

**Commercial fishing patterns influence odontocete whale-longline interactions in the
Southern Ocean**

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Table S1.

Temporal trends of whale-vessel interaction levels

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Table S1. Parameter estimates of the linear models testing for annual trends in a. sperm whale-, and b. killer whale – fisheries interaction levels in the study fishing areas. Interaction levels were calculated as the proportion of fishing days with interactions recorded out of all fishing days at the vessel level ($Pr(days)_{vessel}$) and at the fleet level ($Pr(days)_{fleet}$)

a. sperm whales

Area	<i>n</i> years	Response	Trend			
			<i>Est.</i>	<i>SE</i>	<i>t</i>	<i>P</i>
All	14	$Pr(days)_{vessel}$	-0.009	0.003	-2.697	0.073
		$Pr(days)_{fleet}$	-0.012	0.007	-1.695	0.092
Chile	11	$Pr(days)_{vessel}$	-0.040	0.012	-3.513	0.001
		$Pr(days)_{fleet}$	-0.015	0.008	-1.891	0.064
Falklands	14	$Pr(days)_{vessel}$	0.023	0.009	2.696	0.012
		$Pr(days)_{fleet}$	0.016	0.008	2.114	0.056
South Georgia	13	$Pr(days)_{vessel}$	0.001	0.005	0.174	0.862
		$Pr(days)_{fleet}$	-0.019	0.006	-3.227	0.008
Crozet	14	$Pr(days)_{vessel}$	-0.008	0.004	-2.067	0.041
		$Pr(days)_{fleet}$	0.000	0.003	-0.120	0.906
Kerguelen	14	$Pr(days)_{vessel}$	-0.011	0.004	-2.793	0.006
		$Pr(days)_{fleet}$	-0.005	0.003	-1.350	0.202
HIMI	6	$Pr(days)_{vessel}$	0.004	0.006	0.684	0.503
		$Pr(days)_{fleet}$	0.020	0.007	2.878	0.045

b. killer whales

Area	<i>n</i> years	Response	Trend			
			<i>Est.</i>	<i>SE</i>	<i>t</i>	<i>P</i>
All	14	<i>Pr(days)</i> _{vessel}	0.001	0.003	0.426	0.671
		<i>Pr(days)</i> _{fleet}	-0.007	0.009	-0.855	0.396
Chile	11	<i>Pr(days)</i> _{vessel}	-0.027	0.012	-2.312	0.024
		<i>Pr(days)</i> _{fleet}	-0.008	0.010	-0.850	0.399
Falklands	14	<i>Pr(days)</i> _{vessel}	0.002	0.001	1.274	0.213
		<i>Pr(days)</i> _{fleet}	0.002	0.002	0.854	0.410
South Georgia	13	<i>Pr(days)</i> _{vessel}	0.005	0.002	2.876	0.005
		<i>Pr(days)</i> _{fleet}	-0.002	0.005	-0.321	0.754
Crozet	14	<i>Pr(days)</i> _{vessel}	-0.002	0.005	-0.390	0.698
		<i>Pr(days)</i> _{fleet}	-0.001	0.004	-0.312	0.761
Kerguelen	14	<i>Pr(days)</i> _{vessel}	0.000	0.000	-1.268	0.208
		<i>Pr(days)</i> _{fleet}	-0.001	0.001	-0.801	0.439
HIMI	6	<i>Pr(days)</i> _{vessel}	0.000	0.000	-	-
		<i>Pr(days)</i> _{fleet}	0.000	0.000	-	-