

GEOXP, geographical exploratory mapping functions

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- An extensive set of MATLAB functions that provide links between maps and statistics.
- Uses functions from the spatial econometrics toolbox.
- Soon to be available at www.spatial-econometrics.com

Easy to use

- All adhere to the calling convention:
- `barmap(long,lat,variable,carte,label,symbol);`
- consistently documented: typing 'help barmap' produces:

PURPOSE: This function links a map and a bar plot

USAGE: `out=barmap(long,lat,variable,carte,label,symbol)`

where :

`long` = `n x 1` vector of coordinates on the first axis

`lat` = `n x 1` vector of coordinates on the second axis

`variable` = `n x 1` vector of the variable to study

`carte` = `n x 2` optional matrix giving the polygons
of the edges of the spatial units

`label` = `n x 1` optional variable used to label selected observations

`symbol` = * `symbol=1` : selected spatial units are
marked with a different symbol

* `symbol=0` : selected spatial units are
marked with a different color only (default)

OUTPUTS: `out` = (`n x 1`) 0-1 variable: selected spatial units are marked with a 1

MANUAL: Select points on the map by clicking with the left mouse button

Select bars on the bar plot by clicking with the left mouse button

You can select points inside a polygon on the map:

- right click to set the first point of the polygon

- left click to set the other points

- right click to close the polygon

Selection is lost when you switch graph

To quit, click the middle button or press 'q'

A large number of functions

angleplotmap : This function links a map and an angle plot
(only the angle plot is active)

barmap : This function links a map and a bar plot

boxplotmap : This function links a map and a box and whiskers plot
(only the box and whiskers plot is active)

clustermmap : This function links a map and a bar plot of the
classification variable created by the kmeans method

dblebarmap : This function links a map and two bar plots

dbledensitymap : This function links a map and two density estimators

dblehistomap : This function links a map and two histograms

densitymap : This function links a map and a density estimator

driftmap : This function adds a grid to the map and for each
rectangle of the grid computes

ginimap : This function links a map and a Lorentz Curve

histobarmap : This function links a map, an histogram and a bar plot

histomap : This function links a map and an histogram

mdsmap : This function links a map and mds analysis

moranplotmap : This function links a map and a moran scatterplot

neighbourmap : This function links a map and a neighbour plot
(scatterplot of variable against variable)

pcamap : This function links a map and a pca plot

polyboxplotmap : This function links a map and a box and whiskers plots

pprmap : This function links a map and two scatterplots
of projections found by ppr

scatter3dmap : This function links a map and a three-dimensionnal scatterplot

scattermap : This function links a map and a two-dimensionnal scatterplot

sarmap : adjust a spatial autoregressive model
on a subregion selected on the map

semmap : adjust a spatial error model
on a subregion selected on the map

variocloudmap : This function links a map and a variogram cloud
(only the variogram cloud is active)