

Package ‘metajam’

September 12, 2026

Type Package

Title Easily Download Data and Metadata from 'DataONE'

Version 0.3.2

Date 2026-08-31

Maintainer Julien Brun <julien.brun@alumni.duke.edu>

Description A set of tools to foster the development of reproducible analytical workflow by simplifying the download of data and metadata from 'DataONE' (<<https://www.dataone.org>>) and easily importing this information into R.

License Apache License (== 2.0)

Encoding UTF-8

Language en-US

RoxygenNote 8.1.0

SystemRequirements Mac OSX: redland (>= 1.0.14) ; Linux: librdf0 (>= 1.0.14), librdf0-dev (>= 1.0.14)

URL <https://nceas.github.io/metajam/>, <https://github.com/NCEAS/metajam>

BugReports <https://github.com/NCEAS/metajam/issues>

Depends R (>= 3.6.0)

Imports dataone (>= 2.3.0), dplyr, EML, emld, lubridate, purrr, readr, stats, stringr, tibble, tidyr, XML (>= 3.95-0.1)

Suggests knitr, rmarkdown, testthat

VignetteBuilder knitr

NeedsCompilation no

Author Julien Brun [cre, aut] (ORCID: <<https://orcid.org/0000-0002-7751-6238>>), Irene Steves [aut] (ORCID: <<https://orcid.org/0000-0002-5511-9717>>, <https://github.com/isteves>), Mitchell Maier [aut] (ORCID: <<https://orcid.org/0000-0001-6955-0535>>), Kristen Peach [aut] (ORCID: <<https://orcid.org/0000-0002-6388-0901>>), Nicholas Lyon [aut] (ORCID: <<https://orcid.org/0000-0003-3905-1078>>, <https://njlyon0.github.io/>),

Nathan Hwangbo [ctb] (ORCID: <<https://orcid.org/0000-0002-3777-0821>>),
Derek Strong [ctb] (ORCID: <<https://orcid.org/0000-0002-0347-8574>>),
Colin Smith [ctb] (ORCID: <<https://orcid.org/0000-0003-2261-9931>>),
Regents of the University of California [cph]

Repository CRAN
Date/Publication 2026-09-12 13:30:18 UTC

Contents

check_version	2
download_d1_data	3
download_d1_data_pkg	4
read_d1_files	4
tabularize_eml	5
Index	6

check_version	<i>Check PID version</i>
---------------	--------------------------

Description

This function takes an identifier and checks to see if it has been obsoleted.

Usage

```
check_version(pid, formatType = NULL)
```

Arguments

- pid (character) The persistent identifier of a data, metadata, or resource map object on a DataONE member node.
- formatType (character) Optional. The format type to return (one of 'data', 'metadata', or 'resource').

Value

(data.frame) A data frame of object version PIDs and related information.

Examples

```
## Not run:  
# Most data URLs and identifiers work  
check_version("https://cn.dataone.org/cn/v2/resolve/urn:uuid:a2834e3e-f453-4c2b-8343-99477662b570")  
check_version("doi:10.18739/A2J09W56F")  
  
# Specify a formatType (data, metadata, or resource)  
check_version("doi:10.18739/A2J09W56F", formatType = "metadata")
```

```
# Returns a warning if the identifier has been obsoleted
check_version("doi:10.18739/A2HF7Z", formatType = "metadata")

# Returns an error if no matching identifiers are found
check_version("a_test_pid")

# Returns a warning if several identifiers are returned
check_version("10.18739/A2057CR99")

## End(Not run)
```

download_d1_data	<i>Download data and metadata from DataONE</i>
------------------	--

Description

Downloads a data object from DataONE along with metadata.

Usage

```
download_d1_data(data_url, path)
```

Arguments

data_url	(character) An identifier or URL for a DataONE object to download.
path	(character) Path to a directory to download data to.

Value

(character) Path where data is downloaded to.

See Also

[read_d1_files()] [download_d1_data_pkg()]

Examples

```
download_d1_data("urn:uuid:a2834e3e-f453-4c2b-8343-99477662b570", path = tempdir())
download_d1_data(
  "https://cn.dataone.org/cn/v2/resolve/urn:uuid:a2834e3e-f453-4c2b-8343-99477662b570",
  path = tempdir()
)
```

download_d1_data_pkg	<i>Download all data and metadata of a data package from DataONE</i>
----------------------	--

Description

Downloads all the data objects of a data package from DataONE along with metadata.

Usage

```
download_d1_data_pkg(meta_obj, path)
```

Arguments

meta_obj	(character) A DOI or metadata object PID for a DataONE package to download.
path	(character) Path to a directory to download data to.

Value

(list) Paths where data are downloaded to.

See Also

[read_d1_files()] [download_d1_data()]

Examples

```
download_d1_data_pkg("doi:10.18739/A2CJ87M3J", tempdir())
download_d1_data_pkg("https://doi.org/10.18739/A2CJ87M3J", tempdir())
```

read_d1_files	<i>Read data and metadata based on 'download_d1_data()' file structure</i>
---------------	--

Description

Reads data along with metadata into your R environment based on [download_d1_data()] file structure.

Usage

```
read_d1_files(folder_path, fnc = "read_csv", ...)
```

Arguments

folder_path	(character) Path to a directory where data and metadata are located.
fnc	(character) Function to be used to read the data (default is [readr::read_csv()]).
...	Parameters to pass into the function specified in 'fnc'.

Value

(list) Named list containing data and metadata as data frames.

See Also

[download_d1_data()] [download_d1_data_pkg()]

Examples

```
data_folder <- system.file(file.path("extdata", "test_data"), package = "metajam")
soil_moist_data <- read_d1_files(data_folder)

# You can specify the function you would like to use to read the file and pass parameters
soil_moist_data_skipped <- read_d1_files(data_folder, "read.csv",
                                         skip = 8, stringsAsFactors = FALSE)
```

tabularize_eml	<i>Get tabular metadata</i>
----------------	-----------------------------

Description

This function takes a path to an EML (.xml) metadata file and returns a data frame.

Usage

```
tabularize_eml(eml, full = FALSE)
```

Arguments

eml	An emld class object, the path to an EML (.xml) metadata file, or a raw EML object.
full	(logical) Returns the most commonly used metadata fields by default. If full = TRUE is specified, the full set of metadata fields are returned.

Value

(data.frame) A data frame of selected EML values.

Examples

```
eml <- system.file("extdata",
                   "test_data",
                   "SoilMois2012_2017__full_metadata.xml",
                   package = "metajam")
tabularize_eml(eml)
```

Index

`check_version`, [2](#)

`download_d1_data`, [3](#)

`download_d1_data_pkg`, [4](#)

`read_d1_files`, [4](#)

`tabularize_eml`, [5](#)