

# Package ‘WeibullR.plotly’

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**Type** Package

**Title** Interactive Weibull Probability Plots

**Version** 0.3

**Description** Build interactive Weibull Probability Plots with 'WeibullR' by David Silkworth and Jurgen Symynck (2022) <<https://CRAN.R-project.org/package=WeibullR>>, an R package for Weibull analysis, and 'plotly' by Carson Sievert (2020) <<https://plotly-r.com>>, an interactive web-based graphing library.

**URL** <https://paulgovan.github.io/WeibullR.plotly/>,  
<https://github.com/paulgovan/WeibullR.plotly>

**BugReports** <https://github.com/paulgovan/WeibullR.plotly/issues>

**License** Apache License

**Imports** plotly, ReliaGrowR, WeibullR

**Suggests** knitr, rmarkdown, spelling, testthat (>= 3.0.0),  
WeibullR.learnr, WeibullR.shiny

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**Config/testthat/edition** 3

**Language** en-US

**NeedsCompilation** no

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**Repository** CRAN

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plotly_contour	<i>Interactive Contour Plot.</i>
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### Description

Interactive Contour Plot.

### Usage

```
plotly_contour(  
  wblr_obj,  
  main = "Contour Plot",  
  xlab = "Eta",  
  ylab = "Beta",  
  showGrid = TRUE,  
  col = "black",  
  gridCol = "lightgray",  
  signif = 3  
)
```

### Arguments

wblr_obj	An object of class 'wblr'.
main	Main title.
xlab	X-axis label.
ylab	Y-axis label.
showGrid	Show grid (TRUE) or hide grid (FALSE).
col	Color of the model contour
gridCol	Color of the grid.
signif	Significant digits of results

### Value

The function returns no value.

### Examples

```
library(WeibullR)  
library(WeibullR.plotly)  
failures<-c(30, 49, 82, 90, 96)  
obj<-wblr.conf(wblr.fit(wblr(failures), method.fit = 'mle'), method.conf = 'lrb')  
plotly_contour(obj)
```

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plotly_duane	<i>Interactive Duane Plot.</i>
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**Description**

Interactive Duane Plot.

**Usage**

```
plotly_duane(  
  duane_obj,  
  showGrid = TRUE,  
  main = "Duane Plot",  
  xlab = "Cumulative Time",  
  ylab = "Cumulative MTBF",  
  pointCol = "black",  
  fitCol = "black",  
  gridCol = "lightgray"  
)
```

**Arguments**

duane_obj	An object of class 'duane'.
showGrid	Show grid (TRUE) or hide grid (FALSE).
main	Main title.
xlab	X-axis label.
ylab	Y-axis label.
pointCol	Color of the point values.
fitCol	Color of the model fit.
gridCol	Color of the grid.

**Value**

The function returns no value.

**Examples**

```
library(ReliaGrowR)  
times<-c(100, 200, 300, 400, 500)  
failures<-c(1, 2, 1, 3, 2)  
fit<-duane_plot(times, failures)  
plotly_duane(fit)
```

---

`plotly_rga`*Interactive Reliability Growth Plot.*

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**Description**

Interactive Reliability Growth Plot.

**Usage**

```
plotly_rga(  
  rga_obj,  
  showConf = TRUE,  
  showGrid = TRUE,  
  main = "Reliability Growth Plot",  
  xlab = "Cumulative Time",  
  ylab = "Cumulative Failures",  
  pointCol = "black",  
  fitCol = "black",  
  confCol = "black",  
  gridCol = "lightgray",  
  breakCol = "black"  
)
```

**Arguments**

<code>rga_obj</code>	An object of class 'rga'.
<code>showConf</code>	Show the confidence bounds (TRUE) or not (FALSE).
<code>showGrid</code>	Show grid (TRUE) or hide grid (FALSE).
<code>main</code>	Main title.
<code>xlab</code>	X-axis label.
<code>ylab</code>	Y-axis label.
<code>pointCol</code>	Color of the point values.
<code>fitCol</code>	Color of the model fit.
<code>confCol</code>	Color of the confidence bounds.
<code>gridCol</code>	Color of the grid.
<code>breakCol</code>	Color of the breakpoints.

**Value**

The function returns no value.

**Examples**

```
library(ReliaGrowR)
times<-c(100, 200, 300, 400, 500)
failures<-c(1, 2, 1, 3, 2)
rga<-rga(times, failures)
plotly_rga(rga)
```

---

`plotly_wblr`*Interactive Probability Plot.*

---

**Description**

Interactive Probability Plot.

**Usage**

```
plotly_wblr(
  wblr_obj,
  susp = NULL,
  showConf = TRUE,
  showSusp = TRUE,
  showRes = TRUE,
  showGrid = TRUE,
  main = "Probability Plot",
  xlab = "Time to Failure",
  ylab = "Probability",
  probCol = "black",
  fitCol = "black",
  confCol = "black",
  intCol = "black",
  gridCol = "lightgray",
  signif = 3
)
```

**Arguments**

<code>wblr_obj</code>	An object of class 'wblr'.
<code>susp</code>	An optional numeric vector of suspension data.
<code>showConf</code>	Show the confidence bounds (TRUE) or not (FALSE).
<code>showSusp</code>	Show the suspensions plot (TRUE) or not (FALSE).
<code>showRes</code>	Show the results table (TRUE) or not (FALSE).
<code>showGrid</code>	Show grid (TRUE) or hide grid (FALSE).
<code>main</code>	Main title.
<code>xlab</code>	X-axis label.

<code>ylab</code>	Y-axis label.
<code>probCol</code>	Color of the probability values.
<code>fitCol</code>	Color of the model fit.
<code>confCol</code>	Color of the confidence bounds.
<code>intCol</code>	Color of the intervals for interval censored models.
<code>gridCol</code>	Color of the grid.
<code>signif</code>	Significant digits of results

**Value**

The function returns no value.

**Examples**

```
library(WeibullR)
library(WeibullR.plotly)
failures<-c(30, 49, 82, 90, 96)
obj<-wblr.conf(wblr.fit(wblr(failures)))
plotly_wblr(obj)
```

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