Package 'robis'

July 6, 2020

Title Ocean Biodiversity Information System (OBIS) Client

Description Client for the Ocean Biodiversity Information System (<https://obis.org>).

Version 2.3.9

Date 2020-07-01

URL <https://github.com/iobis/robis>

BugReports <https://github.com/iobis/robis/issues>

Depends R (>= 3.1.3)

Imports httr, dplyr, jsonlite, leaflet, ggplot2, tidyr, httpcache, tibble, mapedit, sf, rlang

License MIT + file LICENSE

Suggests testthat

RoxygenNote 7.0.2

NeedsCompilation no

Author Pieter Provoost [cre, aut],
Samuel Bosch [aut],
Ward Appeltans [ctb],
OBIS [cph]

Maintainer Pieter Provoost <pieterprovoost@gmail.com>

Repository CRAN

Date/Publication 2020-07-06 17:00:02 UTC

R topics documented:

---

area   *Fetch a list of areas*

Description

Fetch a list of areas

Usage

```
area()
```

Value

The areas.

Examples

```
areas <- area()
```

---

checklist   *Create a checklist.*

Description

Create a checklist.

Usage

```
checklist(scientificname = NULL, taxonid = NULL, datasetid = NULL,
  nodeid = NULL, areaid = NULL, startdate = NULL, enddate = NULL,
  startdepth = NULL, enddepth = NULL, geometry = NULL, redlist = NULL,
  hab = NULL, flags = NULL, exclude = NULL, verbose = FALSE)
```

Arguments

`scientificname`	the scientific name.
`taxonid`	the taxon identifier (WoRMS AphiaID).
`datasetid`	the dataset identifier.
`nodeid`	the OBIS node identifier.
`areaid`	the OBIS area identifier.
`startdate`	the earliest date on which occurrence took place.
`enddate`	the latest date on which the occurrence took place.
`startdepth`	the minimum depth below the sea surface.
`enddepth`	the maximum depth below the sea surface.
`geometry`	a WKT geometry string.
`redlist`	include only IUCN Red List species.
`hab`	include only IOC-UNESCO HAB species.
`flags`	quality flags which need to be set.
`exclude`	quality flags to be excluded from the results.
`verbose`	logical. Optional parameter to enable verbose logging (default = FALSE).

Value

The checklist.

Examples

```
taxa <- checklist(scientificname = "Tellinidae")
taxa <- checklist(geometry = "POLYGON ((2.3 51.8, 2.3 51.6, 2.6 51.6, 2.6 51.8, 2.3 51.8))")
taxa <- checklist(areaid = 10181)
```

---

dataset   *Create a list of datasets.*

Description

Create a list of datasets.

Usage

```
dataset(scientificname = NULL, taxonid = NULL, datasetid = NULL,
  nodeid = NULL, areaid = NULL, startdate = NULL, enddate = NULL,
  startdepth = NULL, enddepth = NULL, geometry = NULL, redlist = NULL,
  hab = NULL, exclude = NULL, verbose = FALSE)
```

Arguments

`scientificname`	the scientific name.
`taxonid`	the taxon identifier (WoRMS AphiaID).
`datasetid`	the dataset identifier.
`nodeid`	the OBIS node identifier.
`areaid`	the OBIS area identifier.
`startdate`	the earliest date on which occurrence took place.
`enddate`	the latest date on which the occurrence took place.
`startdepth`	the minimum depth below the sea surface.
`enddepth`	the maximum depth below the sea surface.
`geometry`	a WKT geometry string.
`redlist`	include only IUCN Red List species.
`hab`	include only IOC-UNESCO HAB species.
`exclude`	quality flags to be excluded from the results.
`verbose`	logical. Optional parameter to enable verbose logging (default = FALSE).

Value

The datasets.

Examples

```
datasets <- dataset(scientificname = "Tellinidae")
datasets <- dataset(geometry = "POLYGON ((2.3 51.8, 2.3 51.6, 2.6 51.6, 2.6 51.8, 2.3 51.8))")
datasets <- dataset(areaid = 10181)
```

---

get_geometry   *Get a WKT geometry by drawing on a map.*

Description

Get a WKT geometry by drawing on a map.

Usage

```
get_geometry(provider_tiles = "Esri.WorldGrayCanvas")
```

Arguments

`provider_tiles` the base map provider.

---

map_ggplot *Create a ggplot2 map.*

Description

Create a ggplot2 map.

Usage

```
map_ggplot(data, color = "#ff3399")
```

Arguments

data   the occurrences from occurrence().

color   color to be used for the dots.

---

map_leaflet *Create a leaflet map.*

Description

Create a leaflet map.

Usage

```
map_leaflet(data, color = "#ff3399",
  provider_tiles = "Esri.WorldGrayCanvas", popup = function(x) { x["id"] },
  antarctic = FALSE)
```

Arguments

data   the occurrences from occurrence().

color   color to be used for the dots.

provider_tiles   the base map provider.

popup   function generating the popup content.

antarctic   use antarctic polar stereographic projection.

measurements	*Extract measurements or facts from occurrence data with a mof column.*

Description

Extract measurements or facts from occurrence data with a mof column.

Usage

```
measurements(df, fields = "id")
```

Arguments

df	the occurrence dataframe.
fields	columns from the occurrence dataframe to include.

Value

The measurements.

node	*Fetch a list of nodes*

Description

Fetch a list of nodes

Usage

```
node()
```

Value

The nodes

Examples

```
nodes <- node()
```

---

occurrence   *Find occurrences.*

Description

Find occurrences.

Usage

```
occurrence(scientificname = NULL, taxonid = NULL, datasetid = NULL,
  nodeid = NULL, areaid = NULL, startdate = NULL, enddate = NULL,
  startdepth = NULL, enddepth = NULL, geometry = NULL,
  measurementtype = NULL, measurementtypeid = NULL, measurementvalue = NULL,
  measurementvalueid = NULL, measurementunit = NULL, measurementunitid = NULL,
  redlist = NULL, hab = NULL, mof = NULL, absence = NULL, event = NULL,
  dropped = NULL, flags = NULL, exclude = NULL, fields = NULL,
  verbose = FALSE)
```

Arguments

scientificname	the scientific name.
taxonid	the taxon identifier (WoRMS AphiaID).
datasetid	the dataset identifier.
nodeid	the OBIS node identifier.
areaid	the OBIS area identifier.
startdate	the earliest date on which occurrence took place.
enddate	the latest date on which the occurrence took place.
startdepth	the minimum depth below the sea surface.
enddepth	the maximum depth below the sea surface.
geometry	a WKT geometry string.
measurementtype	
	the measurement type to be included in the measurements data.
measurementtypeid	
	the measurement type ID to be included in the measurements data.
measurementvalue	
	the measurement value to be included in the measurements data.
measurementvalueid	
	the measurement value ID to be included in the measurements data.
measurementunit	
	the measurement unit to be included in the measurements data.
measurementunitid	
	the measurement unit ID to be included in the measurements data.
redlist	include only IUCN Red List species.

hab	include only IOC-UNESCO HAB species.
mof	include measurements data (default = NULL).
absence	only include absence records (TRUE), exclude absence records (NULL) or include absence records (include).
event	only include pure event records (TRUE), exclude pure event records (NULL) or include event records (include).
dropped	only include dropped records (TRUE), exclude dropped records (NULL) or include dropped records (include).
flags	quality flags which need to be set.
exclude	quality flags to be excluded from the results.
fields	fields to be included in the results.
verbose	logical. Optional parameter to enable verbose logging (default = FALSE).

Value

The occurrence records.

Examples

```
records <- occurrence(scientificname = "Abra sibogai")
records <- occurrence(taxonid = 141438, startdate = as.Date("2007-10-10"))
records <- occurrence(taxon = 141438, geometry = "POLYGON ((0 0, 0 45, 45 45, 45 0, 0 0))")
```

---

robis	*robis: R client for the OBIS API*

Description

Work in progress

Index