Glossary of Terms

The following is a list of the most common terms, service names and filters used by the Oceans 3.0 API.

Term	Definition
bbox	A 3D Bounding Box, representing the minimum and maximum extents (latitude, longitude, depth) of all geographic features in a collection.
	Example: "bbox":{"maxDepth":987.0,"maxLat":48.316839,"maxLon":-126.0501233333,"minDepth":981.0,"minLat": 48.3165166667,"minLon":-126.050872}
cvTerm	A web service output value that represents a controlled vocabulary term for the specific item.
	<pre>Example: "cvTerm":{"deviceCategory":[{"uri":"http://vocab.nerc.ac.uk/collection/L05/current/130/"," vocabulary":"SeaDataNet device categories"}]</pre>
Data Produ	Can include both raw data (such as tabular scalar data, manufacturers formats) and visualizations (such as graphs, charts and maps). Data products can also be represented in a number of different formats, such as:
ct	 csv, mat and json for tabular data mn3 and way for audio data
	 mpeg and movifor video data use and movifor tire appointer for complex data
	 See Data Products Home for more information.
Data	Additional, data product specific, filters that are used to define how the data in a data product is compiled, modified or delivered.
Produ ct Optio ns	 All data product option filters required by the dataProductDelivery web service have the prefix dpo
	Example:
	$\& data \texttt{ProductCode=TSSD} \& \texttt{extension=csv} \& \texttt{dpo_qualityControl=1} \& \texttt{dpo_resample=none} \& \texttt{dpo_dataGaps=0} \\ \texttt{dpo_resample=none} \& dpo_resample=non$
	or
	"dataProductCode":"TSSD","extension":"csv",'dpo_qualityControl':1,'dpo_resample':'none','dpo_dataGaps': 0
	See Data Product Options for more information.
dataP	A web service filter or output value that represents an abbreviation of a data product name, which acts as a unique identifier for a data product.
roduct Code	Example: dataProductCode=TSSD or "dataProductCode":"TSSD"
	"TSSD" is the data product code for the "Time Series Scalar Data" data product.
dataP roduct Name	A web service filter or output value that represents the full name of a specific data product, which can be used by a user to identify a specific data product and may be used as a label.
	Example: &dataProductName=Scalar or "dataProductName":"Time Series Scalar Data"
dataS	A locations web service output value that contains a link url to the Oceans 3.0 - Data Search page for a specific location.
earch URL	Example: "dataSearchURL":"http://data.oceannetworks.uvic.ca/DataSearch?location=BACAX"
dateF	A dataProductDelivery service filter that represents the starting date/time of a time interval for a data product request.
rom	See also: ISO 8601 Duration Format definition
	Example: &dateFrom=2015-04-24T00:00:01.000Z

dateTo	A dataProductDelivery service filter that represents the starting date/time of a time interval for a data product request.
	See also: ISO 8601 Duration Format definition
	Example: &dateTo=2015-04-24T00:00:01.000Z
Deplo yment	A specific date range and location that an instrument is connected to ONC network. A deployment is uniquely identified by a deviceCode, a locationCode, begin & end dates and a geographic location (lat, lon, depth). A deployment does not guarantee data availability. An instrument may be connected to the network, but not actively collecting data during portions of a deployment. An instrument my be deployed at multiple locations over its lifespan.
deplo	A web service filter that represents the starting datetime of a time interval for a deployment.
Begin	See also: ISO 8601 Duration Format definition
	Example: &deploymentBegin=2015-04-24T00:00:01.000Z
deplo	A web service filter that represents the ending datetime of a time interval for a deployment.
End	See also: ISO 8601 Duration Format definition
	Example: &deploymentEnd=2015-04-24T00:05:29.000Z
depth	The distance below the water surface. For a location, depth represents the average depth or centroid of a 3D bounding box encompassing all of the site devices represented in the collection. For a device, depth represents the depth of a specific instrument deployment.
	Example: "depth":984.3076
Device	An instrument that has one or more sensors that observe a property or phenomenon with a goal of producing an estimate of the value of the property. A specific sensor on a device is identified by a property (variable). A Device can have data at the device level or at the property (variable) level. For example A camera's image data is at the device level. A device can be deployed at multiple locations over its lifespan.
Devic	A grouping of like devices, such as CTD - Conductivity Temperature (and Depth) sensor. A device category can contain devices from multiple manufactures, for example CTD may contain devices from Sea-Bird, RBR, Alec Electronics, AML, Falmouth.
Categ ory	
devic eCate	A web service filter or output value that represents an abbreviation of a device category name, which acts as a unique identifier for a device category.
goryC	Example: &deviceCategoryCode=CTD or "deviceCategoryCode":"CTD"
ode	"CTD" is the device category code for a Conductivity, Temperature and Depth sensor
devic eCate	A web service filter or output value that represents the full name of a specific device category, which could be used by a user to identify a specific device category and may be used as a label.
goryN ame	Example: &deviceCategoryName=Conductivity or "deviceCategoryName":"Conductivity Temperature (and Depth Sensor)"
devic eld	A numeric unique identifier for a specific device. Used by DMAS and by some legacy web services and user workflows. Included in the results of a devices web service payload.
	Example: "deviceId":23599
devic	A devices web service output value that contains a link url to the Oceans 3.0 - Device Details page for a specific device.
CLINK	Example: "deviceLink":"http://data.oceannetworks.ca/DeviceListing?DeviceId=11302"
devic eName	A web service filter or output value that represents the full name of a specific device, which can be used by a user to identify a specific device and may be used as a label.
	Example: &deviceName=Sea-Bird or "deviceName":"Sea-Bird SeaCAT SBE16plus 4686"
exten	A web service filter or output value that represents a data product file format.
SION	Example: &extension=mat or "extension":"mat"
	"mat" is the extension for the Matlab file format.

filter	A web service input parameter that is used to define an ONC element (location, device, deviceCategory, property or data product), data or data product.
	Reductive Filtering is used by all ONC API Discovery web services. Filters are compound and imply AND, therefore an element must match all filter criteria in order to be included in a result set.
	Data product requests use filters to uniquely define the data representation (ie, data product, format, instrument, date range and data product options).
filters	A collection of one or more filter items.
headi ng	The direction in which the 'front' of the platform is facing. It is not necessarily the same as the direction in which it is travelling.
hasD evice	A web service output value boolean (true/false) that indicates if a data product delivery request can be made using a device (by Device or by Device & Property).
Data	Example: "hasDeviceData":"true"
hasPr operty	A web service output value boolean (true/false) that indicates if a data product delivery request can be made using a primary sensor request (by Location & Property).
Data	Example: "hasPropertyData":"false"
helpD ocum ent	A dataProducts service output value that contains a link url to the Data Product documentation for a specific data product. See Data Products Home for more information.
	Example: "helpDocument":"https://wiki.oceannetworks.ca/display/DP/1" is the help document url for the "Time Series Scalar Data" data product
190	See https://www.digi.com/resources/documentation/digidocs/90001488-13/reference/r_iso_8601_duration_format.htm
ISO 8601 Durati	1. Basic Structure: ISO 8601 duration format begins with the letter "P" (which stands for "period") followed by a sequence of numbers and letters that indicate the duration.
on Form	2. Components: The format can include various components to specify different units of time:
at	 P is the duration designator (referred to as "period"), and is always placed at the beginning of the duration. Y is the year designator that follows the value for the number of years. M is the month designator that follows the value for the number of months. W is the week designator that follows the value for the number of weeks. D is the day designator that follows the value for the number of days. T is the time designator that proceedes the time components.
	 H is the hour designator that follows the value for the number of hours. M is the minute designator that follows the value for the number of minutes. S is the second designator that follows the value for the number of seconds.
	3. Numbers: The numbers represent the quantity of time units. For example, "P3Y" means a period of 3 years, and "P5D" means a period of 5 days.
	4. Combining Units: You can combine units to represent more complex durations. For example, "P1Y2M" means a period of 1 year and 2 months, or "P2DT3H" means a period of 2 days and 3 hours.
	5. Direction: If a duration is in the past, you add a "-" sign before the "P." For example, "-P2Y" means a period of 2 years ago.
	For example: P3Y6M4DT12H30M5S represents a duration of three years, six months, four days, twelve hours, thirty minutes, and five seconds.
lat	Degrees latitude of a geographic location. Latitude is the angular displacement of a place north or south of the equator. For a location, lat represents the average latitude or centroid of bounding box encompassing all site devices represented in the collection. For a device, lat represents the latitude of a specific instrument deployment.
	Example:"lat":48.31668927333395
Locati on	The parent of an Ocean's 2.0 Tree Node that you can get data from. More specifically, in the Oceans 3.0 Data Search GUI, a location is a Tree Node that contains device categories (Instruments by Location) or properties (Variables by Location) that can be selected to download data. From the Ocean's 2.0 perspective, a location is a Search Tree Node that has one or more site devices and/or has one or more primary sensors. If there are multiple instruments of the same device category at a location, child-locations or pseudo-nodes will exist and data can be pulled from any one of them. Device Categories can be either at the location or at the child-location level, whereas Properties (variables) can only be at the location level, due to the 'Primary Sensor' concept, which stitches together data from multiple sensors over time at a location.
	A location represents a feature of interest that can be either at a fixed position, such as a named cluster of instruments on the sea floor, like Axis (POD #1) or above the water, like 'Mill Bay Shore Station' or on a mobile platform, such as the BC Ferries vessel on the 'Tsawwassen - Duke Point' route, a research vessel such as 'R/V Sikuliaq', an ROV such as 'Jason 2' or a Glider.

locati onCo	A web service filter or output value that represents a short abbreviation of a location name, which acts as a unique identifier for a specific location.
de	Example: &locationCode=CQSBG or "locationCode":"CQSBG"
	"CQSBG" is the location code for Clayoquot Slope / Bubbly Gulch
locati onNa	A web service filter or output value that represents the full name of a specific location, which could be used by a user to identify a specific location and may be used as a label.
me	Example: &locationName=Bubbly Gulch or "locationName":"Bubbly Gulch"
lon	Degree longitude of a geographic location. Longitude is the angular displacement of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object. For a location, lon represents the average longitude or centroid of bounding box encompassing all site devices represented in the collection. For a device, lon represents the longitude of a specific instrument deployment. Example: "lon":-126.05033437333402
includ	A locations service boolean filter to include all children of a location in the results, in a non-hierarchical representation.
eChild ren	Example: &includeChildren=true
pitch	The side-to-side motion around the transverse axis of the platform.
Prope rty	The common name given to a sensor type. A property is an observable phenomenon that can be measured to produce an estimated value. A property is also known as a variable.
prope	A web service filter or output which acts as a unique identifier for a specific property (variable).
rtyCo de	Example: &property=oxygen or "property":"oxygen"
prope rtvNa	A web service filter or output value that represents the full name of a specific property, which could be used by a user to identify a specific property and may be used as a label.
me	Example: &propertyName=Pressure or "propertyName":"Pressure"
roll	The up/down motion around the longitudinal axis of the platform.
uom	Unit of Measure
	Example: "uom":"psi" represents "Pounds per sq inch"