

CRUISE SUMMARY REPORT

FOR COLLABORATING CENTRE USE

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

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: **POSEIDON**Call Sign: **DBKV**Type of ship: **Research Vessel**CRUISE NO. / NAME **POS532**

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

CRUISE PERIOD start **4/02/19** to **24/2/2019** end
(set sail) day/ month/ year day/ month/ year (return to port)

PORT OF DEPARTURE (enter name and country) **Mindelo/Cape Verde**PORT OF RETURN (enter name and country) **Mindelo/Cape Verde**

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise

Name: **GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel**Address: **Wischhofstraße 1-3, 24148 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.

Dr. Henk-Jan Hoving **GEOMAR Helmholtz Centre for Ocean Research Kiel**

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.

The aim of this cruise was to investigate the role of gelatinous zooplankton in the biological carbon pump, i.e. transporting carbon from the surface into the deep sea. In addition, the cruise aimed to better understand the biodiversity, abundance and distribution of pelagic fauna including nekton and macrozooplankton in the Cape Verde region, and to provide one of the first bottom surveys in the coastal deep seas of Cape Verde. The latter resulting in new faunal records and biological observations.

We used the manned submersible JAGO (17 dives), the towed camera system PELAGIOS (13 deployments), and two kinds of multinet (midi and maxi) (14 and 7 hauls respectively). Biological specimens were preserved as voucher specimens and samples were obtained for DNA barcoding. CTD sampling was performed to collect hydrographic data. We also collected water samples for environmental DNA and to analyze these samples in the lab for traces of deep-sea organisms such cephalopods. To quantify pelagic biomass and track migration via bioacoustics we used an EK80. Elaborate physical sampling around the islands was performed using CTD and ADCP. In the leeward of the islands Santo Antão and Fogo we performed mesopelagic stations (1000 m) and bathypelagic stations (3000 m) using the mentioned instruments. An offshore mesoscale eddy was sampled with all our oceanographic instruments. Additionally we performed a full oceanographic and biological sampling at the Cape Verde Ocean Observatory, north of Sao Vicente.

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: **DeepC-Jelly**

Coordinating body:

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').

North-east tropical Atlantic

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

Cape Verde (Bay of Tarrafal, Fogo, CVOO time series station)

Squares: 39

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

