

**REPORT ON THE CANCAP-PROJECT FOR MARINE BIOLOGICAL
RESEARCH IN THE CANARIAN - CAPE VERDEAN REGION OF THE
NORTH ATLANTIC OCEAN (1976-1986). PART I. LIST OF STATIONS**

CANCAP-project. Contributions, no. 74

by

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A list of stations is given of the CANCAP-project for marine zoological, botanical and paleontological research in the southeastern part of the North Atlantic Ocean. This project included oceanographic expeditions as well as fieldwork on the islands and the coast of West-Africa in the period from 1976 to 1986.

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INTRODUCTION

The CANCAP-project is a long-term programme of biogeographically oriented marine research in the south-eastern part of the North Atlantic Ocean. It is part of the Netherlands national programme for ocean research. The pre-expedition phase of the programme started in 1974. Expeditions with oceanographic vessels and fieldwork on land took place in the period of 1975 to 1986. The post-expedition phase will last until 1989.

Now that the fieldwork is finished, reports are being compiled. Part I of the general report is merely a list of the stations. This is somewhat unsatisfactory, but the list is urgently needed as a reference guide for the numerous Dutch and foreign scientists involved in studies of the samples. Further details on the expeditions and field trips and the equipment and methods used, will be given in Part II. An introduction to the CANCAP-project was published earlier by Den Hartog (1984).

INSTITUTES INVOLVED

The CANCAP-project was initiated by the Rijksmuseum van Natuurlijke Historie (National Museum of Natural History) in Leiden. Practically from the start on the Rijksherbarium (National Herbarium) in Leiden participated, taking care of the botanical aspects. Paleontological research was undertaken by the Geological Institute of Groningen University, recently succeeded by the Institute of Earth Sciences, Free University, Amsterdam.

Additional zoological research was done by the Zoological Institute of Utrecht University and the Institute of Taxonomic Zoology of the University of Amsterdam. Occasionally other institutes were involved, notably the Department of Fisheries and Fishculture, Agriculture University, Wageningen, and the Zoological Institute of Copenhagen University. Of course local universities and institutes on Madeira, the Azores, the Canary Islands, the Cape Verde Islands and in Mauritania participated in expeditions and coastal research as well.

Most zoological samples were sorted in the marine sorting centre of the Rijksmuseum van Natuurlijke Historie and most collections are kept there, a small part being kept in the Zoological Museum of the Institute of Taxonomic Zoology in Amsterdam. The paleontological collections are stored in the Rijksmuseum van Geologie en Mineralogie (National Museum of Geology and Mineralogy) in Leiden and the botanical collections in the Rijksherbarium, Leiden.

THE EXPEDITIONS

In the period from 1976 to 1986 seven expeditions were made with oceanographic vessels of the Netherlands Hydrographic Service. The first was made with an adapted ocean mine-sweeper, HNIMS "Onversaagd", the others with HNIMS "Tydeman". Sampling with these vessels was done from coastal waters to the deep sea, down to a maximum of about 4000 m. Work in shallow water, usually close to the coast, was done by scuba divers from small boats such as rubber boats and sloops. Shore parties worked in and near the littoral zone and made ornithological or geological and paleontological studies.

In addition to the ship-board expeditions several field trips on land were made, for which institutes on the islands could be used as a base occasionally. Work on land or from the shore included paleontological and ornithological research, but was mostly dedicated to studies of the littoral zone and the shallow sub-littoral (snorkeling and scuba diving). The stations of such trips made prior to or after the ship-board expeditions are mentioned in the station lists of these expeditions. Separate lists are given for trips to the Azores and Senegal. Other fieldwork will be mentioned in Part II.

The CANCAP-I expedition visited the Madeira archipelago (March 8 to 20, 1976) and the Moroccan shelf (March 23 to 28). Prior to the expedition proper several locations at the Madeira coast were studied (February 20 to March 7).

The CANCAP-II expedition was restricted to waters around the Canary Islands: near Fuerteventura in the east (August 23 to 31, 1977) and near Hierro in the west (September 2 to 10). Before and after the expedition several scientists worked along the coast of Gran Canaria.

The CANCAP-III expedition worked near Porto Santo (October 14 to 17, 1978), Madeira (October 18 to 20) and the Selvagens islands (October 21 to 24), and visited the Mauritanian upwelling region (October 26 to November 2). Coastal research was done prior the expedition on Madeira and afterwards on Tenerife (Canary Islands).

In 1979 a small party made a trip to most of the islands of the Azores (September 12 to November 1). Details of this trip were given by Den Hartog & Lavaleye (1981).

The CANCAP-IV again was mainly dedicated to studies of the Canary Islands region and visited areas near Lanzarote (May 14 to 22, 1980), the Selvagens archipelago (May 26 and 27; June 6 and 7), Palma (May 28 to June 5) and Porto Santo (June 9 and 10). Fieldwork was done on Gran Canaria prior to the expedition.

The CANCAP-V expedition went to the Azores (May 23 to June 14, 1981)

and worked in the vicinity of all three groups of islands.

The CANCAP-VI expedition was directed to waters around the Cape Verde Islands (June 4 to 22, 1982). A summary report on this expedition was published already (Den Hartog, 1984). Coastal research was done before the expedition on Tenerife (Canary Islands) and afterwards in Senegal (see separate list of stations, including a second trip to Senegal in November and December 1983).

The CANCAP-VII expedition was again dedicated to research around the Cape Verde Islands (August 18 to September 8, 1986). Prior to this expedition a small party worked on the island of São Tiago.

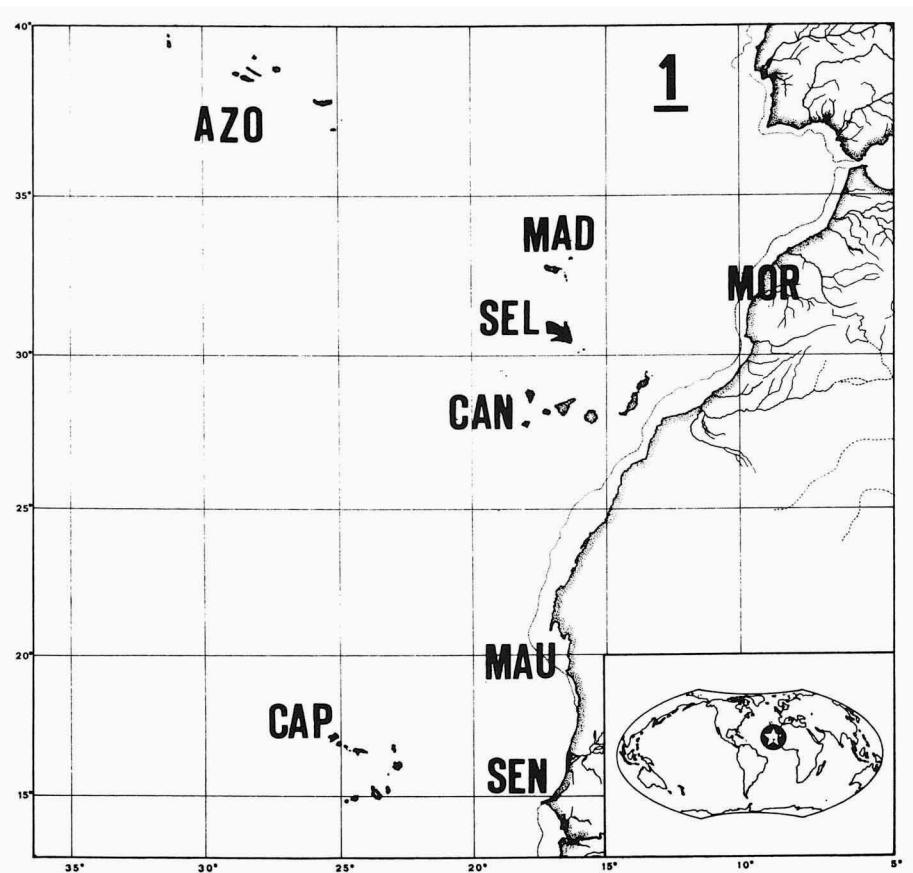


Fig. 1. The archipelagos and countries where research took place; AZO: Azores, CAN: Canary Islands, CAP: Cape Verde Islands, MAD: Madeira archipelago, MAU: Mauritania, MOR: Morocco, SEL: Selvagens archipelago, SEN: Senegal.

THE STATIONS

Apart from a number of collecting localities on land each station was given a number. The station numbers of the ordinary expeditions are preceded by 1. to 7., indicating the number of the expedition. Those of the trips to the Azores and Senegal are preceded by AZO. or SEN. The ships stations have a three-digit number. From the CANCAP-II expedition onwards separate station lists were made for scuba diving stations (D-stations), trap stations (V-stations) and coastal stations (K-stations). These stations were given a two-digit number preceded by D, V or K. During the last expedition the term trap stations was changed into fishing stations, because the use or other types of fishing was added to the V-stations. On those rare occasions when the same number was

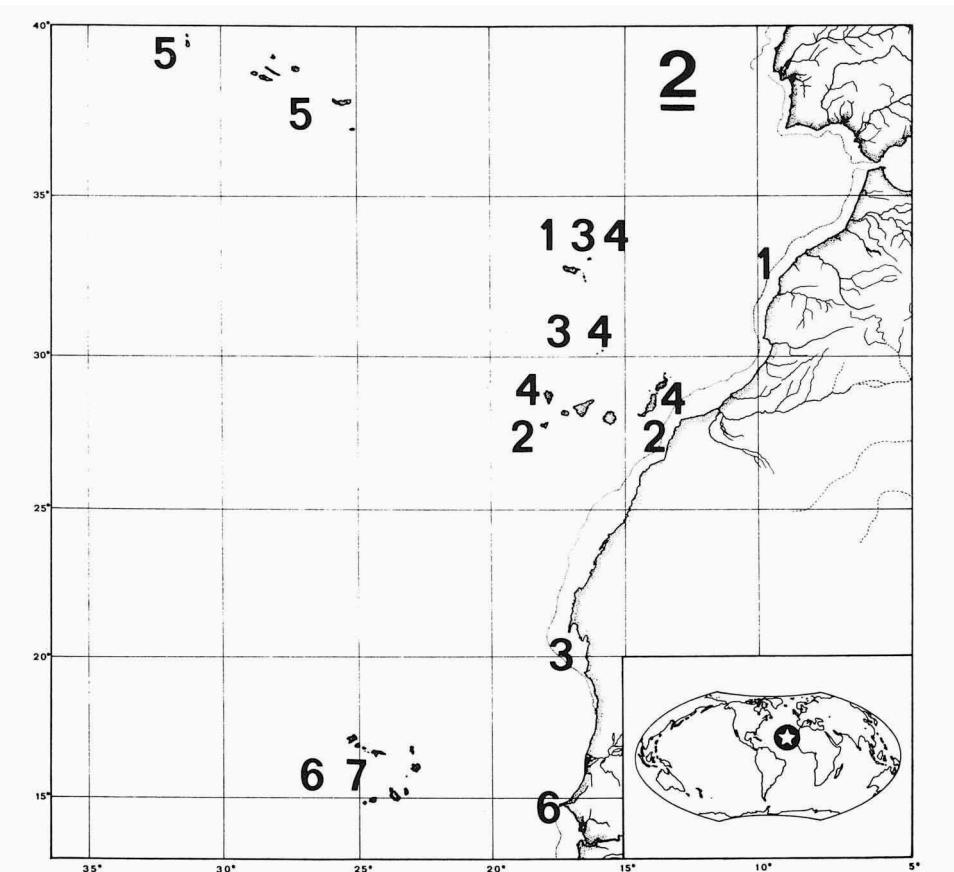


Fig. 2. Indication of the areas where the CANCAP expeditions (1 to 7) took place.

used for different stations letters a and b were added. It should be remarked that D-stations may include the littoral zone, because they are usually very close to the shore and divers often worked in the littoral zone between dives.

In the lists only short descriptions of the stations are given, approximately as they occur on the standard labels. Often additional information was added on the field labels, particularly in the case of coastal stations, which of course may include a wide variety of micro-habitats.

Usually standard oceanographic measurements (salinity, air temperature, water temperature, current, etc.) were made during the entire expedition. Occasionally a BT or a XBT was used as well. The results of these measurements were not mentioned on station labels but they are available in the Leiden museum.

At stations where dredges or trawls were used it was not always possible to determine the type of bottom. In those many cases in which no details are given on the type of bottom, it was mostly of a mixed character, with sand, shells and silt and often also with calcareous nodules and rocks. If no sediment sample was obtained, a short description of the contents of the dredge or trawl may be given instead.

METHODS AND EQUIPMENT

Research methods and equipment will be described in Part II, but some information is given here already, in explanation of the list of stations.

The main goal of the CANCAP-project is to study the horizontal and vertical distribution of the marine benthos in the Canarian-Cape Verdean region. Consequently the benthic flora and fauna had to be sampled from the littoral zone down to the deep sea in as many areas as possible throughout the region.

The littoral zone was usually studied during low tide and shallow coastal waters by snorkeling or scuba diving. Gill-nets and fish-traps were set by divers, who also made use of several types of underwater camera's and video equipment.

Bottom samples were taken from the ship with van Veen grabs and with a Hamon grab (produced by Conrad Stork B.V., Haarlem), which is in fact a heavy bucket sampler (contents 36 l). Both could be used successfully only at depths not exceeding about 1000 m.

Sampling of mixed bottom fauna was mainly done with dredges. On the commonly occurring steep slopes and other areas where rocky bottom prevails, heavy rectangular dredges (model Plymouth, 4 feet) were the most

important samplers. The much lighter triangular dredges (model Plymouth) were regularly used on sandy bottoms. An anchor-dredge (model Plymouth, medium, 18" x 9.5") was sometimes used on deep muddy bottoms. A small detritus sledge (according to Ockelman) was available for meiofauna sampling in shallow water.

Several types of trawls were employed on level bottoms. In shallow water 1.2 m Agassiz trawls were used most often and larger trawls in deep water. The 2.4 m Agassiz trawl is in fact a double frame with two nets, while the 3.5 m Agassiz trawl is a single, much larger net, specially made for use on soft bottom in deep water. The much heavier 5 m beam-trawl was also specially developed for use in the deep sea, although it can be used just as well in shelf conditions. The main difference with ordinary beam-trawls is that it can be towed on both sides. Deep-sea photography was done with a Hydro Products model PC 785 deep-sea camera system.

Although this was in fact only a sideline of the project the pelagic fauna was also sampled rather often. During the first expeditions use was made of a ring-trawl, which is in fact only a simple plankton-net with a diameter of 1 m. Later a midwater-trawl (Hamburg Plankton Net HPN according to Buehringer) was used. Both were towed without a depth indicator and without a closing device. Consequently only some indication of the maximum sampling depths can be given and in all cases the samples are contaminated by material from the upper layers. During the CANCAP-II and III expeditions a very heavy stone was attached to the wire in front of the ring-trawl. In these cases the tow depth could be determined rather accurately. The neuston was sampled occasionally with a neuston-net (Hydro-Bios, Hamburg, model 200, according to David/Hempel).

Traps were set regularly, mostly during one night, down to depths of about 700 m. Metal shrimp-traps of 100 x 50 cm (square or triangular in cross section) were used most often, single or in series of two to four (empty, baited or with light sticks). A similar cage-like trap with somewhat larger openings was used to catch fish, and sometimes also lobster-traps of locally used types. Series of small traps made of polyethylene tubes (called snail-traps) were used to catch small carrion feeders.

**"ONVERSAAGD" MADEIRA-MOROCCO EXPEDITION 1976
CANCAP-I**

- 1.K01: SE coast of Madeira, São Roque near Machico; 32°43'N 16°46'W; rocky shore; 20 Feb 1976.
- 1.K02: SE coast of Madeira, near Santa Cruz; 32°41'N 16°47'W; rocky shore; 21 Feb 1976.
- 1.K03: SE coast of Madeira, E of Caniçal; 32°44'N 16°44'W; rocky shore; 21 Feb 1976.
- 1.K04: N coast of Madeira, near Porto da Cruz (caes); 32°46'N 16°49'W; rocky shore; 22 Feb 1976.
- 1.K05: N coast of Madeira, Ribeira do Macapez; 32°46'N 16°50'W; rocky shore; 22 Feb 1976.
- 1.K06: S coast of Madeira, Ribeira de Tabua; 32°40'N 17°05'W; rocky shore with boulders; 23 Feb 1976.
- 1.K07: S coast of Madeira, W of Tabua; 32°40'N 17°05'W; rocky shore; 23 Feb 1976.
- 1.K08: S coast of Madeira, Funchal, W of harbour; 32°38'N 17°05'W; rocky shore with boulders; 24,25 Feb, 19 Mar 1976.
- 1.D09: SE coast of Madeira, Porto Novo (caes); 32°40'N 16°48'W; depth to 7 m; scuba diving; 24 Feb 1976.
- 1.010: Madeira, Caniçal, whaling station; 32°44'N 16°44'W; sperm whale: parasites and epizoa; 25 Feb 1976.
- 1.K11: N coast of Madeira, São Vicente; 32°48'N 17°03'W; rocky shore with boulders; 26 Feb 1976.
- 1.K12: N coast of Madeira, Porto do Moniz; 32°52'N 17°10'W; rocky shore and large rock pool (piscina); 26 Feb 1976.
- 1.D13: S coast of Madeira, Ponta do Garajau; 32°38'N 16°51'W; depth 5-26 m; scuba diving; 27 Feb 1976.
- 1.K14: SE coast of Madeira, W of Caniçal; 32°44'N 16°44'W; rocky shore; 29 Feb and 2,3,5,6,7 Mar 1976.
- 1.K15: SE coast of Madeira, Ponta de São Lourenço, Prainha; 32°44'N 16°44'W; sandy beach; 29 Feb, 1 Mar 1976.
- 1.K16: SE coast of Madeira, Ponta de São Lourenço, W of Prainha; 32°44'N 16°44'W; rocky shore with tide pools; 29 Feb and 1,3 Mar 1976.
- 1.017: Madeira archipelago, W of Deserta Grande; 32°31'N 16°32'W; depth 120 m, fine sand; van Veen grab; 8 Mar 1976.
- 1.018: Madeira archipelago, W of Deserta Grande; 32°30'N 16°31'W; depth 60 m, fine sand; van Veen grab; 8 Mar 1976.
- 1.019: Madeira archipelago, W of Deserta Grande; 32°29'N 16°31'W; depth 30

- m, fine sand; van Veen grab; 8 Mar 1976.
- 1.020: Madeira archipelago, W of Deserta Grande; 32°31'N 16°32'W; depth 144 m, fine sand with clay and shell gravel; van Veen grab; 8 Mar 1976.
- 1.021: Madeira archipelago, W of Deserta Grande; 32°29'N 16°32'W; depth 228-240 m, sand and shell gravel; van Veen grab; 8 Mar 1976.
- 1.D22: Madeira archipelago, W coast of Deserta Grande; 32°30'N 16°30'W; depth 0-16 m, exposed rocky sub-littoral; scuba diving; 8 Mar 1976.
- 1.023: Madeira archipelago, W of Deserta Grande; 32°28'N 16°36'W; 300 m wire (bottom at 500 m); ring-trawl; 8 Mar 1976.
- 1.025: SE of Madeira; 32°42'N 16°45'W; depth 78 m, sand with some clay and shell gravel; van Veen grab; 9 Mar 1976.
- 1.026: SE of Madeira; 32°41'N 16°45'W; depth 101 m, sand with shell gravel; van Veen grab; 9 Mar 1976.
- 1.D27: SE coast of Madeira, near Agua de Pena; 32°41'N 16°46'W; depth to 25 m; scuba diving; 9 Mar 1976.
- 1.029: SE of Madeira; 32°41'N 16°46'W; depth 340 m, sandy clay; van Veen grab; 9 Mar 1976.
- 1.K30: SE coast of Madeira, near Santa Cruz; 32°41'N 16°47'W; rocky shore; 9 Mar 1976.
- 1.031: SE of Madeira; 32°40'N 16°43'W; depth 1085 m, clay; van Veen grab; 9 Mar 1976.
- 1.032: SE of Madeira; 32°40'N 16°43'W; depth about 5 m (bottom at about 1000 m); plankton-net; 9 Mar 1976.
- 1.034: SE of Madeira; 32°37'N 16°44'W; 1000 m wire (bottom at about 1800 m); ring-trawl; 10 Mar 1976.
- 1.035: SE of Madeira; 32°35'N 16°44'W; 1250 m wire (bottom at about 2000 m); ring-trawl; 10 Mar 1976.
- 1.V37: SE of Madeira; 32°41'N 16°47'W; depth 80 m; shrimp-trap; overnight 9/10 Mar 1976.
- 1.038: SE of Madeira; 32°41'N 16°45'W; depth 550 m; long line; 10 Mar 1976.
- 1.D39: SE coast of Madeira, W of Caniçal; 32°44'N 16°44'W; depth 0-22 m; scuba diving; 10 Mar 1976.
- 1.040: SE of Madeira; 32°44'N 16°44'W; depth 56 m, sand and shells; van Veen grab; 10 Mar 1976.
- 1.042: SE of Madeira; 32°39'N 16°44'W; at surface (bottom at about 600 m); ring-trawl; 10 Mar 1976.
- 1.043: SE of Madeira; 32°33'N 16°46'W; 1600 m wire, angle 55° (bottom at about 2400 m); ring-trawl; 11 Mar 1976.
- 1.044: SE of Madeira; 32°42'N 16°42'W; depth 815 m, shell-sand; van Veen grab; 11 Mar 1976.

- 1.V45: SE of Madeira; 32°43'N 16°44'W; depth 290 m; shrimp-traps; overnight 10/11 Mar 1976.
- 1.V46: SE of Madeira; 32°43'N 16°44'W; depth 218 m; shrimp-traps; overnight 10/11 Mar 1976.
- 1.D47: SE coast of Madeira, E of Caniçal; 32°44'N 16°43'W; depth 0-20 m; scuba diving; 11 Mar 1976.
- 1.D48: SE coast of Madeira, W of Caniçal; 32°44'N 16°44'W; depth 0-22 m; scuba diving; 11 Mar 1976.
- 1.049: SE of Madeira; 32°41'N 16°43'W; depth about 5 m; plankton-net; 11 Mar 1976.
- 1.050: SE of Madeira; 32°40'N 16°42'W; depth about 5 m; plankton-net; 11 Mar 1976.
- 1.052: SE of Madeira; 32°42'N 16°48'W; 2000 m wire (bottom at about 2300 m); ring-trawl; 12 Mar 1976.
- 1.054: SE of Madeira; 32°43'N 16°43'W; depth 420 m; shrimp-traps; overnight 11/12 Mar 1976.
- 1.055: SE of Madeira; 32°43'N 16°43'W; depth 580 m; shrimp-traps; overnight 11/12 Mar 1976.
- 1.D56: SE coast of Madeira, Ponta de São Lourenço, near Ponta das Galvotas; 32°44'N 16°42'W; depth to 27 m; scuba diving; 12 Mar 1976.
- 1.057: SE of Madeira; 32°43'N 16°43'W; depth 100-122 m, shells and sand; van Veen grab; 12 Mar 1976.
- 1.D58: SE coast of Madeira, Ponta de São Lourenço, near Ponta do Baraco; 32°44'N 16°42'W; depth 0-20 m; scuba diving; 12 Mar 1976.
- 1.059: SE of Madeira; 32°43'N 16°43'W; depth 280-300 m, shells and sand; van Veen grab; 12 Mar 1976.
- 1.060: SE of Madeira; 32°32'N 16°49'W; 2000 m wire, angle 38° (bottom at about 2200 m); ring-trawl; 13 Mar 1976.
- 1.061: SE of Madeira; 32°32'N 16°49'W; depth about 30 m (bottom at 2260 m); plankton-net; 13 Mar 1976.
- 1.062: SE of Madeira; 32°40'N 16°46'W; depth 680 m, sandy clay; van Veen grab; 13 Mar 1976.
- 1.V63: SE of Madeira; 32°42'N 16°43'W; depth 670 m; shrimp-traps; overnight 12/13 Mar 1976.
- 1.D66: SE coast of Madeira, Ponta de São Lourenço, near Ponta do Furado; 32°44'N 16°41'W; depth 0-30 m; scuba diving; 13 Mar 1976.
- 1.067: Madeira, bay on SE coast; 32°44'N 16°41'W; depth 30 m, sand, calcareous algae, shell gravel and clay; van Veen grab 5x; 13 Mar 1976.
- 1.D68: SE coast of Madeira, Ponta de São Lourenço, Porto da Abra; 32°45'N 16°41'W; depth 0-12 m; scuba diving; 13 Mar 1976.

- 1.070: E of Madeira; 32°42'N 16°30'W; 600 m wire (bottom at 2000 m); ring-trawl; 13 Mar 1976.
- 1.071: E of Madeira; 32°41'N 16°35'W; depth 120 m, shells and sand; van Veen grab; 14 Mar 1976.
- 1.072: E of Madeira; 32°41'N 16°35'W; depth 80 m, shells and sand; van Veen grab; 14 Mar 1976.
- 1.074: SE of Madeira; 32°40'N 16°40'W; 600 m wire (bottom at 640-880 m); ring-trawl; 14 Mar 1976.
- 1.K75: Madeira archipelago, N coast of Deserta Grande; 32°34'N 16°32'W; shore collecting; 14 Mar 1976.
- 1.K76: Madeira archipelago, W coast of Deserta Grande; 32°31'N 16°31'W; rock pool; 14 Mar 1976.
- 1.077: SE of Madeira; 32°24'N 16°43'W; wire 3000 m, angle 30° (bottom at 3000-3200 m); ring-trawl; 14 Mar 1976.
- 1.078: SE of Madeira; 32°23'N 16°46'W; wire 2500 m, angle 14° (bottom at 3250 m); ring-trawl; 14 Mar 1976.
- 1.D80: S coast of Madeira, near Ponta da Atalaia; 32°39'N 16°49'W; depth 0-22 m; scuba diving; 15 Mar 1976.
- 1.081: Madeira, off S coast; 32°38'N 16°49'W; depth 90-102 m, muddy sand, shells and some clay; van Veen grab; 15 Mar 1976.
- 1.D82: S coast of Madeira, near Ponta da Oliveira; 32°39'N 16°49'W; depth 0-20 m; scuba diving; 15 Mar 1976.
- 1.084: S of Madeira; 32°38'N 16°51'W; depth 86 m, sand and shells with some clay; van Veen grab; 15 Mar 1976.
- 1.085: S of Madeira; 32°38'N 16°51'W; depth 150 m, coarse sand and shells; van Veen grab; 15 Mar 1976.
- 1.086: S of Madeira; 32°37'N 16°51'W; depth 360 m, clay; van Veen grab; 15 Mar 1976.
- 1.088: S of Madeira; 32°34'N 16°51'W; wire 1500 m (bottom at 1920-2060 m); ring-trawl; 16 Mar 1976.
- 1.089: S of Madeira; 32°30'N 16°54'W; wire 2000 m (bottom at 2200-2370 m); ring-trawl; 16 Mar 1976.
- 1.090: S of Madeira; 32°31'N 16°55'W; at surface (bottom at 2300 m); plankton-net; 16 Mar 1976.
- 1.V91: S of Madeira; 32°37'N 16°49'W; depth 630 m; 5 shrimp-traps; overnight 15/16 Mar 1976.
- 1.092: S of Madeira; 32°39'N 16°50'W; depth 80-84 m, corals (mainly dead) and shells; triangular dredge; 16 Mar 1976.
- 1.093: S of Madeira; 32°38'N 16°50'W; depth 98-105 m; triangular dredge; 16 Mar 1976.

- 1.094: S of Madeira; 32°39'N 16°49'W; depth 125-150 m, mainly shells and shell agglomerates; triangular dredge; 16 Mar 1976.
- 1.D95: S coast of Madeira, Ponta do Garajau; 32°38'N 16°51'W; depth 5-26 m; scuba diving; 16 Mar 1976.
- 1.096: S of Madeira; 32°38'N 16°50'W; depth 116-135 m, epifauna only; rectangular dredge; 16 Mar 1976.
- 1.097: S of Madeira; 32°38'N 16°49'W; depth 193-196 m, shells and shell agglomerates; rectangular dredge; 16 Mar 1976.
- 1.098: S of Madeira; 32°38'N 16°49'W; depth 220-226 m, sand and shells; rectangular dredge; 16 Mar 1976.
- 1.099: S of Madeira; 32°38'N 16°48'W; depth 280-300 m, sponges and stones; rectangular dredge; 16 Mar 1976.
- 1.100: S of Madeira; 32°33'N 16°47'W; bird collecting; 16 Mar 1976.
- 1.D101: S coast of Madeira, Ponta do Garajau; 32°38'N 16°51'W; depth 5-26 m; scuba diving; 16 Mar 1976.
- 1.102: S of Madeira; 32°38'N 16°49'W; depth 300 m; triangular and rectangular dredge; 16 Mar 1976.
- 1.103: S of Madeira; 32°38'N 16°49'W; depth 8 m, at night (full moon); plankton-net; 16 Mar 1976.
- 1.104: S of Madeira; 32°37'N 16°49'W; depth 400 m; triangular and rectangular dredge; 16/17 Mar 1976.
- 1.105: S of Madeira; 32°27'N 16°53'W; 2500 m wire (bottom at 2500-2650 m); ring-trawl; 17 Mar 1976.
- 1.108: S of Madeira; 32°42'N 16°44'W; depth 180-210 m; triangular dredge; 17 Mar 1976.
- 1.D109: SE coast of Madeira, near Agua de Pena; 32°41'N 16°46'W; depth to 25 m; scuba diving; 17 Mar 1976.
- 1.110: SE of Madeira; 32°43'N 16°44'W; depth 140-176 m; deep-sea camera; 17 Mar 1976.
- 1.D111: S coast of Madeira, Ponta do Garajau; 32°38'N 16°51'W; depth 26 m; suba diving: underwater photography only; 17 Mar 1976.
- 1.112: S of Madeira; 32°37'N 16°49'W; depth 390 m, shells and sponges; triangular dredge; 17 Mar 1976.
- 1.113: S of Madeira; 32°37'N 16°49'W; depth 40 m (bottom at about 350 m); plankton-net; 17 Mar 1976.
- 1.114: S of Madeira; 32°38'N 16°48'W; depth 280-320 m; rectangular dredge; 17 Mar 1976.
- 1.115: S of Madeira; 32°31'N 16°50'W; 1000 m wire (bottom at 2350-2400 m); ring-trawl; 18 Mar 1976.
- 1.116: S of Madeira; 32°30'N 16°49'W; 500 m wire (bottom at 2320-2420 m);

- ring-trawl; 18 Mar 1976.
- 1.D117: S coast of Madeira, W of Funchal harbour; 32°38'N 16°56'W; 4 dives to 20 m; scuba diving; 19,20 Mar 1976.
- 1.118: Morocco, off Cape Dra; 28°22'N 11°47'W; depth 48 m; 5 m beam-trawl; 23 Mar 1976.
- 1.119: Morocco, off Cape Dra; 28°21'N 11°49'W; depth 42 m, sandy bottom; triangular dredge; 23 Mar 1976.
- 1.120: Morocco, off Cape Hadid; 32°02'N 09°56'W; depth 340 m, clay; van Veen grab; 25 Mar 1976.
- 1.121: Morocco, off Cape Hadid; 32°01'N 09°57'W; depth 125 m, clayey sand and shell gravel; van Veen grab 3x; 25 Mar 1976.
- 1.123: Morocco, off Cape Hadid; 31°58'N 09°54'W; depth 89 m, sandy clay; van Veen grab 5x; 25 Mar 1976.
- 1.124: Morocco, off Cape Hadid; 31°57'N 09°55'W; depth 83-85 m, muddy bottom; triangular dredge 3x; 25 Mar 1976.
- 1.125: Morocco, off Cape Hadid; 31°56'N 09°53'W; depth 85 m, sand and hard bottom; small beam-trawl; 25 Mar 1976.
- 1.126: Morocco, off Cape Hadid; 31°54'N 09°55'W; depth 85 m, muddy sand; 5 m beam-trawl; 25 Mar 1976.
- 1.127: Morocco, off Cape Hadid; 31°55'N 09°52'W; depth 78 m, muddy sand and hard bottom; 5 m beam-trawl; 25 Mar 1976.
- 1.128: Morocco, off Cap Blanc du Nord; 33°15'N 09°12'W; at surface; dipnet; 26 Mar 1976.
- 1.129: Morocco, off Cap Blanc du Nord; 33°15'N 09°11'W; depth 320 m; Agassiz trawl; 26 Mar 1976.
- 1.130: Morocco, off Cap Blanc du Nord; 33°17'N 09°10'W; depth 273 m; triangular dredge; 26 Mar 1976.
- 1.132: Morocco, off Cap Blanc du Nord; 33°17'N 09°09'W; 50 m wire, angle 30° (bottom at 300 m); ring-trawl; 26 Mar 1976.
- 1.133: Morocco, off Cap Blanc du Nord; 33°16'N 09°10'W; 100 m wire, angle 30° (bottom at 300 m); ring-trawl; 26 Mar 1976.
- 1.134: Morocco, off Cap Blanc du Nord; 33°15'N 09°11'W; depth 0-150 m (bottom at 360 m); ring-trawl (and plankton-net at surface); 27 Mar 1976.
- 1.135: Morocco, off Cap Blanc du Nord; 33°15'N 09°13'W; depth 0-200 m (bottom at 370 m); ring-trawl; 27 Mar 1976.
- 1.136: Morocco, off Cap Blanc du Nord; 33°14'N 09°15'W; 250 m wire, angle 30-80° (bottom at 400 m); ring-trawl; 27 Mar 1976.
- 1.137: Morocco, off Cap Blanc du Nord; 33°14'N 09°16'W; 300 m wire, angle 40-70° (bottom at 500 m); ring-trawl; 27 Mar 1976.
- 1.138: Morocco, off Cap Blanc du Nord; 33°16'N 09°13'W; depth 410 m;

- triangular dredge; 27 Mar 1976.
- 1.139: Morocco, off Cap Blanc du Nord; 33°16'N 09°12'W; depth 370 m; small beam-trawl; 27 Mar 1976.
- 1.140: Morocco, off Cap Blanc du Nord; 33°16'N 09°10'W; depth 308-316 m, muddy sand; van Veen grab 2x; 27 Mar 1976.
- 1.141: Morocco, off Cap Blanc du Nord; 33°16'N 09°10'W; depth 300 m; triangular dredge; 27 Mar 1976.
- 1.142: Morocco, off Cap Blanc du Nord; 33°16'N 09°08'W; depth 190 m, 5 m beam-trawl; 27 Mar 1976.
- 1.143: Morocco, off Cap Blanc du Nord; 33°18'N 09°04'W; pelagic, 75, 65...5 fm wire (bottom at 200 m); 5 m beam-trawl; 27 Mar 1976.
- 1.144: Morocco, off Cap Blanc du Nord; 33°13'N 08°49'W; depth 100 m, sand with big stones; van Veen grab 3x; 28 Mar 1976.
- 1.145: Morocco, off Cap Blanc du Nord; 33°14'N 08°49'W; depth 100 m; triangular dredge; 28 Mar 1976.
- 1.146: Morocco, off Cap Blanc du Nord; 33°14'N 08°49'W; depth 105 m, sand, shells, gravel and stones; van Veen grab; 28 Mar 1976.
- 1.147: Morocco, off Cap Blanc du Nord; 33°15'N 08°48'W; depth 100 m, sand and shell gravel; van Veen grab; 28 Mar 1976.
- 1.148: Morocco, off Cap Blanc du Nord; 33°14'N 08°51'W; wire angle 20° (bottom at 100 m), ring-trawl; 28 Mar 1976.
- 1.150: Morocco, off Cap de Mazagan; 33°38'N 08°45'W; depth 420 m; Agassiz trawl; 28 Mar 1976.
- 1.151: Morocco, off Cap de Mazagan; 33°39'N 08°46'W; depth 500 m; Agassiz trawl; 28 Mar 1976.
- 1.152: Morocco, off Cap de Mazagan; 33°39'N 08°47'W; depth 616 m; Agassiz trawl; 28 Mar 1976.
- 1.153: Morocco, off Cap de Mazagan; 33°39'N 08°46'W; depth 632 m; Agassiz trawl; 28 Mar 1976.
- 1.154: Morocco, off Cap de Mazagan; 33°40'N 08°45'W; depth 570 m; Agassiz trawl; 28 Mar 1976.
- 1.155: Morocco, off Cap de Mazagan; 33°42'N 08°44'W; depth 650 m, Agassiz trawl; 28 Mar 1976.
- 1.156: Morocco, off Cap de Mazagan; 33°43'N 08°43'W; 600 m wire, angle 40° (bottom at 700 m); ring-trawl; 28 Mar 1976.
- 1.V157: Morocco, off Cap de Mazagan; 33°41'N 08°43'W; depth 570 m; 5 shrimp-traps; 28 Mar 1976.

LOCALITIES NOT NUMBERED

Madeira, Funchal harbour; 32°39'N 16°55'W; shrimp-traps; 5/6 Mar 1976.
Madeira, Funchal harbour; 32°39'N 16°55'W; divers; 19 Mar 1976.
Madeira, Funchal; 32°39'N 16°55'W; fish market; 20 Mar 1976.
Morocco, Casablanca; 33°35'N 07°35'W; central fish market; 31 Mar 1976.

**"TYDEMAN" CANARY ISLANDS EXPEDITION 1977
CANCAP-II**

- 2.003: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W; depth 140-200 m, sand, calcareous algae, shells; van Veen grab; 23 Aug 1977.
- 2.004: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W; depth 180-330 m, epifauna of mixed bottom; rectangular dredge; 23 Aug 1977.
- 2.005: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°30'W; depth 390-700 m, some epifauna specimens; rectangular dredge; 23 Aug 1977.
- 2.006: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°47'N 14°24'W; depth 2050 m, abyssal plain; 2.4 m Agassiz trawl; 23 Aug 1977.
- 2.007: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°48'N 14°24'W; depth 2000 m, plain with pteropod ooze; anchor dredge; 24 Aug 1977.
- 2.008: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°48'N 14°24'W; depth 0-100 m (bottom at 2000 m), haul 45 min.; ring-trawl; 24 Aug 1977.
- 2.009: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°48'N 14°24'W; depth 0-500 m (bottom at 2000 m), haul 1.5 hr.; ring-trawl; 24 Aug 1977.
- 2.010: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W; depth 100-300 m, sand and shell gravel; van Veen grab; 24 Aug 1977.
- 2.011: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°29'W; depth 125 m, sand; van Veen grab; 24 Aug 1977.
- 2.012: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°28'W; depth 170 m, sand; van Veen grab; 24 Aug 1977.
- 2.013: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°30'W; depth 225 m, sand; van Veen grab; 24 Aug 1977.
- 2.014: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W; depth 200 m, many sponges and other epizoa; rectangular dredge; 24 Aug 1977.
- 2.015: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°30'W;

- depth 570 m, mixed bottom; deep-sea camera 75x; 24 Aug 1977.
- 2.016: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°40'N 14°21'W;
depth 2120 m, abyssal plain; 2.4 m Agassiz trawl; 24 Aug 1977.
- 2.017: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°39'N 14°22'W;
at surface; dip-net; evening 24 Aug 1977.
- 2.018: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°41'N 14°23'W;
depth 0-1000 m (bottom at 2130 m), haul 2 hrs.; ring-trawl; 25 Aug 1977.
- 2.019: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°41'N 14°21'W;
depth 0-300 m (bottom at 2130 m), haul 1 hr.; ring-trawl; 25 Aug 1977.
- 2.020: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°40'N 14°20'W;
depth 1020 m, pteropod ooze; 1.2 m Agassiz trawl with plankton-net inside;
25 Aug 1977.
- 2.021: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°30'W;
depth 40-70 m, fine yellow sand and shell gravel; van Veen grab 6x; 25 Aug
1977.
- 2.022: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°30'W;
depth 83-97 m, fine yellow sand and shell gravel; van Veen grab 2x; 25 Aug
1977.
- 2.023: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°30'W;
depth 154 m, sand; van Veen grab; 25 Aug 1977.
- 2.024: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W;
depth 35-80 m, mixed bottom with algae; triangular dredge 2x; 25 Aug 1977.
- 2.025: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°03'N 14°29'W;
depth 38-100 m, sandy bottom; 1.2 m Agassiz trawl 4x; 25 Aug 1977.
- 2.026: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°50'N 14°29'W;
depth 1980-2200 m; 5 m beam-trawl; 25 Aug 1977.
- 2.027: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°56'N 14°28'W;
depth 1440-1540 m, foot hills with ooze; 2.4 m Agassiz trawl; 25 Aug 1977.
- 2.028: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°56'N 14°28'W;
depth 1510-1540 m, foot hills with ooze; anchor dredge; 26 Aug 1977.
- 2.029: Canary Islands, S of Fuerteventura, Punta de Jandia; 27°55'N 14°29'W;
depth 0-200 m (bottom at 1500 m), haul 2 hrs.; ring-trawl; 26 Aug 1977.
- 2.030: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°12'N 14°01'W;
depth 28 m, sand; van Veen grab; 26 Aug 1977.
- 2.031: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°12'N 14°01'W;
depth 28 m; triangular dredge; 26 Aug 1977.
- 2.032: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°11'N 14°01'W;
depth 40 m; van Veen grab 2x; 26 Aug 1977.
- 2.033: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°10'N 14°01'W;
depth 60 m; van Veen grab; 26 Aug 1977.

- 2.034: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°10'N 14°02'W; depth 90 m; van Veen grab; 26 Aug 1977.
- 2.035: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°10'N 14°02'W; depth 45-80 m; triangular dredge; 26 Aug 1977.
- 2.036: Morocco, W of Cape Yubi; 28°00'N 13°22'W; depth 540-580 m; van Veen grab 2x; 26 Aug 1977.
- 2.037: Morocco, W of Cape Yubi; 28°00'N 13°22'W; depth 570 m; 2.4 m Agassiz trawl; 26 Aug 1977.
- 2.038: Morocco, W of Cape Yubi; 28°03'N 13°26'W; depth 1100 m; van Veen grab; 26 Aug 1977.
- 2.039: Morocco, W of Cape Yubi; 28°02'N 13°26'W; depth 1010 m; 2.4 m Agassiz trawl; 26 Aug 1977.
- 2.040: Morocco, W of Cape Yubi; 28°02'N 13°26'W; depth 1010 m; anchor dredge; 27 Aug 1977.
- 2.041: Morocco, W of Cape Yubi; 28°02'N 13°27'W; depth 0-500 m (bottom at 1000 m), 02.05-03.25 hrs.; ring-trawl; 27 Aug 1977.
- 2.042: Morocco, W of Cape Yubi; 28°02'N 13°27'W; depth 0-750 m (bottom at 1000 m), 03.50-05.30 hrs.; ring-trawl; 27 Aug 1977.
- 2.043: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 13°59'W; depth 47 m, sand with calcareous algae; van Veen grab; 27 Aug 1977.
- 2.044: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 14°00'W; depth 49 m, calcareous and other algae; triangular dredge; 27 Aug 1977.
- 2.045: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 14°00'W; depth 70-300 m, mixed bottom; 2.4 m Agassiz trawl; 27 Aug 1977.
- 2.046: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 14°01'W; depth 41-37 m, mixed bottom; 1.2 m Agassiz trawl; 27 Aug 1977.
- 2.047: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 14°02'W; depth 100-125 m, mixed bottom; 1.2 m Agassiz trawl; 27 Aug 1977.
- 2.048: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°14'N 13°51'W; depth 100 m, sandy bottom; van Veen grab 3x; 27 Aug 1977.
- 2.049: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°12'N 13°53'W; depth 70 m, sand, shells and algae; 1.2 m Agassiz trawl; 27 Aug 1977.
- 2.050: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°12'N 13°52'W; depth 70 m, sandy bottom; triangular dredge; 27 Aug 1977.
- 2.051: Morocco, W of Cape Yubi; 28°00'N 13°22'W; depth 500 m; 1.2 m Agassiz trawl with plankton-net inside; 27 Aug 1977.

- 2.052: Morocco, W of Cape Yubi; 28°01'N 13°22'W; depth 0-400 m (bottom at 570 m), 00.30-01.40 hrs.; ring-trawl; 28 Aug 1977.
- 2.053: Morocco, W of Cape Yubi; 28°01'N 13°22'W; depth 0-300 m (bottom at 680 m), 02.10-03.25 hrs.; ring-trawl; 28 Aug 1977.
- 2.054: Morocco, W of Cape Yubi; 28°01'N 13°22'W; depth 500-550 m; anchor dredge; 28 Aug 1977.
- 2.055: Morocco, W of Cape Yubi; 27°59'N 13°22'W; depth 500-512 m; 2.4 m Agassiz trawl; 28 Aug 1977.
- 2.056: Morocco, W of Cape Yubi; 27°57'N 13°22'W; depth 203-220 m; 5 m beam-trawl; 28 Aug 1977.
- 2.057: Morocco, W of Cape Yubi; 28°06'N 13°15'W; depth 309-320 m; 5 m beam-trawl; 28 Aug 1977.
- 2.058: Morocco, W of Cape Yubi; 27°58'N 13°24'W; depth 500 m, muddy bottom; 5 m beam-trawl; 28 Aug 1977.
- 2.059: Morocco, W of Cape Yubi; 28°02'N 13°27'W; depth 990-1010 m, muddy bottom; 2.4 m Agassiz trawl; 28 Aug 1977.
- 2.060: Morocco, W of Cape Yubi; 28°03'N 13°32'W; depth 1250 m, muddy bottom; 2.4 m Agassiz trawl; 28 Aug 1977.
- 2.061: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°07'N 13°45'W; depth 1550 m, plain; 2.4 m Agassiz trawl; 29 Aug 1977.
- 2.062: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°07'N 13°45'W; depth 0-1520 m, plain with pteropod ooze (plankton-net touched bottom accidentally); ring-trawl; 29 Aug 1977.
- 2.063: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 13°57'W; depth 48-270 m; deep-sea camera 150x; 29 Aug 1977.
- 2.064: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 13°57'W; depth 77 m, shells, calcareous algae; van Veen grab; 29 Aug 1977.
- 2.065: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°11'N 13°57'W; depth 670 m, sandy clay; van Veen grab; 29 Aug 1977.
- 2.066: Canary Islands, SE of Fuerteventura, Punta de Gran Tarajal; 28°01'N 13°57'W; depth 886 m, sandy clay; van Veen grab; 29 Aug 1977.
- 2.067: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 27°58'N 14°12'W; depth 1810-1830 m, pteropod ooze; 5 m beam-trawl; 29 Aug 1977.
- 2.068: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 27°58'N 14°12'W; depth 0-1700 m (bottom at 1810 m), 22.20-00.55 hrs.; ring-trawl; 29 Aug 1977.
- 2.069: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 27°57'N 14°13'W; depth 1820 m; 2.4 m Agassiz trawl; 30 Aug 1977.
- 2.070: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 27°57'N 14°13'W; depth 1820 m, muddy bottom; 2.4 m Agassiz trawl; 30 Aug 1977.

- 2.072: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 28°02'N 14°20'W; depth 92-114 m, sandy bottom with algae; triangular dredge; 30 Aug 1977.
- 2.073: Canary Islands, S of Fuerteventura, Punta del Morro Jable; 28°02'N 14°21'W; depth 96 m, sandy bottom; van Veen grab; 30 Aug 1977.
- 2.074: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°29'W; depth 530 m, sandy clay with a few worms; van Veen grab; 30 Aug 1977.
- 2.075: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°30'W; depth 550 m; van Veen grab 2x; 30 Aug 1977.
- 2.077: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°25'W; depth 400-900 m; 1.2 m Agassiz trawl with plankton-net inside; 31 Aug 1977.
- 2.078: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°01'N 14°26'W; depth 790 m; van Veen grab; 31 Aug 1977.
- 2.079: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°01'N 14°26'W; depth 870 m; van Veen grab; 31 Aug 1977.
- 2.080: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°01'N 14°26'W; depth 980 m; van Veen grab; 31 Aug 1977.
- 2.081: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°00'N 14°26'W; depth 1100 m; van Veen grab; 31 Aug 1977.
- 2.082: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°00'N 14°26'W; depth 1130 m; van Veen grab; 31 Aug 1977.
- 2.083: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°29'W; depth 230 m, sand with some shell gravel and calcareous algae; van Veen grab; 31 Aug 1977.
- 2.084: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°30'W; depth 370 m, sand with some shell gravel; van Veen grab; 31 Aug 1977.
- 2.085: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°30'W; depth 500-700 m, clayey sand and shells; van Veen grab 5x; 31 Aug 1977.
- 2.086: Canary Islands, S of Fuerteventura, Punta de Jandia; 28°02'N 14°29'W; depth 450-500 m, mixed bottom; rectangular dredge 2x; 31 Aug 1977.
- 2.087: Canary Islands, SE of Gran Canaria; 27°42'N 15°02'W; depth 2300 m, abyssal plain, deep-sea clay; 5 m beam-trawl; 31 Aug 1977.
- 2.088: Canary Islands, SE of Gran Canaria; 27°40'N 15°04'W; depth 2390-2460 m, abyssal plain; 2.4 m Agassiz trawl; 1 Sept 1977.
- 2.089: Canary Islands, SE of Gran Canaria; 27°38'N 15°06'W; at surface (bottom at 2400 m), 03.00-03.45 hrs.; ring-trawl; 1 Sept 1977.
- 2.090: Canary Islands, S of Hierro, off Punta de la Restinga; 27°15'N 18°03'W; depth 3730 m, ooze with volcanic stones; 2.4 m Agassiz trawl; 2 Sept 1977.
- 2.091: Canary Islands, S of Hierro, off Punta de la Restinga; 27°16'N 18°00'W;

- depth 0-750 m (bottom at 3730 m), 04.30-06.00 hrs.; ring-trawl; 3 Sept 1977.
- 2.092: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 17°59'W; depth 176 m; van Veen grab; 3 Sept 1977.
- 2.093: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 17°59'W; depth 331 m; van Veen grab; 3 Sept 1977.
- 2.094: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 521 m; van Veen grab; 3 Sept 1977.
- 2.095: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 260 m; van Veen grab; 3 Sept 1977.
- 2.096: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 17°59'W; depth 260 m; van Veen grab; 3 Sept 1977.
- 2.097: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 330 m; van Veen grab; 3 Sept 1977.
- 2.098: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 535 m; van Veen grab; 3 Sept 1977.
- 2.099: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 160 m; van Veen grab; 3 Sept 1977.
- 2.100: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 336 m; van Veen grab; 3 Sept 1977.
- 2.101: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 440 m; van Veen grab; 3 Sept 1977.
- 2.102: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 17°59'W; depth 125 m; van Veen grab; 3 Sept 1977.
- 2.103: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 17°59'W; depth 240 m; van Veen grab; 3 Sept 1977.
- 2.104: Canary Islands, S of Hierro, off Punta de la Restinga; 27°37'N 18°00'W; depth 420-700 m; triangular dredge; 3 Sept 1977.
- 2.106: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 17°59'W; depth 600-1000 m, dead corals and shells; rectangular dredge 3x; 3 Sept 1977.
- 2.107: Canary Islands, S of Hierro, off Punta de la Restinga; 27°34'N 17°59'W; depth 600-675 m, stones with epizoa; rectangular dredge; 3 Sept 1977.
- 2.108: Canary Islands, S of Hierro, off Punta de la Restinga; 27°32'N 18°00'W; depth 0-30 m (bottom at 1200 m), 00.00-01.00 hr.; ring-trawl; 4 Sept 1977.
- 2.109: Canary Islands, S of Hierro, off Punta de la Restinga; 27°31'N 18°00'W; depth 0-100 m (bottom at 1500 m), 01.20-02.20 hrs.; ring-trawl; 4 Sept 1977.
- 2.110: Canary Islands, S of Hierro, off Punta de la Restinga; 27°31'N 18°00'W; depth 0-200 m (bottom at 1500 m), 03.00-04.13 hrs.; ring-trawl; 4 Sept 1977.
- 2.111: Canary Islands, S of Hierro, off Punta de la Restinga; 27°32'N 18°00'W; depth 0-300 m (bottom at 2000 m), 04.45-06.00 hrs.; ring-trawl; 4 Sept 1977.

- 2.112: Canary Islands, S of Hierro, off Punta de la Restinga; 27°13'N 18°07'W; depth 3750 m, abyssal plain, volcanic ashes; 5 m beam-trawl; 4 Sept 1977.
- 2.114: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°09'W; depth 340-480 m; van Veen grab; 4 Sept 1977.
- 2.115: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°38'N 18°13'W; depth 0-500 m (bottom at 2500 m), 00.50-02.00 hrs.; ring-trawl; 5 Sept 1977.
- 2.116: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°38'N 18°13'W; depth 0-1000 m (bottom at 2500 m), 02.20-03.40 hrs.; ring-trawl; 5 Sept 1977.
- 2.117: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°38'N 18°14'W; depth 0-270 m (bottom at 2400 m), 04.10-06.15 hrs.; ring-trawl; 5 Sept 1977.
- 2.118: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°42'N 18°09'W; depth 200-1000 m, rocky bottom; rectangular dredge 12x; 5 Sept 1977.
- 2.119: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°42'N 18°09'W; depth 350 m, old fish-trap and lines; rectangular dredge; 5 Sept 1977.
- 2.120: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°42'N 18°08'W; depth 350-400 m, rocky bottom with sponges; rectangular dredge; 5 Sept 1977.
- 2.121: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°42'N 18°08'W; depth 470-510 m, rocky bottom; rectangular dredge; 5 Sept 1977.
- 2.122: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°37'N 18°16'W; depth 0-1250 m (bottom at 2700 m), 23.20-1.35 hr.; ring-trawl; 5/6 Sept 1977.
- 2.123: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°39'N 18°12'W; depth 0-1500 m (bottom at 2000 m), 2.25-4.50 hrs.; ring-trawl; 6 Sept 1977.
- 2.124: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°38'N 18°13'W; depth 0-850 m (bottom at 2700 m), 5.15-7.00 hrs.; ring-trawl; 6 Sept 1977.
- 2.125: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°10'W; depth 500-1000 m, rocky bottom; rectangular dredge; 6 Sept 1977.
- 2.126: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°10'W; depth 330-430; van Veen grab 3x; 6 Sept 1977.
- 2.127: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°11'W; at surface (bottom at 1200 m), 4.00-5.00 hrs.; ring-trawl; 7 Sept 1977.
- 2.128: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°10'W; depth 630-900 m, rocky bottom with stones; rectangular dredge 3x; 7 Sept 1977.
- 2.129: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°10'W; depth 900 m; van Veen grab; 7 Sept 1977.
- 2.130: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°40'N 18°10'W; depth 1500-1800 m; 1.2 m Agassiz trawl; 8 Sept 1977.

- 2.131: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°40'N 18°10'W; depth 1200-1800 m; 1.2 m Agassiz trawl; 8 Sept 1977.
- 2.132: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°40'N 18°10'W; at surface (bottom at 1400 m), 4.30-5.25 hrs.; ring-trawl; 8 Sept 1977.
- 2.133: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°40'N 18°10'W; depth 1000 m; triangular dredge; 8 Sept 1977.
- 2.134: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°09'W; depth 480 m; grapnel; 8 Sept 1977.
- 2.135: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°11'W; depth 1370 m; van Veen grab; 8 Sept 1977.
- 2.136: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°11'W; depth 1100 m; triangular dredge; 8 Sept 1977.
- 2.137: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°11'W; depth 1000-1200 m, rocky bottom, stones; rectangular dredge; 8 Sept 1977.
- 2.138: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°40'N 18°10'W; depth 1200 m; rectangular dredge; 8 Sept 1977.
- 2.139: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°35'N 18°15'W; depth 0-1750 m (bottom at 2600 m), 23.20-02.20 hrs.; ring-trawl; 8/9 Sept 1977.
- 2.140: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°36'N 18°16'W; depth 0-2000 m (bottom at 2800 m), 03.15-06.15 hrs.; ring-trawl; 9 Sept 1977.
- 2.141: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°09'W; depth 480-540 m, volcanic rocks and gravel; rectangular dredge 2x; 9 Sept 1977.
- 2.142: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°03'W; floating piece of rope; 9 Sept 1977.
- 2.143: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°02'W; depth 510 m; van Veen grab; 9 Sept 1977.
- 2.144: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°02'W; depth 218-260 m; van Veen grab 3x; 9 Sept 1977.
- 2.145: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°02'W; depth 220-300 m; rectangular dredge 6x; 9 Sept 1977.
- 2.146: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°02'W; depth 240-300 m; rectangular dredge 4x; 9 Sept 1977.
- 2.147: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°41'N 18°03'W; depth 550-600 m, gravel and sand; van Veen grab 3x; 9 Sept 1977.
- 2.148: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N 18°03'W; depth 580-700 m, volcanic rocks; rectangular dredge; 9 Sept 1977.
- 2.149: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°40'N

- 18°03'W; depth 790-870 m; rectangular dredge and van Veen grab; 9 Sept 1977.
- 2.150: Canary Islands, S of Hierro, off Punta de Orchilla; 27°31'N 18°10'W; depth 0-2250 m (bottom at 3000 m), 22.45-01.55 hrs.; ring-trawl; 9/10 Sept 1977.
- 2.151: Canary Islands, S of Hierro, off Punta de Orchilla; 27°33'N 18°10'W; depth 0-2500 m (bottom at 3000 m), 02.15-06.00 hrs.; ring-trawl; 10 Sept 1977.
- 2.152: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°41'N 18°02'W; depth 250-350 m; rectangular dredge; 10 Sept 1977.
- 2.153: Canary Islands, S of Hierro, W of Punta de la Restinga; 27°41'N 18°02'W; depth 300-400 m; rectangular dredge; 10 Sept 1977.
- 2.154: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 17°59'W; depth 550 m, coarse sand and gravel; van Veen grab; 10 Sept 1977.
- 2.155: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 17°59'W; depth 700 m, fine sand with pteropod ooze; van Veen grab; 10 Sept 1977.
- 2.156: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 18°00'W; depth 1050 m, fine sand with pteropod ooze; van Veen grab; 10 Sept 1977.
- 2.157: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 17°59'W; depth 650 m, fine sand with pteropod ooze; van Veen grab; 10 Sept 1977.
- 2.158: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 580 m, coarse sand with pteropod ooze; van Veen grab; 10 Sept 1977.
- 2.159: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 620 m, coarse sand with pteropod ooze; van Veen grab; 10 Sept 1977.
- 2.160: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 550 m, coarse sand and gravel with dead coral; van Veen grab; 10 Sept 1977.
- 2.161: Canary Islands, S of Hierro, off Punta de la Restinga; 27°36'N 17°59'W; depth 500-600 m, volcanic rocks with sponges; rectangular dredge 2x; 10 Sept 1977.
- 2.162: Canary Islands, S of Hierro, off Punta de la Restinga; 27°35'N 17°59'W; depth 550-800 m, volcanic rocks; rectangular dredge; 10 Sept 1977.
- 2.163: Canary Islands, S of Hierro, off Punta de la Restinga; 27°34'N 17°59'W; depth 1000-1100 m, rocky bottom; rectangular dredge; 10 Sept 1977.
- 2.164: Canary Islands, S of Hierro, off Punta de la Restinga; 27°21'N 18°01'W; depth 0-2000 m (bottom at 2700 m), 21.14-00.45 hrs.; ring-trawl; 10 Sept 1977.

SCUBA DIVING STATIONS

- 2.D01: Canary Islands, SW coast of Fuerteventura, Punta de Jandia; 28°04'N 14°30'W; sandy bottom, seagrass, rocks, depth 10-15 m; scuba diving; 24,31 Aug 1977.
- 2.D02: Canary Islands, SW coast of Fuerteventura, Punta de Jandia; 28°04'N 14°30'W; sandy bottom, seagrass, rocks, depth 10-15 m; scuba diving; 24,31 Aug 1977.
- 2.D03: Canary Islands, S coast of Fuerteventura, near Punta de Gran Tarajal; 28°12'N 14°01'W; rocky bottom and sand, depth 5-15 m; scuba diving; 26,27,29 Aug 1977.
- 2.D04: Canary Islands, S coast of Fuerteventura, near Punta del Morro Jable; 28°04'N 14°20'W; sandy bottom, seagrass, depth 10-15 m; scuba diving; 30 Aug 1977.
- 2.D05: Canary Islands, S coast of Fuerteventura, near Punta del Morro Jable; 28°04'N 14°21'W; rocky and sandy bottom, depth 10-15 m; scuba diving; 30 Aug 1977.
- 2.D06: Canary Islands, SW coast of Fuerteventura, Punta de Jandia; 28°04'N 14°30'W; sandy bottom, seagrass, rocks, depth 10-15 m; scuba diving; 24,31 Aug 1977.
- 2.D07: Canary Islands, S coast of Hierro, W of Punta de los Saltos, Puerto de Naos; 27°39'N 18°00'W; rocky bottom, depth 10-15 m; scuba diving; 3,10 Sept 1977.
- 2.D08: Canary Islands, SW coast of Hierro, off Faro de Orchilla; 27°42'N 18°08'W; rocky bottom with some sand, depth 5-25 m; scuba diving; 5/9 Sept 1977.
- 2.D09: Canary Islands, S coast of Hierro, Tecerone; 27°41'N 18°02'W; rocky bottom, sand, depth 10-15 m; scuba diving; 9,10 Sept 1977.
- 2.D10: Canary Islands, S coast of Hierro, W of Punta de los Saltos, Puerto de Naos; 27°39'N 18°00'W; rocky bottom, depth 10-15 m; scuba diving; 3,10 Sept 1977.

TRAP STATIONS

- 2.V01: Canary Islands, S coast of Hierro, Tecerone; 27°41'N 18°02'W; depth 40 m; shrimp-traps; overnight 9/10 Sept 1977.
- 2.V113: Canary Islands, SW of Hierro, off Punta de Orchilla; 27°41'N 18°08'W; depth 550 m, rocky bottom; 5 shrimp-traps; overnight 4/5 Sept 1977.

COASTAL STATIONS

- 2.K01: Canary Islands, S coast of Gran Canaria, Maspalomas, Playa del Ingles; 27°45'N 15°34'W; sandy beach; 15 Aug 1977.
- 2.K02: Canary Islands, S coast of Gran Canaria, Puerto de Mogan; 27°49'N 15°50'W; littoral, sheltered rocky coast, rock pools; 16 Aug 1977.
- 2.K03: Canary Islands, S coast of Gran Canaria, E of Arguineguin; 27°45'N 15°40'W; bay, rocky littoral; 16 Aug 1977.
- 2.K04: Canary Islands, S coast of Gran Canaria near San Agustin; 27°46'N 15°32'W; rocky littoral, beach; 17 Aug 1977.
- 2.K05: Canary Islands, S coast of Gran Canaria, E of San Agustin; 27°46'N 15°32'W; beach with pebbles; 17 Aug 1977.
- 2.K06: Canary Islands, SE coast of Gran Canaria, E of San Agustin; 27°46'N 15°31'W; rocky littoral; 17 Aug 1977.
- 2.K07: Canary Islands, E coast of Gran Canaria, Puerto de Arinaga; 27°52'N 15°23'W; rocky littoral, pools; 18 Aug 1977.
- 2.K08: Canary Islands, E coast of Gran Canaria, Playa de Salinetas near Melenara; 27°58'N 15°22'W; beach with rocks and pools; 19 Aug 1977.
- 2.K09: Canary Islands, W coast of Gran Canaria, Puerto de San Nicolas (Caserones); 28°00'N 15°48'W; rocky littoral; 20 Aug 1977.
- 2.K10: Canary Islands, S coast of Gran Canaria, Arguineguin; 27°45'N 15°40'W; bay with boulders, sheltered littoral, sub-littoral; 21 Aug 1977.
- 2.K11: Canary Islands, NW coast of Fuerteventura, N of Punta de Jandia; 28°05'N 14°29'W; rocky littoral; 24/31 Aug 1977.
- 2.K12: Canary Islands, W coast of Fuerteventura, Punta de Jandia; 28°04'N 14°30'W; exposed rocky littoral with large rock pools; 24,31 Aug 1977.
- 2.K13: Canary Islands, W coast of Fuerteventura, near Punta de Jandia; 28°04'N 14°30'W; rocky littoral; 24,25 Aug 1977.
- 2.K14a: Canary Islands, S coast of Fuerteventura, near Punta de Gran Tarajal; 28°12'N 14°01'W; rocky and sandy sub-littoral, depth 1-6 m; 26 Aug 1977.
- 2.K14b: Canary Islands, S coast of Hierro, Puerto de Naos, W of Punta de la Restinga; 27°39'N 18°00'W; rocky littoral, rock pools, sub-littoral, depth -6 m; 3/10 Sept 1977.
- 2.K15: Canary Islands, SW coast of Hierro, Puerto Orchilla; 27°42'N 18°07'W; littoral, sub-littoral, depth 0-7 m; 5/8 Sept 1977.
- 2.K16: Canary Islands, SW coast of Hierro, Faro de Orchilla; 27°42'N 18°08'W; littoral, shallow sub-littoral; 6 Sept 1977.
- 2.K17: Canary Islands, N coast of Gran Canaria, Las Palmas, Las Canteras; 28°08'N 15°26'W; rocks, sand, mud, littoral and sub-littoral, depth 0-6 m; 12

Sept 1977.

- 2.K18: Canary Islands, N coast of Gran Canaria, Bahia del Confital, Las Palmas; 28°08'N 15°27'W; rocky and sandy sub-littoral; 13 Sept 1977.
- 2.K19: Canary Islands, N coast of Gran Canaria, Las Palmas, Las Canteras; 28°08'N 15°27'W; rocks, stones and sand, sub-littoral, depth 0-6 m; 14,15,17 Sept 1977.
- 2.K20: Canary Islands, N coast of Gran Canaria, Las Palmas, Las Canteras; 28°08'N 15°27'W; sandy bottom with seagrass in lagoon, sub-littoral; 14 Sept 1977.
- 2.K21: Canary Islands, E coast of Gran Canaria, Playa de la Laja, S of Las Palmas; 28°04'N 15°25'W; rocky littoral and rock pools; 15 Sept 1977.
- 2.K22: Canary Islands, W coast of Gran Canaria, Puerto de las Nievas, near pier; 28°06'N 15°42'W; rocky littoral, rock pools; 16 Sept 1977.
- 2.K23: Canary Islands, W coast of Gran Canaria, Puerto de las Nievas; 28°06'N 15°42'W; rocks at about 200 m off shore, depth 1-7 m; 16 Sept 1977.

“TYDEMAN” MADEIRA-MAURITANIA EXPEDITION 1978
CANCAP-III

- 3.001: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 109 m, sand and shells; van Veen grab; 14 Oct 1978.
- 3.002: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 42 m, fine sand; van Veen grab; 14 Oct 1978.
- 3.003: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 25 m, fine sand; van Veen grab; 14 Oct 1978.
- 3.004: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 20 m, fine sand; van Veen grab; 14 Oct 1978.
- 3.005: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 350 m, clayey sand; van Veen grab; 14 Oct 1978.
- 3.006: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 215 m, fine sand; van Veen grab; 14 Oct 1978.
- 3.007: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 135 m, sand; van Veen grab; 14 Oct 1978.
- 3.008: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 90 m, sand; van Veen grab; 14 Oct 1978.
- 3.009: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 56 m, sand; van Veen grab; 14 Oct 1978.
- 3.010: Madeira archipelago, S of Poro Santo; 33°00'N 16°21'W; depth 410-630 m; triangular dredge; 14 Oct 1978.

- 3.011: Madeira archipelago, S of Porto Santo; 32°54'N 16°26'W; depth 3100-2800 m, clay; 2.4 m Agassiz trawl; 15 Oct 1978.
- 3.012: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 130 m, sand and shells; van Veen grab; 15 Oct 1978.
- 3.013: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 63 m, sand and shells; van Veen grab; 15 Oct 1978.
- 3.014: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 40 m, sand and shells; van Veen grab; 15 Oct 1978.
- 3.015: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 20 m, sand and shells; van Veen grab; 15 Oct 1978.
- 3.016: Madeira archipelago, S of Porto Santo; 33°02'N 16°22'W; depth 24 m, sand; Hamon grab; 15 Oct 1978.
- 3.017: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 50-110 m, sandy and stony bottom; triangular dredge; 15 Oct 1978.
- 3.018: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 15-45 m, sandy and stony bottom; triangular dredge; 15 Oct 1978.
- 3.020: Madeira archipelago, S of Porto Santo; 32°53'N 16°21'W; depth 2830-3120 m, deep-sea clay with clinkers; 3.5 m Agassiz trawl; 15 Oct 1978.
- 3.021: Madeira archipelago, S of Porto Santo; 32°53'N 16°22'W; wire 2500 m (bottom at 2580-3220 m); ring-trawl; 16 Oct 1978.
- 3.022: Madeira archipelago, S of Porto Santo; 33°01'N 16°21'W; depth 275 m, sand; van Veen grab; 16 Oct 1978.
- 3.023: Madeira archipelago, S of Porto Santo; 33°01'N 16°21'W; depth 240 m, clayey sand; van Veen grab; 16 Oct 1978.
- 3.024: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 310 m, sand and clay; van Veen grab; 16 Oct 1978.
- 3.025: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 400 m, clay and sand; van Veen grab; 16 Oct 1978.
- 3.026: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 510 m, clay and sand; van Veen grab; 16 Oct 1978.
- 3.027: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 640 m, clay and sand; van Veen grab; 16 Oct 1978.
- 3.028: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 740 m, sand and clay; van Veen grab; 16 Oct 1978.
- 3.029: Madeira archipelago, S of Porto Santo; 33°02'N 16°20'W; depth 180-480 m; triangular dredge; 16 Oct 1978.
- 3.030: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 65-135 m; triangular dredge; 16 Oct 1978.
- 3.031: Madeira archipelago, S of Porto Santo; 33°02'N 16°21'W; depth 20-65 m; triangular dredge; 16 Oct 1978.

- 3.032: Madeira archipelago, S of Porto Santo; 33°01'N 16°21'W; depth 370 m, sand; Hamon grab; 16 Oct 1978.
- 3.035: Madeira archipelago, S of Porto Santo; 32°53'N 16°24'W; wire 1000 m (bottom at 3024-3196 m); ring-trawl; 17 Oct 1978.
- 3.036: S of Madeira, 32°31'N 16°31'W; depth 55 m, sand; van Veen grab; 18 Oct 1978.
- 3.037: S of Madeira; 32°30'N 16°31'W; depth 34 m, sand; van Veen grab; 18 Oct 1978.
- 3.038: S of Madeira; 32°30'N 16°31'W; depth 86 m, sand; van Veen grab; 18 Oct 1978.
- 3.039: S of Madeira; 32°31'N 16°31'W; depth 55 m, calcareous algae; van Veen grab; 18 Oct 1978.
- 3.040: S of Madeira; 32°30'N 16°31'W; depth 60 m, sand; van Veen grab; 18 Oct 1978.
- 3.041: S of Madeira; 32°30'N 16°31'W; depth 45 m, gravel; Hamon grab; 18 Oct 1978.
- 3.042: S of Madeira; 32°30'N 16°31'W; depth 45 m, gravel; Hamon grab; 18 Oct 1978.
- 3.043: S of Madeira; 32°31'N 16°31'W; depth 20-60 m; rectangular dredge; 18 Oct 1978.
- 3.044: S of Madeira; 32°31'N 16°31'W; depth 35-60 m; rectangular dredge; 18 Oct 1978.
- 3.046: S of Madeira; 32°22'N 16°55'W; wire 2000 m (bottom at 3160-3200 m); ring-trawl; 19 Oct 1978.
- 3.047: SE of Madeira; 32°42'N 16°40'W; depth 560 m, sand and shells; Hamon grab; 19 Oct 1978.
- 3.051: SE of Madeira; 32°40'N 16°40'W; depth 1100 m, fine sand; van Veen grab; 19 Oct 1978.
- 3.052: SE of Madeira; 32°25'N 16°54'W; depth 2950-3065 m, deep-sea clay with many clinkers; 2.4 m Agassiz trawl; 19 Oct 1978.
- 3.053: S of Madeira; 32°25'N 16°57'W; depth 2850-3010 m, deep-sea clay with many clinkers; 2.4 m Agassiz trawl; 20 Oct 1978.
- 3.054: SE of Madeira; 32°43'N 16°44'W; depth 300-320 m; rectangular dredge; 20 Oct 1978.
- 3.055: SE of Madeira; 32°43'N 16°44'W; depth 350-450 m; rectangular dredge; 20 Oct 1978.
- 3.056: SE of Madeira; 32°43'N 16°44'W; depth 280-480 m; rectangular dredge; 20 Oct 1978.
- 3.057: SE of Madeira; 32°42'N 16°43'W; depth 600-1000 m; rectangular dredge; 20 Oct 1978.

- 3.058: SE of Madeira; 32°42'N 16°44'W; depth about 100 m; rectangular dredge; 20 Oct 1978.
- 3.059: SE of Madeira; 32°42'N 16°44'W; depth 108 m, sand; van Veen grab; 20 Oct 1978.
- 3.060: SE of Madeira; 32°42'N 16°44'W; depth 70-100 m; rectangular dredge; 20 Oct 1978.
- 3.061: Selvagens archipelago, S of Selvagem Grande; 30°08'N 15°52'W; depth 84 m, white sand and calcareous algae; van Veen grab; 21 Oct 1978.
- 3.062: Selvagens archipelago, S of Selvagem Grande; 30°08'N 15°52'W; depth 99 m, white sand and calcareous algae; van Veen grab; 21 Oct 1978.
- 3.063: Selvagens archipelago, SW of Selvagem Grande; 30°08'N 15°52'W; depth 80 m, white sand and calcareous algae; van Veen grab; 21 Oct 1978.
- 3.064: Selvagens archipelago, W of Selvagem Grande; 30°08'N 15°53'W; depth 90 m, greyish sand and calcareous algae; van Veen grab; 21 Oct 1978.
- 3.065: Selvagens archipelago, SW of Selvagem Grande; 30°08'N 15°53'W; depth 100 m, grey fine sand, shell gravel, calcareous algae; van Veen grab; 21 Oct 1978.
- 3.066: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°53'W; depth 110 m, light sand and shell gravel; van Veen grab; 21 Oct 1978.
- 3.068: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°53'W; depth 310 m, fine light sand and shell gravel; van Veen grab; 21 Oct 1978.
- 3.069: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°54'W; depth 610 m, sand with shell gravel; van Veen grab; 21 Oct 1978.
- 3.070: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°54'W; depth 645 m, fine sand; van Veen grab; 21 Oct 1978.
- 3.071: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°54'W; depth 748 m, very fine clayey sand; van Veen grab; 21 Oct 1978.
- 3.072: Selvagens archipelago, SW of Selvagem Grande; 30°06'N 15°54'W; depth 830 m, fine sand with shell gravel; van Veen grab; 21 Oct 1978.
- 3.074: Selvagens archipelago, SW of Selvagem Grande; 30°05'N 15°55'W; depth 850 m; rectangular dredge; 21 Oct 1978.
- 3.076: S of Selvagens archipelago; 29°54'N 15°53'W; near surface (bottom at 3400 m); ring-trawl; 21 Oct 1978.
- 3.077: S of Selvagens archipelago; 29°54'N 15°53'W; depth 3400 m, clay; 2.4 m Agassiz trawl; 21 Oct 1978.
- 3.078: S of Selvagens archipelago; 29°53'N 15°53'W; depth 3400 m, clay; 2.4 m Agassiz trawl; 22 Oct 1978.
- 3.079: S of Selvagens archipelago; 29°53'N 15°52'W; near surface (bottom at 3400 m); ring-trawl; 22 Oct 1978.
- 3.080: Selvagens archipelago, S of Selvagem Pequena; 30°02'N 16°01'W;

- depth 65 m, fine gray sand with clay; van Veen grab; 22 Oct 1978.
- 3.081: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 91 m, nearly purely white, fine sand; van Veen grab; 22 Oct 1978.
- 3.082: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 104 m, fine white sand; van Veen grab; 22 Oct 1978.
- 3.083: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 192 m, fine white sand and shell gravel; van Veen grab; 22 Oct 1978.
- 3.084: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 190 m, nearly purely white sand; van Veen grab; 22 Oct 1978.
- 3.085: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 140-160 m; rectangular dredge; 22 Oct 1978.
- 3.086: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°00'W; depth 140-170 m; rectangular dredge; 22 Oct 1978.
- 3.087: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 322 m, white sand, shell gravel and calcareous algae; van Veen grab; 22 Oct 1978.
- 3.088: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 240 m, fine white sand and shell gravel; van Veen grab; 22 Oct 1978.
- 3.089: Selvagens archipelago, S of Selvagem Pequena; 30°00'N 16°01'W; depth 200-260 m; rectangular dredge; 22 Oct 1978.
- 3.090: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 250-300 m; rectangular dredge; 22 Oct 1978.
- 3.091: Selvagens archipelago, S of Selvagem Pequena; 30°01'N 16°01'W; depth 250-350 m; rectangular dredge; 22 Oct 1978.
- 3.093: Selvagens archipelago, S of Selvagem Pequena; 30°00'N 16°01'W; depth 500-600 m; rectangular dredge; 22 Oct 1978.
- 3.094: S of Selvagens archipelago; 29°54'N 15°52'W; depth 3350 m, clay; 2.4 m Agassiz trawl; 22 Oct 1978.
- 3.095: S of Selvagens archipelago; 29°54'N 15°52'W; surface (bottom at 3350 m); ring-trawl; 22 Oct 1978.
- 3.096: S of Selvagens archipelago; 29°54'N 15°52'W; depth about 3380 m, clay; 2.4 m Agassiz trawl; 23 Oct 1978.
- 3.097: S of Selvagens archipelago; 29°54'N 15°52'W; at surface (bottom at 3380 m); ring-trawl; 23 Oct 1978.
- 3.099: Selvagens archipelago, S of Selvagem Grande; 30°07'N 15°52'W; depth 585 m, fine sand; van Veen grab; 23 Oct 1978.
- 3.101: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°53'W; depth 650-670 m; rectangular dredge; 23 Oct 1978.
- 3.102: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°53'W; depth 600 m, fine, light sand and shell gravel; van Veen grab; 23 Oct 1978.

- 3.103: Selvagens archipelago, SW of Selvagem Grande; 30°07'N 15°53'W; depth 583 m, sand; van Veen grab; 23 Oct 1978.
- 3.105: S of Selvagens archipelago; 29°50'N 15°46'W; depth 3400-3550 m, deep-sea clay; 5 m beam-trawl; 24 Oct 1978.
- 3.106: off Western Sahara; 24°17'N 16°51'W; depth 1008 m, clay; van Veen grab; 26 Oct 1978.
- 3.107: off Western Sahara; 24°17'N 16°49'W; depth 1000-1100 m, mud with worm tubes and sponge spicules; 1.2 m Agassiz trawl; 26 Oct 1978.
- 3.108: off Western Sahara; 24°17'N 16°52'W; depth 1100-1150 m, mud and clay with sponge spicules; 5 m beam-trawl; 26 Oct 1978.
- 3.109: Mauritania, Baie du Lévrier; 20°49'N 17°01'W; depth 14 m, muddy sand with tube worms; van Veen grab; 27 Oct 1978.
- 3.110: off Mauritania; 20°21'N 17°14'W; depth 31 m, coarse shell sand; van Veen grab; 27 Oct 1978.
- 3.111: off Mauritania; 20°21'N 17°14'W; depth 30 m, shell sand with many small tellinids; Hamon grab; 27 Oct 1978.
- 3.112: off Mauritania; 20°20'N 17°15'W; depth 30 m, shell gravel (mainly *Venus* shells); triangular dredge; 27 Oct 1978.
- 3.113: off Mauritania; 20°18'N 17°30'W; depth 52 m, clayey sand with many *Pinna* fragments; van Veen grab; 27 Oct 1978.
- 3.114: off Mauritania; 20°21'N 17°30'W; depth 52 m, muddy sand with many worm tubes; triangular dredge; 27 Oct 1978.
- 3.115: off Mauritania; 20°21'N 17°41'W; depth 107 m, muddy sand; van Veen grab; 27 Oct 1978.
- 3.116: off Mauritania; 20°20'N 17°42'W; depth 105 m, muddy sand with crustaceans and tube worms; 1.2 m Agassiz trawl; 27 Oct 1978.
- 3.117: off Mauritania; 20°18'N 18°24'W; depth 2050-2300 m, muddy bottom, worm tubes; 2.4 m Agassiz trawl; 28 Oct 1978.
- 3.118: off Mauritania; 20°18'N 18°24'W; surface (bottom at 2100-2300 m), 04.30-07.50 hrs.; ring-trawl; 28 Oct 1978.
- 3.119: off Mauritania; 20°22'N 17°54'W; depth 1000 m; 5 m beam-trawl; 28 Oct 1978.
- 3.120: off Mauritania; 20°22'N 17°40'W; depth 200 m, sandy clay with shells and *Lanice* tubes; van Veen grab; 28 Oct 1978.
- 3.121: off Mauritania; 20°22'N 17°40'W; depth 210 m, sandy clay with shells and *Lanice* tubes; 2.4 m Agassiz trawl; 28 Oct 1978.
- 3.122: off Mauritania; 20°21'N 17°39'W; depth 100-150 m, muddy sand; 2.4 m Agassiz trawl; 28 Oct 1978.
- 3.123: off Mauritania; 20°21'N 17°40'W; depth 125 m, muddy sand with *Pinna* shells and worm tubes; van Veen grab; 28 Oct 1978.

- 3.124: off Mauritania; 19°00'N 16°24'W; depth 20 m, rather fine sand with *Chlamys* shells; van Veen grab; 29 Oct 1978.
- 3.125: off Mauritania; 19°00'N 16°24'W; depth 21 m, fine sand with many living *Chlamys*; 1.2 m Agassiz trawl; 29 Oct 1978.
- 3.126: off Mauritania; 19°00'N 16°24'W; depth 21 m; deep-sea camera 17x; 29 Oct 1978.
- 3.127: off Mauritania; 19°00'N 16°25'W; flotsam, mainly brown algae and seagrasses; hand-collecting; 29 Oct 1978.
- 3.128: off Mauritania; 18°57'N 16°30'W; depth 30 m, muddy sand with some shells and worm tubes; van Veen grab; 29 Oct 1978.
- 3.129: off Mauritania; 18°56'N 16°27'W; depth 32 m, muddy sand with shells; 1.2 m Agassiz trawl; 29 Oct 1978.
- 3.130: off Mauritania; 18°57'N 16°29'W; depth 33 m, muddy sand with shells; 5 m beam-trawl; 29 Oct 1978.
- 3.131: off Mauritania; 18°59'N 16°32'W; depth 54 m, muddy sand with shells; van Veen grab 5x; 29 Oct 1978.
- 3.132: off Mauritania; 18°58'N 16°32'W; depth 51 m, muddy sand with shells; 1.2 m Agassiz trawl; 29 Oct 1978.
- 3.133: off Mauritania; 18°59'N 16°37'W; depth 75 m, sandy mud with shells; van Veen grab; 29 Oct 1978.
- 3.134: off Mauritania; 18°59'N 16°36'W; depth 74 m, sandy mud with many shells; 2.4 m Agassiz trawl; 29 Oct 1978.
- 3.135: off Mauritania; 19°00'N 16°42'W; depth 103 m, muddy sand and shells with worm tubes; van Veen grab 5x; 29 Oct 1978.
- 3.136: off Mauritania; 18°59'N 16°43'W; depth 97 m, muddy sand with shells; 2.4 m Agassiz trawl; 29 Oct 1978.
- 3.137: off Mauritania; 18°58'N 16°48'W; depth 150 m, sandy mud with some shells; van Veen grab; 29 Oct 1978.
- 3.138: off Mauritania; 18°59'N 16°47'W; depth 150 m, sandy mud, and shells with crustaceans; 2.4 m Agassiz trawl; 29 Oct 1978.
- 3.139: off Mauritania; 18°59'N 16°47'W; surface (bottom at 150 m), 00.18-00.55 hrs.; ring-trawl; 30 Oct 1978.
- 3.140: off Mauritania; 18°59'N 16°50'W; depth 203 m, sandy clay with worm tubes and shells; van Veen grab; 30 Oct 1978.
- 3.141: off Mauritania; 18°58'N 16°50'W; depth 190 m, sandy mud with shells and crustaceans; 2.4 m Agassiz trawl; 30 Oct 1978.
- 3.142: off Mauritania; 18°58'N 16°50'W; surface (bottom at 190 m), 03.10-03.54 hrs.; ring-trawl; 30 Oct 1978.
- 3.143: off Mauritania; 18°59'N 16°51'W; depth 308 m, sandy clay with worm tubes and some shell gravel; van Veen grab; 30 Oct 1978.

- 3.144: off Mauritania; 19°03'N 16°50'W; depth 325 m, sandy clay with crustaceans and fishes; 2.4 m Agassiz trawl; 30 Oct 1978.
- 3.145: off Mauritania; 19°00'N 16°52'W; depth 530 m, clayey sand with some shell gravel; van Veen grab; 30 Oct 1978.
- 3.146: off Mauritania; 19°05'N 16°53'W; depth 550-680 m; 5 m beam-trawl; 30 Oct 1978.
- 3.147: off Mauritania; 19°00'N 16°52'W; depth 430 m; deep-sea camera 35x; 30 Oct 1978.
- 3.148: off Mauritania; 19°02'N 16°50'W; depth 190 m; deep-sea camera 30x; 30 Oct 1978.
- 3.149: off Mauritania; 19°01'N 16°38'W; depth 100 m; deep-sea camera 56x; 30 Oct 1978.
- 3.150: off Mauritania; 19°01'N 16°32'W; depth 50 m; deep-sea camera 43x; 30 Oct 1978.
- 3.151: off Mauritania; 19°20'N 16°54'W; depth 280-320 m, sand with some clay, calcareous stones; van Veen grab; 31 Oct 1978.
- 3.152: off Mauritania; 19°20'N 16°53'W; depth 220 m, sand with clay and shell gravel; van Veen grab; 31 Oct 1978.
- 3.153: off Mauritania; 19°19'N 16°52'W; depth 150 m, sand with clay and shell gravel; van Veen grab; 31 Oct 1978.
- 3.154: off Mauritania; 19°21'N 16°56'W; depth 200 m, sandy clay with worm tubes and shells; van Veen grab; 31 Oct 1978.
- 3.155: off Mauritania; 19°22'N 16°51'W; depth 100-300 m, sandy clay with shell gravel; van Veen grab; 31 Oct 1978.
- 3.156: off Mauritania; 19°20'N 16°49'W; depth 75 m, sandy clay with gorgonians and bryozoans; van Veen grab 5x; 31 Oct 1978.
- 3.157: off Mauritania; 19°21'N 16°49'W; depth 70 m; rectangular dredge; 31 Oct 1978.
- 3.158: off Mauritania; 19°22'N 16°51'W; depth 85 m, hard bottom with sponges and brown algae; 2.4 m Agassiz trawl; 31 Oct 1978.
- 3.159: off Mauritania; 19°21'N 16°47'W; depth 50 m, clayey sand with worm tubes and *Pinna* shells; van Veen grab 5x; 31 Oct 1978.
- 3.160: off Mauritania; 19°22'N 16°48'W; depth 60 m; 5 m beam-trawl; 31 Oct 1978.
- 3.161: off Mauritania; 19°25'N 16°48'W; depth 56 m; deep-sea camera; 31 Oct 1978.
- 3.162: off Mauritania; 19°25'N 16°50'W; depth 80 m, muddy sand with worm tubes and a few shells; 1.2 m Agassiz trawl; 31 Oct 1978.
- 3.163: off Mauritania; 19°25'N 16°50'W; depth 95 m, muddy sand with many worm tubes and shells; 1.2 m Agassiz trawl; 31 Oct 1978.

- 3.164: off Mauritania; 19°24'N 16°52'W; flotsam, mainly brown algae and seagrasses; hand-collecting; 31 Oct 1978.
- 3.166: off Mauritania; 19°22'N 16°54'W; depth 195-235 m, calcareous boulder; rectangular dredge; 31 Oct 1978.
- 3.167: off Mauritania; 19°21'N 16°55'W; depth 200 m, calcareous boulder; rectangular dredge; 31 Oct 1978.
- 3.168: off Mauritania; 19°21'N 16°55'W; depth 200 m, large calcareous boulder; rectangular dredge; 31 Oct 1978.
- 3.169: off Mauritania; 19°21'N 16°55'W; depth 225 m, four calcareous stones; rectangular dredge; 31 Oct 1978.
- 3.170: off Mauritania; 19°22'N 16°56'W; depth 200-300 m; rectangular dredge; 1 Nov 1978.
- 3.171: off Mauritania; 20°21'N 17°18'W; depth 33 m, sand with shell gravel; van Veen grab; 1 Nov 1978.
- 3.172: off Mauritania; 20°21'N 17°17'W; depth 34 m, sand with shell gravel; triangular dredge; 1 Nov 1978.
- 3.173: off Mauritania; 20°22'N 17°19'W; depth 35 m, sand with shell gravel and shells; 1.2 m Agassiz trawl; 1 Nov 1978.
- 3.174: off Mauritania; 20°23'N 17°07'W; depth 20 m, sand with shell gravel; van Veen grab 6x; 1 Nov 1978.
- 3.175: off Mauritania; 20°23'N 17°07'W; depth 20 m, sand and shell gravel with many shells; triangular dredge; 1 Nov 1978.
- 3.176: off Mauritania; 20°23'N 17°07'W; depth 20 m, calcareous sand; Hamon grab 2x; 1 Nov 1978.
- 3.177: off Mauritania; 20°24'N 17°07'W; depth 20 m; deep-sea camera; 1 Nov 1978.
- 3.178: off Mauritania; 20°23'N 17°04'W; depth 18.5 m, coarse sand with many *Venus verrucosa*; van Veen grab; 1 Nov 1978.
- 3.179: off Mauritania; 20°20'N 17°02'W; depth 13.5 m, coarse sand many shells (mainly *Venus*); van Veen grab; 1 Nov 1978.
- 3.180: off Mauritania; 20°22'N 17°02'W; depth 14.5 m, many shells and calcareous algae; 1.2 m Agassiz trawl; 1 Nov 1978.
- 3.181: off Mauritania; 20°21'N 17°02'W; depth 12.5 m, coarse sand with shells and red algae; van Veen grab; 1 Nov 1978.
- 3.182: off Mauritania; 20°21'N 17°02'W; depth 12 m, coarse sand with many shells; 1.2 m Agassiz trawl; 1 Nov 1978.
- 3.183: off Mauritania; 20°21'N 17°00'W; depth 10 m, coarse sand with many shells; triangular dredge; 1 Nov 1978.
- 3.184: off Mauritania; 20°20'N 17°08'W; depth 20 m, sand with many shells; 1.2 m Agassiz trawl; 1 Nov 1978.

- 3.185: off Mauritania; 20°22'N 17°11'W; depth 21 m, coarse sand with *Venus* shells; van Veen grab; 1 Nov 1978.
- 3.186: off Mauritania; 20°22'N 17°16'W; depth 30 m, muddy sand and shell gravel; van Veen grab 3x; 1 Nov 1978.
- 3.187: off Mauritania; 20°22'N 17°16'W; depth 28 m, *Branchiostoma* sand and shell gravel; 1.2 m Agassiz trawl; 1 Nov 1978.
- 3.188: off Mauritania; 20°21'N 17°20'W; depth 32 m, sand and shell gravel; van Veen grab; 1 Nov 1978.
- 3.189: off Mauritania; 20°20'N 17°23'W; depth 36 m, sand with some mud and shell gravel; van Veen grab; 1 Nov 1978.
- 3.190: off Mauritania; 20°20'N 17°28'W; depth 42 m, shell gravel; van Veen grab; 2 Nov 1978.
- 3.191: off Mauritania; 20°20'N 17°27'W; depth 42 m; 1.2 m Agassiz trawl; 2 Nov 1978.
- 3.192: off Mauritania; 20°20'N 17°29'W; depth 60 m, sand, clay and shell gravel; van Veen grab; 2 Nov 1978.
- 3.193: off Mauritania; 20°20'N 17°33'W; depth 62 m; deep-sea camera 50x; 2 Nov 1978.
- 3.194: off Mauritania; 20°20'N 17°37'W; depth 78 m, sand and clay with worm tubes; van Veen grab; 2 Nov 1978.
- 3.195: off Mauritania; 20°20'N 17°39'W; depth 80 m; deep-sea camera 50x; 2 Nov 1978.
- 3.196: off Mauritania; 20°20'N 17°43'W; depth 102 m; deep-sea camera 50x; 2 Nov 1978.
- 3.197: Mauritania, Baie du Lévrier; 20°52'N 16°00'W; depth 17 m, clay with many worm tubes; van Veen grab; 2 Nov 1978.

SCUBA DIVING STATIONS

- 3.D01: Madeira archipelago, E of Baixo, near Porto Santo; 33°00'N 16°23'W; depth to 15 m; scuba diving; 15 Oct 1978.
- 3.D02: Madeira archipelago, E of Baixo, near Porto Santo; 33°00'N 16°23'W; depth to 20 m; scuba diving; 16 Oct 1978.
- 3.D03: S coast of Madeira, W of Funchal harbour; 32°38'N 16°56'W; depth to 20 m; scuba diving; 17 Oct 1978.
- 3.D04: Madeira archipelago, W coast of Deserta Grande; 32°31'N 16°31'W; depth to 15 m; scuba diving; 18 Oct 1978.
- 3.D05: SE coast of Madeira, Caniçal; 32°44'N 16°44'W; rocky (sub-)littoral with rockpools, depth to 20 m; scuba diving; 19,20 Oct 1978.

- 3.D06: Selvagens archipelago, S coast of Selvagem Grande, small bay in Enseada das Cagarras; 30°08'N 15°52'W; depth 5 to 20 m; scuba diving; 21 Oct 1978.
- 3.D07: Selvagens archipelago, E coast of Selvagem Pequena; 30°02'N 16°01'W; rocky littoral with pools in bay, depth to 20 m; scuba diving; 22 Oct 1978.
- 3.D08: Selvagens archipelago, S coast of Selvagem Grande; 30°08'N 15°52'W; littoral, rock pools, bay, depth to 20 m; scuba diving; 23 Oct 1978.

TRAP STATIONS

- 3.V01: Madeira archipelago, S of Porto Santo; 33°01'N 16°21'W; depth 35 m; 2 baited shrimp-traps (1 m and 2 m); overnight 15/16 Oct 1978.
- 3.V02: Madeira archipelago, S of Porto Santo; 33°01'N 16°21'W; depth 135 m; 2 baited shrimp-traps (1 m and 2 m); overnight 15/16 Oct 1978.
- 3.V03: Madeira archipelago, near Deserta Grande; 32°31'N 16°31'W; depth 58 m; 2 baited shrimp-traps; overnight 18/19 Oct 1978.
- 3.V04: Madeira archipelago, near Deserta Grande; 32°29'N 16°31'W; depth 89 m; baited fish-trap and 2 shrimp-traps; overnight 19/20 Oct 1978.
- 3.V07: Selvagens archipelago, Selvagem Grande; 30°02'N 16°01'W; depth 94 m; 2 baited 2m shrimp-traps and 2 baited snail-traps; overnight 22/23 Oct 1978.
- 3.V08: Selvagens archipelago, Selvagem Grande; 30°01'N 16°01'W; depth 102 m; baited winged fish-trap; overnight 22/23 Oct 1978.
- 3.V09: off Mauritania; 20°21'N 17°42'W; depth 197 m; baited shrimp-traps (1 m and 2 m); overnight 27/28 Oct 1978.
- 3.V10: off Mauritania; 20°21'N 17°42'W; depth 176 m; baited winged fish-trap, 00.15-17.30 hrs; 28 Oct 1978.
- 3.V11: off Mauritania; 19°20'N 16°54'W; depth 170 m; baited shrimp-traps (1 m and 2 m) and 4 snail-traps, 00.20-18.30 hrs; 30 Oct 1978.
- 3.V12: off Mauritania; 19°20'N 16°54'W; depth 180 m; baited winged fish-trap, 01.00-19.00 hrs; 31 Oct 1978.

COASTAL STATIONS

- 3.K01: SE coast of Madeira, Caniçal; 32°44'N 16°44'W; rocky littoral, pools, shallow sub-littoral; 7,8,14 Oct 1978.

- 3.K02: S coast of Madeira, Funchal; 32°38'N 16°56'W; polluted rocky littoral, tidepools, crevices; 9,13 Oct 1978.
- 3.K03: S coast of Madeira, Funchal, W of harbour pier; 32°38'N 16°55'W; polluted rocky littoral, pools; 10,17 Oct 1978.
- 3.K04: NE coast of Madeira, Porto de Moniz; 32°52'N 17°10'W; coastal swimming pool; 11,12 Oct 1978.
- 3.K05: SE coast of Madeira, Ponto de São Lourenço; 32°44'N 16°42'W; rocky littoral, tidepools with sand; 16 Oct 1978.
- 3.K06: Canary Islands, E coast of Tenerife, San Andres; 28°30'N 16°11'W; boulder dam of harbour; 5 Nov 1978.
- 3.K07: Canary Islands, N coast of Tenerife, Bajamar; 28°34'N 16°21'W; exposed rock flat, pools, boulders near small harbour; 6 Nov 1978.
- 3.K08: Canary Islands, S coast of Tenerife, Galletas; 28°00'N 16°41'W; rocky littoral, rockflat, pools subtidal, sand; 8 Nov 1978.
- 3.K09: Canary Islands, S coast of Tenerife, El Médano; 28°02'N 16°32'W; rocky and sandy littoral in quiet, polluted bay; 9 Nov 1978.
- 3.K10: Madeira archipelago, W coast of Deserta Grande; 32°31'N 16°31'W; exposed rocky littoral; fishing with line and hook; 19 Oct 1978.
- 3.K11: S coast of Madeira, Funchal; 32°38'N 16°56'W; pebble beach; 13 Oct 1978.
- 3.K12: SE coast of Madeira, Ponta de São Lourenço, Prainha; 31°44'N 16°43'W; flotsam on beach; 7 Oct 1978.
- 3.K13: Mauritania, Nouadhibou; 20°54'N 17°03'W; quay, harbour piling; 2 Nov 1978.

COLLECTING TRIP TO THE AZORES IN 1979

- AZO.01. Azores, Santa Maria, S coast, Baia da Praia; 36°57'N 25°06'W; rocky flat with tide pools, on both sides bordered by sandy beach; shore-collecting; 13 Sept 1979.
- AZO.02. Azores, Santa Maria, S coast, Baia da Praia; 36°57'N 25°06'W; exposed shore with boulders; shore-collecting; 13 Sept 1979.
- AZO.03. Azores, Santa Maria, S coast, Baia da Praia; 36°57'N 25°06'W; rocky flat with tide pools, W of sandy beach; shore-collecting; 15 Sept 1979.
- AZO.04. Azores, Santa Maria, S coast, Baia da Praia; 36°57'N 25°06'W; sandy beach with shells and driftwood; shore-collecting; 13 Sept 1979.
- AZO.05. Azores, Santa Maria, E coast, Maia; 36°57'N 25°01'W; rocky flat with tide pools; shore-collecting; 14 Sept 1979.
- AZO.06. Azores, Santa Maria, SE coast, Ponta do Castelo, whaling-station;

- 36°56'N 25°01'W; rocky flat with tide pools and boulders; shore-collecting; 15 Sept 1979.
- AZO.07. Azores, Santa Maria, E coast, Baia de São Lourenço; 37°00'N 25°03'W; rocky flat with many holes and tide pools, surrounded by sandy beach, significant cover of algae (*Sargassum*, *Fucus*); shore-collecting; 16 Sept 1979.
- AZO.08. Azores, Santa Maria, NW coast, N of airport; 37°00'N 25°10'W; rocky flat with tide pools and coves with small boulder beaches, surrounded by steep cliffs; shore-collecting; 12,16 Sept 1979.
- AZO.09. Azores, São Miguel, S coast, Vila Franca; 37°43'N 25°26'W; sandy, polluted beach with rocks; shore-collecting; 19 Sept 1979.
- AZO.10. Azores, São Miguel, S coast, between Caloura and Vila Franca, slightly E of Praia; 37°43'N 25°28'W; rocky shore with deep tide pools; shore-collecting and snorkeling; 19 Sept 1979.
- AZO.11. Azores, São Miguel, S coast, Praia do Pópulo; 37°45'N 25°36'W; sandy beach; shore-collecting; 19,20 Sept 1979.
- AZO.12. Azores, São Miguel, W coast, Mosteiros; 37°53'N 25°50'W; fish auction; shore-collecting; 20 Sept 1979.
- AZO.13. Azores, São Miguel, W coast, Ponta dos Mosteiros; 37°54'N 25°50'W; protected basin surrounded by rocks, shallow parts with numerous stones and boulders, depth 0 to 3 m; shore-collecting and snorkeling; 20,25 Sept 1979.
- AZO.14. Azores, São Miguel, N coast, Maia; 37°53'N 25°23'W; natural harbour, protected on N side by rocky flat and on S and W sides by boulder-beaches; bottom of bay sandy with rocks and boulders; shore-collecting and snorkeling (along inner side of rocky flat); 21,26 Sept 1979.
- AZO.15. Azores, São Miguel, S coast, Ponta Delgada, immediately W of harbour; 37°44'N 25°41'W; rocky shore with tide pools, large boulders and gravel; shore-collecting; 22 Sept, 29 Oct 1979.
- AZO.16. Azores, São Miguel, S coast, slightly E of Ponta Delgada, Ponta de Rosto do Cão; 37°44'N 25°38'W; rocky shore with tide pools and large basin, protected by barrier with some narrow inlets, bottom with sand, rocky ledges, stones and boulders; shore-collecting and snorkeling; 23 Sept 1979.
- AZO.17. Azores, São Miguel, S coast, E of Praia do Pópulo, in front of church; 37°45'N 25°36'W; rocky flat with large tide pools, with few loose stones and boulders; shore-collecting and snorkeling; 24 Sept 1979.
- AZO.18. Azores, São Miguel, N coast, Ponta de Santa Bárbara; 37°53'N 25°43'W; very exposed rocky shore with big rocks and boulders (mainly in splash zone); upper part of intertidal zone; shore-collecting; 24 Sept 1979.

- AZO.19. Azores, Sao Miguel, S coast, Caloura, harbour; 37°42'N 25°31'W; rocky shore with gravel (on both sides of slip-way); shore-collecting; 27 Sept 1979.
- AZO.20. Azores, Sao Miguel, S coast, Ilhéu de Vila Franca; 37°42'N 25°27'W; submerged caldeira, connected with the sea by inlet and a few clefts; sandy bottom with stones, depth to about 4 m; shore-collecting and snorkeling; 28 Sept 1979.
- AZO.21. Azores, Terceira, E coast, Porto Martins, S side of bay, W of swimming pool; 38°41'N 27°03'W; rocky shore with loose stones and considerable growth of sponges and algae; shore-collecting; 30 Sept 1979.
- AZO.22. Azores, Terceira, S coast, W of Angra do Heroismo, between Baia de Vila Maria and São Mateus da Calheta; 38°39'N 27°15'W; rocky shore with large, protected pool and several smaller pools, all connected to the sea by crevices; considerable growth of algae; shore-collecting; 1 Oct 1979.
- AZO.23. Azores, Terceira, W coast, Ponta do Queimado, in front of lighthouse (farol); 38°46'N 27°23'W; extremely exposed, steep, rocky coast with some rock pools at about 10 m above sea level, with in- and outflow of splash water; shore-collecting (mainly in pools); 2 Oct 1979.
- AZO.24a. Azores, Terceira, E coast, Praia da Vitória, S part of northern beach; 38°43'N 27°04'W; sandy beach; shore-collecting; 2 Oct 1979.
- AZO.24b. Azores, Terceira, E coast, same locality; agglomeration of loose stones and boulders, on protected side of jetty; shore-collecting; 2 Oct 1979.
- AZO.25a. Azores, Terceira, Praia da Vitório, S part of southern beach; 38°42'N 27°03'W; sandy beach with shell gravel; shore-collecting; 2,4,6 Oct 1979.
- AZO.25b. Azores, Terceira, same locality; rocky shore with loose stones, boulders, sand and tide pools (just N of Forte de Santa Catarina); shore-collecting; 2,4,6 Oct 1979.
- AZO.26. Azores, Terceira, S coast, W of Angra do Heroismo, Porto Negrito, E side of little bay; 38°39'N 27°16'W; rocky shore with tide pools, loose stones, boulders, some muddy sediment and considerable growth of algae; shore-collecting; 3 Oct 1979.
- AZO.27. Azores, Terceira, E coast, between Porto Novo and Porto de São Fernando; 38°41'N 27°04'W; rocky shore with deep tide pools with sand, stones, and boulders; considerable growth of algae, especially on exposed side of rocks; shore-collecting and snorkeling; 5 Oct 1979.
- AZO.28. Azores, Faial, SW coast, Varadouro; 38°34'N 28°46'W; basaltic rocks, surrounding concrete swimming pool; shore-collecting; 7 Oct 1979.
- AZO.29. Azores, Faial, S coast, Horta, W side of Porto Pim; 38°31'N 28°38'W; sandy bottom with rocks, stones and boulders; shore-collecting; 8 Oct 1979.

- AZO.30. Azores, Faial, Fajã, Praia do Norte; 38°37'N 28°45'W; sandy beach with drift wood; shore-collecting; 7,9,18 Oct 1979.
- AZO.31. Azores, Faial, S coast, Horta, just W of Porto Pim; 38°31'N 28°38'W; rocky shore with stones, boulders and (chiefly sub-tidally) sand, depth to 3 m; shore-collecting and snorkeling; 9 Oct 1979.
- AZO.32. Azores, Faial, E coast, Horta, sea front, inside harbour; 38°32'N 28°38'W; sandy bottom with rocks and stones, depth to about 6 m; shore-collecting and snorkeling; 10,11 Oct 1979.
- AZO.33. Azores, Pico, S coast, Lages, harbour; 38°24'N 28°15'W; large, rocky tide flat and protected bay (harbour) with sand, loose rocks, boulders and stones (often cemented together by sponges); shore-collecting and snorkeling; 13,15 Oct 1979.
- AZO.34. Azores, Pico, S coast, just SW of Lages; 38°23'N 28°15'W; tide pools in rocky marsh protected by large boulders; shore-collecting; 14,17 Oct 1979.
- AZO.35. Azores, Pico, N coast, Cais de Pico; 38°31'N 28°19'W; rocky shore with pools (almost no loose stones) on both sides of the slipway of the whaling factory; shore-collecting; 16 Oct 1979.
- AZO.36. Azores, Pico, N coast, Cais de Pico; 38°31'N 28°19'W; ; shore-collecting and snorkeling; 16 Oct 1979.
- AZO.37a. Azores, Flores, SE coast, Porto das Lajes; 39°23'N 31°10'W; exposed rocky barrier with deep, more or less protected tide pools; bottom with boulders and coarse sand; considerable growth of algae; shore-collecting and snorkeling; 19,20,23,25 Oct 1979.
- AZO.37b. Azores, Flores, SE coast, same locality; harbour just N of pier; bottom with stones and boulders, depth 4-6 m; shore-collecting and snorkeling; 23 Oct 1979.
- AZO.38. Azores, Flores, W coast, Porto da Fajã Grande; 39°28'N 31°15'W; boulder beach with jetsam, mostly *Sargassum*; shore-collecting; 21,22 Oct 1979.
- AZO.39a. Azores, Flores, E coast, Santa Cruz, harbour; 39°27'N 31°07'W; bottom with stones and boulders; surrounding rocks and quay with crevices and holes, depth to about 6 m; snorkeling; 21 Oct 1979.
- AZO.39b. Azores, Flores, same locality, just N of harbour; rocky shore with tide pools and boulder beach; rather polluted with considerable growth of algae and *Vermetes*; shore-collecting; 21,24 Oct 1979.
- AZO.40. Azores, Flores, W coast, Porto da Fajã Grande, Ponta do Baixio; 39°27'N 31°16'W; large exposed inlet with turbulent water; bottom with loose stones and boulders, depth 1.5-3 m; shore-collecting and snorkeling; 22,23 Oct 1979.

**"TYDEMAN" SELVAGENS-CANARY ISLANDS EXPEDITION 1980
CANCAP-IV**

- 4.001: Canary Islands, S of Lanzarote; 28°51'N 13°48'W; depth 23 m, sand with shells; van Veen grab; 14 May 1980.
- 4.002: Canary Islands, S of Lanzarote; 28°50'N 13°49'W; depth 36 m, sand; van Veen grab 3x; 14 May 1980.
- 4.003: Canary Islands, S of Lanzarote; 28°50'N 13°48'W; depth 21-24 m; triangular dredge; 14 May 1980.
- 4.004: Canary Islands, S of Lanzarote; 28°50'N 13°48'W; depth 26-37 m, algae; triangular dredge; 14 May 1980.
- 4.005: Canary Islands, S of Lanzarote; 28°51'N 13°50'W; depth 20 m, calcareous sand; van Veen grab; 14 May 1980.
- 4.006: Canary Islands, S of Lanzarote; 28°50'N 13°50'W; depth 30 m, sand with calcareous algae; van Veen grab 3x; 14 May 1980.
- 4.007: Canary Islands, S of Lanzarote; 28°50'N 13°50'W; depth 25-36 m, red algae, including calcareous algae; triangular dredge; 14 May 1980.
- 4.009: Canary Islands, S of Lanzarote; 28°51'N 13°50'W; depth 28-31 m; van Veen grab 3x; 14 May 1980.
- 4.010: Canary Islands, S of Lanzarote; 28°50'N 13°51'W; depth 36-47 m, sand and calcareous algae; van Veen grab 3x; 14 May 1980.
- 4.011: Canary Islands, S of Lanzarote; 28°50'N 13°51'W; depth 49-52 m, calcareous algae; triangular dredge; 14 May 1980.
- 4.012: Canary Islands, S of Lanzarote; 28°51'N 13°51'W; depth 34-46 m; triangular dredge; 14 May 1980.
- 4.013: Canary Islands, S of Lanzarote; 28°51'N 13°51'W; depth 34-40 m, sand; van Veen grab 3x; 14 May 1980.
- 4.014: Canary Islands, S of Lanzarote; 28°51'N 13°52'W; depth 46-64 m, sand; van Veen grab 3x; 14 May 1980.
- 4.015: Canary Islands, S of Lanzarote; 28°51'N 13°52'W; depth 35-70 m, coarse sand and algae; triangular dredge; 14 May 1980.
- 4.016: Canary Islands, S of Lanzarote; 28°49'N 13°49'W; depth 36 m, shell sand and calcareous algae; van Veen grab 3x; 15 May 1980.
- 4.017: Canary Islands, S of Lanzarote; 28°49'N 13°49'W; depth 36 m, calcareous algae; triangular dredge; 15 May 1980.
- 4.018: Canary Islands, S of Lanzarote; 28°48'N 13°50'W; depth 37-40 m, coarse sand and calcareous algae; van Veen grab 3x; 15 May 1980.
- 4.019: Canary Islands, S of Lanzarote; 28°48'N 13°50'W; depth 37-40 m; triangular dredge 2x; 15 May 1980.
- 4.020: Canary Islands, S of Lanzarote; 28°49'N 13°48'W; depth 31-34 m, shell

- gravel and calcareous with algae; van Veen grab 2x; 15 May 1980.
- 4.021: Canary Islands, S of Lanzarote; 28°50'N 13°48'W; depth 24-34 m, calcareous algae with *Caulerpa*; triangular dredge; 15 May 1980.
- 4.022: Canary Islands, S of Lanzarote; 28°49'N 13°48'W; depth 37 m, fine shell gravel and calcareous algae; van Veen grab 2x; 15 May 1980.
- 4.023: Canary Islands, S of Lanzarote; 28°49'N 13°49'W; depth 38-40 m, calcareous algae; triangular dredge; 15 May 1980.
- 4.024: Canary Islands, S of Lanzarote; 28°48'N 13°49'W; depth 39 m, sand with calcareous algae; van Veen grab 3x; 15 May 1980.
- 4.025: Canary Islands, S of Lanzarote; 28°48'N 13°49'W; depth 36-37 m, calcareous algae; triangular dredge; 15 May 1980.
- 4.026: Canary Islands, S of Lanzarote; 28°48'N 13°49'W; depth 37-38 m, calcareous algae; rectangular dredge; 15 May 1980.
- 4.027: Canary Islands, S of Lanzarote; 28°49'N 13°47'W; depth 27-30 m, calcareous algae, shell gravel and sand; van Veen grab 2x; 15 May 1980.
- 4.028: Canary Islands, S of Lanzarote; 28°49'N 13°48'W; depth 32 m, algae and calcareous algae; rectangular dredge; 15 May 1980.
- 4.029: Canary Islands, S of Lanzarote; 28°48'N 13°48'W; depth 30-31 m, sand and shell gravel with calcareous algae; van Veen grab; 15 May 1980.
- 4.030: Canary Islands, S of Lanzarote; 28°49'N 13°48'W; depth 26-31 m, calcareous algae; rectangular dredge; 15 May 1980.
- 4.031: Canary Islands, S of Lanzarote; 28°48'N 13°44'W; depth 0-20 m (bottom at 800 m); midwater-trawl; 15 May 1980.
- 4.032: Canary Islands, S of Lanzarote; 28°48'N 13°37'W; depth 0 to about 1000 m (touched bottom accidentally); ring-trawl; 15/16 May 1980.
- 4.033: Canary Islands, S of Lanzarote; 28°48'N 13°39'W; depth 0 to about 100 m; ring-trawl; 16 May 1980.
- 4.034: Canary Islands, S of Lanzarote; 28°49'N 13°47'W; depth 33-34 m, coarse sand; van Veen grab; 16 May 1980.
- 4.035: Canary Islands, S of Lanzarote; 28°49'N 13°47'W; depth 29-33 m, calcareous algae and bryozoans; rectangular dredge; 16 May 1980.
- 4.036: Canary Islands, S of Lanzarote; 28°49'N 13°47'W; depth 33 m, sand and calcareous algae; van Veen grab 2x; 16 May 1980.
- 4.037: Canary Islands, S of Lanzarote; 28°49'N 13°47'W; depth 33 m; rectangular dredge; 16 May 1980.
- 4.038: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 82 m; van Veen grab; 16 May 1980.
- 4.039: Canary Islands, S of Lanzarote; 28°48'N 13°47'W; depth 70-50 m; rectangular dredge; 16 May 1980.
- 4.040: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 45-70 m;

- rectangular dredge; 16 May 1980.
- 4.041: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 120 m, fine sand with worm tubes; van Veen grab 2x; 16 May 1980.
- 4.042: Canary Islands, S of Lanzarote, 28°48'N 13°47'W; depth 100-50 m; rectangular dredge; 16 May 1980.
- 4.043: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 130-100 m; rectangular dredge; 16 May 1980.
- 4.044: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 150 m, corals; van Veen grab 2x; 16 May 1980.
- 4.045: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 170-130 m, algae and limestone; rectangular dredge; 16 May 1980.
- 4.047: Canary Islands, S of Lanzarote; 28°48'N 13°37'W; depth 0-800 m (bottom at 1080 m); ring-trawl; 17 May 1980.
- 4.048: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 215-325 m, sand and shell gravel; van Veen grab 2x; 17 May 1980.
- 4.049: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 313 m, sand, shells and shell gravel; van Veen grab; 17 May 1980.
- 4.050: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 200-250 m; rectangular dredge; 17 May 1980.
- 4.051: Canary Islands, S of Lanzarote; 28°48'N 13°45'W; depth 450 m; rectangular dredge; 17 May 1980.
- 4.053: Canary Islands, SE of Lanzarote; 28°43'N 13°23'W; depth 1334-1352 m, yellowish clay; 3.5 m Agassiz trawl; 17/18 May 1980.
- 4.054: Canary Islands, SE of Lanzarote; 28°45'N 13°19'W; depth 1134-1315 m, fine yellow clay; 3.5 m Agassiz trawl; 18 May 1980.
- 4.055: Canary Islands, SE of Lanzarote; 28°45'N 13°20'W; depth 1209-1338 m, fine yellowish clay; 3.5 m Agassiz trawl; 18 May 1980.
- 4.056: Canary Islands, SE of Lanzarote; 28°47'N 13°22'W; depth 1306-1345 m, fine yellow-brown clay; 3.5 m Agassiz trawl; 18 May 1980.
- 4.057: Canary Islands, SE of Lanzarote; 28°47'N 13°24'W; depth 1300-1335 m, fine yellow clay; 3.5 m Agassiz trawl; 19 May 1980.
- 4.058: Canary Islands, SE of Lanzarote; 28°48'N 13°45'W; depth 509 m, yellow sand with some clay; van Veen grab; 19 May 1980.
- 4.059: Canary Islands, SE of Lanzarote; 28°48'N 13°45'W; depth 420-475 m, sandy bottom; 1.2 m Agassiz trawl; 19 May 1980.
- 4.060: Canary Islands, SE of Lanzarote; 28°48'N 13°45'W; depth 580-600 m, yellow clayey sand; van Veen grab; 19 May 1980.
- 4.061: Canary Islands, SE of Lanzarote; 28°48'N 13°45'W; depth 620-650 m, clayey sand; 1.2 m Agassiz trawl; 19 May 1980.
- 4.062: Canary Islands, SE of Lanzarote; 28°48'N 13°43'W; depth 820 m, sandy

- clay; van Veen grab; 19 May 1980.
- 4.063: Canary Islands, SE of Lanzarote; 28°49'N 13°42'W; depth 870-880 m, sandy clay; 2.4 m Agassiz trawl; 19 May 1980.
- 4.064: Canary Islands, SE of Lanzarote; 28°47'N 13°41'W; depth 1030 m, sandy clay; van Veen grab; 20 May 1980.
- 4.066: Canary Islands, SE of Lanzarote; 28°50'N 13°37'W; depth 1030-1070 m; 2.4 m Agassiz trawl; 20 May 1980.
- 4.067: Canary Islands, SE of Lanzarote; 28°56'N 13°34'W; depth 47-50 m, fine sand with shell gravel; van Veen grab 3x; 20 May 1980.
- 4.068: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 74-95 m, sand with shell gravel; van Veen grab; 20 May 1980.
- 4.069: Canary Islands, SE of Lanzarote; 28°55'N 13°32'W; depth 109-116 m, sand with grey-yellow clay; van Veen grab; 20 May 1980.
- 4.070: Canary Islands, SE of Lanzarote; 28°56'N 13°33'W; depth 41-50 m, sand with yellow-grey clay with red algae; triangular dredge; 20 May 1980.
- 4.071: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 70-80 m, sand and calcareous algae; triangular dredge; 20 May 1980.
- 4.072: Canary Islands, SE of Lanzarote; 28°56'N 13°33'W; depth 42-60 m, many algae; 1.2 m Agassiz trawl; 20 May 1980.
- 4.073: Canary Islands, SE of Lanzarote; 28°57'N 13°33'W; depth 48 m, coarse sand; Hamon grab; 20 May 1980.
- 4.074: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 85-110 m, sand; 1.2 m Agassiz trawl; 20 May 1980.
- 4.075: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 160 m, sand with shell gravel; van Veen grab; 20 May 1980.
- 4.076: Canary Islands, SE of Lanzarote; 28°46'N 13°37'W; depth 1110-1150 m, soft bottom; 2.4 m Agassiz trawl; 20 May 1980.
- 4.077: Canary Islands, SE of Lanzarote; 28°47'N 13°37'W; depth 1085 m, clay; van Veen grab; 21 May 1980.
- 4.078: Canary Islands, SE of Lanzarote; 28°46'N 13°33'W; depth 1215-1223 m, yellow clay; 2.4 m Agassiz trawl; 21 May 1980.
- 4.079: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 160-180 m; 1.2 m Agassiz trawl; 21 May 1980.
- 4.080: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 200-220 m, shell gravel, sand and some clay; Hamon grab and van Veen grab; 21 May 1980.
- 4.081: Canary Islands, SE of Lanzarote; 28°55'N 13°33'W; depth 200-300 m; 1.2 m Agassiz trawl; 21 May 1980.
- 4.082: Canary Islands, SE of Lanzarote; 28°54'N 13°33'W; depth 450-480 m, sand and volcanic ash with shell gravel; van Veen grab; 21 May 1980.

- 4.083: Canary Islands, SE of Lanzarote; 28°54'N 13°33'W; depth 400-500 m, hard bottom with sponges; rectangular dredge; 21 May 1980.
- 4.084: Canary Islands, SE of Lanzarote; 28°54'N 13°33'W; depth about 500 m, sponges; rectangular dredge; 21 May 1980.
- 4.085: Canary Islands, SE of Lanzarote; 28°54'N 13°33'W; depth about 500 m; rectangular dredge; 21 May 1980.
- 4.086: Canary Islands, SE of Lanzarote; 28°54'N 13°33'W; depth about 785 m, fine sand, mainly pteropods; van Veen grab 2x; 22 May 1980.
- 4.087: Canary Islands, SE of Lanzarote; 28°53'N 13°33'W; depth 700-900 m, yellow-brown mud; 1.2 m Agassiz trawl; 22 May 1980.
- 4.088: Canary Islands, E of Lanzarote; 29°08'N 13°26'W; depth 51 m, coarse sand; Hamon grab; 22 May 1980.
- 4.089: Canary Islands, E of Lanzarote; 29°08'N 13°26'W; depth 45 m, coarse sand with green and red algae; triangular dredge; 22 May 1980.
- 4.090: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth 65 m, fine sand; Hamon grab; 22 May 1980.
- 4.091: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth 55-82 m, coarse sand and brown algae; triangular dredge; 22 May 1980.
- 4.092: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth 92 m, coarse yellowish sand; van Veen grab; 22 May 1980.
- 4.093: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth 100-130 m; triangular dredge; 22 May 1980.
- 4.095: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth about 130 m; rectangular dredge; 22 May 1980.
- 4.096: Canary Islands, E of Lanzarote; 29°08'N 13°25'W; depth 125 m; rectangular dredge; 22 May 1980.
- 4.097: Canary Islands, E of Lanzarote; 29°08'N 13°26'W; depth 50-60 m; 1.2 m Agassiz trawl; 22 May 1980.
- 4.098: Canary Islands, E of Lanzarote; 29°08'N 13°26'W; depth 50-70 m; 1.2 m Agassiz trawl; 22 May 1980.
- 4.099: Canary Islands, E of Lanzarote; 29°07'N 13°27'W; depth 175-200 m; rectangular dredge; 22 May 1980.
- 4.100: Canary Islands, E of Lanzarote; 29°07'N 13°26'W; depth 350-250 m; rectangular dredge; 22 May 1980.
- 4.101: Canary Islands, E of Lanzarote; 29°06'N 13°26'W; depth 308-330 m, brown clay; van Veen grab 2x; 22 May 1980.
- 4.102: Canary Islands, E of Lanzarote; 29°08'N 13°19'W; depth 1290 m; 2.4 m Agassiz trawl; 23 May 1980.
- 4.103: Selvagens archipelago, 30°01'N 16°01'W; depth 425 m, yellowish fine sand and shell gravel; van Veen grab 2x; 26 May 1980.

- 4.104: Selvagens archipelago; 30°01'N 16°01'W; depth 524 m, yellowish sand; van Veen grab; 26 May 1980.
- 4.107: Selvagens archipelago; 30°03'N 15°52'W; depth 2100-2500 m; 2.4 m Agassiz trawl; 26/27 May 1980.
- 4.108: Selvagens archipelago; 29°58'N 15°55'W; depth 2600-2700 m; 2.4 m Agassiz trawl; 27 May 1980.
- 4.110: Canary Islands, S of Palma; 28°27'N 17°51'W; depth 110-180 m, gravel; van Veen grab; 28 May 1980.
- 4.111: Canary Islands, S of Palma; 28°27'N 17°51'W; depth 133 m, gravel; van Veen grab; 28 May 1980.
- 4.112: Canary Islands, S of Palma; 28°27'N 17°51'W; depth 245-141 m; van Veen grab 2x; 28 May 1980.
- 4.114: Canary Islands, S of Palma; 28°27'N 17°51'W; depth about 200 m; van Veen grab; 28 May 1980.
- 4.115: Canary Islands, S of Palma; 28°27'N 17°51'W; depth 300 m, gravel; van Veen grab; 28 May 1980.
- 4.116: Canary Islands, S of Palma; 28°26'N 17°51'W; depth 420 m, gravel, sand and shells; van Veen grab; 28 May 1980.
- 4.117: Canary Islands, S of Palma; 28°26'N 17°51'W; depth 503 m, gravel, sand and shells; van Veen grab; 28 May 1980.
- 4.118: Canary Islands, S of Palma; 28°27'N 17°51'W; depth 410-430 m; rectangular dredge; 28 May 1980.
- 4.120: Canary Islands, SW of Palma; 28°28'N 18°16'W; depth 3250-3230 m; 2.4 m Agassiz trawl; 28/29 May 1980.
- 4.123: Canary Islands, S of Palma; 28°30'N 17°53'W; depth 600-500 m; rectangular dredge; 29 May 1980.
- 4.124: Canary Islands, S of Palma; 28°29'N 17°53'W; depth 800 m; van Veen grab; 29 May 1980.
- 4.126: Canary Islands, SW of Palma; 28°28'N 18°18'W; depth 3300-3590 m, yellow-grey deep-sea clay; 3.5 m Agassiz trawl; 29/30 May 1980.
- 4.128: Canary Islands, S of Palma; 28°32'N 17°55'W; depth 1000 m, sand; van Veen grab; 30 May 1980.
- 4.129: Canary Islands, S of Palma; 28°32'N 17°55'W; depth 1000 m, sand; van Veen grab; 30 May 1980.
- 4.130: Canary Islands, S of Palma; 28°33'N 17°55'W; vertical haul from 750 m; ring-trawl; 30 May 1980.
- 4.131: Canary Islands, S of Palma; 28°33'N 17°55'W; at surface; neuston-net (30 min.); 30 May 1980.
- 4.132: Canary Islands, SW of Palma; 28°30'N 18°16'W; depth 3360 m, clay bottom with some gravel; 3.5 m Agassiz trawl; 30 May 1980.

- 4.133: Canary Islands, S of Palma; 28°33'N 17°56'W; depth 800-900 m; rectangular dredge; 31 May 1980.
- 4.135: Canary Islands, SW of Palma; 28°27'N 18°27'W; depth about 4000 m, silt; 5 m beam-trawl; 1 June 1980.
- 4.136: Canary Islands, SW of Palma; 28°29'N 18°27'W; depth about 3950 m, yellow mud, Foraminifera; 5 m beam-trawl; 1/2 June 1980.
- 4.137: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 50 m, fine sand; van Veen grab; 2 June 1980.
- 4.138: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 75 m, fine sand; van Veen grab; 2 June 1980.
- 4.139: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 100 m, muddy black sand and shell gravel; van Veen grab; 2 June 1980.
- 4.140: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 50 m, coarse, muddy black sand with shell gravel; Hamon grab; 2 June 1980.
- 4.141: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 75 m, sand with shells; Hamon grab; 2 June 1980.
- 4.142: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 100 m, clay and gravel; Hamon grab; 2 June 1980.
- 4.143: Canary Islands, SW of Palma; 28°38'N 17°58'W; depth 110-86 m, muddy bottom with oysters; rectangular dredge; 2 June 1980.
- 4.144: Canary Islands, SW of Palma; 28°38'N 17°59'W; depth 200-140 m; rectangular dredge; 2 June 1980.
- 4.145: Canary Islands, SW of Palma; 28°39'N 17°59'W; depth 160 m, clayey sand with shell gravel; van Veen grab; 2 June 1980.
- 4.147: Canary Islands, SW of Palma; 28°33'N 18°12'W; depth 2900-3000 m, muddy bottom; 3.5 m Agassiz trawl; 2/3 June 1980.
- 4.148: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 60-80 m, muddy sand; rectangular dredge; 3 June 1980.
- 4.150: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 90-50 m; 1.2 m Agassiz trawl; 3 June 1980.
- 4.151: Canary Islands, SW of Palma; 28°39'N 17°58'W; depth 150-50 m; 1.2 m Agassiz trawl; 3 June 1980.
- 4.152: Canary Islands, SW of Palma; 28°38'N 17°59'W; depth 180-120 m, old fish traps with lines; 1.2 m Agassiz trawl; 3 June 1980.
- 4.153: Canary Islands, SW of Palma; 28°38'N 17°59'W; depth 200 m; 1.2 m Agassiz trawl; 3 June 1980.
- 4.154: Canary Islands, W of Palma; 28°37'N 18°15'W; depth 3050-3300 m, deep-sea clay; 5 m beam-trawl; 3 June 1980.
- 4.155: Canary Islands, SW of Palma; 28°38'N 17°58'W; depth 240 m, sandy clay and shell gravel; van Veen grab 2x; 4 June 1980.

- 4.156: Canary Islands, SW of Palma; 28°39'N 17°59'W; depth 310 m; van Veen grab 2x; 4 June 1980.
- 4.157: Canary Islands, SW of Palma; 28°39'N 17°59'W; depth 250-200 m, black mud and shell gravel; rectangular dredge; 4 June 1980.
- 4.158: Canary Islands, SW of Palma; 28°39'N 17°59'W; depth 350-250 m, black mud and sand; rectangular dredge; 4 June 1980.
- 4.159: Canary Islands, SW of Palma; 28°40'N 17°59'W; depth 400 m, muddy sand; van Veen grab; 4 June 1980.
- 4.160: Canary Islands, SW of Palma; 28°40'N 18°00'W; 500 m, black-blue sandy mud; van Veen grab; 4 June 1980.
- 4.161: Canary Islands, W of Palma; 28°38'N 18°07'W; depth 2140-2300 m; 3.5 m Agassiz trawl; 4/5 June 1980.
- 4.162: Canary Islands, SW of Palma; 28°38'N 17°59'W; depth 400-325 m, hard bottom; rectangular dredge; 5 June 1980.
- 4.163: Canary Islands, SW of Palma; 28°38'N 17°58'W; depth 450-375 m; rectangular dredge; 5 June 1980.
- 4.164: Selvagens archipelago; 30°07'N 15°53'W; depth 500-400 m; rectangular dredge; 6 June 1980.
- 4.166: Selvagens archipelago; 29°48'N 15°56'W; depth 3427-3570 m, deep-sea clay; 3.5 m Agassiz trawl; 6 June 1980.
- 4.173: Madeira archipelago, Porto Santo; 33°01'N 16°22'W; depth 25-40 m, rocks and shells; triangular dredge; 9 June 1980.
- 4.174: Madeira archipelago, Porto Santo; 33°02'N 16°22'W; depth 25-50 m, coarse sand with algae; 1.2 m Agassiz trawl 3x; 9 June 1980.
- 4.175: Madeira archipelago, Porto Santo; 33°01'N 16°20'W; depth 75-125 m, sandy bottom with oysters; triangular dredge 2x; 9 June 1980.
- 4.176: Madeira archipelago, Porto Santo; 33°02'N 16°21'W; depth 75 m; triangular dredge; 9 June 1980.
- 4.180: Madeira archipelago, Porto Santo; 32°48'N 16°18'W; depth 3315-3499 m, yellow deep-sea clay, silt and sand; 5 m beam-trawl; 9/10 June 1980.
- 4.182: Madeira archipelago, Porto Santo; 33°01'N 16°20'W; depth 70-40 m; triangular dredge; 10 June 1980.
- 4.183: Madeira archipelago, Porto Santo; 33°01'N 16°20'W; depth about 70 m; triangular dredge; 10 June 1980.
- 4.184: Madeira archipelago, Porto Santo; 33°01'N 16°20'W; depth 70-100 m; triangular dredge; 10 June 1980.
- 4.185: Madeira archipelago, Porto Santo; 33°01'N 16°22'W; depth 100-120 m; triangular dredge; 10 June 1980.

SCUBA DIVING STATIONS

- 4.D01: Canary Islands, S coast of Lanzarote, W of Punta Papagayo; 28°50'N 13°47'W; suba diving and shore collecting in sheltered bay, depth to 15 m; 14/19 May 1980.
- 4.D02: Canary Islands, S coast of Lanzarote, E of Punta Papagayo; 28°51'N 13°47'W; exposed rocky coast, depth to 15 m; scuba diving; 19 May 1980.
- 4.D03: Canary Islands, SE coast of Lanzarote, Arrecife; 28°57'N 13°33'W; rocky and sandy coast, depth to 15 m; scuba diving; 20,21 May 1980.
- 4.D04: Canary Islands, E coast of Lanzarote, Rada de Arrieta; 29°09'N 13°26'W; rocky and sandy coast, depth to 15 m; scuba diving; 22 May 1980.
- 4.D05: Canary Islands, E coast of Lanzarote, Cueva de los Verdes; 29°10'N 13°25'W; steep rocky coast, depth to 15 m; scuba diving; 22 May 1980.
- 4.D06: S coast of Madeira, W of Funchal; 32°41'N 16°56'W; rocky coast, depth to 15 m; scuba diving; 25 May 1980.
- 4.D07: Selvagens archipelago, S coast of Selvagem Pequena; 30°02'N 16°01'W; exposed rocky coast, depth 10 to 20 m; scuba diving; 26 May 1980.
- 4.D08: Selvagens archipelago, Selvagem Grande, Enseada das Cagarras; 30°08'N 15°52'W; rocky coast, sheltered bay, depth to 15 m; scuba diving; 27 May and 6 June 1980.
- 4.D09: Canary Islands, S coast of La Palma, Punta Malpique; 28°27'N 17°51'W; exposed rocky coast, depth to 20 m; scuba diving; 28 May 1980.
- 4.D10: Canary Islands, SW coast of La Palma, Punta del Hombre; 28°30'N 17°53'W; rocky coast, depth to 15 m; scuba diving; 29 May 1980.
- 4.D11: Canary Islands, SW coast of La Palma, Puerto de Naos; 28°35'N 17°55'W; rocky and sandy coast, depth to 15 m; scuba diving; 30,31 May 1980.
- 4.D12: Canary Islands, W coast of La Palma, Punta del Moro; 28°38'N 17°56'W; rocky and sandy coast, depth to 15 m; scuba diving; 2 June 1980.
- 4.D13: Canary Islands, W coast of La Palma, N of Puerto de Naos; 28°36'N 17°55'W; steep rocky coast, depth to 15 m; scuba diving; 3 June 1980.
- 4.D14: Canary Islands, W coast of La Palma, Tijarafe; 28°42'N 17°58'W; bay in rocky coast, depth to 20 m; scuba diving; 4,5 June 1980.
- 4.D15: Selvagens archipelago, Selvagem Grande, Enseada Fonte das Galinhas; 30°08'N 15°52'W; exposed rocky coast, depth to 15 m; scuba diving; 6 June 1980.
- 4.D16: Madeira archipelago, Porto Santo, E coast of Baixo; 33°00'N 16°23'W; rocky coast, depth 5 to 20 m; scuba diving; 9 June 1980.
- 4.D17: Madeira archipelago, Porto Santo, SE coast of Baixo; 33°00'N 16°23'W; exposed rocky coast, depth 5 to 20 m; scuba diving; 9,10 June 1980.

TRAP STATIONS

- 4.V01: Canary Islands, S of Lanzarote; 28°51'N 13°50'W; depth 25 m; fish-trap; overnight 13/14 May 1980.
- 4.V02: Canary Islands, S of Lanzarote; 28°51'N 13°50'W; depth 25 m; 3 shrimp-traps; overnight 13/14 May 1980.
- 4.V03: Canary Islands, S of Lanzarote; 28°50'N 13°47'W; depth 160 m; 2 shrimp-traps, 2 plastic snail-traps; overnight 15/16 May 1980.
- 4.V04: Canary Islands, S of Lanzarote; 28°50'N 13°46'W; depth 175 m; fish-trap; overnight 15/16 May 1980.
- 4.V05: Canary Islands, S of Lanzarote; 28°48'N 13°46'W; depth 225 m; 2 shrimp-traps, 2 plastic snail-traps; overnight 16/17 May 1980.
- 4.V06: Canary Islands, S of Lanzarote; 28°47'N 13°46'W; depth 280 m; fish-trap; overnight 16/17 May 1980.
- 4.V07: Selvagens archipelago, S of Selvagem Grande; 30°07'N 15°53'W; depth 270 m; fish-trap; overnight 26/27 May 1980.
- 4.V08: Selvagens archipelago, S of Selvagem Grande; 30°07'N 15°53'W; depth 260 m; fish-trap, shrimp-trap, 4 plastic snail-traps; overnight 26/27 May 1980.
- 4.V10: Canary Islands, S of La Palma; 28°27'N 17°51'W; depth 280 m; fish-trap; overnight 29/30 May 1980.
- 4.V12: Canary Islands, W of La Palma; 28°38'N 17°58'W; depth 250 m; 2 fish-traps, 4 plastic snail-traps; overnight 2/3 June 1980.
- 4.V13: Canary Islands, W of La Palma; 28°39'N 17°58'W; depth 200 m; fish-trap; overnight 2/3 June 1980.
- 4.V14: Canary Islands, W of La Palma; 28°39'N 17°59'W; depth 290 m; fish-trap; overnight 4/5 June 1980.
- 4.V15: Canary Islands, W of La Palma; 28°39'N 17°59'W; depth 290 m; 2 shrimp-traps, lobster-trap; overnight 4/5 June 1980.
- 4.V16: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 300 m; fish-trap; overnight 9/10 June 1980.
- 4.V17: Madeira archipelago, S of Porto Santo; 33°01'N 16°20'W; depth 300 m; 2 shrimp-traps, lobster-trap; overnight 9/10 June 1980.

COASTAL STATIONS

- 4.K01: Canary Islands, N coast of Gran Canaria, Las Palmas, Playa de las Canteras; 28°09'N 15°26'W; rocky areas, sandy lagoon, depth 0-5 m; 28/30 Apr and 1,9 May 1980.

- 4.K02: Canary Islands, N coast of Gran Canaria, Las Palmas, N side of Playa de las Canteras; 28°09'N 15°26'W; rocks, muddy polluted littoral; 29 Apr and 2,9,11 May 1980.
- 4.K03: Canary Islands, N coast of Gran Canaria, Las Palmas, Playa de las Canteras; 28°09'N 15°26'W; rocky barrier with tide pools; 2,9 May 1980.
- 4.K04: Canary Islands, S coast of Gran Canaria, Maspalomas; 27°44'N 15°35'W; sandy beach, 3,10 May 1980.
- 4.K05: Canary Islands, S coast of Gran Canaria, El Oasis; 27°44'N 15°36'W; rocky littoral; 3 May 1980.
- 4.K06: Canary Islands, E coast of Gran Canaria, Arinaga; 27°51'N 15°24'W; rocks, tide pools, sandy bay, seagrass, depth 0-5 m; 4 May 1980.
- 4.K07: Canary Islands, N coast of Gran Canaria near Guia; 28°10'N 15°38'W; rockflat, tide pools; 5 May 1980.
- 4.K08: Canary Islands, N coast of Gran Canaria near Guia; 28°10'N 15°38'W; rockflat, tide pools; 5 May 1980.
- 4.K09: Canary Islands, S coast of Gran Canaria, Arguineguin; 27°45'N 15°40'W; stones, boulders on beach, polluted littoral; 6,10 May 1980.
- 4.K10: Canary Islands, NW coast of Gran Canaria, Puerto de las Nieves; 28°06'N 15°42'W; rocky shore, boulders, rock pools; 7 May 1980.
- 4.K11: Canary Islands, NW coast of Gran Canaria, Puerto de las Nieves; 28°06'N 15°42'W; submerged rock barrier, depth 0-8 m; 7 May 1980.
- 4.K12: Canary Islands, SE coast of Lanzarote, Arrecife; 28°57'N 13°33'W; rocky shore, tide pools, shallow sandy bay, depth 0-2 m; 20,21 May 1980.
- 4.K13: Canary Islands, E coast of Lanzarote, Rada de Arrieta; 29°09'N 13°25'W; rocky shore with tide flat and pools, depth 0-4 m; 22 May 1980.
- 4.K14: Madeira archipelago, S coast of Madeira, Funchal harbour; 32°41'N 16°55'W; polluted littoral, large bare rocks; 24 May 1980.
- 4.K15: Madeira archipelago, S coast of Madeira, Funchal harbour; 32°41'N 16°55'W; outer side of pier, littoral with large boulders; 24 May 1980.
- 4.K16: Madeira archipelago, S coast of Madeira, Funchal; 32°41'N 16°57'W; polluted littoral, rocky-sandy flat with silt; 24 May 1980.
- 4.K17: Selvagens archipelago, S coast of Selvagem Pequena; 30°02'N 16°01'W; rocky shore, rock flat, tide pools, shallow bay, depth 0-3 m; 26 May 1980.
- 4.K18: Canary Islands, SW coast of La Palma, Punta Malpique; 28°27'N 17°53'W; exposed, rather bare rocky shore; 28 May 1980.
- 4.K19: Canary Islands, SW coast of La Palma, Punta del Hombre; 28°30'N 17°53'W; exposed rockflat, pools, sandy bay, depth 0-3 m; 29 May 1980.
- 4.K20: Canary Islands, SW coast of La Palma, Puerto de Naos; 28°35'N 17°55'W; rocky littoral, boulders, lava gravel beach; 30,31 May 1980.

- 4.K21: Canary Islands, SW coast of La Palma, Punta del Moro; 28°38'N 17°56'W; bare rocky littoral and lava gravel beach; 2 June 1980.
- 4.K22: Canary Islands, W coast of La Palma, N of Puerto de Naos; 28°36'N 17°55'W; rocky littoral, pools with rich growth of algae; 3 June 1980.
- 4.K23: Canary Islands, W coast of La Palma, Tijarafe; 28°42'N 17°58'W; steep rocky shore in large open cave, depth 0-3 m; 4,5 June 1980.
- 4.K24: Selvagens archipelago, Selvagem Grande, Enseada das Cagarras; 30°08'N 15°52'W; rocky shore, pools, bay, depth 0-7 m; 27 May and 6 June 1980.
- 4.K25: Selvagens archipelago, Selvagem Grande, Enseada da Fonte das Galinhas; 30°08'N 15°52'W; rocky shore in bay, depth 0-6 m; 1-6 June 1980.
- 4.K26: Madeira archipelago, Porto Santo, SW coast of Baixo; 33°00'N 16°23'W; rocky coast, tide pools, shallow bay, many algae, depth 0-3 m; 9 June 1980.
- 4.K27: Madeira archipelago, S coast of Porto Santo; 33°01'N 16°22'W; sandy beach; 10 June 1980.
- 4.K28: Selvagens archipelago, Selvagem Grande, Enseada da Fonte das Galinhas; 30°08'N 15°52'W; rocky shore, pools, depth 0-6 m; 3,6 June 1980.
- 4.K29: Selvagens archipelago, S coast of Selvagem Grande; 30°08'N 15°51'W; bay with rocky shore, deep tide pools; 2 June 1980.

**“TYDEMAN” AZORES EXPEDITION 1981
CANCAP-V**

- 5.001: Azores, NE of São Miguel; 38°10'N 24°52'W; depth 2950-3150 m, deep-sea clay, much pumice; 2.4 m Agassiz trawl; 23 May 1981.
- 5.002: Azores, NE of São Miguel; 38°10'N 24°52'W; at surface, neuston and plankton; dip-net; 23 May 1981.
- 5.003: Azores, NE of São Miguel; 38°03'N 24°45'W; depth 2730-2850 m, deep-sea clay; 3.5 m Agassiz trawl; 24 May 1981.
- 5.004: Azores, NE of São Miguel; 38°06'N 24°49'W; depth 2400-3100 m, deep-sea clay with much pumice; 5 m beam-trawl; 24 May 1981.
- 5.005: Azores, NE of São Miguel; 37°55'N 24°46'W; depth 1650-2050 m, deep-sea clay with pumice and clinkers; 2.4 m Agassiz trawl; 24 May 1981.
- 5.006: Azores, S of São Miguel; 37°42'N 25°30'W; depth 35 m, fine sand, mainly calcareous; van Veen grab; 26 May 1981.
- 5.007: Azores, S of São Miguel; 37°42'N 25°30'W; depth 50 m, fine sand, mainly calcareous; van Veen grab; 26 May 1981.
- 5.008: Azores, S of São Miguel; 37°42'N 25°30'W; depth 75 m, fine sand with

- much shell gravel; van Veen grab; 26 May 1981.
- 5.009: Azores, S of São Miguel; 37°41'N 25°30'W; depth 110 m, muddy calcareous sand with shells; van Veen grab; 26 May 1981.
- 5.010: Azores, S of São Miguel; 37°41'N 25°31'W; depth 150 m, coarse sand, gravel and calcareous stones; van Veen grab; 26 May 1981.
- 5.011: Azores, S of São Miguel; 37°41'N 25°31'W; depth 220-290 m, clayey coarse sand with pumice and shells; van Veen grab; 26 May 1981.
- 5.012: Azores, S of São Miguel; 37°39'N 25°31'W; depth 480 m, fine, muddy sand, partly calcareous; van Veen grab; 26 May 1981.
- 5.016: Azores, S of São Miguel; 37°21'N 25°29'W; depth 2000-2100 m, deep-sea clay with much pumice; 2.4 m Agassiz trawl; 26 May 1981.
- 5.017: Azores, E of Formigas; 37°16'N 24°46'W; depth 88 m, yellow calcareous sand and calcareous stones; van Veen grab; 27 May 1981.
- 5.018: Azores, E of Formigas; 37°16'N 24°45'W; depth 43-45 m, hard bottom with *Laminaria*; van Veen grab; 27 May 1981.
- 5.019: Azores, E of Formigas; 37°16'N 24°44'W; depth 140-170 m, coarse sand with shell gravel; van Veen grab; 27 May 1981.
- 5.020: Azores, E of Formigas; 37°16'N 24°44'W; depth 240-245 m, fine calcareous sand with some shell gravel; van Veen grab; 27 May 1981.
- 5.021: Azores, E of Formigas; 37°16'N 24°43'W; depth 240-245 m, fine calcareous sand; van Veen grab; 27 May 1981.
- 5.023: Azores, W of Formigas; 37°17'N 25°07'W; depth 1370-2000 m, clayey bottom; 2.4 m Agassiz trawl; 27 May 1981.
- 5.024: Azores, W of Formigas; 37°17'N 25°14'W; depth 2070-2120 m, clay with pumice; 1.2 m Agassiz trawl; 28 May 1981.
- 5.025: Azores, E of Santa Maria; 36°59'N 25°03'W; depth 10-18 m, very fine, mainly volcanic, sand; van Veen grab; 28 May 1981.
- 5.026: Azores, E of Santa Maria; 37°00'N 25°03'W; depth 30 m, very fine, mainly volcanic, sand; van Veen grab; 28 May 1981.
- 5.027: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 33 m, stone with brown algae; van Veen grab; 28 May 1981.
- 5.028: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 32 m, algae; van Veen grab; 28 May 1981.
- 5.029: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 32 m, stone with brown algae; van Veen grab; 28 May 1981.
- 5.030: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 32 m, stone with brown algae; van Veen grab; 28 May 1981.
- 5.031: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 32 m, brown algae; van Veen grab; 28 May 1981.
- 5.032: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 32 m, stone with

- brown algae; van Veen grab; 28 May 1981.
- 5.033: Azores, E of Santa Maria; 36°59'N 25°02'W; depth 35 m, fine sand with shell gravel; van Veen grab; 28 May 1981.
- 5.034: Azores, E of Santa Maria; 36°59'N 25°02'W; depth 47 m, fine sand with shell gravel; van Veen grab; 28 May 1981.
- 5.035: Azores, E of Santa Maria; 36°59'N 25°02'W; depth 55 m, fine sand with shell gravel; van Veen grab; 28 May 1981.
- 5.036: Azores, E of Santa Maria; 36°59'N 25°02'W; depth 65 m, fine to coarse sand with shell gravel; van Veen grab; 28 May 1981.
- 5.037: Azores, E of Santa Maria; 36°59'N 25°02'W; depth 122 m, fine sand with shell gravel; van Veen grab; 28 May 1981.
- 5.038: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 38-43 m, fine volcanic sand with shell gravel; van Veen grab; 28 May 1981.
- 5.039: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 43 m, fine calcareous sand with shells and algae; van Veen grab; 28 May 1981.
- 5.040: Azores, E of Santa Maria; 37°00'N 25°02'W; depth 41-47 m, coarse calcareous sand with shells and calcareous algae; van Veen grab; 28 May 1981.
- 5.042: Azores, SE of Santa Maria; 36°50'N 24°42'W; depth 2700-2950 m, deep-sea clay with much pumice and clinkers; 3.5 m Agassiz trawl; 28 May 1981.
- 5.043: Azores, SE of Santa Maria; 36°46'N 24°44'W; depth 2800-2950 m, deep-sea clay with much pumice; 2.4 m Agassiz trawl; 29 May 1981.
- 5.044: Azores, S of Santa Maria; 36°55'N 25°08'W; depth 60-150 m, calcareous stones; rectangular dredge; 29 May 1981.
- 5.047: Azores, S of Santa Maria; 36°55'N 25°08'W; depth 60-65 m, coarse sand with some shell gravel; Hamon grab; 29 May 1981.
- 5.048: Azores, SW of Santa Maria; 36°50'N 25°28'W; depth 2450-2480 m, deep-sea clay with much pumice; 3.5 m Agassiz trawl; 29 May 1981.
- 5.049: Azores, SW of Santa Maria; 36°49'N 25°25'W; depth 2200-2450 m; 2.4 m Agassiz trawl; 30 May 1981.
- 5.050: Azores, S of Santa Maria; 36°56'N 25°07'W; depth 55 m, fine calcareous sand; Hamon grab; 30 May 1981.
- 5.051: Azores, S of Santa Maria; 36°55'N 25°07'W; depth 620 m, clayey sand with shell gravel; Hamon grab; 30 May 1981.
- 5.052: Azores, S of Santa Maria; 36°42'N 25°09'W; depth 2500-3000 m, deep-sea clay with pumice; 5 m beam-trawl; 30 May 1981.
- 5.053: Azores, S of São Miguel; 37°42'N 25°27'W; depth 50 m, coarse, mainly volcanic sand; van Veen grab; 31 May 1981.
- 5.054: Azores, S of São Miguel; 37°42'N 25°27'W; depth 110 m, coarse

- volcanic sand with shell gravel; van Veen grab; 31 May 1981.
- 5.055: Azores, S of São Miguel; 37°41'N 25°27'W; depth 125 m, coarse volcanic sand with shell gravel; van Veen grab; 31 May 1981.
- 5.056: Azores, S of São Miguel; 37°41'N 25°26'W; depth 180 m, fine sand; van Veen grab; 31 May 1981.
- 5.057: Azores, S of São Miguel; 37°41'N 25°27'W; depth 135 m, fine sand with shells; van Veen grab; 31 May 1981.
- 5.058: Azores, S of São Miguel; 37°41'N 25°27'W; depth 117 m, coarse mixed sand with shells; van Veen grab; 31 May 1981.
- 5.059: Azores, S of São Miguel; 37°41'N 25°27'W; depth 146 m, coarse mixed sand with shells; van Veen grab; 31 May 1981.
- 5.060: Azores, S of São Miguel; 37°42'N 25°27'W; depth 60 m, stone; rectangular dredge; 31 May 1981.
- 5.061: Azores, S of São Miguel; 37°42'N 25°26'W; depth 60 m, sandy bottom; rectangular dredge; 31 May 1981.
- 5.062: Azores, S of São Miguel; 37°42'N 25°26'W; depth 60-80 m, sandy bottom; rectangular dredge; 31 May 1981.
- 5.063: Azores, S of São Miguel; 37°42'N 25°27'W; depth 47-55 m, sandy bottom; triangular dredge; 31 May 1981.
- 5.064: Azores, S of São Miguel; 37°42'N 25°27'W; depth 60-80 m, sandy bottom; triangular dredge; 31 May 1981.
- 5.065: Azores, S of São Miguel; 37°41'N 25°26'W; depth 95-140 m, sandy bottom; rectangular dredge; 31 May 1981.
- 5.066: Azores, S of São Miguel; 37°41'N 25°27'W; depth 95-120 m, sandy bottom; rectangular dredge; 31 May 1981.
- 5.068: Azores, S of São Miguel; 37°41'N 25°25'W; depth 210 m, muddy coarse sand with shell gravel; van Veen grab; 31 May 1981.
- 5.070: Azores, S of São Miguel; 37°41'N 25°25'W; depth 240 m, fine sand with gravel; van Veen grab; 31 May 1981.
- 5.071: Azores, S of São Miguel; 37°49'N 25°25'W; depth 220 m, coarse sand with shells (mainly fossil); van Veen grab; 31 May 1981.
- 5.072: Azores, S of São Miguel; 37°41'N 25°24'W; depth 315 m; van Veen grab; 31 May 1981.
- 5.073: Azores, S of São Miguel; 37°41'N 25°25'W; depth 245 m, muddy coarse sand with shell gravel; van Veen grab; 31 May 1981.
- 5.074: Azores, S of São Miguel; 37°41'N 25°25'W; depth 225 m, muddy coarse sand with fossil shells; van Veen grab; 31 May 1981.
- 5.075: Azores, S of São Miguel; 37°41'N 25°24'W; depth 196 m, calcareous stone; van Veen grab; 31 May 1981.
- 5.077: Azores, E of Faial; 38°31'N 28°36'W; depth 56-64 m, fine calcareous

- sand with shell gravel; van Veen grab; 1 June 1981.
- 5.078: Azores, E of Faial; 38°31'N 28°36'W; depth 77 m, fine calcareous sand with shell gravel; van Veen grab; 1 June 1981.
- 5.079: Azores, E of Faial; 38°31'N 28°36'W; depth 110 m, fine calcareous sand with shell gravel; van Veen grab; 1 June 1981.
- 5.080: Azores, E of Faial; 38°32'N 28°35'W; depth 146 m, fine calcareous sand with shell gravel; van Veen grab; 1 June 1981.
- 5.081: Azores, E of Faial; 38°32'N 28°35'W; depth 162 m, fine calcareous sand with shell gravel; van Veen grab; 1 June 1981.
- 5.082: Azores, E of Faial; 38°32'N 28°35'W; depth 170 m, fine calcareous sand with shell gravel; van Veen grab; 1 June 1981.
- 5.083: Azores, E of Faial; 38°31'N 28°35'W; depth 177 m, sand with shell gravel; van Veen grab; 1 June 1981.
- 5.084: Azores, E of Faial; 38°31'N 28°35'W; depth 188 m, sand with shell gravel; van Veen grab; 1 June 1981.
- 5.085: Azores, E of Faial; 38°31'N 28°35'W; depth 150-170 m, sandy bottom; 1.2 m Agassiz trawl; 1 June 1981.
- 5.086: Azores, E of Faial; 38°31'N 28°36'W; depth 95-120 m, sandy bottom; 1.2 m Agassiz trawl; 1 June 1981.
- 5.087: Azores, E of Faial; 38°31'N 28°36'W; depth 100-170 m, calcareous stones; rectangular dredge; 1 June 1981.
- 5.088: Azores, E of Faial; 38°31'N 28°36'W; depth 50-60 m, calcareous stones; rectangular dredge; 1 June 1981.
- 5.089: Azores, E of Faial; 38°32'N 28°36'W; depth 50-70 m, shells and algae; rectangular dredge; 1 June 1981.
- 5.090: Azores, S of Pico; 38°09'N 28°31'W; depth 1320-1350 m, hard bottom with fossil corals; 1.2 m Agassiz trawl; 2 June 1981.
- 5.091: Azores, E of Faial; 38°35'N 28°36'W; depth 33 m, fine volcanic sand with shell gravel; van Veen grab; 2 June 1981.
- 5.092: Azores, E of Faial; 38°34'N 28°35'W; depth 70 m, gravel and shell gravel; van Veen grab; 2 June 1981.
- 5.093: Azores, E of Faial; 38°34'N 28°34'W; depth 92 m, volcanic sand with shell gravel; van Veen grab; 2 June 1981.
- 5.094: Azores, E of Faial; 38°34'N 28°34'W; depth 90 m, volcanic sand with shell gravel; van Veen grab; 2 June 1981.
- 5.095: Azores, W of Pico; 38°34'N 28°33'W; depth 70 m, shell gravel with some sand; van Veen grab; 2 June 1981.
- 5.096: Azores, W of Pico; 38°34'N 28°32'W; depth 52 m, shell gravel; van Veen grab; 2 June 1981.
- 5.097: Azores, W of Pico; 38°34'N 28°31'W; depth 55 m, hard bottom with

- algae; van Veen grab; 2 June 1981.
- 5.098: Azores, W of Pico; 38°33'N 28°32'W; depth 40 m, volcanic gravel, shell gravel and stone; van Veen grab; 2 June 1981.
- 5.099: Azores, W of Pico; 38°33'N 28°32'W; depth 30 m, algae; rectangular dredge; 2 June 1981.
- 5.100: Azores, W of Pico; 38°34'N 28°32'W; depth 55 m, sandy bottom; triangular dredge; 2 June 1981.
- 5.101: Azores, W of Pico; 38°34'N 28°33'W; depth 70 m, shell gravel; triangular dredge; 2 June 1981.
- 5.102: Azores, W of Pico; 38°34'N 28°33'W; depth 65 m, shell gravel; 1.2 m Agassiz trawl; 2 June 1981.
- 5.105: Azores, E of Faial; 38°32'N 28°36'W; depth 20-30 m, fine black sand; van Veen grab; 3 June 1981.
- 5.106: Azores, E of Faial; 38°33'N 28°35'W; depth 133 m, coarse, mainly volcanic sand; van Veen grab; 3 June 1981.
- 5.107: Azores, E of Faial; 38°32'N 28°35'W; depth 85 m, *Chama* bed; van Veen grab; 3 June 1981.
- 5.108: Azores, E of Faial; 38°32'N 28°35'W; depth 50 m, coarse black sand with shell gravel; van Veen grab; 3 June 1981.
- 5.109: Azores, E of Faial; 38°32'N 28°35'W; depth 100 m, coarse black sand with shell gravel; van Veen grab; 3 June 1981.
- 5.111: Azores, E of Faial; 38°32'N 28°35'W; depth 140 m, calcareous sand with shell gravel; van Veen grab; 3 June 1981.
- 5.112: Azores, W of Pico; 38°32'N 28°34'W; depth 85 m, coarse sand with shell gravel; van Veen grab; 3 June 1981.
- 5.113: Azores, W of Pico; 38°32'N 28°33'W; depth 45 m, sand with shell gravel, calcareous algae; van Veen grab; 3 June 1981.
- 5.114: Azores, E of Faial; 38°31'N 28°35'W; depth 172 m, sand with shell gravel; Hamon grab; 3 June 1981.
- 5.115: Azores, W of Terceira; 38°46'N 27°55'W; depth 2000-2230 m; 5 m beam-trawl; 4 June 1981.
- 5.116: Azores, N of São Jorge; 38°38'N 27°55'W; depth 20 m, cobbles with algae; van Veen grab; 4 June 1981.
- 5.117: Azores, N of São Jorge; 38°38'N 27°55'W; depth 40-50 m, cobbles with algae; van Veen grab; 4 June 1981.
- 5.118: Azores, N of São Jorge; 38°38'N 27°55'W; depth 75 m, coarse volcanic sand; van Veen grab; 4 June 1981.
- 5.119: Azores, N of São Jorge; 38°38'N 27°54'W; depth 105 m, volcanic sand; van Veen grab; 4 June 1981.
- 5.120: Azores, N of São Jorge; 38°39'N 27°54'W; depth 150 m, volcanic sand;

- van Veen grab; 4 June 1981.
- 5.121: Azores, N of São Jorge; 38°39'N 27°54'W; depth 250 m, volcanic sand with shell gravel; van Veen grab; 4 June 1981.
- 5.122: Azores, N of São Jorge; 38°39'N 27°54'W; depth 400 m, muddy mixed sand with shell gravel; van Veen grab; 4 June 1981.
- 5.123: Azores, W of Terceira; 38°56'N 27°44'W; depth 2300-2400 m, clay with stones; 5 m beam-trawl; 4 June 1981.
- 5.124: Azores, E of Faial; 38°32'N 28°36'W; depth 40 m, volcanic sand with shells; van Veen grab; 5 June 1981.
- 5.125: Azores, E of Faial; 38°32'N 28°36'W; depth 55-75 m, volcanic sand with shells; van Veen grab; 5 June 1981.
- 5.126: Azores, S of Faial; 38°30'N 28°38'W; depth 300 m, fine muddy sand; van Veen grab; 5 June 1981.
- 5.127: Azores, S of Faial; 38°30'N 28°37'W; depth 300 m; rectangular dredge; 5 June 1981.
- 5.128: Azores, E of Faial; 38°35'N 28°34'W; depth 90 m, shell gravel; van Veen grab; 6 June 1981.
- 5.129: Azores, E of Faial; 38°34'N 28°34'W; depth 100 m, sand with shell gravel; van Veen grab; 6 June 1981.
- 5.130: Azores, E of Faial; 38°35'N 28°38'W; depth 80-90 m, sand with shell gravel; van Veen grab; 6 June 1981.
- 5.131: Azores, E of Faial; 38°35'N 28°33'W; depth 120-135 m, sand with shell gravel; van Veen grab; 6 June 1981.
- 5.132: Azores, W of Pico; 38°36'N 28°32'W; depth 168 m, volcanic sand; van Veen grab; 6 June 1981.
- 5.133: Azores, N of Faial; 38°37'N 28°36'W; depth 75-95 m, coarse volcanic sand; van Veen grab; 6 June 1981.
- 5.134: Azores, N of Faial; 38°36'N 28°35'W; depth 132-135 m, fine volcanic sand with shell gravel; van Veen grab; 6 June 1981.
- 5.135: Azores, N of Faial; 38°37'N 28°36'W; depth 180 m, fine volcanic sand with many shells; van Veen grab; 6 June 1981.
- 5.136: Azores, N of Faial; 38°38'N 28°38'W; depth 95 m, volcanic sand with some shell gravel; van Veen grab; 6 June 1981.
- 5.138: Azores, W of Pico; 38°34'N 28°33'W; depth 70 m, sand and shell gravel; van Veen grab; 7 June 1981.
- 5.139: Azores, W of Pico; 38°34'N 28°33'W; depth 77 m, sand and shell gravel; van Veen grab; 7 June 1981.
- 5.140: Azores, W of Pico; 38°34'N 28°33'W; depth 88 m, sand; van Veen grab; 7 June 1981.
- 5.141: Azores; W of Pico; 38°35'N 28°33'W; depth 82-87 m, coarse sand with

- shell gravel and calcareous algae; 1.2 m Agassiz trawl; 7 June 1981.
- 5.142: Azores, W of Pico; 38°35'N 28°33'W; depth 108-118 m, *Chama* bed; rectangular dredge; 7 June 1981.
- 5.143: Azores, E of Flores; 39°26'N 31°08'W; depth 29-32 m, calcareous sand with algae; van Veen grab; 9 June 1981.
- 5.144: Azores, E of Flores; 39°26'N 31°08'W; depth 54 m, coarse sand with mainly shells; van Veen grab; 9 June 1981.
- 5.145: Azores, E of Flores; 39°26'N 31°07'W; depth 75-77 m, muddy fine sand and shell gravel; van Veen grab; 9 June 1981.
- 5.146: Azores, E of Flores; 39°26'N 31°07'W; depth 100 m, muddy sand with shell gravel; van Veen grab; 9 June 1981.
- 5.147: Azores, E of Flores; 39°26'N 31°06'W; depth 165-190 m, muddy sand with shell gravel; van Veen grab; 9 June 1981.
- 5.148: Azores, E of Flores; 39°25'N 31°06'W; depth 190 m, muddy sand with shell gravel; van Veen grab; 9 June 1981.
- 5.150: Azores, E of Flores; 39°25'N 31°06'W; depth 200 m, coarse calcareous sand with gravel; van Veen grab; 9 June 1981.
- 5.153: Azores, E of Flores; 39°26'N 31°06'W; depth 150-168 m, *Chama* bed with fossil shells; rectangular dredge; 9 June 1981.
- 5.154: Azores, E of Flores; 39°22'N 30°53'W; depth to about 350 m (bottom at about 1880 m); midwater-trawl; 9 June 1981.
- 5.155: Azores, E of Flores; 39°21'N 30°52'W; depth 1876-1891 m, muddy bottom; rectangular dredge; 9 June 1981.
- 5.157: Azores, E of Flores; 39°22'N 30°49'W; depth 1834-1900 m, muddy bottom; rectangular dredge; 10 June 1981.
- 5.158: Azores, N of Flores; 39°31'N 31°11'W; depth 46 m, coarse sand with shell gravel; van Veen grab; 10 June 1981.
- 5.159: Azores, N of Flores; 39°31'N 31°11'W; depth 52 m, very fine mixed sand; van Veen grab; 10 June 1981.
- 5.160: Azores, N of Flores; 39°31'N 31°10'W; depth 60 m, fine black sand with some shell gravel; van Veen grab; 10 June 1981.
- 5.161: Azores, N of Flores; 39°31'N 31°10'W; depth 45 m, sandy bottom with algae; triangular dredge; 10 June 1981.
- 5.162: Azores, N of Flores; 39°31'N 31°10'W; depth 75 m, coarse volcanic sand with shell gravel; van Veen grab; 10 June 1981.
- 5.163: Azores, N of Flores; 39°32'N 31°10'W; depth 92-95 m, basaltic stones; van Veen grab; 10 June 1981.
- 5.164: Azores, N of Flores; 39°33'N 31°10'W; depth 104 m, calcareous sand with shell gravel; van Veen grab; 10 June 1981.
- 5.165: Azores, N of Flores; 39°33'N 31°10'W; depth 115 m, shells; rectangular

- dredge; 10 June 1981.
- 5.166: Azores, NE of Flores; 39°30'N 31°06'W; depth 150 m, shells; rectangular dredge; 10 June 1981.
- 5.167: Azores, N of Flores; 39°31'N 31°11'W; depth 20-25 m, mainly algae; triangular dredge (from sloop); 10 June 1981.
- 5.169: Azores, NE of Flores; 39°32'N 31°06'W; depth 500-600 m, hard bottom with fossil corals and shells; rectangular dredge; 10 June 1981.
- 5.170: Azores, E of Flores; 39°21'N 30°51'W; depth 0 to about 700 m (bottom at about 1890 m); midwater-trawl; 10 June 1981.
- 5.171: Azores, E of Flores; 39°20'N 30°52'W; depth 1874-1887 m, muddy bottom; 1.2 m Agassiz trawl; 11 June 1981.
- 5.172: Azores, E of Flores; 39°21'N 30°51'W; depth 1890 m, muddy bottom; 1.2 m Agassiz trawl; 11 June 1981.
- 5.173: Azores, SE of Corvo; 39°40'N 31°06'W; depth 50 m, fine volcanic sand; van Veen grab; 11 June 1981.
- 5.176: Azores, SE of Corvo; 39°40'N 31°05'W; depth 142 m, fine volcanic sand; van Veen grab; 11 June 1981.
- 5.178: Azores, SE of Corvo; 39°41'N 31°03'W; depth about 650 m, fossil corals and cemented sediment; rectangular dredge; 11 June 1981.
- 5.179: Azores, SE of Corvo; 39°41'N 31°03'W; depth 550-650 m, fossil corals and cemented sediment; rectangular dredge; 11 June 1981.
- 5.180: Azores, N of Flores; 39°30'N 31°08'W; at surface; neuston-net; 11 June 1981.
- 5.181: Azores, NE of Flores; 39°30'N 31°05'W; depth 615-690 m, fossil corals and oysters; rectangular dredge; 11 June 1981.
- 5.182: Azores, E of Flores; 39°21'N 30°51'W; depth 0 to about 900 m (bottom at about 1890 m); midwater-trawl; 11 June 1981.
- 5.183: Azores, E of Flores; 39°21'N 30°52'W; depth 1882-1890 m, clay bottom; 2.4 m Agassiz trawl; 12 June 1981.
- 5.184: Azores, E of Flores; 39°23'N 30°52'W; depth 1874-1889 m, clay bottom; 2.4 m Agassiz trawl; 12 June 1981.
- 5.185: Azores, E of Flores; 39°25'N 31°06'W; depth 530-700 m, fossil corals; rectangular dredge; 12 June 1981.
- 5.186: Azores, E of Flores; 39°26'N 31°05'W; depth 600 m, hard bottom; rectangular dredge; 12 June 1981.
- 5.187: Azores, E of Flores; 39°27'N 31°05'W; depth 500-550 m, fossil corals; rectangular dredge; 12 June 1981.
- 5.188: Azores, E of Flores; 39°27'N 31°05'W; depth 700-800 m, hard bottom with fossil corals; rectangular dredge; 12 June 1981.
- 5.189: Azores, E of Flores; 39°29'N 31°06'W; depth 200-250 m, calcareous

- stones and shells; rectangular dredge; 12 June 1981.
- 5.190: Azores, E of Flores; 39°29'N 31°08'W; depth 72 m, fine sand; van Veen grab; 12 June 1981.
- 5.193: Azores, N of São Jorge; 38°44'N 27°48'W; depth 1145 m, clay; Hamon grab; 13 June 1981.
- 5.194: Azores, W of Terceira; 38°54'N 27°40'W; depth 2419-2476 m, clay bottom; 3.5 m Agassiz trawl; 13 June 1981.
- 5.195: Azores, W of Terceira; 38°55'N 27°37'W; depth 2400-2460 m, clay bottom; 3.5 m Agassiz trawl; 13 June 1981.
- 5.196: Azores, N of São Jorge; 38°39'N 27°54'W; depth 350-480 m, hard bottom with shells; rectangular dredge; 14 June 1981.
- 5.197: Azores, SE of Terceira; 38°11'N 26°56'W; at surface; neuston-net; 14 June 1981.

SCUBA DIVING STATIONS

- 5.D01: Azores, S coast of São Miguel; 37°43'N 25°30'W; sheltered bay, depth to 20 m; scuba diving; 26 May 1981.
- 5.D02: Azores, Ilhéus Formigas; 37°16'N 24°47'W; bank in open sea close to some small islands, depth to 15 m; scuba diving; 27 May 1981.
- 5.D03: Azores, E coast of Santa Maria, Baia de São Lourenço; 37°59'N 25°03'W; shallow coastal area near islet, depth to 15 m; scuba diving; 28 May 1981.
- 5.D04: Azores, SW coast of Santa Maria, Ilhéu da Vila; 36°56'N 25°10'W; close to small island, depth to 15 m; scuba diving; 29,30 May 1981.
- 5.D05: Azores, S coast of São Miguel, Ilhéu da Vila; 37°42'N 25°27'W; close to small outlying volcano, depth to 15 m; scuba diving; 31 May 1981.
- 5.D06: Azores, SE coast of Faial, Caldeira Inferno; 38°31'N 28°38'W; in open crater of small volcano, shallow and sandy, depth to 10 m; scuba diving; 1 June 1981.
- 5.D07: Azores, SE coast of Faial near Horta; 38°31'N 28°37'W; rocky coast, south of harbour, depth to 15 m; scuba diving; 1/3, 5 June 1981.
- 5.D08: Azores, N coast of São Jorge, E of Ponta da Caldeira; 38°37'N 28°54'W; exposed coastal area with large boulders, depth to 15 m; scuba diving; 4 June 1981.
- 5.D09: Azores, E coast of Faial, near Almoxarife; 38°33'N 28°37'W; sheltered cove in large bay, depth to 15 m; scuba diving; 6 June 1981.
- 5.D10: Azores, E coast of Flores, S of Santa Cruz; 39°26'N 31°09'W; sheltered cove in large bay, depth to 15 m; scuba diving; 9 June 1981.

- 5.D11: Azores, N coast of Flores, near Ponta Delgada; 39°31'N 31°12'W; entrance of small bay, depth to 15 m; scuba diving; 10 June 1981.
- 5.D12: Azores, SE coast of Flores, Porto das Lajes; 39°23'N 31°10'W; small harbour, depth to 10 m; scuba diving; 12 June 1981.

TRAP STATIONS

- 5.V01: Azores, S of Santa Maria; 36°56'N 25°07'W; depth 70 m; 3 prawn-traps, small snail-traps; overnight 29/30 May 1981.
- 5.V02: Azores, S of Santa Maria; 36°56'N 25°07'W; depth 68 m; 3 prawn-traps; overnight 29/30 May 1981.
- 5.V03: Azores, SE of Faial; 38°28'N 28°32'W; depth 100 m; 3 prawn-traps, small and large snail-trap; overnight 01/02 June 1981.
- 5.V04: Azores, N of São Jorge; 38°39'N 27°55'W; depth 150 m; 3 prawn-traps, 3 small and one large snail-trap; overnight 03/04 June 1981.
- 5.V06: Azores, NE of Flores; 39°30'N 31°06'W; depth 300 m; 3 prawn-traps, 1 small and 1 large snail-trap; overnight 09/10 June 1981.

COASTAL STATIONS

- 5.K01: Azores, Formigas; 37°16'N 24°47'W; tide pools and fissures with strong currents; 27 May 1981.
- 5.K02: Azores, E coast of Santa Maria, Baia de São Lourenço; 37°00'N 25°03'W; rock flat with holes and tide pools, many algae; 28 May 1981.
- 5.K03: Azores, S coast of Santa Maria; 36°57'N 25°07'W; rocky cove with tide pools, cobble beach, algae; 29 May 1981.
- 5.K04: Azores, S coast of São Miguel, Ilhéu da Vila Franca; 37°42'N 25°27'W; open crater with rocky shore and sandy bottom; 30 May 1981.
- 5.K05: Azores, W coast of Pico, Madelena; 38°32'N 28°31'W; rocky shore, pools, cobbles, boulders; 3/5 June 1981.
- 5.K06: Azores, S coast of Pico, Lajes harbour; 38°24'N 28°15'W; large rock flat, sandy bay with boulders and stones; 4 June 1981.
- 5.K07: Azores, N coast of Pico, Cais de Pico; 38°31'N 28°19'W; tide pools; 5 June 1981.
- 5.K08: Azores, S coast of Pico, Lajes harbour; 38°23'N 28°15'W; exposed side of small pier; 6 June 1981.
- 5.K09: Azores, S coast of Pico, SW of Lajes; 38°23'N 28°15'W; pools in large

- rock flat, protected by boulder wall; 7,8 June 1981.
- 5.K10: Azores, N coast of São Jorge, Faja da Caldeira; 38°38'N 27°56'W; cobble beach and lagoon; 4,13 June 1981.
- 5.K11: Azores, E coast of Flores, Santa Cruz; 39°27'N 31°07'W; rocky bay, north of harbour; 9 June 1981.
- 5.K12: Azores, E coast of Flores, S of Santa Cruz; 39°26'N 31°09'W; rocky cove; 9 June 1981.
- 5.K13: Azores, N coast of Flores, Porto Ponta Delgada; 39°31'N 31°12'W; rocky shore; 10 June 1981.
- 5.K14: Azores, SE coast of Corvo, Rosario, landing; 39°40'N 31°07'W; protected side of pier, boulders on bottom; 11 June 1981.
- 5.K15: Azores, SE coast of Corvo, S of Rosario; 39°40'N 31°07'W; rocky shore with deep tide pool, rocky shore; 10 June 1981.
- 5.K16: Azores, SE coast of Corvo, near Rosario; 39°40'N 31°07'W; exposed rocky shore; 11 June 1981.
- 5.K17: Azores, SE coast of Flores, Ponta das Lajes; 39°23'N 31°10'W; exposed rock barrier, tide pools, boulders, algae; 12 June 1981.

"TYDEMAN" CAPE VERDE ISLANDS EXPEDITION 1982
CANCAP-VI

- 6.001: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 15-20 m, coarse sand and calcareous algae; van Veen grab 5x; 4 June 1982.
- 6.002: Cape Verde Islands, SE of São Tiago; 14°39'N 23°21'W; depth 3650-3840 m, deep sea clay; 3.5 m Agassiz trawl; 4/5 June 1982.
- 6.003: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 15-21 m, coarse sand and calcareous algae; van Veen grab 3x; 5 June 1982.
- 6.004: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 63-58 m, sand and shell gravel; van Veen grab 3x; 5 June 1982.
- 6.005: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 75-68 m, sand and shell gravel; van Veen grab 3x; 5 June 1982.
- 6.006: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 110-100 m, muddy sand and shell gravel; van Veen grab 3x; 5 June 1982.
- 6.007: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 70-88 m, muddy sand and shell gravel; van Veen grab 2x; 5 June 1982.
- 6.008: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 120 m, coarse sand and shell gravel; van Veen grab; 5 June 1982.
- 6.009: Cape Verde Islands, S of São Tiago; 14°54'N 23°30'W; depth 175 m, coarse sand and shell gravel; van Veen grab; 5 June 1982.

- 6.010: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth 310 m, sandy mud and shell gravel; van Veen grab; 5 June 1982.
- 6.011: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth 328 m, brown, sandy mud; van Veen grab; 5 June 1982.
- 6.012: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth about 500 m, grey-brown, sandy mud; van Veen grab; 5 June 1982.
- 6.013: Cape Verde Islands, S of São Tiago; 14°52'N 23°31'W; depth 710 m, grey clay; van Veen grab; 5 June 1982.
- 6.014: Cape Verde Islands, S of São Tiago; 14°54'N 23°29'W; depth 18 m, sand and calcareous algae; van Veen grab 4x; 5 June 1982.
- 6.015: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth about 150 m, coarse sand and shell gravel; van Veen grab; 5 June 1982.
- 6.016: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth 340 m, fine sand; van Veen grab; 5 June 1982.
- 6.017: Cape Verde Islands, S of São Tiago; 14°53'N 23°30'W; depth 380 m, sandy clay; van Veen grab; 5 June 1982.
- 6.018: Cape Verde Islands, S of São Tiago; 14°31'N 23°33'W; depth 3825-4025 m, deep sea clay; 3.5 m Agassiz trawl; 5 June 1982.
- 6.019: Cape Verde Islands, W of São Tiago; 15°01'N 23°44'W; depth 466 m, volcanic sand and calcareous gravel; van Veen grab; 6 June 1982.
- 6.020: Cape Verde Islands, W of São Tiago; 15°01'N 23°44'W; depth 470 m, volcanic sand and calcareous gravel; van Veen grab 3x; 6 June 1982.
- 6.021: Cape Verde Islands, W of São Tiago; 15°01'N 23°44'W; depth 600-400 m, mud and basaltic rocks; rectangular dredge; 6 June 1982.
- 6.022: Cape Verde Islands, W of São Tiago; 15°00'N 23°46'W; depth 500-700 m; rectangular dredge; 6 June 1982.
- 6.023: Cape Verde Islands, S of São Tiago; 14°40'N 23°51'W; depth 3900-3875 m, deep sea clay; 5 m beam-trawl; 6 June 1982.
- 6.024: Cape Verde Islands, bay on W coast of São Tiago; 15°00'N 23°44'W; depth 540 m, muddy volcanic sand; van Veen grab; 7 June 1982.
- 6.025: Cape Verde Islands, bay on W coast of São Tiago; 15°00'N 23°44'W; depth 728 m, muddy volcanic sand; van Veen grab; 7 June 1982.
- 6.026: Cape Verde Islands, bay on W coast of São Tiago; 15°00'N 23°44'W; depth 791-820 m, mud and muddy volcanic sand; van Veen grab 2x; 7 June 1982.
- 6.027: Cape Verde Islands, bay on W coast of São Tiago; 15°00'N 23°45'W; depth 920-970 m, muddy volcanic sand and calcareous nodules; van Veen grab; 7 June 1982.
- 6.028: Cape Verde Islands, SE of Fogo; 14°34'N 24°14'W; depth 0 to about 250 m (bottom at about 800 m); midwater-trawl; 7 June 1982.

- 6.029: Cape Verde Islands, S of Fogo; 14°33'N 24°24'W; depth 0 to about 125 m (bottom at about 4000 m); midwater-trawl; 8 June 1982.
- 6.030: Cape Verde Islands, S of Fogo; 14°32'N 24°28'W; depth 0 to about 175 m (bottom at about 4000 m); midwater-trawl; 8 June 1982.
- 6.031: Cape Verde Islands, SW of Brava; 14°50'N 24°45'W; depth 530 m, coarse volcanic sand and gravel; van Veen grab; 8 June 1982.
- 6.032: Cape Verde Islands, SW of Brava; 14°49'N 24°45'W; depth 375 m, hard bottom; rectangular dredge; 8 June 1982.
- 6.033: Cape Verde Islands, SW of Brava; 14°49'N 24°45'W; depth 540 m, hard bottom; rectangular dredge; 8 June 1982.
- 6.034: Cape Verde Islands, SW of Brava; 14°49'N 24°45'W; depth 470-520 m, hard bottom; rectangular dredge; 8 June 1982.
- 6.035: Cape Verde Islands, SW of Brava; 14°49'N 24°45'W; depth 600-675 m, hard bottom; rectangular dredge; 8 June 1982.
- 6.036: Cape Verde Islands, NW of Brava; 15°04'N 25°01'W; depth 4030-4130 m, yellow deep sea clay; 3.5 m Agassiz trawl; 8 June 1982.
- 6.037: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 27 m, rocky bottom; van Veen grab; 9 June 1982.
- 6.038: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 29 m, hard bottom; rectangular dredge; 9 June 1982.
- 6.039: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 30 m, rocky bottom; rectangular dredge; 9 June 1982.
- 6.040: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 55 and 38 m, coarse volcanic sand and shell gravel; van Veen grab 2x; 9 June 1982.
- 6.041: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 60 m, volcanic and calcareous sand and shell gravel; van Veen grab; 9 June 1982.
- 6.042: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 100-150 m, rocky bottom; rectangular dredge; 9 June 1982.
- 6.043: Cape Verde Islands, W of Fogo; 14°55'N 24°31'W; depth 190 m, muddy volcanic sand; van Veen grab; 9 June 1982.
- 6.044: Cape Verde Islands, W of Fogo; 14°55'N 24°32'W; depth 450 m, clayey volcanic sand; van Veen grab; 9 June 1982.
- 6.045: Cape Verde Islands, SW of Fogo; 14°41'N 24°32'W; depth 3100-3600 m, clay with some animals; 3.5 m Agassiz trawl; 9 June 1982.
- 6.046: Cape Verde Islands, SW of Fogo; 14°41'N 24°30'W; depth 3500-3550 m, globigerina-ooze; 3.5 m Agassiz trawl; 10 June 1982.
- 6.047: Cape Verde Islands, SW of Fogo; 14°52'N 24°31'W; depth 800-930 m, volcanic sand and gravel; van Veen grab 2x; 10 June 1982.
- 6.048: Cape Verde Islands, SW of Fogo; 14°52'N 24°32'W; depth 800-1000 m, basaltic rocks; rectangular dredge; 10 June 1982.

- 6.049: Cape Verde Islands, SW of Fogo; 14°52'N 24°32'W; depth 1100-1300 m, basaltic rocks and sandy clay; 1.2 m Agassiz trawl; 10 June 1982.
- 6.050: Cape Verde Islands, SW of Fogo; 14°53'N 24°32'W; depth 1100-1200 m, rocks and sandy clay; 1.2 m Agassiz trawl; 10 June 1982.
- 6.051: Cape Verde Islands, W of Fogo; 14°54'N 24°31'W; depth 230 m, muddy volcanic sand; van Veen grab; 10 June 1982.
- 6.052: Cape Verde Islands, W of Fogo; 14°53'N 24°31'W; depth 85 m, black, volcanic sand and shell gravel; van Veen grab 2x; 10 June 1982.
- 6.053: Cape Verde Islands, SE of Fogo; 14°40'N 24°06'W; depth 3650-3850 m, deep sea clay; 5 m beam-trawl; 10/11 June 1982.
- 6.054: Cape Verde Islands, W of São Tiago; 14°54'N 23°30'W; depth 29-33 m, coarse sand and shell gravel; van Veen grab; 11 June 1982.
- 6.055: Cape Verde Islands, SE of Boa Vista; 15°46'N 22°38'W; depth 1450-2220 m, hard clay and manganese; 3.5 m Agassiz trawl; 11 June 1982.
- 6.056: Cape Verde Islands, SE of Boa Vista; 15°59'N 22°47'W; depth 25 m, sand, shells and calcareous algae; van Veen grab 3x; 12 June 1982.
- 6.057: Cape Verde Islands, SE of Boa Vista; 15°59'N 22°46'W; depth 36 m, yellow sand and calcareous algae; van Veen grab; 12 June 1982.
- 6.058: Cape Verde Islands, SE of Boa Vista; 15°58'N 22°46'W; depth 34 m, sand, shell gravel and calcareous algae; 1.2 m Agassiz trawl; 12 June 1982.
- 6.059: Cape Verde Islands, SE of Boa Vista; 15°57'N 22°44'W; depth 50 m, sand, calcareous algae and shell gravel; van Veen grab; 12 June 1982.
- 6.060: Cape Verde Islands, SE of Boa Vista; 15°57'N 22°45'W; depth 50-55 m, coarse sand, calcareous algae and shell gravel; 1.2 m Agassiz trawl; 12 June 1982.
- 6.061: Cape Verde Islands, SE of Boa Vista; 15°55'N 22°45'W; depth 80 m, coarse sand, calcareous algae and shells; van Veen grab; 12 June 1982.
- 6.062: Cape Verde Islands, SE of Boa Vista; 15°55'N 22°46'W; depth 82-98 m, shells, calcareous algae and bryozoans; 1.2 m Agassiz trawl; 12 June 1982.
- 6.063: Cape Verde Islands, SE of Boa Vista; 15°59'N 22°46'W; depth 25-30 m, sand and calcareous algae; 1.2 m Agassiz trawl; 12 June 1982.
- 6.064: Cape Verde Islands, SE of Boa Vista; 15°58'N 22°47'W; depth 29-32 m, sand, calcareous algae and shell gravel; 1.2 m Agassiz trawl; 12 June 1982.
- 6.065: Cape Verde Islands, E of Boa Vista; 15°58'N 22°33'W; depth 950-1040 m, silt and fine gravel; 2.4 m Agassiz trawl; 12/13 June 1982.
- 6.066: Cape Verde Islands, SW of Boa Vista; 15°53'N 23°00'W; depth 53 m, sand, calcareous algae and shell gravel; van Veen grab 2x; 13 June 1982.
- 6.067: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°00'W; depth 58-62 m, calcareous algae, *Vermetes* and sponges; 1.2 m Agassiz trawl; 13 June 1982.
- 6.068: Cape Verde Islands, SW of Boa Vista; 15°53'N 23°00'W; depth 76 m,

- coarse sand with calcareous algae; van Veen grab 2x; 13 June 1982.
- 6.069: Cape Verde Islands, SW of Boa Vista; 15°53'N 23°00'W; depth 76-90 m, calcareous algae; 1.2 m Agassiz trawl; 13 June 1982.
- 6.070: Cape Verde Islands, SW of Boa Vista; 15°56'N 23°05'W; depth 107 m, yellow sand with a few shells; van Veen grab 3x; 13 June 1982.
- 6.071: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°06'W; depth 110 m, shell bottom with epifauna; rectangular dredge; 13 June 1982.
- 6.072: Cape Verde Islands, SW of Boa Vista; 15°54'N 23°06'W; depth 110 m, shell bottom with epifauna; rectangular dredge; 13 June 1982.
- 6.073: Cape Verde Islands, SW of Boa Vista; 15°56'N 23°04'W; depth 90 m, sand, shell gravel and calcareous algae; van Veen grab 2x; 13 June 1982.
- 6.074: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°04'W; depth 91 m, sand; rectangular dredge; 13 June 1982.
- 6.075: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°04'W; depth 90 m, sand; rectangular dredge; 13 June 1982.
- 6.076: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°05'W; depth 92 m; 1.2 m Agassiz trawl; 13 June 1982.
- 6.077: Cape Verde Islands, SW of Boa Vista; 15°56'N 23°06'W; depth 171-179 m, sand and fine shell gravel; van Veen grab; 13 June 1982.
- 6.078: Cape Verde Islands, SW of Boa Vista; 15°55'N 23°06'W; depth 185-190 m, sand and shell gravel; 1.2 m Agassiz trawl; 13 June 1982.
- 6.079: Cape Verde Islands, SW of Boa Vista; 15°56'N 23°08'W; depth 270-300 m, fine yellowish sand; van Veen grab 3x; 13 June 1982.
- 6.080: Cape Verde Islands, SW of Boa Vista; 15°56'N 23°08'W; depth 220-250 m, sandy bottom; 1.2 m Agassiz trawl; 13 June 1982.
- 6.081: Cape Verde Islands, SW of Boa Vista; 15°57'N 23°08'W; depth 410-540 m, fine sand with brown clay; van Veen grab 3x; 13 June 1982.
- 6.082: Cape Verde Islands, S of São Nicolau; 16°34'N 24°22'W; depth 35 m, lava sand and calcareous algae; van Veen grab 4x; 14 June 1982.
- 6.083: Cape Verde Islands, S of São Nicolau; 16°34'N 24°22'W; depth 49 m, lava sand and calcareous sand; van Veen grab; 14 June 1982.
- 6.084: Cape Verde Islands, S of São Nicolau; 16°34'N 24°22'W; depth 72 m, calcareous sand with Foraminifera; van Veen grab; 14 June 1982.
- 6.085: Cape Verde Islands, S of São Nicolau; 16°34'N 24°22'W; depth 100 m, coarse yellow Foraminifera sand; van Veen grab; 14 June 1982.
- 6.086: Cape Verde Islands, S of São Nicolau; 16°34'N 24°24'W; depth 185-300 m, hard bottom; rectangular dredge; 14 June 1982.
- 6.087: Cape Verde Islands, S of São Nicolau; 16°34'N 24°23'W; depth 300-445 m, fossil corals and red algae; rectangular dredge; 14 June 1982.
- 6.088: Cape Verde Islands, S of São Nicolau; 16°34'N 24°23'W; depth 460-540

- m, fossil corals and red algae, reef; rectangular dredge; 14 June 1982.
- 6.090: Cape Verde Islands, S of São Nicolau; 16°34'N 24°23'W; depth 260-300 m, calcareous algae and shells; rectangular dredge; 14 June 1982.
- 6.091: Cape Verde Islands, S of São Nicolau; 16°34'N 24°24'W; depth 710-800 m, fossil calcareous algae; rectangular dredge; 14 June 1982.
- 6.092: Cape Verde Islands, SW of São Nicolau; 16°23'N 24°37'W; depth 3000-3250 m; 3.5 m Agassiz trawl; 14/15 June 1982.
- 6.093: Cape Verde Islands, SW of Razo; 16°36'N 24°37'W; depth 400-430 m, sand and shell gravel; van Veen grab; 15 June 1982.
- 6.094: Cape Verde Islands, SW of Razo; 16°36'N 24°37'W; depth 800-900 m, rocky bottom; rectangular dredge; 15 June 1982.
- 6.095: Cape Verde Islands, SW of Razo; 16°35'N 24°37'W; depth 930 m, coarse sand and shell gravel; van Veen grab; 15 June 1982.
- 6.096: Cape Verde Islands, SW of Razo; 16°36'N 24°39'W; depth 1000-1350 m, rocky bottom with epifauna; rectangular dredge; 15 June 1982.
- 6.097: Cape Verde Islands, SW of Razo; 16°37'N 24°40'W; depth 900-1200 m, fossil shells and sponges; rectangular dredge; 15 June 1982.
- 6.098: Cape Verde Islands, SW of Razo; 16°36'N 24°38'W; depth 450-700 m, rocky bottom and shells; rectangular dredge; 15 June 1982.
- 6.099: Cape Verde Islands, SW of Santa Luzia; 16°33'N 24°52'W; depth 0-1500 m (bottom at 2000-2300 m); midwater-trawl; 15 June 1982.
- 6.100: Cape Verde Islands, SW of Santa Luzia; 16°32'N 24°53'W; depth 0-2000 m (bottom at 2200-2500 m); midwater-trawl; 16 June 1982.
- 6.101: Cape Verde Islands, SW of Santa Luzia; 16°45'N 24°46'W; depth 20 m, coarse sand, calcareous algae and corals; van Veen grab; 16 June 1982.
- 6.102: Cape Verde Islands, SW of Santa Luzia; 16°44'N 24°46'W; depth 25-33 m, corals, coarse sand and calcareous algae; rectangular dredge; 16 June 1982.
- 6.103: Cape Verde Islands, SW of Santa Luzia; 16°43'N 24°46'W; depth 102 m, fine sand, shell gravel and calcareous algae; van Veen grab; 16 June 1982.
- 6.104: Cape Verde Islands, SSW of Santa Luzia; 16°43'N 24°46'W; depth 110-150 m, calcareous algae and epifauna; rectangular dredge; 16 June 1982.
- 6.105: Cape Verde Islands, SSW of Santa Luzia; 16°43'N 24°47'W; depth 204 m, Foraminifera sand and shell gravel; van Veen grab; 16 June 1982.
- 6.106: Cape Verde Islands, SSW of Santa Luzia; 16°43'N 24°47'W; depth 150-300 m, coarse sand with calcareous algae; rectangular dredge; 16 June 1982.
- 6.107: Cape Verde Islands, SW of Santa Luzia; 16°44'N 24°46'W; depth 50 m, sand; van Veen grab; 16 June 1982.
- 6.108: Cape Verde Islands, SW of Santa Luzia; 16°44'N 24°46'W; depth 55-65 m, calcareous algae; rectangular dredge; 16 June 1982.

- 6.109: Cape Verde Islands, S of Santa Luzia; 16°44'N 24°46'W; depth 55-80 m, calcareous algae and epifauna; 1.2 m Agassiz trawl; 16 June 1982.
- 6.110: Cape Verde Islands, S of Santa Luzia; 16°44'N 24°46'W; depth 60-80 m, coarse sand and shell gravel; 1.2 m Agassiz trawl; 16 June 1982.
- 6.111: Cape Verde Islands, S of Santa Luzia; 16°44'N 24°47'W; depth 55-62 m, coarse yellow sand; Hamon grab 6x; 16 June 1982.
- 6.112: Cape Verde Islands, SW of Santo Antão; 16°47'N 25°20'W; depth 2500-1450 m; net torn, small catch; 5 m beam-trawl; 16/17 June 1982.
- 6.113: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 220 m, rocky bottom, epifauna only; van Veen grab; 17 June 1982.
- 6.114: Cape Verde Islands, SW of Santo Antão; 16°58'N 25°20'W; depth 200 m, black lava sand and brown silt; van Veen grab; 17 June 1982.
- 6.115: Cape Verde Islands, SW of Santo Antão; 16°58'N 25°20'W; depth 161-222 m, sandy mud, rock and epifauna; rectangular dredge; 17 June 1982.
- 6.116: Cape Verde Islands, SW of Santo Antão; 16°58'N 25°20'W; depth 312 m, muddy volcanic sand; van Veen grab; 17 June 1982.
- 6.117: Cape Verde Islands, SW of Santo Antão; 16°58'N 25°20'W; depth 280-220 m, rocky bottom; rectangular dredge; 17 June 1982.
- 6.118: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 500-550 m, mud and volcanic sand; van Veen grab; 17 June 1982.
- 6.119: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 591-396 m, rocks on muddy bottom; rectangular dredge; 17 June 1982.
- 6.120: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 400-600 m, volcanic rocks and gravel; rectangular dredge; 17 June 1982.
- 6.121: Cape Verde Islands, SW of Santo Antão; 16°53'N 25°52'W; depth 0-2000 m (bottom at about 4000 m); midwater-trawl; 17/18 June 1982.
- 6.122: Cape Verde Islands, SW of Santo Antão; 17°00'N 25°21'W; depth 646 m, mud, pebbles and shells; van Veen grab; 18 June 1982.
- 6.123: Cape Verde Islands, SW of Santo Antão; 17°00'N 25°21'W; depth 660-620 m, rocks; rectangular dredge; 18 June 1982.
- 6.124: Cape Verde Islands, SW of Santo Antão; 17°00'N 25°21'W; depth 800 m, volcanic sand and shell gravel; van Veen grab; 18 June 1982.
- 6.125: Cape Verde Islands, SW of Santo Antão; 17°00'N 25°21'W; depth about 700 m, pebbles and calcareous nodules; rectangular dredge; 18 June 1982.
- 6.126: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 0-150 m (bottom at about 250 m); midwater-trawl; 18 June 1982.
- 6.127: Cape Verde Islands, SW of Santo Antão; 16°57'N 25°20'W; depth 0-200 m (bottom at 500-1200 m); midwater-trawl; 18 June 1982.
- 6.128: Cape Verde Islands, S of São Vicente; 16°47'N 25°01'W; depth about 30

- m, coarse Foraminifera sand and calcareous gravel; van Veen grab; 19 June 1982.
- 6.129: Cape Verde Islands, S of São Vicente; 16°47'N 25°02'W; depth 34-42 m, sand and calcareous algae; rectangular dredge; 19 June 1982.
- 6.130: Cape Verde Islands, S of São Vicente; 16°47'N 25°02'W; depth 50 m, sand, some mud and calcareous algae; van Veen grab 3x; 19 June 1982.
- 6.131: Cape Verde Islands, S of São Vicente; 16°47'N 25°02'W; depth 30-43 m, sand, algae and calcareous nodules; 1.2 m Agassiz trawl; 19 June 1982.
- 6.132: Cape Verde Islands, S of São Vicente; 16°46'N 25°02'W; depth 78-80 m, yellow Foraminifera sand; van Veen grab 5x; 19 June 1982.
- 6.133: Cape Verde Islands, S of São Vicente; 16°47'N 25°02'W; depth 50-60 m, sand, shells and calcareous algae; 1.2 m Agassiz trawl; 19 June 1982.
- 6.134: Cape Verde Islands, S of São Vicente; 16°45'N 25°02'W; depth 110-120 m, coarse sand and shell gravel; van Veen grab 3x; 19 June 1982.
- 6.135: Cape Verde Islands, S of São Vicente; 16°46'N 25°03'W; depth 110-150 m, calcareous algae and epifauna; rectangular dredge; 19 June 1982.
- 6.136: Cape Verde Islands, S of São Vicente; 16°46'N 25°02'W; depth 57-61 m, sand, bryozoans and calcareous algae; rectangular dredge; 19 June 1982.
- 6.137: Cape Verde Islands, S of São Vicente; 16°46'N 25°03'W; depth 75-90 m, shells and calcareous nodules; 1.2 m Agassiz trawl; 19 June 1982.
- 6.138: Cape Verde Islands, S of São Vicente; 16°46'N 25°04'W; depth about 150 m, yellow sand and calcareous gravel; van Veen grab; 19 June 1982.
- 6.139: Cape Verde Islands, S of São Vicente; 16°45'N 25°04'W; depth 400-500 m, calcareous nodules; rectangular dredge; 19 June 1982.
- 6.140: Cape Verde Islands, SW of São Vicente; 16°24'N 25°25'W; depth 0-3000 m (bottom at 3500-4000 m); midwater-trawl; 19/20 June 1982.
- 6.141: Cape Verde Islands, SW of São Vicente; 16°49'N 25°05'W; depth 28 m, Foraminifera sand and volcanic sand; van Veen grab 2x; 20 June 1982.
- 6.142: Cape Verde Islands, SW of São Vicente; 16°49'N 25°05'W; depth 36-46 m, sand and shells; 1.2 m Agassiz trawl; 20 June 1982.
- 6.143: Cape Verde Islands, SW of São Vicente; 16°49'N 25°05'W; depth 50 m, Foraminifera sand and shells; van Veen grab; 20 June 1982.
- 6.144: Cape Verde Islands, SW of São Vicente; 16°49'N 25°06'W; depth 51 m, agglutinated calcareous sand; 1.2 m Agassiz trawl; 20 June 1982.
- 6.145: Cape Verde Islands, SW of São Vicente; 16°48'N 25°06'W; depth 73 m, Foraminifera sand and shells; van Veen grab 2x; 20 June 1982.
- 6.146: Cape Verde Islands, SW of São Vicente; 16°48'N 25°06'W; depth 75 m, coarse sand and sponges; 1.2 m Agassiz trawl; 20 June 1982.
- 6.147: Cape Verde Islands, SW of São Vicente; 16°48'N 25°06'W; depth 99 m, Foraminifera sand, shells and calcareous algae; van Veen grab; 20 June 1982.

- 6.148: Cape Verde Islands, SW of São Vicente; 16°47'N 25°06'W; depth 100-200 m, sand, calcareous algae and sponges; 1.2 m Agassiz trawl; 20 June 1982.
- 6.149: Cape Verde Islands, SW of São Vicente; 16°47'N 25°06'W; depth 293 m, muddy Foraminifera sand; van Veen grab; 20 June 1982.
- 6.150: Cape Verde Islands, SW of São Vicente; 16°47'N 25°06'W; depth 300-400 m, calcareous nodules; rectangular dredge; 20 June 1982.
- 6.151: Cape Verde Islands, SW of São Vicente; 16°47'N 25°05'W; depth 300-500 m, calcareous nodules and sponges; rectangular dredge; 20 June 1982.
- 6.152: Cape Verde Islands, SW of São Vicente; 16°47'N 25°04'W; at surface; neuston-net; 20 June 1982.
- 6.153: Cape Verde Islands, NE of São Vicente; 17°11'N 24°39'W; depth 0-40 m (bottom at about 3000 m); midwater-trawl; 20 June 1982.
- 6.154: Cape Verde Islands, NE of São Vicente; 17°11'N 24°39'W; at surface; neuston-net; 20 June 1982.
- 6.155: Cape Verde Islands, NE of São Vicente; 17°12'N 24°41'W; depth about 3000 m, deep sea mud; 3.5 m Agassiz trawl; 21 June 1982.
- 6.156: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 25 m, Foraminifera sand and volcanic sand; van Veen grab 3x; 21 June 1982.
- 6.157: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 24 m, calcareous algae; 1.2 m Agassiz trawl; 21 June 1982.
- 6.158: Cape Verde Islands, NW of São Vicente; 16°53'N 25°01'W; depth 22 m, Foraminifera sand; van Veen grab; 21 June 1982.
- 6.159: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 24 m, Foraminifera sand; van Veen grab 2x; 21 June 1982.
- 6.160: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth about 30 m, calcareous sand and gravel; van Veen grab 3x; 21 June 1982.
- 6.161: Cape Verde Islands, NW of São Vicente; 16°54'N 25°02'W; depth 35-40 m, calcareous algae and bryozoans; 1.2 m Agassiz trawl; 21 June 1982.
- 6.162: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 38-45 m, Foraminifera- and volcanic sand with calcareous algae; van Veen grab 2x; 21 June 1982.
- 6.163: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 45-50 m, Foraminifera sand and calcareous algae; 1.2 m Agassiz trawl; 21 June 1982.
- 6.164: Cape Verde Islands, NW of São Vicente; 16°55'N 25°02'W; depth 67 m, Foraminifera sand and calcareous algae; van Veen grab 2x; 21 June 1982.
- 6.165: Cape Verde Islands, NW of São Vicente; 16°54'N 25°03'W; depth 74-78 m, sand, calcareous algae and bryozoans; triangular dredge; 21 June 1982.
- 6.166: Cape Verde Islands, NW of São Vicente; 16°54'N 25°03'W; depth 78-85

- m, calcareous algae and *Vermetes*; triangular dredge; 21 June 1982.
- 6.167: Cape Verde Islands, NE of São Vicente; 17°13'N 24°39'W; depth about 3040 m, deep sea mud; 2.4 m Agassiz trawl; 21 June 1982.
- 6.168: Cape Verde Islands, NE of São Vicente; 17°05'N 24°31'W; depth 3100 m; 2.4 m Agassiz trawl; 22 June 1982.
- 6.169: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 24-28 m, sand and calcareous algae; 1.2 m Agassiz trawl; 22 June 1982.
- 6.170: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 30-37 m, calcareous algae and shells; 1.2 m Agassiz trawl; 22 June 1982.
- 6.171: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 35 m, Foraminifera sand and volcanic sand; van Veen grab; 22 June 1982.
- 6.172: Cape Verde Islands, NW of São Vicente; 16°53'N 25°01'W; depth 22 m, Foraminifera sand and calcareous algae; van Veen grab; 22 June 1982.
- 6.173: Cape Verde Islands, NW of São Vicente; 16°54'N 25°01'W; depth 40-65 m; deep-sea camera; 22 June 1982.
- 6.174: Cape Verde Islands, NW of São Vicente; 16°55'N 25°02'W; depth 75 m, sand with calcareous algae; 1.2 m Agassiz trawl; 22 June 1982.
- 6.175: Cape Verde Islands, NW of São Vicente; 16°54'N 25°02'W; depth 50 m, muddy fine sand and calcareous algae; van Veen grab 2x; 22 June 1982.
- 6.176: Cape Verde Islands, NW of São Vicente; 16°54'N 25°02'W; depth 54-62 m, calcareous algae and bryozoans; 1.2 m Agassiz trawl; 22 June 1982.

SCUBA DIVING STATIONS

- 6.D01: Cape Verde Islands, S coast of São Tiago, SE of Porto Praia; 14°55'N 23°30'W; sheltered bay, sandy and rocky bottom, depth to 15 m; scuba diving; 4,5 June 1982.
- 6.D02: Cape Verde Islands, W coast of São Tiago, Baia de Santa Clara; 15°01'N 23°44'W; sheltered bay, rocky coast, depth to 20 m; scuba diving; 6,7 June 1982.
- 6.D03: Cape Verde Islands, SW coast of Brava, Porto dos Ferreiros; 14°49'N 24°44'W; sheltered rocky bay, depth to 15 m; scuba diving; 8 June 1982.
- 6.D04: Cape Verde Islands, W coast of Fogo, N of São Filipe; 14°56'N 24°31'W; sandy and rocky bottom, depth to 15 m; scuba diving; 9 June 1982.
- 6.D05: Cape Verde Islands, SE coast of Fogo, SE of São Filipe; 14°54'N 24°30'W; sandy and rocky bottom, depth to 15 m; scuba diving; 10 June 1982.
- 6.D06: Cape Verde Islands, SW coast of São Nicolau, Baia do Tarrafal; 16°35'N 24°22'W; rocky coast, depth to 15 m; scuba diving; 0 June 1982.

- 6.D07: Cape Verde Islands, SW coast of Santa Luzia; 16°45'N 24°46'W; rocky and sandy coast, depth to 10 m; scuba diving; 6 June 1982.
- 6.D08: Cape Verde Islands, SW coast of Santo Antão, W of Tarrafal; 16°58'N 25°20'W; rocky and sandy coast, depth to 10 m; scuba diving; 6 June 1982.
- 6.D09: Cape Verde Islands, SW coast of Santo Antão, W of Monte Trigo; 16°59'N 25°20'W; steep rocky coast, depth to 20 m; scuba diving; 7 June 1982.
- 6.D10: Cape Verde Islands, S coast of São Vicente; 16°48'N 25°01'W; rocky coast, depth to 15 m; scuba diving; 9 June 1982.
- 6.D11: Cape Verde Islands, SW coast of São Vicente, Baia de São Pedro; 16°50'N 25°04'W; rocky and sandy coast, depth to 15 m; scuba diving; 20 June 1982.
- 6.D12: Cape Verde Islands, N coast of São Vicente, bay W of Mindelo; 16°55'N 24°59'W; rocky coast, depth to 15 m; scuba diving; 21,22 June 1982.

TRAP STATIONS

- 6.V01: Cape Verde Islands, S of São Tiago; 15°01'N 23°46'W; depth 440 m; 2 baited shrimp-traps and 2 traps with light; overnight 6/7 June 1982.
- 6.V02: Cape Verde Islands, S of Santa Luzia; 16°44'N 24°46'W; depth 38 m, fish-trap, 8 shrimp-traps with light and bait; overnight 15/16 June 1982.
- 6.V03: Cape Verde Islands, S of Santo Antão; 16°58'N 25°20'W; depth 100 m; fish-trap, 6 shrimp-traps with light and bait; overnight 17/18 June 1982.
- 6.V04: Cape Verde Islands, S of São Vicente; 16°47'N 25°04'W; depth 63 m; fish-trap, 6 shrimp-traps with light and bait; overnight 19/20 June 1982.
- 6.V05: Cape Verde Islands, N of São Vicente; 16°55'N 25°00'W; depth 64 m; 8 shrimp-traps with light and bait; overnight 21/22 June 1982.

COASTAL STATIONS

- 6.K01: Canary Islands, SW coast of Tenerife, near Los Christianos; 28°03'N 16°43'W; rocky littoral, tidal pools; 27,30 May 1982.
- 6.K02: Canary Islands, SW coast of Tenerife, Los Christianos; 28°03'N 16°43'W; rocky littoral; 28 May 1982.
- 6.K03: Canary Islands, SW coast of Tenerife, near Punta de Barbero; 28°13'N 16°50'W; exposed rocky littoral, pools; 29 May 1982.
- 6.K04: Canary Islands, Tenerife near El Médano, E-side of harbour; 28°02'N 16°32'W; rocky littoral; 30 May 1982.

- 6.K05: Canary Islands, N coast of Tenerife, Playa de Los Troches; 28°34'N 16°17'W; exposed rocky shore, pools; 31 May 1982.
- 6.K06: Cape Verde Islands, São Tiago, Porto Praia, Ilhéu de Santa Maria; 14°55'N 23°30'W; sheltered rocky littoral, muddy bay; 4,5,6,11 June 1982.
- 6.K07: Cape Verde Islands, W coast of São Tiago, Baia de Santa Clara; 15°01'N 23°41'W; sheltered rocky shore; 6 June 1982.
- 6.K08: Cape Verde Islands, SW coast of Brava, Porto dos Ferreiros; 14°49'N 24°44'W; rocky and sandy littoral; 8 June 1982.
- 6.K09: Cape Verde Islands, W coast of Fogo, harbour of São Filipe; 14°56'N 24°31'W; littoral zone; 9 June 1982.
- 6.K10: Cape Verde Islands, SW coast of Fogo, SE of São Filipe; 14°54'N 24°30'W; sandy shore; 10 June 1982.
- 6.K11: Cape Verde Islands, S coast of Boa Vista; 15°59'N 22°49'W; sandy beach; 12 June 1982.
- 6.K12: Cape Verde Islands, SW coast of São Nicolau, Baia do Tarrafal; 16°35'N 24°22'W; rocky littoral; 14 June 1982.
- 6.K13: Cape Verde Islands, SW coast of Ilha Razo; 16°36'N 24°36'W; rocky littoral; 15 June 1982.
- 6.K14: Cape Verde Islands, NW coast of Ilha Razo; 16°38'N 24°36'W; exposed rocky littoral, tide pools; 15 June 1982.
- 6.K15: Cape Verde Islands, SW coast of Ilha de Santa Luzia; 16°45'N 24°46'W; sandy coast; 16 June 1982.
- 6.K16: Cape Verde Islands, SW coast of Santo Antão, W of Monte Trigo; 16°59'N 25°20'W; steep rocky coast; 17 June 1982.
- 6.K17: Cape Verde Islands, S coast of São Vicente; 16°48'N 25°01'W; rocky and sandy littoral; 19 June 1982.
- 6.K18: Cape Verde Islands, SW coast of São Vicente, Baia de São Pedro; 16°50'N 25°04'W; coastal lagoon on sandy beach; 20 June 1982.
- 6.K19: Cape Verde Islands, SW coast of São Vicente, Baia de São Pedro; 16°50'N 25°04'W; rocky littoral; 20 June 1982.
- 6.K20: Cape Verde Islands, NE coast of São Vicente, Baia das Gates; 16°54'N 24°55'W; lagoon; 21,22 June 1982.
- 6.K21: Cape Verde Islands, NE coast of São Vicente, Baia das Gates; 16°54'N 24°55'W; exposed rocky shore; 22 June 1982.
- 6.K22: Cape Verde Islands, N coast of São Vicente, Mindelo harbour; 16°55'N 25°00'W; 21,22 June 1982.

COLLECTING TRIPS TO SENEGAL IN 1982 AND 1983

- SEN.01: Senegal, SW side of Cape Verde Peninsula, Fann Residence; rocky abrasion terrace below steep cliffs, with tidal pools containing *Aiptasia* spec., *Corallina* and other short algae; shore collecting; 25 June 1982, 2 Dec 1983.
- SEN.02: Senegal, near Somone, about 60 km SE of Dakar; small lagoon on S side of mouth of Somone river, sandy to muddy bottom and mangroves, depth 0.5-1.5 m; shore-collecting and snorkeling; 27,30 June 1982, 20 Nov 1983.
- SEN.03: Senegal, Western tip of Cape Verde Peninsula, Pointe des Almadies, locality facing lighthouse; rocky to sandy area with many submerged and emerging rocks and skerries in front of sandy beach and two oyster ponds, depth 1-4 m; shore-collecting and snorkeling; 27 June 1982, 1,5 July 1982.
- SEN.04: Senegal, Western tip of Cape Verde Peninsula, Pointe des Almadies; locality facing southward, sandy beach, intertidally and subtidally passing into rocky bottom with large stones, boulders and sandy patches, depth 2-5 m; snorkeling; 27,28 June 1982, 15 Nov 1983.
- SEN.05: Senegal, N side of Cape Verde Peninsula, W of Plage du Virage; rocky tidal flat with stones, boulders, and tidal pools with sand and *Palythoa*; exposed rocks near low-water mark with growth of *Corallina*; shore-collecting; 29 June 1982; 18 Nov 1983.
- SEN.06: Senegal, Cap de Naze, about 45 km SE of Dakar; reddish brown rocks surrounded by sandy beach, rock crevices and some tidal pools with stones and sand; shore-collecting; 30 June 1982.
- SEN.07: Senegal, N side of Cape Verde Peninsula, W of Plage du Virage; rocky tidal flat with large, rather protected tidal pools with *Palythoa*-covered boulders and stones, partly sand covered; shore-collecting; 3 June 1982, 22 Nov 1983.
- SEN.08: Senegal, Southern tip of Cape Verde Peninsula, between Cap Manuel and Pointe Bernard; between concrete stairs and swimming pool of the Lido hotel, boulder beach down the cliffs, with submerged barrier of boulders, merging into sandy bottom at a depth of 4-6 m, depth 0.5-6 m; snorkeling; 2 July 1982, 21, 25 Nov 1983.
- SEN.09: Senegal, SW side of Cape Verde Peninsula, Fann Residence; protected S side of cape, rocky area with boulders and large tidal pools with *Palythoa*; shore-collecting; 16 Nov 1983.
- SEN.10: Senegal, N side of Cape Verde Peninsula, immediately W of Plage du Virage; flat rocky projection with boulders and stones on W part of the beach, just E of the mouth of a small stream; shore-collecting; 17 Nov 1983.

- SEN.11: Senegal, Cap de Biche, W of Rufisque, 15 to 20 km E of Dakar; sandy beach with lime stone formation in oblique layers, with holes and pools; shore-collecting; 19 Nov 1983.
- SEN.12: Senegal, N side of Cape Verde Peninsula; little sandy bay with stones and boulders between Ile de N'Gor and plage du Virage, depth 1-5 m; snorkeling; 23,24 Nov 1983.
- SEN.13: Senegal, SW side of Cape Verde Peninsula, between Pointe des Almadies and Cap Vert (Les Mamelles); small beach, just NW of Baby Beach; shore-collecting; 26 Nov 1983.
- SEN.14: Senegal, SW side of Cape Verde Peninsula, Les Mamelles, below Cape Verde light house; exposed skerries and submerged rocks, depth 3-8 m; snorkeling; 26 Nov 1983.
- SEN.15: Senegal, SW side of Cape Verde Peninsula, Les Mamelles; small exposed sandy beach; shore-collecting; 26 Nov 1983.
- SEN.16: Senegal, SW side of Cape Verde Peninsula, between Pointe des Almadies and Cap Vert (Les Mamelles), in front of and N of Baby Beach; sandy bottom, in places with stones and boulders, depth to 4 m; snorkeling; 27 Nov 1983.
- SEN.17: Senegal, N side of Cape Verde Peninsula, La Calao; protected bay with sand, stones and boulders, W of little, rocky peninsula and facing Ile de N'Gor, depth to 4 m; snorkeling; 28,30 Nov, 1 Dec 1983.
- SEN.18: Senegal, E side of Cape Verde Peninsula, Tahiti Plage, S of Pointe de Bel Air; beach and sandy bottom with stones and boulders, depth to 2 m; shore-collecting and snorkeling; 29 Nov 1983.

**"TYDEMAN" CAPE VERDE ISLANDS EXPEDITION 1986
CANCAP-VII**

- 7.001: Cape Verde Islands, SE of São Tiago; 14°51'N 23°15'W; depth 0-750 m (bottom at about 3000 m); midwater-trawl; 18 Aug 1986.
- 7.002: Cape Verde Islands, SE of São Tiago, near Praia; 14°39'N 23°23'W; depth 0-2850 m; failure, some fish was caught; 5 m beam-trawl; 18 Aug 1986.
- 7.003: Cape Verde Islands, SW of São Tiago; 14°54'N 23°38'W; depth 510 m, muddy sand with pteropods, large gorgonid caught in wire; van Veen grab; 20 Aug 1986.
- 7.004: Cape Verde Islands, SW of São Tiago; 14°54'N 23°38'W; depth 320 m, sandy dark grey mud with tubeworms, few living animals, few shells; van Veen grab; 20 Aug 1986.

- 7.005: Cape Verde Islands, SW of São Tiago; 14°54'N 23°38'W; depth 235 m, muddy brownish-gray sand, fine shell gravel; van Veen grab; 20 Aug 1986.
- 7.006: Cape Verde Islands, SW of São Tiago; 14°53'N 23°38'W; depth 510 m, fine shell gravel; van Veen grab; 20 Aug 1986.
- 7.007: Cape Verde Islands, SW of São Tiago; 14°54'N 23°38'W; depth 420 m, muddy sand; van Veen grab; 20 Aug 1986.
- 7.008: Cape Verde Islands, SW of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 700 m, sandy mud; van Veen grab; 20 Aug 1986.
- 7.009: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 0-600 m (bottom at 3000 m); midwater-trawl; 20 Aug 1986.
- 7.010: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade, 14°41'N 23°39'W; depth 0-2000 m (bottom at 3500 m); midwater-trawl; 20-21 Aug 1986.
- 7.011: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°39'W; depth 325-500 m; rectangular dredge; 21 Aug 1986.
- 7.012: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 215-400 m; rectangular dredge; 21 Aug 1986.
- 7.013: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 115-365 m, dredge lost; rectangular dredge; 21 Aug 1986.
- 7.014: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 450-600 m, muddy sand; van Veen grab; 21 Aug 1986.
- 7.015: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°54'N 23°38'W; depth 450-600 m, grey clay; van Veen grab; 21 Aug 1986.
- 7.016: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°38'N 23°53'W; depth 280-640 m, dredge empty; rectangular dredge; 21 Aug 1986.
- 7.017: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°38'N 23°54'W; depth 310 m, net torn off; rectangular dredge; 21 Aug 1986.
- 7.018: Cape Verde Islands, S of São Tiago, Ponta Grande da Cidade; 14°38'N 23°54'W; depth 515-540 m, muddy sand; anchor dredge; 21 Aug 1986.
- 7.019: Cape Verde Islands, S of São Tiago, near Praia; 14°46'N 23°33'W; depth 0-300 m (bottom at about 3000 m); midwater-trawl; 21 Aug 1986.
- 7.020: Cape Verde Islands, S of São Tiago, near Praia; 14°45'N 23°29'W; depth 0-2200 m (bottom at about 3200 m); midwater-trawl; 21-22 Aug 1986.
- 7.021: Cape Verde Islands, S of São Tiago, Ponta Temerosa; 14°53'N 23°32'W; depth 480-530 m, small catch, mainly polychaetes and tubes, some shells; rectangular dredge; 22 Aug 1986.
- 7.022: Cape Verde Islands, S of São Tiago, Ponta Temerosa; 14°53'N 23°33'W; depth 420 m, dredge lost, polychaete tubes on break end; rectangular dredge; 22 Aug 1986.
- 7.023: Cape Verde Islands, S of São Tiago, Ponta Temerosa; 14°53'N

- 23°32'W; depth 525 m, shell gravel with gorgonians and sponges; 1.2 m Agassiz trawl; 22 Aug 1986.
- 7.024: Cape Verde Islands, S of São Tiago; 14°53'N 23°33'W; depth 740-820 m, no catch; 1.2 m Agassiz trawl; 22 Aug 1986.
- 7.025: Cape Verde Islands, S of São Tiago; 14°53'N 23°34'W; depth 800 m, clay bottom with gorgonians; 1.2 m Agassiz trawl; 22 Aug 1986.
- 7.026: Cape Verde Islands, S of São Tiago; 14°52'N 23°33'W; depth 515 m, small catch; 1.2 m Agassiz trawl; 22 Aug 1986.
- 7.027: Cape Verde Islands, S of São Tiago; 14°53'N 23°34'W; depth 610-820 m, calcareous gravel and shells; anchor dredge; 22 Aug 1986.
- 7.028: Cape Verde Islands, SE of Cima; 14°57'N 24°39'W; depth 225 m, yellow sand with shell gravel; van Veen grab; 23 Aug 1986.
- 7.029: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 380-470 m, no catch; van Veen grab; 23 Aug 1986.
- 7.030: Cape Verde Islands, SE of Cima; 14°57'N 24°39'W; depth 165 m, hard bottom with some yellow calcareous sand; van Veen grab; 23 Aug 1986.
- 7.031: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 75 m, yellow Foraminifera sand; van Veen grab; 23 Aug 1986.
- 7.032: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 65 m, calcareous nodules and yellow sand; van Veen grab; 23 Aug 1986.
- 7.033: Cape Verde Islands, SE of Cima; 14°58'N 24°39'W; depth 40 m, dark grey Foraminifera sand with calcareous red algae; van Veen grab; 23 Aug 1986.
- 7.034: Cape Verde Islands, N of Ilhéu Grande; 15°04'N 24°41'W; depth 0-175 m (bottom at 2000-3000 m); midwater-trawl; 23 Aug 1986.
- 7.035: Cape Verde Islands, N of Ilhéu Grande; 15°08'N 24°35'W; depth 0-2000 m (bottom at about 3100 m); midwater-trawl; 23-24 Aug 1986.
- 7.036: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 30-90 m, sandy bottom; 1.2 m Agassiz trawl; 24 Aug 1986.
- 7.037: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 285-350 m, muddy calcareous sand and shell gravel; van Veen grab; 24 Aug 1986.
- 7.038: Cape Verde Islands, SE of Cima; 14°57'N 24°38'W; depth 410-460 m, yellow-grey calcareous sand and shell gravel with some basaltic pebbles; van Veen grab; 24 Aug 1986.
- 7.039: Cape Verde Islands, SE of Cima; 14°56'N 24°38'W; depth 590-610 m, volcanic and calcareous sand; van Veen grab; 24 Aug 1986.
- 7.040: Cape Verde Islands, SE of Cima; 14°57'N 24°37'W; depth 650-720 m, gorgonians; 1.2 m Agassiz trawl; 24 Aug 1986.
- 7.041: Cape Verde Islands, E of Cima; 14°57'N 24°38'W; depth 580 m, gorgonians and sponges; 1.2 m Agassiz trawl; 24 Aug 1986.

- 7.042: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 76 m, yellow calcareous sand with some shell gravel; van Veen grab; 25 Aug 1986.
- 7.043: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 30 m, calcareous sand; van Veen grab; 25 Aug 1986.
- 7.044: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 45 m, calcareous nodules; rectangular dredge; 25 Aug 1986.
- 7.045: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 95-120 m, calcareous nodules; 1.2 m Agassiz trawl; 25 Aug 1986.
- 7.046: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°13'W; depth 70 m, calcareous red algae; 1.2 m Agassiz trawl; 25 Aug 1986.
- 7.047: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°06'N 23°13'W; depth 75 m, calcareous nodules with hydroids; 1.2 m Agassiz trawl; 25 Aug 1986.
- 7.048: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°06'N 23°14'W; depth 166 m, muddy, yellow-grey Foraminifera sand with some shells, a sponge and several polychaetes (mainly tube worms); van Veen grab; 25 Aug 1986.
- 7.049: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°06'N 23°14'W; depth 273 m, yellow-grey sandy clay with tube worms, shells and dead sponges; van Veen grab; 25 Aug 1986.
- 7.050: Cape Verde Islands, SW of Maio; 15°06'N 23°14'W; depth 380 m, muddy sand and calcareous gravel with a few shells; van Veen grab; 25 Aug 1986.
- 7.051: Cape Verde Islands, SW of Maio; 15°07'N 23°14'W; depth 225 m, some epifauna; 1.2 m Agassiz trawl; 25 Aug 1986.
- 7.052: Cape Verde Islands, SW of Maio; 15°06'N 23°15'W; depth 594 m, practically no sediment; van Veen grab; 25 Aug 1986.
- 7.053: Cape Verde Islands, SW of Maio; 14°59'N 23°10'W; depth 0-880 m (bottom at about 1000 m); midwater-trawl (some specimens caught with dip-nets); 25-26 Aug 1986.
- 7.054: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°06'N 23°14'W; depth 39 m, (attempt to find the fish-traps of sta. 7.V05); rectangular dredge; 26 Aug 1986.
- 7.055: Cape Verde Islands, SW of Maio; 15°07'N 33°14'W; line fishing; 25-26 Aug 1986.
- 7.056: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°08'N 23°14'W; depth 47 m, small catch: calcareous nodules; rectangular dredge;

26 Aug 1986.

- 7.057: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°08'N 23°14'W; depth 47 m, calcareous nodules; rectangular dredge; 26 Aug 1986.
- 7.058: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 69 m, calcareous nodules; rectangular dredge; 26 Aug 1986.
- 7.059: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 61 m, calcareous nodules; rectangular dredge; 26 Aug 1986.
- 7.060: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°14'W; depth 247-300 m, no catch, net lost; rectangular dredge; 26 Aug 1986.
- 7.061: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°15'W; depth 605 m, green-brownish, somewhat sticky mud with tube worms and sipunculids; van Veen grab; 26 Aug 1986.
- 7.062: Cape Verde Islands, SW of Maio, Ponta Inglez/Ponta Preta; 15°07'N 23°15'W; depth 606 m, no catch, dredge lost; rectangular dredge; 26 Aug 1986.
- 7.063: Cape Verde Islands, NNO of São Tiago, Ponta da Costa; 15°45'N 23°31'W; depth 0-400 m (bottom at about 3500 m); midwater-trawl; 26 Aug 1986.
- 7.064: Cape Verde Islands, W of Boa Vista, SW of Ilhéu Calheta do Velho; 16°11'N 22°58'W; depth 25 m, hard calcareous bottom; van Veen grab; 27 Aug 1986.
- 7.065: Cape Verde Islands, W of Boa Vista, SW of Ilhéu Calheta do Velho; 16°10'N 22°58'W; depth 39 m, very fine, yellow, calcareous sand with a few shells; van Veen grab; 27 Aug 1986.
- 7.066: Cape Verde Islands, W of Boa Vista, SW of Ilhéu Calheta do Velho; 16°10'N 22°59'W; depth 46 m, muddy calcareous sand with yellow-grey Foraminifera; van Veen grab; 27 Aug 1986.
- 7.067: Cape Verde Islands, W of Boa Vista, SW of Ilhéu Calheta do Velho; 16°11'N 22°59'W; depth 42 m, yellow-grey calcareous sand, Foraminifera, some shell gravel; van Veen grab; 27 Aug 1986.
- 7.068: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho; 16°11'N 22°59'W; depth 40 m, very fine yellow-grey sand with Foraminifera; van Veen grab; 27 Aug 1986.
- 7.069: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho; 16°11'N 22°58'W; depth 25 m, hard bottom; van Veen grab; 27 Aug 1986.
- 7.070: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho; 16°10'N 22°58'W; depth 25 m, basaltic stones with calcareous overgrowth; van Veen grab; 27 Aug 1986.
- 7.071: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho;

- 16°09'N 22°58'W; depth 34 m, basaltic pebbles and coarse calcareous sand; van Veen grab; 27 Aug 1986.
- 7.072: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho; 16°09'N 22°59'W; depth 40 m, very fine, pure calcareous sand; van Veen grab; 27 Aug 1986.
- 7.073: Cape Verde Islands, W of Boa Vista, WSW of Ilhéu Calheta do Velho; 16°09'N 22°59'W; depth 53 m, yellowish sand; van Veen grab; 27 Aug 1986.
- 7.074: Cape Verde Islands, W of Boa Vista, SW of Ilhéu de Sal Rei; 16°09'N 22°57'W; at surface; line fishing, dip-nets; 27-28 Aug 1986.
- 7.075: Cape Verde Islands, W of Boa Vista, SSW of Ilhéu de Sal Rei; 16°08'N 22°58'W; depth 33 m, nearly pure Foraminifera gravel with small calcareous red algae and some stones; van Veen grab; 28 Aug 1986.
- 7.076: Cape Verde Islands, W of Boa Vista, SSW of Ilhéu de Sal Rei; 16°08'N 22°58'W; depth 40 m, fine yellow sand; van Veen grab; 28 Aug 1986.
- 7.077: Cape Verde Islands, W of Boa Vista, SSW of Ilhéu de Sal Rei; 16°08'N 22°59'W; depth 44 m, muddy, fine calcareous sand with Foraminifera; van Veen grab; 28 Aug 1986.
- 7.078: Cape Verde Islands, W of Boa Vista, W of Ilhéu de Sal Rei; 16°10'N 22°59'W; depth 45 m, some algae and hydroids; 1.2 m Agassiz trawl; 28 Aug 1986.
- 7.079: Cape Verde Islands, W of Boa Vista, W of Ilhéu de Sal Rei; 16°10'N 23°00'W; depth 60 m, yellow Foraminifera sand with shell gravel; van Veen grab; 28 Aug 1986.
- 7.080: Cape Verde Islands, W of Boa Vista, W of Ilhéu de Sal Rei; 16°10'N 23°01'W; depth 74 m, muddy yellow calcareous sand and some gravel; van Veen grab; 28 Aug 1986.
- 7.081: Cape Verde Islands, W of Boa Vista, W of Ilhéu de Sal Rei; 16°11'N 23°00'W; depth 70 m, antipatharians and sponges; 1.2 m Agassiz trawl; 28 Aug 1986.
- 7.082: Cape Verde Islands, SW of Sal; 16°30'N 23°25'W; at surface, mainly squid; handline fishing; 28 Aug 1986.
- 7.083: Cape Verde Islands, SW of Sal; 16°30'N 23°19'W; depth 0-1150 m (bottom at about 3000 m); midwater-trawl; 28-29 Aug 1986.
- 7.084: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N 22°54'W; depth 123 m, muddy calcareous sand; van Veen grab; 29 Aug 1986.
- 7.085: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N 22°54'W; depth 31 m, muddy grey calcareous sand, Foraminifera; van Veen grab; 29 Aug 1986.
- 7.086: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N

- 22°54'W; depth 63 m, calcareous sand and gravel; van Veen grab; 29 Aug 1986.
- 7.087: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N 22°54'W; depth 218 m, no catch; van Veen grab; 29 Aug 1986.
- 7.088: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N 22°54'W; depth 59 m, muddy grey sand; van Veen grab; 29 Aug 1986.
- 7.089: Cape Verde Islands, S of Sal, SW of Ponta do Leme Velho; 16°34'N 22°54'W; depth 75-90 m, calcareous sand; van Veen grab; 29 Aug 1986.
- 7.090: Cape Verde Islands, S of Sal, S of Ponta do Leme Velho; 16°34'N 22°54'W; depth 18-28 m, calcareous white sand and gravel with some green algae; van Veen grab; 29 Aug 1986.
- 7.091: Cape Verde Islands, S of Sal, S of Ponta do Leme Velho; 16°34'N 22°54'W; depth 41 m, yellow-grey calcareous sand; van Veen grab; 29 Aug 1986.
- 7.092: Cape Verde Islands, S of Sal, SE of Ponta do Leme Velho; 16°34'N 22°53'W; depth 23 m, muddy grey calcareous sand; van Veen grab; 29 Aug 1986.
- 7.093: Cape Verde Islands, S of Sal, Baia de Santa Maria; 16°34'N 22°54'W; depth 42 m, calcareous sand and gravel; van Veen grab; 29 Aug 1986.
- 7.094: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°34'N 22°54'W; depth 24 m, calcareous sand and gravel with calcareous algae; van Veen grab; 29 Aug 1986.
- 7.095: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°34'N 22°53'W; depth 30-50 m, white calcareous sand, calcareous algae and bryozoans; van Veen grab; 29 Aug 1986.
- 7.096: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°34'N 22°55'W; depth 145-160 m, sandy mud with some shells; van Veen grab; 29 Aug 1986.
- 7.097: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°34'N 22°55'W; depth 90 m, muddy sand; van Veen grab; 29 Aug 1986.
- 7.098: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°36'N 22°56'W; depth 100 m, hard calcareous bottom; van Veen grab; 29 Aug 1986.
- 7.099: Cape Verde Islands, S of Sal, Santa Maria Bay; 16°34'N 22°55'W; depth 18 m; line fishing, dip-nets; 29-30 Aug 1986.
- 7.100: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°01'W; depth 354 m, volcanic and calcareous mud, sand and gravel with polychaet tubes; van Veen grab; 30 Aug 1986.
- 7.101: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°01'W; depth 262-280 m, calcareous sand and gravel with some nodules and Foraminifera; van Veen grab; 30 Aug 1986.
- 7.102: Cape Verde Islands, W of Sal, off Palmeira; 16°46'N 23°01'W; depth

- 165 m, yellow calcareous sand and gravel and volcanic sand; van Veen grab; 30 Aug 1986.
- 7.103: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°01'W; depth 99 m, boulder with epifauna; van Veen grab; 30 Aug 1986.
- 7.104: Cape Verde Islands, W of Sal, off Palmeira; 16°44'N 23°02'W; depth 125 m, hard bottom with calcareous nodules; van Veen grab; 30 Aug 1986.
- 7.105: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°01'W; depth 123-142 m, calcareous and volcanic sand, nodules and stones with serpulids and Foraminifera; van Veen grab; 30 Aug 1986.
- 7.106: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°00'W; depth 60 m, calcareous sand and nodules with Foraminifera; van Veen grab; 30 Aug 1986.
- 7.107: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 23°00'W; depth 70 m, calcareous nodules; 1.2 m Agassiz trawl; 30 Aug 1986.
- 7.109: Cape Verde Islands, W of Sal, off Palmeira; 16°45'N 22°59'W; depth 31 m, coarse Foraminifera sand with calcareous algae; van Veen grab; 31 Aug 1986.
- 7.110: Cape Verde Islands, W of Sal, off Palmeira; 16°46'N 23°02'W; depth 85 m, coarse calcareous and volcanic sand with Foraminifera; van Veen grab; 31 Aug 1986.
- 7.111: Cape Verde Islands, W of Sal, off Palmeira; 16°46'N 23°02'W; depth 90 m, antipatharians and sponges; 1.2 m Agassiz trawl; 31 Aug 1986.
- 7.112: Cape Verde Islands, W of Sal, off Palmeira; 16°42'N 23°02'W; depth 125-164 m, calcareous nodules; 1.2 m Agassiz trawl; 31 Aug 1986.
- 7.113: Cape Verde Islands, W of Sal, off Palmeira; 16°42'N 23°01'W; depth 224-248 m, calcareous nodules; 1.2 m Agassiz trawl; 31 Aug 1986.
- 7.114: Cape Verde Islands, SW of Sal; 16°42'N 23°41'W; depth 0-330 m (bottom at about 3500 m); midwater-trawl; 31 Aug 1986.
- 7.115: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 80 m, calcareous sand, gravel and nodules with Foraminifera; van Veen grab; 1 Sept 1986.
- 7.116: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 75 m, calcareous sand and gravel; van Veen grab; 1 Sept 1986.
- 7.117: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 100-120 m, hard bottom: only some calcareous stones with epifauna; van Veen grab; 1 Sept 1986.
- 7.118: Cape Verde Islands, S of Razo; 16°36'N 24°37'W; depth 115-129 m, hard bottom with some sand; van Veen grab; 1 Sept 1986.
- 7.119: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 140-160 m, coarse calcareous sand, gravel and stones with Foraminifera; van Veen

- grab; 1 Sept 1986.
- 7.120: Cape Verde Islands, S of Razo; 16°36'N 24°37'W; depth 208 m, muddy calcareous sand; van Veen grab; 1 Sept 1986.
- 7.121: Cape Verde Islands, S of Razo; 16°36'N 24°37'W; depth 200-230 m, muddy calcareous sand; van Veen grab; 1 Sept 1986.
- 7.122: Cape Verde Islands, S of Razo; 16°36'N 24°35'W; depth 100 m; rectangular dredge; 1 Sept 1986.
- 7.123: Cape Verde Islands, S of Razo; 16°35'N 24°36'W; depth 120 m, some calcareous stones with epizoa; rectangular dredge; 1 Sept 1986.
- 7.124: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 205-240 m, a few small calcareous nodules; rectangular dredge; 1 Sept 1986.
- 7.125: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 85-130 m, calcareous algae (mostly dead); rectangular dredge; 1 Sept 1986.
- 7.126: Cape Verde Islands, S of Razo; 16°36'N 24°36'W; depth 208-930 m, calcareous nodules and sponges; rectangular dredge; 1 Sept 1986.
- 7.127: Cape Verde Islands, SE of São Nicolau; 16°24'N 24°43'W; depth 0-1100 m (bottom at 2800-3200 m); midwater-trawl; 1-2 Sept 1986.
- 7.128: Cape Verde Islands, S of São Nicolau, S. Jorge Bay; 16°33'N 24°17'W; depth 400 m, muddy Foraminifera sand, some shell gravel and some volcanic gravel; van Veen grab; 2 Sept 1986.
- 7.129: Cape Verde Islands, S of São Nicolau, S. Jorge Bay; 16°33'N 24°16'W; depth 405 m, muddy bottom with calcareous nodules; rectangular dredge; 2 Sept 1986.
- 7.130: Cape Verde Islands, S of São Nicolau, S. Jorge Bay; 16°33'N 24°16'W; depth 505-523 m, some epifauna (hydroids); rectangular dredge; 2 Sept 1986.
- 7.131: Cape Verde Islands, SE of São Nicolau; 16°32'N 24°16'W; depth 590-602 m, muddy bottom with gorgonids and sponges; 1.2 m Agassiz trawl; 2 Sept 1986.
- 7.132: Cape Verde Islands, SE of São Nicolau; 16°33'N 24°17'W; depth 395 m, small catch: gorgonians and scleractinians with epifauna; 1.2 m Agassiz trawl; 2 Sept 1986.
- 7.133: Cape Verde Islands, S of Branco; 16°40'N 24°40'W; depth 30 m, birds and fish caught on deck; 2-3 Sept 1986.
- 7.134: Cape Verde Islands, S of Branco; 16°33'N 24°15'W; depth 515 m, some calcareous nodules; rectangular dredge; 3 Sept 1986.
- 7.135: Cape Verde Islands, E of São Nicolau; 16°33'N 24°16'W; depth 425 m, calcareous nodules; rectangular dredge; 3 Sept 1986.
- 7.136: Cape Verde Islands, SE of São Nicolau, off Preguiça; 16°33'N 24°17'W; depth 214 m, calcareous nodules; rectangular dredge; 3 Sept 1986.

- 7.137: Cape Verde Islands, SE of São Nicolau, off Preguiça; 16°32'N 24°14'W; depth 715 m, muddy bottom with calcareous gravel; 1.2 m Agassiz trawl; 3 Sept 1986.
- 7.138: Cape Verde Islands, S of Razo; 16°35'N 24°35'W; depth 690 m, small number of calcareous nodules; rectangular dredge; 4 Sept 1986.
- 7.139: Cape Verde Islands, S of Branco and Razo; 16°35'N 24°35'W; depth 612-647 m, small number of epizoa; rectangular dredge; 4 Sept 1986.
- 7.140: Cape Verde Islands, S of Razo; 16°35'N 24°36'W; depth 1200 m, old lobster-pot with about 500 m of nylon rope, covered with numerous epizoa: many hydroids, anemones, alcyonarians, polychaetes and small crustaceans; rectangular dredge; 4 Sept 1986.
- 7.141: Cape Verde Islands, S of Branco; 16°38'N 24°41'W; depth 35 m, calcareous sand and gravel with calcareous algae, Foraminifera, shells and algae; van Veen grab; 4 Sept 1986.
- 7.142: Cape Verde Islands, S of Branco; 16°38'N 24°41'W; depth 56 m, yellow calcareous sand with calcareous red algae and bryozoans; van Veen grab; 4 Sept 1986.
- 7.143: Cape Verde Islands, S of Branco; 16°37'N 24°41'W; depth 102 m, calcareous sand and gravel; van Veen grab; 4 Sept 1986.
- 7.144: Cape Verde Islands, S of Branco; 16°38'N 24°42'W; depth 50 m, calcareous nodules and basaltic stone; rectangular dredge; 4 Sept 1986.
- 7.145: Cape Verde Islands, S of Branco; 16°38'N 24°42'W; depth 80 m, calcareous gravel and nodules with bryozoans; rectangular dredge; 4 Sept 1986.
- 7.146: Cape Verde Islands, S of Branco; 16°40'N 24°42'W; depth 64 m, calcareous nodules with bryozoans; rectangular dredge; 4 Sept 1986.
- 7.147: Cape Verde Islands, S of Branco; 16°34'N 24°41'W; depth 1500-1627 m; 1.2 m Agassiz trawl; 4 Sept 1986.
- 7.148: Cape Verde Islands, S of Branco; 16°31'N 24°49'W; depth 0-1100 m; rectangular dredge; 4-5 Sept 1986.
- 7.149: Cape Verde Islands, S of Branco; 16°38'N 24°43'W; depth 100 m, some calcareous nodules; rectangular dredge; 5 Sept 1986.
- 7.150: Cape Verde Islands, S of Branco; 16°37'N 24°38'W; depth 115 m, calcareous gravel and nodules; 1.2 m Agassiz trawl; 5 Sept 1986.
- 7.151: Cape Verde Islands, S of Branco; 16°38'N 24°41'W; depth 75 m, hard bottom, scraped bryozoans and antipatharians with epizoa; 1.2 m Agassiz trawl; 5 Sept 1986.
- 7.152: Cape Verde Islands, S of Branco; 16°38'N 24°41'W; depth 159 m, net lost; 1.2 m Agassiz trawl; 5 Sept 1986.
- 7.153: Cape Verde Islands, S of Branco; 16°38'N 24°43'W; depth 136 m,

- calcareous nodules with sessile Foraminifera and bryozoans; rectangular dredge; 5 Sept 1986.
- 7.154: Cape Verde Islands, S of Branco; 16°38'N 24°42'W; depth 152 m, calcareous nodules, sessile Foraminifera and bryozoans; rectangular dredge; 5 Sept 1986.
- 7.155: Cape Verde Islands, SW of Branco; 16°39'N 24°43'W; depth 75 m, calcareous nodules with epifauna; rectangular dredge; 5 Sept 1986.
- 7.156: Cape Verde Islands, SW of Branco; 16°40'N 24°43'W; depth 90-110 m, calcareous nodules with hydroids and *Vermetus*-sponge association; rectangular dredge; 5 Sept 1986.
- 7.157: Cape Verde Islands, SW of Branco; 16°36'N 24°42'W; depth 1215-1300 m, sponges; rectangular dredge; 5 Sept 1986.
- 7.158: Cape Verde Islands, SW of Branco; 16°36'N 24°45'W; depth 0-150 m (bottom at 1500-1800 m); midwater-trawl; 5 Sept 1986.
- 7.159: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 52 m, somewhat muddy, grey-yellow calcareous sand and gravel; van Veen grab; 6 Sept 1986.
- 7.160: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 72 m, muddy calcareous sand with worm tubes; van Veen grab; 6 Sept 1986.
- 7.161: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 95 m, muddy, very fine sand; van Veen grab; 6 Sept 1986.
- 7.162: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 100 m, no catch; rectangular dredge; 6 Sept 1986.
- 7.163: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 110 m, small catch: asteroid, antipatharians and sponge; rectangular dredge; 6 Sept 1986.
- 7.164: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 60 m, calcareous nodules and calcareous red algae; rectangular dredge; 6 Sept 1986.
- 7.165: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°54'N 24°54'W; depth 106 m, calcareous nodules; rectangular dredge; 6 Sept 1986.
- 7.166: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°53'N 24°53'W; depth 50 m, calcareous nodules and calcareous red algae; rectangular dredge; 6 Sept 1986.
- 7.167: Cape Verde Islands, NE of São Vicente, Baia das Gatas; 16°53'N 24°53'W; depth 140 m, calcareous nodules and sponges; rectangular dredge; 6 Sept 1986.
- 7.169: Cape Verde Islands, SW of São Vicente, Baia da Ribeirinha; 16°48'N 25°08'W; depth 165 m, clinkers with many epizoa; rectangular dredge; 7 Sept 1986.

- 7.170: Cape Verde Islands, SW of São Vicente; 16°47'N 25°07'W; depth 155 m, calcareous nodules; rectangular dredge; 7 Sept 1986.
- 7.171: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°54'N 25°06'W; depth 200 m, no sediment, only epizoa; rectangular dredge; 7 Sept 1986.
- 7.172: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°53'N 25°07'W; depth 300-350 m, small catch; rectangular dredge; 7 Sept 1986.
- 7.173: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°49'N 25°08'W; depth 500-650 m, dredge lost; rectangular dredge; 7 Sept 1986.
- 7.174: Cape Verde Islands, SW of São Vicente; 16°45'N 25°07'W; depth 1070-1130 m, basaltic gravel with echinoderms; 1.2 m Agassiz trawl; 7 Sept 1986.
- 7.175: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°53'N 25°08'W; depth 360 m, muddy sand; 1.2 m Agassiz trawl; 8 Sept 1986.
- 7.176: Cape Verde Islands, W of São Vicente, W of Baia da Fateixa; 16°52'N 25°06'W; at surface, 2 samples: one above and one below the surface; neuston-net; 8 Sept 1986.
- 7.177: Cape Verde Islands, NW of São Vicente, Canal de São Vicente; 16°50'N 25°08'W; depth 380 m, muddy calcareous and volcanic sand; van Veen grab; 8 Sept 1986.
- 7.178: Cape Verde Islands, W of São Vicente; 16°52'N 25°07'W; depth 90 m, *Vermetes*-sponge association and shells; 1.2 m Agassiz trawl; 8 Sept 1986.
- 7.179: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°58'N 25°03'W; depth 280-330 m, sponges and soft corals; 3.5 m Agassiz trawl; 8 Sept 1986.
- 7.180: Cape Verde Islands, W of São Vicente, Canal de São Vicente; 16°58'N 25°04'W; at surface, 2 samples, one above and one just below the surface; neuston-net; 8 Sept 1986.

SCUBA DIVING STATIONS

- 7.D01: Cape Verde Islands, São Tiago, SW coast near Ponta da Cidade; 14°54'N 23°38'W; loose boulders on coarse sand, down to 22 m; scuba diving; 20,21 Aug 1986.
- 7.D02: Cape Verde Islands, São Tiago, S coast near Praia; 14°34'N 23°31'W; scuba diving, 22 Aug 1986.
- 7.D03: Cape Verde Islands, Cima, SE coast; 14°57'N 24°39'W; rock platform in surge; scuba diving; 23,24 Aug 1986.
- 7.D04: Cape Verde Islands, Cima, SE coast; 14°57'N 24°39'W; scuba diving; 24 Aug 1986.

- 7.D05: Cape Verde Islands, Maio, SW coast off Ponta Preta; 15°07'N 23°18'W; sandy and rocky bottom; scuba diving; 25,26 Aug 1986.
- 7.D06: Cape Verde Islands, Boa Vista, W coast near Ilhéu de Sal Rei; 16°10'N 22°57'W; sandy bottom with cobbles and boulders cemented by calcareous algae, down to 12 m; scuba diving; 27,28 Aug 1986.
- 7.D07: Cape Verde Islands, Boa Vista, W coast near Sal Rei; 16°10'N 22°57'W; scuba diving; 28 Aug 1986.
- 7.D08: Cape Verde Islands, Sal, S coast near Santa Maria; 16°35'N 22°55'W; down to 15 m; scuba diving; 29 Aug 1986.
- 7.D09: Cape Verde Islands, Sal, W coast, Baia da Palmeira; 16°45'N 23°00'W; vertical cliff down to 8 m, steep slope down to 25 m; scuba diving; 30,31 Aug 1986.
- 7.D10: Cape Verde Islands, Razo, S coast; 16°36'N 24°35'W; rocks, boulders and cobbles, little sand, down to 20 m; scuba diving; 1 Sept 1986.
- 7.D11: Cape Verde Islands, São Nicolau, SE coast; 16°34'N 24°17'W; scuba diving; 2,3 Sept 1986.
- 7.D12: Cape Verde Islands, São Nicolau, SE coast; 16°34'N 24°17'W; scuba diving; 3 Sept 1986.
- 7.D13: Cape Verde Islands, Razo, S coast; 16°36'N 24°03'W; scuba diving; 4 Sept 1986.
- 7.D14: Cape Verde Islands, Branco, S coast near Ponta da Parede; 16°39'N 24°41'W; sandy bottom, rock ledges, depth 12-15 m; scuba diving; 4,5 Sept 1986.
- 7.D15: Cape Verde Islands, São Vicente, W coast, Baia da Ribeirinha; 16°50'N 25°05'W; scuba diving; 7 Sept 1986.
- 7.D16: Cape Verde Islands, São Vicente, W coast near Ponta do Manellinho Cambado; 16°52'N 25°04'W; vertical cliff above sandy bottom with corals, red algae and zoantharians, depth 8-12 m; scuba diving; 7,8 Sept 1986.

FISHING STATIONS

- 7.V01: Cape Verde Islands, São Tiago, SW coast; 14°54'N 23°38'W; fishing in shallow water with gill-net, traps, scuba diving, spear fishing; 20/21 Aug 1986.
- 7.V02: Cape Verde Islands, São Tiago, S coast; 14°54'N 23°35'W; fishing in shallow water with 10 traps, depth 500 m; 21/22 Aug 1986.
- 7.V03: Cape Verde Islands, Cima, SE coast; 14°57'N 24°39'W; fishing in shallow water with gill-net, traps, scuba diving; 23 Aug 1986.
- 7.V04: Cape Verde Islands, Maio, S coast; 15°07'N 23°18'W; fishing in shallow

- water with gill-net, traps, scuba diving; 25 Aug 1986.
- 7.V05: Cape Verde Islands, Maio, SW coast; 15°07'N 23°18'W; fishing with 10 traps (only one recovered), depth 40 m; 25/26 Aug 1986.
- 7.V06: Cape Verde Islands, Boa Vista, W coast; 16°10'N 22°57'W; fishing in shallow water with gill-net, traps, scuba diving; 27/28 Aug 1986.
- 7.V07: Cape Verde Islands, Boa Vista, S coast; 16°10'N 22°57'W; fishing in shallow water with beachseine; 27/28 Aug 1986.
- 7.V08: Cape Verde Islands, Sal, S coast; 16°35'N 22°55'W; fishing in shallow water with gill-net, traps, scuba diving; 29 Aug 1986.
- 7.V09: Cape Verde Islands, Sal, W coast; 16°45'N 23°00'W; fishing in shallow water with gill-net, traps, scuba diving; 30/31 Aug 1986.
- 7.V10: Cape Verde Islands, Razo, S coast; 16°36'N 24°35'W; fishing in shallow water with gill-net, traps, scuba diving; 1 Sept 1986.
- 7.V11: Cape Verde Islands, São Nicolau, SE coast; 16°34'N 24°35'W; fishing in shallow water with gill-net, traps, scuba diving; 2/3 Sept 1986.
- 7.V13: Cape Verde Islands, Branco, S coast; 16°37'N 24°40'W; fishing with fish-traps at depths of 17, 22, 30 and 70 m; 4/5 Sept 1986.
- 7.V14a: Cape Verde Islands, Branco, S coast; 16°35'N 24°41'W; fishing with 3 traps, depth 750 m (only 1 trap recovered); 4/5 Sept 1986.
- 7.V14b: Cape Verde Islands, São Vicente, NE coast S of Baia das Gatas; 16°54'N 24°55'W; fishing in shallow water with gill-net, traps, scuba diving; 6 Sept 1986.
- 7.V15: Cape Verde Islands, São Vicente, W coast, Baia do Ribeirinha; 16°50'N 23°05'W; fishing in shallow water with gill-net, traps, scuba diving; 7 Sept 1986.
- 7.V16: Cape Verde Islands, São Vicente, W coast, near Ponta do Manelinho Cambado; 16°52'N 25°04'W; fishing in shallow water with gill-net, traps, scuba diving; 7/8 Sept 1986.
- 7.V18: Cape Verde Islands, NW of São Vicente; 16°59'N 25°01'W; fishing with 3 traps, depth 550 m, traps not recovered; 8/10 Sept 1986.

COASTAL STATIONS

- 7.K01: Cape Verde Islands, São Tiago, S coast near Praia, near Ilhéu de Santa Maria; 14°54'N 23°31'W; shallow sub-littoral, sandy bottom with stones and boulders (at underside covered with sponges, tunicates and serpulid crusts), in places substrate covered with *Porites*, *Siderastrea* and *Favia*, depth 0.5-1.5 m; snorkeling; 10,22 Aug 1986.
- 7.K02: Cape Verde Islands, São Tiago, S coast near Praia; 14°54'N 23°31'W;

- beach; 10 Aug 1986.
- 7.K03: Cape Verde Islands, São Tiago, SW coast; 14°54'N 23°38'W; shallow sub-littoral in protected cove with steep rocks, depth 0-8 m snorkeling; 11 Aug 1986.
- 7.K04: Cape Verde Islands, São Tiago, SW coast; 14°54'N 23°38'W; intertidal, exposed rocks; 11 Aug 1986.
- 7.K05: Cape Verde Islands, São Tiago, E coast; 15°03'N 23°28'W; intertidal, sandy beach with some rocks; 12 Aug 1986.
- 7.K06: Cape Verde Islands, São Tiago, NW coast, Baia do Tarrafal; 15°17'N 23°47'W; intertidal and shallow sub-littoral, rocks and sandy bottom; snorkeling; 13 Aug 1986.
- 7.K07: Cape Verde Islands, São Tiago, NW coast, Baia do Tarrafal; 15°17'N 23°47'W; intertidal and shallow sub-littoral, rocks and sandy bottom; snorkeling; 14 Aug 1986.
- 7.K08: Cape Verde Islands, São Tiago, SE coast, Baia da San Francisco; 14°59'N 23°37'W; intertidal and shallow sub-littoral, exposed rocks and protected area with sandy bottom; snorkeling; 17 Aug 1986.
- 7.K09: Cape Verde Islands, São Tiago, SW coast; 14°54'N 23°38'W; intertidal and shallow sub-littoral, exposed rocks and boulders in surf, rockpools; snorkeling; 18 Aug 1986.
- 7.K10: Cape Verde Islands, São Tiago, SW coast near Cidade Velho; 14°54'N 23°38'W; intertidal; 21 Aug 1986.
- 7.K11: Cape Verde Islands, São Tiago, S coast near Praia; 14°54'N 23°31'W; intertidal, exposed rocks; 22 Aug 1986.
- 7.K12: Cape Verde Islands, São Tiago, S coast; 14°54'N 23°31'W; intertidal and shallow sub-littoral, exposed rocks; snorkeling; 22 Aug 1986.
- 7.K13: Cape Verde Islands, Cima, SE coast; 14°57'N 24°39'W; intertidal, beach with abrasion flat, rockpools; 23,24 Aug 1986.
- 7.K14: Cape Verde Islands, Maio, SW coast near Vila do Maio; 15°07'N 23°18'W; intertidal, boulders and shallow pools; 25 Aug 1986.
- 7.K15: Cape Verde Islands, Boa Vista, W coast, NW coast of Ilhéu de Sal Rei; 16°10'N 22°58'W; intertidal (rockpools) and shallow sub-littoral, protected area with sandy bottom, stones, boulders, corals, depth -4 m; snorkeling; 27,28 Aug 1986.
- 7.K16: Cape Verde Islands, Boa Vista, W coast, NW coast of Ilhéu Sal Rei; 16°10'N 22°58'W; intertidal and shallow sub-littoral, sandy bottom with stones, rocks, sabellariid reefs, depth to 6 m; snorkeling; 28 Aug 1986.
- 7.K17: Cape Verde Islands, Sal, S coast; 16°35'N 22°55'W; rocky intertidal with boulders and shallow sub-littoral, sandy bottom with stones and boulders, depth 2-4 m; snorkeling; 29 Aug 1986.

- 7.K18: Cape Verde Islands, Sal, SE coast, shallow lagoon with corals; 16°36'N 22°55'W; intertidal and shallow sub-littoral; snorkeling; 29 Aug 1986.
- 7.K19: Cape Verde Islands, Sal, W coast, Baia de Palmeira; 16°45'N 23°00'W; intertidal and shallow sub-littoral; snorkeling; 30 Aug 1986.
- 7.K20: Cape Verde Islands, Sal, W coast, Baia de Palmeira; 16°45'N 23°00'W; intertidal, rocky shore with pools; 31 Aug 1986.
- 7.K21: Cape Verde Islands, São Nicolau, SE coast; 16°34'N 24°17'W; rocky intertidal and shallow sub-littoral; snorkeling; 2 Sept 1986.
- 7.K22: Cape Verde Islands, São Nicolau, SE coast, harbour of Preguiça; 16°35'N 24°16'W; shallow sub-littoral; snorkeling; 2 Sept 1986.
- 7.K23: Cape Verde Islands, Branco, S coast; 16°39'N 24°41'W; intertidal and shallow sub-littoral; snorkeling; 5 Sept 1986.
- 7.K24: Cape Verde Islands, Branco, N coast; 16°40'N 24°40'W; intertidal, exposed rocky shore with large pools, numerous algae and anemones; 5 Sept 1986.
- 7.K25: Cape Verde Islands, Razo, S coast; 16°36'N 24°35'W; intertidal, abrasion flat with pools and holes; 2 Sept 1986.
- 7.K26: Cape Verde Islands, Razo, N coast; 16°37'N 24°36'W; intertidal, wide abrasion flat with pools; 3 Sept 1986.
- 7.K27: Cape Verde Islands, Razo, N coast; 16°38'N 24°35'W; intertidal, wide abrasion flat with pools, boulders; 4 Sept 1986.
- 7.K28: Cape Verde Islands, São Vicente, NE coast, Baia das Gatas; 16°55'N 24°55'W; intertidal and shallow sub-littoral, exposed side of pier and protected lagoon, many *Porites*, *Millepora*, *Favia* and *Siderastrea*; snorkeling; 6 Sept 1986.
- 7.K29: Cape Verde Islands, São Vicente, NE coast, Baia das Gatas, W of previous station; 16°55'N 24°55'W; shallow sub-littoral; snorkeling; 6,9 Sept 1986.
- 7.K30: Cape Verde Islands, São Vicente, W coast; 16°56'N 24°53'W; intertidal, abrasion flat with pools and crevices, some *Porites*, many zoantharians; 7,8 Sept 1986.
- 7.K31: Canary Islands, Gran Canaria, N coast, Las Palmas, eastside Playa de Las Canteras; 28°29'N 15°24'W; rocky barrier and protected sandy lagoon, partly with sandstone bottom, shallow sub-littoral, depth 1-5 m; snorkeling; 13,14,20 Sept 1986.
- 7.K32: Canary Islands, Gran Canaria, NW coast, near Puerto de Las Nieves; 28°05'N 15°42'W; intertidal; 15 Sept 1986.
- 7.K33: Canary Islands, Gran Canaria, NW coast, Puerto Las Nieves; 28°05'N 15°42'W; more or less protected natural basin on exposed side of small pier, sand, rocks, stones, shallow sub-littoral, depth 0-2.5 m.; snorkeling; 15,16 Sept 1986.

- 7.K34: Canary Islands, Gran Canaria, NW coast, Puerto de Las Nieves; 28°05'N 15°42'W; bay on protected side of harbour pier, stony and sandy bottom, shallow sub-littoral, depth 1-4 m; snorkeling; 17 Sept 1986.
- 7.K35: Canary Islands, Gran Canaria, W coast, Playa Punto del Risco; 28°05'N 15°45'W; exposed shore with abrasion flat with pools, boulders, intertidal; 18 Sept 1986.

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