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CRUISE SUMMARY REPORT

FOR COLLATIMG CENTRE USE Centre: DOD Ref. No.: Is data exchange No restricted Yes In part

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: FS Poseidon Call Sign: DBKV

Type of ship: Research Vessel

CRUISE NO. / NAME P380

enter the unique number, name or acronym assigned to the cruise (or cruise leg, if appropriate).

CRUISE PERIOD

start (set sail)

20/03/2009 day/ month/ year

06/04/2009 day/ month/ year

(return to port)

PORT OF DEPARTURE (enter name and country) Fort de France, Martinique (France)

PORT OF RETURN (enter name and country) Ponta Delgada, Acores (Portugal)

RESPONSIBLE LABORATORY

enter name and address of the laboratory responsible for coodinating the scientific planning of

Name: Leibniz Institute of Marine Sciences, IFM-GEOMAR

Address: Düsternbrooker Weg 20, D-24105 Kiel

Country: Germany

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

Karbe, Fritz Richard, Leibniz Institute of Marine Sciences, IFM-GEOMAR

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the report data were collected.

After a breakdown of one engine during the previous leg, P380 was delayed by serveral days to sail on 20th March. Consequently, the planned hydrographic survey in the Logachev field area needed to be cancelled in order to not delay the following cruises to much. The research programme of P380 thus consisted of the recovery of 12 Ocean Bottom Seismometers (OBS), 12 Magneto Telluric Units (MT), the deployment and recovery of two Broadband Seafloor Compliance Stations (BSC) with 12 h and 24 h measurement period, as well as the recovery of a 120 m long mooring deployed in January 2009 in order to study mixing processes and near bottom currents in along rift valleys of the midatlantic ridge (MAR). All these instruments were deployed in the vicinity of the Logachev Hydrothermal Vent Field (LHF) and are associated with the DFG project SPP 1144 "From the Mantle to the Ocean: Energy-, Material- and Lifecycles at Spreading Axes". Outside the 200 nm zone, during the transit from Fort de France, Martinique, to the working area and the following transit to Ponta Delgada, Acores, underway sampling of surface water intake took place in order to carry out onshore measurements of contaminants, i.e. concentrations of Nonylphenols and their Ethoxylates. During the whole cruise in international waters underway thermosalingraph (TSG) measurements of sea surface temperature (SST) and sea surface salinity (SSS), underway routine meteorological measurements with the on board DWD weather station, as well as current measurements with a vessel mounted RDI OS 75 kHz ADCP took place. On transit, 5 ARGO floats have been deployed.

PROJECT (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition), then enter the name of the project, and of organisation responsible for co-ordinating the project.

Project name: SPP1144, HYDROPLUMB

Coordinating body: Leibniz Institute of Marine Sciences, IFM-GEOMAR

PRINCIPAL INVESTIGATORS: Enter the name and address of the Principal Investigators responsible for the data collected on the cruise and who may be contacted for further information about the data. (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

- A. Karbe, Fritz R., Leibniz Institute of Marine Sciences, IFM-GEOMAR
- B. Jegen, Marion, Leibniz Institute of Marine Sciences, IFM-GEOMAR
- C. Grevemeyer, Ingo, Leibniz Institute of Marine Sciences, IFM-GEOMAR
- D. Dahm, Torsten, Institute of Geophysics, IfG, Hamburg University, Bundestrasse 55, D-20146
 Hamburg, Germany
- E. Schmale, Oliver, Baltic Sea Research Institute Warnemuende, IOW, Seestrasse 15, D-18119

 Rostock, Germany
- F. Klein, Birgit, BSH

G.

MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

This section should be used for reporting moorings, bottom mounted gear and drifting systems (both surface and deep) deployed and/or recovered during the cruise. Separate entries should be made for each location (only deployment positions need be given for drifting systems). This section may also be used to report data collected at fixed locations which are returned to routinely in order to construct 'long time series'.

PI	APPROXIMATE POSITION						DATA	
PI	LATITUDE LONGITUDE				ONGITUE)F	TYPE	Identify, as appropriate, the nature of the instrumentation the parameters (to be) measured, the number of instruments and their depths, whether deployed and/or
See							enter	recovered, dates of deployments and/or recovery, and any identifiers given to the site.
top of page.	deg	min	N/S	deg	min	E/W	code(s) from list on	
							cover page.	
С	14	46.24	N	45	03.18	W	G71D90	1 OBS, seafloor seismics + T-sensor + Hydrophone, 4181m, recovery
С	14	46.28	N	45	00.61	W	G71D90	1 Ocean Bottom Seismometer (OBS), 3566m, recovery
С	14	46.46	N	44	58.49	W	G71D90	1 OBS, 3210m, recovery
С	14	48.93	N	44	55.93	w	G71D90	· · ·
								1 OBS, 2915m, recovery
С	14	48.95	N	45	00.14	W	G71D90	1 OBS, 3682m, recovery
С	14	48.94	N	45	04.34	W	G71D90	1 OBS, 3306m, recovery
С	14	43.62	N	45	03.16	W	G71	1 OBS, seafloor seismics + Hydrophone, 4177m, recovery
С	14	43.64	N	45	01.11	w	G71	1 OBS, 4183m, recovery
С	14	43.62	N	44	58.99	w	G71D90	1 OBS, seafloor seismics + T-sensor + Hydrophone, 3322m, recovery
С	14	40.94	N	44	57.37	W	G71D90	1 OBS, 3228m, recovery
С	14	40.96	N	45	01.59	W	G71D90	1 OBS, 4019m, recovery
С	14	40.97	N	45	05.75	w	G71D90	1 OBS, 3680m, recovery, all OBS recovered on 26th March
В	14	48.65	N	45	19.19	w	G71G28	1 Magneto Telluric Unit, Seafloor magnetic + electric field, 3500m, recovery
В	14	47.75	N	45	14.58	W	G71G28	1 Magneto Telluric (MT), 1 instrument, 3144m, recovery
В	14	46.91	N	45	10.06	w	G71G28	1 Magneto Telluric, 3269m, recovery
В	14	46.16	N	45	06.02	W	G71G28	1 Magneto Telluric, 3200m, recovery
В	14	45.62	N	45	02.99	W	G71G28	1 Magneto Telluric, 4070m, recovery
В	14	45.71	N	45	00.49	W	G71G28	1 Magneto Telluric, 3269m, recovery
В	14	44.57	N	44	57.47	W	G71G28	1 Magneto Telluric, 2816m, recovery
В	14	44.15	N	44	54.98	w	G71G28	1 Magneto Telluric, 2638m, recovery
В	14	43.70	N	44	52.49	W	G71G28	1 Magneto Telluric, 1866m, recovery
В	14	43.12	N	44	49.47	w	G71G28	1 Magneto Telluric, 2463m, recovery
В	14	42.52	N	44	46.23	W	G71G28	1 Magneto Telluric, 2954m, recovery

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В	14	41.76	N	44	42.06	W	G71G28	Magneto Telluric, 1 instrument, 2666m, recovery, MT recovered on 27 th and 28 th March.
D	14	46.66	N	45	06.02	W	G71D90	BSC, seafloor seismics + differential press. gauge, 1 instrument3200m, deployment/recovery
D	14	45.67	N	45	00.49	W	G71D90	Broadband Seafloor Compliance (BSC), 1 instrument, 3600m, deployment/recovery 26/27 th Mar
Α	14	49.98	N	45	00.96	w	D01D90	120m long mooring, 5 RCM current meters, upper 2 with P-sensor, 3974m, 3950m,
								3928m, 3904m, 3882m, 5 MCP (T,S), 3970m, 3949m, 3927m, 3902m, 3880m, recovery, 28 th March
E			5 Argo	Floats			D06	Please continue on separate sheet if necessary

SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN

Except for the data already described on page 2 under 'Moorings, Bottom Mounted Gear and Drifting Systems', this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements or samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurements/sampling techniques that imply distinctly different accuracy's or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line - it's description may extend over several lines if necessary.

NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of 'stations'; miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under 'NO' and the counting unit should be identified in plain text under 'UNITS'.

				DESCRIPTION
PI	NO	UNITS	DATA TYPE	Identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include any supplementary information that may be appropriate, e. g. vertical or horizontal profiles, depth
see page 2	see above	see above	Enter code(s) from list on cover page	horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken.
Α	1	15 days	H71	Underway thermosalinograph measurements (TSG)
Α	1	15 days	D71	Underway vessel mounted ADCP measurements
Α	1	15 days	M06	Underway meteorological measurements (on board DWD- Weather-Station), no irradiance
E	10	12 days	P05	Underway sampling of surface water intake during Transits to/from Logachev Field (outside
				200 nm zones, onshore determination of concentrations of Nonylphenol and their Ethoxylates
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	Please continue on separate sheet if necessary
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TRACK CHART: You are strongly encouraged to submit, with the completed report, an annotated track chart illustrating the route followed and the points where measurements were taken.

Insert a tick(♥) in this box if a track chart is supplied



GENERAL OCEAN AREA(S): Enter the names of the oceans and/or seas in which data were collected during the cruise – please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas').

Western Tropical Atlantic, Logachev Hydrothermal Vent Field, Mid Atlantic Ridge

SPECIFIC AREAS: If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.

Please insert here the number of each square in which data were collected from the below given chart

43, 42, 41, 77, 76, 112, see maps attached

