

| Name of Variable = pollution | |
|------------------------------|----------|
| Mean of Working Series | 94.20369 |
| Standard Deviation | 27.42528 |
| Number of Observations | 60 |

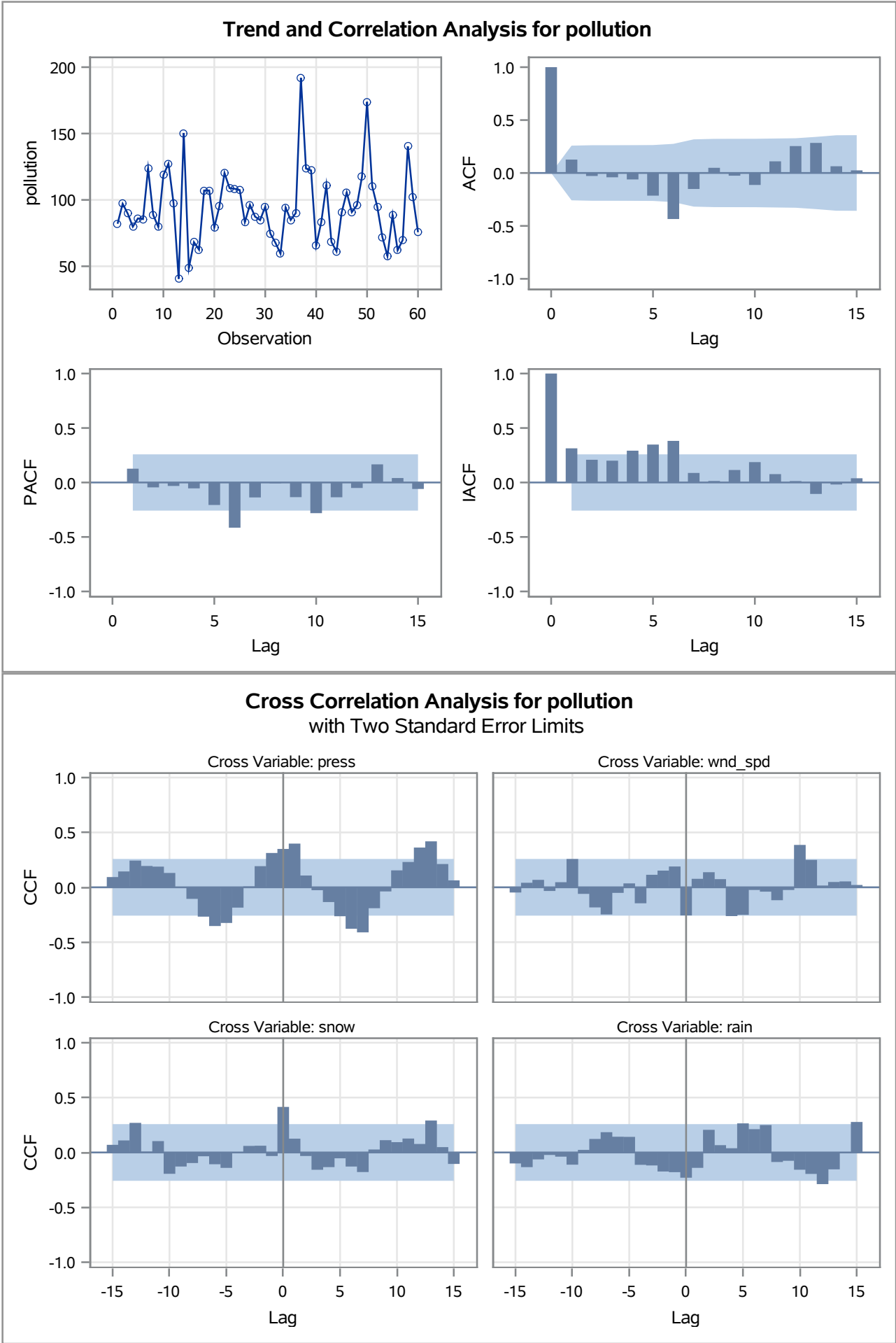
| Autocorrelation Check for White Noise | | | | | | | | | |
|---------------------------------------|------------|----|------------|------------------|--------|--------|--------|--------|--------|
| To Lag | Chi-Square | DF | Pr > ChiSq | Autocorrelations | | | | | |
| 6 | 17.55 | 6 | 0.0075 | 0.127 | -0.028 | -0.041 | -0.061 | -0.214 | -0.435 |
| 12 | 26.25 | 12 | 0.0099 | -0.151 | 0.049 | -0.026 | -0.113 | 0.110 | 0.254 |

| Correlation of pollution and press | |
|------------------------------------|----------|
| Variance of input = | 77.15933 |
| Number of Observations | 60 |

| Correlation of pollution and wnd_spd | |
|--------------------------------------|----------|
| Variance of input = | 246.3649 |
| Number of Observations | 60 |

| Correlation of pollution and snow | |
|-----------------------------------|----------|
| Variance of input = | 14.37682 |
| Number of Observations | 60 |

| Correlation of pollution and rain | |
|-----------------------------------|----------|
| Variance of input = | 51.65104 |
| Number of Observations | 60 |

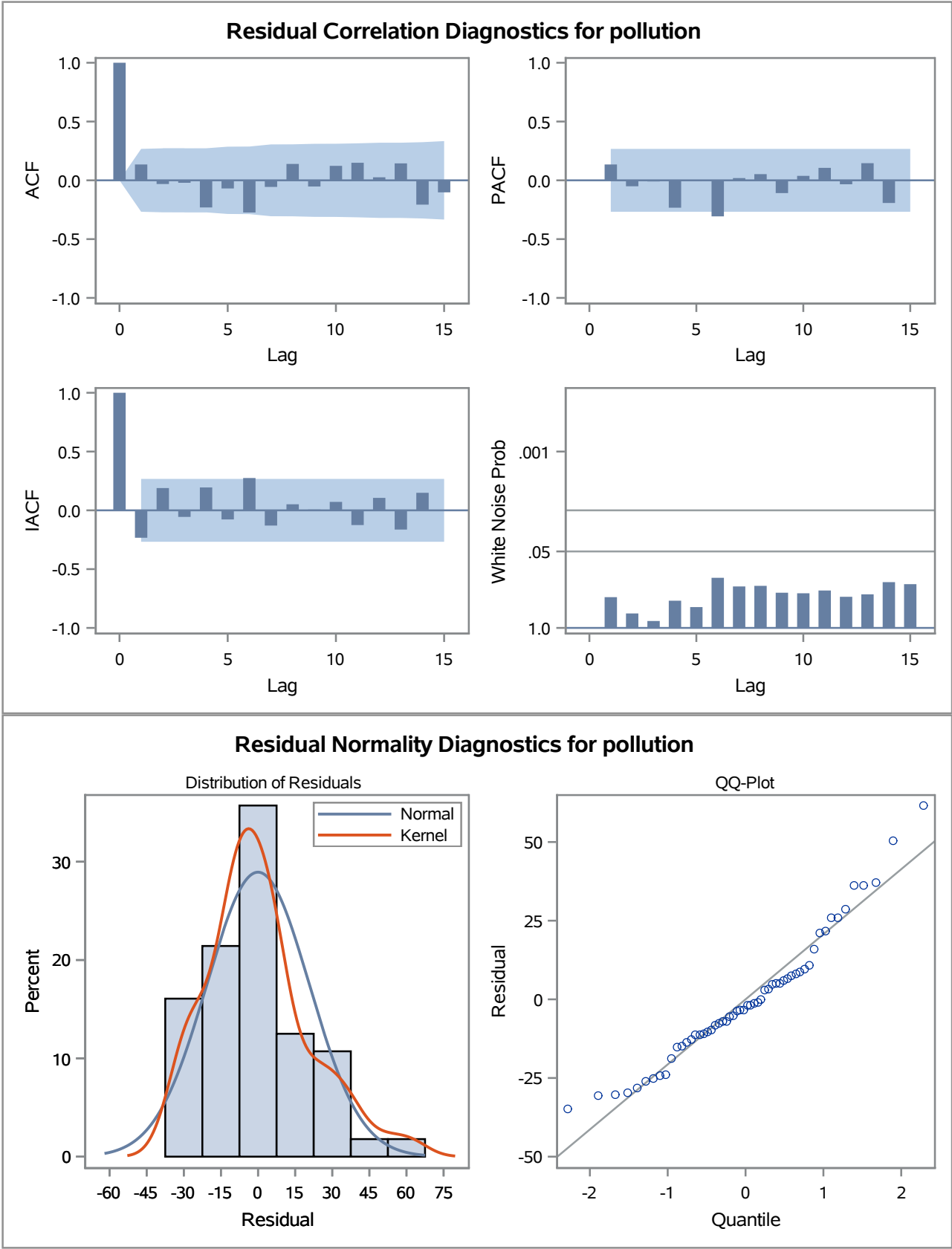


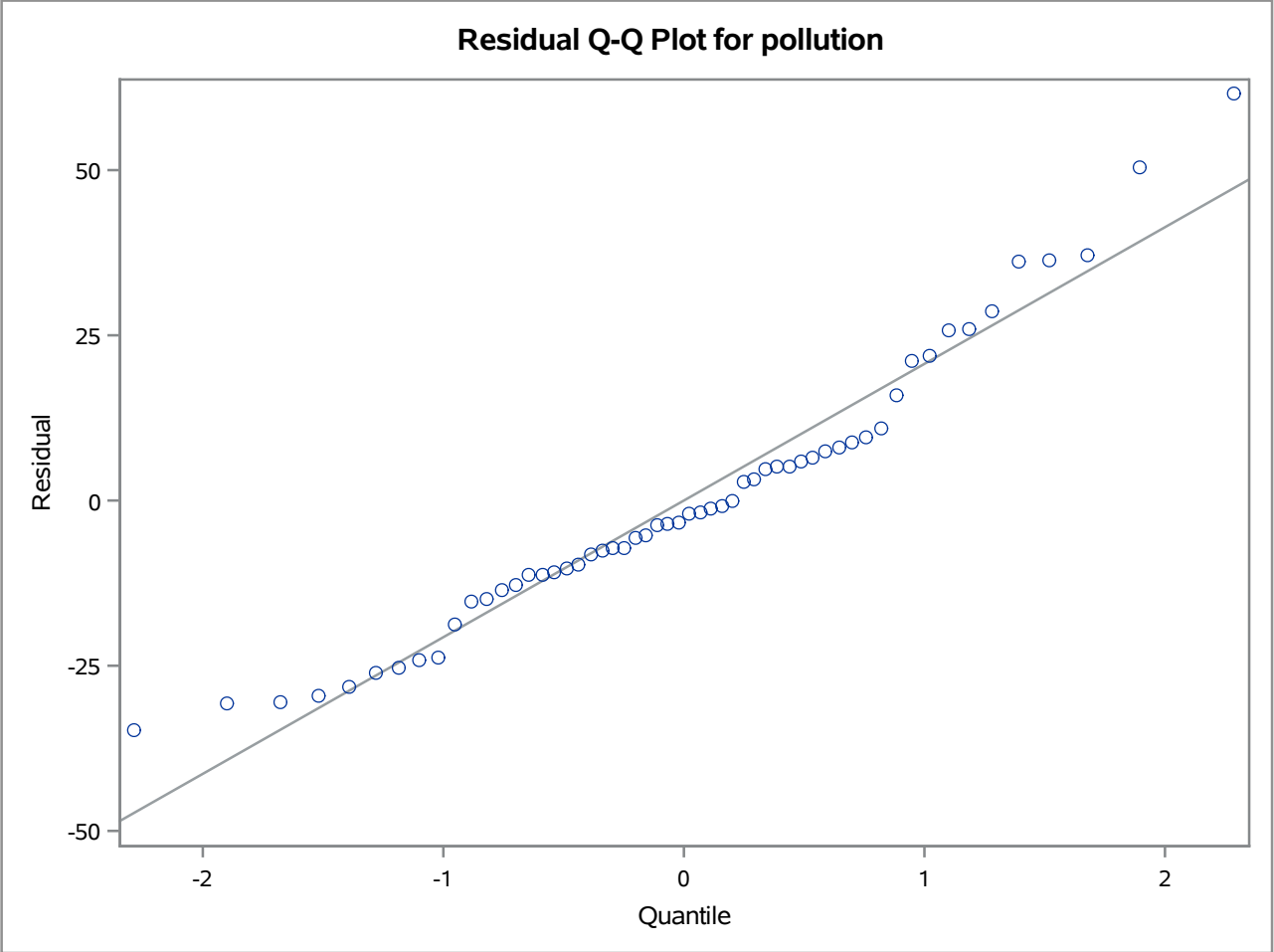
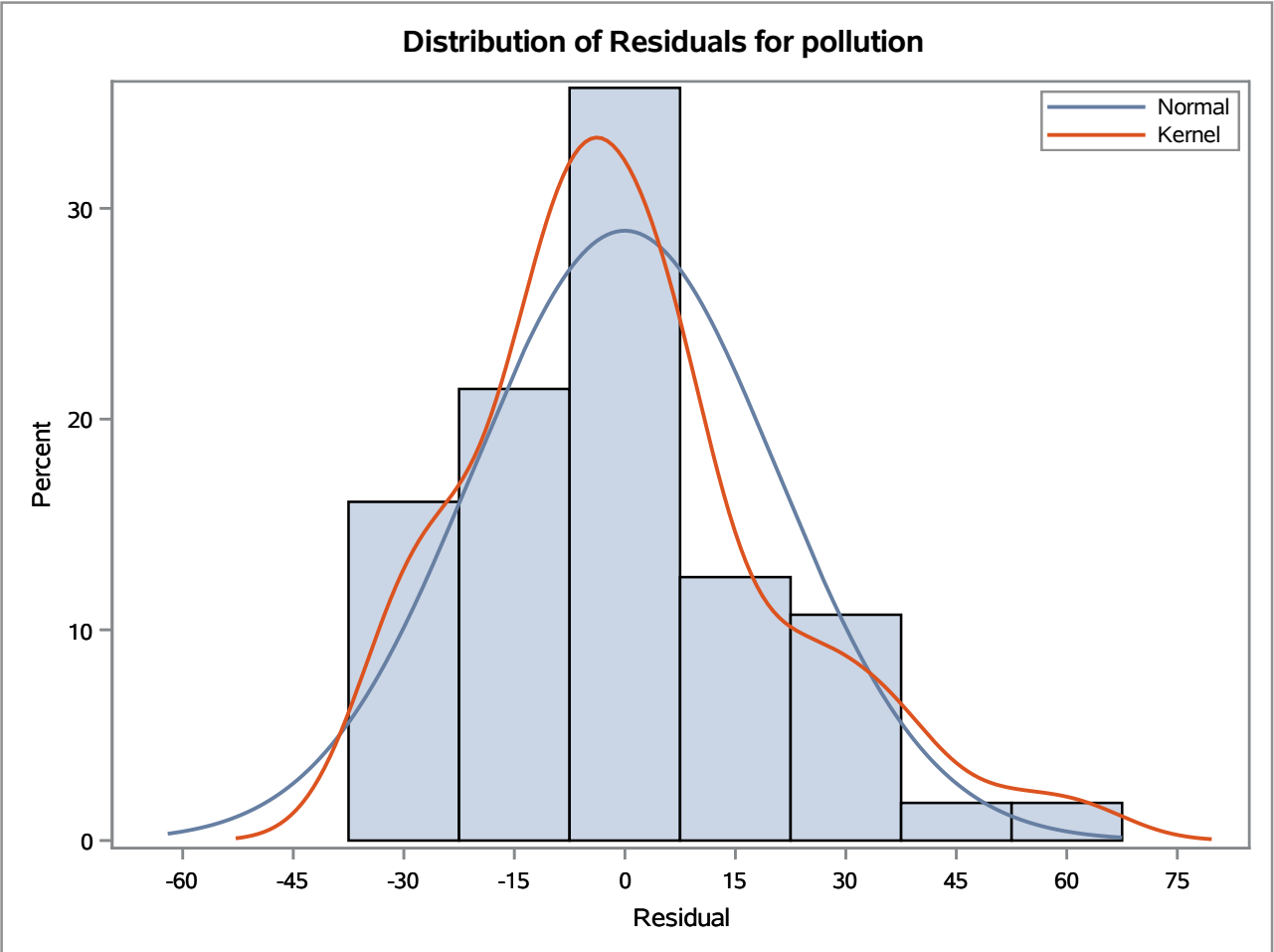
| Maximum Likelihood Estimation | | | | | | | |
|-------------------------------|----------|----------------|---------|----------------|-----|-----------|-------|
| Parameter | Estimate | Standard Error | t Value | Approx Pr > t | Lag | Variable | Shift |
| MU | -1576.5 | 450.69946 | -3.50 | 0.0005 | 0 | pollution | 0 |
| NUM1 | 1.66217 | 0.44700 | 3.72 | 0.0002 | 0 | press | 1 |
| NUM2 | -0.95608 | 0.23914 | -4.00 | <.0001 | 0 | wnd_spd | 0 |
| NUM3 | 2.07430 | 1.03411 | 2.01 | 0.0449 | 0 | snow | 0 |
| NUM4 | 0.36487 | 0.44653 | 0.82 | 0.4139 | 0 | rain | 4 |

| | |
|---------------------|----------|
| Constant Estimate | -1576.52 |
| Variance Estimate | 461.2466 |
| Std Error Estimate | 21.47665 |
| AIC | 507.1839 |
| SBC | 517.3107 |
| Number of Residuals | 56 |

| Correlations of Parameter Estimates | | | | | | |
|-------------------------------------|--------------|------------|--------------|-----------|-----------|--|
| Variable Parameter | pollution MU | press NUM1 | wnd_spd NUM2 | snow NUM3 | rain NUM4 | |
| pollution MU | 1.000 | -1.000 | 0.482 | 0.554 | -0.002 | |
| press NUM1 | -1.000 | 1.000 | -0.489 | -0.556 | 0.001 | |
| wnd_spd NUM2 | 0.482 | -0.489 | 1.000 | 0.320 | -0.383 | |
| snow NUM3 | 0.554 | -0.556 | 0.320 | 1.000 | -0.128 | |
| rain NUM4 | -0.002 | 0.001 | -0.383 | -0.128 | 1.000 | |

| Autocorrelation Check of Residuals | | | | | | | | | |
|------------------------------------|------------|----|------------|------------------|--------|--------|--------|--------|--------|
| To Lag | Chi-Square | DF | Pr > ChiSq | Autocorrelations | | | | | |
| 6 | 9.64 | 6 | 0.1405 | 0.135 | -0.031 | -0.021 | -0.231 | -0.069 | -0.273 |
| 12 | 14.08 | 12 | 0.2954 | -0.056 | 0.139 | -0.053 | 0.123 | 0.149 | 0.026 |
| 18 | 22.22 | 18 | 0.2222 | 0.144 | -0.207 | -0.102 | 0.014 | -0.126 | 0.114 |
| 24 | 28.48 | 24 | 0.2401 | -0.044 | -0.017 | 0.008 | -0.244 | 0.045 | -0.039 |





| Model for variable pollution | |
|------------------------------|----------|
| Estimated Intercept | -1576.52 |

| Input Number 1 | |
|---------------------------|----------|
| Input Variable | press |
| Shift | 1 |
| Overall Regression Factor | 1.662165 |

| Input Number 2 | |
|---------------------------|----------|
| Input Variable | wnd_spd |
| Overall Regression Factor | -0.95608 |

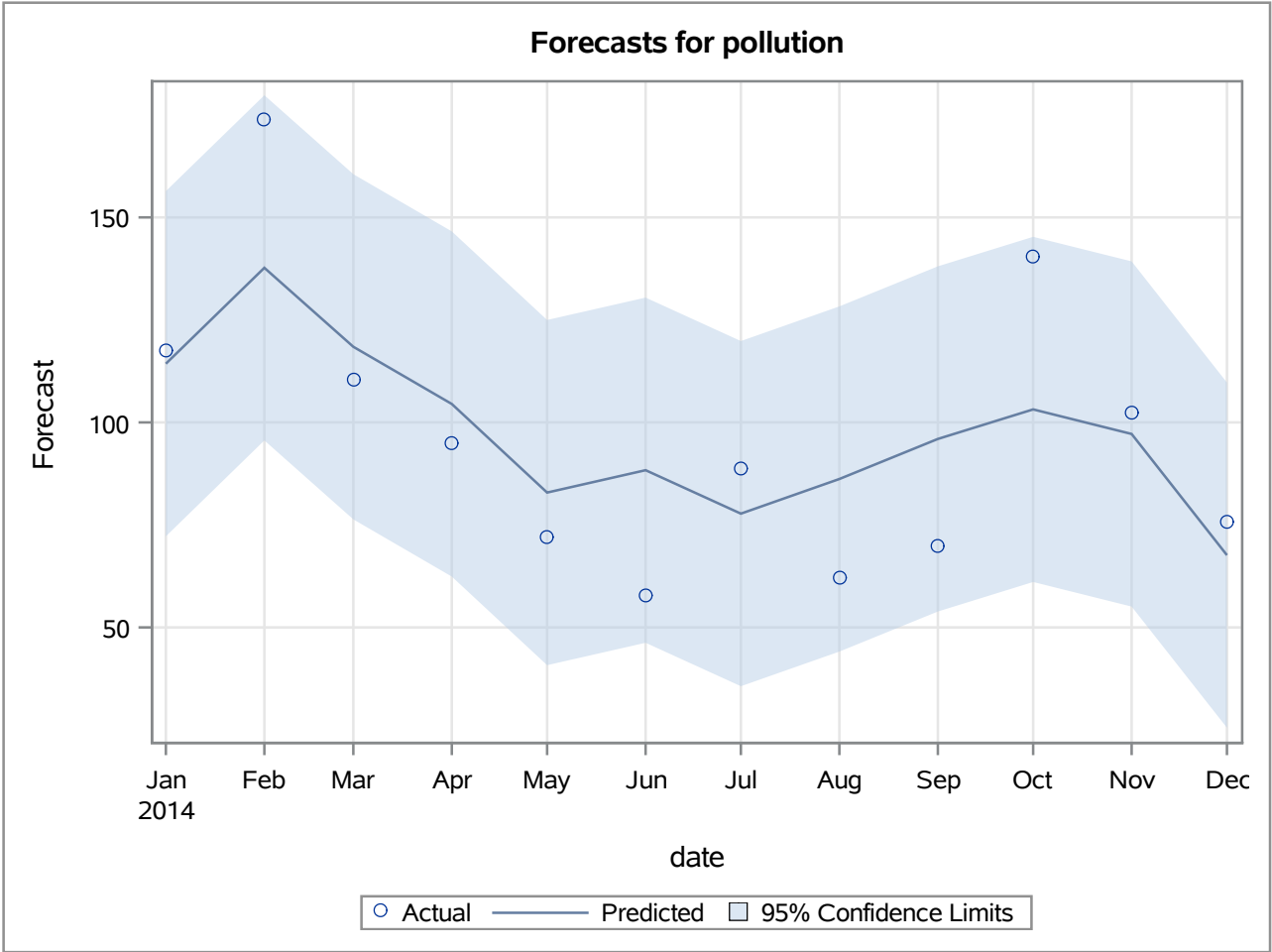
| Input Number 3 | |
|---------------------------|----------|
| Input Variable | snow |
| Overall Regression Factor | 2.074299 |

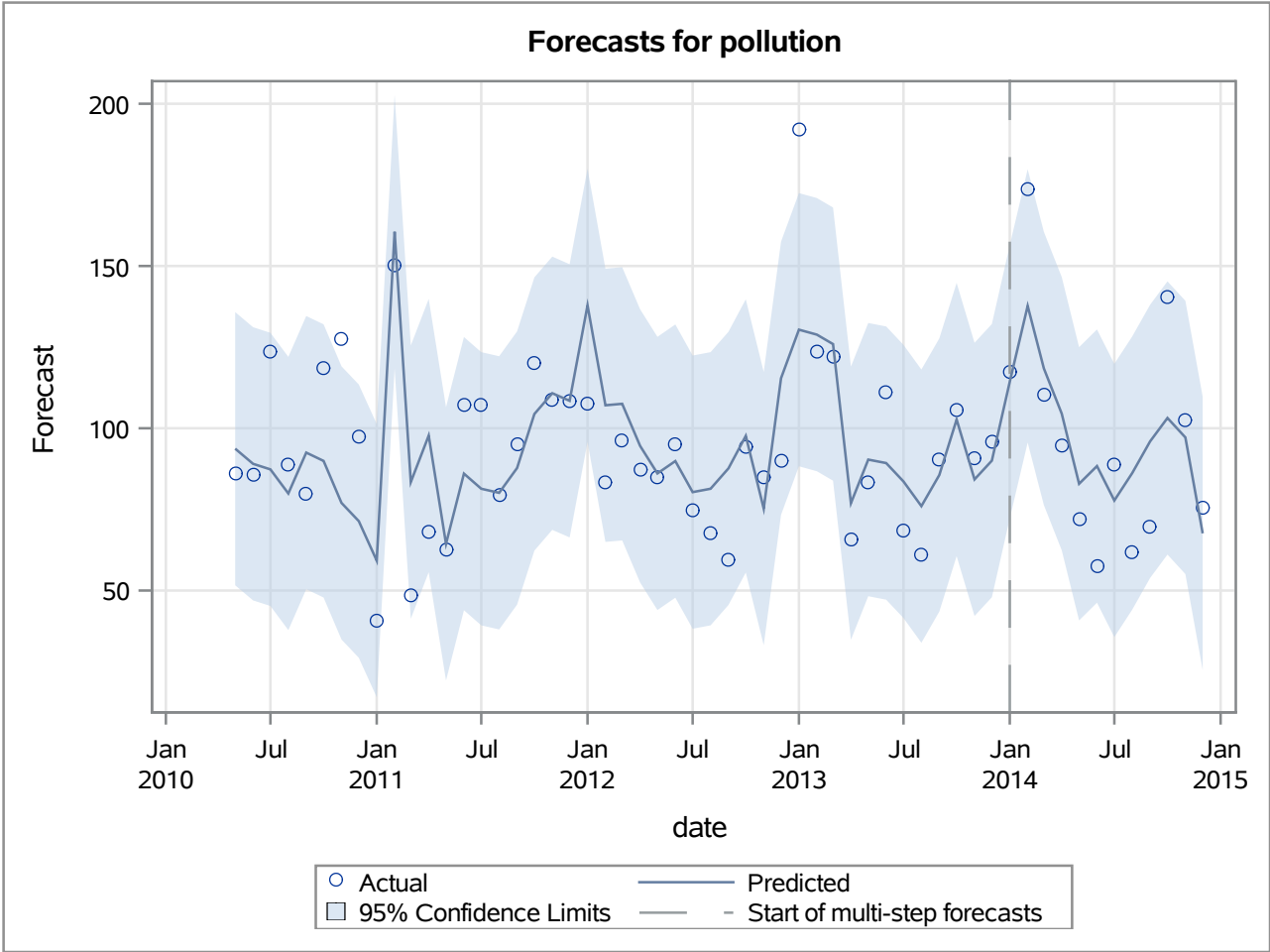
| Input Number 4 | |
|---------------------------|----------|
| Input Variable | rain |
| Shift | 4 |
| Overall Regression Factor | 0.364874 |

| Forecasts for variable pollution | | | | | | |
|----------------------------------|----------|-----------|-----------------------|----------|----------|----------|
| Obs | Forecast | Std Error | 95% Confidence Limits | | Actual | Residual |
| 5 | 93.7064 | 21.4767 | 51.6130 | 135.7999 | 86.0820 | -7.6244 |
| 6 | 89.0430 | 21.4767 | 46.9496 | 131.1365 | 85.5375 | -3.5055 |
| 7 | 87.3251 | 21.4767 | 45.2317 | 129.4186 | 123.6478 | 36.3227 |
| 8 | 79.9011 | 21.4767 | 37.8076 | 121.9945 | 88.6815 | 8.7804 |
| 9 | 92.4997 | 21.4767 | 50.4062 | 134.5931 | 79.6319 | -12.8677 |
| 10 | 89.9384 | 21.4767 | 47.8449 | 132.0318 | 118.6626 | 28.7243 |
| 11 | 77.0070 | 21.4767 | 34.9135 | 119.1004 | 127.3778 | 50.3708 |
| 12 | 71.3830 | 21.4767 | 29.2895 | 113.4765 | 97.3333 | 25.9503 |
| 13 | 59.2236 | 21.4767 | 17.1301 | 101.3170 | 40.5470 | -18.6765 |
| 14 | 160.5632 | 21.4767 | 118.4697 | 202.6567 | 150.3214 | -10.2418 |
| 15 | 83.4092 | 21.4767 | 41.3157 | 125.5027 | 48.6546 | -34.7546 |
| 16 | 97.7414 | 21.4767 | 55.6479 | 139.8348 | 68.1806 | -29.5608 |
| 17 | 64.3911 | 21.4767 | 22.2977 | 106.4846 | 62.5121 | -1.8790 |
| 18 | 86.0223 | 21.4767 | 43.9289 | 128.1158 | 107.1111 | 21.0888 |
| 19 | 81.3638 | 21.4767 | 39.2704 | 123.4573 | 107.1384 | 25.7746 |

| Forecasts for variable pollution | | | | | | |
|----------------------------------|----------|-----------|--------------------------|----------|----------|----------|
| Obs | Forecast | Std Error | 95% Confidence Limits | | Actual | Residual |
| 20 | 80.0982 | 21.4767 | 38.0047 | 122.1916 | 79.2366 | -0.8616 |
| 21 | 87.7513 | 21.4767 | 45.6578 | 129.8447 | 95.1403 | 7.3890 |
| 22 | 104.3988 | 21.4767 | 62.3053 | 146.4923 | 120.2406 | 15.8418 |
| 23 | 110.7983 | 21.4767 | 68.7048 | 152.8918 | 108.8708 | -1.9275 |
| 24 | 108.4551 | 21.4767 | 66.3616 | 150.5485 | 108.3737 | -0.0814 |
| 25 | 137.8807 | 21.4767 | 95.7873 | 179.9742 | 107.4435 | -30.4372 |
| 26 | 107.0770 | 21.4767 | 64.9836 | 149.1705 | 83.2730 | -23.8041 |
| 27 | 107.5349 | 21.4767 | 65.4415 | 149.6284 | 96.3360 | -11.1989 |
| 28 | 94.5716 | 21.4767 | 52.4781 | 136.6651 | 87.3972 | -7.1744 |
| 29 | 86.0789 | 21.4767 | 43.9855 | 128.1724 | 84.7782 | -1.3007 |
| 30 | 89.8888 | 21.4767 | 47.7954 | 131.9823 | 94.9861 | 5.0973 |
| 31 | 80.3177 | 21.4767 | 38.2242 | 122.4111 | 74.6707 | -5.6470 |
| 32 | 81.3597 | 21.4767 | 39.2663 | 123.4532 | 67.7137 | -13.6460 |
| 33 | 87.6450 | 21.4767 | 45.5515 | 129.7385 | 59.5014 | -28.1436 |
| 34 | 97.6503 | 21.4767 | 55.5568 | 139.7437 | 94.3293 | -3.3210 |
| 35 | 75.2505 | 21.4767 | 33.1570 | 117.3439 | 84.8806 | 9.6301 |
| 36 | 115.4112 | 21.4767 | 73.3178 | 157.5047 | 90.1169 | -25.2943 |
| 37 | 130.3796 | 21.4767 | 88.2862 | 172.4731 | 191.9745 | 61.5948 |
| 38 | 128.8499 | 21.4767 | 86.7565 | 170.9434 | 123.6176 | -5.2324 |
| 39 | 125.9388 | 21.4767 | 83.8453 | 168.0322 | 122.2379 | -3.7009 |
| 40 | 76.9152 | 21.4767 | 34.8217 | 119.0087 | 65.6542 | -11.2610 |
| 41 | 90.3474 | 21.4767 | 48.2540 | 132.4409 | 83.1801 | -7.1673 |
| 42 | 89.2755 | 21.4767 | 47.1820 | 131.3689 | 111.1069 | 21.8315 |
| 43 | 83.6075 | 21.4767 | 41.5141 | 125.7010 | 68.3347 | -15.2729 |
| 44 | 76.0012 | 21.4767 | 33.9077 | 118.0947 | 61.1586 | -14.8426 |
| 45 | 85.5955 | 21.4767 | 43.5020 | 127.6890 | 90.3694 | 4.7739 |
| 46 | 102.6921 | 21.4767 | 60.5986 | 144.7855 | 105.5901 | 2.8980 |
| 47 | 84.2427 | 21.4767 | 42.1492 | 126.3361 | 90.7931 | 6.5504 |
| 48 | 90.0292 | 21.4767 | 47.9357 | 132.1227 | 95.8629 | 5.8337 |
| 49 | 114.3140 | 21.4767 | 72.2206 | 156.4075 | 117.4422 | 3.1282 |
| 50 | 137.7016 | 21.4767 | 95.6081 | 179.7950 | 173.8378 | 36.1362 |
| 51 | 118.4453 | 21.4767 | 76.3519 | 160.5388 | 110.3374 | -8.1080 |
| 52 | 104.4908 | 21.4767 | 62.3974 | 146.5843 | 94.8361 | -9.6547 |
| 53 | 82.8855 | 21.4767 | 40.7920 | 124.9789 | 72.0605 | -10.8250 |
| 54 | 88.3449 | 21.4767 | 46.2514 | 130.4383 | 57.6875 | -30.6574 |
| 55 | 77.7463 | 21.4767 | 35.6528 | 119.8397 | 88.6142 | 10.8680 |

| Forecasts for variable pollution | | | | | | |
|----------------------------------|----------|-----------|-----------------------|----------|----------|----------|
| Obs | Forecast | Std Error | 95% Confidence Limits | | Actual | Residual |
| 56 | 86.1981 | 21.4767 | 44.1046 | 128.2916 | 62.0121 | -24.1860 |
| 57 | 95.9682 | 21.4767 | 53.8748 | 138.0617 | 69.8056 | -26.1627 |
| 58 | 103.1711 | 21.4767 | 61.0776 | 145.2645 | 140.3669 | 37.1959 |
| 59 | 97.1779 | 21.4767 | 55.0844 | 139.2713 | 102.3486 | 5.1708 |
| 60 | 67.6207 | 21.4767 | 25.5272 | 109.7142 | 75.6882 | 8.0675 |





| Outlier Detection Summary | |
|---------------------------|------|
| Maximum number searched | 2 |
| Number found | 2 |
| Significance used | 0.05 |

| Outlier Details | | | | |
|-----------------|----------|----------|------------|-------------------|
| Obs | Type | Estimate | Chi-Square | Approx Prob>ChiSq |
| 37 | Additive | 61.59482 | 14.47 | 0.0001 |
| 11 | Additive | 50.37082 | 9.75 | 0.0018 |