

# Package: inlegend (via r-universe)

July 26, 2024

**Title** Inset legend themes for ggplot2 maps

**Version** 0.1.0

**Description** Provides themes for making ggplot2 maps with inset legends and without whitespace around the margins.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.1.1

**Suggests** testthat (>= 3.0.0), spData, dplyr, ggspatial, sf, diffviewer

**Imports** ggplot2, magrittr, ggfx

**Config/testthat/edition** 3

**Repository** <https://milesmbain.r-universe.dev>

**RemoteUrl** <https://github.com/milesmbain/inlegend>

**RemoteRef** master

**RemoteSha** 9cd33beebe48096a1c49a4984d3440cde2713054

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inset\_legend\_custom    *build custom inset map legend.*

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## Description

Build a custom inset map legend

## Usage

```
inset_legend_custom(
  inlegend.location = c("top-right", "top-left", "bottom-left", "bottom-right"),
  legend.background,
  legend.text,
  legend.title,
  legend.key,
  legend.margin = ggplot2::margin(8, 8, 10, 8),
  ...
)
```

## Arguments

inlegend.location	the location of the legend. One of "top-right", "top-left", "bottom-left", "bottom-right"
legend.background	the background rectangle the legend is drawn on. A <code>ggplot2::element_rect</code> , where the following parameter mappings map to what you see: <ul style="list-style-type: none"> <li>• fill - background colour</li> <li>• colour - border colour</li> <li>• size - border thickness.</li> </ul>
legend.text	text for labels, eg factor names, or scale tick labels. A <code>ggplot2::element_text</code> , where the following parameters map to what you see: <ul style="list-style-type: none"> <li>• colour - the text colour</li> <li>• size - the text size</li> <li>• face - the text face (e.g. bold)</li> <li>• family - the text font</li> <li>• margin - <code>ggplot2::margin</code> that sets the spacing around the legend element text</li> </ul>
legend.title	text for legend title. A <code>ggplot2::element_text</code> , where the following parameters map to what you see: <ul style="list-style-type: none"> <li>• colour - the text colour</li> <li>• size - the text size</li> <li>• face - the text face (e.g. bold)</li> <li>• family - the text font</li> </ul>

	<ul style="list-style-type: none"> <li>• <code>margin</code> - <code>ggplot2::margin</code> that sets the spacing around the title text and <code>legend.background</code> edge.</li> </ul>
<code>legend.key</code>	the background rectangles that the individual legend key elements are drawn on. A <code>ggplot2::element_rect</code> where the following parameters map to what you see: <ul style="list-style-type: none"> <li>• <code>fill</code> - the rectangle</li> </ul>
<code>legend.margin</code>	The spacing between the edge of the <code>legend.background</code> and legend elements (text, keys etc.). A <code>ggplot2::margin</code> object. Additional padding on bottom seems to be required for things to look right.
<code>...</code>	arguments passed to <code>ggplot2::theme</code> .

### Details

This function has defaults that will position an inset map `ggplot2` legend. It is the legend constructor used by `inset_legend_light` and `inset_legend_dark`.

### Value

a object of classes 'theme' and 'gg'

### Author(s)

Miles McBain

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`inset_themes`

*inset map legend themes*

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### Description

Inset legend themes for `ggplot2` maps

### Usage

```
inset_legend_dark(
  location = "top-right",
  title_text_size = NULL,
  text_size = NULL
)
```

```
inset_legend_light(
  location = "top-right",
  title_text_size = NULL,
  text_size = NULL
)
```

**Arguments**

location	the location to inset legends. One of "top-left", "top-right", "bottom-left", "bottom-right"
title_text_size	a convenience parameter for setting the size of the legend title text. For high resolution maps the defaults tend to be too small.
text_size	a convenience parameter for setting the size the legend key elements text. For high resolution maps the defaults tend to be too small.

**Details**

These themes move and restyle the ggplot2 legend to be more in line with mapping norms. ggplot2 are inset in the desired map corner. The legends are restyled to appear simpler and draw less attention when overlaid on maps.

Convenience parameters are provided to tweak the size of legend text. The text style can be fully customised with the ggplot2 theme engine. See examples.

**Value**

inlegend\_dark returns dark legend theme based on kepler.gl as an object of classes theme and gg.

inlegend\_light returns a light white legend theme as an object of classes theme and gg.

**Author(s)**

Miles McBain

**Examples**

```
library(spData)
library(dplyr)
library(ggplot2)
library(ggspatial)
library(inlegend)

coffee_prod <-
  world %>%
  left_join(coffee_data,
    by = "name_long"
  )
ggplot() +
  layer_spatial(
    coffee_prod,
    aes(fill = coffee_production_2017)
  ) +
  theme_cropped_map() +
  inset_legend_light("bottom-left",
    title_text_size = 10,
    text_size = 8
  ) +
```

```
theme(legend.title = element_text(face = "bold")) +  
scale_fill_viridis_b()
```

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theme\_cropped\_map      *theme\_cropped\_map*

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### **Description**

Remove plot axis and whitespace margins

### **Usage**

```
theme_cropped_map(...)
```

### **Arguments**

...                    arguments passed to `ggplot2::theme()`

### **Details**

In a map where the legend is inset it may be convenient to have the plot tightly cropped around the map extent. This theme give you a such a plot. Beware that there is no space for titles, so that kind of information must be conveyed in section headings or captions.

When saving map using this theme as an image, you will see whitespace in the output unless the aspect ratio of your output image matches the aspect ratio of the map (plot area) exactly.

### **Author(s)**

Miles McBain

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