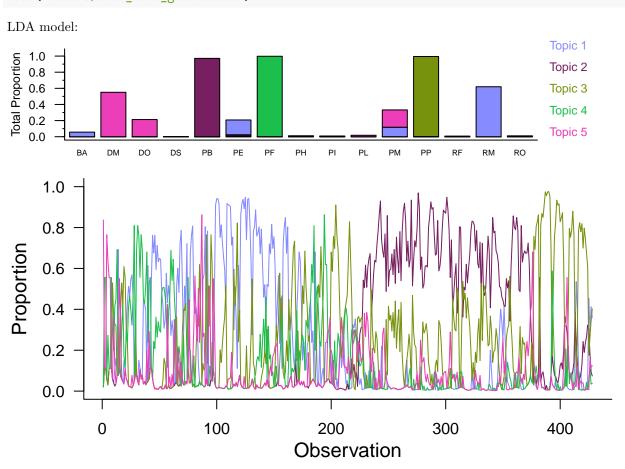
Results

Renata Diaz 5/30/2018

Exclosure plots

Granivores only, fewer plots (4), full time series.

load('models/excl_time_gran.Rdata')



Changepoint model:

```
## Mean Median Lower Upper SD MCMCerr AC10 ESS ## Changepoint_1 219.24 224 185 242 18.6 0.1869 0.2304 595.5178 ## Changepoint_2 368.31 375 326 400 28.9 0.2905 0.3492 316.6409
```

Here are some more diagnostics:

```
## $acceptance_rates
## [1] 0.5480808 0.8333333 0.9108081 0.9355556 0.9440404 0.9434343
##
## $swapping_rates
## [1] 0.1996970 0.5481818 0.8009091 0.9240404 0.9578788
##
## $trip_counts
```

```
## [1] 96 105 105 93 97 87
```

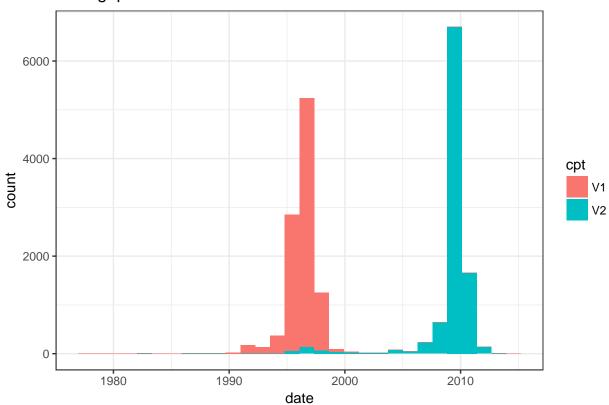
##

\$trip_rates

[1] 0.009696970 0.010606061 0.010606061 0.009393939 0.009797980 0.008787879

`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.

Changepoint estimates - exclosures

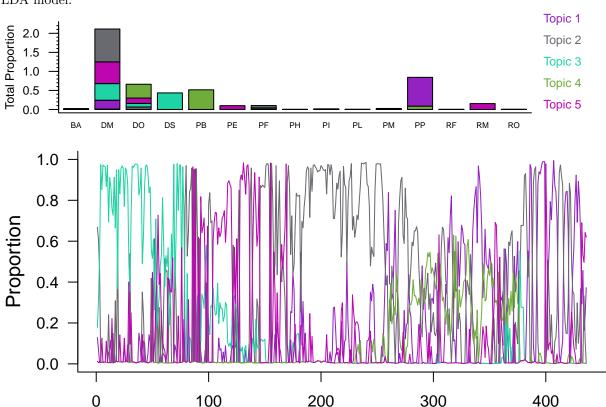


Control plots

Granivores only, fewer plots (4), full time series.

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

LDA model:



Observation

300

400

Changepoint model:

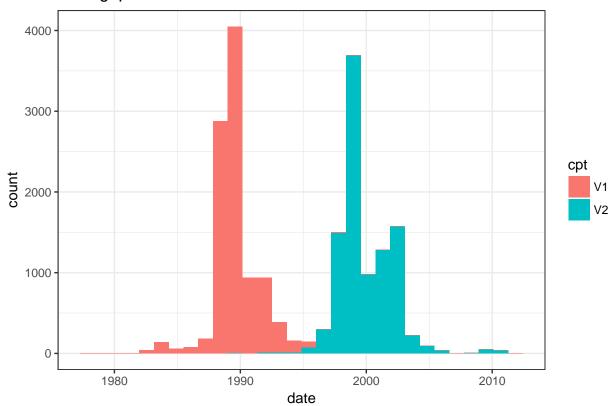
```
##
                   Mean Median Lower Upper
                                                             AC10
                                                                         ESS
                                                SD MCMCerr
## Changepoint_1 146.59
                            145
                                  108
                                        193 20.67
                                                    0.2077 0.1130 1173.4583
## Changepoint_2 266.10
                            259
                                        313 23.59
                                                    0.2371 0.1794 716.1593
                                  233
```

Here are some more diagnostics:

0

```
## $acceptance_rates
## [1] 0.6030303 0.8361616 0.9162626 0.9341414 0.9427273 0.9430303
##
## $swapping_rates
## [1] 0.3097980 0.5561616 0.7623232 0.8917172 0.9348485
##
## $trip_counts
  [1] 133 122 155 151 139 143
##
## $trip_rates
  [1] 0.01343434 0.01232323 0.01565657 0.01525253 0.01404040 0.01444444
   `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

Changepoint estimates – controls



Changepoint estimates

