

# Package ‘spMaps’

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**Type** Package

**Title** Europe SpatialPolygonsDataFrame Builder

**Version** 0.4.0

**Description** Build custom Europe SpatialPolygonsDataFrame, if you don't know what is a SpatialPolygonsDataFrame see SpatialPolygons() in 'sp', by example for mapLayout() in 'antaresViz'.

Antares is a powerful software developed by RTE to simulate and study electric power systems (more information about 'Antares' here: <<https://antares-simulator.org/>>).

**URL** <https://github.com/rte-antares-rpackage/spMaps>

**BugReports** <https://github.com/rte-antares-rpackage/spMaps/issues>

**License** GPL (>= 2) | file LICENSE

**LazyData** TRUE

**Encoding** UTF-8

**Depends** R (>= 2.10), sp, raster, rgeos

**RoxygenNote** 7.0.1

**Suggests** testthat, covr, antaresViz

**NeedsCompilation** no

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**Repository** CRAN

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`getEuropeReferenceTable`*Get custom Europe map (SpatialPolygonsDataFrame)*

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### Description

This function builds a custom Europe map and return a `SpatialPolygonsDataFrame`. The output can be use by example in [mapLayout](#) with the `map` argument.

### Usage

```
getEuropeReferenceTable()

getEuropeCountries(mergeCountry = TRUE)

getEuropeStates()

getSpMaps(countries = "all", states = NULL, mergeCountry = TRUE)
```

### Arguments

<code>mergeCountry</code>	boolean. Merge country ? (UK, Belgium ...). Default to TRUE.
<code>countries</code>	character. Vector of wanted countries, without details / states. Must referred to code column of the reference table <code>getEuropeReferenceTable</code> . "all" (default) keep all countries
<code>states</code>	character. Vector of wanted countries, with details / states. Must referred to code column of the reference table <code>getEuropeReferenceTable</code> . "all" keep all countries. NULL as default.

### Value

`SpatialPolygonsDataFrame`

### Examples

```
# default map : Europe without states
europe_cty <- getSpMaps()
plot(europe_cty)

# subset on some countries
ref_table <- getEuropeReferenceTable()

italy_spain_fra <- getSpMaps(countries = c("FRA", "ITA", "ESP"))
plot(italy_spain_fra)

## Not run:
italy_spain_fra_states <- getSpMaps(countries = NULL, states = c("FRA", "ITA", "ESP"))
```

```
plot(italy_spain_fra_states)

# combine countries and states
combine_map <- getSpMaps(countries = c("ITA", "ESP"), states = "FRA")
plot(combine_map)

# build your custom map : you can use directly data
# to subset the area you really want
europe_states <- getEuropeStates()
europe_countries <- getEuropeCountries()

# for example, have a look to GBR states map
summary(europe_states)
gbr_states_districts <- europe_states[
  europe_states$code %in% "GBR" &
  europe_states$type %in% "Administrative County",]
plot(gbr_states_districts)

# combine with another map : you just have to have the same columns...
# getSpMaps only return "name" and "code" column
custom_states <- rbind(
  getSpMaps(countries = NULL, states = "FRA"),
  gbr_states_districts[, c("name", "code"), drop = FALSE])

plot(custom_states)

## End(Not run)
```

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