# **Guidelines to fill a .json file**

A step-by-step document for easily filling .json files.

Version 1.1.3 – February 2020



Table of contents

[History 3](#_Toc31724161)

[Background information 4](#_Toc31724162)

[About this document 4](#_Toc31724163)

[About .json template 4](#_Toc31724164)

[About the procedure to fill the .json. 4](#_Toc31724165)

[Filling the “deployment.json” file ? 5](#_Toc31724166)

[Naming convention 5](#_Toc31724167)

[Global attributes 5](#_Toc31724168)

[Glider characteristics 6](#_Toc31724169)

[Glider deployment 7](#_Toc31724170)

[Coordinate\_Variables 8](#_Toc31724171)

[Glider\_sensor 8](#_Toc31724172)

[How to fill a senors .json file? 9](#_Toc31724173)

[Naming convention 9](#_Toc31724174)

[SENSOR 9](#_Toc31724175)

[PARAMETER 9](#_Toc31724176)

[CALIBRATION COEFFICIENT 9](#_Toc31724177)

[Example of PSAL derived parameter definition: 10](#_Toc31724178)

[Example of BBP700 derived parameter definition: 11](#_Toc31724179)

[Example of DOXY and DOXY2 derived parameter definition: 11](#_Toc31724180)

[ParameterList 13](#_Toc31724181)

[Reference tables 14](#_Toc31724182)

[Reference table: Data Assembly Centre Codes 14](#_Toc31724183)

[Reference table: Observatory 14](#_Toc31724184)

[Reference table: update\_interval 15](#_Toc31724185)

[Reference table: PLATFORM\_FAMILY 15](#_Toc31724186)

[Reference table: PLATFORM\_TYPE 16](#_Toc31724187)

[Reference table: PLATFORM\_MAKER 16](#_Toc31724188)

[Reference table: TRANS\_SYSTEM 16](#_Toc31724189)

[Reference table: DEPLOYMENT\_START\_QC and DEPLOYMENT\_END\_QC 16](#_Toc31724190)

[Reference table: SENSOR 17](#_Toc31724191)

[Reference table: SENSOR\_MAKER 18](#_Toc31724192)

[Reference table: SENSOR\_MODEL 19](#_Toc31724193)

[Reference Table: SENSOR\_MOUNT 20](#_Toc31724194)

[Reference Table: SENSOR\_ORIENTATION 20](#_Toc31724195)

[Reference Table: PARAMETER 20](#_Toc31724196)

[Reference Table: PARAMETER\_DATA\_MODE 22](#_Toc31724197)

[Reference table: mapping between glider\_variable\_name and ego\_variable\_name 22](#_Toc31724198)

[About data submission 24](#_Toc31724199)

## History

|  |  |  |
| --- | --- | --- |
| Version | Date | Comment |
| 1.0 | 15/11/2016 | VT: Initialisation of the document based on .json template V3.0 |
| 1.1.2 | 24/04/2017 | VT: Based on OGS comment  + remove <glider\_name>. Only <platform\_code> for more coherency  + add #M in examples as it is in .json template  + Add OG for in DAC table  + clarifying contact as author’s email |
| 1.3 | 19/07/2019 | VT: Update after the release of format V1.3  + align with new JSON  + include reference table |
| 1.3.1 | 16/01/2020 | VT: Final update to fit new best practices document and V1.3  + add OceanGliders Site (observatories)  + remove non use fields |
| 1.3.1 | 04/02/2020 | VT : Corrections  + Linking PARAMTERS to BODC control vocab system  + bookmarks |

# Background information

EGO format is a common format to distribute, archive and exchange gliders data. This format is in line with OceanGliders data Management requirements.

## About this document

This document will guide you to fill the .json files (v1.3). Json files are the metadata files needed to run the Coriolis processing chain.

We advise you to download “json” template fromEGO website.

## About .json template

For any glider mission, you should provide a .json file to describes the “mission” (hereafter “deployment.json”) and a json file to describe each sensor onboard (hereafter “sensor.json”).

For example, if your payload is made of a CTD and an OPTODE, you must provide three “.json” files for this mission. One describing the mission itself, one for the CTD and one for the OPTODE. On the other hand, if your payload is made of an OPTODE, a CTD and an OPTICAL BACKSCATTER (wetlab triplet for example), you should provide four .json files.

## About the procedure to fill the .json.

Filling metadata files is mandatory to process your data with CORIOLIS. The .json strategy has been chosen to simplify and optimize the management of the metadata.

Once you have completed a .json file, it can be reused by changing only a minimum number of information. The colour code should guide you in that procedure.

* **Fields in red should be updated for each glider mission**.
* **Fields in green must be updated after each sensor calibration process.**

# Filling the “deployment.json” file ?

Note: Some vocabs are controlled by reference table. Please refer to it when needed.

Note bis: Do not take into account the fields not listed in this document that are present in the template.json.

## Naming convention

It should be named '<platform\_code>\_<deployment\_code>.json’. (<platform\_code> and <deployment\_code> are described below)

Follow the table step by step to fill the deployment .json files.

## Global attributes

|  |  |  |
| --- | --- | --- |
| Global attribute | example | definition |
| platform\_code | “platform\_code” : ”pytheas” | Glider’s nick name. The use of lower case is recommended.  This attribute is mandatory.  If you are not using nicknames for gliders, use the serial number instead. |
| wmo\_platform\_code | “wmo\_platform\_code” : ”61864” | WMO (World Meteorological Organization) unique identifier. Any platform of the GOOS has its unique WMO ID. If you glider do not have a WMO ID please contact [support@jcommops.org](mailto:support@jcommops.org) |
| comment | “comment” : ”” | Miscellaneous information about the data or methods used to produce it. Any free-format text is appropriate. |
| title | “title”: ”Pytheas\_mission14” or ”Pytheas\_20190307” or ”Pytheas\_MooseT00\_24” | Name of the data set. This attributes together should allow data discovery for a human reader.  Free text |
| summary | “summary”: “Oceanographic glider data from Pytheas glider deployed in gulf of Lion, North-West Mediterranean Sea, in 2019. Measured properties: temperature, salinity, oxygen, turbidity.” | Free-format text describing the deployment, mission or project. The display of this attribute should allow data discovery for a human reader.  “summary”: a longer description of the dataset. |
| keywords | “keywords”: "Turbidity, Chlorophyll, Organic Matter, Oxygen, Fluorescence, Scattering, Water Temperature, Conductivity, Salinity” | Comma separated list of key words and  phrases. |
| area | “area”: “North West Mediterranean Sea” | Geographical coverage  Use vocabulary from SeaDataNet sea areas (C16).  <http://seadatanet.maris2.nl/v_bodc_vocab/search.asp?name=(C16)%20SeaDataNet+sea+areas&l=C16> |
| institution | “institution” : ”CNRS-LOCEAN” | PI’s Institution. |
| institution\_references | “institution\_references” : ”[http://www.](http://www.nocs.uk/)locean.fr” | PI’s institution url. |
| sdn\_edmo\_code | “sdn\_edmo\_code” : ”1042” | SeaDataNet EDMO code of the institution.  EDMO is the “European Directory of Marine Organisations”.  <http://seadatanet.maris2.nl/edmo/> |
| author {“first\_name“} | “first\_name” : ”Thierry” | First Name of the person responsible for the creation of the dataset. |
| author {“last\_name“} | “last\_name“ : “Carval“ | Last Name of the person responsible for the creation of the dataset. |
| author {“email“} | “email“: “tierry.carval@ifremer.fr“ | Email of the person responsible for the creation of the dataset |
| author {“orcid“} | “orcid“ :“[0000-0001-7803-9552](https://orcid.org/0000-0001-7803-9552)“ | ORCID of the person responsible for the creation of the dataset |
| author {“affiliations“} | “affiliations“: “IFREMER“ | Author’s institution. |
| data\_assembly\_center | “data\_assembly\_center”: ”IF” | Data Assembly Centre (DAC) in charge of this data file.  **[See reference table](#data_assembly_center_ref_table)** |
| principal\_investigator | “principal\_investigator”: ”Pierre Testor” | Name of the principal investigator in charge of the deployment. |
| principal\_investigator\_email | “principal\_investigator\_email”: “pierre.testor@locean-ipsl.upmc.fr” | Principal investigator’s email address. |
| project\_name | "project\_name": "MOOSE" | Name of the project which operates the profiling glider that performed the profile. |
| observatory | “observatory”: “MooseT00” | Area or line regularly sampled.  **[See reference table](#Observatory_ref_table)** |
| deployment\_code | “deployment\_code”: "MooseT00\_19" | Name of the deployment of mission. It is unique identifier for a deployment or mission. If your glider group is not using deployment code, use deployment start date (YYYYMMDD). |
| deployment\_label | “deployment\_label”: "Moose T00\_19 summer 2010 deployment" | The deployment label, a free text to describe the deployment. |
| doi | “doi”: “” | DOI of the data set. Leave empty for the first processing of this data set. |
| update\_interval | “update\_interval”: ”daily” | Update interval for the file, one of the following:  “hourly”, “daily”, “weekly”, “monthly”, “yearly”, “void”.  Use “void” for delayed-mode or archive data that do not need continuous updating.  Use “daily” if IFREMER/Coriolis is your DAC.  **[See reference table](#update_interval_ref_table)** |

## Glider characteristics

|  |  |  |
| --- | --- | --- |
| Glider\_characteristics | examples | definition |
| PLATFORM\_FAMILY | "PLATFORM\_FAMILY": "glider" | Category of instrument.  **[See reference table](#PLATFORM_FAMILY_ref_table)** |
| PLATFORM\_TYPE | "PLATFORM\_TYPE": "Seaglider" | Type of glider.  **[See reference table](#PLATFORM_TYPE_ref_table)** |
| PLATFORM\_MAKER | "PLATFORM\_MAKER": "Kongsberg" | Name of the manufacturer.  **[See reference table](#PLATFORM_MAKER_ref_table)** |
| GLIDER\_SERIAL\_NO | "GLIDER\_SERIAL\_NO": "Unit\_196" | Serial number of the glider. |
| GLIDER\_OWNER | "GLIDER\_OWNER": "LOCEAN" | The owner of the glider (may be different from the data center and operating institution). |
| OPERATING\_INSTITUTION | "OPERATING\_INSTITUTION": "DTINSU" | The operating institution of the glider (may be different from the glider owner and data center). |
| TRANS\_SYSTEM | "TRANS\_SYSTEM": [“IRIDIUM”, “FREE WAVE”] | Name of the telecommunication system. Usually it is IRIDIUM and FREE WAVE  **[See reference table](#TRANS_SYSTEM_ref_table)** |
| TRANS\_SYSTEM\_ID | “TRANS\_SYSTEM\_ID”: “”, | Unique identifier of the transmission system. |
| BATTERY\_TYPE | "BATTERY\_TYPE": "Lithium" or  "BATTERY\_TYPE": "Lithium and Alkaline" | Describes the type of battery packs in the glider. |
| BATTERY\_PACKS | "BATTERY\_PACKS": "4DD Li + 1C Alk" | Describes the configuration of battery packs in the glider, number and type. |
| SPECIAL\_FEATURES | “SPECIAL\_FEATURES”: ““Ice Sensing Algorithm”” | Additional glider features can be specified here such as algorithms used by the glider (Ice Sensing Algorithm, Interim Storage Algorithm, grounding avoidance) or additional hardware such as a compressed (buoyancy compensator), thruster, etc. |
| FIRMWARE\_VERSION\_NAVIGATION | “FIRMWARE\_VERSION\_NAVIGATION": "7.14" | The version of the docskserver / basestation / landstation. |
| GLIDER\_MANUAL\_VERSION | “GLIDER\_MANUAL\_VERSION” : “” | The version date or number for the manual. |
| ANOMALY | “ANOMALY”: “the immersion drift is not stable” | This field describes any anomaly or problem the glider may have had. |
| CUSTOMIZATION | “CUSTOMIZATION”: “from deep Glider to 200m glider” | Free text field to record changes made to the glider after manufacture and before deployment, i.e. this could be the customization institution plus a list of modifications. |

## Glider deployment

|  |  |  |
| --- | --- | --- |
| Glider\_deployment | Example | definition |
| DEPLOYMENT\_START\_DATE | “DEPLOYMENT\_START\_DATE”: “20011230090500” (for December 30th 2001 09:05:00) | Date and time (UTC) of deployment of the glider.  Format: YYYYMMDDHHMISS |
| DEPLOYMENT\_START\_LATITUDE | “DEPLOYMENT\_START\_LATITUDE”: 44.4991 (for 44° 29’ 56.76’’ N) | Latitude of the deployment.  Unit: decimal degree north. **no quotation marks** |
| DEPLOYMENT\_START\_LONGITUDE | “DEPLOYMENT\_START\_LONGITUDE”: 16.7222 (for 16° 43’ 19.92’’ E) | Longitude of the deployment.  Unit: decimal degree east  **no quotation marks** |
| DEPLOYMENT\_START\_QC | “DEPLOYMENT\_START\_QC”: 1 | Quality flag on deployment date, time and location.  The flag scale is **described in** **[the reference table](#DEPLOYMENT_QC_ref_table).** |
| DEPLOYMENT\_PLATFORM | “DEPLOYMENT\_PLATFORM”: “L’ATALANTE” | Identifier of the deployment platform. |
| DEPLOYMENT\_CRUISE\_ID | “DEPLOYMENT\_CRUISE\_ID”: “POMME2” | Identifier of the cruise used to deploy the platform. |
| DEPLOYMENT\_REFERENCE\_STATION\_ID | “DEPLOYMENT\_REFERENCE\_STATION\_ID”: “ 58776” | Identifier of CTD or XBT stations used to verify the first profile. |
| DEPLOYMENT\_OPERATOR | “Deployment Operator”: “Lou Tine” | Name of the person in charge of the glider deployment |
| DEPLOYMENT\_END\_DATE | “DEPLOYMENT\_END\_DATE”: “20011230090500” (for December 30th 2001 09:05:00) | Date (UTC) of the end of deployment of the glider. |
| DEPLOYMENT\_END\_LATITUDE | “DEPLOYMENT\_END\_LATITUDE”: 44.4991 (for 44° 29’ 56.76’’ N) | Latitude of the recovery of the glider.  Unit: decimal degree north.  **no quotation marks** |
| DEPLOYMENT\_END\_LONGITUDE | “DEPLOYMENT\_END\_LONGITUDE”: 16.7222 (for 16° 43’ 19.92’’ E) | Longitude of the recovery of the glider.  Unit: degree east  ”” if empty  If a value is present, there should be no quotation marks |
| DEPLOYMENT\_END\_QC | “DEPLOYMENT\_END\_QC”: 1 | Quality flag on end deployment date, time and location.  The flag scale is **described in the corresponding** **[reference table](#DEPLOYMENT_QC_ref_table)**[.](#DEPLOYMENT_QC_ref_table) |
| DEPLOYMENT\_END\_STATUS | “DEPLOYMENT\_END\_STATUS”: “R” | Status of the end of mission of the glider.  R: Retrieved  L: lost |

## Coordinate\_Variables

No change needed in this section.

Any question? Please contact [support@jcommops.org](mailto:support@jcommops.org) and codac@ifremer.fr

## Glider\_sensor

In this section, “sensor\_file\_name” refers to the name of the sensor.json file describing the sensors on board.

For example, if your payload is made of CTD and a fluorometer, you will have to provide 2 .json files for the sensors, one for the CTD and one for the fluorometer.

|  |
| --- |
| "glider\_sensor": [  {  "sensor\_file\_name": "p201\_ESTOC2015\_1\_CTD\_1142\_20140104.json"  },  {  "sensor\_file\_name": "p201\_ESTOC2015\_1\_FLNT\_3456\_20140628.json"  }  ] |

# How to fill a senors .json file?

Note: Some vocabs are controlled by reference table. Please refer to it when needed.

Note bis: Do not take into account the fields not listed in this document that are present in the template.json.

## Naming convention

It should be named : '<plateform\_code>\_<deployment\_code>\_<sensor\_model>\_<sensor\_serial\_number>\_<calibration\_date>.json'.

## SENSOR

This section contains information about the sensors of the glider.

|  |  |  |
| --- | --- | --- |
| **Global sensor attributes** | **example** | **definition** |
| SENSOR | "SENSOR”: ["CTD\_CNDC", "CTD\_TEMP", "CTD\_PRES"] | Sensor can be multiple (ex: CTD, Triplet),  **[See reference table](#SENSOR_ref_table)** |
| SENSOR\_MAKER | "SENSOR\_MAKER": ["CTD\_CNDC", "CTD\_TEMP", "CTD\_PRES"] | Name of the manufacturer of the sensor.  **[See reference table](#SENSOR_MAKER_ref_table)** |
| SENSOR\_MODEL | "SENSOR\_MODEL": "Oxygen Optode 5013W" | Model of the sensor  **[See reference table](#SENSOR_MODEL_ref_table)** |
| SENSOR\_SERIAL\_NO | "SENSOR\_SERIAL\_NO": "1302" | Serial number of the sensor. |
| SENSOR\_MOUNT | “SENSOR\_MOUNT”: “mounted\_on\_glider” | **Use “monted\_on\_glider” default.**  **[See reference table](#SENSOR_MOUNT_ref_table)** |
| SENSOR\_ORIENTATION | "SENSOR\_ORIENTATION": "frontward" | Indicates the way a sensor is oriented on the glider. **Use frontward as default.**  **[See reference table](#SENSOR_ORIENTATION_ref_table)** |

## PARAMETER

Parameter meta-data can be set through:

|  |  |  |
| --- | --- | --- |
| **Global sensor attributes** | **example** | **definition** |
| PARAMETER | “PARAMETER”: [“TEMP”, “CNDC”, “PRES”] | Measured parameter.  **[See reference table](#PARAMETER_ref_table)** |
| PARAMETER\_SENSOR | “PARAMETER\_SENSOR”: [“CTD\_TEMP”,”CTD\_CNDC”,”PRES”] | Sensor that measured the parameter. Refer to the SENSOR field above.  **[See reference table](#SENSOR_PARAMETER_ref_table)** |
| PARAMETER\_DATA\_MODE | “PARAMETER\_DATA\_MODE”: [“R”,”R”,”R”] | Data mode can be real time, provisional, delayed mode or mixed. **[See reference table](#PARAMETER_DATA_MODE_ref_table)** |

## CALIBRATION COEFFICIENT

The decoder can compute the following derived parameters:

* PSAL,
* DOXY
* BBP700,
* CDOM,
* CHLA,
* NITRATE,
* TURBIDITY.

To compute those derived parameters, you must fill the calibration coefficient field with the calibration coefficient delivered by the sensor manufacturer after calibration and register the measured parameter (PARAMETER) needed for computation of the derived parameter.

Please refer to the Coriolis decoder user’s manual V2.0 for more detail.

### Example of PSAL derived parameter definition:

|  |
| --- |
| "CALIBRATION\_COEFFICIENT": [],  "parametersList": [  { "ego\_variable\_name": "PRES",  "glider\_variable\_name": "sci\_water\_pressure",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "Pression sensor calibrated the 13/05/2011",  "derivation\_date": "20110518184114",  "processing\_id": ""},  { "ego\_variable\_name": "TEMP",  "glider\_variable\_name": "sci\_water\_temp",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "Pression sensor calibrated the 13/05/2011",  "derivation\_date": "20110518184114",  "processing\_id": ""},  {"ego\_variable\_name": "CNDC",  "glider\_variable\_name": "sci\_water\_cond",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "Pression sensor calibrated the 13/05/2011",  "derivation\_date": "20110518184114",  "processing\_id": ""},  { "ego\_variable\_name": "PSAL",  "glider\_variable\_name": "",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "Not measured by the glider. Calculated by Coriolis",  "derivation\_coefficient": "Not measured by the glider. Calculated by Coriolis",  "derivation\_comment": "",  "derivation\_date": "",  "processing\_id": ""}] |

In this example, we ask the decoder to compute PSAL derived parameter.

For that it needs PRES, TEMP and CNDC parameters (which are previously defined) and no

additional calibration coefficients.

### Example of BBP700 derived parameter definition:

|  |
| --- |
| "CALIBRATION\_COEFFICIENT": [{"BACKSCATTERINGMETER\_BBP700":{  "ScaleFactBBP700": 0.000001868,  "DarkCountBBP700": 50,  "KhiCoefBBP700": 1.076,  "MeasAngleBBP700": 124}}],  "parametersList": [  { "ego\_variable\_name": "BETA\_BACKSCATTERING700",  "glider\_variable\_name": "*sci\_flbbcd\_bpp700*",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "",  "derivation\_date": "",  "processing\_id": ""},    { "ego\_variable\_name": "BBP700",  "glider\_variable\_name": "",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "Not measured by the glider. Calculated by Coriolis",  "derivation\_coefficient": "Not measured by the glider. Calculated by Coriolis",  "derivation\_comment": "",  "derivation\_date": "",  "processing\_id": ""}] |

In this example, we ask the decoder to compute BBP700 derived parameter.

For that it needs BETA\_BACKSCATTERING700 parameter (which is previously defined, if

sci\_flbbcd\_xx is its associated glider variable name) and associated calibration coefficients provided in ‘CALIBRATION\_COEFFICIENT’ section.

### Example of DOXY and DOXY2 derived parameter definition:

|  |
| --- |
| "CALIBRATION\_COEFFICIENT": [  {  "OPTODE\_DOXY": [{"Case": "201\_201\_301",  "DoxyCalibRefSalinity": 0},  {"Case": "201\_202\_202",  "PhaseCoef0": -3.22792E-01,  "PhaseCoef1": 1.10079E00,  "PhaseCoef2": 0.00000E+00,  "PhaseCoef3": 0.00000E+00,  "CCoef00": 5.02745E+03,  "CCoef01": -1.69644E+02,  "CCoef02": 3.47372E+00,  "CCoef03": -3.10884E-02,  "CCoef10": -2.72133E+02,  "CCoef11": 8.19642E+00,  "CCoef12": -1.68036E-01,  "CCoef13": 1.54063E-03,  "CCoef20": 5.94114E+00,  "CCoef21": -1.57673E-01,  "CCoef22": 3.27461E-03,  "CCoef23": -3.08870E-05,  "CCoef30": -6.03008E-02,  "CCoef31": 1.39861E-03,  "CCoef32": -2.98859E-05,  "CCoef33": 2.90209E-07,  "CCoef40": 2.33874E-04,  "CCoef41": -4.68676E-06,  "CCoef42": 1.05069E-07,  "CCoef43": -1.04908E-09}]}],  "parametersList": [  { "ego\_variable\_name": "BPHASE\_DOXY",  "glider\_variable\_name": "sci\_oxy3835\_wphase\_bphase",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "Batch No 2408\r\nCertificate no 3853\_2408\_40043",  "derivation\_date": "20100304143133",  "processing\_id": ""},    { "ego\_variable\_name": "RPHASE\_DOXY",  "glider\_variable\_name": "sci\_oxy3835\_wphase\_rphase",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "",  "derivation\_coefficient": "",  "derivation\_comment": "Batch No 2408\r\nCertificate no 3853\_2408\_40043",  "derivation\_date": "20100304143133",  "processing\_id": ""},  { "ego\_variable\_name": "MOLAR\_DOXY",  "glider\_variable\_name": "sci\_oxy3835\_wphase\_oxygen",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "molar\_doxy=C0 + C1\*dphase + C2\*dphase^2 + C3\*dphase^3 +C4\*dphase^4, with Ci=Ci0 + Ci1\*T + Ci2\*T^2 + Ci3\*T^3 (T: temperature)",  "derivation\_coefficient": "",  "derivation\_comment": "Batch No 2408\r\nCertificate no 3853\_2408\_40043",  "derivation\_date": "20100304143133",  "processing\_id": ""},  { "ego\_variable\_name": "DOXY",  "glider\_variable\_name": "",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "Not measured by the glider. Calculated by Coriolis",  "derivation\_coefficient": "Not measured by the glider. Calculated by Coriolis",  "derivation\_comment": "",  "derivation\_date": "",  "processing\_id": "201\_201\_301"},  { "ego\_variable\_name": "DOXY2",  "glider\_variable\_name": "",  "comment": "",  "cell\_methods": "",  "reference\_scale": "",  "derivation\_equation": "Not measured by the glider. Calculated by Coriolis",  "derivation\_coefficient": "Not measured by the glider. Calculated by Coriolis",  "derivation\_comment": "",  "derivation\_date": "",  "processing\_id": "201\_202\_202"}] |

In this example, we ask the decoder to compute DOXY and DOXY2 derived parameters.

For DOXY it should use case\_201\_201\_301 method that needs MOLAR\_DOXY parameter

(which is previously defined) and associated calibration coefficients.

For DOXY2 it should use case\_201\_202\_202 method that needs BPHASE\_DOXY parameter

(which is previously defined) and associated calibration coefficients.

Such configuration can then be used to compare dissolved oxygen computed by the glider

(DOXY from MOLAR\_DOXY) with dissolved oxygen computed by the decoder from

(DOXY2 from BPHASE\_DOXY).

For this new parameter you should set the EGO variable name and let the glider variable name empty.

## ParameterList

The list below should be repeated for each parameter measured by the sensor. For example, for a CTD you should repeat the list for TEMP, PRES and CDNC.

Note: If you want to compute PSA or DOXY, see example above.

|  |  |  |
| --- | --- | --- |
| **Name** | **example** | **definition** |
| ego\_variable\_name | “ego\_variable\_name”: “CHLA” | This is the name used to map glider variable name and ego variable name. ego\_variable\_name must refer to PARAMETER. You can add ego\_variable\_name if you want it to be computed (PSAL for exemple). [**See reference table**](#Mapping_ref_table) |
| glider\_variable\_name | “glider\_variable\_name”:"sci\_water\_cond” | This is the name of the variable from the glider in raw files. It maps “ego\_variable\_name” and raw data.  **[See reference table](#Mapping_ref_table)**. |
| derivation\_date | “derivation\_date”: “20011230090500” for December 30th 2001 09:05:00 | Date of the derivation or calibration.  Format: YYYYMMDDHHMISS |

# Reference tables

## [Reference](#data_assembly_center) [table: Data Assembly Centre Codes](#data_assembly_center)

|  |  |
| --- | --- |
| **Data Assembly Centers and institutions** | |
| IF | Ifremer for Coriolis (French joint project for operational oceanography) |
| BO | BODC: British Oceanographic Data Centre |
| OG | OGS: Istituto Nazionale di Oceanographia e di Geofisica Sperimentale : OGS |
| NM | NMDC: Norwegian Marine Data Center |
| SO | SOCIB: Sistema d’Observació Costaner i de Predicció |
| IO | IOOS: Integrated Ocean Obersving System |
| DF | DFO: Department of Fisheries and Oceans |
| IM | IMOS: Integrated Monitoring Observing System |
| TU | TTU: Tallin Technological University |

See: *GL\_REFERENCE\_TABLE\_4.txt* in the Coriolis decoder.

## [Reference table: Observatory](#observatory)

This list is maintained by the OceanGliders community. If you are repeatedly sampling a particular line or area or if you are planning to do so, and if this region or line is not registered here, please contact [support@jcommops.org](mailto:support@jcommops.org).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section or area sampled by gliders multiple time** | | | | |
| **In the Atlantic** | **In the Pacific** | **In the Indian Ocean** | **In the marginal seas** | **Elsewhere** |
| AlterEco | CUGN66 | AgulhasGINA | MOOSET00 | AntarcticPeninsula |
| PEACH 1 | CUGN80 | BoB1 | MOOSET02 | WSC1 |
| CaboFrio2 | CUGN90 | BoB2 | BalearicCanalesC | WSC2 |
| UKOSNAP | CUGNAlong |  | NRedSea | BarrowCanyon |
| Svinoy1 | TaiwanKuroshioS |  | Balearic-SardiniaC3 | MackenzieTrough |
| Lofoten | Hawaii |  | Balearic-NAlgeriaC2 |  |
| Halifax | TaiwanKuroshioN |  | EasternLeventine |  |
| PLOCAN1 | NVancouver |  | Convex |  |
| Greenland Sea | SVancouver |  | MOOSET01 |  |
| Svalbard | NCalifornia1 |  | SRedSea |  |
| Taiga | Solomon |  | USVI |  |
| Iceland Sea | Palau2WPapua |  | SPR1 |  |
| Extended Ellet Line | WACoastNANOOS |  | DR1 |  |
| USMidAtlantic | WACoastCascadia |  | DR2 |  |
| Svinoy2 | CB\_OOI |  | SPR2 |  |
| Gimsoy | CF\_OOI |  | GoM |  |
| CaboFrio | GH\_off\_OOI |  | KW2JVille |  |
| NWEuropeSlope | GH\_in\_OOI |  | BaffinDavis |  |
| GulfStream | NH\_off\_OOI |  | SMART |  |
| Bonavista | LP\_OOI |  |  |  |
| NPR1 | 126W\_OOI |  |  |  |
| NPR2 | NH\_in\_OOI |  |  |  |
| A05 | PtArena |  |  |  |
| PLOCAN2 | Line P |  |  |  |
| Bahamas1 | ROGER93 |  |  |  |
| Bahamas2 | ROGER95 |  |  |  |
|  | NEC |  |  |  |
|  | Mindanao |  |  |  |
|  | EAC36 |  |  |  |
|  | EAC1 |  |  |  |
|  | EAC3 |  |  |  |
|  | EAC27 |  |  |  |
|  | EAC2 |  |  |  |

## [Reference table: update\_interval](#update_interval)

Use hourly if you are updating your EGO file every hour.

Use “daily” if Ifremer/Coriolis is your DAC.

|  |  |
| --- | --- |
| **UPDATE\_INTERVAL** | |
| hourly | If you are updating the EGO netcdf file every hour |
| daily | If you are updating the EGO netcdf file every day. This is the case if IFREMER/CORIOLIS is your DAC. |
| yearly | If you are updating the EGO netcdf file every year |
| void | If you are updating the EGO netcdf file every hour |

See: *GL\_REFERENCE\_TABLE\_6.txt* in the Coriolis decoder.

## [Reference table: PLATFORM\_FAMILY](#PLATFORM_FAMILY)

|  |  |
| --- | --- |
| **PLATFORM\_FAMILY** | |
| OPEN\_OCEAN\_GLIDER | 200m to 1000m depth gliders |
| COASTAL\_GLIDER | Gliders adapted for shallow waters |
| DEEP\_GLIDER | Below 1000m depth |

See: *GL\_REFERENCE\_TABLE\_22.txt* in the Coriolis decoder.

## [Reference table: PLATFORM\_TYPE](#PLATFORM_TYPE)

If the type of glider you are using is not register here, please send an email to [support@jcommops.org](mailto:support@jcommops.org) and [codac@ifremer.fr](mailto:codac@ifremer.fr) for a proper update of the system.

|  |
| --- |
| **PLATFORM\_TYPE** |
| SEAEXPLORER |
| SEAGLIDER |
| SLOCUM\_SG1 |
| SLOCUM\_SG2 |
| SLOCUM\_SG3 |
| SPRAY |

See: *GL\_REFERENCE\_TABLE\_23.txt* in the Coriolis decoder.

## [Reference table: PLATFORM\_MAKER](#PLATFORM_MAKER)

|  |
| --- |
| **PLATFORM\_MAKER** |
| KONGSBERG |
| WRC |
| ALSEAMAR |
| BLUEFIN\_ROBOTICS |

See: *GL\_REFERENCE\_TABLE\_24.txt* in the Coriolis decoder.

## [Reference table: TRANS\_SYSTEM](#TRAN_SYSTEM)

|  |
| --- |
| **TRANS\_SYSTEM** |
| IRIDIUM |
| FREEWAVE |

See: *GL\_REFERENCE\_TABLE\_10.1.txt* in the Coriolis decoder.

## [Reference table: DEPLOYMENT\_START\_QC and DEPLOYMENT\_END\_QC](#DEPLOYMENT_QC)

The quality control flags indicate the data quality of the data values in a file and are normally assigned after quality control procedures have been performed.

|  |  |  |
| --- | --- | --- |
| **Code** | **Meaning** | **Comment** |
| 0 | No QC was performed | - |
| 1 | Good data | All QC tests passed. |
| 2 | Probably good data | - |
| 3 | Bad data that are potentially correctable | These data are not to be used without scientific correction or re-calibration. |
| 4 | Bad data | Data have failed one or more tests. |
| 5 | Value changed | Data may be recovered after transmission error. |
| 6 | - | Not used. |
|  |  |  |
| 8 | Estimated value | Estimated value (interpolated, extrapolated or other estimation). |
| 9 | Missing value | - |

See: *GL\_REFERENCE\_TABLE\_2.1.txt* in the Coriolis decoder.

## [Reference table: SENSOR](#SENSOR)

Note: a CTD is made of 3 sensors (pressure, temperature, conductivity), a triplet from wetlab is made of 3 optical sensors.

Can be a list of sensors.

* For CTD use [“CTD\_PRES”, “CTD\_TEMP”, “CTD\_CNDC”]
* For a triplet: [“BACKSCATTERINGMETER\_BBP700”, “BACKSCATTERINGMETER\_BBP660”, “FLUOROMETER\_CHLA”] (as an exemple).

If the sensor you are using is not here, please send an email to [support@jcommops.org](mailto:support@jcommops.org) and [codac@ifremer.fr](mailto:codac@ifremer.fr) for a proper update of the system.

|  |  |
| --- | --- |
| **Sensor** | **Comment** |
| UNKNOWN |  |
| **Usual sensors** | |
| CTD\_PRES | See CTD example below |
| CTD\_TEMP | See CTD example below |
| CTD\_CNDC | See CTD example below |
| FLUOROMETER\_CDOM | See FLUOROMETER example below |
| FLUOROMETER\_CHLA | See FLUOROMETER example below |
| BACKSCATTERINGMETER\_BBP<nnn> | Example: BACKSCATTERINGMETER\_BBP700, BACKSCATTERINGMETER\_BBP660, ... |
| RADIOMETER\_DOWN\_IRR<nnn> |  |
| RADIOMETER\_PAR |  |
| RADIOMETER\_UP\_RAD<nnn> |  |
| IDO\_DOXY | See OXYGEN example below |
| OPTODE\_DOXY | See OXYGEN example below |
| **Other sensors** | |
| ACOUSTIC |  |
| ACOUSTIC\_GEOLOCATION |  |
| EM |  |
| SPECTROPHOTOMETER\_NITRATE |  |
| SPECTROPHOTOMETER\_BISULFIDE |  |
| STS\_CNDC |  |
| STS\_TEMP |  |
| TRANSISTOR\_PH |  |
| TRANSMISSOMETER\_CP<nnn> |  |

See: *GL\_REFERENCE\_TABLE\_25.txt* in the Coriolis decoder.

Example :

* CTD: a CTD has three sensors. Use *SENSOR: [(“CTD\_PRES”, “CTD\_TEMP”, “CTD\_CNDC”)]*
* FLUOROMETER: a FLUOROMETER can measure different wavelength, for example (chla, cdom and 700nm), then use *SENSOR: [(“FLUOROMETER\_CHLA”, “FLUOROMETER\_CDOM”, “BACKSCATTERINGMETER\_BBP700”)]*
* OXYGEN SENSOR: Oxygen sensor usualy measures dissolved Oxygen and temperature, then use *SENSOR: [(OPTODE\_DOXY”,”TEMP\_DOXY”)]*

## [Reference table: SENSOR\_MAKER](#SENSOR_MAKER)

Select sensor makers from the list.

|  |
| --- |
| Sensor manufacturer |
| UNKNOWN |
| AANDERAA |
| AMETEK |
| DRUCK |
| FSI |
| KISTLER |
| PAINE |
| SBE |
| SEASCAN |
| WETLABS |
| MBARI |
| SATLANTIC |
| JAC |
| APL\_UW |
| TSK |
| RBR |
| KELLER |
| MICRON |
| SEAPOINT |
| TURNER\_DESIGN |

See: *GL\_REFERENCE\_TABLE\_26.txt* in the Coriolis decoder.

## [Reference table: SENSOR\_MODEL](#SENSOR_MODEL)

It your sensor is not in this list and you want to add it, please contact [support@jcommops.org](mailto:support@jcommops.org) and [codac@ifremer.fr](mailto:codac@ifremer.fr).

|  |  |  |
| --- | --- | --- |
| **Sensor\_model** | **Sensor\_model** | **Sensor\_model** |
| FSI | SBE\_GPCTD | SUNA\_V2 |
| SBE | SBE\_GPCTD\_1111S | ISUS |
| SBE37 | SBE\_GPCTD\_1200S | ISUS\_V3 |
| SBE41 | SBE\_GPCTD\_1201S | C\_ROVER |
| SBE41\_V2.5 | SBE\_GPCTD\_1300S | DURA |
| SBE41\_V2.6 | SBE\_GPCTD\_1301S | SEAFET |
| SBE41\_V3 | SBE\_GPCTD\_2411S | SATLANTIC\_OCR504\_ICSW |
| SBE41CP | SBE\_GPCTD\_2500S | SATLANTIC\_OCR504\_R10W |
| SBE41\_IDO\_V1.0c | SBE\_GPCTD\_2501S | SATLANTIC\_OCR507\_ICSW |
| SBE41\_IDO\_V2.0 | SBE\_GPCTD\_2600S | SATLANTIC\_OCR507\_R10W |
| SBE41CP\_IDO\_V2.0b | SBE\_GPCTD\_2601S | SATLANTIC\_OCR507\_ICSWR10W |
| SBE41\_IDO\_V3.0 | SBE43\_IDO | SATLANTIC\_PAR |
| SBE41CP\_V1 | SBE43I | ECO\_BB |
| SBE41CP\_V1.1 | SBE43F\_IDO | ECO\_FL |
| SBE41CP\_V1.2 | SBE63\_OPTODE | ECO\_NTU |
| SBE41CP\_V1.2a | AANDERAA\_OPTODE | ECO\_FLBB |
| SBE41CP\_V1.3 | AANDERAA\_OPTODE\_3830 | ECO\_FLBB\_AP2 |
| SBE41CP\_V1.3b | AANDERAA\_OPTODE\_3835 | ECO\_FLBB\_2K |
| SBE41CP\_V1.4 | AANDERAA\_OPTODE\_3930 | ECO\_FLNTU |
| SBE41CP\_V1.5 | AANDERAA\_OPTODE\_4330 | ECO\_BB2 |
| SBE41CP\_V1.7 | AANDERAA\_OPTODE\_4330F | ECO\_FLBBCD |
| SBE41CP\_V1.8 | AANDERAA\_OPTODE\_4831 | ECO\_FLBB2 |
| SBE41CP\_V1.9 | AANDERAA\_OPTODE\_4831F | ECO\_BB3 |
| SBE41CP\_V1.9a | ARO\_FT | MCOMS\_FLBBCD |
| SBE41CP\_V2 | AROD\_FT | MCOMS\_FLBB2 |
| SBE41CP\_V3 | DRUCK\_2900PSIA | CYCLOPS\_7\_FLUOROMETER |
| SBE41CP\_V3.0a | DRUCK | SEAPOINT\_TURBIDITY\_METER |
| SBE41CP\_V3.0c | DRUCK\_10153PSIA | RAFOS |
| SBE41CP\_V4.4.0 | PAINE | PAL\_UW |
| SBE41CP\_V5.0.1 | PAINE\_1500PSIA | EM |
| SBE41CP\_V5.3.0 | PAINE\_1600PSIA | FLOATCLOCK |
| SBE41CP\_V7.2.3 | PAINE\_2000PSIA | AANDERAA\_OPTODE\_5013 |
| SBE41CP\_V7.2.5 | PAINE\_2900PSIA | AANDERAA\_OPTODE\_5014 |
| SBE41N | PAINE\_3000PSIA | AANDERAA\_OPTODE\_5015 |
| SBE41N\_V5.3.0 | AMETEK |  |
| SBE41N\_V5.4.0 | AMETEK\_3000PSIA |  |
| SBE61\_V4.5.2 | KISTLER |  |
| SBE61\_V4.5.3 | KISTLER\_2900PSIA |  |
| SBE61\_V5.0.0 | KISTLER\_10153PSIA |  |
| SBE61\_V5.0.1 | KELLER\_PA8 |  |
| SBE61 | SEASCAN\_SSTD |  |
| CTD\_F01 | MP40\_C\_2000\_G |  |
| RBR | SBE\_STS |  |
| RBRoem\_V1.16 | SUNA |  |

See: *GL\_REFERENCE\_TABLE\_27.txt* in the Coriolis decoder.

## [Reference Table: SENSOR\_MOUNT](#SENSOR_MOUNT)

Use “mounted\_on\_glider” as default

|  |
| --- |
| **Sensor mount** |
| MOUNTED\_ON\_GLIDER |

See: *GL\_REFERENCE\_TABLE\_20.txt* in the Coriolis decoder.

Example:

* for a CTD: "SENSOR\_MOUNT”: ["MOUNTED\_ON\_GLIDER", "MOUNTED\_ON\_GLIDER", "MOUNTED\_ON\_GLIDER"],

## [Reference Table: SENSOR\_ORIENTATION](#SENSOR_ORIENTATION)

|  |  |
| --- | --- |
| Sensor Orientation | comment |
| DOWNWARD | Example: ADCP measuring from surface to bottom currents. |
| UPWARD | Example: ADCP measuring currents towards the surface |
| FRONTWARD | Example: CTD facing the flow |
| BACKWARD | - |

*See: GL\_REFERENCE\_TABLE\_21.txt in the Coriolis decoder.*

Example:

* for a CTD: "SENSOR\_ORIENTATION”: ["FRONTWARD", "FRONTWARD", "FRONTWARD"],

## Reference Table: PARAMETER

PARAMETER is used to map the name of the glider measurements with parameters supported by the processing chain. PARAMETER’s Definition are available here : <https://www.bodc.ac.uk/resources/vocabularies/vocabulary_search/OG1/>

If your glider sample a PARAMETER that is not listed below, please, contact [support@jcommops.org](mailto:support@jcommops.org) and [codac@ifremer.fr](mailto:codac@ifremer.fr).

|  |  |
| --- | --- |
| **PARAMETER** | **PARAMETER** |
| **Supported parameter for CTD** | **Supported parameter for Nitrate sensor** |
| CNDC | UV\_INTENSITY\_NITRATE |
| PRES | UV\_INTENSITY\_DARK\_NITRATE |
| TEMP | UV\_INTENSITY\_DARK\_SEAWATER\_NITRATE |
| PSAL | NITRATE |
| **Supported parameter for OXYGEN sensor** | BISULFIDE |
| DOXY | MOLAR\_NITRATE |
| TEMP\_DOXY | FIT\_ERROR\_NITRATE |
| TEMP\_VOLTAGE\_DOXY | TEMP\_NITRATE |
| VOLTAGE\_DOXY | TEMP\_SPECTROPHOTOMETER\_NITRATE |
| FREQUENCY\_DOXY | HUMIDITY\_NITRATE |
| COUNT\_DOXY | **Supported parameters for PH sensor** |
| BPHASE\_DOXY | VRS\_PH |
| DPHASE\_DOXY | TEMP\_PH |
| TPHASE\_DOXY | IB\_PH |
| C1PHASE\_DOXY | VK\_PH |
| C2PHASE\_DOXY | IK\_PH |
| MOLAR\_DOXY | PH\_IN\_SITU\_TOTAL |
| PHASE\_DELAY\_DOXY | PH\_IN\_SITU\_FREE |
| MLPL\_DOXY | PH\_IN\_SITU\_SEAWATER |
| NB\_SAMPLE | **Supported parameter for backscattering sensor** |
| RPHASE\_DOXY | RAW\_DOWNWELLING\_IRRADIANCE380 |
| TEMP\_COUNT\_DOXY | RAW\_DOWNWELLING\_IRRADIANCE412 |
| LED\_FLASHING\_COUNT\_DOXY | RAW\_DOWNWELLING\_IRRADIANCE443 |
| PPOX\_DOXY | RAW\_DOWNWELLING\_IRRADIANCE490 |
| **Supported parameter for backscattering sensor** | IANCE555 |
| BETA\_BACKSCATTERING470 | DOWN\_IRRADIANCE380 |
| BETA\_BACKSCATTERING532 | DOWN\_IRRADIANCE412 |
| BETA\_BACKSCATTERING700 | DOWN\_IRRADIANCE443 |
| FLUORESCENCE\_CHLA | DOWN\_IRRADIANCE490 |
| TEMP\_CPU\_CHLA | DOWN\_IRRADIANCE555 |
| FLUORESCENCE\_CDOM | RAW\_UPWELLING\_RADIANCE412 |
| SIDE\_SCATTERING\_TURBIDITY | RAW\_UPWELLING\_RADIANCE443 |
| TRANSMITTANCE\_PARTICLE\_BEAM\_ATTENUATION660 | RAW\_UPWELLING\_RADIANCE490 |
| BBP470 | RAW\_UPWELLING\_RADIANCE555 |
| BBP532 | UP\_RADIANCE412 |
| BBP700 | UP\_RADIANCE443 |
| TURBIDITY | UP\_RADIANCE490 |
| CP660 | UP\_RADIANCE555 |
| CHLA | RAW\_DOWNWELLING\_PAR |
| CDOM | DOWNWELLING\_PAR |
|  | TILT |
|  | MTIME |

*See : GL\_REFERENCE\_TABLE\_3.txt in the Coriolis decoder.*

## [Reference Table: PARAMETER\_DATA\_MODE](#PARAMETER_DATA_MODE)

|  |  |
| --- | --- |
| Parameter\_data\_mode | Meaning |
| R | Real-time data. Data coming from the platform through a communication channel without physical access to the instruments, disassembly or recovery of the platform. |
| P | Provisional data. Data obtained after the instruments or the platform have been recovered or serviced. |
| D | Delayed-mode data. Data published after all calibrations and quality control procedures have been applied on the internally recorded or best available original data. This is the best possible version of processed data. |
| M | Mixed. This value is only allowed in the global attribute “data\_mode” or in attributes to variables in the form “<PARAM>:DM\_indicator”. It indicates that the file contains data in more than one of the above states. |

*See: GL\_REFERENCE\_TABLE\_19.txt in the Coriolis decoder.*

## [Reference table: mapping between glider\_variable\_name and ego\_variable\_name](#ego_variable_name)

*This table is only informative and should be updated regularly by glider users. The mapping below may be wrong and is incomplete.*

*Please contact* [support@jcommops.org](mailto:support@jcommops.org) *and* [codac@ifremer.fr](mailto:codac@ifremer.fr) *is there are any update or correction.*

*Note : yellow highlighting indicate a low level of confidence in the mapping.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ego\_variable\_name | glider\_variable\_name | | | |
|  | **Slocums** | **SeaGlider** | **SeaExplorer** | **Spray** |
| **CTD SENSORS** | | | | |
| TEMP | sci\_water\_temp,  temp,  m\_water temp,  sci\_water\_temp2,  gld\_dup\_sci\_water\_temp | sbect.tempFreq,  GC\_phase |  |  |
| CDNC | sci\_water\_cond,  cond,  m\_water\_cond,  sci\_water\_cond2,  gld\_dup\_sci\_water\_cond | sbect.condFreq,  GC\_phase |  |  |
| PRES | sci\_water\_pressure,  pres,  m\_water\_pressure,  sci\_water\_pressure2,  gld\_dup\_sci\_water\_pressure |  |  |  |
| **OXYGEN SENSORS** | | | | |
| MOLAR\_DOXY | oxygen,  sci\_oxy3835\_wphase\_oxygen,  sci\_oxy4\_oxygen, | aa4330.O2,aa.O2,aa1.O2, |  |  |
| DOXY |  |  |  |  |
| TEMP\_DOXY | sci\_oxy4\_temp, | aa4330.Temp,aa.Temp,aa1.Temp,aa.TCPhase,aa1.TCPhase |  |  |
| TEMP\_VOLTAGE\_DOXY |  |  |  |  |
| TEMP\_COUNT\_DOXY |  |  |  |  |
| C1PHASE\_DOXY | sci\_oxy4\_c1rph, | aa4330.CalPhase,aa1.CalPhase,aa.CalPhase, |  |  |
| C2PHASE\_DOXY | sci\_oxy4\_c2rph |  |  |  |
| TPHASE\_DOXY | sci\_oxy4\_tcphase, | aa4330.TCPhase |  |  |
| BPHASE\_DOXY | sci\_oxy3835\_wphase\_bphase |  |  |  |
| DPHASE\_DOXY | sci\_oxy3835\_wphase\_dphase |  |  |  |
| RPHASE\_DOXY |  |  |  |  |
| VOLTAGE\_DOXY |  |  |  |  |
| FREQUENCY\_DOXY | oxygenFreq,  sci\_oxy4\_oxygen, |  |  |  |
| COUNT\_DOXY |  |  |  |  |
| PHASE\_DELAY\_DOXY |  |  |  |  |
| MLPL\_DOXY |  |  |  |  |
| NB\_SAMPLE |  |  |  |  |
| LED\_FLASHING\_COUNT\_DOXY |  |  |  |  |
| PPOX\_DOXY |  |  |  |  |
| **BACKSCATTERING SENSORS** | | | | |
| CHLA | sci\_bb2flsv2\_chl\_scaled,  sci\_bb2flsV2\_chl\_scaled,  sci\_bb2flsv4\_chl\_scaled,  sci\_bb2flsV4\_chl\_scaled,  chla\_scaled,  sci\_bbfl2s\_chlor\_scaled,  sci\_flbbcd\_chlor\_units,  sci\_flntu\_chlor\_units, |  |  |  |
| FLUORESCENCE\_CHLA | sci\_bb2flsv3\_pe\_scaled, sci\_bb2flsV3\_pe\_scaled, sci\_bbfl2sv2\_fl1\_scaled, sci\_bbfl2sV2\_fl1\_scaled, |  |  |  |
| FLUORESCENCE\_CDOM |  |  |  |  |
| CDOM | sci\_bb2fls\_cdom\_scaled,  sci\_bb2flsv5\_cdom\_scaled,  sci\_bb2flsV5\_cdom\_scaled,  sci\_bb2flsv6\_cdom\_scaled,  sci\_bb2flsV6\_cdom\_scaled,  sci\_bbfl2s\_cdom\_scaled,  sci\_bbfl2sv2\_fl2\_scaled,  sci\_bbfl2sV2\_fl2\_scaled,  sci\_flbbcd\_cdom\_units, |  |  |  |
| TURBIDITY | sci\_flntu\_turb\_units, |  |  |  |
| SIDE\_SCATTERING\_TURBIDITY |  |  |  |  |
| TEMP\_CPU\_CHLA |  |  |  |  |
| BBP880/BETA880 | sci\_bb2fls\_b880\_scaled,  sci\_bb2flsv3\_b880\_scaled,  sci\_bb2flsV3\_b880\_scaled,  sci\_bb2flsv6\_b880\_scaled,  sci\_bb2flsV6\_b880\_scaled,  bbp880\_scaled, |  |  |  |
| BBP715/BETA715 | sci\_bb2flsV3\_b715\_scaled,  sci\_bb2flsv3\_b715\_scaled |  |  |  |
| BBP700/BETA700 | sci\_flbbcd\_bb\_units, |  |  |  |
| BBP660/BETA660 | sci\_bb2fls\_b660\_scaled,  sci\_bb2flsv5\_b660\_scaled,  sci\_bb2flsV5\_b660\_scaled,  sci\_bb3slo\_b660\_scaled, |  |  |  |
| BBP532/BETA532 | sci\_bb2flsv2\_b532\_scaled,  sci\_bb2flsV2\_b532\_scaled  sci\_bb2flsv5\_b532\_scaled,  sci\_bb2flsV5\_b532\_scaled,  sci\_bb2flsv6\_b532\_scaled,  sci\_bb2flsV6\_b532\_scaled,  bbp532\_scaled,  sci\_bbfl2s\_bb\_scaled,  sci\_bbfl2sv2\_bb\_scaled,  sci\_bbfl2sV2\_bb\_scaled,  sci\_bb3slo\_b532\_scaled, |  |  |  |
| BBP470/BETA470 | sci\_bb2flsv2\_b470\_scaled,  sci\_bb2flsV2\_b470\_scaled  sci\_bb2flsv4\_b470\_scaled,  sci\_bb2flsV4\_b470\_scaled,  sci\_bb3slo\_b470\_scaled, |  |  |  |
| BBP412/BETA412 | sci\_bb2flsv4\_b412\_scaled,  sci\_bb2flsV4\_b412\_scaled, |  |  |  |
| CP660 |  |  |  |  |
| **NITRATE SENSORS** | | | | |
| SUNA | sci\_suna\_nitrate\_um, |  |  |  |
| MOLAR\_NITRATE |  |  |  |  |

|  |
| --- |
| **Glider variable name to be addressed** |
| Slocum  sci\_flntu\_turb\_ref, sci\_flntu\_chlor\_ref, sci\_bbam\_beam\_c  sci\_oxy4\_saturation, sci\_oxy3835\_saturation, sci\_oxy3835\_wphase\_rphase, sci\_oxy3835\_wphase\_temp  sci\_suna\_record\_offset, sci\_suna\_timestamp, sci\_suna\_nitrate\_mg  sci\_ocr504i\_irrad1, sci\_ocr504i\_irrad2, sci\_ocr504i\_irrad3, sci\_ocr504i\_irrad4  sci\_dvl\_we\_u\_vel, sci\_dvl\_we\_v\_vel, sci\_dvl\_we\_w\_vel,  SeaGlider  aa4330.AirSat, **aa.AirSat, aa1.AirSat,**  **wl.temp1,wlbb2fl.temp**  **wlbb2fl.BB1ref, wlbb2fl.BB1sig, wlbb2fl.BB2ref, wlbb2fl.BB2sig, wlbb2fl.FL1ref, wlbb2fl.FL1sig,wl.ref1, wl.sig1, wl.ref2, wl.sig2, wl.Chlref1, wl.Chlsig1,**  **SeaExplorer**  **Spray** |

## About data submission

Well done, your .json files are ready. Tt is time to upload them on your ftp account at Coriolis in the proper directory: <ftp://eftp.ifremer.fr/>submit/<glider\_name>/<glider\_name>\_<deployment\_start\_date>