

Package ‘GeoBoxplot’

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Type Package

Title Geographic Box Plot

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Description Make geographic box plot as detailed in Willmott et al. (2007).

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boxplot_geog	<i>Geographic Box Plot</i>
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Description

Make geographic box plot as detailed in Willmott et al. (2007).

Usage

```
boxplot_geog(area, data, fence, groups)
```

Arguments

area	the associated areas for each data value
data	values to be box-plotted
fence	fence for box plot (by default =1)
groups	factor levels of data values

Value

A geographic box plot

References

Willmott, C. J., S. M. Robeson, and K. Matsuura, 2007. Geographic box plots. *Physical Geography*, 28, 331-344, DOI: 10.2747/0272-3646.28.4.331.

See Also

[summary_geog](#)

Examples

```
data(pdens2000)
area<-pdens2000$Area; data<-pdens2000$Popdents; fence=1; groups<-pdens2000$Region
boxplot_geog(area, data, fence, groups)
```

boxplot_geog_example *An example comparing traditional and geograoigic box plots*

Description

Make box plots as detailed in Willmott et al. (2007).

Usage

```
boxplot_geog_example(Area, Popdents, State)
```

Arguments

Area	the associated areas for each data value
Popdents	values to be box-plotted
State	factor levels of data values

Value

Both traditional and geographic box plots

References

Willmott, C. J., S. M. Robeson, and K. Matsuura, 2007. Geographic box plots. *Physical Geography*, 28, 331-344, DOI: 10.2747/0272-3646.28.4.331.

See Also

[summary_geog](#)

Examples

```
data(pdens2000)
Area<-pdens2000$Area;Popdents<-pdens2000$Popdents;State<-pdens2000$State
boxplot_geog_example(Area,Popdents,State)
```

pdens2000

2000 Census Bureau estimate of each state's population.

Description

Human population density (in the year 2000) within the contiguous 48 United States.

Usage

```
data(pdens2000)
```

Format

A data frame with 48 observations on the following 4 variables.

State a categorical vector, each state's name

Area a numeric vector, each state's area

Popdents a numeric vector, each state's population using the 2000 Census Bureau estimate

Region a factor, each state's region

References

Willmott, C. J., S. M. Robeson, and K. Matsuura, 2007. Geographic box plots. *Physical Geography*, 28, 331-344, DOI: 10.2747/0272-3646.28.4.331.

See Also

[summary_geog](#), [boxplot_geog](#)

summary_geog

Summary for the geographical box plot

Description

Summaries for geographic box plot

Usage

```
summary_geog(area, data, fence)
```

Arguments

area	the associated areas for each data value
data	values to be box-plotted
fence	fence for box plot (by default =1)

Value

a list of Summary, outliers, and spatial_weighted_mean of the data

References

Willmott, C. J., S. M. Robeson, and K. Matsuura, 2007. Geographic box plots. *Physical Geography*, 28, 331-344, DOI: 10.2747/0272-3646.28.4.331.

See Also

[boxplot_geog](#)

Examples

```
data(pdens2000); area<-pdens2000$Area; data<-pdens2000$Popdens; fence=1  
summary_geog(area, data, fence)
```

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