:RETURN TO Serge HEUSSNER (heussner@univ-perp.fr)

And.....remove this header before returning

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DATA SET SUMMARY (EDMED) **Project:** ADIOS EVK3-2000-00604

Data set name : - Numerical Outputs of the Task 3.5 Ecosystem Modelling

CRUISE OR MOORING: 2001-2002-2003

LABORATORY in charge of Renzo Mosetti, OGS Department of Oceanography

Responsible Scientist NAME : Guido Crispi, Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS, Departement of Oceanography, Trieste, Italy
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DOMAINS/KEYWORDS :

- o **PHYSICAL OCEANOGRAPHY** ex :
  - o SUBSURFACE HYDROGRAPHY (T,S)
  - o CURRENTS, DRIFT, DISPERSION
  - o SURFACE HYDROGRAPHY (eg T,S)
  - o OPTICAL PROPERTIES OF SEA WATER
- o **INORGANIC CHEMISTRY**
  - o DISSOLVED GASES
  - o NUTRIENTS
  - o RADIO-ISOTOPES
- o **ATMOSPHERIC CHEMISTRY**
- x **MODELLING**
- o **REMOTE SENSING**
- o **OTHER DATA TYPES** :
  - o WHICH ONE(S) ?
- o **MARINE BIOLOGY**
  - o BENTHOS
  - o ORGANIC/BIO-CHEMISTRY
  - o MARINE BIOLOGY
  - o BULK CHEMISTRY (eg PH, TCO2)
  - o PRODUCTIVITY, BIOMASS
  - o PIGMENTS (eg CHLOROPHYLL), LIGHT
  - o PLANKTON
  - o FISHES
  - o DEEP SEA ECOLOGY/FAUNA
  - o MICROBIOLOGY
  - o ECOTOXICOLOGY
- o **SEDIMENTOLOGY**

TIME-PERIOD (of the measurements) **:**

GEOGRAPHIC-COVERAGE :

MEASUREMENT TYPE : **(A W P F S PW DB O)** *(circle)*

A : atmosphere	W : sea water	P : suspended particles	F : settling particles (traps)	S : sediment

OBSERVED PARAMETERS :

important :

1. ***parameter names and units have to be consistent with the International System of Units.***
2. ***only the measured parameters are currently archived BUT METADATA SETS ARE TO BE PRODUCED FOR ALL PARAMETERS; except classical parameters like salinity, east and north component of the current.***
3. ***Expected maximum and minimum values are important to perform cross quality checks after transcoding***

CODE	NAME	UNIT	ACCURACY	Minimum value	Maximum value

OBSERVED PARAMETERS (Continuation) :

CODE	NAME	UNIT	FORMAT	Minimum value	Maximum value

INSTRUMENTS

All the ECHYM simulations were performed on the SGI Origin 3800 of the CINECA-Consorzio Interuniversitario del Nord-Est Italiano per il Calcolo Automatico site in Bologna Italy.

DESCRIPTION, OBJECTIVES, METHODOLOGY :

The data are 182 zonally starting from 9.375 W and 57 meridionally starting from 30.5N. The levels are 31, depth in meters: 5, 15, 30, 50, 70, 90, 120, 160, 200, 240, 280, 320, 360, 400, 440, 480, 520, 580, 660, 775, 925, 1150, 1450, 1750, 2050, 2350, 2650, 2950, 3250, 3550, 3850. The parameters in each file are: transport streamfunction, wind stress x-comp., wind stress y-comp., u current, v current, temperature, salinity excess, nitrates, ammonia, phosphates, ultraplankton, netplankton, zooplankton, dissolved oxygen, detritus-N, detritus-P, detritus-C.

The objectives are to numerically assess the influence of atmospheric inputs in the Mediterranean to nitrogen and phosphorus budgets and to estimate the impact of atmospheric input in comparison to the riverine load, and to exchanges with Adriatic and Aegean Seas.

All the files contained in deliverables of the ADIOS Project are simulation outputs of the three-dimensional eco-hydrodynamical model ECHYM (1) developed during EC Project MAss Transfer and Ecosystem Response, MAS3-CT96-0051. The second and third ADIOS deliverables were carried out with phosphate and nitrate initial conditions comig from analysis of data (2). The third deliverable was obtained using the annual average estimate of nitrate and phosphate apports due to the Rhone and the Nile rivers (3).

NUMBER OF PROFILES/NUMBER OF MEASUREMENTS : **CONFIDENTIALITY :** PUBLIC

The following 5 files contain the results of the ECHYM simulations. Doc files are inside each CD-ROM.

DATA FILE NAMES :

1) 3 files: ECHYM4l31.zero.dat, ECHYM.low.dat, ECHYM4l31.pulse.dat in CD-ROM D10-M12.

2) 1 file: ECHY4l31.rivmar.dat in CD-ROM D28-M24.

3) 1 file: ECHYM4l31.dat in CD-ROM D40-M32.

REFERENCES

(1) Crispi, G., Crise, A. and C. Solidoro, 2002. Coupled Mediterranean ecomodel of phosphorus and nitrogen cycles. J. Mar. Syst., 33-34, 497-521.

(2) Crise, A., Crispi, G., Melaku Canu, D., Mosetti, V., Pacciaroni, M. and Tomini, I., 2003. A numerical assessment of the impact of the atmospheric input on the N and P cycles in the Mediterranean Sea. Geoph. Res. Abs., 15, 11284.

(2) Pacciaroni, M. and Crispi, G., 2003. The forthcoming Modular Ocean Model for Mediterranean Ecosystem. ADIOS Project – EVK3-2000-00604. OGS Technical Report 15-2003/OGA7.