

# Package: decomposedPSF (via r-universe)

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**Type** Package

**Title** Time Series Prediction with PSF and Decomposition Methods (EMD and EEMD)

**Version** 0.2

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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

**Encoding** UTF-8

**RxygenNote** 7.1.2

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

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

**RemoteUrl** <https://github.com/cran/decomposedPSF>

**RemoteRef** HEAD

**RemoteSha** aa689c974c783859d679e5b07ef787eeee08024

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eemdarima

*Function to predict with EEMD-ARIMA model*

### Description

Function to predict with EEMD-ARIMA model

### Usage

```
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

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

---

|         |  |
|---------|--|
| eemdpsf | <i>Function to predict with EEMD-PSF model</i> |
|---------|--|

---

## Description

Function to predict with EEMD-PSF model

## Usage

```
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

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

---

|              |  |
|--------------|--|
| eemdpsfarima | <i>Function to predict with EEMD-PSF,ARIMA model</i> |
|--------------|--|

---

## Description

Function to predict with EEMD-PSF,ARIMA model

## Usage

```
eemdpsfarima(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

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

---

emdarima

*Function to predict with EMD-ARIMA model*

---

### 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

```
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

```
# 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

```
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

```
# 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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