

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

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**Type** Package

**Title** Collection of spatial datasets

**Version** 0.1.0

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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).

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**LazyDataCompression** xz

**Depends** R (>= 2.10)

**RoxygenNote** 7.3.2

**Imports** sf

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

**RemoteUrl** <https://github.com/tmieno2/r.spatial.workshop.datasets>

**RemoteRef** HEAD

**RemoteSha** 73e3a5617afa1db44c8a4feced9c22ceb48ca7ce

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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

---

corn_acres_ne	<i>Corn harvested acres in Nebraska</i>
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**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/](https://www.nass.usda.gov/Quick_Stats/)>

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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>
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---

**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

---

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

---

fairway_grid	<i>Fairway plot data</i>
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**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>
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---

**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

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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

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

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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

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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

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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      *PRISM precipitation data*

---

**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      *PRISM maximum temperature data for the Douglas county in NE*

---

**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

*PRISM maximum temperature data for the Saunders county in NE*

---

**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

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prism\_us

*PRISM precipitation data for the contiguous US*

---

**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

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railroads_ne	<i>US railroads in Nebraska</i>
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**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](http://www2.census.gov/geo/tiger/TIGER2019/RAILS/tl_2019_us_rails.zip)">

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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

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

**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

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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

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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

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treatment_blocks	<i>Treatment blocks</i>
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**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>
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**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>>



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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>>

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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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