

kmap()

François Briatte

March 13, 2012

Description

This is a code snippet that I use to produce maps like the ones on the next page. My current research relies extensively on European health data, for which I provide example data and maps. It might be of help to anyone working on European country-level data, which is fairly common in comparative politics.

The code writes the `kmap()` function to work with the associated dataset and shapefiles; see `README` for a description of both. It relies on ISO-2 alphabetical country codes to match them together. I still need to write a full-fledged function to make the data and graphics completely flexible.

Use

You will need `R`, your data and a few ESRI shapefiles that can be read with the `maptools` package.

I am working on an improved version of the code that would use `ggplot2` to draw the maps with more gusto.

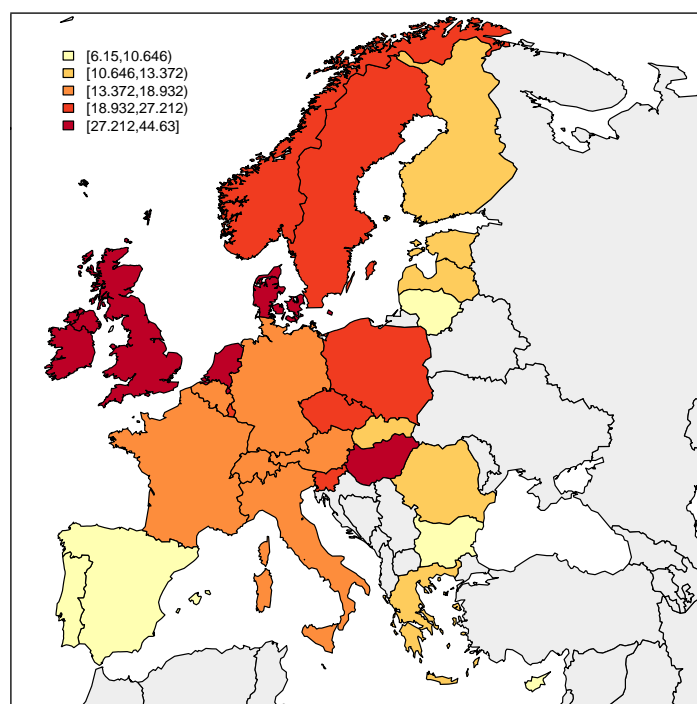
The `kmap` function is coded in one line. It accepts:

- `v`, a variable
- `q`, a number of quantiles over which to split the data
- `xcoord` and `ycoord`, the map coordinates

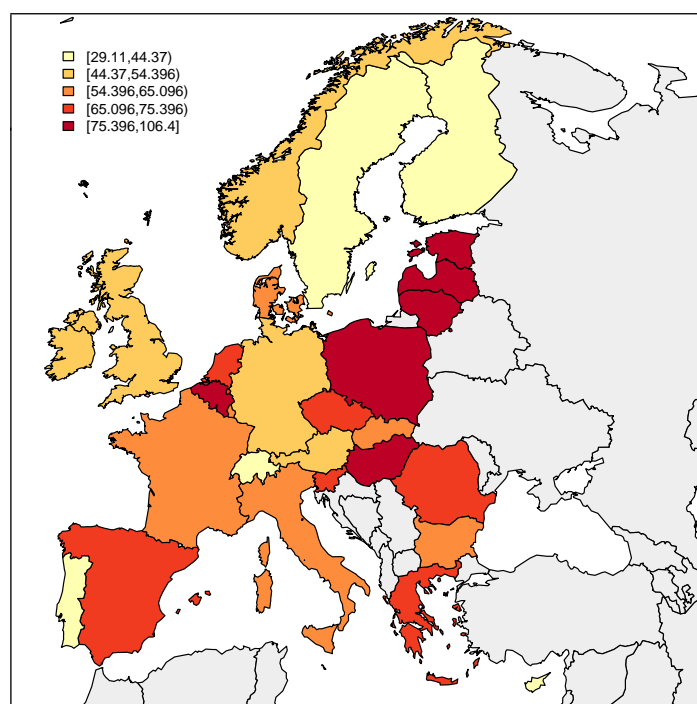
The map is tentatively centred on the European Union by default. If no quantile is passed to the function, it will output `q = 4` quartiles. The intervals are returned by the function in object `class`.

```
> # Lung cancer mortality rates, females  
> kmap(eco$mr_lung_f, q=5)
```

The next page shows two examples.



(a) Males



(b) Females

Figure 1: Estimated lung cancer mortality in European countries, 2008. All rates are age-standardised to the European population. Data: European Cancer Observatory. Maps: GISCO - Eurostat, European Commission, 2006.

Credits

Baptiste Coulmont assisted with the code, and Éric Verdier made encouraging comments on first drafts.