

Preprocesamiento

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
##  1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##  Mean   :15.4    Mean   : 42.98
##  3rd Qu.:19.0    3rd Qu.: 56.00
##  Max.   :25.0    Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```

library ("timeSeries")

## Loading required package: timeDate
library ("ggplot2")

# setwd("/home/sergio/Prisiones")
rm(list=ls())
data = read.csv("POB_SIT.csv",header = FALSE,sep = ",",stringsAsFactors=FALSE)

POB = as.integer(c(unlist(data[2:13,2:dim(data)[2]])))

SIN = c(rep(c(rep(0,12),rep(1,12),rep(2,12)),900/36))

POB_SIN = cbind(POB,SIN)

SIND = subset(POB_SIN,POB_SIN[, "SIN"]==0)

MPP1 = subset(POB_SIN,POB_SIN[, "SIN"]==0)
MPP = MPP1[76:296, "POB"]

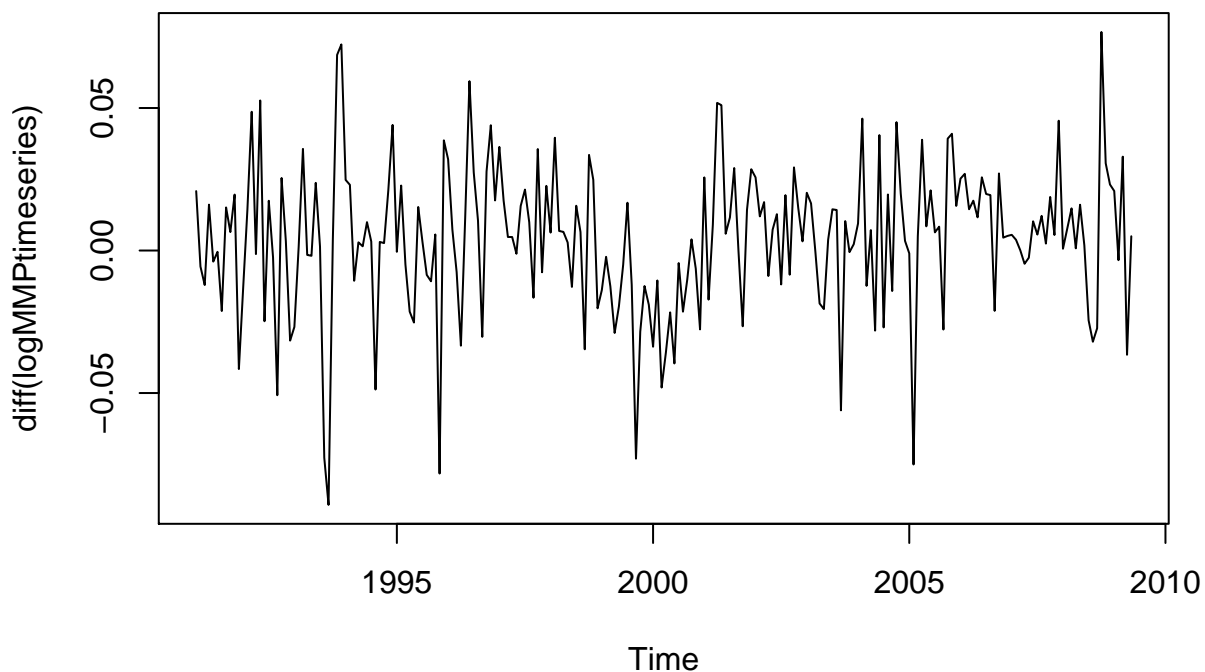
##### SERIES DE TIEMPO
#MPP = Male Prison Population

MPptimeseries <- ts(MPP, frequency=12, start=c(1991,1))

logMMPtimeseries <- log(MPptimeseries)

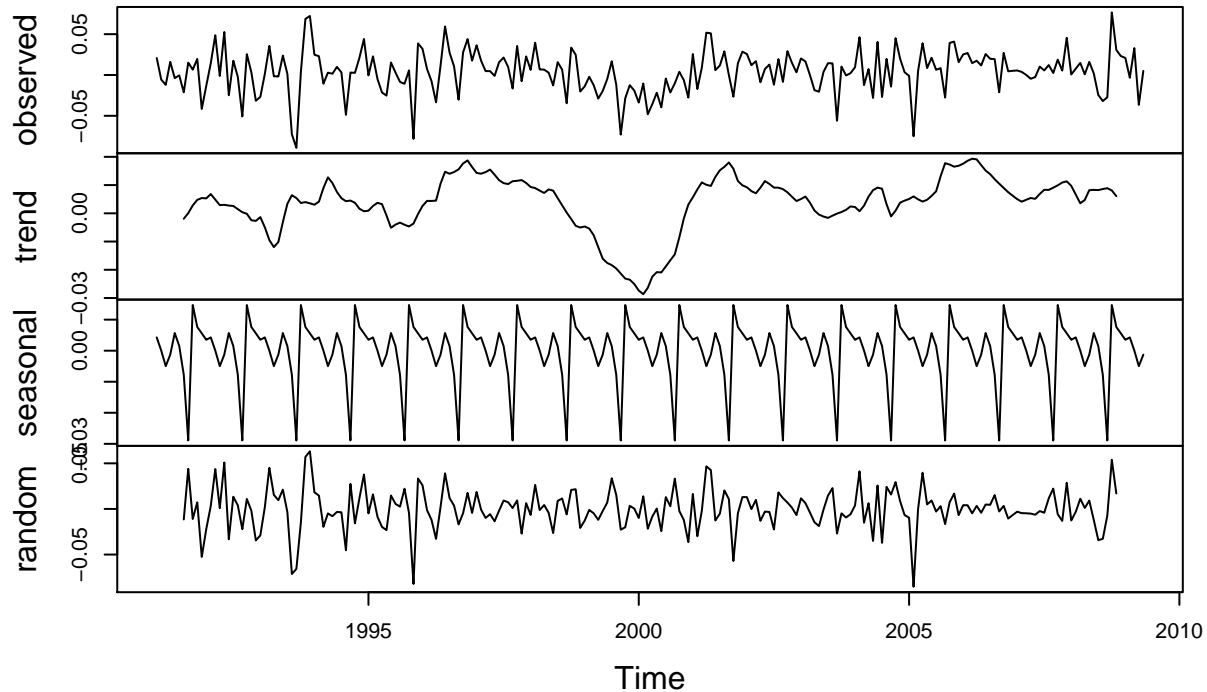
plot.ts(diff(logMMPtimeseries))

```



```
DeltaMPP = decompose(diff(logMMPtimeseries))
plot(DeltaMPP)
```

Decomposition of additive time series



```
# ggplot(DeltaMPP)

write.csv(DeltaMPP$trend, file = 'sindicados.txt', row.names = TRUE)

# Crecimiento promedio
mean(DeltaMPP$trend, na.rm = TRUE)*100

## [1] 0.3728492

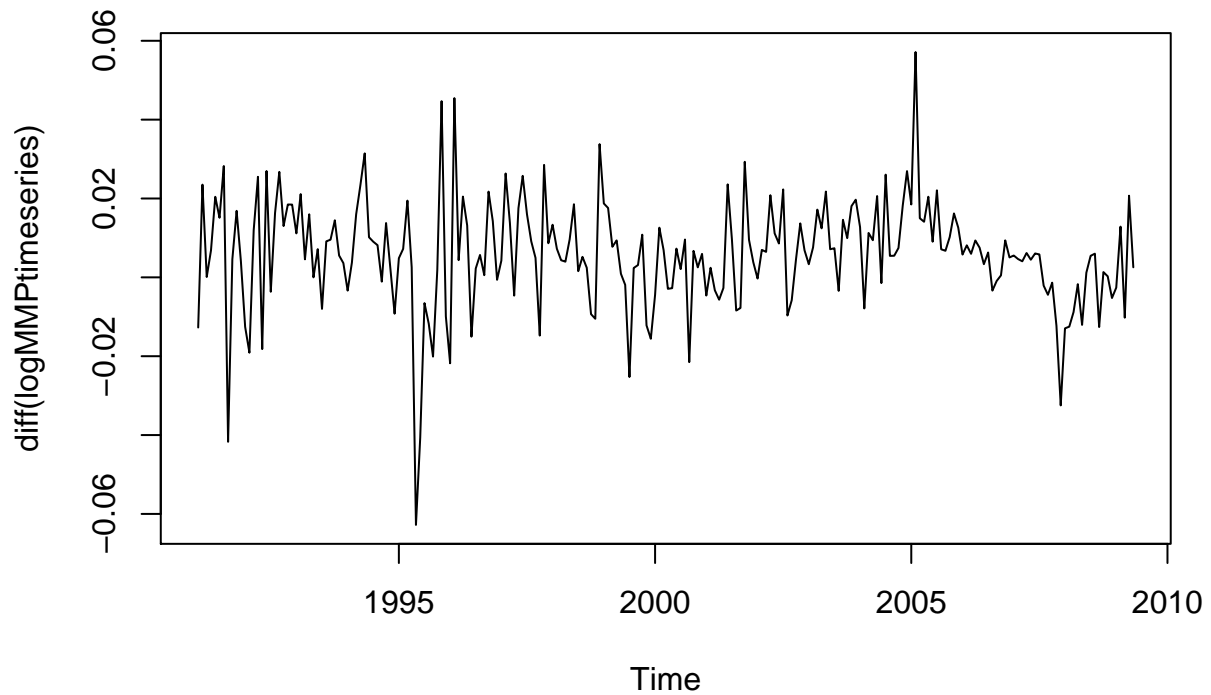
##### CONDENADOS
MPP1 = subset(POB_SIN, POB_SIN[, "SIN"] == 1)
MPP = MPP1[76:296, "POB"]

##### SERIES DE TIEMPO
#MPP = Male Prison Population

MPPtimeseries <- ts(MPP, frequency=12, start=c(1991,1))

logMMPtimeseries <- log(MPPtimeseries)

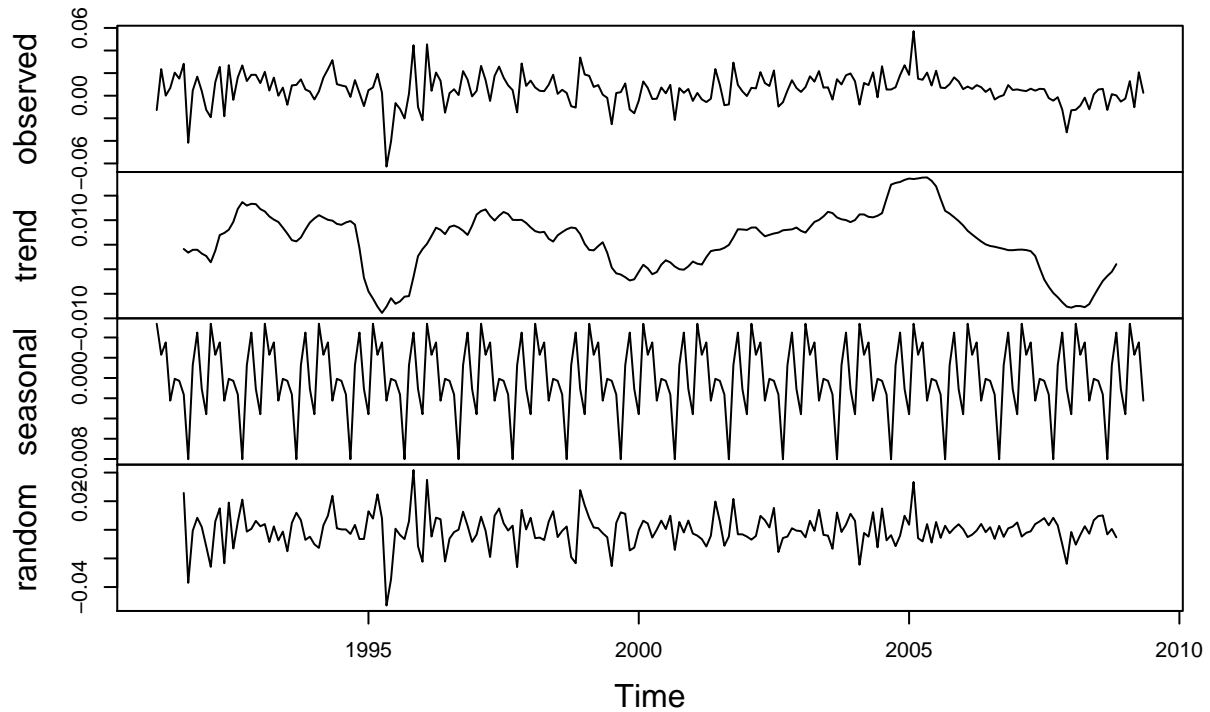
plot.ts(diff(logMMPtimeseries))
```



```
#ggplot(yt.views, aes(Date, Views)) + geom_line() +  
# scale_x_date(format = "%b-%Y") + xlab("") + ylab("Daily Views")
```

```
DeltaMPP = decompose(diff(logMMPtimeseries))  
plot(DeltaMPP)
```

Decomposition of additive time series



```
# ggplot(DeltaMPP)
write.csv(DeltaMPP$trend, file = 'condenados.txt', row.names = TRUE)
```

```
# Crecimiento promedio
mean(DeltaMPP$trend, na.rm = TRUE)*100
```

```
## [1] 0.5827494
```

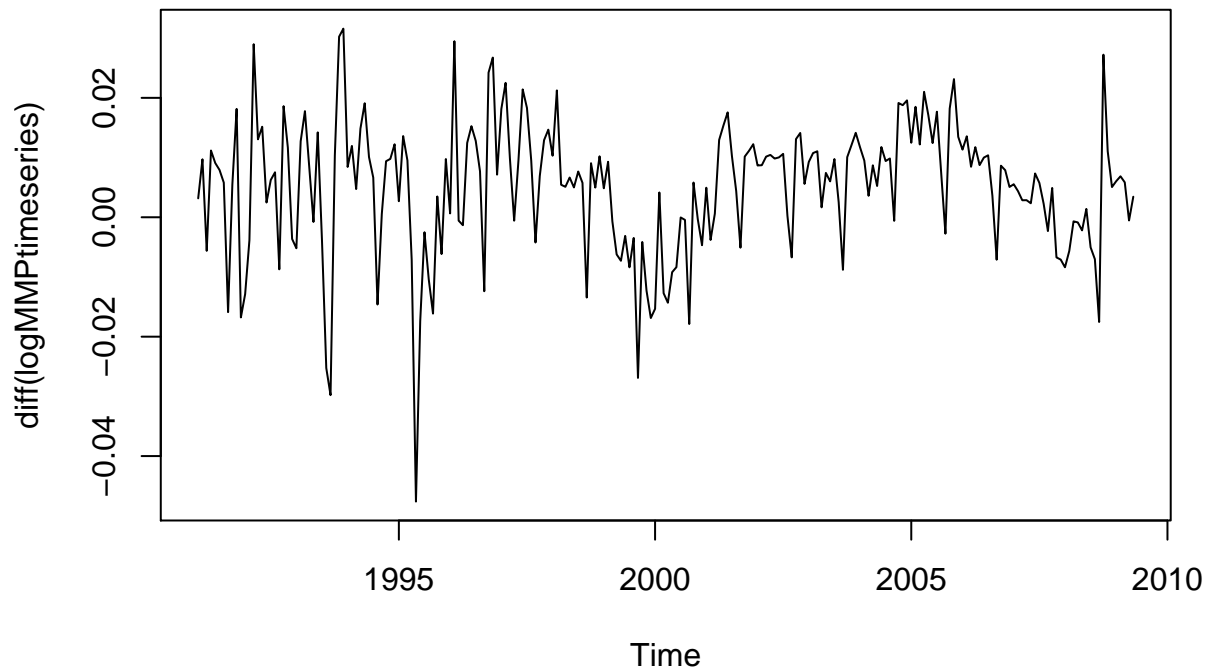
```
##### TOTAL
MPP1 = subset(POB_SIN, POB_SIN[, "SIN"] == 2)
MPP = MPP1[76:296, "POB"]
```

```
##### SERIES DE TIEMPO
#MPP = Male Prison Population
```

```
MPPTimeseries <- ts(MPP, frequency=12, start=c(1991,1))
```

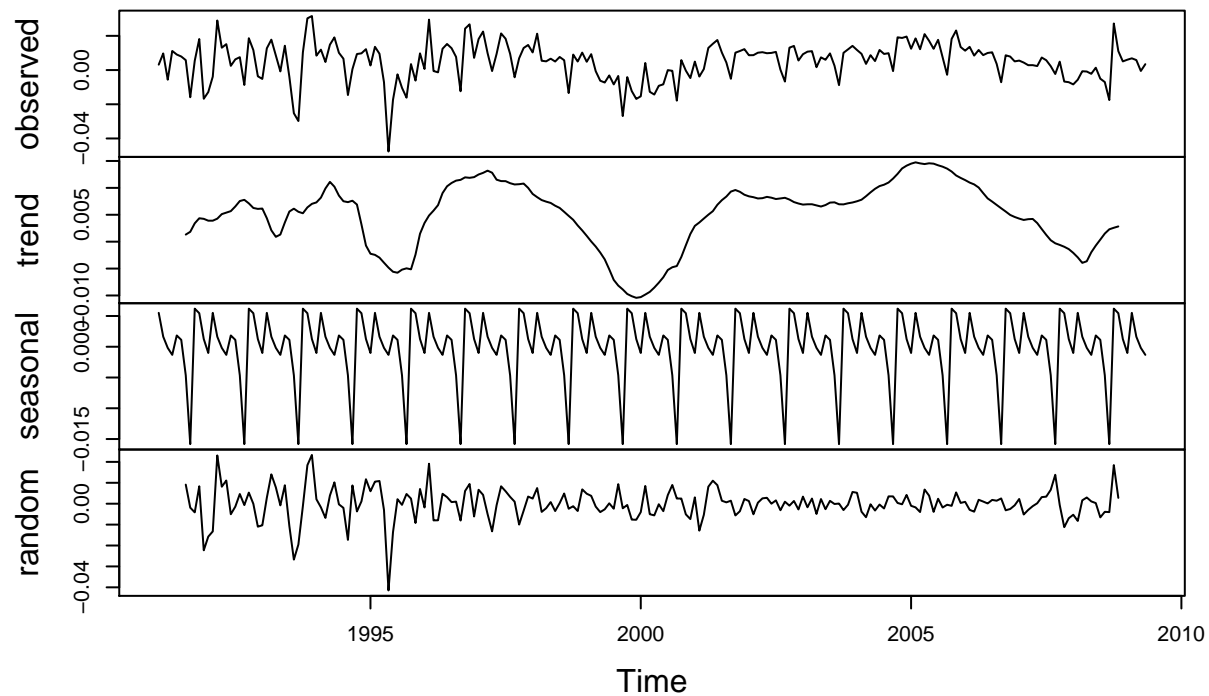
```
logMPPTimeseries <- log(MPPTimeseries)
```

```
plot.ts(diff(logMPPTimeseries))
```



```
DeltaMPP = decompose(diff(logMMPtimeseries))
plot(DeltaMPP)
```

Decomposition of additive time series



```
# ggplot(DeltaMPP)
write.csv(DeltaMPP$trend, file = 'condenados.txt', row.names = TRUE)

# Crecimiento promedio
mean(DeltaMPP$trend, na.rm = TRUE)*100
```

```
## [1] 0.496897
```