

Obs	Y	X1	X2	X3
1	1259406.18	39.0453	39.5333	20.9620
2	936030.31	28.0219	30.9788	16.4584
3	824255.16	32.6895	33.5424	12.1756
4	791935.54	26.0883	47.1915	20.8821
5	814142.80	31.8567	30.1321	10.3030
6	752152.99	14.9992	31.7691	18.7786
7	176651.36	11.6810	64.1199	20.9198
8	244396.44	30.4492	68.8134	16.1491
9	1004875.12	31.3049	51.1534	26.8269
10	200238.38	12.8959	51.4379	11.9838
11	101651.64	13.1630	66.5912	12.2385
12	635281.47	12.1653	30.6465	18.9123
13	725197.67	18.9223	46.3227	25.7313
14	1600049.16	39.2972	38.8604	29.8250
15	571317.10	23.6393	51.5862	23.2357
16	1005276.89	33.5620	45.0854	25.2475
17	323380.67	39.5396	61.2474	11.7854
18	779123.07	25.0209	49.6946	27.6566
19	490745.33	27.8990	54.3608	21.7202
20	886098.22	37.6128	39.7350	16.8526
21	229456.65	35.5826	68.9044	13.5036
22	337405.68	11.0460	42.3839	17.8423
23	805799.45	15.9490	40.9920	24.9541
24	765921.07	28.0789	34.7723	13.9258
25	350691.07	19.1326	57.7863	22.3733
26	1178033.78	19.8324	41.4185	28.2471
27	1024192.13	28.9318	30.3775	16.6190
28	605820.39	27.3136	45.0268	14.6009
29	1301386.30	32.1587	44.9900	28.2166
30	434518.11	38.0469	68.5078	22.1212
31	1024272.06	35.8362	48.1053	22.1716
32	1256281.77	35.3572	42.6946	22.7589
33	1016415.73	38.0535	58.8622	29.0498
34	576442.20	29.5157	44.8027	12.5180
35	1331182.91	18.8233	35.8343	28.4665
36	717640.89	37.1597	67.4827	29.7086
37	594084.23	38.2167	57.7957	22.6690
38	337520.88	36.0285	68.3880	22.1366

Obs	Y	X1	X2	X3
39	760180.80	26.1705	38.7211	17.4500
40	908982.73	20.3232	31.3945	16.2521
41	1236511.35	34.4374	47.6237	27.6603
42	755330.74	30.6595	55.6435	27.4326
43	573772.51	18.4482	44.9645	20.1830
44	643317.00	24.9831	48.3656	19.7600
45	332318.45	25.1482	52.6470	15.1631
46	599135.77	33.0721	56.4273	21.2098
47	1120318.17	22.2252	36.5392	26.9252
48	418112.91	28.9907	68.2687	23.1857
49	531893.54	28.5421	47.0636	14.6195
50	766320.60	14.4073	34.6296	23.1192
51	859140.79	19.5943	51.2994	29.2793
52	1734004.96	32.2640	31.3606	25.8269
53	441216.12	14.9251	52.4488	22.1059
54	502163.83	11.6478	56.5560	27.1347
55	1056067.64	36.9109	46.6381	24.1762
56	783630.08	20.6589	30.0375	15.3360
57	755271.90	29.3215	45.8394	19.8047
58	438922.62	32.2792	55.4011	17.8385
59	779937.25	19.2996	44.8655	28.6092
60	850961.92	25.0652	52.8184	28.4792
61	781417.49	37.6999	69.2292	29.9110
62	1272360.48	32.4433	39.9670	27.4404
63	553085.20	20.0492	61.5211	27.4095
64	718229.09	22.3318	53.8064	27.4870
65	111243.21	10.0528	62.4303	16.9393
66	213516.80	37.7933	68.3678	15.2448
67	549111.01	14.6948	49.6832	27.0536
68	210758.46	29.7968	61.6762	12.7005
69	1043421.10	35.1932	31.1363	13.5069
70	473230.37	14.3290	58.7712	29.3896
71	478283.64	31.1134	58.0030	16.4953
72	571097.77	34.9896	55.2862	19.2766
73	347154.16	17.1287	61.1559	23.3314
74	259174.31	15.9392	63.6911	23.0405
75	1056792.27	35.0648	42.0847	24.4918
76	831176.27	29.4815	31.3584	15.9745

Obs	Y	X1	X2	X3
77	231397.28	20.8011	56.3855	14.4185
78	418711.30	13.6223	41.0289	12.8001
79	527233.05	24.5111	50.3137	17.4720
80	764304.22	39.9908	46.6062	16.0165
81	773714.81	29.7744	48.1206	21.6132
82	461181.59	15.0893	47.6912	19.5957
83	471837.04	32.1322	49.7682	13.9803
84	720949.51	27.5739	44.1710	19.4321
85	537535.97	20.7796	45.2531	20.4768
86	569564.74	34.9490	61.2257	23.6398
87	748416.94	22.5883	36.8303	15.7133
88	502261.03	23.7121	45.9259	12.7609
89	380120.00	10.6510	62.5630	26.5546
90	851262.25	12.6378	42.1794	27.3303
91	217574.53	12.9634	66.5161	22.7152
92	599542.56	37.5201	57.5624	24.6593
93	229270.37	29.0588	64.5441	11.7357
94	1272801.89	29.5933	31.0164	23.5361
95	1395360.80	33.2722	30.5763	22.4219
96	605525.96	31.1426	57.6391	23.4427
97	431882.46	21.3066	62.4051	23.9503
98	664524.15	17.2731	46.0183	23.2666
99	1608001.43	29.4377	41.8730	29.3302
100	1199470.60	30.5792	40.4430	25.5269

The REG Procedure
Model: MODEL1
Dependent Variable: Y

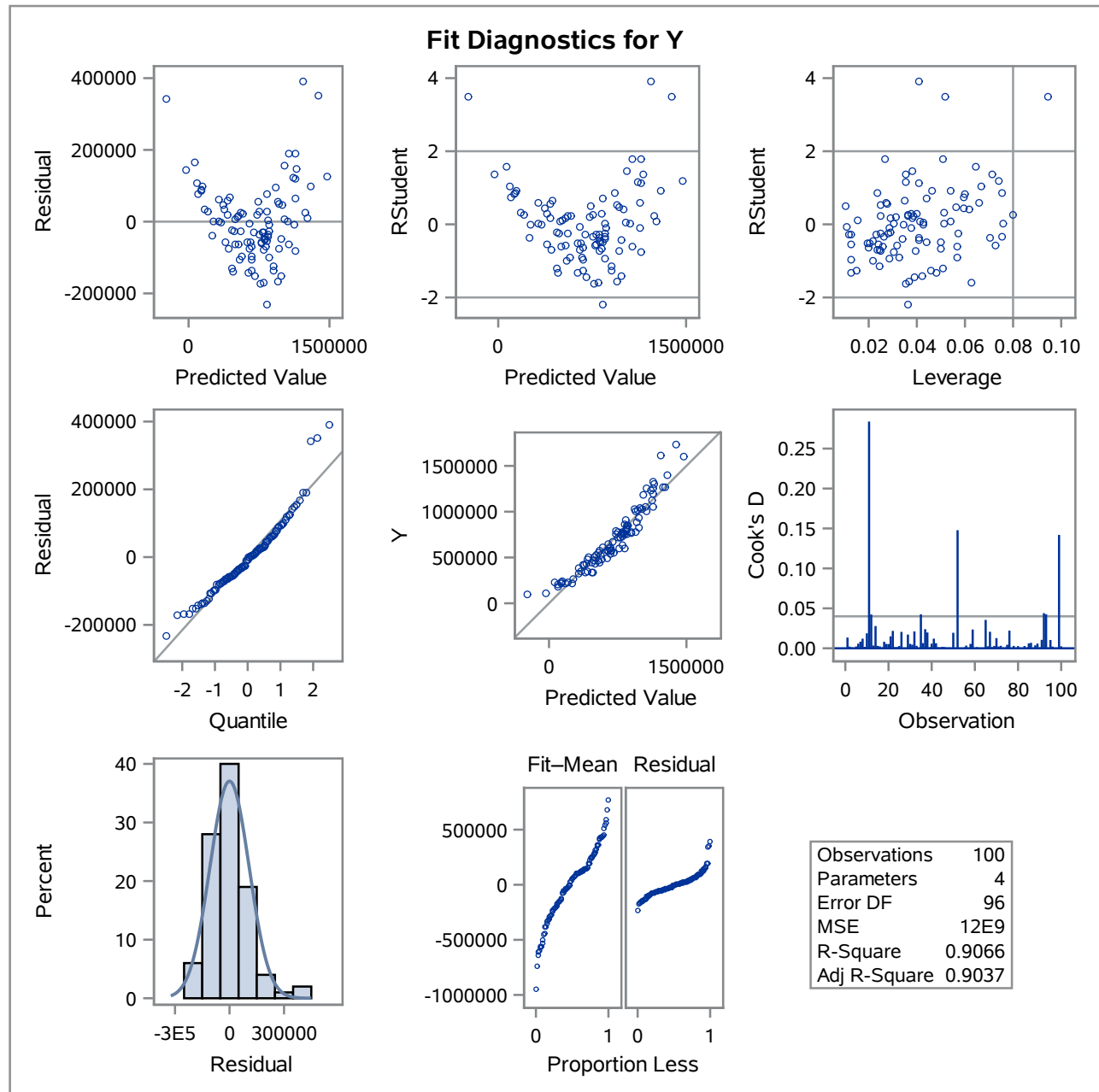
Number of Observations Read	100
Number of Observations Used	100

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1.114325E13	3.714417E12	310.54	<.0001
Error	96	1.148277E12	11961222055		
Corrected Total	99	1.229153E13			

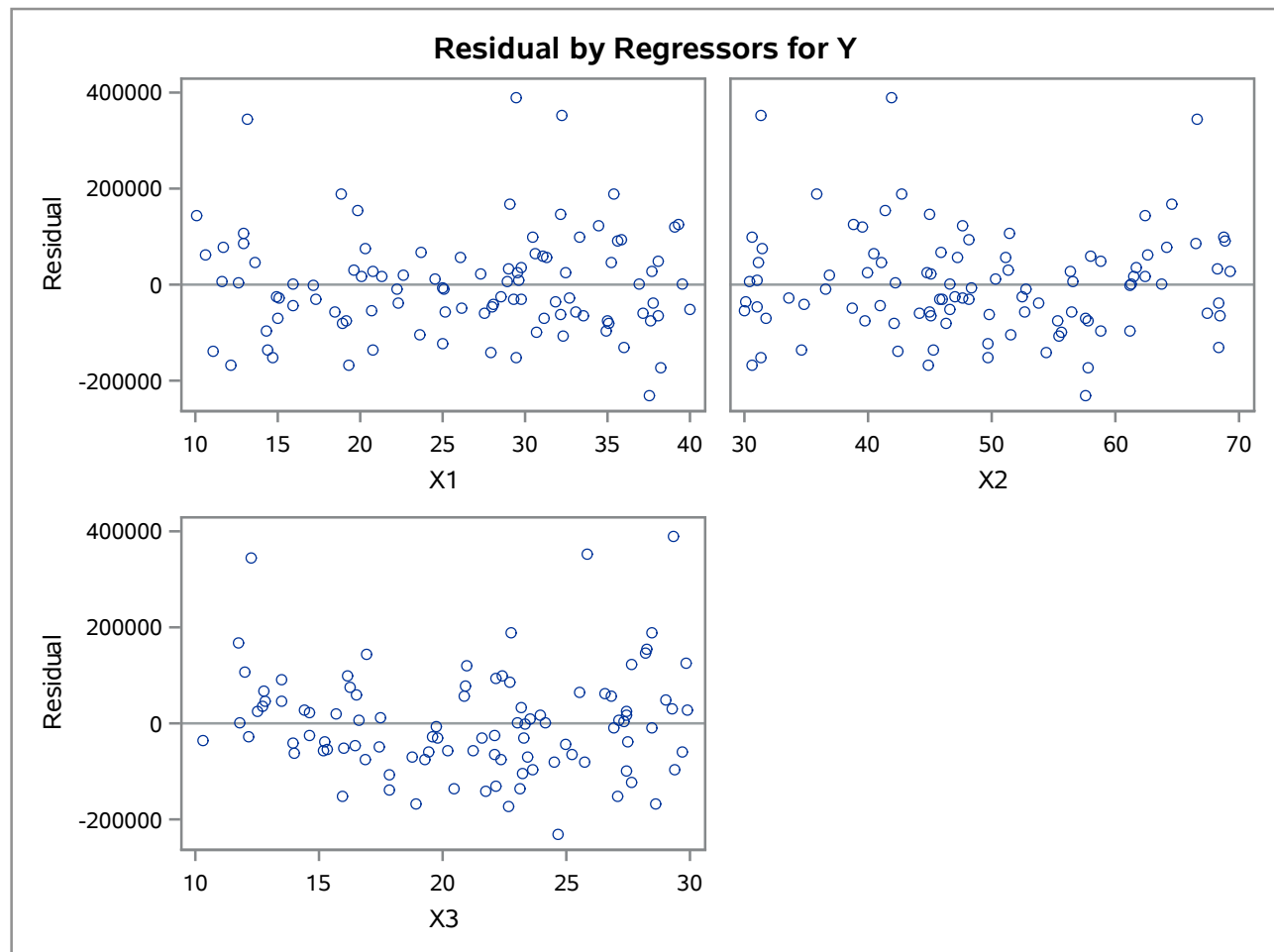
Root MSE	109367	R-Square	0.9066
Dependent Mean	705093	Adj R-Sq	0.9037
Coeff Var	15.51106		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	620077	69959	8.86	<.0001
X1	1	17324	1284.92073	13.48	<.0001
X2	1	-22931	971.27842	-23.61	<.0001
X3	1	35741	2018.01609	17.71	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: Y



The REG Procedure
Model: MODEL1
Dependent Variable: Y



Obs	Y	X1	X2	X3
1	1259406.18	39.0453	39.5333	20.9620
2	936030.31	28.0219	30.9788	16.4584
3	824255.16	32.6895	33.5424	12.1756
4	791935.54	26.0883	47.1915	20.8821
5	814142.80	31.8567	30.1321	10.3030
6	752152.99	14.9992	31.7691	18.7786
7	176651.36	11.6810	64.1199	20.9198
8	244396.44	30.4492	68.8134	16.1491
9	1004875.12	31.3049	51.1534	26.8269
10	200238.38	12.8959	51.4379	11.9838
11	101651.64	13.1630	66.5912	12.2385
12	635281.47	12.1653	30.6465	18.9123
13	725197.67	18.9223	46.3227	25.7313
14	1600049.16	39.2972	38.8604	29.8250
15	571317.10	23.6393	51.5862	23.2357
16	1005276.89	33.5620	45.0854	25.2475
17	323380.67	39.5396	61.2474	11.7854
18	779123.07	25.0209	49.6946	27.6566
19	490745.33	27.8990	54.3608	21.7202
20	886098.22	37.6128	39.7350	16.8526
21	229456.65	35.5826	68.9044	13.5036
22	337405.68	11.0460	42.3839	17.8423
23	805799.45	15.9490	40.9920	24.9541
24	765921.07	28.0789	34.7723	13.9258
25	350691.07	19.1326	57.7863	22.3733
26	1178033.78	19.8324	41.4185	28.2471
27	1024192.13	28.9318	30.3775	16.6190
28	605820.39	27.3136	45.0268	14.6009
29	1301386.30	32.1587	44.9900	28.2166
30	434518.11	38.0469	68.5078	22.1212
31	1024272.06	35.8362	48.1053	22.1716
32	1256281.77	35.3572	42.6946	22.7589
33	1016415.73	38.0535	58.8622	29.0498
34	576442.20	29.5157	44.8027	12.5180
35	1331182.91	18.8233	35.8343	28.4665
36	717640.89	37.1597	67.4827	29.7086
37	594084.23	38.2167	57.7957	22.6690
38	337520.88	36.0285	68.3880	22.1366

Obs	Y	X1	X2	X3
39	760180.80	26.1705	38.7211	17.4500
40	908982.73	20.3232	31.3945	16.2521
41	1236511.35	34.4374	47.6237	27.6603
42	755330.74	30.6595	55.6435	27.4326
43	573772.51	18.4482	44.9645	20.1830
44	643317.00	24.9831	48.3656	19.7600
45	332318.45	25.1482	52.6470	15.1631
46	599135.77	33.0721	56.4273	21.2098
47	1120318.17	22.2252	36.5392	26.9252
48	418112.91	28.9907	68.2687	23.1857
49	531893.54	28.5421	47.0636	14.6195
50	766320.60	14.4073	34.6296	23.1192
51	859140.79	19.5943	51.2994	29.2793
52	1734004.96	32.2640	31.3606	25.8269
53	441216.12	14.9251	52.4488	22.1059
54	502163.83	11.6478	56.5560	27.1347
55	1056067.64	36.9109	46.6381	24.1762
56	783630.08	20.6589	30.0375	15.3360
57	755271.90	29.3215	45.8394	19.8047
58	438922.62	32.2792	55.4011	17.8385
59	779937.25	19.2996	44.8655	28.6092
60	850961.92	25.0652	52.8184	28.4792
61	781417.49	37.6999	69.2292	29.9110
62	1272360.48	32.4433	39.9670	27.4404
63	553085.20	20.0492	61.5211	27.4095
64	718229.09	22.3318	53.8064	27.4870
65	111243.21	10.0528	62.4303	16.9393
66	213516.80	37.7933	68.3678	15.2448
67	549111.01	14.6948	49.6832	27.0536
68	210758.46	29.7968	61.6762	12.7005
69	1043421.10	35.1932	31.1363	13.5069
70	473230.37	14.3290	58.7712	29.3896
71	478283.64	31.1134	58.0030	16.4953
72	571097.77	34.9896	55.2862	19.2766
73	347154.16	17.1287	61.1559	23.3314
74	259174.31	15.9392	63.6911	23.0405
75	1056792.27	35.0648	42.0847	24.4918
76	831176.27	29.4815	31.3584	15.9745

Obs	Y	X1	X2	X3
77	231397.28	20.8011	56.3855	14.4185
78	418711.30	13.6223	41.0289	12.8001
79	527233.05	24.5111	50.3137	17.4720
80	764304.22	39.9908	46.6062	16.0165
81	773714.81	29.7744	48.1206	21.6132
82	461181.59	15.0893	47.6912	19.5957
83	471837.04	32.1322	49.7682	13.9803
84	720949.51	27.5739	44.1710	19.4321
85	537535.97	20.7796	45.2531	20.4768
86	569564.74	34.9490	61.2257	23.6398
87	748416.94	22.5883	36.8303	15.7133
88	502261.03	23.7121	45.9259	12.7609
89	380120.00	10.6510	62.5630	26.5546
90	851262.25	12.6378	42.1794	27.3303
91	217574.53	12.9634	66.5161	22.7152
92	599542.56	37.5201	57.5624	24.6593
93	229270.37	29.0588	64.5441	11.7357
94	1272801.89	29.5933	31.0164	23.5361
95	1395360.80	33.2722	30.5763	22.4219
96	605525.96	31.1426	57.6391	23.4427
97	431882.46	21.3066	62.4051	23.9503
98	664524.15	17.2731	46.0183	23.2666
99	1608001.43	29.4377	41.8730	29.3302
100	1199470.60	30.5792	40.4430	25.5269

The UNIVARIATE Procedure
Variable: mult_reg_e (Residual)

Moments			
N	100	Sum Weights	100
Mean	0	Sum Observations	0
Std Deviation	107697.543	Variance	1.15988E10
Skewness	1.02729692	Kurtosis	2.30908572
Uncorrected SS	1.14828E12	Corrected SS	1.14828E12
Coeff Variation	.	Std Error Mean	10769.7543

Basic Statistical Measures			
Location		Variability	
Mean	0.00	Std Deviation	107698
Median	-7978.69	Variance	1.15988E10
Mode	.	Range	621756
		Interquartile Range	120730

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	0	Pr > t 	1.0000
Sign	M	-3	Pr >= M 	0.6173
Signed Rank	S	-221	Pr >= S 	0.4501

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.942319	Pr < W	0.0003
Kolmogorov-Smirnov	D	0.083089	Pr > D	0.0881
Cramer-von Mises	W-Sq	0.150516	Pr > W-Sq	0.0234
Anderson-Darling	A-Sq	1.067692	Pr > A-Sq	0.0083

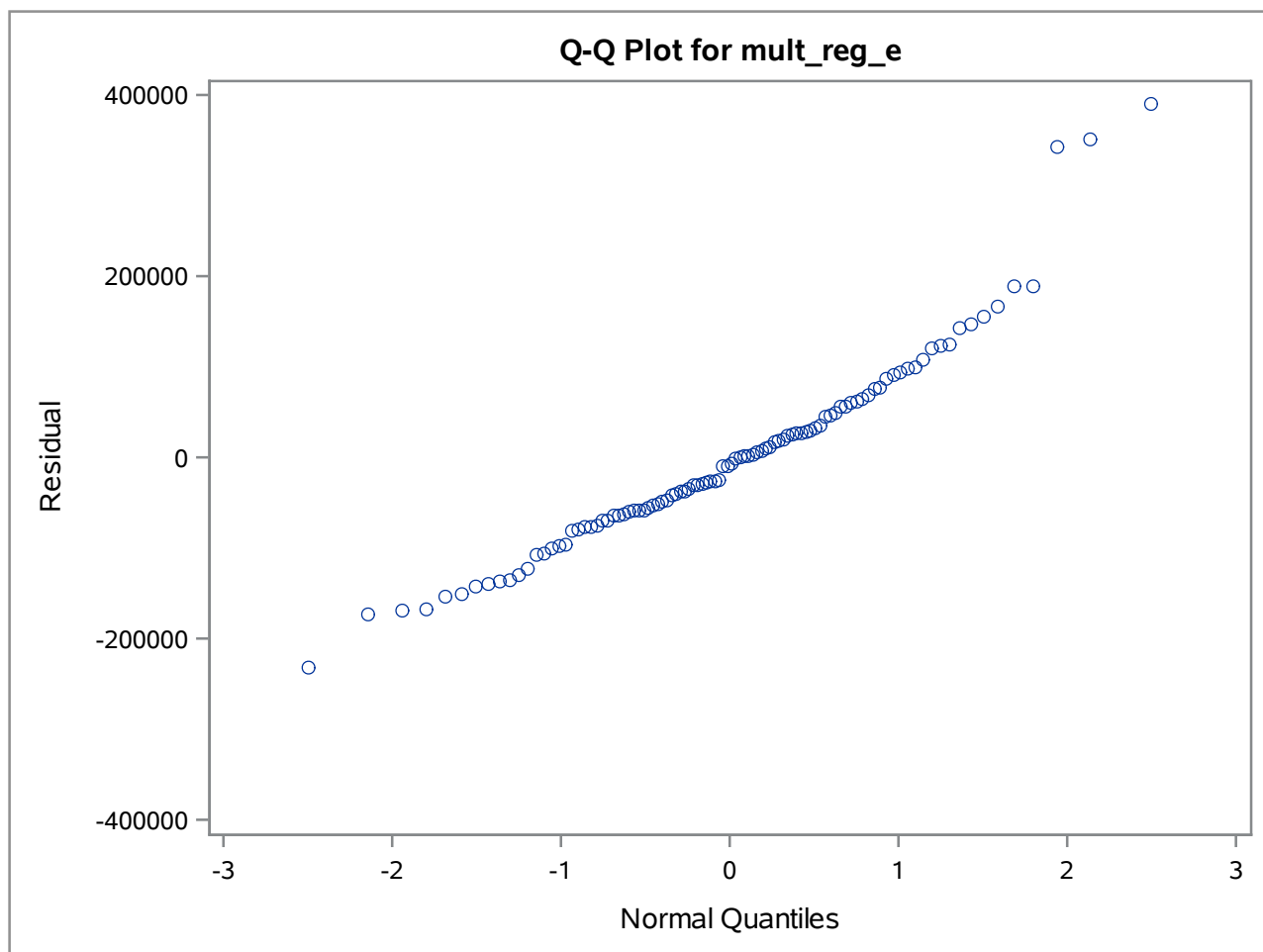
Quantiles (Definition 5)	
Level	Quantile
100% Max	389854.74
99%	370451.53
95%	177850.94
90%	123821.01
75% Q3	56189.93
50% Median	-7978.69
25% Q1	-64539.84

The UNIVARIATE Procedure
Variable: mult_reg_e (Residual)

Quantiles (Definition 5)	
Level	Quantile
10%	-132615.92
5%	-152329.55
1%	-202423.03
0% Min	-231901.08

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-231901	92	189295	32
-172945	37	189315	35
-168733	12	343135	11
-168189	59	351048	52
-153166	67	389855	99

The UNIVARIATE Procedure



The REG Procedure
Model: MODEL1
Dependent Variable: Y

Number of Observations Read	100
Number of Observations Used	100

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1.114325E13	3.714417E12	310.54	<.0001
Error	96	1.148277E12	11961222055		
Corrected Total	99	1.229153E13			

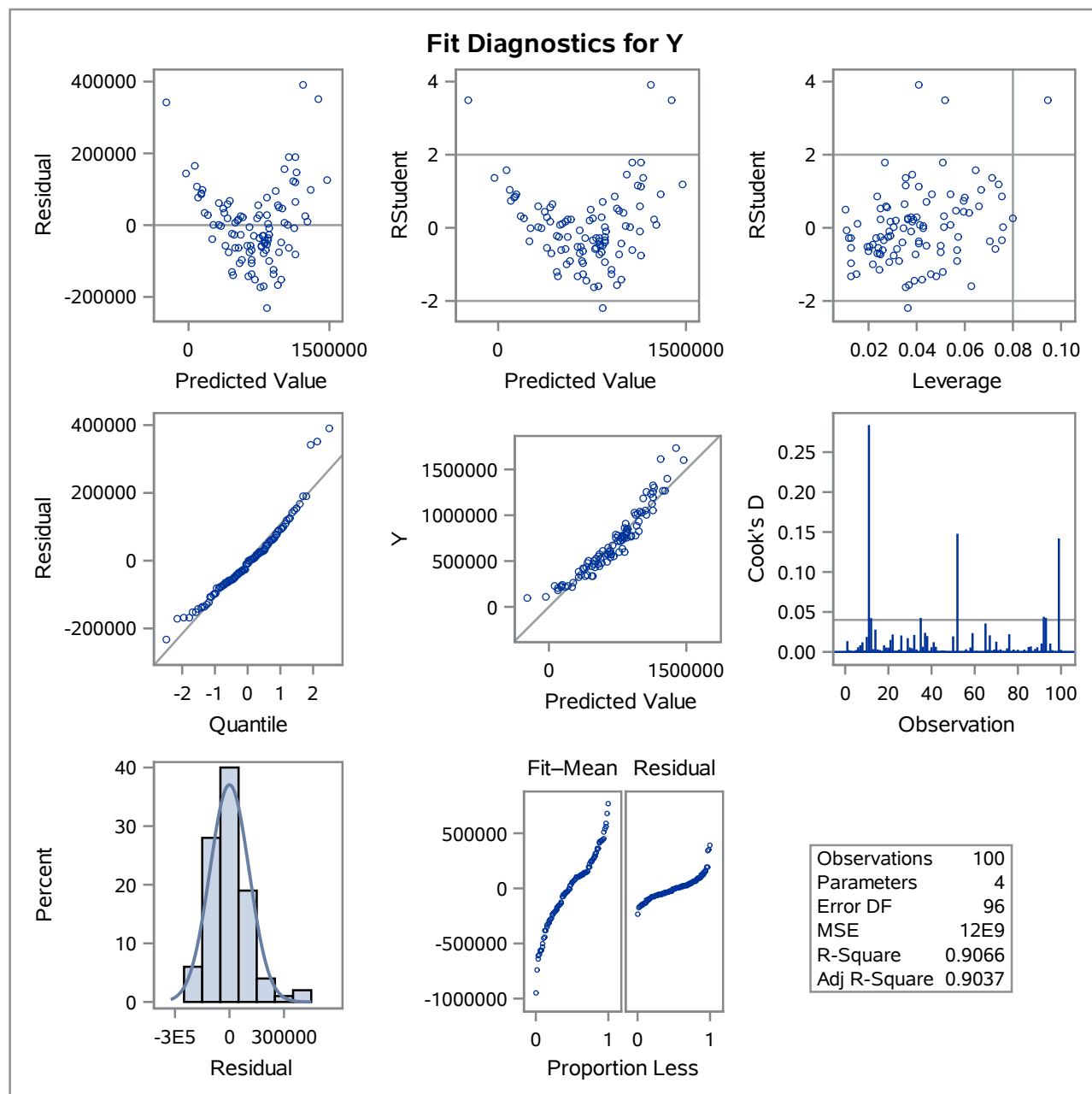
Root MSE	109367	R-Square	0.9066
Dependent Mean	705093	Adj R-Sq	0.9037
Coeff Var	15.51106		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	620077	69959	8.86	<.0001
X1	1	17324	1284.92073	13.48	<.0001
X2	1	-22931	971.27842	-23.61	<.0001
X3	1	35741	2018.01609	17.71	<.0001

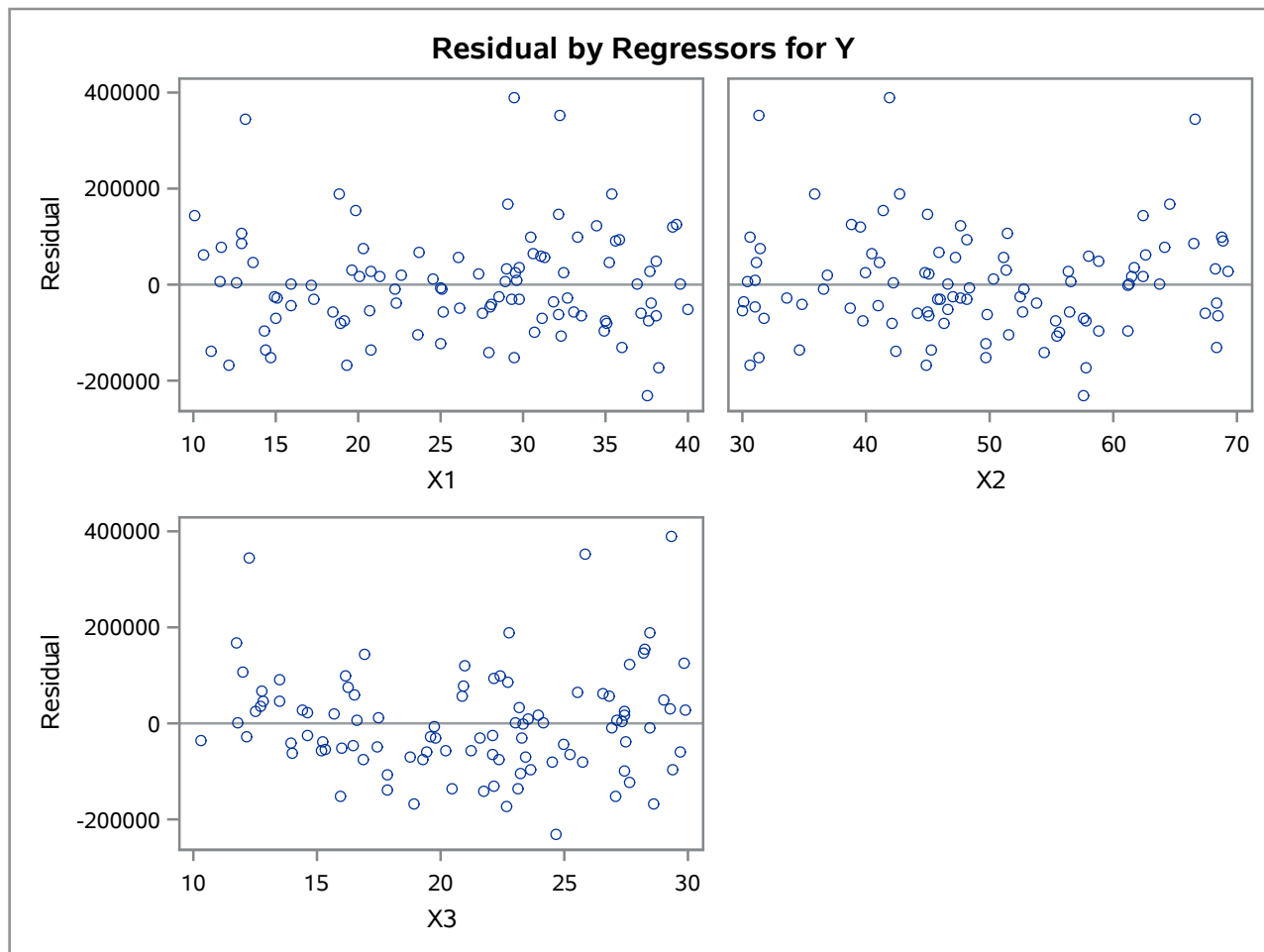
The REG Procedure
Model: MODEL1
Dependent Variable: Y

Test of First and Second Moment Specification		
DF	Chi-Square	Pr > ChiSq
9	13.12	0.1571

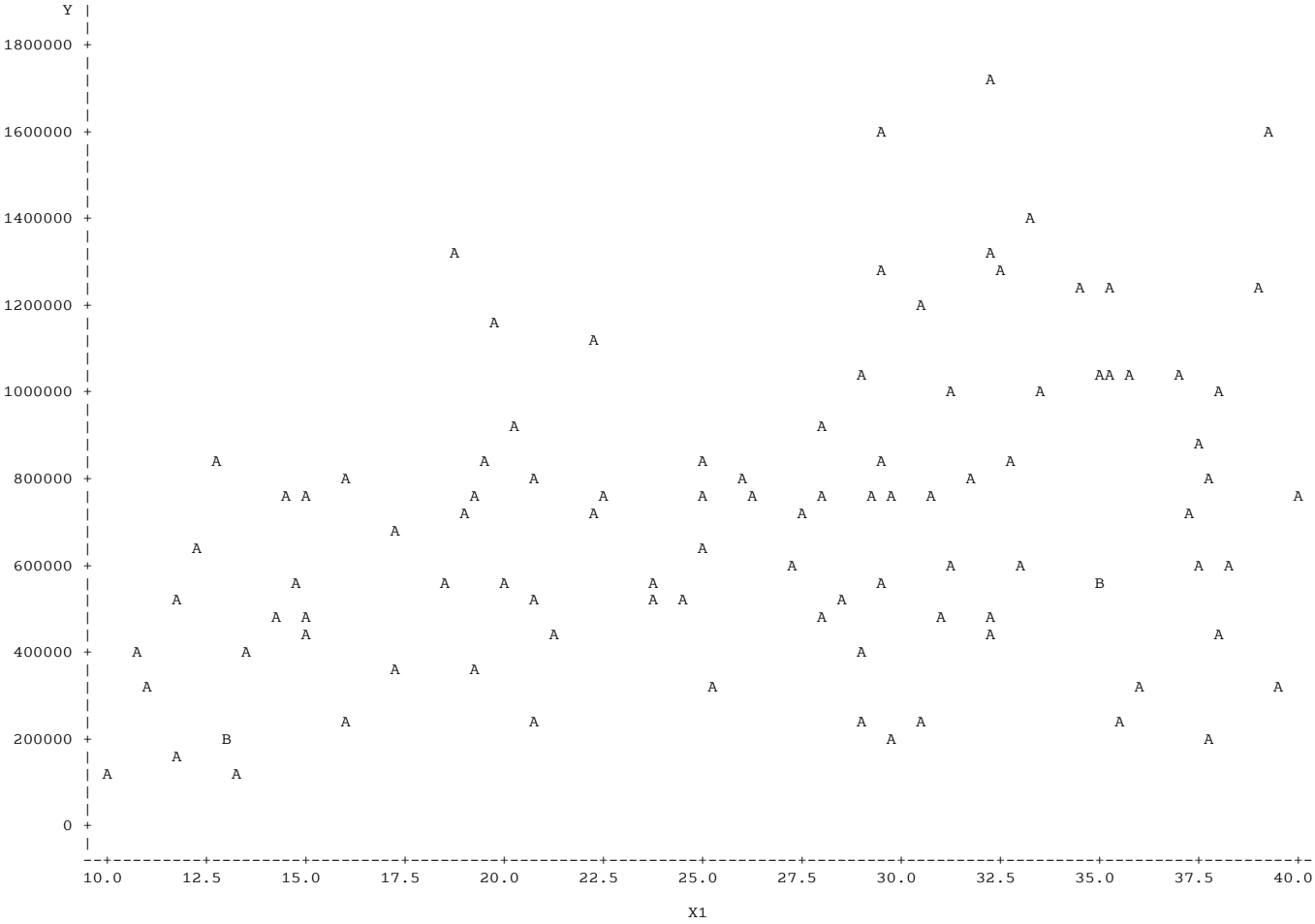
The REG Procedure
Model: MODEL1
Dependent Variable: Y

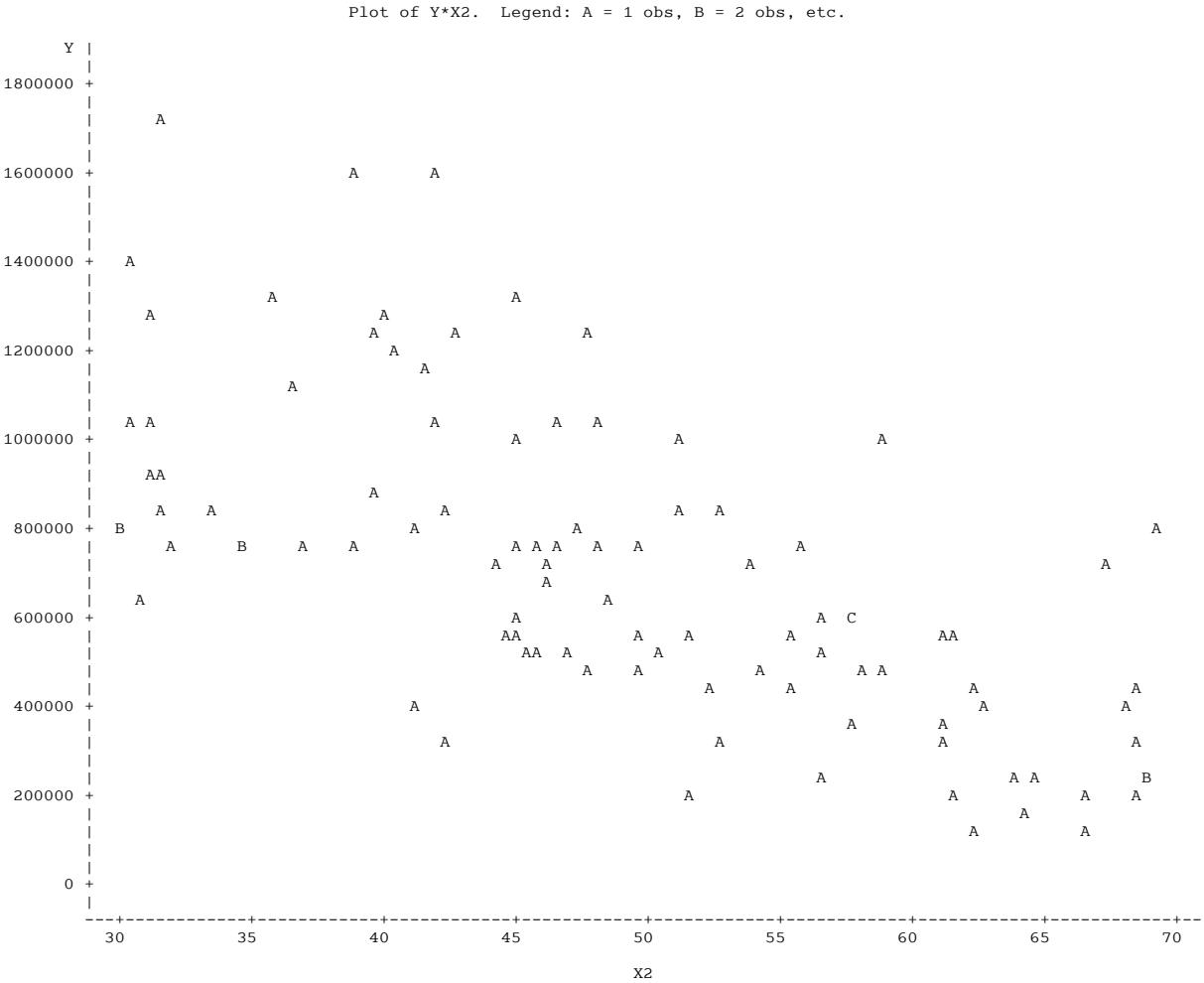


The REG Procedure
Model: MODEL1
Dependent Variable: Y

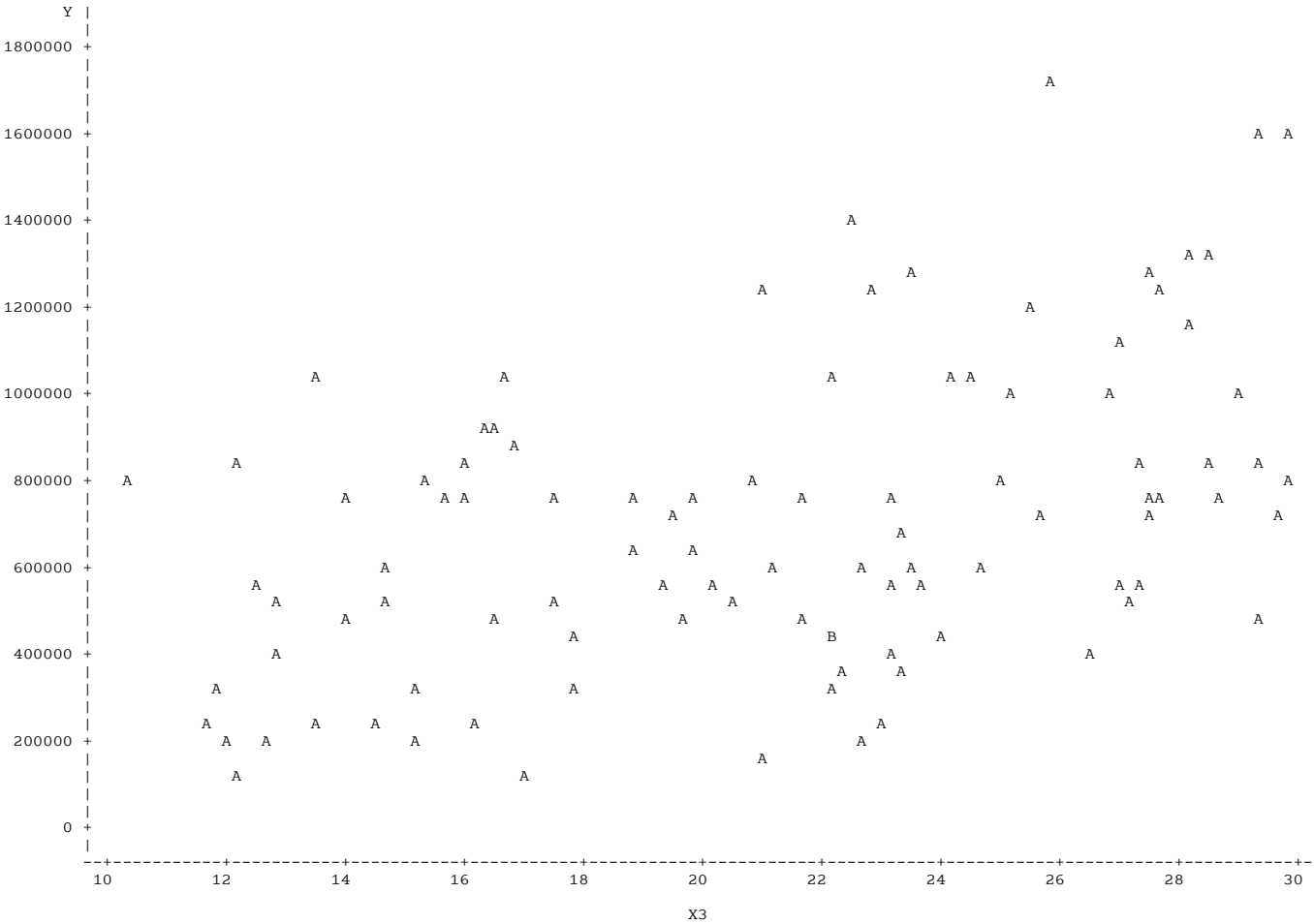


Plot of Y*X1. Legend: A = 1 obs, B = 2 obs, etc.

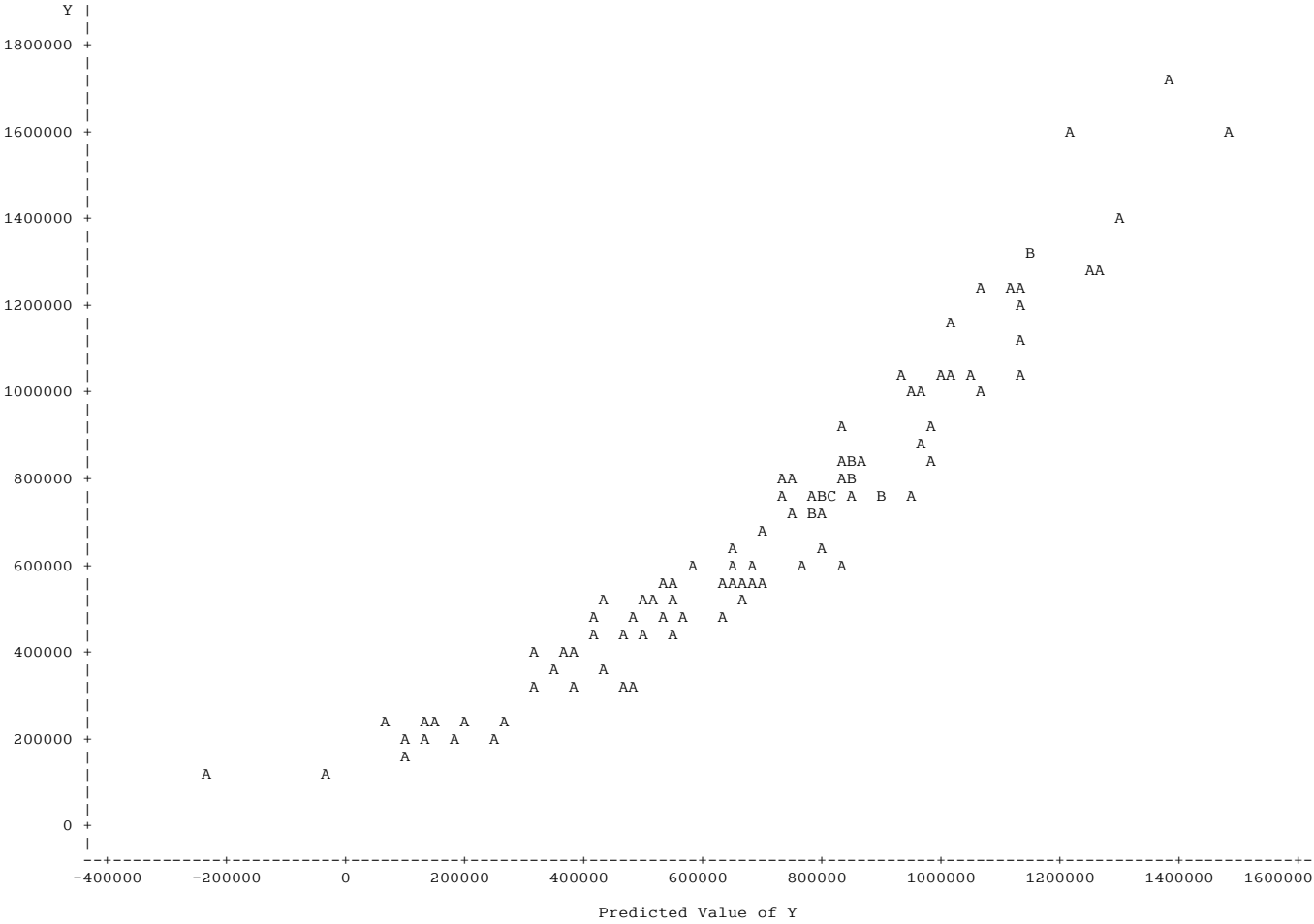


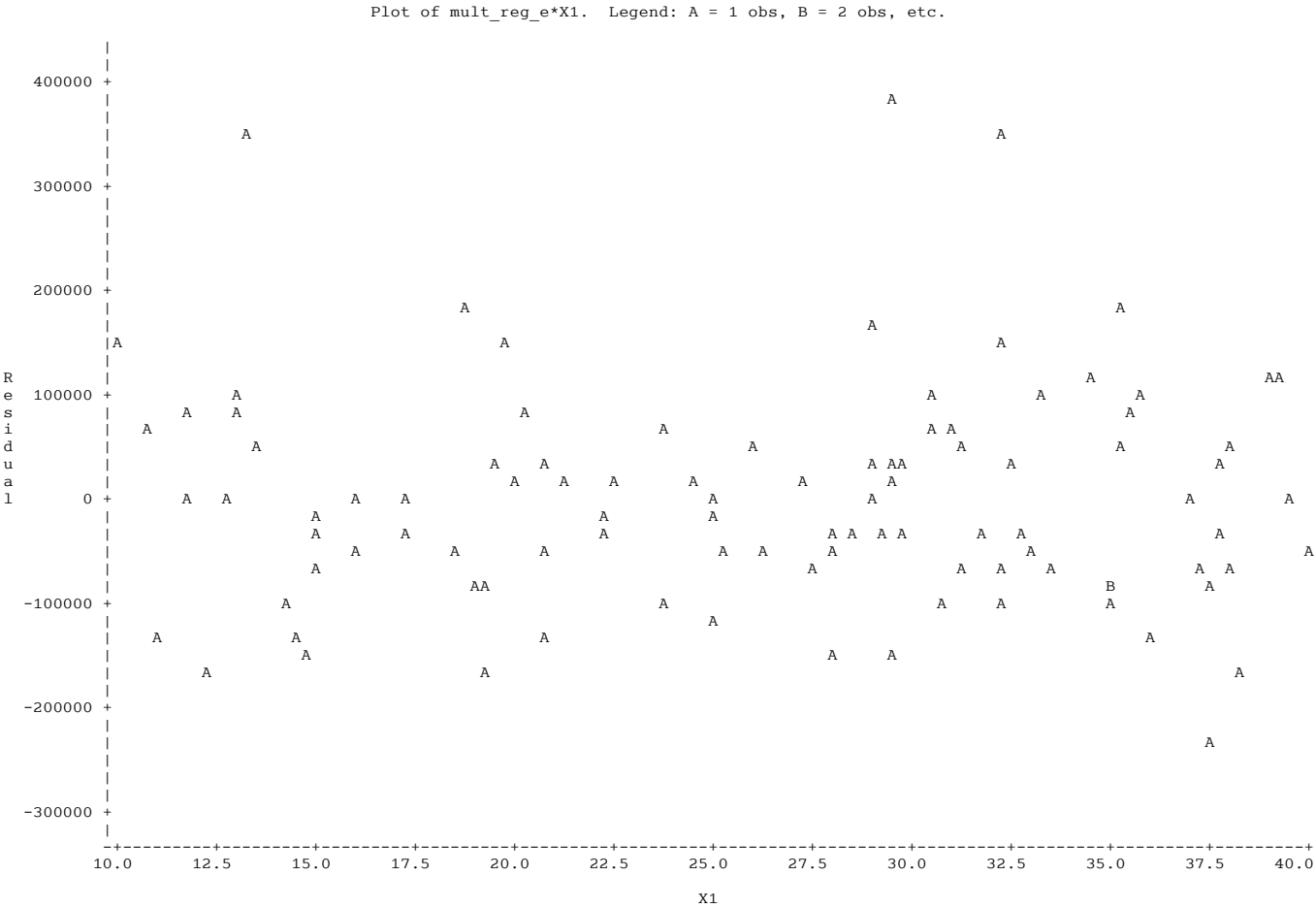


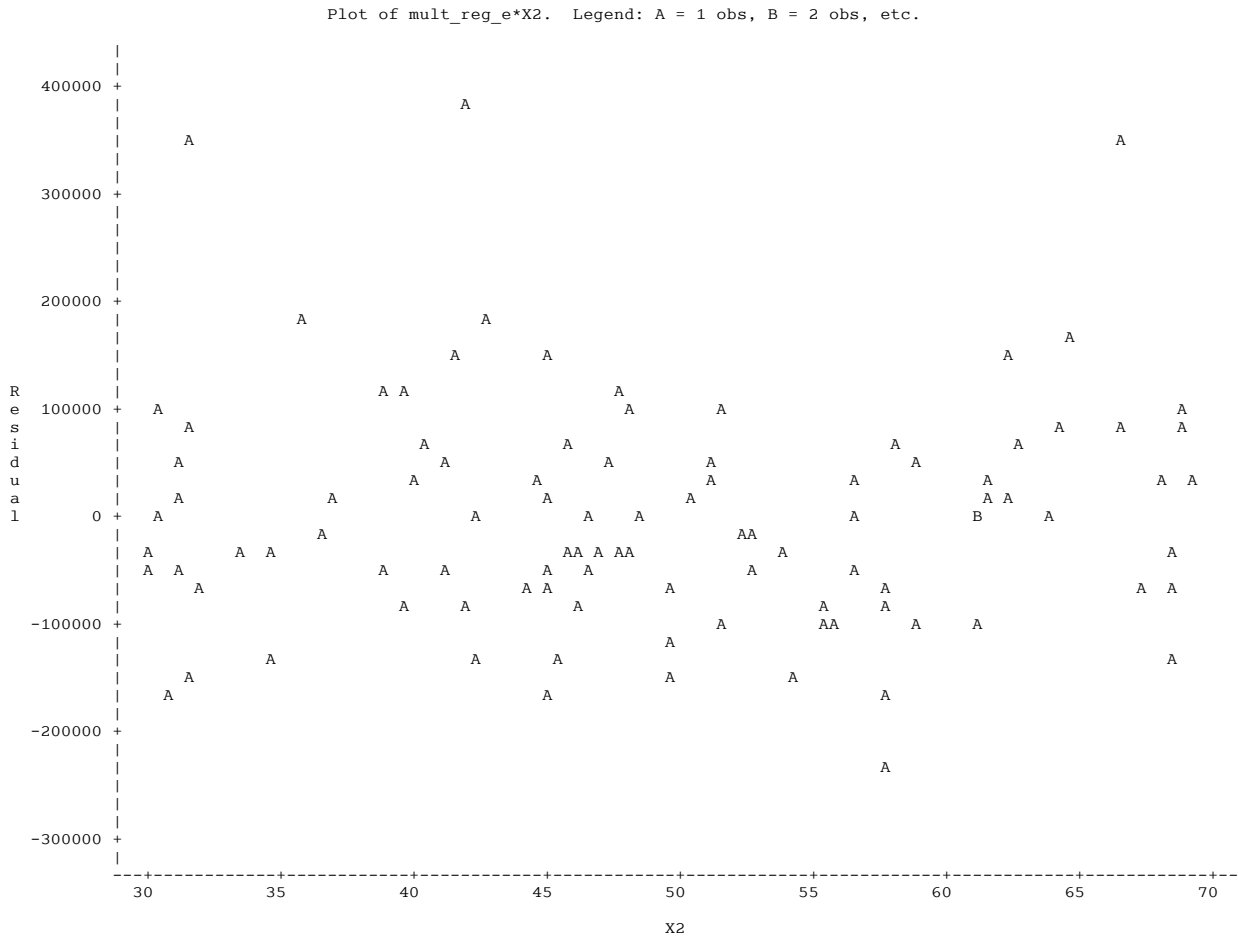
Plot of Y*X3. Legend: A = 1 obs, B = 2 obs, etc.

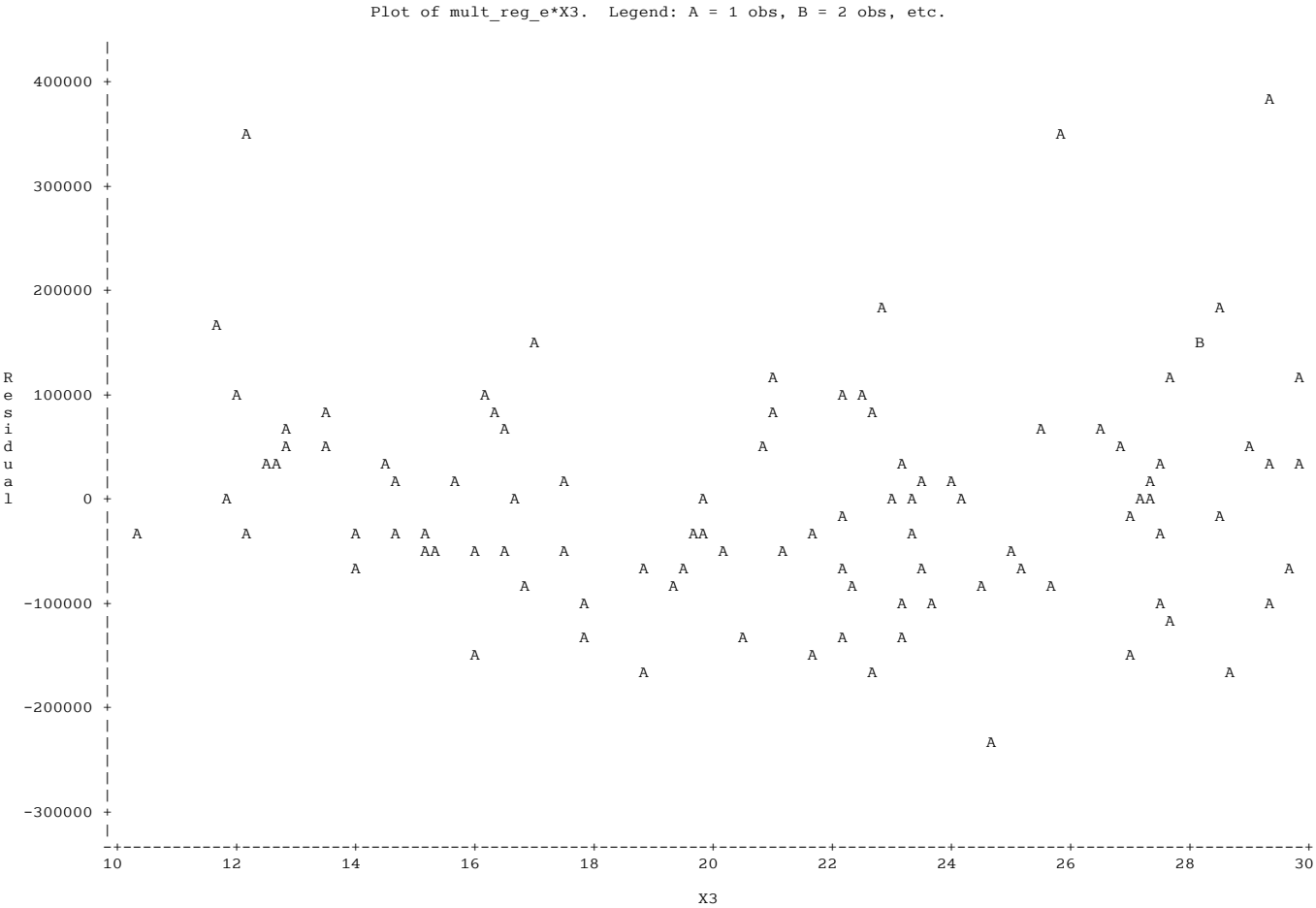


Plot of Y*mult_reg_pred. Legend: A = 1 obs, B = 2 obs, etc.









Plot of mult_reg_e*mult_reg_pred. Legend: A = 1 obs, B = 2 obs, etc.

