Package: rumi (via r-universe)

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Type Package

Title Raster Storage for AI4EO

Version 0.29.0

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Description Reads windows, bands and time steps from Rumi Image and Cube files through the native Rumi library.

License GPL-3

URL https://github.com/asterisk-labs/rumi

BugReports https://github.com/asterisk-labs/rumi/issues

Encoding UTF-8

Language en-US

SystemRequirements CMake (>= 3.21), C11 and C++23 compilers, libcurl (>= 7.83.0), OpenSSL (>= 3.0)

Depends R (>= 4.3)

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.3

Config/pak/sysreqs cmake libssl-dev

Repository https://asterisk-labs.r-universe.dev

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RemoteUrl https://github.com/asterisk-labs/rumi

RemoteRef main

RemoteSha 0c8192554e3576c9d119c0aa9d35dd748ef19a7d

RemoteSubdir bindings/r

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`rumi_close` *Close a Rumi dataset*

Description

Close a Rumi dataset

Usage

```
rumi_close(file)
```

Arguments

`file`	A dataset returned by `rumi_open()`.

`rumi_info` *Inspect a Rumi dataset*

Description

Inspect a Rumi dataset

Usage

```
rumi_info(file)
```

Arguments

`file`	A dataset returned by `rumi_open()`.

rumi_open *Open a Rumi source*

Description

path and its external header stay paired for every partial read. Opening validates the header against the source and reads its metadata.

Usage

```
rumi_open(path, header)
```

Arguments

path	Local path, URI or VSI path.
header	Raw external-header bytes.

Value

A rumi_dataset.

rumi_read *Read a partial Rumi array*

Description

bands, time and window origins use R's one-based indexing. window is (row, column, height, width). The returned Image is (X, Y, Band) and a Cube is (X, Y, Band, Time), matching R's column-major memory order.

Usage

```
rumi_read(
  file,
  header = NULL,
  bands = NULL,
  time = NULL,
  window = NULL,
  pattern = NULL
)
```

Arguments

file	A dataset returned by rumi_open(). Alternatively, a path when header is supplied.
header	External header when file is a path.
bands, time	One-based indices, in output order, or NULL for all.
window	One-based (row, column, height, width), or NULL for all.
pattern	Optional Rumi output pattern.

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rumi_read_many *Read one window from several Rumi datasets*

Description

Read one window from several Rumi datasets

Usage

```
rumi_read_many(
  files,
  windows = NULL,
  bands = NULL,
  time = NULL,
  pattern = NULL
)
```

Arguments

files	A list of datasets from rumi_open().
windows	A list or matrix with one (row, column, height, width) row per dataset. All windows have the same height and width.
bands, time	One-based indices, in output order, or NULL for all.
pattern	Optional Rumi output pattern.

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