble habitat, and it was not possible to map them separately. These patches were considered to be a highly scoured and impoverished variant of the FluCoAs biotope and so have been included in this biotope for mapping purposes. This patchiness is typical of tide-swept seabed environments.

**Plate 8**

*Cobbles and gravel with Flustra foliacea, mixed hydroids and bryozoans and Urticina felina (XFa.FluCoAs).*

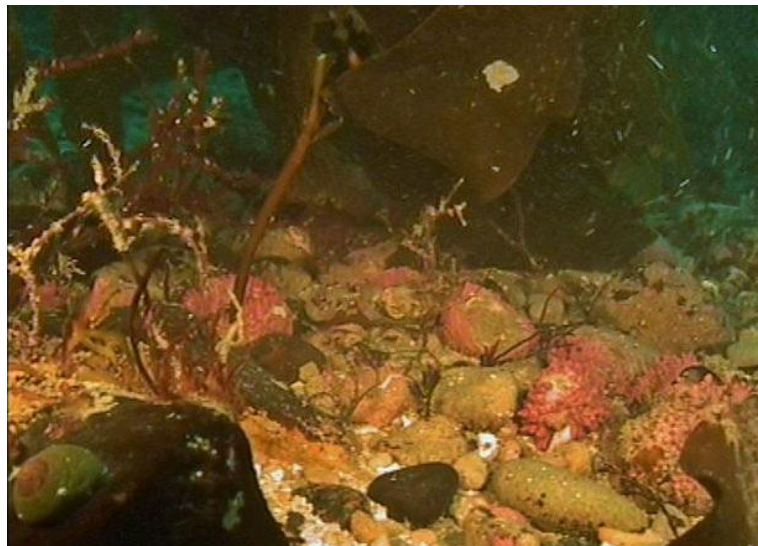


**Plate 9** Scoured cobbles and gravel in the centre of the Sound (XFa.FluCoAs).



The seabed in shallower water was dominated by forest and park of the kelp species *Laminaria hyperborea* on mixed boulder, cobble and sediment. In the tidesept conditions this was classified as IR.MIR.KR.LhypTX "*Laminaria hyperborea* on tide-swept, infralittoral mixed substrata". Coralline crusts were common on the cobbles ([Plate 10](#)) and some areas had a rich understory of red algae but, as with the *Flustra* biotope, there were also extensive areas of scoured and apparently bare cobbles ([Plate 11](#)). Kelp was found down to a maximum depth of approximately 20 m.

**Plate 10** Cobbles covered with coralline crusts in kelp park (LhypTX).



**Plate 11** Scoured cobbles with kelp park (*LhypTX*)



Below the kelp forest there was a zone dominated by foliose red algae IR.HIR.KFaR.FoR “Foliose red seaweeds on exposed lower infralittoral rock”. This was found in depths of approximately 15 to 20 m. Red algae were also frequent in the circalittoral biotopes.

Further inshore in the south of the survey area, the tides were less strong and there was an increasing amount of sediment. The main feature of this area was a bed of maerl *Phymatolithon calcareum* which covered an area of approximately 0.13 km<sup>2</sup>. This was classified as SS.SMp.Mrl.Pcal “*Phymatolithon calcareum* maerl beds in infralittoral clean gravel or coarse sand”. The maerl was mixed with cobble, gravel and occasional boulders and both *Laminaria hyperborea* and *Laminaria saccharina* were frequent. It was difficult to identify many of the algal species on the maerl from the video.

Surrounding the maerl bed on the mixed sediment shelf were several kelp-dominated biotopes. The brown algal *Halidrys siliquosa* was found on gravel and sand in inshore areas (IR.HIR.KSed.XKHal), with an understory of scour-tolerant algae. In the shallowest water there was sand and gravel with *Laminaria saccharina*, scattered foliose algae and lug worms *Arenicola marina* (SS.SMp.KSwSS.LsacR.Sa). A kelp forest and park of mixed *L. hyperborea* and *L. saccharina* occurred on the southern limit of the survey area (IR.LIR.K.LhypLsac). Cape-form kelp plants of both species were found in the inner sections of the more sheltered harbour areas. The rock surfaces here were relatively silty compared to other parts of the survey area ([Plate 12](#)).

It was notable that there was little dense kelp forest found – most of the kelp seen was sparsely distributed. This is probably a reflection of the absence of much bedrock in the shallower water with a preponderance of unstable substrata.





## **5 DISCUSSION**

### **5.1 Conservation interest**

The majority of the seabed in the Sound of Islay (all of the rock and cobble areas) is classed as Reef, an Annex 1 Marine Habitat listed on the Habitats Directive ([JNCC website](#)) and the Sound would also be classed as a Tidal Rapids, a UK Biological Action Plan (BAP) Priority Habitat. Scottish Natural Heritage has recently produced a list of Priority Marine Features (PMF) to support the advice they provide on marine biodiversity and planning issues (Howson *et al.*, 2009; Scottish Natural Heritage 2011; and see SNH website [Priority Marine Features](#)). Three algal dominated PMFs were found during the survey and are discussed below.

Deep tide-swept channels and sounds between islands and in the constricted entrances to sea lochs are a feature of the Scottish coast, but there is relatively little information on the communities they support, partly reflecting the difficulties of surveying these areas. Whilst shallow rapids are generally better studied, information is now accumulating on the deeper sounds through studies for tidal power installations such as this. Very similar diverse circalittoral biotopes were found in Stroma Sound in the Pentland Firth (Howson & Mercer, 2011). CR.HCR.FaT.CTub.Adig dominated broken, irregular bedrock whilst CR.HCR.XFa.FluCoAs was found on areas of boulder, cobble and shell gravel; these were also the main circalittoral biotopes in the Sound of Islay. Stable bedrock platforms in the strongest tidal streams in Stroma Sound supported CR.HCR.FaT.BalTub rather than the CR.HCR.FaT.CTub.CuSp of the Sound of Islay. The difference between the two biotopes is slight, with barnacle crusts far more conspicuous in BalTub, and the presence of this biotope in Stroma Sound is likely to be due to a combination of stronger tidal streams and more stable, flat bedrock which is highly scoured.

Work by Fisheries Research Services and Moore (Hayes, 2009; Moore, 2009) indicates that these communities are widespread in the Pentland Firth and it can be expected that other deep, tide-swept sounds in Scotland will have similar communities and biotopes.



There were several different infralittoral communities surveyed in the Sound of Islay, including three which are listed as PMFs by Howson *et al.* (2009). Of the PMFs recorded, tide-swept *Laminaria hyperborea* forest and park on mixed substrata (IR.MIR.KR.LhypTX) covered the largest area. Although this biotope is often structurally complex and species rich (Howson *et al.*, 2009), this did not appear to be the case in the Sound where much of the cobble substratum was dominated by algal crusts and this particular example of the biotope would not seem to be of high conservation value.

The maerl bed SS.SMp.Mrl.Pcal, another PMF, was relatively small, covering an area of approximately 0.13 km<sup>2</sup>. For comparison, Table 3 shows the estimated area for a number of maerl beds around Britain for which this information is readily available. Scotland has approximately 30% of the maerl beds in north-west Europe (OSPAR, 2010). These beds have a complex structure which supports species rich communities, including juvenile queen scallops, other juvenile invertebrates and gadoids (Kamenos *et al.*, 2004), with many species which live preferentially on maerl. They are fragile and easily damaged by traditional and hydraulic scallop dredging, extraction and pollution (Hall-Spencer & Moore, 2000; Hall-Spencer *et al.*, 2003). Undredged maerl grounds can be of long-term benefit to fisheries, acting as reproductive reservoirs for future generations of commercially important bivalve species. Remote video is not a suitable tool for assessment of the species richness of the maerl, as many of the species normally associated with the habitat are small or difficult to identify, and the survey was carried out in the winter and spring, before seasonal algal growth. Whilst maerl beds are of high intrinsic conservation value, no judgement can be made on the significance of this particular bed in terms of its species composition. However, beds of this size are not uncommon on the west coast of Scotland and it is probable that there are other similar beds in the vicinity.

**Table 3** Extent of selected UK maerl beds compared with the bed surveyed in the Sound of Islay. (Information on other beds from Hirst *et al.*, 2012).

Extent (best estimate in km <sup>2</sup> )	Type of coast	Bed
12.88	Open	Wide Firth and Kirkwall Bay, Orkney
9.07	Open	Sound of Barra, Outer Hebrides
7	Open	Antrim Coast, N. Ireland
4.26	Open	Sound of Arisaig, west Scotland
3.71	Open	Wyre and Rousay, Orkney
1.98	Open	Gairsay, Orkney
1.75	Open	Eday, Orkney
1.5	Estuary	Milford Haven, Wales
0.48	Open	Veantrow Bay, Orkney
0.46	Open	Shapinsay, Orkney
0.12	Sealoch	Badluarach, Little Loch Broom, north west Scotland
0.13	Sound	Sound of Islay, Inner Hebrides (This survey)

The third PMF recorded in the area was *Halidrys siliquosa* and mixed kelps on tide-swept rock and sediment (IR.HIR.KSed.XKHal). This was found in three areas around the edge of the maerl bed and is likely to be more widespread in shallow water in the Sound; Howson *et al.* (2009) comment that it is probably under-recorded in Scotland. There appeared to be a rich associated scour tolerant flora on the sand but it was difficult to identify algal species from the video ([Plate 11](#))

**Plate 11**      *Mixed kelps and Halidrys siliquosa with scour tolerant algae on sand (XKHal).*



The inshore section of the southern survey area comprises a mosaic of these three tide-swept, algal dominated biotopes. Together with the sandier LsacR.Sa, which is not a PMF, they cover an area of approximately 0.52 km<sup>2</sup> and fill most of the embayment. With a range of sediments from cobble to fine sand and the attenuation of the tidal stream into the embayment, this is potentially a species rich site of conservation interest. The resilience of this inshore area to the construction of a cable route would depend upon the precise route and landfall site of the cable. Given that the area is relatively small (Table 3) and that there are likely to be other similar suites of biotopes within the Sound of Islay and adjacent tide-swept areas, putting a cable through the site should be acceptable. With the strong tides through the sound, sedimentation is unlikely to be an issue. The major impact would be due to physical perturbation disrupting the integrity of the maerl bed and surrounding mixed sediments. A cable route through the northern or southern edge of the maerl bed would be preferable to one through the centre and the developer should seek to minimise the area of physical disturbance within the construction zone.

The species observed were generally common and widespread. However, there should be a caveat that the species easiest to identify from video, in the absence of actual specimens, are normally well known and conspicuous; only a small portion of the flora and fauna will have been identified.

## **6 CONCLUSIONS**

The area surveyed in the Sound of Islay consists of strongly tide-swept bedrock, boulder and cobble through the centre of the Sound with a shallow shelf of mixed sediments in the embayment. The communities present are characteristic of scoured and tide-swept conditions. In the circalittoral zone between depths of 17 and 56 m they are dominated by sponges, hydroids including *Tubularia indivisa*, anemones and bryozoans, particularly *Flustra foliacea*. Whilst the communities appeared to be species-rich, they are typical of those found on rock in other tide-swept sounds.

The mixed sediments in shallow water supported a suite of algal dominated biotopes, three of which were Priority Marine Features. These included a maerl bed and this area is potentially very diverse and of conservation significance.

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# Appendix 1

## Log of video positions

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
N harbour basin	17/03/2012	131	55.84895	-6.104666667	1.8	Down Tp 8	LhypLsac
N harbour basin	17/03/2012		55.84901667	-6.104583333		8	LhypLsac
N harbour basin	17/03/2012		55.84913333	-6.1044		8	LhypLsac
N harbour basin	17/03/2012		55.84918333	-6.10425		8	LhypLsac
N harbour basin	17/03/2012		55.8492	-6.10415		8	LhypLsac
N harbour basin	17/03/2012		55.84918333	-6.104166667		8	Lhyp
N harbour basin	17/03/2012	132	55.84916667	-6.104216667	16.6	Up	Lhyp
S harbour basin	17/03/2012	117	55.84778333	-6.104333333	3.0	Down Tp 7	LhypLsac
S harbour basin	17/03/2012		55.8478	-6.10425		7	LhypLsac
S harbour basin	17/03/2012		55.84778333	-6.104166667		7	LhypLsac
S harbour basin	17/03/2012		55.84771667	-6.103633333		7	LhypLsac
S harbour basin	17/03/2012		55.84768333	-6.103416667		7	LhypLsac
S harbour basin	17/03/2012		55.84763333	-6.103316667		7	LhypLsac
S harbour basin	17/03/2012		55.84755	-6.10325		7	LhypLsac
S harbour basin	17/03/2012		55.84746667	-6.10315		7	LhypLsac
S harbour basin	17/03/2012		55.8474	-6.10305		7	LhypLsac
S harbour basin	17/03/2012		55.84735	-6.102916667		7	LhypLsac
S harbour basin	17/03/2012		55.8473	-6.102783333		7	LhypLsac
S harbour basin	17/03/2012		55.84723333	-6.102666667		7	LhypLsac
S harbour basin	17/03/2012		55.84713333	-6.102566667		7	LhypLsac
S harbour basin	17/03/2012	118	55.84705	-6.102483333	26.7	Seabed	FaAICr.Adig
S harbour basin	17/03/2012		55.84695	-6.102433333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84686667	-6.102383333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84678333	-6.10235		7	FaAICr.Adig
S harbour basin	17/03/2012		55.8467	-6.1023		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84661667	-6.10225		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84651667	-6.1022		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84643333	-6.102166667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84633333	-6.102116667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84625	-6.102066667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84616667	-6.102033333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84606667	-6.102		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84598333	-6.101966667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84588333	-6.101916667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84578333	-6.101883333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.8457	-6.101866667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84561667	-6.101833333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84553333	-6.1018		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84545	-6.101766667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84535	-6.101733333		7	FaAICr.Adig



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
S harbour basin	17/03/2012		55.84526667	-6.101716667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84516667	-6.101683333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84506667	-6.101666667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84496667	-6.10165		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84488333	-6.101633333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.8448	-6.1016		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84471667	-6.101583333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84463333	-6.10155		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84455	-6.1015		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84445	-6.101483333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84435	-6.10145		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84426667	-6.101416667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84416667	-6.101383333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84408333	-6.10135		7	FaAICr.Adig
S harbour basin	17/03/2012		55.844	-6.101316667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84391667	-6.101283333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84381667	-6.10125		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84371667	-6.101216667		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84361667	-6.101183333		7	FaAICr.Adig
S harbour basin	17/03/2012		55.84351667	-6.10115		7	FaAICr.Adig
S harbour basin	17/03/2012	119	55.84343333	-6.101133333	34.7	Up	FaAICr.Adig
SP01	15/03/2012	8	55.823	-6.102733333	7.9	Down Tp 2	LhypTX
SP01	15/03/2012		55.82298333	-6.10255		2	LhypTX
SP01	15/03/2012		55.823	-6.102366667		2	LhypTX
SP01	15/03/2012		55.82303333	-6.1022		2	LhypTX
SP01	15/03/2012		55.8231	-6.1021		2	LhypTX
SP01	15/03/2012		55.82318333	-6.102116667		2	LhypTX
SP01	15/03/2012		55.82328333	-6.102133333		2	LhypTX
SP01	15/03/2012		55.82338333	-6.102133333		2	LhypTX
SP01	15/03/2012	8	55.82346667	-6.10215	10.2	Up	LhypTX
SP02	15/03/2012	9	55.82438333	-6.102083333	11.3	Down Tp 2	Lhyp.Pk
SP02	15/03/2012		55.82448333	-6.102066667		2	Lhyp.Pk
SP02	15/03/2012		55.82456667	-6.10205		2	Lhyp.Pk
SP02	15/03/2012		55.82465	-6.102033333		2	Lhyp.Pk
SP02	15/03/2012		55.82473333	-6.102033333		2	Lhyp.Pk
SP02	15/03/2012		55.82478333	-6.102116667		2	Lhyp.Pk
SP02	15/03/2012		55.82486667	-6.102083333		2	Lhyp.Pk
SP02	15/03/2012		55.82488333	-6.101916667		2	Lhyp.Pk
SP02	15/03/2012		55.8249	-6.101833333		2	Lhyp.Pk
SP02	15/03/2012		55.82493333	-6.101816667		2	Lhyp.Pk
SP02	15/03/2012	9	55.82505	-6.101816667	11.3	Up	Lhyp.Pk
SP03	15/03/2012	10	55.82196667	-6.10245	11.6	Down Tp 2	Lhyp.Pk
SP03	15/03/2012		55.82186667	-6.1025		2	Lhyp.Pk
SP03	15/03/2012		55.82178333	-6.102566667		2	Lhyp.Pk
SP03	15/03/2012		55.82171667	-6.10265		2	Lhyp.Pk

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Tape No.	Biotope
SP03	15/03/2012		55.82166667	-6.102766667		2	Lhyp.Pk
SP03	15/03/2012		55.82165	-6.102916667		2	Lhyp.Pk
SP03	15/03/2012		55.8217	-6.103066667		2	Lhyp.Pk
SP03	15/03/2012		55.82176667	-6.103183333		2	Lhyp.Pk
SP03	15/03/2012		55.82183333	-6.103283333		2	Lhyp.Pk
SP03	15/03/2012		55.8219	-6.103383333		2	Lhyp.Pk
SP03	15/03/2012		55.82196667	-6.103466667		2	Lhyp.Pk
SP03	15/03/2012		55.82206667	-6.103533333		2	Lhyp.Pk
SP03	15/03/2012		55.82215	-6.1036		2	Lhyp.Pk
SP03	15/03/2012	10	55.82223333	-6.103633333	2.1	Up	Lhyp.Pk
SP04	15/03/2012	11	55.81868333	-6.102066667	5.5	Down Tp 2	XKHal
SP04	15/03/2012		55.8186	-6.10215		2	XKHal
SP04	15/03/2012		55.81853333	-6.10225		2	XKHal
SP04	15/03/2012		55.81845	-6.102366667		2	XKHal
SP04	15/03/2012		55.8184	-6.1025		2	XKHal
SP04	15/03/2012		55.81838333	-6.102616667		2	XKHal
SP04	15/03/2012		55.81838333	-6.10275		2	XKHal
SP04	15/03/2012		55.81838333	-6.102916667		2	XKHal
SP04	15/03/2012		55.8184	-6.1031		2	XKHal
SP04	15/03/2012		55.81841667	-6.103266667		2	XKHal
SP04	15/03/2012		55.81843333	-6.103416667		2	XKHal
SP04	15/03/2012		55.81848333	-6.10355		2	XKHal
SP04	15/03/2012		55.81851667	-6.103683333		2	XKHal
SP04	15/03/2012		55.81856667	-6.103816667		2	XKHal
SP04	15/03/2012	12	55.81858333	-6.10395	2.9	Up	XKHal
SP05	15/03/2012	13	55.81148333	-6.10075	2.9	Down	XKHal
SP05	15/03/2012		55.81146667	-6.100733333	4.9	Seabed	XKHal
SP05	15/03/2012		55.81143333	-6.100733333		2	XKHal
SP05	15/03/2012		55.81121667	-6.100533333		2	XKHal
SP05	15/03/2012		55.81116667	-6.10035		2	XKHal
SP05	15/03/2012		55.81115	-6.1002		2	XKHal
SP05	15/03/2012		55.81116667	-6.100016667		2	XKHal
SP05	15/03/2012		55.81116667	-6.099833333		2	XKHal
SP05	15/03/2012		55.81116667	-6.099666667		2	XKHal
SP05	15/03/2012		55.81115	-6.099483333		2	XKHal
SP05	15/03/2012		55.81111667	-6.099316667		2	XKHal
SP05	15/03/2012		55.81108333	-6.09915		2	XKHal
SP05	15/03/2012		55.81101667	-6.099		2	XKHal
SP05	15/03/2012		55.81095	-6.098883333		2	XKHal
SP05	15/03/2012		55.81086667	-6.0988		2	XKHal
SP05	15/03/2012	14	55.81078333	-6.0987	4.9	Up	XKHal
SP06	15/03/2012	15	55.80761667	-6.097616667		Down	LhypLsac.Pk
SP06	15/03/2012		55.80765	-6.097733333		2	LhypLsac.Pk
SP06	15/03/2012		55.8077	-6.097883333		2	LhypLsac.Pk
SP06	15/03/2012	15	55.80773333	-6.097966667		Up	LhypLsac.Pk

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Tape No.	Biotope
SP07	15/03/2012	16	55.80645	-6.094916667	9.0	Down	LhypLsac
SP07	15/03/2012		55.80635	-6.094866667		2	LhypLsac
SP07	15/03/2012		55.80626667	-6.094833333		2	LhypLsac
SP07	15/03/2012		55.80616667	-6.09485		2	LhypLsac
SP07	15/03/2012		55.80608333	-6.094883333		2	LhypLsac
SP07	15/03/2012		55.80598333	-6.0949		2	LhypLsac
SP07	15/03/2012		55.8059	-6.09495		2	LhypLsac
SP07	15/03/2012		55.80581667	-6.095016667		2	LhypLsac
SP07	15/03/2012		55.80573333	-6.095116667		2	LhypLsac
SP07	15/03/2012		55.80568333	-6.095233333		2	LhypLsac
SP07	15/03/2012		55.80565	-6.095333333		2	LhypLsac
SP07	15/03/2012		55.80563333	-6.0955		2	LhypLsac
SP07	15/03/2012		55.80561667	-6.09565		2	LhypLsac
SP07	15/03/2012		55.8056	-6.095716667		2	LhypLsac
SP07	15/03/2012		55.8056	-6.095866667		2	LhypLsac
SP07	15/03/2012	17	55.80561667	-6.096016667	7.0	Up	LhypLsac
SP08	15/03/2012	18	55.80513333	-6.09315	10.4	Down	LhypLsac.Pk
SP08	15/03/2012		55.80505	-6.093066667		2	LhypLsac.Pk
SP08	15/03/2012		55.80496667	-6.093		2	LhypLsac.Pk
SP08	15/03/2012		55.80488333	-6.092966667		2	LhypLsac.Pk
SP08	15/03/2012		55.80478333	-6.092933333		2	LhypLsac.Pk
SP08	15/03/2012		55.80468333	-6.092883333		2	LhypLsac.Pk
SP08	15/03/2012		55.8046	-6.09285		2	LhypLsac.Pk
SP08	15/03/2012		55.8045	-6.092816667		2	LhypLsac.Pk
SP08	15/03/2012		55.80441667	-6.092783333		2	LhypLsac.Pk
SP08	15/03/2012		55.80431667	-6.092766667		2	LhypLsac.Pk
SP08	15/03/2012		55.80423333	-6.092733333		2	LhypLsac.Pk
SP08	15/03/2012		55.80413333	-6.0927		2	LhypLsac.Pk
SP08	15/03/2012		55.80405	-6.092666667		2	LhypLsac.Pk
SP08	15/03/2012		55.80396667	-6.092633333		2	LhypLsac.Pk
SP08	15/03/2012		55.80388333	-6.0926		2	LhypLsac.Pk
SP08	15/03/2012	19	55.8038	-6.092566667	10.0	Up	LhypLsac.Pk
SP09	15/03/2012	20	55.80648333	-6.0923	12.4	Down	LhypTX.Pk
SP09	15/03/2012		55.8064	-6.092233333		2	LhypTX.Pk
SP09	15/03/2012		55.80631667	-6.092183333		2	LhypTX.Pk
SP09	15/03/2012		55.80621667	-6.092133333		2	LhypTX.Pk
SP09	15/03/2012		55.80613333	-6.0921		2	LhypTX.Pk
SP09	15/03/2012		55.80603333	-6.09205		2	LhypTX.Pk
SP09	15/03/2012		55.80593333	-6.092		2	LhypTX.Pk
SP09	15/03/2012		55.80585	-6.09195		2	LhypTX.Pk
SP09	15/03/2012		55.80576667	-6.0919		2	LhypTX.Pk
SP09	15/03/2012		55.80568333	-6.091866667		2	LhypTX.Pk
SP09	15/03/2012		55.8056	-6.091816667		2	LhypTX.Pk
SP09	15/03/2012		55.8055	-6.09175		2	LhypTX.Pk
SP09	15/03/2012		55.80541667	-6.0917		2	LhypTX.Pk

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
SP09	15/03/2012		55.80533333	-6.09165		2	LhypTX.Pk
SP09	15/03/2012		55.80523333	-6.0916		2	LhypTX.Pk
SP09	15/03/2012		55.80515	-6.09155		2	LhypTX.Pk
SP09	15/03/2012		55.80505	-6.091483333		2	LhypTX.Pk
SP09	15/03/2012		55.80496667	-6.091433333		2	LhypTX.Pk
SP09	15/03/2012	21	55.80488333	-6.09135	12.3	Up	LhypTX.Pk
SP10	15/03/2012	22	55.81016667	-6.093833333	14.0	Down	LhypTX.Pk
SP10	15/03/2012		55.81006667	-6.093766667		2	LhypTX.Pk
SP10	15/03/2012		55.80996667	-6.0937		2	LhypTX.Pk
SP10	15/03/2012		55.80988333	-6.093633333		2	LhypTX.Pk
SP10	15/03/2012		55.80978333	-6.093583333		2	LhypTX.Pk
SP10	15/03/2012		55.80968333	-6.093516667		2	LhypTX.Pk
SP10	15/03/2012		55.8096	-6.093466667		2	LhypTX.Pk
SP10	15/03/2012		55.8095	-6.093416667		2	LhypTX.Pk
SP10	15/03/2012		55.80941667	-6.093366667		2	LhypTX.Pk
SP10	15/03/2012		55.80933333	-6.093316667		2	LhypTX.Pk
SP10	15/03/2012		55.80925	-6.09325		2	LhypTX.Pk
SP10	15/03/2012		55.80916667	-6.093183333		2	LhypTX.Pk
SP10	15/03/2012		55.80908333	-6.093133333		2	LhypTX.Pk
SP10	15/03/2012	23	55.80898333	-6.093066667	14.0	Up	LhypTX.Pk
SP11	15/03/2012	24	55.8121	-6.097983333	9.6	Down	LhypTX
SP11	15/03/2012		55.81201667	-6.097916667		2	LhypTX
SP11	15/03/2012		55.81191667	-6.097866667		2	LhypTX
SP11	15/03/2012		55.81183333	-6.0978		2	LhypTX
SP11	15/03/2012		55.81175	-6.09775		2	LhypTX
SP11	15/03/2012		55.81165	-6.097683333		2	LhypTX
SP11	15/03/2012		55.81156667	-6.097633333		2	LhypTX
SP11	15/03/2012		55.81146667	-6.097566667		2	LhypTX
SP11	15/03/2012		55.81138333	-6.097516667		2	LhypTX
SP11	15/03/2012		55.8113	-6.097433333		2	LhypTX
SP11	15/03/2012		55.81121667	-6.097366667		2	LhypTX
SP11	15/03/2012		55.81113333	-6.0973		2	LhypTX
SP11	15/03/2012		55.81103333	-6.097233333		2	LhypTX
SP11	15/03/2012		55.81095	-6.097183333		2	LhypTX
SP11	15/03/2012		55.81086667	-6.097116667		2	LhypTX
SP11	15/03/2012		55.81076667	-6.09705		2	LhypTX
SP11	15/03/2012		55.81066667	-6.097		2	LhypTX
SP11	15/03/2012		55.81058333	-6.09695		2	LhypTX
SP11	15/03/2012	25	55.8105	-6.096883333	9.0	Up	LhypTX
SP12	15/03/2012	26	55.81171667	-6.09315	15.0	Down	FoR
SP12	15/03/2012		55.81163333	-6.0931		2	FoR
SP12	15/03/2012		55.81153333	-6.093066667		2	FoR
SP12	15/03/2012		55.81145	-6.093016667		2	FoR
SP12	15/03/2012		55.81136667	-6.092966667		2	FoR
SP12	15/03/2012		55.81128333	-6.092933333		2	FoR



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
SP12	15/03/2012		55.81118333	-6.092883333		2	FoR
SP12	15/03/2012		55.8111	-6.092833333		2	FoR
SP12	15/03/2012		55.811	-6.092783333		2	FoR
SP12	15/03/2012		55.81091667	-6.092716667		2	FoR
SP12	15/03/2012		55.81083333	-6.092666667		2	FoR
SP12	15/03/2012		55.81073333	-6.0926		2	FoR
SP12	15/03/2012		55.81065	-6.092533333		2	FoR
SP12	15/03/2012		55.81056667	-6.092483333		2	FoR
SP12	15/03/2012		55.81048333	-6.092416667		2	FoR
SP12	15/03/2012		55.81038333	-6.092383333		2	FoR
SP12	15/03/2012		55.8103	-6.092333333		2	FoR
SP12	15/03/2012		55.8102	-6.092283333		2	FoR
SP12	15/03/2012		55.81011667	-6.092233333		2	FoR
SP12	15/03/2012		55.81001667	-6.092183333		2	FoR
SP12	15/03/2012		55.80993333	-6.092133333		2	FoR
SP12	15/03/2012	27	55.80983333	-6.092083333	17.0	Up	FoR
SP13	15/03/2012	28	55.81576667	-6.100033333	9.3	Down Tp 3	Pcal
SP13	15/03/2012		55.81568333	-6.100133333		3	Pcal
SP13	15/03/2012		55.81561667	-6.1002		3	Pcal
SP13	15/03/2012		55.81555	-6.100266667		3	Pcal
SP13	15/03/2012		55.8155	-6.100333333		3	Pcal
SP13	15/03/2012		55.8154	-6.1004		3	Pcal
SP13	15/03/2012		55.81533333	-6.1005		3	Pcal
SP13	15/03/2012		55.81525	-6.100583333		3	Pcal
SP13	15/03/2012		55.81516667	-6.100633333		3	Pcal
SP13	15/03/2012		55.81508333	-6.100716667		3	Pcal
SP13	15/03/2012		55.81511667	-6.100666667		3	Pcal
SP13	15/03/2012	29	55.81521667	-6.10055	8.1	Up	Pcal
SP14	17/03/2012	85	55.81811667	-6.102466667	5.8	Down Tp 6	XKHal
SP14	17/03/2012		55.81818333	-6.10255		6	XKHal
SP14	17/03/2012		55.81826667	-6.102616667		6	XKHal
SP14	17/03/2012		55.81833333	-6.102666667		6	XKHal
SP14	17/03/2012		55.81843333	-6.102683333		6	XKHal
SP14	17/03/2012		55.81851667	-6.10275		6	XKHal
SP14	17/03/2012		55.81861667	-6.102766667		6	XKHal
SP14	17/03/2012	86	55.81871667	-6.10275	5.2	Up	XKHal
SP15	17/03/2012	87	55.81846667	-6.101833333	9.6	6	Pcal
SP15	17/03/2012		55.81843333	-6.1017		6	Pcal
SP15	17/03/2012		55.81838333	-6.101566667		6	Pcal
SP15	17/03/2012		55.81833333	-6.101416667		6	Pcal
SP15	17/03/2012		55.81828333	-6.101283333		6	Pcal
SP15	17/03/2012		55.81826667	-6.10115		6	Pcal
SP15	17/03/2012		55.81833333	-6.101016667		6	Pcal
SP15	17/03/2012	87	55.81841667	-6.100966667	9.6	Spot	Pcal
SP16	17/03/2012	88	55.82011667	-6.101433333	9.2	Down	Pcal

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
SP16	17/03/2012		55.82021667	-6.101416667		6	Pcal
SP16	17/03/2012		55.8203	-6.101433333		6	Pcal
SP16	17/03/2012		55.82038333	-6.101533333		6	Pcal
SP16	17/03/2012		55.82046667	-6.101583333		6	Pcal
SP16	17/03/2012		55.82055	-6.101616667		6	Pcal
SP16	17/03/2012		55.82065	-6.10165		6	Pcal
SP16	17/03/2012		55.82073333	-6.101666667		6	Pcal
SP16	17/03/2012		55.82081667	-6.101666667		6	Pcal
SP16	17/03/2012		55.82091667	-6.101666667		6	Pcal
SP16	17/03/2012		55.821	-6.10165		6	Pcal
SP16	17/03/2012		55.82108333	-6.101683333		6	Pcal
SP16	17/03/2012		55.82116667	-6.1018		6	Pcal
SP16	17/03/2012		55.82121667	-6.101933333		6	Pcal
SP16	17/03/2012		55.8213	-6.102		6	Pcal
SP16	17/03/2012		55.8214	-6.102		6	Pcal
SP16	17/03/2012		55.82148333	-6.101983333		6	Pcal
SP16	17/03/2012	89	55.82158333	-6.101933333	9.8	Up	Pcal
SP17	17/03/2012	90	55.8225	-6.102083333	10.7	Down	XKHal
SP17	17/03/2012		55.82263333	-6.1022		6	XKHal
SP17	17/03/2012		55.82273333	-6.102216667		6	XKHal
SP17	17/03/2012		55.82281667	-6.102216667		6	XKHal
SP17	17/03/2012		55.82291667	-6.102166667		6	XKHal
SP17	17/03/2012		55.823	-6.102116667		6	XKHal
SP17	17/03/2012		55.8231	-6.102083333		6	XKHal
SP17	17/03/2012		55.8232	-6.102033333		6	XKHal
SP17	17/03/2012	91	55.82328333	-6.102	9.6	Up	XKHal
SP18	17/03/2012	92	55.81916667	-6.100166667	11.3	Down	Pcal
SP18	17/03/2012		55.81926667	-6.1001		6	Pcal
SP18	17/03/2012		55.81936667	-6.10005		6	Pcal
SP18	17/03/2012		55.81945	-6.100033333		6	Pcal
SP18	17/03/2012		55.81955	-6.100016667		6	Pcal
SP18	17/03/2012		55.81963333	-6.1		6	Pcal
SP18	17/03/2012		55.81971667	-6.099983333		6	Pcal
SP18	17/03/2012		55.8198	-6.099966667		6	Pcal
SP18	17/03/2012		55.8199	-6.099933333		6	Pcal
SP18	17/03/2012		55.82	-6.099916667		6	Pcal
SP18	17/03/2012		55.8201	-6.0999		6	Pcal
SP18	17/03/2012		55.82018333	-6.099883333		6	Pcal
SP18	17/03/2012		55.82028333	-6.099916667		6	Pcal
SP18	17/03/2012		55.82036667	-6.100016667		6	Pcal
SP18	17/03/2012		55.82043333	-6.100116667		6	Pcal
SP18	17/03/2012		55.82053333	-6.1002		6	Pcal
SP18	17/03/2012		55.82063333	-6.1002		6	Pcal
SP18	17/03/2012		55.82073333	-6.1002		6	Pcal
SP18	17/03/2012		55.82083333	-6.1002		6	Pcal

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
SP18	17/03/2012		55.82091667	-6.100216667		6	Pcal
SP18	17/03/2012	93	55.82101667	-6.100216667	13.9	Up	Pcal
SP19	17/03/2012	94	55.82245	-6.1003	16.0	Down	LhypTX
SP19	17/03/2012		55.82253333	-6.100283333		6	LhypTX
SP19	17/03/2012		55.82263333	-6.10025		6	LhypTX
SP19	17/03/2012		55.82273333	-6.100233333		6	LhypTX
SP19	17/03/2012		55.82281667	-6.1002		6	LhypTX
SP19	17/03/2012		55.82291667	-6.1002		6	LhypTX
SP19	17/03/2012		55.82301667	-6.100183333		6	LhypTX
SP19	17/03/2012		55.8231	-6.100183333		6	LhypTX
SP19	17/03/2012		55.82318333	-6.100183333		6	LhypTX
SP19	17/03/2012		55.82328333	-6.100183333		6	LhypTX
SP19	17/03/2012		55.82336667	-6.100183333		6	LhypTX
SP19	17/03/2012	95	55.82346667	-6.100183333	20.0	Up	LhypTX
SP20	17/03/2012	96	55.82041667	-6.097633333	21.0	Down	FluCoAs
SP20	17/03/2012		55.8205	-6.097616667		6	FluCoAs
SP20	17/03/2012		55.8206	-6.0976		6	FluCoAs
SP20	17/03/2012		55.8207	-6.097616667		6	FluCoAs
SP20	17/03/2012		55.82078333	-6.097616667		6	FluCoAs
SP20	17/03/2012		55.82086667	-6.097683333		6	FluCoAs
SP20	17/03/2012		55.8209	-6.09785		6	FluCoAs
SP20	17/03/2012		55.82095	-6.097983333		6	FluCoAs
SP20	17/03/2012		55.82101667	-6.0981		6	FluCoAs
SP20	17/03/2012		55.82108333	-6.098233333		6	FluCoAs
SP20	17/03/2012		55.82115	-6.09835		6	FluCoAs
SP20	17/03/2012		55.82121667	-6.0985		6	FluCoAs
SP20	17/03/2012		55.82128333	-6.0986		6	FluCoAs
SP20	17/03/2012		55.82135	-6.098683333		6	FluCoAs
SP20	17/03/2012		55.82143333	-6.09875		6	FluCoAs
SP20	17/03/2012		55.82151667	-6.0988		6	FluCoAs
SP20	17/03/2012		55.82161667	-6.098816667		6	FluCoAs
SP20	17/03/2012		55.8217	-6.098833333		6	FluCoAs
SP20	17/03/2012		55.8218	-6.09885		6	FluCoAs
SP20	17/03/2012		55.8219	-6.098866667		6	FluCoAs
SP20	17/03/2012		55.82198333	-6.098866667		6	FluCoAs
SP20	17/03/2012		55.82208333	-6.098866667		6	FluCoAs
SP20	17/03/2012		55.82218333	-6.098883333		6	FluCoAs
SP20	17/03/2012		55.82226667	-6.0989		6	FluCoAs
SP20	17/03/2012		55.82235	-6.098916667		6	FluCoAs
SP20	17/03/2012		55.82245	-6.098933333		6	FluCoAs
SP20	17/03/2012	97	55.82253333	-6.098966667	25.0	Up	FluCoAs
SP21	17/03/2012	98	55.82011667	-6.098733333	20.0	Down	FluCoAs
SP21	17/03/2012		55.8202	-6.09865		6	FluCoAs
SP21	17/03/2012		55.8203	-6.098616667		6	FluCoAs
SP21	17/03/2012		55.82038333	-6.098583333		6	FluCoAs

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
SP21	17/03/2012		55.82048333	-6.09855		6	FluCoAs
SP21	17/03/2012		55.82058333	-6.098533333		6	FluCoAs
SP21	17/03/2012		55.82066667	-6.098516667		6	FluCoAs
SP21	17/03/2012		55.82076667	-6.098533333		6	FluCoAs
SP21	17/03/2012		55.82085	-6.098533333		6	FluCoAs
SP21	17/03/2012		55.82093333	-6.09855		6	FluCoAs
SP21	17/03/2012		55.82101667	-6.098583333		6	FluCoAs
SP21	17/03/2012		55.82111667	-6.0986		6	FluCoAs
SP21	17/03/2012		55.82121667	-6.098583333		6	FluCoAs
SP21	17/03/2012		55.82131667	-6.098566667		6	FluCoAs
SP21	17/03/2012		55.8214	-6.09855		6	FluCoAs
SP21	17/03/2012		55.8215	-6.098566667		6	FluCoAs
SP21	17/03/2012	99	55.8216	-6.098566667		Up	FluCoAs
SP22	17/03/2012	100	55.81333333	-6.096366667	13.0	Down Tp 7	LhypTX.pk
SP22	17/03/2012		55.81341667	-6.096383333		7	LhypTX.pk
SP22	17/03/2012		55.81351667	-6.0964		7	LhypTX.pk
SP22	17/03/2012		55.8136	-6.0964		7	LhypTX.pk
SP22	17/03/2012		55.8137	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81378333	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81388333	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81398333	-6.096433333		7	LhypTX.pk
SP22	17/03/2012		55.81408333	-6.096433333		7	LhypTX.pk
SP22	17/03/2012		55.81416667	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81426667	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81436667	-6.096416667		7	LhypTX.pk
SP22	17/03/2012		55.81445	-6.09645		7	LhypTX.pk
SP22	17/03/2012		55.81455	-6.09645		7	LhypTX.pk
SP22	17/03/2012		55.81463333	-6.096466667		7	LhypTX.pk
SP22	17/03/2012		55.81473333	-6.096466667		7	LhypTX.pk
SP22	17/03/2012		55.81483333	-6.096483333		7	LhypTX.pk
SP22	17/03/2012		55.81491667	-6.096483333		7	LhypTX.pk
SP22	17/03/2012		55.81501667	-6.0965		7	LhypTX.pk
SP22	17/03/2012	101	55.8151	-6.0965		Up	LhypTX.pk
T02-a	17/03/2012	110	55.84916667	-6.101066667	47.8	Down Tp 7	CTub.CuSp
T02-a	17/03/2012		55.84921667	-6.101		7	CTub.CuSp
T02-a	17/03/2012		55.84923333	-6.10095		7	CTub.CuSp
T02-a	17/03/2012		55.84923333	-6.10095		7	CTub.CuSp
T02-a	17/03/2012		55.84926667	-6.100866667		7	CTub.CuSp
T02-a	17/03/2012		55.84921667	-6.10095		7	CTub.CuSp
T02-a	17/03/2012		55.84916667	-6.101066667		7	CTub.CuSp
T02-a	17/03/2012		55.84911667	-6.1012		7	CTub.CuSp
T02-a	17/03/2012		55.84911667	-6.10115		7	CTub.CuSp
T02-a	17/03/2012		55.84913333	-6.10105		7	CTub.CuSp
T02-a	17/03/2012	111	55.84915	-6.101016667		Up	CTub.CuSp
T02-b	17/03/2012	112	55.84656667	-6.100266667	55.8	Down	FluCoAs



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T02-b	17/03/2012		55.84655	-6.100266667		7	FluCoAs
T02-b	17/03/2012		55.84651667	-6.10025		7	FluCoAs
T02-b	17/03/2012		55.84625	-6.1		7	FluCoAs
T02-b	17/03/2012		55.84625	-6.099983333		7	FluCoAs
T02-b	17/03/2012		55.84623333	-6.09995		7	FluCoAs
T02-b	17/03/2012		55.84615	-6.099833333		7	FluCoAs
T02-b	17/03/2012		55.84601667	-6.099733333		7	FluCoAs
T02-b	17/03/2012		55.84583333	-6.099766667		7	FluCoAs
T02-b	17/03/2012		55.84573333	-6.099833333		7	FluCoAs
T02-b	17/03/2012		55.84566667	-6.099833333		7	FluCoAs
T02-b	17/03/2012		55.84563333	-6.099833333		7	FluCoAs
T02-b	17/03/2012		55.84561667	-6.099833333		7	FluCoAs
T02-b	17/03/2012	113	55.84545	-6.0996		Up	FluCoAs
T03-a	17/03/2012	114	55.8492	-6.10205	48.2	Down	FluCoAs
T03-a	17/03/2012		55.8491	-6.102083333		7	FluCoAs
T03-a	17/03/2012		55.849	-6.102		7	FluCoAs
T03-a	17/03/2012		55.84895	-6.102133333		7	FluCoAs
T03-a	17/03/2012		55.8489	-6.1022		7	FluCoAs
T03-a	17/03/2012		55.84881667	-6.1021		7	FluCoAs
T03-a	17/03/2012		55.84875	-6.101966667		7	FluCoAs
T03-a	17/03/2012		55.84865	-6.101916667		7	FluCoAs
T03-a	17/03/2012		55.84851667	-6.10205		7	FluCoAs
T03-a	17/03/2012		55.84835	-6.10195		7	FluCoAs
T03-a	17/03/2012		55.84828333	-6.10185		7	FluCoAs
T03-a	17/03/2012		55.84821667	-6.10175		7	FluCoAs
T03-a	17/03/2012		55.84813333	-6.101633333		7	CTub.CuSp
T03-a	17/03/2012		55.84806667	-6.101516667		7	CTub.CuSp
T03-a	17/03/2012		55.84801667	-6.1014		7	CTub.CuSp
T03-a	17/03/2012		55.84796667	-6.101283333		7	CTub.CuSp
T03-a	17/03/2012		55.8479	-6.101166667		7	CTub.CuSp
T03-a	17/03/2012		55.84783333	-6.10105		7	CTub.CuSp
T03-a	17/03/2012		55.84776667	-6.100933333		7	CTub.CuSp
T03-a	17/03/2012		55.84771667	-6.100816667		7	CTub.CuSp
T03-a	17/03/2012		55.84765	-6.100716667		7	CTub.CuSp
T03-a	17/03/2012		55.8476	-6.1006		7	CTub.CuSp
T03-a	17/03/2012		55.84753333	-6.100466667		7	CTub.CuSp
T03-a	17/03/2012		55.84746667	-6.100366667		7	CTub.CuSp
T03-a	17/03/2012		55.8474	-6.10025		7	CTub.CuSp
T03-a	17/03/2012		55.84733333	-6.100133333		7	CTub.CuSp
T03-a	17/03/2012		55.84726667	-6.100016667		7	CTub.CuSp
T03-a	17/03/2012		55.8472	-6.0999		7	CTub.CuSp
T03-a	17/03/2012	115	55.84711667	-6.0998	53.6	Seabed	CTub.CuSp
T03-a	17/03/2012		55.84705	-6.099716667		7	CTub.CuSp
T03-a	17/03/2012		55.84698333	-6.099616667		7	CTub.CuSp
T03-a	17/03/2012		55.8469	-6.099533333		7	CTub.CuSp

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T03-a	17/03/2012		55.84681667	-6.099433333		7	CTub.CuSp
T03-a	17/03/2012		55.84675	-6.09935		7	CTub.CuSp
T03-a	17/03/2012		55.84666667	-6.09925		7	CTub.CuSp
T03-a	17/03/2012		55.84658333	-6.099166667		7	CTub.CuSp
T03-a	17/03/2012		55.8465	-6.099083333		7	CTub.CuSp
T03-a	17/03/2012		55.84641667	-6.098983333		7	CTub.CuSp
T03-a	17/03/2012		55.84635	-6.0989		7	CTub.CuSp
T03-a	17/03/2012		55.84626667	-6.0988		7	CTub.CuSp
T03-a	17/03/2012		55.8462	-6.0987		7	CTub.CuSp
T03-a	17/03/2012		55.84611667	-6.098616667		7	CTub.CuSp
T03-a	17/03/2012		55.84601667	-6.098533333		7	CTub.CuSp
T03-a	17/03/2012		55.84593333	-6.098466667		7	CTub.CuSp
T03-a	17/03/2012		55.84585	-6.098383333		7	CTub.CuSp
T03-a	17/03/2012	116	55.84576667	-6.098333333		Up	CTub.CuSp
T03-b	17/03/2012	126	55.84773333	-6.10205	45.4	Down Tp 8	CTub.Adig
T03-b	17/03/2012		55.84765	-6.10205		8	CTub.Adig
T03-b	17/03/2012		55.84755	-6.10205		8	CTub.Adig
T03-b	17/03/2012		55.84745	-6.10205		8	CTub.Adig
T03-b	17/03/2012		55.84735	-6.10205		8	CTub.Adig
T03-b	17/03/2012		55.84725	-6.102033333		8	CTub.Adig
T03-b	17/03/2012		55.84716667	-6.102033333		8	CTub.Adig
T03-b	17/03/2012		55.84706667	-6.102016667		8	CTub.Adig
T03-b	17/03/2012		55.84696667	-6.102		8	CTub.Adig
T03-b	17/03/2012		55.84688333	-6.101983333		8	CTub.Adig
T03-b	17/03/2012		55.84678333	-6.10195		8	CTub.Adig
T03-b	17/03/2012		55.84668333	-6.101933333		8	CTub.Adig
T03-b	17/03/2012		55.8466	-6.1019		8	CTub.Adig
T03-b	17/03/2012		55.8465	-6.101866667		8	CTub.Adig
T03-b	17/03/2012		55.8464	-6.10185		8	CTub.Adig
T03-b	17/03/2012		55.8463	-6.101816667		8	CTub.Adig
T03-b	17/03/2012		55.84621667	-6.101783333		8	CTub.Adig
T03-b	17/03/2012		55.84611667	-6.10175		8	CTub.Adig
T03-b	17/03/2012		55.84603333	-6.1017		8	CTub.Adig
T03-b	17/03/2012		55.84593333	-6.101666667		8	CTub.Adig
T03-b	17/03/2012		55.84583333	-6.101616667		8	CTub.Adig
T03-b	17/03/2012		55.84573333	-6.101583333		8	CTub.Adig
T03-b	17/03/2012		55.84563333	-6.10155		8	CTub.Adig
T03-b	17/03/2012		55.84553333	-6.1015		8	CTub.Adig
T03-b	17/03/2012		55.84543333	-6.10145		8	CTub.Adig
T03-b	17/03/2012		55.84533333	-6.1014		8	CTub.Adig
T03-b	17/03/2012	127	55.84523333	-6.101366667		Up	CTub.Adig
T03-c	17/03/2012	128	55.84938333	-6.102716667	40.5	Down	CTub.Adig
T03-c	17/03/2012		55.8493	-6.10265		8	CTub.Adig
T03-c	17/03/2012		55.8492	-6.102616667		8	CTub.Adig
T03-c	17/03/2012		55.84911667	-6.102566667		8	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T03-c	17/03/2012		55.84901667	-6.102533333		8	CTub.Adig
T03-c	17/03/2012		55.84883333	-6.102483333		8	CTub.Adig
T03-c	17/03/2012		55.84875	-6.10245		8	CTub.Adig
T03-c	17/03/2012		55.84866667	-6.102416667		8	CTub.Adig
T03-c	17/03/2012		55.84856667	-6.1024		8	CTub.Adig
T03-c	17/03/2012		55.84846667	-6.10235		8	CTub.Adig
T03-c	17/03/2012		55.84838333	-6.102316667		8	CTub.Adig
T03-c	17/03/2012		55.84828333	-6.102283333		8	CTub.Adig
T03-c	17/03/2012		55.8482	-6.10225		8	CTub.Adig
T03-c	17/03/2012		55.8481	-6.1022		8	CTub.Adig
T03-c	17/03/2012		55.84801667	-6.102133333		8	CTub.Adig
T03-c	17/03/2012		55.84793333	-6.102083333		8	CTub.Adig
T03-c	17/03/2012		55.84783333	-6.102033333		8	CTub.Adig
T03-c	17/03/2012		55.84775	-6.102		8	CTub.Adig
T03-c	17/03/2012		55.84766667	-6.101966667		8	CTub.Adig
T03-c	17/03/2012		55.84756667	-6.101916667		8	CTub.Adig
T03-c	17/03/2012		55.8475	-6.101866667		8	CTub.Adig
T03-c	17/03/2012		55.8474	-6.101816667		8	CTub.Adig
T03-c	17/03/2012		55.84731667	-6.101766667		8	CTub.Adig
T03-c	17/03/2012		55.84721667	-6.101733333		8	CTub.Adig
T03-c	17/03/2012		55.84713333	-6.1017		8	CTub.Adig
T03-c	17/03/2012		55.84703333	-6.101683333		8	CTub.Adig
T03-c	17/03/2012		55.84695	-6.101666667		8	CTub.Adig
T03-c	17/03/2012		55.84685	-6.101633333		8	CTub.Adig
T03-c	17/03/2012		55.84676667	-6.101616667		8	CTub.Adig
T03-c	17/03/2012		55.84666667	-6.101583333		8	CTub.Adig
T03-c	17/03/2012		55.84656667	-6.101533333		8	CTub.Adig
T03-c	17/03/2012		55.84646667	-6.1015		8	CTub.Adig
T03-c	17/03/2012		55.84638333	-6.101433333		8	CTub.Adig
T03-c	17/03/2012		55.84633333	-6.101316667		8	CTub.Adig
T03-c	17/03/2012		55.84628333	-6.101166667		8	CTub.Adig
T03-c	17/03/2012		55.8462	-6.1011		8	CTub.Adig
T03-c	17/03/2012		55.84603333	-6.101		8	CTub.Adig
T03-c	17/03/2012		55.84595	-6.10095		8	CTub.Adig
T03-c	17/03/2012		55.84586667	-6.100916667		8	CTub.Adig
T03-c	17/03/2012		55.84578333	-6.100883333		8	CTub.Adig
T03-c	17/03/2012		55.8457	-6.100833333		8	CTub.Adig
T03-c	17/03/2012		55.8456	-6.1008		8	CTub.Adig
T03-c	17/03/2012		55.8455	-6.100766667		8	CTub.Adig
T03-c	17/03/2012	129	55.84541667	-6.100733333	54.7	Seabed	CTub.Adig
T03-c	17/03/2012		55.84531667	-6.100716667		8	CTub.Adig
T03-c	17/03/2012		55.84523333	-6.100683333		8	CTub.Adig
T03-c	17/03/2012		55.84515	-6.100666667		8	CTub.Adig
T03-c	17/03/2012		55.84506667	-6.10065		8	CTub.Adig
T03-c	17/03/2012		55.84498333	-6.100633333		8	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T03-c	17/03/2012		55.84488333	-6.1006		8	CTub.Adig
T03-c	17/03/2012		55.84478333	-6.10055		8	CTub.Adig
T03-c	17/03/2012	130	55.8447	-6.100516667		Up	CTub.Adig
T04-a	17/03/2012	120	55.84951667	-6.10435	11.8	Down Tp 8	LhypLsac
T04-a	17/03/2012		55.84955	-6.104416667		8	LhypLsac
T04-a	17/03/2012		55.84958333	-6.104516667		8	LhypLsac
T04-a	17/03/2012		55.8496	-6.1046		8	LhypLsac
T04-a	17/03/2012		55.8496	-6.104616667		8	LhypLsac
T04-a	17/03/2012		55.84958333	-6.104666667		8	LhypLsac
T04-a	17/03/2012		55.84956667	-6.104633333		8	LhypLsac
T04-a	17/03/2012		55.84951667	-6.10445		8	LhypLsac
T04-a	17/03/2012		55.84943333	-6.104283333		8	LhypLsac
T04-a	17/03/2012		55.84935	-6.104233333		8	LhypLsac
T04-a	17/03/2012		55.84925	-6.1042		8	LhypLsac
T04-a	17/03/2012		55.84915	-6.104166667		8	LhypLsac
T04-a	17/03/2012		55.8491	-6.10415		8	LhypLsac
T04-a	17/03/2012		55.84903333	-6.10415		8	LhypLsac
T04-a	17/03/2012	121	55.84896667	-6.104166667		Up	LhypLsac
T04-b	17/03/2012	122	55.8492	-6.103383333	29.8	Down	CTub.Adig
T04-b	17/03/2012		55.84911667	-6.1033		8	CTub.Adig
T04-b	17/03/2012		55.84901667	-6.103333333		8	CTub.Adig
T04-b	17/03/2012		55.84893333	-6.1034		8	CTub.Adig
T04-b	17/03/2012		55.84886667	-6.103433333		8	CTub.Adig
T04-b	17/03/2012		55.84878333	-6.1034		8	CTub.Adig
T04-b	17/03/2012		55.84871667	-6.103333333		8	CTub.Adig
T04-b	17/03/2012		55.84863333	-6.103283333		8	CTub.Adig
T04-b	17/03/2012		55.84853333	-6.103233333		8	CTub.Adig
T04-b	17/03/2012		55.84845	-6.103183333		8	CTub.Adig
T04-b	17/03/2012		55.84835	-6.103116667		8	CTub.Adig
T04-b	17/03/2012		55.84828333	-6.10305		8	CTub.Adig
T04-b	17/03/2012		55.8482	-6.103016667		8	CTub.Adig
T04-b	17/03/2012		55.8481	-6.102966667		8	CTub.Adig
T04-b	17/03/2012		55.84801667	-6.1029		8	CTub.Adig
T04-b	17/03/2012		55.84793333	-6.102833333		8	CTub.Adig
T04-b	17/03/2012		55.84783333	-6.102783333		8	CTub.Adig
T04-b	17/03/2012		55.84775	-6.102766667		8	CTub.Adig
T04-b	17/03/2012		55.84765	-6.10285		8	CTub.Adig
T04-b	17/03/2012		55.84756667	-6.102983333		8	CTub.Adig
T04-b	17/03/2012		55.8475	-6.1031		8	CTub.Adig
T04-b	17/03/2012		55.84741667	-6.103183333		8	CTub.Adig
T04-b	17/03/2012		55.84733333	-6.103216667		8	CTub.Adig
T04-b	17/03/2012	123	55.84723333	-6.103233333	10.8	Seabed	LhypLsac
T04-b	17/03/2012		55.84713333	-6.103216667		8	LhypLsac
T04-b	17/03/2012		55.84703333	-6.103216667		8	LhypLsac
T04-b	17/03/2012		55.84695	-6.103183333		8	LhypLsac



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T04-b	17/03/2012		55.84685	-6.103133333		8	LhypLsac
T04-b	17/03/2012		55.84676667	-6.103083333		8	LhypLsac
T04-b	17/03/2012		55.84666667	-6.10305		8	LhypLsac
T04-b	17/03/2012		55.84658333	-6.103016667		8	LhypLsac
T04-b	17/03/2012		55.8465	-6.102983333		8	LhypLsac
T04-b	17/03/2012		55.84641667	-6.10295		8	LhypLsac
T04-b	17/03/2012		55.84631667	-6.102916667		8	LhypLsac
T04-b	17/03/2012		55.84623333	-6.102866667		8	LhypLsac
T04-b	17/03/2012		55.84615	-6.10285		8	LhypLsac
T04-b	17/03/2012		55.84605	-6.102866667		8	LhypLsac
T04-b	17/03/2012		55.84596667	-6.102816667		8	LhypLsac
T04-b	17/03/2012		55.8458	-6.1027		8	LhypLsac
T04-b	17/03/2012	124	55.84571667	-6.102633333	13.8	Seabed	LhypLsac
T04-b	17/03/2012		55.84563333	-6.102583333		8	LhypLsac
T04-b	17/03/2012		55.84555	-6.102516667		8	LhypLsac
T04-b	17/03/2012		55.84546667	-6.102466667		8	LhypLsac
T04-b	17/03/2012		55.84538333	-6.1024		8	LhypLsac
T04-b	17/03/2012		55.8453	-6.102366667		8	LhypLsac
T04-b	17/03/2012	125	55.84521667	-6.102283333		Up	LhypLsac
T05	15/03/2012	43	55.8187	-6.091383333	20.0	Down Tp 3	CTub.CuSp
T05	15/03/2012		55.81875	-6.0915		3	CTub.CuSp
T05	15/03/2012		55.81885	-6.09155		3	CTub.CuSp
T05	15/03/2012		55.8189	-6.0916		3	CTub.CuSp
T05	15/03/2012		55.819	-6.09175		3	CTub.CuSp
T05	15/03/2012		55.8191	-6.091716667		3	CTub.CuSp
T05	15/03/2012		55.81921667	-6.091866667		3	CTub.CuSp
T05	15/03/2012		55.81926667	-6.092016667		3	CTub.CuSp
T05	15/03/2012		55.81936667	-6.091983333		3	CTub.CuSp
T05	15/03/2012		55.81945	-6.091883333		3	CTub.CuSp
T05	15/03/2012		55.81953333	-6.091816667		3	CTub.CuSp
T05	15/03/2012		55.81961667	-6.0918		3	CTub.CuSp
T05	15/03/2012		55.81968333	-6.09195		3	CTub.CuSp
T05	15/03/2012	44	55.81976667	-6.092066667	22.0	Seabed	CTub.CuSp
T05	15/03/2012		55.81985	-6.092133333		3	CTub.CuSp
T05	15/03/2012		55.81993333	-6.092216667		3	CTub.CuSp
T05	15/03/2012		55.82001667	-6.09205		3	CTub.CuSp
T05	15/03/2012		55.82005	-6.09195		3	CTub.CuSp
T05	15/03/2012		55.82016667	-6.092		3	CTub.CuSp
T05	15/03/2012		55.82025	-6.092033333		3	CTub.CuSp
T05	15/03/2012		55.82041667	-6.0919		3	FluCoAs
T05	15/03/2012	45	55.82051667	-6.09195	21.0	Seabed	FluCoAs
T05	15/03/2012		55.8206	-6.09205		3	FluCoAs
T05	15/03/2012		55.82068333	-6.09215		3	FluCoAs
T05	15/03/2012		55.82076667	-6.092233333		3	FluCoAs
T05	15/03/2012		55.82095	-6.092183333		3	FluCoAs

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T05	15/03/2012		55.82113333	-6.092116667		3	FluCoAs
T05	15/03/2012		55.82131667	-6.092166667		3	FluCoAs
T05	15/03/2012		55.8214	-6.092266667		3	FluCoAs
T05	15/03/2012	45a	55.8215	-6.09235	23.0	Seabed	CTub.CuSp
T05	15/03/2012		55.82158333	-6.09245		3	CTub.CuSp
T05	15/03/2012	46	55.82186667	-6.092466667	23.0	Seabed Tp 4	CTub.Adig
T05	15/03/2012		55.82193333	-6.092483333		4	CTub.Adig
T05	15/03/2012		55.82203333	-6.092566667		4	CTub.Adig
T05	15/03/2012		55.82213333	-6.09265		4	CTub.Adig
T05	15/03/2012		55.82221667	-6.092716667		4	CTub.Adig
T05	15/03/2012		55.8223	-6.0927		4	CTub.Adig
T05	15/03/2012		55.82278333	-6.09235		4	CTub.Adig
T05	15/03/2012		55.82286667	-6.092416667		4	CTub.Adig
T05	15/03/2012		55.82295	-6.0925		4	CTub.Adig
T05	15/03/2012		55.82301667	-6.092583333		4	CTub.Adig
T05	15/03/2012		55.8231	-6.092683333		4	CTub.Adig
T05	15/03/2012		55.82316667	-6.092766667		4	CTub.Adig
T05	15/03/2012		55.82335	-6.092833333		4	CTub.Adig
T05	15/03/2012		55.82343333	-6.0928		4	CTub.Adig
T05	15/03/2012		55.82353333	-6.092816667		4	CTub.Adig
T05	15/03/2012		55.82361667	-6.092883333		4	CTub.Adig
T05	15/03/2012		55.8237	-6.092966667		4	CTub.Adig
T05	15/03/2012		55.8238	-6.09305		4	CTub.Adig
T05	15/03/2012		55.82388333	-6.093133333		4	CTub.Adig
T05	15/03/2012		55.82396667	-6.0932		4	CTub.Adig
T05	15/03/2012		55.82421667	-6.09315		4	CTub.Adig
T05	15/03/2012		55.82431667	-6.0931		4	CTub.Adig
T05	15/03/2012		55.8244	-6.093133333		4	CTub.Adig
T05	15/03/2012		55.8245	-6.093183333		4	CTub.Adig
T05	15/03/2012		55.82458333	-6.093216667		4	CTub.Adig
T05	15/03/2012		55.82468333	-6.0932		4	CTub.Adig
T05	15/03/2012		55.82476667	-6.093166667		4	CTub.Adig
T05	15/03/2012		55.82486667	-6.09315		4	CTub.Adig
T05	15/03/2012		55.82495	-6.093183333		4	CTub.Adig
T05	15/03/2012		55.82505	-6.093233333		4	CTub.Adig
T05	15/03/2012		55.82515	-6.0933		4	CTub.Adig
T05	15/03/2012		55.82523333	-6.093366667		4	CTub.Adig
T05	15/03/2012		55.82531667	-6.0934		4	CTub.Adig
T05	15/03/2012		55.82541667	-6.0934		4	CTub.Adig
T05	15/03/2012		55.82551667	-6.093366667		4	CTub.Adig
T05	15/03/2012		55.8256	-6.09335		4	CTub.Adig
T05	15/03/2012		55.8257	-6.0933		4	CTub.Adig
T05	15/03/2012		55.82578333	-6.093333333		4	CTub.Adig
T05	15/03/2012		55.82588333	-6.093366667		4	CTub.Adig
T05	15/03/2012		55.82598333	-6.093416667		4	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T05	15/03/2012		55.82606667	-6.093466667		4	CTub.Adig
T05	15/03/2012		55.82613333	-6.093516667		4	CTub.Adig
T05	15/03/2012		55.82621667	-6.0936		4	CTub.Adig
T05	15/03/2012		55.8263	-6.09365		4	CTub.Adig
T05	15/03/2012		55.82638333	-6.093683333		4	CTub.Adig
T05	15/03/2012		55.82656667	-6.093716667		4	CTub.Adig
T05	15/03/2012		55.82666667	-6.093716667		4	CTub.Adig
T05	15/03/2012		55.82676667	-6.0937		4	CTub.Adig
T05	15/03/2012		55.82686667	-6.093666667		4	CTub.Adig
T05	15/03/2012		55.82695	-6.093633333		4	CTub.Adig
T05	15/03/2012		55.82705	-6.0936		4	CTub.Adig
T05	15/03/2012	47	55.82715	-6.0936	19.0	Seabed	CTub.Adig
T05	15/03/2012		55.82723333	-6.093633333		4	CTub.Adig
T05	15/03/2012		55.82733333	-6.093666667		4	CTub.Adig
T05	15/03/2012		55.82741667	-6.093733333		4	CTub.Adig
T05	15/03/2012		55.8275	-6.0938		4	CTub.Adig
T05	15/03/2012		55.8276	-6.09385		4	CTub.Adig
T05	15/03/2012		55.82778333	-6.093966667		4	CTub.Adig
T05	15/03/2012		55.82786667	-6.094033333		4	CTub.Adig
T05	15/03/2012		55.82795	-6.0941		4	CTub.Adig
T05	15/03/2012		55.82805	-6.094166667		4	CTub.Adig
T05	15/03/2012		55.82813333	-6.094233333		4	CTub.Adig
T05	15/03/2012		55.82823333	-6.09425		4	CTub.Adig
T05	15/03/2012		55.82833333	-6.09425		4	CTub.Adig
T05	15/03/2012		55.82841667	-6.094233333		4	CTub.Adig
T05	15/03/2012		55.82851667	-6.0942		4	CTub.Adig
T05	15/03/2012		55.82861667	-6.094183333		4	CTub.Adig
T05	15/03/2012		55.82871667	-6.09415		4	CTub.Adig
T05	15/03/2012		55.8288	-6.094116667		4	CTub.Adig
T05	15/03/2012		55.8289	-6.0941		4	CTub.Adig
T05	15/03/2012		55.829	-6.0941		4	CTub.Adig
T05	15/03/2012		55.82908333	-6.094116667		4	CTub.Adig
T05	15/03/2012		55.82916667	-6.09415		4	CTub.Adig
T05	15/03/2012		55.82926667	-6.094183333		4	CTub.Adig
T05	15/03/2012		55.82935	-6.094233333		4	CTub.Adig
T05	15/03/2012		55.82943333	-6.094283333		4	CTub.Adig
T05	15/03/2012		55.82953333	-6.09435		4	CTub.Adig
T05	15/03/2012		55.82963333	-6.0944		4	CTub.Adig
T05	15/03/2012	47a	55.82981667	-6.09445	34.0	Seabed	CTub.Adig
T05	15/03/2012		55.82991667	-6.094433333		4	CTub.Adig
T05	15/03/2012		55.83	-6.094433333		4	CTub.Adig
T05	15/03/2012		55.8301	-6.094466667		4	CTub.Adig
T05	15/03/2012		55.8302	-6.094516667		4	CTub.Adig
T05	15/03/2012		55.8303	-6.094566667		4	CTub.Adig
T05	15/03/2012		55.83038333	-6.094633333		4	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
T05	15/03/2012		55.83046667	-6.094683333		4	CTub.Adig
T05	15/03/2012		55.83055	-6.094683333		4	CTub.Adig
T05	15/03/2012		55.83065	-6.094666667		4	CTub.Adig
T05	15/03/2012		55.83073333	-6.094633333		4	CTub.Adig
T05	15/03/2012		55.83081667	-6.094633333		4	CTub.Adig
T05	15/03/2012		55.83091667	-6.094666667		4	CTub.Adig
T05	15/03/2012		55.83101667	-6.094716667		4	CTub.Adig
T05	15/03/2012		55.8311	-6.094766667		4	CTub.Adig
T05	15/03/2012		55.83118333	-6.094816667		4	CTub.Adig
T05	15/03/2012		55.83128333	-6.09485		4	CTub.Adig
T05	15/03/2012		55.83138333	-6.094866667		4	CTub.Adig
T05	15/03/2012		55.83148333	-6.094883333		4	CTub.Adig
T05	15/03/2012		55.83156667	-6.094866667		4	CTub.Adig
T05	15/03/2012		55.83166667	-6.094866667		4	CTub.Adig
T05	15/03/2012		55.83176667	-6.094866667		4	CTub.Adig
T05	15/03/2012		55.83185	-6.094866667		4	CTub.Adig
T05	15/03/2012		55.83195	-6.094883333		4	CTub.Adig
T05	15/03/2012		55.83203333	-6.0949		4	CTub.Adig
T05	15/03/2012		55.83213333	-6.094883333		4	CTub.Adig
T05	15/03/2012		55.83223333	-6.094883333		4	CTub.Adig
T05	15/03/2012		55.83231667	-6.0949		4	CTub.Adig
T05	15/03/2012	48	55.8324	-6.094916667	45.0	Seabed	CTub.Adig
T05	15/03/2012		55.8325	-6.094966667		4	CTub.Adig
T05	15/03/2012		55.83258333	-6.095016667		4	CTub.Adig
T05	15/03/2012		55.83268333	-6.095016667		4	CTub.Adig
T05	15/03/2012		55.83276667	-6.095016667		4	CTub.Adig
T05	15/03/2012		55.83285	-6.095033333		4	CTub.Adig
T05	15/03/2012		55.83295	-6.09505		4	CTub.Adig
T05	15/03/2012		55.83303333	-6.0951		4	CTub.Adig
T05	15/03/2012		55.83313333	-6.09515		4	CTub.Adig
T05	15/03/2012		55.83321667	-6.0952		4	CTub.Adig
T05	15/03/2012		55.8333	-6.095233333		4	CTub.Adig
T05	15/03/2012		55.8334	-6.095266667		4	CTub.Adig
T05	15/03/2012		55.8335	-6.095283333		4	CTub.Adig
T05	15/03/2012		55.8337	-6.095233333		4	CTub.Adig
T05	15/03/2012		55.83378333	-6.0952		4	CTub.Adig
T05	15/03/2012		55.83388333	-6.095216667		4	CTub.Adig
T05	15/03/2012		55.83396667	-6.09525		4	CTub.Adig
T05	15/03/2012		55.83406667	-6.095283333		4	CTub.Adig
T05	15/03/2012		55.83415	-6.095333333		4	CTub.Adig
T05	15/03/2012		55.83425	-6.095366667		4	CTub.Adig
T05	15/03/2012		55.83433333	-6.095433333		4	CTub.Adig
T05	15/03/2012		55.83443333	-6.095466667		4	CTub.Adig
T05	15/03/2012		55.83451667	-6.095483333		4	CTub.Adig
T05	15/03/2012		55.83461667	-6.095483333		4	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T05	15/03/2012		55.83471667	-6.0955		4	CTub.Adig
T05	15/03/2012		55.8348	-6.095516667		4	CTub.Adig
T05	15/03/2012		55.8349	-6.095533333		4	CTub.Adig
T05	15/03/2012		55.83498333	-6.095566667		4	CTub.Adig
T05	15/03/2012		55.83506667	-6.095616667		4	CTub.Adig
T05	15/03/2012	49	55.83516667	-6.09565		Up	CTub.Adig
T06-a	15/03/2012	30	55.83431667	-6.097033333	53.6	Down Tp 3	FluCoAs
T06-a	15/03/2012		55.83435	-6.09695		3	FluCoAs
T06-a	15/03/2012		55.83425	-6.0969		3	FluCoAs
T06-a	15/03/2012		55.83415	-6.0969		3	FluCoAs
T06-a	15/03/2012		55.83406667	-6.096916667		3	FluCoAs
T06-a	15/03/2012		55.83396667	-6.096933333		3	FluCoAs
T06-a	15/03/2012		55.83388333	-6.096983333		3	FluCoAs
T06-a	15/03/2012		55.83378333	-6.097016667		3	FluCoAs
T06-a	15/03/2012		55.83368333	-6.097066667		3	FluCoAs
T06-a	15/03/2012		55.8336	-6.0971		3	FluCoAs
T06-a	15/03/2012		55.8335	-6.09715		3	FluCoAs
T06-a	15/03/2012		55.83341667	-6.0972		3	FluCoAs
T06-a	15/03/2012		55.83331667	-6.09725		3	FluCoAs
T06-a	15/03/2012		55.83323333	-6.0973		3	FluCoAs
T06-a	15/03/2012		55.83315	-6.09735		3	FluCoAs
T06-a	15/03/2012		55.83306667	-6.097416667		3	FluCoAs
T06-a	15/03/2012		55.83296667	-6.097466667		3	FluCoAs
T06-a	15/03/2012		55.83286667	-6.097466667		3	FluCoAs
T06-a	15/03/2012		55.83278333	-6.0974		3	FluCoAs
T06-a	15/03/2012		55.8327	-6.0973		3	FluCoAs
T06-a	15/03/2012		55.83263333	-6.097216667		3	FluCoAs
T06-a	15/03/2012		55.83253333	-6.09715		3	FluCoAs
T06-a	15/03/2012		55.83245	-6.097083333		3	FluCoAs
T06-a	15/03/2012		55.83235	-6.09705		3	FluCoAs
T06-a	15/03/2012		55.83226667	-6.09705		3	FluCoAs
T06-a	15/03/2012		55.83218333	-6.0971		3	FluCoAs
T06-a	15/03/2012		55.83208333	-6.09715		3	FluCoAs
T06-a	15/03/2012		55.832	-6.097216667		3	FluCoAs
T06-a	15/03/2012		55.83191667	-6.097266667		3	FluCoAs
T06-a	15/03/2012		55.83183333	-6.097316667		3	FluCoAs
T06-a	15/03/2012		55.83173333	-6.097383333		3	FluCoAs
T06-a	15/03/2012		55.83165	-6.097433333		3	FluCoAs
T06-a	15/03/2012		55.83156667	-6.097483333		3	FluCoAs
T06-a	15/03/2012		55.83148333	-6.097533333		3	FluCoAs
T06-a	15/03/2012		55.83123333	-6.097633333		3	FluCoAs
T06-a	15/03/2012		55.83113333	-6.0976		3	FluCoAs
T06-a	15/03/2012		55.83106667	-6.09755		3	FluCoAs
T06-a	15/03/2012		55.83098333	-6.0975		3	FluCoAs
T06-a	15/03/2012		55.83043333	-6.097		3	FluCoAs



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T06-a	15/03/2012		55.83038333	-6.096883333		3	FluCoAs
T06-a	15/03/2012		55.83033333	-6.09675		3	FluCoAs
T06-a	15/03/2012		55.83028333	-6.096616667		3	FluCoAs
T06-a	15/03/2012		55.83025	-6.0965		3	FluCoAs
T06-a	15/03/2012		55.83021667	-6.096366667		3	FluCoAs
T06-a	15/03/2012		55.83018333	-6.096233333		3	FluCoAs
T06-a	15/03/2012		55.83015	-6.096083333		3	FluCoAs
T06-a	15/03/2012		55.83013333	-6.09595		3	FluCoAs
T06-a	15/03/2012		55.8301	-6.095816667		3	FluCoAs
T06-a	15/03/2012		55.83008333	-6.095683333		3	FluCoAs
T06-a	15/03/2012		55.83008333	-6.095533333		3	FluCoAs
T06-a	15/03/2012		55.83006667	-6.0954		3	FluCoAs
T06-a	15/03/2012		55.83005	-6.09525		3	FluCoAs
T06-a	15/03/2012		55.83003333	-6.0951		3	FluCoAs
T06-a	15/03/2012		55.82996667	-6.09495		3	FluCoAs
T06-a	15/03/2012		55.82993333	-6.094816667		3	FluCoAs
T06-a	15/03/2012		55.8299	-6.094666667		3	FluCoAs
T06-a	15/03/2012		55.82988333	-6.094516667		3	FluCoAs
T06-a	15/03/2012	30a	55.82975	-6.094416667	33.7	Seabed	FluCoAs
T06-a	15/03/2012		55.82966667	-6.094466667		3	FluCoAs
T06-a	15/03/2012	33	55.82956667	-6.0945	34.5	Seabed	CTub.Adig
T06-a	15/03/2012		55.82948333	-6.094566667		3	CTub.Adig
T06-a	15/03/2012		55.82941667	-6.0946		3	CTub.Adig
T06-a	15/03/2012		55.82935	-6.094633333		3	CTub.Adig
T06-a	15/03/2012		55.82925	-6.094666667		3	CTub.Adig
T06-a	15/03/2012		55.82918333	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.8291	-6.094733333		3	CTub.Adig
T06-a	15/03/2012		55.82903333	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.82895	-6.094783333		3	CTub.Adig
T06-a	15/03/2012		55.82888333	-6.094816667		3	CTub.Adig
T06-a	15/03/2012		55.8288	-6.09485		3	CTub.Adig
T06-a	15/03/2012		55.82871667	-6.0949		3	CTub.Adig
T06-a	15/03/2012		55.82863333	-6.09495		3	CTub.Adig
T06-a	15/03/2012		55.82855	-6.095		3	CTub.Adig
T06-a	15/03/2012		55.82848333	-6.095033333		3	CTub.Adig
T06-a	15/03/2012		55.8284	-6.095066667		3	CTub.Adig
T06-a	15/03/2012	34	55.82833333	-6.0951	39.0	Seabed	CTub.Adig
T06-a	15/03/2012		55.82813333	-6.095		3	CTub.Adig
T06-a	15/03/2012		55.82803333	-6.095016667		3	CTub.Adig
T06-a	15/03/2012		55.82795	-6.095066667		3	CTub.Adig
T06-a	15/03/2012		55.82785	-6.095133333		3	CTub.Adig
T06-a	15/03/2012		55.82776667	-6.0952		3	CTub.Adig
T06-a	15/03/2012		55.82768333	-6.095266667		3	CTub.Adig
T06-a	15/03/2012		55.82761667	-6.095216667		3	CTub.Adig
T06-a	15/03/2012		55.82755	-6.0951		3	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T06-a	15/03/2012		55.8275	-6.094983333		3	CTub.Adig
T06-a	15/03/2012		55.827433333	-6.094883333		3	CTub.Adig
T06-a	15/03/2012		55.82735	-6.0948		3	CTub.Adig
T06-a	15/03/2012		55.827283333	-6.094683333		3	CTub.Adig
T06-a	15/03/2012		55.82721667	-6.0946		3	CTub.Adig
T06-a	15/03/2012		55.82715	-6.094583333		3	CTub.Adig
T06-a	15/03/2012		55.82705	-6.094633333		3	CTub.Adig
T06-a	15/03/2012	35	55.82695	-6.09465	35.8	Seabed	CTub.Adig
T06-a	15/03/2012		55.82675	-6.094683333		3	CTub.Adig
T06-a	15/03/2012		55.82666667	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.826583333	-6.094683333		3	CTub.Adig
T06-a	15/03/2012		55.8265	-6.094666667		3	CTub.Adig
T06-a	15/03/2012	35a	55.8264	-6.094683333	36.0	Seabed	CTub.Adig
T06-a	15/03/2012		55.8263	-6.094733333		3	CTub.Adig
T06-a	15/03/2012		55.8262	-6.094766667		3	CTub.Adig
T06-a	15/03/2012		55.82611667	-6.094783333		3	CTub.Adig
T06-a	15/03/2012	35b	55.826033333	-6.0948	32.0	Seabed	CTub.Adig
T06-a	15/03/2012		55.825933333	-6.094833333		3	CTub.Adig
T06-a	15/03/2012		55.825833333	-6.094816667		3	CTub.Adig
T06-a	15/03/2012		55.82575	-6.094783333		3	CTub.Adig
T06-a	15/03/2012		55.82566667	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.825583333	-6.094733333		3	CTub.Adig
T06-a	15/03/2012		55.8255	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.82541667	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.825333333	-6.094666667		3	CTub.Adig
T06-a	15/03/2012		55.82525	-6.094633333		3	CTub.Adig
T06-a	15/03/2012		55.82516667	-6.094633333		3	CTub.Adig
T06-a	15/03/2012		55.825083333	-6.09465		3	CTub.Adig
T06-a	15/03/2012		55.824983333	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.824883333	-6.094683333		3	CTub.Adig
T06-a	15/03/2012		55.824783333	-6.094666667		3	CTub.Adig
T06-a	15/03/2012		55.8247	-6.094666667		3	CTub.Adig
T06-a	15/03/2012		55.8246	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.82451667	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.824433333	-6.094766667		3	CTub.Adig
T06-a	15/03/2012		55.824333333	-6.09475		3	CTub.Adig
T06-a	15/03/2012		55.82425	-6.094716667		3	CTub.Adig
T06-a	15/03/2012		55.82415	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.82406667	-6.0947		3	CTub.Adig
T06-a	15/03/2012		55.823983333	-6.094733333		3	CTub.Adig
T06-a	15/03/2012		55.823883333	-6.0947		3	CTub.Adig
T06-a	15/03/2012	36	55.82371667	-6.094566667	22.9	Seabed	CTub.Adig
T06-a	15/03/2012	37	55.82291667	-6.094616667	23.0	Recording started/stopped	
T06-a	15/03/2012	38	55.821883333	-6.09375	18.0	Seabed	CTub.CuSp
T06-a	15/03/2012		55.8227	-6.092383333		3	CTub.CuSp

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T06-a	15/03/2012		55.8228	-6.092383333		3	CTub.CuSp
T06-a	15/03/2012		55.82288333	-6.0924		3	CTub.CuSp
T06-a	15/03/2012		55.82296667	-6.092433333		3	CTub.CuSp
T06-a	15/03/2012		55.8229	-6.092533333		3	CTub.CuSp
T06-a	15/03/2012		55.82283333	-6.092616667		3	CTub.CuSp
T06-a	15/03/2012		55.82275	-6.0927		3	CTub.CuSp
T06-a	15/03/2012		55.82266667	-6.092733333		3	CTub.CuSp
T06-a	15/03/2012		55.82256667	-6.092683333		3	CTub.CuSp
T06-a	15/03/2012		55.82246667	-6.09265		3	CTub.CuSp
T06-a	15/03/2012		55.82238333	-6.092616667		3	CTub.CuSp
T06-a	15/03/2012		55.82233333	-6.092633333		3	CTub.CuSp
T06-a	15/03/2012		55.8223	-6.0927		3	CTub.CuSp
T06-a	15/03/2012		55.82216667	-6.092766667		3	CTub.CuSp
T06-a	15/03/2012		55.82206667	-6.092766667		3	CTub.CuSp
T06-a	15/03/2012		55.82196667	-6.09275		3	CTub.CuSp
T06-a	15/03/2012		55.82188333	-6.09275		3	CTub.CuSp
T06-a	15/03/2012		55.82185	-6.092783333		3	CTub.CuSp
T06-a	15/03/2012		55.82175	-6.092866667		3	CTub.CuSp
T06-a	15/03/2012		55.82163333	-6.0929		3	CTub.CuSp
T06-a	15/03/2012		55.82153333	-6.0929		3	CTub.CuSp
T06-a	15/03/2012		55.82146667	-6.09295		3	CTub.CuSp
T06-a	15/03/2012	39	55.82146667	-6.093	19.0	Seabed	CTub.CuSp
T06-a	15/03/2012		55.82133333	-6.093083333		3	CTub.CuSp
T06-a	15/03/2012		55.82121667	-6.093066667		3	CTub.CuSp
T06-a	15/03/2012		55.82111667	-6.093033333		3	CTub.CuSp
T06-a	15/03/2012		55.82103333	-6.093		3	CTub.CuSp
T06-a	15/03/2012		55.82095	-6.093016667		3	CTub.CuSp
T06-a	15/03/2012		55.8209	-6.093066667		3	CTub.CuSp
T06-a	15/03/2012		55.82081667	-6.093166667		3	CTub.CuSp
T06-a	15/03/2012		55.82071667	-6.0932		3	CTub.CuSp
T06-a	15/03/2012		55.8206	-6.093216667		3	CTub.CuSp
T06-a	15/03/2012		55.82051667	-6.093216667		3	CTub.CuSp
T06-a	15/03/2012		55.82046667	-6.093266667		3	CTub.CuSp
T06-a	15/03/2012		55.82045	-6.093366667		3	CTub.CuSp
T06-a	15/03/2012		55.82023333	-6.09345		3	CTub.CuSp
T06-a	15/03/2012		55.82013333	-6.093433333		3	CTub.CuSp
T06-a	15/03/2012		55.82003333	-6.093416667		3	CTub.CuSp
T06-a	15/03/2012		55.81996667	-6.093416667		3	CTub.CuSp
T06-a	15/03/2012	40	55.81993333	-6.093466667	20.4	Seabed	CTub.CuSp
T06-a	15/03/2012		55.81985	-6.093583333		3	CTub.CuSp
T06-a	15/03/2012		55.81975	-6.093583333		3	CTub.CuSp
T06-a	15/03/2012		55.81966667	-6.093533333		3	CTub.CuSp
T06-a	15/03/2012		55.81958333	-6.093483333		3	CTub.CuSp
T06-a	15/03/2012		55.81948333	-6.093416667		3	CTub.CuSp
T06-a	15/03/2012		55.8194	-6.09335		3	CTub.CuSp

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T06-a	15/03/2012		55.81931667	-6.093283333		3	CTub.CuSp
T06-a	15/03/2012		55.81923333	-6.093216667		3	CTub.CuSp
T06-a	15/03/2012		55.81915	-6.093116667		3	CTub.CuSp
T06-a	15/03/2012		55.81908333	-6.093083333		3	CTub.CuSp
T06-a	15/03/2012		55.81908333	-6.093133333		3	CTub.CuSp
T06-a	15/03/2012		55.81908333	-6.09315		3	CTub.CuSp
T06-a	15/03/2012		55.81906667	-6.093266667		3	CTub.CuSp
T06-a	15/03/2012	41	55.819	-6.0936	21.0	Seabed	CTub.CuSp
T06-a	15/03/2012		55.8188	-6.093616667		3	CTub.CuSp
T06-a	15/03/2012		55.81871667	-6.093533333		3	CTub.CuSp
T06-a	15/03/2012		55.81865	-6.09345		3	CTub.CuSp
T06-a	15/03/2012		55.81858333	-6.093316667		3	CTub.CuSp
T06-a	15/03/2012		55.81853333	-6.093183333		3	CTub.CuSp
T06-a	15/03/2012		55.81846667	-6.093066667		3	CTub.CuSp
T06-a	15/03/2012		55.8184	-6.093		3	CTub.CuSp
T06-a	15/03/2012		55.81838333	-6.09305		3	CTub.CuSp
T06-a	15/03/2012		55.81838333	-6.093116667		3	CTub.CuSp
T06-a	15/03/2012		55.81836667	-6.093216667		3	CTub.CuSp
T06-a	15/03/2012		55.81838333	-6.093316667		3	CTub.CuSp
T06-a	15/03/2012	42	55.8184	-6.093433333		Up	CTub.CuSp
T06-b	17/03/2012	105	55.82165	-6.0937	21.2	Down Tp 7	CTub.Adig
T06-b	17/03/2012		55.82175	-6.093716667		7	CTub.Adig
T06-b	17/03/2012		55.82183333	-6.093733333		7	CTub.Adig
T06-b	17/03/2012		55.82193333	-6.093716667		7	CTub.Adig
T06-b	17/03/2012		55.82201667	-6.093716667		7	CTub.Adig
T06-b	17/03/2012		55.82211667	-6.093733333		7	CTub.Adig
T06-b	17/03/2012		55.82221667	-6.093716667		7	CTub.Adig
T06-b	17/03/2012		55.8223	-6.093733333		7	CTub.Adig
T06-b	17/03/2012		55.82238333	-6.093733333		7	CTub.Adig
T06-b	17/03/2012		55.82248333	-6.093716667		7	CTub.Adig
T06-b	17/03/2012		55.82258333	-6.0937		7	CTub.Adig
T06-b	17/03/2012		55.82265	-6.093783333		7	CTub.Adig
T06-b	17/03/2012		55.82271667	-6.0939		7	CTub.Adig
T06-b	17/03/2012		55.82278333	-6.094016667		7	CTub.Adig
T06-b	17/03/2012		55.82295	-6.094116667		7	CTub.Adig
T06-b	17/03/2012		55.82306667	-6.094116667		7	CTub.Adig
T06-b	17/03/2012		55.82316667	-6.094116667		7	CTub.Adig
T06-b	17/03/2012		55.82325	-6.094116667		7	CTub.Adig
T06-b	17/03/2012		55.82335	-6.0941		7	CTub.Adig
T06-b	17/03/2012		55.82345	-6.094066667		7	CTub.Adig
T06-b	17/03/2012		55.82353333	-6.094066667		7	CTub.Adig
T06-b	17/03/2012		55.82363333	-6.09405		7	CTub.Adig
T06-b	17/03/2012		55.82373333	-6.09405		7	CTub.Adig
T06-b	17/03/2012		55.82381667	-6.094066667		7	CTub.Adig
T06-b	17/03/2012		55.82386667	-6.094183333		7	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T06-b	17/03/2012		55.82393333	-6.0943		7	CTub.Adig
T06-b	17/03/2012		55.82403333	-6.094366667		7	CTub.Adig
T06-b	17/03/2012		55.82411667	-6.094366667		7	CTub.Adig
T06-b	17/03/2012		55.8242	-6.09435		7	CTub.Adig
T06-b	17/03/2012		55.82431667	-6.094333333		7	CTub.Adig
T06-b	17/03/2012		55.8244	-6.0943		7	CTub.Adig
T06-b	17/03/2012		55.8245	-6.09425		7	CTub.Adig
T06-b	17/03/2012		55.82458333	-6.0942		7	CTub.Adig
T06-b	17/03/2012	106	55.82466667	-6.0942	30.5	Seabed	CTub.Adig
T06-b	17/03/2012		55.82471667	-6.094316667		7	CTub.Adig
T06-b	17/03/2012		55.82476667	-6.094433333		7	CTub.Adig
T06-b	17/03/2012		55.82486667	-6.094483333		7	CTub.Adig
T06-b	17/03/2012		55.82496667	-6.094483333		7	CTub.Adig
T06-b	17/03/2012		55.82508333	-6.094466667		7	CTub.Adig
T06-b	17/03/2012		55.82518333	-6.094433333		7	CTub.Adig
T06-b	17/03/2012		55.82525	-6.094416667		7	CTub.Adig
T06-b	17/03/2012		55.82531667	-6.0945		7	CTub.Adig
T06-b	17/03/2012		55.82536667	-6.094583333		7	CTub.Adig
T06-b	17/03/2012	106a	55.82546667	-6.0946	35.5	Seabed	CTub.CuSp
T06-b	17/03/2012		55.82556667	-6.094583333		7	CTub.CuSp
T06-b	17/03/2012		55.82566667	-6.094533333		7	CTub.CuSp
T06-b	17/03/2012		55.82576667	-6.094516667		7	CTub.CuSp
T06-b	17/03/2012		55.8258	-6.094583333		7	CTub.CuSp
T06-b	17/03/2012		55.8259	-6.0946		7	CTub.CuSp
T06-b	17/03/2012	107	55.826	-6.094566667		Up	CTub.Adig
T06-c	17/03/2012	108	55.8299	-6.095933333	42.8	Down	FluCoAs
T06-c	17/03/2012		55.82993333	-6.095833333		7	FluCoAs
T06-c	17/03/2012		55.83001667	-6.095733333		7	FluCoAs
T06-c	17/03/2012		55.83006667	-6.09575		7	FluCoAs
T06-c	17/03/2012		55.83011667	-6.0959		7	FluCoAs
T06-c	17/03/2012		55.83011667	-6.095916667		7	FluCoAs
T06-c	17/03/2012		55.83011667	-6.095916667		7	FluCoAs
T06-c	17/03/2012		55.83011667	-6.095916667		7	FluCoAs
T06-c	17/03/2012		55.83013333	-6.095883333		7	FluCoAs
T06-c	17/03/2012		55.83018333	-6.095866667		7	FluCoAs
T06-c	17/03/2012	109	55.83025	-6.095783333		Up	FluCoAs
T07-a	16/03/2012	53	55.817	-6.093583333	21.8	Down Tp 4	CTub.CuSp
T07-a	16/03/2012		55.8171	-6.093583333		4	CTub.CuSp
T07-a	16/03/2012		55.81718333	-6.093583333		4	CTub.CuSp
T07-a	16/03/2012		55.81726667	-6.093583333		4	CTub.CuSp
T07-a	16/03/2012		55.81735	-6.093566667		4	CTub.CuSp
T07-a	16/03/2012		55.81743333	-6.09355		4	CTub.CuSp
T07-a	16/03/2012		55.81751667	-6.09355		4	CTub.CuSp
T07-a	16/03/2012		55.8176	-6.09355		4	CTub.CuSp
T07-a	16/03/2012		55.81761667	-6.09355		4	CTub.CuSp



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T07-a	16/03/2012		55.81768333	-6.093716667		4	CTub.CuSp
T07-a	16/03/2012		55.81773333	-6.09385		4	CTub.CuSp
T07-a	16/03/2012		55.81776667	-6.093866667		4	CTub.CuSp
T07-a	16/03/2012		55.81788333	-6.093866667		4	CTub.CuSp
T07-a	16/03/2012		55.818	-6.093783333		4	CTub.CuSp
T07-a	16/03/2012		55.81808333	-6.0937		4	CTub.CuSp
T07-a	16/03/2012		55.81813333	-6.093633333		4	CTub.CuSp
T07-a	16/03/2012		55.81815	-6.093666667		4	CTub.CuSp
T07-a	16/03/2012		55.81818333	-6.093883333		4	CTub.CuSp
T07-a	16/03/2012		55.81818333	-6.093883333		4	CTub.CuSp
T07-a	16/03/2012	54	55.81828333	-6.093866667	20.8	Seabed	CTub.CuSp
T07-a	16/03/2012		55.81835	-6.093783333		4	CTub.CuSp
T07-a	16/03/2012		55.81843333	-6.093916667		4	CTub.CuSp
T07-a	16/03/2012		55.81846667	-6.094066667		4	CTub.CuSp
T07-a	16/03/2012		55.81853333	-6.094116667		4	CTub.CuSp
T07-a	16/03/2012		55.81863333	-6.094083333		4	CTub.CuSp
T07-a	16/03/2012		55.81871667	-6.094		4	CTub.CuSp
T07-a	16/03/2012		55.8188	-6.0939		4	CTub.CuSp
T07-a	16/03/2012		55.81891667	-6.094033333		4	CTub.CuSp
T07-a	16/03/2012		55.81895	-6.094166667		4	CTub.CuSp
T07-a	16/03/2012		55.81898333	-6.094166667		4	CTub.CuSp
T07-a	16/03/2012		55.819	-6.094166667		4	CTub.CuSp
T07-a	16/03/2012		55.81905	-6.094133333		4	CTub.CuSp
T07-a	16/03/2012		55.8191	-6.094083333		4	CTub.CuSp
T07-a	16/03/2012		55.8193	-6.0941		4	CTub.CuSp
T07-a	16/03/2012		55.81936667	-6.09425		4	CTub.CuSp
T07-a	16/03/2012		55.8194	-6.094316667		4	CTub.CuSp
T07-a	16/03/2012		55.8194	-6.094316667		4	CTub.CuSp
T07-a	16/03/2012		55.81946667	-6.094333333		4	CTub.CuSp
T07-a	16/03/2012	55	55.8196	-6.09445	20.4	Seabed	CTub.Adig
T07-a	16/03/2012		55.8197	-6.09455		4	CTub.Adig
T07-a	16/03/2012		55.81973333	-6.094433333		4	CTub.Adig
T07-a	16/03/2012		55.81983333	-6.09445		4	CTub.Adig
T07-a	16/03/2012		55.81991667	-6.0945		4	CTub.Adig
T07-a	16/03/2012		55.81996667	-6.094433333		4	CTub.Adig
T07-a	16/03/2012		55.82001667	-6.09435		4	CTub.Adig
T07-a	16/03/2012		55.82011667	-6.09435		4	CTub.Adig
T07-a	16/03/2012		55.82021667	-6.094383333		4	CTub.Adig
T07-a	16/03/2012		55.82026667	-6.0944		4	CTub.Adig
T07-a	16/03/2012		55.82028333	-6.0944		4	CTub.Adig
T07-a	16/03/2012		55.82038333	-6.0945		4	CTub.Adig
T07-a	16/03/2012		55.82045	-6.094583333		4	CTub.Adig
T07-a	16/03/2012		55.82045	-6.0946		4	CTub.Adig
T07-a	16/03/2012		55.82045	-6.094583333		4	CTub.Adig
T07-a	16/03/2012		55.82065	-6.0945		4	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T07-a	16/03/2012		55.82071667	-6.094633333		4	CTub.Adig
T07-a	16/03/2012		55.82073333	-6.094733333		4	CTub.Adig
T07-a	16/03/2012		55.82073333	-6.094733333		4	CTub.Adig
T07-a	16/03/2012	56	55.82075	-6.094716667	20.8	Seabed	CTub.Adig
T07-a	16/03/2012		55.8208	-6.094466667		4	CTub.Adig
T07-a	16/03/2012		55.82086667	-6.094383333		4	CTub.Adig
T07-a	16/03/2012		55.82096667	-6.094416667		4	CTub.Adig
T07-a	16/03/2012		55.82106667	-6.0945		4	CTub.Adig
T07-a	16/03/2012		55.82115	-6.094616667		4	CTub.Adig
T07-a	16/03/2012		55.82121667	-6.094716667		4	CTub.Adig
T07-a	16/03/2012		55.82121667	-6.094733333		4	CTub.Adig
T07-a	16/03/2012		55.8213	-6.09465		4	CTub.Adig
T07-a	16/03/2012		55.82135	-6.094716667		4	CTub.Adig
T07-a	16/03/2012		55.82136667	-6.094716667		Tp 4 end	CTub.Adig
T07-a	16/03/2012	57	55.82133333	-6.0945	16.8	Blue water Tp 5 start	CTub.Adig
T07-a	16/03/2012		55.82136667	-6.09445		5	CTub.Adig
T07-a	16/03/2012		55.82146667	-6.094466667		5	CTub.Adig
T07-a	16/03/2012		55.82153333	-6.094483333		5	CTub.Adig
T07-a	16/03/2012		55.82161667	-6.09455		5	CTub.Adig
T07-a	16/03/2012		55.8217	-6.094616667		5	CTub.Adig
T07-a	16/03/2012		55.82178333	-6.094666667		5	CTub.Adig
T07-a	16/03/2012		55.82186667	-6.094716667		5	CTub.Adig
T07-a	16/03/2012		55.82193333	-6.094833333		5	CTub.Adig
T07-a	16/03/2012	58	55.822	-6.094966667	18.8	Seabed	CTub.Adig
T07-a	16/03/2012		55.822	-6.094966667		5	CTub.Adig
T07-a	16/03/2012		55.82195	-6.094866667		5	CTub.Adig
T07-a	16/03/2012		55.82193333	-6.09485		5	CTub.Adig
T07-a	16/03/2012	59	55.82193333	-6.094833333		Up	CTub.Adig
T07-b	16/03/2012	60	55.82313333	-6.09515	18.8	Down	CTub.CuSp
T07-b	16/03/2012		55.82303333	-6.09505		5	CTub.CuSp
T07-b	16/03/2012		55.82295	-6.095016667		5	CTub.CuSp
T07-b	16/03/2012		55.82286667	-6.094983333		5	CTub.CuSp
T07-b	16/03/2012		55.82276667	-6.094883333		5	CTub.CuSp
T07-b	16/03/2012		55.8227	-6.0948		5	CTub.CuSp
T07-b	16/03/2012		55.82263333	-6.094716667		5	CTub.CuSp
T07-b	16/03/2012	61	55.82256667	-6.09465		Up	CTub.CuSp
T07-c	16/03/2012	62	55.82546667	-6.09595	18.8	Down	CTub.CuSp
T07-c	16/03/2012		55.8254	-6.09585		5	CTub.CuSp
T07-c	16/03/2012		55.82533333	-6.095716667		5	CTub.CuSp
T07-c	16/03/2012		55.82526667	-6.095616667		5	CTub.CuSp
T07-c	16/03/2012		55.8252	-6.095516667		5	CTub.CuSp
T07-c	16/03/2012		55.82513333	-6.095416667		5	CTub.CuSp
T07-c	16/03/2012		55.82506667	-6.095333333		5	CTub.CuSp
T07-c	16/03/2012		55.825	-6.095233333		5	CTub.CuSp

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T07-c	16/03/2012		55.82491667	-6.09515		5	CTub.CuSp
T07-c	16/03/2012		55.82483333	-6.095066667		5	CTub.CuSp
T07-c	16/03/2012		55.82478333	-6.094966667		5	CTub.CuSp
T07-c	16/03/2012		55.8247	-6.094883333		5	CTub.CuSp
T07-c	16/03/2012		55.82461667	-6.094816667		5	CTub.CuSp
T07-c	16/03/2012		55.82453333	-6.094716667		5	CTub.CuSp
T07-c	16/03/2012		55.82445	-6.094666667		5	CTub.CuSp
T07-c	16/03/2012	63	55.82436667	-6.094616667	-1.2	Up	CTub.CuSp
T07-d	16/03/2012	64	55.83326667	-6.09795	47.8	Down	FluCoAs
T07-d	16/03/2012		55.83321667	-6.098		5	FluCoAs
T07-d	16/03/2012		55.83318333	-6.098		5	FluCoAs
T07-d	16/03/2012		55.8331	-6.097916667		5	FluCoAs
T07-d	16/03/2012		55.83301667	-6.0978		5	FluCoAs
T07-d	16/03/2012		55.83295	-6.097683333		5	FluCoAs
T07-d	16/03/2012		55.83286667	-6.097616667		5	FluCoAs
T07-d	16/03/2012		55.83281667	-6.097583333		5	FluCoAs
T07-d	16/03/2012		55.83273333	-6.097716667		5	FluCoAs
T07-d	16/03/2012		55.83265	-6.097833333		5	FluCoAs
T07-d	16/03/2012		55.83256667	-6.097916667		5	FluCoAs
T07-d	16/03/2012		55.8325	-6.097883333		5	FluCoAs
T07-d	16/03/2012		55.83241667	-6.0978		5	FluCoAs
T07-d	16/03/2012		55.83235	-6.0977		5	FluCoAs
T07-d	16/03/2012		55.83226667	-6.0976		5	FluCoAs
T07-d	16/03/2012		55.8322	-6.097516667		5	FluCoAs
T07-d	16/03/2012		55.83211667	-6.09745		5	FluCoAs
T07-d	16/03/2012		55.83203333	-6.09735		5	FluCoAs
T07-d	16/03/2012		55.83186667	-6.0975		5	FluCoAs
T07-d	16/03/2012		55.8318	-6.097583333		5	FluCoAs
T07-d	16/03/2012		55.83171667	-6.09765		5	FluCoAs
T07-d	16/03/2012		55.83161667	-6.097633333		5	FluCoAs
T07-d	16/03/2012		55.83155	-6.09755		5	FluCoAs
T07-d	16/03/2012	65	55.83146667	-6.097466667	46.4	Seabed	FluCoAs
T07-d	16/03/2012		55.8314	-6.097366667		5	FluCoAs
T07-d	16/03/2012		55.83133333	-6.097283333		5	FluCoAs
T07-d	16/03/2012	66	55.83125	-6.0972	45.6	Seabed	FluCoAs
T07-d	16/03/2012		55.83116667	-6.097133333		5	FluCoAs
T07-d	16/03/2012		55.83108333	-6.097183333		5	FluCoAs
T07-d	16/03/2012		55.83098333	-6.09725		5	FluCoAs
T07-d	16/03/2012		55.8309	-6.097316667		5	FluCoAs
T07-d	16/03/2012		55.83081667	-6.09735		5	FluCoAs
T07-d	16/03/2012		55.83073333	-6.097333333		5	FluCoAs
T07-d	16/03/2012		55.83065	-6.097283333		5	FluCoAs
T07-d	16/03/2012		55.83055	-6.097216667		5	FluCoAs
T07-d	16/03/2012		55.83046667	-6.097166667		5	FluCoAs
T07-d	16/03/2012		55.8304	-6.0971		5	FluCoAs

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T07-d	16/03/2012		55.8303	-6.09705		5	FluCoAs
T07-d	16/03/2012		55.83021667	-6.097016667		5	FluCoAs
T07-d	16/03/2012		55.83013333	-6.096983333		5	FluCoAs
T07-d	16/03/2012		55.83005	-6.096933333		5	FluCoAs
T07-d	16/03/2012		55.82996667	-6.096883333		5	FluCoAs
T07-d	16/03/2012		55.82988333	-6.096833333		5	FluCoAs
T07-d	16/03/2012		55.8298	-6.0968		5	FluCoAs
T07-d	16/03/2012		55.8297	-6.096766667		5	FluCoAs
T07-d	16/03/2012		55.82961667	-6.09675		5	FluCoAs
T07-d	16/03/2012		55.82953333	-6.096783333		5	FluCoAs
T07-d	16/03/2012		55.82928333	-6.09695		5	FluCoAs
T07-d	16/03/2012		55.82918333	-6.097016667		5	FluCoAs
T07-d	16/03/2012		55.8291	-6.09705		5	FluCoAs
T07-d	16/03/2012		55.829	-6.097066667		5	FluCoAs
T07-d	16/03/2012		55.82891667	-6.09705		5	FluCoAs
T07-d	16/03/2012		55.82881667	-6.097016667		5	FluCoAs
T07-d	16/03/2012		55.82871667	-6.096983333		5	FluCoAs
T07-d	16/03/2012		55.82863333	-6.096933333		5	FluCoAs
T07-d	16/03/2012		55.82855	-6.096883333		5	FluCoAs
T07-d	16/03/2012		55.82846667	-6.09685		5	FluCoAs
T07-d	16/03/2012		55.82838333	-6.096816667		5	FluCoAs
T07-d	16/03/2012		55.82828333	-6.096783333		5	FluCoAs
T07-d	16/03/2012		55.8282	-6.09675		5	FluCoAs
T07-d	16/03/2012		55.82811667	-6.096716667		5	FluCoAs
T07-d	16/03/2012		55.82801667	-6.0967		5	FluCoAs
T07-d	16/03/2012		55.82791667	-6.096683333		5	FluCoAs
T07-d	16/03/2012		55.82781667	-6.09665		5	FluCoAs
T07-d	16/03/2012	67	55.82773333	-6.0966	33.5	Seabed	FluCoAs
T07-d	16/03/2012		55.82763333	-6.096583333		5	FluCoAs
T07-d	16/03/2012		55.82755	-6.09655		5	FluCoAs
T07-d	16/03/2012		55.82745	-6.096516667		5	FluCoAs
T07-d	16/03/2012		55.82735	-6.0965		5	FluCoAs
T07-d	16/03/2012		55.82726667	-6.0965		5	FluCoAs
T07-d	16/03/2012		55.82718333	-6.096466667		5	FluCoAs
T07-d	16/03/2012		55.82708333	-6.09645		5	FluCoAs
T07-d	16/03/2012		55.827	-6.096433333		5	FluCoAs
T07-d	16/03/2012		55.8269	-6.096383333		5	FluCoAs
T07-d	16/03/2012		55.82681667	-6.096366667		5	FluCoAs
T07-d	16/03/2012		55.82673333	-6.096333333		5	FluCoAs
T07-d	16/03/2012		55.82663333	-6.0963		5	FluCoAs
T07-d	16/03/2012		55.82653333	-6.096266667		5	FluCoAs
T07-d	16/03/2012		55.82643333	-6.096216667		5	FluCoAs
T07-d	16/03/2012		55.82635	-6.096183333		5	FluCoAs
T07-d	16/03/2012		55.82625	-6.096133333		5	FluCoAs
T07-d	16/03/2012		55.82616667	-6.0961		5	FluCoAs

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T07-d	16/03/2012		55.82606667	-6.096066667		5	FluCoAs
T07-d	16/03/2012		55.82598333	-6.096033333		5	FluCoAs
T07-d	16/03/2012		55.8259	-6.096016667		5	FluCoAs
T07-d	16/03/2012		55.8258	-6.095983333		5	FluCoAs
T07-d	16/03/2012		55.8257	-6.09595		5	FluCoAs
T07-d	16/03/2012		55.82561667	-6.095933333		5	FluCoAs
T07-d	16/03/2012		55.82551667	-6.0959		5	FluCoAs
T07-d	16/03/2012	68	55.82543333	-6.095883333	19.8	Seabed	CTub.Adig
T07-d	16/03/2012		55.82533333	-6.095866667		5	CTub.Adig
T07-d	16/03/2012		55.82525	-6.095833333		5	CTub.Adig
T07-d	16/03/2012		55.82515	-6.095816667		5	CTub.Adig
T07-d	16/03/2012		55.82506667	-6.095766667		5	CTub.Adig
T07-d	16/03/2012		55.82496667	-6.09575		5	CTub.Adig
T07-d	16/03/2012		55.82488333	-6.095733333		5	CTub.Adig
T07-d	16/03/2012		55.82478333	-6.0957		5	CTub.Adig
T07-d	16/03/2012	69	55.82468333	-6.095666667		Up	CTub.Adig
T08	17/03/2012	102	55.81646667	-6.09465	23.7	Down	CTub.Adig
T08	17/03/2012		55.81656667	-6.094666667		7	CTub.Adig
T08	17/03/2012		55.81665	-6.094666667		7	CTub.Adig
T08	17/03/2012		55.81675	-6.094666667		7	CTub.Adig
T08	17/03/2012		55.81683333	-6.09465		7	CTub.Adig
T08	17/03/2012		55.81691667	-6.09465		7	CTub.Adig
T08	17/03/2012		55.81701667	-6.09465		7	CTub.Adig
T08	17/03/2012		55.8171	-6.094666667		7	CTub.Adig
T08	17/03/2012		55.81718333	-6.094683333		7	CTub.Adig
T08	17/03/2012		55.81728333	-6.0947		7	CTub.Adig
T08	17/03/2012		55.81736667	-6.094716667		7	CTub.Adig
T08	17/03/2012		55.81746667	-6.094733333		7	CTub.Adig
T08	17/03/2012		55.8177	-6.095		7	CTub.Adig
T08	17/03/2012		55.81788333	-6.0951		7	CTub.Adig
T08	17/03/2012		55.81796667	-6.095116667		7	CTub.Adig
T08	17/03/2012		55.81806667	-6.095133333		7	CTub.Adig
T08	17/03/2012		55.81816667	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81826667	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81836667	-6.095166667		7	CTub.Adig
T08	17/03/2012		55.81845	-6.095166667		7	CTub.Adig
T08	17/03/2012		55.81855	-6.095166667		7	CTub.Adig
T08	17/03/2012		55.81865	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81873333	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81883333	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81893333	-6.09515		7	CTub.Adig
T08	17/03/2012		55.81903333	-6.095166667		7	CTub.Adig
T08	17/03/2012		55.81911667	-6.095166667		7	CTub.Adig
T08	17/03/2012		55.8192	-6.095216667		7	CTub.Adig
T08	17/03/2012		55.8193	-6.095333333		7	CTub.Adig



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T08	17/03/2012		55.81936667	-6.09545		7	CTub.Adig
T08	17/03/2012		55.81941667	-6.095583333		7	CTub.Adig
T08	17/03/2012		55.8196	-6.095683333		7	CTub.Adig
T08	17/03/2012		55.81966667	-6.095683333		7	CTub.Adig
T08	17/03/2012		55.81975	-6.0957		7	CTub.Adig
T08	17/03/2012		55.81985	-6.0957		7	CTub.Adig
T08	17/03/2012		55.81993333	-6.0957		7	CTub.Adig
T08	17/03/2012		55.82003333	-6.095716667		7	CTub.Adig
T08	17/03/2012		55.82013333	-6.095733333		7	CTub.Adig
T08	17/03/2012	103	55.82021667	-6.095733333	20.7	Seabed	CTub.CuSp
T08	17/03/2012		55.82031667	-6.09575		7	CTub.CuSp
T08	17/03/2012		55.8204	-6.09575		7	CTub.CuSp
T08	17/03/2012		55.8205	-6.095766667		7	CTub.CuSp
T08	17/03/2012		55.8206	-6.095766667		7	CTub.CuSp
T08	17/03/2012		55.82068333	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82078333	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82086667	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82096667	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82106667	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82115	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82125	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82133333	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82143333	-6.095783333		7	CTub.CuSp
T08	17/03/2012		55.82155	-6.095766667		7	CTub.CuSp
T08	17/03/2012		55.82161667	-6.095766667		7	CTub.CuSp
T08	17/03/2012		55.82166667	-6.095866667		7	CTub.CuSp
T08	17/03/2012		55.82176667	-6.0959		7	CTub.CuSp
T08	17/03/2012		55.82185	-6.095916667		7	CTub.CuSp
T08	17/03/2012		55.82195	-6.095916667		7	CTub.CuSp
T08	17/03/2012		55.82205	-6.0959		7	CTub.CuSp
T08	17/03/2012		55.82216667	-6.095883333		7	CTub.CuSp
T08	17/03/2012		55.82225	-6.09585		7	CTub.CuSp
T08	17/03/2012		55.82233333	-6.095833333		7	CTub.CuSp
T08	17/03/2012	104	55.82241667	-6.0958		Up	CTub.CuSp
T09-a	16/03/2012	74	55.82078333	-6.096983333	22.0	Down Tp 6	CTub.Adig
T09-a	16/03/2012		55.82071667	-6.09705		6	CTub.Adig
T09-a	16/03/2012		55.82061667	-6.097116667		6	CTub.Adig
T09-a	16/03/2012		55.82058333	-6.0971		6	CTub.Adig
T09-a	16/03/2012		55.82045	-6.097		6	CTub.Adig
T09-a	16/03/2012		55.82035	-6.096916667		6	CTub.Adig
T09-a	16/03/2012		55.82025	-6.096866667		6	CTub.Adig
T09-a	16/03/2012		55.82013333	-6.096783333		6	CTub.Adig
T09-a	16/03/2012		55.82008333	-6.0967		6	CTub.Adig
T09-a	16/03/2012		55.81998333	-6.096583333		6	CTub.Adig
T09-a	16/03/2012		55.81986667	-6.09655		6	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T09-a	16/03/2012		55.81981667	-6.096533333		6	CTub.Adig
T09-a	16/03/2012	75	55.8197	-6.096516667	20.0	Seabed	CTub.Adig
T09-a	16/03/2012		55.81961667	-6.096433333		6	CTub.Adig
T09-a	16/03/2012		55.81953333	-6.096316667		6	CTub.Adig
T09-a	16/03/2012		55.81945	-6.096266667		6	CTub.Adig
T09-a	16/03/2012		55.81935	-6.096233333		6	CTub.Adig
T09-a	16/03/2012	76	55.81923333	-6.09625		Up	CTub.Adig
T09-b	16/03/2012	77	55.81575	-6.095616667	17.5	Down	LhypTX.Pk
T09-b	16/03/2012		55.81576667	-6.095633333		6	LhypTX.Pk
T09-b	16/03/2012		55.8158	-6.095666667		6	LhypTX.Pk
T09-b	16/03/2012		55.81593333	-6.095733333		6	LhypTX.Pk
T09-b	16/03/2012		55.81611667	-6.09575		6	LhypTX.Pk
T09-b	16/03/2012		55.81625	-6.095733333		6	LhypTX.Pk
T09-b	16/03/2012		55.81636667	-6.095733333		6	LhypTX.Pk
T09-b	16/03/2012		55.81646667	-6.09575		6	LhypTX.Pk
T09-b	16/03/2012		55.81656667	-6.095783333		6	LhypTX.Pk
T09-b	16/03/2012		55.81666667	-6.095816667		6	LhypTX.Pk
T09-b	16/03/2012		55.81676667	-6.095866667		6	LhypTX.Pk
T09-b	16/03/2012		55.81686667	-6.095883333		6	LhypTX.Pk
T09-b	16/03/2012		55.81696667	-6.095883333		6	LhypTX.Pk
T09-b	16/03/2012		55.81706667	-6.095916667		6	LhypTX.Pk
T09-b	16/03/2012		55.81716667	-6.095933333		6	LhypTX.Pk
T09-b	16/03/2012	78	55.81726667	-6.09595	17.6	Seabed	LhypT.Pk
T09-b	16/03/2012		55.81735	-6.096		6	LhypT.Pk
T09-b	16/03/2012		55.81746667	-6.096016667		6	LhypT.Pk
T09-b	16/03/2012	79	55.81755	-6.096066667	20.3	Seabed	CTub.Adig
T09-b	16/03/2012		55.81765	-6.096116667		6	CTub.Adig
T09-b	16/03/2012		55.81776667	-6.09615		6	CTub.Adig
T09-b	16/03/2012		55.81785	-6.0962		6	CTub.Adig
T09-b	16/03/2012		55.81793333	-6.096233333		6	CTub.Adig
T09-b	16/03/2012		55.81803333	-6.096283333		6	CTub.Adig
T09-b	16/03/2012		55.81813333	-6.096333333		6	CTub.Adig
T09-b	16/03/2012		55.81821667	-6.09635		6	CTub.Adig
T09-b	16/03/2012		55.81831667	-6.096333333		6	CTub.Adig
T09-b	16/03/2012		55.81841667	-6.096316667		6	CTub.Adig
T09-b	16/03/2012		55.81851667	-6.096283333		6	CTub.Adig
T09-b	16/03/2012		55.8186	-6.096283333		6	CTub.Adig
T09-b	16/03/2012		55.81868333	-6.096266667		6	CTub.Adig
T09-b	16/03/2012		55.81878333	-6.096283333		6	CTub.Adig
T09-b	16/03/2012		55.81886667	-6.09635		6	CTub.Adig
T09-b	16/03/2012		55.81896667	-6.096383333		6	CTub.Adig
T09-b	16/03/2012		55.81905	-6.096416667		6	CTub.Adig
T09-b	16/03/2012		55.81915	-6.096483333		6	CTub.Adig
T09-b	16/03/2012		55.81925	-6.096516667		6	CTub.Adig
T09-b	16/03/2012		55.81935	-6.096516667		6	CTub.Adig

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T09-b	16/03/2012		55.81945	-6.09655		6	CTub.Adig
T09-b	16/03/2012		55.81953333	-6.096566667		6	CTub.Adig
T09-b	16/03/2012		55.81961667	-6.096566667		6	CTub.Adig
T09-b	16/03/2012		55.81971667	-6.0966		6	CTub.Adig
T09-b	16/03/2012	80	55.81981667	-6.0966		Up	CTub.Adig
T10-a	16/03/2012	81	55.81513333	-6.09685	14.9	Down	LhypT.Pk
T10-a	16/03/2012		55.81518333	-6.096716667		6	LhypT.Pk
T10-a	16/03/2012		55.81521667	-6.096583333		6	LhypT.Pk
T10-a	16/03/2012		55.8153	-6.0965		6	LhypT.Pk
T10-a	16/03/2012		55.81541667	-6.09655		6	LhypT.Pk
T10-a	16/03/2012		55.8155	-6.096616667		6	LhypT.Pk
T10-a	16/03/2012		55.8156	-6.096683333		6	LhypT.Pk
T10-a	16/03/2012		55.81568333	-6.096716667		6	LhypT.Pk
T10-a	16/03/2012		55.81576667	-6.096766667		6	LhypT.Pk
T10-a	16/03/2012		55.81585	-6.0968		6	LhypT.Pk
T10-a	16/03/2012		55.81595	-6.096866667		6	LhypT.Pk
T10-a	16/03/2012		55.81603333	-6.096933333		6	LhypT.Pk
T10-a	16/03/2012		55.81613333	-6.096983333		6	LhypT.Pk
T10-a	16/03/2012		55.81621667	-6.097033333		6	LhypT.Pk
T10-a	16/03/2012		55.81631667	-6.097083333		6	LhypT.Pk
T10-a	16/03/2012		55.81638333	-6.097166667		6	LhypT.Pk
T10-a	16/03/2012		55.81646667	-6.09725		6	LhypT.Pk
T10-a	16/03/2012		55.81655	-6.097316667		6	LhypT.Pk
T10-a	16/03/2012		55.81663333	-6.097383333		6	LhypT.Pk
T10-a	16/03/2012		55.81668333	-6.0974		6	LhypT.Pk
T10-a	16/03/2012		55.8168	-6.09735		6	LhypT.Pk
T10-a	16/03/2012		55.81688333	-6.097283333		6	LhypT.Pk
T10-a	16/03/2012		55.81696667	-6.0972		6	LhypT.Pk
T10-a	16/03/2012		55.81705	-6.097116667		6	LhypT.Pk
T10-a	16/03/2012		55.81713333	-6.097066667		6	LhypT.Pk
T10-a	16/03/2012		55.81723333	-6.097		6	LhypT.Pk
T10-a	16/03/2012		55.81733333	-6.09695		6	LhypT.Pk
T10-a	16/03/2012		55.8174	-6.096966667		6	LhypT.Pk
T10-a	16/03/2012	82	55.8175	-6.097016667		Up	LhypT.Pk
T10-b	16/03/2012	83	55.81835	-6.0975	20.0	Down	CTub.CuSp
T10-b	16/03/2012		55.81843333	-6.097516667		6	CTub.CuSp
T10-b	16/03/2012		55.81853333	-6.09755		6	CTub.CuSp
T10-b	16/03/2012		55.81863333	-6.097583333		6	CTub.CuSp
T10-b	16/03/2012		55.81873333	-6.0976		6	CTub.CuSp
T10-b	16/03/2012		55.81883333	-6.097633333		6	CTub.CuSp
T10-b	16/03/2012		55.8189	-6.0977		6	CTub.CuSp
T10-b	16/03/2012		55.81896667	-6.097816667		6	CTub.CuSp
T10-b	16/03/2012		55.81905	-6.097866667		6	CTub.CuSp
T10-b	16/03/2012		55.81915	-6.097833333		6	CTub.CuSp
T10-b	16/03/2012		55.81923333	-6.097766667		6	CTub.CuSp

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T10-b	16/03/2012		55.81933333	-6.097733333		6	CTub.CuSp
T10-b	16/03/2012		55.81941667	-6.097683333		6	CTub.CuSp
T10-b	16/03/2012		55.8195	-6.09765		6	CTub.CuSp
T10-b	16/03/2012		55.81953333	-6.09765		6	CTub.CuSp
T10-b	16/03/2012		55.81961667	-6.0978		6	CTub.CuSp
T10-b	16/03/2012		55.81971667	-6.09785		6	CTub.CuSp
T10-b	16/03/2012		55.81981667	-6.097916667		6	CTub.CuSp
T10-b	16/03/2012		55.81993333	-6.097966667		6	CTub.CuSp
T10-b	16/03/2012		55.82001667	-6.098		6	CTub.CuSp
T10-b	16/03/2012		55.82011667	-6.098016667		6	CTub.CuSp
T10-b	16/03/2012		55.8202	-6.098066667		6	CTub.CuSp
T10-b	16/03/2012		55.8203	-6.0981		6	CTub.CuSp
T10-b	16/03/2012		55.8204	-6.09815		6	CTub.CuSp
T10-b	16/03/2012		55.82048333	-6.0982		6	CTub.CuSp
T10-b	16/03/2012		55.82058333	-6.098233333		6	CTub.CuSp
T10-b	16/03/2012		55.82066667	-6.098266667		6	CTub.CuSp
T10-b	16/03/2012	84	55.82076667	-6.098283333		Up	CTub.CuSp
T11-c	16/03/2012	69a	55.81981667	-6.098966667	18.7	Down Tp 5	LhypTX.Pk
T11-c	16/03/2012		55.81978333	-6.099033333		5	LhypTX.Pk
T11-c	16/03/2012		55.81976667	-6.099033333		5	LhypTX.Pk
T11-c	16/03/2012		55.81975	-6.09905		5	LhypTX.Pk
T11-c	16/03/2012		55.81973333	-6.099066667		5	LhypTX.Pk
T11-c	16/03/2012		55.81971667	-6.099083333		5	LhypTX.Pk
T11-c	16/03/2012		55.81953333	-6.099116667		5	LhypTX.Pk
T11-c	16/03/2012		55.81933333	-6.098983333		5	LhypTX.Pk
T11-c	16/03/2012		55.81918333	-6.0988		5	LhypTX.Pk
T11-c	16/03/2012		55.81911667	-6.0987		5	LhypTX.Pk
T11-c	16/03/2012		55.81911667	-6.098683333		Seabed	LhypTX.Pk
T11-c	16/03/2012		55.81908333	-6.0987		5	LhypTX.Pk
T11-c	16/03/2012		55.81905	-6.098683333		5	LhypTX.Pk
T11-c	16/03/2012		55.81903333	-6.0987		5	LhypTX.Pk
T11-c	16/03/2012		55.81903333	-6.098716667		5	LhypTX.Pk
T11-c	16/03/2012		55.81875	-6.098683333		5	LhypTX.Pk
T11-c	16/03/2012		55.81861667	-6.098566667		5	LhypTX.Pk
T11-c	16/03/2012		55.81856667	-6.098533333		5	LhypTX.Pk
T11-c	16/03/2012		55.81855	-6.098533333		5	LhypTX.Pk
T11-c	16/03/2012		55.81853333	-6.098533333		5	LhypTX.Pk
T11-c	16/03/2012		55.8185	-6.098616667		5	LhypTX.Pk
T11-c	16/03/2012		55.81835	-6.098733333		5	LhypTX.Pk
T11-c	16/03/2012		55.81823333	-6.098683333		5	LhypTX.Pk
T11-c	16/03/2012		55.81815	-6.098566667		5	LhypTX.Pk
T11-c	16/03/2012		55.81811667	-6.098433333		5	LhypTX.Pk
T11-c	16/03/2012		55.81808333	-6.098366667		5	LhypTX.Pk
T11-c	16/03/2012	71	55.81806667	-6.09835	16.0	Seabed	LhypTX.Pk
T11-c	16/03/2012		55.8179	-6.09835		5	LhypTX.Pk

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T11-c	16/03/2012		55.8178	-6.098283333		5	LhypTX.Pk
T11-c	16/03/2012		55.8177	-6.098233333		5	LhypTX.Pk
T11-c	16/03/2012		55.8176	-6.098216667		5	LhypTX.Pk
T11-c	16/03/2012		55.8175	-6.098233333		5	LhypTX.Pk
T11-c	16/03/2012		55.8174	-6.098233333		5	LhypTX.Pk
T11-c	16/03/2012		55.81731667	-6.098266667		5	LhypTX.Pk
T11-c	16/03/2012		55.81723333	-6.0983		5	LhypTX.Pk
T11-c	16/03/2012		55.81713333	-6.098316667		5	LhypTX.Pk
T11-c	16/03/2012		55.81703333	-6.098333333		5	LhypTX.Pk
T11-c	16/03/2012		55.81693333	-6.098333333		5	LhypTX.Pk
T11-c	16/03/2012		55.81683333	-6.098316667		5	LhypTX.Pk
T11-c	16/03/2012		55.81675	-6.0983		5	LhypTX.Pk
T11-c	16/03/2012		55.81665	-6.0983		5	LhypTX.Pk
T11-c	16/03/2012		55.81656667	-6.098233333		5	LhypTX.Pk
T11-c	16/03/2012		55.81648333	-6.098166667		5	LhypTX.Pk
T11-c	16/03/2012		55.81641667	-6.098083333		5	LhypTX.Pk
T11-c	16/03/2012		55.8164	-6.098083333		5	LhypTX.Pk
T11-c	16/03/2012		55.8163	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81615	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81605	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81595	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81585	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81576667	-6.098016667		5	LhypTX.Pk
T11-c	16/03/2012		55.81566667	-6.098		5	LhypTX.Pk
T11-c	16/03/2012		55.81556667	-6.097933333		5	LhypTX.Pk
T11-c	16/03/2012	72	55.81548333	-6.0979	12.4	Seabed	LhypTX.Pk
T11-c	16/03/2012		55.81536667	-6.097916667		5	LhypTX.Pk
T11-c	16/03/2012		55.81526667	-6.09795		5	LhypTX.Pk
T11-c	16/03/2012		55.81511667	-6.098		5	LhypTX.Pk
T11-c	16/03/2012		55.81501667	-6.097916667		5	LhypTX.Pk
T11-c	16/03/2012		55.81496667	-6.097766667		5	LhypTX.Pk
T11-c	16/03/2012		55.8149	-6.097633333		5	LhypTX.Pk
T11-c	16/03/2012		55.81488333	-6.0976		5	LhypTX.Pk
T11-c	16/03/2012		55.81473333	-6.097516667		5	LhypTX.Pk
T11-c	16/03/2012	73	55.81463333	-6.097533333		Up	LhypTX.Pk
T12-a - 2011	16/03/2012	20	55.81368333	-6.098616667	9.1	Down Tp1	Pcal
T12-a - 2011	16/03/2012		55.81368333	-6.09865		1	Pcal
T12-a - 2011	16/03/2012		55.81391667	-6.09875		1	Pcal
T12-a - 2011	16/03/2012		55.8141	-6.098783333		1	Pcal
T12-a - 2011	16/03/2012		55.81428333	-6.098766667		1	Pcal
T12-a - 2011	16/03/2012		55.81445	-6.09875		1	Pcal
T12-a - 2011	16/03/2012		55.81465	-6.098816667		1	Pcal
T12-a - 2011	16/03/2012		55.81476667	-6.098866667		1	Pcal
T12-a - 2011	16/03/2012		55.81491667	-6.098933333		1	Pcal
T12-a - 2011	16/03/2012		55.81503333	-6.098933333		1	Pcal



Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Tape No.	Biotope
T12-a - 2011	16/03/2012		55.81515	-6.098916667		1	Pcal
T12-a - 2011	16/03/2012		55.81531667	-6.099033333		1	Pcal
T12-a - 2011	16/03/2012		55.81548333	-6.099116667		1	Pcal
T12-a - 2011	16/03/2012		55.81566667	-6.099183333		1	Pcal
T12-a - 2011	16/03/2012		55.81581667	-6.099216667		1	Pcal
T12-a - 2011	16/03/2012		55.81596667	-6.099316667		1	Pcal
T12-a - 2011	16/03/2012		55.81606667	-6.099383333	9.9	1	Lhyp.Ft
T12-a - 2011	16/03/2012		55.81625	-6.099533333		1	Lhyp.Ft
T12-a - 2011	16/03/2012		55.81648333	-6.099533333		1	Lhyp.Ft
T12-a - 2011	16/03/2012		55.81676667	-6.09945		1	Lhyp.Ft
T12-a - 2011	16/03/2012		55.817	-6.099416667		1	Lhyp.Ft
T12-a - 2011	16/03/2012	20a	55.81716667	-6.099316667		Up	Lhyp.Ft
T12-b	15/03/2012		55.81378333	-6.098816667	11.2	Down Tp 2	LsacR.Sa
T12-b	15/03/2012		55.81386667	-6.0989		2	LsacR.Sa
T12-b	15/03/2012		55.81396667	-6.098983333		2	LsacR.Sa
T12-b	15/03/2012		55.81405	-6.099033333		2	LsacR.Sa
T12-b	15/03/2012		55.81413333	-6.099066667		2	LsacR.Sa
T12-b	15/03/2012		55.81425	-6.099083333		2	LsacR.Sa
T12-b	15/03/2012		55.81433333	-6.09905		2	LsacR.Sa
T12-b	15/03/2012		55.81443333	-6.099033333		2	LsacR.Sa
T12-b	15/03/2012		55.81451667	-6.099016667		2	LsacR.Sa
T12-b	15/03/2012		55.8146	-6.098983333		2	LsacR.Sa
T12-b	15/03/2012		55.8147	-6.098983333		2	LsacR.Sa
T12-b	15/03/2012		55.81478333	-6.099016667		2	LsacR.Sa
T12-b	15/03/2012		55.81488333	-6.099066667		2	LsacR.Sa
T12-b	15/03/2012		55.81498333	-6.099133333		2	LsacR.Sa
T12-b	15/03/2012		55.81506667	-6.0992		2	LsacR.Sa
T12-b	15/03/2012		55.81516667	-6.099216667		2	LsacR.Sa
T12-b	15/03/2012		55.81525	-6.099233333		2	LsacR.Sa
T12-b	15/03/2012		55.81533333	-6.0992		2	LsacR.Sa
T12-b	15/03/2012		55.81545	-6.099216667		2	LsacR.Sa
T12-b	15/03/2012		55.81555	-6.099266667		2	LsacR.Sa
T12-b	15/03/2012		55.81563333	-6.099333333		2	LsacR.Sa
T12-b	15/03/2012		55.8157	-6.0994		Up	LsacR.Sa
T12-b	15/03/2012		55.81578333	-6.099466667		Down	LhypTX.Pk
T12-b	15/03/2012		55.81586667	-6.099516667		2	LhypTX.Pk
T12-b	15/03/2012		55.81595	-6.09955		2	LhypTX.Pk
T12-b	15/03/2012		55.81603333	-6.09955		2	LhypTX.Pk
T12-b	15/03/2012		55.81611667	-6.0995		2	LhypTX.Pk
T12-b	15/03/2012		55.8162	-6.09945		2	LhypTX.Pk
T12-b	15/03/2012		55.8163	-6.099483333		2	LhypTX.Pk
T12-b	15/03/2012		55.81638333	-6.099533333		2	LhypTX.Pk
T12-b	15/03/2012		55.81646667	-6.099583333		2	LhypTX.Pk
T12-b	15/03/2012		55.81656667	-6.099616667		2	LhypTX.Pk
T12-b	15/03/2012		55.81665	-6.0996		2	LhypTX.Pk

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Type No.	Biotope
T12-b	15/03/2012		55.81673333	-6.099566667		2	LhypTX.Pk
T12-b	15/03/2012		55.81681667	-6.09955		2	LhypTX.Pk
T12-b	15/03/2012		55.8169	-6.099583333		2	LhypTX.Pk
T12-b	15/03/2012		55.81698333	-6.099633333		2	LhypTX.Pk
T12-b	15/03/2012		55.81705	-6.0997		2	LhypTX.Pk
T12-b	15/03/2012		55.81715	-6.099766667		2	LhypTX.Pk
T12-b	15/03/2012		55.81723333	-6.099816667		2	LhypTX.Pk
T12-b	15/03/2012		55.81731667	-6.099883333		2	LhypTX.Pk
T12-b	15/03/2012		55.8174	-6.09995		2	LhypTX.Pk
T12-b	15/03/2012		55.81748333	-6.100033333		2	LhypTX.Pk
T12-b	15/03/2012		55.81753333	-6.100083333		2	LhypTX.Pk
T12-b	15/03/2012		55.81761667	-6.10005		2	LhypTX.Pk
T12-b	15/03/2012		55.8177	-6.099983333		2	LhypTX.Pk
T12-b	15/03/2012		55.8178	-6.099983333		2	LhypTX.Pk
T12-b	15/03/2012		55.8179	-6.100033333		2	LhypTX.Pk
T12-b	15/03/2012		55.81798333	-6.100066667		2	LhypTX.Pk
T12-b	15/03/2012		55.81806667	-6.100116667		2	LhypTX.Pk
T12-b	15/03/2012		55.81815	-6.100166667		2	LhypTX.Pk
T12-b	15/03/2012		55.81823333	-6.1002		2	LhypTX.Pk
T12-b	15/03/2012		55.81831667	-6.100216667		2	LhypTX.Pk
T12-b	15/03/2012		55.81841667	-6.1002		2	LhypTX.Pk
T12-b	15/03/2012		55.8185	-6.1002		2	LhypTX.Pk
T12-b	15/03/2012		55.81858333	-6.100183333		2	LhypTX.Pk
T12-b	15/03/2012		55.81868333	-6.100166667		2	LhypTX.Pk
T12-b	15/03/2012		55.81878333	-6.100183333		2	LhypTX.Pk
T12-b	15/03/2012		55.81886667	-6.100216667		2	LhypTX.Pk
T12-b	15/03/2012		55.81895	-6.100266667		2	LhypTX.Pk
T12-b	15/03/2012		55.81903333	-6.100333333		2	LhypTX.Pk
T12-b	15/03/2012		55.81913333	-6.100366667		2	LhypTX.Pk
T12-b	15/03/2012		55.81921667	-6.100366667		2	LhypTX.Pk
T12-b	15/03/2012		55.8193	-6.10035	10.2	Up	LhypTX.Pk
T13 - 2011	05/12/2011	18	55.81361667	-6.099816667	7.5	Down Tp1	Pcal
T13 - 2011	05/12/2011		55.81383333	-6.099966667		1	Pcal
T13 - 2011	05/12/2011		55.8141	-6.100033333		1	Pcal
T13 - 2011	05/12/2011		55.8143	-6.100083333		1	Pcal
T13 - 2011	05/12/2011		55.81446667	-6.1001		1	Pcal
T13 - 2011	05/12/2011		55.81468333	-6.100116667		1	Pcal
T13 - 2011	05/12/2011		55.81481667	-6.100133333		1	Pcal
T13 - 2011	05/12/2011		55.81501667	-6.100183333		1	Pcal
T13 - 2011	05/12/2011		55.81518333	-6.1002		1	Pcal
T13 - 2011	05/12/2011		55.8153	-6.100233333		1	Pcal
T13 - 2011	05/12/2011		55.8155	-6.1002		1	Pcal
T13 - 2011	05/12/2011		55.81571667	-6.100233333		1	Pcal
T13 - 2011	05/12/2011		55.81586667	-6.10025		1	Pcal
T13 - 2011	05/12/2011		55.81608333	-6.10045		1	Pcal

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Ta pe No.	Biotope
T13 - 2011	05/12/2011		55.81621667	-6.10055		1	Pcal
T13 - 2011	05/12/2011		55.81631667	-6.100566667		1	Pcal
T13 - 2011	05/12/2011		55.81648333	-6.10075		1	Pcal
T13 - 2011	05/12/2011		55.81665	-6.10085		1	Pcal
T13 - 2011	05/12/2011		55.81676667	-6.10085		1	Pcal
T13 - 2011	05/12/2011		55.81698333	-6.100833333		1	Pcal
T13 - 2011	05/12/2011		55.8171	-6.1008		1	Pcal
T13 - 2011	05/12/2011	19	55.81721667	-6.100733333		Up	Pcal
T14 - 2011	05/12/2011		55.81241667	-6.100733333	6.3	Down Tp1	LsacR.Sa
T14 - 2011	05/12/2011		55.81245	-6.10075		1	LsacR.Sa
T14 - 2011	05/12/2011		55.8126	-6.1008		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81276667	-6.100816667		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81293333	-6.10075		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81311667	-6.100716667		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81328333	-6.100683333		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81345	-6.100633333		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81361667	-6.100666667		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81376667	-6.1006		1	LsacR.Sa
T14 - 2011	05/12/2011		55.81393333	-6.1005		1	Pcal
T14 - 2011	05/12/2011		55.81413333	-6.100466667		1	Pcal
T14 - 2011	05/12/2011		55.8143	-6.1006		1	Pcal
T14 - 2011	05/12/2011		55.81445	-6.100766667		1	Pcal
T14 - 2011	05/12/2011		55.81458333	-6.10095		1	Pcal
T14 - 2011	05/12/2011		55.81471667	-6.101183333		1	Pcal
T14 - 2011	05/12/2011		55.81485	-6.101333333		1	Pcal
T14 - 2011	05/12/2011		55.81505	-6.101383333		1	Pcal
T14 - 2011	05/12/2011		55.81523333	-6.101383333		1	Pcal
T14 - 2011	05/12/2011		55.81538333	-6.101366667		1	Pcal
T14 - 2011	05/12/2011		55.81555	-6.101466667		1	Pcal
T14 - 2011	05/12/2011		55.81568333	-6.101633333		1	Pcal
T14 - 2011	05/12/2011		55.81583333	-6.101683333		1	Pcal
T14 - 2011	05/12/2011		55.81603333	-6.101666667		1	Pcal
T14 - 2011	05/12/2011		55.81621667	-6.10165		1	Pcal
T14 - 2011	05/12/2011		55.81633333	-6.101616667		1	Pcal
T15 - 2011	05/12/2011		55.81238333	-6.101983333	3.0	Down Tp1	LsacR.Sa
T15 - 2011	05/12/2011		55.81253333	-6.101966667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81268333	-6.10205		1	LsacR.Sa
T15 - 2011	05/12/2011		55.8128	-6.101966667	3.4	1	LsacR.Sa
T15 - 2011	05/12/2011		55.81288333	-6.10195		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81298333	-6.101916667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81303333	-6.10195		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81301667	-6.101983333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81296667	-6.101966667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81293333	-6.101933333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.813	-6.101933333		1	LsacR.Sa

Station	Date	Wpt	Latitude	Longitude	Depth m bcd	Comment/Tape No.	Biotope
T15 - 2011	05/12/2011		55.81306667	-6.102	1.5	1	LsacR.Sa
T15 - 2011	05/12/2011		55.8132	-6.10215		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81331667	-6.102316667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81345	-6.10245		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81358333	-6.102533333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81371667	-6.102616667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81381667	-6.102716667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.8139	-6.102733333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81401667	-6.10275		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81415	-6.102833333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81428333	-6.1029		1	LsacR.Sa
T15 - 2011	05/12/2011		55.8144	-6.10295	2.4	1	LsacR.Sa
T15 - 2011	05/12/2011		55.81451667	-6.1029		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81465	-6.1029		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81478333	-6.102916667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.8149	-6.10285		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81501667	-6.102833333		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81513333	-6.10285		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81523333	-6.1029		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81533333	-6.102916667		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81543333	-6.1028		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81548333	-6.1025		1	LsacR.Sa
T15 - 2011	05/12/2011		55.81555	-6.102366667	4.9	1	LsacR.Sa
T15 - 2011	05/12/2011	16	55.81553333	-6.102283333		Up	LsacR.Sa

## Appendix 2

### Species recorded from video

MCS Code	Species
	<b>Porifera</b>
C350	Scypha ciliata
C1670	Pachymatisma johnstonia
C4840	Halichondria panicea
C5960	Esperiopsis fucorum
C6420	Myxilla sp.
C8900	Dysidea fragilis
	<b>Cnidaria</b>
D1440	Tubularia indivisa
D5260	Halecium halecinum
D5970	Nemertesia antennina
D6260	Abietinaria abietina
D5990	Nemertesia ramosa
D6530	Hydrallmania falcata
D6760	Sertularia argentea
D7310	Obelia geniculata
D10240	Alcyonium digitatum
D11680	Urticina felina
D12310	Sagartia elegans
D12420	Actinothoe sphyrodeta
	<b>Polychaeta</b>
P15760	Arenicola marina
P23040	Pomatoceros sp.
	<b>Crustacea</b>
R1090	Balanus sp.
R1091	Balanus crenatus
S24840	Galathea sp.
S25590	Hyas araneus
S26460	Cancer pagurus
S26690	Liocarcinus depurator
S26720	Necora puber
	<b>Mollusca</b>
W1890	Gibbula magus
W1930	Gibbula cineraria
W2000	Calliostoma zizyphinum
W8170	Nucella lapillus
W8440	Buccinum undatum
	<b>Bryozoa</b>
Y30	Crisiidae indet.
Y1370	Alcyonidium diaphanum
Y6060	Cellepora pumicosa
Y6640	Membranipora membranacea
Y6780	Electra pilosa
Y6940	Flustra foliacea
Y7100	Securiflustra securifrons
Y8110	Cellaria sp.
	<b>Echinodermata</b>
ZB1490	Crossaster papposus

<b>MCS Code</b>	<b>Species</b>
ZB1640	Henricia
ZB1900	Asterias rubens
ZB3620	Echinus esculentus
	<b>Ascidacea</b>
ZD320	Polyclinidae indet
ZD460	Morchellium argus
ZD680	Didemnidae indet
ZD1480	Ascidia sp.
	<b>Fish</b>
ZG6010	Crenilabrus melops
	<b>Algae</b>
ZM2080	Bonnemaisonia asparagoides
ZM2560	Dilsea carnosus
ZM3840	Enc. Corallinaceae
ZM3230	Callophyllis laciniata
ZM3280	Kallymenia reniformis
ZM4610	Lithothamnion glaciale
ZM4910	Phymatolithon calcareum
ZM5660	Ahnfeltia plicata
ZM5830	Phyllophora sp.
ZM6110	Chondrus crispus
ZM6250/ZM6430	Polyides rotundus/Furcellaria lumbricalis
ZM6310	Plocamium cartilagineum
ZM9500	Cryptopleura ramosa
ZM9550	Delesseria sanguinea
ZM9850	Hypoglossum hypoglossoides
ZM10120	Phycodrys rubens
ZM10970	Odonthalia dentata
	Dark red algal crusts
ZR4570	Dictyota dichotoma
ZR4970	Desmarestia aculeata
ZR5000	Desmarestia viridis
ZR6330	Laminaria hyperborea
ZR6360	Laminaria saccharina
ZR6460	Saccorhiza polyschides
ZR7160	Halidrys siliquosa
	Brown algal crusts
ZS2400	Ulva sp.