

**Figure 4.1:** Plot of Baguio rain fall time series, from January 2001 to December 2011.

Here, the time series data is broken down into its components. This is done in preparation to eliminating the seasonal component of the data. Only the partial results are shown in (4.2). The full results are in Listing (2).

**Figure 4.2:** Partial results of the seasonal, trend, and random components.

 $baguiorainseries components \ \leftarrow \ decompose(baguiorainseries) \\ baguiorainseries components$ 

```
$x
           Jan
                     Feb
                               Mar
                                          Apr
                                                              Jun
                                                                         Jul
                                                    May
2001
        14.600
                                                                  1642.000
                  39.500
                           289.800
                                      76.000
                                               291.000
                                                          451.400
2002
                   2.000
         5.000
                             0.600
                                      71.200
                                               264.400
                                                          411.000
                                                                  1883.400
2003
         9.800
                  25.400
                             4.800
                                      46.800
                                               662.700
                                                          792.400
                                                                    721.300
                                                    Dec
                     Sep
                               0ct
                                          Nov
           Aug
       274.000
2001
                 842.200
                            97.000
                                      61.600
                                                 23.200
2002
       525.600
                 301.500
                                      67.300
                                                 10.000
                           224.800
2003 1089.400
                 303.200
                           179.700
                                      60.400
                                                  4.400
```