

Décomposition classique des séries temporelles

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Séries temporelles pratiques

```
1 data(co2)
2
3 # Seasonal decomposition
4 fit = stl(co2, s.window="period")
5 class(fit)
6 str(fit) #illisible !
7 names(fit) #un peu mieux
8 fit #aussi
9 ?stl
10 plot(fit, col="purple")
11
12 x=fit$time.series
13 (season_dec=x[1:12,1])
14
15 # additional plots
16 monthplot(co2)
17 library(forecast)
18 seasonplot(myts)
```

(file: Example_stl.R)

```
1 StatChomage=read.table( file="StatChomageFrance.data" ,
2                           sep="," )
3 StatChomage; str(StatChomage)
4 myts=ts(StatChomage[,3], start=c(1983,1), end=c(2012,10),
5         frequency=12)
6 plot(myts)
7
8 # Seasonal decomposition
9 fit = stl(myts, s.window="period")
10 class(fit)
11 str(fit)#illisible !
12 names(fit) #un peu mieux
13 fit #aussi
14 ?stl
15 plot(fit, col="purple")
16
17 x=fit$time.series;(season_dec=x[1:12,1])
18 plot(season_dec, pch=20, col="red")
19
20 monthplot(myts); library(forecast)
21 seasonplot(myts)
```

```
1 StatChomage=read.table( file="StatChomageFrance.data" ,
2                           sep="," )
3 StatChomage; str(StatChomage)
4 myts=ts(StatChomage[,3], start=c(1983,1), end=c(2012,10),
5         frequency=12)
6 plot(myts)
7
8 # Seasonal decomposition
9 fit = decompose(myts)
10 class(fit)
11 str(fit) #illisible !
12 names(fit) #un peu mieux
13 fit #aussi
14 plot(fit, col="purple")
15
16 x=window(fit$seasonal, start=c(1983,1), end=c(1983,12),
17         frequency=12); class(x)
18 plot(x, col="red")
19
20 monthplot(myts, col="blue"); library(forecast)
21 seasonplot(myts, col="green")
```

(file: Example_decompose_chomage.R)