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**
Irregular	**Error Variance**	4711.21769
Level	**Error Variance**	1766.70663

Likelihood Based Fit Statistics	
Statistic	**Value**
Full Log Likelihood	-432.1
Diffuse Part of Log Likelihood	-4.97
Non-Missing Observations Used	108
Estimated Parameters	2
Initialized Diffuse State Elements	13
Normalized Residual Sum of Squares	95
AIC (smaller is better)	868.26
BIC (smaller is better)	873.37
AICC (smaller is better)	868.39
HQIC (smaller is better)	870.32
CAIC (smaller is better)	875.37

Likelihood Optimization Algorithm Converged in 3 Iterations.

Final Estimates of the Free Parameters

Component	Parameter	Estimate	Approx Std Error	t Value	Approx Pr > |t|
Irregular	Error Variance	236.90274	41.57312	5.70	<.0001
Level	Error Variance	39.32716	16.92420	2.32	0.0201

Fit Statistics Based on Residuals

Mean Squared Error	508.98810
Root Mean Squared Error	22.56076
Mean Absolute Percentage Error	10.40647
Maximum Percent Error	33.49969
R-Square	0.71191
Adjusted R-Square	0.70881
Random Walk R-Square	0.26294
Amemiya's Adjusted R-Square	0.69952
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	0.37	0.5442
Level	1	128.47	<.0001
Slope	1	1.01	0.3140
Season	11	59.03	<.0001

Trend Information (Based on the Final State)

Name	Estimate	Standard Error
Level	104.6449483	9.2325932
Slope	-0.62321287	0.619015

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	65.93289	18.243499	13.06	1	0.0003
89	MAY1996	Additive Outlier	49.06566	18.243935	7.23	1	0.0072
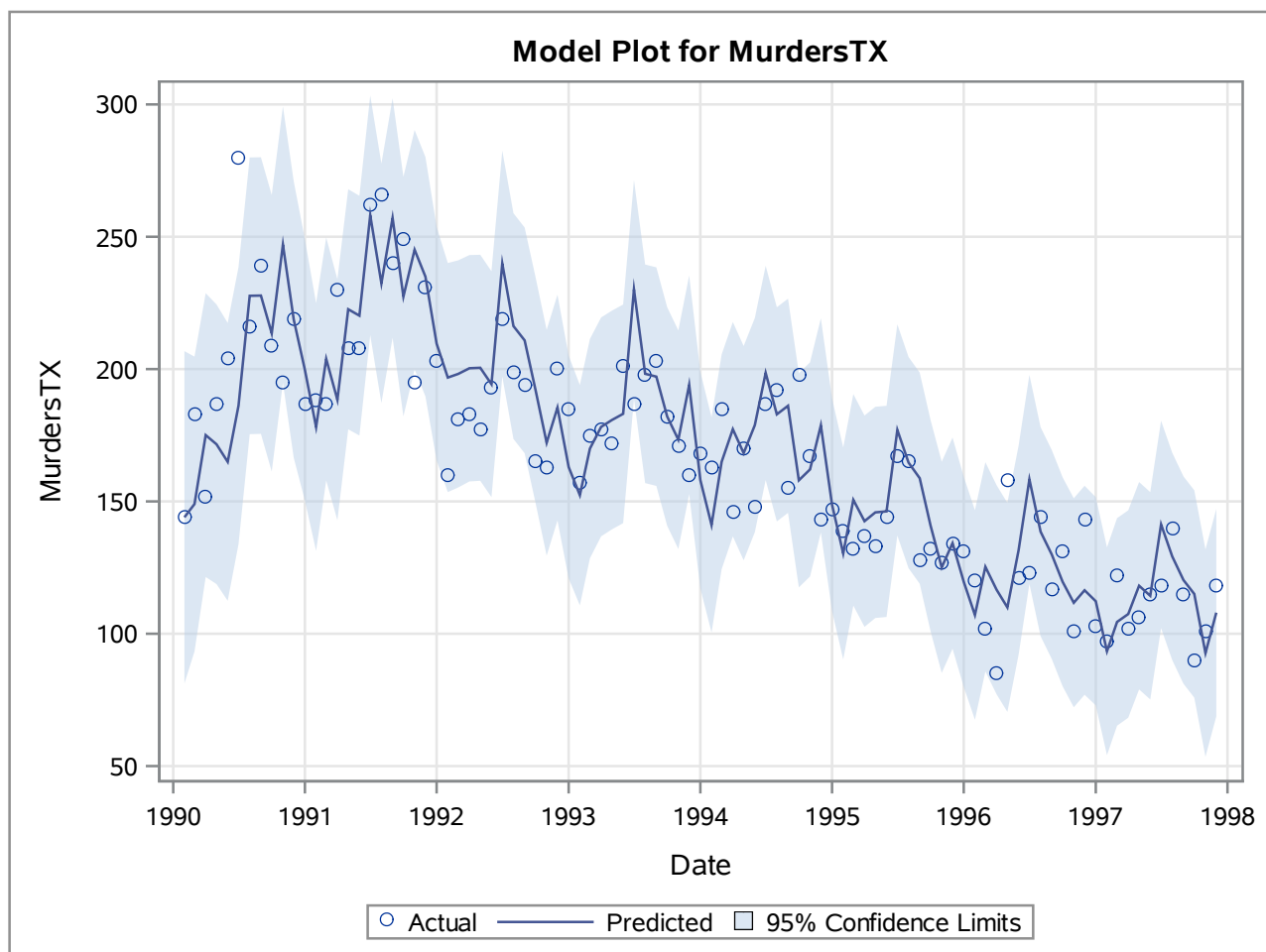
Forecasts for Variable MurdersTX

Obs	Date	Forecast	Standard Error	95% Confidence Limits	
109	JAN1998	95.010731	19.93262	55.943518	134.077945
110	FEB1998	80.344065	21.00015	39.184536	121.503594
111	MAR1998	91.899620	22.01597	48.749111	135.050130
112	APR1998	87.121842	22.98695	42.068251	132.175434
113	MAY1998	98.677398	23.91854	51.797917	145.556879
114	JUN1998	99.899620	24.81519	51.262747	148.536493
115	JUL1998	124.010731	25.68054	73.677789	174.343673
116	AUG1998	122.566287	26.51768	70.592594	174.539979
117	SEP1998	108.677398	27.32918	55.113190	162.241606
118	OCT1998	102.788509	28.11727	47.679671	157.897347

Forecasts for Variable MurdersTX					
Obs	Date	Forecast	Standard Error	95% Confidence Limits	
119	NOV1998	91.566287	28.88387	34.954948	148.177625
120	DEC1998	104.566287	29.63064	46.491307	162.641267

Smoothed Irregular Component for MurdersTX

Smoothed Level Component for MurdersTX

95% Confidence Limits — — Start of multi-step forecasts

Smoothed Slope Component for MurdersTX

95% Confidence Limits — — Start of multi-step forecasts

Smoothed Seasonal Component for MurdersTX
Season Length = 12

Forecasts for MurdersTX