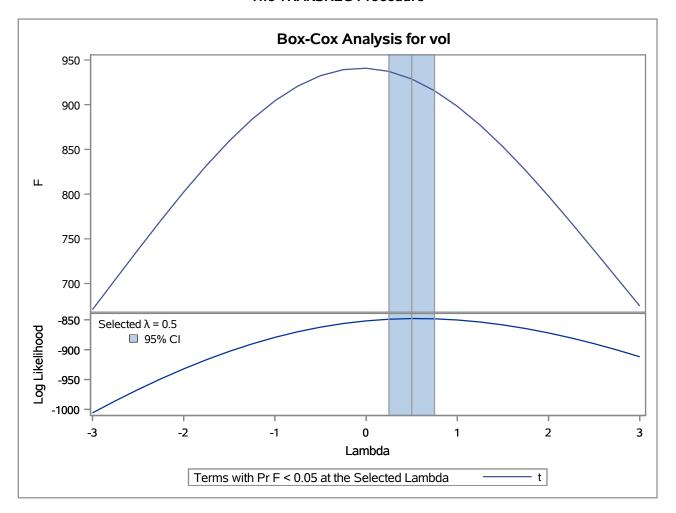
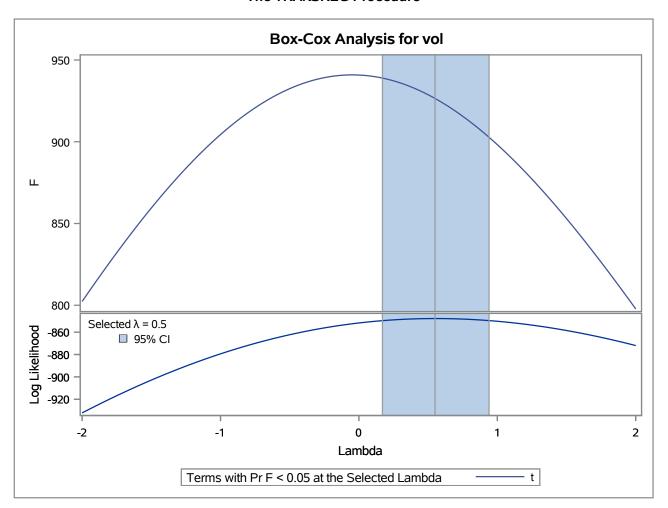


## The TRANSREG Procedure

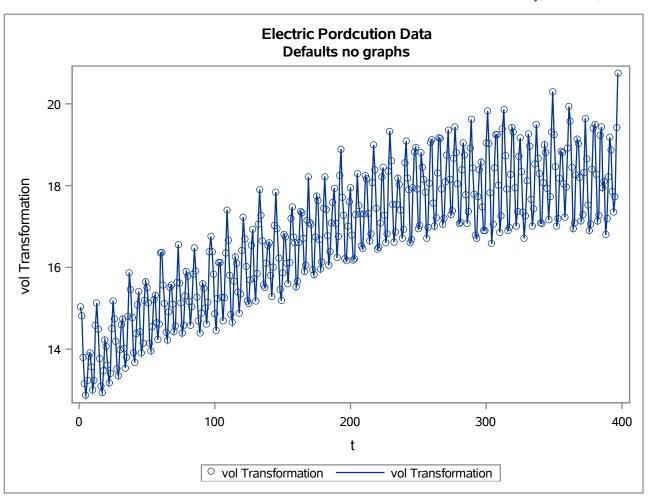


## The TRANSREG Procedure



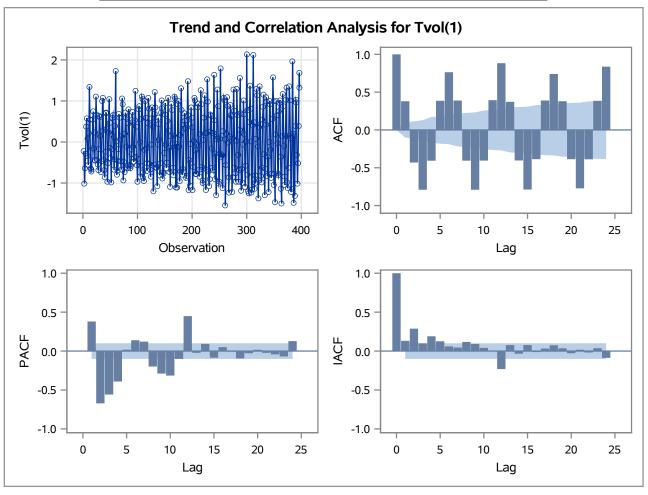
## The TRANSREG Procedure

	Model Statement Specification Details								
Туре	DF	Variable	Description	Value					
Dep	1	BoxCox(vol)	Lambda Used	0.5					
			Lambda 0.55						
			Log Likelihood	-847.9					
			Conv. Lambda	0.5					
			Conv. Lambda LL	-847.9					
			CI Limit	-849.8					
			Alpha	0.05					
			Options	Convenient Lambda Used					
Ind	1	Identity(t)	DF	1					



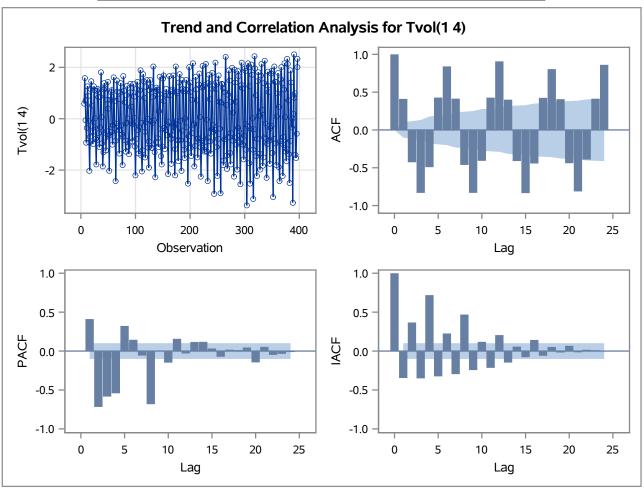
Name of Variable = Tvol					
Period(s) of Differencing	1				
Mean of Working Series	0.014448				
Standard Deviation	0.803113				
Number of Observations	396				
Observation(s) eliminated by differencing	1				

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq		Autocorrelations				
6	744.73	6	<.0001	0.380	-0.431	-0.791	-0.407	0.386	0.764
12	1578.45	12	<.0001	0.389	-0.406	-0.791	-0.405	0.394	0.883
18	2313.26	18	<.0001	0.372	-0.404	-0.788	-0.387	0.390	0.740
24	3110.16	24	<.0001	0.380	-0.387	-0.773	-0.388	0.385	0.837



Name of Variable = Tvol					
Period(s) of Differencing	1,4				
Mean of Working Series	0.012871				
Standard Deviation	1.347825				
Number of Observations	392				
Observation(s) eliminated by differencing	5				

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq		Autocorrelations				
6	866.38	6	<.0001	0.411	-0.428	-0.832	-0.492	0.428	0.841
12	1776.32	12	<.0001	0.414	-0.463	-0.832	-0.409	0.428	0.907
18	2619.63	18	<.0001	0.400	-0.411	-0.836	-0.444	0.425	0.805
24	3490.16	24	<.0001	0.407	-0.440	-0.813	-0.391	0.413	0.861

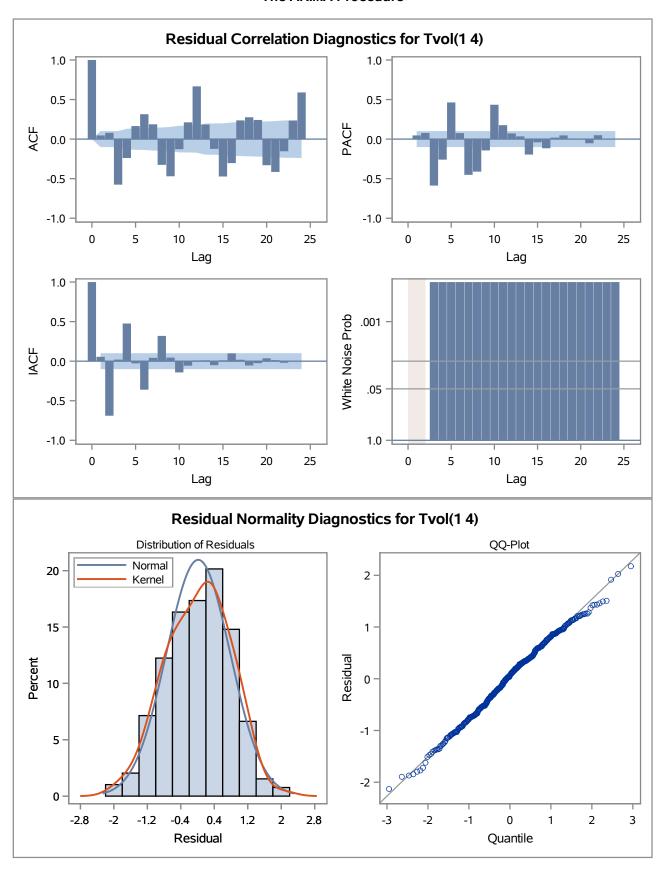


Maximum Likelihood Estimation										
Parameter	Estimate	Standard Error	t Value	Approx Pr >  t	Lag					
MA1,1	1.57789	0.03997	39.48	<.0001	2					
MA1,2	-0.62380	0.03999	-15.60	<.0001	4					

Variance Estimate	0.581343
Std Error Estimate	0.762458
AIC	909.5616
SBC	917.5041
Number of Residuals	392

Correlations of Parameter Estimates						
Parameter	MA1,1	MA1,2				
MA1,1	1.000	-0.972				
MA1,2	-0.972	1.000				

	Autocorrelation Check of Residuals								
To Lag	Chi-Square	DF	Pr > ChiSq		Autocorrelations				
6	207.84	4	<.0001	0.047	0.079	-0.575	-0.238	0.165	0.315
12	558.76	10	<.0001	0.187	-0.326	-0.470	-0.127	0.212	0.666
18	762.63	16	<.0001	0.185	-0.123	-0.472	-0.303	0.237	0.276
24	1082.37	22	<.0001	0.242	-0.330	-0.415	-0.154	0.234	0.590
30	1284.49	28	<.0001	0.209	-0.165	-0.426	-0.313	0.252	0.250
36	1605.26	34	<.0001	0.260	-0.331	-0.387	-0.141	0.217	0.591
42	1794.49	40	<.0001	0.203	-0.155	-0.393	-0.316	0.242	0.231
48	2126.68	46	<.0001	0.221	-0.324	-0.402	-0.118	0.193	0.614



Model for variable Tvol					
Period(s) of Differencing	1,4				

### **The ARIMA Procedure**

## No mean term in this model.

#### **Moving Average Factors**

**Factor 1:** 1 - 1.57789 B\*\*(2) + 0.6238 B\*\*(4)

Forecasts for variable Tvol								
Obs	Forecast	Std Error		% dence nits	Actual	Residual		
386	16.5839	0.7625	15.0895	18.0783	17.9489	1.3651		
387	16.9429	1.0783	14.8295	19.0563	18.1037	1.1608		
388	19.6638	1.1648	17.3808	21.9468	16.7993	-2.8645		
389	19.4179	1.2454	16.9770	21.8588	17.1917	-2.2262		
390	16.5681	1.4788	13.6697	19.4666	18.2142	1.6460		
391	16.9271	1.6801	13.6341	20.2201	19.1805	2.2534		
392	19.6481	1.7284	16.2605	23.0357	18.8740	-0.7740		
393	19.4022	1.7754	15.9225	22.8818	17.8611	-1.5411		
394	16.5524	1.9608	12.7092	20.3956	17.3508	0.7984		
395	16.9114	2.1302	12.7362	21.0866	17.7318	0.8204		
396	19.6323	2.1622	15.3944	23.8702	19.4216	-0.2107		
397	19.3864	2.1938	15.0867	23.6861	20.7512	1.3648		
398	16.5366	2.3590	11.9130	21.1603				
399	16.8956	2.5135	11.9693	21.8220				
400	19.6166	2.5358	14.6465	24.5866				
401	19.3707	2.5579	14.3573	24.3841				
402	16.5209	2.7124	11.2046	21.8372				
403	16.8799	2.8586	11.2771	22.4827				
404	19.6008	2.8744	13.9671	25.2345				
405	19.3550	2.8901	13.6905	25.0194				
406	16.5052	3.0383	10.5502	22.4601				
407	16.8642	3.1796	10.6322	23.0962				
408	19.5851	3.1907	13.3314	25.8388				
409	19.3392	3.2018	13.0639	25.6146				
410	16.4894	3.3462	9.9310	23.0478				
411	16.8484	3.4846	10.0187	23.6782				
412	19.5694	3.4922	12.7247	26.4140				
413	19.3235	3.4999	12.4639	26.1831				
414	16.4737	3.6420	9.3355	23.6118				
415	16.8327	3.7788	9.4265	24.2389				

Forecasts for variable Tvol									
Obs	Forecast	Std Error	Confi	95% Confidence Limits		Residual			
416	19.5536	3.7838	12.1375	26.9698					
417	19.3077	3.7889	11.8817	26.7338					
418	16.4579	3.9297	8.7560	24.1599					
419	16.8169	4.0656	8.8485	24.7853					
420	19.5379	4.0688	11.5633	27.5125					
421	19.2920	4.0719	11.3112	27.2728					
422	16.4422	4.2121	8.1867	24.6977					
423	16.8012	4.3477	8.2799	25.3225	•				
424	19.5221	4.3495	10.9973	28.0470					
425	19.2763	4.3513	10.7478	27.8047					
426	16.4265	4.4913	7.6237	25.2292					
427	16.7855	4.6270	7.7167	25.8542	•				
428	19.5064	4.6279	10.4359	28.5769	•				
429	19.2605	4.6288	10.1883	28.3327					
430	16.4107	4.7689	7.0639	25.7576					
431	16.7697	4.9050	7.1561	26.3833					
432	19.4907	4.9053	9.8764	29.1049					
433	19.2448	4.9056	9.6299	28.8596					
434	16.3950	5.0461	6.5048	26.2852					
435	16.7540	5.1828	6.5958	26.9121					

