

NOTIFICATION OF PROPOSED RESEARCH CRUISE

Great Britain

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GENERAL

Part A

01. Name of research ship: **MARIA S. MERIAN** Cruise No. **MSM06-3**
02. Dates of cruise from **21.11.2007** to **20.12.2007**
03. Operating Authority **Institut für Meereskunde / University of Hamburg**
Bundesstr. 53, D-20146 Hamburg, Germany
Tel.: +49-40-42838-3974 - Fax: +49-40-42838-46 44
Telex: 212586 ifmhh d
04. Owner (if different from para 3) **Federal State Mecklenburg-Vorpommern, Germany**
05. Particulars of ship: Name **MARIA S. MERIAN**
 Nationality **German**
 Overall length **94,8 metres**
 Maximum draught **6,5 metres**
 Nett tonnage **1750 NRZ**
 Propulsion **Diesel Electric**
 Call sign **D B B T**
06. Crew Name of master **Friedhelm von Staa**
 No. of crew **max. 23**
07. Scientific personnel: Name and address of scientist in charge **Prof. Dr. Colin Devey**
IFM-GEOMAR
Wischhofstr. 1-3
24148 Kiel, Germany
 Tel./Fax/Telex No. **+49-431-600-2257 / -2924**
 No. of scientists **max. 23**
08. Geographical areas in which ship will operate (with reference in latitude and longitude)
4° S / 15° W -- 11° S / 10° W
09. Brief description of purpose of cruise
Aim of the work is to investigate the tectonics and structure of the Ascension transform and to constrain the volcanic, hydrothermal and tectonic processes operating at the Mid-Atlantic Ridge South of the Ascension Fracture Zone.
10. Dates and names of intended ports of call
18.11.-21.11.2007: Fortaleza, Brazil
20.12.-28.12.2007: Dakar, Senegal
11. Any special logistic requirements at ports of call: **-/-**

DETAIL

Part B

01. Name of research ship **MARIA S. MERIAN** Cruise No. **MSM06-3**
 02. Dates of cruise from **21.11.2007** to **20.12.2007**
 03. Purpose of research and general operational methods

Aim of the work is to investigate the tectonics and structure of the Ascension transform and to constrain the volcanic, hydrothermal and tectonic processes operating at the Mid-Atlantic Ridge South of the Ascension Fracture Zone. Mapping of bathymetry followed by Autonomous Underwater Vehicle exploration, water and rock sampling and ROV visual observations of the seafloor will be carried out.

04. Attach chart showing (on an appropriate scale) the geographical area of the intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment.

see attachment for working area. Exact location of stations, tracklines will be determined during the cruise based on the information being gathered at the time

05. Types of samples required, e.g. Geological / Water / Plankton / Fish / Radio-activity / Isotope

Rock, hydrothermal precipitates, sediments, fauna, water

and methods by which samples will be obtained (including dredging / coring / drilling).

pumping, volcanic coring, dredging, remotely operated vehicle (ROV) sampling, CTD rosette, sediment coring

06. Details of moored equipment:

D a t e s		Description	Latitude	Longitude
Laying	Recovery			
-/-				

-/-

07. Explosives: ***no explosives***
- (a) Type and Trade name
 - (b) Chemical content
 - (c) Dept of Trade class and stowage
 - (d) Size
 - (e) Depth of detonation
 - (f) Frequency of detonation
 - (g) Position in latitude and longitude
 - (h) Dates of detonation

08. Detail and reference of
- (a) Any relevant previous / future cruises

Magnetic, gravity and bathymetry data are available from cruises described by Brozena and White (1990) and Brugier et al. (in press). Geological work in the area previously carried out during Meteor cruises M41/2 (1998), M62/4&5 (2004), M64/1 (2005), M68/1 (2006)

- (b) Any previous published research data relating to the proposed cruise.
(Attach separate sheet if necessary.)

Brozena, J.M., and White, R.S., 1990, Ridge jumps and propagations in the South Atlantic ocean. *Nature*, 348, 149-152

Brozena, J.M., 1986, Temporal and spatial variability of seafloor spreading processes in the northern South Atlantic. *J. Geophys. Res.*, 91, 497-510

Reston, T.J., and 8 others, 2002, A rifted inside corner massiv on the Mid-Atlantic Ridge at 5° S. *Earth and Planet. Sci. Letts.*, 200, 255-269

09. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made.
- Dr. Tim Minshull, Southampton Oceanographic Center
Dr. Neil Mitchell, Cardiff University**

10. State:

- (a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable.
Not relevant, no port call in U.K.
- (b) Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation / disembarkation.
Yes, after discussion
- (c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means.
**- Cruise Report three months after finishing the research cruise
- Scientific publication within the following three years**

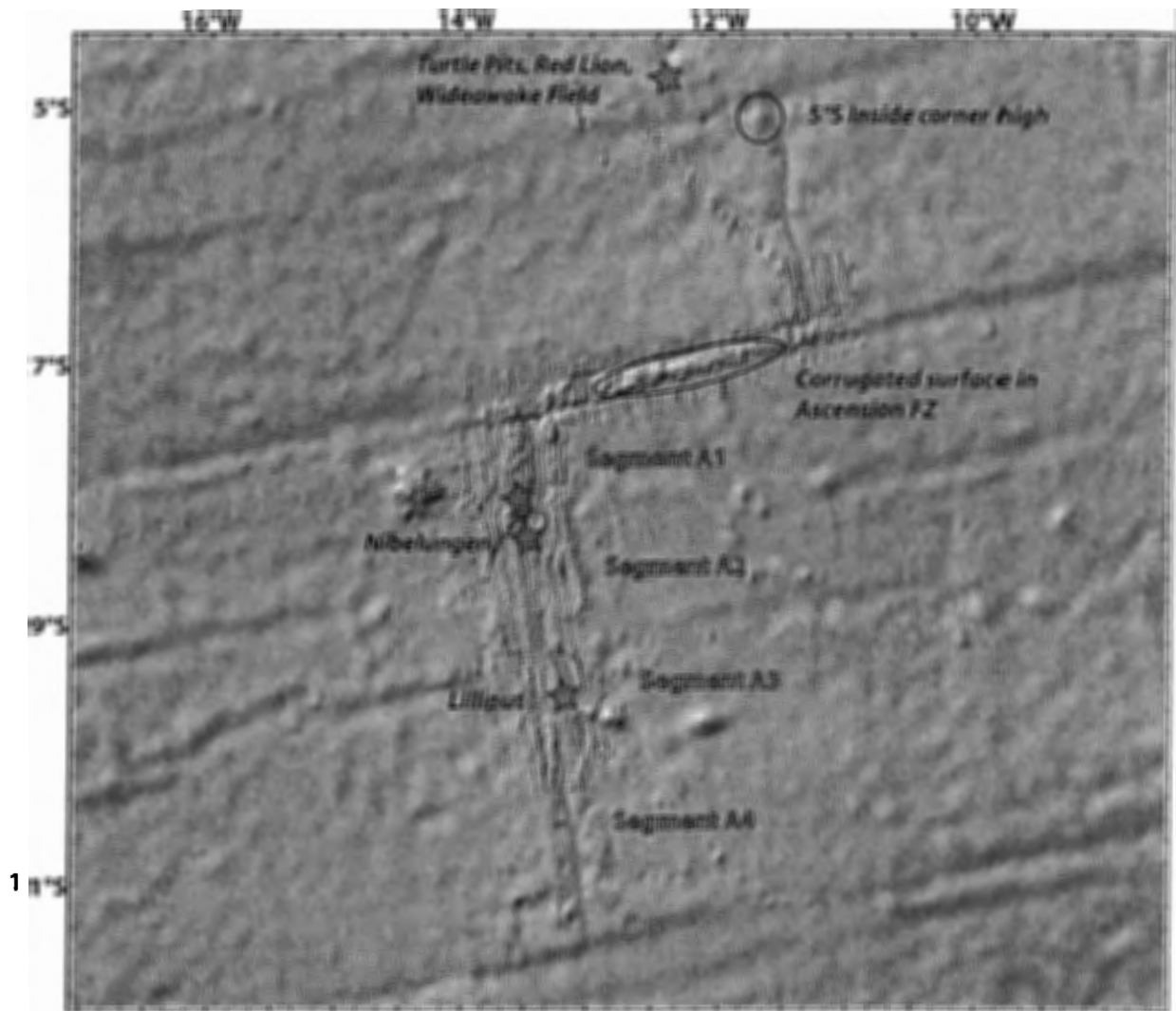
COASTAL STATE: **Great Britain**SCIENTIFIC EQUIPMENT

11. Complete the following table - SEPARATE COPY FOR EACH COASTAL STATE

(indicate 'YES' or 'NO')

List of all major Marine Scientific Equipment it is proposed to use and indicate waters in which it will be deployed	Fisheries Research within Fishing Limits	Research concerning Continental Shelf out to Coastal State's Margin	Within 3 NM	Between 3 - 12 NM	Between 12 - 50 NM	Between 50 - 200 NM
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a) vessel mounted systems: hydroacoustic mapping / measuring (incl. ADCP, Parasound and Hydrosweep)	No	Yes	No	No	Yes	Yes
permanent surface water sampling / pumping (incl. Thermosalinograph)	No	No	No	No	Yes	Yes
b) Ocean-Bottom-Seismometer	No	Yes	No	No	Yes	Yes
Autonomous Underwater Vehicle	No	No	No	No	Yes	Yes
Dredge	No	Yes	No	No	Yes	Yes
Remotely operated vehicle	No	No	No	No	Yes	Yes
CTD rosette	No	No	No	No	Yes	Yes
Gravity corer	No	Yes	No	No	Yes	Yes



Working area for cruise MSM 06/3: Research will take place along the Mid-Atlantic Ridge (green line) concentrating on known hydrothermal systems (named stars) and areas of particular tectonic interest (blue circles).