Package 'kuniezu'

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Type Package

Title Assistance on the National Geography of Japan

Version 0.1.1

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Description Data set on Japan's national geography.
Provides tools for efficient processing and visualization of
unique coordinate systems.

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URL https://uribo.github.io/kuniezu/, https://github.com/uribo/kuniezu

BugReports https://github.com/uribo/kuniezu/issues

Depends R (>= 3.3.0)

Imports dplyr (>= 0.8.5), ggplot2 (>= 3.3.0), leaflet (>= 2.0.3),
magrittr (>= 1.5), parzer (>= 0.1.4), purrr (>= 0.3.3), sf (>=
0.9.1), stringr (>= 1.4.0)

Suggests testthat (>= 2.1.0), covr (>= 3.5.0)

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

NeedsCompilation no

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Geospatial Information Authority of Japan [cph] (Author of Global Map
Japan Data)

Repository CRAN

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R topics documented:

`extreme_points` *The extreme points of Japan*

Description

A list of the east, west, south and north ends of Japan's territory (including remote islands). The northernmost position is what the government claims.

Usage

```
extreme_points
```

Format

A four length list consisting of sfc

See Also

https://www.gsi.go.jp/KOKUJYOHO/center.htm

Examples

```
extreme_points

extreme_points$east

require("purrr")
extreme_points %>%
  reduce(c)
```

GeomJpSegment *Drawing a segment line segment that shows the boundary*

Description

Drawing a segment line segment that shows the boundary

Usage

```
geom_jpsegment(...)
```

Arguments

...	other arguments passed on to geom_segment.

Value

ggplot object and plot

See Also

move_jpn_rs

Examples

```
require("ggplot2")
require("sf")
move_jpn_rs(jgd2011_bbox) %>%
  ggplot() +
  geom_sf() +
  geom_jpsegment()
```

gsi_tiles *Add a tile layer from GSI*

Description

Add a tile layer from Geospatial Information Authority of Japan (GSI).

Usage

```
gsi_tiles
```

Format

A 48 length, leaflet objects.

Details

Stores map tiles that can be used with leaflets. Please follow the terms and conditions of use for the applicable tile at http://maps.gsi.go.jp/development/ichiran.html when using it. It contains tiles that can be used as base maps for interactive maps based on leaflet. See example section its use in leaflet. To use a mapview, a tile name is given to `mapview::mapview(map = )`.

Examples

```
names(gsi_tiles)
require("leaflet")
gsi_tiles[[1]]

gsi_tiles[[1]] %>%
  addCircles(
    data = sf::st_transform(extreme_points %>%
      purrr::reduce(c),
      crs = 4326))
```

`jgd2011_bbox` *JGD2011 / Japan Plane Rectangular CS*

Description

Japanese Geodetic Datum 2011

Usage

```
jgd2011_bbox
```

Format

A sf (CRS EPSG:6668) with 19 rows 3 variables:

- system
- epsg
- geometry

Value

sf

Author(s)

Original polygon data copyright is the Geospatial Information Authority of Japan; compiled for R by Shinya Uryu.

References

Global Map Japan https://www.gsi.go.jp/kankyochiri/gm_jpn.html. Created by processing Global Map Japan.

Examples

```
require("sf")
jgd2011_bbox
```

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jp47prefectural_offices

Japan Prefectural Goverment Offices

Description

Locations of 47 government offices in Japan's prefectures.

Usage

```
jp47prefectural_offices
```

Format

A sf contains 2 column and 47 rows.

Details

The original file was downloaded from https://www.gsi.go.jp/KOKUJYOHO/center.htm, which parses the PDF data and organizes the coordinates of the prefectural hall.

Examples

```
require("sf")
jp47prefectural_offices
```

move_jpn_rs *Clip and move some geometries for mapping*

Description

Move geometry differently from the real-life arrangement for mapping. When displaying a map showing Japan, the southern islands are sometimes moved. To achieve this, we need to perform false operations on the geometry.

Usage

```
move_jpn_rs(data, clip = TRUE)
```

Arguments

data	sf that records the prefecture or municipality of Japan
clip	An option to hide isolated island that are separated from other geometry and have a small area.

Value

sf. Geometry in Tokyo may have rows duplicated in Honshu and islands.

Examples

```
require("sf")
move_jpn_rs(jgd2011_bbox)
```

parse_lon_dohunbyo *Parse longitude and latitude values in DMS*

Description

Parse longitude and latitude values in DMS

Usage

```
parse_lon_dohunbyo(longitude)

parse_lat_dohunbyo(latitude)
```

Arguments

longitude	longitude values
latitude	latitude values

Value

numeric vector

Examples

```
x <- "\u6771\u7d4c139\u5ea644\u520628\u79d28869"
parse_lon_dohunbyo(x)
y <- "\u5317\u7def35\u5ea639\u520629\u79d21572"
parse_lat_dohunbyo(y)
```

---

replace_dohunbyo_kanji

Replace Kanji in degrees, minutes, and seconds with symbols

Description

Replace Kanji in degrees, minutes, and seconds with symbols

Usage

```
replace_dohunbyo_kanji(x)
```

Arguments

x	character

Value

character vector

Examples

```
x <- "\u6771\u7d4c139\u5ea644\u520628\u79d28869"
replace_dohunbyo_kanji(x)
y <- "\u5317\u7def35\u5ea639\u520629\u79d21572"
replace_dohunbyo_kanji(y)
```

st_nearest_jgd2011 *Identify the Japan plane rectangular CS*

Description

Returns the value when the coordinates of ESPG:4326 given to the input are replaced with those of the Japan Plane Rectangular CS.

Usage

```
st_nearest_jgd2011(geometry)

st_detect_jgd2011(geometry)
```

Arguments

geometry	geometry (POINT, EPSG:4326)

Details

- `st_nearest_jgd2011()`: It returns the coordinate system closest to the given ground object. This is valid even when the coordinates are at sea.
- `st_detect_jgd2011()`: Identify the coordinate system in which the given object is located.

Value

numeric vector

See Also

https://www.gsi.go.jp/LAW/heimencho.html

Examples

```
require("sf")
p <-
  st_sfc(sf::st_point(c(140.77, 36.8)), crs = 4326)
st_nearest_jgd2011(p)

st_detect_jgd2011(p)
st_detect_jgd2011(st_sfc(sf::st_point(c(140.73, 36.8)), crs = 4326))
```

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