

H1 INTERRUPTED TIME SERIES MODEL
MO 2010–2016 HOSP Data

The AUTOREG Procedure

Dependent Variable	TCC
	Trend-Cycle Component

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The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	18390.3205	DFE	68
MSE	270.44589	Root MSE	16.44524
SBC	620.523595	AIC	611.41693
MAE	13.4599228	AICC	612.013945
MAPE	1.67346319	HQC	615.04232
Durbin-Watson	0.1487	Total R-Square	0.8724

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	889.6458	4.7999	185.35	<.0001
PRESLOPE	1	-1.9933	0.1139	-17.49	<.0001
INTERVENTION	1	-38.0740	12.6295	-3.01	0.0036
POSTSLOPE	1	5.5278	2.1231	2.60	0.0113

Estimates of Autocorrelations			
Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	255.4	1.000000	*****
1	225.3	0.882085	*****
2	187.1	0.732453	*****
3	143.2	0.560585	*****

Preliminary MSE	52.6560
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Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-1.017196	0.082090	-12.39
3	0.184463	0.082090	2.25

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.8818
2	0.7343
3	0.5624

Coefficients for First NLAG Observations			
	1	2	3
1	0.4547890944	0	0
2	-0.850113685	0.9641194937	0
3	0.1909110453	-1.034956127	0.9828394708

Algorithm converged.

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Maximum Likelihood Estimates			
SSE	982.722556	DFE	66
MSE	14.88974	Root MSE	3.85872
SBC	422.703232	AIC	409.043235
MAE	2.80693721	AICC	410.335543
MAPE	0.3533403	HQC	414.48132
Log Likelihood	-198.52162	Transformed Regression R-Square	0.4920
Durbin-Watson	1.6307	Total R-Square	0.9932
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	885.3505	10.9879	80.57	<.0001
PRESLOPE	1	-1.9446	0.2588	-7.51	<.0001
INTERVENTION	1	-8.6121	3.8958	-2.21	0.0305
POSTSLOPE	1	5.4132	2.7282	1.98	0.0514
AR1	1	-1.3316	0.0476	-28.00	<.0001
AR3	1	0.4327	0.0467	9.27	<.0001

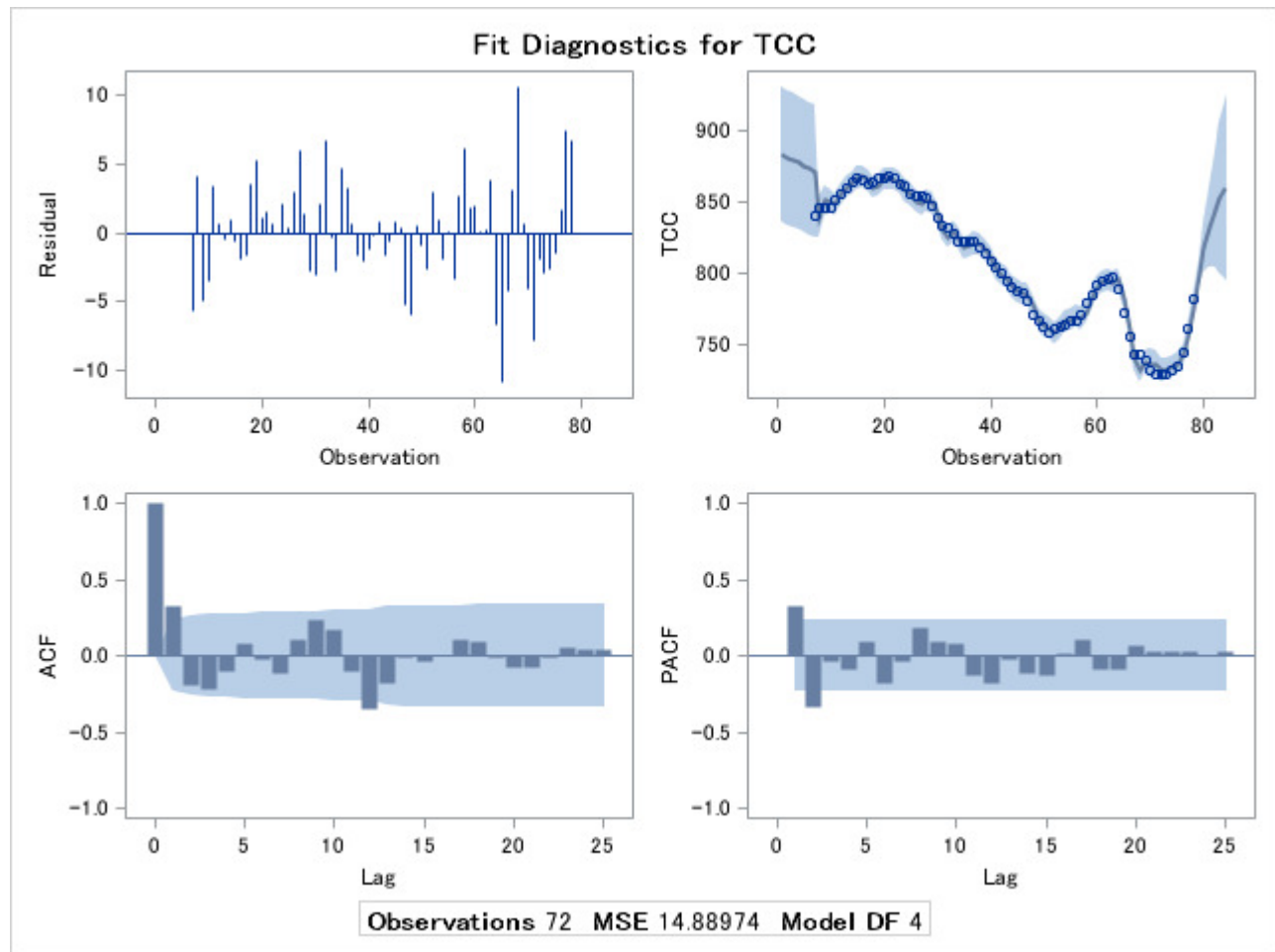
Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9587
2	0.8618
3	0.7148

Coefficients for First NLAG Observations			
	1	2	3
1	0.1808711643	0	0
2	-0.609677615	0.6359411706	0
3	0.639041892	-1.476969181	0.9015518356

Autoregressive parameters assumed given					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	885.3505	10.9156	81.11	<.0001
PRESLOPE	1	-1.9446	0.2567	-7.58	<.0001
INTERVENTION	1	-8.6121	3.8523	-2.24	0.0288
POSTSLOPE	1	5.4132	2.4066	2.25	0.0278

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H2 INTERRUPTED TIME SERIES MODEL
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Dependent Variable	TCC
	Trend-Cycle Component

H2 INTERRUPTED TIME SERIES MODEL MO 2010–2016 HOSP Data

The AUTOREG Procedure

Ordinary Least Squares Estimates			
SSE	1249.79898	DFE	68
MSE	18.37940	Root MSE	4.28712
SBC	426.926989	AIC	417.820324
MAE	3.31456472	AICC	418.417339
MAPE	3.18894361	HQC	421.445715
Durbin-Watson	0.1290	Total R-Square	0.9142

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	106.0692	1.2513	84.77	<.0001
PRESLOPE	1	-0.0745	0.0297	-2.51	0.0146
INTERVENTION	1	7.8851	3.2924	2.39	0.0194
POSTSLOPE	1	6.3007	0.5535	11.38	<.0001

Estimates of Autocorrelations			
Lag	Covariance	Correlation	-1 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 1
0	17.3583	1.000000	*****
1	15.7564	0.907714	*****

Preliminary MSE	3.0560
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Estimates of Autoregressive Parameters			
Lag	Coefficient	Standard Error	t Value
1	-0.907714	0.051261	-17.71

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9077

Coefficients for First NLAG Observations	
	1
1	0.4195895372

Algorithm converged.

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Maximum Likelihood Estimates			
SSE	92.870467	DFE	67
MSE	1.38613	Root MSE	1.17734
SBC	246.887626	AIC	235.504296
MAE	0.83759578	AICC	236.413386
MAPE	0.79786594	HQC	240.036033
Log Likelihood	-112.75215	Transformed Regression R-Square	0.8239
Durbin-Watson	0.7624	Total R-Square	0.9936
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	97.4801	5.2638	18.52	<.0001
PRESLOPE	1	0.1476	0.1035	1.43	0.1584
INTERVENTION	1	-0.0417	1.2661	-0.03	0.9738
POSTSLOPE	1	6.2785	0.4004	15.68	<.0001
ARI	1	-0.9707	0.0249	-38.92	<.0001

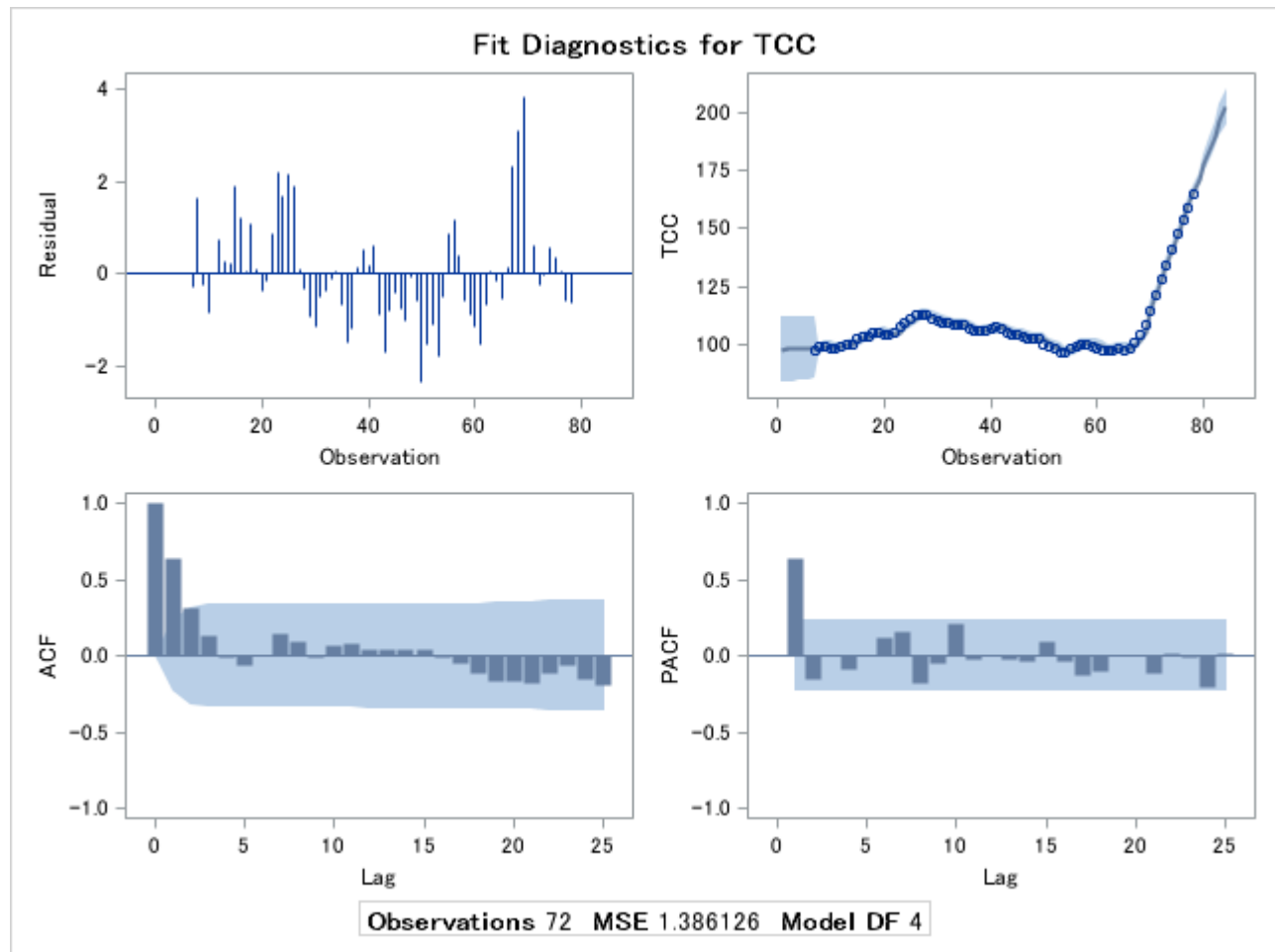
Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9707

Coefficients for First NLAG Observations	
	1
1	0.2404727024

Autoregressive parameters assumed given					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	97.4801	5.2468	18.58	<.0001
PRESLOPE	1	0.1476	0.1021	1.45	0.1530
INTERVENTION	1	-0.0417	1.2660	-0.03	0.9738
POSTSLOPE	1	6.2785	0.3973	15.80	<.0001

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H3 INTERRUPTED TIME SERIES MODEL
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The AUTOREG Procedure

Dependent Variable	TCC
	Trend-Cycle Component

Coefficients for First NLAG Observations			
	1	2	3

Algorithm converged.

H3 INTERRUPTED TIME SERIES MODEL MO 2010–2016 HOSP Data

The AUTOREG Procedure

Maximum Likelihood Estimates			
SSE	10.0766978	DFE	65
MSE	0.15503	Root MSE	0.39373
SBC	96.4454262	AIC	80.5087633
MAE	0.29105675	AICC	82.2587633
MAPE	1.21110105	HQC	86.853196
Log Likelihood	-33.254382	Transformed Regression R-Square	0.6341
Durbin-Watson	1.7389	Total R-Square	0.9957
		Observations	72

Parameter Estimates					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	16.0327	2.0839	7.69	<.0001
PRESLOPE	1	0.1793	0.0468	3.83	0.0003
INTERVENTION	1	-1.1069	0.3651	-3.03	0.0035
POSTSLOPE	1	1.7005	0.2286	7.44	<.0001
AR1	1	-1.6563	0.1226	-13.51	<.0001
AR2	1	0.9327	0.2136	4.37	<.0001
AR3	1	-0.2400	0.1247	-1.92	0.0587

Expected Autocorrelations	
Lag	Autocorr
0	1.0000
1	0.9694
2	0.9054
3	0.8355

Coefficients for First NLAG Observations			
	1	2	3
1	0.1962029868	0	0
2	-0.774529165	0.7989937664	0
3	0.5513781175	-1.475548288	0.970777455

Autoregressive parameters assumed given					
Variable	DF	Estimate	Standard Error	t Value	Approx Pr > t
Intercept	1	16.0327	2.0094	7.98	<.0001
PRESLOPE	1	0.1793	0.0437	4.11	0.0001
INTERVENTION	1	-1.1069	0.3535	-3.13	0.0026
POSTSLOPE	1	1.7005	0.2161	7.87	<.0001

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