

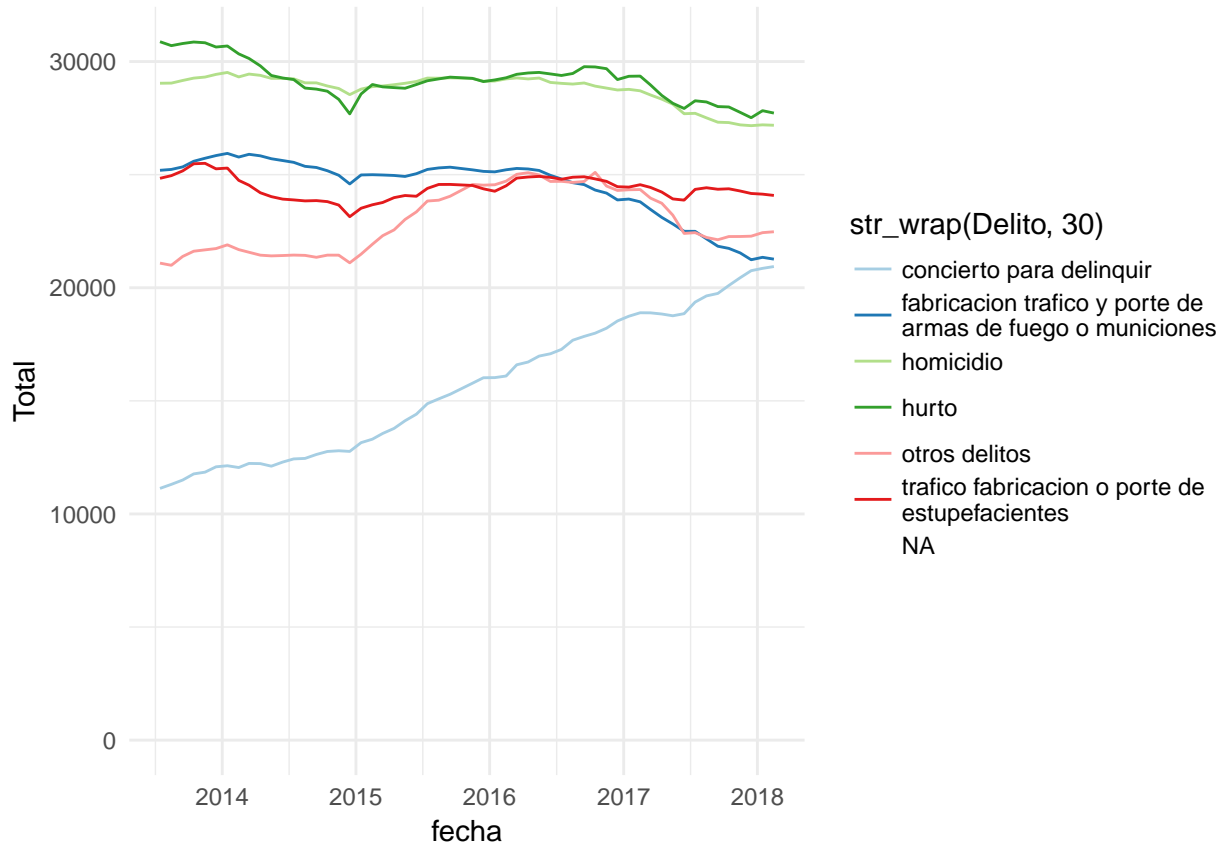
EstCrimen

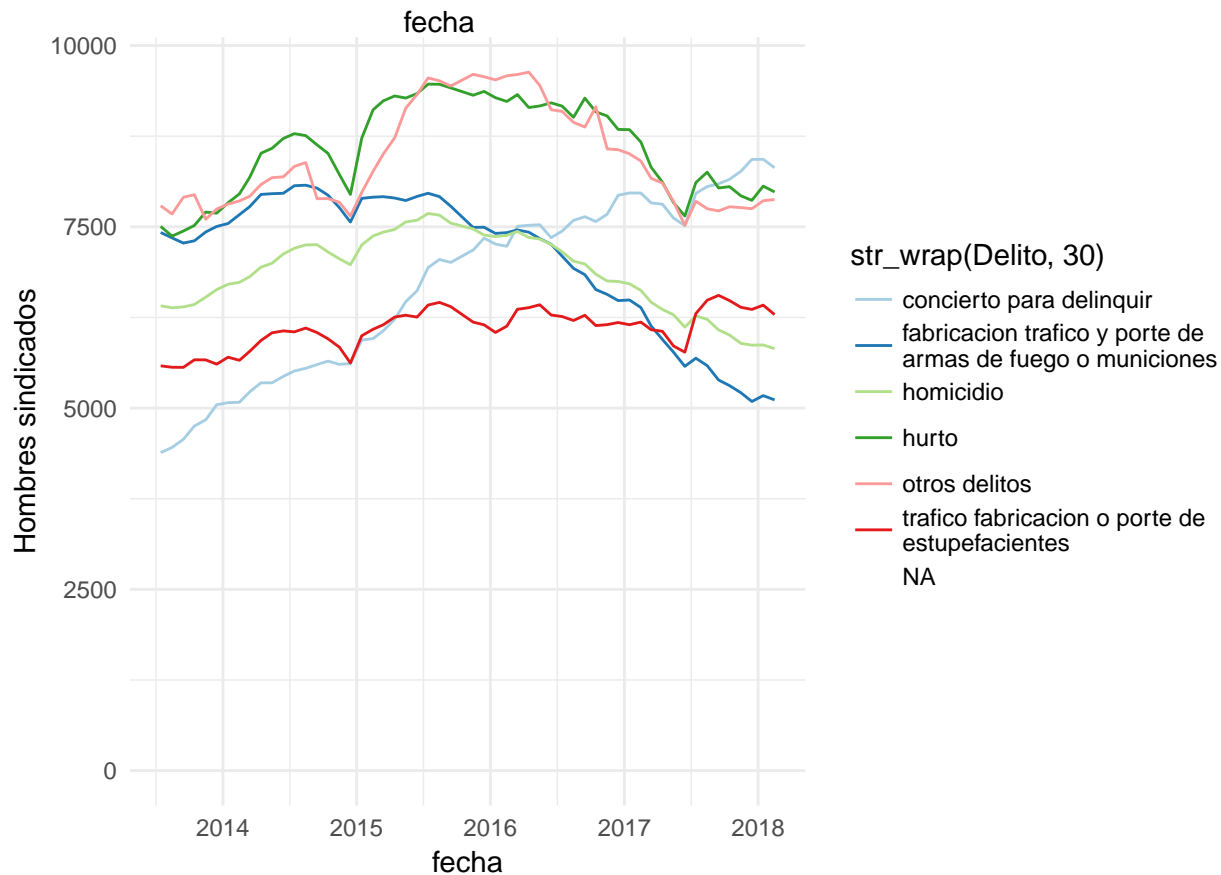
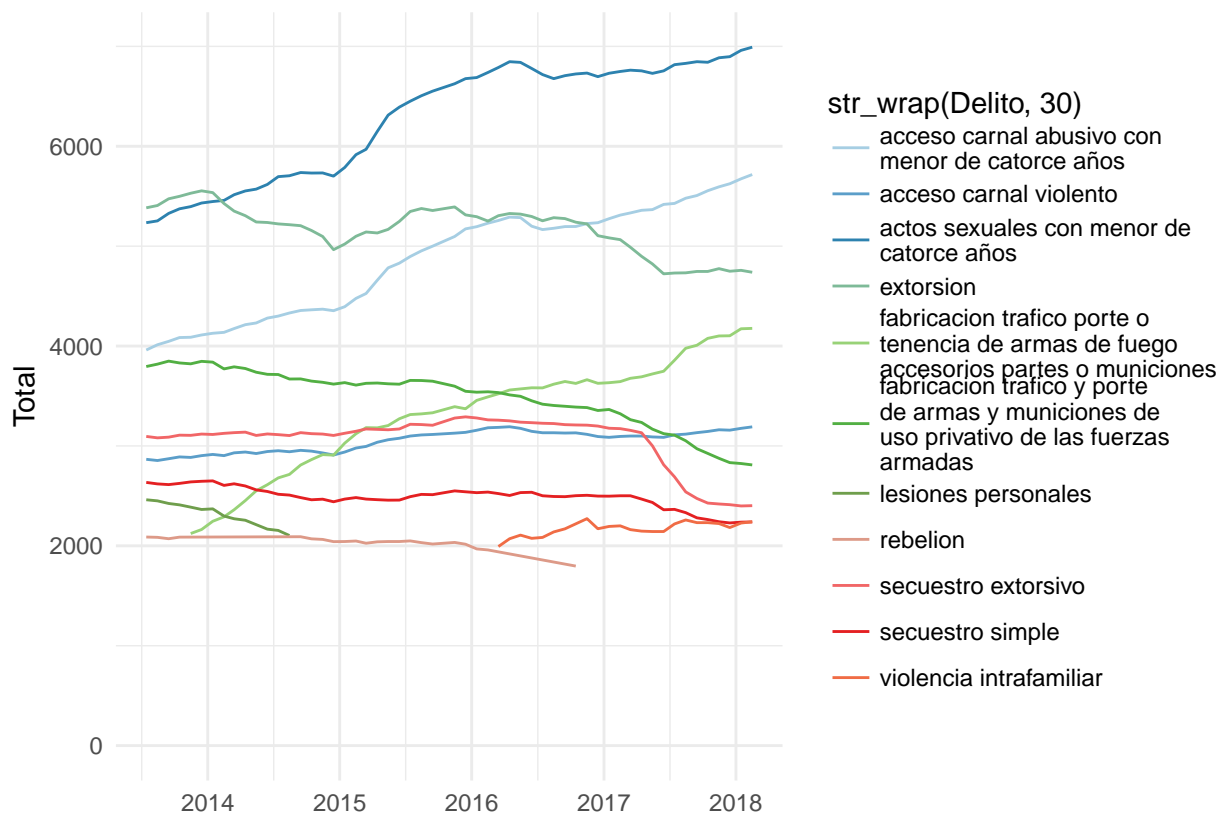
Sergio Solano

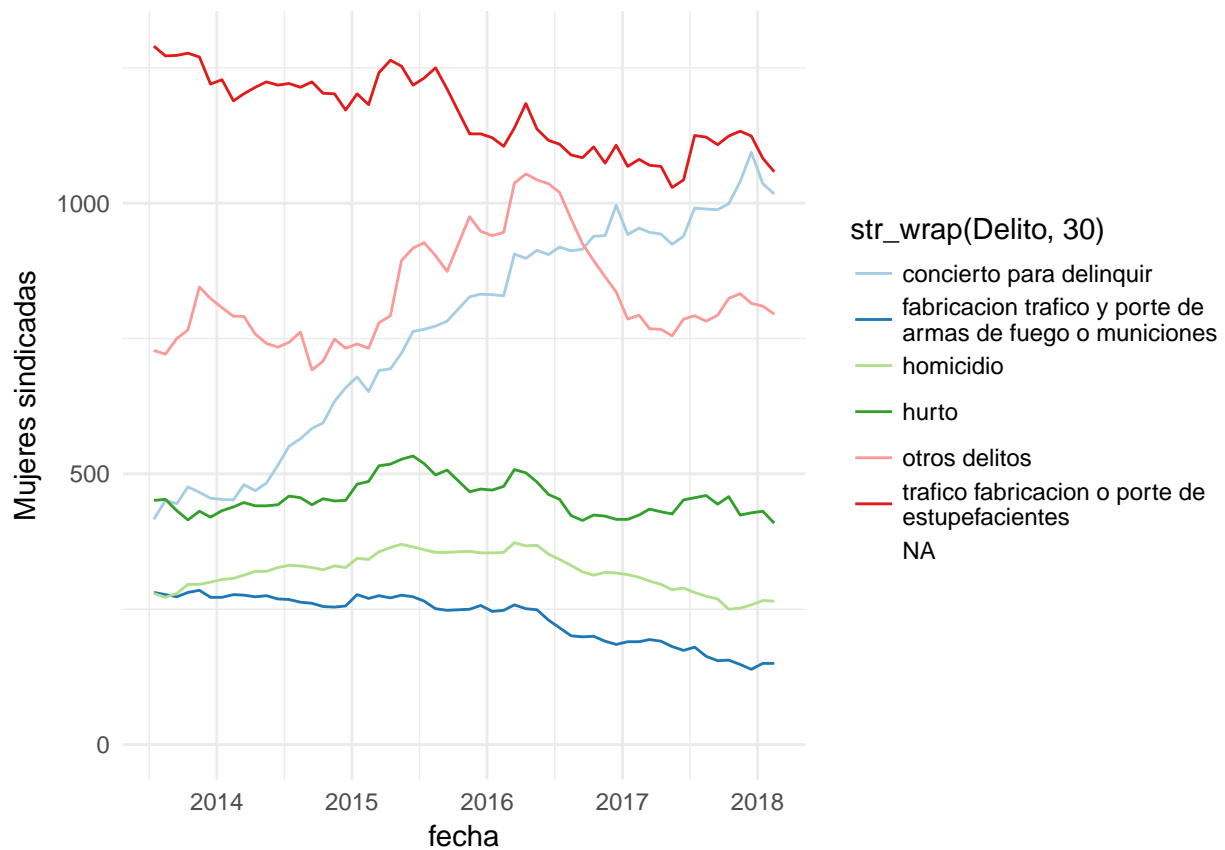
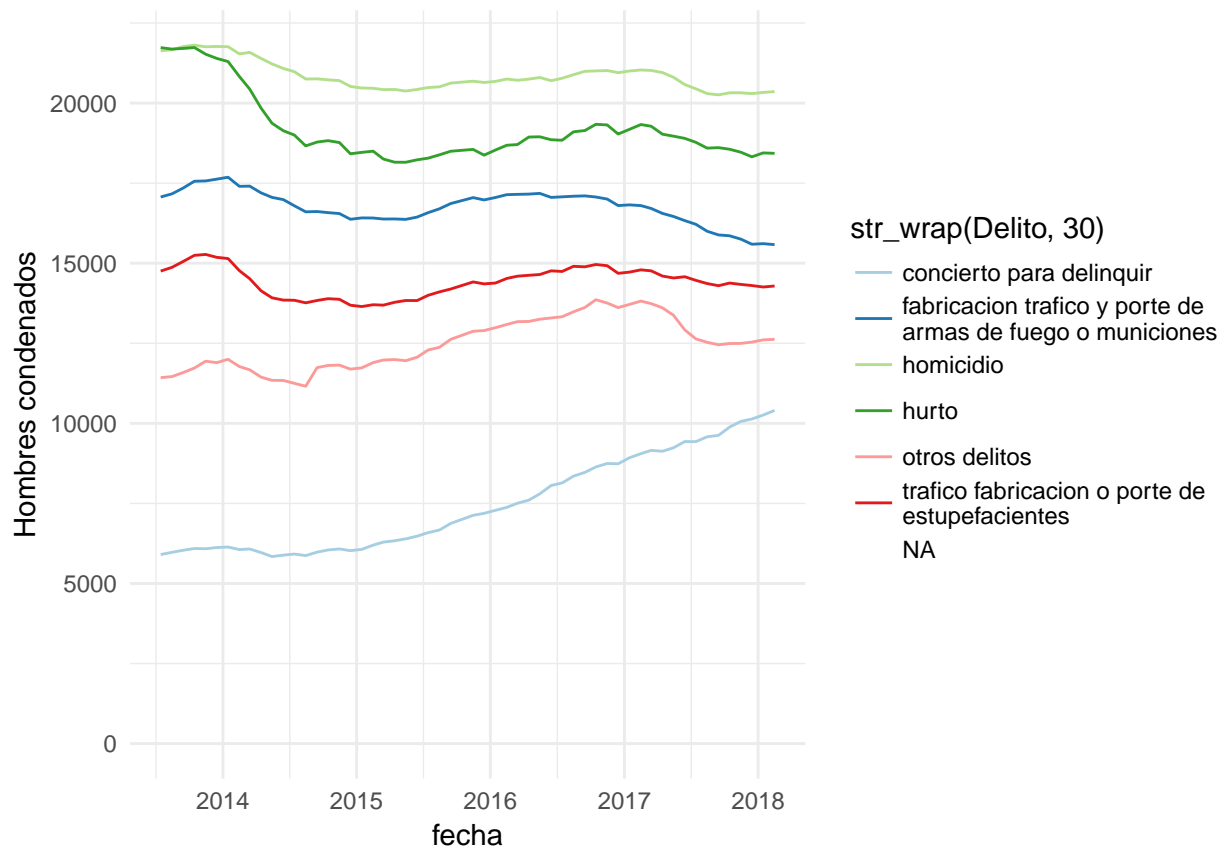
26 de marzo de 2018

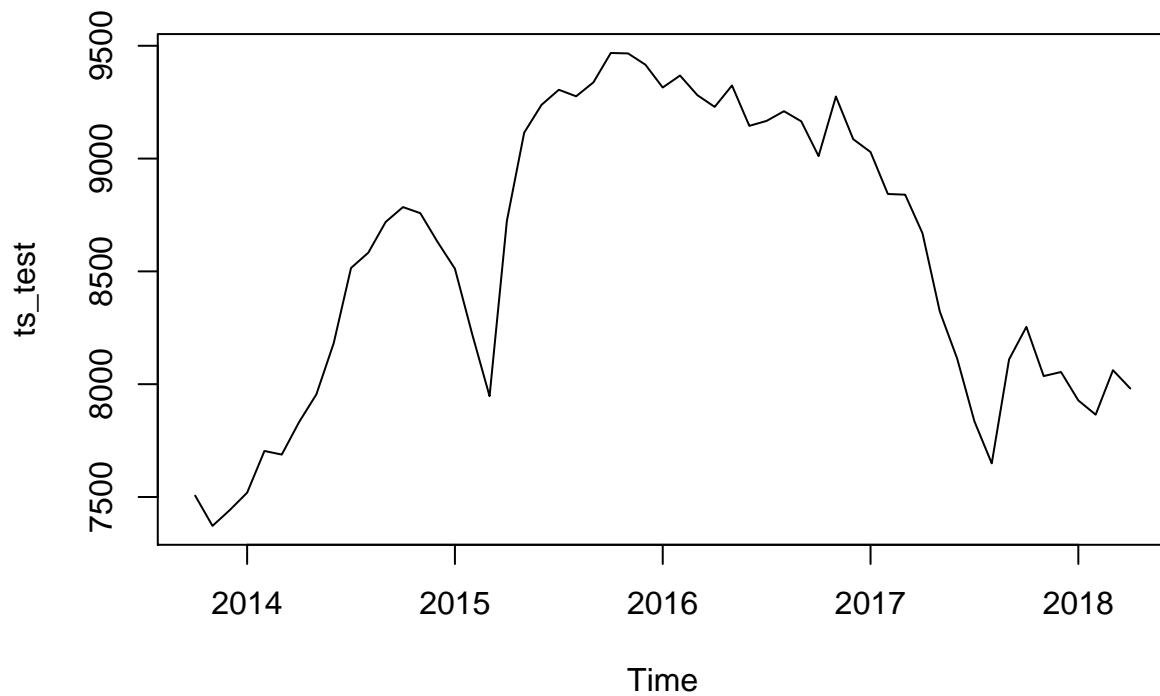
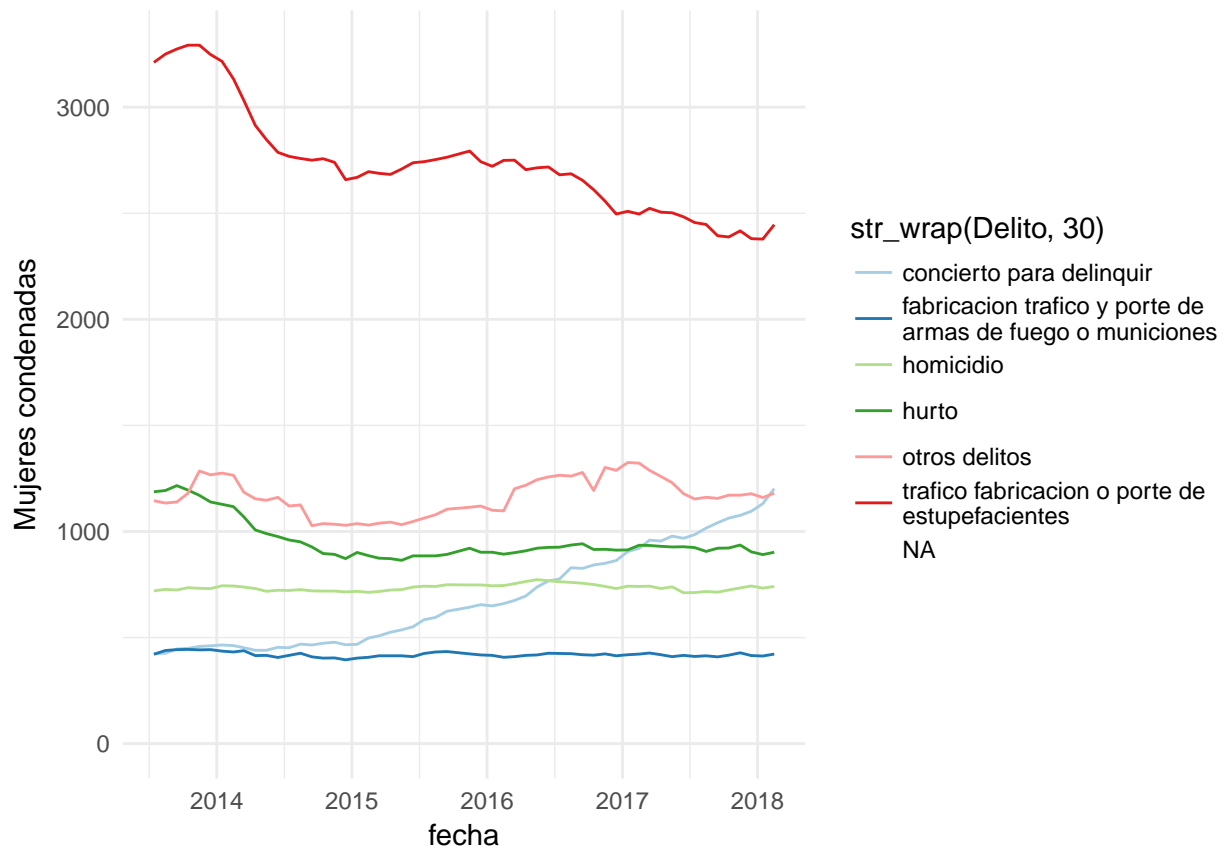
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## [1] "11. ESTADISTICA A NOVIEMBRE DE 2015.xls"
## [1] "11. ESTADISTICAS NOVIEMBRE 30 DE 2017.xls"
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## [1] "3. ESTADISTICAS MARZO 31 DE 2017.xls"
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## [1] "8. ESTADISTICAS AGOSTO 2013.xlsx"
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## [1] "ESTADÍSTICAS MARZO 2014.xls"
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## [1] "ESTADISTICO AGOSTO 2014.xls"
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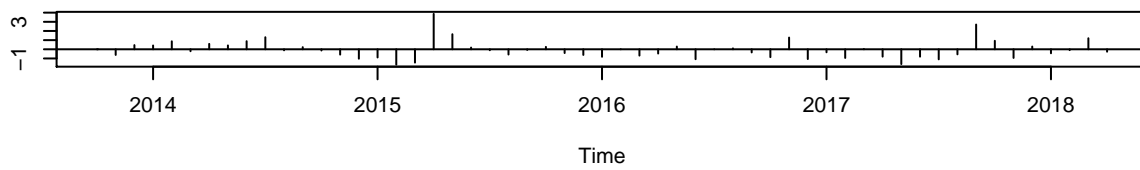
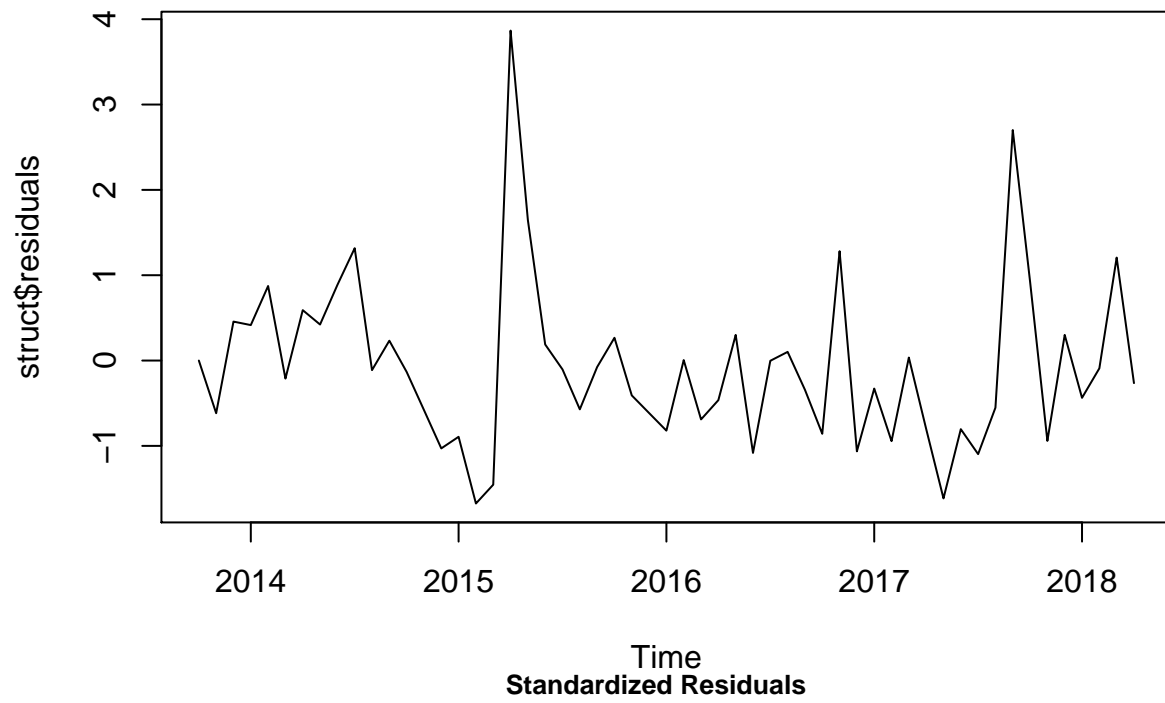




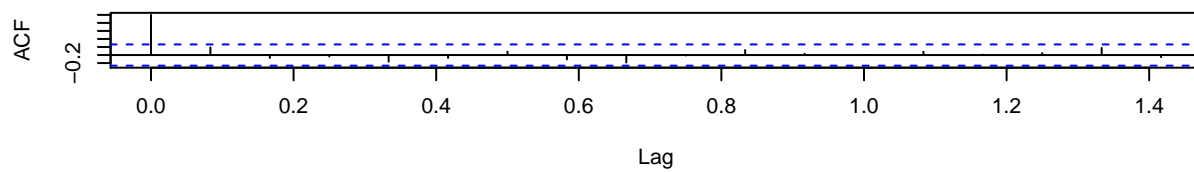
```
##      level      slope      epsilon
## 37524.1531  227.3702    0.0000

## Transitional variance: 37524.15
## Slope variance: 227.3702
```

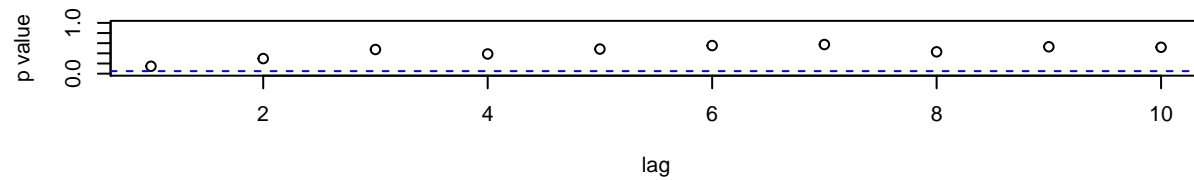
```
## Observational variance: 0
## Initial level of mu: 7506
## Initial level of lambda: 0
```

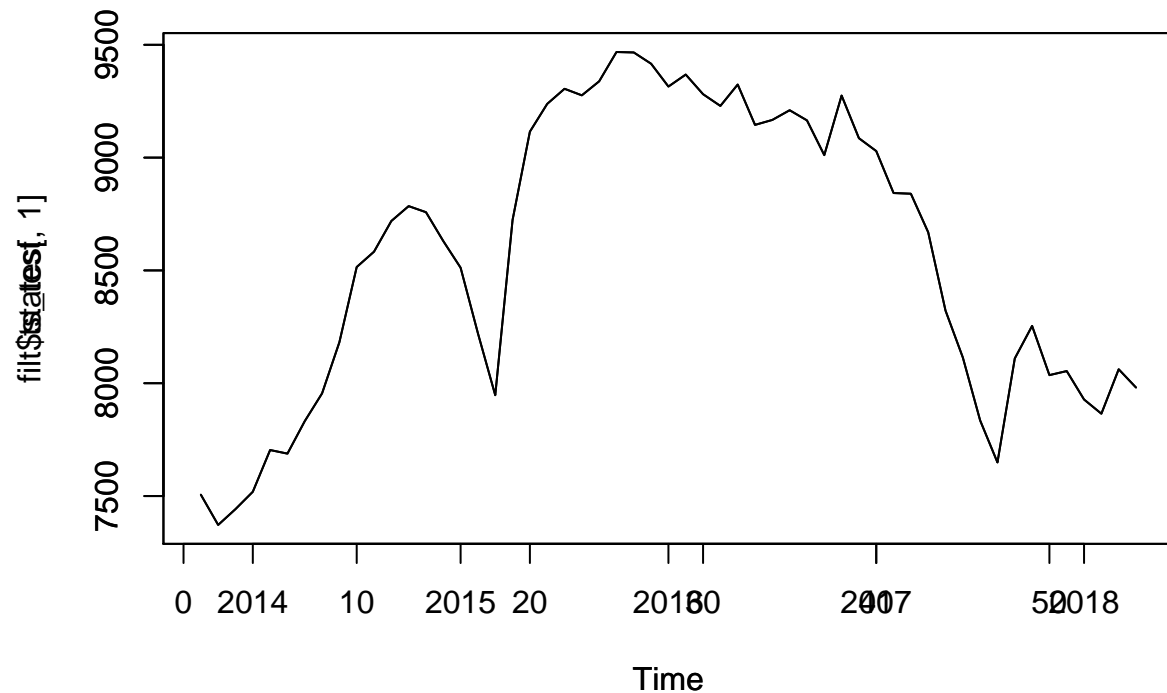


ACF of Residuals



p values for Ljung-Box statistic





```
## $pred
##      Qtr1      Qtr2      Qtr3      Qtr4
## 1975 29.84194 34.41014 39.30815 43.02779
## 1976 46.18808 48.56947 50.44866 51.86064
## 1977 52.94295 53.75521 54.37019 54.83150
##
## $se
##      Qtr1      Qtr2      Qtr3      Qtr4
## 1975  9.00655 11.25606 13.43389 14.51516
## 1976 15.25538 15.65611 15.90158 16.03792
## 1977 16.11764 16.16229 16.18785 16.20220

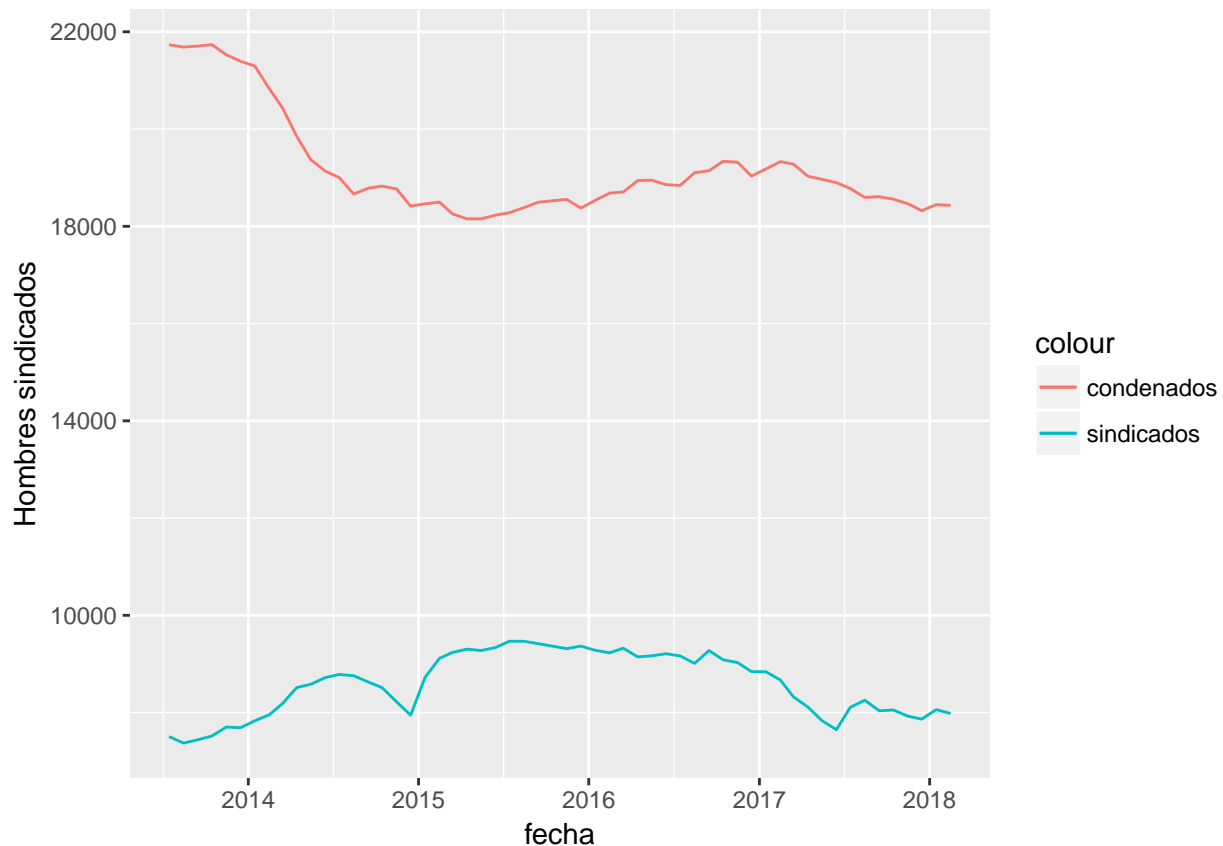
## [1] 29.84194 34.41014 39.30815 43.02779 46.18808 48.56947 50.44866
## [8] 51.86064 52.94295 53.75521 54.37019 54.83150

## [1]  9.00655 11.25606 13.43389 14.51516 15.25538 15.65611 15.90158
## [8] 16.03792 16.11764 16.16229 16.18785 16.20220

## $pred
## [1] 29.84194 34.41014 39.30815 43.02779
##
## $se
## [1]  9.00655 11.25606 13.43389 14.51516
##
## $pred
## [1] 46.18808 48.56947 50.44866 51.86064
##
## $se
## [1] 15.25538 15.65611 15.90158 16.03792
##
## $pred
## [1] 52.94295 53.75521 54.37019 54.83150
##
```

```
## $se
## [1] 16.11764 16.16229 16.18785 16.20220

## Success! abstol and log-log tests passed at 16 iterations.
## Alert: conv.test.slope.tol is 0.5.
## Test with smaller values (<0.1) to ensure convergence.
##
## MARSS fit is
## Estimation method: kem
## Convergence test: conv.test.slope.tol = 0.5, abstol = 0.001
## Estimation converged in 16 iterations.
## Log-likelihood: 4.064946
## AIC: -0.129891   AICc: 1.975372
##
##      Estimate
## R.R      0.0141
## U.U      0.0564
## Q.Q      0.0136
## x0.x0     7.9532
## Initial states (x0) defined at t=0
##
## Standard errors have not been calculated.
## Use MARSSparamCIs to compute CIs and bias estimates.
```



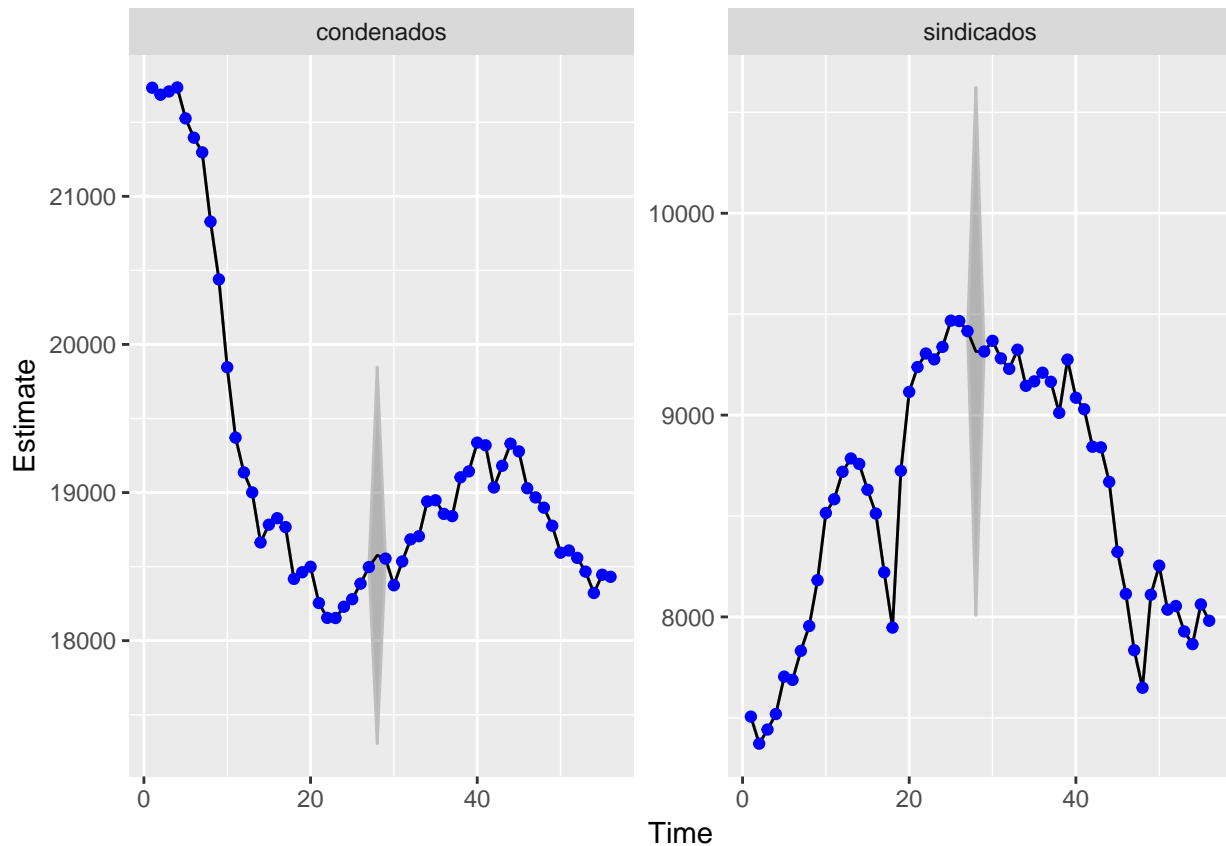
```
## Success! algorithm run for 15 iterations. abstol and log-log tests passed.
## Alert: conv.test.slope.tol is 0.5.
## Test with smaller values (<0.1) to ensure convergence.
##
```



```

## MARSS fit is
## Estimation method: kem
## Convergence test: conv.test.slope.tol = 0.5, abstol = 0.001
## Algorithm ran 15 (=minit) iterations and convergence was reached.
## Log-likelihood: -833.087
## AIC: 1680.174   AICc: 1681.272
##
##      Estimate
## B.b1  9.76e-01
## B.b2  9.54e-02
## B.b4  9.64e-01
## Q.q11 9.15e+05
## Q.q12 -8.12e+05
## Q.q22 7.73e+05
## x0.pi 1.46e+04
## Initial states (x0) defined at t=0
##
## Standard errors have not been calculated.
## Use MARSSparamCIs to compute CIs and bias estimates.

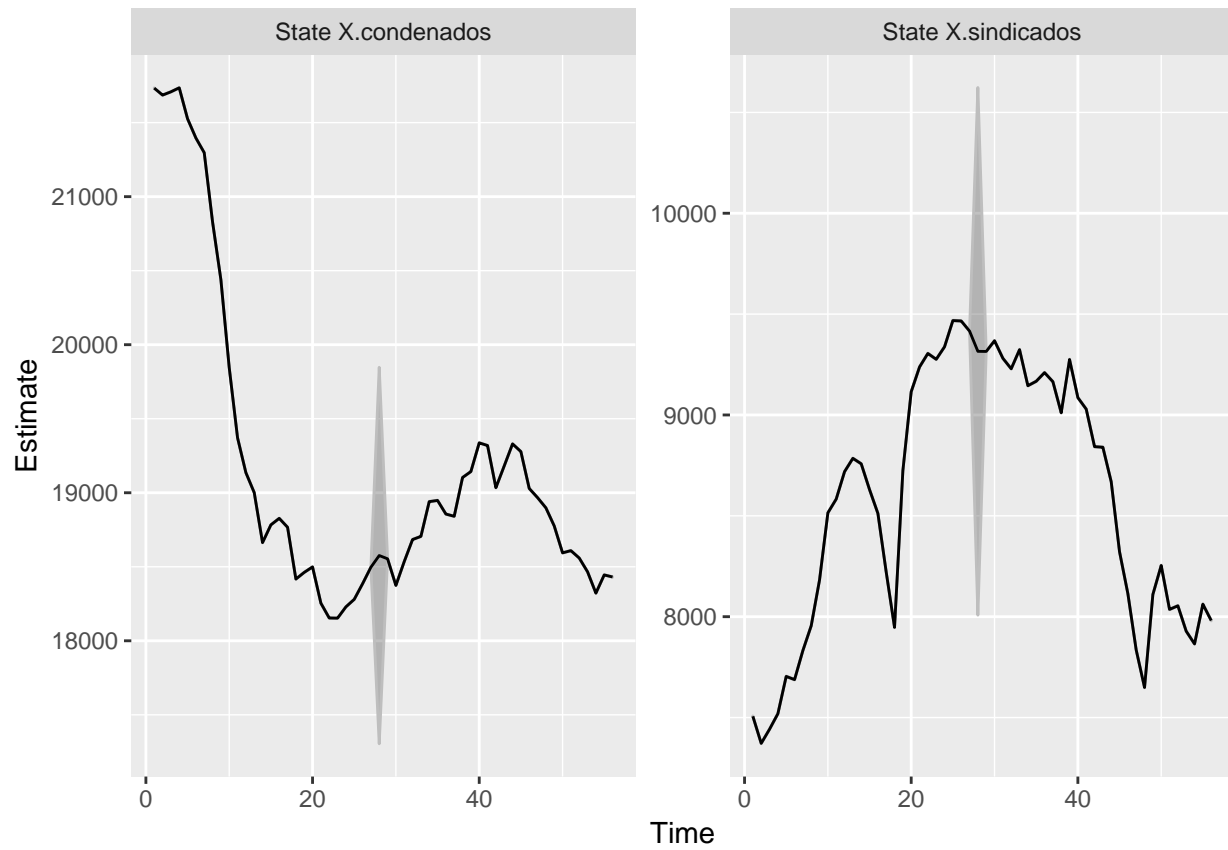
```



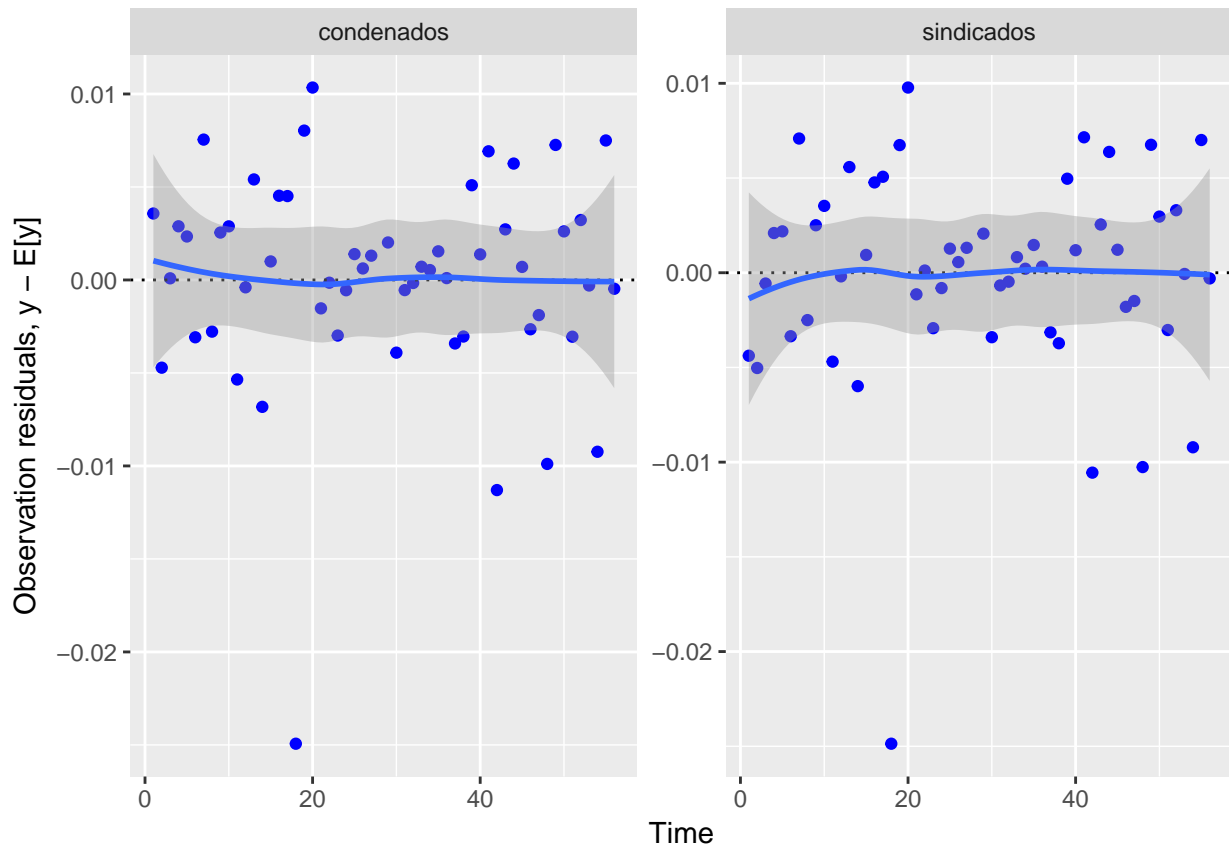
```

## plot.type = observations
## Hit <Return> to see next plot (q to exit):

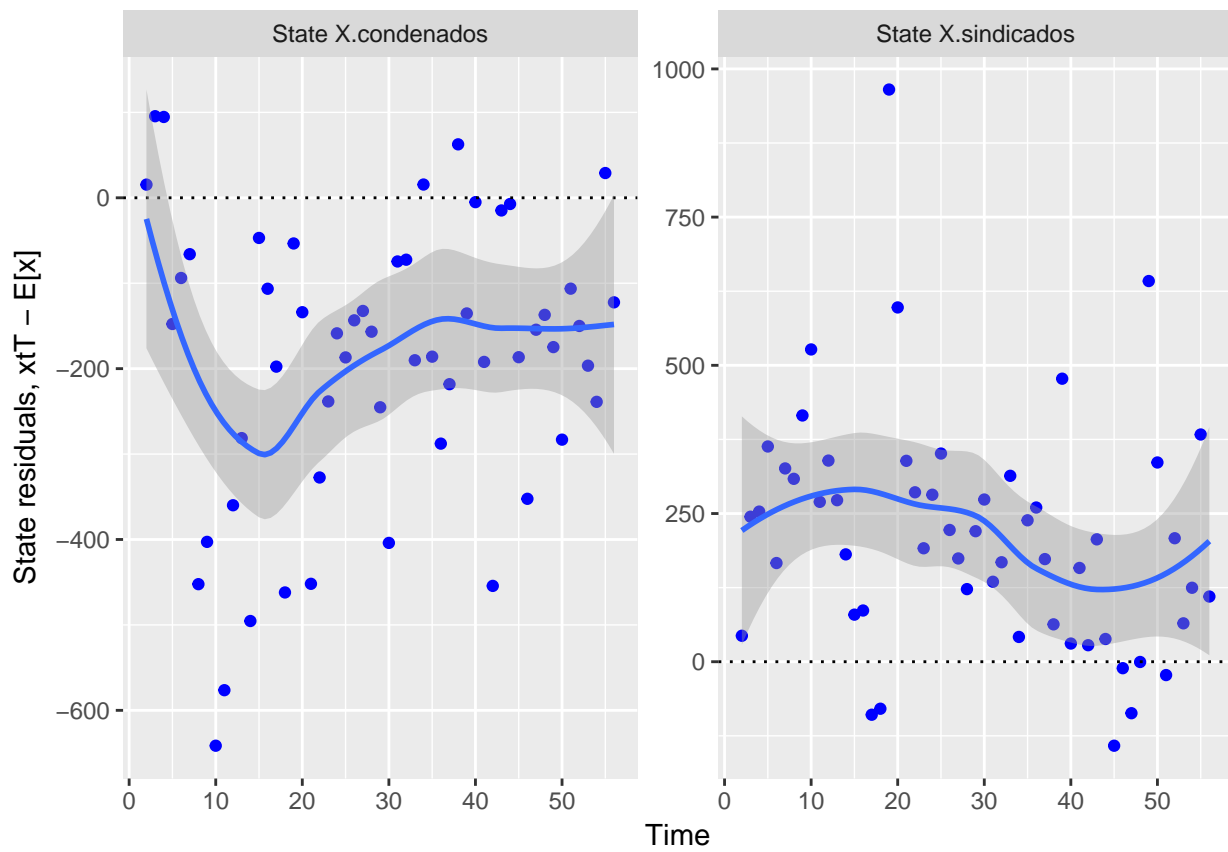
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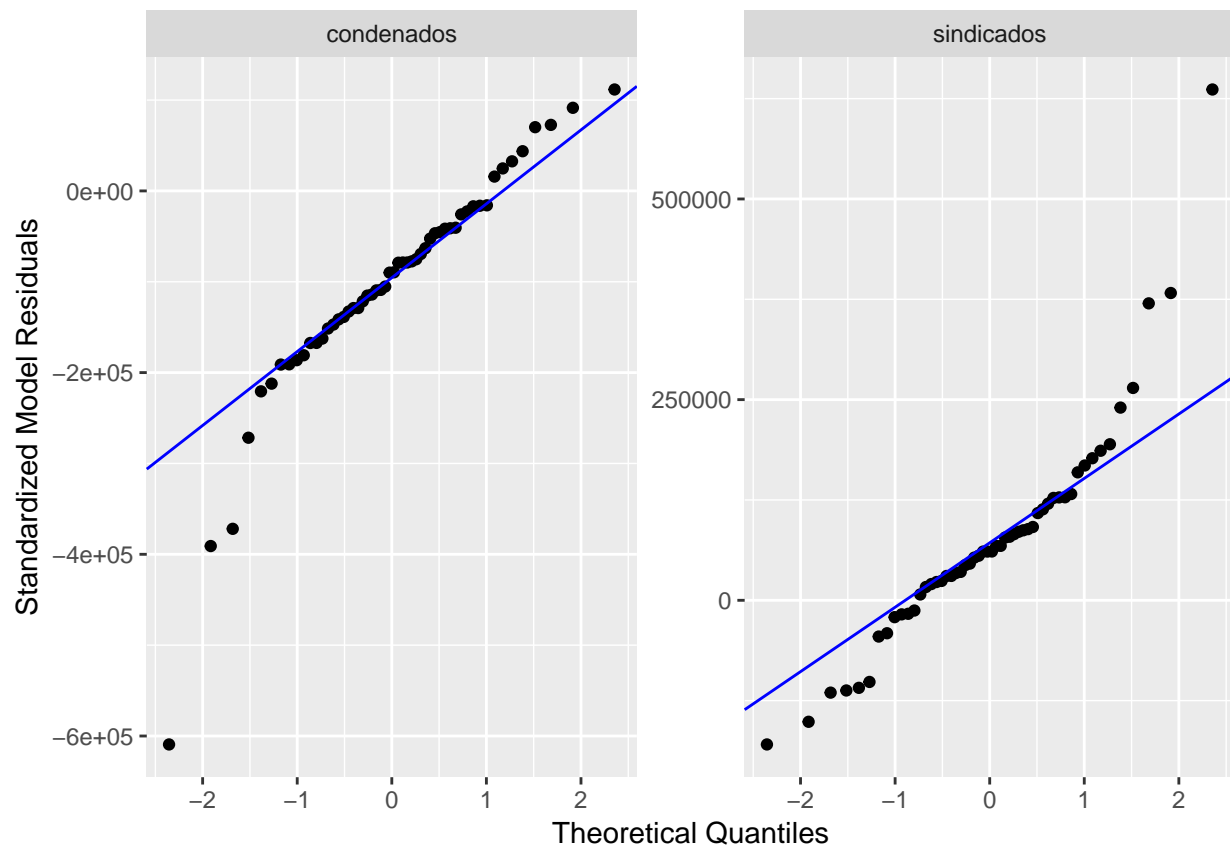
```
## plot.type = states
## Hit <Return> to see next plot (q to exit):
```



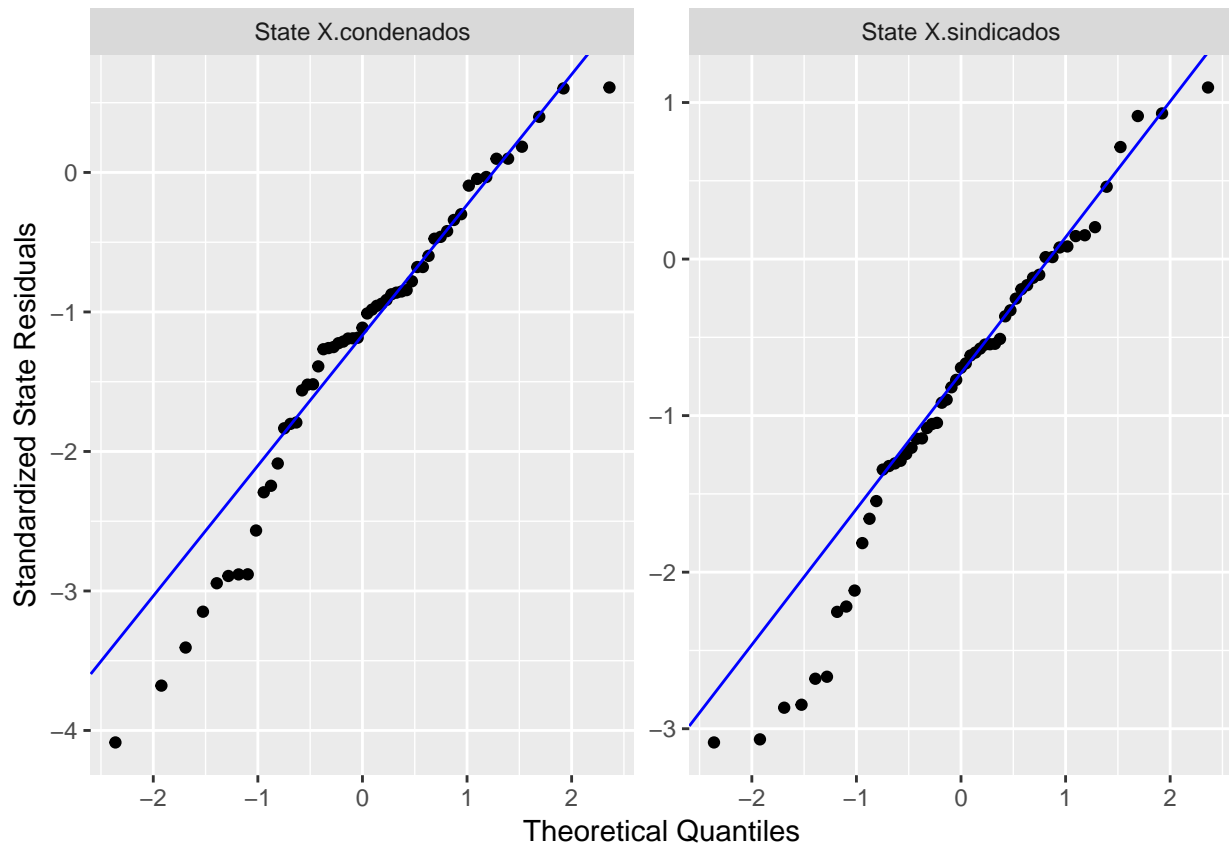
```
## plot.type = model.residuals
## Hit <Return> to see next plot (q to exit):
```



```
## plot.type = state.residuals
## Hit <Return> to see next plot (q to exit):
```



```
## plot.type = model.residuals.qqplot
## Hit <Return> to see next plot (q to exit):
```



Finished plots.