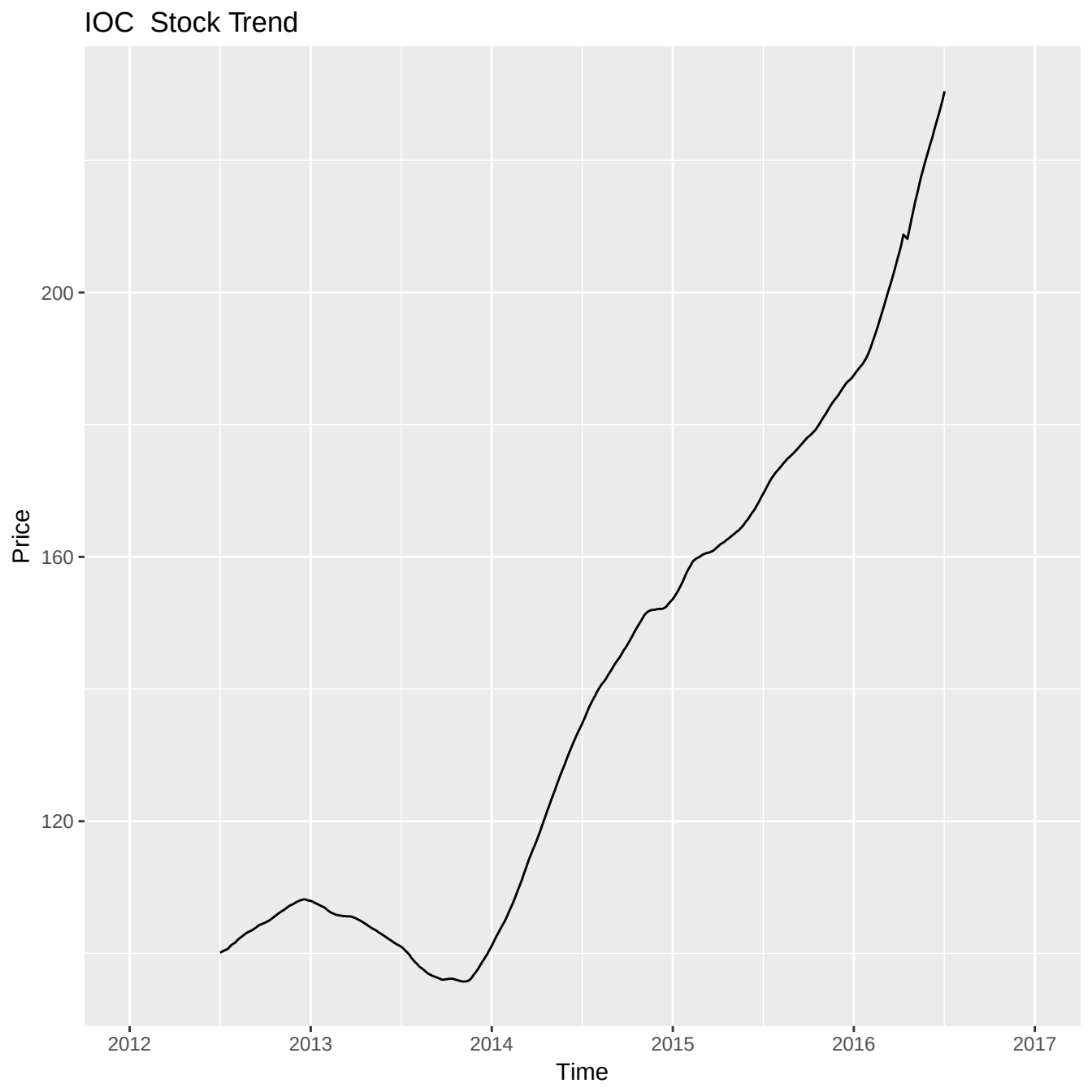
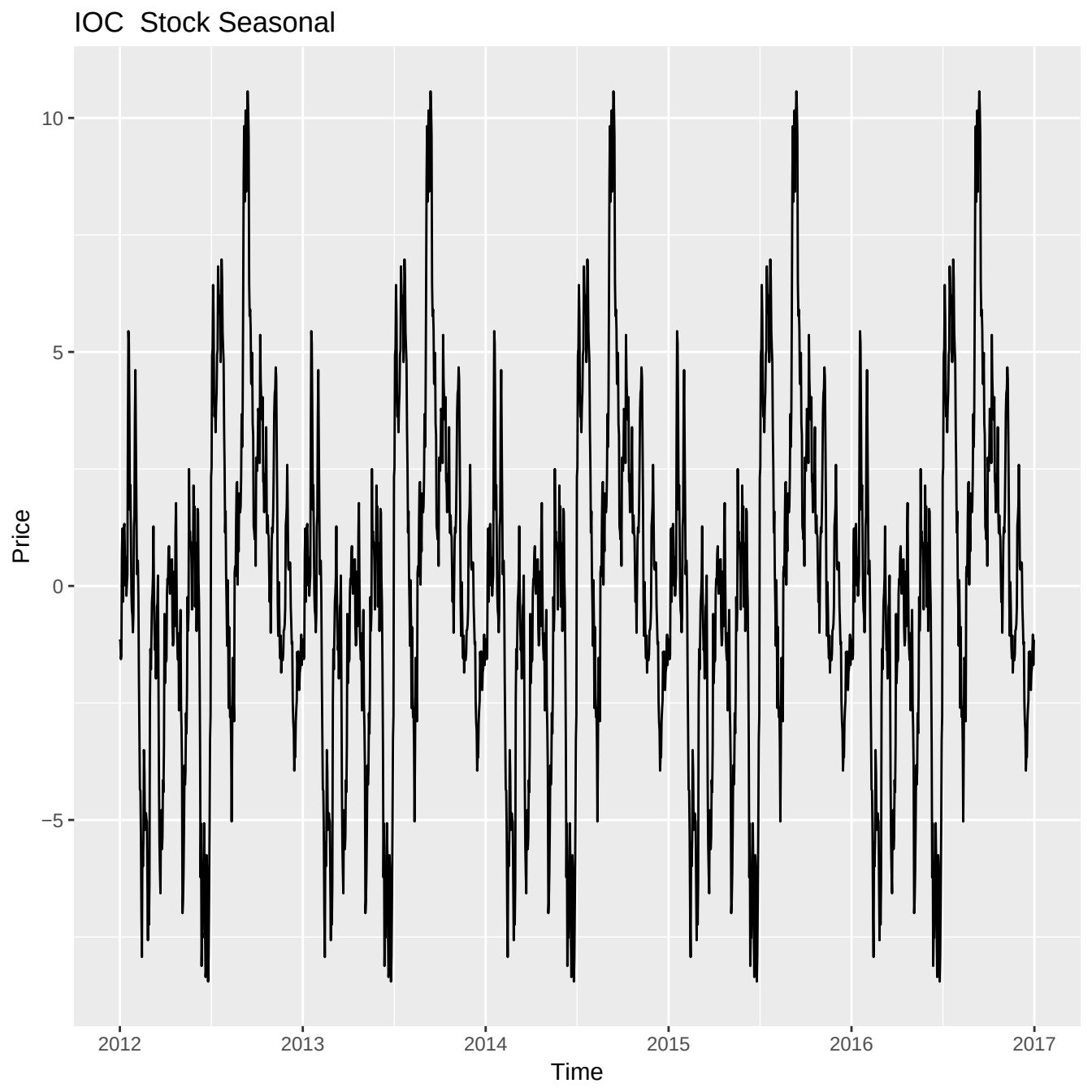
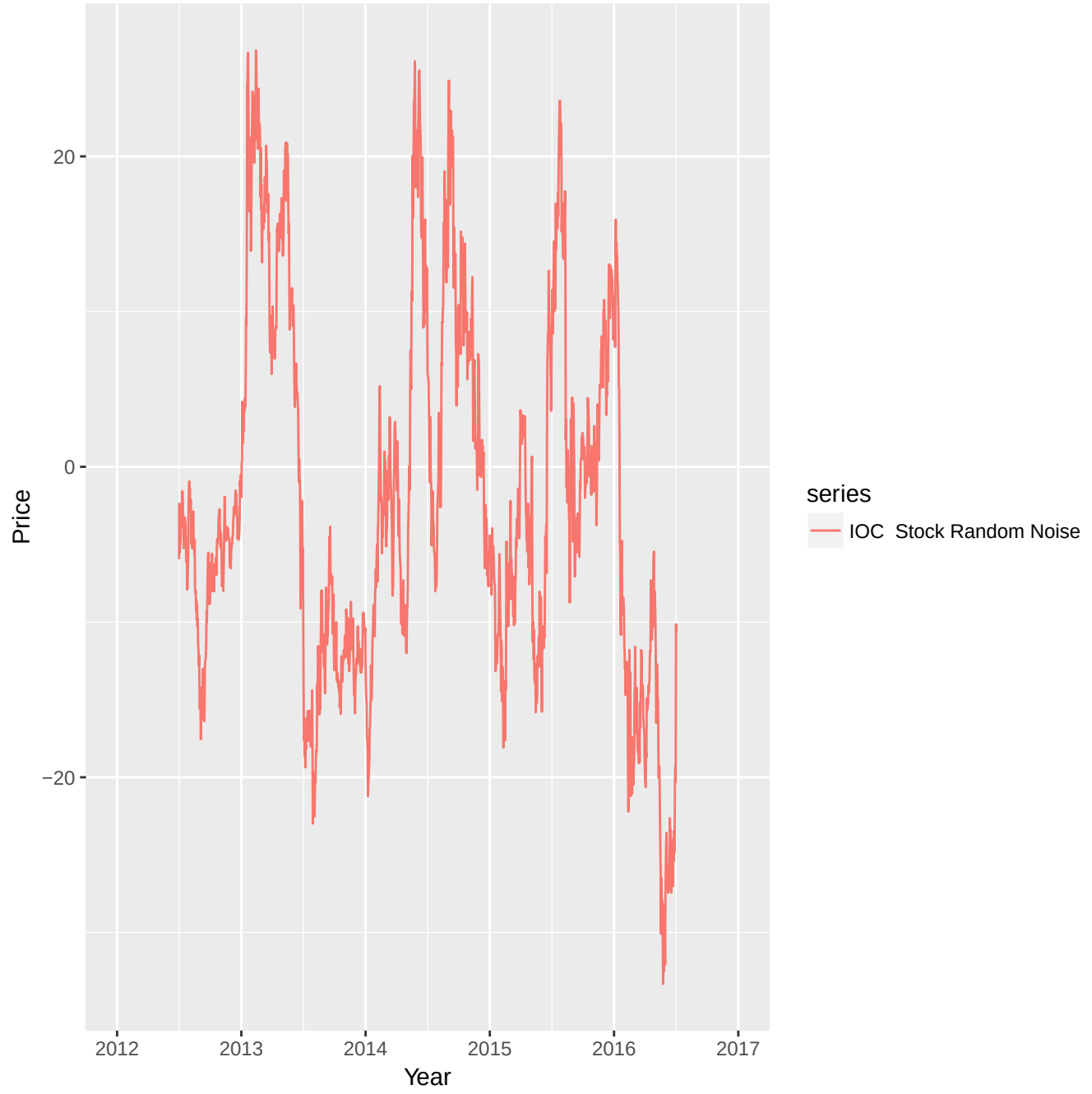
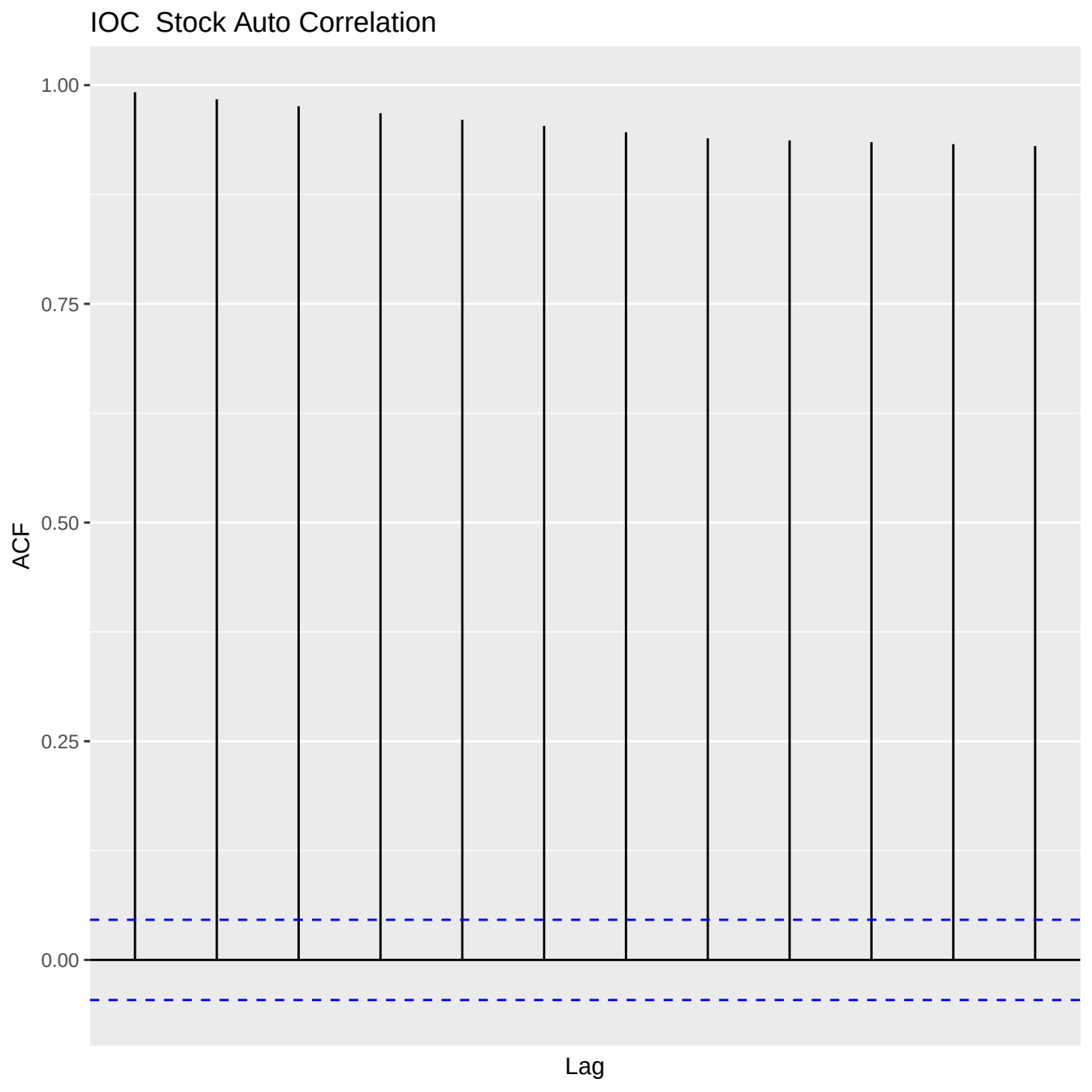
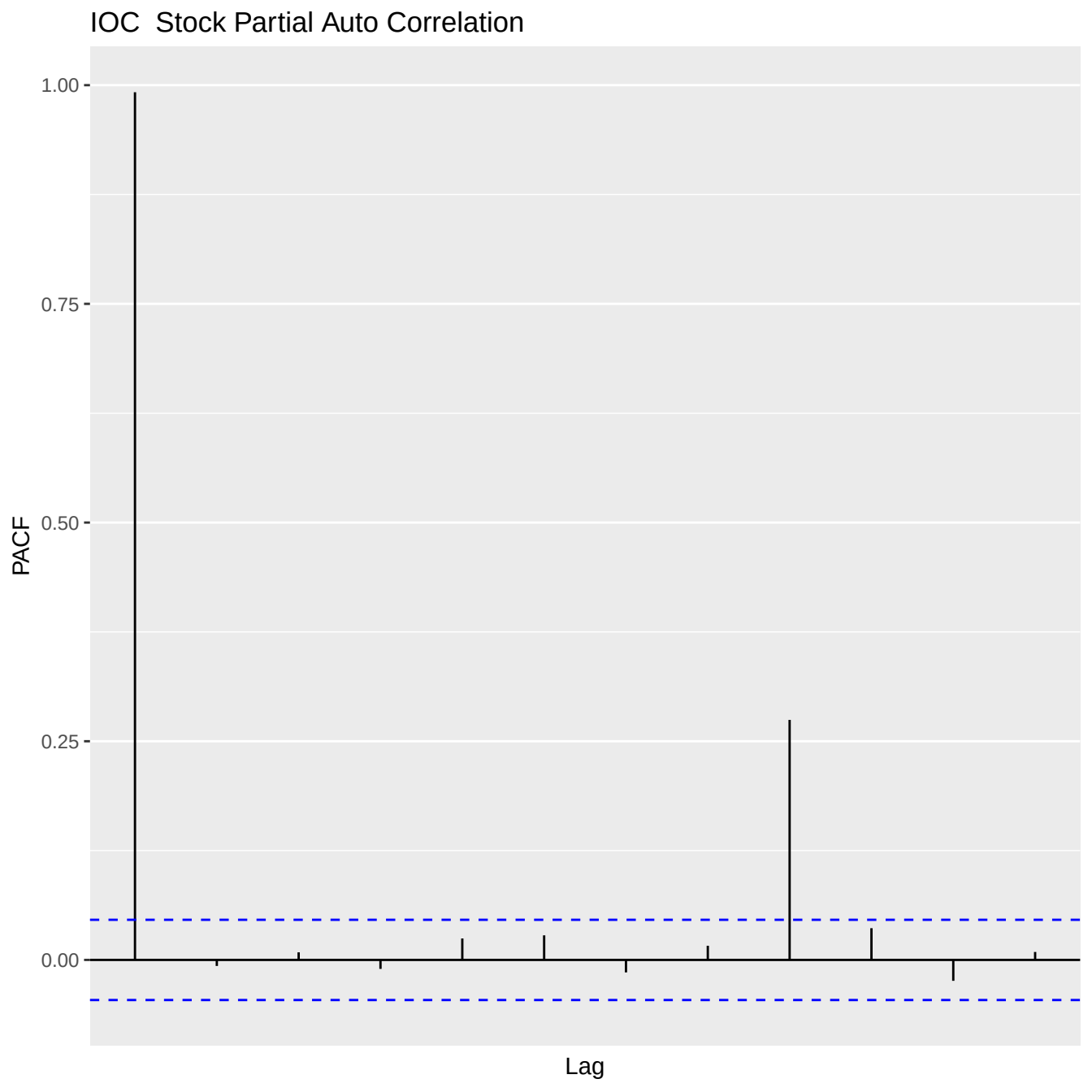
Last 5 Year IOC Stock Price history
Price
300
250
200
150
100
2012
2013
2014
2015
2016
2017
Time

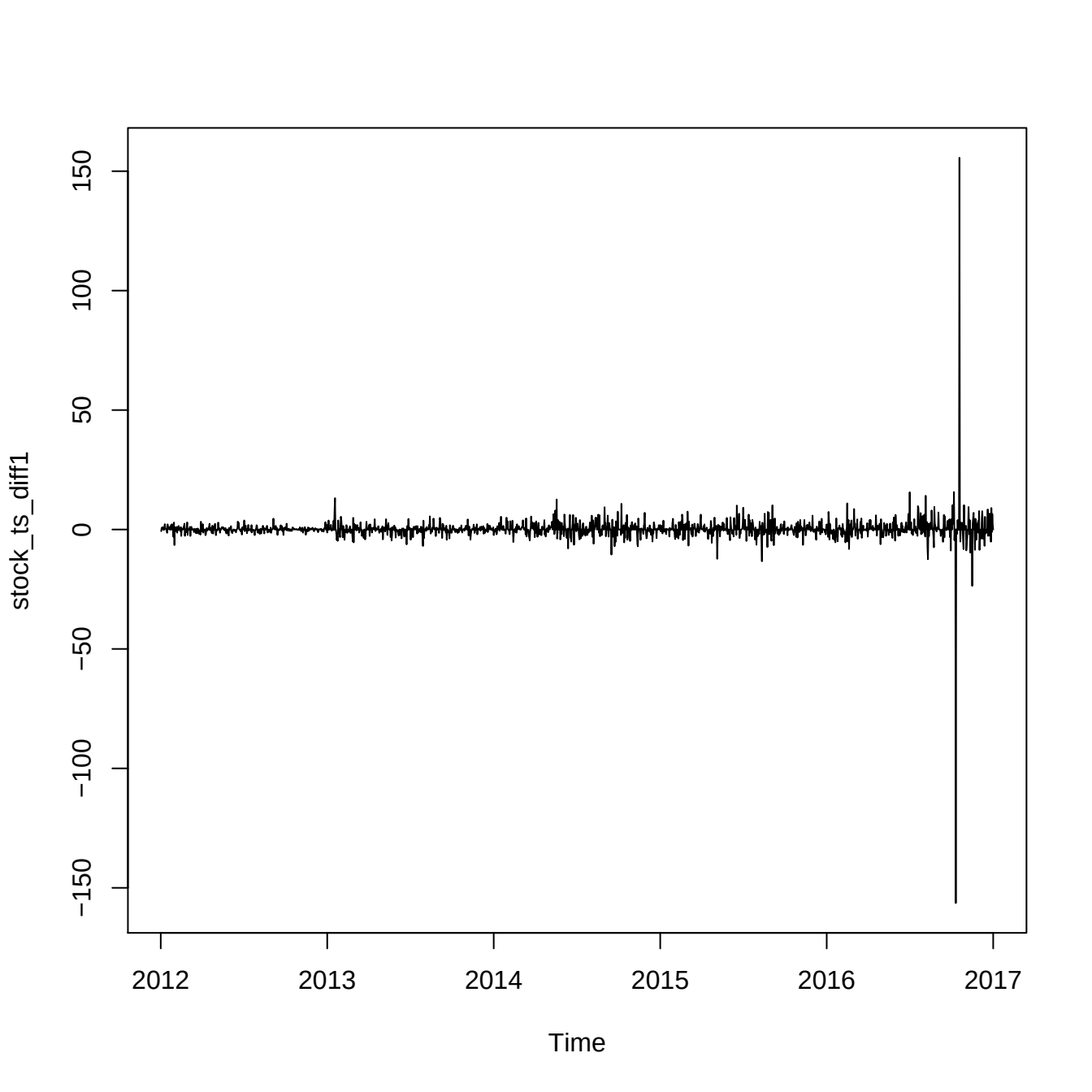

IOC Stock Trend
200
160
120
Price
2012
2013
2014
2015
2016
2017
Time

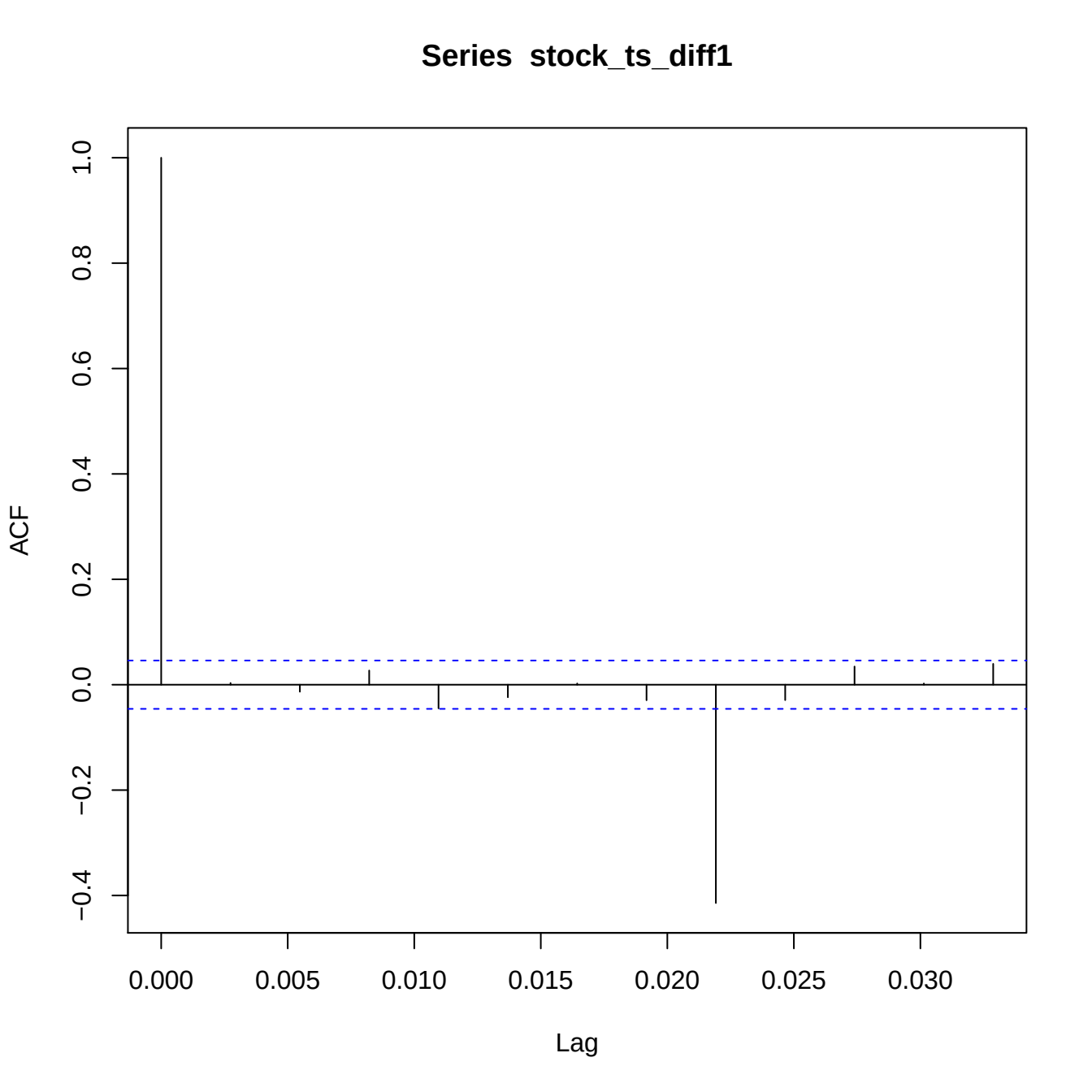

IOC Stock Seasonal
10
5
0
−5
Price
2012
2013
2014
2015
2016
2017
Time

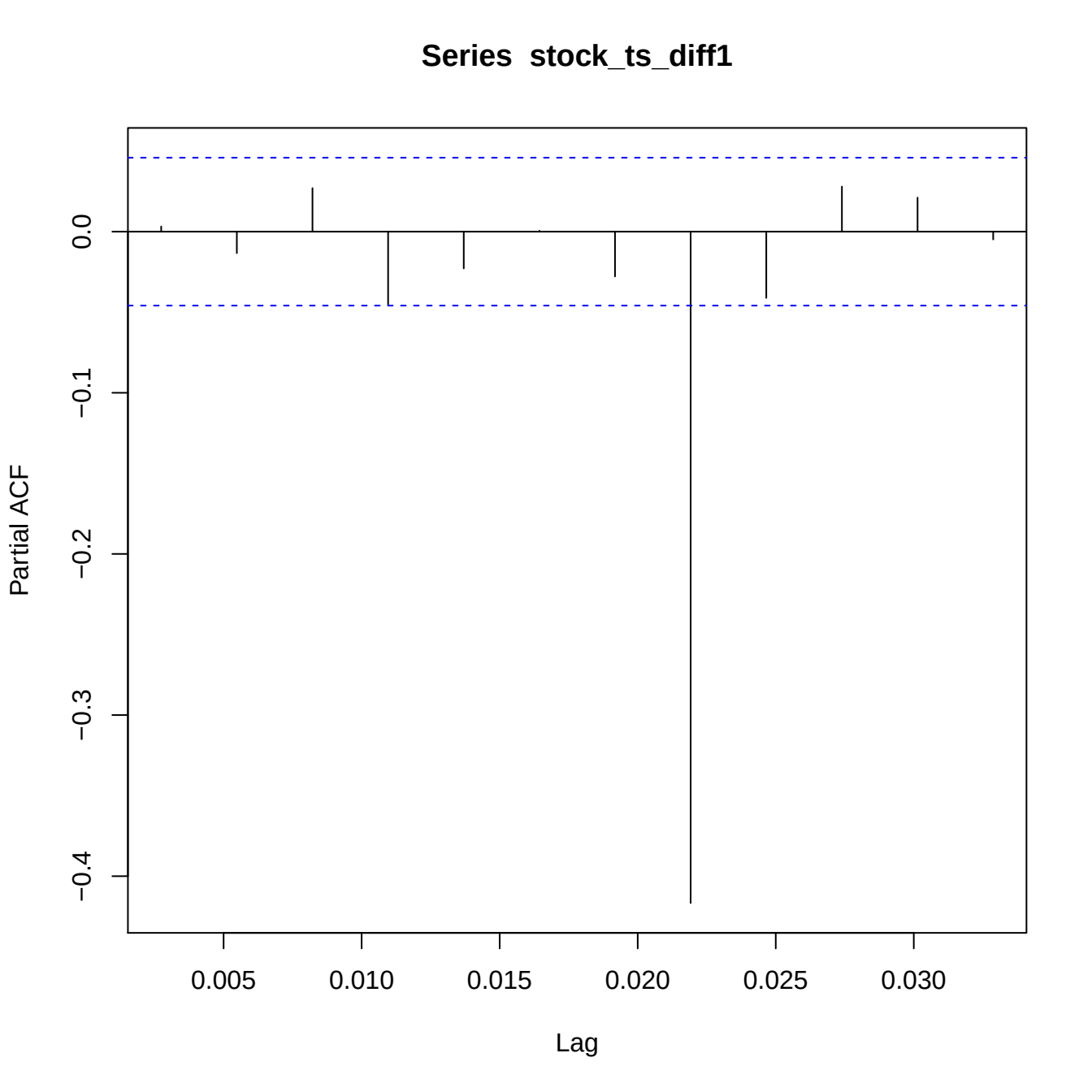

20
0
−20
Price
2012
2013
2014
2015
2016
2017
Year
series
IOC Stock Random Noise

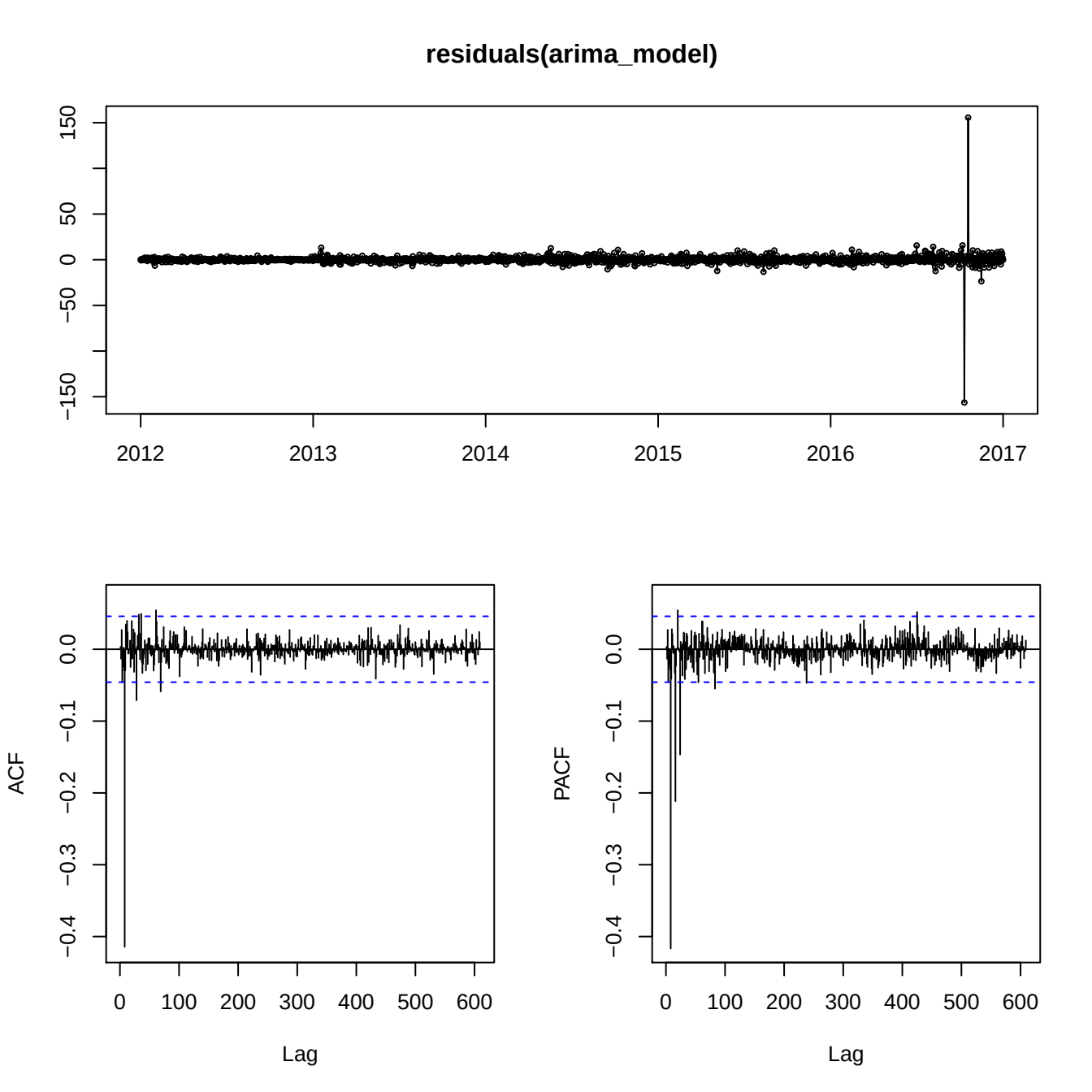

IOC Stock Auto Correlation
1.00
0.75
0.50
0.25
0.00
ACF
Lag

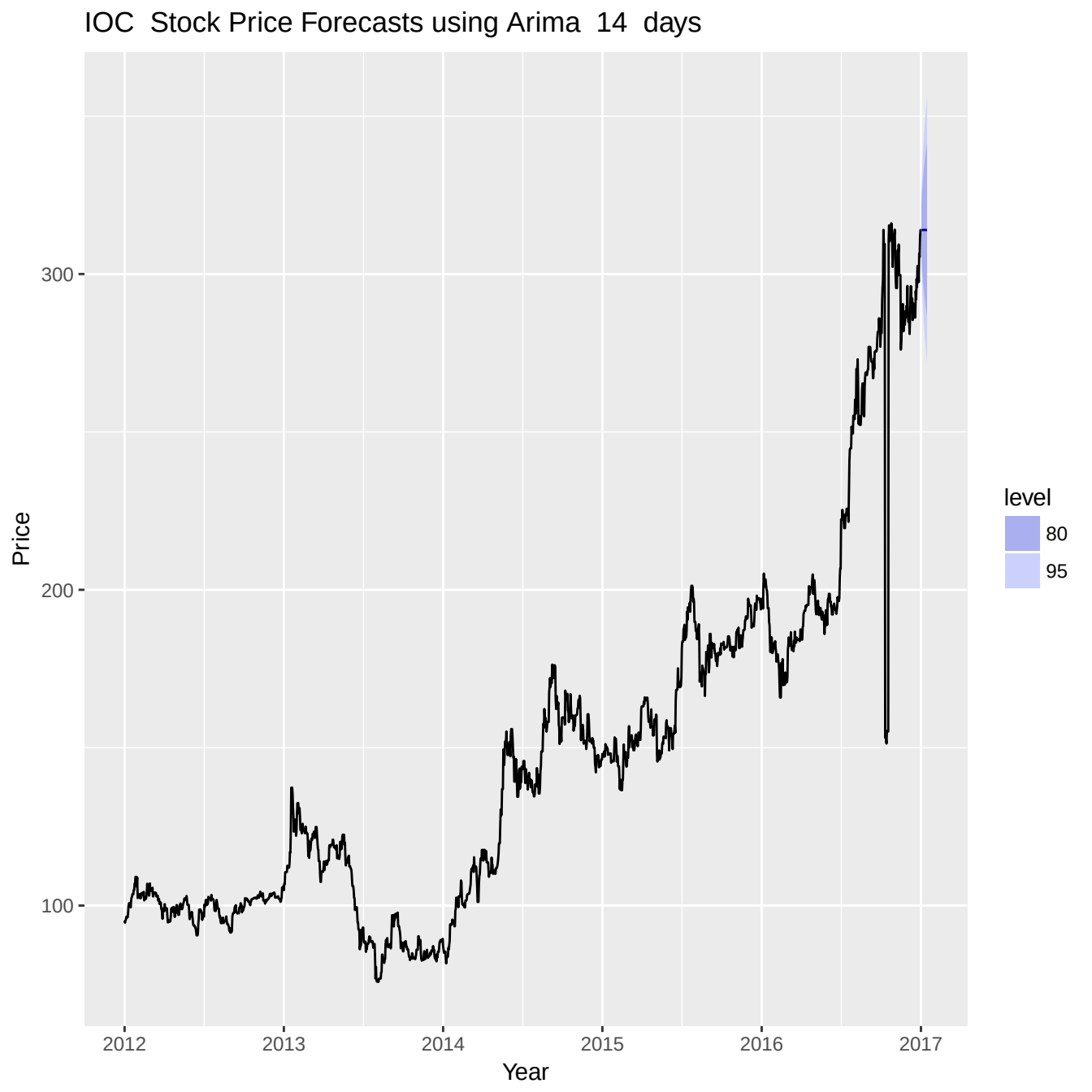

IOC Stock Partial Auto Correlation
1.00
0.75
0.50
0.25
0.00
PACF
Lag

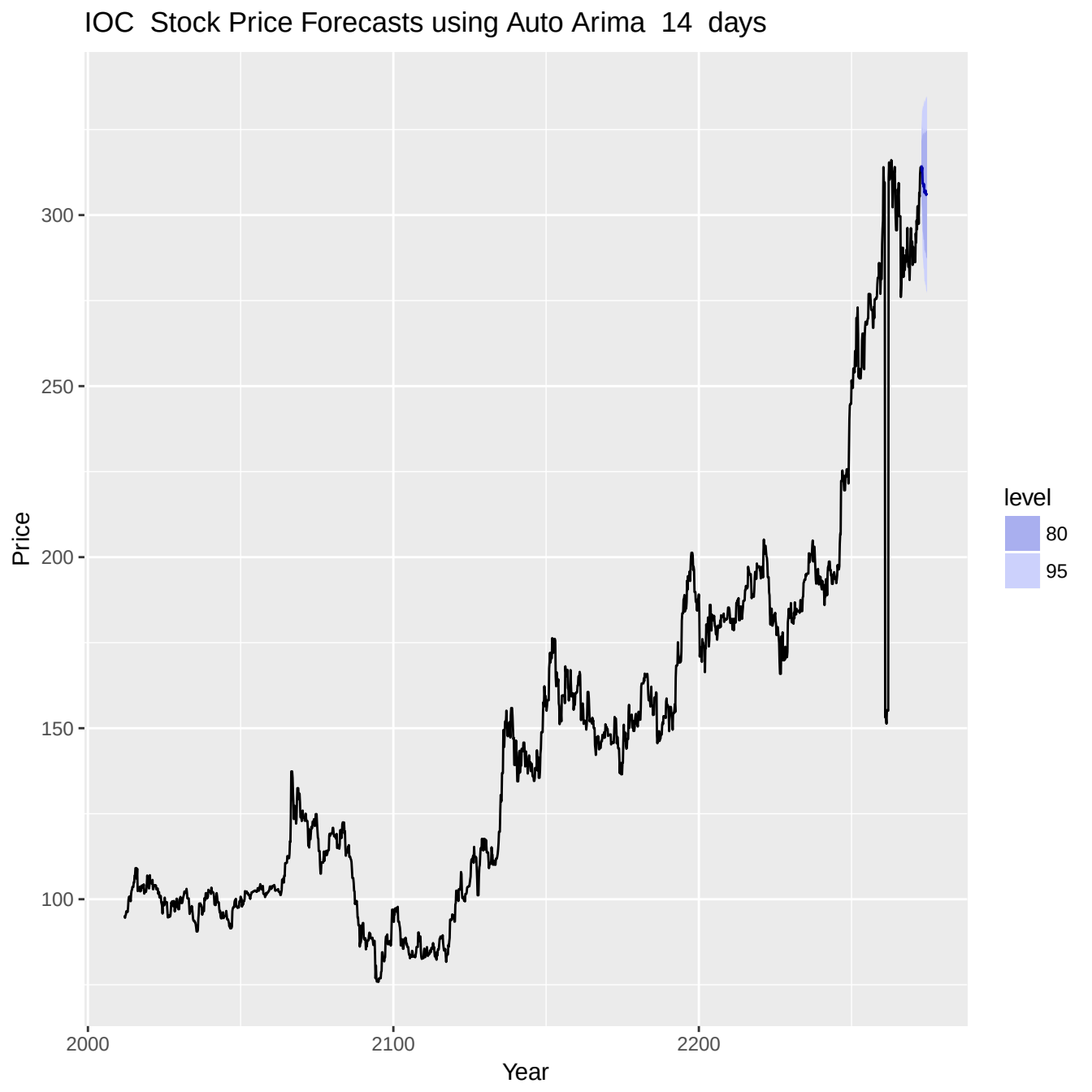

stock_ts_diff1
150
100
50
0
−50
−100
−150
2012
2013
2014
2015
2016
2017
Time

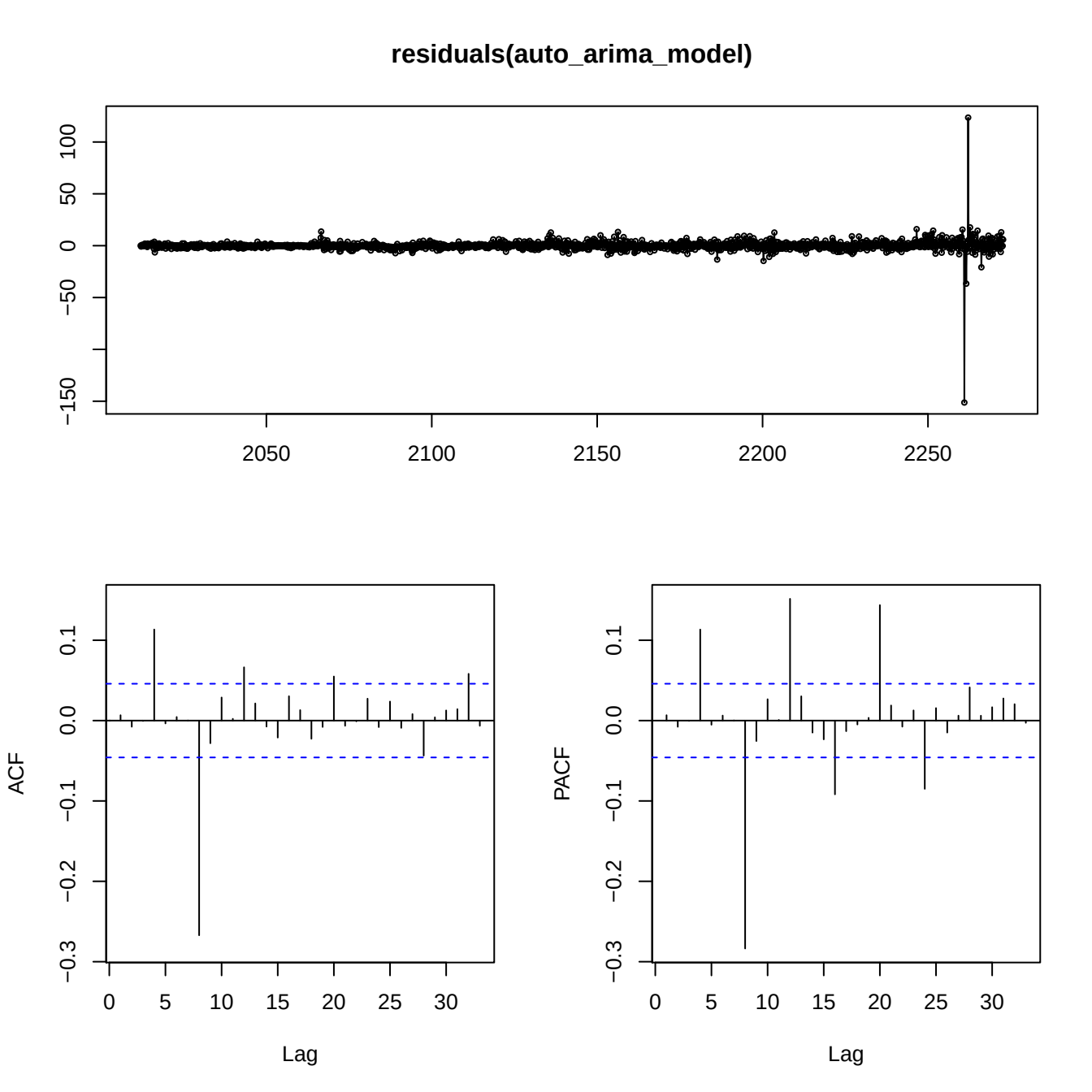

Series stock_ts_diff1
ACF
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
0.000
0.005
0.010
0.015
0.020
0.025
0.030
Lag

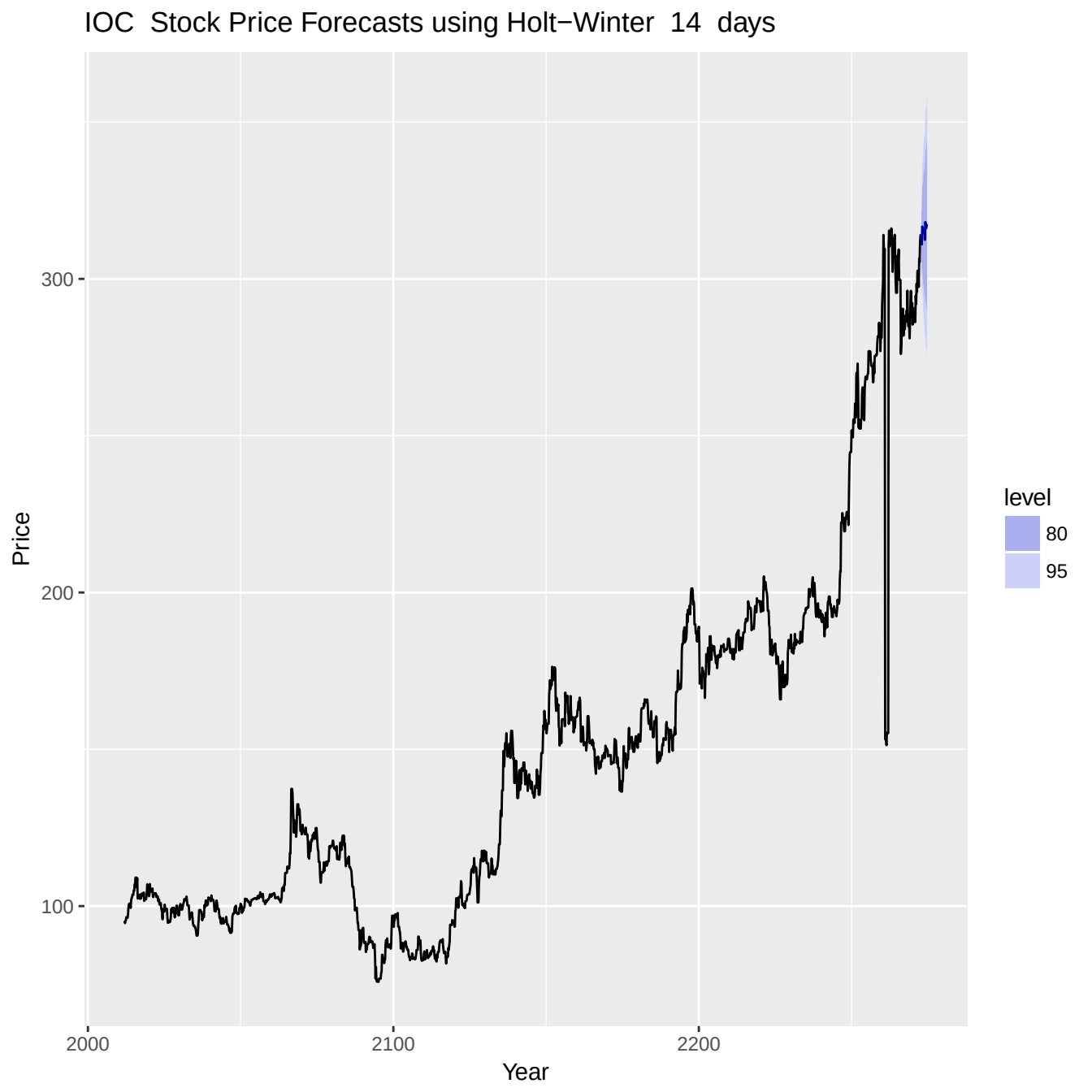

Series stock_ts_diff1
Partial ACF
0.0
−0.1
−0.2
−0.3
−0.4
0.005
0.010
0.015
0.020
0.025
0.030
Lag

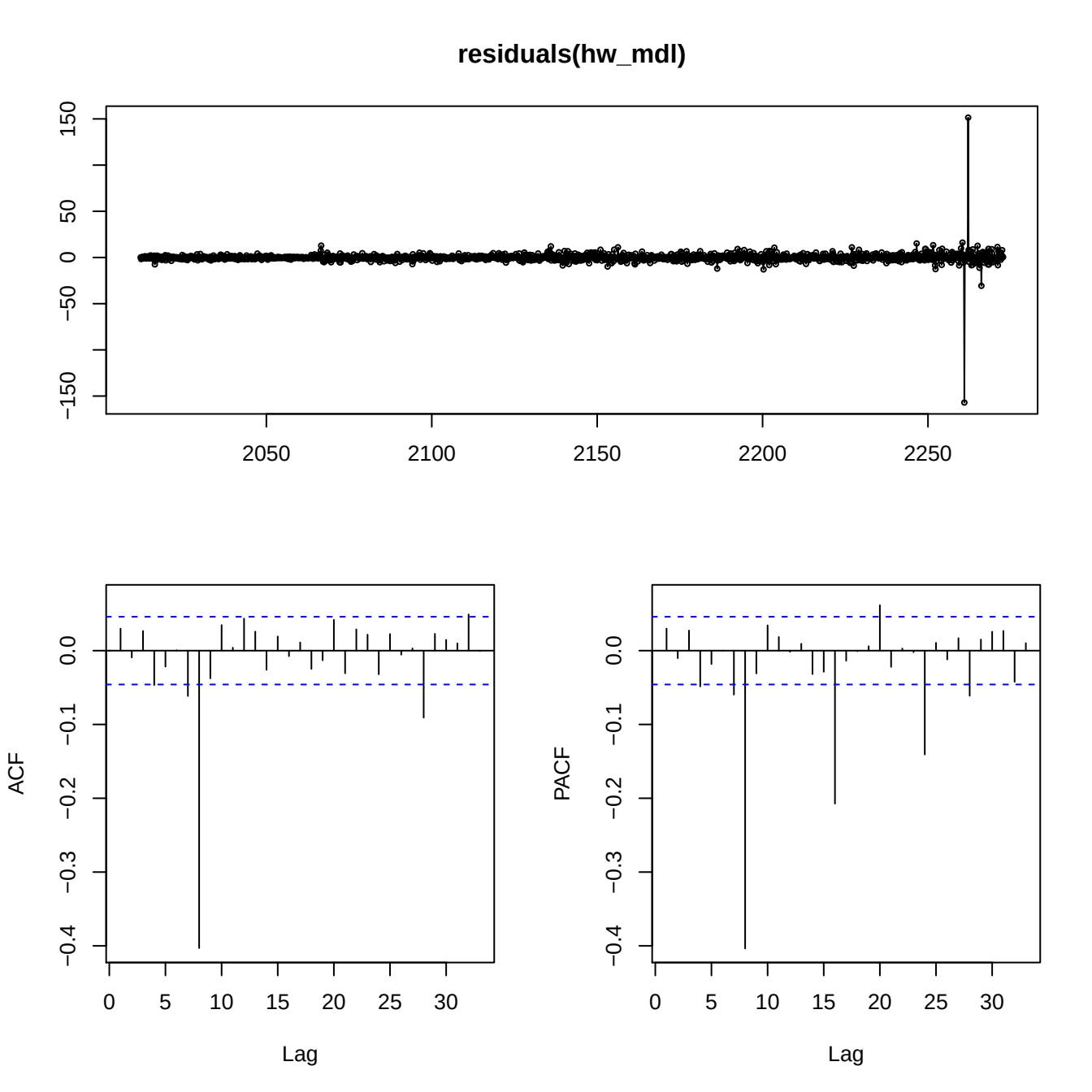

residuals(arima_model)
150
50
0
−50
−150
2012
2013
2014
2015
2016
2017
ACF
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400
500
600
Lag
PACF
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400
500
600
Lag

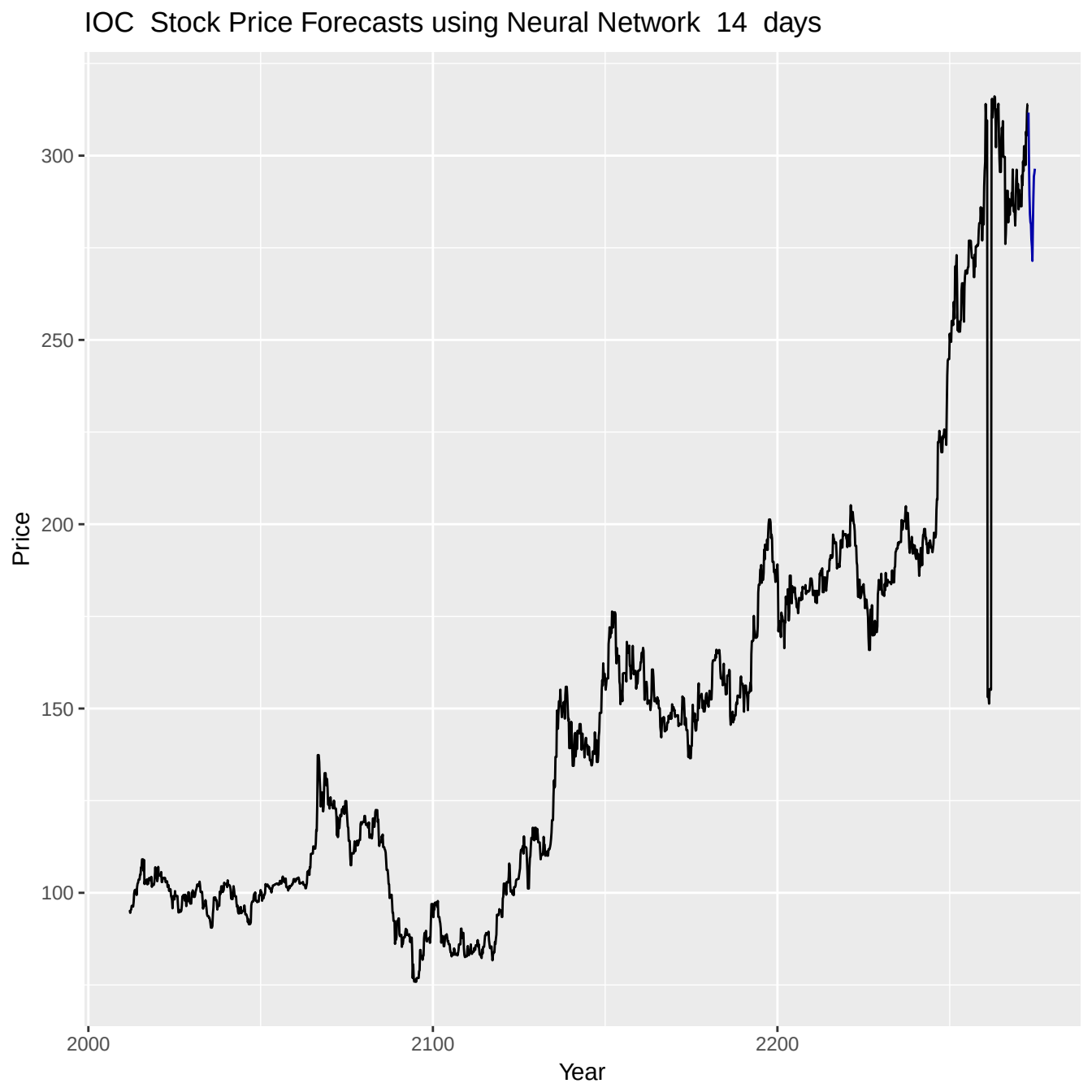

IOC Stock Price Forecasts using Arima 14 days
Price
300
200
100
2012
2013
2014
2015
2016
2017
Year
level
80
95

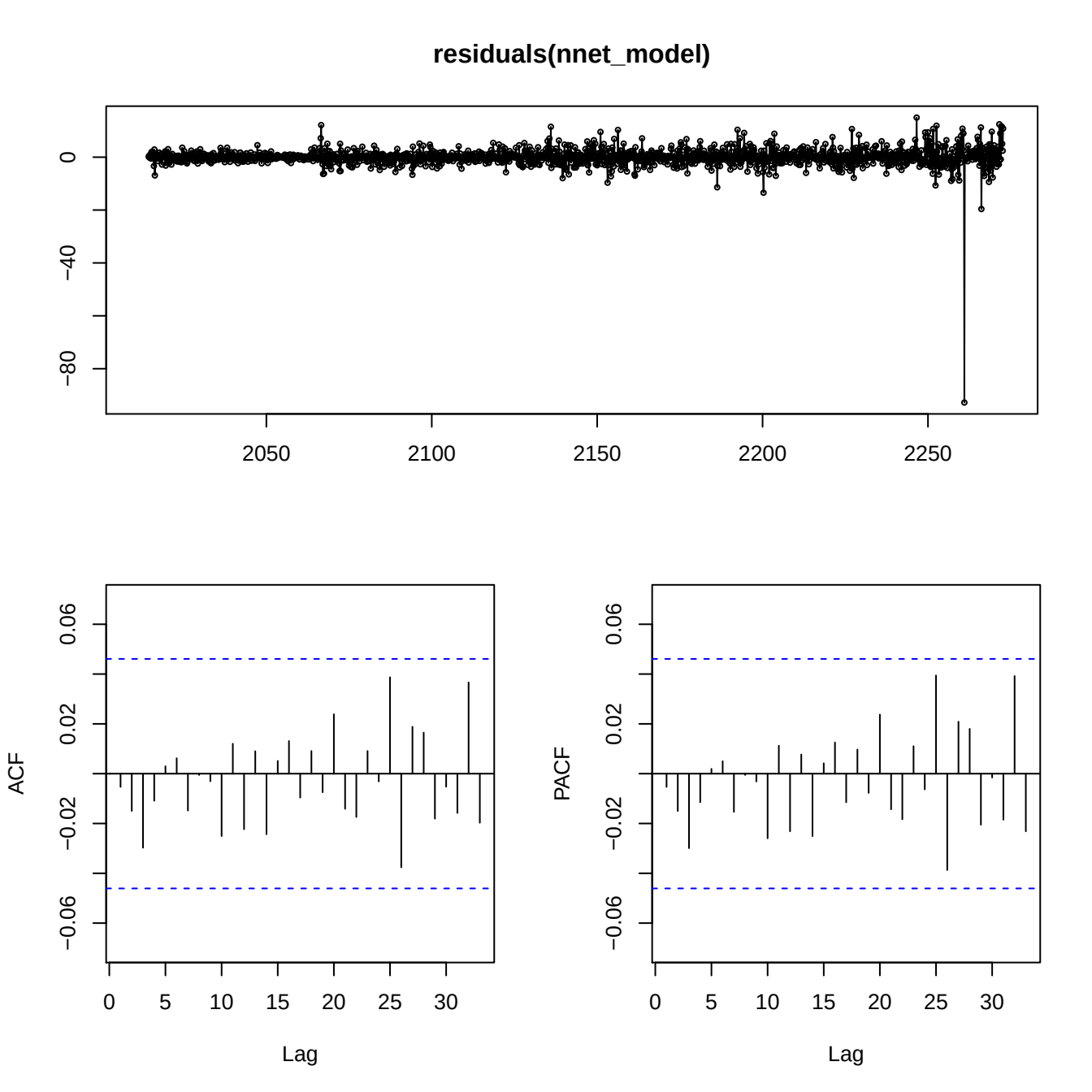

IOC Stock Price Forecasts using Auto Arima 14 days
Price
300
250
200
150
100
2000
2100
2200
Year
level
80
95


residuals(auto_arima_model)
100
50
0
−50
−150
2050
2100
2150
2200
2250
ACF
0.1
0.0
−0.1
−0.2
−0.3
0
5
10
15
20
25
30
Lag
PACF
0.1
0.0
−0.1
−0.2
−0.3
0
5
10
15
20
25
30
Lag


IOC Stock Price Forecasts using Holt−Winter 14 days
Price
300
200
100
2000
2100
2200
Year
level
80
95


residuals(hw_mdl)
150
50
0
−50
−150
2050
2100
2150
2200
2250
ACF
0.0
−0.1
−0.2
−0.3
−0.4
0
5
10
15
20
25
30
Lag
PACF
0.0
−0.1
−0.2
−0.3
−0.4
0
5
10
15
20
25
30
Lag


IOC Stock Price Forecasts using Neural Network 14 days
300
250
200
150
100
Price
2000
2100
2200
Year


residuals(nnet_model)
0
−40
−80
2050
2100
2150
2200
2250
ACF
0.06
0.02
−0.02
−0.06
0
5
10
15
20
25
30
Lag
PACF
0.06
0.02
−0.02
−0.06
0
5
10
15
20
25
30
Lag