



Supplementary Material

Supplementary Figure 1. Total counts of a) Antarctic krill (red), b) aggregate stage salps (dark blue), and c) solitary stage salps (light blue) caught during all ground truthing net tows conducted during the study period. Length-frequency distributions of d) Antarctic krill (red), e) aggregate stage salps (dark blue), and f) solitary stage salps (light blue) from net tows conducted during study period. Up to 100 organisms per species, stage, and catch were randomly selected for length measurements.



Supplementary Figure 2. Example of ground truthing for salp backscattering parameters. a) Echogram from ground truth survey with video footage. Green line represents path of camera. Pink regions were salps detected in Echoview using TS of -85 dB to -70 dB. b) Frame of video footage from the same time stamp as the echogram. Numerous salp aggregations are visible and are marked with a light blue asterisk (*).



Supplementary Figure 3. Example of ground truthing for salp backscattering parameters with net sampling. a) Echogram from ground truth survey with net deployments. Green line represents path of net. Light blue outlined aggregations are salps detected in Echoview using TS of -85 dB to -70 dB. Dense pink-orange ball below net's path was detected as krill using TS threshold of -70 dB. b) Contents of corresponding net tow in which only salps were caught (n=759).



Supplementary Figure 4. a) Time series of the clean, raw acoustic backscatter (Sv, dB re $1m^2m^{-2}$) per profile of the glider's deployment. b) Histogram of acoustic backscatter measured throughout the glider's deployment.