Miller, Sara E (DFG)

From: Jim Murphy - NOAA Federal <jim.murphy@noaa.gov>

Sent: Friday, October 8, 2021 5:39 PM

To: Miller, Sara E (DFG); Piston, Andrew W (DFG); Heinl, Steve (DFG)

Subject: SST data

Although not an area that I have much expertise in, I was wondering what your thoughts were on using principal components or other multidimensional scaling analysis when working with the SST data? I believe these multidimensional approaches are common when working with SST data.

Alex recommended using principal components to handle the autocorrelated environmental variables in the ecosystem rank approach that Joe developed. I think the same principal would apply here and that we should consider attempting to distill the SST variables into a single variable that captures the variability present in the SST data. There are a variety of ways to do this, but I think the simplest may be to take the 1st principal component of all of the SST variables that we identified. This variable could then be compared with the ISTI model.

Thanks, Jim

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