

Input Data Set	
Name	WORK.PREPROCESSEDDATA
Label	U.S. Violent Crime Data 1989-1997
Time ID Variable	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
Slope	Error Variance	0
Season	Error Variance	0

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

Likelihood Based Fit Statistics	
Statistic	Value
Full Log Likelihood	-452.4
Diffuse Part of Log Likelihood	-4.97
Non-Missing Observations Used	108
Estimated Parameters	1
Initialized Diffuse State Elements	13
Normalized Residual Sum of Squares	95
AIC (smaller is better)	906.87
BIC (smaller is better)	909.42
AICC (smaller is better)	906.91
HQIC (smaller is better)	907.9
CAIC (smaller is better)	910.42

Likelihood Optimization Algorithm Converged in 0 Iterations.

Final Estimates of the Free Parameters					
Component	Parameter	Estimate	Approx Std Error	t Value	Approx Pr > t
Level	Error Variance	547.91579	79.49998	6.89	<.0001

Fit Statistics Based on Residuals	
Mean Squared Error	763.67959
Root Mean Squared Error	27.63475
Mean Absolute Percentage Error	13.57653
Maximum Percent Error	43.76130
R-Square	0.56776
Adjusted R-Square	0.56776
Random Walk R-Square	-0.10588
Amemiya's Adjusted R-Square	0.55856
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
Level	1	197.99	<.0001
Slope	1	0.07	0.7983
Season	11	30.42	0.0014

Trend Information (Based on the Final State)		
Name	Estimate	Standard Error
Level	110.8449074	7.8775233
Slope	-0.5787037	2.2640983

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	64.37500	17.555701	13.45	1	0.0002
89	MAY1996	Additive Outlier	56.06250	17.555701	10.20	1	0.0014

Forecasts for Variable MurdersTX					
Obs	Date	Forecast	Standard Error	95% Confidence Limits	
109	JAN1998	101.500000	24.82751	52.838974	150.161026
110	FEB1998	86.833333	35.00287	18.228978	155.437689
111	MAR1998	98.388889	42.82518	14.453082	182.324696
112	APR1998	93.611111	49.42460	-3.259328	190.481550
113	MAY1998	105.166667	55.24117	-3.104031	213.437365
114	JUN1998	106.388889	60.50109	-12.191068	224.968846
115	JUL1998	130.500000	65.33894	2.438029	258.561971
116	AUG1998	129.055556	69.84248	-7.833197	265.944308
117	SEP1998	115.166667	74.07272	-30.013197	260.346530
118	OCT1998	109.277778	78.07409	-43.744622	262.300178
119	NOV1998	98.055556	81.88015	-62.426584	258.537695
120	DEC1998	111.055556	85.51698	-56.554645	278.665756

