

# Package: oceanic (via r-universe)

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**Type** Package

**Title** Location Identify Tool

**Version** 0.1.7

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**Description** Determine the sea area where the fishing boat operates. The latitude and longitude of geographic coordinates are used to match oceanic areas and economic sea areas. You can plot the distribution map with dotplot() function. Please refer to Flanders Marine Institute (2020) <doi:10.14284/403>.

**License** GPL (>= 2)

**Depends** R (>= 3.5.0)

**Imports** sf, sp, broom, ggplot2, maps, spData, methods

**Encoding** UTF-8

**RoxygenNote** 7.2.1

**LazyData** true

**Collate** 'idfocean.R' 'idfeez.R' 'data.R' 'dotplot.R' 'idfland.R' 'idfcode.R' 'idfport.R' 'sixtytoten.R' 'idfoutliers.R'

**NeedsCompilation** no

**Repository** CRAN

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dotplot	<i>dotplot</i>
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## Description

This function allows you to draw data distribution geographically from a numeric vector.

## Usage

```
dotplot(
  lona,
  lata,
  map = "ALL",
  grid = FALSE,
  color = "#FF0000",
  size = 1,
  shape = 16
)
```

## Arguments

lona	Input the longitude.
lata	Input the latitude.
map	default is "ALL", Other possible options is "PAC", "IND" and "ATL".
grid	default is FALSE, when TRUE show the 5 degree grid.
color	default is "#FF0000", define the color of points.
size	default is 1, define the size of points.
shape	default is 16, define the shape of points.

## Value

the plot of lona and lata.

## Examples

```
dotplot(141,23)
```

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eez_rg	<i>Eez Coefficients</i>
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**Description**

Predictor feature coefficients as published in paper.

**Usage**

```
eez_rg
```

**Format**

eez\_rg data.frame with 2 variables: geneName, coef

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idfcode	<i>idfcode</i>
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**Description**

This function allows you to convert the location to 4 digital code

**Usage**

```
idfcode(lon, lat)
```

**Arguments**

lon	Input the longitude.
lat	Input the latitude.

**Examples**

```
idfcode(22,-5)
```

idfeez

*idfeez*

---

**Description**

This function allows you to identify location in which EEZ from a numeric vector.

**Usage**

```
idfeez(lon, lat, ac = TRUE)
```

**Arguments**

lon	Input the longitude.
lat	Input the latitude.
ac	logical. If TRUE will return full name of EEZ.

**Examples**

```
idfeez(141,23)
```

---

idfland

*idfland*

---

**Description**

This function allows you to identify location in which land or ocean.

**Usage**

```
idfland(lon, lat)
```

**Arguments**

lon	Input the longitude.
lat	Input the latitude.

**Examples**

```
idfland(22,-5)
```

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idfocean	<i>idfocean</i>
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**Description**

Return The Pacific Ocean(PAC), Indian Ocean(IND) or Atlantic Ocean(ATL) of your coordinate.

**Usage**

```
idfocean(lon, lat)
```

**Arguments**

lon	Input the longitude.
lat	Input the latitude.

**Value**

the ocean of lon and lat.

**Examples**

```
idfocean(125,20)
```

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idfoutliers	<i>idfoutliers</i>
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**Description**

This function help you to find out the Outliers

**Usage**

```
idfoutliers(x, i = 3, min = 0.25, max = 0.75, na.rm = TRUE)
```

**Arguments**

x	Input the data filed(should be a list and the data format must be numeric)
i	Input the multiple of IQR(default is 3)
min	probabilities of values between 0 and 1(default is 0.25)
max	probabilities of values between 0 and 1(default is 0.75)
na.rm	removes the NA values (default value is TRUE)

**Examples**

```
dt <- data.frame(x=c(1,1,1,1,1,1,1,1,1,1,10))
idfoutliers(dt$x)
```

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idfport	<i>idfport</i>
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**Description**

This function allows you to identify port name from a numeric vector.

**Usage**

```
idfport(lon, lat)
```

**Arguments**

lon	Input the longitude.
lat	Input the latitude.

**Examples**

```
idfport(121.8006, 25.14065)
```

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port	<i>port position</i>
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**Description**

define the position of port in the world

**Usage**

```
port
```

**Format**

port data.frame with 2 variables: row.names, id

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`sixtytoten`

*sixtytoten*

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**Description**

This function allows you to transfer the coordinate system from sexagesimal to decimal

**Usage**

`sixtytoten(num)`

**Arguments**

`num`            Input a value of longitude or latitude.

**Examples**

`sixtytoten(121.49)`

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