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EARS V2 deployment report

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Coordinator	Aodhán Fitzgerald	Marine Institute	14 April 2021
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1 Introduction

Eurofleets+ facilitates open free of charge access to a unique fleet of state-of-the-art research vessels, AUVs and ROVs from European and international partners. This is arranged by competitive transnational access (TA) calls. A Data Policy has been adopted which aims at making Eurofleets+ research data to be findable, accessible, interoperable and reusable (FAIR). Therefore, marine data management is an integral part of the Eurofleets+ approach and is implemented in synergy with SeaDataNet, a leading pan-European infrastructure for marine data management, involving NODCs as core partners. More details about the data management approach can be found in Deliverables D1.3 - Eurofleets+ Data Management Plan and D9.5 - Eurofleets + data sets catalogue.

One objective is to give users e-access to underway and operational information and data from sailing research vessels during the Eurofleets+ TA cruises by means of the EVIOR platform. Moreover, it is planned to give discovery and public access to research data sets as collected and processed by research teams during the TA funded cruises, after the research teams had the necessary time for processing and analysing the collected observations and samples.

This Deliverable D3.3 provides practical information for RV operators and their technicians about the deployment and configuration of the EARS V2 system on RVs that will be engaged in near-future TA Eurofleets+ TA cruises. Due to the COVID-19 crisis, earlier planned TA cruises have been postponed or cancelled. Therefore, this deliverable describes the approach that is undertaken towards coming TA cruises for installing and configuring the EARS V2 system at selected Research Vessels and interacting with the operators of these RVs.

2 General data management in Eurofleets+

The Eurofleets+ project has adopted an open Data Management Strategy:

- To ensure that the research data collected during the funded TA cruises, and the en-route data collected by fixed instruments at the research vessels are made widely available in line with FAIR and Open Research Data principles;
- Publication of TA cruise metadata and data on EVIOR portal (European Virtual Infrastructure in Ocean Research – embedded in EF+ website) and SeaDataNet and EMODnet portals;
- Advancing the shipboard data management system for registering underway and events data and (near) real-time transfer to shore and EVIOR.

For implementing the Open Data Management Strategy, TA cruise teams have to prepare in advance a Data Management Plan (DMP), which will be reviewed by a number of NODCs (National Oceanographic Data Centres), which will be assigned to TA cruise scientific teams. The NODCs will give guidance and support for arranging that overtime metadata and data from the TA cruises will become populated in their data centres and as follow-up in the pan-European SeaDataNet data management infrastructure, which also feeds into EMODnet, CMEMS, and global marine data exchange infrastructures.

As part of the DMP implementation, TA cruise scientific teams will have to keep an index of data and sample acquisition during the cruise, for which is it recommended that use is made of the Eurofleets+ EARS system. EARS stands for *Eurofleets* Automatic Reporting System and beforehand, needs to be installed and configured at the Research Vessels. Furthermore, the Principal Investigator (PI) of the TA cruise needs to prepare and submit a Cruise Summary Report (CSR), soon after the cruise. Such a CSR

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gives an overview of observation deployments and the involved researchers and their institutes. The CSRs are included into the SeaDataNet CSR catalogue, which is wide supported in the marine research community in Europe and beyond. The NODCs in Eurofleets+, namely RBINS, OGS, and HCMR, also encourage and support the TA cruise scientific teams to transfer their collected and processed data sets with sufficient documentation for uptake by the NODCs in their local databases and SeaDataNet. Possible scientific embargo's will be taken into account, however it is strived for transfer of metadata and data still within the duration of the Eurofleets+ project, so that resources can be spent for the population and publishing. For the latter, access to data can be restricted in SeaDataNet to honour the agreed embargo's / moratoria.

The following image gives the workflow of the metadata and data during and after the TA cruises.

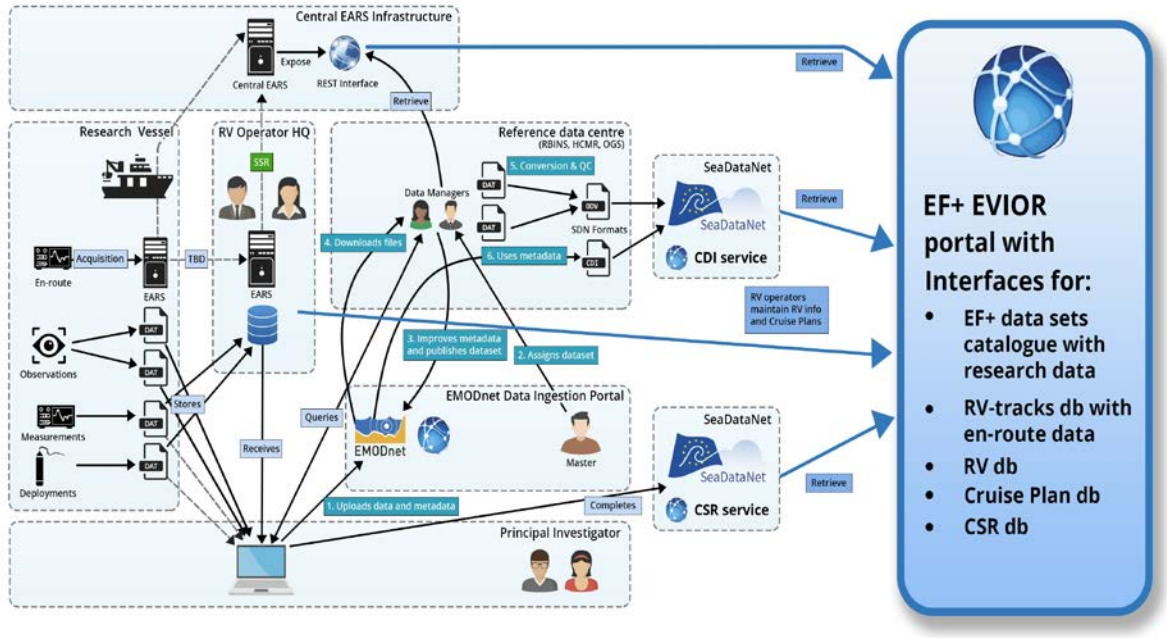

Image 1. General data management in Eurofleets+, as planned

3 The role of EARS in the Eurofleets+ data management approach

During a TA cruise, the following observations will be gathered:

- en-route (underway) data from fixed sensors, such as navigation, meteo sensors, and salinometer;
- human operations, such as CTD profiles, and also including samples (water, sediment, and biota) which are partly processed at the onboard laboratories and partly later at shore;
- long-term timeseries by sensors deployed on frames, ROVs, AUVs or floats.

Once installed at a Research Vessel, the EARS system will be instrumental for gathering automatically the en-route (underway) data and for gathering metadata about the events concerning the human deployments of instruments and taking of samples. The event metadata has to be completed manually in EARS during the cruise by the PIs.

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The en-route data is rerouted from sensor signals from fixed instruments on board, such as navigation equipment, meteo sensor package, and salinometer, and stored in the on-vessel EARS database. In addition to the database, it is stored as NetCDF files that the RV operator should gather at the end of the cruise, in the same way data derived from deployed sensors belonging to the RV, such as CTDs or ADCPs,.. are gathered afterwards.

Event metadata can be entered using the on-board EARS system. Often users store such "manual data" in the form of excel or csv files, but specific formats (for instance those derived from a CTD) also require meta-information for later analyses (eg. calibration information). The EARS event information is later useful for vessel operators and data managers to build campaign reports and Cruise Summary Reports. The EARS system is capable of creating SeaDataNet Cruise Summary Reports (CSR) from the campaign, navigation and event information.

Manual data files that are produced by the scientist are put in a zip archive together with the NetCDF and any other data file, including metadata such as CSR files and a pdf of the DMP. The EMODnet Data Ingestion Portal plays a role in Eurofleets+ as a central mailbox, where the PI has to submit the cruise zip archive, along with completing a submission form. The PI will do this submission after consultation with one of the assigned NODCs (RBINS, OGS, and HCMR). The NODCs will be assigned in the Ingestion framework to arrange the further processing and publishing.

4 The role of EVIOR in the Eurofleets+ data management approach

The European Virtual Infrastructure in Ocean Research (EVIOR) is an online platform and embedded in the Eurofleets+ website. EVIOR gives access to a number of information databases, that are already partly existing and partly will be added in time:

- Research Vessel Cruise Programme database, containing planned cruises per research vessel and owner / operator. Existing;
- Research Vessel database, containing characteristics of each research vessel, owner / operator details and, if available, a link to the ship's web page. Existing;
- Cruise Summary Reports (CSR) database, containing details of completed cruises and providing a first level inventory of oceanographic measurements made and samples taken during the cruises. Existing;
- Dynamic Vessel Tracking & Events System, giving dynamic charts of sailing tracks of selected RVs with position, speed, and bearing, display of underway data sets, and overview of observation events during TA cruises, derived from the EARS on board system. Upgrading is underway;
- Eurofleets+ Data Sets Catalogue, to provide an up-to-date overview of Eurofleets+ TA funded cruises and dynamic links to relevant information for each of the cruises, such as cruise plan, sailing tracks, and en-route information. After research completion, this catalogue should also provide public discovery and access to the research data acquired during the TA funded cruises, processed by the TA cruise research teams, and populated in the SeaDataNet CDI Data Discovery & Access service. This service is under development.

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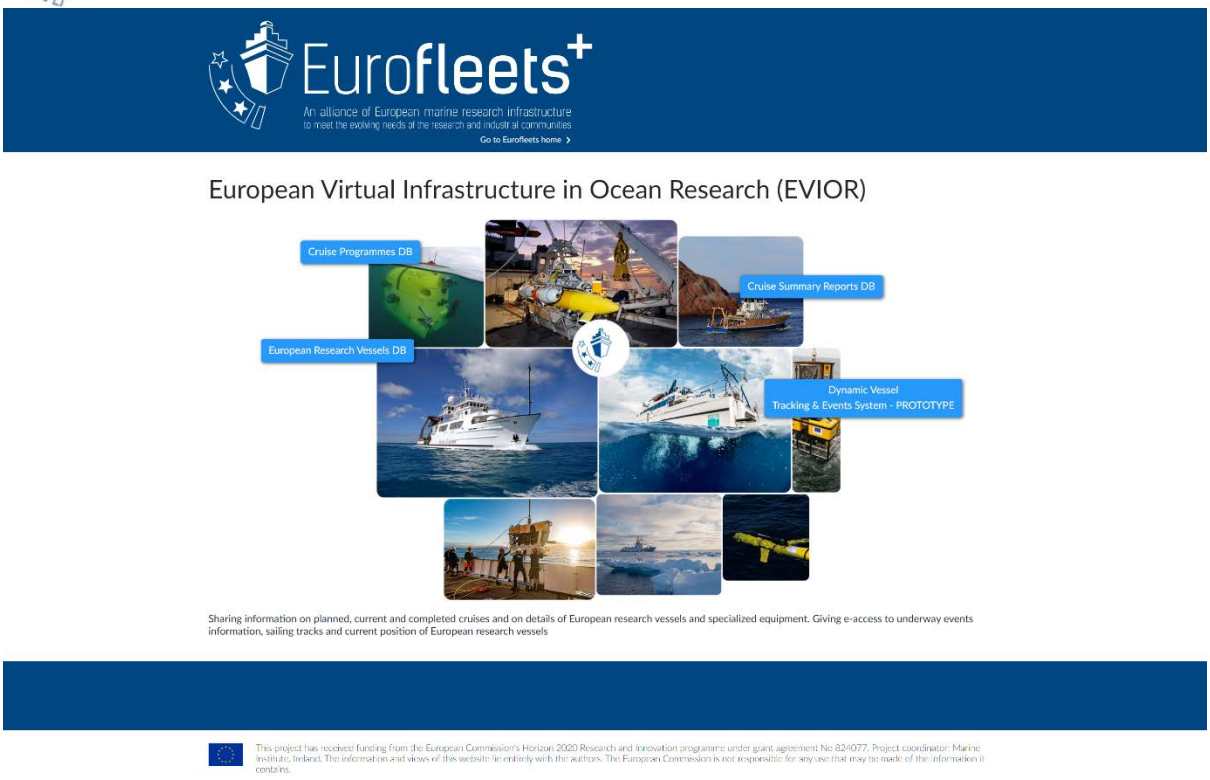

Image 2: landing page of EVIOR platform, giving access to each of the current components

5. Development of EARS V2 and V3

The Eurofleets ship board system has been developed in predecessor Eurofleets projects and has been reviewed and improved in the Eurofleets+ project. As EARS V2 it has been made fully ready for installation and configuration at each of the Eurofleets+ Research Vessels (RVs) that will sail on the first TA cruises in the project.

In addition, work is well underway for a major upgrade of the EARS software from V2 to V3, which system will be deployed for TA cruises after summer 2021. It should be noted, that the migration from V2 to V3, once installed and configured at a Research Vessel, will be very easy.

In practice, the full Eurofleets ship board system consists of four major components:

- EARS module, developed and maintained by RBINS;
- Data Acquisition System, developed and maintained by IFREMER;
- En-route Ship Summary Report (SSR) system, developed and maintained by UTM-CSIC with contributions from IFREMER;
- Web Services, developed and maintained by UTM-CSIC with contributions from IFREMER.

Coordinated by UTM-CSIC, the 3 partners UTM-CSIC, RBINS, and IFREMER have reviewed the existing system and have made several improvements and additions, comprising:

- Improving the source code, executable code generation and installation instructions for the en-route Ship Summary Report (SSR) generation (UTM-CSIC);

- Improving the source code, executable code generation and installation instructions for the Web services generation (UTM-CSIC);
- Updating the specifications of Web Services based on the experiences from Eurofleets2 (UTM-CSIC with RBINS and IFREMER);
- Testing and expanding the instructions and guidance documents for installation and configuration of the EARS V2 (UTM-CSIC with RBINS and IFREMER.

The current planning is that EARS V3 will be finalised and documented by end May 2021. This will then be followed by a number of trials at vessels of the developers, CSIC, RBINS, and IFREMER, and some additional vessels from CNR and SOCIB for testing procedures and well-functioning. For that reason, EARS V3 will be ready for deployment after summer 2021, while EARS V2 is to be used for TA cruises before that date.

6. Reporting underway data to the EVIOR platform

As mentioned earlier, the EARS V2 system and its successor EARS V3, installed and configured on board of the Research Vessels, are instrumental for gathering cruise event metadata and en-route (underway) data from fixed sensors such as navigation, meteorology, and thermosalinometry. It is strived in the Eurofleets+ project that this information is transferred to shore from the vessels while sailing, so that it can be published at the EVIOR platform in a dynamic way.

To arrange and streamline the information transfer from EARS towards EVIOR, it was decided to adopt and adapt the SeaDataNet Sensor Web Enablement (SWE) toolkit, as developed and adapted by 52ºNorth. They are contributing to the Eurofleets+ project as part of a synergy with the EMODnet Ingestion project, in which adoption of SWE for Real Time and Near Real Time data sharing is promoted.

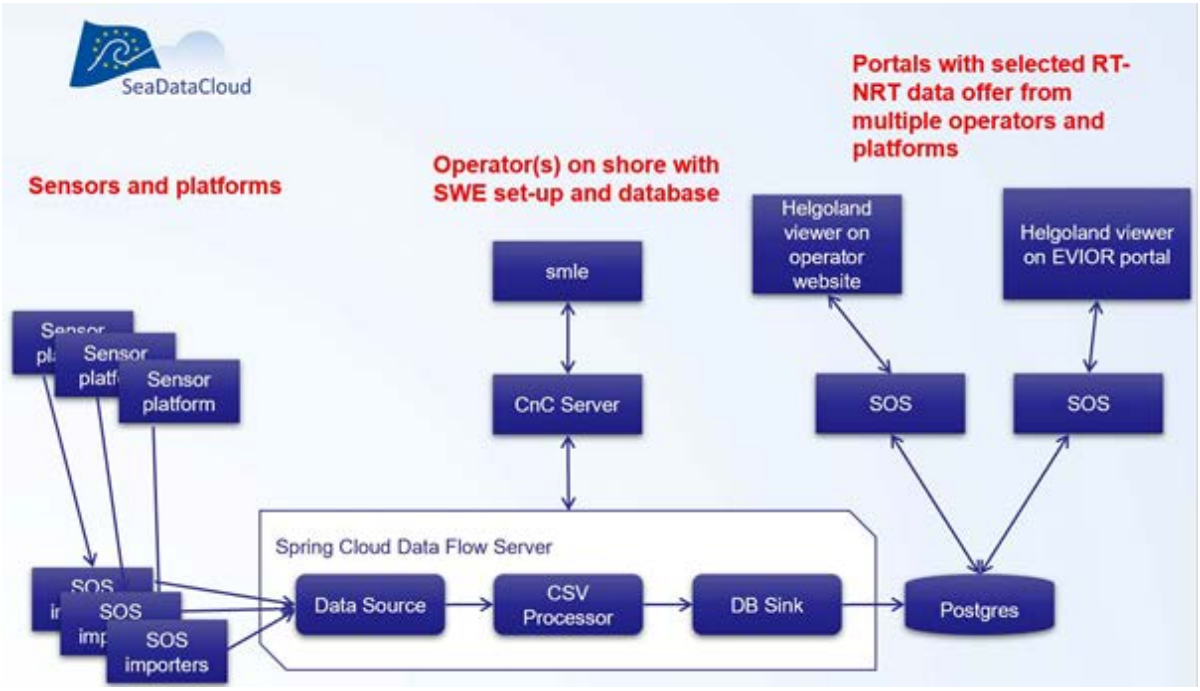

Image 3: SeaDataNet Sensor Web Enablement (SWE) toolkit with various open-source components for data flow from sensors to database to SOS services to viewer

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The SWE toolkit has been deployed by UTM-CSIC with support and adaptation by 52ºN. Currently, it supports transfer of the underway data from the fixed instruments, which are received at the shore and managed in a Data Hub at UTM-CSIC. The SWE protocol has been upgraded to Internet of Things (IoT) in order to lower the threshold and following trends. From the Data Hub the received information can be shared through a SOS service (Sensor Observation Service) and then made accessible for users through a dedicated Dashboard which is based upon the Helgoland viewer of 52ºN.

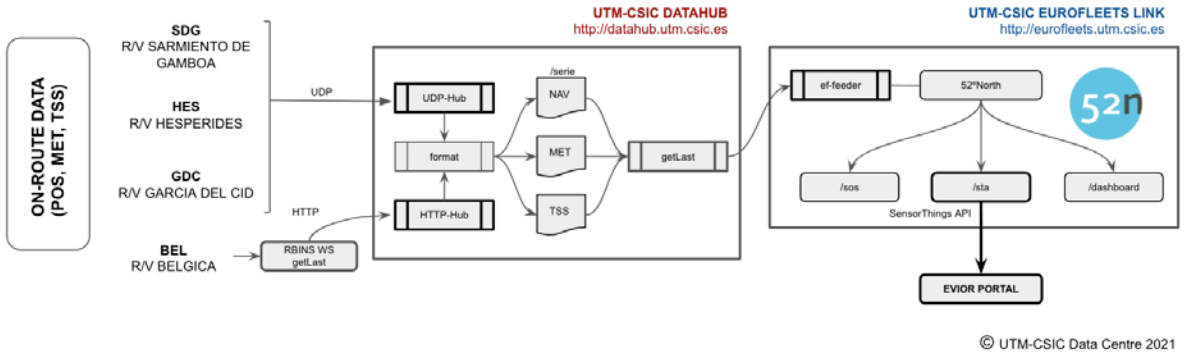

Image 4: Current configuration of the SWE toolkit for transfer of EARS information to Data Hub at UTM-CSIC and publishing through dashboard which will become part of EVIOR

In practice, the 52ºN Sensor Web Enablement (SWE) has been implemented using a docker-compose file which includes the Sensor Observation Service (SOS) and the SensorThingsAPI, both using the same database, and the dashboard based on Helgoland. All components are reverse-proxied by an nginx.

The dashboard can be found at: http://eurofleets.utm.csic.es/dashboard
In a later stage it will be deployed at the EVIOR platform.

The dashboard currently gives access to information streams from the following connected research vessels:

- García del Cid of UTM-CSIC;
- Sarmiento de Gamboa of UTM-CSIC;
- Hesperides of UTM-CSIC;
- Belgica of RBINS (vessel has been decommissioned; last EARS data from 26/03/2021).

UTM-CSIC acts as a datahub in this phase (EARS2) for all connected vessels. In a later stage, RV operators in Eurofleets+ can set up also their own Data Hubs, using Eurofleets+ SWE toolkit components

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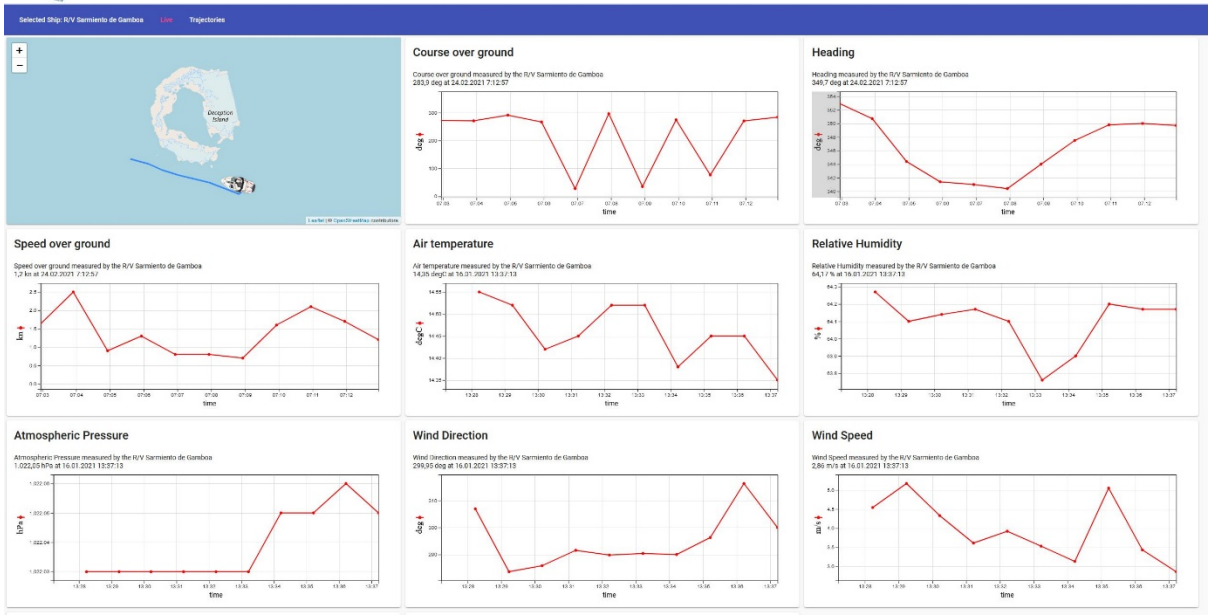

Image 5: Impression of the Eurofleets+ dashboard with sailing vessel and underway data graphics

The feeding is done by a separate feeder for each ship, which at present has to be configured in the UTM-CSIC datahub on shore, where the en-route data coming from EARS are being stored. As part of the EARS V3 development, the information flow and publishing will be expanded with the events information.

As said earlier, it is strived in the Eurofleets+ project that the Research Vessels will facilitate the transfer from vessel to shore while sailing, so that it can be published at the EVIOR platform in a dynamic way. For this to happen, the vessel operator will remain responsible for its arrangement. There are multiple options, such as NRT satellite transmission, but also in delayed mode after the cruise ends.

7. Outfitting the Research Vessels with EARS

As explained, the Eurofleets+ Ship board system is an important component for implementing the Eurofleets+ data management policy and approach in practice. Therefore, in an ideal situation, it should be deployed and used by all Research Vessels of the Eurofleets+ fleet that are engaged in the Eurofleets+ TA cruises.

The EARS V2 system is fully ready for wider deployment. For testing and field trials, the system was installed and configured on the RVs of UTM-CSIC and RBINS. The effective use of the software in the daily routine of these vessels was fostered in order to fine-tune its settings and functionalities.

The next step is to interact with each of the RV operators, that are involved in coming TA cruises, for deployment of the EARS V2 system. For that purpose, a set of documents have been prepared, which are shared with RV operators, and included as Annexes to this Deliverable:

- EARS V2 form;
- EARS V2 installation manual;
- EARS V2 use manual;
- EARS V2 tools checklist.

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The EARS V2 manual has been prepared for installation and configuration, while the checklist helps RV operators and RBINS to customize EARS V2 to the instruments outfit of the selected RV. While the EARS V2 user manual has been prepared by RBINS to give TA cruise researchers information and guidance about the why and the how of using EARS V2. Moreover, meetings and webinars were prepared and partly already given with RV operators or TA Scientific Teams with presentations and videos.

In order to make the installation of the EARS V2 Server easier, UTM-CSIC provides a Virtual Machine image pre-configured for each vessel and a Quick Installation Guide instead of the installation manual.

In the meantime, there has been contact with several RV operators, which were planned for TA cruises. However, due to the COVID crisis, several cruises were postponed or even cancelled, which impacted the further organisation of getting those RVs ready with EARS V2.

Also, the Reference Data Centres in the project, RBINS, OGS, and HCMR, have been in contact with several TA scientific teams about their Data Management Plans and the proposed modus operandi for using Eurofleets+ procedures and EARS, and for ensuring release of cruise metadata and data sets in time for wider publishing. These activities include:

- Remind PIs to submit their full Data Management Plan (DMP);
- Assign a Reference Data Centres (RDC) to projects/cruises;
- Review by each RDC of the full DMP and feedback to PI for the project / cruise to which they are assigned;
- RDC to prepare common guidelines or common layouts for PIs datasets submission;
- RDC to enrich the Eurofleets+ QC guidelines, where needed;
- RDC together with PIs to go through the schedule of submitting metadata and data, following the cruise protocol schema;
- RDC to keep track of cruise progress and contacting PIs for timely delivery of Cruise Summary Report (CSR) and metadata and data sets;
- RDC to receive the en-route and research metadata and data as data package through EMODnet Ingestion and to undertake processing of the assigned datasets. RDC to keep in contact with PI's and/or their data managers for any questions about making the data FAIR.

These activities for EARS deployment with RV operators and for Data Management follow-up with Scientific Teams will continue in the rest of the Eurofleets+ project, hoping for no further delays due to COVID situation. However, if this persists many months longer, it might be decided to shift the focus to adopting EARS V3 for all coming TA cruises.

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ANNEX 1: EUROFLEETS+ technical survey

Message to Research Vessel operators:

Dear vessel operator,

In 2021 many cruises will depart for the Eurofleets+ project. As you know, the use of EARS is required in order to capture the acquisition data and metadata of the cruise.

EARS broadly consists of two components, namely the acquisition (to be installed on board) and the front-end application (to be installed and configured on board, and to be used by the PI).

The partners of WP 3.1 (CSIC, IFREMER and RBINS) are currently working on v3 of the software, to be released by April next year. The EARS acquisition module builds further on its v2 counterpart, and it requires a rerouting (combining from different sensors and sending) of a set of three datagrams (navigation, themosalinometry and meteo) to specific UDP ports of a server dedicated to EARS. This aspect is the same between EARS2 and EARS3.

The EARS acquisition module itself is a set of web services that is to be installed on this server dedicated to EARS. This can happen at a later stage than the data rerouting.

In terms of amount of work of the whole EARS installation, rerouting the data streams takes the most time. We would therefore like to inquire when you would be able to plan this work in the busy schedule of your Research Vessel.

We have bundled this and other questions in a google questionnaire:

https://docs.google.com/forms/d/e/1FAIpQLSfKr_1542TC8Y1GdX0TuT4dy7lL7WVTdmH25sdL194_iEB9zw/viewform

Kind regards,

The Eurofleets+ WP3.1 team

Technical Survey Form:

In this form we would like to assess the technical aspects needed to install the EARS2 software on your Research Vessel. EARS2 must be installed during an Eurofleets+ cruise, because subsequent data management depends on it.

EARS2 consists of two parts: a server and a front-end desktop application.

a) The base server consists of a single docker image that can be booted with the command-line on a physical or virtual machine. Step 1) install docker, step 2) download the image, step 3) build and run the image. This image starts the three different components and database systems that are needed to run an EARS2 server (database+web services). The server needs to be made available on the local network of the vessel, and be made accessible by http.

We also provide a Hyper-V or VirtualBox solution so the virtual machine is directly available and pre-installed. This also includes datagram rewriting.

b) The EARS Front-end application needs to be installed on a central pc in the ship's laboratory, or at

least physically as closely accessible to the scientists and persons taking samples etc. It's a Java8+ application. This central pc needs to be able to access the EARS2 server (the IP address of the EARS2 server is configurable in the settings).

*Obligatory

E-mail address for technical contact *

Research Vessel *

What kind of internet connection is available on board (not only during navigation but also in port)? VSAT, 4G or wifi on dock,... *

Can you make a physical server accessible on the ship's network dedicated to EARS2? *
( ) yes
( ) no

What operating system does it run? *

Do you have any servers on board to host virtual machines such as Virtualbox or Hyper-V images? *

With which operating system your sysadmins or operators are familiar with? (Linux, Windows, both) *
( ) Linux
( ) Windows
( ) Both

Are your sysadmins or operators familiar with docker? *
( ) yes
( ) no

Are all sensor datagrams related to navigation, thermosalinometry and meteo published on udp? If some, explain which. *
( ) yes
( ) no
( ) otherwise:

If the answer to the previous question is no, a Serial to Ethernet converter should be installed (MOXA NPort). Is this feasible for you? Please detail which data is not yet on udp.

Please give the format of the position and depth datagrams (for example GGA) in your R/V. Provide all datagrams so you have these parameters covered: Longitude in decimal degrees, Latitude in decimal degrees, Ship heading in °, FO/AF speed in kn, Water depth in m, Course over ground in °, Speed over ground in kn. Example:
$GPGGA,141829.00,6009.704,N,02454.100,E,,,,,M,,M,,*4E *

Please give the format of the thermosalinometer datagrams in your R/V. Provide all datagrams so you have these parameters covered: Salinity in PSU, Sea water temperature in °C, Raw fluorometry in V, Conductivity in S/m and Sigma theta in kg/m3 *

Please give the datagram format of the meteo datagrams in your R/V. Provide all datagrams so you have these parameters covered: Mean wind speed in m/s, Wind gust speed in m/s, Wind direction in °, Air temperature in °C, Humidity in %, Solar radiation in W/m2, Atmospheric pressure in hPa, Sea water temperature in °C *

EARS2 requires a recombination of sensor datagrams into a set of three datagrams (3:3 or n:3). Do you have the capacity to program these? Note that we have made available a script inside the Virtual Machine capable of reading and converting these. *

How would you like to install EARS? *
( ) Native Linux using docker, you will write and run the datagram conversion script ourselves
( ) VirtualBox Virtual machine on Linux host
( ) Hyper-V Virtual machine on Windows host

When can you plan this work, taking into account the departure of the Eurofleets+ cruise? *

Can you install new Java software on a central lab pc that supports java 8 (exactly java 8)? *
( ) yes
( ) no

By default, EARS does not send data to shore, but this can be arranged. Doing so is highly useful, as it will show the vessel data including location to the dedicated EARS data hub and from there to the EVIOR portal. There are several possibilities to make available the data, and these are discussed during the technician webinar. In principle, do you agree to a data transfer directly from your ship to the dedicated EARS data hub? See also the next question. In case you don't, please state the reasons (security, bandwidth,...)

Alternatively, if the acquisition data is available on shore via a public web service or API, the EARS data hub can connect to this. Is this the case and do you agree we harvest this data?
( ) yes

( ) no
( ) otherwise:

Do you have any other remarks or questions?

SUBMIT

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Guidelines to install the EARS server onboard your Research Vessel

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	Name	**Organisation**	**Date**
Coordinator			
Activity Coordinator			
WP Leader			

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Revision	**Date**	**Modification**	**Author**
	2020-01-09	First draft	Thomas Vandenberghe
	2020-02-13	Review for WP3 colleagues	Thomas Vandenberghe

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1 Introduction

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The Eurofleets+ fleet comprises twenty-seven research vessels operated by European and international research organizations that will provide ship time as part of the transnational access (TA) calls for deploying Eurofleets TA cruises.

In the first two years of the project, the research vessels that partake in a Eurofleets cruise will be equipped with the ship board system **EARS V2** (Eurofleets Automatic Reporting System), developed in predecessor Eurofleets projects.

It consists of four major components:

- EARS Front-end, developed by RBINS
- Data Acquisition System, developed by IFREMER
- En-route Ship Summary Report (SSR) system, developed by CSIC with contributions from IFREMER
- Web Services, developed by CSIC with contributions from IFREMER

These components will be upgraded by each by their original developers in the second year of the project. This should result in an upgraded Eurofleets+ shipboard software suite, EARS V3, that will replace the initial EARS V2 installations. The ambition is to install and configure the upgraded system in the third and fourth years of the project on all Eurofleets+ vessels in various configurations, depending on the existing situations at these research vessels. This is required as each research vessel has a different local configuration, uses other instruments, and thus requires adaptations and flexibility from the Eurofleets+ ship board system.

The EARS V2 system gathers all the cruise data that is acquired. This comprises metadata and data from:

- En-route (underway) data acquisition by fixed sensors on the platform: location, meteorology, thermosalinometry and FerryBox.
- Registered events of scientific measurements made and samples taken

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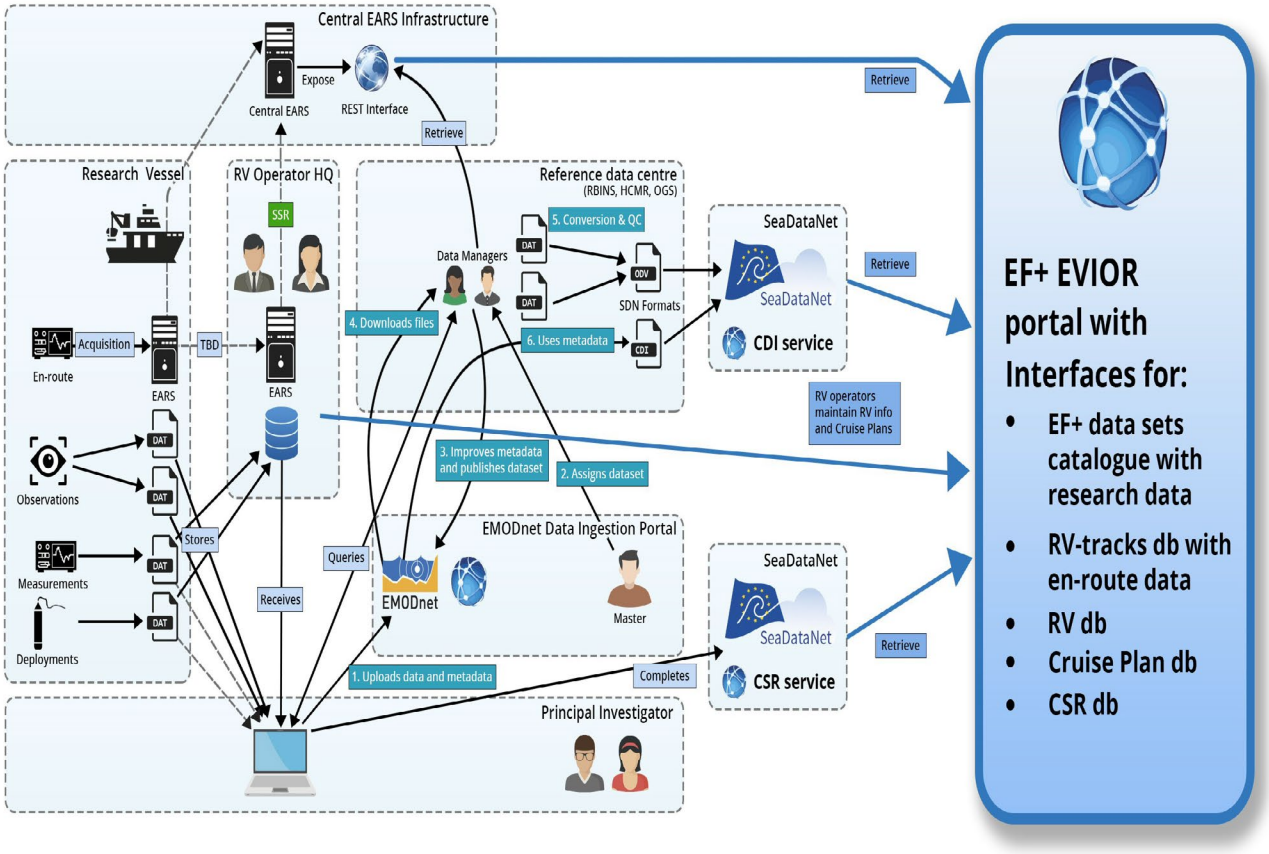

Image 1. Complete dataflow according to D9.5, Eurofleets+ Data Sets Catalogue

2 General architecture of EARS2

EARS2 is composed of 4 java web applications that are bundled in a docker image together with the required web server environment (Apache Tomcat) and database (mysql).

It is also possible to install the whole system by scratch, but this takes time and is not advised.

The following components are present:

- Docker image (run from server):
  - Acquisition module (IFREMER)
  - Web services
    - ears (ears2) endpoint
    - navigation (ears2Nav) endpoint
    - ontology (ears2Ont) endpoint
- EARS Front-end desktop application (run from any pc)

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3 Installation of the EARS server

Prerequisites

The main prerequisite is linux with the docker daemon installed. Installing docker, installing git, get the EARS server files and building an image from the Dockerfile all require a fast and stable internet connection (on-shore cable or 4G preferred over satellite). This is not always possible on board, so plan the installation ahead. The EARS web applications can be installed on an already present physical or virtual server, or can be installed on-shore inside a virtual machine, taken on-board and deployed there. The server must be accessible from the ship's LAN.

To create a linux virtual machine, we refer to the many resources available on this topic, for instance: https://linuxconfig.org/install-and-set-up-kvm-on-ubuntu-18-04-bionic-beaver-linux. The rest of these guidelines is written with Ubuntu in mind. If only windows servers are available on board, virtualisation is a must.

Create EARS datagrams

EARS needs three datagrams put on the network in a very specific format, each for navigation, thermosalinometry and meteorology (weather).

If the data is sent out via a serial port, it needs to be put on Ethernet. This can be done by using a MOXA Nport 5410 Serial Device Server.

The techniques needed to combine data into the datagrams are not part of these guidelines and are understood to be programmable by sysadmins.

Datagram description navigation data (POS):

Start identifier	
Format	$PSDGPOS
Date of position	
Format	ddmmyy
UTC time of position	
Format	hhmmss
Longitude in decimal degrees	
Latitude in decimal degrees	
Ship heading in °	
FO/AF speed in kn	
Water depth in m	
Course over ground in °	
Speed over ground in kn	

Example:

```
$PSDGPOS,131017,132035,3.01803,51.44738,216.2,8.9,
-27.7,215.4,8.7
```

Datagram description thermosalinograph data (TSS):

Start identifier	
Format	$PSDGTSS

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Date of position
Format ddmmyy
UTC time of position
Format hhmmss
Sea water temperature in °C
Salinity in PSU
Sigma theta in kg/m³
Conductivity in S/m
Raw fluorometry in V

Example:

```
$PSDGTSS,131017,132035,14.7808,33.5449,24.8983,41.1335,0.6275
```

Datagram description MET (meteo data):

Start identifier
Format $PSDGMET
Date of position
Format ddmmyy
UTC time of position
Format hhmmss
Mean wind speed in m/s
Wind gust speed in m/s
Wind direction in °
Air temperature in °C
Humidity in %
Solar radiation in W/m²
Atmospheric pressure in hPa
Sea water temperature in °C

Example:

```
$PSDGMET,131017,132035,2.81,2.81,150.4,11.05,,189.07,1018.12
```

Install docker (on physical or virtual machine)

Ubuntu: Follow the guidelines on https://docs.docker.com/install/linux/docker-ce/ubuntu/

Debian, CentOS, Fedora also available.

After installation, ensure that the docker daemon will be started when the server or virtual machine reboots, and start it right now:

```
sudo systemctl enable –now docker
```

Install git

Ubuntu:

```
sudo apt-get update

sudo apt-get install git
```

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Get the required files for the EARS server, including the Dockerfile

Go to where you want to install the docker container. The location has no special need for permissions, as all docker operations require root rights anyway. `/home/general-user/` is a fine location, where general-user is the name of a general user.

```
cd <installation directory>

git clone https://github.com/naturalsciences/ears-server.git

cd ears-server
```

Note the existence of the Dockerfile and the .env file inside the directory.

Change the username and password to modify the vessel ontology

Only to save the vessel ontology a password and username is needed. This username and password needs to be provided in the options of the EARS front-end application as well. This step is optional but essential if you want to protect the vessel ontology (else the password 'REPLACEME' remains the default).

Modify these lines in the Dockerfile to your username and password:

```
RUN echo 'be.naturalsciences.bmdc.ears.ontology.rest.username=earsontology'
> /etc/.java/ears.properties

RUN echo 'be.naturalsciences.bmdc.ears.ontology.rest.password=REPLACEME' >>
/etc/.java/ears.properties
```

If you modify the Dockerfile, or any file except the docker-compose.yml file for that matter, you will need to rebuild the image (`sudo docker-compose build`).

Create the docker container and run the image

```
sudo docker-compose build

sudo docker-compose up -d
```

The -d flag starts the container based on the image in a detached mode, meaning that you can continue the terminal session. If you shutdown and reboot the server that hosts the EARS server container, the container will always restart along with the whole server.

When you run the image, the different components are started in certain order. The web server (tomcat) is the latest as it has to wait for the database to be completed. Wait at least a minute, then visit the following addresses in your web browser:

http://localhost:8080/ears2/getEvents

http://localhost:8080/ears2Nav/getCruiseInfoSSR

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http://localhost:8080/ears2Nav/getLast24hMet

http://localhost:8080/ears2Nav/getLast24hTss

http://localhost:8080/ears2Nav/getLast24hNav

http://localhost:8080/ears2Nav/getLast24hEvt

Replace localhost:8080 with the server's IP adress and the actual port you have configured (see lower).

Make sure that the server is accessible from the network.

Adresses and ports

The EARS webservices are reachable on http://localhost:8080 and the acquisition server on http://localhost:8181, by default. You can modify these ports in the .env file. If a port is already taken, you either change the port in the .env file, or preferrably kill the application that takes the port. In order to find applications using a port, use eg. `sudo netstat -tulpn | grep 8080`, note the pid in the last column and then `sudo kill <pid>`

View the database, e.g. with MySQL Workbench

Install MySQL Workbench

```
sudo apt-get install mysql-workbench
```

First retrieve the ip address of the MySQL container:

```
sudo docker inspect ears-server_mysql
```

Shorthand:

```
sudo docker inspect ears-server_mysql | pcregrep -o1 '"IPAddress": "([0-9\.]+)"'
```

and note the value for the key "IPAddress".

Create a new connection in MySQL Workbench towards this IP address, using as database name 'casino', user 'casino' and password 'casino', and using the default port 3306.

Or by command line

With command line mysql, you can use:

```
ip=$(sudo docker inspect ears-server_mysql | pcregrep -o1 '"IPAddress": "([0-9\.]+)"') \

mysql -h $ip -u casino -p casino -e 'show tables;'
```

Type the password (casino) and verify the tables have been created correctly. Later you can use this to verify data insertion, eg. by:

```
mysql -h $ip -u casino -p casino -e 'select * from Navigation limit 10;'
```

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```
mysql -h $ip -u casino -p casino -e 'select * from event limit 10;'
```

Data volumes

In order to persist the crucial information in the database and the ontology and to safeguard it for when the docker container would be restarted or even deleted, the data is persisted in a directory outside of the docker container. These are 'ears_mysql_data' and 'ontologies'. Do not delete these directories.

Troubleshooting

You can read the logs of the individual modules like so:

The database: `sudo docker logs ears-server_mysql`

The web applications: `sudo docker logs ears-server_tomcat`

The acquisition module: `sudo docker logs ears-server_acquisition`

If you need to kill the docker images, for instance if you make a change in the Dockerfile, enter the following command:

```
sudo docker kill ears-server_acquisition ears-server_tomcat ears-server_mysql
```

The Dockerfile should not be changed, only to change the access password for the vessel ontology, see higher.

Coping with updates

If a new version of any web application (ears2.war, ears2Nav.war) would need a replacement (of which you will be informed by email) please follow this procedure:

- Ensure you have a stable and fast internet connection
- ssh to the server
- cd to the ears-server directory
- `sudo docker kill ears-server_acquisition ears-server_tomcat ears-server_mysql`
- `git pull origin master`
- `sudo docker-compose build`
- `sudo docker-compose up -d`

The build command is smart enough to start rebuilding only the steps that are not affected by the file change (so this is faster than the original build).

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Guidelines to use the EARS Front-end application

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1 Fast track

First use:

- Modify the settings in File>Options to set the EARS server, the vessel and metadata for the countries that are going to be visited
- Create as much cruises and programs as needed
- Build the vessel tree together with a data manager

Normal use:

- Window>Browse trees
- In Browse trees pane, click Vessel tree, double-click ears2-onto-vessel.rdf
- Move the 'Browse terms' pane to a nice location on the left
- Window>Create/edit events
- In the vessel tree, traverse the tree from Tool category>Tool>Process>Action.
- Right-click the action and select 'Create event'.
- Modify the time of the event if needed (quite likely!)

2 Introduction

The EARS front-end application is a desktop application running on Linux, Windows and MacOS to register manual events of marine scientific campaigns onboard Research Vessels.

The EARS front-end application cannot run without a web server running the EARS web services.

It is intended for events that cannot be automated, i.e.: measurements or instrument manipulations, gear deployments,.... This passes through two steps: a selection of the tool categories, tools, actions and processes that are used during the cruise and the actual logging of events during a cruise. The first phase should be ready before any cruise starts.

When logging an event, the event and its details are stored in a database, which can be disseminated for later data management. When leaving the vessel, you can export the events as an excel file together with the matching underway data, amongst others to georeference the event.

Vocabulary trees (containing both terminology and semantics) can be created on three scopes: program, vessel and test scope. On a program scope, the principal investigator of the program is responsible to create a vocabulary tree for his/her program. The vessel IT technicians are responsible to maintain an up-to-date vessel vocabulary tree; vessel operators and visiting scientists should not be responsible for this.

These trees are just XML files (technically, xml/rdf). They represent an ontology, an information structure explained in this online document: https://www.w3.org/standards/semanticweb/ontology.

3 Prerequisite: installing the EARS web services

The installation files for the EARS web services can be found on https://github.com/naturalsciences/ears-server. This should be pre-installed by vessel technicians before the cruise starts.

4 Users, roles and internet connection

The tool is developed for the following roles/users:

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1 IT technicians and data managers operating on research vessels (advanced users)
2 scientists

For any kind of user this application must be connected to the vessel LAN in order to work. For the first and second category, this application is installed on a computer that never leaves the vessel. Scientists might have it on a laptop and can visit multiple EARS-capable vessels, in this case they can set the current vessel themselves (see Base settings).

The application can only be used when connected to the LAN of the vessel. When you plan to edit a vocabulary tree, it is advisable to have stable internet. Each time the application restarts it will try to auto-update the base tree and the metadata files (these store countries, harbours, seas, organisations and projects). These files are only downloaded if a newer version is needed. Therefore the application should be opened before the cruise starts!

5 Terminology

Events are composed from the following terms:

- Subject: the scientific purpose of the event
- Tool category: groups of sensors, instruments or sampling devices.
- Tool: the specific device or instrument performing the event (sampling gear, sensor, ..). A tool can belong to multiple tool categories
- Action: a step in an ongoing process, and can be deliberate or incidentally
- Process: defines a general ongoing activity a tool or vessel can do and consists of a sequence of punctuated actions (including malfunctions and deliberate actions).
- Event property: A property of an event. An event can have multiple events and properties can be associated with multiple events.

Event: An event is something that happens at specific time related to a subject, tool category, tool, process and action. The person executing it can also be taken into account. Possible events are defined beforehand with a tool, a tool category, a process, an action and zero or more properties. When the event actually occurs, any properties attached to it can receive a value.

6 Installation and update

Installers for Mac, Windows and Linux of the EARS app can be found on https://github.com/naturalsciences/ears/releases. Execute the installer for your OS.

The Java 8 Virtual Machine (JRE or JDK) is a prerequisite for the application. If you need other later major versions of java (for other applications), you must still install java 8. If this is the case, you should indicate the location of the JVM in the configuration file located in earsapp/etc/earsapp.conf (the example is for Linux):

```
# default location of JDK or JRE (must be Java 8), can be overridden by using --jdkhome <dir> switch
#jdkhome="/path/to/jdk"
#eg. Linux jdkhome="/usr/lib/jvm/jdk1.8.0_60"
#eg. Windows jdkhome="C:\Program Files\Java\jre1.8.0_20"
#jdkhome="/usr/lib/jvm/jdk1.8.0_162"
jdkhome="/usr/lib/jvm/java-8-openjdk-amd64"
```

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If the only java version on the computer the application will run is java 8, you can comment the last line out. The application works the same on OpenJDK or Oracle JDK.

By default, the application is installed in /home/<user>/earsapp on Linux and in Program Files/earsapp on Windows. **Do not use another installation location as this will lead to unexpected results**. For windows, you must install this using administrator rights as you need access to the Program Files directory. For Linux, do not use sudo rights to either install or run the application.

The application's home directory is in /home/user/.earsapp on Linux and in Users\user\AppData\Roaming\earsapp On Windows. Here the application stores its settings. For instance the location of the vessel tree is /home/<user>/.earsapp/dev/config/onto/earsv2-onto-vessel.rdf. Do not edit this file directly.

Updates

Updates are found on https://github.com/naturalsciences/ears/releases. The current version of the application can be read in Help>About.
To update the application to a newer version, you must first uninstall it by executing the uninstall executable inside the application directory, i.e. earsapp/bin. The uninstaller prompts if you want to clear the settings directory. Preferrably you should not do this. If you would encounter abnormalities in the GUI, you should uninstall the application, clear the settings directory when prompted by using the uninstaller, and reinstall it in the default locations.

7 Launching the program

Launch the program from the launchers in earsapp/bin. On linux, do not start using sudo.

During the first launch the application will be unresponsive for a while as it downloads the needed list files. On a satellite connection this is noticeable, in the office barely, so please ensure that you have stable and fast internet then. When the application becomes responsive again, it's best to close and reopen the application.

8 Base settings

The settings can be found in "File>Options". You can modify the general settings and the actors. Settings are set just once and saved into a configuration file, so they are available across sessions of the application.

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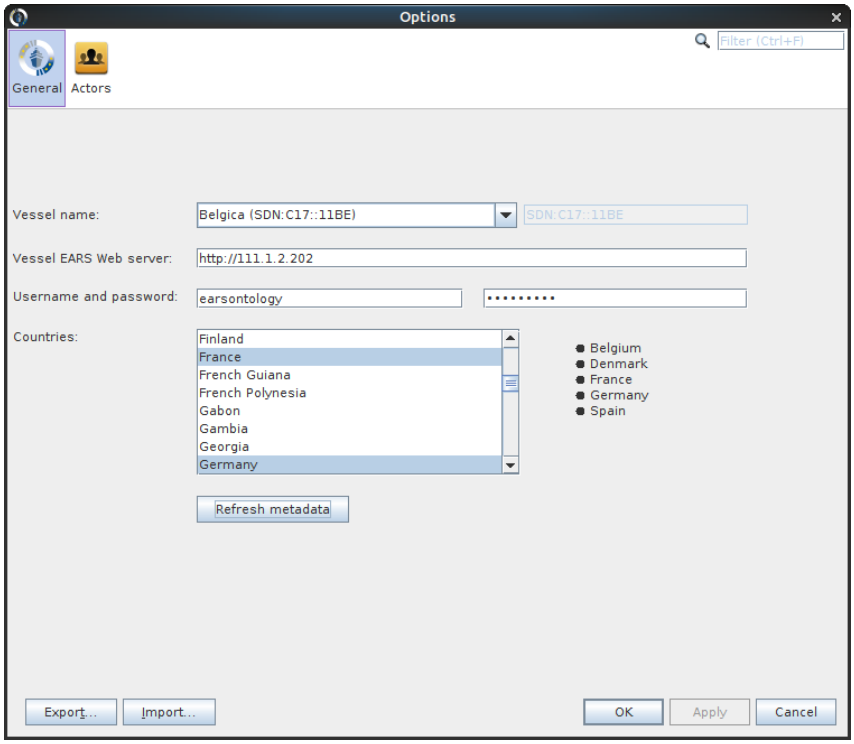

Figure 1: the general settings

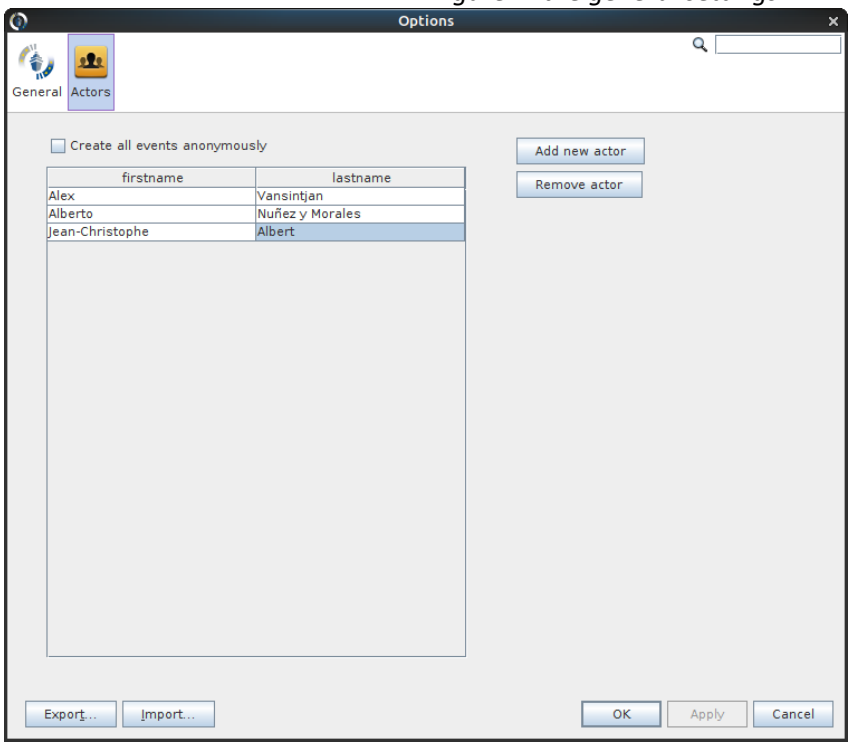

Figure 2: The actor settings

The current vessel should be set.

The base url of the EARS web server needs to be set for EARS to work (note this is without the ears2, ears2Nav part of the url).

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A user account and a password can be provided in order to edit the vessel tree. Editing this file is only allowed for IT technicians or data managers.

It is possible to limit the countries from where the harbour, organisation and project lists are retrieved. These lists are shown in the create cruise and create program screens. To select multiple countries, hold ctrl and select the countries. Click refresh metadata so that the correct lists are downloaded.

Actors allow you to save which person specifically performed the event. This is not considered the Principal Investigator, but rather the operator. I f you mark the tickbox 'Create all events anonymously', it's not possible to choose an actor for the vents.

Click 'Save' to save the general settings including the actors. The application will be unresponsive for a while as the necessary files are synchronized with the EARS web server.

It is also possible to save the settings to be reused at a later stage (across different installs). After importing you should exit and reopen the application to get the new settings.

General interface

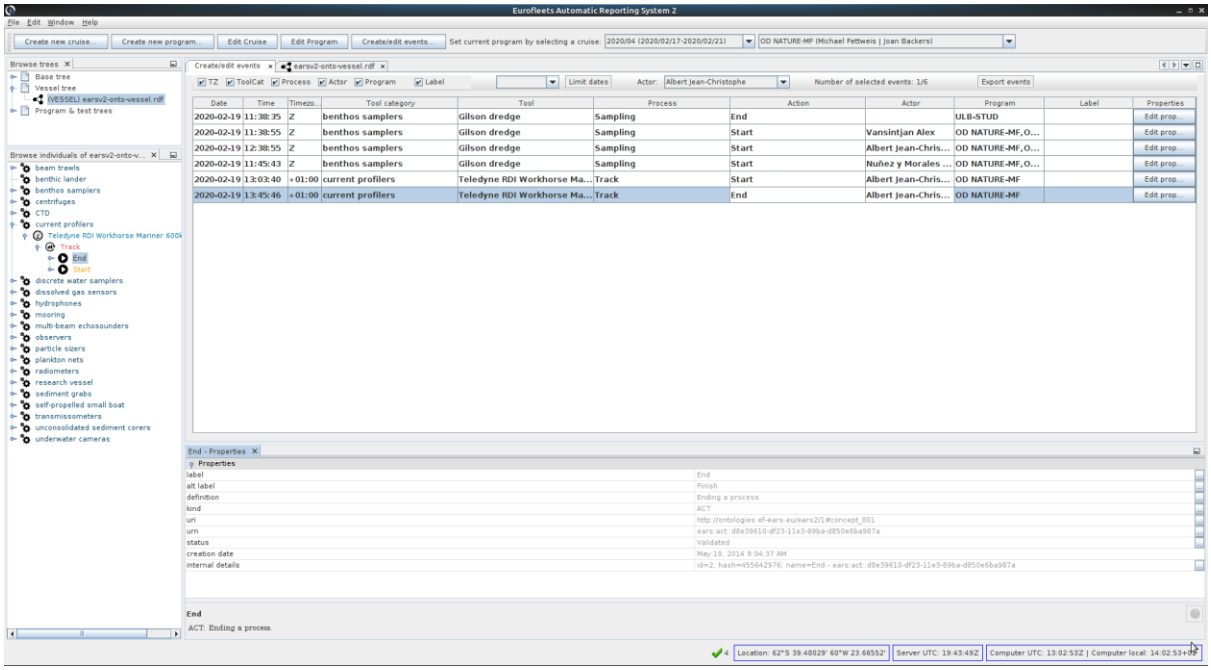

*Figure 3: The general view of the application with all the important panes open, which are the '**trees browser**' and the '**browse terms**' pane on the left, the '**properties pane**' on the bottom and the '**create events**' pane in the middle. Note that the current cruise and program have been se on top.*

The application consists of a menu bar, a tool bar, a message bar and some core components that are put in panes. The message bar displays feedback balloons. The application saves opened panes across sessions.

In the toolbar, the two rightmost dropdown menus allow to set the current cruise. First select the cruise to limit the programs on this vessel, then select the program. When the application opens, the current cruise is automatically selected.

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The core components of the application appear by default in their own pane, but can be moved freely from pane to pane. All panes can be accessed through the Window menu item. The application has the following components:

- **Trees browser**: find the available vocabulary trees by their scope, e.g. base scope, vessel scope and program scope. You will probably just use this once to be able to browse (or edit) the terms.
- **Browse terms**: view the terms of a vocabulary tree file organised as a tree. The end nodes of the tree show potential events (meaningful combinations of a tool category, tool program, action and possibly property)
- **Create events**: create events from nodes in a tree and edit them
- **Properties**: view the definitions of the terms
- Edit terms: drag and drop terms from any other open term component, create new terms
- Concept list: a list of all the terms available in the currently open trees
- Create/edit cruise
- Create/edit program
- View vessel cruises: an overview of all cruises of the current vessel
- View cruises' programs: an overview of all programs of the current cruise
- Output: messages too large for the information balloons appear here.

9 Creating a cruise

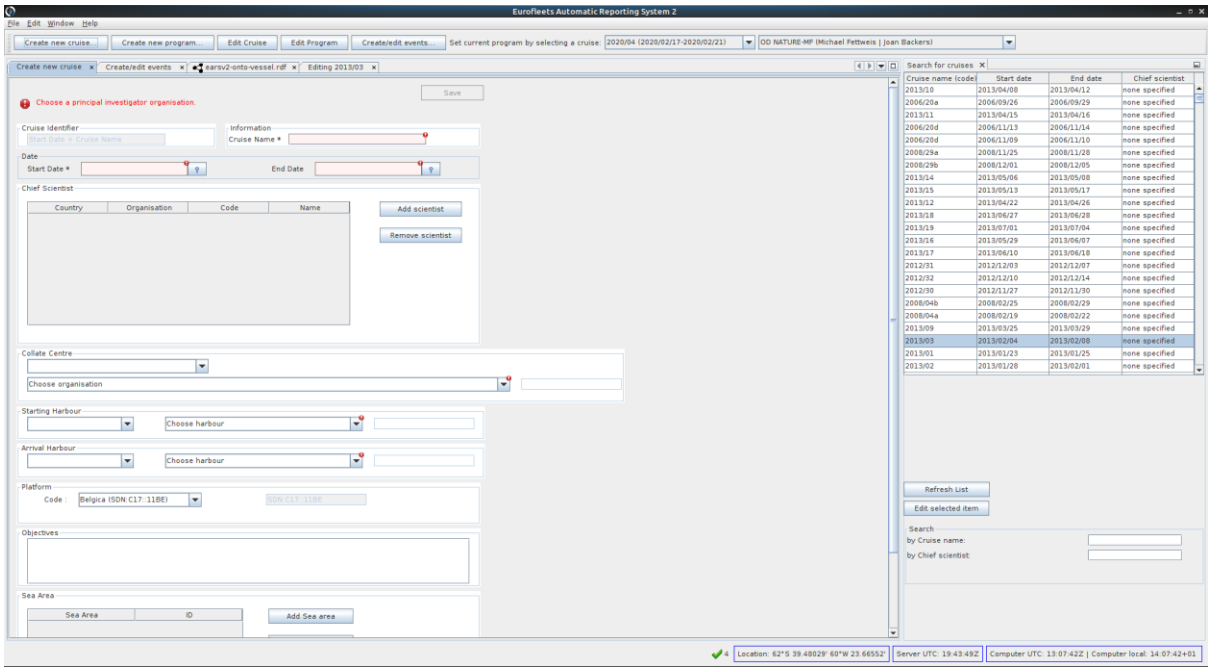

Figure 4: creating a new cruise. Note on the right the overview of cruises that can be edited.

If the current cruise does not already exist, it should be created. In the toolbar, click, 'Create new cruise', or go to Window>Cruise & program setup>Create new cruise. When creating a cruise, the following validation is performed:

- Cruise name should be filled in. Its best to use a code here. Limited to 50 characters.
- Start and end date should be filled in and start should be before end date.
- Collate centre organisation should be filled in.

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- Starting harbour should be filled in.
- Arrival harbour should be filled in.

You can limit the lists of organisations and harbours by first selecting the country in the corresponding left dropdown menu. Select the first element in the country dropdown menu for worldwide lists of organisations and harbours.

The field Objectives is limited to 1000 characters.

Multiple chief scientists can be added. Click 'Add scientist' or 'Remove scientist'. Idem for the Sea Areas.

When the cruise is validated, the save button becomes available. It is saved to the EARS database by a call to the web services. It is verified whether:

- The cruise with this name does not exist yet, as it must be unique. Note that the EARS database is capable of storing cruises for multiple vessels (so cruise names must be unique over different vessels).
- The cruise does not temporally overlap with another cruise of the same vessel.

10 Creating a program

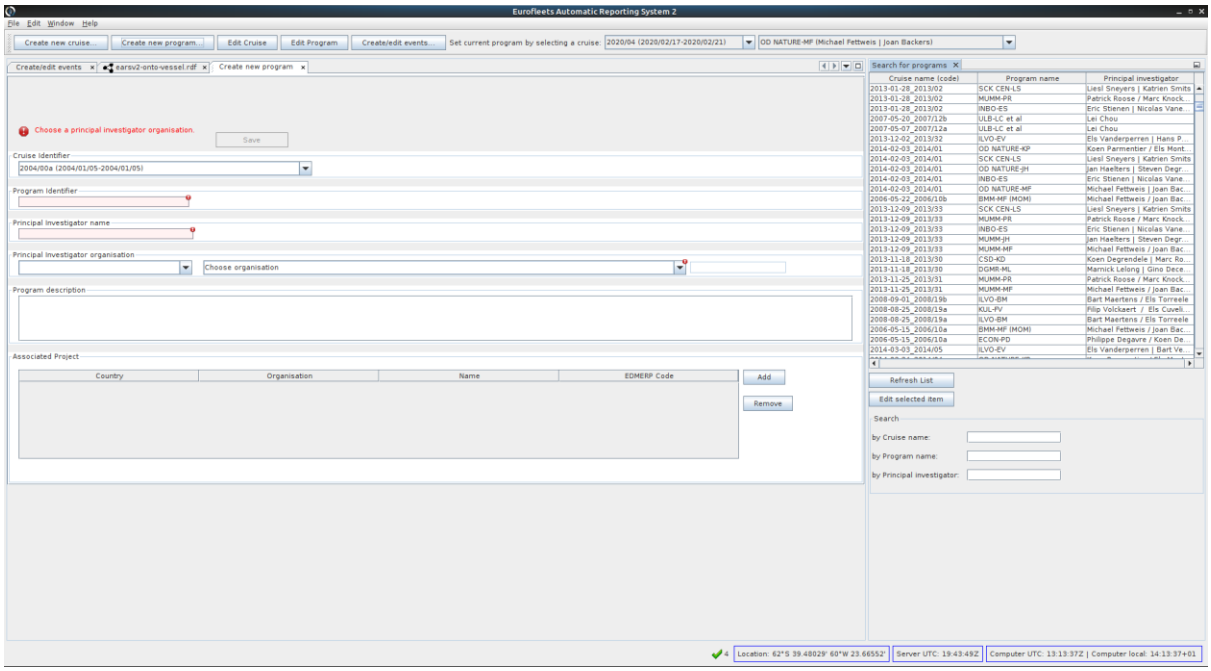

Figure 5: Creating a program. Note on the right the overview of cruises that can be edited.

Before oceanographic events and terms for a scientific program can be generated, the program needs to be defined. Note that in this version of the EARS infrastructure, a cruise must be created before a program as each program is linked to exactly 1 cruise. Click 'Create new cruise' or go to Window>Cruise & program setup>Create new program. The following validation is performed during program creation:

- Cruise should be selected.

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- The name of the program should be completed. In real scenarios this is an abbreviation. This is limited to 50 characters.
- The name of the principal investigator should be completed. This is limited to 50 characters.
- The principal investigator's organisation should be completed.

You can limit the lists of organisations by first selecting the country in the corresponding left dropdown menu. Select the first element in the country dropdown menu for a worldwide list of organisations.

The field Description is limited to 1000 characters.

Multiple EDMERP projects can be added. Click 'Add' or 'Remove'. If the project does not appear in the EDMERP list, you should contact your collate center in order to have it added to the EDMERP records.

When the cruise is validated, the save button becomes available. It is saved to the EARS database by a call to the web services. It is verified whether the program name is unique over all cruises and over all vessels (in this version of the EARS infrastructure).

11 Editing cruises and programs

Cruises and programs can be edited by click ‘Edit cruise/program' or going to Window>Cruise & program setup>Edit cruise. A list of cruises/programs appears in the right pane. The cruises are for the current vessel and the programs for the active cruise. Edit the cruise by clicking the ‘Edit selected item’ button or right-clicking the table row. It’s possible to dynamically search the table. After adding cruises or programs, the list is refreshed automatically.

(editing a program is not possible in the current version of EARS as it missing from the web services)

12 Browsing tree terms

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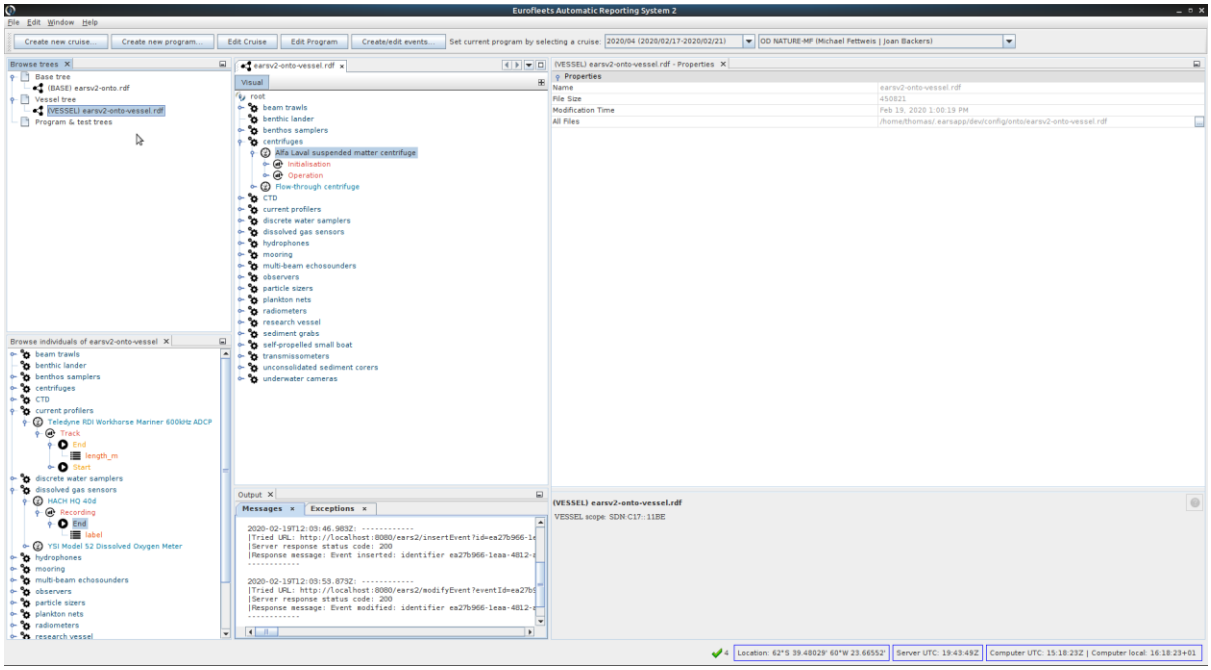

Figure 6: An opened browse trees pane (top left), browse terms pane (bottom left), edit terms pane (middle) and properties pane (right). Note that the properties pane shows the full path to the vessel tree xml file.

Go to the browse trees component via Window>Trees>Browse trees. A list with the three scopes is shown. The base tree can only be browsed, not edited. This tree represents the longlist of all terms used in the EARS setting and contains terms created by BODC and Eurofleets+. The vessel tree can be edited by persons with a password (set by the vessel IT technician in the settings). To create program trees the program should be already defined in the system and should be selected). It is also possible to create a test tree to get to know the software (this doesn't need an active program).

Right-click on the scope node and select refresh if a new file is put in the directory (only meaningful for program and test trees).

It's also possible to force download a tree from the server (right-click on the tree). This is useful if a new tree has been added to the sever via another instance of the front end application in the meantime.

Right-click on a tree file to browse or edit it. The application can have as many trees open for browsing as needed, but only one tree can be edited at a time. A new pane opens.

In the browse terms pane, you can navigate the nodes in a tree that is opened for browsing. The nodes are displayed in a hierarchy from tool category->tool->process->action->event property.

It’s convenient (to create events and to edit a tree) to stack the different browsing panes (base tree and vessel tree) in the leftmost column (see figure 7).

From the browsing panes, it’s possible to create new events (if the create events pane is opened and if the program and the actor are selected). Open all nodes until you reach an action node. Right click the action node and select ‘Create event’.

Right click a node and select ‘Expand all’ to expand all its children recursively.

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The properties of a node can be inspected via its property sheet, which can be accessed at Window>Properties. In figure 6 this shows info on the vessel tree file node, but it can also show info on any node (ie. a tool, tool category, etc. of the tree itself, like in figure 7)

It is possible to search for terms in tree by clicking on any node of the tree and typing for a search term. The tree needs to be expanded fully in order to search at all levels.

All the terms present in the currently opened trees can be accessed via Window>Trees>View concept list. They are organised per type (Tool Categories, Tools, etc.). This provides a useful overview of all capabilities of the vessel and base trees.

13 Creating vessel and test trees and editing vessel, program and test trees

1. General

Each vessel outfitted with this software should have a vessel tree, that contains the fixed instrumentarium of a vessel; it can be considered as the shortlist. Optionally, it's also possible to create a program tree. This is a list of all the terms and their combinations available for a specific program. As a vocabulary tree is just a file (rdf/xml), it can be shared and copied. **EARS tree files should never be manually edited with a text editor.**

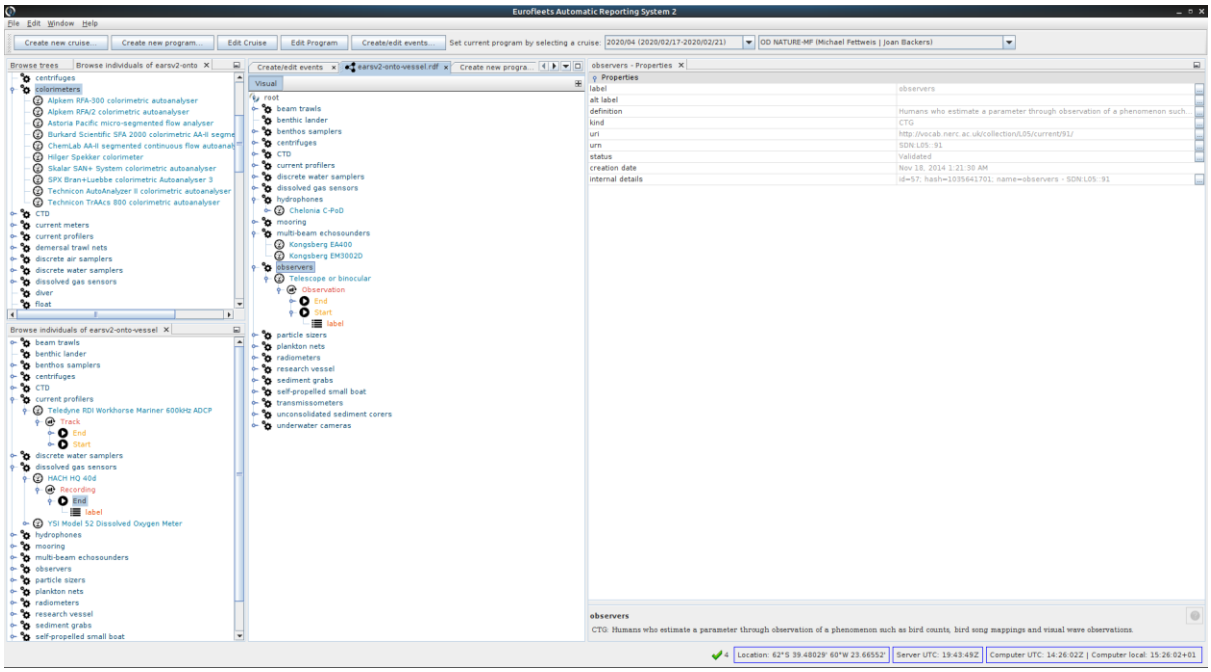

Figure 7: placing the base tree panes at the left

2. Creating and saving program or test vocabulary trees

After changing a program tree, it can be saved (also under a new name). Use File>Save or File>Save as. 'Save as' is intended as an export function as the software cannot open files that are not stored in the 'application home directory'/trees folder.

A new empty program tree can be made from File>New program tree. A program needs to be selected to create a program tree for it. A file is generated in 'application home directory'/trees with

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the name of the program as a filename. Inside the file is also a reference to the program. Creating a new file for this program will open the one already existing!

Once created, the file is opened for editing. Refresh the Program & test trees in the 'Browse trees' pane to refresh the list and view the file.

Likewise, test trees can be made from File>New test tree.

3. Editing an existing vocabulary tree and creating new terms

Navigation is similar as in the browse pane. The editing pane can receive nodes by a drag and drop from any other browse pane. If it is a legal move, the incoming node is added as a child. Tool categories can only be moved to the root node, tools can only be moved to other tools or tool categories, processes to tools, actions to processes, and properties to actions.

It is possible to edit a program tree file (if one has it) even if the actual program set in the cruise doesn't match with the program of the tree.

A node can be removed from its parent node by right-clicking and selecting 'Delete'.

There is no 'undo' functionality.

In some cases, a new node can be created in a parent node by by right-clicking and selecting 'Create child'. This creates a new node of the correct type. Use the property sheet to change the preferred name (=label), alternative name and definition of the term. Please realize it is mandatory to recuperate an already existing term.

Please note that it is not possible to create events from 'home-made' tool terms, only from official terms that are used in the BODC L22 list. See Chapter 14.

The application will disallow a term to be created with an already existing label. It will search the base tree, the vessel tree and the current program tree for a term with the same name and will present it to the user. The user must then recuperate the already existing term.

The new node will automatically receive an url containing the vessel code, so that it is unique and can be reused in any other environment. This also applies to terms created in a program tree. A urn is also assigned consisting of a unique hash (large hexadecimal number).

In this way, it is possible to create a complete tree describing potential events on board.

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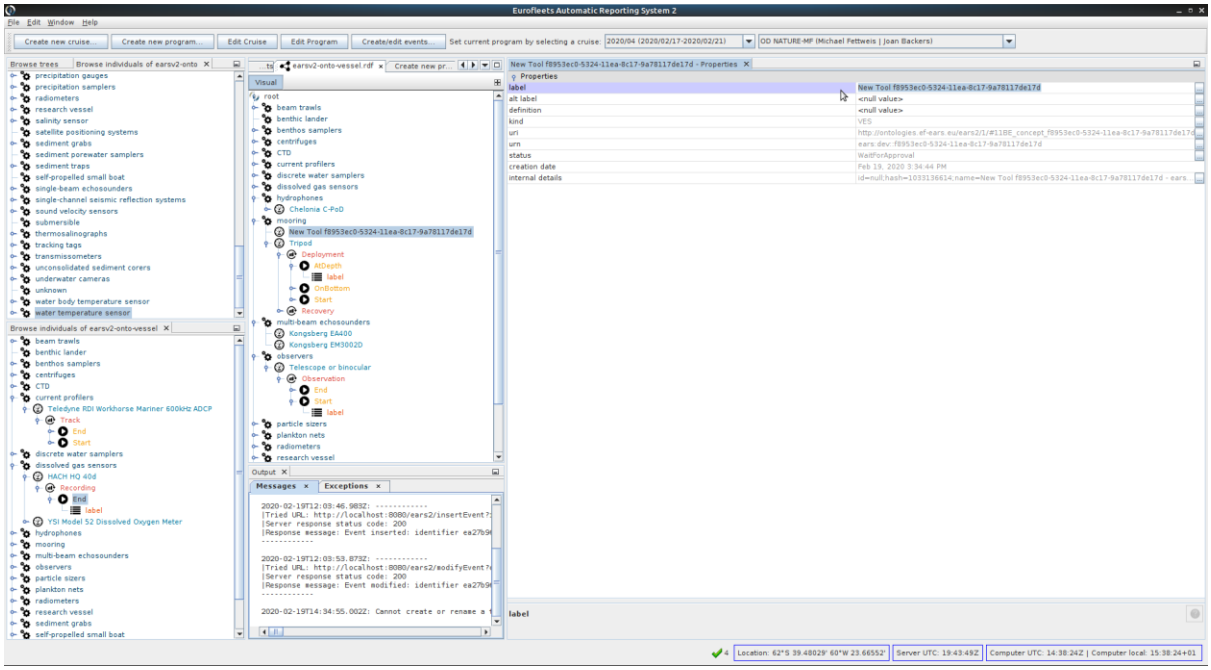

Figure 8: Adding a new tool in the mooring tool category.

14 Important considerations regarding terms and workflow

This application's goal is to create interoperable metadata from the start. To achieve this it depends on a correct and thorough use of the BODC/SeaDataNet/IOC L22 device catalogue, the L05 (device categories) and L06 (platform categories). The base tree that comes with the EARS Front end software is synchronized with these catalogues as soon as there are changes in them.

In order to remain interoperable and have stable terminology on the long run, the **creation of new tools only serves the purpose of temporary placeholders, and no events can be created from them.**

For each tool category, the base tree contains a basic set of operations (i.e. Processes and Actions) that constitute their best-practice usage. eg. for sediment samplers the appropriate usage is Sampling-Start or Sampling-End.

In order to capture these requirements, the following workflow should be followed:

1. The ears-server (docker container) and EARS Front-end software (this software) is installed on-shore.
2. The ears-server (docker container) and EARS Front-end software (this software) is installed on-board in time before a cruise starts
3. Using the on-shore copy, a vessel tree is made that represents the complete vessel instrumentarium.
4. The same procedure as 3. is followed for any programs that use their own instrumentarium.
5. If any terminology is missing from the Tool list, it must be requested on-shore to vocab.services@bodc.ac.uk, with tvandenberghe@bmdc.be in copy. Please make an excel overview to request new tools.
6. If any terminology is missing from the Process, Action or Property list, it must be requested on-shore to tvandenberghe@bmdc.be.

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7. Once the terminology is created, the EARS front-end synchronizes with the official catalogues and your term will be available. You should then add the new term in the on-shore vessel/program tree and delete the temporary term placeholder.
8. Go to the Research vessel and close the EARS Front end application if it is open
9. Replace the on-board vessel tree (on linux this is /home/<home>/.earsapp/dev/config/onto/earsv2-onto-vessel.rdf) with the on-shore vessel tree you just created.
10. Open EARS Front end, make a minor edit to the vessel tree (move around a node and put it back) so that the tree can be 'saved as' on the server.

You can use the EARS software to create the request list of tools as follows:

- Create your term as a temporary placeholder as described in 13.3.
- Close all trees except the vessel tree and program tree if applicable
- Open the concept list via Window>Trees>View concept list.
- Open the Tool node and notice the tools marked in italic text
- Open the properties pane
- Copy over their label, alt label and definition to an excel sheet
- Send this excel sheet to vocab.services@bodc.ac.uk
- Proceed as above, but replace step 10 with:
    - Open EARS Front end
    - In 'Browse trees', open the base tree and edit the vessel tree
    - Copy over the new tools available in the base tree over to the same location as the old tools
    - Delete the old tools

15 Creating events

The main goal of the tool is to create oceanographic events; all previous steps work towards this.

Open the events component by clicking the ‘Create/edit events’ button. Events can be composed from actions in any opened vocabulary tree (including the one that is being edited) by right-clicking it and selecting ‘Create event’.

To create an event, a program must be selected. The actor is optional and is the person that performs the event, not the person that is responsible for the event. The actors can be added and modified in File>Options.

The event appears in the main table with the current timestamp, the tool category, tool, process, action and actor. Time should correspond to the **event time** and not the time of logging. After the creation of an event, only the datetime, actor and properties can be changed. The datetime is decomposed in a date, time and timezone component.

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The timezone is the timezone of the computer the event is created on. It should be verified that this timezone is still correct for the actual position of the ship. Events are saved in UTC in the database, based on their original timezone. It is possible to change the timezone to UTC for a specific event by setting the timezone to 'Z' and setting the time accordingly.

One or more Events can be selected. Events can deleted. Events can be copied with the exact same time, or they can be copied to the actual time.

By default, all the previous events of the current campaign are displayed. If there is no campaign selected, there are no events displayed. Events can be filtered by date by clicking the dropdown menu left from the 'Limit dates' button. If an event is created, it is visible in the screen even if it does not coincide with a campaign. If you would close the application the event will no longer be visible if there is no campaign going on now. Create a campaign first to see its events.

The properties of an event, if it has any, can be set by clicking 'View properties', upon which a popup window appears.

Adding or removing a property in the vocabulary tree editor is possible, but actual events that have already been created with those properties will not be changed: they will not lose or gain these properties nor their assigned values.

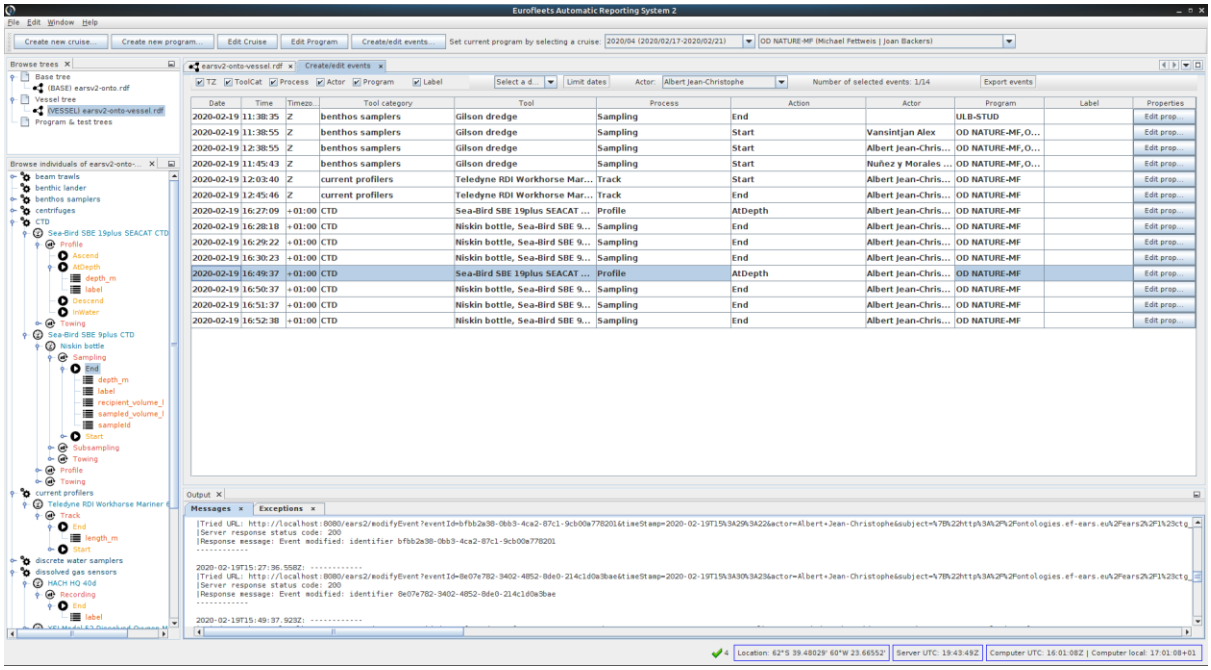

Figure 5: managing events

Event properties allow users to enter value or text variables for an event. Examples are:

- label: a (back)reference to a tool, a line, track,…
- the volume of water passing through the centrifuge
- the name of a station when arriving at a station, as a 'label'
- the towing distance
- the sampling depth
- the sample id

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- the subsample id

16. Exporting events

Finally, it is possible to export the events that are currently shown in the event pane, i.e. all the events of a single cruise or of a single day. Click the 'Export events' button. A popup window will prompt you with a save location and name, by default the home directory is suggested. The event information is combined with any coinciding navigation, thermosalinometry or meteo data. The timestamps of the events may not always coincide with a data point, so the closest data points are selected.

Exporting the events may take a while if there are many, as the acquisition data is requested.

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Annex 4 Tool Questionnaire

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This is the complete list of device categories available on the NERC vocabulary server (L05).

Please indicate in the leftmost column if you have any devices of this type permanently on board as part of the standard instrumentarium.

on_board?	Tool_Category	Tool_Category_definition	tci
	acoustic backscatter sensors	Instrument that measures the amount of sound energy transmitted into the water column returned to the instrument.	SDN:L05::183
	acoustic tracking systems	A network of acoustic sensors that determine the location of a sound source by triangulation such as acoustically active float tracking systems.	SDN:L05::357
	active fluorometers	Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating the phytoplankton with controlled high-intensity illumi	SDN:L05::353
	ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that make high frequency measurements of three-dimensi	SDN:L05::384
	Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	SDN:L05::386
	aerosol samplers	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.	SDN:L05::13
	Aethalometers	Instruments that quantify atmospheric particulate carbon ('black carbon') concentrations.	SDN:L05::387
	airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations of the bubble as it alternatively expands and contract	SDN:L05::SNAG
	airgun array	A marine seismic source where multiple airguns of different sizes are tuned so that a broader frequency spectrum will be generated.	SDN:L05::ARAG
	altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the seabed. Classification includes acoustic and pressure	SDN:L05::379
	anemometers	Instrument that measures wind speed and direction at a single elevation.	SDN:L05::101
	atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmosphere.	SDN:L05::382
	atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for the quantification of atmospheric phenomena.	SDN:L05::308
	atmospheric transparency quantifiers	Instruments that quantify the degree of scattering and absorption of light passing through the atmosphere, including instruments that quantify aerosol and	SDN:L05::ATRANS
	bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temperature senor package (MBT) or dropping a free falli	SDN:L05::132
	beam trawls	Nets towed over the sea floor having the horizontal net opening provided by a wooden or metal beam that disrupts the surface of the bed.	SDN:L05::62
	bench fluorometers	Instruments that determinesthe amount of chlorophyll in in-vitro samples by measuring the quantity of red light (around 685nm) emitted following excitatio	SDN:L05::LAB23
	bench particle sizers	Instruments that measure the size spectrum of particles in a water or sediment sample.	SDN:L05::LAB27
	benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted nets like beam trawls, and ROV manipulators.	SDN:L05::24
	bioluminescence sensors	Submersible instruments which measure visible emissions from bioluminescent organisms by stimulating intracellular chemiluminescence through mecha	SDN:L05::BLUMS
	cameras	All types of photographic equipment that may be deployed in aircraft or satellites including stills, video, film and digital systems.	SDN:L05::311
	Chirp	Chirp systems emit a 'swept-frequency signal', meaning that the transmitted signal is emitted over a period of time and over a set range of frequencies. Th	SDN:L05::CHRP
	cloud cover quantifiers	Instruments that measure the proportion of the sky covered by cloud (cloud amount) and/or the height of the cloud above the ground (cloud base).	SDN:L05::CCOV
	colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to determine the concentration of a specific coloured s	SDN:L05::LAB03
	continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or from which discrete samples may be drawn.	SDN:L05::58
	continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or from which samples may be drawn.	SDN:L05::31
	CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity) and pressure (for depth).	SDN:L05::130
	current meters	Instrument that measures current speed and direction at a single depth.	SDN:L05::114
	current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneously.	SDN:L05::115
	demersal trawl nets	Nets towed over the sea floor designed to sample species living on or near the bottom.	SDN:L05::61
	discrete air samplers	A device that collects a sample of air from the atmosphere and stores it, usually under pressure, for subsequent analysis.	SDN:L05::11
	discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface without contamination by the waters through which it pa	SDN:L05::30
	dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water column.	SDN:L05::351
	Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and electronic data acquisition system. Probes are dropp	SDN:L05::389
	expendable CTDs	Instruments that measure vertical profiles of sea temperature and salinity with a free falling disposable temperature and conductivity sensor package.	SDN:L05::354
	Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic signals. They are often optimised for this purpose	SDN:L05::FFES
	Flexotir	A seismic method for marine shooting whereby small charges are propelled through a rubber hose by water under pressure into a steel cage where they a	SDN:L05::FLXT
	flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instruments or sampling devices.	SDN:L05::388
	fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of electromagnetic radiation emitted into the water colur	SDN:L05::113
	gill nets	Nets drifting in the sea or standing on the sea floor in which fish become entangled, usually through their gill covers.	SDN:L05::65
	gravimeters	Instrument that makes measurements of the Earth's gravity field.	SDN:L05::158
	high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Samples microzooplankton, mesozooplankton and nekto	SDN:L05::67
	hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	SDN:L05::369
	ice thickness profilers	Instruments that measure the freeboard, draught or thickness of ice sheets or sea ice. These are not to be confused with tethered ice profilers that are pla	SDN:L05::ICEP
	in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of particles suspended in it.	SDN:L05::150
	inorganic carbon analysers	Instruments measuring carbonate in sediments and inorganic carbon in the water column.	SDN:L05::86
	inverted echosounders	Instruments that locate acoustic reflectors such as fronts in the water column by transmitting pulses of sound from the seabed and determing reflection re	SDN:L05::112
	laser altimeters	Instruments that determine the distance between the platform and the Earth's surface by timing reflected pulses of laser light.	SDN:L05::310
	magnetometers	Instrument that makes measurements of the Earth's magnetic field.	SDN:L05::159

	Mechanical bathythermographs	Tethered probes that measure temperature in relation to depth using a temperature and pressure package that is lowered into the water and subsequentl	SDN:L05::390
	metal analysers	In-situ instruments that can determine the total, dissolved or particulate concentration of one or more metallic elements (including trace metalloids like ars	SDN:L05::383
	meteorological LiDARs	Instruments that measure meteorological phenomena such as wind speed, wind direction and air quality remotely by determining the distances from a pla	SDN:L05::92
	meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressure, temperature and humidity.	SDN:L05::102
	microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body properties on a millimetric scale.	SDN:L05::184
	multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pulses of sound reflected on the seafloor.	SDN:L05::157
	multi-channel seismic reflection syste	An energy source of unspecified frequency plus a multiple strings of towed hydrophones (streamers) that determine geologic structure by detecting waves	SDN:L05::154
	multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of samples during a tow or haul. Samples microzooplank	SDN:L05::68
	neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to the surface of a water column (top 10 to 50 centimet	SDN:L05::69
	nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phosphate or silicate dissolved in the water column.	SDN:L05::181
	ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for the determination of ocean chlorophyll concentratio	SDN:L05::304
	optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column returned to the instrument.	SDN:L05::123
	pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	SDN:L05::23
	pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	SDN:L05::355
	plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column including for example microzooplankton, mesozoopl	SDN:L05::22
	plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent identification and counting.	SDN:L05::21
	platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direction or along any axis. Excludes inertial navigation sy	SDN:L05::385
	precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graupel.	SDN:L05::381
	precipitation samplers	A device that collects a sample of precipitation (rain, hail or snow) as it falls.	SDN:L05::14
	radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the water column.	SDN:L05::122
	radiosondes	A balloon-borne package equipped with a radio transmitter and meteorological sensors typically measuring temperature, pressure, and humidity.	SDN:L05::103
	redox potential sensors	Instruments that measure the tendency of the water column to either gain or lose electrons when it is subject to change by introduction of a new species.	SDN:L05::356
	rock corers	A device that extracts rock either by chipping or drilling.	SDN:L05::53
	salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column to provide temperature and salinity data.	SDN:L05::350
	salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity or optical properties.	SDN:L05::LAB30
	scatterometers	Sensors that measure the reflection or scattering effect produced while scanning the surface of the earth. Primarily used to measure near surface winds c	SDN:L05::305
	sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed vertical datum.	SDN:L05::111
	sediment dredges	Bucket-like containers hauled over the sea bed collecting integrated samples of surface sediment along a segment of ship track.	SDN:L05::60
	sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shovel or bucket.	SDN:L05::50
	sediment profile imagers	Devices that provide in-situ still or video images of a section including bottom water, the undisturbed sediment-water interface and the upper sediment lay	SDN:L05::378
	sediment suction samplers	Devices that collect samples from the sediment layer surface using suction. The mechanism of suction can be accomplished by either vacuum, by pressu	SDN:L05::391
	sediment traps	A collector of particulates as they sink through the water column.	SDN:L05::33
	seismic refraction systems	A network of seismometers or geophones plus an energy source that determine geologic structure by detecting waves refracted by subsurface layers.	SDN:L05::155
	seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	SDN:L05::368
	sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that emit fan-shaped pulses down toward the seafloor acr	SDN:L05::152
	sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another device that is a suspension of solid particles in a liqu	SDN:L05::84
	single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound reflected on the seafloor.	SDN:L05::156
	single-channel seismic reflection sys	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that determine geologic structure by detecting waves ref	SDN:L05::153
	snow and ice samplers	A device that collects a sample of frozen seawater or accumulated frozen precipitation.	SDN:L05::56
	sound velocity sensors	Instrument that measures the velocity of sound in seawater.	SDN:L05::185
	spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in the near infra-red, visible and ultraviolet wavebands	SDN:L05::LAB20
	surface current radars	Instruments that measure the speed and direction of sea surface travel by timing reflected radio waves.	SDN:L05::303
	synthetic aperture radars	Instruments that generate maps of radar reflectivity through the synthesis of multiple pulses from a moving platform.	SDN:L05::306
	terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for the quantification of terrestrial phenomena.	SDN:L05::309
	thermistor chains	A group of rigidly-mounted temperature sensors sampled by a common data logger held at various depths in the water column.	SDN:L05::135
	thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a surface water supply.	SDN:L05::133
	thin film metal samplers	Metal samplers comprising a filter, a diffusive gel layer and a resin layer that scavenge trace metals by diffusion from water bodies or in-situ sediment por	SDN:L05::TFSAMP
	tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms as a function of time after tagging and release.	SDN:L05::TRTG
	transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes human observer plus Secchi Disk.	SDN:L05::124
	unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depths from centimetres to 10s of metres with minimal dis	SDN:L05::51
	underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and digital systems.	SDN:L05::180
	water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a manner optimised for the determination of water bo	SDN:L05::302
	water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made by in-situ measurements in water bodies. Dependir	SDN:L05::WPS
	water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SDN:L05::134
	wave recorders	Instrument that measures water column surface wave parameters including height, period, direction and energy spectra.	SDN:L05::110

This is the complete list of devices available on the NERC vocabulary server (L22 as of 2020-03-13). The EARS system uses this list. It is mandatory to first let the BODC extend the L22 list with any of your missing devices.

Please refer to this list to see if any of your devices are not included in it (tab 3).

Please note that this list will be very helpful at a later stage (to use the EARS software). Although not needed at this stage, we would appreciate it if you already indicate if a specific device is present in column E.

Tool_Category	Tool_Category_definition	Tool	Tool_definition	on_board	tci	ti
ice thickness profilers	Instruments that measure the freeboard, draught or thickness of ice sheets or sea ice. These are not t	ASL Environmental Sciences IPS4 Ice Profiler Sonar	The ASL Environmental Sciences IPS4 is an upward		SDN:L05::ICEP	SDN:L22::TOOL0292
ice thickness profilers	Instruments that measure the freeboard, draught or thickness of ice sheets or sea ice. These are not t	ASL Environmental Sciences Shallow Water Ice Profiler	An upward-looking sonar device which can be mount		SDN:L05::ICEP	SDN:L22::TOOL1250
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Pico-Technology PT-100 Temperature Sensor Model SE012	The platinum resistance thermometer offers a tempe		SDN:L05::302	SDN:L22::TOOL0844
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Along Track Scanning Radiometer - 1	A passive optical imager with dual view composed of		SDN:L05::302	SDN:L22::TOOL1072
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Very High Resolution Radiometer - 2	A radiation-detection imager with five spectral bands,		SDN:L05::302	SDN:L22::TOOL1075
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Along Track Scanning Radiometer - 2	A passive optical imager with dual view composed of		SDN:L05::302	SDN:L22::TOOL1073
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Microwave Scanning Radiometer-2	A conical scanning, passive microwave radiometer d		SDN:L05::302	SDN:L22::TOOL1065
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Scanning Multichannel Microwave Radiometer	The Scanning Multichannel Microwave Radiometer (S		SDN:L05::302	SDN:L22::TOOL1050
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Along-Track Scanning Radiometer	A passive optical imager with dual view composed of		SDN:L05::302	SDN:L22::TOOL1061
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	WindSat Polarimetric Microwave Radiometer	The WindStat Polarimetric Microwave Radiometer is		SDN:L05::302	SDN:L22::TOOL1060
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Microwave Scanning Radiometer for Earth Observation from Space (AMSR-E)	A conical scanning, passive microwave radiometer d		SDN:L05::302	SDN:L22::TOOL1066
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Very High Resolution Radiometer - 3	A radiation-detection imager with six spectral bands,		SDN:L05::302	SDN:L22::TOOL1076
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Advanced Very High Resolution Radiometer - 1	A radiation-detection imager with four spectral bands		SDN:L05::302	SDN:L22::TOOL1074
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	Everest Interscience Sea-Therm 4000L temperature sensor	A rugged temperature sensor designed to measure w		SDN:L05::302	SDN:L22::TOOL0930
water body temperature sensor	Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a	University of Southampton ISAR SST radiometer	An autonomous radiometer developed by the Univers		SDN:L05::302	SDN:L22::TOOL1016
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 300kHz Workhorse Monitor direct-reading ADCP	A direct reading acoustic doppler current profiler (AD		SDN:L05::115	SDN:L22::TOOL0061
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Aanderaa RDCP 600 Recording Doppler Current Profiler	The RDCP 600 is a medium range, 600kHz self-reco		SDN:L05::115	SDN:L22::TOOL0166
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track		SDN:L05::115	SDN:L22::TOOL0378
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track		SDN:L05::115	SDN:L22::TOOL0376
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track		SDN:L05::115	SDN:L22::TOOL0372
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track		SDN:L05::115	SDN:L22::TOOL0375
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 150kHz Narrowband Vessel-Mounted ADCP	The Teledyne RDI Narrowband Vessel-Mounted Acou		SDN:L05::115	SDN:L22::TOOL0062
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Ocean Surveyor 75kHz vessel-mounted ADCP	The Teledyne RDI 75kHz Ocean Surveyor vessel-mo		SDN:L05::115	SDN:L22::TOOL0362
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Long-Ranger ADCP	The Teledyne RDI Workhorse Long-Ranger acoustic		SDN:L05::115	SDN:L22::TOOL0056
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Partrac Voyager II Benthic Annular Flume	A benthic flume designed for in-situ studies of sedime		SDN:L05::115	SDN:L22::TOOL1289
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Scripps Institution of Oceanography Hydrographic Doppler Sonar System	A dual-frequency (50-140 kHz) Acoustic Doppler Curr		SDN:L05::115	SDN:L22::TOOL0884
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Ocean Surveyor 150kHz vessel-mounted ADCP	The Teledyne RDI 150kHz Ocean Surveyor vessel-m		SDN:L05::115	SDN:L22::TOOL0363
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Signature500 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use		SDN:L05::115	SDN:L22::TOOL1010
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Proudman Oceanographic Laboratory 1MHz ADCP	An ADCP with a range of 30 m, designed to measure		SDN:L05::115	SDN:L22::TOOL0600
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Aquadopp Doppler current profiler	A family of self-contained Doppler current profilers de		SDN:L05::115	SDN:L22::TOOL0888
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Vector 3D Acoustic Velocimeter	An acoustic current meter designed to measure high-		SDN:L05::115	SDN:L22::TOOL1286
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Aquadopp 600 kHz Doppler current profiler	A self-contained 600 kHz Doppler current profiler des		SDN:L05::115	SDN:L22::TOOL0887
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Continental Doppler current profiler	A family of self-contained Doppler current profilers de		SDN:L05::115	SDN:L22::TOOL0905
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek 1 MHz acoustic wave and current profiler	An instrument that simultaneously measures current		SDN:L05::115	SDN:L22::TOOL0897
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Signature1000 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use		SDN:L05::115	SDN:L22::TOOL1009
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Continental 470 kHz Doppler current profiler	A self-contained 470 kHz Doppler current profiler des		SDN:L05::115	SDN:L22::TOOL0903
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Aquadopp 400 kHz Doppler current profiler	A self-contained 400 kHz Doppler current profiler des		SDN:L05::115	SDN:L22::TOOL0392
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek acoustic wave and current profiler	A family of instruments that simultaneously measure		SDN:L05::115	SDN:L22::TOOL0898
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek 400 kHz acoustic wave and current profiler	An instrument that simultaneously measures current		SDN:L05::115	SDN:L22::TOOL0895
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Continental 190 kHz Doppler current profiler	A self-contained 190 kHz Doppler current profiler des		SDN:L05::115	SDN:L22::TOOL0904
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek 600 kHz acoustic wave and current profiler	An instrument that simultaneously measures current		SDN:L05::115	SDN:L22::TOOL0896
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Rio Grande 600kHz ADCP	The Workhorse Rio Grande WRG-600 is a 600kHz ra		SDN:L05::115	SDN:L22::TOOL0750
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Sentinel-1200 ADCP	An ADCP designed for self-contained use on mooring		SDN:L05::115	SDN:L22::TOOL0293
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	FlowQuest 75 Ultra long-range Acoustic Current Profiler	FlowQuest 75 Ultra long-range Acoustic Current Prof		SDN:L05::115	SDN:L22::TOOL0777
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Sentinel-600 ADCP	An ADCP designed for self-contained use on mooring		SDN:L05::115	SDN:L22::TOOL0294
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Nortek Signature55 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use		SDN:L05::115	SDN:L22::TOOL1241
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Broadband 150kHz ADCP	The RDI Broadband ADCP is designed for mooring d		SDN:L05::115	SDN:L22::TOOL0445
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Sentinel-300 ADCP	An ADCP designed for self-contained use on mooring		SDN:L05::115	SDN:L22::TOOL0295
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Ocean Surveyor 38kHz ADCP	The workhorse Ocean Surveyor provides long-range		SDN:L05::115	SDN:L22::TOOL0747
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	FlowQuest 150 Long-range Acoustic Current Profiler	FlowQuest 150 Long-range Acoustic Current Profiler		SDN:L05::115	SDN:L22::TOOL0681
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Mariner 1200kHz ADCP	The workhorse mariner WM-1200 provides short-ran		SDN:L05::115	SDN:L22::TOOL0748
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 600 kHz Broadband ADCP	A direct reading or self contained broadband acoustic		SDN:L05::115	SDN:L22::TOOL0938
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Proudman Oceanographic Laboratory 75kHz ADCP	An ADCP designed to use low-frequency sound (actu		SDN:L05::115	SDN:L22::TOOL0598
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Mariner 300kHz ADCP	The workhorse mariner WM-300 provides short-rang		SDN:L05::115	SDN:L22::TOOL0749
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 75kHz Ocean Observer narrowband ADCP	An acoustic doppler current profiler (ADCP) designed		SDN:L05::115	SDN:L22::TOOL0351
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Proudman Oceanographic Laboratory 250kHz ADCP	An ADCP with a range of 100 m, designed to measu		SDN:L05::115	SDN:L22::TOOL0599
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 600kHz Workhorse Monitor direct-reading ADCP	A direct reading acoustic doppler current profiler (AD		SDN:L05::115	SDN:L22::TOOL1025
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI 300kHz Narrowband Vessel-Mounted ADCP	The 300 kHz Teledyne RDI Narrowband Vessel-Mour		SDN:L05::115	SDN:L22::TOOL0158
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Quartermaster 150kHz ADCP	A 4-beam 150 KHz instrument designed for moored i		SDN:L05::115	SDN:L22::TOOL0732
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Narrowband 150kHz ADCP	A narrowband ADCP designed for mooring deployme		SDN:L05::115	SDN:L22::TOOL0091
current profilers	Instrument that measures current speed and direction at multiple predetermined depths simultaneous	Teledyne RDI Workhorse Mariner 600kHz ADCP	The workhorse mariner WM-600 provides short-rang		SDN:L05::115	SDN:L22::TOOL0881
sediment profile imagers	Devices that provide in-situ still or video images of a section including bottom water, the undisturbed s	Institute of Oceanographic Sciences 7.5 kHz profiling sonar	A sub-bottom profiling sonar operating at 7.5 kHz, de		SDN:L05::378	SDN:L22::TOOL1265
sediment profile imagers	Devices that provide in-situ still or video images of a section including bottom water, the undisturbed s	Kongsberg (Simrad) TOPAS PS018 sub-bottom profiler	TOPAS parametric sub bottom profiler is a high spati		SDN:L05::378	SDN:L22::TOOL0859
sediment profile imagers	Devices that provide in-situ still or video images of a section including bottom water, the undisturbed s	Unspecified 3.5 kHz sub-bottom profiler	A 3.5 kHz sub-bottom profiler system, designed to id		SDN:L05::378	SDN:L22::TOOL1255
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	Partrac Voyager II Benthic Annular Flume	A benthic flume designed for in-situ studies of sedime		SDN:L05::180	SDN:L22::TOOL1289
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	Unspecified Panasonic 3-chip camcorder	Domestic photographic equipment, recording primary		SDN:L05::180	SDN:L22::TOOL1270
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	Kongsberg Simrad PAL OE1364 colour CCD camera	A colour inspection charge-couple device (CCD) cam		SDN:L05::180	SDN:L22::TOOL1271

underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::180	SDN:L22::TOOL0564
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::180	SDN:L22::NETT0007
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	METAS Underwater Stereo Camera system	A stereo camera system designed for underwater est	SDN:L05::180	SDN:L22::TOOL1275
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	National Oceanography Centre Seafloor High Resolution Imaging Platform	A high resolution deep-towed camera platform develc	SDN:L05::180	SDN:L22::TOOL1201
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	Kongsberg Maritime OE 14-522 (underwater) video camera	A high definition underwater video camera capable of	SDN:L05::180	SDN:L22::TOOL1338
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	Bowtech Aqua Vision L3C-550 colour camera	A miniature colour charge-couple device (CCD) came	SDN:L05::180	SDN:L22::TOOL1269
underwater cameras	All types of photographic equipment that may be deployed underwater including stills, video, film and	GoPro Hero3 Camera	A waterproof and shockproof digital action camera wi	SDN:L05::180	SDN:L22::TOOL1203
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::350	SDN:L22::NETT0008
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::350	SDN:L22::TOOL1217
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa RCM 4/5 temperature and salinity recorders	Withdrawn RCM4 or RCM5 current meters fitted with	SDN:L05::350	SDN:L22::TOOL0212
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa conductivity sensor 3919A	An inductive conductivity sensor designed to operate	SDN:L05::350	SDN:L22::TOOL0498
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 16 SEACAT C-T Recorder	The SBE 16 SEACAT is a conductivity and temperatu	SDN:L05::350	SDN:L22::TOOL0023
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Applied Microsystems CTD-12	A self-contained CTD with platinized 4-electrode glas	SDN:L05::350	SDN:L22::TOOL0041
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 19 SEACAT CTD	A self-contained battery powered CTD with precision	SDN:L05::350	SDN:L22::TOOL0042
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Christian Albrechts University of Kiel Multisonde CTD profiler	A conductivity-temperature-pressure profiler with a pi	SDN:L05::350	SDN:L22::TOOL0371
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Neil Brown MK2 conductivity temperature and depth system	An integral unit comprising pressure, temperature an	SDN:L05::350	SDN:L22::TOOL0144
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Plessey 9400 CTD	The Plessey 9400 CTD system combines a Plessey 9	SDN:L05::350	SDN:L22::TOOL0009
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 911plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::350	SDN:L22::TOOL0058
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Valeport CTD 600	A CTD that samples on either time or depth incremer	SDN:L05::350	SDN:L22::TOOL0232
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Meerestechnik OTS-1200 CTD	An integral unit comprising pressure, temperature an	SDN:L05::350	SDN:L22::TOOL0149
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 25 Sealogger CTD	A compact self-contained CTD comprising a conduct	SDN:L05::350	SDN:L22::TOOL0040
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Conductivity, temperature and depth package	A generic term for a set of co-located conductivity, te	SDN:L05::350	SDN:L22::TOOL0001
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Neil Brown MK3 CTD	The Neil Brown MK3 CTD consists of an integral unit	SDN:L05::350	SDN:L22::TOOL0002
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Bissett-Bermann 9040 CTD system	This instrument, also known as the Plessey 9040, inc	SDN:L05::350	SDN:L22::TOOL0005
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 911 CTD	High precision and accuracy CTD made up from a Se	SDN:L05::350	SDN:L22::TOOL0035
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::350	SDN:L22::TOOL0451
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments NXIC CTD Series	A collection of conductivity, temperature and depth (C	SDN:L05::350	SDN:L22::TOOL0173
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments Integrated CTD Profiler	CTD profiler with a sampling frequency of 32Hz and a	SDN:L05::350	SDN:L22::TOOL0364
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Guildline Model 8705 Digital CTD	A CTD unit designed for open ocean applications dov	SDN:L05::350	SDN:L22::TOOL0032
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SM MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0017
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Applied Microsystems Micro CTD	A small, high accuracy CTD including a 4-electrode c	SDN:L05::350	SDN:L22::TOOL0434
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::350	SDN:L22::NETT0120
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Rockland Scientific MicroRider-1000 turbulence microstructure profiler	A self-contained device designed to measure turbuler	SDN:L05::350	SDN:L22::TOOL1232
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Fast Light Yo-yo (FLY II) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::350	SDN:L22::TOOL0428
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Gulf VII Pro-net and MAFF-Guildline high-speed samplers - Nash et al. (1998)	An un-encased frame 275 cm long and 76 cm in dian	SDN:L05::350	SDN:L22::NETT0051
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses ai	SDN:L05::350	SDN:L22::NETT0084
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::350	SDN:L22::NETT0087
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Idronaut Ocean Seven 320 CTD	A fast response, multi-parameter conductivity, tempe	SDN:L05::350	SDN:L22::TOOL0213
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SeaKeeper thermosalinograph	A themosalinograph. It is designed for shipboard dete	SDN:L05::350	SDN:L22::TOOL1295
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Precision Measurement Engineering SCAMP microstructure profiler	A self contained, autonomous microstructure profiler	SDN:L05::350	SDN:L22::TOOL0473
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa conductivity sensor 3919B	An inductive conductivity sensor designed to operate	SDN:L05::350	SDN:L22::TOOL0499
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa CTR7 thermistor conductivity chain	An instrument with up to 5 induction conductivity and	SDN:L05::350	SDN:L22::TOOL0590
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SMP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0018
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 52-MP moored profiler CTD	A light and compact instrument intended as a modula	SDN:L05::350	SDN:L22::TOOL1231
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	RBR XR-420 CTD Marine	A small autonomous data logger designed to monitor	SDN:L05::350	SDN:L22::TOOL0053
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Fast Light Yo-yo (FLY IV) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::350	SDN:L22::TOOL0429
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Lockheed Martin Sippican AXCTD	An expendable free-fall probe that provides a profile c	SDN:L05::350	SDN:L22::TOOL0714
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Lockheed Martin Sippican XCTD-1 probe	An expendable free-fall CTD profiling system which p	SDN:L05::350	SDN:L22::TOOL0591
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Lockheed Martin Sippican XCTD-2 probe	An expendable free-fall CTD profiling system which p	SDN:L05::350	SDN:L22::TOOL0592
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::350	SDN:L22::NETT0097
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::350	SDN:L22::NETT0028
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Rosette-Controlled Tucker Trawl system - Burd and Thompson (1993)	A 100 cm x 140 cm rectangular mouth opening frame	SDN:L05::350	SDN:L22::NETT0157
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizon	SDN:L05::350	SDN:L22::NETT0187
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::350	SDN:L22::NETT0185
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	SAIV SD-204 CTD	A CTD that measures, calculates and records sea wa	SDN:L05::350	SDN:L22::TOOL0180
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 917plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::350	SDN:L22::TOOL0214
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Grundy Environmental 6620 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::350	SDN:L22::TOOL0336
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 21 Thermosalinograph	A platinum-electrode conductivity sensor and a therm	SDN:L05::350	SDN:L22::TOOL0667
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments Excell thermosalinograph	The instrument comprises an FSI internal field condu	SDN:L05::350	SDN:L22::TOOL0593
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	OceanData TSG103 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::350	SDN:L22::TOOL0276
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 45 MicroTSG thermosalinograph	A small externally powered, high-accuracy instrumen	SDN:L05::350	SDN:L22::TOOL0190
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Teledyne RDI Citadel TS-N Thermosalinograph	A compact, low-maintenance system that uses Teled	SDN:L05::350	SDN:L22::TOOL0602
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-IMP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0019
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::350	SDN:L22::TOOL1360
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::350	SDN:L22::TOOL0613
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::350	SDN:L22::TOOL0737
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Idronaut Ocean Seven 316 plus CTD	An underwater CTD probe designed for on-line profili	SDN:L05::350	SDN:L22::TOOL1306
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::350	SDN:L22::TOOL0526
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::350	SDN:L22::TOOL0738
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa conductivity sensor 4319A	An inductive conductivity sensor designed to operate	SDN:L05::350	SDN:L22::TOOL0626
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 25plus Sealogger CTD	A compact and self-contained battery-powered CTD t	SDN:L05::350	SDN:L22::TOOL1162
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Chelsea Technologies Group Aqualog CTD	A self-contained unit comprising pressure, temperatu	SDN:L05::350	SDN:L22::TOOL0043
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird CT Sail CTD	A self-contained unpumped unit comprising the temp	SDN:L05::350	SDN:L22::TOOL1188
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::350	SDN:L22::TOOL0675
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::350	SDN:L22::TOOL1318
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-IM MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0022
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Teledyne RDI Citadel CTD-NH	A fast-sampling, fully integrated CTD package for use	SDN:L05::350	SDN:L22::TOOL1163
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Applied Microsystems CTD-12 plus	A self-contained CTD with platinized 4-electrode glas	SDN:L05::350	SDN:L22::TOOL0433

salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea and Sun Technology Microstructure Profiler MSS 90	A profiler that measures micro-structure water stratifi	SDN:L05::350	SDN:L22::TOOL0453
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 49 FasCAT CTD	A CTD sensor for use in autonomous platforms. It co	SDN:L05::350	SDN:L22::TOOL0827
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Valeport CTD 604	A CTD that samples on either time or depth incremer	SDN:L05::350	SDN:L22::TOOL0407
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SMP-IDO MicroCAT C-T-DO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0634
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE Glider Payload CTD (GPCTD)	A modular, externally powered profiling instrument fo	SDN:L05::350	SDN:L22::TOOL1026
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	YSI Model 30/30M Salinity, Conductivity and Temperature System	A handheld instrument designed for measurement of	SDN:L05::350	SDN:L22::TOOL1136
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 917 CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::350	SDN:L22::TOOL0409
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments OEM conductivity-temperature sensor	A high accuracy conductivity and temperature sensor	SDN:L05::350	SDN:L22::TOOL0122
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Uncles STD profiler	A direct-reading salinity-temperature-depth profiler in	SDN:L05::350	SDN:L22::TOOL0448
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Howaldtswerke-Deutsche Werft Bathysonde CTD profiler	A conductivity-temperature-pressure profiler with a pi	SDN:L05::350	SDN:L22::TOOL0527
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Applied Microsystems conductivity and temperature array	A data logger based on the AML MC7 micro-CTD wit	SDN:L05::350	SDN:L22::TOOL0152
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SMP-ODO MicroCAT C-T-ODO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0869
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	SMRU Ltd CTD-Satellite Relay Data Logger 9000	CTD sensor package combined with a 401 MHz RF u	SDN:L05::350	SDN:L22::TOOL0446
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 61 Deep Argo CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::350	SDN:L22::TOOL1238
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea and Sun Technology and ISW Wassermesstechnik microstructure profiler	The MSS Profiler is designed for simultaneous micro	SDN:L05::350	SDN:L22::TOOL0439
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37 {MicroCAT-CTP} (submersible) CTD logger series	A series of high accuracy conductivity and temperatu	SDN:L05::350	SDN:L22::TOOL1393
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Neil Brown MK5 conductivity temperature and depth system	The Neil Brown MK5 CTD consists of an integral unit	SDN:L05::350	SDN:L22::TOOL0431
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	RBR DUO CT (submersible) CT logger series	Self-contained, dual channel conductivity and temper	SDN:L05::350	SDN:L22::TOOL1396
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	RBR DUO 3-CT (submersible) CT logger	A self-contained, dual channel conductivity and temp	SDN:L05::350	SDN:L22::TOOL1395
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SI MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0021
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37-SIP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::350	SDN:L22::TOOL0020
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 37 {MicroCAT-CT} (submersible) CT logger series	A series of high accuracy conductivity and temperatu	SDN:L05::350	SDN:L22::TOOL1394
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 41 CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::350	SDN:L22::TOOL0668
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Electronic Instruments Ltd MC5 {EIL MC5} temperature and salinity meter	A measuring bridge with a limit of resolution of 2 part	SDN:L05::350	SDN:L22::TOOL1355
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Bissett-Bermann 9006 STD system	The Bissett-Bermann 9006 was an STD (salinity, tem	SDN:L05::350	SDN:L22::TOOL0006
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Chelsea Technologies Group MINIpack CTD-F	A single titanium/acetyl housing containing temperatu	SDN:L05::350	SDN:L22::TOOL0341
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 41CP CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::350	SDN:L22::TOOL0669
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Neil Brown Smart CTD	The Neil Brown Smart CTD consists of and integral u	SDN:L05::350	SDN:L22::TOOL0033
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::350	SDN:L22::NETT0007
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 19plus V2 SEACAT CTD	Self-contained self-powered CTD profiler. Measures c	SDN:L05::350	SDN:L22::TOOL0871
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 16plus SEACAT C-T Recorder	The SBE 16plus is a high accuracy conductivity and t	SDN:L05::350	SDN:L22::TOOL0100
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Chelsea Technologies Group Aquapack CTD	Single titanium housing containing temperature, conc	SDN:L05::350	SDN:L22::TOOL0048
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments MicroCTD	A miniature integrated sensor and communication sy	SDN:L05::350	SDN:L22::TOOL1266
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Star-Oddi DST CTD	A miniature self-contained CTD primarily designed fo	SDN:L05::350	SDN:L22::TOOL0183
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Meerestechnik Elektronik or MICSOS microstructure profiler	A free sinking or rising multi-parameter probe equipp	SDN:L05::350	SDN:L22::TOOL0438
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Autosampling and Recording Instrumental Environmental Sampler - Dunn et al. (1993)	A stretched version of the Lowestoft modified Gulf III	SDN:L05::350	SDN:L22::NETT0004
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 19plus SEACAT CTD	Self contained self powered CTD profiler. Measures c	SDN:L05::350	SDN:L22::TOOL0047
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 16Plus V2 SEACAT C-T Recorder	The SBE 16plus V2 is a high accuracy conductivity a	SDN:L05::350	SDN:L22::TOOL0870
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Plymouth Marine Laboratory Aiken CTD	A conductivity-temperature-depth package developec	SDN:L05::350	SDN:L22::TOOL0450
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	SMRU Ltd CTD/Fluorometer Satellite Relay Data Logger	A package comprising a Valeport CTD sensor head p	SDN:L05::350	SDN:L22::TOOL0720
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Valeport Braystoke STM 500 temperature and salinity probe	A battery-operated, submersible probe that measures	SDN:L05::350	SDN:L22::TOOL1359
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	AML Oceanographic Smart X CTD	A triple port, real-time probe part of the AML Oceano	SDN:L05::350	SDN:L22::TOOL1331
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Unspecified conductivity sensor	Instrument that measures the electrical conductivity c	SDN:L05::350	SDN:L22::TOOL1272
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Aanderaa conductivity sensor 4319B	An inductive conductivity sensor designed to operate	SDN:L05::350	SDN:L22::TOOL0627
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Falmouth Scientific Instruments ocean conductivity module	An inductively coupled conductivity sensor with a low	SDN:L05::350	SDN:L22::TOOL0455
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 7 microstructure conductivity sensor	Microstructure conductivity sensor designed for use c	SDN:L05::350	SDN:L22::TOOL0644
salinity sensor	Instrument that simultaneously measures electrical conductivity and temperature in the water column	Sea-Bird SBE 4C conductivity sensor	Water conductivity sensor designed for use on the SE	SDN:L05::350	SDN:L22::TOOL0417
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::134	SDN:L22::NETT0008
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 56 temperature recorder	This is a small (30cm by 2.54cm diameter) high-accu	SDN:L05::134	SDN:L22::TOOL0687
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::134	SDN:L22::TOOL1217
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa RCM 4/5 temperature and salinity recorders	Withdrawn RCM4 or RCM5 current meters fitted with	SDN:L05::134	SDN:L22::TOOL0212
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Mercury reversing thermometer	A generic term for a mercury-in-glass thermometer th	SDN:L05::134	SDN:L22::TOOL0238
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR TR-1050 underwater temperature logger	The TR-1050 is a small (230mm x 38mm OD), self-c	SDN:L05::134	SDN:L22::TOOL0055
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lowestoft frame trawl - Walker and Davies (1986)	A 142 cm x 142 cm rectangular mouth opening trawl	SDN:L05::134	SDN:L22::NETT0085
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	University of Texas Institute of Geophysics Heat Flow Probe	University of Texas Institute of Geophysics (UTIG) he	SDN:L05::134	SDN:L22::TOOL0955
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	JFE Advantech Rinko III {ARO-CAV} oxygen sensor	A fast-response optical dissolved oxygen and temper	SDN:L05::134	SDN:L22::TOOL1294
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aquatec AQUAlogger 210TY turbidity sensor series	A series of in-situ turbidity sensors. They are primaril	SDN:L05::134	SDN:L22::TOOL1302
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 16 SEACAT C-T Recorder	The SBE 16 SEACAT is a conductivity and temperatu	SDN:L05::134	SDN:L22::TOOL0023
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Applied Microsystems CTD-12	A self-contained CTD with platinized 4-electrode glas	SDN:L05::134	SDN:L22::TOOL0041
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 19 SEACAT CTD	A self-contained battery powered CTD with precision	SDN:L05::134	SDN:L22::TOOL0042
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Christian Albrechts University of Kiel Multisonde CTD profiler	A conductivity-temperature-pressure profiler with a pi	SDN:L05::134	SDN:L22::TOOL0371
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Neil Brown MK2 conductivity temperature and depth system	An integral unit comprising pressure, temperature an	SDN:L05::134	SDN:L22::TOOL0144
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Plessey 9400 CTD	The Plessey 9400 CTD system combines a Plessey 6	SDN:L05::134	SDN:L22::TOOL0009
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 911plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::134	SDN:L22::TOOL0058
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Valeport CTD 600	A CTD that samples on either time or depth incremer	SDN:L05::134	SDN:L22::TOOL0232
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Meerestechnik OTS-1200 CTD	An integral unit comprising pressure, temperature an	SDN:L05::134	SDN:L22::TOOL0149
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 25 Sealogger CTD	A compact self-contained CTD comprising a conduct	SDN:L05::134	SDN:L22::TOOL0040
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Conductivity, temperature and depth package	A generic term for a set of co-located conductivity, te	SDN:L05::134	SDN:L22::TOOL0001
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Neil Brown MK3 CTD	The Neil Brown MK3 CTD consists of an integral unit	SDN:L05::134	SDN:L22::TOOL0002
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Bissett-Bermann 9040 CTD system	This instrument, also known as the Plessey 9040, inc	SDN:L05::134	SDN:L22::TOOL0005
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 911 CTD	High precision and accuracy CTD made up from a Se	SDN:L05::134	SDN:L22::TOOL0035
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::134	SDN:L22::TOOL0451
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments NXIC CTD Series	A collection of conductivity, temperature and depth (C	SDN:L05::134	SDN:L22::TOOL0173
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments Integrated CTD Profiler	CTD profiler with a sampling frequency of 32Hz and a	SDN:L05::134	SDN:L22::TOOL0364
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SM MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0017
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 3plus (SBE 3P) temperature sensor	Water temperature sensor designed for use on the SI	SDN:L05::134	SDN:L22::TOOL0416
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Oregon State University Ocean Mixing Group ChiPod temperature microstructure profiler	A self-contained device designed to measure small-s	SDN:L05::134	SDN:L22::TOOL1230
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Applied Microsystems Micro CTD	A small, high accuracy CTD including a 4-electrode c	SDN:L05::134	SDN:L22::TOOL0434

water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	U.S. Sensor Ultra Precision Interchangeable Thermistors	A series of interchangeable, resistive thermistors of e	SDN:L05::134	SDN:L22::TOOL0734
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR XX-105 {TPOD} (submersible) temperature logger	A first generation RBR data logger. It is a single char	SDN:L05::134	SDN:L22::TOOL1399
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Digitron TM-22 Differential Digital Thermometer	The Digitron TM-22 is a water-resistant, hand-held di	SDN:L05::134	SDN:L22::TOOL1190
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0379
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0373
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0374
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Multiple Plankton Sampler based on MOCNESS and NIO nets - Sameoto et al. (1977)	A 100 cm x 100 cm mouth opening with 10 nets (0.2	SDN:L05::134	SDN:L22::NETT0101
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0378
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::134	SDN:L22::NETT0120
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Woods Hole Oceanographic Institution VMCM 2 {ng-vmcm} (submersible) vector measuring current meter	The VMCM2 current meter is based on the original Vl	SDN:L05::134	SDN:L22::TOOL1400
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0377
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0376
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0372
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0375
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Rockland Scientific MicroRider-1000 turbulence microstructure profiler	A self-contained device designed to measure turbuler	SDN:L05::134	SDN:L22::TOOL1232
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Biospherical Instruments C-OPS spectroradiometer system	A radiometer system used for determining apparent c	SDN:L05::134	SDN:L22::TOOL1116
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi DST Tilt platform orientation sensor	A miniature data logger that measures and records te	SDN:L05::134	SDN:L22::TOOL1121
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi DST Pitch and Roll Recorder	A miniature underwater data logger which measures	SDN:L05::134	SDN:L22::TOOL0490
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Workhorse Navigator 1200kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::134	SDN:L22::TOOL0872
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Fast Light Yo-yo (FLY II) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::134	SDN:L22::TOOL0428
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR TR-1060P Temperature Logger	The TR-1060P is a small, self-contained, submersibl	SDN:L05::134	SDN:L22::TOOL0728
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Gulf VII Pro-net and MAFF-Guildline high-speed samplers - Nash et al. (1998)	An un-encased frame 275 cm long and 76 cm in dian	SDN:L05::134	SDN:L22::NETT0051
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses a	SDN:L05::134	SDN:L22::NETT0084
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::134	SDN:L22::NETT0087
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Catcher II high-speed sampler	A high-speed, opening-closing plankton sampler.	SDN:L05::134	SDN:L22::NETT0018
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 39-IM temperature recorder	A high-accuracy temperature recorder (pressure optic	SDN:L05::134	SDN:L22::TOOL0688
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Idronaut Ocean Seven 320 CTD	A fast response, multi-parameter conductivity, tempe	SDN:L05::134	SDN:L22::TOOL0213
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SiS RTM 4002 X digital reversing thermometer	A second-generation digital thermometer that collects	SDN:L05::134	SDN:L22::TOOL0239
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa WLR 8 Water Level Recorder	The WLR 8 is a bottom pressure recorder recording s	SDN:L05::134	SDN:L22::TOOL0030
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SeaKeeper thermosalinograph	A themosalinograph. It is designed for shipboard dete	SDN:L05::134	SDN:L22::TOOL1295
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Precision Measurement Engineering SCAMP microstructure profiler	A self contained, autonomous microstructure profiler	SDN:L05::134	SDN:L22::TOOL0473
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa CTR7 thermistor conductivity chain	An instrument with up to 5 induction conductivity and	SDN:L05::134	SDN:L22::TOOL0590
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 26 SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wit	SDN:L05::134	SDN:L22::TOOL0024
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1387
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-3 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1382
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican AXBT XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1389
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican Fast Deep XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1290
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-20 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1388
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-1 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1381
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1384
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton AXBT	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0713
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0262
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0263
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0435
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1383
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-11 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0716
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0718
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0717
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican Deep Blue XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL0715
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1385
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sparton of Canada T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::134	SDN:L22::TOOL1386
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sequoia Laser In-Situ Sediment Size Transmissometer model 100-B	A self-contained unit which measures the scattering c	SDN:L05::134	SDN:L22::TOOL0441
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SMP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0018
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 35 thermometer	An oceanographic thermometer with a measurement	SDN:L05::134	SDN:L22::TOOL0318
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 52-MP moored profiler CTD	A light and compact instrument intended as a modula	SDN:L05::134	SDN:L22::TOOL1231
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SMRU GPS Satellite Relay Data Logger (Argos)	A package comprising a wet/dry, pressure and tempe	SDN:L05::134	SDN:L22::TOOL0873
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR XR-420 CTD Marine	A small autonomous data logger designed to monitor	SDN:L05::134	SDN:L22::TOOL0053
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Paroscientific 410K Pressure Transducer	An absolute pressure transducer with a Digiquartz pr	SDN:L05::134	SDN:L22::TOOL0403
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Fast Light Yo-yo (FLY IV) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::134	SDN:L22::TOOL0429
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR TWR-2050 Submersible Tide and Wave Recorder	The TWR-2050P is a small, self-contained, submersi	SDN:L05::134	SDN:L22::TOOL0729
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican AXCTD	An expendable free-fall probe that provides a profile c	SDN:L05::134	SDN:L22::TOOL0714
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican XCTD-1 probe	An expendable free-fall CTD profiling system which p	SDN:L05::134	SDN:L22::TOOL0591
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Lockheed Martin Sippican XCTD-2 probe	An expendable free-fall CTD profiling system which p	SDN:L05::134	SDN:L22::TOOL0592
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp 3D doppler current meter	The Aquadopp is a single-depth doppler current mete	SDN:L05::134	SDN:L22::TOOL0089
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp 6000 3D Doppler current meter	The Nortek Aquadopp 6000 is a single-depth doppler	SDN:L05::134	SDN:L22::TOOL0476
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp 3000 3D Doppler current meter	The Nortek Aquadopp 3000 is a single-depth doppler	SDN:L05::134	SDN:L22::TOOL0477
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::134	SDN:L22::NETT0097
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::134	SDN:L22::NETT0028
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Rosette-Controlled Tucker Trawl system - Burd and Thompson (1993)	A 100 cm x 140 cm rectangular mouth opening frame	SDN:L05::134	SDN:L22::NETT0157
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizon	SDN:L05::134	SDN:L22::NETT0187
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	The National Institute of Oceanography Rectangular Midwater Trawl combination net 1+8 - Baker et al. (1973)	A combination 100 cm x 141 cm rectangular flexible	SDN:L05::134	SDN:L22::NETT0149
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::134	SDN:L22::NETT0185
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Mettler Toledo Delta 350 pH meter	The Delta 350 meter is a laboratory instrument desig	SDN:L05::134	SDN:L22::TOOL1219
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SAIV SD-204 CTD	A CTD that measures, calculates and records sea wa	SDN:L05::134	SDN:L22::TOOL0180
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Signature500 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use	SDN:L05::134	SDN:L22::TOOL1010
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 917plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::134	SDN:L22::TOOL0214
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa WLR 7 Water Level Recorder	A bottom pressure recorder for measuring sea level il	SDN:L05::134	SDN:L22::TOOL0031
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Paroscientific 415K Pressure Transducer	An absolute pressure transducer with a Digiquartz pr	SDN:L05::134	SDN:L22::TOOL0475

water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RPS MetOcean CM 04 current meter	An acoustic current meter designed for the study of h	SDN:L05::134	SDN:L22::TOOL0957
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 53 BPR Bottom Pressure Recorder	The SBE 53 BPR is a water level recorder with a Digi	SDN:L05::134	SDN:L22::TOOL0025
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Grundy Environmental 6620 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::134	SDN:L22::TOOL0336
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 21 Thermosalinograph	A platinum-electrode conductivity sensor and a therm	SDN:L05::134	SDN:L22::TOOL0667
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments Excell thermosalinograph	The instrument comprises an FSI internal field condu	SDN:L05::134	SDN:L22::TOOL0593
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	OceanData TSG103 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::134	SDN:L22::TOOL0276
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 45 MicroTSG thermosalinograph	A small externally powered, high-accuracy instrumen	SDN:L05::134	SDN:L22::TOOL0190
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Citadel TS-N Thermosalinograph	A compact, low-maintenance system that uses Teled	SDN:L05::134	SDN:L22::TOOL0602
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-IMP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0019
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 48 Hull Temperature Sensor	A high-accuracy temperature recorder with non-volati	SDN:L05::134	SDN:L22::TOOL0670
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 26plus SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wil	SDN:L05::134	SDN:L22::TOOL0696
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sequoia LISST-200X particle size analyser	A submersible, self-contained sensor that uses laser	SDN:L05::134	SDN:L22::TOOL1369
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::134	SDN:L22::TOOL1360
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::134	SDN:L22::TOOL0613
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::134	SDN:L22::TOOL0737
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Idronaut Ocean Seven 316 plus CTD	An underwater CTD probe designed for on-line profili	SDN:L05::134	SDN:L22::TOOL1306
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::134	SDN:L22::TOOL0526
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::134	SDN:L22::TOOL0738
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Micronketon net - Blackburn and Keith (1962)	A 152 cm x 152 cm rectangular mouth opening net a	SDN:L05::134	SDN:L22::NETT0094
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Vemco Minilog8 temperature recorder	A miniature data logger that records temperature at a	SDN:L05::134	SDN:L22::TOOL0181
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Valeport MIDAS water level recorder	A precision water level recorder designed for use in b	SDN:L05::134	SDN:L22::TOOL1011
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RPS MetOcean CM 04 PUV current meter	An acoustic current meter designed for the study of h	SDN:L05::134	SDN:L22::TOOL0958
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR TGR-2050 submersible tide gauge	A small (265mm x 38mm OD) self-contained, subme	SDN:L05::134	SDN:L22::TOOL0809
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 39plus temperature sensor	A water body temperature sensor. It is designed for n	SDN:L05::134	SDN:L22::TOOL1122
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Gemini Tinytag plus TGP-0050 temperature recorder	A data logger plus a 10k NTC thermistor internally m	SDN:L05::134	SDN:L22::TOOL0231
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Steedman Science and Engineering CM01 Acoustic Current Meter	A recording current meter fitted with two orthogonal a	SDN:L05::134	SDN:L22::TOOL0620
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Vemco Minilog12 temperature recorder	A miniature data logger that records temperature at a	SDN:L05::134	SDN:L22::TOOL0105
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 25plus Sealogger CTD	A compact and self-contained battery-powered CTD l	SDN:L05::134	SDN:L22::TOOL1162
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Chelsea Technologies Group Aqualog CTD	A self-contained unit comprising pressure, temperatu	SDN:L05::134	SDN:L22::TOOL0043
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird CT Sail CTD	A self-contained unpumped unit comprising the temp	SDN:L05::134	SDN:L22::TOOL1188
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa Pressure Sensor 4117/4117R	An integrated pressure and temperature sensor desig	SDN:L05::134	SDN:L22::TOOL1207
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	ReefNet Sensus Ultra	The ReefNet Sensus Ultra is a compact temperature	SDN:L05::134	SDN:L22::TOOL0731
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Analog Devices AD590 Temperature Transducer	This is a 2-terminal integrated circuit temperature tra	SDN:L05::134	SDN:L22::TOOL0707
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::134	SDN:L22::TOOL0675
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::134	SDN:L22::TOOL1318
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp Doppler current profiler	A family of self-contained Doppler current profilers de	SDN:L05::134	SDN:L22::TOOL0888
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Hugrun Seamon Mini temperature recorder	A small underwater temperature sensor and data logi	SDN:L05::134	SDN:L22::TOOL0228
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 39 temperature recorder	A high-accuracy temperature recorder (pressure optic	SDN:L05::134	SDN:L22::TOOL0266
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Discrete-depth plankton sampler - Aron et al. (1964)	A cod-end sampler used with IKMT or a 1-m diamete	SDN:L05::134	SDN:L22::NETT0029
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Vector 3D Acoustic Velocimeter	An acoustic current meter designed to measure high-	SDN:L05::134	SDN:L22::TOOL1286
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-IM MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0022
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teledyne RDI Citadel CTD-NH	A fast-sampling, fully integrated CTD package for use	SDN:L05::134	SDN:L22::TOOL1163
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Neil Brown Smart acoustic current meter	An acoustic current meter with temperature sensor th	SDN:L05::134	SDN:L22::TOOL0835
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Applied Microsystems CTD-12 plus	A self-contained CTD with platinized 4-electrode glas	SDN:L05::134	SDN:L22::TOOL0433
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea and Sun Technology Microstructure Profiler MSS 90	A profiler that measures micro-structure water stratifi	SDN:L05::134	SDN:L22::TOOL0453
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Double Longhurst-Hardy Plankton Recorder - Williams et al. (1983)	A modified version of the LHPR . An unenclosed Low	SDN:L05::134	SDN:L22::NETT0033
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 49 FasCAT CTD	A CTD sensor for use in autonomous platforms. It co	SDN:L05::134	SDN:L22::TOOL0827
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Valeport CTD 604	A CTD that samples on either time or depth incremer	SDN:L05::134	SDN:L22::TOOL0407
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SMRU Ltd Satellite Relay Data Logger 9000x	A depth and temperature sensor package combined v	SDN:L05::134	SDN:L22::TOOL0719
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	WETLabs ECO FLBBCD backscattering sensor	A combined three channel ECO back scatter sensor f	SDN:L05::134	SDN:L22::TOOL1141
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SMP-IDO MicroCAT C-T-DO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0634
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	JFE Compact-TD ATD-HR temperature and depth sensor	A light, small and robust autonomously deployable d	SDN:L05::134	SDN:L22::TOOL0977
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE Glider Payload CTD (GPCTD)	A modular, externally powered profiling instrument fo	SDN:L05::134	SDN:L22::TOOL1026
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	NKE SP2T temperature and depth recorder	A family of small self-contained temperature and dep	SDN:L05::134	SDN:L22::TOOL0233
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	YSI Model 30/30M Salinity, Conductivity and Temperature System	A handheld instrument designed for measurement of	SDN:L05::134	SDN:L22::TOOL1136
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa WLR 5 Water Level Recorder	A bottom pressure recorder for measuring sea level ii	SDN:L05::134	SDN:L22::TOOL0629
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 917 CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::134	SDN:L22::TOOL0409
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Vemco Minilog12 temperature-pressure recorder	A miniature data logger that records temperature and	SDN:L05::134	SDN:L22::TOOL0665
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aquatech AQUAlogger 520PT mini temperature and pressure logger	A miniature (200mm long, 32mm diameter) self-cont	SDN:L05::134	SDN:L22::TOOL0685
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi DST centi-TD Temperature and Depth Recorder	A miniature underwater temperature-pressure record	SDN:L05::134	SDN:L22::TOOL0383
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Omega ON-950 44005 thermistor	A precision thermistor in a small SST housing with a	SDN:L05::134	SDN:L22::TOOL0907
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Rockland Scientific FP07-38 microstructure thermistor	A fast-response temperature sensor for oceanograph	SDN:L05::134	SDN:L22::TOOL0641
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments OEM conductivity-temperature sensor	A high accuracy conductivity and temperature sensor	SDN:L05::134	SDN:L22::TOOL0122
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Uncles STD profiler	A direct-reading salinity-temperature-depth profiler in	SDN:L05::134	SDN:L22::TOOL0448
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Howaldtswerke-Deutsche Werft Bathysonde CTD profiler	A conductivity-temperature-pressure profiler with a pr	SDN:L05::134	SDN:L22::TOOL0527
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Modified Longhurt-Hardy Plankton Recorder - Haury et al. (1976)	Three lengths (230, 300, 370 cm) of 70 cm diamete	SDN:L05::134	SDN:L22::NETT0083
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Digitron 2000 series 2028T Thermometer	Digitron 2000 series are a range of hand-held digital	SDN:L05::134	SDN:L22::TOOL0945
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Collapsible Rectangular Midwater Trawl 1+8 - Griffiths et al. (1980)	The RMT 1+8 system described by Baker was modifi	SDN:L05::134	SDN:L22::NETT0025
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Pumped multiple sample collection system - Yamazi (1960)	A submersible pump mounted in a circular frame wo	SDN:L05::134	SDN:L22::NETT0146
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp 600 kHz Doppler current profiler	A self-contained 600 kHz Doppler current profiler des	SDN:L05::134	SDN:L22::TOOL0887
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Applied Microsystems conductivity and temperature array	A data logger based on the AML MC7 micro-CTD wit	SDN:L05::134	SDN:L22::TOOL0152
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa RCM 9/11 Recording Current Meter	The RCM 9/11 a family of single-point doppler record	SDN:L05::134	SDN:L22::TOOL0029
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Valeport MIDAS Sound Velocity Probe	This instrument comprises a time of flight sound spe	SDN:L05::134	SDN:L22::TOOL0531
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Measurement Engineering Australia SDI-12 temperature sensor	A CMOS chip containing a thermistor temperature se	SDN:L05::134	SDN:L22::TOOL0906
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa thermistor chain	An instrument with 11 Fenwal 2K iso-curve thermisto	SDN:L05::134	SDN:L22::TOOL0589
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SMP-ODO MicroCAT C-T-ODO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0869
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments ocean temperature module	A standards-grade platinum resistance thermometer	SDN:L05::134	SDN:L22::TOOL0123
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Continental Doppler current profiler	A family of self-contained Doppler current profilers de	SDN:L05::134	SDN:L22::TOOL0905

water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek 1 MHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::134	SDN:L22::TOOL0897
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SMRU Ltd CTD-Satellite Relay Data Logger 9000	CTD sensor package combined with a 401 MHz RF u	SDN:L05::134	SDN:L22::TOOL0446
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 61 Deep Argo CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::134	SDN:L22::TOOL1238
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea and Sun Technology and ISW Wassermesstechnik microstructure profiler	The MSS Profiler is designed for simultaneous micro	SDN:L05::134	SDN:L22::TOOL0439
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37 {MicroCAT-CTP} (submersible) CTD logger series	A series of high accuracy conductivity and temperatu	SDN:L05::134	SDN:L22::TOOL1393
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Longhurst-Hardy Plankton recorder - Longhurst et al (1966)	A 50 cm diameter net mounted in a towing frame. Att	SDN:L05::134	SDN:L22::NETT0082
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Neil Brown MK5 conductivity temperature and depth system	The Neil Brown MK5 CTD consists of an integral unit	SDN:L05::134	SDN:L22::TOOL0431
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa temperature sensor 4050	A compact fully integrated sensor for measuring the v	SDN:L05::134	SDN:L22::TOOL0712
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Vemco Minilog II T 16-bit Temperature Logger	The VEMCO Minilog II T is a fully submersible, 10-ye	SDN:L05::134	SDN:L22::TOOL0706
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR DUO CT (submersible) CT logger series	Self-contained, dual channel conductivity and temper	SDN:L05::134	SDN:L22::TOOL1396
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Modified large Longhurt-Hardy Plankton Recorder - Bone (1986)	A modified version of the LHPR . A tubular frame 185	SDN:L05::134	SDN:L22::NETT0081
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 3F temperature sensor	Water temperature sensor primarily designed for use	SDN:L05::134	SDN:L22::TOOL0640
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Unknown temperature and pressure sensor	A temperature and pressure sensor package where th	SDN:L05::134	SDN:L22::TOOL1323
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Signature1000 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use	SDN:L05::134	SDN:L22::TOOL1009
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR DUO 3-CT (submersible) CT logger	A self-contained, dual channel conductivity and temp	SDN:L05::134	SDN:L22::TOOL1395
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SI MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0021
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Biospherical Instruments Profiling Reflectance Radiometer PRR-600	An underwater radiometer designed for multiwavelen	SDN:L05::134	SDN:L22::TOOL0443
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::134	SDN:L22::TOOL0564
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37-SIP MicroCAT C-T Sensor	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::134	SDN:L22::TOOL0020
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Continental 470 kHz Doppler current profiler	A self-contained 470 kHz Doppler current profiler des	SDN:L05::134	SDN:L22::TOOL0903
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Aquadopp 400 kHz Doppler current profiler	A self-contained 400 kHz Doppler current profiler des	SDN:L05::134	SDN:L22::TOOL0392
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek acoustic wave and current profiler	A family of instruments that simultaneously measure	SDN:L05::134	SDN:L22::TOOL0898
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 37 {MicroCAT-CT} (submersible) CT logger series	A series of high accuracy conductivity and temperatu	SDN:L05::134	SDN:L22::TOOL1394
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek 400 kHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::134	SDN:L22::TOOL0895
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aquatech AQUAlogger 520T mini temperature logger	A miniature (200mm long, 32mm diameter) self-cont	SDN:L05::134	SDN:L22::TOOL0684
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 41 CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::134	SDN:L22::TOOL0668
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi Starmon mini temperature recorder	An underwater temperature recorder in either a plasti	SDN:L05::134	SDN:L22::TOOL0267
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Electronic Instruments Ltd MC5 {EIL MC5} temperature and salinity meter	A measuring bridge with a limit of resolution of 2 part	SDN:L05::134	SDN:L22::TOOL1355
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Bissett-Bermann 9006 STD system	The Bissett-Bermann 9006 was an STD (salinity, tem	SDN:L05::134	SDN:L22::TOOL0006
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	AML Oceanographic Smart SV and T sound velocity probe	A sound velocity probe for use in sound chest applica	SDN:L05::134	SDN:L22::TOOL0823
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	YSI Model 57 Dissolved Oxygen Meter	A field instrument designed for measurement of dissc	SDN:L05::134	SDN:L22::TOOL0549
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Chelsea Technologies Group MINIpack CTD-F	A single titanium/acetyl housing containing temperatu	SDN:L05::134	SDN:L22::TOOL0341
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sequoia Laser In-Situ Sediment Size Transmissometer	A self-contained unit which measures the scattering c	SDN:L05::134	SDN:L22::TOOL0044
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	NIOZ fast thermistor string	A thermistor chain developed and built by Netherland	SDN:L05::134	SDN:L22::TOOL0840
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	WETLabs ECO BB9 backscattering sensor	A sensor system for measuring optical backscattering	SDN:L05::134	SDN:L22::TOOL1125
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 41CP CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::134	SDN:L22::TOOL0669
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Neil Brown Smart CTD	The Neil Brown Smart CTD consists of and integral u	SDN:L05::134	SDN:L22::TOOL0033
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek Continental 190 kHz Doppler current profiler	A self-contained 190 kHz Doppler current profiler des	SDN:L05::134	SDN:L22::TOOL0904
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Nortek 600 kHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::134	SDN:L22::TOOL0896
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi DST centi-T Temperature Recorder	A miniature underwater temperature recorder with a t	SDN:L05::134	SDN:L22::TOOL0580
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aanderaa temperature sensor 4060	A compact fully integrated sensor for measuring the v	SDN:L05::134	SDN:L22::TOOL0711
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::134	SDN:L22::NETT0007
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Waterproof thermometer	A generic term for a temperature sensor capable of b	SDN:L05::134	SDN:L22::TOOL0237
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 19plus V2 SEACAT CTD	Self-contained self-powered CTD profiler. Measures c	SDN:L05::134	SDN:L22::TOOL0871
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 16plus SEACAT C-T Recorder	The SBE 16plus is a high accuracy conductivity and t	SDN:L05::134	SDN:L22::TOOL0100
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	METAS Underwater Stereo Camera system	A stereo camera system designed for underwater est	SDN:L05::134	SDN:L22::TOOL1275
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Chelsea Technologies Group Aquapack CTD	Single titanium housing containing temperature, conc	SDN:L05::134	SDN:L22::TOOL0048
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Falmouth Scientific Instruments MicroCTD	A miniature integrated sensor and communication sy	SDN:L05::134	SDN:L22::TOOL1266
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sensoren Instrumente Systeme Digital Reversing Thermometer	First generation of digital reversing thermometers ma	SDN:L05::134	SDN:L22::TOOL1268
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Guildline Model 8770 Digital CTD	CTD with conductivity electrode mounted in pyrex gla	SDN:L05::134	SDN:L22::TOOL0034
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Aquatec Aquascat 1000 R (automated) acoustic suspended sediment profiler	A high frequency acoustic suspended sediment profil	SDN:L05::134	SDN:L22::TOOL1357
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sediment Transport and Boundary Layer Equipment Mark II	A pop-up benthic lander with four Savonius rotor curr	SDN:L05::134	SDN:L22::TOOL0596
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Star-Oddi DST CTD	A miniature self-contained CTD primarily designed fo	SDN:L05::134	SDN:L22::TOOL0183
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Meerestechnik Elektronik or MICSOS microstructure profiler	A free sinking or rising multi-parameter probe equipp	SDN:L05::134	SDN:L22::TOOL0438
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Autosampling and Recording Instrumental Environmental Sampler - Dunn et al. (1993)	A stretched version of the Lowestoft modified Gulf III	SDN:L05::134	SDN:L22::NETT0004
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR Solo T Temperature logger	Compact single channel temperature logger designec	SDN:L05::134	SDN:L22::TOOL1024
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 19plus SEACAT CTD	Self contained self powered CTD profiler. Measures c	SDN:L05::134	SDN:L22::TOOL0047
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	RBR TDR-2050 underwater temperature logger	The TDR-2050 is a small (235mm x 38mm OD), self-	SDN:L05::134	SDN:L22::TOOL0054
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Omni Tinytalk TK-0040 temperature recorder	A miniature temperature logger with a user programn	SDN:L05::134	SDN:L22::TOOL0182
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Teleost Pressure Recorder	A pressure recorder developed by the Institute of Oce	SDN:L05::134	SDN:L22::TOOL0621
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 38 thermometer	An oceanographic thermometer with a measurement	SDN:L05::134	SDN:L22::TOOL0191
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Sea-Bird SBE 16Plus V2 SEACAT C-T Recorder	The SBE 16plus V2 is a high accuracy conductivity a	SDN:L05::134	SDN:L22::TOOL0870
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Plymouth Marine Laboratory Aiken CTD	A conductivity-temperature-depth package developec	SDN:L05::134	SDN:L22::TOOL0450
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	SMRU Ltd CTD/Fluorometer Satellite Relay Data Logger	A package comprising a Valeport CTD sensor head p	SDN:L05::134	SDN:L22::TOOL0720
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	Valeport Braystoke STM 500 temperature and salinity probe	A battery-operated, submersible probe that measures	SDN:L05::134	SDN:L22::TOOL1359
water temperature sensor	An instrument that measures the temperature of the water with which it is in contact.	AML Oceanographic Smart X CTD	A triple port, real-time probe part of the AML Oceano	SDN:L05::134	SDN:L22::TOOL1331
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::388	SDN:L22::NETT0008
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Lowestoft frame trawl - Walker and Davies (1986)	A 142 cm x 142 cm rectangular mouth opening trawl	SDN:L05::388	SDN:L22::NETT0085
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Neuston sampler - Schram et al. (1981)	A framework supports five 50 cm x 20 cm mouth ope	SDN:L05::388	SDN:L22::NETT0119
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	WP3 net - UNESCO Working Party 3 (1968)	A non-closing net with a 1.13 m diameter mouth ope	SDN:L05::388	SDN:L22::NETT0170
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Clarke-Bumpus plankton sampler - Clarke and Bumpus (1939, 1950)	Construction is a 12.7 cm diameter mouth opening w	SDN:L05::388	SDN:L22::NETT0021
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Multiple Plankton Sampler based on MOCNESS and NIO nets - Sameoto et al. (1977)	A 100 cm x 100 cm mouth opening with 10 nets (0.2	SDN:L05::388	SDN:L22::NETT0101
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::388	SDN:L22::NETT0120
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Multiple-net Tucker Trawl - Frost and McCrone (1974)	A 100 cm x 141 cm rectangular flexible mouth openir	SDN:L05::388	SDN:L22::NETT0158
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Bottom skimmer - Frolander and Pratt (1962)	A double runner sled 46 cm wide x 23 cm tall x 132 c	SDN:L05::388	SDN:L22::NETT0015
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Gulf V high-speed sampler - Arnold (1959)	A 41 cm diameter mouth opening with frame 130 cm	SDN:L05::388	SDN:L22::NETT0050
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified Gulf V high-speed sampler - Lockwood (1974)	Construction is a 50 cm diameter mouth opening x 2	SDN:L05::388	SDN:L22::NETT0049
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Scripps-Narragansett high-speed multiple plankton sampler - Fish and Snodgrass (1962)	A 50 cm diameter mouth opening Gulf III sampler wit	SDN:L05::388	SDN:L22::NETT0152

flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Gulf VII Pro-net and MAFF-Guildline high-speed samplers - Nash et al. (1998)	An un-encased frame 275 cm long and 76 cm in dian	SDN:L05::388	SDN:L22::NETT0051
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Bary Catcher high-speed plankton sampler - Bary et al. (1958)	Has a 22.9 cm diameter mouth opening behind a clo	SDN:L05::388	SDN:L22::NETT0017
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Isaacs high-speed sampler - Ahlstrom (1958)	Construction comprises a 2.5 cm mouth opening exp	SDN:L05::388	SDN:L22::NETT0076
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Gulf I high-speed sampler - Arnold (1952)	A 7.6 cm diameter inside cylinder net 91 cm long of M	SDN:L05::388	SDN:L22::NETT0046
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses a	SDN:L05::388	SDN:L22::NETT0084
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::388	SDN:L22::NETT0087
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Gulf III high-speed sampler - Gehringer (1952)	Construction is a 40.7 cm diameter nose piece entrar	SDN:L05::388	SDN:L22::NETT0048
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Lowestoft multiple high-speed plankton sampler - Beverton and Tungate (1967)	Construction comprises a 30.5 to 48.5 cm diameter	SDN:L05::388	SDN:L22::NETT0086
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Catcher II high-speed sampler	A high-speed, opening-closing plankton sampler.	SDN:L05::388	SDN:L22::NETT0018
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Messenger-operated Tucker Trawl - Hopkins et al. (1973)	A 180 cm x 180 cm rectangular mouth opening Tucke	SDN:L05::388	SDN:L22::NETT0159
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Marutoku - Nakai (1962)	Has a 45 cm diameter mouth opening with cylinder/c	SDN:L05::388	SDN:L22::NETT0093
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizon	SDN:L05::388	SDN:L22::NETT0187
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Multiple Plankton Sampler - Be et al. (1959); Be (1962)	Construction is a 50 cm x 50 cm opening with nets of	SDN:L05::388	SDN:L22::NETT0099
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	The National Institute of Oceanography Rectangular Midwater Trawl combination net 1+8 - Baker et al. (1973)	A combination 100 cm x 141 cm rectangular flexible	SDN:L05::388	SDN:L22::NETT0149
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::388	SDN:L22::NETT0185
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Multiple Rectangular Midwater Trawl 1+8 - Roe and Shale (1979)	A combination multiple plankton and nekton collectin	SDN:L05::388	SDN:L22::NETT0148
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Marine Scotland Opening Closing Environmental Acoustic Net MKII	An oceanographic sampler designed to be towed beh	SDN:L05::388	SDN:L22::NETT0172
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Surface plankton push net - Miller (1973)	A pair of rectangular nets (0.505 mm nylon mesh)ea	SDN:L05::388	SDN:L22::NETT0156
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Neuston net - Lippincott and Thomas (1983)	Has a 128 cm wide x 30 cm tall rectangular mouth op	SDN:L05::388	SDN:L22::NETT0110
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Neuston sampler - Danielssen and Tveite (1968)	A framework supports five rectangular nets with mes	SDN:L05::388	SDN:L22::NETT0117
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Manta net - Brown and Cheng (1981)	A rectangular framework 100 cm wide by 20 cm tall v	SDN:L05::388	SDN:L22::NETT0088
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Double Longhurst-Hardy Plankton Recorder - Williams et al. (1983)	A modified version of the LHPR . An unenclosed Low	SDN:L05::388	SDN:L22::NETT0033
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified Longhurt-Hardy Plankton Recorder - Haury et al. (1976)	Three lengths (230, 300, 370 cm) of 70 cm diamete	SDN:L05::388	SDN:L22::NETT0083
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Collapsible Rectangular Midwater Trawl 1+8 - Griffiths et al. (1980)	The RMT 1+8 system described by Baker was modifi	SDN:L05::388	SDN:L22::NETT0025
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Longhurst-Hardy Plankton recorder - Longhurst et al (1966)	A 50 cm diameter net mounted in a towing frame. Att	SDN:L05::388	SDN:L22::NETT0082
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified large Longhurt-Hardy Plankton Recorder - Bone (1986)	A modified version of the LHPR . A tubular frame 18	SDN:L05::388	SDN:L22::NETT0081
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Autosampling and Recording Instrumental Environmental Sampler - Dunn et al. (1993)	A stretched version of the Lowestoft modified Gulf III	SDN:L05::388	SDN:L22::NETT0004
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Opening-closing Bongo net - McGowan and Brown (1966)	A pair of circular hoops (70 cm diameter joined by a	SDN:L05::388	SDN:L22::NETT0011
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	MARMAP Bongo net - Posgay and Marak (1980)	Plankton net described as MARMAP Bongo Net [Pos	SDN:L05::388	SDN:L22::NETT0089
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Horizontal opening-closing plankton net - Slack (1955)	Has a 14.0 cm diameter mouth opening with framew	SDN:L05::388	SDN:L22::NETT0130
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Bottom plankton sampler - Omori (1969)	A 70 x 70 cm rectangular mouth opening net is attacl	SDN:L05::388	SDN:L22::NETT0013
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Enlarged Clarke-Bumpus sampler - Yentsch et al. (1962)	An enlarged (jumbo) version of the Clarke-Bumpus S	SDN:L05::388	SDN:L22::NETT0037
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	WP-2 standard net as described by UNESCO Working Party 2 (1968)	Plankton net described as the UNESCO WP-2 stand	SDN:L05::388	SDN:L22::NETT0168
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	NIPR-I sampler - Fukuchi et al. (1979)	A cylinder (24 cm x 57.5 cm) contains a motor driven	SDN:L05::388	SDN:L22::NETT0121
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Horizontal ichthyoplankton tow-net system - Nester (1987)	A 50 cm diameter circular net ring is mounted in a 53	SDN:L05::388	SDN:L22::NETT0069
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	HOrizontal PLAnkton SAmpler - Ruetzler et al. (1980)	18.5 cm diameter x 40 cm long plexiglass cylinder ho	SDN:L05::388	SDN:L22::NETT0064
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Enlarged Clarke-Bumpus sampler - Paquette et al. (1961)	Construction is a 25.4 cm diameter mouth opening w	SDN:L05::388	SDN:L22::NETT0038
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified North Pacific standard net - Motoda (1994)	Has a 45 cm diameter circular mouth opening with cy	SDN:L05::388	SDN:L22::NETT0123
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Litre Meter LMSPFA.05 flow meter	Pelton Wheel flow meter designed to monitor water fl	SDN:L05::388	SDN:L22::TOOL0493
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Modified N70 net - Currie ans Foston (1957)	A modified version of the Nansen net with a large de	SDN:L05::388	SDN:L22::NETT0107
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Litre Meter flow meter	A flow meter of unspecified model used to monitor w	SDN:L05::388	SDN:L22::TOOL0400
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Bottom plankton sampler - Macer (1867)	Approximately 30 cm x 20 cm mouth opening. Net di	SDN:L05::388	SDN:L22::NETT0014
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	ICITA plankton net - Jossi (1966)	A 100 cm diameter mouth opening with a conical net	SDN:L05::388	SDN:L22::NETT0070
flow meters	Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instrur	Messenger-operated Tucker Trawl - Sameoto and Jaroszynski (1976)	A 100 cm x 100 cm and a 400 cm x 400 cm rectangu	SDN:L05::388	SDN:L22::NETT0160
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::68	SDN:L22::NETT0008
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Multiple Plankton Sampler based on MOCNESS and NIO nets - Sameoto et al. (1977)	A 100 cm x 100 cm mouth opening with 10 nets (0.2	SDN:L05::68	SDN:L22::NETT0101
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::68	SDN:L22::NETT0120
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Multiple-net Tucker Trawl - Frost and McCrone (1974)	A 100 cm x 141 cm rectangular flexible mouth openir	SDN:L05::68	SDN:L22::NETT0158
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Automatic high-speed plankton sampler - Williamson (1962, 1963)	A sampler that has a series of 21 nets attached to the	SDN:L05::68	SDN:L22::NETT0005
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses a	SDN:L05::68	SDN:L22::NETT0084
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::68	SDN:L22::NETT0097
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::68	SDN:L22::NETT0028
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Rosette-Controlled Tucker Trawl system - Burd and Thompson (1993)	A 100 cm x 140 cm rectangular mouth opening frame	SDN:L05::68	SDN:L22::NETT0157
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	British Antarctic Survey Rectangular Midwater Trawl 1+8	A British Antarctic Survey-built pelagic trawl system,	SDN:L05::68	SDN:L22::NETT0179
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Ocean Research Institute Vertical Muliple Plankton Sampler - Terazaki (1991)	Has a 100 cm x 100 cm rectangular mouth opening r	SDN:L05::68	SDN:L22::NETT0134
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizon	SDN:L05::68	SDN:L22::NETT0187
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	British Antarctic Survey Net Traps	A pair of nets composed by an upward-looking bongo	SDN:L05::68	SDN:L22::TOOL1274
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Modified opening-closing Isaacs-Kidd Midwater Trawl - Brown (1975)	An IKMT was outfitted with a flap of material that exte	SDN:L05::68	SDN:L22::NETT0073
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Dual Methot Isaacs-Kidd Trawl net	Pelagic trawl net described as Dual Methot Trawl net	SDN:L05::68	SDN:L22::TOOL0985
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Multiple Plankton Sampler - Be et al. (1959); Be (1962)	Construction is a 50 cm x 50 cm opening with nets of	SDN:L05::68	SDN:L22::NETT0099
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Wishner Deep-Tow net system adapted for use on Alvin - Kim and Mullineaux (1998)	Three rectangular mouth opening nets ~30 cm wide x	SDN:L05::68	SDN:L22::NETT0166
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	The National Institute of Oceanography Rectangular Midwater Trawl combination net 1+8 - Baker et al. (1973)	A combination 100 cm x 141 cm rectangular flexible	SDN:L05::68	SDN:L22::NETT0149
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::68	SDN:L22::NETT0185
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Deep-Tow net system - Wishner (1980)	Three rectangular mouth opening nets ~30 cm wide x	SDN:L05::68	SDN:L22::NETT0030
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Modified Isaacs-Kidd Midwater Trawl with MPS cod-end - Pearcy and Hubbard (1964)	A 1.8 m IKMT fitted with a scaled down version of the	SDN:L05::68	SDN:L22::NETT0072
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Modified Multiple Plankton Sampler - Weikert and John (1981)	A modified version of the Be MPS net with a rectangu	SDN:L05::68	SDN:L22::NETT0098
multinet	A system comprising several nets that can be opened and closed sequentially to collect a series of sa	Multiple Rectangular Midwater Trawl 1+8 - Roe and Shale (1979)	A combination multiple plankton and nekton collectin	SDN:L05::68	SDN:L22::NETT0148
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::23	SDN:L22::NETT0008
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Lowestoft frame trawl - Walker and Davies (1986)	A 142 cm x 142 cm rectangular mouth opening trawl	SDN:L05::23	SDN:L22::NETT0085
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Multiple Plankton Sampler based on MOCNESS and NIO nets - Sameoto et al. (1977)	A 100 cm x 100 cm mouth opening with 10 nets (0.2	SDN:L05::23	SDN:L22::NETT0101
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::23	SDN:L22::NETT0120
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Multiple-net Tucker Trawl - Frost and McCrone (1974)	A 100 cm x 141 cm rectangular flexible mouth openir	SDN:L05::23	SDN:L22::NETT0158
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses a	SDN:L05::23	SDN:L22::NETT0084
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Closing midwater trawl - Enzenhofer and Hume (1989)	Construction is a 300 cm x 700 cm rectangular mout	SDN:L05::23	SDN:L22::NETT0022
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Messenger-operated Tucker Trawl - Hopkins et al. (1973)	A 180 cm x 180 cm rectangular mouth opening Tucke	SDN:L05::23	SDN:L22::NETT0159
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::23	SDN:L22::NETT0097
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::23	SDN:L22::NETT0028
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Rosette-Controlled Tucker Trawl system - Burd and Thompson (1993)	A 100 cm x 140 cm rectangular mouth opening frame	SDN:L05::23	SDN:L22::NETT0157

pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	British Antarctic Survey Rectangular Midwater Trawl 1+8	A British Antarctic Survey-built pelagic trawl system,	SDN:L05::23	SDN:L22::NETT0179
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizonl	SDN:L05::23	SDN:L22::NETT0187
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Modified opening-closing Isaacs-Kidd Midwater Trawl - Brown (1975)	An IKMT was outfitted with a flap of material that exte	SDN:L05::23	SDN:L22::NETT0073
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Dual Methot Isaacs-Kidd Trawl net	Pelagic trawl net described as Dual Methot Trawl net	SDN:L05::23	SDN:L22::TOOL0985
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	The National Institute of Oceanography Rectangular Midwater Trawl combination net 1+8 - Baker et al. (1973)	A combination 100 cm x 141 cm rectangular flexible	SDN:L05::23	SDN:L22::NETT0149
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::23	SDN:L22::NETT0185
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Modified Isaacs-Kidd Midwater Trawl with MPS cod-end - Pearcy and Hubbard (1964)	A 1.8 m IKMT fitted with a scaled down version of the	SDN:L05::23	SDN:L22::NETT0072
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Multiple Rectangular Midwater Trawl 1+8 - Roe and Shale (1979)	A combination multiple plankton and nekton collectin	SDN:L05::23	SDN:L22::NETT0148
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Collapsible Rectangular Midwater Trawl 1+8 - Griffiths et al. (1980)	The RMT 1+8 system described by Baker was modifi	SDN:L05::23	SDN:L22::NETT0025
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Messenger-operated Tucker Trawl - Sameoto and Jaroszynski (1976)	A 100 cm x 100 cm and a 400 cm x 400 cm rectangu	SDN:L05::23	SDN:L22::NETT0160
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	British Antarctic Survey Rectangular Midwater Trawl 8	A British Antarctic Survey-built pelagic trawl system,	SDN:L05::23	SDN:L22::NETT0180
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	British Antarctic Survey Rectangular Midwater Trawl 25	A British Antarctic Survey-built pelagic trawl system,	SDN:L05::23	SDN:L22::NETT0181
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Isaacs-Kidd Midwater Trawl - Isaacs and Kidd (1953)	A trawl with a pentagonal mouth opening and a dihec	SDN:L05::23	SDN:L22::NETT0071
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Tucker-style opening-closing Rectangular Midwater Trawl 8 - Clarke (1969)	A 283 cm x 400 cm rectangular flexible mouth openir	SDN:L05::23	SDN:L22::NETT0150
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	British Antarctic Survey Rectangular Midwater Trawl 1	A British Antarctic Survey-built pelagic trawl system,	SDN:L05::23	SDN:L22::NETT0178
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Opening-closing Tucker Trawl - Davis and Barham (1969)	Modification used timing clocks to open and close the	SDN:L05::23	SDN:L22::NETT0162
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Tucker Trawl - Tucker (1951)	Has a 183 cm x 183 cm flexible rectangular net mou	SDN:L05::23	SDN:L22::NETT0161
pelagic trawl nets	A net towed through the water column designed to sample free-swimming nekton or fish.	Foxton two-chamber cod-end - Currie (1962) Foston (1963)	A modification to the IKMT to allow pressure actuate	SDN:L05::23	SDN:L22::NETT0043
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::130	SDN:L22::NETT0008
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 19 SEACAT CTD	A self-contained battery powered CTD with precision	SDN:L05::130	SDN:L22::TOOL0042
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Christian Albrechts University of Kiel Multisonde CTD profiler	A conductivity-temperature-pressure profiler with a pr	SDN:L05::130	SDN:L22::TOOL0371
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Neil Brown MK2 conductivity temperature and depth system	An integral unit comprising pressure, temperature an	SDN:L05::130	SDN:L22::TOOL0144
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Plessey 9400 CTD	The Plessey 9400 CTD system combines a Plessey 6	SDN:L05::130	SDN:L22::TOOL0009
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 911plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::130	SDN:L22::TOOL0058
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Valeport CTD 600	A CTD that samples on either time or depth incremer	SDN:L05::130	SDN:L22::TOOL0232
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Meerestechnik OTS-1200 CTD	An integral unit comprising pressure, temperature an	SDN:L05::130	SDN:L22::TOOL0149
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 25 Sealogger CTD	A compact self-contained CTD comprising a conduct	SDN:L05::130	SDN:L22::TOOL0040
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Neil Brown MK3 CTD	The Neil Brown MK3 CTD consists of an integral unit	SDN:L05::130	SDN:L22::TOOL0002
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Bissett-Bermann 9040 CTD system	This instrument, also known as the Plessey 9040, inc	SDN:L05::130	SDN:L22::TOOL0005
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 911 CTD	High precision and accuracy CTD made up from a Se	SDN:L05::130	SDN:L22::TOOL0035
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::130	SDN:L22::TOOL0451
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Falmouth Scientific Instruments NXIC CTD Series	A collection of conductivity, temperature and depth (C	SDN:L05::130	SDN:L22::TOOL0173
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Falmouth Scientific Instruments Integrated CTD Profiler	CTD profiler with a sampling frequency of 32Hz and a	SDN:L05::130	SDN:L22::TOOL0364
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Applied Microsystems Micro CTD	A small, high accuracy CTD including a 4-electrode c	SDN:L05::130	SDN:L22::TOOL0434
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::130	SDN:L22::NETT0087
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Idronaut Ocean Seven 320 CTD	A fast response, multi-parameter conductivity, tempe	SDN:L05::130	SDN:L22::TOOL0213
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 52-MP moored profiler CTD	A light and compact instrument intended as a modula	SDN:L05::130	SDN:L22::TOOL1231
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	SAIV SD-204 CTD	A CTD that measures, calculates and records sea wa	SDN:L05::130	SDN:L22::TOOL0180
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 917plus CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::130	SDN:L22::TOOL0214
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Idronaut Ocean Seven 316 plus CTD	An underwater CTD probe designed for on-line profili	SDN:L05::130	SDN:L22::TOOL1306
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 25plus Sealogger CTD	A compact and self-contained battery-powered CTD I	SDN:L05::130	SDN:L22::TOOL1162
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Chelsea Technologies Group Aqualog CTD	A self-contained unit comprising pressure, temperatu	SDN:L05::130	SDN:L22::TOOL0043
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird CT Sail CTD	A self-contained unpumped unit comprising the temp	SDN:L05::130	SDN:L22::TOOL1188
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::130	SDN:L22::TOOL1318
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Teledyne RDI Citadel CTD-NH	A fast-sampling, fully integrated CTD package for use	SDN:L05::130	SDN:L22::TOOL1163
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Applied Microsystems CTD-12 plus	A self-contained CTD with platinized 4-electrode glas	SDN:L05::130	SDN:L22::TOOL0433
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 49 FasCAT CTD	A CTD sensor for use in autonomous platforms. It co	SDN:L05::130	SDN:L22::TOOL0827
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Valeport CTD 604	A CTD that samples on either time or depth incremer	SDN:L05::130	SDN:L22::TOOL0407
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 917 CTD	High precision and accuracy CTD comprising an SBE	SDN:L05::130	SDN:L22::TOOL0409
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Uncles STD profiler	A direct-reading salinity-temperature-depth profiler in	SDN:L05::130	SDN:L22::TOOL0448
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Howaldtswerke-Deutsche Werft Bathysonde CTD profiler	A conductivity-temperature-pressure profiler with a pr	SDN:L05::130	SDN:L22::TOOL0527
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	SMRU Ltd CTD-Satellite Relay Data Logger 9000	CTD sensor package combined with a 401 MHz RF u	SDN:L05::130	SDN:L22::TOOL0446
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 61 Deep Argo CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::130	SDN:L22::TOOL1238
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Neil Brown MK5 conductivity temperature and depth system	The Neil Brown MK5 CTD consists of an integral unit	SDN:L05::130	SDN:L22::TOOL0431
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 41 CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::130	SDN:L22::TOOL0668
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Bissett-Bermann 9006 STD system	The Bissett-Bermann 9006 was an STD (salinity, tem	SDN:L05::130	SDN:L22::TOOL0006
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Chelsea Technologies Group MINIpack CTD-F	A single titanium/acetyl housing containing temperatu	SDN:L05::130	SDN:L22::TOOL0341
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 41CP CTD	A self-contained unit comprising the MicroCAT tempe	SDN:L05::130	SDN:L22::TOOL0669
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Neil Brown Smart CTD	The Neil Brown Smart CTD consists of and integral u	SDN:L05::130	SDN:L22::TOOL0033
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::130	SDN:L22::NETT0007
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 19plus V2 SEACAT CTD	Self-contained self-powered CTD profiler. Measures c	SDN:L05::130	SDN:L22::TOOL0871
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Chelsea Technologies Group Aquapack CTD	Single titanium housing containing temperature, conc	SDN:L05::130	SDN:L22::TOOL0048
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Falmouth Scientific Instruments MicroCTD	A miniature integrated sensor and communication sy	SDN:L05::130	SDN:L22::TOOL1266
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Guildline Model 8770 Digital CTD	CTD with conductivity electrode mounted in pyrex gla	SDN:L05::130	SDN:L22::TOOL0034
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Star-Oddi DST CTD	A miniature self-contained CTD primarily designed fo	SDN:L05::130	SDN:L22::TOOL0183
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Sea-Bird SBE 19plus SEACAT CTD	Self contained self powered CTD profiler. Measures c	SDN:L05::130	SDN:L22::TOOL0047
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Plymouth Marine Laboratory Aiken CTD	A conductivity-temperature-depth package developec	SDN:L05::130	SDN:L22::TOOL0450
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	SMRU Ltd CTD/Fluorometer Satellite Relay Data Logger	A package comprising a Valeport CTD sensor head p	SDN:L05::130	SDN:L22::TOOL0720
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	AML Oceanographic Smart X CTD	A triple port, real-time probe part of the AML Oceano	SDN:L05::130	SDN:L22::TOOL1331
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	Idronaut Ocean Seven 304 CTD	A low powered micro conductivity temperature depth	SDN:L05::130	SDN:L22::TOOL0861
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	RBR Concerto CTD	Conductivity, temperature depth recorder with fluoron	SDN:L05::130	SDN:L22::TOOL0856
CTD	A reusable instrument that always simultaneously measures conductivity and temperature (for salinity	RBR XR-620 CTD Profiler	A small profiling data logger designed to monitor con	SDN:L05::130	SDN:L22::TOOL0730
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	BIONESS 1m - Sameoto, Jaroszynski and Fraser (1979, 1980)	Construction is a 100 cm x 100 cm mouth opening w	SDN:L05::385	SDN:L22::NETT0008
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Sperry Marine MK37 series gyrocompasses	A family of instruments that contains a controlled gyr	SDN:L05::385	SDN:L22::TOOL0661
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne TSS Meridian Surveyor gyrocompass	A free-spining gyroscope which uses gravity control a	SDN:L05::385	SDN:L22::TOOL0883
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Datawell MOSE-G1000	A GPS-based motion sensor to measure the long per	SDN:L05::385	SDN:L22::TOOL1027
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0379
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0373

platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Kongsberg Seatex Seapath 200 Global Positioning System receiver and Gyrocompass	Sensor-based inertial navigation and Differential Glot	SDN:L05::385	SDN:L22::TOOL0456
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0374
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	RM Young 32500 (electronic) magnetic compass	A combined compass and serial interface with YOUN	SDN:L05::385	SDN:L22::TOOL1327
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Multiple Plankton Sampler based on MOCNESS and NIO nets - Sameoto et al. (1977)	A 100 cm x 100 cm mouth opening with 10 nets (0.2-	SDN:L05::385	SDN:L22::NETT0101
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Airmar Ultrasonic WeatherStation PB200 weather station	An integrated, multi-parameter meteorological senso	SDN:L05::385	SDN:L22::TOOL1224
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Airmar CS4500 (ultrasonic) water speed sensor	A speed sensor that is used on all types and sizes of	SDN:L05::385	SDN:L22::TOOL1225
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	LP-Research LPMS-RS232AL2 motion sensor	A high performance motion sensor / MEMS miniature	SDN:L05::385	SDN:L22::TOOL1404
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0378
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Modified Rectangular Midwater Trawl 1+8 - Dimmler and Klindt (1990)	RMT fitted with modified electronics comprising a PC	SDN:L05::385	SDN:L22::NETT0120
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Woods Hole Oceanographic Institution VMCM 2 {ng-vmcm} (submersible) vector measuring current meter	The VMCM2 current meter is based on the original VI	SDN:L05::385	SDN:L22::TOOL1400
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Multiple-net Tucker Trawl - Frost and McCrone (1974)	A 100 cm x 141 cm rectangular flexible mouth openir	SDN:L05::385	SDN:L22::NETT0158
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Simrad Navico MX420 global positioning system	A marine positioning system which can be configurec	SDN:L05::385	SDN:L22::TOOL0937
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Sperry Marine MK-27F Gyrocompass	Fibre optic gyrocompass for heading and attitude. It i	SDN:L05::385	SDN:L22::TOOL0813
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Microstrain 3DM-GX1 Gyro Enhanced Orientation Sensor	The MicroStrain 3DM-GX3 is a triaxial accelerometer	SDN:L05::385	SDN:L22::TOOL0721
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Sperry Marine NAVIGAT X MK 2 digital gyrocompass	A digital gyrocompass for use in marine navigation. T	SDN:L05::385	SDN:L22::TOOL0624
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	British Antarctic Survey Shipboard Three Component Magnetometer	A British Antarctic Survey-built shipboard three-comp	SDN:L05::385	SDN:L22::TOOL1251
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0377
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0376
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0372
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Sentek Northstar Navigator navigation system	A small, light-weight, modular navigation system for	SDN:L05::385	SDN:L22::TOOL0880
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	TSS HRP-2-25 compact motion sensor	The TSS Compact Motion Sensor is designed to mee	SDN:L05::385	SDN:L22::TOOL0093
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0375
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	KVH Industries C100 {Compass Engine} fluxgate compass	An industrial grade, micro-processor fluxgate compa	SDN:L05::385	SDN:L22::TOOL1296
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Rockland Scientific MicroRider-1000 turbulence microstructure profiler	A self-contained device designed to measure turbuler	SDN:L05::385	SDN:L22::TOOL1232
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Yokogawa CMZ700B gyrocompass	A gyrocompass system for use on small high-speed	SDN:L05::385	SDN:L22::TOOL0902
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Simrad GC80 and GC85 gyrocompass	A gyrocompass for use in autopilot and dynamic pos	SDN:L05::385	SDN:L22::TOOL0875
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Biospherical Instruments C-OPS spectroradiometer system	A radiometer system used for determining apparent c	SDN:L05::385	SDN:L22::TOOL1116
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Gyrocompass	A compass of unspecified make or model number tha	SDN:L05::385	SDN:L22::TOOL0079
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Star-Oddi DST Tilt platform orientation sensor	A miniature data logger that measures and records te	SDN:L05::385	SDN:L22::TOOL1121
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Star-Oddi DST Pitch and Roll Recorder	A miniature underwater data logger which measures	SDN:L05::385	SDN:L22::TOOL0490
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	PNI Tilt Compensated 3-Axis Compass Module TCM 2.5	A 3-axis compass module designed to measure com	SDN:L05::385	SDN:L22::TOOL1022
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Systron Donner Motionpak II accelerometer	The BEI Systron Donner Inertial Division MotionPak I	SDN:L05::385	SDN:L22::TOOL1403
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	SignalQuest SQ-SI-360DA inclinometer	A solid-state MEMS inclinometer module. It is used fo	SDN:L05::385	SDN:L22::TOOL1226
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Systron Donner MotionPak accelerometer	The Systron Donner Inertial MotionPak is a solid-stat	SDN:L05::385	SDN:L22::TOOL0086
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Sperry Marine NAVIGAT X MK 1 digital gyrocompass	A digital gyrocompass for use in marine navigation. T	SDN:L05::385	SDN:L22::TOOL0699
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Teledyne RDI Workhorse Navigator 1200kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::385	SDN:L22::TOOL0872
platform attitude sensors	Instruments that measure platform orientation or rates of platform motion or acceleration in any direct	Unspecified orientation sensor	An instrument designed to measure pitch, roll and he	SDN:L05::385	SDN:L22::TOOL1276
bench fluorometers	Instruments that determinesthe amount of chlorophyll in in-vitro samples by measuring the quantity of	Thermo Scientific Fluoroskan Ascent microplate fluorometer	A bench-top, microplate fluorometer used in laborato	SDN:L05::LAB23	SDN:L22::TOOL1143
bench fluorometers	Instruments that determinesthe amount of chlorophyll in in-vitro samples by measuring the quantity of	Turner Designs Trilogy fluorometer	A compact laboratory instrument for making fluoreso	SDN:L05::LAB23	SDN:L22::TOOL0459
bench fluorometers	Instruments that determinesthe amount of chlorophyll in in-vitro samples by measuring the quantity of	Turner Designs 700 Laboratory Fluorometer	A benchtop fluorometer designed to detect fluoresce	SDN:L05::LAB23	SDN:L22::TOOL0510
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	Flygt pump	Submersible electrical pump designed for continuous	SDN:L05::31	SDN:L22::TOOL0539
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	Clean pumped sea water supply	The system comprises a precision echosounder (PES	SDN:L05::31	SDN:L22::TOOL0561
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	SubCtech OceanPack RACE 5th generation {FerryBox} combined pCO2 analyser and microplastics sampler	A flow-through system packaged into a mobile manif	SDN:L05::31	SDN:L22::TOOL1377
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	National Oceanography Centre torpedo towfish water sampler	An epoxy resin-coated steel torpedo-shaped object de	SDN:L05::31	SDN:L22::TOOL0555
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	IFM Kiel clean pumped sea water supply	A system designed for continuous, underway, clean s	SDN:L05::31	SDN:L22::TOOL0562
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	Unknown manual bilge pump	A hand-powered submersible pump that can be used	SDN:L05::31	SDN:L22::TOOL1405
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	SubCtech OceanPack RACE 5th generation {FerryBox} combined pCO2 analyser and underway system	A flow-through system packaged into a mobile manif	SDN:L05::31	SDN:L22::TOOL1321
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	Kompressoren-Pumpen-Zentrale GMBH pump	A submersible pump that can be used for multiple ap	SDN:L05::31	SDN:L22::TOOL1135
continuous water samplers	A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or	Non-toxic sea water supply	A source of uncontaminated near-surface (commonly	SDN:L05::31	SDN:L22::TOOL0413
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::113	SDN:L22::TOOL1217
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO FL fluorometer	An open flat-face fluorometer that can be used to me	SDN:L05::113	SDN:L22::TOOL0172
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Technologies Group Aquatracka fluorometer	A submersible fluorometer that may be configured fo	SDN:L05::113	SDN:L22::TOOL0049
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Technologies Group Aquatracka III fluorometer	A compact light-weight submersible fluorometer for d	SDN:L05::113	SDN:L22::TOOL0424
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Precision Measurement Engineering SCAMP microstructure profiler	A self contained, autonomous microstructure profiler	SDN:L05::113	SDN:L22::TOOL0473
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	HOBI HydroScat-2 Optical Backscatter Fluorometer	Instrument that measures optical backscatter at 2 wa	SDN:L05::113	SDN:L22::TOOL0141
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::113	SDN:L22::NETT0097
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::113	SDN:L22::NETT0028
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet BB2FL-VMT scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1310
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::113	SDN:L22::TOOL1360
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::113	SDN:L22::TOOL0737
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::113	SDN:L22::TOOL0738
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Seapoint Fluorescein Fluorometer	A low power fluorometer for in-situ measurements of	SDN:L05::113	SDN:L22::TOOL0664
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet BBFL2-IRB scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1311
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO-FLNTU combined fluorometer and turbidity sensor	The ECO-FLNTU combines the ECO fluorometer with	SDN:L05::113	SDN:L22::TOOL0215
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Technologies Group Aqualog CTD	A self-contained unit comprising pressure, temperatu	SDN:L05::113	SDN:L22::TOOL0043
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::113	SDN:L22::TOOL0675
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Double Longhurst-Hardy Plankton Recorder - Williams et al. (1983)	A modified version of the LHPR . An unenclosed Low	SDN:L05::113	SDN:L22::NETT0033
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO FLBBCD backscattering sensor	A combined three channel ECO back scatter sensor t	SDN:L05::113	SDN:L22::TOOL1141
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Technologies Group MINIpack CTD-F	A single titanium/acetyl housing containing temperat	SDN:L05::113	SDN:L22::TOOL0341
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::113	SDN:L22::NETT0007
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Technologies Group Aquapack CTD	Single titanium housing containing temperature, conc	SDN:L05::113	SDN:L22::TOOL0048
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	SMRU Ltd CTD/Fluorometer Satellite Relay Data Logger	A package comprising a Valeport CTD sensor head p	SDN:L05::113	SDN:L22::TOOL0720
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner Designs Cyclops-7 chlorophyll fluorometer	A high performance, in-situ fluorometer with 470 nm	SDN:L05::113	SDN:L22::TOOL0365
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet FLBBCD-SLC scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1312
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Dr.Haardt BackScat Fluorometer Model 1302	Backscatter fluorometer comprising three optical sen	SDN:L05::113	SDN:L22::TOOL0066
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner Designs Cyclops-7 phycoerythrin cyanobacteria fluorometer	A high performance, in-situ fluorometer with 544 nm	SDN:L05::113	SDN:L22::TOOL0366
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet FLBBCD-SLK scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1313
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Unknown chlorophyll fluorometer	An in-situ instrument that transmits pulses of UV ligh	SDN:L05::113	SDN:L22::TOOL0145

fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet sensor	A miniature version of the ECO Triplet sensor. It is a	SDN:L05::113	SDN:L22::TOOL0673
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO-FLNTU(SB) combined fluorometer and turbidity sensor	A combined fluorometer and turbidity sensor with an	SDN:L05::113	SDN:L22::TOOL1320
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner Designs Cyclops-7 phycocyanin cyanobacteria fluorometer	A high performance, in-situ fluorometer with 600 nm	SDN:L05::113	SDN:L22::TOOL0367
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Triplet 6KFLBBCD scattering fluorescence sensor	A variant of the standard ECO sensor (http://vocab.n	SDN:L05::113	SDN:L22::TOOL1314
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Triplet sensor	A three-optical-sensor, user-defined instrument that r	SDN:L05::113	SDN:L22::TOOL0674
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Dr.Haardt BackScat I Fluorometer Model 1101	Backscatter fluorometer with a xenon-flashlight sourc	SDN:L05::113	SDN:L22::TOOL0408
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner Designs Cyclops-7 coloured dissolved organic matter fluorometer	A high performance, in-situ fluorometer with 365 nm	SDN:L05::113	SDN:L22::TOOL0368
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Triplet 6KBBFL2 {6KFLFLBB} scattering fluorescence sensor	A variant of the standard ECO sensor (http://vocab.n	SDN:L05::113	SDN:L22::TOOL1315
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet BBFL2-VMT scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1309
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO FL(RT) fluorometer	A single-channel fluorometer used to measure fluores	SDN:L05::113	SDN:L22::TOOL1392
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs WETStar fluorometer	Submersible fluorometer designed for through-flow o	SDN:L05::113	SDN:L22::TOOL0075
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Triplet BBFL2 scattering fluorescence sensor	A three optical-sensor instrument designed for simult	SDN:L05::113	SDN:L22::TOOL1282
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet BB2FL-SLC scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1316
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	SeaTech 57S fluorometer	A linear-response submersible chlorophyll-a fluorome	SDN:L05::113	SDN:L22::TOOL0637
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Shimadzu RF-20 A fluorescence detector	A high-sensitivity fluorescence spectrometer used to	SDN:L05::113	SDN:L22::TOOL1340
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO-FLNTU(RT) combined fluorometer and turbidty sensor	A combined ECO fluorometer and optical scattering r	SDN:L05::113	SDN:L22::TOOL1283
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner Designs SCUFA II Submersible Fluorometer	An accurate, versatile submersible fluorometer for ch	SDN:L05::113	SDN:L22::TOOL0189
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Chelsea Instruments MINITracka II fluorometer	In-situ miniature low-power fluorometer with good tur	SDN:L05::113	SDN:L22::TOOL0118
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Turner 10-AU chlorophyll field fluorometer	A field fluorometer designed for continuous-flow mon	SDN:L05::113	SDN:L22::TOOL0393
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Perkin-Elmer Model 204 Fluorescence Spectrophotometer	An automatic recording that measures the fluorescen	SDN:L05::113	SDN:L22::TOOL0534
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO FLBB scattering fluorescence sensor	A dual-optical-sensor that carries a single-wavelengt	SDN:L05::113	SDN:L22::TOOL1361
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	WETLabs ECO Puck Triplet BBFL2-SLO scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::113	SDN:L22::TOOL1317
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Agilent Cary Eclipse fluorescence spectrophotometer	A laboratory instrument that measures the amount of	SDN:L05::113	SDN:L22::TOOL1222
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	Seapoint chlorophyll fluorometer	A high-performance, low power fluorometer for in-situ	SDN:L05::113	SDN:L22::TOOL0119
fluorometers	Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of e	SeaTech S131 fluorometer	A chlorophyll-a fluorometer with six internally selecta	SDN:L05::113	SDN:L22::TOOL0187
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Technicap NOEX bottle	Water bottle designed for oceanographic sampling. T	SDN:L05::30	SDN:L22::TOOL0538
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	General Oceanics GO-FLO water sampler	A plastic free-flushing water sampling bottle with a ca	SDN:L05::30	SDN:L22::TOOL0506
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Nereides 300l sample bottle	A 300 litre capacity sampling bottle designed for ocea	SDN:L05::30	SDN:L22::TOOL0552
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Plymouth Marine Laboratory Interfacial Sampler	A sampler comprising a frame fitted with 10 horizonta	SDN:L05::30	SDN:L22::TOOL0546
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Friedinger bottle water sampler	A free flushing sample bottle of 1-5 litre capacity com	SDN:L05::30	SDN:L22::TOOL0508
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Lancaster University syringe water sampler	A water sample collection system comprising a perist	SDN:L05::30	SDN:L22::TOOL0547
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::30	SDN:L22::TOOL0564
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Autosampling and Recording Instrumental Environmental Sampler - Dunn et al. (1993)	A stretched version of the Lowestoft modified Gulf III	SDN:L05::30	SDN:L22::NETT0004
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Nansen-Petterson water bottle	Metal or plastic insulated bottles with an approximate	SDN:L05::30	SDN:L22::TOOL0248
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Plymouth Marine Laboratory Near-Surface Sampling Device	A water sample collection system comprising a flotat	SDN:L05::30	SDN:L22::TOOL0548
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Niskin bottle	A plastic free-flushing water sampling bottle with a ca	SDN:L05::30	SDN:L22::TOOL0412
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	McLane RAS-100 remote-access sampler	A deep water or coastal time series water sampler tha	SDN:L05::30	SDN:L22::TOOL0940
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Cefas water sampler	A programmable water sampler developed in-house,	SDN:L05::30	SDN:L22::TOOL1339
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Lindahl dividable phytoplankton sampling hose	A rubber hose (material may vary) comprising length	SDN:L05::30	SDN:L22::NETT0175
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Glass bottle and bung water sampler	Glass bottle of unknown capacity used for manual wa	SDN:L05::30	SDN:L22::TOOL0556
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	RAPID ISOMAP-UK manual water sampler	Manual water sample collection system used during t	SDN:L05::30	SDN:L22::TOOL0557
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	EnviroTech LLC Aqua Monitor Smart Water Sampler	A programmable water sampler that can collect up to	SDN:L05::30	SDN:L22::TOOL0381
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Autosampling and Recording Instrumental Environmental Sampler rosette water bottle	A custom made water sampling bottle designed to fit	SDN:L05::30	SDN:L22::TOOL0501
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	National Institute of Oceanography water sampling bottle	A plastic free-flushing water sampling bottle designed	SDN:L05::30	SDN:L22::TOOL0540
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Polypropylene 10L surface sample bottle	Polypropylene plastic bottle with 10 litre capacity use	SDN:L05::30	SDN:L22::TOOL0542
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Max Planck Institute Pump CTD water sampler	Free falling system developed by MPI which allows fo	SDN:L05::30	SDN:L22::TOOL0828
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Winchester bottle	A strong, heavy bottle typically made of brown glass	SDN:L05::30	SDN:L22::TOOL0537
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	McLane Research Laboratories PPS {Phytoplankton Sampler} water sampler	An autonomous time-series particulate sampler. It co	SDN:L05::30	SDN:L22::TOOL1326
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Water bottle	A generic term for a device for the collection of a wat	SDN:L05::30	SDN:L22::TOOL0235
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Knudsen reversing water bottle	A frameless reversing water bottle with reversing ther	SDN:L05::30	SDN:L22::TOOL0505
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	NIOZ PRISTINE ultraclean water sampler	Ultraclean water sampler developed by the Royal Net	SDN:L05::30	SDN:L22::TOOL0503
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Carboy	A rigid container made of material such as glass or h	SDN:L05::30	SDN:L22::TOOL0504
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Teflon-coated Niskin bottle	A teflon-coated free-flushing water sampling bottle wi	SDN:L05::30	SDN:L22::TOOL0418
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Transparent sample bottle	Sampling bottle of unknown material that posseses th	SDN:L05::30	SDN:L22::TOOL0543
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Lever Action Niskin Bottle	A plastic free-flushing water sampling bottle with a ca	SDN:L05::30	SDN:L22::TOOL0427
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Van Dorn water sampler	A free-flushing water sample bottle comprising a cylir	SDN:L05::30	SDN:L22::TOOL0502
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	National Institute of Oceanography plastic reversing water bottle	A 1.35 litre plastic water bottle designed by the Natio	SDN:L05::30	SDN:L22::TOOL0236
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Unspecified Marine Snow Catcher	A large water bottle (volume of approximately 100 litr	SDN:L05::30	SDN:L22::TOOL1253
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Bucket	Typically a watertight, vertical cylinder or truncated c	SDN:L05::30	SDN:L22::TOOL0536
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	Marine Scotland Opening Closing Environmental Acoustic Net water bottle	A custom made water sampling bottle designed to fit	SDN:L05::30	SDN:L22::TOOL0535
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	OSIL Marine Snow Catcher	The Marine Snow Catcher is a large volume water bo	SDN:L05::30	SDN:L22::TOOL0660
discrete water samplers	A device that collects an in-situ discrete water sample from any depth and returns it to the surface wit	McLane RAS-500 remote-access sampler	A deep water or coastal time series water sampler tha	SDN:L05::30	SDN:L22::TOOL0939
ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Satlantic Hyperspectral Surface Acquisition System (HyperSAS) radiometer	An above-water optical sensing system designed to p	SDN:L05::304	SDN:L22::TOOL1334
ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	AERONET SeaWIFS SeaPRISM radiometer	A CIMEL CE 318 Sun Photometer that has been moc	SDN:L05::304	SDN:L22::TOOL1120
ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Moderate Resolution Imaging Spectroradiometer	The Moderate Resolution Imaging Spectroradiometer	SDN:L05::304	SDN:L22::TOOL1035
ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Medium-Spectral Resolution, Imaging Spectrometer	A programmable, medium-spectral resolution, imagir	SDN:L05::304	SDN:L22::TOOL1086
ocean colour radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Sea-viewing Wide Field-of-view Sensor - SeaWiFS	The Sea-viewing Wide Field-of-view Sensor (SeaWiF	SDN:L05::304	SDN:L22::TOOL0867
sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another d	Garrett Screen surface sampler	A hand-held Monel (nickel-copper alloy) mesh screen	SDN:L05::84	SDN:L22::TOOL0507
sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another d	Challenger Oceanic Stand-alone Pump	A submersible battery powered water pump that suck	SDN:L05::84	SDN:L22::TOOL0469
sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another d	SubCtech OceanPack RACE 5th generation {FerryBox} combined pCO2 analyser and microplastics sampler	A flow-through system packaged into a mobile manif	SDN:L05::84	SDN:L22::TOOL1377
sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another d	Pall AcroPak 200 filter cartridge	A filter cartridge designed for small- to medium-volur	SDN:L05::84	SDN:L22::TOOL0420
sieves and filters	Devices that separate solid particles larger than a particular size from a sample collected by another d	Stand-alone pump	A submersible battery powered water pump that suck	SDN:L05::84	SDN:L22::TOOL0500
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	RS Aqua WaveRadar Rex wave and sea level sensor	Microwave radar measuring the distance between ins	SDN:L05::110	SDN:L22::TOOL0361
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Datawell MOSE-G1000	A GPS-based motion sensor to measure the long per	SDN:L05::110	SDN:L22::TOOL1027
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Sea-Bird SBE 26 SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wil	SDN:L05::110	SDN:L22::TOOL0024
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	AutoFlux Logging System	An autonomous system designed to produce continu	SDN:L05::110	SDN:L22::TOOL1193
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	RBR TWR-2050 Submersible Tide and Wave Recorder	The TWR-2050P is a small, self-contained, submersi	SDN:L05::110	SDN:L22::TOOL0729
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Radar Water Level Recorder	A generic term for radar water level recorders (also k	SDN:L05::110	SDN:L22::TOOL0331

wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	TRIAXYS directional wave sensor	A sensor packaged in a small stainless steel box with	SDN:L05::110	SDN:L22::TOOL0710
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Sea-Bird SBE 26plus SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wil	SDN:L05::110	SDN:L22::TOOL0696
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Datawell waverider buoy	A non-directional waverider system with an acceleror	SDN:L05::110	SDN:L22::TOOL0781
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Nortek 1 MHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::110	SDN:L22::TOOL0897
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Nortek acoustic wave and current profiler	A family of instruments that simultaneously measure	SDN:L05::110	SDN:L22::TOOL0898
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Nortek 400 kHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::110	SDN:L22::TOOL0895
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Nortek 600 kHz acoustic wave and current profiler	An instrument that simultaneously measures current	SDN:L05::110	SDN:L22::TOOL0896
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Fugro Oceanor Wavescan buoy meteorological package	A meteorological tower with wind, air pressure and ai	SDN:L05::110	SDN:L22::TOOL0265
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	National Oceanography Centre Spar Buoy [standard] capacitance wave wire buoy	A custom-built system that uses capacitance wave w	SDN:L05::110	SDN:L22::TOOL1324
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	CODAR SeaSonde continuous surface current mapping and wave monitoring HF radar system	A high-frequency radar system designed for fixed de	SDN:L05::110	SDN:L22::TOOL1366
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	TRIAXYS non-directional wave sensor	A sensor packaged in a small stainless steel box with	SDN:L05::110	SDN:L22::TOOL0709
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Helzel Messtechnik WERA HF Radar	A shore based remote sensing HF radar system usec	SDN:L05::110	SDN:L22::TOOL0603
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Fugro Oceanor Wavescan buoy waverider	A meteocean waverider buoy incorporating direction	SDN:L05::110	SDN:L22::TOOL0264
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Teledyne RDI Workhorse NEMO-WHSW600 Waves Processing Array	A module that may be attached to the Workhorse AD	SDN:L05::110	SDN:L22::TOOL0733
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	OceanWaveS WaMoS II 500 waves and surface current radar	The WaMoS II 500 radar is an industry-proven X-ban	SDN:L05::110	SDN:L22::TOOL0999
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Teledyne RDI Workhorse Waves Array	An optional upgrade package that may be fitted to RI	SDN:L05::110	SDN:L22::TOOL0636
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Datawell directional waverider buoy	A directional waverider buoy comprising a heave-pitc	SDN:L05::110	SDN:L22::TOOL0268
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Institute of Oceanographic Sciences shipborne wave recorder	A vessel-mounted wave recorder comprising a pair o	SDN:L05::110	SDN:L22::TOOL0612
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	National Oceanography Centre Spar Buoy [modified length] {Bubble Buoy} capacitance wave wire buoy	A custom-built system that uses capacitance wave w	SDN:L05::110	SDN:L22::TOOL1325
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	MIROS SM-050 Wave and Current Radar Mk III	A wave and surface current radar designed for the m	SDN:L05::110	SDN:L22::TOOL1093
wave recorders	Instrument that measures water column surface wave parameters including height, period, direction a	Interocean S4DW current meter directional wave monitor	Instrument combines electromagnetic current sensor	SDN:L05::110	SDN:L22::TOOL0157
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RS Aqua WaveRadar Rex wave and sea level sensor	Microwave radar measuring the distance between ins	SDN:L05::111	SDN:L22::TOOL0361
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RBR TGR-1050P submersible tide gauge	A pressure recorder designed to measure tides. Poss	SDN:L05::111	SDN:L22::TOOL0387
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::111	SDN:L22::TOOL1217
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	SEBAPULS 20 radar water level recorder	Pulse microwave radar measuring the distance betwe	SDN:L05::111	SDN:L22::TOOL0094
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aanderaa WLR 8 Water Level Recorder	The WLR 8 is a bottom pressure recorder recording s	SDN:L05::111	SDN:L22::TOOL0030
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Sea-Bird SBE 26 SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wil	SDN:L05::111	SDN:L22::TOOL0024
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	SEBAPULS 30 radar water level recorder	Pulse microwave radar measuring the distance betwe	SDN:L05::111	SDN:L22::TOOL0095
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RBR TWR-2050 Submersible Tide and Wave Recorder	The TWR-2050P is a small, self-contained, submersi	SDN:L05::111	SDN:L22::TOOL0729
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aanderaa WLR 7 Water Level Recorder	A bottom pressure recorder for measuring sea level i	SDN:L05::111	SDN:L22::TOOL0031
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Radar Water Level Recorder	A generic term for radar water level recorders (also k	SDN:L05::111	SDN:L22::TOOL0331
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Sea-Bird SBE 53 BPR Bottom Pressure Recorder	The SBE 53 BPR is a water level recorder with a Digi	SDN:L05::111	SDN:L22::TOOL0025
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	SEBAPULS 70 radar water level recorder	Pulse microwave radar measuring the distance betwe	SDN:L05::111	SDN:L22::TOOL0096
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Sea-Bird SBE 26plus SEAGAUGE Wave and Tide Recorder	The SBE 26 SEAGAUGE is a water level recorder wil	SDN:L05::111	SDN:L22::TOOL0696
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::111	SDN:L22::TOOL0613
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::111	SDN:L22::TOOL0737
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::111	SDN:L22::TOOL0738
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Valeport MIDAS water level recorder	A precision water level recorder designed for use in b	SDN:L05::111	SDN:L22::TOOL1011
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RBR TGR-2050 submersible tide gauge	A small (265mm x 38mm OD) self-contained, subme	SDN:L05::111	SDN:L22::TOOL0809
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	ReefNet Sensus Ultra	The ReefNet Sensus Ultra is a compact temperature	SDN:L05::111	SDN:L22::TOOL0731
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::111	SDN:L22::TOOL0675
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aanderaa WLR 5 Water Level Recorder	A bottom pressure recorder for measuring sea level i	SDN:L05::111	SDN:L22::TOOL0629
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aquatech AQUAlogger 520PT mini temperature and pressure logger	A miniature (200mm long, 32mm diameter) self-cont	SDN:L05::111	SDN:L22::TOOL0685
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Teleost Pressure Recorder	A pressure recorder developed by the Institute of Oce	SDN:L05::111	SDN:L22::TOOL0621
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RBR DR-1050 depth recorder	The DR-1050 is a pressure recorder with possible rar	SDN:L05::111	SDN:L22::TOOL0169
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Ott chart float tide gauge	Mechanical tide gauge with a float installed in a stillin	SDN:L05::111	SDN:L22::TOOL0097
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Ott optical float tide gauge	Mechanical tide gauge with a float installed in a stillin	SDN:L05::111	SDN:L22::TOOL0098
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Institute of Oceanographic Sciences MkII bottom pressure recorder	The instrument comprised a strain gauge, vibrating w	SDN:L05::111	SDN:L22::TOOL0594
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Coastal Leasing MacroTide water level recorder	A sub-surface water level recorder designed for meas	SDN:L05::111	SDN:L22::TOOL0302
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	AML Oceanographic Smart SV and P sound velocity probe	A sound velocity probe for use in shallow water appli	SDN:L05::111	SDN:L22::TOOL0830
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Ott magnetic float tide gauge	Mechanical tide gauge with a float installed in a stillin	SDN:L05::111	SDN:L22::TOOL0099
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Analogue tide gauge	Generic term for instruments that transform the dam	SDN:L05::111	SDN:L22::TOOL0335
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Coastal Leasing MacroTide+ water level recorder	A sub-surface water level recorder designed for meas	SDN:L05::111	SDN:L22::TOOL0303
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Institute of Oceanographic Sciences MkIII bottom pressure recorder	A deep water (300-5000m) seafloor pressure gauge c	SDN:L05::111	SDN:L22::TOOL0227
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	GE Druck RPT 350 Resonant Pressure Transducer	A Resonant Pressure Transducer, designed to meas	SDN:L05::111	SDN:L22::TOOL0680
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Cary Porter tide gauge	An analogue instrument that measured sea level by a	SDN:L05::111	SDN:L22::TOOL0622
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	RBR Concerto APT Accelerometer and Bottom Pressure Recorder	A combined triaxial quartz accelerometer and bottom	SDN:L05::111	SDN:L22::TOOL1353
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	GE Druck PTX and PCDR 1830 and 1840 series level pressure sensors	The PDCR 1830/1840 transducer (mV output) and P	SDN:L05::111	SDN:L22::TOOL0789
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Dataring pressure point transducer	The Dataring pressure point comprises differential tra	SDN:L05::111	SDN:L22::TOOL0013
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aanderaa pressure recorder	An early (1970s) pressure recorder that used a Digiq	SDN:L05::111	SDN:L22::TOOL0804
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Lea float tide gauge	The Lea gauge is a vertically mounted chart recordin	SDN:L05::111	SDN:L22::TOOL0010
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Wellhead tide gauge	The Wellhead gauge measures the sea level by meal	SDN:L05::111	SDN:L22::TOOL0015
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Ott pneumatic tide gauge	The Ott pneumatic gauge derives its measuring signa	SDN:L05::111	SDN:L22::TOOL0016
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Bubbler tide gauge	The full tide bubbler system normally consists of two	SDN:L05::111	SDN:L22::TOOL0011
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Institute of Oceanographic Sciences MkIV bottom pressure recorder	A deep water (300-5000m) seafloor pressure gauge c	SDN:L05::111	SDN:L22::TOOL0226
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Valeport 740 tide gauge	The Valeport 740 tide gauge is a strain gauge sensor	SDN:L05::111	SDN:L22::TOOL0320
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Aquatech AQUAlogger 520P mini pressure logger	A miniature (200mm long, 32mm diameter) self-cont	SDN:L05::111	SDN:L22::TOOL0686
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Mid-tide bubbler tide gauge	The operation of the mid tide bubbler is similar to tha	SDN:L05::111	SDN:L22::TOOL0012
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Heise Model DXD Digital Output Pressure Transducer	This is digital pressure transducer with an RS232 or I	SDN:L05::111	SDN:L22::TOOL0708
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Munro tide gauge	The Munro gauge measures sea level by means of a	SDN:L05::111	SDN:L22::TOOL0014
sea level recorders	Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed	Neyrpic bubbler pressure gauge	An early tide gauge comprising a seabed-mounted ga	SDN:L05::111	SDN:L22::TOOL0610
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Marudai - Nakai (1962)	Construction comprises a 250 cm diameter mouth op	SDN:L05::22	SDN:L22::NETT0091
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	OCEAN sampler pup net	Plankton net described as one of typically two simple	SDN:L05::22	SDN:L22::TOOL0987
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Octagon net - Sameoto and Jaroszynski (1976)	Has a 75 cm diameter iron channel octagon mouth o	SDN:L05::22	SDN:L22::NETT0125
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified Juday net - Clayton and Pavlou (1978)	A net designed to avoid surface contamination of the	SDN:L05::22	SDN:L22::NETT0079
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	WP3 net - UNESCO Working Party 3 (1968)	A non-closing net with a 1.13 m diameter mouth ope	SDN:L05::22	SDN:L22::NETT0170
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Clarke-Bumpus plankton sampler - Clarke and Bumpus (1939, 1950)	Construction is a 12.7 cm diameter mouth opening w	SDN:L05::22	SDN:L22::NETT0021
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Vertical and horizontal closing nets with flow meter - Nansen (1915)	Construction has a 35 to 100 cm net diameter (but up	SDN:L05::22	SDN:L22::NETT0164

plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Bottom skimmer - Frolander and Pratt (1962)	A double runner sled 46 cm wide x 23 cm tall x 132 c	SDN:L05::22	SDN:L22::NETT0015
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey Mini-Bongo net	A British Antarctic Survey-built small and light versio	SDN:L05::22	SDN:L22::TOOL0994
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ORI-200 - Omori (1965)	Has a 160 cm diameter mouth opening with 2x70 cm	SDN:L05::22	SDN:L22::NETT0132
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Bongo-style vertical closing net - Brown (1975)	An open pair of 50 cm diameter circular net hoops w	SDN:L05::22	SDN:L22::NETT0009
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Marunaka - Nakai (1962)	Has a 60 cm diameter mouth opening cylinder/cone	SDN:L05::22	SDN:L22::NETT0092
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	1-metre ring net	Plankton net described as 1-metre ring net; designed	SDN:L05::22	SDN:L22::TOOL0988
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	MTD horizontal net - Motoda (1971)	Comprises a 56 cm diameter cylinder (80 cm length	SDN:L05::22	SDN:L22::NETT0100
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Opening-closing mechanism for plankton nets - Bourdillon et al. (1978)	A double messenger system to allow a ring net to be	SDN:L05::22	SDN:L22::NETT0126
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Hensen egg net - Hensen (1887); Jenkins (1901); Wimpenny (1937)	Construction is a 38 cm diameter mouth (40 cm long	SDN:L05::22	SDN:L22::NETT0054
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Marine Scotland Opening Closing Environmental Acoustic Net MKI	An oceanographic sampler designed to be towed beh	SDN:L05::22	SDN:L22::NETT0171
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	CalCOFI net - Ahlstrom (1948)	A 100 cm diameter ring net about 5 m in length with	SDN:L05::22	SDN:L22::NETT0016
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey Towed Bongo Net	A British Antarctic Survey-built bongo net used to col	SDN:L05::22	SDN:L22::TOOL0995
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ORI-C - Omori (1965)	Has a 160 cm diameter mouth opening with 2x70 cm	SDN:L05::22	SDN:L22::NETT0133
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Marutoku - Nakai (1962)	Has a 45 cm diameter mouth opening with cylinder/c	SDN:L05::22	SDN:L22::NETT0093
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Ocean Research Institute Vertical Mulıple Plankton Sampler - Terazaki (1991)	Has a 100 cm x 100 cm rectangular mouth opening r	SDN:L05::22	SDN:L22::NETT0134
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Hyrdo-Bios MultiNet Mammoth	A multiple plankton sampler which facilitates horizon	SDN:L05::22	SDN:L22::NETT0187
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Multiple Plankton Sampler - Be et al. (1959); Be (1962)	Construction is a 50 cm x 50 cm opening with nets of	SDN:L05::22	SDN:L22::NETT0099
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Wishner Deep-Tow net system adapted for use on Alvin - Kim and Mullineaux (1998)	Three rectangular mouth opening nets ~30 cm wide x	SDN:L05::22	SDN:L22::NETT0166
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey multiple plankton net system based on MOCNESS	A British Antarctic Survey-built version of the Multiple	SDN:L05::22	SDN:L22::NETT0185
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Deep-Tow net system - Wishner (1980)	Three rectangular mouth opening nets ~30 cm wide x	SDN:L05::22	SDN:L22::NETT0030
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified Multiple Plankton Sampler - Weikert and John (1981)	A modified version of the Be MPS net with a rectangu	SDN:L05::22	SDN:L22::NETT0098
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Half-metre ring net	Plankton net described as 0.5-m ring net; designed w	SDN:L05::22	SDN:L22::TOOL0989
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Opening-closing net - Hoyle (1889)	A 61 cm diameter conical net (muslin or silk). No oth	SDN:L05::22	SDN:L22::NETT0127
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Marine Scotland Opening Closing Environmental Acoustic Net MKII	An oceanographic sampler designed to be towed beh	SDN:L05::22	SDN:L22::NETT0172
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Closing Net - Hart (1935)	A rod of wood or pipe is outfitted with a combination	SDN:L05::22	SDN:L22::NETT0023
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plankton-Bar - Tonolli (1951)	A device for continuously sampling plankton from se	SDN:L05::22	SDN:L22::NETT0140
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey N70 Plankton Net	A British Antarctic Survey-rebuilt version of the Nans	SDN:L05::22	SDN:L22::TOOL0996
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Micronketon net - Blackburn and Keith (1962)	A 152 cm x 152 cm rectangular mouth opening net a	SDN:L05::22	SDN:L22::NETT0094
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Manta net	A generic term for a net system designed for samplin	SDN:L05::22	SDN:L22::NETT0177
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N100 - Kemp et al. (1929); Marr (1938)	Cylinder-cone net structure. The cylinder is 100 cm d	SDN:L05::22	SDN:L22::NETT0102
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Opening-closing net system - Leavitt (1935, 1938)	100, 150, and 200 cm diameter nets made of scrim,	SDN:L05::22	SDN:L22::NETT0128
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Manta net - Brown and Cheng (1981)	A rectangular framework 100 cm wide by 20 cm tall v	SDN:L05::22	SDN:L22::NETT0088
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Discrete-depth plankton sampler - Aron et al. (1964)	A cod-end sampler used with IKMT or a 1-m diamete	SDN:L05::22	SDN:L22::NETT0029
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plankton pump sampler	An in situ pump and net system for collecting planktc	SDN:L05::22	SDN:L22::NETT0173
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Cod-end sampler - Motoda (1953)	Construction is a 15.5 cm diameter mouth opening a	SDN:L05::22	SDN:L22::NETT0024
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Planktonbenthos dredge - Beauchamp (1932)	A simple pair of U-shaped runners were connected b	SDN:L05::22	SDN:L22::NETT0141
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Wollaston pop-down net - Buchanan-Wollaston (1911)	A 55 cm net opening diameter 34 cm long made of c	SDN:L05::22	SDN:L22::NETT0167
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Opening-closing Bongo net - McGowan and Brown (1966)	A pair of circular hoops (70 cm diameter joined by a	SDN:L05::22	SDN:L22::NETT0011
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	MARMAP Bongo net - Posgay and Marak (1980)	Plankton net described as MARMAP Bongo Net [Pos	SDN:L05::22	SDN:L22::NETT0089
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Horizontal opening-closing plankton net - Slack (1955)	Has a 14.0 cm diameter mouth opening with framew	SDN:L05::22	SDN:L22::NETT0130
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Bottom plankton sampler - Omori (1969)	A 70 x 70 cm rectangular mouth opening net is attacl	SDN:L05::22	SDN:L22::NETT0013
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Enlarged Clarke-Bumpus sampler - Yentsch et al. (1962)	An enlarged (jumbo) version of the Clarke-Bumpus S	SDN:L05::22	SDN:L22::NETT0037
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	WP-2 standard net as described by UNESCO Working Party 2 (1968)	Plankton net described as the UNESCO WP-2 stand	SDN:L05::22	SDN:L22::NETT0168
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	NIPR-I sampler - Fukuchi et al. (1979)	A cylinder (24 cm x 57.5 cm) contains a motor driven	SDN:L05::22	SDN:L22::NETT0121
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Horizontal ichthyoplankton tow-net system - Nester (1987)	A 50 cm diameter circular net ring is mounted in a 53	SDN:L05::22	SDN:L22::NETT0069
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	HOrizontal PLAnkton SAmpler - Ruetzler et al. (1980)	18.5 cm diameter x 40 cm long plexiglass cylinder ho	SDN:L05::22	SDN:L22::NETT0064
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Enlarged Clarke-Bumpus sampler - Paquette et al. (1961)	Construction is a 25.4 cm diameter mouth opening w	SDN:L05::22	SDN:L22::NETT0038
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified North Pacific standard net - Motoda (1994)	Has a 45 cm diameter circular mouth opening with cy	SDN:L05::22	SDN:L22::NETT0123
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified N70 net - Currie ans Foston (1957)	A modified version of the Nansen net with a large dep	SDN:L05::22	SDN:L22::NETT0107
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Bottom plankton sampler - Macer (1867)	Approximately 30 cm x 20 cm mouth opening. Net di	SDN:L05::22	SDN:L22::NETT0014
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ICITA plankton net - Jossi (1966)	A 100 cm diameter mouth opening with a conical net	SDN:L05::22	SDN:L22::NETT0070
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	MARMAP 20-cm Bongo net	Plankton net described as 20-cm MARMAP Bongo N	SDN:L05::22	SDN:L22::TOOL0997
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Parachute net - Wheeler (1941)	This has a 275 cm diameter parachute opening taper	SDN:L05::22	SDN:L22::NETT0135
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Midwater net - Fowler (1898)	A 11.4 cm x 11.4 cm rectangular net mouth frame wi	SDN:L05::22	SDN:L22::NETT0095
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N200 - Kemp et al. (1929); Marr (1938)	Cylinder-cone net structure. The cylinder is 200 cm d	SDN:L05::22	SDN:L22::NETT0103
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Horizontal opening-closing net - Bigelow (1913)	A hinged ring to which a net with 75 cm diameter mo	SDN:L05::22	SDN:L22::NETT0129
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Diver tow net - Emery (1968)	A 30 cm diameter ring net with 0.183 mm mesh towe	SDN:L05::22	SDN:L22::NETT0031
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	KC Denmark AS small plankton net	Construction has an upper cylindrical net made of str	SDN:L05::22	SDN:L22::NETT0174
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Planktonbenthos sampler - Hensen (1895)	An eight wheeled carriage-like sled with a net mounte	SDN:L05::22	SDN:L22::NETT0142
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Chun-Peterson net - Chun (1888, 1903)	A vertical net lowered closed with propellor-activated	SDN:L05::22	SDN:L22::NETT0019
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Miniature Plankton Indicator - Henderson et al. (1936); Glover (1953)	This indicator had a body length of 33 cm, a diamete	SDN:L05::22	SDN:L22::NETT0136
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N450 - Kemp et al. (1929); Marr (1938)	Cylinder-cone net structure with four sections. The cy	SDN:L05::22	SDN:L22::NETT0104
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Diver-pushed net - Porter (1973)	A 50 cm diameter ring net 200 cm long with 0.12 mm	SDN:L05::22	SDN:L22::NETT0032
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plummet net - Hovekamp ; Daly [personal communication to Wiebe and Benfield]	Construction has a 100 cm diameter mouth with a lea	SDN:L05::22	SDN:L22::NETT0143
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ORI-33 - Omori (1965)	Has a 160 cm diameter mouth opening with 2x70 cm	SDN:L05::22	SDN:L22::NETT0169
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Fixed in-current plankton net - Johannes et al (1970)	A pair of 50 cm diameter nets made from number 10	SDN:L05::22	SDN:L22::NETT0137
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N50 - Kemp et al. (1929); Marr (1938)	Cylinder-cone net structure. The cylinder is 50 cm dia	SDN:L05::22	SDN:L22::NETT0105
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Bongo net	A generic term for a plankton net designed with doub	SDN:L05::22	SDN:L22::NETT0176
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Adriatic plankton sampler - Krsinic (1990)	Construction is a 50 cm diameter cylindrical sampler	SDN:L05::22	SDN:L22::NETT0001
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	WP-2-style net	Plankton net described as WP-2-style net; designed v	SDN:L05::22	SDN:L22::TOOL0980
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plummet net type II - Hovekamp (1989) and Daly [personal communication to Wiebe and Benfield]	A downward-fishing, vertical, closing plummet net wil	SDN:L05::22	SDN:L22::NETT0144
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plankton purse seine - Murphy and Clutter (1972)	A miniature purse seine 3048 cm long x 640 cm tall v	SDN:L05::22	SDN:L22::NETT0138
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N70 - Kemp et al. (1929)	Cylinder-cone net structure. The cylinder is 70 cm dia	SDN:L05::22	SDN:L22::NETT0106
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Epi-benthic plankton sampler - Bossanyi (1951)	Approximately 91 cm x 61 cm rectangular mouth with	SDN:L05::22	SDN:L22::NETT0040
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Deep Submergence Rescue Vehicle Alvin Net-1 - Grice and Huelsemann (1970)	A pair of nets were mounted onto the front of DSRV A	SDN:L05::22	SDN:L22::NETT0034
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Scotia closing plankton net - Bruce (1904)	Essentially like the Nansen net (construction has a 3	SDN:L05::22	SDN:L22::NETT0151
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Hand-held plankton net	Plankton net described as an hand-held plankton net	SDN:L05::22	SDN:L22::TOOL0981
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Indian Ocean standard net - Currie (1963)	Net has a 113 cm diameter mouth with 3 cylinder sec	SDN:L05::22	SDN:L22::NETT0075

plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Gimbal-ring zooplankton sampler - Kozasa (1984)	Construction is a double-gimballed frame 100 cm tall	SDN:L05::22	SDN:L22::NETT0045
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Umbrella net - Rakusa-Suszczewski (1972)	A pair of nets attached to an umbrella-like support. T	SDN:L05::22	SDN:L22::NETT0163
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ARIES pup net	Plankton net described as one of typically two simple	SDN:L05::22	SDN:L22::TOOL0986
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Apstein-style ring net	Plankton net described as Apstein-style ring net base	SDN:L05::22	SDN:L22::TOOL0978
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plymouth Marine Laboratory 63-um Bongo net	Plankton net described as 63 micron Bongo net as us	SDN:L05::22	SDN:L22::TOOL0983
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Maruchi conical nets - Nakai (1962)	Construction comprises a 130 cm diameter mouth op	SDN:L05::22	SDN:L22::NETT0090
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Epi-benthic plankton net - Russell (1928)	Construction is 122 cm wide x 30 cm tall rectangular	SDN:L05::22	SDN:L22::NETT0039
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	WP-2 net	Plankton net described as WP-2 net adapted from UI	SDN:L05::22	SDN:L22::TOOL0979
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	BAS MUDL Bongo net	A motion-compensated upwards and downwards lool	SDN:L05::22	SDN:L22::TOOL1181
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	University of Aberdeen size-resolving Bongo net	Plankton net described as University of Aberdeen 95-	SDN:L05::22	SDN:L22::TOOL0984
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Discovery net N70 V net - Currie and Foxton (1956)	A version of the Nansen net with a 70 cm diameter m	SDN:L05::22	SDN:L22::NETT0108
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Horizontal self-closing net - Kofoid (1911, 1911, 1912)	Has a 37 cm net diameter. Conical silk bolting cloth r	SDN:L05::22	SDN:L22::NETT0153
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Streamer Plankton sampler - Ishida (1963, 1964)	A 45 cm diameter mouth opening with a closing door	SDN:L05::22	SDN:L22::NETT0155
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	ORI nets - Omori (1965)	Generic term for 160 cm cylinder-cone nets equipped	SDN:L05::22	SDN:L22::NETT0131
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified opening-closing Bongo net - Sameoto and Jaroszynski (1976)	A 75 cm diameter reinforced ring held to the wire by t	SDN:L05::22	SDN:L22::NETT0010
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Closing net - Barnes (1953)	Construction is a hemispherical metal cowling mount	SDN:L05::22	SDN:L22::NETT0006
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey Foredeck Net	The foredeck (also fore-deck) net was designed by Di	SDN:L05::22	SDN:L22::TOOL0992
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	International Council for the Exploration of the Seas standard net - Ostenfeld and Jespersen (1924)	Net has 50 cm diameter mouth with 60 cm cylindrica	SDN:L05::22	SDN:L22::NETT0074
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Epi-benthic plankton sampler - Clutter (1965)	Construction is a 32cm x 32 cm rectangular mouth o	SDN:L05::22	SDN:L22::NETT0041
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	British Antarctic Survey Motion Compensated Bongo Net	A British Antarctic Survey-built motion compensated	SDN:L05::22	SDN:L22::TOOL0993
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Mechanically opening-closing epi-benthic plankton sled - Wickstead (1953)	Construction is a 61 cm x 30 cm rectangular mouth c	SDN:L05::22	SDN:L22::NETT0042
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Free-fall plankton net - Heron (1982)	A modified WP2 cylinder-cone closing net (mesh not	SDN:L05::22	SDN:L22::NETT0044
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Kitahara - Nakai (1962)	Net has a 24 cm diameter mouth opening for head pi	SDN:L05::22	SDN:L22::NETT0080
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	English umbrella net - Macaulay and Daly (1987)	A rectangular net 200 cm on a side and 300 cm long	SDN:L05::22	SDN:L22::NETT0036
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Plymouth Marine Laboratory twin WP-2 Bongo net	Plankton net described as PML twin WP-2 Bongo net	SDN:L05::22	SDN:L22::TOOL0982
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N-series (N50, N70, N100, N200, N450) nets - Kemp et al. (1929); Marr (1938)	Cylinder-cone nets of varying sizes that were used in	SDN:L05::22	SDN:L22::NETT0124
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Apstein net as described by Apstein (1896); Dakin (1908)	Plankton net described as the Apstein net (Apstein 18	SDN:L05::22	SDN:L22::NETT0003
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Modified Juday net - Aksnes and Magnesen (1983)	A pair of Juday nets with 40 cm diameter mouth oper	SDN:L05::22	SDN:L22::NETT0077
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Deep Submergence Rescue Vehicle Alvin Net-2 - Grice (1972)	A pair of nets were attached to a pair of rectangular f	SDN:L05::22	SDN:L22::NETT0035
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Reeve net - Reeve (1981)	A very large acrylic cylindrical cod end (30 litres) atta	SDN:L05::22	SDN:L22::NETT0147
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	N113 (modified Indian Ocean standard net) - Foxton (1969)	Plankton net described as N113 (modified Indian Oce	SDN:L05::22	SDN:L22::TOOL0990
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	Juday net - Juday (1916)	Net has a 25 cm diameter mouth opening with 33 cm	SDN:L05::22	SDN:L22::NETT0078
plankton nets	A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column i	North Pacific standard net - Motoda (1957)	Has a 45 cm mouth diameter with a conical net lengt	SDN:L05::22	SDN:L22::NETT0122
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::351	SDN:L22::TOOL1217
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	JFE Advantech Rinko III {ARO-CAV} oxygen sensor	A fast-response optical dissolved oxygen and temper	SDN:L05::351	SDN:L22::TOOL1294
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Neil Brown MK3 CTD	The Neil Brown MK3 CTD consists of an integral unit	SDN:L05::351	SDN:L22::TOOL0002
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::351	SDN:L22::TOOL0451
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Endeco model 1125 dissolved oxygen system	A controller with up to four multiplexed Endeco type 1	SDN:L05::351	SDN:L22::TOOL0277
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 4130	A dissolved oxygen sensor for use with Aanderaa dat	SDN:L05::351	SDN:L22::TOOL0102
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::351	SDN:L22::NETT0087
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Mettler Toledo FiveGo Portable Instruments	The Mettler Toledo FiveGo meters are portable instru	SDN:L05::351	SDN:L22::TOOL1218
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Kongsberg Maritime CONTROS HydroC CH4 (underwater) methane sensor	A methane sensor is designed for background metha	SDN:L05::351	SDN:L22::TOOL1303
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	AutoFlux Logging System	An autonomous system designed to produce continu	SDN:L05::351	SDN:L22::TOOL1193
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Battele Seaology pCO2 monitoring system	An autonomous air and water pCO2 monitoring devic	SDN:L05::351	SDN:L22::TOOL0878
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 3835	A dissolved oxygen sensor designed to mount on RC	SDN:L05::351	SDN:L22::TOOL0103
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::351	SDN:L22::NETT0097
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::351	SDN:L22::NETT0028
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 13 Dissolved Oxygen Sensor	Dissolved oxygen sensor with either a Beckmann (SE	SDN:L05::351	SDN:L22::TOOL0039
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Mettler Toledo SevenGo Portable Instruments	The Mettler Toledo SevenGo meters are portable inst	SDN:L05::351	SDN:L22::TOOL1137
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::351	SDN:L22::TOOL1360
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::351	SDN:L22::TOOL0613
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::351	SDN:L22::TOOL0737
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Idronaut Ocean Seven 316 plus CTD	An underwater CTD probe designed for on-line profili	SDN:L05::351	SDN:L22::TOOL1306
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::351	SDN:L22::TOOL0526
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::351	SDN:L22::TOOL0738
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 4175	A dissolved oxygen sensor for OEM applications. Me	SDN:L05::351	SDN:L22::TOOL0101
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Chelsea Technologies Group Aqualog CTD	A self-contained unit comprising pressure, temperatu	SDN:L05::351	SDN:L22::TOOL0043
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::351	SDN:L22::TOOL0675
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 37-SMP-IDO MicroCAT C-T-DO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::351	SDN:L22::TOOL0634
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 37-SMP-ODO MicroCAT C-T-ODO	The SBE 37 MicroCAT is a high accuracy conductivit	SDN:L05::351	SDN:L22::TOOL0869
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	YSI Model 57 Dissolved Oxygen Meter	A field instrument designed for measurement of disso	SDN:L05::351	SDN:L22::TOOL0549
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 43 I (integral) dissolved oxygen sensor	High performance through-flow Clark polarographic r	SDN:L05::351	SDN:L22::TOOL1233
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	National Marine Facilities Microelectrode Oxygen Sensor	A non-membrane dissolved oxygen sensor for marine	SDN:L05::351	SDN:L22::TOOL0405
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa 4831F oxygen optode	A dissolved oxygen sensor which provides analogue	SDN:L05::351	SDN:L22::TOOL1240
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	SubCtech OceanPack RACE 5th generation {FerryBox} combined pCO2 analyser and microplastics sampler	A flow-through system packaged into a mobile manif	SDN:L05::351	SDN:L22::TOOL1377
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	SubCtech OceanPack RACE 5th generation {FerryBox} combined pCO2 analyser and underway system	A flow-through system packaged into a mobile manif	SDN:L05::351	SDN:L22::TOOL1321
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sunburst Submersible Autonomous Moored Instrument Carbon Dioxide Sensor	A reagent based CO2 sensor for measuring partial pr	SDN:L05::351	SDN:L22::TOOL0139
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 63 dissolved oxygen sensor	An optode dissolved oxygen sensor mounted in plast	SDN:L05::351	SDN:L22::TOOL0739
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Pro Oceanus Mini CH4 Submersible pCH4 Sensor	A compact plug-n-play methane sensor designed to r	SDN:L05::351	SDN:L22::TOOL1242
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Pro Oceanus CO2-Pro Submersible pCO2 Sensor	An in-situ dissolved gas sensor measuring the partial	SDN:L05::351	SDN:L22::TOOL1119
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 43 Dissolved Oxygen Sensor	High performance through-flow Clark polarographic r	SDN:L05::351	SDN:L22::TOOL0036
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Unknown 1520 oxygen meter	A model of oxygen meter where the manufacturer is u	SDN:L05::351	SDN:L22::TOOL1354
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 4330 and 4330F	A dissolved oxygen sensor for use with Aanderaa dat	SDN:L05::351	SDN:L22::TOOL0826
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 3975	A dissolved oxygen sensor which provides analogue	SDN:L05::351	SDN:L22::TOOL0369
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa 4531 oxygen optode	A dissolved oxygen sensor which provides analogue	SDN:L05::351	SDN:L22::TOOL0969
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Sea-Bird SBE 43F Dissolved Oxygen Sensor	High performance through-flow Clark polarographic r	SDN:L05::351	SDN:L22::TOOL0037
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Franatech METS Methane Sensor	An underwater sensor for detecting dissolved methar	SDN:L05::351	SDN:L22::TOOL1244
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Unisense oxygen microsensor	A miniaturized Clark-type dissolved oxygen instrume	SDN:L05::351	SDN:L22::TOOL0461

dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa 4831 oxygen optode	A dissolved oxygen sensor which provides analogue	SDN:L05::351	SDN:L22::TOOL1239
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Lamont-Doherty Earth Observatory pCO2 underway system	An integrated system designed for underway measur	SDN:L05::351	SDN:L22::TOOL0913
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Pro Oceanus Mini CO2 (submersible) pCO2 analyser	A miniature, plug and play pCO2 analyser. It is desig	SDN:L05::351	SDN:L22::TOOL1319
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa 4330 oxygen optode	A dissolved oxygen sensor that uses a standard sens	SDN:L05::351	SDN:L22::TOOL1247
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Unknown dissolved oxygen meter	A dissolved oxygen meter where the instrument man	SDN:L05::351	SDN:L22::TOOL1358
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa Oxygen Optode 3830	A dissolved oxygen sensor designed to mount on RC	SDN:L05::351	SDN:L22::TOOL0836
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Pro Oceanus GTD-Pro dissolved gas sensor	In-situ dissolved gas sensor measuring the sum of th	SDN:L05::351	SDN:L22::TOOL0679
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa 4330 F oxygen optode	A dissolved oxygen sensor that uses a fast response	SDN:L05::351	SDN:L22::TOOL1248
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	Aanderaa optode	A generic label for a range of dissolved oxygen sensc	SDN:L05::351	SDN:L22::TOOL0805
dissolved gas sensors	Instrument that measures the concentration of gases, generally oxygen, dissolved in the water columr	PreSens OXY-10 Mini oxygen meter	The OXY-10 mini is a precise multi-channel oxygen r	SDN:L05::351	SDN:L22::TOOL1144
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::123	SDN:L22::TOOL1217
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Aquatec AQUAlogger 210TY turbidity sensor series	A series of in-situ turbidity sensors. They are primaril	SDN:L05::123	SDN:L22::TOOL1302
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::123	SDN:L22::TOOL0451
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Partrac Voyager II Benthic Annular Flume	A benthic flume designed for in-situ studies of sedime	SDN:L05::123	SDN:L22::TOOL1289
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	HOBI HydroScat-2 Optical Backscatter Fluorometer	Instrument that measures optical backscatter at 2 wa	SDN:L05::123	SDN:L22::TOOL0141
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet BB2FL-VMT scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1310
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	D and A Instruments Optical Backscatter Sensor OBS-3	Optical backscatter instrument measuring scattering	SDN:L05::123	SDN:L22::TOOL0579
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-NTU turbidity sensor	The ECO-NTU uses optical scattering at 700m to me	SDN:L05::123	SDN:L22::TOOL0879
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Seapoint Turbidity Meter	A turbidity meter that detects light scattered by partic	SDN:L05::123	SDN:L22::TOOL0104
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::123	SDN:L22::TOOL1360
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::123	SDN:L22::TOOL0613
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::123	SDN:L22::TOOL0737
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::123	SDN:L22::TOOL0526
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::123	SDN:L22::TOOL0738
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet BBFL2-IRB scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1311
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-FLNTU combined fluorometer and turbidity sensor	The ECO-FLNTU combines the ECO fluorometer with	SDN:L05::123	SDN:L22::TOOL0215
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs Water Quality Monitor	An instrument that incorporates WET Labs' fluorome	SDN:L05::123	SDN:L22::TOOL0675
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::123	SDN:L22::TOOL1318
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO FLBBCD backscattering sensor	A combined three channel ECO back scatter sensor t	SDN:L05::123	SDN:L22::TOOL1141
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::123	SDN:L22::TOOL0564
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO BB9 backscattering sensor	A sensor system for measuring optical backscattering	SDN:L05::123	SDN:L22::TOOL1125
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet FLBBCD-SLC scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1312
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Dr.Haardt BackScat Fluorometer Model 1302	Backscatter fluorometer comprising three optical sen	SDN:L05::123	SDN:L22::TOOL0066
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet FLBBCD-SLK scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1313
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-NTU(S) turbidity sensor	An optical scattering meter designed to measure in si	SDN:L05::123	SDN:L22::TOOL1390
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet sensor	A miniature version of the ECO Triplet sensor. It is a	SDN:L05::123	SDN:L22::TOOL0673
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-FLNTU(SB) combined fluorometer and turbidity sensor	A combined fluorometer and turbidity sensor with an	SDN:L05::123	SDN:L22::TOOL1320
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Triplet 6KFLBBCD scattering fluorescence sensor	A variant of the standard ECO sensor (http://vocab.n	SDN:L05::123	SDN:L22::TOOL1314
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-NTU(RT)D turbidity sensor	The ECO-NTU(RT)D uses optical scattering at 700m	SDN:L05::123	SDN:L22::TOOL0452
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-NTU(SB) turbidity sensor	An optical scattering meter designed to measure in s	SDN:L05::123	SDN:L22::TOOL1391
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Triplet sensor	A three-optical-sensor, user-defined instrument that r	SDN:L05::123	SDN:L22::TOOL0674
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	Dr.Haardt BackScat I Fluorometer Model 1101	Backscatter fluorometer with a xenon-flashlight sourc	SDN:L05::123	SDN:L22::TOOL0408
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Triplet 6KBBFL2 {6KFLFLBB} scattering fluorescence sensor	A variant of the standard ECO sensor (http://vocab.n	SDN:L05::123	SDN:L22::TOOL1315
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet BBFL2-VMT scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1309
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Triplet BBFL2 scattering fluorescence sensor	A three optical-sensor instrument designed for simult	SDN:L05::123	SDN:L22::TOOL1282
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet BB2FL-SLC scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1316
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-FLNTU(RT) combined fluorometer and turbidty sensor	A combined ECO fluorometer and optical scattering r	SDN:L05::123	SDN:L22::TOOL1283
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO FLBB scattering fluorescence sensor	A dual-optical-sensor that carries a single-wavelengtl	SDN:L05::123	SDN:L22::TOOL1361
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO Puck Triplet BBFL2-SLO scattering fluorescence sensor	A variant of the ECO Puck Triplet (http://vocab.nerc.a	SDN:L05::123	SDN:L22::TOOL1317
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-NTU(RT) turbidity sensor	An optical scattering meter designed to measure turb	SDN:L05::123	SDN:L22::TOOL1284
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO-VSF Optical Backscatter Meter	A three-angle optical backscatter meter, measuring s	SDN:L05::123	SDN:L22::TOOL0401
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	WETLabs ECO BB(RT)D Scattering Meter	Single angle optical backscattering meter, measures	SDN:L05::123	SDN:L22::TOOL0060
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	SeaTech Light Back-Scattering Sensor	The instrument projects light into the sample volume	SDN:L05::123	SDN:L22::TOOL0426
optical backscatter sensors	Instrument that measures the amount of electromagnetic radiation emitted into the water column retu	NOAA PMEL Miniature Autonomous Plume Recorder	National Oceanic Atmospheric Administration (NOAA	SDN:L05::123	SDN:L22::TOOL0954
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::355	SDN:L22::TOOL1217
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Zullig Hydropolytester profiler	Profiling package for measurement of water propertie	SDN:L05::355	SDN:L22::TOOL0451
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	University of Minnesota (automated) pH sensor	An in situ self-contained chemical sensor designed b	SDN:L05::355	SDN:L22::TOOL1367
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::355	SDN:L22::NETT0087
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Mettler Toledo FiveGo Portable Instruments	The Mettler Toledo FiveGo meters are portable instru	SDN:L05::355	SDN:L22::TOOL1218
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Mettler Toledo Delta 350 pH meter	The Delta 350 meter is a laboratory instrument desig	SDN:L05::355	SDN:L22::TOOL1219
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Mettler Toledo SevenGo Portable Instruments	The Mettler Toledo SevenGo meters are portable inst	SDN:L05::355	SDN:L22::TOOL1137
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	National Oceanography Centre Colorimetric Microfluidic pH sensor	A National Oceanography Centre custom designed b	SDN:L05::355	SDN:L22::TOOL1129
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Satlantic SeaFET V2 {Sea-Bird Scientific} (shallow) pH sensor	A pH sensor. The sensor can be used for ocean acidi	SDN:L05::355	SDN:L22::TOOL1293
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::355	SDN:L22::TOOL1360
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Mettler Toledo InLab Expert Pro electrode	An electrochemical pH electrode for use with a variet	SDN:L05::355	SDN:L22::TOOL1220
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Unisense pH microelectrode	A miniaturized conventional pH electrode. The instrur	SDN:L05::355	SDN:L22::TOOL1140
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Ruthern Instruments marine pH monitor	A pH monitor that may be included in either a portabl	SDN:L05::355	SDN:L22::TOOL0200
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::355	SDN:L22::TOOL0613
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::355	SDN:L22::TOOL0737
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Idronaut Ocean Seven 316 plus CTD	An underwater CTD probe designed for on-line profili	SDN:L05::355	SDN:L22::TOOL1306
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Sea-Bird SBE 18 pH Sensor	A pH sensor using a pressure-balanced glass-electro	SDN:L05::355	SDN:L22::TOOL0069
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Thermo Fisher Scientific (Thermo Scientific) ORION Ross pH electrode series	A series of pH electrodes that have been in productio	SDN:L05::355	SDN:L22::TOOL1322
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Satlantic SeaFET V1 pH sensor	A pH sensor. The sensor can be used for ocean acidi	SDN:L05::355	SDN:L22::TOOL1292
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::355	SDN:L22::TOOL0526
pH sensors	Instruments that measure the hydrogen ion concentration in the water column.	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::355	SDN:L22::TOOL0738
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	YSI EXO multiparameter water quality sondes	Comprehensive multi-parameter, water-quality monit	SDN:L05::181	SDN:L22::TOOL1217
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	Satlantic ISUS V2 Nitrate Sensor	An in-situ UV absorption sensor which calculates nitr	SDN:L05::181	SDN:L22::TOOL0135
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	National Oceanography Centre Nitrate Sensor SUV6	An in situ UV absorption spectrophotometer that mea	SDN:L05::181	SDN:L22::TOOL0370

nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::181	SDN:L22::TOOL0737
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::181	SDN:L22::TOOL0738
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	EnviroTech LLC NAS-3X Nutrient Analyser	In-situ nutrient analyzer for high-frequency time-serie	SDN:L05::181	SDN:L22::TOOL0380
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	Satlantic Submersible Ultraviolet Nitrate Analyser	The Submersible Ultraviolet Nitrate Analyser (SUNA)	SDN:L05::181	SDN:L22::TOOL0489
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	National Oceanography Centre (NOC) Nitrate and Nitrite v3.3c Lab-On-Chip (LOC) sensor	A developmental microfluidic sensor that can be use	SDN:L05::181	SDN:L22::TOOL1167
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	Satlantic ISUS V3 Nitrate Sensor	An active optical instrument with an internal UV light	SDN:L05::181	SDN:L22::TOOL0528
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	EnviroTech LLC NAS-2E Nutrient Analyser	In-situ nutrient analyser for high frequency time-serie	SDN:L05::181	SDN:L22::TOOL0170
nutrient analysers	Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phos	National Oceanography Centre (NOC) Nitrate and Nitrite v3.2c Lab-On-Chip (LOC) sensor	A stand-alone microfluidic wet-chemical (colourimetri	SDN:L05::181	SDN:L22::TOOL1103
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Mini-Hamon grab	The Mini-Hamon Grab was introduced by CEFAS an	SDN:L05::50	SDN:L22::TOOL0961
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Smith-McIntyre grab	This grab was designed to operate under difficult con	SDN:L05::50	SDN:L22::TOOL0962
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Day grab	The Day grab is regarded as a valuable alternative to	SDN:L05::50	SDN:L22::TOOL0963
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Unspecified Standard ponar grab	Developed in the mid-1960s (Powers and Robertson	SDN:L05::50	SDN:L22::TOOL1215
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Gunther grab	A light sediment grab, 12.5 cm wide and weighing 1k	SDN:L05::50	SDN:L22::TOOL0788
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Unspecified Petite ponar grab	Developed in the mid-1960s (Powers and Robertson	SDN:L05::50	SDN:L22::TOOL1216
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Hamon grab	The Hamon grab is used for obtaining samples in coa	SDN:L05::50	SDN:L22::TOOL0960
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Unspecified ponar grab	Developed in the mid-1960s (Powers and Robertson	SDN:L05::50	SDN:L22::TOOL1214
sediment grabs	A device that collects a sample of surface sediment including manually deployed equipment like a shc	Van Veen grab	A simple clam-shell sediment grab penetrating appro	SDN:L05::50	SDN:L22::TOOL0653
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V8 Coded Transmitter Tag	A small (8 mm diamter) acoustic transmitter used to	SDN:L05::TRTG	SDN:L22::TOOL1156
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V9 Coded Transmitter Tag	A small (9 mm diamter) acoustic transmitter used to	SDN:L05::TRTG	SDN:L22::TOOL1157
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V16 Coded Transmitter Tag	A 16 mm diamter acoustic transmitter used to track a	SDN:L05::TRTG	SDN:L22::TOOL1154
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Unspecified time depth recorder	A detachable device providing detailed depth informa	SDN:L05::TRTG	SDN:L22::TOOL1263
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V13 Coded Transmitter Tag	A small (13 mm diamter) acoustic transmitter used to	SDN:L05::TRTG	SDN:L22::TOOL1152
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V9AP Coded Transmitter Tag	A coded acoustic transmitter used to measure the ac	SDN:L05::TRTG	SDN:L22::TOOL1158
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V7 Coded Transmitter Tag	A small (7 mm diamter) acoustic transmitter used to	SDN:L05::TRTG	SDN:L22::TOOL1155
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Biotrack MK3 geolocator tags	A family of tags designed for tracking animal movem	SDN:L05::TRTG	SDN:L22::TOOL0929
tracking tags	Devices attached to living organisms with the purpose of determining the location of those organisms	Vemco V13AP Coded Accelerometer Pressure Transmitter Tag	A coded acoustic transmitter used to measure the ac	SDN:L05::TRTG	SDN:L22::TOOL1153
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Octagon net - Sameoto and Jaroszynski (1976)	Has a 75 cm diameter iron channel octagon mouth o	SDN:L05::67	SDN:L22::NETT0125
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Modified small Hardy Plankton Sampler - Miller (1961)	This is a small high-speed sampler (modified from th	SDN:L05::67	SDN:L22::NETT0053
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Automatic high-speed plankton sampler - Williamson (1962, 1963)	A sampler that has a series of 21 nets attached to the	SDN:L05::67	SDN:L22::NETT0005
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Gulf V high-speed sampler - Arnold (1959)	A 41 cm diameter mouth opening with frame 130 cm	SDN:L05::67	SDN:L22::NETT0050
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-Speed net model II - Cassie (1956)	Same as the model 1 (6cm diameter 6cm long brass	SDN:L05::67	SDN:L22::NETT0060
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Modified Gulf V high-speed sampler - Lockwood (1974)	Construction is a 50 cm diameter mouth opening x 2	SDN:L05::67	SDN:L22::NETT0049
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed net model I - Cassie (1956)	A brass cylinder 6 cm diameter and 6 cm long with b	SDN:L05::67	SDN:L22::NETT0059
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed sampler - Erdmann (1937)	Construction comprises a ~4.5 cm diameter mouth e	SDN:L05::67	SDN:L22::NETT0057
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed sampler - Zacharias (1907)	A cylindrical tube similar to Apstein's with ~3 cm diar	SDN:L05::67	SDN:L22::NETT0066
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed metal plankton net - Fry (1937)	Construction comprises a 10.2 cm diameter mouth o	SDN:L05::67	SDN:L22::NETT0058
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed multiple sampler - Porche (1978)	Comprises 4 nets and one intake. The nets rotate int	SDN:L05::67	SDN:L22::NETT0068
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Scripps-Narragansett high-speed multiple plankton sampler - Fish and Snodgrass (1962)	A 50 cm diameter mouth opening Gulf III sampler wit	SDN:L05::67	SDN:L22::NETT0152
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed net model III - Cassie (1956)	Same as model 2 (6cm diameter 6cm long brass cyli	SDN:L05::67	SDN:L22::NETT0061
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Gulf VII Pro-net and MAFF-Guildline high-speed samplers - Nash et al. (1998)	An un-encased frame 275 cm long and 76 cm in dian	SDN:L05::67	SDN:L22::NETT0051
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Bary Catcher high-speed plankton sampler - Bary et al. (1958)	Has a 22.9 cm diameter mouth opening behind a clo	SDN:L05::67	SDN:L22::NETT0017
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed sampler - Smith and Ahlstrom (1948)	Construction comprises a 2.54 cm diameter mouth e	SDN:L05::67	SDN:L22::NETT0055
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed successive plankton sampler - Motoda (1953)	Body is 10 cm diameter and 100 cm in length. Taper	SDN:L05::67	SDN:L22::NETT0065
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed net - Cassie (1956)	A combination of model 1, model 2 and model 3 nets	SDN:L05::67	SDN:L22::NETT0062
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Isaacs high-speed sampler - Ahlstrom (1958)	Construction comprises a 2.5 cm mouth opening exp	SDN:L05::67	SDN:L22::NETT0076
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Standard Plankton Indicator high-speed sampler - Hardy (1926, 1936); Glover (1953)	Originally had a 10.1 cm diameter mouth opening ex	SDN:L05::67	SDN:L22::NETT0154
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Vertical high-speed plankton net - Jaschnov (1961)	Rectangular mouth opening. Closed like a Juday net.	SDN:L05::67	SDN:L22::NETT0165
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed sampler - Apstein (1906)	Construction is a cylindrical tube with ~2 cm diamete	SDN:L05::67	SDN:L22::NETT0002
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Modified Gulf III high-speed sampler - Hempel (1960)	Construction comprises an entrance of 18 cm diamet	SDN:L05::67	SDN:L22::NETT0052
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Clarke Jet Net high-speed plankton sampler - Clarke (1964)	Construction is a 12 cm diameter mouth opening with	SDN:L05::67	SDN:L22::NETT0020
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Gulf I high-speed sampler - Arnold (1952)	A 7.6 cm diameter inside cylinder net 91 cm long of M	SDN:L05::67	SDN:L22::NETT0046
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed plankton sampler - Pierce (1937)	Construction comprises a 7 cm mouth opening of fro	SDN:L05::67	SDN:L22::NETT0056
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Nackthai net - Nellen and Hempel (1969)	A modified Gulf V sampler with a 20 cm diameter no	SDN:L05::67	SDN:L22::NETT0109
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Large Opening-closing High-speed Sampling System - Dunn et al. (1989, 1993)	Rectangular net design similar to BIONESS. Uses a	SDN:L05::67	SDN:L22::NETT0084
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Small plankton sampler - Glover (1953)	This is a small high-speed sampler (similar to the Ha	SDN:L05::67	SDN:L22::NETT0139
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High-speed tow net - Gauld and Beganal (1951)	A 46 cm diameter mouth opening with 15 cm long ca	SDN:L05::67	SDN:L22::NETT0063
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	High speed-sampler - Monti (1910)	A cylindrical tube modified from Zacharias with a 3-4	SDN:L05::67	SDN:L22::NETT0067
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	MAFF-Guildline high-speed samplers - Milligan and Riches (1983)	A modified Lowestoft Sampler -itself a modified Gulf	SDN:L05::67	SDN:L22::NETT0087
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Gulf III high-speed sampler - Gehringer (1952)	Construction is a 40.7 cm diameter nose piece entrar	SDN:L05::67	SDN:L22::NETT0048
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Lowestoft multiple high-speed plankton sampler - Beverton and Tungate (1967)	Construction comprises a 30.5 to 48.5 cm diameter	SDN:L05::67	SDN:L22::NETT0086
high-speed plankton samplers	A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Sam	Catcher II high-speed sampler	A high-speed, opening-closing plankton sampler.	SDN:L05::67	SDN:L22::NETT0018
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Eppley Total Ultraviolet Radiometer	The Eppley Total Ultraviolet Radiometer (TUVR) mea	SDN:L05::122	SDN:L22::TOOL0812
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments MER-2040A Profiling Spectroradiometer	An underwater radiometer designed for multiwavelen	SDN:L05::122	SDN:L22::TOOL0440
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CGR3 pyrgeometer	An instrument designed to measure far infrared radia	SDN:L05::122	SDN:L22::TOOL1332
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CGR4 pyrgeometer	An instrument designed to measure far infrared radia	SDN:L05::122	SDN:L22::TOOL1333
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments C-OPS spectroradiometer system	A radiometer system used for determining apparent c	SDN:L05::122	SDN:L22::TOOL1116
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Didcot/ELE DRP-5 PAR sensor	A sensor that measures the photon flux density of ligl	SDN:L05::122	SDN:L22::TOOL0128
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Alec Electronics MDS-MkV/L light intensity recorder	This is an ultra-miniature light meter less than 10cm	SDN:L05::122	SDN:L22::TOOL0918
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen PAR LITE radiometer	A non-submersible PAR sensor with a spectral range	SDN:L05::122	SDN:L22::TOOL0395
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QSP-2155 underwater PAR sensor	A custom-built version of the QSP-2150 Quantum Sc	SDN:L05::122	SDN:L22::TOOL1368
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::122	SDN:L22::NETT0097
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::122	SDN:L22::NETT0028
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Chelsea Technologies 4-pi Photosynthetically Active Radiation sensor HB 071	A submersible instrument designed to measure irradi	SDN:L05::122	SDN:L22::TOOL0480
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	TriOS RAMSES-ARC Hyperspectral UV-VIS Radiometer	This is a spectral radiometer measuring over the visu	SDN:L05::122	SDN:L22::TOOL0774
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Satlantic OCR-504 multispectral radiometer	A cosine-response, submersible radiometer designed	SDN:L05::122	SDN:L22::TOOL0625
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Satlantic OCR-507 multispectral radiometer	A cosine-response, submersible radiometer designed	SDN:L05::122	SDN:L22::TOOL0442
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM5 pyranometer	A first class pyranometer that measures solar irradiai	SDN:L05::122	SDN:L22::TOOL0919
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM6B pyranometer	A pyranometer that measures solar irradiance with a	SDN:L05::122	SDN:L22::TOOL0410

radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical QSP-200L underwater PAR	Underwater radiometer with a PAR spectral response	SDN:L05::122	SDN:L22::TOOL0070
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen SP LITE pyranometer	A silicon pyranometer with a spectral range of 400-1	SDN:L05::122	SDN:L22::TOOL0396
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QCP-2350 [underwater] PAR sensor	A cosine-corrected PAR quantum irradiance profiling	SDN:L05::122	SDN:L22::TOOL1186
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::122	SDN:L22::TOOL1360
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::122	SDN:L22::TOOL0737
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::122	SDN:L22::TOOL0738
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Ocean Optics HR4000 spectrometer	A microcontroller-based, miniature fibre optic spectro	SDN:L05::122	SDN:L22::TOOL0964
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Eppley UVB-1 pyranometer	A precision radiometer that measures biologically effe	SDN:L05::122	SDN:L22::TOOL0932
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	TriOS RAMSES-ACC-VIS Hyperspectral UV-VIS Radiometer	This is a spectral radiometer measuring over the visu	SDN:L05::122	SDN:L22::TOOL0775
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QSP-2150 underwater PAR sensor	Quantum Scalar Irradiance PAR Sensor. Developed	SDN:L05::122	SDN:L22::TOOL1305
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Pumped multiple sample collection system - Yamazi (1960)	A submersible pump mounted in a circular frame wo	SDN:L05::122	SDN:L22::NETT0146
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments Profiling Reflectance Radiometer PRR-600	An underwater radiometer designed for multiwavelen	SDN:L05::122	SDN:L22::TOOL0443
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::122	SDN:L22::NETT0007
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical QCD-905L underwater PAR sensor	Aluminum quantum cosine PAR sensor with log outp	SDN:L05::122	SDN:L22::TOOL0286
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Skye Instruments SKE510 PAR energy sensor	A PAR energy sensor suitable for atmospheric or ver	SDN:L05::122	SDN:L22::TOOL0411
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical QSR-240 surface PAR	Shipboard radiometer with a PAR spectral response	SDN:L05::122	SDN:L22::TOOL0071
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QCP-2350-HP [underwater] PAR sensor	A cosine-corrected PAR quantum irradiance profiling	SDN:L05::122	SDN:L22::TOOL1187
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Didcot DRP-1 PAR sensor	Instrument used to measure the photosynthetically a	SDN:L05::122	SDN:L22::TOOL0927
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Satlantic HyperOCR spectroradiometer series	A series of cosine-response radiometers for in-water	SDN:L05::122	SDN:L22::TOOL1117
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Satlantic Micro Surface Acquisition System (MicroSAS) radiometer	A remote sensing system for above-water measurem	SDN:L05::122	SDN:L22::TOOL0398
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Eppley Precision Spectral Pyranometer	A discontinued instrument that measured sun and sk	SDN:L05::122	SDN:L22::TOOL0666
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Delta-T Instruments PAR sensor	Instrument used to measure the photosynthetically a	SDN:L05::122	SDN:L22::TOOL0928
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical QCP-2300 underwater PAR sensor	Log output quantum cosine PAR profiling sensor. For	SDN:L05::122	SDN:L22::TOOL0288
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen PSQ1 PAR Quantum Sensor	A non-submersible PAR sensor incorporating a diffus	SDN:L05::122	SDN:L22::TOOL0530
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Satlantic Photosynthetically Active Radiation sensor	PAR (400 - 700 nm) sensor that measures quantum	SDN:L05::122	SDN:L22::TOOL0973
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Apogee CS300 pyranometer	A silicon pyranometer with a spectral range of 300-1	SDN:L05::122	SDN:L22::TOOL0224
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QCP-2200 [underwater] PAR sensor	A cosine-corrected PAR quantum irradiance profiling	SDN:L05::122	SDN:L22::TOOL1189
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Marcel Kruse PAR Spectrometer	Self-contained spectral radiometer manufactured by	SDN:L05::122	SDN:L22::TOOL0067
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	LI-COR LI-192 PAR sensor	An underwater or atmospheric quantum sensor with	SDN:L05::122	SDN:L22::TOOL0120
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Underwater PAR radiometer	Underwater PAR radiometer of unknown type. Assum	SDN:L05::122	SDN:L22::TOOL0074
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Skye High Output Silicon Cell Pyranometer Sensor SKL 2650	A cosine corrected silicon cell pyranometer designed	SDN:L05::122	SDN:L22::TOOL0479
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	JFE Advantech DEFI2-L PAR sensor	A pocket-sized PAR logger. It measures photon flux	SDN:L05::122	SDN:L22::TOOL1126
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Bangor Ocean Colour Sensor	An ocean colour sensor set measuring upwelling irra	SDN:L05::122	SDN:L22::TOOL0597
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM11 pyranometer	A secondary standard pyranometer that measures sc	SDN:L05::122	SDN:L22::TOOL0082
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Chelsea Technologies Group 2-pi PAR irradiance sensor	A submersible irradiance sensor designed by Plymou	SDN:L05::122	SDN:L22::TOOL0050
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	WETLabs ECO-PAR	A cosine-collector underwater light meter in an acetal	SDN:L05::122	SDN:L22::TOOL0676
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	LI-COR LI-190 PAR sensor	A non-submersible cosine-corrected PAR sensor sen	SDN:L05::122	SDN:L22::TOOL0193
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QSP-2350 underwater PAR sensor	Quantum Scalar Irradiance PAR Sensor. Developed f	SDN:L05::122	SDN:L22::TOOL1277
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Eppley Precision Infrared Radiometer Pyrgeometer	The Eppley Precision Infrared Radiometer (PIR) pyrg	SDN:L05::122	SDN:L22::TOOL0083
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Skye Instruments SKS1110 pyranometer	A silicon cell pyranometer for measurement of sunlig	SDN:L05::122	SDN:L22::TOOL0194
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Skye SKP215 Quantum Sensor	A meteorological radiometer with a blue-enhanced sil	SDN:L05::122	SDN:L22::TOOL0645
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen SP LITE2 pyranometer	A silicon pyranometer with a spectral range of 400-1	SDN:L05::122	SDN:L22::TOOL0529
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM6 pyranometer	A first class pyranometer that measures solar irradia	SDN:L05::122	SDN:L22::TOOL0920
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM14 albedometer	An albedometer that measures net global radiation a	SDN:L05::122	SDN:L22::TOOL0922
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical Instruments QSR-2000 series quantum scalar reference sensors	Irradiance sensors which measure the total incident F	SDN:L05::122	SDN:L22::TOOL0811
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Plessey underwater radiometer	A submersible cosine collector radiometer designed t	SDN:L05::122	SDN:L22::TOOL0574
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Kipp and Zonen CM10 pyranometer	A secondary standard pyranometer that measures sc	SDN:L05::122	SDN:L22::TOOL0921
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	Biospherical PAR sensor (UnSpec model)	An irradiance sensor, designed to measure Photosyn	SDN:L05::122	SDN:L22::TOOL1254
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	TriOS RAMSES ACC-UV Hyperspectral UVA and UVB Radiometer	This is a spectral radiometer measuring over the UV	SDN:L05::122	SDN:L22::TOOL0810
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	LI-COR LI-1800UW Underwater Spectroradiometer	A cosine-collector underwater radiometer with a spec	SDN:L05::122	SDN:L22::TOOL0432
radiometers	Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the wa	LI-COR LI-193 Spherical Quantum PAR sensor	An underwater spherical quantum sensor which mea	SDN:L05::122	SDN:L22::TOOL0458
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Paine 3000 PSIA pressure sensor	A strain gauge pressure sensor rated to a maximum	SDN:L05::WPS	SDN:L22::TOOL0838
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Aquatec AQUAlogger 210TY turbidity sensor series	A series of in-situ turbidity sensors. They are primaril	SDN:L05::WPS	SDN:L22::TOOL1302
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Rockland Scientific MicroRider-1000 turbulence microstructure profiler	A self-contained device designed to measure turbuler	SDN:L05::WPS	SDN:L22::TOOL1232
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Biospherical Instruments C-OPS spectroradiometer system	A radiometer system used for determining apparent c	SDN:L05::WPS	SDN:L22::TOOL1116
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Star-Oddi DST Tilt platform orientation sensor	A miniature data logger that measures and records te	SDN:L05::WPS	SDN:L22::TOOL1121
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Paine 1600 PSIA pressure sensor	A strain gauge pressure sensor rated to a maximum	SDN:L05::WPS	SDN:L22::TOOL0839
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	SMRU GPS Satellite Relay Data Logger (Argos)	A package comprising a wet/dry, pressure and tempe	SDN:L05::WPS	SDN:L22::TOOL0873
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Kistler 603B pressure sensor	A miniature quartz piezoelectric pressure sensor with	SDN:L05::WPS	SDN:L22::TOOL0852
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Paroscientific 410K Pressure Transducer	An absolute pressure transducer with a Digiquartz pr	SDN:L05::WPS	SDN:L22::TOOL0403
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Paroscientific Digiquartz depth sensors	A family of encapsulated pressure sensors based on	SDN:L05::WPS	SDN:L22::TOOL0931
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	GE Druck UNIK 5000 Pressure Sensing Platform	The UNIK 5000 is a bespoke pressure sensing unit th	SDN:L05::WPS	SDN:L22::TOOL0846
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Nortek Signature500 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use	SDN:L05::WPS	SDN:L22::TOOL1010
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Paroscientific 415K Pressure Transducer	An absolute pressure transducer with a Digiquartz pr	SDN:L05::WPS	SDN:L22::TOOL0475
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Sequoia LISST-200X particle size analyser	A submersible, self-contained sensor that uses laser	SDN:L05::WPS	SDN:L22::TOOL1369
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	JFE Advantech AAQ-RINKO 176 1.06 {AAQ176} water quality profiler	A water quality profiler featuring an array of 8 sensor	SDN:L05::WPS	SDN:L22::TOOL1360
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Sea-Bird SBE 39plus temperature sensor	A water body temperature sensor. It is designed for n	SDN:L05::WPS	SDN:L22::TOOL1122
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Aanderaa Pressure Sensor 4117/4117R	An integrated pressure and temperature sensor desig	SDN:L05::WPS	SDN:L22::TOOL1207
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::WPS	SDN:L22::TOOL1318
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Nortek Vector 3D Acoustic Velocimeter	An acoustic current meter designed to measure high-	SDN:L05::WPS	SDN:L22::TOOL1286
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	WETLabs ECO FLBBCD backscattering sensor	A combined three channel ECO back scatter sensor f	SDN:L05::WPS	SDN:L22::TOOL1141
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	JFE Compact-TD ATD-HR temperature and depth sensor	A light, small and robust autonomously deployable d	SDN:L05::WPS	SDN:L22::TOOL0977
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Sea-Bird SBE 37 {MicroCAT-CTP} (submersible) CTD logger series	A series of high accuracy conductivity and temperatu	SDN:L05::WPS	SDN:L22::TOOL1393
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Unknown temperature and pressure sensor	A temperature and pressure sensor package where th	SDN:L05::WPS	SDN:L22::TOOL1323
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Nortek Signature1000 Acoustic Doppler Current Profiler	An Acoustic Doppler Current Profiler (ADCP) for use	SDN:L05::WPS	SDN:L22::TOOL1009
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	WETLabs ECO BB9 backscattering sensor	A sensor system for measuring optical backscattering	SDN:L05::WPS	SDN:L22::TOOL1125
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	METAS Underwater Stereo Camera system	A stereo camera system designed for underwater est	SDN:L05::WPS	SDN:L22::TOOL1275
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Aquatec Aquascat 1000 R (automated) acoustic suspended sediment profiler	A high frequency acoustic suspended sediment profil	SDN:L05::WPS	SDN:L22::TOOL1357

water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Sediment Transport and Boundary Layer Equipment Mark II	A pop-up benthic lander with four Savonius rotor curr	SDN:L05::WPS	SDN:L22::TOOL0596
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Valeport Braystoke STM 500 temperature and salinity probe	A battery-operated, submersible probe that measures	SDN:L05::WPS	SDN:L22::TOOL1359
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	AML Oceanographic Smart X CTD	A triple port, real-time probe part of the AML Oceano	SDN:L05::WPS	SDN:L22::TOOL1331
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Campbell Scientific CS456 pressure transducer	A submersible pressure transducer. Its applications a	SDN:L05::WPS	SDN:L22::TOOL1124
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Sensoren Instrumente Systeme Digital Reversing Pressure Meter	First generation of digital reversing pressure meters r	SDN:L05::WPS	SDN:L22::TOOL1267
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	RBR Solo 3-D (submersible) pressure logger	A self-contained, single channel depth logger for moc	SDN:L05::WPS	SDN:L22::TOOL1397
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	Druck 2900 PSIA pressure sensor	A strain gauge pressure sensor rated to a maximum	SDN:L05::WPS	SDN:L22::TOOL0837
water pressure sensors	Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made	RBR Solo D (submersible) pressure logger series	Self-contained, single channel depth loggers for moo	SDN:L05::WPS	SDN:L22::TOOL1398
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	ASL AZFP Acoustic Zooplankton Fish Profiler	An autonomous scientific echosounder for the measu	SDN:L05::FFES	SDN:L22::TOOL1151
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Simrad EK-60 echosounder	A split-beam scientific echosounder primarily designe	SDN:L05::FFES	SDN:L22::TOOL0198
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Unspecified Institute of Oceanographic Sciences 10 kHz echosounder	A bathymetric echosounder manufactured by the Inst	SDN:L05::FFES	SDN:L22::TOOL1256
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Simrad ES60 echosounder	A third generation single-beam or split-beam multi-fre	SDN:L05::FFES	SDN:L22::TOOL0689
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	British Antarctic Survey Acoustic Towfish	An acoustic towfish developed by the British Antarcti	SDN:L05::FFES	SDN:L22::TOOL1202
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Simrad EK500 Fishery Research Echosounder	The EK500 is a modular triple frequency scientific ec	SDN:L05::FFES	SDN:L22::TOOL0857
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Simrad EK80 echo sounder	A high precision scientific echo sounder, designed to	SDN:L05::FFES	SDN:L22::TOOL1205
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Simrad Wideband Autonomous Transceiver (WBAT)	An autonomous, self-contained echo-sounder, desigr	SDN:L05::FFES	SDN:L22::TOOL1208
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Furuno FCV 292 video echosounder fish finder	The Furuno FCV-292 is a dual-frequency (28, 50, 88	SDN:L05::FFES	SDN:L22::TOOL0795
Fish-finder echosounders	Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic	Furuno FCV 582 video echosounder fish finder	The Furuno FCV-582 is dual-frequency (50kHz and 2	SDN:L05::FFES	SDN:L22::TOOL0796
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified box corer	A marine geological tool that recovers undisturbed sc	SDN:L05::51	SDN:L22::TOOL1177
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Bowers and Connelly Mega Corer	A sediment corer which collects relatively undisturbe	SDN:L05::51	SDN:L22::TOOL0472
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	NIOZ PVC 15cm manual sediment corer	A manual sediment corer produced by NIOZ for sam	SDN:L05::51	SDN:L22::TOOL0806
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified trigger corer	A trigger corer is a marine geological coring device u	SDN:L05::51	SDN:L22::TOOL1178
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	NIOZ Steel 10.5cm manual sediment corer	A manual sediment corer produced by NIOZ for sam	SDN:L05::51	SDN:L22::TOOL0807
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Partrac Voyager II Benthic Annular Flume	A benthic flume designed for in-situ studies of sedim	SDN:L05::51	SDN:L22::TOOL1289
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified sediment corer	A generic term for a coring device that allows for rela	SDN:L05::51	SDN:L22::TOOL1374
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Oktopus MC8-12 multicorer	An oceanographic sediment core sampling device. C	SDN:L05::51	SDN:L22::TOOL1191
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	British Antarctic Survey gravity corer	Gravity corer built in 2010 by P.Smit, Netherland. It w	SDN:L05::51	SDN:L22::TOOL1179
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified HAPS corer	A generic term for a HAPS corer. It is a gravity corer	SDN:L05::51	SDN:L22::TOOL1375
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified manual sediment corer	A hand-held sediment corer. Consists of a tube that i	SDN:L05::51	SDN:L22::TOOL1376
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Duncan and Associates unknown box corer	A Duncan and Associates box corer where the model	SDN:L05::51	SDN:L22::TOOL1173
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	British Antarctic Survey (long) piston corer	Long Piston Corer (LPC) developed by BAS in collab	SDN:L05::51	SDN:L22::TOOL1169
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	National Marine Facilities piston corer	A marine piston corer part of the UK National Marine	SDN:L05::51	SDN:L22::TOOL1176
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	National Marine Facilities gravity corer	A marine sediment corer. The corer consists of a wei	SDN:L05::51	SDN:L22::TOOL1175
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified vibrocorer	A corer designed to collect sediment samples from u	SDN:L05::51	SDN:L22::TOOL1235
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified gravity corer	Marine geological coring device that uses a lead weig	SDN:L05::51	SDN:L22::TOOL1260
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	British Geological Survey RD1 5m (combined) rockdrill and vibrocorer	A combined rockdrill and vibrocorer system develope	SDN:L05::51	SDN:L22::TOOL1172
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	BX-650 box corer	A box corer designed for sediment surface sampling,	SDN:L05::51	SDN:L22::TOOL1204
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	GEMAX gravity corer	A gravity corer with an internal tube diameter of 90mi	SDN:L05::51	SDN:L22::TOOL1285
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Duncan and Associates gravity corer	A marine sediment corer. It uses the pull of gravity to	SDN:L05::51	SDN:L22::TOOL1174
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Unspecified kasten corer	A marine geological coring device designed to sampl	SDN:L05::51	SDN:L22::TOOL1199
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	British Geological Survey VC1 6m vibrocorer	British Geological Survey (BGS) VC1 Vibrocorer is a	SDN:L05::51	SDN:L22::TOOL1171
unconsolidated sediment corers	Devices designed to collect samples of unconsolidated sediment from between the surface and depth	Barnett-Watson multiple corer	A corer designed at SMBA (current name Scottish As	SDN:L05::51	SDN:L22::TOOL0784
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	British Geological Survey Deep Tow Boomer	A British Geological Survey-built seismic tool, design	SDN:L05::153	SDN:L22::TOOL1262
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	University of Hamburg Airgun Seismic Reflection System	A single-channel seismic reflection profiling system d	SDN:L05::153	SDN:L22::TOOL1194
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	British Geological Survey Airgun Profiling System	A British Geological Survey-built airgun profiling syst	SDN:L05::153	SDN:L22::TOOL1195
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	Kongsberg GeoAcoustics GeoPulse Boomer sub-bottom profiling system	A broad-band sound source system that operates in t	SDN:L05::153	SDN:L22::TOOL0831
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	British Geological Survey Sparker Profiling System	A British Geological Survey-built sparker profiling sys	SDN:L05::153	SDN:L22::TOOL1196
single-channel seismic reflection syste	An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that	National Marine Facilities Sea Systems (NMFSS) Single-Channel Airgun Seismic Reflection System	A NMFSS-built single-channel seismic reflection profi	SDN:L05::153	SDN:L22::TOOL1198
airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations c	Bolt Technology Corporation 2800-LLX air gun	A towed chamber that rapidly releases a single bubbl	SDN:L05::SNAG	SDN:L22::TOOL0355
airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations c	Bolt Technology Corporation 1900-LLXT air gun	A towed chamber that rapidly releases a single bubbl	SDN:L05::SNAG	SDN:L22::TOOL0356
airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations c	Bolt Technology Corporation 1500-LL air gun	A towed chamber that rapidly releases a single bubbl	SDN:L05::SNAG	SDN:L22::TOOL0357
airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations c	Bolt Associates Inc. PAR air gun	A towed chamber that rapidly released a single bubbl	SDN:L05::SNAG	SDN:L22::TOOL0358
airgun	A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations c	Bolt Technology Corporation Long-Life air gun	A family of air guns with maximum bubble sizes from	SDN:L05::SNAG	SDN:L22::TOOL0353
multi-channel seismic reflection syster	An energy source of unspecified frequency plus a multiple strings of towed hydrophones (streamers) t	National Marine Facilities Sea Systems (NMFSS) Multi-Channel Airgun Seismic Reflection System	A NMFSS-built multi-channel seismic reflection profil	SDN:L05::154	SDN:L22::TOOL1197
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston sampler - Schram et al. (1981)	A framework supports five 50 cm x 20 cm mouth ope	SDN:L05::69	SDN:L22::NETT0119
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - Zaitsev (1959, 1970)	Has a 60cm x 20 cm rectangular mouth aperture with	SDN:L05::69	SDN:L22::NETT0114
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - Willis (1963)	Has a 17.8 cm x 3.8 cm rectangular mouth opening c	SDN:L05::69	SDN:L22::NETT0116
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - Sconfietti and Cantonati (1990)	A 40 cm diameter net (60 cm long) is attached at the	SDN:L05::69	SDN:L22::NETT0112
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Surface plankton push net - Miller (1973)	A pair of rectangular nets (0.505 mm nylon mesh)eac	SDN:L05::69	SDN:L22::NETT0156
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Booby-II neuston net - Bieri and Newbury (1966)	Construction is a wooden frame 63 cm wide x 16.5 cı	SDN:L05::69	SDN:L22::NETT0012
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Midwater neuston trawl - Zaitsev (1970)	Construction is an elliptical metal frame 100 cm wide	SDN:L05::69	SDN:L22::NETT0096
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Modified David neuston net - Hempel and Weikert (1972)	A pair of vertically stacked nets with 30 cm x 15 cm r	SDN:L05::69	SDN:L22::NETT0027
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Mini-neuston net - Schram et al. (1981)	Neuston sampling system with three nets having a 60	SDN:L05::69	SDN:L22::NETT0115
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - Lippincott and Thomas (1983)	Has a 128 cm wide x 30 cm tall rectangular mouth op	SDN:L05::69	SDN:L22::NETT0110
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston sampler - Danielssen and Tveite (1968)	A framework supports five rectangular nets with mes	SDN:L05::69	SDN:L22::NETT0117
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	PNS neuston net - Zaitsev (1961, 1970)	A five-stage sampling frame with a height of 100 cm	SDN:L05::69	SDN:L22::NETT0145
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	British Antarctic Survey NEuston MOdified {NEMO} microplastics net	A HydroBios microplastic sampling net of mesh size	SDN:L05::69	SDN:L22::NETT0188
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - David (1965)	Has a 30 cm x 15 cm rectangular mouth opening with	SDN:L05::69	SDN:L22::NETT0113
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston net - Ellertsen (1977)	Six stacked nets two with 10 cm tall x 25 cm wide rec	SDN:L05::69	SDN:L22::NETT0111
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Neuston sampler - Sameoto and Jaroszynski (1969)	Has a 102 cm x 102 cm square mouth opening alum	SDN:L05::69	SDN:L22::NETT0118
neuston net	A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to	Manta net	A generic term for a net system designed for samplin	SDN:L05::69	SDN:L22::NETT0177
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation WX series	Airmar Ultrasonic WeatherStation WX series instrum	SDN:L05::102	SDN:L22::TOOL1028
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic AG HygroClip2 HC2-S3 L temperature and humidity probe	A temperature and humidity probe. It is used for long	SDN:L05::102	SDN:L22::TOOL1328
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vector Instruments air temperature sensor	Instrument used to measure air temperature. The mo	SDN:L05::102	SDN:L22::TOOL0923
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTU30T Pressure and Temperature Transmitter	The Vaisala PTU30T is an air pressure, humidity and	SDN:L05::102	SDN:L22::TOOL0740
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Atmospheric thermometer	A generic term for a device that measures atmosphe	SDN:L05::102	SDN:L22::TOOL0283
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Lufft WS501-UMB weather station	An all-in-one, multi-sensor weather station that uses	SDN:L05::102	SDN:L22::TOOL1365
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic Instruments MP1xxA humidity and temperature probe series	An analogue, linear response atmospheric humidity a	SDN:L05::102	SDN:L22::TOOL0617

meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic Instruments MP103A humidity and temperature probe	An analogue, linear response atmospheric humidity a	SDN:L05::102	SDN:L22::TOOL0399
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 365 Humidity and temperature transmitters	The Vaisala HMT365 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1099
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation PB200 weather station	An integrated, multi-parameter meteorological senso	SDN:L05::102	SDN:L22::TOOL1224
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala Present Weather Detector PWD series	Vaisala Present Weather and Visibility sensors (PWD	SDN:L05::102	SDN:L22::TOOL1003
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation 100WX	Airmar Ultrasonic WeatherStation 100WX is a compa	SDN:L05::102	SDN:L22::TOOL1029
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTU300 Pressure, Humidity and Temperature Transmitter	The Vaisala PTU300 is a series of air pressure, humi	SDN:L05::102	SDN:L22::TOOL0741
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic Instruments Hygromet (MP1xxH) humidity and temperature probe series	An analogue atmospheric humidity and temperature	SDN:L05::102	SDN:L22::TOOL0618
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic Hygromet MP102H temperature and humidity probe	Meteorological probe with a Hygro Clip HC2-S3 plug-	SDN:L05::102	SDN:L22::TOOL0494
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rotronic Hygromet MP402H temperature and humidity probe	Meteorological probe with a Hygro Clip HC2-S3 plug-	SDN:L05::102	SDN:L22::TOOL0495
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	AutoFlux Logging System	An autonomous system designed to produce continu	SDN:L05::102	SDN:L22::TOOL1193
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PA 11 digital barometer	An aviation quality digital barometer providing accura	SDN:L05::102	SDN:L22::TOOL0780
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala Present Weather Detector PWD10	Vaisala Present Weather and Visibility sensor PWD1	SDN:L05::102	SDN:L22::TOOL1004
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Rosemount ST2401 temperature probe	A platinum resistor thermometer with a serial interfac	SDN:L05::102	SDN:L22::TOOL0808
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation 150WX	Airmar Ultrasonic WeatherStation 150WX is a compa	SDN:L05::102	SDN:L22::TOOL1031
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Delta-T Devices WS-GP1 Weather Station	A compact Weather Station supplied as a ready to us	SDN:L05::102	SDN:L22::TOOL1279
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation 200WX	Airmar Ultrasonic WeatherStation 200WX is a compa	SDN:L05::102	SDN:L22::TOOL1032
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Airmar Ultrasonic WeatherStation 110WX	Airmar Ultrasonic WeatherStation 110WX is a compa	SDN:L05::102	SDN:L22::TOOL1030
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala Present Weather Detector PWD12	Vaisala Present Weather and Visibility sensor PWD1	SDN:L05::102	SDN:L22::TOOL1005
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Gemini Tinytag plus TGP-0050 temperature recorder	A data logger plus a 10k NTC thermistor internally m	SDN:L05::102	SDN:L22::TOOL0231
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala WXT520 weather transmitter	This is a a self-contained weather station measuring	SDN:L05::102	SDN:L22::TOOL0683
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 364 Humidity and temperature transmitters	The Vaisala HMT364 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1098
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Fugro Oceanor Wavescan buoy meteorological package	A meteorological tower with wind, air pressure and ai	SDN:L05::102	SDN:L22::TOOL0265
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala Present Weather Detector PWD22	Vaisala Present Weather and Visibility sensor PWD2	SDN:L05::102	SDN:L22::TOOL1007
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	CAE SPM20 Weather Station	A modular weather station	SDN:L05::102	SDN:L22::TOOL0690
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTB 210 digital barometer	Digital barometer using a silicon capacitive absolute	SDN:L05::102	SDN:L22::TOOL0397
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	YSI 44203 (thermilinear network) temperature sensor	A combined thermistor component and resistor set. It	SDN:L05::102	SDN:L22::TOOL1180
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	CAE TU20 thermistor/hygrometer	An electronic hygrometer TU20 that comprises a PT1	SDN:L05::102	SDN:L22::TOOL0693
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 361 Humidity and temperature transmitters	The Vaisala HMT361 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1096
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMP temperature and humidity sensor	A family of sensors and instruments (sensors plus int	SDN:L05::102	SDN:L22::TOOL0081
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Campbell Scientific 50Y Temperature and Relative Humidity Probe	A meteorological probe that uses a 1000 ohm platinu	SDN:L05::102	SDN:L22::TOOL0646
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala DPA21 digital barometer	A digital aneroid barometer with serial communicatio	SDN:L05::102	SDN:L22::TOOL0779
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala WXT510 weather transmitter	This is a a self-contained weather station measuring	SDN:L05::102	SDN:L22::TOOL0682
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vector Instruments H301 psychrometer	A precision instrument for the measurement of air ter	SDN:L05::102	SDN:L22::TOOL0582
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Pico Technologies PT-104 Platinum Resistance Data Logger	The Pico Technologies Pt104 is a four-channel temp	SDN:L05::102	SDN:L22::TOOL0727
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTB220 Digital Barometer	Fully compensated digital barometer using a silicon c	SDN:L05::102	SDN:L22::TOOL0672
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala WXT500 weather transmitters	The Vaisala WXT500 family includes the WXT510 ar	SDN:L05::102	SDN:L22::TOOL0894
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Young 61302 barometric pressure sensor	Young baromnetric pressure sensors combine high a	SDN:L05::102	SDN:L22::TOOL1001
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Hygrometer	A generic term for a device that measures atmosphe	SDN:L05::102	SDN:L22::TOOL0282
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Lambrecht Quatro NAV C1642 and CH1642 static weather sensors	A self-contained weather station for naval ships. it is	SDN:L05::102	SDN:L22::TOOL0966
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Young 41382 relative humidity and temperature probe	The Model 41382 Relative Humidity/Temperature Pro	SDN:L05::102	SDN:L22::TOOL1000
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	OSi OWI-430 DSP-WIVIS Present Weather and Visibility Sensor	The Osi OWI-430 WIVIS is an optical weather and vi	SDN:L05::102	SDN:L22::TOOL0726
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Campbell Scientific 215 Temperature and Relative Humidity Probe	A meteorological sensor that uses the Sensirion SHT	SDN:L05::102	SDN:L22::TOOL0647
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT310 temperature and humidity transmitter	The Vaisala HMT310 is a series of humidity and tem	SDN:L05::102	SDN:L22::TOOL0678
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 363 Humidity and temperature transmitters	The Vaisala HMT363 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1097
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 367 Humidity and temperature transmitters	The Vaisala HMT367 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1100
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTB330 digital barometer	A series of class A and B barometers designed for m	SDN:L05::102	SDN:L22::TOOL1015
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT300 humidity and temperature transmitters	The Vaisala HMT300 family includes Humidity and T	SDN:L05::102	SDN:L22::TOOL0893
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Barometer	A generic term for a device that measures atmosphe	SDN:L05::102	SDN:L22::TOOL0281
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTB100 barometric pressure sensor	A series of analogue barometers using the BAROCAI	SDN:L05::102	SDN:L22::TOOL0125
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Setra CS100 barometer	A barometer based on a capacitive pressure transdu	SDN:L05::102	SDN:L22::TOOL0222
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 368 Humidity and temperature transmitters	The Vaisala HMT368 is a humidity and temperature t	SDN:L05::102	SDN:L22::TOOL1101
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	CAE BA20 barometer	An electronic barometer with sensitivity of 0.1 hPa ar	SDN:L05::102	SDN:L22::TOOL0692
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT330 temperature and humidity transmitter	The Vaisala HMT330 is a series of humidity and tem	SDN:L05::102	SDN:L22::TOOL0677
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala PTB110 barometer	An industrial, analog barometer which uses a silicon	SDN:L05::102	SDN:L22::TOOL0701
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Institute of Oceanographic Sciences psychrometer	A psychrometer designed by Institute of Oceanograp	SDN:L05::102	SDN:L22::TOOL0080
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala Present Weather Detector PWD20	Vaisala Present Weather and Visibility sensor PWD2	SDN:L05::102	SDN:L22::TOOL1006
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Druck RPT 301 barometer	A barometer based on silicon pressure sensor having	SDN:L05::102	SDN:L22::TOOL0196
meteorological packages	Instrument that makes routine meteorological measurements on the atmosphere, typically air pressur	Vaisala HMT 360 series Humidity and temperature transmitters	The Vaisala HMT360 series of humidity and tempera	SDN:L05::102	SDN:L22::TOOL1095
anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation WX series	Airmar Ultrasonic WeatherStation WX series instrum	SDN:L05::101	SDN:L22::TOOL1028
anemometers	Instrument that measures wind speed and direction at a single elevation.	Lufft WS501-UMB weather station	An all-in-one, multi-sensor weather station that uses	SDN:L05::101	SDN:L22::TOOL1365
anemometers	Instrument that measures wind speed and direction at a single elevation.	Vaisala WAA15A cup anemometer	Three lightweight, conical cups mounted on the cup v	SDN:L05::101	SDN:L22::TOOL0877
anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation PB200 weather station	An integrated, multi-parameter meteorological senso	SDN:L05::101	SDN:L22::TOOL1224
anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation 100WX	Airmar Ultrasonic WeatherStation 100WX is a compa	SDN:L05::101	SDN:L22::TOOL1029
anemometers	Instrument that measures wind speed and direction at a single elevation.	Vector Instruments cup anemometer	Instrument used to measure wind speed. The model i	SDN:L05::101	SDN:L22::TOOL0924
anemometers	Instrument that measures wind speed and direction at a single elevation.	AutoFlux Logging System	An autonomous system designed to produce continu	SDN:L05::101	SDN:L22::TOOL1193
anemometers	Instrument that measures wind speed and direction at a single elevation.	Young 05305 Wind Monitor-AQ anemometer	An anemometer with a lightweight, carbon fibre thern	SDN:L05::101	SDN:L22::TOOL0220
anemometers	Instrument that measures wind speed and direction at a single elevation.	Vector Instruments wind vane	Instrument used to measure wind direction. The mod	SDN:L05::101	SDN:L22::TOOL0925
anemometers	Instrument that measures wind speed and direction at a single elevation.	Sonic Gill R3-100 Research sonic anemometer	Triaxial sonic anemometer with symmetrical head (ve	SDN:L05::101	SDN:L22::TOOL0404
anemometers	Instrument that measures wind speed and direction at a single elevation.	anemometer	A generic term for a mechanical device for measurin	SDN:L05::101	SDN:L22::TOOL0269
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Instruments Ltd WindMaster ultrasonic anemometer	Three axis ultrasonic anemometer offers sonic tempe	SDN:L05::101	SDN:L22::TOOL0616
anemometers	Instrument that measures wind speed and direction at a single elevation.	Vaisala WAV151 wind vane	A counter-balanced, low-threshold, optoelectic wind-v	SDN:L05::101	SDN:L22::TOOL0127
anemometers	Instrument that measures wind speed and direction at a single elevation.	Sonic Gill R3A-100 Research sonic anemometer	Triaxial sonic anemometer with asymmetric head and	SDN:L05::101	SDN:L22::TOOL0084
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Instruments WindObserver II Anemometer	The WindObserver II is a solid state ultrasonic anem	SDN:L05::101	SDN:L22::TOOL0704
anemometers	Instrument that measures wind speed and direction at a single elevation.	Cup and vane anemometer	A generic term for a device that measures windspeed	SDN:L05::101	SDN:L22::TOOL0280
anemometers	Instrument that measures wind speed and direction at a single elevation.	Metek uSonic-3 Scientific {formerly: USA-1} ultrasonic anemometer	A high precision 3D sonic anemometer. Typical appli	SDN:L05::101	SDN:L22::TOOL1402
anemometers	Instrument that measures wind speed and direction at a single elevation.	Munro SO/8 cup and vane anemometer	A cup and vane anemometer measuring horizontal w	SDN:L05::101	SDN:L22::TOOL0607
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Instruments Ltd WindMaster pro ultrasonic anemometer	Three axis ultrasonic anemometer offers sonic tempe	SDN:L05::101	SDN:L22::TOOL0615
anemometers	Instrument that measures wind speed and direction at a single elevation.	CAE DV20/VV20 anemometer	A cup and vane anemometer with sensity of 0.02 m/s	SDN:L05::101	SDN:L22::TOOL0691

anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation 150WX	Airmar Ultrasonic WeatherStation 150WX is a compa	SDN:L05::101	SDN:L22::TOOL1031
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Instruments Intrinsically Safe WindObserver anemometer	A 2-axis ultrasonic anemometer measuring horizonta	SDN:L05::101	SDN:L22::TOOL0605
anemometers	Instrument that measures wind speed and direction at a single elevation.	Delta-T Devices WS-GP1 Weather Station	A compact Weather Station supplied as a ready to us	SDN:L05::101	SDN:L22::TOOL1279
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Windobserver 70 (ultrasonic) anemometer	A solid state, heated ultrasonic anemometer. Designe	SDN:L05::101	SDN:L22::TOOL1213
anemometers	Instrument that measures wind speed and direction at a single elevation.	Gill Windsonic anemometer	A 2-axis sonic anemometer measuring horizontal win	SDN:L05::101	SDN:L22::TOOL0197
anemometers	Instrument that measures wind speed and direction at a single elevation.	Young MA05106 Wind Monitor anemometer	A lightweight anemometer with a helicoid propellor sp	SDN:L05::101	SDN:L22::TOOL0195
anemometers	Instrument that measures wind speed and direction at a single elevation.	Muir Matheson OMC-150 Combined Wind Speed and Direction Sensor	A cup and vane anemometer measuring horizontal w	SDN:L05::101	SDN:L22::TOOL0606
anemometers	Instrument that measures wind speed and direction at a single elevation.	Young 05103 Wind Monitor anemometer	An anemometer with a four blade helicoid propeller a	SDN:L05::101	SDN:L22::TOOL0260
anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation 200WX	Airmar Ultrasonic WeatherStation 200WX is a compa	SDN:L05::101	SDN:L22::TOOL1032
anemometers	Instrument that measures wind speed and direction at a single elevation.	Vaisala WAA151 cup anemometer	Three lightweight, conical cups mounted on the cup v	SDN:L05::101	SDN:L22::TOOL0126
anemometers	Instrument that measures wind speed and direction at a single elevation.	Airmar Ultrasonic WeatherStation 110WX	Airmar Ultrasonic WeatherStation 110WX is a compa	SDN:L05::101	SDN:L22::TOOL1030
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Teledyne Reson SeaBat 7125	The Teledyne Reson SeaBat 7125 is a 200-400kHz n	SDN:L05::157	SDN:L22::TOOL0772
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg (Simrad) EM 1002S multibeam echosounder	A 95 kHz multibeam echosounder, this is the shallow	SDN:L05::157	SDN:L22::TOOL0385
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg (Simrad) EM 1002 multibeam echosounder	A 95 kHz multibeam echosounder designed for use ir	SDN:L05::157	SDN:L22::TOOL0384
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 1000 m (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL0916
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B (profiling) multibeam echosounder series	A series of multibeam (swath) echosounders with vid	SDN:L05::157	SDN:L22::TOOL1342
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 120 x 20 degrees (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL1347
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	SeaBeam 2000 multibeam echo sounder	SeaBeam sensors are now manufactured by L-3 Con	SDN:L05::157	SDN:L22::TOOL0755
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Simrad EM12D multibeam echosounder	A low frequency (13 kHz) multibeam echo sounder w	SDN:L05::157	SDN:L22::TOOL0394
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Simrad EM12 S-120 multibeam echosounder	A low frequency (13 kHz) multibeam echo sounder w	SDN:L05::157	SDN:L22::TOOL0131
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Atlas Hydrographic Hydrosweep DS multibeam echo sounder	A deep water multi-beam echo sounder which uses a	SDN:L05::157	SDN:L22::TOOL0911
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Simrad SM2000 FR Multibeam Echosounder	A 200 kHz multibeam echosounder which can operat	SDN:L05::157	SDN:L22::TOOL0858
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 6000 m (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL1344
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Teledyne Reson SeaBat 8101	The Teledyne Reson SeaBat 8101 is a 240kHz multit	SDN:L05::157	SDN:L22::TOOL0773
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 4000 m (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL1345
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Atlas Hydrographic Hydrosweep DS 3 multibeam echo sounder	Also known as a DS 3G. A deep water multi-beam ec	SDN:L05::157	SDN:L22::TOOL0909
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg EM 122 multibeam echosounder	A multibeam 12 kHz echsounder designed for high re	SDN:L05::157	SDN:L22::TOOL0492
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	SeaBeam 3012 multibeam echo sounder	SeaBeam sensors are now manufactured by L-3 Con	SDN:L05::157	SDN:L22::TOOL0757
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 300 m (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL1346
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg (Simrad) EM 120 multibeam echosounder	A low frequency (12 kHz) multibeam echosounder wi	SDN:L05::157	SDN:L22::TOOL0386
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg EM 710 multibeam echosounder	The Kongsberg EM710 is a high resolution multibean	SDN:L05::157	SDN:L22::TOOL0746
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Atlas Hydrographic Hydrosweep DS 2 multibeam echo sounder	A deep water multi-beam echo sounder which uses a	SDN:L05::157	SDN:L22::TOOL0910
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg EM 302 multibeam echosounder	The Kongsberg EM302 is a 30 kHz multibeam echos	SDN:L05::157	SDN:L22::TOOL0744
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Teledyne Reson SeaBat 7160 multibeam echosounder	A multibeam echosounder for continental shelf mapp	SDN:L05::157	SDN:L22::TOOL1110
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Kongsberg EM 300 multibeam echosounder	The Kongsberg EM300 is a 30 kHz multibeam echos	SDN:L05::157	SDN:L22::TOOL0745
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	SeaBeam 2112 multibeam echo sounder	SeaBeam sensors are now manufactured by L-3 Con	SDN:L05::157	SDN:L22::TOOL0756
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	R2Sonic SONIC 2024 Wideband multibeam echosounder	A broadband - wideband high resolution shallow wate	SDN:L05::157	SDN:L22::TOOL1281
multi-beam echosounders	Instruments that measure water depth along several tracks parallel to the platform track by timing pul	Imagenex Delta T 837B 120 kHz (profiling) multibeam echosounder	A multibeam (swath) echosounder with video-imagin	SDN:L05::157	SDN:L22::TOOL1343
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Middleton Solar EQ08 Pyranometer	The Middleton EQ08 Solar Pyranometer is designed	SDN:L05::308	SDN:L22::TOOL0722
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Kipp and Zonen CNR4 Net Radiometer	The CNR4 is a net radiometer that measures the ene	SDN:L05::308	SDN:L22::TOOL0702
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Remote Measurement and Research Co. Portable Radiation Package model 1	An integrated system for making measurements of al	SDN:L05::308	SDN:L22::TOOL0912
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Along Track Scanning Radiometer - 1	A passive optical imager with dual view composed of	SDN:L05::308	SDN:L22::TOOL1072
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	AERONET SeaWIFS SeaPRISM radiometer	A CIMEL CE 318 Sun Photometer that has been moc	SDN:L05::308	SDN:L22::TOOL1120
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Very High Resolution Radiometer - 2	A radiation-detection imager with five spectral bands,	SDN:L05::308	SDN:L22::TOOL1075
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Along Track Scanning Radiometer - 2	A passive optical imager with dual view composed of	SDN:L05::308	SDN:L22::TOOL1073
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	CAE HE20/K pyranometer	A HE20/K pyranometer measuring total incident solai	SDN:L05::308	SDN:L22::TOOL0695
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Thermal And Near-infrared Sensor for Carbon Observation - Cloud and Aerosol Imager	The Thermal And Near-infrared Sensor for Carbon O	SDN:L05::308	SDN:L22::TOOL1054
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Lufft WS501-UMB weather station	An all-in-one, multi-sensor weather station that uses	SDN:L05::308	SDN:L22::TOOL1365
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Kipp and Zonen CGR3 pyrgeometer	An instrument designed to measure far infrared radia	SDN:L05::308	SDN:L22::TOOL1332
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Microwave Sounding Unit - A	A multi-channel microwave radiometer designed to m	SDN:L05::308	SDN:L22::TOOL1067
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Microwave Scanning Radiometer-2	A conical scanning, passive microwave radiometer d	SDN:L05::308	SDN:L22::TOOL1065
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Spinning Enhanced Visible and Infrared Imager	The Spinning Enhanced Visible and Infrared Imager (	SDN:L05::308	SDN:L22::TOOL1049
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Scanning Multichannel Microwave Radiometer	The Scanning Multichannel Microwave Radiometer (S	SDN:L05::308	SDN:L22::TOOL1050
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Kipp and Zonen CNR1 Net Radiometer	The CNR4 is a net radiometer that measures the ene	SDN:L05::308	SDN:L22::TOOL0703
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Microwave Sounding Unit - B	A five-channel microwave radiometer designed for hu	SDN:L05::308	SDN:L22::TOOL1068
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Moderate Resolution Imaging Spectroradiometer	The Moderate Resolution Imaging Spectroradiometer	SDN:L05::308	SDN:L22::TOOL1035
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Along-Track Scanning Radiometer	A passive optical imager with dual view composed of	SDN:L05::308	SDN:L22::TOOL1061
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Special Sensor Microwave Imager	The Special Sensor Microwave Imager (SSM/I) is a p	SDN:L05::308	SDN:L22::TOOL1052
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Geostationary Operational Environmental Satellite Imager (12-15)	A five-channel imaging radiometer designed to meas	SDN:L05::308	SDN:L22::TOOL1091
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Geostationary Operational Environmental Satellite Imager (8-11)	A five-channel imaging radiometer designed to meas	SDN:L05::308	SDN:L22::TOOL1090
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Tropical Rainfall Measuring Mission (TRMM) Microwave Imager	The Tropical Rainfall Measuring Mission's (TRMM) M	SDN:L05::308	SDN:L22::TOOL1058
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Japanese Advanced Meteorological Imager	A five-channel moderate resolution optical imager de	SDN:L05::308	SDN:L22::TOOL1085
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	WindSat Polarimetric Microwave Radiometer	The WindStat Polarimetric Microwave Radiometer is	SDN:L05::308	SDN:L22::TOOL1060
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Middleton Solar SK01-DP2 Pyranometer	The Middleton SK01-DP2 PAR Sensor (or Quantum S	SDN:L05::308	SDN:L22::TOOL0723
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Microwave Scanning Radiometer for Earth Observation from Space (AMSR-E)	A conical scanning, passive microwave radiometer d	SDN:L05::308	SDN:L22::TOOL1066
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Special Sensor Microwave Imager Sounder	The Special Sensor Microwave Imager Sounder (SSN	SDN:L05::308	SDN:L22::TOOL1053
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Very High Resolution Radiometer - 3	A radiation-detection imager with six spectral bands,	SDN:L05::308	SDN:L22::TOOL1076
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Micro-Wave Radiation Imager	The Microwave Radiation Imager (MWRI) is a conica	SDN:L05::308	SDN:L22::TOOL1037
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Atmospheric Infrared Sounder	A space-based cross-track scanning instrument desi	SDN:L05::308	SDN:L22::TOOL1063
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Kipp and Zonen CGR4 pyrgeometer	An instrument designed to measure far infrared radia	SDN:L05::308	SDN:L22::TOOL1333
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Advanced Very High Resolution Radiometer - 1	A radiation-detection imager with four spectral bands	SDN:L05::308	SDN:L22::TOOL1074
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Polarisation and Directionality of the Earth's Reflectances	POLDER (Polarisation and Directionality of the Earth	SDN:L05::308	SDN:L22::TOOL1042
atmospheric radiometers	Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for tl	Infrared Atmospheric Sounding Interferometer	A cross-nadir, hyperspectral infrared sounder, design	SDN:L05::308	SDN:L22::TOOL1084
current meters	Instrument that measures current speed and direction at a single depth.	Chernikeeff Aquaprobe Mk5 electromagnetic speed log	This is a military grade electromagnetic log system d	SDN:L05::114	SDN:L22::TOOL0206
current meters	Instrument that measures current speed and direction at a single depth.	NBA DNC-3 direct reading current meter	A direct-reading instrument measuring current speed	SDN:L05::114	SDN:L22::TOOL0583
current meters	Instrument that measures current speed and direction at a single depth.	Plessey recording current meter model 9021	An axial flow impeller current meter designed to oper	SDN:L05::114	SDN:L22::TOOL0577
current meters	Instrument that measures current speed and direction at a single depth.	Woods Hole Oceanographic Institution VMCM 2 {ng-vmcm} (submersible) vector measuring current meter	The VMCM2 current meter is based on the original Vl	SDN:L05::114	SDN:L22::TOOL1400
current meters	Instrument that measures current speed and direction at a single depth.	NBA DNC-2 recording current meter	A self-logging instrument measuring current speed w	SDN:L05::114	SDN:L22::TOOL0584

current meters	Instrument that measures current speed and direction at a single depth.	Plessey recording current meter model M021	An axial flow impeller current meter designed to oper	SDN:L05::114	SDN:L22::TOOL0578
current meters	Instrument that measures current speed and direction at a single depth.	Nortek Aquadopp 3D doppler current meter	The Aquadopp is a single-depth doppler current mete	SDN:L05::114	SDN:L22::TOOL0089
current meters	Instrument that measures current speed and direction at a single depth.	Nortek Aquadopp 6000 3D Doppler current meter	The Nortek Aquadopp 6000 is a single-depth doppler	SDN:L05::114	SDN:L22::TOOL0476
current meters	Instrument that measures current speed and direction at a single depth.	Nortek Aquadopp 3000 3D Doppler current meter	The Nortek Aquadopp 3000 is a single-depth doppler	SDN:L05::114	SDN:L22::TOOL0477
current meters	Instrument that measures current speed and direction at a single depth.	Marsh McBirney 585 OEM electromagnetic flowmeter	A rugged solid-state electromagnetic current sensor (	SDN:L05::114	SDN:L22::TOOL0057
current meters	Instrument that measures current speed and direction at a single depth.	RPS MetOcean CM 04 current meter	An acoustic current meter designed for the study of h	SDN:L05::114	SDN:L22::TOOL0957
current meters	Instrument that measures current speed and direction at a single depth.	NBA DNC-2B recording current meter	A self-logging instrument measuring current speed w	SDN:L05::114	SDN:L22::TOOL0585
current meters	Instrument that measures current speed and direction at a single depth.	Sperry Marine SRD 500 Doppler speed log	A dual-axis Doppler speedlLog operating at 307kHz.	SDN:L05::114	SDN:L22::TOOL0815
current meters	Instrument that measures current speed and direction at a single depth.	RPS MetOcean CM 04 PUV current meter	An acoustic current meter designed for the study of h	SDN:L05::114	SDN:L22::TOOL0958
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 11 Recording Current Meter	The RCM 11 is a single-point doppler recording curre	SDN:L05::114	SDN:L22::TOOL0026
current meters	Instrument that measures current speed and direction at a single depth.	Steedman Science and Engineering CM01 Acoustic Current Meter	A recording current meter fitted with two orthogonal a	SDN:L05::114	SDN:L22::TOOL0620
current meters	Instrument that measures current speed and direction at a single depth.	Neil Brown Smart acoustic current meter	An acoustic current meter with temperature sensor th	SDN:L05::114	SDN:L22::TOOL0835
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 9/11 Recording Current Meter	The RCM 9/11 a family of single-point doppler record	SDN:L05::114	SDN:L22::TOOL0029
current meters	Instrument that measures current speed and direction at a single depth.	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::114	SDN:L22::TOOL0564
current meters	Instrument that measures current speed and direction at a single depth.	Sediment Transport and Boundary Layer Equipment Mark II	A pop-up benthic lander with four Savonius rotor curr	SDN:L05::114	SDN:L22::TOOL0596
current meters	Instrument that measures current speed and direction at a single depth.	NBA DNC-2M recording current meter	A self-logging instrument measuring current speed w	SDN:L05::114	SDN:L22::TOOL0586
current meters	Instrument that measures current speed and direction at a single depth.	Sperry Marine SRD 301 Doppler speed log	A Doppler speed log for use on a range of marine ves	SDN:L05::114	SDN:L22::TOOL0886
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 7/8 Recording Current Meter	Family of self-recording paddle wheel current meters	SDN:L05::114	SDN:L22::TOOL0121
current meters	Instrument that measures current speed and direction at a single depth.	Interocean S4AD current meter	A current meter is designed to directly measure the tr	SDN:L05::114	SDN:L22::TOOL0153
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 9 LW Recording Current Meter	The RCM 9 LW is a single-point doppler recording cu	SDN:L05::114	SDN:L22::TOOL0027
current meters	Instrument that measures current speed and direction at a single depth.	Yokogawa EML500 FA2 electromagnetic speed log	A dual-axis, flush-mounted electromagnetic speed lo	SDN:L05::114	SDN:L22::TOOL0901
current meters	Instrument that measures current speed and direction at a single depth.	Valeport 308 recording current meter	A self-recording instrument with speed and direction	SDN:L05::114	SDN:L22::TOOL0587
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 9 IW Recording Current Meter	The RCM 9 IW is a single-point doppler recording cu	SDN:L05::114	SDN:L22::TOOL0028
current meters	Instrument that measures current speed and direction at a single depth.	Suber SLS21 vector-averaging current meter	A current meter fitted with a Savonius rotor magnetic	SDN:L05::114	SDN:L22::TOOL0611
current meters	Instrument that measures current speed and direction at a single depth.	Interocean S4 current meter	Basic elecromagnetic current meter with two pairs of	SDN:L05::114	SDN:L22::TOOL0154
current meters	Instrument that measures current speed and direction at a single depth.	Furuno DS 50 and DS 50T Doppler speed log	The Furuno DS-50 is a 3-beam Doppler speed log pr	SDN:L05::114	SDN:L22::TOOL0793
current meters	Instrument that measures current speed and direction at a single depth.	Valeport BFM 208 current meter	A current meter with styrene impeller current sensor	SDN:L05::114	SDN:L22::TOOL0638
current meters	Instrument that measures current speed and direction at a single depth.	Interocean S4R current meter	Basic elecromagnetic current meter with two pairs of	SDN:L05::114	SDN:L22::TOOL0155
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa Seaguard Recording Current Meter	A multi-frequency Doppler current sensor for measur	SDN:L05::114	SDN:L22::TOOL0306
current meters	Instrument that measures current speed and direction at a single depth.	SonTek Argonaut moored 3D doppler current meter	The Argonaut-MD is a single-point doppler 3D vector	SDN:L05::114	SDN:L22::TOOL0090
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa doppler current sensor 4100	A 2 MHz vector averaging sensor for measuring curre	SDN:L05::114	SDN:L22::TOOL0171
current meters	Instrument that measures current speed and direction at a single depth.	Uncles direct reading current meter	A version of the Valeport Braystoke impeller flow met	SDN:L05::114	SDN:L22::TOOL0449
current meters	Instrument that measures current speed and direction at a single depth.	Aanderaa RCM 4/5 Recording Current Meter	Family of self-recording current meters with Savonius	SDN:L05::114	SDN:L22::TOOL0211
current meters	Instrument that measures current speed and direction at a single depth.	Interocean S4A current meter	Advanced elecromagnetic current meter with two pair	SDN:L05::114	SDN:L22::TOOL0156
current meters	Instrument that measures current speed and direction at a single depth.	Furuno DS 80 Doppler speed log	The Furuno DS-80 is a pair-beam Doppler speed log	SDN:L05::114	SDN:L22::TOOL0794
current meters	Instrument that measures current speed and direction at a single depth.	Skipper Electronics DL 850 Doppler speed log	A dual axis speed log which uses the Doppler princip	SDN:L05::114	SDN:L22::TOOL0700
surface current radars	Instruments that measure the speed and direction of sea surface travel by timing reflected radio wave	CODAR SeaSonde continuous surface current mapping and wave monitoring HF radar system	A high-frequency radar system designed for fixed dep	SDN:L05::303	SDN:L22::TOOL1366
surface current radars	Instruments that measure the speed and direction of sea surface travel by timing reflected radio wave	Helzel Messtechnik WERA HF Radar	A shore based remote sensing HF radar system usec	SDN:L05::303	SDN:L22::TOOL0603
surface current radars	Instruments that measure the speed and direction of sea surface travel by timing reflected radio wave	MIROS SM-050 Wave and Current Radar Mk III	A wave and surface current radar designed for the m	SDN:L05::303	SDN:L22::TOOL1093
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia LISST-100X particle sizer	A self contained unit which measures the scattering c	SDN:L05::150	SDN:L22::TOOL1146
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia Laser In-Situ Sediment Size Transmissometer model 100-B	A self-contained unit which measures the scattering c	SDN:L05::150	SDN:L22::TOOL0441
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia LISST-200X particle size analyser	A submersible, self-contained sensor that uses laser	SDN:L05::150	SDN:L22::TOOL1369
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Lasentec Partec 100 focused beam reflectance measurement particle sizer	An in situ particle sizer that uses the principal of focu	SDN:L05::150	SDN:L22::TOOL0509
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia Laser In-Situ Sediment Size Transmissometer	A self-contained unit which measures the scattering c	SDN:L05::150	SDN:L22::TOOL0044
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Aquatec Aquascat 1000 R (automated) acoustic suspended sediment profiler	A high frequency acoustic suspended sediment profil	SDN:L05::150	SDN:L22::TOOL1357
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia LISST Digital Holographic Particle Imaging System	Submersible Digital Holographic Particle Imaging Sy	SDN:L05::150	SDN:L22::TOOL0855
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Focal Technologies Corporation optical plankton counter	An in-situ instrument with a sampling tunnel that cau	SDN:L05::150	SDN:L22::TOOL0628
in-situ particle sizers	Sensors or instruments physically located in any body of water that measure the size spectrum of par	Sequoia LISST-Glider Slocum G2-G3 particle size analyser	A submersible, self-contained sensor that uses laser	SDN:L05::150	SDN:L22::TOOL1370
acoustic backscatter sensors	Instrument that measures the amount of sound energy transmitted into the water column returned to t	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::183	SDN:L22::NETT0028
acoustic backscatter sensors	Instrument that measures the amount of sound energy transmitted into the water column returned to t	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::183	SDN:L22::NETT0007
acoustic backscatter sensors	Instrument that measures the amount of sound energy transmitted into the water column returned to t	Aquatec Aquascat 1000 R (automated) acoustic suspended sediment profiler	A high frequency acoustic suspended sediment profil	SDN:L05::183	SDN:L22::TOOL1357
acoustic backscatter sensors	Instrument that measures the amount of sound energy transmitted into the water column returned to t	Kongsberg Mesotech High-Resolution and Domed sonar heads 1071 / 1171 series	Single-beam underwater sonar heads, either high-res	SDN:L05::183	SDN:L22::TOOL1330
Flexotir	A seismic method for marine shooting whereby small charges are propelled through a rubber hose by	Institut Francais du Petrole Flexotir seismic source	A seismic source whereby small charges (50-150g) a	SDN:L05::FLXT	SDN:L22::TOOL0359
precipitation samplers	A device that collects a sample of precipitation (rain, hail or snow) as it falls.	University of East Anglia rainwater sampler	A rainwater sampler comprising a 40 cm diameter pc	SDN:L05::14	SDN:L22::TOOL0541
precipitation samplers	A device that collects a sample of precipitation (rain, hail or snow) as it falls.	Young 522 series Tipping Bucket Raingauge	A series comprising two tipping bucket raingauges, th	SDN:L05::14	SDN:L22::TOOL0648
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	Institute of Oceanographic Sciences 30 kHz sidescan sonar	A sidescan sonar operating at 30 kHz, manufactured	SDN:L05::152	SDN:L22::TOOL1264
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	BGS Waverley Sonar 3000 Side Scan Sonar	Waverley Sonar 3000 is the primary side scan sonar	SDN:L05::152	SDN:L22::TOOL0853
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	HAWAII MR1 Sidescan Sonar	HAWAII MR1 is a shallow towed sidescan sonar syst	SDN:L05::152	SDN:L22::TOOL0854
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	Kongsberg Mesotech High-Resolution and Domed sonar heads 1071 / 1171 series	Single-beam underwater sonar heads, either high-res	SDN:L05::152	SDN:L22::TOOL1330
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	Marine Electronics Sand Ripple Profiling Sonar	A single axis mechanically scanning sonar unit. The s	SDN:L05::152	SDN:L22::TOOL0046
sidescan sonars	Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that e	Marine Electronics 3D Sand Ripple Profiling Logging Sonar	A dual axis mechanically scanning sonar unit with a t	SDN:L05::152	SDN:L22::TOOL0045
gravimeters	Instrument that makes measurements of the Earth's gravity field.	LaCoste and Romberg S83 gravity meter modified by Zero Length Spring corporation	A gravity meter modified by the Zero Length Spring (/	SDN:L05::158	SDN:L22::TOOL1273
gravimeters	Instrument that makes measurements of the Earth's gravity field.	Varian V75 Magnetometer	The Varian V75 magnetometer was a sealed towed p	SDN:L05::158	SDN:L22::TOOL0863
gravimeters	Instrument that makes measurements of the Earth's gravity field.	LaCoste and Romberg S33 gravity meter	A stabilized-platform sensor which measures the Ear	SDN:L05::158	SDN:L22::TOOL0876
gravimeters	Instrument that makes measurements of the Earth's gravity field.	Micro-g LaCoste air-sea gravity system II gravimeter	Device used for gravity measurements from ships an	SDN:L05::158	SDN:L22::TOOL0752
gravimeters	Instrument that makes measurements of the Earth's gravity field.	LaCoste and Romberg S84 Gravity Meter	A marine gravity meter that measures the earth's gra	SDN:L05::158	SDN:L22::TOOL0865
Chirp	Chirp systems emit a 'swept-frequency signal', meaning that the transmitted signal is emitted over a p	Knudsen Chirp Rack 3202 sub-bottom profiling echosounder	A sub-bottom profiler echosounderfor use on survey	SDN:L05::CHRP	SDN:L22::TOOL1106
Chirp	Chirp systems emit a 'swept-frequency signal', meaning that the transmitted signal is emitted over a p	Knudsen Chirp Rack sub-bottom profiling echosounder series	A series of sub-bottom profiler echosoundersfor use	SDN:L05::CHRP	SDN:L22::TOOL1105
synthetic aperture radars	Instruments that generate maps of radar reflectivity through the synthesis of multiple pulses from a m	Advanced Synthetic Aperture Radar	A radio-occultation imaging radar designed to captur	SDN:L05::306	SDN:L22::TOOL1069
synthetic aperture radars	Instruments that generate maps of radar reflectivity through the synthesis of multiple pulses from a m	Synthetic Aperture Radar X-band	SAR is an active system that transmits a beam of rac	SDN:L05::306	SDN:L22::TOOL1088
synthetic aperture radars	Instruments that generate maps of radar reflectivity through the synthesis of multiple pulses from a m	Active Microwave Instrument	An active microwave instrument consisting of a synth	SDN:L05::306	SDN:L22::TOOL1064
discrete air samplers	A device that collects a sample of air from the atmosphere and stores it, usually under pressure, for s	Stainless steel air sample canister	Stainless steel sampling container suitable for the co	SDN:L05::11	SDN:L22::TOOL0545
discrete air samplers	A device that collects a sample of air from the atmosphere and stores it, usually under pressure, for s	Tedlar atmospheric sampling bag	A generic term for atmospheric sampling bags manu	SDN:L05::11	SDN:L22::TOOL0588
discrete air samplers	A device that collects a sample of air from the atmosphere and stores it, usually under pressure, for s	Electropolished air sample canister	Metal sampling container of unknown make and capa	SDN:L05::11	SDN:L22::TOOL0544
seismic refraction systems	A network of seismometers or geophones plus an energy source that determine geologic structure by	Geological Survey of Canada Ocean Bottom Seismometer	An instrument designed to measure movements in th	SDN:L05::155	SDN:L22::TOOL1257
beam trawls	Nets towed over the sea floor having the horizontal net opening provided by a wooden or metal beam	Unknown beam trawl	A net that is held open by a solid wooden or metal be	SDN:L05::62	SDN:L22::TOOL0651
beam trawls	Nets towed over the sea floor having the horizontal net opening provided by a wooden or metal beam	CEFAS 4m survey beam trawl	This is the standard net used by the CEFAS fisheries	SDN:L05::62	SDN:L22::TOOL0652
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Bottom skimmer - Frolander and Pratt (1962)	A double runner sled 46 cm wide x 23 cm tall x 132 c	SDN:L05::24	SDN:L22::NETT0015

benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Planktonbenthos dredge - Beauchamp (1932)	A simple pair of U-shaped runners were connected b	SDN:L05::24	SDN:L22::NETT0141
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Bottom plankton sampler - Omori (1969)	A 70 x 70 cm rectangular mouth opening net is attacl	SDN:L05::24	SDN:L22::NETT0013
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	HOrizontal PLAnkton SAmpler - Ruetzler et al. (1980)	18.5 cm diameter x 40 cm long plexiglass cylinder hc	SDN:L05::24	SDN:L22::NETT0064
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Bottom plankton sampler - Macer (1867)	Approximately 30 cm x 20 cm mouth opening. Net di	SDN:L05::24	SDN:L22::NETT0014
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Planktonbenthos sampler - Hensen (1895)	An eight wheeled carriage-like sled with a net mounte	SDN:L05::24	SDN:L22::NETT0142
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Unspecified scallop dredge	Rigid structures with a chain mail collecting bag, tow	SDN:L05::24	SDN:L22::TOOL1378
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	British Antarctic Survey Epi-benthic Sledge	A British Antarctic Survey-built sledge, designed to b	SDN:L05::24	SDN:L22::NETT0182
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Unspecified queen scallop dredge	The dredges used to target queen scallops are wider	SDN:L05::24	SDN:L22::TOOL1379
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Epi-benthic plankton sampler - Bossanyi (1951)	Approximately 91 cm x 61 cm rectangular mouth with	SDN:L05::24	SDN:L22::NETT0040
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Unspecified naturalists {rectangular} dredge	An instrument designed for the collection of benthic c	SDN:L05::24	SDN:L22::NETT0190
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Marine Institute Slurp Sampler	The slurp sampler is a manipulator designed by the M	SDN:L05::24	SDN:L22::TOOL1165
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Epi-benthic plankton sampler - Clutter (1965)	Construction is a 32cm x 32 cm rectangular mouth o	SDN:L05::24	SDN:L22::NETT0041
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Mechanically opening-closing epi-benthic plankton sled - Wickstead (1953)	Construction is a 61 cm x 30 cm rectangular mouth c	SDN:L05::24	SDN:L22::NETT0042
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	FMC Technologies Schilling Robotics ORION 7P and 7R Manipulators	The ORION 7 manipulators are seven-function manip	SDN:L05::24	SDN:L22::TOOL1166
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Unknown 41 x 91 cm hydraulic blade dredge	A towed box dredge where the make and manufactur	SDN:L05::24	SDN:L22::NETT0191
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Rauschert dredge	A fine-mesh dredge composed of a symmetrical met	SDN:L05::24	SDN:L22::NETT0186
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	Unspecified hyperbenthic sledge	A benthic sledge used for sampling benthic organism	SDN:L05::24	SDN:L22::NETT0189
benthos samplers	A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted n	University Marine Biological Station Millport hydraulic blade dredge	A hydraulic (water-jet) dredge designed to collect epil	SDN:L05::24	SDN:L22::NETT0192
bench particle sizers	Instruments that measure the size spectrum of particles in a water or sediment sample.	Malvern Mastersizer 3000/3000E laser diffraction particle size analyser	A laser diffraction particle size analyser available for	SDN:L05::LAB27	SDN:L22::TOOL1139
bench particle sizers	Instruments that measure the size spectrum of particles in a water or sediment sample.	Malvern Mastersizer 2000 laser diffraction particle size analyser	Laser diffraction particle analyser measures the distri	SDN:L05::LAB27	SDN:L22::TOOL1297
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Vemco VR2C Acoustic Monitoring Receiver	A fully autonomous acoustic receiver for monitoring t	SDN:L05::369	SDN:L22::TOOL0949
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Geological Survey of Canada Ocean Bottom Seismometer	An instrument designed to measure movements in th	SDN:L05::369	SDN:L22::TOOL1257
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	CMST-DSTO underwater sound recorder	Instrument that contains a hydrophone plus a data lo	SDN:L05::369	SDN:L22::TOOL0663
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	British Antarctic Survey prototype re-usable Sonic sonobuoy	A British Antarctic Survey-built prototype of a free-flo	SDN:L05::369	SDN:L22::TOOL1258
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	GEOMAR Ocean Bottom Hydrophone System	An observation and registration system designed to r	SDN:L05::369	SDN:L22::TOOL1200
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Vemco VR2W Single Channel Receiver	A single channel acoustic receiver comprising hydrop	SDN:L05::369	SDN:L22::TOOL1160
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Institut Francais du Petrole Geomecanique hydrophone array	A collection of underwater microphones mounted in c	SDN:L05::369	SDN:L22::TOOL0360
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Vemco VR4-UWM Underwater Modem Receiver	A submersible acoustic receiver capable of detecting	SDN:L05::369	SDN:L22::TOOL1161
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	University of Hamburg Airgun Seismic Reflection System	A single-channel seismic reflection profiling system d	SDN:L05::369	SDN:L22::TOOL1194
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	British Geological Survey Airgun Profiling System	A British Geological Survey-built airgun profiling syst	SDN:L05::369	SDN:L22::TOOL1195
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	British Geological Survey Sparker Profiling System	A British Geological Survey-built sparker profiling sys	SDN:L05::369	SDN:L22::TOOL1196
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Vemco VR2 Receiver	An acoustic receiver comprising hydrophone, receive	SDN:L05::369	SDN:L22::TOOL1164
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Ocean Sonics icListen HF hydrophone	Instrument that contains a high frequency hydrophon	SDN:L05::369	SDN:L22::TOOL0942
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	National Marine Facilities Sea Systems (NMFSS) Multi-Channel Airgun Seismic Reflection System	A NMFSS-built multi-channel seismic reflection profil	SDN:L05::369	SDN:L22::TOOL1197
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Vemco VR2AR Acoustic Release, Receiver and Transmitter	The VR2AR is a submersible acoustic receiver, comb	SDN:L05::369	SDN:L22::TOOL1159
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	National Marine Facilities Sea Systems (NMFSS) Single-Channel Airgun Seismic Reflection System	A NMFSS-built single-channel seismic reflection profi	SDN:L05::369	SDN:L22::TOOL1198
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Wildlife Acoustics Song Meter SM2M Marine Recorder	A submersible 16-bit digital acoustic recorder used to	SDN:L05::369	SDN:L22::TOOL1246
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Ultra Electronics SSQ906 Disposable Sonobuoy	Ultra Electronics SSQ906 disposable sonobuoy is an	SDN:L05::369	SDN:L22::TOOL0952
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Unspecified sonobuoy	An expendable underwater listening device designed	SDN:L05::369	SDN:L22::TOOL1261
hydrophones	Devices containing transducers that convert underwater sound waves into electrical signals.	Ultra Electronics SSQ907 Disposable Sonobuoy	Ultra Electronics SSQ907 disposable sonobuoy is an	SDN:L05::369	SDN:L22::TOOL0953
rock corers	A device that extracts rock either by chipping or drilling.	British Geological Survey RD1 5m (combined) rockdrill and vibrocorer	A combined rockdrill and vibrocorer system develope	SDN:L05::53	SDN:L22::TOOL1172
rock corers	A device that extracts rock either by chipping or drilling.	British Antarctic Survey rock chipper	BAS built rock chipper (also known as a wax corer) c	SDN:L05::53	SDN:L22::TOOL1170
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Skalar SAN+ System colorimetric autoanalyser	A continuous flow analyser designed for laboratory u	SDN:L05::LAB03	SDN:L22::TOOL0245
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Technicon TrAAcs 800 colorimetric autoanalyser	The TrAAcs system is a continuous flow wet chemist	SDN:L05::LAB03	SDN:L22::TOOL0520
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	SPX Bran+Luebbe colorimetric Autoanalyser 3	A colorimetric autoanalyser (AA) that may be used to	SDN:L05::LAB03	SDN:L22::TOOL0497
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Technicon AutoAnalyzer II colorimetric autoanalyser	A rapid flow analyser that may be used to measure n	SDN:L05::LAB03	SDN:L22::TOOL0291
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Hilger Spekker colorimeter	A photoelectric absorbsiometer developed in 1936 an	SDN:L05::LAB03	SDN:L22::TOOL0243
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Alpkem RFA/2 colorimetric autoanalyser	A rapid flow analyser that may be used to measure n	SDN:L05::LAB03	SDN:L22::TOOL0244
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Astoria Pacific micro-segmented flow analyser	A continuous flow analyser that can be used to meas	SDN:L05::LAB03	SDN:L22::TOOL0415
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	ChemLab AA-II segmented continuous flow autoanalyser	A rapid flow analyser that may be used to measure n	SDN:L05::LAB03	SDN:L22::TOOL0342
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Alpkem RFA-300 colorimetric autoanalyser	A rapid flow analyser (RFA) that may be used to mea	SDN:L05::LAB03	SDN:L22::TOOL0414
colorimeters	Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to	Burkard Scientific SFA 2000 colorimetric AA-II segmented flow analyser	A colorimetric segmented flow nutrient AA-II analyse	SDN:L05::LAB03	SDN:L22::TOOL0614
salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity c	Electronic Instruments Ltd MC5 {EIL MC5} temperature and salinity meter	A measuring bridge with a limit of resolution of 2 part	SDN:L05::LAB30	SDN:L22::TOOL1355
salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity c	Guildline 8400 bench salinometer	A laboratory instrument that determines salinity of a v	SDN:L05::LAB30	SDN:L22::TOOL0454
salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity c	Autolab bench salinometer	A laboratory instrument that determines salinity of a v	SDN:L05::LAB30	SDN:L22::TOOL0240
salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity c	Plessey Environmental Systems 6230N bench salinometer	A laboratory instrument that determines salinity of a v	SDN:L05::LAB30	SDN:L22::TOOL0241
salinometers	Instruments that measure the salinity of a collected water sample based on its electrical conductivity c	Guildline Portasal 8410 series salinometer	A portable instrument for laboratory or field use that c	SDN:L05::LAB30	SDN:L22::TOOL0242
seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	Lamont-Doherty Earth Observatory Standard ocean bottom seismometer	The LDEO standard seismometer design has been in	SDN:L05::368	SDN:L22::TOOL1107
seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	Geological Survey of Canada Ocean Bottom Seismometer	An instrument designed to measure movements in th	SDN:L05::368	SDN:L22::TOOL1257
seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	Lamont-Doherty Earth Observatory 2011 Model ocean bottom seismometer	The LDEO 2011 seismometer design is a upfare of th	SDN:L05::368	SDN:L22::TOOL1108
seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	Lamont-Doherty Earth Observatory Trawl Resistant ocean bottom seismometer	The LDEO trawl-resistant (TRM) ocean bottom seism	SDN:L05::368	SDN:L22::TOOL1109
seismometers	Devices placed on the ground or seabed to measure physical movement of that substrate.	Lamont-Doherty Earth Observatory ocean bottom seismometer series	Ocean bottom seismometer instruments designed by	SDN:L05::368	SDN:L22::TOOL1112
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Knudsen Chirp 3260	The Knudsen Chirp 3260 is a deep water system cap	SDN:L05::156	SDN:L22::TOOL0890
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Simrad EA501P echosounder	A single-beam, single-frequency, portable echosound	SDN:L05::156	SDN:L22::TOOL0814
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Knudsen 320BP echosounder	The Knudsen 320B/P Echosounder Transducer is int	SDN:L05::156	SDN:L22::TOOL0891
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Kongsberg (Simrad) EA600 Echosounder	The EA600 single beam echosounder operates up to	SDN:L05::156	SDN:L22::TOOL0319
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Valeport MIDAS Surveyor	A combined GPS receiver and echosounder designe	SDN:L05::156	SDN:L22::TOOL0841
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Knudsen 320BR echosounder	The Knudsen 320 B/R operates at different frequenci	SDN:L05::156	SDN:L22::TOOL0892
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Kongsberg (Simrad) EA640 Echosounder	A single beam echosounder system for determining s	SDN:L05::156	SDN:L22::TOOL0965
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Knudsen 320M marine echosounder	The Knudsen 320M is an echosounder designed for v	SDN:L05::156	SDN:L22::TOOL0889
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Kongsberg Mesotech High-Resolution and Domed sonar heads 1071 / 1171 series	Single-beam underwater sonar heads, either high-res	SDN:L05::156	SDN:L22::TOOL1330
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Imagenex 853 Echo Sounder	Scientific echo sounder with data logger. This single	SDN:L05::156	SDN:L22::TOOL0950
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Kongsberg Mesotech 808 300Khz echo sounder	A high frequency (300 kHz) echosounder (also know	SDN:L05::156	SDN:L22::TOOL0951
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Simrad EA500 echosounder	A single-beam, single-frequency (12kHz) deep water	SDN:L05::156	SDN:L22::TOOL0130
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	RD200A echosounder	A single-beam navigational echo sounder optimised f	SDN:L05::156	SDN:L22::TOOL0273
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Imagenex 881A Digital Multi-Frequency (profiling) single-beam echosounder	A programmable multi-frequency digital scanning pro	SDN:L05::156	SDN:L22::TOOL1363
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Imagenex 881A Digital Multi-Frequency (imaging) single-beam echosounder	A programmable multi-frequency digital scanning ima	SDN:L05::156	SDN:L22::TOOL1364
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Raytheon RD500 singlebeam echosounder	The Raytheon RD500 echosounder records and print	SDN:L05::156	SDN:L22::TOOL0770

single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Raytheon Raymarine V820 singlebeam echosounder	The Raytheon Raymarine V820 echosounder has an	SDN:L05::156	SDN:L22::TOOL0771
single-beam echosounders	Instruments that measure water depth at a single point below the platform by timing pulses of sound r	Furuno FE 700 echo sounder	The Furuno FE-700 is an echo sounder for shallow o	SDN:L05::156	SDN:L22::TOOL0797
thermistor chains	A group of rigidly-mounted temperature sensors sampled by a common data logger held at various de	Aanderaa CTR7 thermistor conductivity chain	An instrument with up to 5 induction conductivity and	SDN:L05::135	SDN:L22::TOOL0590
thermistor chains	A group of rigidly-mounted temperature sensors sampled by a common data logger held at various de	Aanderaa thermistor chain	An instrument with 11 Fenwal 2K iso-curve thermisto	SDN:L05::135	SDN:L22::TOOL0589
thermistor chains	A group of rigidly-mounted temperature sensors sampled by a common data logger held at various de	NIOZ fast thermistor string	A thermistor chain developed and built by Netherland	SDN:L05::135	SDN:L22::TOOL0840
airgun array	A marine seismic source where multiple airguns of different sizes are tuned so that a broader frequer	British Geological Survey Airgun Profiling System	A British Geological Survey-built airgun profiling syst	SDN:L05::ARAG	SDN:L22::TOOL1195
snow and ice samplers	A device that collects a sample of frozen seawater or accumulated frozen precipitation.	KOVACS ice coring systems	A series of hand auger systems designed for the retri	SDN:L05::56	SDN:L22::TOOL1249
sediment dredges	Bucket-like containers hauled over the sea bed collecting integrated samples of surface sediment alor	Unknown 1 x 0.25m sediment pipe dredge	A heavy-duty dredge consisting of a steel pipe where	SDN:L05::60	SDN:L22::TOOL1373
sediment dredges	Bucket-like containers hauled over the sea bed collecting integrated samples of surface sediment alor	Unspecified naturalists {rectangular} dredge	An instrument designed for the collection of benthic c	SDN:L05::60	SDN:L22::NETT0190
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Oregon State University Ocean Mixing Group ChiPod temperature microstructure profiler	A self-contained device designed to measure small-s	SDN:L05::184	SDN:L22::TOOL1230
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Rockland Scientific MicroRider-1000 turbulence microstructure profiler	A self-contained device designed to measure turbuler	SDN:L05::184	SDN:L22::TOOL1232
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Fast Light Yo-yo (FLY II) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::184	SDN:L22::TOOL0428
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Precision Measurement Engineering SCAMP microstructure profiler	A self contained, autonomous microstructure profiler	SDN:L05::184	SDN:L22::TOOL0473
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Fast Light Yo-yo (FLY IV) microstructure profiler	A free-falling instrument designed to measure tempe	SDN:L05::184	SDN:L22::TOOL0429
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Rockland Scientific FP07-38 microstructure thermistor	A fast-response temperature sensor for oceanograph	SDN:L05::184	SDN:L22::TOOL0641
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Rockland Scientific Vertical Microstructure Profiler (VMP) 2000	A deep sea tethered microstructure profiler for the me	SDN:L05::184	SDN:L22::TOOL0864
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Sea-Bird SBE 7 microstructure conductivity sensor	Microstructure conductivity sensor designed for use c	SDN:L05::184	SDN:L22::TOOL0644
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Rockland Scientific Vertical Microstructure Profiler (VMP) 6000	A full ocean-depth untethered vertical microstructure	SDN:L05::184	SDN:L22::TOOL1150
microstructure sensors	Fast response sensors sampled at high frequency to determine the distribution of water body propertie	Rockland Scientific Vertical Microstructure Profiler (VMP) 5500	A full ocean-depth untethered vertical microstructure	SDN:L05::184	SDN:L22::TOOL0639
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	LI-COR LI-840A CO2/H2O gas analyser	The LI-840A is an absolute, non-dispersive infrared g	SDN:L05::382	SDN:L22::TOOL0845
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	AutoFlux Logging System	An autonomous system designed to produce continu	SDN:L05::382	SDN:L22::TOOL1193
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	Battele Seaology pCO2 monitoring system	An autonomous air and water pCO2 monitoring devic	SDN:L05::382	SDN:L22::TOOL0878
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	University of Leeds compact Fluorescence Assay by Gas Expansion instrument	The compact Fluorescence Assay by Gas Expansion	SDN:L05::382	SDN:L22::TOOL0436
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	LI-COR LI-7000 CO2/H20 gas analyser	The LI-7000 is a differential, single source, non-dispe	SDN:L05::382	SDN:L22::TOOL0705
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	LI-COR LI-6262 CO2/H2O infrared gas analyser	A differential, non-dispersive, infrared (NDIR) gas ana	SDN:L05::382	SDN:L22::TOOL1123
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	Lamont-Doherty Earth Observatory pCO2 underway system	An integrated system designed for underway measur	SDN:L05::382	SDN:L22::TOOL0913
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	General Oceanics model 8050 pCO2 measuring system	The General Oceanics model 8050 pCO2 Measuring	SDN:L05::382	SDN:L22::TOOL0724
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	Vaisala GM70 atmospheric carbon dioxide analyser	An instrument designed for the measurement of atmo	SDN:L05::382	SDN:L22::TOOL0229
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	Thermo Scientific 49i ozone analyser	A dual cell photometer ozone analyser that uses UV p	SDN:L05::382	SDN:L22::TOOL1104
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	LI-COR LI-840 CO2 and H2O gas analyser	An absolute, non-dispersive infrared gas analyser ba	SDN:L05::382	SDN:L22::TOOL0915
atmospheric gas analysers	In-situ instruments that can determine the proportion of one or more gaseous components of the atmo	LI-COR 7500 infrared gas analyser	A non-dispersive infrared gas analyser that measures	SDN:L05::382	SDN:L22::TOOL0085
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Droplet Measurement Technologies Passive Cavity Aerosol Spectrometer Probe (PCASP) 100	The PCASP 100 is an optical particle counter that me	SDN:L05::58	SDN:L22::TOOL0406
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Perfluoroalkoxy pipe air sampler	Perfluoroalkoxy tubbing leading directly from the leas	SDN:L05::58	SDN:L22::TOOL1012
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Cyclonic separation sampler	A device designed to remove particulates from an air	SDN:L05::58	SDN:L22::TOOL0563
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Copper pipe air sampler	Copper tubing leading directly from the least contami	SDN:L05::58	SDN:L22::TOOL0571
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Teflon PFA manifold air sampler	Teflon PFA manifold leading directly from the least co	SDN:L05::58	SDN:L22::TOOL0573
continuous air samplers	A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or fro	Ecotech HiVol3000 air sampler	High volume particulate matter air sampler that can p	SDN:L05::58	SDN:L22::TOOL0843
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	WETLabs ac-9 Absorption and Attenuation meter	Flow-through absorption and attenuation meter that r	SDN:L05::124	SDN:L22::TOOL0402
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Sequoia Laser In-Situ Sediment Size Transmissometer model 100-B	A self-contained unit which measures the scattering c	SDN:L05::124	SDN:L22::TOOL0441
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	MOCNESS modified Tucker trawl - Wiebe et al (1976, 1985)	Has a 100 cm x 141 cm rigid mouth opening with nir	SDN:L05::124	SDN:L22::NETT0097
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	DBAD-MOCNESS - Wiebe (1994); Greene (1998)	A 1-m2 MOCNESS was equipped with a dual-beam e	SDN:L05::124	SDN:L22::NETT0028
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Rosette-Controlled Tucker Trawl system - Burd and Thompson (1993)	A 100 cm x 140 cm rectangular mouth opening frame	SDN:L05::124	SDN:L22::NETT0157
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	BIOPROBE benthic lander	A seabed lander comprising a stainless steel tripod w	SDN:L05::124	SDN:L22::TOOL0564
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Sequoia Laser In-Situ Sediment Size Transmissometer	A self-contained unit which measures the scattering c	SDN:L05::124	SDN:L22::TOOL0044
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	BIOMAPER-II - Wiebe et al (1999, 2002)	An integrated instrument platform for coupled biologi	SDN:L05::124	SDN:L22::NETT0007
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Chelsea Technologies Group Alphatracka transmissometer	Dual beam, ratiometric digitally controlled transmissc	SDN:L05::124	SDN:L22::TOOL0065
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Chelsea Technologies Group Alphatracka II transmissometer	A compact digitally controlled transmissometer simila	SDN:L05::124	SDN:L22::TOOL0425
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	SeaTech transmissometer	SeaTech manufactured a range of transmissometers	SDN:L05::124	SDN:L22::TOOL0003
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	WETLabs ac-3 Absorption and Attenuation meter	Spectral transmittance and spectral absorption sensc	SDN:L05::124	SDN:L22::TOOL0114
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	WETLabs ac-9 plus Absorption and Attenuation meter	WETLabs ac-9 Plus is a flow-through absorption and	SDN:L05::124	SDN:L22::TOOL0570
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	WETLabs C-Star transmissometer	An underwater optical beam transmissometer capabl	SDN:L05::124	SDN:L22::TOOL0160
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Unknown transmissometer	An in-situ instrument that transmits monochromatic li	SDN:L05::124	SDN:L22::TOOL0148
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	WETLabs ac-s in-situ spectrophotometer	The WETLabs ac-s in-situ spectrophotometer is base	SDN:L05::124	SDN:L22::TOOL0834
transmissometers	Systems that measure the attenuation of electromagnetic radiation by the water column. Includes hun	Secchi disk	A circular disk, typically 20cm in diameter, used to m	SDN:L05::124	SDN:L22::TOOL0430
acoustic tracking systems	A network of acoustic sensors that determine the location of a sound source by triangulation such as	Teledyne Reson TC1037 directional telephone transducer	A directional transducer with low frequency (6kHz-15	SDN:L05::357	SDN:L22::TOOL0914
scatterometers	Sensors that measure the reflection or scattering effect produced while scanning the surface of the ea	Helzel Messtechnik WERA HF Radar	A shore based remote sensing HF radar system usec	SDN:L05::305	SDN:L22::TOOL0603
scatterometers	Sensors that measure the reflection or scattering effect produced while scanning the surface of the ea	Advanced SCATterometer	A C-band scatterometer designed to detect wind spec	SDN:L05::305	SDN:L22::TOOL1070
scatterometers	Sensors that measure the reflection or scattering effect produced while scanning the surface of the ea	Active Microwave Instrument	An active microwave instrument consisting of a synth	SDN:L05::305	SDN:L22::TOOL1064
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Gulf II high-speed sampler - Collier (1957)	A shipboard pump drew water from near the keel of t	SDN:L05::21	SDN:L22::NETT0047
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Double Longhurst-Hardy Plankton Recorder - Williams et al. (1983)	A modified version of the LHPR . An unenclosed Low	SDN:L05::21	SDN:L22::NETT0033
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Modified Longhurt-Hardy Plankton Recorder - Haury et al. (1976)	Three lengths (230, 300, 370 cm) of 70 cm diamete	SDN:L05::21	SDN:L22::NETT0083
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Pumped multiple sample collection system - Yamazi (1960)	A submersible pump mounted in a circular frame wo	SDN:L05::21	SDN:L22::NETT0146
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Longhurst-Hardy Plankton recorder - Longhurst et al (1966)	A 50 cm diameter net mounted in a towing frame. Att	SDN:L05::21	SDN:L22::NETT0082
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Modified large Longhurt-Hardy Plankton Recorder - Bone (1986)	A modified version of the LHPR . A tubular frame 185	SDN:L05::21	SDN:L22::NETT0081
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Autosampling and Recording Instrumental Environmental Sampler - Dunn et al. (1993)	A stretched version of the Lowestoft modified Gulf III	SDN:L05::21	SDN:L22::NETT0004
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	Continuous Plankton Recorder - Hardy (1926, 1936); Glover (1962)	Construction is a 1.27 cm on side square mouth oper	SDN:L05::21	SDN:L22::NETT0026
plankton recorders	A device that continuously samples a flow of water, separating and fixing plankton for subsequent ide	British Antarctic Survey Continuous Plankton Recorder	A British Antarctic Survey-built plankton sampling ins	SDN:L05::21	SDN:L22::NETT0184
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	ThermoFinnigan SpectraSYSTEM High Performance Liquid Chromatograph	The SpectraSYSTEM is designed for automated sam	SDN:L05::LAB20	SDN:L22::TOOL0487
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Hitachi High-Technologies U-2000 UV-Visible spectrophotometer	A laboratory instrument that measures the amount of	SDN:L05::LAB20	SDN:L22::TOOL0467
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Unicam SP500 spectrophotometer	A laboratory instrument that measures the amount of	SDN:L05::LAB20	SDN:L22::TOOL0246
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Agilent 8453 UV-visible spectrophotometer	A laboratory optical instrument for chemical analysis	SDN:L05::LAB20	SDN:L22::TOOL1336
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Konica Minolta CM-2600d Spectrophotometer	A portable, sphere type spectrophotometer which me	SDN:L05::LAB20	SDN:L22::TOOL0657
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Hach DR 5000 UV-Vis Laboratory Spectrophotometer	A complete scanning UV/VIS spectrophotometer use	SDN:L05::LAB20	SDN:L22::TOOL1147
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	World Precision Instruments Liquid Waveguide Capillary Cell	Liquid Waveguide Capillary Cells (LWCC) are fiber o	SDN:L05::LAB20	SDN:L22::TOOL0604
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	GEOTEK Multi-Sensor Core Logger XYZ {MSCL-XYZ} core analyser	An automated, high-resolution, multi-sensor system u	SDN:L05::LAB20	SDN:L22::TOOL0654
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Burkard Scientific SFA 2000 colorimetric AA-II segmented flow analyser	A colorimetric segmented flow nutrient AA-II analyser	SDN:L05::LAB20	SDN:L22::TOOL0614
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	SEAL Analytical QuAAtro Autoanalyser	A microflow Segmented Flow Analysis (SFA) system	SDN:L05::LAB20	SDN:L22::TOOL0511
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Hitachi U1800 UV-Visible Spectrophotometer	A bench-top, scanning spectrophotometer which oper	SDN:L05::LAB20	SDN:L22::TOOL0972

spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Varian Cary 50 UV-Vis Spectrophotometer	A laboratory instrument that measures the amount of	SDN:L05::LAB20	SDN:L22::TOOL0523
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Hitachi U3010 UV-Visible scanning spectrophotometer	A bench-top scanning spectrophotometer which oper	SDN:L05::LAB20	SDN:L22::TOOL0824
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Perkin-Elmer Model LAMBDA series 25 Spectrophotometer	The Lambda spectrophotometer provides UV-Visibilit	SDN:L05::LAB20	SDN:L22::TOOL0946
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Perkin-Elmer Model LAMBDA series 35 Spectrophotometer	The Lambda spectrophotometer provides UV-Visibilit	SDN:L05::LAB20	SDN:L22::TOOL0947
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	ThermoFinnigan UV6000LP photodiode array detector	A UV/Visible programmable detector designed for spe	SDN:L05::LAB20	SDN:L22::TOOL0488
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	World Precision Instruments UltraPath Ultraviolet spectrophotometer	A high performance spectrophotometer that measure	SDN:L05::LAB20	SDN:L22::TOOL0460
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Perkin-Elmer Model LAMBDA series 45 Spectrophotometer	The Lambda spectrophotometer provides UV-Visibilit	SDN:L05::LAB20	SDN:L22::TOOL0948
spectrophotometers	Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in	Shimadzu UV-1800 UV-VIS spectrophotometer	A double-beam spectrophotometer used for marine c	SDN:L05::LAB20	SDN:L22::TOOL1362
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	Manchester Centre for Atmospheric Science Differential Mobility Particle Sizer	An in-situ instrument that gives size-resolved aerosol	SDN:L05::386	SDN:L22::TOOL0300
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	Grimm 5.403 Condensation Particle Counter	The GRIMM 5.403 Condensation Particle Counter is	SDN:L05::386	SDN:L22::TOOL0382
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	TSI 3936 Scanning Mobility Particle Sizer	A differential mobility analyser that measures the size	SDN:L05::386	SDN:L22::TOOL0423
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	TSI 3321 Aerodynamic Particle Sizer	The TSI 3321 Aerodynamic Particle Sizer (APS) mea	SDN:L05::386	SDN:L22::TOOL0422
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	University of Leeds Volatile Aerosol Concentration and Composition instrument	The Volatile Aerosol Concentration and Composition	SDN:L05::386	SDN:L22::TOOL0340
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	Aerodyne High Resolution Time-of-Flight Aerosol Mass Spectrometer	An in-situ instrument that provides quantitative size a	SDN:L05::386	SDN:L22::TOOL0297
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	GRIMM 1.109 aerosol spectrometer	A portable in-situ instrument that optically counts atm	SDN:L05::386	SDN:L22::TOOL0298
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	TSI 3800 Aerosol Time-of-Flight Mass Spectrometer	The TSI 3800 Aerosol Time-of-Flight Mass Spectrom	SDN:L05::386	SDN:L22::TOOL0419
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	Manchester Centre for Atmospheric Science Hygroscopic Tandem Differential Mobility Analyser	The Hygroscopic Tandem Differential Mobility Analys	SDN:L05::386	SDN:L22::TOOL0352
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	Droplet Measurement Technologies Passive Cavity Aerosol Spectrometer Probe (PCASP) 100	The PCASP 100 is an optical particle counter that me	SDN:L05::386	SDN:L22::TOOL0406
Aerosol physical characterisers	Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.	GRIMM 1.108 aerosol spectrometer	An instrument that measures size-resolved aerosol al	SDN:L05::386	SDN:L22::TOOL0299
expendable CTDs	Instruments that measure vertical profiles of sea temperature and salinity with a free falling disposable	Lockheed Martin Sippican AXCTD	An expendable free-fall probe that provides a profile o	SDN:L05::354	SDN:L22::TOOL0714
expendable CTDs	Instruments that measure vertical profiles of sea temperature and salinity with a free falling disposable	Lockheed Martin Sippican XCTD-1 probe	An expendable free-fall CTD profiling system which p	SDN:L05::354	SDN:L22::TOOL0591
expendable CTDs	Instruments that measure vertical profiles of sea temperature and salinity with a free falling disposable	Lockheed Martin Sippican XCTD-2 probe	An expendable free-fall CTD profiling system which p	SDN:L05::354	SDN:L22::TOOL0592
cameras	All types of photographic equipment that may be deployed in aircraft or satellites including stills, videc	Operational Land Image	The Operational Land Imager (OLI) is a high resolutio	SDN:L05::311	SDN:L22::TOOL1038
cameras	All types of photographic equipment that may be deployed in aircraft or satellites including stills, videc	High-Resolution Stereoscopic instrument	An optical imager designed for high-resolution land o	SDN:L05::311	SDN:L22::TOOL1083
cameras	All types of photographic equipment that may be deployed in aircraft or satellites including stills, videc	Brinno TLC200 time-lapse camera	A portable, time-lapse video and still photo camera. I	SDN:L05::311	SDN:L22::TOOL1229
cameras	All types of photographic equipment that may be deployed in aircraft or satellites including stills, videc	Manta G-609 camera	A Gigabit Ethernet (GigE) camera including a Sony I	SDN:L05::311	SDN:L22::TOOL1206
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	British Antarctic Survey Shipboard Three Component Magnetometer	A British Antarctic Survey-built shipboard three-comp	SDN:L05::159	SDN:L22::TOOL1251
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	Barringer M123 Marine Proton Magnetometer	Barringer M123 magnetometer is a towed proton pre	SDN:L05::159	SDN:L22::TOOL0956
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	Marine Magnetics SeaSPY Marine Magnetometer	A marine magnetometer that measures the ambient r	SDN:L05::159	SDN:L22::TOOL0474
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	Ultra Electronics 3-axis Fluxgate Magnetometer	Instrument measures shifts in the magnetic patterns	SDN:L05::159	SDN:L22::TOOL0866
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	Geometrics G882 Marine magnetometer	A magnetometer designed for the detection and map	SDN:L05::159	SDN:L22::TOOL0832
magnetometers	Instrument that makes measurements of the Earth's magnetic field.	IXSea Magis magnetometer	A towed magnetometer designed for the detection of	SDN:L05::159	SDN:L22::TOOL0874
Aethalometers	Instruments that quantify atmospheric particulate carbon ('black carbon') concentrations.	Magee Scientific AE1 Aethalometer	The Magee Scientific AE1 Aethalometer determines c	SDN:L05::387	SDN:L22::TOOL0333
demersal trawl nets	Nets towed over the sea floor designed to sample species living on or near the bottom.	Rough Bottom Otter Trawl	A cone-shaped net kept opened horizontally by two o	SDN:L05::61	SDN:L22::NETT0183
demersal trawl nets	Nets towed over the sea floor designed to sample species living on or near the bottom.	Epi-benthic plankton net - Russell (1928)	Construction is 122 cm wide x 30 cm tall rectangular	SDN:L05::61	SDN:L22::NETT0039
demersal trawl nets	Nets towed over the sea floor designed to sample species living on or near the bottom.	Unspecified Agassiz trawl	A sledge composed of a metal frame with a net attac	SDN:L05::61	SDN:L22::TOOL1252
demersal trawl nets	Nets towed over the sea floor designed to sample species living on or near the bottom.	Agassiz 3.5m trawl sampler	Demersal trawl net described as 3.5m Agassiz trawl s	SDN:L05::61	SDN:L22::TOOL0991
precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graup	CAE PMB2 rain/snow gauge	A mechanical rain/snow gauge with sensitivity of 100	SDN:L05::381	SDN:L22::TOOL0694
precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graup	Texas Electronics TE525 rain gauge	A tipping bucket rain gauge with a 6 inch collector an	SDN:L05::381	SDN:L22::TOOL0221
precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graup	Young 50202 Precipitation Gauge	An instrument that accurately measures rain or snow	SDN:L05::381	SDN:L22::TOOL0671
precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graup	Biral HSS VPF-730 Visibility and Present Weather Sensor	An infrared forward scatter meter which measures h	SDN:L05::381	SDN:L22::TOOL0609
precipitation gauges	Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graup	OSi ORG-815 series optical rain gauges	A series of optical scintillation rain gauges that meas	SDN:L05::381	SDN:L22::TOOL0725
metal analysers	In-situ instruments that can determine the total, dissolved or particulate concentration of one or more	University of Liverpool cathodic stripping voltammetry metal analyser	A research mode continuous flow metal analyser dev	SDN:L05::383	SDN:L22::TOOL0278
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Sea-Bird SeaKeeper thermosalinograph	A themosalinograph. It is designed for shipboard dete	SDN:L05::133	SDN:L22::TOOL1295
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Grundy Environmental 6620 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::133	SDN:L22::TOOL0336
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Sea-Bird SBE 21 Thermosalinograph	A platinum-electrode conductivity sensor and a therm	SDN:L05::133	SDN:L22::TOOL0667
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Falmouth Scientific Instruments Excell thermosalinograph	The instrument comprises an FSI internal field condu	SDN:L05::133	SDN:L22::TOOL0593
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	OceanData TSG103 thermosalinograph	An autoranging instrument taking inputs from a hull c	SDN:L05::133	SDN:L22::TOOL0276
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Sea-Bird SBE 45 MicroTSG thermosalinograph	A small externally powered, high-accuracy instrumen	SDN:L05::133	SDN:L22::TOOL0190
thermosalinographs	Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a s	Teledyne RDI Citadel TS-N Thermosalinograph	A compact, low-maintenance system that uses Teled	SDN:L05::133	SDN:L22::TOOL0602
gill nets	Nets drifting in the sea or standing on the sea floor in which fish become entangled, usually through th	Unspecified trammel net	A net consisting of a sheet of fine-meshed net sandw	SDN:L05::65	SDN:L22::TOOL1259
aerosol samplers	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.	High Volume Air Sampler	An atmospheric sampler that pumps air through a se	SDN:L05::13	SDN:L22::TOOL0551
aerosol samplers	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.	Droplet Measurement Technologies Passive Cavity Aerosol Spectrometer Probe (PCASP) 100	The PCASP 100 is an optical particle counter that me	SDN:L05::13	SDN:L22::TOOL0406
aerosol samplers	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.	University of Manchester 4-stage Compact Cascade Impactor	An aerosol sampler modelled on the Harvard Compa	SDN:L05::13	SDN:L22::TOOL0554
aerosol samplers	A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.	University of East Anglia Low Volume Air Sampler	An atmospheric sampler that pumps air through a se	SDN:L05::13	SDN:L22::TOOL0550
active fluorometers	Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating th	Chelsea Instruments FASTtracka I Fast Repetition Rate Fluorometer	An in-situ Fast Repetition Rate Fluorometer which ca	SDN:L05::353	SDN:L22::TOOL0142
active fluorometers	Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating th	EcoMonitor PumpProbe Fluorometer	A submersible double-flash pulse fluorometer for con	SDN:L05::353	SDN:L22::TOOL0437
active fluorometers	Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating th	Satlantic FIRe system - Fluorescence Induction and Relaxation of Emission Spectrometer	The Satlantic FIRe (Fluorescence Induction and Rela	SDN:L05::353	SDN:L22::TOOL0860
active fluorometers	Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating th	Chelsea Instruments FASTtracka II Fast Repetition Rate Fluorometer	A Fast Repetition Rate Fluorometer incorporating sig	SDN:L05::353	SDN:L22::TOOL0143
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Sea and Sun Technology Microstructure Profiler MSS 90	A profiler that measures micro-structure water stratifi	SDN:L05::384	SDN:L22::TOOL0453
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Sea and Sun Technology and ISW Wassermesstechnik microstructure profiler	The MSS Profiler is designed for simultaneous micro	SDN:L05::384	SDN:L22::TOOL0439
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Meerestechnik Elektronik or MICSOS microstructure profiler	A free sinking or rising multi-parameter probe equipp	SDN:L05::384	SDN:L22::TOOL0438
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Rockland Scientific SPM-38 velocity shear probe	A velocity shear probe measuring microstructure velc	SDN:L05::384	SDN:L22::TOOL0642
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Rockland Scientific Geo-electro magnetic current meter (GEMCM)	A geo-electromagnetic current meter based upon Sta	SDN:L05::384	SDN:L22::TOOL0643
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Rockland Scientific Vertical Microstructure Profiler (VMP) 6000	A full ocean-depth untethered vertical microstructure	SDN:L05::384	SDN:L22::TOOL1150
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Rockland Scientific Vertical Microstructure Profiler (VMP) 5500	A full ocean-depth untethered vertical microstructure	SDN:L05::384	SDN:L22::TOOL0639
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	SonTek ADVOcean/Hydra acoustic doppler velocimeter	The ADVOcean uses acoustic Doppler technology to	SDN:L05::384	SDN:L22::TOOL0092
ADVs and turbulence probes	ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that n	Rockland Scientific Vertical Microstructure Profiler VMP 500	A vertical microstructure turbulence profiler for the m	SDN:L05::384	SDN:L22::TOOL0576
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Benthos PSA-916T Sonar Altimeter	A titanium sonar altimeter with 200 kHz operating fre	SDN:L05::379	SDN:L22::TOOL0134
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0379
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0373
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0374
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0378
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0377
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 300 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0376
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log and current profiler	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0372
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 150 kHz Doppler Velocity Log, current profiler and pressure sensor	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0375
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne RDI Workhorse Navigator 1200kHz Doppler Velocity Log	A Doppler velocity log (DVL) measuring bottom track	SDN:L05::379	SDN:L22::TOOL0872

altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Benthos 2216 Deep Sea pinger	The Benthos 2216 Deep Sea Pinger is a 12kHz acou	SDN:L05::379	SDN:L22::TOOL0790
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Teledyne Benthos BFP 213 Bottom Finding pinger	The Teledyne Benthos BFP-312 bottom finding pinge	SDN:L05::379	SDN:L22::TOOL0791
altimeters	Instruments that measure their distance above a specified elevation such as the sea surface or the se	Tritech PA-200 Altimeter	Digital precision altimeter with 200kHz signal giving h	SDN:L05::379	SDN:L22::TOOL0059
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Very High Resolution Radiometer - 2	A radiation-detection imager with five spectral bands,	SDN:L05::309	SDN:L22::TOOL1075
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Along Track Scanning Radiometer - 2	A passive optical imager with dual view composed of	SDN:L05::309	SDN:L22::TOOL1073
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Microwave Scanning Radiometer-2	A conical scanning, passive microwave radiometer d	SDN:L05::309	SDN:L22::TOOL1065
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Along-Track Scanning Radiometer	A passive optical imager with dual view composed of	SDN:L05::309	SDN:L22::TOOL1061
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Microwave Scanning Radiometer for Earth Observation from Space (AMSR-E)	A conical scanning, passive microwave radiometer d	SDN:L05::309	SDN:L22::TOOL1066
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Very High Resolution Radiometer - 3	A radiation-detection imager with six spectral bands,	SDN:L05::309	SDN:L22::TOOL1076
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Micro-Wave Radiation Imager	The Microwave Radiation Imager (MWRI) is a conica	SDN:L05::309	SDN:L22::TOOL1037
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Very High Resolution Radiometer - 1	A radiation-detection imager with four spectral bands	SDN:L05::309	SDN:L22::TOOL1074
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Phased Array type L-band Synthetic Aperture Radar	The Phased Array type L-band Synthetic Aperture Ra	SDN:L05::309	SDN:L22::TOOL1041
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Enhanced Thematic Mapper Plus	An eight-band whiskbroom scanning radiometer desi	SDN:L05::309	SDN:L22::TOOL1077
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Thematic Mapper	The TM (Thematic Mapper) is a whick broom passive	SDN:L05::309	SDN:L22::TOOL1057
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Operational Land Image	The Operational Land Imager (OLI) is a high resoluti	SDN:L05::309	SDN:L22::TOOL1038
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Multispectral Scanner System	The Multispectral Scanner System (MSS) is a high re	SDN:L05::309	SDN:L22::TOOL1036
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Thermal Infrared Sensor	The Thermal Infrared Sensor (TIRS) is a push-boom	SDN:L05::309	SDN:L22::TOOL1056
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	VEGETATION	VEGETATION is a 4-channel optical imager operatin	SDN:L05::309	SDN:L22::TOOL1059
terrestrial radiometers	Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for	Advanced Spaceborne Thermal Emission and Reflection Radiometer	An optical imager detecting 14 spectral bands rangin	SDN:L05::309	SDN:L22::TOOL1071
laser altimeters	Instruments that determine the distance between the platform and the Earth's surface by timing reflec	Geoscience Laser Altimeter System	A laser-ranging (lidar) instrument designed to perforn	SDN:L05::310	SDN:L22::TOOL1079
inverted echosounders	Instruments that locate acoustic reflectors such as fronts in the water column by transmitting pulses o	Sea Data Inverted Echo Sounder (IES)	The Sea Data IES was based on the earlier designs c	SDN:L05::112	SDN:L22::TOOL1130
inverted echosounders	Instruments that locate acoustic reflectors such as fronts in the water column by transmitting pulses o	University of Rhode Island-Graduate School of Oceanography Inverted Echo Sounder (IES)	The URI-GSO IES is a 12 kHz acoustic echo sounde	SDN:L05::112	SDN:L22::TOOL1127
sediment traps	A collector of particulates as they sink through the water column.	Peterson Indented Rotating Sphere Sediment Trap	This is a sediment trap designed to eliminate sedime	SDN:L05::33	SDN:L22::TOOL0917
sediment traps	A collector of particulates as they sink through the water column.	Technicap PPS 4-3 24S 500ML sediment trap	A mooring sediment trap designed for long-term cont	SDN:L05::33	SDN:L22::TOOL1304
sediment traps	A collector of particulates as they sink through the water column.	McLane PARFLUX Mark78H-21 Sediment Traps	A sediment trap designed for mid-water mooring dep	SDN:L05::33	SDN:L22::TOOL0785
sediment traps	A collector of particulates as they sink through the water column.	McLane PARFLUX Mark78HW-13 Sediment Traps	A sediment trap designed for mid-water mooring dep	SDN:L05::33	SDN:L22::TOOL0786
sediment traps	A collector of particulates as they sink through the water column.	McLane PARFLUX Mark8-13	A sediment trap designed for mid-water mooring dep	SDN:L05::33	SDN:L22::TOOL0787
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1387
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-3 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1382
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican AXBT XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1389
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican Fast Deep XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1290
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-20 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1388
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-1 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1381
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1384
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton AXBT	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0713
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0262
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0263
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0435
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1383
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-11 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0716
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0718
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0717
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Unspecified {MBT} mechanical bathythermograph	A term to describe a generic mechanical bathyther	SDN:L05::132	SDN:L22::TOOL1287
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Unspecified (XBT) expendable bathythermograph	A term to describe a generic expendable bathyther	SDN:L05::132	SDN:L22::TOOL1291
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Lockheed Martin Sippican Deep Blue XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL0715
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1385
bathythermographs	Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temp	Sparton of Canada T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::132	SDN:L22::TOOL1386
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	AML Oceanographic Micro SV sound velocity probe	A single sensor, sound velocity probe for multi-beam	SDN:L05::185	SDN:L22::TOOL0821
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	AML Oceanographic X Metrec multiparameter CTD	An interchangeable, in-situ multiparameter CTD sonc	SDN:L05::185	SDN:L22::TOOL1318
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	Valeport MIDAS Sound Velocity Probe	This instrument comprises a time of flight sound spe	SDN:L05::185	SDN:L22::TOOL0531
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	AML Oceanographic Smart SV and T sound velocity probe	A sound velocity probe for use in sound chest applica	SDN:L05::185	SDN:L22::TOOL0823
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	AML Oceanographic SV 2000 Smart Sensor sound velocity probe	A single sensor, sound velocity probe for use in a mu	SDN:L05::185	SDN:L22::TOOL0822
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	AML Oceanographic Smart SV and P sound velocity probe	A sound velocity probe for use in shallow water appli	SDN:L05::185	SDN:L22::TOOL0830
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	Applied Microsystems Sound Velocity Profiler model 16	An autonomous, battery-powered sound velocity prof	SDN:L05::185	SDN:L22::TOOL0447
sound velocity sensors	Instrument that measures the velocity of sound in seawater.	Applied Microsystems Ltd. SV Plus probe	An instrument that measures the velocity of sound in	SDN:L05::185	SDN:L22::TOOL0868
redox potential sensors	Instruments that measure the tendency of the water column to either gain or lose electrons when it is	Hydrolab DataSonde 3 Water Quality Multiple Probe Logger	The DS3 multiparameter DataSonde is a multiprobe l	SDN:L05::356	SDN:L22::TOOL0613
redox potential sensors	Instruments that measure the tendency of the water column to either gain or lose electrons when it is	YSI 6-series multiparameter water quality sondes	Comprehensive multi-parameter, water quality monit	SDN:L05::356	SDN:L22::TOOL0737
redox potential sensors	Instruments that measure the tendency of the water column to either gain or lose electrons when it is	Horiba U-22 multiparameter instrument	The Horiba U-22 multiparameter sensor is a submers	SDN:L05::356	SDN:L22::TOOL0526
redox potential sensors	Instruments that measure the tendency of the water column to either gain or lose electrons when it is	Hydrolabs Series 5 probes	Multi-parameter probes that can measure from 12 (M	SDN:L05::356	SDN:L22::TOOL0738
radiosondes	A balloon-borne package equipped with a radio transmitter and meteorological sensors typically meas	VIZ 1223 Radiosonde	An instrument package in common use in the 1970s	SDN:L05::103	SDN:L22::TOOL0619
radiosondes	A balloon-borne package equipped with a radio transmitter and meteorological sensors typically meas	Vaisala RS92-SGP radiosonde	An all-digital radiosonde equipped with high performa	SDN:L05::103	SDN:L22::TOOL1008
sediment suction samplers	Devices that collect samples from the sediment layer surface using suction. The mechanism of suctio	Unspecified diver-operated sediment suction sampler	A generic term for a manually operated instrument th	SDN:L05::391	SDN:L22::TOOL1371
sediment suction samplers	Devices that collect samples from the sediment layer surface using suction. The mechanism of suctio	Unknown diver-operated sediment suction sampler - Rostron 1983	A manually operated instrument that is used to collec	SDN:L05::391	SDN:L22::TOOL1372
thin film metal samplers	Metal samplers comprising a filter, a diffusive gel layer and a resin layer that scavenge trace metals b	DGT Research Diffusive Gradients in Thin Films trace metal sampler	A device designed to measure concentrations of diss	SDN:L05::TFSAMP	SDN:L22::TOOL0553
bioluminescence sensors	Submersible instruments which measure visible emissions from bioluminescent organisms by stimula	Chelsea Technologies GLOWtracka bioluminescence	The GLOWtracka is designed to measure visible emi	SDN:L05::BLUMS	SDN:L22::TOOL0662
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1387
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-3 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1382
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican AXBT XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1389
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican Fast Deep XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1290
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-20 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1388
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-1 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1381
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1384
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton AXBT	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0713
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-5 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0262
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0263
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0435
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-4 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1383
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-11 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0716

Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-10 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0718
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0717
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Unspecified (XBT) expendable bathythermograph	A term to describe a generic expendable bathytherm	SDN:L05::389	SDN:L22::TOOL1291
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Lockheed Martin Sippican Deep Blue XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL0715
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-6 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1385
Expendable bathythermographs	Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and e	Sparton of Canada T-7 XBT probe	An expendable free-fall temperature probe that provic	SDN:L05::389	SDN:L22::TOOL1386
Mechanical bathythermographs	Tethered probes that measure temperature in relation to depth using a temperature and pressure pacl	Unspecified {MBT} mechanical bathythermograph	A term to describe a generic mechanical bathytherm	SDN:L05::390	SDN:L22::TOOL1287
inorganic carbon analysers	Instruments measuring carbonate in sediments and inorganic carbon in the water column.	Apollo SciTech AS-C3 Dissolved Inorganic Carbon (DIC) analyser	A Dissolved Inorganic Carbon (DIC) analyser, for use	SDN:L05::86	SDN:L22::TOOL1017
cloud cover quantifiers	Instruments that measure the proportion of the sky covered by cloud (cloud amount) and/or the heigh	Vaisala CL31 Ceilometer for Cloud Height Detection	A fully automatic ceilometer for cloud base height an	SDN:L05::CCOV	SDN:L22::TOOL1023
cloud cover quantifiers	Instruments that measure the proportion of the sky covered by cloud (cloud amount) and/or the heigh	MTECH Ceilometer 8200-CHS	The MTECH 8200-CHS is a compact ceilometer desi	SDN:L05::CCOV	SDN:L22::TOOL1094
cloud cover quantifiers	Instruments that measure the proportion of the sky covered by cloud (cloud amount) and/or the heigh	Eliasson CBME80 infrared laser diode cloud ceilometer	An infrared laser diode measuring the cloud base hei	SDN:L05::CCOV	SDN:L22::TOOL0608
atmospheric transparency quantifiers	Instruments that quantify the degree of scattering and absorption of light passing through the atmosph	Thermo Scientific 5012 Multi Angle Absorption Photometer	An in-situ instrument that determines atmospheric ae	SDN:L05::ATRANS	SDN:L22::TOOL0296
atmospheric transparency quantifiers	Instruments that quantify the degree of scattering and absorption of light passing through the atmosph	Eliasson CBME80 infrared laser diode cloud ceilometer	An infrared laser diode measuring the cloud base hei	SDN:L05::ATRANS	SDN:L22::TOOL0608
atmospheric transparency quantifiers	Instruments that quantify the degree of scattering and absorption of light passing through the atmosph	Biral HSS VPF-730 Visibility and Present Weather Sensor	An infrared forward scatter meter which measures h	SDN:L05::ATRANS	SDN:L22::TOOL0609
meteorological LiDARs	Instruments that measure meteorological phenomena such as wind speed, wind direction and air qual	Geoscience Laser Altimeter System	A laser-ranging (lidar) instrument designed to perforn	SDN:L05::92	SDN:L22::TOOL1079
meteorological LiDARs	Instruments that measure meteorological phenomena such as wind speed, wind direction and air qual	Vaisala CL31 Ceilometer for Cloud Height Detection	A fully automatic ceilometer for cloud base height an	SDN:L05::92	SDN:L22::TOOL1023
meteorological LiDARs	Instruments that measure meteorological phenomena such as wind speed, wind direction and air qual	MTECH Ceilometer 8200-CHS	The MTECH 8200-CHS is a compact ceilometer desi	SDN:L05::92	SDN:L22::TOOL1094

Please provide on this tab which devices are permanently on-board but which you can't find in the tool list tab.

You can add comma-separated entries in the cell.

Tool Category	List any permanent on-	Tool Category definition
acoustic backscatter sensors		Instrument that measures the amount of sound energy transmitted into the water column returned to the instrument.
acoustic tracking systems		A network of acoustic sensors that determine the location of a sound source by triangulation such as acoustically active float tracking systems.
active fluorometers		Fluorometers that measure photosynthetic parameters by taking measurements whilst manipulating the phytoplankton with controlled high-intensity illumination such as pump and probe and FRRF.
ADVs and turbulence probes		ADV is the acronym for acoustic doppler velocimeter. The group includes all in-situ instruments that make high frequency measurements of three-dimensional current velocity in order to determine the extent of turbulence within a water body.
Aerosol physical characterisers		Instruments that determine physical attributes such as size and abundance of atmospheric aerosols.
aerosol samplers		A device that collects a sample of aerosol (dry particles or liquid droplets) from the atmosphere.
Aethalometers		Instruments that quantify atmospheric particulate carbon ('black carbon') concentrations.
airgun		A marine seismic source which injects a bubble of highly compressed air into the water. Oscillations of the bubble as it alternatively expands and contracts generate a sonic wave whose frequency depends on the amount of air in the bubble, its pressure, and the water depth.
airgun array		A marine seismic source where multiple airguns of different sizes are tuned so that a broader frequency spectrum will be generated.
altimeters		Instruments that measure their distance above a specified elevation such as the sea surface or the seabed. Classification includes acoustic and pressure-based instruments that are designed to provide platform z co-ordinate spatial coverage in the atmosphere or a water body. It excludes remote sensing instruments such as LIDAR and satellite radar altimeters designed to map surface elevation.
anemometers		Instrument that measures wind speed and direction at a single elevation.
atmospheric gas analysers		In-situ instruments that can determine the proportion of one or more gaseous components of the atmosphere.
atmospheric radiometers		Sensors that measure the intensity an nature of electromagnetic radiation in a manner optimised for the quantification of atmospheric phenomena.
atmospheric transparency quantifiers		Instruments that quantify the degree of scattering and absorption of light passing through the atmosphere, including instruments that quantify aerosol and particulate concentrations (e.g. black carbon) and instruments measure meteorological visibility.
bathythermographs		Instruments that measure vertical profiles of sea temperature by either lowering a pressure plus temperature senor package (MBT) or dropping a free falling disposable sensor (XBT).
beam trawls		Nets towed over the sea floor having the horizontal net opening provided by a wooden or metal beam that disrupts the surface of the bed.
bench fluorometers		Instruments that determinesthe amount of chlorophyll in in-vitro samples by measuring the quantity of red light (around 685nm) emitted following excitation by pulses of blue light (around 460-470nm).
bench particle sizers		Instruments that measure the size spectrum of particles in a water or sediment sample.
benthos samplers		A mechanical device that collects organisms from the seafloor. Includes dredges, sledges, weighted nets like beam trawls, and ROV manipulators.
bioluminescence sensors		Submersible instruments which measure visible emissions from bioluminescent organisms by stimulating intracellular chemiluminescence through mechanical-stressors, such as turbulent water-flow, and sensing by photodetectors, such as photodiodes or photomultiplier tubes. Excludes bioluminescence biosensors which detect the presence of target chemicals or compounds using engineered-bioluminescent bacteria.
cameras		All types of photographic equipment that may be deployed in aircraft or satellites including stills, video, film and digital systems.
Chirp		Chirp systems emit a 'swept-frequency signal', meaning that the transmitted signal is emitted over a period of time and over a set range of frequencies. This repeatable (transmitted) waveform can be varied in terms of pulse length, frequency bandwidth, and phase/amplitude. A matched filter, or correlation process, collapses the swept frequency modulated (FM) received signal into a pulse of short duration, maximizing the signal-to-noise-ratio. The reflected signal is received by a tuned transducer array that generates the outgoing acoustic energy. Chirps operate within a range of 400Hz - 24 kHz and are used for the first 20-30 metres of unconsolidated sediments.
cloud cover quantifiers		Instruments that measure the proportion of the sky covered by cloud (cloud amount) and/or the height of the cloud above the ground (cloud base).
colorimeters		Instruments measuring the amount of light of a given wavelength absorbed by a sample of solution to determine the concentration of a specific coloured solute.
continuous air samplers		A device that continuously supplies a flow of air either to an analytical instrument, over a sensor or from which discrete samples may be drawn.
continuous water samplers		A device that continuously supplies a flow of water either to an analytical instrument, over a sensor or from which samples may be drawn.
CTD		A reusable instrument that always simultaneously measures conductivity and temperature (for salinity) and pressure (for depth).
current meters		Instrument that measures current speed and direction at a single depth.
current profilers		Instrument that measures current speed and direction at multiple predetermined depths simultaneously.
demersal trawl nets		Nets towed over the sea floor designed to sample species living on or near the bottom.
discrete air samplers		A device that collects a sample of air from the atmosphere and stores it, usually under pressure, for subsequent analysis.
discrete water samplers		A device that collects an in-situ discrete water sample from any depth and returns it to the surface without contamination by the waters through which it passes, such as a water bottle.
dissolved gas sensors		Instrument that measures the concentration of gases, generally oxygen, dissolved in the water column.
Expendable bathythermographs		Disposable, free-falling probes that measure temperature in relation to depth using a thermistor and electronic data acquisition system. Probes are dropped into the water and a temperature signal is transferred to the platform by a wire that breaks when the wire is out. Depth is calculated as a function of time to descend and a known constant rate of descent.
expendable CTDs		Instruments that measure vertical profiles of sea temperature and salinity with a free falling disposable temperature and conductivity sensor package.
Fish-finder echosounders		Instruments primarily designed to detect shoals of fish through transmission and reception of acoustic signals. They are often optimised for this purpose through the use of multiple frequencies.
Flexotir		A seismic method for marine shooting whereby small charges are propelled through a rubber hose by water under pressure into a steel cage where they are detonated. Holes in the cage allow the water repelled by the explosion to flow out and in thus dissipating some of the energy in the bubble effect.
flow meters		Sensors that quantify the rate at which fluids (e.g. water or air) pass through sensor packages, instruments or sampling devices.
fluorometers		Instrument that measures the amount of stimulated electromagnetic radiation produced by pulses of electromagnetic radiation emitted into the water column.
gill nets		Nets drifting in the sea or standing on the sea floor in which fish become entangled, usually through their gill covers.
gravimeters		Instrument that makes measurements of the Earth's gravity field.
high-speed plankton samplers		A fine-meshed net or filter towed behind a moving vessel that collects a single sample for a tow. Samples microzooplankton, mesozooplankton and nekton.
hydrophones		Devices containing transducers that convert underwater sound waves into electrical signals.
ice thickness profilers		Instruments that measure the freeboard, draught or thickness of ice sheets or sea ice. These are not to be confused with tethered ice profilers that are platforms that sample the water column beneath sea ice.
in-situ particle sizers		Sensors or instruments physically located in any body of water that measure the size spectrum of particles suspended in it.
inorganic carbon analysers		Instruments measuring carbonate in sediments and inorganic carbon in the water column.
inverted echosounders		Instruments that locate acoustic reflectors such as fronts in the water column by transmitting pulses of sound from the seabed and determing reflection return times.
laser altimeters		Instruments that determine the distance between the platform and the Earth's surface by timing reflected pulses of laser light.
magnetometers		Instrument that makes measurements of the Earth's magnetic field.
Mechanical bathythermographs		Tethered probes that measure temperature in relation to depth using a temperature and pressure package that is lowered into the water and subsequently retrieved using a winch. The profile of temperature is recorded mechanically by etchings on a glass slide. Depth is calculated as a function of pressure.
metal analysers		In-situ instruments that can determine the total, dissolved or particulate concentration of one or more metallic elements (including trace metalloids like arsenic) in a water body.
meteorological LiDARs		Instruments that measure meteorological phenomena such as wind speed, wind direction and air quality remotely by determining the distances from a platform to a reflective surface in the atmosphere or at ground level, calculated from timed return rates of continuous or pulsed emissions of laser light.
meteorological packages		Instrument that makes routine meteorological measurements on the atmosphere, typically air pressure, temperature and humidity.
microstructure sensors		Fast response sensors sampled at high frequency to determine the distribution of water body properties on a millimetric scale.
multi-beam echosounders		Instruments that measure water depth along several tracks parallel to the platform track by timing pulses of sound reflected on the seafloor.
multi-channel seismic reflection systems		An energy source of unspecified frequency plus a multiple strings of towed hydrophones (streamers) that determine geologic structure by detecting waves reflected by subsurface layers.
multinet		A system comprising several nets that can be opened and closed sequentially to collect a series of samples during a tow or haul. Samples microzooplankton, mesozooplankton and nekton.
neuston net		A fine-meshed net designed to collect small size organisms, aggregates, or litter on top of or close to the surface of a water column (top 10 to 50 centimetres) including for example microzooplankton, mesozooplankton, nekton, microplastic or other litter.
nutrient analysers		Instrument that makes in-situ measurements of one or more of nitrate, nitrite, ammonium, urea, phosphate or silicate dissolved in the water column.
ocean colour radiometers		Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for the determination of ocean chlorophyll concentration.
optical backscatter sensors		Instrument that measures the amount of electromagnetic radiation emitted into the water column returned to the instrument.
pelagic trawl nets		A net towed through the water column designed to sample free-swimming nekton or fish.
pH sensors		Instruments that measure the hydrogen ion concentration in the water column.
plankton nets		A fine-meshed net designed to collect small size organisms, aggregates, or litter in the water column including for example microzooplankton, mesozooplankton, nekton, microplastic or other litter.
plankton recorders		A device that continuously samples a flow of water, separating and fixing plankton for subsequent identification and counting.
platform attitude sensors		Instruments that measure platform orientation or rates of platform motion or acceleration in any direction or along any axis. Excludes inertial navigation systems that are designed to determine platform location with respect to an external co-ordinate reference system.
precipitation gauges		Instruments that measure either the rate of fall or integrated amount of rain, snow, sleet, hail or graupel.
precipitation samplers		A device that collects a sample of precipitation (rain, hail or snow) as it falls.

radiometers		Instrument that measures the intensity of electromagnetic radiation in either the atmosphere or the water column.
radiosondes		A balloon-borne package equipped with a radio transmitter and meteorological sensors typically measuring temperature, pressure, and humidity.
redox potential sensors		Instruments that measure the tendency of the water column to either gain or lose electrons when it is subject to change by introduction of a new species.
rock corers		A device that extracts rock either by chipping or drilling.
salinity sensor		Instrument that simultaneously measures electrical conductivity and temperature in the water column to provide temperature and salinity data.
salinometers		Instruments that measure the salinity of a collected water sample based on its electrical conductivity or optical properties.
scatterometers		Sensors that measure the reflection or scattering effect produced while scanning the surface of the earth. Primarily used to measure near surface winds over the oceans.
sea level recorders		Instruments that make smoothed measurements of the elevation of the sea surface relative to a fixed vertical datum.
sediment dredges		Bucket-like containers hauled over the sea bed collecting integrated samples of surface sediment along a segment of ship track.
sediment grabs		A device that collects a sample of surface sediment including manually deployed equipment like a shovel or bucket.
sediment profile imagers		Devices that provide in-situ still or video images of a section including bottom water, the undisturbed sediment-water interface and the upper sediment layers.
sediment suction samplers		Devices that collect samples from the sediment layer surface using suction. The mechanism of suction can be accomplished by either vacuum, by pressure difference between the air inside the sampler and surrounding water, by pumping water directly into the sampler or by under pressure air to elevate the sediment inside the sampler. Devices are typically diver- or remotely-operated.
sediment traps		A collector of particulates as they sink through the water column.
seismic refraction systems		A network of seismometers or geophones plus an energy source that determine geologic structure by detecting waves refracted by subsurface layers.
seismometers		Devices placed on the ground or seabed to measure physical movement of that substrate.
sidescan sonars		Instruments with directional acoustic transmitters and receivers fitted to an underwater platform that emit fan-shaped pulses down toward the seafloor across a wide angle perpendicular to the path of the platform through the water.
sieves and filters		Devices that separate solid particles larger than a particular size from a sample collected by another device that is a suspension of solid particles in a liquid or gas.
single-beam echosounders		Instruments that measure water depth at a single point below the platform by timing pulses of sound reflected on the seafloor.
single-channel seismic reflection systems		An energy source of unspecified frequency plus a single string of towed hydrophones (streamer) that determine geologic structure by detecting waves reflected by subsurface layers.
snow and ice samplers		A device that collects a sample of frozen seawater or accumulated frozen precipitation.
sound velocity sensors		Instrument that measures the velocity of sound in seawater.
spectrophotometers		Instruments measuring the relative absorption of electromagnetic radiation of different wavelengths in the near infra-red, visible and ultraviolet wavebands by samples.
surface current radars		Instruments that measure the speed and direction of sea surface travel by timing reflected radio waves.
synthetic aperture radars		Instruments that generate maps of radar reflectivity through the synthesis of multiple pulses from a moving platform.
terrestrial radiometers		Sensors that measure the intensity and nature of electromagnetic radiation in a manner optimised for the quantification of terrestrial phenomena.
thermistor chains		A group of rigidly-mounted temperature sensors sampled by a common data logger held at various depths in the water column.
thermosalinographs		Temperature and conductivity sensors mounted on a sea-surface platform continuously measuring a surface water supply.
thin film metal samplers		Metal samplers comprising a filter, a diffusive gel layer and a resin layer that scavenge trace metals by diffusion from water bodies or in-situ sediment pore waters. A constant concentration gradient is set up in the gel from which the metal concentration in the sampled medium may be determined.
tracking tags		Devices attached to living organisms with the purpose of determining the location of those organisms as a function of time after tagging and release.
transmissometers		Systems that measure the attenuation of electromagnetic radiation by the water column. Includes human observer plus Secchi Disk.
unconsolidated sediment corers		Devices designed to collect samples of unconsolidated sediment from between the surface and depths from centimetres to 10s of metres with minimal disturbance of the sediment structure.
underwater cameras		All types of photographic equipment that may be deployed underwater including stills, video, film and digital systems.
water body temperature sensor		Sensors that measure the intensity and nature of electromagnetic radiation emitted from the Earth in a manner optimised for the determination of water body surface temperature.
water pressure sensors		Sensors measuring hydrostatic pressure that are capable of withstanding the physical demands made by in-situ measurements in water bodies. Depending upon the mode of deployment they may measure sea level, waves, mooring performance or the depth of a profiling instrument.
water temperature sensor		An instrument that measures the temperature of the water with which it is in contact.
wave recorders		Instrument that measures water column surface wave parameters including height, period, direction and energy spectra.