Package: ggdal (via r-universe)

August 17, 2024

Title GDAL Rendering for 'ggplot2'

Version 0.0.3

Description A 'ggplot2' extension that enables image data from GDAL data sources (DSN).

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Encoding UTF-8

Language es

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

URL https://github.com/hypertidy/ggdal

BugReports https://github.com/hypertidy/ggdal/issues

Imports ggplot2, grDevices, grid, scales, sds, vapour (>= 0.9.5)

Depends R (>= 2.10)

LazyData true

Remotes hypertidy/sds

Suggests maps, sf

Repository https://hypertidy.r-universe.dev

RemoteUrl https://github.com/hypertidy/ggdal

RemoteRef HEAD

RemoteSha af3a17447174e2bfbcdf5ffb4f8ab136e326cda7

Contents

annotation_gdal *Add background imagery*

Description

Uses OpenStreetMap or VirtualEarth to add background imagery, or a custom source via 'dsn'. If you are publishing a map using these tiles, make sure to use the proper attribution (e.g., "Copyright OpenStreetMap contributors" when using an OpenStreetMap-based tile set). Ditto for VirtualEarth or any dsn you use.

Usage

```
annotation_gdal(
  dsn = c("osm", "virtualearth"),
  resample = "bilinear",
  interpolate = FALSE,
  data = NULL,
  mapping = NULL,
  alpha = 1
)

GeomGdal
```

Arguments

`dsn`	The map source (currently 'osm' or 'virtualearth' are built-in -streetmap, or imagery, otherwise use a GDAL DSN - see package sds for some helpers)
`resample`	resample algorithm for the GDAL warper
`interpolate`	Passed to `grid::rasterGrob()`
`data, mapping`	Specify data and mapping to use this geom with facets
`alpha`	Use to make this layer semi-transparent

Format

An object of class `GeomGdal` (inherits from `Geom`, `ggproto`, `gg`) of length 5.

Value

A ggplot2 layer

Examples

```
library(ggplot2)
data(iw)

ggplot() +
  annotation_gdal() +
  geom_sf(data = sf::st_transform(iw, "EPSG:3857"), fill = NA, col = "grey50")

 ggplot() +
  annotation_gdal("virtualearth") +
  geom_sf(data = iw, fill = NA, col = "grey50")


pts <- do.call(cbind, maps::map(plot = FALSE)[1:2])
pts <- pts[!is.na(pts[,1]), ]
pts <- pts[seq(1, nrow(pts), length.out = 8000), ]
sf <- sf::st_sf(geom = sf::st_sfc(sf::st_multipoint(pts), crs = "OGC:CRS84"))
ggplot() +
  annotation_gdal(dsn = "virtualearth") +
  geom_sf(data = sf::st_transform(sf, "+proj=laea +lon_0=147 +lat_0=-42"),
  fill = NA, col = "yellow", pch = ".")

pts2 <- pts[pts[,1] > 50 & pts[,1] < 120 & pts[,2] < -20 & pts[,2] > -45, ]
sf <- sf::st_sf(geom = sf::st_sfc(sf::st_multipoint(pts2), crs = "OGC:CRS84"))
ggplot() +
  annotation_gdal(dsn = "osm") +
  geom_sf(data = sf::st_transform(sf, "EPSG:3577"), fill = NA, col = "yellow", pch = ".")
pts3 <- pts[ pts[,2] < -20, ]
sf <- sf::st_sf(geom = sf::st_sfc(sf::st_multipoint(pts3), crs = "OGC:CRS84"))
wms_arcgis_mapserver_tms <- arcgis_mapserver_imgery()
ggplot() +
  annotation_gdal(dsn = wms_arcgis_mapserver_tms, resample ="lanczos") +
 geom_sf(data = sf::st_transform(sf, "EPSG:3031"), fill = NA, col = "hotpink", pch = 19, cex = 0.2)
```

iw *inlandwaters polygon dataset*

Description

’iw’ copy of inlandwaters from silicate

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