

# Package ‘metajam’

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**Type** Package

**Title** Easily Download Data and Metadata from 'DataONE'

**Version** 0.3.0

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**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** 7.3.2

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

**URL** <https://nceas.github.io/metajam/>

**BugReports** <https://github.com/nceas/metajam/issues>

**Depends** R (>= 3.6.0)

**Imports** dataone, dplyr, EML, emld, lubridate, purrr, readr, stats, stringr, tibble, tidyr, XML

**Suggests** knitr, rmarkdown, testthat

**VignetteBuilder** knitr

**NeedsCompilation** no

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check_version	<i>Check PID version</i>
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## 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/A2ZF6M")

# Specify a formatType (data, metadata, or resource)
check_version("doi:10.18739/A2ZF6M", 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)
```

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

```
## Not run:
download_d1_data("urn:uuid:a2834e3e-f453-4c2b-8343-99477662b570", path = file.path("."))
download_d1_data(
  "https://cn.dataone.org/cn/v2/resolve/urn:uuid:a2834e3e-f453-4c2b-8343-99477662b570",
  path = file.path(".")
)

## End(Not run)
```

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`download_d1_data_pkg` *Download all data and metadata of a data package from DataONE*

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### 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

```
## Not run:
download_d1_data_pkg("doi:10.18739/A2028W", ".")
download_d1_data_pkg("https://doi.org/10.18739/A2028W", ".")

## End(Not run)
```

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`read_d1_files` *Read data and metadata based on 'download\_d1\_data()' file structure*

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### 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)
```

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tabularize_eml	<i>Get tabular metadata</i>
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**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)
```

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