## CRUISE SUMMARY REPORT

CRUISE Name: ACS4 No: GDP08-??

CRUISE PERIOD start: 24 June 2008 to end: 29 June 2008

PORT OF DEPARTURE Ancona (Italy)
PORT OF RETURN Ancona (Italy)

SHIP Name: DALLAPORTA Call Sign: MVQ Type of ship: trawl research vessel (35 m.)

RESPONSIBLE LABORATORY Name: CNR-ISMAR-AN Address: Largo Fiera della Pesca, 2

Ancona, 60125 Country: ITALY

CHIEF SCIENTIST(S) Name: Penna Pierluigi CNR-ISMAR-AN

## **OBJECTIVES AND BRIEF NARRATIVE OF CRUISE**

Fourth seasonal (summer) monitoring cruise of ADRICOSM-STAR Project.

Surface water reflectance measurements for HYPAD.COM project.

Summer monitoring cruise in Jabuka depression for LTER Project.

The ship departed on Tuesday 24 June. Course to Zelenika.

Dallaporta arrived, in Zelenika on the 25 June, where all the foreign staff went on board.

From Montenegro: Zoran Kljajic, Aleksandar Jovicic and Dragana Drakulovic.

From Albania: Elvin Como and Bledar Murtaj.

Then the ship sailed further inside Boka Kotorcska to make CTD casts in every basins (KO,TV and HN stations).

When exited to open sea, the ship sailed to the off-shore station of transects 1 and 2.

At the end of transect 2, the ship sailed to station 4-1 and we stopped the cruise for wait the right sunlight for reflectance measurement (HYPAD.COM project). On 26 June, along the course of the transect 4, the airborne with on board the hyperspectral sensor MIVIS (Multispectral Infrared Visible Image Spectrometer) make the same path for reflectance measurement at 1.5 and 4 Km from sea level. (HYPAD.COM project). On the afternoon we made transect 7 and we stopped again the cruise for wait the sunlight.

At 9.00 27 June we started transetc 6 and after 5 and 3 was made. The whole transetc 5 and stations from 3-1 to 3-5 a CTD Idronaut model 316 plus (IBMK owner) was put in the frame in order to check the idronaut system..

The last station was 3-7 on the evening of 27 June. The ship ended the Adricosm-Star cruise in Zelenika harbour on the morning of 28 June. Foreing staff and Rosa Maria Cavalli were disembarked.

In the night of 28 June we started Jabuka transect from station P10 and ended in the morning of 29 June in station P01. The ship ended the cruise in Ancona harbour on the afternoon of 29 June.

Water samples for Oxygen Winkler analisys were made on board. During the cruise water surface temperature date as well as GPS data were carried out at 1 minute time interval.

The italian scientific crew was: Mattia Betti, Giuseppe Caccamo, Alessandra Campanelli and Pierluigi Penna from ISMAR-Ancona, Rosa Maria Cavalli and Cristiana Bassani from IIA-LARA. Penna and Caccamo performed the CTD and rosette operations.

Campanelli and Betti, helped by Como and Murtaj performed the sample and filtration operations Cavalli and Bassani perfomed radiometric measurement at some stations.

Kljajic take fito-plankton samples at some stations for on shore analysis in Kotor Institute and for OGS-Trieste Institute.

Aleksandar Jovicic helped by Penna manage and start up Hydronaut CTD system.

PROJECT name: ADRICOSM-STAR Coordinanting body: CMCC viale Gallipoli, 49 Lecce 73100 ITALY

| PRINCIPAL INVESTIGATORS |                          |  |            |                             |  |  |  |
|-------------------------|--------------------------|--|------------|-----------------------------|--|--|--|
| name                    | body                     | address                                    | country    | e-mail                      |  |  |  |
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| C Zoran Kljajic         | IBMK                     | Dobrota bb, POB 85330<br>Kotor             | MONTENEGRO | biokotor@cg.yu              |  |  |  |
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| E Rosa Maria<br>Cavalli | CNR-IIA-<br>LARA         | via del Fosso del<br>Cavaliere, Roma 00133 | ITALY      | rosa.cavalli@lara.rm.cnr.it |  |  |  |

## MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS PI Latitude Longitude TYPE DESCRIPTION

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| SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN |           |                               |   |  |  |
|---|-----------|-------------------------------|---|--|--|
| PI NO                                     | UNITS     | TYPE                          | DESCRIPTION   |  |  |
| A 6                                       | files     | D90                           | cruise track Navigation program SeaClearll with GARMIN GPS 36   |  |  |
| A 6                                       | files     | H71                           | surface temperature underway with AANDERAA model 3660<br>Datalogger and 3444 sensor with 1 reading/minute             |  |  |
| A 62                                      | casts     | H10                           | SBE911plus (C, T, D)<br>with SBE43 (Oxy), TURNER SCUFA(FI,Tur), BENTHOS<br>916(Alt)                                   |  |  |
| C 10                                      | casts     | H10                           | Hydronaut 316plus (C, T, D)   |  |  |
| A 62                                      | casts     | H09                           | Carousel SBE32 with 4 bottles of 10 litres and 3 of 1.7 litres  |  |  |
| B 48                                      | samples   | H21                           | Oxygen Winkler method on board analysis with METROHM Tritino720 and sampler760  |  |  |
| B 981                                     | l samples | H22, H24,<br>H25, H76,<br>H26 | Phosphate, Nitrate, Nitrite, Ammonia, Silicate, on shore analysis with Autoanalizer BRAN+LUEBBE model QuAAtro (2 Ch.) |  |  |
| B 63                                      | samples   | B02                           | Phyto-plankton Pigments (Chlorophyl a, b, c) on shore analysis with HPLC DIONEX model PDA100+GP50                     |  |  |
| B 60                                      | samples   | B06                           | Colored DOM on board analysis with spectral-photometer<br>Perkin-Elmer  |  |  |
| B 60                                      | samples   | B90                           | Total Suspended matter on shore analysis with gravimetric method  |  |  |
| 0 60                                      | comples   | DOO                           | double samples of Phyto-plankton for Kotor and OGS-Trieste  |  |  |

on shore analysis

radiometer instrument for airborne hyperspectral data E 35 measurements D90 calibration and validation (sea surface reflectance

measurement)

**TRACK CHART:** none

**GENERAL OCEAN AREA(S)**: Eastern Mediterranean Sea (179 Marsden Square)

SPECIFIC AREAS: South Adriatic Sea