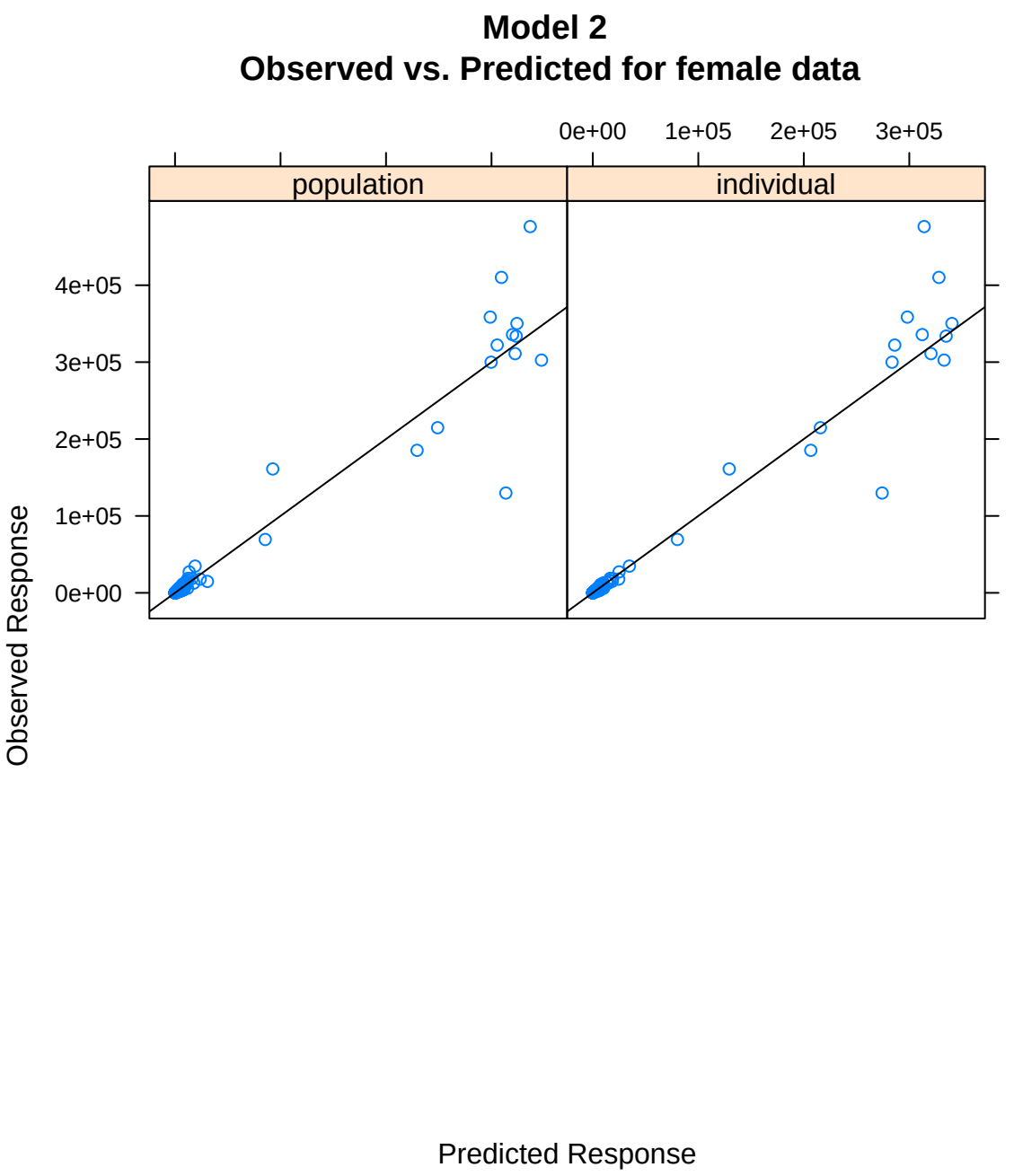
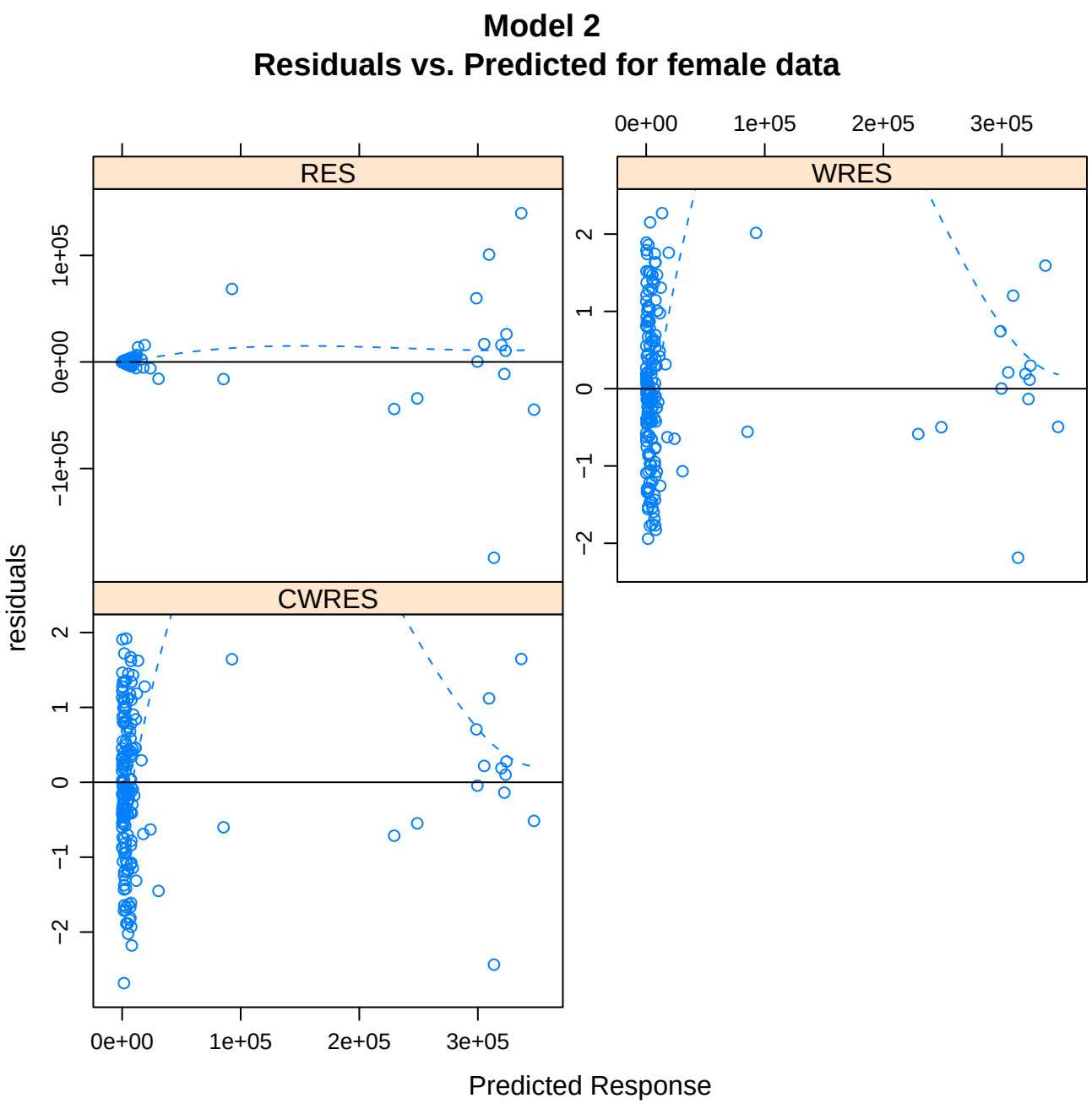
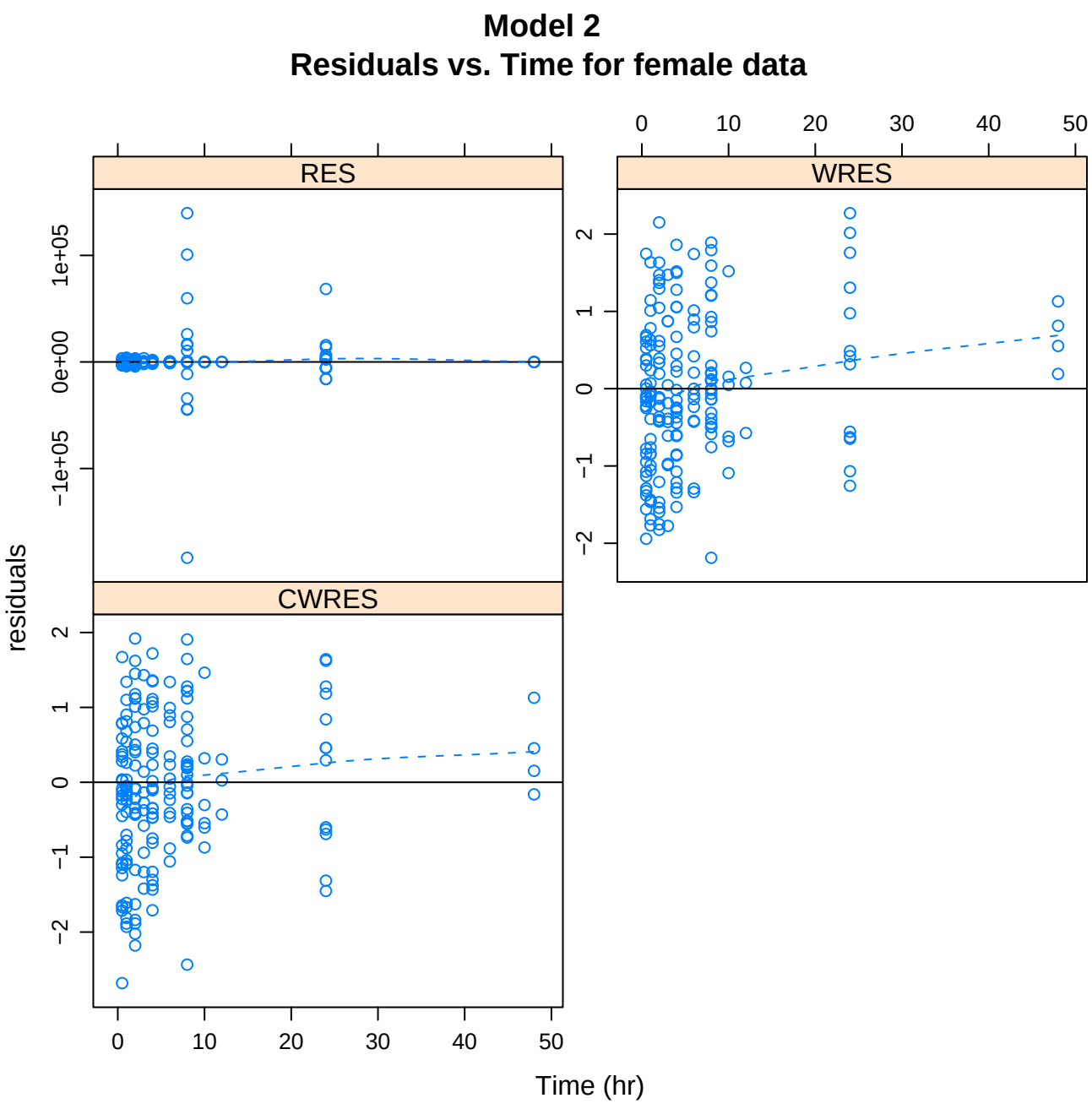
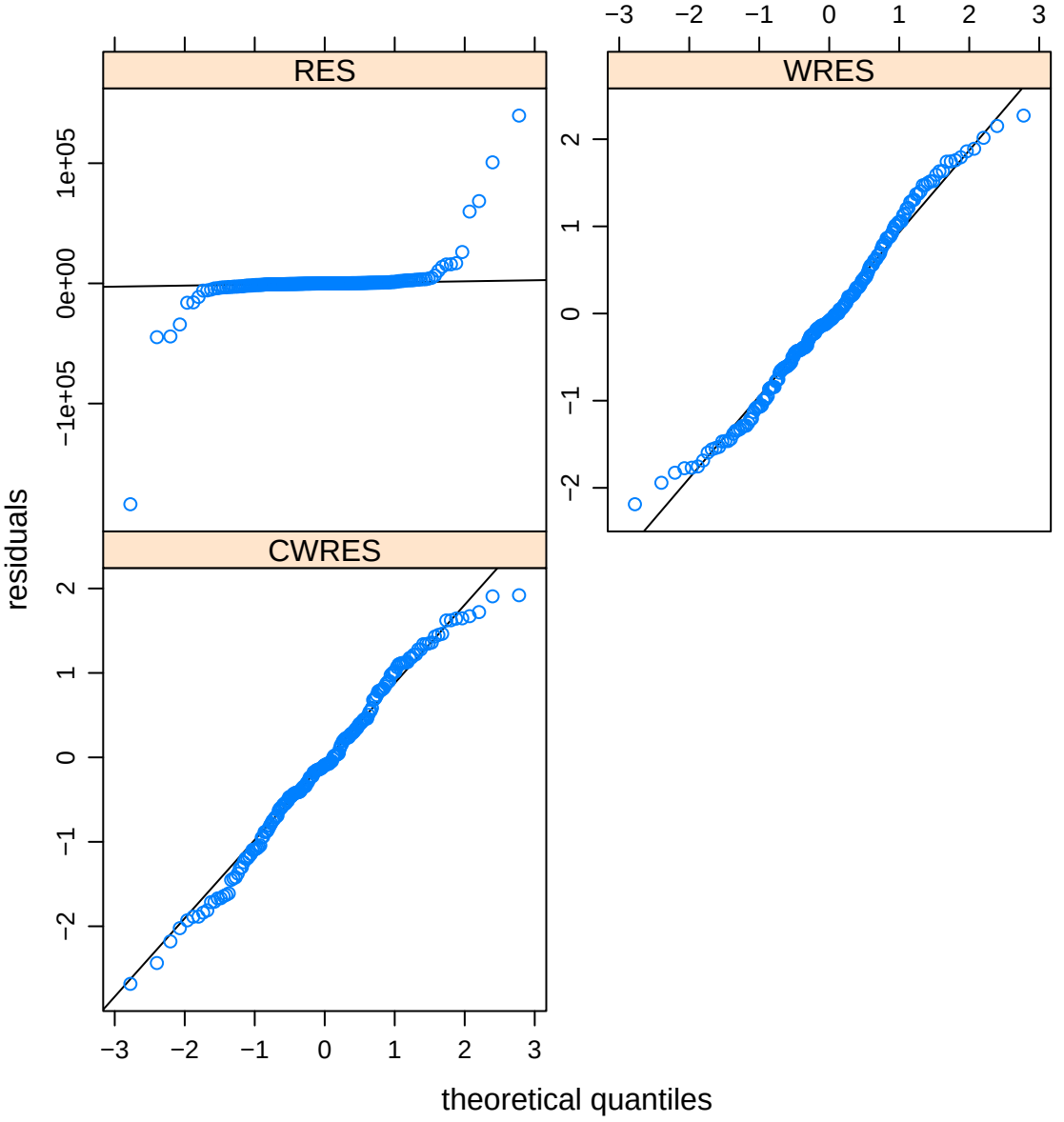

Model 2
Observed vs. Predicted for female data
population
individual
0e+00
1e+05
2e+05
3e+05
4e+05
Observed Response
Predicted Response


Model 2
Residuals vs. Predicted for female data
RES
WRES
CWRES
residuals
Predicted Response
0e+00
1e+05
2e+05
3e+05
−1e+05
−2
−1
0
1
2

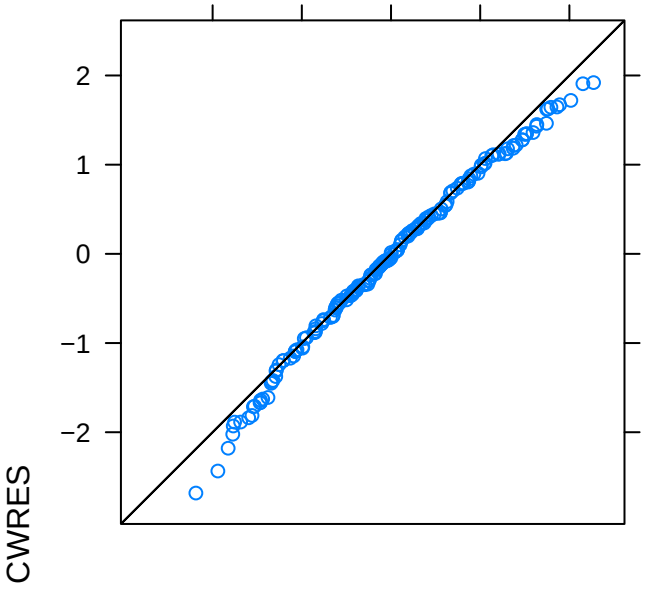

Model 2
Residuals vs. Time for female data
RES
WRES
CWRES
residuals
Time (hr)
1e+05
0e+00
−1e+05
2
1
0
−1
−2
0
10
20
30
40
50

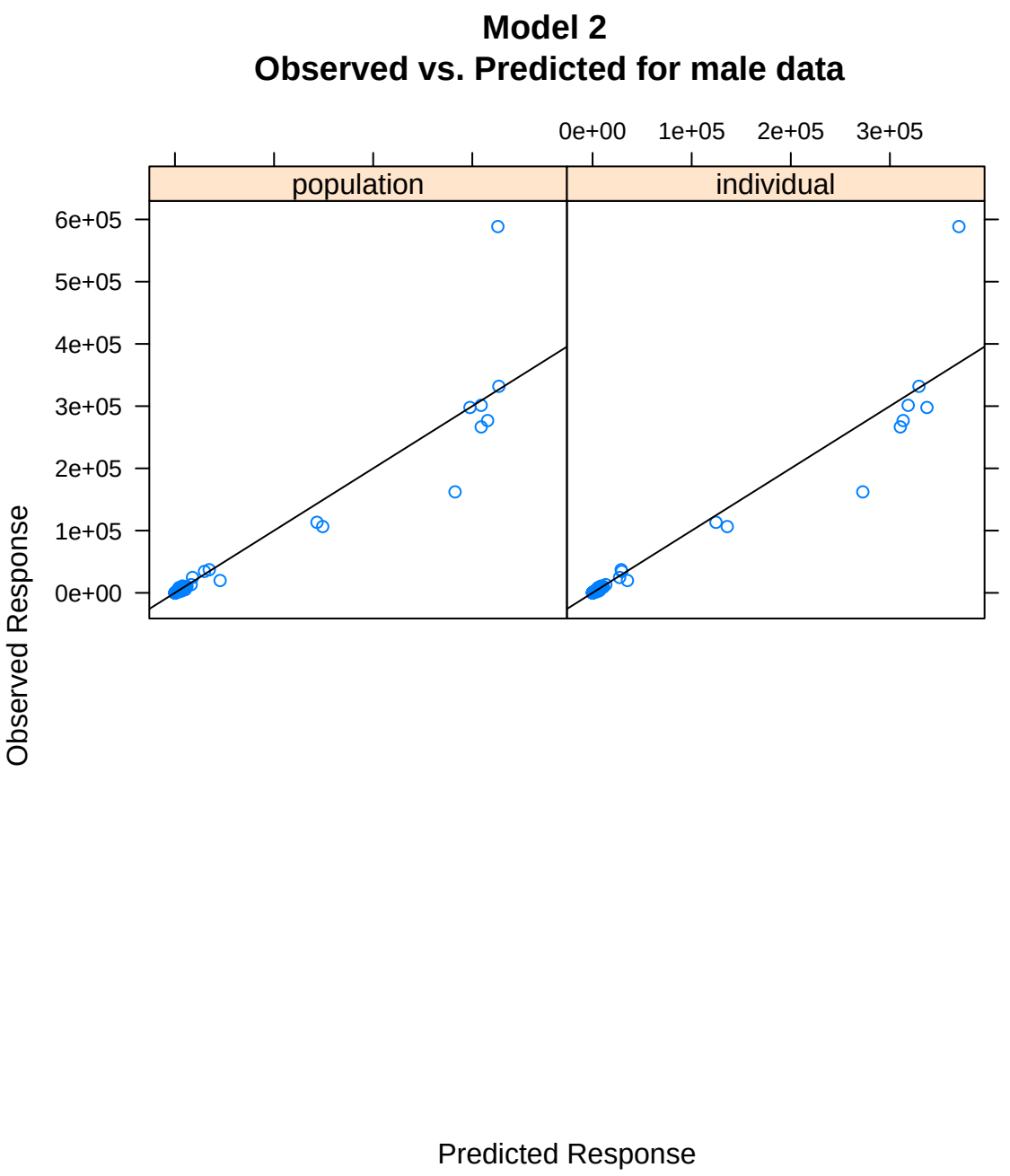
Model 2

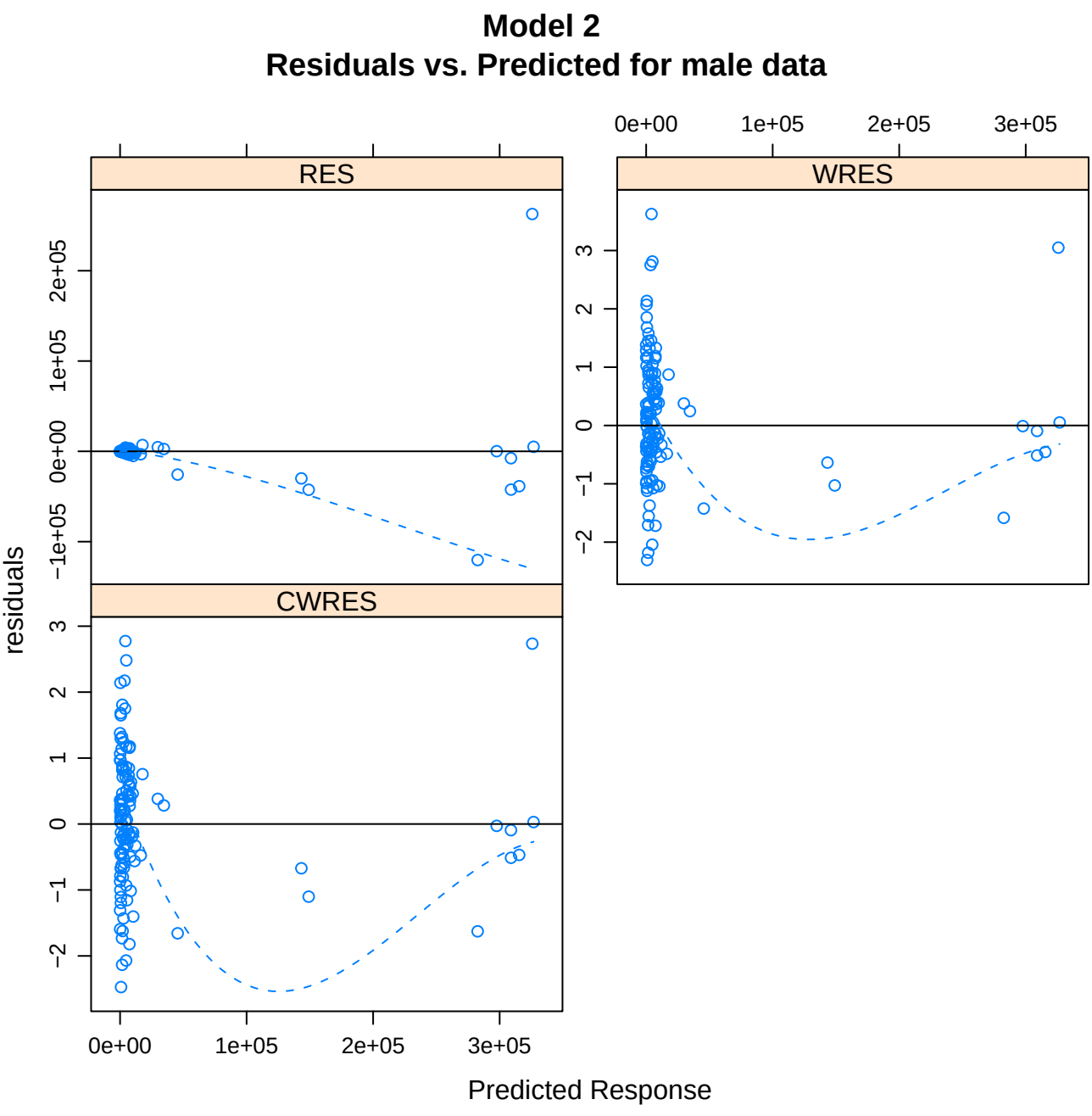
Normal Q−Q Plot Residuals for female data

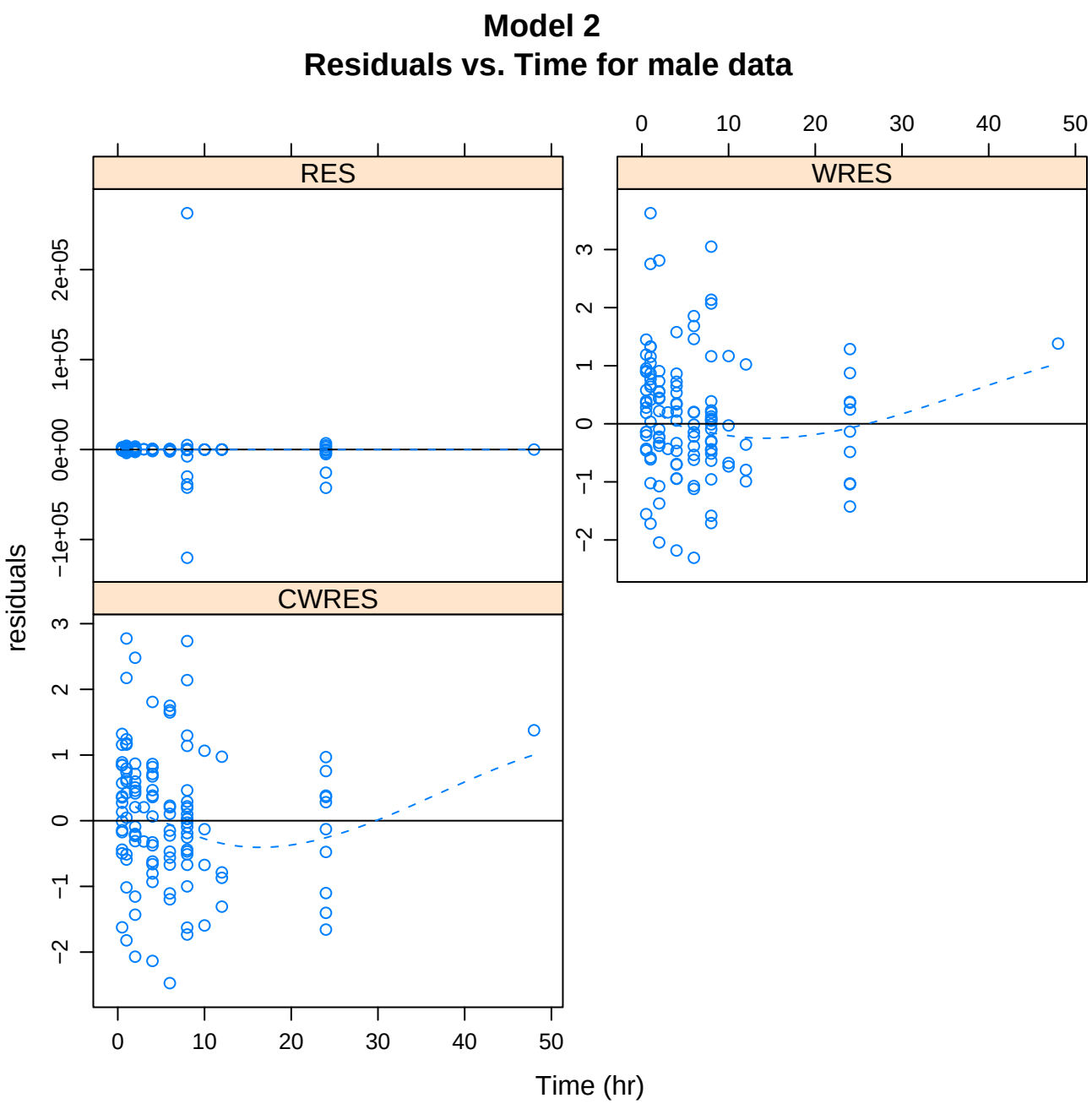


Model 2
Q−Q Plot of CWRES vs. WRES for female data

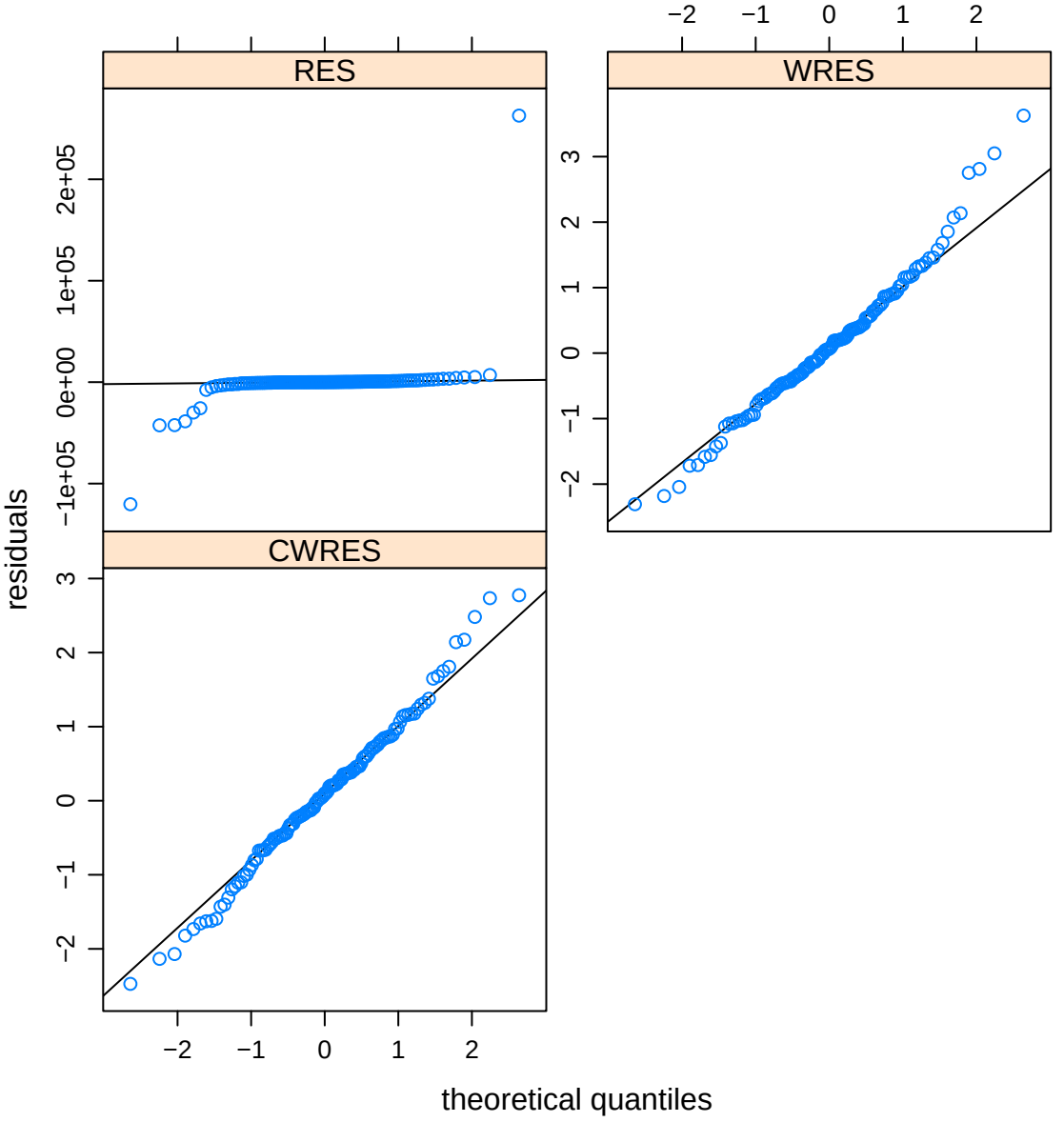



Model 2
Observed vs. Predicted for male data
0e+00
1e+05
2e+05
3e+05
population
individual
6e+05
5e+05
4e+05
3e+05
2e+05
1e+05
0e+00
Observed Response
Predicted Response


Model 2
Residuals vs. Predicted for male data
RES
WRES
CWRES
residuals
Predicted Response
0e+00
1e+05
2e+05
3e+05
−1e+05
−2
−1
0
1
2
3

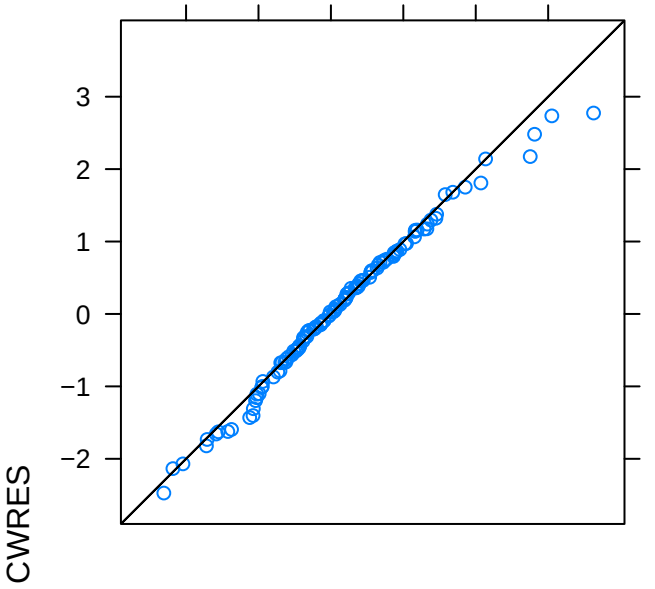

Model 2
Residuals vs. Time for male data
RES
WRES
CWRES
residuals
Time (hr)
0
10
20
30
40
50
−1e+05
0e+00
1e+05
2e+05
−2
−1
0
1
2
3

Model 2
Normal Q−Q Plot Residuals for male data



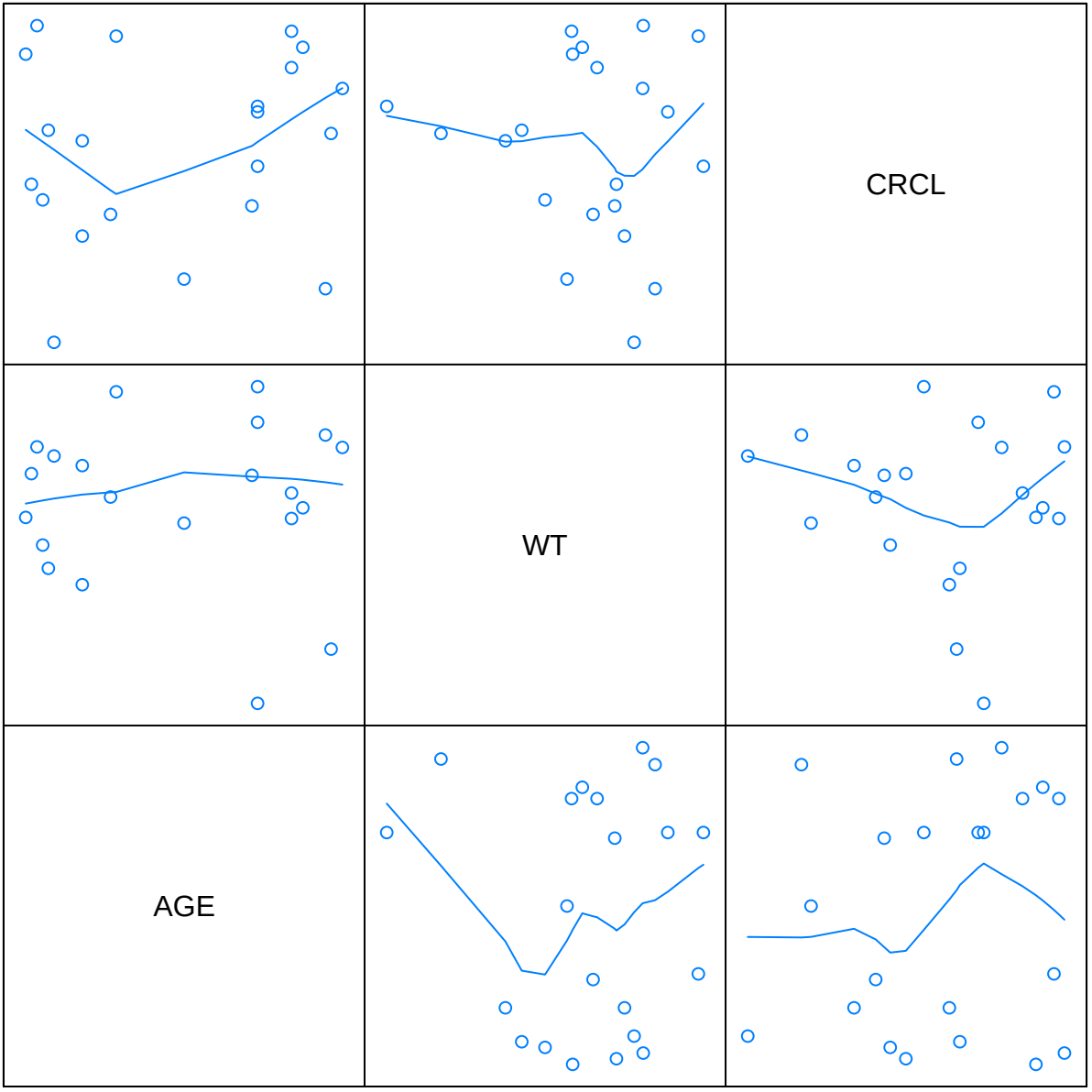
Model 2

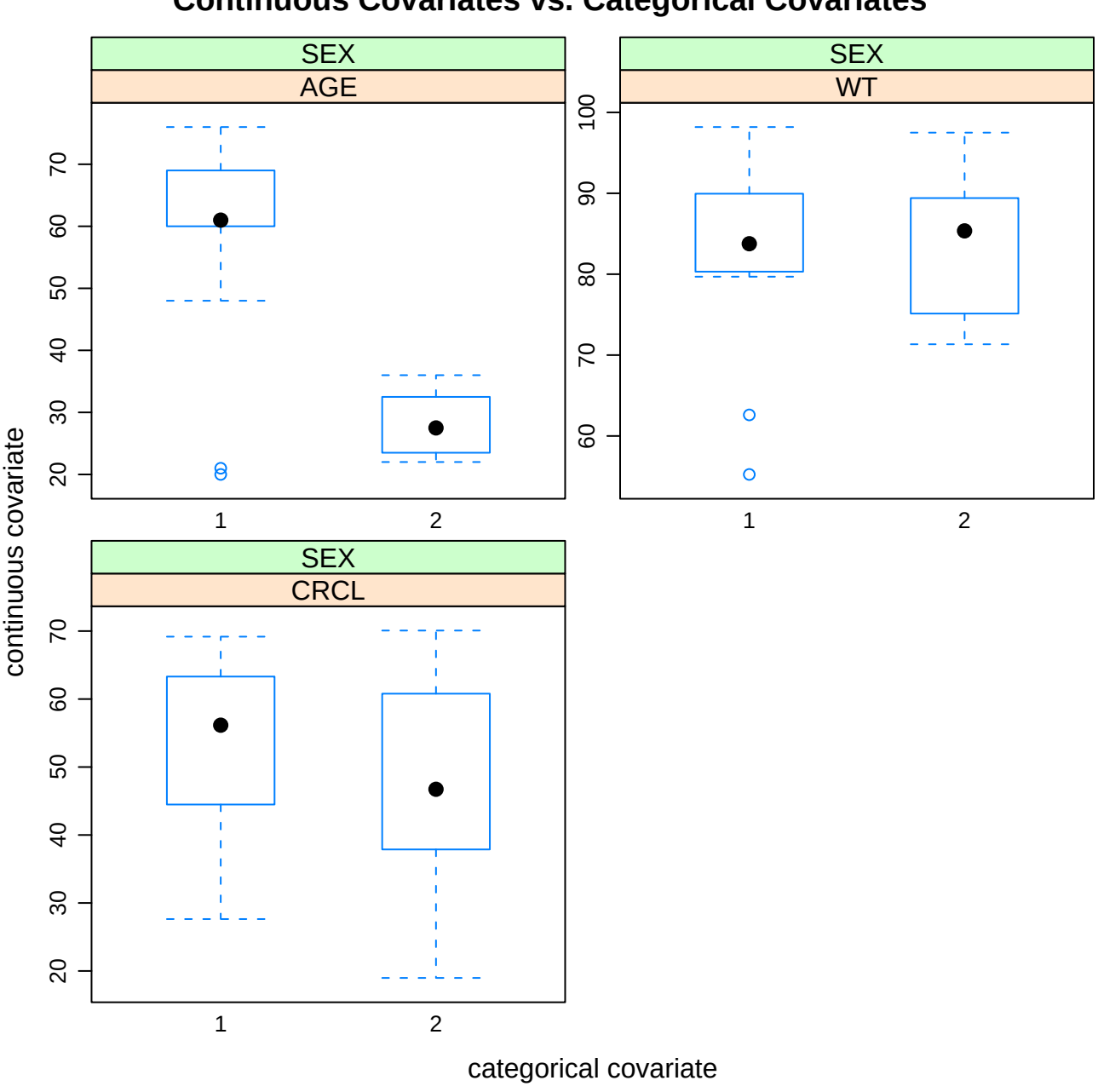
Q−Q Plot of CWRES vs. WRES for male data



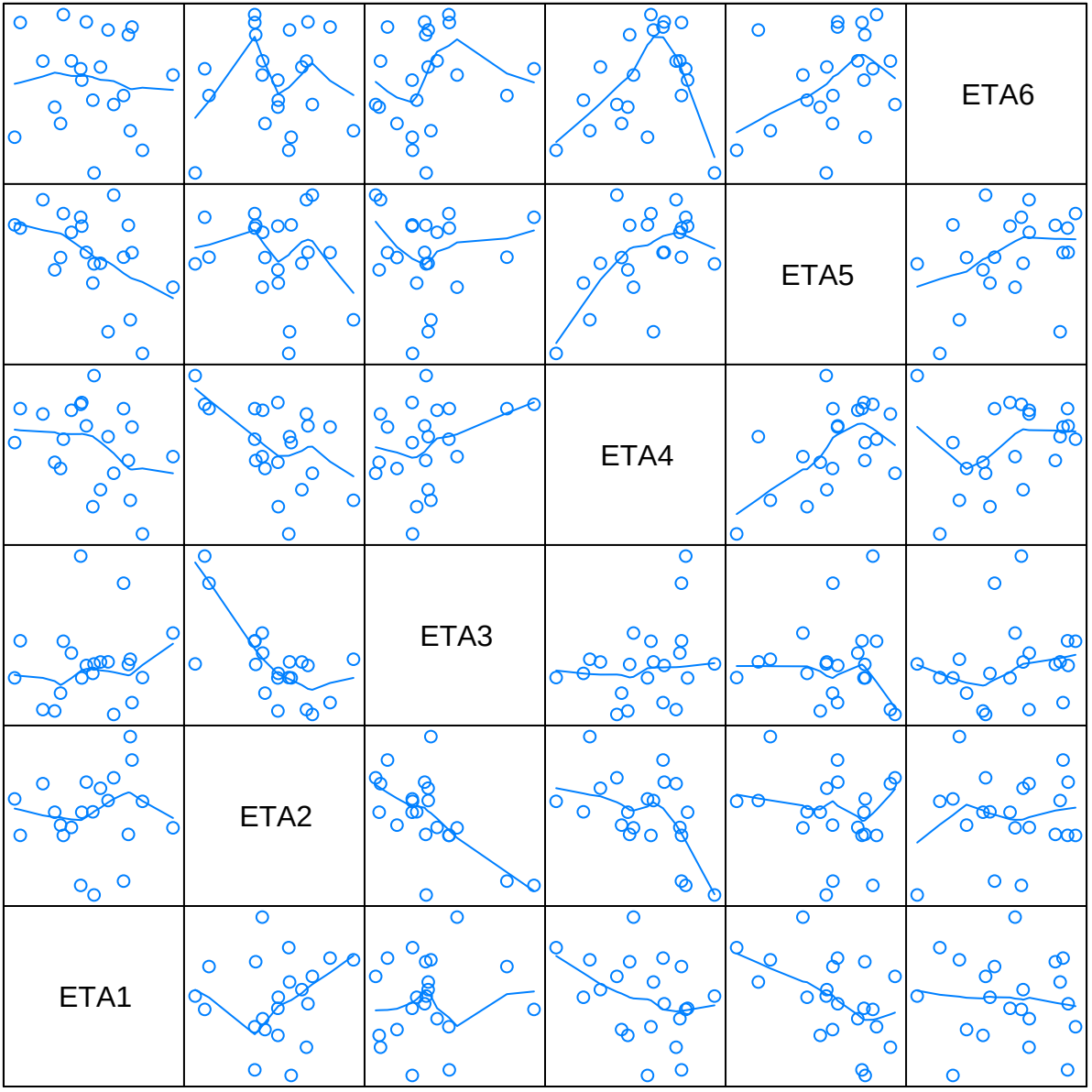
WRES

Covariate Scatterplots

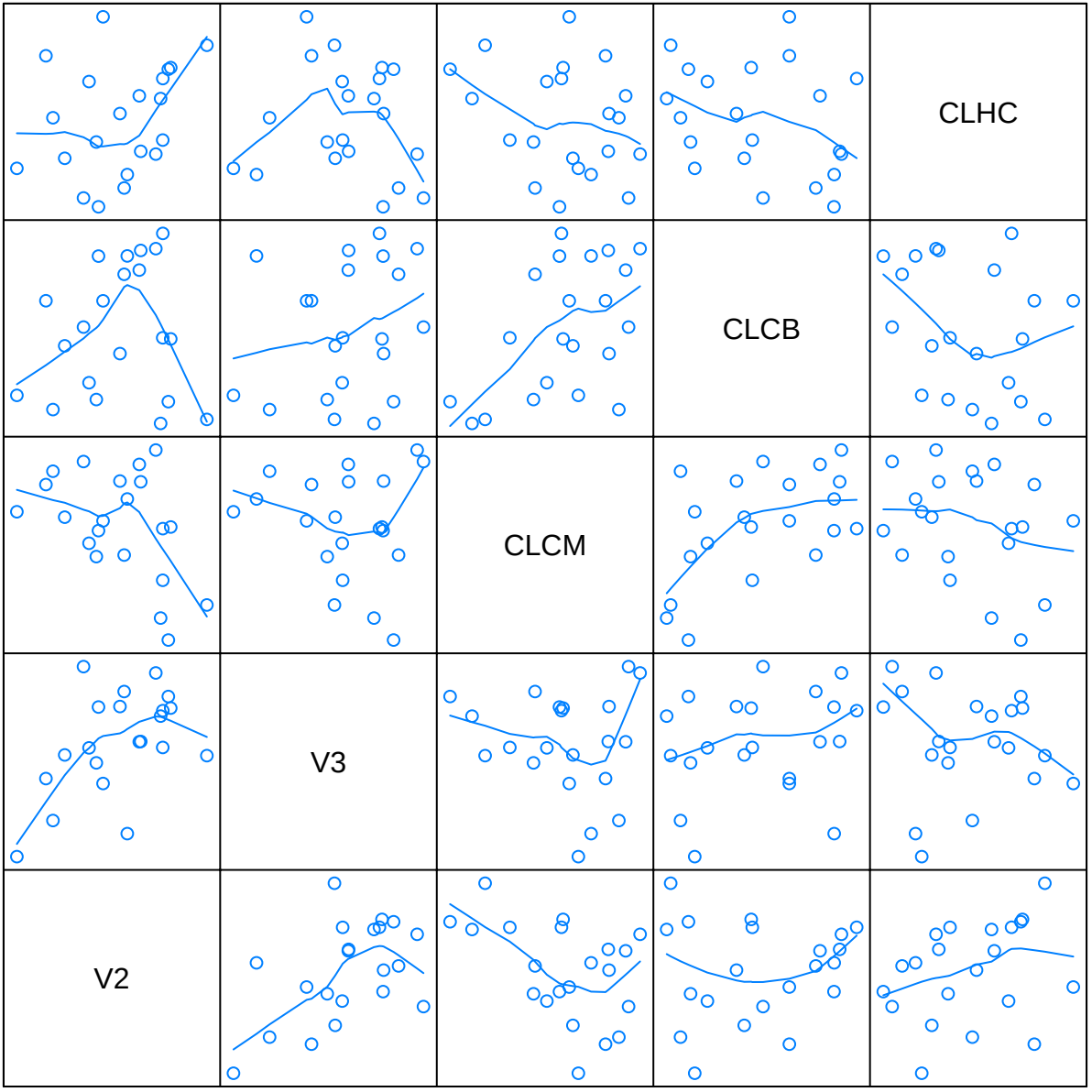


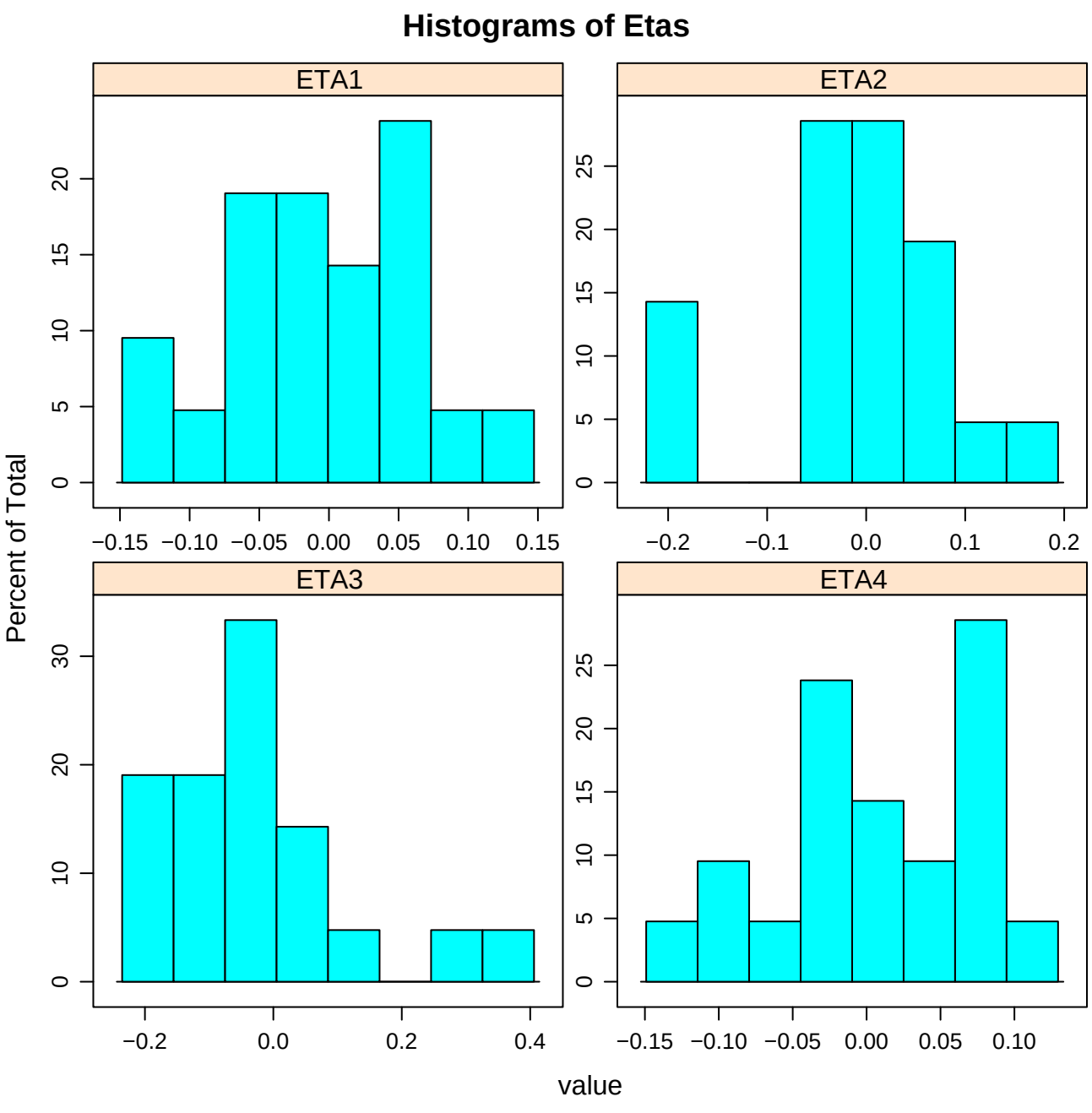

Continuous Covariates vs. Categorical Covariates
SEX
AGE
SEX
WT
SEX
CRCL
continuous covariate
categorical covariate
20
30
40
50
60
70
60
70
80
90
100
1
2

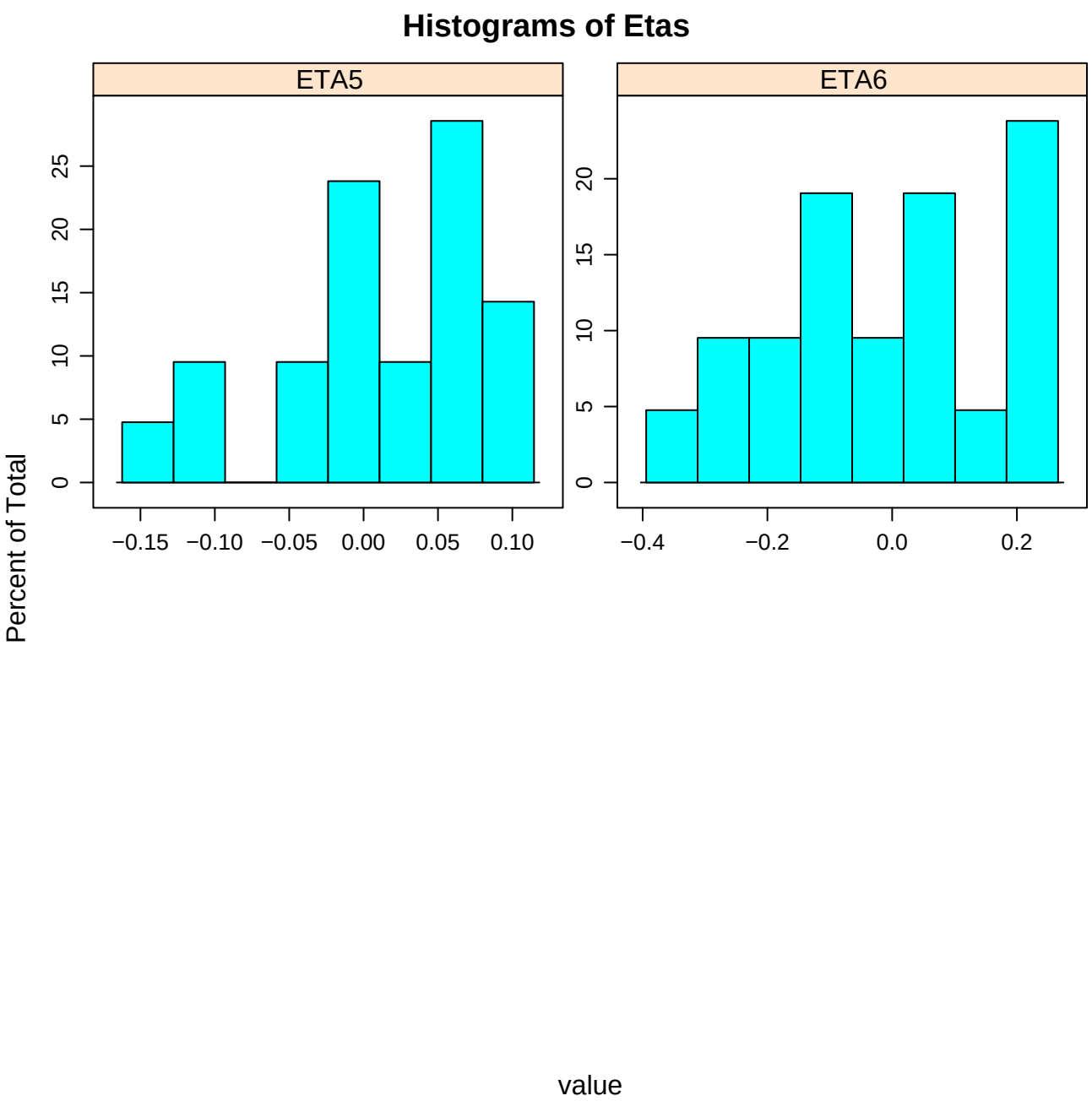
ETA Scatterplots

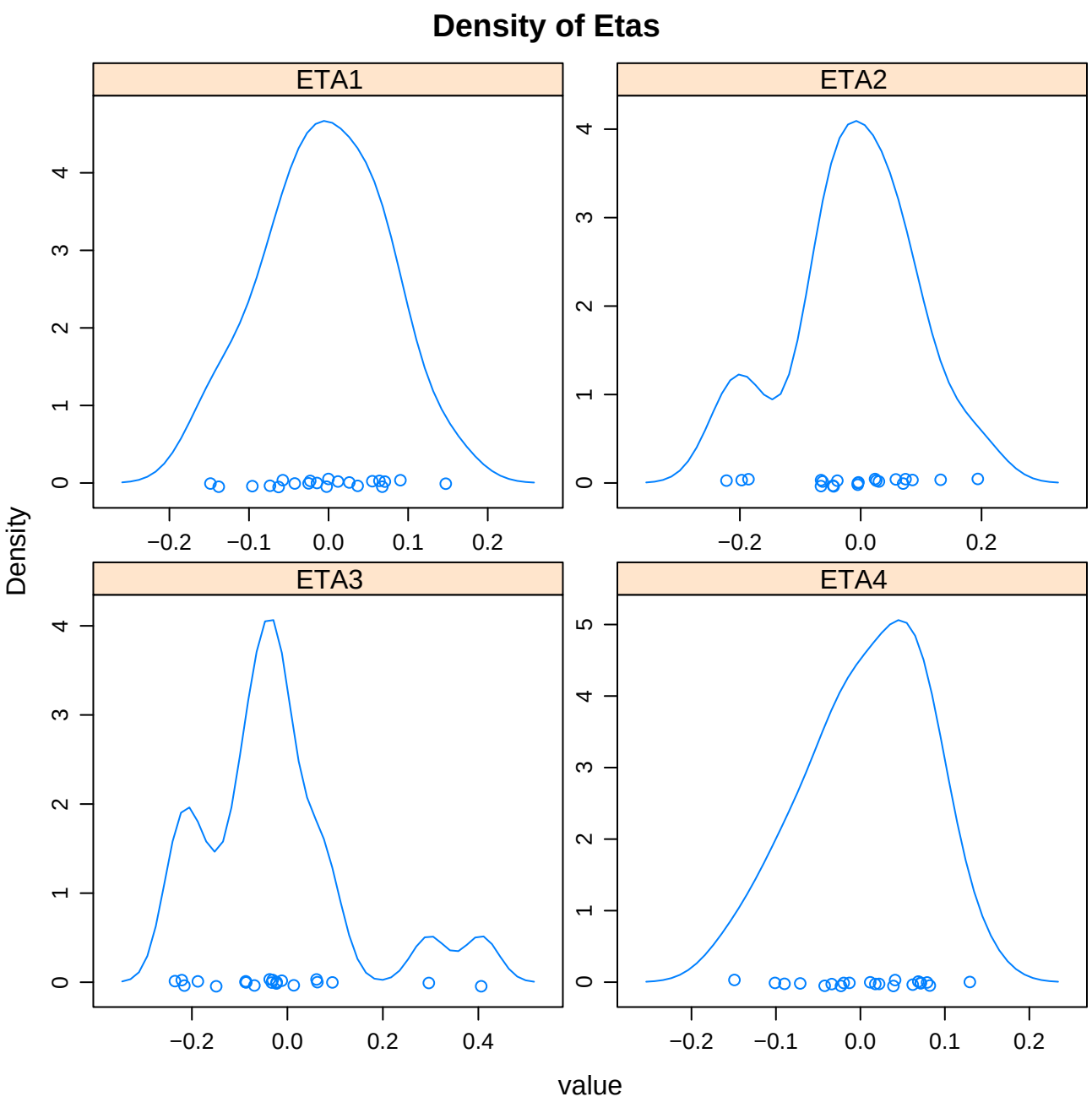


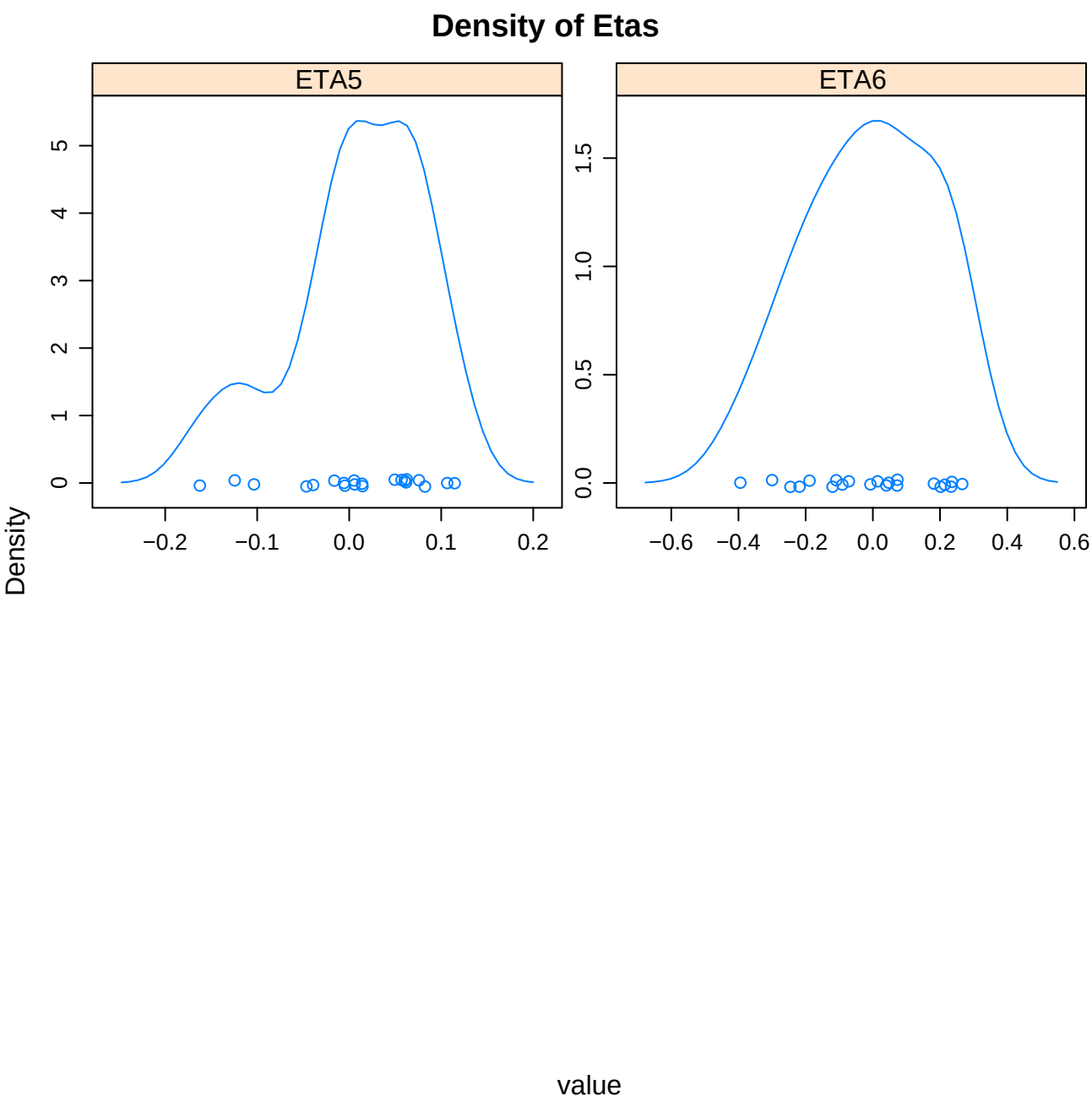
Parameter Scatterplots

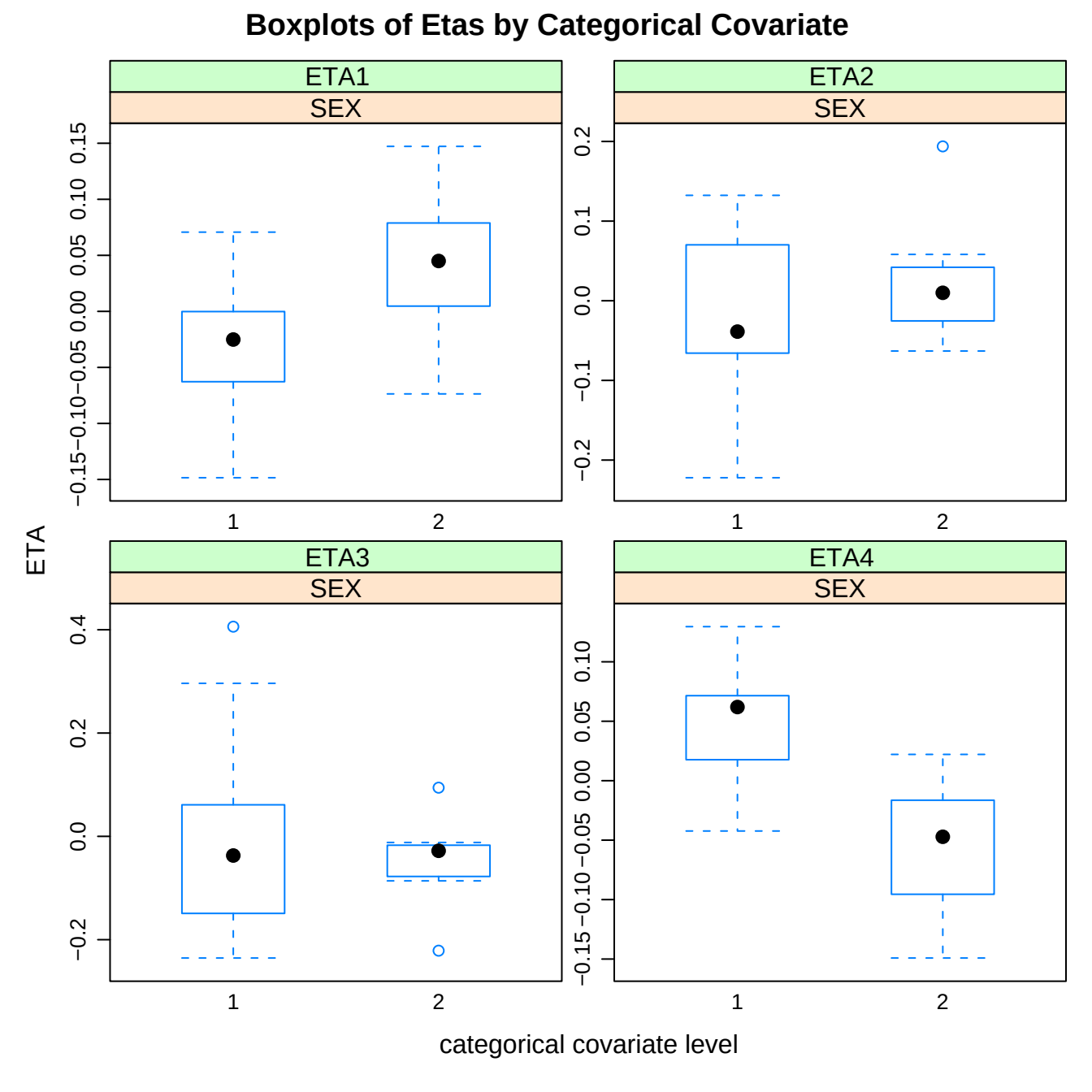


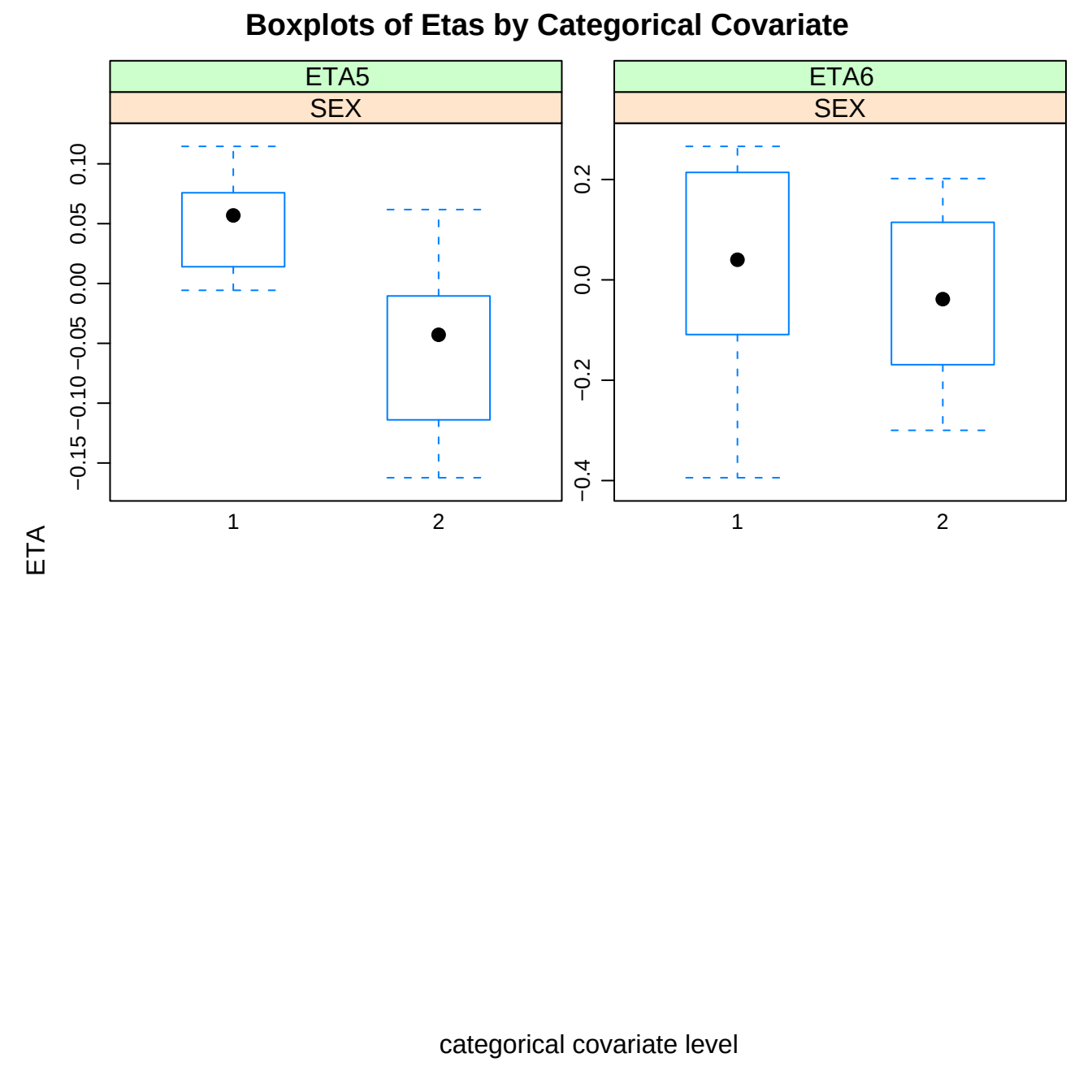

Histograms of Etas
ETA1
ETA2
ETA3
ETA4
Percent of Total
value
0
5
10
15
20
25
30
−0.15
−0.10
−0.05
0.00
0.05
0.10
0.15
−0.2
−0.1
0.0
0.1
0.2
0.4

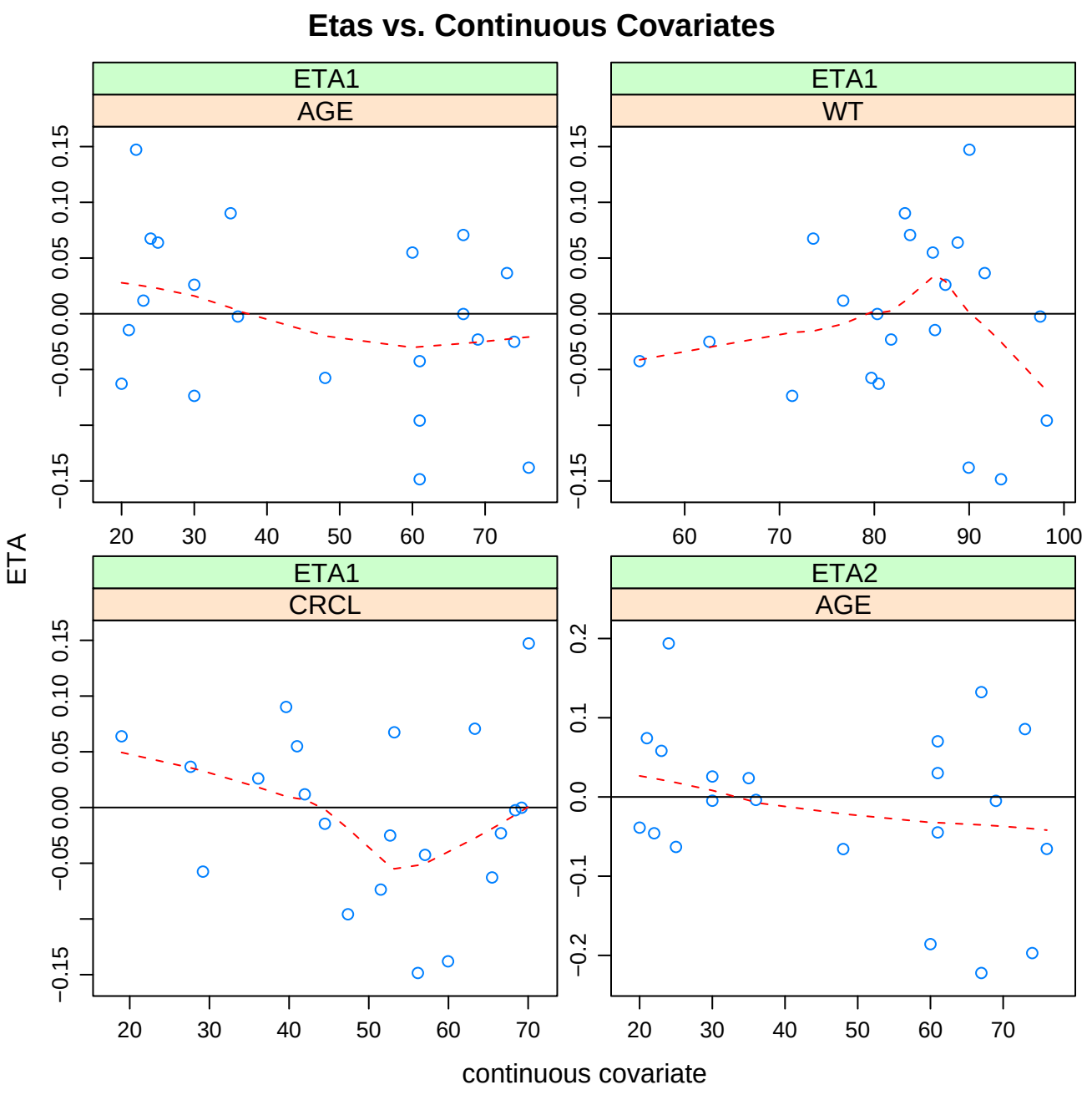

Histograms of Etas
ETA5
ETA6
Percent of Total
value
0
5
10
15
20
25
−0.15
−0.10
−0.05
0.00
0.05
0.10
−0.4
−0.2
0.0
0.2

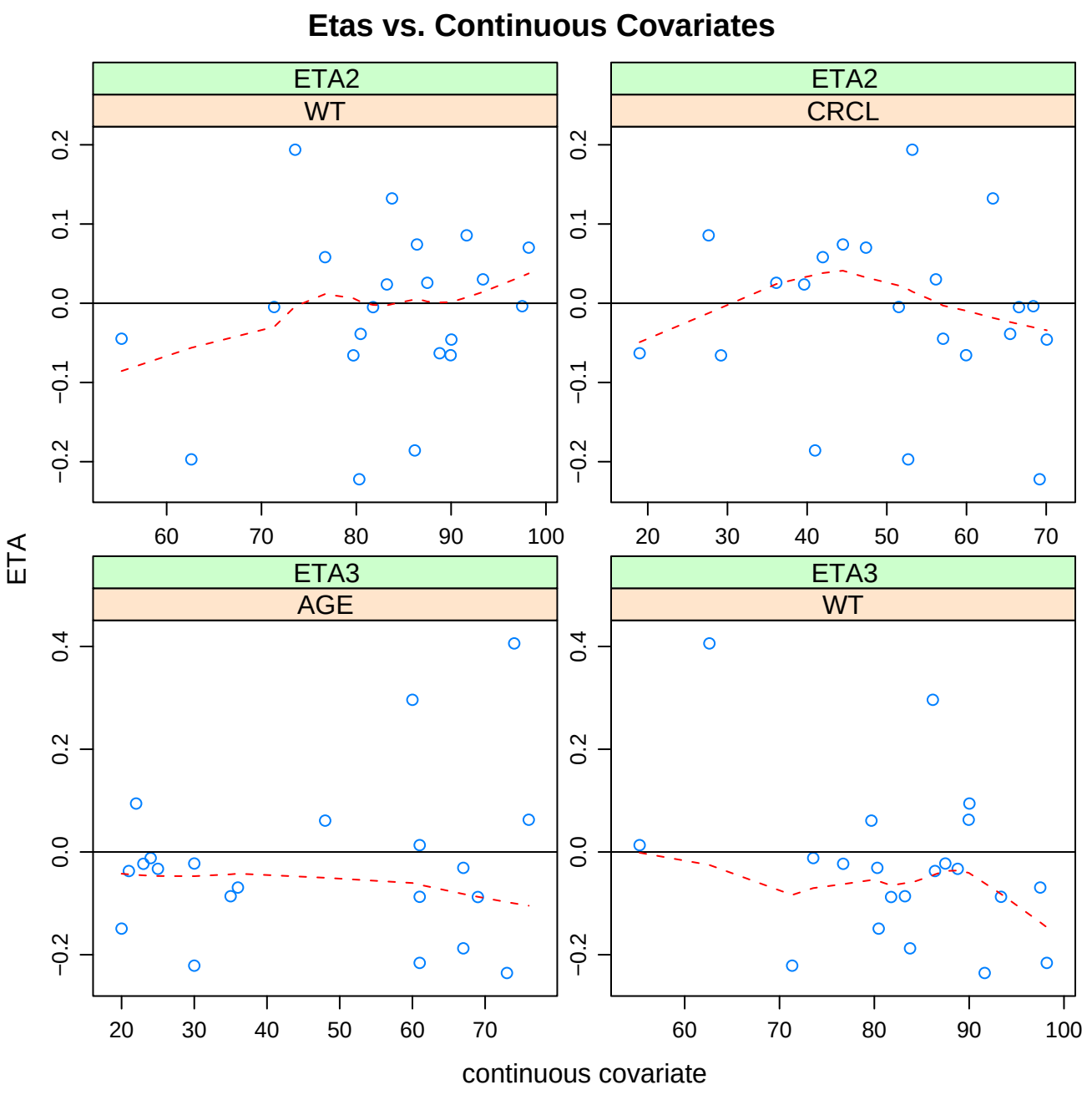

Density of Etas
ETA1
ETA2
ETA3
ETA4
Density
value

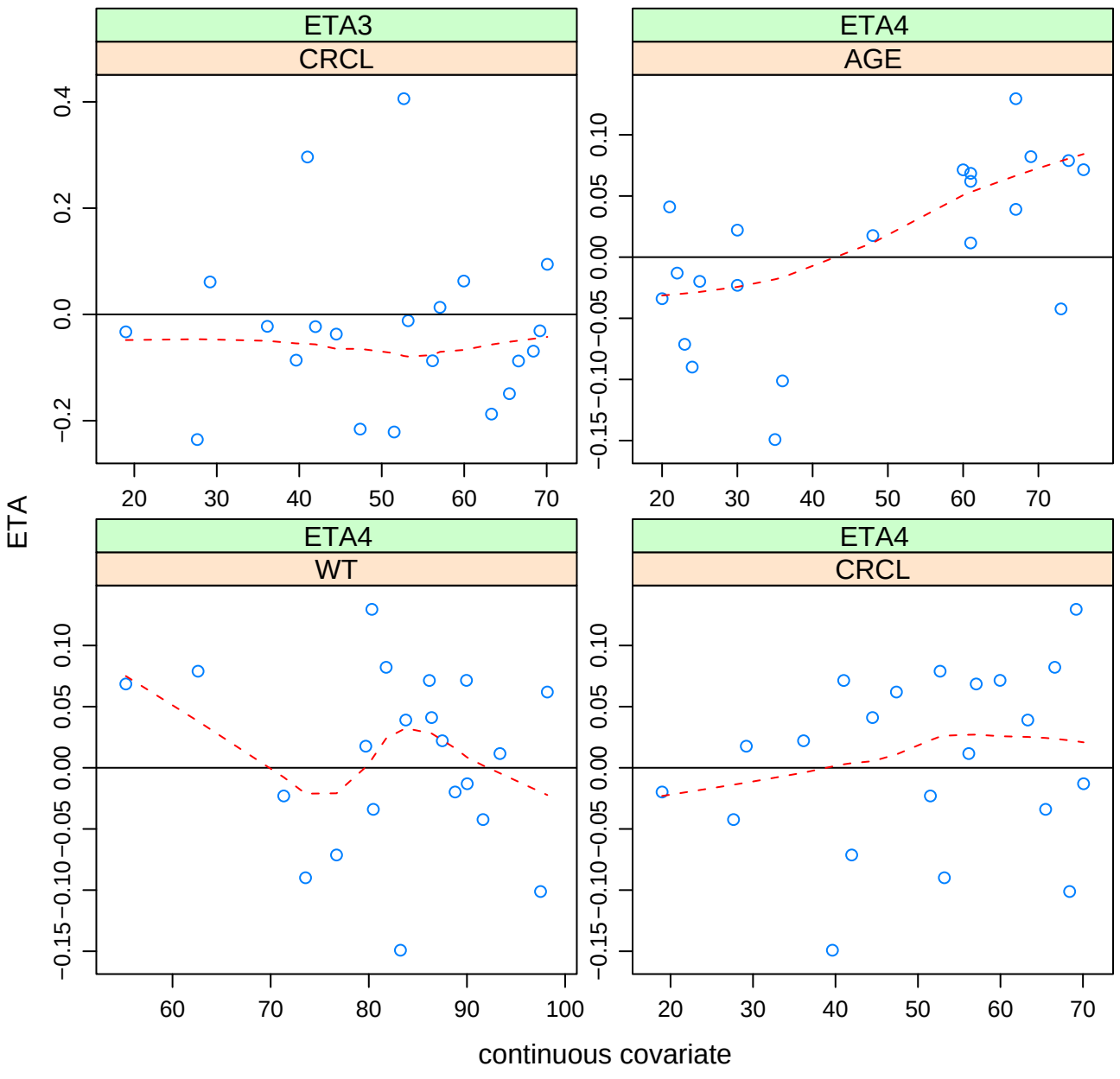

Density of Etas
ETA5
ETA6
Density
value
0
1
2
3
4
5
0.0
0.5
1.0
1.5
−0.2
−0.1
0.0
0.1
0.2
−0.6
−0.4
−0.2
0.0
0.2
0.4
0.6

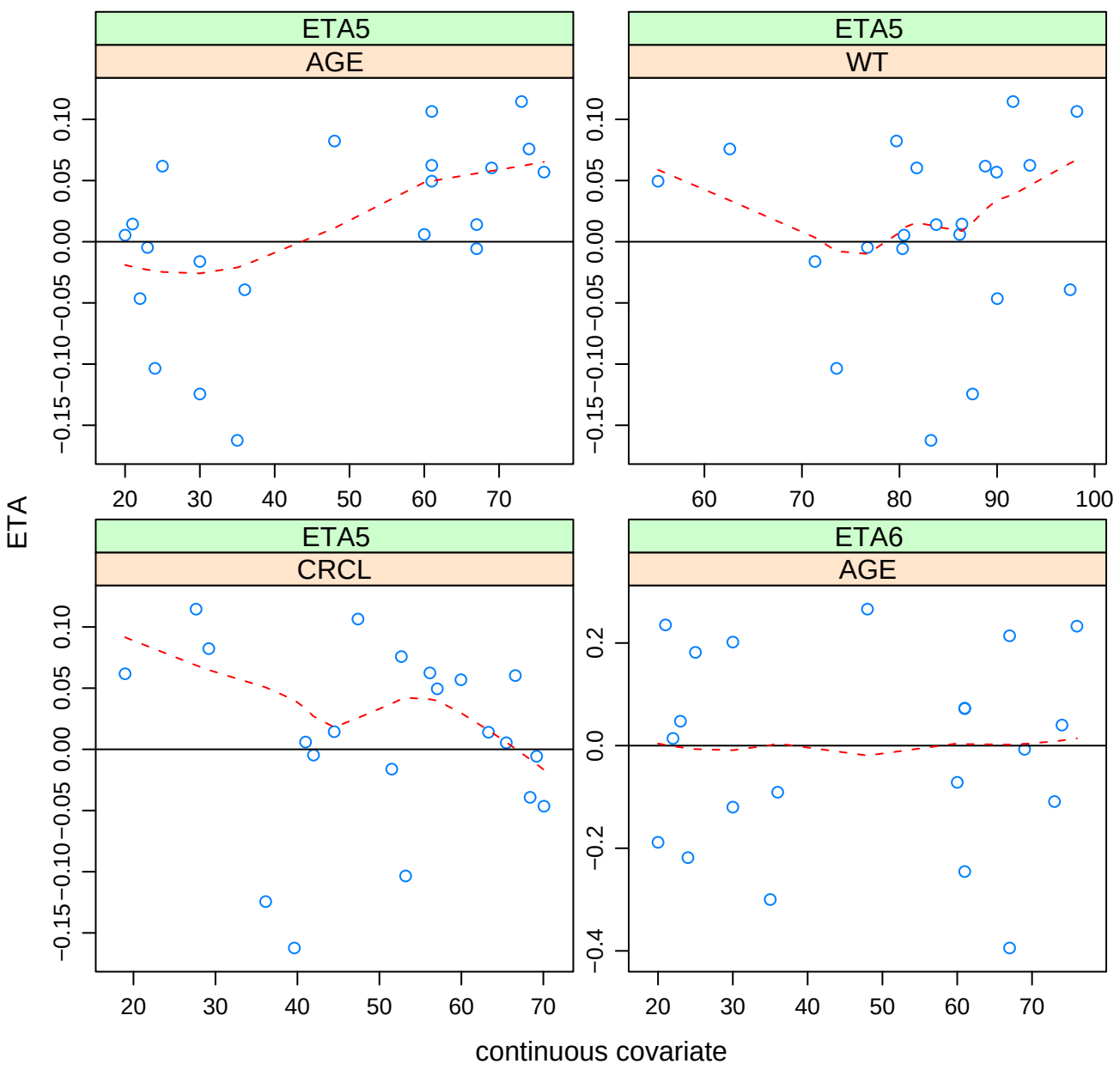

Boxplots of Etas by Categorical Covariate
ETA1
SEX
ETA2
SEX
ETA3
SEX
ETA4
SEX
ETA
categorical covariate level
1
2
−0.15
−0.10
−0.05
0.00
0.05
0.10
0.15
−0.2
−0.1
0.0
0.1
0.2
0.4

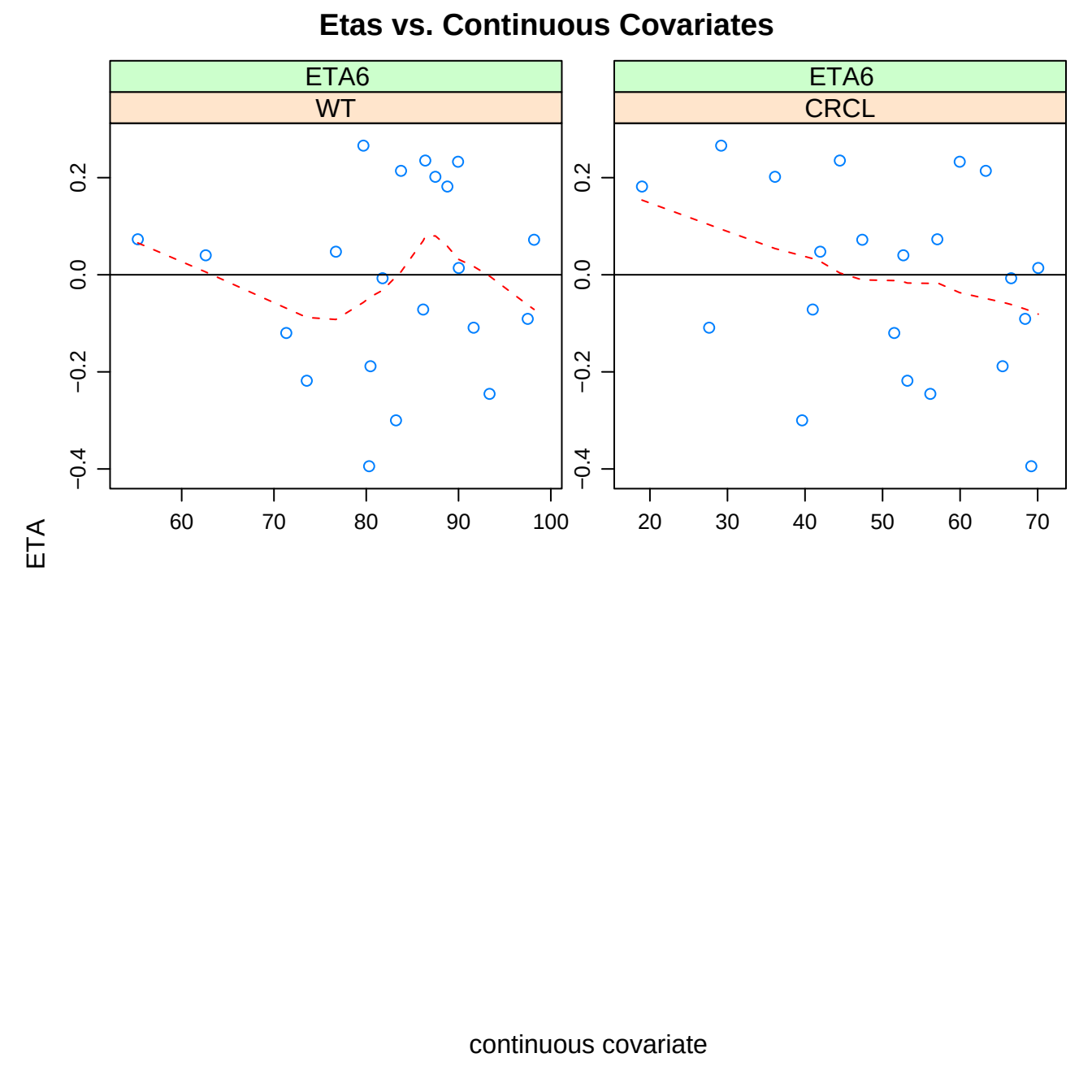

Boxplots of Etas by Categorical Covariate
ETA5
SEX
ETA6
SEX
0.10
0.05
0.00
−0.05
−0.10
−0.15
0.2
0.0
−0.2
−0.4
1
2
1
2
ETA
categorical covariate level


Etas vs. Continuous Covariates
ETA1
AGE
ETA1
WT
ETA1
CRCL
ETA2
AGE
ETA
continuous covariate

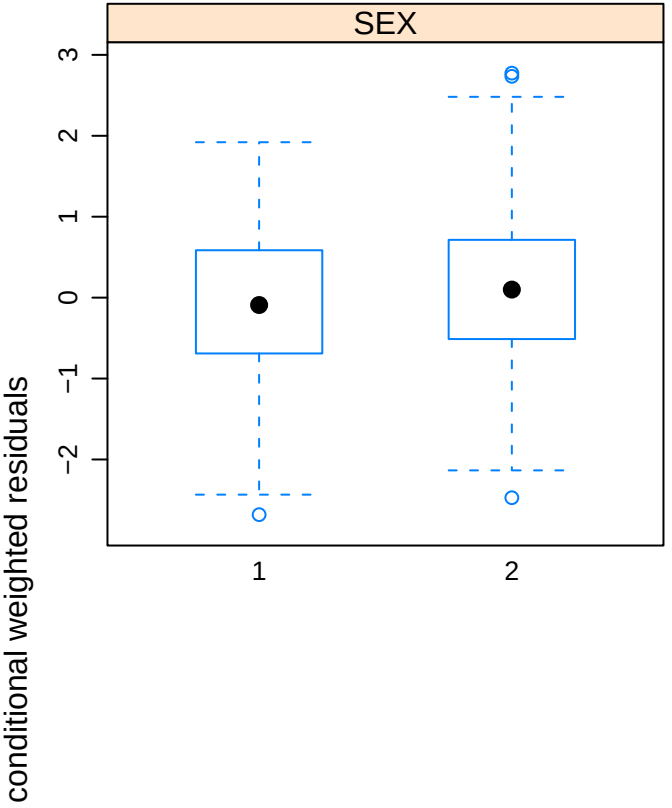

Etas vs. Continuous Covariates
ETA2
WT
ETA2
CRCL
ETA3
AGE
ETA3
WT
ETA
continuous covariate

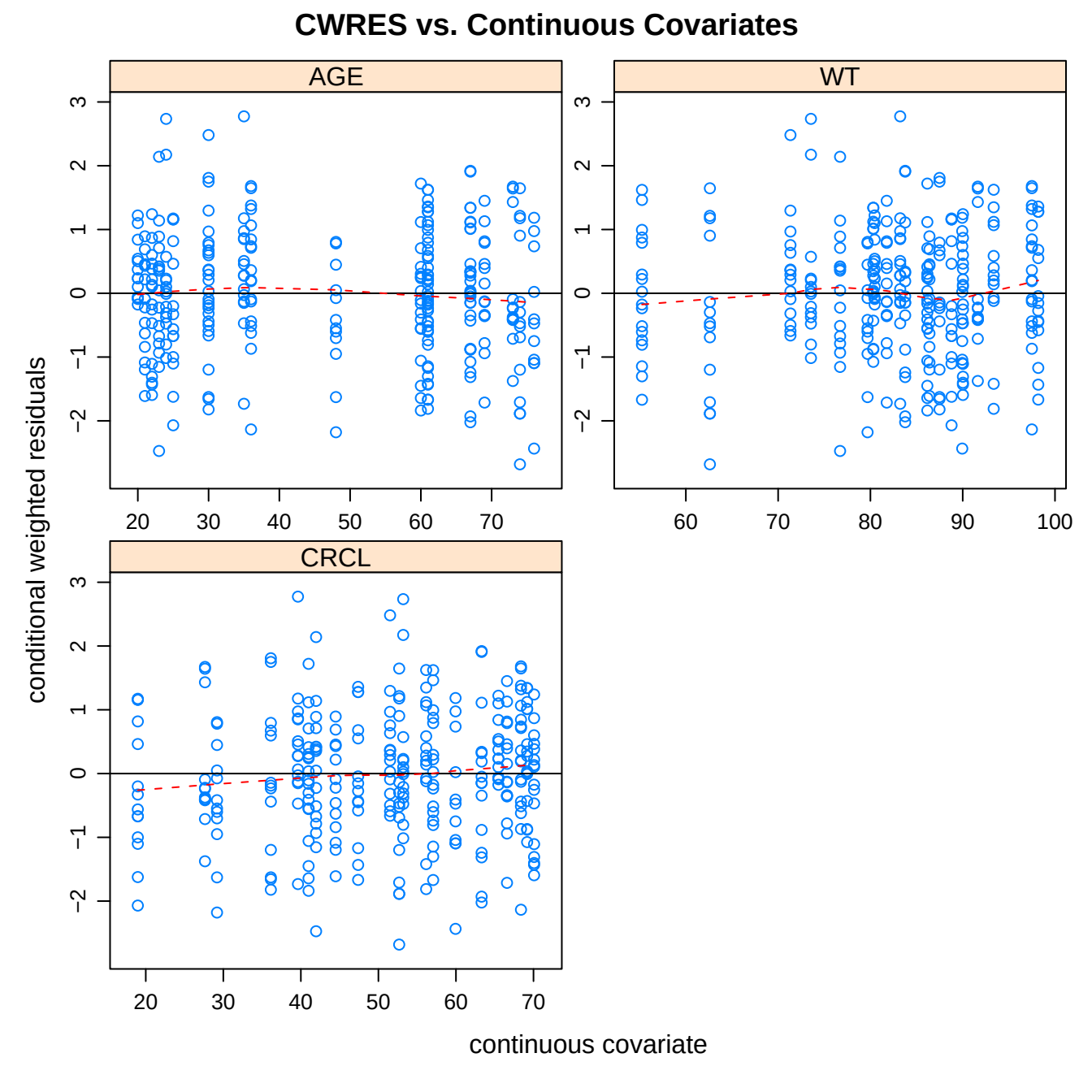

Etas vs. Continuous Covariates
ETA3
CRCL
ETA4
AGE
ETA4
WT
ETA4
CRCL
ETA
continuous covariate


Etas vs. Continuous Covariates
ETA5
AGE
ETA5
WT
ETA5
CRCL
ETA6
AGE
ETA
continuous covariate


Etas vs. Continuous Covariates
ETA6
WT
ETA6
CRCL
ETA
0.2
0.0
−0.2
−0.4
60
70
80
90
100
20
30
40
50
60
70
continuous covariate

CWRES vs. Categorical Covariates




CWRES vs. Continuous Covariates
AGE
WT
CRCL
conditional weighted residuals
continuous covariate
3
2
1
0
−1
−2
20
30
40
50
60
70
80
90
100