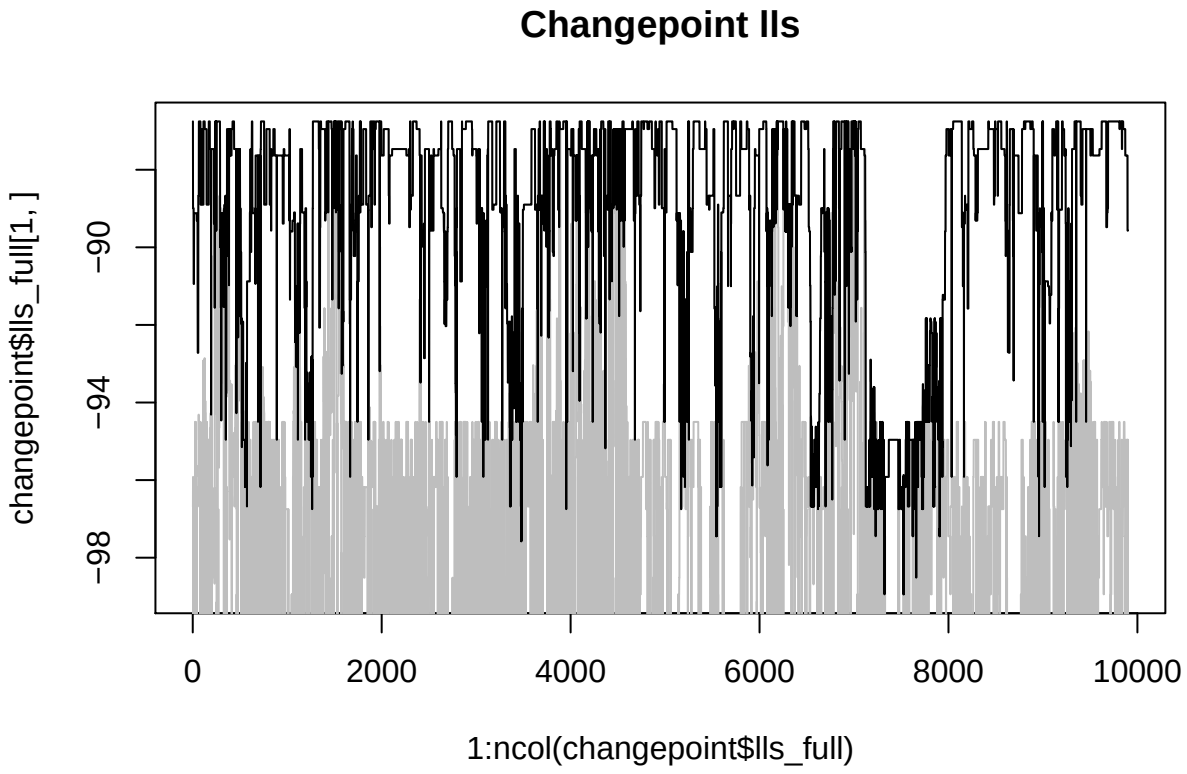
Changepoint diagnostics

Exclosures, 4 plots, full time series

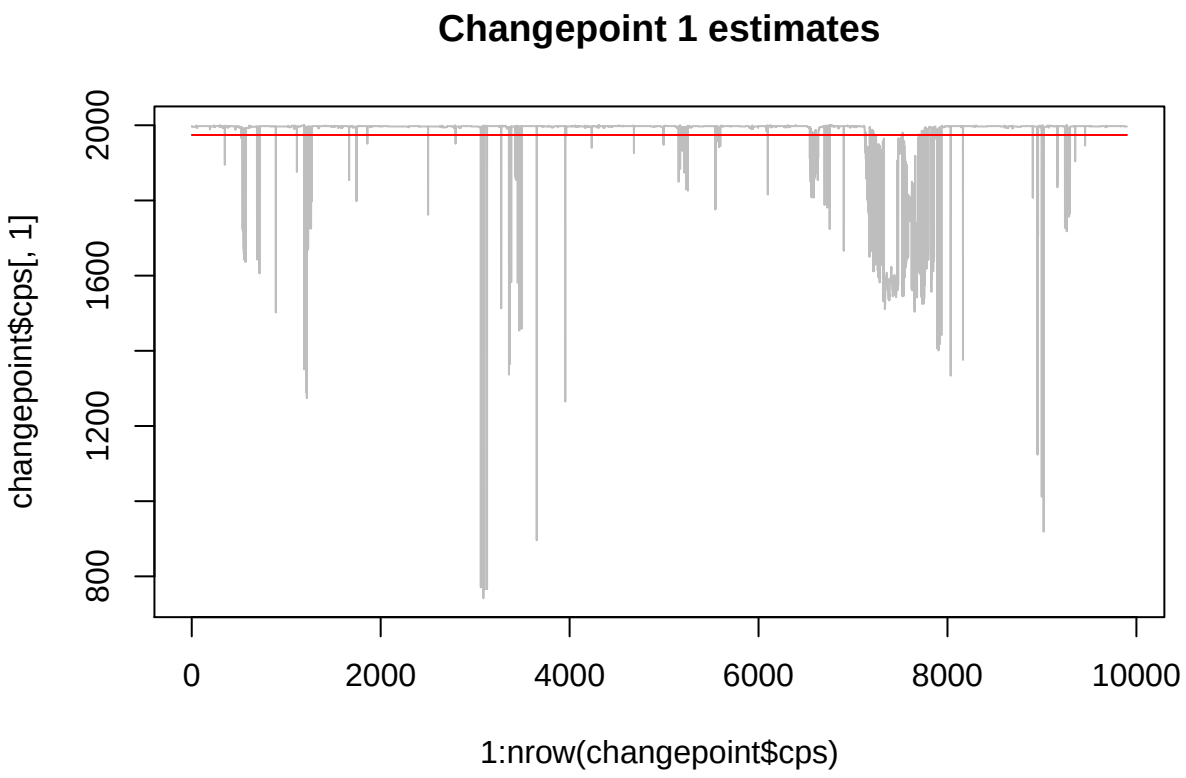
```
load('models/excl_time_gran.Rdata')

summarize_cps(changepoint$cps, prob = 0.95)
```

```
##                   Mean  Median    Lower    Upper    SD MCMCerr   AC10
## Changepoint_1 1974.11 1997.79 1784.789 1999.789 91.57  0.9203 0.5874
## Changepoint_2 2008.44 2009.79 1996.789 2011.789  4.50  0.0452 0.8130
##                     ESS
## Changepoint_1 39.23734
## Changepoint_2 41.23844
```

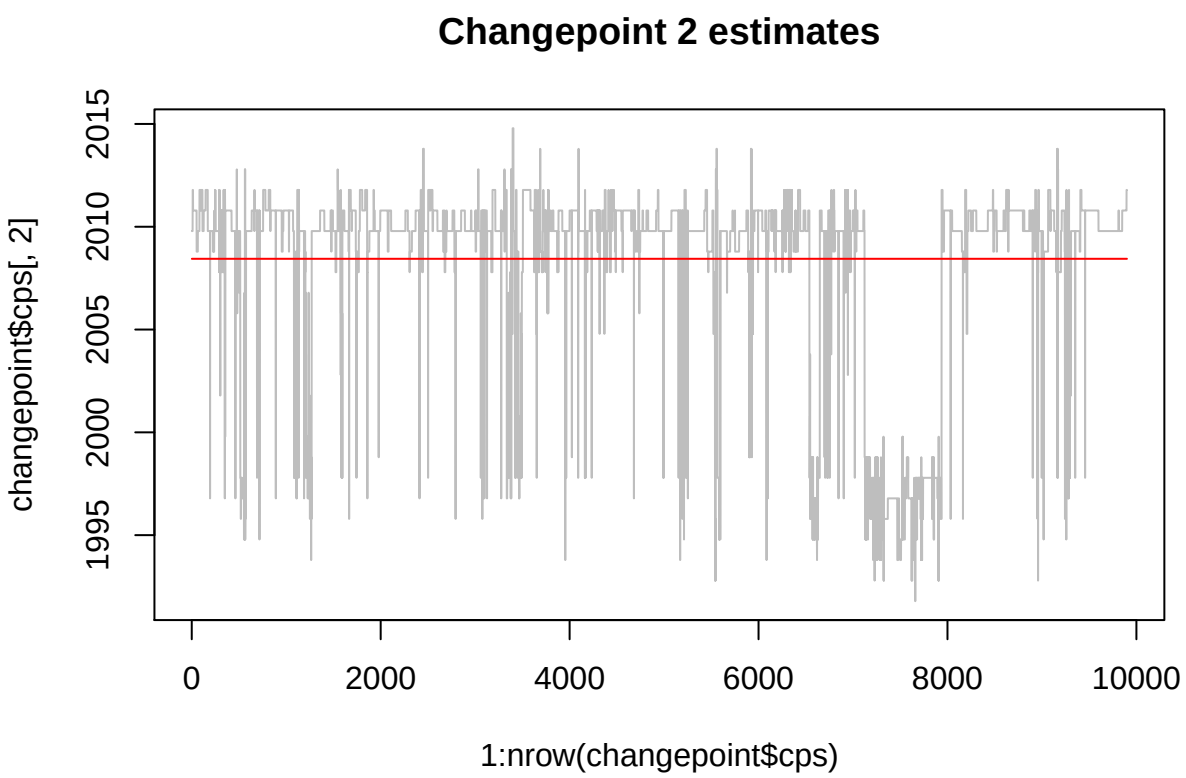
```
plot(1:ncol(changepoint$lls_full), changepoint$lls_full[1, ], type = 'n', main = 'Changepoint lls')
lines(changepoint$lls_full[1, ], col = 'grey')
lines(changepoint$lls_full[2,], col = 'grey')
lines(changepoint$lls_full[3, ], col ='grey')
lines(changepoint$lls_full[4, ], col = 'grey')
lines(changepoint$lls_full[5, ], col = 'grey')
lines(changepoint$lls_full[6, ], col = 'grey')
lines(changepoint$lls, col = 'black')
```




```
plot(1:nrow(changepoint$cps), changepoint$cps[,1 ], type ='n', main = 'Changepoint 1 estimates')
lines(changepoint$cps[, 1], col = 'grey')
lines(x = 1:nrow(changepoint$cps), y = rep(mean(changepoint$cps[,1]), nrow(changepoint$cps)), col = 'red
```




```
plot(1:nrow(changepoint$cps), changepoint$cps[,2 ], type ='n', main = 'Changepoint 2 estimates')
lines(changepoint$cps[,2], col = 'grey')
lines(x = 1:nrow(changepoint$cps), y = rep(mean(changepoint$cps[,2]), nrow(changepoint$cps)), col = 'red
```

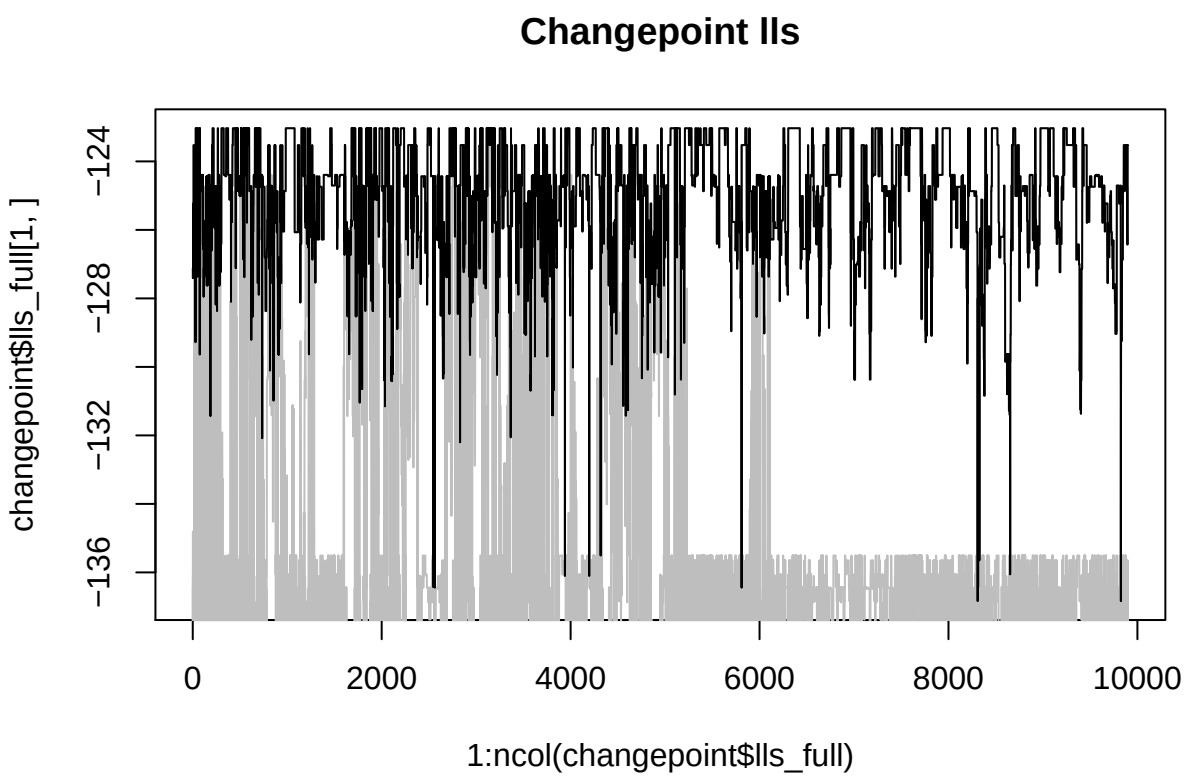


Controls, full time series

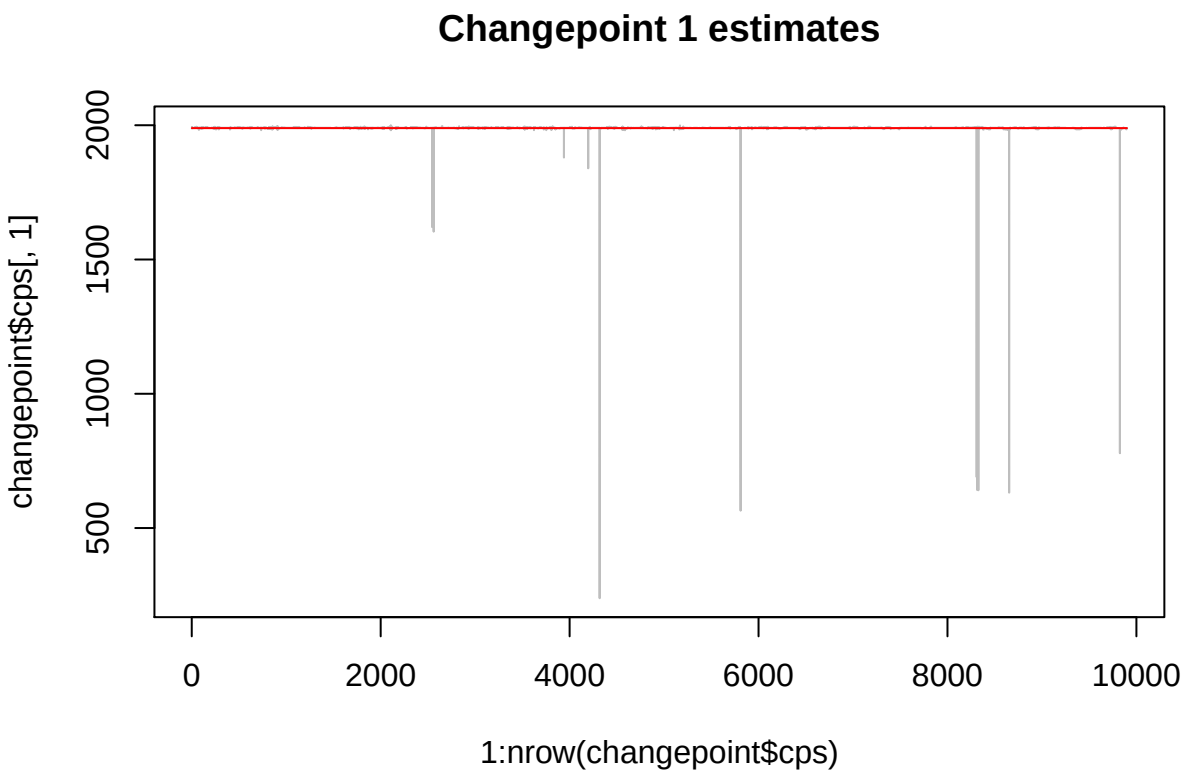
```
load('models/ctrl_time_gran.Rdata')

summarize_cps(changepoint$cps, prob = 0.95)
```

```
##                   Mean  Median    Lower    Upper    SD MCMCerr    AC10
## Changepoint_1 1989.21 1990.54 1986.537 1993.537 37.73  0.3792 -0.0003
## Changepoint_2 2000.16 1999.54 1997.537 2003.537  1.90  0.0191  0.3479
##                      ESS
## Changepoint_1 4916.5129
## Changepoint_2  457.8272
```

```
plot(1:ncol(changepoint$lls_full), changepoint$lls_full[1, ], type = 'n', main = 'Changepoint lls')
lines(changepoint$lls_full[1, ], col = 'grey')
lines(changepoint$lls_full[2,], col = 'grey')
lines(changepoint$lls_full[3, ], col ='grey')
lines(changepoint$lls_full[4, ], col = 'grey')
lines(changepoint$lls_full[5, ], col = 'grey')
lines(changepoint$lls_full[6, ], col = 'grey')
lines(changepoint$lls, col = 'black')
```




```
plot(1:nrow(changepoint$cps), changepoint$cps[,1 ], type ='n', main = 'Changepoint 1 estimates')
lines(changepoint$cps[, 1], col = 'grey')
lines(x = 1:nrow(changepoint$cps), y = rep(mean(changepoint$cps[,1]), nrow(changepoint$cps)), col = 'red
```




```
plot(1:nrow(changepoint$cps), changepoint$cps[,2 ], type ='n', main = 'Changepoint 2 estimates')
lines(changepoint$cps[,2], col = 'grey')
lines(x = 1:nrow(changepoint$cps), y = rep(mean(changepoint$cps[,2]), nrow(changepoint$cps)), col = 'red
```