

# Package ‘decomposedPSF’

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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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**Author** Neeraj Bokde

**Maintainer** Neeraj Bokde <neerajdhanraj@gmail.com>

**URL** <https://www.neerajbokde.in/software/>

**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

**RoxygenNote** 7.1.2

**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**

```
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                      *Function to predict with EEMD-PSF model*

---

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

---

**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**

<code>data</code>	as input time series
<code>n.ahead</code>	as horizon of values to be predicted

**Value**

returns the predicted results

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