# Package 'RLumBuild'

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Type Package
Title RLum Universe Package Building
<b>Version</b> 0.1.10
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Maintainer Sebastian Kreutzer < sebastian.kreutzer@uni-heidelberg.de>
<b>Description</b> Build packages from the RLum-universe.  A collection of tools and scripts to unify the building of packages.
License GPL-3
BugReports https://github.com/R-Lum/RLumBuild/issues
URL https://github.com/R-Lum/RLumBuild
<b>Depends</b> R (>= 4.2.0), utils
Imports crayon (>= 1.5.2),     rmarkdown (>= 2.25),     cli (>= 3.6.2),     codemetar (>= 0.3.5),     devtools (>= 2.4.5),     jsonlite (>= 1.8.8),     miniCRAN (>= 0.2.16),     pander (>= 0.6.5),     pkgbuild (>= 1.4.3),     roxygen2 (>= 7.3.1),     Rcpp (>= 1.0.12),     R2HTML (>= 2.3.3),     stringi (>= 1.8.3),     stringi (>= 1.5.1),     tools,     xtable (>= 1.8-4)
Encoding UTF-8
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Contents
RLumBuild-package

2 RLumBuild-package

module_build_documentation	4
module_check_ReverseDependencies	4
module_compactVignette	(
module_compile_Attributes	- 7
module_create_DependencyGraph	- 7
*	
*	
module_write_i Dr_mandai	1-
	1
	module_compactVignette

**Description** 

RLumBuild-package

Build packages from the RLum-universe. A collection of tools and scripts to unify the building of packages.

RLum Universe Package Building #'

#### **Details**

#### **Funding**

In 2019, the work of Sebastian Kreutzer as maintainer of the package was supported by the LabEx LaScArBxSK (ANR - n. ANR-10-LABX-52).

#### Author(s)

Maintainer: Sebastian Kreutzer < sebastian.kreutzer@uni-heidelberg.de> (ORCID)

• Christoph Burow (ORCID)

#### See Also

Useful links:

- https://github.com/R-Lum/RLumBuild
- Report bugs at https://github.com/R-Lum/RLumBuild/issues

build\_package 3

build\_package

Check and Build Package

#### **Description**

Central function to run the package build process.

#### Usage

```
build_package(
  path = ".",
  exclude = NULL,
  write_Rbuildignore = TRUE,
  as_cran = FALSE
)
```

#### **Arguments**

```
path character (with default): set package path
exclude character (optional): names of build modules you want to exclude]
write_Rbuildignore
logical (optional): writes are master build-ignore
as_cran logical (with default): enable/disable --as-cran check
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. build\_package(): Check and Build Package. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

### **Examples**

```
print("This is only to silence the CRAN check")
## Not run:
build_package()
## End(Not run)
```

module\_add\_HowToCite Add How to Cite Section

#### **Description**

Adds a function tailored section 'How to Cite' to each manual page as long as author names and a section 'Function version' exists.

#### Usage

module\_add\_HowToCite()

#### **Details**

#### **Output example**

Burow, C., Kreutzer, S. (2019). module\_add\_HowToCite(): Add How to Cite Section. Function version 0.1.0. In: Kreutzer, S., Burow, C. (2019). RLumBuild: RLum Universe Package BuildingR package version 0.1.1.9000-5. https://github.com/R-Lum/RLumBuild

#### **Function version**

0.3.0

#### How to cite

Burow, C., Kreutzer, S., 2025. module\_add\_HowToCite(): Add How to Cite Section. Function version 0.3.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Christoph Burow (Germany), Sebastian Kreutzer, IRAMAT-CRP2A, UMR 5060, CNRS - Université Bordeaux Montaigne (France), RLum Developer Team

module\_add\_RLumTeam

Module: add RLum-Team and update version timestamp

#### **Description**

If the package was supported by the RLumTeam (the standard) the RLum-Team is added as author to all functions.

#### Usage

module\_add\_RLumTeam()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_add\_RLumTeam(): Module: add RLum-Team and update version timestamp. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_build\_documentation

Module: Build Documentation

#### **Description**

Create documentation using roxygen2

#### **Usage**

module\_build\_documentation()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_build\_documentation(): Module: Build Documentation. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_check\_ReverseDependencies

Check Reverse Dependencies

#### **Description**

Check the reverse dependencies of the package

#### Usage

module\_check\_ReverseDependencies()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_check\_ReverseDependencies(): Check Reverse Dependencies. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_compactVignette

Module: compact\_Vignette

#### **Description**

Try to further downsize the vignette, so far available

#### Usage

module\_compactVignette()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_compactVignette(): Module: compact\_Vignette. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

```
module_compile_Attributes
```

Module: Compile attributes

#### Description

Compile C++ attributes if such code is part of the package

#### Usage

```
module_compile_Attributes()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_compile\_Attributes(): Module: Compile attributes. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

#### Description

Create package dependency graph

#### Usage

```
module_create_DependencyGraph(
   Rversion = paste(R.version[c("major", "minor")], collapse = ".")
)
```

#### **Arguments**

Rversion [character] (with default): R version for which the graph is created

#### Details

The script based on:

8 module\_knit\_NEWS

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_create\_DependencyGraph(): Create Dependency Graph. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Note

Module currently not acctivated

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_knit\_NEWS M

Module: Knit NEWS

#### Description

Create NEWS.md from NEWS.Rmd

#### Usage

module\_knit\_NEWS()

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_knit\_NEWS(): Module: Knit NEWS. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

module\_knit\_README

Module: Knit README

#### **Description**

Create README.md from README.Rmd

#### Usage

```
module_knit_README()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_knit\_README(): Module: Knit README. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

```
module_set_VersionNumber
```

Module: set\_VersionNumber

#### **Description**

Automatically set version number in DESCRIPTION file if the pattern '.9000' is found.

#### Usage

```
module_set_VersionNumber()
```

#### **Details**

If the package is under development it is somehow meaningful to easily distinguish between different build versions. In the R community the pattern '.9000' in a version number is used to declare a package under development. If such pattern is found, the module either adds '-1' or if already there, increase such number by '1' every time the package is built.

For release versions the patter '.9000' is removed from the DESCRIPTION file and nothing is done if the module is run.

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_set\_VersionNumber(): Module: set\_VersionNumber. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_update\_datalist

Update datalist

#### **Description**

Updates the file 'data/datalist' if available. The standard CRAN functionality only works for data > 1 MB. For whatever reason.

#### Usage

```
module_update_datalist()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_update\_datalist(): Update datalist. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_update\_zenodoJSON

Module: Update .zenodo.json file

#### Description

Automatically update the .zenodo.json file

#### Usage

module\_update\_zenodoJSON()

#### **Details**

A small helper to make sure that we have not to take care update 'version', 'title' and 'description' in the 'zenodo.json' file

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_update\_zenodoJSON(): Module: Update .zenodo.json file. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

#### **Description**

Check and display the timing results of the example checks to avoid too long example runs.

#### Usage

```
module_verify_ExampleTimings()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_verify\_ExampleTimings(): Verify Example Timings. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

#### **Description**

A BibTeX file to be used to cite the package is automatically created.

#### Usage

```
module_write_BibTeX()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_write\_BibTeX(): Create Package BibTeX file. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

module\_write\_codemetar

Create Codemetar JSON-LD file

#### **Description**

Add JSON-LD file file to make the package more tracable

#### Usage

```
module_write_codemetar()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_write\_codemetar(): Create Codemetar JSON-LD file. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

#### See Also

```
[codemetar::create_codemeta]
```

```
module_write_FunctionList
```

Write Function Argument List

#### **Description**

Create a spread-sheet table with all function arguments

Create a HTML and markdown list of all major functions in the package

#### Usage

```
module_write_FunctionList()
module_write_FunctionList()
```

#### **Details**

Pevious versions were written by Michael Dietze and Sebastian Kreutzer. This version programmatically fetches all functions and arguments and does not rely on parsing the .Rd files with regular expressions.

#### **Function version**

0.1.0

0.1.0

#### How to cite

Burow, C., Kreutzer, S., 2025. module\_write\_FunctionList(): Write Function Argument List. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Christoph Burow, Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany)

module\_write\_PDF\_manual

Create PDF Manual

#### Description

Build PDF Manual tar.gz is available

#### Usage

```
module_write_PDF_manual()
```

#### **Function version**

0.1.0

#### How to cite

Kreutzer, S., 2025. module\_write\_PDF\_manual(): Create PDF Manual. Function version 0.1.0. In: Kreutzer, S., Burow, C., 2025. RLumBuild: RLum Universe Package Building. R package version 0.1.10. https://github.com/R-Lum/RLumBuild

#### Author(s)

Sebastian Kreutzer, Institute of Geography, Heidelberg University (Germany) , RLum Developer Team

#### See Also

[devtools::build\_manual]

## **Index**

```
* package
    RLumBuild-package, 2
build_package, 3
character, 3
logical, 3
module_add_HowToCite, 4
module_add_RLumTeam, 4
module_build_documentation, 5
module_check_ReverseDependencies, 5
module_compactVignette, 6
module_compile_Attributes, 7
module_create_DependencyGraph, 7
{\tt module\_knit\_NEWS}, \\ 8
\verb|module_knit_README|, 9
module_set_VersionNumber, 9
module_update_datalist, 10
module_update_zenodoJSON, 10
module_verify_ExampleTimings, 11
module_write_BibTeX, 12
module_write_codemetar, 12
module_write_FunctionList, 13
module_write_PDF_manual, 14
RLumBuild (RLumBuild-package), 2
RLumBuild-package, 2
```