

Quickstart Guide: zztab2fig v0.2.0

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This quickstart guide covers the key features in zztab2fig v0.2.0. For complete documentation, see the “Object Types and Themes” and “Advanced Features” vignettes.

Installation

```
# Install from GitHub
# devtools::install_github("rgt47/zztab2fig")

library(zztab2fig)
#> zztab2fig 0.2.0 - LaTeX table generation for R
```

Basic Usage

Convert a data frame to a cropped PDF table:

```
t2f(mtcars[1:6, 1:4], filename = "basic_table", sub_dir = output_dir)
```

	mpg	cyl	disp	hp
Mazda RX4	21.0	6	160	110
Mazda RX4 Wag	21.0	6	160	110
Datsun 710	22.8	4	108	93
Hornet 4 Drive	21.4	6	258	110
Hornet Sportabout	18.7	8	360	175
Valiant	18.1	6	225	105

This generates three files:

- `basic_table.tex` - LaTeX source
- `basic_table.pdf` - Full PDF
- `basic_table_cropped.pdf` - Cropped PDF for document inclusion

Journal Themes

Built-in themes provide journal-specific styling:

```
t2f(mtcars[1:6, 1:4], theme = "nejm",
     filename = "nejm_table", sub_dir = output_dir)
```

	mpg	cyl	disp	hp
Mazda RX4	21.0	6	160	110
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Available themes: "nejm", "apa", "nature", "minimal"

Set a global theme:

```
t2f_theme_set("nejm")
t2f(mtcars[1:6, 1:4])
t2f(iris[1:6, ])
```

Statistical Objects

t2f works directly with statistical objects:

```
model <- lm(mpg ~ cyl + hp + wt, data = mtcars)
t2f(model, filename = "regression", sub_dir = output_dir,
    include = c("estimate", "std.error", "p.value"))
```

Term	Estimate	Std_Error	p_value
(Intercept)	38.752	1.787	<0.001
cyl	-0.942	0.551	0.098
hp	-0.018	0.012	0.140
wt	-3.167	0.741	<0.001

Supported object types: lm, glm, anova, aov, htest, matrix, table

Model Comparison

Compare multiple models side-by-side:

```
m1 <- lm(mpg ~ cyl, data = mtcars)
m2 <- lm(mpg ~ cyl + hp, data = mtcars)
m3 <- lm(mpg ~ cyl + hp + wt, data = mtcars)

t2f_regression(
  Model1 = m1, Model2 = m2, Model3 = m3,
  stars = TRUE,
  filename = "model_comparison",
  sub_dir = output_dir
)
```

Term	Model1	Model2	Model3
(Intercept)	37.885* (2.074)	36.908* (2.191)	38.752* (1.787)
cyl	-2.876* (0.322)	-2.265* (0.576)	-0.942 (0.551)
hp		-0.019 (0.015)	-0.018 (0.012)
wt			-3.167* (0.741)
N	32	32	32
R-squared	0.726	0.741	0.843
Adj. R-squared	0.717	0.723	0.826

Captions and Labels

Add LaTeX captions and cross-reference labels:

```
t2f(mtcars[1:6, 1:4],
  caption = "Motor Trend Car Road Tests (1974)",
  label = "tab:mtcars",
  filename = "captioned_table")
```

Column Alignment

Explicit or auto-detected alignment:

```
t2f(iris[1:6, ], align = NULL)
t2f(mtcars[1:6, 1:4], align = c("l", "r", "r", "r"))
t2f(mtcars[1:6, 1:4], align = "c")
```

Decimal Alignment

Use siunitx for decimal-aligned columns:

```
df <- data.frame(
  Item = c("A", "B", "C"),
  Value1 = c(1.5, 123.45, 12.345),
  Value2 = c(0.001, 10.1, 1000.01)
)

t2f(df, filename = "decimal_aligned", sub_dir = output_dir,
  align = list("l", t2f_siunitx(table_format = "3.3"),
    t2f_siunitx(table_format = "4.2")))
```

Item	Value1	Value2
A	1.500	0.001
B	123.450	10.100
C	12.345	1000.010

Multi-Page Tables

For large tables that span multiple pages:

```
t2f(mtcars,
  longtable = TRUE,
  caption = "Complete mtcars Dataset",
  filename = "long_table")
```

Quick Reference

Key t2f() Parameters

Parameter	Description	Default
caption	LaTeX table caption	NULL
label	LaTeX label for cross-refs	NULL
align	Column alignment (l/c/r)	NULL (auto)
longtable	Multi-page table support	FALSE
crop	Crop PDF margins	TRUE
crop_margin	Margin size (pts)	10
theme	Theme name or object	NULL

Core Functions

Function	Purpose
t2f()	Convert object to PDF table
t2f_regression()	Compare regression models
t2f_theme_set()	Set global theme
t2f_theme_get()	Get current theme
t2f_list_themes()	List available themes

S3 Methods

Object Type	Method
data.frame	t2f.data.frame()
matrix	t2f.matrix()
lm	t2f.lm()
glm	t2f.glm()
anova / aov	t2f.anova() / t2f.aov()
htest	t2f.htest()

Theme Presets

Function	Style
t2f_theme_nejm()	NEJM (medical journals)
t2f_theme_apa()	APA (psychology)
t2f_theme_nature()	Nature (scientific)
t2f_theme_minimal()	Clean, minimal

System Requirements

- R >= 4.0

- LaTeX distribution (TeX Live, MiKTeX, or MacTeX)
- `pdflatex` and `pdfcrop` executables
- Optional: ImageMagick (for PNG output)