

Table S1. Proposed detection function models (Model), estimated average detection probability ( $\hat{P}$ ), coefficient of variation (CV) of  $\hat{P}$ , Akaike's information criterion differences between the model in question and the most parsimonious model ( $\Delta\text{AIC}$ ), abundance corrected for visibility bias and group size bias computed for each model in question ( $\widehat{N}_c$ ), potential biological removal (PBR). Uniform (Unif), half-normal (Hn) and hazard-rate (Hr) key functions, cosine (cos), Hermite polynomial (Herm) and polynomial (poly) adjustment terms of order(x), and group size covariate (size).

Model	$\hat{P}$	CV ( $\hat{P}$ )	$\Delta\text{AIC}$	$\widehat{N}_c$ (CV)	PBR
Hn	0.616	0.176	0.000	1143 (0.561)	1.21
Unif+cos(1)	0.607	0.145	0.005	1159 (0.556)	1.23
Hn + size	0.616	0.177	1.998	1152 (0.603)	1.13
Hn + cos(2)	0.618	0.327	1.999	1138 (0.601)	1.12
Hn + Herm(4)	0.616	0.274	1.999	1140 (0.583)	1.16
Hr	0.652	0.240	2.010	1079 (0.576)	1.11
Hr + poly(4)	0.636	0.337	3.997	1136 (0.626)	1.08
Hr + size	0.651	0.242	4.009	1085 (0.623)	1.03

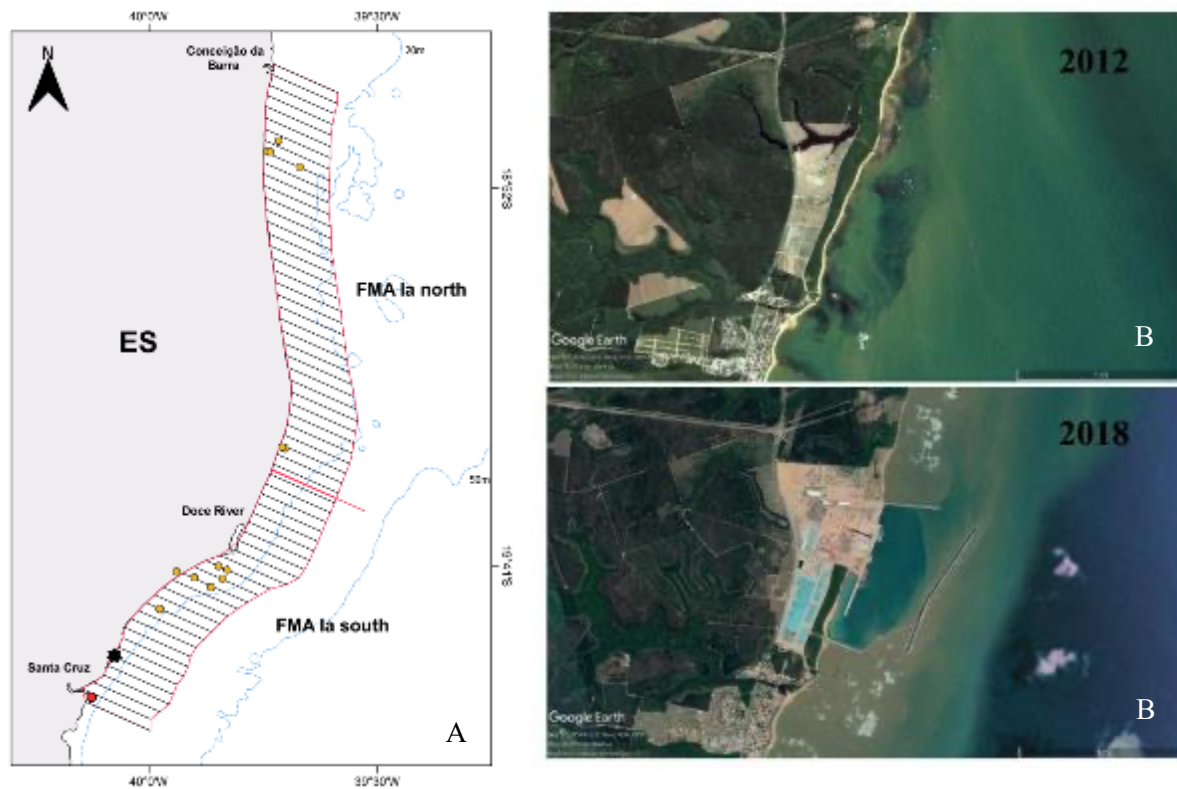


Figure S1. (A) Franciscana groups sighted during aerial surveys conducted in 2018 (yellow dots) off the Espírito Santo State (ES), and survey effort used for abundance estimation. The red circle indicates a franciscana group recorded during aerial surveys conducted in 2012 off the ES coast (Danilewicz et al. 2012) and the star indicates the location where a shipyard was built after the 2012 surveys. (B) Google Earth images of the area before (top) and after (below) the construction of the shipyard indicated by the star in the left panel.

## References

Danilewicz, D., A. N. Zerbini, A. Andriolo, *et al.* 2012. Abundance and distribution of an isolated population of franciscana dolphins (*Pontoporia blainvillei*) in southeastern Brazil: Red alert for FMA I?. International Whaling Commission, Scientific Committee Paper SC/64/SM17.