

## Supplement 5

Output plots of GAMs for the 14 tested environmental covariates. Shown are the GAM smoother response curves which indicate foraging probability. Dashed lines represent the 95% confidence intervals. Rugs on the x-axis reflect the presence of covariate values in the dataset.

All response curves were generated from GAMs run separately for each species and with a single environmental covariate (as smooth term) and breeding stage (as factor) included in the model.

Fig. S5.1. GAM smoother response curve for foraging probability in response to sea ice concentration

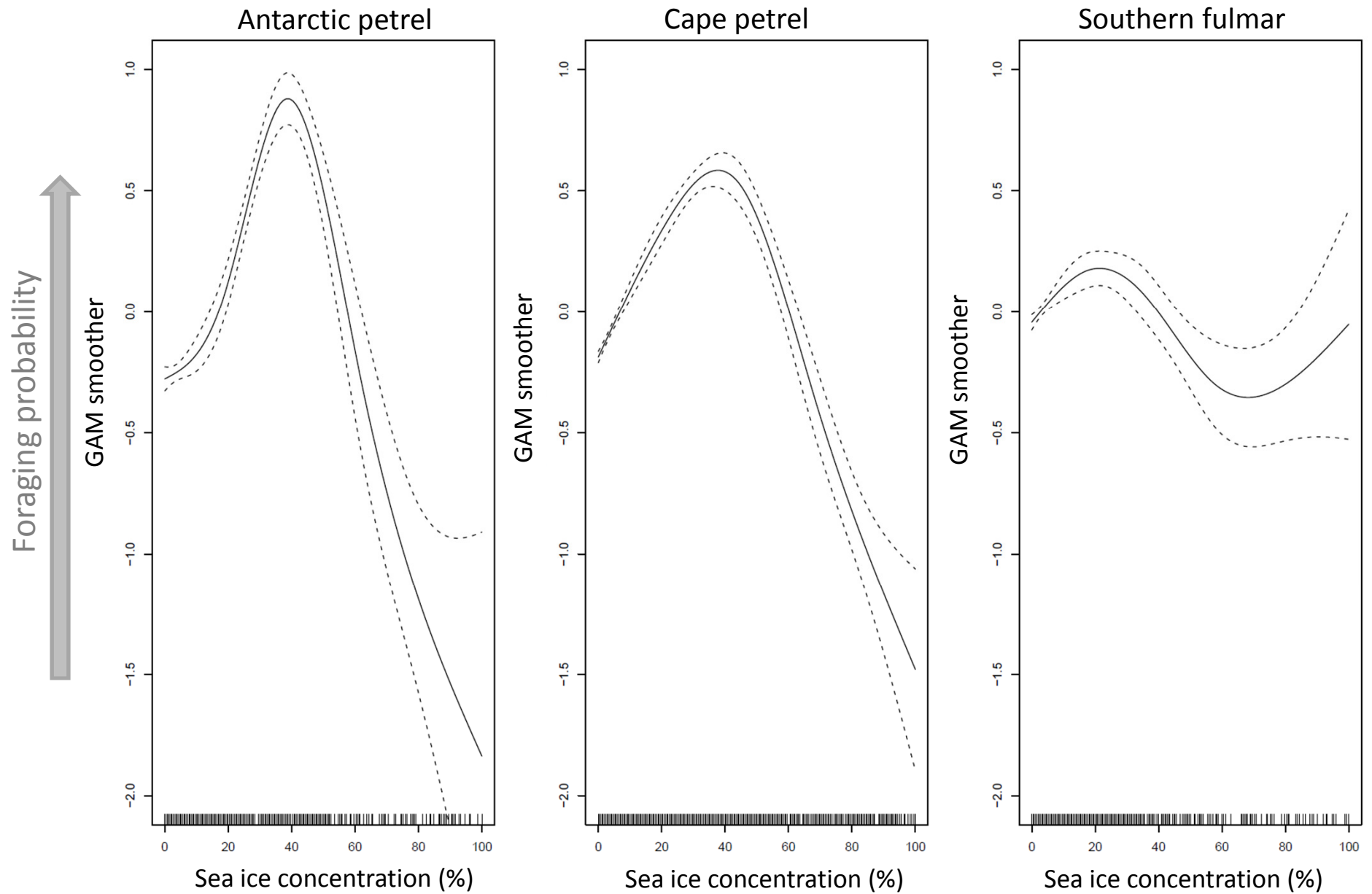


Fig. S5.2. GAM smoother response curve for foraging probability in response to sea surface height

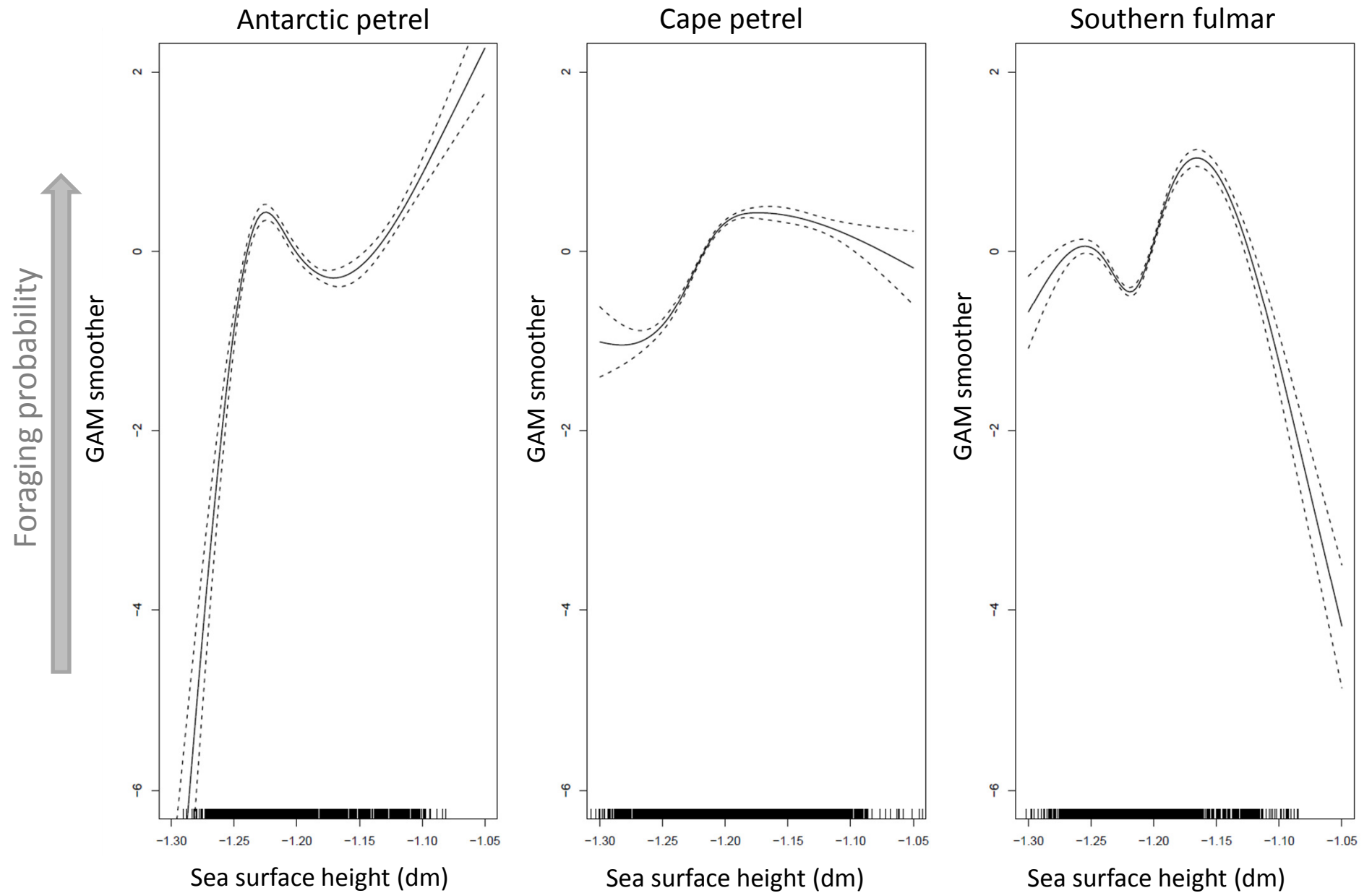


Fig. S5.3. GAM smoother response curve for foraging probability in response to distance to sea ice

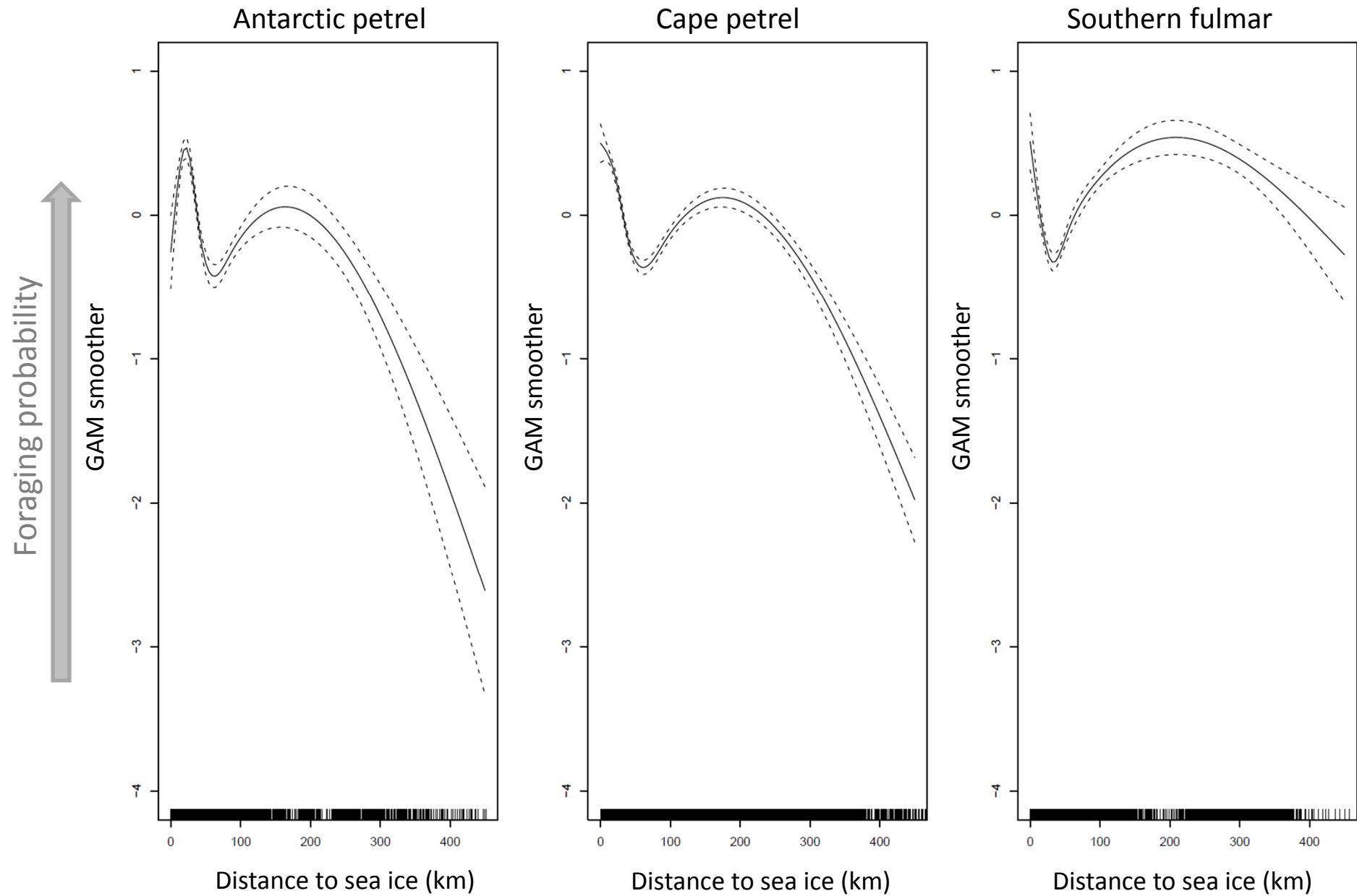


Fig. S5.4. GAM smoother response curve for foraging probability in response to distance to shelf

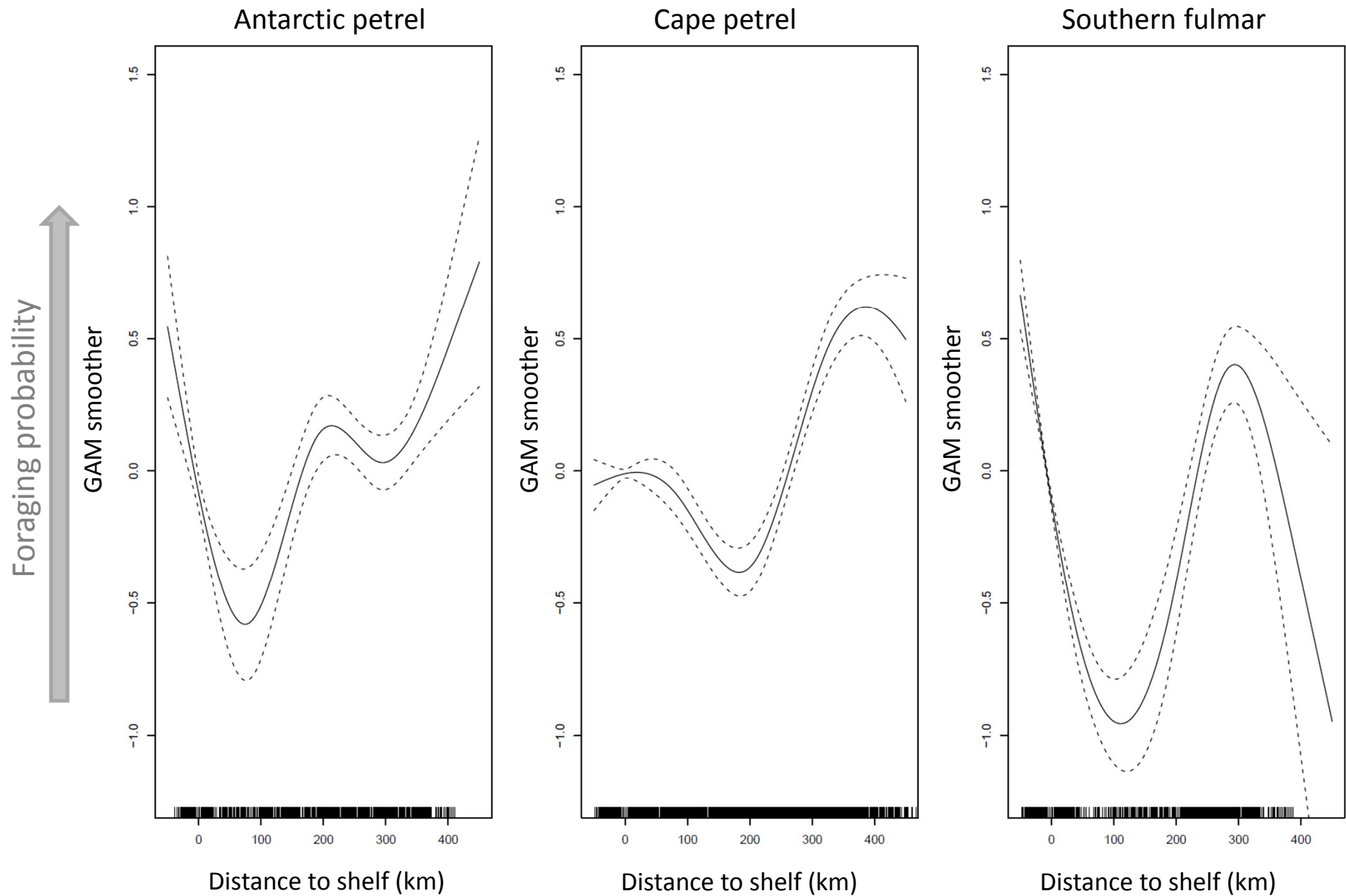


Fig. S5.5. GAM smoother response curve to foraging probability in response to time since/to melt of sea ice

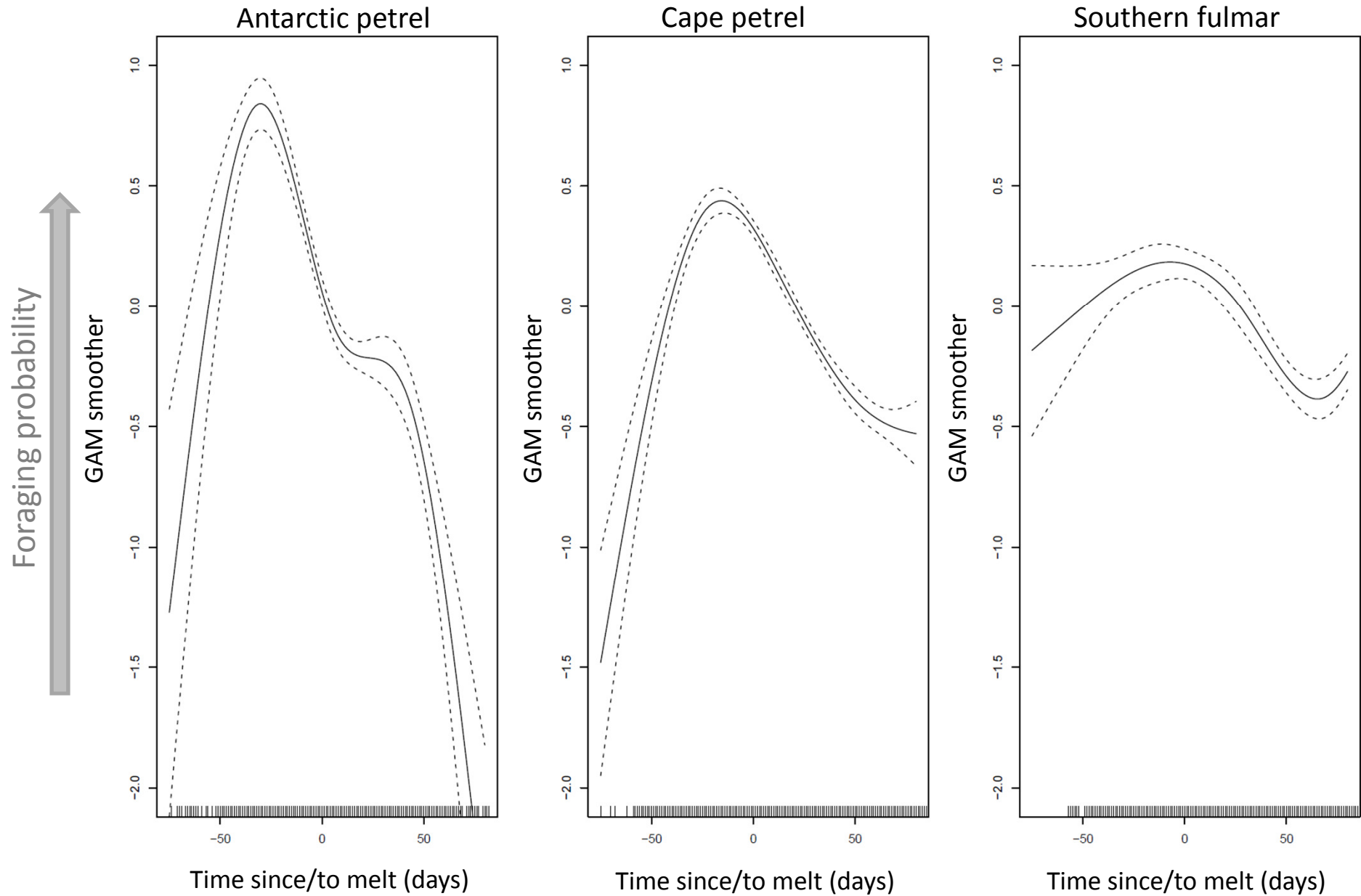


Fig. S5.6. GAM smoother response curve to foraging probability in response to sea surface temperature

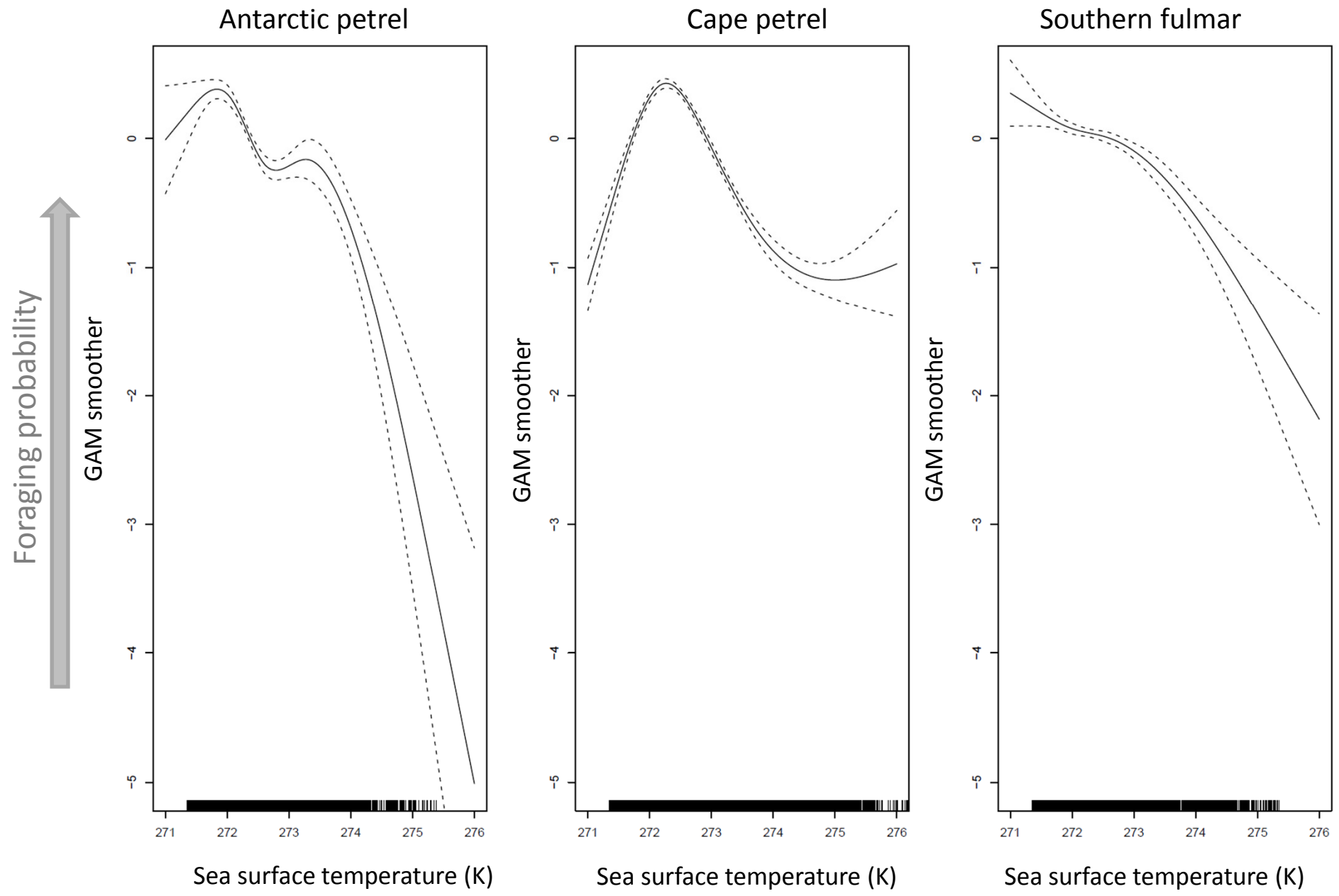


Fig. S5.7. GAM smoother response curve to foraging probability in response to bathymetry

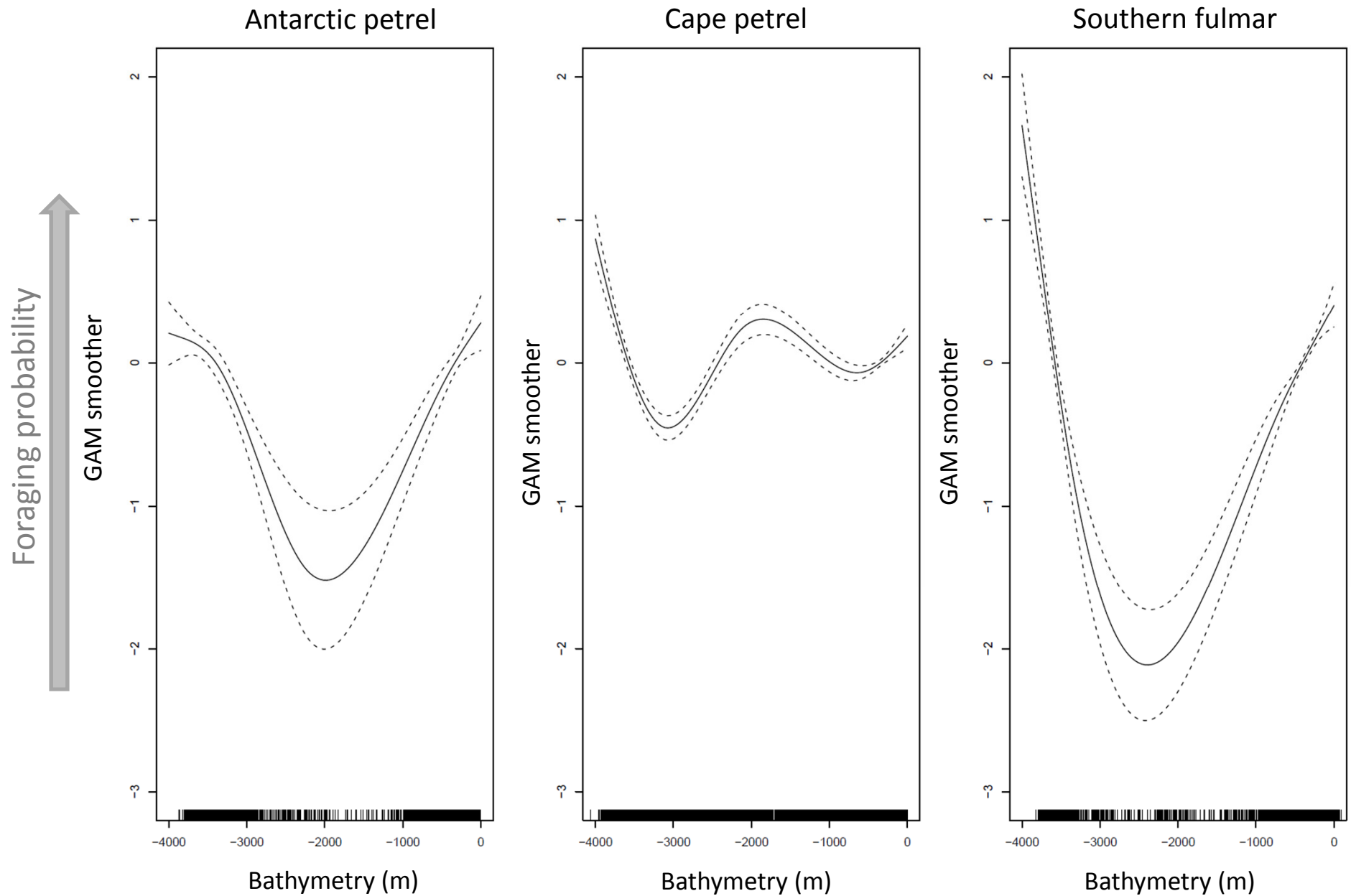




Fig. S5.8. GAM smoother response curve to foraging probability in response to the gradient in bathymetry

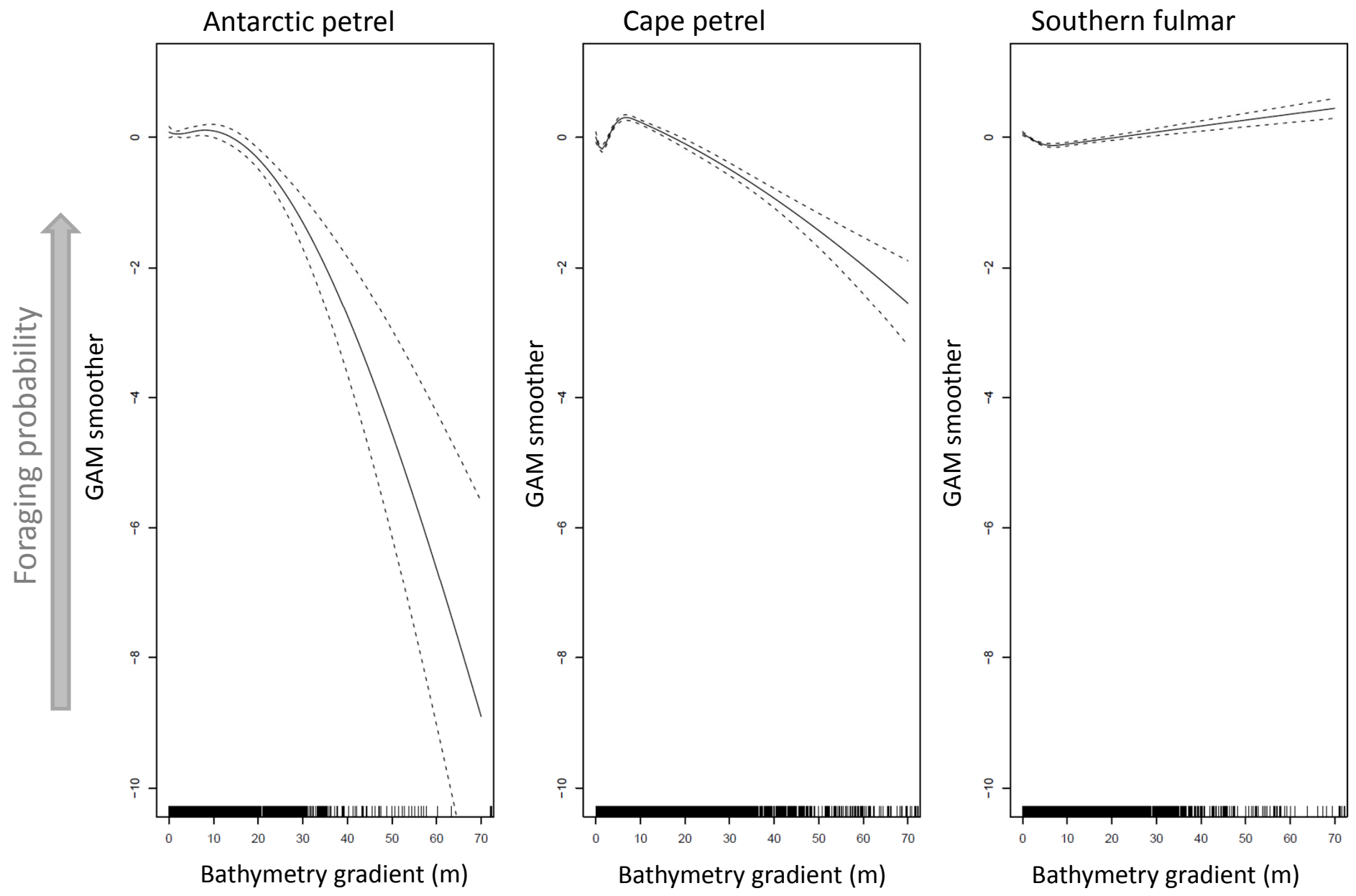


Fig. S5.9. GAM smoother response curve to foraging probability in response to the seasonal average of sea surface temperature

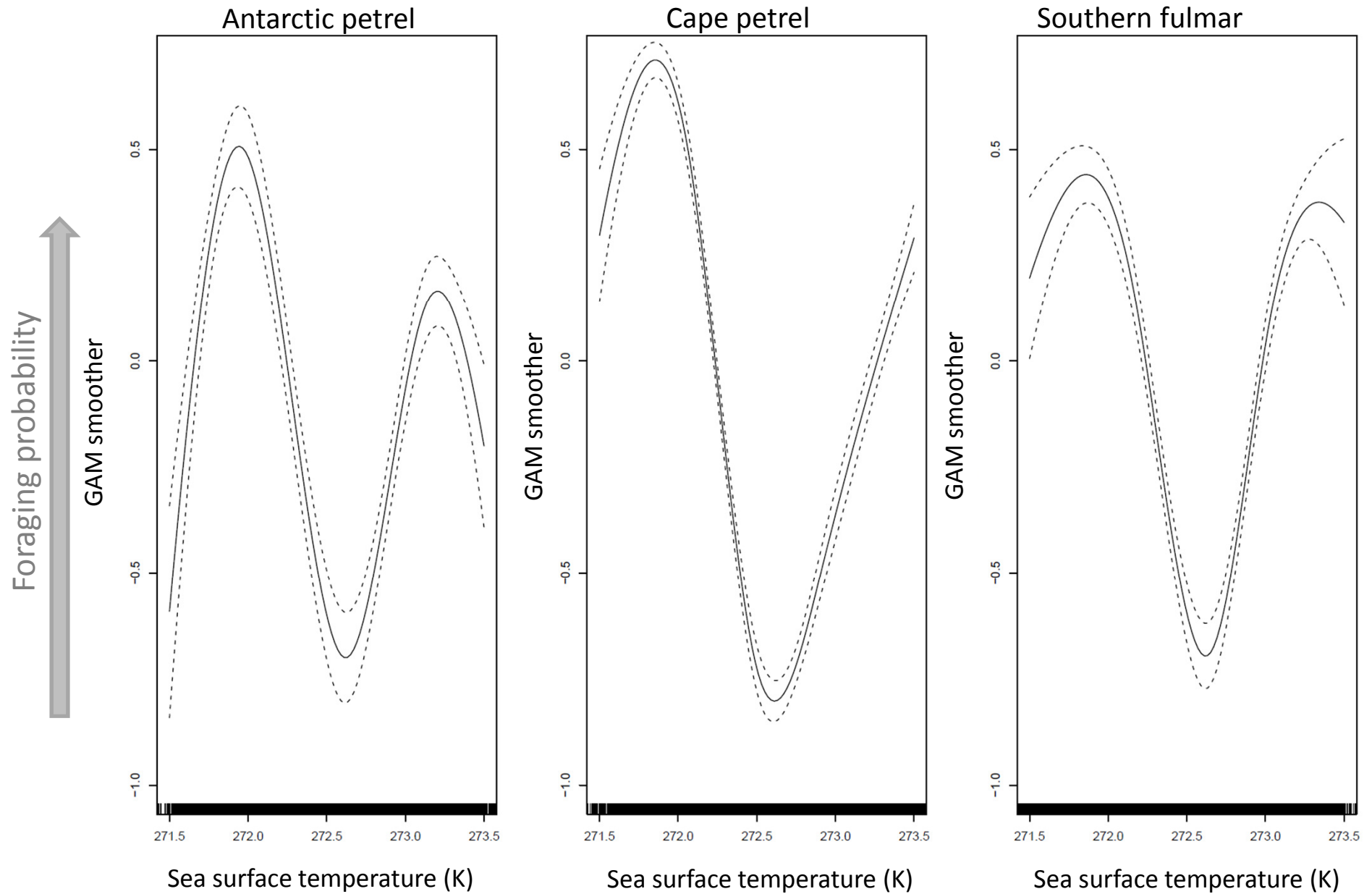


Fig. S5.10. GAM smoother response curve to foraging probability in response to the seasonal gradient in sea surface temperature

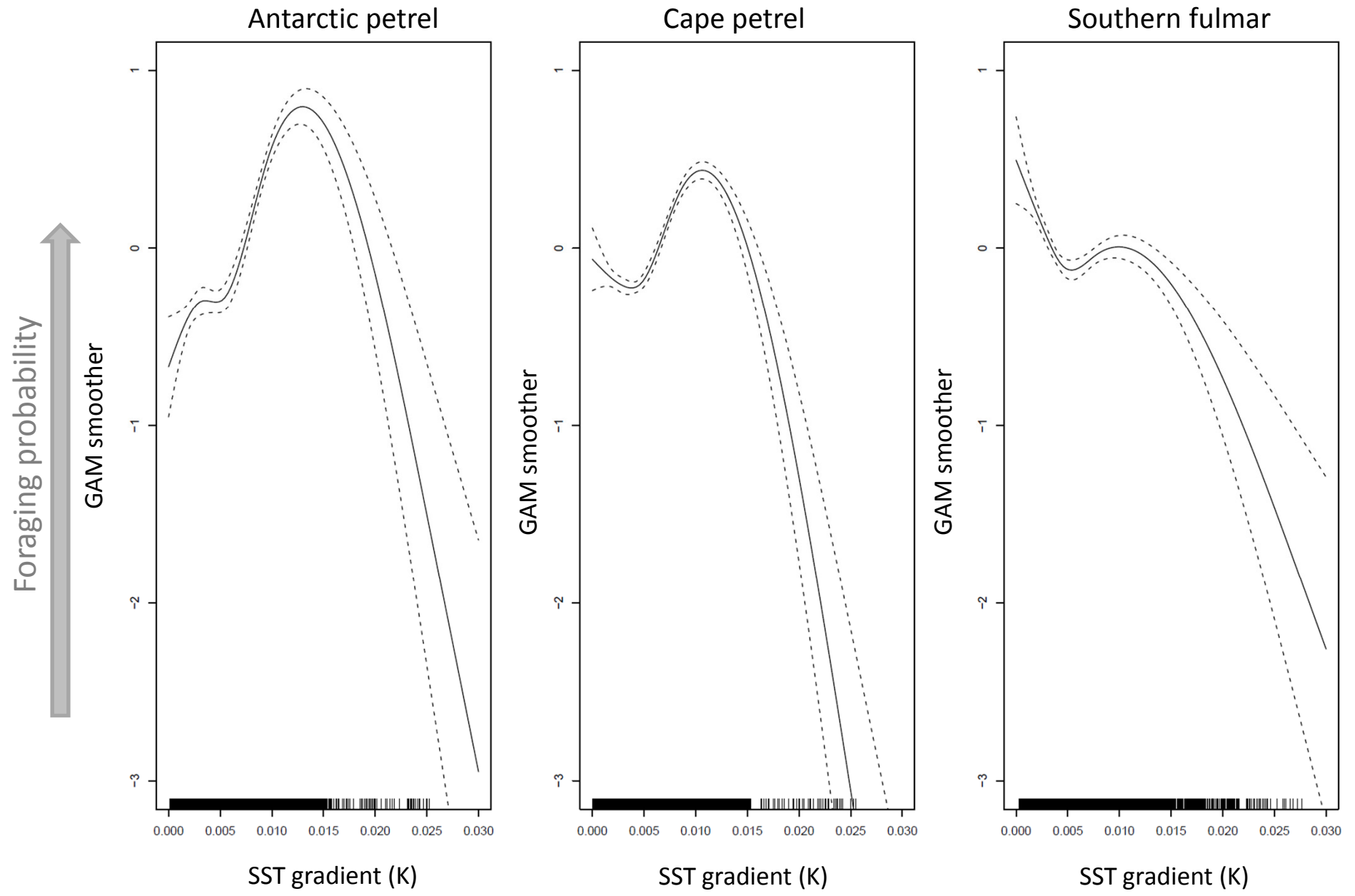


Fig. S5.11. GAM smoother response curve to foraging probability in response to the seasonal average of sea ice concentration

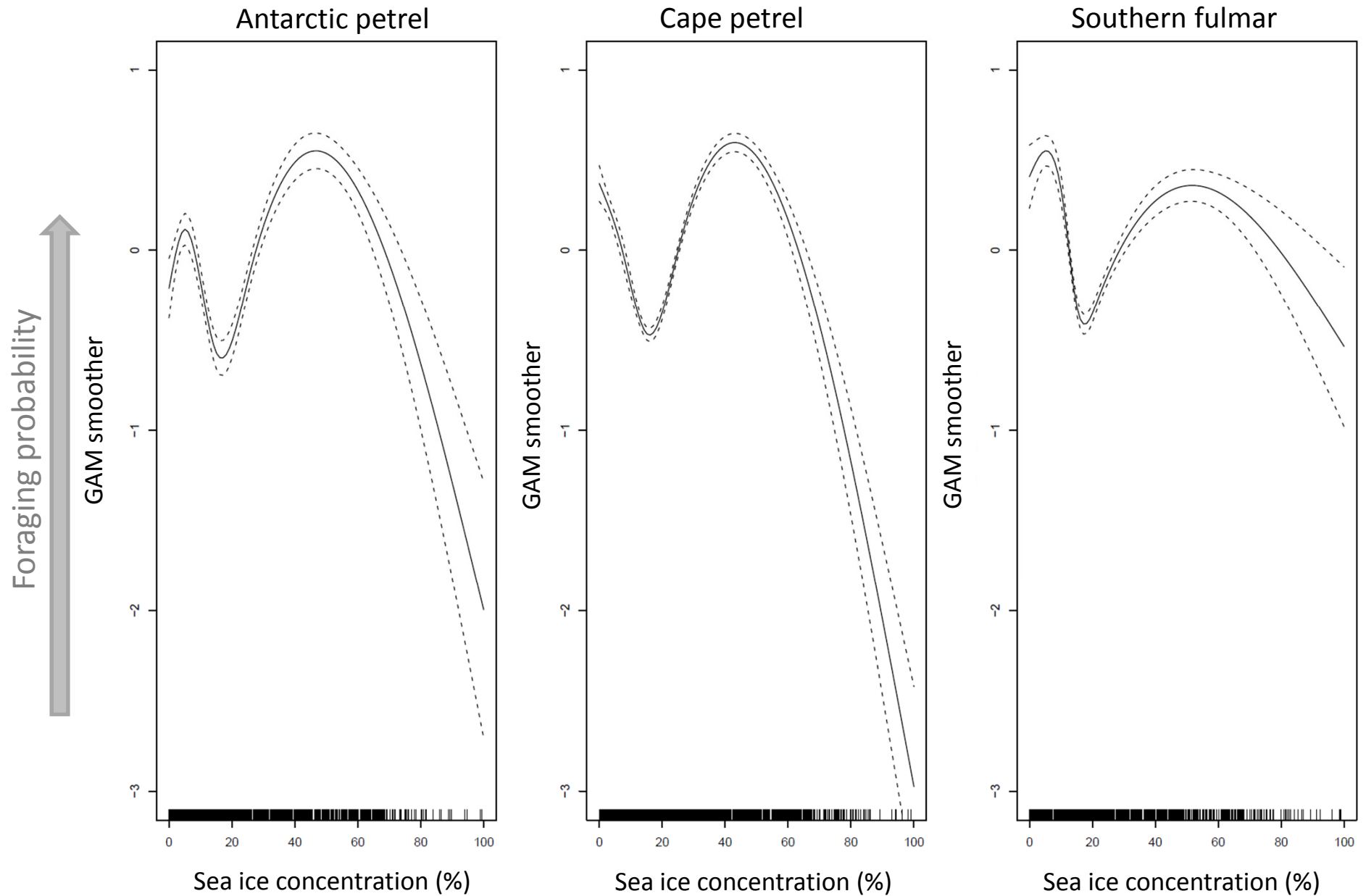


Fig. S5.12. GAM smoother response curve to foraging probability in response to the seasonal gradient of sea ice concentration

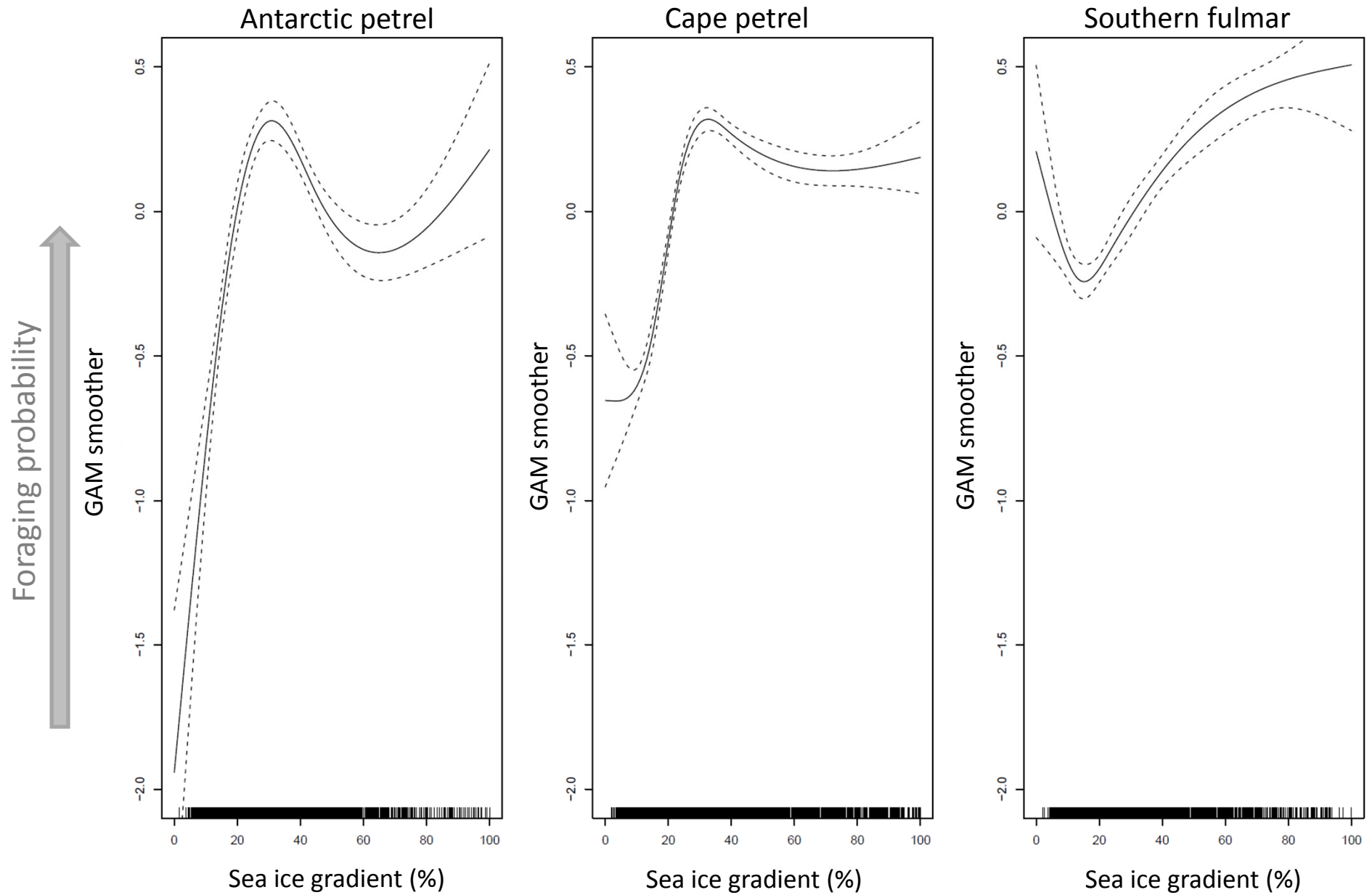


Fig. S5.13. GAM smoother response curve to foraging probability in response to the seasonal average chlorophyll concentration

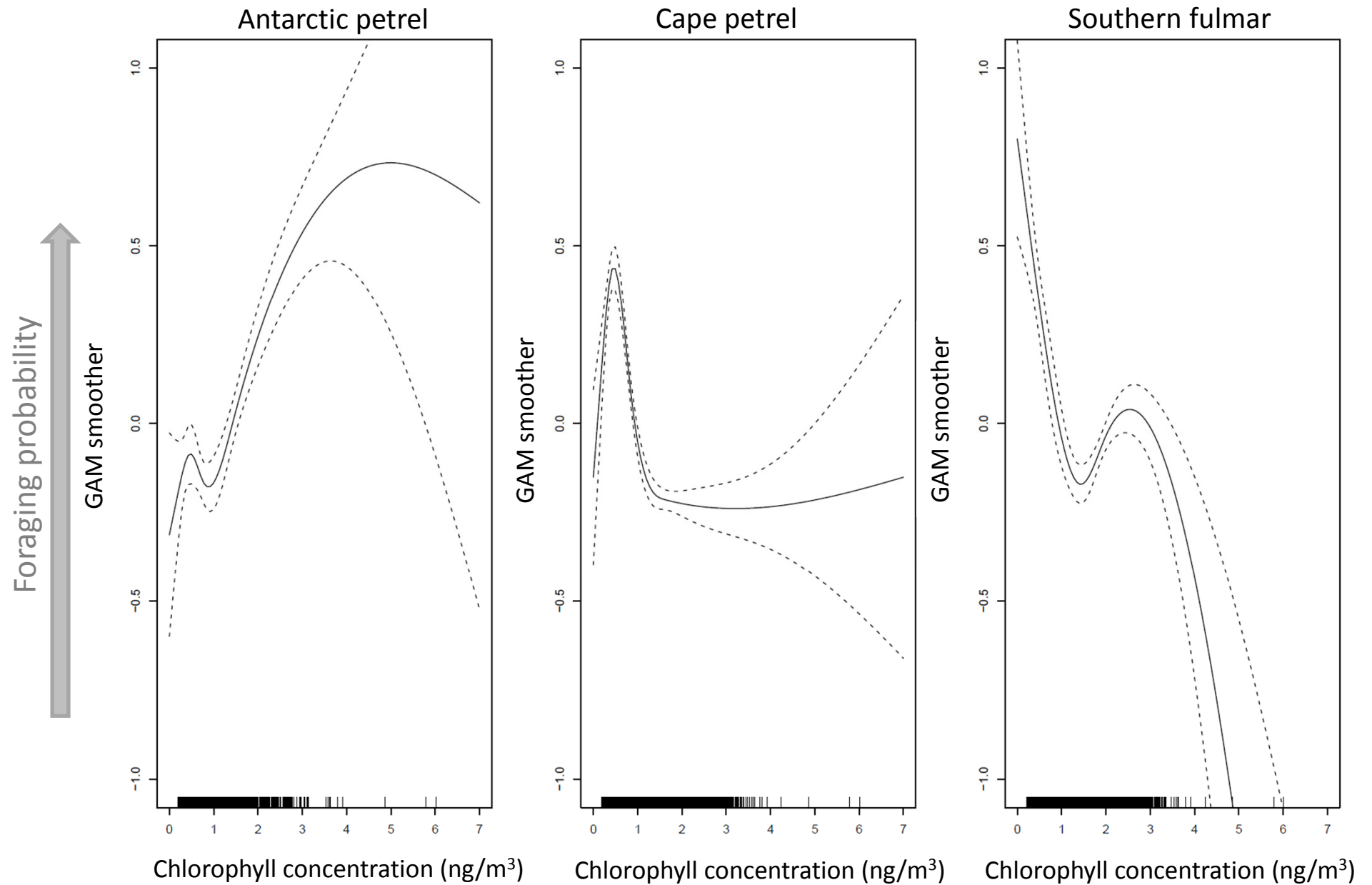


Fig. S5.14. GAM smoother response curve to foraging probability in response to wind speed

