IPL.R

2023-06-01

```
# Read the Excel file
data <- read.csv("C:\\Users\\\\OneDrive\\Desktop\\BA2\\EDA\\ipl nope.csv")</pre>
# Initialize empty data frames to store results
top_run_scores <- data.frame()</pre>
low_wicket_takers <- data.frame()</pre>
# Loop over unique years
for (year in unique(data$Year)) {
  # Filter data for each year
  year_data <- subset(data, Year == year)</pre>
  # Sort data by runs and wickets
  sorted_by_runs <- year_data[order(-year_data$Runs), ]</pre>
  sorted_by_wickets <- year_data[order(year_data$Wkts), ]</pre>
  # Extract top 3 run scores and Low 3 wicket takers
  top_run_scores <- rbind(top_run_scores, sorted_by_runs[1:3, c("Year",</pre>
"Name", "Runs")])
  low_wicket_takers <- rbind(low_wicket_takers, sorted_by_wickets[1:3,</pre>
c("Year", "Name", "Wkts")])
}
# Print the results
print("Year-wise Top 3 Run Scores:")
## [1] "Year-wise Top 3 Run Scores:"
print(top_run_scores)
##
        Year
                       Name Runs
## 894 2008
                Shaun Marsh 616
## 322 2008 Gautam Gambhir
                             534
## 880 2008
               Shane Watson 472
## 2
        2009 AB de Villiers 465
## 963 2009 Suresh Raina 434
## 412 2009
                  JP Duminy 372
## 964 2010
               Suresh Raina 520
## 645 2010
               Murali Vijay 458
## 855 2010 Saurabh Tiwary 419
## 209 2011 Chris Gayle 608
```

```
## 1047 2011
                 Virat Kohli
                               557
## 896
                               504
        2011
                 Shaun Marsh
## 210
        2012
                 Chris Gayle
                               733
## 326
        2012 Gautam Gambhir
                               590
## 908
        2012 Shikhar Dhawan
                               569
## 591
        2013 Michael Hussey
                               733
## 211
        2013
                 Chris Gayle
                               708
## 1049 2013
                 Virat Kohli
                               634
## 809
        2014
               Robin Uthappa
                               660
## 304
        2014
                Dwayne Smith
                               566
## 340
        2014
               Glenn Maxwell
                               552
## 254
        2015
                David Warner
                               562
## 56
        2015 Ajinkya Rahane
                               540
## 515
        2015
              Lendl Simmons
                               540
## 1052 2016
                 Virat Kohli
                               973
## 255
        2016
                David Warner
                               848
## 9
        2016 AB de Villiers
                               687
## 256
        2017
                David Warner
                               641
                               498
## 331
        2017 Gautam Gambhir
## 913
        2017 Shikhar Dhawan
                               479
print("Year-wise Low 3 Wicket Takers:")
## [1] "Year-wise Low 3 Wicket Takers:"
print(low wicket takers)
##
                          Name Wkts
       Year
## 1
       2008
               AB de Villiers
                                  0
## 50
       2008
               Ajinkya Rahane
## 59
       2008
                 Ajit Agarkar
                                  0
## 2
       2009
               AB de Villiers
                                  0
                                  0
## 100 2009
               Angelo Mathews
## 191 2009 Brendon McCullum
                                  0
## 3
       2010
               AB de Villiers
                                  0
## 11
       2010
                  Aaron Finch
                                  0
## 27
       2010
               Abhishek Nayar
## 4
       2011
               AB de Villiers
                                  0
## 12
       2011
                  Aaron Finch
                                  0
## 47
       2011
               Aiden Blizzard
                                  0
## 5
       2012
               AB de Villiers
                                  0
## 13
       2012
                  Aaron Finch
                                  0
## 21
       2012 Abhimanyu Mithun
                                  0
## 6
               AB de Villiers
       2013
                                  0
## 42
       2013
                  Aditya Tare
                                  0
## 54
       2013
               Ajinkya Rahane
                                  0
## 7
       2014
               AB de Villiers
                                  0
## 15
       2014
                  Aaron Finch
                                  0
## 31
       2014
               Abhishek Navar
                                  0
## 8
       2015
               AB de Villiers
                                  0
## 16
       2015
                  Aaron Finch
                                  0
```

```
## 23 2015 Abhimanyu Mithun
## 9
              AB de Villiers
                                0
       2016
## 17
      2016
                 Aaron Finch
                                0
## 24 2016 Abhimanyu Mithun
                                0
## 10 2017
             AB de Villiers
                                0
## 18
      2017
                 Aaron Finch
                                0
## 46 2017
                 Aditya Tare
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
# Read the CSV file
data1 <-
read.csv("C:\\Users\\chara\\OneDrive\\Desktop\\BA2\\EDA\\IPL Ball by Ball 200
8_2022.csv")
# Group the data by season, batsman, and match
grouped data <- data1 %>%
  group_by(Season, batter) %>%
  summarize(
    total_runs = sum(batsman_run),
    )
## `summarise()` has grouped output by 'Season'. You can override using the
## `.groups` argument.
grouped data1 <- data1 %>%
  group_by(Season, bowler) %>%
  summarize(
  total wickets = sum(ifelse(isWicketDelivery == "W", 1, 0))
## `summarise()` has grouped output by 'Season'. You can override using the
## `.groups` argument.
# Print the arranged data
print(grouped data)
## # A tibble: 3,032 × 3
## # Groups:
              Season [28]
##
      Season batter
                            total runs
##
  <int> <chr>
                                 <int>
```

```
## 1
        1082 A Choudhary
                                     25
                                    49
## 2
        1082 A Mishra
                                     5
## 3
        1082 A Zampa
                                     7
## 4
       1082 AB Dinda
       1082 AB de Villiers
## 5
                                   216
## 6
        1082 AD Mathews
                                    32
##
  7
       1082 AD Nath
                                     0
## 8
                                     7
        1082 AF Milne
## 9
        1082 AJ Finch
                                    300
## 10
        1082 AJ Tye
                                    53
## # ... with 3,022 more rows
print(grouped_data1)
## # A tibble: 2,263 × 3
## # Groups:
               Season [28]
##
      Season bowler
                         total_wickets
##
       <int> <chr>>
                                 <dbl>
## 1
        1082 A Choudhary
                                      0
## 2
        1082 A Mishra
                                      0
## 3
       1082 A Nehra
                                      0
## 4
       1082 A Zampa
                                      0
## 5
       1082 AB Dinda
                                      0
## 6
       1082 AD Mathews
                                      0
## 7
       1082 AF Milne
                                      0
## 8
       1082 AJ Tye
                                      0
## 9
        1082 AR Patel
                                      0
## 10
        1082 AS Rajpoot
                                      0
## # ... with 2,253 more rows
library(dplyr)
library(fitdistrplus)
## Warning: package 'fitdistrplus' was built under R version 4.2.3
## Loading required package: MASS
## Warning: package 'MASS' was built under R version 4.2.3
##
## Attaching package: 'MASS'
## The following object is masked from 'package:dplyr':
##
##
       select
## Loading required package: survival
library(ggplot2)
# Filter the data for the last three IPL years
last_three_years <- max(data$Year) - 2</pre>
```

```
filtered data <- data %>% filter(Year >= last three years)
# Calculate aggregate runs and wickets for each player
aggregate runs <- filtered data %>%
  group_by(Name) %>%
  summarise(total runs = sum(Runs)) %>%
  arrange(desc(total_runs)) %>%
  top_n(3)
## Selecting by total_runs
aggregate wickets <- filtered data %>%
  group by(Name) %>%
  summarise(total_wickets = sum(Wkts)) %>%
  arrange(desc(total_wickets)) %>%
  top_n(3)
## Selecting by total wickets
# Fit distributions to runs and wickets data
fit_runs <- fitdist(aggregate_runs$total_runs, "norm")</pre>
fit_wickets <- fitdist(aggregate_wickets$total_wickets, "pois")</pre>
# Print the distribution fits
print(fit_runs)
## Fitting of the distribution ' norm ' by maximum likelihood
## Parameters:
##
         estimate Std. Error
## mean 1751.0000
                    150.3519
## sd
        260.4163
                    106.3143
print(fit_wickets)
## Fitting of the distribution ' pois ' by maximum likelihood
## Parameters:
##
          estimate Std. Error
## lambda 59.66667
                     4.459696
library(lmtest)
## Warning: package 'lmtest' was built under R version 4.2.3
## Loading required package: zoo
## Warning: package 'zoo' was built under R version 4.2.3
##
## Attaching package: 'zoo'
## The following objects are masked from 'package:base':
##
##
       as.Date, as.Date.numeric
```

```
# Convert Status to a factor variable
data$Status <- as.factor(data$Status)</pre>
# Perform a regression analysis
model <- lm(Final.Price ~ Status, data = data)</pre>
# Check the regression model summary
summary(model)
##
## Call:
## lm(formula = Final.Price ~ Status, data = data)
##
## Residuals:
##
      Min
              1Q Median
                             3Q
                                    Max
## -5e+07
          0e+00 0e+00
                          0e+00
                                 5e+07
##
## Coefficients:
##
                  Estimate Std. Error t value Pr(>|t|)
                1.000e+06
## (Intercept)
                            1.400e+07
                                         0.071 0.943152
## Status3
                 5.500e+05
                            1.566e+07
                                         0.035 0.972016
## Status4
                5.000e+04
                            1.566e+07
                                         0.003 0.997455
## Status5
                 5.000e+06
                            1.617e+07
                                         0.309 0.757521
## Status6
                -1.174e-05
                            1.980e+07
                                         0.000 1.000000
                                         0.000 1.000000
## Status7
                -8.017e-06
                            1.980e+07
## Status8
                1.000e+05
                            1.715e+07
                                         0.006 0.995354
## Status9
                1.150e+07
                            1.715e+07
                                         0.671 0.503408
## Status10
                1.000e+05
                            1.715e+07
                                         0.006 0.995354
## Status11
                -7.855e-06
                            1.980e+07
                                         0.000 1.000000
                1.500e+06
                                         0.087 0.930405
## Status13
                            1.715e+07
## Status14
                1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status15
                -1.000e+05
                            1.715e+07
                                        -0.006 0.995354
## Status16
                -8.814e-06
                            1.980e+07
                                         0.000 1.000000
## Status18
                -4.000e+05
                            1.980e+07
                                        -0.020 0.983908
## Status19
                1.000e+06
                            1.980e+07
                                         0.050 0.959785
                                        -0.020 0.983908
## Status20
                -4.000e+05
                            1.980e+07
## Status21
                1.500e+06
                            1.980e+07
                                         0.076 0.939710
## Status23
                -8.392e-06
                            1.980e+07
                                         0.000 1.000000
                -7.289e-06
                                         0.000 1.000000
## Status25
                            1.980e+07
## Status26
                1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status27
                -8.795e-06
                            1.980e+07
                                         0.000 1.000000
## Status28
                8.360e+06
                            1.617e+07
                                         0.517 0.605785
                                         0.097 0.923131
## Status29
                1.657e+06
                            1.715e+07
                1.000e+05
                                         0.006 0.995354
## Status30
                            1.715e+07
## Status32
                -7.214e-06
                            1.980e+07
                                         0.000 1.000000
## Status33
                -7.636e-06
                            1.980e+07
                                         0.000 1.000000
## Status34
                -8.826e-06
                            1.980e+07
                                         0.000 1.000000
## Status35
                4.000e+05
                            1.617e+07
                                         0.025 0.980292
## Status36
                2.500e+06
                            1.715e+07
                                         0.146 0.884272
## Status37
                -2.000e+05
                           1.980e+07
                                        -0.010 0.991954
```

```
0.006 0.995354
## Status39
                 1.000e+05
                             1.715e+07
                             1.980e+07
## Status40
                 4.736e+05
                                          0.024 0.980948
## Status44
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status45
                 3.887e+05
                             1.980e+07
                                          0.020 0.984363
## Status46
                             1.980e+07
                 2.000e+05
                                          0.010 0.991954
## Status47
                -7.322e-06
                             1.980e+07
                                          0.000 1.000000
## Status50
                 1.157e+07
                             1.715e+07
                                          0.675 0.500632
## Status51
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status53
                 5.000e+06
                             1.715e+07
                                          0.292 0.770986
## Status54
                                          0.101 0.919673
                 2.000e+06
                             1.980e+07
## Status55
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
## Status56
                 7.500e+06
                             1.980e+07
                                          0.379 0.705358
## Status57
                -7.445e-06
                                          0.000 1.000000
                             1.980e+07
## Status59
                -7.230e-06
                             1.980e+07
                                          0.000 1.000000
                                          0.064 0.948933
## Status60
                 1.100e+06
                             1.715e+07
## Status63
                 6.950e+06
                                          0.444 0.657655
                             1.566e+07
## Status69
                 2.250e+06
                             1.715e+07
                                          0.131 0.895774
## Status73
                 1.536e+06
                             1.715e+07
                                          0.090 0.928717
## Status74
                 6.000e+06
                             1.715e+07
                                          0.350 0.726877
## Status76
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status77
                -1.000e+05
                             1.715e+07
                                         -0.006 0.995354
## Status78
                 5.500e+05
                             1.566e+07
                                          0.035 0.972016
## Status79
                -7.674e-06
                             1.980e+07
                                          0.000 1.000000
                -2.000e+05
                                         -0.010 0.991954
## Status82
                             1.980e+07
## Status84
                 1.450e+07
                             1.715e+07
                                          0.845 0.399024
## Status86
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status87
                             1.980e+07
                                          0.050 0.959785
                 1.000e+06
## Status88
                 1.283e+07
                             1.617e+07
                                          0.794 0.428475
                                          0.000 1.000000
## Status89
                -7.151e-06
                             1.715e+07
## Status90
                 2.260e+06
                             1.715e+07
                                          0.132 0.895314
## Status92
                 5.000e+05
                             1.715e+07
                                          0.029 0.976775
## Status93
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status94
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status95
                 1.200e+07
                             1.715e+07
                                          0.700 0.485059
## Status96
                 4.133e+06
                             1.617e+07
                                          0.256 0.798542
## Status98
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status99
                -4.000e+04
                             1.715e+07
                                         -0.002 0.998142
                -8.254e-06
                             1.715e+07
                                          0.000 1.000000
## Status102
## Status105
                 3.887e+05
                             1.980e+07
                                          0.020 0.984363
                -6.942e-06
## Status106
                             1.980e+07
                                          0.000 1.000000
## Status107
                -8.325e-06
                             1.980e+07
                                          0.000 1.000000
## Status108
                -6.729e-06
                             1.980e+07
                                          0.000 1.000000
## Status109
                 8.500e+06
                             1.980e+07
                                          0.429 0.668298
                             1.617e+07
## Status111
                 1.600e+06
                                          0.099 0.921290
## Status112
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status113
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status116
                 5.000e+05
                             1.715e+07
                                          0.029 0.976775
## Status117
                 1.100e+06
                             1.715e+07
                                          0.064 0.948933
## Status118
                -5.642e-06
                             1.980e+07
                                          0.000 1.000000
## Status119
                -6.197e-06
                             1.980e+07
                                          0.000 1.000000
```

```
0.000 1.000000
## Status120
                -8.540e-06
                             1.980e+07
## Status121
                             1.980e+07
                -7.323e-06
                                          0.000 1.000000
## Status124
                -2.000e+05
                             1.980e+07
                                         -0.010 0.991954
## Status126
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
                             1.980e+07
## Status128
                 2.000e+06
                                          0.101 0.919673
## Status129
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status130
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status131
                -9.821e-06
                             1.980e+07
                                          0.000 1.000000
## Status132
                -7.346e-06
                             1.980e+07
                                          0.000 1.000000
## Status135
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status136
                 3.000e+06
                             1.980e+07
                                          0.151 0.879766
## Status137
                 6.400e+06
                             1.534e+07
                                          0.417 0.677035
## Status140
                -6.922e-06
                             1.980e+07
                                          0.000 1.000000
## Status142
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
## Status143
                -7.692e-06
                             1.980e+07
                                          0.000 1.000000
## Status146
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status147
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status149
                 1.500e+06
                             1.715e+07
                                          0.087 0.930405
## Status152
                -7.823e-06
                             1.715e+07
                                          0.000 1.000000
## Status154
                -1.000e+05
                                         -0.006 0.995354
                             1.715e+07
                                          0.029 0.976775
## Status158
                 5.000e+05
                             1.715e+07
## Status162
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status168
                 3.629e+07
                             1.980e+07
                                          1.833 0.068624 .
                -2.000e+05
                                         -0.010 0.991954
## Status169
                             1.980e+07
## Status170
                 1.500e+06
                             1.715e+07
                                          0.087 0.930405
## Status174
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status176
                -4.000e+05
                             1.980e+07
                                         -0.020 0.983908
## Status178
                -7.074e-06
                             1.980e+07
                                          0.000 1.000000
                 2.500e+06
                             1.980e+07
                                          0.126 0.899687
## Status179
## Status181
                -7.477e-06
                             1.980e+07
                                          0.000 1.000000
## Status182
                 1.800e+07
                             1.980e+07
                                          0.909 0.364657
## Status183
                 3.500e+06
                             1.980e+07
                                          0.177 0.859921
## Status185
                -7.343e-06
                             1.980e+07
                                          0.000 1.000000
## Status188
                 2.013e+06
                             1.715e+07
                                          0.117 0.906676
## Status192
                 1.500e+06
                             1.715e+07
                                          0.087 0.930405
## Status193
                 3.000e+06
                             1.980e+07
                                          0.151 0.879766
## Status195
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status196
                -7.025e-06
                                          0.000 1.000000
                             1.715e+07
## Status199
                 1.800e+07
                             1.980e+07
                                          0.909 0.364657
## Status200
                 4.500e+06
                             1.715e+07
                                          0.262 0.793335
## Status201
                -8.160e-06
                                          0.000 1.000000
                             1.980e+07
## Status203
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status205
                 4.250e+06
                             1.715e+07
                                          0.248 0.804575
                             1.980e+07
## Status206
                 5.000e+06
                                          0.252 0.800968
## Status208
                 2.667e+06
                             1.617e+07
                                          0.165 0.869199
## Status209
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status210
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status211
                -7.826e-06
                             1.980e+07
                                          0.000 1.000000
## Status216
                 2.500e+07
                             1.980e+07
                                          1.262 0.208517
## Status218
                 4.416e+06
                             1.617e+07
                                          0.273 0.785095
```

```
0.278 0.781551
## Status219
                 5.500e+06
                             1.980e+07
## Status220
                             1.980e+07
                -9.255e-06
                                          0.000 1.000000
## Status224
                 1.200e+07
                             1.980e+07
                                          0.606 0.545340
## Status225
                 6.000e+06
                             1.980e+07
                                          0.303 0.762270
                 3.000e+06
                             1.980e+07
## Status226
                                          0.151 0.879766
## Status227
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status229
                 6.000e+05
                             1.715e+07
                                          0.035 0.972132
## Status230
                 3.100e+07
                             1.980e+07
                                          1.565 0.119341
## Status232
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
                                          1.137 0.257120
## Status233
                 1.950e+07
                             1.715e+07
## Status234
                 1.496e+07
                             1.715e+07
                                          0.872 0.384393
## Status237
                -7.106e-06
                             1.980e+07
                                          0.000 1.000000
## Status238
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status239
                 1.000e+06
                             1.715e+07
                                          0.058 0.953570
## Status243
                 1.157e+07
                             1.617e+07
                                          0.715 0.475366
## Status244
                 2.910e+06
                             1.980e+07
                                          0.147 0.883347
## Status248
                 1.000e+05
                             1.715e+07
                                          0.006 0.995354
## Status251
                 2.600e+07
                             1.980e+07
                                          1.313 0.190971
## Status255
                 7.000e+06
                             1.980e+07
                                          0.353 0.724163
## Status258
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
                             1.980e+07
                                          0.000 1.000000
## Status261
                -7.125e-06
## Status264
                 4.400e+07
                             1.980e+07
                                          2.222 0.027610 *
## Status265
                 5.750e+06
                             1.715e+07
                                          0.335 0.737826
                 1.200e+07
                                          0.700 0.485059
## Status266
                             1.715e+07
## Status267
                 1.100e+07
                             1.980e+07
                                          0.555 0.579299
## Status272
                 1.100e+06
                             1.715e+07
                                          0.064 0.948933
                 1.000e+06
## Status275
                             1.980e+07
                                          0.050 0.959785
## Status276
                 1.400e+07
                             1.980e+07
                                          0.707 0.480553
                             1.980e+07
                                          0.000 1.000000
## Status277
                -7.277e-06
                 1.050e+07
## Status278
                             1.980e+07
                                          0.530 0.596646
## Status280
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status282
                 4.024e+06
                             1.715e+07
                                          0.235 0.814758
## Status285
                -7.896e-06
                             1.980e+07
                                          0.000 1.000000
## Status286
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
## Status290
                -8.037e-06
                             1.980e+07
                                          0.000 1.000000
## Status292
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status294
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status295
                 1.759e+07
                                          1.026 0.306380
                             1.715e+07
## Status298
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status300
                 3.000e+06
                             1.980e+07
                                          0.151 0.879766
## Status302
                -7.985e-06
                             1.715e+07
                                          0.000 1.000000
## Status304
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status306
                 5.750e+06
                             1.715e+07
                                          0.335 0.737826
## Status310
                 1.000e+06
                             1.715e+07
                                          0.058 0.953570
## Status311
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
                             1.980e+07
## Status312
                 2.000e+06
                                          0.101 0.919673
## Status313
                 6.000e+06
                             1.980e+07
                                          0.303 0.762270
## Status314
                 8.250e+06
                             1.715e+07
                                          0.481 0.631095
## Status317
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status322
                 3.580e+07
                             1.980e+07
                                          1.808 0.072402
```

```
0.035 0.972132
## Status324
                 6.000e+05
                             1.715e+07
## Status326
                             1.980e+07
                 1.000e+06
                                          0.050 0.959785
## Status328
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status329
                 6.901e+06
                             1.715e+07
                                          0.402 0.687910
## Status330
                 7.500e+06
                             1.980e+07
                                          0.379 0.705358
## Status336
                 2.340e+07
                             1.715e+07
                                          1.364 0.174229
## Status337
                 8.660e+06
                             1.980e+07
                                          0.437 0.662440
## Status341
                 1.350e+07
                             1.715e+07
                                          0.787 0.432270
## Status343
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status344
                 1.700e+07
                                          0.858 0.391845
                             1.980e+07
## Status345
                 5.750e+06
                             1.715e+07
                                          0.335 0.737826
## Status346
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
                             1.980e+07
## Status350
                 3.580e+07
                                          1.808 0.072402
## Status355
                 6.000e+06
                             1.715e+07
                                          0.350 0.726877
                                          0.010 0.991954
## Status356
                 2.000e+05
                             1.980e+07
## Status358
                 5.500e+06
                             1.715e+07
                                          0.321 0.748828
## Status362
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status364
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status367
                 1.052e+07
                             1.715e+07
                                          0.614 0.540226
## Status370
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
                 2.500e+06
                                          0.146 0.884272
## Status373
                             1.715e+07
## Status378
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status379
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status380
                 4.000e+06
                                          0.202 0.840165
                             1.980e+07
## Status382
                 1.117e+07
                             1.617e+07
                                          0.691 0.490743
## Status384
                 7.970e+06
                             1.715e+07
                                          0.465 0.642719
## Status385
                 1.600e+07
                             1.980e+07
                                          0.808 0.420239
## Status386
                 2.680e+06
                             1.980e+07
                                          0.135 0.892508
                 5.000e+05
                             1.980e+07
                                          0.025 0.979886
## Status388
## Status389
                -6.967e-06
                             1.980e+07
                                          0.000 1.000000
## Status390
                 2.048e+05
                             1.980e+07
                                          0.010 0.991761
## Status391
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status392
                 8.500e+06
                             1.980e+07
                                          0.429 0.668298
## Status397
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status399
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status400
                -7.337e-06
                             1.980e+07
                                          0.000 1.000000
## Status401
                -7.283e-06
                             1.980e+07
                                          0.000 1.000000
## Status404
                -7.732e-06
                             1.980e+07
                                          0.000 1.000000
## Status405
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
## Status411
                 1.550e+07
                             1.715e+07
                                          0.904 0.367378
## Status416
                 2.500e+07
                             1.980e+07
                                          1.262 0.208517
## Status422
                 4.250e+06
                             1.715e+07
                                          0.248 0.804575
## Status424
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status426
                 6.270e+06
                             1.715e+07
                                          0.366 0.715116
## Status431
                -2.000e+05
                             1.980e+07
                                         -0.010 0.991954
                -8.127e-06
                             1.980e+07
## Status432
                                          0.000 1.000000
## Status434
                -8.476e-06
                             1.980e+07
                                          0.000 1.000000
## Status439
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status441
                 1.280e+07
                             1.980e+07
                                          0.646 0.518910
## Status442
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
```

```
## Status446
                 3.900e+07
                             1.980e+07
                                          1.969 0.050530 .
## Status447
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status448
                 6.210e+06
                             1.715e+07
                                          0.362 0.717724
## Status449
                 8.085e+06
                             1.715e+07
                                          0.471 0.637934
                 3.900e+07
                             1.980e+07
## Status452
                                          1.969 0.050530
## Status455
                 5.643e+06
                             1.497e+07
                                          0.377 0.706648
## Status457
                -6.971e-06
                             1.980e+07
                                          0.000 1.000000
## Status459
                 3.580e+07
                             1.980e+07
                                          1.808 0.072402
## Status461
                 2.900e+07
                             1.980e+07
                                          1.464 0.144921
## Status467
                                          0.787 0.432270
                 1.350e+07
                             1.715e+07
## Status469
                 5.527e+06
                             1.715e+07
                                          0.322 0.747637
## Status477
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
                                         0.151 0.879766
## Status478
                 3.000e+06
                             1.980e+07
## Status479
                 1.625e+07
                             1.980e+07
                                          0.821 0.413029
## Status483
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status485
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status487
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status494
                -8.060e-06
                             1.980e+07
                                          0.000 1.000000
## Status497
                 2.833e+06
                             1.617e+07
                                          0.175 0.861105
## Status500
                 3.580e+07
                             1.980e+07
                                          1.808 0.072402
                             1.980e+07
                                          0.101 0.919673
## Status506
                 2.000e+06
## Status509
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status511
                 1.152e+07
                             1.715e+07
                                          0.672 0.502725
                 1.190e+08
## Status515
                             1.980e+07
                                          6.009 1.10e-08
## Status517
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status518
                 3.900e+07
                             1.980e+07
                                          1.969 0.050530
## Status521
                                          0.959 0.338690
                 1.900e+07
                             1.980e+07
## Status522
                 4.250e+06
                             1.715e+07
                                          0.248 0.804575
                 1.142e+07
                             1.980e+07
                                          0.577 0.564915
## Status523
## Status527
                 3.810e+07
                             1.980e+07
                                          1.924 0.056029
## Status534
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status535
                 4.495e+06
                             1.715e+07
                                          0.262 0.793548
## Status538
                 6.500e+05
                                          0.038 0.969811
                             1.715e+07
## Status539
                 3.820e+07
                             1.617e+07
                                          2.363 0.019280 *
## Status544
                 1.500e+06
                             1.715e+07
                                          0.087 0.930405
## Status546
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status554
                 4.100e+07
                             1.980e+07
                                          2.070 0.039925 *
                 1.513e+06
                             1.980e+07
                                          0.076 0.939168
## Status556
## Status561
                 1.096e+07
                             1.980e+07
                                          0.553 0.580678
## Status562
                 8.500e+06
                             1.715e+07
                                          0.496 0.620793
## Status566
                 8.640e+07
                                          4.363 2.22e-05
                             1.980e+07
## Status568
                 1.619e+07
                             1.980e+07
                                          0.818 0.414695
## Status571
                -7.082e-06
                             1.980e+07
                                          0.000 1.000000
## Status573
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status574
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status578
                 3.000e+06
                             1.980e+07
                                          0.151 0.879766
## Status579
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status582
                 1.100e+07
                             1.980e+07
                                          0.555 0.579299
## Status584
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status586
                 1.000e+06
                             1.980e+07
                                         0.050 0.959785
```

```
0.757 0.449818
## Status589
                 1.500e+07
                             1.980e+07
## Status590
                             1.980e+07
                 2.000e+06
                                          0.101 0.919673
## Status592
                 2.900e+07
                             1.980e+07
                                          1.464 0.144921
## Status597
                 5.400e+03
                             1.980e+07
                                          0.000 0.999783
                 3.750e+06
## Status598
                             1.715e+07
                                          0.219 0.827175
## Status599
                 8.400e+07
                             1.980e+07
                                          4.242 3.63e-05
## Status603
                 9.800e+06
                             1.715e+07
                                          0.571 0.568458
                             1.980e+07
## Status605
                -6.822e-06
                                          0.000 1.000000
## Status606
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
                                          0.454 0.650063
## Status612
                 9.000e+06
                             1.980e+07
## Status613
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status614
                 4.736e+05
                             1.980e+07
                                          0.024 0.980948
## Status617
                -7.447e-06
                             1.980e+07
                                          0.000 1.000000
## Status621
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status625
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
                 5.900e+06
                             1.980e+07
                                          0.298 0.766115
## Status629
## Status630
                -8.834e-06
                             1.980e+07
                                          0.000 1.000000
## Status632
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status637
                 1.100e+07
                             1.980e+07
                                          0.555 0.579299
## Status639
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
                             1.980e+07
                                          0.606 0.545340
## Status641
                 1.200e+07
## Status643
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status644
                 3.005e+07
                             1.980e+07
                                          1.517 0.131008
                 1.500e+07
                                          0.757 0.449818
## Status646
                             1.980e+07
## Status653
                 5.000e+06
                             1.980e+07
                                          0.252 0.800968
## Status654
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status656
                 2.000e+05
                                          0.010 0.991954
                             1.980e+07
## Status658
                 3.000e+06
                             1.980e+07
                                          0.151 0.879766
                                          0.646 0.518910
## Status661
                 1.280e+07
                             1.980e+07
## Status666
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
## Status669
                 5.250e+06
                             1.715e+07
                                          0.306 0.759882
## Status672
                 1.500e+06
                             1.980e+07
                                          0.076 0.939710
## Status673
                 2.611e+07
                             1.980e+07
                                          1.318 0.189144
## Status674
                 5.500e+06
                             1.980e+07
                                          0.278 0.781551
## Status675
                 2.900e+07
                             1.980e+07
                                          1.464 0.144921
## Status679
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status685
                 3.100e+07
                             1.980e+07
                                          1.565 0.119341
## Status690
                             1.980e+07
                                          1.703 0.090459
                 3.372e+07
## Status696
                 3.870e+07
                             1.715e+07
                                          2.257 0.025307 *
                                          2.070 0.039925 *
## Status698
                 4.100e+07
                             1.980e+07
                             1.980e+07
                                          3.666 0.000329 ***
## Status704
                 7.260e+07
## Status708
                 1.400e+07
                             1.980e+07
                                          0.707 0.480553
## Status709
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
                             1.980e+07
## Status723
                 2.000e+06
                                          0.101 0.919673
## Status730
                 5.000e+05
                             1.715e+07
                                          0.029 0.976775
                                          0.437 0.662431
## Status732
                 7.500e+06
                             1.715e+07
## Status735
                 7.500e+06
                             1.980e+07
                                          0.379 0.705358
## Status736
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status740
                 3.900e+07
                             1.980e+07
                                          1.969 0.050530
## Status743
                 2.275e+07
                             1.715e+07
                                          1.327 0.186437
```

```
2.787 0.005919 **
## Status744
                 4.780e+07
                             1.715e+07
## Status750
                 5.500e+06
                             1.980e+07
                                          0.278 0.781551
## Status751
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status752
                 5.000e+06
                             1.715e+07
                                          0.292 0.770986
## Status753
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status755
                 1.300e+07
                             1.980e+07
                                          0.656 0.512408
## Status759
                 4.150e+07
                             1.980e+07
                                          2.096 0.037593 *
## Status761
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status764
                 7.260e+07
                             1.980e+07
                                          3.666 0.000329
## Status765
                 7.500e+06
                                          0.379 0.705358
                             1.980e+07
## Status774
                 4.500e+06
                             1.980e+07
                                          0.227 0.820510
## Status775
                 1.700e+07
                             1.980e+07
                                          0.858 0.391845
## Status781
                 3.810e+07
                             1.980e+07
                                          1.924 0.056029
## Status786
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
## Status787
                 5.900e+07
                             1.980e+07
                                          2.979 0.003311
## Status796
                 1.413e+07
                             1.617e+07
                                          0.874 0.383294
## Status797
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
## Status807
                 1.000e+06
                             1.715e+07
                                          0.058 0.953570
## Status811
                 7.000e+06
                             1.715e+07
                                          0.408 0.683663
## Status815
                 1.400e+07
                             1.980e+07
                                          0.707 0.480553
                                          0.612 0.541188
## Status816
                 1.050e+07
                             1.715e+07
## Status819
                 4.000e+06
                             1.980e+07
                                          0.202 0.840165
## Status823
                 2.100e+07
                             1.980e+07
                                          1.060 0.290442
                                          0.292 0.770986
## Status827
                 5.000e+06
                             1.715e+07
## Status835
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status844
                 5.081e+05
                             1.980e+07
                                          0.026 0.979560
## Status846
                 4.100e+07
                             1.980e+07
                                          2.070 0.039925 *
## Status850
                -6.964e-06
                             1.980e+07
                                          0.000 1.000000
                             1.980e+07
                                          0.050 0.959785
## Status854
                 1.000e+06
## Status857
                 1.850e+07
                             1.715e+07
                                          1.079 0.282235
## Status864
                 3.150e+07
                             1.980e+07
                                          1.591 0.113539
## Status868
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status870
                 2.324e+07
                             1.715e+07
                                          1.355 0.177167
## Status873
                 2.531e+06
                             1.715e+07
                                          0.148 0.882829
## Status876
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status877
                 1.600e+07
                             1.980e+07
                                          0.808 0.420239
## Status879
                 1.600e+07
                             1.980e+07
                                          0.808 0.420239
## Status881
                 1.142e+07
                             1.980e+07
                                          0.577 0.564915
## Status882
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status883
                 3.600e+06
                             1.980e+07
                                          0.182 0.855962
## Status885
                 1.289e+07
                             1.980e+07
                                          0.651 0.516076
## Status889
                 2.487e+07
                             1.715e+07
                                          1.450 0.148773
## Status892
                 1.000e+07
                             1.980e+07
                                          0.505 0.614228
## Status894
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status897
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
                 1.974e+07
## Status898
                             1.715e+07
                                          1.151 0.251410
## Status906
                 2.300e+07
                             1.980e+07
                                          1.161 0.247087
## Status909
                 3.667e+06
                             1.617e+07
                                          0.227 0.820873
## Status911
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status914
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
```

```
0.656 0.512408
## Status920
                 1.300e+07
                             1.980e+07
## Status922
                                         1.210 0.227985
                 2.075e+07
                             1.715e+07
## Status923
                 4.100e+07
                             1.980e+07
                                          2.070 0.039925 *
## Status925
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
                 1.096e+07
                             1.980e+07
## Status926
                                          0.553 0.580678
## Status935
                 2.500e+07
                             1.980e+07
                                          1.262 0.208517
## Status937
                 9.500e+06
                             1.715e+07
                                          0.554 0.580345
## Status941
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status947
                 7.500e+06
                             1.980e+07
                                          0.379 0.705358
## Status949
                 2.200e+07
                             1.980e+07
                                          1.111 0.268157
## Status952
                 2.075e+07
                             1.980e+07
                                          1.048 0.296204
## Status953
                 2.031e+07
                             1.980e+07
                                          1.026 0.306579
                                         0.202 0.840165
## Status977
                 4.000e+06
                             1.980e+07
## Status984
                 2.700e+07
                             1.980e+07
                                          1.363 0.174546
## Status986
                -7.439e-06
                             1.980e+07
                                          0.000 1.000000
## Status989
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status1003
                 1.456e+06
                             1.980e+07
                                          0.074 0.941475
## Status1016
                 1.202e+07
                             1.715e+07
                                          0.701 0.484471
## Status1019
                 1.800e+07
                             1.980e+07
                                          0.909 0.364657
## Status1020
                 5.400e+07
                             1.980e+07
                                          2.727 0.007064 **
                             1.980e+07
                                          0.101 0.919673
## Status1021
                 2.000e+06
## Status1030
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status1032
                 1.657e+07
                             1.715e+07
                                          0.966 0.335392
                             1.980e+07
                                          0.010 0.991954
## Status1041
                 2.000e+05
## Status1043
                 2.000e+06
                             1.980e+07
                                          0.101 0.919673
## Status1060
                 2.890e+07
                             1.980e+07
                                          1.459 0.146304
## Status1062
                                          0.278 0.781551
                 5.500e+06
                             1.980e+07
## Status1067
                 1.500e+07
                             1.980e+07
                                          0.757 0.449818
                             1.980e+07
                                          1.969 0.050530
## Status1071
                 3.900e+07
## Status1075
                 5.430e+07
                             1.980e+07
                                          2.742 0.006763 **
## Status1079
                 4.400e+07
                             1.980e+07
                                          2.222 0.027610 *
## Status1097
                 2.200e+07
                             1.980e+07
                                         1.111 0.268157
## Status1099
                 3.216e+07
                             1.980e+07
                                          1.624 0.106269
## Status1104
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status1114
                 3.150e+07
                             1.715e+07
                                          1.837 0.067991
## Status1117
                 2.700e+07
                             1.980e+07
                                          1.363 0.174546
## Status1124
                 2.297e+07
                             1.980e+07
                                          1.160 0.247670
## Status1129
                 7.500e+06
                             1.980e+07
                                          0.379 0.705358
## Status1138
                 2.000e+05
                             1.980e+07
                                          0.010 0.991954
## Status1141
                 4.150e+07
                             1.980e+07
                                          2.096 0.037593
                                         0.227 0.820510
## Status1150
                 4.500e+06
                             1.980e+07
## Status1153
                 1.900e+07
                             1.980e+07
                                          0.959 0.338690
## Status1162
                 2.650e+07
                             1.715e+07
                                          1.545 0.124154
## Status1166
                 1.000e+06
                             1.980e+07
                                          0.050 0.959785
## Status1167
                 1.400e+07
                             1.980e+07
                                          0.707 0.480553
                             1.980e+07
## Status1169
                 1.100e+07
                                          0.555 0.579299
## Status1171
                 2.200e+07
                             1.980e+07
                                          1.111 0.268157
## Status1174
                 4.100e+07
                             1.617e+07
                                          2.536 0.012123 *
## Status1176
                 9.000e+06
                             1.980e+07
                                          0.454 0.650063
## Status1178
                 1.280e+07
                             1.980e+07
                                          0.646 0.518910
```

```
2.306 0.022322 *
## Status1180
                 4.566e+07
                            1.980e+07
## Status1192
                            1.980e+07
                 4.000e+06
                                         0.202 0.840165
## Status1193
                 4.140e+07
                            1.617e+07
                                         2.560 0.011323 *
                                         2.096 0.037593 *
## Status1194
                 4.150e+07
                            1.980e+07
                 6.500e+06
                            1.980e+07
## Status1200
                                         0.328 0.743137
## Status1208
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
## Status1210
                 1.983e+07
                            1.980e+07
                                         1.001 0.318058
## Status1217
                 1.300e+07
                            1.980e+07
                                         0.656 0.512408
## Status1222
                 3.650e+07
                            1.980e+07
                                         1.843 0.067045
## Status1229
                 7.000e+06
                            1.980e+07
                                         0.353 0.724163
## Status1231
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status1235
                 1.096e+07
                            1.980e+07
                                         0.553 0.580678
## Status1236
                 2.000e+06
                            1.715e+07
                                         0.117 0.907299
## Status1238
                 2.000e+07
                            1.980e+07
                                         1.010 0.313951
## Status1239
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status1243
                 1.500e+07
                            1.980e+07
                                         0.757 0.449818
## Status1246
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886
## Status1266
                 1.200e+07
                            1.980e+07
                                         0.606 0.545340
## Status1274
                 4.327e+06
                            1.980e+07
                                         0.219 0.827298
## Status1290
                 1.740e+07
                            1.980e+07
                                         0.879 0.380824
                            1.980e+07
                                         2.040 0.042886
## Status1292
                 4.040e+07
## Status1296
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status1298
                 1.400e+07
                            1.980e+07
                                         0.707 0.480553
                            1.980e+07
                                         0.303 0.762270
## Status1301
                 6.000e+06
## Status1303
                 9.654e+06
                            1.980e+07
                                         0.488 0.626528
## Status1310
                 4.400e+07
                            1.980e+07
                                         2.222 0.027610
                                         4.495 1.28e-05 ***
                 7.708e+07
                            1.715e+07
## Status1316
## Status1317
                 1.280e+07
                            1.980e+07
                                         0.646 0.518910
## Status1323
                                         1.516 0.131362
                 2.600e+07
                            1.715e+07
## Status1324
                 3.150e+07
                            1.980e+07
                                         1.591 0.113539
## Status1325
                 1.520e+07
                            1.980e+07
                                         0.768 0.443764
                                         0.328 0.743137
## Status1327
                 6.500e+06
                            1.980e+07
## Status1329
                 3.600e+06
                            1.980e+07
                                         0.182 0.855962
                                         2.727 0.007064 **
## Status1330
                 5.400e+07
                            1.980e+07
## Status1332
                 2.000e+05
                            1.980e+07
                                         0.010 0.991954
## Status1337
                 1.281e+07
                            1.715e+07
                                         0.747 0.456099
## Status1355
                 4.270e+07
                            1.980e+07
                                         2.156 0.032469 *
## Status1367
                 2.000e+06
                            1.980e+07
                                         0.101 0.919673
## Status1378
                 3.168e+07
                            1.980e+07
                                         1.600 0.111556
## Status1382
                 4.500e+06
                            1.980e+07
                                         0.227 0.820510
                 1.314e+06
## Status1390
                            1.980e+07
                                         0.066 0.947154
## Status1391
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886
## Status1396
                 2.000e+05
                            1.980e+07
                                         0.010 0.991954
## Status1403
                 6.368e+06
                            1.980e+07
                                         0.322 0.748173
## Status1407
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status1408
                 8.640e+07
                            1.980e+07
                                         4.363 2.22e-05 ***
## Status1411
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status1413
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
## Status1414
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
                                         4.828 3.06e-06 ***
## Status1431
                 9.560e+07
                            1.980e+07
```

```
## Status1442
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status1445
                            1.980e+07
                 4.900e+07
                                         2.474 0.014327 *
## Status1446
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status1460
                 2.000e+06
                            1.980e+07
                                         0.101 0.919673
                 3.900e+07
                            1.980e+07
## Status1466
                                         1.969 0.050530 .
## Status1472
                 1.280e+07
                            1.980e+07
                                         0.646 0.518910
## Status1486
                -7.703e-06
                            1.980e+07
                                         0.000 1.000000
## Status1490
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886
## Status1497
                 1.300e+06
                            1.980e+07
                                         0.066 0.947736
## Status1501
                                         0.101 0.919673
                 2.000e+06
                            1.980e+07
## Status1504
                 3.887e+05
                            1.980e+07
                                         0.020 0.984363
## Status1520
                 5.900e+07
                            1.980e+07
                                         2.979 0.003311
## Status1546
                                         0.808 0.420239
                 1.600e+07
                            1.980e+07
## Status1550
                 1.500e+07
                            1.980e+07
                                         0.757 0.449818
## Status1554
                 1.205e+07
                            1.980e+07
                                         0.609 0.543602
## Status1555
                 2.150e+07
                            1.980e+07
                                         1.086 0.279147
## Status1578
                 2.300e+07
                            1.980e+07
                                         1.161 0.247087
## Status1584
                 3.810e+07
                            1.980e+07
                                         1.924 0.056029
## Status1590
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status1595
                 8.200e+06
                            1.980e+07
                                         0.414 0.679336
                            1.980e+07
## Status1596
                 3.496e+07
                                         1.765 0.079314
## Status1598
                 4.270e+07
                            1.980e+07
                                         2.156 0.032469
                                         2.640 0.009074 **
## Status1608
                 5.227e+07
                            1.980e+07
                                         0.454 0.650063
## Status1611
                 9.000e+06
                            1.980e+07
## Status1614
                 9.054e+06
                            1.980e+07
                                         0.457 0.648105
## Status1620
                 1.280e+07
                            1.980e+07
                                         0.646 0.518910
## Status1625
                                         2.096 0.037593 *
                 4.150e+07
                            1.980e+07
## Status1636
                 4.500e+06
                            1.980e+07
                                         0.227 0.820510
                 6.540e+06
                            1.980e+07
                                         0.330 0.741594
## Status1639
## Status1652
                 9.560e+07
                            1.980e+07
                                         4.828 3.06e-06
## Status1657
                 1.800e+07
                            1.980e+07
                                         0.909 0.364657
## Status1661
                 2.200e+07
                            1.980e+07
                                         1.111 0.268157
## Status1663
                 3.150e+07
                            1.980e+07
                                         1.591 0.113539
## Status1668
                 4.150e+07
                            1.980e+07
                                         2.096 0.037593 *
## Status1673
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status1675
                 2.000e+06
                            1.980e+07
                                         0.101 0.919673
## Status1685
                 1.300e+07
                            1.980e+07
                                         0.656 0.512408
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status1686
## Status1693
                 4.150e+07
                            1.980e+07
                                         2.096 0.037593 *
                                         1.111 0.268157
## Status1694
                 2.200e+07
                            1.980e+07
                 2.800e+07
                            1.980e+07
                                         1.414 0.159208
## Status1698
## Status1707
                 7.000e+06
                            1.980e+07
                                         0.353 0.724163
## Status1730
                 1.600e+07
                            1.980e+07
                                         0.808 0.420239
## Status1741
                 1.650e+07
                            1.715e+07
                                         0.962 0.337359
                            1.980e+07
## Status1743
                 1.300e+07
                                         0.656 0.512408
                            1.980e+07
## Status1749
                 1.800e+07
                                         0.909 0.364657
## Status1758
                 5.024e+06
                            1.980e+07
                                         0.254 0.800033
## Status1760
                 1.280e+07
                            1.980e+07
                                         0.646 0.518910
## Status1764
                 9.560e+07
                            1.980e+07
                                         4.828 3.06e-06
## Status1767
                 9.184e+06
                            1.980e+07
                                         0.464 0.643411
```

```
0.010 0.991954
## Status1769
                 2.000e+05
                            1.980e+07
## Status1772
                            1.980e+07
                 3.600e+06
                                         0.182 0.855962
## Status1781
                 8.589e+06
                            1.980e+07
                                         0.434 0.665052
## Status1792
                 3.650e+07
                            1.980e+07
                                         1.843 0.067045
                 9.400e+07
                            1.980e+07
## Status1816
                                         4.747 4.37e-06 ***
## Status1833
                 1.040e+08
                            1.980e+07
                                         5.252 4.46e-07 ***
## Status1835
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
## Status1848
                 5.500e+06
                            1.980e+07
                                         0.278 0.781551
## Status1849
                 3.025e+07
                            1.980e+07
                                         1.527 0.128533
                                         1.691 0.092672
## Status1865
                 2.900e+07
                            1.715e+07
                                         4.747 4.37e-06 ***
## Status1872
                 9.400e+07
                            1.980e+07
## Status1875
                 1.100e+07
                            1.980e+07
                                         0.555 0.579299
                                         0.488 0.626528
## Status1886
                 9.654e+06
                            1.980e+07
## Status1917
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status1930
                 4.150e+07
                            1.980e+07
                                         2.096 0.037593 *
## Status1936
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886 *
## Status1947
                 2.000e+07
                            1.980e+07
                                         1.010 0.313951
## Status1950
                 3.600e+07
                            1.980e+07
                                         1.818 0.070836 .
## Status1953
                 2.900e+07
                            1.980e+07
                                         1.464 0.144921
## Status1966
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
                            1.980e+07
                                         0.020 0.984363
## Status1974
                 3.887e+05
## Status1977
                 7.000e+06
                            1.980e+07
                                         0.353 0.724163
## Status1989
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530 .
                 5.000e+06
## Status1997
                            1.980e+07
                                         0.252 0.800968
## Status1999
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886
## Status2018
                 1.000e+06
                            1.980e+07
                                         0.050 0.959785
## Status2026
                 1.900e+07
                                         0.959 0.338690
                            1.980e+07
## Status2036
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
                                         4.131 5.66e-05
## Status2049
                 8.180e+07
                            1.980e+07
## Status2061
                 1.500e+07
                            1.980e+07
                                         0.757 0.449818
## Status2063
                 2.297e+07
                            1.980e+07
                                         1.160 0.247670
## Status2065
                -7.799e-06
                            1.980e+07
                                         0.000 1.000000
## Status2084
                 2.085e+07
                            1.980e+07
                                         1.053 0.293890
## Status2085
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status2103
                 2.900e+07
                            1.980e+07
                                         1.464 0.144921
                                         2.979 0.003311 **
## Status2117
                 5.900e+07
                            1.980e+07
## Status2129
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530 .
## Status2133
                 9.040e+06
                            1.980e+07
                                         0.457 0.648613
## Status2138
                 7.000e+06
                            1.980e+07
                                         0.353 0.724163
## Status2141
                 1.300e+07
                            1.980e+07
                                         0.656 0.512408
## Status2159
                 9.100e+07
                            1.980e+07
                                         4.595 8.39e-06 ***
## Status2171
                 3.229e+07
                            1.980e+07
                                         1.631 0.104791
## Status2172
                 5.943e+06
                            1.980e+07
                                         0.300 0.764442
## Status2226
                 4.400e+07
                            1.980e+07
                                         2.222 0.027610
## Status2230
                 1.600e+07
                            1.980e+07
                                         0.808 0.420239
                            1.980e+07
## Status2232
                 2.500e+07
                                         1.262 0.208517
## Status2246
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886 *
## Status2248
                 2.711e+07
                            1.980e+07
                                         1.369 0.172775
## Status2264
                 3.810e+07
                            1.980e+07
                                         1.924 0.056029
## Status2268
                 2.895e+07
                            1.980e+07
                                         1.462 0.145611
```

```
1.066 0.288067
## Status2271
                 2.110e+07
                            1.980e+07
                            1.980e+07
## Status2276
                 9.654e+06
                                         0.488 0.626528
## Status2302
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
## Status2316
                 2.085e+07
                            1.980e+07
                                         1.053 0.293890
                            1.980e+07
## Status2319
                 2.000e+06
                                         0.101 0.919673
## Status2327
                 2.000e+06
                            1.980e+07
                                         0.101 0.919673
## Status2353
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status2363
                 1.000e+06
                            1.980e+07
                                         0.050 0.959785
## Status2370
                 2.200e+07
                            1.980e+07
                                         1.111 0.268157
                                         1.053 0.293890
## Status2383
                 2.085e+07
                            1.980e+07
## Status2388
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2392
                 4.694e+07
                            1.980e+07
                                         2.371 0.018883
                                         2.361 0.019353
## Status2403
                 4.676e+07
                            1.980e+07
## Status2408
                -8.213e-06
                            1.980e+07
                                         0.000 1.000000
                                         0.101 0.919673
## Status2411
                 2.000e+06
                            1.980e+07
## Status2424
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status2427
                 9.100e+07
                            1.980e+07
                                         4.595 8.39e-06
## Status2430
                 1.777e+06
                            1.980e+07
                                         0.090 0.928588
## Status2432
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status2447
                 3.830e+07
                            1.980e+07
                                         1.934 0.054790
                            1.980e+07
                                         1.295 0.197244
## Status2455
                 2.563e+07
## Status2456
                 4.040e+07
                            1.980e+07
                                         2.040 0.042886 *
## Status2457
                 3.235e+07
                            1.980e+07
                                         1.634 0.104192
                 1.300e+07
                            1.980e+07
                                         0.656 0.512408
## Status2460
## Status2462
                 1.000e+06
                            1.980e+07
                                         0.050 0.959785
## Status2464
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
                                         3.737 0.000254 ***
## Status2470
                 7.400e+07
                            1.980e+07
## Status2478
                 1.663e+06
                            1.980e+07
                                         0.084 0.933153
                                         0.454 0.650063
## Status2489
                 9.000e+06
                            1.980e+07
## Status2499
                 1.408e+07
                            1.980e+07
                                         0.711 0.478021
## Status2504
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2508
                 3.580e+07
                            1.980e+07
                                         1.808 0.072402 .
## Status2516
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status2526
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2543
                 3.050e+07
                            1.715e+07
                                         1.778 0.077117
## Status2546
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
                                         2.727 0.007064 **
## Status2556
                 5.400e+07
                            1.980e+07
## Status2583
                 3.350e+07
                            1.980e+07
                                         1.692 0.092539
## Status2609
                 1.625e+07
                            1.980e+07
                                         0.821 0.413029
## Status2612
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status2622
                 2.085e+07
                            1.980e+07
                                         1.053 0.293890
## Status2627
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
## Status2634
                 4.676e+07
                            1.980e+07
                                         2.361 0.019353 *
## Status2635
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09
## Status2649
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
                4.027e+06
                            1.980e+07
                                         0.203 0.839101
## Status2659
## Status2660
                 4.100e+07
                            1.980e+07
                                         2.070 0.039925 *
## Status2662
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2667
                 1.100e+07
                            1.980e+07
                                         0.555 0.579299
## Status2670
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
```

```
2.727 0.007064 **
## Status2671
                 5.400e+07
                            1.980e+07
## Status2693
                            1.980e+07
                 5.400e+07
                                         2.727 0.007064 **
## Status2699
                 3.113e+07
                            1.980e+07
                                         1.572 0.117834
## Status2722
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
                            1.980e+07
## Status2738
                 6.500e+06
                                         0.328 0.743137
## Status2755
                 2.890e+07
                            1.980e+07
                                         1.459 0.146304
## Status2757
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status2767
                 4.650e+07
                            1.980e+07
                                         2.348 0.020017 *
                                         3.484 0.000628 ***
## Status2769
                 6.900e+07
                            1.980e+07
                                         1.262 0.208517
## Status2770
                 2.500e+07
                            1.980e+07
## Status2772
                 3.600e+07
                            1.980e+07
                                         1.818 0.070836
## Status2775
                 9.054e+06
                            1.980e+07
                                         0.457 0.648105
## Status2781
                                         1.026 0.306579
                 2.031e+07
                            1.980e+07
                                         3.586 0.000439 ***
## Status2791
                 6.150e+07
                            1.715e+07
## Status2795
                 6.000e+06
                            1.980e+07
                                         0.303 0.762270
                 1.000e+06
                            1.980e+07
                                         0.050 0.959785
## Status2811
## Status2839
                 4.150e+07
                            1.980e+07
                                         2.096 0.037593
## Status2840
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status2849
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status2857
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424
                            1.980e+07
## Status2887
                 3.700e+07
                                         1.868 0.063424
## Status2896
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2901
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
                                         0.659 0.510595
## Status2907
                 1.306e+07
                            1.980e+07
## Status2909
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
## Status2945
                 1.855e+07
                            1.980e+07
                                         0.937 0.350223
## Status2946
                                         0.555 0.579299
                 1.100e+07
                            1.980e+07
## Status2947
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
                            1.980e+07
                                         1.969 0.050530
## Status2949
                 3.900e+07
## Status2964
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status2974
                 3.150e+07
                            1.980e+07
                                         1.591 0.113539
## Status2995
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530
## Status2997
                 3.750e+07
                            1.715e+07
                                         2.187 0.030136 *
## Status2999
                 3.810e+07
                            1.980e+07
                                         1.924 0.056029
                                         4.131 5.66e-05 ***
## Status3007
                 8.180e+07
                            1.980e+07
                                         3.021 0.002912 **
## Status3013
                 5.180e+07
                            1.715e+07
                                         4.747 4.37e-06 ***
## Status3018
                 9.400e+07
                            1.980e+07
## Status3032
                 1.280e+07
                            1.980e+07
                                         0.646 0.518910
## Status3037
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
                                         4.747 4.37e-06
## Status3050
                 9.400e+07
                            1.980e+07
## Status3057
                 1.947e+06
                            1.980e+07
                                         0.098 0.921787
## Status3060
                 7.400e+07
                            1.980e+07
                                         3.737 0.000254 ***
## Status3095
                -7.757e-06
                            1.980e+07
                                         0.000 1.000000
## Status3099
                 9.100e+07
                            1.980e+07
                                         4.595 8.39e-06
## Status3109
                 7.000e+06
                            1.980e+07
                                         0.353 0.724163
## Status3119
                 1.000e+06
                            1.980e+07
                                         0.050 0.959785
## Status3122
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status3127
                 2.890e+07
                            1.980e+07
                                         1.459 0.146304
## Status3131
                 2.036e+07
                            1.980e+07
                                         1.028 0.305234
## Status3136
                 1.057e+07
                            1.980e+07
                                         0.534 0.594116
```

```
## Status3151
                 1.970e+07
                            1.980e+07
                                         0.995 0.321243
                            1.980e+07
## Status3155
                 4.424e+07
                                         2.234 0.026775 *
## Status3158
                 1.855e+07
                            1.980e+07
                                         0.937 0.350223
                                         4.747 4.37e-06 ***
## Status3176
                 9.400e+07
                            1.980e+07
                 3.400e+07
                            1.980e+07
## Status3183
                                         1.717 0.087814 .
                                         3.737 0.000254 ***
## Status3185
                 7.400e+07
                            1.980e+07
## Status3192
                 3.900e+07
                            1.980e+07
                                         1.969 0.050530 .
## Status3193
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status3231
                 3.300e+07
                            1.980e+07
                                         1.666 0.097469 .
## Status3254
                                         1.462 0.145611
                 2.895e+07
                            1.980e+07
                                         3.484 0.000628 ***
## Status3281
                 6.900e+07
                            1.980e+07
## Status3286
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
## Status3299
                 4.298e+07
                                         2.170 0.031381 *
                            1.980e+07
## Status3308
                 3.887e+05
                            1.980e+07
                                         0.020 0.984363
## Status3346
                 2.085e+07
                            1.980e+07
                                         1.053 0.293890
## Status3353
                 8.200e+06
                            1.980e+07
                                         0.414 0.679336
## Status3371
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status3377
                 2.164e+07
                            1.980e+07
                                         1.093 0.276045
## Status3398
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814 .
## Status3409
                 1.700e+07
                            1.980e+07
                                         0.858 0.391845
                            1.980e+07
## Status3416
                 3.100e+07
                                         1.565 0.119341
## Status3421
                 7.400e+07
                            1.980e+07
                                         3.737 0.000254
## Status3422
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
                            1.980e+07
                                         1.155 0.249588
## Status3439
                 2.288e+07
## Status3472
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status3479
                 7.400e+07
                            1.980e+07
                                         3.737 0.000254
## Status3483
                 1.900e+07
                                         0.959 0.338690
                            1.980e+07
## Status3494
                 3.810e+07
                            1.980e+07
                                         1.924 0.056029 .
                 3.629e+07
                            1.980e+07
                                         1.833 0.068624
## Status3500
## Status3502
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status3514
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status3521
                 4.650e+07
                            1.980e+07
                                         2.348 0.020017 *
## Status3545
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status3566
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status3568
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
## Status3573
                 2.895e+07
                            1.980e+07
                                         1.462 0.145611
                                         4.363 2.22e-05 ***
## Status3594
                 8.640e+07
                            1.980e+07
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
## Status3595
## Status3613
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
                                         1.060 0.290442
## Status3622
                 2.100e+07
                            1.980e+07
                 4.150e+07
                            1.980e+07
## Status3625
                                         2.096 0.037593 *
## Status3644
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
## Status3652
                 9.560e+07
                            1.980e+07
                                         4.828 3.06e-06 ***
## Status3662
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status3676
                 2.400e+07
                            1.980e+07
                                         1.212 0.227214
                 8.180e+07
                            1.980e+07
## Status3706
                                         4.131 5.66e-05 ***
## Status3720
                 3.100e+07
                            1.980e+07
                                         1.565 0.119341
## Status3737
                 6.900e+07
                            1.980e+07
                                         3.484 0.000628
## Status3761
                 2.132e+07
                            1.715e+07
                                         1.243 0.215571
## Status3764
                 5.760e+07
                            1.980e+07
                                         2.909 0.004117 **
```

```
## Status3768
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status3794
                 1.970e+07
                                         0.995 0.321243
                            1.980e+07
## Status3796
                 1.100e+07
                            1.980e+07
                                         0.555 0.579299
## Status3801
                 4.020e+06
                            1.980e+07
                                         0.203 0.839377
                 1.498e+07
                            1.980e+07
## Status3852
                                         0.757 0.450391
## Status3878
                 2.036e+07
                            1.980e+07
                                         1.028 0.305234
## Status3892
                 1.900e+07
                            1.980e+07
                                         0.959 0.338690
## Status3907
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09
## Status3910
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
## Status3912
                 2.700e+07
                                         1.363 0.174546
                            1.980e+07
## Status3997
                 7.400e+07
                            1.980e+07
                                         3.737 0.000254 ***
                                         6.262 3.01e-09 ***
## Status4041
                 1.240e+08
                            1.980e+07
                                         1.262 0.208517
## Status4059
                 2.500e+07
                            1.980e+07
## Status4068
                 3.350e+07
                            1.980e+07
                                         1.692 0.092539 .
## Status4086
                 4.650e+07
                            1.980e+07
                                         2.348 0.020017 *
## Status4101
                 2.200e+07
                            1.980e+07
                                         1.111 0.268157
## Status4105
                 5.880e+07
                            1.980e+07
                                         2.969 0.003417 **
                                         3.232 0.001477 **
## Status4132
                 6.400e+07
                            1.980e+07
## Status4139
                 3.580e+07
                            1.980e+07
                                         1.808 0.072402 .
## Status4145
                 3.600e+06
                            1.980e+07
                                         0.182 0.855962
                            1.980e+07
                                         5.524 1.22e-07 ***
## Status4172
                 1.094e+08
## Status4184
                 1.700e+07
                            1.980e+07
                                         0.858 0.391845
## Status4185
                 2.413e+07
                            1.980e+07
                                         1.219 0.224621
                                         0.709 0.479169
## Status4191
                 1.404e+07
                            1.980e+07
## Status4204
                 3.400e+07
                            1.980e+07
                                         1.717 0.087814
## Status4219
                 5.420e+07
                            1.980e+07
                                         2.737 0.006860 **
                 3.338e+07
## Status4237
                            1.980e+07
                                         1.686 0.093665
## Status4255
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
                            1.980e+07
                                         0.454 0.650063
## Status4263
                 9.000e+06
## Status4287
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
## Status4292
                 4.424e+07
                            1.980e+07
                                         2.234 0.026775 *
                                         1.072 0.285384
## Status4306
                 2.122e+07
                            1.980e+07
## Status4326
                 9.100e+07
                            1.980e+07
                                         4.595 8.39e-06 ***
## Status4339
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424
## Status4348
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
                                         2.979 0.003311 **
## Status4356
                 5.900e+07
                            1.980e+07
## Status4374
                 2.900e+07
                            1.980e+07
                                         1.464 0.144921
## Status4409
                 1.496e+07
                            1.980e+07
                                         0.756 0.450905
## Status4415
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06
## Status4470
                 1.100e+07
                            1.980e+07
                                         0.555 0.579299
## Status4487
                 2.800e+07
                            1.980e+07
                                         1.414 0.159208
## Status4498
                 4.900e+07
                            1.980e+07
                                         2.474 0.014327 *
## Status4499
                 2.800e+07
                            1.980e+07
                                         1.414 0.159208
                                         3.737 0.000254 ***
## Status4512
                 7.400e+07
                            1.980e+07
                                         2.098 0.037367 *
## Status4514
                 4.155e+07
                            1.980e+07
                            1.980e+07
## Status4524
                 3.140e+07
                                         1.586 0.114646
## Status4588
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
## Status4635
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status4695
                 5.900e+07
                            1.980e+07
                                         2.979 0.003311
## Status4708
                 4.327e+06
                            1.980e+07
                                         0.219 0.827298
```

```
2.040 0.042886 *
## Status4744
                 4.040e+07
                            1.980e+07
## Status4754
                            1.980e+07
                 1.510e+07
                                         0.763 0.446808
## Status4777
                 4.500e+07
                            1.980e+07
                                         2.272 0.024315 *
## Status4782
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
                 3.300e+07
                            1.980e+07
## Status4828
                                         1.666 0.097469
## Status4854
                 4.155e+07
                            1.980e+07
                                         2.098 0.037367 *
                                         4.747 4.37e-06 ***
## Status4871
                 9.400e+07
                            1.980e+07
## Status4914
                 2.100e+07
                            1.980e+07
                                         1.060 0.290442
## Status4920
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
                                         2.096 0.037593 *
## Status4930
                 4.150e+07
                            1.980e+07
                                         2.979 0.003311 **
## Status4951
                 5.900e+07
                            1.980e+07
## Status4955
                 1.590e+08
                            1.980e+07
                                         8.029 1.55e-13 ***
                                         0.454 0.650063
## Status4971
                 9.000e+06
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status4988
                 1.240e+08
                            1.980e+07
                                         2.727 0.007064 **
## Status4996
                 5.400e+07
                            1.980e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status5016
                 9.400e+07
## Status5036
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
                                         3.737 0.000254 ***
## Status5076
                 7.400e+07
                            1.980e+07
## Status5077
                 4.700e+07
                            1.980e+07
                                         2.373 0.018741 *
## Status5080
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
                 2.900e+07
                            1.980e+07
                                         1.464 0.144921
## Status5096
## Status5137
                 3.235e+07
                            1.980e+07
                                         1.634 0.104192
## Status5139
                 3.168e+07
                            1.980e+07
                                         1.600 0.111556
                 9.100e+07
                                         4.595 8.39e-06 ***
## Status5149
                            1.980e+07
                                         2.096 0.037593 *
## Status5160
                 4.150e+07
                            1.980e+07
## Status5167
                 5.932e+07
                            1.980e+07
                                         2.996 0.003147 **
                                         2.272 0.024315 *
                 4.500e+07
                            1.980e+07
## Status5188
                                         3.737 0.000254 ***
## Status5217
                 7.400e+07
                            1.980e+07
                            1.980e+07
                                         0.891 0.374183
## Status5229
                 1.764e+07
## Status5240
                 1.911e+07
                            1.980e+07
                                         0.965 0.335959
                                         4.747 4.37e-06 ***
## Status5281
                 9.400e+07
                            1.980e+07
                                         0.454 0.650063
## Status5282
                 9.000e+06
                            1.980e+07
## Status5287
                 5.000e+06
                            1.980e+07
                                         0.252 0.800968
                                         3.484 0.000628 ***
## Status5336
                 6.900e+07
                            1.980e+07
## Status5347
                 2.700e+07
                            1.980e+07
                                         1.363 0.174546
                                         2.727 0.007064 **
## Status5349
                 5.400e+07
                            1.980e+07
## Status5353
                 4.027e+06
                            1.980e+07
                                         0.203 0.839101
## Status5361
                 5.880e+07
                            1.980e+07
                                         2.969 0.003417 **
## Status5369
                 4.155e+07
                            1.980e+07
                                         2.098 0.037367 *
## Status5415
                 1.150e+07
                            1.715e+07
                                         0.671 0.503408
                 4.694e+07
## Status5478
                            1.980e+07
                                         2.371 0.018883 *
## Status5497
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424
                                         3.811 0.000193 ***
## Status5499
                 6.535e+07
                            1.715e+07
                                         2.969 0.003417 **
## Status5638
                 5.880e+07
                            1.980e+07
                                         5.190 5.95e-07 ***
## Status5696
                 8.900e+07
                            1.715e+07
                            1.980e+07
## Status5744
                 4.650e+07
                                         2.348 0.020017 *
## Status5805
                 3.150e+07
                            1.980e+07
                                         1.591 0.113539
## Status5807
                 5.000e+07
                            1.980e+07
                                         2.525 0.012489 *
## Status5816
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
                                         6.262 3.01e-09 ***
## Status5818
                 1.240e+08
                            1.980e+07
```

```
2.727 0.007064 **
## Status5879
                 5.400e+07
                            1.980e+07
                                         1.565 0.119341
## Status5928
                 3.100e+07
                            1.980e+07
## Status5961
                 5.400e+07
                            1.980e+07
                                         2.727 0.007064 **
                                         2.969 0.003417 **
## Status5990
                 5.880e+07
                            1.980e+07
                            1.980e+07
                                         3.737 0.000254 ***
## Status5993
                 7.400e+07
                                         4.747 4.37e-06 ***
## Status6032
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status6120
                 9.400e+07
                            1.980e+07
## Status6124
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
                                         6.262 3.01e-09 ***
## Status6127
                 1.240e+08
                            1.980e+07
                                         4.131 5.66e-05 ***
## Status6179
                 8.180e+07
                            1.980e+07
## Status6228
                 1.983e+07
                            1.980e+07
                                         1.001 0.318058
## Status6249
                 2.500e+07
                            1.980e+07
                                         1.262 0.208517
## Status6464
                 3.235e+07
                            1.980e+07
                                         1.634 0.104192
## Status6494
                 4.000e+06
                            1.980e+07
                                         0.202 0.840165
## Status6501
                 3.603e+07
                            1.980e+07
                                         1.820 0.070588
                            1.980e+07
                 9.400e+07
                                         4.747 4.37e-06 ***
## Status6527
## Status6681
                 2.430e+07
                            1.980e+07
                                         1.227 0.221421
                                         2.040 0.042886 *
## Status6787
                 4.040e+07
                            1.980e+07
## Status6812
                 9.400e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
                                         3.737 0.000254 ***
## Status6814
                 7.400e+07
                            1.980e+07
                            1.980e+07
                                         3.737 0.000254 ***
## Status6916
                 7.400e+07
## Status6981
                 3.363e+07
                            1.980e+07
                                         1.698 0.091334 .
                                         6.262 3.01e-09 ***
## Status6982
                 1.240e+08
                            1.980e+07
                            1.980e+07
                                         0.711 0.478021
## Status7051
                 1.408e+07
                                         6.262 3.01e-09 ***
## Status7117
                 1.240e+08
                            1.980e+07
                                         2.070 0.039925 *
## Status7224
                 4.100e+07
                            1.980e+07
                                         2.979 0.003311 **
                 5.900e+07
## Status7234
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status7285
                 1.240e+08
                            1.980e+07
                            1.980e+07
                                         0.959 0.338690
## Status7289
                 1.900e+07
                                         4.131 5.66e-05 ***
## Status7328
                 8.180e+07
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status7338
                 1.240e+08
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status7467
                 9.400e+07
                            1.980e+07
## Status7624
                 7.400e+07
                            1.980e+07
                                         3.737 0.000254 ***
                                         4.747 4.37e-06 ***
## Status7668
                 9.400e+07
                            1.980e+07
## Status7706
                 5.400e+07
                            1.980e+07
                                         2.727 0.007064 **
                                         2.474 0.014327 *
## Status7710
                 4.900e+07
                            1.980e+07
## Status7753
                 9.000e+06
                            1.980e+07
                                         0.454 0.650063
## Status7812
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status7837
                 3.150e+07
                            1.980e+07
                                         1.591 0.113539
                                         2.969 0.003417 **
## Status7840
                 5.880e+07
                            1.980e+07
                 2.200e+07
                            1.980e+07
## Status7853
                                         1.111 0.268157
## Status7893
                 2.400e+07
                            1.980e+07
                                         1.212 0.227214
                                         4.131 5.66e-05 ***
## Status7997
                 8.180e+07
                            1.980e+07
## Status8038
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424
                                         3.989 9.83e-05 ***
## Status8048
                 7.900e+07
                            1.980e+07
## Status8061
                 5.000e+06
                            1.980e+07
                                         0.252 0.800968
## Status8092
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
                                         3.178 0.001765 **
## Status8114
                 6.292e+07
                            1.980e+07
## Status8165
                 5.400e+07
                            1.980e+07
                                         2.727 0.007064 **
                                         4.131 5.66e-05 ***
## Status8170
                 8.180e+07
                            1.980e+07
```

```
6.262 3.01e-09 ***
## Status8247
                 1.240e+08
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status8250
                 9.400e+07
                            1.980e+07
## Status8283
                 3.580e+07
                            1.980e+07
                                         1.808 0.072402 .
                                         6.262 3.01e-09 ***
## Status8284
                1.240e+08
                            1.980e+07
                            1.980e+07
## Status8296
                 3.150e+07
                                         1.591 0.113539
## Status8328
                4.786e+06
                            1.980e+07
                                         0.242 0.809307
                                         4.131 5.66e-05 ***
## Status8332
                 8.180e+07
                            1.980e+07
## Status8354
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424 .
                                         6.262 3.01e-09 ***
## Status8386
                 1.240e+08
                            1.980e+07
                                         1.591 0.113539
## Status8390
                 3.150e+07
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status8404
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status8484
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status8505
                 1.240e+08
                            1.980e+07
## Status8540
                 3.700e+07
                            1.980e+07
                                         1.868 0.063424 .
## Status8631
                 5.000e+06
                            1.980e+07
                                         0.252 0.800968
                            1.980e+07
## Status8639
                 2.164e+07
                                         1.093 0.276045
                                         6.262 3.01e-09 ***
## Status8958
                 1.240e+08
                            1.980e+07
## Status9048
                 3.895e+07
                            1.980e+07
                                         1.967 0.050809
                                         2.969 0.003417 **
## Status9091
                 5.880e+07
                            1.980e+07
                                         5.524 1.22e-07 ***
## Status9403
                 1.094e+08
                            1.980e+07
                            1.980e+07
## Status9527
                 3.400e+07
                                         1.717 0.087814
## Status9735
                 1.400e+07
                            1.980e+07
                                         0.707 0.480553
                                         2.727 0.007064 **
## Status9760
                 5.400e+07
                            1.980e+07
                                         2.969 0.003417 **
## Status9843
                 5.880e+07
                            1.980e+07
                                         3.447 0.000716 ***
## Status9856
                 6.825e+07
                            1.980e+07
                                         5.524 1.22e-07 ***
## Status9966
                 1.094e+08
                            1.980e+07
                                         2.040 0.042886 *
## Status9970
                4.040e+07
                            1.980e+07
                                         2.727 0.007064 **
## Status10350
                5.400e+07
                            1.980e+07
## Status10378
                8.180e+07
                            1.980e+07
                                         4.131 5.66e-05 ***
                                         4.131 5.66e-05 ***
## Status10594
                8.180e+07
                            1.980e+07
                                         3.794 0.000206 ***
## Status10661
                7.514e+07
                            1.980e+07
                                         4.747 4.37e-06 ***
## Status10840
                9.400e+07
                            1.980e+07
## Status10920
                 1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
## Status10995
                 3.168e+07
                            1.980e+07
                                         1.600 0.111556
                                         3.250 0.001393 **
## Status11038
                6.435e+07
                            1.980e+07
## Status11288
                 3.300e+07
                            1.980e+07
                                         1.666 0.097469
                                         4.131 5.66e-05 ***
## Status11387
                8.180e+07
                            1.980e+07
## Status11630
                1.240e+08
                            1.980e+07
                                         6.262 3.01e-09 ***
                                         4.747 4.37e-06 ***
## Status12131
                9.400e+07
                            1.980e+07
## Status12277
                 2.890e+07
                            1.980e+07
                                         1.459 0.146304
                            1.980e+07
## Status12688
                                         3.232 0.001477 **
                 6.400e+07
                                         3.232 0.001477 **
## Status13850
                 6.400e+07
                            1.980e+07
                                         3.573 0.000460 ***
## Status13945
                7.075e+07
                            1.980e+07
## Status14016
                1.900e+07
                            1.980e+07
                                         0.959 0.338690
                                         2.474 0.014327 *
## Status14022
                4.900e+07
                            1.980e+07
                                         6.262 3.01e-09 ***
                            1.980e+07
## Status14063
                1.240e+08
## Status14377
                 6.400e+07
                            1.980e+07
                                         3.232 0.001477 **
                                         7.272 1.24e-11 ***
## Status14458
                1.440e+08
                            1.980e+07
## Status15057
                 5.400e+07
                            1.980e+07
                                         2.727 0.007064 **
## Status15770 3.150e+07
                            1.980e+07
                                         1.591 0.113539
```

```
## Status17063 5.400e+07 1.980e+07
                                      2.727 0.007064 **
## Status17208 5.400e+07 1.980e+07 2.727 0.007064 **
## Status18516 1.240e+08 1.980e+07
                                      6.262 3.01e-09 ***
## Status18778 8.900e+07 1.980e+07
                                     4.494 1.29e-05 ***
## Status19998 1.240e+08 1.980e+07
                                      6.262 3.01e-09 ***
## Status20887 3.900e+07 1.980e+07
                                      1.969 0.050530 .
## Status21068 1.240e+08 1.980e+07
                                     6.262 3.01e-09 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.4e+07 on 170 degrees of freedom
## Multiple R-squared: 0.9666, Adjusted R-squared: 0.7825
## F-statistic: 5.251 on 937 and 170 DF, p-value: < 2.2e-16
# Perform an analysis of variance (ANOVA) to test the significance of the
relationship
anova results <- anova(model)</pre>
print(anova_results)
## Analysis of Variance Table
##
## Response: Final.Price
                    Sum Sq
                              Mean Sq F value
            937 9.6479e+17 1.0297e+15 5.2514 < 2.2e-16 ***
## Status
## Residuals 170 3.3333e+16 1.9608e+14
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
# Plot the relationship between Status and Final Price
ggplot(data, aes(x = Status, y = Final.Price)) +
 geom_boxplot() +
 labs(x = "Status", y = "Final.Price") +
ggtitle("Relationship between Status and Final Price")
```

Relationship between Status and Final Price

