R Notebook

```r
library(tidyr)
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
```

```r
library(stringr)
library(ggplot2)
library(reticulate)
```

```python
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

```r
df = read.csv("~/Downloads/DEV _ March Madness.csv")
```

```r
head(df)
```

```
##   Season Short.Conference.Name Adjusted.Temo Adjusted.Tempo.Rank Raw.Tempo
## 1   2025                   ACC          65.9                 256      66.7
## 2   2015                   SEC          62.4                 274      63.8
## 3   2021                   WCC          73.8                   7      74.3
## 4   2024                    BE          64.6                 330      66.0
## 5   2025                   SEC          67.8                 147      69.1
## 6   2025                   B12          61.4                 360      62.3
##   Raw.Tempo.Rank Adjusted.Offensive.Efficiency
## 1            253                         128.1
## 2            242                         121.3
## 3             14                         126.4
## 4            305                         127.5
## 5            121                         128.8
## 6            360                         123.6
##   Adjusted.Offensive.Efficiency.Rank Raw.Offensive.Efficiency
## 1                                  2                    124.6
## 2                                  6                    115.5
## 3                                  1                    121.9
## 4                                  1                    123.0
## 5                                  1                    121.5
## 6                                 10                    117.1
##   Raw.Offensive.Efficiency.Rank Adjusted.Defensive.Efficiency
## 1                             1                          90.1
## 2                             9                          84.4
## 3                             1                          89.9
## 4                             1                          91.1
## 5                             2                          93.2
## 6                            16                          88.2
##   Adjusted.Defensive.Efficiency.Rank Raw.Defensive.Efficiency
## 1                                  4                     92.9
## 2                                  1                     84.7
## 3                                 11                     93.4
## 4                                  4                     96.4
## 5                                 12                    100.4
## 6                                  2                     91.8
##   Raw.Defensive.Efficiency.Rank Avg.Possession.Length..Offense.
## 1                             3                            17.0
## 2                             1                            17.7
## 3                            17                            14.4
## 4                             9                            18.6
## 5                            49                            17.2
```

```
## 6                              1                              19.4
##    Avg.Possession.Length..Offense..Rank Avg.Possession.Length..Defense.
## 1                                    97                            19.1
## 2                                    98                            19.6
## 3                                     3                            18.0
## 4                                   305                            17.5
## 5                                   123                            17.7
## 6                                   342                            18.8
##    Avg.Possession.Length..Defense..Rank   eFGPct RankeFGPct    TOPct RankTOPct
## 1                                    363 57.44898          5 14.36282        18
## 2                                    327 51.51160         75 16.25290        32
## 3                                    299 61.01781          1 16.12793        40
## 4                                    183 56.90748          7 14.49968        36
## 5                                    197 55.94636         23 13.46983         7
## 6                                    358 52.76058         89 14.69939        25
##       ORPct RankORPct    FTRate RankFTRate    OffFT RankOffFT Off2PtFG
## 1  35.42260        32 31.68367        207 17.78021       257 45.63709
## 2  39.50120         8 43.86050         31 23.62070        45 55.37930
## 3  30.07064       102 35.72519         66 17.62281       214 57.64342
## 4  36.69797        12 31.93916        202 17.26044       270 51.41278
## 5  34.59062        44 33.35020        170 18.17172       231 48.85270
## 6  36.49374        13 28.43137        315 16.56467       310 50.99959
##    RankOff2PtFG Off3PtFG RankOff3PtFG    DefFT RankDefFT Def2PtFG RankDef2PtFG
## 1           300 36.58269           59 17.22956       287 50.02447          167
## 2            54 21.00000          326 20.91600       161 54.29650           57
## 3            26 24.73377          312 15.91928       287 54.88789           45
## 4           153 31.32678          149 20.26814       110 52.05047          124
## 5           197 32.97557          131 23.48451        15 51.18994          115
## 6           133 32.43574          152 21.46570        51 43.13929          347
##    Def3PtFG RankDef3PtFG   Tempo RankTempo AdjTempo RankAdjTempo      OE RankOE
## 1  32.74596          127 66.6705       253  66.0774          256 124.568      1
## 2  24.78750          301 63.7517       242  62.4233          274 115.452      9
## 3  29.19283          227 74.3411        14  73.7515            7 121.917      1
## 4  27.68139          277 66.0359       305  64.6331          330 123.036      1
## 5  25.32555          348 69.0824       122  67.8881          147 121.500      2
## 6  35.39501           49 62.3037       360  61.5377          360 117.137     16
##       AdjOE RankAdjOE      DE RankDE   AdjDE RankAdjDE   AdjEM RankAdjEM
## 1  128.100         2 92.9295      3 90.0132         4 38.0870         1
## 2  121.305         6 84.6617      1 84.3933         1 36.9118         1
## 3  126.433         1 93.4015     17 89.9493        11 36.4833         1
## 4  127.524         1 96.3938      9 91.0982         4 36.4262         1
## 5  128.734         1 100.4000    49 93.1660        12 35.5678         2
## 6  123.506        10 91.7694      1 88.1109         2 35.3956         3
##      FG2Pct RankFG2Pct   FG3Pct RankFG3Pct    FTPct RankFTPct  BlockPct
## 1  58.13953          8 37.74011         20 78.42190        18 10.499577
## 2  51.21170         53 34.87970        145 72.64050        59 18.163300
## 3  63.89947          1 36.80982         45 73.07692        97  6.907137
## 4  59.11017          4 35.75184         72 74.33862        84 14.192283
## 5  56.26598         30 36.98630         35 74.50683       101 16.584158
## 6  49.13522        261 39.78979          4 73.68421       123 16.159496
##    RankBlockPct OppFG2Pct RankOppFG2Pct OppFG3Pct RankOppFG3Pct OppFTPct
## 1           110  43.26842             3  31.01530            39 71.98364
## 2             2  39.11560             2  27.08980             1 66.02090
## 3           262  46.96853            76  32.73002           112 70.29703
## 4            13  43.16547             4  31.24166            37 72.49647
## 5             4  47.02970            40  29.28349             5 72.73992
## 6             6  43.54669             4  30.96862            36 70.84048
##    RankOppFTPct OppBlockPct RankOppBlockPct  FG3Rate RankFG3Rate OppFG3Rate
## 1           174    9.674419             214 45.15306          55   37.84211
## 2            28    5.994900               3 27.06980         325   30.52930
## 3           143    6.778370              26 33.18066         275   33.72330
## 4           221    8.333333             102 40.17744         103   32.87972
## 5           222    7.502131              34 40.63765         138   34.62783
## 6           117    6.525157               6 34.36533         296   43.47568
##    RankOppFG3Rate    ARate RankARate OppARate RankOppARate     StlRate
## 1             142 58.28989        50 51.63488          181 0.10453951
## 2              71 54.97020       136 40.13330            2 0.10080000
## 3              67 55.60704        79 45.47648           47 0.10640248
## 4              44 63.55140         5 44.74273           41 0.09313111
## 5              46 55.48589        93 40.36939            7 0.10091113
## 6             315 44.94382       329 56.23053          289 0.12694928
##    RankStlRate OppStlRate RankOppStlRate DFP   NSTRate RankNSTRate OppNSTRate
## 1          113 0.08135901             26  NA 6.226919          43   7.272314
## 2          107 0.07250000             12  NA       NA          NA         NA
## 3           57 0.08168694             90  NA 7.959240          33   8.671383
## 4          172 0.08101649             54  NA 6.398031          46   6.700897
## 5          142 0.08784674             86  NA 4.685160           2   7.298037
## 6           24 0.07826948             16  NA 6.872442         111   9.115531
##    RankOppNSTRate AvgHeight RankAvgHeight CenterHeight RankCenterHeight PFHeight
```

```
## 1             212  79.77         1         2.67        10   1.49
## 2              NA  79.28         1         3.00         5   3.89
## 3             275  78.11        29         0.83        79   0.47
## 4             300  78.42        23         2.47        10   0.59
## 5             211  78.42        27         1.11        67   0.53
## 6              24  76.84       238        -1.39       304   0.23
```

	RankPFHeight	SFHeight	RankSFHeight	SGHeight	RankSGHeight	PGHeight
## 1	37	1.46	30	2.68	2	4.52
## 2	1	2.88	3	3.30	2	0.00
## 3	103	0.69	88	1.77	28	2.21
## 4	105	0.39	125	1.16	49	1.83
## 5	112	1.44	31	2.01	12	0.98
## 6	141	-0.71	280	-0.19	204	0.24

	RankPGHeight	EffectiveHeight	RankEffectiveHeight	Experience	RankExperience
## 1	1	2.08	10	1.94716	129
## 2	183	6.89	1	0.73000	346
## 3	22	0.65	82	1.54000	247
## 4	39	1.53	24	2.43106	68
## 5	88	0.82	75	2.79421	25
## 6	165	-0.58	257	2.64489	41

	Bench	BenchRank	CenterPts	RankCenterPts	PFPts	RankPFPts	SFPts	RankSFPts	SGPts
## 1	31.01	187	15.35	313	27.53	10	22.69	80	15.98
## 2	39.90	27	19.66	147	23.57	55	18.78	250	22.66
## 3	24.27	311	25.77	31	21.49	94	16.72	267	17.33
## 4	28.14	242	22.54	73	18.97	214	20.91	135	21.40
## 5	33.94	106	20.84	120	20.99	128	18.59	218	19.08
## 6	29.54	232	15.39	312	18.78	211	18.83	212	21.40

	RankSGPts	PGPts	RankPGPts	CenterOR	RankCenterOR	PFOR	RankPFOR	SFOR	RankSFOR
## 1	329	18.42	235	49.19	15	17.94	326	10.76	318
## 2	99	15.33	300	33.72	193	34.47	53	20.03	115
## 3	270	18.63	219	39.47	116	19.89	293	6.54	338
## 4	121	16.13	307	33.13	242	18.66	309	20.29	101
## 5	250	20.49	160	45.88	23	30.35	97	12.95	277
## 6	138	25.61	40	45.83	24	26.88	166	9.60	337

	SGOR	RankSGOR	PGOR	RankPGOR	CenterDR	RankCenterDR	PFDR	RankPFDR	SFDR
## 1	12.68	123	9.37	138	25.41	196	27.08	65	14.05
## 2	5.69	329	6.08	259	27.92	96	30.08	17	18.01
## 3	22.61	12	11.41	66	23.99	228	18.56	307	13.28
## 4	13.83	99	14.05	42	25.88	175	17.21	338	20.98
## 5	5.43	334	5.35	311	29.95	77	24.60	135	16.65
## 6	13.03	114	4.66	332	26.42	162	20.80	263	17.49

	RankSFDR	SGDR	RankSGDR	PGDR	RankPGDR	Net.Rating	Net.Rating.Rank
## 1	345	19.73	64	13.70	213	38.0	1
## 2	232	13.00	305	10.99	311	36.9	2
## 3	332	24.63	12	19.49	20	36.5	3
## 4	111	20.55	41	15.33	126	36.4	4
## 5	270	16.18	185	12.60	273	35.6	5
## 6	232	23.22	12	12.06	298	35.4	6

	Mapped.Conference.Name	Mapped.ESPN.Team.Name	Current.Coach
## 1	Atlantic Coast Conference (ACC)	Duke	Jon Scheyer
## 2	Southeastern Conference (SEC)	Kentucky	Mark Pope
## 3	West Coast Conference (WCC)	Gonzaga	Mark Few
## 4	Big East Conference	UConn	Dan Hurley
## 5	Southeastern Conference (SEC)	Auburn	Bruce Pearl
## 6	Big 12 Conference	Houston	Kelvin Sampson

	Full.Team.Name	Since	Active.Coaching.Length	Active.Coaching.Length.Index
## 1	Duke Blue Devils	202223	2 years	3
## 2	Kentucky Wildcats	202425	0 years	1
## 3	Gonzaga Bulldogs	199900	25 years	26
## 4	UConn Huskies	201819	6 years	7
## 5	Auburn Tigers	201415	10 years	11
## 6	Houston Cougars	201415	10 years	11

	Seed	Region
## 1	Not In a Post-Season Tournament	Not In a Post-Season Tournament
## 2	1	Midwest
## 3	1	West
## 4	1	East
## 5	Not In a Post-Season Tournament	Not In a Post-Season Tournament
## 6	Not In a Post-Season Tournament	Not In a Post-Season Tournament

	Post.Season.Tournament	Post.Season.Tournament.Sorting.Index
## 1	Not In a Post-Season Tournament	5
## 2	March Madness	1
## 3	March Madness	1
## 4	March Madness	1
## 5	Not In a Post-Season Tournament	5
## 6	Not In a Post-Season Tournament	5

	Top.12.in.AP.Top.25.During.Week.6.
## 1	Yes
## 2	Yes

```
## 3                                    Yes
## 4                                    Yes
## 5                                    Yes
## 6                                    No
```

```
colnames(df)
```

```
##   [1] "Season"
##   [2] "Short.Conference.Name"
##   [3] "Adjusted.Temo"
##   [4] "Adjusted.Tempo.Rank"
##   [5] "Raw.Tempo"
##   [6] "Raw.Tempo.Rank"
##   [7] "Adjusted.Offensive.Efficiency"
##   [8] "Adjusted.Offensive.Efficiency.Rank"
##   [9] "Raw.Offensive.Efficiency"
##  [10] "Raw.Offensive.Efficiency.Rank"
##  [11] "Adjusted.Defensive.Efficiency"
##  [12] "Adjusted.Defensive.Efficiency.Rank"
##  [13] "Raw.Defensive.Efficiency"
##  [14] "Raw.Defensive.Efficiency.Rank"
##  [15] "Avg.Possession.Length..Offense."
##  [16] "Avg.Possession.Length..Offense..Rank"
##  [17] "Avg.Possession.Length..Defense."
##  [18] "Avg.Possession.Length..Defense..Rank"
##  [19] "eFGPct"
##  [20] "RankeFGPct"
##  [21] "TOPct"
##  [22] "RankTOPct"
##  [23] "ORPct"
##  [24] "RankORPct"
##  [25] "FTRate"
##  [26] "RankFTRate"
##  [27] "OffFT"
##  [28] "RankOffFT"
##  [29] "Off2PtFG"
##  [30] "RankOff2PtFG"
##  [31] "Off3PtFG"
##  [32] "RankOff3PtFG"
##  [33] "DefFT"
##  [34] "RankDefFT"
##  [35] "Def2PtFG"
##  [36] "RankDef2PtFG"
##  [37] "Def3PtFG"
##  [38] "RankDef3PtFG"
##  [39] "Tempo"
##  [40] "RankTempo"
##  [41] "AdjTempo"
##  [42] "RankAdjTempo"
##  [43] "OE"
##  [44] "RankOE"
##  [45] "AdjOE"
##  [46] "RankAdjOE"
##  [47] "DE"
##  [48] "RankDE"
##  [49] "AdjDE"
##  [50] "RankAdjDE"
##  [51] "AdjEM"
##  [52] "RankAdjEM"
##  [53] "FG2Pct"
##  [54] "RankFG2Pct"
##  [55] "FG3Pct"
##  [56] "RankFG3Pct"
##  [57] "FTPct"
##  [58] "RankFTPct"
##  [59] "BlockPct"
##  [60] "RankBlockPct"
##  [61] "OppFG2Pct"
##  [62] "RankOppFG2Pct"
##  [63] "OppFG3Pct"
##  [64] "RankOppFG3Pct"
##  [65] "OppFTPct"
##  [66] "RankOppFTPct"
##  [67] "OppBlockPct"
##  [68] "RankOppBlockPct"
##  [69] "FG3Rate"
##  [70] "RankFG3Rate"
```

```
##  [71] "OppFG3Rate"
##  [72] "RankOppFG3Rate"
##  [73] "ARate"
##  [74] "RankARate"
##  [75] "OppARate"
##  [76] "RankOppARate"
##  [77] "StlRate"
##  [78] "RankStlRate"
##  [79] "OppStlRate"
##  [80] "RankOppStlRate"
##  [81] "DFP"
##  [82] "NSTRate"
##  [83] "RankNSTRate"
##  [84] "OppNSTRate"
##  [85] "RankOppNSTRate"
##  [86] "AvgHeight"
##  [87] "RankAvgHeight"
##  [88] "CenterHeight"
##  [89] "RankCenterHeight"
##  [90] "PFHeight"
##  [91] "RankPFHeight"
##  [92] "SFHeight"
##  [93] "RankSFHeight"
##  [94] "SGHeight"
##  [95] "RankSGHeight"
##  [96] "PGHeight"
##  [97] "RankPGHeight"
##  [98] "EffectiveHeight"
##  [99] "RankEffectiveHeight"
## [100] "Experience"
## [101] "RankExperience"
## [102] "Bench"
## [103] "BenchRank"
## [104] "CenterPts"
## [105] "RankCenterPts"
## [106] "PFPts"
## [107] "RankPFPts"
## [108] "SFPts"
## [109] "RankSFPts"
## [110] "SGPts"
## [111] "RankSGPts"
## [112] "PGPts"
## [113] "RankPGPts"
## [114] "CenterOR"
## [115] "RankCenterOR"
## [116] "PFOR"
## [117] "RankPFOR"
## [118] "SFOR"
## [119] "RankSFOR"
## [120] "SGOR"
## [121] "RankSGOR"
## [122] "PGOR"
## [123] "RankPGOR"
## [124] "CenterDR"
## [125] "RankCenterDR"
## [126] "PFDR"
## [127] "RankPFDR"
## [128] "SFDR"
## [129] "RankSFDR"
## [130] "SGDR"
## [131] "RankSGDR"
## [132] "PGDR"
## [133] "RankPGDR"
## [134] "Net.Rating"
## [135] "Net.Rating.Rank"
## [136] "Mapped.Conference.Name"
## [137] "Mapped.ESPN.Team.Name"
## [138] "Current.Coach"
## [139] "Full.Team.Name"
## [140] "Since"
## [141] "Active.Coaching.Length"
## [142] "Active.Coaching.Length.Index"
## [143] "Seed"
## [144] "Region"
## [145] "Post.Season.Tournament"
## [146] "Post.Season.Tournament.Sorting.Index"
## [147] "Top.12.in.AP.Top.25.During.Week.6."
```
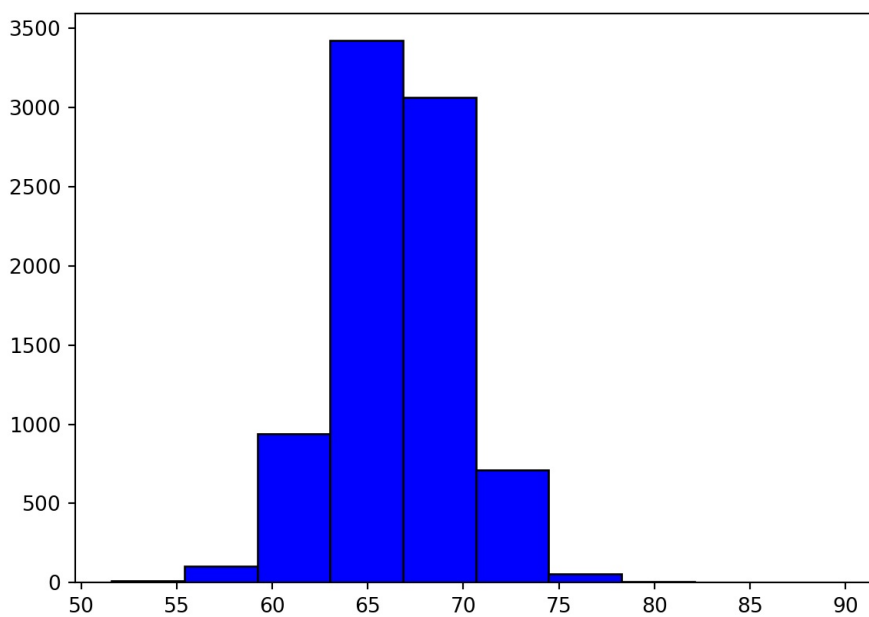
```
print(sorted(r.df.Season.unique()))
```

```
## [np.int32(2002), np.int32(2003), np.int32(2004), np.int32(2005), np.int32(2006), np.int32(2007), np.int32(2008
), np.int32(2009), np.int32(2010), np.int32(2011), np.int32(2012), np.int32(2013), np.int32(2014), np.int32(2015)
, np.int32(2016), np.int32(2017), np.int32(2018), np.int32(2019), np.int32(2020), np.int32(2021), np.int32(2022),
np.int32(2023), np.int32(2024), np.int32(2025)]
```
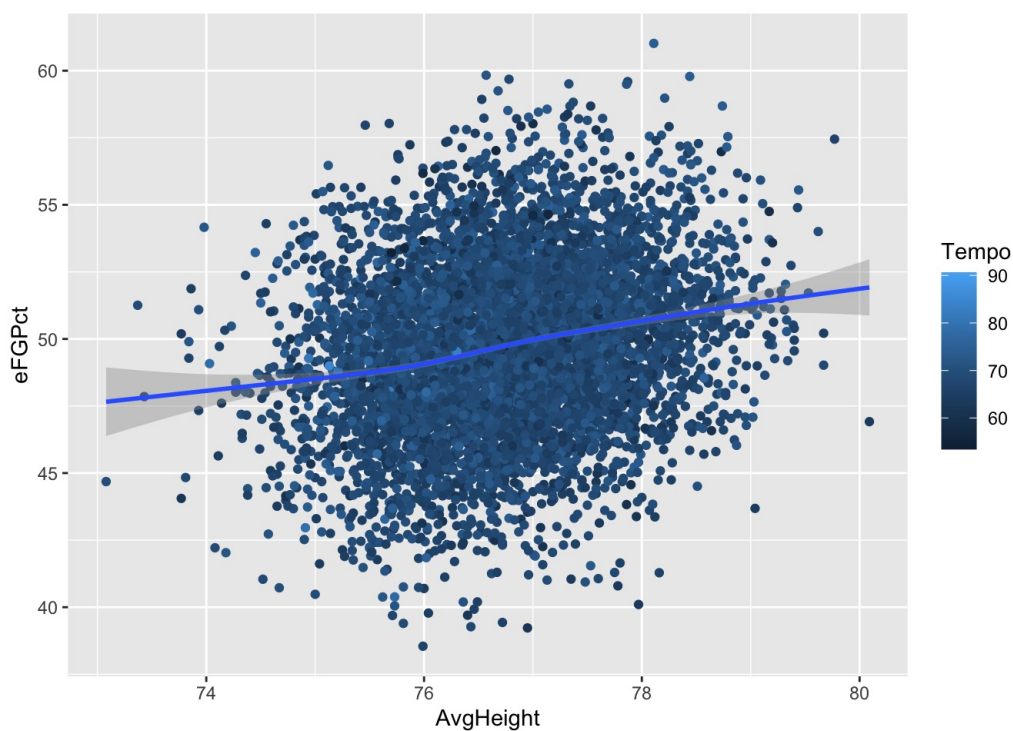
```
r.df['Full.Team.Name'].nunique()
```

```
## 365
```

```
fig = plt.figure()
ax = fig.add_subplot()
ax.hist(r.df.AdjTempo,edgecolor='black',color='blue')
plt.show()
```



```
ggplot(df %>% filter(AvgHeight > 0), aes(x=AvgHeight,y=eFGPct)) + geom_point(aes(color=Tempo)) + geom_smooth()
```

```
## `geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
```

```
ggplot(df %>% filter(Tempo > 0) %>% group_by(Season) %>% summarise(avgTempo = mean(Tempo,na.rm=T))) + geom_line(a
es(x=Season,y=avgTempo)) + geom_smooth(aes(x=Season,y=avgTempo))
```
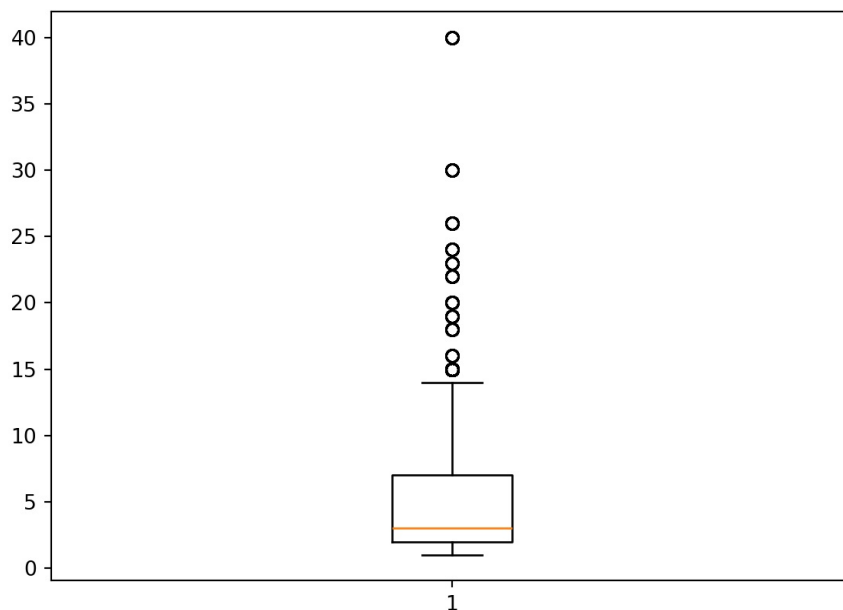
```
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```



```
fig = plt.figure()
ax = fig.add_subplot()
ax.boxplot(r.df[r.df['Active.Coaching.Length.Index'] > 0]['Active.Coaching.Length.Index'])
```

```
## {'whiskers': [<matplotlib.lines.Line2D object at 0x1225f4b90>, <matplotlib.lines.Line2D object at 0x1225f4cd0>
], 'caps': [<matplotlib.lines.Line2D object at 0x1225f4e10>, <matplotlib.lines.Line2D object at 0x1225f4f50>], 'b
oxes': [<matplotlib.lines.Line2D object at 0x1225f4a50>], 'medians': [<matplotlib.lines.Line2D object at 0x1225f5
090>], 'fliers': [<matplotlib.lines.Line2D object at 0x1225f51d0>], 'means': []}
```

```
plt.show()
```



```
df %>% filter(Active.Coaching.Length.Index > 0) %>% arrange(desc(Active.Coaching.Length.Index)) %>% head(1) %>% s
elect(Current.Coach,Active.Coaching.Length,Full.Team.Name)
```

```
##   Current.Coach Active.Coaching.Length           Full.Team.Name
## 1    Greg Kampe             40 years Oakland Golden Grizzlies
```

```
df$Seed = sapply(df$Seed,function(r){
  if (r == 'Not In a Post-Season Tournament') {
    return(0)
  } else {
    return(r)
  }
})
```

```
df$Seed = as.integer(df$Seed)
str(select(df,Seed))
```

```
## 'data.frame':    8315 obs. of  1 variable:
##  $ Seed: int  0 1 1 1 0 0 1 0 1 1 ...
```

```
df %>% group_by(Mapped.ESPN.Team.Name) %>% filter(Seed > 0) %>% summarise(avgSeed = mean(Seed,na.rm=T),seasons =
n()) %>% filter(seasons >= mean(seasons,na.rm=T),avgSeed > 0) %>% arrange(avgSeed) %>% head(10)
```

```
## # A tibble: 10 × 3
##    Mapped.ESPN.Team.Name avgSeed seasons
##    <chr>                   <dbl>   <int>
##  1 Kansas                   2        22
##  2 Duke                     2.24     21
##  3 North Carolina           3.1      20
##  4 Kentucky                 3.76     21
##  5 Virginia                 3.78     18
##  6 Baylor                   3.8      15
##  7 Georgetown               4        14
##  8 Louisville               4.06     17
##  9 Ohio State               4.17     18
## 10 UConn                    4.18     17
```

```
df %>% group_by(Mapped.ESPN.Team.Name) %>% filter(Seed > 0) %>% summarise(avgSeed = mean(Seed,na.rm=T),seasons =
n()) %>% filter(seasons >= mean(seasons,na.rm=T),avgSeed > 0) %>% arrange(desc(avgSeed)) %>% head(10)
```

```
## # A tibble: 10 × 3
##    Mapped.ESPN.Team.Name avgSeed seasons
##    <chr>                   <dbl>   <int>
##  1 Winthrop                 13.8      8
##  2 UNC Asheville            13.4      8
##  3 Texas Southern           13.3     11
##  4 Hampton                  13.2      8
##  5 Montana                  12.7     12
##  6 New Mexico State         12.4     11
##  7 Iona                     12.2     12
##  8 Morehead State           12        8
##  9 Oral Roberts             12        8
## 10 South Dakota State       11.2     11
```

```
df %>% filter(AvgHeight > 0) %>% group_by(Mapped.ESPN.Team.Name) %>% summarise(avgHeight = mean(AvgHeight,na.rm=T
)) %>% arrange(desc(avgHeight)) %>% head(10)
```

```
## # A tibble: 10 × 2
##    Mapped.ESPN.Team.Name avgHeight
##    <chr>                     <dbl>
##  1 Florida State              78.8
##  2 Syracuse                   78.4
##  3 Kentucky                   78.3
##  4 Duke                       78.2
##  5 Stanford                   78.2
##  6 USC                        78.1
##  7 Iowa                       78.0
##  8 UCLA                       78.0
##  9 Gonzaga                    78.0
## 10 Nevada                     78.0
```

```
df %>% filter(AvgHeight > 0) %>% group_by(Mapped.ESPN.Team.Name) %>% summarise(avgHeight = mean(AvgHeight,na.rm=T
)) %>% arrange(avgHeight) %>% head(10)
```

```
## # A tibble: 10 × 2
##    Mapped.ESPN.Team.Name    avgHeight
##    <chr>                        <dbl>
##  1 Mercyhurst                    75.0
##  2 Centenary (NJ)                75.3
##  3 St. Francis (NY)              75.3
##  4 Winstom-Salem                 75.4
##  5 Abilene Christian             75.4
##  6 Mississippi Valley State      75.6
##  7 Sam Houston                   75.6
##  8 Savannah State                75.6
##  9 Gardner-Webb                  75.6
## 10 Army                          75.6
```
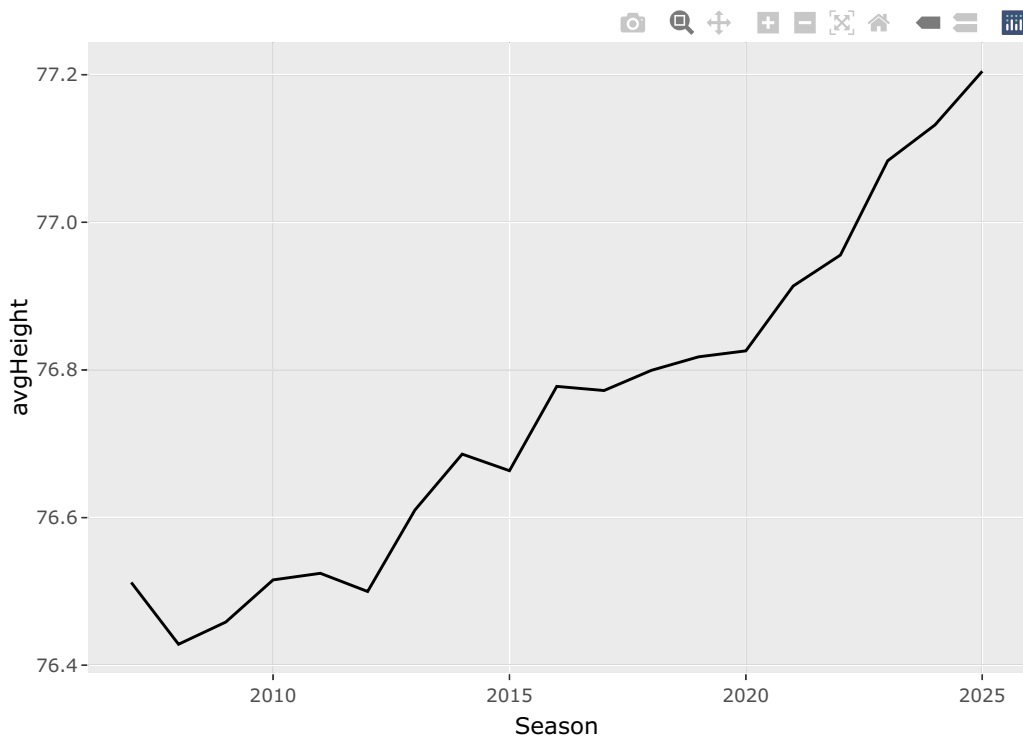
```
library(plotly)
```

```
##
## Attaching package: 'plotly'
```

```
## The following object is masked from 'package:ggplot2':
##
##     last_plot
```
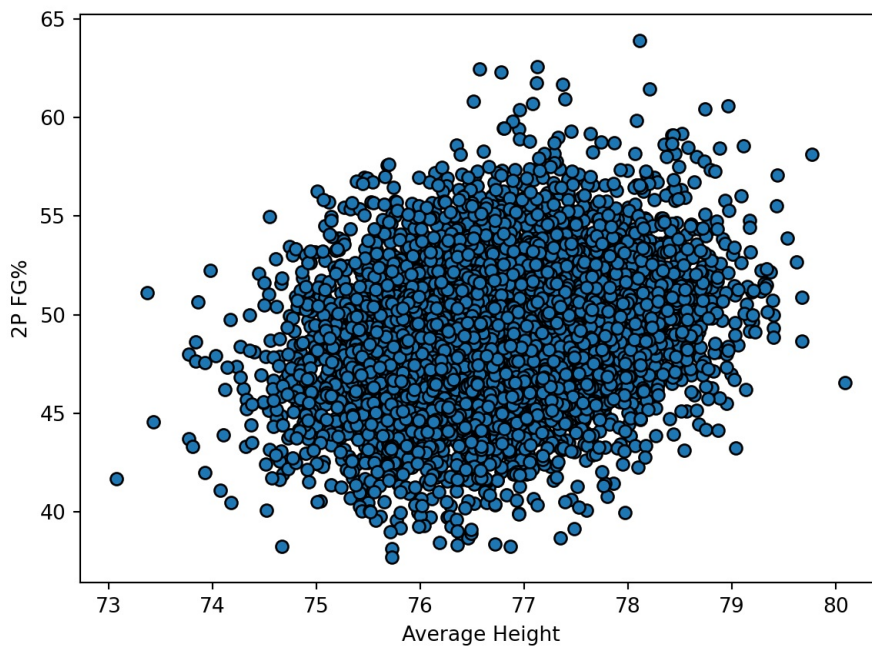
```
## The following object is masked from 'package:stats':
##
##     filter
```

```
## The following object is masked from 'package:graphics':
##
##     layout
```

```
ggplotly(ggplot(df %>% filter(AvgHeight > 0) %>% group_by(Season) %>% summarise(avgHeight = mean(AvgHeight,na.rm=
T)),aes(x=Season,y=avgHeight)) + geom_line())
```



```
fig = plt.figure()
ax = fig.add_subplot()
ax.scatter(x=r.df[r.df.FG2Pct > 0].AvgHeight,y=r.df[r.df.FG2Pct > 0].FG2Pct,edgecolor='black')
ax.set_xlabel('Average Height')
ax.set_ylabel('2P FG%')
plt.show()
```

```
corr = r.df.select_dtypes(include='number').corr()
```

```
corrdf = corr['Seed'].reset_index().sort_values(by='Seed',ascending=False)
corrdf[corrdf.Seed > 0.05]
```

```
##                                   index      Seed
## 136                                Seed  1.000000
## 49                                AdjEM  0.390397
## 132                          Net.Rating  0.390392
## 43                                AdjOE  0.339472
## 5      Adjusted.Offensive.Efficiency    0.339373
## 7         Raw.Offensive.Efficiency      0.312802
## 41                                   OE  0.312802
## 17                               eFGPct  0.246373
## 51                               FG2Pct  0.216341
## 53                               FG3Pct  0.210253
## 21                                ORPct  0.152883
## 23                               FTRate  0.138387
## 57                             BlockPct  0.137676
## 98                           Experience  0.137619
## 71                                ARate  0.125185
## 75                              StlRate  0.112550
## 79                                  DFP  0.110520
## 15     Avg.Possession.Length..Defense.  0.109743
## 55                                FTPct  0.104554
## 96                       EffectiveHeight  0.102517
## 25                               OffFT  0.065721
## 33                              Def2PtFG  0.060856
```

```
columns = corrdf[corrdf.Seed > 0.05]['index'].tolist()
```
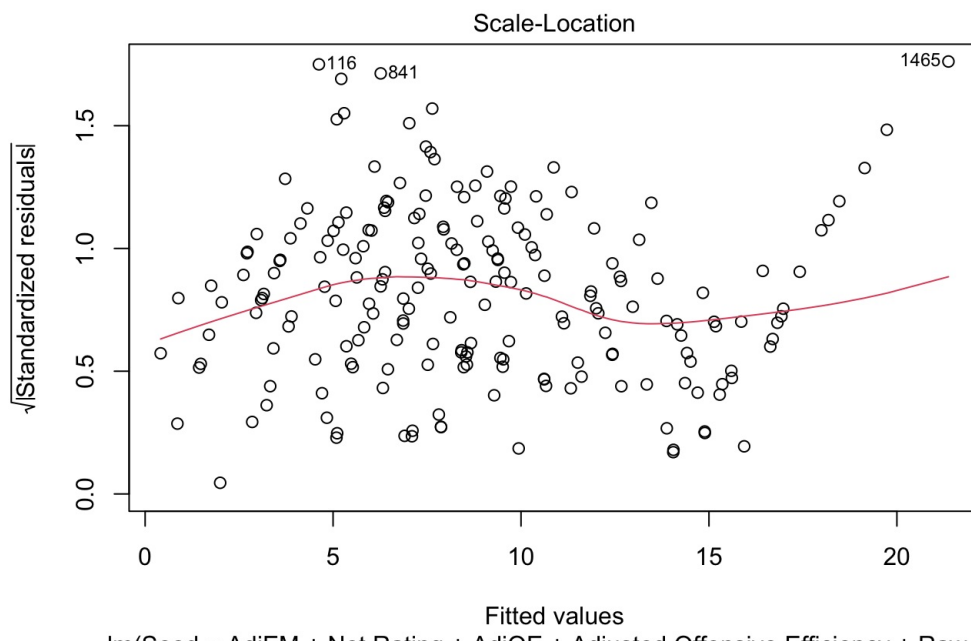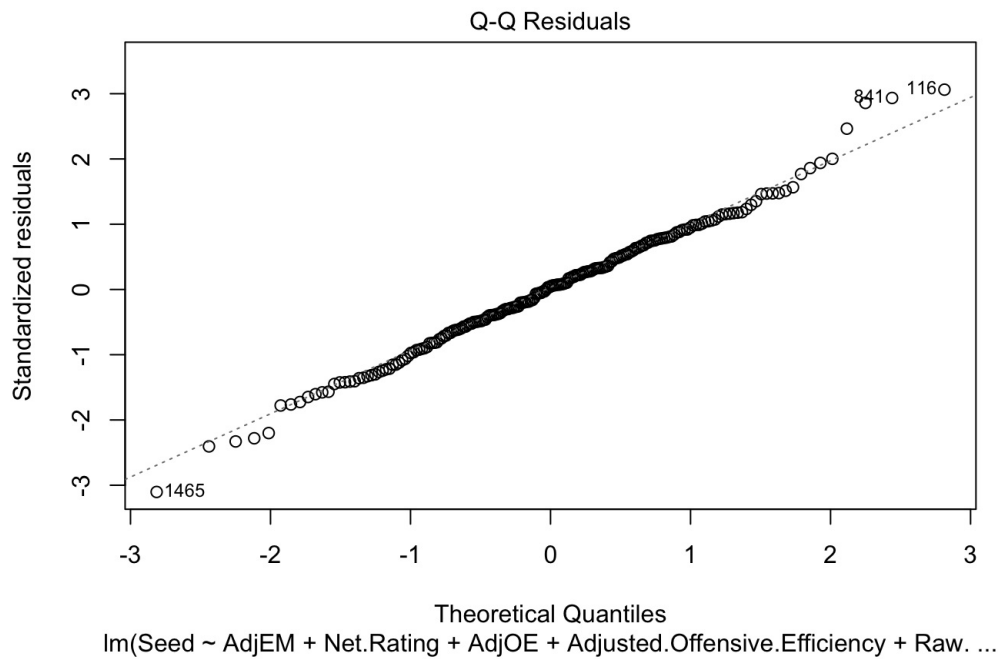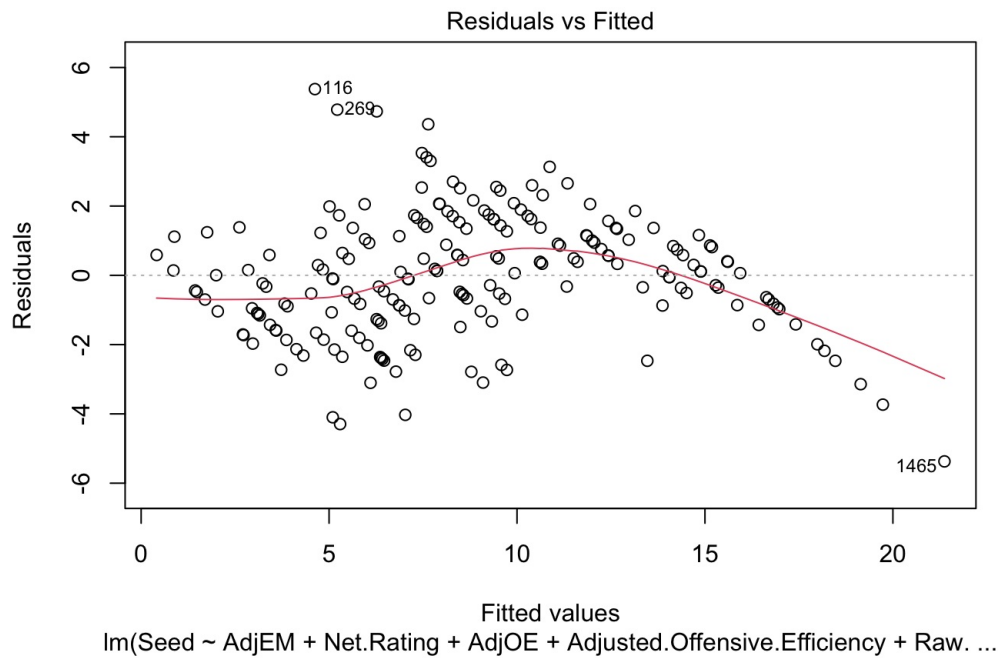
```
py$columns
```

```
##  [1] "Seed"                          "AdjEM"
##  [3] "Net.Rating"                    "AdjOE"
##  [5] "Adjusted.Offensive.Efficiency" "Raw.Offensive.Efficiency"
##  [7] "OE"                            "eFGPct"
##  [9] "FG2Pct"                        "FG3Pct"
## [11] "ORPct"                         "FTRate"
## [13] "BlockPct"                      "Experience"
## [15] "ARate"                         "StlRate"
## [17] "DFP"                           "Avg.Possession.Length..Defense."
## [19] "FTPct"                         "EffectiveHeight"
## [21] "OffFT"                         "Def2PtFG"
```

```
model = lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency +
            Raw.Offensive.Efficiency + OE + eFGPct + FG2Pct + FG3Pct + ORPct +
            FTRate + BlockPct + Experience + ARate + StlRate + DFP +
            Avg.Possession.Length..Defense. + FTPct + EffectiveHeight +
            OffFT + Def2PtFG, data = filter(df,Post.Season.Tournament == 'March Madness',Season != 2025))
```
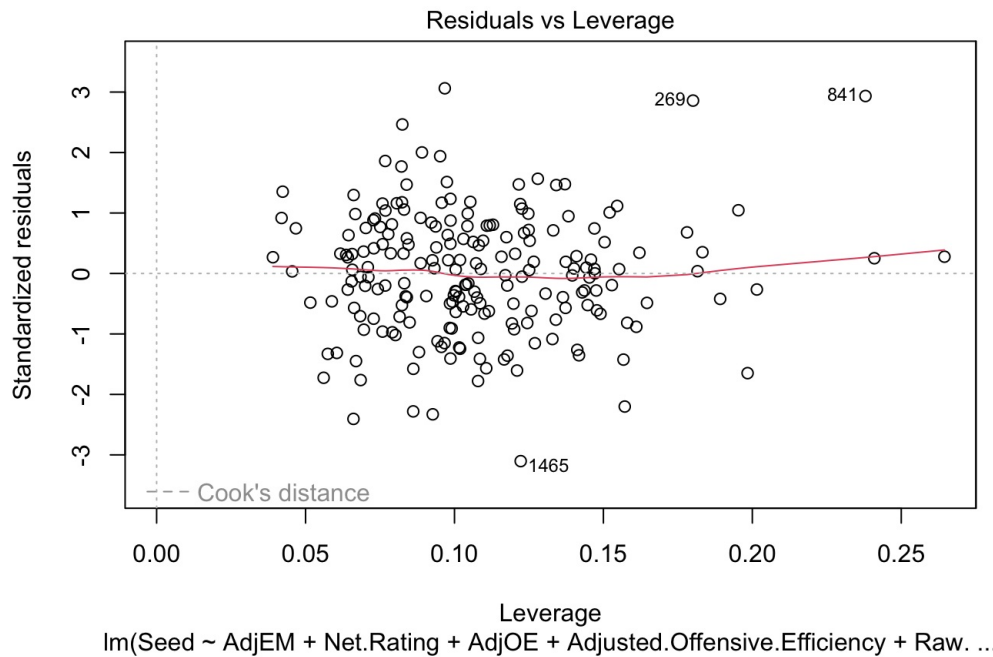
```
summary(model)
```

```
##
## Call:
## lm(formula = Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency +
##     Raw.Offensive.Efficiency + OE + eFGPct + FG2Pct + FG3Pct +
##     ORPct + FTRate + BlockPct + Experience + ARate + StlRate +
##     DFP + Avg.Possession.Length..Defense. + FTPct + EffectiveHeight +
##     OffFT + Def2PtFG, data = filter(df, Post.Season.Tournament ==
##     "March Madness", Season != 2025))
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -5.3712 -1.0731  0.0798  1.1772  5.3764
##
## Coefficients:
##                                 Estimate Std. Error t value Pr(>|t|)
## (Intercept)                    27.957912   9.547070   2.928  0.00384 **
## AdjEM                           1.641591   4.918105   0.334  0.73893
## Net.Rating                     -2.063999   4.927122  -0.419  0.67578
## AdjOE                         -11.121404   7.089878  -1.569  0.11847
## Adjusted.Offensive.Efficiency  11.018330   7.102420   1.551  0.12256
## Raw.Offensive.Efficiency        0.202348   4.632934   0.044  0.96521
## OE                             -0.046309   4.638013  -0.010  0.99204
## eFGPct                         -0.111629   0.777575  -0.144  0.88601
## FG2Pct                         -0.350618   0.426214  -0.823  0.41179
## FG3Pct                         -0.277883   0.391842  -0.709  0.47913
## ORPct                          -0.061070   0.052161  -1.171  0.24321
## FTRate                          0.928989   0.547158   1.698  0.09125 .
## BlockPct                       -0.103749   0.063048  -1.646  0.10158
## Experience                     -0.509008   0.393227  -1.294  0.19715
## ARate                          -0.003413   0.031969  -0.107  0.91509
## StlRate                        11.110228   9.957242   1.116  0.26598
## DFP                             0.044644   0.033375   1.338  0.18268
## Avg.Possession.Length..Defense. 0.105170  0.259846   0.405  0.68614
## FTPct                           0.384996   0.267625   1.439  0.15199
## EffectiveHeight                -0.092570   0.141651  -0.654  0.51425
## OffFT                          -2.095164   1.233655  -1.698  0.09115 .
## Def2PtFG                       -0.064554   0.048401  -1.334  0.18396
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.848 on 182 degrees of freedom
##   (1263 observations deleted due to missingness)
## Multiple R-squared:  0.86,  Adjusted R-squared:  0.8438
## F-statistic: 53.24 on 21 and 182 DF,  p-value: < 2.2e-16
```

```
plot(model)
```

Residuals vs Fitted

Residuals

Fitted values
lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

o116
o269o

1465o

Q-Q Residuals

Standardized residuals

Theoretical Quantiles
lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

841o 116o

o1465

Scale-Location

√|Standardized residuals|

Fitted values

o116 o841 1465o

Residuals vs Leverage

lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

```
head(filter(df, Season == 2025))  # Check the first few rows of the 2025 data
```

```
##   Season Short.Conference.Name Adjusted.Temo Adjusted.Tempo.Rank Raw.Tempo
## 1   2025                   ACC          65.9                 256      66.7
## 2   2025                   SEC          67.8                 147      69.1
## 3   2025                   B12          61.4                 360      62.3
## 4   2025                   SEC          69.5                  62      70.7
## 5   2025                   SEC          63.7                 346      65.5
## 6   2025                   SEC          74.9                   1      76.2
##   Raw.Tempo.Rank Adjusted.Offensive.Efficiency
## 1            253                         128.1
## 2            121                         128.8
## 3            360                         123.6
## 4             49                         127.3
## 5            308                         119.7
## 6              1                         126.9
##   Adjusted.Offensive.Efficiency.Rank Raw.Offensive.Efficiency
## 1                                  2                    124.6
## 2                                  1                    121.5
## 3                                 10                    117.1
## 4                                  3                    119.8
## 5                                 18                    114.1
## 6                                  4                    119.2
##   Raw.Offensive.Efficiency.Rank Adjusted.Defensive.Efficiency
## 1                             1                          90.1
## 2                             2                          93.2
## 3                            16                          88.2
## 4                             7                          92.4
## 5                            40                          88.8
## 6                             8                          96.2
##   Adjusted.Defensive.Efficiency.Rank Raw.Defensive.Efficiency
## 1                                  4                     92.9
## 2                                 12                    100.4
## 3                                  2                     91.8
## 4                                  9                     97.0
## 5                                  3                     95.1
## 6                                 26                    105.3
##   Raw.Defensive.Efficiency.Rank Avg.Possession.Length..Offense.
## 1                             3                            17.0
## 2                            49                            17.2
## 3                             1                            19.4
## 4                            18                            16.2
## 5                             9                            18.2
## 6                           163                            15.0
##   Avg.Possession.Length..Offense..Rank Avg.Possession.Length..Defense.
## 1                                   97                            19.1
## 2                                  123                            17.7
## 3                                  342                            18.8
## 4                                   33                            17.7
```

```
## 5                                             267                    18.6
## 6                                               4                    16.5
##   Avg.Possession.Length..Defense..Rank  eFGPct RankeFGPct    TOPct RankTOPct
## 1                                   363 57.44898          5 14.36282        18
## 2                                   197 55.94636         23 13.46983         7
## 3                                   358 52.76058         89 14.69939        25
## 4                                   196 54.99022         38 15.33702        50
## 5                                   351 52.92350         85 16.02700        98
## 6                                    11 56.55658         11 16.77721       156
##      ORPct RankORPct    FTRate RankFTRate    OffFT RankOffFT  Off2PtFG
## 1 35.42260        32 31.68367        207 17.78021       257 45.63709
## 2 34.59062        44 33.35020        170 18.17172       231 48.85270
## 3 36.49374        13 28.43137        315 16.56467       310 50.99959
## 4 38.20225         8 31.94716        202 17.17023       289 47.89978
## 5 35.91954        20 34.04372        149 19.08939       169 47.20134
## 6 34.99157        37 40.31083         25 20.37607        99 45.47009
##   RankOff2PtFG Off3PtFG RankOff3PtFG    DefFT RankDefFT Def2PtFG RankDef2PtFG
## 1          300 36.58269           59 17.22956       287 50.02447          167
## 2          197 32.97557          131 23.48451        15 51.18994          115
## 3          133 32.43574          152 21.46570        51 43.13929          347
## 4          231 34.92999           82 20.13667       115 51.29841          109
## 5          256 33.70927          113 19.27711       157 46.38554          298
## 6          303 34.15385          103 20.05420       120 53.11653           50
##   Def3PtFG RankDef3PtFG   Tempo RankTempo AdjTempo RankAdjTempo      OE RankOE
## 1 32.74596          127 66.6705       253  66.0774          256 124.568      1
## 2 25.32555          348 69.0824       122  67.8881          147 121.500      2
## 3 35.39501           49 62.3037       360  61.5377          360 117.137     16
## 4 28.56492          295 70.7031        49  69.6695           62 119.846      7
## 5 34.33735           78 65.5145       308  63.8389          346 114.107     40
## 6 26.82927          335 76.1931         1  75.0248            1 119.155      8
##      AdjOE RankAdjOE      DE RankDE   AdjDE RankAdjDE   AdjEM RankAdjEM
## 1 128.100         2 92.9295      3 90.0132         4 38.0870         1
## 2 128.734         1 100.4000    49 93.1660        12 35.5678         2
## 3 123.506        10 91.7694      1 88.1109         2 35.3956         3
## 4 127.293         3 96.9531     18 92.3953         9 34.8972         4
## 5 119.678        18 95.0901      9 88.7708         3 30.9073         5
## 6 126.845         4 105.2770   163 96.1485        26 30.6962         6
##     FG2Pct RankFG2Pct   FG3Pct RankFG3Pct    FTPct RankFTPct BlockPct
## 1 58.13953          8 37.74011         20 78.42190        18 10.49958
## 2 56.26598         30 36.98630         35 74.50683       101 16.58416
## 3 49.13522        261 39.78979          4 73.68421       123 16.15950
## 4 56.57093         25 35.30726         96 71.36294       216 12.42938
## 5 54.01530         70 34.31122        153 73.35474       133 16.49899
## 6 59.85599          3 35.12658        104 71.80723       197 10.12031
##   RankBlockPct OppFG2Pct RankOppFG2Pct OppFG3Pct RankOppFG3Pct OppFTPct
## 1          110  43.26842             3  31.01530            39 71.98364
## 2            4  47.02970            40  29.28349             5 72.73992
## 3            6  43.54669             4  30.96862            36 70.84048
## 4           45  45.43987            12  29.47814             7 70.49442
## 5            5  46.47887            29  27.60291             1 73.84615
## 6          129  48.54919            87  30.31496            17 70.66849
##   RankOppFTPct OppBlockPct RankOppBlockPct  FG3Rate RankFG3Rate OppFG3Rate
## 1          174    9.674419             214 45.15306          55   37.84211
## 2          222    7.502131              34 40.63765         138   34.62783
## 3          117    6.525157               6 34.36533         296   43.47568
## 4           99    8.442124              94 43.78669          72   36.39630
## 5          272    9.177820             164 42.84153          84   45.38462
## 6          111   12.241224             344 46.04177          44   35.03448
##   RankOppFG3Rate    ARate RankARate OppARate RankOppARate    StlRate RankStlRate
## 1            142 58.28989        50 51.63488          181 0.1045395         113
## 2             46 55.48589        93 40.36939            7 0.1009111         142
## 3            315 44.94382       329 56.23053          289 0.1269493          24
## 4             95 52.89855       136 45.59585           37 0.1100552          76
## 5            343 60.55156        23 46.37681           52 0.1068467          97
## 6             55 54.20842       112 43.62050           20 0.0798139         317
##   OppStlRate RankOppStlRate DFP  NSTRate RankNSTRate OppNSTRate RankOppNSTRate
## 1 0.08135901             26  NA 6.226919          43   7.272314            212
## 2 0.08784674             86  NA 4.685160           2   7.298037            211
## 3 0.07826948             16  NA 6.872442         111   9.115531             24
## 4 0.08928177            101  NA 6.408840          56   6.276243            321
## 5 0.08824389             89  NA 7.202609         149   7.584204            172
## 6 0.10180345            233  NA 6.596863          74   5.700993            355
##   AvgHeight RankAvgHeight CenterHeight RankCenterHeight PFHeight RankPFHeight
## 1     79.77             1         2.67               10     1.49           37
## 2     78.42            27         1.11               67     0.53          112
## 3     76.84           238        -1.39              304     0.23          141
## 4     77.78            95         1.20               58     1.59           32
## 5     77.16           189         1.26               54     1.23           49
## 6     78.08            57         1.61               33     3.15            1
```

```
##   SFHeight RankSFHeight SGHeight RankSGHeight PGHeight RankPGHeight
## 1     1.46           30     2.68            2     4.52            1
## 2     1.44           31     2.01           12     0.98           88
## 3    -0.71          280    -0.19          204     0.24          165
## 4    -0.65          272    -0.04          189     0.79          113
## 5    -0.39          240     0.68           95    -3.01          353
## 6     0.27          141    -0.51          256    -0.12          206
##   EffectiveHeight RankEffectiveHeight Experience RankExperience Bench BenchRank
## 1            2.08                  10    1.94716            129 31.01       187
## 2            0.82                  75    2.79421             25 33.94       106
## 3           -0.58                 257    2.64489             41 29.54       232
## 4            1.40                  36    2.42012             62 28.34       265
## 5            1.24                  51    2.92752             14 24.97       313
## 6            2.38                   5    2.99678              9 38.21        36
##   CenterPts RankCenterPts PFPts RankPFPts SFPts RankSFPts SGPts RankSGPts PGPts
## 1     15.35           313 27.53        10 22.69        80 15.98       329 18.42
## 2     20.84           120 20.99       128 18.59       218 19.08       250 20.49
## 3     15.39           312 18.78       211 18.83       212 21.40       138 25.61
## 4     18.18           219 17.69       257 19.07       199 23.39        69 21.68
## 5     17.51           234 19.64       179 27.90        11 15.56       336 19.34
## 6     15.60           306 19.05       201 18.55       220 21.51       133 25.28
##   RankPGPts CenterOR RankCenterOR  PFOR RankPFOR  SFOR RankSFOR  SGOR RankSGOR
## 1       235    49.19           15 17.94      326 10.76      318 12.68      123
## 2       160    45.88           23 30.35       97 12.95      277  5.43      334
## 3        40    45.83           24 26.88      166  9.60      337 13.03      114
## 4       135    40.80           85 33.29       56  9.06      342  6.29      318
## 5       207    34.99          198 33.00       60  7.70      350 16.03       52
## 6        50    29.84          285 28.78      128 26.33       28 10.02      210
##    PGOR RankPGOR CenterDR RankCenterDR  PFDR RankPFDR  SFDR RankSFDR  SGDR
## 1  9.37      138    25.41          196 27.08       65 14.05      345 19.73
## 2  5.35      311    29.95           77 24.60      135 16.65      270 16.18
## 3  4.66      332    26.42          162 20.80      263 17.49      232 23.22
## 4 10.56      105    30.42           63 24.22      146 14.06      344 15.82
## 5  8.21      186    28.24          110 24.67      129 17.36      238 16.53
## 6  5.03      317    27.73          126 29.40       25 19.66      162 11.86
##   RankSGDR  PGDR RankPGDR Net.Rating Net.Rating.Rank
## 1       64 13.70      213       38.0               1
## 2      185 12.60      273       35.6               5
## 3       12 12.06      298       35.4               6
## 4      200 15.48      133       34.9               8
## 5      168 13.13      245       30.9              33
## 6      337 11.35      321       30.7              36
##             Mapped.Conference.Name Mapped.ESPN.Team.Name  Current.Coach
## 1 Atlantic Coast Conference (ACC)                  Duke    Jon Scheyer
## 2   Southeastern Conference (SEC)                Auburn    Bruce Pearl
## 3               Big 12 Conference               Houston Kelvin Sampson
## 4   Southeastern Conference (SEC)               Florida    Todd Golden
## 5   Southeastern Conference (SEC)             Tennessee    Rick Barnes
## 6   Southeastern Conference (SEC)               Alabama      Nate Oats
##        Full.Team.Name  Since Active.Coaching.Length
## 1      Duke Blue Devils 202223                2 years
## 2         Auburn Tigers 201415               10 years
## 3       Houston Cougars 201415               10 years
## 4        Florida Gators 202223                2 years
## 5 Tennessee Volunteers 201516                9 years
## 6 Alabama Crimson Tide 201920                5 years
##   Active.Coaching.Length.Index Seed                          Region
## 1                            3    0 Not In a Post-Season Tournament
## 2                           11    0 Not In a Post-Season Tournament
## 3                           11    0 Not In a Post-Season Tournament
## 4                            3    0 Not In a Post-Season Tournament
## 5                           10    0 Not In a Post-Season Tournament
## 6                            6    0 Not In a Post-Season Tournament
##           Post.Season.Tournament Post.Season.Tournament.Sorting.Index
## 1 Not In a Post-Season Tournament                                    5
## 2 Not In a Post-Season Tournament                                    5
## 3 Not In a Post-Season Tournament                                    5
## 4 Not In a Post-Season Tournament                                    5
## 5 Not In a Post-Season Tournament                                    5
## 6 Not In a Post-Season Tournament                                    5
##   Top.12.in.AP.Top.25.During.Week.6.
## 1                                Yes
## 2                                Yes
## 3                                 No
## 4                                Yes
## 5                                Yes
## 6                                Yes
```

```
summary(filter(df, Season == 2025))  # Check for any NA values or unexpected data types
```

```
##       Season       Short.Conference.Name Adjusted.Temo    Adjusted.Tempo.Rank
## Min.   :2025   Length:364           Min.   :58.90   Min.   :  1.00
## 1st Qu.:2025   Class :character     1st Qu.:65.60   1st Qu.: 91.75
## Median :2025   Mode  :character     Median :67.30   Median :182.50
## Mean   :2025                        Mean   :67.27   Mean   :182.50
## 3rd Qu.:2025                        3rd Qu.:68.80   3rd Qu.:273.25
## Max.   :2025                        Max.   :74.90   Max.   :364.00
##
##    Raw.Tempo      Raw.Tempo.Rank    Adjusted.Offensive.Efficiency
## Min.   :59.50   Min.   :  1.00   Min.   : 82.6
## 1st Qu.:66.28   1st Qu.: 91.75   1st Qu.:101.4
## Median :67.95   Median :182.50   Median :106.5
## Mean   :67.98   Mean   :182.50   Mean   :106.8
## 3rd Qu.:69.53   3rd Qu.:273.25   3rd Qu.:111.7
## Max.   :76.20   Max.   :364.00   Max.   :128.8
##
## Adjusted.Offensive.Efficiency.Rank Raw.Offensive.Efficiency
## Min.   :  1.00                     Min.   : 79.4
## 1st Qu.: 91.75                     1st Qu.:102.1
## Median :182.50                     Median :105.7
## Mean   :182.50                     Mean   :106.1
## 3rd Qu.:273.25                     3rd Qu.:110.2
## Max.   :364.00                     Max.   :124.6
##
## Raw.Offensive.Efficiency.Rank Adjusted.Defensive.Efficiency
## Min.   :  1.00                Min.   : 87.7
## 1st Qu.: 91.75                1st Qu.:102.6
## Median :182.50                Median :107.2
## Mean   :182.50                Mean   :106.8
## 3rd Qu.:273.25                3rd Qu.:111.7
## Max.   :364.00                Max.   :124.8
##
## Adjusted.Defensive.Efficiency.Rank Raw.Defensive.Efficiency
## Min.   :  1.00                     Min.   : 91.8
## 1st Qu.: 91.75                     1st Qu.:102.8
## Median :182.50                     Median :106.5
## Mean   :182.50                     Mean   :106.3
## 3rd Qu.:273.25                     3rd Qu.:109.8
## Max.   :364.00                     Max.   :124.6
##
## Raw.Defensive.Efficiency.Rank Avg.Possession.Length..Offense.
## Min.   :  1.00                Min.   :14.20
## 1st Qu.: 91.75                1st Qu.:16.90
## Median :182.50                Median :17.70
## Mean   :182.50                Mean   :17.66
## 3rd Qu.:273.25                3rd Qu.:18.30
## Max.   :364.00                Max.   :22.00
##
## Avg.Possession.Length..Offense..Rank Avg.Possession.Length..Defense.
## Min.   :  1.00                        Min.   :15.80
## 1st Qu.: 91.75                        1st Qu.:17.30
## Median :182.50                        Median :17.60
## Mean   :182.50                        Mean   :17.62
## 3rd Qu.:273.25                        3rd Qu.:18.00
## Max.   :364.00                        Max.   :19.10
##
## Avg.Possession.Length..Defense..Rank    eFGPct       RankeFGPct
## Min.   :  1.00                        Min.   :42.10   Min.   :  1.00
## 1st Qu.: 91.75                        1st Qu.:48.87   1st Qu.: 91.75
## Median :182.50                        Median :50.67   Median :182.50
## Mean   :182.50                        Mean   :50.81   Mean   :182.50
## 3rd Qu.:273.25                        3rd Qu.:52.66   3rd Qu.:273.25
## Max.   :364.00                        Max.   :58.27   Max.   :364.00
##
##     TOPct          RankTOPct        ORPct         RankORPct
## Min.   :12.50   Min.   :  1.00   Min.   :17.80   Min.   :  1.00
## 1st Qu.:15.93   1st Qu.: 91.75   1st Qu.:26.54   1st Qu.: 91.75
## Median :17.20   Median :182.50   Median :29.98   Median :182.50
## Mean   :17.30   Mean   :182.50   Mean   :29.73   Mean   :182.49
## 3rd Qu.:18.51   3rd Qu.:273.25   3rd Qu.:32.78   3rd Qu.:273.25
## Max.   :25.10   Max.   :364.00   Max.   :42.05   Max.   :364.00
##
##     FTRate         RankFTRate       OffFT         RankOffFT
## Min.   :22.18   Min.   :  1.00   Min.   :12.93   Min.   :  1.00
## 1st Qu.:30.01   1st Qu.: 91.75   1st Qu.:17.50   1st Qu.: 91.75
```

```
## Median :32.85   Median :182.50   Median :18.91   Median :182.50
## Mean   :33.07   Mean   :182.50   Mean   :18.98   Mean   :182.50
## 3rd Qu.:35.97   3rd Qu.:273.25   3rd Qu.:20.53   3rd Qu.:273.25
## Max.   :47.70   Max.   :364.00   Max.   :24.94   Max.   :364.00
##
##    Off2PtFG       RankOff2PtFG      Off3PtFG       RankOff3PtFG
## Min.   :36.91   Min.   :  1.00   Min.   :16.60   Min.   :  1.00
## 1st Qu.:46.66   1st Qu.: 91.75   1st Qu.:28.12   1st Qu.: 91.75
## Median :49.63   Median :182.50   Median :31.48   Median :182.50
## Mean   :49.54   Mean   :182.50   Mean   :31.48   Mean   :182.50
## 3rd Qu.:52.33   3rd Qu.:273.25   3rd Qu.:34.73   3rd Qu.:273.25
## Max.   :62.54   Max.   :364.00   Max.   :45.96   Max.   :364.00
##
##     DefFT          RankDefFT        Def2PtFG       RankDef2PtFG
## Min.   :11.48   Min.   :  1.00   Min.   :33.50   Min.   :  1.00
## 1st Qu.:17.53   1st Qu.: 91.75   1st Qu.:47.15   1st Qu.: 91.75
## Median :18.91   Median :182.50   Median :49.70   Median :182.50
## Mean   :19.00   Mean   :182.50   Mean   :49.47   Mean   :182.50
## 3rd Qu.:20.43   3rd Qu.:273.25   3rd Qu.:51.92   3rd Qu.:273.25
## Max.   :25.76   Max.   :364.00   Max.   :60.32   Max.   :364.00
##
##    Def3PtFG       RankDef3PtFG        Tempo          RankTempo
## Min.   :21.83   Min.   :  1.00   Min.   :59.53   Min.   :  1.00
## 1st Qu.:29.23   1st Qu.: 91.75   1st Qu.:66.25   1st Qu.: 91.75
## Median :31.24   Median :182.50   Median :67.93   Median :182.50
## Mean   :31.53   Mean   :182.50   Mean   :67.98   Mean   :182.50
## 3rd Qu.:33.85   3rd Qu.:273.25   3rd Qu.:69.56   3rd Qu.:273.25
## Max.   :51.63   Max.   :364.00   Max.   :76.19   Max.   :364.00
##
##    AdjTempo       RankAdjTempo        OE             RankOE
## Min.   :59.01   Min.   :  1.00   Min.   : 79.37   Min.   :  1.00
## 1st Qu.:65.76   1st Qu.: 91.75   1st Qu.:102.07   1st Qu.: 91.75
## Median :67.42   Median :182.50   Median :105.68   Median :182.50
## Mean   :67.40   Mean   :182.50   Mean   :106.07   Mean   :182.50
## 3rd Qu.:68.94   3rd Qu.:273.25   3rd Qu.:110.15   3rd Qu.:273.25
## Max.   :75.02   Max.   :364.00   Max.   :124.57   Max.   :364.00
##
##     AdjOE         RankAdjOE          DE             RankDE
## Min.   : 82.55   Min.   :  1.00   Min.   : 91.77   Min.   :  1.00
## 1st Qu.:101.37   1st Qu.: 91.75   1st Qu.:102.82   1st Qu.: 91.75
## Median :106.42   Median :182.50   Median :106.51   Median :182.50
## Mean   :106.79   Mean   :182.50   Mean   :106.29   Mean   :182.50
## 3rd Qu.:111.70   3rd Qu.:273.25   3rd Qu.:109.86   3rd Qu.:273.25
## Max.   :128.73   Max.   :364.00   Max.   :124.64   Max.   :364.00
##
##     AdjDE         RankAdjDE          AdjEM          RankAdjEM
## Min.   : 87.63   Min.   :  1.00   Min.   :-42.223   Min.   :  1.00
## 1st Qu.:102.55   1st Qu.: 91.75   1st Qu.: -9.274   1st Qu.: 91.75
## Median :107.22   Median :182.50   Median : -1.732   Median :182.50
## Mean   :106.79   Mean   :182.50   Mean   :  0.000   Mean   :182.50
## 3rd Qu.:111.62   3rd Qu.:273.25   3rd Qu.:  7.622   3rd Qu.:273.25
## Max.   :124.77   Max.   :364.00   Max.   : 38.087   Max.   :364.00
##
##     FG2Pct         RankFG2Pct        FG3Pct         RankFG3Pct
## Min.   :41.53   Min.   :  1.00   Min.   :26.70   Min.   :  1.00
## 1st Qu.:48.79   1st Qu.: 91.75   1st Qu.:31.81   1st Qu.: 91.75
## Median :51.02   Median :182.50   Median :33.72   Median :182.50
## Mean   :51.02   Mean   :182.49   Mean   :33.71   Mean   :182.48
## 3rd Qu.:53.35   3rd Qu.:273.25   3rd Qu.:35.42   3rd Qu.:273.25
## Max.   :60.57   Max.   :364.00   Max.   :40.00   Max.   :364.00
##
##     FTPct          RankFTPct        BlockPct       RankBlockPct
## Min.   :59.03   Min.   :  1.00   Min.   : 3.645   Min.   :  1.00
## 1st Qu.:69.51   1st Qu.: 91.75   1st Qu.: 7.733   1st Qu.: 91.75
## Median :72.18   Median :182.50   Median : 9.150   Median :182.50
## Mean   :72.10   Mean   :182.48   Mean   : 9.394   Mean   :182.50
## 3rd Qu.:74.74   3rd Qu.:273.25   3rd Qu.:11.042   3rd Qu.:273.25
## Max.   :82.80   Max.   :364.00   Max.   :18.549   Max.   :364.00
##
##    OppFG2Pct      RankOppFG2Pct     OppFG3Pct      RankOppFG3Pct
## Min.   :42.62   Min.   :  1.00   Min.   :27.60   Min.   :  1.00
## 1st Qu.:48.76   1st Qu.: 91.75   1st Qu.:32.36   1st Qu.: 91.75
## Median :50.99   Median :182.50   Median :33.78   Median :182.50
## Mean   :51.04   Mean   :182.50   Mean   :33.82   Mean   :182.43
## 3rd Qu.:53.28   3rd Qu.:273.25   3rd Qu.:35.29   3rd Qu.:273.25
## Max.   :59.81   Max.   :364.00   Max.   :39.70   Max.   :364.00
##
##    OppFTPct       RankOppFTPct      OppBlockPct    RankOppBlockPct
## Min.   :65.12   Min.   :  1.00   Min.   : 5.381   Min.   :  1.00
```

```
##   1st Qu.:70.44   1st Qu.: 91.75   1st Qu.: 8.424   1st Qu.: 91.75
##   Median :72.13   Median :181.00   Median : 9.383   Median :182.50
##   Mean   :72.18   Mean   :182.48   Mean   : 9.457   Mean   :182.49
##   3rd Qu.:73.94   3rd Qu.:273.25   3rd Qu.:10.302   3rd Qu.:273.25
##   Max.   :78.59   Max.   :364.00   Max.   :14.775   Max.   :364.00
##
##      FG3Rate        RankFG3Rate       OppFG3Rate      RankOppFG3Rate
##   Min.   :20.67   Min.   :  1.00   Min.   :27.68   Min.   :  1.00
##   1st Qu.:35.28   1st Qu.: 91.75   1st Qu.:36.22   1st Qu.: 91.75
##   Median :38.41   Median :182.50   Median :38.84   Median :182.50
##   Mean   :39.01   Mean   :182.50   Mean   :39.05   Mean   :182.50
##   3rd Qu.:42.44   3rd Qu.:273.25   3rd Qu.:41.34   3rd Qu.:273.25
##   Max.   :53.96   Max.   :364.00   Max.   :59.32   Max.   :364.00
##
##      ARate          RankARate        OppARate        RankOppARate
##   Min.   :38.03   Min.   :  1.00   Min.   :37.39   Min.   :  1.00
##   1st Qu.:48.26   1st Qu.: 91.75   1st Qu.:48.35   1st Qu.: 91.75
##   Median :51.52   Median :182.50   Median :51.69   Median :182.50
##   Mean   :51.76   Mean   :182.50   Mean   :51.96   Mean   :182.49
##   3rd Qu.:55.56   3rd Qu.:273.25   3rd Qu.:55.48   3rd Qu.:273.25
##   Max.   :66.39   Max.   :364.00   Max.   :69.72   Max.   :364.00
##
##      StlRate         RankStlRate       OppStlRate       RankOppStlRate
##   Min.   :0.04810   Min.   :  1.00   Min.   :0.06016   Min.   :  1.00
##   1st Qu.:0.08622   1st Qu.: 91.75   1st Qu.:0.08853   1st Qu.: 91.75
##   Median :0.09628   Median :182.50   Median :0.09630   Median :182.50
##   Mean   :0.09729   Mean   :182.50   Mean   :0.09754   Mean   :182.50
##   3rd Qu.:0.10758   3rd Qu.:273.25   3rd Qu.:0.10624   3rd Qu.:273.25
##   Max.   :0.14564   Max.   :364.00   Max.   :0.14495   Max.   :364.00
##
##       DFP           NSTRate         RankNSTRate        OppNSTRate
##   Min.   : NA     Min.   : 4.424   Min.   :  1.00   Min.   : 4.735
##   1st Qu.: NA     1st Qu.: 6.722   1st Qu.: 91.75   1st Qu.: 6.748
##   Median : NA     Median : 7.451   Median :182.50   Median : 7.511
##   Mean   :NaN     Mean   : 7.544   Mean   :182.50   Mean   : 7.531
##   3rd Qu.: NA     3rd Qu.: 8.168   3rd Qu.:273.25   3rd Qu.: 8.266
##   Max.   : NA     Max.   :13.292   Max.   :364.00   Max.   :10.611
##   NA's   :364
##   RankOppNSTRate     AvgHeight       RankAvgHeight      CenterHeight
##   Min.   :  1.00   Min.   :74.27   Min.   :  1.00   Min.   :-3.030000
##   1st Qu.: 91.75   1st Qu.:76.64   1st Qu.: 91.75   1st Qu.:-0.922500
##   Median :182.50   Median :77.19   Median :182.50   Median : 0.060000
##   Mean   :182.50   Mean   :77.20   Mean   :182.50   Mean   :-0.000082
##   3rd Qu.:273.25   3rd Qu.:77.80   3rd Qu.:273.25   3rd Qu.: 0.875000
##   Max.   :364.00   Max.   :79.77   Max.   :364.00   Max.   : 4.530000
##
##   RankCenterHeight  PFHeight          RankPFHeight       SFHeight
##   Min.   :  1.00   Min.   :-3.480000   Min.   :  1.00   Min.   :-3.480000
##   1st Qu.: 91.75   1st Qu.:-0.720000   1st Qu.: 91.75   1st Qu.:-0.652500
##   Median :182.50   Median :-0.080000   Median :182.50   Median :-0.010000
##   Mean   :182.05   Mean   : 0.000687   Mean   :181.94   Mean   :-0.000549
##   3rd Qu.:273.25   3rd Qu.: 0.722500   3rd Qu.:273.25   3rd Qu.: 0.725000
##   Max.   :364.00   Max.   : 3.150000   Max.   :364.00   Max.   : 3.050000
##
##     RankSFHeight      SGHeight        RankSGHeight       PGHeight
##   Min.   :  1.00   Min.   :-4.0400   Min.   :  1.00   Min.   :-4.52000
##   1st Qu.: 91.75   1st Qu.:-0.7300   1st Qu.: 91.75   1st Qu.:-0.95250
##   Median :182.50   Median : 0.0200   Median :182.50   Median : 0.12000
##   Mean   :181.40   Mean   : 0.0000   Mean   :181.41   Mean   :-0.00011
##   3rd Qu.:273.25   3rd Qu.: 0.7025   3rd Qu.:273.25   3rd Qu.: 0.94750
##   Max.   :364.00   Max.   : 3.0900   Max.   :364.00   Max.   : 4.52000
##
##     RankPGHeight    EffectiveHeight    RankEffectiveHeight   Experience
##   Min.   :  1.00   Min.   :-2.710000   Min.   :  1.00     Min.   :0.000
##   1st Qu.: 91.75   1st Qu.:-0.692500   1st Qu.: 91.75     1st Qu.:1.241
##   Median :182.50   Median :-0.045000   Median :182.50     Median :1.742
##   Mean   :181.83   Mean   : 0.000082   Mean   :182.50     Mean   :1.732
##   3rd Qu.:273.25   3rd Qu.: 0.662500   3rd Qu.:273.25     3rd Qu.:2.176
##   Max.   :364.00   Max.   : 3.270000   Max.   :364.00     Max.   :3.639
##
##   RankExperience      Bench          BenchRank        CenterPts
##   Min.   :  1.00   Min.   :14.14   Min.   :  1.00   Min.   :10.12
##   1st Qu.: 91.75   1st Qu.:27.70   1st Qu.: 91.75   1st Qu.:16.55
##   Median :182.50   Median :31.12   Median :182.50   Median :19.21
##   Mean   :182.50   Mean   :31.19   Mean   :182.50   Mean   :19.43
##   3rd Qu.:273.25   3rd Qu.:34.51   3rd Qu.:273.25   3rd Qu.:22.25
##   Max.   :364.00   Max.   :46.49   Max.   :364.00   Max.   :30.75
##
##   RankCenterPts        PFPts           RankPFPts           SFPts
```

```
##    Min.   :  1.00   Min.   : 9.12   Min.   :  1.00   Min.   : 8.12
##    1st Qu.: 91.75   1st Qu.:17.34   1st Qu.: 91.75   1st Qu.:16.91
##    Median :182.50   Median :19.55   Median :182.50   Median :19.68
##    Mean   :182.50   Mean   :19.79   Mean   :182.50   Mean   :19.76
##    3rd Qu.:273.25   3rd Qu.:21.99   3rd Qu.:273.25   3rd Qu.:22.33
##    Max.   :364.00   Max.   :29.82   Max.   :364.00   Max.   :32.41
##
##     RankSFPts          SGPts         RankSGPts          PGPts
##    Min.   :  1.00   Min.   :11.43   Min.   :  1.00   Min.   :11.03
##    1st Qu.: 91.75   1st Qu.:18.13   1st Qu.: 91.75   1st Qu.:17.55
##    Median :182.50   Median :20.45   Median :182.50   Median :19.89
##    Mean   :182.50   Mean   :20.54   Mean   :182.50   Mean   :20.44
##    3rd Qu.:273.25   3rd Qu.:22.57   3rd Qu.:273.25   3rd Qu.:23.33
##    Max.   :364.00   Max.   :31.00   Max.   :364.00   Max.   :32.81
##
##     RankPGPts         CenterOR        RankCenterOR        PFOR
##    Min.   :  1.00   Min.   :10.84   Min.   :  1.00   Min.   : 9.40
##    1st Qu.: 91.75   1st Qu.:30.57   1st Qu.: 91.75   1st Qu.:21.14
##    Median :182.50   Median :35.84   Median :182.50   Median :25.95
##    Mean   :182.50   Mean   :35.67   Mean   :182.50   Mean   :26.10
##    3rd Qu.:273.25   3rd Qu.:40.36   3rd Qu.:273.25   3rd Qu.:30.48
##    Max.   :364.00   Max.   :61.59   Max.   :364.00   Max.   :43.91
##
##     RankPFOR           SFOR          RankSFOR           SGOR
##    Min.   :  1.00   Min.   : 4.30   Min.   :  1.00   Min.   : 2.920
##    1st Qu.: 91.75   1st Qu.:13.19   1st Qu.: 91.75   1st Qu.: 8.057
##    Median :182.50   Median :17.59   Median :182.50   Median :10.805
##    Mean   :182.50   Mean   :17.70   Mean   :182.50   Mean   :11.399
##    3rd Qu.:273.25   3rd Qu.:21.44   3rd Qu.:273.25   3rd Qu.:14.127
##    Max.   :364.00   Max.   :40.68   Max.   :364.00   Max.   :32.340
##
##     RankSGOR           PGOR          RankPGOR          CenterDR
##    Min.   :  1.00   Min.   : 2.870   Min.   :  1.00   Min.   :13.78
##    1st Qu.: 91.75   1st Qu.: 6.285   1st Qu.: 91.75   1st Qu.:22.79
##    Median :182.50   Median : 8.320   Median :182.50   Median :25.74
##    Mean   :182.50   Mean   : 9.078   Mean   :182.50   Mean   :25.99
##    3rd Qu.:273.25   3rd Qu.:11.280   3rd Qu.:273.25   3rd Qu.:28.89
##    Max.   :364.00   Max.   :24.230   Max.   :364.00   Max.   :39.51
##
##    RankCenterDR         PFDR          RankPFDR           SFDR
##    Min.   :  1.00   Min.   :13.39   Min.   :  1.00   Min.   :10.74
##    1st Qu.: 91.75   1st Qu.:20.52   1st Qu.: 91.75   1st Qu.:16.61
##    Median :182.50   Median :23.26   Median :182.50   Median :19.02
##    Mean   :182.50   Mean   :23.27   Mean   :182.50   Mean   :19.44
##    3rd Qu.:273.25   3rd Qu.:25.79   3rd Qu.:273.25   3rd Qu.:21.85
##    Max.   :364.00   Max.   :37.11   Max.   :364.00   Max.   :34.41
##
##     RankSFDR           SGDR          RankSGDR           PGDR
##    Min.   :  1.00   Min.   : 8.03   Min.   :  1.00   Min.   : 7.71
##    1st Qu.: 91.75   1st Qu.:14.22   1st Qu.: 91.75   1st Qu.:12.60
##    Median :182.50   Median :16.24   Median :182.50   Median :14.26
##    Mean   :182.50   Mean   :16.52   Mean   :182.50   Mean   :14.74
##    3rd Qu.:273.25   3rd Qu.:18.64   3rd Qu.:273.25   3rd Qu.:16.51
##    Max.   :364.00   Max.   :28.87   Max.   :364.00   Max.   :23.48
##
##     RankPGDR         Net.Rating        Net.Rating.Rank Mapped.Conference.Name
##    Min.   :  1.00   Min.   :-42.20000   Min.   :   1    Length:364
##    1st Qu.: 91.75   1st Qu.: -9.30000   1st Qu.:2205    Class :character
##    Median :182.50   Median : -1.75000   Median :4422    Mode  :character
##    Mean   :182.50   Mean   : -0.00192   Mean   :4227
##    3rd Qu.:273.25   3rd Qu.:  7.60000   3rd Qu.:6394
##    Max.   :364.00   Max.   : 38.00000   Max.   :8313
##
##    Mapped.ESPN.Team.Name Current.Coach      Full.Team.Name        Since
##    Length:364            Length:364         Length:364         Min.   :198485
##    Class :character      Class :character   Class :character   1st Qu.:201819
##    Mode  :character      Mode  :character   Mode  :character   Median :202122
##                                                                Mean   :201946
##                                                                3rd Qu.:202324
##                                                                Max.   :202425
##
##    Active.Coaching.Length Active.Coaching.Length.Index      Seed
##    Length:364            Min.   : 1.000               Min.   :0
##    Class :character      1st Qu.: 2.000               1st Qu.:0
##    Mode  :character      Median : 4.000               Median :0
##                          Mean   : 5.742               Mean   :0
##                          3rd Qu.: 7.000               3rd Qu.:0
##                          Max.   :40.000               Max.   :0
##
```

```
##        Region          Post.Season.Tournament Post.Season.Tournament.Sorting.Index
##  Length:364            Length:364             Min.   :5
##  Class :character      Class :character       1st Qu.:5
##  Mode  :character      Mode  :character       Median :5
##                                               Mean   :5
##                                               3rd Qu.:5
##                                               Max.   :5
##
##  Top.12.in.AP.Top.25.During.Week.6.
##  Length:364
##  Class :character
##  Mode  :character
##
##
##
##
```

```
df %>% filter(Season == 2025) %>%
  select(Seed, AdjEM, Net.Rating, AdjOE, Adjusted.Offensive.Efficiency,
         Raw.Offensive.Efficiency, OE, eFGPct, FG2Pct, FG3Pct, ORPct,
         FTRate, BlockPct, Experience, ARate, StlRate, DFP,
         Avg.Possession.Length..Defense., FTPct, EffectiveHeight,
         OffFT, Def2PtFG)
```

```
##       Seed      AdjEM Net.Rating     AdjOE Adjusted.Offensive.Efficiency
## 1        0 38.0870000       38.0 128.1000                         128.1
## 2        0 35.5678000       35.6 128.7340                         128.8
## 3        0 35.3956000       35.4 123.5060                         123.6
## 4        0 34.8972000       34.9 127.2930                         127.3
## 5        0 30.9073000       30.9 119.6780                         119.7
## 6        0 30.6962000       30.7 126.8450                         126.9
## 7        0 28.0678000       28.1 125.3140                         125.4
## 8        0 27.8208000       27.8 118.1550                         118.2
## 9        0 27.3128000       27.3 123.6340                         123.7
## 10       0 27.0189000       27.0 119.4790                         119.5
## 11       0 26.5985000       26.6 117.9780                         118.0
## 12       0 26.2714000       26.3 123.1450                         123.2
## 13       0 25.9166000       25.9 113.5490                         113.6
## 14       0 25.8199000       25.8 122.8420                         122.9
## 15       0 24.3634000       24.3 125.3780                         125.4
## 16       0 24.3129000       24.3 123.9260                         124.0
## 17       0 24.0850000       24.1 116.3100                         116.4
## 18       0 23.9511000       23.9 118.6960                         118.7
## 19       0 23.8541000       23.9 124.2140                         124.3
## 20       0 23.6288000       23.6 121.6910                         121.7
## 21       0 23.2751000       23.3 116.0110                         116.1
## 22       0 23.1346000       23.1 115.3610                         115.4
## 23       0 22.6862000       22.6 118.3040                         118.3
## 24       0 22.3941000       22.4 123.0330                         123.1
## 25       0 22.0957000       22.1 117.9130                         118.0
## 26       0 21.8146000       21.8 116.8550                         116.9
## 27       0 21.5565000       21.6 117.7160                         117.8
## 28       0 21.6445000       21.6 116.4940                         116.5
## 29       0 21.1228000       21.1 120.8430                         120.9
## 30       0 20.8522000       20.9 116.8230                         116.9
## 31       0 20.1248000       20.2 118.8210                         118.9
## 32       0 20.2130000       20.2 116.7020                         116.7
## 33       0 19.5556000       19.6 118.9320                         119.0
## 34       0 19.3599000       19.4 122.0080                         122.1
## 35       0 19.3133000       19.3 115.4940                         115.5
## 36       0 19.1372000       19.1 117.0450                         117.1
## 37       0 18.3544000       18.3 117.6730                         117.7
## 38       0 18.3331000       18.3 119.0520                         119.1
## 39       0 18.2159000       18.2 114.9720                         115.0
## 40       0 17.6828000       17.7 112.9620                         113.0
## 41       0 17.3591000       17.4 112.5270                         112.6
## 42       0 17.1723000       17.2 115.4670                         115.5
## 43       0 17.1603000       17.1 116.7700                         116.8
## 44       0 16.7361000       16.7 116.6800                         116.7
## 45       0 16.6140000       16.6 116.1270                         116.2
## 46       0 16.4687000       16.5 113.9390                         114.0
## 47       0 16.3105000       16.3 109.8360                         109.9
## 48       0 16.2098000       16.2 113.6720                         113.7
## 49       0 16.1756000       16.2 116.6420                         116.7
## 50       0 16.1469000       16.2 118.0150                         118.1
## 51       0 15.5771000       15.6 113.5580                         113.6
## 52       0 15.2222000       15.2 120.7520                         120.8
```

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## 53     0   15.1114000   15.1 109.0600                    109.1
## 54     0   14.7999000   14.8 110.5600                    110.6
## 55     0   14.8920000   14.8 113.3060                    113.3
## 56     0   14.2735000   14.3 118.3190                    118.4
## 57     0   14.1620000   14.2 115.9120                    116.0
## 58     0   14.1483000   14.1 112.6550                    112.7
## 59     0   13.7314000   13.7 114.3400                    114.4
## 60     0   13.6804000   13.6 114.7070                    114.7
## 61     0   13.6356000   13.6 115.6940                    115.7
## 62     0   13.1925000   13.2 111.8720                    111.9
## 63     0   12.9857000   13.0 116.6910                    116.7
## 64     0   12.8452000   12.9 107.7230                    107.8
## 65     0   12.8603000   12.8 119.6050                    119.6
## 66     0   12.7306000   12.7 111.7640                    111.8
## 67     0   12.1760000   12.2 109.4110                    109.5
## 68     0   12.0202000   12.0 110.2500                    110.3
## 69     0   11.5973000   11.6 115.4230                    115.5
## 70     0   11.4319000   11.4 110.4950                    110.5
## 71     0   11.2088000   11.2 112.5560                    112.6
## 72     0   11.1674000   11.1 108.1960                    108.2
## 73     0   11.0120000   11.0 115.6450                    115.7
## 74     0   11.2770000   10.9 115.1980                    114.5
## 75     0   10.6069000   10.7 112.4100                    112.5
## 76     0   10.7534000   10.7 115.0550                    115.1
## 77     0   10.5687000   10.6 116.1610                    116.2
## 78     0   10.6084000   10.6 111.0840                    111.1
## 79     0    9.9359800    9.9 112.7850                    112.8
## 80     0    9.5208500    9.6 108.8200                    108.9
## 81     0    9.5839900    9.6 105.3820                    105.4
## 82     0    9.5046900    9.5 112.2140                    112.3
## 83     0    9.4889600    9.4 112.7020                    112.7
## 84     0    9.3095500    9.3 118.4450                    118.5
## 85     0    9.3541000    9.3 116.3010                    116.3
## 86     0    8.8133100    8.9 105.8140                    105.9
## 87     0    8.8274500    8.8 108.3840                    108.4
## 88     0    8.6261700    8.6 109.0710                    109.1
## 89     0    8.5076700    8.5 110.1630                    110.2
## 90     0    8.3959500    8.4 108.8150                    108.9
## 91     0    7.9452200    7.9 110.1640                    110.2
## 92     0    7.5136600    7.5 107.5520                    107.6
## 93     0    7.1323700    7.2 107.7220                    107.8
## 94     0    7.0829100    7.1 111.3350                    111.4
## 95     0    7.1064000    7.1 111.5340                    111.6
## 96     0    6.9251500    7.0 106.8240                    106.9
## 97     0    6.9940300    7.0 112.1770                    112.2
## 98     0    6.8653900    6.9 107.7180                    107.8
## 99     0    6.6832600    6.7 113.3460                    113.4
## 100    0    6.3424600    6.3 107.7580                    107.8
## 101    0    5.8657800    5.9 109.9090                    110.0
## 102    0    5.6291400    5.6 106.2810                    106.3
## 103    0    5.2615900    5.3 110.7140                    110.8
## 104    0    5.1507200    5.2 109.3330                    109.4
## 105    0    5.1447000    5.2 112.3430                    112.4
## 106    0    5.0834300    5.1 109.1070                    109.2
## 107    0    5.0453200    5.0 109.1050                    109.1
## 108    0    4.9035800    4.9 115.1950                    115.2
## 109    0    4.9056100    4.9 111.9920                    112.0
## 110    0    4.8832400    4.9 117.1800                    117.2
## 111    0    4.9054400    4.9 107.7530                    107.8
## 112    0    4.7924700    4.8 106.0580                    106.1
## 113    0    4.6501900    4.7 111.3510                    111.4
## 114    0    4.5960000    4.6 108.0280                    108.1
## 115    0    4.4416600    4.5 112.3180                    112.4
## 116    0    4.4015000    4.4 112.6150                    112.7
## 117    0    4.3926600    4.4 110.4290                    110.5
## 118    0    4.3573700    4.4 109.7160                    109.8
## 119    0    4.2618600    4.3 109.1100                    109.2
## 120    0    4.2784800    4.3 109.1760                    109.2
## 121    0    4.1461700    4.1 113.6840                    113.7
## 122    0    4.1051700    4.1 107.4720                    107.5
## 123    0    4.0352100    4.0 112.0760                    112.1
## 124    0    3.9229500    3.9 111.6790                    111.7
## 125    0    3.6893900    3.7 108.9750                    109.0
## 126    0    3.7730800    3.7 107.6030                    107.6
## 127    0    3.4740200    3.5 113.6570                    113.7
## 128    0    3.3768200    3.4 112.3640                    112.4
## 129    0    3.1255900    3.2 107.1270                    107.2
## 130    0    2.8796800    2.9 106.1430                    106.2
## 131    0    2.9483900    2.9 104.3710                    104.4
```

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## 132   0   2.8158700     2.8 113.8720                    114.0
## 133   0   2.8033600     2.8 115.4510                    115.5
## 134   0   2.7407500     2.8 109.7220                    109.8
## 135   0   2.6919900     2.7 106.7840                    106.8
## 136   0   2.6773500     2.7 105.5410                    105.6
## 137   0   2.2944500     2.3 109.6400                    109.7
## 138   0   2.0654000     2.1 107.0420                    107.1
## 139   0   1.9335900     2.0 111.9090                    112.0
## 140   0   1.8847700     1.9 106.8100                    106.9
## 141   0   1.8988900     1.9 106.4470                    106.5
## 142   0   1.7621500     1.8 107.3090                    107.4
## 143   0   1.7744100     1.8 107.2070                    107.3
## 144   0   1.5757600     1.6 104.1670                    104.2
## 145   0   1.6392200     1.6 108.5680                    108.6
## 146   0   1.5396200     1.5 109.7580                    109.8
## 147   0   1.5742900     1.5 110.1870                    110.2
## 148   0   1.5533800     1.5 108.7950                    108.8
## 149   0   0.8920900     0.8 108.1890                    108.2
## 150   0   0.6839980     0.7 106.8380                    106.9
## 151   0   0.6553720     0.7 110.4050                    110.5
## 152   0   0.6294560     0.6 107.3640                    107.4
## 153   0   0.6398740     0.6 106.8620                    106.9
## 154   0   0.6491780     0.6 106.1030                    106.1
## 155   0   0.5345050     0.6 104.2070                    104.3
## 156   0   0.5195660     0.5 111.0990                    111.1
## 157   0   0.3988520     0.4 110.8460                    110.9
## 158   0   0.4037920     0.4 105.3600                    105.4
## 159   0   0.2520810     0.3 106.0190                    106.1
## 160   0   0.2978010     0.3 103.4500                    103.5
## 161   0   0.1885150     0.2 106.4520                    106.5
## 162   0   0.0712060     0.1 110.5170                    110.6
## 163   0  -0.0479318     0.0 108.3550                    108.4
## 164   0  -0.0956877    -0.1 107.3200                    107.4
## 165   0  -0.1774880    -0.1 102.0220                    102.1
## 166   0  -0.0790135    -0.1 109.0510                    109.1
## 167   0  -0.3128590    -0.3 105.9200                    106.0
## 168   0  -0.4022660    -0.4 103.7160                    103.8
## 169   0  -0.5613490    -0.5 101.1100                    101.2
## 170   0  -0.5206240    -0.5 106.3330                    106.4
## 171   0  -0.5796720    -0.5 110.0160                    110.1
## 172   0  -0.6879730    -0.7 108.1620                    108.2
## 173   0  -0.7746440    -0.8 105.6790                    105.7
## 174   0  -0.8389680    -0.9 106.9850                    107.0
## 175   0  -0.9645930    -1.0 110.3930                    110.4
## 176   0  -1.1499700    -1.1 106.8450                    106.9
## 177   0  -1.3189800    -1.3 107.1740                    107.2
## 178   0  -1.6243100    -1.4 105.8440                    105.5
## 179   0  -1.4615700    -1.5 101.7550                    101.8
## 180   0  -1.5756200    -1.6 109.5870                    109.6
## 181   0  -1.5961300    -1.6 107.5770                    107.6
## 182   0  -1.7415300    -1.7 105.4410                    105.5
## 183   0  -1.7444000    -1.8  99.7977                     99.8
## 184   0  -1.7227600    -1.8 109.6910                    109.7
## 185   0  -2.0205600    -2.0 105.3120                    105.4
## 186   0  -1.9818000    -2.0 103.6010                    103.6
## 187   0  -2.0591200    -2.1 103.9800                    104.0
## 188   0  -2.1717700    -2.2  99.8644                     99.9
## 189   0  -2.2703600    -2.3 106.3020                    106.3
## 190   0  -2.4056800    -2.4 103.0640                    103.1
## 191   0  -2.4337800    -2.5 107.1990                    107.2
## 192   0  -2.5299500    -2.6 113.4940                    113.5
## 193   0  -2.7852500    -2.7 100.4520                    100.6
## 194   0  -2.7432400    -2.7 105.6490                    105.7
## 195   0  -2.8078900    -2.8 104.5890                    104.6
## 196   0  -2.8415900    -2.9 103.4820                    103.5
## 197   0  -2.9807300    -3.0 107.4420                    107.5
## 198   0  -3.0045300    -3.0 109.4200                    109.5
## 199   0  -3.1007900    -3.1 105.3860                    105.4
## 200   0  -3.1040100    -3.1 106.1270                    106.2
## 201   0  -3.0917800    -3.1 109.0440                    109.1
## 202   0  -3.2179100    -3.2 109.0760                    109.1
## 203   0  -3.2909300    -3.3 106.2720                    106.3
## 204   0  -3.3018400    -3.3 101.8930                    101.9
## 205   0  -3.2871000    -3.3 102.1630                    102.2
## 206   0  -3.4535500    -3.5 100.5780                    100.6
## 207   0  -3.4134500    -3.5  98.7929                     98.8
## 208   0  -3.6352300    -3.6 103.1780                    103.3
## 209   0  -3.6946600    -3.7 103.6560                    103.7
## 210   0  -3.7861100    -3.8 105.9650                    106.0
```

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## 211   0  -3.8527400    -3.8 100.7180                      100.8
## 212   0  -3.8609100    -3.9 105.8620                      105.9
## 213   0  -3.8951300    -3.9 105.9560                      106.0
## 214   0  -3.9953300    -4.0 102.0370                      102.1
## 215   0  -4.1286400    -4.1 102.3530                      102.4
## 216   0  -4.1151200    -4.1 103.7620                      103.8
## 217   0  -4.2209300    -4.2 106.4270                      106.5
## 218   0  -4.3278300    -4.3 101.9340                      102.0
## 219   0  -4.4639500    -4.5  97.7669                       97.8
## 220   0  -4.5478700    -4.5 101.6500                      101.7
## 221   0  -4.4740000    -4.5  97.9591                       98.0
## 222   0  -4.5951900    -4.6 103.8110                      103.8
## 223   0  -4.6794900    -4.6 109.4960                      109.6
## 224   0  -4.7387400    -4.8 103.1990                      103.2
## 225   0  -4.9033700    -4.9 102.7640                      102.8
## 226   0  -5.0382200    -5.0 107.4580                      107.5
## 227   0  -5.0683400    -5.1  99.1694                       99.2
## 228   0  -5.2773900    -5.2 106.4210                      106.5
## 229   0  -5.2375500    -5.2 102.6380                      102.7
## 230   0  -5.3020800    -5.3 107.3210                      107.4
## 231   0  -5.4055800    -5.4 104.5260                      104.6
## 232   0  -5.5760200    -5.6 109.3750                      109.4
## 233   0  -5.7050800    -5.7 102.6200                      102.7
## 234   0  -5.7104900    -5.7  98.9492                       99.0
## 235   0  -5.8572100    -5.8 100.4440                      100.5
## 236   0  -5.9584000    -5.9 102.1190                      102.2
## 237   0  -5.8577100    -5.9 108.4590                      108.5
## 238   0  -6.0255100    -6.0 103.0620                      103.1
## 239   0  -6.0534600    -6.1 106.3760                      106.4
## 240   0  -6.1248400    -6.1 109.3120                      109.4
## 241   0  -6.1280200    -6.1 112.1080                      112.2
## 242   0  -6.2315300    -6.2 108.6340                      108.7
## 243   0  -6.1766000    -6.2 104.7440                      104.8
## 244   0  -6.1815300    -6.2  99.1762                       99.2
## 245   0  -6.2782800    -6.3 101.0580                      101.1
## 246   0  -6.3889900    -6.4 101.0580                      101.1
## 247   0  -6.5132000    -6.5  97.1614                       97.2
## 248   0  -6.5769200    -6.6 106.0470                      106.1
## 249   0  -6.5198100    -6.6 104.2940                      104.3
## 250   0  -6.9891300    -7.0 102.6530                      102.7
## 251   0  -7.2279500    -7.3  99.4814                       99.5
## 252   0  -7.4083200    -7.4 100.3250                      100.4
## 253   0  -7.4545300    -7.4 102.8330                      102.9
## 254   0  -7.3342600    -7.4 102.2040                      102.2
## 255   0  -7.5181900    -7.5  96.6829                       96.7
## 256   0  -7.6475100    -7.6 101.2790                      101.4
## 257   0  -7.6555200    -7.7 100.8910                      100.9
## 258   0  -7.7779400    -7.8 104.5510                      104.6
## 259   0  -7.9264300    -7.9 109.5690                      109.6
## 260   0  -7.9323200    -8.0 104.6830                      104.7
## 261   0  -8.0037600    -8.0  98.2766                       98.3
## 262   0  -8.0130500    -8.0 104.7450                      104.8
## 263   0  -8.0414000    -8.1  99.2819                       99.3
## 264   0  -8.1430800    -8.2 103.0780                      103.1
## 265   0  -8.2296000    -8.2 106.4570                      106.5
## 266   0  -8.1427700    -8.2 107.7830                      107.8
## 267   0  -8.5722600    -8.5 103.9110                      104.0
## 268   0  -8.6215400    -8.7 101.3970                      101.4
## 269   0  -8.9125900    -8.9 105.8020                      105.9
## 270   0  -9.0408800    -9.0 103.2530                      103.3
## 271   0  -9.1144200    -9.1  97.1243                       97.2
## 272   0  -9.1361800    -9.1 102.3480                      102.4
## 273   0  -9.2536500    -9.3 101.8570                      101.9
## 274   0  -9.3369200    -9.3 103.5170                      103.6
## 275   0  -9.4613800    -9.4 107.3100                      107.4
## 276   0  -9.5526700    -9.5 106.3820                      106.5
## 277   0  -9.5515000    -9.5  95.1140                       95.2
## 278   0  -9.5977400    -9.6 101.7850                      101.8
## 279   0  -9.5325300    -9.6 100.5990                      100.6
## 280   0  -9.5919000    -9.6  96.5850                       96.6
## 281   0  -9.7176100    -9.7 104.3640                      104.4
## 282   0 -10.1975000   -10.2 100.6950                      100.7
## 283   0 -10.3160000   -10.3 100.1500                      100.2
## 284   0 -10.2547000   -10.3 101.4710                      101.5
## 285   0 -10.4019000   -10.4  94.8778                       94.9
## 286   0 -10.3799000   -10.4  93.0954                       93.1
## 287   0 -10.5765000   -10.6  97.2659                       97.3
## 288   0 -10.5539000   -10.6 100.2760                      100.3
## 289   0 -10.6762000   -10.7  98.1462                       98.2
```

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## 290     0 -10.8797000     -10.9  98.9854                        99.0
## 291     0 -10.9410000     -10.9 103.9930                       104.1
## 292     0 -11.0011000     -11.0 101.8000                       101.8
## 293     0 -11.0004000     -11.0 101.7400                       101.8
## 294     0 -10.9858000     -11.0 101.4690                       101.5
## 295     0 -11.1325000     -11.1  98.2275                        98.3
## 296     0 -11.2611000     -11.3  99.4562                        99.5
## 297     0 -11.4252000     -11.4  94.9180                        95.0
## 298     0 -11.3268000     -11.4  97.5930                        97.6
## 299     0 -11.3891000     -11.4 106.5350                       106.6
## 300     0 -11.4415000     -11.4 101.2270                       101.3
## 301     0 -11.7435000     -11.8 101.8960                       101.9
## 302     0 -11.9895000     -12.0  99.6903                        99.7
## 303     0 -12.0864000     -12.1 101.8600                       101.9
## 304     0 -12.3016000     -12.3 100.8490                       100.9
## 305     0 -12.2708000     -12.3  99.0618                        99.1
## 306     0 -12.3601000     -12.4 100.4770                       100.5
## 307     0 -12.5335000     -12.5 101.6560                       101.7
## 308     0 -12.5341000     -12.5  98.7324                        98.8
## 309     0 -12.5012000     -12.5  98.3605                        98.4
## 310     0 -12.5417000     -12.6  98.9677                        99.0
## 311     0 -12.7836000     -12.8  99.7020                        99.7
## 312     0 -13.2474000     -13.2 103.6260                       103.7
## 313     0 -13.2855000     -13.3 101.6970                       101.7
## 314     0 -13.3703000     -13.3 109.5250                       109.6
## 315     0 -13.3838000     -13.4  93.5484                        93.6
## 316     0 -13.5110000     -13.5  97.7500                        97.8
## 317     0 -13.8680000     -13.8  98.8262                        98.9
## 318     0 -13.7174000     -13.8 101.4960                       101.5
## 319     0 -13.8877000     -13.9 101.8430                       101.9
## 320     0 -13.9624000     -14.0  95.1470                        95.2
## 321     0 -14.1402000     -14.1 101.1300                       101.2
## 322     0 -14.2390000     -14.2 100.8380                       100.9
## 323     0 -14.3697000     -14.3 102.7210                       102.8
## 324     0 -14.5143000     -14.5  99.8903                        99.9
## 325     0 -14.6083000     -14.7  97.6006                        97.6
## 326     0 -14.7821000     -14.7  94.1183                        94.2
## 327     0 -14.8144000     -14.8  97.6768                        97.7
## 328     0 -14.8983000     -14.9 102.8860                       102.9
## 329     0 -15.0317000     -15.0 100.4580                       100.5
## 330     0 -15.0785000     -15.1  96.5379                        96.6
## 331     0 -15.4426000     -15.5 101.6010                       101.6
## 332     0 -15.7260000     -15.7 101.9080                       102.0
## 333     0 -15.9208000     -16.0  98.1779                        98.2
## 334     0 -16.1027000     -16.1 100.7350                       100.8
## 335     0 -16.4085000     -16.4  97.0185                        97.1
## 336     0 -16.5489000     -16.6  98.2845                        98.3
## 337     0 -17.0245000     -17.1  95.0938                        95.1
## 338     0 -17.1165000     -17.1  95.2680                        95.3
## 339     0 -17.5967000     -17.5  96.3090                        96.4
## 340     0 -17.5288000     -17.6  98.4002                        98.4
## 341     0 -17.6634000     -17.7 103.7970                       103.8
## 342     0 -17.9327000     -17.9  95.3580                        95.4
## 343     0 -17.8343000     -17.9  98.7980                        98.8
## 344     0 -18.1466000     -18.1  94.3442                        94.4
## 345     0 -18.0971000     -18.1  92.2253                        92.3
## 346     0 -18.1656000     -18.2  97.6939                        97.7
## 347     0 -18.2195000     -18.2  99.0436                        99.1
## 348     0 -18.3530000     -18.3  96.1254                        96.2
## 349     0 -18.3363000     -18.3  99.3635                        99.4
## 350     0 -18.2857000     -18.3  96.8984                        96.9
## 351     0 -18.3904000     -18.4  93.9265                        94.0
## 352     0 -19.3017000     -19.3  99.4075                        99.5
## 353     0 -20.2953000     -20.3  93.2417                        93.3
## 354     0 -20.6378000     -20.6 101.2190                       101.3
## 355     0 -21.5507000     -21.5  93.8358                        93.9
## 356     0 -21.7971000     -21.8  94.9736                        95.0
## 357     0 -22.1468000     -22.1  95.5533                        95.6
## 358     0 -22.6702000     -22.7  95.7733                        95.8
## 359     0 -22.9138000     -23.0  99.0013                        99.0
## 360     0 -23.5544000     -23.6  91.9958                        92.0
## 361     0 -24.3182000     -24.3  87.3312                        87.4
## 362     0 -24.3209000     -24.4  91.8903                        91.9
## 363     0 -26.1062000     -26.1  95.0210                        95.1
## 364     0 -42.2232000     -42.2  82.5490                        82.6
##       Raw.Offensive.Efficiency       OE  eFGPct   FG2Pct   FG3Pct   ORPct
## 1                        124.6 124.5680 57.44898 58.13953 37.74011 35.42260
## 2                        121.5 121.5000 55.94636 56.26598 36.98630 34.59062
## 3                        117.1 117.1370 52.76058 49.13522 39.78979 36.49374
```

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## 4                    119.8 119.8460 54.99022 56.57093 35.30726 38.20225
## 5                    114.1 114.1070 52.92350 54.01530 34.31122 35.91954
## 6                    119.2 119.1550 56.55658 59.85599 35.12658 34.99157
## 7                    119.9 119.8830 55.45546 54.33996 37.89238 34.25760
## 8                    112.7 112.7200 51.29151 53.91850 30.59581 35.76779
## 9                    121.2 121.2390 55.71429 57.76664 34.42390 32.68379
## 10                   113.8 113.8200 54.56204 55.07845 35.78501 32.16981
## 11                   115.1 115.1100 53.90071 52.71013 37.37518 31.52174
## 12                   117.1 117.0990 54.58055 55.45723 35.74514 28.25688
## 13                   109.9 109.9130 49.44496 51.43238 29.95461 37.46106
## 14                   116.0 115.9750 53.00995 55.25915 32.52149 36.26667
## 15                   120.4 120.3670 56.19748 56.73250 36.96203 33.73272
## 16                   116.9 116.9230 56.00098 55.94937 37.38208 28.68217
## 17                   109.4 109.4030 47.47264 47.99666 31.06796 42.04545
## 18                   115.1 115.0720 53.63171 52.32558 37.15047 33.72835
## 19                   117.0 117.0290 56.33387 55.50737 38.45070 30.96647
## 20                   115.1 115.1200 52.31898 57.27029 31.14919 36.00668
## 21                   109.0 109.0040 53.14496 53.36323 35.15065 30.41958
## 22                   114.9 114.8610 50.86842 51.81675 32.64984 40.52111
## 23                   113.9 113.8800 53.65916 57.32673 33.15678 32.04225
## 24                   117.2 117.2040 57.18274 58.64440 37.07983 33.30300
## 25                   110.7 110.6940 51.08422 51.01180 34.12798 25.35446
## 26                   112.4 112.3950 52.96816 53.08017 35.17964 32.82876
## 27                   112.2 112.2130 52.03488 54.91434 32.46073 30.11647
## 28                   110.5 110.4860 55.04315 58.55263 33.54430 33.04598
## 29                   113.2 113.1970 51.54127 51.22378 34.67532 35.57348
## 30                   115.9 115.8920 52.52824 54.12844 33.82688 37.01707
## 31                   113.2 113.1520 51.74224 55.16956 31.37698 34.07643
## 32                   110.0 110.0170 52.24806 53.03030 34.00268 30.55304
## 33                   113.5 113.4880 54.17062 54.85327 35.33931 29.21635
## 34                   118.1 118.1480 55.53496 57.28782 35.44776 35.57505
## 35                   110.2 110.1520 52.51381 53.84615 33.48348 36.10315
## 36                   111.3 111.2560 56.00962 60.56782 34.20195 26.88275
## 37                   111.9 111.8560 53.52972 52.55537 36.76056 28.97727
## 38                   112.6 112.5810 54.94297 54.57944 36.96498 26.46776
## 39                   116.5 116.5360 55.28684 56.01336 36.36364 25.67308
## 40                   107.9 107.9310 52.73153 54.35855 33.28612 27.56120
## 41                   108.7 108.6910 50.77153 50.62362 34.05573 31.54907
## 42                   111.6 111.5840 53.90539 51.31810 38.82353 25.19763
## 43                   112.9 112.9030 52.53479 51.80908 35.90463 29.78541
## 44                   113.2 113.2060 52.23543 56.44841 31.09354 33.33333
## 45                   112.5 112.5460 55.80504 56.97897 36.15385 26.52860
## 46                   108.1 108.1400 49.76935 49.68847 33.28336 31.17444
## 47                   105.0 104.9840 50.66626 51.64835 32.76923 29.34010
## 48                   107.7 107.7430 51.13039 52.59843 32.12025 31.49819
## 49                   115.3 115.2970 54.67866 53.72425 37.62811 36.72014
## 50                   113.0 113.0400 51.66751 53.59256 32.53769 32.15821
## 51                   111.3 111.2810 54.10923 52.35435 38.38863 34.22509
## 52                   118.7 118.7000 55.99241 57.70677 35.76923 34.62264
## 53                   102.6 102.6410 49.97286 50.85599 32.62662 25.87601
## 54                   106.3 106.2620 50.88250 52.64874 32.01058 32.28895
## 55                   107.6 107.6090 51.55815 53.30317 32.51445 26.78571
## 56                   115.6 115.6380 54.85464 51.11759 39.79849 30.15717
## 57                   114.5 114.5080 55.50761 54.62345 37.67644 32.82236
## 58                   113.3 113.2930 53.82372 54.56410 35.03521 36.04520
## 59                   114.4 114.3870 53.27314 53.16682 35.63748 34.67049
## 60                   111.2 111.2210 54.07366 55.59441 34.25926 28.61357
## 61                   112.4 112.4160 52.21502 52.44240 34.59530 29.04718
## 62                   111.0 110.9870 58.03188 57.59717 39.00256 19.24324
## 63                   110.3 110.3250 54.56744 54.27632 36.74419 28.22026
## 64                   107.7 107.7240 51.94414 51.17253 35.60127 28.61244
## 65                   114.9 114.8580 56.75545 56.56814 38.01653 25.13181
## 66                   110.1 110.1130 53.04090 54.67557 33.95062 29.00627
## 67                   103.6 103.6430 50.59187 51.80723 32.52241 29.40156
## 68                   111.8 111.7850 52.26658 51.14007 36.08618 32.49139
## 69                   107.5 107.5320 49.36954 48.63749 33.60752 32.37868
## 70                   103.8 103.8410 48.87608 49.81096 31.61004 30.35714
## 71                   104.1 104.1360 51.44336 49.80952 35.75064 25.17857
## 72                   103.5 103.5160 49.35466 52.94627 28.50318 26.79245
## 73                   112.2 112.1750 52.61344 52.11946 35.56188 29.59685
## 74                   117.1 117.8700 54.73949 53.54839 38.18898 33.86912
## 75                   108.3 108.3060 51.71414 53.89671 32.61131 34.92741
## 76                   108.9 108.8520 50.56730 51.29450 32.85917 30.78246
## 77                   109.5 109.5400 53.04610 51.71773 36.64430 26.44860
## 78                   110.1 110.1260 52.53623 53.27553 34.45190 29.84155
## 79                   110.4 110.4450 53.72549 55.28674 34.08072 27.42090
## 80                   101.9 101.8790 50.56787 51.89655 32.22061 28.92112
## 81                   105.5 105.5250 51.59314 51.48042 34.52991 32.06967
## 82                   109.2 109.2100 50.43837 50.00000 34.03727 31.05862
```

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## 83                    115.5 115.4880 55.91635 56.69456 36.70151 24.13108
## 84                    121.3 121.3420 56.41581 57.37123 36.61581 33.98821
## 85                    115.5 115.5290 54.58880 54.46097 36.54485 31.82819
## 86                    100.3 100.2740 46.80000 47.75510 30.00000 33.01887
## 87                    104.8 104.8240 50.44133 52.07297 31.80556 31.58829
## 88                    104.8 104.8020 51.08753 55.21127 30.48780 29.46429
## 89                    104.7 104.6610 49.86157 50.77855 32.15385 30.19713
## 90                    105.4 105.3680 50.70729 52.33798 31.66397 29.69035
## 91                    110.8 110.7850 49.26050 50.51635 31.79872 33.95349
## 92                    104.8 104.8330 49.72618 49.62343 33.28051 27.27273
## 93                    104.6 104.5590 50.35300 49.88142 34.12256 30.54852
## 94                    108.0 107.9910 51.69402 50.80440 35.45198 29.63964
## 95                    112.9 112.9380 56.78060 54.45920 40.00000 26.31058
## 96                    107.1 107.1330 51.04972 52.95587 31.52709 32.58004
## 97                    106.9 106.8550 52.12766 51.05105 35.61151 33.18057
## 98                    108.6 108.5530 50.08523 53.86200 30.29151 38.58195
## 99                    115.6 115.5640 55.49423 55.83104 36.72566 32.79279
## 100                   101.0 101.0450 48.25613 48.02687 32.45342 30.98346
## 101                   111.3 111.2550 55.47904 55.27544 37.22871 25.59834
## 102                   105.6 105.6180 50.22371 51.89003 31.41026 28.03030
## 103                   105.3 105.3060 52.65700 49.94720 37.51763 22.36025
## 104                   107.4 107.3610 56.32689 59.78774 35.27357 23.62525
## 105                   114.7 114.6690 52.21741 53.72881 33.03438 35.45706
## 106                   109.4 109.4100 51.81670 51.48903 35.03521 35.42435
## 107                   103.4 103.4460 50.61296 50.09074 34.36989 27.50965
## 108                   115.3 115.3440 56.45798 57.48194 36.81592 25.77963
## 109                   115.5 115.4500 51.72759 51.45929 34.82014 33.50427
## 110                   117.8 117.8020 51.18402 50.80028 34.74576 38.48123
## 111                   107.2 107.2370 53.33145 53.76344 35.16043 29.24710
## 112                   106.8 106.7520 50.70340 51.57179 32.51418 30.93180
## 113                   108.1 108.1490 47.80220 48.15409 31.48148 34.74510
## 114                   107.6 107.6000 50.61418 53.21806 31.33333 32.14612
## 115                   110.9 110.8750 53.21744 53.77932 34.92268 30.74890
## 116                   113.7 113.7080 54.63945 53.97614 36.93182 34.61538
## 117                   106.0 105.9970 51.04379 51.93036 32.81493 31.37931
## 118                   105.2 105.1540 52.67394 53.33979 34.60246 27.22420
## 119                   107.6 107.6110 49.56622 49.13400 33.54430 30.99134
## 120                   106.3 106.3410 50.80386 52.92553 31.70732 30.65371
## 121                   112.8 112.7820 53.27913 54.61140 34.54545 35.54545
## 122                   108.6 108.6420 50.82353 53.57143 31.70103 28.33656
## 123                   114.5 114.5000 57.34797 58.90909 36.53846 25.15658
## 124                   109.5 109.4570 56.66492 57.99821 36.52393 31.30352
## 125                   106.7 106.7450 52.50000 53.45572 34.09786 29.30283
## 126                   105.2 105.1590 48.30367 48.34495 32.15385 28.83046
## 127                   117.3 117.2670 57.80460 58.12236 38.29532 21.42857
## 128                   111.6 111.6470 54.82478 52.93578 38.11149 27.18447
## 129                   103.8 103.8210 49.31034 52.16017 30.59418 32.54494
## 130                   103.8 103.7510 49.97185 49.20635 33.98438 32.93904
## 131                   102.0 101.9540 46.17197 46.07477 30.89172 32.52896
## 132                   115.5 115.5450 58.26693 60.38710 37.34610 26.01726
## 133                   119.1 119.1100 58.23208 56.54450 39.79592 26.23491
## 134                   112.6 112.5970 53.59179 54.51092 34.80742 33.63007
## 135                   105.3 105.3490 48.74346 50.10973 30.20258 31.94444
## 136                   107.0 107.0360 48.66738 50.42808 30.50847 35.74007
## 137                   110.6 110.5770 53.59589 53.16901 36.00000 29.99054
## 138                   110.1 110.1370 51.33745 50.73290 34.91620 35.25862
## 139                   112.6 112.6320 56.02716 56.57328 36.94875 24.60317
## 140                   109.5 109.5240 50.19966 48.87365 34.69945 35.65460
## 141                   105.6 105.5590 49.40205 48.66920 33.66477 29.10584
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## 143                   109.0 108.9780 50.66425 48.00839 36.18234 31.14428
## 144                   102.1 102.0960 46.53524 46.29803 31.30148 29.87974
## 145                   109.3 109.2760 52.08946 52.75362 34.03614 27.24551
## 146                   108.7 108.7400 52.36134 53.27014 34.07311 24.35775
## 147                   108.2 108.1610 49.50495 48.96116 33.49754 32.32498
## 148                   109.8 109.8460 54.62754 52.36052 38.09524 27.57282
## 149                   107.5 107.5070 52.80997 53.34572 34.61538 28.25670
## 150                   109.8 109.7600 50.89374 51.26050 33.47518 34.02836
## 151                   111.0 111.0450 51.14251 49.85836 35.59603 33.82789
## 152                   110.2 110.1930 55.19304 54.06190 37.76398 27.60618
## 153                   107.1 107.0900 47.94912 46.69421 33.37989 35.28919
## 154                   107.4 107.3910 52.37092 51.75747 35.52632 26.54155
## 155                   102.7 102.6870 50.27871 50.70159 33.10345 22.76576
## 156                   112.5 112.4580 53.49087 52.49344 36.71766 29.15129
## 157                   111.6 111.5860 56.36201 57.27788 36.52597 22.57019
## 158                   103.0 102.9980 49.29619 47.69797 34.73344 25.35478
## 159                   107.2 107.2380 52.77450 53.04420 34.74747 31.90429
## 160                   100.4 100.4270 47.86486 48.02867 31.74387 23.52438
## 161                   103.3 103.3430 51.23735 50.33050 35.04868 31.01145
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## 162                    109.9 109.9270 50.66054 50.00000 34.30750 32.00380
## 163                    110.2 110.1550 53.30265 54.96049 33.75706 31.17904
## 164                    103.7 103.6850 50.55340 49.10630 35.08065 26.81359
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## 166                    111.5 111.5120 54.74352 53.95538 37.12213 22.02557
## 167                    104.4 104.4430 48.27676 48.63344 31.74367 33.30442
## 168                    105.2 105.2480 49.30636 49.57045 32.50883 34.50980
## 169                    103.0 102.9560 49.71135 48.80174 34.00936 27.53479
## 170                    108.1 108.1160 49.94650 50.97518 32.25371 32.95945
## 171                    109.5 109.5390 49.91722 48.19277 35.80247 32.02555
## 172                    110.2 110.1530 53.86313 54.07341 35.68345 29.97033
## 173                    104.7 104.7310 48.10127 45.55749 34.97758 30.61578
## 174                    105.7 105.7490 51.06762 51.07632 34.03614 30.01969
## 175                    106.0 105.9830 51.00243 46.98318 38.26772 30.30000
## 176                    107.9 107.9420 48.42499 49.29926 31.21212 33.82997
## 177                    106.7 106.6990 50.13151 53.23610 30.59701 34.09290
## 178                    106.0 106.4220 51.60494 49.94041 35.59539 26.39752
## 179                    104.2 104.1510 50.13951 47.38176 37.00658 35.19395
## 180                    107.3 107.2660 55.22212 55.99613 36.32163 27.60033
## 181                    110.7 110.7300 52.61438 54.86799 31.21019 32.54565
## 182                    102.4 102.3680 48.92325 47.56801 34.44816 28.83046
## 183                    105.0 104.9900 52.18418 53.66516 32.93718 26.54127
## 184                    110.8 110.7630 49.71354 47.74775 34.93827 32.38342
## 185                    106.1 106.0680 52.78884 53.84615 34.25926 20.72336
## 186                    100.6 100.6060 50.32468 49.45274 34.39768 29.95261
## 187                    106.8 106.7760 52.17746 51.94805 35.04399 33.01708
## 188                    101.0 101.0320 49.35519 49.29445 32.95739 20.75134
## 189                    106.2 106.2430 48.57641 47.76828 33.23353 33.71681
## 190                    106.9 106.9210 51.01918 50.62278 34.55882 35.59322
## 191                    105.9 105.9350 49.68821 46.14604 36.11825 27.04225
## 192                    108.6 108.6410 51.94700 55.05717 31.32022 28.22736
## 193                    103.4 103.3690 50.53405 49.68711 34.33476 22.77778
## 194                    105.1 105.0660 51.55192 51.02041 35.06711 30.29440
## 195                    105.3 105.2760 49.18605 49.48980 32.35294 30.91787
## 196                    104.3 104.2700 49.72633 51.14035 31.58661 27.73852
## 197                    108.8 108.8230 50.21251 50.88634 32.84884 36.29032
## 198                    109.2 109.1560 50.74799 49.36102 36.21399 35.09804
## 199                    105.5 105.4960 49.77564 51.15385 31.34615 32.13898
## 200                    109.6 109.6010 53.37655 53.92245 35.04043 23.93567
## 201                    110.8 110.7820 51.98251 52.37668 34.16667 29.72441
## 202                    108.3 108.2670 54.56897 56.61680 35.01722 26.18817
## 203                    107.7 107.7110 52.34588 52.64188 34.64858 31.11511
## 204                    103.9 103.8630 51.33751 51.11111 34.49367 24.00000
## 205                    104.6 104.5820 49.75897 52.13930 31.32251 29.30884
## 206                    104.3 104.3080 50.50147 51.68539 31.97026 33.43080
## 207                     93.9  93.9184 44.74576 43.86677 31.16883 31.21739
## 208                    104.4 104.3990 51.13342 52.12187 33.12000 30.12959
## 209                    104.5 104.5040 51.05519 51.32890 33.69565 31.41798
## 210                    108.0 107.9730 47.79366 48.33333 31.23939 38.30228
## 211                    104.3 104.2880 51.96645 51.00262 35.91065 22.02020
## 212                    105.3 105.2620 47.71414 47.26962 32.28454 26.48557
## 213                    109.0 108.9890 51.31258 52.31054 32.91367 32.12121
## 214                    103.6 103.5710 48.39531 50.65681 29.79866 33.45102
## 215                    100.4 100.4260 45.14099 46.62212 28.01252 34.27673
## 216                    105.2 105.2230 47.51674 46.91358 32.37082 33.98927
## 217                    103.4 103.3890 49.65035 48.92966 34.00576 27.62614
## 218                    104.6 104.6450 48.94886 47.77184 34.01254 31.76044
## 219                     95.7  95.6706 46.68915 47.82609 28.88350 30.06924
## 220                    103.7 103.7290 49.97034 51.47808 31.91489 24.55621
## 221                     98.6  98.5937 48.87153 48.14443 33.24213 25.75188
## 222                    101.5 101.5440 46.05063 44.46970 32.82443 30.53312
## 223                    111.1 111.0590 56.36111 55.40661 38.61968 27.83920
## 224                    102.6 102.6470 50.61889 53.12500 30.95652 30.87912
## 225                    105.1 105.1240 53.83784 54.44546 35.30962 25.99445
## 226                    105.3 105.3060 51.68675 50.62500 35.42857 32.77723
## 227                    100.3 100.2880 49.52140 47.17286 36.61710 30.38570
## 228                    103.3 103.3090 48.66117 49.07652 32.04969 31.52709
## 229                    101.3 101.3220 48.74541 46.52712 35.16295 33.13725
## 230                    108.3 108.2860 53.72093 55.75540 34.53725 26.15830
## 231                    106.8 106.8050 51.20919 49.67860 36.10619 29.55466
## 232                    109.4 109.4390 55.06135 54.08163 37.69231 22.43590
## 233                    103.9 103.9450 49.80706 50.32318 32.69494 31.02821
## 234                    100.3 100.2910 47.22709 47.41907 31.22807 34.44339
## 235                    103.5 103.5350 48.43366 47.53019 33.05439 32.85421
## 236                    104.6 104.6180 51.80442 51.10643 35.11053 23.76726
## 237                    110.1 110.1290 50.74328 50.29528 34.24284 32.63158
## 238                    100.1 100.0640 48.37523 49.71815 31.18280 19.31244
## 239                    105.9 105.8570 48.24903 45.26398 37.18200 35.64815
## 240                    112.5 112.5420 50.07858 51.71836 31.56425 29.99150
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## 241                      111.5 111.5210 50.51308 50.53841 33.63309 29.89510
## 242                      109.2 109.1790 54.57022 56.33673 34.15061 26.10132
## 243                      104.9 104.9250 51.67164 55.43860 31.82927 30.80041
## 244                      101.2 101.1850 49.04363 49.47146 32.32462 26.15830
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## 246                      101.8 101.8130 50.92081 49.12281 35.98673 32.11753
## 247                       96.8  96.7697 46.25229 45.08507 32.24700 27.63533
## 248                      106.9 106.9270 51.14046 49.71751 35.76159 34.48276
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## 250                      104.3 104.2520 50.62500 49.77578 34.46328 32.93173
## 251                      101.9 101.9030 47.89291 47.76346 32.09169 39.11620
## 252                      101.7 101.6700 50.95132 50.14085 34.76454 30.98859
## 253                      105.3 105.2650 49.39792 49.54463 32.78464 28.79342
## 254                      104.4 104.4430 51.34902 52.54970 32.64957 33.77609
## 255                       96.3  96.2576 46.14310 47.44000 28.75696 31.07747
## 256                      101.5 101.4560 50.57432 52.24719 32.03390 24.76636
## 257                       97.4  97.4179 46.10794 45.62951 31.32353 27.01839
## 258                      105.4 105.3820 48.33620 49.61165 30.99579 25.43618
## 259                      110.2 110.1850 53.19797 54.02426 34.99530 27.98635
## 260                      106.1 106.1400 54.15301 54.58846 35.70505 23.69439
## 261                       97.1  97.0866 48.78555 51.49701 29.88338 22.61790
## 262                      106.7 106.7040 51.01163 50.41171 34.50226 31.37584
## 263                      101.6 101.5690 48.97225 49.82847 31.79487 28.84141
## 264                      104.8 104.8140 51.91657 53.11973 32.99320 33.36466
## 265                      106.6 106.5570 50.41819 49.84326 34.37991 32.33743
## 266                      108.6 108.5810 49.67777 50.31334 32.48322 33.70593
## 267                      103.4 103.3980 47.19602 44.18605 35.24962 29.75000
## 268                      102.3 102.3180 49.52301 51.55642 31.16711 27.17391
## 269                      102.4 102.3800 50.14577 49.84488 33.68984 23.91931
## 270                      106.4 106.3740 49.26432 50.24631 31.67883 32.35816
## 271                      101.4 101.4380 49.88318 51.54350 31.41524 30.57199
## 272                      104.7 104.6920 48.01567 46.84385 33.33333 31.26050
## 273                      103.5 103.5280 48.69707 47.13896 34.00810 25.78671
## 274                      107.1 107.1220 51.32858 51.03093 34.55497 26.36555
## 275                      107.9 107.9210 51.76199 51.49834 34.69880 28.87189
## 276                      108.3 108.2840 52.62985 53.88769 33.78151 25.88369
## 277                       94.8  94.7754 46.67294 48.75622 28.74150 34.56670
## 278                      104.3 104.3030 47.25959 45.64460 32.94529 28.25917
## 279                       99.6  99.6008 49.07919 49.28806 32.54190 25.96899
## 280                       98.4  98.4347 47.45042 46.20811 33.12203 30.46661
## 281                      106.3 106.3120 52.39044 52.35023 34.97024 29.69052
## 282                      101.9 101.9280 51.12468 49.07787 36.37931 21.35193
## 283                      101.0 101.0280 44.09136 45.04644 28.25485 36.41221
## 284                       99.5  99.4807 48.14498 50.32140 29.71342 28.84615
## 285                       99.0  98.9900 47.66780 48.80342 30.27211 32.26415
## 286                       89.8  89.7728 45.87989 45.02814 32.24044 28.09365
## 287                       98.6  98.5583 48.18182 48.38188 31.86120 28.84283
## 288                      101.3 101.2580 48.48485 50.22831 31.00775 25.24085
## 289                      101.9 101.8820 50.22409 49.67136 34.02778 23.99635
## 290                      102.9 102.9210 49.82568 49.47064 33.57771 25.54814
## 291                      102.5 102.5000 49.42966 49.88610 32.57143 26.92703
## 292                      102.6 102.6140 50.93486 52.46377 32.26324 26.91903
## 293                      102.4 102.3720 47.62443 48.54995 31.06332 34.67249
## 294                      103.3 103.2830 47.02381 49.34464 28.18898 34.35940
## 295                       95.8  95.7726 46.76282 47.24335 30.51181 30.14403
## 296                       98.0  97.9916 45.69756 46.34921 29.68750 29.86279
## 297                       98.6  98.5721 44.66180 42.39482 32.18589 36.98347
## 298                       97.8  97.7624 47.93616 49.82548 29.80626 28.07018
## 299                      107.3 107.3190 55.23669 53.79443 38.36672 19.41545
## 300                      102.5 102.4720 50.17783 51.13208 32.37640 24.36399
## 301                       99.3  99.3081 48.76791 47.90476 33.38129 26.17080
## 302                      100.6 100.6450 48.70716 50.67358 30.65903 31.18081
## 303                       99.0  98.9555 49.20786 46.97581 35.32423 28.51197
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## 305                      101.4 101.3830 50.17825 50.66530 33.00283 32.45614
## 306                      102.8 102.7540 50.14603 50.67698 32.89086 28.59941
## 307                      104.7 104.7330 48.79899 47.64940 35.47401 34.00211
## 308                      101.5 101.5080 50.33475 50.53038 33.33333 26.13169
## 309                      101.2 101.2410 49.08309 49.65720 32.18232 25.90867
## 310                       95.3  95.2939 50.09282 50.54022 33.07791 22.73603
## 311                      100.2 100.2490 51.56434 52.58883 33.42736 25.35070
## 312                      105.9 105.8510 53.48542 52.57202 36.63366 28.99669
## 313                      102.7 102.6750 47.67687 48.07256 31.17338 32.22707
## 314                      109.3 109.3340 50.42143 46.17143 36.76845 30.56895
## 315                       94.3  94.2697 44.10112 42.62877 31.72269 30.01894
## 316                       97.0  97.0194 45.74932 44.98239 31.33047 25.88134
## 317                      102.0 101.9910 51.59337 50.69860 35.44974 26.87831
## 318                      100.8 100.7500 50.63898 50.83732 33.60768 27.70833
## 319                      103.2 103.1560 53.05457 49.58848 38.51541 23.21244
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## 320                      97.0  97.0352 47.29242 46.94444 31.95876 26.28516
## 321                     103.0 102.9650 52.03379 51.75055 34.94152 23.55415
## 322                     102.8 102.7810 51.05003 49.38821 35.41667 26.35897
## 323                     105.5 105.5270 50.11947 49.86425 33.74341 34.57395
## 324                     103.0 102.9860 49.68997 52.10728 30.82192 25.79143
## 325                      98.4  98.3786 46.11268 45.44000 31.80952 33.57934
## 326                      96.0  96.0029 45.01401 47.64353 26.69903 29.99136
## 327                      98.2  98.1713 45.93909 45.47206 31.22677 31.15234
## 328                     103.7 103.7080 49.96578 48.54981 34.43114 22.56637
## 329                     102.2 102.2060 49.44169 47.65306 34.81013 28.97561
## 330                      94.7  94.6543 49.18320 51.12867 31.40097 28.09612
## 331                     104.8 104.7690 49.04126 49.51745 31.55080 34.08203
## 332                     101.8 101.7510 47.71930 45.77735 33.83234 29.49309
## 333                     100.0  99.9799 46.34015 45.81152 31.46067 28.60825
## 334                     100.8 100.8060 50.93656 52.18855 32.98429 18.35507
## 335                      98.2  98.1718 45.83781 46.30872 30.00000 26.99336
## 336                     100.8 100.8210 47.87363 45.38813 35.20871 27.89318
## 337                      96.2  96.1809 45.59628 43.88379 33.26923 31.90559
## 338                      93.6  93.6196 45.42125 46.28975 29.65779 25.80952
## 339                      97.5  97.4868 48.81797 51.37131 30.37634 24.83599
## 340                      98.7  98.7009 49.77169 53.07414 29.41176 25.32957
## 341                     104.6 104.5990 53.66005 53.87978 35.58106 20.24202
## 342                      96.5  96.4789 48.01917 49.07193 31.15220 27.35382
## 343                     100.6 100.6060 48.63968 45.82463 35.70128 22.19731
## 344                      95.0  94.9907 47.15698 45.37713 32.66332 17.79661
## 345                      94.0  94.0259 43.73642 41.53132 31.59923 31.80328
## 346                      99.2  99.1678 47.44009 50.15641 29.64652 28.54686
## 347                     101.1 101.1270 50.15985 46.64634 37.41379 27.93651
## 348                      96.4  96.4496 45.02544 43.11377 32.50000 29.01786
## 349                      96.9  96.9460 45.86957 45.96078 30.44248 31.64557
## 350                      98.4  98.3878 47.18943 48.35076 29.66418 26.09489
## 351                      90.6  90.6471 44.16928 46.05138 27.02206 25.85551
## 352                     100.7 100.6710 50.23838 50.19120 33.54430 24.05941
## 353                      95.1  95.1264 45.32333 45.03250 30.53435 27.67695
## 354                     102.1 102.1490 51.53430 53.23077 32.75109 25.64356
## 355                      94.9  94.9100 47.13631 46.80851 31.74157 27.35426
## 356                      95.2  95.1747 46.89679 49.49109 29.16667 27.21585
## 357                      98.1  98.0998 48.15732 48.59038 31.53595 24.52830
## 358                      94.4  94.4018 45.65657 44.69453 31.52174 27.05167
## 359                      98.0  97.9873 51.16557 48.41998 36.70520 18.32994
## 360                      94.8  94.8255 45.09804 44.32379 30.79057 33.91154
## 361                      88.7  88.6941 43.98353 44.21642 28.99408 26.51515
## 362                      90.2  90.1502 44.40258 43.40309 30.56653 22.58065
## 363                      96.8  96.8030 50.26675 52.57634 30.98592 26.34055
## 364                      79.4  79.3707 42.10165 41.64194 28.76404 22.66112
##         FTRate  BlockPct Experience     ARate    StlRate DFP
## 1     31.68367 10.499577  1.9471600 58.28989 0.10453951  NA
## 2     33.35020 16.584158  2.7942100 55.48589 0.10091113  NA
## 3     28.43137 16.159496  2.6448900 44.94382 0.12694928  NA
## 4     31.94716 12.429379  2.4201200 52.89855 0.11005525  NA
## 5     34.04372 16.498994  2.9275200 60.55156 0.10684665  NA
## 6     40.31083 10.120311  2.9967800 54.20842 0.07981390  NA
## 7     29.72973  8.116883  2.6491000 58.35996 0.09662976  NA
## 8     37.74381 13.412409  1.6128300 61.73121 0.08093525  NA
## 9     30.85714  8.319185  2.9830600 61.86845 0.10666950  NA
## 10    38.47758 10.231317  2.8147100 53.91304 0.13277830  NA
## 11    32.77609 11.867220  2.1482300 50.05359 0.11146602  NA
## 12    33.50489  5.944625  2.5946000 54.63687 0.07696113  NA
## 13    30.57354 15.066079  2.3430100 53.91753 0.13012955  NA
## 14    37.01493 12.170213  2.7337400 57.56303 0.11037492  NA
## 15    46.84874  7.489362  2.6726100 49.02597 0.13381030  NA
## 16    35.85834 11.290323  3.0535300 56.73469 0.09261567  NA
## 17    41.68838 13.918630  2.9751900 47.68461 0.11074223  NA
## 18    28.18414 10.411199  3.0246600 52.25523 0.11256822  NA
## 19    34.62158  5.268109  1.7367500 57.72180 0.09831533  NA
## 20    34.59536  9.139073  1.0791700 51.94532 0.06026945  NA
## 21    24.32432 13.061564  3.6390000 60.89677 0.08927556  NA
## 22    31.42105 10.370370  1.6933800 57.12630 0.09723919  NA
## 23    35.10747  8.057676  3.1753000 52.13004 0.09383371  NA
## 24    30.15228  9.756098  1.9284400 59.78947 0.10356498  NA
## 25    35.60262 12.354086  3.4698200 53.36374 0.12579367  NA
## 26    32.91959 10.503282  2.2324400 60.53241 0.12159838  NA
## 27    26.06589 10.912343  2.0794000 49.51034 0.13155281  NA
## 28    35.92233  9.539208  2.2455800 58.33333 0.07907439  NA
## 29    31.03448  8.190476  2.7405800 53.45838 0.11099923  NA
## 30    31.36095 15.313653  2.6508100 56.76329 0.12498266  NA
## 31    31.64678 14.097744  2.2720500 53.33333 0.13065294  NA
## 32    33.38501 10.072522  2.6842400 54.41176 0.10308772  NA
## 33    34.83412  9.701493  2.2572200 50.74627 0.08259078  NA
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## 34   30.61441 17.857143  1.7519000 64.01766 0.08098665  NA
## 35   39.83425 14.716312  1.8621900 47.55662 0.11260478  NA
## 36   28.52564 10.911701  2.6512800 63.29966 0.05389155  NA
## 37   35.82803  9.792028  2.1592300 47.94989 0.09224239  NA
## 38   39.59804  6.785714  2.2918200 52.01381 0.11165085  NA
## 39   34.08324  7.367281  1.1162100 56.50061 0.14265146  NA
## 40   35.53590 15.352697  1.5731000 53.23661 0.10754589  NA
## 41   37.77999 14.273281  2.4775000 51.53846 0.11742807  NA
## 42   37.18372  7.155026  3.5394500 63.91509 0.10988336  NA
## 43   36.58052 11.736717  2.8535700 47.47040 0.09063572  NA
## 44   39.44539  7.200000  2.1316600 56.02484 0.07946127  NA
## 45   31.59912  8.103448  2.3937600 62.75626 0.07747006  NA
## 46   31.31727 10.651974  2.2341900 55.81395 0.10296185  NA
## 47   32.04119 18.549346  1.5289800 50.68493 0.11272121  NA
## 48   33.07045  9.200344  2.2764200 58.43858 0.08382768  NA
## 49   36.65810 10.311958  2.7803700 55.08021 0.11529399  NA
## 50   34.00707 11.369740  2.3752800 50.05599 0.12816675  NA
## 51   38.97137 12.869565  3.1448800 52.05784 0.10631546  NA
## 52   37.63557  9.391125  2.1613000 61.14222 0.12488684  NA
## 53   25.62432 11.582670  2.1429500 56.52174 0.11415498  NA
## 54   23.39889 11.731392  2.1946300 50.90090 0.11090742  NA
## 55   36.00445  9.145129  2.7938600 52.45700 0.10137782  NA
## 56   28.85354  7.763023  2.8859800 49.04988 0.08922341  NA
## 57   28.88325  8.506944  2.1324200 58.47826 0.09311511  NA
## 58   42.96824  8.476518  0.3268410 54.17237 0.14564397  NA
## 59   35.66591 11.836283  2.7635500 50.12077 0.13330393  NA
## 60   37.94643 11.250000  2.4870600 57.80886 0.11358022  NA
## 61   34.19773 12.500000  2.6838400 51.43885 0.10808554  NA
## 62   31.33047  7.759372  1.8907200 61.20907 0.09274495  NA
## 63   36.43203  8.390411  2.5138300 56.85619 0.09142409  NA
## 64   36.69222  8.892482  1.7394200 60.88517 0.09264236  NA
## 65   25.95642 11.048839  1.7955100 59.84174 0.09259749  NA
## 66   34.98385  9.191489  1.7706500 51.76887 0.09524884  NA
## 67   27.63767  9.178744  2.5701200 58.99533 0.10852282  NA
## 68   37.00947  8.361970  2.8655400 45.83333 0.12229819  NA
## 69   36.27546 11.044328  2.2090000 52.34286 0.10592274  NA
## 70   43.28530  7.833333  1.8920600 54.65587 0.08403410  NA
## 71   35.89325 12.116041  2.0454900 51.24378 0.07601874  NA
## 72   36.13917 12.676056  2.1386500 45.82278 0.10588222  NA
## 73   37.90925 10.324484  2.9400300 59.41846 0.10614921  NA
## 74   31.82674 12.068966  1.6989200 54.19355 0.08340400  NA
## 75   36.97257 10.191638  2.0365700 66.39053 0.09185000  NA
## 76   36.20423 10.245902  1.5692900 47.74566 0.09934762  NA
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## 80   36.34397 11.111111  1.3208400 58.37379 0.10278153  NA
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## 82   29.65446  9.607352  1.3937900 54.10226 0.10361288  NA
## 83   31.37039  7.749382  2.6803500 54.42890 0.09901735  NA
## 84   37.62859  7.191781  2.3714300 44.94505 0.08708592  NA
## 85   38.91538  8.565737  1.4504800 55.21092 0.09505282  NA
## 86   33.54667 10.658915  1.9217500 49.87179 0.11277149  NA
## 87   25.75286 11.090909  1.7779900 53.55893 0.11627974  NA
## 88   32.46684 11.714507  2.0964100 48.80668 0.10090178  NA
## 89   31.45072 12.851064  3.1878500 61.18090 0.09275446  NA
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## 93   31.16490 10.158201  1.9040000 55.25114 0.08306025  NA
## 94   31.76284  5.110132  2.0488000 44.18331 0.08308545  NA
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## 113 38.86114  9.334353  2.3149400 41.16945 0.09019703  NA
## 114 40.81519  8.741259  1.6487100 55.76679 0.13039296  NA
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## 133 32.62454  4.805077  1.4857100 55.17241 0.05294911  NA
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## 161 30.82115  5.794393  1.0440600 51.46497 0.08134024  NA
## 162 30.44227  8.423913  2.3446600 45.78313 0.09087332  NA
## 163 47.69897  8.691983  2.6611100 43.81503 0.10408625  NA
## 164 31.48866  7.592892  1.8476400 50.83014 0.08782827  NA
## 165 28.98469 14.742968  1.2040500 56.57534 0.10442679  NA
## 166 29.06784  7.410882  1.9095800 47.55662 0.11384466  NA
## 167 29.71279  6.880000  2.1019900 45.59902 0.09706793  NA
## 168 31.04046 14.103924  1.8214600 52.29961 0.12109032  NA
## 169 35.15074  8.817829  2.2299100 51.50150 0.08552468  NA
## 170 34.83146 14.442568  2.3107700 53.31695 0.08998298  NA
## 171 45.19868  9.219269  2.3131300 40.84682 0.08781159  NA
## 172 23.06843  7.530120  2.1720100 50.70423 0.08352885  NA
## 173 33.13154 10.154125  1.9660300 42.80053 0.10561760  NA
## 174 35.11269  8.274021  1.9508200 56.01604 0.08973363  NA
## 175 36.33050  8.126858  1.3450900 49.44290 0.08496177  NA
## 176 35.23759 11.614005  2.6449500 49.75124 0.11047906  NA
## 177 31.66754  8.691835  1.2718000 51.08434 0.09854475  NA
## 178 25.30864  6.101695  1.6164700 55.81062 0.10089777  NA
## 179 28.23661 13.187856  1.5649000 50.25445 0.11306152  NA
## 180 26.84310  5.384615  0.8689010 52.88066 0.10384981  NA
## 181 38.08675  8.775510  2.1329000 48.89163 0.09380391  NA
## 182 31.52954 10.476190  1.7262900 45.33844 0.07602912  NA
## 183 25.91499 12.142152  1.6310000 50.44473 0.11195482  NA
## 184 25.98958  9.481216  1.4518300 46.98647 0.11965214  NA
## 185 31.87251  8.968254  2.1242800 52.00501 0.09168036  NA
## 186 30.40142  8.229665  1.7930100 48.22888 0.06502463  NA
## 187 24.16984 11.943987  0.7172050 48.39094 0.07479907  NA
## 188 24.44922 10.598291  1.2864800 49.68234 0.14556870  NA
## 189 43.28879  8.538732  1.8488600 50.89655 0.07142423  NA
## 190 43.76499  9.844055  1.3272400 56.53897 0.12662740  NA
## 191 29.02494  9.731877  2.4307200 48.09783 0.12560102  NA
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## 192 26.39264  9.610154  2.4356900 46.99647 0.09371450  NA
## 193 30.50734  8.032129  1.5828100 57.92779 0.06838367  NA
## 194 34.19865  8.516484  1.4412600 52.41038 0.08738394  NA
## 195 34.70930  7.075963  2.1441700 46.17414 0.10039617  NA
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## 197 38.79781 11.820782  1.1861300 48.45938 0.07771330  NA
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## 200 33.54943  7.171636  1.8382800 49.41725 0.09979359  NA
## 201 34.40233 11.507937  2.1974300 45.62738 0.10107550  NA
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## 203 33.71522 13.867356  1.7540700 59.82906 0.08631624  NA
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## 205 36.42207 13.228346  1.8761700 51.38539 0.09744053  NA
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## 209 28.03030 12.625418  1.5870500 49.70060 0.11263279  NA
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## 211 27.93522 10.083256  2.2487900 55.66751 0.13189797  NA
## 212 33.57856  9.707904  1.4003200 45.18987 0.08528204  NA
## 213 45.42125  6.538049  1.7831500 49.79973 0.10695122  NA
## 214 31.12583 12.356792  1.7879200 52.44338 0.11424896  NA
## 215 34.03827 13.035714  1.3066500 48.20322 0.10720914  NA
## 216 30.24554  8.600000  1.8268100 42.14765 0.10572687  NA
## 217 31.61838  7.294118  1.1889000 59.47489 0.08625543  NA
## 218 33.06818 11.531191  1.5323400 51.39442 0.09256182  NA
## 219 37.15512  8.366534  1.3412300 51.56695 0.14201097  NA
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## 221 25.34722 11.730205  1.4001300 55.60166 0.08830294  NA
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## 223 27.05556  7.901444  1.9961800 52.32163 0.08091769  NA
## 224 39.93485  5.980651  1.5778800 49.41860 0.05216724  NA
## 225 36.70270  9.233449  1.7428800 51.97216 0.09412422  NA
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## 227 28.99775 16.769547  1.1468300 52.62484 0.13053338  NA
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## 234 38.12026 11.949686  0.6888580 49.16667 0.13020069  NA
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## 239 34.51918  8.640674  1.3961300 38.03364 0.09767835  NA
## 240 45.41645  7.816483  1.8394900 38.31554 0.09734631  NA
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## 242 31.59806 10.041841  2.5169200 52.36318 0.08239894  NA
## 243 22.74627  6.778087  1.7484700 57.00680 0.10469628  NA
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## 246 34.25414  8.359457  1.1932000 49.93065 0.10717386  NA
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## 248 27.49100  9.589041  1.8483600 46.10215 0.09803337  NA
## 249 29.64450  3.645320  2.2132300 52.36220 0.08219354  NA
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## 251 28.01190  9.462151  0.7940440 56.32319 0.14009818  NA
## 252 31.33744  7.921715  1.4134700 60.00000 0.08696593  NA
## 253 37.27422 13.294314  0.4199600 48.27586 0.09965360  NA
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## 257 36.37779  8.743633  0.4203920 43.98977 0.10405581  NA
## 258 42.74240  6.138107  1.8078000 51.91257 0.07689918  NA
## 259 24.82234  7.016248  1.5285900 53.59629 0.08432506  NA
## 260 22.56831  6.868867  1.2720500 52.40328 0.09537656  NA
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## 263 29.80473  7.961165  1.5508400 46.44150 0.10689530  NA
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## 265 33.76895  7.907743  1.7425000 43.85965 0.07124933  NA
## 266 33.56606  7.149577  1.0518800 45.14925 0.07581860  NA
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## 269 32.24490  7.423581  1.9168300 61.44414 0.06463187  NA
## 270 29.47977  6.480648  2.2995400 45.71773 0.11705247  NA
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## 271 22.37150  9.716981  1.1845700 55.77689 0.08876802  NA
## 272 33.83812  8.007449  1.2171400 52.80899 0.09632779  NA
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## 276 29.45431  5.823068  2.0875800 60.14286 0.10254830  NA
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## 291 28.89734  4.658077  1.5127500 55.70571 0.07269945  NA
## 292 31.06152  8.806262  0.3026390 52.55376 0.10967258  NA
## 293 34.38914  8.361582  0.2946190 51.12360 0.11434688  NA
## 294 30.95238  6.672932  1.2307200 45.29915 0.09772953  NA
## 295 36.15385  8.988764  1.0856100 48.31288 0.06682480  NA
## 296 30.49898 10.125448  0.5354400 45.77554 0.10231460  NA
## 297 34.68170 10.572687  1.1798900 45.34483 0.09623735  NA
## 298 33.79196 11.168385  1.8883200 56.93904 0.09379034  NA
## 299 31.59763  5.906822  1.7209400 50.43263 0.09849744  NA
## 300 34.73622  6.945863  1.7004600 42.68456 0.09672226  NA
## 301 33.63897  8.533554  1.6544500 51.56463 0.09329145  NA
## 302 43.89657  6.133540  2.2527600 47.51067 0.06591635  NA
## 303 35.48796  8.255159  1.6169100 49.33135 0.08072300  NA
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## 306 29.26402  7.918969  1.2451600 54.75234 0.10255836  NA
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## 311 23.84888  6.726014  0.6447690 50.33113 0.09077193  NA
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## 318 36.67732  8.286778  0.7611220 52.38806 0.07303314  NA
## 319 22.18268  7.866184  1.1365200 48.21664 0.06467989  NA
## 320 35.07822  9.805654  0.8934030 48.48485 0.10064902  NA
## 321 30.35044  6.457926  1.2521800 51.40449 0.09302326  NA
## 322 31.43916  6.914894  1.1553700 60.37196 0.09081857  NA
## 323 39.78495  5.737705  1.4703900 54.64334 0.10388459  NA
## 324 25.76099  6.096362  1.7192300 50.19506 0.09047693  NA
## 325 30.36620  8.481675  0.9470450 43.53741 0.09988363  NA
## 326 35.96639 10.045249  0.9620450 42.30236 0.10882822  NA
## 327 37.56345  6.384977  1.6230700 48.12500 0.08097755  NA
## 328 34.97604  7.103825  1.6909700 39.83740 0.06797514  NA
## 329 34.42928  4.328224  0.7208960 49.19942 0.04809868  NA
## 330 28.00467 10.595447  0.7187810 61.57083 0.12320596  NA
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## 332 31.63743  5.998033  1.9316500 48.79090 0.07594399  NA
## 333 25.40366  8.386509  1.7632100 51.00134 0.09908767  NA
## 334 37.03927  5.422222  1.1786500 59.27476 0.07163332  NA
## 335 31.20301  8.233276  0.9907430 44.35591 0.08771162  NA
## 336 30.68044  7.088123  1.0809100 43.41534 0.09517036  NA
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## 338 27.04518  8.995816  0.5639280 48.80383 0.06841696  NA
## 339 32.74232  8.717949  0.7096710 52.87518 0.08790001  NA
## 340 30.36530  6.445498  0.0127775 47.87645 0.10129491  NA
## 341 26.48883  5.632184  1.3255700 52.36167 0.09263442  NA
## 342 31.30990  9.386282  0.7958250 53.27103 0.08609715  NA
## 343 30.92236  6.022727  0.7458730 57.48031 0.10108323  NA
## 344 31.58220  9.523810  1.1487000 52.13270 0.07899421  NA
## 345 29.32657  5.138889  1.8991600 54.78927 0.09537853  NA
## 346 28.81264  8.057395  0.6764010 56.14035 0.10372438  NA
## 347 27.23785  9.217877  1.2833300 38.31361 0.08208139  NA
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## 350 28.83642  9.251559  0.0000000 51.05263 0.09960894  NA
## 351 39.18495  6.079665  0.9418470 41.52139 0.07110251  NA
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## 353 27.36721  9.154930  0.6525860 41.89781 0.06952635  NA
## 354 37.72563  5.809524  1.0162200 54.30108 0.09468968  NA
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## 358 35.62290  5.741127  0.6322360 46.36210 0.07743689  NA
## 359 23.31142  7.170172  1.1962000 47.73663 0.09307198  NA
## 360 38.58131 10.742188  0.8640710 53.35320 0.10945591  NA
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## 362 26.80301 10.187668  0.7945000 48.51904 0.10565359  NA
## 363 32.83936  6.269270  0.6584230 52.20294 0.09604641  NA
## 364 30.28846  4.734300  1.0210600 41.71220 0.08655187  NA
##     Avg.Possession.Length..Defense.    FTPct EffectiveHeight    OffFT Def2PtFG
## 1                              19.1 78.42190            2.08 17.78021 50.02447
## 2                              17.7 74.50683            0.82 18.17172 51.18994
## 3                              18.8 73.68421           -0.58 16.56467 43.13929
## 4                              17.7 71.36294            1.40 17.17023 51.29841
## 5                              18.6 73.35474            1.24 19.08939 46.38554
## 6                              16.5 71.80723            2.38 20.37607 53.11653
## 7                              18.0 76.43098           -0.28 17.00375 53.27354
## 8                              17.5 78.07263            1.73 22.31537 50.04669
## 9                              18.4 80.09259            0.70 18.15320 50.30461
## 10                             18.0 75.74526            1.22 21.07843 47.55120
## 11                             18.0 75.27048            0.72 18.62333 53.70892
## 12                             17.4 82.79570            1.39 20.26316 49.65695
## 13                             18.3 68.98638            0.32 17.57903 47.37810
## 14                             17.7 78.49462            0.36 21.51013 46.50774
## 15                             17.6 72.53363            1.45 23.21493 49.24087
## 16                             16.8 73.79973            1.38 19.11190 49.18288
## 17                             18.3 69.50000           -0.46 23.38099 39.92640
## 18                             19.1 76.58802            1.53 16.75268 52.05353
## 19                             17.6 73.02326            0.52 18.32685 51.15090
## 20                             16.5 75.92339            1.82 20.06508 56.53940
## 21                             18.0 71.11111            1.87 13.99602 48.46894
## 22                             17.4 69.51424            1.31 17.67462 56.72098
## 23                             17.7 74.78134            1.00 19.65517 50.04405
## 24                             18.1 70.53872            0.41 15.68114 44.97649
## 25                             17.7 73.79603           -0.68 20.45544 44.78243
## 26                             18.2 70.32787            1.18 17.93478 44.50785
## 27                             18.9 72.30483            0.75 15.33307 50.75155
## 28                             18.1 72.07207            3.21 19.04006 49.89078
## 29                             18.1 74.57912           -0.69 18.33609 46.92687
## 30                             18.7 74.78559            1.32 18.25031 49.56298
## 31                             17.7 69.98492            0.30 17.62918 43.56355
## 32                             17.9 76.31579            1.75 19.60239 52.96882
## 33                             17.7 73.74150           -0.21 19.16549 50.22866
## 34                             18.0 79.06574            0.66 17.89350 48.19599
## 35                             17.4 71.70596            1.65 21.38131 48.60234
## 36                             17.7 73.97004            2.93 15.85072 55.65294
## 37                             17.2 74.81481           -0.54 20.02379 49.38377
## 38                             17.6 79.42387            0.20 22.25211 49.79757
## 39                             18.4 74.75248           -1.28 18.72675 43.79487
## 40                             17.3 73.35286            2.20 19.81804 49.82964
## 41                             17.9 68.37945            1.40 20.28136 48.91832
## 42                             18.0 79.43787            0.49 21.50581 52.29277
## 43                             17.9 74.86413            0.53 20.65992 48.77850
## 44                             17.9 78.04878           -0.05 22.76151 52.08333
## 45                             18.3 77.81629           -0.47 18.03937 49.70787
## 46                             18.1 73.32242            0.98 18.74477 47.15162
## 47                             18.4 66.72968            1.79 17.42349 40.75269
## 48                             17.6 70.58824            1.67 18.58518 50.75922
## 49                             18.3 72.08976            2.20 19.46232 46.01619
## 50                             17.7 74.73997           -1.18 19.74097 48.05683
## 51                             17.6 71.02041           -0.03 20.36676 47.75737
## 52                             19.0 70.17291            0.31 19.08307 45.21277
## 53                             17.8 72.03390            0.20 15.58918 51.59113
## 54                             18.1 66.81034            1.39 13.31615 54.67958
## 55                             17.6 74.80680            1.15 20.71031 45.06419
## 56                             18.0 80.03802            0.27 17.38951 44.18500
## 57                             17.6 72.75923            1.41 15.91696 51.13685
## 58                             18.1 70.73906           -1.33 22.01878 51.18790
## 59                             18.6 70.72785           -0.79 19.14347 42.67740
## 60                             17.6 75.58824            0.96 20.96248 50.57269
## 61                             18.3 78.19905            1.88 20.38715 46.93427
## 62                             17.3 65.16634           -0.78 14.95957 56.70103
## 63                             17.3 74.63127           -0.39 19.94482 50.90325
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## 64                           16.8 80.59701       0.73 22.15839 50.09416
## 65                           17.8 70.52239       0.39 13.88685 53.38403
## 66                           16.8 71.69231       0.71 19.12187 55.11031
## 67                           17.7 69.08752       1.12 15.87505 53.98346
## 68                           18.3 77.69653       0.53 21.57360 47.70115
## 69                           17.4 77.67380       1.82 22.20099 52.49622
## 70                           17.5 71.50466       0.62 24.04837 53.63080
## 71                           16.9 72.38240       1.29 20.16061 49.20311
## 72                           17.3 75.62112       0.62 21.68299 44.00551
## 73                           18.1 75.45455       0.87 21.37339 48.28532
## 74                           17.1 73.96450      -0.67 17.69703 40.98093
## 75                           17.7 63.90870       2.18 18.59693 47.09957
## 76                           17.7 71.79487       1.26 20.44625 51.97421
## 77                           17.0 74.22680       1.77 20.68117 56.32184
## 78                           17.8 74.28571       0.59 18.73499 53.74059
## 79                           18.6 70.27027       1.51 19.61442 42.17082
## 80                           17.5 75.44643       1.40 21.32941 47.81893
## 81                           18.4 70.80925       0.47 22.53910 43.66412
## 82                           17.5 78.78261       2.43 18.80448 52.29712
## 83                           17.9 79.64912       0.56 18.26227 55.81181
## 84                           18.0 76.40288       0.67 20.30593 50.59814
## 85                           18.3 78.86677       0.83 21.94291 47.24556
## 86                           18.4 64.70588       0.56 18.82516 50.11369
## 87                           18.3 70.56452       1.48 15.26385 48.41054
## 88                           17.3 71.40523       0.37 18.49344 52.73885
## 89                           17.9 66.37324       1.11 17.30946 51.81533
## 90                           18.0 71.68508       2.14 21.77927 45.53687
## 91                           17.3 73.08229      -0.46 20.23947 50.75269
## 92                           18.3 71.71254       0.63 20.52516 47.06406
## 93                           17.3 68.60841       0.85 17.51342 46.94561
## 94                           17.5 74.00000       1.01 18.52315 50.83612
## 95                           18.6 75.68027       1.21 17.76447 44.38642
## 96                           17.2 73.15522       0.58 23.73091 52.16581
## 97                           18.0 68.63469      -0.08 16.29435 50.34483
## 98                           17.6 72.63158      -0.08 21.50490 49.46237
## 99                           17.1 74.71910      -2.71 15.28150 51.21019
## 100                          17.0 72.25131      -0.08 23.76238 46.24183
## 101                          18.8 69.04762       0.37 17.97255 47.90076
## 102                          18.4 73.55072       0.80 18.43778 45.38056
## 103                          18.6 75.28604       1.38 15.87072 50.25737
## 104                          18.0 69.35167       0.18 15.50967 50.56332
## 105                          17.6 75.25036       0.52 21.40822 47.25324
## 106                          17.6 73.33333      -0.86 20.20877 33.91971
## 107                          17.4 69.03553       0.53 19.04762 51.64690
## 108                          18.0 76.88172      -0.02 17.64706 46.76354
## 109                          17.5 69.96753      -0.76 17.26071 48.65816
## 110                          17.3 75.74335       0.35 18.91364 53.26633
## 111                          18.0 66.49030       0.01 16.63725 47.06977
## 112                          17.8 69.15493       0.53 22.10716 52.40432
## 113                          17.3 74.55013       0.07 23.25581 52.95975
## 114                          18.0 70.17784       0.68 22.03608 51.56250
## 115                          18.0 70.10955       1.36 17.92717 48.64421
## 116                          17.6 72.10145      -0.38 16.18544 44.59930
## 117                          16.4 70.50691       0.68 18.62825 51.20811
## 118                          16.9 70.64394      -0.05 15.52873 53.73622
## 119                          17.3 76.13843       0.48 19.60600 46.39076
## 120                          17.8 67.82753       0.38 17.74403 52.95424
## 121                          17.6 66.84119      -0.98 16.30481 43.60902
## 122                          19.0 70.92820      -1.73 18.98734 33.50305
## 123                          18.0 72.89562      -0.48 17.53036 52.30235
## 124                          17.6 69.83871       1.50 16.64744 50.42537
## 125                          17.7 75.04521      -0.13 20.00964 50.52213
## 126                          18.6 72.58621      -0.21 19.50880 54.05405
## 127                          17.3 77.68595      -1.03 18.58442 46.31043
## 128                          17.8 71.34503       0.70 14.49505 48.63766
## 129                          17.7 73.18519      -0.42 22.35294 46.93694
## 130                          18.1 64.54034      -0.08 16.23407 47.86730
## 131                          17.7 67.69231       0.08 20.16293 46.02768
## 132                          18.1 75.75758      -0.56 15.62500 50.81466
## 133                          17.2 78.95717      -0.06 18.11192 51.33787
## 134                          17.2 75.31993       0.67 17.97557 43.82177
## 135                          17.7 72.61905      -0.28 20.76596 51.80723
## 136                          17.5 75.48845      -1.00 18.88050 45.59585
## 137                          17.6 69.56522       1.28 18.70130 50.38654
## 138                          16.9 72.02142      -0.46 21.23125 52.38908
## 139                          17.5 74.72325      -0.85 16.98113 46.25323
## 140                          18.2 66.49485      -0.51 18.02515 47.25655
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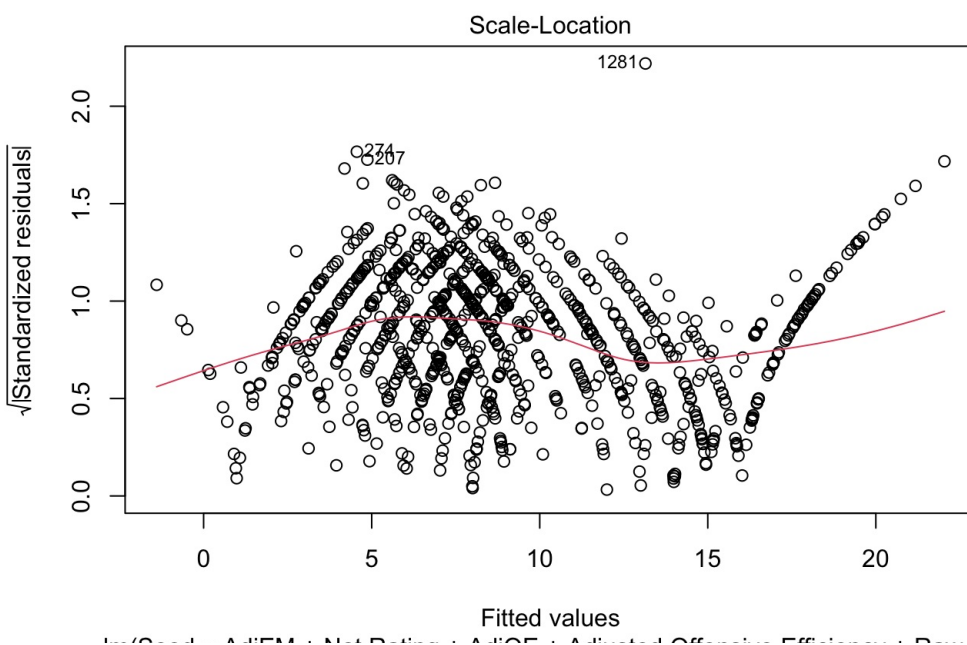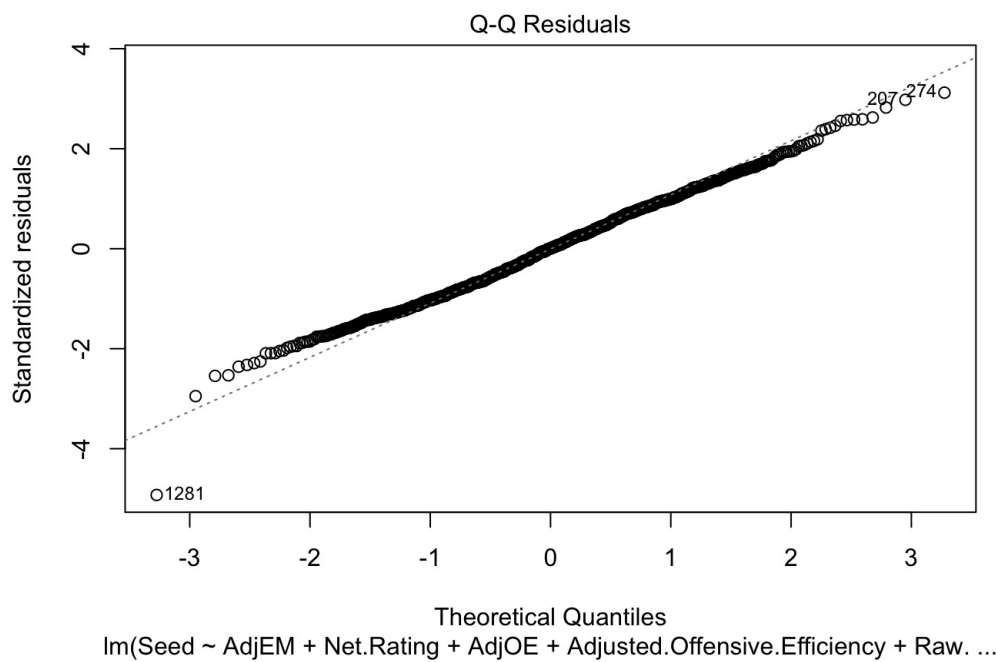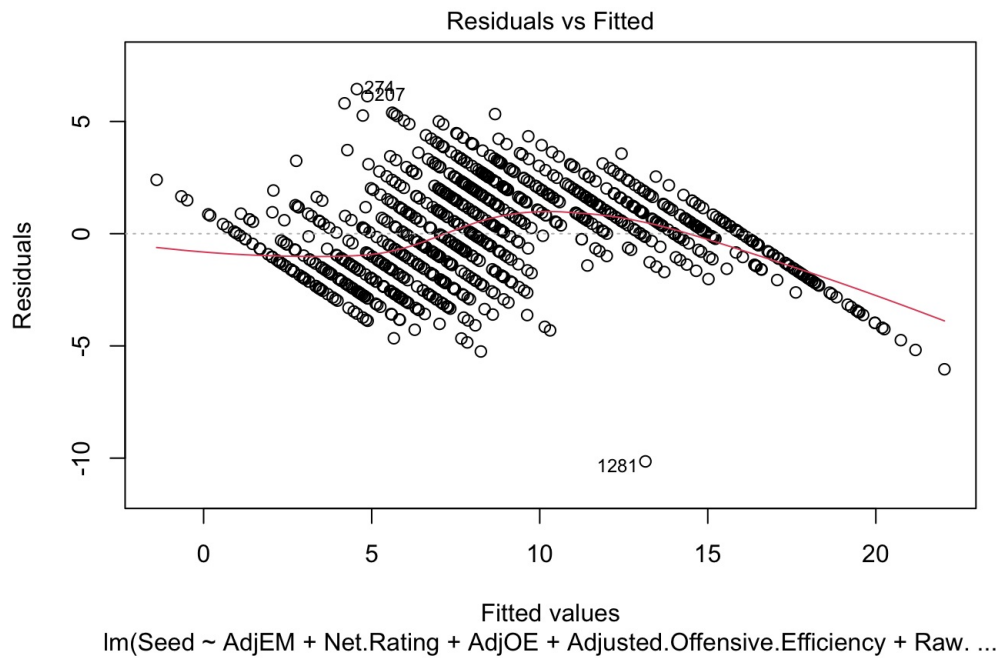
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## 145                          18.1 75.54439       0.03 20.30617 45.30075
## 146                          18.4 74.95292       0.50 17.26681 50.19676
## 147                          17.2 76.76951       1.07 18.20921 49.16773
## 148                          17.6 77.18631       0.96 17.33561 51.95858
## 149                          17.5 69.25247       0.61 21.21867 50.46563
## 150                          16.8 71.61290       0.54 17.80273 51.24678
## 151                          17.5 76.09329       0.32 23.48178 45.43389
## 152                          17.4 72.53788       0.40 15.87236 49.36095
## 153                          18.3 68.19013      -0.21 16.80180 50.29995
## 154                          17.5 71.08067       0.92 19.02240 52.07101
## 155                          18.2 72.16891       1.78 17.24771 52.19338
## 156                          17.3 73.26440       0.01 19.93569 44.50843
## 157                          17.9 74.58746      -1.66 19.32450 53.99568
## 158                          17.7 71.74603      -0.82 21.19081 47.64107
## 159                          17.7 62.21865       0.07 17.79310 48.21683
## 160                          17.4 72.22222      -0.11 19.50000 43.56347
## 161                          17.7 71.35036       0.21 17.66832 49.97864
## 162                          17.8 76.41509       0.40 18.67220 51.21495
## 163                          16.9 66.17480      -0.85 22.84483 48.48485
## 164                          17.0 73.46221      -0.69 18.61915 56.63417
## 165                          17.9 69.86301       0.87 17.64706 49.17870
## 166                          17.4 75.14231      -0.48 16.63167 52.33727
## 167                          17.9 75.74692      -0.15 18.90351 56.13565
## 168                          17.4 72.06704      -0.37 18.49021 46.35108
## 169                          17.6 65.51095       1.65 18.80566 51.78857
## 170                          17.9 68.97081      -0.25 19.38687 52.44880
## 171                          17.1 73.38217       0.30 24.93776 51.03907
## 172                          18.3 69.37799      -0.86 12.93488 44.86412
## 173                          17.6 68.60465      -0.87 19.11152 51.13901
## 174                          17.8 72.12838      -0.57 19.86971 53.11355
## 175                          17.4 72.90970       0.42 20.61466 47.22719
## 176                          18.4 72.87879      -1.27 20.95861 49.58533
## 177                          17.0 69.93355      -1.73 18.09196 47.56711
## 178                          17.1 70.48780      -0.63 14.73738 48.04469
## 179                          17.4 68.18182       0.20 16.10644 49.22933
## 180                          17.9 76.93662      -2.36 15.75342 49.80600
## 181                          17.7 75.66303       0.73 21.49823 45.20356
## 182                          17.9 71.80385      -0.54 18.79010 50.48957
## 183                          18.5 74.48747      -0.70 15.60859 52.40359
## 184                          17.5 77.35471      -0.44 16.81917 51.20773
## 185                          18.4 72.50000      -0.08 17.95666 56.38533
## 186                          17.0 65.24272       0.22 16.46252 49.27007
## 187                          17.9 69.81982      -0.72 13.92007 53.97412
## 188                          19.0 72.30769      -1.66 15.18929 52.07547
## 189                          18.1 68.32215       1.02 23.33792 49.54128
## 190                          16.6 70.13699      -0.06 23.12556 51.44231
## 191                          17.8 79.10156      -0.51 18.76738 47.70806
## 192                          18.1 76.43443       0.19 16.25981 49.36000
## 193                          17.4 75.27352      -1.00 18.51453 56.25000
## 194                          17.9 67.82178      -0.57 18.36461 48.03419
## 195                          17.8 74.53936      -0.08 20.82358 47.14218
## 196                          18.1 71.78683      -0.34 20.13187 49.05822
## 197                          17.6 75.74335       3.27 22.63798 46.73605
## 198                          17.5 76.03834      -1.30 21.25000 46.44295
## 199                          17.7 73.16637      -0.36 20.84608 45.91633
## 200                          18.0 76.48953      -1.00 19.37984 52.14852
## 201                          16.5 72.20339       0.14 19.28474 48.67535
## 202                          16.9 75.32051      -0.64 19.83959 49.59083
## 203                          17.3 69.09385       0.43 18.20119 50.74373
## 204                          17.8 71.79487      -0.73 16.78967 52.91005
## 205                          17.2 73.67647       0.46 21.23781 52.60439
## 206                          17.2 63.51119      -0.19 17.73186 50.00000
## 207                          18.0 66.32302       0.05 19.59391 43.90027
## 208                          18.1 63.19444      -1.67 14.74082 51.59915
## 209                          18.0 68.72587      -0.95 15.87160 52.75908
## 210                          16.9 74.32188       0.34 21.08774 50.43657
## 211                          18.4 72.87785      -0.04 16.37971 52.53501
## 212                          18.4 79.02973       0.18 21.75786 52.36515
## 213                          17.3 72.44624      -1.61 24.27928 50.54348
## 214                          18.0 76.59574      -0.47 19.76351 49.41584
## 215                          17.3 67.15976      -0.08 20.20472 47.46485
## 216                          17.4 70.84871      -0.66 18.39962 50.21196
## 217                          17.5 71.56398       1.42 18.55797 51.90549
## 218                          17.9 67.86942       0.64 18.64967 48.06278
## 219                          17.5 71.94719      -0.60 22.25625 51.31195
## 220                          18.8 76.40000      -0.55 18.48089 56.05769
## 221                          18.1 70.77626      -0.45 15.50775 42.89228
```

```
## 222                               17.3 72.41935          0.11 19.79718 50.55854
## 223                               18.0 70.02053         -1.05 14.38819 51.08153
## 224                               17.4 74.38825          1.28 22.68657 52.30326
## 225                               17.7 66.42121          0.96 18.46091 46.64457
## 226                               18.2 65.30945          0.46 18.94190 50.09107
## 227                               16.9 70.67961          0.12 17.14555 42.89800
## 228                               16.8 72.25705         -0.52 19.60868 53.74204
## 229                               18.4 69.96198         -0.46 18.76594 45.89372
## 230                               18.8 72.87582         -0.60 19.44202 47.91844
## 231                               17.6 68.08511         -0.43 17.20430 51.99241
## 232                               17.6 77.68313         -1.29 17.47126 53.11916
## 233                               18.7 67.19577         -0.27 17.41316 47.78919
## 234                               17.2 65.54364         -1.29 20.91887 45.65757
## 235                               17.0 76.93837         -0.94 19.70468 49.50980
## 236                               18.0 75.88933         -0.48 17.74492 53.41900
## 237                               17.7 77.07948         -1.26 19.02372 49.81516
## 238                               17.8 80.78512          1.05 19.85780 40.69821
## 239                               17.0 77.29469         -1.47 21.66065 44.63519
## 240                               17.5 71.39562         -0.56 24.45674 50.21178
## 241                               17.5 75.68741         -0.39 20.98716 52.69646
## 242                               17.4 77.20307         -1.26 18.26836 54.73493
## 243                               17.4 71.12861         -1.63 13.53646 54.00193
## 244                               17.8 72.08835         -0.12 17.95000 50.54618
## 245                               15.8 73.00275          0.18 22.34401 47.83838
## 246                               18.4 65.41219         -2.52 18.03360 48.74884
## 247                               17.6 74.40382         -0.77 23.56495 46.41350
## 248                               17.4 68.34061         -0.29 15.51810 54.32340
## 249                               17.5 66.15087         -0.50 16.31679 50.73355
## 250                               18.0 65.09434          0.16 14.55696 46.79803
## 251                               17.0 68.67257         -0.44 16.72414 46.46378
## 252                               18.0 73.21429         -0.13 18.37741 46.59593
## 253                               17.1 74.30250          0.69 21.89528 53.74946
## 254                               16.7 68.37725         -0.09 21.60386 49.44715
## 255                               17.9 70.49689          0.06 21.56770 48.80637
## 256                               17.9 77.56233         -2.04 15.75689 55.00000
## 257                               17.2 69.18688          1.28 21.44120 51.12316
## 258                               17.9 75.16779         -0.27 24.94432 55.18966
## 259                               17.4 67.89366         -1.36 13.67381 57.43191
## 260                               18.3 73.12349         -0.35 13.22242 49.61307
## 261                               17.5 70.47619          1.45 18.34408 43.27010
## 262                               17.8 73.51248         -1.26 15.94505 46.59232
## 263                               17.8 65.34483         -0.67 16.58643 42.88107
## 264                               17.2 69.20684         -0.81 19.45780 51.61024
## 265                               17.3 68.73065          0.63 18.71049 50.13905
## 266                               16.2 70.08000         -0.29 19.14336 49.24949
## 267                               17.5 74.17974          0.85 22.40414 47.04463
## 268                               17.4 67.15928         -0.50 18.81325 53.67551
## 269                               17.1 77.93852          2.08 20.03719 50.10267
## 270                               17.8 72.37077         -1.83 17.79921 53.49439
## 271                               18.3 70.75718         -0.85 13.69378 49.22441
## 272                               17.8 73.14815         -1.93 20.49287 48.08511
## 273                               17.3 71.29456         -1.09 17.47930 49.85113
## 274                               17.0 70.26239          0.50 23.33011 52.39677
## 275                               17.7 76.11684         -0.57 19.82103 49.93684
## 276                               17.3 72.76786          0.03 16.91749 48.46077
## 277                               17.4 63.03502         -0.06 17.89067 49.40813
## 278                               17.9 69.90132         -0.40 18.30319 47.68836
## 279                               18.0 68.81288         -2.18 17.61978 59.13209
## 280                               17.2 71.96078         -0.04 17.97258 45.59733
## 281                               17.6 74.31034          0.17 18.97007 46.67503
## 282                               18.4 67.75510         -0.41 17.26469 52.99061
## 283                               18.4 71.74960         -0.04 20.10796 52.26800
## 284                               16.7 73.39130          0.06 20.00948 47.36842
## 285                               17.6 72.98969         -1.36 17.43842 45.60893
## 286                               15.8 72.89562         -1.27 24.78535 43.78989
## 287                               16.9 69.00149         -0.75 20.44150 51.99496
## 288                               17.3 76.69903         -1.07 22.85439 46.09272
## 289                               18.2 69.17431          0.03 17.37327 49.79812
## 290                               16.9 74.70489         -0.59 20.52827 49.00487
## 291                               17.2 69.73684         -0.24 16.93291 49.11441
## 292                               18.0 77.28155         -0.76 19.07044 48.05592
## 293                               17.8 69.40789         -0.82 20.03799 41.89435
## 294                               16.7 67.39130          0.72 18.15315 49.09929
## 295                               16.2 72.87234          0.18 21.97861 58.91841
## 296                               16.9 75.12521          1.85 20.04454 44.91228
## 297                               17.6 73.61377          0.10 22.22864 47.68286
## 298                               16.9 69.38111         -1.47 19.64945 50.25295
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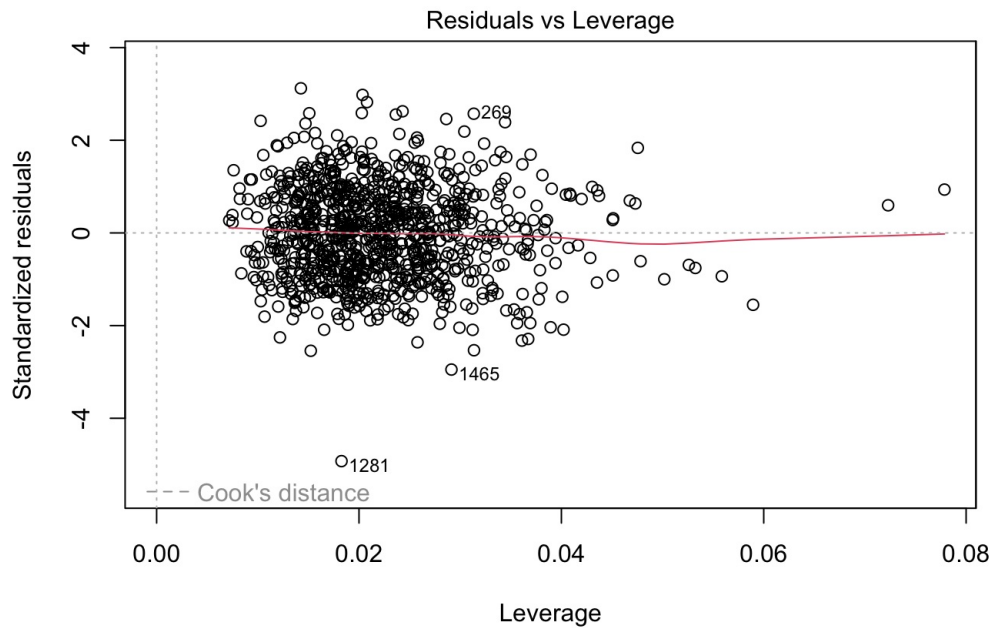
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## 310                               17.0 63.46154           0.43 18.31483 52.10013
## 311                               17.9 72.52475          -1.57 14.36275 49.00181
## 312                               16.6 76.02131          -0.79 20.22684 51.85841
## 313                               17.4 72.19251          -0.96 18.31750 49.87342
## 314                               17.4 74.77954          -1.29 20.20010 48.83117
## 315                               17.6 69.31818          -1.03 20.57336 42.80630
## 316                               18.1 72.89377          -1.37 19.16225 50.40512
## 317                               16.7 70.07576          -0.57 18.60231 49.81096
## 318                               17.4 71.42857           0.76 20.55138 50.09058
## 319                               17.7 71.65775          -1.60 13.02868 54.52080
## 320                               18.0 72.89880           0.32 21.28192 49.53445
## 321                               18.1 74.02062          -0.96 17.75470 49.23220
## 322                               17.5 72.10216          -0.67 18.16832 53.12647
## 323                               17.6 70.12012          -1.25 21.77156 55.29309
## 324                               17.7 68.49015          -1.50 15.07707 50.38168
## 325                               16.7 71.98516          -1.55 19.16049 46.41425
## 326                               17.7 68.84735          -0.99 21.57150 49.68553
## 327                               17.2 67.39865           0.00 21.60260 52.44444
## 328                               17.3 75.92955          -1.11 20.99567 48.59287
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## 330                               17.0 64.37500          -0.85 15.48872 51.78802
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## 332                               17.6 74.49168          -0.68 19.80344 50.02149
## 333                               18.5 73.30508           0.10 16.73114 51.40351
## 334                               17.3 78.46656          -1.87 22.19659 48.91914
## 335                               17.3 68.67470          -0.92 18.94587 51.34228
## 336                               17.5 73.86139          -0.76 19.13802 49.66698
## 337                               17.6 73.34594           0.06 18.88078 42.42424
## 338                               16.6 73.36343           0.62 17.92609 46.39412
## 339                               16.5 69.85560           0.50 18.97989 52.85412
## 340                               17.1 67.66917          -1.24 17.11027 49.59677
## 341                               17.4 76.58080          -1.27 15.89694 42.57846
## 342                               18.0 68.16327           0.20 18.18182 43.13910
## 343                               17.6 80.68670          -1.73 20.41260 49.07914
## 344                               16.9 70.84149          -1.51 19.17373 46.18149
## 345                               18.7 71.11111          -0.68 19.25134 44.68864
## 346                               17.2 72.02268           0.43 17.94630 40.81301
## 347                               17.8 69.24883          -0.57 15.82618 52.53411
## 348                               17.4 70.96189           0.99 19.70766 48.96014
## 349                               16.5 66.93419          -0.89 19.80998 49.21753
## 350                               17.0 69.00585          -1.38 17.41269 46.25793
## 351                               17.2 73.76000           0.16 24.65241 45.16949
## 352                               16.9 73.87387           0.93 19.56107 48.45277
## 353                               17.2 72.99578          -1.13 18.05846 53.20108
## 354                               17.7 70.97289          -0.26 20.62095 46.51925
## 355                               16.9 65.29284          -0.13 15.45968 51.53215
## 356                               17.3 62.34043          -1.63 17.88767 48.42421
## 357                               16.8 69.05537          -1.72 19.49425 55.04515
## 358                               17.1 66.72968          -0.47 20.65535 52.28332
## 359                               17.6 75.89744          -0.90 14.74104 50.38982
## 360                               17.1 66.66667           0.19 22.18905 45.74881
## 361                               17.3 67.82609          -0.60 21.92243 49.95516
## 362                               17.0 70.48193          -1.70 17.54123 49.48372
## 363                               17.1 59.02527           0.16 16.16411 45.81320
## 364                               16.4 66.89342          -0.77 19.39513 51.04778
```

```
model2 = lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency +
          Raw.Offensive.Efficiency + OE + eFGPct + FG2Pct + FG3Pct + ORPct +
          FTRate + BlockPct + Experience + ARate + StlRate +
          Avg.Possession.Length..Defense. + FTPct + EffectiveHeight +
          OffFT + Def2PtFG, data = filter(df,Post.Season.Tournament == 'March Madness',Season != 2025))
```

```
plot(model2)
```

Residuals vs Fitted

Residuals

Fitted values
lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

Q-Q Residuals

Standardized residuals

Theoretical Quantiles
lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

Scale-Location

√|Standardized residuals|

Fitted values

Residuals vs Leverage

Leverage
lm(Seed ~ AdjEM + Net.Rating + AdjOE + Adjusted.Offensive.Efficiency + Raw. ...

```
preds = predict(model2,filter(df,Season == 2025),interval='prediction')
preds2 = predict(model2,filter(df,Season == 2025),interval='confidence')
```

```
min_seed <- 1
max_seed <- 16
normalized_preds <- (preds - min(preds)) / (max(preds) - min(preds)) * (max_seed - min_seed) + min_seed
normalized_preds2 <- (preds2 - min(preds2)) / (max(preds2) - min(preds2)) * (max_seed - min_seed) + min_seed
```

```
predsdf = data.frame(Team = df[df$Season == 2025,]$Full.Team.Name, PredictedSeed = normalized_preds)
predsdf2 = data.frame(Team = df[df$Season == 2025,]$Full.Team.Name, PredictedSeed = normalized_preds2)
```

```
head(predsdf,4)
```

```
##              Team PredictedSeed.fit PredictedSeed.lwr PredictedSeed.upr
## 1 Duke Blue Devils          2.508704          1.000000          4.017408
## 2    Auburn Tigers          2.651613          1.141675          4.161551
## 3  Houston Cougars          3.087878          1.553967          4.621789
## 4   Florida Gators          2.664517          1.163363          4.165671
```

```
head(predsdf2,4)
```

```
##              Team PredictedSeed.fit PredictedSeed.lwr PredictedSeed.upr
## 1 Duke Blue Devils          1.316234          1.000000          1.632467
## 2    Auburn Tigers          1.485422          1.161040          1.809805
## 3  Houston Cougars          2.001913          1.546392          2.457434
## 4   Florida Gators          1.500700          1.239637          1.761762
```