

Dear reviewer,

Here we present the 90% confidence bounds for each of the correlations of Absorbing Aerosol Index (AAI) with biological proxies over the ocean. Confidence bounds were calculated by the bias-corrected and accelerated (BCa) bootstrap method (Efron, 1987) with 20,000 replications using functions from the R packages “boot” (Davison and Hinkley, 1997; Canty and Ripley, 2014) and “raster” (Hijmans and Etten, 2013).

Correlations are presented here in the order they appear in the manuscript. Correlation with chlorophyll-*a* is presented first (Figure 1), then with C_{phyto} (Figure 2), Diatoms dominance (Figure 3) and Synechococcus dominance (Figure 4).

References

Canty, A. and Ripley, B.: boot - Bootstrap R (S-Plus) Functions, R package version 1.3-13, 2014.

Davison, A. C. and Hinkley, D. V.: Bootstrap Methods and Their Applications, Cambridge University Press, Cambridge, ISBN 0-521-57391-2, 1997.

Efron, B.: Better Bootstrap Confidence Intervals, Journal of the American Statistical Association, 82(397), 171-185, doi: 10.2307/2289144, 1987.

Hijmans, R. J. and Etten, J. van: raster: Geographic data analysis and modeling, [online] Available from: <http://cran.r-project.org/package=raster>, 2013.

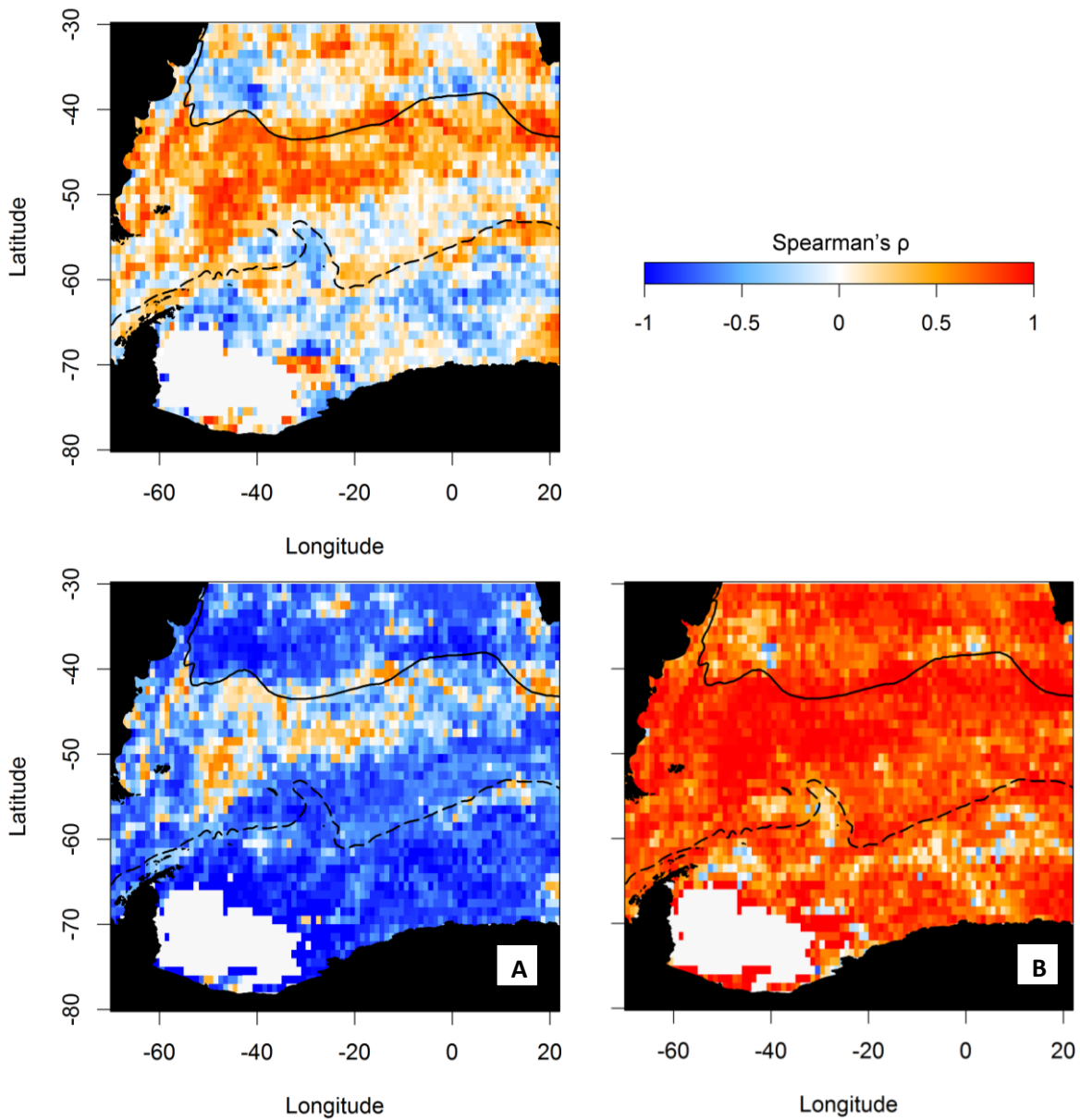


Figure 1 - Chlorophyll-*a* and AAI correlation. Spearman's correlation is presented in the upper panel, and the lower (A) and upper (B) confidence bounds are presented in the lower panel.

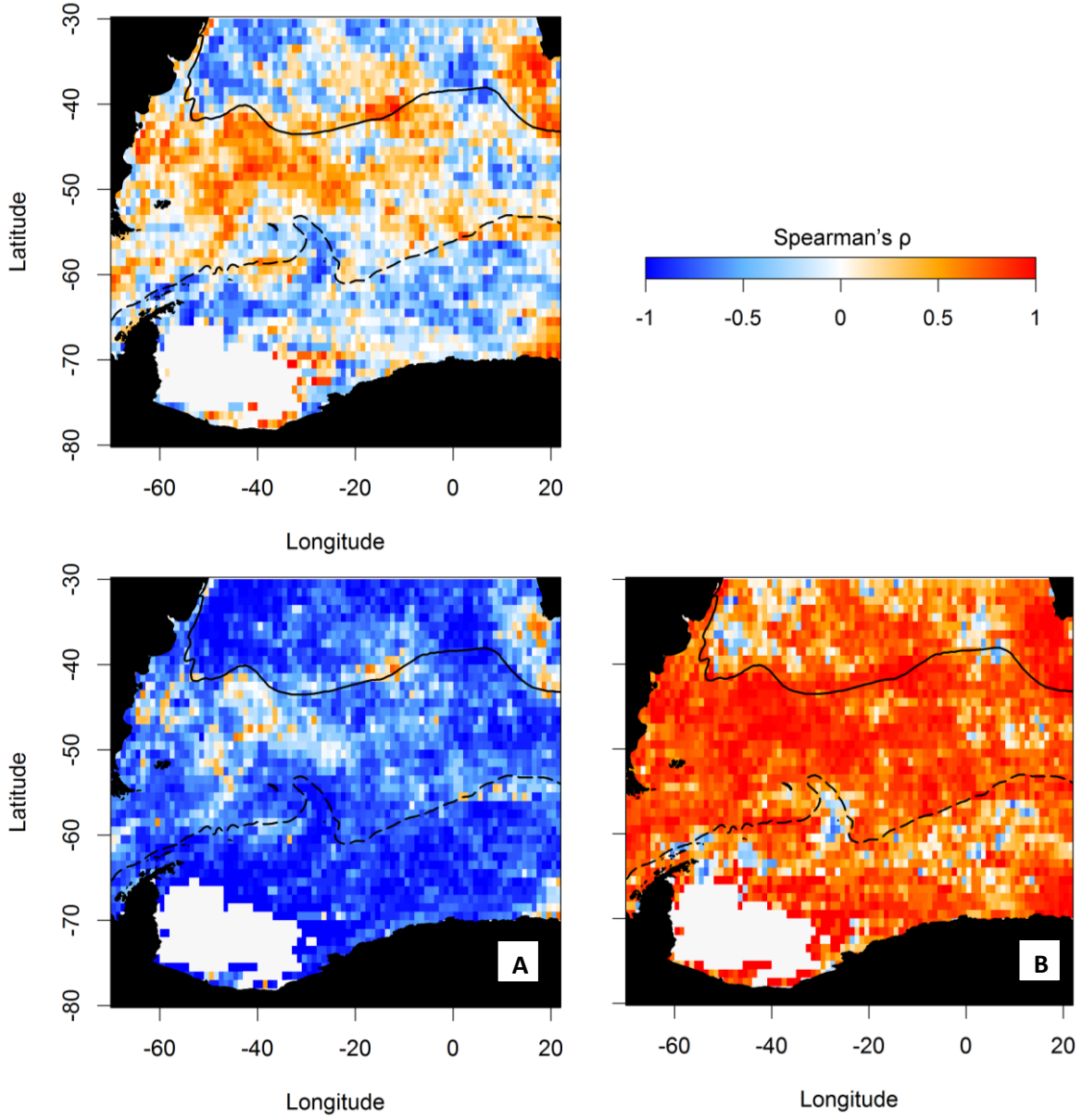


Figure 2 - C_{phyto} and AAI correlation. Spearman's correlation is presented in the upper panel, and the lower (A) and upper (B) confidence bounds are presented in the lower panel.

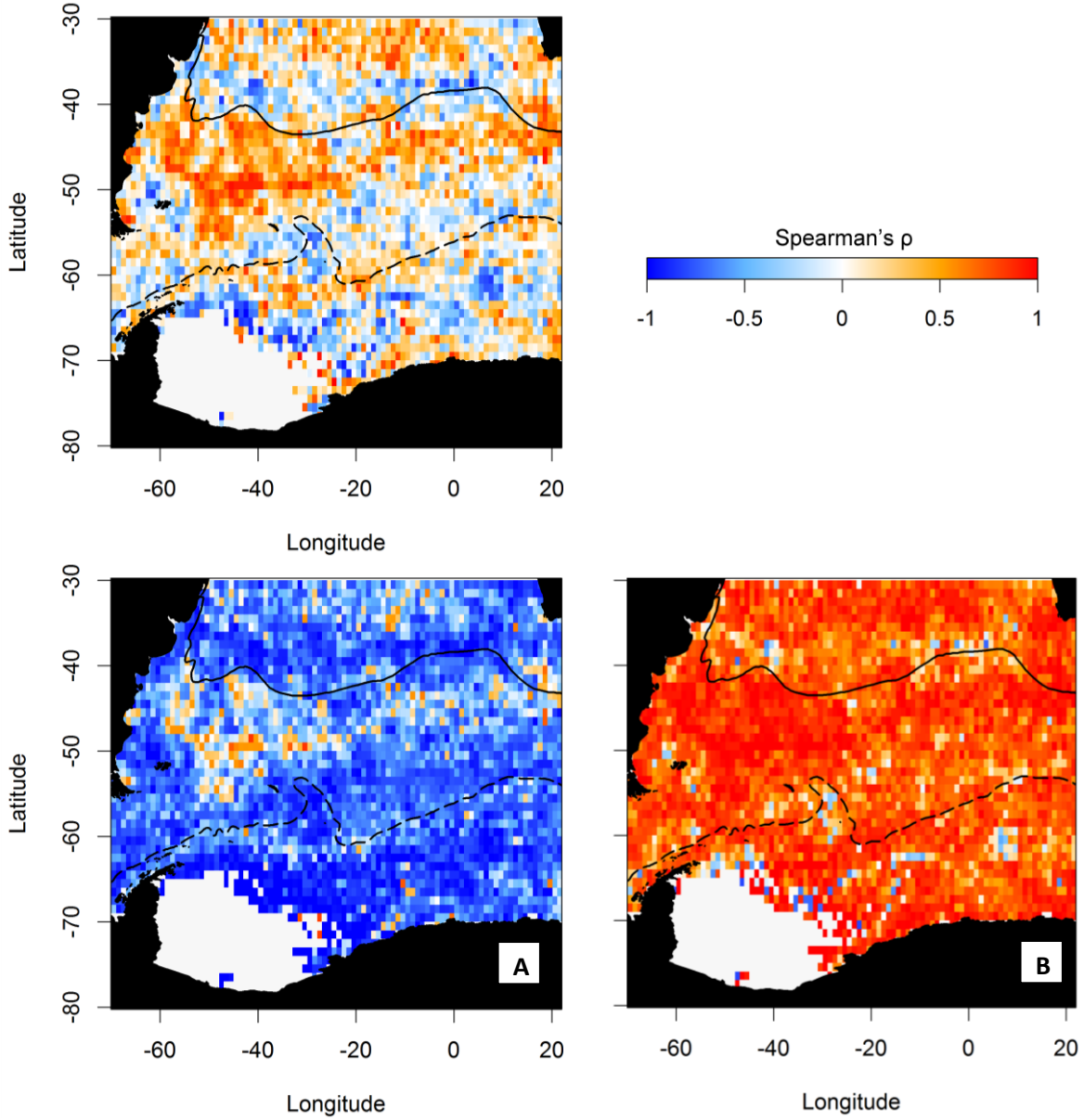


Figure 3 – Diatom dominance and AAI correlation. Spearman's correlation is presented in the upper panel, and the lower (A) and upper (B) confidence bounds are presented in the lower panel.

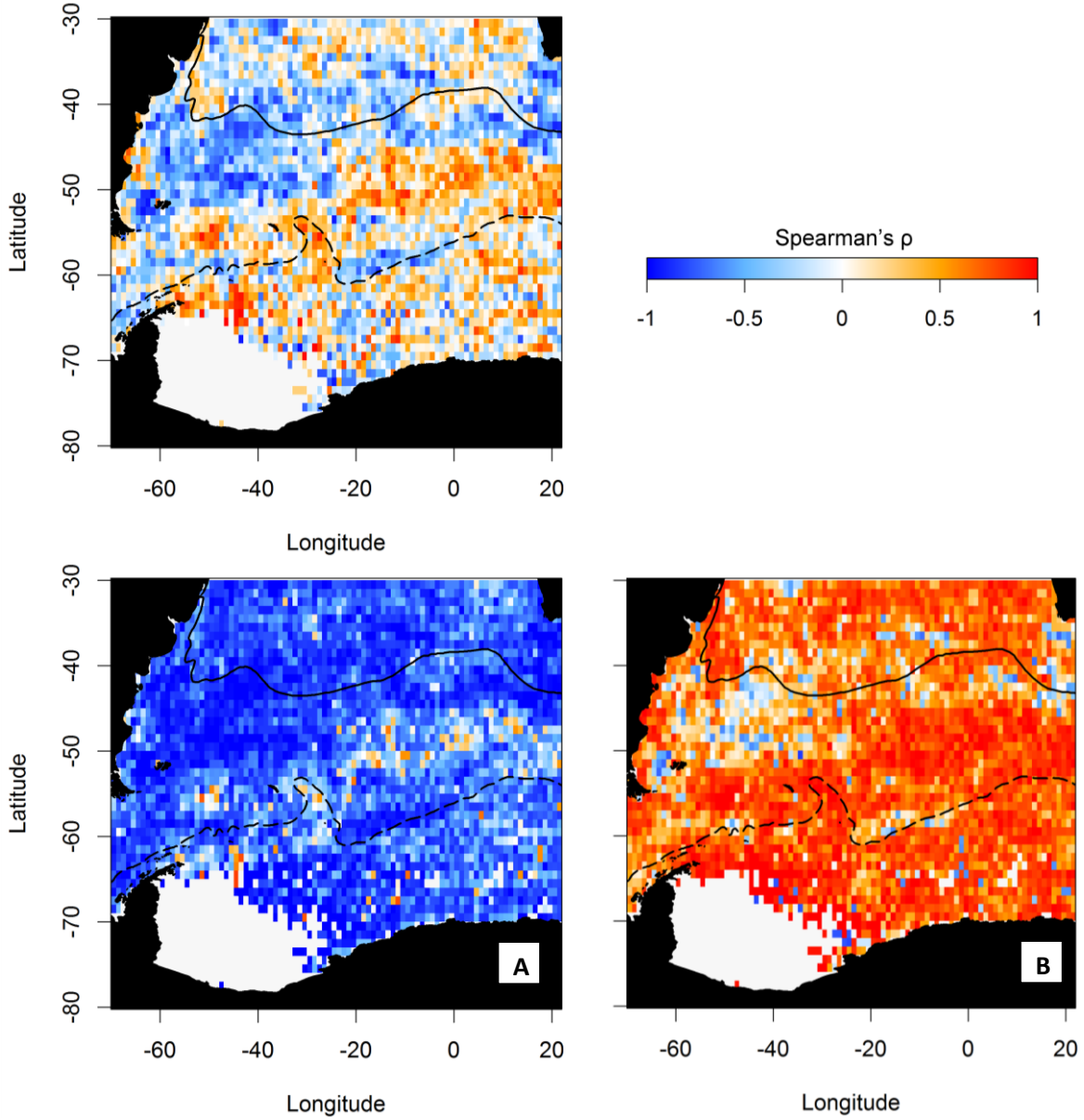


Figure 4 – Synechococcus dominance and AAI correlation. Spearman's correlation is presented in the upper panel, and the lower (A) and upper (B) confidence bounds are presented in the lower panel.