



CORALFISH 2010 Cruise Report: CF0910-ROV

24–29th September 2010

Eastern Ionian,
Cephalonia Island

**Dr. Chris Smith & Shipboard Scientific Crew
Hellenic Centre for Marine Research**

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Expedition Objectives

The general objective of the expedition was to undertake underwater surveys in relation to cold water coral species in the Eastern Ionian sea. More specific objectives included:

- To undertake fixed video transect surveys of the seabed with remotely operated vehicle at depths of 400-800 m in pre-defined areas off the island of Cephalonia (CoralFish WT3.4).
- To undertake replicate transects in areas both with corals and without corals
- To identify areas to be targeted for long line fishing (CoralFish WT3.3).

Cruise Participants

For a full list and dates of participation see Table 1.

- HCMR, Institute of Marine Biological Resources: Chief Scientist, scientific staff
- HCMR, Underwater Activities: technical staff (ROV support and diver).

Area of Operations

The area of operations was in the Ionian Sea off the West coast of Greece and included (see Fig 1):

- South West and West of Cephalonia Island

Principal Equipment Deployed

RV Philia (26 m)

ROV: DSSI Max Rover, 2000 m rated.

CTD: Seabird

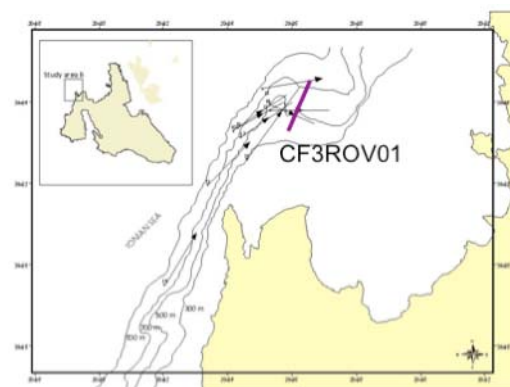
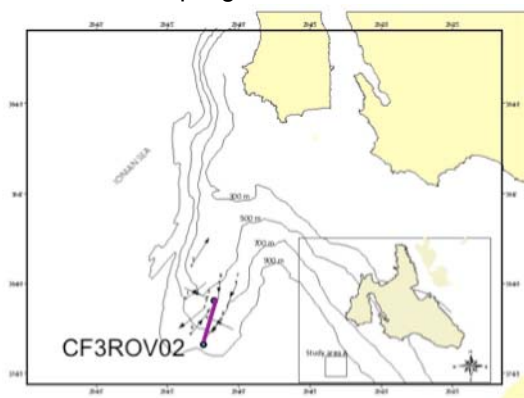
Summary of Scientific Activities

The cruise was split divided between two different sampling areas; the area of low fishing intensity with corals present and an area of very low fishing intensity and no corals. These areas were defined after the June 2009 mapping cruise. Several individual transects were defined in each of the areas. Unfortunately the weather during the sampling period was very poor with wind and large swells from the SW west. This limited the activities from a safety point of view (launch and recovery, plus cable strain during the transects) to just one longer dive and one CTD cast in each of the areas. For each transect, the ROV was deployed close to the start point. It reached the bottom and drove onto the start position. The transect was then run with attention paid to constant speed and altitude. Video recording was accomplished on DVD through the pilots camera (with graphics overlay) and also on a separate self contained HD Video recorder. The Max Rover ROV was involved in 2 dives for a total duration of 621 minutes (10.35 hours). See Table 2 for summary. Transects were generally from 800 to 300 m depth. CTD profiles were undertaken in both areas close to the start of each transect (deepest points) for characterisation of near bottom waters. See Table 3 for summary. The full activities diary is recorded at the end of this report.

Figure 1. CoralFish Sept 2010 Eastern Ionian Sampling Areas



Ionian Sea Sampling Sites



“Coral In” and “Coral Out” sites off SW and W Cephalonia, showing different ROV dives

Table 1. CoralFish September 2010 Participants and Dates on Board

No.	Name	Institution	Position	24-03
1	Smith, C.	HCMR/IMBR	Chief Scientist	X
2	Fotopoulos, T.	HCMR	Deep Tow/ROV	X
3	Kallergis, M	HCMR	ROV	X
4	Manousakis, L.	HCMR	ROV	X
5	Katsaros, K.	HCMR	ROV	X
				10

Table 2. ROV: Max Rover Dive Summary

No.	Date	Site	Position	Depth	Duration
CF3ROV01	25.05.10	SW Cephalonia	38 24.5780 20 27.1820	781-350	225
CF3ROV02	26.05.10	SW Cephalonia	37 57.2161 20 17.4851	749-450	396
				Total	621

Table 3. CTD:

Sample	Date	Area	Position	Depth
CF3CTD01	28.09.10	W Cephalonia	38 24.4231 20 27.2570	720
CF3CTD02	28.09.10	SW Cephalonia	37 57.1571 20 17.4650	700

CoralFish September 2010 Diary

23.09.10 Thursday

Heraklion harbour: Loading ROV system on Philia, set-up and system trial.

24.09.10 Friday

Weather S, F2, clear

10:00 Depart Heraklion for Corinthiakos, (forecast not good for East Peleponese route)

On Board:

C. Smith – Chief Scientist, IMBR

L. Manousakis, IMBR

M. Kallergis, HCMR

12:00 Further system installation, troubleshooting underwater navigation recording.

25.09.10 Saturday

Weather S, F3, clear

07:00 Arrive at Corinth Canal

07:15-07:45 Passing through Corinth Canal

14:10 Pass Rio Bridge

18:50 Arrive in Kylini port

On board: K. Katsaros – HCMR

T. Fotopoulos – HCMR

20:30 Berth Kylini: weather in Zakynthos channel not good

26.09.10 Sunday

06:30 Depart Kylini for SW Cephalonia “Coral-In” Area

09:00 In Zakynthos-Cephalonia channel, bad swell, winds rising with squalls

09:30 Heading for Ag. Nikaloas, Zakynthos

10:25 Berth Ag. Nikaloas

27.09.10 Sunday

07:15 Depart Ag. Nikaloas for SW Cephalonia “Coral-In” Area

07:30 Clearing N. Zakynthos, swell 1.2 m, wind 7 m-2, not good conditions

10:05 On station SW Cephalonia, not possible to dive with swell

10:15 Depart for Lixuri, Cephalonia

11:45 Berth Lixuri, Cephalonia

28.09.10 Monday

07:30 Depart Lixuri for SW Cephalonia “Coral-In” Area

08:00 Still swell SW of Cephalonia, change plan, heading north to “Coral-Out” Area.

10:10 On station Coral IN (W. Cephalonia), running bathymetry lines

11:20 Deploy ROV – CF3ROV1: 38 24.5780 20 27.1820

11:56 On bottom, 781 m, moving to start of transect

12:27 Start Transect, 38 24.4903 20 27.2890 763 m

15:40 End Transect, coming up, 38 22.9870 20 26.9006 350 m

16:05 On deck

16:16 CF3CTD01 38 24.4231 20 27.2570 720 m

16:45 Heading for Lixuri, Cephalonia

19:50 Berth Lixuri, Cephalonia

29.09.10 Tuesday

07:15 Depart Lixuri for SW Cephalonia "Coral-In" Area
09:00 On site shallow end of transect, running bathymetry line.
09:40 Deploy ROV – CF3ROV2: 37 57.2161 20 17.4851
10:15 On bottom, 710 m, moving N on transect
15:37 End Transect, coming up, 37 59.0183 20 17.7993 m
16:16 On deck
16:16 CF3CTD02 37 57.1571 20 17.4650 700 m
16:50 Depart towards Corinthiakos and next scientific mission.

Activities Captured During the CoralFish Sept 2010 HCMR Cruise



RV Philia



Passing through the Corinth Canal



Passing Rio Bridge



Deploying CTD



Deploying Cable Pinger



Deploying ROV



Dynamic Positioner



ROV Crew Off Duty



ROV Crew Approaching Station



Deploying ROV



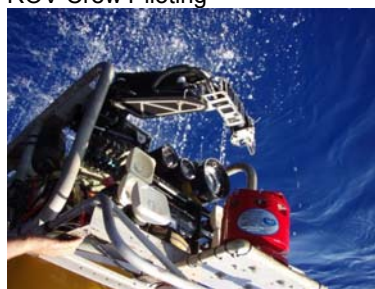
ROV Crew Piloting



Antipatharian Coral



Recovering the ROV



Bringing in Coral Sample



Recovered Coral Sample