Package 'xlum'

April 4, 2022
Type Package
Title Read, Write, and Convert xlum Data
Version 0.1.0.9000-8
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Description Support for the xlum-file format for exchange and long-term preservation of luminescence data.
License GPL-3
Depends R (>= 4.1), utils
Imports methods, $xml2 (>= 1.3.3)$
Encoding UTF-8
Language en-GB
LazyData true
RoxygenNote 7.1.2
Collate 'read_xlum.R' 'utils.R' 'validate_xlum.R' 'xlum-package.R'
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xlum-package	Read, Write, and Convert xlum Data

Description

Support for the xlum-file format for exchange and long-term preservation of luminescence data.

Details

Support contact

• https://github.com/R-Lum/xlum/discussions

Bug reporting

• https://github.com/R-Lum/xlum/issues

Project source code repository

• https://github.com/R-Lum/xlum

Package maintainer

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Description

#TODO

Usage

```
read_xlum(file, verify = TRUE, output = "xlum_list")
```

Arguments

file	character (required): path to file
verify	logical (with default): enable/disable format validation
output	<pre>character (with default): output object of the import, supported are "xml_document", "list", "xlum_list" (the default)</pre>

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Details

Supported output options

"xlum_list" (default): imports XML-data and coerces them to list. Numeric values for level <curve> are transposed into numeric vectors for better handling

"list": imports XML-data and coerces it to a list, no further treatment of data

"xml_document": unprocessed output from xml2::read_xml

Value

##TODO

How to cite

Kreutzer, S., 2022. read_xlum(): Import xlum files. In: Kreutzer, S., 2022. xlum: Read, Write, and Convert xlum Data. R package version 0.1.0.9000-8.

Author(s)

Sebastian Kreutzer, Geography & Earth Sciences, Aberystwyth University

validate_xlum

Validate xlum format against an XSD reference schema

Description

A a convenience wrapper around xml2::xml_validate against the reference format description shipped with xlum-package

Usage

```
validate_xlum(file)
```

Arguments

file xml2::xml_document (required): object to test

Value

Results of the validation logical with attributes

How to cite

Kreutzer, S., 2022. validate_xlum(): Validate xlum format against an XSD reference schema. In: Kreutzer, S., 2022. xlum: Read, Write, and Convert xlum Data. R package version 0.1.0.9000-8.

Author(s)

Sebastian Kreutzer, Geography & Earth Sciences, Aberystwyth University

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Examples

```
file <- system.file("extdata/xlum_prototype.xlum", package = "xlum")
validate_xlum(file)</pre>
```

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