FICHE META\_INFORMATION\_PARAMETRES

(à remplir par le responsable du paramètre)

#### 

### Nom du DATASET / Data SET NAME

*Data set Name :* Backscattering at 6 wavelengths ( HYDROSCAT-6) St1 to 6, LDA D1 to D5

### PROJET-ETUDE / *PROJECT TITLE* & Chefs de projet et mission / PIs

*Campaign NAME* : OUTPACE *LEG :*

*Date* *begin : 18/02/2015*

*Date end : 03/04/2015*

*Chief Scientist*: Thierry Moutin & Sophie Bonnet

*Address :* *M.I.O. Institut Méditerranéen d’Océanologie - UMR 7294   
OSU Institut Pythéas, Campus de Luminy, Bâtiment Méditerranée   
13288 MARSEILLE cedex 09, FRANCE*

& *M.I.O. Institut Méditerranéen d’Océanologie - IRD/CNRS/Aix-Marseille University*

*IRD Noumea, 101 Promenade R. Laroque, BP A5, 98 848 Nouméa Cedex*

*NEW CALEDONIA*

*Chief Mission*: Thierry Moutin

*Address : M.I.O. Institut Méditerranéen d’Océanologie - UMR 7294   
OSU Institut Pythéas , Campus de Luminy, Bâtiment Méditerranée   
13288 MARSEILLE cedex 09, France*

### ECHANTILLONNAGE ET OPERATIONS A LA MER / SAMPLING METHOD AND OPERATIONS AT SEA

*Sampling method : HYDROSCAT-6*

*Station number-Cast number :*

|  |  |
| --- | --- |
| Station Number | Sampled Cast Number |
| *SD-01* | SD-01 |
| *SD-02* | SD-02 |
| SD-03 | SD-03 |
| LD-A | LDA-1, LDA-2, LDA-3, LDA-4, LDA-5 |
| SD-04 | SD-04 |
| SD-05 | SD-05 |
| SD-06 | SD-06 |

*Panne carte électronique à bord d’acquisition de l’instrument à SD7*

*Operation code :*  Bb (m-1)

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nom / *name* | adresse /*address* | téléphone /*phone number* | fax /*fax number* | adresse mél /*email address* |
| **DUPOUY Cécile** | Aix-Marseille Université, Univ. Toulon, CNRS, IRD UMR235 (UM110)  Centre IRD Nouméa BP A5 - 98848 Nouméa cedex Nouvelle Calédonie | **687 26 07 29** |  | Cecile.dupouy@mio.osupytheas.fr |

Remarque / Remark : Pour la pérennité de la base de données, il est fortement suggéré que le responsable scientifique ait un poste permanent / For the perinity of the database, it is recommended that the PI of the parameter has a permanent position.

### Contact Base de données pour ce paramètre / DATASET contact for this parameter

Remarque / Remark : Pour la pérennité de la base de données, il est fortement suggéré que le contact base de donnée ait un poste permanent / For the perinity of the database, it is recommended that the dataset contact for this parameter has a permanent position.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Nom / *name* | adresse /*address* | téléphone / *phone number* | fax /*fax number* | adresse mél /*email address* |
| **DUPOUY Cécile** | Aix-Marseille Université, Univ. Toulon, CNRS, IRD UMR235 (UM110)  Centre IRD Nouméa BP A5 - 98848 Nouméa cedex Nouvelle Calédonie | **687 26 07 29** |  | Cecile.dupouy@mio.osupytheas.fr |

### Autre(s) participant(s) à la mesure de ce paramètre / Other participant(s) for the measurement of this parameter

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

### INFORMATION GEOGRAPHIQUES */ GEOGRAPHIC INFORMATION*

*Predefined site (if relevant):*

*Location: South Pacific Ocean*

*LATITUDE: S 17° - S 23°*

*LONGITUDE: E 159° – W 149°*

### DESCRIPTION DES INSTRUMENTS / INSTRUMENTS DESCRIPTION

*Instrument Type:* Backscattering profiler (bb) at the 6 SeaWiFS wavelengths (412, 440, 510, 550, 620, 670nm)

*Manufacturer:* HOBILABS

*Model:* Hydroscat-6

*Instrument Features / Calibration: Calibration of radiometers by HOBILABS manufacturer performed in February just before the cruise*

### 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:* The Hydroscat-6 was downloaded independently on the side of the Atalante. The backscattering coefﬁcient, bb, was measured with a Hydroscat-6 proﬁler (H6: HobiLabs, wavebands centered at 442, 488, 510, 550, 620 and 670 nm; with a bandwidth of 10 nm for 442–550 nm bands, and 20 nm for the 620 and 670 nm bands).

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

Data were processed using the manufacturer’s protocol for the correction of the incomplete recovery of backscattered light (the Sigma correction) (Mafﬁone and Dana, 1997). This protocol corrects the measured backscattering coefﬁcient in the blue channel (440 nm) by 2%, and less than 2% in other channels for the range of Tchla measured in the oligotrophic waters (Tchla maximum value of 1 mg m-3) as mentioned in Dupouy et al. (2008a). Further processing included an averaging of measurements along the proﬁle down to 180 m and the extraction of the surface coefﬁcient by eliminating the ﬁrst 0–1 m values and by averaging bb(L) over 2–5 m in order to compare with measured parameters obtained from the ﬁrst Niskin sample (2 m depth). Then, bbp(L) was calculated by subtracting from bb(k) the theoretical ‘‘pure water spectrum”, bbw (calculated as bbw(L) = 0.5 bw(L); Morel et al., 2007) (L= wavelength, nm).

*Units:* (m-1)

*Sensor Precision:*

Typical analytical = 5%

# 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 : First trimester 2016*

### REFERENCES BIBLIOGRAPHIQUES

* Dupouy C.,Loisel, H., Neveux, J., Brown, S. L., Moulin, C., Blanchot, J., Le Bouteiller, A. and M. R. Landry, 2003. Microbial absorption and backscattering coefficients from *in situ* and satellite data during an ENSO cold phase in the equatorial Pacific (180°). *Journal of Geophysical Research*, **108** (C12), 8138, doi:10.1029/2001JC001298
* Dupouy C., 2004. Base de données PROOF DIAPAZON. Rétrodiffusion des 9 campagnes DIAPALIS.
* Dupouy, C**.,** Neveux, J., Dirberg, G., Röttgers, R., Tenório,M. M. B., S. Ouillon, 2008. Bio-optical properties of the marine cyanobacteria *Trichodesmium* spp., *Journal of Applied Remote Sensing*, **2**, 1-17. doi:10.1117/1.2839036
* Dupouy C., Neveux J., Ouillon S., Frouin, R., Murakami H., Hochard S., Dirberg, G., 2010. Inherent optical properties and satellite retrieval of chlorophyll concentration in the lagoon and open ocean waters of New Caledonia, *Marine Pollution Bulletin*, 61, 503-518, doi:10.1016/j.marpolbul.2010.06.039