

# DATA SET SUMMARY (EDMED)

Project : JGOFS

Data set name : EUMELI 5

CRUISE OR MOORING : CRUISE

LABORATORY in charge of : Laboratoire d'Océanographie Biologique et Ecologie du Plancton marin  
LOBEPM BP 28 06234 Villefranche/mer FRANCE

## DOMAINS/KEYWORDS :

- |   |  |
|---|--|
| <input type="checkbox"/> PHYSICAL OCEANOGRAPHY ex :<br>SUBSURFACE HYDROGRAPHY (T,S)<br>CURRENTS, DRIFT, DISPERSION<br>SURFACE HYDROGRAPHY (EG T,S)<br>OPTICAL PROPERTIES OF SEA WATER   | <input type="checkbox"/> INORGANIC CHEMISTRY<br>DISSOLVED GASES<br>NUTRIENTS<br>RADIO-ISOTOPES |
| <input type="checkbox"/> MARINE BIOLOGY<br>BENTHOS<br>ORGANIC/BIO-CHEMISTRY<br>MARINE BIOLOGY<br>BULK CHEMISTY (EG PH, TCO2)<br>PRODUCTIVITY, BIOMASS<br>PIGMENTS (EG CHLOROPHYLL), LIGHT<br>PLANKTON<br>FISHES<br>DEEP SEA ECOLOGY/FAUNA<br>MICROBIOLOGY | <input type="checkbox"/> OTHER DATA<br>MARINE SNOW<br>Particles                                |

## TIME-PERIOD :

December 1992

## GEOGRAPHIC COVERAGE :

Atlantic Ocean

## MEASUREMENT TYPE : (W P F S O B)

W: sea water    P : water column particles    F : settling particles    S : sediment    O : pore water  
near the sediment

## OBSERVED PARAMETERS :

(units have to be consistent with the International System of Units described in the project Data Manual)

Files \*.Re1 :

Particles > 202 µm ESD

| NAME                 | UNIT            | FORMAT     |
|----------------------|-----------------|------------|
| pressure             | Decibars        | Scientific |
| # particules / liter |                 |            |
| Mean Length          | mm              |            |
| Mean Surface         | mm <sup>2</sup> |            |
| Mean ESD *           | mm              |            |
| Total Volume *       | Ppm             |            |
| Total Dry Weight *   | microg/l        |            |
| Median ESD *         | mm              |            |
| DSE S.D.*            | S.D.            |            |
| Spherical Surface *  | mm <sup>2</sup> |            |
| Ratio (Length/ESD)*  |                 |            |

\* calculated values

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| NAME                                     | UNIT  | FORMAT     |
|--|-------|------------|
| Volume of analysed sea water             | liter | Scientific |
| Depth of sample                          | Dbars |            |
| # particles 3 pixels surface (92 µm ESD) |       |            |
| # particles 4 pixels surface             |       |            |
| # particles 5 pixels surface             |       |            |
| .....                                    |       |            |
| # particles 150 pixels surface           |       |            |

Usefull equations :

$$Y = 0.00139 x^{1.430} \quad x = \text{Surface (pixels)} \quad Y = \text{Surface (mm}^2\text{)}$$

See Lars Stemmann thesis for values limitation.

$$L = 0.835 I^{0.123} \quad I = \text{Lengh (pixels)} \quad L = \text{Lengh (mm)}$$

**INSTRUMENTS** (separate forms to describe the instruments) :

Underwater Video Profiler ( U.V.P. 2a)

**DESCRIPTION & OBJECTIVES :**

**VOLUME/NUMBER OF PROFILES :** 15 (Marine snow)

**AVAILABILITY :**

**RESPONSIBLE SCIENTIST :** GORSKY Gabriel

Tel : 04 93 76 38 16

Fax : 04 93 76 38 34

Email : gorsky@ccrv.obs-vlfr.fr

**BIBLIOGRAPHICAL REFERENCES (METHODOLOGY) :**

Alldredge, A. L. (1979) The chemical composition of macroscopic aggregates in two neritic seas. Limnology and Oceanography, 24(5) : 855-866.

Alldredge, A. L. and M. W. Silver (1988) Characteristics, Dynamics and significance of marine snow. Progress in Oceanography, 20 : 41-82.

Chester, R. and H. Stoner (1974) The distribution of particulate organic carbon and nitrogen in some surface waters of the world ocean. Marine chemistry, 2 : 263-275.

Gorsky, G., Aldorf, C., Picheral, M., Kage, M., Garcia, Y. and J. Favole (1992) Vertical distribution of suspended aggregates determined by a new Underwater Video Profiler. Ann. Inst. oceanogr., Paris, 68 (1-2): 275-280.

Gorsky, G., Picheral, M. and L. Stemmann (in press) Use of the Underwater Video Profiler for the Study of Aggregate Dynamics in the North Mediterranean. Estuarine, Coastal and Shelf Science.

Picheral, M., Grisoni, J-M., Stemmann, L. and G. Gorsky (1998) Underwater Video Profiler for the "in situ" study of suspended particulate matter. OCEANS 98, 28 September- 1 October, IEEE/OES conference, Nice, p. 171-174.

Picheral, M., Stemmann, L. et G. Gorsky (1995) Système multiparamétrique pour la mesure et la quantification de la matière particulaire en suspension dans la colonne d'eau. 3e Colloque Européen Des Capteurs pour l'Environnement, Grenoble, 30-31 Mars 1995. pp. 162-165.

Stemmann, L. (1998) Analyse spatio-temporelle de la matière particulaire. Thèse Doctorale, Université Paris 6, pp 178.

Stemmann, L., Picheral, M. and G. Gorsky. (in press) Diel changes in the vertical distribution of suspended particulate matter in the NW Mediterranean Sea investigated with the Underwater Video Profiler. Deep-Sea Research.

#### **STATIONS LOCATION**

(preference is an ASCII file on ftp or attached document)

StationsEumeli5.xls file.

