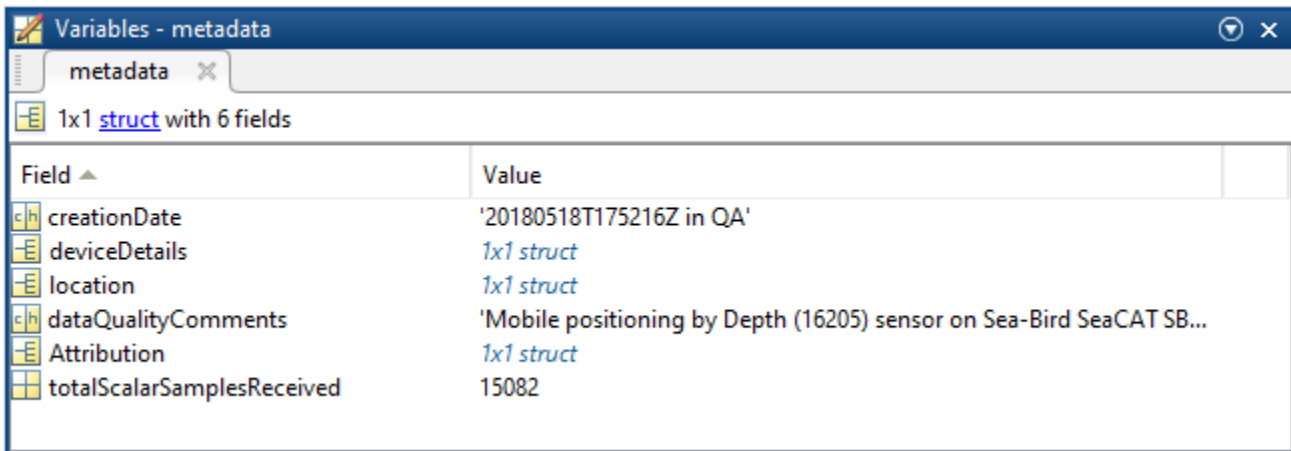


MAT file Metadata structure - Scalar

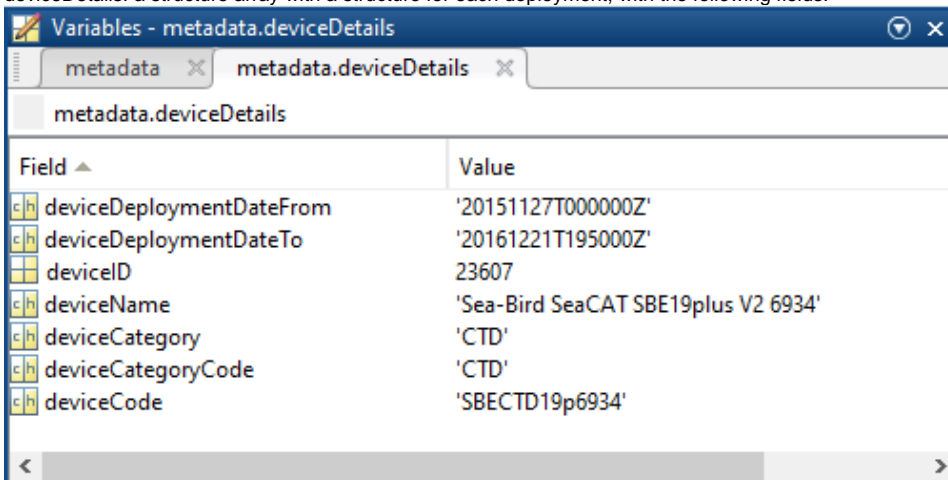
metadata: a structure array (one structure per device) containing the following metadata fields:



The screenshot shows the MATLAB Variables window for a variable named 'metadata'. It is a 1x1 struct with 6 fields. The fields and their values are:

Field	Value
creationDate	'20180518T175216Z in QA'
deviceDetails	1x1 struct
location	1x1 struct
dataQualityComments	'Mobile positioning by Depth (16205) sensor on Sea-Bird SeaCAT SB...'
Attribution	1x1 struct
totalScalarSamplesReceived	15082

- creationDate: Date and time (using ISO8601 format) that the data product was produced. This is a valuable indicator for comparing to other revisions of the same data product.
- deviceDetails: a structure array with a structure for each deployment, with the following fields:



The screenshot shows the MATLAB Variables window for a variable named 'metadata.deviceDetails'. It is a structure with 7 fields. The fields and their values are:

Field	Value
deviceDeploymentDateFrom	'20151127T000000Z'
deviceDeploymentDateTo	'20161221T195000Z'
deviceID	23607
deviceName	'Sea-Bird SeaCAT SBE19plus V2 6934'
deviceCategory	'CTD'
deviceCategoryCode	'CTD'
deviceCode	'SBECTD19p6934'

- deviceDeploymentDateFrom
- deviceDeploymentDateTo
- deviceID: A unique identifier to represent the instrument within the ONC observatory.
- deviceName: A name given to the instrument.
- deviceCategory: A unique name given to the category of devices, such as 'CTD'
- deviceCategoryCode: Code representing the device category. Used for accessing webservices, as described here: [API / webservice documentation](#) (log in to see this link).
- deviceCode: A unique string for the instrument which is used to generate instrument search data product file names.

- location: a structure array with a structure for each deployment location, with the following fields:

Field	Value
locationName	'Saanich Inlet Central Node'
stationName	'Inshore Profiling System_Profiling Instrument Package'
stationCode	'YPVPP'
lat_degrees	48.6223
lon_degrees	-123.4989
depth_metres	[3.4500,199.4900]
heading_degrees	NaN
pitch_degrees	NaN
roll_degrees	NaN

- stationName: Secondary location name.
 - stationCode: Code representing the station. Used for accessing webservises, as described here: [API / webservice documentation](#) (log in to see this link).
 - depth_metres: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
 - lat_degrees: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
 - lon_degrees: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
 - heading_degrees: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
 - pitch_degrees: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
 - roll_degrees: Obtained at time of deployment. If NaN, the device is mobile and this position is a variable, the data for which is supplied by a sensor in the data struct.
- dataQualityComments: In some cases, there are particular quality-related issues that are mentioned here. This is distinct from QAQC information contained in the data structure.
- Attribution: A structure array with citation information, ordered by importance and date. For internal users, go to the [Network Console](#) to configure the citations. If a company has more than one role it will be collated. If there are gaps in the date ranges, they are filled in with the default Ocean Networks Canada citation. If the "Citation Required?" field is set to "No" on the [Network Console](#) then the citation will not appear. For data products with a citation (except MAT files) and for users making products from a MAT file, if the special citation is blank/null, then the company default citation will be used and if it is also blank/null, then the final citation will consist of the company name and role: "Ocean Networks Canada (Owner, Collaborator)". Here are the fields:

Field	Value
acknowledgement	'Ocean Networks Canada Data Archive, http://www.oceannetworks....'
startDate	[]
endDate	[]
organizationName	'Ocean Networks Canada'
organizationRole	'Owner'

- acknowledgement: the citation text, note that if the special citation is blank/null, the default citation is used.
 - startDate: datenum format
 - endDate: datenum format
 - organizationName
 - organizationRole
- totalScalarSamplesReceived: The number of time stamps that have any valid data on any sensor (at each time stamp). Only defined for metaData (1).totalScalarSamplesReceived, as this total is a summary of all device deployments in the data product.