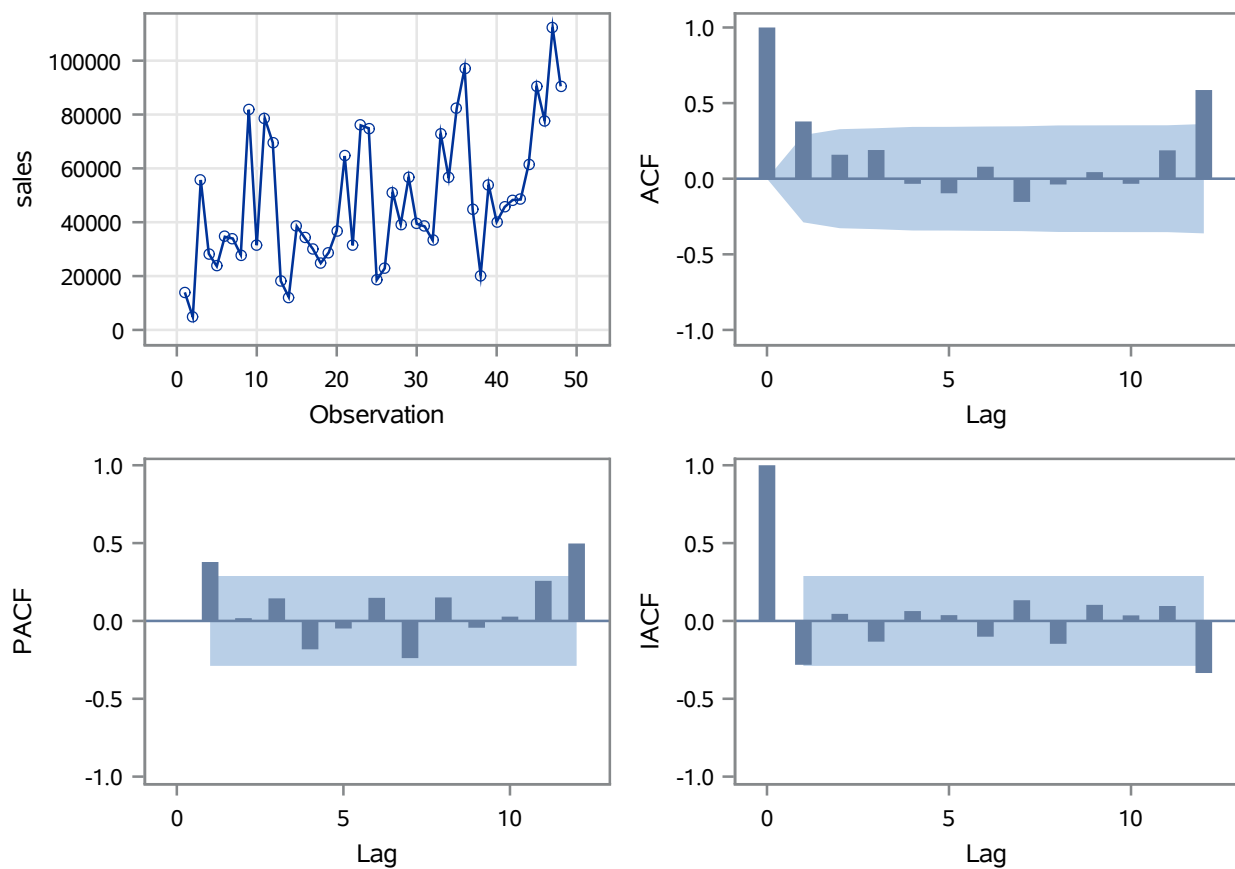


Name of Variable = sales	
Mean of Working Series	47858.35
Standard Deviation	24812.49
Number of Observations	48

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	11.48	6	0.0745	0.378	0.158	0.190	-0.034	-0.096	0.079
12	38.35	12	0.0001	-0.154	-0.038	0.043	-0.034	0.188	0.587

### Trend and Correlation Analysis for sales

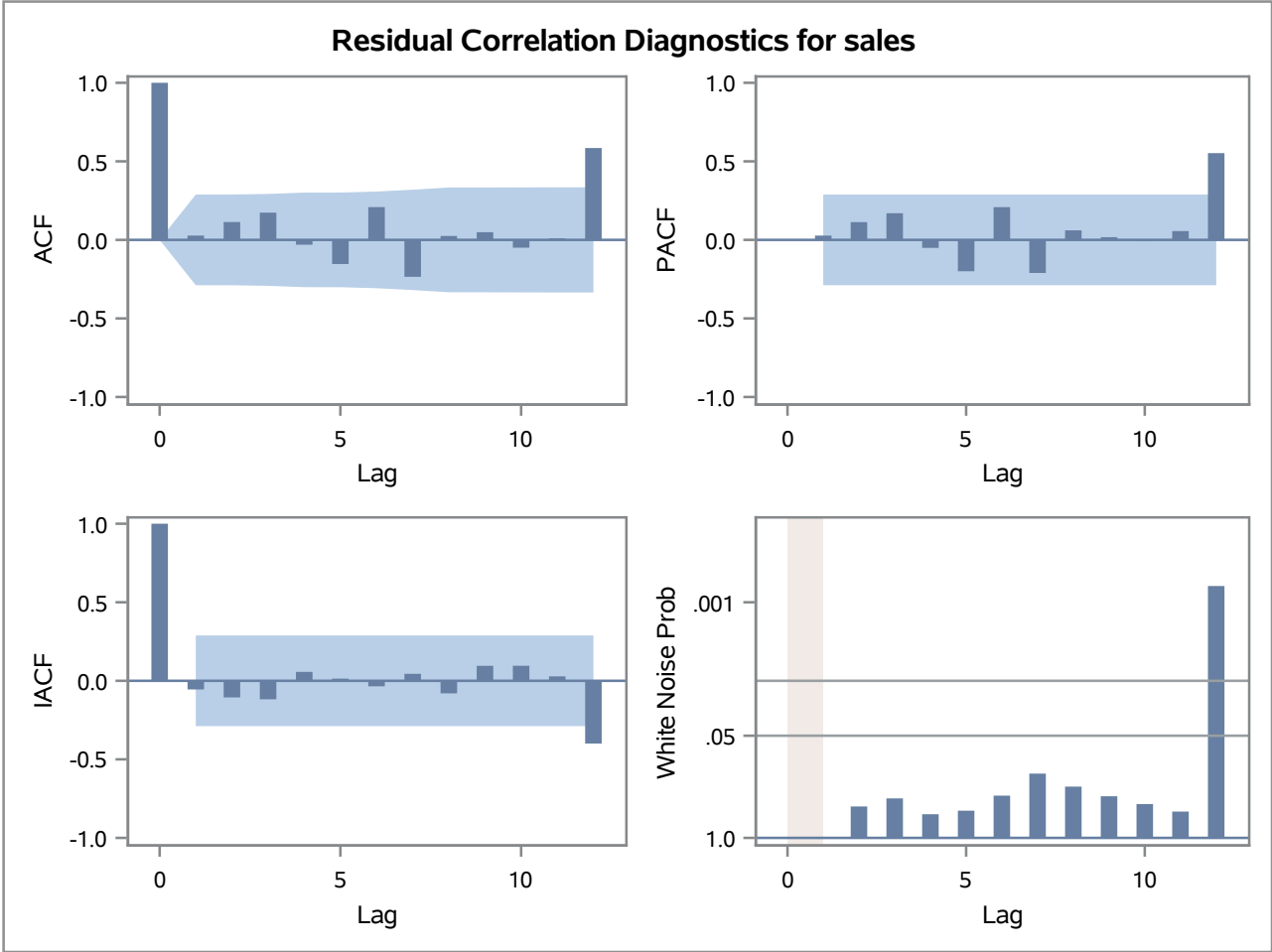


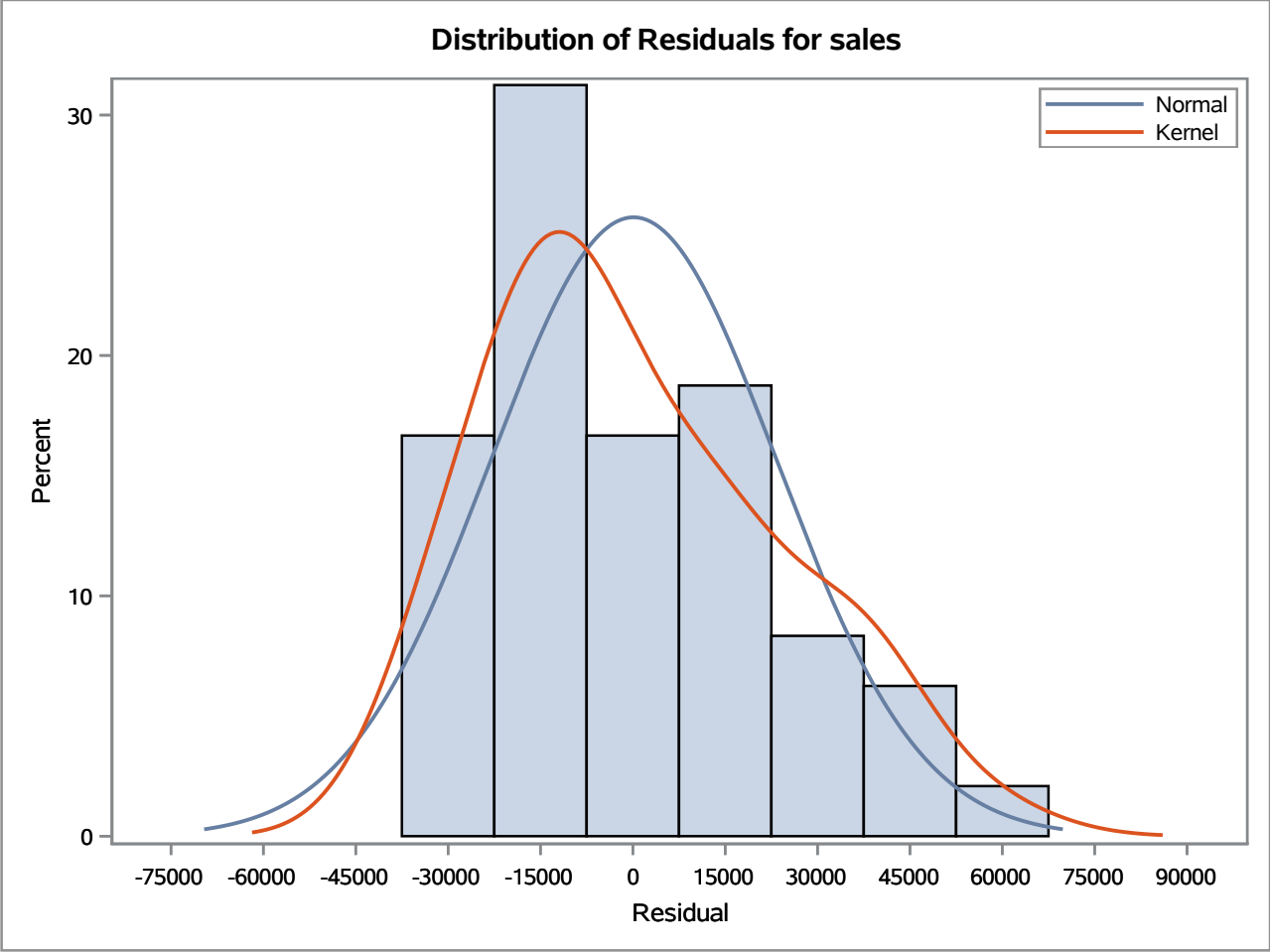
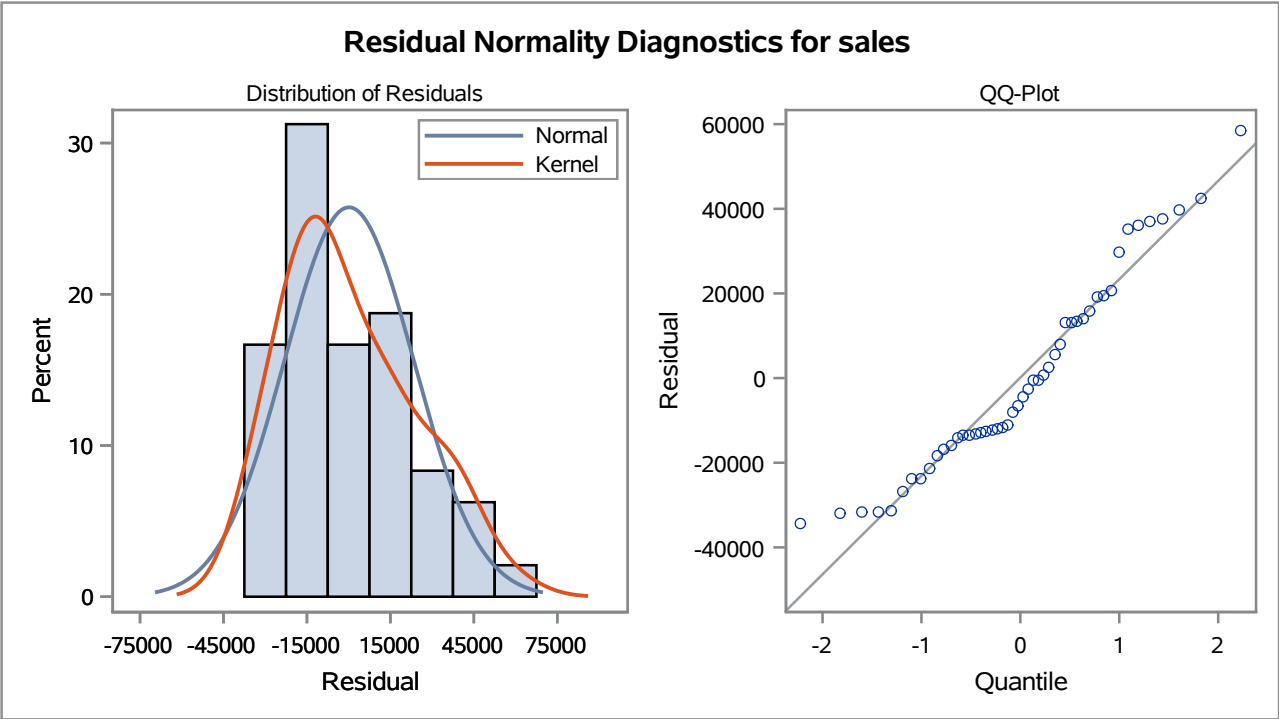
Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr >  t	Lag
MU	47894.4	4634.1	10.34	<.0001	0
MA1,1	-0.37654	0.13725	-2.74	0.0061	1

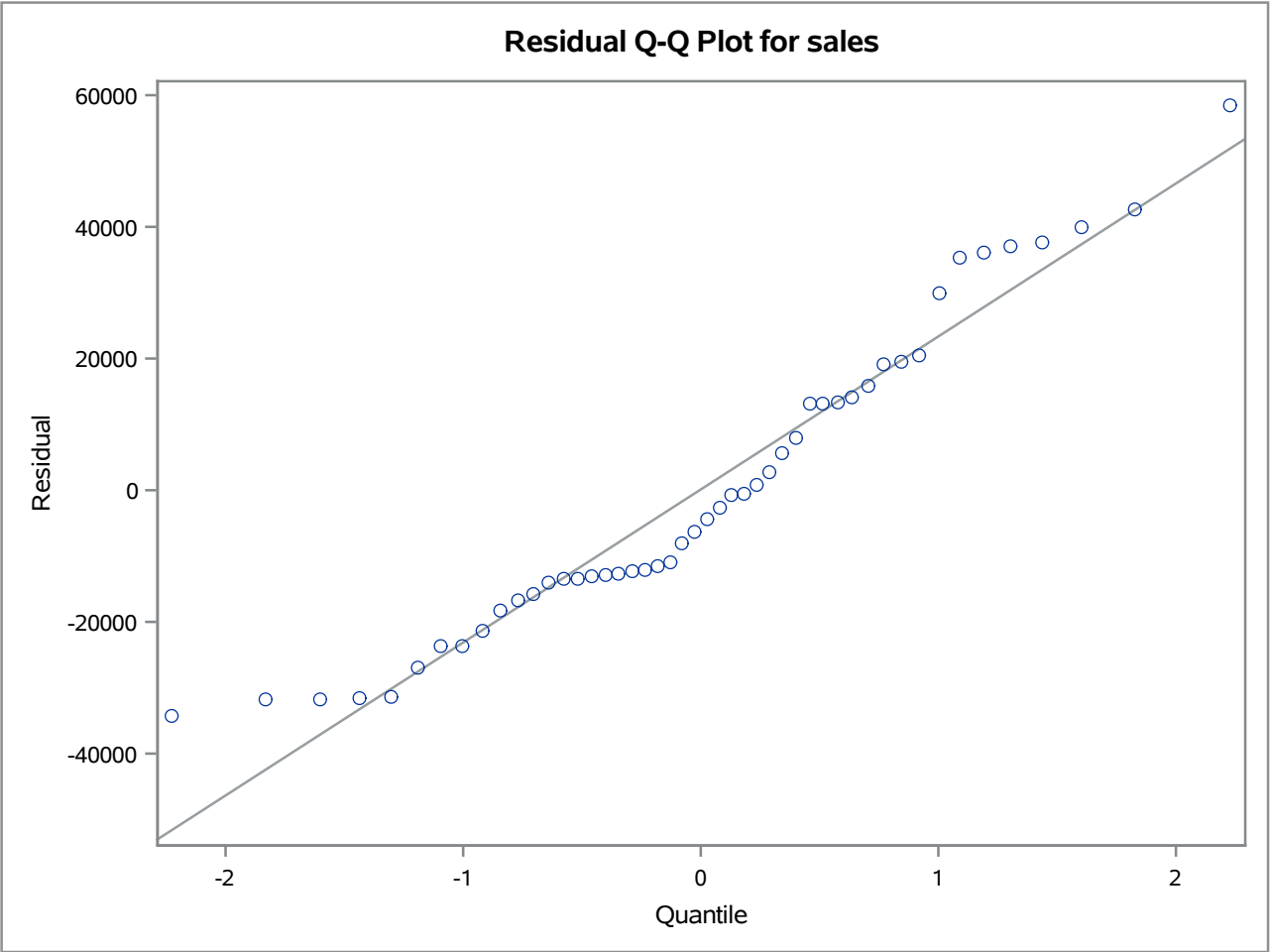
Constant Estimate	47894.37
Variance Estimate	5.5185E8
Std Error Estimate	23491.46
AIC	1104.51
SBC	1108.252
Number of Residuals	48

Correlations of Parameter Estimates		
Parameter	MU	MA1,1
MU	1.000	-0.002
MA1,1	-0.002	1.000

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	6.17	5	0.2903	0.027	0.114	0.173	-0.031	-0.154	0.208
12	32.54	11	0.0006	-0.235	0.025	0.049	-0.050	0.010	0.585
18	35.93	17	0.0047	0.024	0.021	0.056	-0.053	-0.133	0.138
24	54.05	23	0.0003	-0.217	0.000	-0.020	-0.118	-0.066	0.353







Model for variable sales	
Estimated Mean	47894.37

Moving Average Factors	
Factor 1:	1 + 0.37654 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.

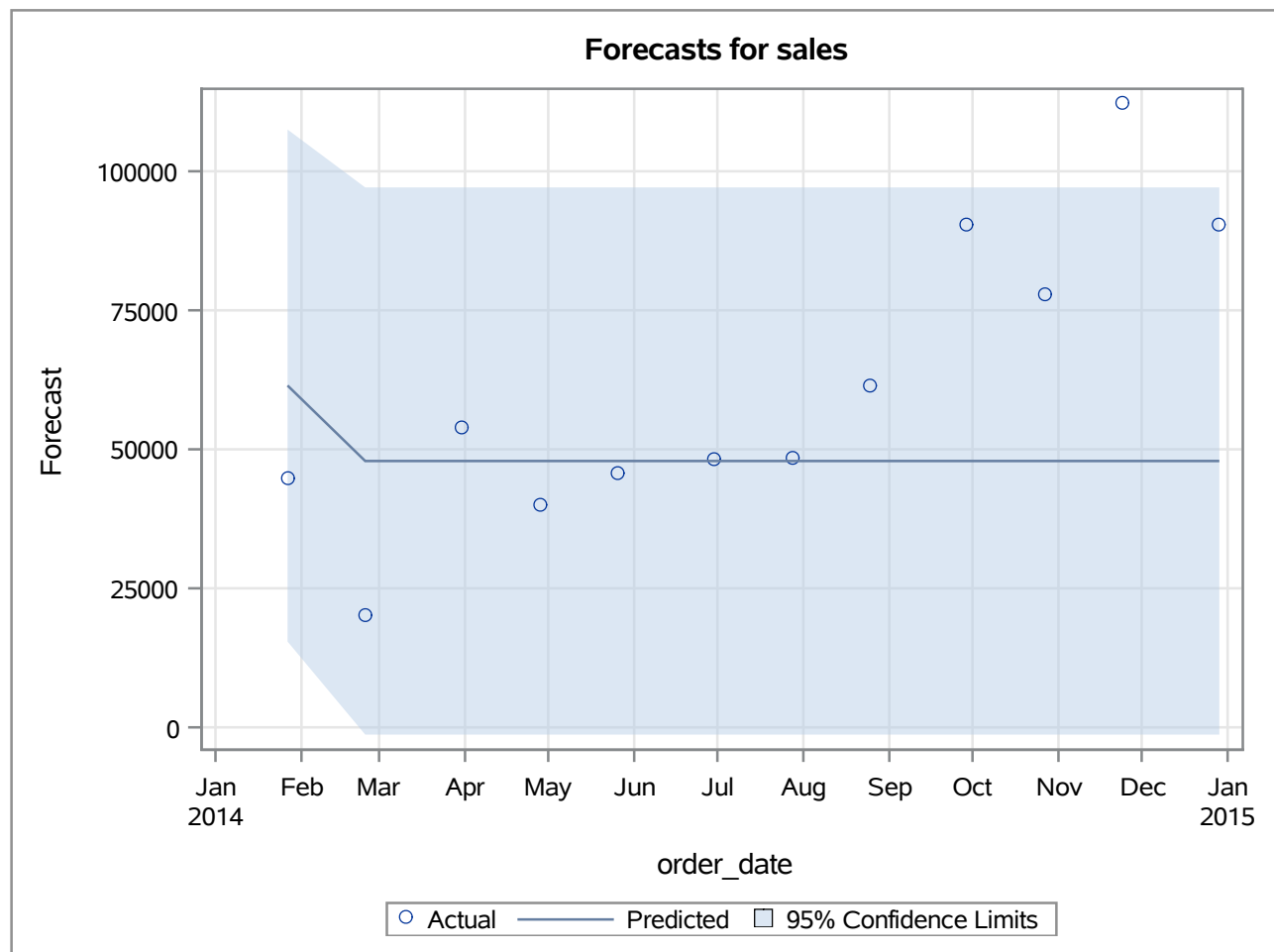
**Note:** Further warnings will not be printed.

**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	61467.6623	23491.464	15425.2399	107510.0848	44703.1420	-16764.5203
38	47894.3663	25101.649	-1303.9613	97092.6939	20283.5134	-27610.8529
39	47894.3663	25101.649	-1303.9613	97092.6939	53908.9620	6014.5957
40	47894.3663	25101.649	-1303.9613	97092.6939	40112.4209	-7781.9454
41	47894.3663	25101.649	-1303.9613	97092.6939	45651.2362	-2243.1301
42	47894.3663	25101.649	-1303.9613	97092.6939	48259.7487	365.3824
43	47894.3663	25101.649	-1303.9613	97092.6939	48428.3650	533.9987
44	47894.3663	25101.649	-1303.9613	97092.6939	61516.0860	13621.7197
45	47894.3663	25101.649	-1303.9613	97092.6939	90488.7220	42594.3557
46	47894.3663	25101.649	-1303.9613	97092.6939	77793.7552	29899.3889
47	47894.3663	25101.649	-1303.9613	97092.6939	112326.4710	64432.1047
48	47894.3663	25101.649	-1303.9613	97092.6939	90474.6008	42580.2345



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

Outlier Details				
Obs	Type	Estimate	Chi-Square	Approx Prob>ChiSq
45	Shift	43043.7	8.35	0.0039

Obs	rmse	mae	mape
1	24477.01	20021.73	64.9136