PerformanceChange

```
##     Min.  1st Qu.   Median     Mean  3rd Qu.     Max.
##  0.06349  0.87350  0.99930  1.05700  1.13600 16.00000
```

```
##       Min.    1st Qu.     Median       Mean    3rd Qu.       Max.
## -0.8466000 -0.0676500 -0.0004403 -0.0020570  0.0646600  0.8375000
```

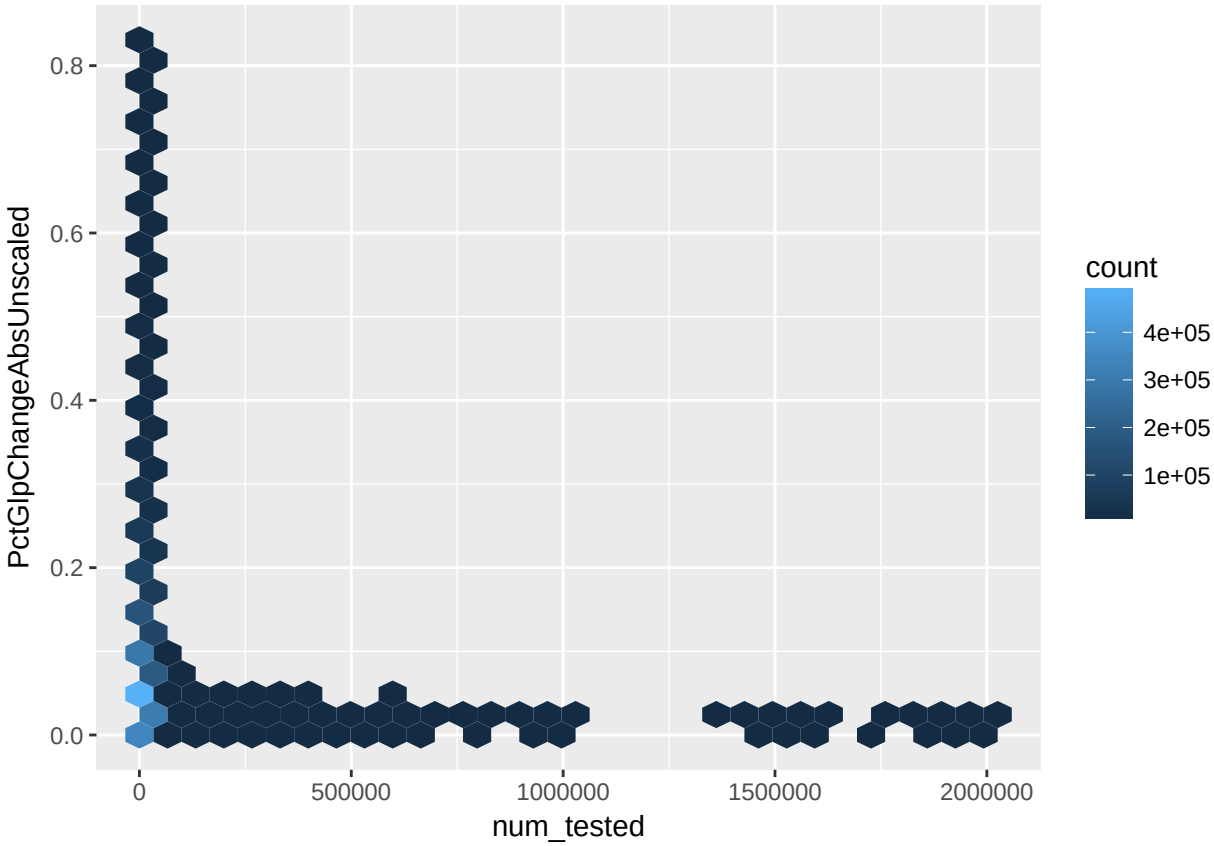
Why are some of the unscaled changes so high?

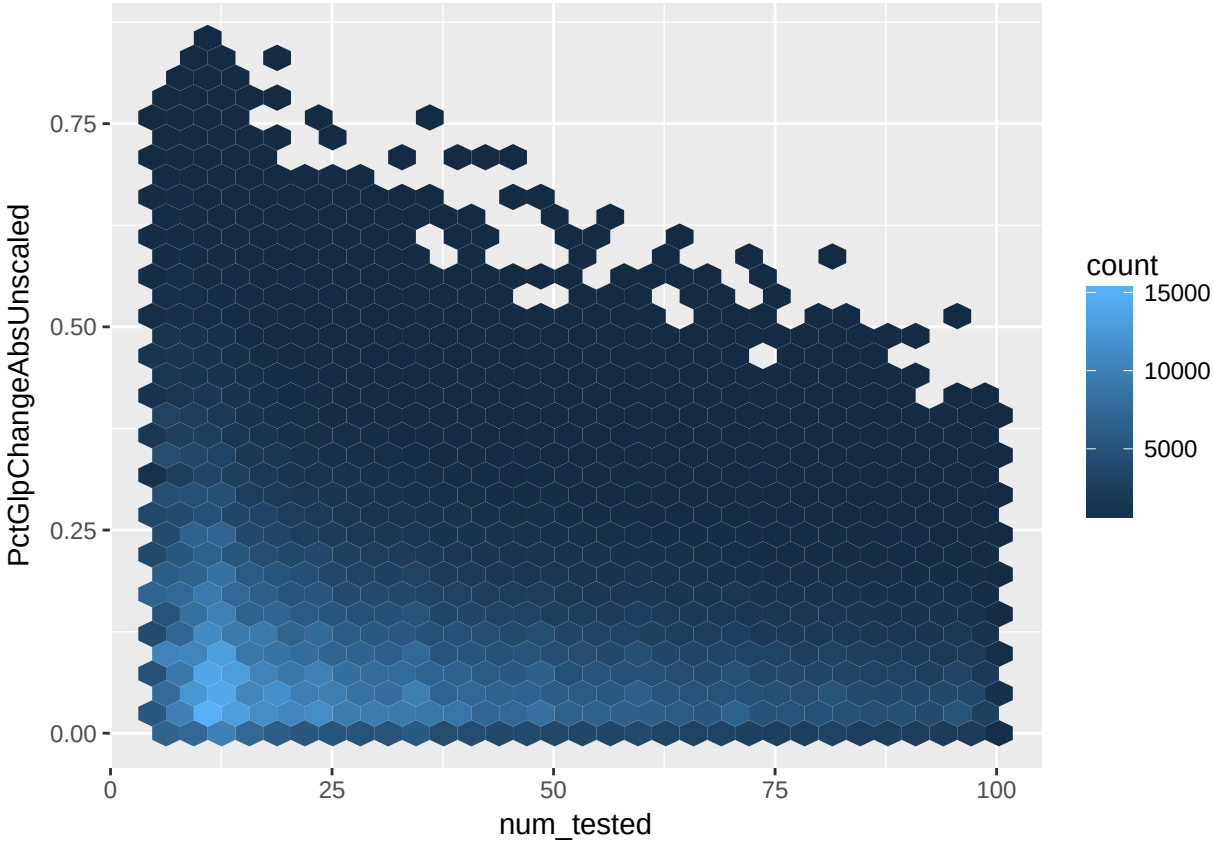
```
##        0.1%          1%          2%          3%
## 0.000000000 0.000000000 0.001181429 0.002463054
```

```
##     99.9%       99%       98%       97%
## 0.6111111 0.4333333 0.3725490 0.3333333
```

```
## [1] 0.04320322
```

```
##         0%        25%        50%        75%       100%
## 0.00000000 0.02839442 0.06653251 0.13105413 0.84659091
```

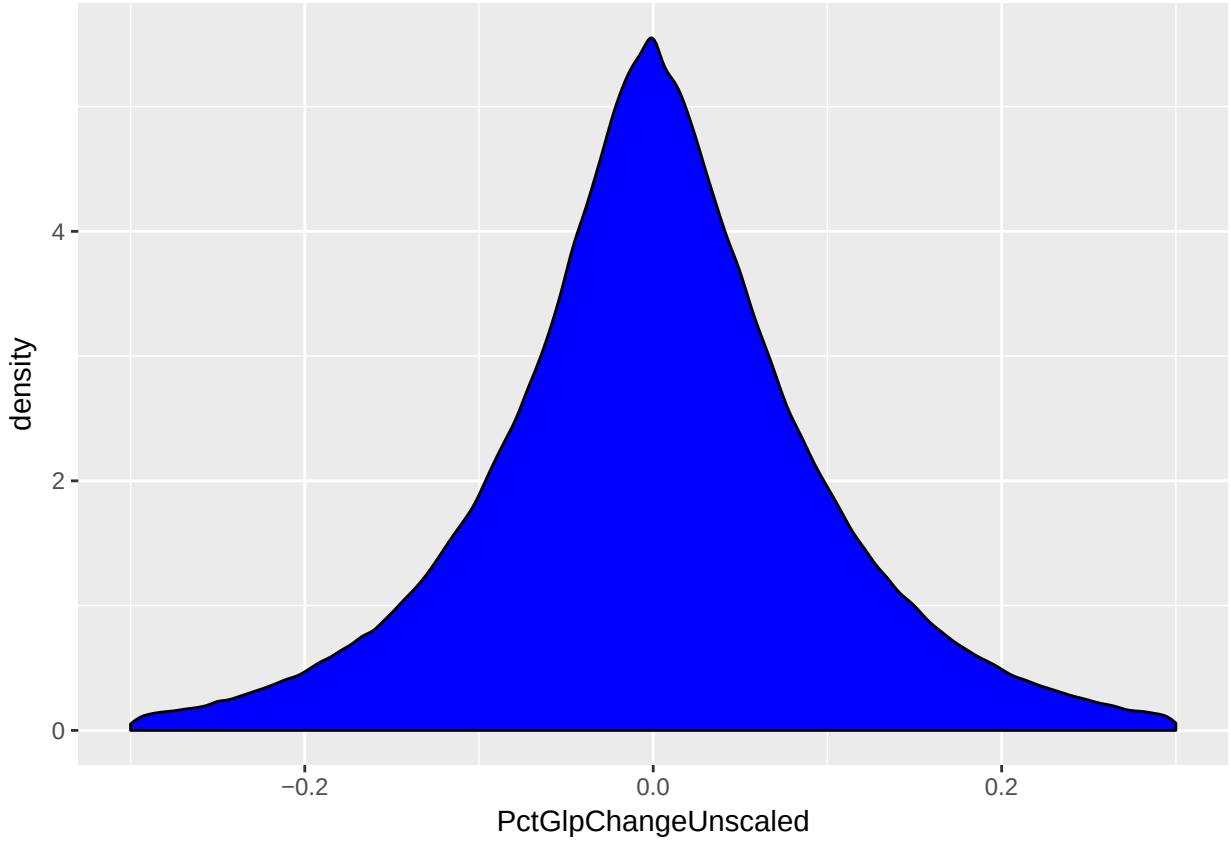


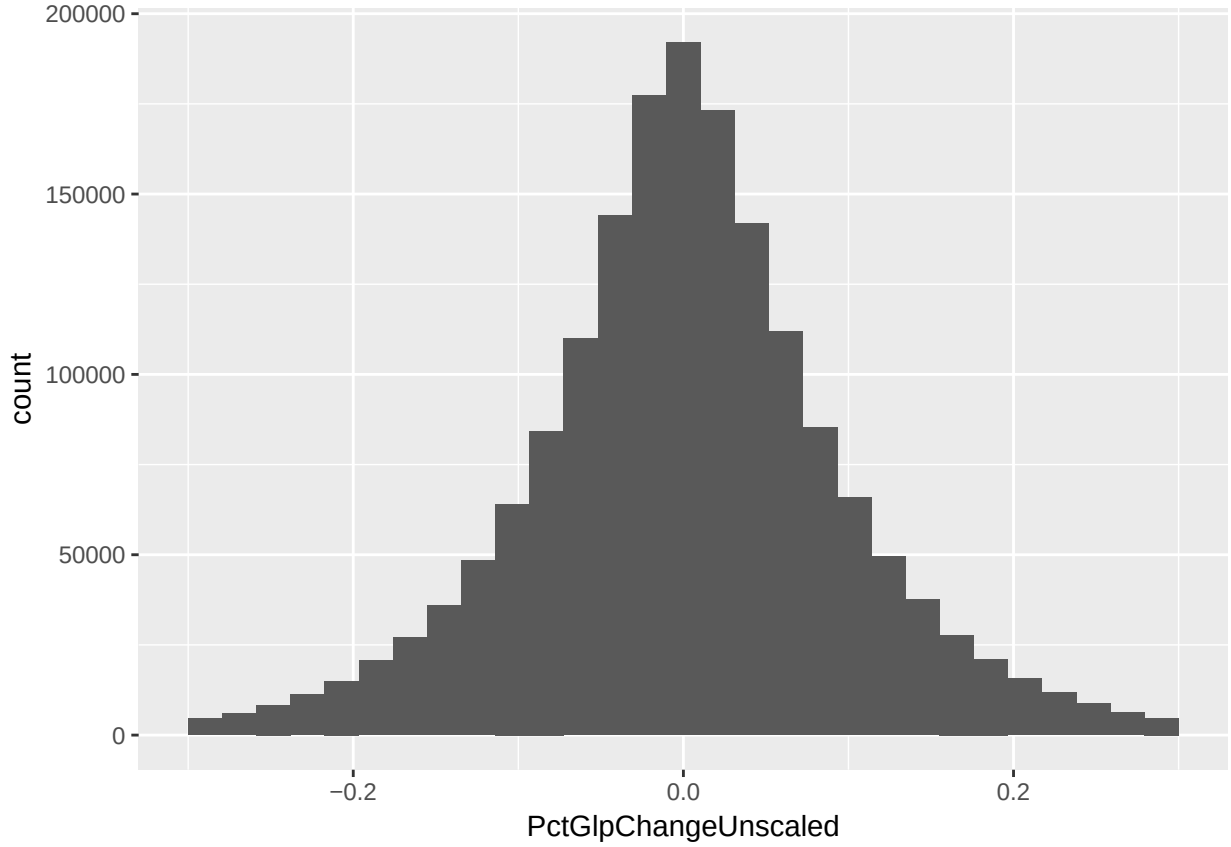


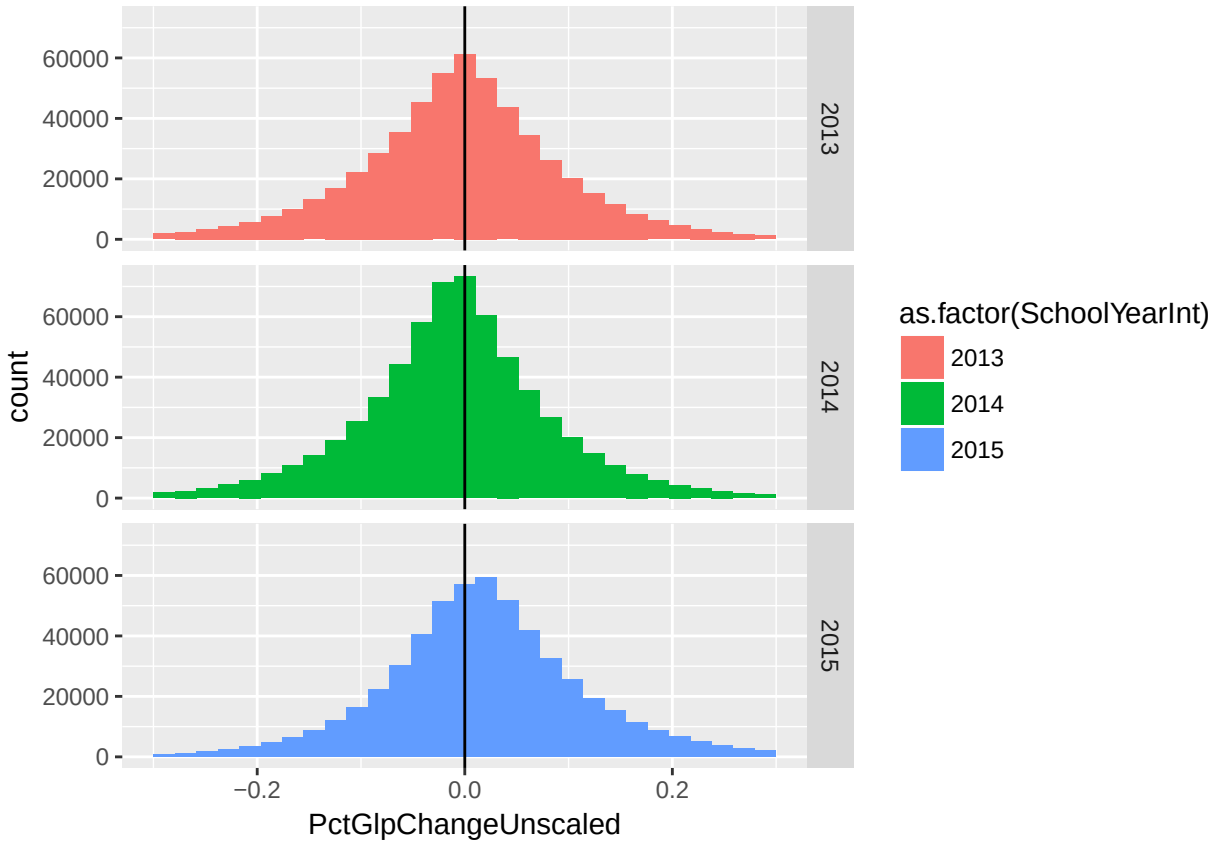

```
## # A tibble: 2,313,022 × 14
##    school_code grade_span subject gradeFactor  type subgroup SchoolYearInt
##          <chr>      <chr>   <chr>       <ord> <chr>    <chr>          <int>
## 1       NC-SEA       <NA>     ALL         ALL   ALL      ALL           2013
## 2       NC-SEA       <NA>     ALL         ALL   ALL      ALL           2014
## 3       NC-SEA       <NA>     ALL         ALL    RG      ALL           2014
## 4       NC-SEA       <NA>     ALL         ALL    RG      ALL           2013
## 5       NC-SEA       <NA>     ALL         ALL   ALL  NOT_LEP           2013
## 6       NC-SEA       <NA>     ALL         ALL   ALL  NOT_LEP           2014
## 7       NC-SEA       <NA>     ALL         ALL    RG  NOT_LEP           2014
## 8       NC-SEA       <NA>     ALL         ALL    RG  NOT_LEP           2013
## 9       NC-SEA       <NA>     ALL         ALL   ALL  NOT_SWD           2015
## 10      NC-SEA       <NA>     ALL         ALL    RG  NOT_SWD           2013
## # ... with 2,313,012 more rows, and 7 more variables: num_tested <int>,
## #   pct_glp <dbl>, CurrentGLP <dbl>, PriorGLP <dbl>, PctGlpChange <dbl>,
## #   PctGlpChangeUnscaled <dbl>, PctGlpChangeAbsUnscaled <dbl>
```

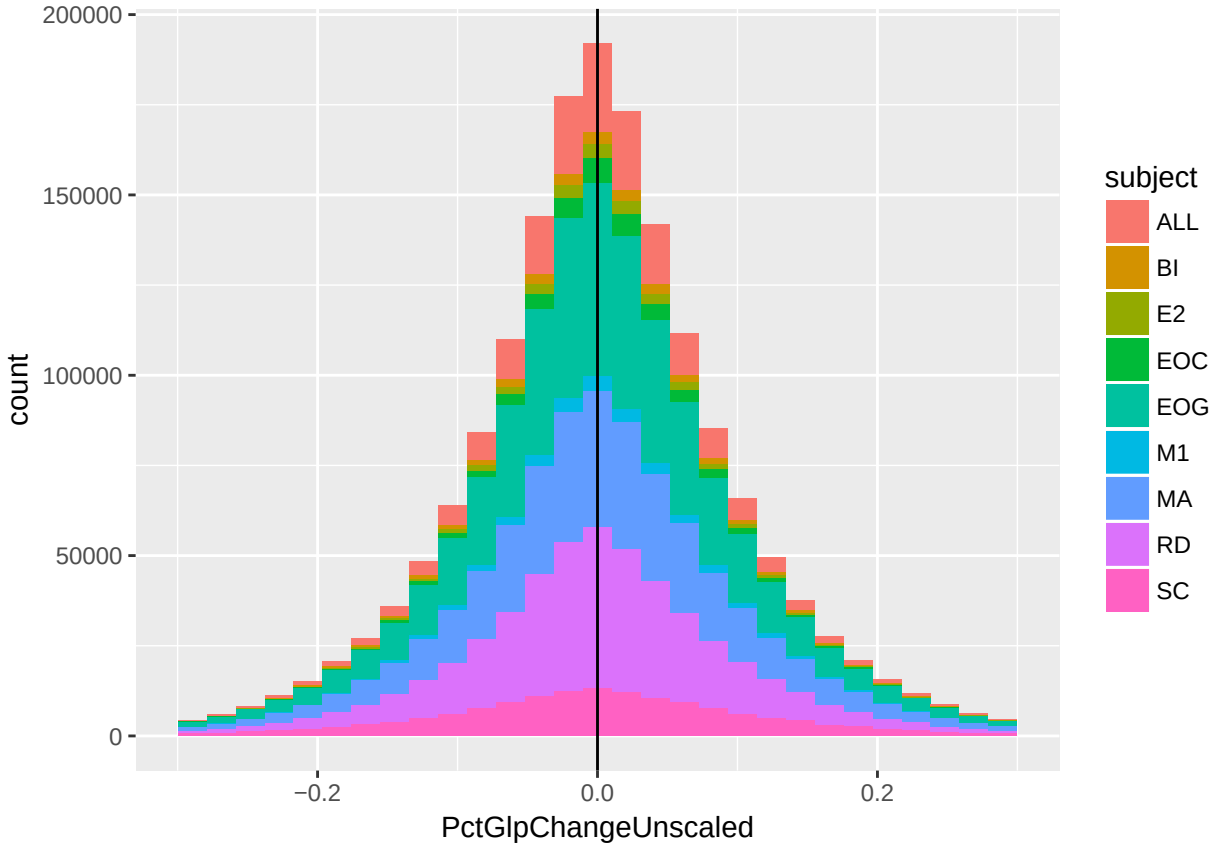
Work with unscaled changes lte 25%

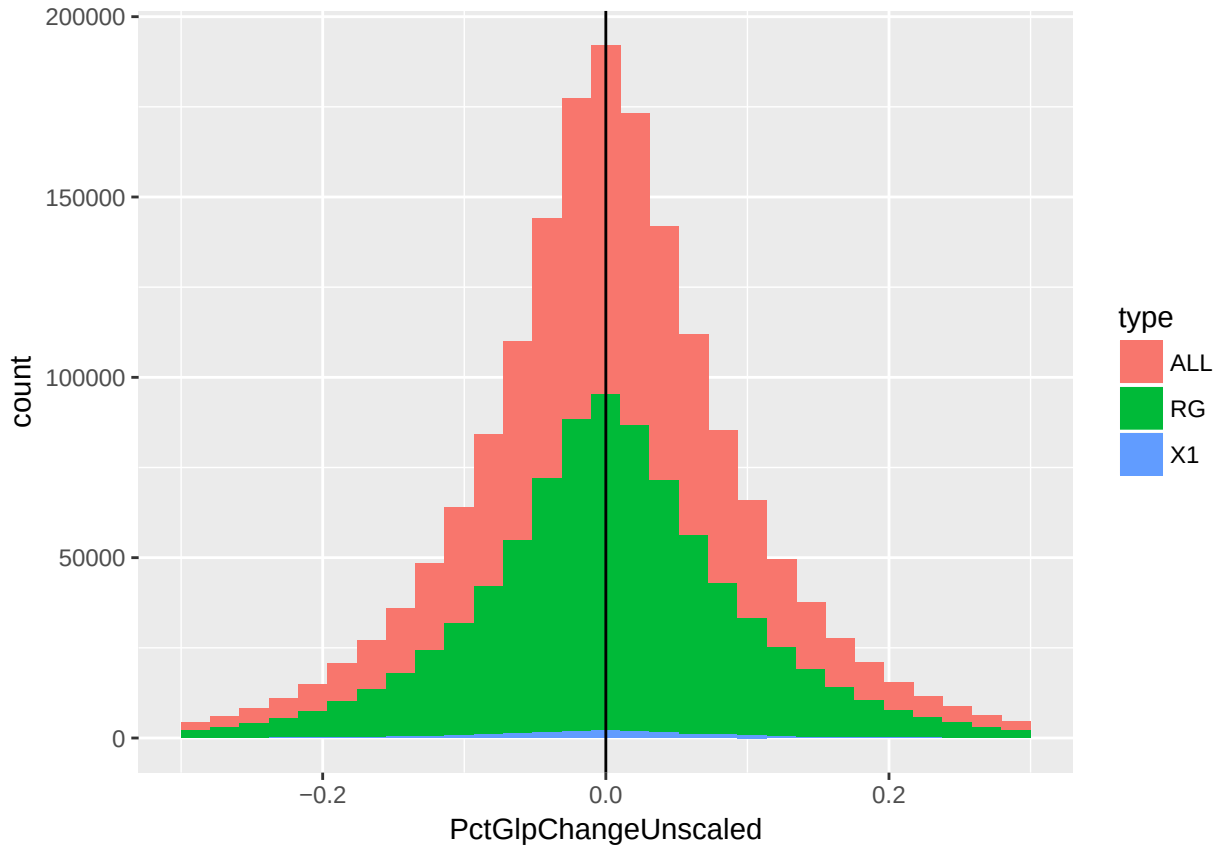
```
## [1] 0.01359523
```

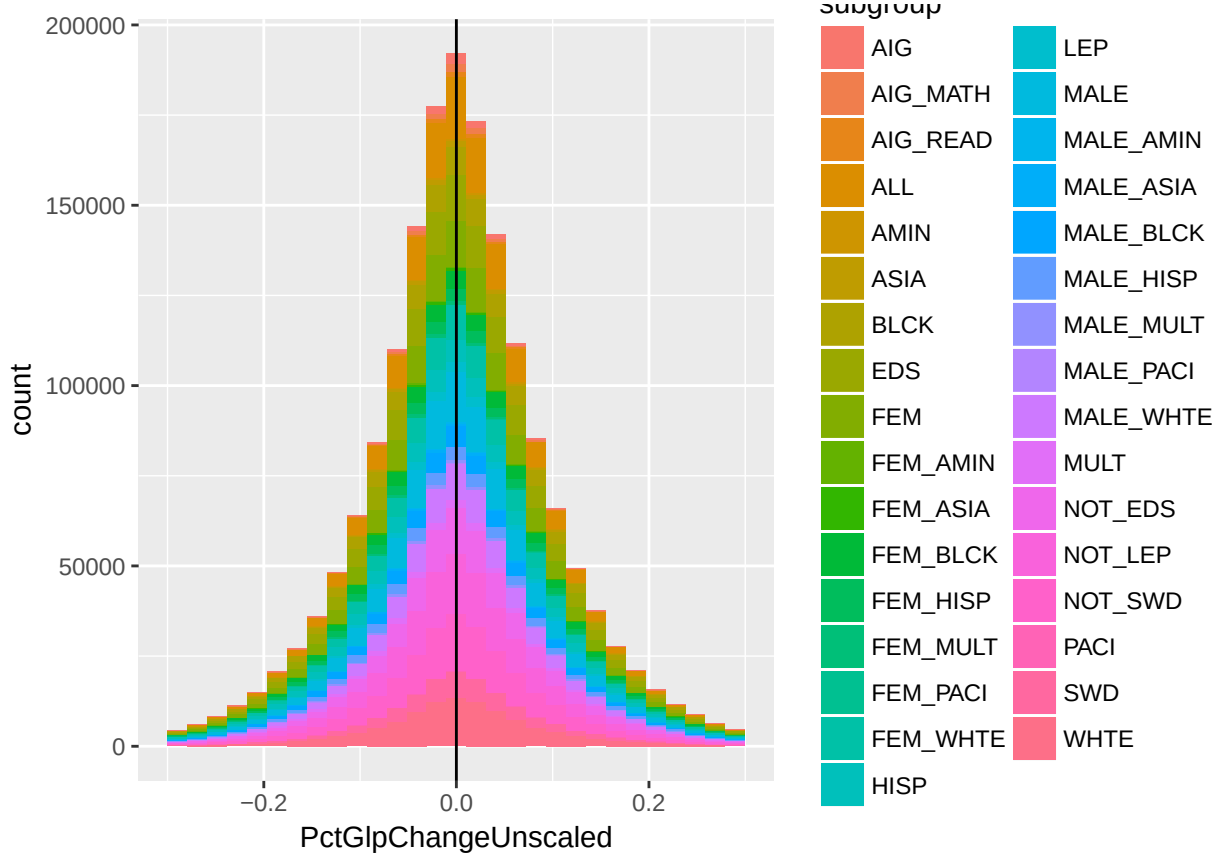

density
4
2
0
−0.2
0.0
0.2
PctGlpChangeUnscaled

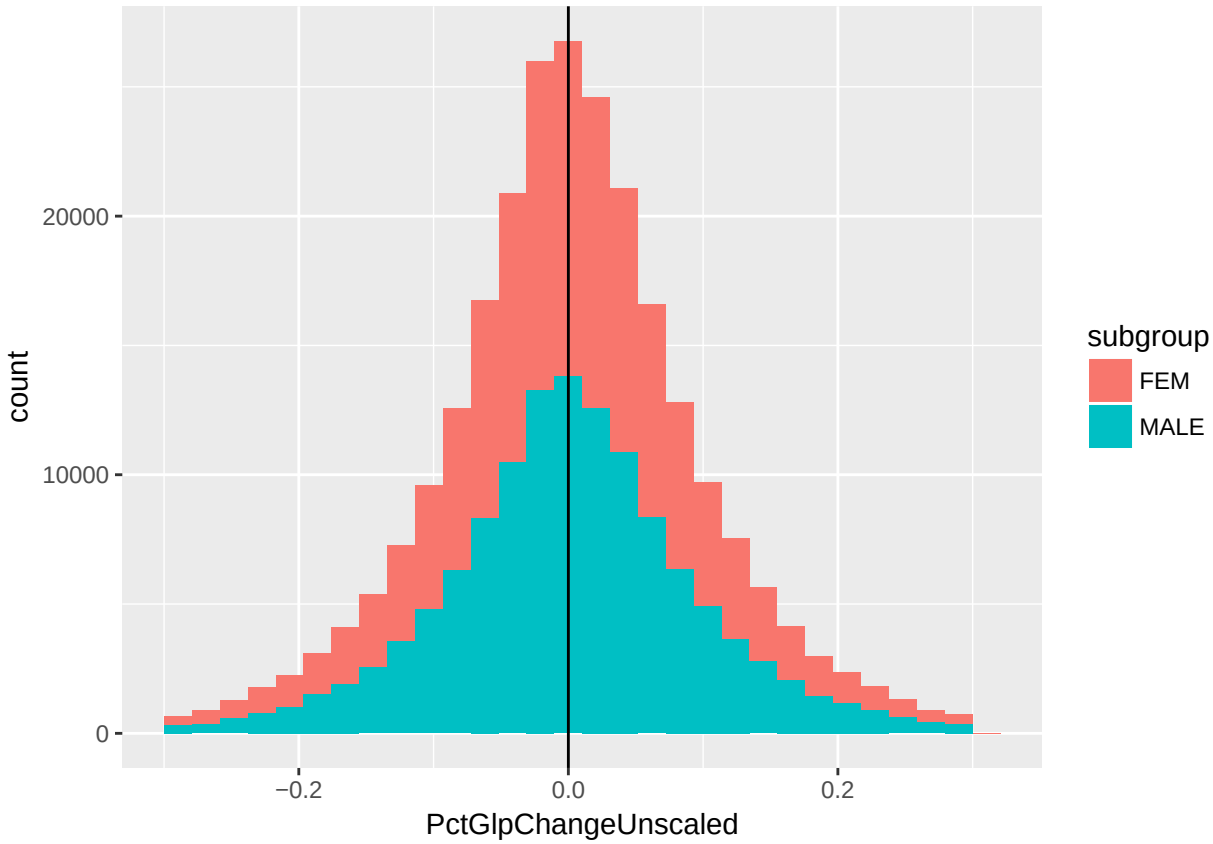

count
200000
150000
100000
50000
0
−0.2
0.0
0.2
PctGlpChangeUnscaled


60000
40000
20000
0
2013
2014
2015
count
−0.2
0.0
0.2
PctGlpChangeUnscaled
as.factor(SchoolYearInt)
2013
2014
2015


200000
150000
100000
50000
0
count
−0.2
0.0
0.2
PctGlpChangeUnscaled
subject
ALL
BI
E2
EOC
EOG
M1
MA
RD
SC


200000
150000
100000
50000
0
count
−0.2
0.0
0.2
PctGlpChangeUnscaled
type
ALL
RG
X1


200000
150000
100000
50000
0
count
−0.2
0.0
0.2
PctGlpChangeUnscaled
Subgroup
AIG
AIG_MATH
AIG_READ
ALL
AMIN
ASIA
BLCK
EDS
FEM
FEM_AMIN
FEM_ASIA
FEM_BLCK
FEM_HISP
FEM_MULT
FEM_PACI
FEM_WHTE
HISP
LEP
MALE
MALE_AMIN
MALE_ASIA
MALE_BLCK
MALE_HISP
MALE_MULT
MALE_PACI
MALE_WHTE
MULT
NOT_EDS
NOT_LEP
NOT_SWD
PACI
SWD
WHTE




```
## # A tibble: 2 × 2
##   subgroup TotalTested
##      <chr>       <int>
## 1      FEM    67569193
## 2     MALE    70844486
```

```
##  chr "dfDisag"
##  chr "dfGender"
##  chr "dfPlot"
##  chr "dfYearToYear"
##  chr "dfYearToYearSmallSize"
##  chr "dfYearToYearTrunc"
##  chr "plt"
##  chr "pltBySubGroup"
##  chr "pltBySubject"
##  chr "pltByType"
##  chr "pltByYear"
##  chr "pltGender"
##  chr "pltOverall"
```

```
## NULL
```