Package 'mapSenegal'

May 8, 2026

Type Package

Title Administrative Boundaries of Senegal

Version 0.1.1

Description The administrative boundaries of Senegal are provided at several levels, including regions, departments, arrondissements and communes. The Global Administrative Areas database, or `GADM` <https://gadm.org/>, is the primary source for these layers. The dataset is complemented by the incorporation of additional geographic layers, such as localities, universities, roads, or health facility locations.

Depends R (>= 3.5.0), sf

URL https://github.com/mapSenegal/mapSenegal

BugReports https://github.com/mapSenegal/mapSenegal/issues

Suggests mapsf

License GPL-3

Encoding UTF-8

RoxygenNote 7.3.3

NeedsCompilation no

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Repository CRAN

Date/Publication 2026-04-07 07:50:02 UTC

Contents

`sn_arrondissements` *Arrondissements*

Description

Arrondissements of Senegal.

- GID_1: identifier for regions
- GID_2: identifier for departments
- GID_3: unique identifier for arrondissements
- NAME: name of the arrondissement
- CC_3: unknown code

Usage

```
sn_arrondissements()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter.

Examples

```
ardt <- sn_arrondissements()
plot(ardt)
if (require("mapsf")) {
  mf_map(ardt)
  mf_title("Arrondissements of Senegal")
}
```

sn_communes *Communes*

Description

Communes of Senegal.

- GID_1: identifier for regions
- GID_2: identifier for departments
- GID_3: identifier for arrondissements
- GID_4: identifier for communes
- NAME: name of the arrondissement
- CC_4: unknown code

Usage

```
sn_communes()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter.

Examples

```
com <- sn_communes()
plot(com)
if (require("mapsf")) {
  mf_map(com)
  mf_title("Communes of Senegal")
}
```

sn_country *Country*

Description

Senegal, level-0 entity.

- GID_0: unique identifier for countries
- NAME: name of the country

Usage

```
sn_country()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter.

Examples

```
senegal <- sn_country()
plot(senegal)
if (require("mapsf")) {
  mf_map(senegal)
  mf_title("Senegal")
}
```

sn_departments *Departments*

Description

Departments of Senegal, level-2 entities.

- GID_1: identifier for regions
- GID_2: unique identifier for departments
- NAME: name of the department
- CC_2: unknown code
- HASC_2: hierarchical administrative subdivision codes for level-2 entities
- POP_RGPH5: 2023 population
- POP_2024: 2024 population

Usage

```
sn_departments()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter.

Examples

```
dep <- sn_departments()
plot(dep)
if (require("mapsf")) {
  mf_map(dep)
  mf_title("Departments of Senegal")
}
```

---

sn_health_facilities *Health facilities*

Description

Health facilities of Senegal

- NAME: health facility name
- CC_1: unkown code
- CC_2: unkown code
- TYPE: health facility category

Usage

```
sn_health_facilities()
```

Value

An sf object is returned.

Source

Direction des Travaux geographiques et de la cartographie, Senegal.

Examples

```
hf <- sn_health_facilities()
plot(hf)
if (require("mapsf")) {
  mf_map(hf, var = "TYPE", type = "symb", cex = 1, pal = "Dark 3", add = FALSE)
  mf_title("Health Facilities of Senegal")
}
```

`sn_localities` *Localities*

Description

Localites of Senegal.

- NAME: locality name
- CC_1: unkown code
- CC_2: unkown code

Usage

```
sn_localities()
```

Value

An sf object is returned.

Source

Direction des Travaux geographiques et de la cartographie, Senegal.

Examples

```
loc <- sn_localities()
plot(loc)
if (require("mapsf")) {
  mf_map(loc)
  mf_title("Localities of Senegal")
}
```

sn_neighbors *Neighboring countries*

Description

Neighboring countries of Senegal, level-0 entities.

- GID_0: unique identifier for countries
- NAME: name of the country

Usage

```
sn_neighbors()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter. Countries were cropped using a 100 km buffer around the Senegal bounding box.

Examples

```
neighbors <- sn_neighbors()
plot(neighbors)
if (require("mapsf")) {
  mf_map(neighbors)
  mf_label(neighbors, "NAME", halo = TRUE)
  mf_title("Senegal and Neighboring Countries")
}
```

sn_regions *Regions*

Description

Regions of Senegal, level-1 entities.

- GID_1: unique identifier for regions
- NAME: name of the region
- CC_1: unknown identifier
- HASC_1: hierarchical administrative subdivision codes for level-1 entities
- ISO: ISO codes for level-1 entities (ISO-3166-2)
- POP_RGPH4: 20xx population
- POP_RGPH5: 2023 population

Usage

```
sn_regions()
```

Value

An sf object is returned.

Source

Codes and geometries have been extracted from the GADM database v4.1 (https://gadm.org/). Geometries precision has been fixed to 1 meter.

Examples

```
reg <- sn_regions()
plot(reg)
if (require("mapsf")) {
  mf_map(reg)
  mf_title("Regions of Senegal")
}
```

---

sn_roads *Roads*

Description

Roads of Senegal.

- TYPE: road type. 1 for motorways, 2 for national roads, 3 for regional roads, 4 for departmental roads, 5 for other roads.
- NAME: road name

Usage

```
sn_roads()
```

Value

An sf object is returned.

Source

Direction des Travaux geographiques et de la cartographie, Senegal.

Examples

```
roads <- sn_roads()
plot(roads)
if (require("mapsf")) {
  mf_map(roads, var = "TYPE", type = "typo", lwd = 2)
  mf_title("Roads of Senegal")
}
```

`sn_universities` *Universities*

Description

Universities of Senegal.

- NAME: university name
- NB_FACULTIES: number of faculties
- NB_STUDENTS: number of students

Usage

```
sn_universities()
```

Value

An sf object is returned.

Source

Dataset gathered by Labaly Toure.

Examples

```
univ <- sn_universities()
plot(univ)
if (require("mapsf")) {
  mf_map(univ, var = "NB_STUDENTS", type = "prop", add = FALSE)
  mf_title("Universities of Senegal")
}
```

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