Nation	Total	number	Total	surve	
	of surveys		length (km)		
Australia	5		30479		
Brazil	1		5578		
China	1		2015		
France	3		7706		
Germany	18		59621		
Italy	13	34341			
Japan	20	48980			
Korea	11	9207			
New Zealand	1	3400			
Norway	6		12771		
Poland	1		1100		
USSR, Russia	27	95100			
Spain	8	19675			
United Kingdom	3	8674			
USA	10		25154		

Table S1. National distribution of MCS research surveys in the Southern Ocean based on the data submitted to theSDLS until 06 September 2012.

Season Total number Total Total survey Regions survey of surveys length (km) duration (days) 1976/77 1 910 4.1 WS 1977/78 0 0 0 WS 1978/79 2 7083 31.9 1979/80 1 1100 4.9 AP 1980/81 3 10775 48.5 AP, RS, WS 1981/82 4 12146 54.7 PB, RS, WL, WS RS, WL, WS 1982/83 2 3150 14.2 3 1983/84 7350 33.1 RS, WL 1984/85 4 9240 41.6 AP, PB, WS, 1985/86 4 11235 50.6 PB, QML, WS 3 57.8 1986/87 12845 MBL, PB, RS, WS 1987/88 6 18916 85.1 AP, PB, RS 62.3 1988/89 4 13854 AP, RS, WL, WS 72.6 1989/90 6 16128 AP, PB, RS, WL, WS 1990/91 8 84.4 AP, PB, RS, WL, WS 18755 1991/92 6 16538 74.4 AP, RS, WS 1992/93 4 8647 38.9 AP, RS 1993/94 9889 44.5 4 AP, MBL, PB, RS, WL 1994/95 14572 65.6 AP, MBL, PB, WL, WS 6 1995/96 7 70.0 15565 AP, QML, RS, WS 1996/97 17819 80.2 6 AP, RS, WS 1997/98 3 8871 39.9 AP, QML 3 8308 1998/99 37.4 AP, PB, QML 1999/00 3 8412 37.9 EL, PB, WL 101.1 2000/01 6 22479 AP, EL, MBL, WL 95.3 2001/02 6 21169 AP, PB, QML, WL 5 49.6 2002/03 11015 AP, PB, QML, RS, WL 2003/04 4 9712 43.7 AP, QML, RS, WL 2004/05 3 7612 34.3 AP, WL 2005/06 3 6307 28.4 AP, MBL, RS 2006/07 3 11700 52.6 PB, RS, WL 2007/08 4590 20.7 WL 1 3000 PB 2008/09 1 13.5 2009/10 2 9200 41.4 MBL, WL 2010/11 1 4900 22.0 QML 35 128 363801 1637.0 Total 1 3.7 10394 46.8 Average per season

Table S2. Seasonal distribution of MCS research surveys in the Southern Ocean based on the data submitted to the SDLS until 06 September 2012. The total survey duration is computed from the total survey length by assuming a ship velocity of 5 kn.

AP = An	tarctic F	Peninsu	la, EL = l	Enderby I	Land, MB	L = M	larie Byrd L	and, $PB = 1$	Prydz Ba	y, QM	L = Dronning	Maud
Land,	RS	=	Ross	Sea,	WL	=	Wilkes	Land,	WS	=	Weddell	Sea.

Table S3. Regional distribution of MCS research surveys in the Southern Ocean based on the data submitted to the SDLS until 06 September 2012. The areas for the different regions are computed according to their boundaries in Fig. 1 and thus include parts of the sea surface of the Southern Ocean and small parts of the land surface of Antarctica. The total number of surveys, the total survey length and the total survey duration consider all surveys within the 35 seasons from 1976/77 - 2010/11. The average survey length and duration per season are derived from the total survey length by division by 35 seasons and by assuming a ship velocity of 5 kn, and the average number of profile line metres per season and km² by a further division by the area of each region.

Region	Area	Total number	Total surve	ey Total survey	Average survey	Average survey	Average number of profile
		of surveys	length	duration	length per season	duration per season	line metres per season and
			(km)	(days)	(km/season)	(days/season)	km ² (m/season/km ²)
	$(10^6 \mathrm{km}^2)$						
Antarctic Peninsula	2.8	40	90356	407	2582	11.6	0.9
Wilkes Land	3.0	19	70366	317	2011	9.0	0.7
Ross Sea	1.6	22	58732	264	1678	7.6	0.4
Weddell Sea	3.2	19	46839	211	1338	6.0	0.4
Prydz Bay	1.6	16	46031	207	1315	5.9	0.8
Dronning Maud Land	3.0	8	27659	125	790	3.6	0.3
Marie Byrd Land	4.3	6	14891	67	426	1.9	0.1
nderby Land	1.4	2 8	3927	40 2	55 1.	.1 0.	2