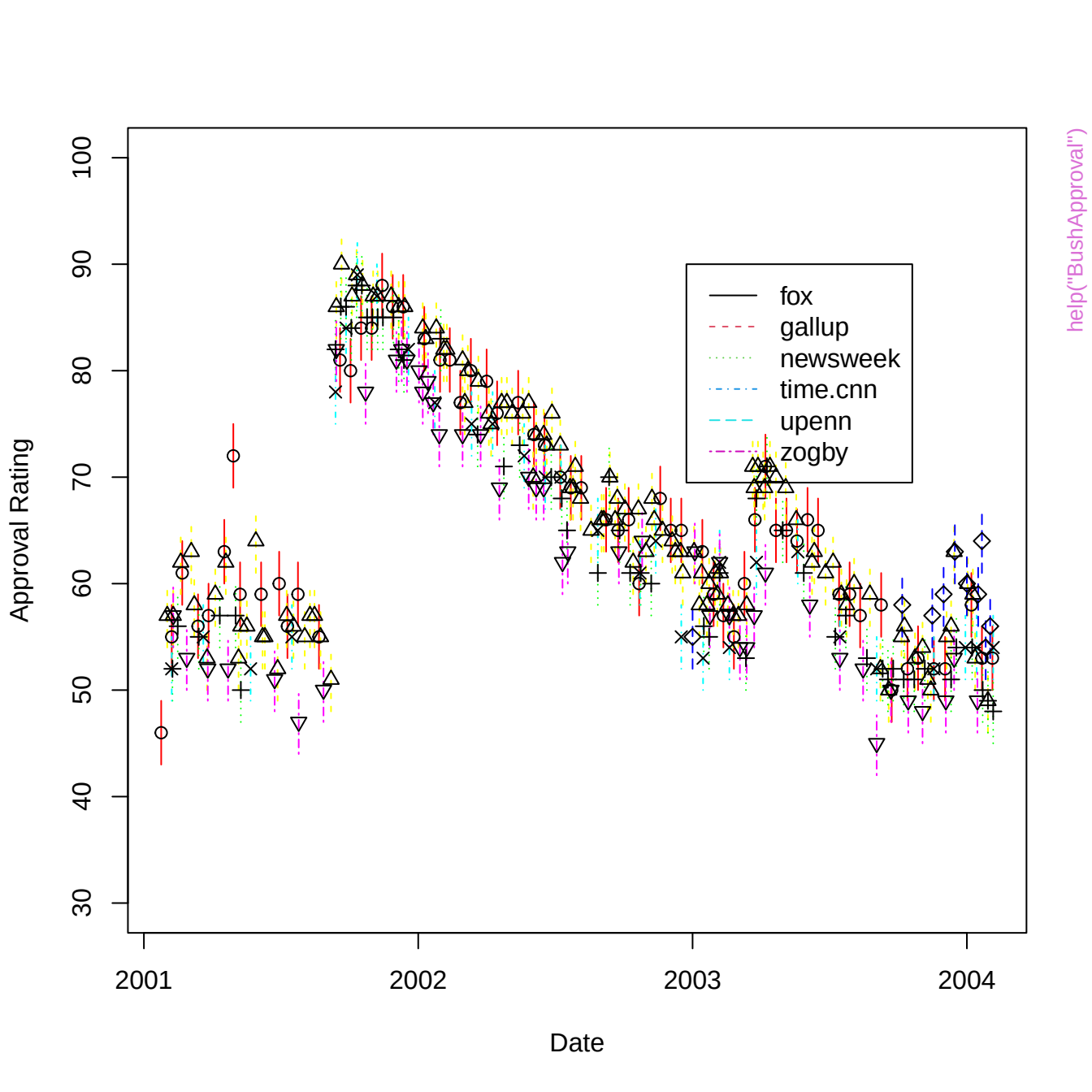
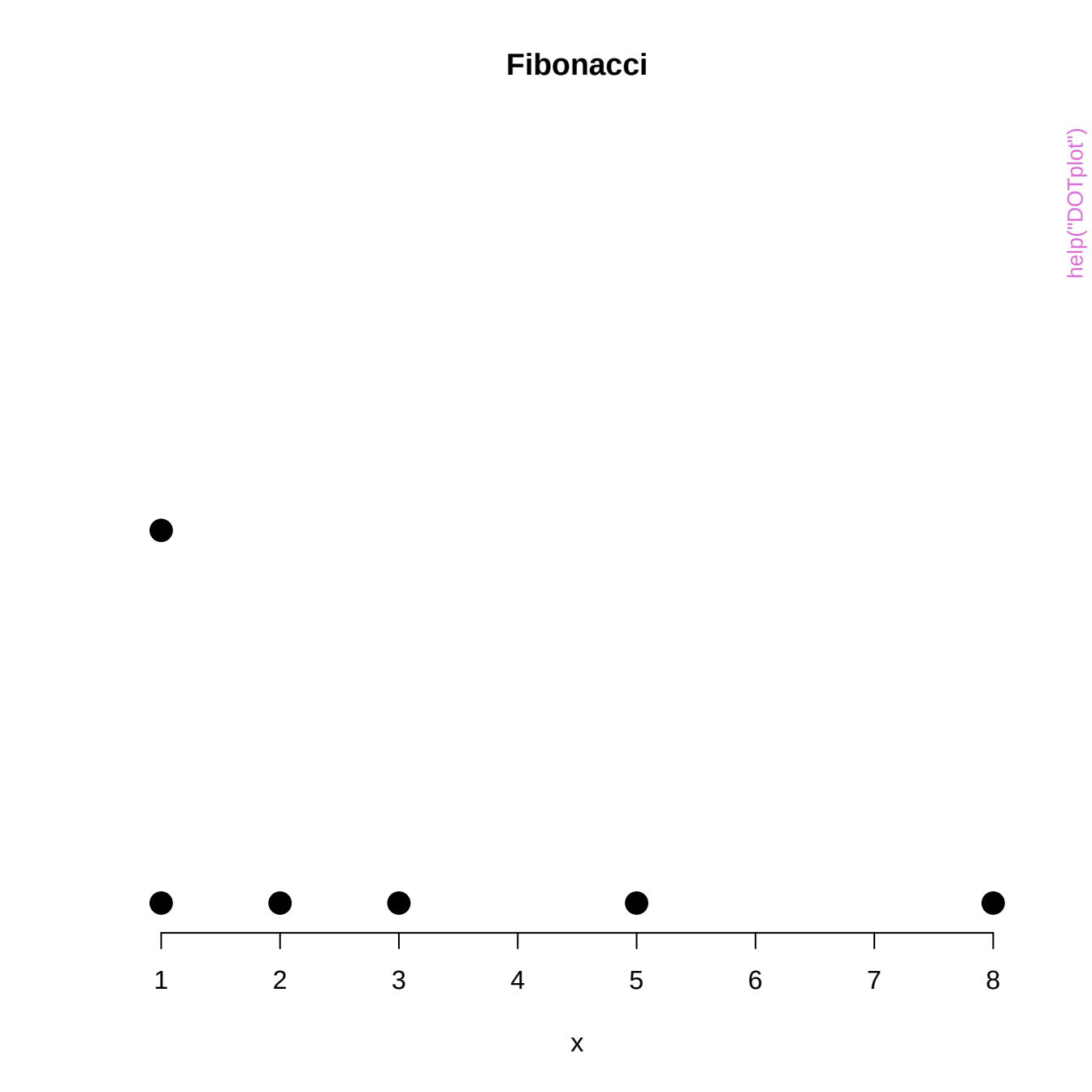
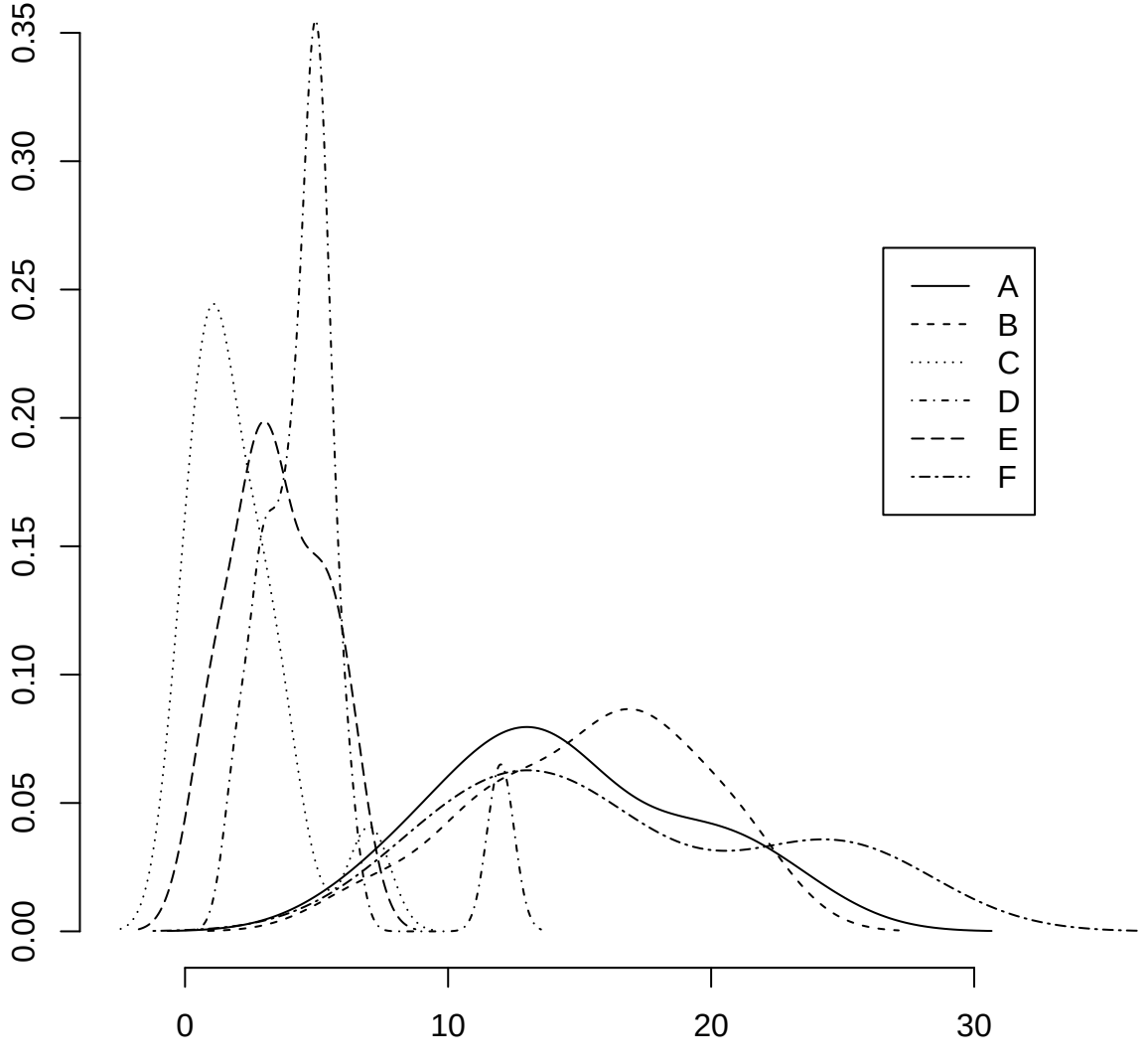
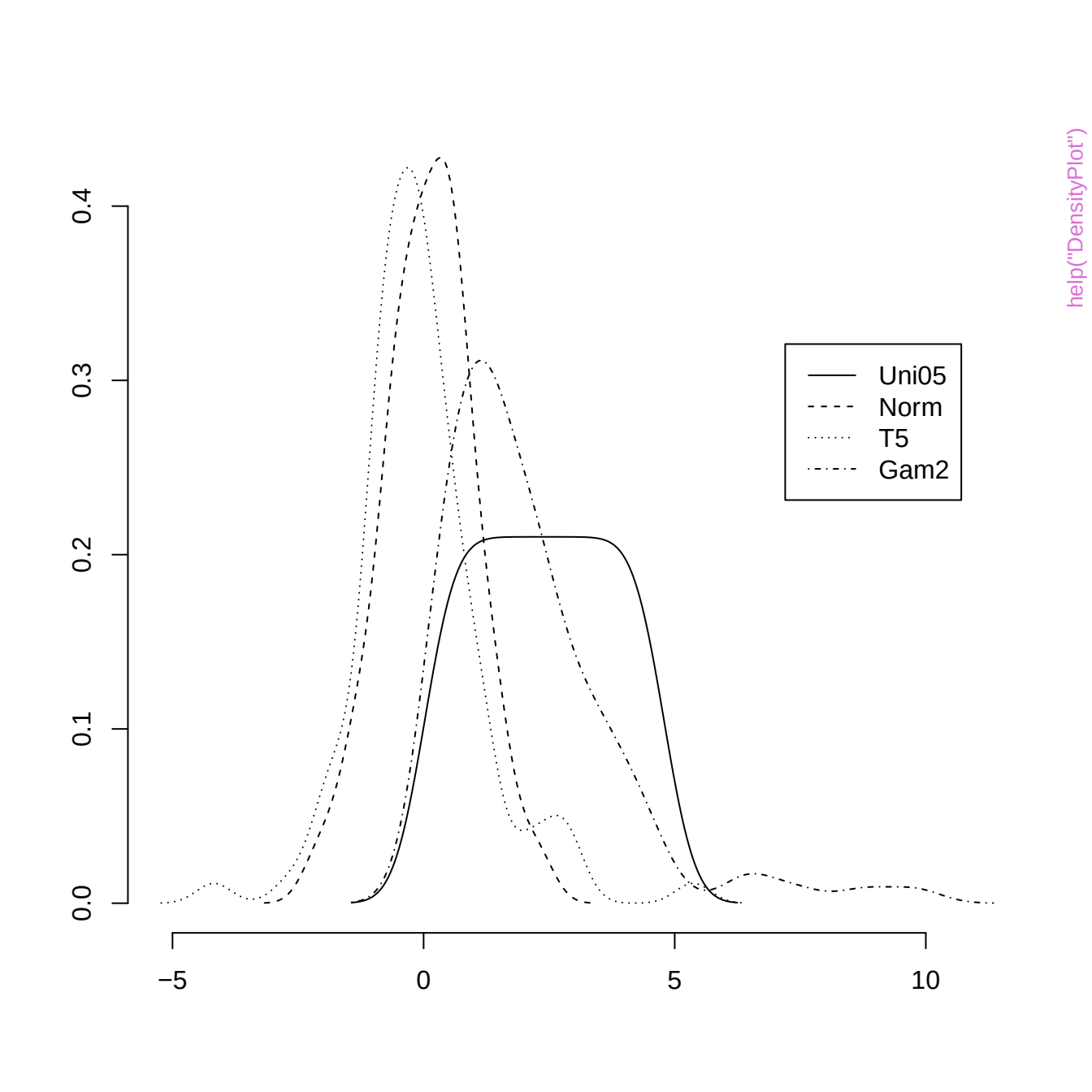

Approval Rating
100
90
80
70
60
50
40
30
2001
2002
2003
2004
Date
fox
gallup
newsweek
time.cnn
upenn
zogby
help("BushApproval")

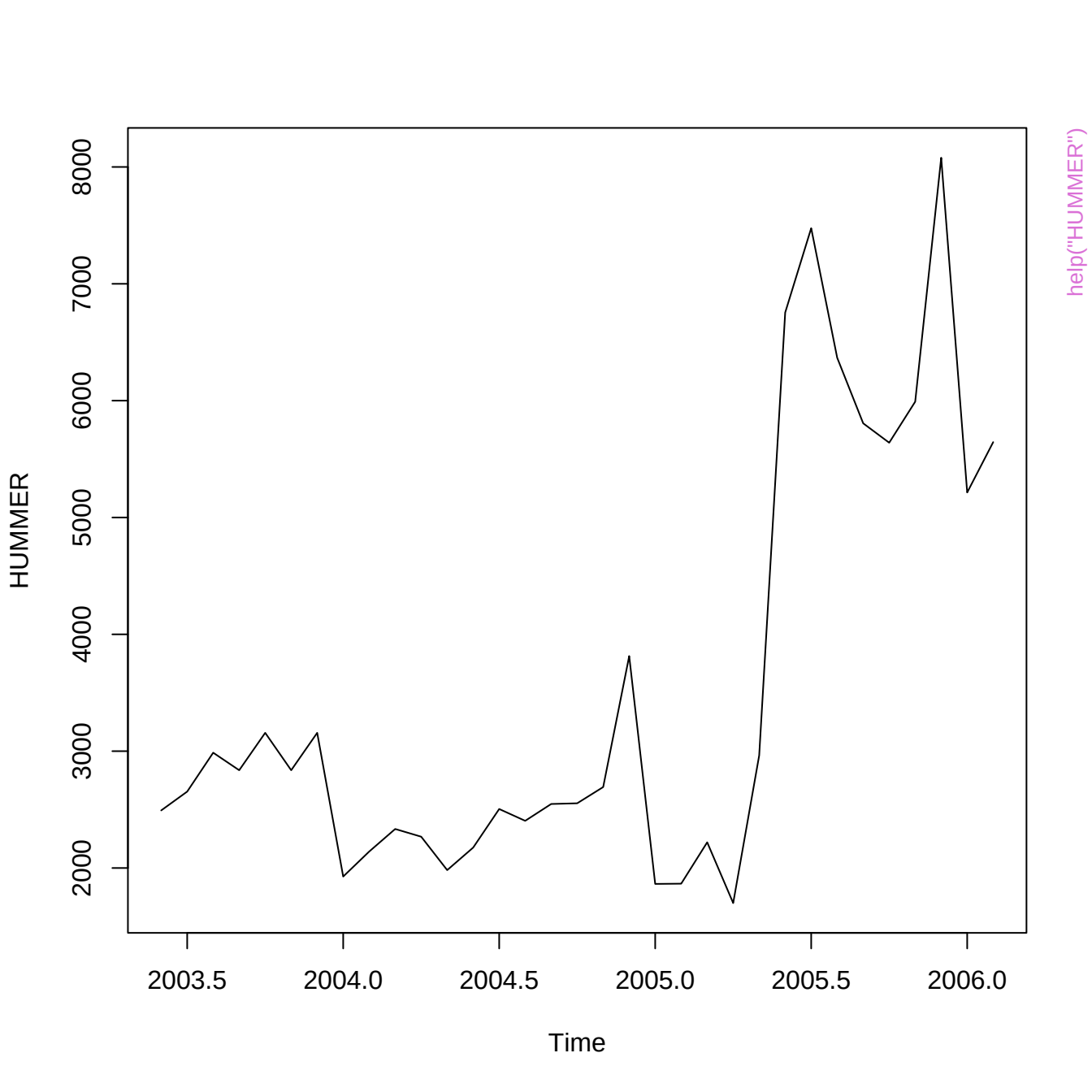

Fibonacci
help("DOTplot")
1
2
3
4
5
6
7
8
x

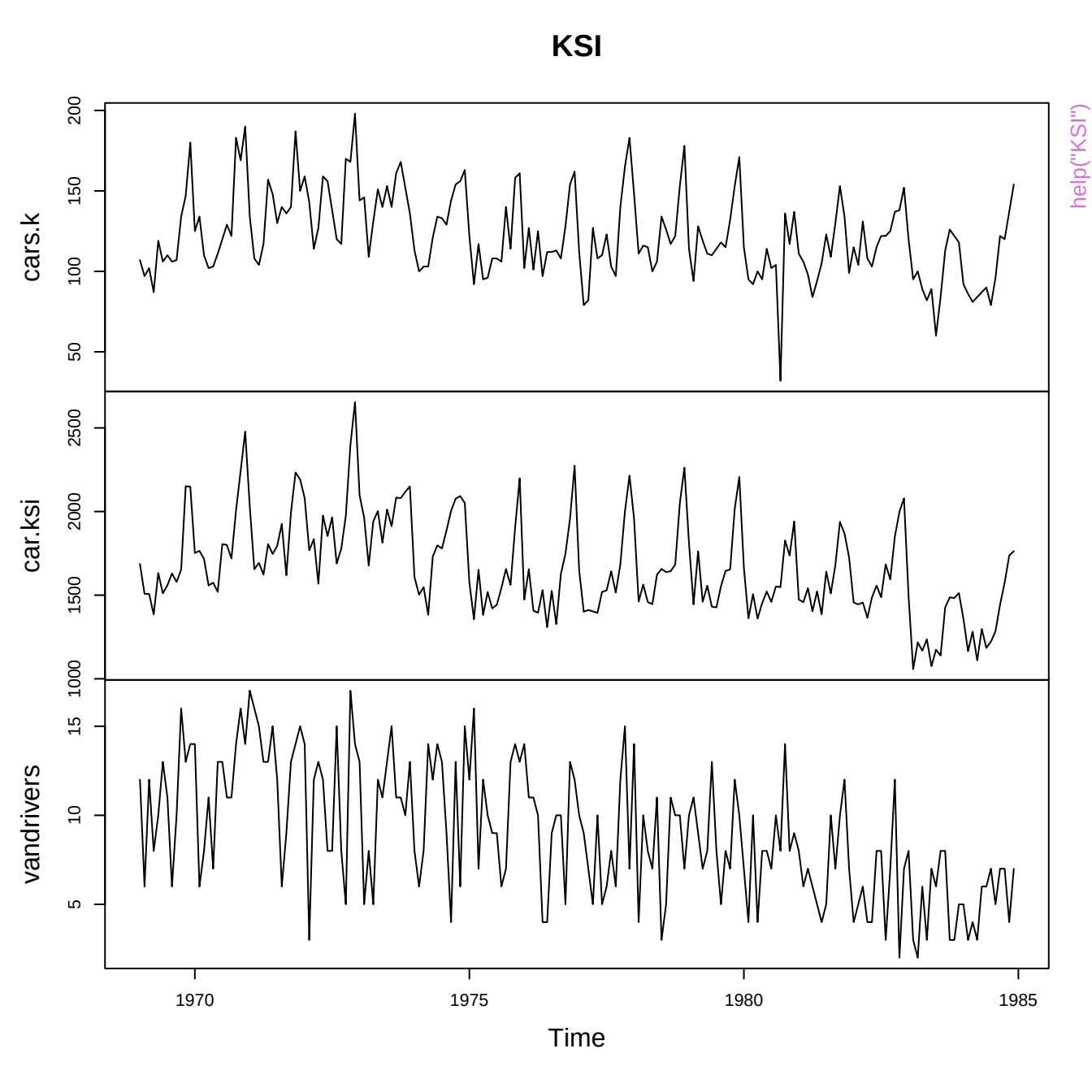


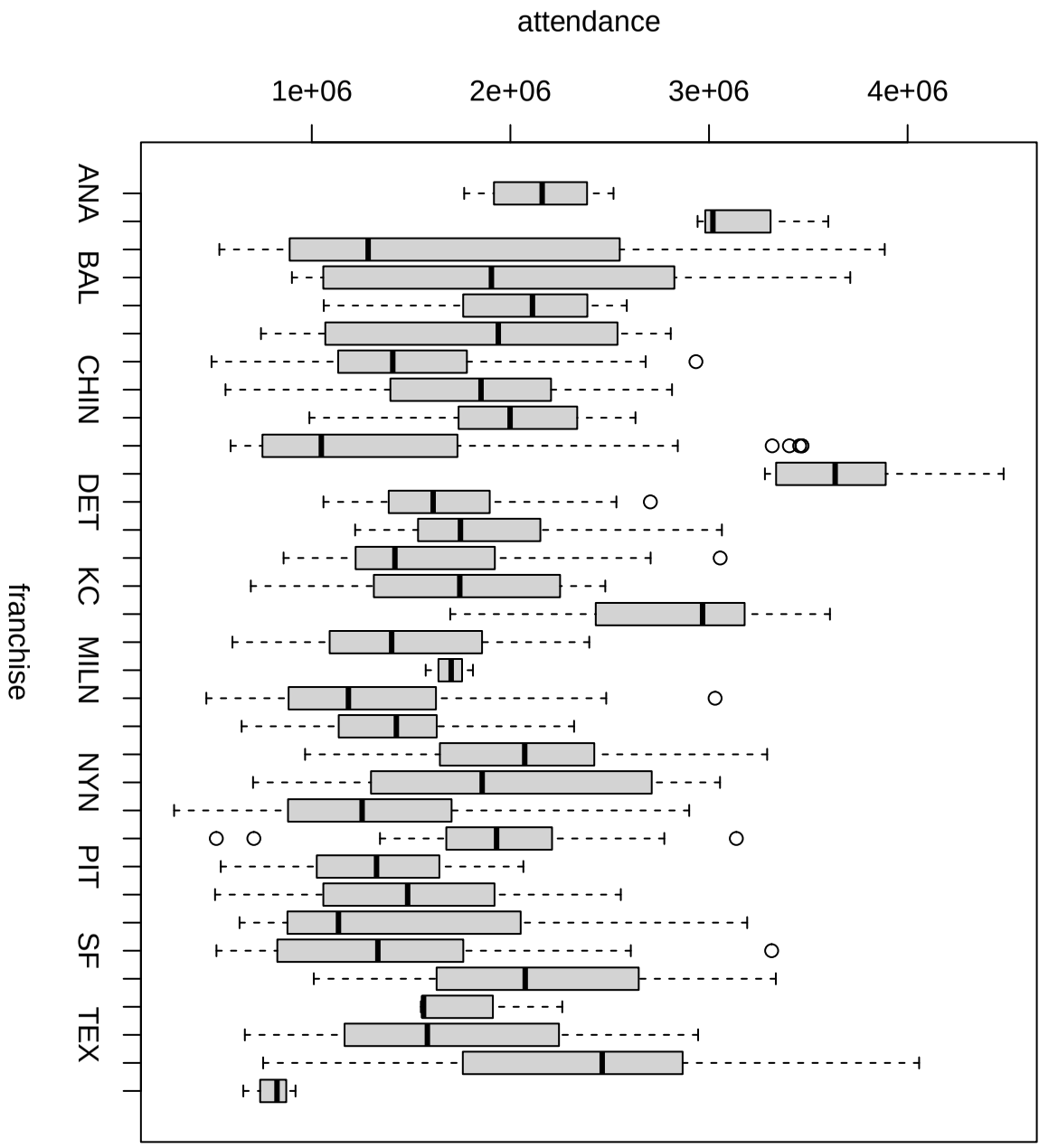
help("DensityPlot")



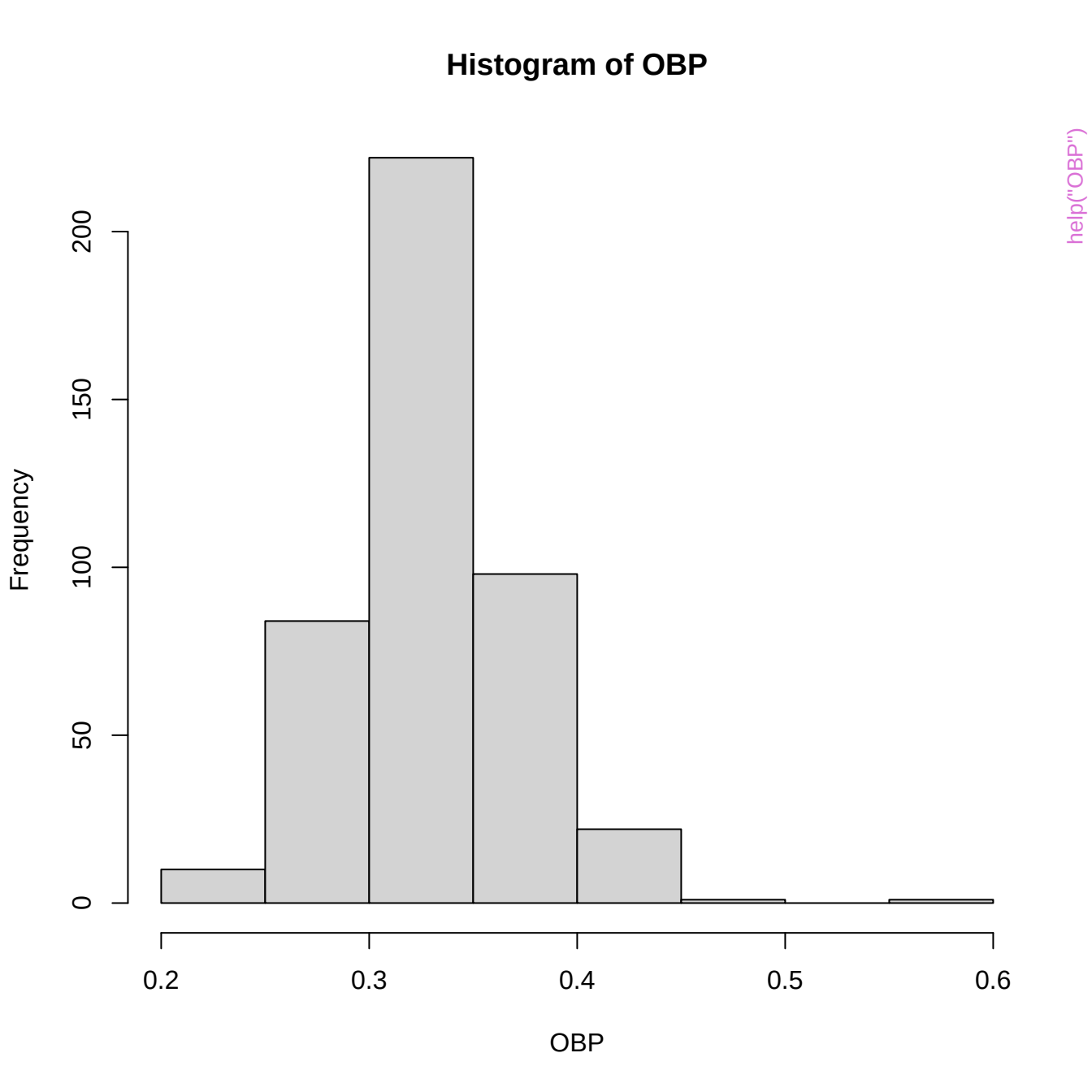
help("DensityPlot")


HUMMER
2000
3000
4000
5000
6000
7000
8000
2003.5
2004.0
2004.5
2005.0
2005.5
2006.0
Time
help("HUMMER")


KSI
cars.k
car.ksi
vandrivers
50
100
150
200
1000
1500
2000
2500
5
10
15
1970
1975
1980
1985
Time
help("KSI")

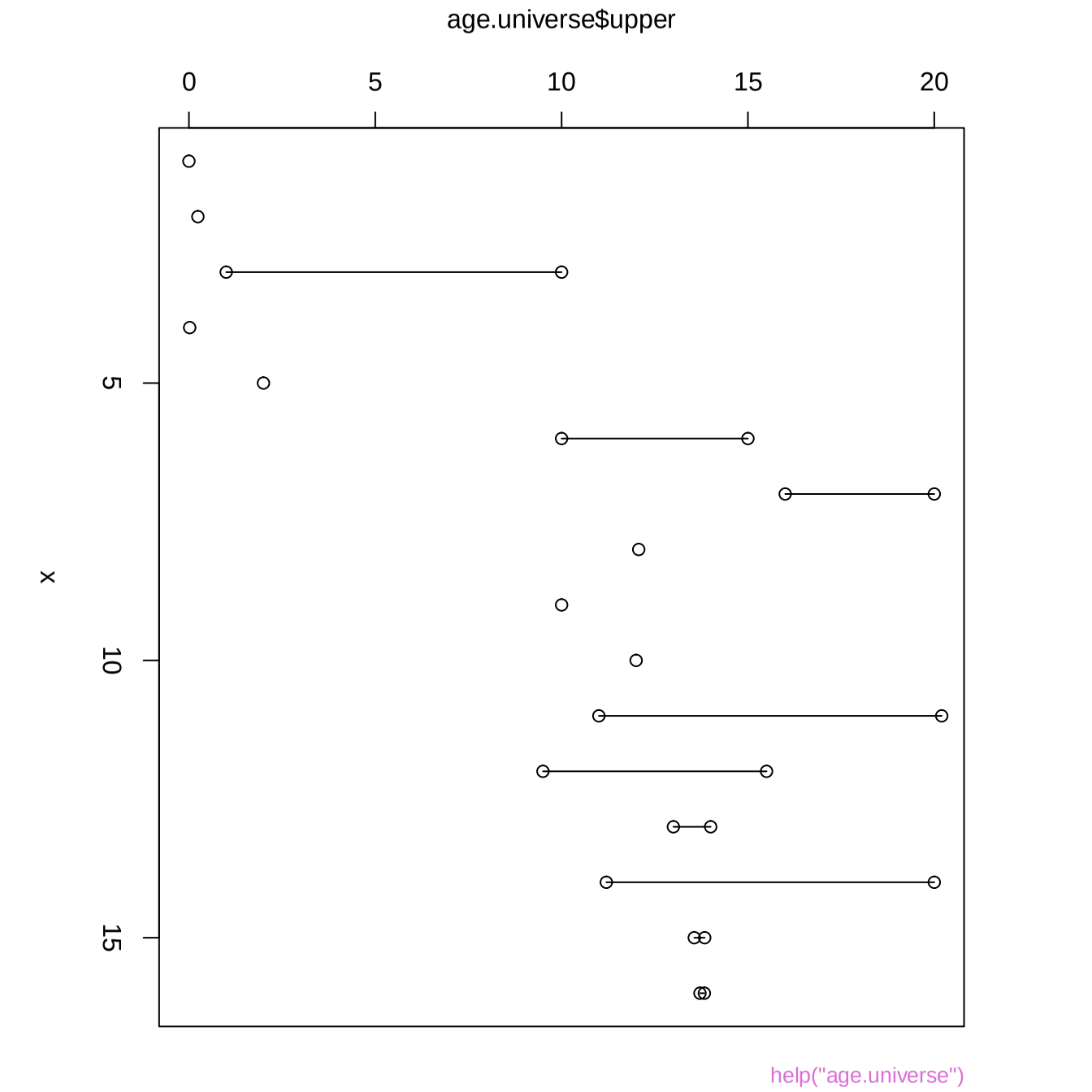


help("MLBattend")

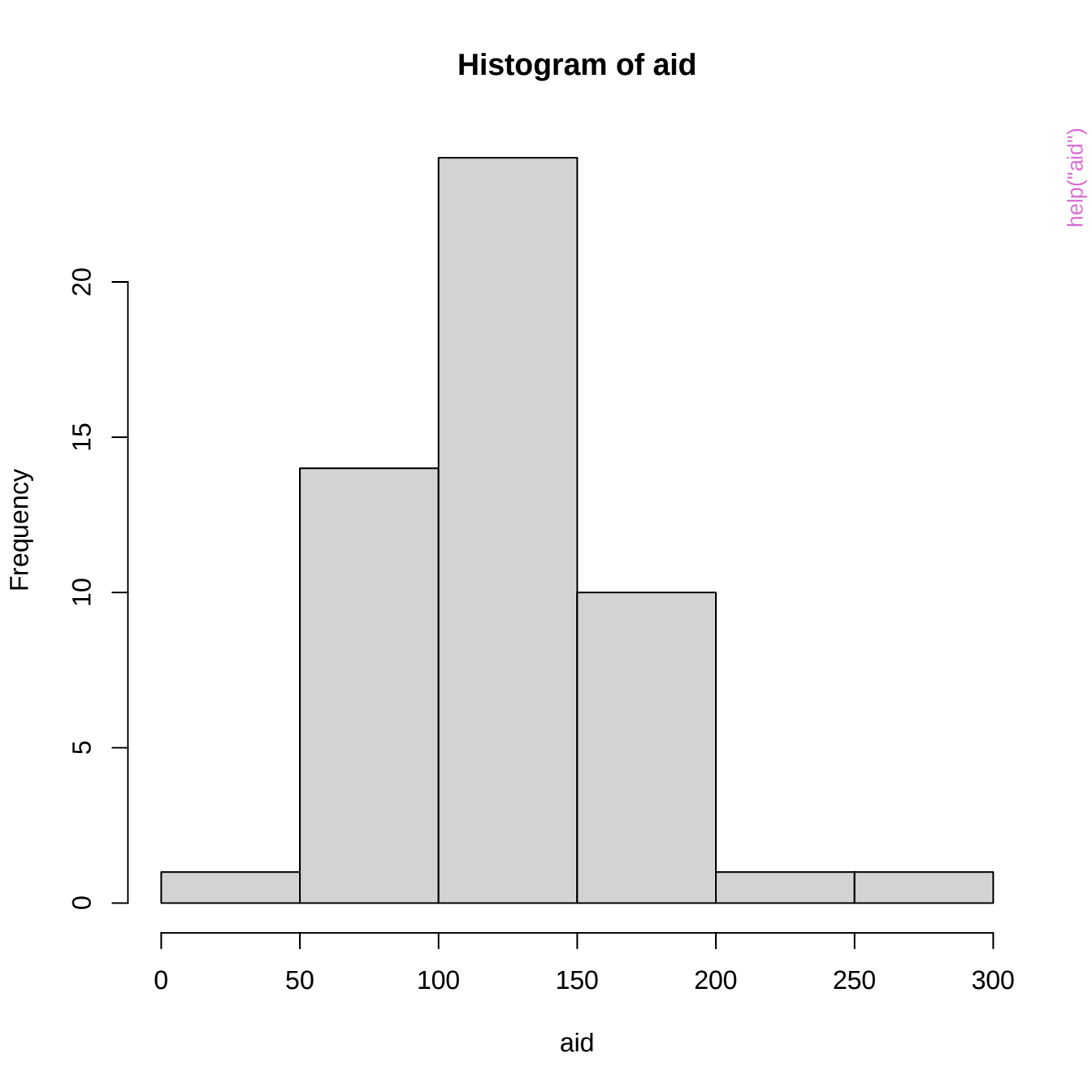

Histogram of OBP
help("OBP")
Frequency
0
50
100
150
200
0.2
0.3
0.4
0.5
0.6
OBP

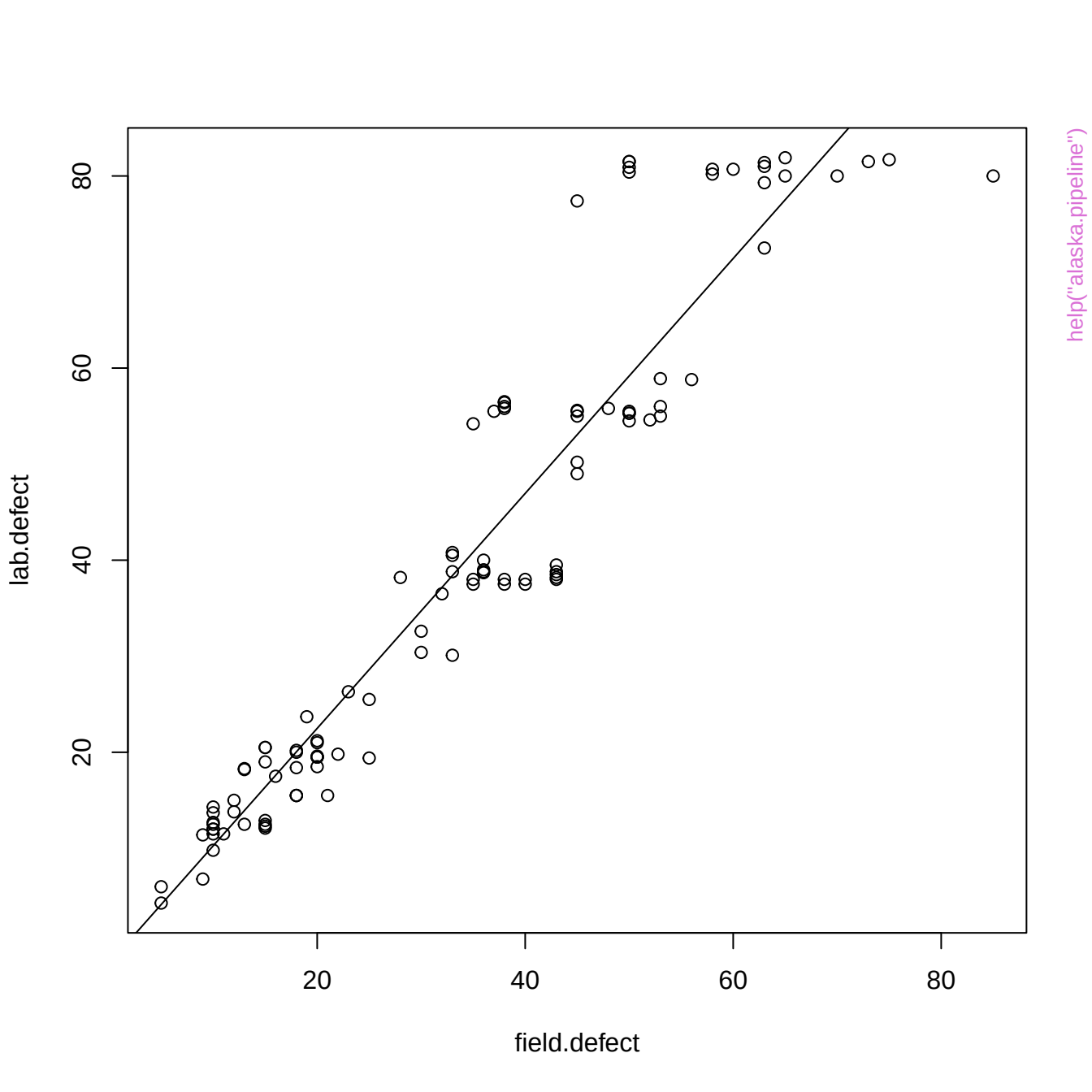
qqplot

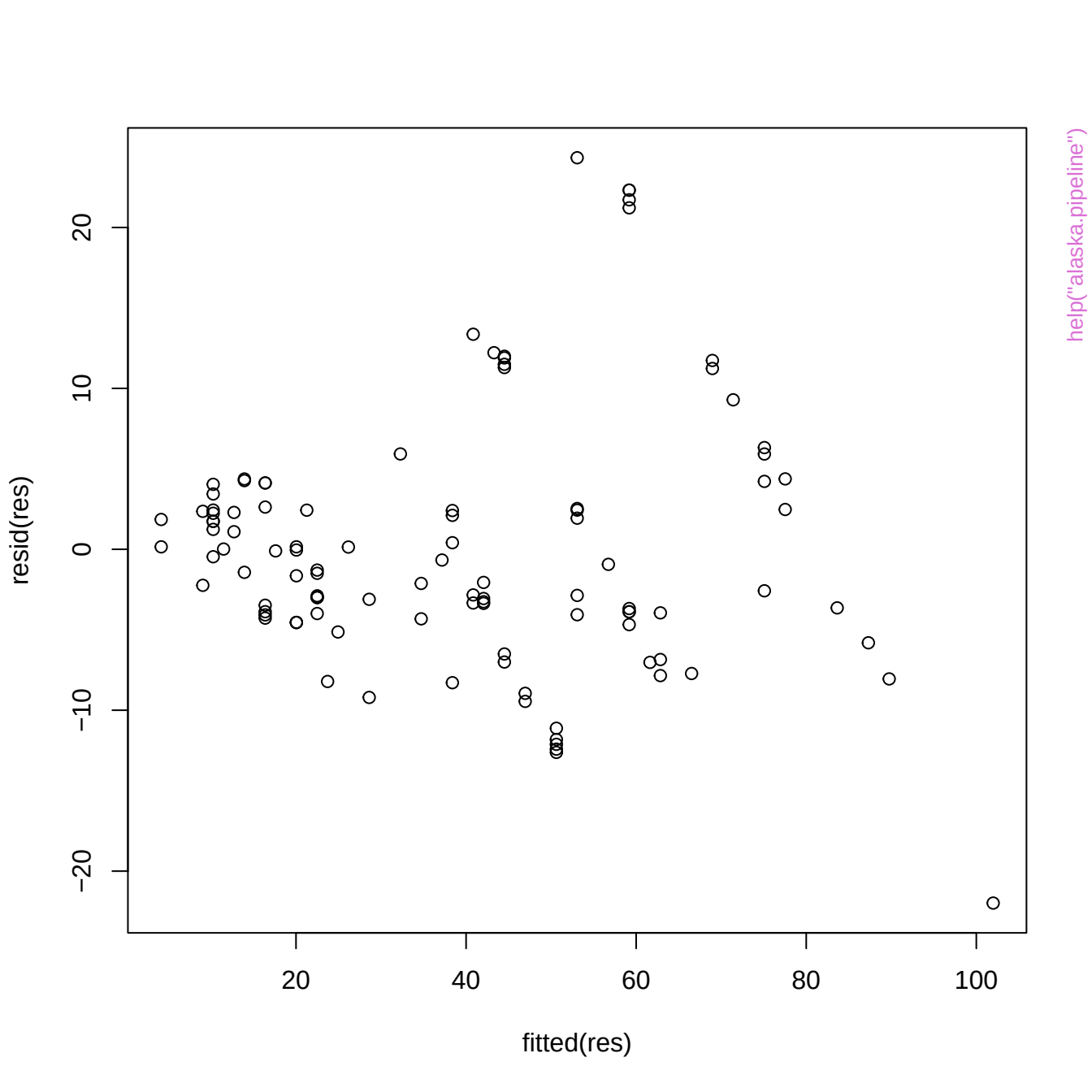
help("QQplot")



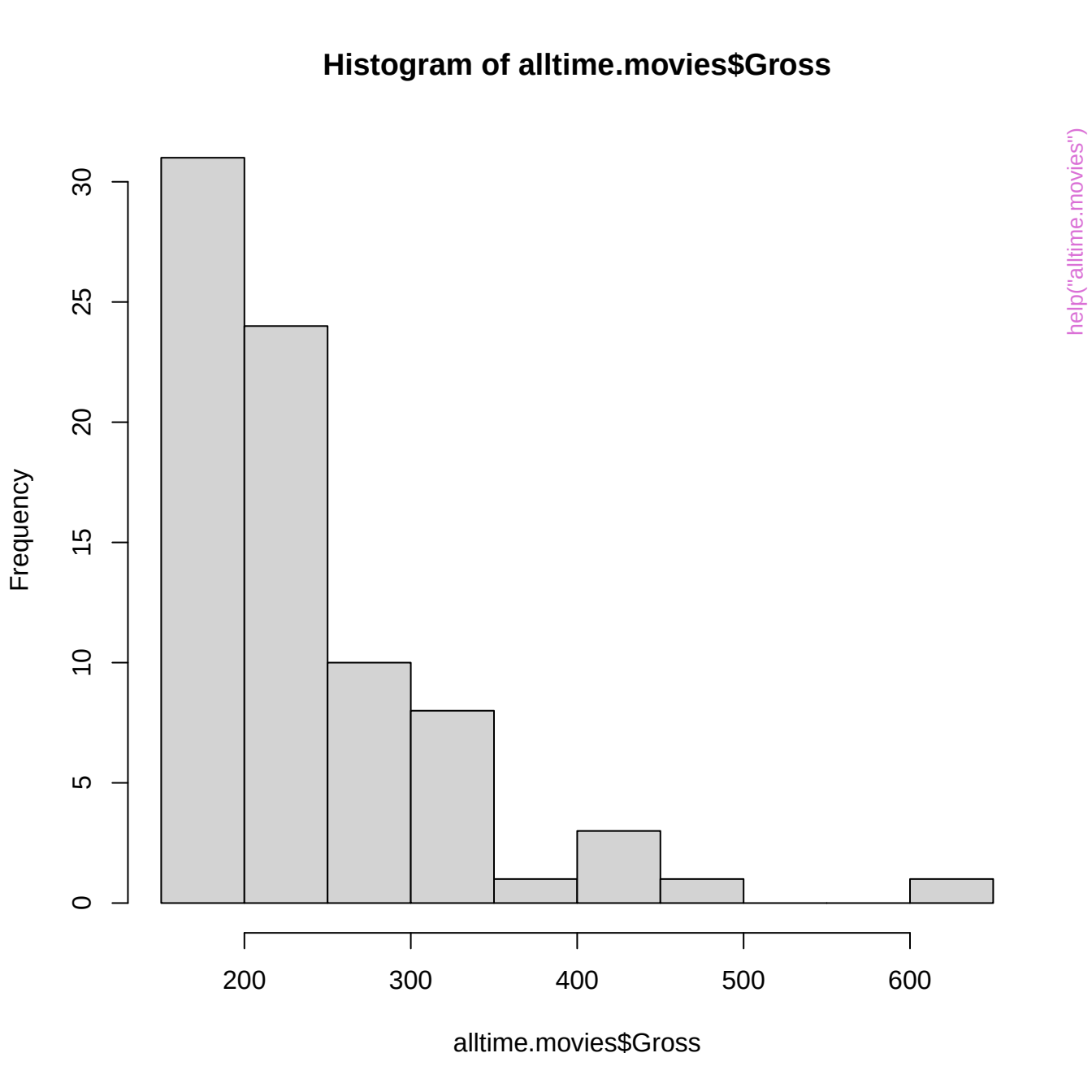
help("age.universe")

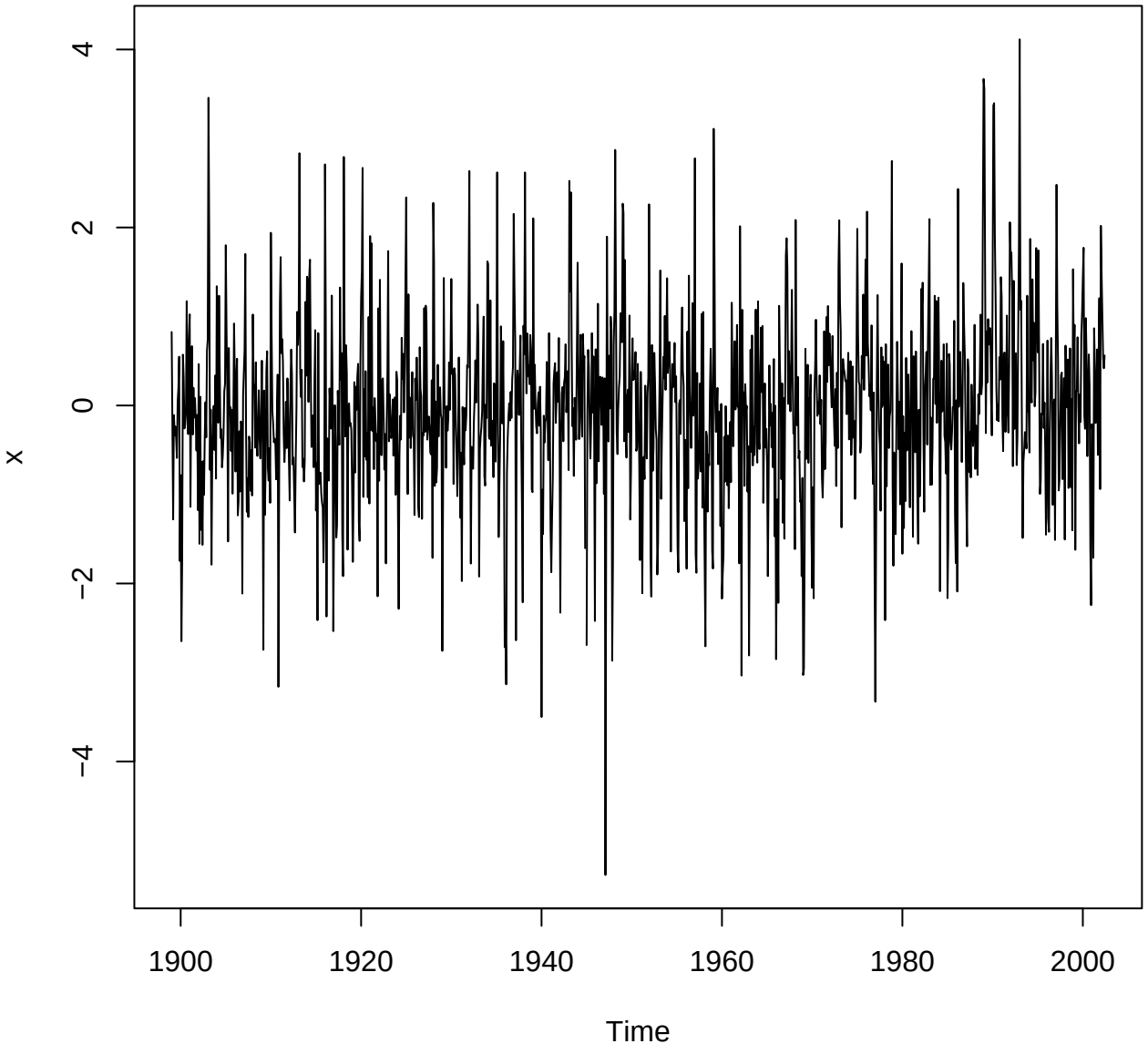

Histogram of aid
help("aid")
Frequency
0
5
10
15
20
0
50
100
150
200
250
300
aid

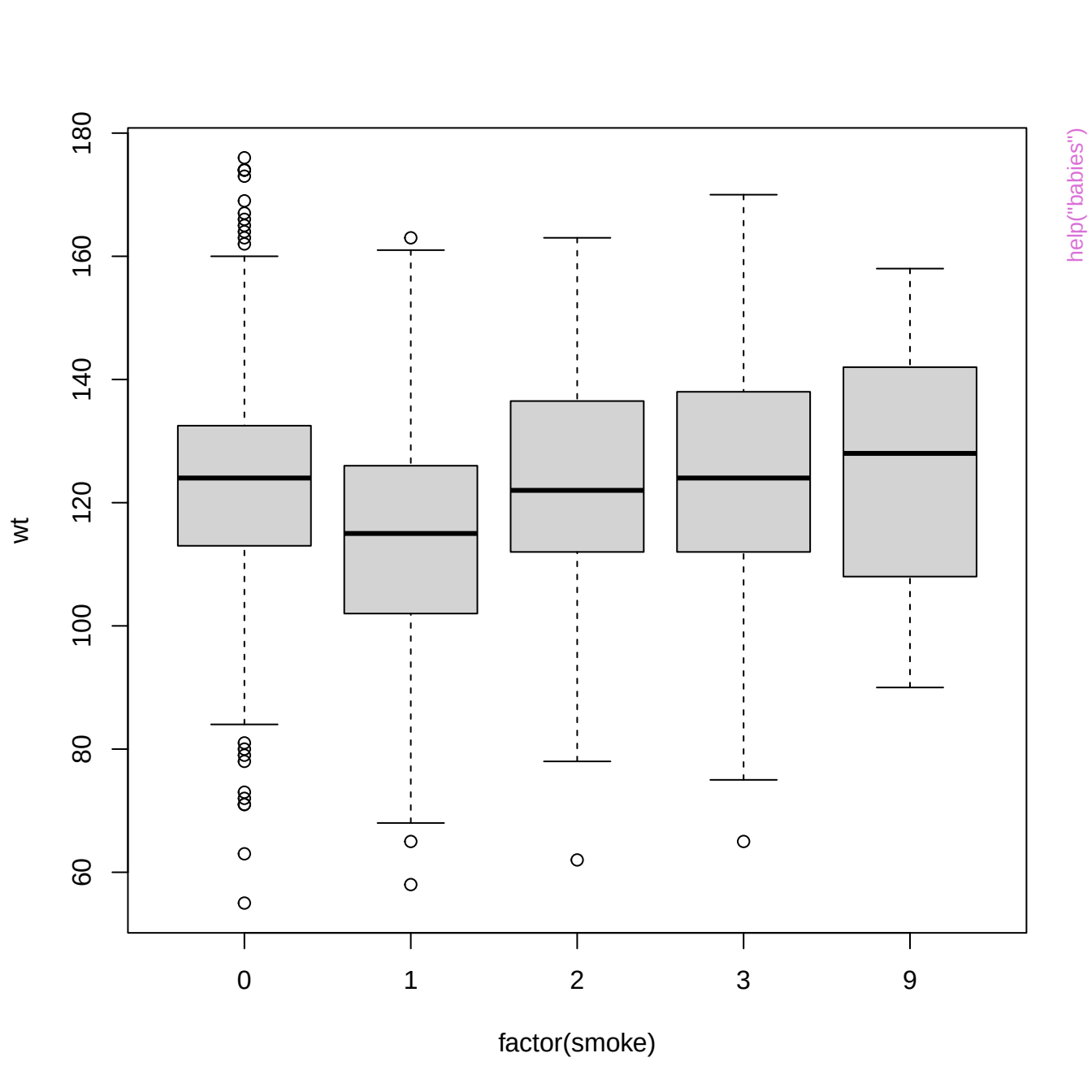

lab.defect
field.defect
20
40
60
80
20
40
60
80
help("alaska.pipeline")



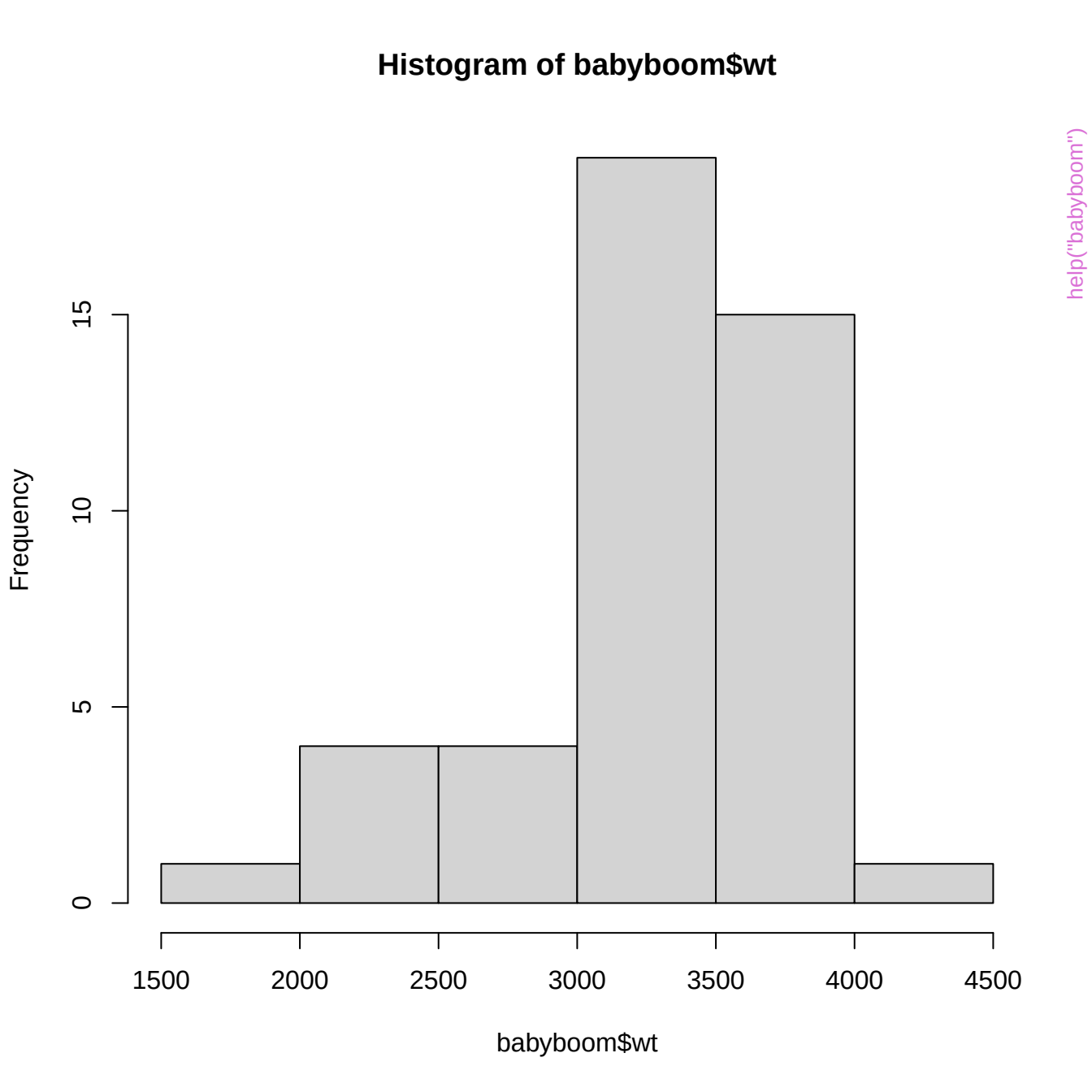
help("alaska.pipeline")

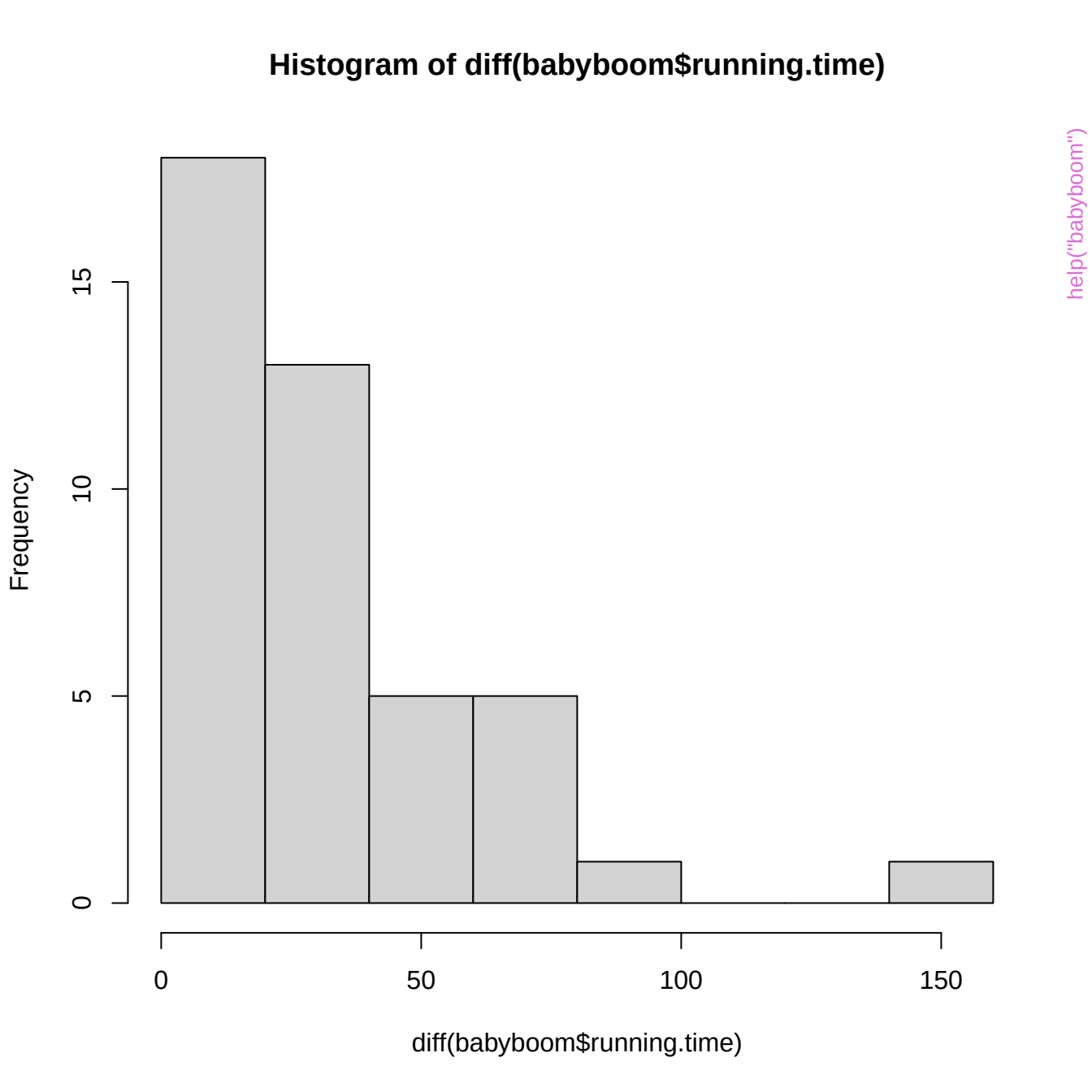

Histogram of alltime.movies$Gross
Frequency
0
5
10
15
20
25
30
200
300
400
500
600
alltime.movies$Gross
help("alltime.movies")

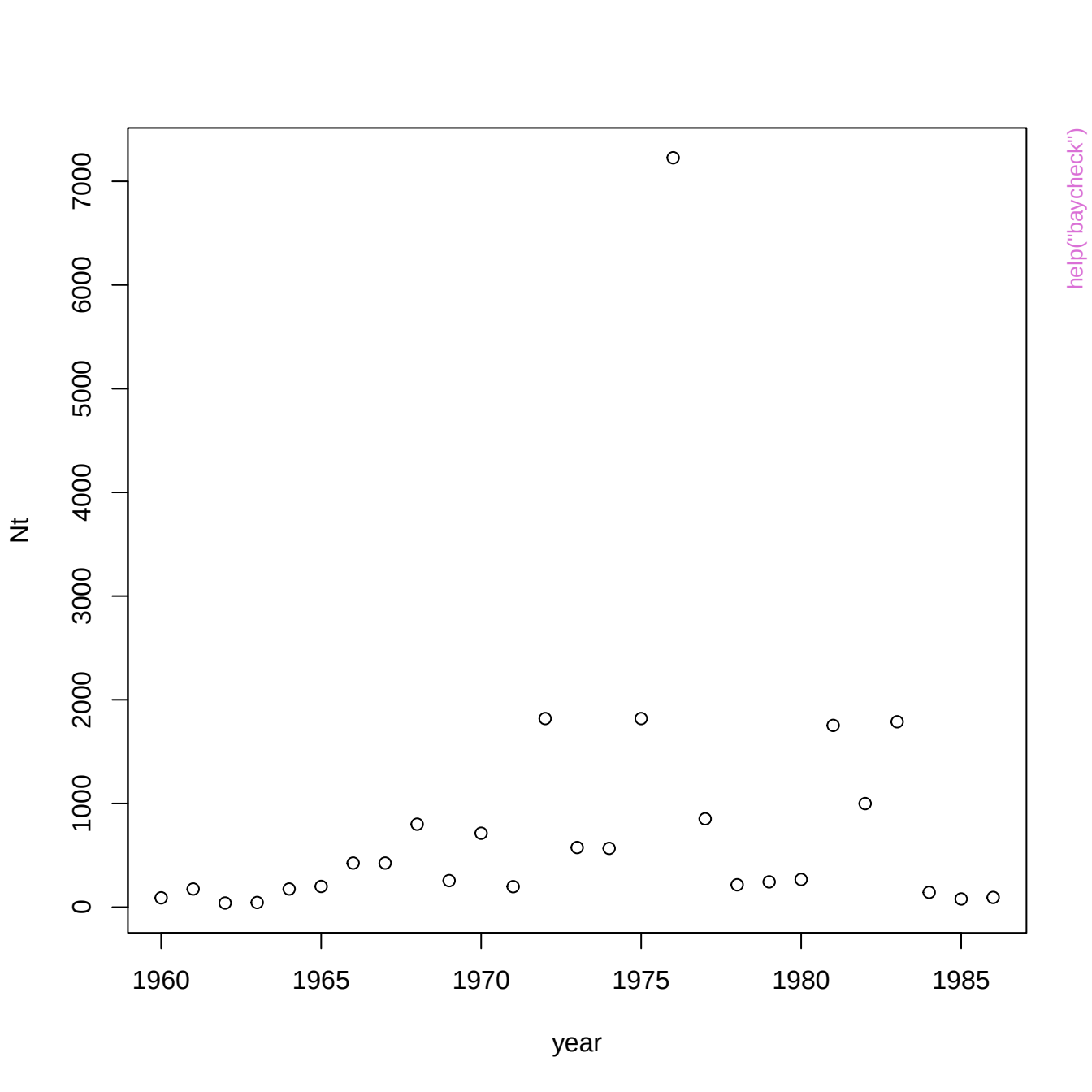

x
4
2
0
−2
−4
1900
1920
1940
1960
1980
2000
Time
help("arctic.oscillations")

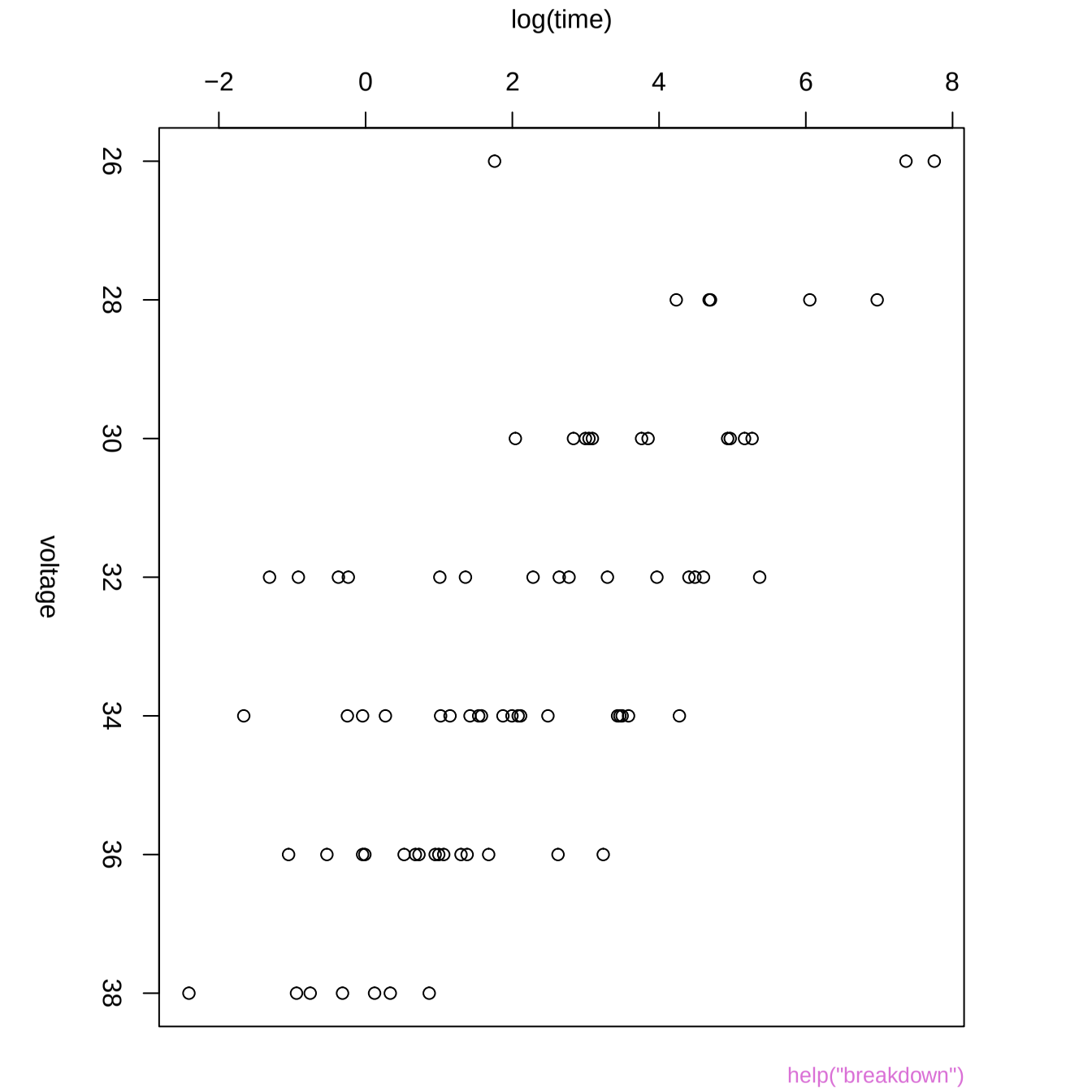

wt
60
80
100
120
140
160
180
0
1
2
3
9
factor(smoke)
help("babies")

help("babies")

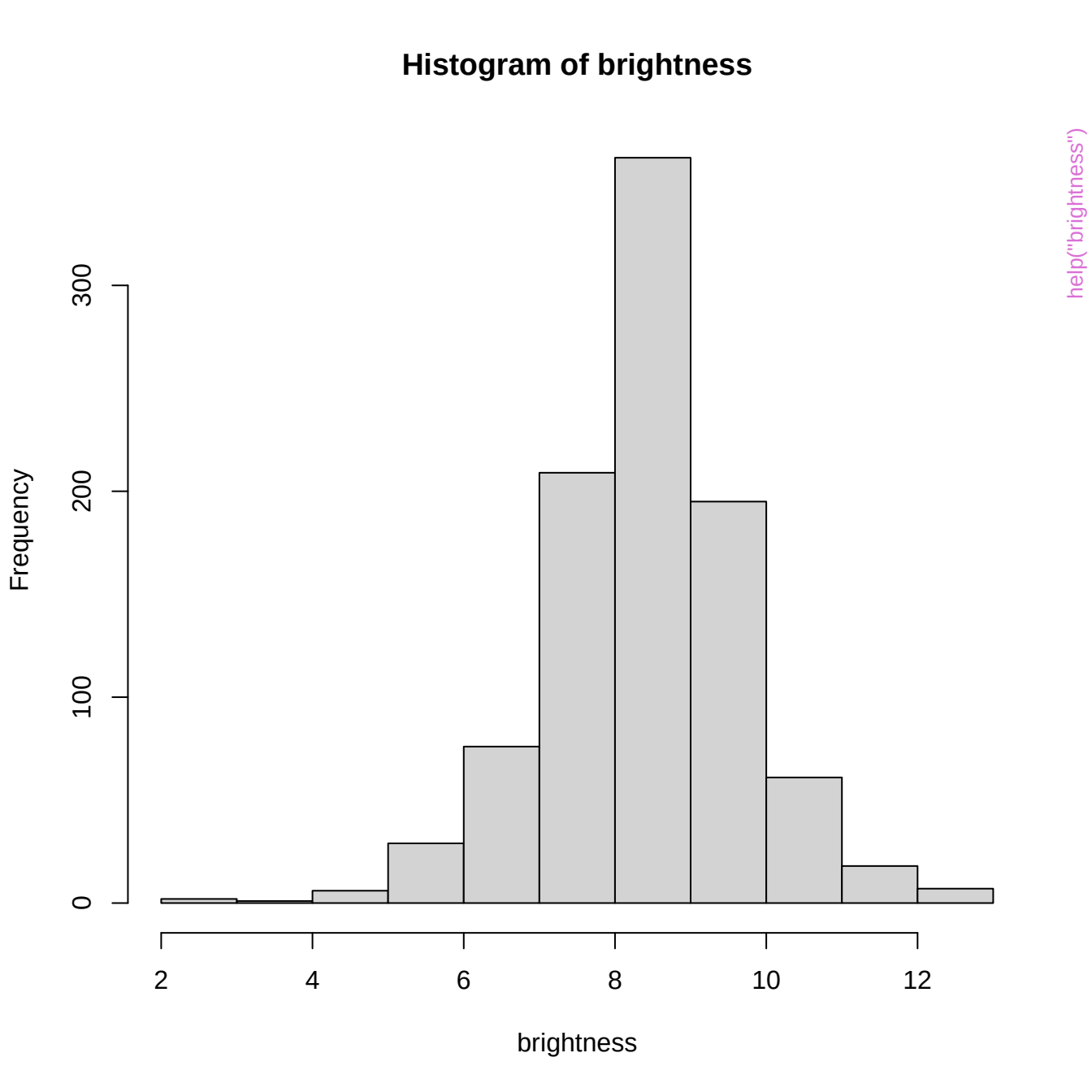

Histogram of babyboom$wt
help("babyboom")
Frequency
0
5
10
15
1500
2000
2500
3000
3500
4000
4500
babyboom$wt

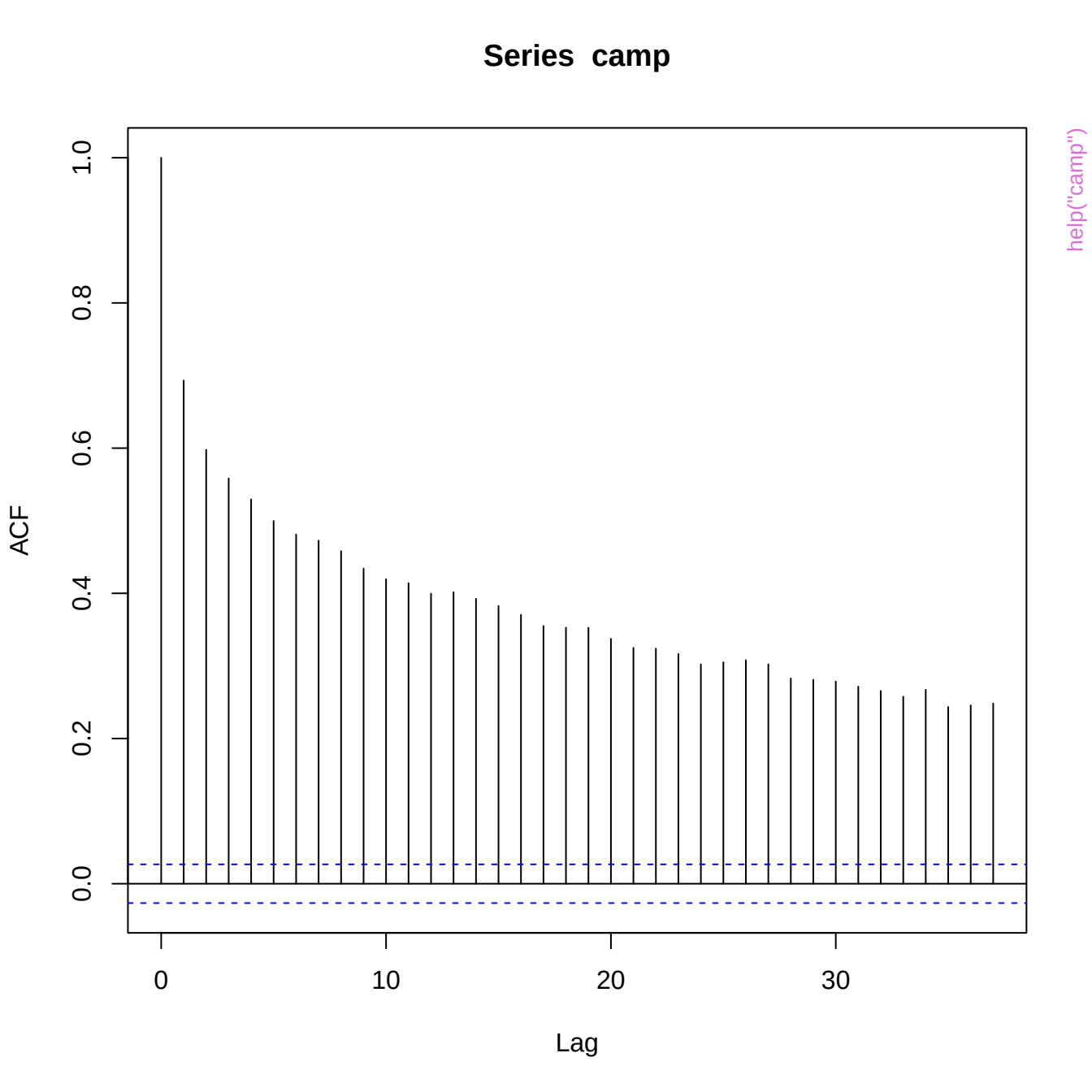

Histogram of diff(babyboom$running.time)
Frequency
0
5
10
15
0
50
100
150
diff(babyboom$running.time)
help("babyboom")

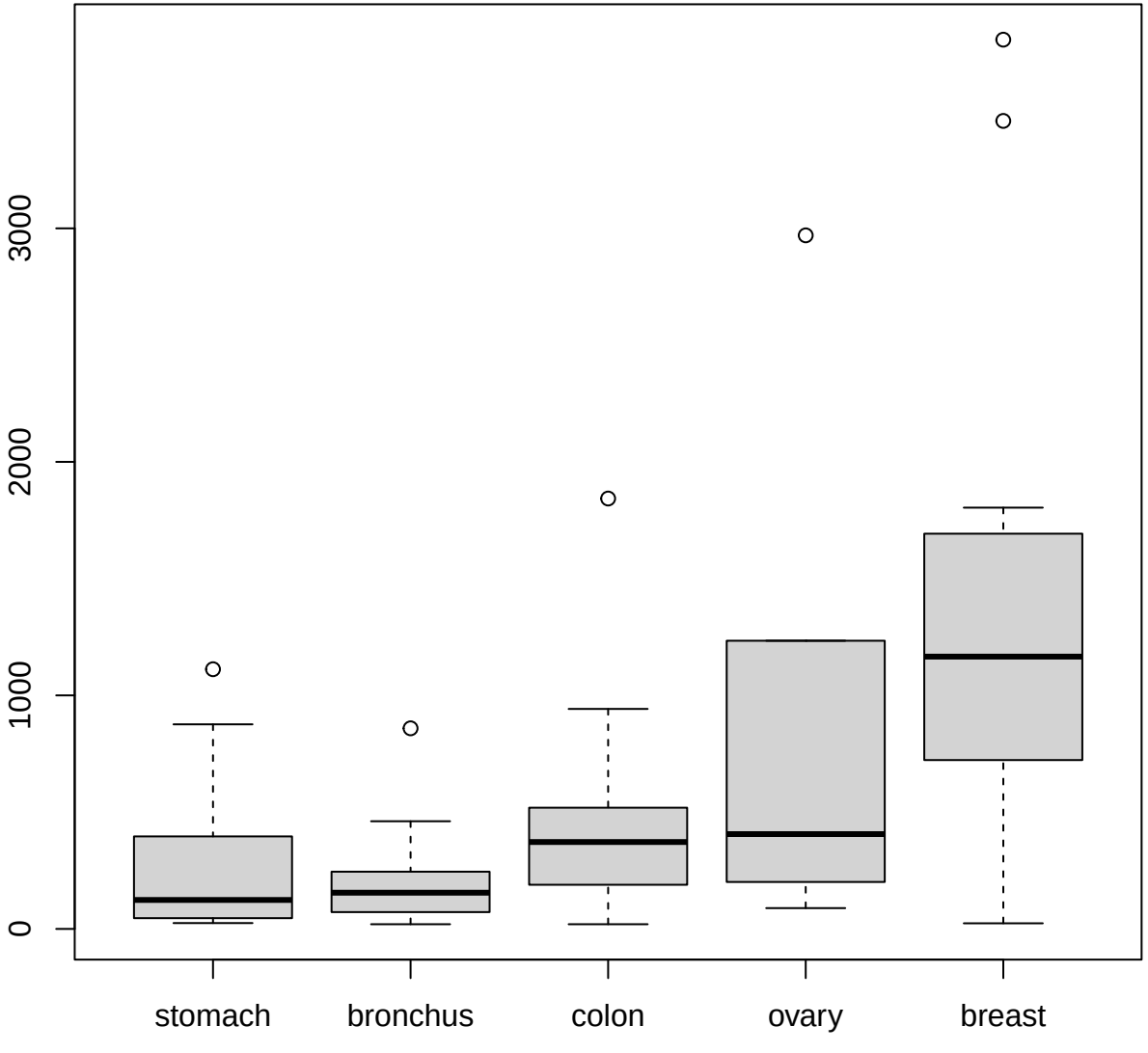

Nt
0
1000
2000
3000
4000
5000
6000
7000
1960
1965
1970
1975
1980
1985
year
help("baycheck")



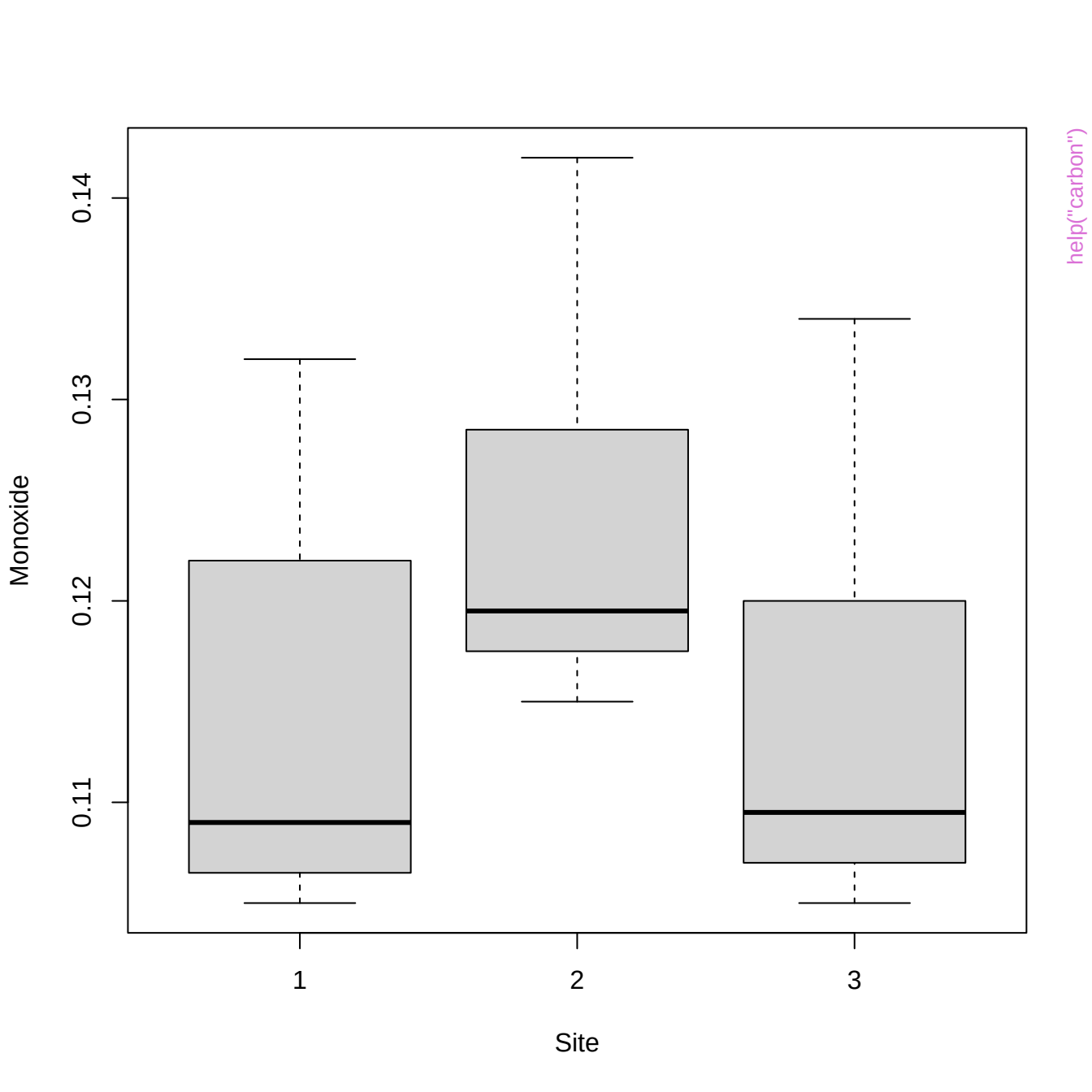
help("breakdown")

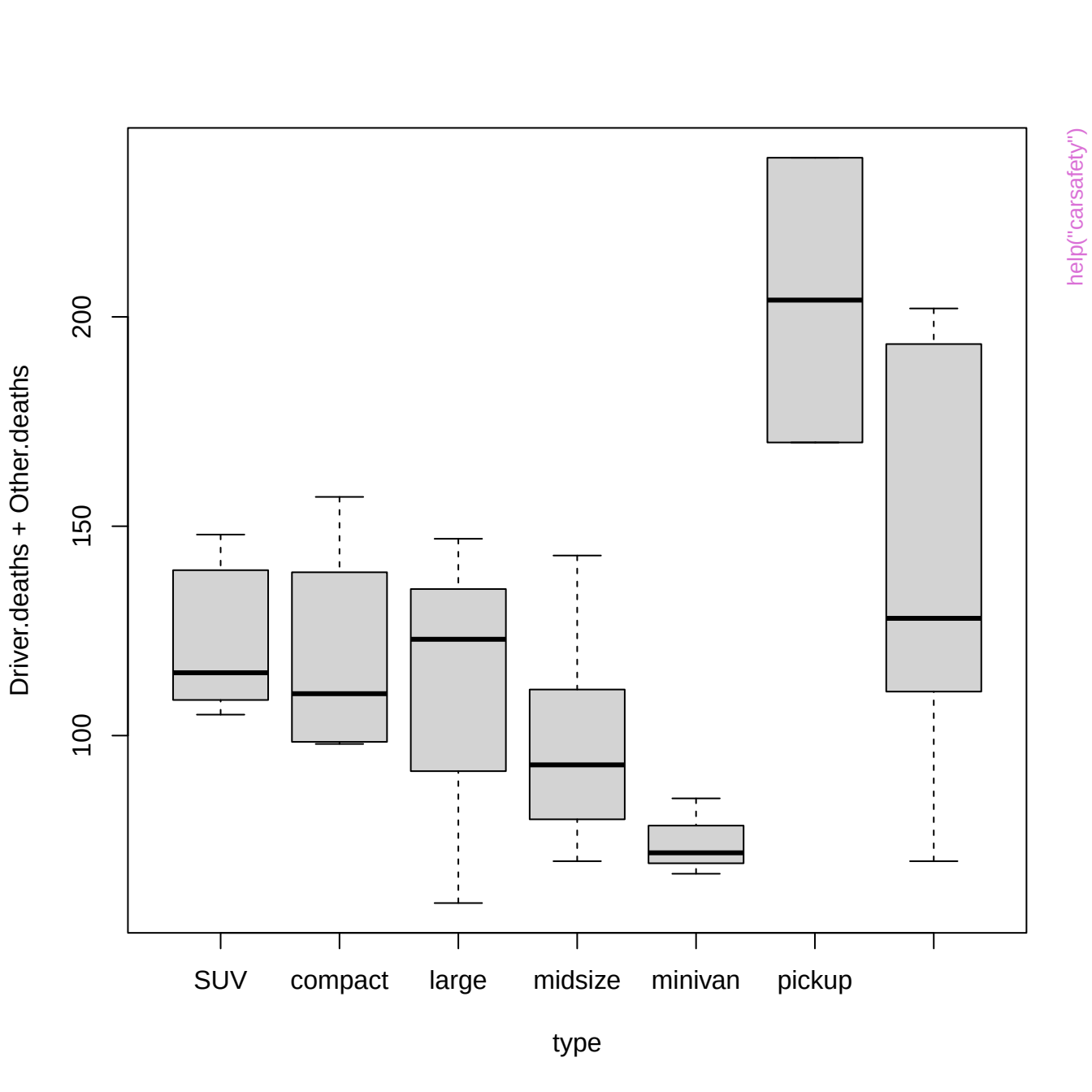

Histogram of brightness
help("brightness")
Frequency
0
100
200
300
2
4
6
8
10
12
brightness

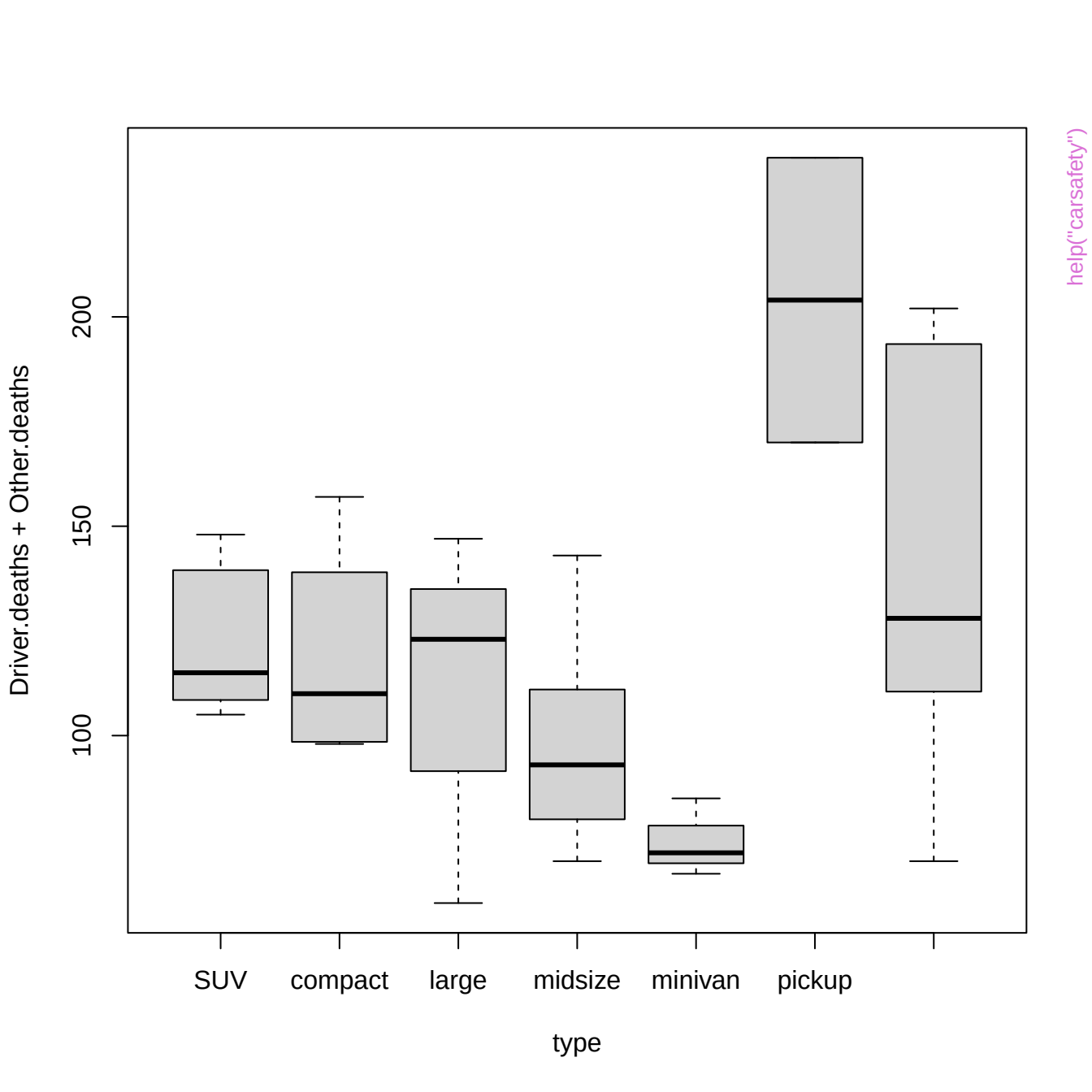

Series camp
ACF
1.0
0.8
0.6
0.4
0.2
0.0
0
10
20
30
Lag
help("camp")

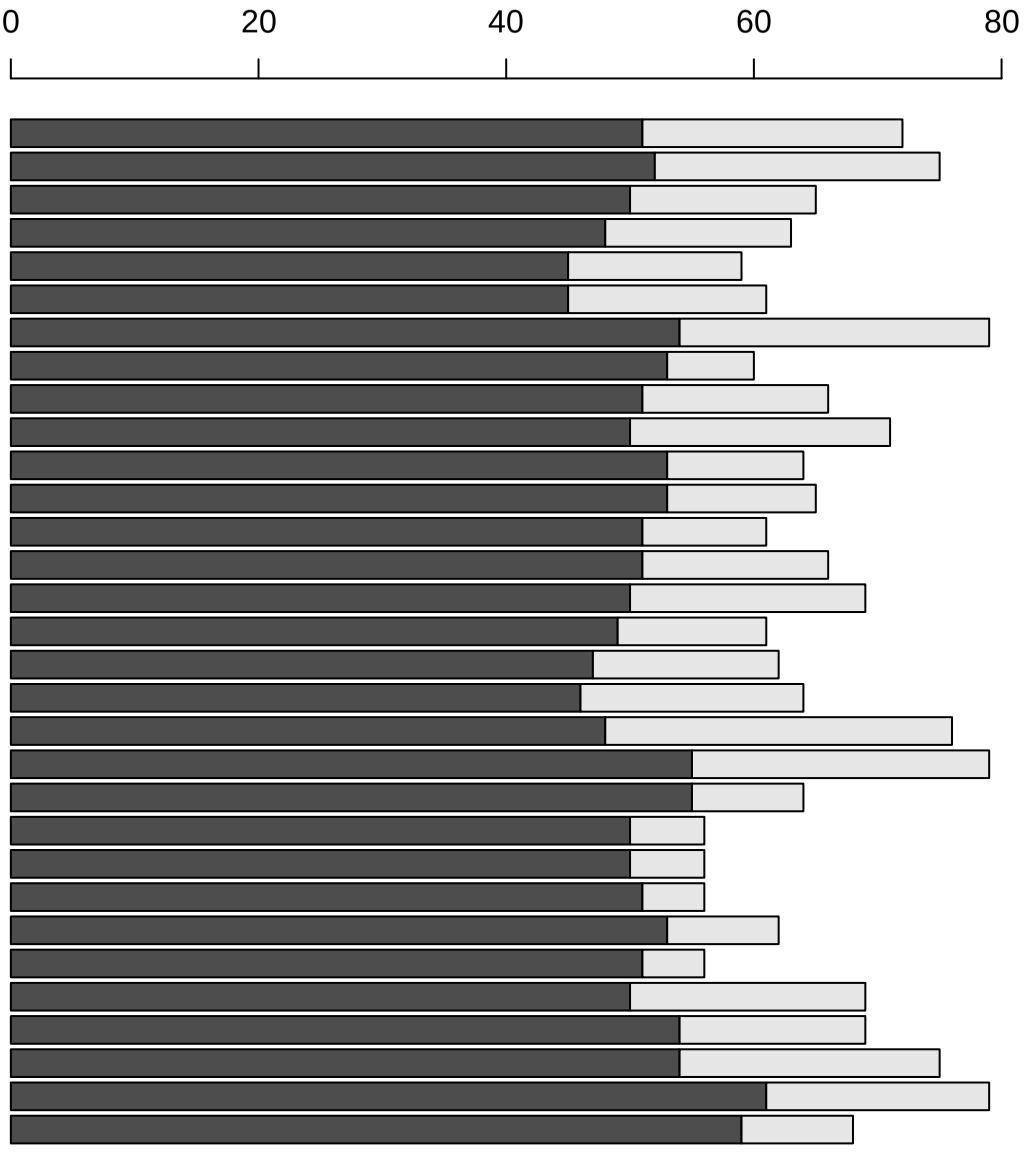


help("cancer")

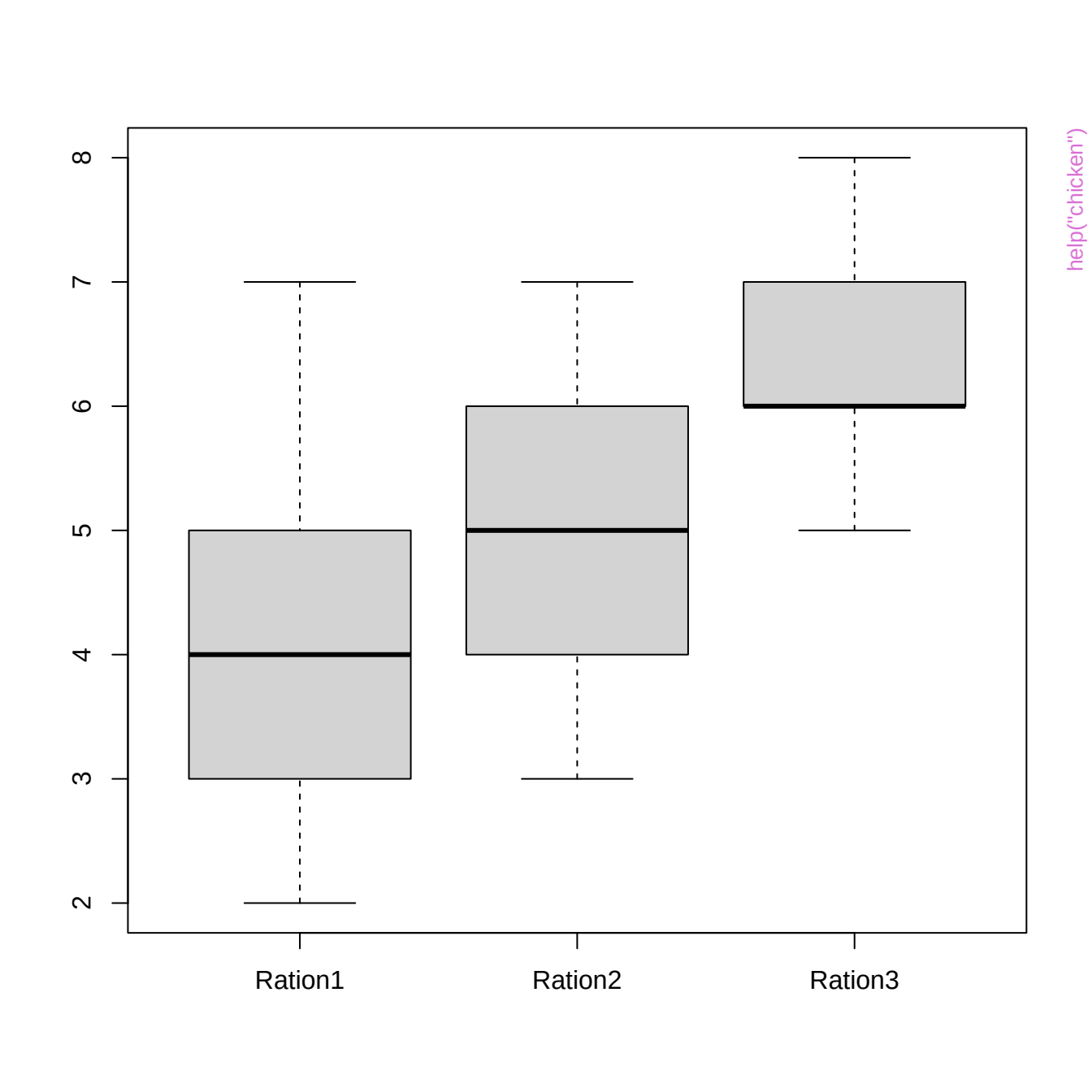

Monoxide
0.11
0.12
0.13
0.14
1
2
3
Site
help("carbon")

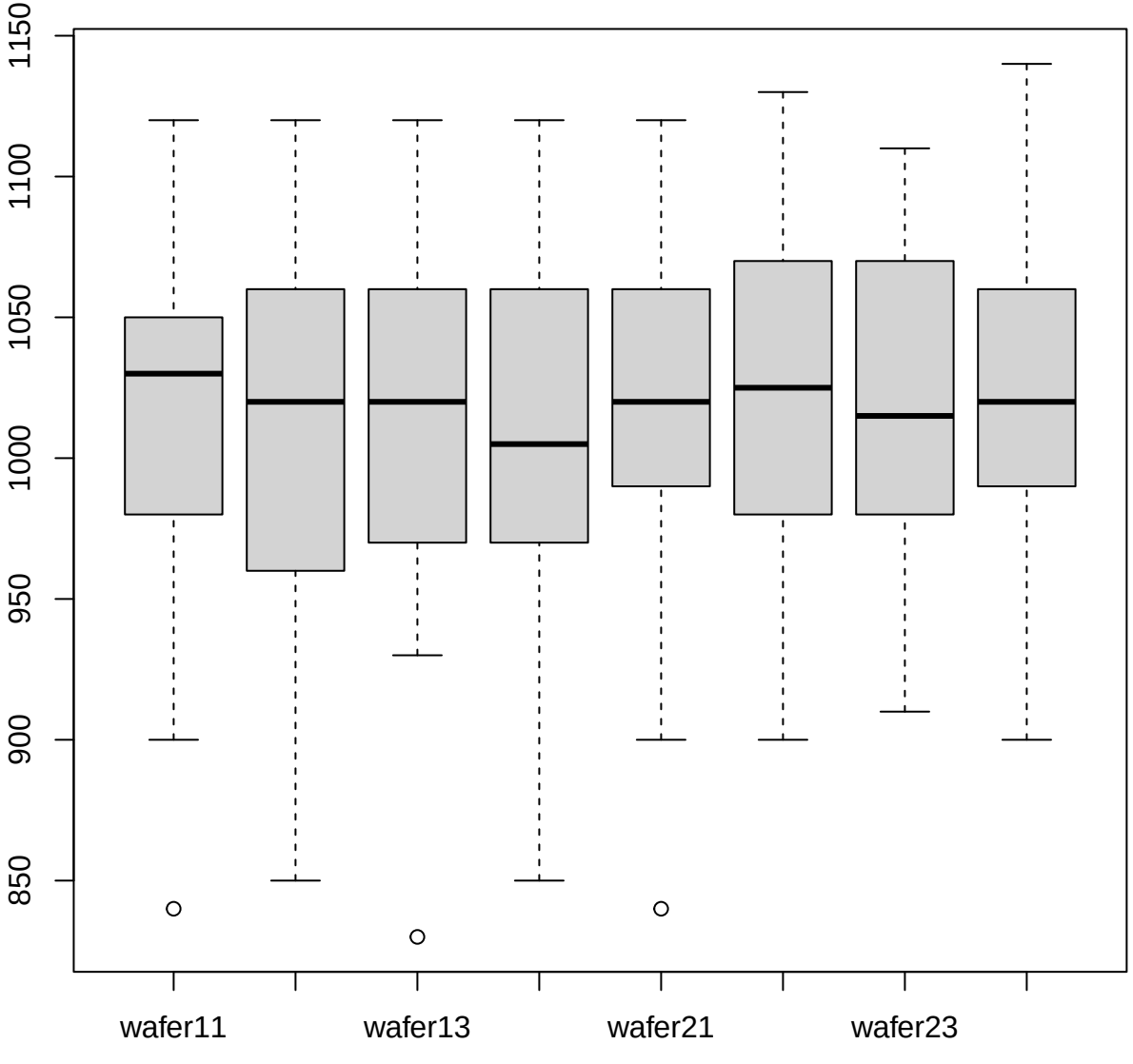

help("carsafety")
Driver.deaths + Other.deaths
100
150
200
SUV
compact
large
midsize
minivan
pickup
type


help("carsafety")
Driver.deaths + Other.deaths
100
150
200
SUV
compact
large
midsize
minivan
pickup
type

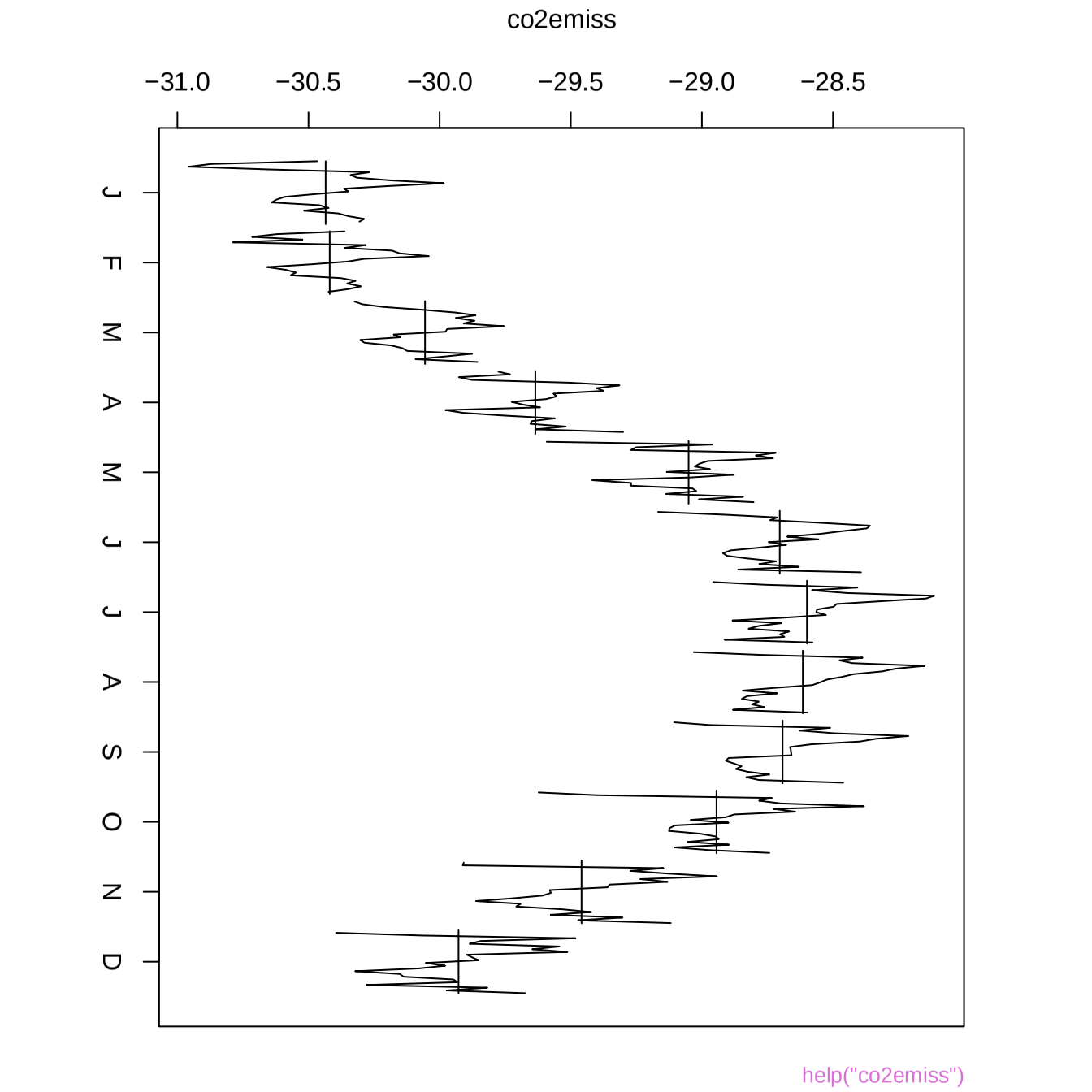


help("central.park")

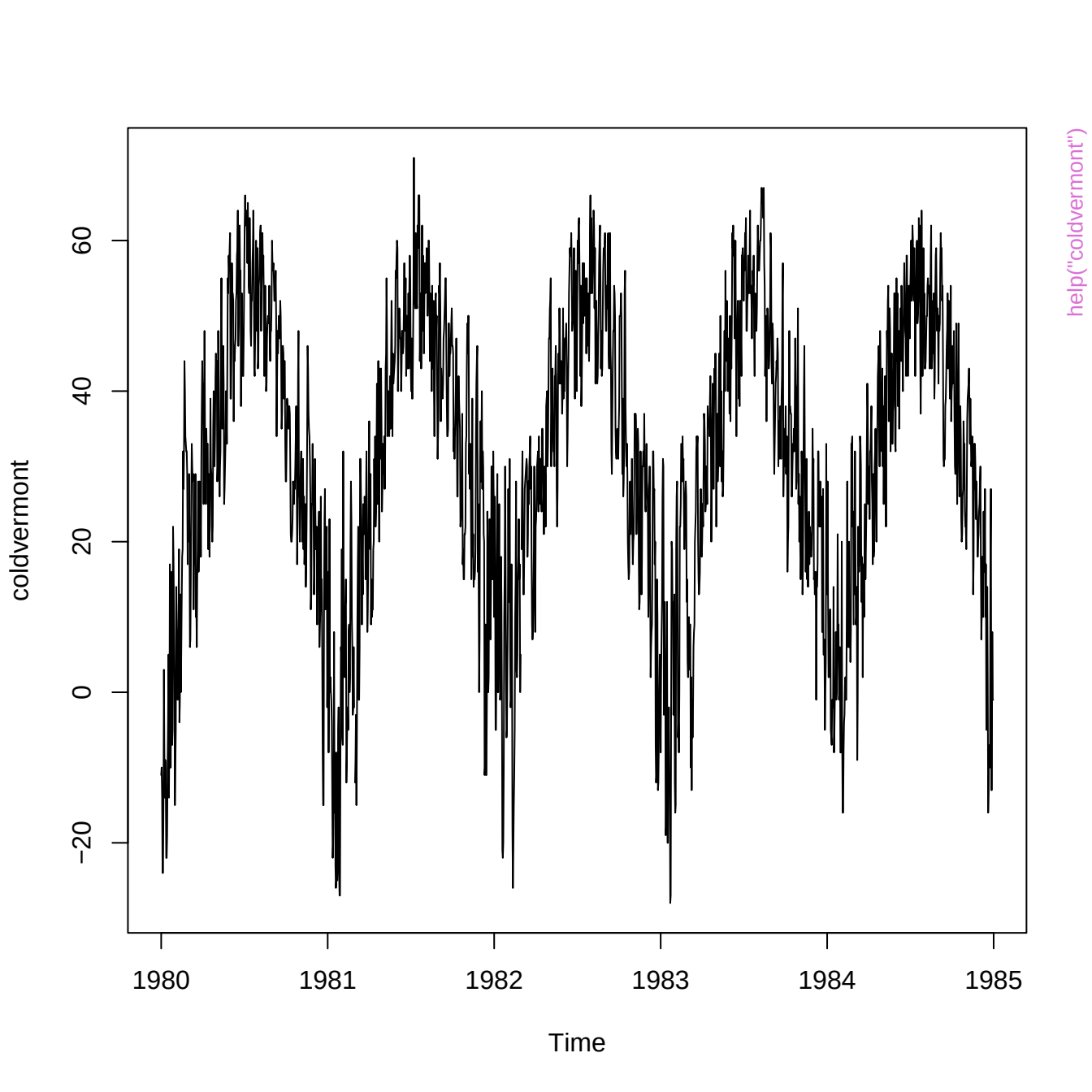

help("chicken")
8
7
6
5
4
3
2
Ration1
Ration2
Ration3

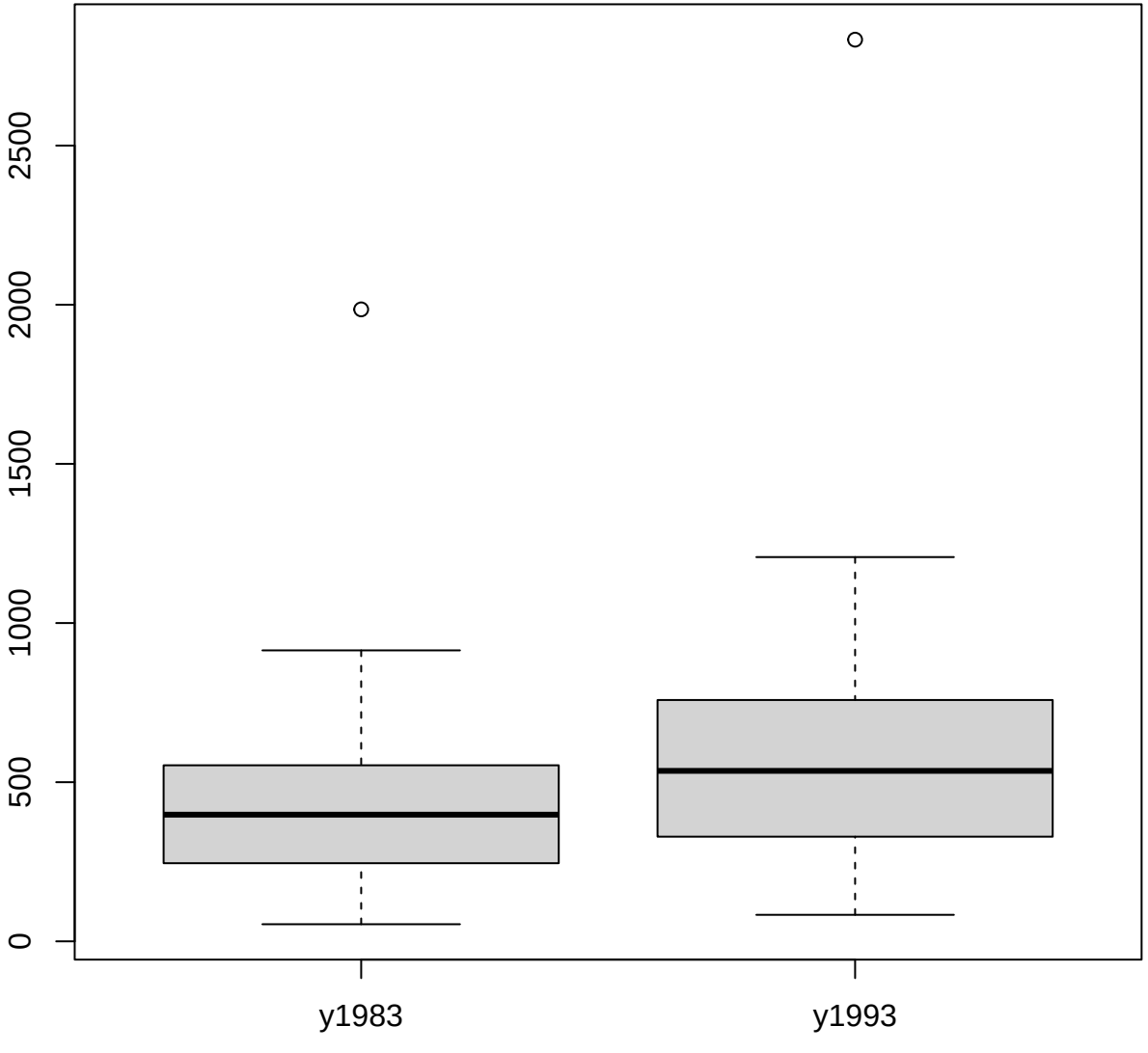

1150
1100
1050
1000
950
900
850
wafer11
wafer13
wafer21
wafer23

help("chips")

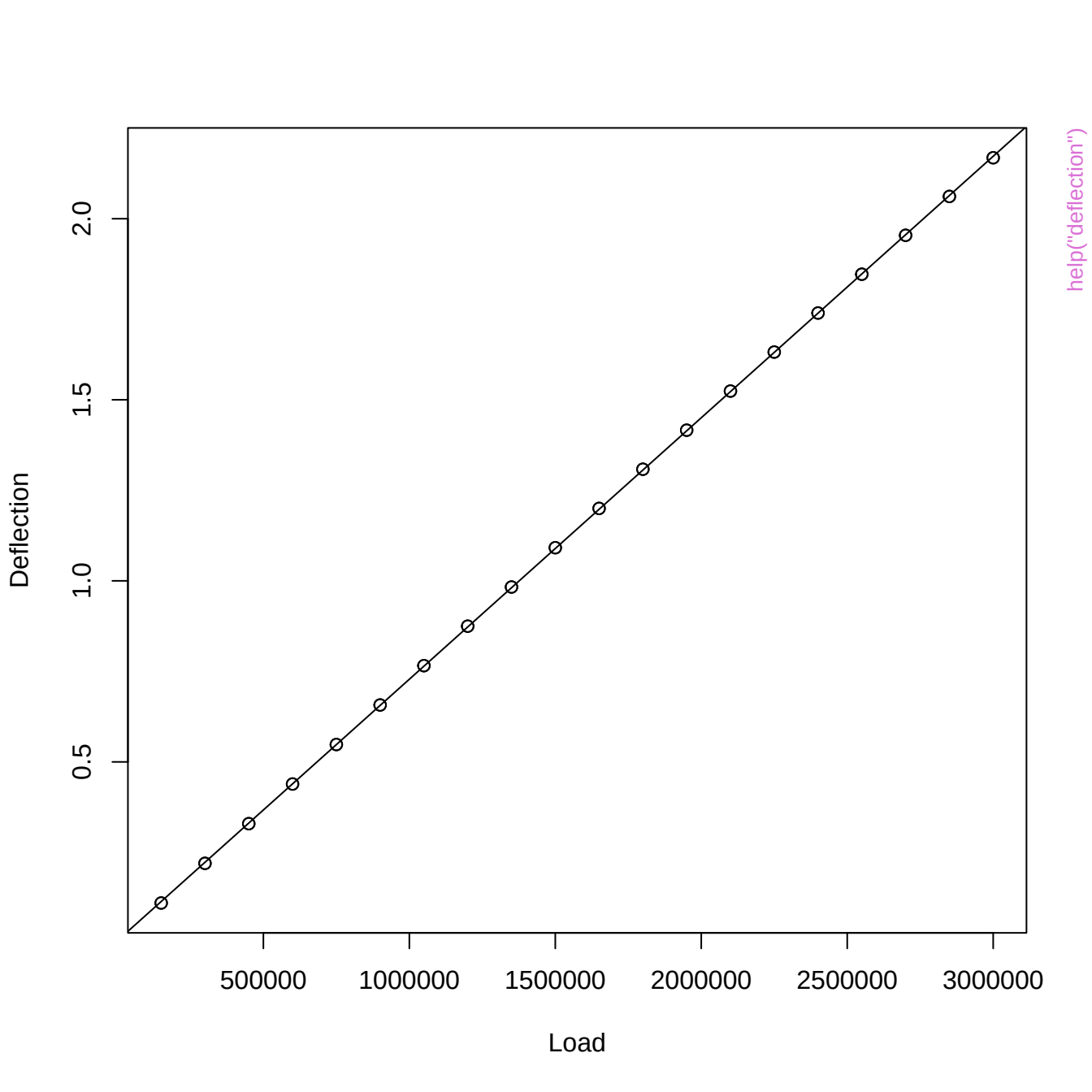


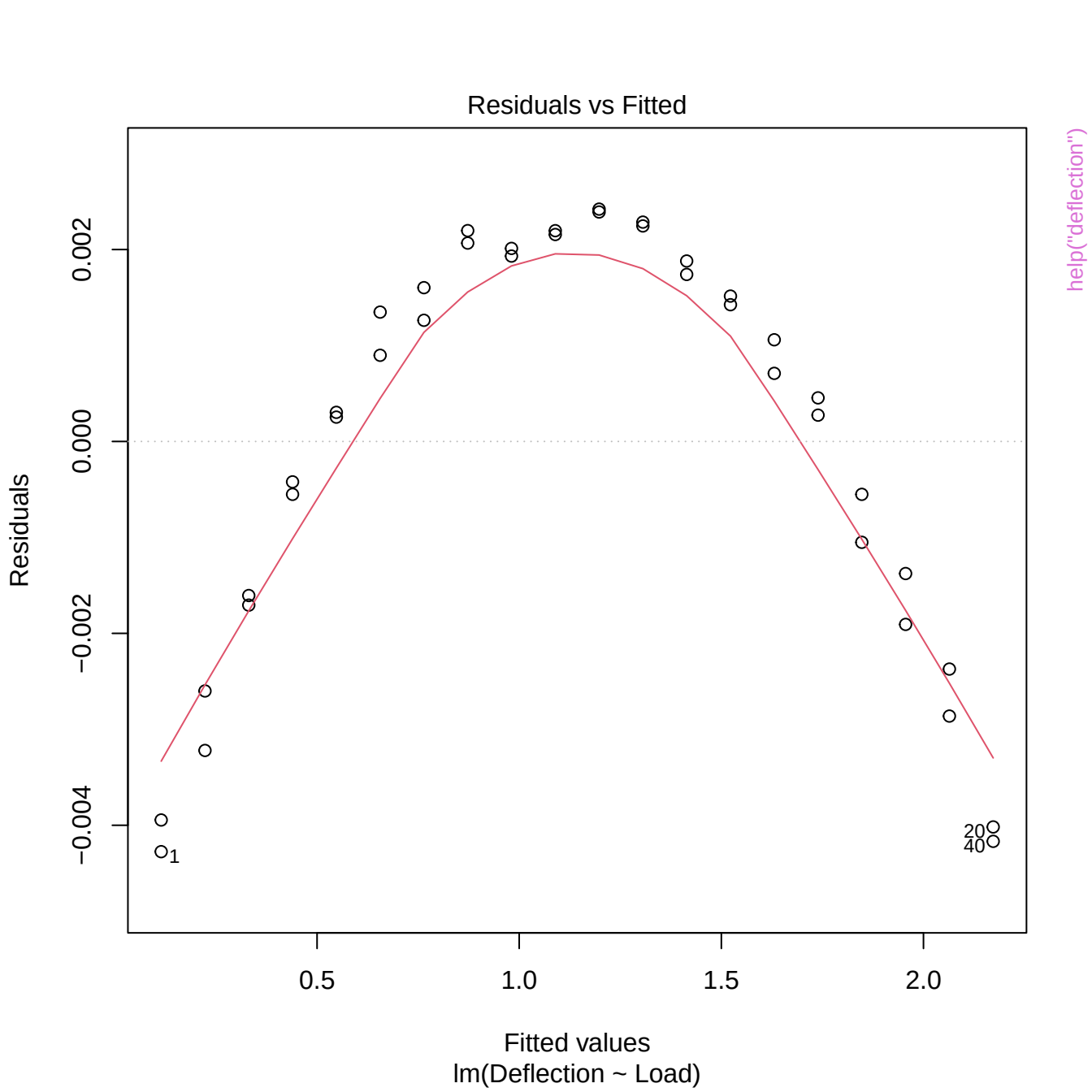
help("co2emiss")

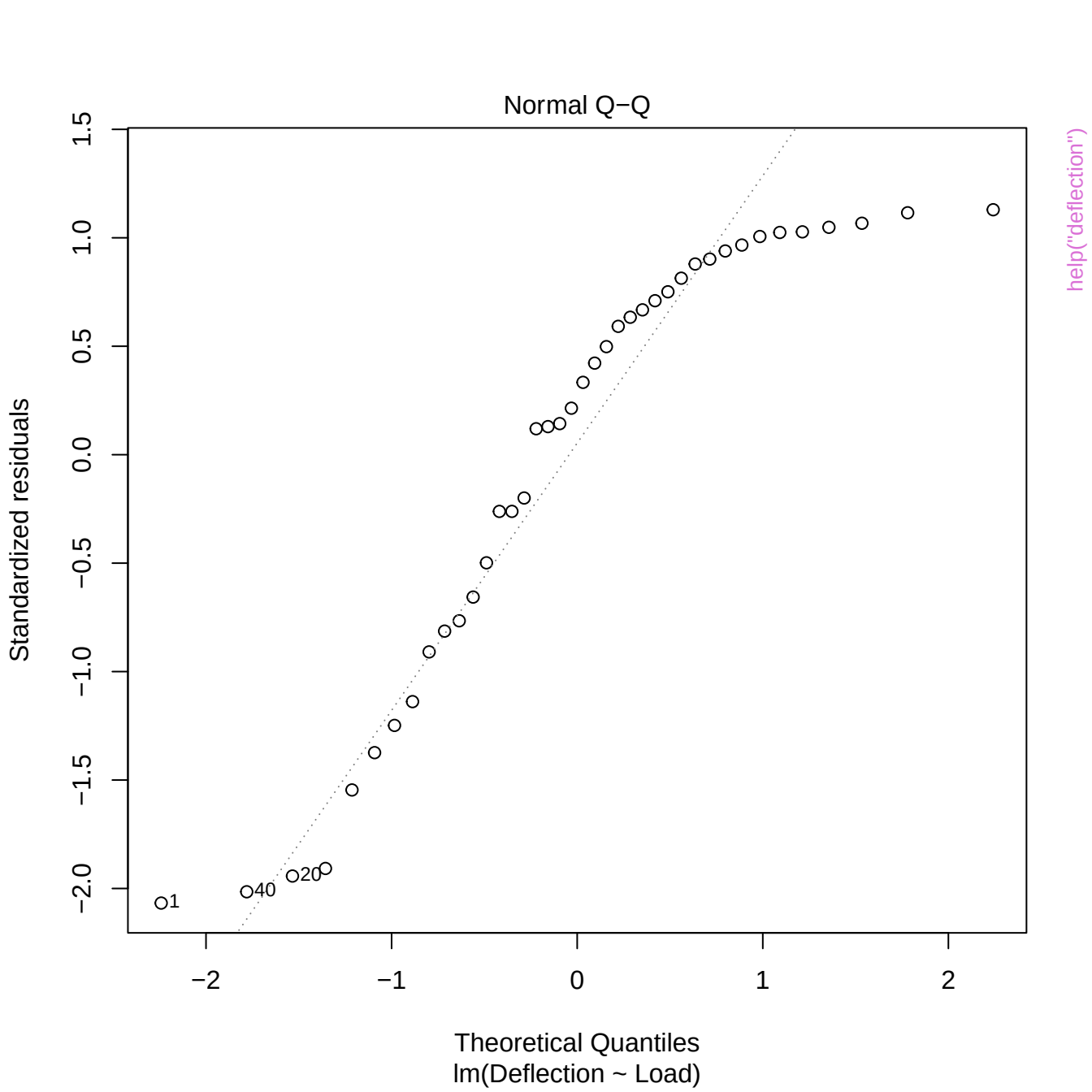

coldvermont
60
40
20
0
−20
1980
1981
1982
1983
1984
1985
Time
help("coldvermont")

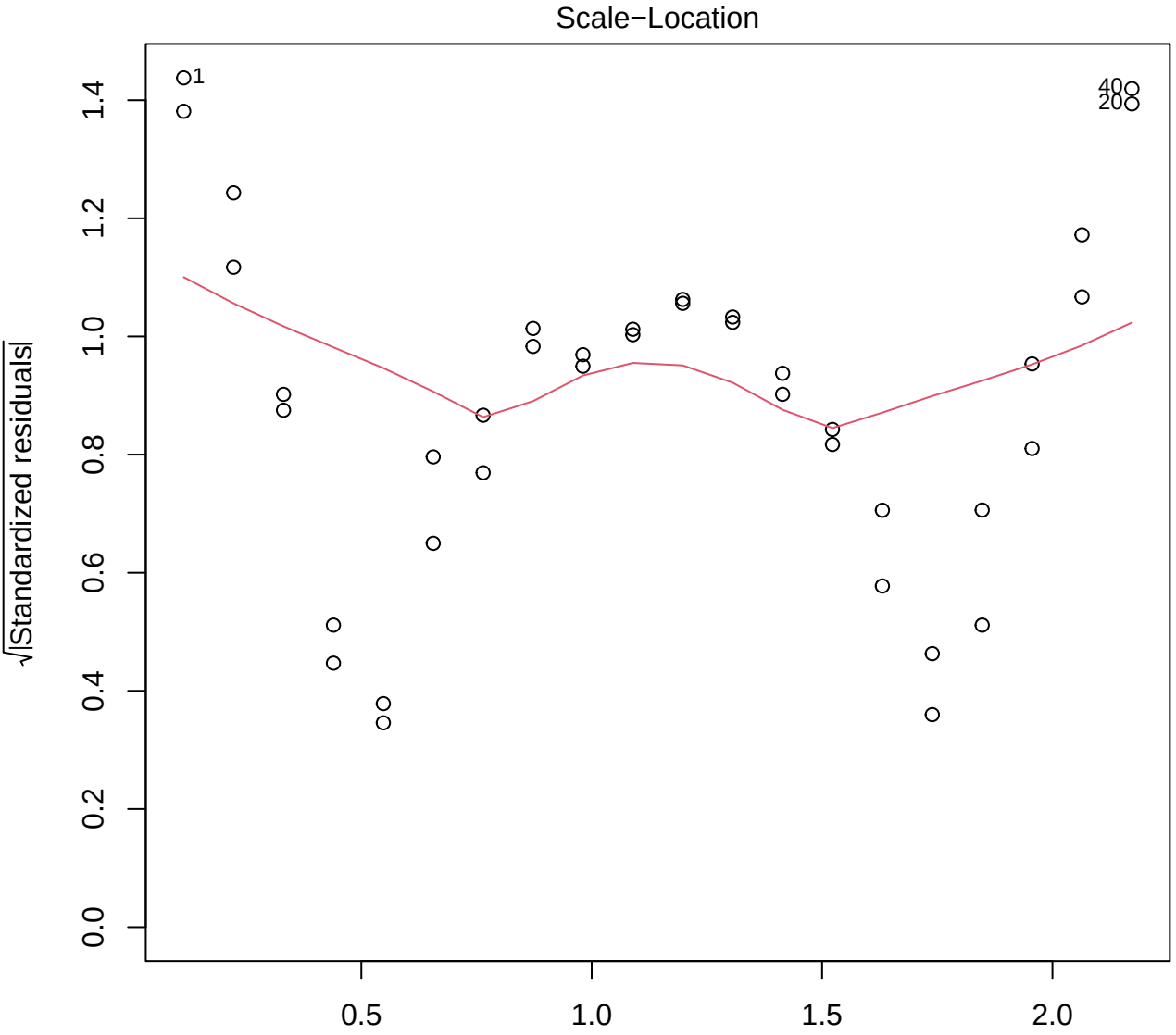


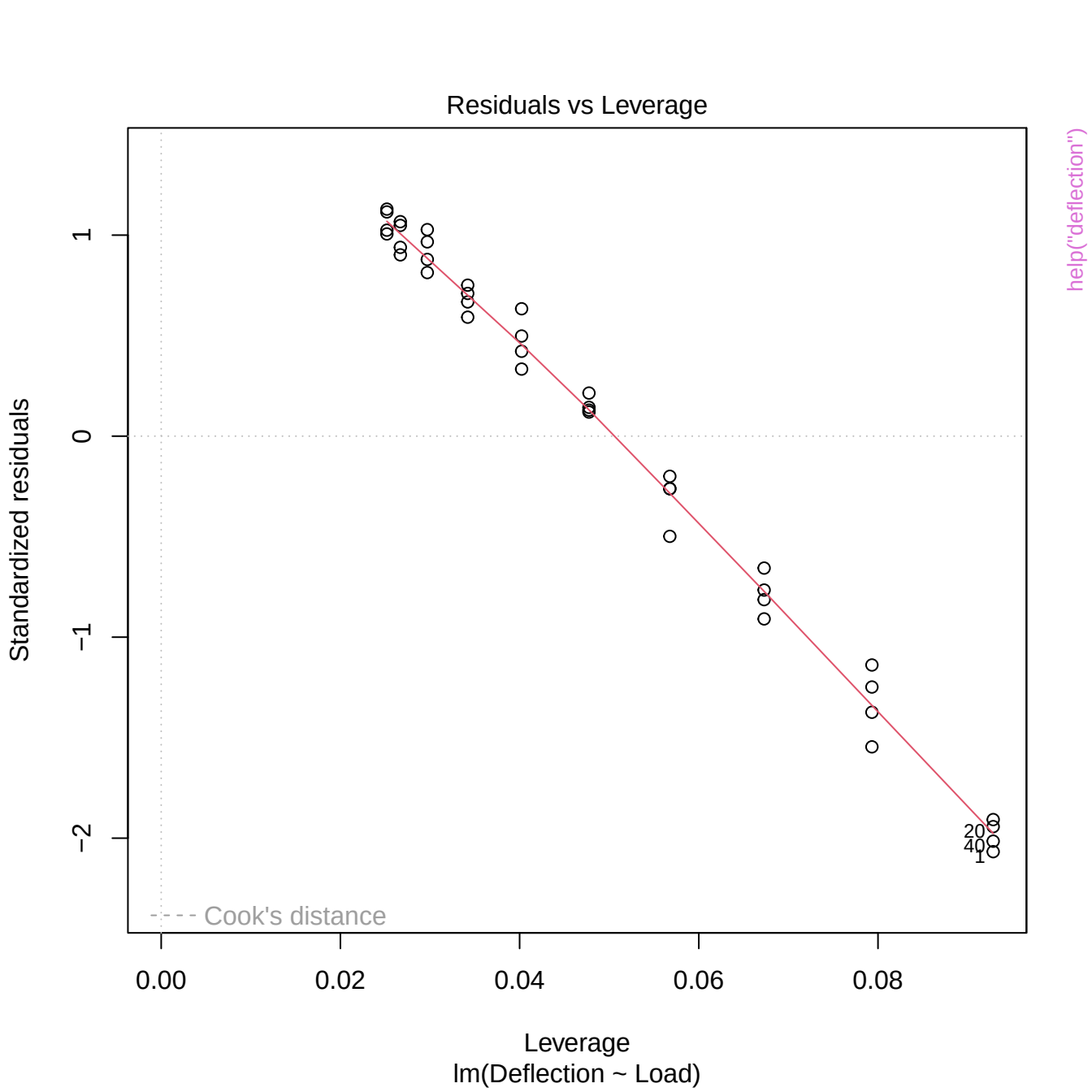
help("crime")

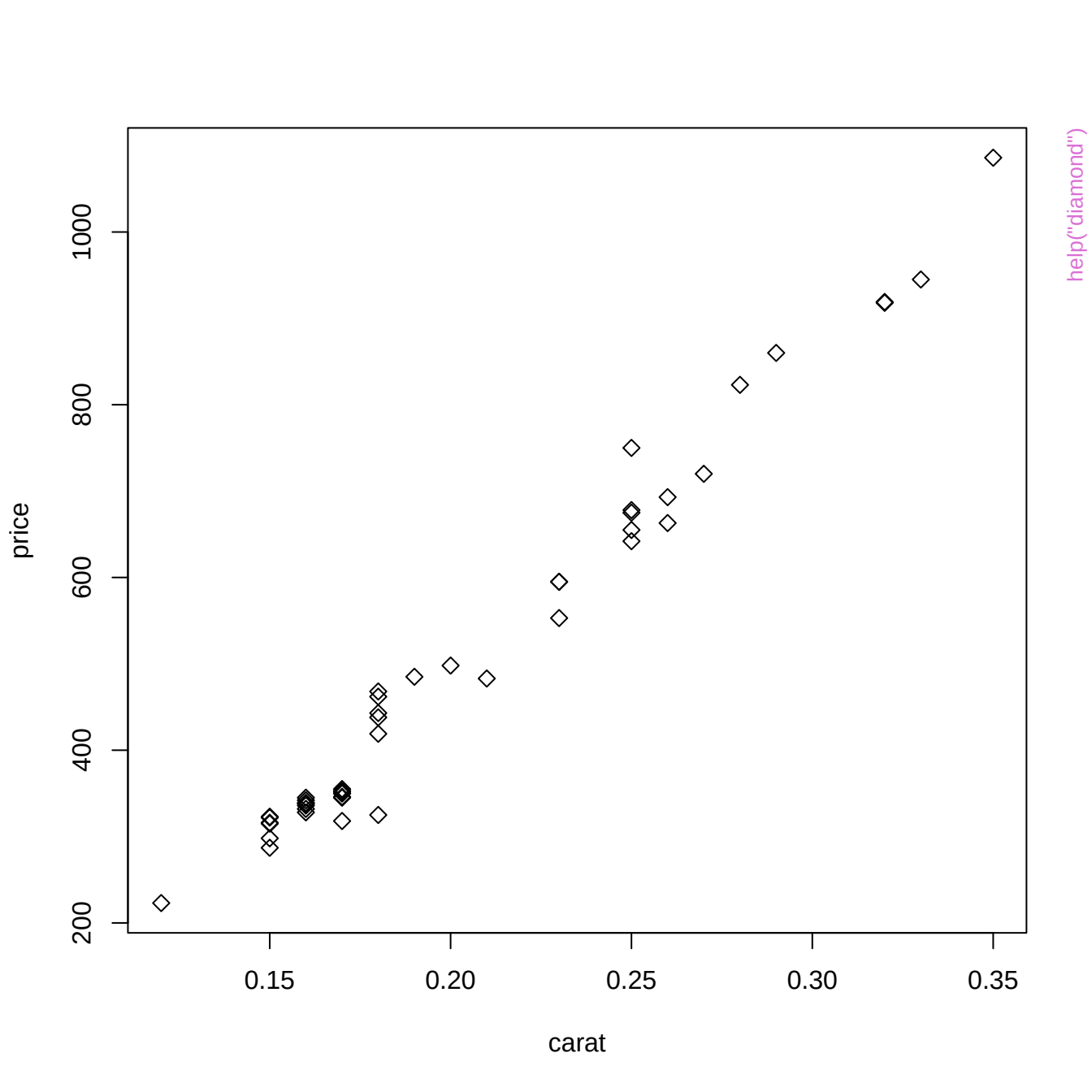

Deflection
0.5
1.0
1.5
2.0
500000
1000000
1500000
2000000
2500000
3000000
Load
help("deflection")

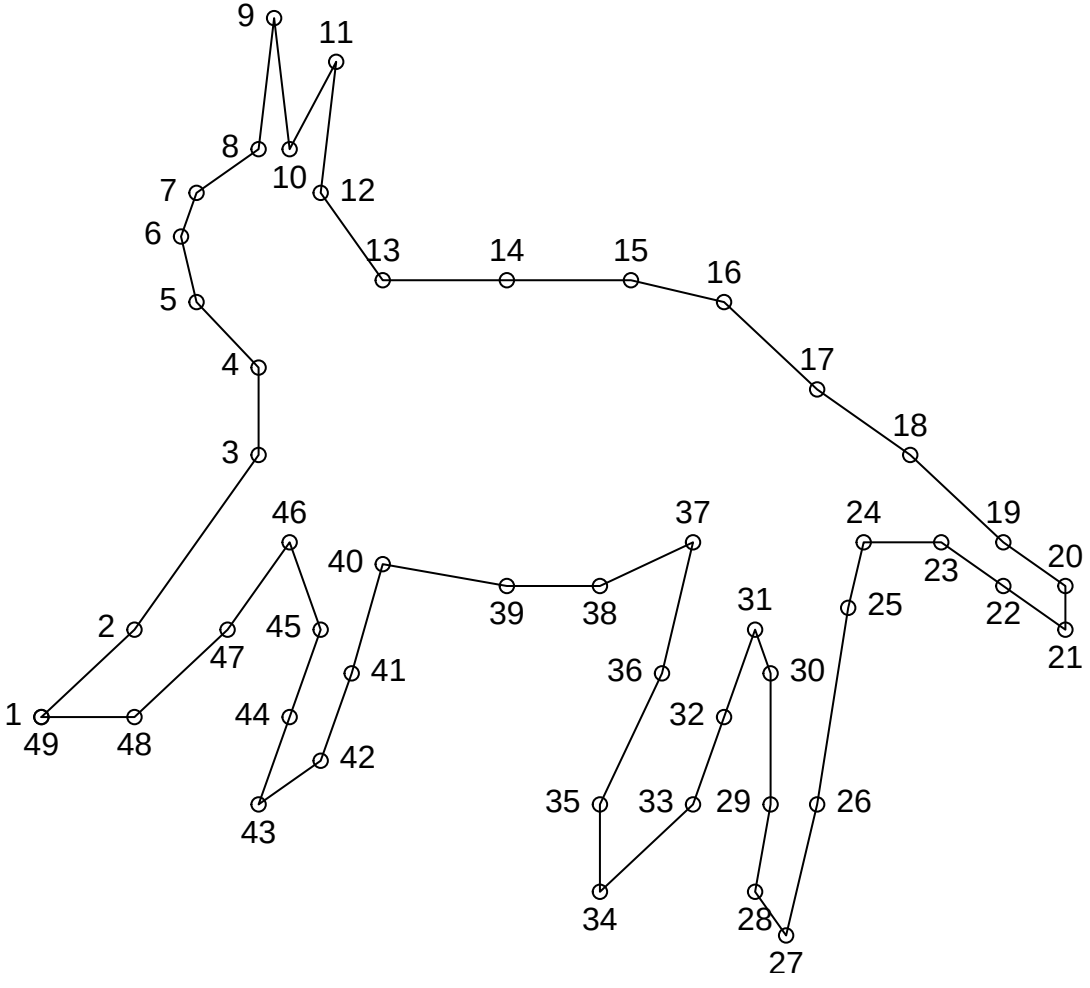

Residuals vs Fitted
help("deflection")
Residuals
0.002
0.000
−0.002
−0.004
0.5
1.0
1.5
2.0
1
20
40
Fitted values
lm(Deflection ~ Load)


Normal Q−Q
Standardized residuals
Theoretical Quantiles
lm(Deflection ~ Load)
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2
−1
0
1
2
1
40
20
help("deflection")

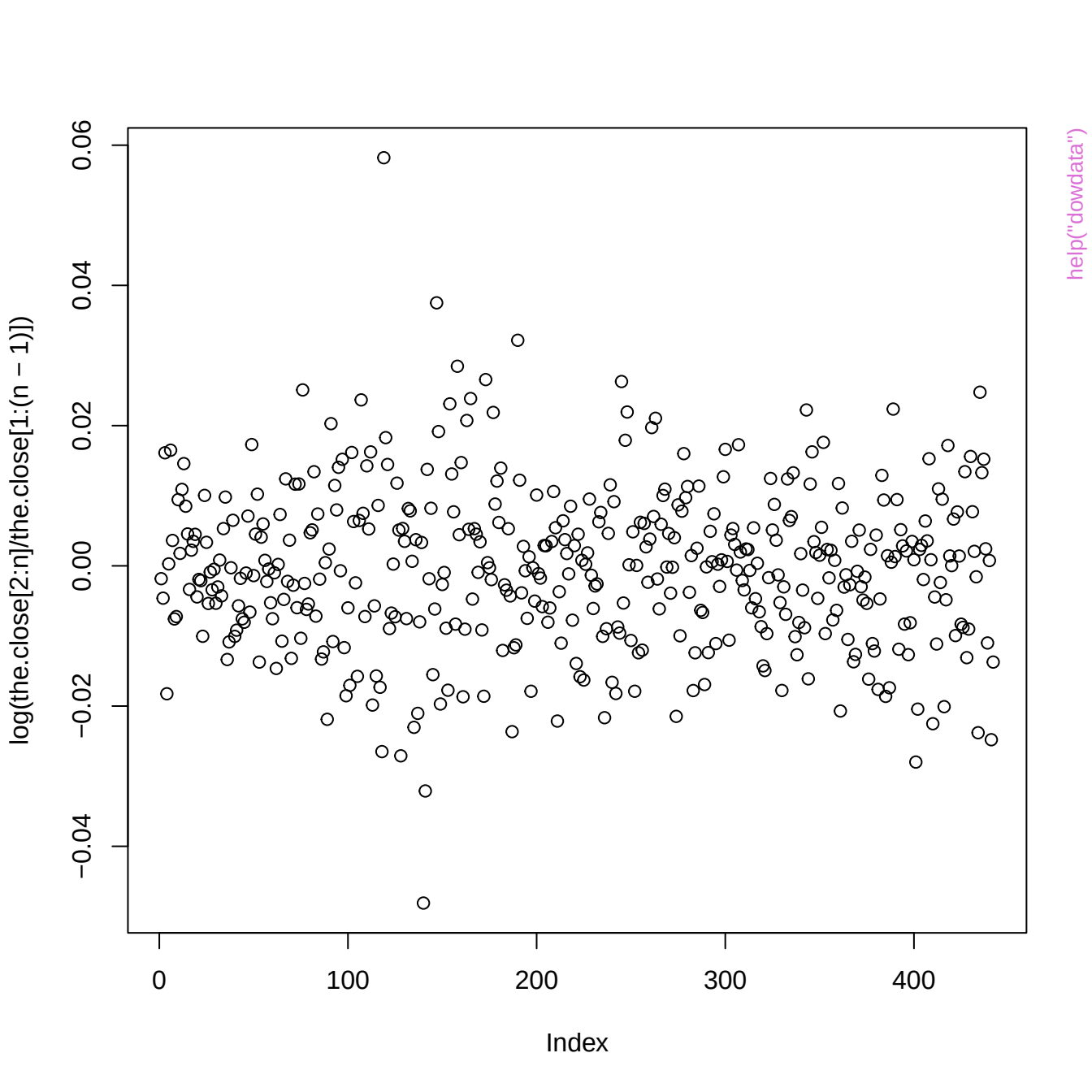

Scale−Location
√|Standardized residuals|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
40
20
0.5
1.0
1.5
2.0
Fitted values
lm(Deflection ~ Load)
help("deflection")

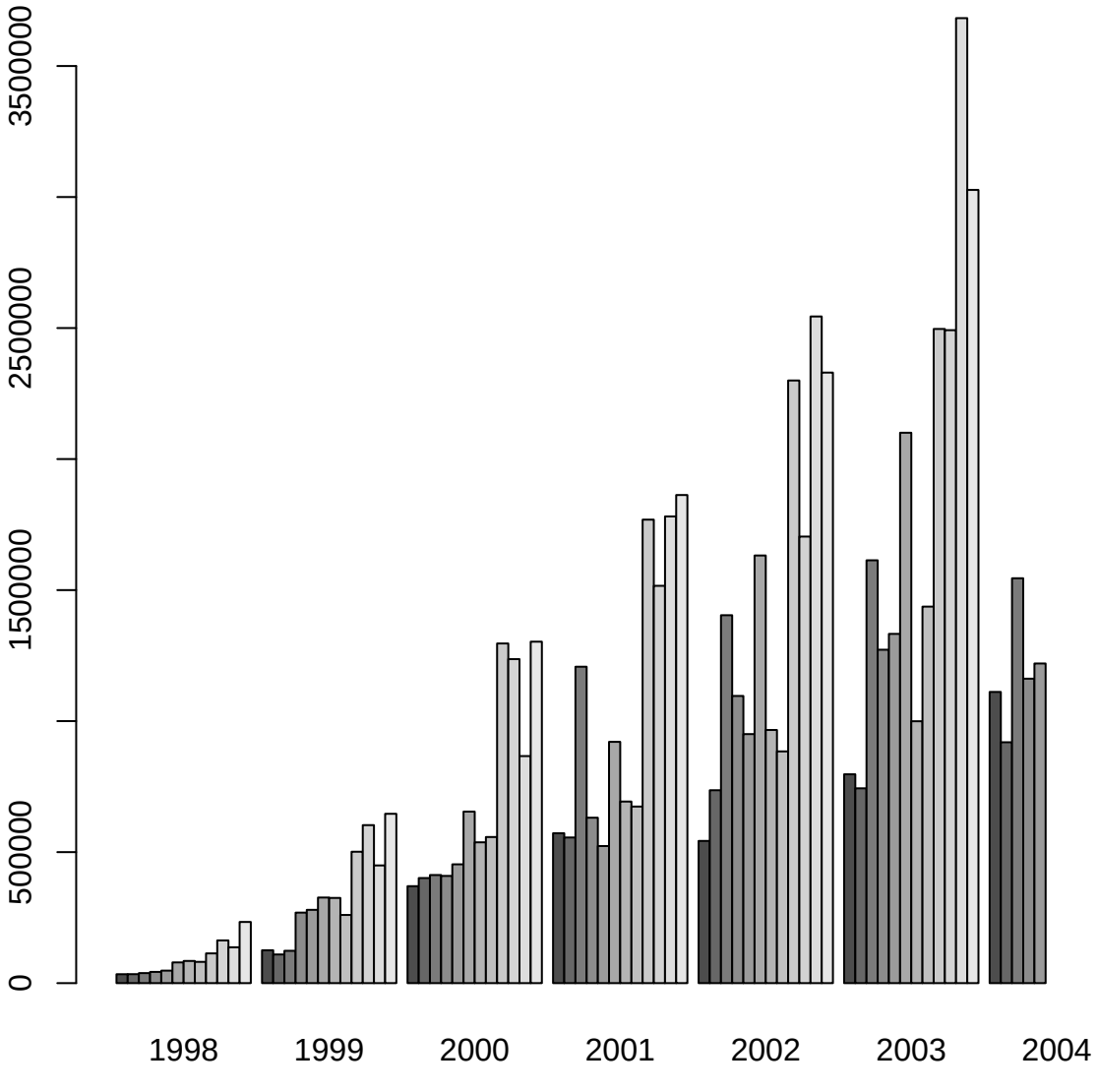

Residuals vs Leverage
help("deflection")
Standardized residuals
1
0
−1
−2
Cook's distance
0.00
0.02
0.04
0.06
0.08
Leverage
lm(Deflection ~ Load)
20
40
1


price
200
400
600
800
1000
0.15
0.20
0.25
0.30
0.35
carat
help("diamond")



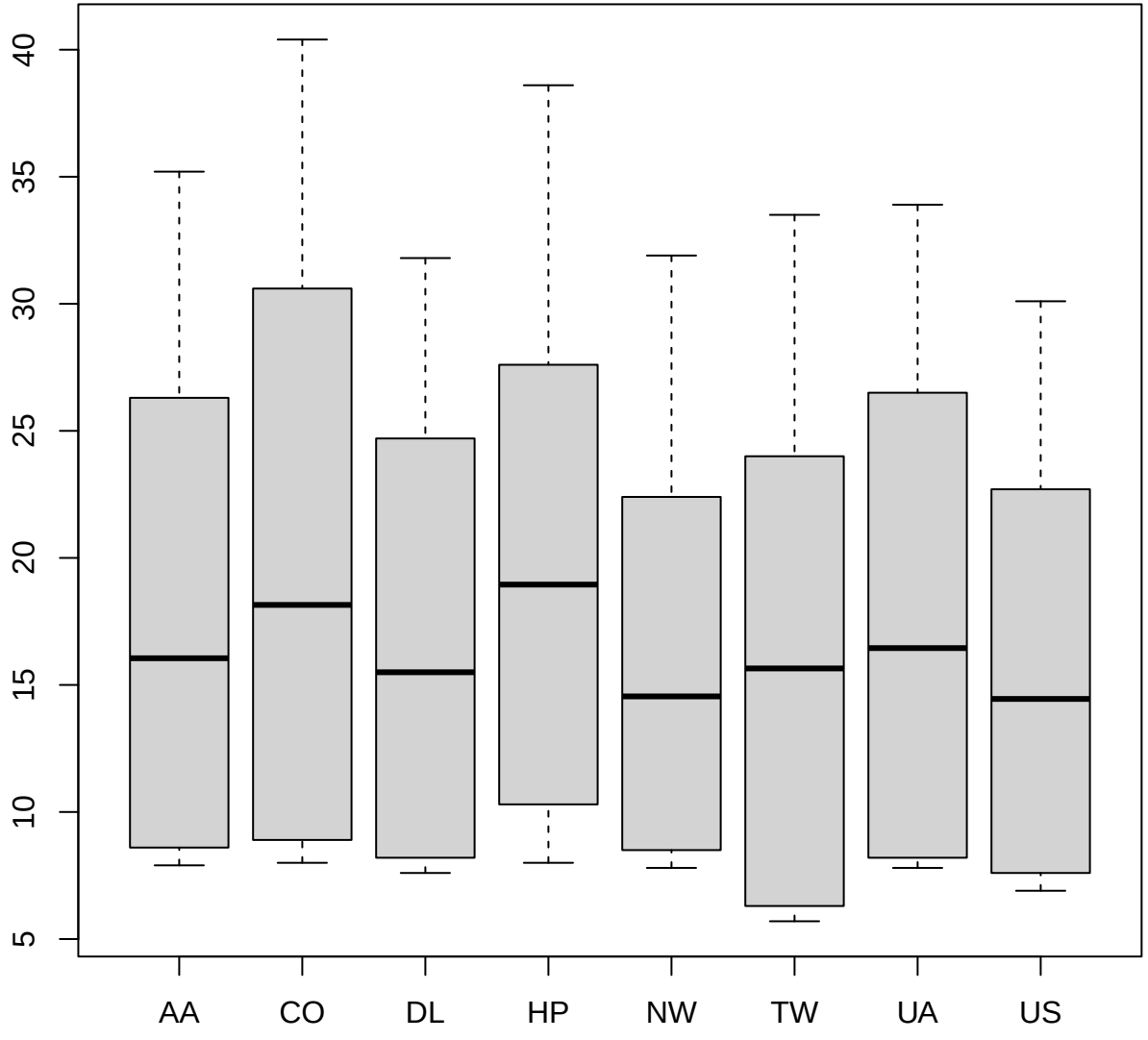
help("dottodot")


log(the.close[2:n]/the.close[1:(n − 1)])
0.06
0.04
0.02
0.00
−0.02
−0.04
0
100
200
300
400
Index
help("dowdata")

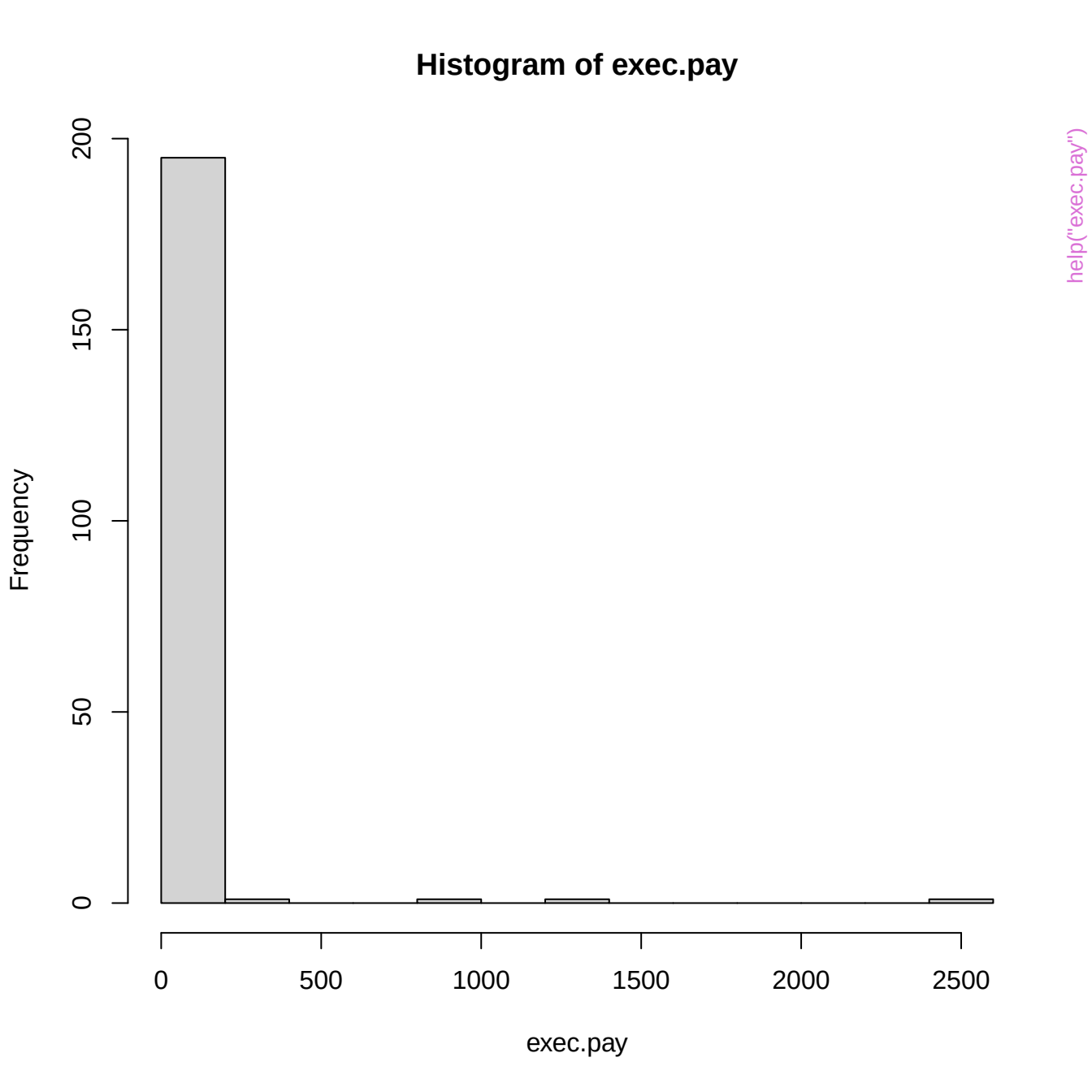


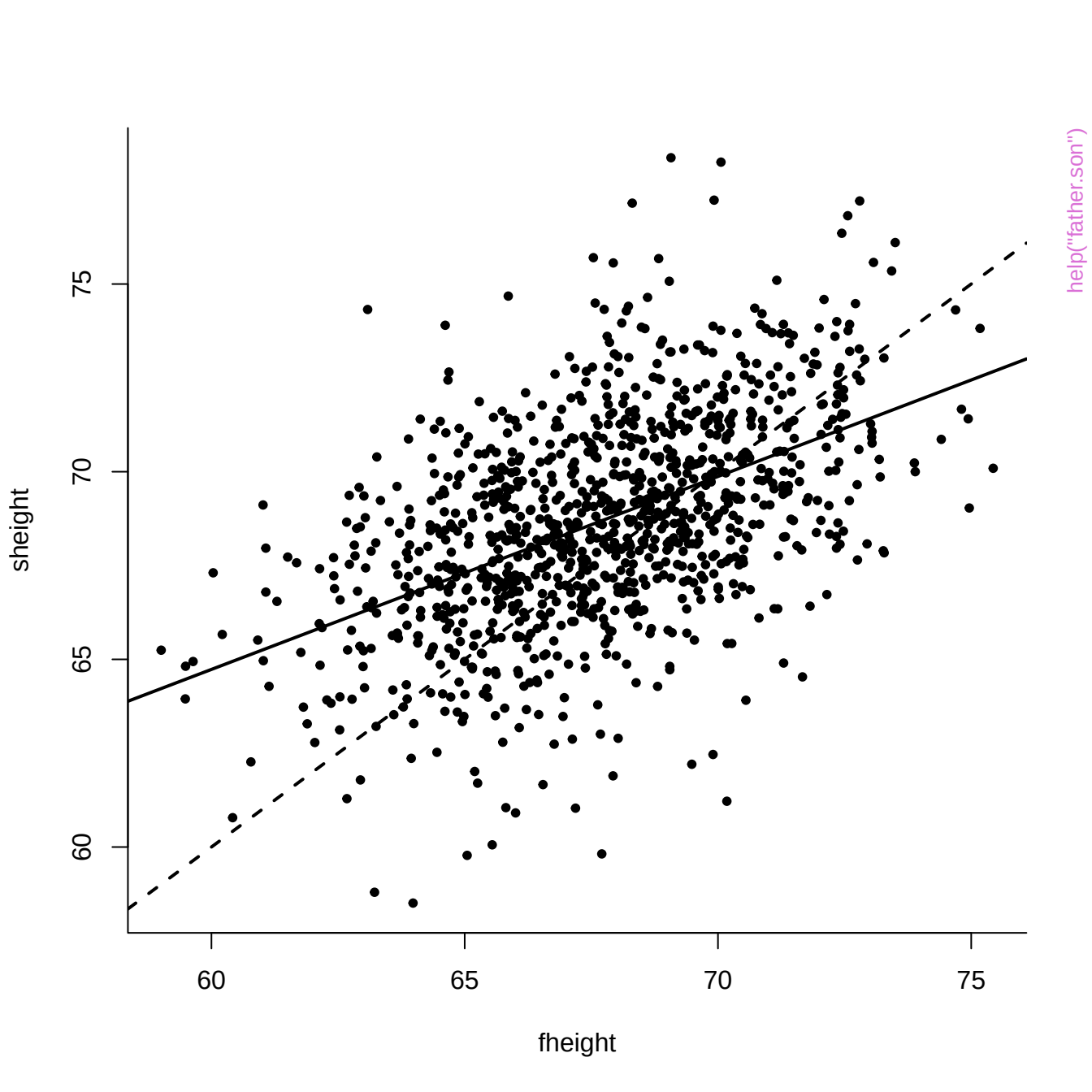
help("dvdsales")

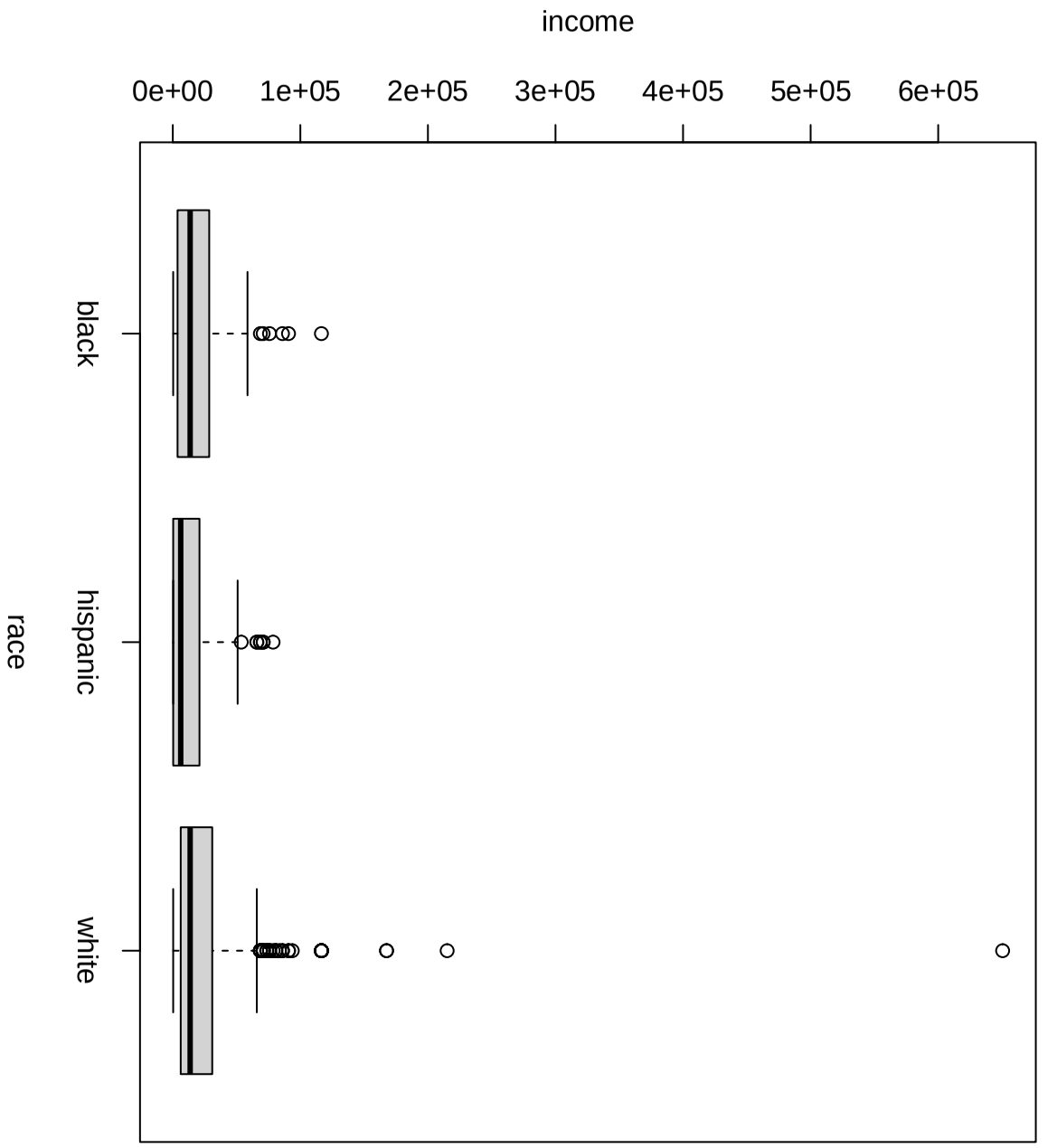
GDP
perCapita
CO2
5000
15000
25000
0e+00
2e+06
4e+06
6e+06
8e+06
0
1000
3000
5000
7000
help("emissions")



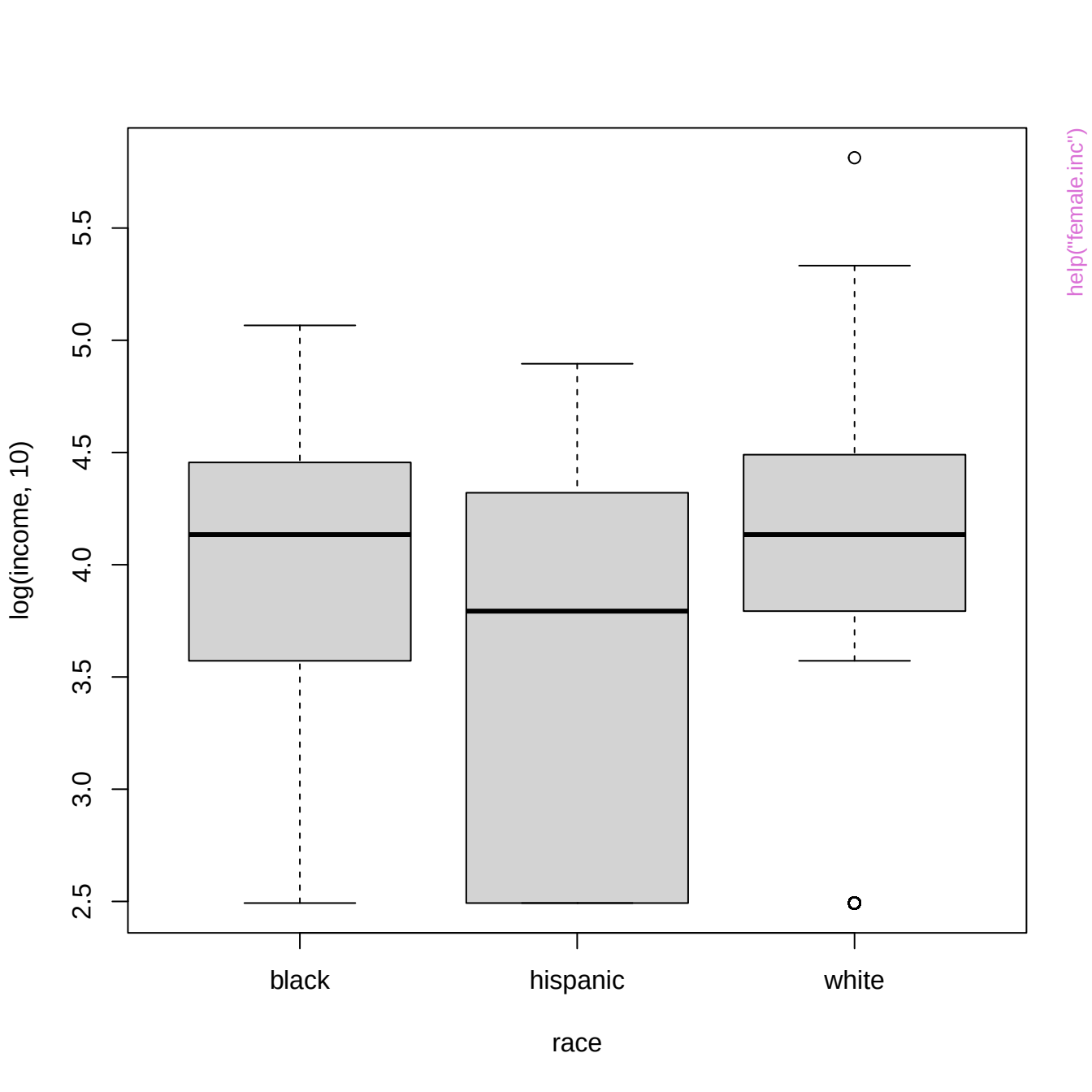
help("ewr")

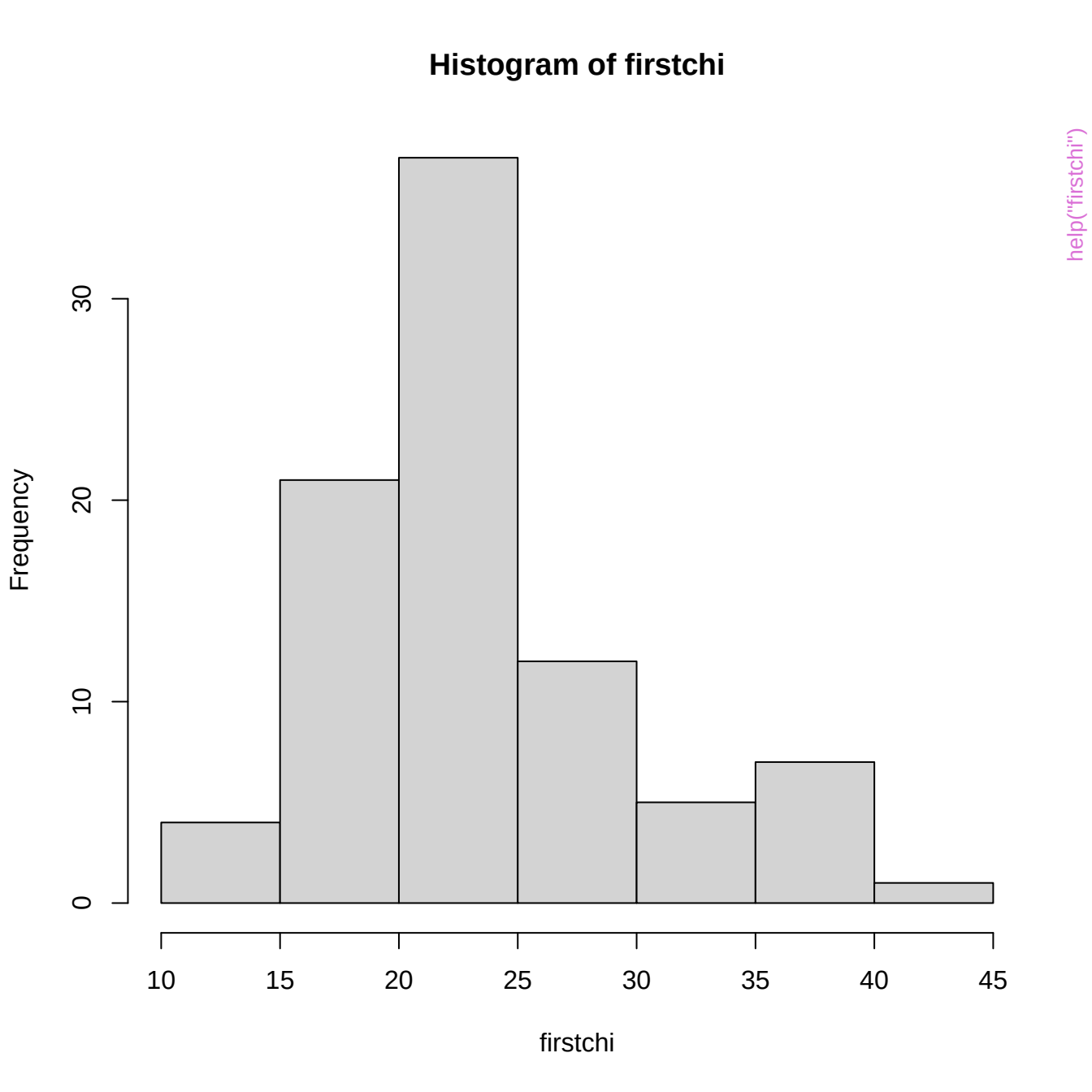

Histogram of exec.pay
Frequency
0
50
100
150
200
0
500
1000
1500
2000
2500
exec.pay
help("exec.pay")

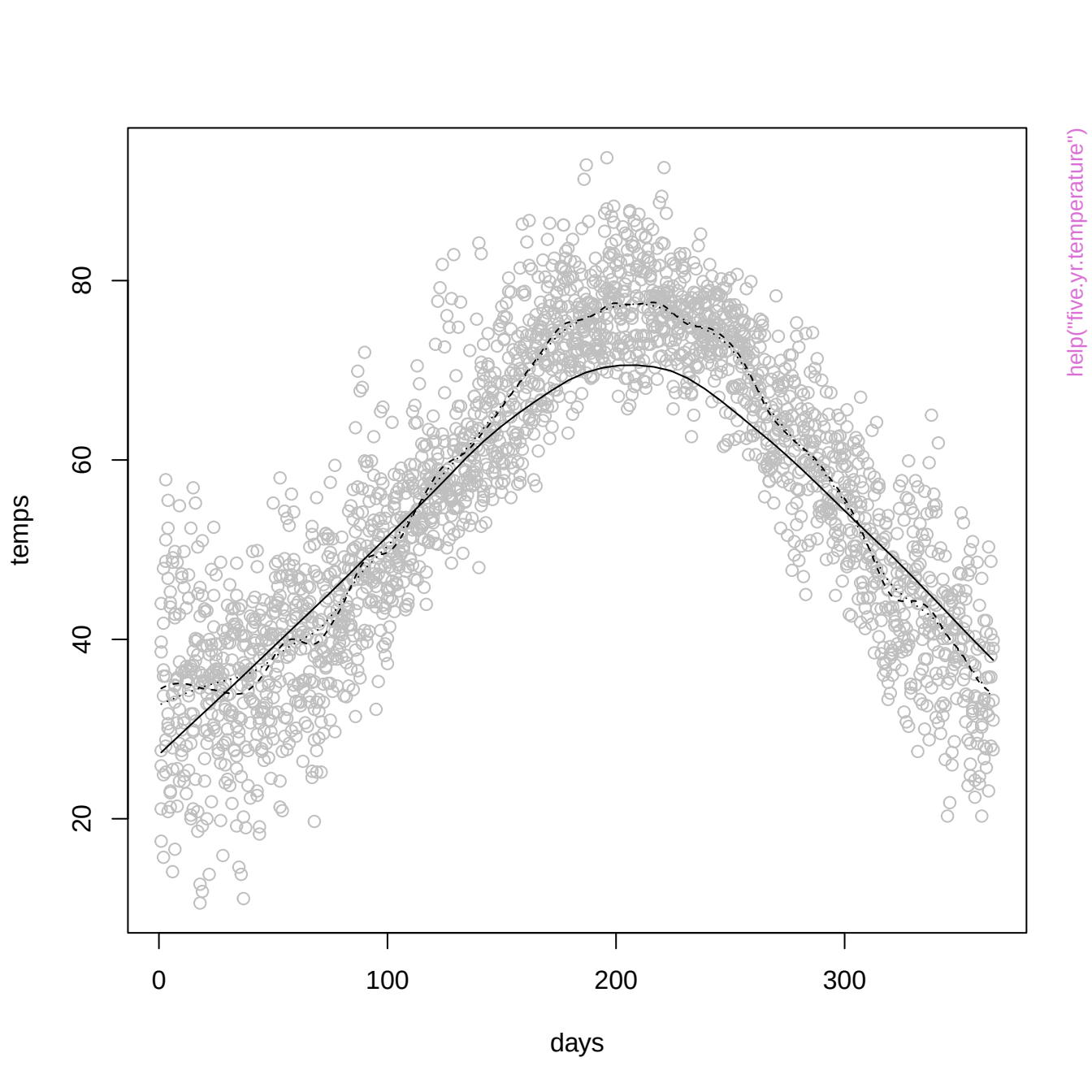

sheight
60
65
70
75
fheight
60
65
70
75
help("father.son")

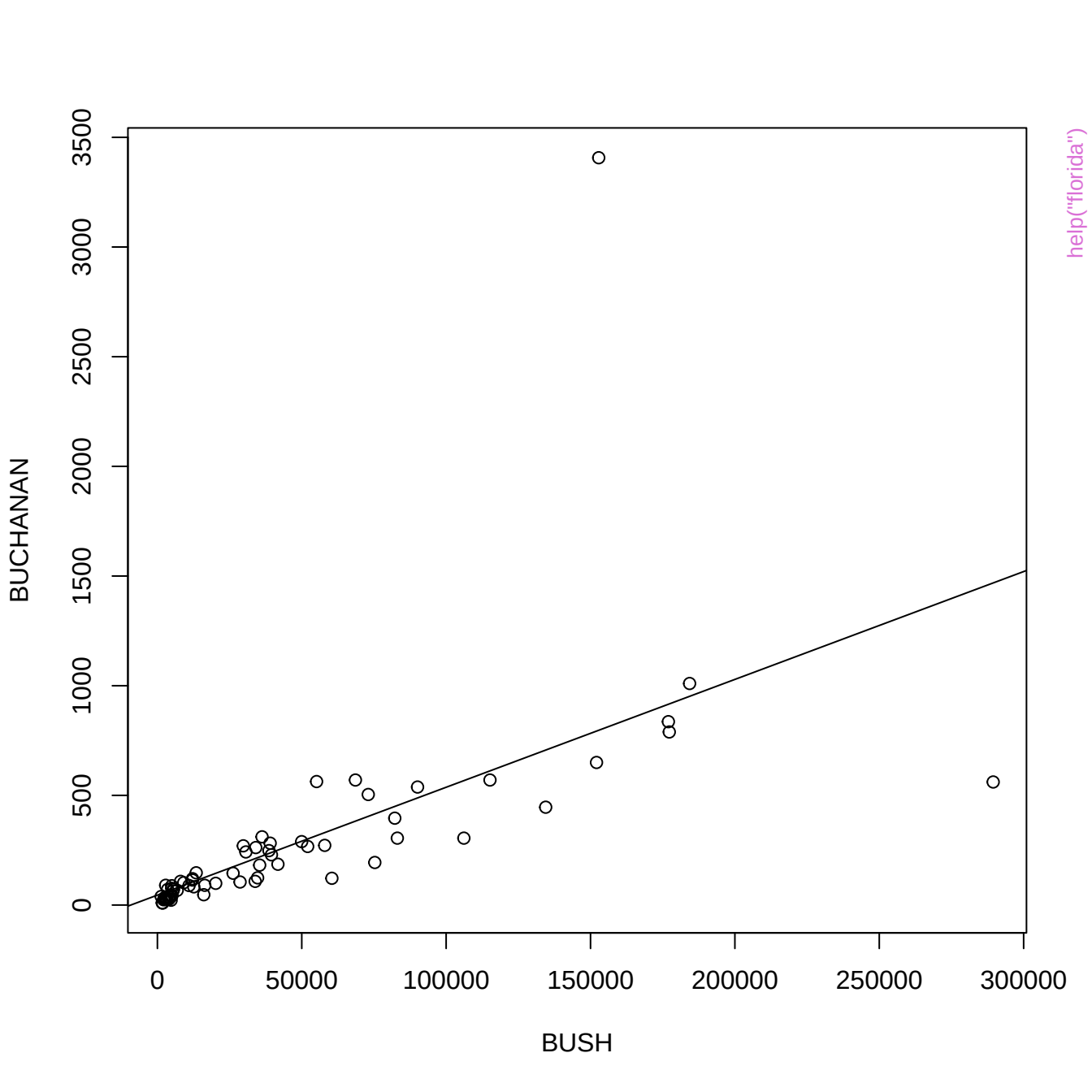


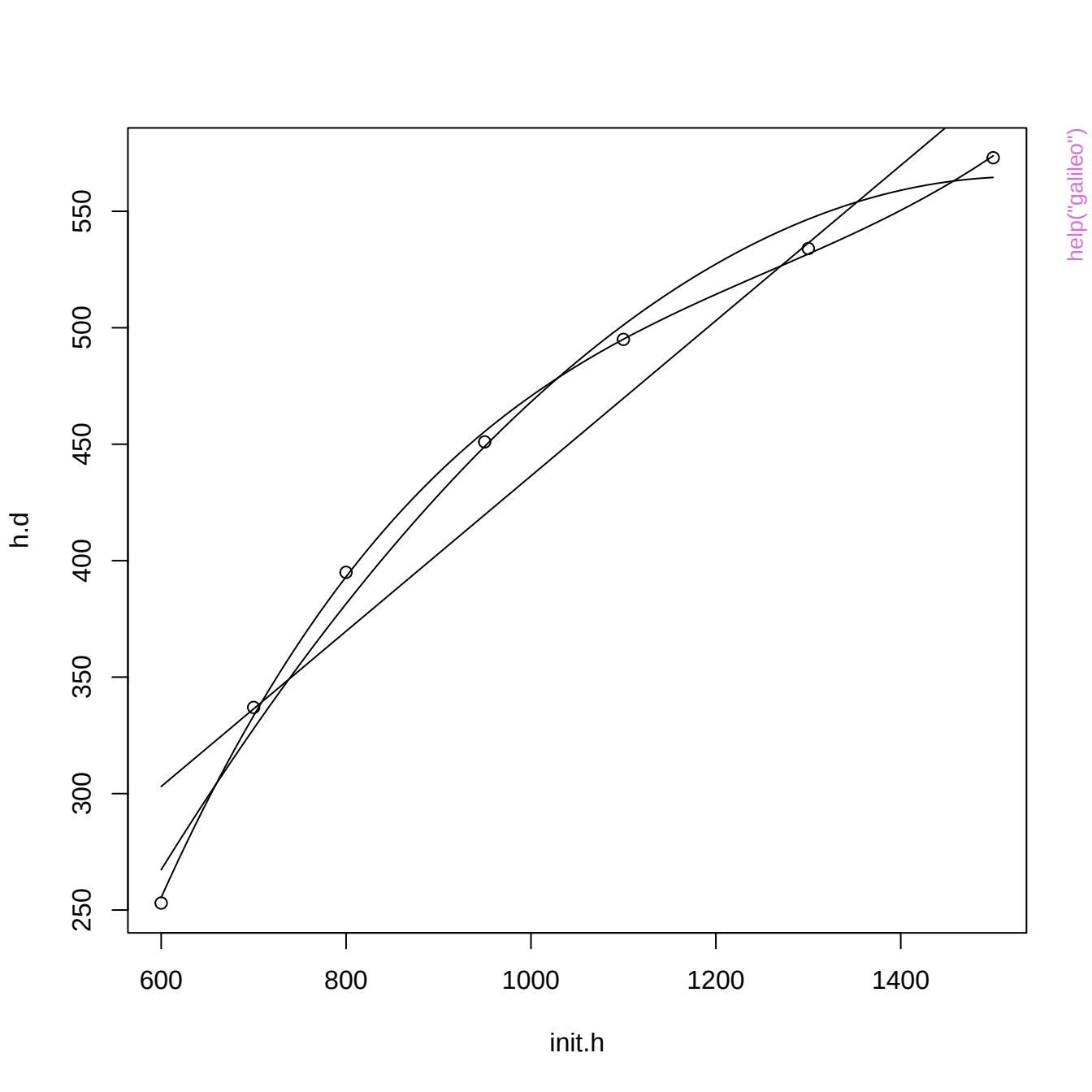
help("female.inc")

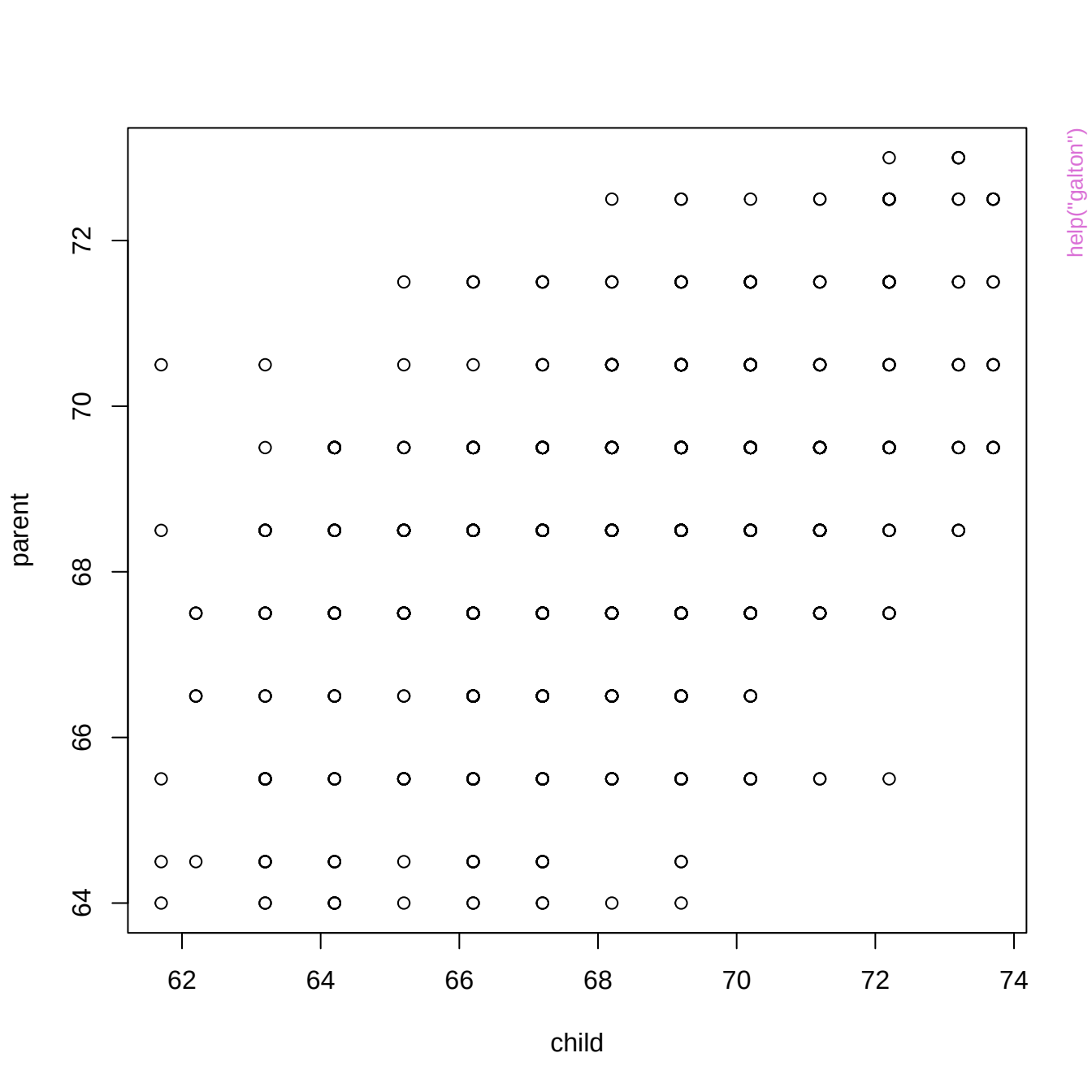

log(income, 10)
2.5
3.0
3.5
4.0
4.5
5.0
5.5
black
hispanic
white
race
help("female.inc")

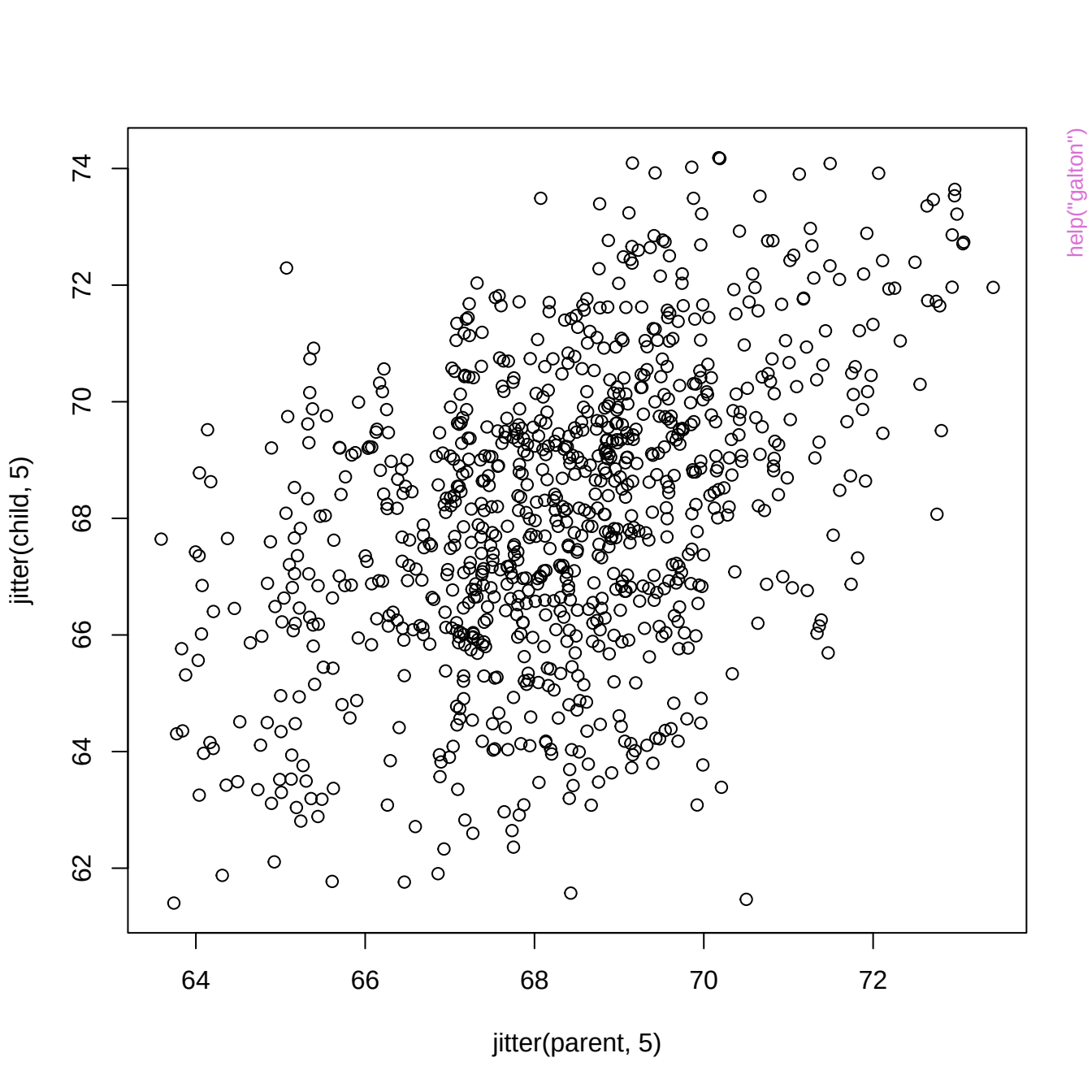

Histogram of firstchi
help("firstchi")
Frequency
0
10
20
30
10
15
20
25
30
35
40
45
firstchi

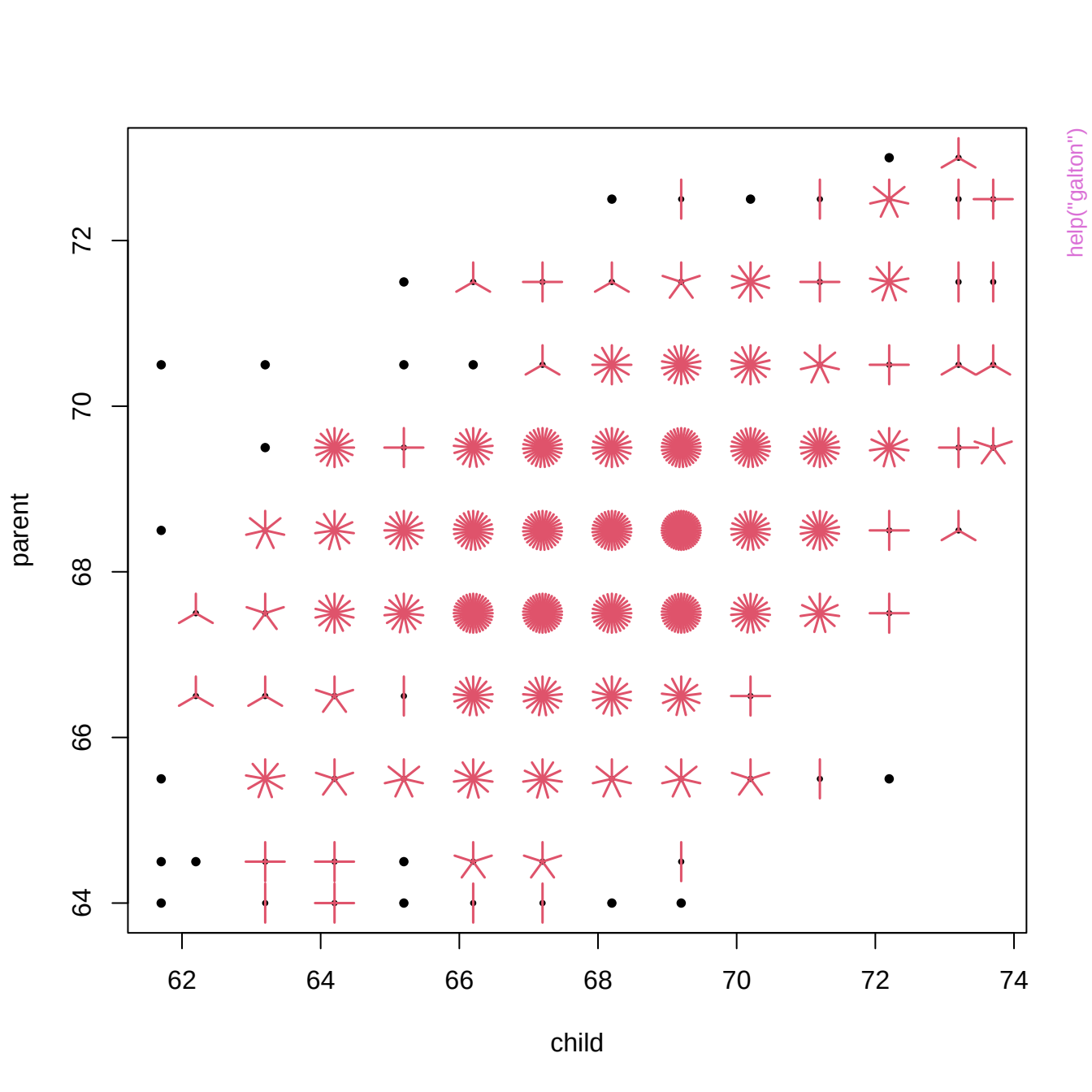

temps
20
40
60
80
0
100
200
300
days
help("five.yr.temperature")

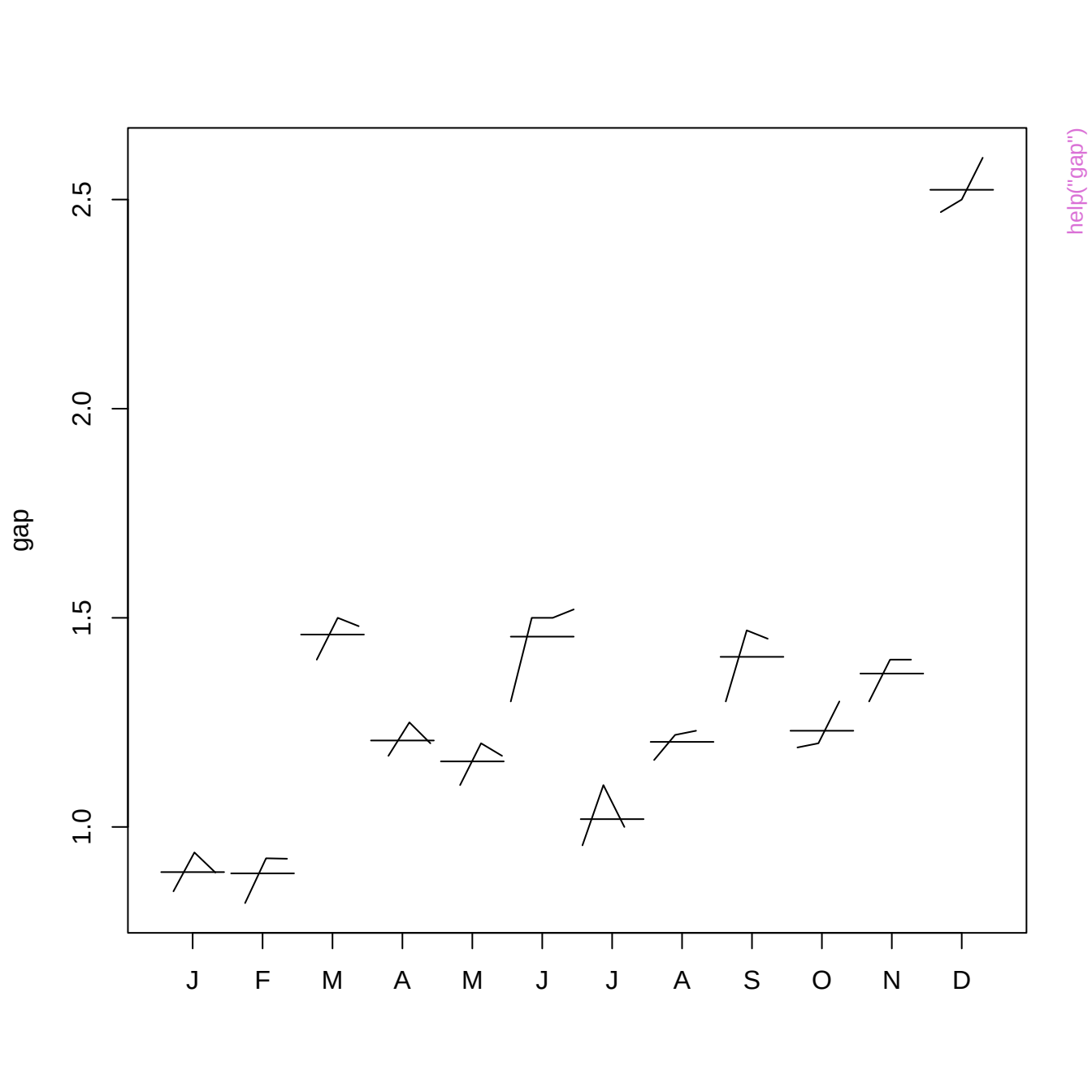

BUCHANAN
0
500
1000
1500
2000
2500
3000
3500
0
50000
100000
150000
200000
250000
300000
BUSH
help("florida")

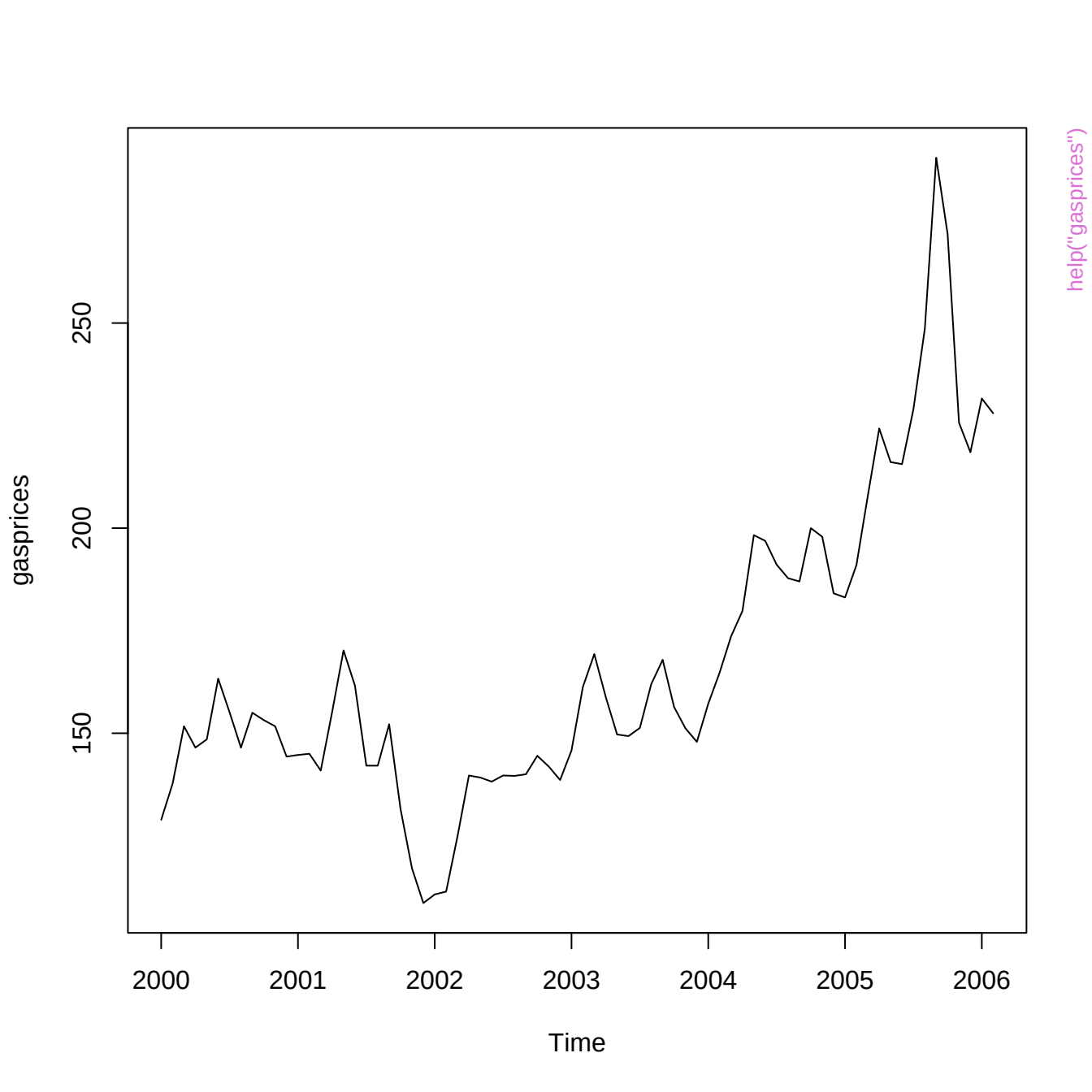

h.d
250
300
350
400
450
500
550
600
800
1000
1200
1400
init.h
help("galileo")

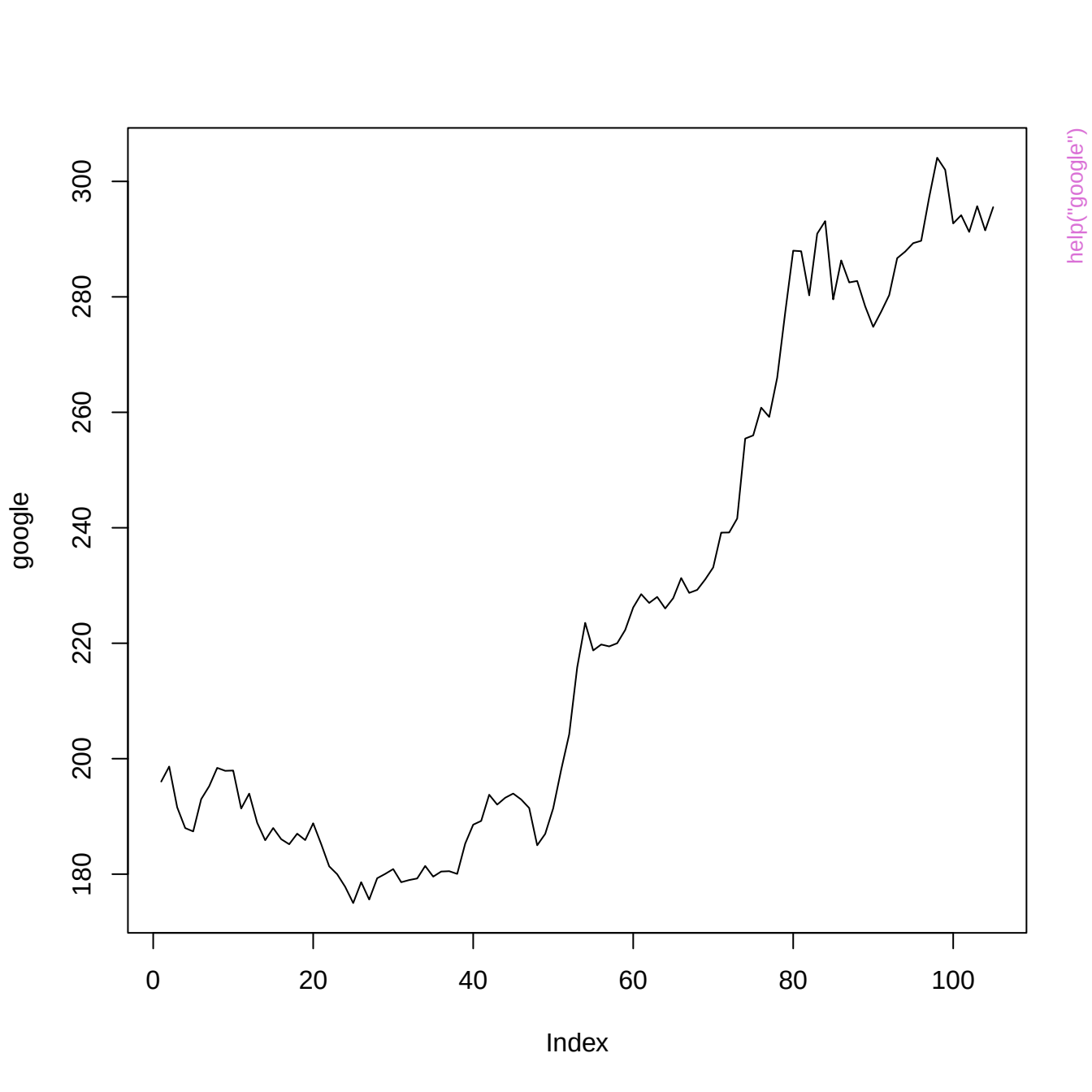

parent
child
64
66
68
70
72
62
64
66
68
70
72
74
help("galton")

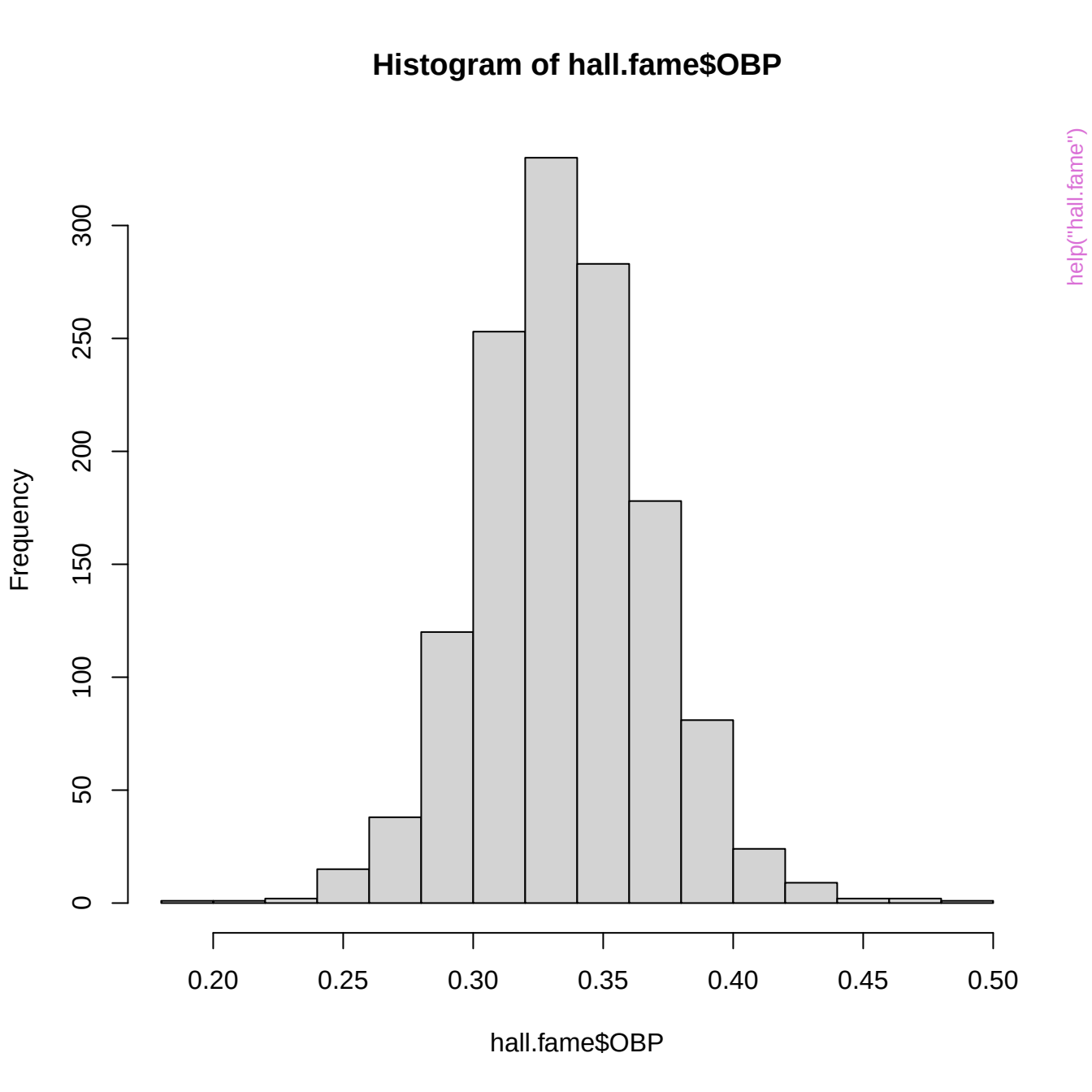

jitter(child, 5)
62
64
66
68
70
72
74
jitter(parent, 5)
64
66
68
70
72
help("galton")

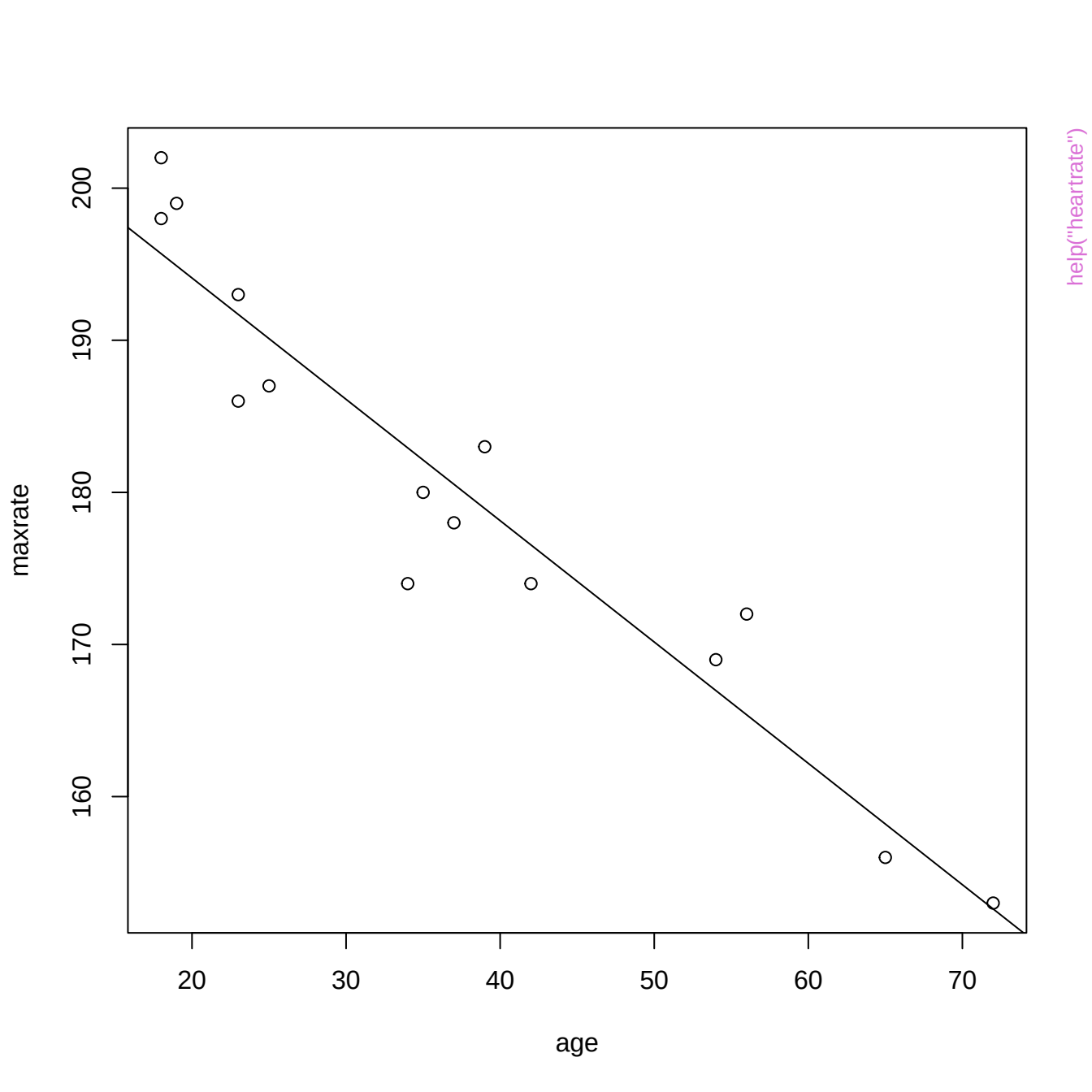

parent
child
64
66
68
70
72
62
64
66
68
70
72
74
help("galton")


gap
1.0
1.5
2.0
2.5
J
F
M
A
M
J
J
A
S
O
N
D
help("gap")


gasprices
150
200
250
2000
2001
2002
2003
2004
2005
2006
Time
help("gasprices")

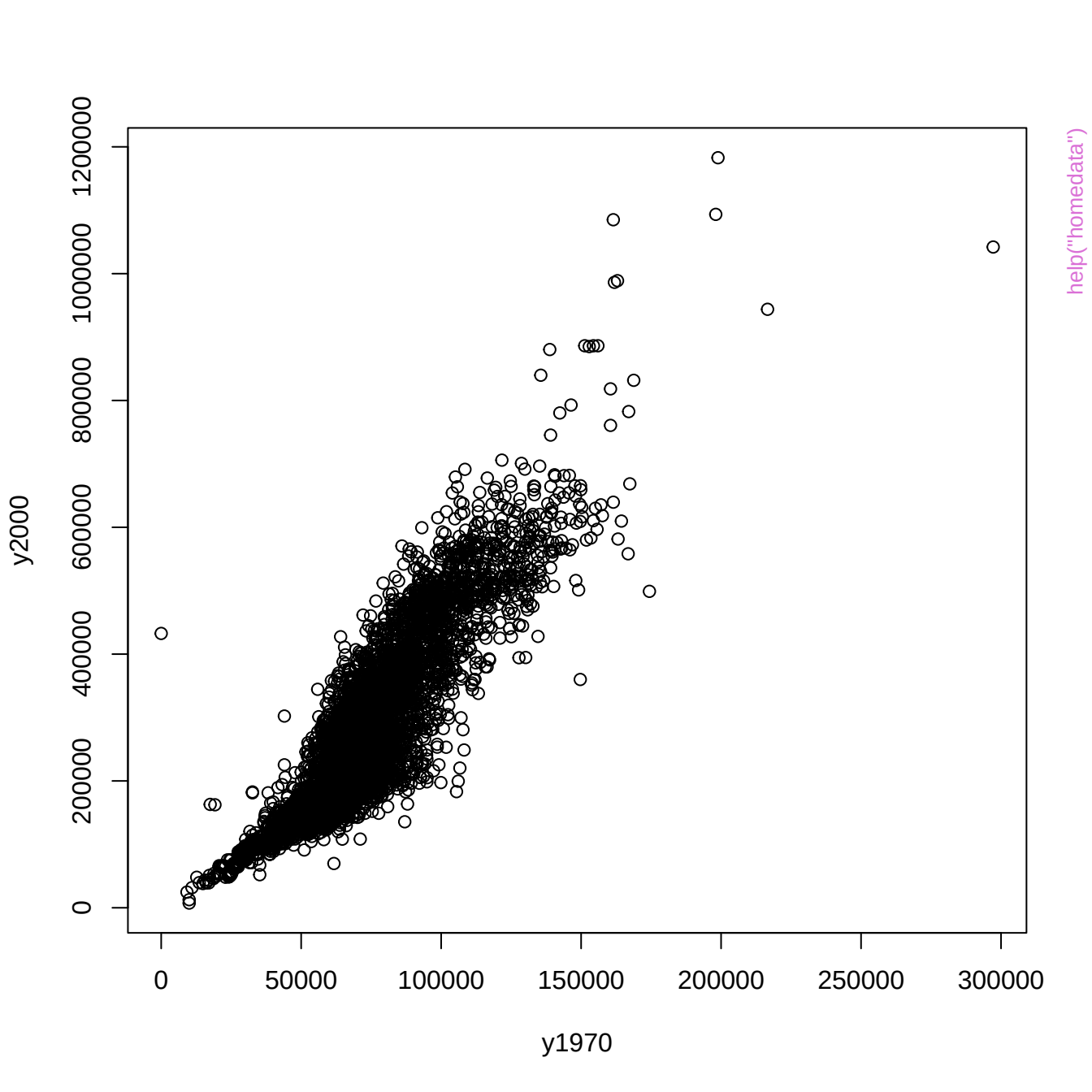

google
Index
180
200
220
240
260
280
300
0
20
40
60
80
100
help("google")

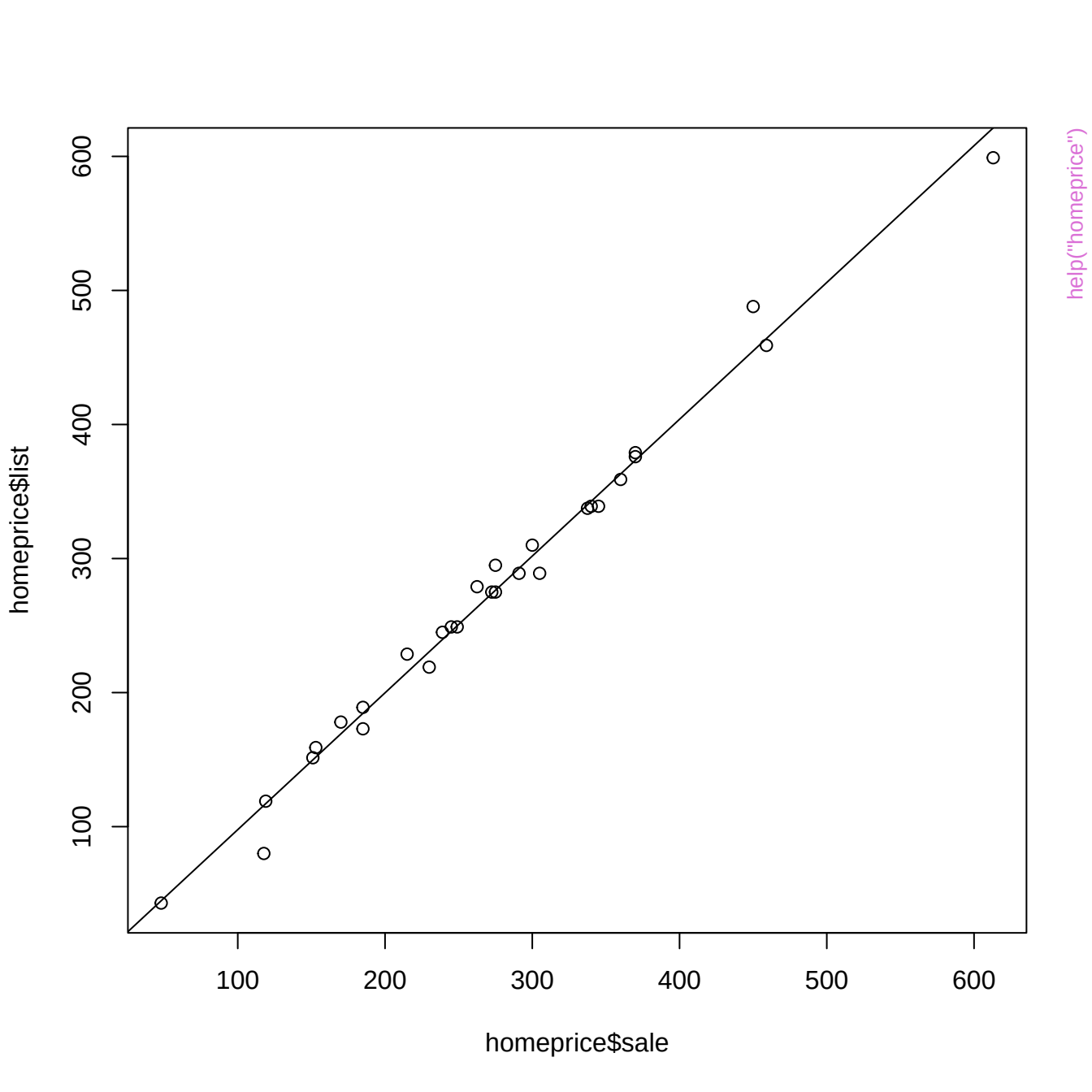

Histogram of hall.fame$OBP
Frequency
0
50
100
150
200
250
300
0.20
0.25
0.30
0.35
0.40
0.45
0.50
hall.fame$OBP
help("hall.fame")

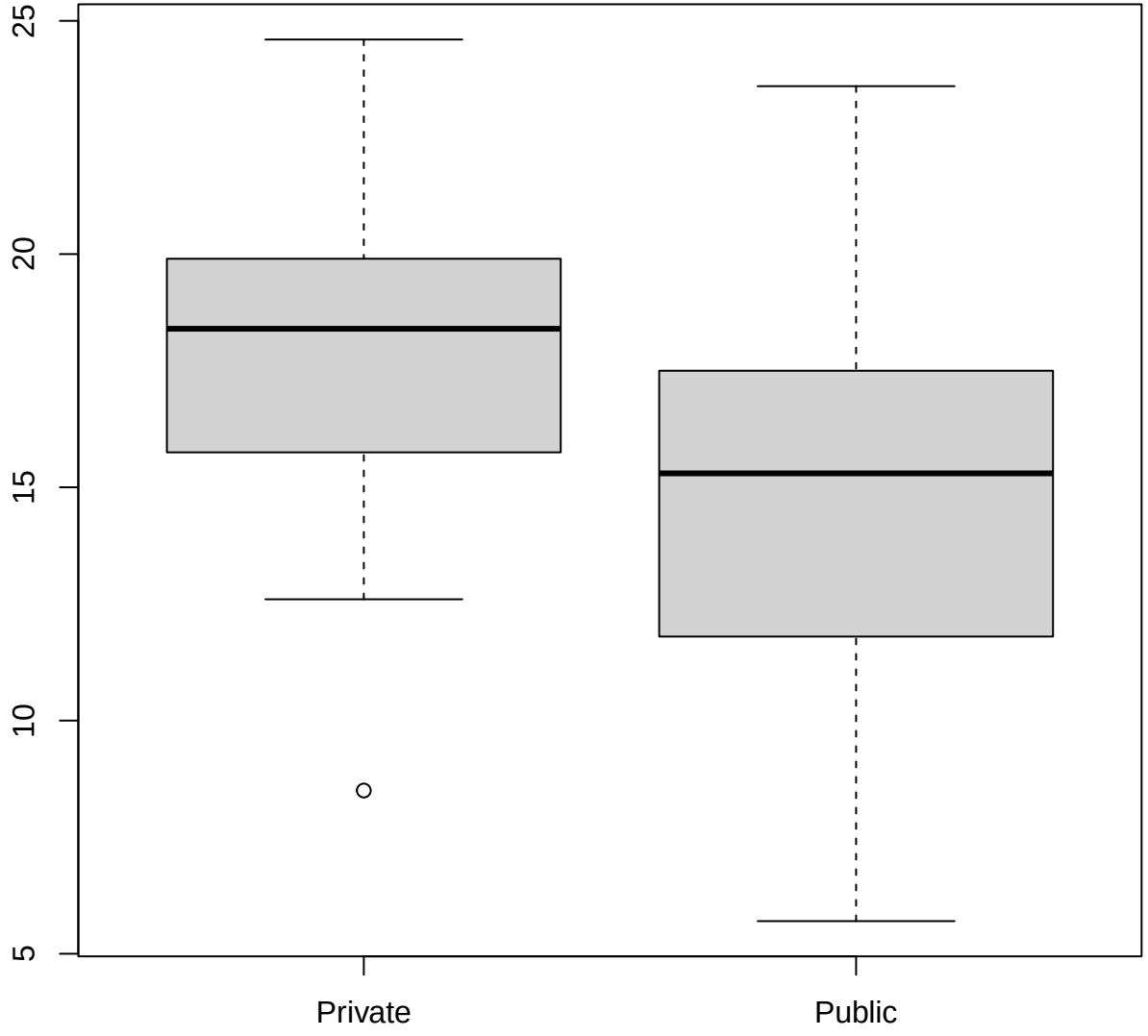


help("heartrate")

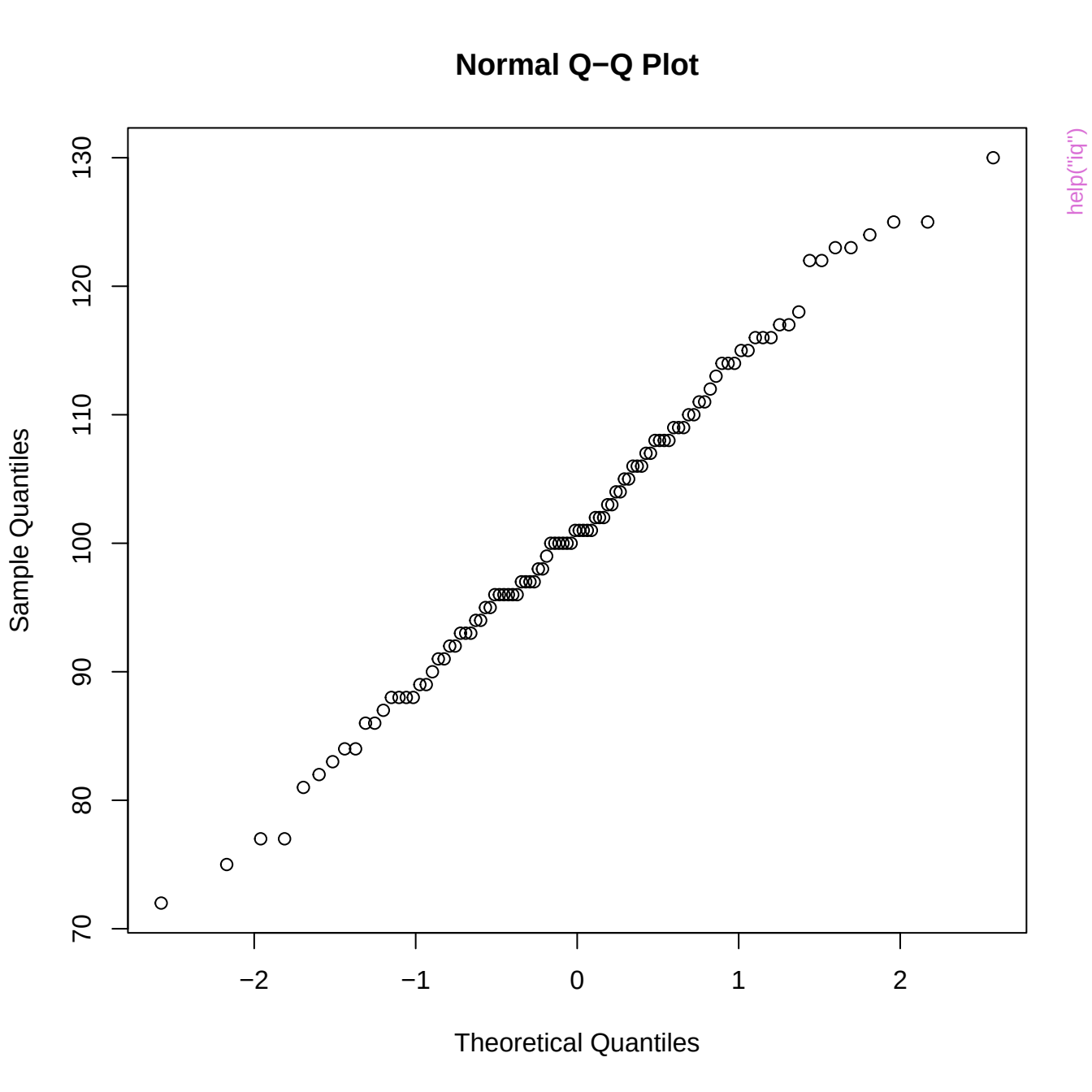
help("home")

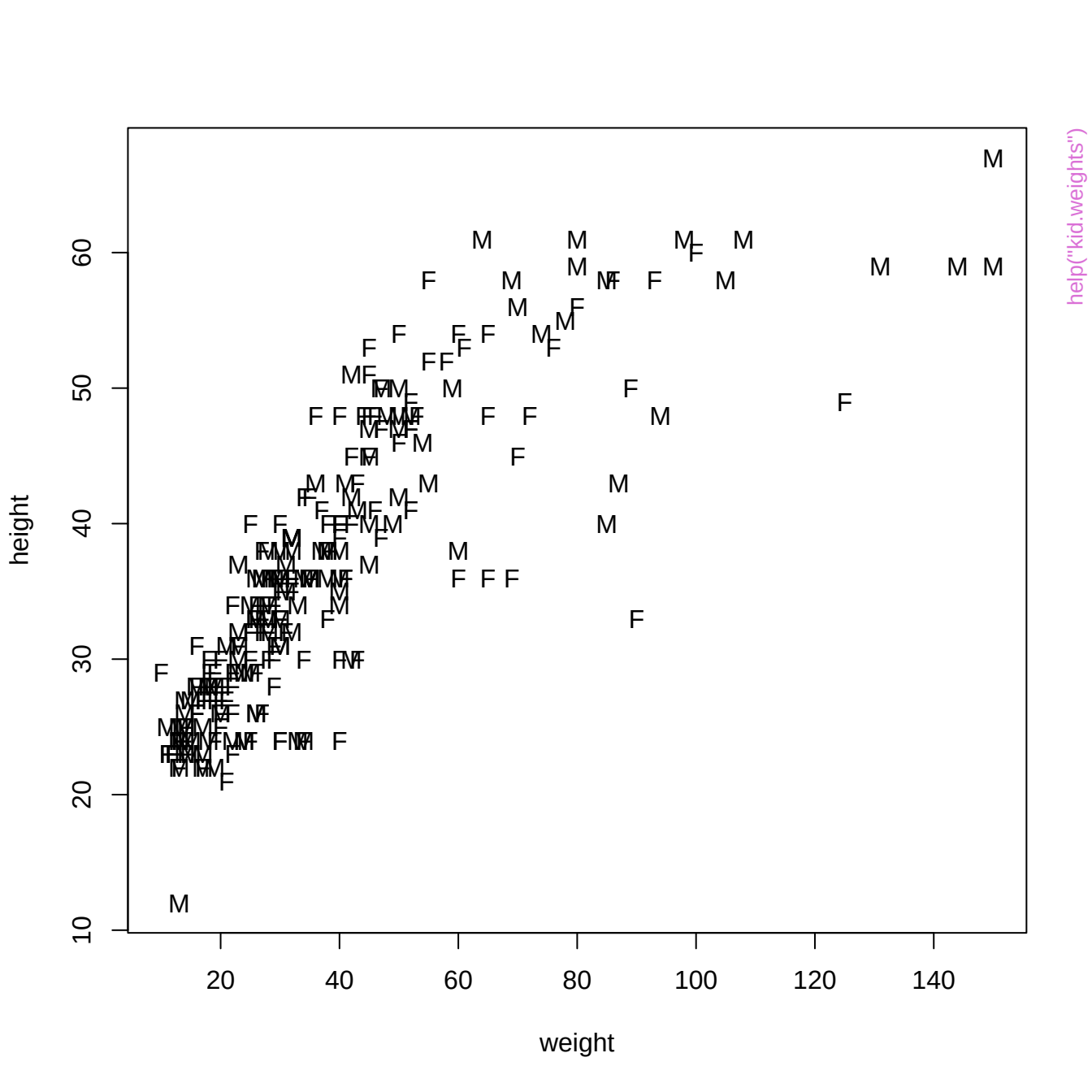

y2000
0
200000
400000
600000
800000
1000000
1200000
0
50000
100000
150000
200000
250000
300000
y1970
help("homedata")

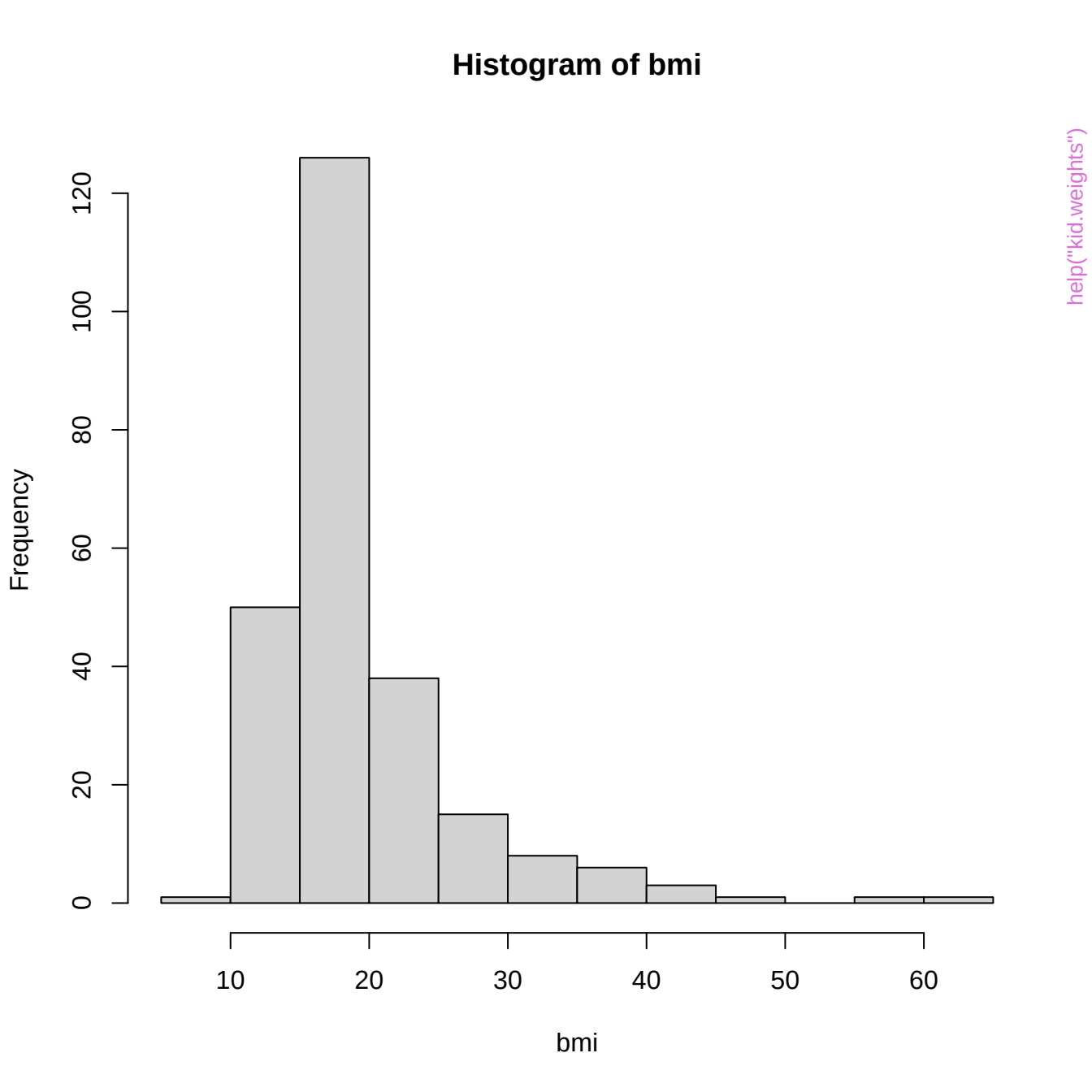

homeprice$list
homeprice$sale
100
200
300
400
500
600
help("homeprice")

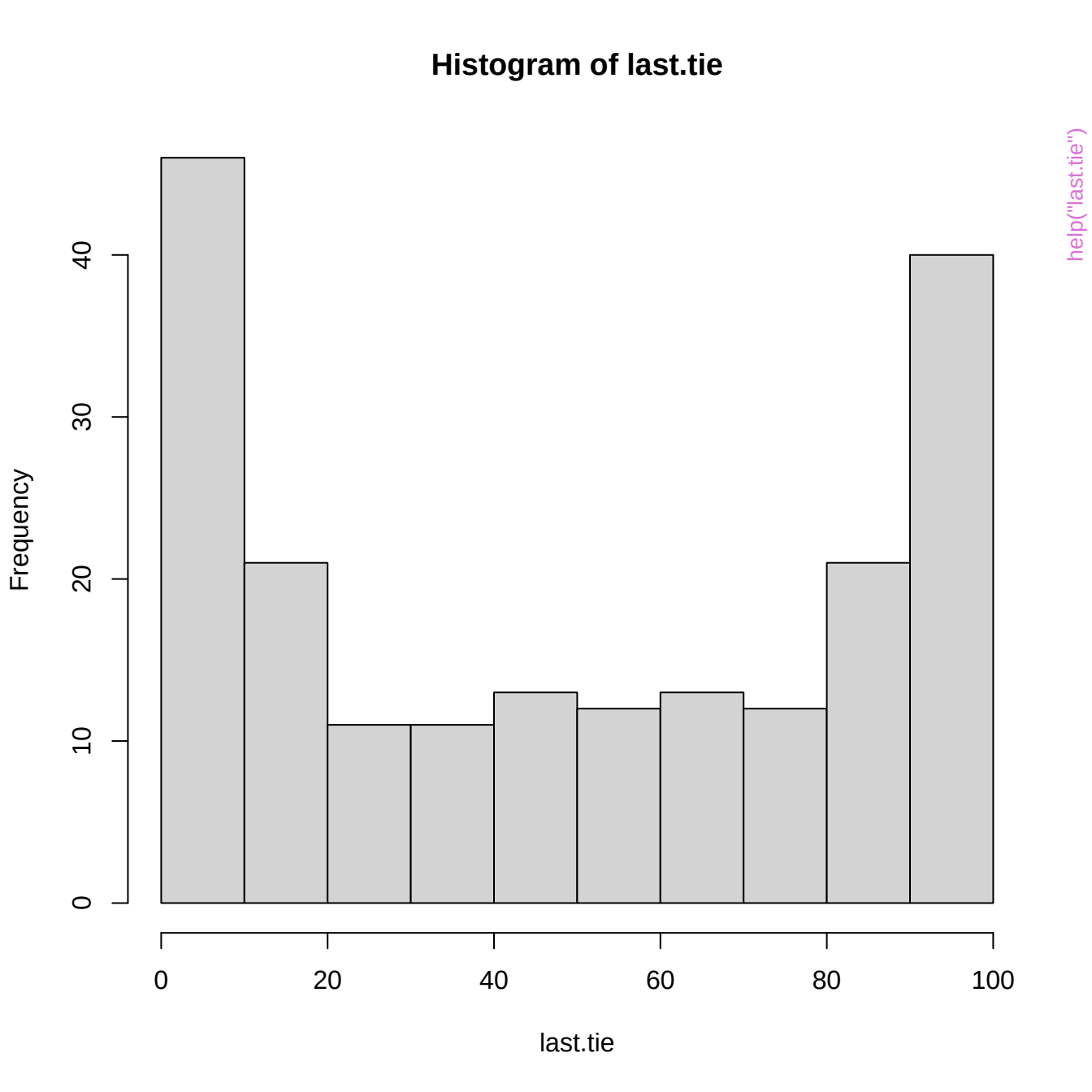


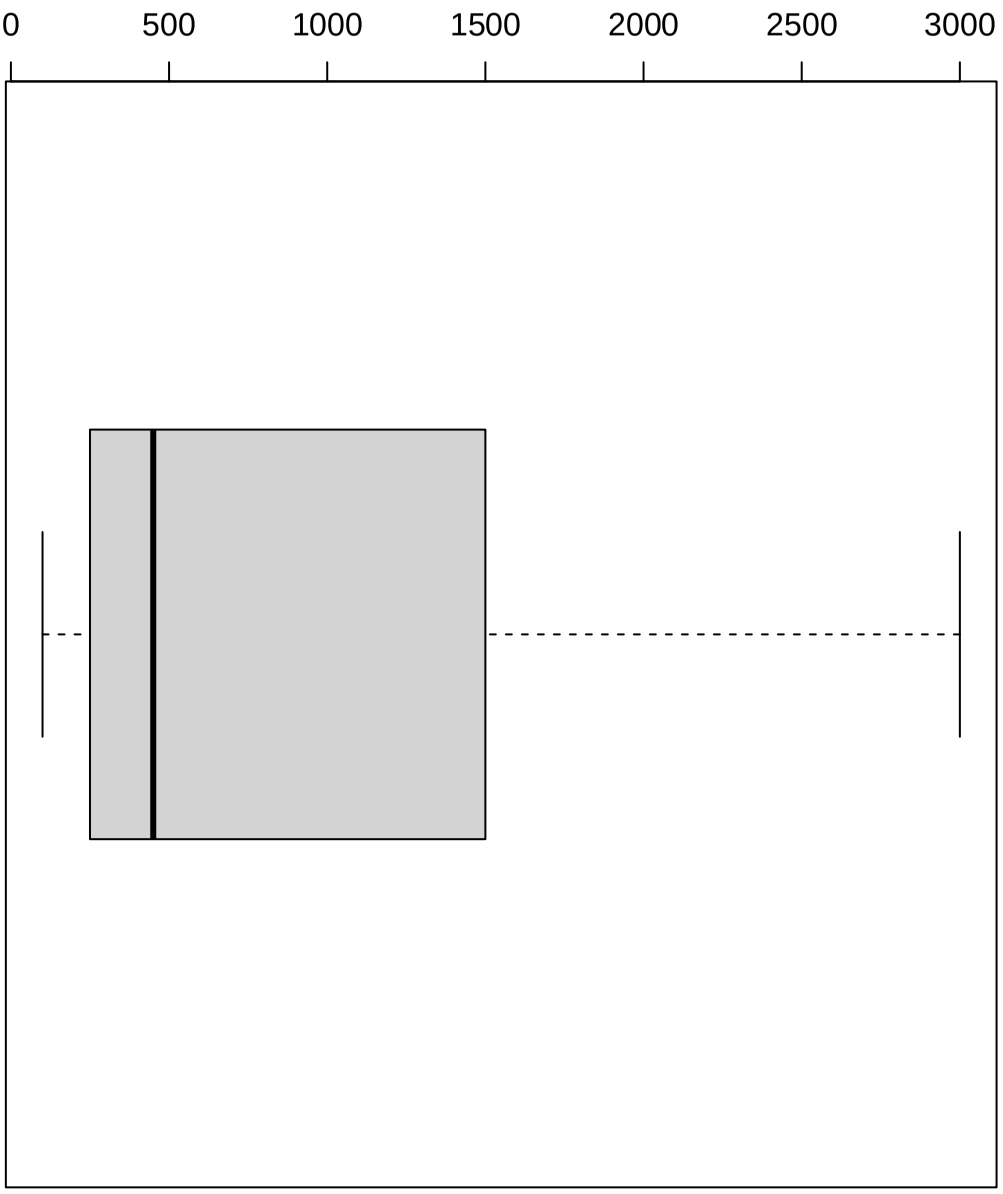
help("homework")


Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
70
80
90
100
110
120
130
−2
−1
0
1
2
help("iq")

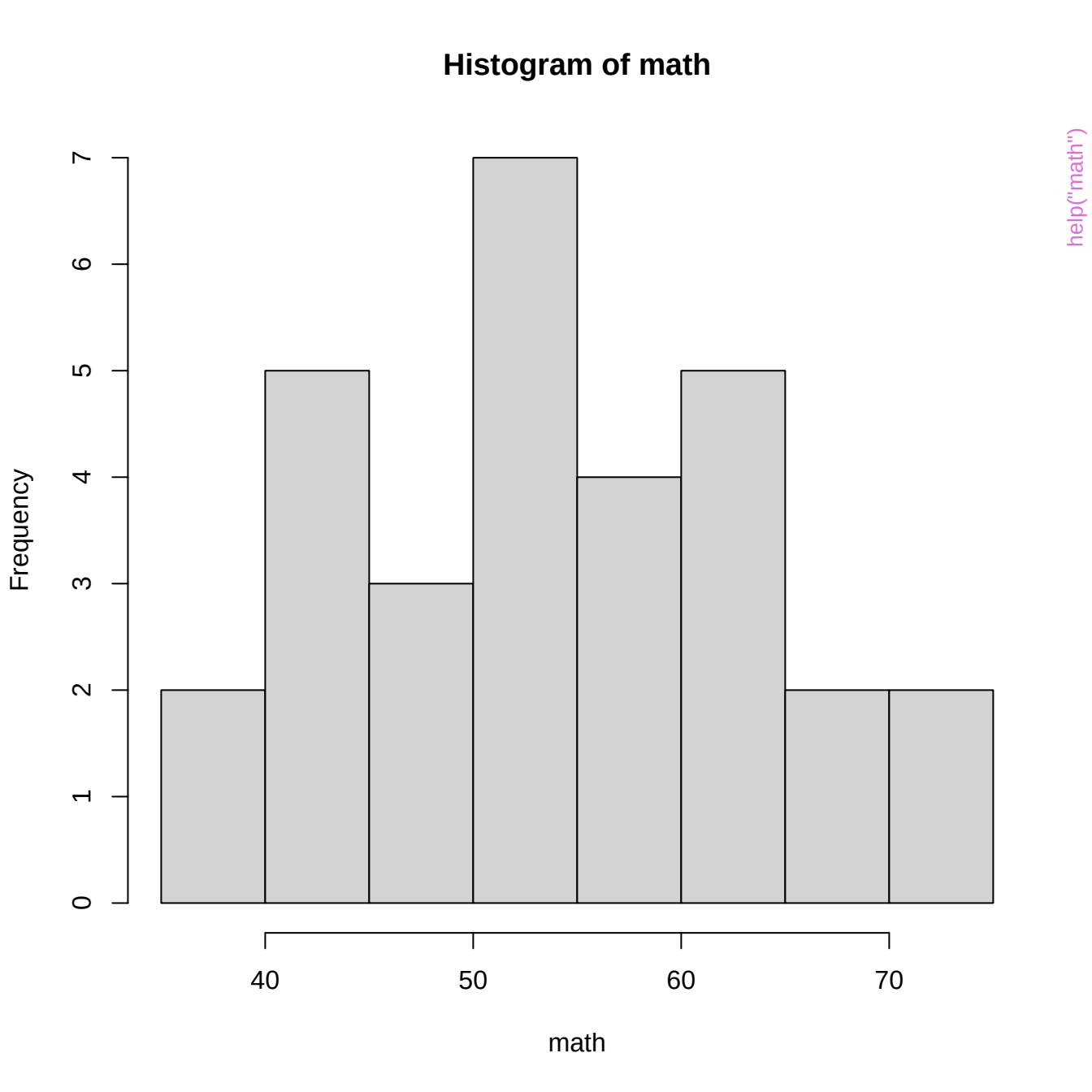

height
weight
10
20
30
40
50
60
20
40
60
80
100
120
140
help("kid.weights")

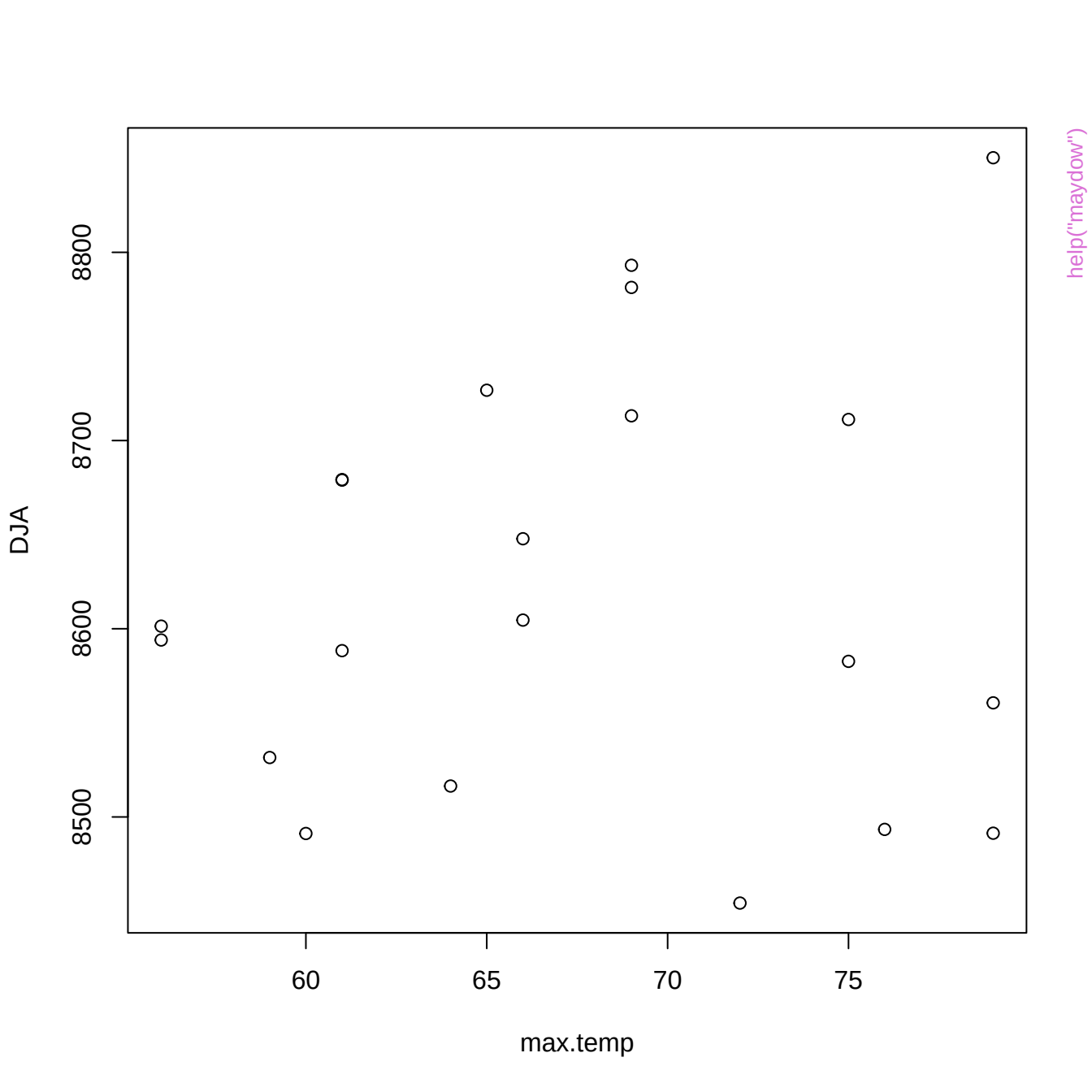

Histogram of bmi
Frequency
0
20
40
60
80
100
120
10
20
30
40
50
60
bmi
help("kid.weights")


Histogram of last.tie
Frequency
0
10
20
30
40
0
20
40
60
80
100
last.tie
help("last.tie")



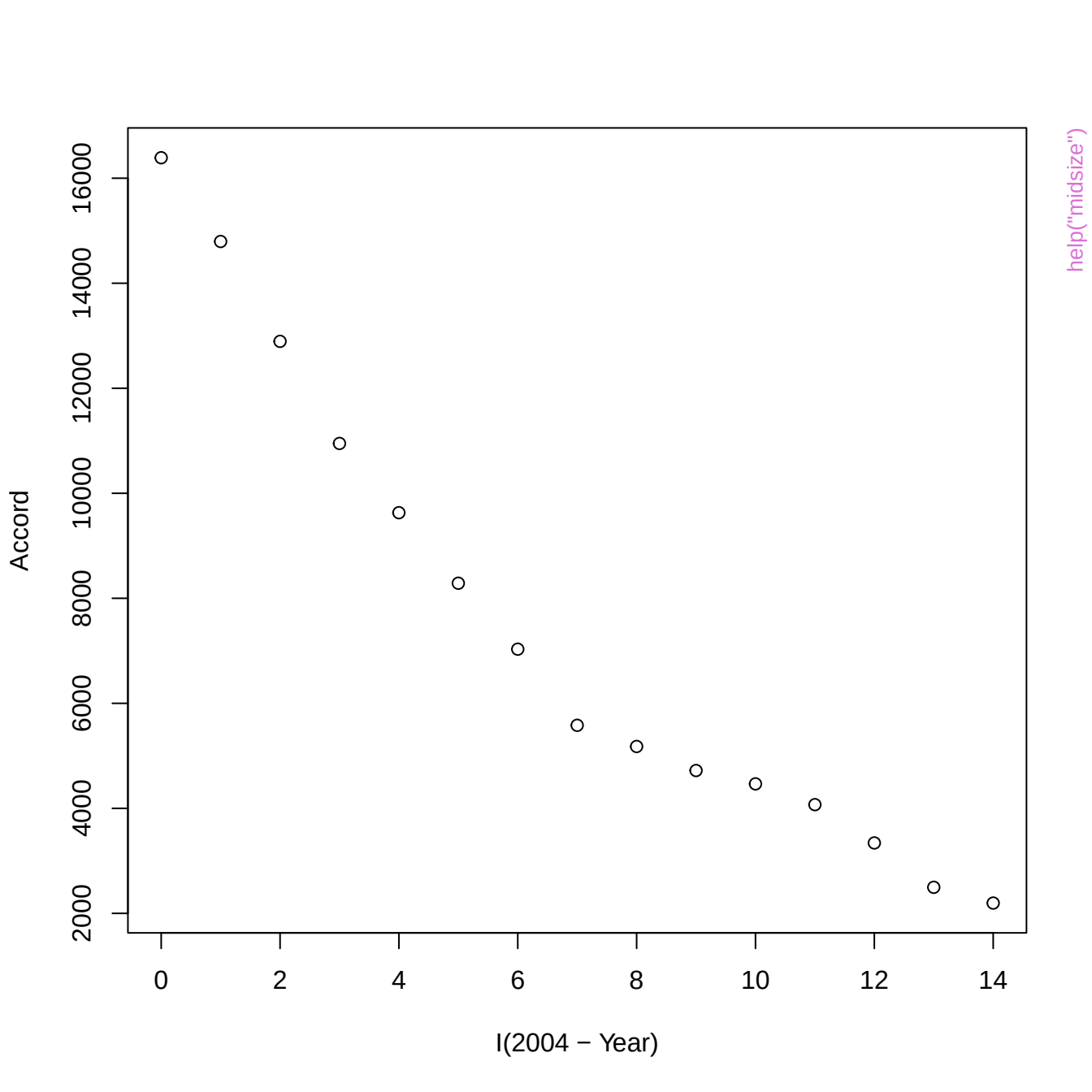
help("malpract")

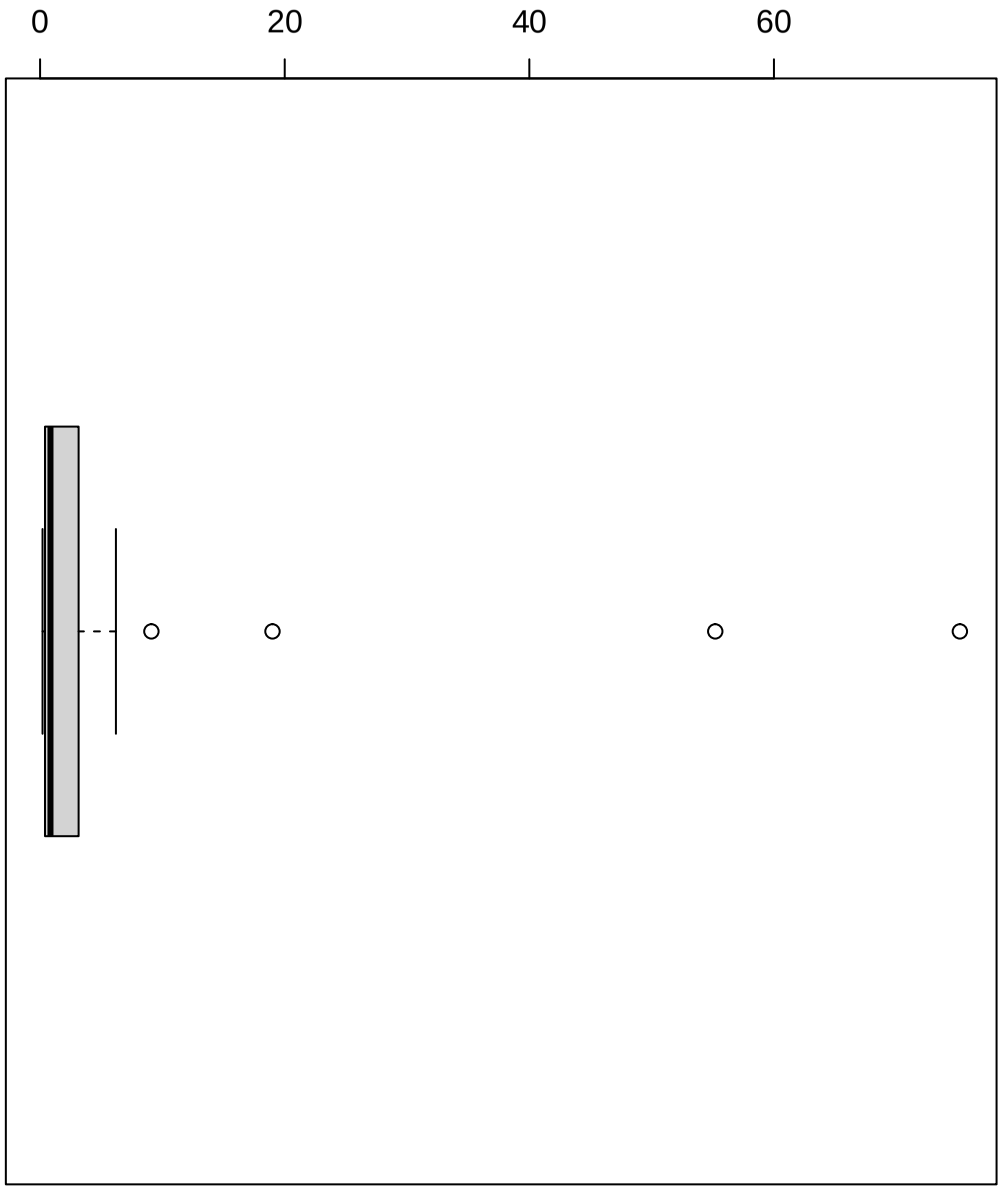

Histogram of math
help("math")
Frequency
0
1
2
3
4
5
6
7
40
50
60
70
math



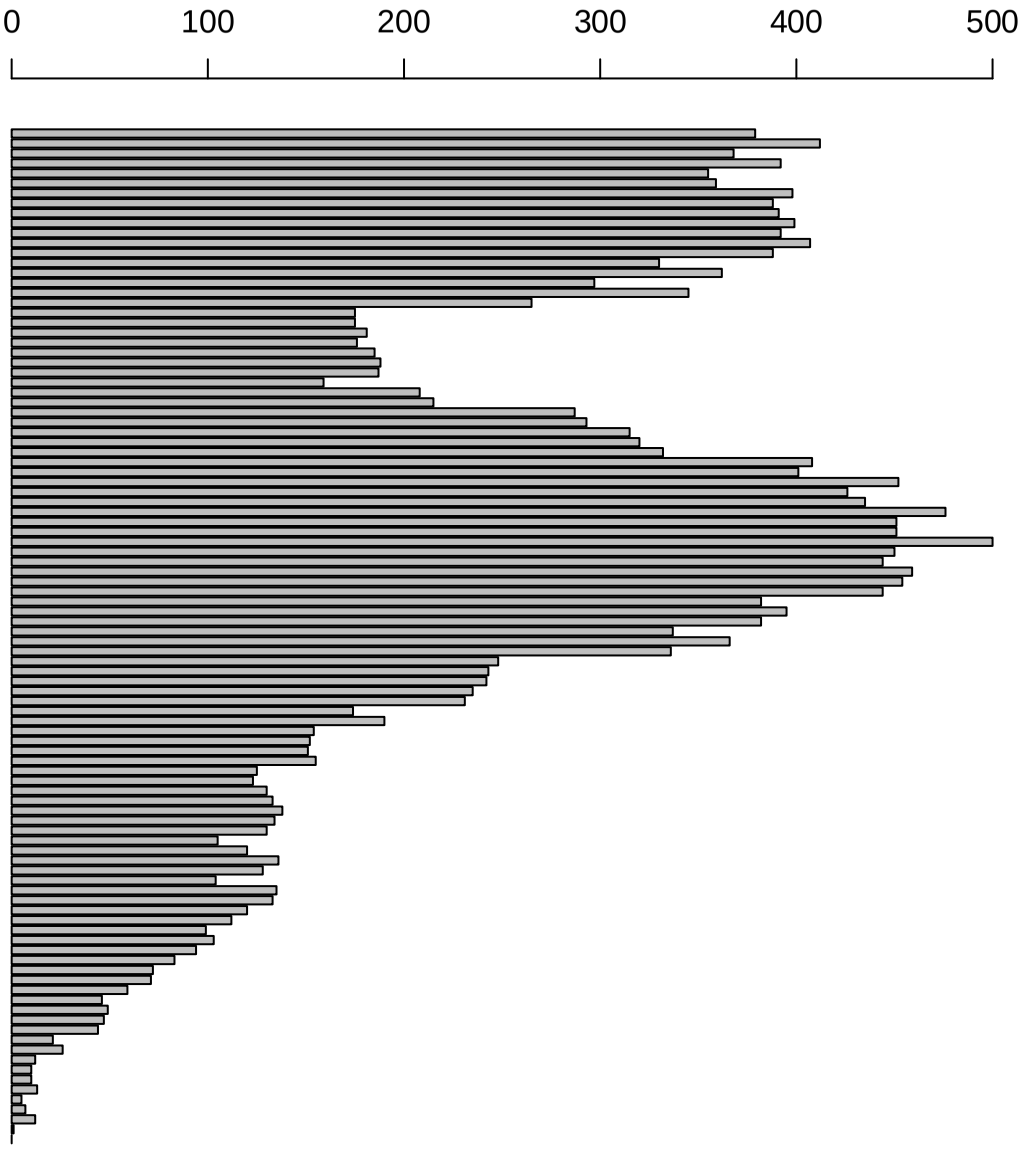
help("maydow")

help("maydow")

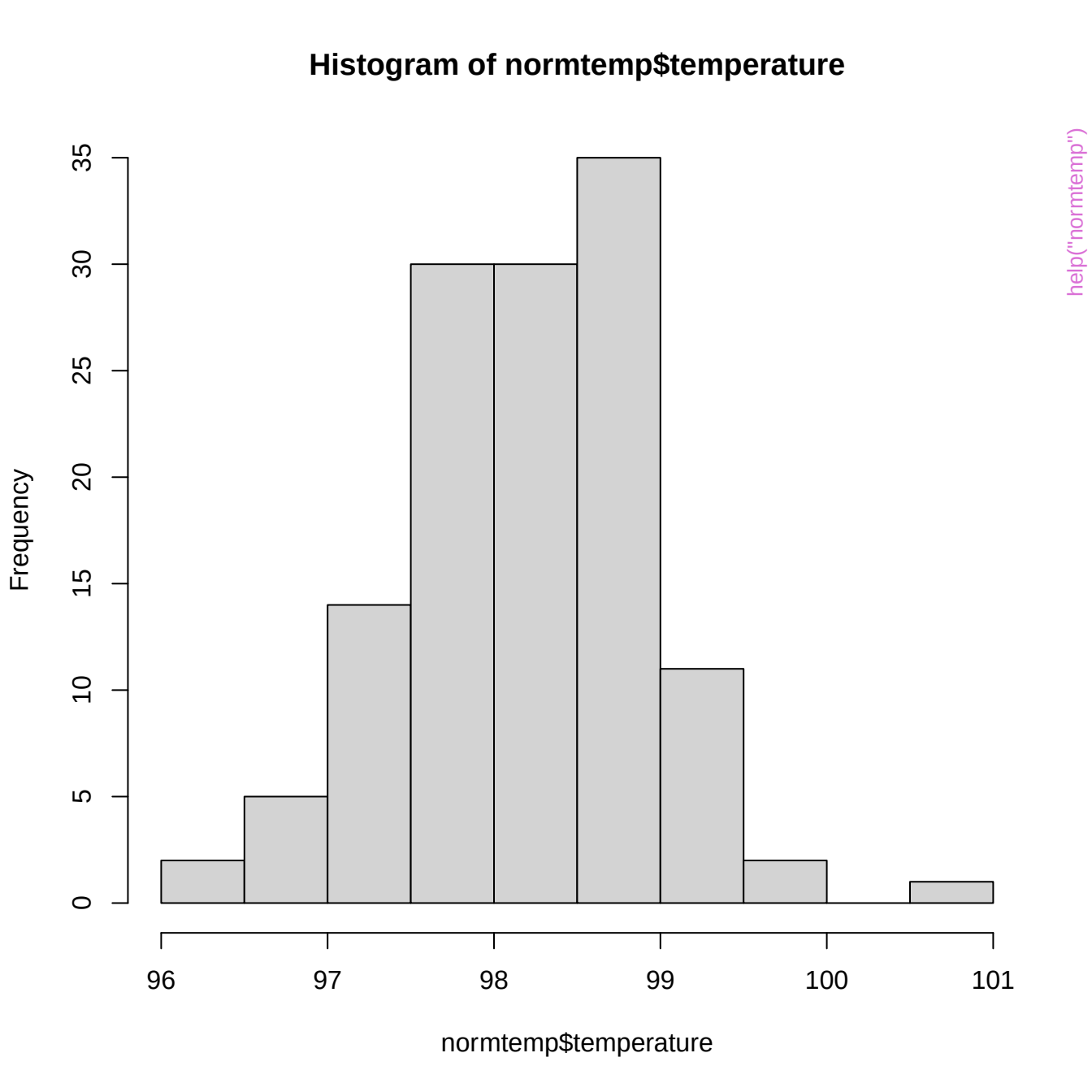

Accord
2000
4000
6000
8000
10000
12000
14000
16000
0
2
4
6
8
10
12
14
I(2004 − Year)
help("midsize")

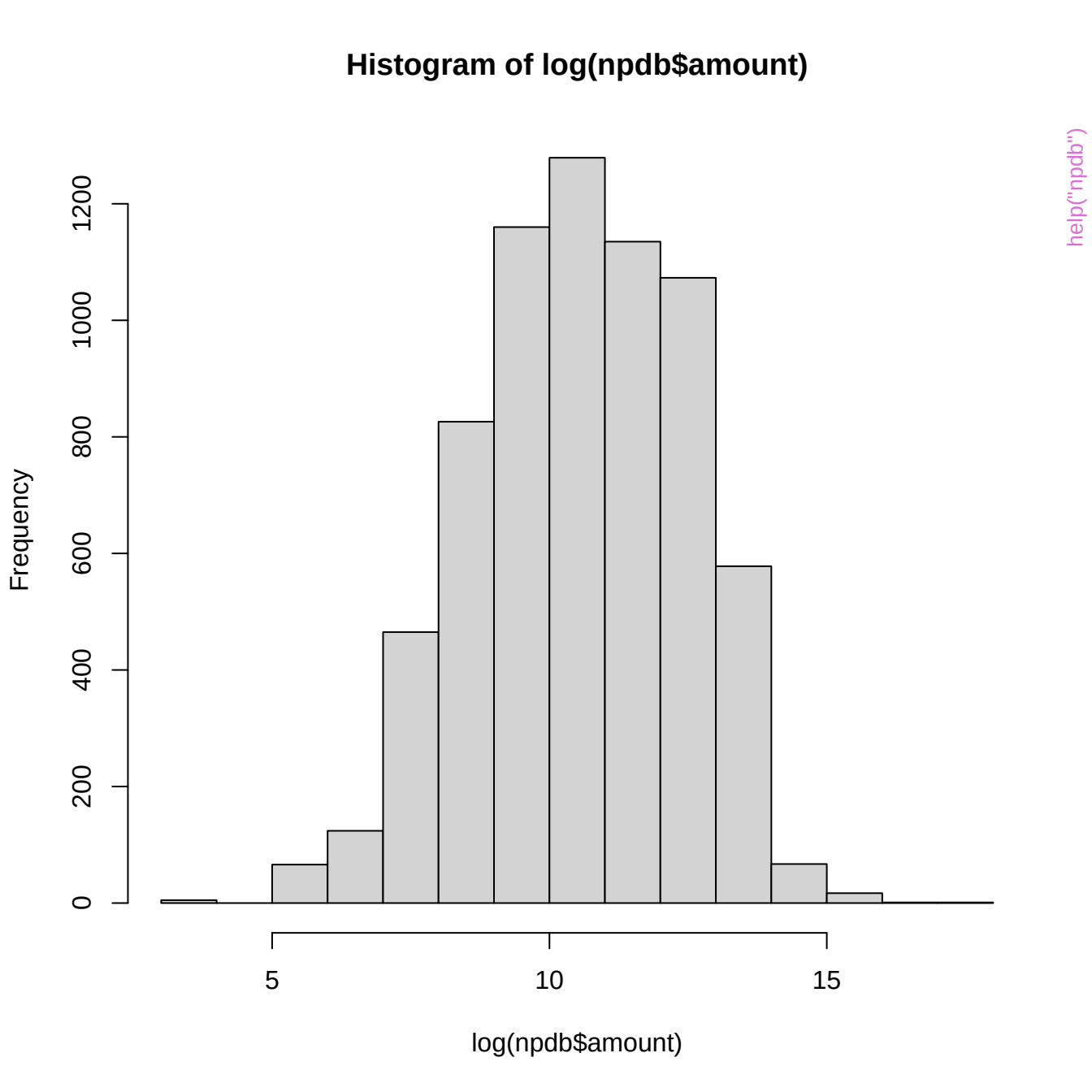


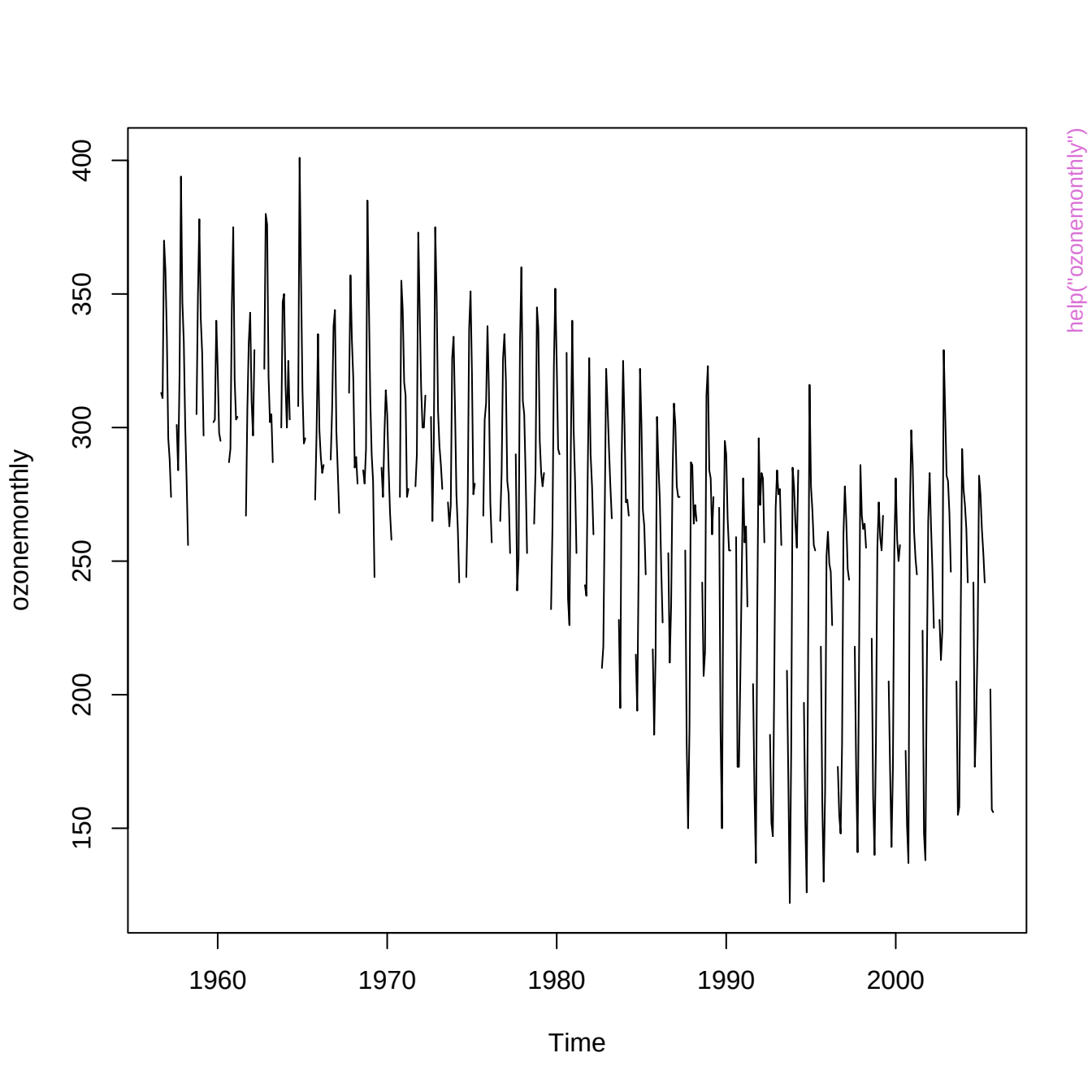
help("movies")

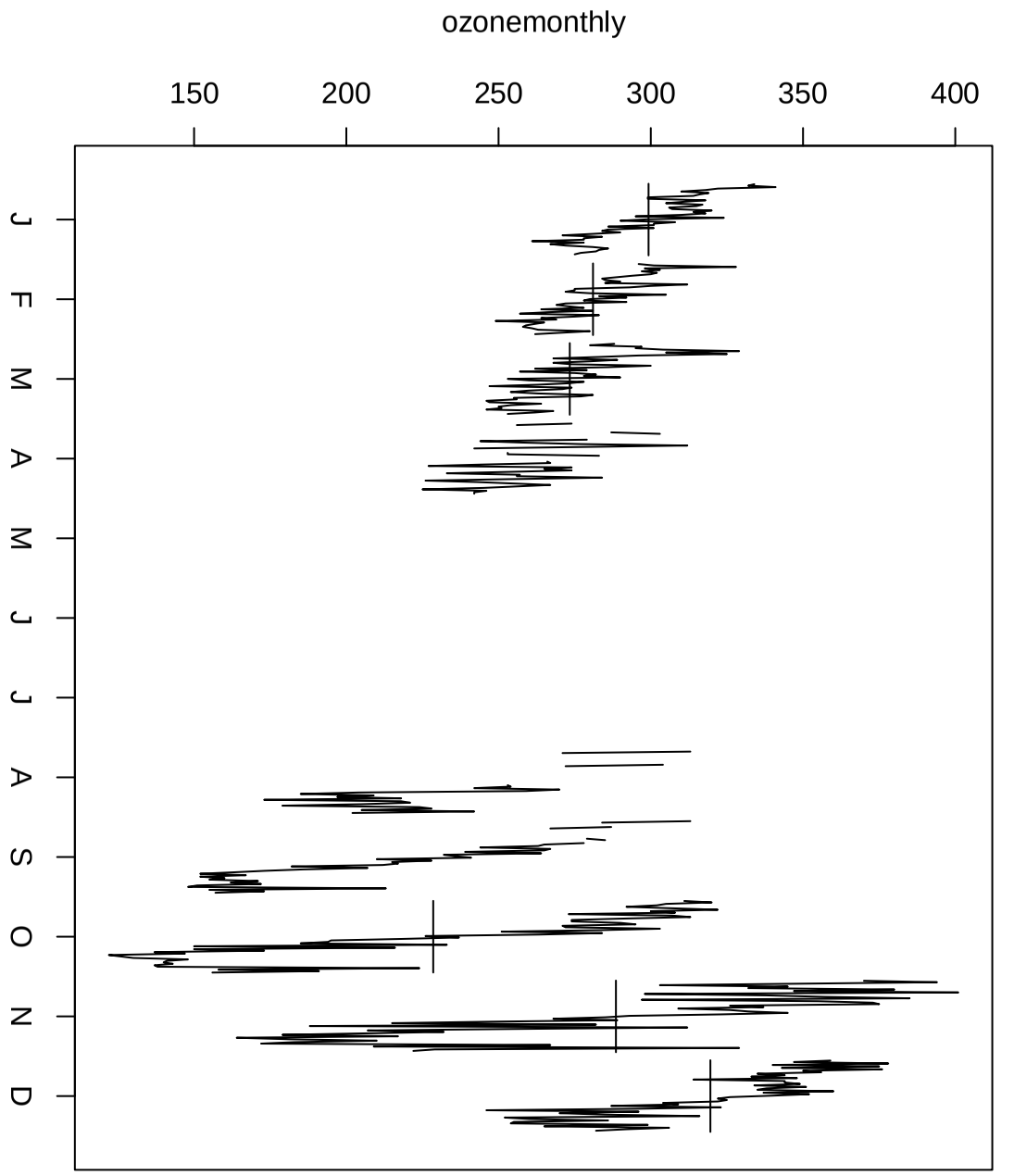


help("mw.ages")

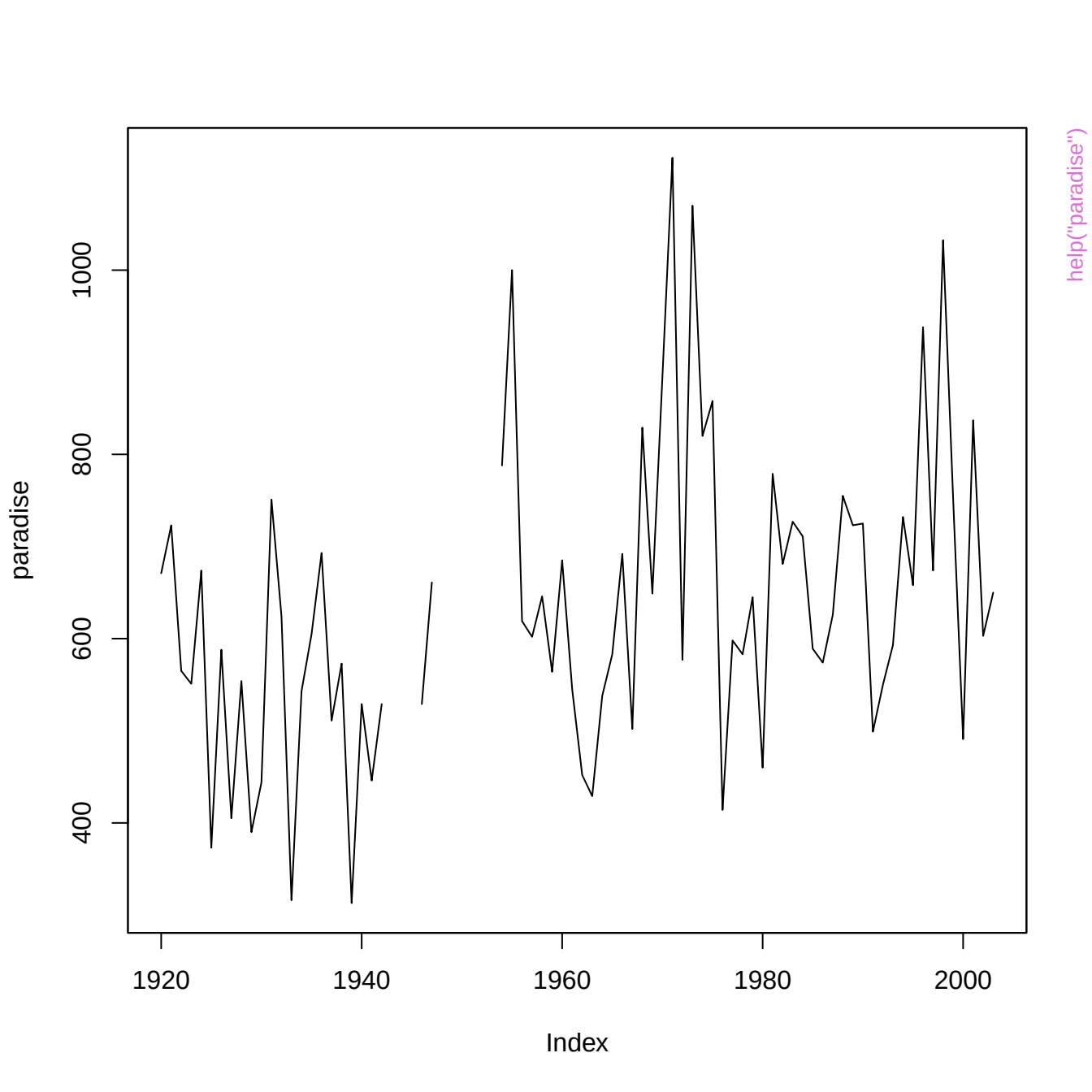

Histogram of normtemp$temperature
Frequency
0
5
10
15
20
25
30
35
96
97
98
99
100
101
normtemp$temperature
help("normtemp")

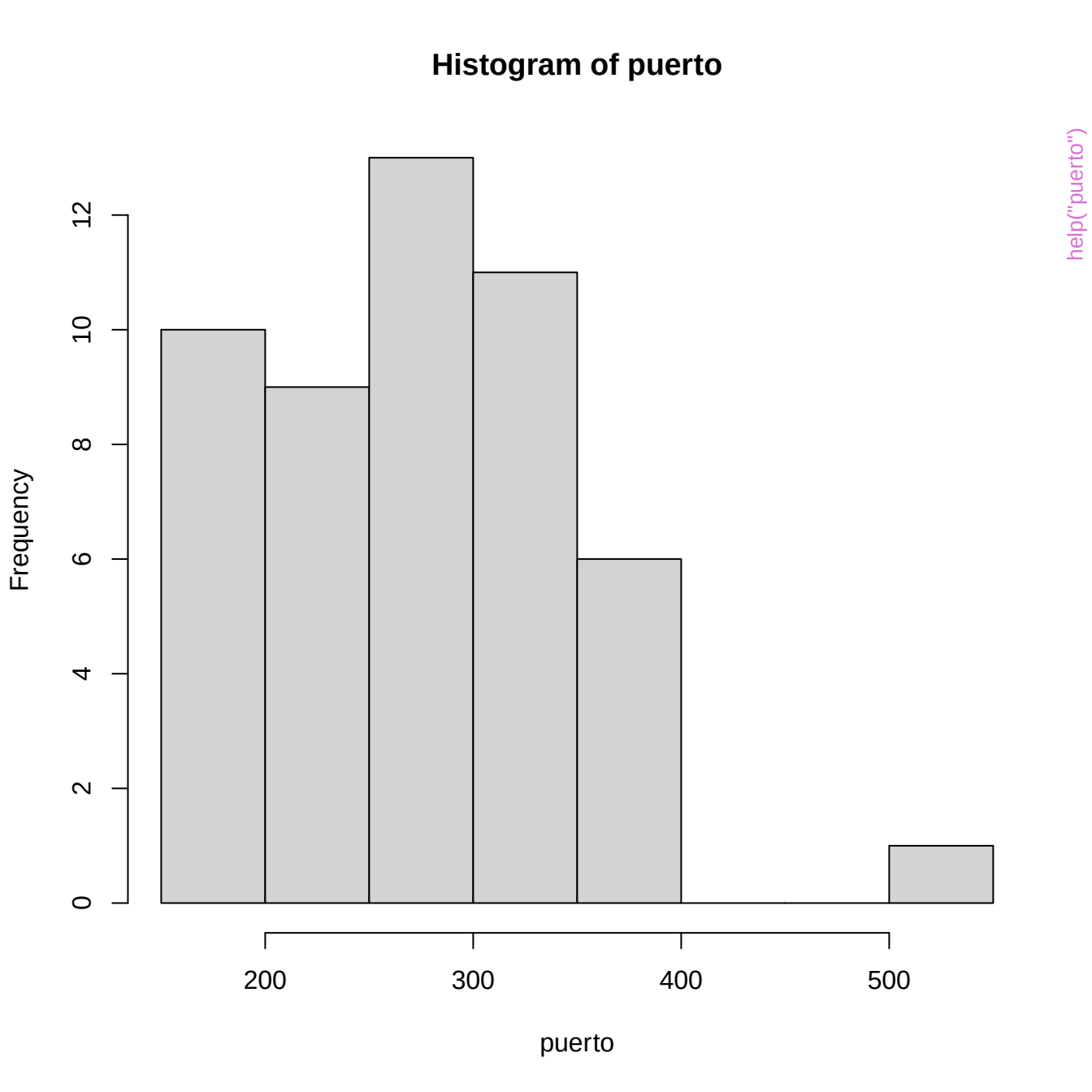

Histogram of log(npdb$amount)
Frequency
0
200
400
600
800
1000
1200
5
10
15
log(npdb$amount)
help("npdb")

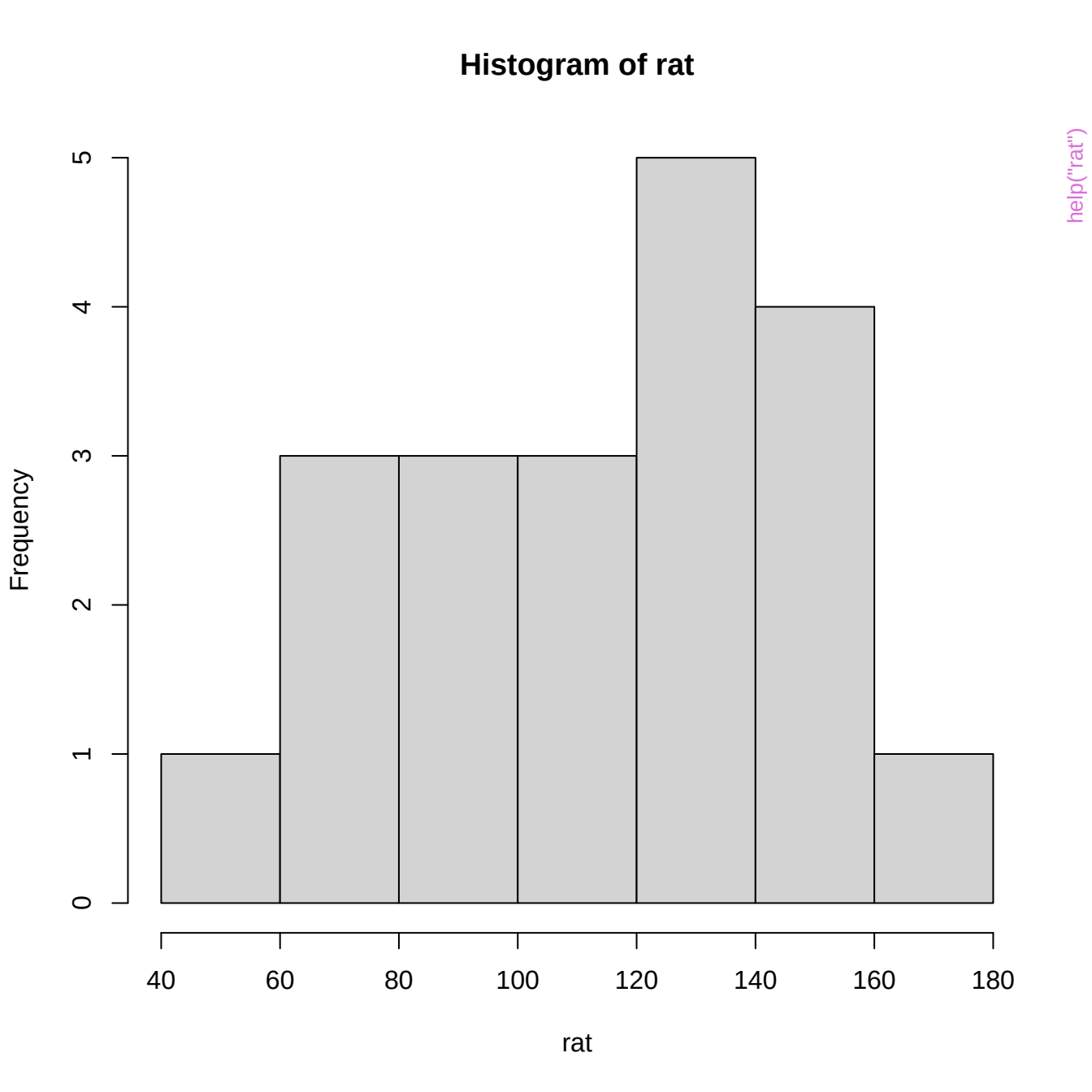

ozonemonthly
150
200
250
300
350
400
1960
1970
1980
1990
2000
Time
help("ozonemonthly")

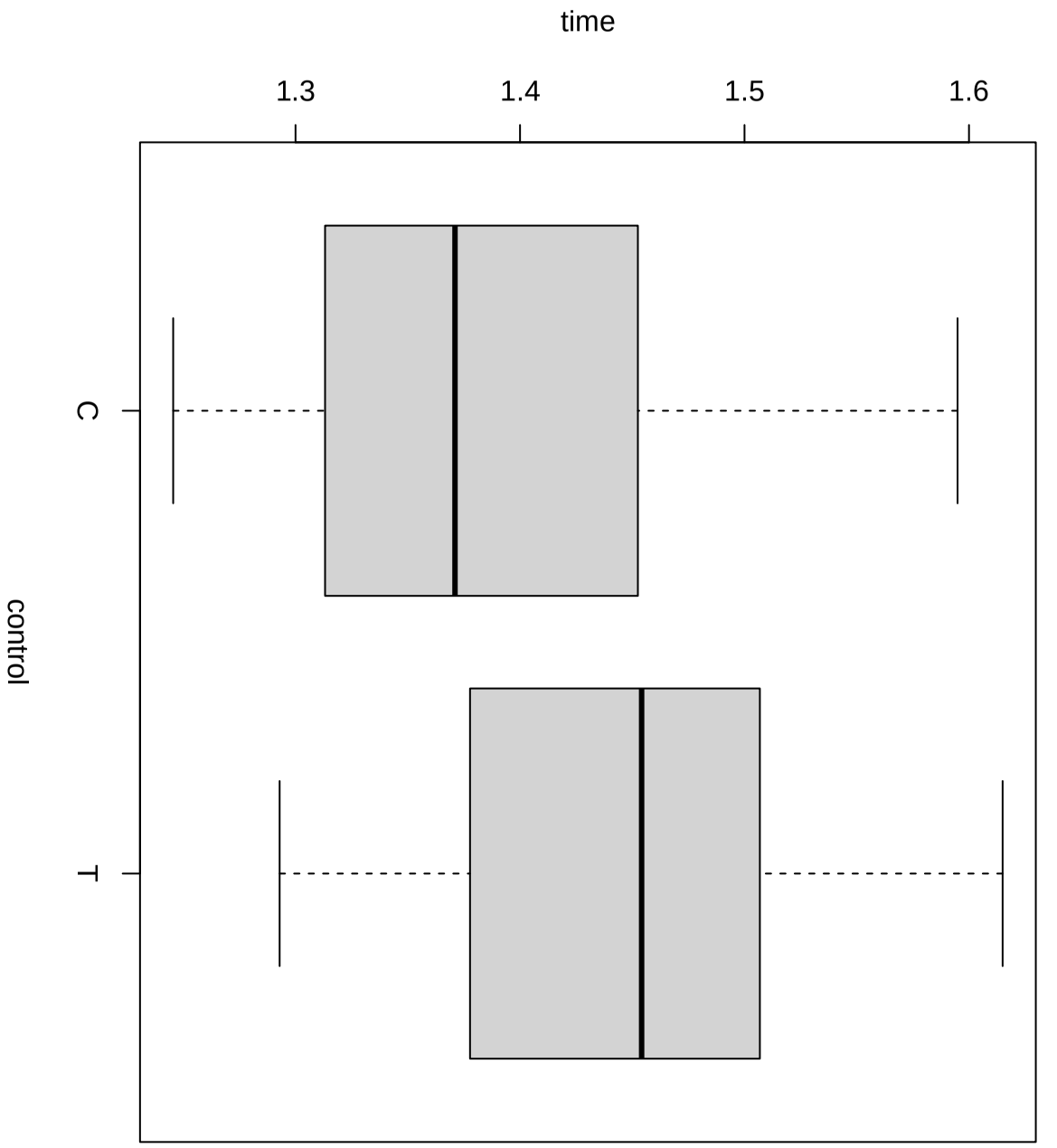


help("ozonemonthly")

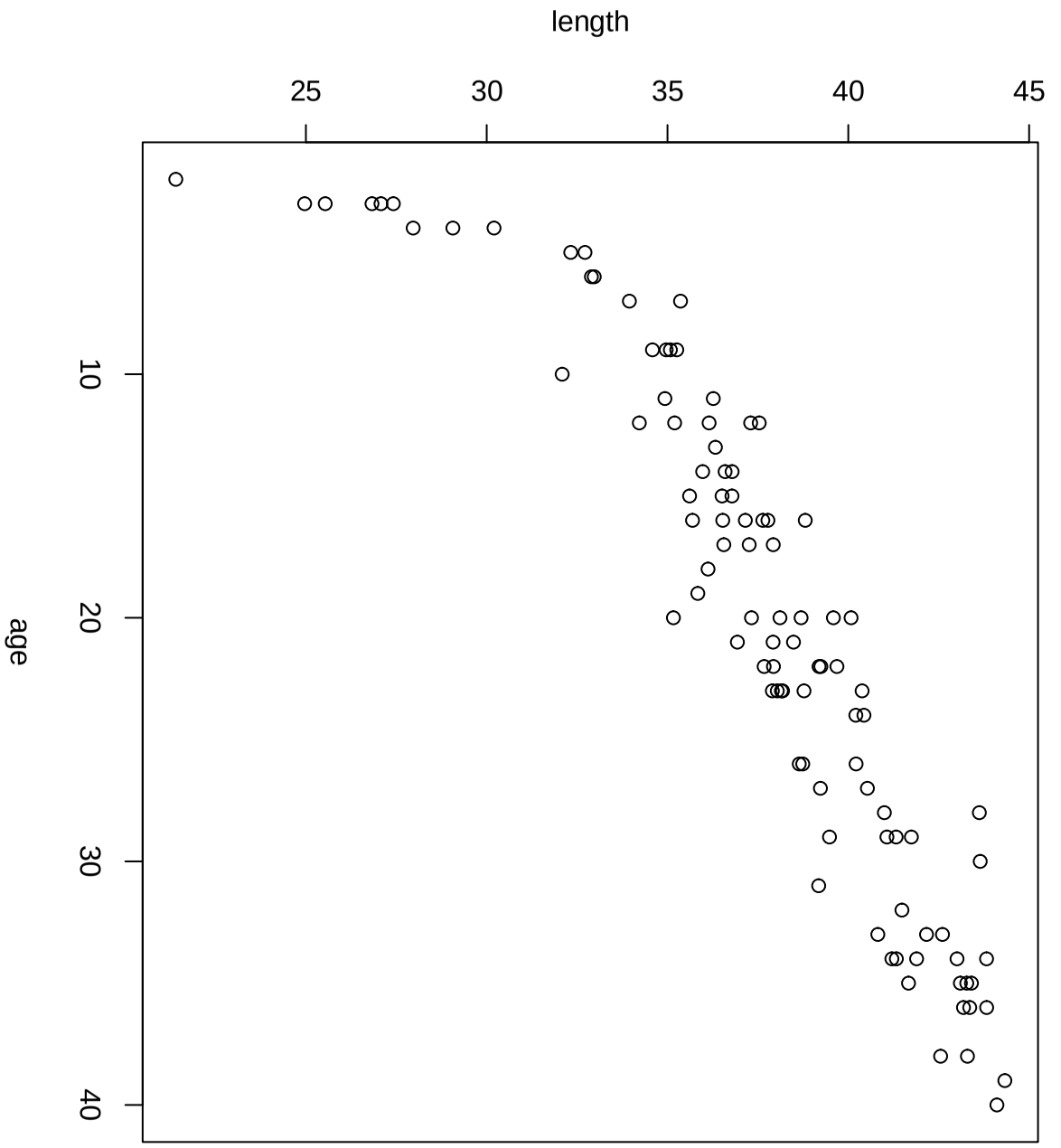

paradise
400
600
800
1000
1920
1940
1960
1980
2000
Index
help("paradise")


Histogram of puerto
Frequency
0
2
4
6
8
10
12
200
300
400
500
puerto
help("puerto")

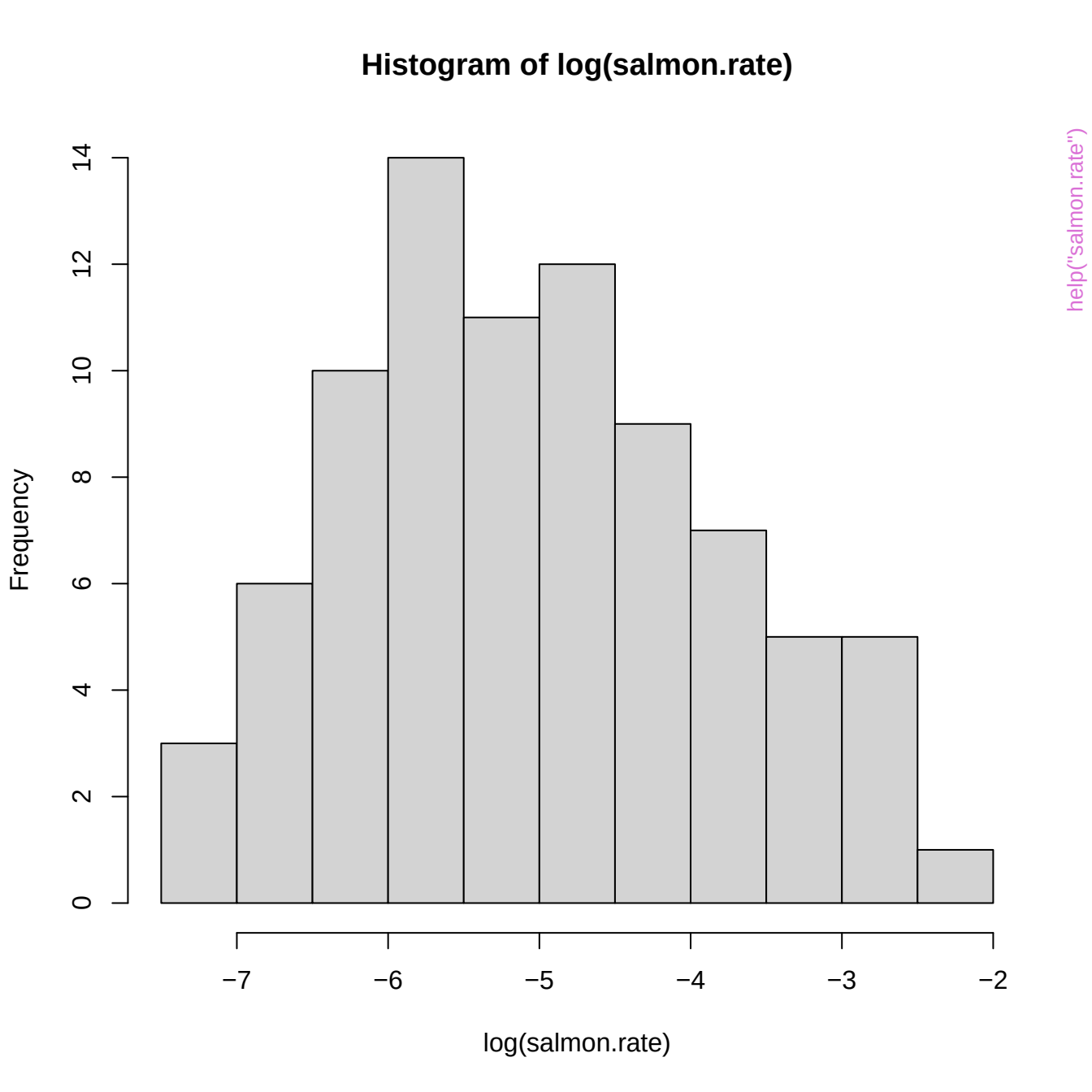

Histogram of rat
help("rat")
Frequency
0
1
2
3
4
5
40
60
80
100
120
140
160
180
rat

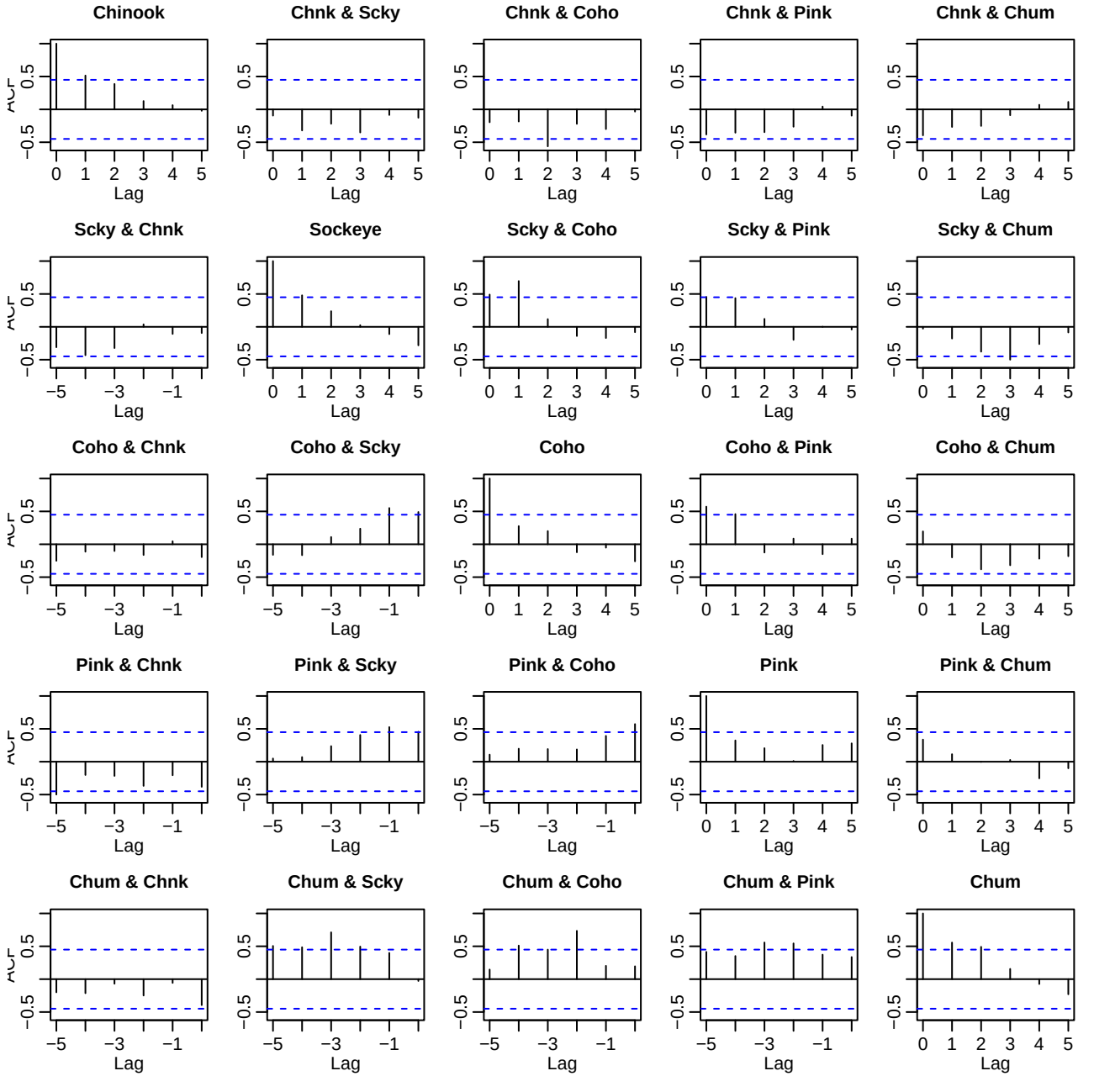


help("reaction.time")



help("reddrum")

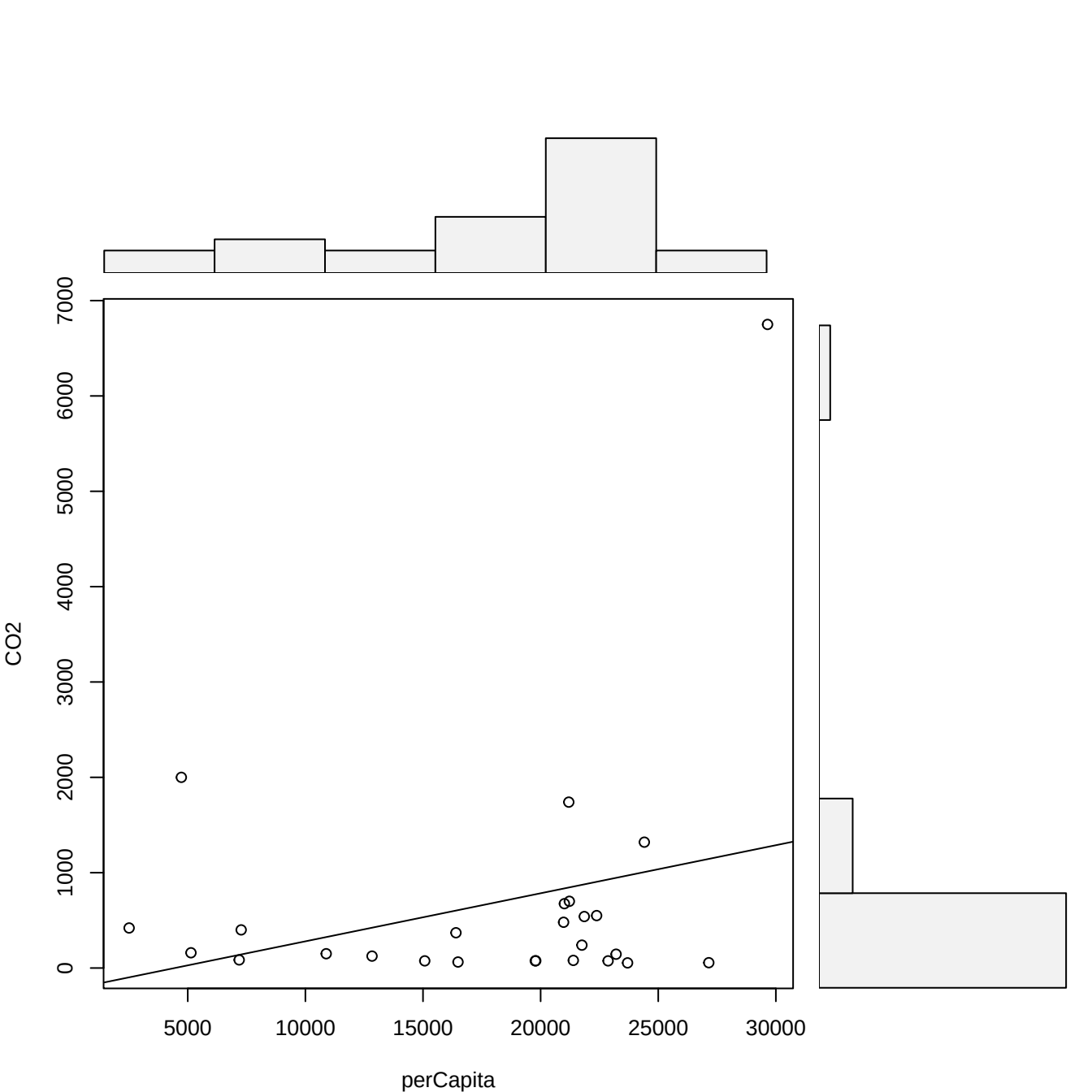

Histogram of log(salmon.rate)
Frequency
0
2
4
6
8
10
12
14
−7
−6
−5
−4
−3
−2
log(salmon.rate)
help("salmon.rate")

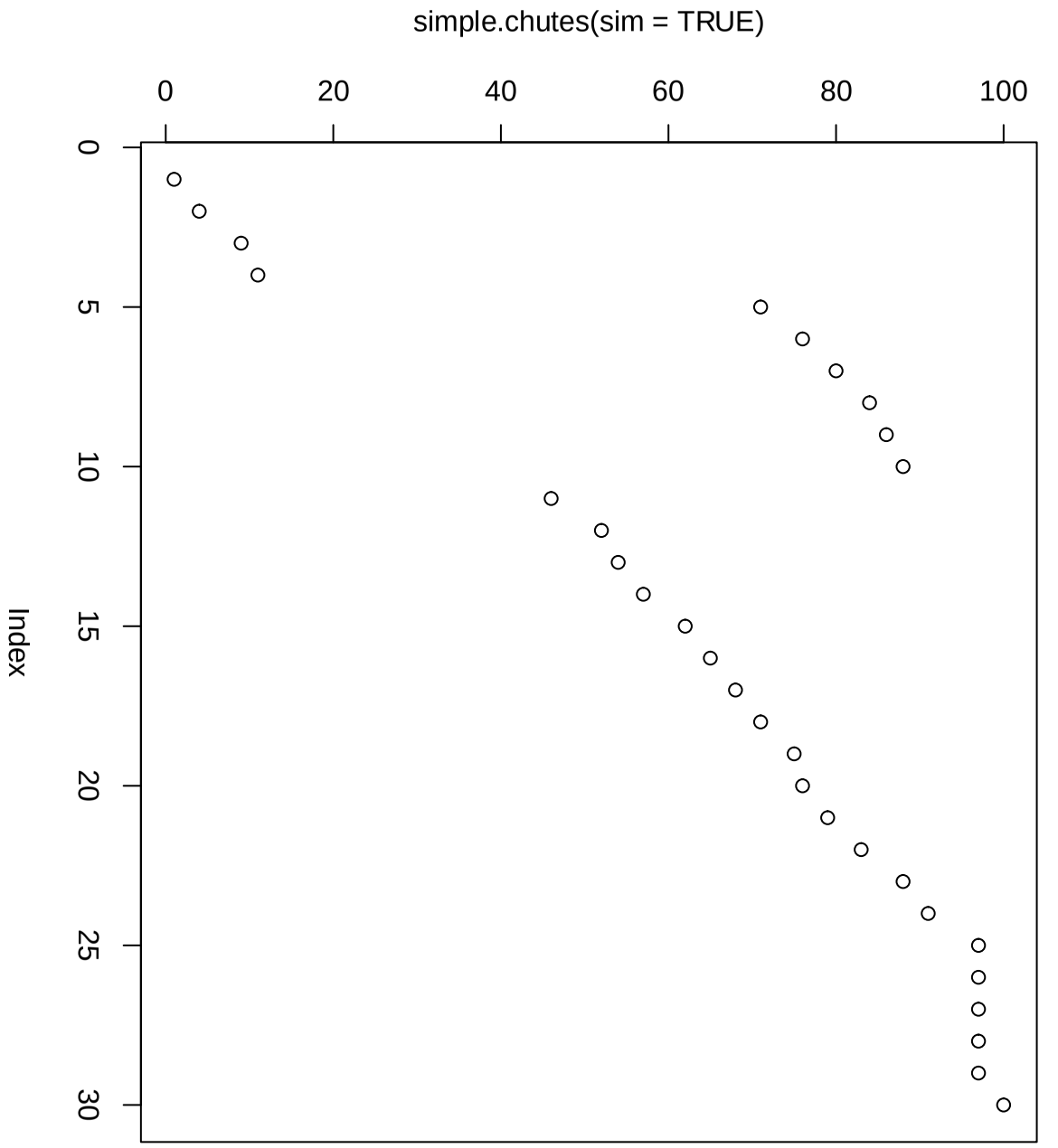

Chinook
Chnk & Scky
Chnk & Coho
Chnk & Pink
Chnk & Chum
Scky & Chnk
Sockeye
Scky & Coho
Scky & Pink
Scky & Chum
Coho & Chnk
Coho & Scky
Coho
Coho & Pink
Coho & Chum
Pink & Chnk
Pink & Scky
Pink & Coho
Pink
Pink & Chum
Chum & Chnk
Chum & Scky
Chum & Coho
Chum & Pink
Chum
ACF
Lag

1

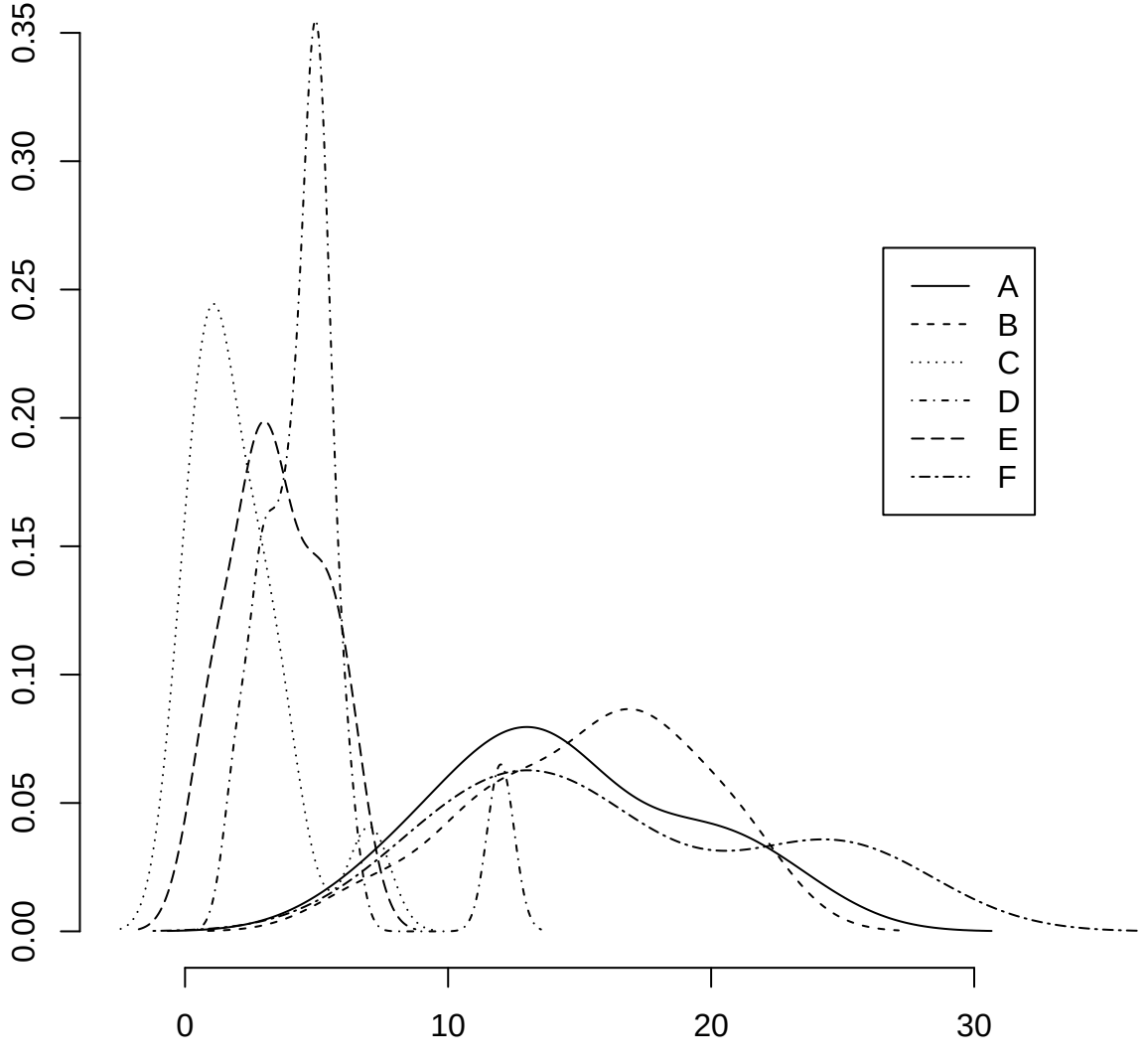
3

2

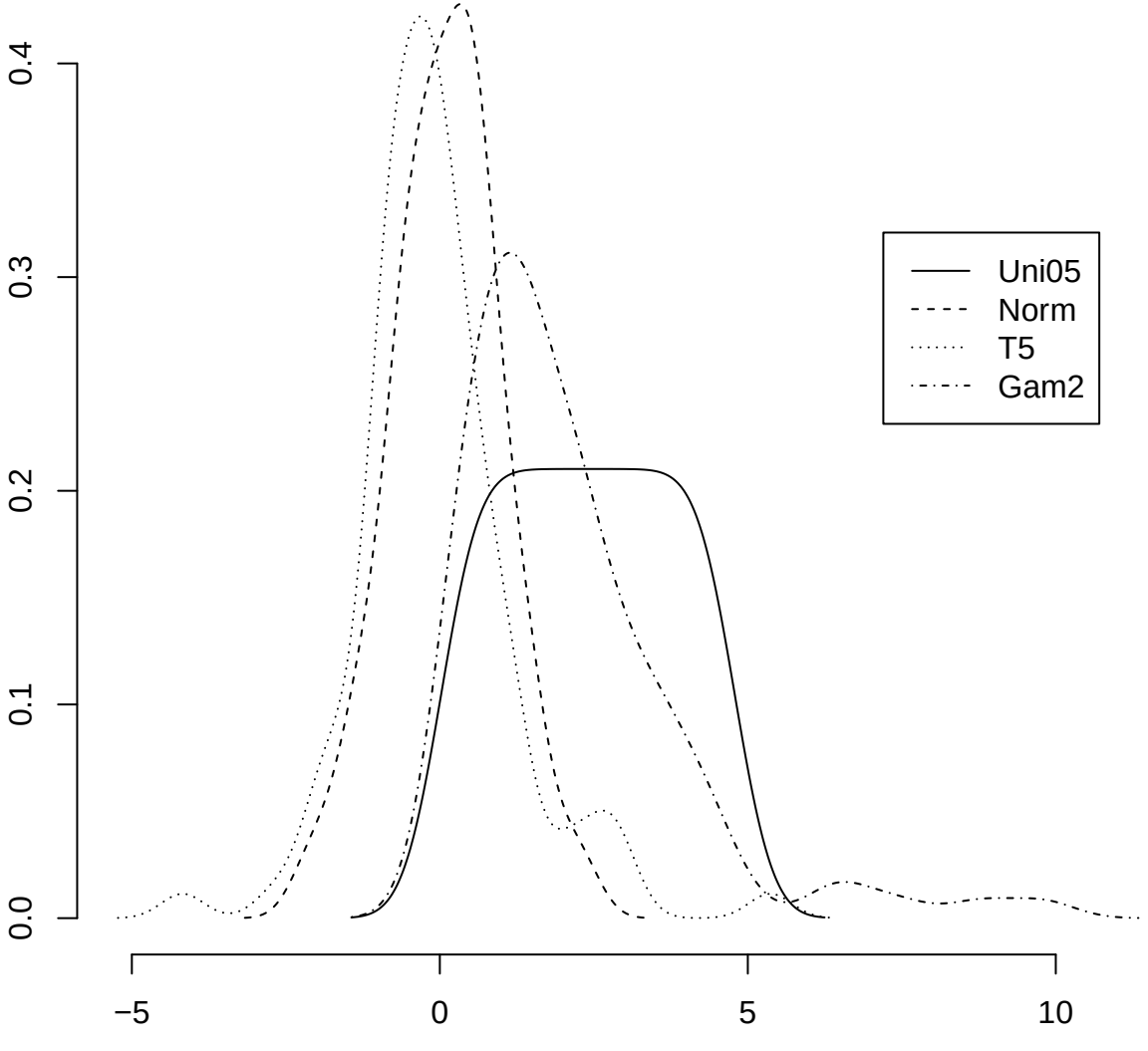

CO2
0
1000
2000
3000
4000
5000
6000
7000
5000
10000
15000
20000
25000
30000
perCapita



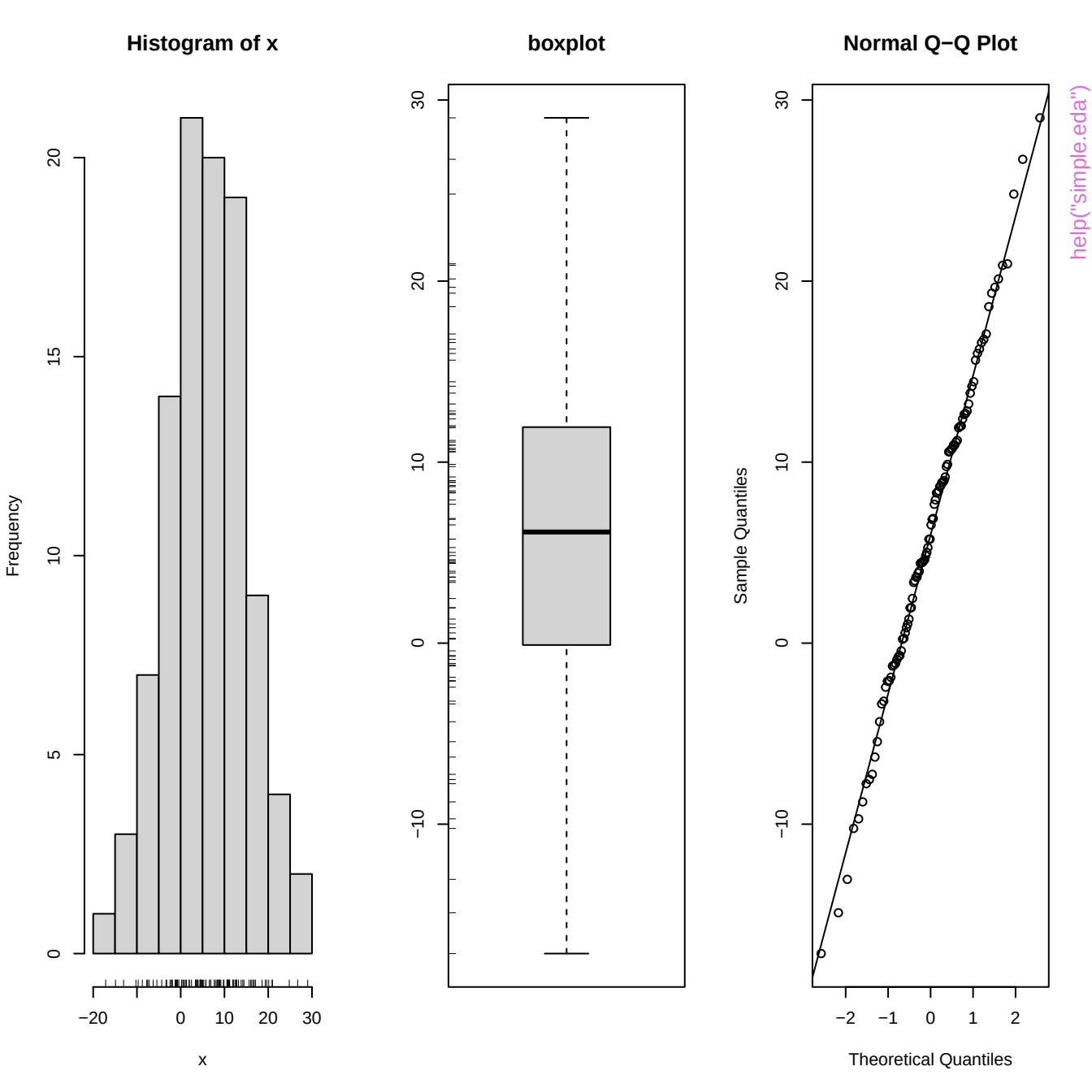
help("simple.chutes")



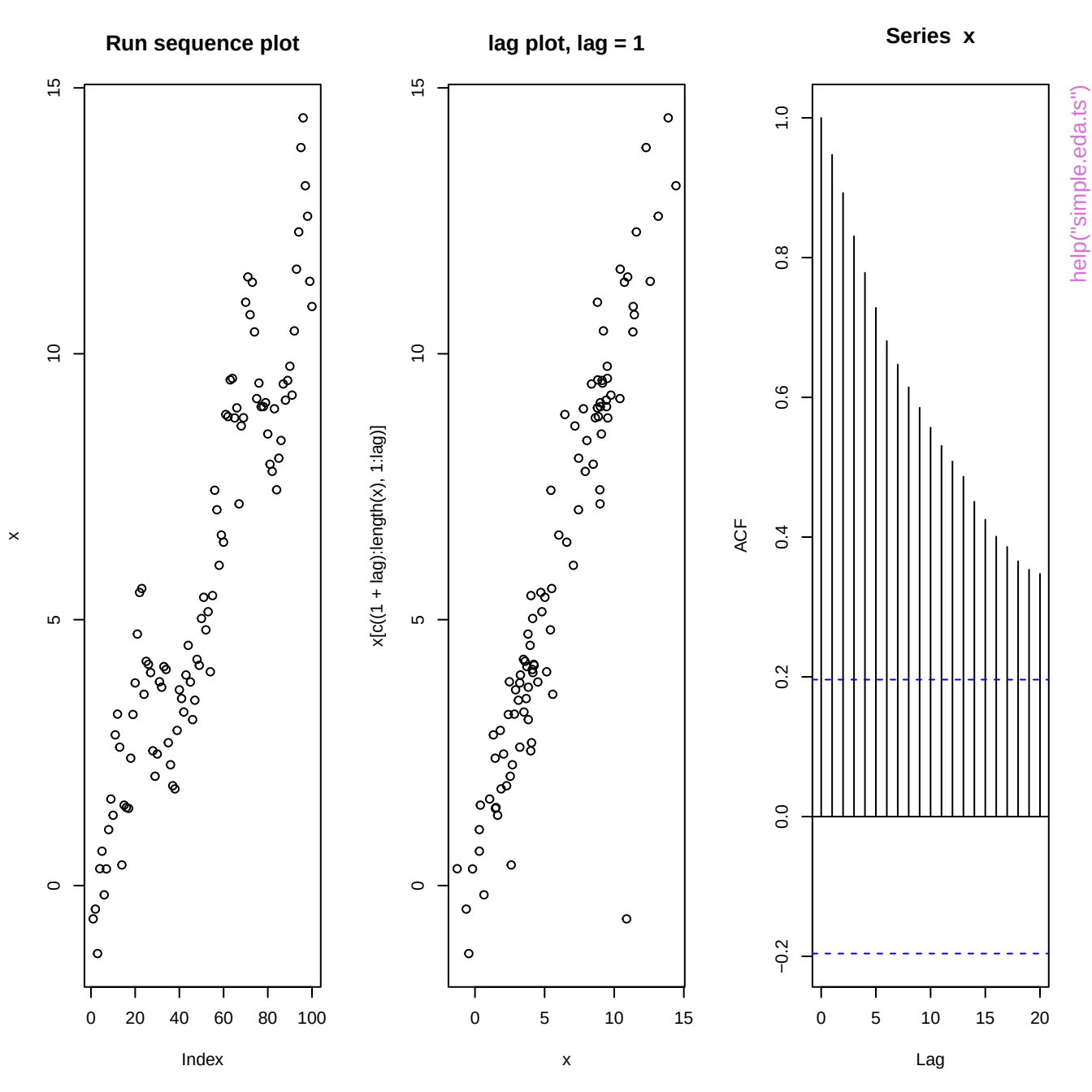
help("simple.densityplot")

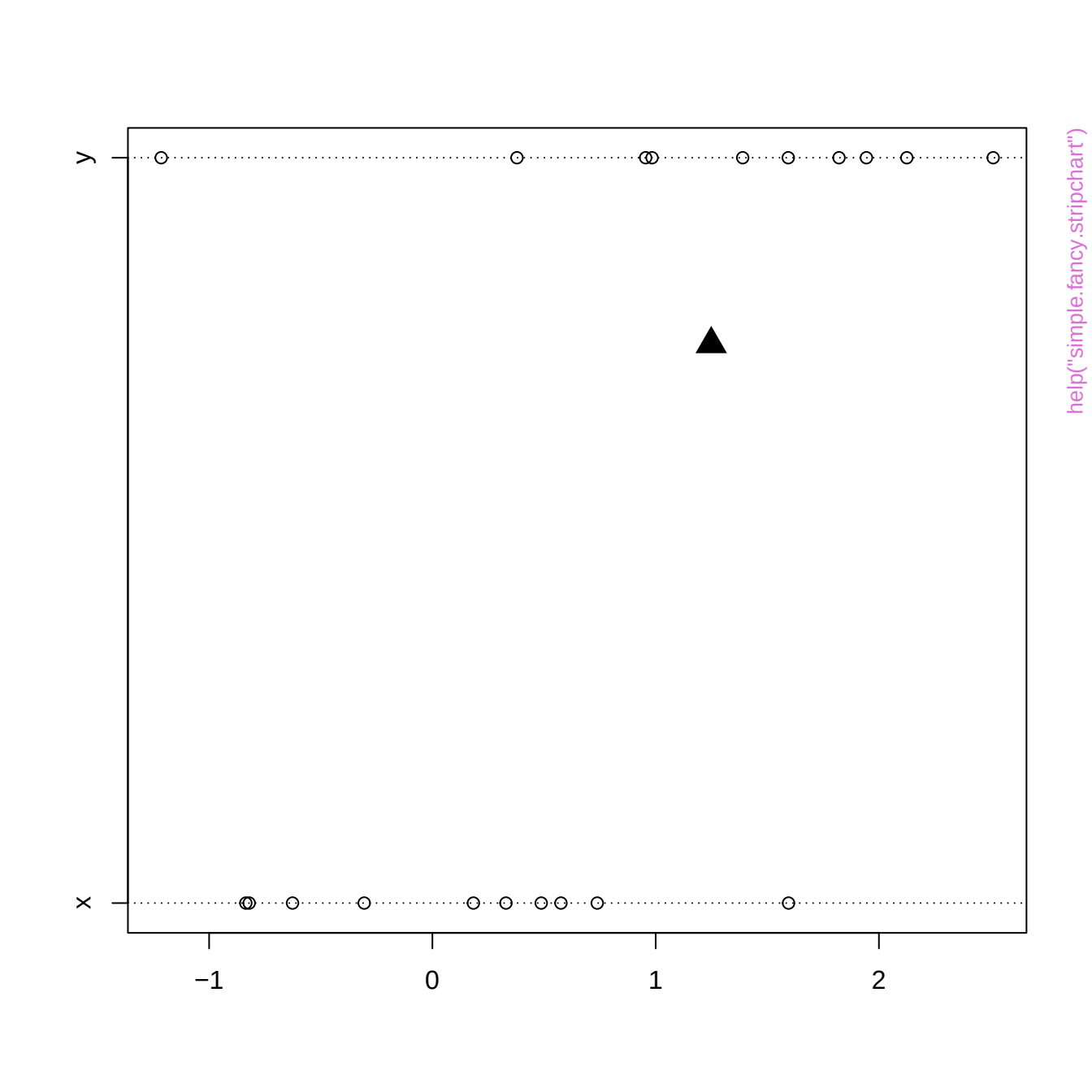


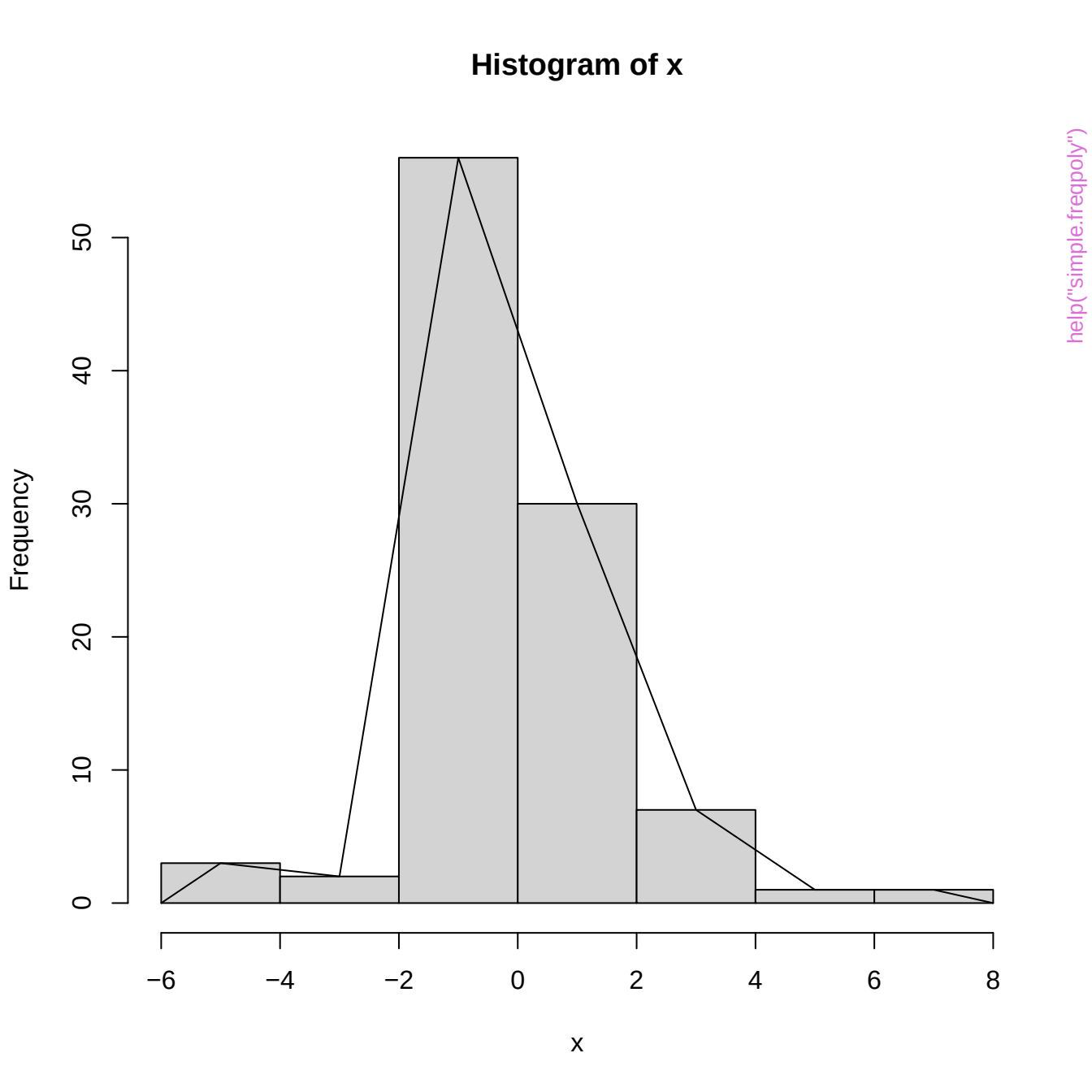
help("simple.densityplot")

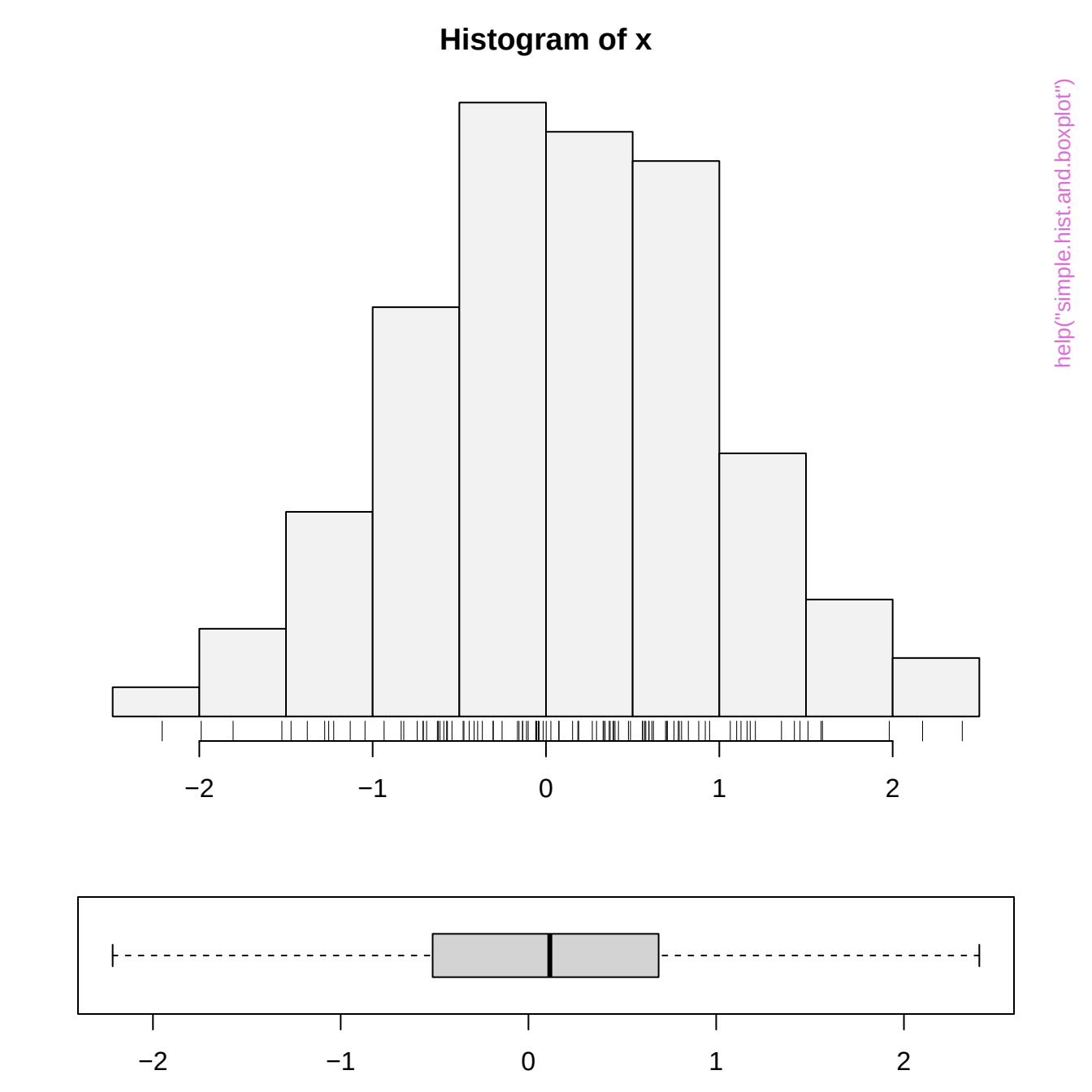

Histogram of x
Frequency
0
5
10
15
20
−20
0
10
20
30
x
boxplot
30
20
10
0
−10
Normal Q−Q Plot
Sample Quantiles
30
20
10
0
−10
−2
−1
0
1
2
Theoretical Quantiles
help("simple.eda")

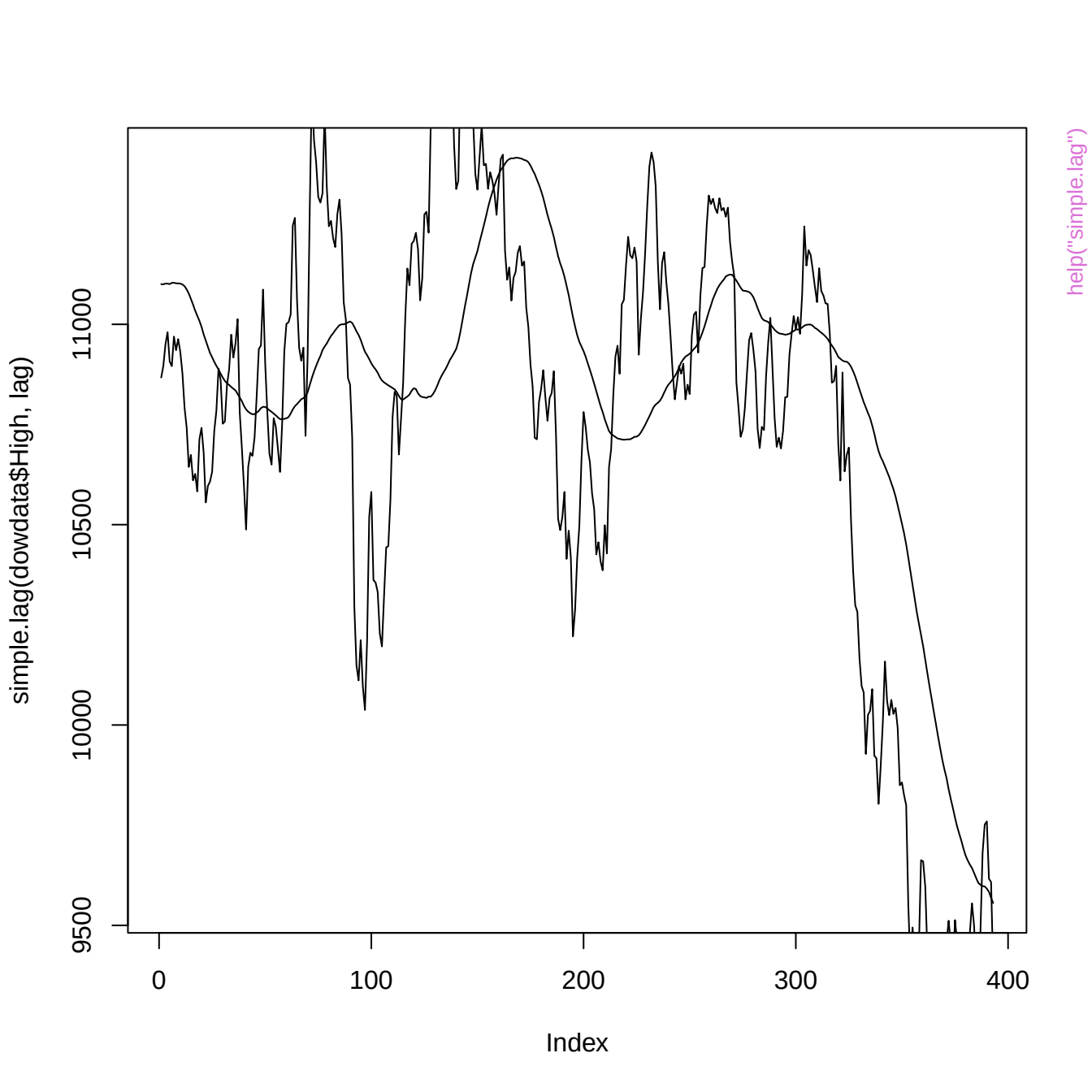
help("simple.eda.ts")

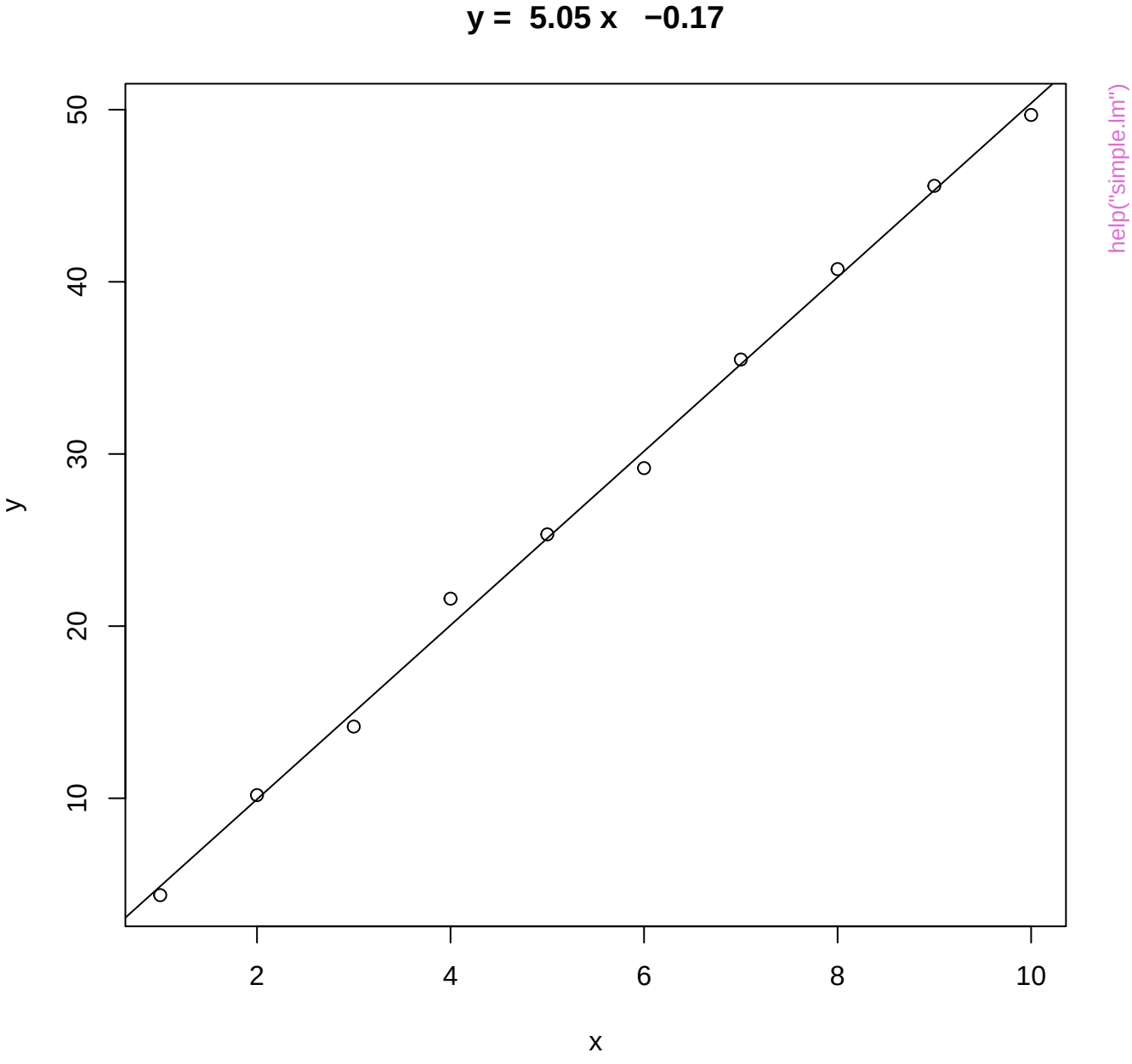

Run sequence plot
x
Index
lag plot, lag = 1
x[c((1 + lag):length(x), 1:lag)]
x
Series x
ACF
Lag
help("simple.eda.ts")

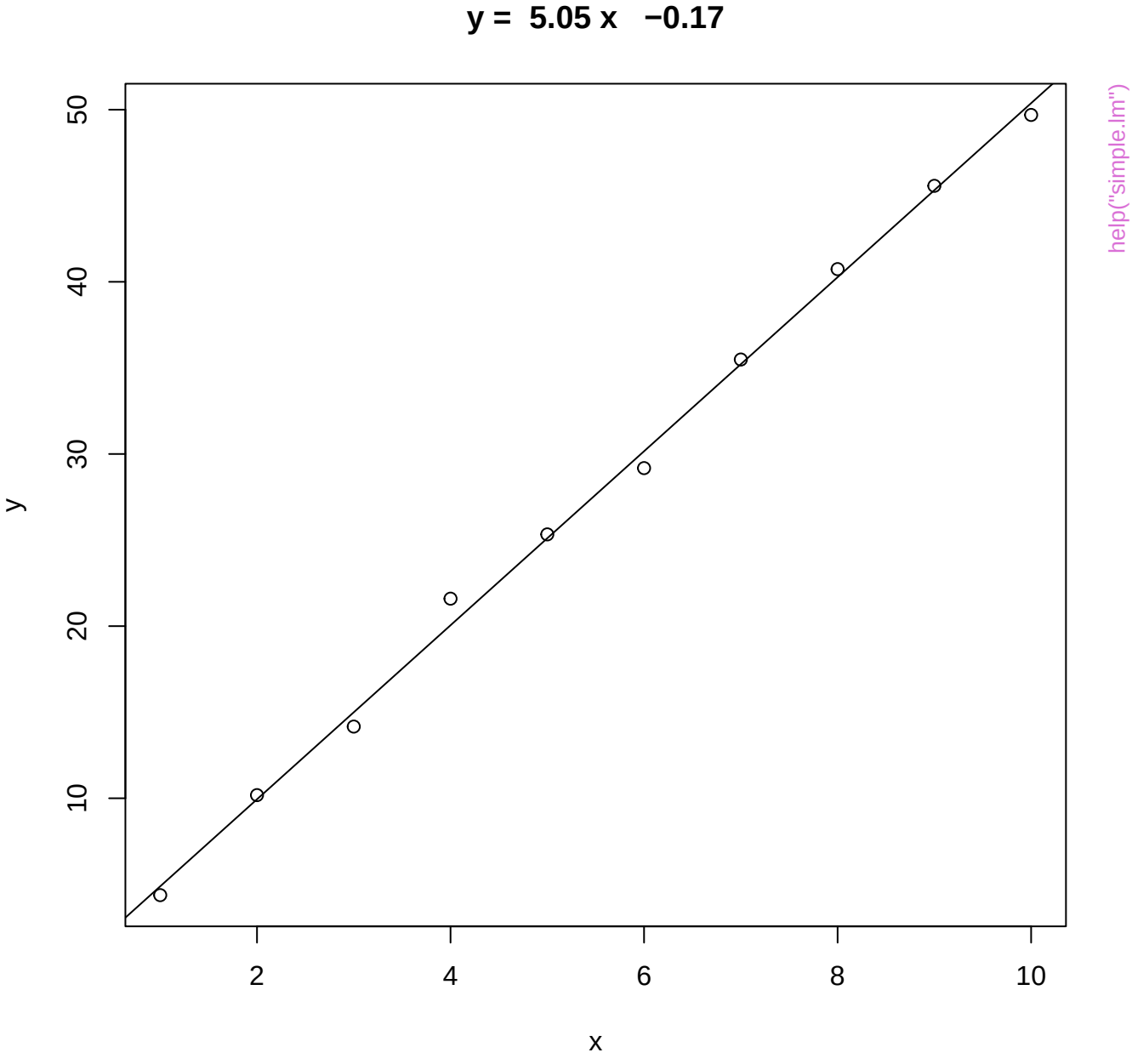

y
x
−1
0
1
2
help("simple.fancy.stripchart")


Histogram of x
Frequency
0
10
20
30
40
50
−6
−4
−2
0
2
4
6
8
x
help("simple.freqpoly")


Histogram of x
−2
−1
0
1
2
−2
−1
0
1
2
help("simple.hist.and.boxplot")


simple.lag(dowdata$High, lag)
9500
10000
10500
11000
0
100
200
300
400
Index
help("simple.lag")

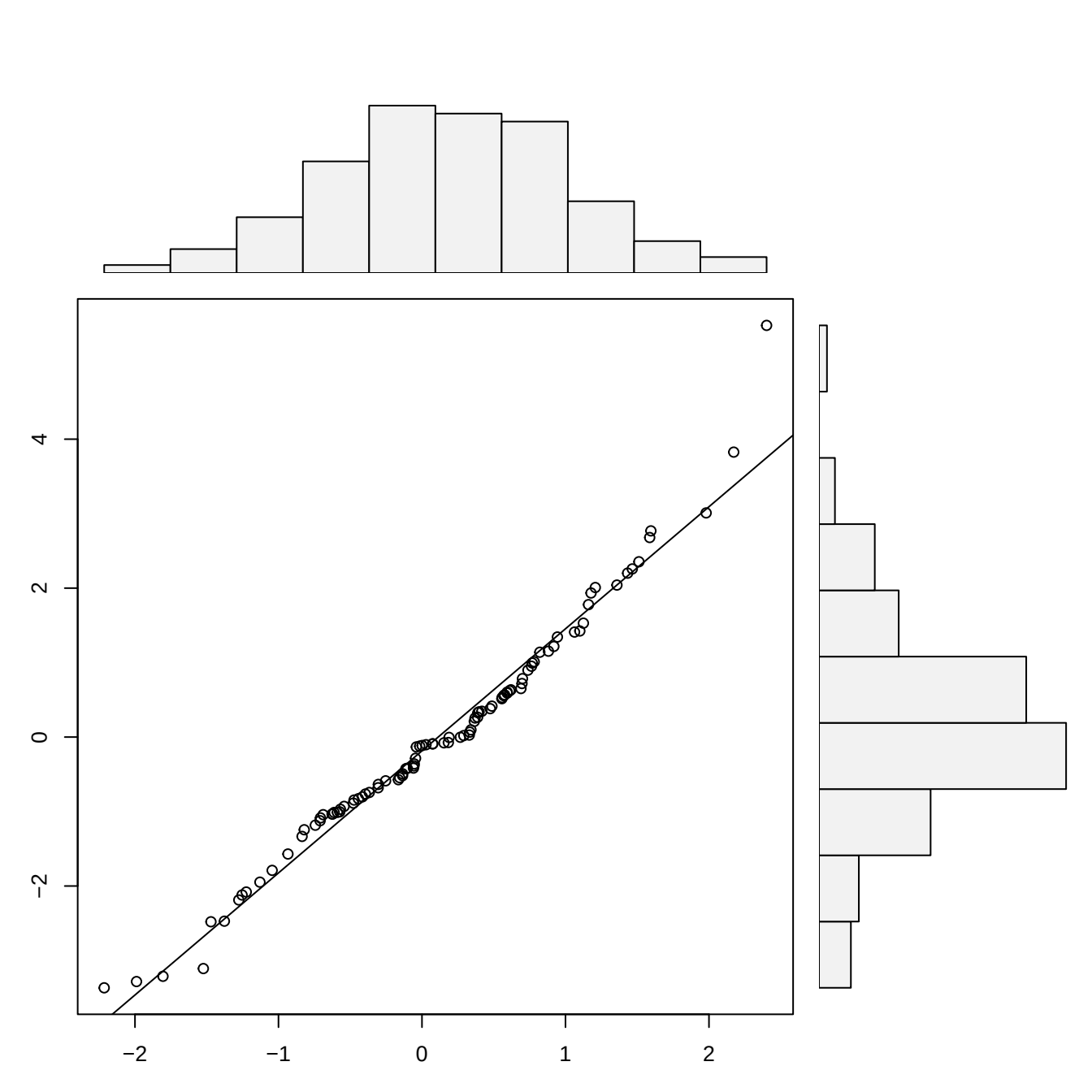

y = 5.05 x −0.17
y
x
10
20
30
40
50
2
4
6
8
10
help("simple.lm")

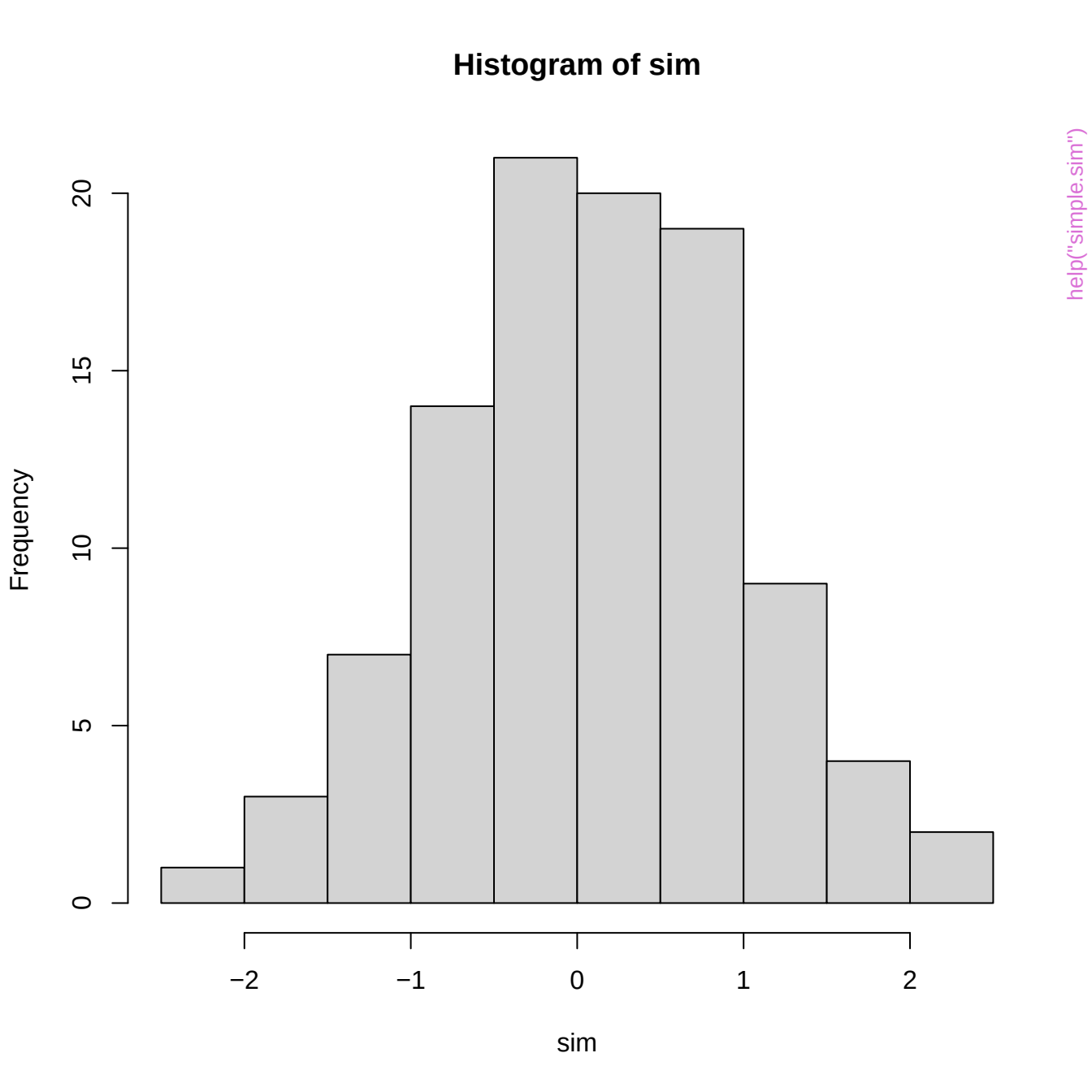

y = 5.05 x −0.17
y
x
10
20
30
40
50
2
4
6
8
10
help("simple.lm")

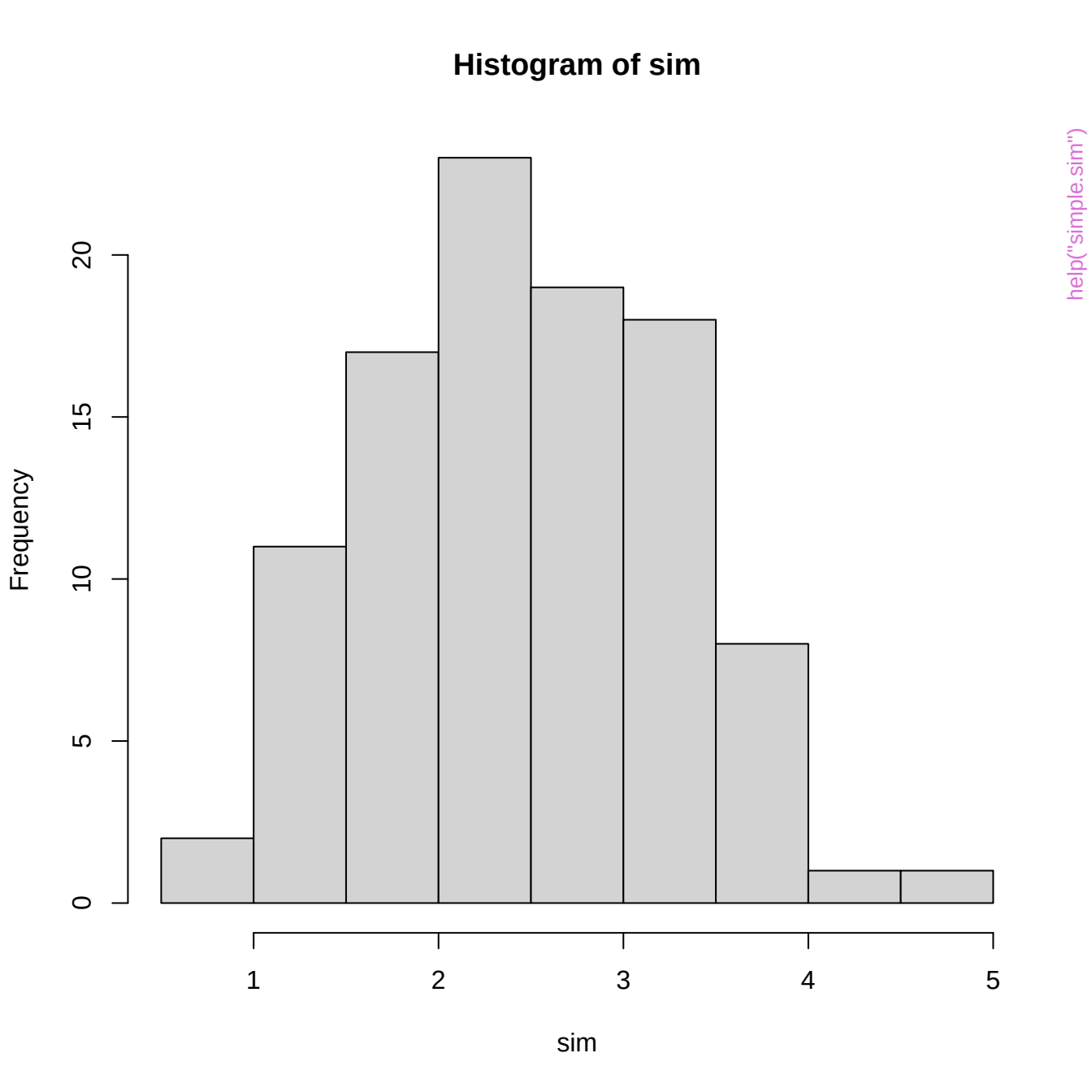
2

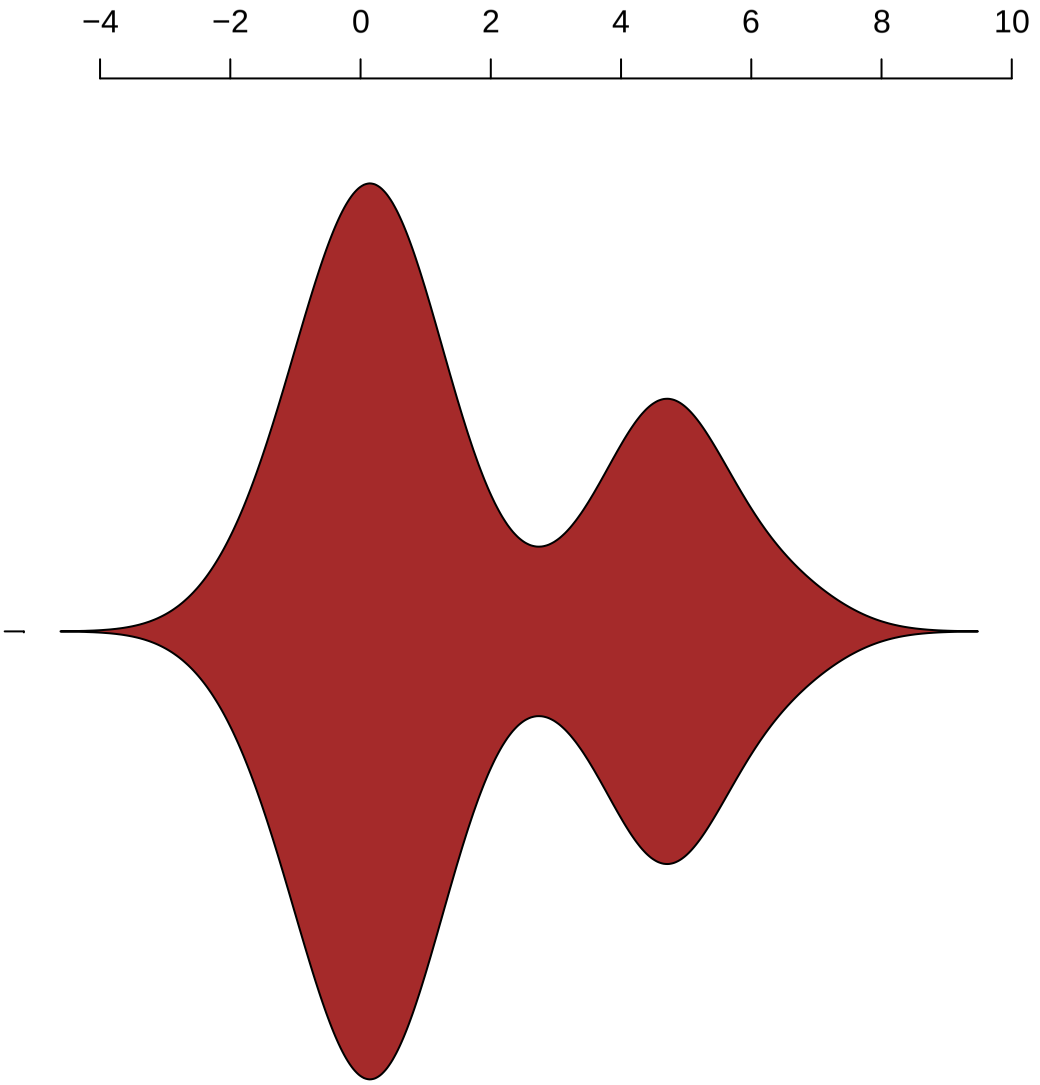
1

3

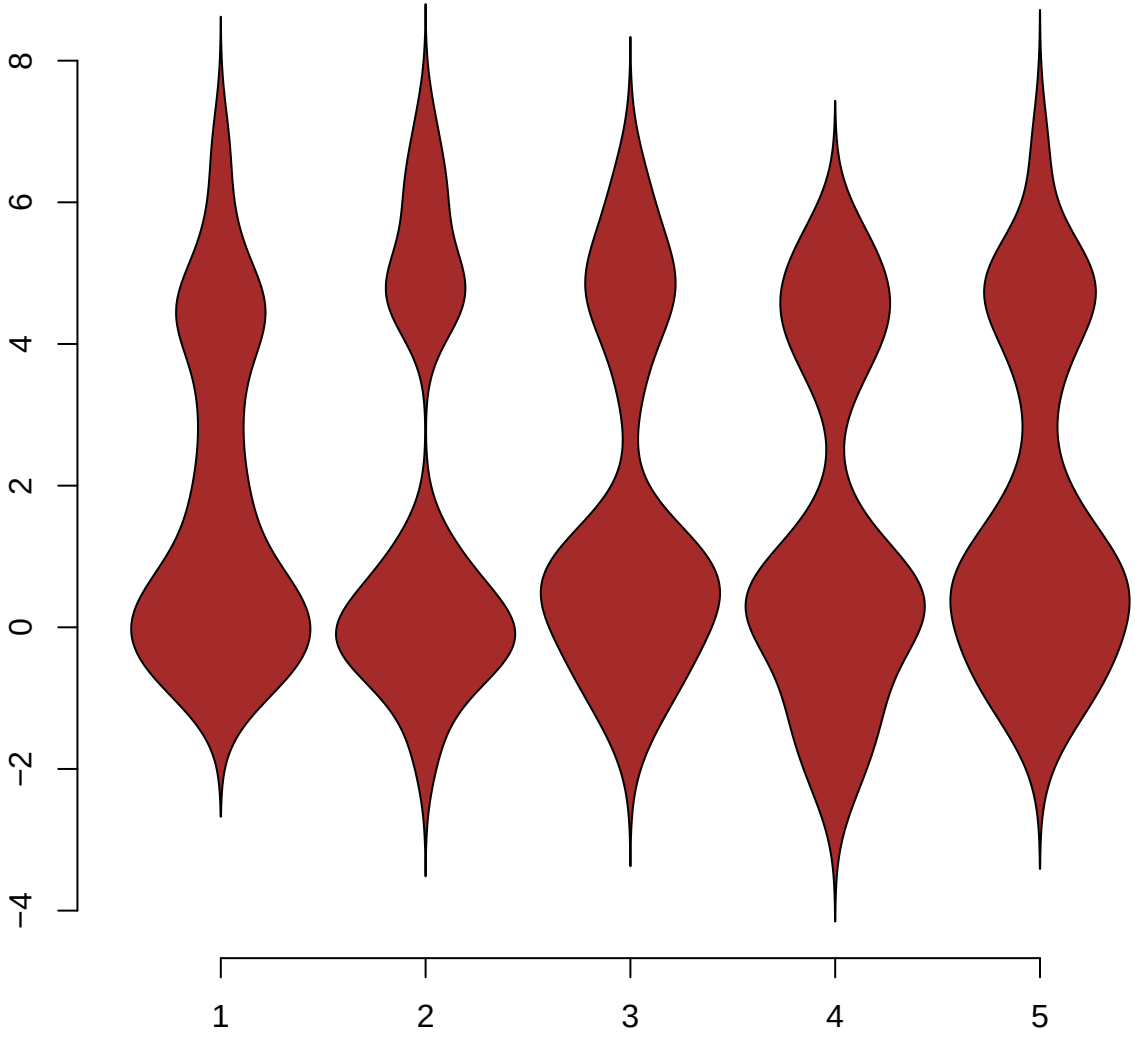

4
2
0
−2
−2
−1
0
1
2


Histogram of sim
Frequency
0
5
10
15
20
−2
−1
0
1
2
sim
help("simple.sim")

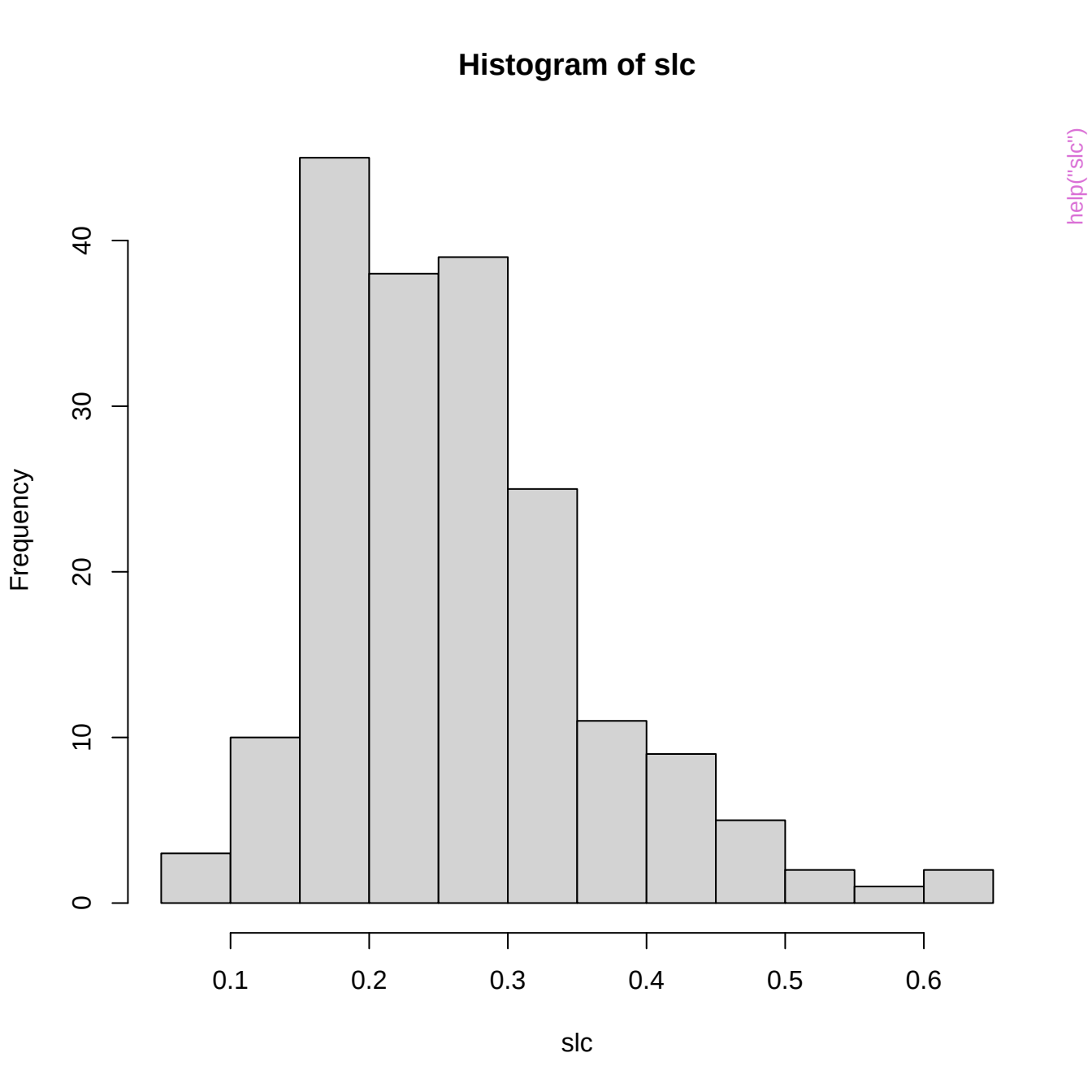

Histogram of sim
Frequency
0
5
10
15
20
1
2
3
4
5
sim
help("simple.sim")

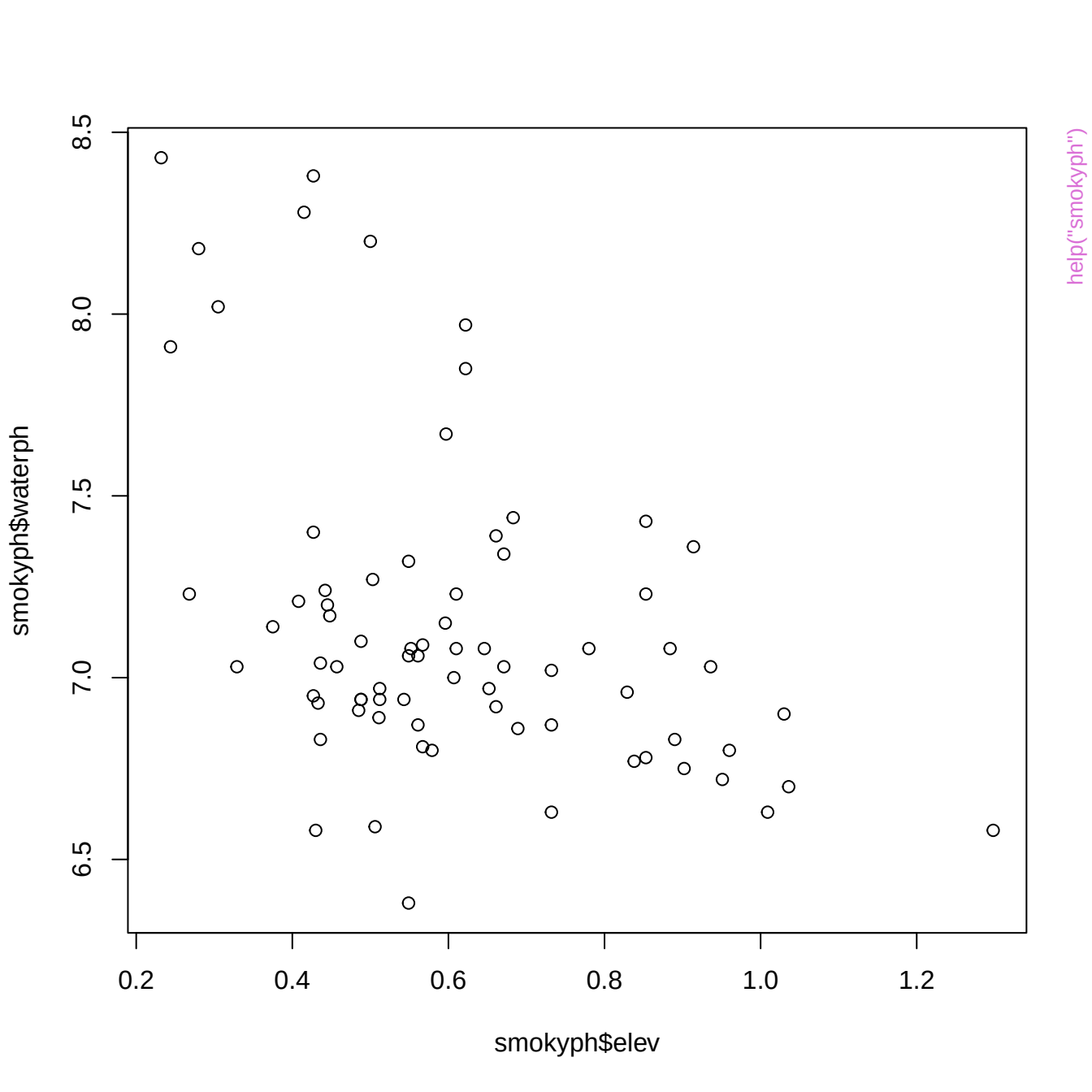


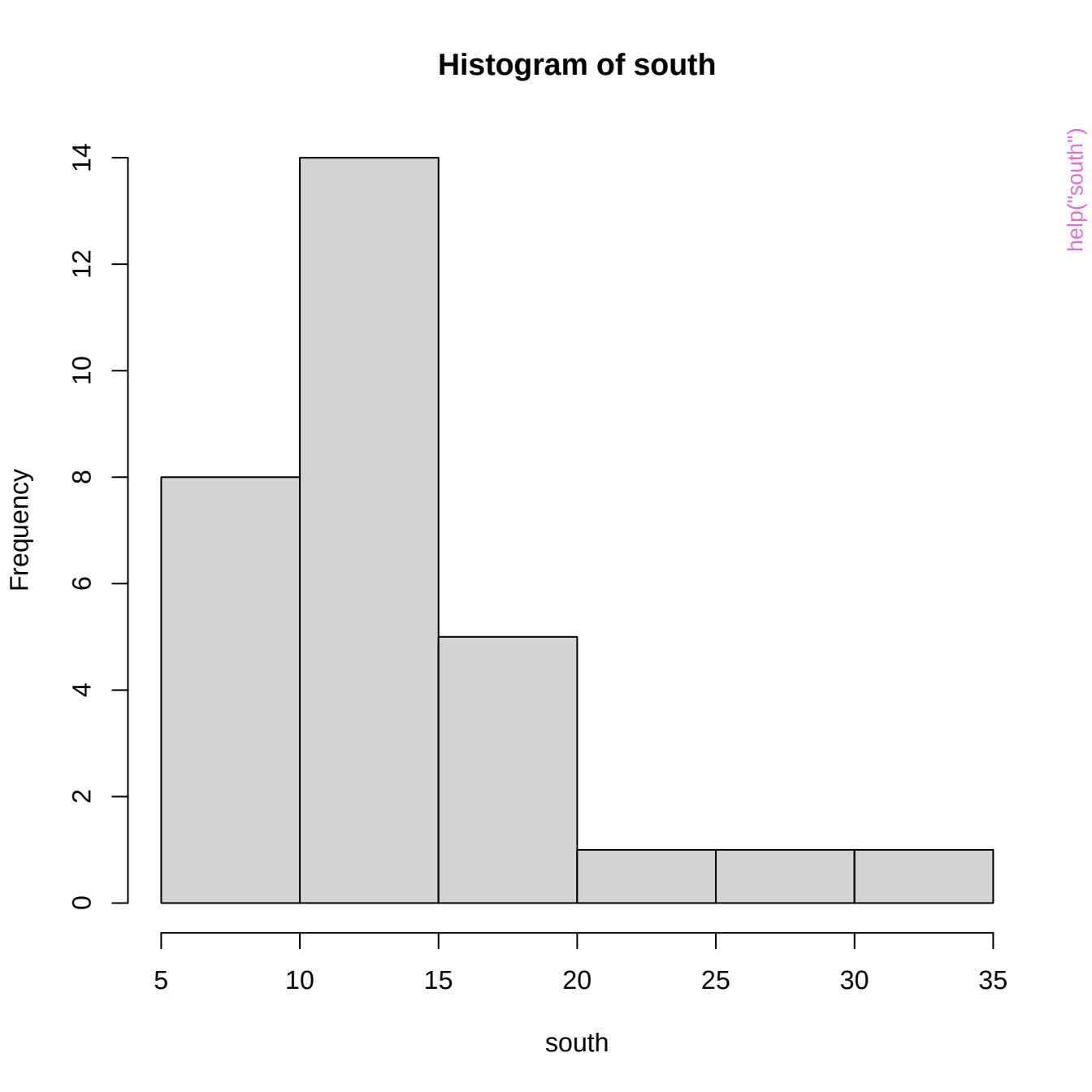
help("simple.violinplot")

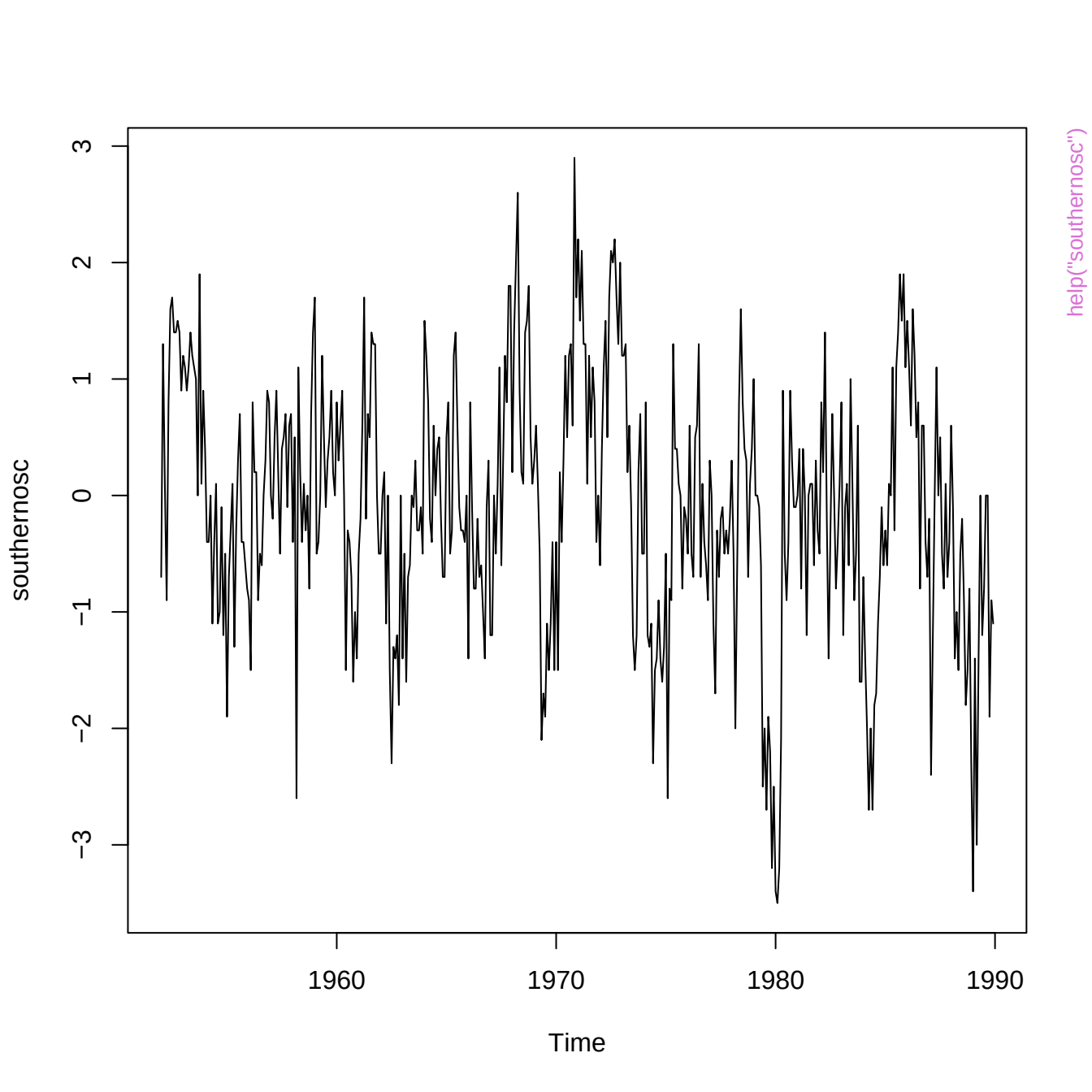


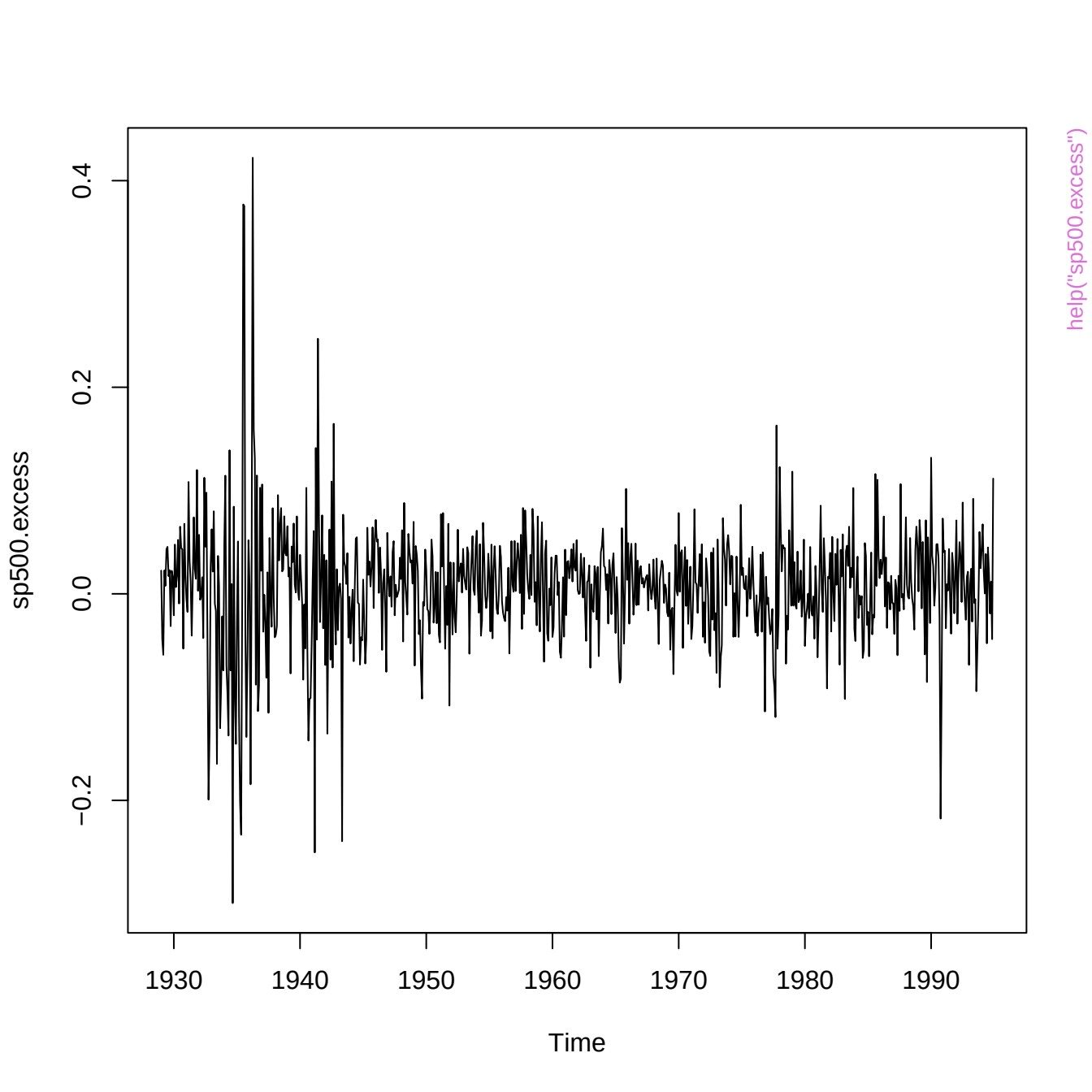
help("simple.violinplot")

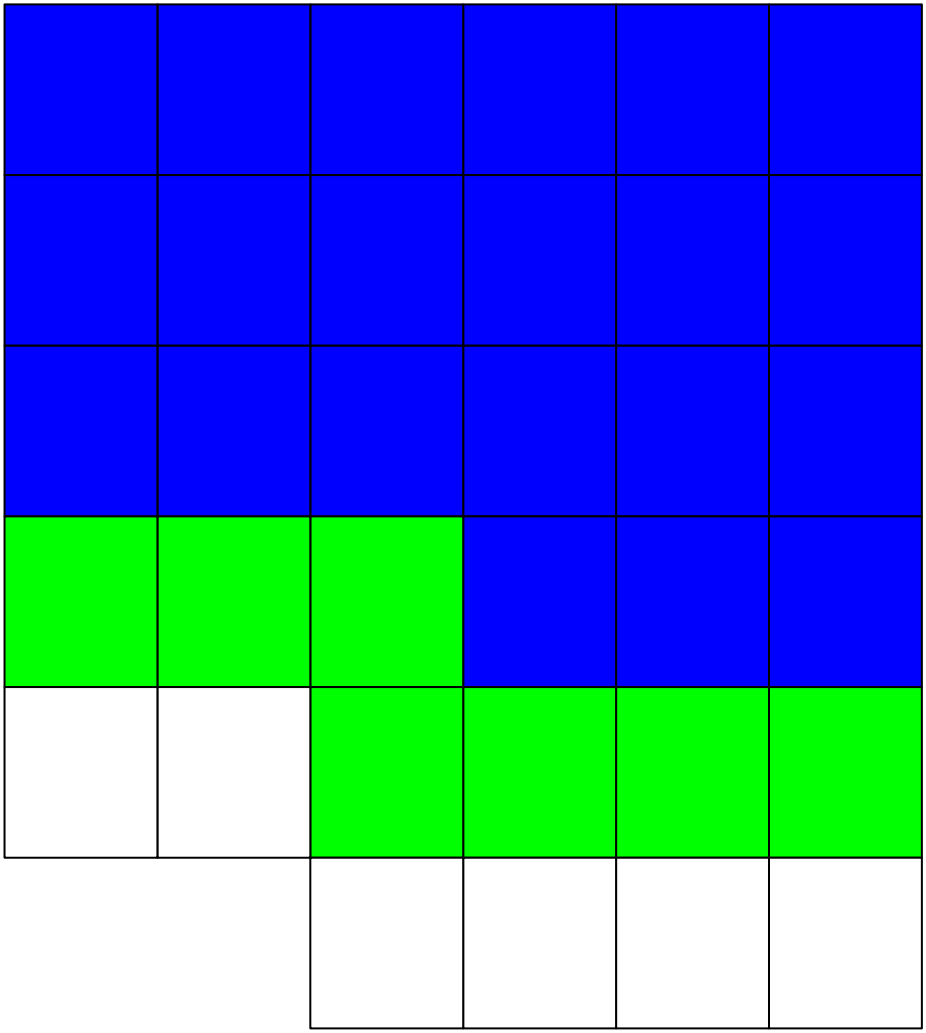

Histogram of slc
help("slc")
Frequency
0
10
20
30
40
0.1
0.2
0.3
0.4
0.5
0.6
slc


smokyph$waterph
8.5
8.0
7.5
7.0
6.5
0.2
0.4
0.6
0.8
1.0
1.2
smokyph$elev
help("smokyph")

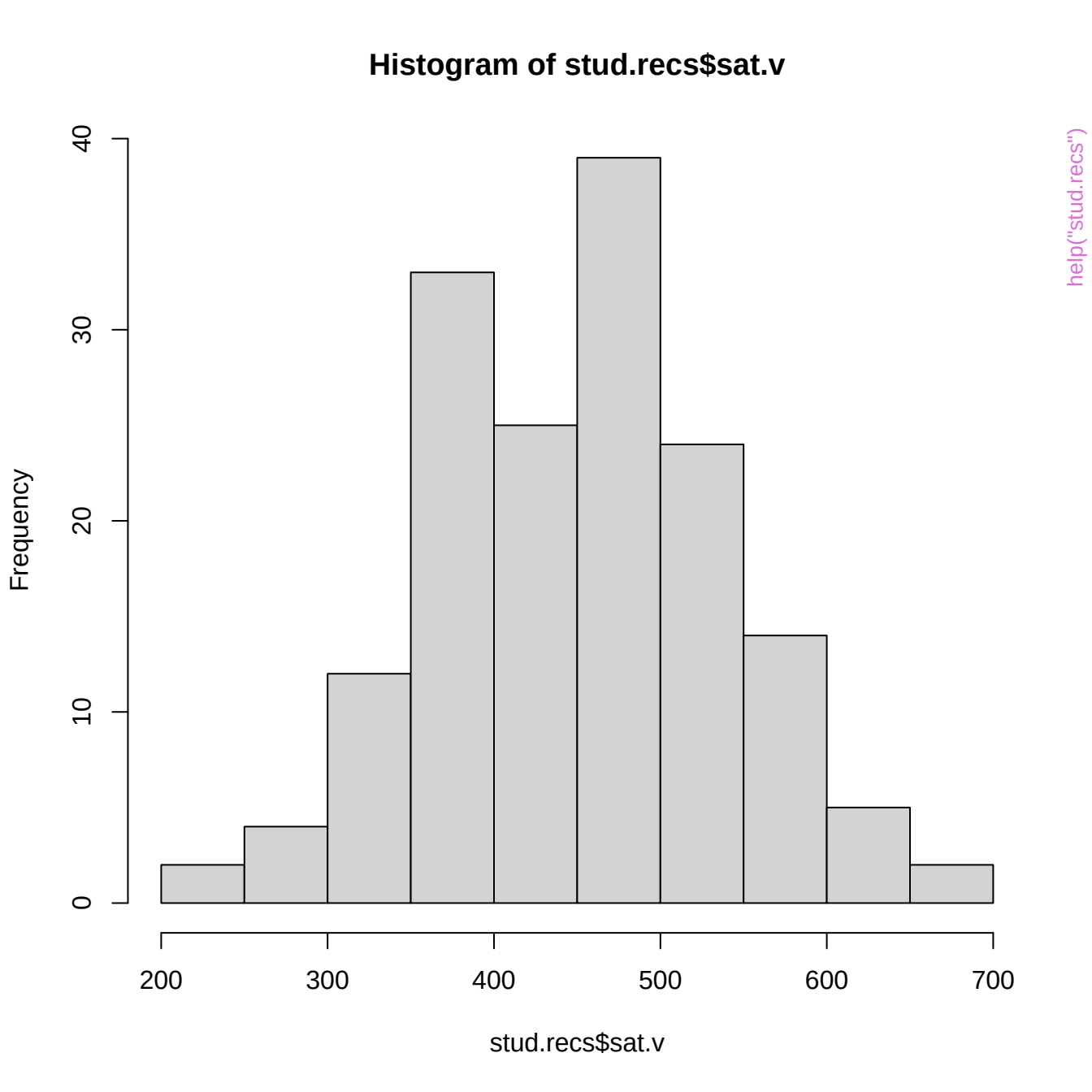

Histogram of south
help("south")
Frequency
0
2
4
6
8
10
12
14
5
10
15
20
25
30
35
south

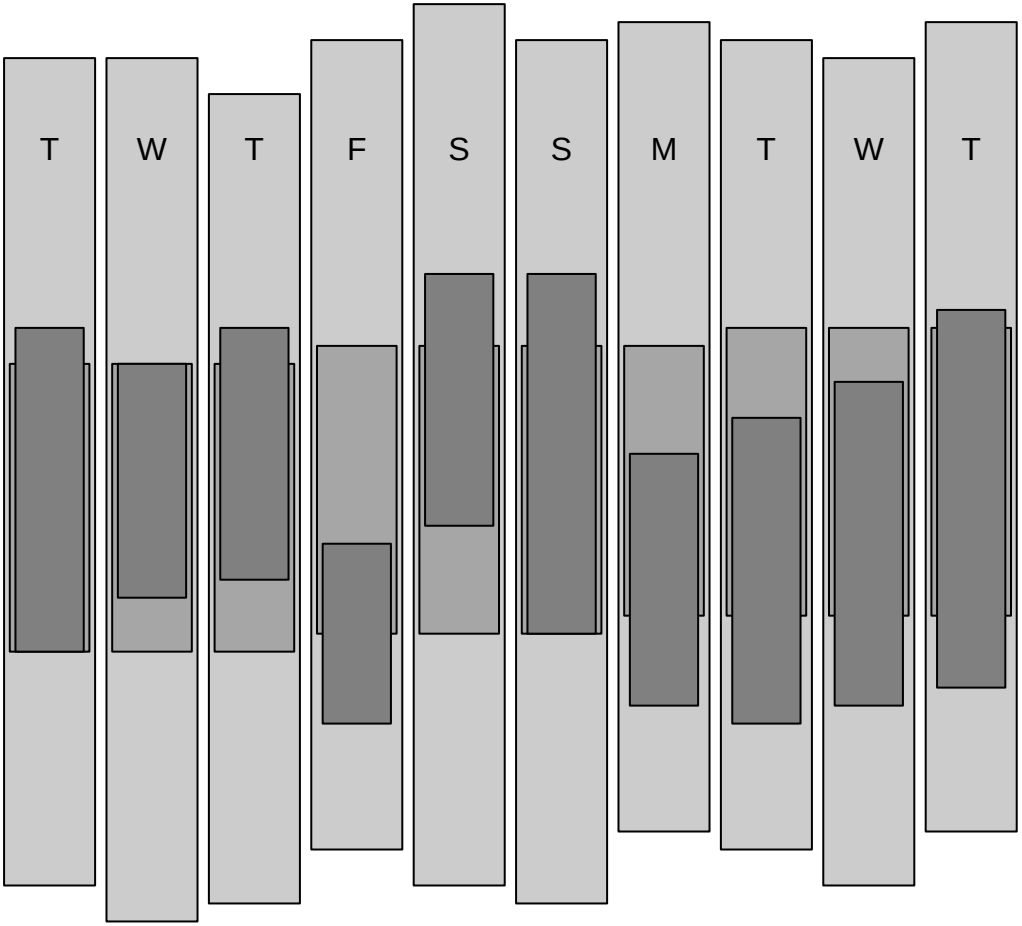

southernosc
3
2
1
0
−1
−2
−3
1960
1970
1980
1990
Time
help("southernosc")


sp500.excess
0.4
0.2
0.0
−0.2
1930
1940
1950
1960
1970
1980
1990
Time
help("sp500.excess")

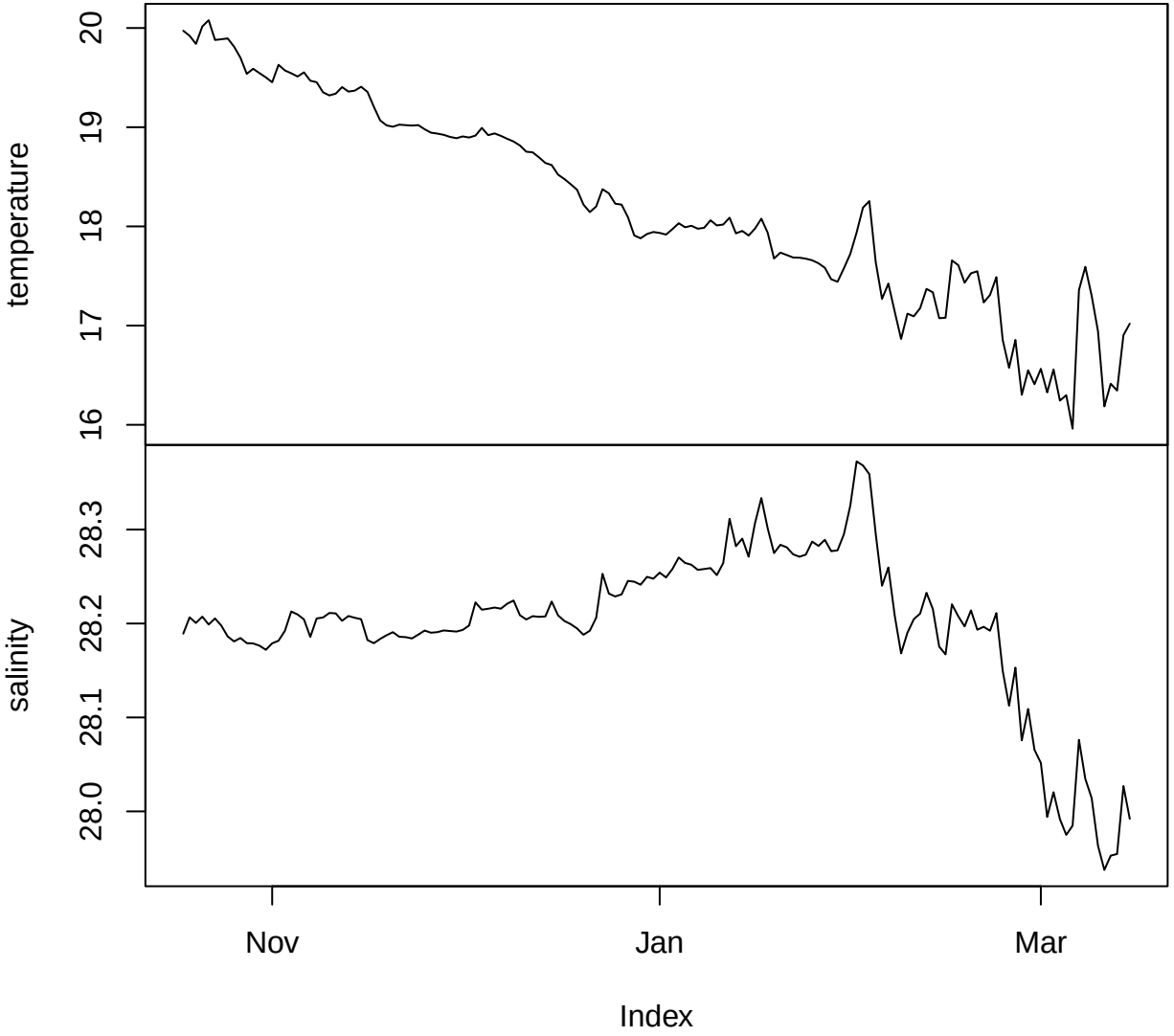


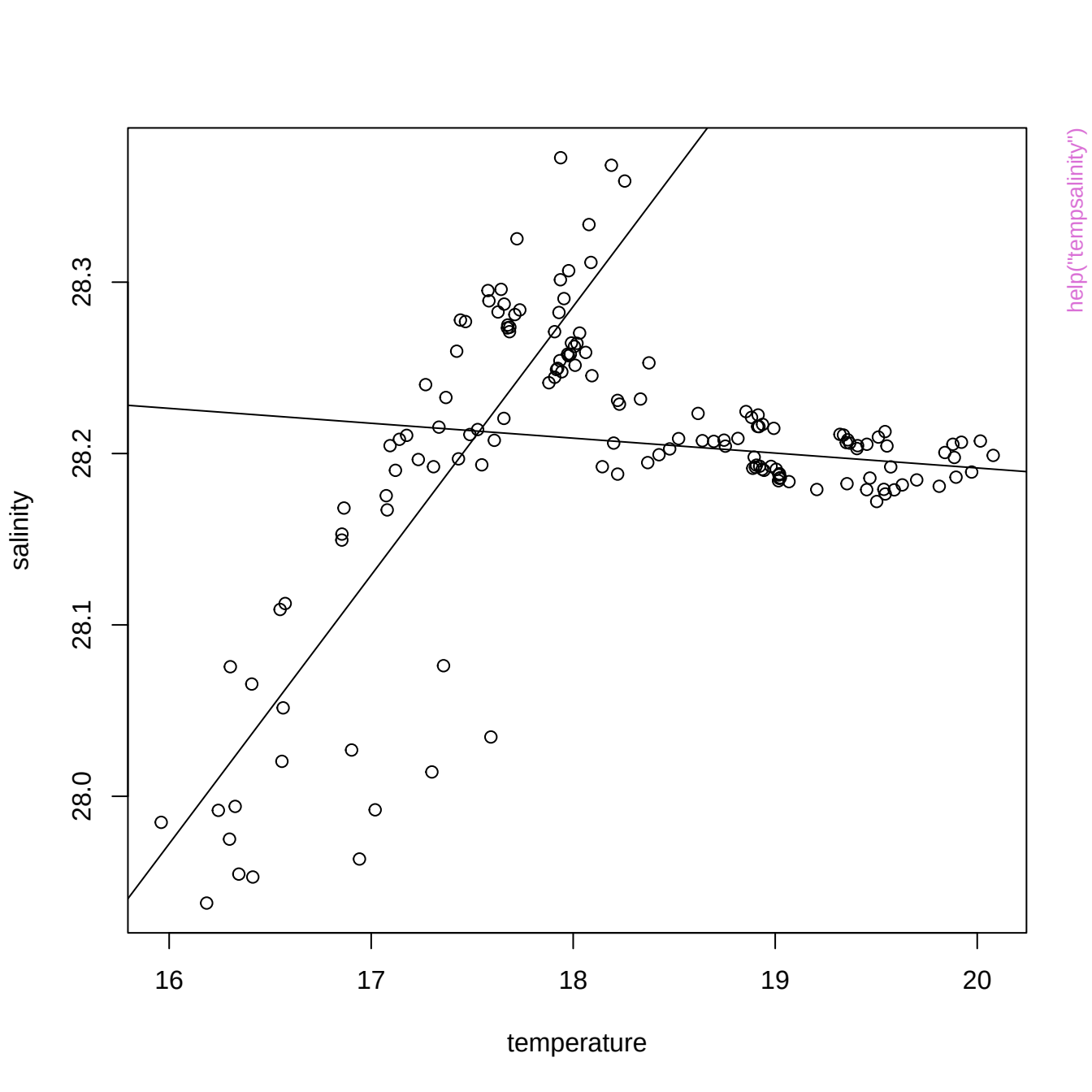
help("squareplot")

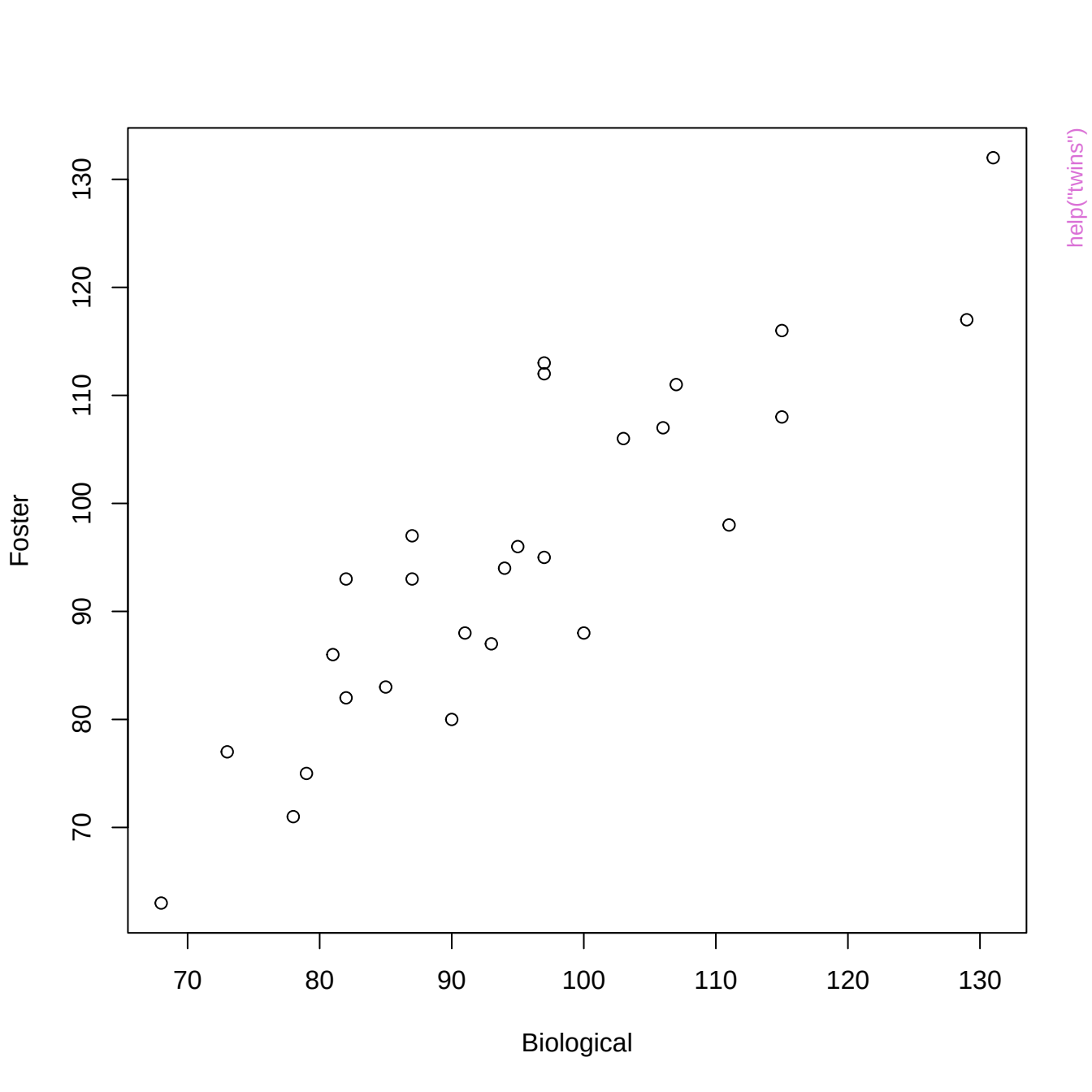

Histogram of stud.recs$sat.v
Frequency
0
10
20
30
40
200
300
400
500
600
700
stud.recs$sat.v
help("stud.recs")

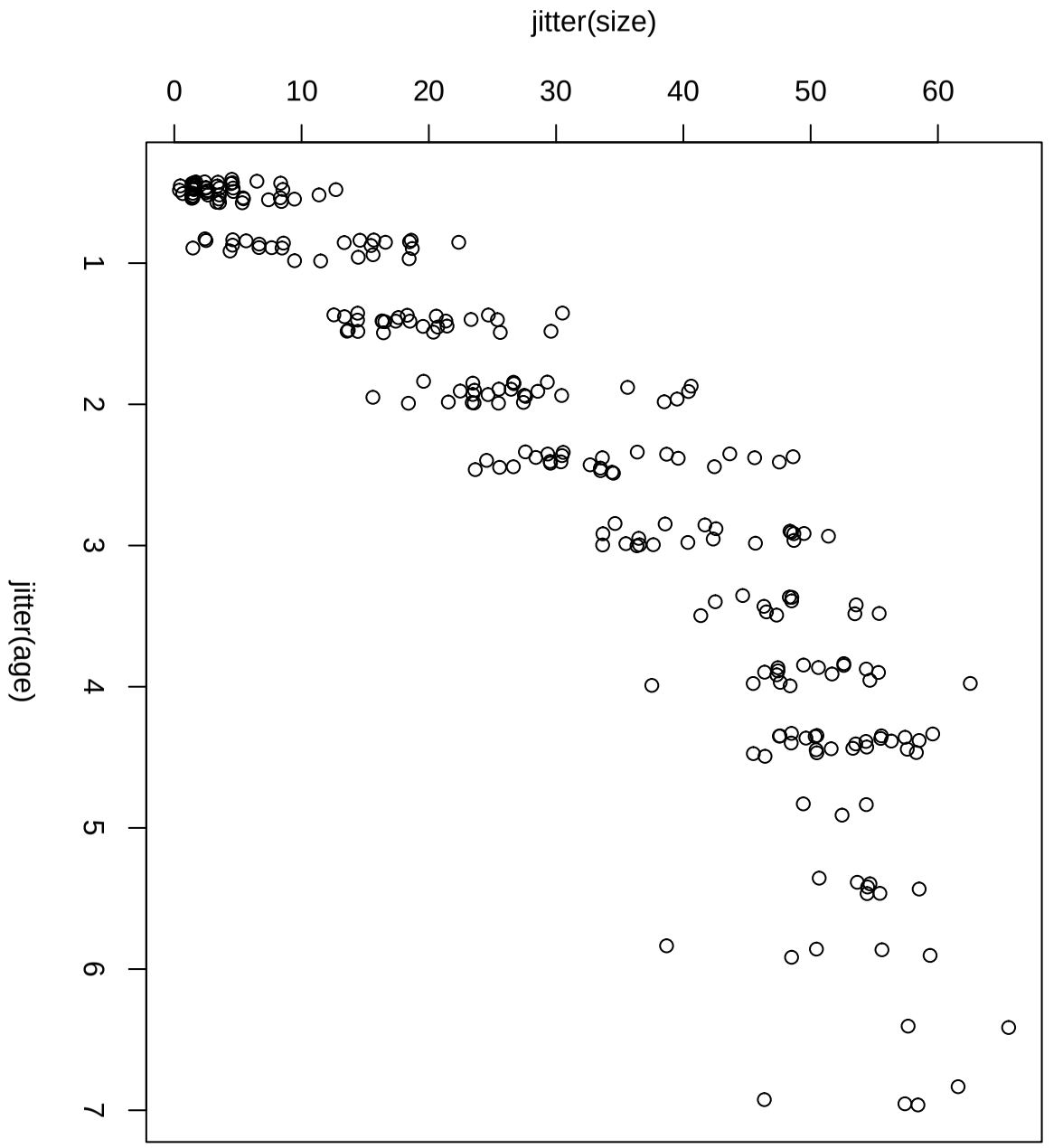


help("superbarplot")

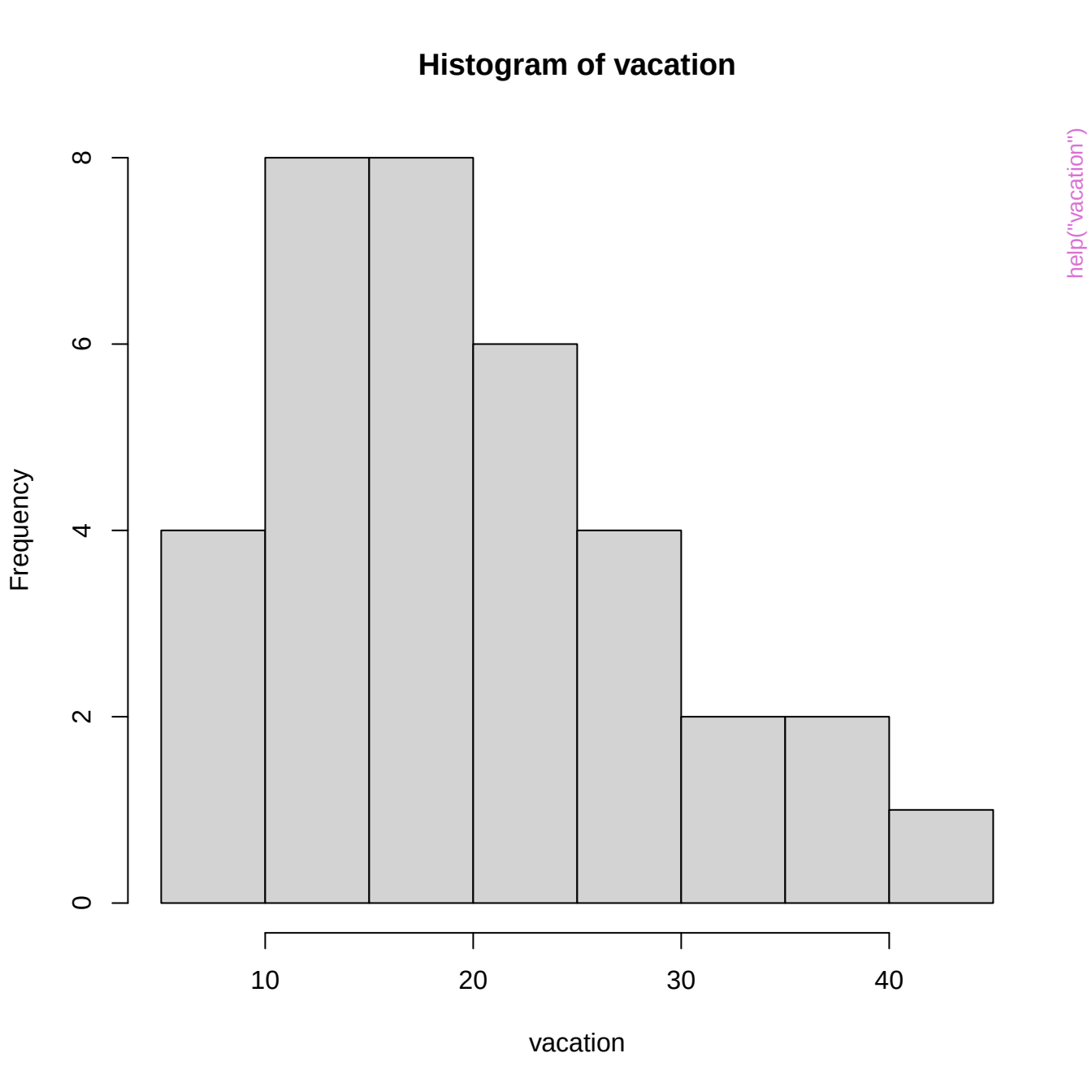

tempsalinity[, 3:4]
temperature
16
17
18
19
20
salinity
28.0
28.1
28.2
28.3
Nov
Jan
Mar
Index
help("tempsalinity")

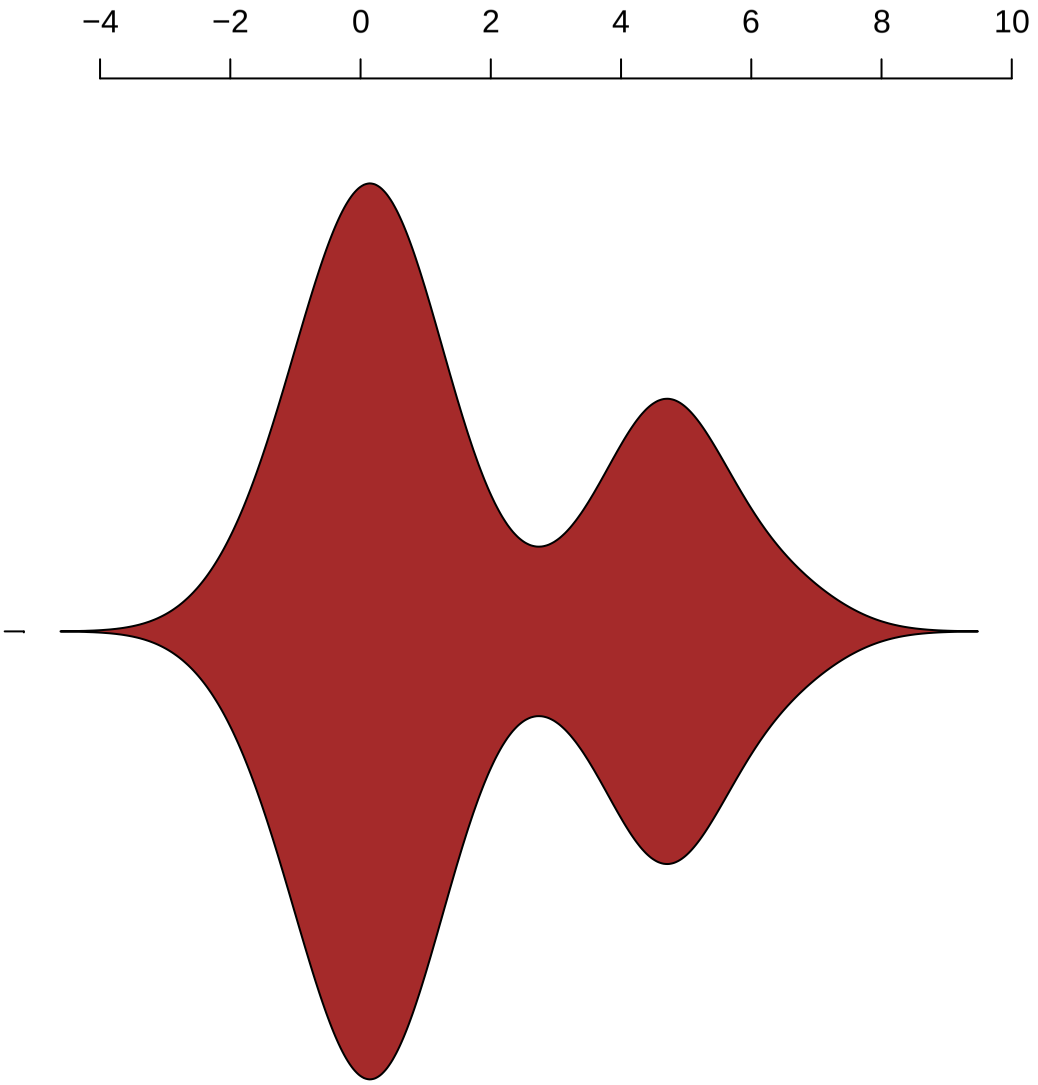

salinity
28.0
28.1
28.2
28.3
16
17
18
19
20
temperature
help("tempsalinity")


Foster
Biological
70
80
90
100
110
120
130
help("twins")

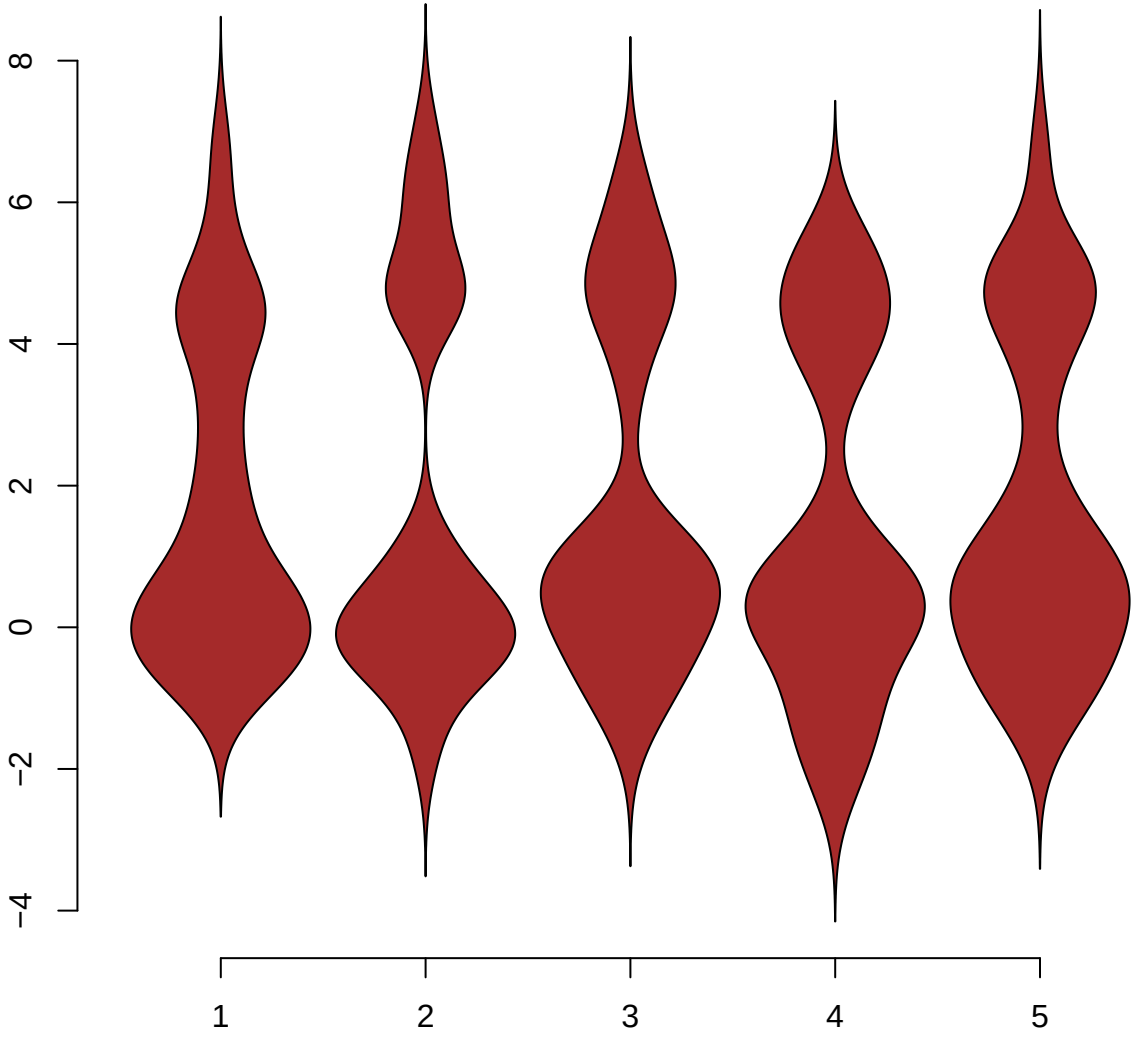


help("urchin.growth")

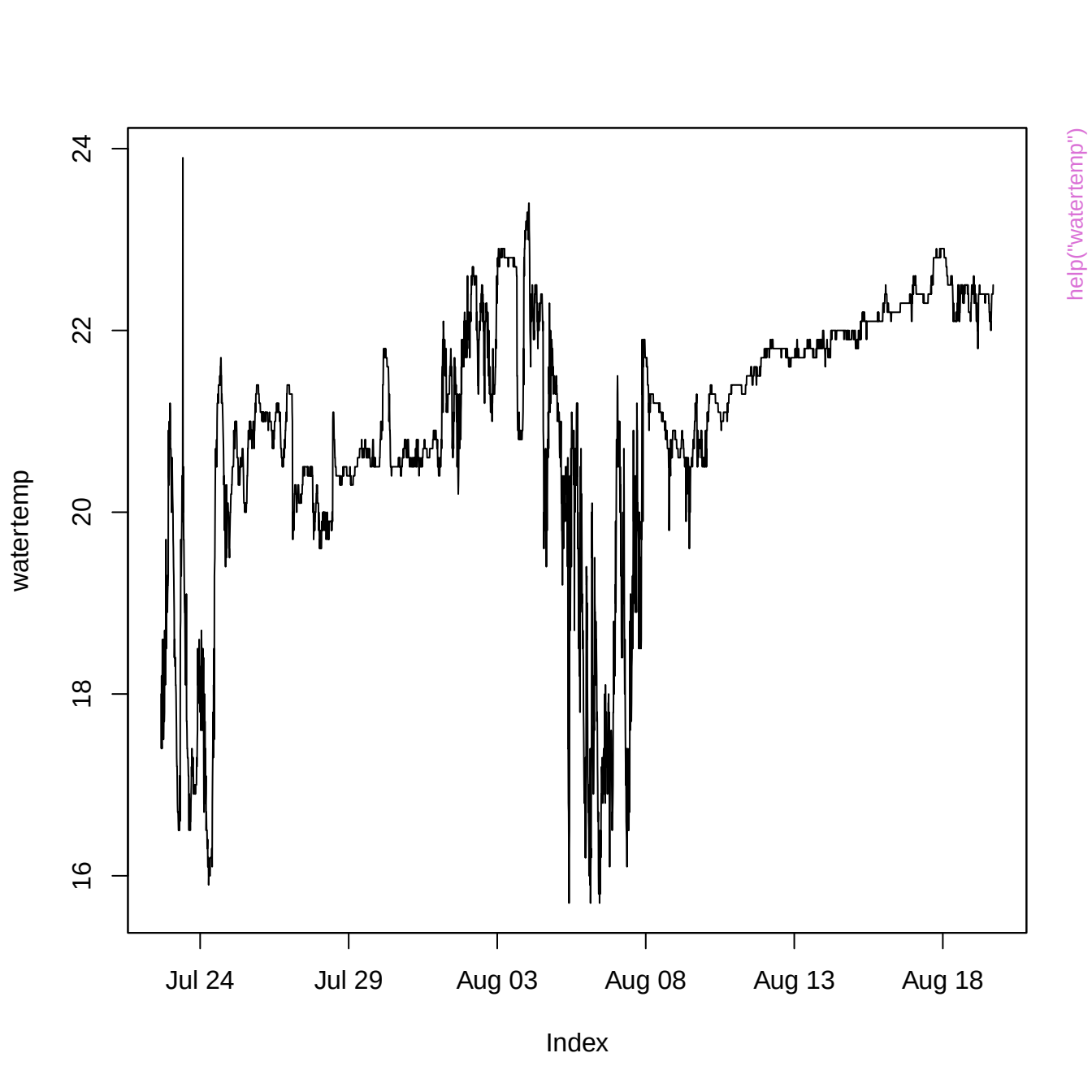

Histogram of vacation
Frequency
0
2
4
6
8
10
20
30
40
vacation
help("vacation")

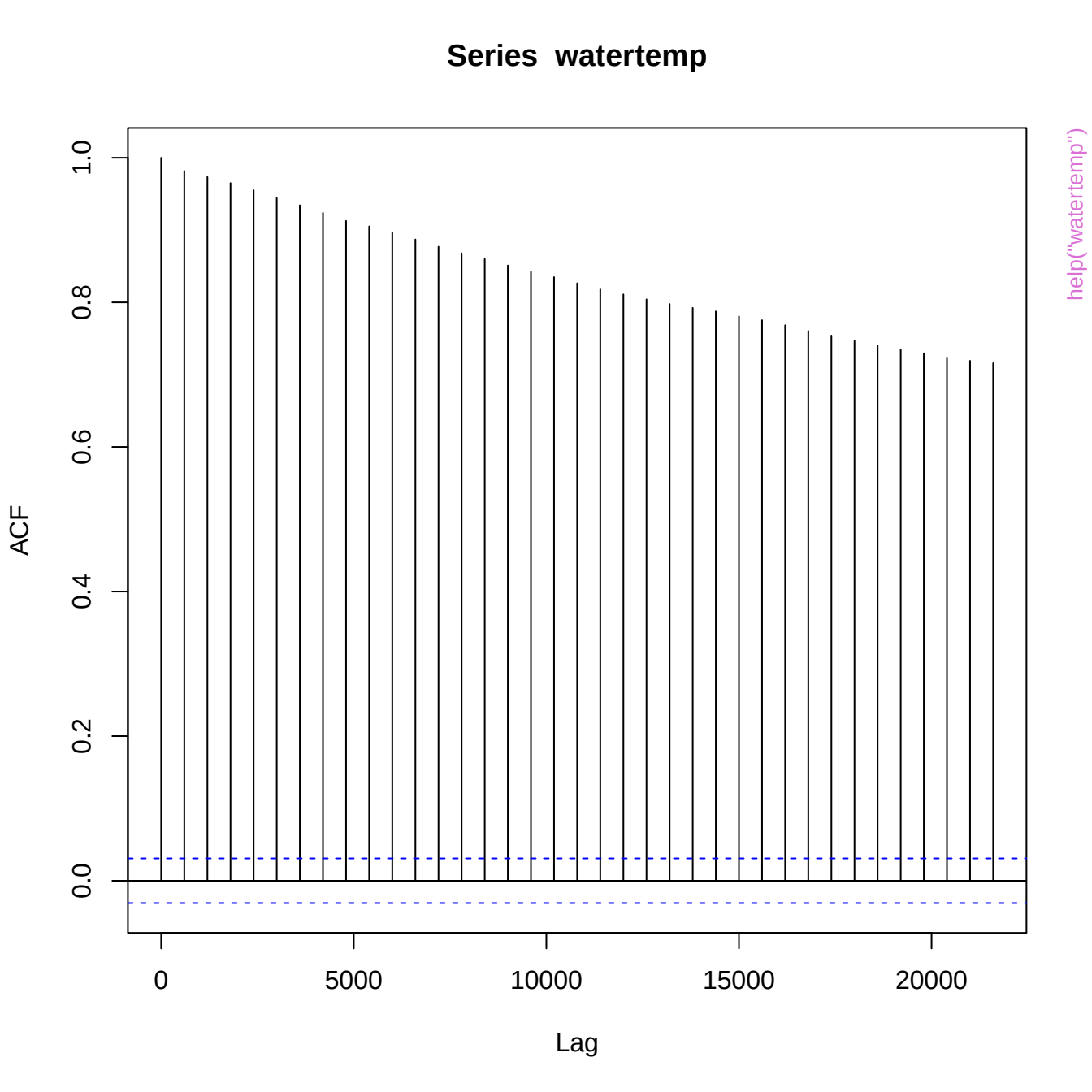


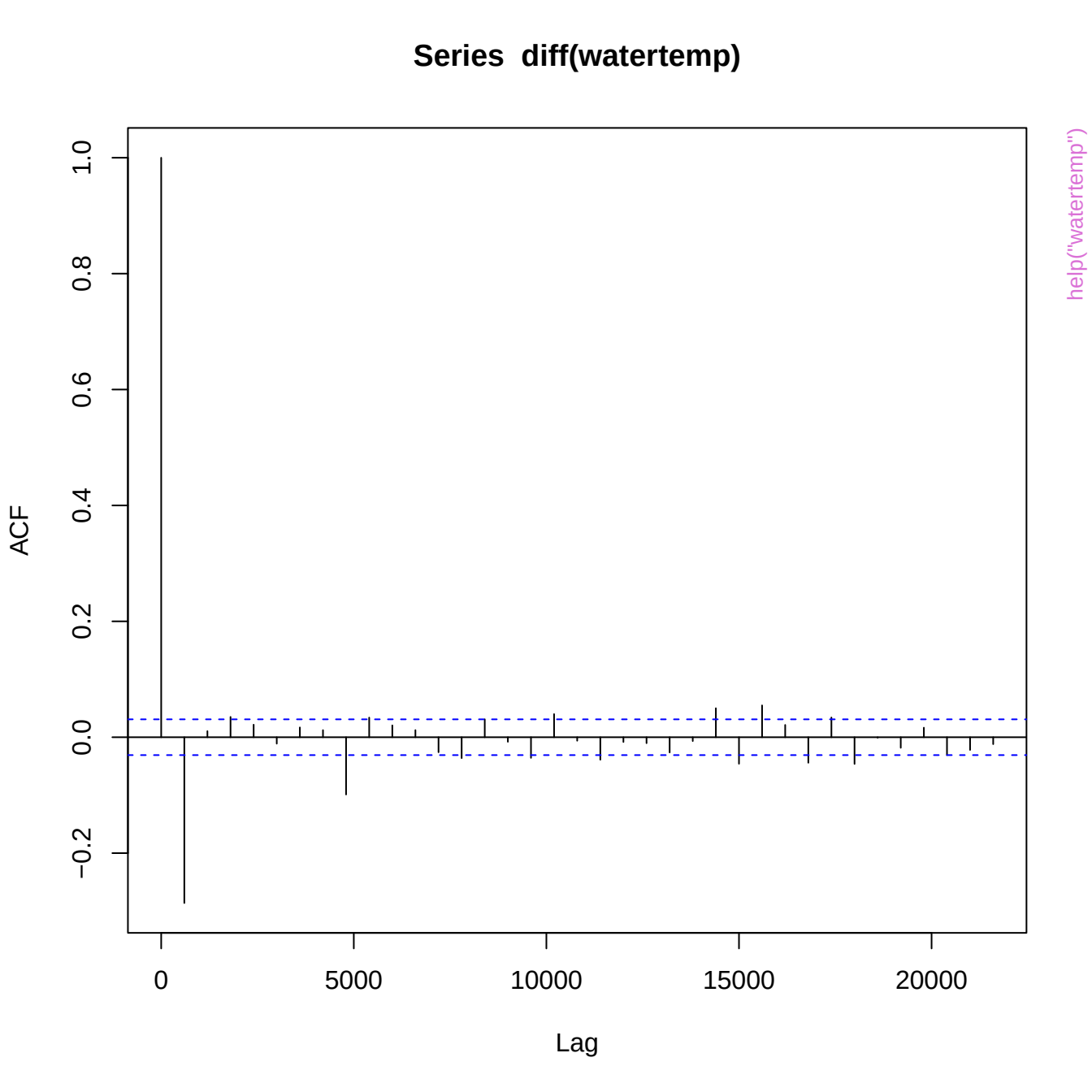
help("violinplot")

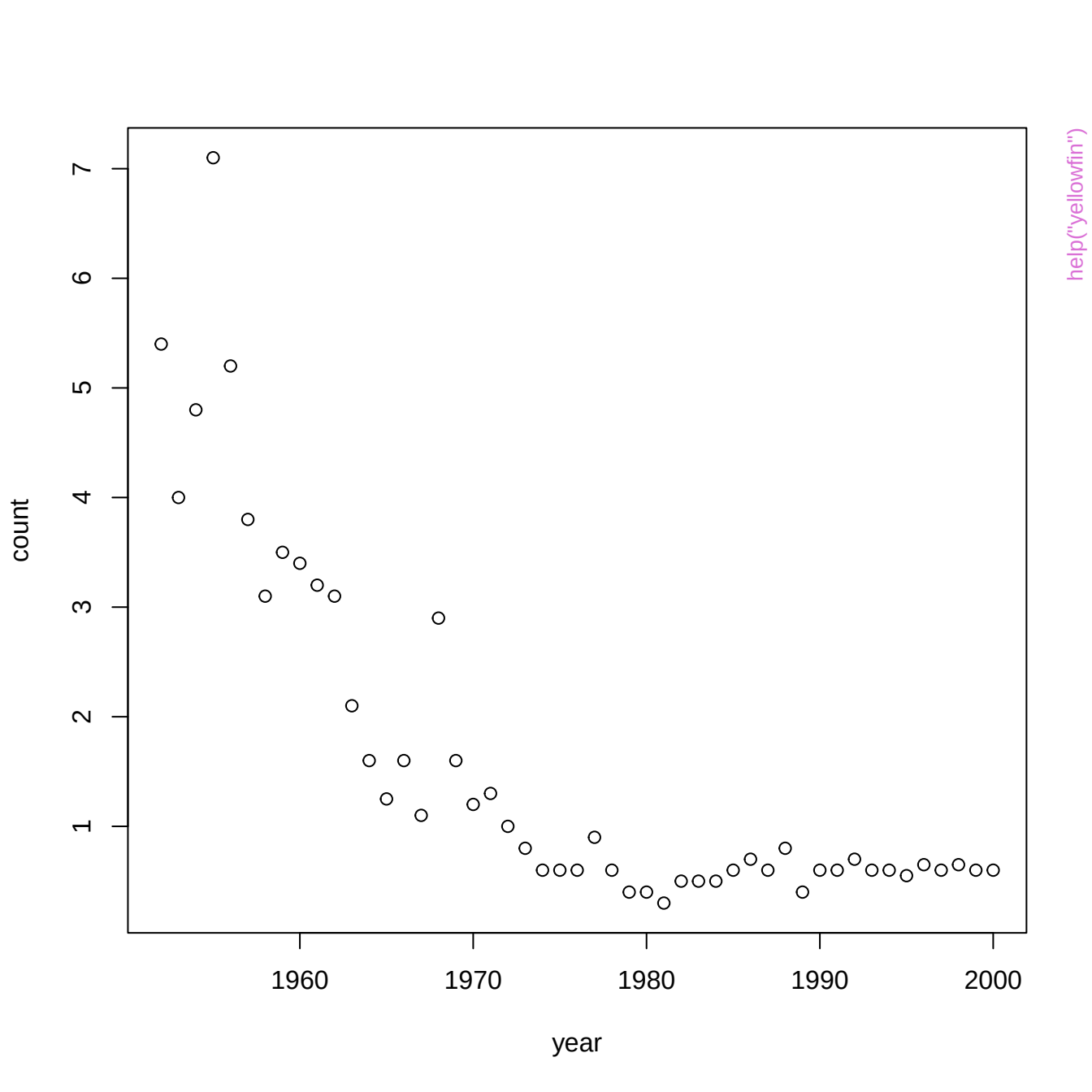


help("violinplot")


watertemp
16
18
20
22
24
Jul 24
Jul 29
Aug 03
Aug 08
Aug 13
Aug 18
Index
help("watertemp")


Series watertemp
ACF
1.0
0.8
0.6
0.4
0.2
0.0
0
5000
10000
15000
20000
Lag
help("watertemp")


Series diff(watertemp)
ACF
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
0
5000
10000
15000
20000
Lag
help("watertemp")


count
year
1
2
3
4
5
6
7
1960
1970
1980
1990
2000
help("yellowfin")