SUPPORTING INFORMATION

Perfluorooctanesulfonate and Related Fluorochemicals in Albatrosses, Elephant Seals, Penguins, and Polar Skuas from the Southern Ocean

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Table S1. Recoveries for matrix spikes and internal standards (Mean±SE)

	Matrix spikes Recovery (%)				
Sample Type	PFOS	PFDS	PFHS	PFOSA	PFHpA
Liver	77±6	42±31	85±7	17±5	103±20
Blood/Serum	81±14	39±32	86±8	83±8	97±18
	PFOA	PFNA	PFDA	PFUnDA	PFDoDA
Liver	94±17	51±37	28±28	10±5	8±2
Blood/Serum	85±25	62±42	48±36	57±20	66±21

	Internal Standard Recovery (%)		
	PFBS	13C4-PFOS	13C4-PFOA
Liver	63±19	71±13	69±26
Blood/Serum	85±6	77±12	90±17
Egg	89±14	90±12	97±22

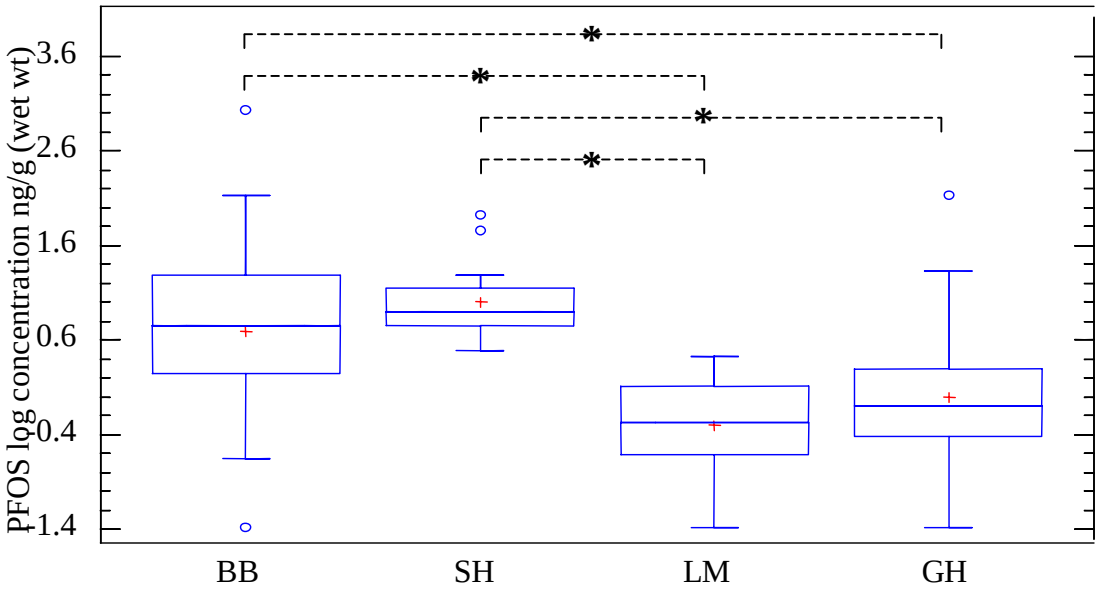


Figure S1. Log concentrations of PFOS in black-browed (BB), shy (SH), light-mantled sooty (LM), and grey-headed (GH) albatrosses from the Southern Ocean. Statistically significant difference ($p<0.01$) is indicated by *.

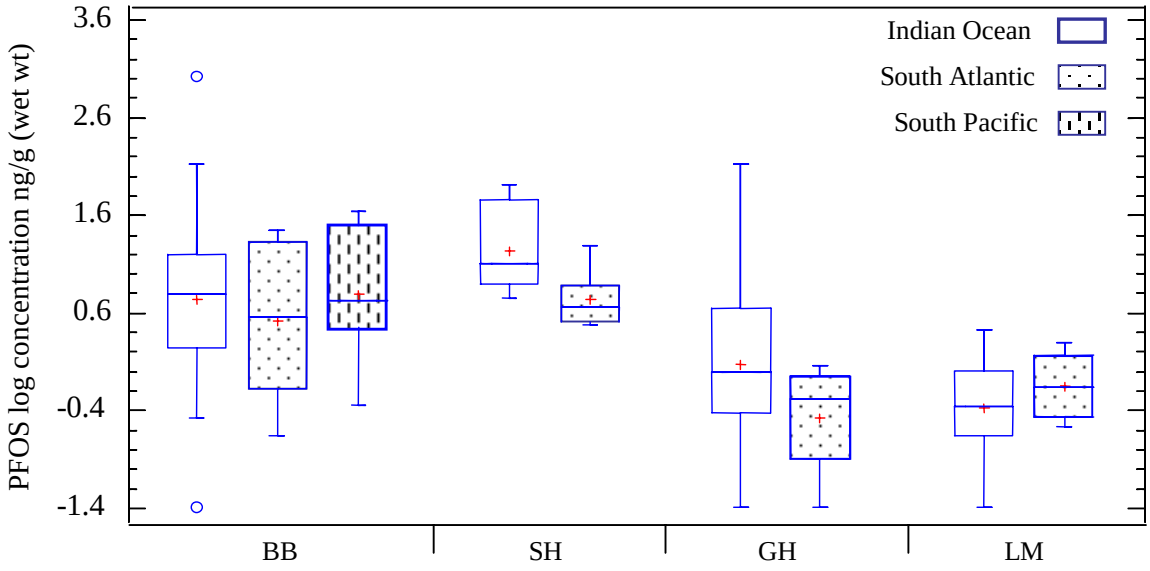


Figure S2. Log concentrations of PFOS in four species of albatrosses from the Southern Ocean. ANOVA shows that the concentrations of PFOS in black-browed albatrosses (BB) from the Indian, South Atlantic, and South Pacific Oceans were not significantly different; the concentrations of PFOS in shy albatross (SH) from the Indian Ocean was not significantly different from concentrations in SH from the South Atlantic Ocean; the concentrations of PFOS in grey-headed albatross (GH) from the Indian Ocean were not significantly different from concentrations in GH from the South Atlantic Ocean; the concentrations of PFOS in light-mantled sooty albatrosses (LM) from the Indian Ocean were not significantly different from concentrations in LM from the South Atlantic Ocean.

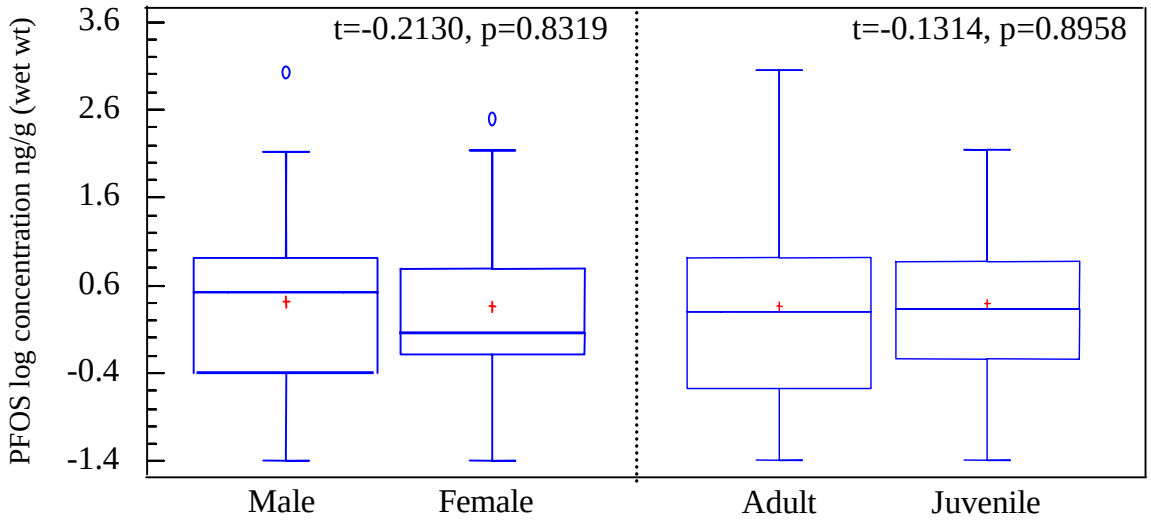


Figure S3. PFOS concentrations in albatrosses from the Southern Ocean were not statistically different between male and female, or between adult and juvenile.

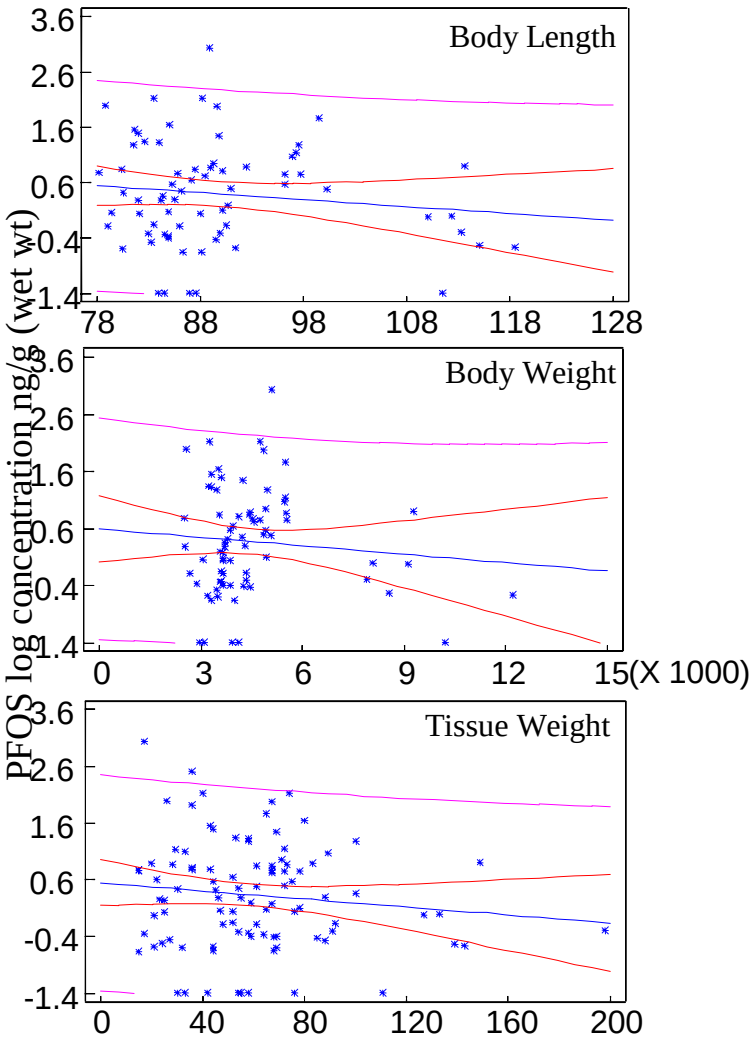
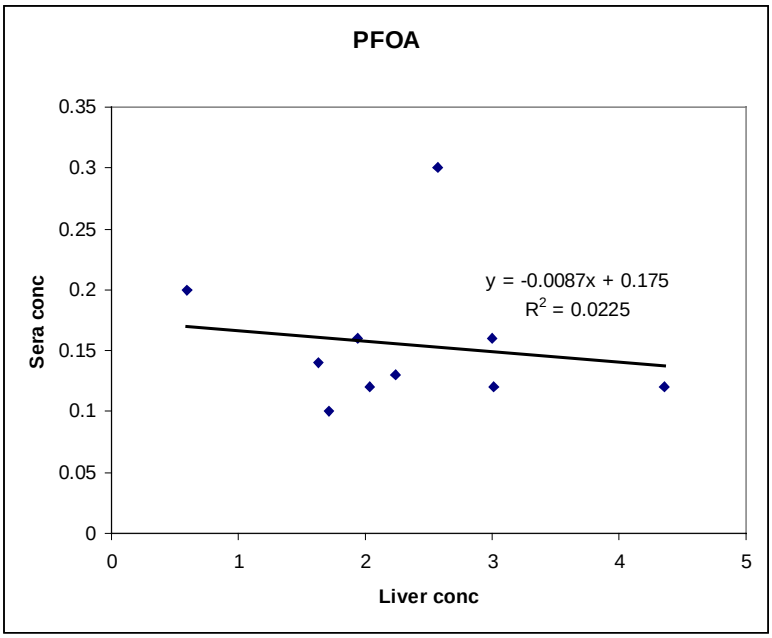


Figure S4. Regression analysis indicated no significant relationship between log concentrations of PFOS and body length, body weight, or tissue (liver) weight.



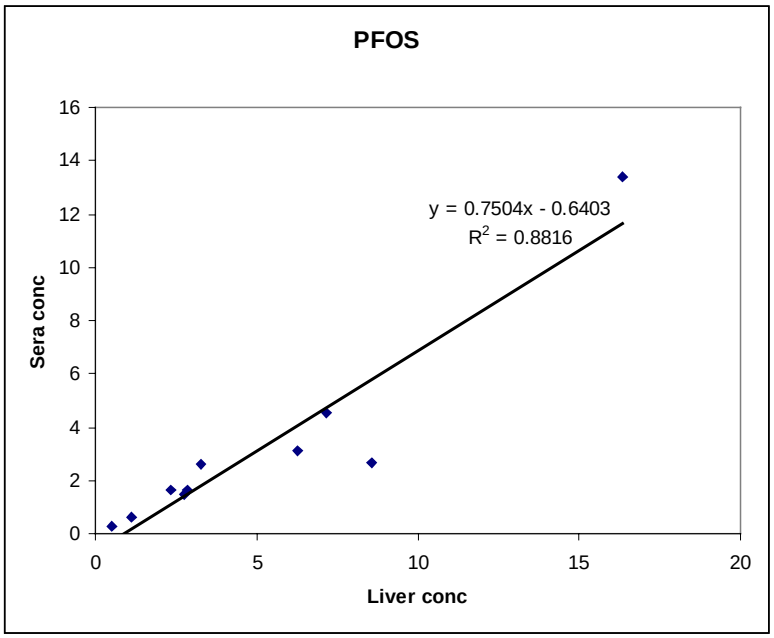


FIGURE S5. Relationship between liver and serum concentrations (ng/g) of PFOS and PFOA in Laysan albatrosses from the North Pacific Ocean.

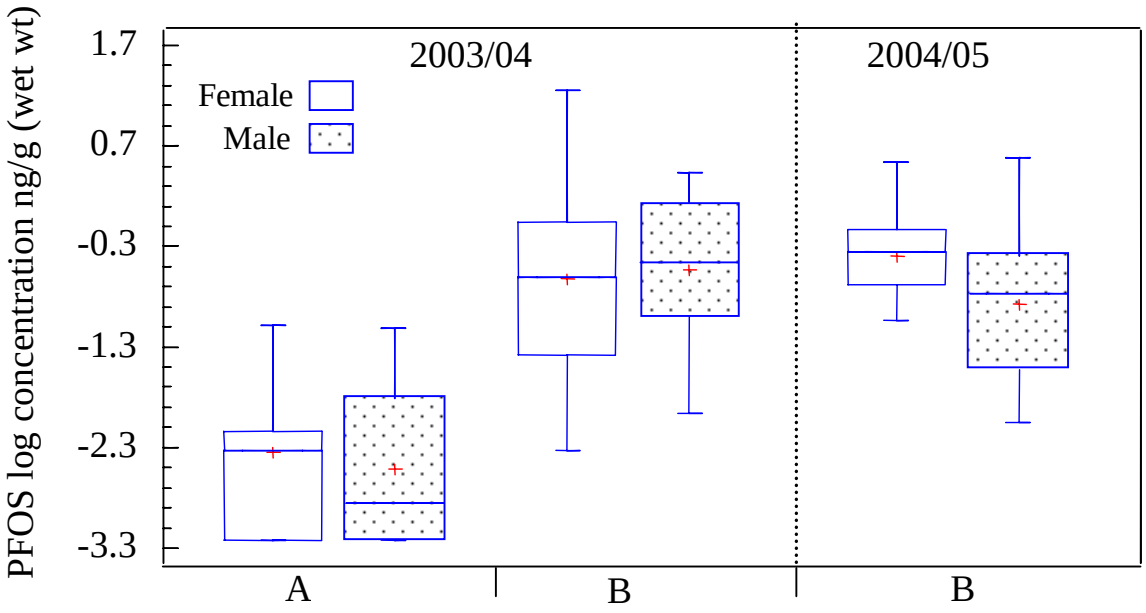


Figure S6. Log concentrations of PFOS in elephant seal blood collected in two sampling periods. Samples were grouped into juvenile and adult (A), weaned and yearling pups (B). Statistics showed no difference between female and male. However, difference existed between the groups A (adult/juvenile) and B (pups) (ANOVA, $p<0.01$).