The display of Corona incidences in space and time

The representation of the spacial and temporal dispersion of the Corona pandemic is a key issue of epidemiologic research but also of public media. This issue is often realized via maps which are often animated. The web-application which is presented here (https://www.inwt-statistics.com/read-blog/covid-19_heat-map_of-local_7-day_incidences_over_time.html) uses an alternative statistical concept for the display of Corona incidences. Instead of the standard assumption of a uniform distribution over the reference area we use the approach of Gross et al. (2020). The gain of this approach is the joint analysis of neighboring areas.

This general statistical approach is applied here for the estimation of local Corona incidences in Germany. The approach avoids the discontinuities at the borderlines of counties which appear in standard maps by a joint analysis of neighboring counties. The focus of the presentation is the realization of this concept by a web-application and its use. By three examples we demonstrate that during the second Corona wave there exist in Germany fixed local clusters which may broaden over time and which may also merge.

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Rendtel, U.; Neudecker, A.; Fuchs, L. (2021): Die Darstellung von Inzidenzgebieten mit simulierten Geokoordinaten. (The display of incidence areas by simulated geo-coordinates. In German) AStA Wirtschafts- und Sozialstatistisches Archiv, 15, Online under https://doi.org/10.1007/s11943-021-00288-x