

Linked Micromap Plots for South America – General Design Considerations and Specific Adjustments

Linked Micromap (LM) plots have been in use in the United States of America (USA) since their introduction in 1996 as an effective way to display regional data, such as for states or counties. However, LM plots were always hard to create by non--experts. The introduction of the micromap R package has simplified the construction of LM plots for arbitrary geographic regions by facilitating the use of external GIS features (such as shapfiles) as the basis for the maps. In this article, we will introduce LM plots for countries from South America. However, spatial representations of features are often not immediately suitable for LM plots, even after some automated simplification of the boundaries of the map regions. A common problem is that relatively small geographic regions are often not visible when plotted in LM plots. Thus, it is necessary to enlarge small regions and display them on the outside of the main map. We introduce some algorithmic guidelines on how small regions can be addressed in LM plots for South America. Moreover, we will provide recommendations how to include areas into LM plots that are far away from the main geographic region.