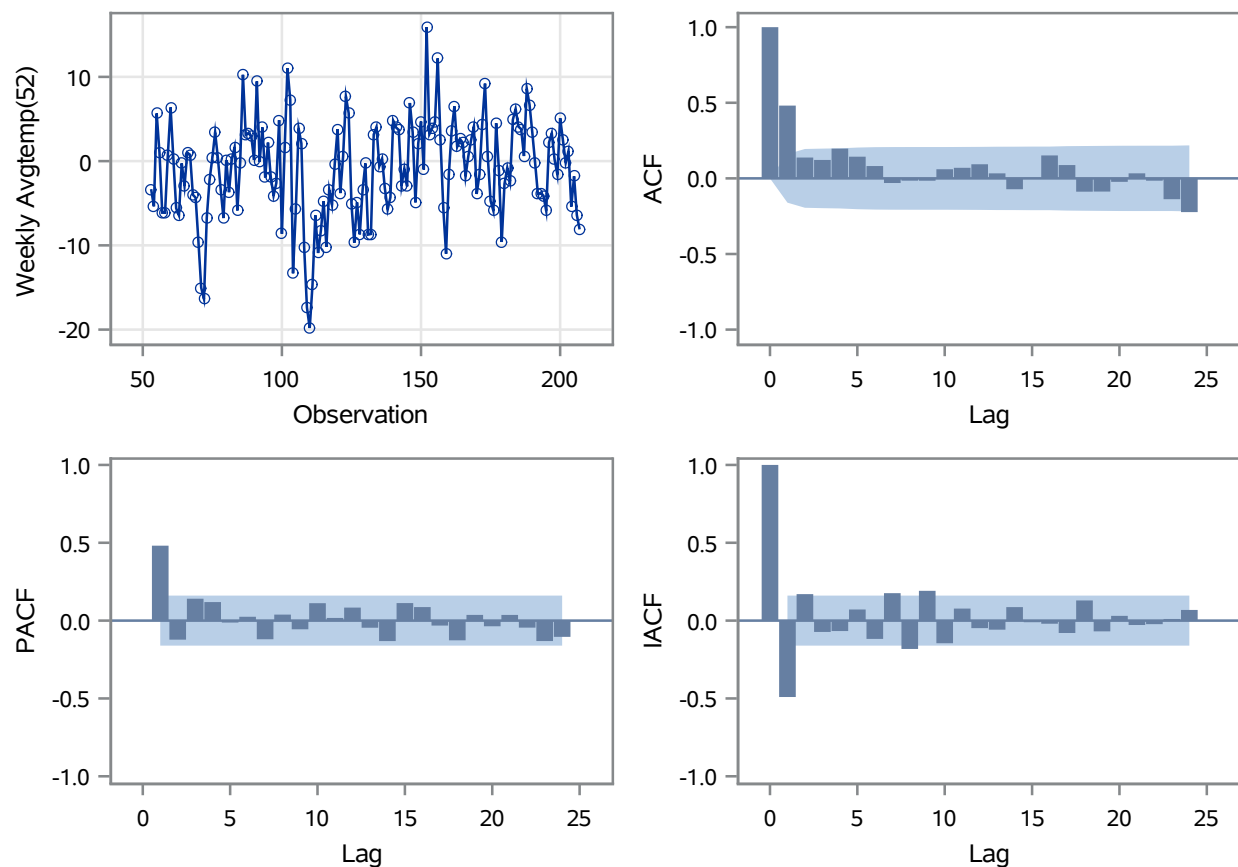


Name of Variable = Weekly Avgtemp	
Period(s) of Differencing	52
Mean of Working Series	-1.01703
Standard Deviation	5.886649
Number of Observations	155
Observation(s) eliminated by differencing	52

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	52.66	6	<.0001	0.481	0.138	0.122	0.197	0.143	0.082
12	55.82	12	<.0001	-0.031	-0.015	-0.015	0.060	0.070	0.093
18	63.66	18	<.0001	0.033	-0.072	0.004	0.152	0.088	-0.088
24	78.10	24	<.0001	-0.087	-0.023	0.033	-0.015	-0.138	-0.223

### Trend and Correlation Analysis for Weekly Avgtemp(52)

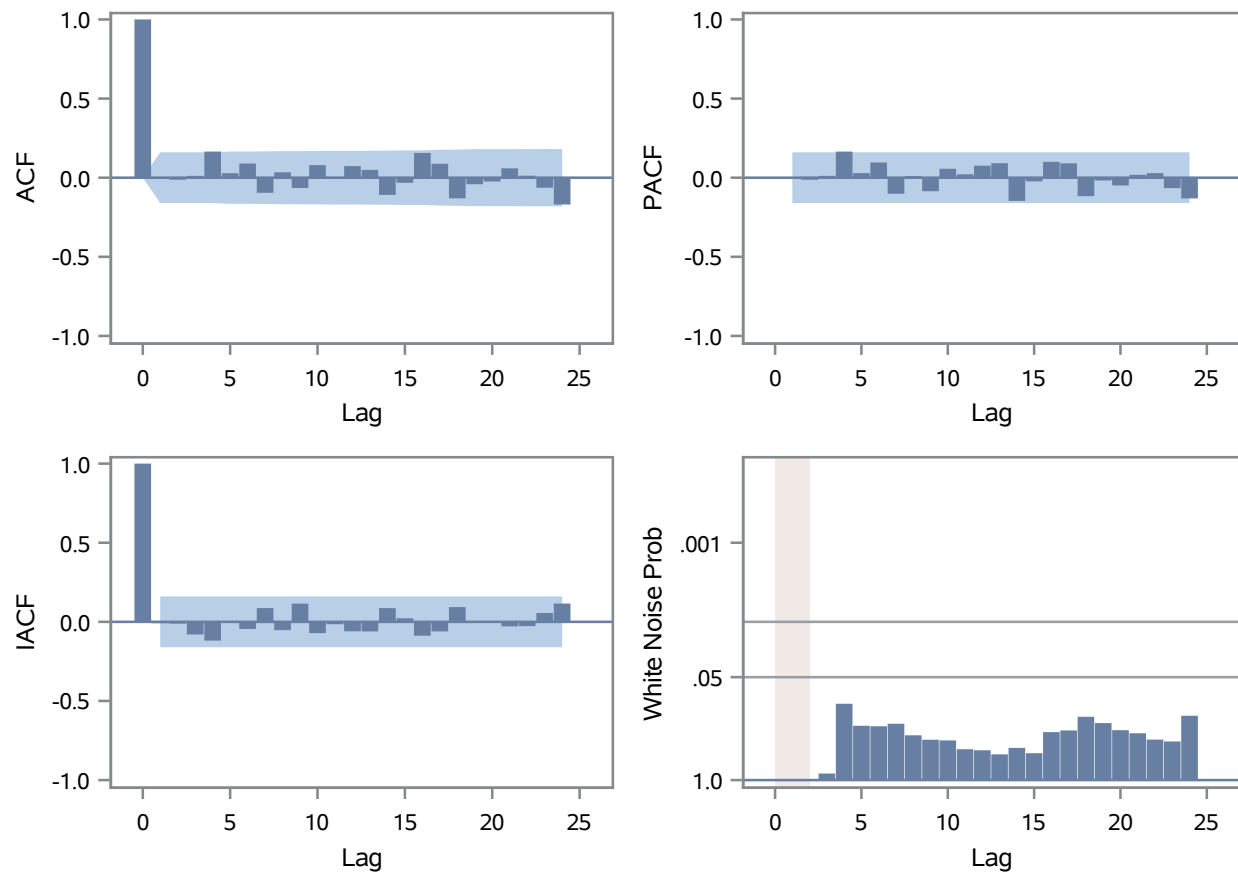
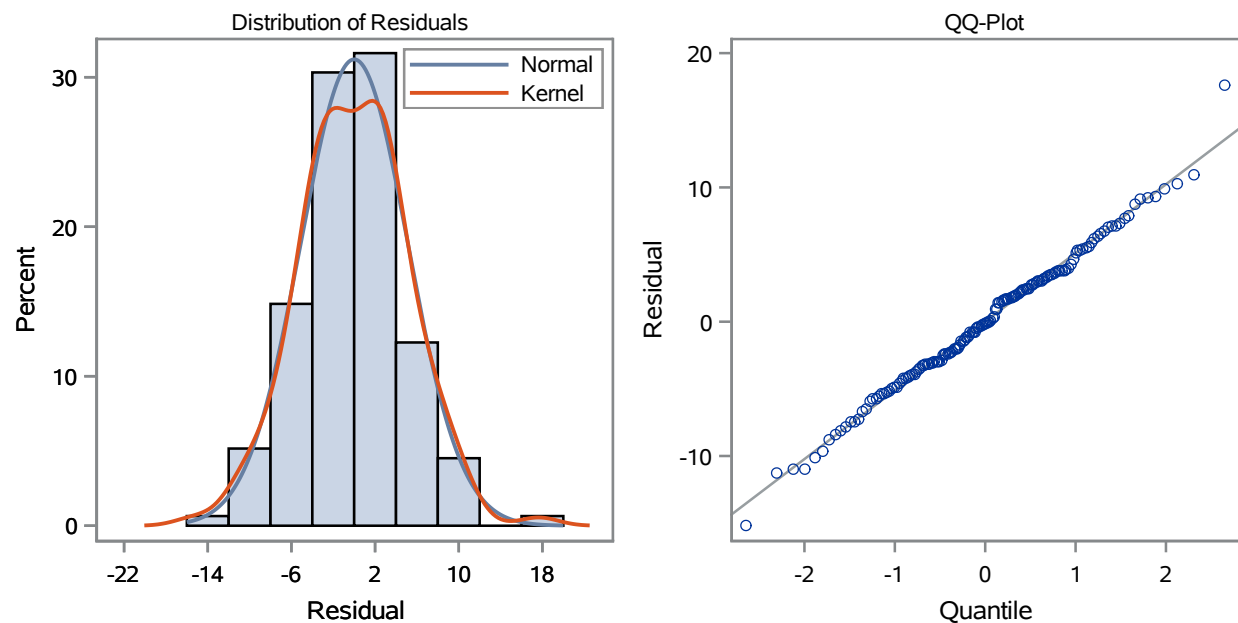


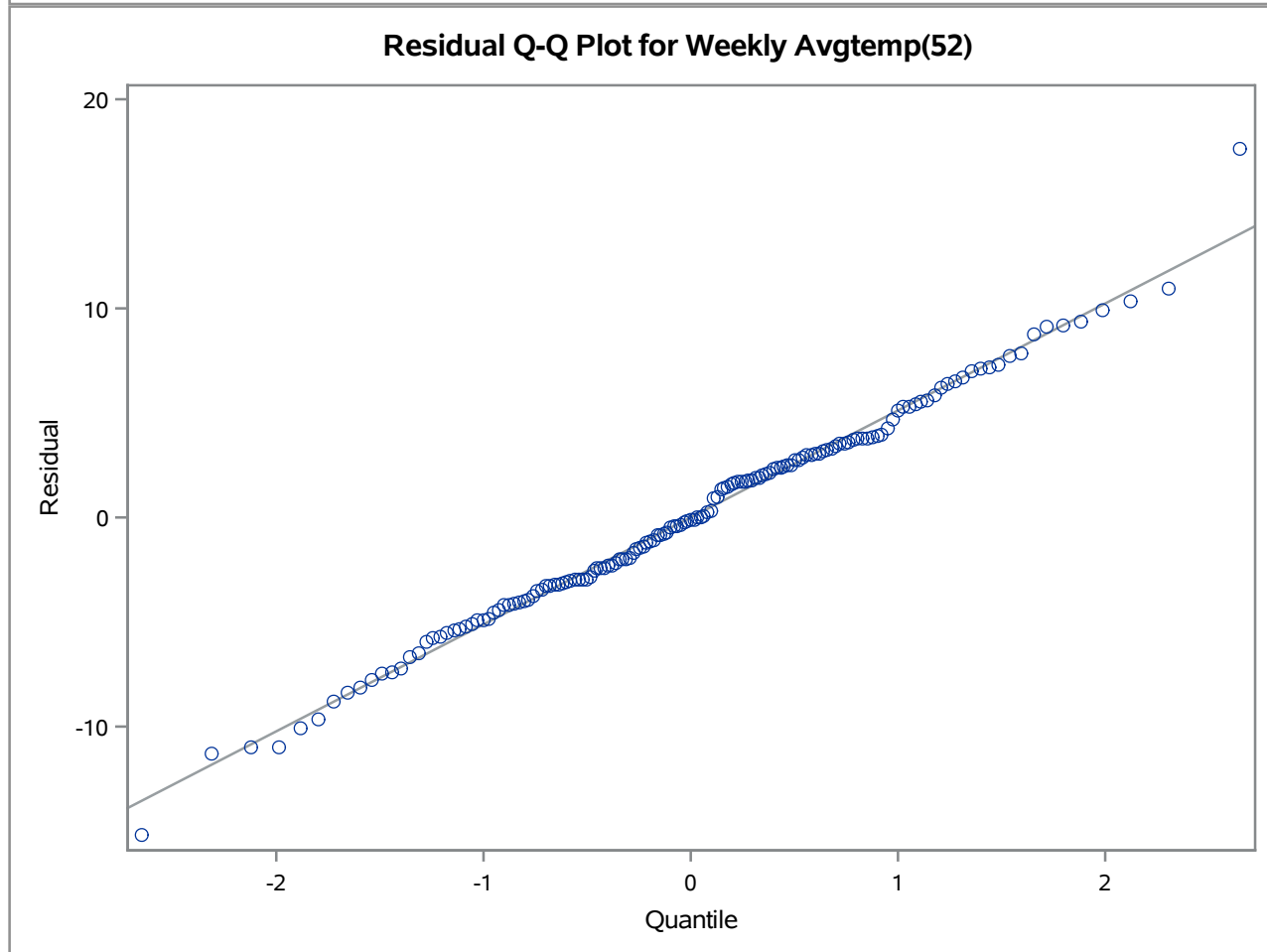
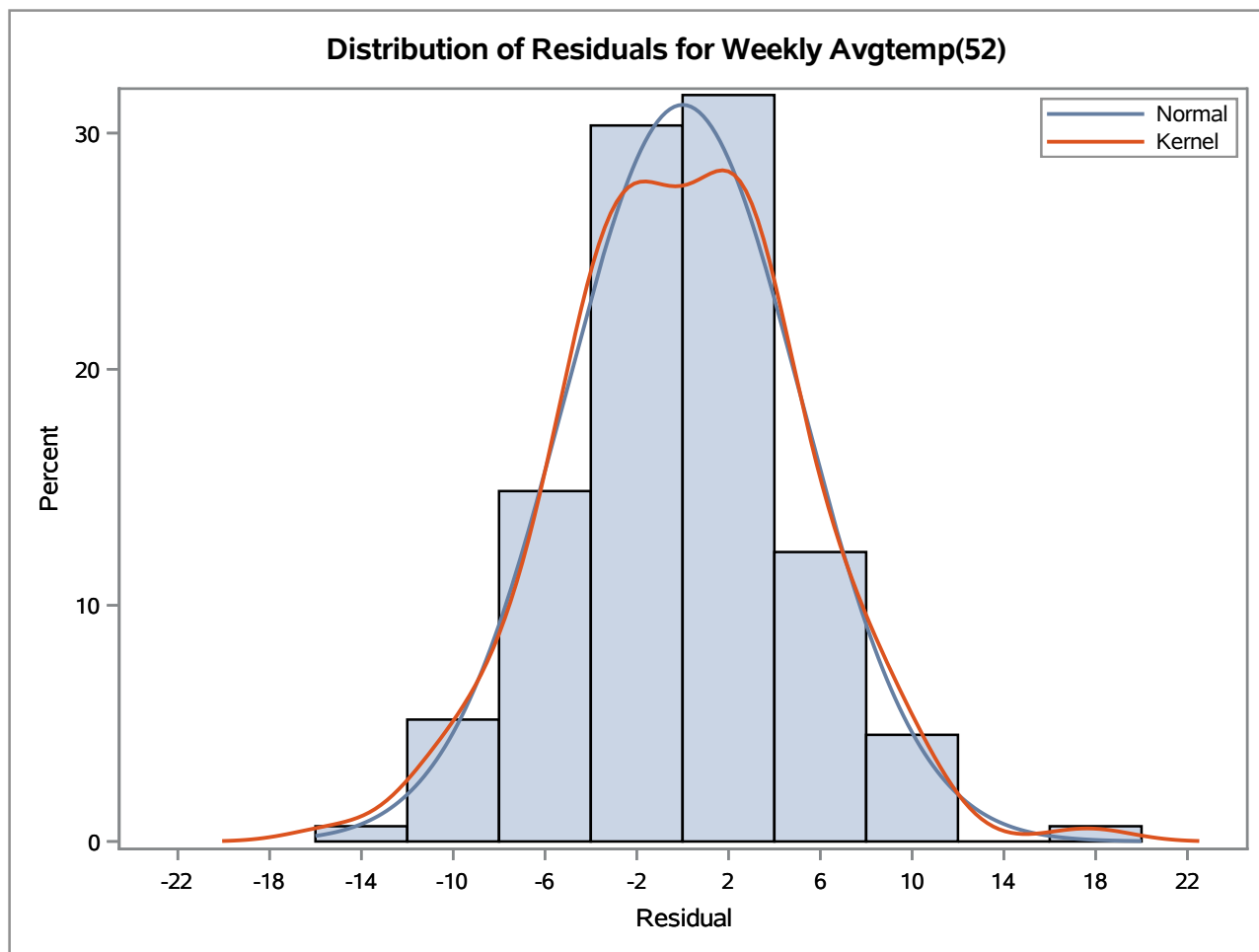
Maximum Likelihood Estimation					
Parameter	Estimate	Standard Error	t Value	Approx Pr >  t	Lag
MU	-1.04588	0.72129	-1.45	0.1471	0
MA1,1	-0.29299	0.15145	-1.93	0.0530	1
AR1,1	0.26211	0.15297	1.71	0.0866	1

Constant Estimate	-0.77174
Variance Estimate	26.50917
Std Error Estimate	5.148706
AIC	951.1615
SBC	960.2918
Number of Residuals	155

Correlations of Parameter Estimates			
Parameter	MU	MA1,1	AR1,1
MU	1.000	-0.011	-0.013
MA1,1	-0.011	1.000	0.859
AR1,1	-0.013	0.859	1.000

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	5.87	4	0.2087	0.003	-0.013	0.011	0.165	0.028	0.089
12	10.24	10	0.4198	-0.096	0.034	-0.065	0.079	-0.001	0.073
18	21.55	16	0.1584	0.049	-0.109	-0.032	0.156	0.088	-0.130
24	28.70	22	0.1537	-0.041	-0.024	0.059	0.013	-0.063	-0.170
30	35.47	28	0.1566	-0.058	-0.046	0.060	0.056	-0.034	-0.148

**Residual Correlation Diagnostics for Weekly Avgtemp(52)****Residual Normality Diagnostics for Weekly Avgtemp(52)**



Model for variable Weekly Avgtemp	
Estimated Mean	-1.04588
Period(s) of Differencing	52

Autoregressive Factors	
Factor 1:	1 - 0.26211 B**(1)

Moving Average Factors	
Factor 1:	1 + 0.29299 B**(1)

Name of Variable = avgactivepower	
Period(s) of Differencing	52
Mean of Working Series	-0.36141
Standard Deviation	4.311193
Number of Observations	155
Observation(s) eliminated by differencing	52

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	12.10	6	0.0599	0.256	0.089	0.033	-0.014	-0.037	0.003
12	14.52	12	0.2689	-0.044	-0.065	-0.066	-0.023	-0.047	-0.035
18	18.64	18	0.4145	0.016	-0.037	0.020	0.002	-0.101	-0.105
24	20.07	24	0.6926	-0.012	-0.009	0.052	0.042	0.049	0.026

**Variable Weekly Avgtemp has been differenced.**

Correlation of avgactivepower and Weekly Avgtemp	
Period(s) of Differencing	52
Number of Observations	155
Observation(s) eliminated by differencing	52
Variance of transformed series avgactivepower	19.17414
Variance of transformed series Weekly Avgtemp	25.99677

**Both series have been prewhitened.**

Crosscorrelation Check Between Series									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	6.82	6	0.3379	0.037	-0.076	0.039	-0.153	0.109	-0.018
11	14.89	12	0.2473	-0.019	0.007	-0.062	-0.122	0.116	0.140
17	22.46	18	0.2120	-0.139	-0.056	-0.083	0.116	-0.062	0.045
23	25.07	24	0.4018	0.119	0.002	-0.021	0.032	0.012	0.033

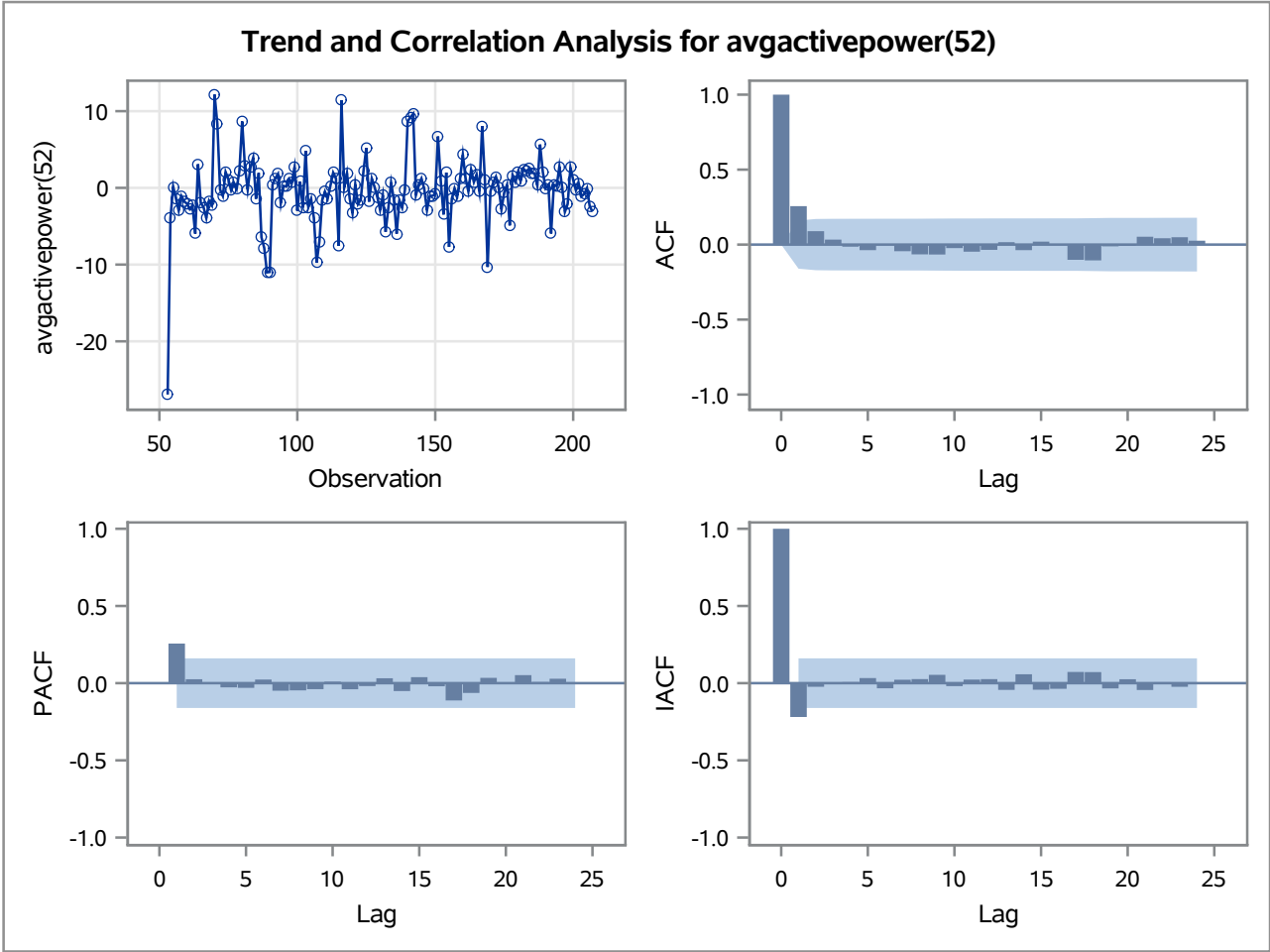
**Both variables have been prewhitened by the following filter:**

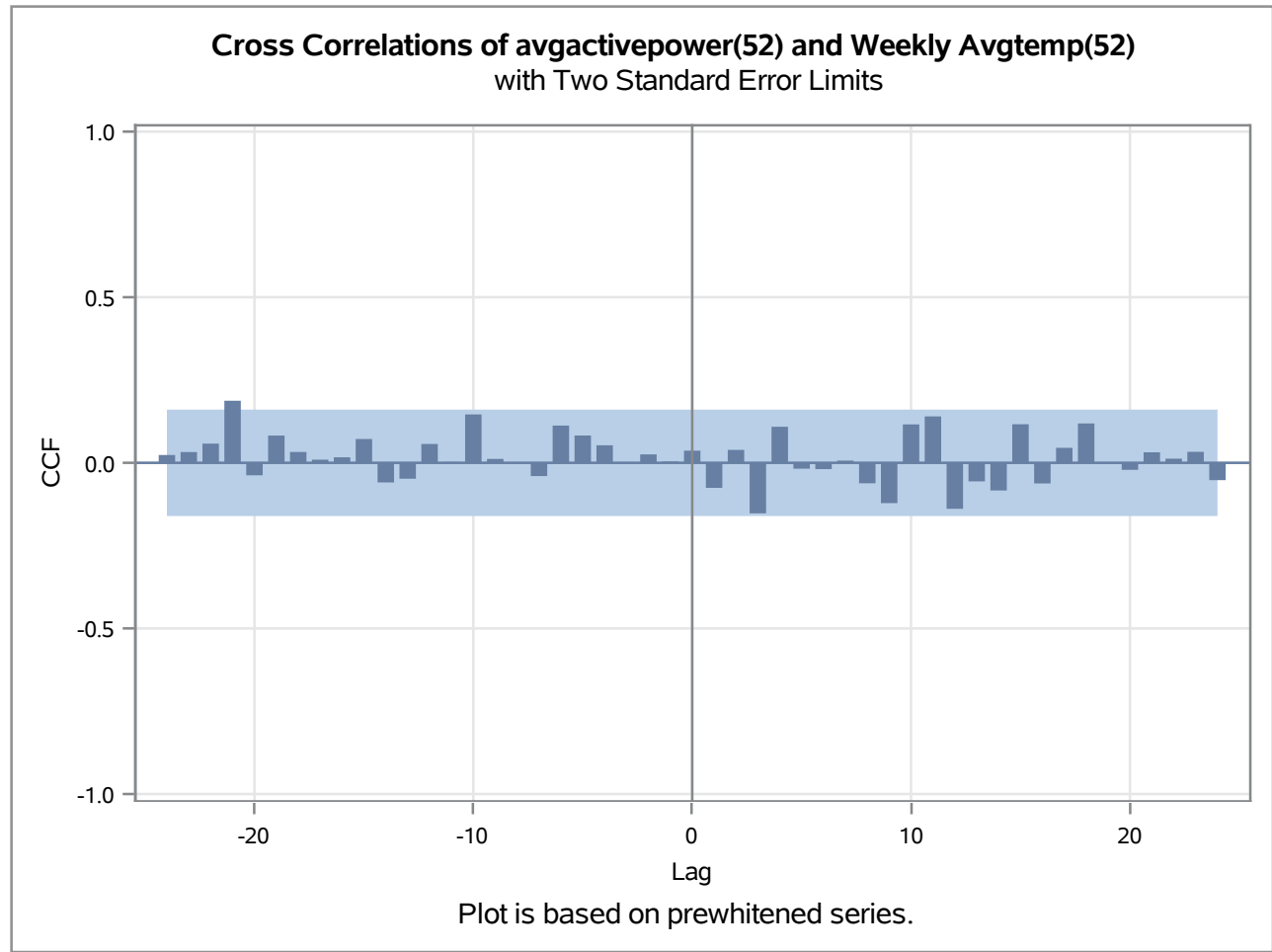
Prewhitening Filter

Autoregressive Factors	
Factor 1:	$1 - 0.26211 B^{**}(1)$

Moving Average Factors	
Factor 1:	$1 + 0.29299 B^{**}(1)$

Trend and Correlation Analysis for avgactivepower(52)





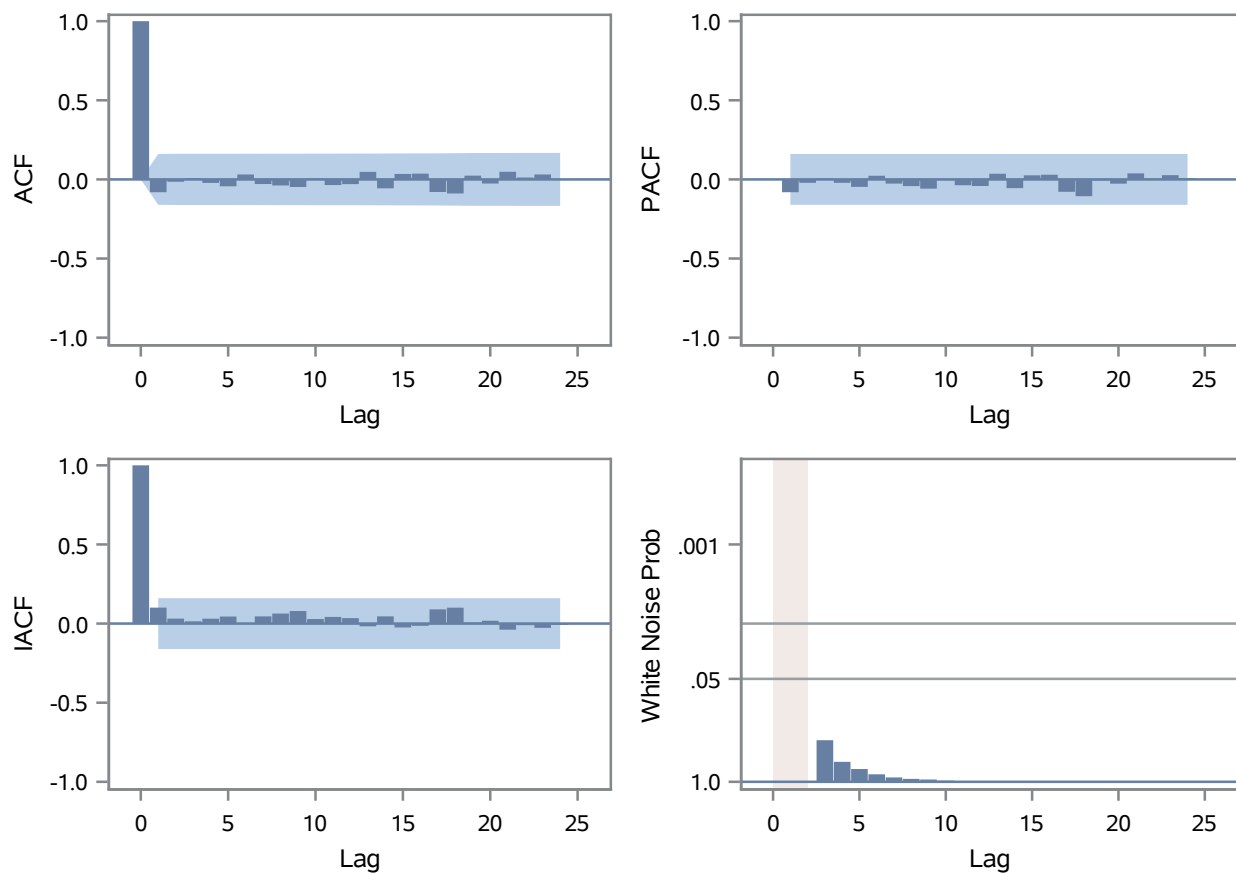
Maximum Likelihood Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr >  t	Lag	Variable	Shift
MU	-0.44896	0.52162	-0.86	0.3894	0	avgactivepower	0
MA1,1	0.06053	0.23878	0.25	0.7999	1	avgactivepower	0
AR1,1	0.39410	0.21977	1.79	0.0729	1	avgactivepower	0
NUM1	0.01600	0.06410	0.25	0.8029	0	Weekly Avgtemp	0

Constant Estimate	-0.27203
Variance Estimate	17.3932
Std Error Estimate	4.170515
AIC	886.6349
SBC	898.8086
Number of Residuals	155

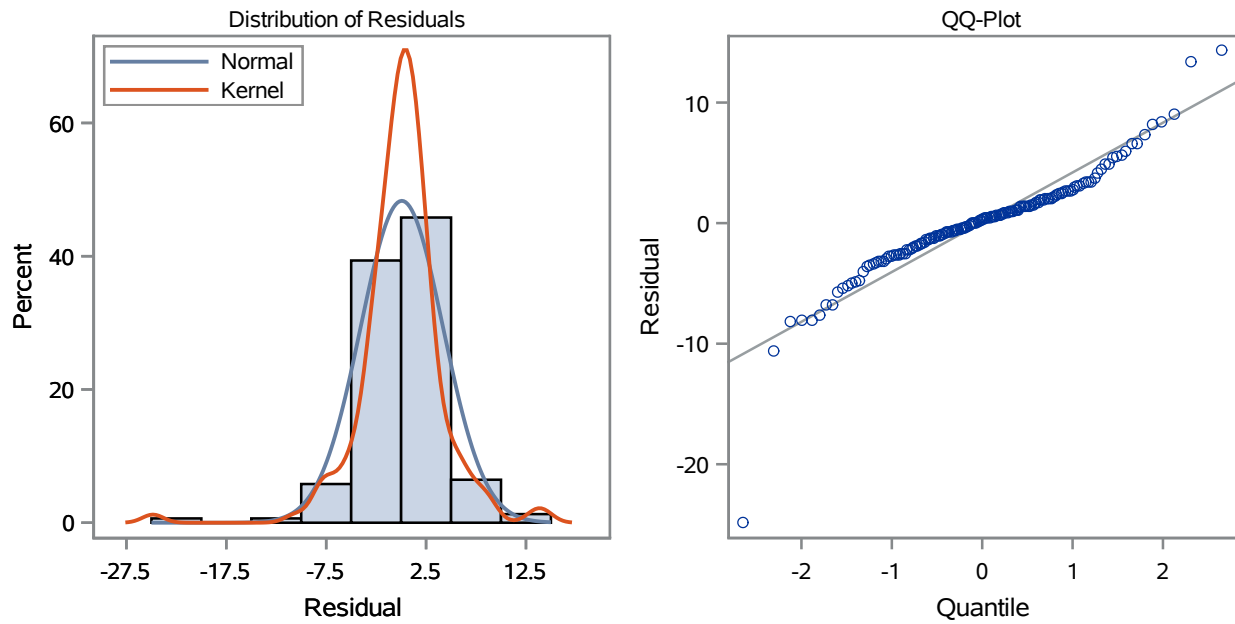
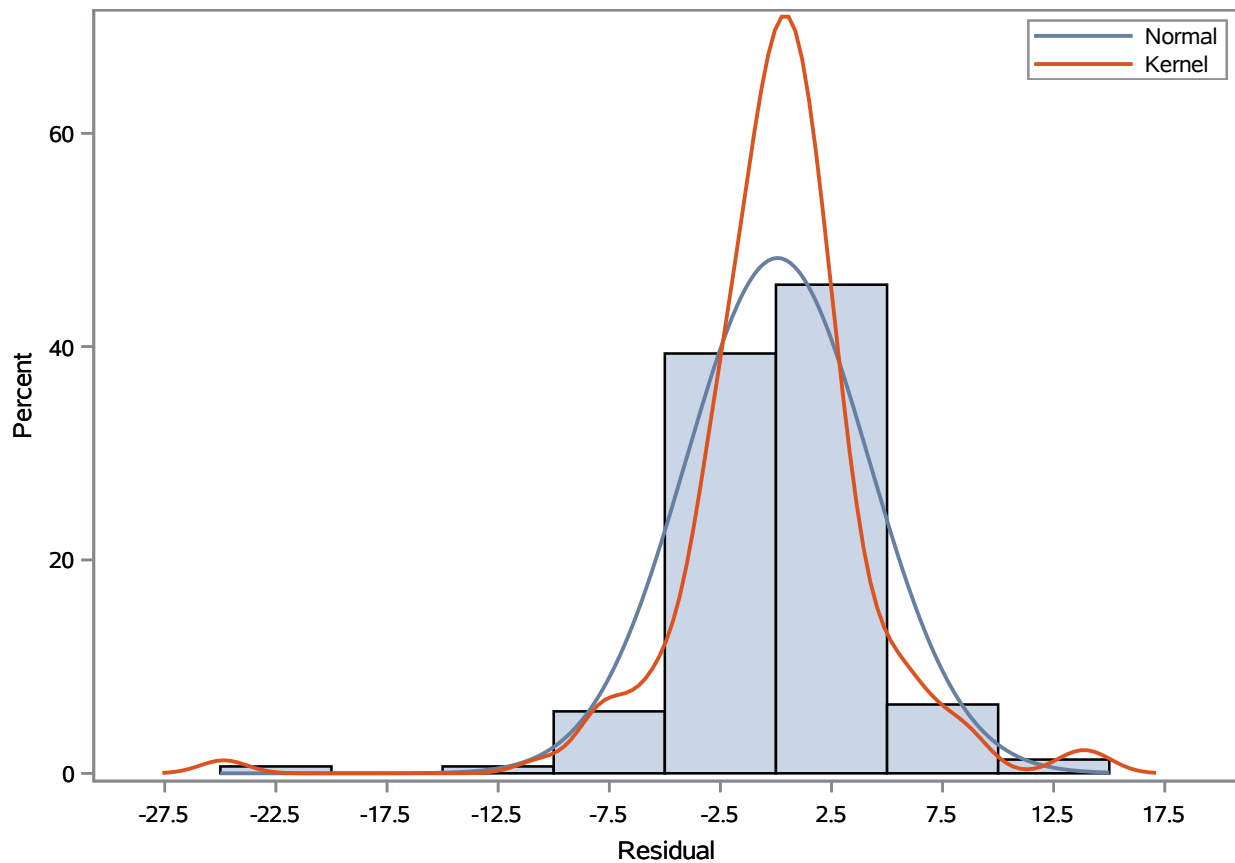
Correlations of Parameter Estimates				
Variable Parameter	avgactivepower MU	avgactivepower MA1,1	avgactivepower AR1,1	Weekly Avgtemp NUM1
avgactivepower MU	1.000	-0.013	-0.015	0.130
avgactivepower MA1,1	-0.013	1.000	0.941	-0.042
avgactivepower AR1,1	-0.015	0.941	1.000	-0.053
Weekly Avgtemp NUM1	0.130	-0.042	-0.053	1.000

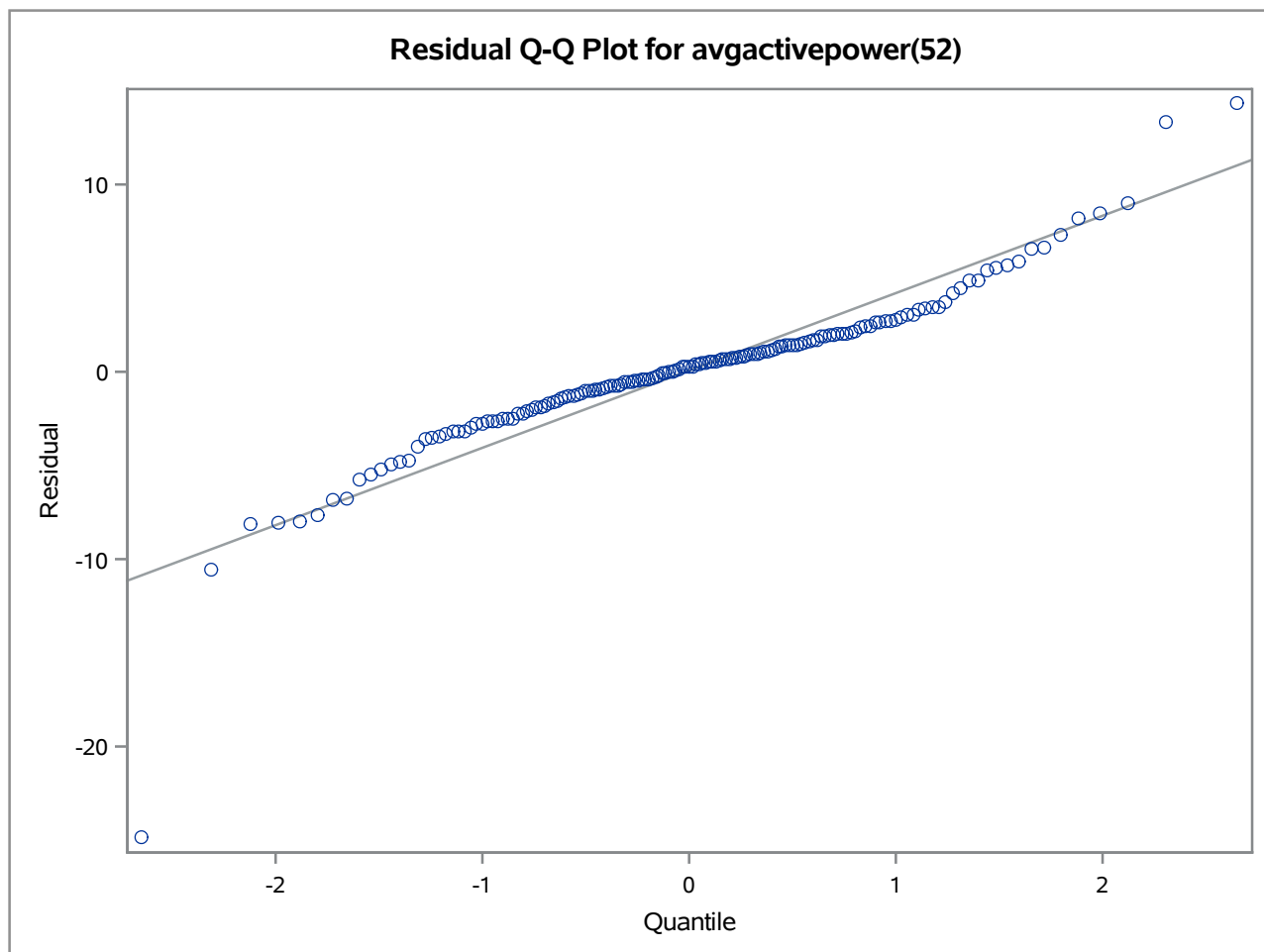
Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	1.59	4	0.8112	-0.080	-0.014	0.010	-0.021	-0.042	0.032
12	2.66	10	0.9884	-0.028	-0.037	-0.047	0.007	-0.034	-0.029
18	6.50	16	0.9817	0.049	-0.055	0.036	0.038	-0.078	-0.088
24	7.37	22	0.9985	0.025	-0.025	0.049	0.013	0.032	-0.002
30	12.05	28	0.9962	0.044	0.038	-0.144	0.016	-0.009	0.005

### Residual Correlation Diagnostics for avgactivepower(52)





**Residual Normality Diagnostics for avgactivepower(52)****Distribution of Residuals for avgactivepower(52)**



Crosscorrelation Check of Residuals with Input Weekly Avgtemp									
To Lag	Chi-Square	DF	Pr > ChiSq	Crosscorrelations					
5	5.36	6	0.4984	0.014	-0.077	0.023	-0.148	0.075	0.015
11	16.09	12	0.1874	-0.029	0.004	-0.063	-0.143	0.097	0.186
17	23.66	18	0.1664	-0.120	-0.105	-0.095	0.112	-0.035	0.027
23	27.44	24	0.2844	0.142	0.029	-0.030	0.024	0.021	0.037
29	30.65	30	0.4326	-0.046	0.010	0.049	0.029	0.053	-0.112

Model for variable avgactivepower	
Estimated Intercept	-0.44896
Period(s) of Differencing	52

Autoregressive Factors	
Factor 1:	1 - 0.3941 B**(1)

Moving Average Factors	
Factor 1:	1 - 0.06053 B**(1)

Input Number 1	
Input Variable	Weekly Avgtemp
Period(s) of Differencing	52
Overall Regression Factor	0.015999

Forecasts for variable avgactivepower						
Obs	Forecast	Std Error	95% Confidence Limits		Actual	Residual
156	20.1372	4.1713	11.9615	28.3128	21.5624	1.4253
157	21.1157	4.3974	12.4969	29.7345	22.4669	1.3512
158	21.5792	4.4315	12.8937	30.2648	21.3871	-0.1922
159	20.8568	4.4368	12.1609	29.5527	22.7175	1.8606
160	17.5538	4.4376	8.8563	26.2513	22.3792	4.8254
161	20.7402	4.4377	12.0424	29.4379	22.4671	1.7269
162	24.6148	4.4377	15.9170	33.3126	24.6369	0.0221
163	22.1501	4.4377	13.4523	30.8479	24.9857	2.8356
164	25.3439	4.4377	16.6461	34.0417	26.5780	1.2341
165	23.7140	4.4377	15.0162	32.4118	25.9285	2.2145
166	23.4542	4.4377	14.7564	32.1519	23.4609	0.0067
167	13.5347	4.4377	4.8370	22.2325	22.0501	8.5154
168	20.6018	4.4377	11.9040	29.2996	22.0822	1.4804
169	20.3001	4.4377	11.6023	28.9979	10.4571	-9.8430
170	22.2966	4.4377	13.5988	30.9944	22.3079	0.0113
171	18.1288	4.4377	9.4310	26.8266	19.2894	1.1606
172	18.8333	4.4377	10.1355	27.5310	20.7536	1.9203
173	19.9668	4.4377	11.2690	28.6645	20.4903	0.5236
174	19.3724	4.4377	10.6746	28.0702	17.0384	-2.3340
175	18.6797	4.4377	9.9819	27.3775	18.5324	-0.1473
176	16.9311	4.4377	8.2333	25.6289	17.7879	0.8568
177	18.1285	4.4377	9.4308	26.8263	13.7017	-4.4269
178	16.8777	4.4377	8.1799	25.5755	18.8462	1.9684
179	18.3733	4.4377	9.6755	27.0710	19.6127	1.2395
180	15.8351	4.4377	7.1373	24.5329	18.3873	2.5521
181	15.4212	4.4377	6.7234	24.1190	16.8431	1.4219
182	13.7354	4.4377	5.0376	22.4332	16.6673	2.9319
183	14.4105	4.4377	5.7127	23.1083	17.0562	2.6457
184	13.0313	4.4377	4.3335	21.7291	15.9738	2.9425
185	13.2265	4.4377	4.5288	21.9243	15.6629	2.4364
186	12.4735	4.4377	3.7757	21.1713	14.8374	2.3639
187	12.3318	4.4377	3.6340	21.0296	13.1340	0.8022
188	7.6982	4.4377	-0.9996	16.3959	13.8147	6.1165
189	8.7073	4.4377	0.0096	17.4051	11.2359	2.5285
190	8.6473	4.4377	-0.0505	17.3451	9.0684	0.4211
191	5.5131	4.4377	-3.1846	14.2109	6.3648	0.8516

Forecasts for variable avgactivepower						
Obs	Forecast	Std Error	95% Confidence Limits		Actual	Residual
192	11.7093	4.4377	3.0115	20.4071	6.2311	-5.4782
193	11.8544	4.4377	3.1566	20.5521	12.7310	0.8767
194	12.1928	4.4377	3.4950	20.8906	12.8774	0.6847
195	14.2940	4.4377	5.5962	22.9918	17.5338	3.2398
196	15.1569	4.4377	6.4591	23.8547	15.7601	0.6032
197	17.8534	4.4377	9.1556	26.5512	15.1959	-2.6575
198	16.8621	4.4377	8.1643	25.5599	15.2247	-1.6374
199	15.7176	4.4377	7.0198	24.4154	18.8281	3.1105
200	17.8688	4.4377	9.1710	26.5666	19.3600	1.4912
201	19.7068	4.4377	11.0090	28.4046	19.8521	0.1453
202	20.0190	4.4377	11.3212	28.7168	21.0525	1.0335
203	18.1439	4.4377	9.4461	26.8417	17.4959	-0.6480
204	19.2499	4.4377	10.5521	27.9477	18.9164	-0.3335
205	21.2227	4.4377	12.5250	29.9205	21.6627	0.4399
206	22.2889	4.4377	13.5911	30.9867	20.3325	-1.9563
207	20.8135	4.4377	12.1158	29.5113	18.1880	-2.6256
208	19.6715	6.0904	7.7344	31.6085	.	.
209	20.6500	6.2475	8.4052	32.8948	.	.
210	21.1135	6.2715	8.8217	33.4054	.	.
211	20.3911	6.2752	8.0919	32.6903	.	.
212	17.0881	6.2758	4.7878	29.3884	.	.
213	20.2745	6.2759	7.9740	32.5749	.	.
214	24.1491	6.2759	11.8486	36.4496	.	.
215	21.6844	6.2759	9.3839	33.9849	.	.
216	24.8782	6.2759	12.5777	37.1787	.	.
217	23.2483	6.2759	10.9478	35.5488	.	.
218	22.9885	6.2759	10.6879	35.2890	.	.
219	13.0691	6.2759	0.7685	25.3696	.	.
220	20.1361	6.2759	7.8356	32.4366	.	.
221	19.8344	6.2759	7.5339	32.1349	.	.
222	21.8309	6.2759	9.5304	34.1314	.	.
223	17.6631	6.2759	5.3626	29.9636	.	.
224	18.3676	6.2759	6.0670	30.6681	.	.
225	19.5011	6.2759	7.2005	31.8016	.	.
226	18.9067	6.2759	6.6062	31.2072	.	.
227	18.2140	6.2759	5.9135	30.5145	.	.

Forecasts for variable avgactivepower						
Obs	Forecast	Std Error	95% Confidence Limits		Actual	Residual
228	16.4654	6.2759	4.1648	28.7659	.	.
229	17.6628	6.2759	5.3623	29.9634	.	.
230	16.4120	6.2759	4.1115	28.7125	.	.
231	17.9076	6.2759	5.6070	30.2081	.	.
232	15.3694	6.2759	3.0689	27.6699	.	.
233	14.9555	6.2759	2.6550	27.2560	.	.
234	13.2697	6.2759	0.9692	25.5702	.	.
235	13.9448	6.2759	1.6443	26.2454	.	.
236	12.5656	6.2759	0.2651	24.8661	.	.
237	12.7608	6.2759	0.4603	25.0614	.	.
238	12.0078	6.2759	-0.2927	24.3083	.	.
239	11.8661	6.2759	-0.4344	24.1666	.	.
240	7.2325	6.2759	-5.0681	19.5330	.	.
241	8.2416	6.2759	-4.0589	20.5422	.	.
242	8.1816	6.2759	-4.1189	20.4821	.	.
243	5.0474	6.2759	-7.2531	17.3480	.	.
244	11.2436	6.2759	-1.0569	23.5441	.	.
245	11.3887	6.2759	-0.9119	23.6892	.	.
246	11.7271	6.2759	-0.5735	24.0276	.	.
247	13.8283	6.2759	1.5278	26.1288	.	.
248	14.6912	6.2759	2.3907	26.9917	.	.
249	17.3877	6.2759	5.0872	29.6882	.	.
250	16.3964	6.2759	4.0959	28.6970	.	.
251	15.2519	6.2759	2.9514	27.5524	.	.
252	17.4031	6.2759	5.1026	29.7036	.	.
253	19.2411	6.2759	6.9406	31.5416	.	.
254	19.5533	6.2759	7.2528	31.8538	.	.
255	17.6782	6.2759	5.3777	29.9787	.	.
256	18.7842	6.2759	6.4836	31.0847	.	.
257	20.7570	6.2759	8.4565	33.0576	.	.
258	21.8232	6.2759	9.5227	34.1237	.	.
259	20.3478	6.2759	8.0473	32.6484	.	.

