R Package : quaker

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Description

The document describes the R package **quaker**.

The **quaker** API allows users to retrieve, analyse and visualize global seismic activity. The data used is available on the Earthquake Hazards Program sections of the USGS website.

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quaker function list

1. getSeismicData(timeFrame, minMagnitude)

   - returns a GeoJson formatted document of global seismic activity

Name	Description	Valid input
timeFrame	The time interval	PAST_HOUR, PAST_DAY, PAST_WEEK, PAST_WEEK
minMagnitude	The minimum magnitude	all, 1.0, 2.5, 4.5

2. summaryStats(timeFrame, minMagnitude)

   - Produce summary statistics

Name	Description	Valid input
timeFrame	The time interval	PAST_HOUR, PAST_DAY, PAST_WEEK, PAST_WEEK
minMagnitude	The minimum magnitude	all, 1.0, 2.5, 4.5

3. earthquakeRegression(timeFrame, minMagnitude)

   - A simple regression model is computed of cumulative earthquake frequency by magnitude

Name	Description	Valid input
timeFrame	The time interval	PAST_HOUR, PAST_DAY, PAST_WEEK, PAST_WEEK
minMagnitude	The minimum magnitude	all, 1.0, 2.5, 4.5

4. plotByLocation(timeFrame, minMagnitude)

   - interactive geo-plot

Name	Description	Valid input
timeFrame	The time interval	PAST_HOUR, PAST_DAY, PAST_WEEK, PAST_WEEK
minMagnitude	The minimum magnitude	all, 1.0, 2.5, 4.5

5. plotByAnimate(timeFrame, minMagnitude)

- interactive geo-plot , annimating the plot to plot the earthquakes by day