

CRUISE SUMMARY REPORT

FOR COLLATING CENTRE USE

Centre: **DOD** Ref. No.:Is data exchange Yes In part No
restricted

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 **20/03/2009** to **06/04/2009** end
(set sail) 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 coordinating the scientific planning of the cruise

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 several 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 thermosalinograph (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, Bundestrassse 55, D-20146

Hamburg, Germany

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

Please continue on separate sheet if necessary

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

GEOGRAPHIC COVERAGE - INSERT 'X' IN EACH SQUARE IN WHICH DATA WERE COLLECTED

