Package ‘decomposedPSF’

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Type Package
Title Time Series Prediction with PSF and Decomposition Methods (EMD and EEMD)
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Description Predict future values with hybrid combinations of Pattern Sequence based Forecasting (PSF), Autoregressive Integrated Moving Average (ARIMA), Empirical Mode Decomposition (EMD) and Ensemble Empirical Mode Decomposition (EEMD) methods based hybrid methods.
License GPL
Imports PSF, Rlibeemd, forecast, tseries
LazyData TRUE
RoxygenNote 5.0.1
Suggests knitr, rmarkdown
VignetteBuilder knitr
NeedsCompilation no
Repository CRAN
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**eemdarima**

*Function to predict with EEMD-ARIMA model*

**Description**

Function to predict with EEMD-ARIMA model

**Usage**

```r
eemdarima(data, n.ahead)
```

**Arguments**

- `data` as input time series data
- `n.ahead` as horizon of values to be predicted

**Value**

predicted values with EEMD-ARIMA model

**Examples**

```r
# eemdarima(data = nottem, n.ahead = 6)
```

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**eemdpsf**

*Function to predict with EEMD-PSF model*

**Description**

Function to predict with EEMD-PSF model

**Usage**

```r
eemdpsf(data, n.ahead)
```

**Arguments**

- `data` as input time series data
- `n.ahead` as horizon of values to be predicted

**Value**

predicted values with EEMD-PSF model

**Examples**

```r
# eemdpsf(data = nottem, n.ahead = 6)
```
### eemdparsfarma

**Description**
Function to predict with EEMD-PSF,ARIMA model

**Usage**
eemdparsfarma(data, n.ahead)

**Arguments**
- **data**: as input time series data
- **n.ahead**: as horizon of values to be predicted

**Value**
predicted values with EEMD-PSF,ARIMA model

**Examples**
```
# eemdparsfarma(data = nottem, n.ahead = 6)
```

### emdarima

**Description**
Function to predict with EMD-ARIMA model

**Usage**
emdarima(data, n.ahead)

**Arguments**
- **data**: as input time series data
- **n.ahead**: as horizon of values to be predicted

**Value**
predicted values with EMD-ARIMA model

**Examples**
```
# emdarima(data = nottem, n.ahead = 6)
```
**emdpsf**  
*Function to predict with EMD-PSF model*

**Description**  
Function to predict with EMD-PSF model

**Usage**  
```r  
emdpsf(data, n.ahead)  
```

**Arguments**  
- `data` as input time series data  
- `n.ahead` as horizon of values to be predicted

**Value**  
predicted values with EMD-PSF model

**Examples**  
```r  
# emdpsf(data = nottem, n.ahead = 6)  
```

---

**emdpsfarima**  
*Function to predict with EMD-PSF,ARIMA model*

**Description**  
Function to predict with EMD-PSF,ARIMA model

**Usage**  
```r  
emdpsfarima(data, n.ahead)  
```

**Arguments**  
- `data` as input time series data  
- `n.ahead` as horizon of values to be predicted

**Value**  
predicted values with EMD-PSF,ARIMA model

**Examples**  
```r  
# emdpsfarima(data = nottem, n.ahead = 6)  
```
*lpsf*

**Function to restrict the length of dataset in multiples of 24**

**Description**
Function to restrict the length of dataset in multiples of 24

**Usage**

```
lpsf(data, n.ahead)
```

**Arguments**

- `data` as input time series
- `n.ahead` as horizon of values to be predicted

**Value**
returns the predicted results
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