Variable Pricing

```
      time              action            reward            busy_for
 Min.   :     1    wait :  5529    Min.   :-8.0     Min.    :1.0
 1st Qu.:250001    drive:211919    1st Qu.:-1.0     1st Qu.:1.0
 Median :500000    offer:436397    Median :-1.0     Median :1.0
 Mean   :500000    NA's :346154    Mean   : 3.9     Mean    :1.5
 3rd Qu.:750000                    3rd Qu.:-1.0     3rd Qu.:2.0
 Max.   :999999                    Max.   :78.0     Max.    :4.0
                                   NA's   :346154   NA's    :346154
 location          destination       passenger          fare
 2   : 42542    6   : 27479    declined:208347    Min.   :  5.0
 1   : 27895    3   : 45222    accepted: 93272    1st Qu.: 48.0
 5   : 59420    2   : 56238    NA's    :698380    Median : 60.0
 3   :121223    4   : 57715                       Mean   : 95.5
 4   :107542    1   : 59434                       3rd Qu.:132.0
 6   :295223    5   : 55531                       Max.   :400.0
 NA's:346154    NA's:698380                       NA's   :698380
```

Observed rewards over time
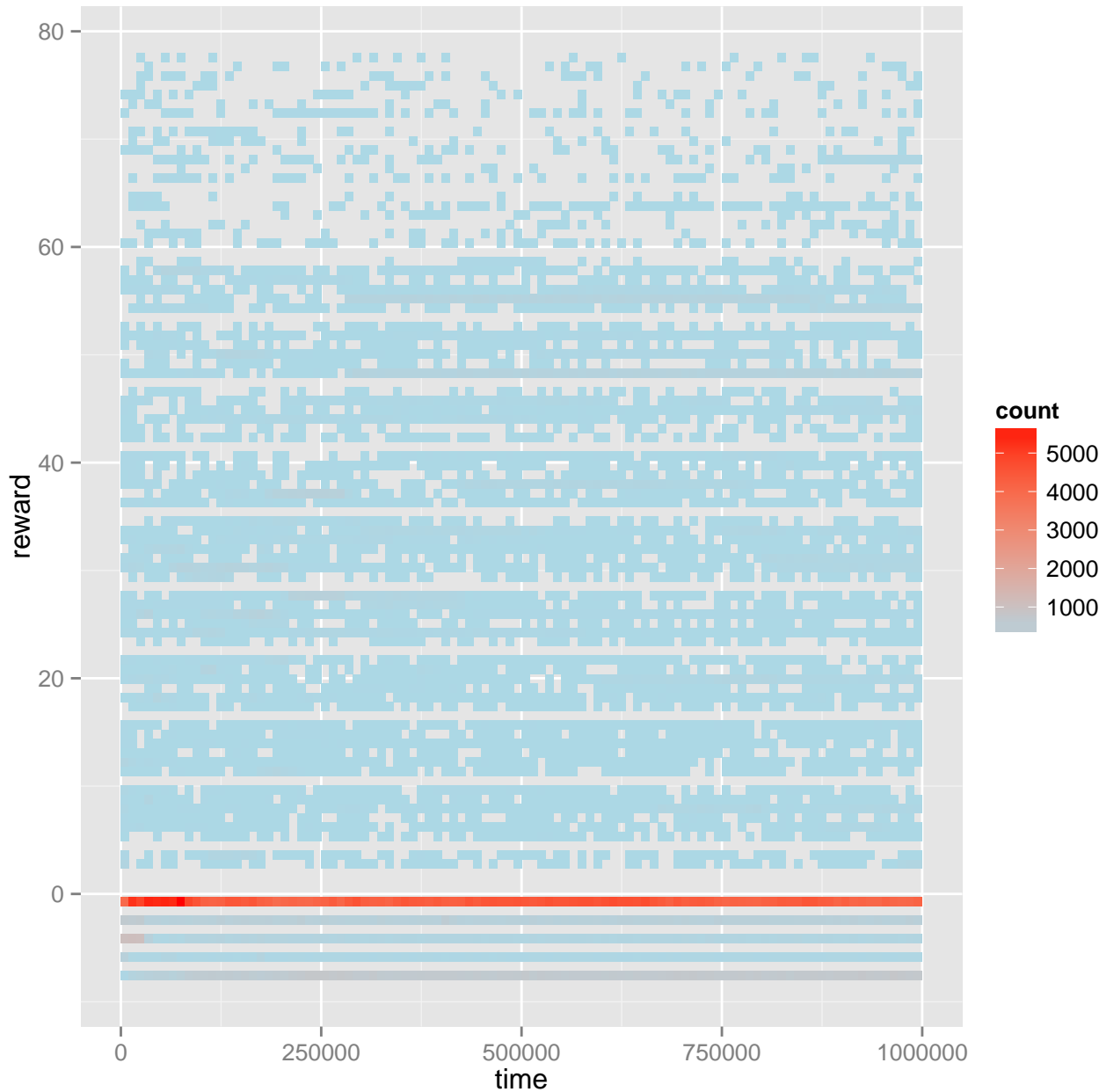
```
Analysis of Variance Table

Response: reward
             Df     Sum Sq Mean Sq F value    Pr(>F)
time          1     144282  144282   607.3 < 2.2e-16 ***
Residuals 653843 155340694     238
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '
```
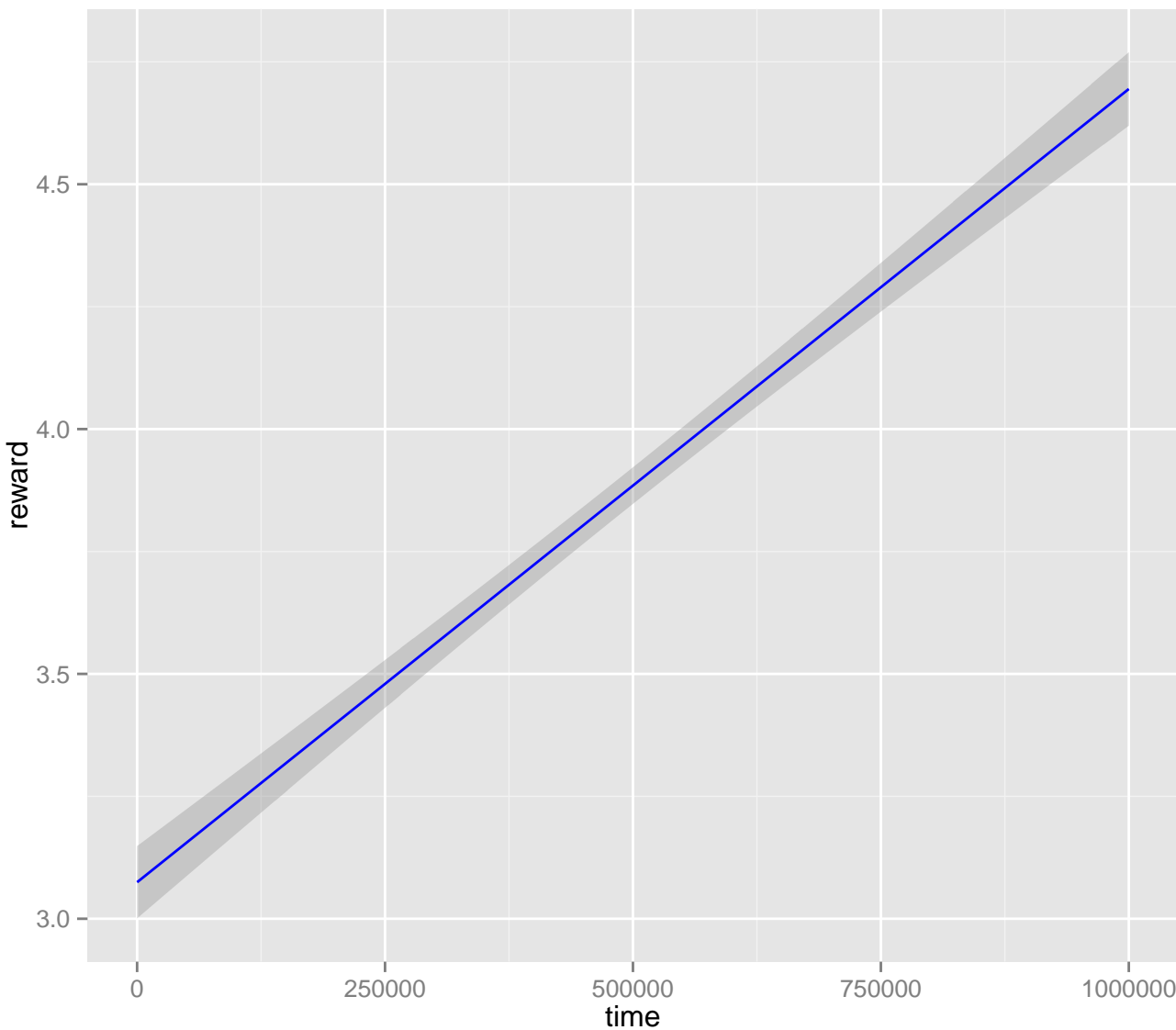
```
      time                action              reward              busy_for
 Min.   :      1    wait : 60510    Min.    :-8.0      Min.   :1.0
 1st Qu.: 250001    drive:411215    1st Qu.:-4.0       1st Qu.:1.0
 Median : 500001    offer:105339    Median :-2.0       Median :1.0
 Mean   : 500001    NA's :422936    Mean    : 0.3      Mean   :1.7
 3rd Qu.: 750000                    3rd Qu.:-1.0       3rd Qu.:3.0
 Max.   :1000000                    Max.    :72.0      Max.   :4.0
                                    NA's    :422936    NA's   :422936
 location         destination        passenger             fare
 1   : 35252    3   :  9443    declined: 21147    Min.   :20.0
 2   : 88246    5   : 10993    accepted: 49458    1st Qu.:40.0
 3   :136478    6   : 10607    NA's     :929395   Median :40.0
 4   : 49946    1   : 14094                       Mean   :41.3
 5   :161666    4   : 13553                       3rd Qu.:60.0
 6   :105476    2   : 11915                       Max.   :80.0
 NA's:422936    NA's:929395                       NA's   :929395
```

Observed rewards over time
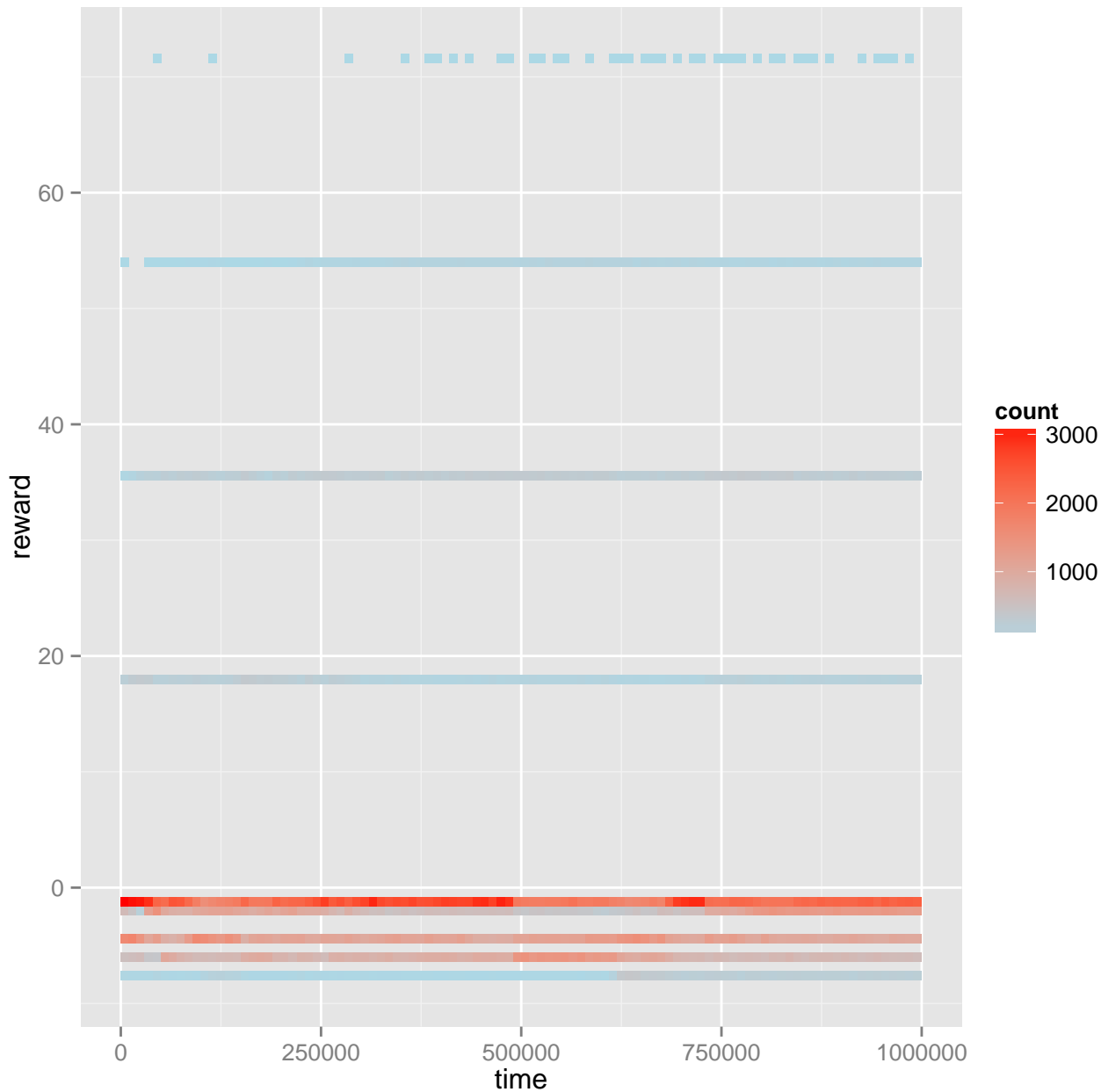
```
Analysis of Variance Table

Response: reward
             Df    Sum Sq Mean Sq F value    Pr(>F)
time          1     16707 16706.8  144.13 < 2.2e-16 ***
Residuals 577062 66891387   115.9
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '
```

Regression analysis of observed rewards over time