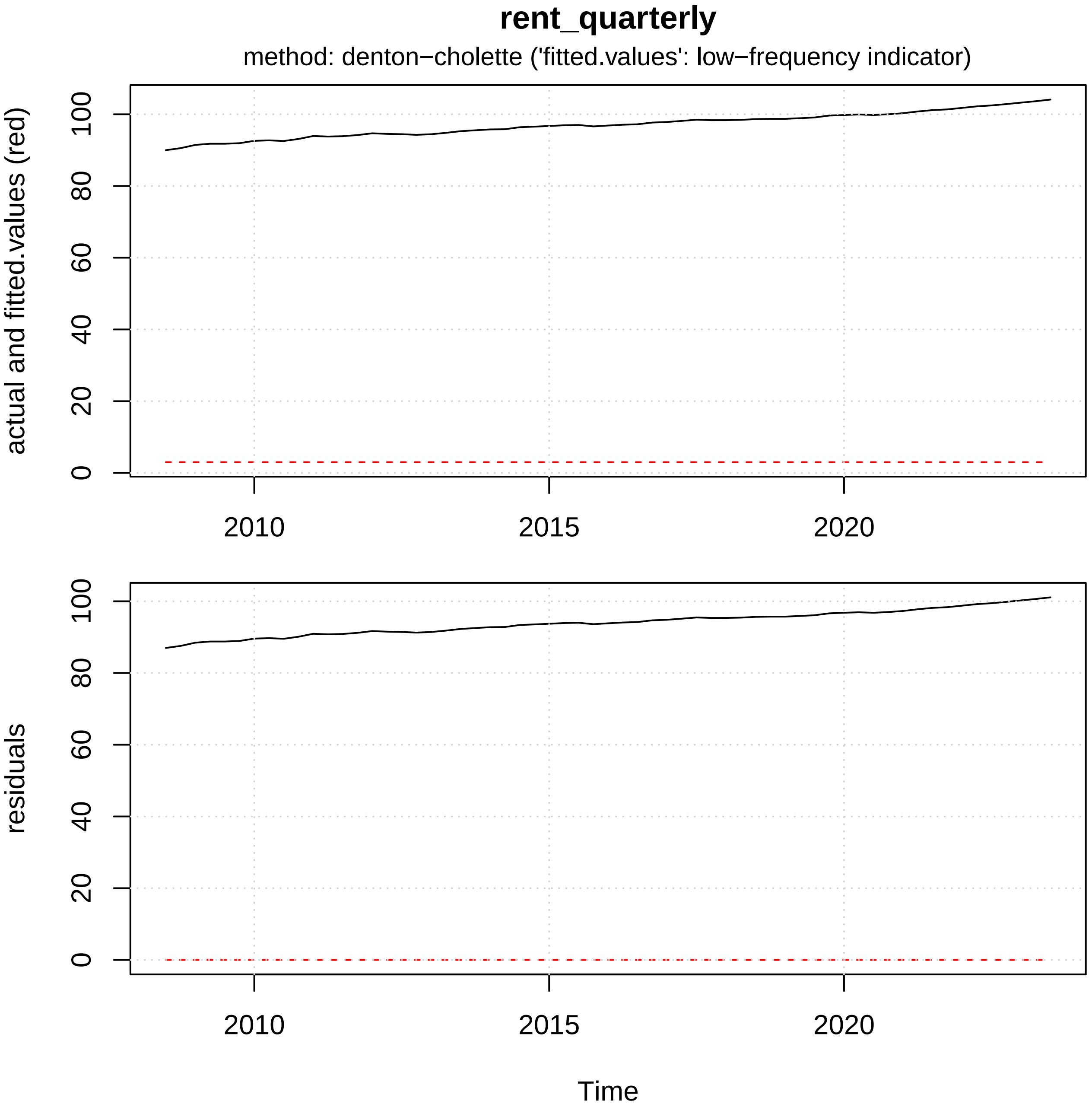
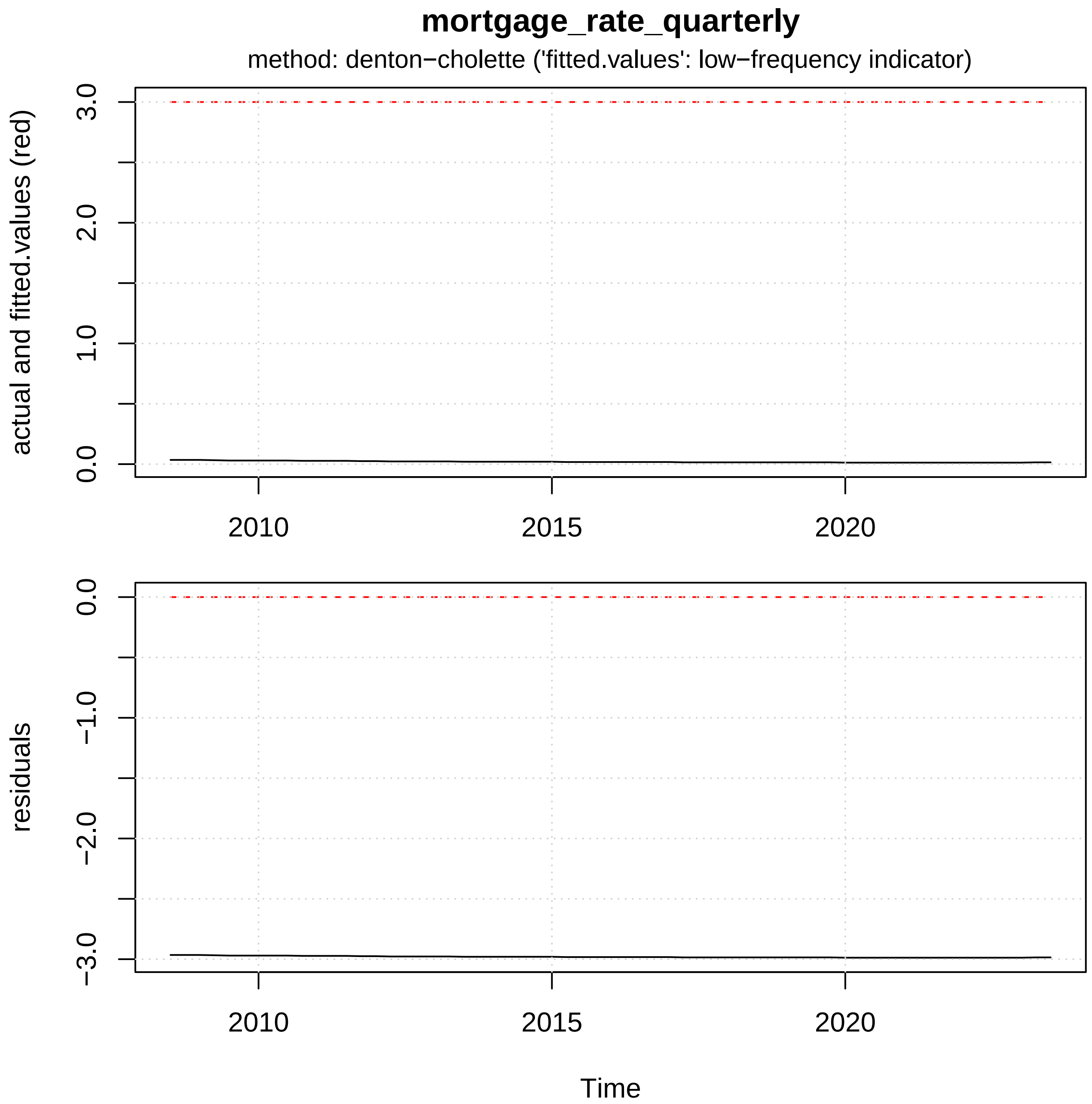
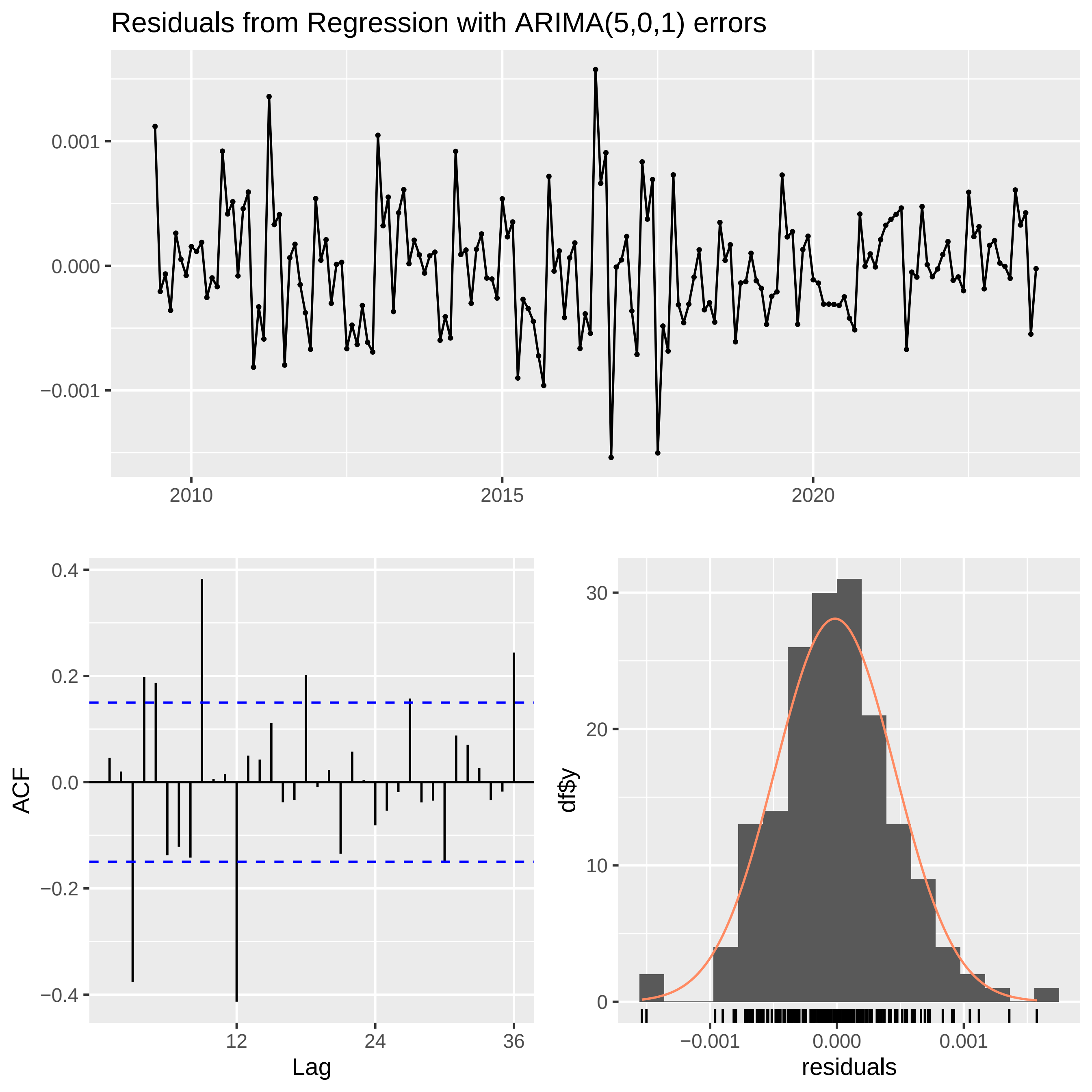
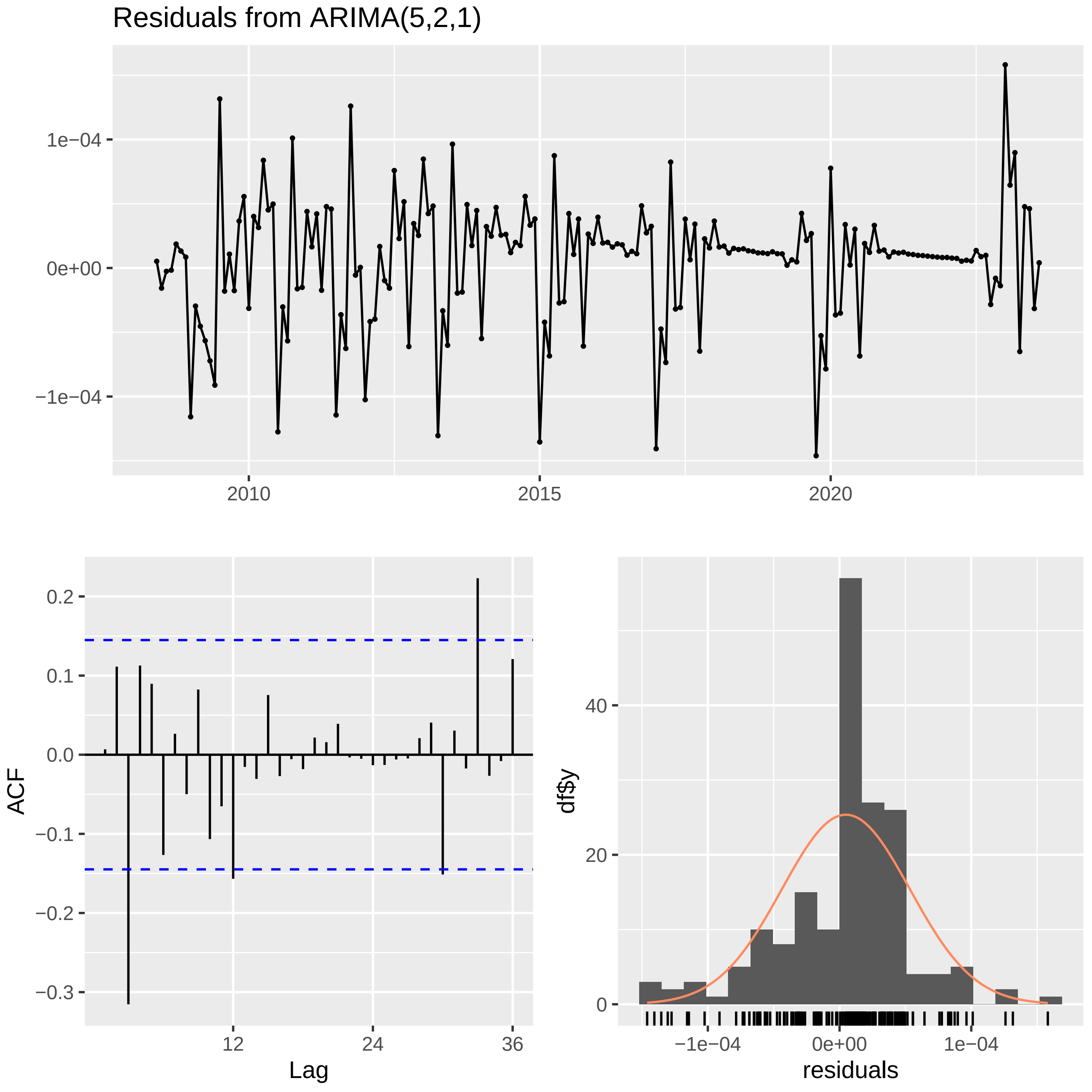
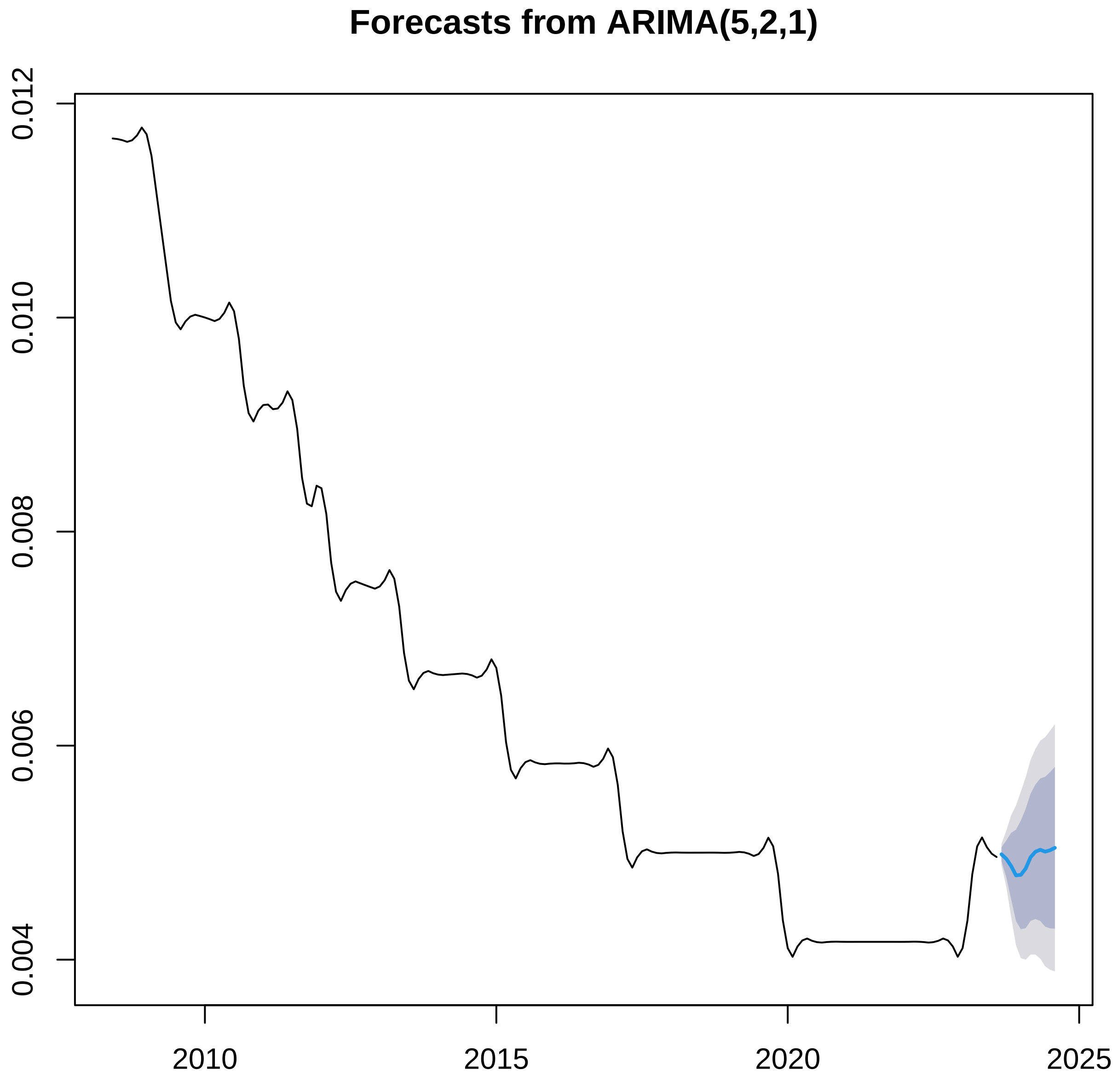

rent_quarterly
method: denton−cholette ('fitted.values': low−frequency indicator)
actual and fitted.values (red)
residuals
0
20
40
60
80
100
2010
2015
2020
Time

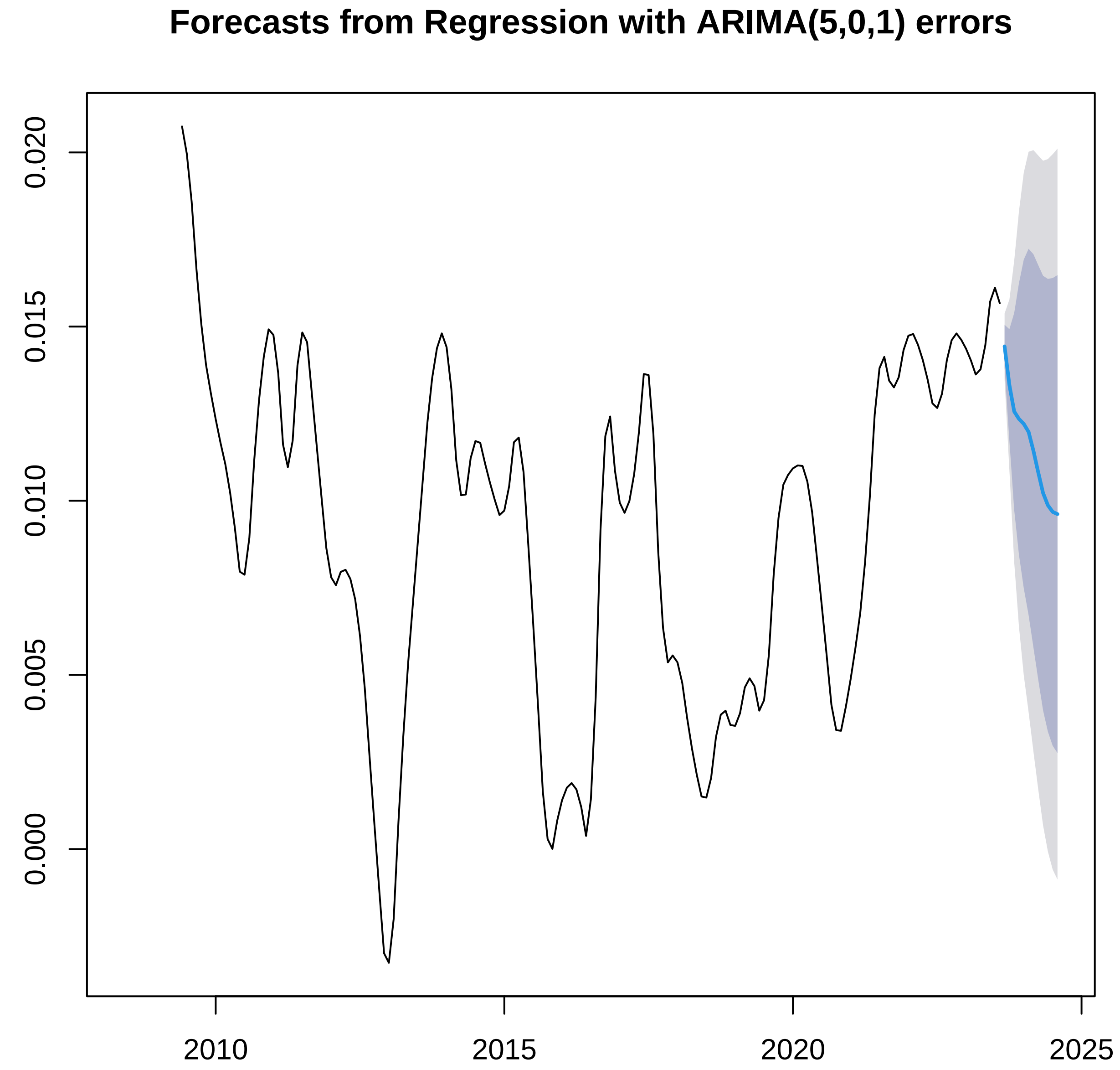

mortgage_rate_quarterly
method: denton−cholette ('fitted.values': low−frequency indicator)
actual and fitted.values (red)
3.0
2.0
1.0
0.0
2010
2015
2020
residuals
0.0
−1.0
−2.0
−3.0
2010
2015
2020
Time



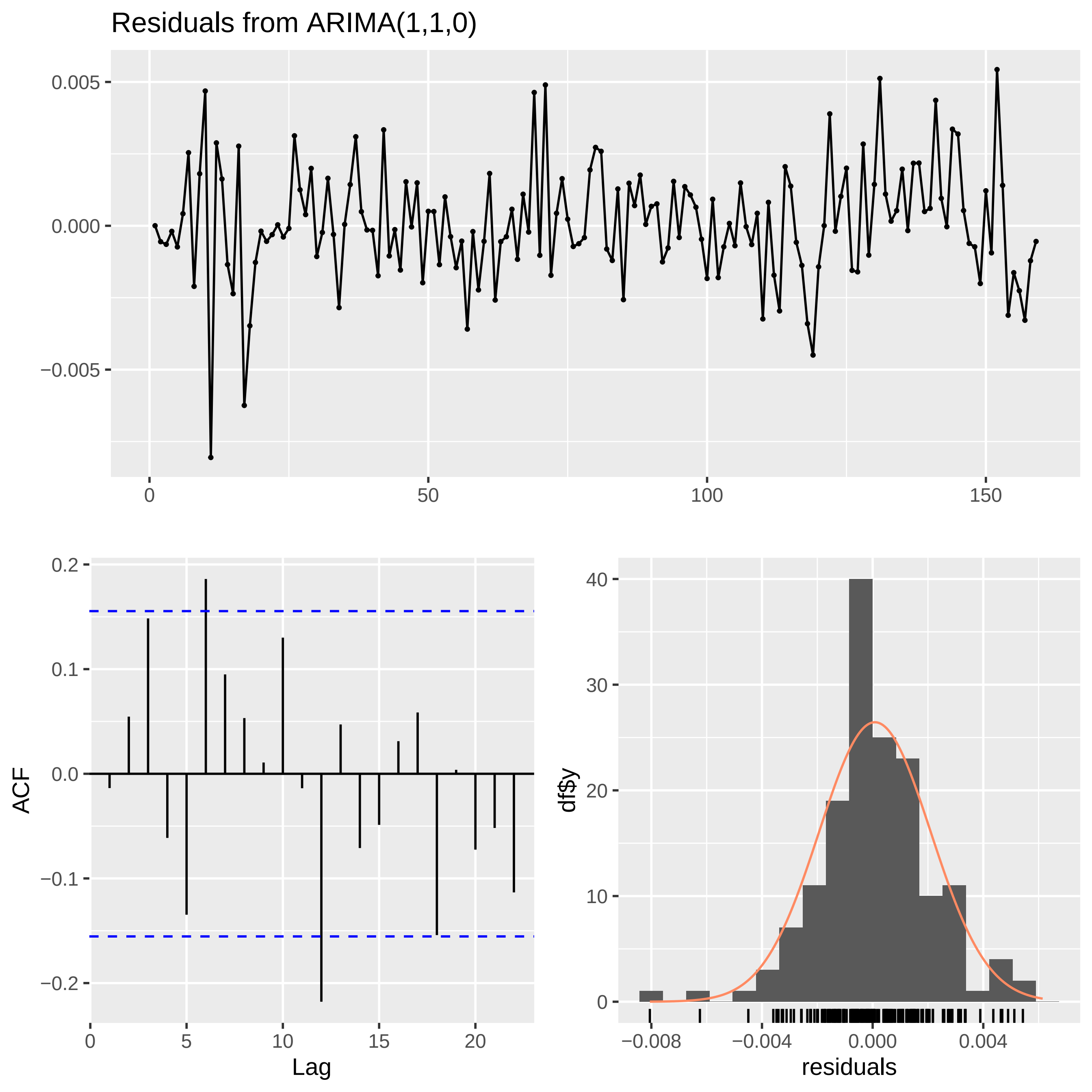
Residuals from Regression with ARIMA(5,0,1) errors
0.001
0.000
−0.001
2010
2015
2020
ACF
0.4
0.2
0.0
−0.2
−0.4
12
24
36
Lag
df$y
30
20
10
0
−0.001
0.000
0.001
residuals

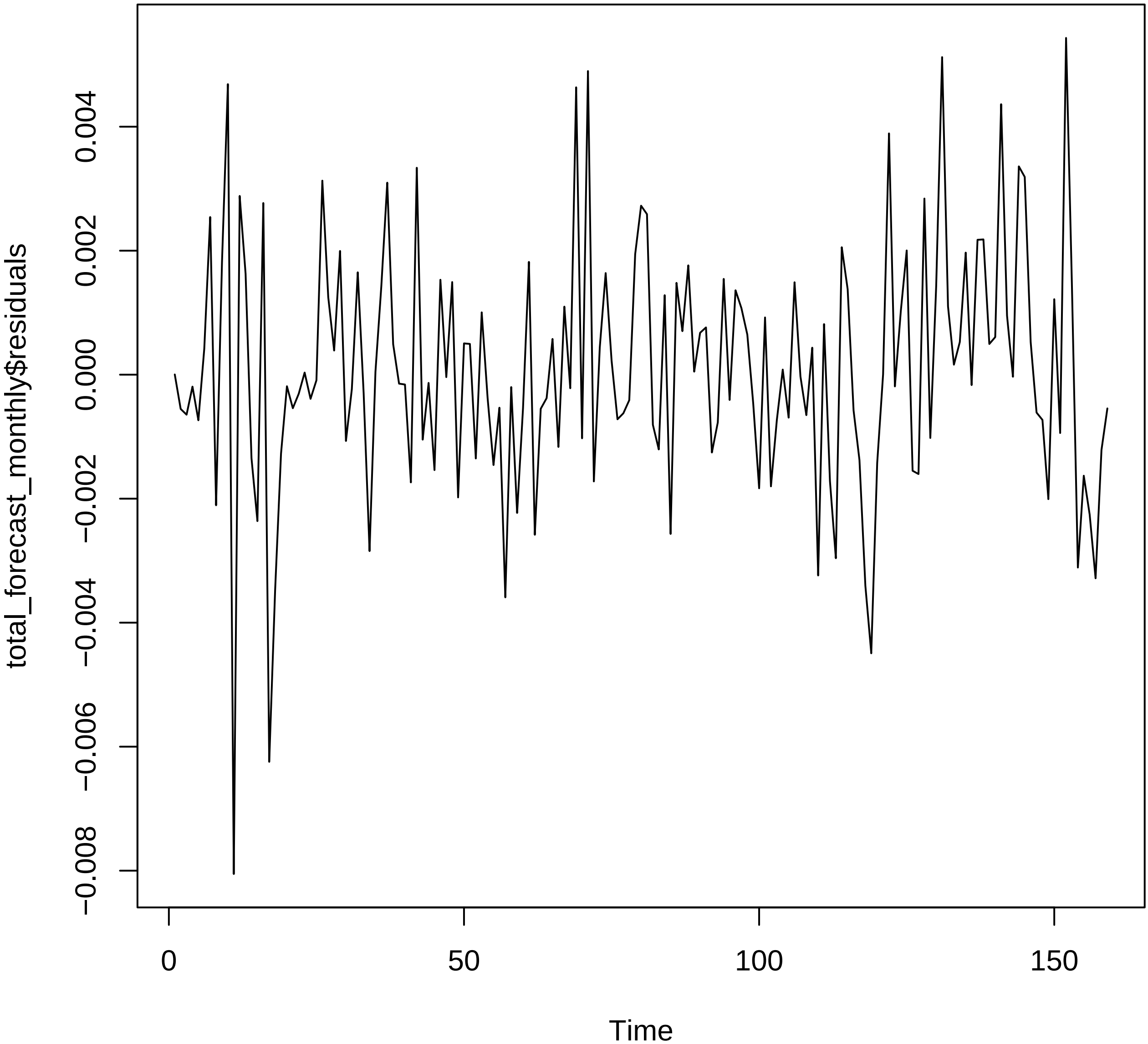

Residuals from ARIMA(5,2,1)
1e−04
0e+00
−1e−04
2010
2015
2020
ACF
0.2
0.1
0.0
−0.1
−0.2
−0.3
12
24
36
Lag
df$y
40
20
0
−1e−04
0e+00
1e−04
residuals


Forecasts from ARIMA(5,2,1)
0.004
0.006
0.008
0.010
0.012
2010
2015
2020
2025

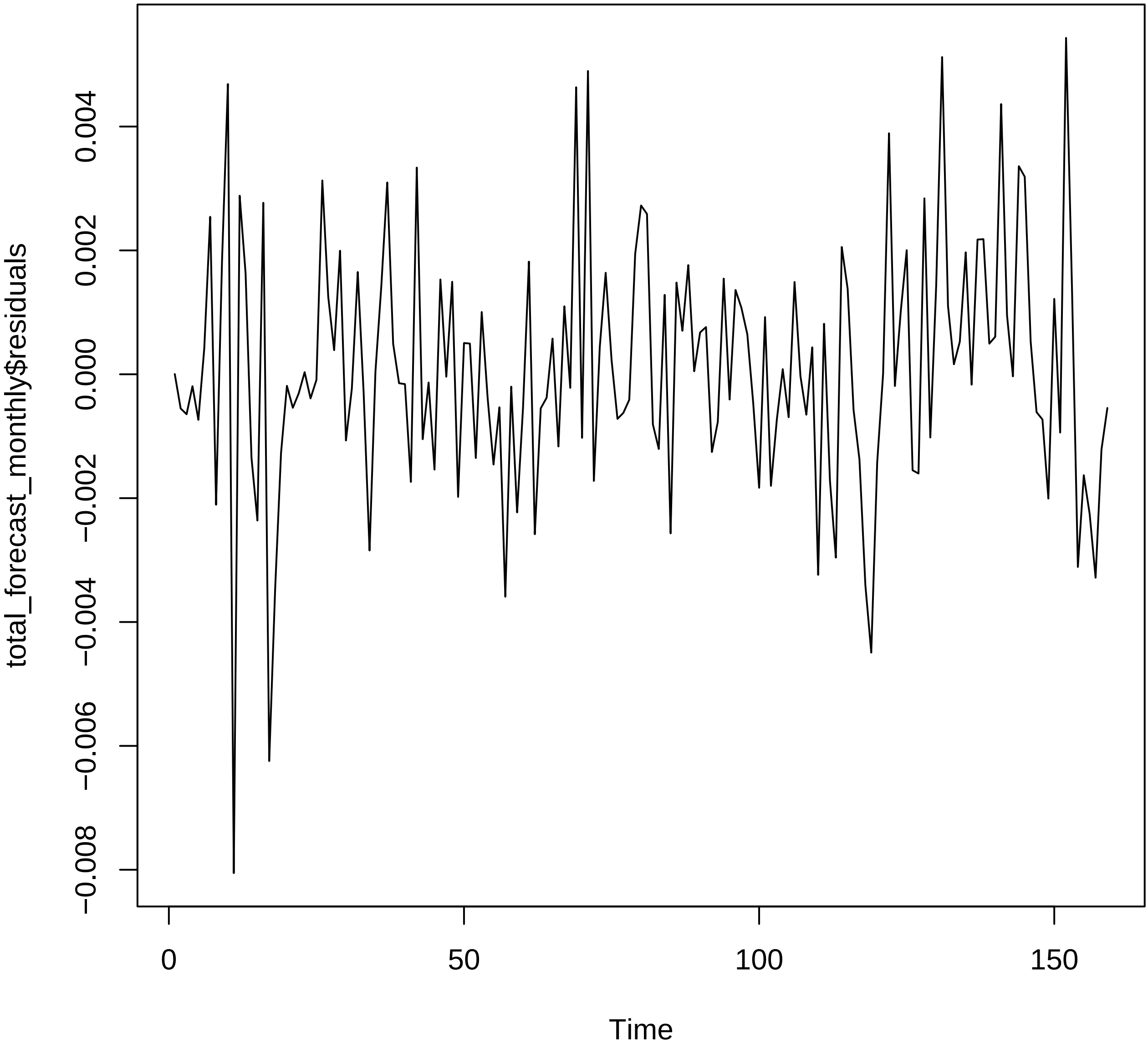


Forecasts from Regression with ARIMA(5,0,1) errors
0.000
0.005
0.010
0.015
0.020
2010
2015
2020
2025

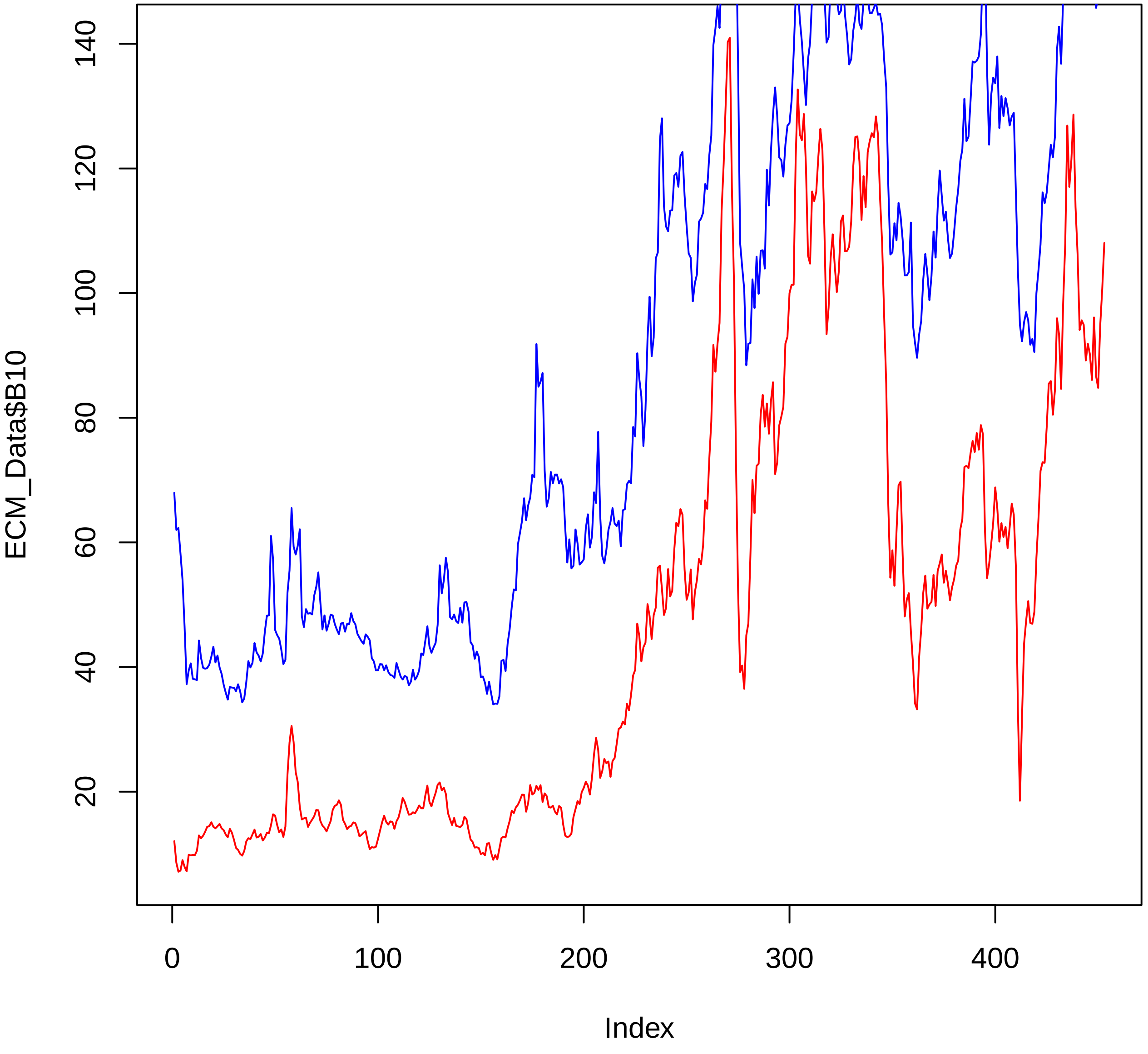

Residuals from ARIMA(1,1,0)
0.005
0.000
−0.005
0
50
100
150
ACF
0.2
0.1
0.0
−0.1
−0.2
0
5
10
15
20
Lag
df$y
40
30
20
10
0
−0.008
−0.004
0.000
0.004
residuals



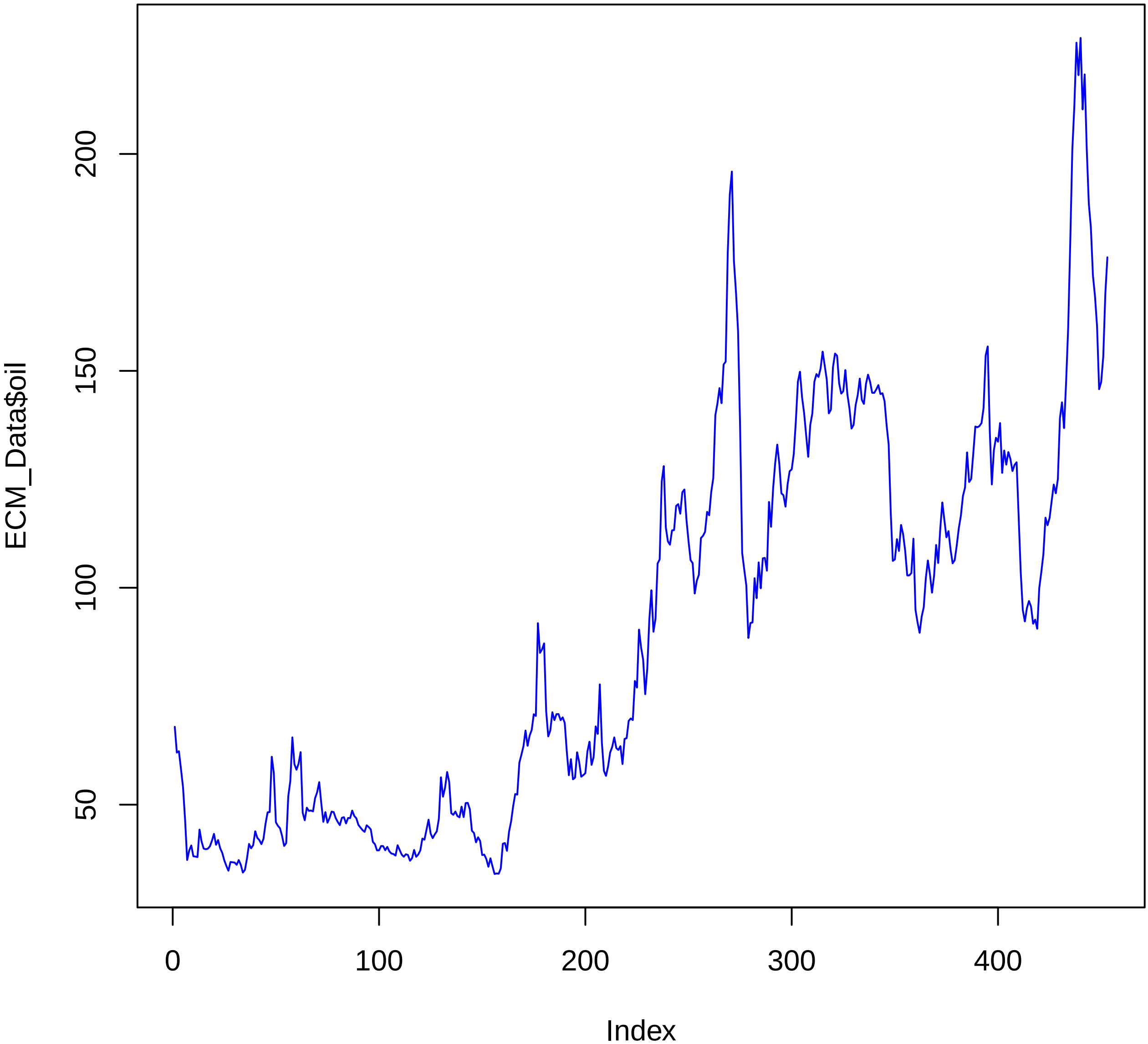
total_forecast_monthly$residuals
0.004
0.002
0.000
−0.002
−0.004
−0.006
−0.008
0
50
100
150
Time

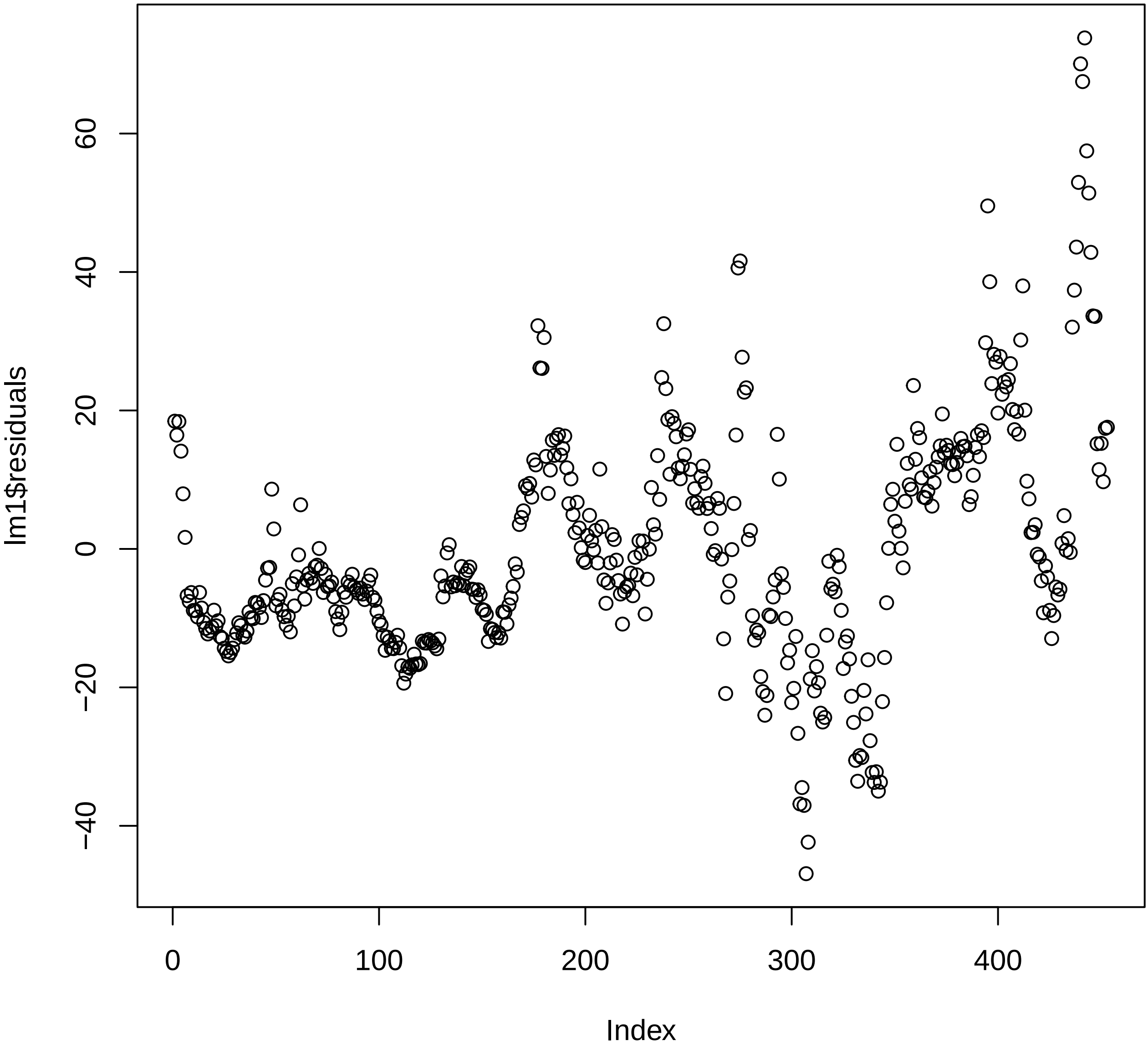


total_forecast_monthly$residuals
0.004
0.002
0.000
−0.002
−0.004
−0.006
−0.008
0
50
100
150
Time

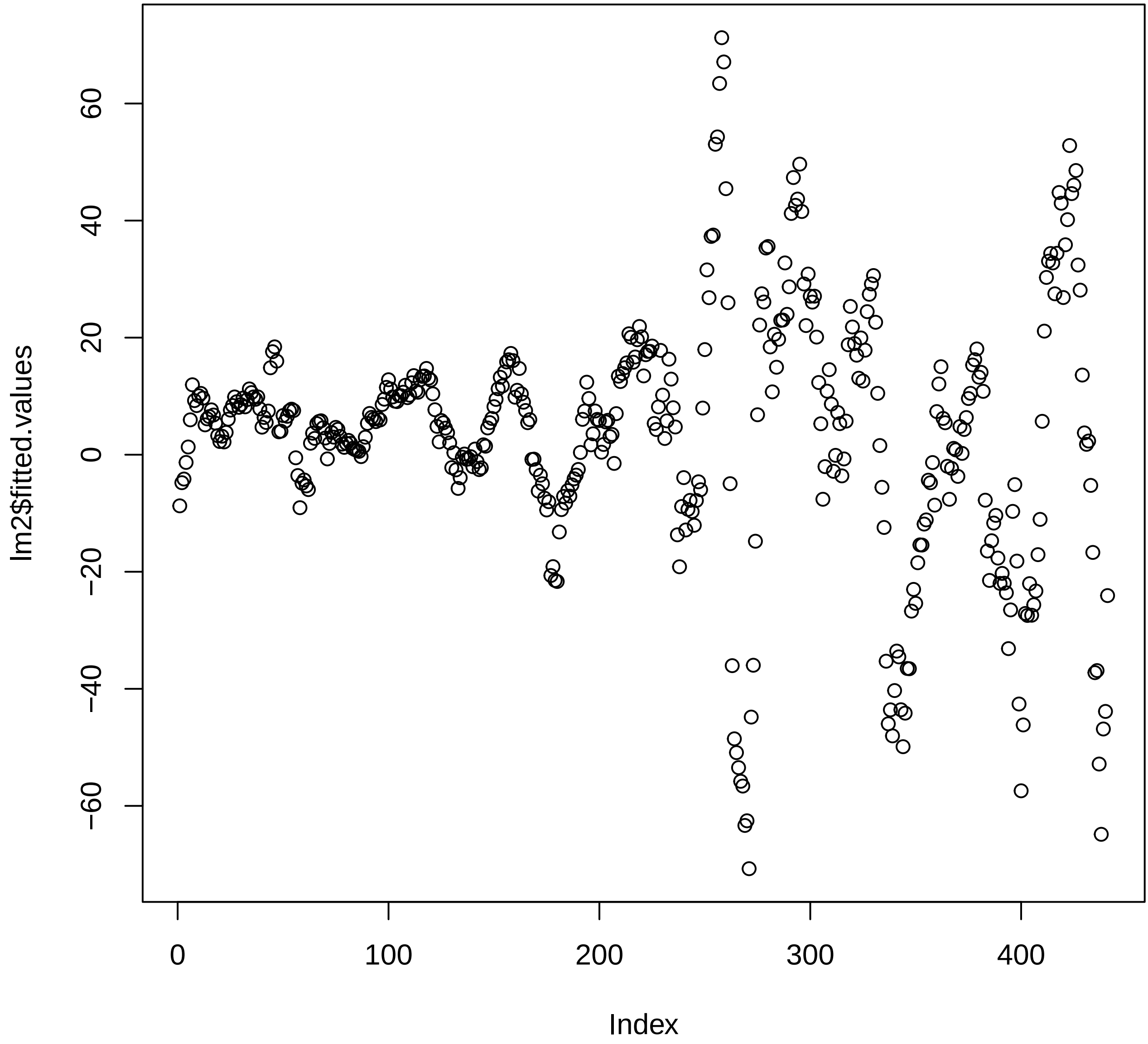


ECM_Data$B10
20
40
60
80
100
120
140
0
100
200
300
400
Index

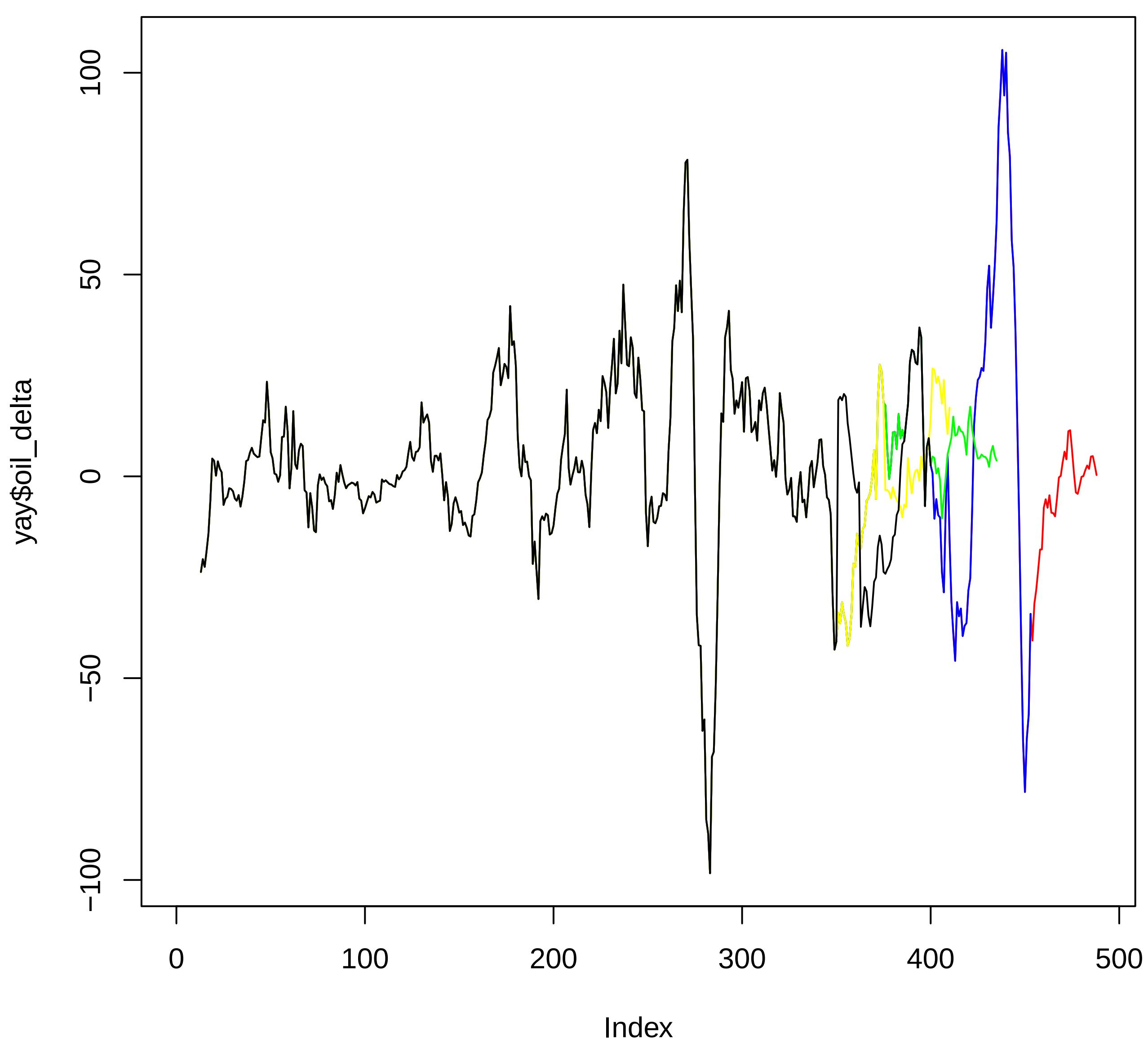

ECM_Data$oil
200
150
100
50
0
100
200
300
400
Index



lm1$residuals
Index
−40
−20
0
20
40
60
0
100
200
300
400



lm2$fitted.values
60
40
20
0
−20
−40
−60
0
100
200
300
400
Index



100
50
0
−50
−100
yay$oil_delta
0
100
200
300
400
500
Index