Marine and Freshwater Research, 2017, **68**, 1403–1413
http://dx.doi.org/10.1071/MF16126_AC

Supplementary material

Optimising the design of large-scale acoustic telemetry curtains

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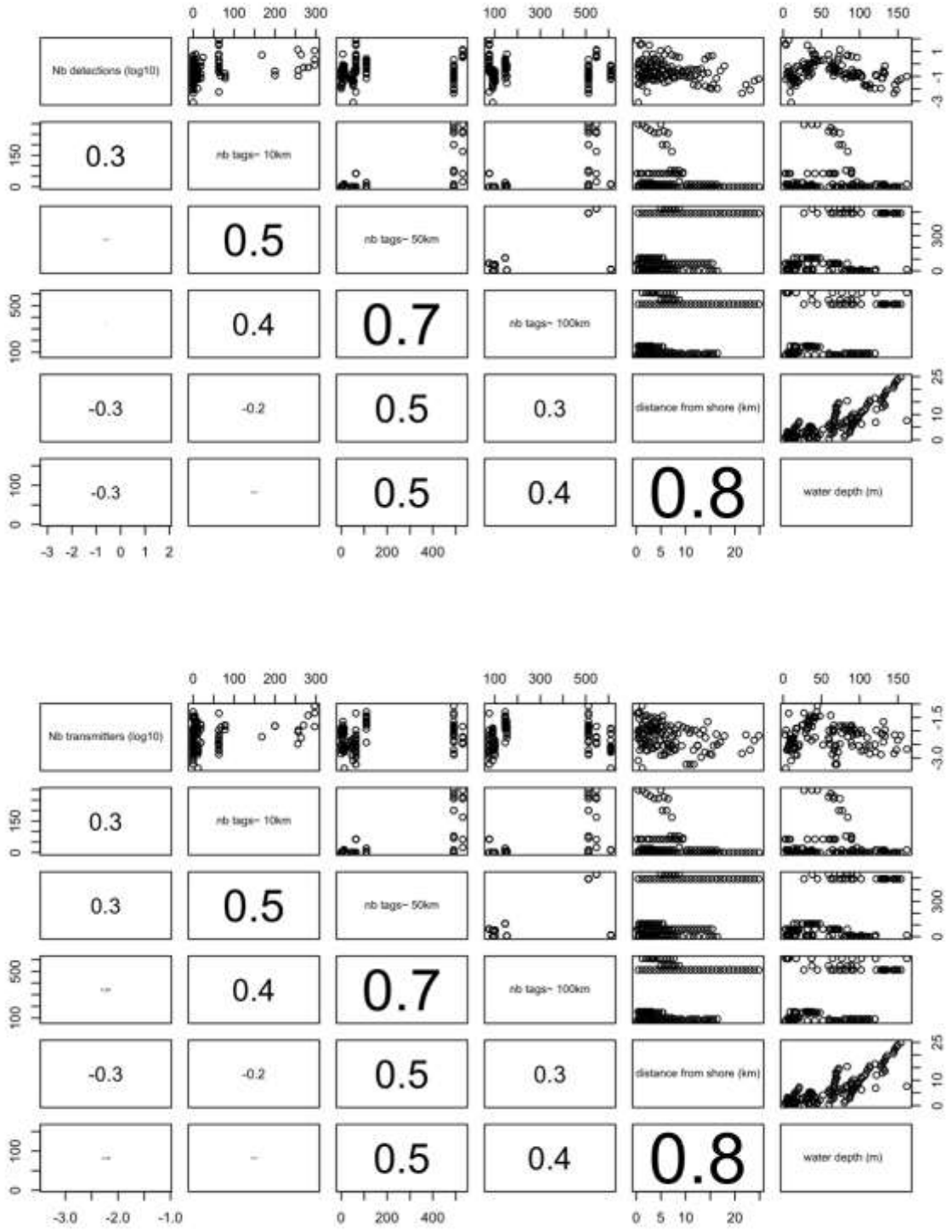

Fig. S1. Pairwise scatterplot and Spearman rho correlation of (A) the average number of detections and (B) the average number of detected transmitters per day and the potential predictors distance from shore (km), water depth (m), and number of tags released within 10, 50 and 100 km of each station.

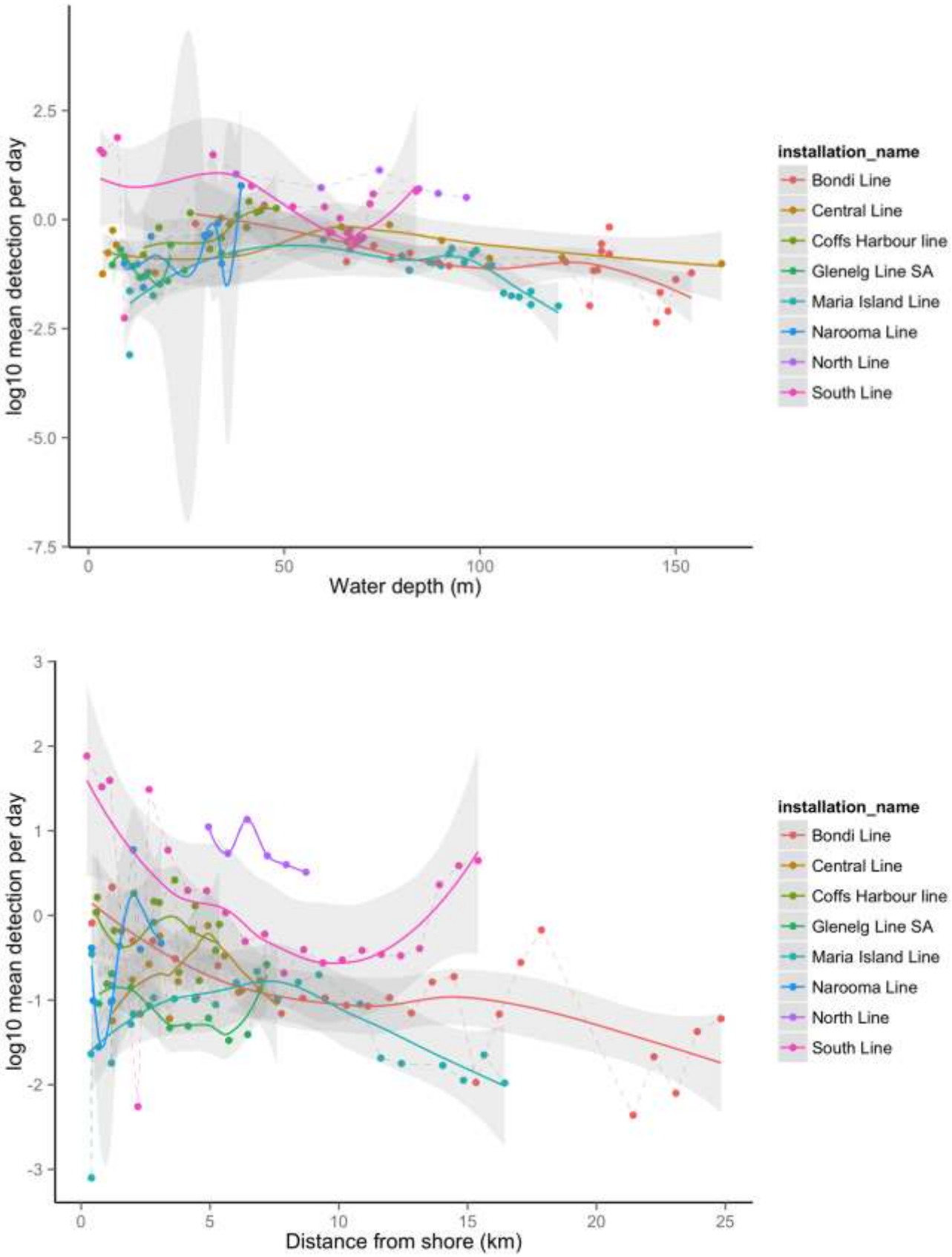

Fig. S2. Scatterplots of (A) the mean number of detection per day and (B) the mean number of tags detected per day *v.* water depth (m) and distance from shore (km) stratified by curtain identity. Solid lines indicate the trend fit by less smooth curves.

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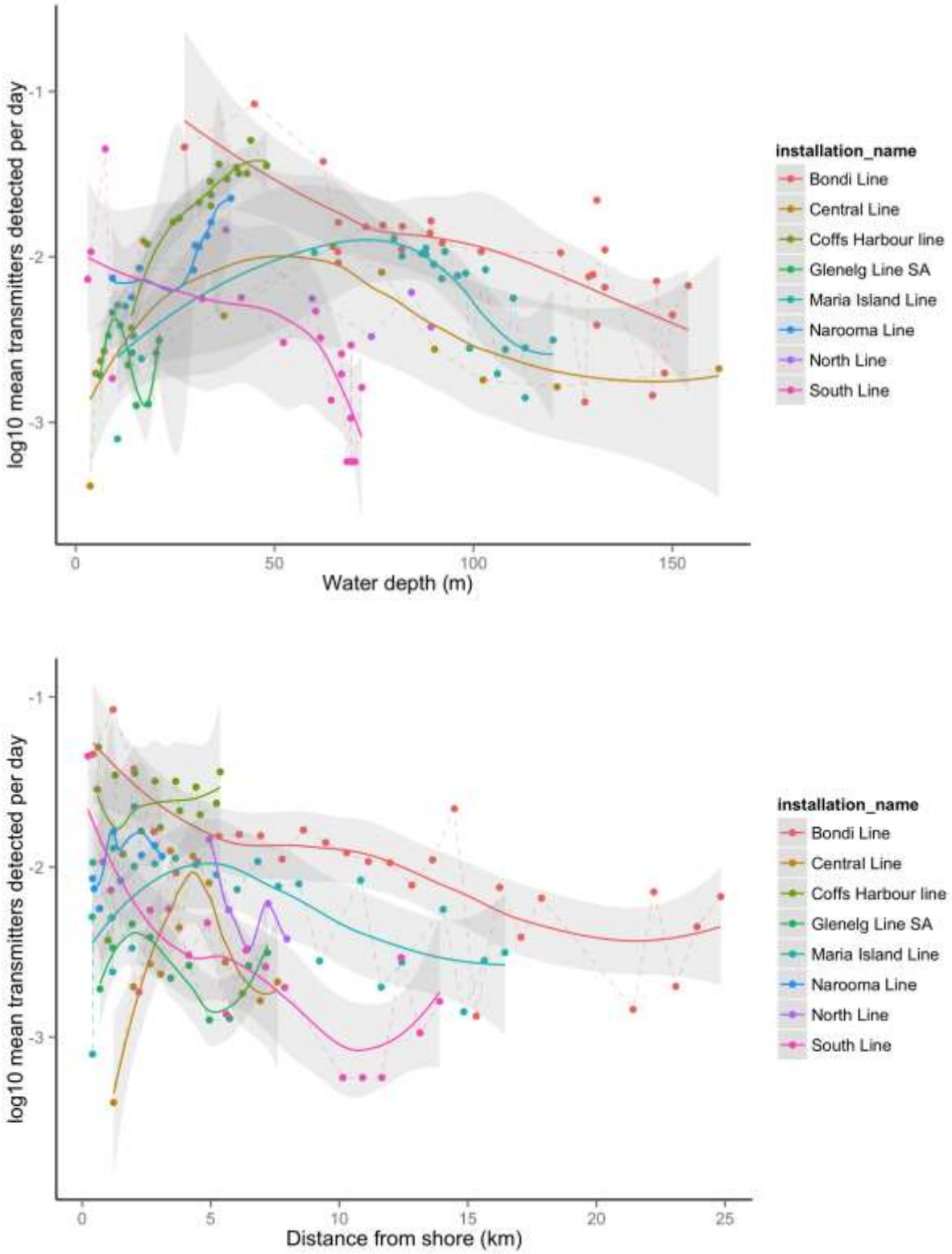

Fig. S3. Average prototypical relationship between each outcome and water depth across curtains as estimated by the univariate mixed models with cubic depth polynomial terms (red line). The *x*-axis shows water depth (m) centred on average water depth (~63 m) and standardised (s.d. = 1). When transforming depth back to its original scales, these graphs show that on average across stations both outcomes tend to increase with water depth between 0 and ~50 m and then decrease when depth goes above ~50 m.