

Glossary of Terms

The following is a list of the most common terms, service names and filters used by the Oceans 2.0 API.

Term	Definition
begin	<p>A dataProductDelivery service filter that represents the starting datetime of a time interval for a data product request. (This has been deprecated in favour of "dateFrom".)</p> <p>Example: <code>&begin=2015-04-24T00:00:01.000Z</code></p>
bbox	<p>A 3D Bounding Box, representing the minimum and maximum extents (latitude, longitude, depth) of all geographic features in a collection.</p> <p>Example: <code>"bbox": {"maxDepth": 987.0, "maxLat": 48.316839, "maxLon": -126.0501233333, "minDepth": 981.0, "minLat": 48.3165166667, "minLon": -126.050872}</code></p>
cvTerm	<p>A web service output value that represents a controlled vocabulary term for the specific item.</p> <p>Example: <code>"cvTerm": {"deviceCategory": [{"uri": "http://vocab.nerc.ac.uk/collection/L05/current/130/"}], "vocabulary": "SeaDataNet device categories"}</code></p>
Data Product	<p>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:</p> <ul style="list-style-type: none"> • csv, mat and json for tabular data • mp3 and wav for audio data • mpeg and mov for video data • vec and manufacturer specific formats for complex data. • See Data Products Home for more information.
Data Product Options	<p>Additional, data product specific, filters that are used to define how the data in a data product is compiled, modified or delivered.</p> <ul style="list-style-type: none"> • All data product option filters required by the dataProductDelivery web service have the prefix dpo_ • A request to the dataProductDelivery web service must include all of the data product options required by the data product and extension combination. For example, the 'Time Series Scalar Data' data product, with a 'csv' extension, requires the dpo_qualityControl, dpo_resample and dpo_dataGaps data product options to be included in the request. If all of the data product options are not included in the filters of the request, the dataProductDelivery service will return an error and message. • Some data product option values used by a data product require additional data product options to be used. For example, when using the dpo_resample=average option, a resample period data product option must be included, such as dpo_average=3600. See the specific data product in Data Products Home for more information. <p>Example:</p> <pre>&dataProductCode=TSSD&extension=csv&dpo_qualityControl=1&dpo_resample=none&dpo_dataGaps=0</pre> <p>or</p> <pre>"dataProductCode": "TSSD", "extension": "csv", 'dpo_qualityControl': 1, 'dpo_resample': 'none', 'dpo_dataGaps': 0</pre> <ul style="list-style-type: none"> • See Data Product Options for more information.
dataProductCode	<p>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.</p> <p>Example: <code>dataProductCode=TSSD</code> or <code>"dataProductCode": "TSSD"</code></p> <ul style="list-style-type: none"> • "TSSD" is the data product code for the "Time Series Scalar Data" data product.
dataProductName	<p>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.</p> <p>Example: <code>&dataProductName=Scalar</code> or <code>"dataProductName": "Time Series Scalar Data"</code></p>
dataSearchURL	<p>A locations web service output value that contains a link url to the Oceans 2.0 - Data Search page for a specific location.</p> <p>Example: <code>"dataSearchURL": "http://data.oceannetworks.uvic.ca/DataSearch?location=BACAX"</code></p>

dateFrom	<p>A dataProductDelivery service filter that represents the starting date/time of a time interval for a data product request. (This replaced the deprecated "begin".)</p> <p>Example: <code>&dateFrom=2015-04-24T00:00:01.000Z</code></p>
dateTo	<p>A dataProductDelivery service filter that represents the starting date/time of a time interval for a data product request. (This replaced the deprecated "end".)</p> <p>Example: <code>&dateTo=2015-04-24T00:00:01.000Z</code></p>
Deployment	<p>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 may be deployed at multiple locations over its lifespan.</p>
deploymentBegin	<p>A web service filter that represents the starting datetime of a time interval for a deployment.</p> <p>Example: <code>&deploymentBegin=2015-04-24T00:00:01.000Z</code></p>
deploymentEnd	<p>A web service filter that represents the ending datetime of a time interval for a deployment.</p> <p>Example: <code>&deploymentEnd=2015-04-24T00:05:29.000Z</code></p>
depth	<p>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.</p> <p>Example: <code>"depth":984.3076</code></p>
Device	<p>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.</p>
Device Category	<p>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.</p>
deviceCategoryCode	<p>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.</p> <p>Example: <code>&deviceCategoryCode=CTD</code> or <code>"deviceCategoryCode":"CTD"</code></p> <ul style="list-style-type: none"> • "CTD" is the device category code for a Conductivity, Temperature and Depth sensor
deviceCategoryName	<p>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.</p> <p>Example: <code>&deviceCategoryName=Conductivity</code> or <code>"deviceCategoryName":"Conductivity Temperature (and Depth Sensor)"</code></p>
deviceId	<p>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.</p> <p>Example: <code>"deviceId":23599</code></p>
deviceLink	<p>A devices web service output value that contains a link url to the Oceans 2.0 - Device Details page for a specific device.</p> <p>Example: <code>"deviceLink":"http://data.oceannetworks.ca/DeviceListing?DeviceId=11302"</code></p>
deviceName	<p>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.</p> <p>Example: <code>&deviceName=Sea-Bird</code> or <code>"deviceName":"Sea-Bird SeaCAT SBE16plus 4686"</code></p>
end	<p>A dataProductDelivery service filter that represents the ending datetime of a time interval for a data product request. (This has been deprecated in favour of "dateTo".)</p> <p>Example: <code>&end=2015-04-24T00:05:29.000Z</code></p>

extension	<p>A web service filter or output value that represents a data product file format.</p> <p>Example: <code>&extension=mat</code> or <code>"extension":"mat"</code></p> <ul style="list-style-type: none"> "mat" is the extension for the Matlab file format.
filter	<p>A web service input parameter that is used to define an ONC element (location, device, deviceCategory, property or data product), data or data product.</p> <p>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.</p> <p>Data product requests use filters to uniquely define the data representation (ie, data product, format, instrument, date range and data product options).</p>
filters	A collection of one or more filter items.
heading	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.
hasDeviceData	<p>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).</p> <p>Example: <code>"hasDeviceData":"true"</code></p>
hasPropertyData	<p>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).</p> <p>Example: <code>"hasPropertyData":"false"</code></p>
helpDocument	<p>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.</p> <p>Example: <code>"helpDocument":"https://wiki.oceannetworks.ca/display/DP/1"</code> is the help document url for the "Time Series Scalar Data" data product</p>
lat	<p>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.</p> <p>Example: <code>"lat":48.31668927333395</code></p>
Location	<p>The parent of an Ocean's 2.0 Tree Node that you can get data from. More specifically, in the Oceans 2.0 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.</p> <p>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.</p>
locationCode	<p>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.</p> <p>Example: <code>&locationCode=CQSBG</code> or <code>"locationCode":"CQSBG"</code></p> <ul style="list-style-type: none"> "CQSBG" is the location code for Clayoquot Slope / Bubbly Gulch
locationName	<p>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.</p> <p>Example: <code>&locationName=Bubbly Gulch</code> or <code>"locationName":"Bubbly Gulch"</code></p>
lon	<p>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.</p> <p>Example: <code>"lon":-126.05033437333402</code></p>

includeChildren	<p>A locations service boolean filter to include all children of a location in the results, in a non-hierarchical representation.</p> <p>Example: <code>&includeChildren=true</code></p>
pitch	<p>The side-to-side motion around the transverse axis of the platform.</p>
Property	<p>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.</p>
propertyCode	<p>A web service filter or output which acts as a unique identifier for a specific property (variable).</p> <p>Example: <code>&property=oxygen</code> or <code>"property": "oxygen"</code></p>
propertyName	<p>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.</p> <p>Example: <code>&propertyName=Pressure</code> or <code>"propertyName": "Pressure"</code></p>
roll	<p>The up/down motion around the longitudinal axis of the platform.</p>
uom	<p>Unit of Measure</p> <p>Example: <code>"uom": "psi"</code> represents "Pounds per sq inch"</p>