

# Package ‘rjdmarkdown’

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**Type** Package

**Title** ‘rmarkdown’ Extension for Formatted ‘RJDemetra’ Outputs

**Version** 0.2.2

**Description** Functions to have nice ‘rmarkdown’ outputs of the seasonal and trading day adjustment models made with ‘RJDemetra’.

**SystemRequirements** Java (>= 8)

**Depends** R (>= 3.1.1), RJDemetra

**Imports** knitr, kableExtra, magrittr

**License** EUPL

**URL** <https://github.com/AQLT/rjdmarkdown>

**BugReports** <https://github.com/AQLT/rjdmarkdown/issues>

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**VignetteBuilder** knitr

**Suggests** rmarkdown, ggdemetra

**NeedsCompilation** no

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**Repository** CRAN

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create\_rmd

*Create and render 'rmarkdown' file***Description**

Function to create a 'rmarkdown' file with all the output and render it

**Usage**

```
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
  ...
)

## S3 method for class 'SA'
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
  ...
)

## S3 method for class 'jSA'
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
```

```
  ...
)

## S3 method for class 'workspace'
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
  ...
)

## S3 method for class 'multiprocessing'
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
  ...,
  workspace
)

## S3 method for class 'sa_item'
create_rmd(
  x,
  output_file,
  output_format = "pdf_document",
  preprocessing_fun = print_preprocessing,
  decomposition_fun = print_decomposition,
  diagnostics_fun = print_diagnostics,
  title = "Seasonal adjustment summary",
  knitr_chunk_opts = list(fig.pos = "h", echo = FALSE, results = "asis", fig.cap =
    "S-I Ratio"),
  ...,
  workspace
)
```

## Arguments

- x the object to render: it can be a "SA", "jSA", "sa\_item", "multiprocessing" or "workspace" object
- output\_file the name of the output 'rmarkdown' file.
- output\_format the R Markdown output format to convert to: "pdf\_document" for a pdf output, "html\_document" for a HTML output. See [render](#) for more details.
- preprocessing\_fun the function used to print the preprocessing. [print\\_preprocessing](#) by default. If preprocessing\_fun = NULL the function is not used.
- decomposition\_fun the function used to print the decomposition [print\\_decomposition](#) by default. If decomposition\_fun = NULL the function is not used.
- diagnostics\_fun the function used to print the diagnostics [print\\_diagnostics](#) by default. If diagnostics\_fun = NULL the function is not used.
- title the title of the R Markdown document.
- knitr\_chunk\_opts options for R code chunks. See [opts\\_chunk](#) for more details.
- ... other arguments to pass to [render](#).
- workspace the workspace. Only used when x is a "sa\_item" or "multiprocessing".

## Examples

```

ipi <- RJDemetra::ipi_c_eu[, "FR"]
jsa_x13 <- RJDemetra::jx13(ipi)

output_file <- tempfile(fileext = ".Rmd")
create_rmd(jsa_x13, output_file, output_format = "pdf_document")
# To directly open the pdf:
browseURL(sub(".Rmd",".pdf", output_file, fixed = TRUE))

# To create a pdf from a workspace:
jsa_ts <- jtramoseats(ipi)
wk <- new_workspace()
mp <- new_multiprocessing(wk, "sa1")
add_sa_item(wk, "sa1", jsa_x13, "X13")
add_sa_item(wk, "sa1", jsa_ts, "TramoSeats")

# It's important to compute the workspace to be able
# to import the models
compute(wk)

output_file <- tempfile(fileext = ".Rmd")
create_rmd(wk, output_file,
           output_format = c("pdf_document", "html_document"),
           output_options = list(toc = TRUE,

```

---

```
number_sections = TRUE))
# To open the file:
browseURL(sub(".Rmd",".pdf", output_file, fixed = TRUE))
browseURL(sub(".Rmd",".html", output_file, fixed = TRUE))
```

---

**print\_decomposition** *Print the decomposition*

---

## Description

Function to print the decomposition model

## Usage

```
print_decomposition(
  x,
  format = knitr::opts_knit$get("rmarkdown.pandoc.to"),
  plot = TRUE,
  digits = 3,
  decimal.mark = getOption("OutDec"),
  booktabs = TRUE,
  ...
)
```

## Arguments

x	the object to print.
format	output format: "latex" or "html".
plot	boolean indicating whether to plot or not the S-I Ratio.
digits	number of digits after the decimal point.
decimal.mark	the character to be used to indicate the numeric decimal point.
booktabs	boolean indicating whether to use or not the booktabs package (when format = "latex").
...	arguments passed to <a href="#">plot.decomposition_X11</a> or <a href="#">plot.decomposition_SEATS</a> .

## Examples

```
ipi <- RJDemetra::ipi_c_eu[, "FR"]

jsa_x13 <- RJDemetra::jx13(ipi)
print_decomposition(jsa_x13, format = "latex")

sa_ts <- RJDemetra::jtramoseats(ipi)
print_decomposition(sa_ts, format = "html")
```

---

<code>print_diagnostics</code>	<i>Print the diagnostics</i>
--------------------------------	------------------------------

---

## Description

Function to print diagnostics tests on the quality of the pre-processing and the decomposition

## Usage

```
print_diagnostics(
  x,
  format = knitr::opts_knit$get("rmarkdown.pandoc.to"),
  signif.stars = TRUE,
  tests = c("mean", "skewness", "kurtosis", "ljung_box",
            "ljung_box (residuals at seasonal lags)", "ljung_box (squared residuals)",
            "qs test on sa", "qs test on i", "f-test on sa (seasonal dummies)",
            "f-test on i (seasonal dummies)", "Residual seasonality (entire series)",
            "Residual seasonality (last 3 years)", "f-test on sa (td)", "f-test on i (td)" ),
  digits = 3,
  decimal.mark = getOption("OutDec"),
  booktabs = TRUE,
  ...
)
```

## Arguments

<code>x</code>	the object to print.
<code>format</code>	output format: "latex" or "html".
<code>signif.stars</code>	logical; if TRUE, p-values are additionally encoded visually as 'significance stars' in order to help scanning of long coefficient tables
<code>tests</code>	characters containing the names of the tests to print.
<code>digits</code>	number of digits after the decimal point.
<code>decimal.mark</code>	the character to be used to indicate the numeric decimal point.
<code>booktabs</code>	boolean indicating whether to use or not the booktabs package (when <code>format = "latex"</code> ).
<code>...</code>	unused arguments.

## Examples

```
ipi <- RJDemetra::ipi_c_eu[, "FR"]

jsa_x13 <- RJDemetra::jx13(ipi)
print_diagnostics(jsa_x13, format = "latex")
```

```
sa_ts <- RJDemetra::tramoseats(ipi)
print_diagnostics(sa_ts, format = "html")
```

`print_preprocessing` *Print the pre-processing model*

## Description

Function to print the pre-processing model

## Usage

```
print_preprocessing(
  x,
  format = knitr::opts_knit$get("rmarkdown.pandoc.to"),
  signif.stars = TRUE,
  digits = 3,
  decimal.mark = getOption("OutDec"),
  booktabs = TRUE,
  summary = TRUE,
  likelihood = TRUE,
  arima = TRUE,
  regression = TRUE,
  ...
)
```

## Arguments

<code>x</code>	the object to print.
<code>format</code>	output format: "latex" or "html".
<code>signif.stars</code>	logical; if TRUE, p-values are additionally encoded visually as ‘significance stars’ in order to help scanning of long coefficient tables
<code>digits</code>	number of digits after the decimal point.
<code>decimal.mark</code>	the character to be used to indicate the numeric decimal point.
<code>booktabs</code>	boolean indicating whether to use or not the booktabs package (when <code>format = "latex"</code> ).
<code>summary</code>	boolean indicating whether to use or not the summary section.
<code>likelihood</code>	boolean indicating whether to use or not the likelihood section.
<code>arima</code>	boolean indicating whether to use or not the arima section.
<code>regression</code>	boolean indicating whether to use or not the regression section.
<code>...</code>	unused.

**Examples**

```
ipi <- RJDemetra::ipi_c_eu[, "FR"]

sa_x13 <- RJDemetra::jx13(ipi)
print_preprocessing(sa_x13, format = "latex")

sa_ts <- RJDemetra::tramoseats(ipi)
print_preprocessing(sa_ts, format = "html")
```

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