

Package ‘viscover’

October 15, 2018

Title Overlay and visualize Soil Data Layer and Cropland Data Layer

Version 0.1.0

Description This package embed a shiny app to visualize soil survey data and cropland data layer. Some functions to fetch CDL file and values are also provided.

Depends R (>= 3.5.0)

License GPL-3

Encoding UTF-8

LazyData true

Imports raster, sp, XML, glue, dplyr, utils, methods, dismo, RCurl, magrittr, rgeos, soilDB (>= 2.0-1), leaflet (>= 2.0.0), leaflet.extras (>= 1.0.0), plotly (>= 4.8.0), DT, shiny (>= 1.1.0), shinycss-loaders, shinydashboard, shinyWidgets

RoxygenNote 6.1.0

Suggests knitr,
rmarkdown

VignetteBuilder knitr

R topics documented:

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cdl.dbf	<i>CDL color scheme</i>
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Description

A dataset containing the codebook and color sheme of CDL points.

Usage

```
cdl.dbf
```

Format

A data frame with 255 rows and 6 variables.

Examples

```
dplyr::glimpse(cdl.dbf)
```

cdlpal	<i>CDL color palette</i>
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Description

Obtain the color code for given CDL value.

Usage

```
cdlpal(x)
```

Arguments

x	a integer value or vector of CDL values
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Value

color code used in CDL for given CDL value(s)

Examples

```
cdlpal(0:10)
```

`GetCDLFile`*Get CDL raster*

Description

Get CDL raster file by spatial extent in WGS84.

Usage

```
GetCDLFile(year, b)
```

Arguments

year	one of the available CDL years
b	a spatial object in the projection of WGS84

Value

A CDL raster within the given extent

Examples

```
## not run  
# GetCDLFile(2017, poly)
```

`GetCDLValue`*Get CDL point*

Description

Get CDL point information by longitude and latitude in WGS84.

Usage

```
GetCDLValue(year, lon, lat)
```

Arguments

year	one of the available CDL years
lon	longitude in WGS84
lat	latitude in WGS84

Value

A list with the CDL value, category and color

Examples

```
## not run  
# GetCDLValue(2017, -93.65, 42.03)
```

poly	<i>An example spatial polygon from soil survey data</i>
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Description

An example spatial polygon from soil survey data

Usage

poly

Format

A SpatialPolygonsDataFrame with 7 parital map unit polygons. The data slot has 7 rows and 8 variables.

runTool	<i>Run the overlay tool</i>
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Description

Run the overlay tool

Usage

runTool()

Examples

```
## not run
# runTool()
## print the directory containing the code for the application
system.file("shiny-examples", "overlay", package = "viscover")
```

tile	<i>An example CDL raster</i>
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Description

An example CDL raster

Usage

tile

Format

A raster layer with 72 rows and 37 columns

`TileinPoly`*Overlay raster tile and polygon*

Description

Obtain the spatial intersection of a raster tile and a spatial polygon.

Usage

```
TileinPoly(tile, poly)
```

Arguments

<code>tile</code>	a raster object
<code>poly</code>	a spatial polygon object in WGS84

Value

a dataframe with the counts of tile points in the polygon

Examples

```
library(dplyr)
TileinPoly(tile, poly)
```

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