



Agglomerative clustering of climate networks by representation optimization

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We develop a new agglomerative network clustering technique that aims at finding an optimal representation of the original network by a network of clusters. The method is not based on finding community structure alone but also uses distance information and the principle of node splitting invariance.

Here, we apply our new approach to a climate network representing linear correlations in global surface air temperature dynamics, and present a 100 clusters solution which seems to recover well-known regions of the climate system.