

Input Data Set	
<b>Name</b>	WORK.PREPROCESSEDDATA
<b>Label</b>	U.S. Violent Crime Data 1989-1997
<b>Time ID Variable</b>	Date

Estimation Span Summary									
Variable	Type	First Obs	Last Obs	NObs	NMiss	Min	Max	Mean	Standard Deviation
MurdersTX	Dependent	JAN1989	DEC1997	108	0	85.00000	280.00000	166.47222	39.87280

Forecast Span Summary									
Variable	Type	First Obs	Last Obs	NObs	NMiss	Min	Max	Mean	Standard Deviation
MurdersTX	Dependent	JAN1989	DEC1997	108	0	85.00000	280.00000	166.47222	39.87280

Fixed Parameters in the Model		
Component	Parameter	Value
Season	Error Variance	0

Preliminary Estimates of the Free Parameters		
Component	Parameter	Estimate
Irregular	Error Variance	4711.21769
Level	Error Variance	1766.70663
Slope	Error Variance	1766.70663

Likelihood Based Fit Statistics	
Statistic	Value
Full Log Likelihood	-431.5
Diffuse Part of Log Likelihood	-4.97
Non-Missing Observations Used	108
Estimated Parameters	3
Initialized Diffuse State Elements	13
Normalized Residual Sum of Squares	95
AIC (smaller is better)	869.09
BIC (smaller is better)	876.75
AICC (smaller is better)	869.35
HQIC (smaller is better)	872.18
CAIC (smaller is better)	879.75

Likelihood Optimization Algorithm Converged in 6 Iterations.

Final Estimates of the Free Parameters					
Component	Parameter	Estimate	Approx Std Error	t Value	Approx Pr >  t
Irregular	Error Variance	247.85482	43.80894	5.66	<.0001
Level	Error Variance	24.50078	18.36962	1.33	0.1823
Slope	Error Variance	0.08448	0.13614	0.62	0.5349

Fit Statistics Based on Residuals	
Mean Squared Error	503.94367
Root Mean Squared Error	22.44869
Mean Absolute Percentage Error	10.31004
Maximum Percent Error	34.24305
R-Square	0.71477
Adjusted R-Square	0.70857
Random Walk R-Square	0.27024
Amemiya's Adjusted R-Square	0.69616
Number of non-missing residuals used for computing the fit statistics = 95	

Significance Analysis of Components (Based on the Final State)			
Component	DF	Chi-Square	Pr > ChiSq
Irregular	1	0.62	0.4313
Level	1	132.54	<.0001
Slope	1	0.98	0.3227
Season	11	62.62	<.0001

Trend Information (Based on the Final State)		
Name	Estimate	Standard Error
Level	102.9496922	8.9423493
Slope	-1.28947644	1.3038198

Summary of Seasons			
Name	Type	Season Length	Error Variance
Season	DUMMY	12	0

Outlier Summary							
Obs	Date	Break Type	Estimate	Standard Error	Chi-Square	DF	Pr > ChiSq
19	JUL1990	Additive Outlier	66.37528	18.183126	13.33	1	0.0003
89	MAY1996	Additive Outlier	47.65992	18.183233	6.87	1	0.0088

Forecasts for Variable MurdersTX					
Obs	Date	Forecast	Standard Error	95% Confidence Limits	
109	JAN1998	93.000666	19.89371	54.009715	131.991618
110	FEB1998	77.534464	20.84299	36.682956	118.385972
111	MAR1998	88.311295	21.82464	45.535781	131.086810
112	APR1998	82.775605	22.83620	38.017484	127.533725
113	MAY1998	93.594059	23.87541	46.799116	140.389001
114	JUN1998	94.099991	24.94027	45.217967	142.982014
115	JUL1998	117.515623	26.02894	66.499840	168.531406
116	AUG1998	115.396511	27.13978	62.203530	168.589493
117	SEP1998	100.853766	28.27127	45.443089	156.264443
118	OCT1998	94.331833	29.42207	36.665641	151.998024
119	NOV1998	82.497377	30.59091	22.540295	142.454460
120	DEC1998	94.905955	31.77666	32.624845	157.187066

