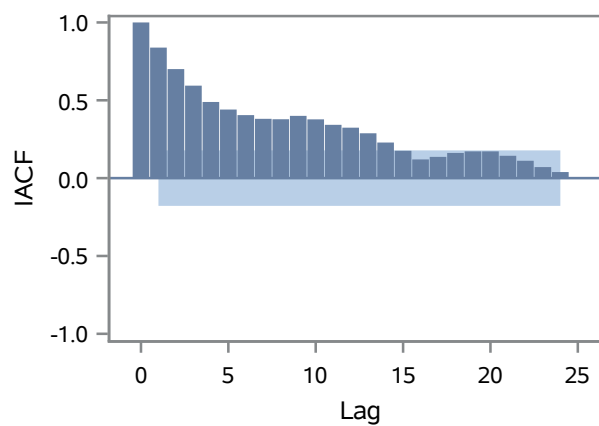
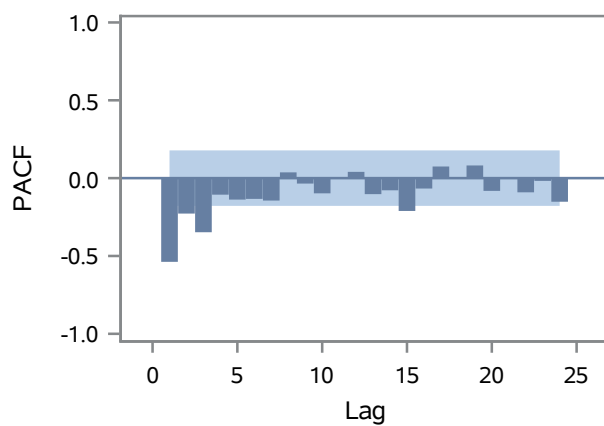
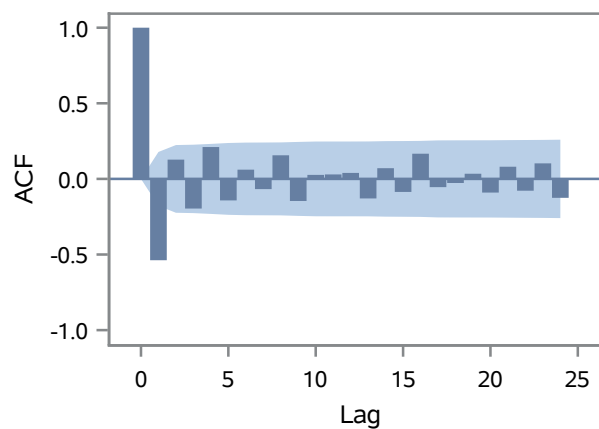
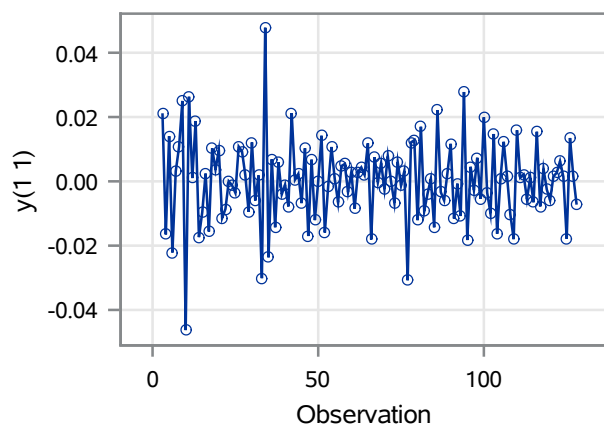


The ARIMA Procedure

Name of Variable = y	
Period(s) of Differencing	1,1
Mean of Working Series	0.000145
Standard Deviation	0.012795
Number of Observations	126
Observation(s) eliminated by differencing	2

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	53.52	6	<.0001	-0.538	0.127	-0.196	0.211	-0.142	0.061
12	60.85	12	<.0001	-0.068	0.156	-0.146	0.027	0.030	0.040
18	69.64	18	<.0001	-0.129	0.071	-0.086	0.166	-0.054	-0.027
24	77.13	24	<.0001	0.034	-0.090	0.080	-0.078	0.103	-0.125

Trend and Correlation Analysis for y(1 1)



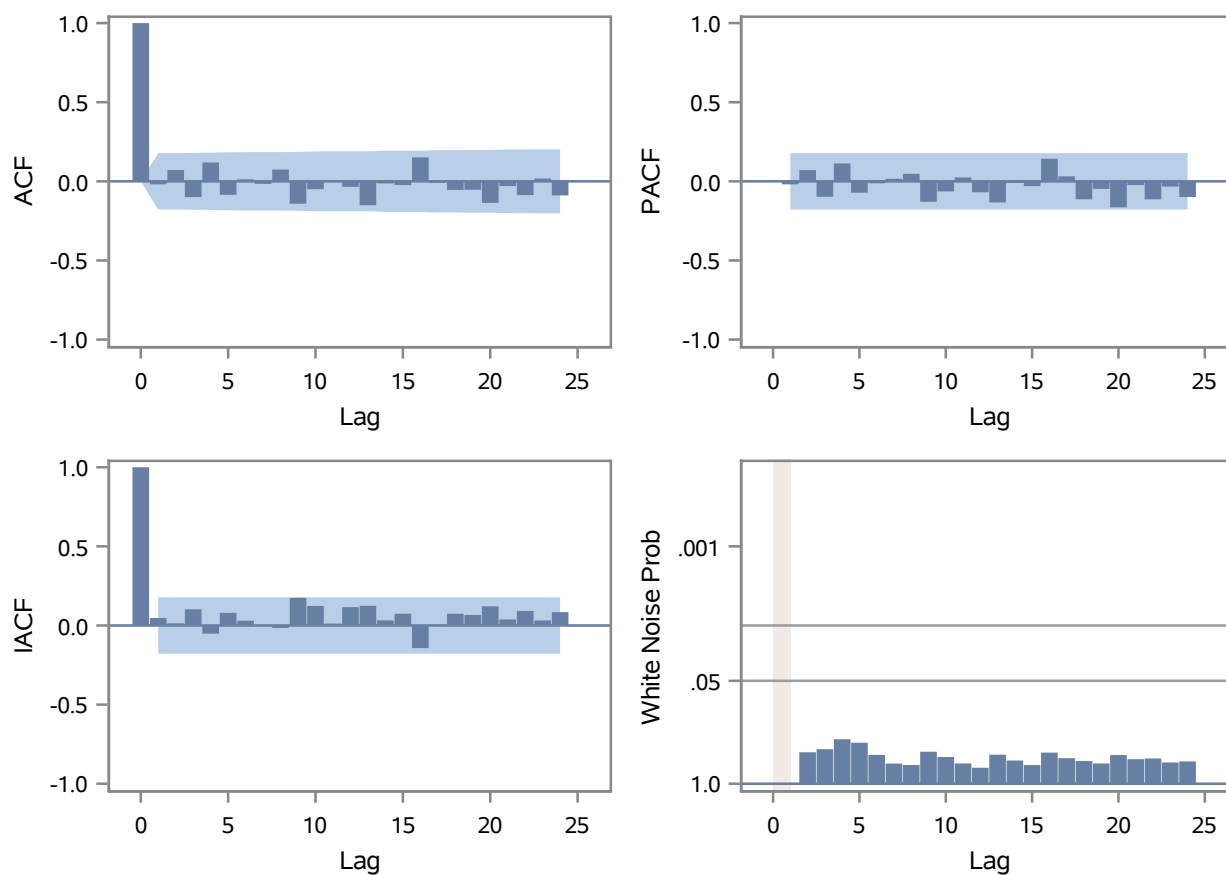
The ARIMA Procedure

Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MA1,1	0.88885	0.04283	20.75	<.0001	1

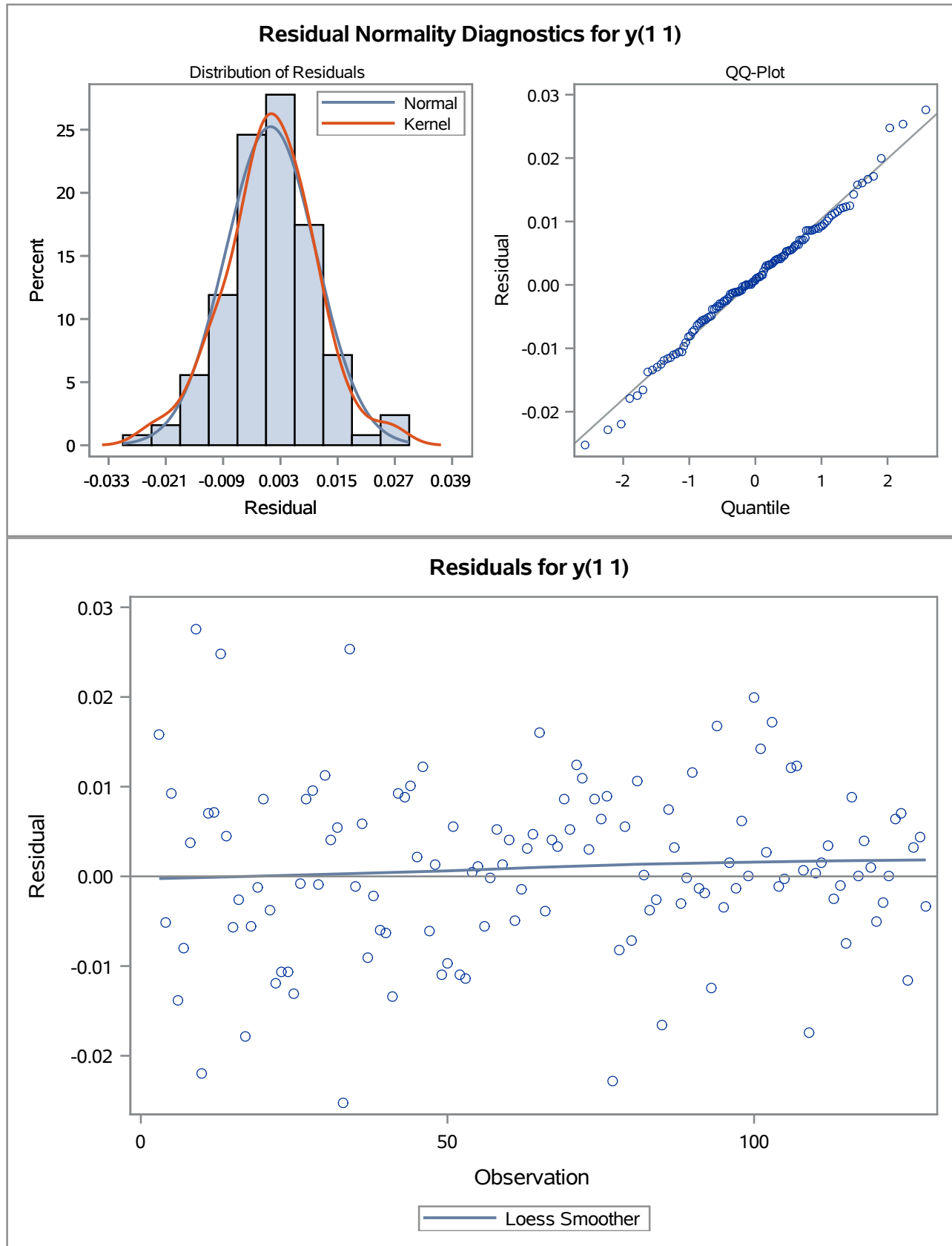
Variance Estimate	0.000091
Std Error Estimate	0.00953
AIC	-812.512
SBC	-809.675
Number of Residuals	126

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	4.88	5	0.4313	-0.010	0.080	-0.091	0.128	-0.074	0.022
12	8.52	11	0.6664	-0.009	0.083	-0.131	-0.041	0.002	-0.028
18	15.53	17	0.5576	-0.144	-0.006	-0.015	0.159	0.000	-0.045
24	20.05	23	0.6389	-0.043	-0.123	-0.017	-0.074	0.030	-0.075

Residual Correlation Diagnostics for y(1 1)



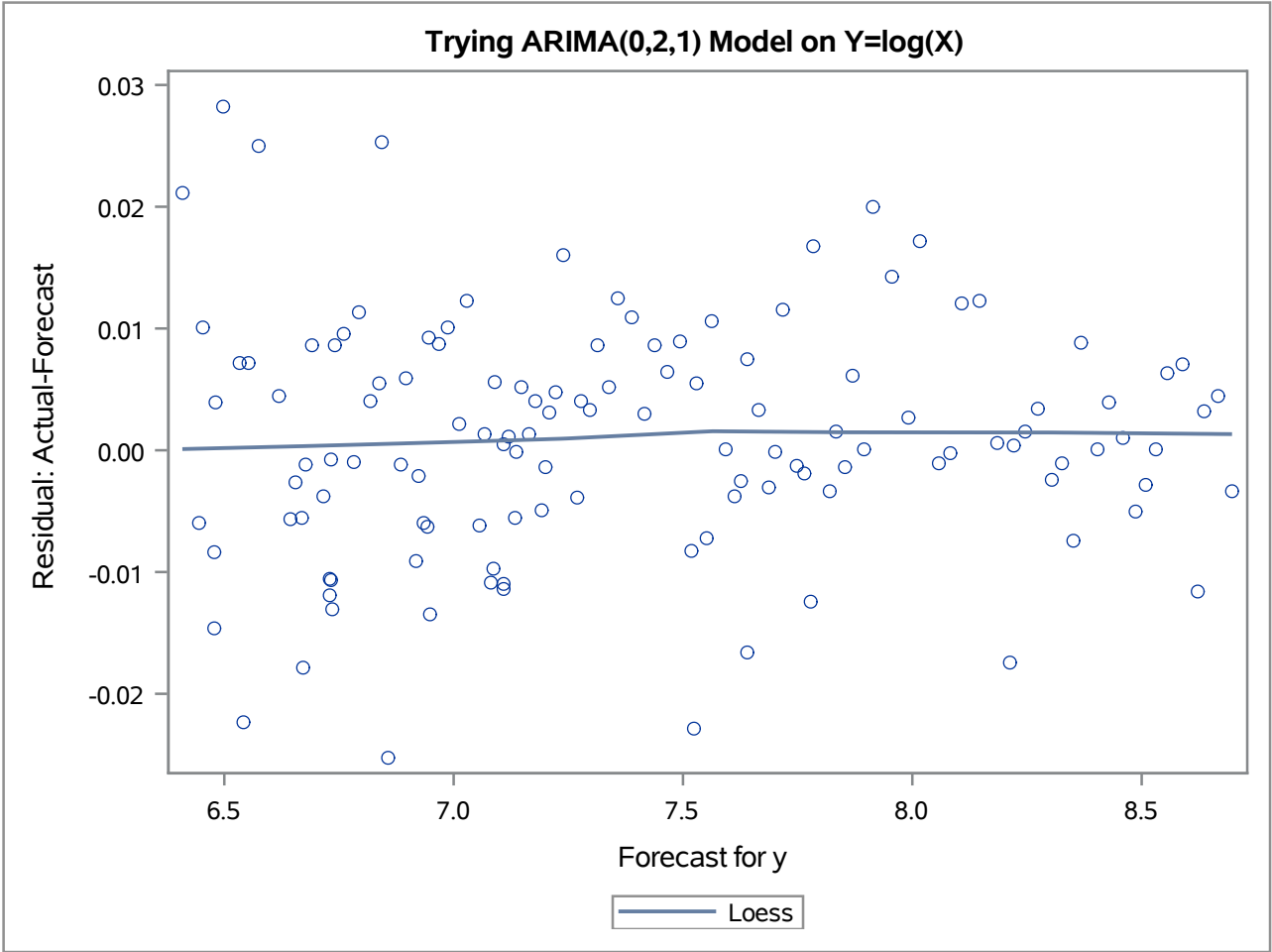
The ARIMA Procedure



No mean term in this model.

The ARIMA Procedure

Moving Average Factors	
Factor 1:	$1 - 0.88885 B^{(1)}$

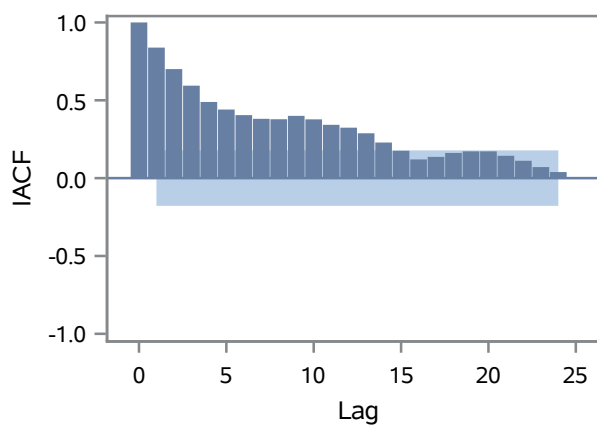
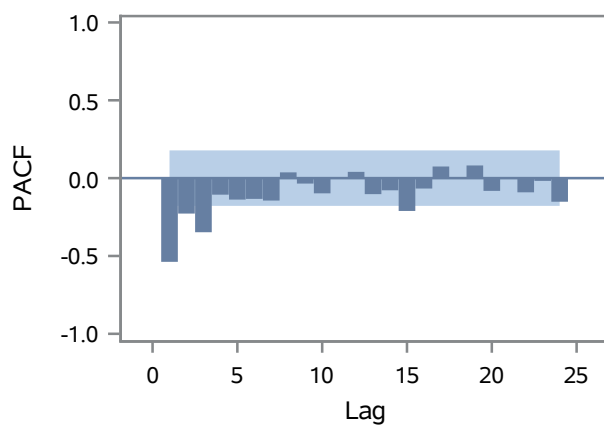
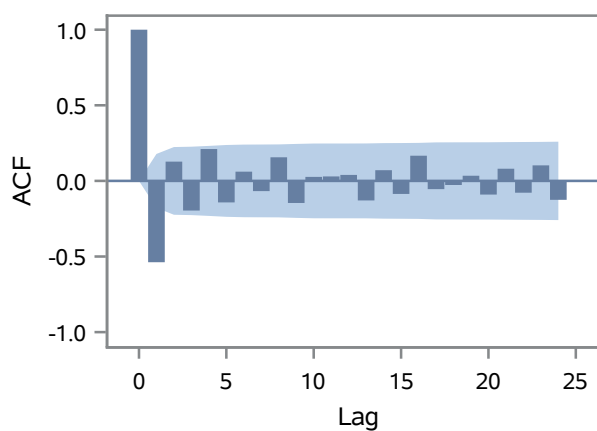
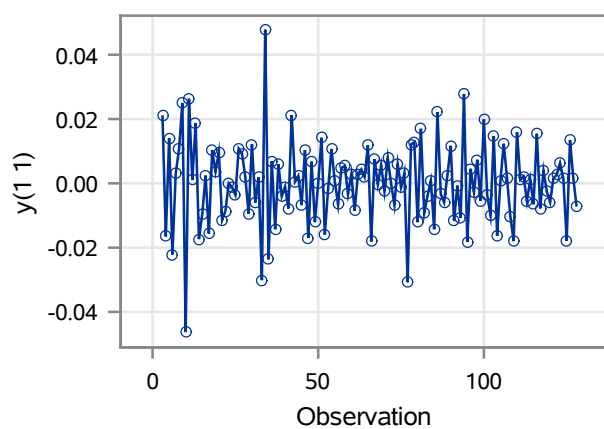


The ARIMA Procedure

Name of Variable = y	
Period(s) of Differencing	1,1
Mean of Working Series	0.000145
Standard Deviation	0.012795
Number of Observations	126
Observation(s) eliminated by differencing	2

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	53.52	6	<.0001	-0.538	0.127	-0.196	0.211	-0.142	0.061
12	60.85	12	<.0001	-0.068	0.156	-0.146	0.027	0.030	0.040
18	69.64	18	<.0001	-0.129	0.071	-0.086	0.166	-0.054	-0.027
24	77.13	24	<.0001	0.034	-0.090	0.080	-0.078	0.103	-0.125

Trend and Correlation Analysis for y(1 1)



The ARIMA Procedure

Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
AR1,1	-0.75224	0.08374	-8.98	<.0001	1
AR1,2	-0.46504	0.09939	-4.68	<.0001	2
AR1,3	-0.35917	0.08430	-4.26	<.0001	3

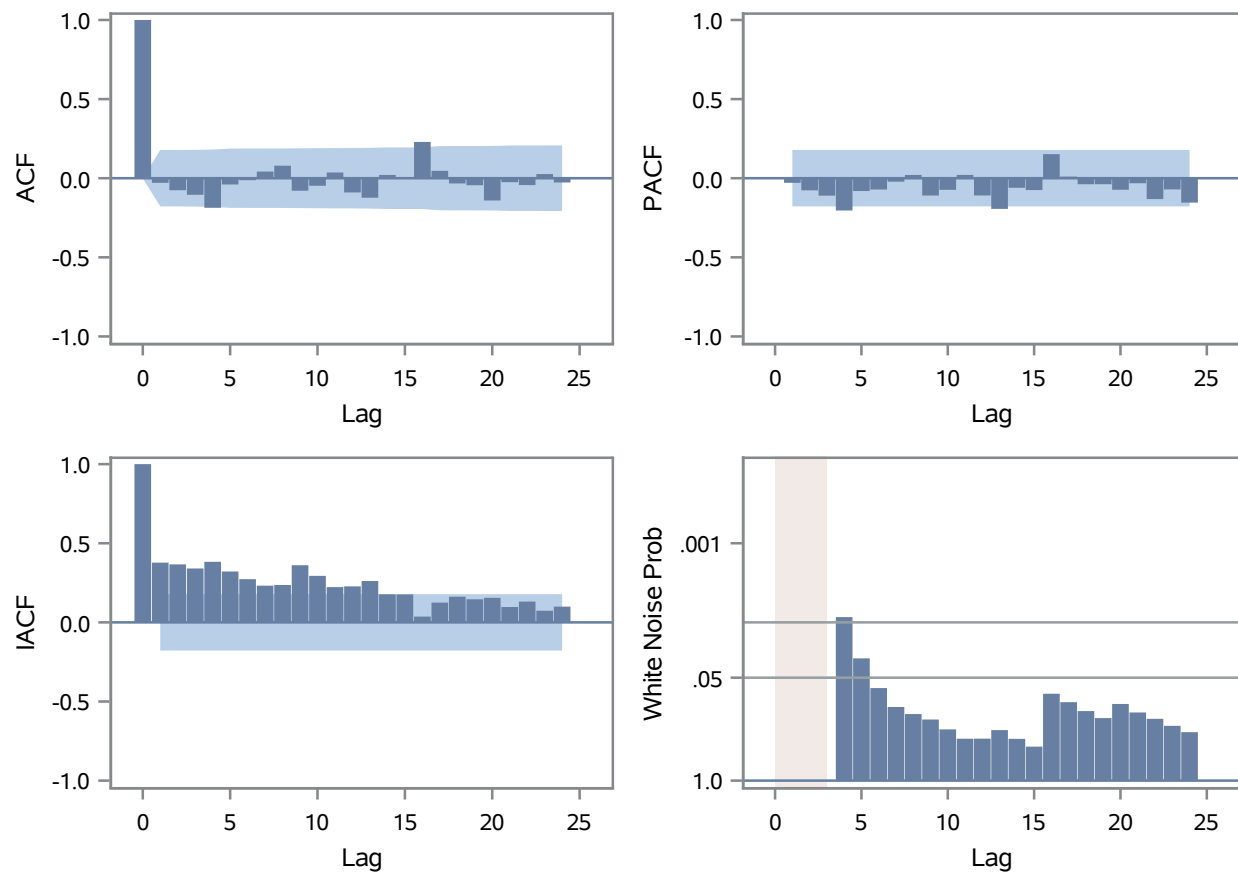
Variance Estimate	0.000097
Std Error Estimate	0.009866
AIC	-802.48
SBC	-793.971
Number of Residuals	126

Correlations of Parameter Estimates			
Parameter	AR1,1	AR1,2	AR1,3
AR1,1	1.000	0.574	0.220
AR1,2	0.574	1.000	0.573
AR1,3	0.220	0.573	1.000

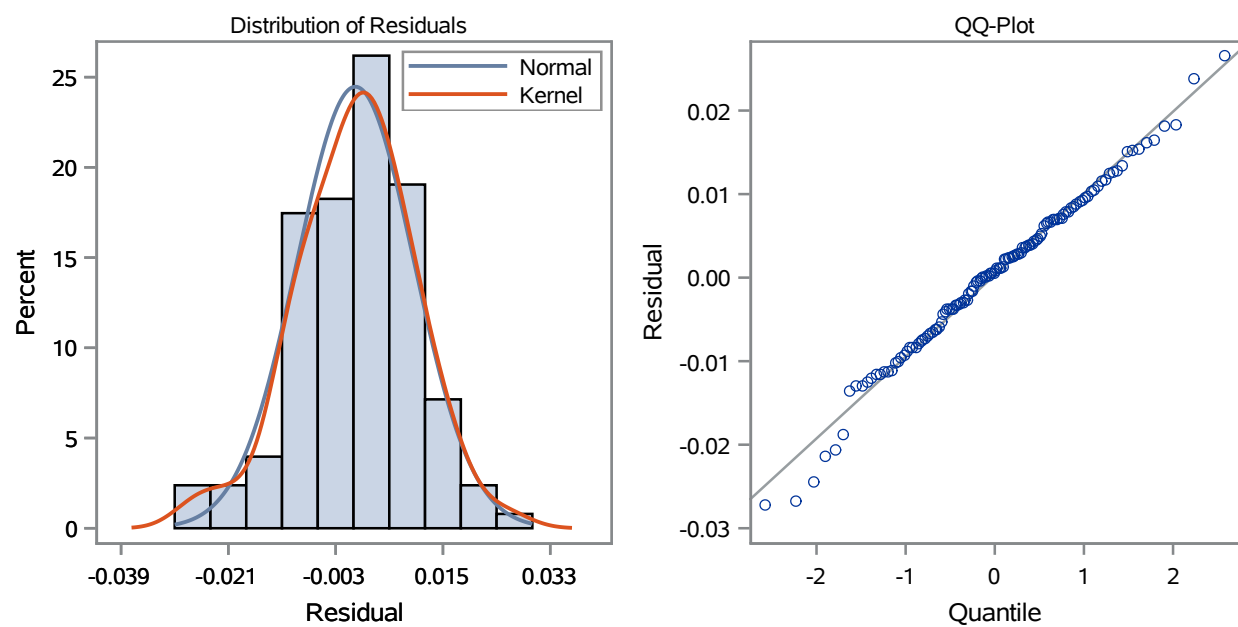
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	7.01	3	0.0715	-0.028	-0.075	-0.104	-0.185	-0.038	-0.011
12	10.59	9	0.3049	0.042	0.080	-0.078	-0.047	0.036	-0.090
18	21.08	15	0.1343	-0.123	0.021	0.008	0.230	0.048	-0.032
24	24.88	21	0.2523	-0.044	-0.139	-0.023	-0.041	0.028	-0.025

The ARIMA Procedure

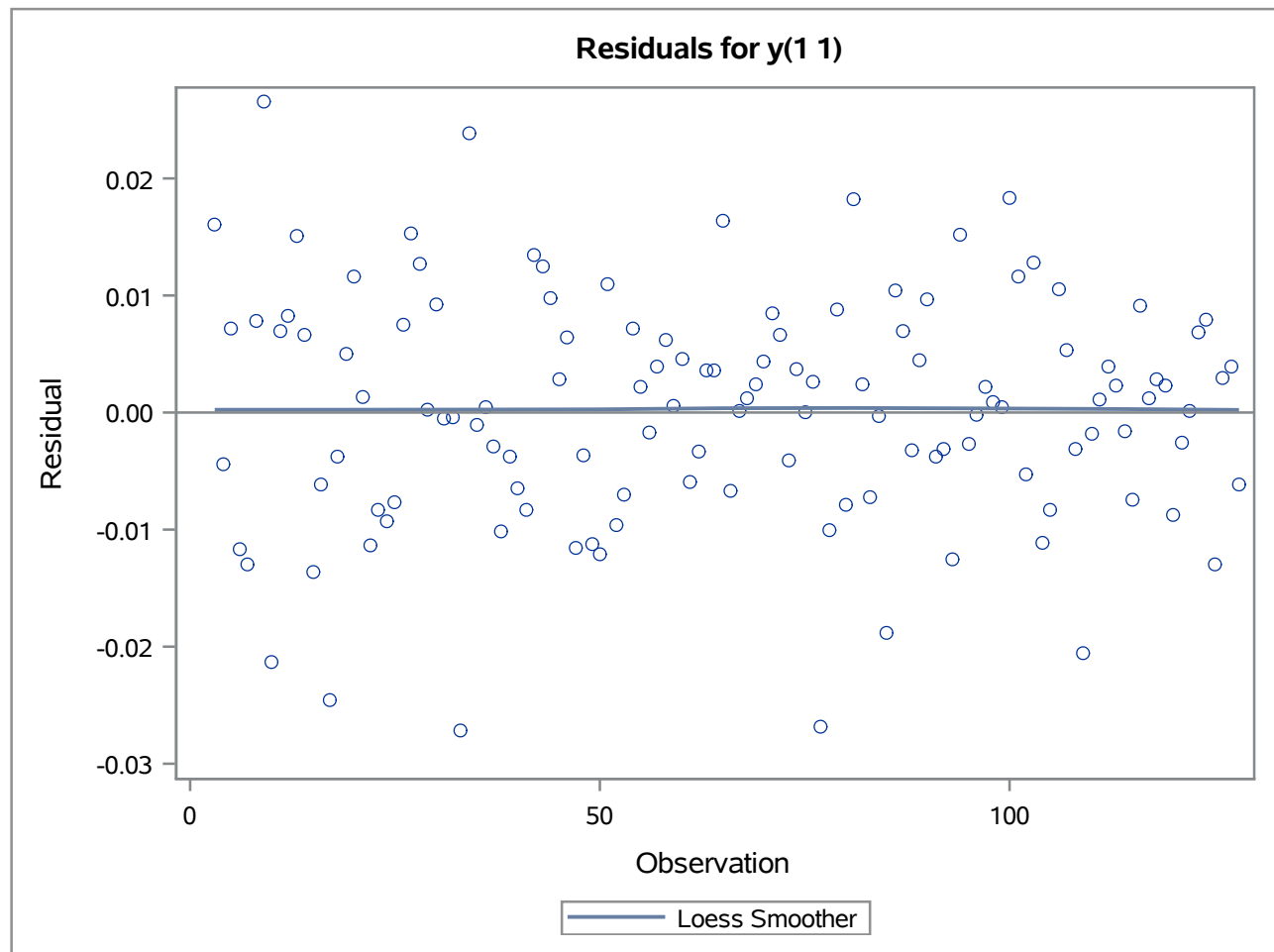
Residual Correlation Diagnostics for y(1 1)



Residual Normality Diagnostics for y(1 1)



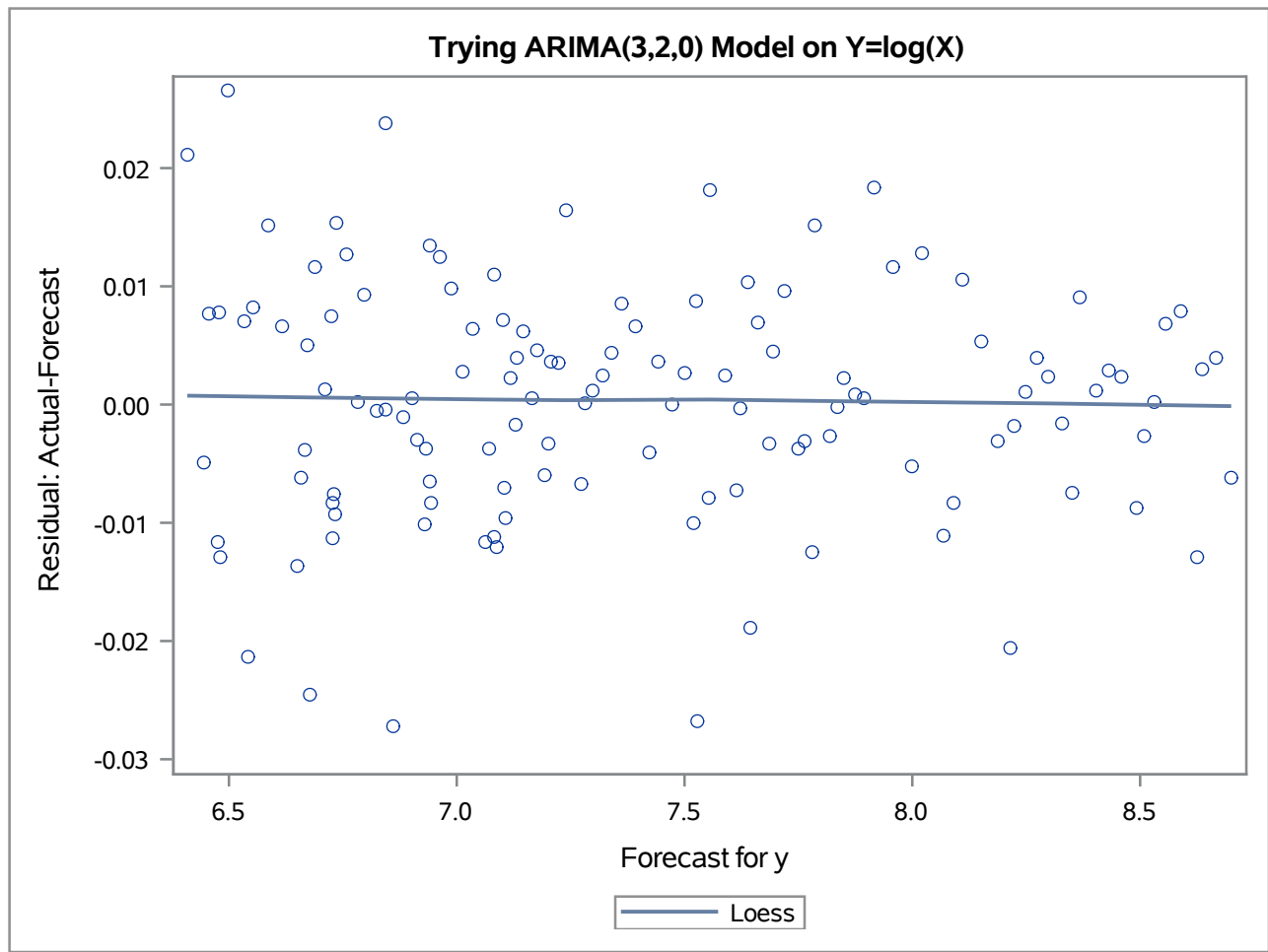
The ARIMA Procedure



Model for variable y	
Period(s) of Differencing	1,1

No mean term in this model.

Autoregressive Factors	
Factor 1:	$1 + 0.75224 B^{**}(1) + 0.46504 B^{**}(2) + 0.35917 B^{**}(3)$



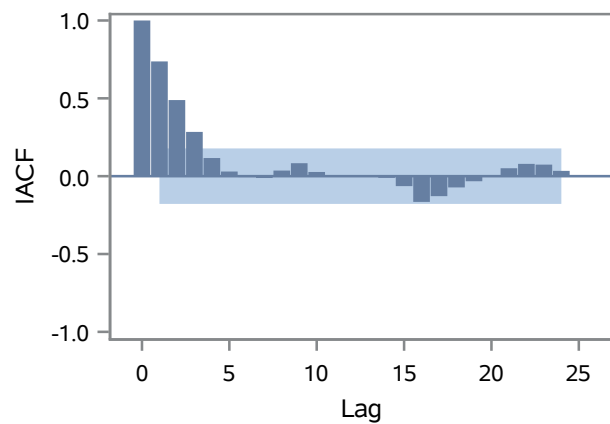
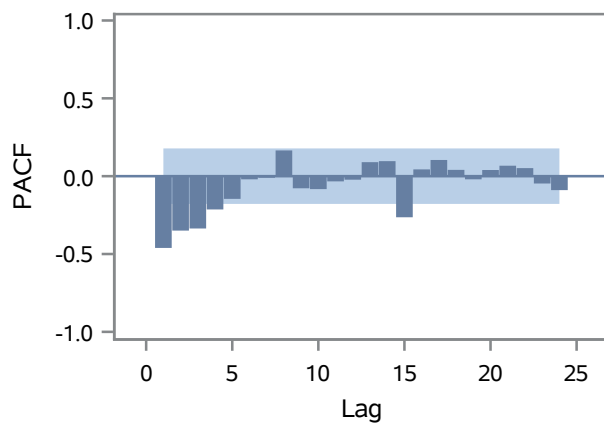
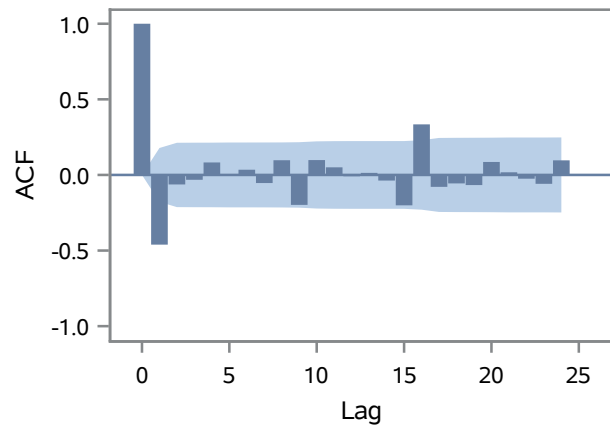
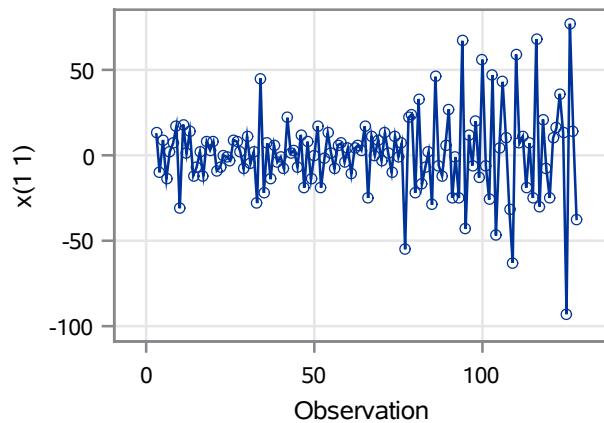
Trying ARIMA(0,2,1) Model on the Raw Data X

The ARIMA Procedure

Name of Variable = x	
Period(s) of Differencing	1,1
Mean of Working Series	1.063492
Standard Deviation	24.1962
Number of Observations	126
Observation(s) eliminated by differencing	2

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	29.13	6	<.0001	-0.461	-0.063	-0.032	0.083	-0.001	0.034
12	37.92	12	0.0002	-0.053	0.097	-0.198	0.098	0.050	-0.009
18	61.80	18	<.0001	0.014	-0.037	-0.201	0.334	-0.079	-0.056
24	65.75	24	<.0001	-0.067	0.086	0.018	-0.025	-0.059	0.096

Trend and Correlation Analysis for x(1 1)



Trying ARIMA(0,2,1) Model on the Raw Data X

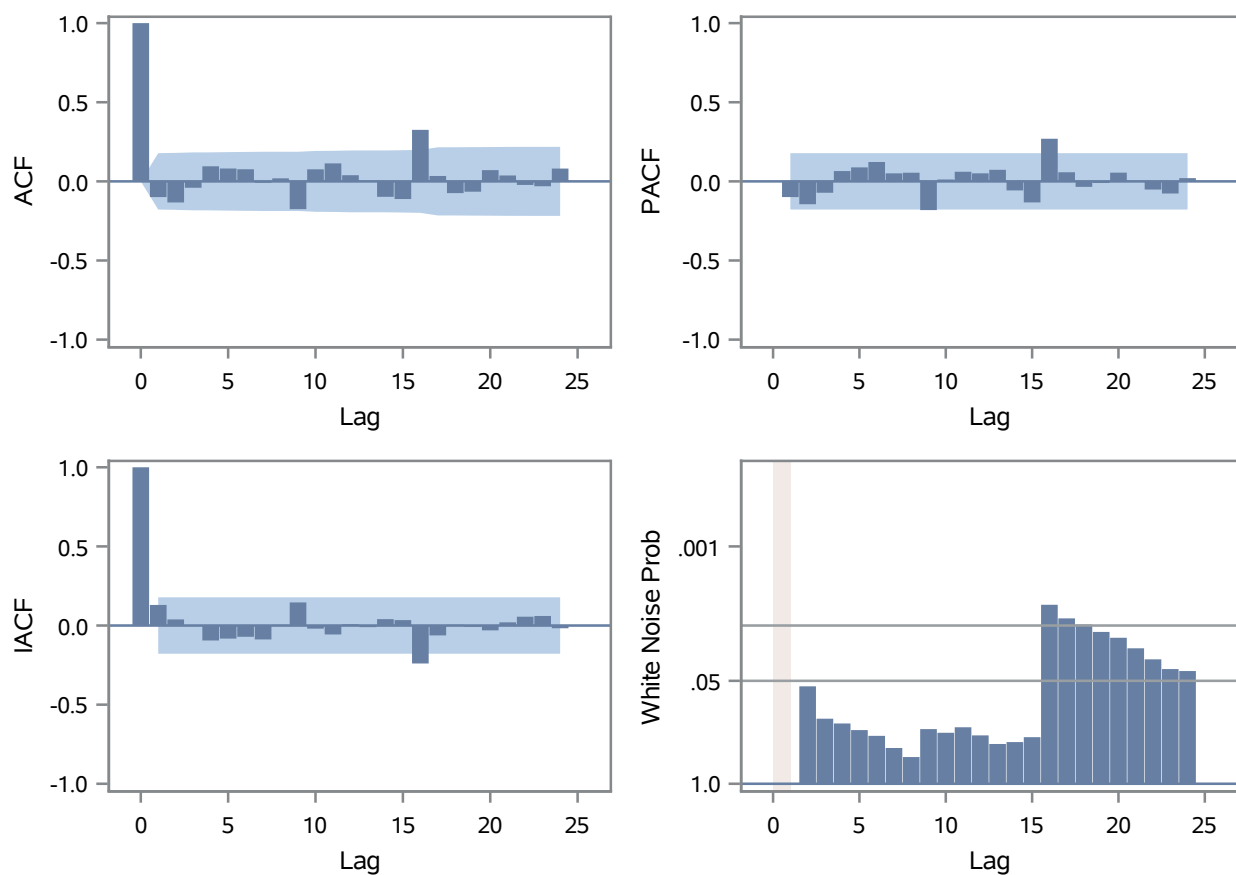
The ARIMA Procedure

Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MA1,1	0.71488	0.06384	11.20	<.0001	1

Variance Estimate	372.081
Std Error Estimate	19.2894
AIC	1105.092
SBC	1107.928
Number of Residuals	126

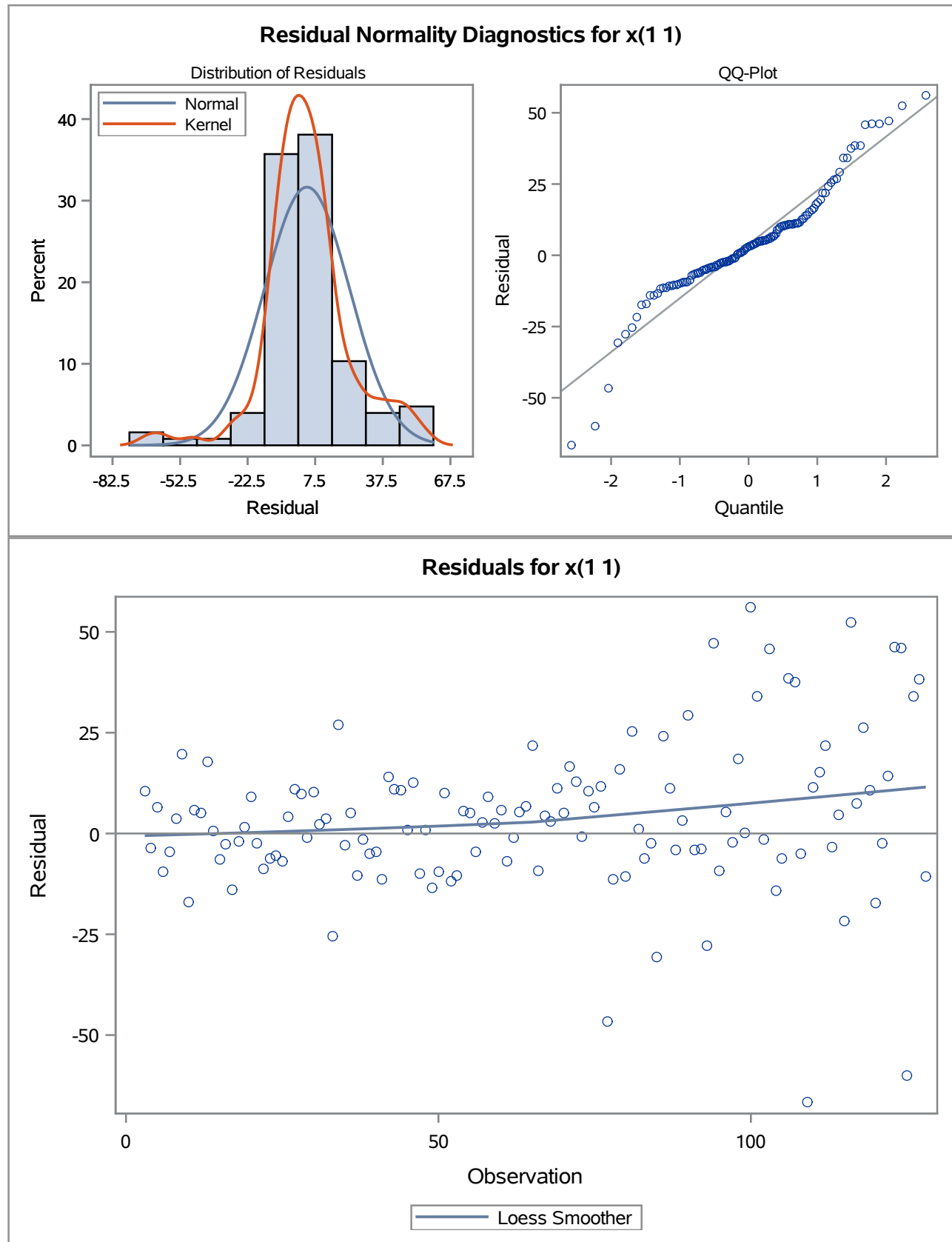
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	7.09	5	0.2142	-0.055	-0.090	-0.004	0.132	0.116	0.107
12	14.94	11	0.1853	0.023	0.052	-0.134	0.106	0.139	0.067
18	34.62	17	0.0070	0.024	-0.065	-0.077	0.343	0.062	-0.044
24	39.01	23	0.0198	-0.036	0.101	0.070	0.011	0.000	0.108

Residual Correlation Diagnostics for x(1 1)



Trying ARIMA(0,2,1) Model on the Raw Data X

The ARIMA Procedure



Model for variable x	
Period(s) of Differencing	1,1

Trying ARIMA(0,2,1) Model on the Raw Data X

The ARIMA Procedure

No mean term in this model.

Moving Average Factors	
Factor 1:	$1 - 0.71488 B^{(1)}$

