# Package 'Wats'

December 15, 2013
Title Wrap Around Time Series graphics
<b>Description</b> Wrap-around Time Series (WATS) Plots for Interrupted Time Series Designs
Version 0.1-5
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URL https://github.com/wibeasley/Wats,https://r-forge.r-project.org/projects/wats/
<b>Depends</b> R (>= 3.0.0),stats
Imports ggplot2,lubridate,plyr,zoo
Suggests devtools,knitr,testit,testthat
License GPL (>= 2)
LazyData true
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2 AnnotateData

AnnotateDa	ata
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Finds midpoints and bands for the within and between cycles.

#### **Description**

Finds midpoints and bands for the within and between cycles.

#### Usage

```
AnnotateData(dsLinear, dvName, centerFunction, spreadFunction,
  cycleTallyName = "CycleTally", stageIDName = "StageID",
  proportionThroughCycleName = "ProportionThroughCycle",
  proportionIDName = "ProportionID",
  terminalPointInCycleName = "TerminalPointInCycle")
```

### **Arguments**

dsLinear The data.frame to containing the detailed data.

dvName The name of the dependent/criterion variable.

centerFunction A function to calculate the center of a subsample.

spreadFunction A function to calculate the bands of a subsample.

cycleTallyName The variable name indicating how many cycles have been completed.

stageIDName The variable name indicating the stage. In a typical interrupted time series, these values are 1 before the interruption and 2 after.

proportionThroughCycleName

The variable name indicating how far the point is through a cycle. For example, 0 degrees would be  $\emptyset$ , 180 degrees would be  $\emptyset$ . 5, 359 degrees would be  $\emptyset$ . 9972, and 360 degrees would be  $\emptyset$ .

proportionIDName

The variable name indicating the ordinal position through a cycle.

terminal Point In Cycle Name

The variable name indicating the last point within a given cycle.

#### Value

Returns a data. frame with additional variables «Say what they are».

#### **Examples**

```
a <- 32+323
```

AugmentCycleData 3

AugmentCycleData

Calculates variables necessary for WATS Plots

# Description

Calculates variables necessary for WATS Plots

#### Usage

AugmentYearDataWithMonthResolution(dsLinear, dateName)

#### **Arguments**

dsLinear The data. frame to containing the detailed data.

dateName The variable name in dsLinear containing the date or datetime value.

# Value

 $Returns\ a\ data.\ frame\ with\ additional\ variables:\ CycleTally,\ ProportionThroughCycle,\ ProportionID,\ and\ TerminalPointInCycle.$ 

# **Examples**

a <- 32+323

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# Description

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