Package 'RAFPALdb'

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Title R-AFPALdb package.

Version 0.0.0.9000

Description Package dedicated to the interaction with and extraction of data stored in AFAPLdb.

Depends R (>= 3.2.2)

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LazyData true

RoxygenNote 5.0.1.9000

Imports RMySQL,
rjson

R topics documented:

`Connect` *Connection to the database*

Description

This function allows you to connect to AFPALdb.

Usage

```
Connect(user = -1, pass = -1, host = -1)
```

Arguments

`user`	User.
`pass`	Password.
`host`	Adresse of the server. Default 'localhost'.

Examples

```
Connect(user="root",pass="root123")
```

`digitizeR` *DigitizeR software*

Description

Starts the digitizeR software.

Usage

```
digitizeR()
```

Examples

```
digitizeR()
```

Disconnect — *Disconnect the user from the database*

Description

This function disconnects the AFPALdb.

Usage

```
Disconnect()
```

Examples

```
Disconnect()
```

getAgeList — *Get the Age table.*

Description

This function allows you to get all the entries from the AFPALdb.C14 table.

Usage

```
getAgeList(ORDERBY = "LabCode")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'LabCode' by default.

Examples

```
Age=getAgeList()
Age=getAgeList("LabCode")
```

getAltitude — *Get the Altitude table.*

Description

This function allows you to get all the entries from the AFPALdb.Altitude table.

Usage

```
getAltitude()
```

Examples

```
altitude=getAltitude()
```

getBio *Get the bio table.*

Description

This function allows you to get all the entries from the AFPALdb.bio table.

Usage

```
getBio()
```

Examples

```
bio=getBio()
```

getBiome *Get the Biome table.*

Description

This function allows you to get all the entries from the AFPALdb.Biome table.

Usage

```
getBiome()
```

Examples

```
biome=getBiome()
```

getChronoAgeList *Get the ChronoC14 table.*

Description

This function allows you to get all the entries from the AFPALdb.ChronoC14 table.

Usage

```
getChronoAgeList(ORDERBY = "Chrono_ID,LabCode")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Chrono_ID x LabCode' by default.

Examples

```
chronocAge=getChronoAgeList()
chronocAge=getChronoAgeList("LabCode")
```

getChronoDataList *Get the ChronoData table.*

Description

This function allows you to get all the entries from the AFPALdb.ChronoData table.

Usage

```
getChronoDataList(ORDERBY = "Chrono_ID,Dataset_ID")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Chrono_ID x Dataset_ID' by default.

Examples

```
chronodata=getChronoDataList()
chronodata=getChronoDataList("Dataset_ID")
```

getChronoFromDataID *Extract datasets from the database*

Description

This function allows you to extract the chronology of a dataset identified by its ID.

Usage

```
getChronoFromDataID(Dataset_ID, Uncertainties = FALSE)
```

Arguments

Dataset_ID	ID of the dataset that needs its little chronology.
Uncertainties	Boolean value for the extraction of chronological uncertainties.

Examples

```
chrono1=getChronoFromDataID(49)
chrono2=getChronoFromDataID(49,TRUE)
```

getChronologyList *Get the Chronology table.*

Description

This function allows you to get all the entries from the AFPALdb.Chronology table, except the data.

Usage

```
getChronologyList(ORDERBY = "Chrono_ID")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Chrono_ID' by default.

Examples

```
chronology=getChronologyList()
chronology=getChronologyList("Record_Name")
```

getData *Extract chronologies from the database*

Description

This function allows you to extract JSON objects (chronology containers) from AFPALdb.

This function allows you to extract JSON objects (data containers) from AFPALdb.

Usage

```
getData(Site_Name = "", Record_Name = "", Citation_Key = "", Proxy = "",
  Proxy.Uncer = FALSE, Dataset_ID = -1, Chronology = TRUE,
  Chrono.Uncer = FALSE)

getData(Site_Name = "", Record_Name = "", Citation_Key = "", Proxy = "",
  Proxy.Uncer = FALSE, Dataset_ID = -1, Chronology = TRUE,
  Chrono.Uncer = FALSE)
```

Arguments

Site_Name	Name of the site.
Record_Name	Name of the specific record requested.
Citation_Key	Reference associated to the dataset requested.
Proxy	Type of proxy of dataset requested.
Dataset_ID	ID of the requested dataset.
Chrono_ID	ID of the requested dataset.
Site_Name	Name of the site.

Record_Name	Name of the specific record requested.
Citation_Key	Reference associated to the dataset requested.
Proxy	Type of proxy of dataset requested.

Examples

```
d0=getData() # Returns NULL
d1=getData(Site_Name="Seweweekspoort")
d2=getData(Proxy="d13C")
d3=getData(Citation_Key="Chase_etal_2013")
d4=getData(Citation_Key="Chase_etal_2013",Record_Name="SWP-1-1")
d0=getData() # Returns NULL
d1=getData(Site_Name="Seweweekspoort")
d2=getData(Proxy="d13C")
d3=getData(Citation_Key="Chase_etal_2013")
d4=getData(Citation_Key="Chase_etal_2013",Record_Name="SWP-1-1",Proxy.Uncer=TRUE,Chrono.Uncer=TRUE)
```

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getDatasetFromReference

Get a list of datasets associated to a given reference.

Description

This function allows you to get a list of datasets associated to a given reference. This function DOES NOT return data, just information about the dataset.

Usage

```
getDatasetFromReference(Citation_Key, fullRef = FALSE,
  ORDERBY = "Record_Name")
```

Arguments

Citation_Key	Citation key.
fullRef	Boolean. TRUE returns all the details of the site.
ORDERBY	Field name to sort the output table. Default 'Record_Name'.

Examples

```
getDatasetFromReference("Chase_etal_2013")
getDatasetFromReference("Tierney_etal_2008",ORDERBY="Proxy")
```

getDatasetFromSite *Get a list of datasets associated to a given site.*

Description

This function allows you to get a list of datasets associated to a given site. This function DOES NOT return data, just information about the dataset.

Usage

```
getDatasetFromSite(Site_ID = -1, Site_Name = "", Record_Name = "",
  fullRef = FALSE, ORDERBY = "Record_Name")
```

Arguments

fullRef	Boolean. TRUE returns all the details of the site.
ORDERBY	Field name to sort the output table. Default 'Record_Name'.
Citation_Key	Citation key.

Examples

```
getDatasetFromSite(Site_ID=1)
getDatasetFromSite(Site_Name="Seweweekspoort")
getDatasetFromSite(Record_Name="SWP-1-1")
```

getDatasetList *Get the Dataset table.*

Description

This function allows you to get all the entries from the AFPALdb.Reference table, except the data.

Usage

```
getDatasetList(ORDERBY = "Dataset_ID")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Dataset_ID' by default.

Examples

```
dataset=getDatasetList()
dataset=getDatasetList("Proxy")
dataset=getDatasetList("Record_Name,Citation_Key")
```

getDistrib *Get the distrib table.*

Description

This function allows you to get all the entries from the AFPALdb.distrib table.

Usage

```
getDistrib()
```

Examples

```
distrib=getDistrib()
```

getInsolation *Get monthly insolation values.*

Description

This function allows to extract monthly insolation values at 500 years resolution between present and 100,000 years ago.

Usage

```
getInsolation(lat, month, from = 0, to = 1e+05)
```

Arguments

lat	Latitude of the desired insolation. Integer between -90 and 90.
month	Month of the desired insolation. Can be either an integer between 1 and 12 or a string among jan/feb/mar/apr/may/jun/jul/aug/sep/oct/nov/dcm.
from	Beginning of the desired period of time. Default is '0'.
to	End of the desired period of time. Default is '100,000'.

Examples

```
getInsolation(65,"aug",0,35000)
getInsolation(-30,"dec",10000,0000)
```

getPET *Get the PET table.*

Description

This function allows you to get all the entries from the AFPALdb.PET table.

Usage

```
getPET()
```

Examples

```
pet=getPET()
```

getPrecip *Get the precip table.*

Description

This function allows you to get all the entries from the AFPALdb.precip table.

Usage

```
getPrecip()
```

Examples

```
precip=getPrecip()
```

getReferenceFromDataID *Get the reference associated to a dataset.*

Description

This function allows you to get the reference associated to a dataset.

Usage

```
getReferenceFromDataID(Dataset_ID, fullRef = FALSE)
```

Arguments

fullRef	Boolean. TRUE returns all the details of the reference.
Region	Name of the region.

Examples

```
getReferenceFromDataID(1)
getReferenceFromDataID(2,TRUE)
```

getReferenceFromRegion *Get a list of studies performed in a given Region.*

Description

This function allows you to get a list of studies performed in a given Region.

Usage

```
getReferenceFromRegion(Region, fullRef = FALSE, ORDERBY = "Citation_Key")
```

Arguments

Region	Name of the region.
fullRef	Boolean. TRUE returns all the details of the reference.
ORDERBY	Field name to sort the output table. Default 'Citation_Key'.

Examples

```
getReferenceFromRegion("SRZ")
getReferenceFromRegion("WRZ",TRUE,ORDERBY="Site_Name")
```

getReferenceFromSite *Get a list of references associated to a given site.*

Description

This function allows you to get a list of references associated to a given site.

Usage

```
getReferenceFromSite(Site_ID = -1, Site_Name = "", Record_Name = "",
  fullRef = FALSE, ORDERBY = "Citation_Key")
```

Arguments

Site_ID	ID of the site.
Site_Name	Name of the site.
Record_Name	Name of the record.
fullRef	Boolean. TRUE returns all the details of the reference.
ORDERBY	Field name to sort the output table. Default 'Citation_Key'.

Examples

```
d1=getReferenceFromSite(Site_Name="Seweweekspoort")
d2=getReferenceFromSite(Site_ID=1,fullRef=FALSE,ORDERBY="Journal")
d3=getReferenceFromSite(Record_Name="SWP-1-1",fullRef=TRUE)
```

getReferenceFromXY *Get a list of studies performed in a given area.*

Description

This function allows you to get a list of studies performed in a given area.

Usage

```
getReferenceFromXY(xmn, xmx, ymn, ymx, fullRef = FALSE,
  ORDERBY = "Citation_Key")
```

Arguments

xmn	Lower bound of the longitudinal range.
xmx	Upper bound of the longitudinal range.
ymn	Lower bound of the latitudinal range.
ymx	Upper bound of the latitudinal range.
fullRef	Boolean. TRUE returns all the details of the reference.
ORDERBY	Field name to sort the output table. Default 'Citation_Key'.

Examples

```
getReferenceFromXY(20,30,-30,-20,ORDERBY="Site_Name")
getReferenceFromXY(25,30,-30,-20,fullRef=TRUE)
getReferenceFromXY(25,20,-30,-20)
```

getReferenceList *Get the Reference table.*

Description

This function allows you to get all the entries from the AFPALdb.Reference table.

Usage

```
getReferenceList(ORDERBY = "Citation_Key")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Citation_Key' by default.

Examples

```
ref=getReferenceList()
ref=getReferenceList("Citation_Key")
```

getRefSiteList *Get the RefSite table.*

Description

This function allows you to get all the entries from the AFPALdb.RefSite table.

Usage

```
getRefSiteList(ORDERBY = "Citation_Key,Record_Name")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Citation_Key x Record_Name' by default.

Examples

```
refsite=getRefSiteList()
refsite=getRefSiteList("Record_Name")
```

getSiteFromDataID *Get the site associated to a dataset.*

Description

This function allows you to get the site associated to a dataset.

Usage

```
getSiteFromDataID(Dataset_ID, fullRef = FALSE)
```

Arguments

fullRef	Boolean. TRUE returns all the details of the site.
Region	Name of the region.

Examples

```
getSiteFromDataID(1)
getSiteFromDataID(2,TRUE)
```

getSiteFromReference *Get a list of references associated to a given site.*

Description

This function allows you to get a list of references associated to a given site.

Usage

```
getSiteFromReference(Citation_Key, fullRef = FALSE, ORDERBY = "Site_Name")
```

Arguments

Citation_Key	Citation key.
fullRef	Boolean. TRUE returns all the details of the site.
ORDERBY	Field name to sort the output table. Default 'Site_Name'.

Examples

```
getSiteFromReference("Chase_etal_2013")
getSiteFromReference("Tierney_etal_2008",TRUE)
```

getSiteFromRegion *Get a list of sites part of a given Region.*

Description

This function allows you to get a list of sites part of a given Region.

Usage

```
getSiteFromRegion(Region, fullRef = FALSE, ORDERBY = "Site_Name")
```

Arguments

Region	Name of the region.
fullRef	Boolean. TRUE returns all the details of the reference.
ORDERBY	Field name to sort the output table. Default 'Site_Name'.

Examples

```
getSiteFromRegion("SRZ")
getSiteFromRegion("WRZ",TRUE)
```

getSiteFromXY *Get a list of studies performed in a given area.*

Description

This function allows you to get a list of studies performed in a given area.

Usage

```
getSiteFromXY(xmn, xmx, ymn, ymx, fullRef = FALSE, ORDERBY = "Site_Name")
```

Arguments

xmn	Lower bound of the longitudinal range.
xmx	Upper bound of the longitudinal range.
ymn	Lower bound of the latitudinal range.
ymx	Upper bound of the latitudinal range.
fullRef	Boolean. TRUE returns all the details of the site.
ORDERBY	Field name to sort the output table. Default 'Site_Name'.

Examples

```
getSiteFromXY(20,30,-30,-20)
getSiteFromXY(25,30,-30,-20)
getSiteFromXY(25,20,-30,-20,ORDERBY="Lat")
```

getSiteList *Get the Site table.*

Description

This function allows you to get all the entries from the AFPALdb.Site table.

Usage

```
getSiteList(ORDERBY = "Site_Name")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Site_Name' by default.

Examples

```
sites=getSiteList()
sites=getSiteList(ORDERBY="Site_ID")
sites=getSiteList("Site_Name")
```

getSiteRegionList *Get the SiteRegion table.*

Description

This function allows you to get all the entries from the AFPALdb.SiteRegion table.

Usage

```
getSiteRegionList(ORDERBY = "Region")
```

Arguments

ORDERBY	Set of variables (separated by a comma) to order the results by. Results sorted by 'Region' by default.

Examples

```
siteregion=getSiteRegionList()
siteregion=getSiteRegionList("SRZ")
```

getTaxalist *Get the Taxalist table.*

Description

This function allows you to get all the entries from the AFPALdb.Taxalist table.

Usage

```
getTaxalist()
```

Examples

```
taxalist=getTaxalist()
```

getTmpr_max *Get the tmpr_max table.*

Description

This function allows you to get all the entries from the AFPALdb.tmpr_max table.

Usage

```
getTmpr_max()
```

Examples

```
tmpr_max=getTmpr_max()
```

getTmpr_mean *Get the tmpr_mean table.*

Description

This function allows you to get all the entries from the AFPALdb.tmpr_mean table.

Usage

```
getTmpr_mean()
```

Examples

```
tmpr_mean=getTmpr_mean()
```

getTmpr_min *Get the tmpr_min table.*

Description

This function allows you to get all the entries from the AFPALdb.tmpr_min table.

Usage

```
getTmpr_min()
```

Examples

```
tmpr_min=getTmpr_min()
```

openPDF *DigitizeR software*

Description

Starts the digitizeR software.

Usage

```
openPDF(file, bg = TRUE)
```

Examples

```
digitizeR()
```

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