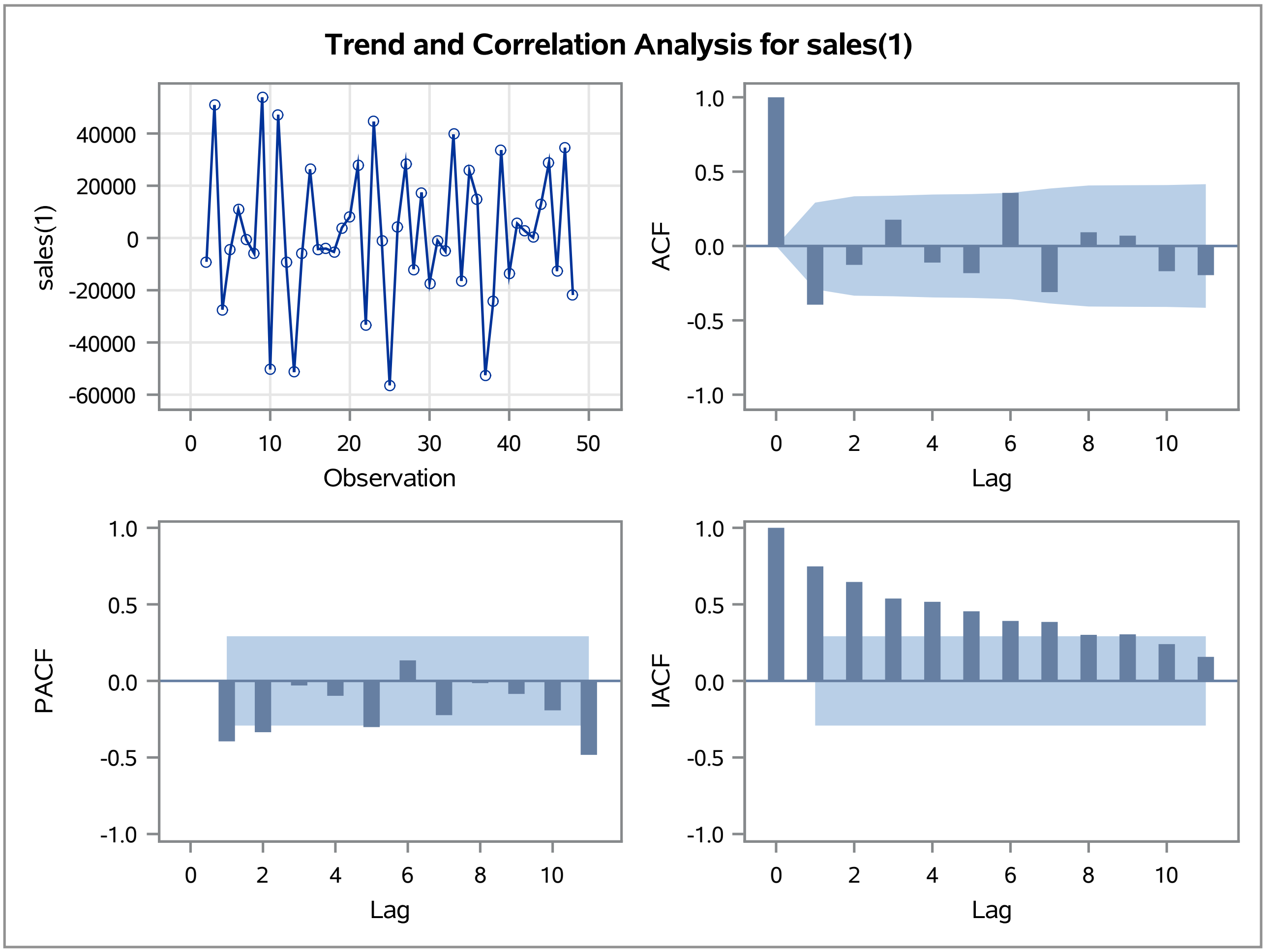
Name of Variable = sales	
Period(s) of Differencing	1
Mean of Working Series	1628.263
Standard Deviation	26754.34
Number of Observations	47
Observation(s) eliminated by differencing	1

Autocorrelation Check for White Noise									
To Lag	**Chi-Square**	**DF**	**Pr > ChiSq**	**Autocorrelations**					
6	19.93	6	0.0029	-0.395	-0.127	0.177	-0.112	-0.183	0.357



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

Warning: Estimates may not have converged.

ARIMA Estimation Optimization Summary	
Estimation Method	Maximum Likelihood
Parameters Estimated	3
Termination Criteria	Maximum Relative Change in Estimates
Iteration Stopping Value	0.001
Criteria Value	33.35369

ARIMA Estimation Optimization Summary	
Maximum Absolute Value of Gradient	3.9501E9
R-Square Change from Last Iteration	0.28328
Objective Function	Log Gaussian Likelihood
Objective Function Value	-537.066
Marquardt's Lambda Coefficient	0.00001
Numerical Derivative Perturbation Delta	0.001
Iterations	4
Warning Message	Estimates may not have converged.

Maximum Likelihood Estimation

Parameter	Estimate	Standard Error	t Value	Approx Pr > |t|	Lag
MU	890.46293	533.67662	1.67	0.0952	0
MA1,1	0.99957	21.96842	0.05	0.9637	1
AR1,1	0.42546	0.20504	2.07	0.0380	1

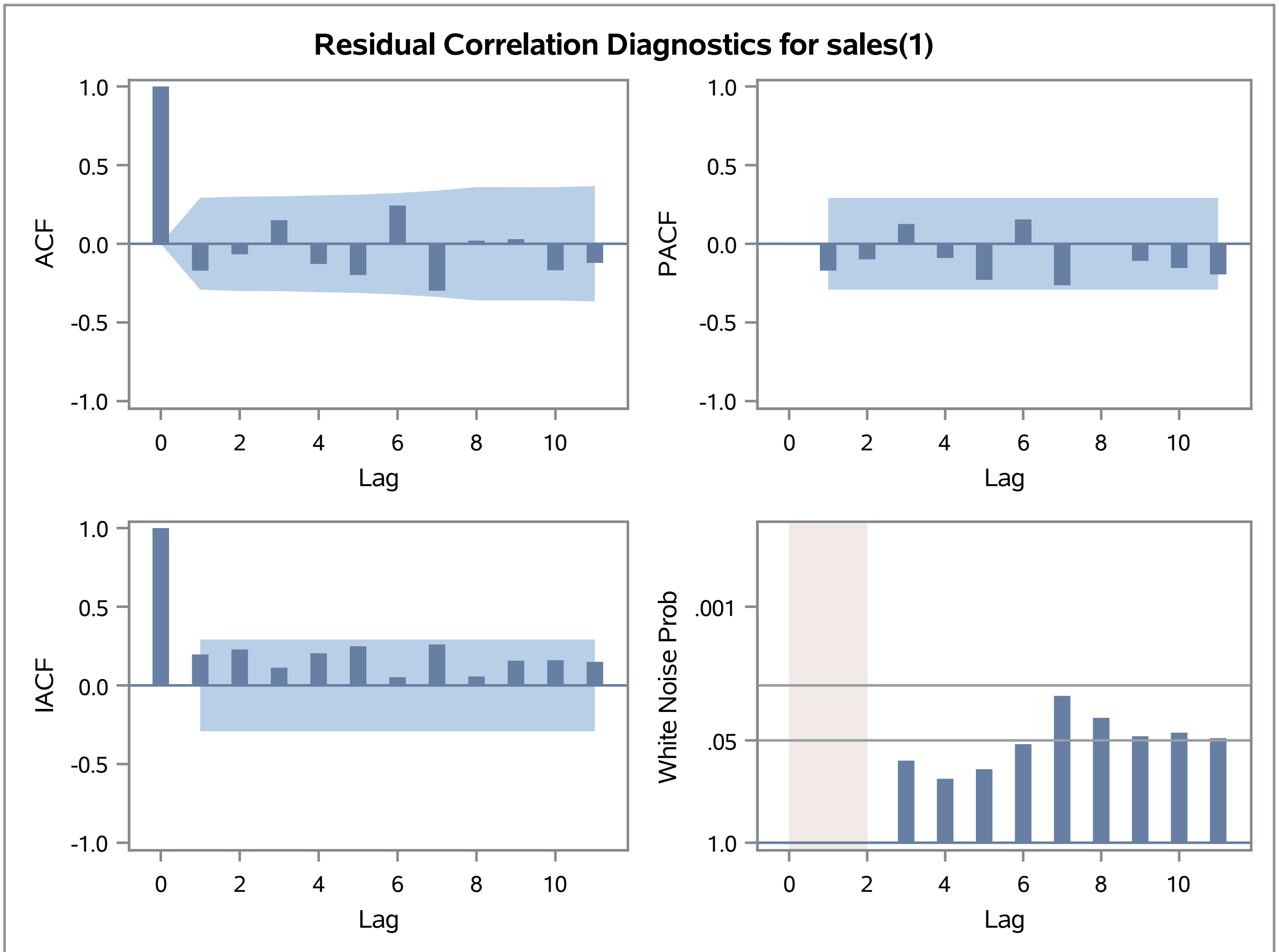
Constant Estimate	511.6097
Variance Estimate	4.9433E8
Std Error Estimate	22233.56
AIC	1080.133
SBC	1085.683
Number of Residuals	47

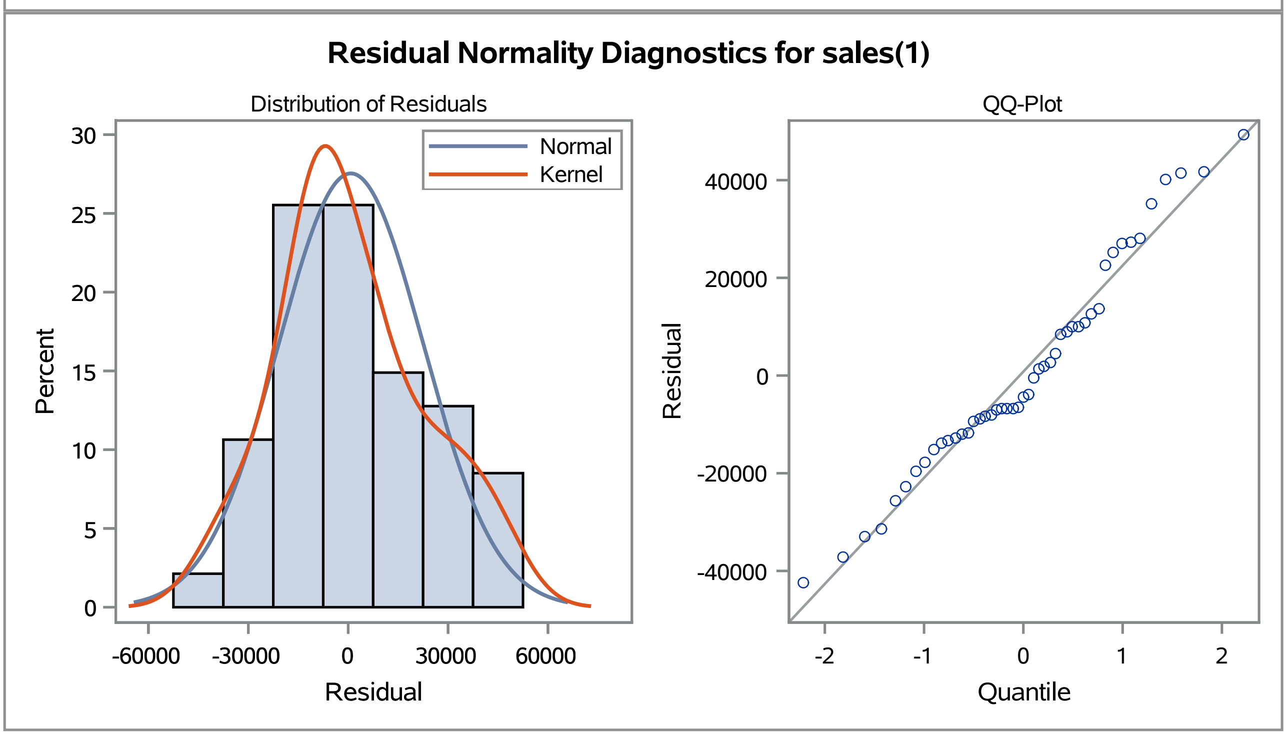
Correlations of Parameter Estimates

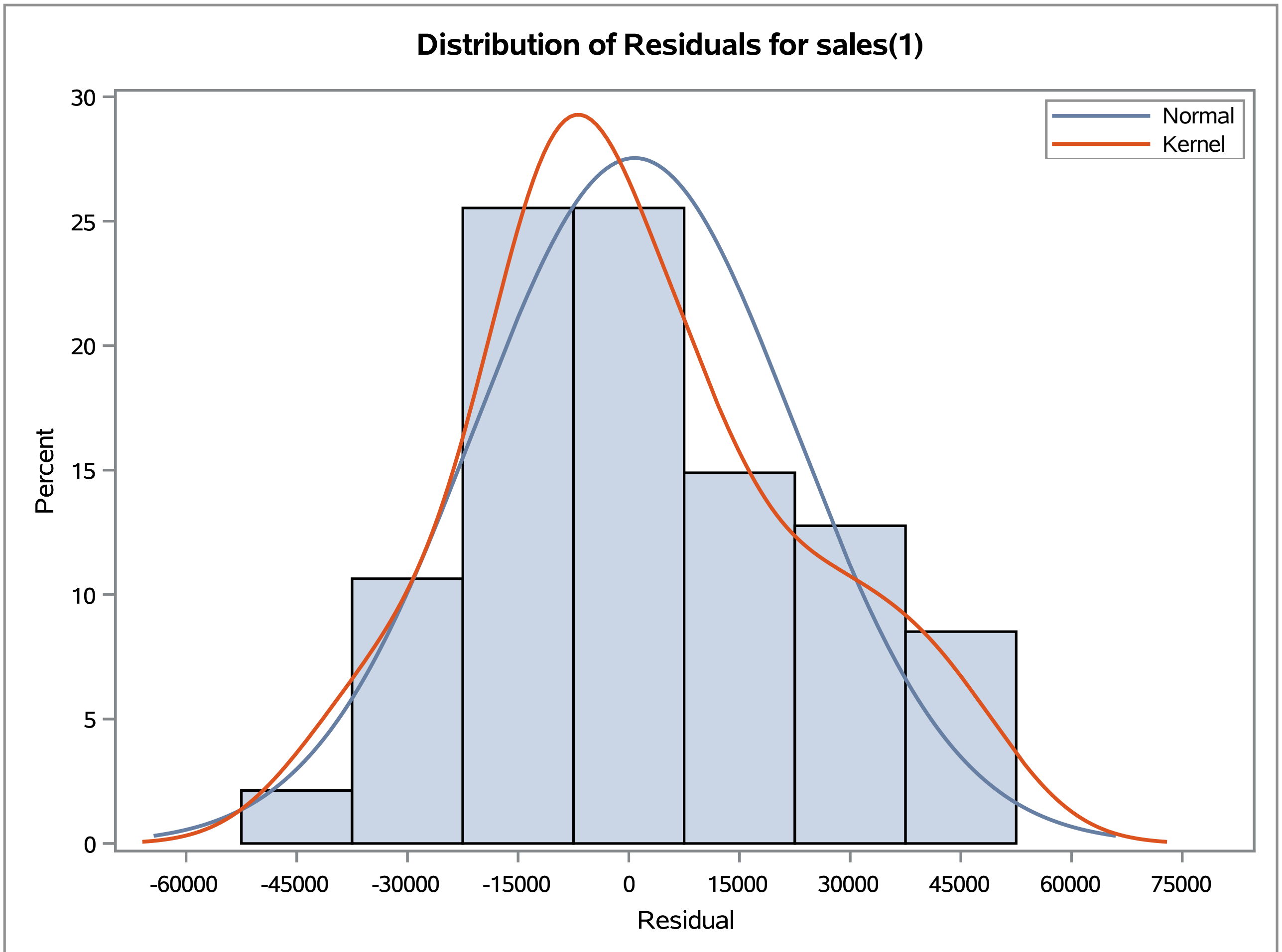
Parameter	MU	MA1,1	AR1,1
MU	1.000	-0.714	-0.464
MA1,1	-0.714	1.000	0.682
AR1,1	-0.464	0.682	1.000

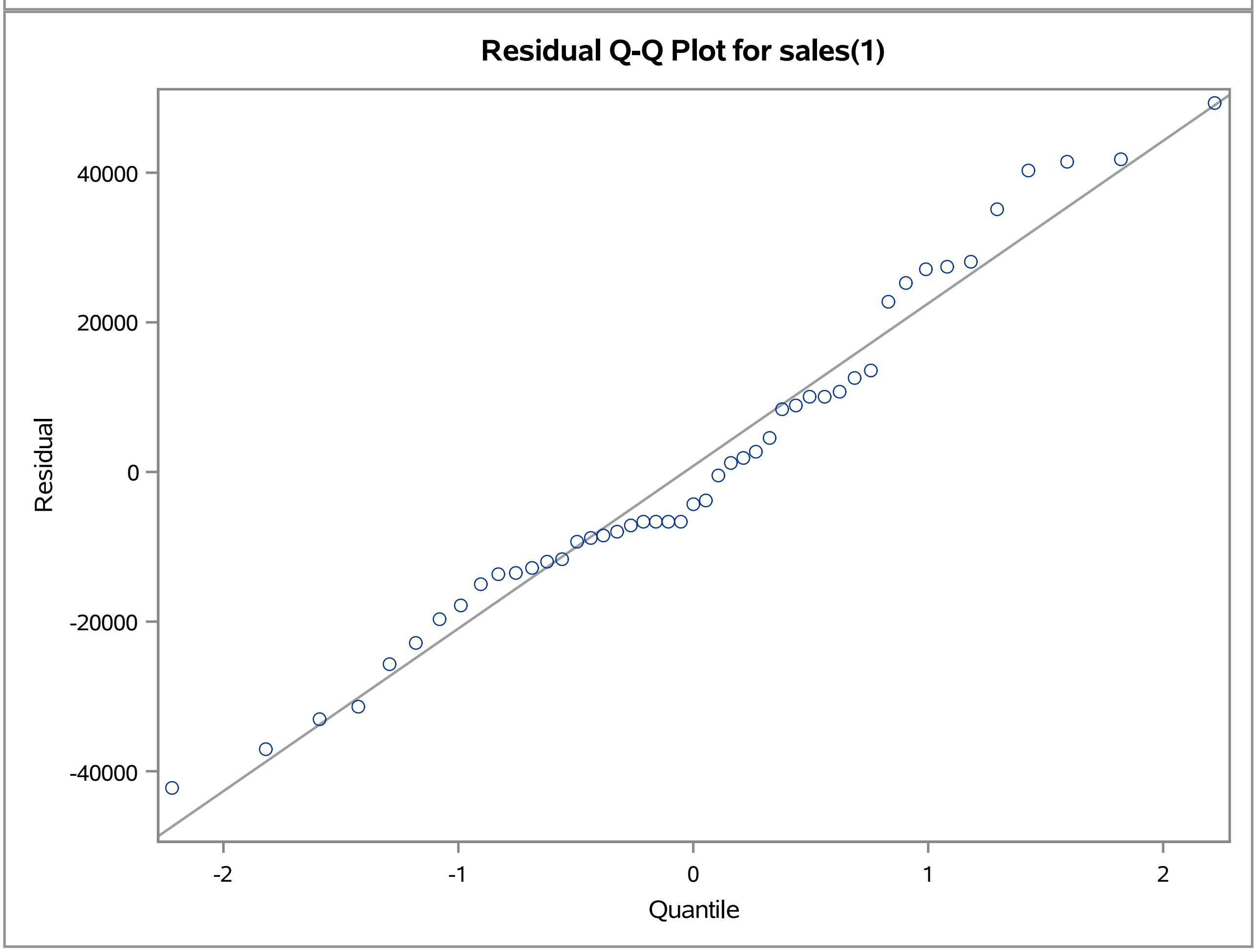
Autocorrelation Check of Residuals

To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	9.18	4	0.0567	-0.169	-0.068	0.149	-0.130	-0.201	0.241
12	37.48	10	<.0001	-0.299	0.017	0.028	-0.171	-0.124	0.555
18	43.65	16	0.0002	-0.066	-0.076	0.058	-0.088	-0.149	0.192
24	64.14	22	<.0001	-0.235	0.041	0.026	-0.147	-0.099	0.358


Residual Correlation Diagnostics for sales(1)
ACF
PACF
IACF
White Noise Prob
Lag
1.0
0.5
0.0
-0.5
-1.0
.001
.05
1.0
0
2
4
6
8
10


Residual Normality Diagnostics for sales(1)
Distribution of Residuals
Normal
Kernel
Percent
Residual
-60000
-30000
0
30000
60000
0
5
10
15
20
25
30
QQ-Plot
Residual
Quantile
40000
20000
0
-20000
-40000
-2
-1
0
1
2


Distribution of Residuals for sales(1)
Normal
Kernel
Percent
30
25
20
15
10
5
0
-60000
-45000
-30000
-15000
0
15000
30000
45000
60000
75000
Residual


Residual Q-Q Plot for sales(1)
Residual
40000
20000
0
-20000
-40000
-2
-1
0
1
2
Quantile

Model for variable sales	
Estimated Mean	890.4629
Period(s) of Differencing	1

Autoregressive Factors	
Factor 1:	1 - 0.42546 B**(1)

Moving Average Factors	
Factor 1:	1 - 0.99957 B**(1)

Warning: The ID value for observation 3 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 5 according to ID variable ORDER_DATE.

Warning: The ID value for observation 6 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 8 according to ID variable ORDER_DATE.

Warning: The ID value for observation 9 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 10 according to ID variable ORDER_DATE.

Warning: The ID value for observation 12 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 13 according to ID variable ORDER_DATE.

Warning: The ID value for observation 15 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 16 according to ID variable ORDER_DATE.

Warning: The ID value for observation 18 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: There are gaps in the interval for observation 19 according to ID variable ORDER_DATE.

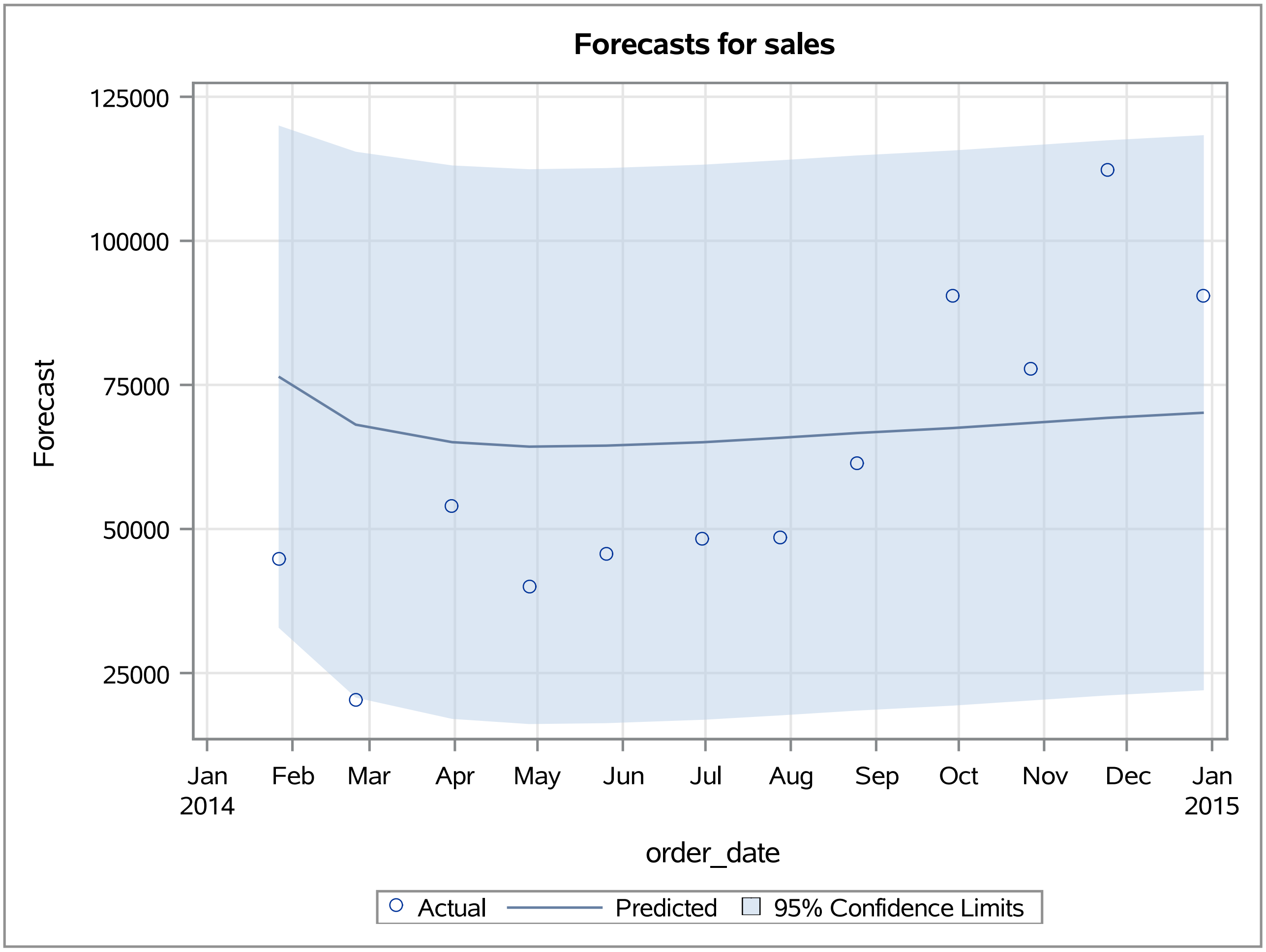
Note: Further warnings will not be printed.

Warning: The ID value for observation 21 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: The ID value for observation 27 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Warning: The ID value for observation 30 is the same as the ID value for the last observation according to ID variable ORDER_DATE.

Forecasts for variable sales						
Obs	**Forecast**	**Std Error**	**95% Confidence Limits**		**Actual**	**Residual**
37	76439.0511	22233.561	32862.0725	120016.0298	44703.1420	-31735.9091
38	68101.8623	24165.933	20737.5048	115466.2199	20283.5134	-47818.3489
39	65066.3614	24501.002	17045.2799	113087.4430	53908.9620	-11157.3994
40	64286.4978	24561.835	16146.1864	112426.8092	40112.4209	-24174.0769
41	64466.3096	24573.117	16303.8846	112628.7345	45651.2362	-18815.0734
42	65054.4214	24575.284	16887.7499	113221.0928	48259.7487	-16794.6727
43	65816.2471	24575.732	17648.6978	113983.7964	48428.3650	-17387.8821
44	66651.9805	24575.839	18484.2206	114819.7404	61516.0860	-5135.8945
45	67519.1584	24575.873	19351.3332	115686.9835	90488.7220	22969.5636
46	68399.7145	24575.887	20231.8608	116567.5683	77793.7552	9394.0407
47	69285.9626	24575.896	21118.0914	117453.8337	112326.4710	43040.5084
48	70174.6323	24575.903	22006.7475	118342.5170	90474.6008	20299.9685



Outlier Detection Summary	
Maximum number searched	1
Number found	1
Significance used	0.05

Outlier Details

Obs	Type	Estimate	Chi-Square	Approx Prob>ChiSq
9	Additive	51125.6	8.78	0.0030

Obs	rmse	mae	mape
1	23532.44	19395.19	53.6151