

# Package ‘spatialwidget’

August 31, 2020

**Type** Package

**Title** Formats Spatial Data for Use in Htmlwidgets

**Version** 0.2.3

**Date** 2020-08-26

**Description** Many packages use 'htmlwidgets' <<https://CRAN.R-project.org/package=htmlwidgets>> for interactive plotting of spatial data.  
This package provides functions for converting R objects, such as simple features, into structures suitable for use in 'htmlwidgets' mapping libraries.

**URL** <https://symbolixau.github.io/spatialwidget/articles/spatialwidget.html>

**License** GPL-3

**Depends** R (>= 3.3.0)

**SystemRequirements** C++11

**Encoding** UTF-8

**LazyData** true

**Imports** Rcpp

**LinkingTo** BH, colourvalues (>= 0.3.4), geojsonsf (>= 1.3.3), geometries, jsonify (>= 1.1.1), rapidjsonr, Rcpp, sfheaders (>= 0.2.1)

**RoxygenNote** 7.1.0

**Suggests** colourvalues, covr, geojsonsf, jsonify, sfheaders, knitr, rmarkdown, testthat

**VignetteBuilder** knitr

**NeedsCompilation** yes

**Author** David Cooley [aut, cre]

**Maintainer** David Cooley <dcooley@symbolix.com.au>

**Repository** CRAN

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widget_arcs	<i>Origin Destination points between Sydney, Australia and other capitals cities</i>
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### Description

A simple feature sf object with two sfc columns, "origin" and "destination"

### Usage

```
widget_arcs
```

### Format

A sf object with 199 observations and 6 variables

**country\_from** origin country

**capital\_from** origin capital

**country\_to** destination country

**capital\_to** destination capital

**origin** sfc geometry column

**destination** sfc geometry column

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widget_capitals	<i>Capital cities for each country</i>
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**Description**

A simple feature sf object containing the coordinates of 200 capital cities in the world

**Usage**

```
widget_capitals
```

**Format**

A sf object with 200 observations and 4 variables

**country** country name

**capital** capital name

**geometry** sfc geometry column

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widget_line	<i>Widget Line</i>
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**Description**

Converts an 'sf' object with LINESTRING geometriers into JSON for plotting in an htmlwidget

**Usage**

```
widget_line(  
  data,  
  stroke_colour = NULL,  
  stroke_opacity = NULL,  
  stroke_width = NULL,  
  legend = TRUE,  
  json_legend = TRUE,  
  digits = 6  
)
```

**Arguments**

<code>data</code>	sf object
<code>stroke_colour</code>	string specifying column of <code>sf</code> to use for the stroke colour, or a single value to apply to all rows of data
<code>stroke_opacity</code>	string specifying column of <code>sf</code> to use for the stroke opacity, or a single value to apply to all rows of data
<code>stroke_width</code>	string specifying column of <code>sf</code> to use for the stroke width, or a single value to apply to all rows of data
<code>legend</code>	logical indicating if legend data will be returned
<code>json_legend</code>	logical indicating if the legend will be returned as json
<code>digits</code>	number of decimal places for rounding lon o& lat coordinates. Default 6

**Examples**

```
## use default stroke options
l <- widget_line( widget_roads, legend = TRUE )
```

---

<code>widget_melbourne</code>	<i>Melbourne</i>
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**Description**

A simple feature sf object of Polygons for Melbourne and the surrounding area

**Usage**

```
widget_melbourne
```

**Format**

A data frame with 397 observations and 7 variables

**SA2\_NAME** statistical area 2 name of the polygon

**SA3\_NAME** statistical area 3 name of the polygon

**AREASQKM** area of the SA2 polygon

**geometry** sfc geometry column

**Details**

This data set is a subset of the Statistical Area Level 2 (SA2) ASGS Edition 2016 data released by the Australian Bureau of Statistics <https://www.abs.gov.au/>

The data is realised under a Creative Commons Attribution 2.5 Australia licence <https://creativecommons.org/licenses/by/2.5/au/>

The data has been down-cast from MULTIPOLYGONS to POLYGONS.

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`widget_od`*Widget OD*

---

**Description**

Converts an 'sf' object with two POINT geometriers into JSON for plotting in an htmlwidget

**Usage**

```
widget_od(  
  data,  
  origin,  
  destination,  
  fill_colour = NULL,  
  fill_opacity = NULL,  
  legend = TRUE,  
  json_legend = TRUE,  
  digits = 6  
)
```

**Arguments**

<code>data</code>	sf object
<code>origin</code>	string specifying the column of data containing the origin geometry
<code>destination</code>	string specifying the column of data containing the destination geometry
<code>fill_colour</code>	string specifying column of sf to use for the fill colour, or a single value to apply to all rows of data
<code>fill_opacity</code>	string specifying column of sf to use for the fill opacity, or a single value to apply to all rows of data
<code>legend</code>	logical indicating if legend data will be returned
<code>json_legend</code>	logical indicating if the legend will be returned as json
<code>digits</code>	number of decimal places for rounding lon o& lat coordinates. Default 6

**Examples**

```
l <- widget_od( data = widget_arcs, origin = "origin", destination = "destination", legend = FALSE )
```

---

`widget_point`*Widget Point*

---

**Description**

Converts an 'sf' object with POINT geometriers into JSON for plotting in an htmlwidget

**Usage**

```
widget_point(  
  data,  
  fill_colour = NULL,  
  fill_opacity = NULL,  
  lon = NULL,  
  lat = NULL,  
  legend = TRUE,  
  json_legend = TRUE,  
  digits = 6  
)
```

**Arguments**

<code>data</code>	sf object
<code>fill_colour</code>	string specifying column of sf to use for the fill colour, or a single value to apply to all rows of data
<code>fill_opacity</code>	string specifying column of sf to use for the fill opacity, or a single value to apply to all rows of data
<code>lon</code>	string specifying the column of data containing the longitude. Ignored if using an sf object
<code>lat</code>	string specifying the column of data containing the latitude. Ignored if using an sf object
<code>legend</code>	logical indicating if legend data will be returned
<code>json_legend</code>	logical indicating if the legend will be returned as json
<code>digits</code>	number of decimal places for rounding lon o& lat coordinates. Default 6

**Examples**

```
l <- widget_point( data = widget_capitals, legend = FALSE )
```

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widget_polygon	<i>Widget Polygon</i>
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### Description

Converts an 'sf' object with POLYGON geometriers into JSON for plotting in an htmlwidget

### Usage

```
widget_polygon(
  data,
  stroke_colour = NULL,
  stroke_opacity = NULL,
  stroke_width = NULL,
  fill_colour = NULL,
  fill_opacity = NULL,
  legend = TRUE,
  json_legend = TRUE,
  digits = 6
)
```

### Arguments

data	sf object
stroke_colour	string specifying column of sf to use for the stroke colour, or a single value to apply to all rows of data
stroke_opacity	string specifying column of sf to use for the stroke opacity, or a single value to apply to all rows of data
stroke_width	string specifying column of sf to use for the stroke width, or a single value to apply to all rows of data
fill_colour	string specifying column of sf to use for the fill colour, or a single value to apply to all rows of data
fill_opacity	string specifying column of sf to use for the fill opacity, or a single value to apply to all rows of data
legend	logical indicating if legend data will be returned
json_legend	logical indicating if the legend will be returned as json
digits	number of decimal places for rounding lon o& lat coordinates. Default 6

### Examples

```
l <- widget_polygon( widget_melbourne, legend = FALSE )
l <- widget_polygon( widget_melbourne, fill_colour = "AREASQKM16", legend = TRUE )
```

---

`widget_roads`*Roads in central Melbourne*

---

**Description**

A simple feature sf object of roads in central Melbourne

**Usage**

```
widget_roads
```

**Format**

An sf and data frame object with 18286 observations and 16 variables

**Details**

Obtained from <https://www.data.gov.au/> and distributed under the Creative Commons 4 License <https://creativecommons.org/licenses/by/4.0/>



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