

# Package: kuniezu (via r-universe)

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**Type** Package

**Title** Assistance on the National Geography of Japan

**Version** 0.1.2.9000

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

**License** MIT + file LICENSE

**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), magrittr (>= 1.5), parzer (>= 0.1.4), purrr (>= 0.3.3), sf (>= 0.9.1), stringr (>= 1.4.0)

**Suggests** leaflet (>= 2.0.3), testthat (>= 2.1.0), covr (>= 3.5.0)

**Encoding** UTF-8

**LazyData** true

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.2.3

**Repository** <https://uribo.r-universe.dev>

**RemoteUrl** <https://github.com/uribo/kuniezu>

**RemoteRef** HEAD

**RemoteSha** 3cbd88fc64118069be8b3d9fc9004c8c96baaf9e

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|-----------------------|------------------------------------|
| <b>extreme_points</b> | <i>The extreme points of Japan</i> |
|-----------------------|------------------------------------|

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**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/KOKUJYOH0/center.htm>

**Examples**

```
extreme_points

extreme_points$east

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

---

|               |   |
|---------------|---|
| GeomJpSegment | <i>Drawing a segment line segment that shows the boundary</i> |
|---------------|---|

---

**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 | <i>Add a tile layer from GSI</i> |
|-----------|----------------------------------|

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**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 <https://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/kankyochoiri/gm\\_jpn.html](https://www.gsi.go.jp/kankyochoiri/gm_jpn.html). Created by processing Global Map Japan.

## Examples

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

---

jp47prefectural\_offices

*Japan Prefectural Goverment Offices*

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## 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/KOKUYOHO/center.htm>, which parses the PDF data and organizes the coordinates of the prefectoral 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**

|                   |   |
|-------------------|---|
| <code>data</code> | <code>sf</code> that records the prefecture or municipality of Japan                            |
| <code>clip</code> | 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**

|                        |                  |
|------------------------|------------------|
| <code>longitude</code> | longitude values |
| <code>latitude</code>  | 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 EPSG: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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