

Modeling swordfish daytime vertical habitat in the North Pacific Ocean from pop-up archival tags

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Supplement 1. Additional data

Table 1. Summaries of the individual GAM models. GAM: general additive model; edf: estimated degrees of freedom; GCV: general cross validation; scale est.: estimated scale parameter

Mean depth ~ s(log(chl))

	Estimate	SE	<i>t</i>	Pr(> <i>t</i>)
(Intercept)	371.98	3.71	100.3	<2e-16

	edf	<i>F</i>	<i>p</i>
s(log(chl))	10.87	68.1	<2e-16

R ² (adj) = 0.545	Deviance explained = 55.2%		
GCV score = 10103	Scale est. = 9800.8	n = 713	

Mean depth ~ s(ox400)

	Estimate	SE	<i>t</i>	Pr(> <i>t</i>)
(Intercept)	370.68	3.91	94.83	<2e-16

	edf	<i>F</i>	<i>p</i>
s(ox400)	12.92	48.58	<2e-16

R ² (adj) = 0.475	Deviance explained = 48.5%		
GCV score = 11672	Scale est. = 11277	n = 738	

Mean depth ~ s(T400)

	Estimate	SE	<i>t</i>	Pr(> <i>t</i>)
(Intercept)	379.67	4.12	92.26	<2e-16

	edf	<i>F</i>	<i>p</i>
s(T400)	7.25	74.94	<2e-16

R ² (adj) = 0.462	Deviance explained = 46.8%		
GCV score = 11789	Scale est. = 11532	n = 681	

Fig. S1. Diagnostic plots for the full model

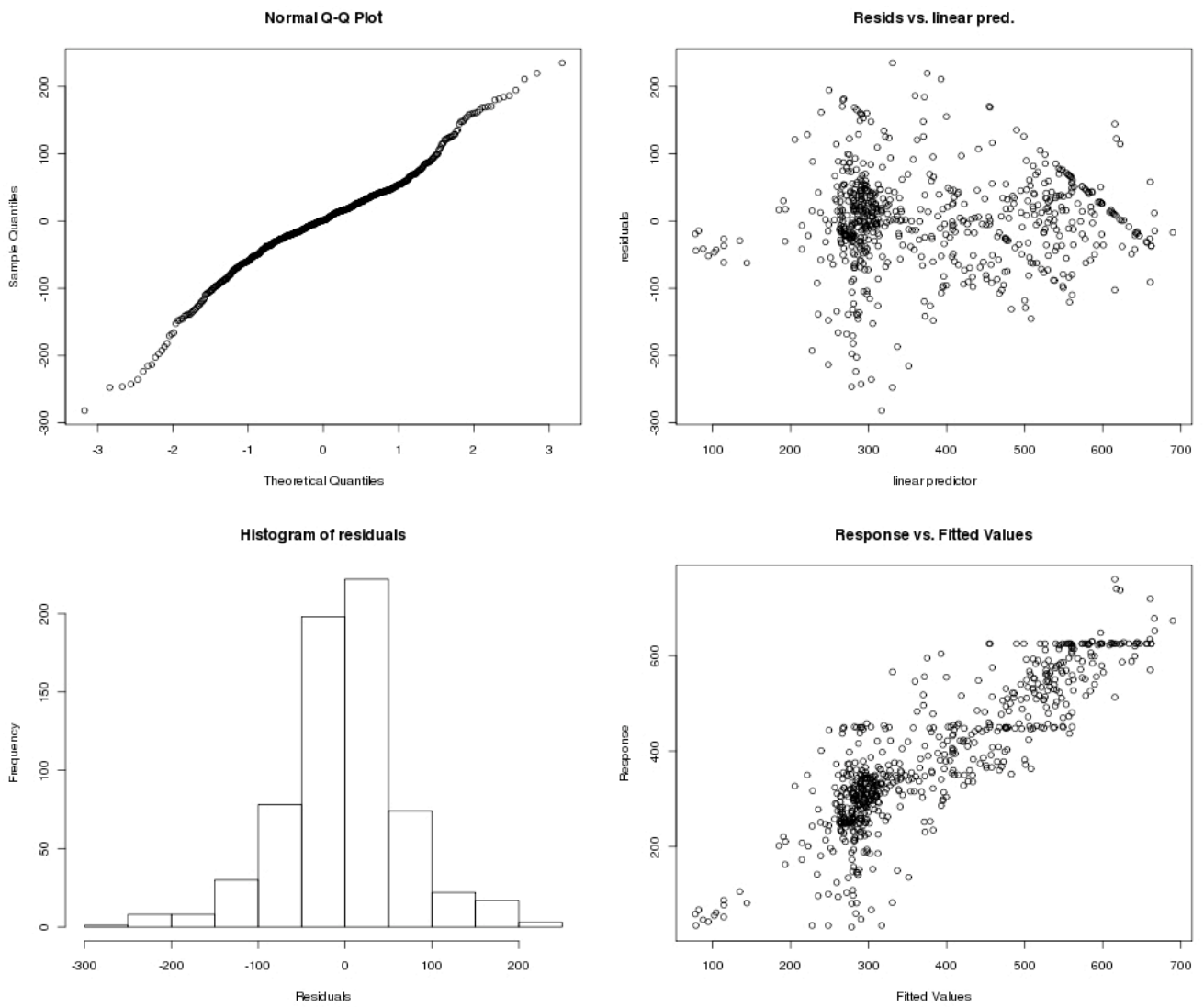


Fig. S2. Plots of the smooths for chl *a*, oxygen and interaction term estimated by the full model. See Table S1 for definition of T400 and ox400

