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Variation partitioning (constrained ordination)

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R functions

- **varpart** (library vegan) - variation partitioning (using RDA, CCA or db-RDA) among up to four matrices of environmental variables. First argument (Y) is dependent variable, usually the matrix of species composition (the function calculates RDA, or, if `chisquare = TRUE`, CCA), but could be also only a single variable (in that case it calculates linear regression) or distance matrix (applying db-RDA using the function `capscale`). Further arguments (up to four) are (groups of) explanatory variables. The function uses either formula interface (with `~`, see [examples](#)) or matrices. The interpretation should be based on adjusted R^2 , although raw R^2 is also reported (for CCA, adjusted R^2 is calculated by permutation method of Peres-Neto et al. 2006 and may slightly vary between re-analyses of the same data).
- **plot.varpart** (library vegan) - draws Venn's diagram with fractions of explained variation. In default setting it doesn't show negative values of explained variation (argument `cutoff = 0`). The function can use arguments of `showvarparts` below, e.g. to add the labels for individual (groups of) variables (Xnames), or colors of the fractions (bg). Consult `?plot.varpart` for more details.
- **showvarparts** (library vegan) - draws schema of Venn's diagram with codes of individual fractions.

From:

<https://anadat-r.davidzeleny.net/> - **Analysis of community ecology data in R**

Permanent link:

https://anadat-r.davidzeleny.net/doku.php/en:varpart_r?rev=1554544889

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