

## AREAS OF SEABED WITHIN SELECTED DEPTH RANGES IN CCAMLR SUBAREA 48.3, SOUTH GEORGIA

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### Abstract

Areas of seabed within 50 m depth contours down to 250 m, between 250 and 500 m and deeper than 500 m have been estimated from nautical charts. The results are presented by CCAMLR fine-scale reporting areas.

### Résumé

Les aires de fond marin situées à l'intérieur de courbes bathymétriques de 50 m, entre 0 et 250 m, entre 250 et 500 m et à plus de 500 m de profondeur ont été estimées à partir de cartes marines. Les résultats sont présentés par zones de déclaration à échelle précise de la CCAMLR.

### Резюме

По морским картам была определена площадь участков морского дна по глубинным горизонтам от 50 до 250 метров, от 250 до 500 метров и глубже. Результаты представлены по мелкомасштабным участкам представления данных АНТКОМа.

### Resumen

A partir de las cartas de navegación, se han estimado áreas de lecho marino de las curvas de profundidad de 50 a 250 m; entre 250 y 500 metros y a más de 500 m. Los resultados se presentan por áreas de notificación de la CCRVMA y a escala fina.

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## 1. INTRODUCTION

During the 1989 Meeting of the Working Group on Fish Stock Assessment in Hobart, it was agreed that data should be available within 50 m depth contours and within CCAMLR fine-scale reporting areas. This paper contains such data for the South Georgia area, CCAMLR Subarea 48.3 and supersedes that presented in a similar paper (Everson, 1988).

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## 2. DATA SOURCES

The main sources of data have been UK Admiralty Charts for the region. The following charts have been used:

	Reference Number
1. Approaches to South Georgia	3596
2. South Georgia	3597
3. Stewart Strait	3592
4. Harbours and Anchorages in South Georgia	3589
5. Harbours and Anchorages in South Georgia	3585

Further information has been obtained by reference to small scale 'collector sheets'. These are charts containing all reported and validated soundings and are used to update the published charts. The areas covered by these collector sheets are listed below.

Latitude Range (degrees South)	Longitude Range (degrees West)
48°00' - 54°00'	30°00' - 45°00'
54°00' - 60°00'	30°00' - 45°00'
53°52' - 54°42'	36°25' - 37°15'
53°36' - 54°58'	35°40' - 36°10'
53°10' - 54°59'	35°38' - 36°36'
53°50' - 54°25'	37°04' - 38°27'
54°00' - 54°15'	37°35' - 38°02'
54°02' - 54°20'	37°10' - 37°56'
54°14' - 54°33'	36°53' - 37°22'
54°20' - 54°33'	36°27' - 37°05'
54°05' - 54°23'	36°10' - 36°42'
54°03' - 54°23'	35°55' - 36°32'
53°50' - 54°15'	35°55' - 36°55'

Certain of the CCAMLR fine-scale rectangles, specifically those at 54°S 37°W, 54°S 36°W and 54°30'S 36°W are divided by land. The southerly part of each of these rectangles has been designated by '(S)' in the longitude (W) column of the tables.

## 3. RESULTS

Areas of seabed, expressed as square kilometres, by fine-scale rectangle and within 50 m depth contours are set out in Table 1. The areas have been summed within the depth strata that are currently used for standing stock estimation and are presented in Table 2.

There is some justification for considering some fishery resources at Shag Rocks separately from those around the mainland of South Georgia. The areas of seabed within the Shag Rocks zone, defined as being between latitudes 53°S and 54°S and longitudes 40°W and 44°W have therefore been calculated. The total areas within depth strata for all Subarea 48.3, South Georgia and Shag Rocks are summarized in Table 3.

## REFERENCES

- EVERSON, I. 1988. Areas of seabed within selected depth ranges in the south-west Atlantic and Antarctic Peninsula regions of the Southern Ocean. In: *Selected Scientific Papers, 1987 (SC-CAMLR-SSP/4)*. Hobart, Australia: CCAMLR. pp. 49-73.

Table 1a: Areas of seabed (km<sup>2</sup>) around South Georgia between 53° and 54°30'S.

NE Corner			0 - 50	50 - 100	100 - 150	150 - 200	200 - 250	250 - 500	>500
S°	S'	W°							
53	0	43	0.0	0.0	0.0	0.0	0.0	12.0	3673.9
53	0	42	0.0	0.0	0.0	129.8	158.3	445.2	2952.6
53	0	41	0.0	0.0	88.9	116.9	41.4	26.8	3411.9
53	0	40	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	39	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	38	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	37	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	36	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	35	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	0	34	0.0	0.0	0.0	0.0	0.0	0.0	3685.9
53	30	43	0.0	0.0	0.0	0.0	0.0	0.0	3642.8
53	30	42	0.0	0.0	93.3	174.9	115.0	178.6	3081.0
53	30	41	0.0	0.0	1209.8	500.2	495.1	410.5	1027.2
53	30	40	0.0	3.8	77.7	101.3	37.6	536.9	2885.5
53	30	39	0.0	0.0	0.0	39.5	138.1	689.2	2776.0
53	30	38	51.2	105.8	363.9	819.4	340.7	640.9	1320.9
53	30	37	107.6	232.7	1025.4	585.5	246.5	732.9	690.8
53	30	36	0.0	0.0	131.0	808.2	728.6	723.1	1251.9
53	30	35	0.0	0.0	6.0	57.7	81.6	270.5	3227.0
53	30	34	0.0	0.0	0.0	0.0	0.0	0.0	3642.8
54	0	43	0.0	0.0	0.0	0.0	0.0	0.0	3599.2
54	0	42	0.0	0.0	0.0	0.0	0.0	0.0	3599.2
54	0	41	0.0	0.0	0.0	0.0	0.0	0.0	3599.2
54	0	40	0.0	0.0	0.0	0.0	0.0	0.0	3599.2
54	0	39	0.0	0.0	15.8	260.6	457.5	482.7	2382.6
54	0	38	54.0	106.7	113.1	782.7	2466.2	66.5	0.0
54	0	37	124.4	46.6	41.6	14.3	5.5	4.6	0.0
54	0	37(S)	447.6	313.6	703.4	605.3	510.9	251.3	0.0
54	0	36	138.4	313.4	447.4	309.2	414.7	176.6	0.0
54	0	36(S)	175.0	76.7	26.2	24.9	23.8	0.0	0.0
54	0	35	0.0	38.8	100.5	451.4	1261.8	528.7	1218.0
54	0	34	0.0	0.0	0.0	0.0	0.0	0.0	3599.2

Table 1b: Areas of seabed (km<sup>2</sup>) around South Georgia between 54°30' and 56°S.

NE Corner			0 - 50	50 - 100	100 - 150	150 - 200	200 - 250	250 - 500	>500
S°	S'	W°							
54	30	43	0.0	0.0	0.0	0.0	0.0	0.0	3555.5
54	30	42	0.0	0.0	0.0	0.0	0.0	0.0	3555.5
54	30	41	0.0	0.0	0.0	0.0	0.0	0.0	3555.5
54	30	40	0.0	0.0	0.0	0.0	0.0	0.0	3555.5
54	30	39	0.0	0.0	0.0	14.1	113.1	106.0	3322.3
54	30	38	0.0	0.0	0.0	542.9	715.0	273.8	2023.8
54	30	37	0.0	0.0	422.0	649.6	1034.7	455.5	993.7
54	30	36	17.9	2.6	10.3	0.0	0.0	0.0	0.0
54	30	36(S)	234.8	263.5	565.0	492.2	597.5	903.7	0.0
54	30	35	180.8	371.8	922.0	792.9	443.1	554.0	84.9
54	30	34	0.0	8.9	142.4	145.0	199.4	317.7	2742.1
55	0	43	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	42	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	41	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	40	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	39	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	38	0.0	0.0	0.0	0.0	0.0	0.0	3511.5
55	0	37	0.0	0.0	0.0	0.0	0.0	6.9	3504.6
55	0	36	0.0	4.6	22.8	262.8	94.8	178.2	2948.3
55	0	35	0.0	52.8	1321.2	810.1	586.4	457.9	283.1
55	0	34	0.0	18.1	523.9	221.0	55.5	153.4	2539.6
55	30	43	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	42	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	41	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	40	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	39	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	38	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	37	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	36	0.0	0.0	0.0	0.0	0.0	0.0	3467.1
55	30	35	0.0	0.0	0.0	0.0	0.0	18.3	3448.8
55	30	34	0.0	0.0	0.0	0.0	0.0	209.5	3257.7

Table 2a: Areas of seabed (km<sup>2</sup>) around South Georgia between 53° and 54°30'S.

NE Corner			50 - 150	150 - 250	250 - 500	>500
S°	S'	W°				
53	0	43	0.0	0.0	12.0	3673.9
53	0	42	0.0	288.1	445.2	2952.6
53	0	41	88.9	158.3	26.8	3411.9
53	0	40	0.0	0.0	0.0	3685.9
53	0	39	0.0	0.0	0.0	3685.9
53	0	38	0.0	0.0	0.0	3685.9
53	0	37	0.0	0.0	0.0	3685.9
53	0	36	0.0	0.0	0.0	3685.9
53	0	35	0.0	0.0	0.0	3685.9
53	0	34	0.0	0.0	0.0	3685.9
53	30	43	0.0	0.0	0.0	3642.8
53	30	42	93.3	289.9	178.6	3081.0
53	30	41	1209.8	995.3	410.5	1027.2
53	30	40	81.5	138.9	536.9	2885.5
53	30	39	0.0	177.6	689.2	2776.0
53	30	38	469.7	1160.1	640.9	1320.9
53	30	37	1258.1	832.0	732.9	690.8
53	30	36	131.0	1536.8	723.1	1251.9
53	30	35	6.0	139.3	270.5	3227.0
53	30	34	0.0	0.0	0.0	3642.8
54	0	43	0.0	0.0	0.0	3599.2
54	0	42	0.0	0.0	0.0	3599.2
54	0	41	0.0	0.0	0.0	3599.2
54	0	40	0.0	0.0	0.0	3599.2
54	0	39	15.8	718.1	482.7	2382.6
54	0	38	219.8	3248.9	66.5	0.0
54	0	37	88.2	19.8	4.6	0.0
54	0	37(S)	1017.0	1116.2	251.3	0.0
54	0	36	760.8	723.9	176.6	0.0
54	0	36(S)	102.9	48.7	0.0	0.0
54	0	35	139.3	1713.2	528.7	1218.0
54	0	34	0.0	0.0	0.0	3599.2

Table 2b: Areas of seabed (km<sup>2</sup>) around South Georgia between 54°30' and 56°S.

NE Corner			50 - 150	150 - 250	250 - 500	>500
S°	S'	W°				
54	30	43	0.0	0.0	0.0	3555.5
54	30	42	0.0	0.0	0.0	3555.5
54	30	41	0.0	0.0	0.0	3555.5
54	30	40	0.0	0.0	0.0	3555.5
54	30	39	0.0	127.2	106.0	3322.3
54	30	38	0.0	1257.9	273.8	2023.8
54	30	37	422.0	1684.3	455.5	993.7
54	30	36	12.9	0.0	0.0	0.0
54	30	36(S)	828.5	1089.7	903.7	0.0
54	30	35	1293.8	1236.0	554.0	84.9
54	30	34	151.3	344.4	317.7	2742.1
55	0	43	0.0	0.0	0.0	3511.5
55	0	42	0.0	0.0	0.0	3511.5
55	0	41	0.0	0.0	0.0	3511.5
55	0	40	0.0	0.0	0.0	3511.5
55	0	39	0.0	0.0	0.0	3511.5
55	0	38	0.0	0.0	0.0	3511.5
55	0	37	0.0	0.0	6.9	3504.6
55	0	36	27.4	357.6	178.2	2948.3
55	0	35	1374.0	1396.5	457.9	283.1
55	0	34	542.0	276.5	153.4	2539.6
55	30	43	0.0	0.0	0.0	3467.1
55	30	42	0.0	0.0	0.0	3467.1
55	30	41	0.0	0.0	0.0	3467.1
55	30	40	0.0	0.0	0.0	3467.1
55	30	39	0.0	0.0	0.0	3467.1
55	30	38	0.0	0.0	0.0	3467.1
55	30	37	0.0	0.0	0.0	3467.1
55	30	36	0.0	0.0	0.0	3467.1
55	30	35	0.0	0.0	18.3	3448.8
55	30	34	0.0	0.0	209.5	3257.7

Table 3: Summary of areas of seabed for Shag Rocks, South Georgia and the whole of Subarea 48.3. An asterisk (\*) indicates that there are no reported soundings for this depth range.

Depth Range (m)	Area of Seabed (km <sup>2</sup> )		
	Shag Rocks	South Georgia	The Whole of Subarea 48.3
0 - 50	*	1531.7	1531.7
50 - 100	3.8	1956.6	1960.4
100 - 150	1469.7	6903.8	8373.6
150 - 200	1023.1	8689.3	9712.4
200 - 250	847.5	10515.0	11362.8
250 - 500	1610.0	8201.9	9811.9
> 500	24360.0	144798.0	169158.9
<b>Total</b>	<b>29314.1</b>	<b>182597.6</b>	<b>211911.7</b>

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- Tableau 3: Récapitulatif des aires de fond marin pour les îlots Shag, la Géorgie du Sud et la totalité de la sous-zone 48.3. Une astérisque (\*) indique qu'aucun sondage n'a été signalé pour cet intervalle bathymétrique.

### Список таблиц

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