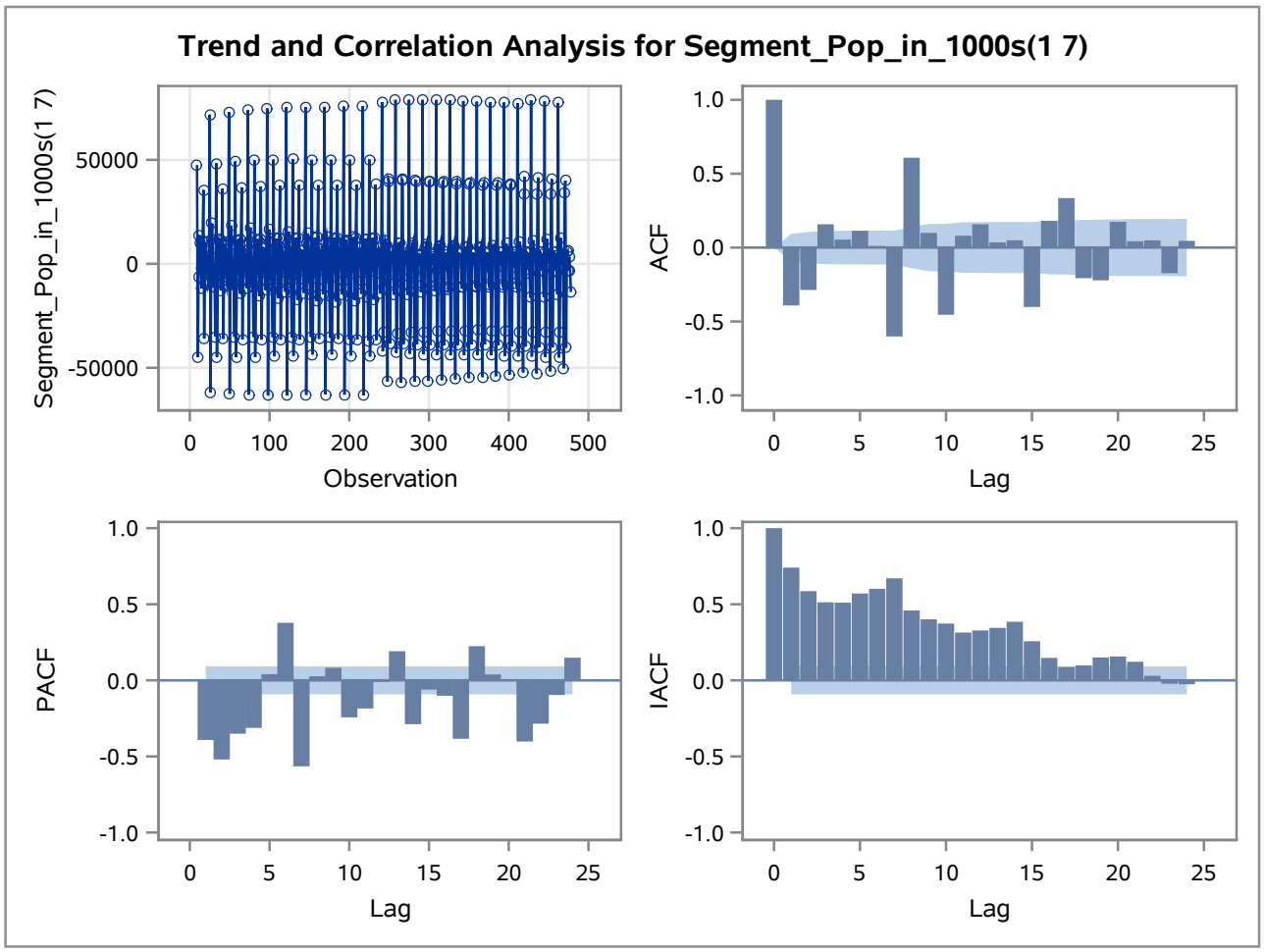
Industry_Mgmt_professional_and_R=.

Name of Variable = Segment_Pop_in_1000s	
Period(s) of Differencing	1,7
Mean of Working Series	22.22347
Standard Deviation	30056.59
Number of Observations	470
Observation(s) eliminated by differencing	8

Autocorrelation Check for White Noise									
To Lag	**Chi-Square**	**DF**	**Pr > ChiSq**	**Autocorrelations**					
6	130.90	6	<.0001	-0.392	-0.287	0.158	0.054	0.114	0.011
12	601.21	12	<.0001	-0.601	0.608	0.099	-0.454	0.080	0.158
18	773.75	18	<.0001	0.035	0.049	-0.402	0.181	0.335	-0.207
24	830.80	24	<.0001	-0.222	0.174	0.043	0.049	-0.173	0.045



Warning: The model defined by the new estimates is unstable. The iteration process has been terminated.

Warning: Estimates may not have converged.

Industry_Mgmt_professional_and_R=.

ARIMA Estimation Optimization Summary	
Estimation Method	Maximum Likelihood
Parameters Estimated	5
Termination Criteria	Maximum Relative Change in Estimates
Iteration Stopping Value	0.001
Criteria Value	40.39892
Maximum Absolute Value of Gradient	2.5E10
R-Square Change from Last Iteration	0.377834
Objective Function	Log Gaussian Likelihood
Objective Function Value	-5141.9
Marquardt's Lambda Coefficient	0.00001
Numerical Derivative Perturbation Delta	0.001
Iterations	5
Warning Message	Estimates may not have converged.

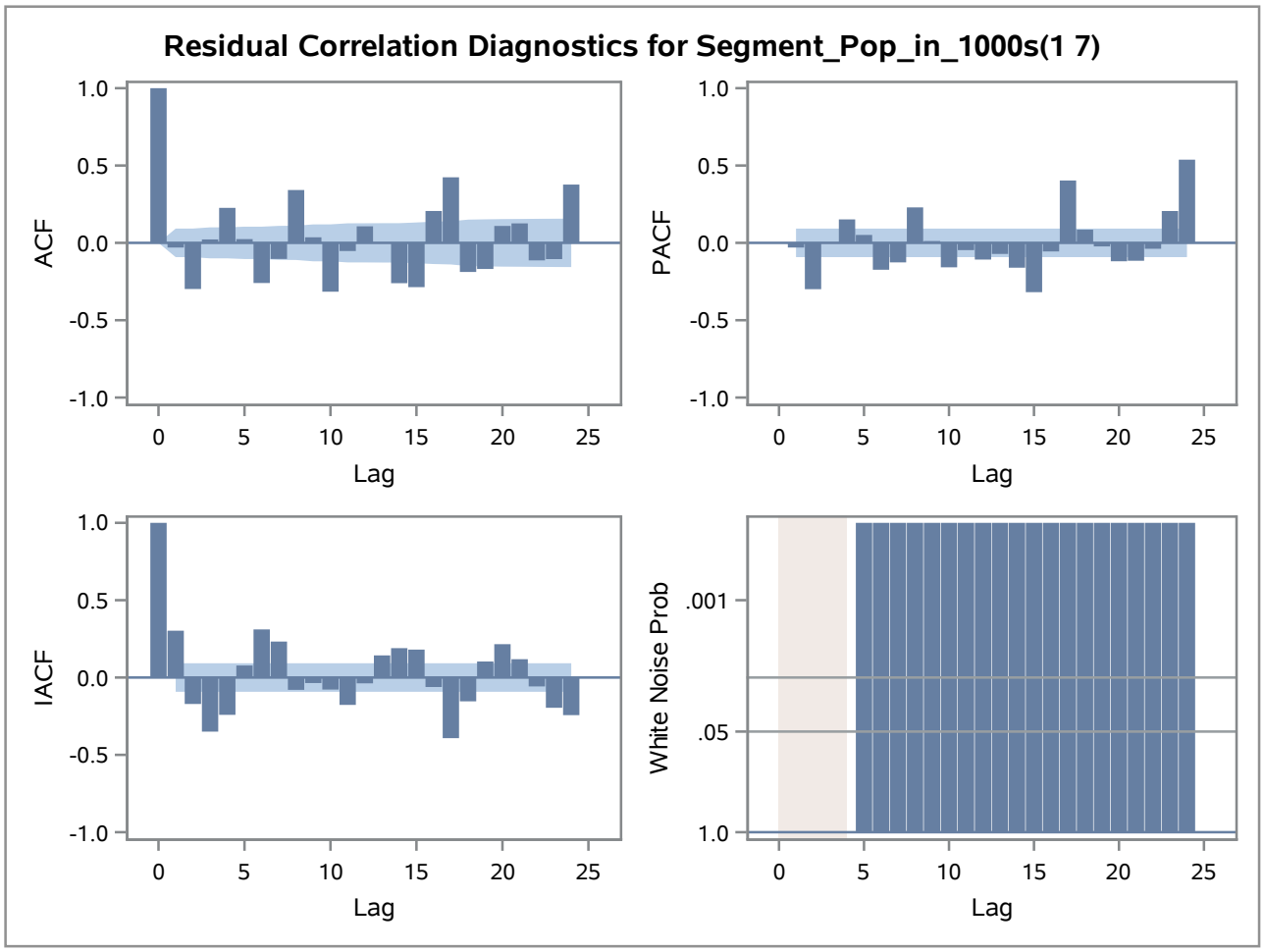
Maximum Likelihood Estimation					
Parameter	**Estimate**	**Standard Error**	**t Value**	**Approx Pr > |t|**	**Lag**
MU	4.11913	3.61927	1.14	0.2551	0
MA1,1	0.90895	0.04309	21.10	<.0001	1
MA2,1	0.99980	7.08720	0.14	0.8878	7
AR1,1	0.12917	0.05712	2.26	0.0237	1
AR2,1	-0.27064	0.04729	-5.72	<.0001	7

Constant Estimate	4.557877
Variance Estimate	1.7418E8
Std Error Estimate	13197.82
AIC	10293.8
SBC	10314.56
Number of Residuals	470

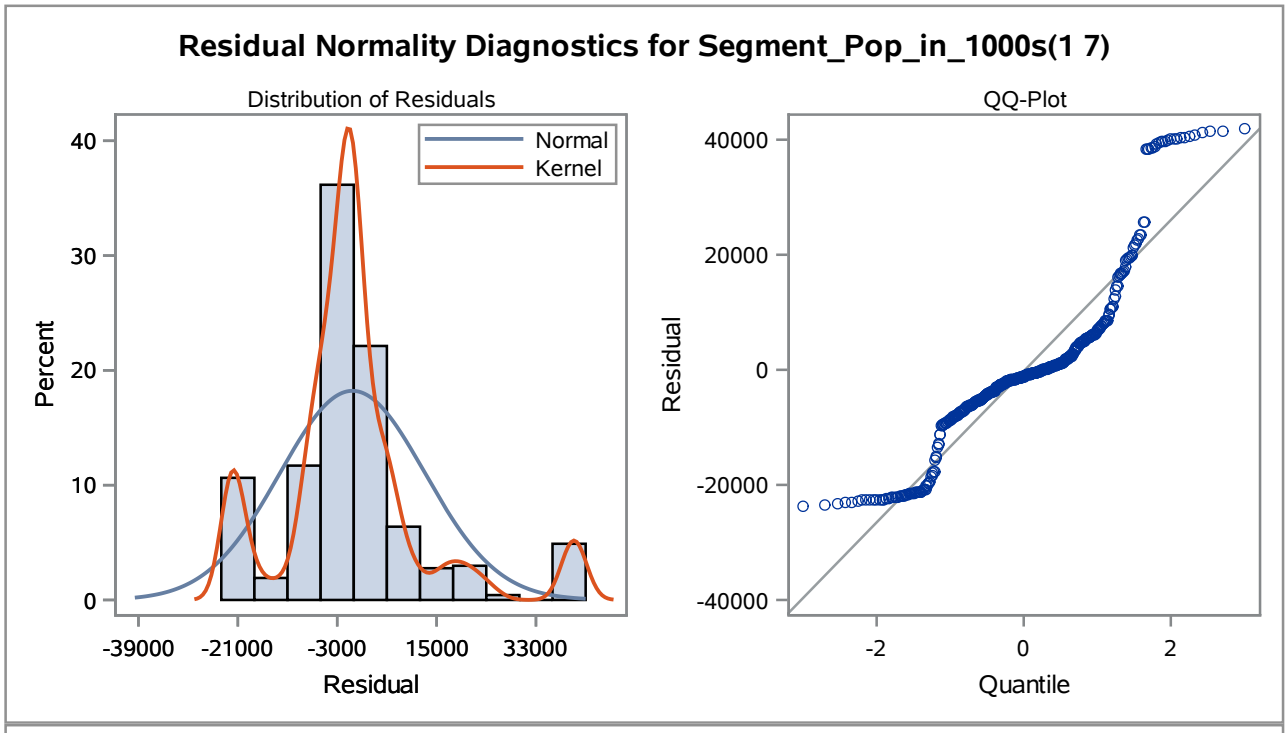
Correlations of Parameter Estimates					
Parameter	**MU**	**MA1,1**	**MA2,1**	**AR1,1**	**AR2,1**
MU	1.000	-0.468	-0.511	-0.259	-0.181
MA1,1	-0.468	1.000	0.018	0.577	0.204
MA2,1	-0.511	0.018	1.000	0.103	0.276
AR1,1	-0.259	0.577	0.103	1.000	0.327
AR2,1	-0.181	0.204	0.276	0.327	1.000

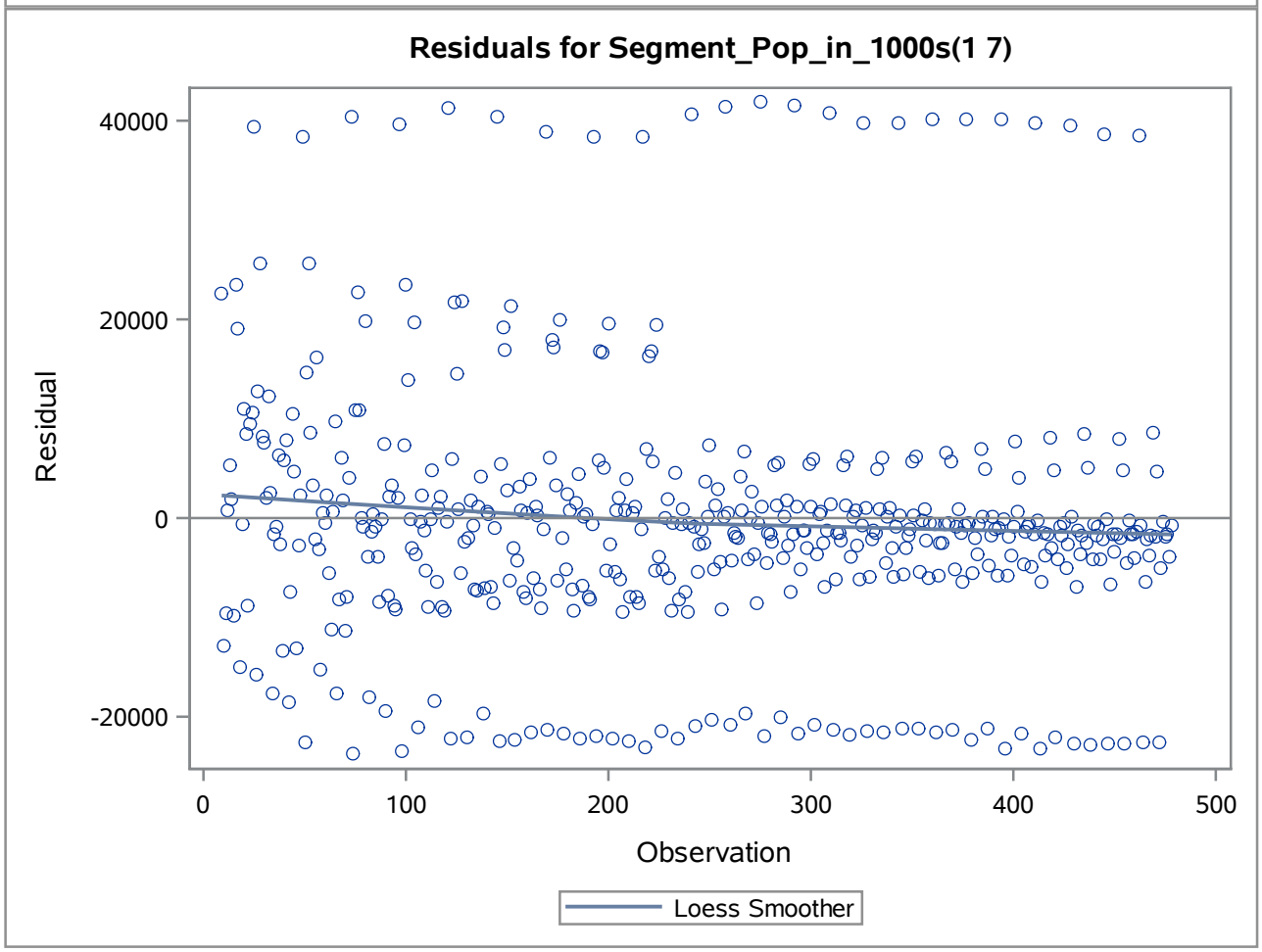
Industry_Mgmt_professional_and_R=.

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	99.50	2	<.0001	-0.030	-0.298	0.023	0.226	0.024	-0.259
12	216.21	8	<.0001	-0.104	0.342	0.036	-0.315	-0.052	0.107
18	415.26	14	<.0001	-0.001	-0.260	-0.286	0.206	0.424	-0.188
24	525.51	20	<.0001	-0.168	0.110	0.126	-0.113	-0.104	0.377
30	561.86	26	<.0001	0.098	0.016	-0.051	0.155	0.039	-0.185
36	596.15	32	<.0001	-0.084	0.013	-0.060	0.225	0.002	-0.076
42	627.63	38	<.0001	-0.071	-0.145	-0.109	0.117	-0.089	-0.040
48	700.95	44	<.0001	0.108	0.035	0.061	-0.088	-0.052	0.336



Industry_Mgmt_professional_and_R=.





Model for variable Segment_Pop_in_1000s	
Estimated Mean	4.119127
Period(s) of Differencing	1,7

Industry_Mgmt_professional_and_R=.

Autoregressive Factors	
Factor 1:	1 - 0.12917 B**(1)
Factor 2:	1 + 0.27064 B**(7)

Moving Average Factors	
Factor 1:	1 - 0.90895 B**(1)
Factor 2:	1 - 0.9998 B**(7)

Warning: Observation 2 is out of order according to the ID variable YEAR.

Warning: Observation 3 is out of order according to the ID variable YEAR.

Warning: Observation 4 is out of order according to the ID variable YEAR.

Warning: Observation 5 is out of order according to the ID variable YEAR.

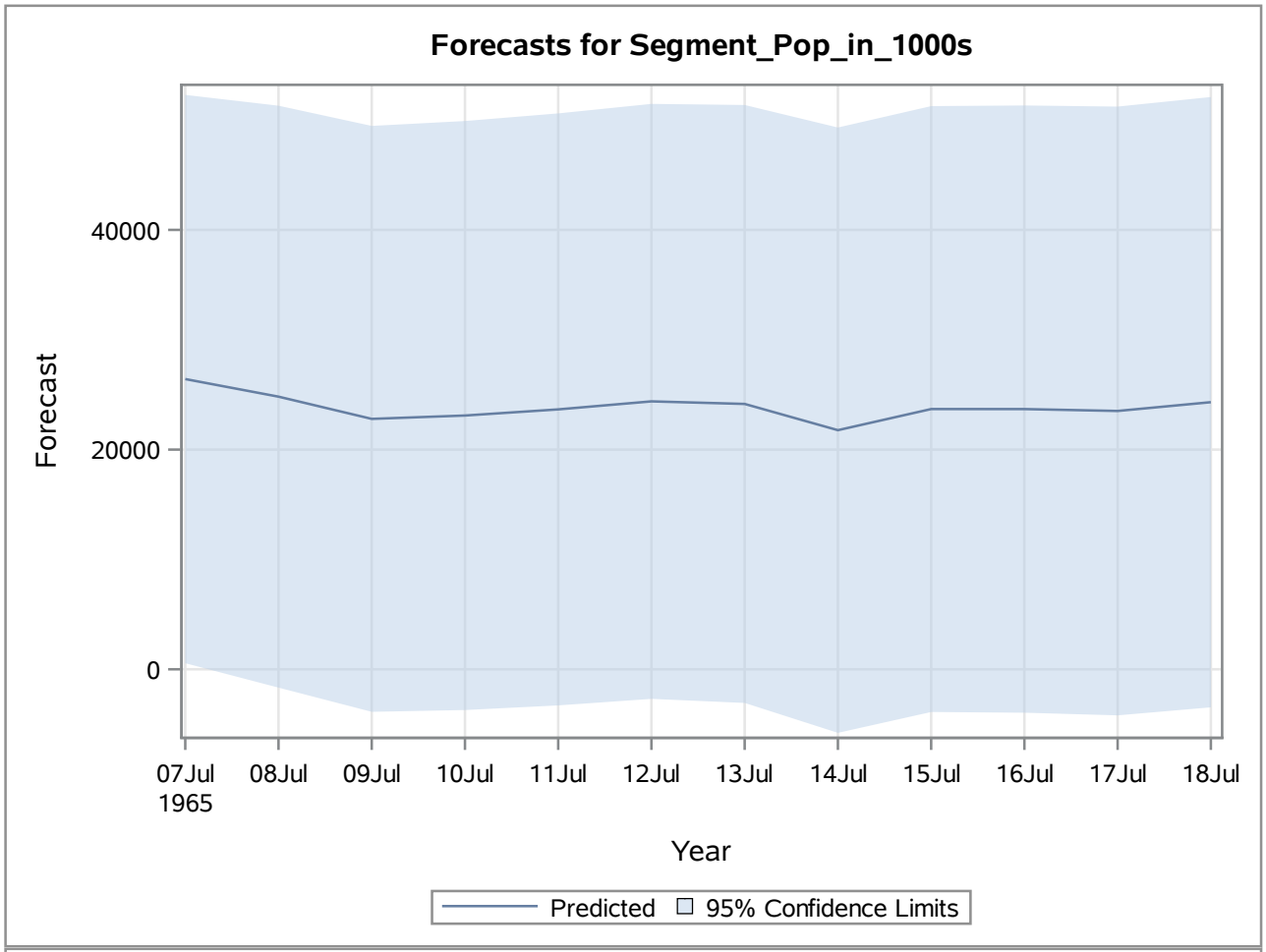
Warning: Observation 6 is out of order according to the ID variable YEAR.

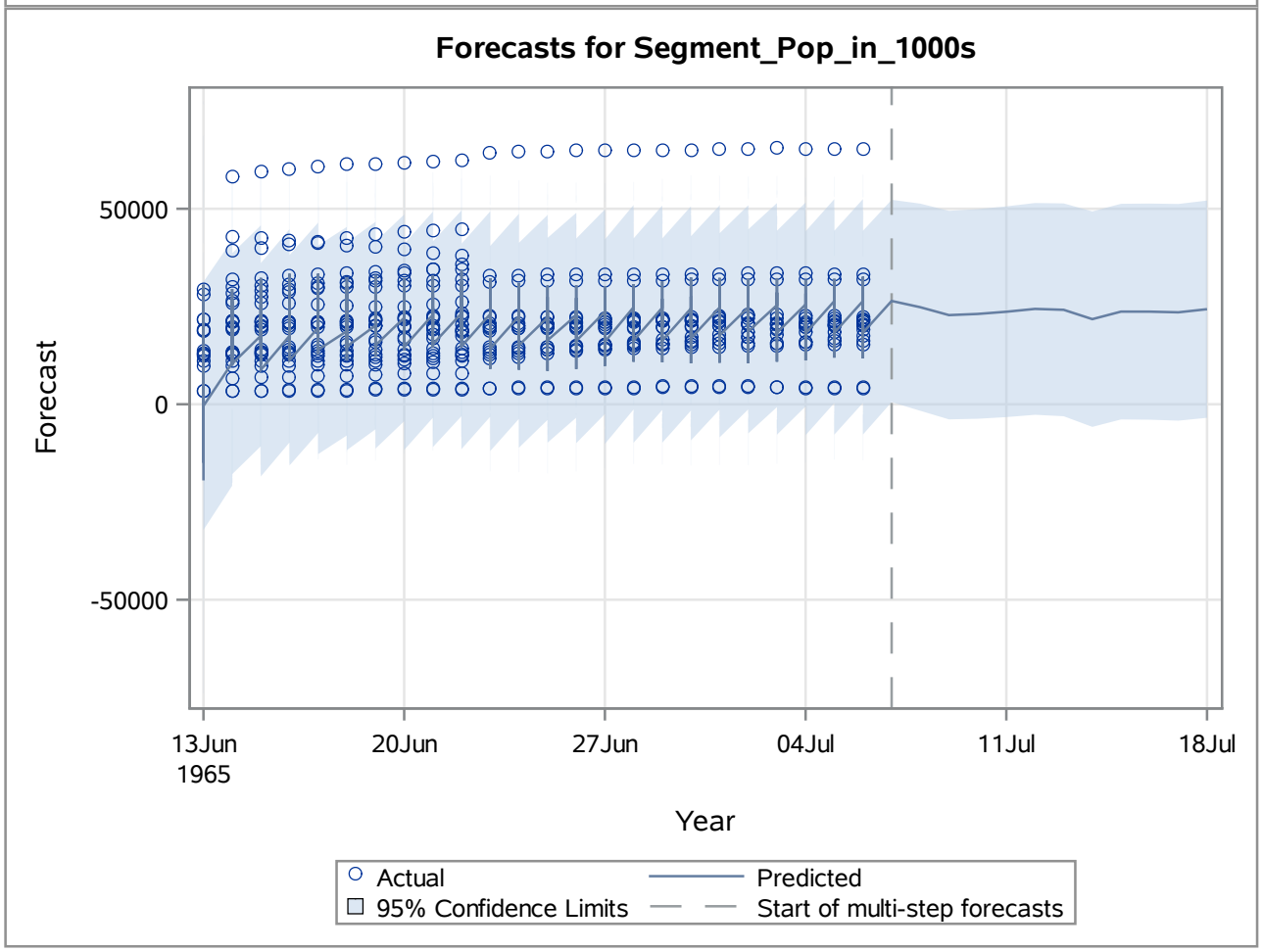
Warning: Observation 7 is out of order according to the ID variable YEAR.

Note: Further warnings will not be printed.

Forecasts for variable Segment_Pop_in_1000s				
Obs	**Forecast**	**Std Error**	**95% Confidence Limits**	
479	26420.5024	13197.820	553.2513	52287.7535
480	24817.6007	13514.041	-1669.4327	51304.6340
481	22795.9917	13605.746	-3870.7807	49462.7641
482	23100.0934	13678.131	-3708.5512	49908.7379
483	23658.0263	13747.886	-3287.3354	50603.3881
484	24389.0563	13817.003	-2691.7711	51469.8837
485	24153.9320	13885.738	-3061.6147	51369.4786
486	21766.4248	14057.280	-5785.3377	49318.1872
487	23689.5877	14069.818	-3886.7497	51265.9251
488	23687.1333	14102.081	-3952.4379	51326.7045
489	23515.3573	14137.478	-4193.5909	51224.3056
490	24315.0711	14173.211	-3463.9127	52094.0549

Industry_Mgmt_professional_and_R=.





Industry_Mgmt_professional_and_R=.

Outlier Detection Summary	
Maximum number searched	5
Number found	5
Significance used	0.05

Outlier Details				
Obs	**Type**	**Estimate**	**Chi-Square**	**Approx Prob>ChiSq**
121	Additive	43428.2	38.95	<.0001
145	Additive	43225.4	40.27	<.0001
97	Additive	42946.5	41.78	<.0001
73	Additive	42729.6	42.74	<.0001
169	Additive	42389.2	44.83	<.0001