

## 2009 BCC SURVEY NO. 1

### TRANSBOUNDARY SURVEY BETWEEN NAMIBIA AND SOUTH AFRICA WITH FOCUS ON THE SHARED STOCKS OF DEEP WATER HAKE

Cruise report No 1/2009

7 January – 20 February 2009

by

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Bergen May 2010

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## 1 Introduction

One of the key areas of the BCLME focus has been the monitoring/assessment of major transboundary fish resources in the BCLME region to enable sustainable management of these resources. The biological and ecological dynamics of deepwater hake have come under spotlight in stock assessment of these resources. The BCLME programme has therefore been involved in supporting appropriate research that could contribute to improved conservation and management efforts of this transboundary fish resource. This led in 2003 to the first coordinated survey of the hake resources in the West Coast of South Africa using similar gear and methods as for the Namibian trawl surveys running since 1990. This enabled joint analysis of fish distribution and abundance with a special focus on the shared stock of deep water hake, *M. paradoxus*. This survey was repeated in 2005 under BCLME. During the bridging phase of the BENEFIT project (2006-2007) the BENEFIT resources working group emphasised the long term needs for the management of the transboundary stocks and to recommended to continue the joint surveys with Namibia early in the year as a high priority for the years 2006 and 2007. Both BENEFIT and BCLME came to close at the end 2007 while the following Benguela Current Commission did not become functional before August 2008. In the interim period an interim steering committee decided it was vital to uphold the time series on the shared stocks of hake and requested the FAO to assist through the EAF-Nansen Programme with a survey in the beginning of 2008. The same request was repeated in late 2008 as for a survey in 2009, this survey. The time series now thus comprise the years 2003 and 2005 through 2009.

Specific objectives of the survey are:

1. To plan and conduct a transboundary survey from Cape Agulhas to Orange River to produce distribution maps and abundance estimates of the two species of hake to be later merged with similar data from a co-occurring Namibian national demersal survey, to enable complete mapping and assessment of shared stocks, thus providing a measure of the degree of sharing of the stocks at the time of the survey.
2. To collect data on the maturity stages of the hakes to check for possible spawning activity.
3. To do an acoustic mini-survey off Hondeklip Bay to map aggregations of pelagic juvenile hake.

4. To collect other relevant data to better understand the environment impact on the distribution of hakes, and the fish community structure in the distribution areas of the hake.

## 2 Materials and methods

### 2.1 Registration of weather conditions

The underway weather data aboard Dr. Fridtjof Nansen are logged with the Aanderaa Weather Station unit fitted with the following sensors:

Sensor type	Measurement units
Air temperature	Degrees °C
Wind speed	M/s
Solar radiation	W/m <sup>2</sup>
Wind direction	Degrees re. the magnetic N. Pole
Sea surface temperature	Degrees °C

All sensors but Sea surface temperature (SST) are mounted on a mast positioned midships, at about 20 meters above the sea level. The SST sensor is located at the intake of the water for cooling the engine and its readings are representative to a water layer at about 5 meters below the sea level.

The weather station data were logged continuously throughout the survey. The results presented in this report are based on a standard output from the logging system comprising one nautical mile averages along the ship's track.

### 2.2 Hydrography

The data on temperature salinity and oxygen were collected with a CTD *Seabird 9 plus* probe between the surface and 10 meters off the bottom. CTDs were made at each trawl station. In addition, water bottle samples for oxygen and salinity calibrations were taken at most CTD stations.

The salinity samples were analysed with the Guildline Portasal salinometer unit. The laboratory conditions onboard are suitable to detect deviations between the CTD and *in situ* samples at a level of 0.005 of salinity units. Since no deviations reaching or exceeding this range were detected, the salinity values based on the factory calibration of the conductivity sensor are used throughout this report.

The samples for dissolved oxygen were titrated within 12 hours of sample collection, using the standard Winkler method.

### 2.3 Current measurements.

Current measurements were carried out with vessel-mounted acoustic Doppler current profiler (ADCP) by RD Instruments, which operated 150 kHz in broad-band mode with 5 m vertical cells. Currents were measured from a depth of 25 m down to about 30 meters above the bottom. Only the bottom-tracked data were used in the data analysis.

### 2.4 Acoustic measurements

#### 2.4.1 Acoustic equipment

The acoustic recordings were conducted using Simrad EK 500 echosounder coupled to a keel-mounted transducer of 38 kHz. Acoustic raw-data was logged on the Sun-Unix based Bergen Echo Integrator (BEI) version 2000. The technical specifications and operational settings of the echosounders used during the survey are given in Annex 2 together with the results from the last calibration of the system. The acoustic data were scrutinized using the post-processing module of the LSSS software, developed by IMR.

#### 2.4.2 Classification

Scatterers were displayed at 38 kHz, standardized to 5 nautical miles (NM) echograms with 1,000 pings (horizontal) by 500 bins (vertical). The mean 5 NM area backscattering coefficients  $s_A$  ( $m^2/NM^2$ ) was allocated to a predefined set of species or species groups on the basis established echogram features. When concentrations of juvenile pelagic hake were encountered the  $s_A$ -values were stored with a 1 NM resolution.

Acoustic groups used were: a) Juvenile pelagic hake < 17 cm, b) older hake, usually demersal, c) horse mackerel, d) Pelagic group1 (pilchard, anchovies, red eye), e) Pelagic group 2 (pelagic fish not of Pelagic 1), f) demersal fish, not hake, g) mesopelagic fish, h) plankton. The classification was based on the characteristics of the echo traces, experience accumulated from previous similar surveys in Namibia since 1990 and in South Africa since 2000, supported when possible with results from nearby bottom trawl stations.

The results from the acoustic system are considered as a pilot study with the main aim of delineating the limits of distribution of juvenile pelagic hake and some information on relative densities. The figures will not be converted to biomass, as the target strength is uncertain and as the classification scheme and methods are too coarse for such a purpose. Adult hake were very rarely observed in the acoustic channel during daytime, while it showed up frequently above bottom at nighttime.

## 2.6 Trawl sampling procedures

The standard bottom trawl of Dr. Fridtjof Nansen, a Gisund Super shrimp cum fish trawl, was used in the survey and for the intercalibration. A description of the trawl and gear is given in Annex 2. Dr. Fridtjof Nansen use a 20 m strapping on the warps 105 m in front of the doors to keep the door and wingspread constant at 50 m and 21 m respective, independent of trawl depth.

A standard haul was 30 minutes at 3 knots, sometimes reduced to 20 minutes in areas of expected high densities. The exact time for start and stop of the trawl operation was determined by SCANMAR sensors. The output from the SCANMAR system was also recorded on files to facilitate later analysis of bottom contact and door-spread if necessary.

For conversion of catch rates (kg/hour) to fish densities (t/NM<sup>2</sup>), the effective fishing area was considered as the product of the wing spread and the haul length, or distance over the bottom, based on GPS readings. In the survey a nominal distance of 18.5 m was applied to facilitate analysis with previous surveys. The area swept for each haul was thus 18.5 m times the distance trawled, converted to NM<sup>2</sup>. The catchability coefficient (q), i.e. the fraction of the fish encountered by the trawl that was actually caught, was conservatively assumed equal to 1, to allow comparison with previous results.

### 2.5.1 *Handling the catch*

In most cases, the whole trawl catch was sorted and all species were recorded with their weight and numbers. For especially big catches the abundant species were sub-sampled while the other fish were sorted out. Length measurements (total length) were taken for target species. The length of each fish was recorded to the nearest 1 cm below. The mantle length of squid was measured to the nearest 1 cm below. All samples of small hake was checked for the species identity by vertebrae count (usually 3-5 fish were examined).

An electronic measuring board was used for length measurement, main sample weights were recorded by Scanvaegt electronic balances and a Marel weight was used for single fish and small species measurements.

### 2.5.2 *Biological samples*

Biological samples were collected for the two hake species in special areas. The following information were collected: Sex, maturity stage, gonad weight and stomach content. The maturity scale used was the one adopted at Marine and Coastal Management, Cape Town:

- 1: immature,
- 2: active,
- 3: ripe,
- 4: ripe and running,
- 5: spent and
- 6: inactive

### 3 Narrative

The scientific staff consisted of:

From MCM, South Africa:

Sharon de Plessis (teamleader until 23.01), Marek Lipinski (teamleader from 24.01)

Interns, South Africa:

Gavin Louw; Until 23.01: Sekive Mbande, Andrea Bernatzeder, Marc Hendrichs, Mthuzeli Gulekana, Robert Williamson, Garth Walters; From 24.01: Jessica Escobar, Christine Madden, Kit Magellan, Robert McFarlane, Dean Weltz; From 11.02: Brendon Lee.

From IMR, Norway:

Oddgeir Alvheim (cruise leader 7-23.01 and 11-20.02), Tore Strømme (cruise leader 24.01-10.02), Marek Ostrowski (until 10.02), Tore Mørk, Terje Svoren (until 10.02), Jan Frode Wilhelmsen (from 11.02)

The cruise tracks with fishing, hydrographical and plankton multinet stations are shown in Figure 3.1a-b.

The vessel departed Cape Town in the evening of 7 January, steaming south to Cape Agulhas where trawl sampling started next morning. Sampling proceeded northwards in regular transects about 20nm apart. Sampling was interrupted at the transect off Doring Bay, when the vessel sailed to Cape Town for crew change on 24 January. Vessel resumed work on 25 January but had to return to port the following day due to sudden and fatal sickness that led to the captain's death. The new departure was set at 30 January and work resumed off Doring Bay the next day. Due to the fatal event the planned work on pelagic juvenile hake off Hondeklip Bay had to be cancelled, saving the regular sampling grid for mapping distribution of demersal stocks. The work proceeded north until the border with Namibia where the vessel steamed north to Walvis Bay to change scientific crew and start on the second leg of the survey, intercalibrations with the Namibian trawler Blue Sea 1. After a short call in Walvis Bay on 10 February the vessel left the same day to join Blue Sea which was operating off Cape Frio. Intercalibration was carried out by Nansen duplicating the regular haul of the Blue Sea with an arrangement of parallel trawling. Intercalibration work was carried out in the period 11-19 February with 43 parallel hauls between the Cunene and Move



Point, whereafter the vessel ended the survey with arrival in Walvis Bay on 20 February.

The weather conditions were for long periods unfavourable with strong winds and heavy swell, especially in the first part until 23 January, but the sampling work could still be carried out with caution.

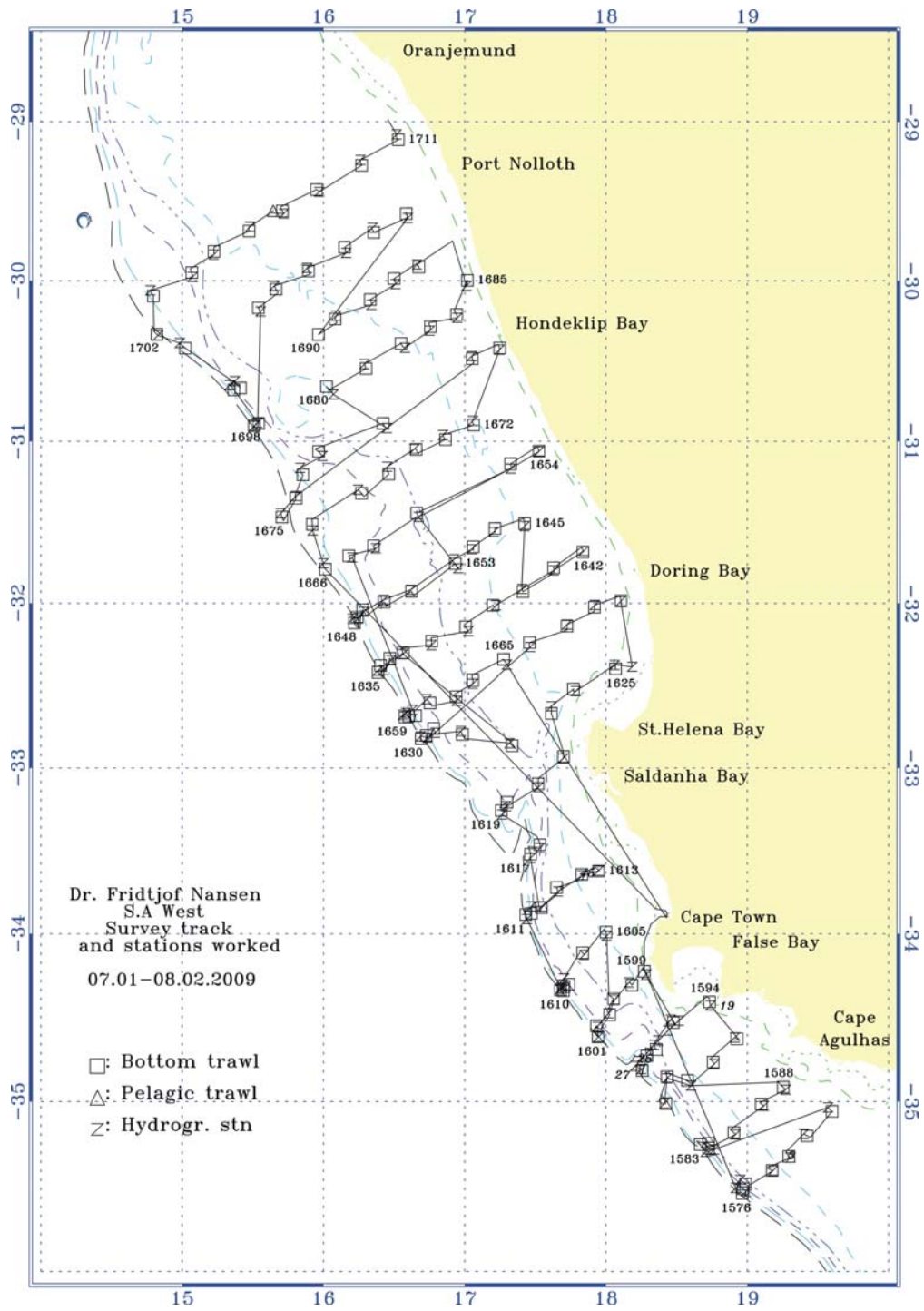


Figure 3.1a Course tracks with hydrographic and trawl stations Cape Agulhas-Orange River.

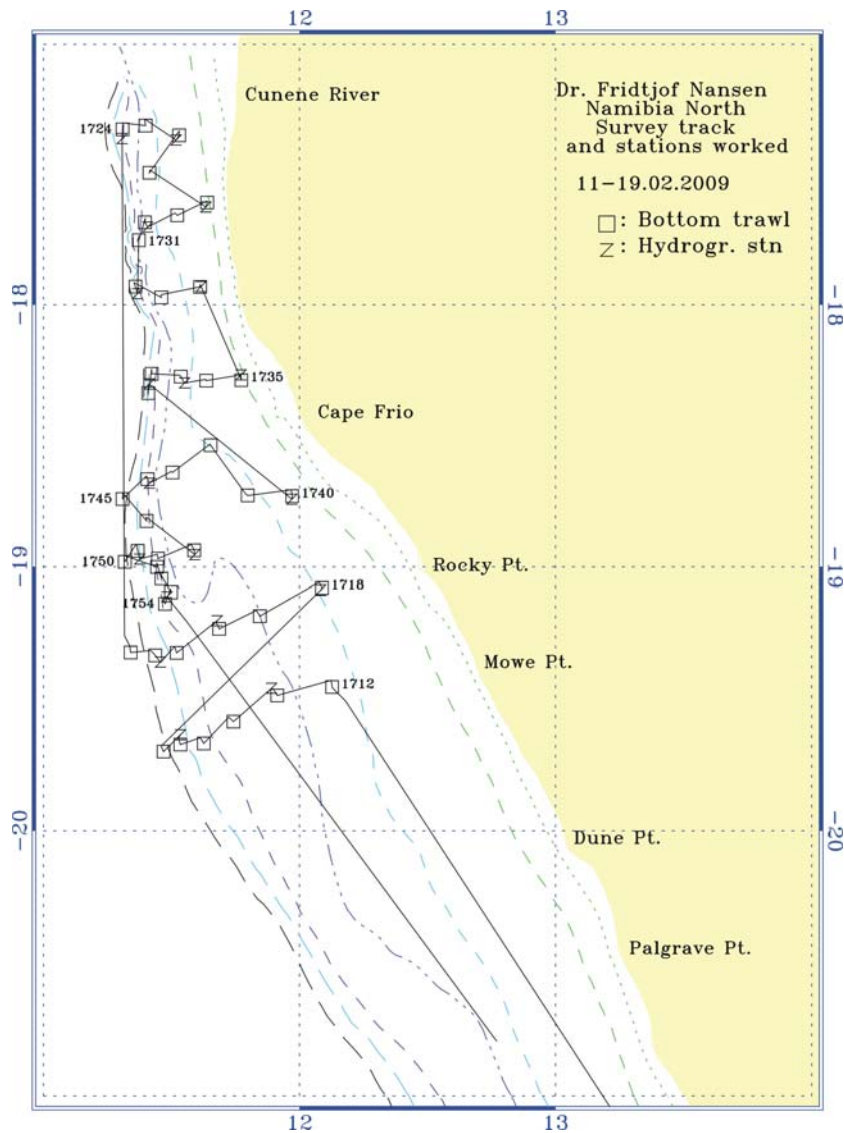


Figure 3.1b Course tracks with hydrographic and trawl stations during intercalibration in northern Namibia.

## 4 Results

### 4.1 Hydrography

#### 4.1.1 Wind field

Modulation of upwelling with periods of 3-10 days is the well-known feature of hydrographic variability in the survey region. This variability arises from the passage of cyclones south of the continent and associated relaxations and reversals of the coastal

wind. Figure 4.1 presents the three main wind regimes around the Southern Africa encountered during January and February 2009. The maps are derived from the QuickSCAT satellite mission data provided courtesy of SSMI ([www.ssmi.com](http://www.ssmi.com)). Weak to moderate winds prevailed over the survey area between January 1 and 10 (Figure 4a). Over the Agulhas Banks, the wind was predominantly easterly with the speed in the range of 7-9 m s<sup>-1</sup>. A cyclonic wind pattern, apparently associated with a low-pressure cell centred at 34°S, 16°E, was a dominant feature of the wind field between the Cape Point and Namaqua Coast. During the maximum development of this cell, from 5 to 10 January, the wind forcing was upwelling favourable off the Agulhas Bank. Over the principal upwelling area, located off Namaqua Coast and Orangle Banks, the wind was rather weak (< 2 m s<sup>-1</sup>) and predominantly directed onshore.

Along the West Coast the upwelling favourable conditions set in by January 11. A strong wind cell was initially formed between the Capes Point and Columbine and after that it gradually shifted northwards expanding its latitudinal extent. By January 17 the SE trade wind with the speed above 10 m s<sup>-1</sup>, blew along the entire West Coast (Figure 4.1b). The wind speed generally increased in strength towards offshore, resulting in cyclonic curl of the wind field. From January 19, the area affected by strong wind became to contact and migrate southwards. By February 7, the cell of strong SE wind was positioned between the coastal region off Cape Point and open ocean to the west of the African mainland. This type of wind distribution is frequently encountered during summer in association with the presence of high pressure cell (the ridging anticyclone) over the ocean. The wind conditions along the coastal boundary of the Namaqua coast were generally calm during this period and hence not supportive for upwelling in the immediate vicinity of the coast. However, the strength of the wind increased notably away from the coast suggesting a an intensification of curl driven open-ocean upwelling near the offshore boundary of the shelf.

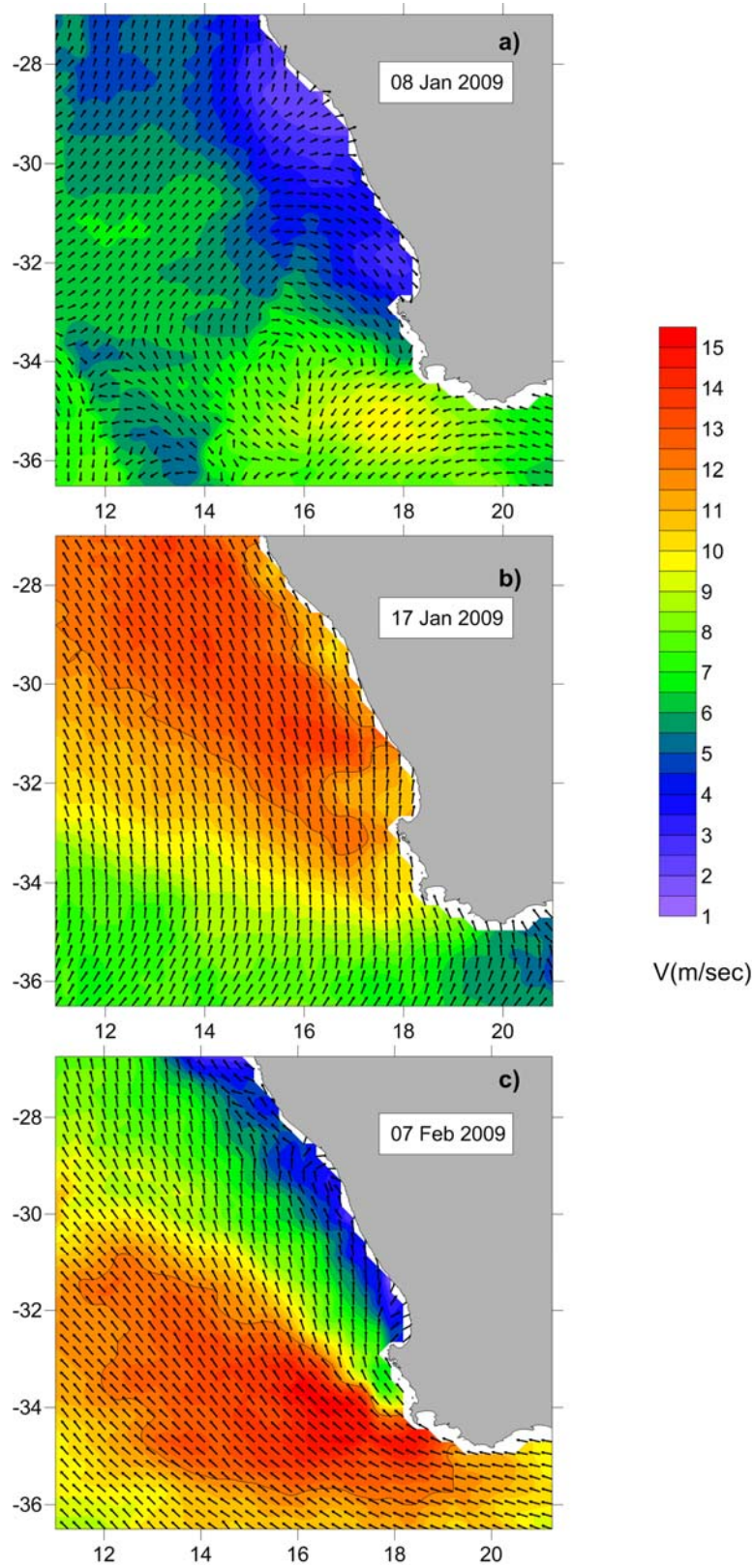


Figure 4.1. Windfields 8 January – 7 February

## 4.1.2 Hydrographic sections

### *Sections along the West Coast*

The Cape Point section (Figure 4.2) was occupied on January 11 during upwelling favourable wind conditions. The temperature and salinity distribution clearly manifest a division of the shelf into the offshore stratified and inshore well-mixed region. The stratified region, located between Stations 31 and 34, is characterized by the well-developed thermocline in the 40-50 m depth range. In the well-mixed region (inshore of Station 31) isotherms slope upward manifesting uplift of cool and low-salinity bottom waters towards inshore. The salinity distribution at Stations 30 and 32 exhibits a pronounced maximum ( $S > 35.1$ ) located just below the thermocline. Above this maximum, salinity drops to less than 34.9 matching the range of values characterizing the near bottom layers. The presence of the same salinity characteristics in the top layer is an indicative of surface offshore transport of bottom water upwelled at the coastal boundary.

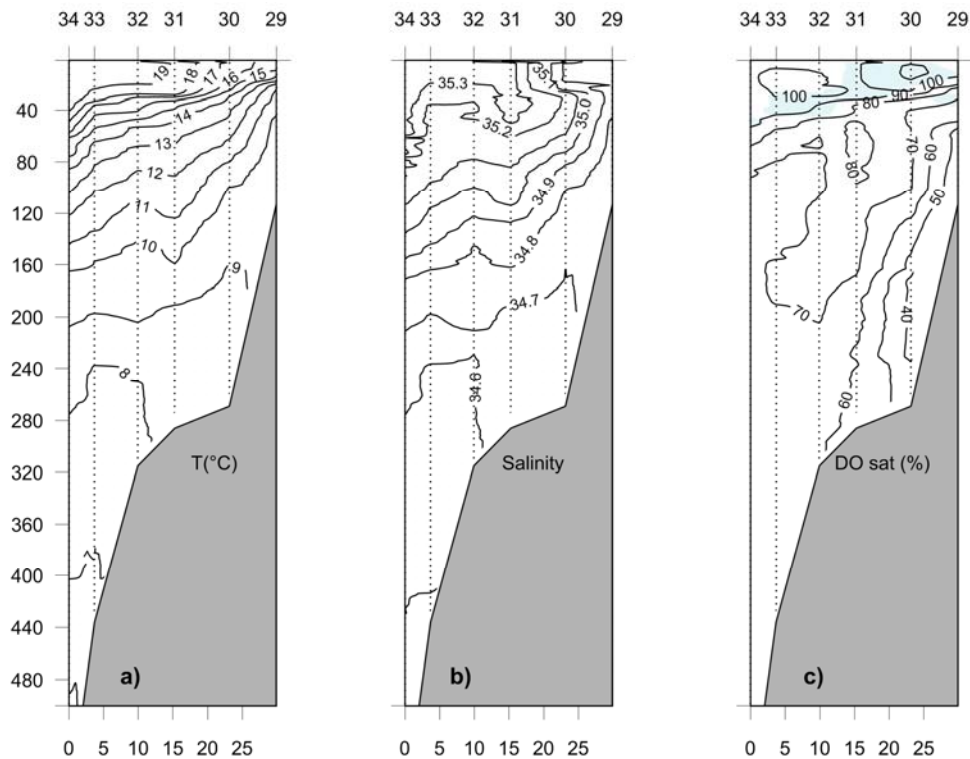


Figure 4.2, Hydrographic section off Cape Point

There is no similar signature on the temperature distribution because heat flux from the warmer atmosphere and wind-induced turbulence increases temperature in the top layer overriding the cold water signature in the advected water. Below the thermocline



temperature and salinity decrease monotonically with depth. The ranges observed between 200 and 500 m (6-9°C and 34.5-34.8, for temperature and salinity, respectively) are characteristic to central water masses originating in the Cape Basin. Percent of oxygen saturation (Figure 4.2c) exceeds 90% in the surface layer. The distinction between the offshore and inshore regions is not well manifested. Chlorophyll levels, (as measured with the fluorescence sensor) are moderate ( $< 0.7 \text{ mg m}^{-3}$ , fluorescence units). In the upwelling affected inshore region the vertical ranges of chlorophyll and percent oxygen saturation coincide suggesting biogenic causes of the saturation. In the stratified region, the chlorophyll forms a subsurface maximum located just below the thermocline at the interface with nutrient-rich subsurface waters. The water of low saturation ( $< 40\%$  at Station 30) dominates the bottom layers within the well-mixed region, reflecting both advective contributions from oxygen-poor upwelled waters as well as locally enhanced benthic and water column metabolism.

The Namaqua section (Figure 4.3) was occupied during the period of strong upwelling favourable wind event on January 17 (See Figure 4.1b). The upward sloping contour lines in the temperature and salinity distributions indicate a developed upwelling phase.

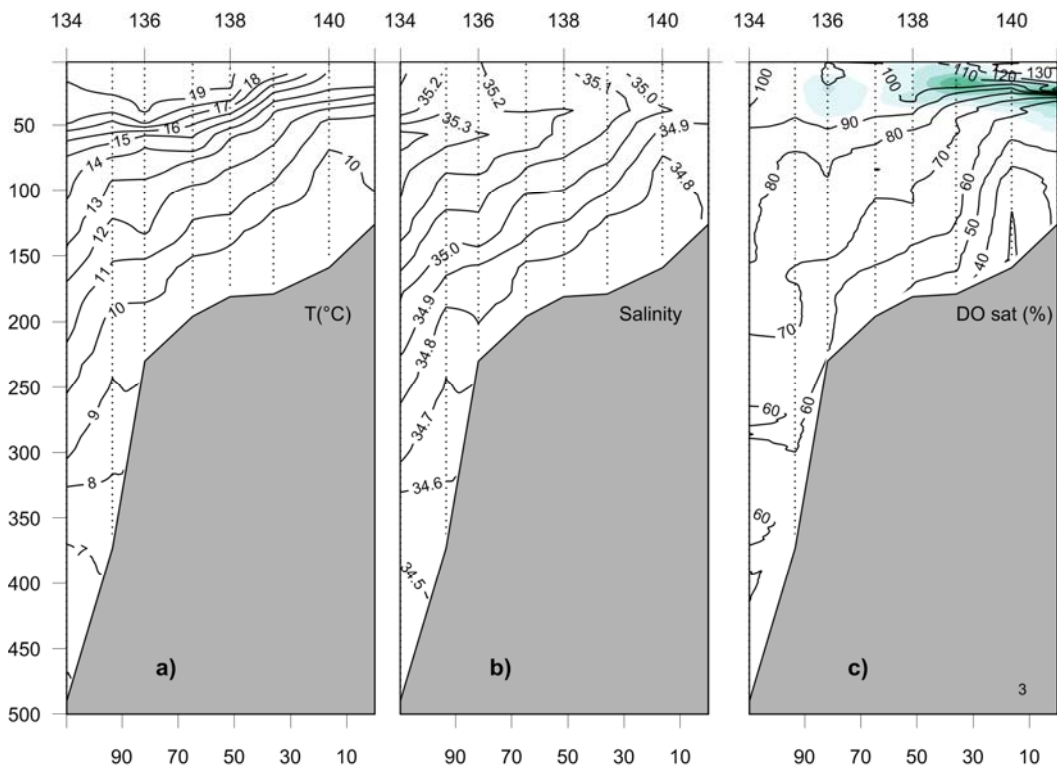


Figure 4.3. Hydrographic section off Namaqua coast

Considering the position of the 16°C isotherm as the border between the stratified and upwelled water at the sea surface, we see that the distance from the coast that is affected by upwelling is off the Namaqua Coast about three times larger than that observed off Cape Point (Note the difference in the horizontal scales in the corresponding figures). The salinity distribution exhibits a pronounced subsurface maximum (Stations 65-74), the indicative of offshore advection of upwelled waters in the surface Ekman layer. Surface oxygen is supersaturated in the offshore part of the section, the saturation decreasing shoreward, thus manifesting an impact of newly upwelled waters and enhanced grazing near the coast. The oxygen conditions near the bottom are hypoxic reflecting high rates of local benthic metabolism. The fluorescence distribution displays a decreasing seaward trend and the vertical extent that reaches that of the surface Ekman layer revealed by the salinity distribution. This suggests that the observed chlorophyll concentrations have been advected from the coastal areas, rather than derived from local primary production over the mid-shelf.

The Southern Orange Bank section (Figure 4.4) was observed on February 8. The wind was on that day calm near the coast but relatively strong at the offshore boundary of the shelf. These conditions promote wind stress-curl driven upwelling.

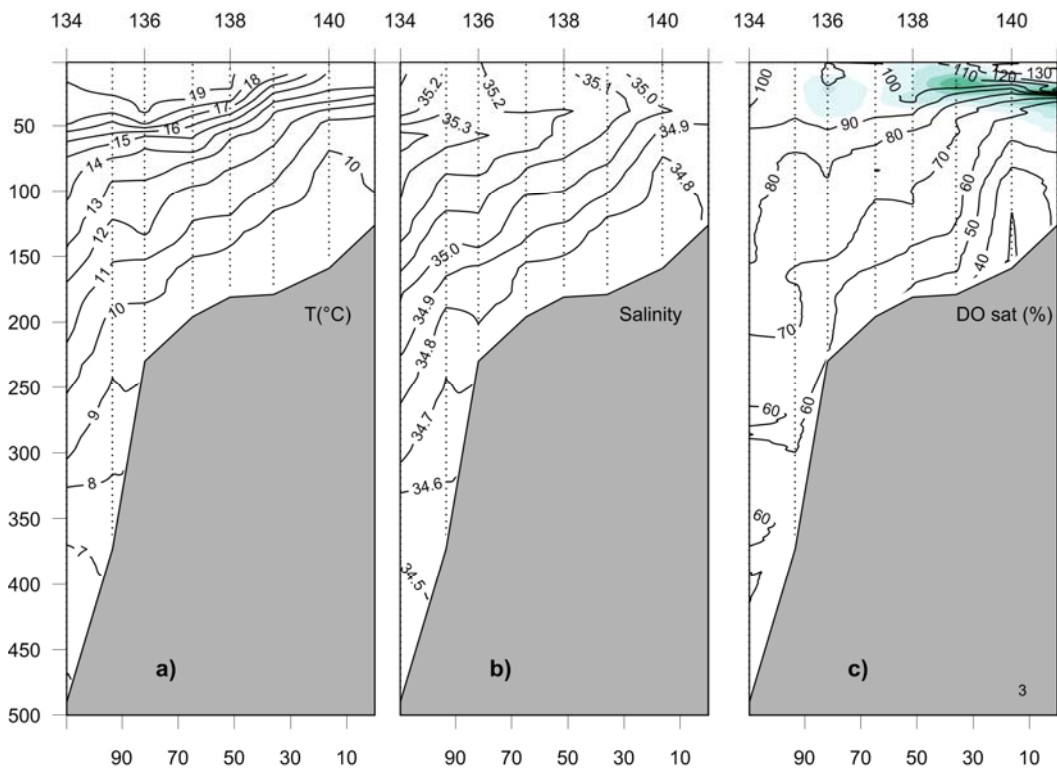


Figure 4.4. Hydrographic section on southern Orange Banks



The temperature distribution manifests the presence of the well-mixed surface layer with temperature > 19°C, located between Stations 134 and 138 and a shallow temperature front 16°-18°C, between Station 139 and 140. The flattening of the isotherms 12°-15°C between Stations 140 and 141 indicates a development of stratified conditions over the upwelled water. The stratification development may have been caused by a relaxation of local upwelling cell or by advection of warm and less saline surface water from the north along the coast. (The sampling during this survey stopped at the 100 m depth; data from the shallower would have been required to verify this.) The consequences of the developing stratification are observed in the oxygen and fluorescence data as the concurrent rise in primary productivity and supersaturated oxygen over the shoreward, stratified part of the section. In the bottom layer, over the flat portion of the Orange Banks bottom, conditions are highly hypoxic (percent oxygen saturation < 30%). This confirms the results from the previous surveys with RV Dr. Fridtjof Nansen, which identified the existence of poorly ventilated, resident water mass near the bottom of the Orange Banks.

#### *The Agulhas Bank*

The Agulhas Bank is a shallow bank located just west of a location where strong western-boundary Agulhas Current detaches from the African mainland. The influences of this current are clearly manifested on the section collected on January 8 (Figure 4.5), by the rise in temperature and salinity in the bottom layers with respect to the sections occupied on the West Coast.

The section covers the outer stratified portion of the shelf (Station 1-6) while the conditions on the inner shelf can be deducted exclusively from Station 7. Stations 6 and 7 are separated just 10 nautical miles apart, but exhibit strong contrasts in the temperature and salinity profiles. This sudden drop over the relatively short distance suggests an existence of a shelf-break upwelling type, created by frictional drag of the current flowing against the shelf edge.

The outer of the section is dominated by near saturated oxygen conditions (> 90%) (Figure 4.5c). Over the inner bank (Station 7) percent of oxygen saturation elevates to supersaturation levels (> 120%) despite the fact that temperature drops from Station 7 to 6, which should have increased oxygen solubility. The concomitant raise in fluorescence levels over the same layer suggests biotic causes of this supersaturation. Overall, very few data have been collected in the inner bank area, but those existing confirm that rates of primary productivity over the inner Agulhas Bank were high during the survey.

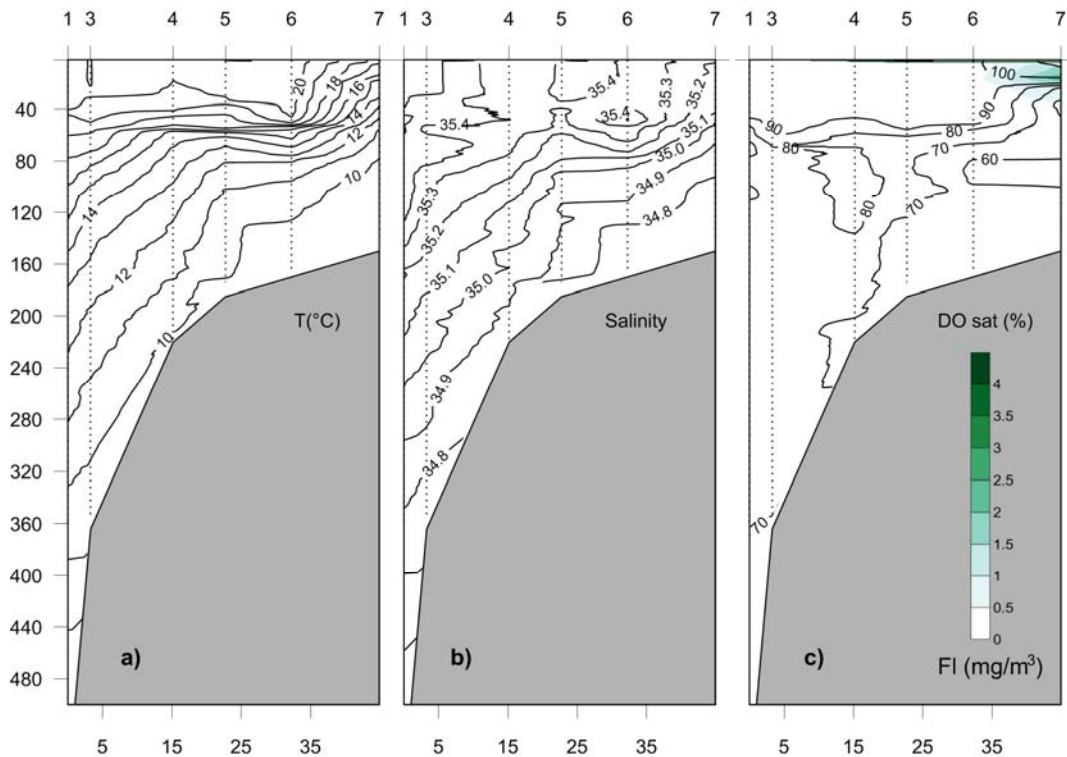


Figure 4.5. Hydrographic section on Agulhas Bank

## 4.2 Biology

Annex 1 shows the complete record of the fishing stations. Figure 4.6 shows the distribution of deep water hake (*M. paradoxus*) in the survey area. Dense concentrations of adult fish are found on the slope between Cape Agulhas and north to 31°N much similar to the two previous years. Dense concentrations of juvenile fish are found mid-shelf between Doring Bay and Hondeklip Bay, suggesting a 'gate' to the slope off St. Helena Bay. As in 2008 the young fish has a more southern distribution compared to preceding surveys as high densities does not extend north of Hondeklip Bay. The major spill-over of juveniles north over the Orange Banks into Namibia, which has been observed on some previous surveys was not observed neither in 2009 and 2008. The distribution of shallow water hake (*M. capensis*) is more uniform (Fig. 4.7) and at low uniform level.

The density estimates from the point samples have been converted into biomass estimates by length classes. The similar data from the Namibian trawl survey running in the same period have been processed following similar procedures. The joint

estimates on deep water hake are shown in Table 4.1. Figure 4.8 shows the regional distribution of deep water hake from combining the Namibian and South African data. It is believed that this comprise most part of the stock, except a minor component extending into Agulhas Banks. Figure 4.9a shows a graphical representation of the estimates by numbers of deep water hake, with the Namibian estimates stacked on top of the South African while Fig 4.9b shows the % share of the biomass of the respective countries in numbers by length. There is an increasing share of fish from Namibia from 20 cm onto about 50cm in line with previous years. Between 50 and 57 cm more than 50% of the fish is in Namibian waters. Beyond 57cm the Namibian share is decreasing and from approximately 65cm the fish is only found in South Africa. This is the same general trend as from previous surveys. In this survey very few fish of length less than 20cm was found in Namibian waters. This is consistent with the finding that there is no fish spilling over the Orange Banks from South Africa into Namibia, Figure 4.6.

Figure 4.10 shows the distribution of 'baby' hake 1-6cm as observed from all trawl hauls, bottom and pelagic. The main part of the fish is located midshelf off Port Nolloth, between 180 and 240m bottom depth. Although most of this fish is pelagic its consistent presence over years in the trawl in this area, and not outside, indicate that this is the aggregation and nursery area for the very young deep water hake. It is not mixed with shallow water hake in this location. New in 2009 is a patch of baby hake off the Cape Peninsula. This has not been recorded previously in the course of these surveys.

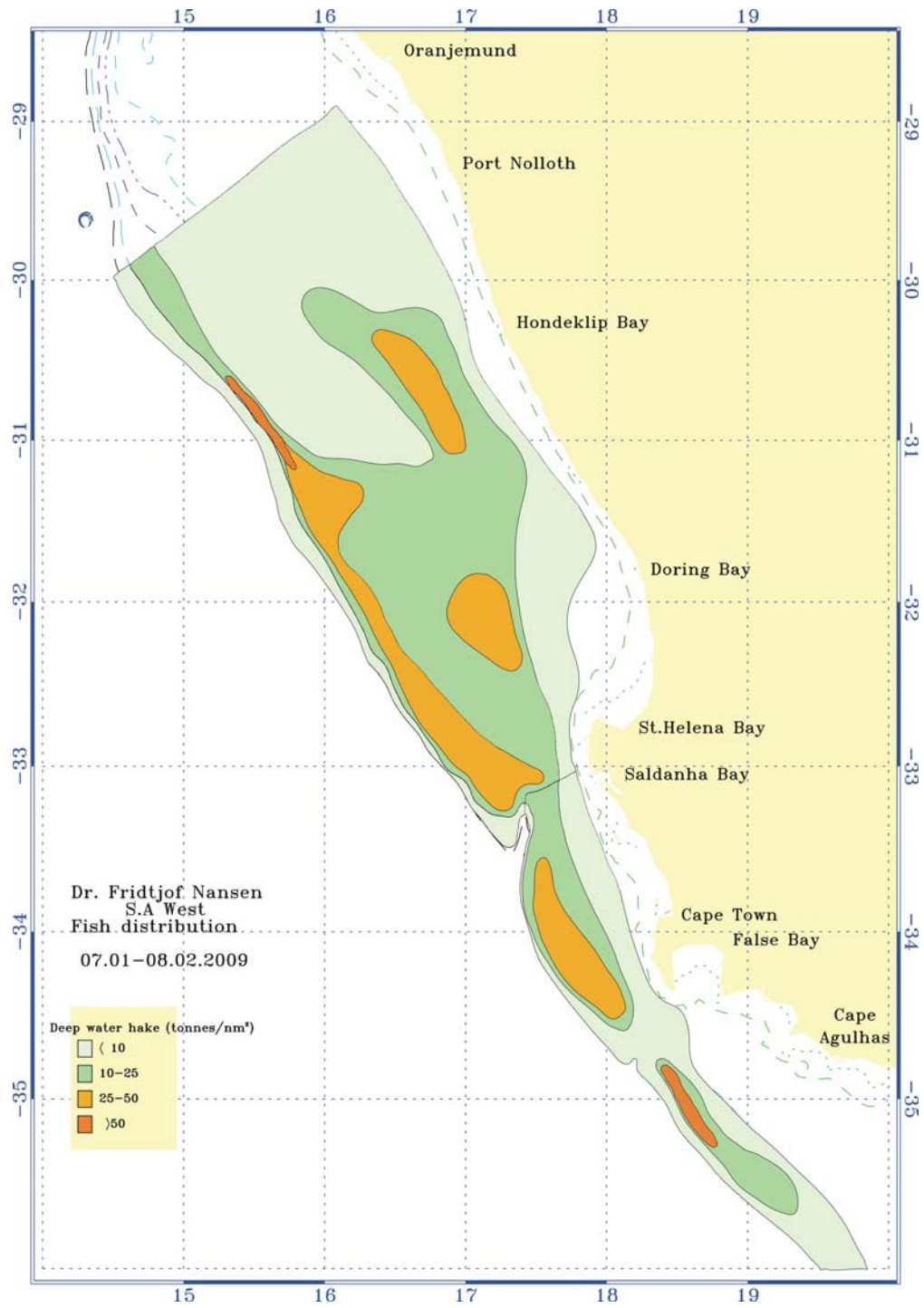


Figure 4.6 Distribution of deep-water hake (*Merluccius paradoxus*) in January-February 2009.

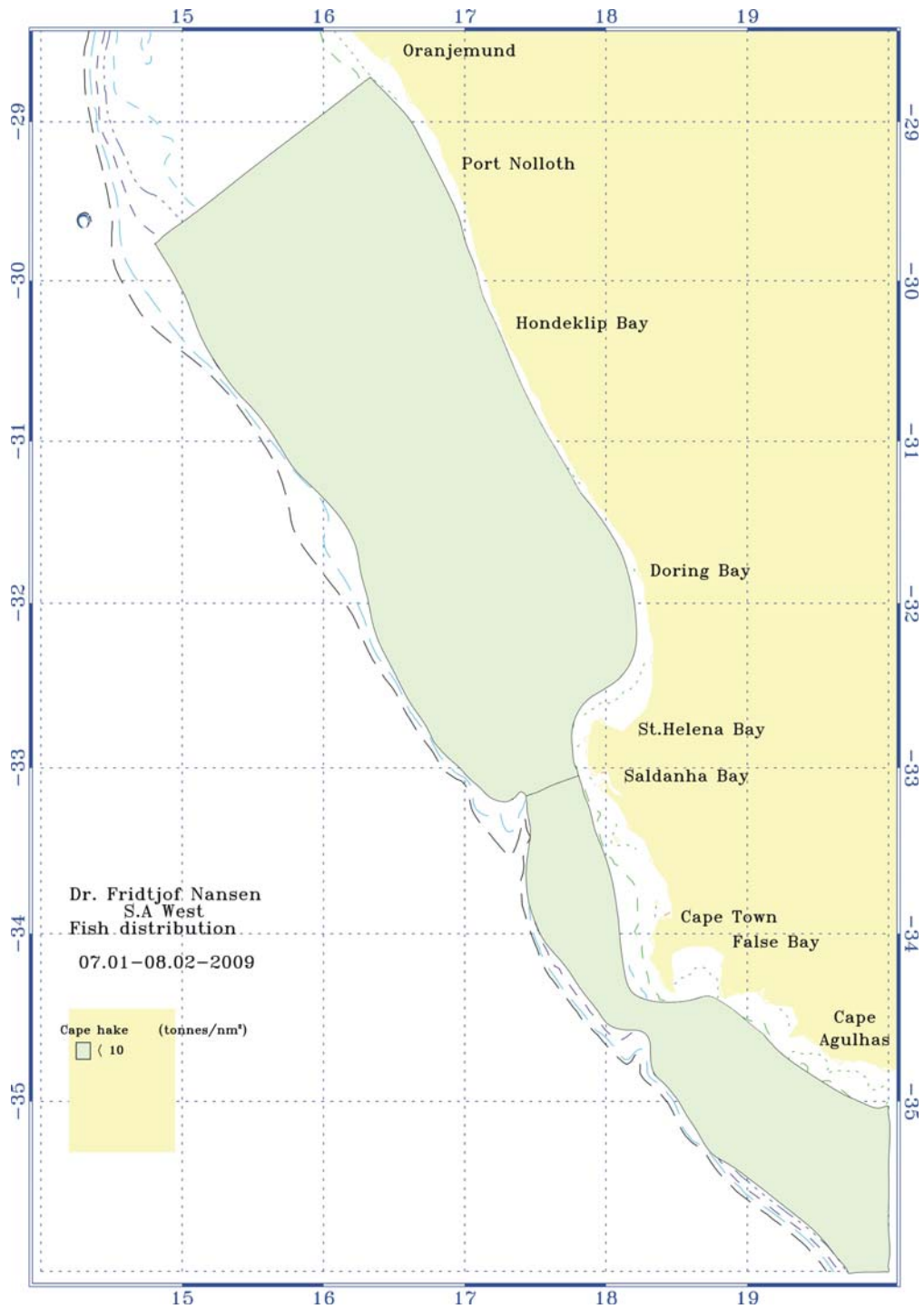


Figure 4.7 Distribution of Cape hake (*Merluccius capensis*) in January-February 2009.

Table 4.2 shows the biomass estimates of deep water hake split by fishable and non-fishable biomass in Namibia and South Africa for the years 2003, 2005-2009. Figure 4.11a and 4.11b show the Namibian and South African biomasses plotted against each other for the non-fishable and fishable biomass respectively. Both the level and ratio of

Table 4.1 Regional abundance estimates of *M. paradoxus*.

Length	Biomass in tonnes			Number in millions		
	Namibia	S. Africa	Total	Namibia	S. Africa	Total
0	0	0	0	0.0	0.2	0.2
5	5	796	796	1.7	233.7	235.4
10	130	5610	5740	11.1	480.7	491.8
15	444	48856	49300	13.6	1464.9	1478.5
20	5441	65431	70872	70.3	965.0	1035.3
25	19993	58713	78706	159.1	483.1	642.2
30	21668	44064	65732	102.7	209.9	312.6
35	24177	43297	67474	74.5	133.0	207.5
40	17076	36501	53577	36.2	77.6	113.8
45	14239	22126	36365	21.3	33.8	55.1
50	15951	12692	28643	17.7	14.1	31.8
55	7380	6997	14377	6.3	5.9	12.2
60	1233	3762	4995	0.9	2.5	3.4
65	375	2052	2427	0.2	1.0	1.2
70	42	1102	1144	0.0	0.5	0.5
75	66	579	645	0.0	0.0	0.0
80	0	423	423	0.0	0.0	0.0
85	0	94	94	0.0	0.0	0.0
90	0	0	0	0.0	0.0	0.0
95	0	0	0	0.0	0.0	0.0
100	0	0	0	0.0	0.0	0.0
Total	128220	353095	481315	515.6	4105.9	4621.5
Non-fishable	52139	231501	283340	374.6	3866.5	4241.1
Fishable	76081	121594	197675	141.0	239.4	380.4

non-fishable biomass between the two countries seems to be rather stable in the period until 2008, while a decline was observed in Namibia in 2009, Figure 4.11a. The fishable biomass, Figure 4.11b shows a relative stable level in the years 2003, 2005 and 2006. In 2007 the Namibian biomass has increased considerably since the previous year, while in South Africa it remains at the previous stable level. In 2008 the Namibian stock has increased further, and the South African part of the stock now also shows a considerable growth. In 2009 the Namibian estimate has dropped 18% from 92 to 76 thousand tonnes, while the South African estimate of fishable biomass remains same as for the year before.

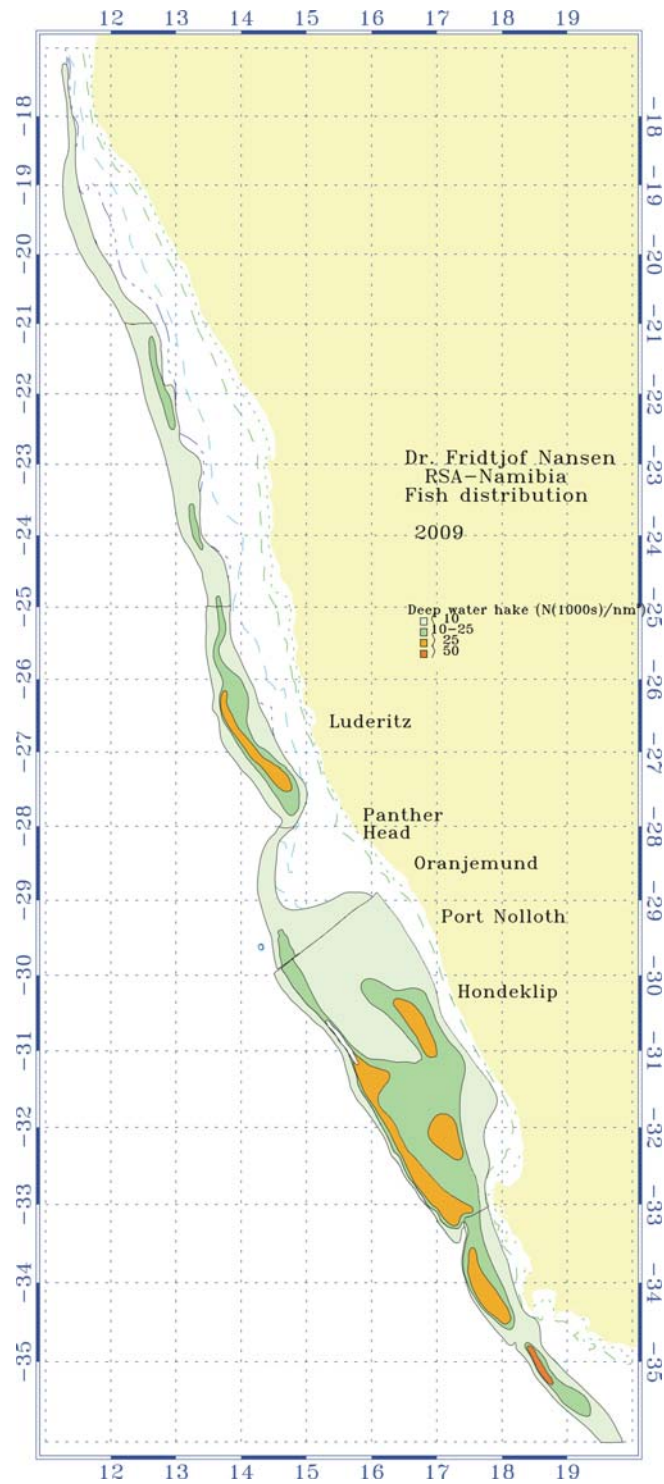


Figure 4.8 Distribution of deep-water hake (*M. paradoxus*) from Cunene to Cape Agulhas 2009

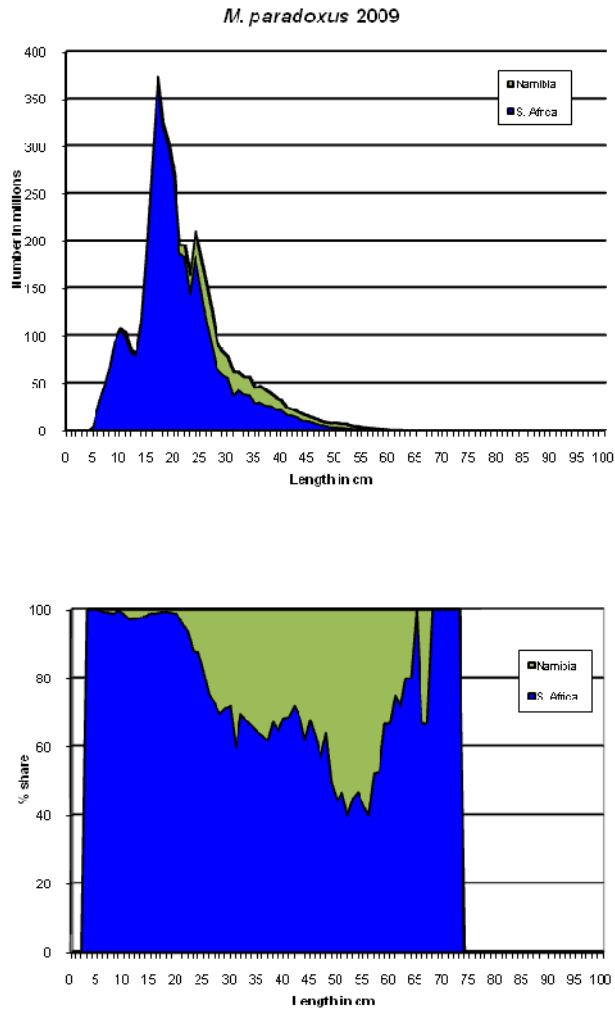


Figure 4.9 a) Estimated abundance in numbers of deep-water hake by 1 cm length classes. Namibia (green) added on top of South-Africa (blue).  
 b) % share between South-Africa (blue) and Namibia (green) of deep-water hake in numbers by 1 cm length classes in January-February 2009.



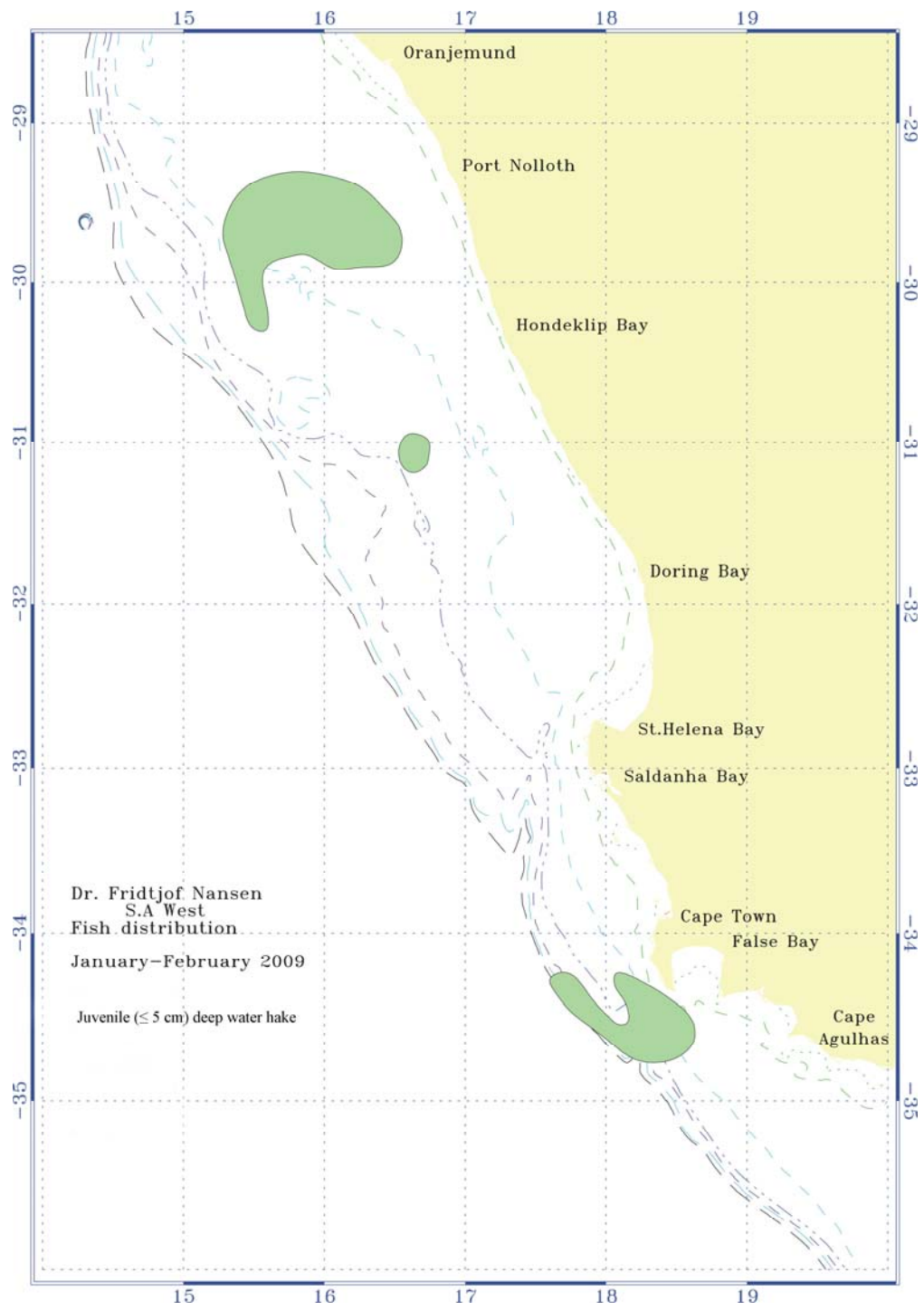


Figure 4.10 Presence of baby hake (<5cm length) in trawl catches

Table 4.2 Non-fishable and fishable biomass deep water hake  
Namibia and South Africa 2003-2009

Year	Non-Fishable		Fishable	
	Namibia	South-Africa	Namibia	South-Africa
2003	76361	232227	40080	79455
2005	68235	200077	46962	88850
2006	71781	273640	43414	66823
2007	81984	234518	66044	79894
2008	71080	194948	92272	117127
2009	52139	231501	76081	121594

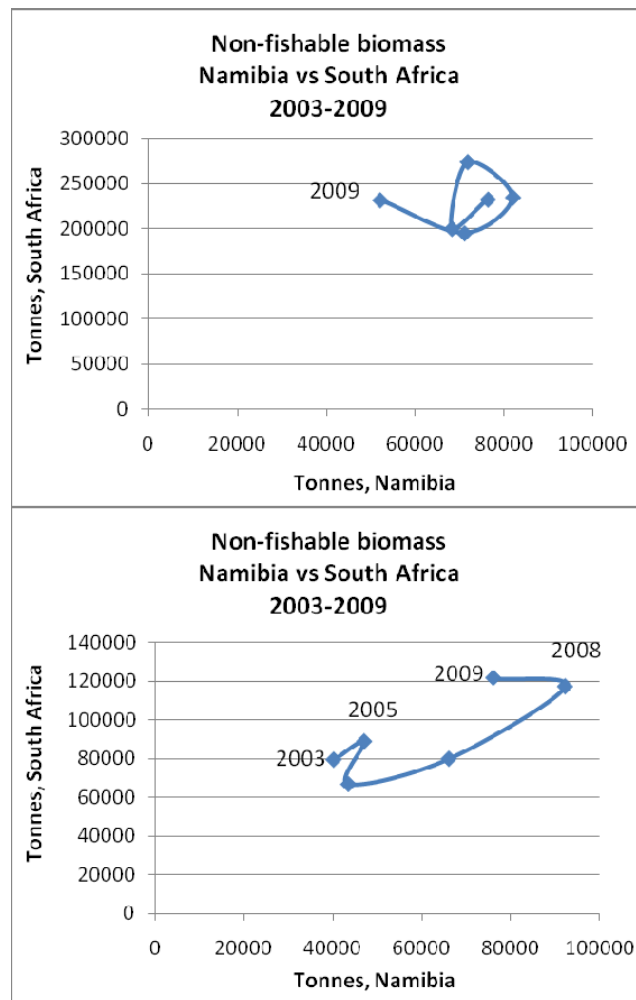


Figure 4.11. Relationship between biomass estimates on deep water hake in Namibia and South Africa. Above: Non-fishable biomass (<36cm), Below: fishable biomass

Table 4.3 shows the density estimates of *M. paradoxus* by bottom depth strata and by regions, three regions in Namibia and four in South Africa. Table 4.3 shows the similar data for *M. capensis*. The areas of these depth strata and regions are listed in Annex 3.

Table 4.3 Density estimates of *M. paradoxus* by depth strata and regions.

Region	0-99m	100-199m	200-299m	300-399m	400-499m	500-599	600-699
Cunene-21°S	n.a.	0	0	0	4.00	4.16	3.21
21°S-25°S	n.a.	0	0	7.51	3.68	2.78	3.08
25°S-Orange River	0	0.10	1.98	19.10	13.15	3.04	4.80
Orange River-S. Hondeklip Bay	n.a.	4.00	8.10	9.38	71.60	4.40	1.51
S. Hondeklip Bay-N. Saldanha Bay	0	3.71	22.31	17.07	31.42	17.10	4.52
N. Saldanha Bay- Cape of Good Hope	n.a.	4.40	23.81	48.57	27.31	5.42	n.a.
Cape of Good Hope – Cape Agulhas	5.41	0.88	8.41	108.51	44.49	1.67	0.99

Table 4.3 Density estimates of *M. capensis* by depth strata and regions.

Region	0-99m	100-199m	200-299m	300-399m	400-499m	500-599	600-699
Cunene-21°S	n.a.	36.19	81.66	14.46	0.05	0	0
21°S-25°S	n.a.	33.17	37.22	7.65	0	0	0
25°S-Orange River	30.88	34.40	54.46	0.42	0.06	0	0
Orange River-S. Hondeklip Bay	n.a.	6.21	1.56	0.51	0	0	0
S. Hondeklip Bay-N. Saldanha Bay	4.77	1.45	1.28	2.88	0.17	0	0
N. Saldanha Bay-Cape of Good Hope	n.a.	0.62	2.70	1.05	0.06	0	n.a.
Cape of Good Hope – Cape Agulhas	0.00	0.88	3.13	0.54	0.08	0	0

## 5 Considerations of the survey results, *M. paradoxus*

The findings from the survey 7 January-20 February combined with similar findings from the Namibian survey in the period 12 January-17 February confirms some the general features as regards the distribution of *M. paradoxus*:

- Minimal spawning takes place at this time of the year, confirmed through few signs of maturing gonads.
- The early pelagic stage is mainly confined to the central-outer part of the shelf off Port Nolloth and in a new area off the Cape Peninsula.
- Juveniles between 15 and 24cm are mainly concentrated on the shelf between Hondeklip Bay and St. Helena Bay. In contrast to some earlier years there are no spillover of juvenile fish northwards over the Orange Banks into Namibia. The main interface between Namibia and South Africa seems to be along the slope. The same pattern occurred in 2007 and 2008 while in the preceeding years there was a continous channel of fish extending into Namibia over the Orange Banks during the January surveys.
- The massive migration towards the slope starts in the 25-29cm group and when the fish is bigger than 30cm this movement is mainly completed.
- The adult fish is found from Cunene in the north and southwards beyond Cape Agulhas. The biggest fish, bigger than 70cm is, in consistency with previous surveys, only recorded in South Africa.
- The main part of the stock is at the time of the survey in 2009 located in South Africa which holds about 62% of the fishable biomass (fish bigger than 35cm) and 82% of the non-fishable biomass.
- The regional standing stock has been on a rising trend in the last three years, perhaps culminating during the last year. The regional estimate of fishable biomass has increased from 110 thousand tonnes in 2006 to roundly 200 thousand tonnes in 2009, close to the 210 thousand in 2008.
- Between 55 and 60cm fish length there is an increased share of the biomass in Namibian waters compared to smaller and bigger fish classes, perhaps indicating a periodic immigration from south.

- Blue Sea and Dr. Fridtjof Nansen use identical trawls and similar survey design and sampling protocol. The catchability coefficient in the biomass estimates applied is 0.8. Since the catchability coefficient of the trawl used on Dr. Fridtjof Nansen and Blue Sea has not been calibrated against absolute densities in the path of the trawl, the biomass estimates given here should not be considered as absolute biomass, but as indices of biomass. Thus the essential information is in relative comparisons and trends.

# Annex 1 Records of fishing stations

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1420  
 DATE :11.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°4.38  
 start stop duration Lon E 14°24.80  
 TIME :11:03:50 11:36:57 33.1 (min) Purpose : 3  
 LOG : 7660.35 7661.91 1.6 Region : 5030  
 FDEPTH: 470 481 Gear cond.: 0  
 BDEPTH: 470 481 Validity : 0  
 Towing dir: 0° Wire out : 1020 m Speed : 2.8 kn  
 Sorted : 471 Total catch: 470.89 Catch/hour: 853.57

TIME :08:01:19 08:32:23 31.1 (min) Purpose : 3  
 LOG : 7939.83 7941.45 1.6 Region : 5030  
 FDEPTH: 519 546 Gear cond.: 0  
 BDEPTH: 519 546 Validity : 0  
 Towing dir: 0° Wire out : 1400 m Speed : 3.1 kn  
 Sorted : 96 Total catch: 96.39 Catch/hour: 186.14

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	639.88	937	74.96
Malacocephalus laevis	52.21	237	6.12
Caelorinchus simorhynchus	41.15	644	4.82
Gemypteris capensis	25.38	9	2.97
Helicolenus dactylopterus	23.56	56	2.76
Bassanago albescens	17.22	47	2.02
Octopus magnificus	10.15	2	1.19
Centrolophus niger	9.61	2	1.13
Lophius vomerinus	7.43	5	0.87
Raja leopardenus	6.89	4	0.81
Merluccius paradoxus	4.53	16	0.53
Todarodes angolensis	2.56	5	0.30
Selachophidium guentheri	2.36	27	0.28
Todarodes angolensis	1.81	9	0.21
Holohalaelurus regani	1.52	4	0.18
Tripterygion gilchristi	1.52	53	0.18
Lampanyctodes hectoris	1.03	382	0.12
Lucigadus ori	0.96	98	0.11
Lycoteuthis lorigera	0.92	158	0.11
Symbolophorus boops	0.72	87	0.08
Beryx splendens	0.51	4	0.06
Physiculus capensis	0.36	18	0.04
Rossia enigmatica	0.31	9	0.04
Caelorinchus matama	0.17	2	0.02
Shrimps, small, non comm.	0.16	16	0.02
Gymnoscopelus sp.	0.13	18	0.02
Hoplostethus mediterraneus	0.11	2	0.01
Myxine capensis	0.10	2	0.01
Oreosoma atlanticum	0.06	2	0.01
Parapaparus pilosimanus	0.06	20	0.01
Photichthys argenteus	0.05	4	0.01
Shrimps, small, non comm.	0.04	27	0.00
Scopelosaurus herwigi	0.03	2	0.00
Argentina sp.	0.02	2	0.00
Abrialopsis gilchristi	0.02	4	0.00
Diaphus efulgens	0.02	2	0.00
Stoloteuthis sp.	0.01	7	0.00
Total	853.57		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1421  
 DATE :11.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°27.57  
 start stop duration Lon E 14°24.14  
 TIME :05:25:13 05:51:59 26.8 (min) Purpose : 3  
 LOG : 7772.84 7774.26 1.4 Region : 5030  
 FDEPTH: 465 483 Gear cond.: 7  
 BDEPTH: 465 483 Validity : 4  
 Towing dir: 0° Wire out : 1100 m Speed : 3.2 kn  
 Sorted : 2 Total catch: 1.63 Catch/hour: 3.66

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorinchus simorhynchus	78.21	2300	42.02
Merluccius paradoxus	36.69	42	19.71
Nezumia sp.	19.31	483	10.37
Ebinania costaecanarie	14.68	189	7.88
Todarodes angolensis	10.43	15	5.60
Malacocephalus laevis	3.67	29	1.97
Todarodes angolensis	3.28	10	1.76
Funchalia woodwardi	2.32	210	1.24
Centrolophus niger	2.32	2	1.24
Cruriraja parcomaculata	2.32	4	1.24
Photichthys argenteus	2.22	170	1.19
Lithodes ferox	1.93	2	1.04
Notacanthus sexspinis	1.64	10	0.88
Raja leopardenus	1.04	2	0.56
Hoplostethus cadenati	1.00	42	0.54
Opiostheutis rossi	0.54	2	0.29
Helicolenus dactylopterus	0.50	4	0.27
Gymnoscopelus sp.	0.49	58	0.26
Hydrolagus sp.	0.46	2	0.25
Caelorinchus matama	0.46	6	0.24
Epigonus sp.	0.39	44	0.21
Trachyscorpia eschmeyerii	0.37	0	0.20
Merluccius paradoxus	0.29	4	0.15
Tripterygion gilchristi	0.24	15	0.13
Shrimps, small, non comm.	0.21	68	0.11
Lycoteuthis lorigera	0.16	31	0.09
Symbolophorus boops	0.14	19	0.08
Etmopterus brachyurus	0.09	4	0.05
Shrimps, small, non comm.	0.09	104	0.05
Lucigadus ori	0.08	10	0.04
Physiculus capensis	0.07	6	0.04
Scopelosaurus meadi	0.07	4	0.04
Argentina sp.	0.06	2	0.03
Chauliocrus gionni	0.06	4	0.03
Hoplostethus mediterraneus	0.05	2	0.03
Neoscopelus sp.	0.05	6	0.03
Diaphus sp.	0.05	19	0.03
Diaphus efulgens	0.03	2	0.02
Scopelosaurus herwigi	0.02	4	0.01
Sergia sp.	0.02	4	0.01
Stereomastis sp.	0.02	6	0.01
Brama brama	0.01	2	0.01
Stoloteuthis sp.	0.01	27	0.01
Xenodermichthys copei	0.01	2	0.00
Myctophum sp.	0.01	2	0.00
Abrialopsis gilchristi	0.01	2	0.00
Chlorophthalmus sp.	0.01	2	0.00
Rochinia sp.	0.01	2	0.00
Total	186.14		100.00

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Gymnoscopelus sp.	0.96	141	26.29
Lampanyctodes hectoris	0.61	307	16.79
Symbolophorus boops	0.45	63	12.38
Lycoteuthis lorigera	0.33	63	9.13
Funchalia woodwardi	0.26	22	7.11
Electrona risso	0.25	58	6.80
PARALEPIDIDAE	0.19	27	5.15
Scopelosaurus meadi	0.17	7	4.78
Todarodes angolensis	0.13	2	3.68
Photichthys argenteus	0.09	7	2.45
Diaphus sp.	0.08	25	2.14
Scopelosaurus herwigi	0.07	2	2.02
Abrialopsis gilchristi	0.03	7	0.80
Oreosoma atlanticum	0.02	4	0.49
Total	3.66		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1424  
 DATE :14.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°45.16  
 start stop duration Lon E 15°21.54  
 TIME :09:27:35 09:58:16 30.7 (min) Purpose : 3  
 LOG : 8248.28 8249.87 1.6 Region : 5030  
 FDEPTH: 181 180 Gear cond.: 0  
 BDEPTH: 181 180 Validity : 0  
 Towing dir: 0° Wire out : 480 m Speed : 3.1 kn  
 Sorted : 1154 Total catch: 1154.40 Catch/hour: 2256.89

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
PORIFERA (Sponges)	1059.63	0	46.95
Chelidonichthys capensis	357.77	976	15.85
Merluccius capensis	238.51	256	10.57
Trachurus capensis	146.63	551	6.50
Zeus capensis	119.26	886	5.28
Merluccius capensis	90.91	426	4.03
Merluccius paradoxus	80.16	553	3.55
Helicolenus dactylopterus	72.34	6199	3.21
Todaropsis eblanae	17.60	364	0.78
Sepia australis	13.69	805	0.61
Paracallionymus costatus	10.95	1460	0.49
Lepidopus caudatus	8.80	108	0.39
Chelidonichthys queketti	7.82	53	0.35
Raja leopardenus	5.87	2	0.26
Etmopterus whiteheadi	4.18	65	0.19
Callorhynchus capensis	3.91	2	0.17
Lophius vomerinus	3.71	12	0.16
Holohalaelurus regani	3.13	18	0.14
Cynoglossus zanzibarensis	2.93	96	0.13
Gemypteris capensis	2.76	10	0.12
Thyrsites atun	2.54	2	0.11
Coniopodus spinifer	1.17	27	0.05
Merluccius paradoxus	0.98	166	0.04
Cruriraja parcomaculata	0.98	6	0.04
Exodromidia sp.	0.34	22	0.02
Macropodus australis	0.23	6	0.01
Lolligoncula mercatoris	0.08	35	0.00
Bathynectes piperitis	0.02	2	0.00
Iniotteuthis capensis	0.01	4	0.00
Total	2256.89		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1422  
 DATE :11.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°25.82  
 start stop duration Lon E 14°26.31  
 TIME :08:50:27 09:21:15 30.8 (min) Purpose : 3  
 LOG : 7786.80 7788.32 1.5 Region : 5030  
 FDEPTH: 422 419 Gear cond.: 0  
 BDEPTH: 422 419 Validity : 0  
 Towing dir: 0° Wire out : 1100 m Speed : 3.0 kn  
 Sorted : 260 Total catch: 260.05 Catch/hour: 506.59

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	300.00	758	59.22
Gemypteris capensis	75.97	43	15.00
Merluccius paradoxus	38.96	228	7.69
Caelorinchus simorhynchus	35.06	547	6.92
Todarodes angolensis	16.56	19	3.27
Todarodes angolensis	7.21	16	1.42
Cruriraja parcomaculata	7.01	2	1.38
Helicolenus dactylopterus	7.01	19	1.38
Raja wallacei	6.82	2	1.35
Raja leopardenus	4.09	2	0.81
Lophius vomerinus	3.90	2	0.77
Malacocephalus laevis	1.14	29	0.23
Lucigadus ori	0.62	95	0.12
Epigonus sp.	0.56	84	0.11
Myxine capensis	0.39	6	0.08
Lampanyctodes hectoris	0.27	150	0.05
Funchalia woodwardi	0.19	16	0.04
Lycoteuthis lorigera	0.14	29	0.03
Symbolophorus boops	0.14	18	0.03
Rossia enigmatica	0.13	45	0.03
Tripterygion gilchristi	0.08	4	0.02
Shrimps, small, non comm.	0.08	45	0.02
Bassanago albescens	0.07	2	0.01
Paracallionymus costatus	0.05	10	0.01
C R A B S	0.03	8	0.01
Hoplostethus mediterraneus	0.02	2	0.00
Photichthys argenteus	0.02	2	0.00
Stereomastis sp.	0.02	8	0.00
C R A B S	0.02	2	0.00
Physiculus capensis	0.01	2	0.00
Stoloteuthis sp.	0.01	4	0.00
Total	506.59		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1425  
 DATE :14.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°38.84  
 start stop duration Lon E 15°38.03  
 TIME :12:46:38 13:19:29 32.9 (min) Purpose : 3  
 LOG : 8268.42 8270.06 1.6 Region : 5030  
 FDEPTH: 170 166 Gear cond.: 0  
 BDEPTH: 170 166 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.0 kn  
 Sorted : 142 Total catch: 142.42 Catch/hour: 260.13

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Sepia australis	58.45	1669	22.47
Merluccius capensis	47.49	287	18.26
Chelidonichthys capensis	37.44	144	14.39
Merluccius capensis	27.40	31	10.53
Thyrsites atun	10.96	9	4.21
Caelorinchus simorhynchus	9.13	247	3.51
Brama brama	8.22	4	3.16
Gemypteris capensis	7.31	62	2.81
Helicolenus dactylopterus	6.94	407	2.67
Mustelus palumbes	6.94	2	2.67
Raja leopardenus	6.39	4	2.46
Paracallionymus costatus	5.48	731	2.11
Lolligoncula mercatoris	4.75	2064	1.83
Callorhynchus capensis	4.57	2	1.76
Merluccius paradoxus	4.57	195	2.76
Total	260.13		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1423  
 DATE :12.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 27°39.54  
 start stop duration Lon E 14°28.91

Cynoglossus zanzibarensis	3.11	106	1.19	45
Trachurus capensis	2.59	18	1.00	47
Macropodus australis	1.48	42	0.57	
Todaropsis eblanae	1.30	53	0.50	46
Lepidopus caudatus	1.15	110	0.44	
Maurollicus muelleri	0.91	528	0.35	
Lophius vomerinus	0.77	9	0.29	43
Sufflogobius bibarbatatus	0.74	163	0.28	
Lampanyctodes hectoris	0.55	243	0.21	
Zeus capensis	0.51	20	0.20	44
Congiopodus spinifer	0.36	5	0.14	
Pterygosquilla armata capensis	0.32	22	0.12	
Etrumeus whiteheadi	0.13	2	0.05	
Champsodon capensis	0.07	4	0.03	
Physiculus capensis	0.06	4	0.02	
Mursia cristimanus	0.04	2	0.02	
C R A B S	0.01	2	0.00	
Mnioteuthis capensis	0.00	2	0.00	
Total		260.13		100.00

Etrumeus whiteheadi	10.98	170	1.68	
Merluccius capensis	10.78	8	1.65	77
Chelidonichthys capensis	10.58	24	1.62	75
Todaropsis eblanae	10.48	319	1.60	85
Caelorinchus simorhynchus	9.08	0	1.39	
Cynoglossus zanzibarensis	6.74	309	1.03	81
Holohalaelurus regani	5.49	66	0.84	
Gemypteris capensis	3.79	50	0.58	84
Lophius vomerinus	2.25	100	0.34	82
Pterygosquilla armata capensis	1.25	126	0.19	
Sepia hieronis	0.26	6	0.04	
Lepidopus caudatus	0.21	10	0.03	
Macropodus australis	0.17	10	0.03	
Maurollicus muelleri	0.14	70	0.02	
Congiopodus spinifer	0.06	6	0.01	
Goneplax angulata	0.02	6	0.00	
Total		654.51		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1426  
 DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°40.33 Lon E 16°13.63  
 start stop duration Purpose : 3  
 LOG : 8419.03 8420.54 1.5 Region : 5030  
 FDEPTH: 95 97 Gear cond.: 0  
 BDEPTH: 95 97 Validity : 0  
 Towing dir: 0° Wire out : 250 m Speed : 3.0 kn  
 Sorted : 233 Total catch: 916.96 Catch/hour: 1812.77

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Merluccius capensis	1232.62	43143	68.00	48
Chelidonichthys capensis	150.50	644	8.30	49
Raja alba	108.73	2	6.00	
Merluccius capensis	57.33	538	3.16	50
Aequorea forskalea	50.19	0	2.77	
Callorhynchus capensis	49.42	49	2.73	40
Pasiphaea sp.	45.86	0	2.53	
Galeorhinus galeus	37.56	2	2.07	
Lolligoncula mercatoris	25.80	0	1.42	
Merluccius capensis	15.06	1414	0.83	51
Thyrsites atrop	7.18	0	0.40	
Todaropsis eblanae	5.81	524	0.32	54
Austroglossus microlepis	5.02	43	0.28	53
Gemypteris capensis	4.71	22	0.26	52
Sepia australis	4.13	136	0.23	
Sufflogobius bibarbatatus	3.83	652	0.21	
Jasus lalandii	3.30	30	0.18	58
Pterygosquilla armata capensis	1.59	115	0.09	
Jasus lalandii	1.44	22	0.08	57
Trachurus capensis	1.11	14	0.06	55
Macropodus australis	0.49	14	0.03	
Todarodes angolensis	0.47	36	0.03	56
Lepidopus caudatus	0.43	49	0.02	
Etrumeus whiteheadi	0.26	8	0.01	
Total		1812.87		100.01

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1427  
 DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 28°49.28 Lon E 15°52.86  
 start stop duration Purpose : 3  
 LOG : 8442.07 8443.60 1.5 Region : 5030  
 FDEPTH: 159 164 Gear cond.: 0  
 BDEPTH: 159 164 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.0 kn  
 Sorted : 195 Total catch: 194.77 Catch/hour: 386.32

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Aequorea forskalea	146.78	0	37.99	
PORIFERA (Sponges)	67.44	0	17.46	
Galeorhinus galeus	31.74	2	8.21	
Brama brama	27.77	14	7.19	59
Todaropsis eblanae	20.83	417	5.39	71
Merluccius capensis	16.86	161	4.36	72
Merluccius capensis	8.53	69	2.21	63
Gemypteris capensis	8.33	67	2.16	62
Helicolenus dactylopterus	7.93	430	2.05	61
Sepia australis	7.54	377	1.95	
Merluccius paradoxus	6.55	244	1.69	68
Paracallionymus costatus	5.30	440	1.37	
Pasiphaea sp.	4.56	0	1.18	
Merluccius capensis	3.97	2	1.03	60
Raja straeleni	3.77	4	0.98	
Caelorinchus simorhynchus	3.05	123	0.79	
Chelidonichthys capensis	2.98	10	0.77	64
Heart urchin	2.38	34	0.62	
Maurollicus muelleri	2.26	0	0.59	
Trachurus capensis	1.63	14	0.42	69
Pterygosquilla armata capensis	1.55	91	0.40	
Lophius vomerinus	0.95	4	0.25	67
Cynoglossus zanzibarensis	0.81	34	0.21	66
Lolligoncula mercatoris	0.60	254	0.15	
Jasus lalandii	0.46	2	0.12	73
Austroglossus microlepis	0.40	2	0.10	70
Zeus capensis	0.40	14	0.10	65
Macropodus australis	0.38	10	0.10	
Etrumeus whiteheadi	0.18	4	0.05	
Lepidopus caudatus	0.11	18	0.03	
Sufflogobius bibarbatatus	0.10	24	0.03	
Congiopodus spinifer	0.06	2	0.02	
Goneplax angulata	0.05	12	0.01	
Exodromia sp.	0.04	4	0.01	
Lampanyctodes hectoris	0.03	14	0.01	
Mursia cristimanus	0.02	2	0.01	
Notopogon macrosolen	0.02	2	0.01	
Total		386.32		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1428  
 DATE :15.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°0.19 Lon E 15°40.64  
 start stop duration Purpose : 3  
 LOG : 8461.42 8462.97 1.6 Region : 5030  
 FDEPTH: 182 182 Gear cond.: 0  
 BDEPTH: 182 182 Validity : 0  
 Towing dir: 0° Wire out : 460 m Speed : 3.1 kn  
 Sorted : 181 Total catch: 327.80 Catch/hour: 654.51

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Aequorea forskalea	244.59	0	37.37	
Sepia australis	82.86	5179	12.66	
Merluccius capensis	50.92	178	7.78	78
Galeorhinus galeus, male	43.93	2	6.71	
Merluccius paradoxus	40.93	479	6.25	83
Paracallionymus costatus	39.93	2218	6.10	
Lophius vomerinus	32.14	94	5.06	74
Helicolenus dactylopterus	18.97	1104	2.90	79
Trachurus capensis	15.97	44	2.44	76
Merluccius paradoxus	10.98	998	1.68	80

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1429  
 DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°39.22 Lon E 14°32.62  
 start stop duration Purpose : 3  
 LOG : 8544.95 8546.38 1.4 Region : 5030  
 FDEPTH: 525 527 Gear cond.: 0  
 BDEPTH: 525 527 Validity : 0  
 Towing dir: 0° Wire out : 1280 m Speed : 2.9 kn  
 Sorted : 234 Total catch: 234.26 Catch/hour: 470.87

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Merluccius paradoxus	387.94	804	82.39	86
Bathyraxia smithii	24.12	4	5.12	
Caelorinchus braueri	13.47	498	2.86	
Malacocephalus laevis	6.64	32	1.84	
Todarodes angolensis	6.63	12	1.41	87
Etmopterus brachyurus	4.82	119	1.02	
Nezumia sp.	4.22	141	0.90	
Starfish	4.02	0	0.85	
Todarodes angolensis	4.02	4	0.85	88
Funchalia woodwardi	2.85	265	0.61	
Raja confundens	2.61	2	0.55	
Selachophidium guentheri	1.93	32	0.41	
Epigonus sp.	1.59	58	0.34	
Hoplostethus mediterraneus	0.78	10	0.17	
Photichthys argenteus	0.72	58	0.15	
Myxine capensis	0.70	6	0.15	
Helicolenus dactylopterus	0.48	6	0.10	89
Rossia enigmatica	0.18	8	0.04	
Physiculus capensis	0.15	6	0.03	
PARALEPIDIDAE	0.15	14	0.03	
Chaeocon macphersoni	0.14	2	0.03	
Symbolophorus boops	0.13	12	0.03	
Lampanyctodes hectoris	0.12	70	0.03	
Scopelosaurus meadi	0.09	4	0.02	
Lycoteuthis lorigera	0.06	6	0.01	
Gymnoscopelus sp.	0.06	0	0.01	
Tripteroptychus gilchristi	0.06	2	0.01	
Bassanago albescens	0.06	2	0.01	
Plesiopeneus edwardsianus	0.05	2	0.01	
Stereomastix sp.	0.03	8	0.01	
Electrona risso	0.02	4	0.00	
Goneplax angulata	0.01	2	0.00	
Stoloteuthis sp.	0.01	0	0.00	
Total		470.87		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1430  
 DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°33.63 Lon E 14°37.37  
 start stop duration Purpose : 3  
 LOG : 8557.58 8559.19 1.6 Region : 5030  
 FDEPTH: 419 415 Gear cond.: 0  
 BDEPTH: 419 415 Validity : 0  
 Towing dir: 0° Wire out : 1100 m Speed : 3.1 kn  
 Sorted : 1206 Total catch: 2346.12 Catch/hour: 1246.12

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Merluccius paradoxus	1974.07	6364	84.14	90
Caelorinchus simorhynchus	58.35	972	2.49	
Lepidopus caudatus	46.68	64	1.99	
Gemypteris capensis	43.76	29	1.87	91
Scyliorhinus capensis	31.12	29	1.33	
Lophius vomerinus	31.12	12	1.33	92
Helicolenus dactylopterus	29.76	150	1.27	94
Holohalaelurus regani	29.17	210	1.24	
Bassanago albescens	21.39	37	0.91	
Mustelus mustelus	16.53	14	0.70	
Otopus magnificus	16.14	4	0.69	
Epigonus sp.	13.61	486	0.58	
Raja confundens	8.95	10	0.38	
Malacocephalus laevis	7.20	31	0.31	
Todarodes angolensis	5.45	10	0.23	95
Lucifagadus ori	3.09	224	0.13	
Brama brama	2.92	2	0.12	93
Todarodes angolensis	2.20	4	0.09	96
Rossia enigmatica	1.95	62	0.08	
Tripteroptychus gilchristi	0.57	31	0.02	
Physiculus capensis	0.42	21	0.02	
Caelorinchus braueri	0.35	14	0.02	
Etmopterus brachyurus	0.31	8	0.01	
Hoplostethus mediterraneus	0.30	4	0.01	
Paracallionymus costatus	0.13	23	0.01	
Ophichthus bennettii	0.11	2	0.00	
Myxine capensis	0.10	2	0.00	
Goneplax angulata	0.10	4	0.00	
Nezumia sp.	0.09	4	0.00	
Symbolophorus boops	0.05	6	0.00	
Champsodon capensis	0.04	6	0.00	
Stereomastix sp.	0.04	12	0.00	
Parapagurus pilosimanus	0.04	2	0.00	
Maurollicus muelleri	0.01	4	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Total		2346.12		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1431  
 DATE :16.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°15.97 Lon E 15°11.85  
 start stop duration Purpose : 3  
 LOG : 8598.06 8599.77 1.7 Region : 5030  
 FDEPTH: 196 197 Gear cond.: 0  
 BDEPTH: 196 197 Validity : 0  
 Towing dir: 0° Wire out : 525 m Speed : 3.3 kn  
 Sorted : 250 Total catch: 249.72 Catch/hour: 483.80

SPECIES	weight	CATCH/HOUR numbers	% OF TOT. C	SAMP
Merluccius paradoxus	168.55	2271	34.84	100
Merluccius capensis	85.24	83	17.62	98
Etrumeus whiteheadi	62.00	837	12.81	
Lophius vomerinus	44.56	46	9.21	99
Sepia australis	23.25	2736	4.81	

Holohalaelurus regani	19.37	66	4.00	
Trachurus capensis	13.56	62	2.80	103
Paracallionymus costatus	8.02	1042	1.66	
Thyrsites atun	7.17	6	1.48	97
Merluccius paradoxus	5.99	1035	1.24	102
Chelidonichthys capensis	5.81	12	1.20	101
Todaropsis eblanae	5.13	128	1.06	106
Cynoglossus zanzibarensis	4.46	74	0.92	105
Emmelichthys nitidus	4.26	15	0.88	
Raja straeleni	3.87	6	0.80	
Heart urchin	3.87	0	0.80	
Todarodes angolensis	3.68	4	0.76	108
Squalus megalops	2.91	6	0.60	
Helicolenus dactylopterus	2.71	322	0.56	104
Chelidonichthys queketti	1.94	15	0.40	
Lepidopus caudatus	1.66	17	0.34	
Congiopodus spinifer	1.52	14	0.31	
Arnoglossus capensis	1.34	112	0.28	
Todarodes angolensis	1.07	2	0.22	107
Zeus capensis	0.76	12	0.16	
Caelorinchus simorhynchus	0.33	6	0.07	
Ophichthus bennettai	0.30	2	0.06	
Parapagurus dimorphus	0.12	15	0.02	
Notopogon macrosolen	0.08	37	0.02	
Macropipus australis	0.06	2	0.01	
Maurolicus muelleri	0.06	39	0.01	
Sepia hieronis	0.05	2	0.01	
Lampanyctodes hectoris	0.05	21	0.01	
Lolligoncula mercatoris	0.05	23	0.01	
Iniot euthis capensis	0.01	4	0.00	
Sepia typica	0.01	2	0.00	
Total	483.80		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1432  
 DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°33.44  
 start stop duration Lon E 15°42.39  
 TIME :04:43:37 05:13:18 29.7 (min) Purpose : 3  
 LOG : 8674.84 8676.40 1.6 Region : 6100  
 FDEPTH: 182 180 Gear cond.: 0  
 BDEPTH: 182 180 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.2 kn  
 Sorted : 201 Total catch: 265.48 Catch/hour: 536.86

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius capensis	192.11 324	35.78	109
Etrumeus whiteheadi	60.16 0	11.21	
Galeorhinus galeus	38.42 2	7.16	
Heart urchin	35.39 0	6.59	
Sepia australis	31.14 3114	5.80	
Lophius vomerinus	30.33 67	5.65	111
Chelidonichthys capensis	24.27 61	4.52	110
Merluccius paradoxus	23.72 2775	4.42	117
Merluccius paradoxus	21.23 241	3.96	115
Paracallionymus costatus	15.71 392	2.93	
Aequorea forskalea	14.16 0	2.64	
Holohalaelurus regani	14.16 107	2.64	
PORIFERA (Sponges)	10.11 0	1.88	
Thyrsites atun	9.10 6	1.70	112
Cynoglossus zanzibarensis	5.88 178	1.10	116
Helicolenus dactylopterus	2.83 129	0.53	114
Raja straeleni	2.43 4	0.45	
Trachurus capensis	2.18 8	0.41	113
Chelidonichthys queketti	2.02 10	0.38	
Zeus capensis	0.58 14	0.11	
Congiopodus spinifer	0.37 28	0.07	
Macropipus australis	0.27 8	0.05	
Notopogon macrosolen	0.14 135	0.03	
Lolligoncula mercatoris	0.14 42	0.03	
Total	536.86	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1433  
 DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°25.22  
 start stop duration Lon E 15°56.67  
 TIME :08:38:52 09:09:18 30.4 (min) Purpose : 3  
 LOG : 8696.92 8698.44 1.5 Region : 6100  
 FDEPTH: 180 178 Gear cond.: 0  
 BDEPTH: 180 178 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 3.0 kn  
 Sorted : 360 Total catch: 360.08 Catch/hour: 709.74

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
PORIFERA (Sponges)	331.14 0	46.66	
Merluccius capensis	147.83 369	20.83	118
Paracallionymus costatus	57.16 3810	8.05	
Helicolenus dactylopterus	34.10 2842	4.80	121
Merluccius paradoxus	31.54 447	4.44	122
Chelidonichthys capensis	23.65 53	3.33	124
Sepia australis	21.68 986	3.05	
Lophius vomerinus	17.74 77	2.50	123
Brama brama	13.80 8	1.94	120
Heart urchin	5.91 0	0.83	
Etrumeus whiteheadi	3.94 89	0.56	
Thyrsites atun	2.96 2	0.42	119
Merluccius paradoxus	2.76 408	0.39	125
Todarodes angolensis	2.76 4	0.39	120
Congiopodus spinifer	2.68 22	0.38	
URCHINS	1.97 12	0.28	
Genypterus capensis	1.97 20	0.28	126
Todaropsis eblanae	1.97 73	0.28	127
Holohalaelurus regani	1.42 24	0.20	
Trachurus capensis	1.04 4	0.15	129
Cynoglossus zanzibarensis	0.43 10	0.06	128
Ophichthus bennettai	0.32 2	0.04	
Lepidopus caudatus	0.30 4	0.04	
Caelorinchus simorhynchus	0.19 2	0.03	
Macropipus australis	0.18 6	0.03	
Exodromidia sp.	0.12 14	0.02	
Zeus capensis	0.11 6	0.01	131
Maurolicus muelleri	0.03 18	0.00	
Physiculus capensis	0.02 2	0.00	
Champsodon capensis	0.01 2	0.00	
Total	709.74	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1434  
 DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°16.90  
 start stop duration Lon E 16°16.57  
 TIME :13:59:09 14:29:43 30.6 (min) Purpose : 3  
 LOG : 8722.64 8724.24 1.6 Region : 6100  
 FDEPTH: 157 153 Gear cond.: 0  
 BDEPTH: 157 153 Validity : 0  
 Towing dir: 0° Wire out : 430 m Speed : 3.1 kn  
 Sorted : 58 Total catch: 58.24 Catch/hour: 114.31

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Paracallionymus costatus	23.55 2047	20.60	
Aequorea forskalea	23.55 0	20.60	
Merluccius capensis	14.72 120	12.88	133
Merluccius paradoxus	8.05 237	7.04	134

Brama brama	7.85	4	6.87	135
Todaropsis eblanae	7.26	444	6.35	138
Helicolenus dactylopterus	6.28	628	5.49	136
PORIFERA (Sponges)	5.89	0	5.15	
Sepia australis	5.10	200	4.46	
Lophius vomerinus	4.91	33	4.29	137
Merluccius capensis	1.96	2	1.72	132
Maurolicus muelleri	0.96	640	0.84	
Macropipus australis	0.82	24	0.72	
Cynoglossus zanzibarensis	0.80	35	0.70	139
Genypterus capensis	0.77	10	0.67	140
Etrumeus whiteheadi	0.69	14	0.60	
Lampanyctodes hectoris	0.54	192	0.47	
Pterygoquilla armata capensis	0.20	18	0.18	
Lolligoncula mercatoris	0.17	67	0.15	
Sardinops ocellatus	0.13	2	0.11	
Caelorinchus simorhynchus	0.07	6	0.06	
Sufflogobius bibarbatatus	0.03	6	0.03	
Total	114.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1435  
 DATE :17.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°07.73  
 start stop duration Lon E 16°27.50  
 TIME :17:16:51 17:47:10 30.3 (min) Purpose : 3  
 LOG : 8738.93 8741.08 2.2 Region : 6100  
 FDEPTH: 132 131 Gear cond.: 0  
 BDEPTH: 132 131 Validity : 0  
 Towing dir: 0° Wire out : 330 m Speed : 4.2 kn  
 Sorted : 83 Total catch: 277.13 Catch/hour: 548.41

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius capensis	311.18 7904	56.74	144
Aequorea forskalea	92.51 0	16.87	
Merluccius capensis	65.60 505	11.96	143
Chelidonichthys capensis	32.45 146	5.92	149
Paspiphaea sp.	16.82 0	3.07	
Genypterus capensis	7.92 89	1.44	142
Sepia australis	4.95 142	0.90	
Octopus magnificus	3.96 2	0.72	
Todaropsis eblanae	3.67 135	0.67	145
Lophius vomerinus	1.85 8	0.34	146
Pterygoquilla armata capensis	1.68 202	0.31	
Cynoglossus zanzibarensis	1.39 18	0.25	147
Austroglossus microlepis	1.19 4	0.22	141
Maurolicus muelleri	0.84 0	0.15	
Sufflogobius bibarbatatus	0.43 85	0.08	
Sepia hieronis	0.39 8	0.07	
Caelorinchus simorhynchus	0.39 18	0.07	
Etrumeus whiteheadi	0.32 8	0.06	
Macropipus australis	0.28 8	0.05	
Lolligoncula mercatoris	0.22 101	0.04	
Exodromidia sp.	0.18 42	0.03	
Lepidopus caudatus	0.13 18	0.02	
Lampanyctodes hectoris	0.04 8	0.01	
Merluccius capensis	0.04 8	0.01	148
Total	548.41	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1436  
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°35.91  
 start stop duration Lon E 16°35.72  
 TIME :03:57:04 04:27:22 30.3 (min) Purpose : 3  
 LOG : 8777.54 8779.11 1.6 Region : 6100  
 FDEPTH: 149 152 Gear cond.: 0  
 BDEPTH: 149 152 Validity : 0  
 Towing dir: 0° Wire out : 0 m Speed : 3.1 kn  
 Sorted : 36 Total catch: 242.70 Catch/hour: 480.59

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
PORIFERA (Sponges)	304.95 0	63.45	
Merluccius capensis	87.13 1782	18.13	150
Pterygoquilla armata capensis	38.61 2414	8.03	
Sepia australis	16.08 554	3.35	
Lophius vomerinus	8.71 44	1.81	154
Chelidonichthys capensis	4.85 20	1.01	151
Lolligoncula mercatoris	4.12 154	0.86	153
Helicolenus dactylopterus	3.96 396	0.82	152
Sufflogobius bibarbatatus	3.05 556	0.63	
Caelorinchus simorhynchus	2.81 242	0.59	
Paracallionymus costatus	2.65 455	0.55	
Solenocera africana	1.98 208	0.41	
Macropipus australis	0.42 14	0.09	
Exodromidia sp.	0.40 63	0.08	
Congiopodus spinifer	0.36 4	0.07	
Lolligoncula mercatoris	0.34 14	0.07	
Maurolicus muelleri	0.09 53	0.02	
Goneplax angulata	0.07 10	0.01	
Iniot euthis capensis	0.01 4	0.00	
Total	480.59	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1437  
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°41.93  
 start stop duration Lon E 16°20.69  
 TIME :06:49:24 07:21:09 31.8 (min) Purpose : 3  
 LOG : 8795.06 8796.64 1.6 Region : 6100  
 FDEPTH: 169 169 Gear cond.: 0  
 BDEPTH: 169 169 Validity : 0  
 Towing dir: 0° Wire out : 460 m Speed : 3.0 kn  
 Sorted : 425 Total catch: 455.06 Catch/hour: 859.96

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
PORIFERA (Sponges)	663.31 0	77.13	
Merluccius paradoxus	61.80 1831	7.19	160
Merluccius capensis	29.29 119	3.41	157
Brama brama	24.57 11	2.86	155
Lophius vomerinus	16.29 144	1.89	159
Paracallionymus costatus	15.27 1527	1.78	
Helicolenus dactylopterus	13.98 1500	1.63	158
Sepia australis	12.25 627	1.42	
Thyrsites atun	5.67 2	0.66	156
Todaropsis eblanae	3.94 140	0.46	164
Heart urchin	3.78 0	0.44	
Chelidonichthys capensis	2.76 9	0.32	162
Pterygoquilla armata capensis	1.19 113	0.14	
Etrumeus whiteheadi	0.91 26	0.11	161
Merluccius paradoxus	0.91 81	0.11	163
Cynoglossus zanzibarensis	0.87 19	0.10	
Macropipus australis	0.69 23	0.08	
Genypterus capensis	0.63 13	0.07	165
Holohalaelurus regani	0.45 17	0.05	
Exodromidia sp.	0.38 32	0.04	
Trachurus capensis	0.36 4	0.04	166
Caelorinchus simorhynchus	0.33 36	0.04	
Maurolicus muelleri	0.11 62	0.01	
Sepia hieronis	0.08 4	0.01	
Solenocera africana	0.07 6	0.01	
Lampanyctodes hectoris	0.05 23	0.01	
Iniot euthis capensis	0.02 6	0.00	
Physiculus capensis	0.02 4	0.00	



Total 859.96 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1438  
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°49.09  
 start stop duration Lon E 16°9.85  
 TIME :10:08:08 10:38:11 30.0 (min) Purpose : 3  
 LOG : 8810.93 8812.44 1.6 Region : 6100  
 FDEPTH: 186 186 Gear cond.: 0  
 BDEPTH: 186 186 Validity : 0  
 Towing dir: 0° Wire out : 525 m Speed : 3.2 kn  
 Sorted : 209 Total catch: 209.04 Catch/hour: 417.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	97.87	2846	23.44	175
Merluccius capensis	89.88	172	21.53	167
Lophius vomerinus	57.92	377	13.87	171
Paracallionymus costatus	35.95	2876	8.61	
Aequorea forskalea	35.95	0	8.61	
Sepia australis	33.95	2425	8.13	
Helicolenus dactylopterus	29.96	3385	7.18	169
Heart urchin	7.99	52	1.91	
Todaropsis eblanae	6.69	268	1.60	174
Genypteris capensis	4.99	4	1.20	179
Chelidonichthys capensis	3.99	10	0.96	170
Thyrsites atun	3.00	2	0.72	168
Merluccius paradoxus	2.60	372	0.62	172
Holohalaelurus regani	2.44	32	0.58	
Cynoglossus zanzibarensis	1.92	70	0.46	173
Merluccius paradoxus	0.45	2	0.11	176
Lepidopus caudatus	0.28	8	0.07	
Trachurus capensis	0.27	2	0.07	177
Starfish	0.24	4	0.06	
Caelorinchus simorhynchus	0.21	14	0.05	
Heart urchin	0.20	12	0.05	0
Macropipus australis	0.17	4	0.04	
Maurollicus muelleri	0.17	108	0.04	
Sepia hieronis	0.16	6	0.04	
Whelks	0.13	2	0.03	
Zeus capensis	0.11	2	0.03	178
Gonoplax angulata	0.02	4	0.00	
Lampanyctodes hectoris	0.01	6	0.00	
Lolligonula mercatoris	0.01	2	0.00	
Leptocephalus	0.00	2	0.00	
Inioteuthis capensis	0.00	2	0.00	
Total	417.52		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1439  
 DATE :18.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°55.83  
 start stop duration Lon E 15°53.49  
 TIME :14:56:46 15:27:35 30.8 (min) Purpose : 3  
 LOG : 8830.92 8832.54 1.6 Region : 6100  
 FDEPTH: 203 200 Gear cond.: 0  
 BDEPTH: 203 200 Validity : 0  
 Towing dir: 0° Wire out : 550 m Speed : 3.2 kn  
 Sorted : 149 Total catch: 284.34 Catch/hour: 553.55

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	273.33	5671	49.38	186
Merluccius capensis	122.65	191	22.16	180
Aequorea forskalea	35.04	0	6.33	
Lophius vomerinus	21.41	33	3.87	181
Caelorinchus simorhynchus	16.55	452	2.99	
Sepia australis	12.65	1055	2.29	
Helicolenus dactylopterus	11.45	446	2.07	188
Callorhynchus capensis	8.76	4	1.58	
Paracallionymus costatus	8.01	942	1.45	
Raja straeleni	7.79	6	1.41	
Holohalaelurus regani	7.76	51	1.40	
Chelidonichthys capensis	7.20	19	1.30	184
Merluccius paradoxus	5.34	1291	0.96	187
Todaropsis eblanae	3.70	64	0.67	190
Etrumeus whiteheadi	2.99	0	0.54	
Cynoglossus zanzibarensis	2.36	56	0.43	189
Genypteris capensis	1.95	12	0.35	182
Merluccius paradoxus	1.95	95	0.35	183
Chelidonichthys queketti	1.17	8	0.21	185
Emmelichthys nitidus	0.60	6	0.11	
Lophius vomerinus	0.27	19	0.05	192
Maurollicus muelleri	0.19	115	0.04	
Heart urchin	0.17	19	0.03	
Starfish	0.13	14	0.02	
Champsodon capensis	0.06	6	0.01	
Pterygossquilla armata capensis	0.04	6	0.01	
Lampanyctodes hectoris	0.03	14	0.00	
Zeus capensis	0.02	6	0.00	191
Total	553.55		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1440  
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°19.48  
 start stop duration Lon E 15°57.88  
 TIME :04:03:45 04:33:12 29.5 (min) Purpose : 3  
 LOG : 8871.01 8872.48 1.5 Region : 6100  
 FDEPTH: 230 225 Gear cond.: 0  
 BDEPTH: 230 225 Validity : 0  
 Towing dir: 0° Wire out : 590 m Speed : 3.0 kn  
 Sorted : 129 Total catch: 166.29 Catch/hour: 338.79

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	59.08	79	17.44	193
Merluccius paradoxus	58.27	786	17.20	196
Aequorea forskalea	48.08	0	14.19	
Lophius vomerinus	46.86	24	13.83	194
Helicolenus dactylopterus	29.52	628	8.71	198
Caelorinchus simorhynchus	17.11	216	5.05	
Raja straeleni	11.21	6	3.31	
Holohalaelurus regani	10.39	55	3.07	
Genypteris capensis	9.17	29	2.71	197
Etrumeus whiteheadi	6.52	137	1.92	
Callorhynchus capensis	6.52	4	1.92	
Merluccius paradoxus	5.50	1499	1.62	199
Cynoglossus zanzibarensis	5.50	90	1.62	202
Sepia australis	5.09	283	1.50	
Chelidonichthys capensis	4.07	12	1.20	195
Congiopus spinifer	3.26	18	0.96	
Paracallionymus costatus	2.40	801	0.71	
Trachurus capensis	2.04	8	0.60	203
Heart urchin	1.87	16	0.55	
Todaropsis eblanae	1.67	39	0.49	200
Rossia enigmatica	1.39	4	0.41	
Zeus capensis	1.26	12	0.37	201
Ophichthus bennettai	0.76	6	0.23	
Chelidonichthys queketti	0.51	2	0.15	204
Malacocephalus laevis	0.32	2	0.09	
Exodromidia sp.	0.15	4	0.04	
Macropipus australis	0.12	4	0.04	
Emmelichthys nitidus	0.10	10	0.03	
Inioteuthis capensis	0.04	16	0.01	

Total 338.79 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1441  
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°15.18  
 start stop duration Lon E 16°5.74  
 TIME :08:02:07 08:31:28 29.4 (min) Purpose : 3  
 LOG : 8887.35 8888.95 1.6 Region : 6100  
 FDEPTH: 216 213 Gear cond.: 0  
 BDEPTH: 216 213 Validity : 0  
 Towing dir: 0° Wire out : 560 m Speed : 3.3 kn  
 Sorted : 129 Total catch: 128.60 Catch/hour: 262.89

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	102.21	149	38.88	206
Aequorea forskalea	34.75	0	13.22	209
Lophius vomerinus	26.98	65	10.26	206
Callorhynchus capensis	14.31	4	5.44	
Merluccius paradoxus	12.27	168	4.67	211
Todaropsis eblanae	8.79	180	3.34	217
Etrumeus whiteheadi	6.95	182	2.64	
Lepidopus caudatus	6.75	4	2.57	
Helicolenus dactylopterus	6.75	217	2.57	210
Brama brama	6.75	4	2.57	205
Holohalaelurus regani	6.13	22	2.33	
Raja wallacei	4.21	0	1.87	
PORIFERA (Sponges)	4.09	2	1.56	
Chelidonichthys capensis	3.07	8	1.17	208
Genypteris capensis	3.07	16	1.17	212
Chelidonichthys queketti	3.07	20	1.17	207
Paracallionymus costatus	2.53	231	0.96	
Sepia australis	2.25	123	0.86	
Zeus capensis	1.43	8	0.54	213
Raja straeleni	1.02	2	0.39	
Trachurus capensis	0.92	4	0.35	216
Starfish	0.82	2	0.31	
Heart urchin	0.82	8	0.31	
Congiopus spinifer	0.61	6	0.23	
Cynoglossus zanzibarensis	0.51	6	0.19	
Cynoglossus zanzibarensis	0.35	6	0.13	214
Merluccius paradoxus	0.33	55	0.12	215
Todarodes angolensis	0.30	10	0.12	218
Parapagurus dimorphus	0.10	10	0.04	
Rossia enigmatica	0.04	2	0.02	
Lolligonula mercatoris	0.02	6	0.01	
Inioteuthis capensis	0.00	2	0.00	
Total	262.89		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1442  
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°8.55  
 start stop duration Lon E 16°20.55  
 TIME :12:10:30 12:40:11 29.7 (min) Purpose : 3  
 LOG : 8908.50 8910.16 1.7 Region : 6100  
 FDEPTH: 190 190 Gear cond.: 0  
 BDEPTH: 190 190 Validity : 0  
 Towing dir: 0° Wire out : 525 m Speed : 3.3 kn  
 Sorted : 175 Total catch: 174.52 Catch/hour: 352.92

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	125.38	245	35.53	219
Aequorea forskalea	76.85	0	21.77	
Todaropsis eblanae	38.42	1056	10.89	225
Chelidonichthys capensis	22.24	51	6.30	220
Brama brama	20.22	12	5.73	221
Helicolenus dactylopterus	14.56	451	4.13	223
Merluccius paradoxus	14.16	364	4.01	224
Callorhynchus capensis	12.13	4	3.44	
Etrumeus whiteheadi	7.08	158	2.01	
Paracallionymus costatus	6.07	433	1.72	
Genypteris capensis	5.66	16	1.60	222
Starfish	2.43	0	0.69	
Sepia australis	1.90	111	0.54	
Merluccius paradoxus	1.42	156	0.40	226
Chelidonichthys queketti	1.07	8	0.30	227
Holohalaelurus regani	0.95	10	0.27	
Cynoglossus zanzibarensis	0.50	12	0.14	231
Lepidopus caudatus	0.07	8	0.13	
Caelorinchus simorhynchus	0.33	8	0.09	
Zeus capensis	0.27	4	0.08	230
Lophius vomerinus	0.23	2	0.07	229
Trachurus capensis	0.21	2	0.06	228
Heart urchin	0.17	2	0.05	
Champsodon capensis	0.11	8	0.03	
Lolligonula mercatoris	0.06	22	0.02	
Physiculus capensis	0.02	2	0.01	
Parapagurus dimorphus	0.02	2	0.01	
Total	352.92		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1443  
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°0.46  
 start stop duration Lon E 16°30.43  
 TIME :15:10:49 15:41:12 30.4 (min) Purpose : 3  
 LOG : 8924.13 8925.74 1.6 Region : 6100  
 FDEPTH: 180 179 Gear cond.: 0  
 BDEPTH: 180 179 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 3.2 kn  
 Sorted : 103 Total catch: 225.07 Catch/hour: 444.36

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	165.84	0	37.32	
Lampanyctodes hectoris	71.08	705	16.00	
Galeorhinus galeus, female	53.31	2	12.00	
Merluccius paradoxus	53.31	1889	12.00	237
Sepia australis	27.90	1396	6.28	
Helicolenus dactylopterus	21.32	2466	4.80	236
Merluccius capensis	16.58	63	3.73	235
PORIFERA (Sponges)	9.87	0	2.22	
Todaropsis eblanae	7.76	160	1.75	238
Paracallionymus costatus	6.69	573	1.51	
Merluccius paradoxus	1.60	219	0.36	239
Lophius vomerinus	1.27	18	0.29	243
Chelidonichthys capensis	1.09	4	0.24	234
Lophius vomerinus	0.99	6	0.22	232
Cynoglossus zanzibarensis	0.82	47	0.19	240
Heart urchin	0.71	6	0.16	
Sepia hieronis	0.69	24	0.16	
Lepidopus caudatus	0.65	36	0.15	
Holohalaelurus regani	0.50	18	0.11	
Heart urchin	0.49	24	0.11	0
Todarodes angolensis	0.44	12	0.10	242
Genypteris capensis	0.39	2	0.09	233
Trachurus capensis	0.33	12	0.07	241
Maurollicus muelleri	0.30	193	0.07	
CYPRAEIDAE (Bulia)	0.19	6	0.04	
Genypteris capensis	0.11	6	0.03	244
Pterygossquilla armata capensis	0.10	12	0.02	
Lolligonula mercatoris	0.03	12	0.01	
Total	444.36		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1444  
 DATE :19.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 29°54.33  
 start stop duration Lon E 16°40.27  
 TIME :17:22:43 17:52:47 30.1 (min) Purpose : 3  
 LOG : 8937.49 8939.07 1.6 Region : 6100  
 FDEPTH: 158 158 Gear cond.: 0  
 BDEPTH: 158 158 Validity : 0  
 Towing dir: 0° Wire out : 410 m Speed : 3.1 km  
 Sorted : 71 Total catch: 71.37 Catch/hour: 142.41

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	119.72	0	84.07	
Sepia australis	8.78	303	6.16	
Helicolenus dactylopterus	3.99	411	2.80	245
Lepidopus caudatus	3.13	196	2.20	
Merluccius capensis	2.37	22	1.67	247
Todaropsis eblanae	1.66	40	1.16	246
Maurollicus muelleri	1.00	0	0.70	
Merluccius paradoxus	0.52	34	0.36	248
Solenocera africana	0.27	36	0.19	
Paracallionymus costatus	0.21	30	0.14	
PASIPHAEIDAE	0.20	0	0.14	
Cynoglossus zanzibarensis	0.19	6	0.13	249
Lophius vomerinus	0.09	4	0.06	252
Gerypteris capensis	0.08	4	0.06	250
Todarodes angolensis	0.07	2	0.05	251
Sepia hieronis	0.05	2	0.04	
Pterygosquilla armata capensis	0.05	4	0.03	
Lampanyctodes hectoris	0.02	0	0.01	
Trachurus capensis	0.01	4	0.01	253
Iniotheuthis capensis	0.00	2	0.00	
Total	142.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1445  
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°13.59  
 start stop duration Lon E 16°57.01  
 TIME :03:52:31 04:22:36 30.1 (min) Purpose : 3  
 LOG : 8998.86 9000.30 1.4 Region : 6100  
 FDEPTH: 151 150 Gear cond.: 0  
 BDEPTH: 151 150 Validity : 0  
 Towing dir: 0° Wire out : 420 m Speed : 2.9 km  
 Sorted : 902 Total catch: 901.94 Catch/hour: 1799.68

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	1716.00	0	95.35	
Aequorea forskalea	39.91	0	2.22	
Todaropsis eblanae	9.78	239	0.54	255
Ekodromidia sp.	7.98	443	0.44	
Sepia australis	5.67	257	0.31	
Helicolenus dactylopterus	2.77	251	0.15	258
Gerypteris capensis	2.71	60	0.15	257
Lophius vomerinus	2.67	18	0.15	256
Paracallionymus costatus	2.17	395	0.12	
Pterygosquilla armata capensis	2.12	235	0.12	
Merluccius paradoxus	1.20	22	0.07	261
Merluccius capensis	1.20	6	0.07	260
Cynoglossus zanzibarensis	1.10	38	0.06	254
Merluccius paradoxus	1.00	62	0.06	259
Whelks	0.70	16	0.04	
Heart urchin	0.68	22	0.04	
Solenocera africana	0.56	64	0.03	
Starfish	0.40	8	0.02	
Macropipus australis	0.40	14	0.02	
Congiopodus spinifer	0.23	2	0.01	
Maurollicus muelleri	0.20	0	0.01	
Sepia hieronis	0.18	4	0.01	
Caelorinchus simorhynchus	0.05	0	0.00	
CYPRIDAE (Bullia)	0.01	2	0.00	
Physiculus capensis	0.01	2	0.00	
Notopogon macrosolen	0.00	2	0.00	
Total	1799.68		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1446  
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°16.81  
 start stop duration Lon E 16°44.89  
 TIME :06:02:50 06:34:58 32.1 (min) Purpose : 3  
 LOG : 9012.46 9014.03 1.6 Region : 6100  
 FDEPTH: 189 188 Gear cond.: 0  
 BDEPTH: 189 188 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 2.9 km  
 Sorted : 134 Total catch: 133.96 Catch/hour: 250.24

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	100.87	0	40.31	
Merluccius paradoxus	57.91	1455	23.14	262
Merluccius capensis	33.62	99	13.44	296
Lophius vomerinus	15.50	86	6.20	266
Raja straeleni	8.41	4	3.36	
Helicolenus dactylopterus	8.29	755	3.31	263
Holohalaelurus regani	7.47	196	2.99	
Todaropsis eblanae	7.88	205	1.95	268
Sepia australis	3.74	177	1.49	
Gerypteris capensis	2.24	17	0.90	267
Paracallionymus costatus	2.13	304	0.85	
Merluccius paradoxus	1.31	235	0.52	264
Cynoglossus zanzibarensis	0.93	21	0.37	265
Caelorinchus simorhynchus	0.89	52	0.36	
Heart urchin	0.76	24	0.31	
Chelidonichthys capensis	0.52	2	0.21	269
Lepidopus caudatus	0.22	9	0.09	
Heart urchin	0.17	2	0.07	
Maurollicus muelleri	0.12	80	0.05	
Parapagurus pilosimanus	0.09	9	0.03	
Macropipus australis	0.06	2	0.02	
Ekodromidia sp.	0.04	4	0.02	
Lolligoncula mercatoris	0.04	19	0.02	
Pterygosquilla armata capensis	0.01	2	0.01	
Physiculus capensis	0.01	2	0.00	
Total	250.24		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1447  
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°24.96  
 start stop duration Lon E 16°33.78  
 TIME :08:43:33 09:14:09 30.6 (min) Purpose : 3  
 LOG : 9029.31 9030.90 1.6 Region : 6100  
 FDEPTH: 213 217 Gear cond.: 0  
 BDEPTH: 213 217 Validity : 0  
 Towing dir: 0° Wire out : 580 m Speed : 3.1 km  
 Sorted : 289 Total catch: 289.00 Catch/hour: 566.84

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	219.68	314	38.75	270
Etrumeus whiteheadi	99.07	196	17.30	
Merluccius paradoxus	88.26	1903	15.57	277
Lophius vomerinus	56.88	73	10.03	274
Aequorea forskalea	17.65	0	3.11	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Helicolenus dactylopterus	11.77	453	2.08	276
Chelidonichthys capensis	11.77	22	2.08	272
Todaropsis eblanae	11.18	324	1.97	280
Chelidonichthys queketti	9.81	57	1.73	271
Callorhynchus capensis	9.81	4	1.73	
Brama brama	7.85	6	1.38	273
Holohalaelurus regani	7.85	92	1.38	
Paracallionymus costatus	3.92	280	0.69	
Zeus capensis	3.92	22	0.59	278
Merluccius paradoxus	1.96	10	0.35	275
Heart urchin	1.84	25	0.33	
Trachurus capensis	1.20	6	0.21	281
Merluccius paradoxus	0.98	159	0.17	279
Congiopodus spinifer	0.72	8	0.13	
Caelorinchus simorhynchus	0.67	12	0.12	
Lepidopus caudatus	0.45	10	0.08	
Sepia australis	0.25	12	0.04	
Heart urchin	0.22	18	0.04	0
Parapagurus dimorphus	0.09	8	0.02	
Pterygosquilla armata capensis	0.02	4	0.00	
Physiculus capensis	0.01	2	0.00	
Champsodon capensis	0.01	2	0.00	
Emmelichthys nitidus	0.01	2	0.00	
Lolligoncula mercatoris	0.00	2	0.00	
Total	566.84		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1448  
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°32.50  
 start stop duration Lon E 16°17.86  
 TIME :12:07:25 12:22:20 14.9 (min) Purpose : 3  
 LOG : 9049.59 9050.42 0.8 Region : 6100  
 FDEPTH: 246 248 Gear cond.: 0  
 BDEPTH: 246 248 Validity : 1  
 Towing dir: 0° Wire out : 610 m Speed : 3.3 km  
 Sorted : 168 Total catch: 167.63 Catch/hour: 674.10

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	221.18	3028	32.81	
Merluccius paradoxus	120.64	1975	17.90	284
Helicolenus dactylopterus	84.45	1488	12.53	283
Aequorea forskalea	60.32	0	8.95	
Merluccius capensis	56.30	76	8.35	282
Lepidopus caudatus	20.11	24	2.98	
Caelorinchus simorhynchus	18.90	213	2.80	
Lophius vomerinus	18.90	20	2.80	285
Holohalaelurus regani	18.10	76	2.68	
Zeus capensis	8.85	32	1.31	286
Chelidonichthys queketti	7.64	44	1.13	287
Chelidonichthys capensis	7.24	8	1.07	291
Trachurus capensis	5.23	32	0.78	290
Emmelichthys nitidus	4.77	28	0.72	
Todaropsis eblanae	4.38	97	0.65	289
Gerypteris capensis	4.02	4	0.60	292
Merluccius paradoxus	3.36	8	0.50	295
Todarodes angolensis	3.10	4	0.46	294
Squalus megalops	2.21	4	0.33	
Cynoglossus zanzibarensis	1.37	24	0.20	288
Malacocephalus laevis	1.13	12	0.17	
Paracallionymus costatus	0.84	97	0.12	
Congiopodus spinifer	0.68	4	0.10	
Merluccius paradoxus	0.15	24	0.02	293
Rossia enigmatica	0.12	4	0.02	
Physiculus capensis	0.01	4	0.00	
Branchiopod	0.01	4	0.00	
Total	674.10		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1449  
 DATE :20.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°41.16  
 start stop duration Lon E 16°31.15  
 TIME :15:37:30 16:07:29 30.0 (min) Purpose : 3  
 LOG : 9068.42 9069.91 1.5 Region : 6100  
 FDEPTH: 208 207 Gear cond.: 0  
 BDEPTH: 208 207 Validity : 0  
 Towing dir: 0° Wire out : 600 m Speed : 3.0 km  
 Sorted : 104 Total catch: 103.83 Catch/hour: 207.73

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Squalus megalops	54.02	114	26.00	
Lophius vomerinus	38.01	20	18.30	297
Merluccius capensis	30.01	66	14.45	303
Etrumeus whiteheadi	18.01	234	8.67	300
Helicolenus dactylopterus	16.61	468	7.99	300
Zeus capensis	13.40	74	6.45	298
Emmelichthys nitidus	9.80	284	4.72	
Aequorea forskalea	5.20	0	2.50	
Arnoglossus capensis	5.10	378	2.46	
Todaropsis eblanae	4.26	76	2.05	302
Cynoglossus zanzibarensis	3.06	32	1.47	301
Congiopodus spinifer	3.00	14	1.44	
Octopus magnificus	2.20	2	1.06	
Chelidonichthys queketti	2.00	6	0.96	299
Cruridra paracomulata	1.56	4	0.75	
Sepia australis	0.50	48	0.24	
Starfish	0.43	0	0.21	
Paracallionymus costatus	0.24	28	0.12	
Sepia hieronis	0.12	2	0.06	
Echinus gilchristi ?	0.06	0	0.03	
Champsodon capensis	0.03	6	0.02	
Whelks	0.03	2	0.01	
Starfish	0.03	2	0.01	0
Parapagurus dimorphus	0.02	12	0.01	
Iniotheuthis capensis	0.01	4	0.00	
Sepia typica	0.01	2	0.00	
Total	207.73		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1450  
 DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°54.99  
 start stop duration Lon E 16°26.09  
 TIME :10:19:47 10:49:29 29.7 (min) Purpose : 3  
 LOG : 9186.62 9188.25 1.6 Region : 6100  
 FDEPTH: 280 278 Gear cond.: 0  
 BDEPTH: 280 278 Validity : 0  
 Towing dir: 0° Wire out : 690 m Speed : 3.3 km  
 Sorted : 300 Total catch: 300.29 Catch/hour: 606.65

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	202.02	2598	33.30	310
Zeus capensis	135.35	444	22.31	305
Helicolenus dactylopterus	64.65	483	10.66	307
Merluccius capensis	48.48	55	7.99	304
Caelorinchus simorhynchus	28.28	515	4.66	
Lophius vomerinus	22.22	16	3.66	314
Brama brama	14.14	10	2.33	306
Malacocephalus laevis	13.13	131	2.16	
Holohalaelurus regani	12.12	61	2.00	
Mustelus mustelus	10.10	6	1.67	
Callorhynchus capensis	10.10	4	1.67	
PORIFERA (Sponges)	8.08	0	1.33	

Todaropsis eblanae	7.47	89	1.23	316
Trachurus capensis	6.06	53	1.00	313
Etrumeus whiteheadi	5.05	63	0.83	
Chelidonicichthys queketti	3.84	24	0.63	312
Genypterus capensis	3.84	4	0.63	309
Thyrsites atun	3.23	2	0.53	308
Todaropsis angolensis	2.11	2	0.35	317
Cynoglossus zanzibarensis	1.54	18	0.25	315
Netopogon macrosolea	0.49	6	0.25	
Merluccius paradoxus	1.41	4	0.23	318
Lepidopus caudatus	1.19	4	0.20	
Paracallionymus costatus	0.61	77	0.10	
Maurollicus muelleri	0.07	38	0.01	
Rossia enigmatica	0.03	4	0.00	
Merluccius paradoxus	0.02	6	0.00	319
Total	606.65		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1451  
 DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°44.23  
 start stop duration Lon E 16°41.62  
 TIME :14:13:00 14:42:55 29.9 (min) Purpose : 3  
 LOG : 9206.55 9208.14 1.6 Region : 6100  
 FDEPTH: 233 230 Gear cond.: 0  
 BDEPTH: 233 230 Validity : 0  
 Towing dir: 0° Wire out : 600 m Speed : 3.2 kn  
 Sorted : 107 Total catch: 106.70 Catch/hour: 213.98

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	90.24	1287	42.17 324
Merluccius capensis	62.17	90	29.05 322
Aequorea forskalea	32.09	0	14.99
Brama brama	8.02	4	3.75 321
Lophius vomerinus	47.42	18	3.47 323
Merluccius paradoxus	5.21	16	2.44 320
Helicolenus dactylopterus	2.21	104	1.03 326
Lampanyctodes hectoris	1.43	375	0.67
Cynoglossus zanzibarensis	0.86	14	0.40 328
Caelorinchus simorhynchus	0.80	24	0.37
Paracallionymus costatus	0.78	64	0.37
Trachurus capensis	0.60	2	0.28 327
Todaropsis eblanae	0.56	20	0.26 325
Maurollicus muelleri	0.44	313	0.20
Genypterus capensis	0.42	2	0.20 329
Holohalaelurus regani	0.24	2	0.11
Parapagurus dimorphus	0.17	12	0.08
Merluccius paradoxus	0.15	16	0.07 330
Sepia australis	0.14	8	0.06
Pterygosquilla armata capensis	0.02	2	0.01
Starfish	0.01	2	0.01
Total	213.98		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1452  
 DATE :21.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°36.30  
 start stop duration Lon E 16°51.85  
 TIME :16:43:20 17:13:21 30.0 (min) Purpose : 3  
 LOG : 9220.79 9222.30 1.5 Region : 6100  
 FDEPTH: 196 196 Gear cond.: 0  
 BDEPTH: 196 196 Validity : 0  
 Towing dir: 0° Wire out : 560 m Speed : 3.0 kn  
 Sorted : 99 Total catch: 236.35 Catch/hour: 472.39

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Aequorea forskalea	123.92	0	26.23
Merluccius paradoxus	97.44	2039	20.63 334
Merluccius capensis	47.97	94	10.15 331
Lophius vomerinus	47.42	208	10.04 337
Helicolenus dactylopterus	34.38	2808	7.28 335
Etrumeus whiteheadi	33.78	704	7.15
Todaropsis eblanae	24.68	474	5.23 336
Paracallionymus costatus	19.49	975	4.13
PORIFERA (Sponges)	12.99	0	2.75
Chelidonicichthys capensis	9.99	22	2.12 333
Sepia australis	6.00	400	1.27
Thyrsites atun	4.80	2	1.02 332
Parapagurus dimorphus	2.60	254	0.55
Genypterus capensis	1.40	14	0.30 338
Caelorinchus simorhynchus	1.11	92	0.23
Heart urchin	0.99	6	0.21
Pterygosquilla armata capensis	0.98	98	0.21
Cynoglossus zanzibarensis	0.78	20	0.17 339
Holohalaelurus regani	0.56	6	0.12
Macropodus australis	0.54	14	0.11
Merluccius paradoxus	0.53	98	0.11 340
Lolligoncula mercatoris	0.07	0	0.01
Total	472.39		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1453  
 DATE :21.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°36.14  
 start stop duration Lon E 16°34.45  
 TIME :20:57:41 21:26:32 28.9 (min) Purpose : 1  
 LOG : 9246.37 9248.24 1.9 Region : 6100  
 FDEPTH: 23 20 Gear cond.: 0  
 BDEPTH: 225 221 Validity : 0  
 Towing dir: 0° Wire out : 80 m Speed : 3.9 kn  
 Sorted : 100 Total catch: 100.30 Catch/hour: 208.59

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Aequorea forskalea	207.97	0	99.70
Lampanyctodes hectoris	0.47	212	0.22 341
Maurollicus muelleri	0.12	148	0.06 342
Lepidopus caudatus	0.02	10	0.01 343
Trachurus capensis	0.01	6	0.00 344
Inioteuthis capensis	0.00	2	0.00
Total	208.59		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1454  
 DATE :22.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°32.42  
 start stop duration Lon E 15°58.65  
 TIME :16:50:56 17:20:41 29.8 (min) Purpose : 1  
 LOG : 9391.41 9393.08 1.7 Region : 6100  
 FDEPTH: 125 135 Gear cond.: 0  
 BDEPTH: 260 261 Validity : 0  
 Towing dir: 0° Wire out : 410 m Speed : 3.4 kn  
 Sorted : 0 Total catch: 0.00 Catch/hour: 0.00

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
N O C A T C H	0.00	0	0.00
Total	0.00		0.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1455  
 DATE :23.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°11.10  
 start stop duration Lon E 15°27.51  
 TIME :14:24:06 14:54:12 30.1 (min) Purpose : 3  
 LOG : 9547.94 9549.56 1.6 Region : 6100

FDEPTH: 242 242 Gear cond.: 0  
 BDEPTH: 242 242 Validity : 0  
 Towing dir: 0° Wire out : 600 m Speed : 3.2 kn  
 Sorted : 225 Total catch: 225.49 Catch/hour: 449.47

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Emmelichthys nitidus	109.63	1246	24.39
Merluccius capensis	41.86	48	9.31 345
Thyrsites atun	37.87	28	8.43 347
Lepidopus caudatus	31.89	28	7.10
Helicolenus dactylopterus	29.90	626	6.65 354
Caelorinchus simorhynchus	23.92	249	5.32
Chelidonicichthys queketti	19.14	114	4.26 350
Zeus capensis	17.94	110	3.99 352
Holohalaelurus regani	17.94	88	3.99
Merluccius paradoxus	15.95	161	3.55 353
Galeorhinus galeus	13.95	2	3.10
Etrumeus whiteheadi	13.16	140	2.93
Trachurus capensis	11.96	56	2.66 351
Callorhynchus capensis	11.16	4	2.48
Malacocephalus laevis	8.97	78	2.00
Squalus megalops	8.57	20	1.91
Merluccius paradoxus	6.08	2310	1.35 349
Lophius vomerinus	5.98	6	1.33 346
Heart urchin	5.58	80	1.24 300
Mustelus mustelus	3.99	2	0.89
PORIFERA (Sponges)	3.59	0	0.80
Chelidonicichthys capensis	1.99	2	0.44
Cynoglossus zanzibarensis	1.99	38	0.44 357
Todaropsis eblanae	1.67	30	0.37 358
Genypterus capensis	1.32	4	0.29 356
Heart urchin	1.02	50	0.23
Paracallionymus costatus	0.64	84	0.14
Merluccius paradoxus	0.62	82	0.14 355
Starfish	0.44	0	0.10
Whelks	0.34	8	0.08
Champsodon capensis	0.17	16	0.04
Parapagurus dimorphus	0.13	20	0.03
Sepia australis	0.06	4	0.01
Pterygosquilla armata capensis	0.03	4	0.01
Inioteuthis capensis	0.02	6	0.00
Maurollicus muelleri	0.01	4	0.00
Total	449.47		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1456  
 DATE :23.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°3.91  
 start stop duration Lon E 15°40.47  
 TIME :16:55:44 17:25:35 29.8 (min) Purpose : 3  
 LOG : 9565.47 9567.01 1.6 Region : 6100  
 FDEPTH: 218 212 Gear cond.: 0  
 BDEPTH: 218 212 Validity : 0  
 Towing dir: 0° Wire out : 550 m Speed : 3.1 kn  
 Sorted : 139 Total catch: 138.87 Catch/hour: 279.22

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	102.55	1530	36.73 365
Merluccius capensis	70.38	111	25.20 360
Aequorea forskalea	54.29	0	19.44
Lophius vomerinus	25.13	24	9.00 359
Sepia australis	3.82	255	1.37
Cynoglossus zanzibarensis	3.42	76	1.22 367
Merluccius paradoxus	2.82	1017	1.01 368
Chelidonicichthys capensis	2.61	4	0.94 361
Holohalaelurus regani	2.51	10	0.90
Merluccius paradoxus	2.21	8	0.79 363
Genypterus capensis	2.01	6	0.72 362
Caelorinchus simorhynchus	1.49	30	0.53
Merluccius paradoxus	1.17	151	0.42 369
Helicolenus dactylopterus	1.01	58	0.36 366
Chelidonicichthys queketti	1.01	4	0.36 364
Paracallionymus costatus	0.95	189	0.34
Todaropsis eblanae	0.80	28	0.29 370
Inioteuthis capensis	0.36	173	0.13
Heart urchin	0.20	2	0.07
Maurollicus muelleri	0.17	121	0.06
Sepia hieronis	0.11	6	0.04
Pterygosquilla armata capensis	0.10	14	0.04
Bassanago albescens	0.05	0	0.02
Rossia enigmatica	0.03	2	0.01
CORAL	0.02	4	0.01
Lolligoncula mercatoris	0.01	6	0.01
Lampanyctodes hectoris	0.01	2	0.00
Rochinia sp.	0.00	2	0.00
Total	279.22		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1457  
 DATE :23.01.2008 GEAR TYPE: PT NO: 1 POSITION:Lat S 30°1.87  
 start stop duration Lon E 15°40.84  
 TIME :18:36:26 19:05:23 29.0 (min) Purpose : 1  
 LOG : 9571.72 9573.84 2.1 Region : 6100  
 FDEPTH: 35 25 Gear cond.: 0  
 BDEPTH: 209 213 Validity : 0  
 Towing dir: 0° Wire out : 100 m Speed : 4.4 kn  
 Sorted : 806 Total catch: 806.44 Catch/hour: 1671.38

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Aequorea forskalea	1658.03	0	99.20
Seriola lalandi	6.22	2	0.37 371
Brama brama	5.39	4	0.32 372
Todaropsis eblanae	0.86	52	0.05 375
Merluccius paradoxus	0.39	116	0.02 373
Etrumeus whiteheadi	0.16	0	0.01
Lepidopus caudatus	0.12	6	0.01
Sepia australis	0.10	4	0.01
Merluccius paradoxus	0.05	2	0.00 374
Maurollicus muelleri	0.03	17	0.00
Inioteuthis capensis	0.01	6	0.00
Lolligoncula mercatoris	0.00	2	0.00
Helicolenus dactylopterus	0.00	2	0.00
Trachurus capensis	0.00	2	0.00
Total	1671.38		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1458  
 DATE :24.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°3.54  
 start stop duration Lon E 14°46.10  
 TIME :06:00:36 06:31:56 31.3 (min) Purpose : 3  
 LOG : 9653.74 9655.31 1.6 Region : 6100  
 FDEPTH: 490 488 Gear cond.: 0  
 BDEPTH: 490 488 Validity : 0  
 Towing dir: 0° Wire out : 1280 m Speed : 3.0 kn  
 Sorted : 372 Total catch: 371.74 Catch/hour: 711.69

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	520.74	1135	73.17 377
Helicolenus dactylopterus	74.66	341	10.49 379
Ruvettus pretiosus	40.20	4	5.65
Genypterus capensis	18.00	4	2.53 376
Total	653.60		100.00

Caelorinchus simorhynchus	11.49	103	1.61	
Bassanago albescens	8.04	25	1.13	
Lophius vomerinus	5.55	10	0.78	378
Todarodes angolensis	4.79	6	0.67	381
Caelorinchus braueri	3.98	153	0.56	
Hydrolagus africanus	3.25	6	0.46	
Selachophidium guentheri	2.81	61	0.40	
Squalus mitsukurii	2.68	2	0.38	
Todarodes angolensis	2.30	4	0.32	380
Raja confundens	2.18	4	0.31	
Starfish	1.91	0	0.27	
Malacocephalus laevis	1.24	6	0.17	
Parapagurus pilosimanus	1.15	48	0.16	
Holohalaelurus regani	1.09	2	0.15	
Lucigadus ori	1.07	101	0.15	
Photichthys argenteus	0.96	80	0.13	
Epigonus sp.	0.82	31	0.10	
Hoplostethus mediterraneus	0.75	11	0.10	
Caelorinchus matama	0.61	8	0.09	
Rossia enigmatica	0.45	21	0.06	
Physiculus capensis	0.24	10	0.03	
Tripterophycis gilchristi	0.23	10	0.03	
Symbolophorus boops	0.17	19	0.02	
Lycoteuthis lorigera	0.14	8	0.02	
Gymnoscopus sp.	0.05	8	0.01	
PARALEPIDIDAE	0.05	4	0.01	
Diaphus sp	0.03	11	0.00	
Mycetophum sp.	0.02	4	0.00	
Lampanyctodes hectoris	0.01	6	0.00	
Goneplax angulata	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	711.69		100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1461	
DATE	:24.01.2008	GEAR TYPE: PT NO:	4	POSITION:Lat	S 30°1.08
		start stop duration		Lon	E 15°39.94
TIME	:19:09:24	19:39:17	29.9 (min)	Purpose	: 1
LOG	: 9750.18	9751.80	1.6	Region	: 6100
FDEPTH:	10	10		Gear cond.:	0
BDEPTH:	208	203		Validity:	0
Towing dir:	0°	Wire out	: 130 m	Speed	: 3.2 kn
Sorted	: 310	Total catch:	309.87	Catch/hour:	622.02
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Aequorea forskalea	602.21	0		96.81	
Brama brama	7.63	6		1.23	406
Merluccius paradoxus	4.76	2345		0.76	408
Etrumeus whiteheadi	2.85	36		0.46	
Sepia australis	2.41	120		0.39	
Todaropsis eblanae	0.90	80		0.15	407
Inioteuthis capensis	0.53	233		0.09	
Merluccius paradoxus	0.27	6		0.04	411
Maurolicus muelleri	0.16	0		0.03	
Lepidopus caudatus	0.08	24		0.01	
Lampanyctodes hectoris	0.07	24		0.01	
Lolligoncula mercatoris	0.05	24		0.01	
Helicolenus dactylopterus	0.04	38		0.01	410
Brama brama, juvenile	0.03	2		0.00	
Emmelichthys nitidus	0.02	2		0.00	
Trachurus capensis	0.01	12		0.00	409
Shrimps, small, non comm.	0.00	0		0.00	
Total	622.02			100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1459	
DATE	:24.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 29°56.90
		start stop duration		Lon	E 15°4.26
TIME	:09:26:36	09:56:20	29.7 (min)	Purpose	: 3
LOG	: 9676.11	9677.68	1.6	Region	: 6100
FDEPTH:	366	368		Gear cond.:	0
BDEPTH:	366	368		Validity:	0
Towing dir:	0°	Wire out	: 900 m	Speed	: 3.2 kn
Sorted	: 611	Total catch:	610.88	Catch/hour:	1232.44

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1462	
DATE	:24.01.2008	GEAR TYPE: PT NO:	4	POSITION:Lat	S 30°5.49
		start stop duration		Lon	E 15°44.66
TIME	:21:21:53	21:51:43	29.8 (min)	Purpose	: 1
LOG	: 9762.88	9764.45	1.6	Region	: 6100
FDEPTH:	7	7		Gear cond.:	0
BDEPTH:	215	216		Validity:	0
Towing dir:	0°	Wire out	: 130 m	Speed	: 3.1 kn
Sorted	: 11	Total catch:	11.20	Catch/hour:	22.52
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Aequorea forskalea	20.11	0		89.29	
Thyrsites atun	2.01	2		8.93	
Argonauta hians	0.40	4		1.79	
Inioteuthis capensis	0.00	0		0.00	
Maurolicus muelleri	0.00	0		0.00	
Todarodes angolensis	0.00	0		0.00	
Total	22.52			100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1459	
DATE	:24.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 29°56.90
		start stop duration		Lon	E 15°4.26
TIME	:09:26:36	09:56:20	29.7 (min)	Purpose	: 3
LOG	: 9676.11	9677.68	1.6	Region	: 6100
FDEPTH:	366	368		Gear cond.:	0
BDEPTH:	366	368		Validity:	0
Towing dir:	0°	Wire out	: 900 m	Speed	: 3.2 kn
Sorted	: 611	Total catch:	610.88	Catch/hour:	1232.44
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	677.87	1328		55.00	383
Lepidopus caudatus	96.84	518		7.86	
Helicolenus dactylopterus	92.80	436		7.53	386
Brama brama	78.68	50		6.38	384
Caelorinchus simorhynchus	48.42	646		3.93	
Squalus mitsukurii	44.38	36		3.60	
Scyliorhinus capensis	36.21	52		2.95	
Epigonus sp.	33.09	753		2.68	
Thyrsites atun	29.25	14		2.37	387
Genypterus capensis	26.23	18		2.13	385
Malacocephalus laevis	19.37	85		1.57	
Holohalaelurus regani	10.69	34		0.87	
Lophius vomerinus	8.07	4		0.65	382
Todarodes angolensis	6.05	12		0.49	390
Zeus capensis	5.14	6		0.42	389
Todaropsis eblanae	0.84	50		0.39	392
Galeus polli	3.99	28		0.32	
Todarodes angolensis	3.73	4		0.30	391
Hoplostethus mediterraneus	2.82	69		0.23	
Lucigadus ori	0.99	125		0.08	
CynoGLOSSUS zanzibarensis	0.95	20		0.08	388
Starfish	0.87	0		0.07	
Rossia enigmatica	0.22	10		0.02	
Paracallionymus costatus	0.21	02		0.02	
Beryx splendens	0.18	2		0.01	
Tripterophycis gilchristi	0.12	12		0.01	
Lampanyctodes hectoris	0.11	44		0.01	
Parapagurus pilosimanus	0.06	4		0.01	
Maurolicus muelleri	0.05	36		0.00	
Lycoteuthis lorigera	0.02	2		0.00	
Bathynectes piperitus	0.02	2		0.00	
Physiculus capensis	0.01	2		0.00	
Mursia cristimanus	0.01	2		0.00	
Rochinia sp.	0.01	2		0.00	
Total	1232.44			100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1463	
DATE	:25.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 30°40.07
		start stop duration		Lon	E 15°22.84
TIME	:05:49:14	06:19:56	30.7 (min)	Purpose	: 3
LOG	: 9827.67	9829.19	1.5	Region	: 6100
FDEPTH:	393	381		Gear cond.:	0
BDEPTH:	393	381		Validity:	0
Towing dir:	0°	Wire out	: 1050 m	Speed	: 3.1 kn
Sorted	: 275	Total catch:	274.63	Catch/hour:	536.74
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	388.93	897		72.46	413
Genypterus capensis	68.40	51		12.74	412
Caelorinchus simorhynchus	27.36	702		5.10	
Lophius vomerinus	16.61	10		3.10	414
Lepidopus caudatus	11.14	12		2.08	
Malacocephalus laevis	4.50	21		0.84	
Helicolenus dactylopterus	3.91	20		0.73	416
Squalus mitsukurii	3.52	2		0.66	
Merluccius capensis	3.32	2		0.62	415
Todarodes angolensis	2.93	4		0.55	418
Todaropsis eblanae	2.35	2		0.44	419
Todaropsis eblanae	1.95	20		0.36	417
Paracallionymus costatus	0.66	98		0.12	
Epigonus sp.	0.47	18		0.09	
Lycoteuthis lorigera	0.23	12		0.04	
Rossia enigmatica	0.18	8		0.03	
Lampanyctodes hectoris	0.09	39		0.02	
Tripterophycis gilchristi	0.05	6		0.01	
Symbolophorus boops	0.05	4		0.01	
Stereomastix sp.	0.03	8		0.01	
Mursia cristimanus	0.03	4		0.00	
Hoplostethus mediterraneus	0.01	6		0.00	
Abraliopsis gilchristi	0.01	2		0.00	
Pterygosquilla armata capensis	0.01	2		0.00	
Total	536.74			100.00	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1460	
DATE	:24.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 29°48.98
		start stop duration		Lon	E 15°13.48
TIME	:11:49:09	12:19:17	30.1 (min)	Purpose	: 3
LOG	: 9689.89	9691.49	1.6	Region	: 6100
FDEPTH:	231	233		Gear cond.:	0
BDEPTH:	231	233		Validity:	0
Towing dir:	0°	Wire out	: 610 m	Speed	: 3.2 kn
Sorted	: 367	Total catch:	367.42	Catch/hour:	731.42

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1464	
DATE	:25.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 30°42.43
		start stop duration		Lon	E 15°19.79
TIME	:08:31:56	09:03:36	31.7 (min)	Purpose	: 3
LOG	: 9838.09	9839.69	1.6	Region	: 6100
FDEPTH:	607	604		Gear cond.:	0
BDEPTH:	607	604		Validity:	0
Towing dir:	0°	Wire out	: 1500 m	Speed	: 3.0 kn
Sorted	: 119	Total catch:	119.08	Catch/hour:	225.61
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	71.99	682		31.91	420
Caelorinchus braueri	62.52	1042		27.71	
Notacanthus sexspinis	18.95	542		8.40	
Todarodes angolensis	18.00	32		7.98	421
Nezumia sp.	16.10	294		7.14	
Todarodes angolensis	7.58	8		3.36	422
Funchalia woodwardi	6.08	608		2.70	
Genypterus capensis	5.68	57		2.52	
Raja confundens	4.36	4		1.93	
Emptopterus brachyurus	4.00	127		1.77	
Raja leopardus	1.89	2		0.84	
Ebinania costaecanariae	1.63	13		0.72	
Opistotheutis rossi	1.13	2		0.50	
Chaeceon macphersoni	1.02	11		0.45	
Photichthys argenteus	0.67	27		0.30	
Helicolenus dactylopterus	0.63	2		0.28	423
Neosopelus macrolepidotus	0.57	38		0.25	
Malacocephalus laevis	0.51	4		0.23	
Caelorinchus matama	0.48	2		0.21	
Myxine capensis	0.34	4		0.15	
Beryx splendens	0.27	2		0.12	
Oreosoma atlanticum	0.24	4		0.10	
Hydrolagus africanus	0.22	2		0.10	
Coloconger cadenati	0.19	2		0.08	
Lampanyctodes hectoris	0.13	49		0.06	
Lycoteuthis lorigera	0.08	9		0.03	
Gymnoscopus sp.	0.08	11		0.03	
Argentina sp.	0.06	2		0.03	
Plesiopeneus edwardsianus	0.06	2		0.03	
Diaphus efulgens	0.04	2		0.02	

R/V Dr. Fridtjof Nansen		SURVEY:2008401		STATION: 1460	
DATE	:24.01.2008	GEAR TYPE: BT NO:	15	POSITION:Lat	S 29°48.98
		start stop duration		Lon	E 15°13.48
TIME	:11:49:09	12:19:17	30.1 (min)	Purpose	: 3
LOG	: 9689.89	9691.49	1.6	Region	: 6100
FDEPTH:	231	233		Gear cond.:	0
BDEPTH:	231	233		Validity:	0
Towing dir:	0°	Wire out	: 610 m	Speed	: 3.2 kn
Sorted	: 367	Total catch:	367.42	Catch/hour:	731.42
SPECIES					
	weight	numbers	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	216.99	2285		29.67	397
Merluccius capensis	139.35	171		19.05	393
Zeus capensis	63.70	352		8.71	395
Etrumeus whiteheadi	45.79	514		6.26	
Galeorhinus galeus, male	34.24	2		4.68	
Trachurus capensis	33.84	175		4.63	401
Callorhynchus capensis	22.89	10		3.13	
Chelidonichthys queketti	21.90	96		2.99	399
Thyrsites atun	18.91	10		2.59	394
Caelorinchus simorhynchus	18.91	1			

Symblophorus boops	0.03	2	0.01	
Argyroleleus aculeatus	0.02	2	0.01	
Howella shernborni	0.02	2	0.01	
Nemichthys scolopaceus	0.02	2	0.01	
Stereomastis sp.	0.01	4	0.01	
Macropodus australis	0.01	2	0.00	
Sergia sp.	0.01	2	0.00	
<b>Total</b>	<b>225.61</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1465  
 DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°52.16  
 start stop duration Lon E 15°31.49  
 TIME :12:18:56 12:50:35 31.7 (min) Purpose : 3  
 LOG : 9857.80 9859.42 1.6 Region : 6100  
 FDEPTH: 469 473 Gear cond.: 0  
 BDEPTH: 469 473 Validity : 0  
 Towing dir: 0° Wire out : 1170 m Speed : 3.1 kn  
 Sorted : 481 Total catch: 480.76 Catch/hour: 911.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	445.50	694	48.88	424
Notacanthus sexspinis	191.47	3359	21.01	
Genypterus capensis	72.04	21	7.90	425
Lophius vomerinus	58.77	13	6.45	426
Raja confundens	47.39	45	5.20	
Raja leopardus	37.91	30	4.16	
Etmopterus brachyurus	34.12	758	3.74	
Starfish	5.69	0	0.62	
Todarodes angolensis	3.49	6	0.38	427
Chaeceon macphersoni	3.32	40	0.36	
Caelorinchus simorhynchus	2.37	55	0.26	
Etmopterus sp.	1.90	82	0.21	
Helicolenus dactylopterus	1.61	4	0.18	429
Stereomastis sp.	0.97	133	0.11	
Myxine capensis	0.93	9	0.10	
Todaropsis eblanae	0.66	4	0.07	428
Hoplostethus mediterraneus	0.46	6	0.05	
Photichthys argenteus	0.44	36	0.05	
Malacocephalus laevis	0.38	11	0.04	
Tripterygius gilchristi	0.32	27	0.04	
Shrimps, small, non comm.	0.28	49	0.03	
PARALEPIDIDAE	0.26	19	0.02	
Physiculus capensis	0.23	19	0.03	
Lucigadus ori	0.19	40	0.02	
Symblophorus boops	0.16	13	0.02	
Lycoteuthis lorigera	0.12	8	0.01	
Paracallionymus costatus	0.10	21	0.01	
Bassanago albescens	0.07	2	0.01	
Lampantodes hectoris	0.05	21	0.01	
PANALIDAE	0.05	2	0.01	
Psychrolutes macrocephalus	0.05	2	0.00	
Rossia enigmatica	0.04	2	0.00	
Mursia cristimanus	0.02	8	0.00	
Chauliodus sloani	0.02	2	0.00	
Rochinia sp.	0.02	2	0.00	
<b>Total</b>	<b>911.40</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1466  
 DATE :25.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°53.97  
 start stop duration Lon E 15°30.32  
 TIME :14:38:47 15:09:09 30.4 (min) Purpose : 3  
 LOG : 9865.53 9867.07 1.5 Region : 6100  
 FDEPTH: 560 559 Gear cond.: 0  
 BDEPTH: 560 559 Validity : 0  
 Towing dir: 0° Wire out : 1500 m Speed : 3.0 kn  
 Sorted : 108 Total catch: 108.13 Catch/hour: 213.63

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	51.37	69	24.04	430
Bathyrja smithii	35.56	6	16.65	
Centropristis squamosus	29.63	6	13.87	
Caelorinchus braueri	15.81	527	7.40	
Nezumia sp.	9.48	221	4.44	
Selachophidium guentheri	9.48	122	4.44	
Raja leopardus	8.50	10	3.98	
Notacanthus sexspinis	6.12	115	2.87	
Todarodes angolensis, female	5.33	4	2.50	
Anemones, white	4.94	10	2.31	
Helicolenus dactylopterus	4.94	38	2.31	431
Starfish	4.29	0	2.01	
Deania calcea	3.95	6	1.85	
Raja confundens	3.95	6	1.85	
Hydrolagus africanus	3.95	8	1.85	
Funchalia woodwardi	3.54	273	1.66	
Todarodes angolensis, male	3.06	6	1.43	
Chaeceon macphersoni	2.59	14	1.21	
Etmopterus brachyurus	2.33	71	1.09	0
Photichthys argenteus	1.21	79	0.56	
Coloconger cadenati	0.90	8	0.42	
Lucigadus ori	0.67	109	0.31	
Etmopterus brachyurus	0.53	140	0.25	
Symblophorus boops	0.26	24	0.12	
Raja leopardus, juvenile	0.22	8	0.10	
Sergia sp.	0.21	45	0.10	
Myxine capensis	0.21	4	0.10	
Stereomastis sp.	0.12	20	0.06	
Gymnoscopelus sp.	0.09	12	0.04	
Diaphus sp.	0.08	30	0.04	
Neoscopelus macrolepidotus	0.08	4	0.04	
Rossia enigmatica	0.06	2	0.03	
Lycoteuthis lorigera	0.04	10	0.02	
Psychrolutes macrocephalus	0.03	4	0.01	
Xenodermichthys copei	0.03	2	0.01	
Lepidion capensis	0.02	2	0.01	
Shrimps, small, non comm.	0.02	2	0.01	
Lampantodes hectoris	0.01	8	0.01	
Myctophum sp.	0.01	2	0.01	
Abraliopsis gilchristi	0.01	2	0.00	
<b>Total</b>	<b>213.63</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1467  
 DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°4.03  
 start stop duration Lon E 15°58.27  
 TIME :05:21:41 05:53:38 32.0 (min) Purpose : 3  
 LOG : 9941.41 9943.09 1.7 Region : 6100  
 FDEPTH: 358 348 Gear cond.: 0  
 BDEPTH: 358 348 Validity : 0  
 Towing dir: 0° Wire out : 900 m Speed : 3.2 kn  
 Sorted : 453 Total catch: 778.66 Catch/hour: 1461.81

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Zeus capensis	536.92	1034	36.73	432
Merluccius paradoxus	529.41	2660	36.22	433
Caelorinchus simorhynchus	71.34	1346	4.88	
Merluccius paradoxus	62.83	71	4.37	435
Helicolenus dactylopterus	61.95	257	4.24	434
Merluccius capensis	60.08	34	4.11	436
Malacocephalus laevis	48.81	60	3.34	

Lophius vomerinus	28.16	17	1.93	437
Epigonus sp.	15.02	208	1.03	
Holohalaelurus regani	13.14	26	0.90	
Squalus mitsukurii	13.14	9	0.90	
Genypterus capensis	9.39	9	0.64	438
Thyrstites atun	3.75	2	0.26	439
Paracallionymus costatus	2.22	222	0.15	
Todaropsis eblanae	1.39	15	0.10	440
Scyliorhinus capensis	1.28	4	0.09	
Beryx splendens	0.75	4	0.05	
Sepia hieronis	0.57	11	0.04	
Heart urchin	0.33	4	0.02	
Rossia enigmatica	0.21	8	0.01	
Parapagurus pilosimanus	0.06	4	0.00	
Lampantodes hectoris	0.06	30	0.00	
<b>Total</b>	<b>1461.81</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1468  
 DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°12.30  
 start stop duration Lon E 15°51.55  
 TIME :08:06:43 08:37:29 30.8 (min) Purpose : 3  
 LOG : 9955.13 9956.64 1.5 Region : 6100  
 FDEPTH: 482 482 Gear cond.: 0  
 BDEPTH: 482 482 Validity : 0  
 Towing dir: 0° Wire out : 1300 m Speed : 2.9 kn  
 Sorted : 632 Total catch: 631.56 Catch/hour: 1231.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1000.32	2012	81.23	441
Merluccius paradoxus	130.65	148	10.61	442
Genypterus capensis	40.95	8	3.33	443
Bathyrja smithii	12.67	2	1.03	
Helicolenus dactylopterus	11.70	53	0.95	444
Raja confundens	6.82	6	0.55	
Hoplostethus atlanticus	4.48	6	0.36	
Raja leopardus	3.90	2	0.32	
Malacocephalus laevis	3.31	14	0.27	
Todarodes angolensis	2.98	4	0.24	446
Todarodes angolensis	2.73	4	0.22	445
Bassanago albescens	2.34	2	0.19	
Notacanthus sexspinis	1.45	27	0.12	
Parapagurus pilosimanus	1.11	62	0.09	
Todaropsis eblanae	0.99	10	0.08	447
Galeus polli	0.86	4	0.07	
Histioteuthis miranda	0.76	0	0.06	
Anemones, white	0.67	2	0.05	
Hoplostethus mediterraneus	0.65	10	0.05	
Starfish	0.35	0	0.03	
Gymnoscopelus sp.	0.34	45	0.03	
Paracallionymus costatus	0.32	53	0.03	
Rossia enigmatica	0.22	12	0.02	
Myxine capensis	0.21	2	0.02	
Lycoteuthis lorigera	0.20	14	0.02	
Psychrolutes macrocephalus	0.15	4	0.01	
Symblophorus boops	0.10	8	0.01	
Photichthys argenteus	0.08	6	0.01	
Whelks	0.06	2	0.01	
Starfish	0.05	4	0.00	0
Stereomastis sp.	0.03	12	0.00	
Macropodus australis	0.03	6	0.00	
<b>Total</b>	<b>1231.52</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1469  
 DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°20.76  
 start stop duration Lon E 15°48.28  
 TIME :10:43:48 11:14:46 31.0 (min) Purpose : 3  
 LOG : 9966.40 9968.03 1.6 Region : 6100  
 FDEPTH: 560 562 Gear cond.: 0  
 BDEPTH: 560 562 Validity : 0  
 Towing dir: 0° Wire out : 1330 m Speed : 3.1 kn  
 Sorted : 184 Total catch: 183.56 Catch/hour: 355.63

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	269.29	422	75.72	448
Caelorinchus braueri	49.43	515	13.62	
Helicolenus dactylopterus	15.50	70	4.36	449
Selachophidium guentheri	4.94	54	1.39	
Malacocephalus laevis	3.29	17	0.93	
Nezumia sp.	2.81	54	0.79	
Hydrolagus africanus	2.05	8	0.58	
Funchalia woodwardi	1.45	139	0.41	
Notacanthus sexspinis	1.43	23	0.40	
Todarodes angolensis	1.20	2	0.34	450
Raja confundens	1.16	2	0.33	
Centropristis squamosus	0.97	2	0.27	
Etmopterus brachyurus	0.77	14	0.22	
Starfish	0.60	0	0.17	
Raja confundens	0.43	2	0.12	0
Lophius vomerinus	0.26	2	0.07	451
Sergia sp.	0.21	46	0.06	
Photichthys argenteus	0.15	8	0.04	
Myxine capensis	0.14	2	0.04	
Rossia enigmatica	0.08	4	0.02	
Bathophilus longipinnis	0.07	2	0.02	
Gymnoscopelus sp.	0.06	8	0.02	
Tripterygius gilchristi	0.06	2	0.02	
Physiculus capensis	0.06	2	0.02	
Chauliodus sloani	0.04	2	0.01	
Bassanago albescens, juvenile	0.03	2	0.01	
Raja leopardus, juvenile	0.02	4	0.01	
Symblophorus boops	0.02	2	0.01	
Nemichthys scolopaceus	0.02	2	0.01	
Abraliopsis gilchristi	0.02	4	0.01	
Stereomastis sp.	0.01	2	0.00	
Munidopsis chuni	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
<b>Total</b>	<b>355.63</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1470  
 DATE :26.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°29.06  
 start stop duration Lon E 15°42.95  
 TIME :13:48:49 14:21:04 32.3 (min) Purpose : 3  
 LOG : 9979.64 9981.26 1.6 Region : 6100  
 FDEPTH: 664 663 Gear cond.: 0  
 BDEPTH: 664 663 Validity : 0  
 Towing dir: 0° Wire out : 1510 m Speed : 3.0 kn  
 Sorted : 163 Total catch: 162.64 Catch/hour: 302.58

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	113.49	1135	37.51	
Merluccius paradoxus	100.47	119	33.20	452
Centropristis squamosus	18.60	4	6.15	
Sergia sp.	16.74	3907	5.53	
Nezumia sp.	14.14	179	4.67	453
Hoplostethus atlanticus	7.44	20	2.46	
Trachyscorpia eschmeyerii	6.14	15	2.03	
Histioteuthis miranda	4.47	4	1.48	

Funchalia woodwardi	3.48	348	1.15	
Caelorinchus matama	1.86	7	0.61	
Photichthys argenteus	1.86	65	0.61	
Etmopterus brachyurus	1.79	9	0.59	
Oreosoma atlanticum	1.49	6	0.49	
Selachophidium guentheri	1.40	19	0.46	
Todarodes angolensis	1.36	2	0.45	454
Deania calcea	1.36	2	0.45	
Todarodes angolensis	1.27	2	0.42	455
Chaeceon macphersoni	0.95	11	0.31	
Neoscopelus macrolepidotus	0.88	26	0.29	
Raja leopardus	0.87	2	0.29	
Notacanthus sexspinus	0.61	7	0.20	
Ancistrocheirus leaeuuri	0.47	2	0.15	
Alloctytus verrucosus	0.29	4	0.10	
Starfish	0.19	0	0.06	
Myxine capensis	0.15	2	0.05	
Xenodermichthys copei	0.14	9	0.04	
Bathophilus longipinnis	0.14	2	0.04	
Diaphus sp.	0.13	56	0.04	
Gymnoscopelus sp.	0.12	15	0.04	
Raja leopardus, juvenile	0.09	4	0.03	
Hoplostethus cadenati	0.04	2	0.01	
Lampnycotodes hectoris	0.04	4	0.01	0
Lycoteuthis lorigera	0.03	7	0.01	
Nemichthys curvirostris	0.03	2	0.01	
Coloconger cadenati	0.02	4	0.01	
Plesionaeus edwardsianus	0.01	2	0.00	
Myctophum sp.	0.01	2	0.00	
Lampnycotodes hectoris	0.01	6	0.00	
Rochinia sp.	0.01	4	0.00	
Stereomastis sp.	0.00	2	0.00	
Total	302.58		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1471  
 DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°50.22  
 start stop duration Lon E 16°40.05  
 TIME :04:29:20 04:59:05 29.8 (min) Purpose : 3  
 LOG : 287.86 289.34 1.5 Region : 6100  
 FDEPTH: 738 749 Gear cond.: 0  
 BDEPTH: 738 749 Validity : 0  
 Towing dir: 0° Wire out : 1850 m Speed : 3.0 kn  
 Sorted : 144 Total catch: 143.89 Catch/hour: 290.20

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Caelorinchus braueri	108.91	1345	37.53	
Alloctytus verrucosus	58.49	244	20.15	457
Hoplostethus atlanticus	47.39	137	16.33	456
Notacanthus sexspinus	18.15	143	6.25	
Caelorinchus matama	14.52	50	5.00	
Histioteuthis miranda	9.48	6	3.27	
Nezumia sp.	8.07	139	2.78	
Etmopterus brachyurus	5.06	6	1.74	
Trachyscorpia eschmeyerii	3.63	10	1.25	
Merluccius paradoxus	3.53	2	1.22	458
Lepidion capensis	2.44	8	0.84	
Synaphobranchus kaupii	1.97	16	0.68	
Diastobranchus capensis	1.36	10	0.47	
Chaeceon macphersoni	1.33	16	0.46	
Photichthys argenteus	0.98	16	0.34	
Odontomacrus murrayi	0.90	2	0.31	
Selachophidium guentheri	0.68	6	0.23	
Centropristis squamosus	0.61	6	0.21	
Nemichthys scolopaceus	0.57	14	0.20	0
Bathyroconger vicinus	0.53	4	0.18	
Chauliodus sloani	0.46	16	0.16	
ANTHOZOA (Sea anemones)	0.18	2	0.06	
Hoplostethus cadenati	0.16	4	0.05	
Mastigoteuthis sp.	0.13	2	0.04	
Sergia sp.	0.12	28	0.04	
Lycoteuthis lorigera	0.12	8	0.04	
Xenodermichthys copei	0.10	2	0.03	
Nemichthys scolopaceus	0.08	2	0.03	
Glyphocrangon sp.	0.07	8	0.02	
Diaphus sp.	0.05	26	0.02	
Myctophum sp.	0.05	4	0.02	
Gymnoscopelus sp.	0.03	6	0.01	
Malacocephalus sp.	0.03	4	0.01	
Total	290.20		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1472  
 DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°48.53  
 start stop duration Lon E 16°40.95  
 TIME :07:40:35 08:12:56 32.4 (min) Purpose : 3  
 LOG : 301.78 303.52 1.8 Region : 6100  
 FDEPTH: 619 608 Gear cond.: 0  
 BDEPTH: 619 608 Validity : 0  
 Towing dir: 0° Wire out : 1680 m Speed : 3.2 kn  
 Sorted : 83 Total catch: 82.81 Catch/hour: 153.59

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Caelorinchus braueri	57.50	959	37.43	
Merluccius paradoxus	42.66	26	27.77	459
Notacanthus sexspinus	10.57	69	6.88	
Bathyrja smithii	8.35	2	5.43	
Sergia sp.	6.18	1091	4.02	
Alloctytus verrucosus	5.75	30	3.74	461
Helicolenus dactylopterus	4.64	30	3.02	460
Lepidion capensis	4.08	35	2.66	
Caelorinchus matama	3.71	11	2.42	
Nezumia sp.	2.49	72	1.62	
Etmopterus brachyurus	1.71	17	1.11	
Bathysaurus ferox	1.36	2	0.88	
Selachophidium guentheri	1.28	15	0.83	
Lophius vomerinus	0.89	2	0.58	
Oreosoma atlanticum	0.41	6	0.27	
Photichthys argenteus	0.37	7	0.24	
G A S T R O P O D S	0.37	0	0.24	0
Synaphobranchus kaupii	0.24	2	0.16	
Ophichthus bennettii	0.24	2	0.16	
Psychrolutes macrocephalus	0.18	2	0.12	
Nemichthys curvirostris	0.17	6	0.11	
Bathyrja smithii, juvenile	0.12	2	0.08	
Lycoteuthis lorigera	0.09	6	0.06	
Chaeceon macphersoni	0.08	2	0.05	
Chauliodus sloani	0.07	4	0.04	
Diaphus sp.	0.04	11	0.03	
Lampnycotodes sp.	0.02	2	0.02	
Symblophorus boops	0.01	2	0.01	
Lepidion sp., juvenile	0.01	2	0.01	
PARALEPIDIDAE	0.00	2	0.00	
G A S T R O P O D S	0.00	2	0.00	
Phyllosoma	0.00	13	0.00	1096
Total	153.59		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1473  
 DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°49.00  
 start stop duration Lon E 16°44.23  
 TIME :10:30:42 11:00:50 30.1 (min) Purpose : 3

LOG : 316.05 317.53 1.5 Region : 6100  
 FDEPTH: 515 505 Gear cond.: 0  
 BDEPTH: 515 505 Validity : 0  
 Towing dir: 0° Wire out : 1200 m Speed : 2.9 kn  
 Sorted : 65 Total catch: 64.69 Catch/hour: 128.83

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	40.82	48	31.69	463
Notacanthus sexspinus	27.88	279	21.64	
Caelorinchus braueri	12.55	285	9.74	
Helicolenus dactylopterus	10.95	131	8.50	464
Lophius vomerinus	5.04	6	3.91	465
Caelorinchus simorhynchus	4.58	100	3.56	
Histioteuthis miranda	4.52	4	3.51	
SALPS	4.44	0	3.45	
Maurollicus muelleri	3.98	0	3.09	
Argyropietus aculeatus	1.99	2	1.55	
Bassanago albescens	1.99	4	1.55	
Paraliparis australis	1.99	2	1.55	
Myxine capensis	1.73	22	1.34	
Sergia sp.	1.31	219	1.02	
Raja leopardus	1.21	2	0.94	
Stereomastis sp.	0.63	66	0.49	
Nezumia sp.	0.41	18	0.32	
Plesionika martia	0.40	66	0.31	
Etmopterus brachyurus	0.36	2	0.28	
Starfish	0.32	0	0.25	
Chaeceon macphersoni	0.27	4	0.21	
Whelks	0.23	2	0.18	
ANTHOZOA (Sea anemones)	0.19	2	0.15	
Raja leopardus, juvenile	0.19	8	0.14	
Hoplostethus mediterraneus	0.16	2	0.13	
Lucigadus ori	0.15	12	0.12	
Malacocephalus laevis	0.15	4	0.11	
PARALEPIDIDAE	0.06	6	0.05	
Scopelosaurus herwigi	0.05	2	0.04	
Chauliodus sloani	0.05	2	0.04	
Nemichthys curvirostris	0.05	2	0.04	
Photichthys argenteus	0.04	2	0.03	
Symblophorus boops	0.04	6	0.03	
Tripterygius gilchristi	0.03	2	0.02	
P O L Y C H A E T A	0.02	6	0.02	
Diaphus sp.	0.01	4	0.01	
MYCTOPHIDAE	0.01	2	0.00	
Phyllosoma	0.00	14	0.00	1097
Total	128.82		99.99	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1474  
 DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°47.33  
 start stop duration Lon E 16°47.53  
 TIME :13:08:20 13:39:04 30.7 (min) Purpose : 3  
 LOG : 326.55 328.10 1.6 Region : 6100  
 FDEPTH: 440 434 Gear cond.: 0  
 BDEPTH: 440 434 Validity : 0  
 Towing dir: 0° Wire out : 1050 m Speed : 3.0 kn  
 Sorted : 79 Total catch: 78.64 Catch/hour: 153.54

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Helicolenus dactylopterus	43.21	248	29.25	468
Notacanthus sexspinus	24.99	416	16.28	
Caelorinchus simorhynchus	20.89	465	13.61	
Bassanago albescens	13.08	16	8.52	
Genypterus capensis	12.11	2	7.88	471
Merluccius paradoxus	10.15	14	6.61	466
Merluccius paradoxus	7.81	35	5.09	467
SALPS	5.84	0	3.80	
Lophius vomerinus	5.68	4	3.70	470
Todarodes angolensis	2.15	2	1.40	469
Parapagurus dimorphus	1.48	269	0.97	
Hoplostethus mediterraneus	0.74	8	0.48	
Lucigadus ori	0.52	59	0.34	
Myxine capensis	0.47	6	0.31	
Stereomastis sp.	0.43	49	0.28	
Etmopterus brachyurus	0.34	2	0.22	
Plesionika martia	0.33	152	0.22	
ANTHOZOA (Sea anemones)	0.30	2	0.20	
Starfish	0.30	0	0.20	
CARIDEA	0.20	0	0.13	
Rossia enigmatica	0.16	8	0.10	
Nemichthys curvirostris	0.13	6	0.09	
Maurollicus muelleri	0.12	84	0.08	
Heart urchin	0.08	6	0.05	
Symblophorus boops	0.05	4	0.04	
Paracallionymus costatus	0.05	18	0.03	
Starfish	0.04	4	0.03	
Whelks	0.04	4	0.02	
PARALEPIDIDAE	0.03	2	0.02	
Epigonus telescopus	0.03	2	0.02	
CYPRAEIDAE (Bulla)	0.02	6	0.01	
Funchalia woodwardi	0.02	2	0.01	
Physiculus capensis	0.02	4	0.01	
Lampnycotodes hectoris	0.02	12	0.01	
Myctophum sp.	0.01	2	0.01	
MYCTOPHIDAE	0.01	2	0.01	
Coloconger cadenati	0.00	2	0.00	
Phyllosoma	0.00	2	0.00	1098
Total	153.54		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1475  
 DATE :30.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°49.36  
 start stop duration Lon E 16°59.80  
 TIME :16:19:31 16:49:16 29.8 (min) Purpose : 3  
 LOG : 344.72 346.24 1.5 Region : 6100  
 FDEPTH: 351 354 Gear cond.: 0  
 BDEPTH: 351 354 Validity : 0  
 Towing dir: 0° Wire out : 1000 m Speed : 3.1 kn  
 Sorted : 183 Total catch: 186.53 Catch/hour: 376.20

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP	
	weight numbers			
Merluccius paradoxus	205.71	1275	54.68	474
Helicolenus dactylopterus	66.55	141	17.69	478
Zeus capensis	30.25	54	8.04	475
Merluccius capensis	21.18	14	5.63	472
Caelorinchus simorhynchus	19.16	240	5.09	
Merluccius paradoxus	13.31	14	3.54	473
Malacocephalus laevis	5.04	10	1.34	
Lampnycotodes hectoris	4.36	1747	1.16	
Genypterus capensis	3.03	6	0.80	476
Lophius vomerinus	1.49	2	0.40	477
Parapagurus pilosimanus	1.37	77	0.36	
Sepia hieronis	0.97	16	0.26	
Holohalaelurus regani	0.87	2	0.23	
Notacanthus sexspinus	0.67	8	0.18	
Whelks	0.42	16	0.11	
Sea cucumber	0.30	22	0.08	
Rossia enigmatica	0.25	0	0.07	
Rochinia sp.	0.24	30	0.06	
Starfish, mixed	0.23	22	0.06	
Paracallionymus costatus	0.23	46	0.06	
Starfish	0.11	16	0.03	0

Merluccius paradoxus	0.11	22	0.03	479
Tripterygopsis gilchristi	0.11	8	0.03	
Stereomastis sp.	0.07	8	0.02	
Mursia cristimanus	0.06	8	0.02	
Exodromidia sp.	0.05	16	0.01	
Hoplostethus mediterraneus	0.02	8	0.01	
Ophiuroidea	0.00	2	0.00	
Total	376.18		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1476  
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°3.04  
 start stop duration Lon E 17°31.27  
 TIME :04:14:31 04:34:23 19.9 (min) Purpose : 3  
 LOG : 460.95 462.01 1.1 Region : 6100  
 FDEPTH: 135 136 Gear cond.: 0  
 BDEPTH: 135 136 Validity : 0  
 Towing dir: 0° Wire out : 380 m Speed : 3.2 kn  
 Sorted : 102 Total catch: 102.30 Catch/hour: 308.90

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	88.02	0	28.49	
Euphausiacea	72.02	0	23.31	
Aequorea forskalea	57.37	0	18.57	
Chelidonichthys capensis	25.67	69	8.31	480
Callorhynchus capensis	21.74	27	7.04	
Merluccius capensis	19.33	390	6.26	481
Pterygosquilla armata capensis	12.08	779	3.91	
Merluccius capensis	3.68	655	1.19	482
Whelks	3.02	103	0.98	
Trachurus capensis	1.75	6	0.57	483
Squalus acanthias	1.51	3	0.49	
Solenocera africana	1.01	163	0.33	
Todaropsis eblanae	0.77	88	0.25	484
Lepidopus caudatus	0.41	36	0.13	
Sufflogobius bibarbatu	0.30	302	0.10	
Lolligoncula mercatoris	0.11	33	0.04	
Rochinia sp.	0.06	6	0.02	
Holohalaelurus regani, juvenile	0.04	3	0.01	
Engraulis capensis	0.01	3	0.00	
Total	308.90		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1477  
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°10.07  
 start stop duration Lon E 17°19.97  
 TIME :06:24:14 06:57:29 33.3 (min) Purpose : 3  
 LOG : 476.18 477.91 1.7 Region : 6100  
 FDEPTH: 185 184 Gear cond.: 0  
 BDEPTH: 185 184 Validity : 0  
 Towing dir: 0° Wire out : 480 m Speed : 3.1 kn  
 Sorted : 75 Total catch: 325.40 Catch/hour: 587.19

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	396.99	0	67.61	
Lampanyctodes hectoris	99.25	50896	16.90	
Merluccius paradoxus	33.38	1002	5.69	489
Sepia australis	10.38	650	1.77	
Lophius vomerinus	9.92	14	1.69	487
Merluccius capensis	9.02	27	1.54	490
Thyrsites atun	7.40	2	1.26	485
Helicolenus dactylopterus	5.14	325	0.88	493
Callorhynchus capensis	3.61	2	0.61	
Holohalaelurus regani	3.16	126	0.54	
Paracallionymus costatus	2.53	316	0.43	
Todaropsis eblanae	1.89	90	0.32	491
Cynoglossus zanzibarensis	1.17	27	0.20	492
Austroglossus microlepis	0.96	9	0.16	486
Merluccius paradoxus	0.54	108	0.09	494
Caelorhynchus simorhynchus	0.52	36	0.09	
Bathypolypus valdiviae	0.50	9	0.08	
Maurollicus muelleri	0.23	226	0.04	
Genypterus capensis	0.20	2	0.03	488
Starfish	0.16	45	0.03	
Pterygosquilla armata capensis	0.14	18	0.02	
Lolligoncula mercatoris	0.06	18	0.01	
Lepidopus caudatus	0.03	9	0.00	
Total	587.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1478  
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°52.92  
 start stop duration Lon E 17°3.37  
 TIME :09:42:59 10:33:08 30.2 (min) Purpose : 3  
 LOG : 501.56 503.12 1.6 Region : 6100  
 FDEPTH: 197 201 Gear cond.: 0  
 BDEPTH: 197 201 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 3.1 kn  
 Sorted : 82 Total catch: 176.43 Catch/hour: 351.11

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	109.45	2778	31.17	504
Lampanyctodes hectoris	104.48	50965	29.76	
Aequorea forskalea	55.72	0	15.87	
Helicolenus dactylopterus	24.88	2513	7.08	499
Merluccius capensis	18.91	56	5.38	498
Sepia australis	11.24	563	3.20	
Lophius vomerinus	9.95	28	2.83	496
Thyrsites atun	7.16	2	2.04	495
Paracallionymus costatus	2.75	215	0.78	
Merluccius paradoxus	1.49	245	0.43	500
Chelidonichthys capensis	1.00	2	0.28	497
Cynoglossus zanzibarensis	0.92	26	0.26	502
Holohalaelurus regani	0.80	26	0.23	
Todaropsis eblanae	0.76	16	0.22	501
Genypterus capensis	0.53	6	0.15	503
Caelorhynchus simorhynchus	0.46	40	0.13	
Lepidopus caudatus	0.24	20	0.07	
Maurollicus muelleri	0.19	209	0.05	
Bathynectes piperitus	0.10	6	0.03	
Lolligoncula mercatoris	0.05	20	0.01	
Champsodon capensis	0.04	6	0.01	
Total	351.11		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1479  
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°30.89  
 start stop duration Lon E 17°3.99  
 TIME :13:23:54 13:53:36 29.7 (min) Purpose : 3  
 LOG : 530.75 532.24 1.5 Region : 6100  
 FDEPTH: 157 158 Gear cond.: 0  
 BDEPTH: 157 158 Validity : 0  
 Towing dir: 0° Wire out : 430 m Speed : 3.0 kn  
 Sorted : 384 Total catch: 383.83 Catch/hour: 775.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	678.79	0	87.54	
Pterygosquilla armata capensis	24.24	2693	3.13	
Lophius vomerinus	15.15	101	1.95	510

Todaropsis eblanae	11.11	309	1.43	512
Helicolenus dactylopterus	10.10	970	1.30	507
Merluccius capensis	8.69	40	1.12	508
Callorhynchus capensis	6.46	2	0.83	
Sepia australis	5.58	265	0.72	
Exodromidia sp.	3.13	196	0.40	
Merluccius paradoxus	2.63	59	0.34	509
Genypterus capensis	2.63	34	0.34	513
Todaropsis eblanae	2.02	2	0.26	506
Chelidonichthys capensis	1.41	4	0.18	514
Paracallionymus costatus	0.87	192	0.11	
Cynoglossus zanzibarensis	0.77	18	0.10	511
Octopus vulgaris	0.42	2	0.05	
Bathynectes piperitus	0.36	10	0.05	
Lolligoncula mercatoris	0.30	125	0.04	
Janusalandia	0.26	2	0.03	505
Whelks	0.21	6	0.03	
Starfish	0.13	8	0.02	
Zeus capensis	0.11	4	0.01	515
Physiculus capensis	0.03	8	0.00	
Solenocera africana	0.01	2	0.00	
Caelorhynchus simorhynchus	0.00	2	0.00	
Total	775.40		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1480  
 DATE :31.01.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°25.24  
 start stop duration Lon E 17°14.94  
 TIME :15:42:36 16:12:18 29.7 (min) Purpose : 3  
 LOG : 545.54 546.96 1.4 Region : 6100  
 FDEPTH: 123 124 Gear cond.: 0  
 BDEPTH: 123 124 Validity : 0  
 Towing dir: 0° Wire out : 330 m Speed : 2.9 kn  
 Sorted : 91 Total catch: 390.23 Catch/hour: 788.35

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Euphausiacea	439.15	878303	55.71	
Merluccius capensis	121.21	3079	15.38	519
Lampanyctodes hectoris	106.30	31891	13.48	
Chelidonichthys capensis	37.17	137	4.72	516
Merluccius capensis	24.24	4404	3.08	520
Callorhynchus capensis	20.20	18	2.56	
Aequorea forskalea	12.12	0	1.54	
Lepidopus caudatus	8.12	473	1.03	
Lophius vomerinus	6.06	12	0.77	522
Todaropsis eblanae	4.24	121	0.54	521
Pterygosquilla armata capensis	3.15	327	0.40	
Austroglossus microlepis	2.63	10	0.33	517
Genypterus capensis	2.42	12	0.31	518
Lolligoncula mercatoris	1.25	582	0.16	
Sufflogobius bibarbatu	0.07	12	0.01	
Total	788.35		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1481  
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 30°58.80  
 start stop duration Lon E 16°51.48  
 TIME :04:17:49 04:48:40 30.9 (min) Purpose : 3  
 LOG : 645.94 647.45 1.5 Region : 6100  
 FDEPTH: 228 227 Gear cond.: 0  
 BDEPTH: 228 227 Validity : 0  
 Towing dir: 0° Wire out : 560 m Speed : 2.9 kn  
 Sorted : 181 Total catch: 268.69 Catch/hour: 522.57

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	202.27	3439	38.71	527
Merluccius capensis	85.58	123	15.38	525
Lophius vomerinus	64.18	117	28.28	523
Lampanyctodes hectoris	31.12	12447	5.95	
Paracallionymus costatus	29.95	1964	5.73	
Helicolenus dactylopterus	20.23	770	3.87	532
Aequorea forskalea	11.67	0	2.23	
Raja straeleni	11.67	4	2.23	
Chelidonichthys capensis	11.67	19	2.23	524
Holohalaelurus regani	10.89	62	2.08	
Callorhynchus capensis	5.83	2	1.12	
Caelorhynchus simorhynchus	5.23	440	1.12	
Parapagurus dimorphus	5.29	352	1.01	
Merluccius paradoxus	5.25	766	1.00	531
Cynoglossus zanzibarensis	3.93	74	0.75	529
Todaropsis eblanae	3.85	97	0.74	528
Raja wallacei	3.11	0	0.60	
Pterygosquilla armata capensis	1.98	280	0.38	
Genypterus capensis	1.94	10	0.37	526
Etrumeus whiteheadi	1.91	39	0.36	
Rossia enigmatica	1.63	4	0.31	
Maurollicus muelleri	1.17	825	0.22	
Trachurus capensis	1.01	8	0.19	530
Sepia australis	0.47	31	0.09	
Iniolaeus capensis	0.05	23	0.01	
Sepia hieronis	0.04	4	0.01	
Lolligoncula mercatoris	0.04	16	0.01	
Sepia sp.	0.02	4	0.00	
Total	522.57		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1482  
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°4.74  
 start stop duration Lon E 16°39.95  
 TIME :07:03:37 07:34:26 30.8 (min) Purpose : 3  
 LOG : 662.96 664.53 1.6 Region : 6100  
 FDEPTH: 254 255 Gear cond.: 0  
 BDEPTH: 254 255 Validity : 0  
 Towing dir: 0° Wire out : 590 m Speed : 3.1 kn  
 Sorted : 391 Total catch: 509.45 Catch/hour: 991.78

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	377.68	4476	38.08	541
Zeus capensis	225.83	526	22.77	533
Merluccius capensis	99.28	97	10.21	539
Etrumeus whiteheadi	54.51	637	5.50	
Lophius vomerinus	36.99	35	3.73	543
Brama brama	36.99	25	3.73	534
Helicolenus dactylopterus	29.20	477	2.94	536
Lepidopus caudatus	23.36	35	2.36	
Holohalaelurus regani	20.64	72	2.08	
Trachurus capensis	15.57	90	1.57	540
Thyrsites atun	11.68	6	1.18	535
Caelorhynchus simorhynchus	10.57	167	1.07	
Merluccius paradoxus	9.73	23	0.98	542
Todaropsis eblanae	9.46	125	0.95	544
Chelidonichthys queketti	7.79	51	0.79	537
Callorhynchus capensis	7.79	4	0.79	
Genypterus capensis	3.89	14	0.39	538
Paracallionymus costatus	3.11	273	0.31	
Emmelichthys nitidus	2.65	27	0.27	
Raja wallacei	1.95	2	0.20	
Cynoglossus zanzibarensis	1.17	19	0.12	545
Conglopius spinifer	0.82	8	0.08	
Parapagurus dimorphus	0.59	55	0.06	
Rossia enigmatica	0.25	12	0.02	

Merluccius paradoxus	0.16	23	0.02	546
Starfish	0.13	4	0.01	
Total	991.78		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1483  
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°12.02  
 start stop duration Lon E 16°27.55  
 TIME :09:34:14 10:06:17 32.1 (min) Purpose : 3  
 LOG : 680.15 681.79 1.6 Region : 6100  
 FDEPTH: 317 314 Gear cond.: 0  
 BDEPTH: 317 314 Validity : 0  
 Towing dir: 0° Wire out : 730 m Speed : 3.1 kn  
 Sorted : 332 Total catch: 395.93 Catch/hour: 741.20

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Zeus capensis	245.24	640	33.09
Merluccius paradoxus	112.32	0	15.15
Caelorinchus simorhynchus	87.99	1060	11.87
Brama brama	54.29	34	7.32
Helicolenus dactylopterus	52.42	670	7.07
Helicolenus queketti	22.46	97	3.03
Malacocephalus laevis	22.46	142	3.03
Merluccius capensis	20.59	15	2.78
Caelorinchus capensis	18.72	6	2.53
Holohalaelurus regani	15.73	51	2.12
Lophius vomerinus	14.04	15	1.89
Todaropsis eblanae	13.10	137	1.77
Todaropsis eblanae	11.23	133	1.52
Epigonus sp.	10.67	236	1.44
Squalus mitsukurii	9.36	7	1.26
Merluccius paradoxus	8.42	15	1.14
Gerypteris capensis	4.68	6	0.63
Thyrsites atrovirens	2.12	2	0.56
Paracallionymus costatus	3.41	359	0.46
Octopus magnificus	2.96	2	0.40
Trachurus capensis	2.19	11	0.30
Cynoglossus zanzibarensis	1.87	17	0.25
Emmelichthys nitidus	1.59	4	0.21
Rossia enigmatica	0.44	49	0.06
Octopus vulgaris	0.39	2	0.05
Lepidopus caudatus	0.37	4	0.05
Champsodon capensis	0.09	4	0.01
Merluccius paradoxus	0.03	4	0.00
Total	741.20		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1484  
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°19.66  
 start stop duration Lon E 16°16.36  
 TIME :13:29:53 14:00:37 30.7 (min) Purpose : 3  
 LOG : 702.26 703.70 1.5 Region : 6100  
 FDEPTH: 431 434 Gear cond.: 0  
 BDEPTH: 431 434 Validity : 0  
 Towing dir: 0° Wire out : 950 m Speed : 2.8 kn  
 Sorted : 658 Total catch: 658.04 Catch/hour: 1284.81

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	908.00	3587	70.36
Merluccius paradoxus	117.15	98	9.12
Helicolenus dactylopterus	93.72	310	7.29
Caelorinchus simorhynchus	41.00	533	3.19
Bassanago albescens	30.07	35	2.34
Squalus mitsukurii	23.43	14	1.82
Gerypteris capensis	17.96	10	1.40
Lophius vomerinus	12.50	6	0.97
Scyliorhinus capensis	10.35	10	0.81
Merluccius capensis	8.98	2	0.70
Lepidopus caudatus	7.81	12	0.61
Lampanyctodes hectoris	4.41	1697	0.34
Brama brama	2.54	2	0.20
Todarodes angolensis	2.46	2	0.19
Raja confundens	1.46	2	0.11
Todarodes angolensis	1.35	2	0.10
Malacocephalus laevis	1.15	12	0.09
Parapagurus pilosimanus	0.98	57	0.08
Rossia enigmatica	0.74	33	0.06
Todaropsis eblanae	0.69	6	0.05
Epigonus sp.	0.40	37	0.03
Paracallionymus costatus	0.38	74	0.03
Tripterygius gilchristi	0.18	14	0.01
Zu elongatus	0.18	2	0.01
Todaropsis eblanae	0.17	2	0.01
Lucigadus ori	0.16	41	0.01
Anemones, pink	0.16	2	0.01
Hoplostethus mediterraneus	0.15	6	0.01
Whelks	0.07	8	0.01
Lycoteuthis lorigera	0.04	8	0.00
Physiculus capensis	0.04	6	0.00
Starfish	0.04	2	0.00
Starfish	0.02	4	0.00
Stereomastis sp.	0.02	2	0.00
Sergia sp.	0.01	4	0.00
CYPRIDIAE (Bulia)	0.01	4	0.00
Exodermidia sp.	0.01	2	0.00
Stoloteuthis sp.	0.01	4	0.00
Champsodon capensis	0.01	2	0.00
Rochinia sp.	0.00	4	0.00
Total	1284.81		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1485  
 DATE :01.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°28.26  
 start stop duration Lon E 15°55.55  
 TIME :17:05:38 17:35:12 29.6 (min) Purpose : 3  
 LOG : 728.02 729.50 1.5 Region : 6100  
 FDEPTH: 523 524 Gear cond.: 0  
 BDEPTH: 523 524 Validity : 0  
 Towing dir: 0° Wire out : 1300 m Speed : 3.0 kn  
 Sorted : 405 Total catch: 405.36 Catch/hour: 822.50

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	572.20	1017	69.57
Ruvettus pretiosus	117.69	10	14.31
Notacanthus sexspinis	47.68	477	5.80
Helicolenus dactylopterus	27.19	144	3.31
Caelorinchus braueri	17.86	256	2.17
Gerypteris capensis	7.30	2	0.89
Lophius vomerinus	6.90	4	0.84
Raja confundens	6.70	4	0.81
Selachophidium guentheri	6.09	73	0.74
Raja leoparden	4.06	2	0.49
Nezumia sp.	2.43	45	0.30
Bassanago albescens	2.03	12	0.25
Malacocephalus laevis	0.83	10	0.10
Lycoteuthis lorigera	0.73	75	0.09
Chaceon macphersoni	0.54	2	0.07
Anemones, pink	0.49	2	0.06
Ophichthus bennettai	0.32	2	0.04
Rossia enigmatica	0.25	12	0.03
Symbolophorus boops	0.21	18	0.03

Photichthys argenteus	0.20	8	0.02
Lucigadus ori	0.13	18	0.02
Caelorinchus matama	0.12	2	0.01
Kuronezumia leonis	0.10	2	0.01
Paracallionymus costatus	0.10	16	0.01
Starfish	0.09	0	0.01
Diaphus sp.	0.08	28	0.01
Parapagurus pilosimanus	0.04	2	0.00
Lepidion capensis	0.04	2	0.00
Tripterygius gilchristi	0.03	2	0.00
Starfish	0.02	4	0.00
Gymnoscopelus sp.	0.02	2	0.00
PARALEPIDIDAE	0.01	2	0.00
Abrialopsis gilchristi	0.01	2	0.00
Argyropelecus aculeatus	0.00	4	0.00
Pycnogonid	0.00	2	0.00
Paraliparis australis	0.00	2	0.00
Total	822.50		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1486  
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°56.14  
 start stop duration Lon E 16°2.53  
 TIME :04:25:30 04:56:28 31.0 (min) Purpose : 3  
 LOG : 791.70 793.13 1.4 Region : 6100  
 FDEPTH: 681 688 Gear cond.: 0  
 BDEPTH: 681 688 Validity : 0  
 Towing dir: 0° Wire out : 1650 m Speed : 2.8 kn  
 Sorted : 133 Total catch: 133.43 Catch/hour: 258.50

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorinchus braueri	129.80	1046	50.21
Hoplostethus atlanticus	31.00	105	11.99
Nezumia sp.	25.19	252	9.74
Merluccius paradoxus	14.92	10	5.77
Alloctytus verrucosus	6.97	72	2.70
Trachyscorpia eschmeyerii	6.78	15	2.62
Bathyrhaja smithii	6.20	2	2.40
Ebinania costaecanarie	5.81	15	2.25
Caelorinchus matama	5.81	29	2.25
Funchalia woodwardi	5.15	397	1.99
Raja leoparden	3.87	2	1.50
Chaceon macphersoni	3.87	52	1.50
Notacanthus sexspinis	2.29	29	0.88
Sergia sp.	1.76	420	0.68
Selachophidium guentheri	1.36	12	0.52
Synphobranchus kaupii	0.85	10	0.33
Etmopterus sp.	0.77	2	0.30
Photichthys argenteus	0.76	17	0.29
Oreosoma atlanticum	0.57	4	0.22
Etmopterus brachyurus	0.57	4	0.22
Bathophilus nigerrimus	0.46	12	0.18
Chauliodus sloani	0.44	21	0.17
Raja confundens, juvenile	0.39	2	0.15
Diastobranchus capensis	0.33	10	0.13
Tetragonurus cuvieri	0.29	2	0.11
Gonostoma elongatum	0.26	6	0.10
Myxine capensis	0.24	4	0.09
Apristurus saidhana	0.16	2	0.06
Raja leoparden, juvenile	0.13	4	0.05
Starfish	0.12	0	0.05
Lampanyctus sp.	0.11	4	0.04
Lycodes agulhensis	0.11	6	0.04
Neoscopelus macrolepidotus	0.11	4	0.04
Scombrobrax heterolepis	0.09	2	0.03
Lycoteuthis lorigera	0.09	6	0.03
Symbolophorus boops	0.09	6	0.03
Gymnoscopelus sp.	0.08	12	0.03
Mycophonus sp.	0.08	6	0.03
Xenodermichthys copei	0.08	4	0.03
Hoplostethus cadonati	0.07	6	0.03
Photichthys argenteus	0.06	4	0.02
P O L Y C H A E T A	0.06	0	0.02
Scopelosaurus meadi	0.05	2	0.02
GONOSTOMATIDAE	0.05	2	0.02
Hygophum sp.	0.04	12	0.02
PARALEPIDIDAE	0.03	2	0.01
Teuhenomega megalops	0.03	2	0.01
Electrona risso	0.03	4	0.01
Argyropelecus aculeatus	0.02	4	0.01
Hydrolagus africanus, juvenile	0.02	2	0.01
Diaphus sp.	0.02	6	0.01
Taonius sp.	0.02	2	0.01
Spirula spirula	0.02	2	0.01
Lampanyctodes hectoris	0.01	10	0.01
Rochinia sp.	0.01	4	0.00
MYCTOPHIDAE	0.01	2	0.00
Total	258.50		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1487  
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°48.35  
 start stop duration Lon E 16°1.47  
 TIME :07:04:44 07:34:44 30.0 (min) Purpose : 3  
 LOG : 805.64 807.27 1.6 Region : 6100  
 FDEPTH: 565 571 Gear cond.: 0  
 BDEPTH: 565 571 Validity : 0  
 Towing dir: 0° Wire out : 1400 m Speed : 3.1 kn  
 Sorted : 229 Total catch: 229.16 Catch/hour: 458.31

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	210.00	280	45.82
Ruvettus pretiosus	120.00	6	26.18
Caelorinchus braueri	42.00	750	9.16
Helicolenus dactylopterus	40.00	146	8.73
Funchalia woodwardi	8.56	714	1.87
Notacanthus sexspinis	7.40	130	1.61
Raja leoparden	7.00	8	1.53
Hydrolagus africanus	4.00	14	0.87
Nezumia sp.	3.60	58	0.79
Todarodes angolensis	3.20	6	0.70
Etmopterus brachyurus	2.40	6	0.52
Chaceon macphersoni	1.86	16	0.41
Photichthys argenteus	1.18	18	0.26
Selachophidium guentheri	1.07	34	0.23
Ebinania costaecanarie	0.92	12	0.20
Alloctytus verrucosus	0.83	2	0.18
Bathophilus nigerrimus	0.75	10	0.16
Bathophilus nigerrimus	0.73	18	0.16
Raja leoparden, juvenile	0.68	18	0.15
Malacocephalus laevis	0.54	4	0.12
Chauliodus sloani	0.37	18	0.08
Bathypolypus valdiviae	0.28	4	0.06
Myxine capensis	0.22	4	0.05
Lophius vomerinus	0.13	2	0.03
Neoscopelus macrolepidotus	0.12	10	0.03
Lycoteuthis lorigera	0.08	14	0.02
Gymnoscopelus sp.	0.08	12	0.02
Starfish	0.05	12	0.01
Malacoctenus niger	0.05	2	0.01
P O L Y C H A E T A	0.04	10	0.01
Argyropelecus aculeatus	0.04	8	0.01
Ceratiias tentaculatus	0.03	2	0.01



Diaphus sp.	0.02	8	0.00	
Electrona risso	0.02	4	0.00	
Rossia enigmatica	0.02	2	0.00	
Myctophum sp.	0.02	2	0.00	
Lucigadus ori	0.01	2	0.00	
Chlorophthalmus sp.	0.01	2	0.00	
Cerattias sp.	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1099
Total	458.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1488  
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°42.83  
 start stop duration Lon E 16°10.90  
 TIME :09:54:25 10:24:22 Purpose : 3  
 LOG : 822.62 824.16 Region : 6100  
 FDEPTH: 453 453 Gear cond.: 0  
 BDEPTH: 453 453 Validity : 0  
 Towing dir: 0° Wire out : 1200 m Speed : 3.1 kn  
 Sorted : 684 Total catch: 683.96 Catch/hour: 1369.29

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	1127.13	82.31	583
Bassanago albescens	128.13	9.36	
Helicolenus dactylopterus	22.02	1.61	587
Lophius vomerinus	20.02	1.46	584
Caelorinchus simorhynchus	14.01	1.02	
Merluccius paradoxus	14.01	1.02	589
Octopus magnificus	12.01	0.88	
Malacocephalus laevis	10.01	0.73	
Brama brama	6.01	0.44	586
Gemypteris capensis	4.00	0.29	585
Lepidopus caudatus	4.00	0.29	
Todarodes angolensis	2.78	0.20	588
Beryx splendens	0.62	0.05	
Sea pens	0.60	0.04	
Lucigadus ori	0.43	0.03	
Hoplostethus mediterraneus	0.39	0.03	
Parapagurus pilosimanus	0.39	0.03	
Photichthys argenteus	0.27	0.02	
Paracallionymus costatus	0.27	0.02	
Lycoteuthis lorigera	0.26	0.02	
Starfish	0.26	0.02	0
Anemones, pink	0.25	0.02	
Notacanthus sexspinis	0.18	0.01	
MYCTOPHIDAE	0.15	0.01	
Myxine capensis	0.15	0.01	
Rossia enigmatica	0.13	0.01	
Stereomastis sp.	0.13	0.01	
Raja confundens, juvenile	0.13	0.01	
Raja leopardus, juvenile	0.11	0.01	
Physiculus capensis	0.07	0.01	
Histioteuthis sp.	0.07	0.01	
Whelks	0.07	0.01	
Starfish	0.07	0.01	
Tripterophycis gilchristi	0.06	0.00	
Diaphus sp.	0.03	0.00	
Symbolophorus boops	0.02	0.00	
Heart urchin	0.02	0.00	
Champsodon capensis	0.01	0.00	
Argyropelecus aculeatus	0.00	0.00	
Total	1369.29	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1489  
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°39.17  
 start stop duration Lon E 16°21.41  
 TIME :12:36:47 13:07:12 Purpose : 3  
 LOG : 836.15 837.65 Region : 6100  
 FDEPTH: 374 377 Gear cond.: 0  
 BDEPTH: 374 377 Validity : 0  
 Towing dir: 0° Wire out : 900 m Speed : 3.0 kn  
 Sorted : 768 Total catch: 768.06 Catch/hour: 1514.90

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	830.37	54.81	590
Dead coral	134.12	8.85	
Zeus capensis	118.34	7.81	591
Helicolenus dactylopterus	71.01	4.69	592
Brama brama	69.03	4.56	595
Caelorinchus simorhynchus	63.12	4.17	
Merluccius paradoxus	49.31	3.25	593
Malacocephalus laevis	45.36	2.99	
Merluccius capensis	37.48	2.47	594
Epigonus sp.	21.70	1.43	
Gemypteris capensis	14.99	0.99	596
Lophius vomerinus	13.81	0.91	597
Squalus mitsukurii	7.89	0.52	
Lepidopus caudatus	7.89	0.52	
Octopus magnificus	5.33	0.35	
PORIPERA (Sponges)	5.13	0.34	
Scyllorhinus capensis	4.93	0.33	
Parapagurus pilosimanus	3.94	0.26	
Holohalaelurus regani	3.35	0.22	
Cyttus traversi	1.78	0.12	
Todaropsis eblanae	1.26	0.08	598
Todarodes angolensis	1.14	0.07	599
Sea pens	0.77	0.05	
Starfish	0.50	0.03	0
Ornithoteuthis antillarum	0.45	0.03	
Lucigadus ori	0.38	0.02	
Beryx splendens	0.33	0.02	
Paracallionymus costatus	0.28	0.02	
Physiculus capensis	0.24	0.02	
Rossia enigmatica	0.22	0.01	
Whelks	0.22	0.01	
Starfish	0.12	0.01	
Mursia cristimanus	0.07	0.00	
Rochinia sp.	0.03	0.00	
CYPRRAEIDAE (Bullia)	0.02	0.00	
Total	1514.90	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1490  
 DATE :02.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°27.12  
 start stop duration Lon E 16°39.96  
 TIME :16:00:28 16:30:04 Purpose : 3  
 LOG : 861.10 862.61 Region : 6100  
 FDEPTH: 303 301 Gear cond.: 0  
 BDEPTH: 303 301 Validity : 0  
 Towing dir: 0° Wire out : 730 m Speed : 3.1 kn  
 Sorted : 184 Total catch: 411.59 Catch/hour: 834.31

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	304.05	36.44	606
Merluccius capensis	113.51	13.61	602
Helicolenus dactylopterus	109.46	13.12	607
Zeus capensis	99.32	11.90	604
Caelorinchus simorhynchus	76.62	9.18	
Lophius vomerinus	38.51	4.62	600
Todaropsis eblanae	25.78	3.09	609

Malacocephalus laevis	22.99	109	2.76
Thyrsites atun	8.11	4	0.97
Octopus magnificus	5.07	4	0.61
Trachurus capensis	4.29	12	0.51
Merluccius paradoxus	4.05	8	0.49
Notopogon macrosolen	3.77	24	0.45
Squalus mitsukurii	3.75	2	0.45
Gemypteris capensis	3.04	6	0.36
Brama brama	2.64	2	0.32
Chelidonicichthys queketti	2.31	12	0.28
Lepidopus caudatus	2.23	4	0.27
Holohalaelurus regani	1.62	6	0.19
Spatangus capensis	1.05	12	0.13
Paracallionymus costatus	0.92	134	0.11
Cynoglossus zanzibarensis	0.84	24	0.10
Starfish	0.21	12	0.02
Champsodon capensis	0.07	12	0.01
Parapagurus dimorphus	0.06	12	0.01
G A S T R O P O D S	0.02	12	0.00
Total	834.31		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1491  
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°5.54  
 start stop duration Lon E 16°14.69  
 TIME :04:37:28 05:10:34 Purpose : 3  
 LOG : 924.58 926.14 Region : 6100  
 FDEPTH: 550 559 Gear cond.: 0  
 BDEPTH: 550 559 Validity : 0  
 Towing dir: 0° Wire out : 1400 m Speed : 2.8 kn  
 Sorted : 97 Total catch: 96.73 Catch/hour: 175.34

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	101.51	121	57.89
Caelorinchus braueri	32.63	859	18.61
Notacanthus sexspinis	12.69	163	7.24
Helicolenus dactylopterus	7.89	49	4.50
Funchalia woodwardi	4.64	370	2.65
Raja leopardus	3.81	4	2.17
Selachophidium guentheri	2.52	25	1.44
Etmopterus brachyurus	1.52	16	0.87
Todarodes angolensis	1.32	2	0.75
Todarodes angolensis	1.09	2	0.62
Anemones, pink	0.98	4	0.56
Nezumia sp.	0.74	18	0.42
Photichthys argenteus	0.71	31	0.41
Chaeceon macphersoni	0.54	15	0.31
Lycoteuthis lorigera	0.53	25	0.30
Malacocephalus laevis	0.41	2	0.24
Raja leopardus, juvenile	0.36	2	0.20
Myxine capensis	0.28	4	0.16
Hoplostethus mediterraneus	0.18	2	0.10
Lucigadus ori	0.17	15	0.10
Avocettina sp.	0.14	2	0.08
Psychrolutes macrocephalus	0.13	5	0.08
Diaphus sp.	0.11	40	0.07
Merluccius paradoxus	0.11	5	0.06
Starfish	0.07	0	0.04
Physiculus capensis	0.05	4	0.03
Lepidion capensis	0.05	2	0.03
Starfish	0.04	4	0.02
P O L Y C H A E T A	0.03	5	0.01
Cryptopsaras coesii	0.02	5	0.01
Argyropelecus aculeatus	0.02	4	0.01
Xenodermichthys copei	0.01	2	0.01
Myctophum sp.	0.01	2	0.01
Shrimps, small, non comm.	0.01	0	0.01
Electrona risso	0.01	2	0.01
Argonauta hians	0.00	2	0.00
Phyllosoma	0.00	4	0.00
Total	175.33		99.99

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1492  
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°3.96  
 start stop duration Lon E 16°17.97  
 TIME :06:53:50 07:24:45 Purpose : 3  
 LOG : 935.29 936.70 Region : 6100  
 FDEPTH: 465 474 Gear cond.: 0  
 BDEPTH: 465 474 Validity : 0  
 Towing dir: 0° Wire out : 1050 m Speed : 2.7 kn  
 Sorted : 781 Total catch: 781.27 Catch/hour: 1516.05

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	1404.92	3085	92.67
Merluccius paradoxus	58.21	37	3.84
Malacocephalus laevis	12.23	43	0.81
Helicolenus dactylopterus	10.87	56	0.72
Gemypteris capensis	8.73	4	0.58
Hoplostethus mediterraneus	5.82	66	0.38
Caelorinchus braueri	4.08	177	0.27
Caelorinchus simorhynchus	3.20	78	0.21
Bassanago albescens	1.73	2	0.11
Raja confundens	1.55	4	0.10
Todarodes angolensis	1.03	2	0.07
Raja leopardus	0.87	10	0.06
Chaeceon macphersoni	0.43	4	0.03
Myxine capensis	0.35	4	0.02
Physiculus capensis	0.24	12	0.02
Notacanthus sexspinis	0.21	6	0.01
Starfish	0.20	43	0.01
Tripterophycis gilchristi	0.17	8	0.01
Lycoteuthis lorigera	0.16	12	0.01
Lampanyctodes hectoris	0.16	76	0.01
Lucigadus ori	0.15	19	0.01
Bathypolypus validiviae	0.14	6	0.01
Diaphus sp.	0.14	41	0.01
Symbolophorus boops	0.09	6	0.01
Parapagurus pilosimanus	0.09	8	0.01
Photichthys argenteus	0.07	4	0.00
Myctophum sp.	0.06	10	0.00
MYCTOPHIDAE	0.05	16	0.00
Argyropelecus aculeatus	0.04	6	0.00
Abrialopsis gilchristi	0.03	8	0.00
Paracallionymus costatus	0.03	6	0.00
Shrimps, small, non comm.	0.01	4	0.00
Stereomastis sp.	0.01	2	0.00
Munida sp.	0.01	2	0.00
Total	1516.05		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1493  
 DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 32°0.08  
 start stop duration Lon E 16°26.07  
 TIME :09:01:42 09:31:40 Purpose : 3  
 LOG : 947.52 948.99 Region : 6100  
 FDEPTH: 394 398 Gear cond.: 0  
 BDEPTH: 394 398 Validity : 0  
 Towing dir: 0° Wire out : 950 m Speed : 2.9 kn  
 Sorted : 493 Total catch: 493.10 Catch/hour: 987.19

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
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	weight	numbers		
Merluccius paradoxus	404.40	1395	40.97	622
Lepidopus caudatus	294.29	408	29.81	
Helicolenus dactylopterus	116.12	507	11.76	627
Caelorinchus simorhynchus	44.04	440	4.46	
Merluccius paradoxus	37.24	26	3.77	623
Zeus capensis	37.24	82	3.77	624
Malacocephalus laevis	10.01	28	1.01	
Brama brama	9.01	6	0.91	625
Genyterus capensis	8.01	4	0.81	626
Bassanago albescens	6.01	10	0.61	
Holohalaelurus regani	4.88	10	0.49	
Epigonus sp.	3.80	44	0.39	
Squalus mitsukurii	3.40	2	0.34	
Scyliorhinus capensis	3.20	4	0.32	
Todarodes angolensis	1.70	2	0.17	628
Todaropsis eblanae	1.18	10	0.12	629
Hoplostethus mediterraneus	0.87	10	0.09	
Octopus magnificus	0.74	2	0.07	
Starfish	0.34	0	0.03	
Physiculus capensis	0.13	6	0.01	
Whelks	0.11	4	0.01	
Rossia enigmatica	0.10	4	0.01	
Starfish	0.10	2	0.01	0
Paracallionymus costatus	0.10	18	0.01	
Lucigadus ori	0.07	10	0.01	
Tripterygion gilchristi	0.02	2	0.00	
Lampanyctodes hectoris	0.02	10	0.00	
Electrona risso	0.02	2	0.00	
Munidopsis chuni	0.01	2	0.00	
Abrialopsis gilchristi	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1101
Total	987.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1494  
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°56.63  
start stop duration Lon E 16°38.01  
TIME :11:21:45 11:51:40 29.9 (min) Purpose : 3  
LOG : 962.65 964.13 1.5 Region : 6100  
FDEPTH: 338 340 Gear cond.: 0  
BDEPTH: 338 340 Validity : 0  
Towing dir: 0° Wire out : 800 m Speed : 3.0 kn  
Sorted : 163 Total catch: 717.98 Catch/hour: 1439.81

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Merluccius paradoxus	1094.92	5787	76.05 635
Caelorinchus simorhynchus	89.04	1023	6.18
Helicolenus dactylopterus	66.18	626	4.60 636
Merluccius paradoxus	38.70	38	2.69 632
Zeus capensis	27.43	60	1.93 638
Holohalaelurus regani	26.47	60	1.84
Octopus magnificus	22.66	4	1.57
Brama brama	16.84	12	1.17 631
Merluccius capensis	15.24	6	1.06 633
Todarodes angolensis	12.99	12	0.90 637
Lophius vomerinus	10.03	6	0.70 634
Cyttus traversi	6.14	12	0.43
Todaropsis eblanae	5.90	36	0.41 639
Epigonus sp.	3.73	72	0.26
Merluccius paradoxus	1.20	84	0.08
Tripterygion gilchristi	0.63	12	0.04
Sepia hieronis	0.53	24	0.04
Rossia enigmatica	0.53	24	0.04
Paracallionymus costatus	0.46	72	0.03
Physiculus capensis	0.26	12	0.02
Lucigadus ori	0.19	48	0.01
Parapagurus dimorphus	0.10	24	0.01
Lampanyctodes hectoris	0.05	12	0.00
Merluccius paradoxus	0.05	12	0.00
Exochromia sp.	0.04	12	0.00
Mursia cristimanus	0.04	12	0.00
Total	1439.81		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1495  
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°45.58  
start stop duration Lon E 16°56.13  
TIME :14:30:20 15:00:22 30.0 (min) Purpose : 3  
LOG : 985.57 987.14 1.6 Region : 6100  
FDEPTH: 287 287 Gear cond.: 0  
BDEPTH: 287 287 Validity : 0  
Towing dir: 0° Wire out : 690 m Speed : 3.1 kn  
Sorted : 164 Total catch: 653.00 Catch/hour: 1304.70

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Merluccius paradoxus	1012.99	9954	77.64 643
Merluccius capensis	117.88	126	9.04 641
Aequorea forskalea	39.96	0	3.06
Lampanyctodes hectoris	36.76	11489	2.82
Caelorinchus simorhynchus	29.37	625	2.25
Merluccius paradoxus	25.97	44	1.99 642
Helicolenus dactylopterus	19.28	306	1.48 647
Genyterus capensis	5.99	10	0.46 646
Lophius vomerinus	5.59	4	0.43 644
Holohalaelurus regani	5.60	14	0.28
Malacocephalus laevis	3.20	40	0.25
Todaropsis eblanae	1.24	26	0.09 649
Chelidonichthys capensis	0.90	2	0.07 645
Parapagurus dimorphus	0.69	80	0.05
Merluccius paradoxus	0.36	80	0.03 648
Paracallionymus costatus	0.29	80	0.02
Maurolicus muelleri	0.20	134	0.02
Rossia enigmatica	0.11	14	0.01
Rochinia sp.	0.11	26	0.01
Starfish	0.09	14	0.01 0
Argyropelecus aculeatus	0.04	14	0.00
Starfish	0.04	14	0.00
Inioteuthis capensis	0.03	14	0.00
Total	1304.70		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1496  
DATE :03.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°40.24  
start stop duration Lon E 17°9.79  
TIME :16:42:28 17:13:24 30.9 (min) Purpose : 3  
LOG : 997.15 998.65 1.5 Region : 6100  
FDEPTH: 259 259 Gear cond.: 0  
BDEPTH: 259 259 Validity : 0  
Towing dir: 0° Wire out : 650 m Speed : 2.9 kn  
Sorted : 156 Total catch: 737.40 Catch/hour: 1430.45

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Merluccius paradoxus	923.38	10031	64.55 652
Paracallionymus costatus	159.15	1895	11.13
Lampanyctodes hectoris	93.70	2716	6.55
Merluccius capensis	75.65	91	5.29 650
Caelorinchus simorhynchus	48.21	1236	3.37
Aequorea forskalea	34.22	0	2.39
Helicolenus dactylopterus	27.16	584	1.90 653
Merluccius paradoxus	17.46	33	1.22 651
Etrumeus whiteheadi	10.32	149	0.72

Lophius vomerinus	9.70	16	0.68 656
Cynoglossus zanzibarensis	7.88	95	0.55 654
Callorhynchus capensis	5.43	2	0.38
Genyterus capensis	4.56	27	0.32 657
Trachurus capensis	3.94	41	0.28 655
Holohalaelurus regani	2.33	12	0.16
Malacocephalus laevis	2.12	27	0.15
Parapagurus dimorphus	1.67	244	0.12
Todaropsis eblanae	1.02	14	0.07 659
Merluccius paradoxus	0.80	122	0.06 658
Whelks	0.68	27	0.05
Maurolicus muelleri	0.62	502	0.04
E C H I N O D E R M A T A	0.31	27	0.02
Pterygosquilla armata capensis	0.11	14	0.01
Inioteuthis capensis	0.05	27	0.00
Total	1430.45		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1497  
DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°33.78  
start stop duration Lon E 17°12.91  
TIME :04:11:05 04:42:57 31.9 (min) Purpose : 3  
LOG : 1031.05 1032.65 1.6 Region : 6100  
FDEPTH: 230 239 Gear cond.: 0  
BDEPTH: 230 239 Validity : 0  
Towing dir: 0° Wire out : 620 m Speed : 3.0 kn  
Sorted : 106 Total catch: 260.95 Catch/hour: 491.28

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Merluccius paradoxus	229.68	2711	46.75 673
Aequorea forskalea	118.61	0	24.14 0
Merluccius capensis	50.83	79	10.35 670
Paracallionymus costatus	17.13	1557	3.49
Lampanyctodes hectoris	16.34	4878	3.33
Holohalaelurus regani	13.18	79	2.68
Merluccius paradoxus	11.30	28	2.30 671
Helicolenus dactylopterus	9.88	382	2.01 674
Caelorinchus simorhynchus	7.25	237	1.48
Lophius vomerinus	5.65	6	1.15 680
Cynoglossus zanzibarensis	1.65	26	0.34 675
Genyterus capensis	1.32	9	0.27 672
Raja straeleni	1.32	2	0.27
Todaropsis eblanae	1.23	13	0.25 679
Malacocephalus laevis	0.96	8	0.20
Trachurus capensis	0.93	8	0.19 677
Myxine capensis	0.75	8	0.15
Congiopodus spinifer	0.72	8	0.15
Todaropsis eblanae	0.61	8	0.12 678
Heart urchin	0.60	21	0.12
Sepia australis	0.58	26	0.12
Maurolicus muelleri	0.43	316	0.09
Rossia enigmatica	0.43	13	0.02
Merluccius paradoxus	0.07	13	0.01 676
Champsodon capensis	0.05	8	0.01
Pterygosquilla armata capensis	0.03	8	0.01
Parapagurus dimorphus	0.03	8	0.01
Starfish	0.03	13	0.01
Inioteuthis capensis	0.02	8	0.00
Solenocera africana	0.02	8	0.00
Total	491.28		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1498  
DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°29.99  
start stop duration Lon E 17°25.38  
TIME :06:22:23 06:52:16 29.9 (min) Purpose : 3  
LOG : 1045.31 1046.87 1.6 Region : 6100  
FDEPTH: 171 180 Gear cond.: 0  
BDEPTH: 171 180 Validity : 0  
Towing dir: 0° Wire out : 440 m Speed : 3.1 kn  
Sorted : 69 Total catch: 207.86 Catch/hour: 417.38

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Lampanyctodes hectoris	261.04	121416	62.54
Aequorea forskalea	70.28	0	16.84
Merluccius paradoxus	32.13	307	7.70 682
Merluccius capensis	24.10	76	5.77 683
PORIFERA (Sponges)	10.04	0	2.41
Lepidopus caudatus	7.43	60	1.78
Sepia australis	7.43	392	1.78
Helicolenus dactylopterus	2.11	181	0.51 684
Holohalaelurus regani	1.00	20	0.24
Paracallionymus costatus	0.61	60	0.15
Chelidonichthys capensis	0.38	2	0.09 681
Caelorinchus simorhynchus	0.33	10	0.08
Todaropsis eblanae	0.25	30	0.06 686
Lolliguncula mercatoris	0.12	40	0.03
Merluccius paradoxus	0.11	10	0.03 685
Total	417.38		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1499  
DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°41.00  
start stop duration Lon E 17°50.03  
TIME :10:24:15 10:54:05 29.8 (min) Purpose : 3  
LOG : 1074.39 1075.89 1.5 Region : 6100  
FDEPTH: 124 125 Gear cond.: 0  
BDEPTH: 124 125 Validity : 0  
Towing dir: 0° Wire out : 350 m Speed : 3.0 kn  
Sorted : 214 Total catch: 213.94 Catch/hour: 430.33

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
weight numbers			
Lampanyctodes hectoris	237.34	93077	55.15
Aequorea forskalea	60.34	0	14.02 0
Pterygosquilla armata capensis	40.23	2299	9.35
PORIFERA (Sponges)	33.19	0	7.71 0
Chelidonichthys capensis	20.11	74	4.67 687
Merluccius capensis	18.10	245	4.21 688
Raja straeleni	7.84	6	1.82
Sufflogobius bibarbatatus	2.94	368	0.68
Todaropsis eblanae	2.59	125	0.60 691
Lepidopus caudatus	2.41	143	0.56
Genyterus capensis	1.27	12	0.29 689
Callorhynchus capensis	1.19	2	0.28
Merluccius capensis	1.03	201	0.24 690
Whelks	0.76	42	0.18
Lophius vomerinus	0.42	2	0.10 693
Lolliguncula mercatoris	0.15	60	0.04
Exochromia sp.	0.13	6	0.03
Sepia australis	0.11	6	0.03
Starfish	0.09	12	0.02
Paracallionymus costatus	0.03	2	0.01
Etrumeus whiteheadi	0.02	2	0.01
Todarodes angolensis	0.02	2	0.00 694
Zeus capensis	0.00	2	0.00 692
Total	430.33		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1500  
DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°47.10

start stop duration Lon E 17°37.84  
 TIME :13:19:46 13:35:05 15.3 (min) Purpose : 3  
 LOG : 1090.19 1090.97 0.8 Region : 6100  
 FDEPTH: 138 138 Gear cond.: 0  
 BDEPTH: 138 138 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 3.1 km  
 Sorted : 473 Total catch: 520.30 Catch/hour: 2037.72

Total 1856.21 100.00  
 R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1504  
 DATE :05.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°20.92  
 start stop duration Lon E 16°28.69  
 TIME :10:19:02 10:50:11 31.2 (min) Purpose : 3  
 LOG : 1186.08 1187.48 1.4 Region : 6100  
 FDEPTH: 450 447 Gear cond.: 0  
 BDEPTH: 450 447 Validity : 0  
 Towing dir: 0° Wire out : 1050 m Speed : 2.7 km  
 Sorted : 214 Total catch: 214.38 Catch/hour: 412.93

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	1566.58	0	76.88	
PORIFERA (Sponges)	234.99	0	11.53	
Maurololicus muelleri	81.97	81971	4.02	
Pterygosquilla armata capensis	80.95	5463	3.97	
Lepidopus caudatus	20.87	1527	1.02	
Thyrsites atun	10.18	4	0.50	695
Brama brama	7.44	4	0.37	697
Heart urchin	6.79	255	0.33	
Merluccius capensis	6.15	31	0.30	699
Merluccius capensis	5.60	352	0.27	700
Sepia australis	4.07	305	0.20	
Chelidonichthys capensis	3.92	8	0.19	696
Exodromidia sp.	3.87	305	0.19	
Paracallionymus costatus	1.63	305	0.08	
Todaropsis eblanae	1.32	51	0.06	701
Champsodon capensis	0.56	51	0.03	
Caelorinchus simorhynchus	0.46	51	0.02	
Trachurus capensis	0.43	4	0.02	698
Total	2037.72		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1501  
 DATE :04.02.2008 GEAR TYPE: BT NO: 15 POSITION:Lat S 31°54.19  
 start stop duration Lon E 17°24.23  
 TIME :16:10:38 16:42:17 31.7 (min) Purpose : 3  
 LOG : 1108.31 1109.90 1.6 Region : 6100  
 FDEPTH: 156 154 Gear cond.: 0  
 BDEPTH: 156 154 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.0 km  
 Sorted : 50 Total catch: 589.43 Catch/hour: 1117.40

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	1023.70	0	91.61	
Merluccius capensis	30.33	118	2.71	702
Lampanyctodes hectoris	25.59	10036	2.29	
Sepia australis	13.99	990	1.25	
Merluccius paradoxus	13.31	682	1.19	705
Cynoglossus zanzibarensis	3.41	34	0.31	706
Pterygosquilla armata capensis	2.18	136	0.20	
Chelidonichthys capensis	1.90	8	0.17	703
Erumus whiteheadi	1.26	34	0.11	
Trachurus capensis	0.95	6	0.08	704
Helicolenus dactylopterus	0.78	68	0.07	707
Total	1117.41		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1502  
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°13.74  
 start stop duration Lon E 16°46.02  
 TIME :04:31:48 05:02:00 30.2 (min) Purpose : 3  
 LOG : 1159.30 1160.92 1.6 Region : 6100  
 FDEPTH: 320 321 Gear cond.: 0  
 BDEPTH: 320 321 Validity : 0  
 Towing dir: 0° Wire out : 880 m Speed : 3.2 km  
 Sorted : 116 Total catch: 454.10 Catch/hour: 902.18

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	603.97	3254	66.95	713
Caelorinchus simorhynchus	137.09	1715	15.19	
Parapagurus dimorphus	31.79	2648	3.52	
Malacocephalus laevis	22.65	32	2.51	
Helicolenus dactylopterus	19.87	183	2.20	708
Anemones, pink	14.62	32	1.62	
Zeus capensis	13.91	26	1.54	709
Merluccius paradoxus	13.71	16	1.52	712
Genypteris capensis	7.95	14	0.88	710
Starfish	6.02	433	0.78	
Lophius vomerinus	6.95	0	0.77	711
Raja leoparden	6.46	2	0.72	
Raja wallacei	5.96	2	0.66	
Holohalaelurus regani	3.97	12	0.44	
Squalus mitsukurii	3.48	2	0.39	
Todaropsis eblanae	1.03	10	0.11	714
Whelks	0.64	10	0.07	
Paracallionymus costatus	0.45	54	0.05	
Rossia enigmatica	0.38	10	0.04	
Mursia cristimanus	0.16	22	0.02	
CYPRAEIDAE (Bullia)	0.14	10	0.02	
Total	902.18		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1503  
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°17.86  
 start stop duration Lon E 16°33.71  
 TIME :07:27:02 07:58:18 31.3 (min) Purpose : 3  
 LOG : 1174.70 1176.15 1.5 Region : 6100  
 FDEPTH: 381 384 Gear cond.: 0  
 BDEPTH: 381 384 Validity : 0  
 Towing dir: 0° Wire out : 930 m Speed : 2.8 km  
 Sorted : 225 Total catch: 967.40 Catch/hour: 1856.21

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1485.90	5071	80.05	716
Caelorinchus simorhynchus	105.61	2247	5.69	
Merluccius paradoxus	88.26	86	4.76	715
Helicolenus dactylopterus	55.64	294	3.00	717
Scyliorhinus capensis	25.79	36	1.39	
Malacocephalus laevis	24.56	61	1.32	
Holohalaelurus regani	21.11	50	1.14	
Genypteris capensis	9.02	10	0.49	719
Raja leoparden	6.33	4	0.34	
Starfish, mixed	5.99	0	0.32	
Lampanyctodes hectoris	5.54	2636	0.30	
Lophius vomerinus	4.99	4	0.27	718
Parapagurus dimorphus	3.49	491	0.19	
Torpedo nobiliana	3.45	2	0.19	
Epigonus sp.	2.49	25	0.13	
Anemones, pink	2.12	12	0.11	
Starfish	1.38	12	0.07	
Mursia cristimanus	1.15	12	0.06	
Lucigadus ori	0.81	159	0.04	
Rossia enigmatica	0.65	25	0.04	
Starfish	0.55	12	0.03	0
Paracallionymus costatus	0.54	73	0.03	
Tripteroptychus gilchristi	0.32	36	0.02	
G A S T R O P O D S	0.18	12	0.01	
Sergia sp.	0.10	25	0.01	
Benthoctopus sp.	0.09	12	0.00	
Rochinia sp.	0.08	12	0.00	
Pterygosquilla armata capensis	0.06	12	0.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	275.44	528	66.70	720
Helicolenus dactylopterus	28.89	223	7.00	722
Caelorinchus simorhynchus	25.81	614	6.25	
Myxine capensis	19.26	331	4.66	
Octopus magnificus	19.26	2	4.66	
Bassanago albescens	14.06	23	3.41	
Aequorea forskalea	13.48	0	3.27	0
Genypteris capensis	8.48	4	2.05	721
Psychrolutes macrocephalus	1.06	8	0.26	
Lophius vomerinus	0.96	2	0.23	723
Hoplostethus mediterraneus	0.96	10	0.23	
Notacanthus sexpinis	0.96	19	0.23	
Physiculus capensis	0.79	31	0.19	
Funchalia woodwardi	0.58	40	0.14	
Raja leoparden	0.50	2	0.12	
Tripteroptychus gilchristi	0.46	27	0.11	
Malacocephalus laevis	0.33	2	0.08	
Photichthys argenteus	0.22	8	0.05	
Lucigadus ori	0.22	23	0.05	
Parapagurus dimorphus	0.19	13	0.05	
Lampanyctodes hectoris	0.16	91	0.04	
Starfish	0.16	0	0.04	
Diaphus sp.	0.10	33	0.02	
Chaeceon macphersoni	0.10	2	0.02	
Whelks	0.08	6	0.02	
Symbolophorus boops	0.08	6	0.02	
Plesionika martia	0.06	19	0.02	
Paracallionymus costatus	0.06	12	0.01	
Diaphus efulgens	0.05	4	0.01	
Merluccius paradoxus	0.05	6	0.01	724
Champsodon capensis	0.04	2	0.01	
Lycoteuthis lorigera	0.04	2	0.01	
Stereomastis sp.	0.03	4	0.01	
Total	412.93		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1505  
 DATE :05.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°24.62  
 start stop duration Lon E 16°25.63  
 TIME :13:14:25 13:44:30 30.1 (min) Purpose : 3  
 LOG : 1198.23 1199.64 1.4 Region : 6100  
 FDEPTH: 550 546 Gear cond.: 0  
 BDEPTH: 550 546 Validity : 0  
 Towing dir: 0° Wire out : 1200 m Speed : 2.8 km  
 Sorted : 381 Total catch: 380.90 Catch/hour: 759.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	552.34	718	72.72	725
Caelorinchus braueri	53.84	459	7.09	
Notacanthus sexpinis	33.90	425	4.46	
Funchalia woodwardi	23.93	1840	3.15	
Centrophorus squamosus	17.95	4	2.36	
Caelorinchus simorhynchus	10.37	399	1.37	
Helicolenus dactylopterus	9.57	100	1.26	
Sergia sp.	7.98	1773	1.05	731
Starfish	7.78	0	1.02	
Etmopterus brachyurus	7.22	44	0.95	
Todarodes angolensis	4.99	4	0.66	726
Histioteuthis miranda	4.59	6	0.60	
Raja leoparden	3.99	20	0.53	
Ancistrocheirus lesueurii	3.60	4	0.47	
Chaeceon macphersoni	2.99	44	0.39	
Hydrolagus africanus	1.99	6	0.26	
Selachophidium guentheri	1.79	24	0.24	
Todarodes angolensis	1.60	2	0.21	727
Psychrolutes macrocephalus	1.08	18	0.14	
Lophius vomerinus	0.99	2	0.13	730
Photichthys argenteus	0.97	46	0.13	
Lampanyctodes hectoris	0.86	467	0.11	
Diaphus sp.	0.83	257	0.11	
Bassanago albescens	0.60	2	0.08	
Nezumia sp.	0.54	14	0.07	
Hoplostethus mediterraneus	0.41	4	0.05	
P O L Y C H A E T A	0.37	0	0.05	
Lucigadus ori	0.33	30	0.04	
Merluccius paradoxus	0.25	4	0.03	728
Whelks	0.23	12	0.03	
Lycoteuthis lorigera	0.23	18	0.03	
Stereomastis sp.	0.17	28	0.02	
Parapagurus pilosimanus	0.17	18	0.02	
Neosopelus macrolepidotus	0.15	4	0.02	
Avocettina sp.	0.14	2	0.02	
Starfish	0.13	2	0.02	0
Tripteroptychus gilchristi	0.10	6	0.01	
Gymnoscopelus sp.	0.09	12	0.01	
Liocranchia reinhardti	0.09	2	0.01	
Merluccius paradoxus	0.07	16	0.01	729
Rochinia sp.	0.05	12	0.01	
Bathypolypus valdiviae	0.05	2	0.01	
Anemones, D.W.	0.03	2	0.00	
Mycotophum sp.	0.03	2	0.00	
Heart urchin	0.03	4	0.00	
Champsodon capensis	0.02	2	0.00	
Diaphus sp.	0.02	2	0.00	0
Teuthonia richardsoni	0.02	2	0.00	
Argyropelecus aculeatus	0.02	2	0.00	
Electrona risso	0.02	2	0.00	
Spirula spirula	0.01	2	0.00	
Cryptopsaras couesii	0.01	2	0.00	
Abrollopsis gilchristi	0.01	2	0.00	
Channax pictus	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1102
Total	759.52		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1506  
 DATE :05.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 32°24.84  
 start stop duration Lon E 16°22.94  
 TIME :15:52:53 16:22:11 29.3 (min) Purpose : 3  
 LOG : 1207.61 1208.98 1.4 Region : 6100  
 FDEPTH: 653 645 Gear cond.: 0  
 BDEPTH: 653 645 Validity : 0  
 Towing dir: 0° Wire out : 1500 m Speed : 2.8 km  
 Sorted : 139 Total catch: 139.46 Catch/hour: 285.59

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	124.91	121	43.74	732

Caelorinchus braueri	28.67	471	10.04	
Funchalia woodwardi	26.62	1902	9.32	
Chaeceon macphersoni	20.48	217	7.17	
Oreosoma atlanticum	14.33	70	5.02	
Trachyscorpia eschmeyerii	8.19	20	2.87	733
Caelorinchus matama	7.17	33	2.51	
Nezumia sp.	6.96	102	2.44	
Todarodes angolensis	5.67	4	1.99	736
Etmopterus spinax	5.16	12	1.81	0
Hoplostethus atlanticus	5.12	20	1.79	734
Lepidion capensis	4.46	31	1.56	
Sergia sp.	2.89	481	1.01	
Photichthys argenteus	2.44	63	0.85	
Apristurus saldanha	2.21	4	0.77	
Etmopterus brachyurus	2.07	6	0.72	
Notacanthus sexspinus	1.86	20	0.65	
Starfish	1.74	0	0.61	
Ancistrocheirus lesueurii, female	1.74	2	0.61	
Todarodes angolensis	1.66	2	0.58	735
Raja leopardus	1.56	25	0.54	
Myxine capensis	1.17	18	0.41	
Psychrolutes macrocephalus	1.06	4	0.37	
G A S T R O P O D S	1.02	170	0.36	
Diastobranthus capensis	0.98	6	0.34	
Genypterus capensis	0.74	4	0.26	
Bathypolypus valdiviae	0.65	8	0.23	
White sea cucumber	0.49	4	0.17	
Aristostomias lunifer	0.49	4	0.17	
Lycodes agulhensis	0.41	4	0.14	
Bathophilus longipinnis	0.35	6	0.12	
Simenchelys parasitica	0.33	4	0.11	
Photichthys argenteus	0.26	6	0.09	0
Chauliodus sloani	0.20	10	0.07	
Neoscopelus macrolepidotus	0.18	4	0.06	
Diaphus sp.	0.16	0.53	0.05	
Diaphus efulgens	0.14	2	0.05	
Etmopterus spinax	0.13	2	0.05	
Lycoteuthis lorigera	0.10	12	0.03	
Idiacanthus atlanticus	0.09	2	0.03	
Gymnoscopelus sp.	0.09	12	0.03	
Lampantodes hectoris	0.08	47	0.03	
Diretmus argenteus	0.08	6	0.03	
Kurozeumia leonis	0.07	2	0.02	
Nunobolites copei	0.05	2	0.02	
Raja sp., juvenile	0.04	4	0.01	
Avocettina acuticeps	0.04	4	0.01	
Lucigadus ori	0.04	8	0.01	
Cranchia scabra	0.04	2	0.01	
Leptocephalus	0.03	2	0.01	0
Symblophorus boops	0.03	2	0.01	
Teuthowenia richardsoni	0.02	2	0.01	
Hoplostethus cadenati	0.02	6	0.01	
Paracallionymus costatus	0.01	2	0.01	
Stereomastis sp.	0.01	2	0.00	0
Leptocephalus	0.01	2	0.00	
Diaphus sp.	0.01	2	0.00	0
Stereomastis sp.	0.01	2	0.00	
Oreosoma atlanticum, juvenile	0.01	2	0.00	
Phyllosoma	0.00	2	0.00	1103
Total	285.59		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1507  
 DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°43.50  
 start stop duration Lon E 16°34.63  
 TIME :04:16:18 04:48:25 32.1 (min) Purpose : 3  
 LOG : 1269.84 1271.69 1.9 Region : 6100  
 FDEPTH: 763 768 Gear cond.: 0  
 BDEPTH: 763 768 Validity : 0  
 Towing dir: 0° Wire out : 1850 m Speed : 3.5 kn  
 Sorted : 104 Total catch: 104.49 Catch/hour: 195.19

SPECIES		CATCH/HOUR		% OF TOT. C	SAMP
		weight	numbers		
Caelorinchus braueri		67.25	1431	34.45	
Allocyttus verrucosus		22.42	77	11.48	738
Centroscyllium fabricii		16.25	28	8.33	
Notacanthus sexspinus		12.33	56	6.32	
Merluccius paradoxus		11.77	9	6.03	737
Chaeceon macphersoni		8.71	121	4.98	
Apristurus saldanha		8.41	11	4.31	
Selachophidium guentheri		7.66	77	3.92	
Histioteuthis miranda, male		7.29	7	3.73	
Bathyrja smithii		6.91	2	3.54	
Nezumia sp.		4.97	161	2.55	
Diastobranthus capensis		2.99	11	1.53	
Hoplostethus atlanticus		2.90	11	1.48	739
Opiostheutis seasi		2.33	2	1.20	
Synaphobranchus kaupii		0.87	17	0.96	
Bathysaurus ferox		1.72	2	0.88	
P O L Y C H A E T A		1.49	0	0.77	
Lepidion capensis		1.42	6	0.73	
Avocettina sp.		0.95	22	0.49	
Megalocranchia sp.		0.79	0	0.40	
Kurozeumia leonis		0.47	4	0.24	
Ornithoteuthis antillarum		0.42	2	0.22	740
Starfish		0.30	106	0.16	
Myctophum sp.		0.30	19	0.16	
Simenchelys parasitica		0.26	7	0.13	
Sergia sp.		0.26	64	0.13	
Funchalia woodwardi		0.26	30	0.13	
Chauliodus sloani		0.26	7	0.13	
Coloconger cadenati		0.22	2	0.11	
Photichthys argenteus		0.21	4	0.11	
Lampantodes hectoris		0.16	2	0.08	
Epigonus sp.		0.16	2	0.08	
Parapagurus pilosimanus		0.11	4	0.06	
Raja leopardus, juvenile		0.10	6	0.05	
Lampantodes hectoris		0.09	56	0.05	0
Histioteuthis meleagroteuthis		0.08	2	0.04	
Bathophilus sp.		0.07	4	0.04	
Lycoteuthis lorigera		0.02	4	0.01	
Whelks		0.01	2	0.01	
Diaphus sp.		0.00	2	0.00	
Maurollicus muelleri		0.00	4	0.00	
Phyllosoma		0.00	4	0.00	1104
Total		195.19		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1508  
 DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°42.49  
 start stop duration Lon E 16°35.01  
 TIME :07:02:29 07:32:25 29.9 (min) Purpose : 3  
 LOG : 1282.79 1284.44 1.7 Region : 6100  
 FDEPTH: 695 691 Gear cond.: 0  
 BDEPTH: 695 691 Validity : 0  
 Towing dir: 0° Wire out : 1670 m Speed : 3.3 kn  
 Sorted : 203 Total catch: 202.97 Catch/hour: 406.90

SPECIES		CATCH/HOUR		% OF TOT. C	SAMP
		weight	numbers		
Caelorinchus braueri		70.16	23	24.14	
Notacanthus sexspinus		70.16	433	17.24	
Merluccius paradoxus		38.09	22	9.36	741
Allocyttus verrucosus		34.08	156	8.38	743

Histioteuthis miranda	28.07	20	6.90	
Chaeceon macphersoni	28.07	235	6.90	
Centroscyllium fabricii	20.65	22	5.07	
Nezumia sp.	15.24	180	3.74	
Hoplostethus atlanticus	14.03	40	3.45	744
Caelorinchus matama	14.03	40	3.45	
Diastobranthus capensis	9.02	16	2.22	
Lepidion capensis	5.01	14	1.23	
P O L Y C H A E T A	4.81	0	1.18	
Merluccius paradoxus	4.61	18	1.13	742
Sergia sp.	4.15	664	1.02	
Selachophidium guentheri	3.61	36	0.89	
Coryphaenoides macrolophus	2.38	2	0.58	
Apristurus saldanha	2.31	8	0.57	
Trachyscorpia eschmeyerii	2.08	4	0.51	745
Lophius vomerinus	2.00	2	0.49	
Myxine capensis	1.32	16	0.33	
Synaphobranchus kaupii	1.24	10	0.31	
Bathypolypus valdiviae	0.94	14	0.23	
Avocettina sp.	0.71	20	0.18	
Whelks	0.41	8	0.10	
Lycodes agulhensis	0.35	4	0.09	
Anemones, pink	0.19	2	0.05	
Simenchelys parasitica	0.17	2	0.04	
Myctophum sp.	0.16	8	0.04	
Aristostomias lunifer	0.15	2	0.04	
Lampantodes hectoris	0.14	76	0.03	
Histioteuthis sp.	0.12	2	0.03	
Chauliodus sloani	0.06	2	0.02	
G A S T R O P O D S	0.05	8	0.01	
Physiculus capensis	0.04	2	0.01	
Starfish	0.04	0	0.01	
Hoplostethus cadenati	0.04	2	0.01	
Symbolophorus boops	0.03	2	0.01	
Unidentified fish	0.03	2	0.01	
Merluccius paradoxus	0.02	4	0.01	746
Starfish	0.02	6	0.01	0
Lycoteuthis lorigera	0.01	2	0.00	
Abrialopsis gilchristi	0.00	2	0.00	
Total	406.90		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1509  
 DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°42.02  
 start stop duration Lon E 16°36.70  
 TIME :10:09:13 10:41:20 32.1 (min) Purpose : 3  
 LOG : 1296.45 1298.07 1.6 Region : 6100  
 FDEPTH: 590 627 Gear cond.: 0  
 BDEPTH: 590 627 Validity : 0  
 Towing dir: 0° Wire out : 1300 m Speed : 3.0 kn  
 Sorted : 196 Total catch: 195.65 Catch/hour: 365.48

SPECIES		CATCH/HOUR		% OF TOT. C	SAMP
		weight	numbers		
Notacanthus sexspinus		143.84	637	39.36	
Merluccius paradoxus		138.23	181	37.82	747
Histioteuthis miranda		18.68	13	5.11	
Caelorinchus braueri		16.81	400	4.60	
Raja leopardus		5.60	4	1.53	
Chaeceon macphersoni		5.60	82	1.53	
Helicolenus dactylopterus		5.29	49	1.45	751
Merluccius paradoxus		4.48	54	1.23	750
Lophius vomerinus		3.46	6	0.95	748
Lepidion capensis		3.18	28	0.87	
Sergia sp.		3.03	521	0.83	
P O L Y C H A E T A		2.95	0	0.81	
Torpedo nobiliana		2.80	2	0.77	
Anemones, pink		2.52	0	0.69	
Todarodes angolensis		1.87	4	0.51	749
Psychrolutes macrocephalus		1.44	9	0.39	
Etmopterus brachyurus		1.40	13	0.38	
Myxine capensis		1.12	15	0.31	
Bathypolypus valdiviae		0.75	11	0.20	
Raja confundens		0.75	2	0.20	
Nezumia sp.		0.32	7	0.09	
Raja leopardus, juvenile		0.30	9	0.08	
Avocettina sp.		0.16	7	0.04	
Selachophidium guentheri		0.12	2	0.03	
Histioteuthis meleagroteuthis		0.11	2	0.03	0
Whelks		0.10	2	0.03	
Lucigadus ori		0.06	7	0.02	
Starfish		0.06	11	0.02	
Physiculus capensis		0.05	2	0.01	
Nezumia sp.		0.05	2	0.01	0
Benguelia 'marek'		0.04	2	0.01	
Lampantodes sp.		0.04	19	0.01	
Symblophorus boops		0.04	2	0.01	
Lycoteuthis lorigera		0.04	7	0.01	
Myctophum sp.		0.04	2	0.01	
Merluccius paradoxus		0.03	4	0.01	752
Champsodon capensis		0.02	2	0.01	
Diaphus sp.		0.02	4	0.01	
Paracallionymus costatus		0.02	6	0.01	
Tripterygiopsis gilchristi		0.02	2	0.01	
Chauliodus sloani		0.02	2	0.00	
Starfish		0.01	4	0.00	0
Electrona rissø		0.01	2	0.00	
Chlorophthalmus sp.		0.01	2	0.00	
Hoplostethus mediterraneus		0.00	7	0.00	
Nemichthys sp.		0.00	2	0.00	
Argyropelecus sp.		0.00	2	0.00	
Total		365.48		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1510  
 DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°40.09  
 start stop duration Lon E 16°38.56  
 TIME :12:10:44 12:41:29 30.8 (min) Purpose : 3  
 LOG : 1305.06 1306.65 1.6 Region : 6100  
 FDEPTH: 475 478 Gear cond.: 0  
 BDEPTH: 475 478 Validity : 0  
 Towing dir: 0° Wire out : 1150 m Speed : 3.1 kn  
 Sorted : 580 Total catch: 580.05 Catch/hour: 1131.81

SPECIES		CATCH/HOUR		% OF TOT. C	SAMP
		weight	numbers		
Merluccius paradoxus		437.07	1500	38.62	754
Merluccius paradoxus		347.32	299	30.69	753
Notacanthus sexspinus		142.44	1056	12.59	
Caelorinchus simorhynchus		51.32	1387	4.53	
Genypterus capensis		30.24	8	2.67	755
Bassanago albescens		29.27	80	2.59	
Lophius vomerinus		27.35	14	2.41	757
Chaeceon macphersoni		21.46	246	1.90	
Helicolenus dactylopterus		16.59	139	1.47	756
Starfish		16.39	0	1.45	
Myxine capensis		3.16	47	0.28	
Etmopterus brachyurus		2.93	20	0.26	
Whelks		1.07	20	0.09	
Epigonus sp.		0.55	18	0.05	
Bathypolypus valdiviae		0.43	10	0.04	
Stereomastis sp.		0.38	39	0.03	
Holohalaelurus regani		0.37	2	0.03	
Raja leopardus		0.33	6	0.03	
Hoplostethus mediterraneus		0.30	8	0.03	

Anemones, white	0.27	4	0.02	
Starfish	0.23	14	0.02	0
Paracallionymus costatus	0.20	37	0.02	
Sergia sp.	0.20	4	0.02	
Merluccius paradoxus	0.18	31	0.02	758
Physiculus capensis	0.16	8	0.01	
G A S T R O P O D S	0.13	14	0.01	
Luciogadus ori	0.13	144	0.01	
Psychrolutes macrocephalus	0.04	2	0.00	
Symbolophorus boops	0.04	2	0.00	
Chascanopsetta lugubris	0.03	2	0.00	
Munidopsis sp.	0.03	4	0.00	
Champsodon capensis	0.03	2	0.00	
Rossia enigmatica	0.02	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Tripterophycis gilchristi	0.01	2	0.00	
Chlorophthalmus agassizi	0.01	2	0.00	
Total	1130.67		99.90	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1511  
 DATE :06.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°37.46  
 start stop duration Lon E 16°46.07  
 TIME :15:23:34 15:52:21 28.8 (min) Purpose : 3  
 LOG : 1319.80 1321.23 1.4 Region : 6100  
 FDEPTH: 392 392 Gear cond.: 0  
 BDEPTH: 395 392 Validity : 0  
 Towing dir: 0° Wire out : 940 m Speed : 3.0 kn  
 Sorted : 86 Total catch: 86.10 Catch/hour: 179.44

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	54.19	263	30.20	762
Caelorinchus simorhynchus	35.43	421	19.74	
Starfish	18.76	0	10.45	
Merluccius paradoxus	18.13	17	10.10	760
Notacanthus sexspinis	10.00	50	5.57	
Helicolenus dactylopterus	9.17	0	5.11	
Lophius vomerinus	8.75	6	4.88	761
Genypteris capensis	6.88	2	3.83	759
Myxine capensis	6.25	0	3.48	
Bassanago albescens	5.21	8	2.90	
Holohalaelurus regani	1.44	2	0.80	
Etmopterus brachyurus	1.25	6	0.70	
Heart urchin	1.08	110	0.60	
Lampanyctodes hectoris	0.92	311	0.51	
Luciogadus ori	0.31	46	0.17	
Bathypolypus valdiviae	0.24	6	0.14	
Merluccius paradoxus	0.19	42	0.11	764
Paracallionymus costatus	0.16	40	0.09	
Starfish	0.15	15	0.09	
Todaropsis eblanae	0.11	2	0.06	766
Stereomastis sp.	0.11	13	0.06	
Mursia cristimanus	0.10	10	0.06	
Todaropsis eblanae	0.09	2	0.05	765
Parapagurus dimorphus	0.09	6	0.05	
Symbolophorus boops	0.08	4	0.04	
Anemones, pink	0.07	6	0.04	
CYPRAEIDAE (Bulia)	0.06	25	0.03	
Haliporoides triarthrus	0.04	4	0.02	
Physiculus capensis	0.03	4	0.02	
G A S T R O P O D S	0.03	8	0.02	
Tripterophycis gilchristi	0.02	2	0.01	
Rossia enigmatica	0.02	2	0.01	
Sea cucumber	0.02	2	0.01	
Hoplostethus mediterraneus	0.02	8	0.01	
Epigonus sp.	0.01	2	0.01	
Sergia sp.	0.01	4	0.01	
Pterygosquilla armata capensis	0.01	2	0.00	
Total	179.44		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1512  
 DATE :07.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°34.51  
 start stop duration Lon E 16°56.82  
 TIME :04:30:05 05:00:04 30.0 (min) Purpose : 3  
 LOG : 1357.44 1359.00 1.6 Region : 6100  
 FDEPTH: 317 319 Gear cond.: 0  
 BDEPTH: 317 319 Validity : 0  
 Towing dir: 0° Wire out : 850 m Speed : 3.1 kn  
 Sorted : 130 Total catch: 365.63 Catch/hour: 731.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	276.09	1681	37.74	771
Merluccius paradoxus	132.04	136	18.05	763
Parapagurus dimorphus	132.04	14671	18.05	
Caelorinchus simorhynchus	94.18	1685	13.13	
Notacanthus sexspinis	28.81	288	3.94	
Merluccius capensis	12.00	6	1.64	768
Starfish	7.24	60	0.99	0
Helicolenus dactylopterus	7.20	54	0.98	769
Starfish	6.96	0	0.95	
Lophius vomerinus	6.60	6	0.90	770
Holohalaelurus regani	5.00	14	0.68	
Emmelichthys nitidus	4.18	12	0.57	
Lampanyctodes hectoris	2.42	1010	0.33	
Whelks	2.23	60	0.31	
Paracallionymus costatus	2.09	276	0.29	
Sergia australis	1.54	36	0.21	
Giant bullia gastropod	1.42	84	0.19	
Todaropsis eblanae	1.20	12	0.16	772
Genypteris capensis	1.00	4	0.14	767
Hoplostethus mediterraneus	0.97	12	0.13	
Maurollicus muelleri	0.95	862	0.13	
Merluccius paradoxus	0.77	156	0.11	773
Pterygosquilla armata capensis	0.41	48	0.06	
Tripterophycis gilchristi	0.38	12	0.05	
Mursia cristimanus	0.37	60	0.05	
Luciogadus ori	0.28	48	0.04	
Rochinia sp.	0.28	12	0.04	
Exodromidia sp.	0.20	12	0.03	
CYPRAEIDAE (Bulia)	0.20	48	0.03	
Raja confundens	0.20	2	0.03	
Epigonus sp.	0.19	36	0.03	
Symbolophorus boops	0.16	12	0.02	
Lycoteuthis lorigera	0.02	12	0.00	
Total	731.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1513  
 DATE :07.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°28.29  
 start stop duration Lon E 17°3.51  
 TIME :08:25:31 08:55:48 30.3 (min) Purpose : 3  
 LOG : 1371.87 1373.38 1.5 Region : 6100  
 FDEPTH: 292 293 Gear cond.: 0  
 BDEPTH: 292 293 Validity : 0  
 Towing dir: 0° Wire out : 700 m Speed : 3.0 kn  
 Sorted : 254 Total catch: 1215.14 Catch/hour: 2407.01

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1596.57	11053	66.33	774
Caelorinchus simorhynchus	338.73	6913	14.07	

Parapagurus dimorphus	176.30	19163	7.32	
Merluccius paradoxus	89.14	105	3.70	778
Genypteris capensis	31.69	18	1.32	776
Lampanyctodes hectoris	25.57	6729	1.06	
Paracallionymus costatus	20.03	1854	0.83	
Malacocephalus laevis	16.92	81	0.70	
Lophius vomerinus	15.85	14	0.66	775
Helicolenus dactylopterus	13.54	244	0.56	779
Merluccius capensis	12.88	12	0.53	777
Holohalaelurus regani	10.30	28	0.43	
Todaropsis eblanae	9.29	81	0.39	783
Raja wallacei	7.92	2	0.33	
Todaropsis eblanae	7.24	67	0.30	782
Raja straeleni	5.94	2	0.25	
Squalus mitsukurii	5.94	4	0.25	
Starfish	4.67	0	0.19	
Trachurus capensis	3.64	14	0.15	781
Symbolophorus boops	3.04	162	0.13	
Zeus capensis	2.93	14	0.12	784
Whelks	1.99	67	0.08	
Pterygosquilla armata capensis	1.72	176	0.07	
Sergia hieronis	1.57	28	0.06	780
Merluccius paradoxus	1.46	176	0.06	
Giant bullia gastropod	0.65	28	0.03	
Rochinia sp.	0.52	28	0.02	
Rossia enigmatica	0.35	14	0.01	
Exodromidia sp.	0.20	14	0.01	
Physiculus capensis	0.11	14	0.00	
Mursia cristimanus	0.11	14	0.00	
CYPRAEIDAE (Bulia)	0.10	14	0.00	
Maurollicus muelleri	0.08	67	0.00	
Notopogon macrosolen	0.04	14	0.00	
Total	2407.01		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1514  
 DATE :07.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°22.12  
 start stop duration Lon E 17°17.47  
 TIME :11:54:17 12:24:56 30.7 (min) Purpose : 3  
 LOG : 1389.84 1391.34 1.5 Region : 6100  
 FDEPTH: 240 237 Gear cond.: 0  
 BDEPTH: 240 237 Validity : 0  
 Towing dir: 0° Wire out : 600 m Speed : 2.9 kn  
 Sorted : 462 Total catch: 462.46 Catch/hour: 905.31

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	387.60	5058	42.81	786
Merluccius capensis	101.79	188	11.24	787
Etrumeus whiteheadi	88.09	1554	9.73	
Thyrasites atun	84.18	33	9.30	785
Parapagurus dimorphus	43.07	2609	4.76	
Galeorhinus galeus, female	32.28	2	2.68	
Holohalaelurus regani	31.32	0	3.46	
Lophius vomerinus	26.62	70	2.94	790
Caelorinchus simorhynchus	21.53	296	2.38	
Paracallionymus costatus	14.68	1175	1.62	
Brama brama	14.49	10	1.60	788
Zeus capensis	10.57	100	1.17	789
Mustelus palumbes	9.20	2	1.02	
Raja straeleni	7.63	8	0.84	
Helicolenus dactylopterus	6.85	194	0.76	793
Trachurus capensis	3.52	31	0.39	791
Heart urchin	3.35	143	0.37	
Callorhynchus capensis	3.13	2	0.35	
Todaropsis eblanae	2.86	37	0.32	795
Genypteris capensis	2.74	16	0.30	792
Todaropsis eblanae	2.21	31	0.24	796
Aequorea forskalea	1.96	0	0.22	
Chelidonichthys capensis	1.37	2	0.15	794
Starfish	0.62	35	0.07	
Lepidopus caudatus	0.53	10	0.06	
Whelks	0.45	14	0.05	
Congiopodus spinifer	0.31	4	0.03	
Mursia cristimanus	0.31	18	0.03	
Giant bullia gastropod	0.22	6	0.02	
Cynoglossus zanzibarensis	0.22	2	0.02	798
Maurollicus muelleri	0.20	0	0.02	
Malacocephalus laevis	0.14	2	0.01	
Merluccius paradoxus	0.11	14	0.01	797
Rossia enigmatica	0.05	4	0.01	
Pterygosquilla armata capensis	0.05	6	0.01	
Exodromidia sp.	0.04	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	905.31		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1515  
 DATE :07.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°7.41  
 start stop duration Lon E 16°59.64  
 TIME :15:40:25 16:10:10 29.8 (min) Purpose : 3  
 LOG : 1412.17 1413.53 1.4 Region : 6100  
 FDEPTH: 266 268 Gear cond.: 0  
 BDEPTH: 266 268 Validity : 0  
 Towing dir: 0° Wire out : 640 m Speed : 2.8 kn  
 Sorted : 185 Total catch: 764.83 Catch/hour: 1542.51

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	919.66	9340	59.62	799
Merluccius capensis	225.68	278	14.63	805
Lophius vomerinus	66.76	133	4.33	800
Caelorinchus simorhynchus	58.49	1218	3.79	
Merluccius paradoxus	44.37	93	2.88	804
Raja straeleni	35.50	16	2.30	
Paracallionymus costatus	33.68	2866	2.18	
Holohalaelurus regani	33.48	184	2.17	
Helicolenus dactylopterus	28.42	577	1.84	802
Lampanyctodes hectoris	19.46	5560	1.26	
Malacocephalus laevis	14.88	50	0.96	
Raja wallacei	12.10	8	0.78	
Zeus capensis	11.90	34	0.77	801
Mustelus palumbes	10.49	8	0.68	
Todaropsis eblanae	7.44	75	0.48	808
Trachurus capensis	7.28	50	0.47	806
Octopus sp.	2.44	8	0.16	
Todaropsis eblanae	2.26	24	0.15	807
Genypteris capensis	2.10	16	0.14	803
Starfish	1.71	0	0.11	0
Starfish	1.69	8	0.11	
Echinus gilchristi ?	0.53	8	0.03	
Parapagurus dimorphus	0.50	75	0.03	
Sergia hieronis	0.48	8	0.03	
Pterygosquilla armata capensis	0.32	50	0.02	
Mursia cristimanus	0.18	16	0.01	
Psychrolutes macrocephalus	0.06	8	0.00	
Rossia enigmatica	0.05	8	0.00	
Rochinia sp.	0.02	8	0.00	
Total	1541.94		99.96	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1596.57	11053	66.33	774
Caelorinchus simorhynchus	338.73	6913	14.07	

TIME :03:57:26 04:28:04 30.6 (min)  
 LOG : 1451.10 1452.62 1.5  
 FDEPTH: 204 199  
 BDEPTH: 204 199  
 Towing dir: 0° Wire out : 500 m  
 Sorted : 123 Total catch: 279.82

Purpose : 3  
 Region : 6100  
 Gear cond.: 0  
 Validity : 0  
 Speed : 3.0 kn  
 Catch/hour: 548.30

FDEPTH: 123 124  
 BDEPTH: 123 124  
 Towing dir: 0° Wire out : 330 m  
 Sorted : 368 Total catch: 647.60

Gear cond.: 0  
 Validity : 0  
 Speed : 2.9 kn  
 Catch/hour: 1297.36

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	293.93	5428	53.61	813
Merluccius capensis	43.11	96	7.86	811
Aequorea forskalea	38.41	0	7.00	
Heart urchin	27.43	807	5.00	
Lophius vomerinus	22.53	35	4.11	810
Paracallionymus costatus	21.26	2310	3.88	
Holohalaelurus regani	19.60	298	3.57	
Caelorhynchus simorhynchus	13.72	572	2.50	
Helicolenus dactylopterus	13.72	570	2.50	814
Sepia australis	13.52	829	2.47	
Merluccius paradoxus	8.82	24	1.61	812
Raja straeleni	5.88	4	1.07	
Pterygosquilla armata capensis	4.41	376	0.80	
Genypteris capensis	4.21	33	0.79	809
Cynoglossus zanzibarensis	4.11	51	0.75	815
Todaropsis eblanae	2.41	49	0.44	817
Todaropsis eblanae	2.12	35	0.39	818
Starfish	1.96	186	0.36	
Lampanyctodes hectoris	1.62	384	0.30	
Merluccius paradoxus	1.45	186	0.26	816
Exodromidia sp.	1.29	53	0.24	
Maurolicus muelleri	0.55	137	0.10	
Parapagurus dimorphus	0.49	55	0.09	
Whelks	0.45	0	0.08	
Congiopodus spinifer	0.43	8	0.08	
Mursia cristimanus	0.43	55	0.08	
Sepia hieronis	0.25	8	0.05	
Physiculus capensis	0.07	8	0.01	
Solenocera africana	0.03	8	0.01	
<b>Total</b>	<b>548.30</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1517  
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°15.44  
 start stop duration Lon E 17°27.46  
 TIME :07:23:45 07:54:35 30.8 (min) Purpose : 3  
 LOG : 1473.85 1475.30 1.5 Region : 6100  
 FDEPTH: 183 179 Gear cond.: 0  
 BDEPTH: 183 179 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 2.8 kn  
 Sorted : 78 Total catch: 170.06 Catch/hour: 330.86

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	73.93	2016	22.34	825
Lampanyctodes hectoris	51.36	2335	15.52	
Paracallionymus costatus	47.47	4996	14.35	
Thyrssites atun	29.18	12	8.82	819
Merluccius capensis	23.35	78	7.06	824
Lophius vomerinus	18.48	62	5.59	821
Sepia australis	13.54	947	4.09	
Parapagurus dimorphus	11.67	1167	3.53	
Chelidonichthys capensis	11.67	27	3.53	820
Todaropsis eblanae	10.12	226	3.06	828
Helicolenus dactylopterus	9.42	786	2.85	827
Brama brama	7.78	4	2.35	822
Pterygosquilla armata capensis	4.82	459	1.46	
Etrumeus whiteheadi	3.66	62	1.11	
Genypteris capensis	2.53	19	0.76	823
Caelorhynchus simorhynchus	2.33	78	0.71	
Cynoglossus zanzibarensis	2.26	31	0.68	829
Zeus capensis	1.87	23	0.56	826
Merluccius paradoxus	1.44	210	0.44	830
Starfish	1.21	117	0.37	
Mursia cristimanus	0.92	62	0.28	
Exodromidia sp.	0.47	16	0.14	
Heart urchin	0.46	459	0.14	
Sepia hieronis	0.34	8	0.10	
Congiopodus spinifer	0.21	8	0.06	
Champsodon capensis	0.15	8	0.04	
Lepidopus caudatus	0.09	8	0.03	
Holohalaelurus regani	0.07	8	0.02	
B I V A L V E S	0.05	8	0.02	
<b>Total</b>	<b>330.86</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1518  
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°10.12  
 start stop duration Lon E 17°43.45  
 TIME :09:59:57 10:29:54 30.0 (min) Purpose : 3  
 LOG : 1490.48 1491.91 1.4 Region : 6100  
 FDEPTH: 155 152 Gear cond.: 0  
 BDEPTH: 155 152 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 2.9 kn  
 Sorted : 61 Total catch: 168.00 Catch/hour: 336.56

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	162.27	19090	48.21	
Merluccius paradoxus	66.11	2680	19.64	834
Lampanyctodes hectoris	36.06	11824	10.71	
Aequorea forskalea	16.17	0	4.80	
Sepia australis	12.86	709	3.82	
Merluccius capensis	10.42	28	3.10	831
Helicolenus dactylopterus	8.05	637	2.39	836
Paracallionymus costatus	6.95	787	2.04	
PORIFERA (Sponges)	6.01	0	1.79	
Todaropsis eblanae	3.97	138	1.18	837
Genypteris capensis	2.00	18	0.60	832
Giant bullia gastropod	1.10	36	0.33	
Merluccius paradoxus	1.00	6	0.30	835
Cynoglossus zanzibarensis	0.60	6	0.18	833
Exodromidia sp.	0.60	36	0.18	
Starfish	0.52	60	0.16	0
Mursia cristimanus	0.49	30	0.15	
Lepidopus caudatus	0.34	36	0.10	
Starfish	0.25	12	0.07	
Caelorhynchus simorhynchus	0.21	12	0.06	
Merluccius paradoxus	0.18	24	0.05	838
Bathynectes piperitus	0.17	6	0.05	
Oreosoma atlanticum, juvenile	0.10	6	0.03	
Parapagurus dimorphus	0.07	12	0.02	839
Todarodes angolensis	0.07	6	0.02	
Sepia hieronis	0.05	6	0.01	
Solenocera africana	0.02	6	0.01	
Heart urchin	0.01	6	0.00	
Pterygioteuthis gemmata	0.01	6	0.00	
<b>Total</b>	<b>336.56</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1519  
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°3.19  
 start stop duration Lon E 17°55.24  
 TIME :12:18:58 12:48:55 30.0 (min) Purpose : 3  
 LOG : 1504.96 1506.39 1.4 Region : 6100

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
PORIFERA (Sponges)	504.84	0	38.91	
Lampanyctodes hectoris	460.77	153590	35.52	
Pterygosquilla armata capensis	73.12	4063	5.64	
Merluccius capensis	68.11	313	5.25	841
Thyrssites atun	42.07	44	3.24	844
Chelidonichthys capensis	40.07	138	3.09	843
Merluccius paradoxus	27.25	1362	2.10	851
Todaropsis eblanae	22.24	841	1.71	850
Aequorea forskalea	13.02	0	1.00	
Exodromidia sp.	10.82	761	0.83	
Lophius vomerinus	8.01	22	0.62	845
Brama brama	6.21	4	0.48	847
Genypteris capensis	5.01	50	0.39	848
Whelks	4.89	220	0.38	
Sufflogobius bibarbatus	2.64	160	0.20	
Starfish	2.50	501	0.19	
Merluccius paradoxus	1.54	220	0.12	852
Helicolenus dactylopterus	0.88	80	0.07	853
Paracallionymus costatus	0.74	120	0.06	
Cynoglossus zanzibarensis	0.56	8	0.04	849
Caelorhynchus simorhynchus	0.54	40	0.04	
Janusalandii	0.46	4	0.04	840
Trachurus capensis	0.40	4	0.03	846
Lolligoncula mercatoris	0.34	120	0.03	
Janusalandii	0.20	2	0.02	842
Lepidopus caudatus	0.12	20	0.01	
<b>Total</b>	<b>1297.36</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1520  
 DATE :08.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 31°58.26  
 start stop duration Lon E 18°6.10  
 TIME :16:34:49 17:04:05 29.3 (min) Purpose : 3  
 LOG : 1520.21 1521.58 1.4 Region : 6100  
 FDEPTH: 107 107 Gear cond.: 0  
 BDEPTH: 107 107 Validity : 0  
 Towing dir: 0° Wire out : 280 m Speed : 2.8 kn  
 Sorted : 84 Total catch: 215.81 Catch/hour: 442.39

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Pterygosquilla armata capensis	270.58	16399	61.16	
Sufflogobius bibarbatus	86.91	0	19.65	
Merluccius capensis	30.95	383	7.00	854
Chelidonichthys capensis	29.72	127	6.72	855
Austroglossus microlepis	12.71	158	2.87	856
PORIFERA (Sponges)	4.10	0	0.93	
Merluccius capensis	1.64	2	0.37	857
Callorhynchus capensis	1.58	2	0.36	
Todaropsis eblanae	1.39	66	0.32	859
Lepidopus caudatus	1.01	57	0.23	
Merluccius capensis	0.64	59	0.14	858
Giant bullia gastropod	0.61	41	0.14	
Holohalaelurus regani	0.52	8	0.12	
Lolligoncula mercatoris	0.02	16	0.01	
<b>Total</b>	<b>442.39</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1521  
 DATE :08.02.2008 GEAR TYPE: PT NO: 7 POSITION:Lat S 32°1.90  
 start stop duration Lon E 18°7.20  
 TIME :18:55:00 19:04:41 9.5 (min) Purpose : 1  
 LOG : 1532.42 1532.95 0.5 Region : 6100  
 FDEPTH: 20 20 Gear cond.: 0  
 BDEPTH: 105 106 Validity : 0  
 Towing dir: 0° Wire out : 130 m Speed : 3.0 kn  
 Sorted : 100 Total catch: 99.78 Catch/hour: 630.16

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	600.00	0	95.21	
Thyrssites atun	1.05	0	3.01	
Pterygosquilla armata capensis	6.32	0	1.00	
Sufflogobius bibarbatus	3.16	0	0.50	
Todaropsis eblanae, juvenile	0.63	0	0.10	
Maurolicus muelleri	0.63	0	0.10	
Merluccius capensis	0.47	38	0.08	865
<b>Total</b>	<b>630.16</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1522  
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°22.82  
 start stop duration Lon E 18°11.34  
 TIME :04:04:52 04:29:56 25.1 (min) Purpose : 3  
 LOG : 1565.27 1566.40 1.1 Region : 6100  
 FDEPTH: 76 73 Gear cond.: 0  
 BDEPTH: 76 73 Validity : 0  
 Towing dir: 0° Wire out : 250 m Speed : 2.7 kn  
 Sorted : 338 Total catch: 338.35 Catch/hour: 809.76

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chrysaora sp.	737.14	0	91.03	
Giant bullia gastropod	50.26	1417	6.21	
Pterygosquilla armata capensis	7.75	1410	0.96	
Caridae white	7.18	1967	0.89	
Sufflogobius bibarbatus	6.92	373	0.85	
Austroglossus microlepis	0.39	2	0.05	866
Exodromidia sp.	0.09	5	0.01	
Engraulis capensis	0.03	5	0.00	
<b>Total</b>	<b>809.76</b>		<b>100.00</b>	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1523  
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°23.94  
 start stop duration Lon E 18°3.97  
 TIME :06:07:01 06:24:19 17.3 (min) Purpose : 3  
 LOG : 1576.17 1576.93 0.8 Region : 6100  
 FDEPTH: 96 97 Gear cond.: 0  
 BDEPTH: 96 97 Validity : 0  
 Towing dir: 0° Wire out : 280 m Speed : 2.6 kn  
 Sorted : 169 Total catch: 722.46 Catch/hour: 2505.65

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
P O L Y C H A E T A	856.65	0	34.19	
Pterygosquilla armata capensis	541.04	37314	21.59	
Sufflogobius bibarbatus	450.87	21992	17.99	
Giant bullia gastropod	405.78	14237	16.19	
Chrysaora sp.	69.36	0	2.77	
Aequorea forskalea	65.90	0	2.63	
Austroglossus microlepis	38.15	333	1.52	861
Callorhynchus capensis	31.21	62	1.25	
Merluccius capensis	22.99	406	0.92	863
Chelidonichthys capensis	14.88	90	0.59	862
Todaropsis eblanae	4.46	225	0.18	864

Genypterus capensis 1.73 3 0.07 860  
 Exodromidia sp. 1.58 90 0.06  
 Mursia cristimanus 0.68 45 0.03  
 ANTHOZOA (Sea anemones) 0.36 45 0.01  
 Total 2505.65 100.00

DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°4.18  
 start stop duration Lon E 17°31.14  
 TIME :16:24:28 16:54:21 29.9 (min) Purpose : 3  
 LOG : 1641.82 1643.39 1.6 Region : 6100  
 FDEPTH: 336 345 Gear cond.: 0  
 BDEPTH: 336 345 Validity : 0  
 Towing dir: 0° Wire out : 820 m Speed : 3.2 kn  
 Sorted : 275 Total catch: 303.36 Catch/hour: 609.16

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1524  
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°32.61  
 start stop duration Lon E 17°46.02  
 TIME :09:09:37 09:39:06 29.5 (min) Purpose : 3  
 LOG : 1597.44 1598.86 1.4 Region : 6100  
 FDEPTH: 153 159 Gear cond.: 0  
 BDEPTH: 153 159 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 2.9 kn  
 Sorted : 100 Total catch: 258.43 Catch/hour: 525.79

SPECIES	CATCH/HOUR	weight numbers	% OF TOT. C	SAMP
Merluccius paradoxus	212.85	1110	34.94	901
Caelorinchus simorhynchus	130.52	1735	21.43	
Genypterus capensis	106.43	30	17.47	900
Helicolenus dactylopterus	40.16	414	6.59	904
PORIFERA (Sponges)	30.12	0	4.94	
Parapagurus dimorphus	26.51	4819	4.35	
Whelks	9.95	554	1.63	
Todaropsis eblanae	9.40	112	1.54	907
Octopus magnificus	6.83	2	1.12	
Todaropsis eblanae	6.51	153	1.07	906
Rochinia sp.	5.74	303	0.94	
Callorhynchus capensis	4.02	6	0.66	
Starfish	3.07	0	0.50	0
Parapagurus pilosimanus	2.89	112	0.47	
Lophius vomerinus	2.41	2	0.40	903
Starfish	2.15	20	0.35	
Mursia cristimanus	2.05	249	0.34	
Merluccius paradoxus	1.29	169	0.21	909
Cruriraja parcomaculata	1.00	2	0.16	
Exodromidia sp.	0.95	64	0.16	
Zeus capensis	0.86	2	0.14	902
Chelidonichthys capensis	0.78	2	0.13	908
Rossia enigmatica	0.49	16	0.08	
Sepia hieronis	0.42	8	0.07	
Lampanyctodes hectoris	0.42	0	0.07	
Anemones, pink	0.39	0	0.06	
Trachurus capensis	0.32	2	0.05	905
Anemones, white	0.20	2	0.03	
Sepia sp.	0.15	28	0.03	
Sepia sp.	0.09	8	0.01	0
Epigonus sp.	0.06	4	0.01	
Maurolucius muelleri	0.04	0	0.01	
Lucigadus ori	0.03	4	0.01	
Bathypolypus valdiviae	0.03	4	0.00	
Solenocera africana	0.03	8	0.00	
C R A B S, juvenile	0.01	4	0.00	
Total	609.16	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1525  
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°39.37  
 start stop duration Lon E 17°36.88  
 TIME :11:30:10 12:00:00 29.8 (min) Purpose : 3  
 LOG : 1611.45 1613.09 1.6 Region : 6100  
 FDEPTH: 233 233 Gear cond.: 0  
 BDEPTH: 233 233 Validity : 0  
 Towing dir: 0° Wire out : 550 m Speed : 3.3 kn  
 Sorted : 195 Total catch: 257.90 Catch/hour: 518.57

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1528  
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°12.24  
 start stop duration Lon E 17°17.93  
 TIME :04:39:39 05:10:10 30.5 (min) Purpose : 3  
 LOG : 1705.16 1706.64 1.5 Region : 6100  
 FDEPTH: 397 407 Gear cond.: 0  
 BDEPTH: 397 407 Validity : 0  
 Towing dir: 0° Wire out : 890 m Speed : 3.0 kn  
 Sorted : 419 Total catch: 419.12 Catch/hour: 824.49

SPECIES	CATCH/HOUR	weight numbers	% OF TOT. C	SAMP
Merluccius paradoxus	301.61	2451	58.16	878
Lampanyctodes hectoris	112.60	45959	21.71	
Parapagurus dimorphus	43.83	3507	8.45	
Caelorinchus simorhynchus	26.14	629	5.04	
Aegoreia forskalea	12.55	0	2.42	
Callorhynchus capensis	10.05	8	1.94	
Paracallionymus costatus	8.93	1116	1.72	
Helicolenus dactylopterus	8.04	579	1.55	886
Maurolucius muelleri	6.84	0	1.32	
Zeus capensis	5.23	62	1.01	879
Raja straeleni	4.02	2	0.78	
Lophius vomerinus	3.22	2	0.62	881
Merluccius capensis	2.01	2	0.39	885
Chelidonichthys capensis	1.81	4	0.35	880
Todaropsis eblanae	1.66	40	0.32	887
Helicolenus dactylopterus	1.29	24	0.25	
Genypterus capensis	1.23	2	0.24	884
Merluccius paradoxus	1.01	2	0.19	882
Mursia cristimanus	0.88	72	0.17	
Exodromidia sp.	0.64	64	0.12	
Sepia australis	0.42	24	0.08	
Trachurus capensis	0.32	2	0.06	883
Jesus lalandii	0.23	2	0.04	877
Solenocera africana	0.10	16	0.02	
Lolligoncula mercatoris	0.07	24	0.01	
Pterygosquilla armata capensis	0.05	8	0.01	
Total	554.76	106.98		

SPECIES	CATCH/HOUR	weight numbers	% OF TOT. C	SAMP
Merluccius paradoxus	660.98	2465	80.17	910
Caelorinchus simorhynchus	92.46	1157	11.21	
Merluccius paradoxus	23.61	20	2.86	911
Helicolenus dactylopterus	21.64	138	2.62	914
Bassanago albescens	5.90	12	0.72	
Zeus capensis	5.82	12	0.71	913
Rochinia sp.	3.25	270	0.39	
Parapagurus dimorphus	3.15	655	0.38	
Brama brama	2.95	2	0.36	
Todaropsis eblanae	1.36	12	0.16	916
Todaropsis eblanae	0.83	8	0.10	915
Paracallionymus costatus	0.72	94	0.09	
Rossia enigmatica	0.52	16	0.06	
Whelks	0.28	12	0.03	
Parapagurus pilosimanus	0.26	12	0.03	
Starfish	0.16	0	0.02	0
Lucigadus ori	0.15	18	0.02	
Mursia cristimanus	0.14	16	0.02	
Gonorhynchus gonorhynchus	0.09	2	0.01	
Starfish	0.05	2	0.01	
Exodromidia sp.	0.04	8	0.01	
Diaphus sp.	0.03	2	0.00	
Shrimps, small, non comm.	0.03	12	0.00	
Lampanyctodes hectoris	0.02	8	0.00	
Champsodon capensis	0.02	6	0.00	
Physiculus capensis	0.01	2	0.00	
CYPRIDAE (Bulla)	0.01	4	0.00	
Bathypolypus valdiviae	0.01	2	0.00	
Merluccius paradoxus	0.01	2	0.00	917
Maurolucius muelleri	0.01	4	0.00	
Small crabs	0.00	2	0.00	
Sepia sp. New SA	0.00	2	0.00	
Argyropelecus aculeatus	0.00	2	0.00	
Total	824.49	100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1526  
 DATE :09.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 32°53.92  
 start stop duration Lon E 17°41.93  
 TIME :13:54:34 14:26:37 32.1 (min) Purpose : 3  
 LOG : 1626.81 1628.72 1.9 Region : 6100  
 FDEPTH: 163 163 Gear cond.: 0  
 BDEPTH: 163 163 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 3.6 kn  
 Sorted : 561 Total catch: 631.22 Catch/hour: 1181.70

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1529  
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°15.43  
 start stop duration Lon E 17°15.62  
 TIME :06:42:20 07:12:08 29.8 (min) Purpose : 3  
 LOG : 1712.76 1714.35 1.6 Region : 6100  
 FDEPTH: 465 441 Gear cond.: 0  
 BDEPTH: 465 441 Validity : 0  
 Towing dir: 0° Wire out : 1100 m Speed : 3.2 kn  
 Sorted : 1187 Total catch: 1186.62 Catch/hour: 2389.16

SPECIES	CATCH/HOUR	weight numbers	% OF TOT. C	SAMP
Merluccius paradoxus	314.51	1554	26.61	892
Pterygosquilla armata capensis	196.57	16381	16.63	
Chelidonichthys capensis	190.95	541	16.16	888
Merluccius capensis	172.23	1455	14.57	891
Callorhynchus capensis	108.58	62	9.19	
Genypterus capensis	69.27	105	5.86	889
Raja alba	34.63	4	2.93	
Lophius vomerinus	14.98	49	1.27	890
Todaropsis eblanae	13.73	728	1.16	893
Lampanyctodes hectoris	12.97	4055	1.10	
Aegoreia forskalea	10.30	0	0.87	
Helicolenus dactylopterus	8.75	446	0.74	894
Solenocera africana	8.57	1715	0.73	
Sepia australis	5.02	296	0.42	
Paracallionymus costatus	4.36	970	0.37	
Merluccius paradoxus	2.95	371	0.25	896
Trachurus capensis	2.10	11	0.18	895
Whelks	1.93	54	0.16	
Physiculus capensis	1.68	258	0.14	
Merluccius paradoxus	1.65	107	0.14	897
Starfish	1.61	217	0.14	
Austroglossus microlepis	1.35	4	0.11	899
Exodromidia sp.	1.24	86	0.10	
Caelorinchus simorhynchus	1.16	4	0.10	
Raja straeleni	0.86	4	0.07	
Ophichthus bennettai	0.75	4	0.06	
Sepia hieronis	0.55	13	0.05	
Lepidopus caudatus	0.49	4	0.04	
Lolligoncula mercatoris	0.40	152	0.03	
Mursia cristimanus	0.37	28	0.03	
Gonorhynchus gonorhynchus	0.34	4	0.03	
Parapagurus dimorphus	0.31	99	0.03	
Cynoglossus zanzibarensis	0.14	4	0.01	898
Sufflogobius bibarbatatus	0.03	4	0.00	
Total	1185.34	100.31		

SPECIES	CATCH/HOUR	weight numbers	% OF TOT. C	SAMP
Merluccius paradoxus	1568.46	4659	65.65	918
Bassanago albescens	269.80	296	11.29	
Helicolenus dactylopterus	267.79	2364	11.21	920
Merluccius paradoxus	126.85	121	5.32	919
Caelorinchus simorhynchus	122.82	1411	5.14	
Genypterus capensis	8.05	2	0.34	921
Gorgonians	6.04	0	0.25	
Notacanthus sexspinis	4.91	14	0.21	
Parapagurus pilosimanus	3.54	197	0.15	
Whelks	2.82	151	0.12	
Coryphaenoides CF hextii	1.58	2	0.07	
Anemones, white	1.43	20	0.06	
Todaropsis eblanae	1.09	6	0.05	922
Starfish	1.04	26	0.04	
Lucigadus ori	0.46	52	0.02	
Ophichthus bennettai	0.42	2	0.02	
Rochinia sp.	0.42	42	0.02	
Starfish	0.29	14	0.01	0
Shrimps, small, non comm.	0.27	79	0.01	
Tripterothyris gilchristi	0.23	14	0.01	
Rossia enigmatica	0.21	0	0.01	
Tripterothyris gilchristi	0.16	8	0.01	0
Paracallionymus costatus	0.09	22	0.00	
Stereomastis sp.	0.09	10	0.00	
Sepia sp.	0.06	8	0.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1527

Funchalia woodwardi 0.04 2 0.00  
 Caelorinchus braueri 0.04 4 0.00  
 Electrona risso 0.02 2 0.00  
 Lampanyctodes hectoris 0.02 0 0.00  
 Champsodon capensis 0.02 2 0.00  
 Mursia cristimanus 0.02 2 0.00  
 Stoloteuthis sp. 0.01 4 0.00  
 Lampadena sp. 0.01 2 0.00  
 Small crabs 0.01 2 0.00  
 Lycoteuthis lorigera 0.01 2 0.00  
 Chaeceon macphersoni, juvenile 0.01 2 0.00  
 Myxine capensis 0.00 2 0.00  
 CYPRAEIDAE (Bullia) 0.00 2 0.00  
 Total 2389.13 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1532  
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°17.07  
 start stop duration Lon E 17°42.45  
 TIME :15:13:44 15:42:54 29.2 (min) Purpose : 3  
 LOG : 1761.43 1762.76 1.3 Region : 6100  
 FDEPTH: 188 190 Gear cond.: 0  
 BDEPTH: 188 190 Validity : 0  
 Towing dir: 0° Wire out : 470 m Speed : 2.7 kn  
 Sorted : 115 Total catch: 314.80 Catch/hour: 647.51

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	329.11	3369	50.83 948
Aequorea forskalea	115.19	0	17.79
Lampanyctodes hectoris	31.26	0	4.83
Raja straeleni	24.68	8	3.81
Genypterus capensis	23.45	0	3.62
Pterygopodilla armata capensis	19.58	2304	3.02
Merluccius capensis	15.43	37	2.38 946
Merluccius paradoxus	13.37	33	2.06 947
Callorhynchus capensis	12.34	6	1.91
Todaropsis eblanae	9.30	0	1.44
Paracallionymus costatus	9.05	755	1.40
Lophius vomerinus	6.99	0	1.08
Merluccius paradoxus	6.75	1053	1.04 949
Helicolenus dactylopterus	5.92	272	0.91 951
Zeua capensis	3.62	66	0.56 952
Cardium sp.	3.08	115	0.48
Sepia australis	2.51	222	0.39
Caelorinchus simorhynchus	2.22	8	0.34
Starfish, mixed	2.05	0	0.32
Maurollicus muelleri	1.65	0	0.25
Trachurus capensis	1.32	10	0.20 945
Chelidonichthys capensis	1.19	2	0.18 944
Cynoglossus zanzibarensis	1.09	12	0.17 943
Exochomida sp.	1.05	49	0.16
Physiculus capensis	1.04	66	0.16
Sepia hieronis	0.85	25	0.13
Lepidopus caudatus	0.83	66	0.13
Emmelichthys nitidus	0.57	8	0.09
Todarodes angolensis	0.52	8	0.08 953
Whelks	0.49	8	0.07
Helicolenus dactylopterus	0.25	2	0.04 941
Parapagurus dimorphus	0.24	25	0.04
Solenocera africana	0.24	41	0.04
Mursia cristimanus	0.13	25	0.02
Stereomastis sp.	0.12	25	0.02
Rochinia sp.	0.06	16	0.01
Total	647.51	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1530  
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°30.41  
 start stop duration Lon E 17°27.71  
 TIME :10:27:30 10:59:48 32.3 (min) Purpose : 3  
 LOG : 1736.28 1737.72 1.4 Region : 6100  
 FDEPTH: 481 480 Gear cond.: 0  
 BDEPTH: 481 480 Validity : 0  
 Towing dir: 0° Wire out : 1050 m Speed : 2.7 kn  
 Sorted : 185 Total catch: 184.95 Catch/hour: 343.56

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	130.03	773	37.85 924
Bassanago albescens	92.88	137	27.03
Notacanthus sexspinis	31.58	234	9.19
Caelorinchus simorhynchus	27.86	606	8.11
Etmopterus brachyurus	15.42	67	4.49
Lophius vomerinus	9.29	4	2.70 925
Merluccius paradoxus	8.36	9	2.43 923
Helicolenus dactylopterus	7.43	71	2.16 926
Starfish, mixed	5.57	0	1.62
Lampanyctodes hectoris	4.87	1947	1.42
Octopus magnificus	2.60	2	0.76
Raja confundens	1.23	2	0.36
Starfish	1.22	17	0.35
Caelorinchus braueri	1.00	119	0.29
Hoplostethus mediterraneus	0.84	9	0.24
Merluccius paradoxus	0.82	93	0.11 927
Rossia enigmatica	0.36	13	0.11
Todaropsis eblanae	0.33	2	0.10 929
Anemones, white	0.30	0	0.09
Lucigadus ori	0.24	20	0.07
Todaropsis eblanae	0.22	2	0.06 928
Whelks	0.22	7	0.06
Tripterophycis gilchristi	0.22	0	0.06
Shrimps, small, non comm.	0.20	35	0.06
Physiculus capensis	0.14	7	0.04
Psychrolutes macrocephalus	0.14	2	0.04
Chaunax pictus	0.12	2	0.04
Malacocephalus laevis	0.11	4	0.03
Chlorophthalmus sp.	0.10	2	0.03
Photichthys argenteus	0.09	0	0.02
Epigonus sp.	0.07	4	0.02
Paracallionymus costatus	0.04	6	0.01
Echinus gilchristi ?	0.03	2	0.01
Gonostoma elongatum	0.02	0	0.01
Maurollicus muelleri	0.02	0	0.01
Champsodon capensis	0.02	2	0.00
Sergia sp.	0.01	2	0.00
Lycoteuthis lorigera	0.01	2	0.00
Total	343.56	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1533  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°53.48  
 start stop duration Lon E 17°26.05  
 TIME :04:38:32 05:08:30 30.0 (min) Purpose : 3  
 LOG : 1824.80 1826.10 1.3 Region : 6100  
 FDEPTH: 586 581 Gear cond.: 0  
 BDEPTH: 586 581 Validity : 0  
 Towing dir: 0° Wire out : 1350 m Speed : 2.6 kn  
 Sorted : 178 Total catch: 177.85 Catch/hour: 356.06

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorinchus braueri	216.22	3544	60.73
Merluccius paradoxus	44.04	30	12.37 955
Lepidion capensis	20.02	178	5.62
Chaeceon macphersoni	15.22	1189	4.27
Bathyraxia smithii, male	12.01	2	3.37 956
Helicolenus dactylopterus	7.01	52	1.97
Notacanthus sexspinis	6.21	94	1.74
Lophius vomerinus	6.03	2	1.69 954
Trachyscorpia eschmeyerii	4.60	40	1.29
Psychrolutes macrocephalus	4.42	22	1.24
Etmopterus gracilispinis	4.30	78	1.21
Anemones, pink	2.46	16	0.69
Funchalia woodwardi	1.94	144	0.55
Benthoctopus berryi	1.80	2	0.51
Nezumia sp.	1.76	112	0.49
Starfish, mixed	1.55	0	0.44
Whelks	1.01	16	0.28
P O L Y C H A E T A	0.88	0	0.25
Hydrolagus africanus	0.84	2	0.24
Synaphobranchus kaupii	0.74	4	0.21
Tetragonurus cuvieri	0.69	4	0.19
Myxine capensis	0.41	4	0.12
Photichthys argenteus	0.34	10	0.10
Raja confundens, juvenile	0.32	2	0.09
Coloconger cadensis	0.31	2	0.09
Bassanago albescens	0.20	2	0.06
Ophichthus bennettai	0.16	2	0.04
Scopelosaurus meadi	0.10	2	0.03
Selachophidium guentheri	0.10	2	0.03
Paracallionymus costatus	0.07	6	0.02
Benguella 'marek'	0.05	2	0.01
Tripterophycis gilchristi	0.05	2	0.01
Lucigadus ori	0.04	6	0.01
MYCTOPHIDAE	0.03	10	0.01
Gonostoma elongatum	0.03	2	0.01
Bathylagus sp.	0.02	2	0.01
Symblophorus boops	0.02	2	0.01
Champsodon capensis	0.01	2	0.00
Sergia sp.	0.01	2	0.00
Oreosoma atlanticum, juvenile	0.01	2	0.00
Stoloteuthis sp.	0.01	2	0.00
Chauliodus sloani	0.01	2	0.00
Paraliparis australis	0.01	2	0.00
Diaphus sp.	0.00	2	0.00
Total	356.06	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1531  
 DATE :10.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°27.15  
 start stop duration Lon E 17°31.89  
 TIME :12:31:29 13:01:49 30.3 (min) Purpose : 3  
 LOG : 1744.98 1746.32 1.4 Region : 6100  
 FDEPTH: 421 420 Gear cond.: 0  
 BDEPTH: 421 420 Validity : 0  
 Towing dir: 0° Wire out : 925 m Speed : 2.7 kn  
 Sorted : 97 Total catch: 96.75 Catch/hour: 191.33

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorinchus simorhynchus	47.46	617	24.81
Aequorea forskalea	21.75	0	11.37
Merluccius paradoxus	21.75	134	11.37 934
Notacanthus sexspinis	15.43	85	8.06
Genypterus capensis	12.85	4	6.72 931
Squalus mitakurii, male	9.89	2	5.17
Starfish, mixed	5.00	0	4.44
Lampanyctodes hectoris	8.31	0	4.34
Lophius vomerinus	7.91	6	4.13 930
Maurollicus muelleri	6.72	0	3.51
Bassanago albescens	4.75	8	2.48
Etmopterus brachyurus	4.15	16	2.17
Merluccius paradoxus	3.36	2	1.76 933
Myxine capensis	2.47	27	1.29
Octopus magnificus	2.43	2	1.27
Whelks	1.60	0	0.84
Todaropsis eblanae	1.48	42	0.78 936
Merluccius capensis	1.48	2	0.78 932
Whelks	1.47	40	0.77 0
Todaropsis eblanae	1.21	12	0.63 937
Helicolenus dactylopterus	0.93	16	0.49 935
Ornithoteuthis antillarum	0.76	2	0.40 940
Paracallionymus costatus	0.61	99	0.32
Parapagurus pilosimanus	0.59	34	0.31
Stereomastis sp.	0.55	75	0.29
Psychrolutes macrocephalus	0.54	28	0.28
Trachurus capensis	0.47	2	0.24 939
Rossia enigmatica	0.30	12	0.16
Ophichthus bennettai	0.22	2	0.11
Anemones, white	0.17	2	0.09
Merluccius paradoxus, juvenile	0.13	0	0.07
CYPRAEIDAE (Bullia)	0.13	34	0.07
Mursia cristimanus	0.13	20	0.07
Sepia hieronis	0.12	2	0.06
Sepia sp.	0.12	22	0.06
Physiculus capensis	0.08	8	0.04
Lepidopus caudatus	0.08	2	0.04
Rochinia sp.	0.07	12	0.04
Tripterophycis gilchristi	0.06	4	0.03
Epigonus telescopus	0.06	4	0.03
Bassanago albescens, juvenile	0.05	2	0.03
Symblophorus boops	0.04	2	0.02
Shrimps, small, non comm.	0.04	4	0.02
Lucigadus ori	0.02	4	0.01
Todarodes angolensis, juvenile	0.02	2	0.01
Bristle worms	0.02	2	0.01
Anemones, pink	0.01	2	0.01
Heart urchin	0.01	2	0.00
Bathypolypus valdiviae	0.01	2	0.00
Small crabs	0.00	2	0.00
Total	191.33	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1534  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°53.16  
 start stop duration Lon E 17°28.29  
 TIME :06:39:57 07:11:59 32.0 (min) Purpose : 3  
 LOG : 1833.02 1834.25 1.2 Region : 6100  
 FDEPTH: 457 452 Gear cond.: 0  
 BDEPTH: 457 452 Validity : 0  
 Towing dir: 0° Wire out : 1000 m Speed : 2.3 kn  
 Sorted : 629 Total catch: 628.57 Catch/hour: 1177.46

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	783.02	554	66.50 957
Merluccius paradoxus	159.23	423	13.52 959
Caelorinchus simorhynchus	134.87	3289	11.45
Notacanthus sexspinis	28.10	300	2.39
Bassanago albescens	26.23	36	2.23
Helicolenus dactylopterus	11.24	107	0.95 960
Galeorhinus galeus, female	7.49	2	0.64
Genypterus capensis	5.62	2	0.48 958
Caelorinchus braueri	3.32	129	0.28
Lophius vomerinus	3.00	4	0.25 961
Anemones, white	2.36	21	0.20
Scyliorhinus capensis	1.99	2	0.17
Funchalia woodwardi	1.31	122	0.11



Hoplostethus mediterraneus	1.16	13	0.10
Tetragonurus cuvieri	1.13	9	0.10
Paracallionymus costatus	1.01	127	0.09
Lucigadus ori	0.96	105	0.08
Tripterygius gilchristi	0.79	36	0.07
Octopus magnificus	0.75	2	0.06
Starfish	0.66	75	0.06
Beryx splendens	0.65	4	0.06
Chaeceon macphersoni	0.36	4	0.03
Lampanyctodes hectoris	0.31	126	0.03
Physiculus capensis	0.28	11	0.02
Ornithoteuthis antillarum	0.26	2	0.02
Trachyscorpia eschmeyerii	0.23	2	0.02
Ophichthus bennettai	0.15	2	0.01
Etmopterus gracilispinis	0.14	6	0.01
Lepidion capensis	0.13	4	0.01
Epiplatys sp.	0.13	7	0.01
Stereomastis sp.	0.09	13	0.01
Diaphus efulgens	0.09	4	0.01
Rossia enigmatica	0.08	2	0.01
Photichthys argenteus	0.07	6	0.01
CYPRAEIDAE (Bulia)	0.05	13	0.00
Unidentified fish	0.04	17	0.00
Cryptoparas couesii	0.03	2	0.00
Lampichthys procerus	0.03	2	0.00
Plagioscion rubiginosus	0.03	2	0.00
Diaphus sp.	0.02	6	0.00
Argyroplecus aculeatus	0.02	4	0.00
Lycoteuthis lorigera	0.01	4	0.00
Abraaliopsis gilchristi	0.01	2	0.00
Stoloteuthis sp.	0.01	2	0.00
PARALEPIDIDAE	0.01	2	0.00
Maurolicus muelleri	0.01	6	0.00
Paraliparis australis	0.00	2	0.00
Idiacanthus atlanticus	0.00	2	0.00
Total	1177.46		100.00

BDEPTH: 187 187 Validity : 0  
 Towing dir: 0° Wire out : 460 m Speed : 2.6 kn  
 Sorted : 156 Total catch: 326.09 Catch/hour: 653.49

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lampanyctodes hectoris	136.27	0	20.85	
Aequorea forskalea	88.18	0	13.49	
Merluccius capensis	84.17	248	12.88	986
Merluccius paradoxus	70.54	4691	10.79	997
Hydrolagus africanus	40.08	26	6.13	
Lophius vomerinus	40.08	114	6.13	992
Chelidonicichthys capensis	33.07	84	5.06	988
Merluccius paradoxus	32.06	156	4.91	987
Paracallionymus costatus	29.26	3954	4.48	
Todaropsis eblanæ	29.10	826	4.45	995
Merluccius paradoxus	17.64	2575	2.70	996
Cynoglossus zanzibarensis	8.62	130	1.32	991
Parapagurus dimorphus	7.86	427	1.20	
Helicolenus dactylopterus	6.01	321	0.92	994
Pterygosquilla armata capensis	5.69	130	0.87	
Zeus capensis	5.21	72	0.80	993
Genypterus capensis	4.61	20	0.71	990
Thyrssites atun	4.01	2	0.61	989
Caelorinchus simorhynchus	2.81	128	0.43	
Starfish	1.30	0	0.20	
Heart urchin	1.15	48	0.18	
Sepia australis	1.11	72	0.17	
Trachurus capensis	0.97	8	0.15	998
Cardium sp.	0.94	120	0.14	
Exodromidia sp.	0.89	24	0.14	
Maurolicus muelleri	0.80	0	0.12	
Mursia cristimanus	0.55	32	0.08	
Lepidopus caudatus	0.22	24	0.03	
Physiculus capensis	0.13	16	0.02	
CYPRAEIDAE (Bulia)	0.12	16	0.02	
Lolligoncula mercatoris	0.03	16	0.00	
Inioteuthis capensis	0.02	8	0.00	
Total	653.49		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1535  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°51.18  
 start stop duration Lon E 17°32.44  
 TIME :08:17:36 08:48:23 30.8 (min) Purpose : 3  
 LOG : 1839.11 1840.60 1.5 Region : 6100  
 FDEPTH: 315 307 Gear cond.: 0  
 BDEPTH: 315 307 Validity : 0  
 Towing dir: 0° Wire out : 800 m Speed : 2.9 kn  
 Sorted : 802 Total catch: 2408.36 Catch/hour: 4693.14

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1538  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°36.57  
 start stop duration Lon E 17°56.65  
 TIME :14:19:57 14:49:14 29.3 (min) Purpose : 3  
 LOG : 1871.39 1873.01 1.6 Region : 6100  
 FDEPTH: 160 161 Gear cond.: 0  
 BDEPTH: 160 161 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 3.3 kn  
 Sorted : 96 Total catch: 251.49 Catch/hour: 515.17

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4287.11	18366	91.35	962
Caelorinchus simorhynchus	88.28	1635	1.88	
Brama brama	79.90	49	1.70	968
Merluccius paradoxus	77.95	72	1.66	964
Merluccius capensis	62.36	55	1.33	972
Helicolenus dactylopterus	32.93	520	0.70	970
Parapagurus dimorphus	15.20	1126	0.32	
Lophius vomerinus	9.74	8	0.21	966
Malacocephalus laevis	9.24	33	0.20	
Ommastrephes bartrami	6.43	4	0.14	971
Thyrssites atun	5.85	2	0.12	963
Paracallionymus costatus	3.18	361	0.07	
Todaropsis eblanæ	3.14	27	0.07	973
Holohalaelurus regani	1.95	2	0.04	
Ancistrocheirus lesueurii	1.75	6	0.04	
Trachurus capensis	1.66	6	0.04	965
Starfish, mixed	1.48	0	0.03	
Zeus capensis	1.36	4	0.03	969
Lampanyctodes hectoris	1.33	0	0.03	
Genypterus capensis	0.97	2	0.02	967
Starfish	0.60	6	0.01	
Ornithoteuthis antillarum	0.38	2	0.01	974
Physiculus capensis	0.33	14	0.01	
CYPRAEIDAE (Bulia)	0.04	6	0.00	
Total	4693.14		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Aequorea forskalea	106.52	0	20.68	
Merluccius paradoxus	75.79	8085	14.71	1008
Merluccius capensis	73.75	639	14.31	1002
Chelidonicichthys capensis	71.70	289	13.92	999
Merluccius paradoxus	44.25	365	8.59	1003
Merluccius paradoxus	36.22	6809	7.03	1007
Lampanyctodes hectoris	17.21	7481	3.34	
Caelorinchus capensis	16.39	20	3.18	
Sepia australis	15.16	776	2.94	
Todaropsis eblanæ	12.70	451	2.47	1004
Paracallionymus costatus	7.48	879	1.45	
Lophius vomerinus	7.17	16	1.39	1001
Genypterus capensis	6.15	35	1.19	1000
Whelks	6.06	123	1.18	
Cynoglossus zanzibarensis	3.61	41	0.70	1005
Helicolenus dactylopterus	2.70	156	0.52	1006
Exodromidia sp.	2.10	139	0.41	
Lepidopus caudatus	1.82	164	0.35	
Sepia hieronis	1.42	25	0.28	
Starfish small	1.39	205	0.27	
Zeus capensis	1.16	16	0.23	1009
Lolligoncula mercatoris	0.90	320	0.17	
Physiculus capensis	0.87	41	0.17	
Caelorinchus simorhynchus	0.61	66	0.12	
Parapagurus dimorphus	0.49	246	0.10	
Chelidonicichthys kumu	0.45	8	0.09	
Mursia cristimanus	0.44	25	0.09	
Congloporus spinifer	0.16	16	0.03	
Starfish red	0.15	8	0.03	
Starfish	0.15	8	0.03	
CYPRAEIDAE (Bulia)	0.11	16	0.02	
Champsodon capensis	0.09	8	0.02	
Inioteuthis capensis	0.02	8	0.00	
Total	515.17		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1536  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°44.90  
 start stop duration Lon E 17°39.63  
 TIME :10:17:45 10:48:45 31.0 (min) Purpose : 3  
 LOG : 1848.86 1850.29 1.4 Region : 6100  
 FDEPTH: 245 245 Gear cond.: 0  
 BDEPTH: 245 245 Validity : 0  
 Towing dir: 0° Wire out : 600 m Speed : 2.8 kn  
 Sorted : 498 Total catch: 650.84 Catch/hour: 1259.69

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1539  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°37.11  
 start stop duration Lon E 17°56.80  
 TIME :04:44:57 05:15:12 30.3 (min) Purpose : 3  
 LOG : 1948.91 1950.44 1.5 Region : 6100  
 FDEPTH: 578 572 Gear cond.: 0  
 BDEPTH: 578 572 Validity : 0  
 Towing dir: 0° Wire out : 1400 m Speed : 3.0 kn  
 Sorted : 169 Total catch: 169.04 Catch/hour: 335.28

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Brama brama	654.19	426	51.93	975
Merluccius paradoxus	379.35	2866	30.11	980
Caelorinchus simorhynchus	60.97	1742	4.84	
Parapagurus dimorphus	31.35	2508	2.49	
Caelorinchus capensis	28.06	12	2.23	
Helicolenus dactylopterus	14.38	985	1.14	981
Lampanyctodes hectoris	14.32	0	1.14	
Paracallionymus costatus	13.55	1595	1.08	
Lophius vomerinus	12.19	23	0.97	979
Thyrssites atun	11.61	8	0.92	976
Octopus magnificus	8.90	2	0.71	
Merluccius capensis	5.81	10	0.46	977
Anemones, white	3.48	10	0.28	
Maurolicus muelleri	3.10	0	0.25	
Todaropsis eblanæ	2.79	31	0.22	983
Etmopterus whiteheadi	2.75	45	0.22	
Merluccius paradoxus	2.52	6	0.20	978
Trachurus capensis	2.38	14	0.19	984
Todaropsis eblanæ	1.99	21	0.16	982
Raja straeleni	0.97	2	0.08	
Lepidopus caudatus	0.95	0	0.08	
Malacocephalus laevis	0.89	17	0.07	
Ophichthus bennettai	0.58	2	0.05	
Whelks	0.45	10	0.04	
Physiculus capensis	0.32	39	0.03	
Holohalaelurus regani	0.29	4	0.02	
Starfish	0.23	4	0.02	0
Rossia enigmatica	0.21	4	0.02	
Starfish	0.21	27	0.02	
Exodromidia sp.	0.20	14	0.02	
Merluccius paradoxus	0.19	31	0.01	985
Pterygosquilla armata capensis	0.16	14	0.01	
Congloporus spinifer	0.13	4	0.01	
Cardium sp.	0.11	14	0.01	
Starfish, mixed	0.06	14	0.00	
Abraaliopsis gilchristi	0.02	4	0.00	
Total	1259.69		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	214.21	5637	63.89	
Merluccius paradoxus	55.54	44	16.56	1010
Helicolenus dactylopterus	13.88	85	4.14	1012
Brama brama	9.92	4	2.96	1011
ANTHOZOA (Sea anemones)	5.95	65	1.77	
Squalus mitsukurii	5.75	2	1.72	
Chaeceon macphersoni	4.92	0	1.47	
Lycoteuthis lorigera	4.72	113	1.41	
Malacocephalus laevis	3.97	12	1.18	
Starfish small	3.57	0	1.06	
Todarodes angolenis	2.78	2	0.83	1013
Notacanthus seppis	2.48	48	0.74	
Photichthys argenteus	1.75	38	0.52	
Psychrolutes macrocephalus	1.31	12	0.39	
Funchalia woodwardi	0.99	121	0.30	
Ruvettus pretiosus	0.94	2	0.28	
Bassanago albescens	0.57	2	0.17	
Myxine capensis	0.42	6	0.12	
P O L Y C H A E T A	0.38	0	0.11	
Lucigadus ori	0.36	32	0.11	
Caelorinchus simorhynchus	0.33	6	0.10	
Diaphus sp.	0.16	52	0.05	
Symbolophorus boops	0.06	6	0.02	
Lampichthys procerus	0.05	4	0.01	
Rossia enigmatica	0.05	2	0.01	
Lampanyctodes hectoris	0.05	22	0.01	
PARALEPIDIDAE	0.04	2	0.01	
ARGENTINIDAE	0.04	2	0.01	
Exodromidia sp.	0.03	4	0.01	
Nezumia sp.	0.03	8	0.01	
Champsodon capensis	0.03	2	0.01	
Diaphus sp.	0.02	2	0.01	0
Stoloteuthis sp.	0.00	2	0.00	
Hoplostethus mediterraneus	0.00	2	0.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1537  
 DATE :11.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°39.63  
 start stop duration Lon E 17°50.04  
 TIME :12:31:49 13:01:45 29.9 (min) Purpose : 3  
 LOG : 1861.83 1863.15 1.3 Region : 6100  
 FDEPTH: 187 187 Gear cond.: 0

Total 335.28 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1540  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°32.78  
 start stop duration Lon E 17°55.73  
 TIME :06:34:40 07:03:50 Purpose : 3  
 LOG : 1956.50 1957.94 1.5 Region : 6100  
 FDEPTH: 435 432 Gear cond.: 0  
 BDEPTH: 435 432 Validity : 0  
 Towing dir: 0° Wire out : 1000 m Speed : 3.0 kn  
 Sorted : 710 Total catch: 709.90 Catch/hour: 1460.20

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	880.36	4046	60.29 1014
Helicolenus dactylopterus	205.69	1697	14.09 1015
Caelorhynchus simorhynchus	123.41	3980	8.45
Bassanago albescens	109.02	152	7.47
Merluccius paradoxus	59.65	78	4.09 1016
Octopus magnificus	37.02	8	2.54
Brama brama	11.11	6	0.76 1017
ANTHOZOA (Sea anemones)	6.17	84	0.42
Malacocephalus laevis	4.11	12	0.28
Caelorhynchus braueri	3.81	88	0.26
Parapagurus pilosimanus	3.33	239	0.23
Lycoteuthis lorigera	2.32	84	0.16
Lepidopus caudatus	2.06	2	0.14
Lucigadus ori	1.62	138	0.11
Todarodes angolensis	1.51	2	0.10 1018
Tripterophycis gilchristi	1.42	97	0.10
Lampanyctodes hectoris	0.91	378	0.06
Whelks	0.91	25	0.06
Starfish	0.87	0	0.06
Chaecoon macphersoni	0.76	8	0.05
Rossia enigmatica	0.70	23	0.05
Bathypolypus valdiviae	0.65	10	0.04
Todaropsis eblanae	0.64	4	0.04 1019
Epigonus sp.	0.58	27	0.04
Beryx splendens	0.42	2	0.03
Paracallionymus costatus	0.39	51	0.03
Physiculus capensis	0.32	14	0.02
Oreosoma atlanticum	0.16	2	0.01
Shrimps, small, non comm.	0.06	16	0.00
Abrialopsis gilchristi	0.05	14	0.00
Psychrolutes macrocephalus	0.05	2	0.00
Starfish red	0.03	2	0.00
Stereomastis sp.	0.03	6	0.00
Maurolitic muelleri	0.02	0	0.00
Diaphus sp.	0.01	2	0.00
CYPRAEIDAE (Bullia)	0.01	2	0.00
Phyllosoma	0.00	12	0.00 1105
Total	1460.20	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1541  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°28.55  
 start stop duration Lon E 18°1.08  
 TIME :08:32:25 09:03:09 Purpose : 3  
 LOG : 1965.93 1967.39 1.5 Region : 6100  
 FDEPTH: 311 311 Gear cond.: 0  
 BDEPTH: 312 311 Validity : 0  
 Towing dir: 0° Wire out : 760 m Speed : 2.9 kn  
 Sorted : 188 Total catch: 1084.25 Catch/hour: 2117.68

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	1282.23	29918	60.55 1024
Helicolenus dactylopterus	266.60	1676	12.53 1023
Caelorhynchus simorhynchus	152.24	3385	7.19
Merluccius capensis	134.77	111	6.36 1021
Todaropsis eblanae	112.73	1777	5.32 1028
Todaropsis eblanae	74.90	1270	3.54 1027
Lophius vomerinus	70.31	37	3.32 1026
Merluccius paradoxus	7.81	8	0.37 1022
Zeus capensis	5.08	10	0.24 1025
Paracallionymus costatus	2.67	254	0.13
Octopus magnificus	2.54	2	0.12
Starfish	2.03	178	0.10
Genypteris capensis	1.66	2	0.08 1020
Giant bullia gastropod	0.94	76	0.04
Whelks	0.84	25	0.04
Abrialopsis gilchristi	0.18	51	0.01
Phyllosoma	0.03	127	0.00 1106
Rochinia sp.	0.03	25	0.00
Total	2117.68	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1542  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°22.82  
 start stop duration Lon E 18°12.57  
 TIME :10:41:51 11:10:59 Purpose : 3  
 LOG : 1975.15 1976.65 1.5 Region : 6100  
 FDEPTH: 282 285 Gear cond.: 0  
 BDEPTH: 282 285 Validity : 0  
 Towing dir: 0° Wire out : 650 m Speed : 3.1 kn  
 Sorted : 144 Total catch: 298.32 Catch/hour: 614.46

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	160.66	1038	26.15 1031
Helicolenus dactylopterus	123.17	2109	20.05 1032
Merluccius capensis	94.75	101	15.42 1029
Caelorhynchus simorhynchus	74.97	1745	12.20
Lophius vomerinus	49.43	16	8.05 1030
Parapagurus dimorphus	36.87	4097	6.00
Todaropsis eblanae	32.13	542	5.23 1034
Todaropsis eblanae	29.66	562	4.83 1033
Raja straeleni	9.89	4	1.61
Paracallionymus costatus	0.91	113	0.15
Emmelichthys nitidus	0.68	6	0.11
Whelks	0.32	6	0.05
Starfish red	0.32	6	0.05
Lepidopus caudatus	0.26	12	0.04
Starfish	0.23	21	0.04
Giant bullia gastropod	0.10	6	0.02
Starfish - Ophibroids	0.07	21	0.01
Abrialopsis gilchristi	0.02	6	0.00
Phyllosoma	0.00	12	0.00 1107
Total	614.46	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1543  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°19.78  
 start stop duration Lon E 18°12.38  
 TIME :13:47:14 14:17:13 Purpose : 3  
 LOG : 1991.07 1992.49 1.4 Region : 6100  
 FDEPTH: 288 289 Gear cond.: 0  
 BDEPTH: 288 289 Validity : 0  
 Towing dir: 0° Wire out : 680 m Speed : 2.8 kn  
 Sorted : 201 Total catch: 201.31 Catch/hour: 402.76

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	160.66	1038	26.15 1031
Helicolenus dactylopterus	123.17	2109	20.05 1032
Merluccius capensis	94.75	101	15.42 1029
Caelorhynchus simorhynchus	74.97	1745	12.20
Lophius vomerinus	49.43	16	8.05 1030
Parapagurus dimorphus	36.87	4097	6.00
Todaropsis eblanae	32.13	542	5.23 1034
Todaropsis eblanae	29.66	562	4.83 1033
Raja straeleni	9.89	4	1.61
Paracallionymus costatus	0.91	113	0.15
Emmelichthys nitidus	0.68	6	0.11
Whelks	0.32	6	0.05
Starfish red	0.32	6	0.05
Lepidopus caudatus	0.26	12	0.04
Starfish	0.23	21	0.04
Giant bullia gastropod	0.10	6	0.02
Starfish - Ophibroids	0.07	21	0.01
Abrialopsis gilchristi	0.02	6	0.00
Phyllosoma	0.00	12	0.00 1107
Total	614.46	100.00	

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Caelorhynchus simorhynchus	100.03	1234	24.84
Merluccius paradoxus	68.02	280	16.89 1035
Parapagurus dimorphus	60.02	6668	14.90
Helicolenus dactylopterus	46.02	724	11.42 1040
Merluccius capensis	26.01	44	6.46 1036
Octopus magnificus	18.01	2	4.47
Caelorhynchus capensis	16.01	4	3.97
PORIFERA (Sponges)	12.00	0	2.98
Raja straeleni	8.80	4	2.19
Lophius vomerinus	6.00	8	1.49 1037
Trachurus capensis	5.30	46	1.32 1038
Todaropsis eblanae	4.72	90	1.17 1041
Todaropsis eblanae	4.44	92	1.10 1042
Starfish red	4.20	40	1.04
Raja pullopnctata	3.80	2	0.94
Whelks	3.20	130	0.79
Raja confundens	2.50	4	0.62
Paracallionymus costatus	1.84	238	0.46
Truemeus whiteheadi	1.61	26	0.40
CYPRAEIDAE (Bullia)	1.50	42	0.37
Starfish "hairy"	1.28	0	0.32
Chelidonicichthys capensis	1.12	2	0.28 1039
Spatangus capensis	1.00	10	0.25
Echinus gilchristi ?	0.80	8	0.20
Merluccius paradoxus	0.70	68	0.17 1044
Mursia cristimanus	0.69	9	0.17
Exodromidia sp.	0.48	40	0.12
Holohalaelurus regani	0.40	10	0.10
Genypteris capensis	0.37	2	0.09 1043
Starfish	0.34	16	0.08
Gonorhynchus gonorhynchus	0.34	2	0.08
Starfish red	0.26	10	0.07 0
Bristle worms	0.25	42	0.06 0
Heart urchin	0.20	14	0.05
Pterygosquilla armata capensis	0.15	30	0.04
Starfish yellow	0.10	12	0.02
Physiculus capensis	0.05	2	0.01
Rochinia sp.	0.05	14	0.01
Rossia enigmatica	0.02	2	0.01
Sepia sp.	0.02	4	0.01
Solenocera africana	0.02	2	0.01
Starfish - Ophibroids	0.02	6	0.00
Iniotheuthis capensis	0.01	2	0.00
Abrialopsis gilchristi	0.01	2	0.00
Total	402.74	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1544  
 DATE :12.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°14.11  
 start stop duration Lon E 18°16.62  
 TIME :16:40:19 17:04:54 Purpose : 3  
 LOG : 2004.15 2005.30 1.1 Region : 6100  
 FDEPTH: 110 108 Gear cond.: 0  
 BDEPTH: 110 108 Validity : 0  
 Towing dir: 0° Wire out : 280 m Speed : 2.8 kn  
 Sorted : 82 Total catch: 594.29 Catch/hour: 594.29

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Etrumeus whiteheadi	410.09	8915	69.01
Aegurea forskalea	43.94	0	7.39
Merluccius capensis	29.29	373	4.93 1045
Caelorhynchus capensis	27.10	7	4.56
Todaropsis eblanae	24.68	1826	4.15 1047
PORIFERA (Sponges)	14.65	0	2.46
Raja pullopnctata	13.18	7	2.22
Chelidonicichthys capensis	7.32	37	1.23 1051
Echinus gilchristi ?	5.71	117	0.96
Helicolenus dactylopterus	4.69	51	0.79 1052
Trachurus capensis	3.00	37	0.41 1048
Zeus capensis	2.78	95	0.47 1050
Merluccius capensis	2.44	2	0.41 1046
Starfish red	1.70	37	0.29
Cynoglossus zanzibarensis	1.46	15	0.25 1049
Whelks	0.53	5	0.09
Sepia australis	0.45	39	0.08
Starfish yellow	0.29	44	0.05
B I V A L V E S	0.25	29	0.04
Scyliorhinus capensis, juvenile	0.15	7	0.02
Mursia cristimanus	0.12	29	0.02
Pterygosquilla armata capensis	0.10	15	0.02
Emmelichthys nitidus	0.09	7	0.01
Lepidopus caudatus	0.09	7	0.01
Starfish	0.08	44	0.01
Rochinia sp.	0.05	37	0.01
Exodromidia sp.	0.03	15	0.00
Lolligoncula mercatoris	0.01	5	0.00
Total	594.29	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1545  
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°17.04  
 start stop duration Lon E 17°42.38  
 TIME :04:38:34 05:10:45 Purpose : 3  
 LOG : 2053.64 2055.27 1.6 Region : 6100  
 FDEPTH: 407 416 Gear cond.: 0  
 BDEPTH: 407 416 Validity : 0  
 Towing dir: 0° Wire out : 950 m Speed : 3.0 kn  
 Sorted : 664 Total catch: 664.07 Catch/hour: 1238.16

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
Merluccius paradoxus	1079.55	4641	87.19 1053
Helicolenus dactylopterus	63.39	940	5.12 1055
Merluccius paradoxus	44.75	50	3.61 1058
Caelorhynchus simorhynchus	21.44	466	1.73
Merluccius capensis	19.58	19	1.58 1054
Anemones, pink	4.20	0	0.34
Todarodes angolensis	1.04	2	0.08 1056
Starfish red	0.75	19	0.06
Physiculus capensis	0.68	35	0.06
Tripterophycis gilchristi	0.58	39	0.05
Anemones, white	0.40	4	0.03
Epigonus sp.	0.32	15	0.03
Starfish "hairy"	0.31	28	0.02
Maurolitic muelleri	0.19	0	0.02
Todaropsis eblanae	0.18	2	0.01 1057
Lucigadus ori	0.17	19	0.01
Hoplostethus mediterraneus	0.17	2	0.01
Whelks	0.13	4	0.01
Beryx splendens	0.09	2	0.01
Shrimps, small, non comm.	0.05	19	0.00
Malacocephalus laevis	0.05	2	0.00
Rochinia sp.	0.04	6	0.00
Stereomastis sp.	0.04	7	0.00
Mursia cristimanus	0.01	2	0.00
CYPRAEIDAE (Bullia)	0.01	4	0.00
Paracallionymus costatus	0.01	2	0.00
Parapagurus pilosimanus	0.01	2	0.00
Total	1238.16	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1546

DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 34°7.26  
 start stop duration Lon E 17°50.40  
 TIME :07:44:03 08:14:42 30.7 (min) Purpose : 3  
 LOG : 2069.23 2070.75 1.5 Region : 6100  
 FDEPTH: 270 272 Gear cond.: 0  
 BDEPTH: 270 272 Validity : 0  
 Towing dir: 0° Wire out : 650 m Speed : 3.0 kn  
 Sorted : 175 Total catch: 290.67 Catch/hour: 569.02

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	285.81	2784	50.23	1063
Caelorinchus simorhynchus	101.79	2367	17.89	
Trachurus capensis	54.81	235	9.63	1060
Parapagurus dimorphus	43.07	6626	7.57	
Brama brama	29.36	22	5.16	1059
Merluccius capensis	18.60	27	3.27	1065
Helicolenus dactylopterus	10.81	309	1.90	1066
Lophius vomerinus	7.24	8	1.27	1061
Todaropsis eblanae	2.90	55	0.51	1068
Todaropsis eblanae	2.62	43	0.46	1067
Merluccius paradoxus	2.45	6	0.43	1064
Holohalaelurus regani	2.04	6	0.36	
Malacocephalus laevis	1.64	16	0.29	
Paracallionymus costatus	1.61	249	0.28	
Starfish "hairy"	1.10	0	0.19	
Zeus capensis	0.96	2	0.19	1062
Starfish red	0.72	12	0.13	
Emmelichthys nitidus	0.68	8	0.12	
Maurolucius muelleri	0.24	0	0.04	
Sepia hieronis	0.18	0	0.03	
Merluccius paradoxus	0.17	23	0.03	1069
Rossia enigmatica	0.04	0	0.01	
Lampantodes hectoris	0.04	0	0.01	
CYPRAEIDAE (Bullia)	0.03	4	0.00	
Exodromidia sp.	0.02	4	0.00	
Total	569.02		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1547  
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°58.76  
 start stop duration Lon E 17°59.42  
 TIME :10:05:11 10:35:18 30.1 (min) Purpose : 3  
 LOG : 2083.86 2085.21 1.4 Region : 6100  
 FDEPTH: 190 188 Gear cond.: 0  
 BDEPTH: 190 188 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 2.7 kn  
 Sorted : 189 Total catch: 189.45 Catch/hour: 377.38

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Todaropsis eblanae	61.12	1375	16.19	1081
Todaropsis eblanae	55.96	1325	14.83	1082
Helicolenus dactylopterus	53.78	3819	14.25	1076
Chelidonichthys capensis	44.82	102	11.88	1071
Parapagurus dimorphus	35.86	4781	9.50	
Merluccius capensis	33.86	72	8.97	1073
Lophius vomerinus	19.92	42	5.28	1070
Callorhynchus capensis	14.74	8	3.91	
Etrumeus whiteheadi	10.96	199	2.90	
Paracallionymus costatus	9.06	1008	2.40	
Merluccius paradoxus	7.97	102	2.11	1074
Trachurus capensis	6.97	22	1.85	1072
Raja straeleni	6.37	4	1.69	
Merluccius paradoxus	3.90	297	1.03	1080
Octopus vulgaris	2.79	2	0.74	
Merluccius paradoxus	2.25	337	0.60	1079
Zeus capensis	1.99	22	0.53	1078
Congiopodus spinifer	1.02	16	0.27	
Starfish red	0.58	12	0.15	
Gonypterus capensis	0.47	4	0.12	1083
Cynoglossus zanzibarensis	0.42	8	0.11	1077
Chelidonichthys queketti	0.39	2	0.10	1084
Mursia cristimanus	0.31	18	0.08	
E C H I N O D E R M A T A	0.29	6	0.08	
Loligo vulgaris	0.27	2	0.07	1085
Sepia australis	0.24	20	0.06	
Lepidopus caudatus	0.22	4	0.06	
Nudibranchs	0.21	2	0.05	
Exodromidia sp.	0.15	8	0.04	
Starfish "hairy"	0.12	14	0.03	
Whelks	0.11	4	0.03	
Holohalaelurus regani	0.10	2	0.03	
Starfish yellow	0.07	10	0.02	
G A S T R O P O D S	0.05	8	0.01	
Solenocera africana	0.01	2	0.00	
Gorgonians	0.01	2	0.00	
Lolligonula mercatoris	0.01	4	0.00	
Total	377.38		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1548  
 DATE :13.02.2008 GEAR TYPE: BT NO: 18 POSITION:Lat S 33°51.21  
 start stop duration Lon E 18°07.19  
 TIME :12:21:34 12:49:46 28.2 (min) Purpose : 3  
 LOG : 2098.84 2100.23 1.4 Region : 6100  
 FDEPTH: 140 137 Gear cond.: 8  
 BDEPTH: 140 137 Validity : 4  
 Towing dir: 0° Wire out : 375 m Speed : 3.0 kn  
 Sorted : 45 Total catch: 45.30 Catch/hour: 96.37

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	22.98	411	23.84	
Aequorea forskalea	18.51	0	19.21	
Merluccius capensis	12.34	209	12.80	1088
Merluccius capensis	9.15	26	9.49	1087
Todaropsis eblanae	8.85	268	9.18	1094
Todaropsis eblanae	7.17	206	7.44	1095
Thyrssites atun	6.38	4	6.62	1086
Chelidonichthys capensis	2.36	6	2.45	1090
PORIFERA (Sponges)	2.13	0	2.21	
Trachurus capensis	1.40	4	1.46	1091
Heart urchin	1.18	2	1.20	
Helicolenus dactylopterus	0.89	66	0.93	1089
Sebastes capensis	0.83	0	0.86	
Zeus capensis	0.49	9	0.51	1092
Paracallionymus costatus	0.27	26	0.28	
Sepia australis	0.23	19	0.24	
Echinus gilchristi ?	0.21	32	0.22	
Merluccius paradoxus	0.20	17	0.21	1093
Congiopodus spinifer	0.14	2	0.15	
Starfish red	0.11	4	0.12	
Starfish	0.11	2	0.11	
Whelks	0.11	2	0.11	
Pterygosquilla armata capensis	0.07	11	0.07	
CYPRAEIDAE (Bullia)	0.05	13	0.06	
Exodromidia sp.	0.05	4	0.05	
Starfish "hairy"	0.05	2	0.05	
Lolligonula mercatoris	0.03	11	0.03	
Parapagurus dimorphus	0.03	6	0.03	
Mursia cristimanus	0.01	2	0.01	
Nudibranchs	0.01	2	0.01	
Ophiuroidea	0.01	268	0.01	

Total 96.37 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1549  
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°31.65  
 start stop duration Lon E 18°56.67  
 TIME :04:37:27 05:06:58 29.5 (min) Purpose : 3  
 LOG : 2236.50 2237.84 1.3 Region : 6100  
 FDEPTH: 546 547 Gear cond.: 0  
 BDEPTH: 546 547 Validity : 0  
 Towing dir: 0° Wire out : 1250 m Speed : 2.7 kn  
 Sorted : 1223 Total catch: 1222.69 Catch/hour: 2485.13

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	2119.92	8478	85.30	1111
Merluccius paradoxus	262.20	252	10.55	1110
Gonypterus capensis	34.55	0	1.39	1109
Caelorinchus simorhynchus	22.36	234	0.90	
Helicolenus dactylopterus	18.90	203	0.76	1112
Lophius vomerinus	8.13	4	0.33	1108
Maurolucius muelleri	4.07	0	0.16	
Caelorinchus braueri	2.74	85	0.11	
Malacocephalus laevis	2.54	6	0.10	
Bassanago albescens	2.24	4	0.09	
Physiculus capensis	2.13	79	0.09	
Ancistrocheirus lesueurii	2.03	2	0.08	
Anemones, pink	1.21	6	0.05	
Tripterygion gilchristi	0.81	39	0.03	
Rossia enigmatica	0.22	6	0.01	
Bathypolypus valdiviae	0.19	2	0.01	
Lycoteuthis lorigera	0.19	8	0.01	
Photichthys argenteus	0.12	4	0.00	
Persiparsia kopua	0.09	2	0.00	
Stereomastis sp.	0.06	8	0.00	
Chaecoon macphersoni	0.05	2	0.00	
Shrimps, small, non comm.	0.05	10	0.00	
Starfish	0.03	2	0.00	
Lucigadus ori	0.03	24	0.00	
Munidopsis chuni	0.02	4	0.00	
Parapagurus pilosimanus	0.00	2	0.00	
Total	2484.87		99.99	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1550  
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°24.01  
 start stop duration Lon E 19°9.63  
 TIME :07:24:36 07:53:51 29.3 (min) Purpose : 3  
 LOG : 2253.11 2254.69 1.6 Region : 6100  
 FDEPTH: 224 230 Gear cond.: 0  
 BDEPTH: 224 230 Validity : 0  
 Towing dir: 0° Wire out : 550 m Speed : 3.2 kn  
 Sorted : 377 Total catch: 376.77 Catch/hour: 772.60

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Parapagurus dimorphus	252.22	4036	32.65	
Caelorinchus simorhynchus	153.79	1538	19.91	
Merluccius capensis	110.73	168	14.33	1113
Trachurus capensis	32.81	141	4.25	1114
Helicolenus dactylopterus	30.76	1468	3.98	1119
Squalus megalops	24.63	68	3.18	
Lophius vomerinus	24.61	31	3.18	1115
Callorhynchus capensis	21.53	8	2.79	
Loligo vulgaris	17.43	76	2.26	1122
Todaropsis eblanae	15.38	234	1.99	1125
Thyrssites atun	15.17	16	1.96	1118
Paracallionymus costatus	11.69	3340	1.51	
Merluccius paradoxus	10.87	53	1.41	1117
Todaropsis eblanae	10.46	168	1.35	1126
Mustelus palumbes	8.20	6	1.06	
Chelidonichthys capensis	8.20	16	1.06	1116
Scyliorhinus capensis	5.33	29	0.69	
Holohalaelurus regani	3.08	8	0.40	
Lepidopus caudatus	2.56	12	0.33	
Centrolophus niger	2.26	2	0.29	
Raja straeleni	2.05	6	0.27	
Loligo vulgaris	1.58	10	0.20	1123
Chelidonichthys queketti	1.57	6	0.20	1127
Starfish yellow	1.29	0	0.17	
Cynoglossus zanzibarensis	1.03	23	0.13	1120
Merluccius paradoxus	0.82	158	0.11	1124
Zeus capensis	0.82	10	0.11	1121
Gonypterus capensis	0.45	2	0.06	1128
Etrumeus whiteheadi	0.34	4	0.04	
Starfish red	0.32	4	0.04	
Champsodon capensis	0.22	12	0.03	
Heart urchin	0.13	8	0.02	
Exodromidia sp.	0.10	12	0.01	
Chlorophthalmus sp.	0.07	4	0.01	
Stereomastis sp.	0.04	6	0.01	
Starfish "hairy"	0.02	6	0.00	
Nudibranchs	0.02	4	0.00	
Pterygosquilla armata capensis	0.02	2	0.00	
Sepia hieronis	0.01	2	0.00	
Munidopsis sp.	0.01	2	0.00	
Total	772.60		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1551  
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°19.50  
 start stop duration Lon E 19°17.72  
 TIME :09:40:01 10:09:53 29.9 (min) Purpose : 3  
 LOG : 2266.50 2268.13 1.6 Region : 6100  
 FDEPTH: 187 186 Gear cond.: 0  
 BDEPTH: 187 186 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.3 kn  
 Sorted : 160 Total catch: 159.62 Catch/hour: 320.63

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Lophius vomerinus	118.51	193	36.96	1129
Merluccius capensis	51.22	123	15.98	1134
Squalus megalops	50.22	125	15.66	
Chelidonichthys capensis	21.09	48	6.58	1131
Trachurus capensis	14.06	70	4.39	1130
Mustelus palumbes	10.04	6	3.13	
Helicolenus dactylopterus	9.04	269	2.82	1135
Heart urchin	7.03	177	2.19	
Todaropsis eblanae	4.90	82	1.53	1139
Thyrssites atun	4.82	4	1.50	1132
Holohalaelurus regani	4.02	14	1.25	
Parapagurus dimorphus	3.98	442	1.24	
Todaropsis eblanae	3.90	76	1.22	1140
Loligo vulgaris	3.33	26	1.04	1138
Raja wallacei	2.41	2	0.75	
Loligo vulgaris	2.39	14	0.75	1137
Zeus capensis	2.21	24	0.69	1133
Raja pullopectata	2.01	2	0.63	
Paracallionymus costatus	1.83	406	0.57	
Chelidonichthys queketti	0.63	2	0.20	1212
Gonyrhyngus gonorhynchus	0.51	2	0.17	
Cynoglossus zanzibarensis	0.40	8	0.13	1136
Sepia australis	0.39	32	0.12	
Congiopodus spinifer	0.35	2	0.11	

Starfish red	0.34	8	0.10
Etrumeus whiteheadi	0.30	6	0.09
Starfish yellow	0.26	0	0.08
Scyllorhinus capensis	0.22	4	0.07
Octopus vulgaris, juvenile	0.12	2	0.04
Champsodon capensis	0.06	10	0.02
Total	320.63		100.00

Total 927.19 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1555  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°55.06  
 start stop duration Lon E 19°15.48  
 TIME :06:47:57 07:17:45 29.8 (min) Purpose : 3  
 LOG : 2375.43 2377.16 1.7 Region : 6100  
 FDEPTH: 154 153 (gear cond.: 0  
 BDEPTH: 154 153 Validity : 0  
 Towing dir: 0° Wire out : 400 m Speed : 3.5 kn  
 Sorted : 376 Total catch: 661.74 Catch/hour: 1331.92

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1552  
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°12.06  
 start stop duration Lon E 19°25.09  
 TIME :11:47:35 12:17:51 30.3 (min) Purpose : 3  
 LOG : 2278.89 2280.51 1.6 Region : 6100  
 FDEPTH: 171 171 Gear cond.: 0  
 BDEPTH: 171 171 Validity : 0  
 Towing dir: 0° Wire out : 420 m Speed : 3.2 kn  
 Sorted : 237 Total catch: 553.20 Catch/hour: 1096.52

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	497.52	11837	45.37	
Merluccius capensis	249.10	1425	22.72	1145
Merluccius capensis	140.73	238	12.83	1143
Chelidonichthys capensis	49.55	147	4.52	1141
Todaropsis eblanae	36.41	729	3.32	1148
Lophius vomerinus	35.68	63	3.25	1144
Callorhynchus capensis	15.06	6	1.37	
Squalus megalops	13.28	44	1.21	
Zeus capensis	8.52	137	0.78	1150
Helicolenus dactylopterus	7.14	172	0.65	1149
Raja straeleni	6.94	4	0.63	
Loligo vulgaris	6.34	48	0.58	1146
Holohalaelurus regani	5.75	18	0.52	
Loligo vulgaris	4.76	40	0.43	1147
Lepidopus caudatus	3.96	2	0.36	
Chelidonichthys queketti	3.96	34	0.36	1142
Cardium	3.43	404	0.31	
Heart urchin	2.32	34	0.21	
Sepia australis	1.72	155	0.16	
Trachurus capensis	1.47	18	0.13	1152
Paracallionymus costatus	0.88	240	0.08	
Congiopodus spinifer	0.66	2	0.06	
Merluccius capensis	0.36	34	0.03	1154
Starfish red	0.27	8	0.02	
Parapagurus dimorphus	0.25	26	0.02	
Cynoglossus zanzibarensis	0.22	8	0.02	1151
Genypteris capensis	0.11	2	0.01	1153
CYPRAEIDAE (Bulia)	0.08	18	0.01	
Champsodon capensis	0.04	8	0.00	
Total	1096.52		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	426.70	9277	32.04	
Merluccius capensis	245.56	2244	18.44	1185
Chelidonichthys capensis	215.35	564	16.17	1180
Callorhynchus capensis	142.91	107	10.73	
Merluccius capensis	138.88	296	10.43	1181
Scomber japonicus	40.25	435	3.02	1183
Todaropsis eblanae	21.90	499	1.64	1186
Merluccius capensis	19.97	1208	1.50	1191
Raja pullopectata	16.10	2	1.21	
Raja straeleni	14.09	10	1.06	
Loligo vulgaris	13.69	72	1.03	1192
Lophius vomerinus	8.05	14	0.60	1182
Loligo vulgaris	5.82	46	0.44	1193
Raja wallacei	5.43	2	0.41	
Helicolenus dactylopterus	4.43	145	0.33	1187
Zeus capensis	2.90	48	0.22	1188
Congiopodus torvus	2.44	2	0.18	
Engraulis capensis	2.33	0	0.18	
Argyrozoona argyrozona	1.35	8	0.10	1194
Sepia papillata	0.87	2	0.07	
Trachurus capensis	0.81	8	0.06	1189
Genypteris capensis	0.81	4	0.06	1184
Caelorinchus simorhynchus	0.58	8	0.04	
Sepia australis	0.23	16	0.02	
Paracallionymus costatus	0.23	32	0.02	
Mursia cristimanus	0.14	8	0.01	
Champsodon capensis	0.09	8	0.01	
Rochinia sp.	0.01	8	0.00	
Total	1331.92		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1556  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°0.98  
 start stop duration Lon E 19°6.11  
 TIME :08:58:48 09:29:00 30.2 (min) Purpose : 3  
 LOG : 2388.88 2390.47 1.6 Region : 6100  
 FDEPTH: 177 177 Gear cond.: 0  
 BDEPTH: 177 177 Validity : 0  
 Towing dir: 0° Wire out : 440 m Speed : 3.2 kn  
 Sorted : 211 Total catch: 211.17 Catch/hour: 419.69

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1553  
 DATE :19.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°3.96  
 start stop duration Lon E 19°36.62  
 TIME :14:24:59 14:53:38 28.7 (min) Purpose : 3  
 LOG : 2295.32 2296.94 1.6 Region : 6100  
 FDEPTH: 152 152 Gear cond.: 0  
 BDEPTH: 152 152 Validity : 0  
 Towing dir: 0° Wire out : 380 m Speed : 3.4 kn  
 Sorted : 127 Total catch: 1201.48 Catch/hour: 2516.19

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	2211.52	7372	87.89	
Merluccius capensis	103.66	1418	4.12	1162
Merluccius capensis	37.70	59	1.50	1158
Callorhynchus capensis	31.41	17	1.25	
Lophius vomerinus	31.41	50	1.25	1155
Todaropsis eblanae	29.38	588	1.17	1159
Merluccius capensis	17.28	1244	0.69	1163
Raja straeleni	9.21	13	0.37	
Zeus capensis	9.16	138	0.36	1164
Helicolenus dactylopterus	9.02	105	0.36	1166
Sepia australis	8.05	865	0.32	
Chelidonichthys capensis	6.28	10	0.25	1157
Paracallionymus costatus	4.46	691	0.14	
Sardinops ocellatus	2.97	40	0.12	
Trachurus capensis	2.56	69	0.10	1165
Loligo vulgaris	1.14	8	0.05	1160
Loligo vulgaris	0.86	6	0.03	1161
Starfish red	0.59	36	0.02	
Genypteris capensis	0.52	10	0.02	1156
Total	2516.19		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Chelidonichthys capensis	149.06	405	35.52	1195
Merluccius capensis	79.50	205	18.94	1197
Lophius vomerinus	35.77	89	8.52	1199
Etrumeus whiteheadi	29.81	543	7.10	
Callorhynchus capensis	25.84	14	6.16	
Todaropsis eblanae	19.08	405	4.55	1201
Helicolenus dactylopterus	14.71	294	3.50	1202
Genypteris capensis	11.92	26	2.84	1198
Loligo vulgaris	8.94	54	2.13	1205
Squalus megalops	8.45	36	2.01	
Loligo vulgaris	7.95	54	1.89	1206
Zeus capensis	7.75	109	1.85	1200
Parapagurus dimorphus	3.97	378	0.96	
Chelidonichthys queketti	3.58	22	0.85	1196
Heart urchin	3.38	64	0.81	
Mustelus palumbes	3.38	2	0.81	
Raja straeleni	3.18	4	0.76	
Lepidopus caudatus	0.78	18	0.18	
Sepia australis	0.48	42	0.11	
Paracallionymus costatus	0.40	95	0.09	
Starfish	0.40	20	0.09	
Cynoglossus zanzibarensis	0.36	6	0.09	1203
Gonorhynchus gonorhynchus	0.18	2	0.04	
Sardinops ocellatus	0.17	2	0.04	
Whelks	0.17	8	0.04	
Caelorinchus simorhynchus	0.16	2	0.04	
Giant bullia gastropod	0.15	2	0.04	
Scyllorhinus capensis	0.06	2	0.01	
Champsodon capensis	0.06	8	0.01	
Merluccius capensis	0.04	4	0.01	1204
G A S T R O P O D S	0.02	10	0.01	
Small crabs	0.00	2	0.00	
Total	419.69		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1554  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°45.06  
 start stop duration Lon E 19°23.94  
 TIME :04:30:37 04:59:05 28.5 (min) Purpose : 3  
 LOG : 2360.18 2361.56 1.4 Region : 6100  
 FDEPTH: 85 93 Gear cond.: 0  
 BDEPTH: 85 93 Validity : 0  
 Towing dir: 0° Wire out : 220 m Speed : 2.9 kn  
 Sorted : 100 Total catch: 439.95 Catch/hour: 927.18

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Etrumeus whiteheadi	619.60	28164	66.83	
Engraulis capensis	214.96	18693	23.18	
Callorhynchus capensis	28.45	23	3.07	
Raja straeleni	12.86	6	1.39	
Merluccius capensis	11.51	582	1.24	1176
Lophius vomerinus	9.27	6	1.00	1167
Spatangus capensis	7.51	25	0.81	
Chelidonichthys capensis	6.32	4	0.68	1179
Zeus capensis	2.66	114	0.29	1175
Merluccius capensis	2.23	4	0.24	1171
Lepidopus caudatus	1.86	291	0.20	
Chelidonichthys queketti	1.39	67	0.15	1170
Sepia papillata	1.24	4	0.13	
Loligo vulgaris	1.16	4	0.13	1172
Gonorhynchus gonorhynchus	0.99	15	0.11	
Sepia australis	0.94	215	0.10	
Halaalurus natalensis	0.86	2	0.09	
Cynoglossus zanzibarensis	0.53	4	0.06	1169
Jasus lalandii	0.48	2	0.05	1168
Loligo vulgaris	0.36	2	0.04	1178
Pagellus bellottii natalensis	0.32	4	0.03	
Paracallionymus costatus	0.24	63	0.03	
Trachurus capensis	0.19	4	0.02	1174
Starfish red	0.18	13	0.02	
Starfish yellow	0.18	25	0.02	
Pterygosquilla armata capensis	0.16	63	0.02	
Congiopodus spinifer	0.15	2	0.02	
Champsodon capensis	0.14	13	0.02	
Scomber japonicus	0.12	2	0.01	1173
Macrorhamphosus scolopax	0.11	25	0.01	
Mursia cristimanus	0.11	4	0.01	
Helicolenus dactylopterus	0.09	51	0.01	1177
Arnoglossus capensis	0.03	2	0.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1557  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°10.87  
 start stop duration Lon E 18°54.05  
 TIME :11:33:06 12:02:53 29.8 (min) Purpose : 3  
 LOG : 2406.21 2407.68 1.5 Region : 6100  
 FDEPTH: 226 228 Gear cond.: 0  
 BDEPTH: 226 228 Validity : 0  
 Towing dir: 0° Wire out : 500 m Speed : 3.0 kn  
 Sorted : 335 Total catch: 335.23 Catch/hour: 675.42

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius capensis	134.99	89	19.99	1207
Merluccius paradoxus	86.64	461	12.83	1209
Trachurus capensis	67.49	461	9.99	1210
Todaropsis eblanae	53.79	1034	7.96	1219
Chelidonichthys capensis	50.37	93	7.46	1211
Todaropsis eblanae	42.91	739	6.35	1220
Etrumeus whiteheadi	41.50	576	6.14	
Callorhynchus capensis	34.25	16	5.07	
Squalus megalops	31.23	87	4.62	
Parapagurus dimorphus	30.22	3181	4.47	
Lophius vomerinus	22.16	32	3.28	1216
Mustelus palumbes	22.16	14	3.28	
Caelorinchus simorhynchus	15.51	218	2.30	
Helicolenus dactylopterus	8.06	165	1.19	1215
Paracallionymus costatus	7.25	1320	1.07	
Loligo vulgaris	7.05	24	1.04	1213
Scyllorhinus capensis	4.43	22	0.66	
Zeus capensis	4.03	24	0.60	1208
Holohalaelurus regani	3.63	12	0.54	
Raja straeleni	2.01	2	0.30	
Lepidopus caudatus	2.01	2	0.30	
Loligo vulgaris	1.61	8	0.24	1214
Cynoglossus zanzibarensis	0.52	10	0.08	1217
Scyllorhinus capensis	0.37	2	0.05	0
Genypteris capensis	0.28	2	0.04	1218
Emmelichthys nitidus	0.27	2	0.04	
Sepia australis	0.24	16	0.04	
Champsodon capensis	0.15	16	0.04	
Lepidopus caudatus	0.15	2	0.02	0
Starfish	0.04	6	0.01	

Whelks 0.03 2 0.01  
 Sepia hieronias 0.02 4 0.00  
 Total 675.42 100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1561  
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°29.74  
 start stop duration Lon E 18°56.65  
 TIME :06:35:32 07:05:34 30.0 (min) Purpose : 3  
 LOG : 2479.48 2480.90 1.4 Region : 6100  
 FDEPTH: 453 458 Gear cond.: 0  
 BDEPTH: 453 458 Validity : 0  
 Towing dir: 0° Wire out : 1050 m Speed : 2.8 kn  
 Sorted : 416 Total catch: 2403.20 Catch/hour: 4800.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1558  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°15.49  
 start stop duration Lon E 18°44.08  
 TIME :13:59:16 14:29:40 30.4 (min) Purpose : 3  
 LOG : 2419.61 2421.25 1.6 Region : 6100  
 FDEPTH: 380 387 Gear cond.: 0  
 BDEPTH: 380 387 Validity : 0  
 Towing dir: 0° Wire out : 870 m Speed : 3.2 kn  
 Sorted : 326 Total catch: 3654.77 Catch/hour: 7213.37

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	4024.63	15643	83.85	1246
Merluccius paradoxus	243.68	274	5.08	1247
Helicolenus dactylopterus	203.73	4150	4.24	1250
Caelorinchus simorhynchus	131.62	3134	2.74	
Lepidopus caudatus	51.93	48	1.08	
Anemones, pink	38.06	391	0.79	
Bassanago albescens	18.81	32	0.39	
Todaropsis eblanae	15.98	94	0.33	1251
Zeus capensis	12.78	16	0.27	1249
Lophius vomerinus	5.99	4	0.12	1248
Starfish "hairy"	5.59	627	0.12	
Beryx splendens	5.42	112	0.11	
Hoplostethus mediterraneus	5.33	48	0.11	
Parapagurus pilosimanus	4.85	423	0.10	
Malacocephalus laevis	4.57	16	0.10	
Tripterygius gilchristi	4.43	266	0.09	
Anemones, white	4.23	62	0.09	
Physiculus capensis	3.56	156	0.07	
Todaropsis eblanae	2.81	16	0.06	1252
Lucigadus ori	2.24	172	0.05	
Shrimps, small, non comm.	2.21	533	0.05	
Dead coral	1.85	0	0.04	
Paracallionymus costatus	1.31	172	0.03	
Rochinia sp.	1.27	407	0.03	
Stereomastis sp.	0.72	110	0.01	
Whelks	0.69	16	0.01	
Munidopsis sp.	0.58	78	0.01	
Starfish yellow	0.39	62	0.01	
Parapagurus dimorphus	0.28	32	0.01	
G A S T R O P O D S	0.19	62	0.00	
Caelorinchus braueri	0.18	16	0.00	
CYPRAEIDAE (Bulia)	0.08	32	0.00	
Total	4800.00		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1559  
 DATE :20.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°15.31  
 start stop duration Lon E 18°42.24  
 TIME :16:17:01 16:47:12 30.2 (min) Purpose : 3  
 LOG : 2429.27 2430.84 1.6 Region : 6100  
 FDEPTH: 451 471 Gear cond.: 0  
 BDEPTH: 451 471 Validity : 0  
 Towing dir: 0° Wire out : 1150 m Speed : 3.1 kn  
 Sorted : 842 Total catch: 841.71 Catch/hour: 1672.83

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1562  
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°16.50  
 start stop duration Lon E 18°40.77  
 TIME :09:39:29 10:06:18 26.8 (min) Purpose : 3  
 LOG : 2498.41 2499.94 1.5 Region : 6100  
 FDEPTH: 592 571 Gear cond.: 0  
 BDEPTH: 592 571 Validity : 0  
 Towing dir: 0° Wire out : 1390 m Speed : 3.4 kn  
 Sorted : 97 Total catch: 96.78 Catch/hour: 216.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1504.47	2564	89.94	1229
Helicolenus dactylopterus	105.33	2357	6.30	1231
Caelorinchus simorhynchus	39.75	892	2.38	
Caelorinchus braueri	6.96	254	0.42	
Lampanyctodes hectoris	5.96	0	0.36	
Lophius vomerinus	1.99	2	0.12	1230
Todaropsis eblanae	1.99	10	0.12	1232
Notacanthus sexspinis	1.19	10	0.07	
Anemones, pink	1.11	16	0.07	
Lycoteuthis lorigera	0.78	18	0.05	
Todaropsis eblanae	0.38	6	0.02	1233
Tripterygius gilchristi	0.38	24	0.02	
Paracallionymus costatus	0.34	56	0.02	
Photichthys argenteus	0.32	6	0.02	
Symblophorus boops	0.26	22	0.02	
Hoplostethus mediterraneus	0.20	6	0.01	
Myxine capensis	0.18	2	0.01	
Anemones, white	0.18	2	0.01	
Starfish yellow	0.17	12	0.01	
Lucigadus ori	0.15	16	0.01	
Funchalia woodwardi	0.12	8	0.01	
Haliporoides triarthrus	0.12	8	0.01	
Whelks	0.11	4	0.01	
Diaphus sp.	0.08	6	0.00	0
Diaphus sp.	0.07	18	0.00	
Starfish "hairy"	0.05	6	0.00	
Physiculus capensis	0.04	4	0.00	
Epigonus sp.	0.04	4	0.00	
PARALEPIDIDAE	0.03	2	0.00	
Shrimps, small, non comm.	0.03	4	0.00	
Champsodon capensis	0.02	2	0.00	
Holohalaelurus regani	0.02	2	0.00	
Stereomastis sp.	0.02	2	0.00	
Abraliopsis gilchristi	0.01	2	0.00	
Pterygosquilla armata capensis	0.01	2	0.00	
Stoloteuthis sp.	0.01	2	0.00	
Rochinia sp.	0.01	2	0.00	
Total	1672.89		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Caelorinchus braueri	87.25	1897	40.30	
Merluccius paradoxus	25.50	22	11.78	1253
Photichthys argenteus	22.37	4	10.33	1256
Squalus mitsukurii	21.25	4	9.82	
Helicolenus dactylopterus	14.09	168	6.51	1254
Funchalia woodwardi	10.60	662	4.90	
Histioteuthis miranda	5.59	4	2.58	
Psychrolutes macrocephalus	4.70	40	2.17	
Starfish "hairy"	3.87	0	1.79	
Nezumia sp.	3.36	186	1.55	
Starfish yellow	3.04	48	1.41	
Notacanthus sexspinis	2.80	49	1.29	
Photichthys argenteus	2.80	49	1.29	
Ancistroleirus lesueurii	2.12	2	0.98	1255
Sergia sp.	1.18	226	0.54	
P O L Y C H A E T A	1.07	0	0.50	
Diastobranchius capensis	0.97	29	0.45	
Pasiphaea sp.	0.94	376	0.43	
Etmopterus brachyurus	0.73	11	0.34	
Anemones, pink	0.63	13	0.29	
Starfish yellow	0.54	0	0.25	
Chaceon macphersoni	0.49	2	0.23	
Symblophorus boops	0.48	34	0.22	
Kuronezumia leonis	0.32	7	0.15	
Rochinia sp.	0.26	78	0.12	
Bathypolypus valdiviae	0.25	9	0.11	
Ophichthus bennettai	0.24	2	0.11	
Lycoteuthis lorigera	0.23	4	0.11	
Coloconger cadetani	0.22	2	0.10	
Shrimps, small, non comm.	0.20	36	0.09	
Lampanyctodes hectoris	0.19	130	0.09	
Diaphus sp.	0.19	47	0.09	
Polymixia nobilis	0.13	2	0.06	
Plesiopaneus edwardsianus	0.08	7	0.04	
Cranhia scabra	0.07	2	0.03	
Starfish red	0.07	2	0.03	
Lepidion capensis	0.07	2	0.03	
Whelks	0.05	2	0.02	
Stereomastis sp.	0.05	11	0.02	
Nemichthys sp.	0.05	2	0.02	
Munidopsis sp.	0.05	9	0.02	
Chauliodus sloani	0.04	2	0.02	
Diaphus sp.	0.04	2	0.02	0
Parapagurus pilosimanus	0.03	4	0.02	
Rossia enigmatica	0.03	2	0.01	
Abraliopsis gilchristi	0.02	4	0.01	
Champsodon capensis	0.01	2	0.01	
Lampadina sp.	0.01	2	0.00	
Maurolicus muelleri	0.00	4	0.00	
Argyropelecus sp.	0.00	4	0.00	
Phyllosoma	0.00	4	0.00	1369
Total	216.50		100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1560  
 DATE :21.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 35°29.40  
 start stop duration Lon E 18°59.56  
 TIME :04:41:48 05:11:50 30.0 (min) Purpose : 3  
 LOG : 2472.55 2473.78 1.2 Region : 6100  
 FDEPTH: 351 348 Gear cond.: 0  
 BDEPTH: 351 348 Validity : 0  
 Towing dir: 0° Wire out : 825 m Speed : 2.5 kn  
 Sorted : 250 Total catch: 1637.75 Catch/hour: 3272.23

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1563  
 DATE :21.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 35°0.62  
 start stop duration Lon E 18°26.87  
 TIME :13:17:36 13:40:04 22.5 (min) Purpose : 3  
 LOG : 2524.54 2525.57 1.0 Region : 6100  
 FDEPTH: 648 634 Gear cond.: 0  
 BDEPTH: 648 634 Validity : 0  
 Towing dir: 0° Wire out : 1500 m Speed : 2.8 kn  
 Sorted : 38 Total catch: 38.37 Catch/hour: 102.50

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	1426.57	9199	43.60	1240
Caelorinchus simorhynchus	713.29	11145	21.80	
Helicolenus dactylopterus	489.11	4911	14.95	1239
Parapagurus dimorphus	163.84	14895	5.01	
Zeus capensis	66.53	62	2.03	1241
Merluccius capensis	61.94	24	1.89	1236
Lophius vomerinus	53.95	22	1.65	1237
Todaropsis eblanae	52.55	651	1.61	1242
Malacocephalus laevis	48.75	142	1.49	
Todaropsis eblanae	42.96	549	1.31	1243
Scyliorhinus capensis	32.17	62	0.98	
Gempylus capensis	31.97	22	0.98	1238
Merluccius paradoxus	27.97	14	0.85	1235
Dead coral	11.53	0	0.35	
Helicolenus dactylopterus	6.89	4	0.21	1245
Anemones, pink	6.48	82	0.20	
Lepidopus caudatus	5.99	8	0.18	
Emmelichthys nitidus	5.15	20	0.16	
Cyttus traversi	4.70	2	0.14	
Cynoglossus zanzibarensis	4.14	122	0.13	1244
Thysites atun	3.40	2	0.10	1234
Whelks	3.36	102	0.10	
Rossia enigmatica	2.35	62	0.07	
Octopus magnificus	2.00	4	0.06	
Starfish red	1.40	20	0.04	
Physiculus capensis	1.33	82	0.04	
Parapagurus pilosimanus	1.24	82	0.04	
Starfish "hairy"	0.36	20	0.01	
Starfish yellow	0.32	40	0.01	
Total	3272.23		100.00	

SPECIES	CATCH/HOUR		% OF TOT. C	SAMP
	weight	numbers		
Merluccius paradoxus	40.07	51	39.09	1258
Caelorinchus braueri	24.58	371	23.98	
Helicolenus dactylopterus	16.83	77	16.42	1257
Histioteuthis miranda	4.97	3	4.85	
Nezumia sp.	4.11	144	4.01	
Lepidion capensis	2.78	16	2.71	
Sergia sp.	2.35	459	2.29	
Eptatretus profundus	2.04	3	1.99	
Photichthys argenteus	0.77	11	0.76	
Hoplostethus mediterraneus	0.71	8	0.70	
Etmopterus brachyurus	0.64	8	0.63	

Raja leoparden	0.56	13	0.54
Ophichthus bennettai	0.40	3	0.39
Myxine sp.	0.29	3	0.28
Psychrolutes macrocephalus	0.28	3	0.27
Trachyscorpia eschmeyerii	0.22	3	0.21
Chlorophthalmus agassizi	0.20	3	0.19
Shrimps, small, non comm.	0.14	16	0.14
Diaphus sp.	0.12	8	0.12
Lampanyctodes hectoris	0.11	59	0.11
Caelorinchus simorhynchus	0.09	3	0.09
Selachophidium guentheri	0.08	3	0.08
Paraliparis australis	0.05	37	0.05
Tripteroptychus gilchristi	0.05	3	0.05
Plesiopteneus edwardsianus	0.05	3	0.05
Maurolucius muelleri	0.01	8	0.01
Total	102.50		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1564  
 DATE :21.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 34°57.81  
 start stop duration Lon E 18°28.28  
 TIME :15:57:06 16:17:19 20.2 (min) Purpose : 3  
 LOG : 2534.18 2535.26 1.1 Region : 6100  
 FDEPTH: 441 456 Gear cond.: 0  
 BDEPTH: 441 456 Validity : 0  
 Towing dir: 0° Wire out : 1150 m Speed : 3.2 kn  
 Sorted : 536 Total catch: 535.89 Catch/hour: 1590.17

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Helicolenus dactylopterus	590.50 3730	37.13	1261
Merluccius paradoxus	326.41 837	20.53	1260
Merluccius paradoxus	222.55 243	14.00	1259
Caelorinchus simorhynchus	213.65 2374	13.44	
Bassanago albescens	118.69 125	7.46	
Lophius vomerinus	41.54 21	2.61	1262
Gorgonians	17.80 0	1.12	
Octopus magnificus	17.06 6	1.07	
Whelks	10.98 487	0.69	
Starfish	10.15 0	0.64	
Lepidion capensis	8.90 9	0.56	
Lucigadus ori	2.97 148	0.19	
Todaropsis eblanae	2.76 15	0.17	1264
Sea cucumber	1.66 18	0.10	
Tripteroptychus gilchristi	0.98 39	0.06	
Notacanthus sexspinis	0.80 3	0.05	
Parapagurus pilosimanus	0.66 36	0.04	
Dead coral	0.45 0	0.03	
Echinus gilchristi ?	0.40 3	0.03	
Anemones, pink	0.34 3	0.02	
CORAL	0.24 0	0.01	
Lycoteuthis lorigera	0.12 3	0.01	
Rochinia sp.	0.12 30	0.01	
Cynoglossus zanzibarensis	0.10 3	0.01	1263
Epigonus sp.	0.06 3	0.00	
Plagiogeneion rubiginosus	0.06 3	0.00	
Lampanyctodes hectoris	0.04 15	0.00	
Diastobranthus capensis	0.03 9	0.00	
Physiculus capensis	0.03 3	0.00	
Octopus sp.	0.03 3	0.00	
Paracallionymus costatus	0.02 3	0.00	
Parapagurus dimorphus	0.02 3	0.00	
G A S T R O P O D S	0.02 9	0.00	
CYPRAEIDAE (Bulia)	0.01 3	0.00	
Maurolucius muelleri	0.01 3	0.00	
Small crabs	0.01 3	0.00	
Total	1590.17	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1565  
 DATE :22.02.2008 GEAR TYPE: BT NO: 19 POSITION:Lat S 34°48.42  
 start stop duration Lon E 18°18.68  
 TIME :04:41:19 05:01:08 19.8 (min) Purpose : 3  
 LOG : 2570.60 2571.64 1.0 Region : 6100  
 FDEPTH: 455 454 Gear cond.: 0  
 BDEPTH: 455 454 Validity : 0  
 Towing dir: 0° Wire out : 1125 m Speed : 3.1 kn  
 Sorted : 427 Total catch: 426.93 Catch/hour: 1292.41

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	417.76 784	32.32	1266
Merluccius paradoxus	323.92 303	25.06	1265
Bassanago albescens	184.66 209	14.29	
Helicolenus dactylopterus	130.17 984	10.07	1267
Caelorinchus simorhynchus	112.01 3027	8.67	
Octopus magnificus	60.54 9	4.68	
CORAL	12.11 0	0.94	
Parapagurus pilosimanus	9.78 493	0.76	
Lepidion capensis	7.57 6	0.59	
Squalus mitsukurii	6.36 3	0.49	
Tripteroptychus gilchristi	5.24 288	0.41	
Physiculus capensis	3.39 212	0.26	
Dead coral	2.91 0	0.23	
Whelks	2.46 103	0.19	
Scyllorhinus capensis	2.42 3	0.19	
Starfish "hairy"	2.36 0	0.18	
Lucigadus ori	2.06 242	0.16	
Starfish	1.76 0	0.14	
Paracallionymus costatus	1.33 139	0.10	
Starfish red	0.82 12	0.06	0
Starfish yellow	0.64 6	0.05	
Anemones, pink	0.45 6	0.04	
Starfish red	0.38 12	0.03	
Epigonus sp.	0.27 12	0.02	
Rochinia sp.	0.25 42	0.02	
Rossia enigmatica	0.19 6	0.01	
Lycoteuthis lorigera	0.18 9	0.01	
Stereomastis sp.	0.11 18	0.01	
G A S T R O P O D S	0.11 36	0.01	
Not found	0.06 6	0.00	
Sepia sp.	0.03 6	0.00	
P O L Y C H A E T A	0.03 6	0.00	
Parapagurus dimorphus	0.03 3	0.00	
Haliporoides triarthrus	0.02 3	0.00	
Electrona risso	0.02 3	0.00	
Cardium sp.	0.01 3	0.00	
Lampanyctodes hectoris	0.01 3	0.00	
Total	1292.41	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1566  
 DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°49.48  
 start stop duration Lon E 18°25.25  
 TIME :06:24:42 06:56:02 31.4 (min) Purpose : 3  
 LOG : 2580.22 2582.09 1.9 Region : 6100  
 FDEPTH: 346 370 Gear cond.: 0  
 BDEPTH: 346 370 Validity : 0  
 Towing dir: 0° Wire out : 810 m Speed : 3.6 kn  
 Sorted : 264 Total catch: 2619.38 Catch/hour: 5013.17

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	4126.32 14842	82.31	1268

Caelorinchus simorhynchus	348.33	6967	6.95
Todaropsis eblanae	171.48	1072	3.42 1278
Todaropsis eblanae	99.14	831	1.98 1277
Merluccius paradoxus	91.87	105	1.83 1274
Lophius vomerinus	40.19	15	0.80 1270
Helicolenus dactylopterus	25.45	456	0.51 1275
Holohalaelurus regani	19.10	697	0.38
Malacocephalus laevis	17.95	107	0.36
Cynoglossus zanzibarensis	15.27	241	0.31 1276
Paracallionymus costatus	12.33	1420	0.25
Mustelus mustelus	11.48	2	0.23
Dead coral	11.25	0	0.22
Zeus capensis	7.08	6	0.14 1271
Scomber japonicus	3.83	2	0.08 1269
Brama brama	3.25	2	0.06 1272
Starfish red	2.68	375	0.05
Trachurus capensis	2.41	27	0.05 1279
Genypterus capensis	1.53	2	0.03 1273
Rochinia sp.	0.86	134	0.02
Starfish yellow	0.40	80	0.01
Parapagurus dimorphus	0.35	27	0.01
CYPRAEIDAE (Bulia)	0.27	54	0.01
Maurolucius muelleri	0.13	80	0.00
Mursia cristimanus	0.11	27	0.00
Chaceon sp., juvenile	0.11	2	0.00
Total	5013.17		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1567  
 DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°53.12  
 start stop duration Lon E 18°35.28  
 TIME :08:24:19 08:43:50 19.5 (min) Purpose : 3  
 LOG : 2591.68 2592.67 1.0 Region : 6100  
 FDEPTH: 225 225 Gear cond.: 0  
 BDEPTH: 225 225 Validity : 0  
 Towing dir: 0° Wire out : 560 m Speed : 3.0 kn  
 Sorted : 350 Total catch: 350.16 Catch/hour: 1075.75

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	298.00 1908	27.70	1283
Etrumeus whiteheadi	202.76 2633	18.85	
Chelidonichthys capensis	84.49 129	7.85	1284
Lophius vomerinus	77.11 120	7.17	1286
Squalus megalops	73.73 218	6.85	
Merluccius capensis	72.20 92	6.71	1282
Caelorinchus simorhynchus	61.44 697	5.71	
Jasus lalandii	36.87 68	3.43	1280
Helicolenus dactylopterus	35.33 1432	3.28	1288
Todaropsis eblanae	23.53 320	2.19	1292
Paracallionymus costatus	16.90 1877	1.57	
Todaropsis eblanae	16.41 227	1.53	1293
Parapagurus dimorphus	16.28 1164	1.51	
Mustelus plumbes	13.82 3	1.29	
Brama brama	9.22 6	0.86	1281
Loligo vulgaris	7.96 34	0.74	1290
Lepidopus caudatus	6.14 3	0.57	
Aegourea forskalea	6.14 0	0.57	
Raja straeleni	3.56 9	0.33	
Scyllorhinus capensis	3.38 18	0.31	
Zeus capensis	3.07 9	0.29	1287
Trachurus capensis	2.15 22	0.20	1289
Genypterus capensis	1.47 9	0.14	1285
Holohalaelurus regani	1.00 98	0.09	
Cubiceps capensis	0.64 9	0.06	
Loligo vulgaris	0.52 3	0.05	1291
Merluccius paradoxus	0.41 22	0.04	1294
Starfish "hairy"	0.37 0	0.03	
Merluccius capensis	0.33 12	0.03	1295
Starfish yellow	0.30 0	0.03	
Cynoglossus zanzibarensis	0.14 6	0.01	1296
Spatangon capensis	0.02 3	0.00	
Champsodon capensis	0.02 3	0.00	
Rochinia sp.	0.01 3	0.00	
Sepia sp.	0.01 3	0.00	
Total	1075.75	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1568  
 DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°45.34  
 start stop duration Lon E 18°44.85  
 TIME :10:54:14 11:18:18 24.1 (min) Purpose : 3  
 LOG : 2606.29 2607.42 1.1 Region : 6100  
 FDEPTH: 176 176 Gear cond.: 0  
 BDEPTH: 176 176 Validity : 0  
 Towing dir: 0° Wire out : 425 m Speed : 2.8 kn  
 Sorted : 304 Total catch: 822.76 Catch/hour: 2050.91

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Etrumeus whiteheadi	1562.94 22013	76.21	
Merluccius capensis	196.93 673	9.60	1307
Chelidonichthys capensis	114.67 364	5.59	1308
Lophius vomerinus	42.38 75	2.07	1309
Todaropsis eblanae	18.94 461	0.92	1304
Raja straeleni	17.45 5	0.85	
Todaropsis eblanae	16.58 319	0.81	1305
Loligo vulgaris	13.96 70	0.68	1302
Zeus capensis	10.34 155	0.50	1298
Callorhynchus capensis	9.72 2	0.47	
Sepia australis	8.41 710	0.41	
Helicolenus dactylopterus	5.56 130	0.27	1299
Squalus megalops	5.48 50	0.27	
Paracallionymus costatus	4.74 995	0.23	
Loligo vulgaris	4.24 27	0.21	1303
Aegourea forskalea	3.12 12	0.15	
Merluccius capensis	2.99 322	0.15	1301
Jasus lalandii	2.49 5	0.12	1297
Holohalaelurus regani	2.24 12	0.11	
Anemones, pink	2.01 95	0.10	
Galeorhinus galeus	1.99 2	0.10	
Trachurus capensis	1.74 25	0.09	1300
Caelorinchus simorhynchus	0.75 12	0.04	
Cynoglossus zanzibarensis	0.45 12	0.02	1306
Coral - Alcyonaria?	0.28 82	0.01	
Congiopodus spinifer	0.24 12	0.01	
CORAL	0.16 12	0.01	
Champsodon capensis	0.07 12	0.00	
Parapagurus dimorphus	0.07 25	0.00	
Total	2050.91	100.00	

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1569  
 DATE :22.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°37.73  
 start stop duration Lon E 18°55.77  
 TIME :13:37:49 14:05:17 27.5 (min) Purpose : 3  
 LOG : 2626.67 2628.20 1.5 Region : 6100  
 FDEPTH: 144 142 Gear cond.: 0  
 BDEPTH: 144 142 Validity : 0  
 Towing dir: 0° Wire out : 360 m Speed : 3.3 kn  
 Sorted : 207 Total catch: 1763.49 Catch/hour: 3853.23

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		

Etrumeus whiteheadi	3461.03	128187	89.82		
Merluccius capensis	98.32	122	2.55	1311	
Merluccius capensis	93.95	555	2.44	1312	
Engraulis capensis	76.91	4807	2.00		
Chelidonichthys capensis	32.77	122	0.85	1313	
Raja straeleni	18.14	15	0.47		
Callorhynchus capensis	14.86	9	0.39		
Lophius vomerinus	13.55	13	0.35	1314	
Sardinops ocellatus	12.67	162	0.33		
Todaropsis eblanae	9.61	288	0.25	1316	
Helicolenus dactylopterus	6.25	144	0.16	1315	
Merluccius capensis	5.68	361	0.15	1318	
Heart urchin	4.81	48	0.12		
Todaropsis eblanae	2.40	96	0.06	1317	
Zeus capensis	1.49	48	0.04	1319	
Paracallionymus costatus	0.77	96	0.02		
Total	3853.23		100.00		

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1570  
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°23.17  
 start stop duration Lon E 18°44.07  
 TIME :04:38:35 05:08:20 29.8 (min) Purpose : 3  
 LOG : 2681.38 2682.82 1.4 Region : 6100  
 FDEPTH: 84 89 Gear cond.: 0  
 BDEPTH: 84 89 Validity : 0  
 Towing dir: 0° Wire out : 200 m Speed : 2.9 kn  
 Sorted :1209 Total catch: 1209.08 Catch/hour: 2438.48

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Jasus lalandii	1337.14	8692	54.83 1321
Jasus lalandii	635.29	3193	26.05 1320
Callorhynchus capensis	237.98	1081	9.76
Chelidonichthys capensis	102.86	317	4.22 1322
Etrumeus whiteheadi	62.52	0	2.56
Merluccius capensis	26.22	38	1.08 1324
Merluccius capensis	22.18	294	0.91 1325
Scyliorhinus capensis	4.84	2	0.20
Raja straeleni	4.64	2	0.19
Cynoglossus zanzibarensis	2.82	34	0.12 1323
Mustelus palumbes	0.70	2	0.03
Squalus megalops	0.49	2	0.02
Loligo vulgaris	0.42	2	0.02 1326
Congiopodus spinifer	0.26	4	0.01
Genypterus capensis	0.08	2	0.00 1327
Pterygosquilla armata capensis	0.02	2	0.00
Total	2438.48		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1571  
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°21.58  
 start stop duration Lon E 18°28.32  
 TIME :07:36:02 07:49:23 13.4 (min) Purpose : 3  
 LOG : 2699.79 2700.50 0.7 Region : 6100  
 FDEPTH: 176 0 Gear cond.: 0  
 BDEPTH: 176 0 Validity : 0  
 Towing dir: 0° Wire out : 450 m Speed : 3.2 kn  
 Sorted : 177 Total catch: 541.38 Catch/hour: 2433.15

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Etrumeus whiteheadi	1779.78	52346	73.15
Jasus lalandii	242.70	944	9.97 1328
Merluccius capensis	107.87	315	4.43 1332
Merluccius capensis	93.84	2022	3.86 1334
Callorhynchus capensis	35.96	45	1.48
Chelidonichthys capensis	26.97	81	1.11 1330
Raja straeleni	22.47	18	0.92
Todaropsis eblanae	21.84	512	0.90 1335
Loligo vulgaris	16.45	108	0.68 1338
Merluccius capensis	16.45	1052	0.68 1336
Lophius vomerinus	15.73	31	0.65 1331
Helicolenus dactylopterus	13.48	189	0.55 1329
Sardinops ocellatus	10.52	135	0.43
Zeus capensis	8.63	108	0.35 1333
Loligo vulgaris	7.01	54	0.29 1337
Paracallionymus costatus	3.72	512	0.15
Mustelus palumbes	3.51	4	0.14
Sepia australis	2.97	189	0.12
Scomber japonicus	1.81	27	0.07 1339
Genypterus capensis	0.90	13	0.04 1340
Coral - Alcyonaria?	0.27	27	0.01
Congiopodus spinifer	0.16	27	0.01
Rochinia sp.	0.13	27	0.01
Total	2433.15		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1572  
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°40.29  
 start stop duration Lon E 18°20.55  
 TIME :11:30:04 11:59:19 29.3 (min) Purpose : 3  
 LOG : 2717.07 2718.46 1.4 Region : 6100  
 FDEPTH: 365 377 Gear cond.: 0  
 BDEPTH: 365 377 Validity : 0  
 Towing dir: 0° Wire out : 820 m Speed : 2.8 kn  
 Sorted :1220 Total catch: 1219.56 Catch/hour: 2501.66

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	1920.00	8601	76.75 1341
Caelorhynchus simorhynchus	215.38	3713	8.61
Helicolenus dactylopterus	157.95	843	6.31 1343
Merluccius paradoxus	153.85	158	6.15 1342
Lepidopus caudatus	36.92	45	1.48
Malacocephalus laevis	5.64	18	0.23
Lophius vomerinus	4.72	2	0.19 1344
Holohalaelurus regani	1.91	4	0.08
Todaropsis eblanae	1.83	12	0.07 1346
Bassanago albescens	0.96	2	0.04
Paracallionymus costatus	0.82	80	0.03
Todaropsis eblanae	0.66	6	0.03 1345
Trachurus capensis	0.42	2	0.02 1347
Myxine capensis	0.22	2	0.01
Beryx splendens	0.11	2	0.00
Rossia enigmatica	0.10	27	0.00
Physiculus capensis	0.09	6	0.00
Starfish red	0.08	2	0.00
Rochinia sp.	0.01	2	0.00
Mursia cristimanus	0.01	2	0.00
Total	2501.66		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1573  
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°42.04  
 start stop duration Lon E 18°16.77  
 TIME :14:53:03 15:13:35 20.0 (min) Purpose : 3  
 LOG : 2728.23 2729.36 1.1 Region : 6100  
 FDEPTH: 481 484 Gear cond.: 0  
 BDEPTH: 481 484 Validity : 0  
 Towing dir: 0° Wire out : 1150 m Speed : 128.3 kn  
 Sorted : 456 Total catch: 455.88 Catch/hour: 1367.65

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	981.00	2157	71.73 1349
Merluccius paradoxus	201.00	174	14.70 1348
Caelorhynchus simorhynchus	57.00	1356	4.17
Bassanago albescens	30.00	48	2.19
Todaropsis eblanae	22.50	150	1.65 1353
Todaropsis eblanae	21.00	174	1.54 1352
Helicolenus dactylopterus	18.00	252	1.32 1354
Caelorhynchus braueri	12.39	540	0.91
Lophius vomerinus	9.90	3	0.72 1350
Brama brama	3.60	3	0.26 1351
Cyttus traversi	1.64	3	0.12
Centrolophus niger	1.58	3	0.12
Paracallionymus costatus	1.47	141	0.11
Lampanyctodes hectoris	1.26	486	0.09
Anemones, pink	1.16	6	0.08
Psychrolutes macrocephalus	0.88	9	0.06
Whelks	0.57	18	0.04
Lycoteuthis lorigera	0.50	12	0.04
Rossia enigmatica	0.50	15	0.04
Physiculus capensis	0.46	21	0.03
Tripterophycis gilchristi	0.29	18	0.02
Parapagurus pilosimanus	0.28	24	0.02
Lucigadus ori	0.16	24	0.01
Stereocastis sp.	0.15	27	0.01
Starfish red	0.14	9	0.01
P O L Y C H A E T A	0.07	12	0.01
G A S T R O P O D S	0.05	15	0.00
Parapagurus dimorphus	0.03	6	0.00
CYPRAEIDAE (Bulla)	0.02	6	0.00
Sepia sp.	0.02	3	0.00
Chlorophthalmus sp.	0.02	3	0.00
Rochinia sp.	0.02	6	0.00
Maurollicus muelleri	0.01	9	0.00
Starfish "hairy"	0.00	3	0.00
Total	1367.65		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1574  
 DATE :23.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 34°48.48  
 start stop duration Lon E 18°15.23  
 TIME :17:34:59 17:54:15 19.3 (min) Purpose : 3  
 LOG : 2739.21 2740.26 1.1 Region : 6100  
 FDEPTH: 576 563 Gear cond.: 0  
 BDEPTH: 576 563 Validity : 0  
 Towing dir: 0° Wire out : 1350 m Speed : 3.3 kn  
 Sorted : 97 Total catch: 96.87 Catch/hour: 301.77

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Caelorhynchus braueri	246.11	3280	81.55
Merluccius paradoxus	24.30	16	8.05 1357
Chaecoon macphersoni	8.57	44	2.84
Helicolenus dactylopterus	7.60	69	2.52 1355
Todaropsis eblanae	4.21	40	1.39 1356
Notacanthus sexspinis	2.71	40	0.90
Ruvettus pretiosus	2.21	3	0.73
Psychrolutes macrocephalus	1.09	6	0.36
Starfish "hairy"	0.89	0	0.30
Nemuria sp.	0.70	69	0.23
Not found	0.62	9	0.21
Shrimps, small, non comm.	0.60	112	0.20
Hoplostethus mediterraneus	0.46	12	0.15
Neoraja stehmanni	0.43	3	0.14
Oreosoma atlanticum	0.33	3	0.11
Symbolophorus boops	0.14	12	0.05
Physiculus capensis	0.13	6	0.04
Diaphus effulgens	0.12	9	0.04
P O L Y C H A E T A	0.11	22	0.04
Rossia enigmatica	0.10	6	0.03
Lucigadus ori	0.08	6	0.03
Lampanyctodes hectoris	0.06	28	0.02
Tripterophycis gilchristi	0.05	3	0.02
Paracallionymus costatus	0.04	3	0.01
Electrona risso	0.03	40	0.01
Rochinia sp.	0.02	6	0.01
G A S T R O P O D S	0.02	6	0.01
Diaphus sp.	0.02	3	0.01
MYCTOPHIDAE	0.02	3	0.00
Paraliparis australis	0.01	3	0.00
Argyropelecus sp.	0.00	3	0.00
Total	301.77		100.00

R/V Dr. Fridtjof Nansen SURVEY:2008401 STATION: 1575  
 DATE :24.02.2008 GEAR TYPE: BT NO: 22 POSITION:Lat S 32°51.75  
 start stop duration Lon E 17°19.79  
 TIME :07:01:21 07:31:05 29.7 (min) Purpose : 2  
 LOG : 2869.61 2871.07 1.5 Region : 6100  
 FDEPTH: 306 306 Gear cond.: 0  
 BDEPTH: 306 306 Validity : 0  
 Towing dir: 0° Wire out : 750 m Speed : 2.9 kn  
 Sorted : 683 Total catch: 682.82 Catch/hour: 1377.58

SPECIES	CATCH/HOUR	% OF TOT. C	SAMP
	weight numbers		
Merluccius paradoxus	700.07	3601	50.82 1360
Brama brama	270.34	171	19.62 1359
Caelorhynchus simorhynchus	161.40	2689	11.72
Zeus capensis	117.01	220	8.49 1361
Malacocephalus laevis	14.12	79	1.03
Helicolenus dactylopterus	12.10	107	0.88 1362
Raja wallacei	12.10	2	0.88
Merluccius paradoxus	12.10	16	0.88 1366
Genypterus capensis	11.10	10	0.81 1365
Lophius vomerinus	10.69	10	0.78 1364
Holohalaelurus regani	10.09	24	0.73
Merluccius capensis	8.07	8	0.59 1363
Thyrastes atun	7.46	2	0.54 1358
Callorhynchus capensis	7.26	2	0.53
Todaropsis eblanae	4.48	46	0.33 1368
Todaropsis eblanae	2.91	36	0.21 1367
Parapagurus dimorphus	2.58	163	0.18
Squalus mitsukurii	2.02	2	0.15
Whelks	1.69	0	0.12
Paracallionymus costatus	1.39	155	0.10
Echinus gilchristi ?	1.11	14	0.08
Rossia enigmatica	0.91	28	0.07
Cruriraja parcomaculata	0.79	2	0.06
Emmelichthys nitidus	0.67	6	0.05
Aphrodite pol	0.50	93	0.04
Exochromida sp.	0.46	36	0.03
Symbolophorus boops	0.45	22	0.03
Giant bullia gastropod	0.44	2	0.03
Starfish "hairy"	0.34	0	0.03
Mursia cristimanus	0.30	46	0.02
Heart urchin	0.30	2	0.02
Sepia hieronis	0.27	6	0.02
Bathypolypus valdiviae	0.26	8	0.02
Lepidopus caudatus	0.24	2	0.02
Parapagurus pilosimanus	0.24	12	0.02
Starfish yellow	0.22	16	0.02
Starfish red	0.22	2	0.02
Hoplostethus mediterraneus	0.18	2	0.01

Pterygosquilla armata capensis	0.17	20	0.01
Notopogon macrosolen	0.17	2	0.01
Etrumeus whiteheadi	0.16	2	0.01
ANTHOZOA (Sea anemones)	0.08	2	0.01
PORIFERA (Sponges)	0.07	2	0.00
Raja leopardus, juvenile	0.04	2	0.00
Sepia sp.	0.01	4	0.00
Rochinia sp.	0.01	2	0.00
Lampanyctodes hectoris	0.01	4	0.00
Total	1377.58		100.00



## Annex 2 Instruments and fishing gear

The Simrad EK-500, 38 kHz scientific echosounder was used for abundance estimation during the survey, in addition data from the 18 kHz, 120 kHz and 200 kHz transducers were logged for possible future multi frequency target estimation. The Bergen Echo Integrator system (BEI) were logging the echogram raw data from the sounder and used to scrutinize the acoustic records, and to allocate integrator data to fish species. All raw data were stored to tape, and a backup of the database of scrutinized data, stored. The details of the settings of the echosounders were as follows:

Transceiver 1 menu	
Transducer depth	5.5 m
Absorption coeff.	10 dB/km
Pulse length	medium (1ms)
Bandwidth	wide
Max power	2000 Watt
2-way beam angle	-21.0 dB
SV transducer gain	27.17dB
TS transducer gain	29.96
Angle sensitivity	21.9
3 dB beamwidth along.	7.3
3 dB beamwidth athw.	7.0
Alongship offset	0.05
Athwardship offset	0.04

Transceiver 2 menu	
Transducer depth	5.5 m
Absorption coeff.	38 dB/km
Pulse length	long (1ms)
Bandwidth	narrow
Max power	1000 Watt
2-way beam angle	-20.6 dB
SV transducer gain	25.96B
TS transducer gain	25.95dB
Angle sensitivity	21.0
3 dB beamwidth along.	7.4
3 dB beamwidth athw.	7.2
Alongship offset	0.24
Athwardship offset	0.04

### Transceiver 3 menu

Transducer depth	5.5 m
Absorption coeff.	3 dB/km
Pulse length	short (0.7ms)
Bandwidth	wide
Max power	2000 Watt
2-way beam angle	-17.2 dB
SV transducer gain	23.75dB
TS transducer gain	23.36B
Angle sensitivity	13.9
3 dB beamwidth along.	10.8
3 dB beamwidth athw.	10.8
Alongship offset	0.06
Athwardship offset	-004

### Transceiver 4 menu

Transducer depth	5.5 m
Absorption coeff.	53 dB/km
Pulse length	long (0.6ms)
Bandwidth	narrow
Max power	1000 Watt
2-way beam angle	-20.5 dB
SV transducer gain	24.18dB
TS transducer gain	24.80B
Angle sensitivity	0.0
3 dB beamwidth along.	0.0°
3 dB beamwidth athw.	0.0°
Alongship offset	0.00°
Athwardship offset	0.00°

### Display menu

Echogram	1
Bottom range	10 m
Bottom range start	10 m
TVG	20 log R
Sv colour min -	65 dB
TS Colour minimum	-65 dB

### Printer- menu

Range	0-50, 0-100, 0-150, 0-250 or 0-500 m
TVG	20 log R
Sv colour min	-67 dB

### Bottom detection menu

Minimum level	-40 dB
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### Calibration

A calibration of the acoustic instruments was conducted during the survey in Angola on 18 August 2006.

## Fishing gear

The vessel has two different sized "Åkrahavn" pelagic trawls and one "Gisund super" bottom trawl. For all trawls, the Tyborørn, 7.8m<sup>2</sup> (1670 kg) trawl doors were used.

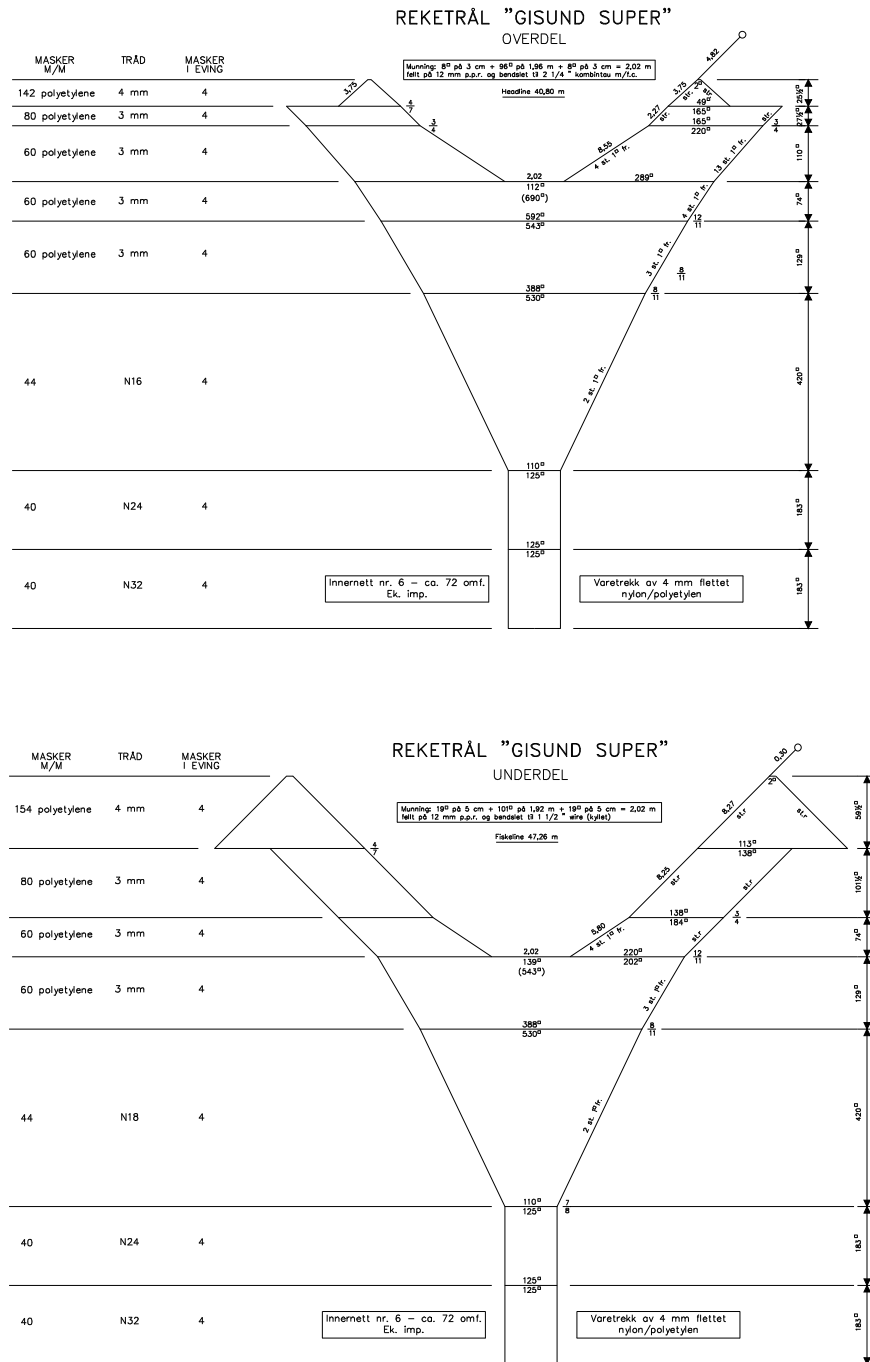


Figure 1 Design of the trawl used.

6,85 M  
16 MM CHAIN  
SHORT LINKED

SIDE GEAR  
6,55 M

SIDE GEAR  
6,55 M

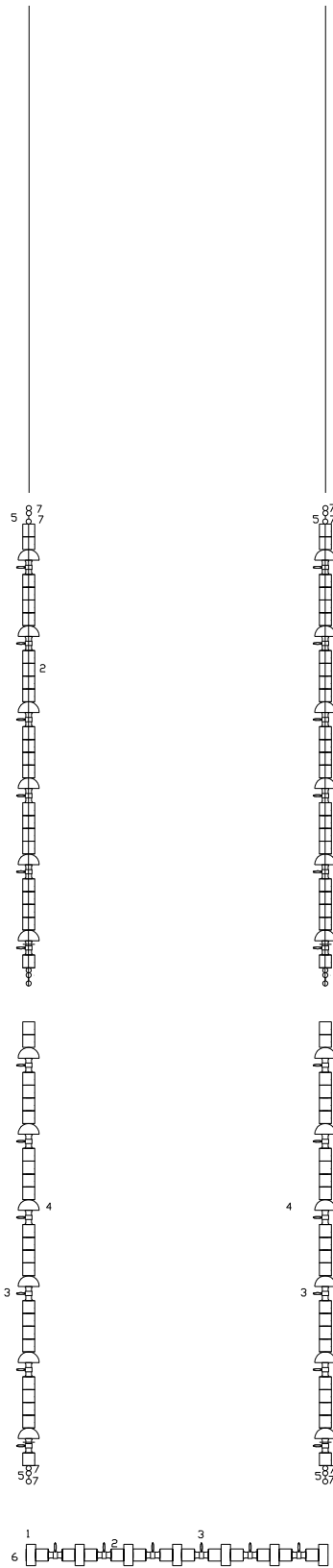


Figure 2 Schematic drawing of the ground gear.

### Annex 3 Depth strata in MN<sup>2</sup> by latitude in Namibia and South Africa.

#### NAMIBIA. Depth strata by 1° latitude in NM<sup>2</sup>

(Based on echo soundings from Nansen surveys 1996-2003. Depths from surface to bottom). 02.02.2003 OBA

	0-50 m	50-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-600m
17°15'-18°	47	162	490	243	95	63	65	46	46	54	47	1360	1165
18-19°	287	324	783	822	154	128	119	101	100	87	128	3033	2618
19-20°	186	435	1259	810	1090	328	287	266	192	241	220	5314	4396
20-21°	229	401	1378	883	987	286	265	258	272	281	280	5519	4429
21-22°	372	547	1644	563	893	257	201	200	199	184	179	5238	4477
22-23°	479	709	2196	1086	929	154	126	127	108	97	142	6153	5678
23-24°	244	376	2006	1074	670	238	153	175	139	136	130	5340	4760
24-25°	394	433	1343	822	753	238	149	161	162	166	144	4764	4131
25-26°	204	415	1580	1102	529	227	166	155	161	153	125	4817	4223
26-27°	216	184	894	986	1408	744	140	133	139	131	119	5095	4573
27-28°	119	244	1269	527	858	480	205	170				3872	3702
28-29°	211	390	4207	391	153	123	164					5639	5639
29-30°	0	0	1042	533	327	276	162	167	107	121	121	2859	2341
30°-S	0	0	0	0	0	0	0	0	0	3	5	8	0
North	750	1322	3911	2759	2326	806	736	670	610	663	675	15226	12608
Central	1489	2064	7189	3544	3245	887	627	664	608	582	595	21494	19046
South	750	1234	8992	3540	3276	1850	837	625	408	407	371	22290	20478
Total	2988	4620	20091	9842	8848	3543	2200	1960	1625	1652	1642	59003	52132

Areas in *Italics*: few soundings, interpolated

Open areas: no or very few soundings

**South Africa. Depth strata by 1° latitude in NM<sup>2</sup>**

(Based on echo soundings from Nansen surveys 1996-2004. Depths from surface to bottom).

10.03.2004 OBA

	0-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-500 m	0-600m
28°40'-29°	186	303	0	0	0	0	0	0	0	0	489	489	489
29-30°	359	4348	451	195	202	23	7	2	0	0	5588	5556	5579
30-31°	200	2481	3443	460	465	262	177	135	193	149	7965	7049	7311
31-32°	288	2187	1794	1209	894	493	211	173	180	149	7577	6371	6864
32-33°	839	1308	1318	1303	432	156	122	111	109	116	5815	5201	5357
33-34°	654	833	546	375	381	247	243	117	120	102	3617	2789	3036
34-35°	1280	1376	662	496	259	134	80	69	53	66	4475	4074	4208
35-36°	25	1901	778	168	143	131	89	86	59	84	3464	3015	3146
36-37°													
Total	3830	14737	8992	4207	2777	1446	929	692	714	666	38989	34543	35989

**South Africa. Depth strata by regions in NM<sup>2</sup>**

26.08.2005 OBA

	0-100 m	100-200m	200-300m	300-400m	400-500m	500-600m	600-700m	700-800m	800-900m	900-1000m	Total	0-500 m	0-600m
Oranjemund-S. Hondeklip Bay	742	6835	4262	1062	1152	634	314	262	282	230	15776	14054	14688
S. Hondeklip Bay-n Saldanha	1169	3593	2685	2257	1088	454	392	224	242	230	12333	10792	11245
n Saldanha-C. of Good Hope	746	982	935	598	325	154	89	83	59	77	4047	3586	3740
C. of Good Hope-C. Agulhas	1131	3098	998	473	202	167	104	81	58	87	6397	5901	6068
Total	3787	14508	8881	4390	2767	1409	898	650	641	624	38554	34333	35741