

Package: rrrricanesdata (via r-universe)

September 24, 2024

Type Package

Title Data for Atlantic and east Pacific tropical cyclones since 1998

Description Includes storm discussions, forecast/advisories, public advisories, wind speed probabilities, strike probabilities and more. This package can be used along with rrrricanes (>= 0.2.0-6). Data is considered public domain via the National Hurricane Center.

Version 0.2.1

Depends R (>= 3.3)

URL <https://docs.ropensci.org/rrricanesdata>,
<https://github.com/ropensci/rrricanesdata>

BugReports <https://github.com/ropensci/rrricanesdata/issues>

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Suggests rrrricanes

Remotes github::ropensci/rrricanes@develop

LazyData TRUE

ByteCompile TRUE

RoxygenNote 6.0.1

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

RemoteUrl <https://github.com/ropensci/rrricanesdata>

RemoteRef master

RemoteSha 358f810a7cf018c75066862174b0efef38e14165

Contents

adv	2
discus	3
fcst	3
fcst_wr	4

fstadv	4
posest	6
prblty	6
public	7
rrricanesdata	7
storms	8
update	8
wndprb	9
wr	10
Index	11

adv	<i>Advisory - Basic advisory data</i>
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Description

- Key** Unique identifier of cyclone
- Adv** Advisory number
- Date** Date and time of advisory
- Status** Classification of cyclone
- Name** Name of cyclone
- Lat** Latitude of cyclone center
- Lon** Longitude of cyclone center
- Wind** Maximum sustained one-minute winds in knots
- Gust** Maximum sustained one-minute gusts in knots
- Pressure** Minimum central pressure in millibars
- PosAcc** Position accuracy of cyclone in nautical miles
- FwdDir** Compass angle of forward motion
- FwdSpeed** Forward speed in miles per hour
- Eye** Size of eye in nautical miles
- SeasNE** Radius of 12ft seas in northeast quadrant
- SeasSE** Radius of 12ft seas in southeast quadrant
- SeasSW** Radius of 12ft seas in southwest quadrant
- SeasNW** Radius of 12ft seas in northwest quadrant

Usage

adv

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 12862 rows and 18 columns.

discus	<i>Storm Discussions</i>
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Description

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Adv Advisory Number

Date Date of advisory issuance

Key ID of cyclone

Contents Text content of product

Usage

discus

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 12847 rows and 6 columns.

fcst	<i>Forecasts - Forecast positions per Forecast/Advisory</i>
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Description

Key Unique identifier of cyclone

Adv Advisory number

Date Date and time of advisory

FcstDate Forecast date and time in UTC

Lat Forecast latitude

Lon Forecast Longitude

Wind Forecast wind in knots

Gust Forecast gust in knots

Usage

fcst

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 66170 rows and 8 columns.

fcst_wr	<i>Forecast Wind Radius - Wind radius for each fcst</i>
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Description

Key Unique identifier of cyclone
Adv Advisory number
Date Date and time of advisory
FcstDate Forecast date and time in UTC
WindField Minimum sustained wind field for quadrants
NE Radius in nautical miles for northeast quadrant
SE Radius in nautical miles for southeast quadrant
SW Radius in nautical miles for southwest quadrant
NW Radius in nautical miles for northwest quadrant

Usage

```
fcst_wr
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 85255 rows and 9 columns.

fstadv	<i>Forecast/Advisory</i>
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Description

Status Classification of cyclone
Name Name of cyclone
Adv Advisory number
Date Date and time of advisory
Key Unique identifier of cyclone
Lat Latitude of cyclone center
Lon Longitude of cyclone center
Wind Maximum sustained one-minute winds in knots
Gust Maximum sustained one-minute gusts in knots
Pressure Minimum central pressure in millibars
PosAcc Position accuracy of cyclone in nautical miles

FwdDir Compass angle of forward motion
FwdSpeed Forward speed in miles per hour
Eye Size of eye in nautical miles
NE64 Radius of ≥ 64 kt winds in northeast quadrant
SE64 Radius of ≥ 64 kt winds in southeast quadrant
SW64 Radius of ≥ 64 kt winds in southwest quadrant
NW64 Radius of ≥ 64 kt winds in northwest quadrant
NE50 Radius of ≥ 50 kt winds in northeast quadrant
SE50 Radius of ≥ 50 kt winds in southeast quadrant
SW50 Radius of ≥ 50 kt winds in southwest quadrant
NW50 Radius of ≥ 50 kt winds in northwest quadrant
NE34 Radius of ≥ 34 kt winds in northwest quadrant
SE34 Radius of ≥ 34 kt winds in southeast quadrant
SW34 Radius of ≥ 34 kt winds in southwest quadrant
NW34 Radius of ≥ 34 kt winds in northwest quadrant
Hr{n}FcstDate Forecast valid date
Hr{n}Lat Forecast latitude in 'n' hours
Hr{n}Lon Forecast longitude in 'n' hours
Hr{n}Wind Forecast maximum wind in 'n' hours
Hr{n}Gust Forecast maximum gust in 'n' hours
Hr{n}NE64 Forecast wind radius in 'n' hours
Hr{n}SE64 Forecast wind radius in 'n' hours
Hr{n}SW64 Forecast wind radius in 'n' hours
Hr{n}NW64 Forecast wind radius in 'n' hours
Hr{n}NE50 Forecast wind radius in 'n' hours
Hr{n}SE50 Forecast wind radius in 'n' hours
Hr{n}SW50 Forecast wind radius in 'n' hours
Hr{n}NW50 Forecast wind radius in 'n' hours
Hr{n}NE34 Forecast wind radius in 'n' hours
Hr{n}SE34 Forecast wind radius in 'n' hours
Hr{n}SW34 Forecast wind radius in 'n' hours
Hr{n}NW34 Forecast wind radius in 'n' hours
SeasNE Radius of 12ft seas in northeast quadrant
SeasSE Radius of 12ft seas in southeast quadrant
SeasSW Radius of 12ft seas in southwest quadrant
SeasNW Radius of 12ft seas in northwest quadrant

Usage

fstadv

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 12874 rows and 117 columns.

 posest

Position Estimates

Description

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Date Date of advisory issuance

Contents Text content of product

Usage

posest

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 85 rows and 4 columns.

 prblty

Strike Probabilities

Description

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Adv Advisory Number

Date Date of advisory issuance

Location Location for which the probability statistics rely

A Probability of a strike within the next 12 hours

B Probability of a strike between 12 and 24 hours

C Probability of a strike between 24 and 36 hours

D Probability of a strike between 36 and 48 hours

E Probability of a strike between 48 and 72 hours

Usage

```
prblty
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 55571 rows and 10 columns.

public	<i>Public Advisory</i>
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Description

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Adv Advisory Number

Date Date of advisory issuance

Key Unique ID of the cyclone

Contents Text content of product

Usage

```
public
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 14080 rows and 6 columns.

rrricanesdata	<i>rrricanesdata</i>
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Description

`rrricanesdata` is the complimentary data package to ‘`rrricanes`’. It includes all product datasets for north Atlantic and northeast Pacific tropical cyclones from 1998 through the previous month. This package will be updated on the first of every month provided at least one cyclone advisory was issued in the previous month.

storms

Storm Summary

Description

Key Storm ID

Name Storm name

Wind Peak wind speed in knots

StartDate Date/time of first advisory

EndDate Date/time of last advisory

Usage

storms

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 647 rows and 5 columns.

update

Tropical Cyclone Updates

Description

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Date Date of advisory issuance

Key Unique ID of cyclone

Contents Text content of product

Usage

update

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 237 rows and 5 columns.

wndprb

*Wind Speed Probabilities***Description**

Status Classification of storm, e.g., Tropical Storm, Hurricane, etc.

Name Name of storm

Adv Advisory Number

Date Date of advisory issuance

Wind Minimum wind speed for which probabilities reference

Wind12 Probability of sustained 'Wind' within 12 hours

Wind24 Probability of sustained 'Wind' within 24 hours

Wind24Cum Cumulative probability through 24 hours

Wind36 Probability of sustained 'Wind' within 36 hours

Wind36Cum Cumulative probability through 36 hours

Wind48 Probability of sustained 'Wind' within 48 hours

Wind48Cum Cumulative probability through 48 hours

Wind72 Probability of sustained 'Wind' within 72 hours

Wind72Cum Cumulative probability through 72 hours

Wind96 Probability of sustained 'Wind' within 96 hours

Wind96Cum Cumulative probability through 96 hours

Wind120 Probability of sustained 'Wind' within 120 hours

Wind120Cum Cumulative probability through 120 hours

Usage

wndprb

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 118222 rows and 18 columns.

wr	<i>Wind Radius - Current wind radius</i>
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Description

- Key** Unique identifier of cyclone
- Adv** Advisory number
- Date** Date and time of advisory
- Windfield** Minimum wind speed expected
- NE** Radius of ‘Windfield’ in the northeast quadrant
- SE** Radius of ‘Windfield’ in the southeast quadrant
- SW** Radius of ‘Windfield’ in the southwest quadrant
- NW** Radius of ‘Windfield’ in the northwest quadrant

Usage

wr

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 19294 rows and 8 columns.

Index

* datasets

- adv, [2](#)
- discus, [3](#)
- fcst, [3](#)
- fcst_wr, [4](#)
- fstadv, [4](#)
- posest, [6](#)
- prblty, [6](#)
- public, [7](#)
- storms, [8](#)
- update, [8](#)
- wndprb, [9](#)
- wr, [10](#)

adv, [2](#)

discus, [3](#)

fcst, [3](#)

fcst_wr, [4](#)

fstadv, [4](#)

posest, [6](#)

prblty, [6](#)

public, [7](#)

rrricanesdata, [7](#)

rrricanesdata-package (rrricanesdata), [7](#)

storms, [8](#)

update, [8](#)

wndprb, [9](#)

wr, [10](#)