

## Gridded Population – new data sets for an improved disaggregation approach

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### Abstract

There is a demand on population data that are independent from administrative areas. Raster representations meet this demand but are not yet available for all European countries. Spatial disaggregation of population data can overcome this gap and has been performed on a European scale based on CORINE land cover data (CLC). The drawback of this approach is the limited spatial resolution of the CLC data set that leads to over-/underestimation of sparsely populated areas depending on the applied method.

With the recently published EEA Fast Track Service Precursor on Land Monitoring a new data set is now available that provides the degree of soil sealing for EU27+ countries. Applying this data set as a proxy for population density the spatial disaggregation can be improved significantly. Since the soil sealing is not directly corresponding to residential building density a number of pre-processing steps are required beforehand. These steps are defined as simple rules and require CLC data as additional input.

The presentation will show the results of the disaggregation for a European transect and detailed accuracy assessment for the territory of Austria. A comparison between the CLC approach and the new soil sealing based technique will be presented and validated against the Austrian population grid provided by Statistik Austria. Remaining discrepancies will be discussed and potential improvements proposed. Finally a proposal for cooperation will be made in order to validate the product in other European countries.