CaseRegression

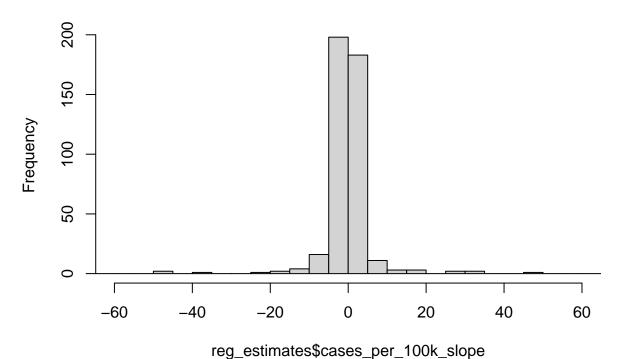
Marlin

2022-07-27

```
## [1] 1
## # A tibble: 6 x 10
## # Groups:
               WWTP [1]
##
     date
                WWTP cases cases~1 pastw~2 pastw~3 variant mean_~4 pastw~5 pastw~6
     <date>
                <chr> <int>
                               <dbl>
                                       <dbl>
                                               <int> <chr>
                                                                 <dbl>
                                                                         <dbl>
## 1 2021-02-01 Madi~
                                10.5
                                        84.7
                                                  593 Alpha/~
                                                               380000
                                                                          22.3
                                                                                  156.
                          40
## 2 2021-02-02 Madi~
                                17.1
                                        86.1
                                                  603 Alpha/~
                                                               380000
                                                                          22.7
                                                                                  159.
## 3 2021-02-03 Madi~
                                                  598 Alpha/~
                         159
                                41.8
                                        85.4
                                                               380000
                                                                          22.5
                                                                                  157.
## 4 2021-02-04 Madi~
                          93
                                24.5
                                        85
                                                  595 Alpha/~
                                                               380000
                                                                          22.4
                                                                                  157.
## 5 2021-02-05 Madi~
                          76
                                20
                                        81
                                                  567 Alpha/~
                                                               380000
                                                                          21.3
                                                                                  149.
## 6 2021-02-06 Madi~
                                16.8
                                        78.4
                                                  549 Alpha/~
                                                               380000
                                                                          20.6
                          64
                                                                                  144.
## # ... with abbreviated variable names 1: cases_per_100k,
       2: pastwk.avg.casesperday, 3: pastwk.sum.casesperday, 4: mean_pop_served,
       5: pastwk.avg.casesperday.per100k, 6: pastwk.sum.casesperday.per100k
                   Site FirstConfirmed FirstConfirmed.Per100K
           date
## 1 2021-02-01 Madison
                                                       10.52632
                                     40
## 2 2021-02-02 Madison
                                     65
                                                       17.10526
## 3 2021-02-03 Madison
                                                       41.84211
                                    159
## 4 2021-02-04 Madison
                                     93
                                                       24.47368
## 5 2021-02-05 Madison
                                     76
                                                       20.00000
## 6 2021-02-06 Madison
                                     64
                                                       16.84211
     pastwk.sum.casesperday.Per100K
## 1
                            156.0526
## 2
                            158.6842
## 3
                            157.3684
## 4
                            156.5789
## 5
                            149.2105
## 6
                            144.4737
```

[1] "Madison"

Histogram of reg_estimates\$cases_per_100k_slope



Min. 1st Qu. Median Mean 3rd Qu. Max. ## -217.39662 -1.14192 -0.03759 0.01707 0.88816 195.93985

```
## [1] "Madison" "FirstConfirmed.Per100K"
```

```
## # A tibble: 1 x 9
     days_elapsed lmreg_n lmreg_s~1 lmreg~2 model~3 pastw~4 case_~5 case_~6 slope~7
##
            <dbl>
                    <int>
                              <dbl>
                                       <dbl>
                                               <dbl>
                                                       <dbl>
                                                               <dbl>
                                                                       <dbl>
                                                                                <dbl>
                                                       99630
               NA
                       NA
                                 NA
                                         NA
                                                  NA
                                                                           23
## # ... with abbreviated variable names 1: lmreg_slope, 2: lmreg_sig,
       3: modeled_percentchange, 4: pastwk.sum.casesperday.Per100K, 5: case_flag,
       6: case_flag_plus_comm.threshold, 7: slope_switch_flag
## # A tibble: 1 x 4
```

A tibble: 1 x 4
WWTP case_flag case_flag_plus_comm.threshold slope_switch_flag
<chr> <int> <int> <int> <int> <int> <</pre>
9

