

ORV SAGAR KANYA

CRUISE SK – 215

Itinerary

Embarkation ⇒ Marmugao ⇒ 12/12/2004

Disembarkation ⇒ Marmugao ⇒ 31/12/2004

Area of operation : Eastern Arabian Sea

Participants :

1) Shri M. M. Subramaniam	NCAOR	Chief Scientist
2) Dr. S. M. Pedneka	“	
3) Shri Rambir Singh	“	
4) Ms. Meena Pandey	“	
5) Ms. Mamna Vallabh Sahai	“	
6) Shri Yoganand V.	OSTC, Mangalore	
7) Ms. Esther Pushparani	“	
8) Shri P. Boopathy	Norinco (AMC)	
9) Shri Biju V. Nair	“	
10) Shri Anandha Krishnan	“	
11) Shri G. Ramkumar	“	
12) Shri Girish E. Madar	“	
13) Shri Branlio G. Dias	“	

Sr. No. 8 continuing from previous cruise.

Objectives :

1. Palaeoclimatic studies using sediment cores off SW continental margin of India for DOD project “Evolution of late quaternary climate and coastal geomorphology, Eastern Arabian Sea”.
2. Collection of all underway data.
3. Testing of all shipboard equipment
4. Training / acclimatization to field work at high-seas to new research scholars.
5. Preparation of defects list for necessary repairs.

22/12/2004

All participants boarded the vessel after due formalities completed at 1215 hrs at Mormugao anchorage. Discussed with OSTC participants regarding coring stations as proposed by OSTC. Discussed with Master on bridge on the above coring stations and about the possibility of going to Laxmi Ridge after completing above corings for dredging. As calculated by Master / his staff, not possible to go to Laxmi Ridge within the time available.

However we will have 2 days approximately after coring operations which would not be sufficient for Laxmi Ridge travel / operations.

Above had been informed to GD-OSSG on phone. He advised to proceed with planned operations and shall add more operations as per time available in the same region (Eastern Arabian Sea).

Vessel sailed from Mormugao anchorage at about 1630 hrs. First coring station (off Coondapur) ETA tomorrow early hours. Conducted meeting at 1800 hrs with all participants and elaborated the work plan and duties entrusted to the individuals. More emphasis was given to sub-sampling and underway data collection / watch keeping.

The underway data collection equipment were started one-by-one after sailing. All the instruments were on by 2100 hrs. Watch keeping log book was prepared and one-hourly entries commenced. AWS and Magnetometer are not operational

23/12/2004

Reached first operation. There was problem in storage winch. All rectified out the operation successful. Coring point Lat. $13^{\circ}40'198''N$; Long. $73^{\circ}21'564''E$ (off Coondapur) Depth : 496 m , core recovered : 4.4m

In the forenoon, safety guidelines / other instructions given by Master. Evening 1630 hrs Boat and fire drill conducted.

Coring station : 2

In the evening $\Rightarrow 13^{\circ}00.12''N$; $73^{\circ}49.13''E$ off Mangalore core lenth 5.2 m, water Depth 509 m.

24/12/2004

FN – arrangements in cargo-hold commenced

Coring Station : 3 \Rightarrow 1630 hrs (off Kochi)

$10^{\circ}29'85''N$; $75^{\circ}06.47''E$; Depth : 1550 m; Core recovered 4.78 m.

Coring station : 4 ⇒ 1830 hrs (off Kochi)

10°28'27"N ; 75°09'62"E ; Depth : 1300 m Core recovered : 5.4m

Coring station : 5 ⇒ 2200 hrs(off Kochi)

10°30'74"N ; 75°22'49"E ; core recovered 4.2 m; Depth : 460m.

25/12/2004

Coring station no. 6 → 0030 hrs 10°29'78"N ; 75°31'96"E ; Depth 80m core recovered : 0.75m

After completing above coring stations vessel sailed toward deeper water (= 2200 m) for testing all the three pingers. Pinger trial started at 0700 hrs.

IX sea sl no. 408 :

Performed satisfactorily synchronisation, further lowering upto 2100m were traced on ES properly. Bottom echo was received faintly. (1 sec ping rate, 2 min ping length), Depth erratic, while heaving up.

IXsea sl no. 409 :

Synchronisation not successful inspite of repeated trials. Cl sec. Ping rate, 2m ping length)

Benthos Model 2216 sl no. 1307:

Synchronisation not successful.

Above operations completed by 1600 hrs.

Vessel sailed towards shallow station (station no. -7) (off Quilon)

Today's X'mas celebration onboard was excellent.

As per calculations, we will complete the all planned operations (of OSTC, Mangalore) by 1700 hrs 26/12/2004. Sent mail to C. Ganesh, proposing bathymetric survey off Kochi (as per proposed of Dr. AC Narayana, Kochi who could not participate in the cruise in the last moment) for taking approval from GD-OSSG. Ganesh replied in the evening that he is not able to get Dr. M. Sudhakar on phone & shall inform tomorrow.

26/12/2004

Safety meeting held onboard at 1000 hrs

Vessel sailing towards coring station no. 7 (off Quilon , ETA 1600 hrs).

Station no 7 08°28'14"N ; 76°35'88"E ; Depth : 98m. No sample recovered due to sandy bottom (attempted twice). As all planned coring operations (of OSTC, Mangalore) are

completed, planned to proceed with bathymetric survey for Dr. AC Narayana as proposed by my email of 25th Dec. To Dr. M Sudhakar, GD-OSSD / Mr.C.Ganesh. First line started at 1120 hrs PM (2320 hrs).

27/12/2004

1500 hrs – Line 1 completed (S-N) Message sent to NCAOR for informing our homes, our safety onboard (Earthquake/ Tsunami in Bay of Bengal) emails also sent to OSTC & Norinco.

28/12/2004

0915 hrs line 2 completed (N-5)

29/12/2004

completed line – 3.
Line - 4 (short) completed at 1045 hrs
Line - 5 (short) completed at 1830 hrs.

30/12/2004

Finalised the equipment to be condemned. GD-OSSG informed over phone to manifest the condemned items.

Sailing towards Goa

31/12/2004

Reached Marmugao early hour. Anchored at 0830 hrs when anchorage, Marmugao.