FICHE META\_INFORMATION\_PARAMETRES

(à remplir par le responsable du paramètre)

### Nom du DATASET / Data SET NAME

*Data set Name:* DISSOLVED ORGANIC CARBON (DOC)

### PROJET-ETUDE / *PROJECT TITLE*

*Campaign NAME*: LATEX2010 *LEG : 2*

*Date* *begin: 31/08/2010*

*Date end: 24/09/2010*

*Chief Scientist*: Frédéric DIAZ et Anne PETRENKO

*Address :* Institut Méditerranéen d’Océanologie (M.I.O.) – UMR7294, UR 235.

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*Chief Mission*: Bernard Queguiner

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### OPERATION & CAMPAGNE & PIs / *OPERATION & CAMPAIGN&PIs*

*Sampling method : Discrete sampling from 12 Niskin bottles on a rosette*

*Station number-Cast number: 22*

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| --- |
| ***LATEX LEG 2*** |
| ***Station number/Cast number*** |
| *008– 009 – 010– 012 – 014 – 015 – 017 – 018 – 020 – 022 – 023 – 024 – 025 – 028 – 029 – 030 –032 – 034 – 035 – 037 –039 – 041* |

*Operation code:*

### RESPONSABLE SCIENTIFIQUE du paramètre / *PI of the parameter*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nom / *name* | adresse /*address* | téléphone / *phone number* | fax /*fax number* | adresse mél /*email address* |
| Mireille Pujo-Pay | LOMIC UMR 7621 avenue du Fontaulé 66650 Banyuls/mer | 04 68 88 73 51 | 04 68 88 73 95 | pujopay@obs-banyuls.fr |
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### DATASET contact

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nom / *name* | adresse /*address* | téléphone / *phone number* | fax /*fax number* | adresse mél /*email address* |
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|  |  |  |  |  |

### INFORMATION GEOGRAPHIQUES */ GEOGRAPHIC INFORMATION*

*Predefined site (if relevant):* no because of Lagrangian sampling

*Location:* Northwestern Mediterranean Sea

*LATITUDE:*

*LONGITUDE:*

### DESCRIPTION DES INSTRUMENTS / INSTRUMENTS DESCRIPTION

*Instrument Type:* TOC analyzer = High temperature combustion analyser (high temperature catalytic oxidation)

*Manufacturer:* Shimadzu

*Model:* TOC-L

*Instrument Features / Calibration:*

Carbon concentrations was determined by automatic comparison with a five-points calibration curve performed with standards (25 to 200 μM C) prepared by diluting a stock solution of Acetalinid in MilliQ water.

### DESCRIPTION DES PARAMETRES */ PARAMETERS DESCRIPTION*

# Ce qui a été collecté, mesuré et comment / *How was the parameter collected and measured (include references for analytical methods)?*

*Sampling:* Samples were collected from the Niskin CTD Rosette in ashed glass bottles and were immediately filtered onto 2 ashed 25 mm GFF whatman filters (porosity becomes close to 0.2µm). Filtered samples were collected into ashed glass ampoule, poisoned with orthophosphoric acid and sealed until analyses (performed immediately when return from the cruise).

*Analytical procedure: (briefly, could be a short recall to a published reference):*

DOC was analysed by high temperature catalytic oxidation (HTCO) (Sugimura & Suzuki 1988, Cauwet, 1994, 1999) with a Shimadzu TOC-L analyzer. Analytical accuracy of measurements is better than 2 %.

Consensus Reference sea water (1) was analyses every 10-12 samples to insure stable operating conditions.

*(1) http://www.rsmas.miami.edu/groups/biogeochem/CRM.html*

*Units: mmol* m-3

*Sensor Precision:*

Typical analytical precision is ±0.1–0.5 (SD) or 0.2–1% (CV).

# Décrire quels types de données sont nécessaires pour vous compléter votre propre jeu de données **avant** envoi à la base de données, et estimer le délai avant la disponibilité de vos données pour la base de données / *Post-cruise data analysis/treatment required, and the time frame for this*

*Estimated Date of Delivery :*

### REFERENCES BIBLIOGRAPHIQUES

Cauwet G. 1994. HTCO method for dissolved organic carbon analysis in seawater : influence of catalyst on blank estimation. Mar. Chem., 47 (1) : 55-64.

Cauwet G., 1999. Determination of dissolved organic carbon (DOC) and nitrogen (DON) by high temperature combustion. In: K. Grashoff, K. Kremling and M. Ehrhard (Eds), Methods of seawater analysis, 3 rd edition. Wiley-VCH, Weinheim. pp. 407-420.

Sugimura Y, Suzuki Y., 1988. A high-temperature catalytic oxidation method for the determination of non-volatile dissolved organic carbon in seawater by direct injection of a liquid sample. Mar Chem 24:105-131.