dataProducts Discovery Service

Description

The API **dataProducts** service returns all data products defined in Oceans 2.0 that meet a filter criteria.

Data Products are downloadable representations of ONC observational data, provided in formats that can be easily ingested by analytical or visualization software.

The primary purpose of this service is to identify which Data Products and Formats (file extensions) are available for the Locations, Devices, Device Categories or Properties of interest. Use the dataProductCode and extension when requesting a data product via the dataProductDelivery web service.

URL

```
https://data.oceannetworks.ca/api/dataProducts
```

Method	Description	Example
get	Retrieve a list Data Products codes	`method=get`

get

The get method retrieves a list of Data Product codes

Parameters

Parameter	Type	Description	Example
Required			
token	string	ll Web Services require a token. Once logged in at https://data.oceannetworks.ca/login, your token can be retrieved or generated at https://data.oceannetworks.ca/Profile . Click on the "Web Services" tab, then click "Generate Token".	token=YOUR_TOKEN_HERE
Optional			
dataProductCode	string	Return all Data Product Extensions matching a specific **Data Product Code.** • Data Product Code must be valid and match exactly, including case.	dataProductCode=annotationfile
extension	string	Return all Data Products that have a specific **File Extension.** • Extension must be valid and match exactly, including case.	extension=csv
dataProductName	string	Return all Data Products where the **Data Product Name** contains a keyword. • Filter is not case sensitive, treating time, Time and TIME as the same word. • Filter will find partial words. The filter dataProductName=time returns "Time Series Scalar Data", "Time Series Scalar Profile Plot", "Nortek Time Series", "ASL Acoustic Profiler Time Series" and more.	dataProductName=time
locationCode	string	Return all Data Products available for a specific **Location.** • Location Code must be valid and match exactly, including case. • Specific Location Codes can be obtained using the locations service.	locationCode=BACAX

deviceCategoryCode	string	Return all Data Products available for devices belonging to a specific **Device Category.** • Device Category Code must be valid and match exactly, including case. • Specific Device Category Codes can be obtained using the deviceCateogries service.	deviceCategoryCode=ADCP2MHZ
deviceCode	string	Return all Data Products available for a specific **Device.** • Device Code must be valid and match exactly, including case. • Specific Device Codes can be obtained from the devices service.	deviceCode=AandOpt0581
propertyCode	string	Return all Data Products available for a specific **Property.** • Property Code must be valid and match exactly, including case. • Specific Property Codes can be obtained using the properties service.	propertyCode=air density

Response

Example for request https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE] &deviceCategoryCode=CTD&locationCode=BACAX

Success (HTTP 200)

Returns a list of data product extensions with values for Data Product Code, Data Product Name, Extension and Help Document URL, ordered alphabetically by Data Product Code

```
[
  {"dataProductCode":"AF","dataProductName":"Annotation File","extension":"an","helpDocument":"https://wiki.
oceannetworks.ca/display/DP/89"},
  {"dataProductCode":"LF","dataProductName":"Log File","extension":"txt","helpDocument":"https://wiki.
oceannetworks.ca/display/DP/4"},
  {"dataProductCode":"MSQAQCR","dataProductName":"Manual Scalar QAQC Results","extension":"qaqc","helpDocument":"
https://wiki.oceannetworks.ca/display/DP/106"},
  {"dataProductCode":"SBCTDRF","dataProductName":"Sea-Bird CTD Raw Files","extension":"hex","helpDocument":"https
://wiki.oceannetworks.ca/display/DP/78"},
  {"dataProductCode":"TSSCP","dataProductName":"Time Series Staircase Plot","extension":"pdf","helpDocument":"htt
ps://wiki.oceannetworks.ca/display/DP/21"},
  {"dataProductCode":"TSSCP","dataProductName":"Time Series Staircase Plot","extension":"png","helpDocument":"htt
ps://wiki.oceannetworks.ca/display/DP/21"},
  {"dataProductCode":"TSSD","dataProductName":"Time Series Scalar Data","extension":"json","helpDocument":"https:
//wiki.oceannetworks.ca/display/DP/1"},
  {"dataProductCode":"TSSD","dataProductName":"Time Series Scalar Data","extension":"csv","helpDocument":"https:/
/wiki.oceannetworks.ca/display/DP/1"},
  {"dataProductCode":"TSSD","dataProductName":"Time Series Scalar Data","extension":"mat","helpDocument":"https:/
/wiki.oceannetworks.ca/display/DP/1"},
  {"dataProductCode":"TSSD","dataProductName":"Time Series Scalar Data","extension":"txt","helpDocument":"https:/
/wiki.oceannetworks.ca/display/DP/1"},
  {"dataProductCode":"TSSP","dataProductName":"Time Series Scalar Plot","extension":"pdf","helpDocument":"https:/
/wiki.oceannetworks.ca/display/DP/2"},
  {"dataProductCode":"TSSP","dataProductName":"Time Series Scalar Plot","extension":"png","helpDocument":"https:/
/wiki.oceannetworks.ca/display/DP/2"}]
```

Property	Type	Description	Example
dataProductCode	string	Returns the data product code.	`"dataProductCode":"TSSD"`
dataProductName	string	Returns the name of the data product.	`"dataProductName":"Time Series Scalar Data"`
extension	string	Returns the file extension for the data product.	`"extension":"json"`
hasDeviceData	boolean	Returns whether at least one device and/or sensor with this data product is NEPTUNE searchable	`"hasDeviceData":true`
hasPropertyData	boolean	Returns whether at least one sensor with this data product is a NEPTUNE-searchable primary sensor	`"hasPropertyData":false`
helpDocument	string	Returns a Link URL to the Oceans 2.0 Help documentation for the specific Data Product.	`"helpDocument":"https://wiki.oceannetworks.ca/display/DP/1"`

Bad Request (HTTP 400)

errorCode	errorMessage	Description
127	Invalid parameter value	Occurs when an invalid code is used in the filter. Most filters require an exact match, otherwise this error will occur. • The name of the filter parameter is included in the "parameter" property.
129	Invalid parameter name	Occurs when a filter parameter is in the query but is not supported. • The name of the filter parameter is included in the "parameter" property.

URL Examples

- Return a list of **All** Data Product Extensions (no filters)

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]

- Return a list of all Data Product Extensions available for **Data Product Code** 'TSSD' (Time Series Scalar Data)

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&dataProductCode=TSSD

- Return a list of all Data Products Extensions available for the **Extension** 'pdf'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&extension=pdf

- Return a list of all Data Products Extensions available for **Data Product Code** 'TSSD' (Time Series Scalar Data) and **Extension** of 'csv'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&dataProductCode=TSSD&extension=csv

- Return a list of all Data Product Extension with a **Data Product Name** containing 'scalar'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&dataProductName=scalar

- Return a list of all Data Product Extensions available for instruments at the location with **Location Code** 'BACAX'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&locationCode=BACAX

- Return a list of all Data Products with the **Extension** 'mat' that are available for instruments at the location with **Location Code** 'BACAX'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&extension=mat&locationCode=BACAX

- Return a list of all Data Product Extensions available for the device with **Device Code** 'NORTEKAQDPRO8398'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&deviceCode=NORTEKAQDPRO8398

- Return a list of all Data Product Extensions available for instruments with the **Device Category** 'ADCP2MHZ'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&deviceCategoryCode=ADCP2MHZ

- Return a list of all Data Products Extensions available for the **Property Code** 'seawatertemperature'

    https://data.oceannetworks.ca/api/dataProducts?method=get&token=[YOUR_TOKEN_HERE]&propertyCode=seawatertemperature

API Proxy

The https://data.oceannetworks.ca/**apiproxy**/dataProducts URL link in the above examples can be used in a browser for sharing or testing purposes; however, it can not be accessed from code. Calls to the apiproxy server are redirected to a login screen to capture your user id. Accessing the apiproxy URL from code will return html in the payload, which may cause errors or unexpected behaviour. In order to use the dataProducts endpoint from code, you must use the https://data.oceannetworks.ca/**api**/dataProducts url along with a valid token.

Code Examples

Title	Creator	Modified
Python Client Library	Ryan Ross	16-Aug-19
MATLAB Client Library	Ryan Ross	26-Apr-19
Discover Data Products	Ryan Ross	26-Sep-17

ⓘ   Please report all issues with the web services, documentation, samples and client libraries to the Oceans 2.0 Help Centre