# Package: kwb.mia.evalCritO2 (via r-universe)

October 29, 2024

**Title** Evaluation of MIA-CSO data with R

**Version** 0.2.4

**Description** Definition of functions that will be used to produce diagrams showing the number of critical oxygen events in the river.

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**URL** <https://github.com/KWB-R/kwb.mia.evalCritO2>

**BugReports** <https://github.com/KWB-R/kwb.mia.evalCritO2/issues>

**Imports** kwb.barplot, kwb.base, kwb.db, kwb.utils

**Remotes** github::kwb-r/kwb.barplot, github::kwb-r/kwb.base, github::kwb-r/kwb.db, github::kwb-r/kwb.utils

**Encoding** UTF-8

**RoxygenNote** 7.1.2

**Repository** https://kwb-r.r-universe.dev

**RemoteUrl** https://github.com/KWB-R/kwb.mia.evalCritO2

**RemoteRef** HEAD

**RemoteSha** 584ef0552c1f291a18f9084aeddbc3da1d31ce47

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hsGroupByYearAndKm        *Group By Year And Km*

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### Description

Groups input data.frame by its columns "Jahr" and "Spree_km".

### Usage

```
hsGroupByYearAndKm(
  frmData,
  strValField,
  boolDescKm = FALSE,
  boolDescYr = FALSE,
  vecMp = NULL
)
```

### Arguments

| | |
|---|---|
| frmData | data.frame with columns "Jahr" and "Spree_km" |
| strValField | Name of value field in input data.frame of which for each Jahr/Spree_km group the sum will be calculated. |
| boolDescKm | if TRUE, columns in result matrix will be ordered according to decreasing "Spree_km" values |
| boolDescYr | if TRUE, columns in result matrix will be ordered according to decreasing "Jahr" values |
| vecMp | Vector containing pairs of km value and monitoring point name |

### Value

Returns the matrix calculated by hsGroupBy2Fields()

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hsPlotAll        *Plot All*

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### Description

Plot result of evaluation in forms of barplots, with default settings

## Usage

```
hsPlotAll(
  strDb,
  strTable,
  myScaled = TRUE,
  myReverse = TRUE,
  myBeside = TRUE,
  myCexNames = 1,
  mySub = "",
  dbg = FALSE,
  myWidth = 1,
  myValLabs = FALSE,
  yearsInSub = FALSE,
  lng = "de",
  ...
)
```

## Arguments

| | |
|---|---|
| strDb | path to Microsoft Access Database file |
| strTable | name of database table containing the data to plot |
| myScaled | logical. Default: `TRUE` |
| myReverse | logical. Default: `TRUE` |
| myBeside | if `TRUE` (the default), bars are plotted side by side |
| myCexNames | character expansion factor for names |
| mySub | subtitle. Default: "" |
| dbg | if `TRUE`, debug messages are shown |
| myWidth | bar width. Default: 1 |
| myValLabs | logical. Default: `FALSE` |
| yearsInSub | logical. Default: `FALSE` |
| lng | language code, one of "en" (English, the default) or "de" (German) |
| ... | further arguments passed to hsPlotCritEvents |

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| hsPlotAllToPdf | *Plot All To PDF File* |
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## Description

Print result of evaluation in forms of barplots into pdf file

## Usage

```
hsPlotAllToPdf(strPdf, ...)
```

**Arguments**

| | |
|---|---|
| strPdf | path to PDF file to which to plot |
| ... | further arguments passed to [hsPlotAll](#) |

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hsPlotO2Eval                    *Plot O2 Evaluation*

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**Description**

Plot O2 Evaluation

**Usage**

```
hsPlotO2Eval(dat, main = "Title?", lng = "en")
```

**Arguments**

| | |
|---|---|
| dat | data frame with columns *Jahr*, *LamEvents*, *2mgEvents*, *LamKalTage*, *2mgKalTage* |
| main | main plot title |
| lng | language code, one of "en" (English, the default) or "de" (German) |

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hsPlotO2EvalPdf                 *Plot Result of O2 Evaluation to PDF*

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**Description**

Plot Result of O2 Evaluation to PDF

**Usage**

```
hsPlotO2EvalPdf(dat, main = "Title?", pdffile = NULL)
```

**Arguments**

| | |
|---|---|
| dat | data frame with columns *Jahr*, *LamEvents*, *2mgEvents*, *LamKalTage*, *2mgKalTage* |
| main | main plot title |
| pdffile | path to PDF file to which to plot |

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| hsTranslate | *Translate* |
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## Description

translates *text.en* into target language *lng*.

## Usage

```
hsTranslate(text.en, lng)
```

## Arguments

text.en          english text (character vector of length 1 expected)

lng              target language: en = English, de = German

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