**Supplementary materials for Smith et al., Per-length Biomass Estimates of Antarctic krill (*Euphausia superba*)**

Stratification of the bootstrap:

An uneven number of length-frequency (n = 3,750) and length-wetmass (n = 503) measurements were taken. As the bootstrap was resampled over trawl station, as opposed to individual, separate datasets were produced for resampled length-frequency and wetmass. The implementation of a stratified bootstrap ensured length-frequency data with associated weights matched length-weight indices from the same individuals.
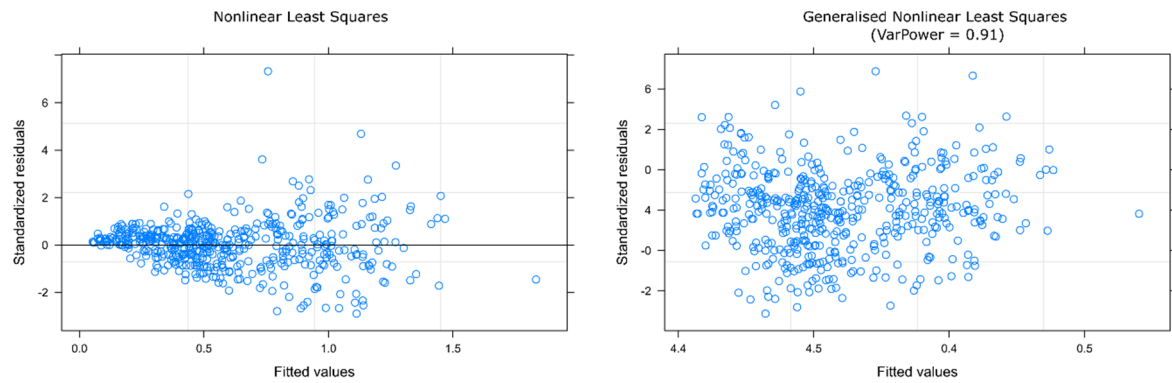
Figure S1: Spread of the length-wetmass fitted value to variance relationship for two statistical models: data variability from nonlinear least squares (left) and generalized nonlinear least squares (right). The nonlinear least squares plot shows heteroscedasticity, i.e., variance increasing with the magnitude of the fitted values, whereas the generalised nonlinear least squares has no fitted value-variance relationship.
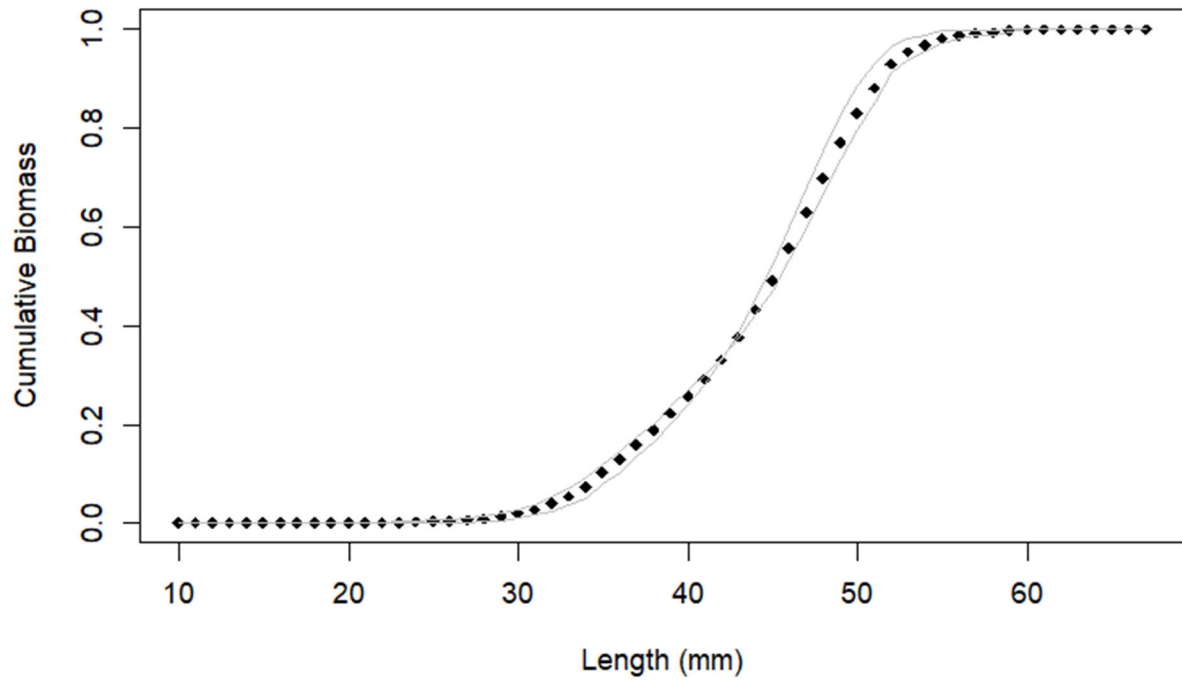
Figure S2: Cumulative contribution of length classes to total biomass estimate (95% confidence intervals in grey). The confidence intervals are an amalgamation of the observed length frequency distribution (Fig. 1) and the fitted length-wetmass relationship (Fig. 3). Specifically, the lower variance at L < 30 mm is due to a combination of relatively few small krill with lower wetmass, and the lower variance at L > 55 mm was due to few large krill (<5% of total catch by number; Fig. 1).