

Package: r.spatial.workshop.datasets (via r-universe)

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Type Package

Title Collection of spatial datasets

Version 1.0

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Description This packages provides spatial datasets in various format.
They are used for demonstrating spatial operations and map
creation using R spatial pacakges (e.g., sf, terra, tmap).

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Encoding UTF-8

LazyData true

LazyDataCompression xz

Depends R (>= 3.5)

RoxygenNote 7.3.2

Imports sf

Config/pak/sysreqs libabsl-dev cmake libgdal-dev gdal-bin libgeos-dev libssl-dev libproj-dev libsqlite3-dev libudunits2-dev

Repository <https://tmieno2.r-universe.dev>

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as_applied_s_rate	<i>As-applied seed rate</i>
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Description

As-applied seed rate in 1000

Usage

as_applied_s_rate

Format

sf A data frame with 1,041 rows and 3 columns:

seed_rate Seed rate in 1000

geometry geometry

seed_id ID

Source

privately obtained

co_counties	<i>Colorado county boundary data</i>
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Description

Colorado county boundary as an sf object

Usage

co_counties

Format

‘sf’ An sf with 2 rows and 1 columns:

statefp State FIP

countyfp County FIP

name County name

geometry geometry

Source

<https://www2.census.gov/geo/pdfs/maps-data/data/tiger/tgrshp2019/TGRSHP2019_TechDoc.pdf>

corn_acres_ne	<i>Corn harvested acres in Nebraska</i>
---------------	---

Description

Corn harvested acres in Nebraska

Usage

corn_acres_ne

Format

‘sf’ An sf with 6205 rows and 4 columns:

year year

county_code County FIP

acre harvested corn acres

geometry geometry

Source

<https://www.nass.usda.gov/Quick_Stats/>

corn_yield	<i>Corn yield</i>
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Description

Corn yield from yield monitor

Usage

corn_yield

Format

sf An sf object with 3830 rows and 2 columns:

- geometry** geometry
- yield** corn yield

Source

privately obtained

county_yield	<i>Corn yield by county</i>
--------------	-----------------------------

Description

Corn and soybean yield by county for a few states.

Usage

county_yield

Format

tibble A tibble object with 1956 rows and 10 columns:

corn_yield corn yield

soy_yield soybean yield

year year

state_name state name

d0_5_9 drought intensity indicator: category 0

d1_5_9 drought intensity indicator: category 1

d2_5_9 drought intensity indicator: category 2

d3_5_9 drought intensity indicator: category 3

d4_5_9 drought intensity indicator: category 4

geometry geometry

Source

privately obtained

fairway_grid

Fairway plot data

Description

Fairway plot polygons saved as an sf object

Usage

fairway_grid

Format

'sf' An sf with 42 rows and 2 columns:

grid grid ID

geometry geometry

Source

privately obtained

hp_boundary

High-Plains Aquifer boundary data

Description

High-Plains Aquifer boundary polygon data saved as an sf object

Usage

hp_boundary

Format

'sf' An sf with 2 rows and 1 columns:

geometry geometry

Source

<<https://www.sciencebase.gov/catalog/item/6314061bd34e36012efa397b>>

huc_ia

Hydrologic Units

Description

Hydrologic units that covers Iowa

Usage

huc_ia

Format

sf A data frame with 29 rows and 2 columns:

huc_code HUC ID

geometry geometry

Source

<"<https://www.sciencebase.gov/catalog/item/631405c4d34e36012efa315f>">

ia_nitrogen	<i>Fake nitrogen use by county in Iowa</i>
-------------	--

Description

Fake nitrogen use by county in Iowa

Usage

ia_nitrogen

Format

sf An sf with 99 rows and 3 columns:

countyfp County FIPS number

geometry geometry

nitrogen_rate Nitrogen rate (lb/acre)

Source

USDA NASS

lines	<i>Lines</i>
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Description

Lines

Usage

lines

Format

sf A data frame with 2 rows and 2 columns:

x geometry

line_name name of the line

Source

generated using R

mower_sensor	<i>Mower sensor data</i>
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Description

Mower sensor data

Usage

mower_sensor

Format

‘data.frame‘ A data frame with 420 rows and 3 columns:

LNG Longitude

LAT Latitude

ELEV Elevation

Source

privately obtained

NDRE	<i>NDRE values</i>
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Description

NDRE values

Usage

NDRE

Format

stars A stars object with 2 dimensions and 1 attribute:

Source

privately obtained

ne_counties	<i>Nebraska county boundary data</i>
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Description

Nebraska county boundary as an sf object

Usage

ne_counties

Format

‘sf’ An sf with 2 rows and 1 columns:

statefp State FIP

countyfp County FIP

name County name

geometry geometry

Source

<https://www2.census.gov/geo/pdfs/maps-data/data/tiger/tgrshp2019/TGRSHP2019_TechDoc.pdf>

NIR	<i>Near-Infrared Red (NIR)</i>
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Description

Near-Infrared Red from drone

Usage

NIR

Format

stars A stars object with 2 dimensions and 1 attribute:

NIR NIR

Source

privately obtained

points	<i>Points</i>
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Description

Points

Usage

points

Format

sf An sf with 3 rows and 2 columns:

x geometry

point_name name of the point

Source

generated using R

polygons	<i>Polygons</i>
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Description

Polygons

Usage

polygons

Format

sf A data frame with 3 rows and 2 columns:

x geometry

polygon_name name of the polygon

Source

generated using R

prism_2012_aug	<i>PRISM precipitation data</i>
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Description

PRISM precipitation data from Aug 1 to Aug 5 in 2012

Usage

prism_2012_aug

Format

stars A stars object with 3 dimensions and 1 attribute:

Source

privately obtained

prism_douglas	<i>PRISM maximum temperature data for the Douglas county in NE</i>
---------------	--

Description

PRISM maximum temperature data for the Douglas county in NE on 08/01/2012

Usage

prism_douglas

Format

stars A stars object with 2 dimensions and 1 attribute:

Source

privately obtained

prism_saunders	<i>PRISM maximum temperature data for the Saunders county in NE</i>
----------------	---

Description

PRISM maximum temperature data for the Saunders county in NE on 08/01/2012

Usage

prism_saunders

Format

stars A stars object with 2 dimensions and 1 attribute:

Source

privately obtained

prism_us	<i>PRISM precipitation data for the contiguous US</i>
----------	---

Description

PRISM precipitation data for the contiguous US on 08/01/2012

Usage

prism_us

Format

stars A stars object with 2 dimensions and 1 attribute:

Source

privately obtained

railroads_ne	<i>US railroads in Nebraska</i>
--------------	---------------------------------

Description

US railroads stored as an sf object

Usage

```
railroads_ne
```

Format

‘sf’ An sf with 2 rows and 1 columns:

LINEARID rail ID

geometry geometry

Source

<"http://www2.census.gov/geo/tiger/TIGER2019/RAILS/tl_2019_us_rails.zip">

RED	<i>Red (RED)</i>
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Description

Red from drone

Usage

```
RED
```

Format

stars A stars object with 2 dimensions and 1 attribute:

Source

privately obtained

reflec_blue	<i>Blue reflectance</i>
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Description

Blue reflectance from drone

Usage

reflec_blue

Format

stars A stars object with 2 dimensions and 1 attribute:

blue blue reflectance

Source

privately obtained

reflec_green	<i>Green reflectance</i>
--------------	--------------------------

Description

Green reflectance from drone

Usage

reflec_green

Format

stars A stars object with 2 dimensions and 1 attribute:

green green reflectance

Source

privately obtained

reflec_red	<i>Red reflectance</i>
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Description

Red reflectance from drone

Usage

reflec_red

Format

stars A stars object with 2 dimensions and 1 attribute:

red red reflectance

Source

privately obtained

soy_yield	<i>Soybean yield</i>
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Description

Soybean yield (bu/acre)

Usage

soy_yield

Format

sf A data frame with 1,683 rows and 3 columns:

yield soybean yield (bu/acre)

geometry geometry

yield_id ID

Source

privately obtained

treatment_blocks	<i>Treatment blocks</i>
------------------	-------------------------

Description

Treatment blocks

Usage

treatment_blocks

Format

sf An sf object with 25 rows and 4 columns:

product product name

target rate target nitrogen rate

replication replication id

geometry geometry

Source

privately obtained

wells_ne	<i>Wells in Nebraska with geographic coordinates</i>
----------	--

Description

A subset of wells registered in Nebraska

Usage

wells_ne

Format

data.frame A data frame with 1,000 rows and 3 columns:

wellid Well ID number

longdd Longitude

latdd Latitude

Source

<<https://dnr.nebraska.gov/groundwater>>

wells_ne_sf	<i>Wells in Nebraska as sf</i>
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Description

This is an sf version of wells_ne with fake groundwater extraction added.

Usage

wells_ne_sf

Format

sf An sf with 1,000 rows and 3 columns:

wellid Well ID number

geometry geometry

gw_extracted Fake groundwater extraction amount in acre-feet

Source

<<https://dnr.nebraska.gov/groundwater>>

world	<i>Country boundary</i>
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Description

Counties boundary as sf

Usage

world

Format

sf A data frame with 242 rows and 2 columns:

name Country name

geometry geometry

Source

rnaturalearthdata package

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