

be extended to the heatmap. In this way, when a station is clicked in the geomap, the timeline will change accordingly and the corresponding records in the heatmap will also be highlighted. Second, this functionality can also be extended to the visualization of co-clustering. The small multiples, timeline and geomap can be linked during the results phase as well. For example, if a user is interested in a specific co-cluster (e.g. station-cluster3/year-cluster2), they can click on the co-cluster to highlight it in the heatmap. It will then also highlight the corresponding co-cluster within both the small multiples and the timeline. Third, the functionality can be expanded by allowing users to use their own spatial point or polygon datasets. Currently a user can upload their own attribute dataset but not yet their own spatial point or polygon definition. This means that practical use is limited to Dutch point datasets. In the next version, users can upload their own map data in geojson format, either as point or polygon data. This will enable clustering analysis to be applied a wider range of datasets and geographic contexts. Fourth, we would like to allow users to set both their own color scheme as well as define their own class breaks. Currently the color scheme and class breaks are predefined for the temperature dataset. In the next version, users will be encouraged to select their own color scheme and pick appropriate class breaks based on their dataset and objectives of their analysis. Fifth, the present platform has only one single algorithm for co-clustering analysis (BBAC_I). Although interesting patterns can be revealed, different datasets and analytical objectives require more clustering algorithms. Thus, in the next version, we plan to add co-clustering algorithms (e.g. minimum sum-squared residue co-clustering algorithm) or one-way clustering algorithms (e.g. self-organizing maps (SOMs)). Finally, the platform can then be released as a stand-alone website and the underlying client and server-side code can be made available as open-source.

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