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APPENDIX C

Outputs from the INTER transformation of the *distantia* analysis

With the INTER scaling of the *distantia* analysis, Lake Neuchâtel, Lake Bourget and Lake Annecy are the less distant lakes (Fig. C1), meaning they have similar values for the compared variables. Lake Neuchâtel and Lake Annecy get a bit further when removing the zooplankton variables, implying similar values on these variables. Lake Aiguebelette is the most distant of the five lakes. It is the lake with the wider range of temperatures, with the lowest winter and summer temperatures and the highest spring temperature. Note that distance values with the INTER transformation have higher probability values of obtaining randomly equal or inferior distance values, meaning less statistically reliable outputs.

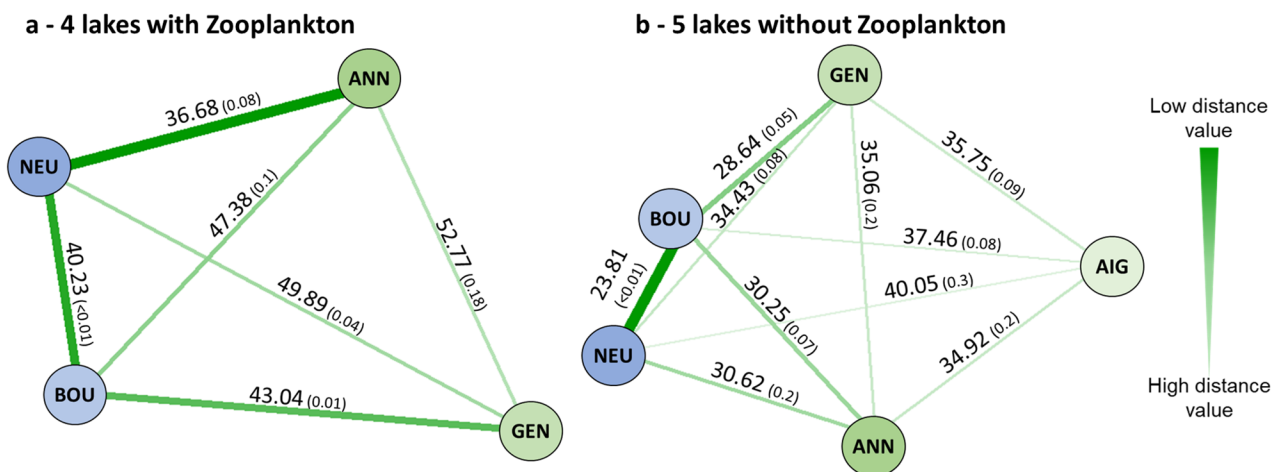


Fig. C1. Adjacency networks illustrating the total distance between the five lakes with the INTER scaling method for (a) four lakes with the zooplankton abundance variables and (b) five lakes without the zooplankton abundance variables. GEN, Lake Geneva; NEU, Lake Neuchâtel; BOU, Lake Bourget; ANN, Lake Annecy; AIG, Lake Aiguebelette. Line thickness and color intensity both quantify multivariate similarity in temporal fluctuations; multivariate distance values are reported above lines. In parentheses: probability of randomly obtaining an equal or lower distance value.

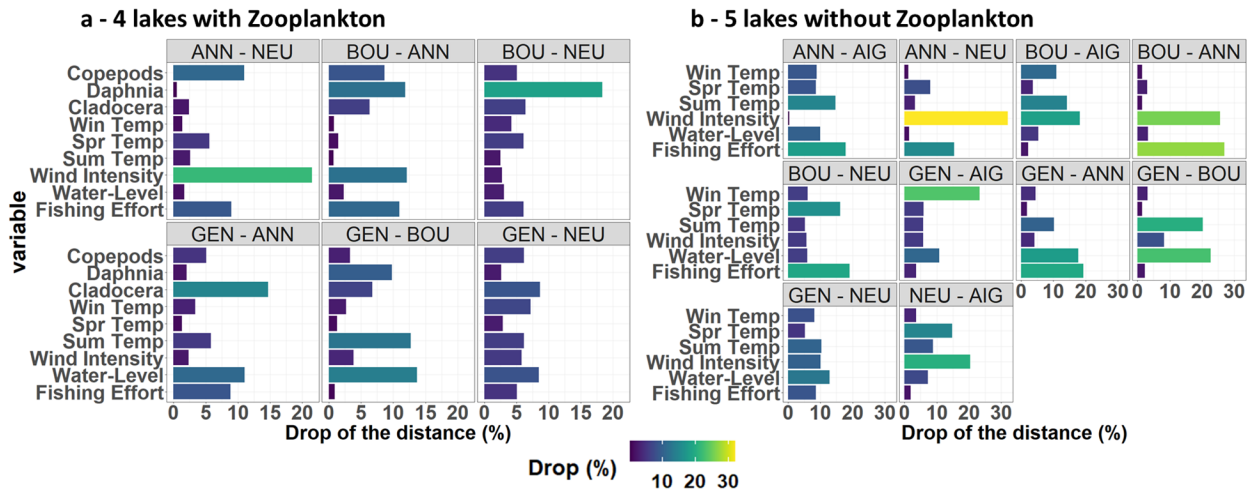


Fig. C2. Pairwise drops of distance values when a variable is removed from the dataset with the INTER scaling method for (a) four lakes with the zooplankton abundance variables and (b) five lakes without the zooplankton abundance variables. The higher the percentage drop, the higher the contribution of that variable to the multivariate distance value.

The contribution of each environmental variable to the distance between two lakes were consistent with the outputs of the INTRA transformation. Zooplankton variables still contribute significantly to the distance value, but usually once at a time with the INTER approach. Winter and spring temperature tend to be the least contributing variables overall.