

CRUISE REPORT

KY12-01 Leg2

“KAIYO” SURVEY

off Kii-Suido



January 2012

Earthquake and Tsunami Research Project for Disaster Prevention
JAMSTEC

TABLE OF CONTENTS

1. INTRODUCTION
2. SCHEDULE
3. SURVEY RESULTS
4. CONCLUDING REMARKS

1. INTRODUCTION

The present KY12-01 Leg2 cruise aims to acquire high resolution multi-beam bathymetric data in the DONET2 area in terms of “Seabeam2100” system. The following map shows the survey areas and in which the survey lines by blue boxes and lines for the bathymetric survey in the present cruise. Two boxes for near shore and three boxes off shore are prepared in the present survey. No box area such as 2C, 2D, and 2E areas are completed in the bathymetry survey during the YK11-E02 cruise.

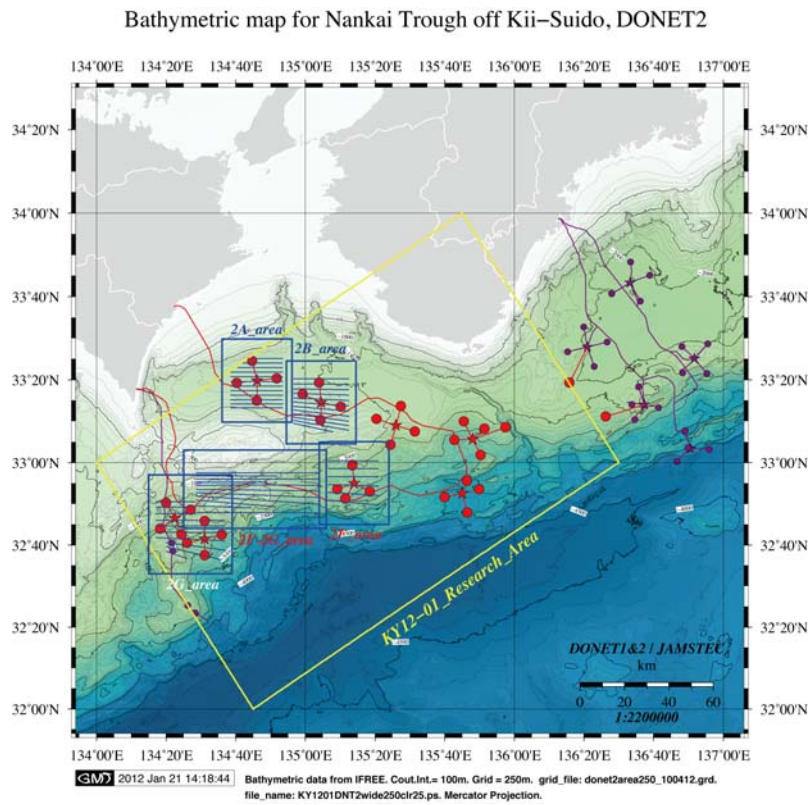


Fig. 1. Survey area for bathymetry for DONET2 project.

2. SCHEDULE

Actual schedule of the KY12-01 Leg2 cruise was summarized in Table 1. Our cruise started from Shingu, Wakayama and finished at JAMSTEC via off Kii-suido in order to carry out multi-beam bathymetric survey. Ship track of the KY12-01 Leg2 cruise is shown in Fig. 2. On the board, Hiroyuki Matsumoto, as a chief scientist and Tohru Kodera joined the present cruise.

Table 1 Schedule of KY12-01 Leg2 cruise

Date	Survey plan	Actual survey	Remarks
19 January	Departure from Shingu	Departure from Shingu to Tanabe	
20 January	2G area	Evading navigation	Tanabe, Wakayama
21 January	2F area	Evading navigation	Tanabe, Wakayama
22 January	2F-2G section	2A area	
23 January	2F-2G section	Evading navigation	Off Muroto, Kochi
24 January	2B area	2A area followed by 2B area	
25 January	2A area	2B area followed by evading navigation	
26 January	Alternative date	2G area	
27 January	Bring out	2F-2G section partly	
28 January	Arrival at JAMSTEC	Arrival at JAMSTEC	

KY12-01 R/V KAIYO Ship Track. 2012/01/18 – 2012/01/28

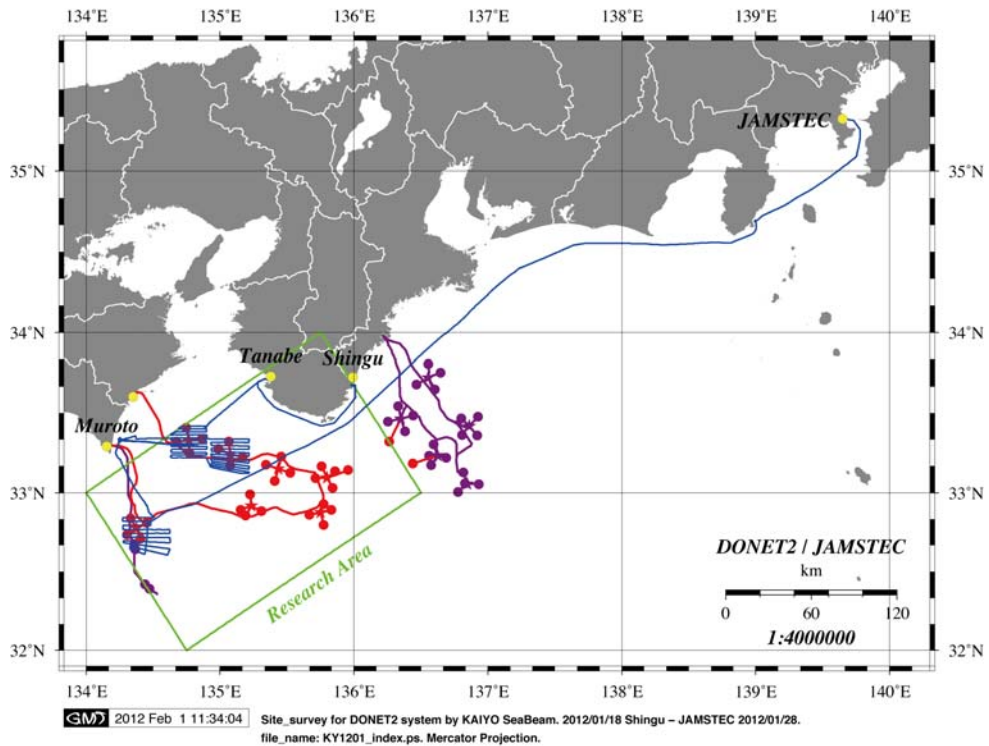
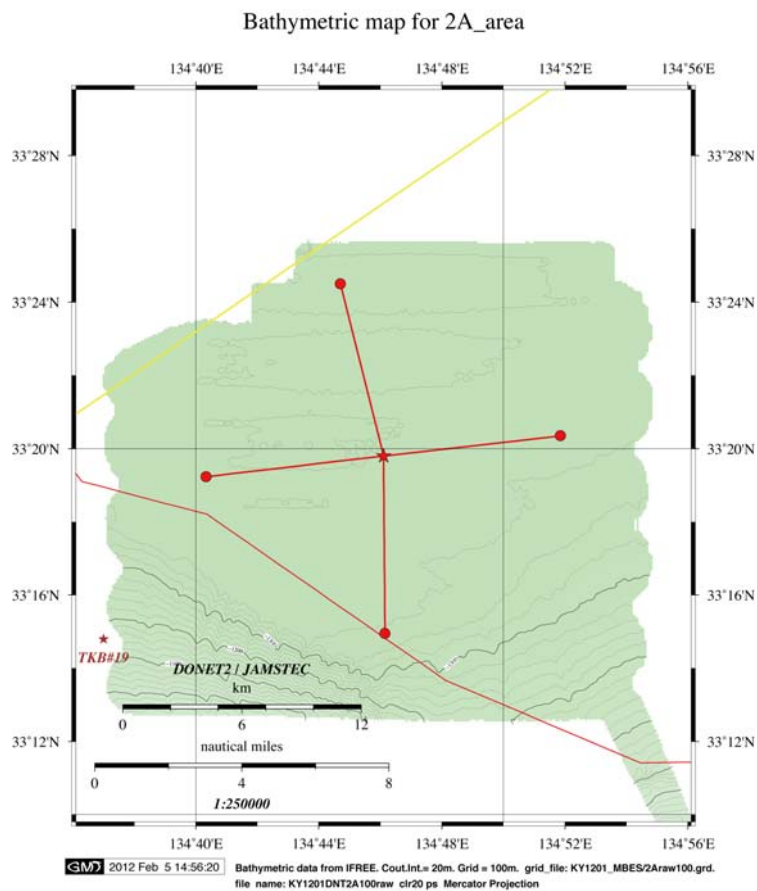


Fig.2. Ship track of the KY12-01 Leg2 cruise

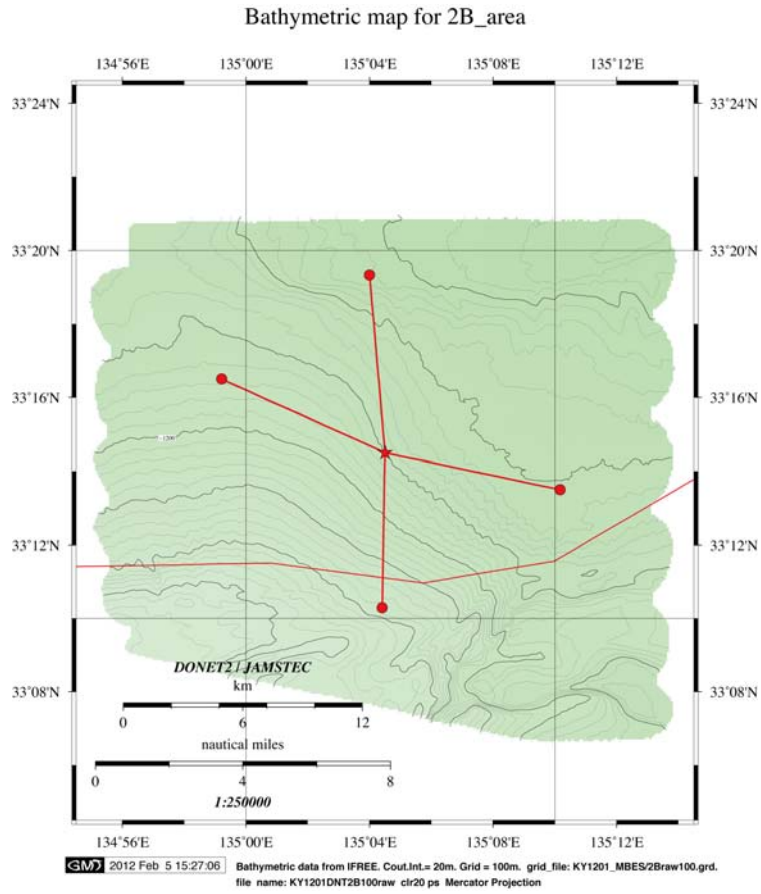
3. SURVEY RESULTS

The present survey was carried out at the end of January, hence the sea state was rather bad. In the original plan, we expect that we could complete the bathymetric survey. However, actually we could do the bathymetry survey in 2A, 2B, and 2G areas by using only four days of all ten days. The following figures are bathymetry map obtained in the present survey.

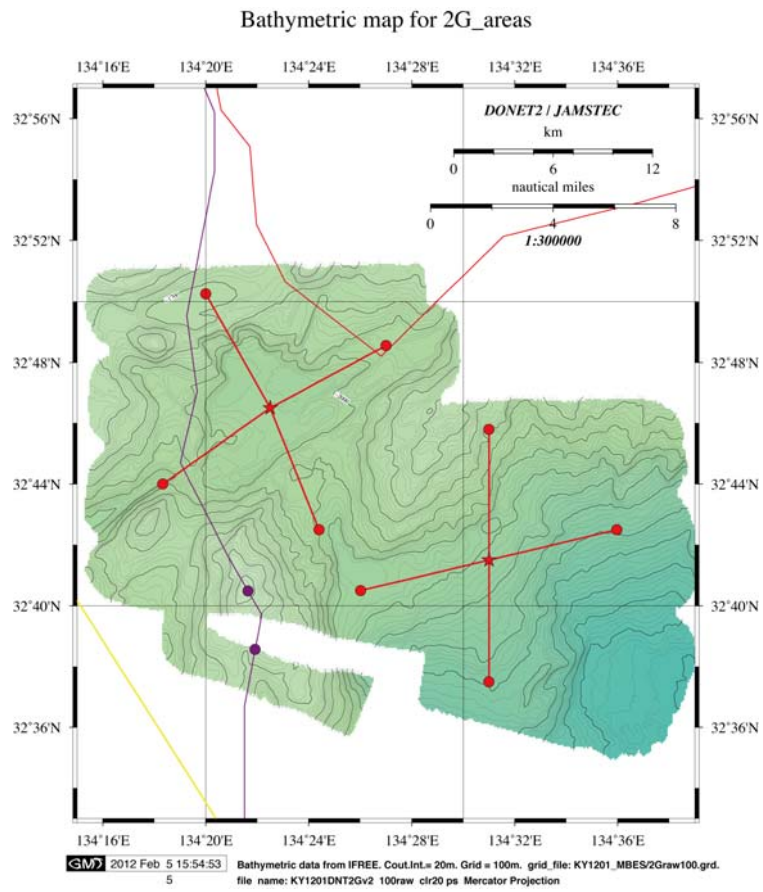
(1) 2A area



(2) 2B area



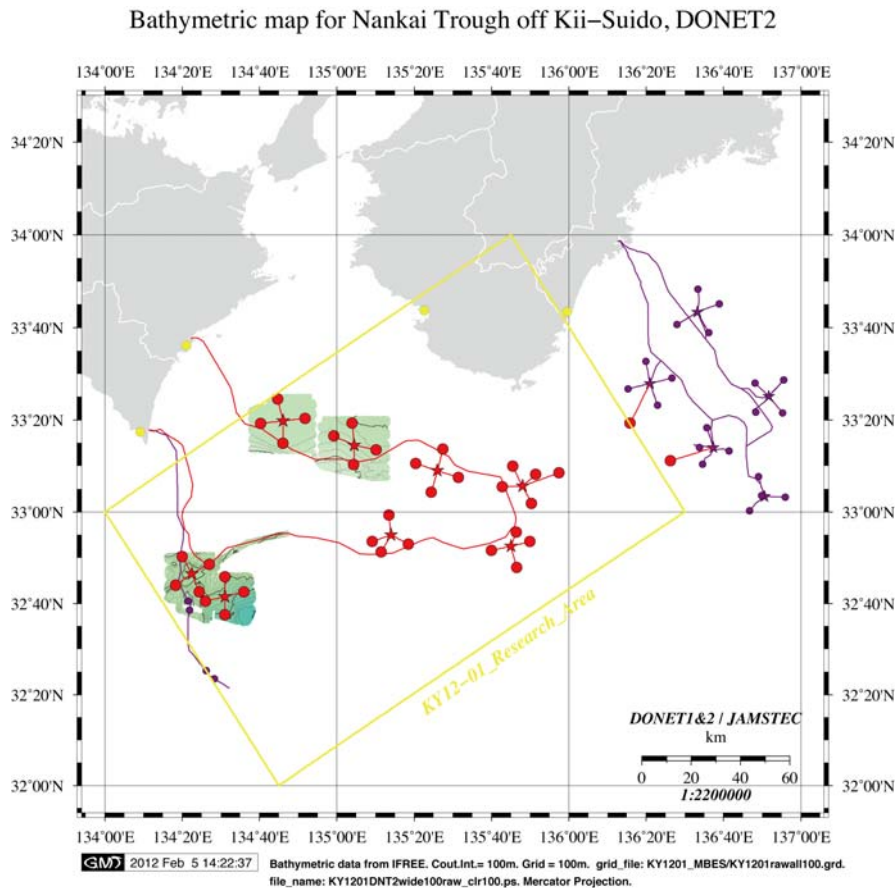
(3) 2G area



4. CONCLUDING REMARKS

We conducted KY12-01 Leg2 cruise by using R/V Kaiyo for ten days as the bathymetry survey in order for route plan of the DONET2. High resolution multi-beam bathymetry map could be made in the area of the 2A, 2B, and 2G. We have already made the bathymetry map in the area 2C, 2D, and 2E in the YK11-E07 cruise, so only 2F is still remaining for the time being as for the observatories' planning. Offshore cable route between 2F and 2G should be evaluated in the future but no later than September 2012.

For the future plan, we will make cross section profiles along the cable route, and evaluate the applicability as a cable route.



Acknowledgements

At the end of the cruise, we would like to express our sincere thanks to all crew of “Kaiyo” for their kind cooperation of our cruise.