

| Obs | id | y | x1 | x2 | x3 | x4 | x5 | x6 |
|-----|------------|----|------|-----|-----|-----|-------|-----|
| 1 | Phoenix | 10 | 70.3 | 213 | 582 | 6.0 | 7.05 | 36 |
| 2 | Little_R | 13 | 61.0 | 91 | 132 | 8.2 | 48.52 | 100 |
| 3 | San_Fran | 12 | 56.7 | 453 | 716 | 8.7 | 20.66 | 67 |
| 4 | Denver | 17 | 51.9 | 454 | 515 | 9.0 | 12.95 | 86 |
| 5 | Hartford | 56 | 49.1 | 412 | 158 | 9.0 | 43.37 | 127 |
| 6 | Wilmington | 36 | 54.0 | 80 | 80 | 9.0 | 40.25 | 114 |
| 7 | Washingt | 29 | 57.3 | 434 | 757 | 9.3 | 38.89 | 111 |
| 8 | Jacksonv | 14 | 68.4 | 136 | 529 | 8.8 | 54.47 | 116 |
| 9 | Miami | 10 | 75.5 | 207 | 335 | 9.0 | 59.80 | 128 |
| 10 | Atlanta | 24 | 61.5 | 368 | 497 | 9.1 | 48.34 | 115 |

The CORR Procedure

| | | | | | | | |
|--------------|---|----|----|----|----|----|----|
| 7 Variables: | y | x1 | x2 | x3 | x4 | x5 | x6 |
|--------------|---|----|----|----|----|----|----|

| Simple Statistics | | | | | | |
|-------------------|----|-----------|-----------|-----------|----------|-----------|
| Variable | N | Mean | Std Dev | Sum | Minimum | Maximum |
| y | 41 | 30.04878 | 23.47227 | 1232 | 8.00000 | 110.00000 |
| x1 | 41 | 55.76341 | 7.22772 | 2286 | 43.50000 | 75.50000 |
| x2 | 41 | 463.09756 | 563.47395 | 18987 | 35.00000 | 3344 |
| x3 | 41 | 608.60976 | 579.11302 | 24953 | 71.00000 | 3369 |
| x4 | 41 | 9.44390 | 1.42864 | 387.20000 | 6.00000 | 12.70000 |
| x5 | 41 | 36.76902 | 11.77155 | 1508 | 7.05000 | 59.80000 |
| x6 | 41 | 113.90244 | 26.50642 | 4670 | 36.00000 | 166.00000 |

| Pearson Correlation Coefficients, N = 41 Prob > r under H0: Rho=0 | | | | | | | |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | y | x1 | x2 | x3 | x4 | x5 | x6 |
| y | 1.00000 | -0.43360 0.0046 | 0.64477 <.0001 | 0.49378 0.0010 | 0.09469 0.5559 | 0.05429 0.7360 | 0.36956 0.0174 |
| x1 | -0.43360 0.0046 | 1.00000 | -0.19004 0.2340 | -0.06268 0.6970 | -0.34974 0.0250 | 0.38625 0.0126 | -0.43024 0.0050 |
| x2 | 0.64477 <.0001 | -0.19004 0.2340 | 1.00000 | 0.95527 <.0001 | 0.23795 0.1341 | -0.03242 0.8405 | 0.13183 0.4113 |
| x3 | 0.49378 0.0010 | -0.06268 0.6970 | 0.95527 <.0001 | 1.00000 | 0.21264 0.1819 | -0.02612 0.8712 | 0.04208 0.7939 |
| x4 | 0.09469 0.5559 | -0.34974 0.0250 | 0.23795 0.1341 | 0.21264 0.1819 | 1.00000 | -0.01299 0.9357 | 0.16411 0.3052 |
| x5 | 0.05429 0.7360 | 0.38625 0.0126 | -0.03242 0.8405 | -0.02612 0.8712 | -0.01299 0.9357 | 1.00000 | 0.49610 0.0010 |
| x6 | 0.36956 0.0174 | -0.43024 0.0050 | 0.13183 0.4113 | 0.04208 0.7939 | 0.16411 0.3052 | 0.49610 0.0010 | 1.00000 |

The REG Procedure
 Model: MODEL1
 Dependent Variable: y

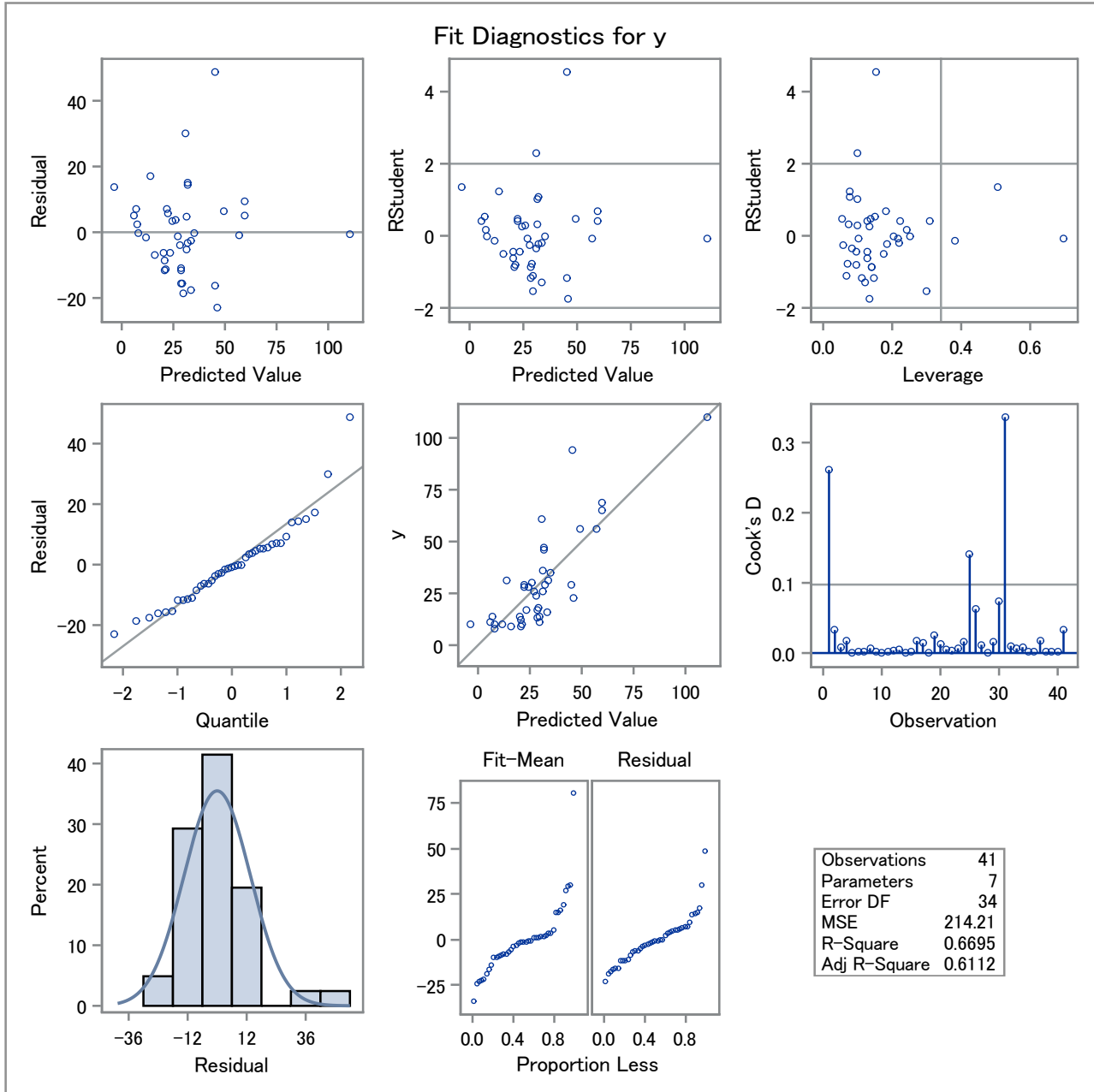
| | |
|-----------------------------|----|
| Number of Observations Read | 41 |
| Number of Observations Used | 41 |

| Analysis of Variance | | | | | |
|----------------------|----|----------------|-------------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
| Model | 6 | 14755 | 2459.10601 | 11.48 | <.0001 |
| Error | 34 | 7283.26641 | 214.21372 | | |
| Corrected Total | 40 | 22038 | | | |

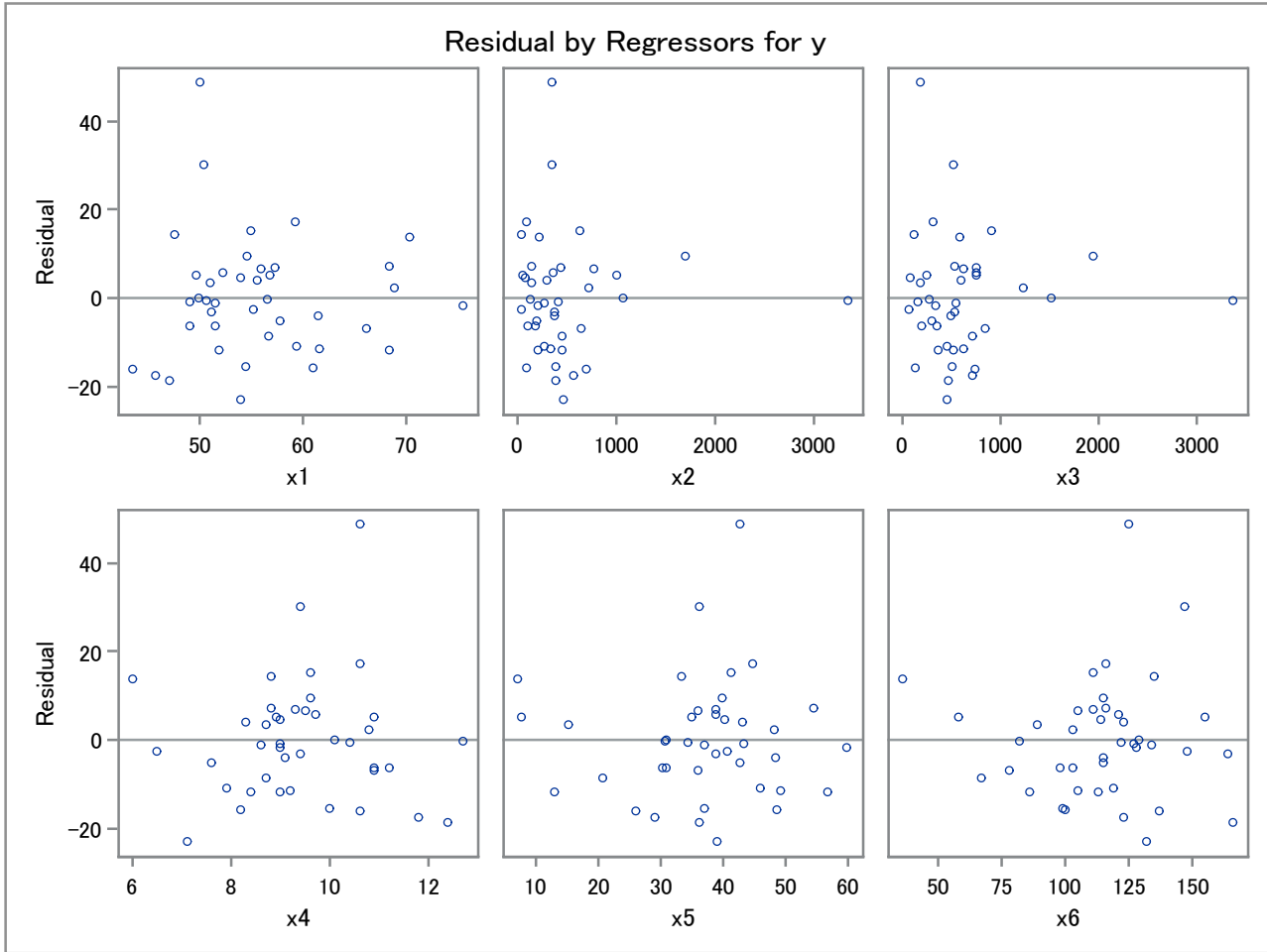
| | | | |
|----------------|----------|----------|--------|
| Root MSE | 14.63604 | R-Square | 0.6695 |
| Dependent Mean | 30.04878 | Adj R-Sq | 0.6112 |
| Coeff Var | 48.70761 | | |

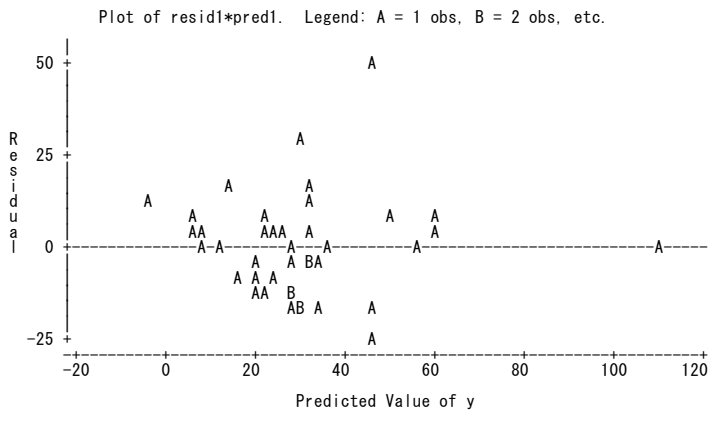
| Parameter Estimates | | | | | |
|---------------------|----|--------------------|----------------|---------|---------|
| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > t |
| Intercept | 1 | 111.72848 | 47.31810 | 2.36 | 0.0241 |
| x1 | 1 | -1.26794 | 0.62118 | -2.04 | 0.0491 |
| x2 | 1 | 0.06492 | 0.01575 | 4.12 | 0.0002 |
| x3 | 1 | -0.03928 | 0.01513 | -2.60 | 0.0138 |
| x4 | 1 | -3.18137 | 1.81502 | -1.75 | 0.0887 |
| x5 | 1 | 0.51236 | 0.36276 | 1.41 | 0.1669 |
| x6 | 1 | -0.05205 | 0.16201 | -0.32 | 0.7500 |

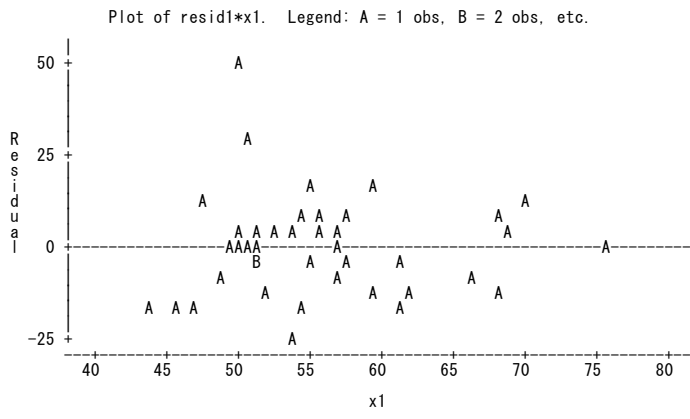
The REG Procedure
 Model: MODEL1
 Dependent Variable: y

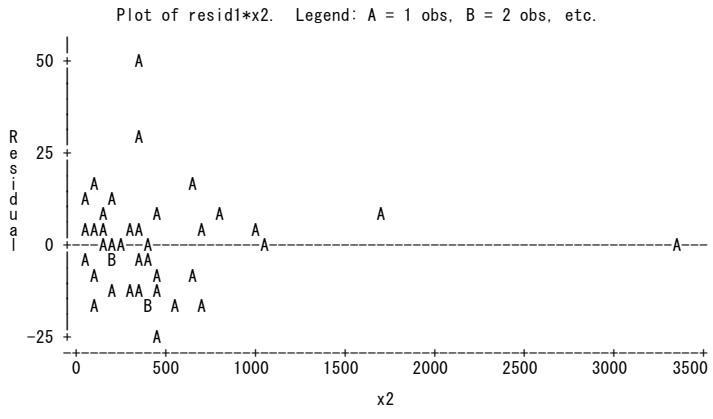


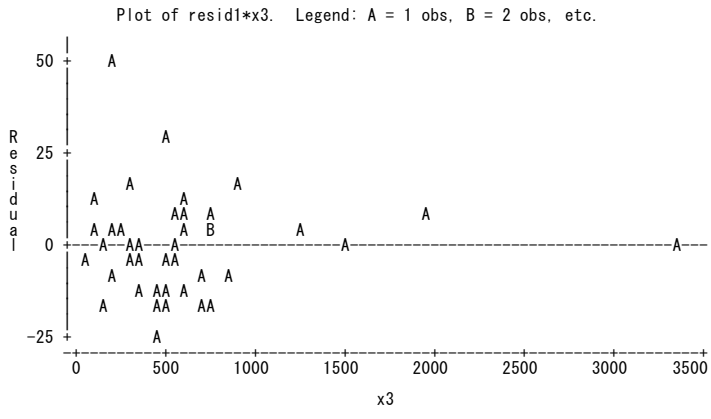
The REG Procedure
Model: MODEL1
Dependent Variable: y

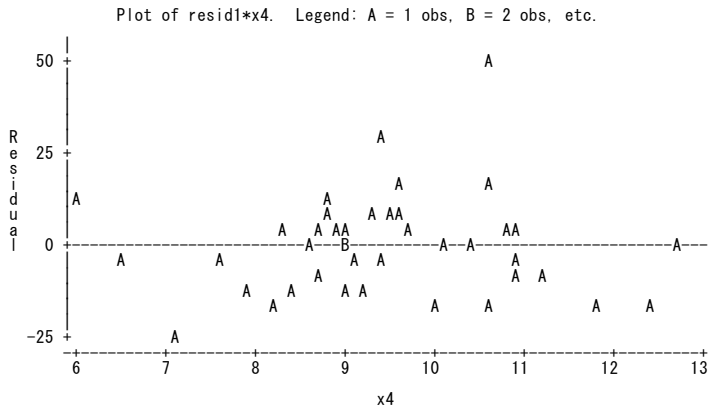


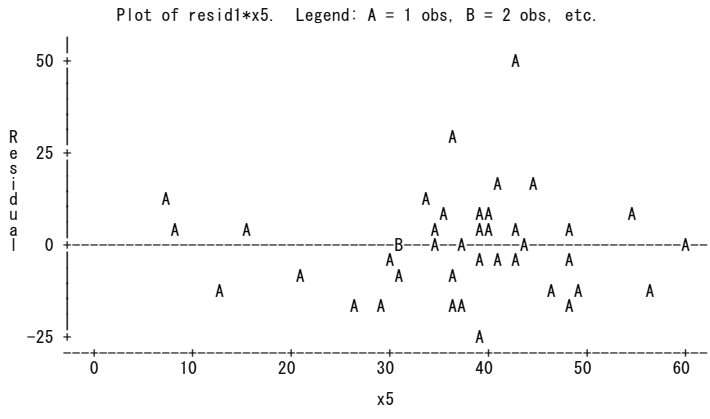


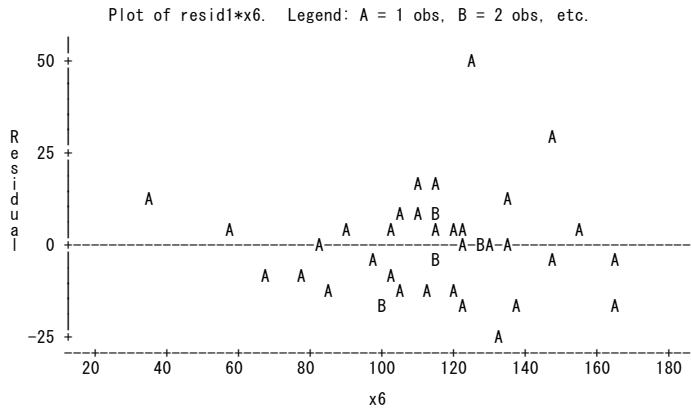


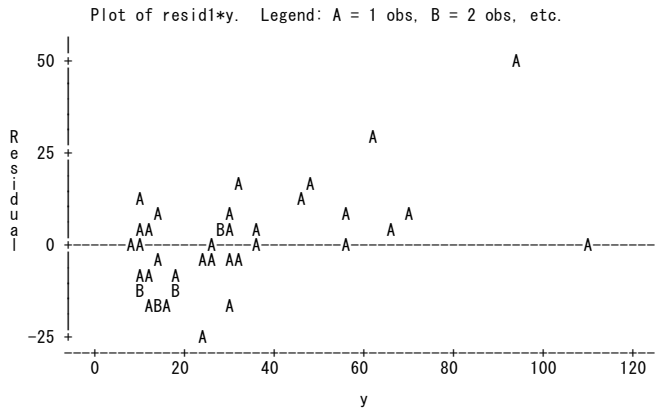












The REG Procedure
 Model: MODEL1
 Dependent Variable: y

| | |
|-----------------------------|----|
| Number of Observations Read | 41 |
| Number of Observations Used | 41 |

Stepwise Selection: Step 1

Variable x2 Entered: R-Square = 0.4157 and C(p) = 23.1089

| Analysis of Variance | | | | | |
|----------------------|----|----------------|-------------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
| Model | 1 | 9161.74469 | 9161.74469 | 27.75 | <.0001 |
| Error | 39 | 12876 | 330.15789 | | |
| Corrected Total | 40 | 22038 | | | |

| Variable | Parameter Estimate | Standard Error | Type II SS | F Value | Pr > F |
|-----------|--------------------|----------------|------------|---------|--------|
| Intercept | 17.61057 | 3.69159 | 7513.50474 | 22.76 | <.0001 |
| x2 | 0.02686 | 0.00510 | 9161.74469 | 27.75 | <.0001 |

Bounds on condition number: 1, 1

Stepwise Selection: Step 2

Variable x3 Entered: R-Square = 0.5863 and C(p) = 7.5586

| Analysis of Variance | | | | | |
|----------------------|----|----------------|-------------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
| Model | 2 | 12921 | 6460.63359 | 26.93 | <.0001 |
| Error | 38 | 9116.63526 | 239.91145 | | |
| Corrected Total | 40 | 22038 | | | |

| Variable | Parameter Estimate | Standard Error | Type II SS | F Value | Pr > F |
|-----------|--------------------|----------------|------------|---------|--------|
| Intercept | 26.32508 | 3.84044 | 11273 | 46.99 | <.0001 |
| x2 | 0.08243 | 0.01470 | 7548.02378 | 31.46 | <.0001 |
| x3 | -0.05661 | 0.01430 | 3759.52248 | 15.67 | 0.0003 |

Bounds on condition number: 11.434, 45.735

Stepwise Selection: Step 3

Variable x6 Entered: R-Square = 0.6174 and C(p) = 6.3610

| Analysis of Variance | | | | | |
|----------------------|----|----------------|-------------|---------|--------|
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
| Model | 3 | 13606 | 4535.41173 | 19.90 | <.0001 |
| Error | 37 | 8431.66725 | 227.88290 | | |
| Corrected Total | 40 | 22038 | | | |

The REG Procedure
 Model: MODEL1
 Dependent Variable: y

Stepwise Selection: Step 3

| Variable | Parameter Estimate | Standard Error | Type II SS | F Value | Pr > F |
|-----------|--------------------|----------------|------------|---------|--------|
| Intercept | 6.96585 | 11.77691 | 79.72552 | 0.35 | 0.5578 |
| x2 | 0.07433 | 0.01507 | 5547.32154 | 24.34 | <.0001 |
| x3 | -0.04939 | 0.01454 | 2628.36952 | 11.53 | 0.0016 |
| x6 | 0.16436 | 0.09480 | 684.96801 | 3.01 | 0.0913 |

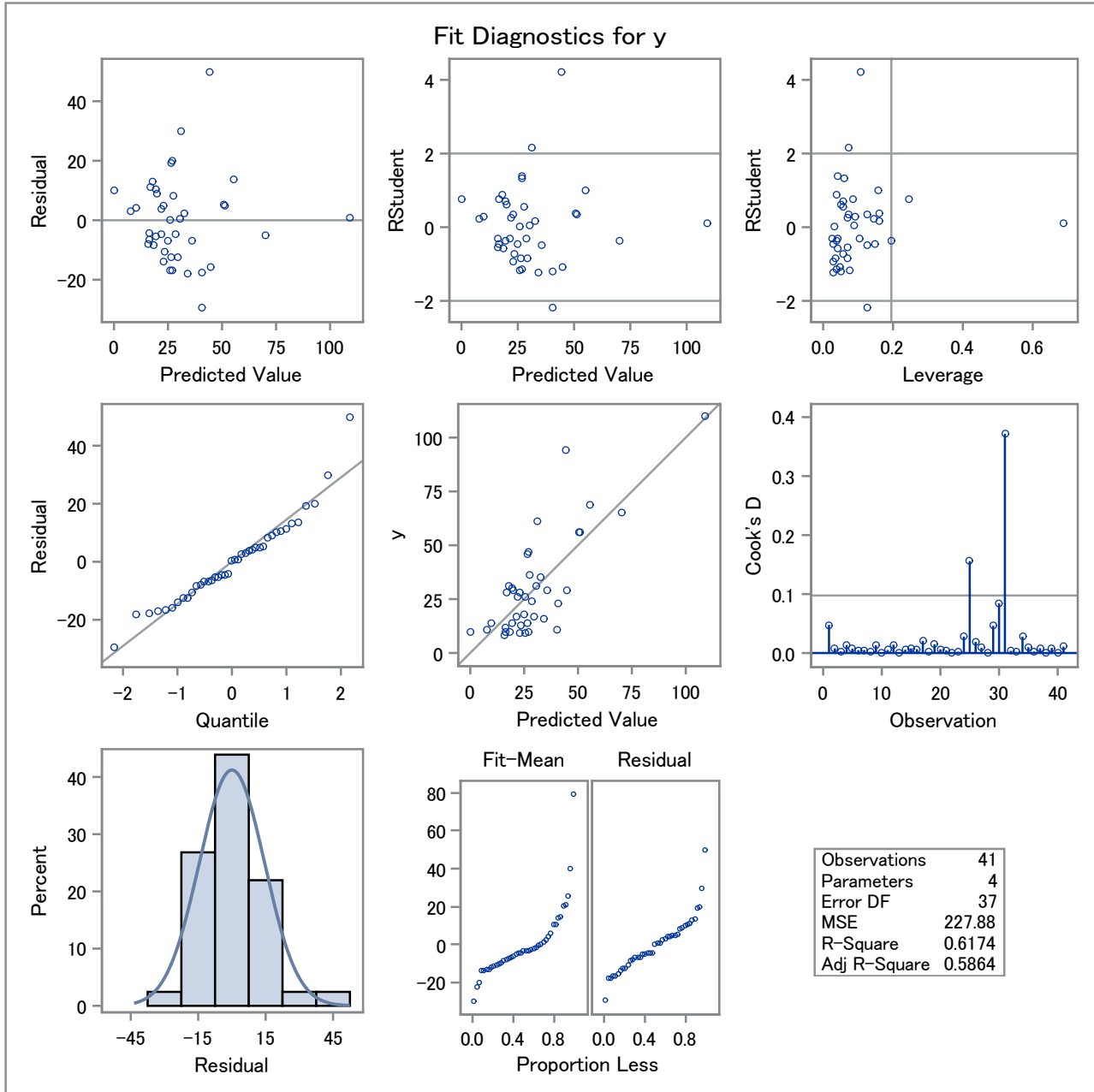
Bounds on condition number: 12.65, 78.633

All variables left in the model are significant at the 0.1500 level.

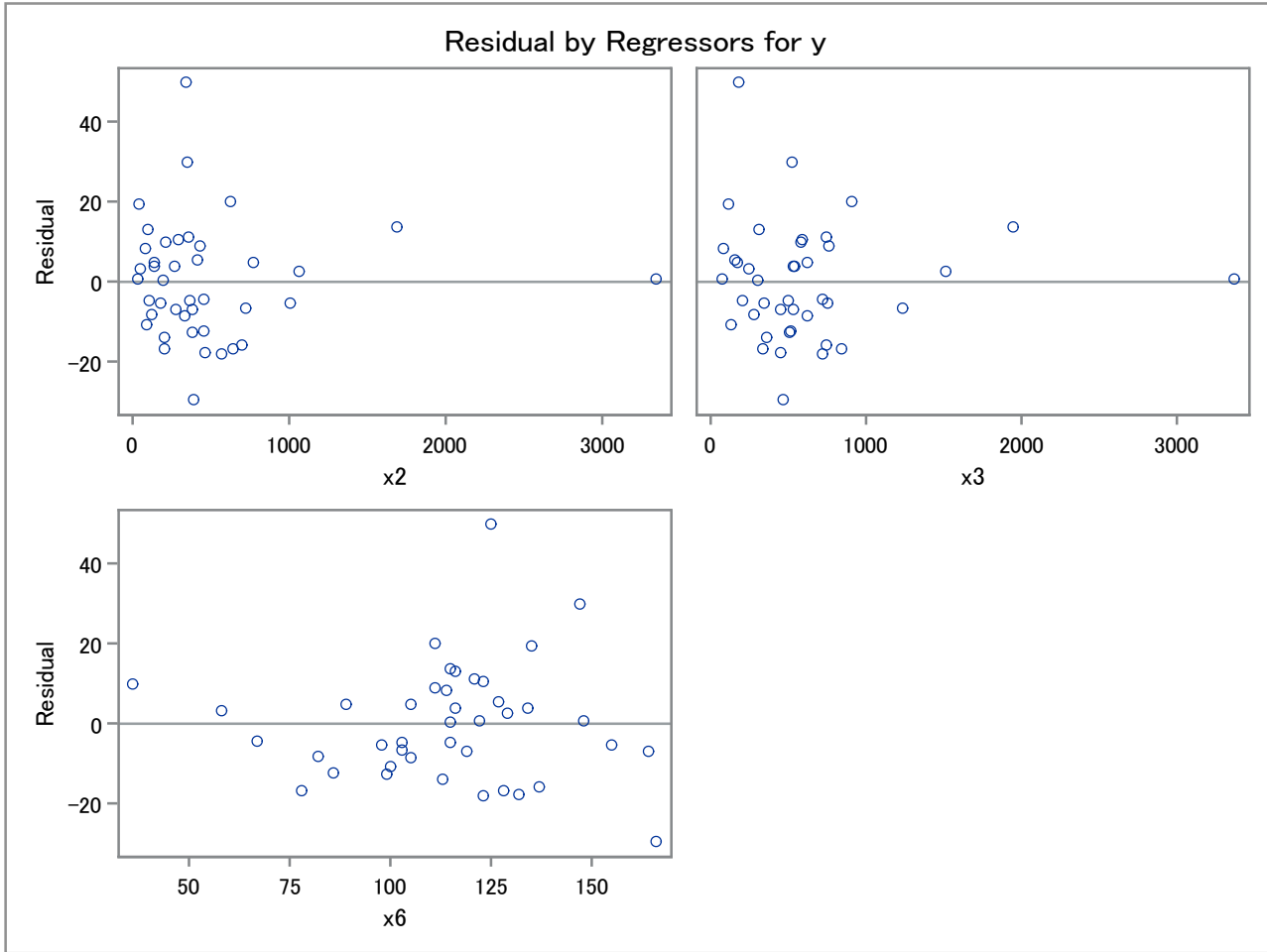
No other variable met the 0.1500 significance level for entry into the model.

| Summary of Stepwise Selection | | | | | | | | |
|-------------------------------|------------------|------------------|----------------|------------------|----------------|---------|---------|--------|
| Step | Variable Entered | Variable Removed | Number Vars In | Partial R-Square | Model R-Square | C(p) | F Value | Pr > F |
| 1 | x2 | | 1 | 0.4157 | 0.4157 | 23.1089 | 27.75 | <.0001 |
| 2 | x3 | | 2 | 0.1706 | 0.5863 | 7.5586 | 15.67 | 0.0003 |
| 3 | x6 | | 3 | 0.0311 | 0.6174 | 6.3610 | 3.01 | 0.0913 |

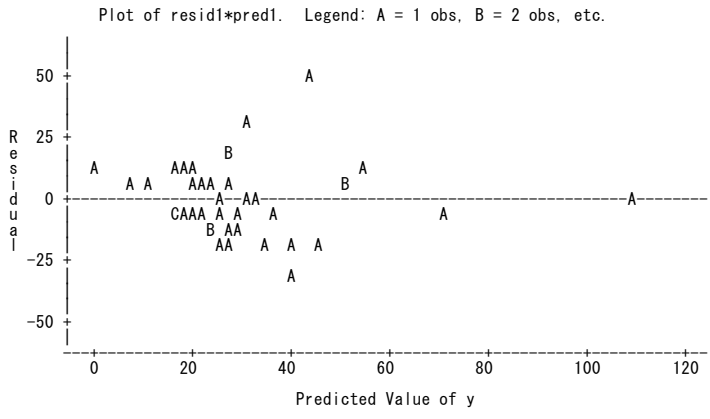
The REG Procedure
Model: MODEL1
Dependent Variable: y

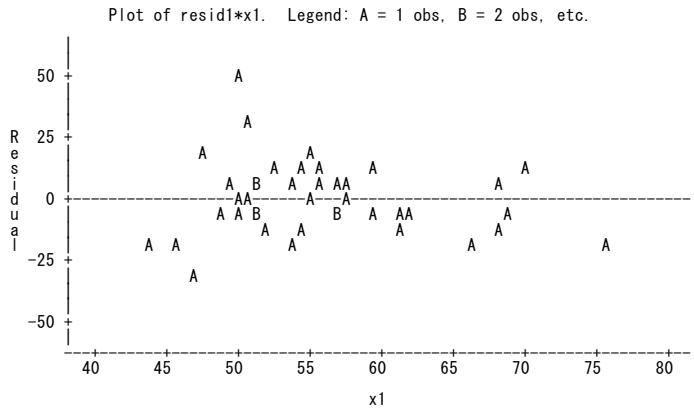


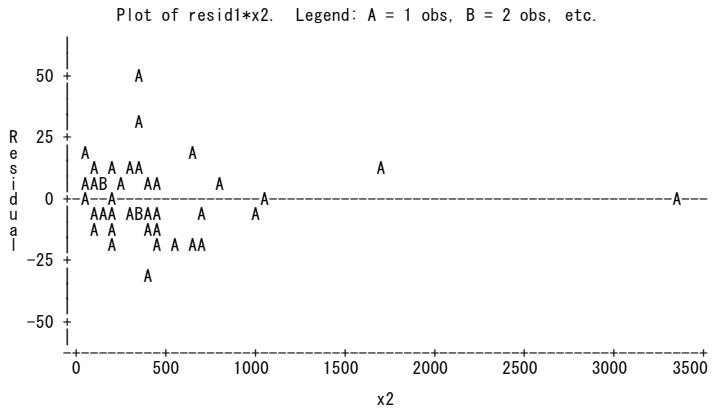
The REG Procedure
Model: MODEL1
Dependent Variable: y

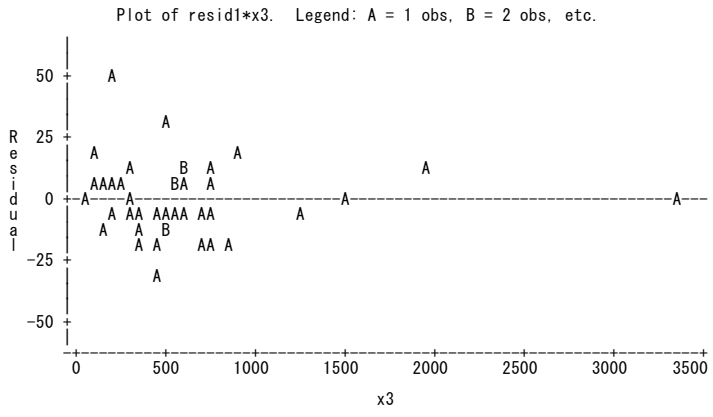


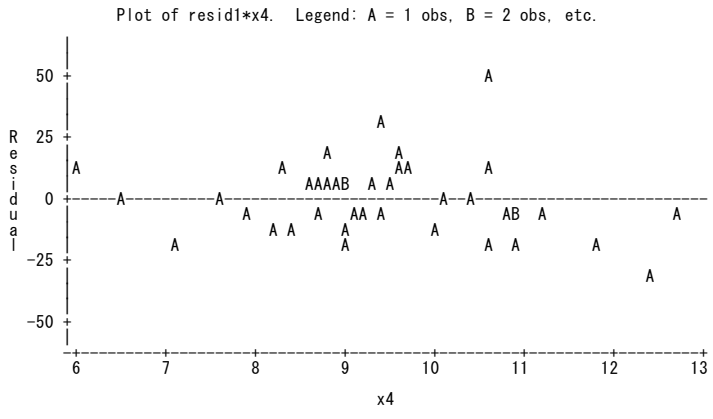
| Obs | id | y | x1 | x2 | x3 | x4 | x5 | x6 | pred1 | resid1 |
|-----|------------|-----|------|------|------|------|-------|-----|---------|----------|
| 1 | Phoenix | 10 | 70.3 | 213 | 582 | 6.0 | 7.05 | 36 | -0.032 | 10.0316 |
| 2 | Little_R | 13 | 61.0 | 91 | 132 | 8.2 | 48.52 | 100 | 23.646 | -10.6461 |
| 3 | San_Fran | 12 | 56.7 | 453 | 716 | 8.7 | 20.66 | 67 | 16.285 | -4.2849 |
| 4 | Denver | 17 | 51.9 | 454 | 515 | 9.0 | 12.95 | 86 | 29.410 | -12.4103 |
| 5 | Hartford | 56 | 49.1 | 412 | 158 | 9.0 | 43.37 | 127 | 50.661 | 5.3392 |
| 6 | Wilmington | 36 | 54.0 | 80 | 80 | 9.0 | 40.25 | 114 | 27.698 | 8.3020 |
| 7 | Washingt | 29 | 57.3 | 434 | 757 | 9.3 | 38.89 | 111 | 20.079 | 8.9208 |
| 8 | Jacksonv | 14 | 68.4 | 136 | 529 | 8.8 | 54.47 | 116 | 10.011 | 3.9887 |
| 9 | Miami | 10 | 75.5 | 207 | 335 | 9.0 | 59.80 | 128 | 26.844 | -16.8439 |
| 10 | Atlanta | 24 | 61.5 | 368 | 497 | 9.1 | 48.34 | 115 | 28.673 | -4.6731 |
| 11 | Chicago | 110 | 50.6 | 3344 | 3369 | 10.4 | 34.44 | 122 | 109.181 | 0.8191 |
| 12 | Indianap | 28 | 52.3 | 361 | 746 | 9.7 | 38.74 | 121 | 16.840 | 11.1603 |
| 13 | Des_Moin | 17 | 49.0 | 104 | 201 | 11.2 | 30.85 | 103 | 21.697 | -4.6973 |
| 14 | Wichita | 8 | 56.6 | 125 | 277 | 12.7 | 30.58 | 82 | 16.053 | -8.0528 |
| 15 | Louisvil | 30 | 55.6 | 291 | 593 | 8.3 | 43.11 | 123 | 19.522 | 10.4776 |

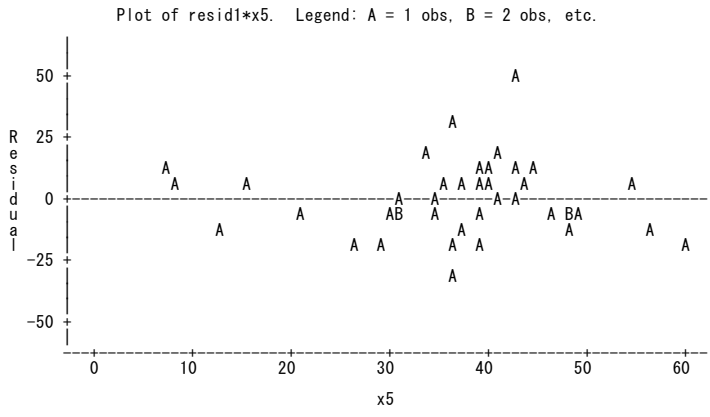


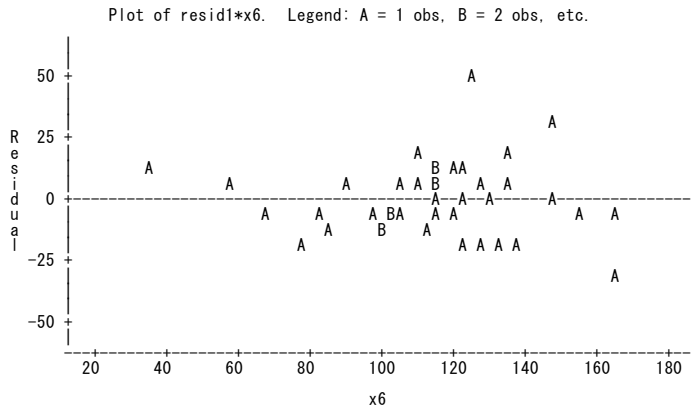


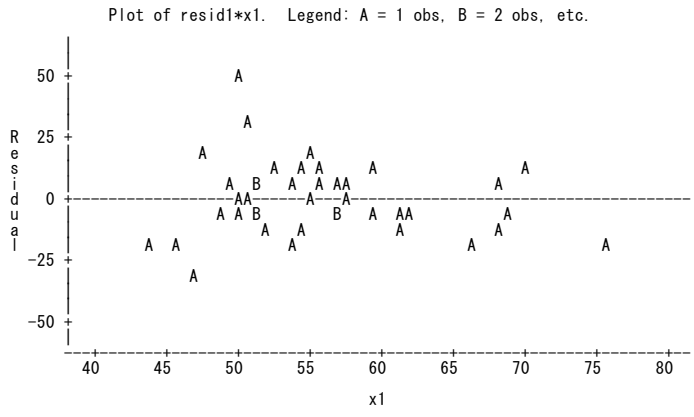


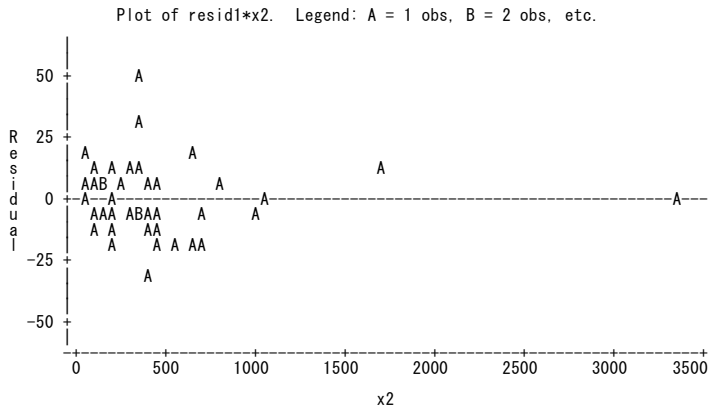


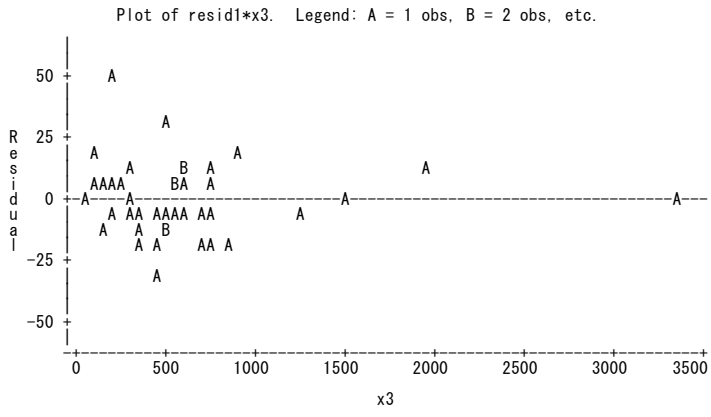


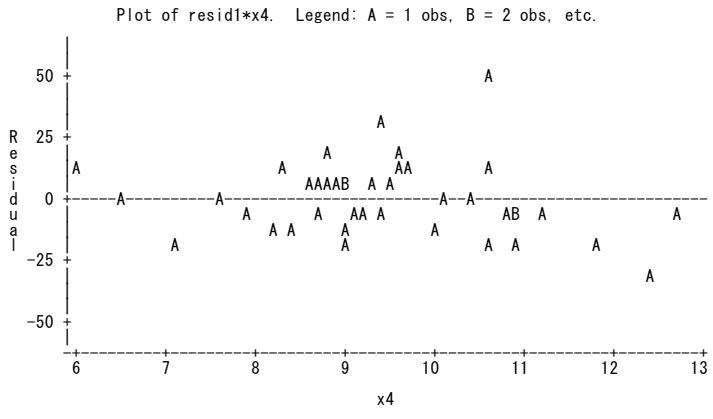


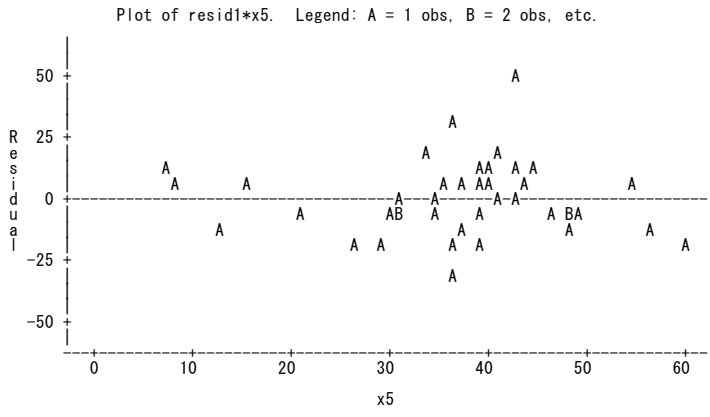


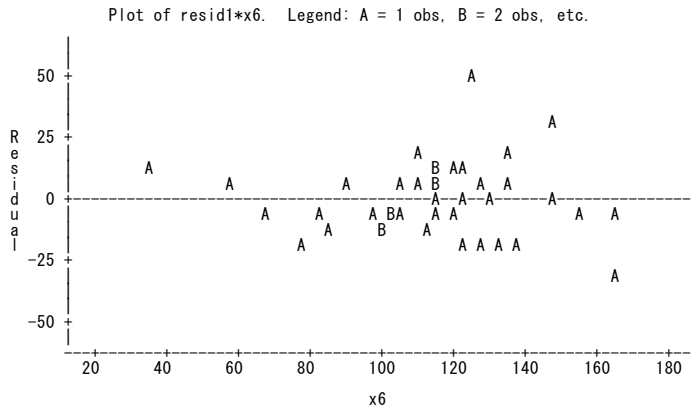


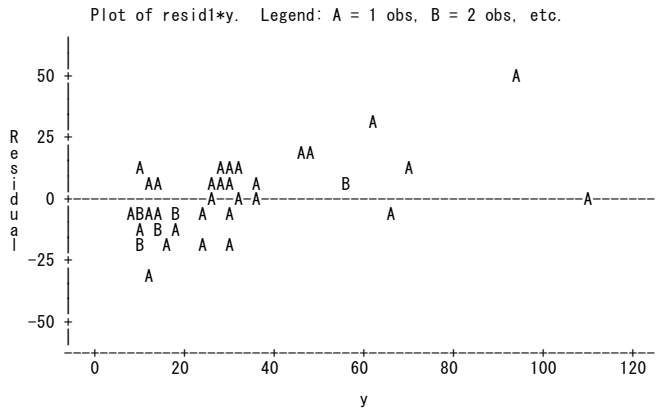












The REG Procedure
 Model: MODEL1
 Dependent Variable: y

R-Square Selection Method

| | |
|-----------------------------|----|
| Number of Observations Read | 41 |
| Number of Observations Used | 41 |

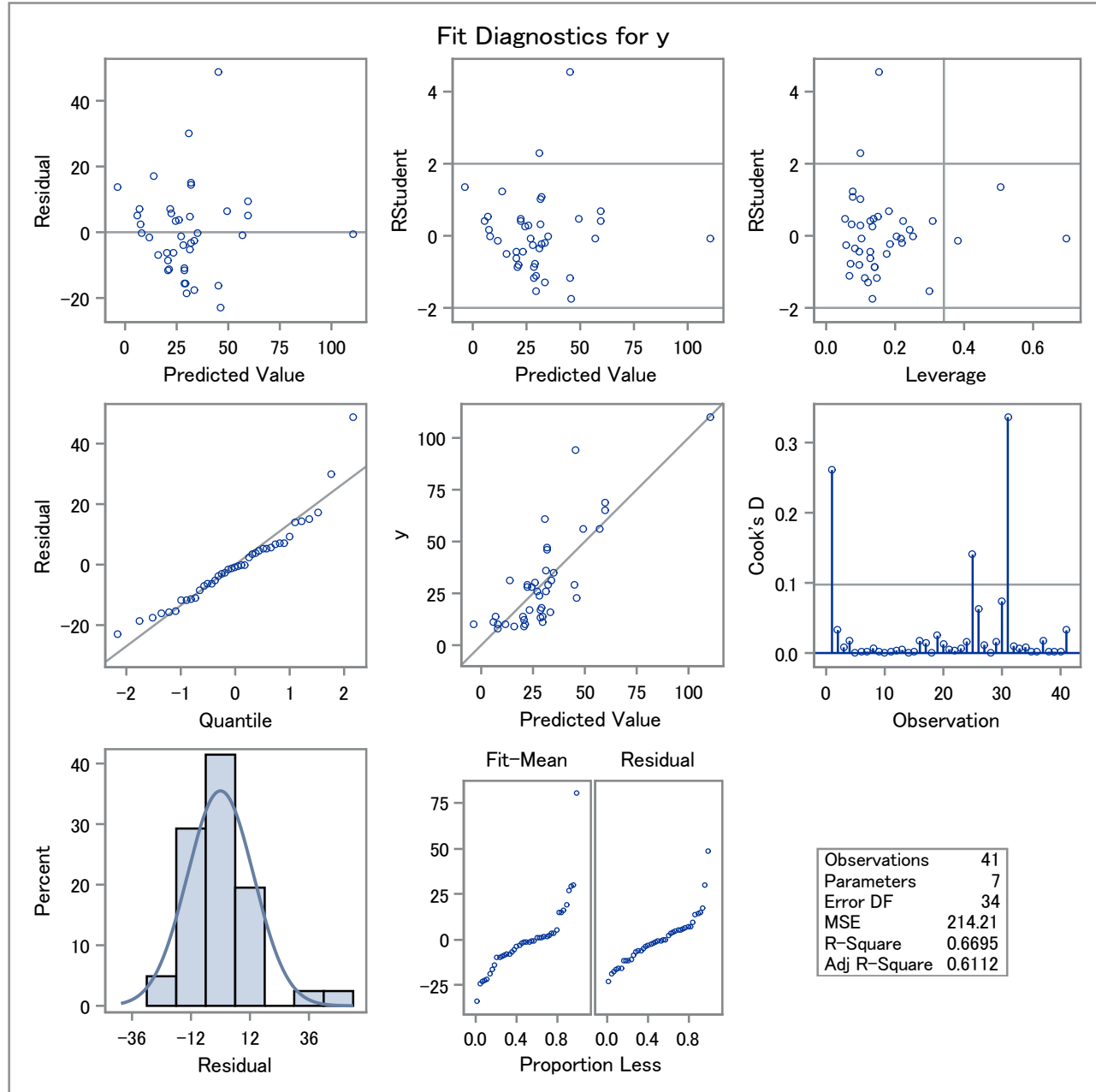
| Number in Model | R-Square | Variables in Model |
|-----------------|----------|--------------------|
| 1 | 0.4157 | x2 |
| 1 | 0.2438 | x3 |
| 1 | 0.1880 | x1 |
| 1 | 0.1366 | x6 |
| 1 | 0.0090 | x4 |
| 1 | 0.0029 | x5 |
| 2 | 0.5863 | x2 x3 |
| 2 | 0.5161 | x1 x2 |
| 2 | 0.4981 | x2 x6 |
| 2 | 0.4214 | x2 x5 |
| 2 | 0.4194 | x2 x4 |
| 2 | 0.4066 | x1 x3 |
| 2 | 0.3657 | x3 x6 |
| 2 | 0.2483 | x3 x5 |
| 2 | 0.2458 | x1 x5 |
| 2 | 0.2439 | x3 x4 |
| 2 | 0.2291 | x1 x6 |
| 2 | 0.1917 | x1 x4 |
| 2 | 0.1587 | x5 x6 |
| 2 | 0.1378 | x4 x6 |
| 2 | 0.0120 | x4 x5 |
| 3 | 0.6174 | x2 x3 x6 |
| 3 | 0.6125 | x1 x2 x3 |
| 3 | 0.5930 | x2 x3 x5 |
| 3 | 0.5930 | x2 x3 x4 |
| 3 | 0.5622 | x1 x2 x5 |
| 3 | 0.5452 | x1 x2 x6 |
| 3 | 0.5452 | x1 x2 x4 |
| 3 | 0.5083 | x2 x4 x6 |
| 3 | 0.5047 | x2 x5 x6 |
| 3 | 0.4649 | x1 x3 x5 |
| 3 | 0.4446 | x1 x3 x6 |
| 3 | 0.4320 | x1 x3 x4 |
| 3 | 0.4250 | x2 x4 x5 |
| 3 | 0.3808 | x3 x5 x6 |
| 3 | 0.3702 | x3 x4 x6 |

The REG Procedure
 Model: MODEL1
 Dependent Variable: y

R-Square Selection Method

| Number in Model | R-Square | Variables in Model |
|-----------------|----------|--------------------|
| 3 | 0.2550 | x1 x4 x5 |
| 3 | 0.2484 | x3 x4 x5 |
| 3 | 0.2462 | x1 x5 x6 |
| 3 | 0.2332 | x1 x4 x6 |
| 3 | 0.1590 | x4 x5 x6 |
| 4 | 0.6396 | x1 x2 x3 x5 |
| 4 | 0.6329 | x1 x2 x3 x4 |
| 4 | 0.6291 | x1 x2 x3 x6 |
| 4 | 0.6285 | x2 x3 x4 x6 |
| 4 | 0.6176 | x2 x3 x5 x6 |
| 4 | 0.6028 | x1 x2 x4 x5 |
| 4 | 0.5997 | x2 x3 x4 x5 |
| 4 | 0.5747 | x1 x2 x4 x6 |
| 4 | 0.5622 | x1 x2 x5 x6 |
| 4 | 0.5164 | x2 x4 x5 x6 |
| 4 | 0.5035 | x1 x3 x4 x5 |
| 4 | 0.4708 | x1 x3 x4 x6 |
| 4 | 0.4649 | x1 x3 x5 x6 |
| 4 | 0.3871 | x3 x4 x5 x6 |
| 4 | 0.2550 | x1 x4 x5 x6 |
| 5 | 0.6685 | x1 x2 x3 x4 x5 |
| 5 | 0.6501 | x1 x2 x3 x4 x6 |
| 5 | 0.6396 | x1 x2 x3 x5 x6 |
| 5 | 0.6290 | x2 x3 x4 x5 x6 |
| 5 | 0.6040 | x1 x2 x4 x5 x6 |
| 5 | 0.5043 | x1 x3 x4 x5 x6 |
| 6 | 0.6695 | x1 x2 x3 x4 x5 x6 |

The REG Procedure
 Model: MODEL1
 Dependent Variable: y



The REG Procedure
Model: MODEL1
Dependent Variable: y

