

Obs	time	z
1	1	460
2	2	457
3	3	452
4	4	459
5	5	462

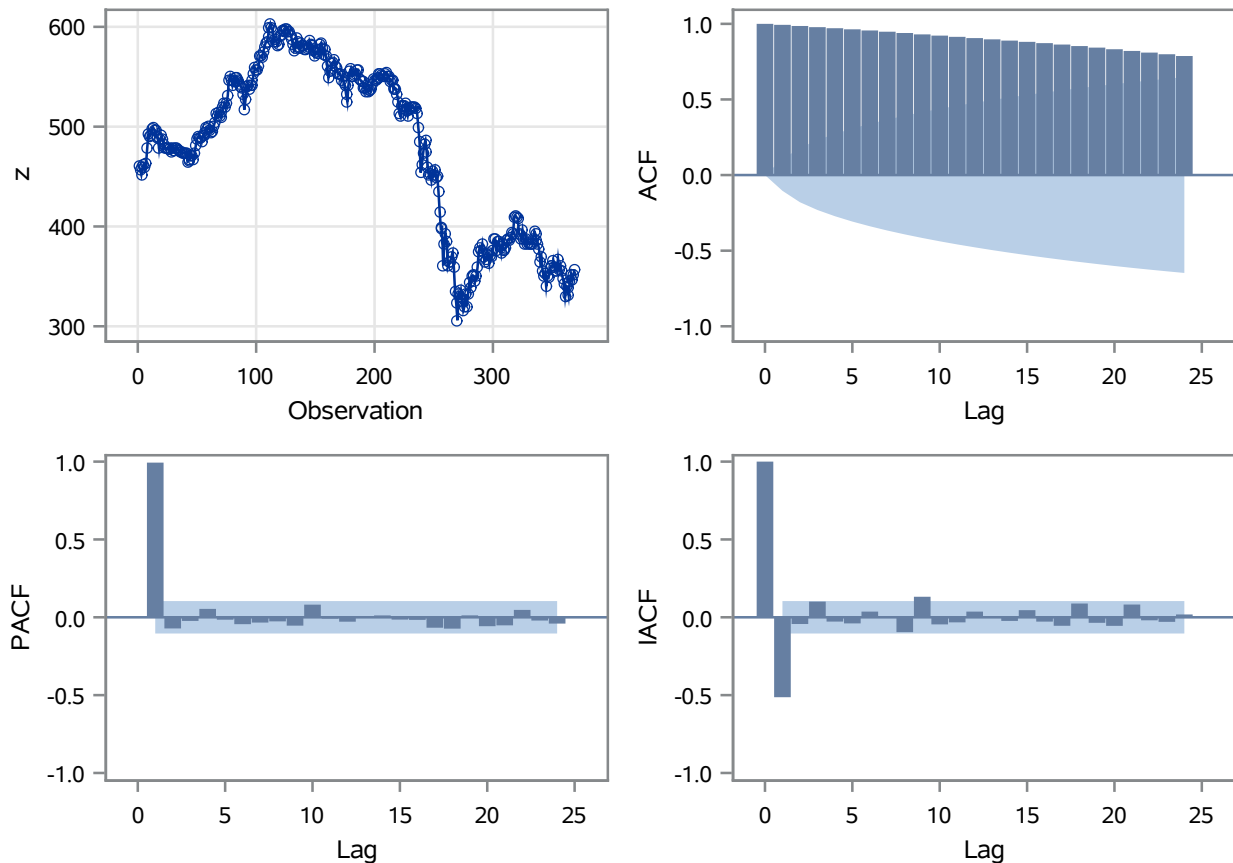
Identification Stage

The ARIMA Procedure

Name of Variable = z	
Mean of Working Series	478.4688
Standard Deviation	84.10504
Number of Observations	369

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	2135.31	6	<.0001	0.993	0.986	0.978	0.971	0.964	0.956
12	4097.40	12	<.0001	0.948	0.939	0.930	0.922	0.914	0.906
18	5880.78	18	<.0001	0.897	0.889	0.881	0.872	0.863	0.853
24	7452.40	24	<.0001	0.843	0.832	0.821	0.810	0.799	0.787

Trend and Correlation Analysis for z



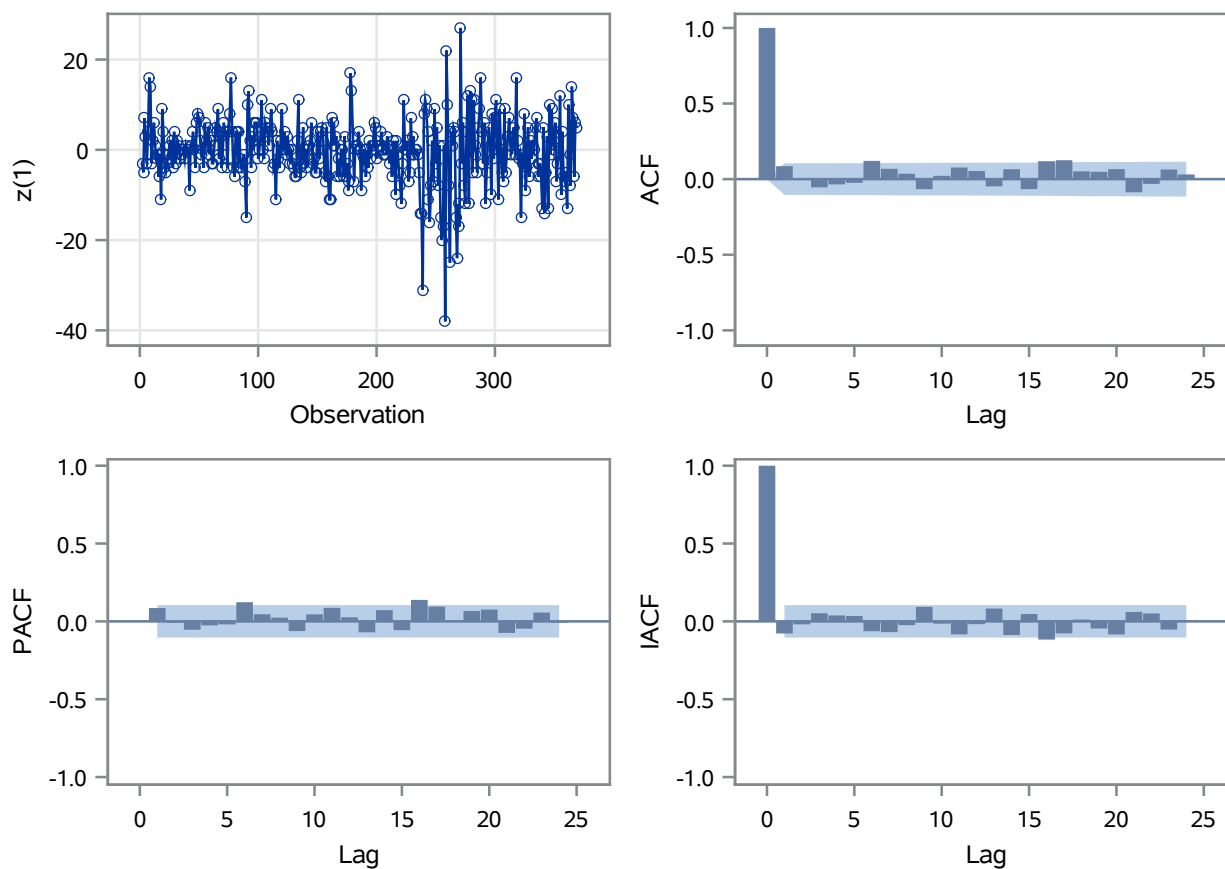
Name of Variable = z	
Period(s) of Differencing	1
Mean of Working Series	-0.27989
Standard Deviation	7.248345

The ARIMA Procedure

Name of Variable = z	
Number of Observations	368
Observation(s) eliminated by differencing	1

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	9.98	6	0.1256	0.086	-0.001	-0.054	-0.035	-0.024	0.121
12	17.42	12	0.1344	0.068	0.036	-0.066	0.022	0.077	0.054
18	34.20	18	0.0119	-0.048	0.066	-0.066	0.119	0.125	0.052
24	42.16	24	0.0124	0.049	0.066	-0.087	-0.031	0.064	0.031

Trend and Correlation Analysis for z(1)

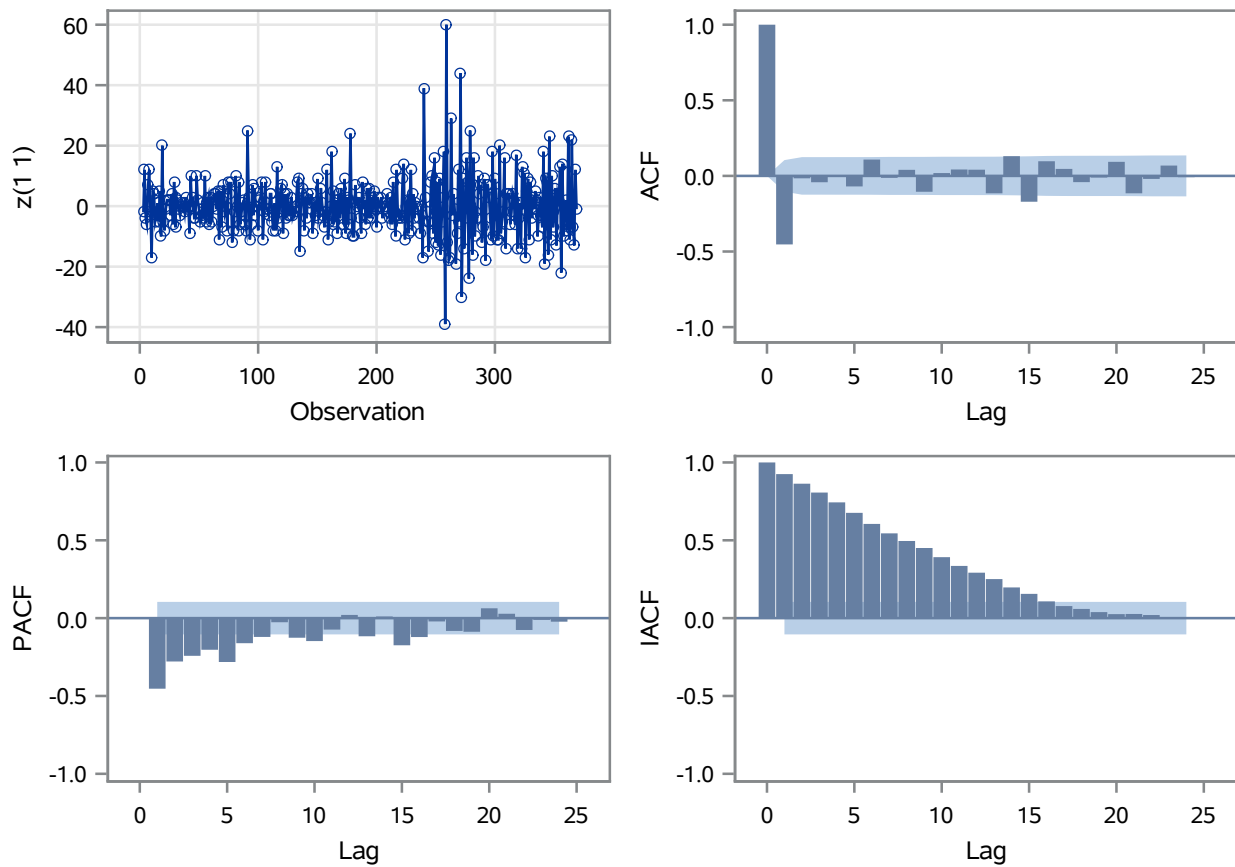


Name of Variable = z	
Period(s) of Differencing	1,1
Mean of Working Series	0.021798
Standard Deviation	9.810719
Number of Observations	367
Observation(s) eliminated by differencing	2

The ARIMA Procedure

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	82.94	6	<.0001	-0.453	-0.016	-0.042	0.003	-0.070	0.108
12	89.23	12	<.0001	-0.013	0.040	-0.105	0.019	0.042	0.041
18	117.15	18	<.0001	-0.115	0.130	-0.171	0.097	0.046	-0.041
24	127.78	24	<.0001	-0.011	0.093	-0.115	-0.020	0.068	-0.008

Trend and Correlation Analysis for z(1 1)



The ARIMA Procedure

Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MU	-0.27933	0.40956	-0.68	0.4952	0
MA1,1	-0.08521	0.05211	-1.64	0.1020	1

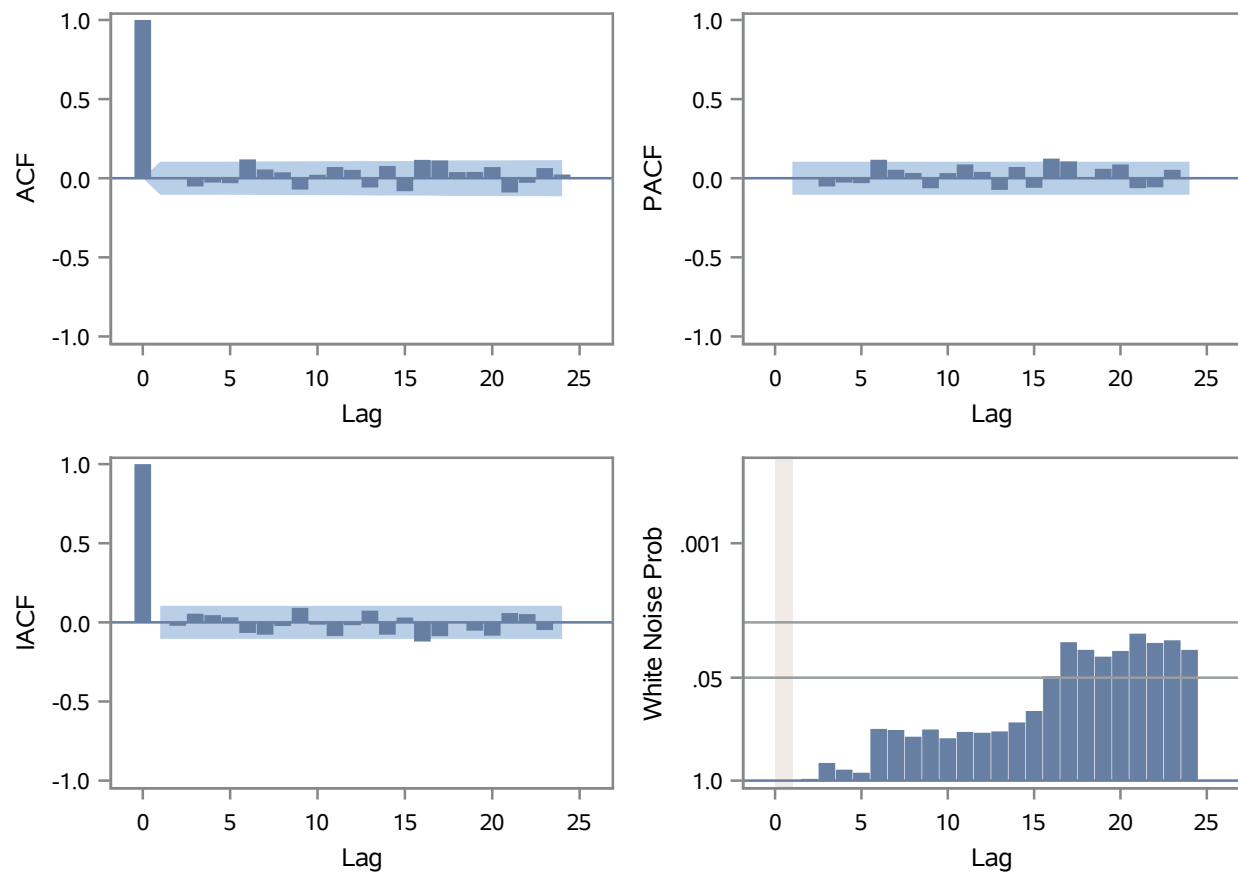
Constant Estimate	-0.27933
Variance Estimate	52.43771
Std Error Estimate	7.241389
AIC	2503.483
SBC	2511.299
Number of Residuals	368

Correlations of Parameter Estimates		
Parameter	MU	MA1,1
MU	1.000	-0.001
MA1,1	-0.001	1.000

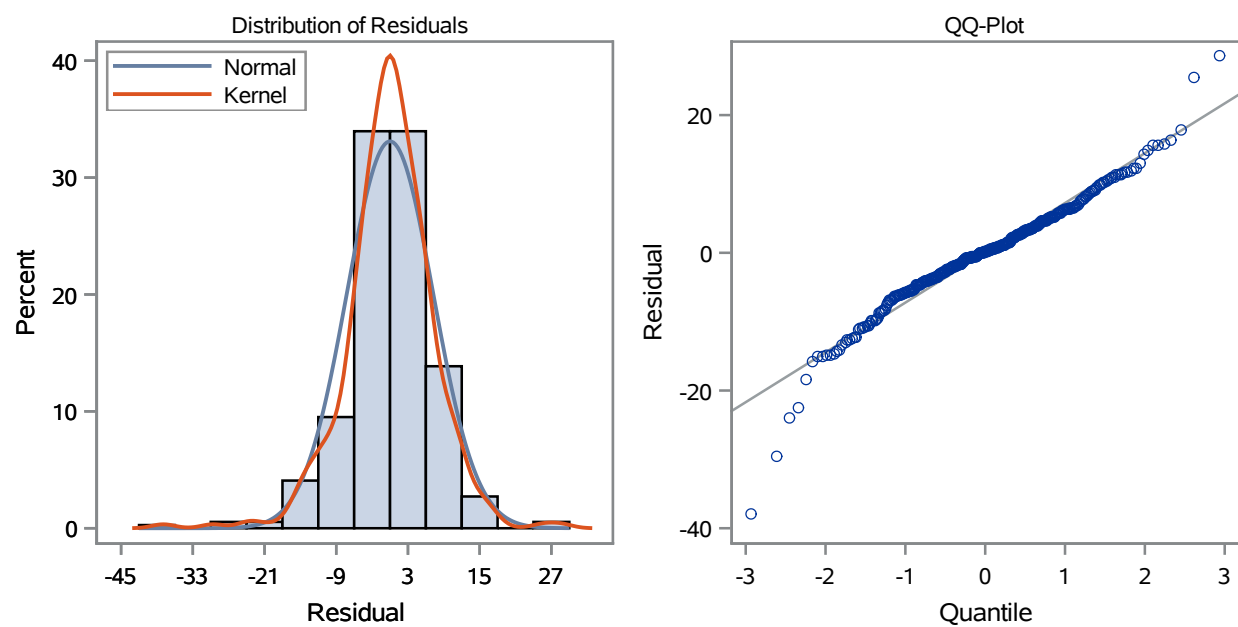
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	6.98	5	0.2220	0.001	0.003	-0.052	-0.027	-0.031	0.119
12	13.73	11	0.2485	0.055	0.037	-0.072	0.022	0.071	0.052
18	30.61	17	0.0222	-0.059	0.077	-0.082	0.116	0.112	0.039
24	38.54	23	0.0223	0.040	0.071	-0.090	-0.029	0.064	0.023
30	49.34	29	0.0106	0.026	-0.102	-0.057	0.049	0.027	0.098
36	56.02	35	0.0135	0.071	-0.075	-0.065	-0.008	0.021	0.034
42	63.96	41	0.0124	0.064	-0.086	0.057	-0.061	0.017	0.016
48	75.85	47	0.0048	-0.117	-0.039	0.072	0.004	0.068	0.056

The ARIMA Procedure

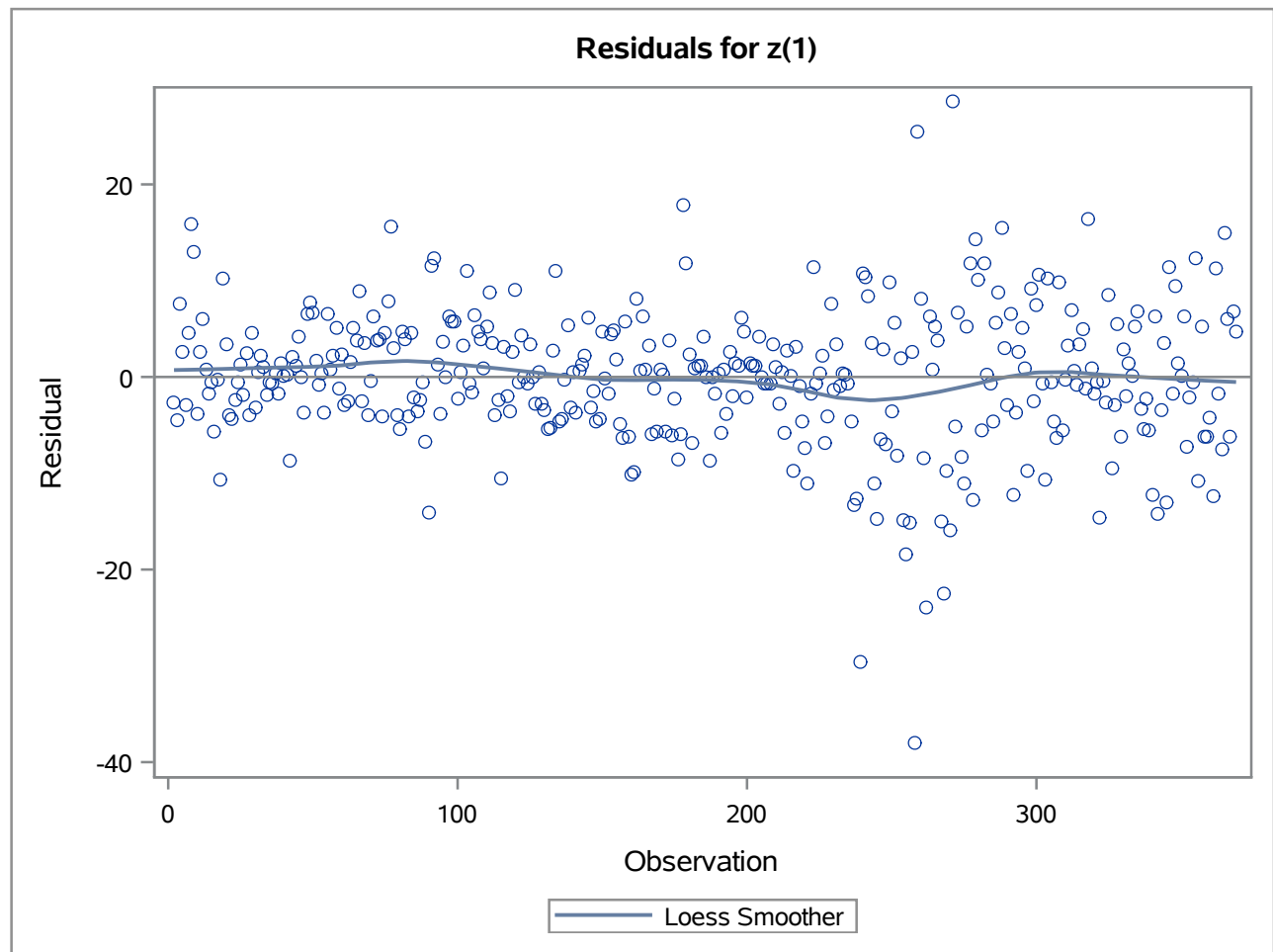
Residual Correlation Diagnostics for z(1)



Residual Normality Diagnostics for z(1)



The ARIMA Procedure



Model for variable z	
Estimated Mean	-0.27933
Period(s) of Differencing	1

Moving Average Factors	
Factor 1:	1 + 0.08521 B**(1)

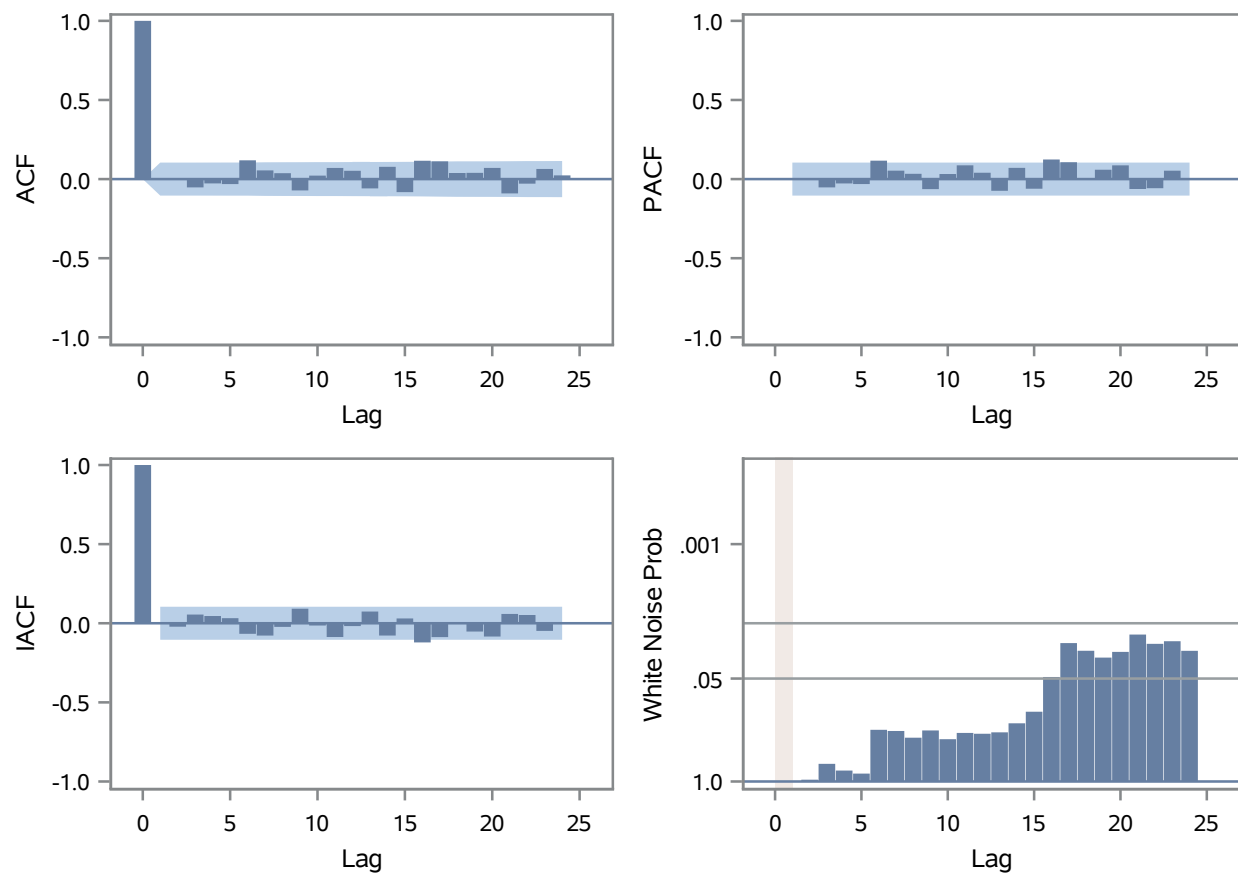
Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MA1,1	-0.08637	0.05203	-1.66	0.0969	1

Variance Estimate	52.36119
Std Error Estimate	7.236103
AIC	2501.95
SBC	2505.858
Number of Residuals	368

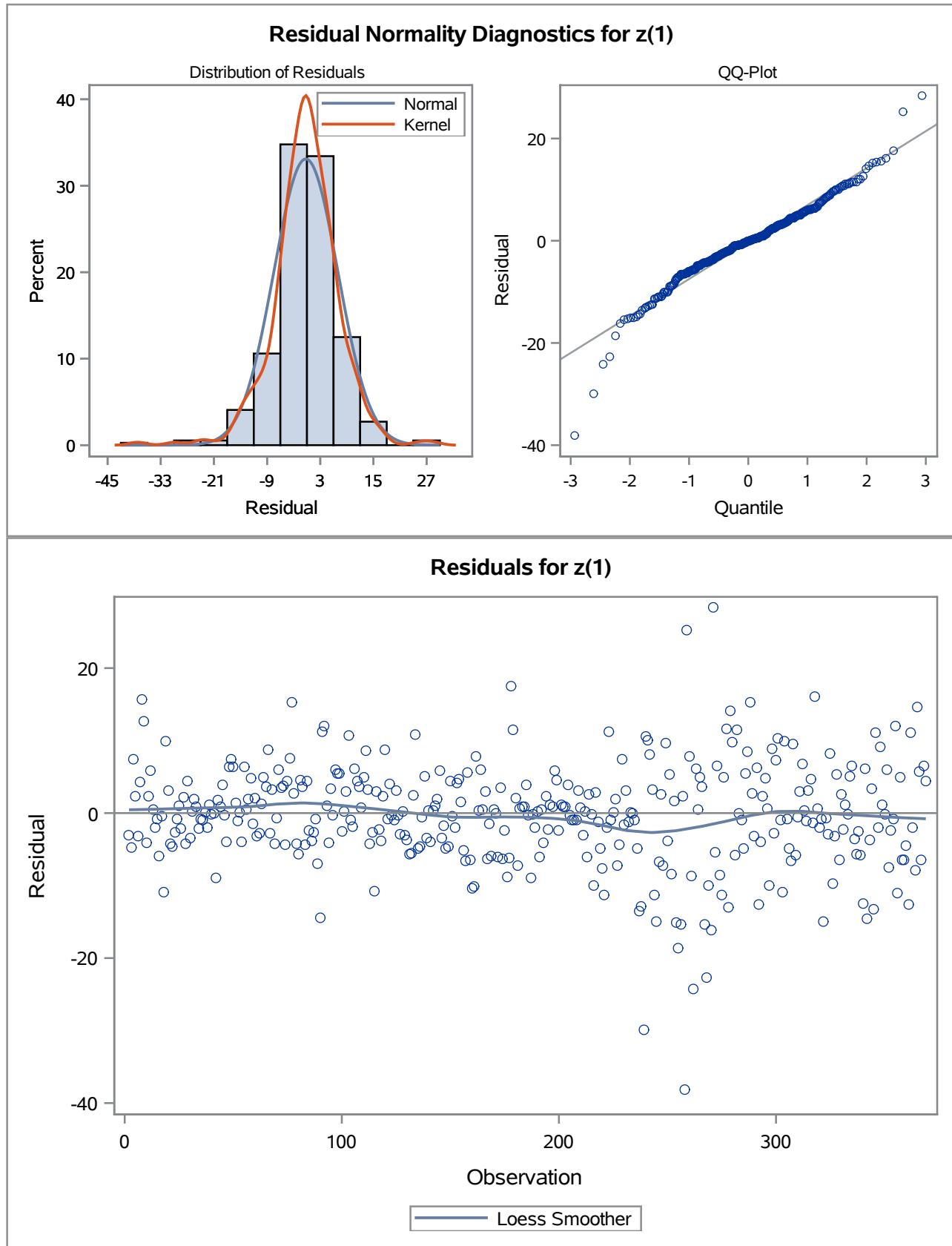
The ARIMA Procedure

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	6.99	5	0.2216	0.001	0.005	-0.051	-0.026	-0.030	0.120
12	13.94	11	0.2363	0.057	0.039	-0.070	0.024	0.072	0.054
18	31.04	17	0.0198	-0.057	0.079	-0.081	0.118	0.113	0.040
24	39.06	23	0.0196	0.041	0.072	-0.089	-0.027	0.066	0.025
30	49.84	29	0.0094	0.028	-0.100	-0.055	0.051	0.028	0.099
36	56.48	35	0.0122	0.072	-0.074	-0.063	-0.007	0.022	0.035
42	64.42	41	0.0112	0.066	-0.085	0.059	-0.060	0.018	0.017
48	76.33	47	0.0044	-0.116	-0.038	0.073	0.005	0.069	0.057

Residual Correlation Diagnostics for z(1)



The ARIMA Procedure

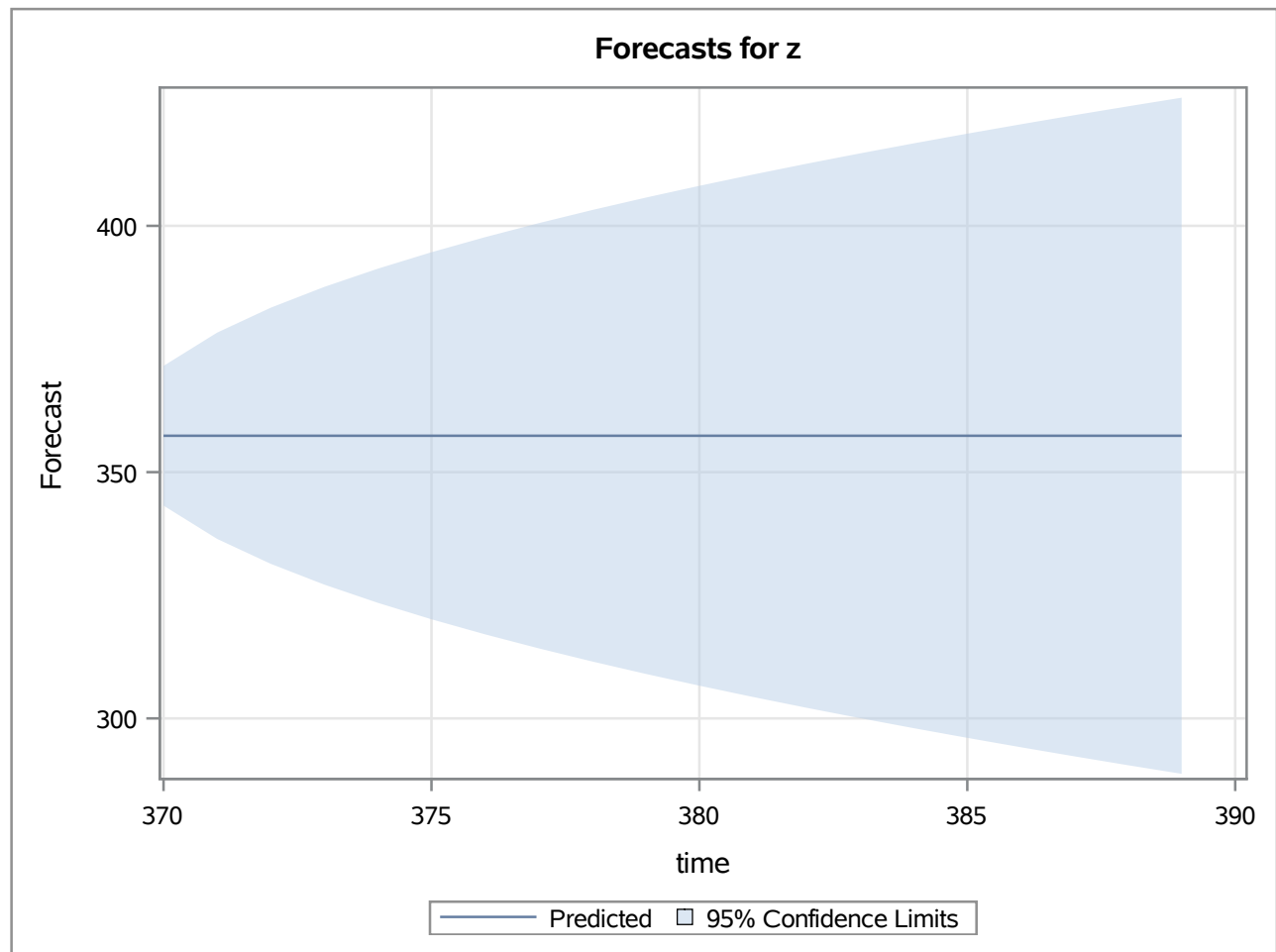


The ARIMA Procedure

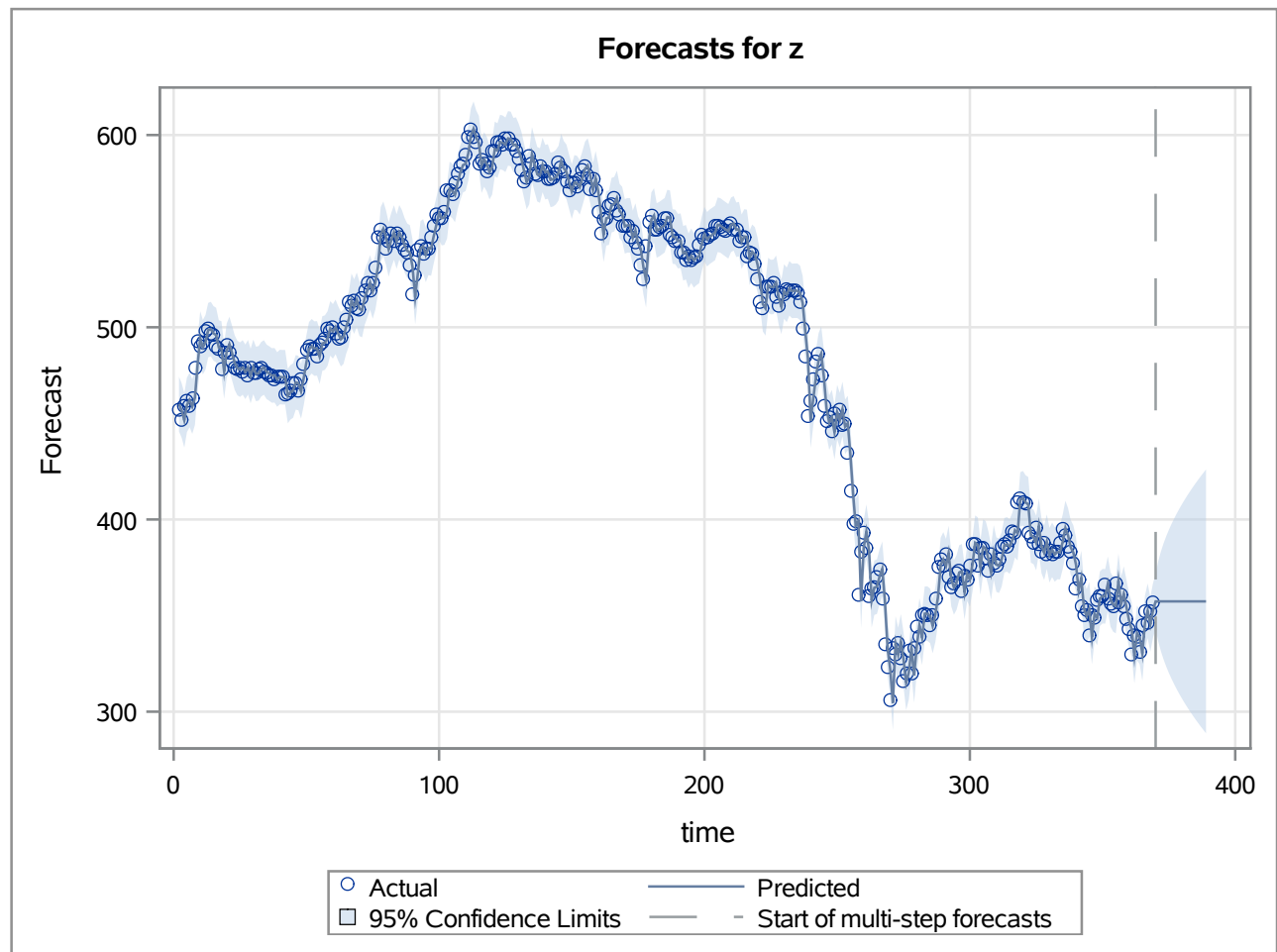
Moving Average Factors	
Factor 1:	1 + 0.08637 B**(1)

Forecasts for variable z				
Obs	Forecast	Std Error	95% Confidence Limits	
370	357.3829	7.2361	343.2004	371.5654
371	357.3829	10.6844	336.4418	378.3240
372	357.3829	13.2647	331.3845	383.3813
373	357.3829	15.4191	327.1619	387.6038
374	357.3829	17.3074	323.4610	391.3048
375	357.3829	19.0090	320.1259	394.6399
376	357.3829	20.5703	317.0658	397.7000
377	357.3829	22.0212	314.2221	400.5437
378	357.3829	23.3823	311.5545	403.2113
379	357.3829	24.6683	309.0338	405.7319
380	357.3829	25.8906	306.6382	408.1275
381	357.3829	27.0577	304.3508	410.4150
382	357.3829	28.1765	302.1580	412.6078
383	357.3829	29.2526	300.0489	414.7168
384	357.3829	30.2904	298.0148	416.7510
385	357.3829	31.2938	296.0481	418.7177
386	357.3829	32.2661	294.1425	420.6233
387	357.3829	33.2099	292.2927	422.4731
388	357.3829	34.1276	290.4940	424.2717
389	357.3829	35.0213	288.7425	426.0233

The ARIMA Procedure



The ARIMA Procedure



The ARIMA Procedure

Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
MU	-0.27924	0.41267	-0.68	0.4986	0
AR1,1	0.08550	0.05212	1.64	0.1009	1

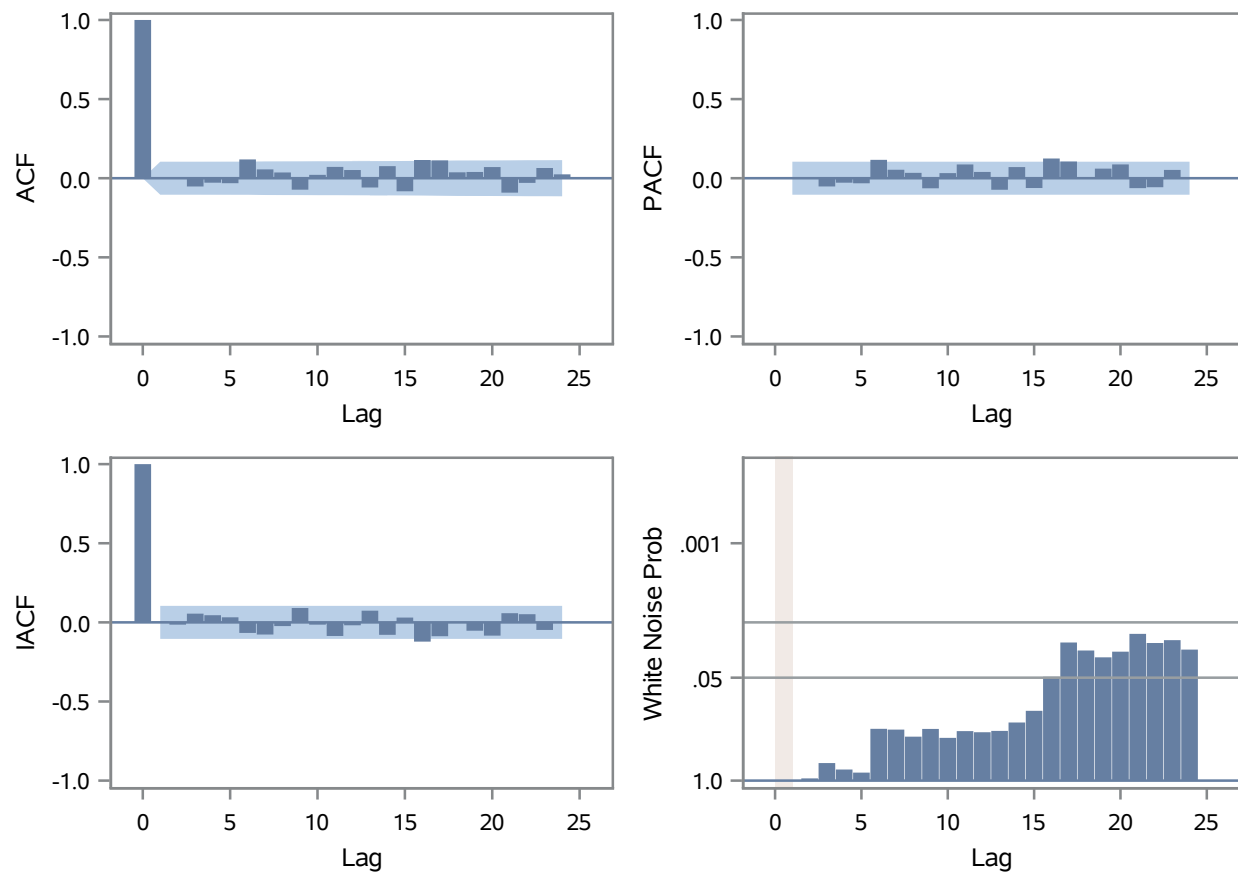
Constant Estimate	-0.25537
Variance Estimate	52.43805
Std Error Estimate	7.241412
AIC	2503.485
SBC	2511.302
Number of Residuals	368

Correlations of Parameter Estimates		
Parameter	MU	AR1,1
MU	1.000	0.002
AR1,1	0.002	1.000

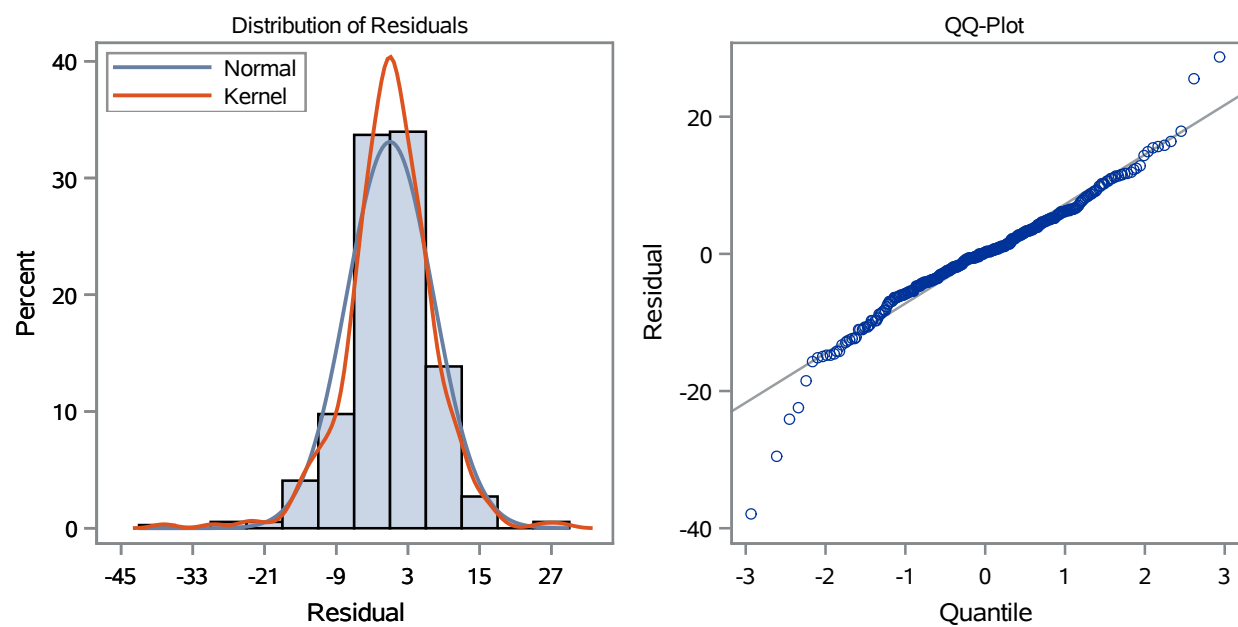
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	6.99	5	0.2216	0.001	-0.004	-0.052	-0.028	-0.031	0.119
12	13.79	11	0.2446	0.056	0.036	-0.073	0.021	0.071	0.052
18	30.54	17	0.0227	-0.059	0.076	-0.083	0.115	0.112	0.037
24	38.57	23	0.0221	0.039	0.070	-0.091	-0.030	0.064	0.024
30	49.44	29	0.0104	0.026	-0.103	-0.057	0.049	0.027	0.098
36	56.23	35	0.0129	0.071	-0.076	-0.065	-0.008	0.021	0.035
42	64.09	41	0.0120	0.064	-0.086	0.057	-0.061	0.017	0.016
48	76.11	47	0.0046	-0.118	-0.039	0.072	0.004	0.068	0.057

The ARIMA Procedure

Residual Correlation Diagnostics for z(1)



Residual Normality Diagnostics for z(1)



Model for variable z	
Estimated Mean	-0.27924
Period(s) of Differencing	1

The ARIMA Procedure

Autoregressive Factors	
Factor 1:	1 - 0.0855 B**(1)

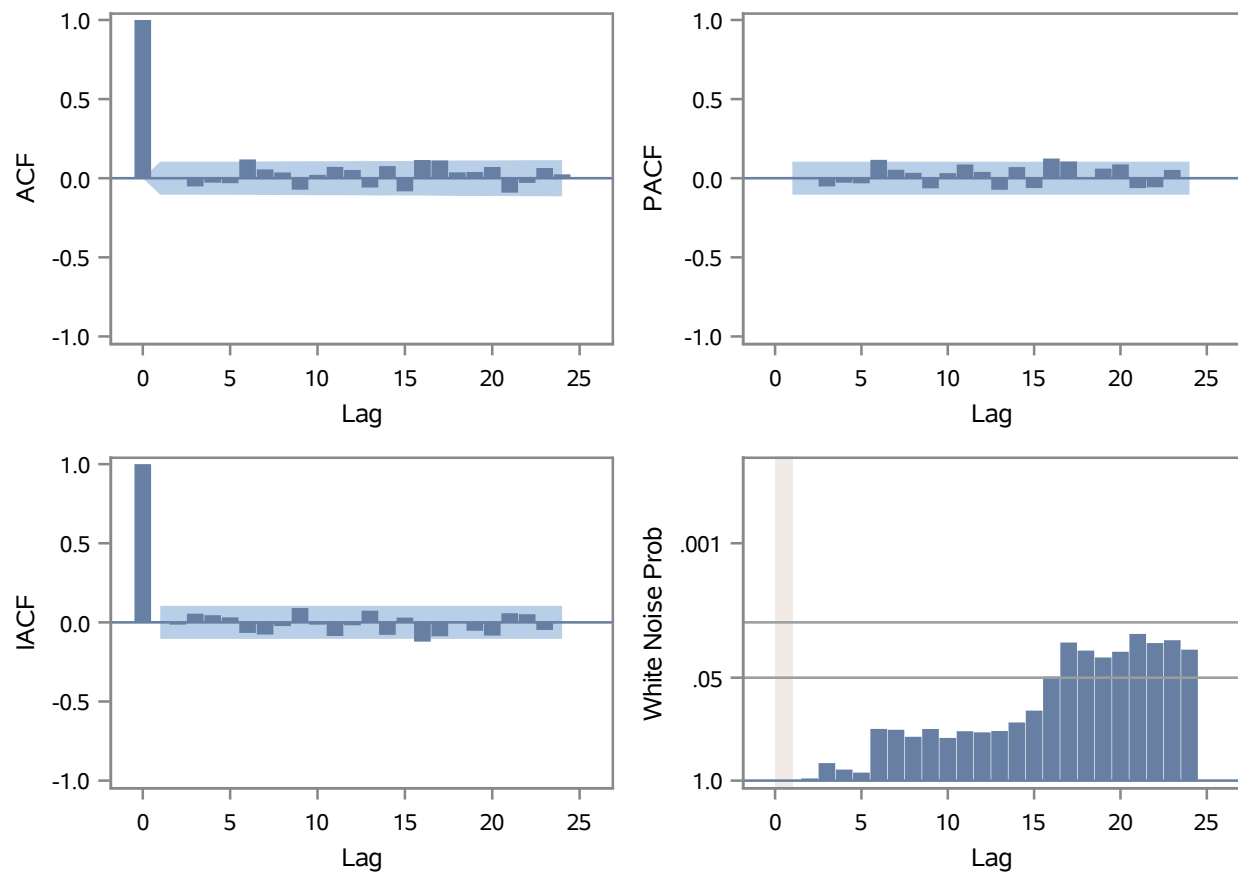
Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag
AR1,1	0.08689	0.05203	1.67	0.0950	1

Variance Estimate	52.36045
Std Error Estimate	7.236052
AIC	2501.945
SBC	2505.853
Number of Residuals	368

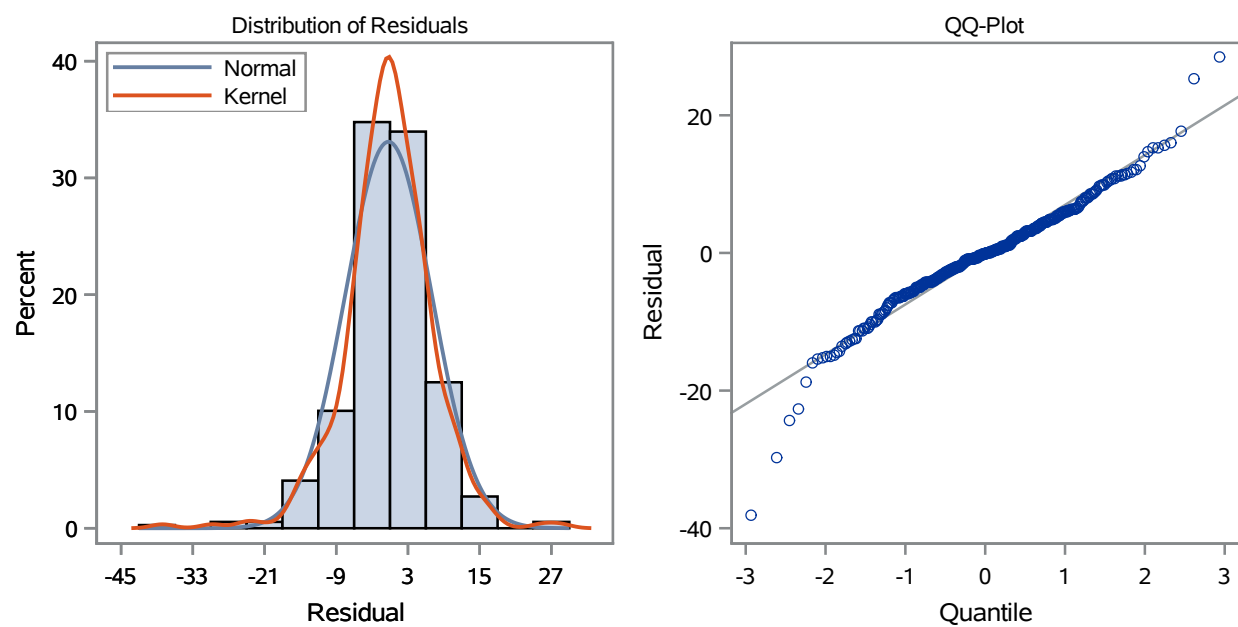
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	6.98	5	0.2219	0.001	-0.003	-0.051	-0.027	-0.030	0.120
12	13.99	11	0.2335	0.057	0.038	-0.071	0.023	0.073	0.053
18	30.94	17	0.0203	-0.057	0.078	-0.081	0.117	0.114	0.038
24	39.06	23	0.0195	0.041	0.072	-0.090	-0.028	0.066	0.026
30	49.91	29	0.0092	0.028	-0.101	-0.056	0.050	0.028	0.099
36	56.66	35	0.0117	0.072	-0.075	-0.064	-0.007	0.022	0.036
42	64.53	41	0.0109	0.065	-0.085	0.058	-0.060	0.018	0.018
48	76.57	47	0.0041	-0.117	-0.038	0.074	0.004	0.069	0.058

The ARIMA Procedure

Residual Correlation Diagnostics for z(1)



Residual Normality Diagnostics for z(1)



Model for variable z	
Period(s) of Differencing	1

No mean term in this model.

The ARIMA Procedure

Autoregressive Factors	
Factor 1:	$1 - 0.08689 B^{**}(1)$

Obs	time	z	FORECAST	STD	L95	U95	RESIDUAL
1	1	460	.	.	.	.	.
2	2	457	460.000	7.26304	445.765	474.235	-3.00000
3	3	452	456.743	7.23630	442.560	470.926	-4.74282
4	4	459	451.590	7.23610	437.408	465.773	7.40960
5	5	462	459.640	7.23610	445.457	473.822	2.36006

