

```

[1] -296.55 -293.19 -283.56 -235.99  80.13  204.37  561.21  522.65
[9]  122.05  128.05 -212.33 -296.84

$type
[1] "additive"

attr(,"class")
[1] "decomposed.ts"

```

It can be seen in Figure (4.2) that the data is of additive type. The plot is in Figure (4.3).

```
plot(baguiorainseriescomponents)
```

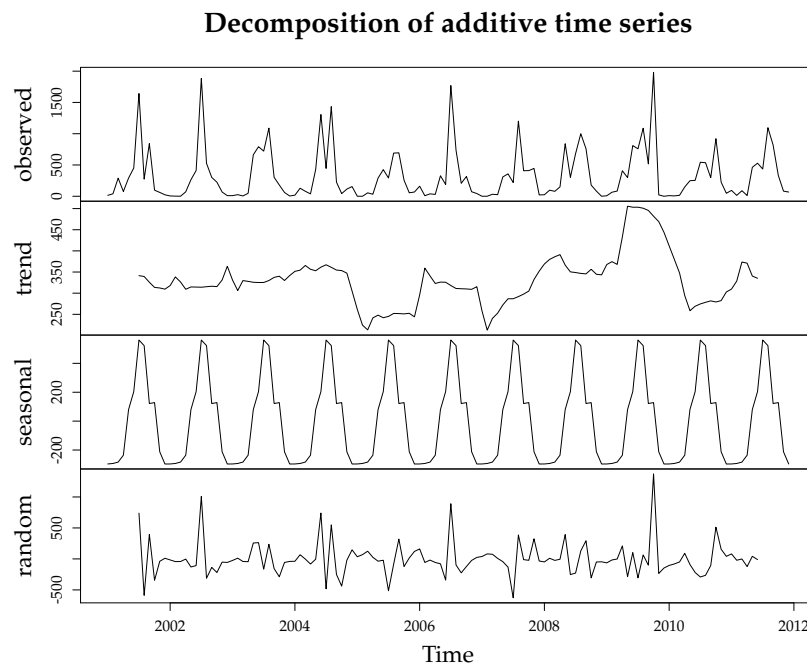


Figure 4.3: The plot of the components of the rainfall time series data.

To use exponential smoothing to make forecasts for the time series of monthly rainfall in Baguio City, the `HoltWinters()` function was used.

The output of `HoltWinters()` made forecast for the same time period covered by the original time series, the time series included rainfall for Baguio City for the period January 2000 to December 2011. So the forecasts were also for that period. An α of 0.001826 indicates that the forecasts were based on both recent and less recent observations—although somewhat more weight was placed on recent observations