

Pitcher, C.R., Lawton, P., Ellis, N., Smith, S.J., Incze, L.S., Wei, C-L., Greenlaw, M.E., Wolff, N.H., Sameoto, J.A. & Snelgrove, P.V.R. (2012) Exploring the role of environmental variables in shaping patterns of seabed biodiversity composition in regional-scale ecosystems. *Journal of Applied Ecology*

Appendix S3. Complete graphical results for three marine regions.

S3-1. Overall performance ('out-of-bag' R^2) of environmental variables for predicting individual species distributions among sites, in each dataset from each region.

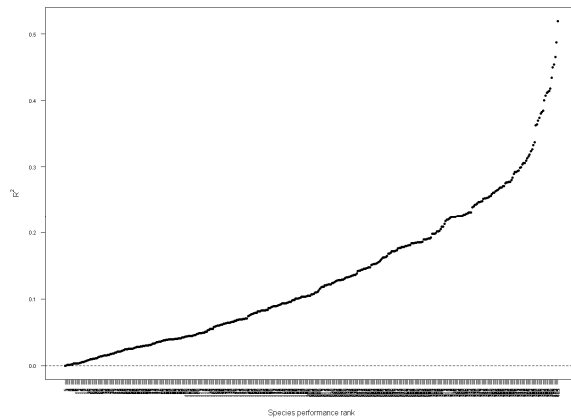


Fig. S3-1.1. GBR Sled.

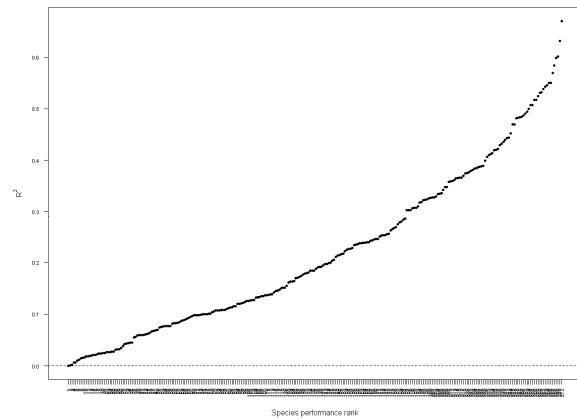


Fig. S3-1.2. GBR Trawl.

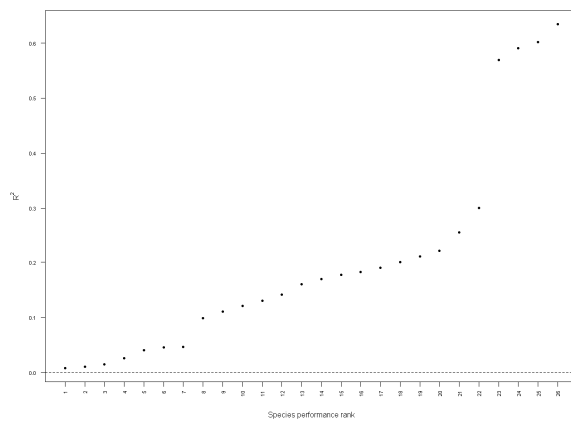


Fig. S3-1.3. GoMA NEFSC grab.

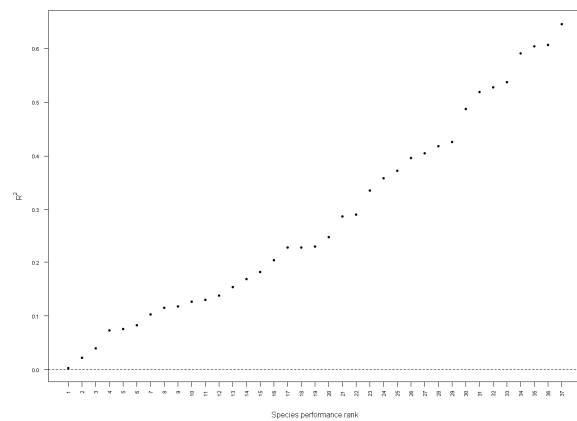


Fig. S3-1.4. GoMA DFO Georges Bank trawl.

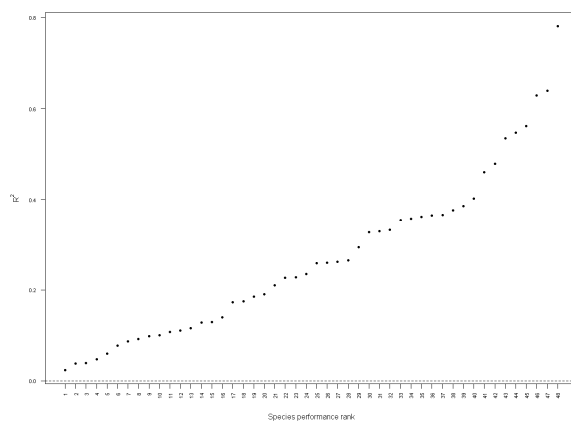


Fig. S3-1.5. GoMA DFO Scotian Shelf trawl.

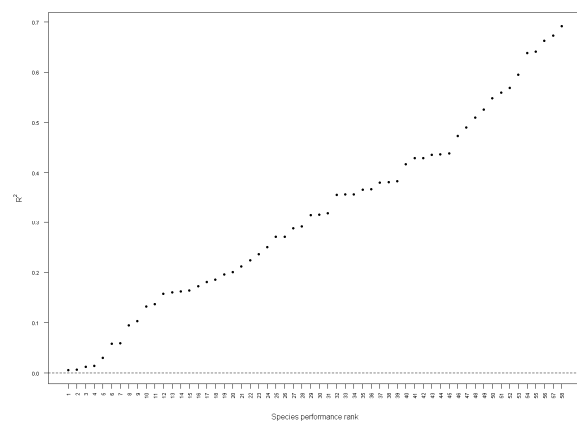


Fig. S3-1.6. GoMA NEFSC Spring trawl.

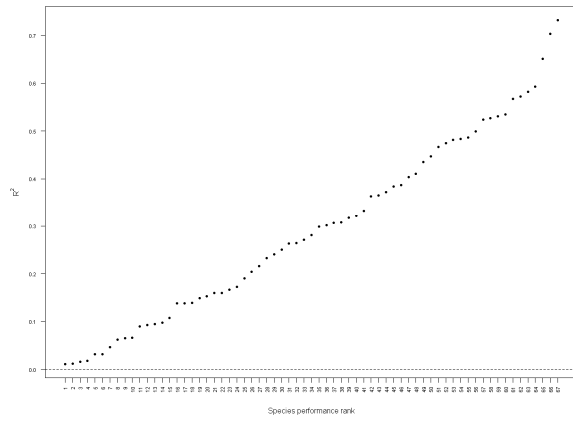


Fig. S3-1.7. GoMA NEFSC Fall trawl.

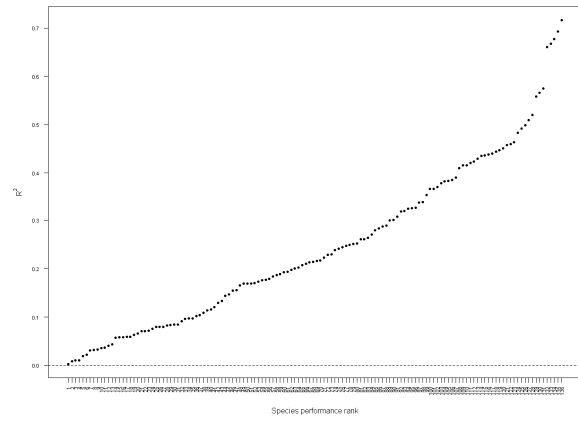


Fig. S3-1.8. DGoMx NGoMCS box core macrofauna.

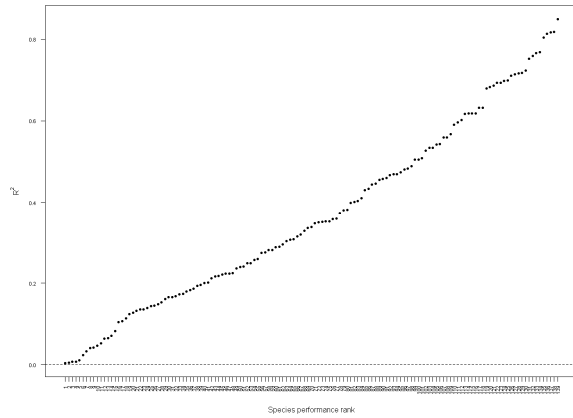


Fig. S3-1.9. DGoMx NGoMCS trawl megafauna.

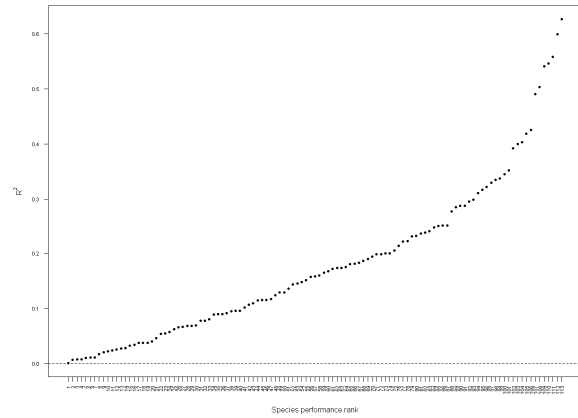


Fig. S3-1.10. DGoMx DGoMB box core macrofauna.

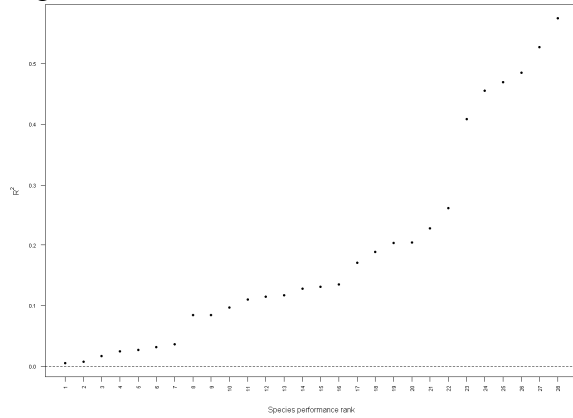


Fig. S3-1.11. DGoMx DGoMB trawl megafauna.

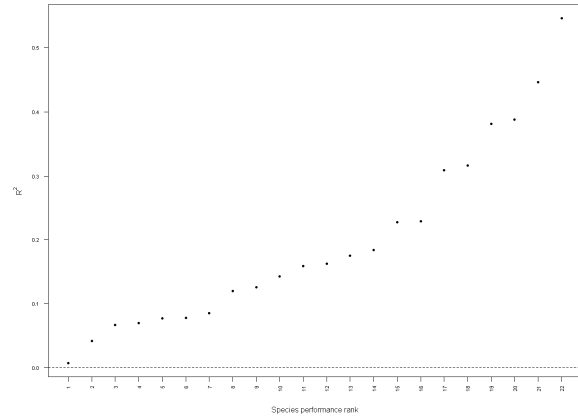


Fig. S3-1.12. DGoMx DGoMB box core harpacticoids.

S3-2. Conditional importance of environmental variables, weighted by R^2 , for predicting species distributions among sites, in each dataset from each region (see Appendix S2 for full descriptions of predictors).

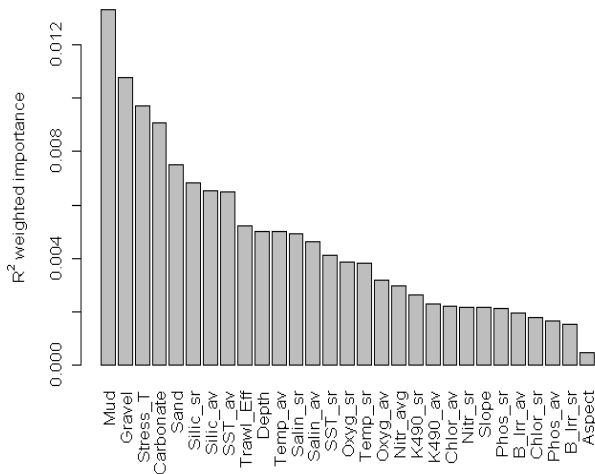


Fig. S3-2.1. GBR Sled.

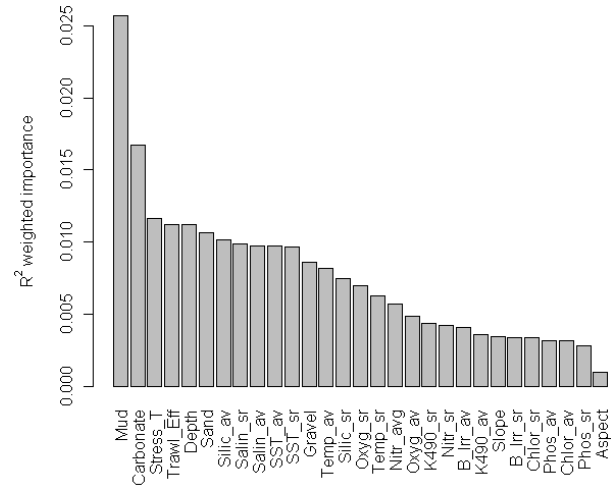


Fig. S3-2.2. GBR Trawl.

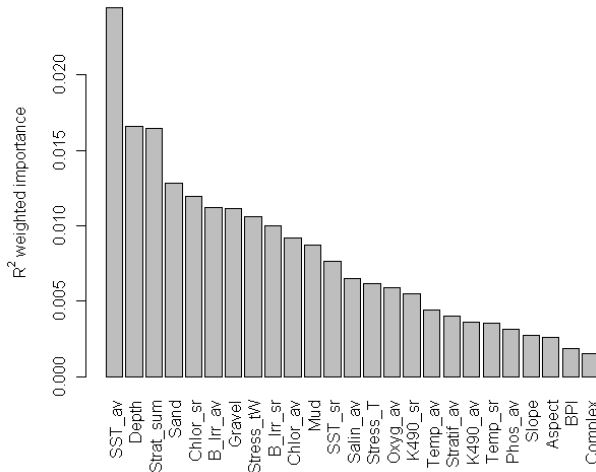


Fig. S3-2.3. GoMA NEFSC grab.

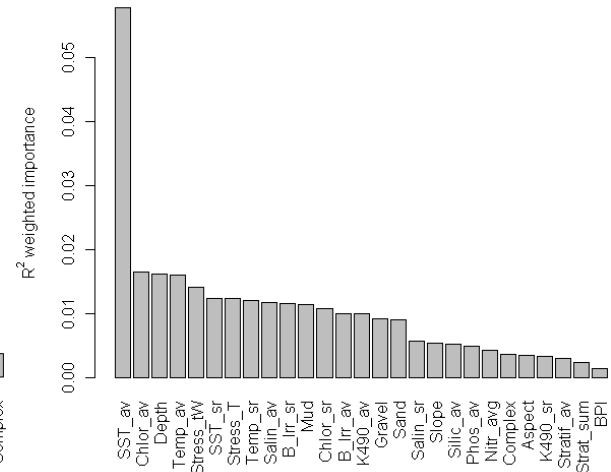


Fig. S3-2.4. GoMA DFO Georges Bank trawl.

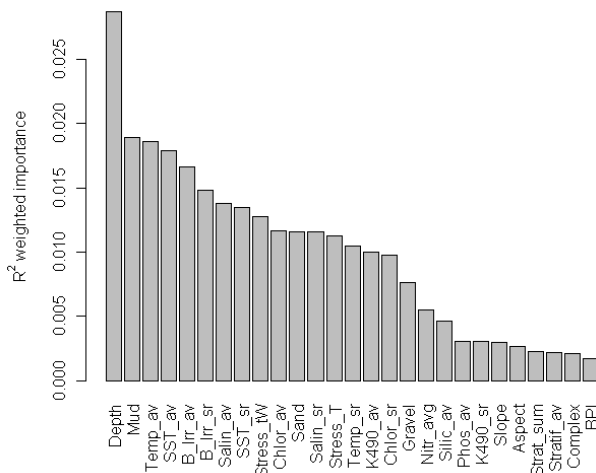


Fig. S3-2.5. GoMA DFO Scotian Shelf trawl.

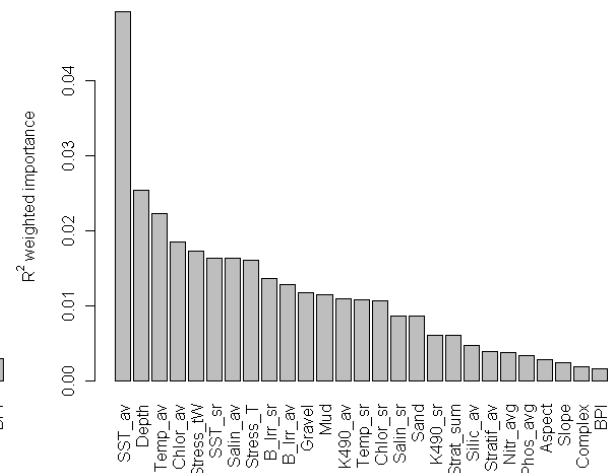


Fig. S3-2.6. GoMA NEFSC Spring trawl.

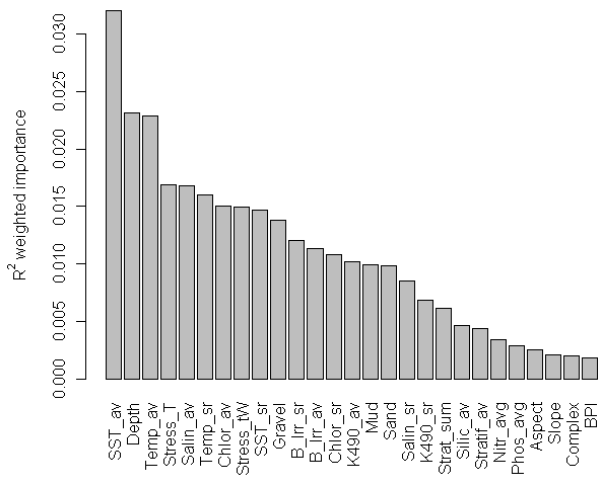


Fig. S3-2.7. GoMA NEFSC Fall trawl.

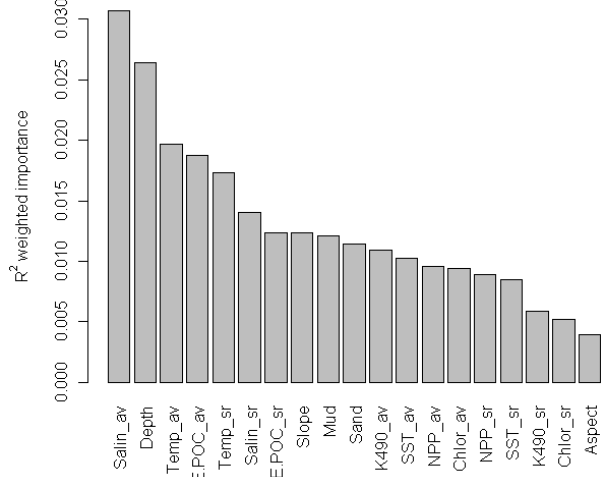


Fig. S3-2.8. DGoMx NGoMCS box core macrofauna.

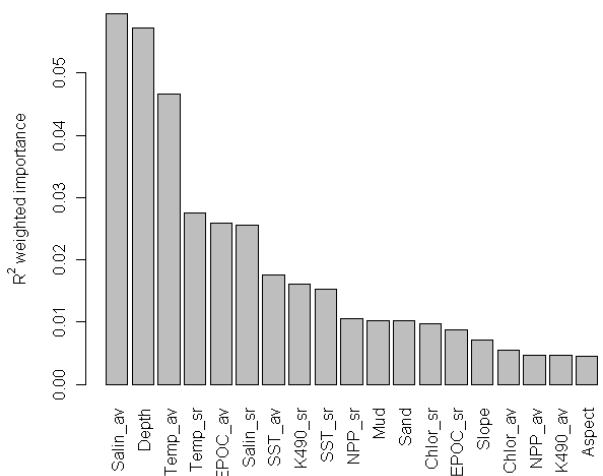


Fig. S3-2.9. DGoMx NGoMCS trawl megafauna.

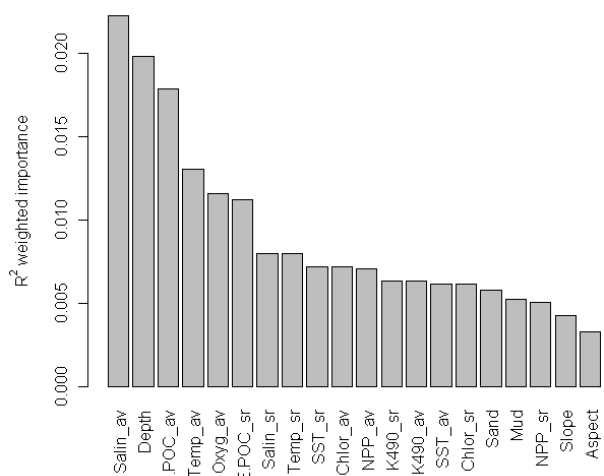


Fig. S3-2.10. DGoMx DGoMB box core macrofauna.

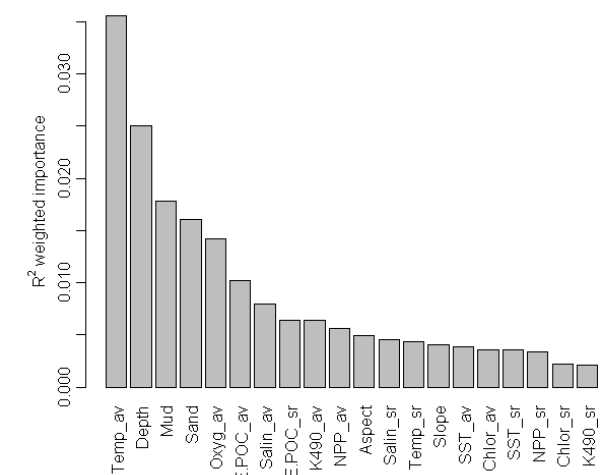


Fig. S3-2.11. DGoMx DGoMB trawl megafauna.

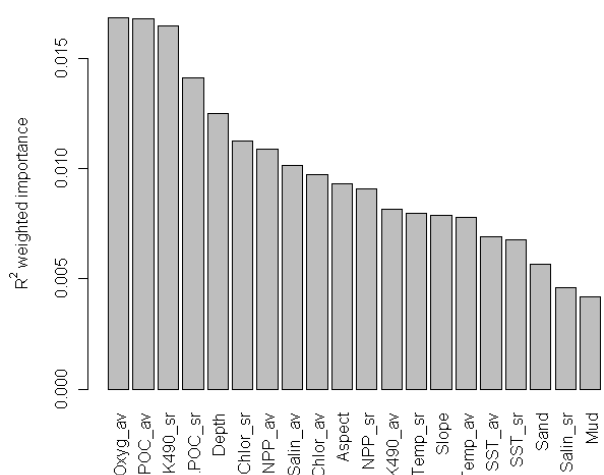


Fig. S3-2.12. DGoMx DGoMB box core harpacticoids

S3-3. Importance and location of splits on gradients (spikes), kernel density of splits (—), of observations (—) and of splits standardized by observations density (—), for each environmental predictor, in each dataset from each region (see Appendix S2 for full descriptions of predictors).

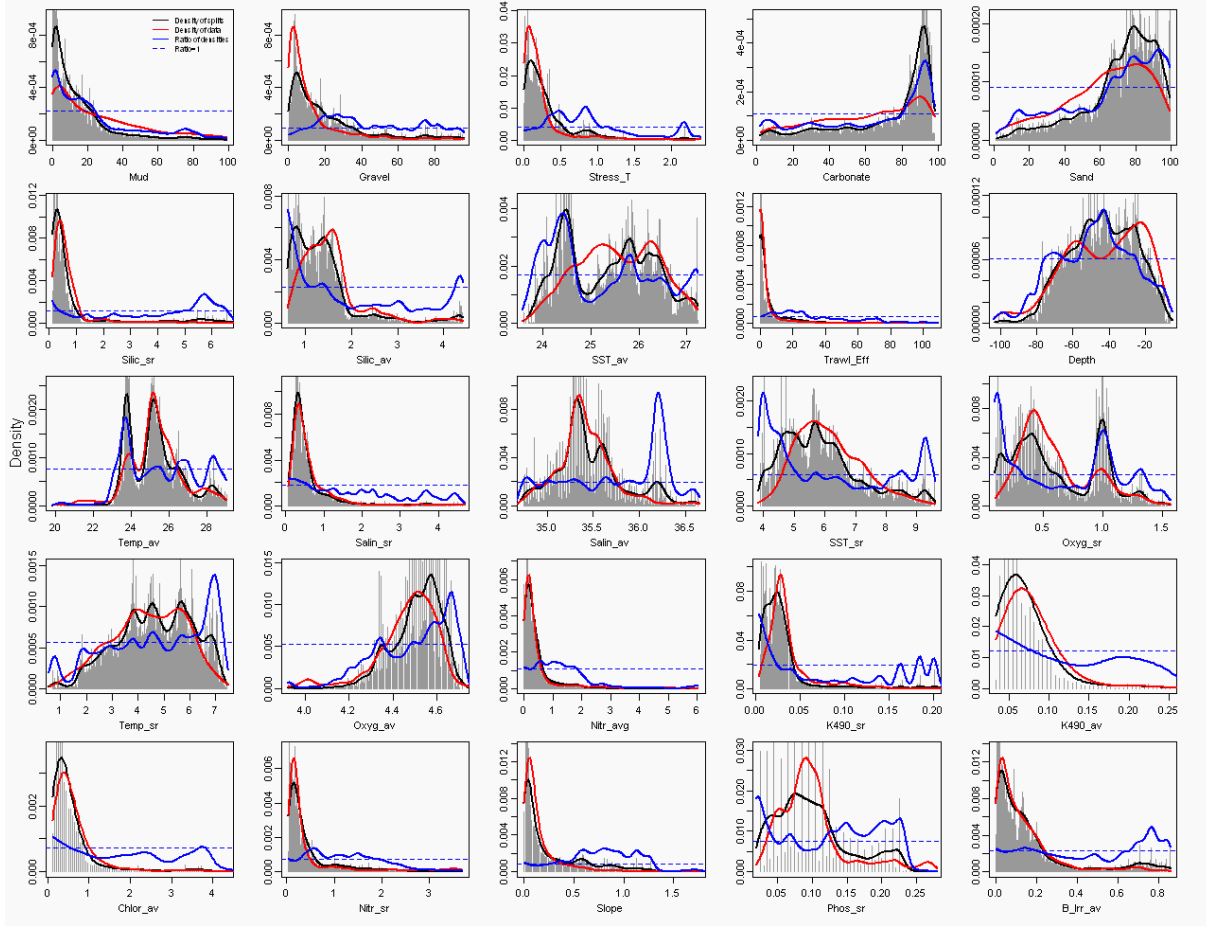


Fig. S3-3.1. GBR Sled.

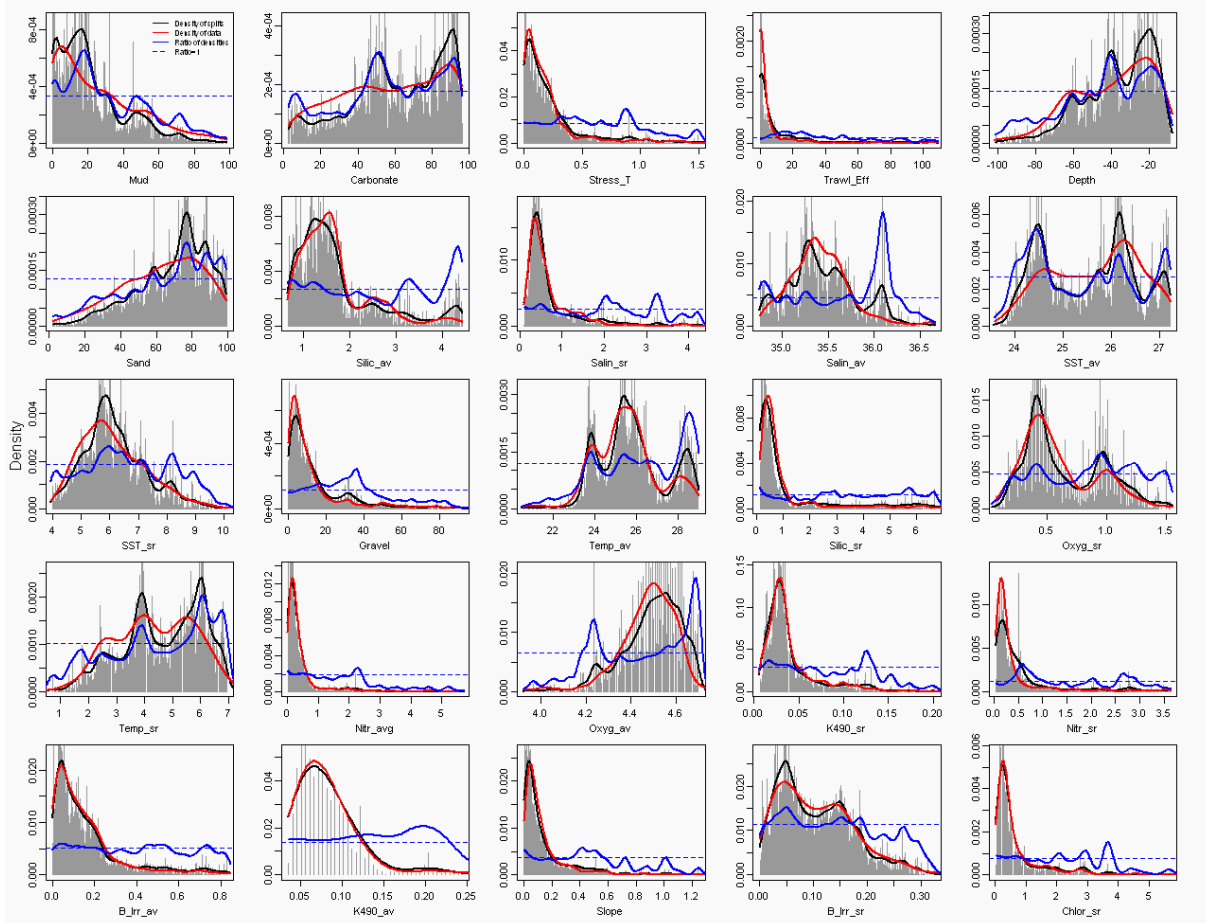


Fig. S3-3.2. GBR Trawl.

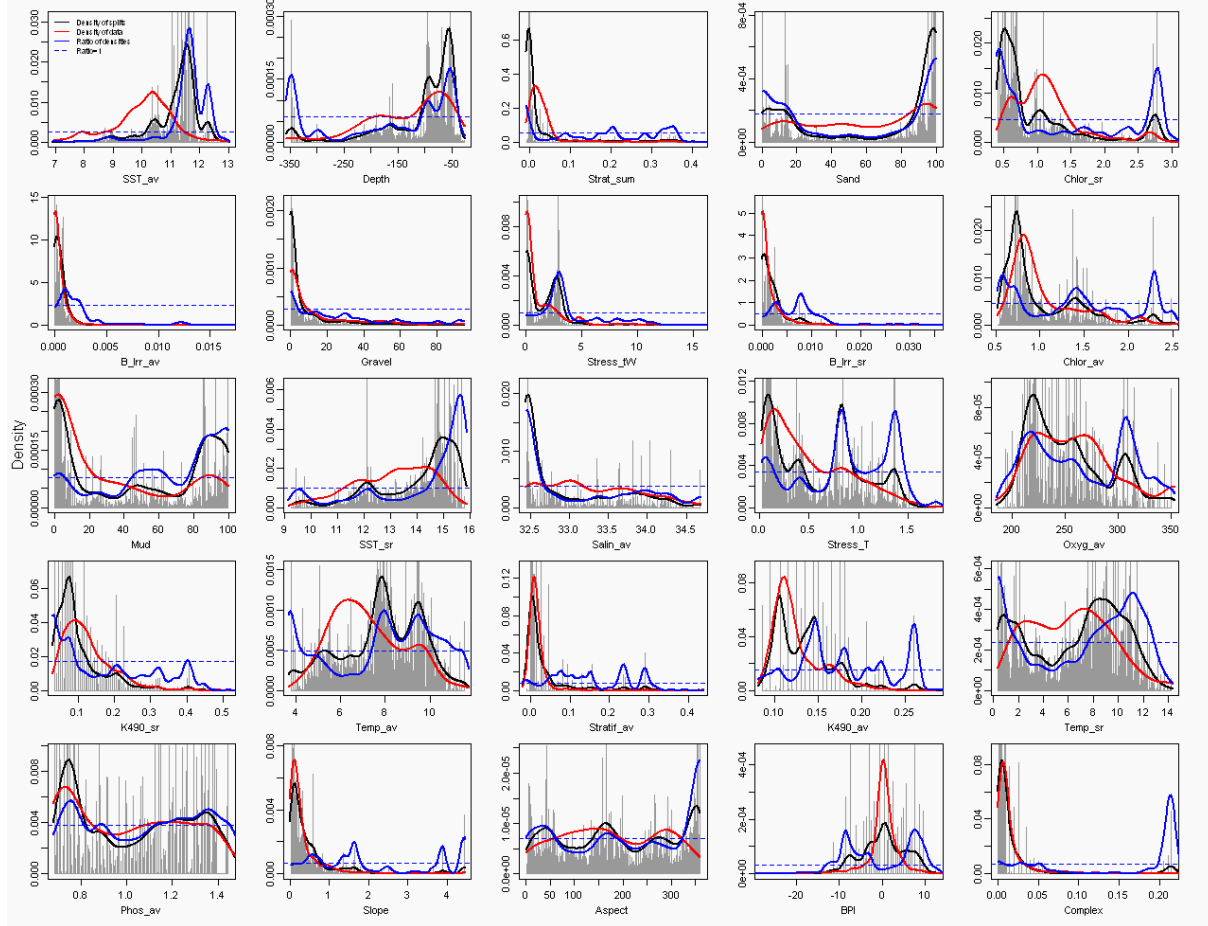


Fig. S3-3.3. GoMA NEFSC grab.

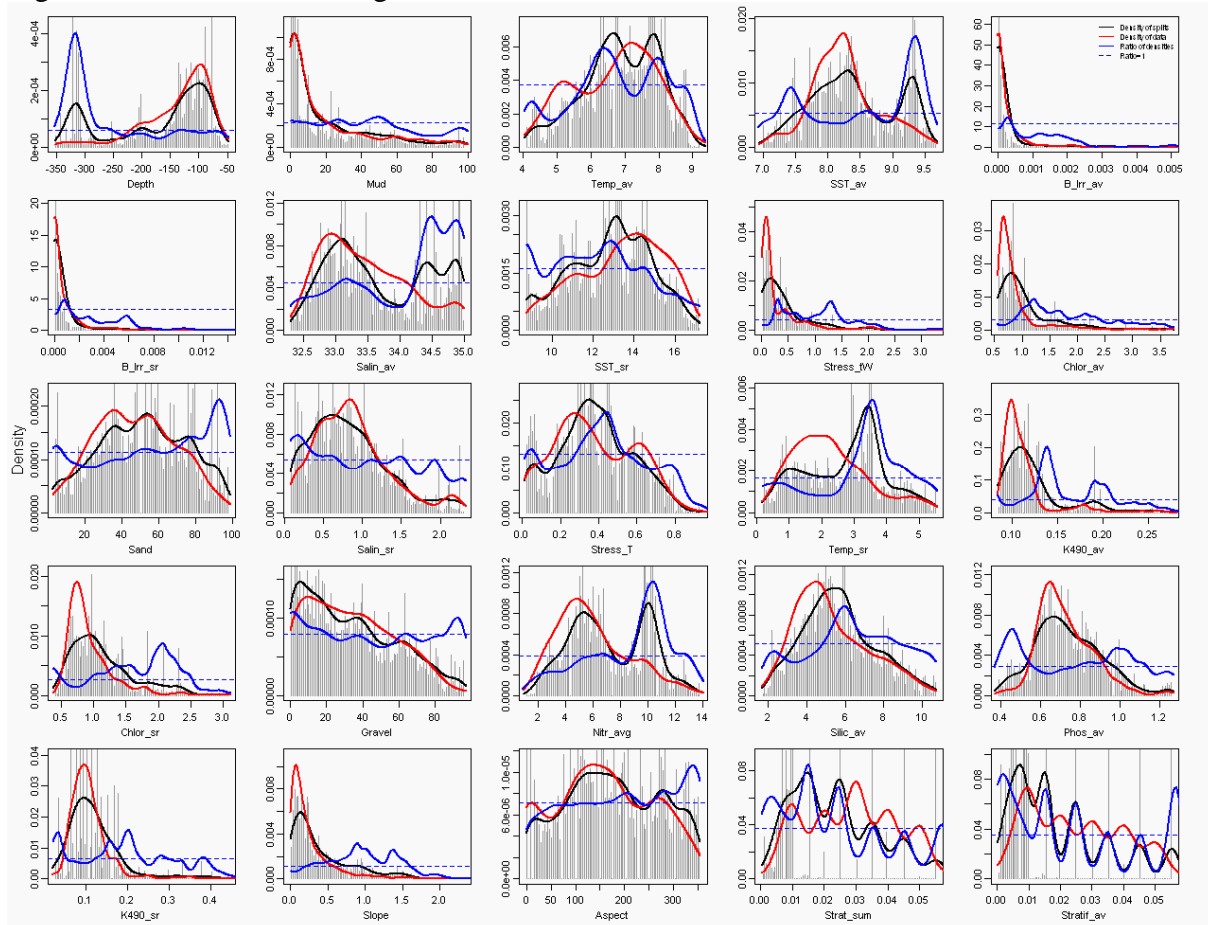


Fig. S3-3.4. GoMA DFO Scotian Shelf trawl.

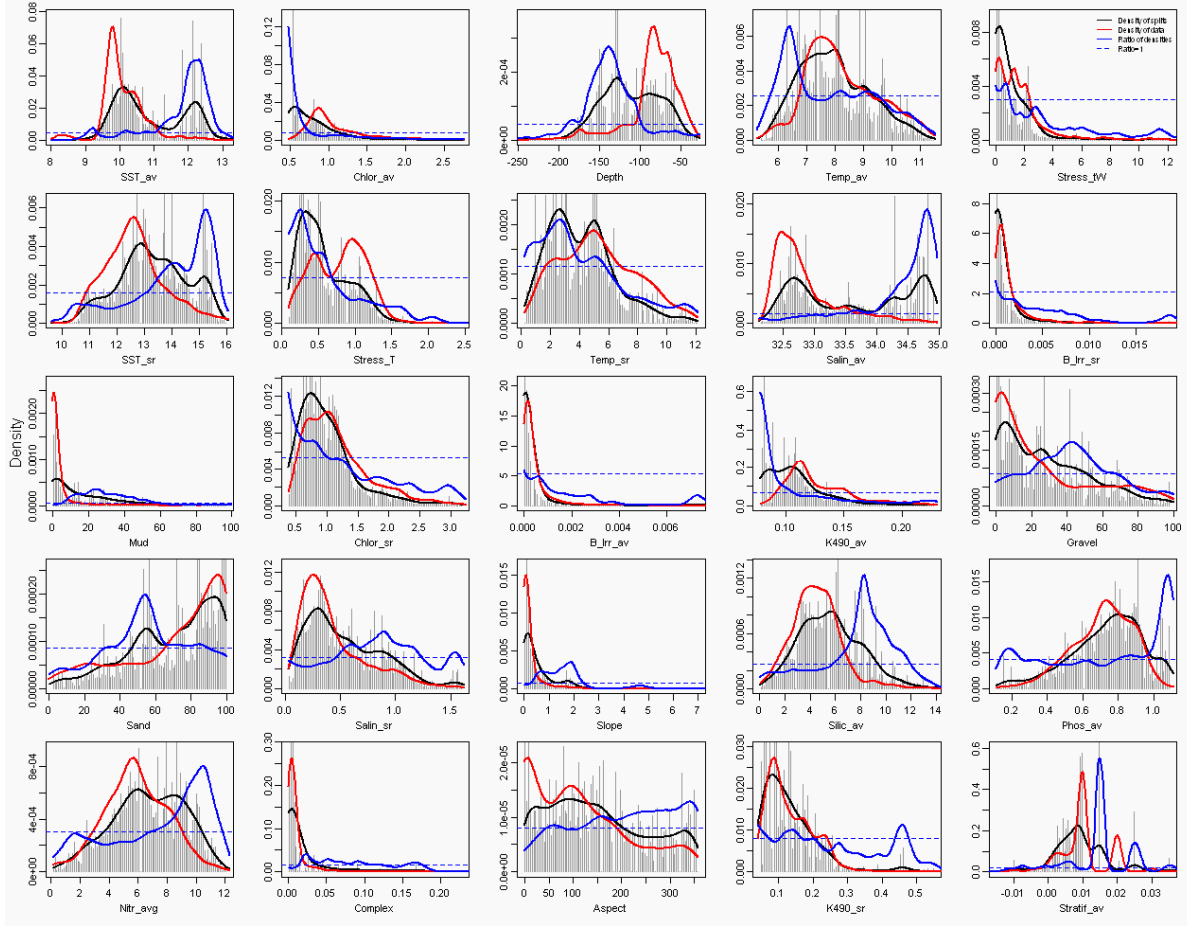


Fig. S3-3.5. GoMA DFO Georges Bank trawl.

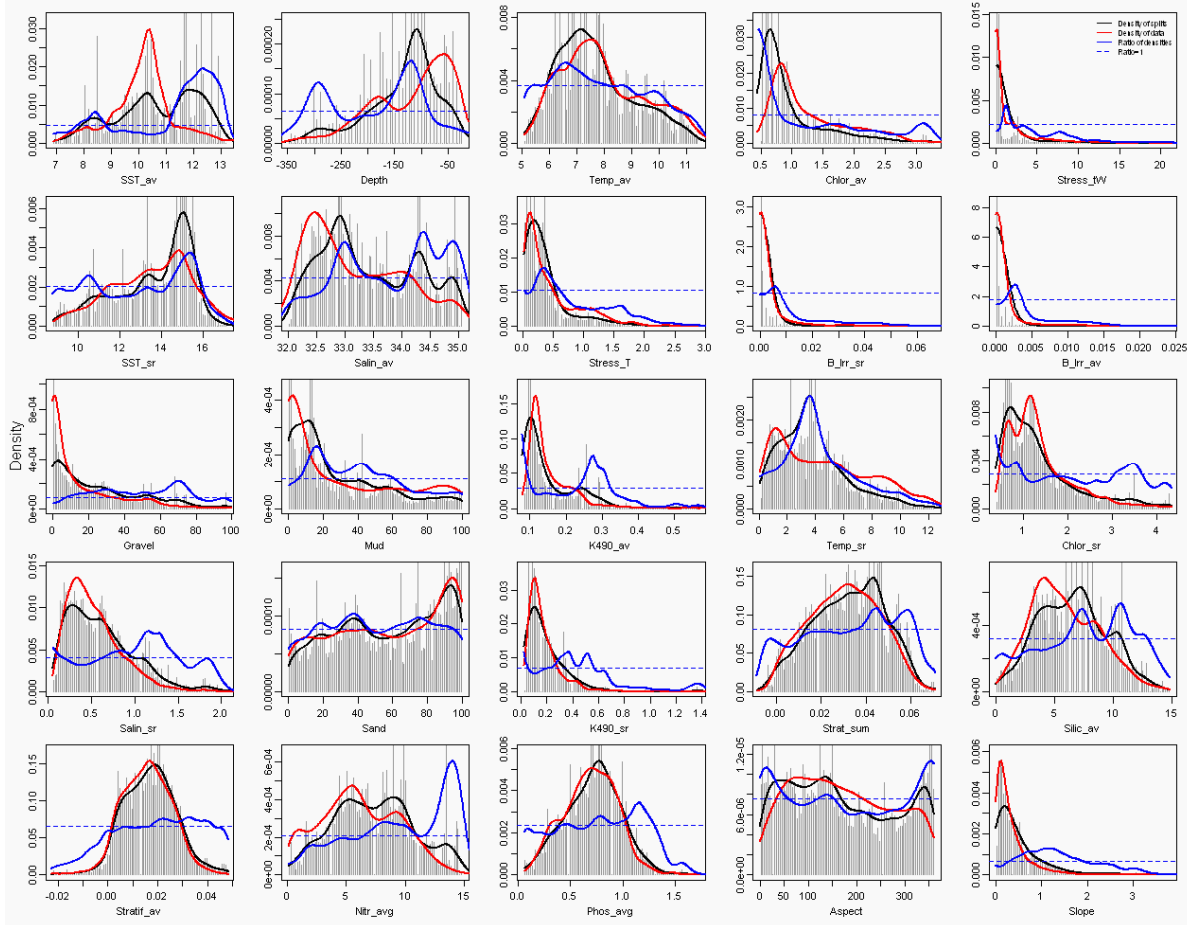


Fig. S3-3.6. GoMA NEFSC Spring trawl.

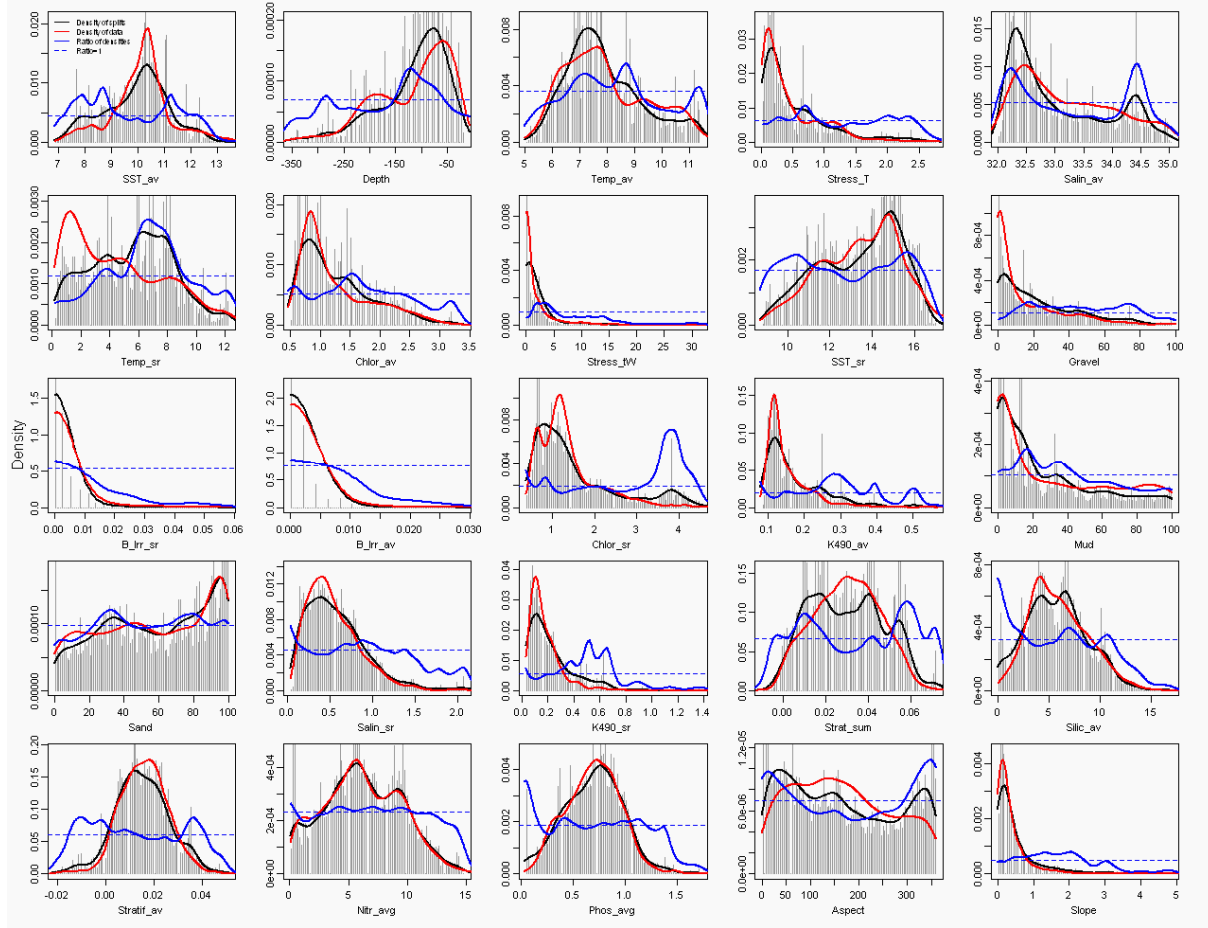


Fig. S3-3.7. GoMA NEFSC Fall trawl.

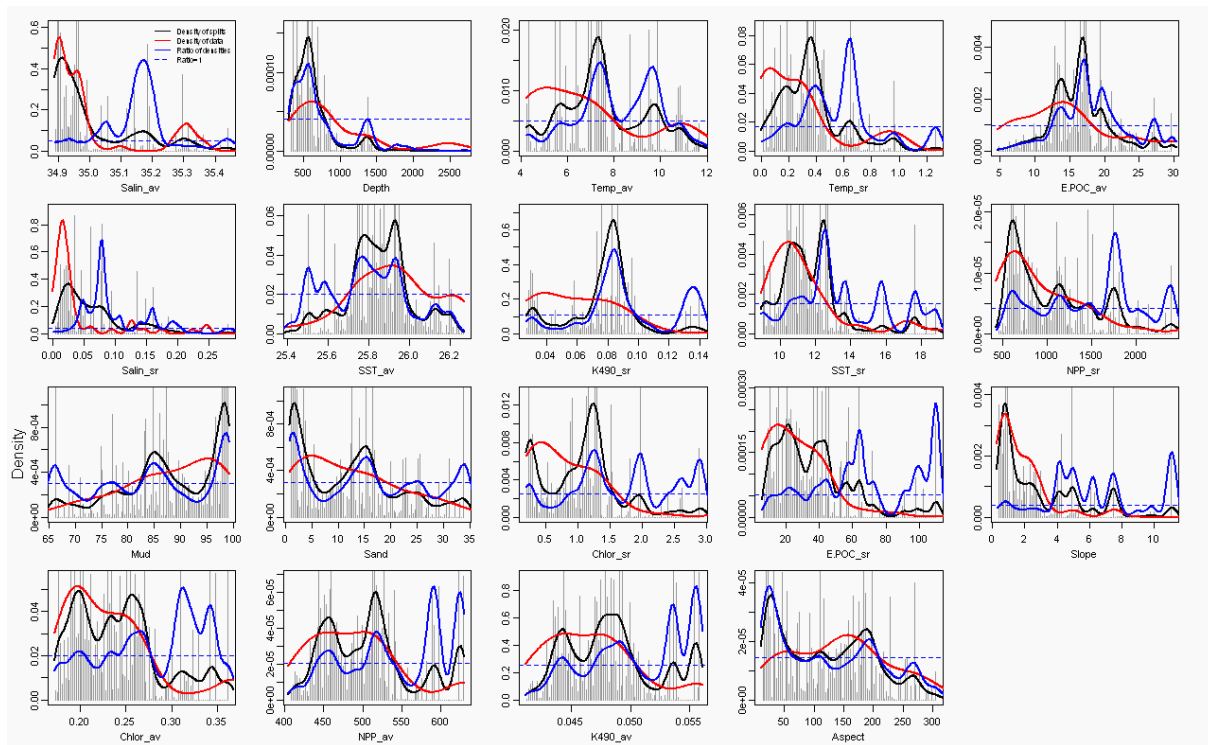


Fig. S3-3.8. DGoMx NGoMCS trawl megafauna.

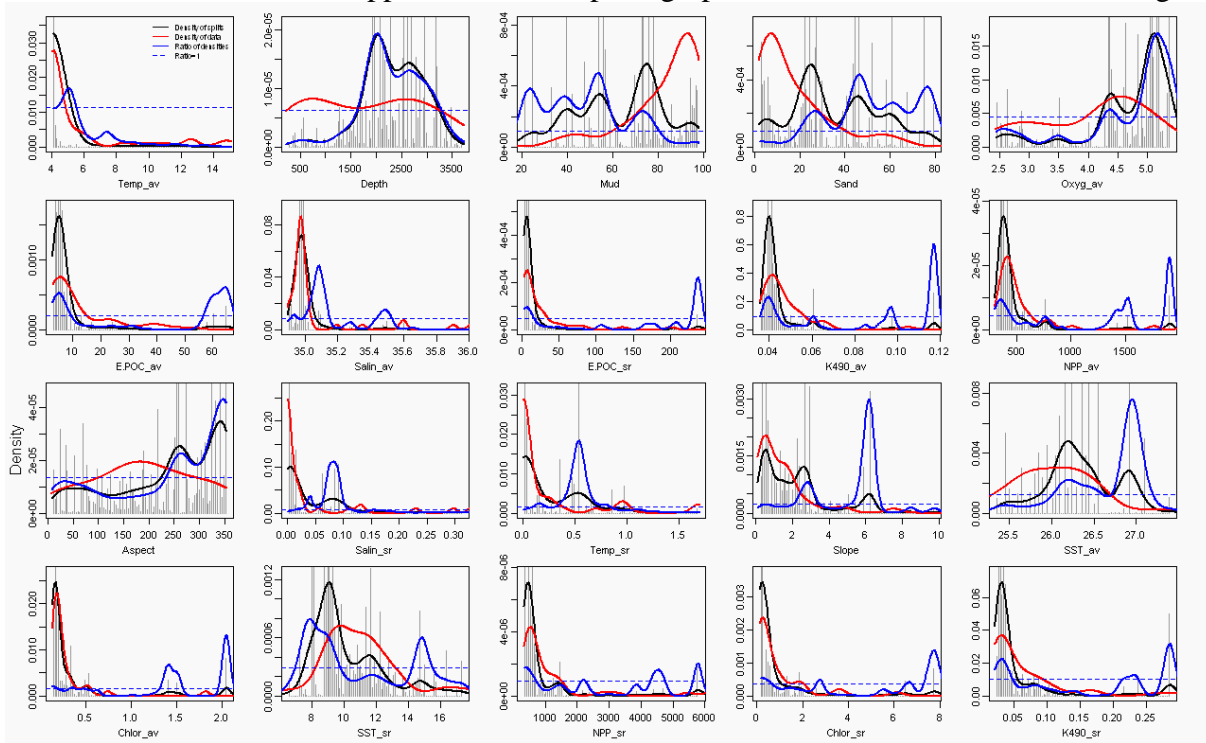


Fig. S3-3.9. DGoMx DGoMB trawl megafauna.

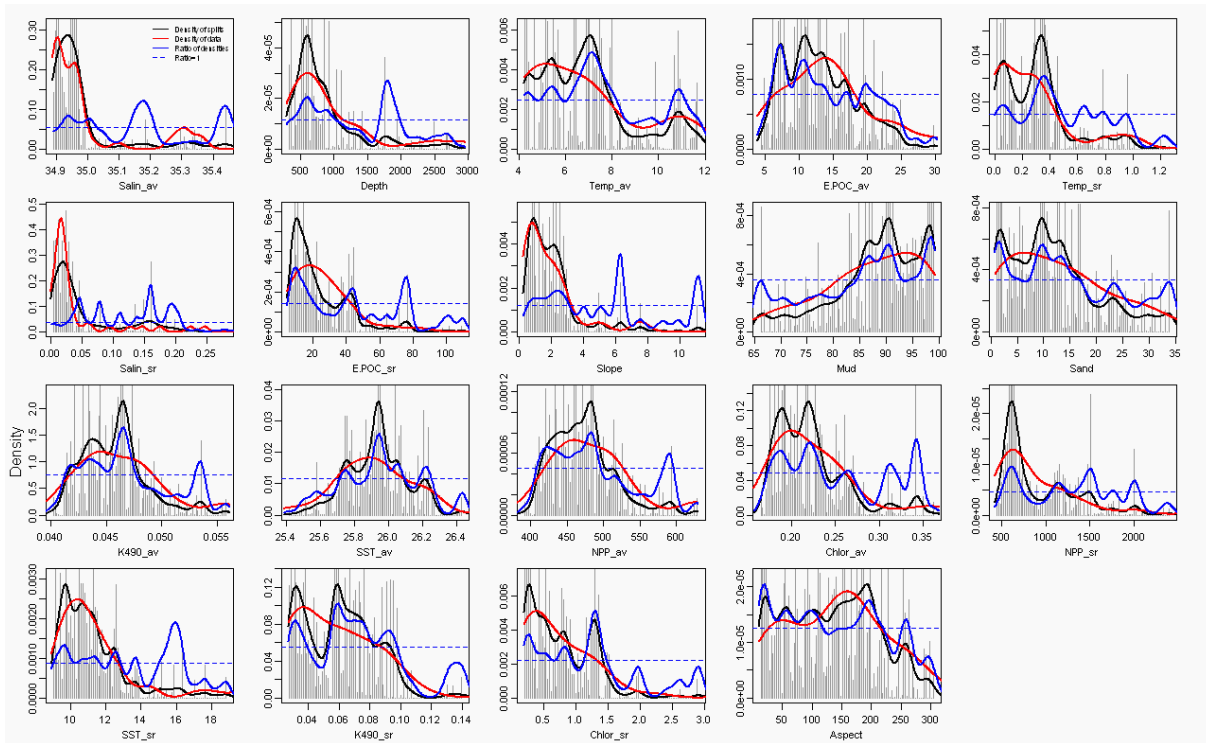


Fig. S3-3.10. DGoMx NGoMCS box core macrofauna.

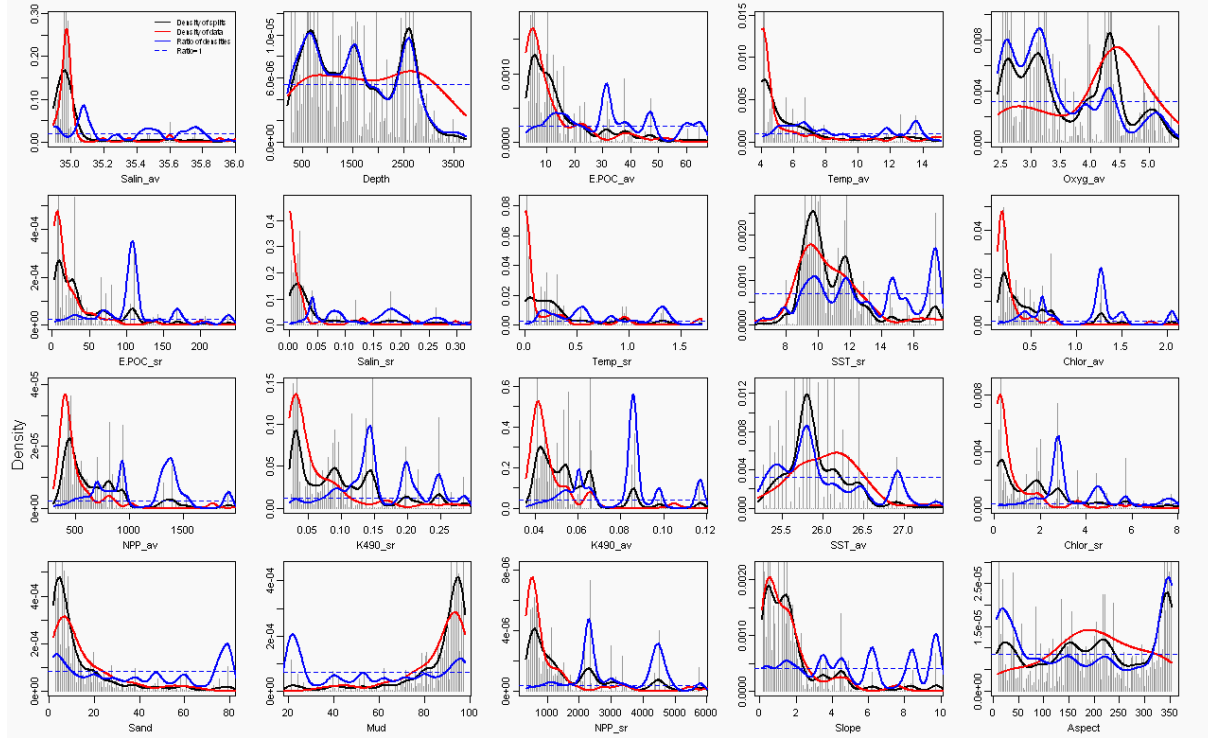


Fig. S3-3.11. DGoMx DGoMB box core macrofauna.

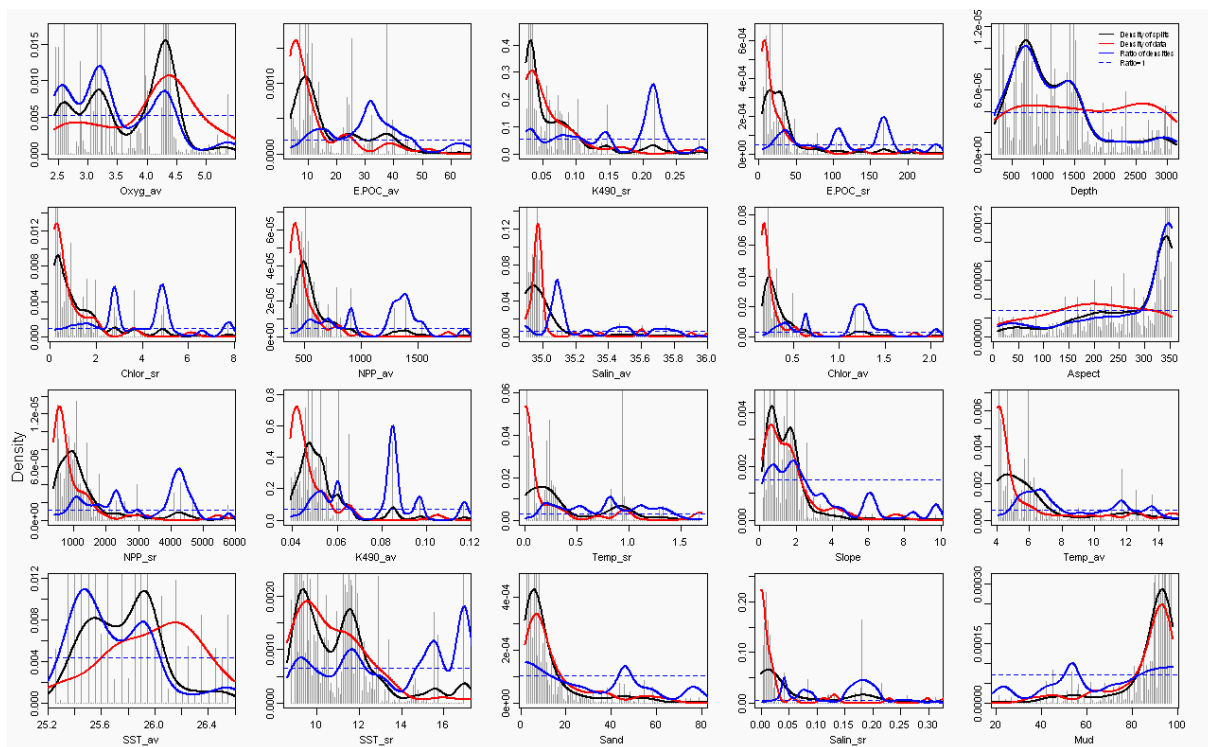


Fig. S3-3.12. DGoMx DGoMB box core harpacticoids.

S3-4. Cumulative distributions of standardized splits improvement for each species, scaled by R^2 weighted importance, for each environmental predictor, in each dataset from each region (see Appendix S2 for full descriptions of predictors).

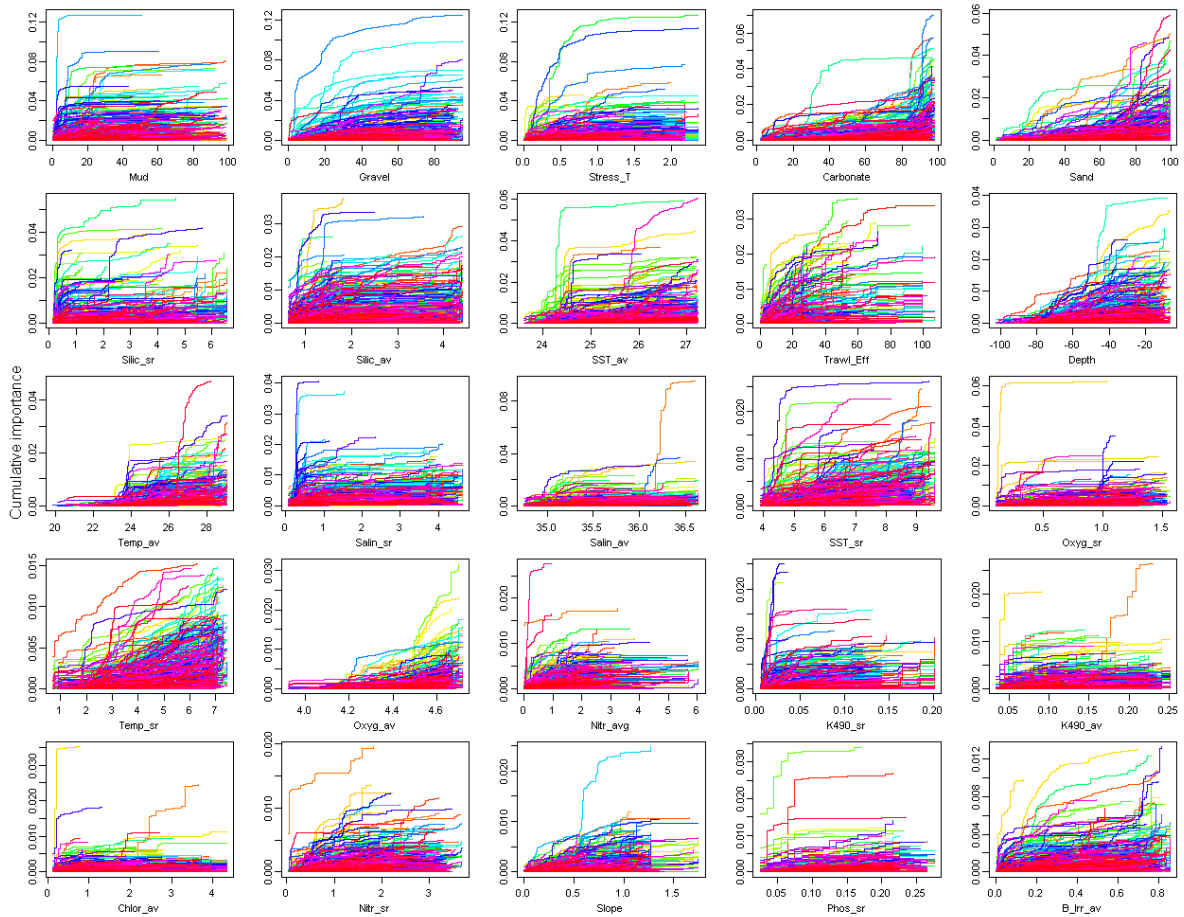


Fig. S3-4.1. GBR Sled.

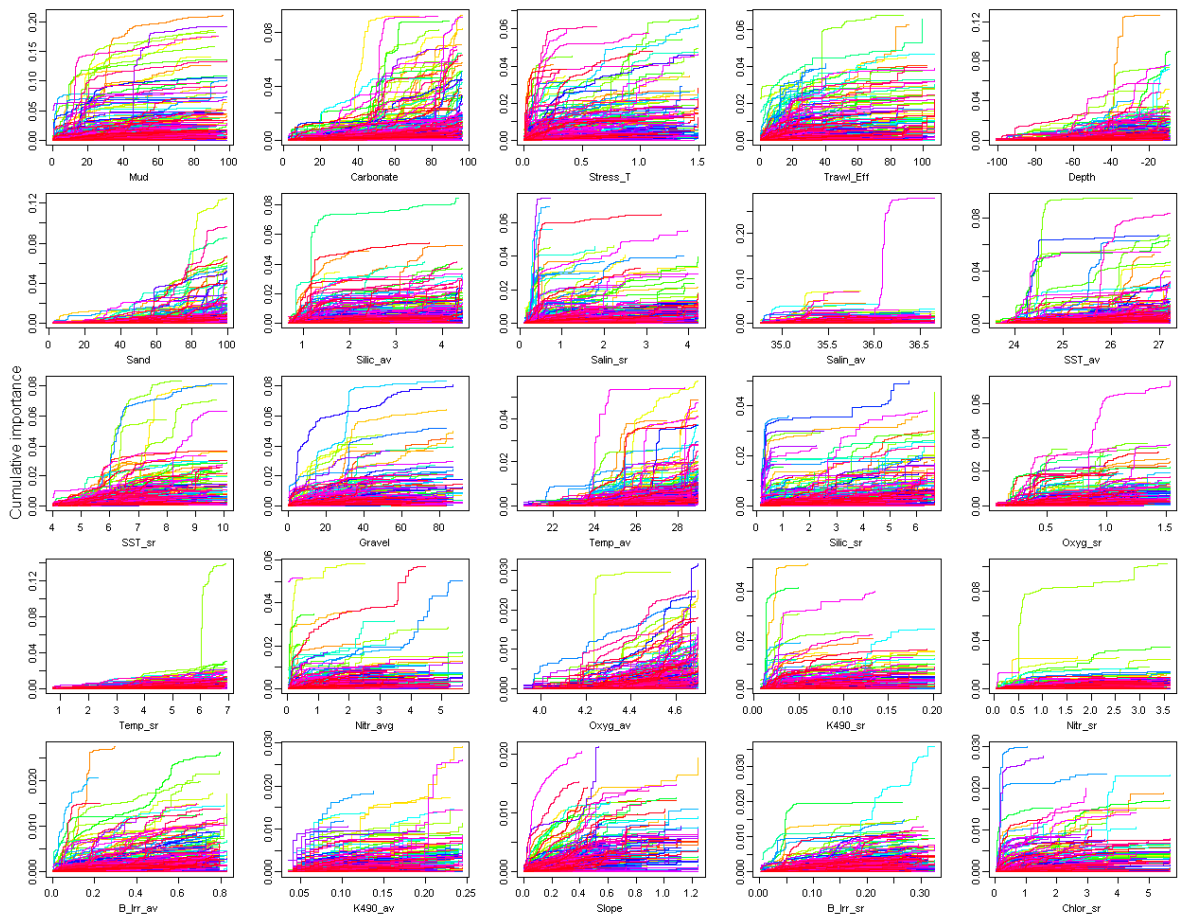


Fig. S3-4.2. GBR Trawl.

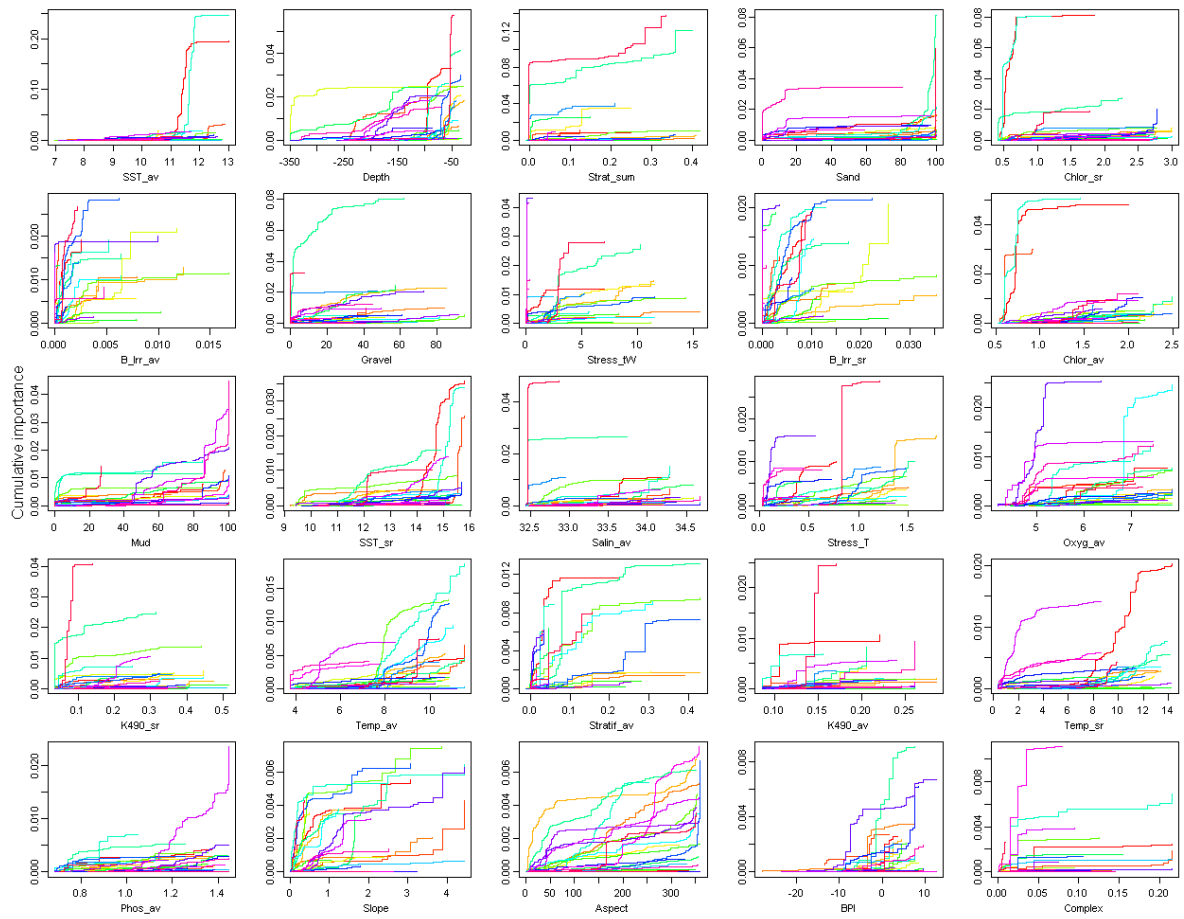


Fig. S3-4.3. GoMA NEFSC grab.

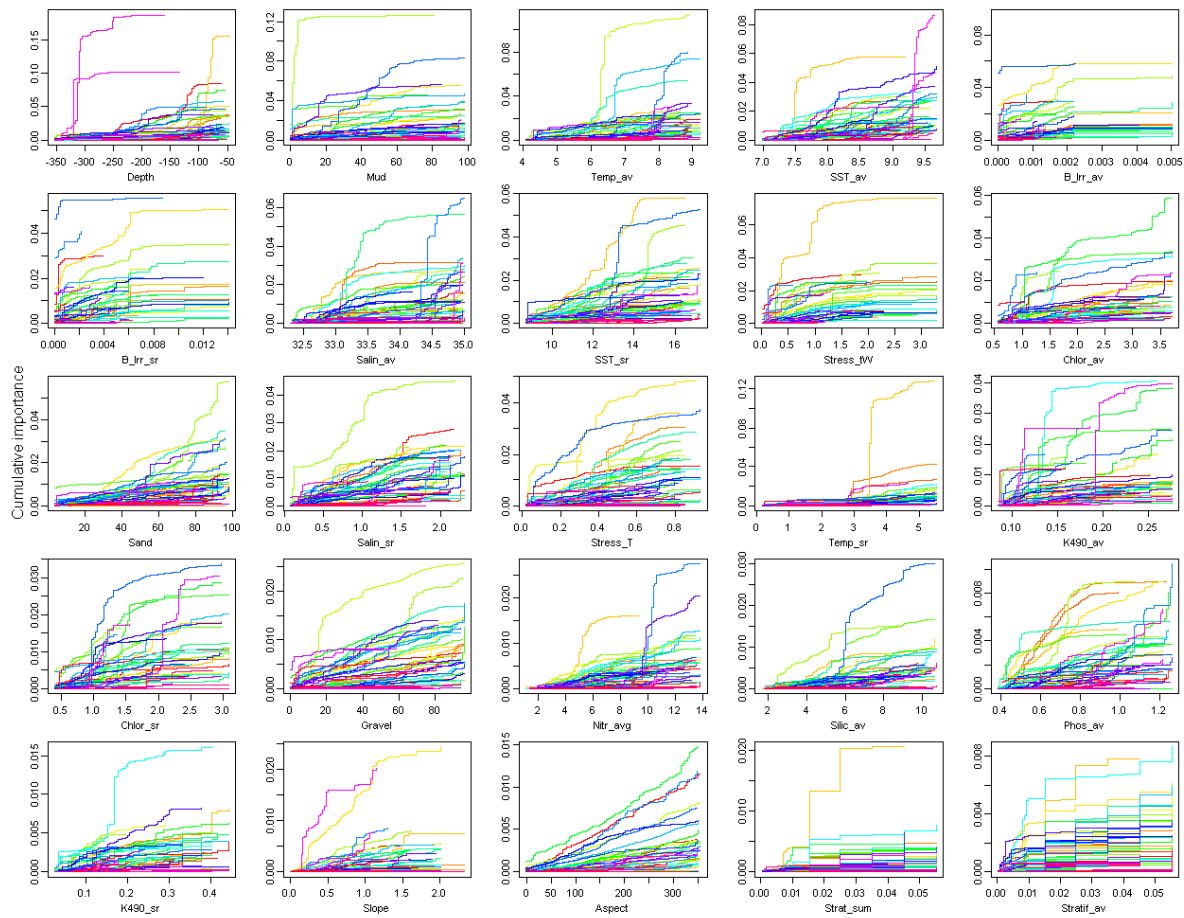


Fig. S3-4.4. GoMA DFO Scotian Shelf trawl.

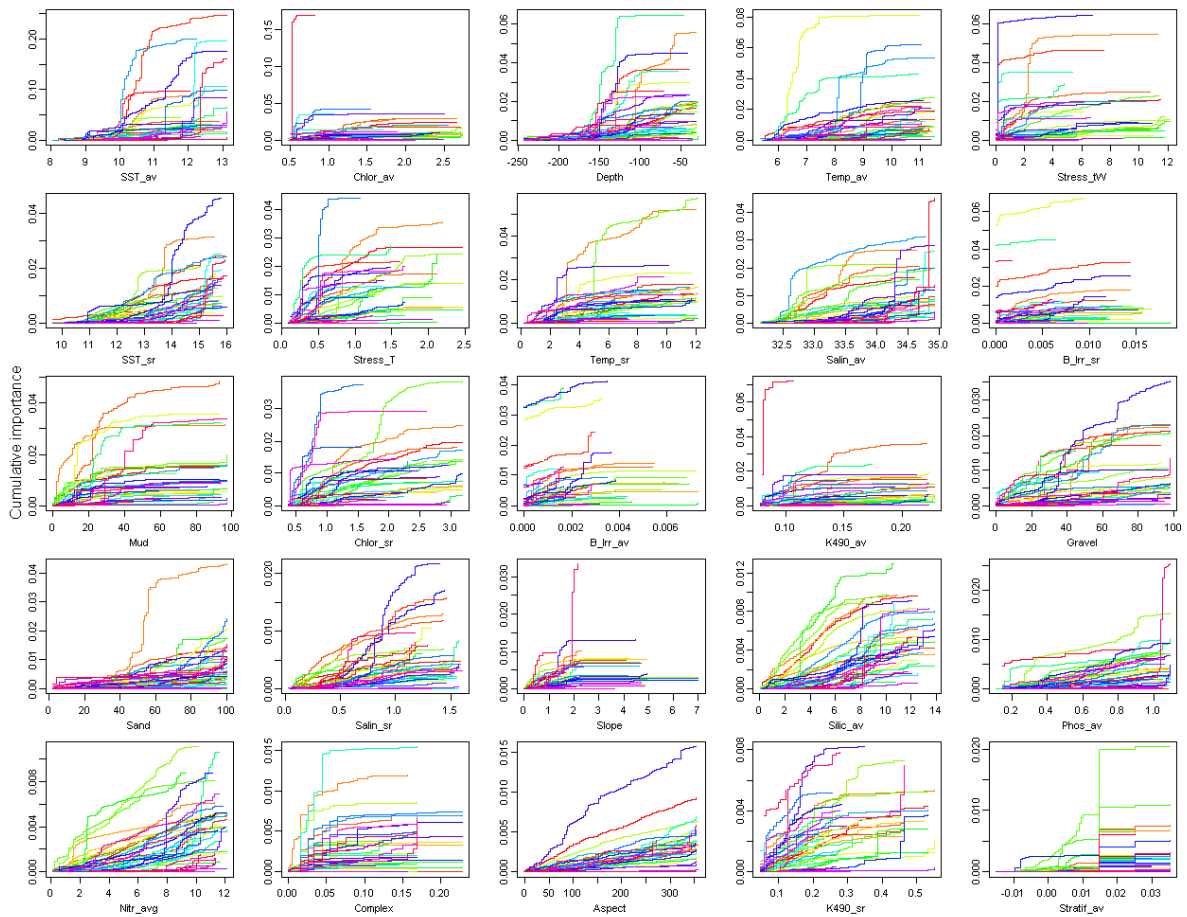


Fig. S3-4.5. GoMA DFO Georges Bank trawl.

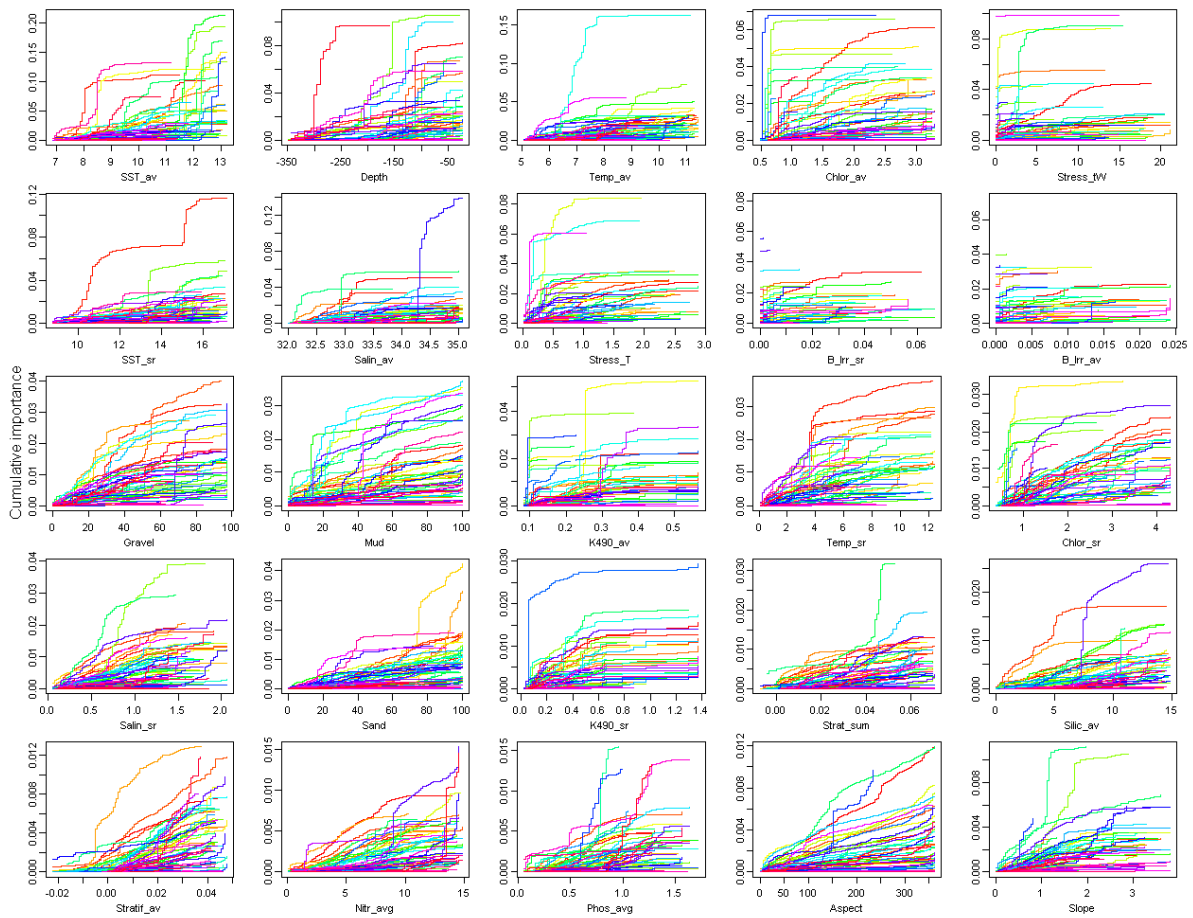


Fig. S3-4.6. GoMA NEFSC Spring trawl.

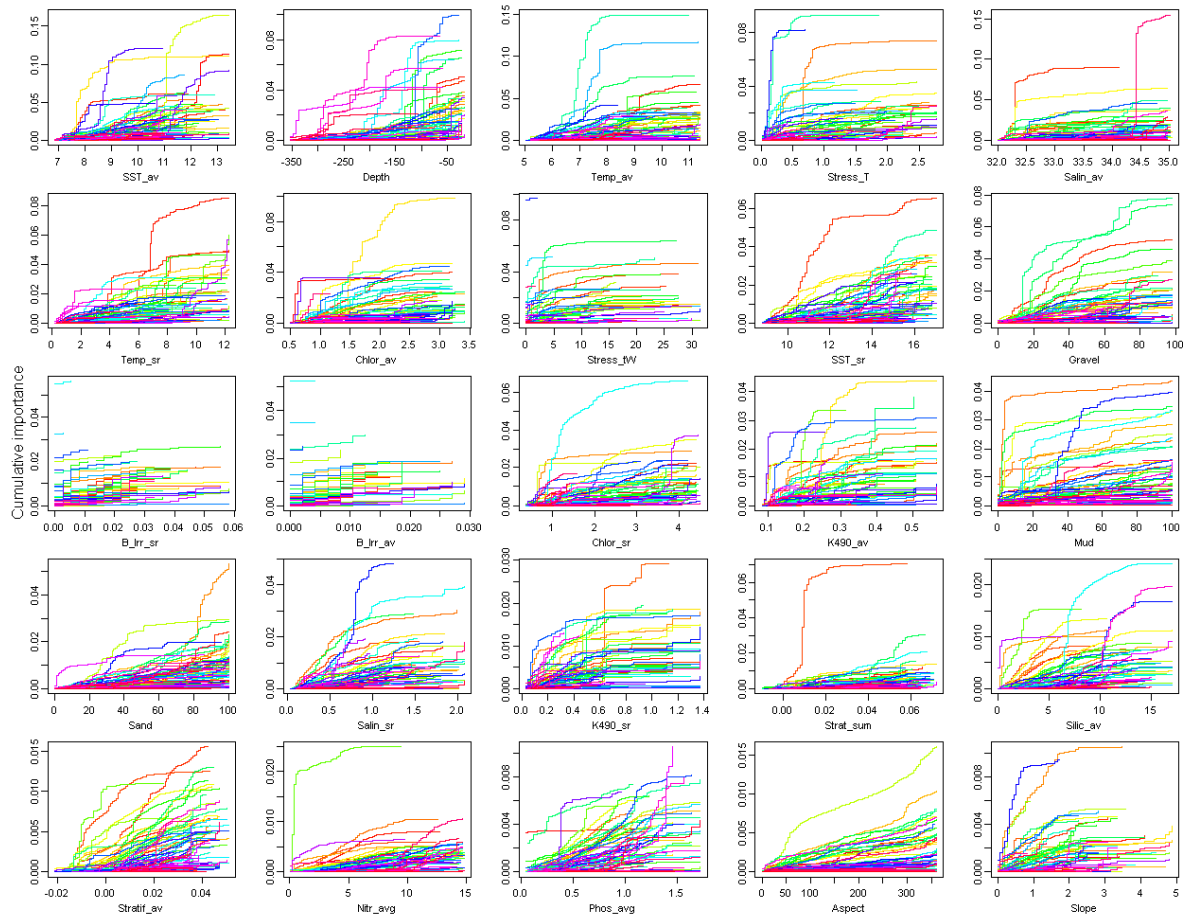


Fig. S3-4.7. GoMA NEFSC Fall trawl.

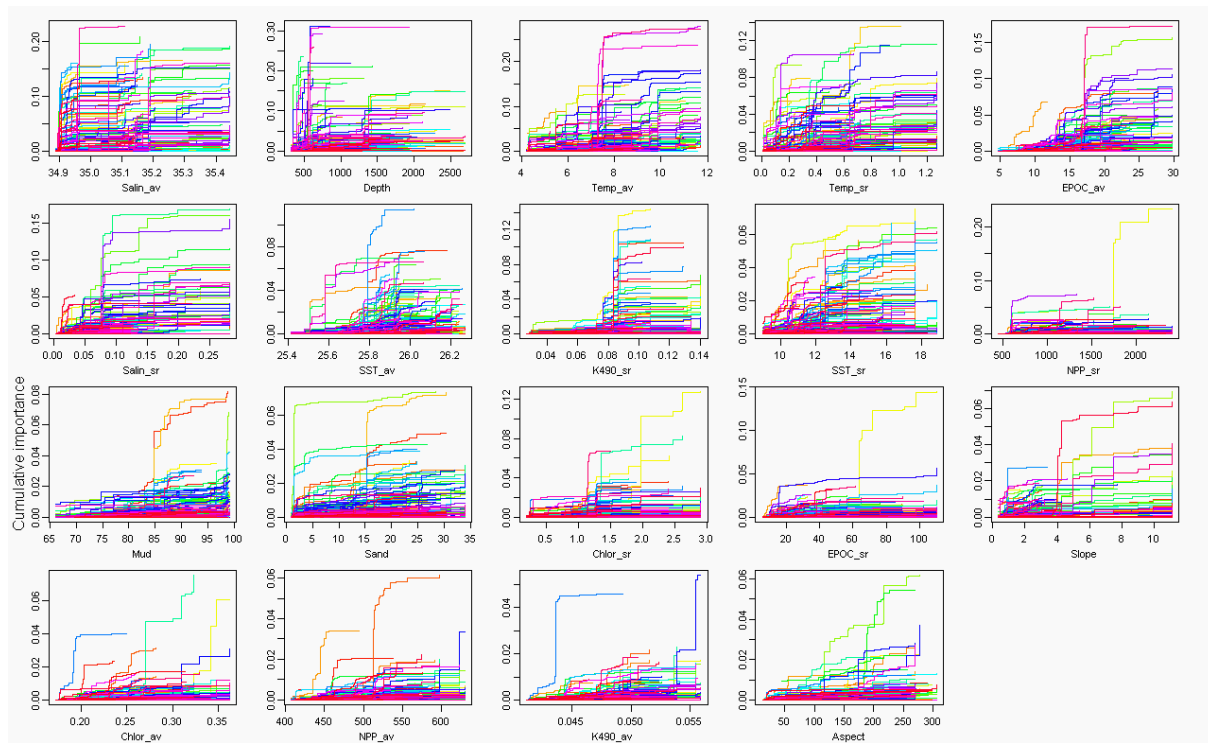


Fig. S3-4.8. DGoMx NGoMCS trawl megafauna.

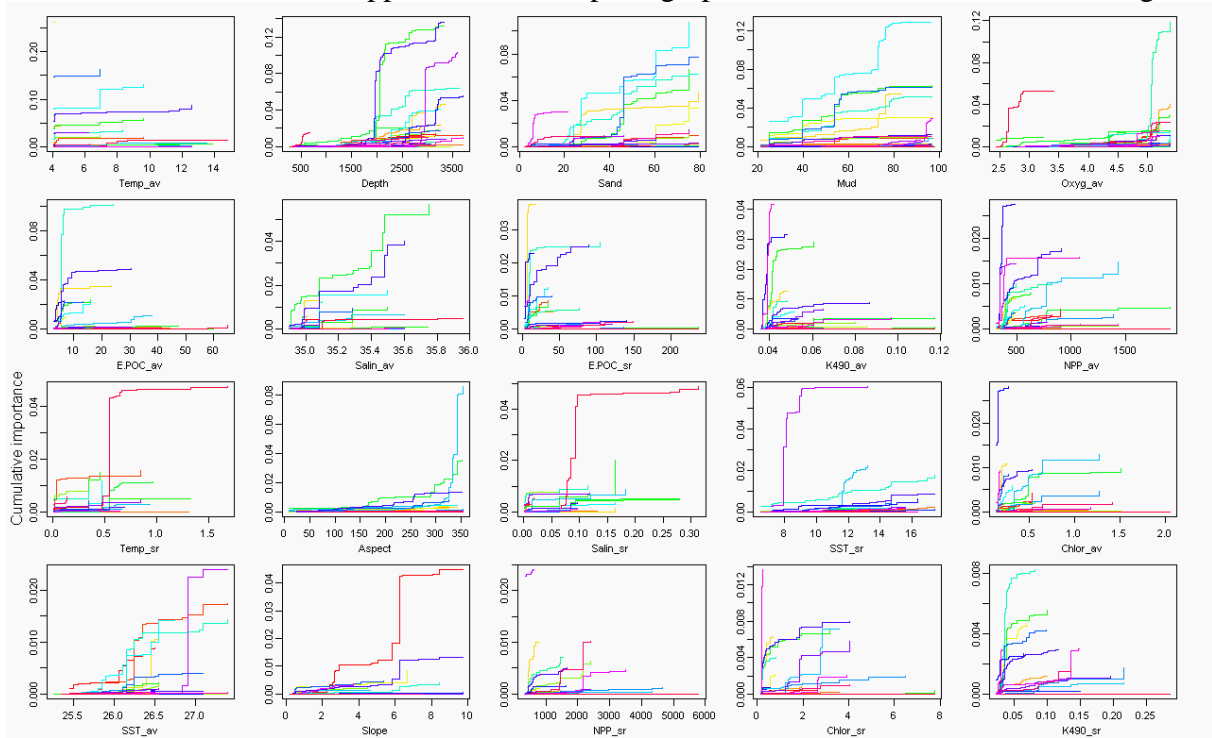


Fig. S3-4.9. DGoMx DGoMB trawl megafauna.

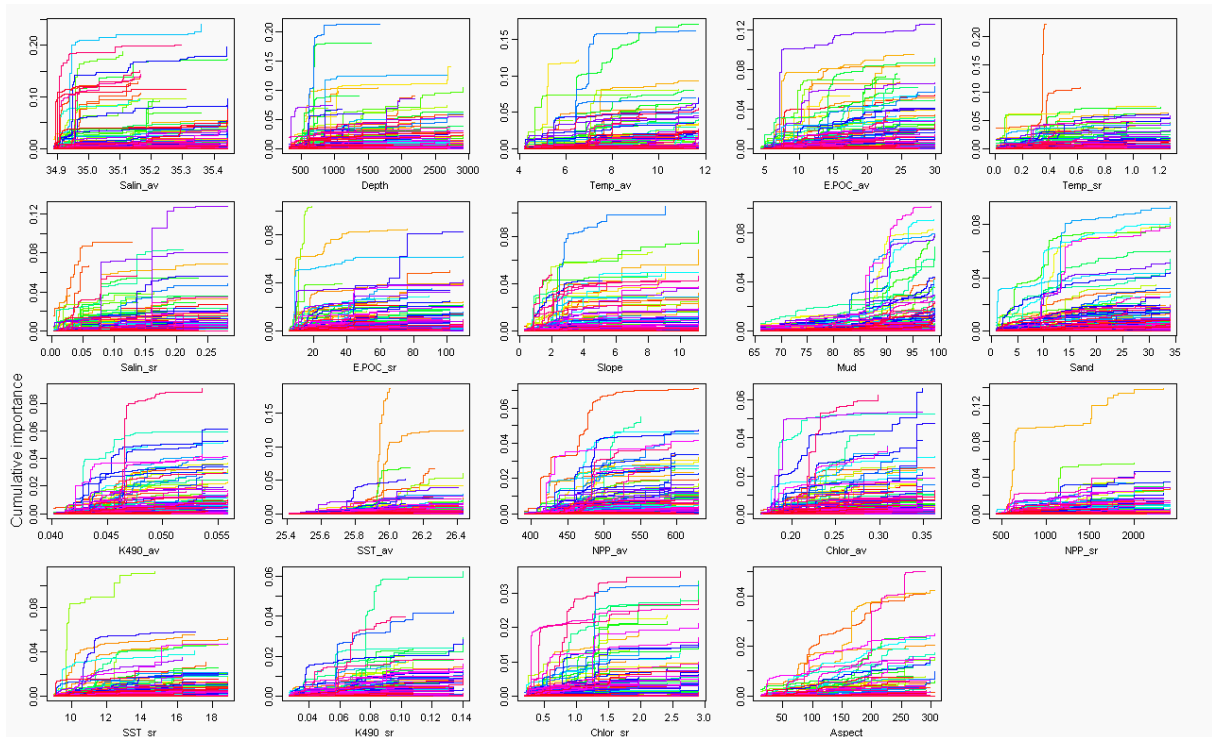


Fig. S3-4.10. DGoMx NGoMCS box core macrofauna.

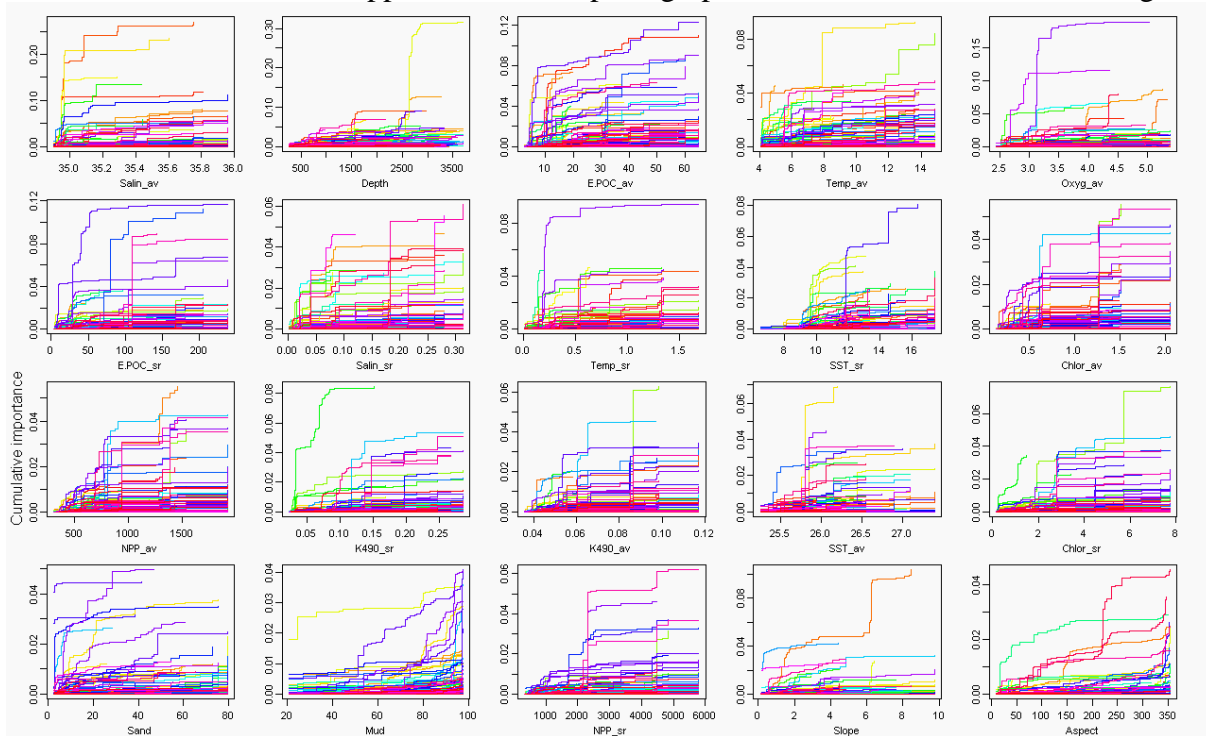


Fig. S3-4.11. DGoMx DGoMB box core macrofauna.

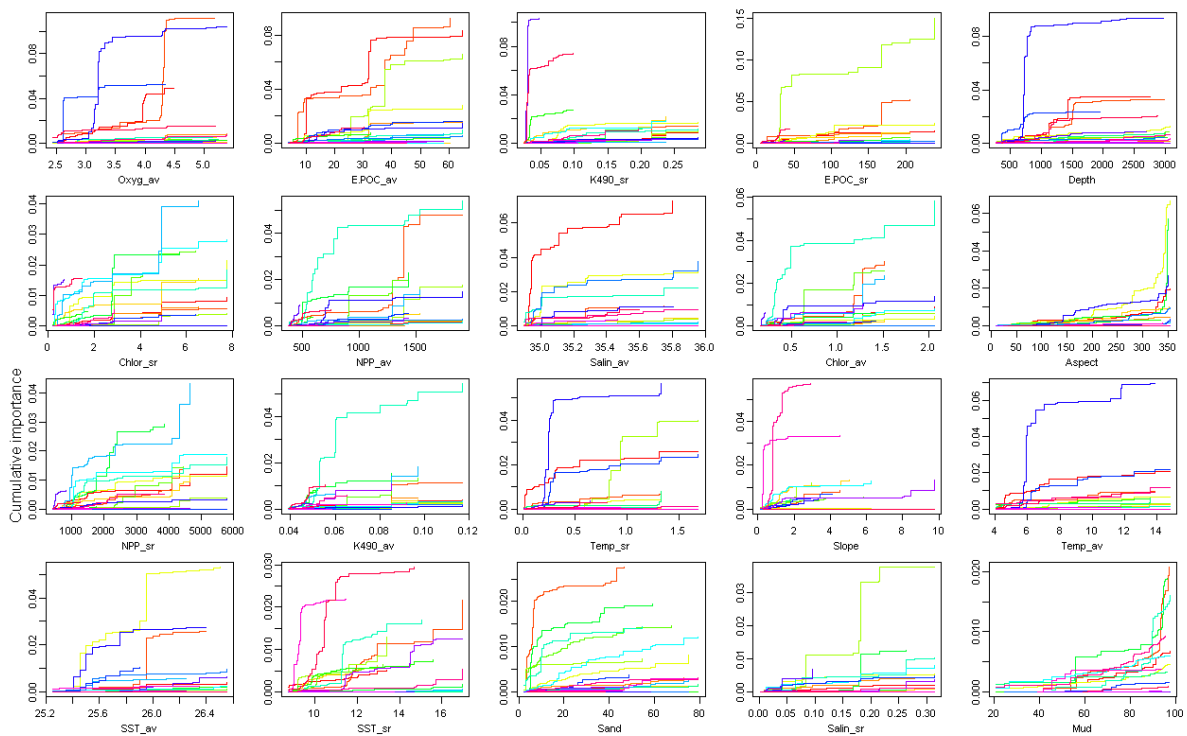


Fig. S3-4.12. DGoMx DGoMB box core harpacticoids.

S3-5. Overall pattern of cumulative importance, scaled by R^2 , for each environmental predictor, in each dataset from each region (see Appendix S2 for full descriptions of predictors).

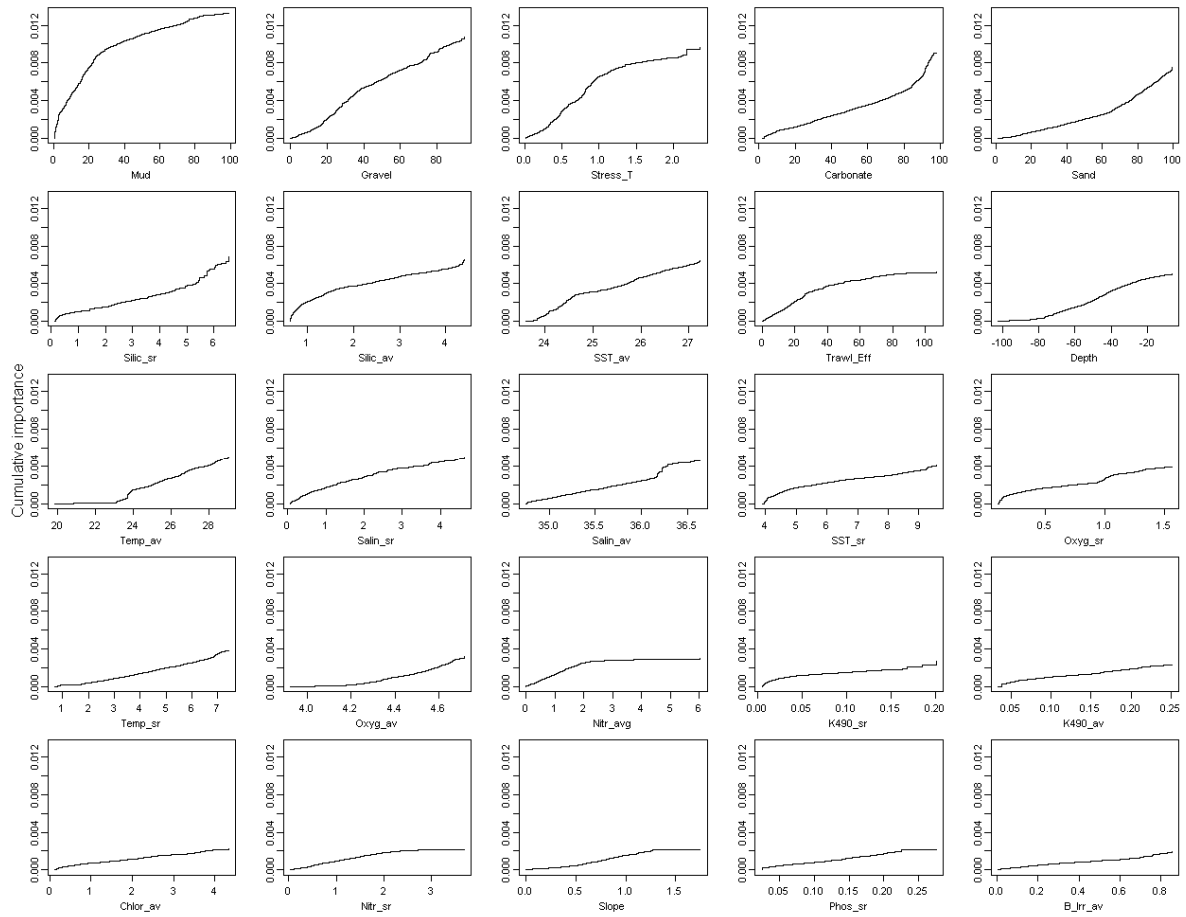


Fig. S3-5.1. GBR Sled.

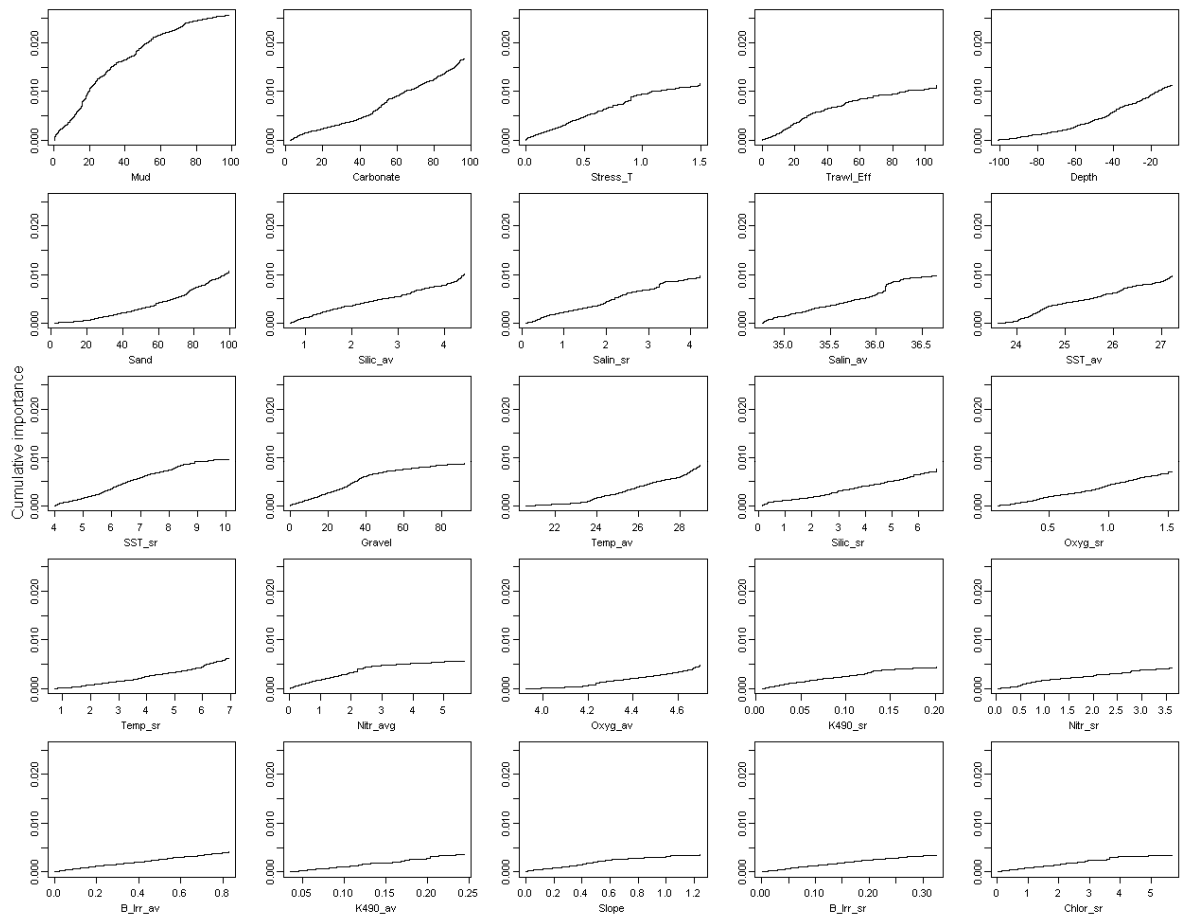


Fig. S3-5.2. GBR Trawl.

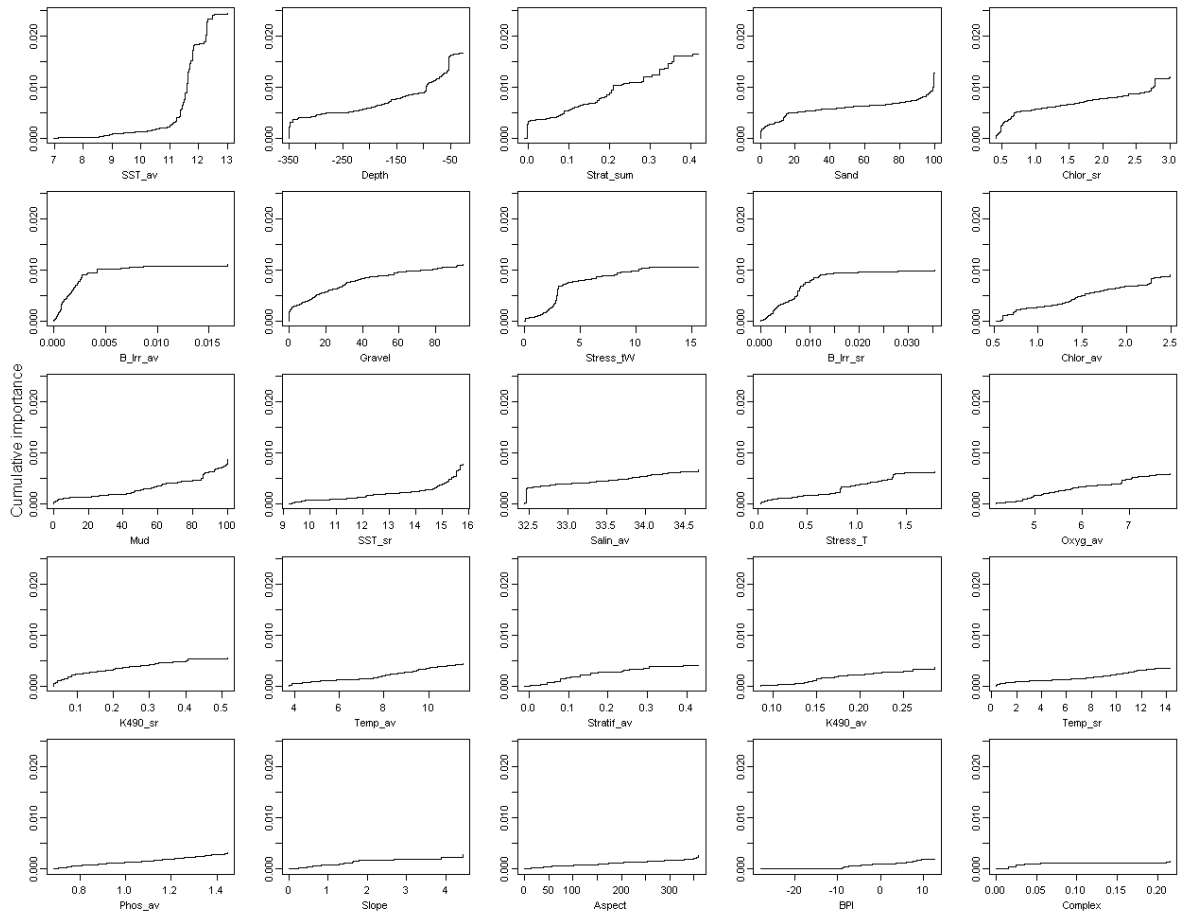


Fig. S3-5.3. GoMA NEFSC grab.

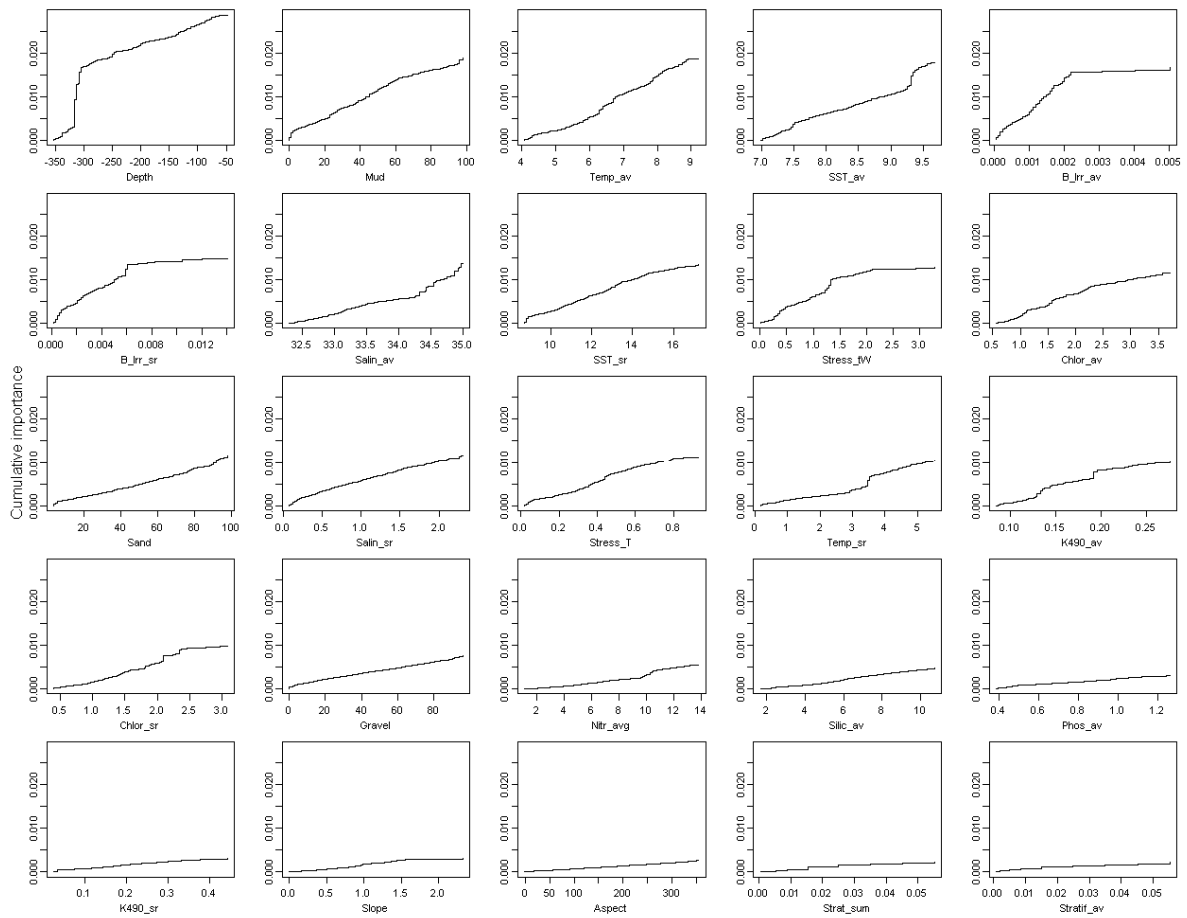


Fig. S3-5.4. GoMA DFO Scotian Shelf trawl.

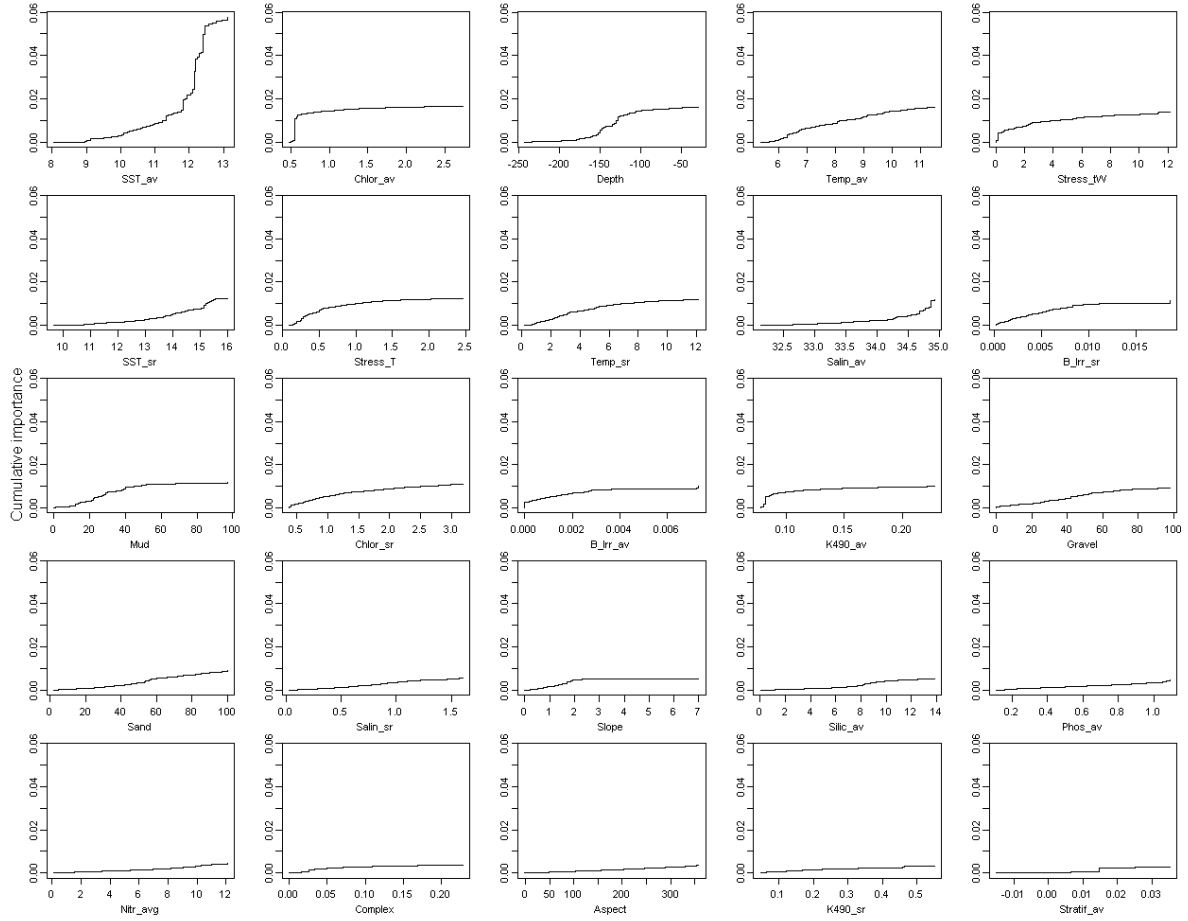


Fig. S3-5.5. GoMA DFO Georges Bank trawl.

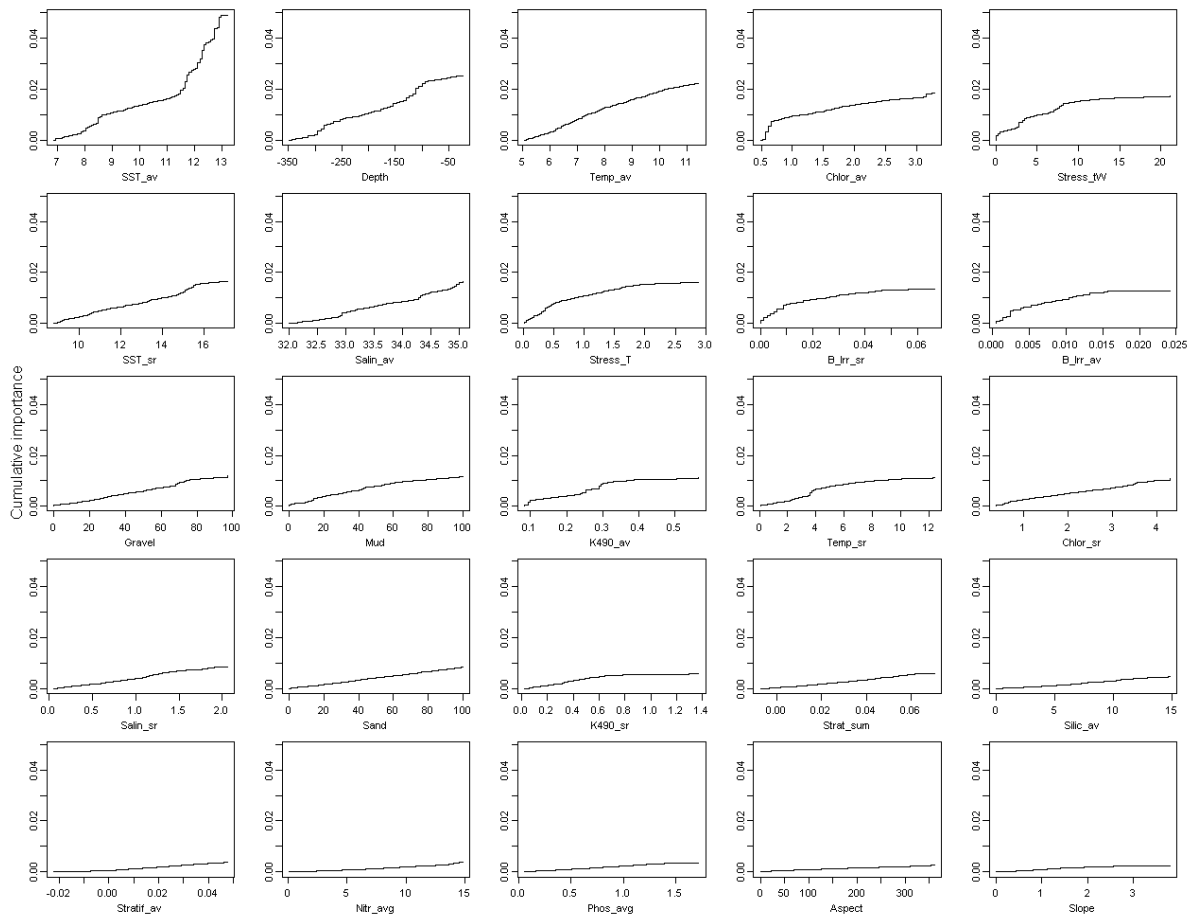


Fig. S3-5.6. GoMA NEFSC Spring trawl.

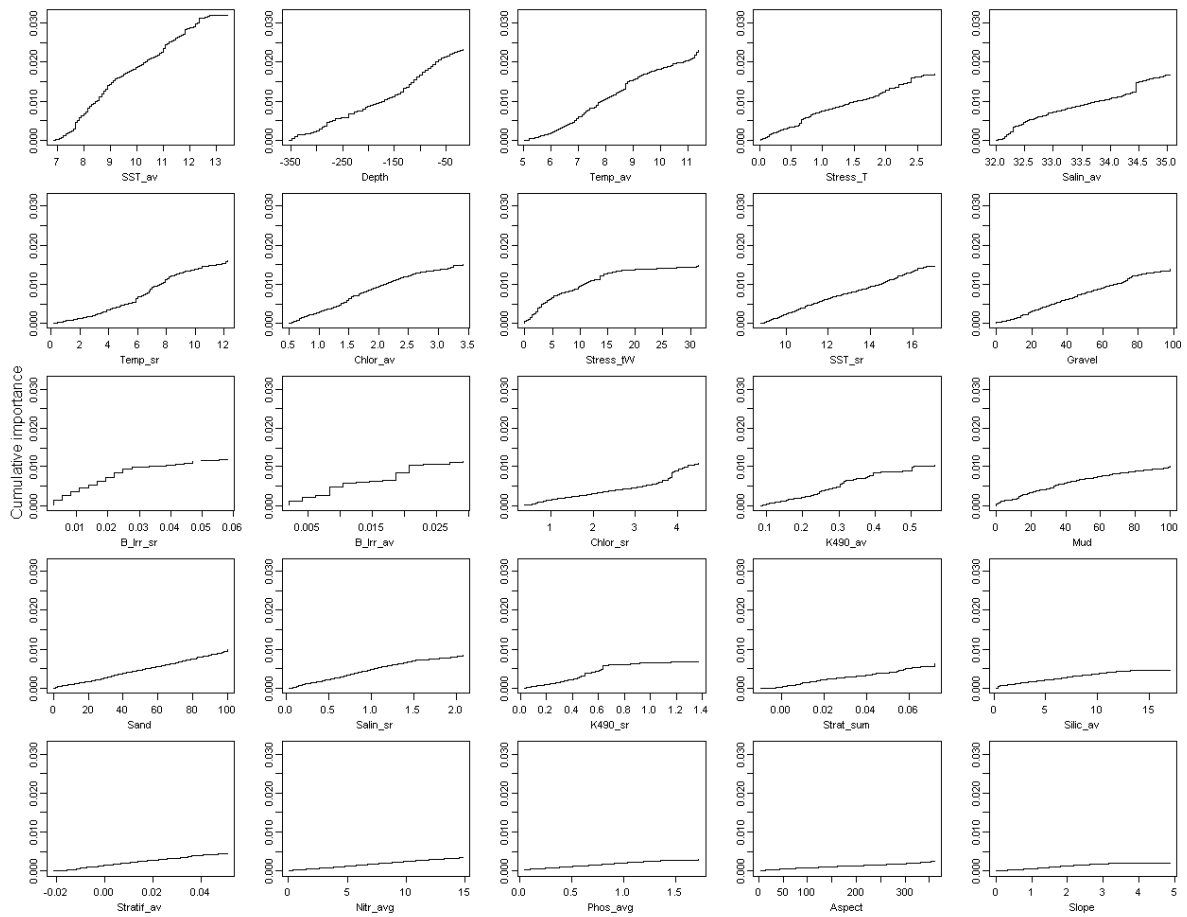


Fig. S3-5.7. GoMA NEFSC Fall trawl.

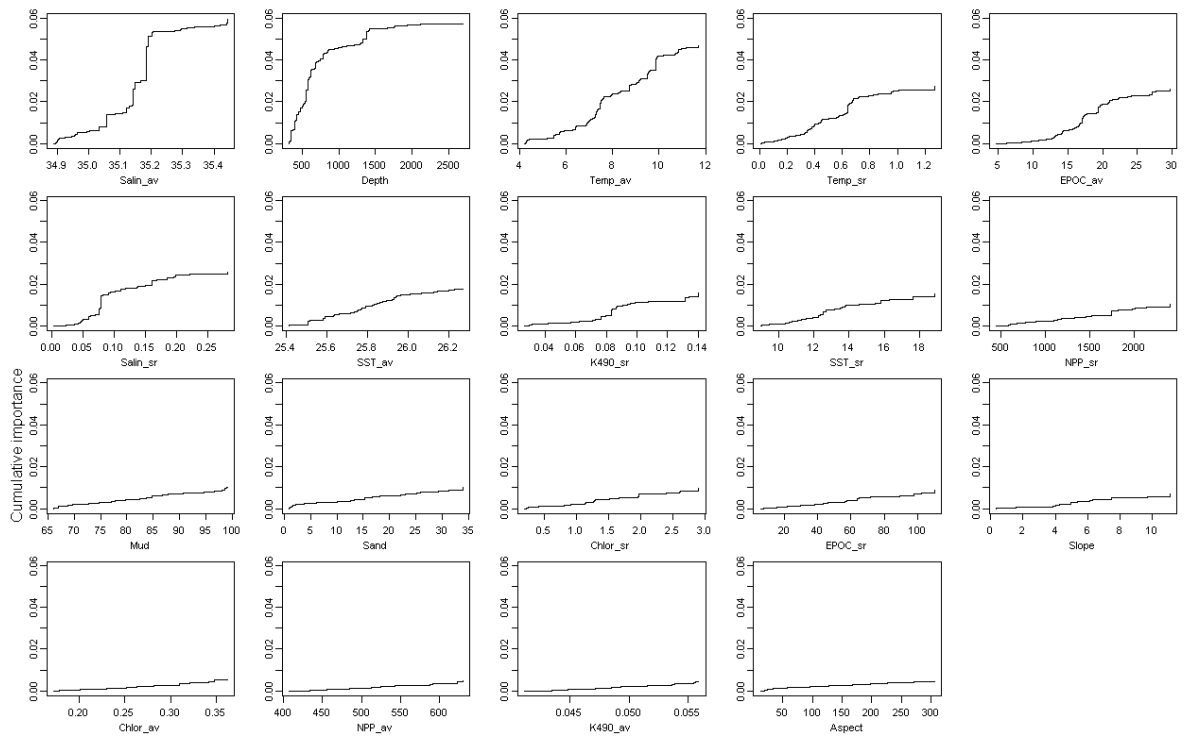


Fig. S3-5.8. DGoMx NGoMCS trawl megafauna.

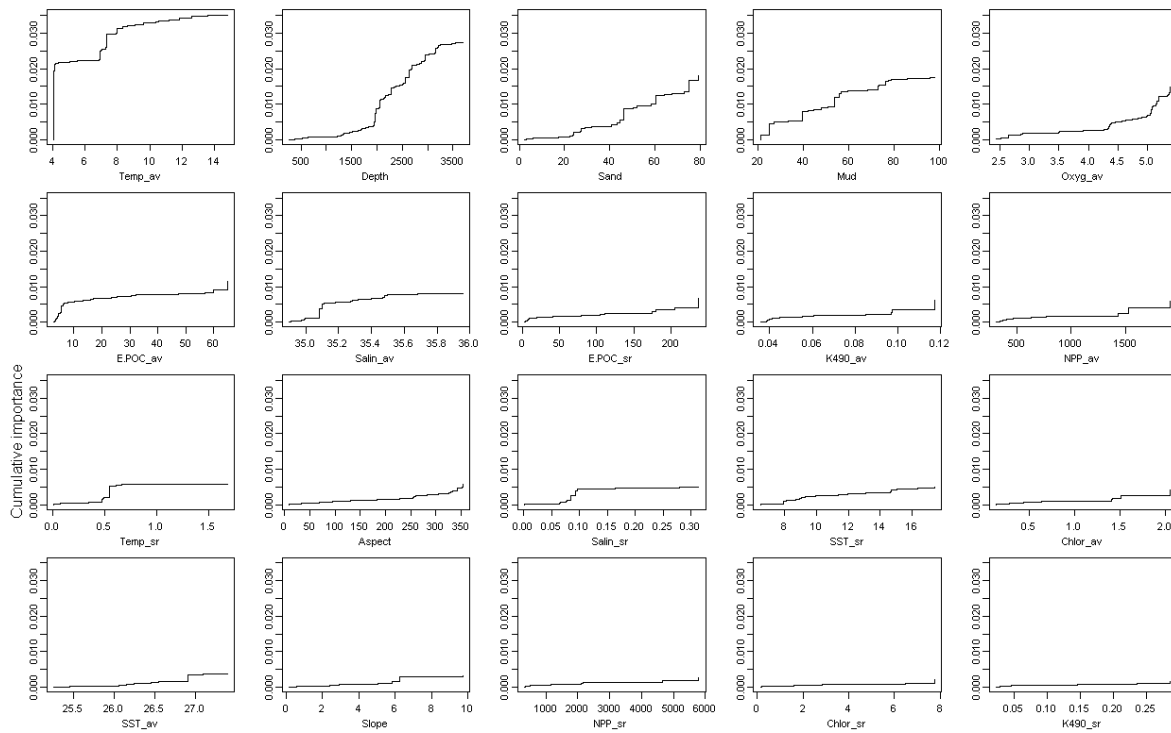


Fig. S3-5.9. DGoMx DGoMB trawl megafauna.

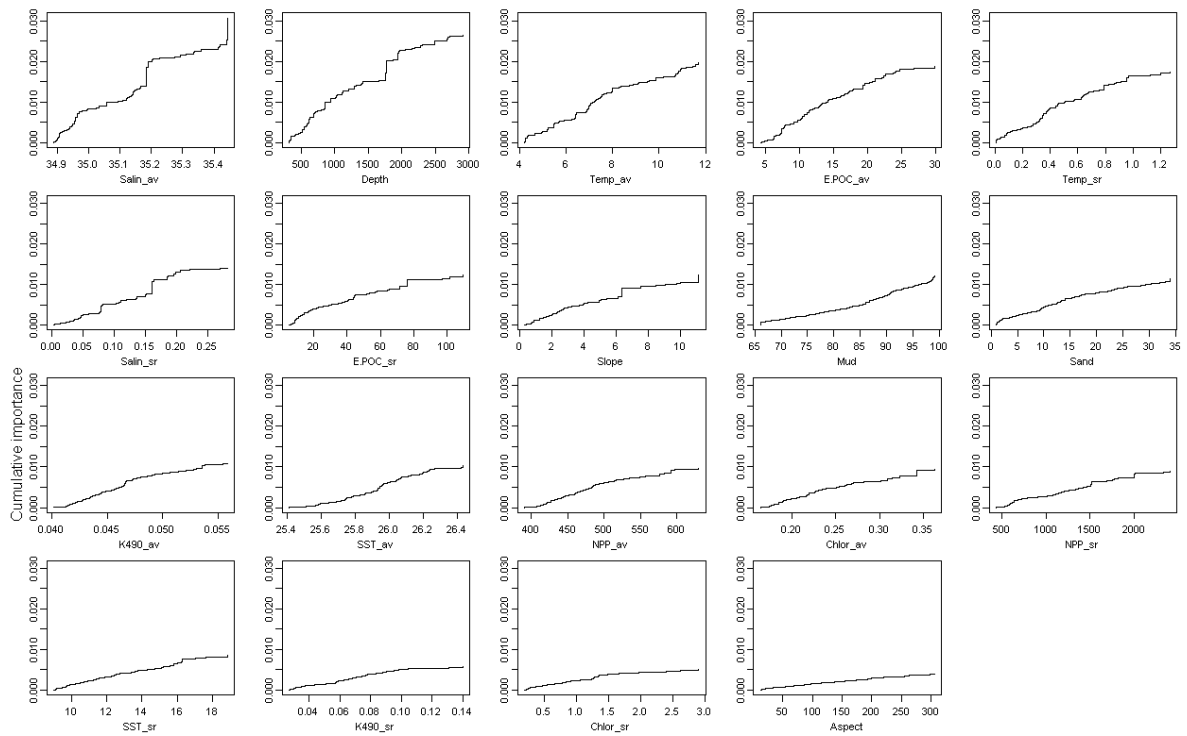


Fig. S3-5.10. DGoMx NGoMCS box core macrofauna.

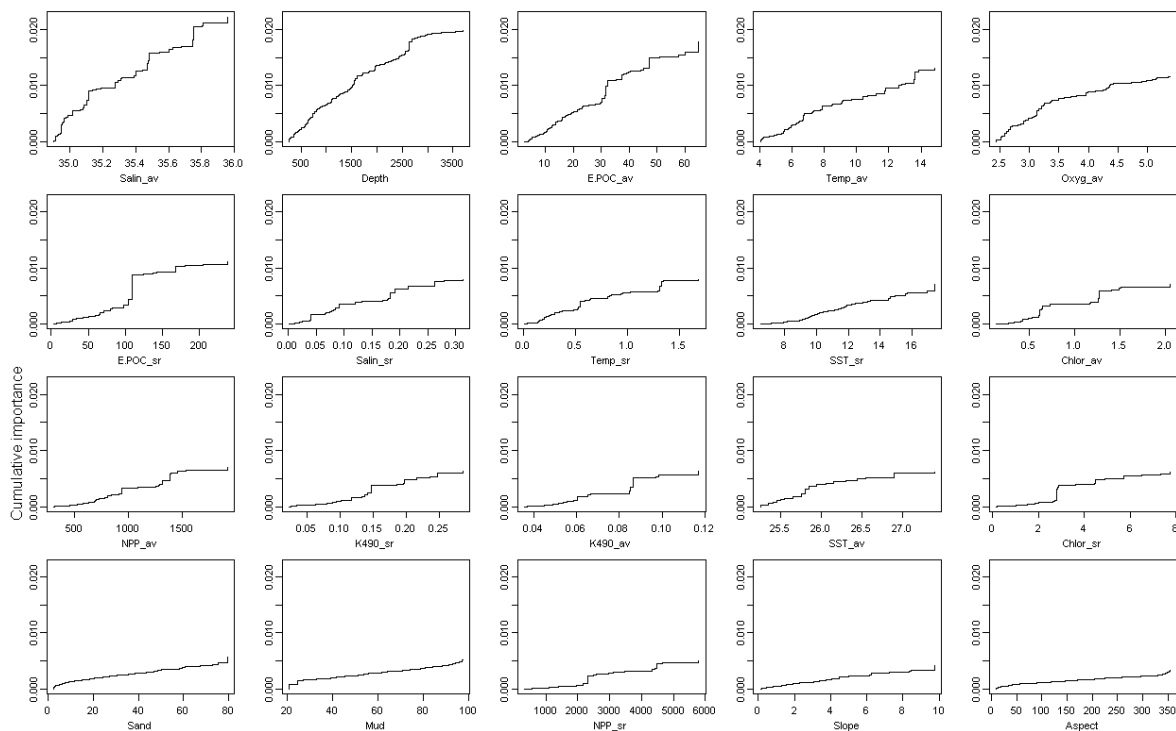


Fig. S3-5.11. DGoMx DGoMB box core macrofauna

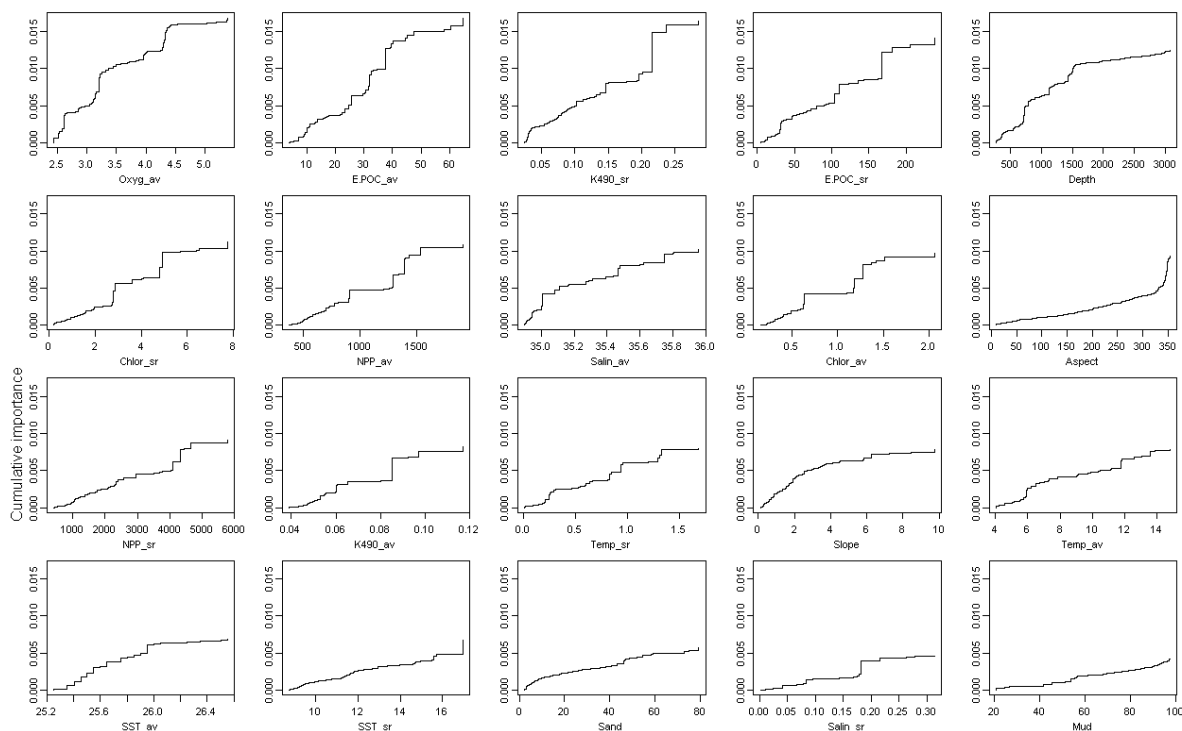


Fig. S3-5.12. DGoMx DGoMB box core harpacticoids

S3-6. Overall pattern of cumulative importance, scaled by R^2 , for each environmental predictor, combined for the two major sampling devices in each region (see Appendix S2 for full descriptions of predictors).

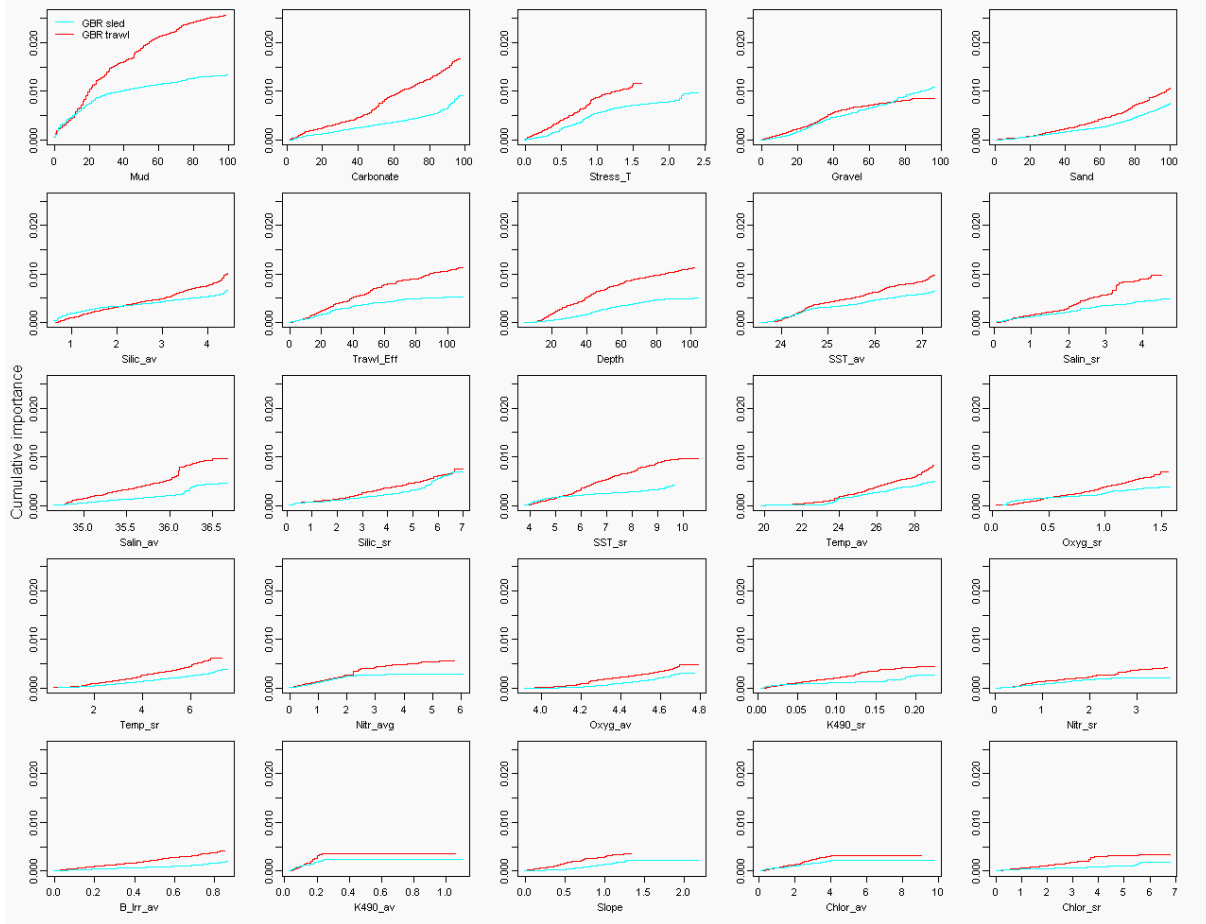


Fig. S3-6.1. GBR sled and trawl.

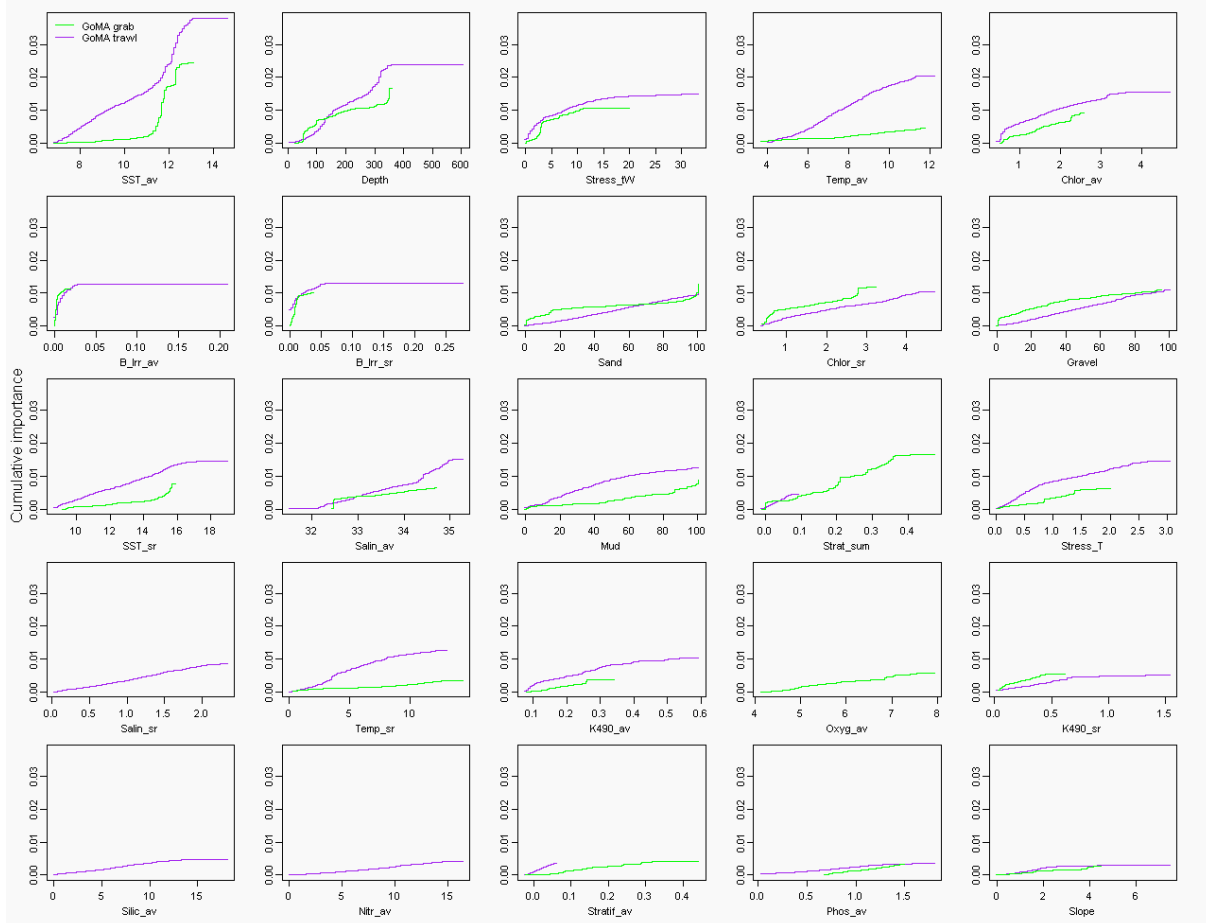


Fig. S3-6.2. GoMA grab and trawl.

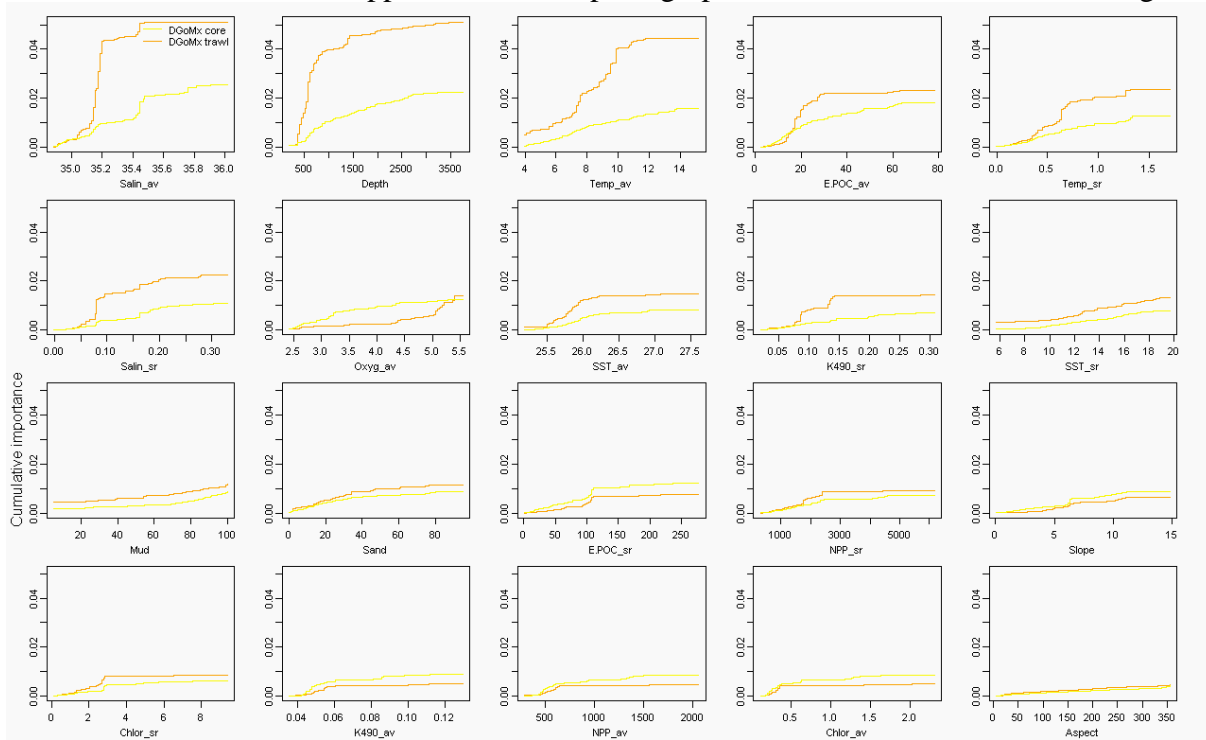


Fig. S3-6.3. DGoMx box-core and trawl

S3-7. Overall pattern of cumulative importance, scaled by R^2 , for each environmental predictor, combined for two sampling devices used in each region, across three regions (see Appendix S2 for full descriptions of predictors).

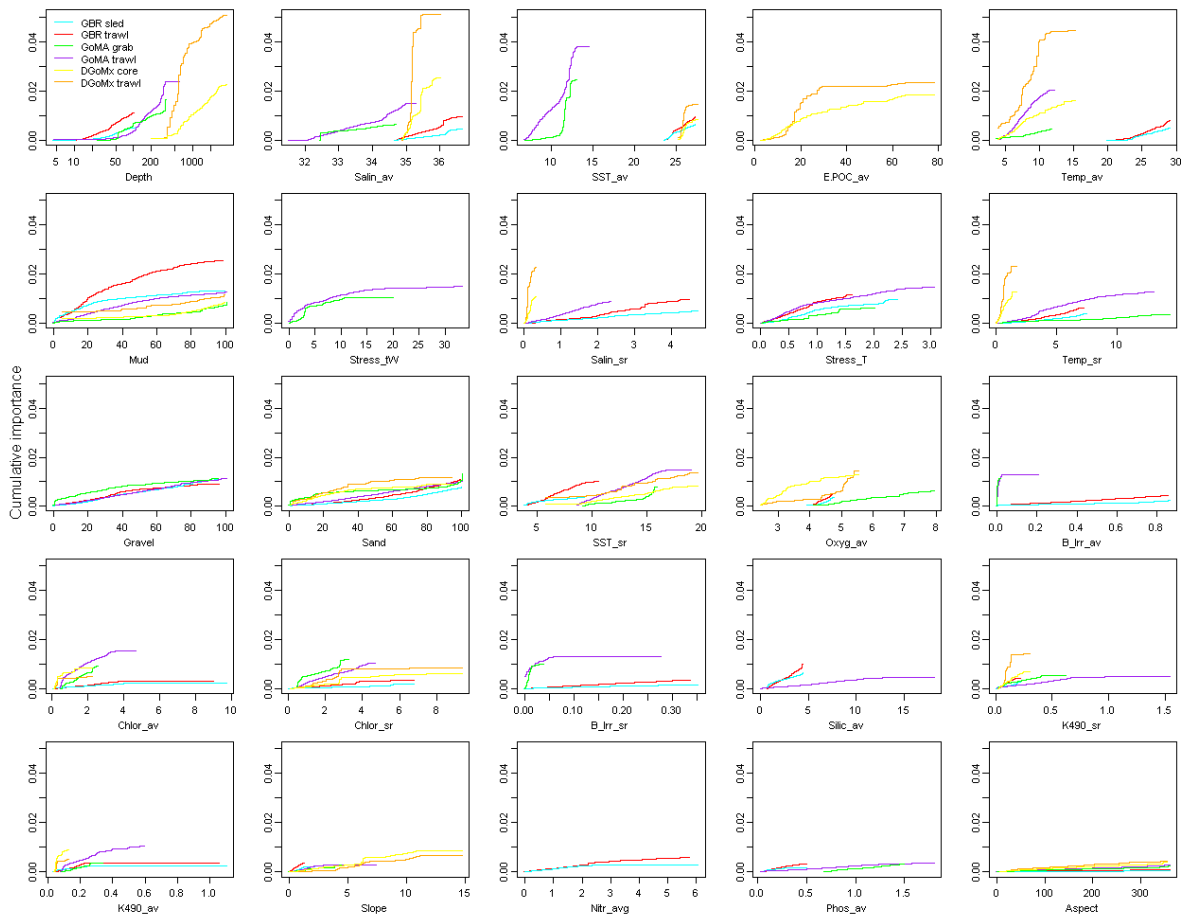


Fig. S3-7.1. GBR sled and trawl, GoMA grab and trawl, and DGoMx box-core and trawl