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| --- | --- |
| line 64 – Add a sentence explaining that PCA rotation visualizes relationships using a few factors that represent orthogonal drivers of spatial/spatiotemporal variation with maximum variance explained in rank order. How about:  “We use this PCA rotation to visualize a reduced number of orthogonal factors representing average spatial variation or spatio-temporal variation while explaining the majority ofº covariation among catch rates, as well as the association of each species with these maps. We refer to the association of each species with a given factor as its ‘association with this factor’, and the value of each factor at a given location as its ‘coefficient’ at that location”.  … or feel free to propose another explanation. But it seems important to highlight that these factors are (1) orthogonal, and (2) represent in rank order the dominant patterns in covariation. The 2nd proposed section is to clarify notation, which is a bit scattered as I note below. I’m actually pretty confused by your use of coefficient in the revised draft, seemingly to refer to both factor values (which I’m proposing to call “coefficients”) and loadings values (which I’m proposing to call “associations”). | Yes, that’s helpful clarity. I toyed with putting it in the results leader paragraph, but incorporated it where suggested and linked in the results leader a bit better instead. |
| 87 – I recommend replacing “species-groups” in your new usage in the revision with “assemblage”. It looks like you’re replacing your old term “species-group” (which you previously used to reference a combination of species and stage) with “species”, so I guess the new draft would have no instances of the term “species-group” after changing to “assemblage”. | Yes! |
| 93-101 – A few typos remain here, including “nuances differences” and “help spatially separate explotation” (which is clumsy wording IMO) | Yes, have amended |
| 105 – “spatial average – over time – positive density effect” seems very clumsy. What about “average spatial variation”, and clarifying positive density or encounter probability in later sentences individually? | Hmm...I wasn’t comfortable with this usage but wanted to head off the question of the “average of what”. Maybe that’s self evident though, so happy to amend and done so. |
| 117 – I recommend calling the parameter representing the association of species with factors as “assocations”, so “species associations with the …”. I’m fine with using “coefficient” to refer to the value of each factor at each location. | Yes, sorry, we had been through this once and my revisions have confused. I’ve reverted / revised for consistency. |
| 121 – I recommend using consistent vocabulary for estimates. So replace “positive association with the easterly waters” with “positive coefficient in the easterly waters” following your terminology in 116 | As above |
| 122-123 – Again, I recommend “loadings” instead of coefficient. | Yes |
| 124 – Here you’re using “positive coefficient values in the northerly areas” and let’s keep this terminology. | Yes |
| 157/158/159/161/162/163/164/165 – “species-groups” to “assemblages” | Yes |
| 169 – Change header to “three assemblages show similar spatial patterns” | Yes, but changed to “spatiotemporal” |
| 175/etc (I’ll stop noting instances) – change to “assemblages” | Done |
| 182 – “this underscores the [correlations] among species seen in the association of each species with factors, with three distinct assemblages being identified”. This rephrasing is to reserve the word “association” only with the factor loading values, and replacing an informal use of “assocations” with the word “correlation” | OK, have changed to reflect |
| 185/187/189 “association” -> “correlation” | Yes, and elsewhere |
| 208 – please rephrase “spatial pattern in factor loadings values” to use term “coefficient” for factor values, to be consistent with earlier usage. | Done |
| 214/217/246 – “species-group” -> “assemblage” | Yes |
| 286 – “model parameter estimates” is clumsy IMO, what about “parameter estimates” | Deleted |
| 207 – “groups” -> “assemblages” | Yes |