



CCAMLR

**COMM CIRC 10/100**  
**SC CIRC 10/56**

**Vendredi, 17 Septembre 2010**

## **Notification de projet de recherche scientifique pour 2010/11 - Corée**

**Téléphone:** +61 3 6210 1111  
**Fax:** +61 3 6224 8744  
**Courriel:** [ccamlr@ccamlr.org](mailto:ccamlr@ccamlr.org)  
**Web:** [ccamlr.org](http://ccamlr.org)

PO Box 213, North Hobart, Tasmania 7002 Australia  
181 Macquarie Street, Hobart, Tasmania 7000 Australia



**CCAMLR**

PO BOX 213, NORTH HOBART, TASMANIA 7002 AUSTRALIA  
181 MACQUARIE STREET, HOBART, TASMANIA 7000 AUSTRALIA  
Website: [www.ccamlr.org](http://www.ccamlr.org)

Phone: (61) 3 6210 1111  
Fax: (61) 3 6224 8744  
Email: [ccamlr@ccamlr.org](mailto:ccamlr@ccamlr.org)

**À TOUS LES MEMBRES DE LA COMMISSION  
ET DU COMITÉ SCIENTIFIQUE**

**COMM CIRC 10/100  
SC CIRC 10/56**

Hobart, le 17 septembre 2010

**Notification de projet de recherche scientifique pour 2010/11 – Corée**

Conformément à la mesure de conservation 24-01, les Membres sont avisés que la Corée a soumis une notification de projet d'activités de pêche scientifique pour la sous-zone 88.3 en vue d'étudier l'état du stock et les caractéristiques biologiques de *Dissostichus* spp. (ci-jointe). Il est prévu que la capture ne dépassera pas 95 tonnes de *Dissostichus* spp. dans la sous-zone 88.3 de mars à mai 2011.

La notification relève du paragraphe 3 de la mesure de conservation 24-01 et le plan de recherche sera soumis au WG-FSA pour sa réunion de 2010.

Andrew Wright  
Secrétaire exécutif

P.J.

# **Research plan for toothfish in Statistical Subarea 88.3 by Jung Woo No. 2 in 2010/2011**

Format 2

## **FORMAT FOR REPORTING PLANS FOR FINFISH SURVEYS IN ACCORDANCE WITH PARAGRAPH 3 OF CONSERVATION MEASURE 24-01**

CCAMLR MEMBER Republic of Korea

### **SURVEY DETAILS**

A statement of the planned research objectives

Korean Flagged Vessel ‘*Jung Woo No. 2*’ plans 95 hauls and expects to take 95 tonnes.

In order to clarify the stock status and biological characteristics of *Dissostichus spp.* in Statistical Subarea 88.3, Korea submits this research plan for toothfish by Korean flagged vessel “*Jung Woo No. 2*” to be conducted in 14<sup>th</sup> Mar.-14<sup>th</sup> May 2011.

Korea has annually participated in exploratory longline fisheries as a CCAMLR member, whereas this survey is the first time of the scientific research planned by Korea. Through participation to the research activities, Korea would like to consider the future scientific information, including collaborative work with other Member States.

The purpose of the planned research objectives in Statistical Subarea 88.3, which has been prohibited since 1 December 2003, is to clarify the current stock status of *Dissostichus spp.* and to obtain various biological information for three consecutive years such as;

- length distribution of toothfish,
- toothfish diet
- statistical analysis of standardised catch per unit effort from the fishery
- all by-catch species
- Vulnerable Marine Ecosystems(VMEs) data

The research plan will be conducted using a commercial fishing vessel, *Jung Woo No. 2* from 14<sup>th</sup> Mar. to 14<sup>th</sup> May 2011. A bottom longline system will be employed for all hauls. To apply the mark-and-recapture studies, sufficient tagging rate of 5 fish/ton will be conducted throughout the survey.

In order to take into account the need for completion of the research and impact on the fish stock, Korean flagged vessel “*Jung Woo No. 2*” proposes to take 45 tonnes of total allowable sample size in SSRU A (see Fig. 1 attached), 30 tonnes in SSRU B (see Fig. 2 attached), and 20 tonnes in SSRU C (see Fig. 3 attached) for the 2010/2011 research plan. This notification will be presented to the WG-FSA and the Scientific Committee.

Survey Area/Subarea/Division: Subarea 88.3 SSRU A, B, and C (Fig. 1 – 3)

Geographical Boundaries:

SSRU A (Lat: 60°S - Coast, Long: 95°W - 105°W )

SSRU B (Lat: 60°S - Coast, Long: 85°W - 95°W)

SSRU C (Lat: 60°S - Coast, Long: 75°W - 85°W)

SSRU D (Lat: 60°S - Coast, Long: 70°W - 75°W)

Is a map of area surveyed (preferably including bathymetry and positions of sampling stations/hauls) appended to the format?

Yes, the maps, including bathymetry and position of hauls are appended in Fig. 1 – 3.

Proposed dates of survey: 14 March – 14 May 2011

Name(s) and address of the chief scientist(s) responsible for planning and coordinating the research: Kyujin Seok, Ph. D.

Fisheries Resources Management Division

National Fisheries Research and Development Institute

152-1 Haeam-ro, Gijang-eup, Gijang-gun, Busan, Korea

TEL: +82-51-720-2321 FAX: +82-51-720-2337, E-mail: pisces@nfrdi.gov.kr

Number of scientific observers 2 and crew 37 to be aboard the vessel

Is there opportunity for inviting scientists from other Members? No due to space limitation

If so, indicate a number of such scientists 0

#### DESCRIPTION OF VESSEL

Name of vessel: Jung Woo No. 2

Name and address of vessel owner Name: Sunwoo Corporation

Address: Sunwoo Corporation, Dayul-Ri 624-5, Gyoha-Eup, Paju City, Gyeonggi-Do, South Korea

Vessel type (dedicated research or chartered commercial vessel):

Voluntary commercial fishing vessel

Port of registration: Busan      Registration number: 0510001 – 6261109

Radio call sign: DTBQ4      Overall length: 51.01 (m)

Tonnage: 498 ton

Equipment used for determining position:

Two independent GPS Systems;

GPS J.R.C J - NAV 500 & GPS TAIYO TGN - 200

Fishing capacity (limited to scientific sampling activities only or commercial capacity): 10 (ton/day)

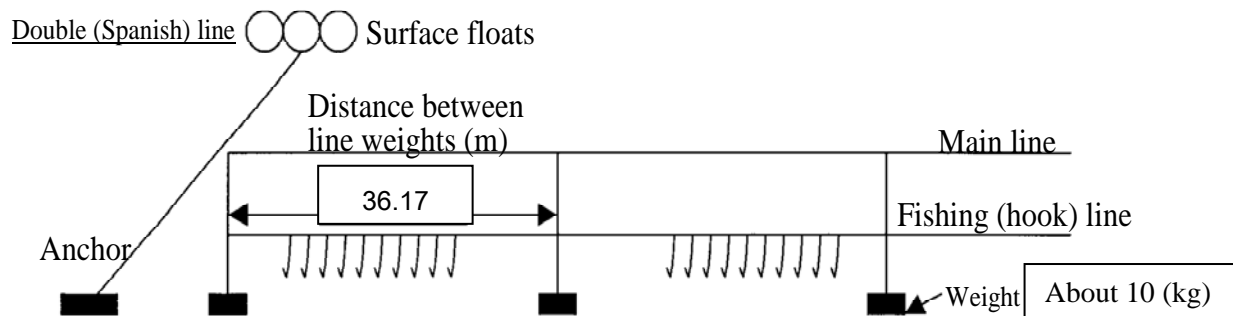
Fish processing capacity (if vessel type is commercial): 10 (ton/day)

Fish storage capacity (if vessel type is commercial): 671.14 m<sup>3</sup>

## DESCRIPTION OF FISHING GEAR TO BE USED

Bottom Longline System;

Jung Woo No. 2 (Referred to Scientific Observer Cruise Report in 2009/10 season.);



### Additional details of gear:

Hook Type: Circle type hook and Sword Fish Hook (Knife Edged Point) 10/0

Numbers per line of hooks within a line: About 12,000EA

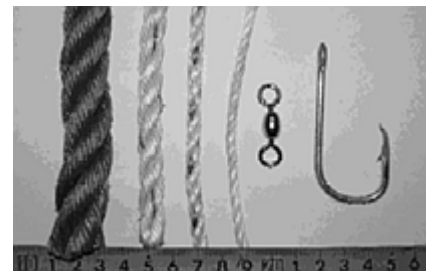
Spacing of hooks within a line: About 156Cm

Weight material and mass: traditional weight (stone), 8.5 ~ 14.7kg

Spacing of Traditional Weight (stone): 37m

Anchor Type: JIS stocked anchor

Sample 1. Samples of longline system from “Jung Woo No. 2”: (from left to right) Main line (ø20 mm), Railing (ø10 mm), Fishing line (ø6 mm), Branch line (ø3.5 mm), Steel swivel, Steel hook.



In 2009/10 season, the circle-type hooks were used (30-32 mm x 65 mm x 3 mm, WxHxD, material – steel, made in South Korea). They were linked to the fishing line by steel swivels and branch lines made from polyester of 3.5 mm diameter and 0.5 m length. Spacing between branches lines on fishing line was 1.7 m.

## DESCRIPTION OF ACOUSTIC GEAR TO BE USED

Type: FURUNO FCV – 1200LM Frequency: 28 kHz/50kHz

## SURVEY DESIGN AND METHODS OF DATA ANALYSES

Survey design (random, semi-random): Random. Total 95 longline sets are expected to be surveyed for the 2010/2011 research plan in Subarea 88.3 at the following positions:

1. SSRU A (Lat: 68°S - Coast, Long: 95°W - 105°W ): 45 sets will be employed
2. SSRU B (Lat: 68°S - Coast, Long: 85°W - 95°W): 30 sets will be employed
3. SSRU C (Lat: 66°S - Coast, Long: 75°W - 85°W): 20 sets will be employed

(See Fig. 1 – 3)

Target species: Dissostichus spp. (Dissostichus eleginoides and D. mawsoni)

Stratification (if any) according to:

Depth zones (list) N/A:

Fish density (list) N/A

Other (specify) N/A

Duration of standard sampling stations/hauls (preferably 30 min): Soak time of not less than six hours

Proposed number of hauls: 95 hauls

Proposed sample size (total): undecided

Proposed methods of survey data analyses (i.e. swept area method, acoustic survey)

Swept area method and mark-and-recapture analysis

## DATA TO BE COLLECTED

Haul-by-haul catch and effort data in accordance with CCAMLR Form C4 for reporting results of fishing for research purposes: Dissostichus spp.

Fine-scale biological data in accordance with CCAMLR Forms B1, B2 and B3:

B2 and Longline observer data: Dissostichus spp.

Other data (as applicable)

Tagging of Dissostichus spp.: 5 fish/ton

Migration and population structure of toothfish, if recapture catches occurred

# **Research plan for toothfish in Statistical Subarea 88.3 by Jung Woo No. 3 in 2010/2011**

Format 2

## **FORMAT FOR REPORTING PLANS FOR FINFISH SURVEYS IN ACCORDANCE WITH PARAGRAPH 3 OF CONSERVATION MEASURE 24-01**

CCAMLR MEMBER Republic of Korea

### **SURVEY DETAILS**

A statement of the planned research objectives

Korean Flagged Vessel ‘*Jung Woo No. 3*’ plans 95 hauls and expects to take 95 tonnes.

In order to clarify the stock status and biological characteristics of *Dissostichus spp.* in Statistical Subarea 88.3, Korea submits this research plan for toothfish by Korean flagged vessel “*Jung Woo No. 3*” to be conducted in 14<sup>th</sup> Mar.-14<sup>th</sup> May 2011.

Korea has annually participated in exploratory longline fisheries as a CCAMLR member, whereas this survey is the first time of the scientific research planned by Korea. Through participation to the research activities, Korea would like to consider the future scientific information, including collaborative work with other Member States.

The purpose of the planned research objectives in Statistical Subarea 88.3, which has been prohibited since 1 December 2003, is to clarify the current stock status of *Dissostichus spp.* and to obtain various biological information for three consecutive years such as;

- length distribution of toothfish,
- toothfish diet
- statistical analysis of standardised catch per unit effort from the fishery
- all by-catch species
- Vulnerable Marine Ecosystems(VMEs) data

The research plan will be conducted using a commercial fishing vessel, *Jung Woo No. 3* from 14<sup>th</sup> Mar. to 14<sup>th</sup> May 2011. A bottom longline system will be employed for all hauls. To apply the mark-and-recapture studies, sufficient tagging rate of 5 fish/ton will be conducted throughout the survey.

In order to take into account the need for completion of the research and impact on the fish stock, Korean flagged vessel “*Jung Woo No. 3*” proposes to take 45 tonnes of total allowable sample size in SSRU A (see Fig. 1 attached), 30 tonnes in SSRU B (see Fig. 2 attached), and 20 tonnes in SSRU C (see Fig. 3 attached) for the 2010/2011 research plan. This notification will be presented to the WG-FSA and the Scientific Committee.

Survey Area/Subarea/Division: Subarea 88.3 SSRU A, B, and C (Fig. 1 – 3)

Geographical Boundaries:

SSRU A (Lat: 60°S - Coast, Long: 95°W - 105°W )

SSRU B (Lat: 60°S - Coast, Long: 85°W - 95°W)

SSRU C (Lat: 60°S - Coast, Long: 75°W - 85°W)

SSRU D (Lat: 60°S - Coast, Long: 70°W - 75°W)

Is a map of area surveyed (preferably including bathymetry and positions of sampling stations/hauls) appended to the format?

Yes, the maps, including bathymetry and position of hauls are appended in Fig. 1 – 3.

Proposed dates of survey: 14 March – 14 May 2011

Name(s) and address of the chief scientist(s) responsible for planning and coordinating the research: Kyujin Seok, Ph. D.

Fisheries Resources Management Division

National Fisheries Research and Development Institute

152-1 Haean-ro, Gijang-eup, Gijang-gun, Busan, Korea

TEL: +82-51-720-2321 FAX: +82-51-720-2337, E-mail: pisces@nfrdi.gov.kr

Number of scientific observers 2 and crew 37 to be aboard the vessel

Is there opportunity for inviting scientists from other Members? No due to space limitation

If so, indicate a number of such scientists 0

#### DESCRIPTION OF VESSEL

Name of vessel: Jung Woo No. 3

Name and address of vessel owner Name: Sunwoo Corporation

Address: Sunwoo Corporation, Dayul-Ri 624-5, Gyoha-Eup, Paju City, Gyeonggi-Do, South Korea

Vessel type (dedicated research or chartered commercial vessel):

Voluntary commercial fishing vessel

Port of registration: Busan      Registration number: 0811001 – 6261101

Radio call sign: DTBV7      Overall length: 48 (m)

Tonnage: 494 ton

Equipment used for determining position:

Two independent GPS Systems;

GPS FURUNO GP - 62 & GPS J.R.C JIR – 6000MK11

Fishing capacity (limited to scientific sampling activities only or commercial capacity): 10 (ton/day)



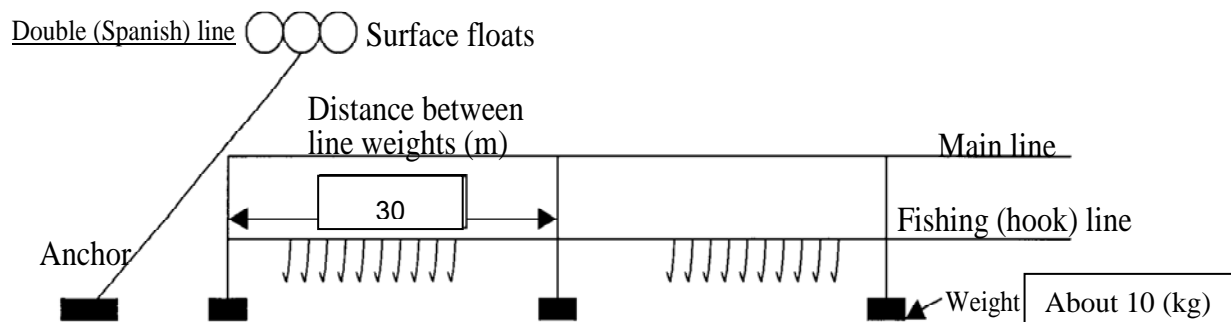
Fish processing capacity (if vessel type is commercial): 10 (ton/day)

Fish storage capacity (if vessel type is commercial): 512.130 m<sup>3</sup>

## DESCRIPTION OF FISHING GEAR TO BE USED

Bottom Longline System;

Jung Woo No. 3 (Referred to Scientific Observer Cruise Report in 2009/10 season.);



### Additional details of gear:

Hook Type: Circle type hook and Sword Fish Hook (Knife Edged Point) 10/0

Numbers per line of hooks within a line: About 12,000EA

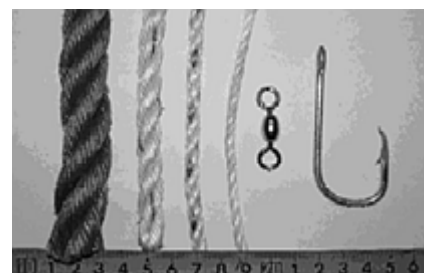
Spacing of hooks within a line: About 156Cm

Weight material and mass: traditional weight (stone), 8.5 ~ 14.7kg

Spacing of Traditional Weight (stone): 37m

Anchor Type: JIS stocked anchor

Sample 1. Samples of longline system from “Jung Woo No. 3”: (from left to right)  
Main line (ø20 mm), Railing (ø10 mm),  
Fishing line (ø6 mm), Branch line (ø3.5 mm), Steel swivel, Steel hook.



In 2009/10 season, the circle-type hooks were used (30-32 mm x 65 mm x 3 mm, WxHxD, material – steel, made in South Korea). They were linked to the fishing line by steel swivels and branch lines made from polyestil of 3.5 mm diameter and 0.5 m length. Spacing between branches lines on fishing line was 1.7 m.

## DESCRIPTION OF ACOUSTIC GEAR TO BE USED

Type: FURUNO FCV – 780      Frequency: 28kHz/50kHz

## SURVEY DESIGN AND METHODS OF DATA ANALYSES

Survey design (random, semi-random): Random. Total 95 longline sets are expected to be surveyed for the 2010/2011 research plan in Subarea 88.3 at the following positions;

1. SSRU A (Lat: 68°S - Coast, Long: 95°W - 105°W ): 45 sets will be employed
2. SSRU B (Lat: 68°S - Coast, Long: 85°W - 95°W): 30 sets will be employed
3. SSRU C (Lat: 66°S - Coast, Long: 75°W - 85°W): 20 sets will be employed

(See Fig. 1 – 3)

Target species: Dissostichus spp. (Dissostichus eleginoides and D. mawsoni)

Stratification (if any) according to:

Depth zones (list) N/A:

Fish density (list) N/A

Other (specify) N/A

Duration of standard sampling stations/hauls (preferably 30 min): Soak time of not less than six hours

Proposed number of hauls: 95 hauls

Proposed sample size (total): undecided

Proposed methods of survey data analyses (i.e. swept area method, acoustic survey)

Swept area method and mark-and-recapture analysis

## DATA TO BE COLLECTED

Haul-by-haul catch and effort data in accordance with CCAMLR Form C4 for reporting results of fishing for research purposes: Dissostichus spp.

Fine-scale biological data in accordance with CCAMLR Forms B1, B2 and B3:

B2 and Longline observer data: Dissostichus spp.

Other data (as applicable)

Tagging of Dissostichus spp.: 5 fish/ton

Migration and population structure of toothfish, if recapture catches occurred

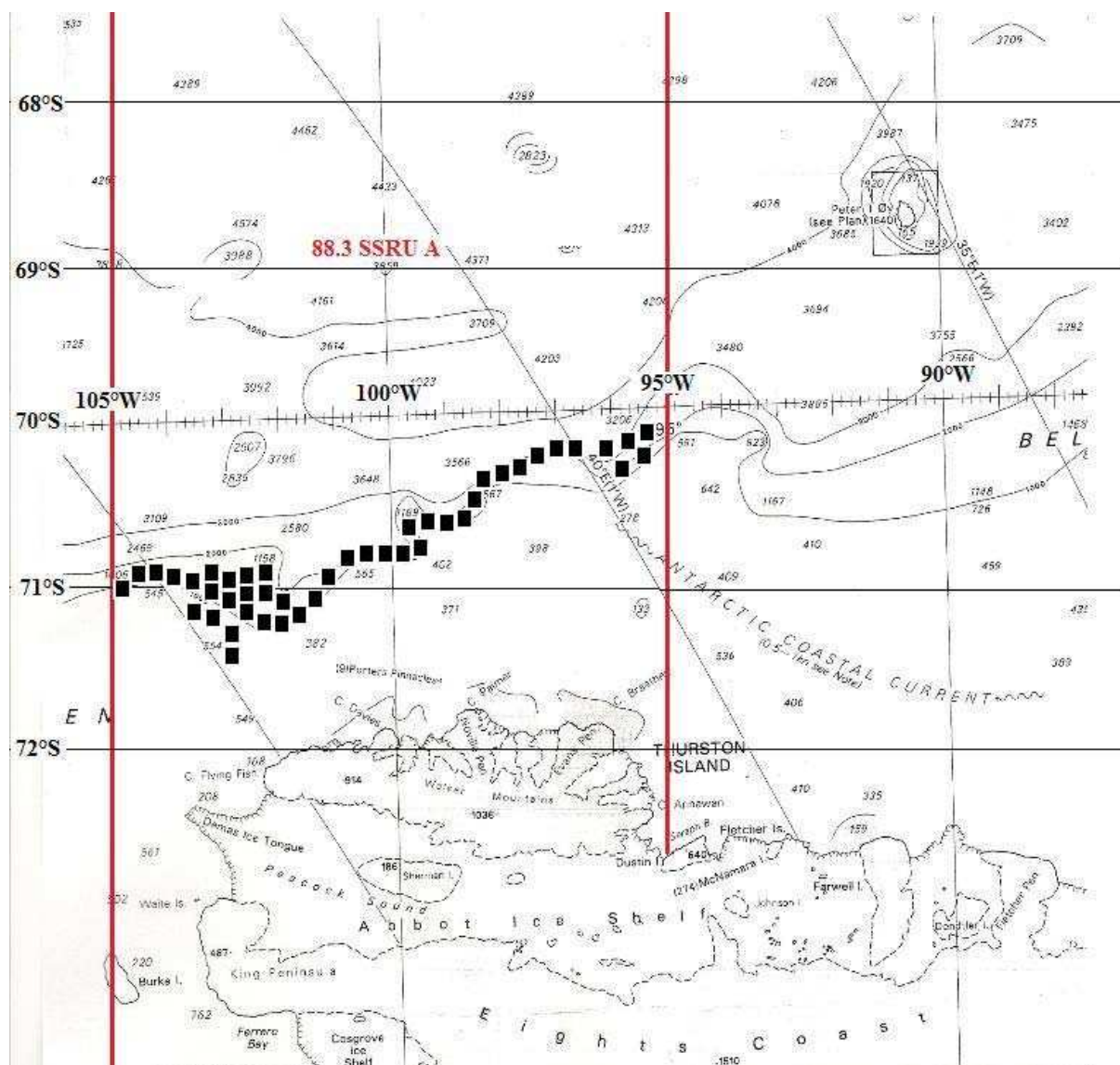


Fig. 1 Allocated locations (45 positions) for bottom longline research in Subarea 88.3 SSRU A.

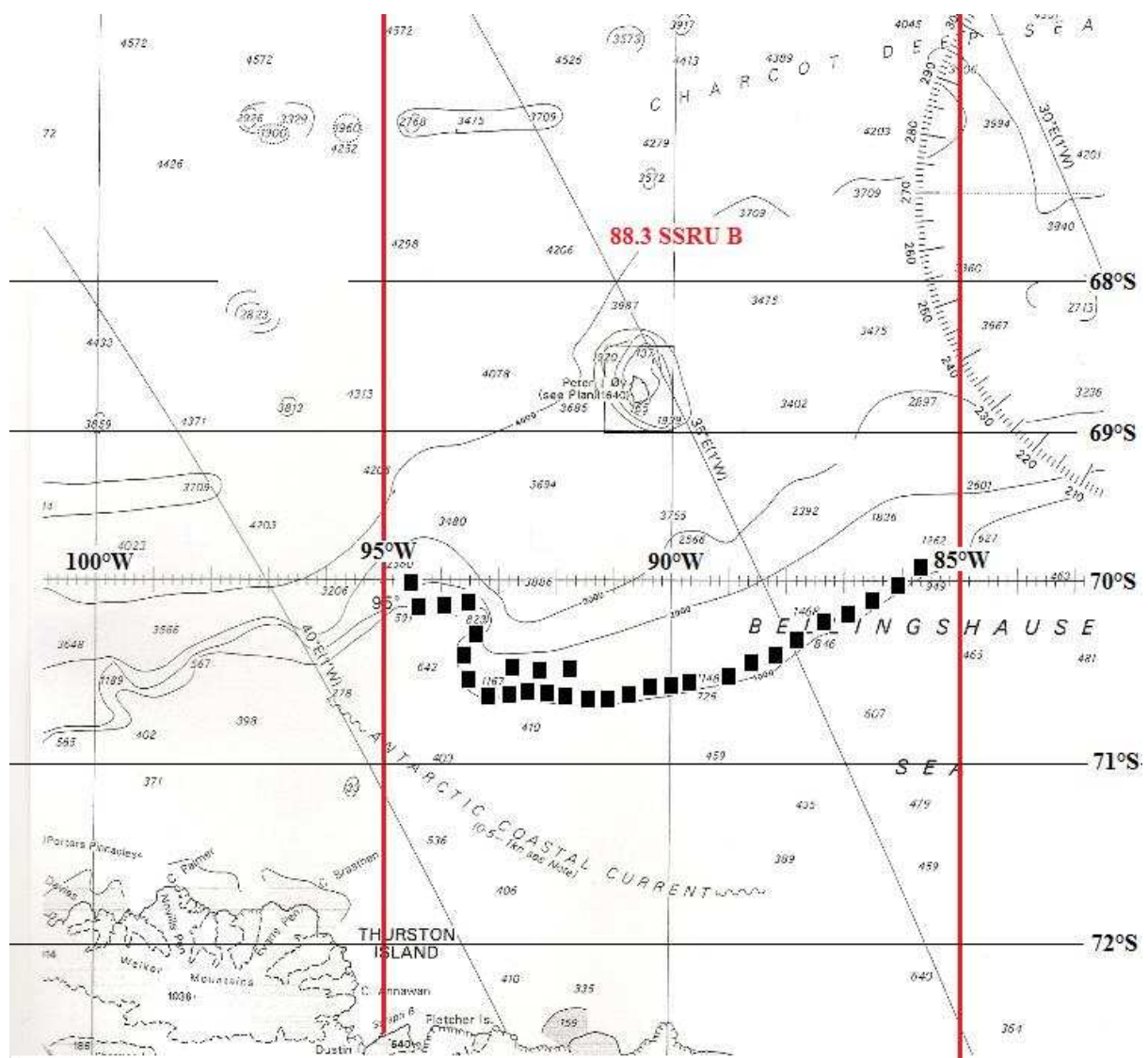


Fig. 2 Allocated locations (30 points) for bottom longline research in Subarea 88.3 SSRU B.

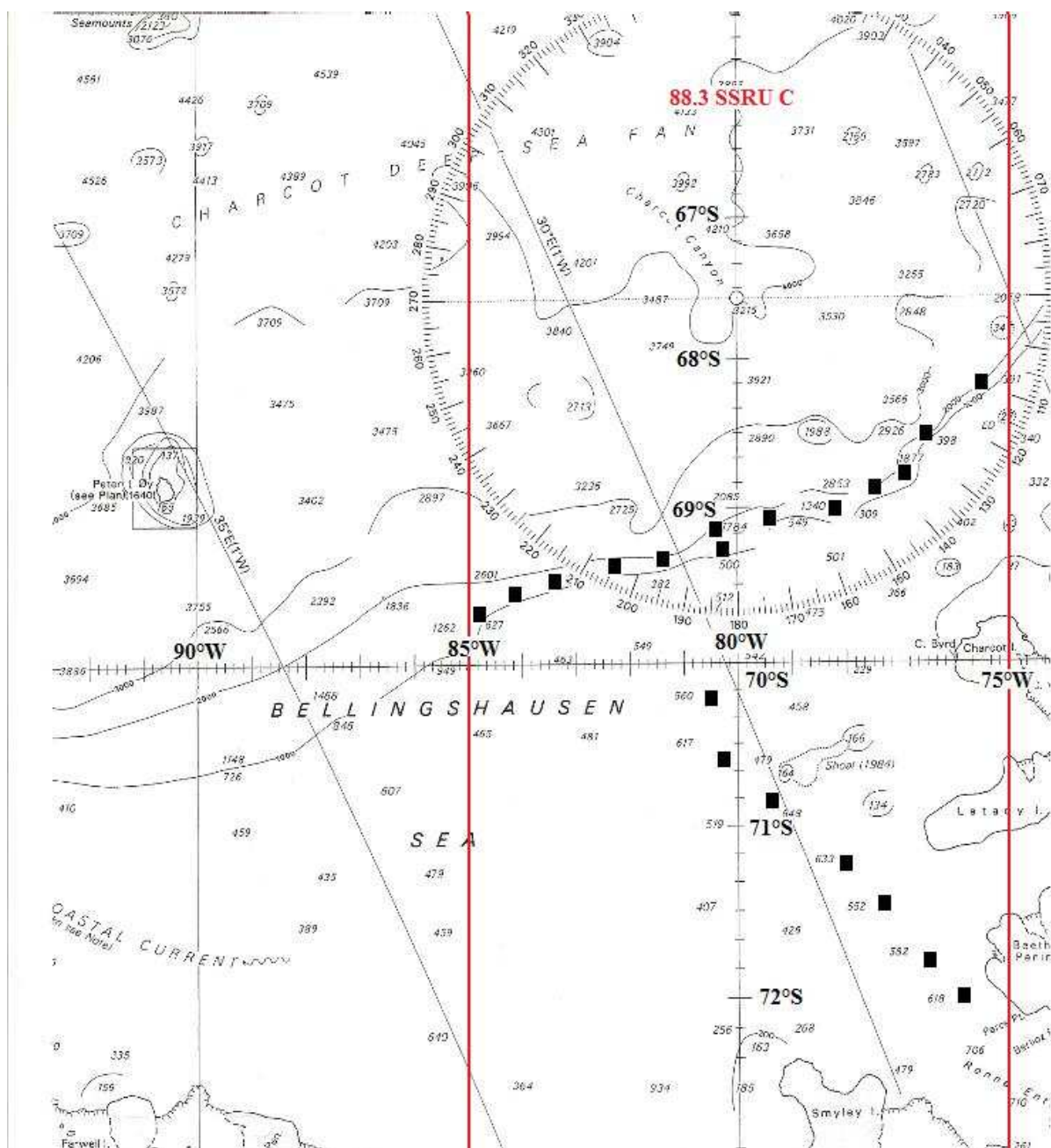


Fig. 3 Allocated locations (20 positions) for bottom longline research in Subarea 88.3 SSRU C.