The REG Procedure
Model: MODEL1
Dependent Variable: log10

Number of Observations Read	113
Number of Observations Used	110
Number of Observations with Missing Values	3

Backward Elimination: Step 0

All Variables Entered: R-Square = 0.5615 and C(p) = 13.0000

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	12	188.82775	15.73565	10.35	<.0001
Error	97	147.43908	1.51999		

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.90117	1.99317	5.82293	3.83	0.0532
age	0.07340	0.02904	9.70920	6.39	0.0131
infection	0.47666	0.13027	20.35009	13.39	0.0004
culturing	-0.00063632	0.01656	0.00224	0.00	0.9694
xray	0.01246	0.00720	4.55538	3.00	0.0866
bednum	-0.00290	0.00383	0.86830	0.57	0.4516
medschool	-0.29975	0.44340	0.69466	0.46	0.5006
census	0.01050	0.00531	5.93904	3.91	0.0509
nursenum	-0.00436	0.00242	4.92662	3.24	0.0749
facilities	-0.00869	0.01466	0.53421	0.35	0.5547
region2	-0.78421	0.35438	7.44322	4.90	0.0293
region3	-1.10120	0.36074	14.16370	9.32	0.0029
region4	-1.97783	0.46198	27.85934	18.33	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	188.82550	17.16595	11.41	<.0001
Error	98	147.44132	1.50450		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.87314	1.84528	6.62818	4.41	0.0384
age	0.07376	0.02731	10.97608	7.30	0.0081
infection	0.47404	0.11046	27.70959	18.42	<.0001
xray	0.01242	0.00709	4.61648	3.07	0.0830
bednum	-0.00293	0.00372	0.93262	0.62	0.4330
medschool	-0.29560	0.42782	0.71826	0.48	0.4912
census	0.01056	0.00503	6.63330	4.41	0.0383
nursenum	-0.00438	0.00238	5.09290	3.39	0.0688
facilities	-0.00865	0.01454	0.53202	0.35	0.5534
region2	-0.78107	0.34311	7.79659	5.18	0.0250
region3	-1.09855	0.35228	14.63071	9.72	0.0024
region4	-1.97185	0.43279	31.23086	20.76	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	188.29348	18.82935	12.60	<.0001
Error	99	147.97335	1.49468		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.60513	1.78354	6.10692	4.09	0.0459
age	0.07344	0.02721	10.88614	7.28	0.0082
infection	0.46495	0.10904	27.17756	18.18	<.0001
xray	0.01249	0.00707	4.66500	3.12	0.0804
bednum	-0.00340	0.00362	1.31651	0.88	0.3503
medschool	-0.27064	0.42436	0.60793	0.41	0.5251
census	0.01062	0.00501	6.71352	4.49	0.0366
nursenum	-0.00451	0.00236	5.46814	3.66	0.0587
region2	-0.75739	0.33968	7.43104	4.97	0.0280
region3	-1.04469	0.33932	14.16776	9.48	0.0027
region4	-1.92349	0.42369	30.80545	20.61	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	187.68555	20.85395	14.04	<.0001
Error	100	148.58128	1.48581		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.13837	1.62163	5.56504	3.75	0.0558
age	0.07137	0.02694	10.42924	7.02	0.0094
infection	0.46015	0.10845	26.74681	18.00	<.0001
xray	0.01272	0.00704	4.85488	3.27	0.0737
bednum	-0.00369	0.00358	1.57842	1.06	0.3052
census	0.01129	0.00488	7.94886	5.35	0.0228
nursenum	-0.00439	0.00235	5.21501	3.51	0.0639
region2	-0.74511	0.33812	7.21530	4.86	0.0298
region3	-1.06019	0.33744	14.66648	9.87	0.0022
region4	-1.89813	0.42057	30.26505	20.37	<.0001

Bounds on condition number: 36.057, 768.87

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	186.10713	23.26339	15.65	<.0001
Error	101	150.15969	1.48673		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.21046	1.62062	5.83447	3.92	0.0503
age	0.06966	0.02690	9.97380	6.71	0.0110
infection	0.47174	0.10790	28.41637	19.11	<.0001
xray	0.01259	0.00704	4.75922	3.20	0.0766
census	0.00684	0.00227	13.44861	9.05	0.0033
nursenum	-0.00473	0.00232	6.16032	4.14	0.0444
region2	-0.80879	0.33253	8.79497	5.92	0.0168
region3	-1.10391	0.33487	16.15631	10.87	0.0014
region4	-2.00241	0.40834	35.75087	24.05	<.0001

Bounds on condition number: 7.8171, 194.99

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	181.34792	25.90685	17.06	<.0001
Error	102	154.91891	1.51881		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	4.12363	1.55466	10.68542	7.04	0.0093
age	0.06731	0.02715	9.33213	6.14	0.0148
infection	0.55556	0.09824	48.56941	31.98	<.0001
census	0.00655	0.00229	12.40077	8.16	0.0052
nursenum	-0.00467	0.00235	6.00072	3.95	0.0495
region2	-0.87175	0.33422	10.33321	6.80	0.0105
region3	-1.23635	0.33009	21.30674	14.03	0.0003
region4	-2.14957	0.40427	42.94103	28.27	<.0001

Bounds on condition number: 7.7778, 157.4

Backward Elimination: Step 6

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	175.34719	29.22453	18.71	<.0001
Error	103	160.91964	1.56233		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.92153	1.57340	9.70519	6.21	0.0143
age	0.07099	0.02747	10.42982	6.68	0.0112
infection	0.54332	0.09944	46.63493	29.85	<.0001
census	0.00237	0.00091882	10.35128	6.63	0.0115
region2	-0.79772	0.33686	8.76147	5.61	0.0197
region3	-1.13653	0.33089	18.43167	11.80	0.0009
region4	-2.23873	0.40748	47.15760	30.18	<.0001

Bounds on condition number: 1.6972, 49.395

Backward Elimination: Step 7

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	166.58572	33.31714	20.42	<.0001
Error	104	169.68111	1.63155		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	2.72459	1.52266	5.22394	3.20	0.0765
age	0.08325	0.02757	14.87083	9.11	0.0032
infection	0.57727	0.10056	53.76259	32.95	<.0001
census	0.00216	0.00093496	8.74434	5.36	0.0226
region3	-0.68996	0.27785	10.06034	6.17	0.0146
region4	-1.81579	0.37429	38.39920	23.54	<.0001

Bounds on condition number: 1.2236, 28.476

Backward Elimination: Step 8

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	157.84138	39.46035	23.22	<.0001
Error	105	178.42545	1.69929		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	3.01578	1.54864	6.44417	3.79	0.0542
age	0.07829	0.02806	13.23108	7.79	0.0063
infection	0.66521	0.09503	83.27167	49.00	<.0001
region3	-0.64262	0.28279	8.77477	5.16	0.0251
region4	-1.94760	0.37753	45.22250	26.61	<.0001

Bounds on condition number: 1.1398, 17.115

Backward Elimination: Step 9

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	149.06661	49.68887	28.14	<.0001
Error	106	187.20022	1.76604		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	2.76735	1.57482	5.45339	3.09	0.0818
age	0.07456	0.02855	12.04291	6.82	0.0103
infection	0.71185	0.09459	100.02484	56.64	<.0001
region4	-1.70552	0.36924	37.67931	21.34	<.0001

Bounds on condition number: 1.0001, 9.0006

Backward Elimination: Step 10

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	137.02370	68.51185	36.79	<.0001
Error	107	199.24312	1.86209		
Corrected Total	109	336.26683			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	6.72110	0.44484	425.08511	228.28	<.0001
infection	0.71328	0.09712	100.43177	53.94	<.0001
region4	-1.70394	0.37914	37.60984	20.20	<.0001

Bounds on condition number: 1.0001, 4.0003

All variables left in the model are significant at the 0.0100 level.

The REG Procedure
Model: MODEL1
Dependent Variable: log10

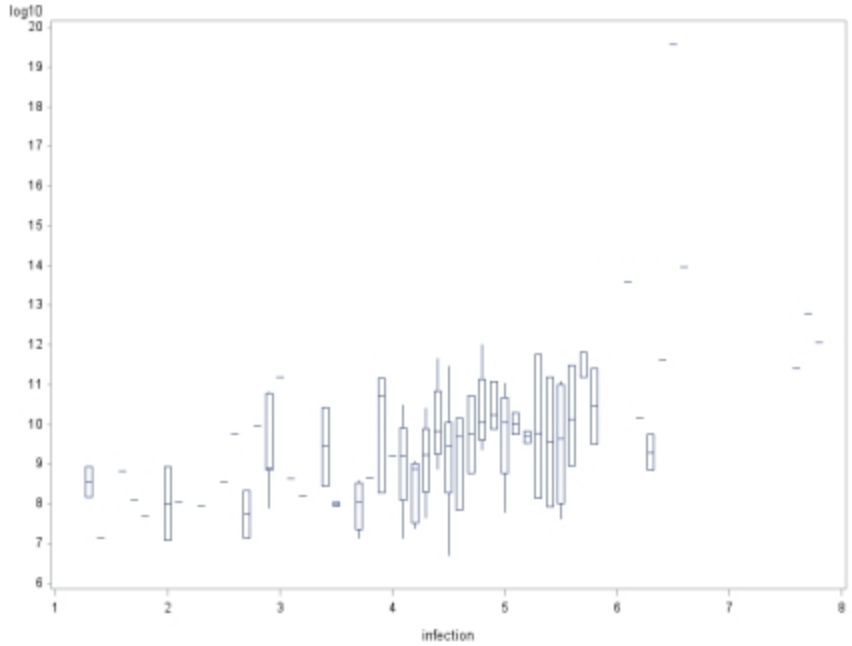
Summary of Backward Elimination

Step	Variable Removed	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value
1	culturing	11	0.0000	0.5615	11.0015	0.00
2	facilities	10	0.0016	0.5600	9.3515	0.35
3	medschool	9	0.0018	0.5581	7.7514	0.41
4	bednum	8	0.0047	0.5535	6.7899	1.06
5	xray	7	0.0142	0.5393	7.9210	3.20
6	nursenum	6	0.0178	0.5215	9.8688	3.95
7	region2	5	0.0261	0.4954	13.6330	5.61
8	census	4	0.0260	0.4694	17.3859	5.36
9	region3	3	0.0261	0.4433	21.1588	5.16
10	age	2	0.0358	0.4075	27.0818	6.82

The REG Procedure
Model: MODEL1
Dependent Variable: log10

Summary of Backward Elimination
Pr > F
0.9694
0.5534
0.5251
0.3052
0.0766
0.0495
0.0197
0.0226
0.0251
0.0103

Box Plot



Capability analysis of: infection

The CAPABILITY Procedure
Variable: infection

Basic Statistical Measures			
Location		**Variability**	
Mean	4.354867	**Std Deviation**	1.34091
Median	4.400000	**Variance**	1.79803
Mode	4.300000	**Range**	6.50000
		Interquartile Range	1.50000

Note: The mode displayed is the smallest of 2 modes with a count of 7.

Basic Confidence Limits Assuming Normality			
Parameter	**Estimate**	**95% Confidence Limits**	
Mean	4.354867	4.104933	4.604801
Std Deviation	1.340908	1.185951	1.542814
Variance	1.798034	1.406479	2.380275

Tests for Location: Mu0=0				
Test	**Statistic**		**p Value**	
Student's t	**t**	34.52353	**Pr > |t|**	<.0001

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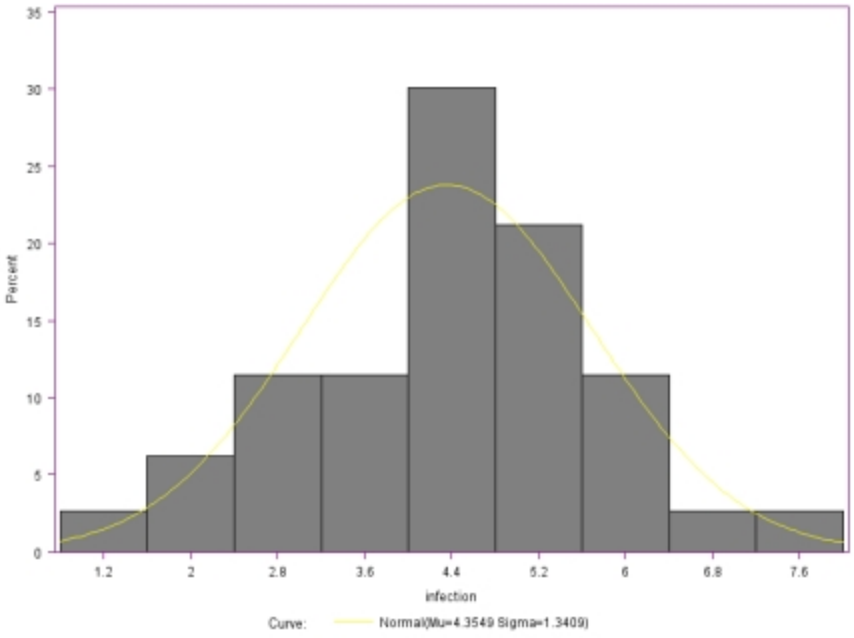
Capability analysis of: infection

The CAPABILITY Procedure
Variable: infection

Tests for Location: Mu0=0				
Test	**Statistic**		**p Value**	
Sign	**M**	56.5	**Pr >= |M|**	<.0001
Signed Rank	**S**	3220.5	**Pr >= |S|**	<.0001

Capability analysis of: infection



Capability analysis of: infection

The CAPABILITY Procedure
Fitted Normal Distribution for infection

Parameters for Normal Distribution		
Parameter	**Symbol**	**Estimate**
Mean	Mu	4.354867
Std Dev	Sigma	1.340908

Goodness-of-Fit Tests for Normal Distribution					
Test	**Statistic**		**DF**	**p Value**	
Kolmogorov-Smirnov	**D**	0.09719325		**Pr > D**	<0.010
Cramer-von Mises	**W-Sq**	0.12564767		**Pr > W-Sq**	0.050
Anderson-Darling	**A-Sq**	0.70027905		**Pr > A-Sq**	0.069
Chi-Square	**Chi-Sq**	9.90029901	6	**Pr > Chi-Sq**	0.129

Quantiles for Normal Distribution		
	Quantile	
Percent	**Observed**	**Estimated**
1.0	1.30000	1.23545
5.0	1.80000	2.14927
10.0	2.60000	2.63642
25.0	3.70000	3.45044

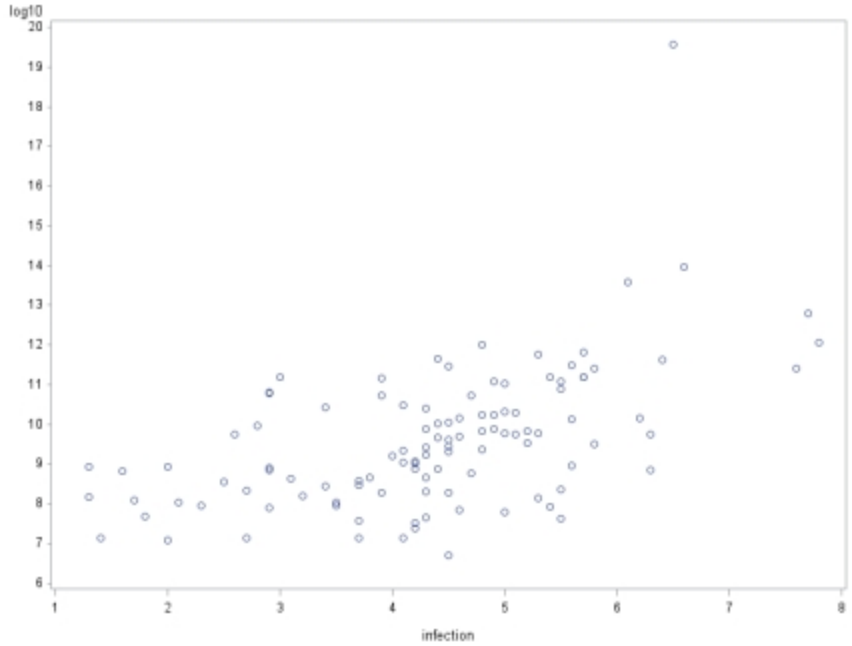
Capability analysis of: infection

The CAPABILITY Procedure
Fitted Normal Distribution for infection

Quantiles for Normal Distribution

Percent	Quantile	
	Observed	Estimated
50.0	4.40000	4.35487
75.0	5.20000	5.25930
90.0	5.80000	6.07331
95.0	6.40000	6.56046
99.0	7.70000	7.47429

Scatter Plot



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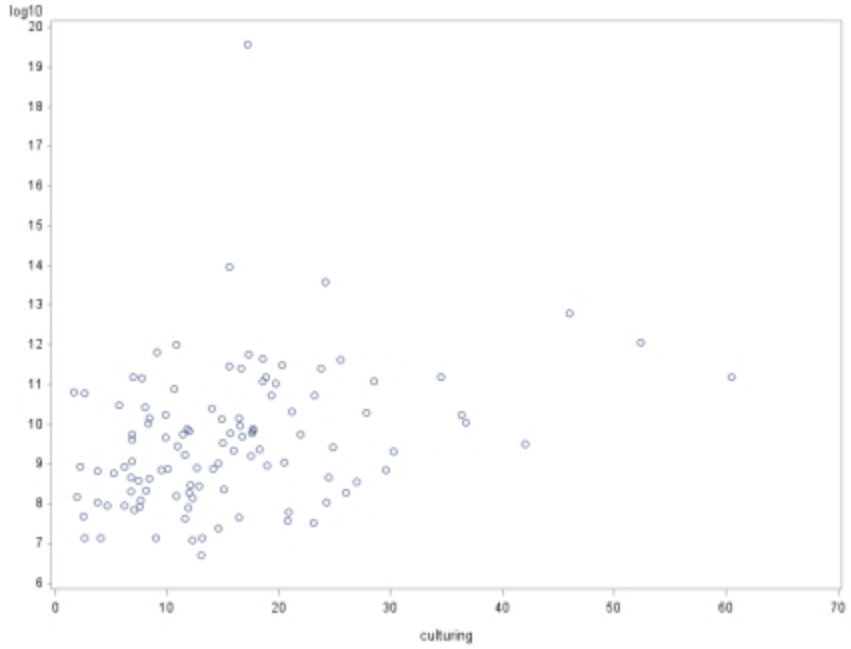

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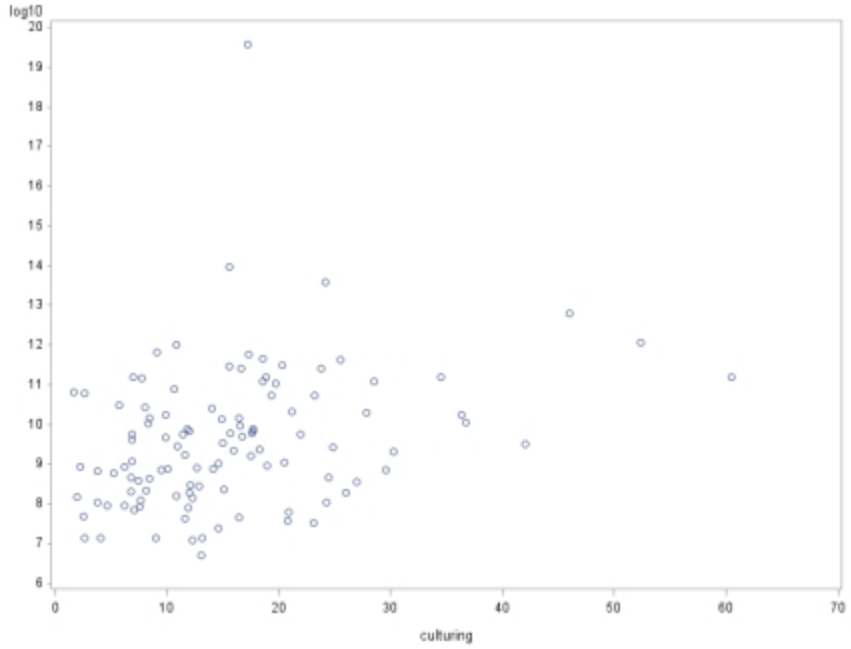

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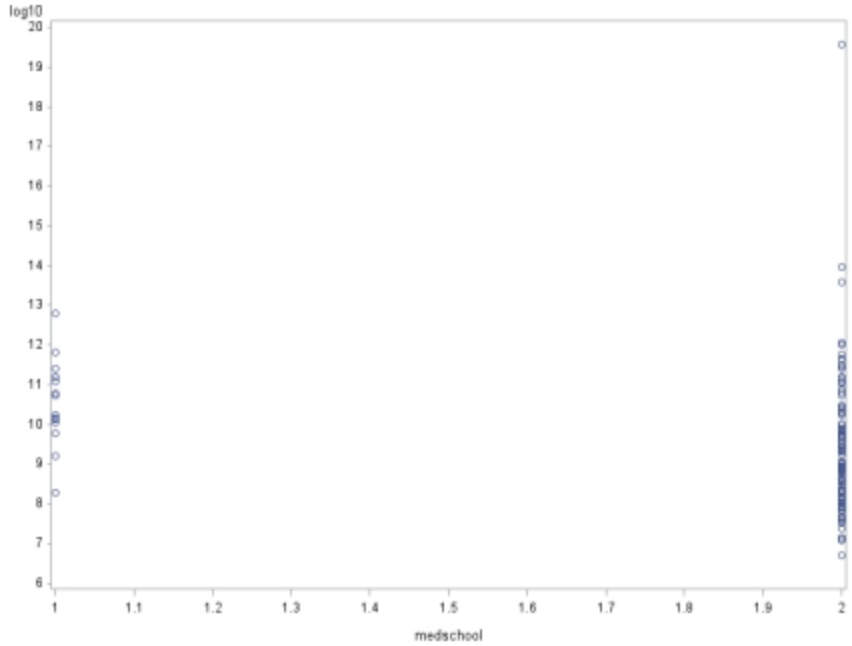

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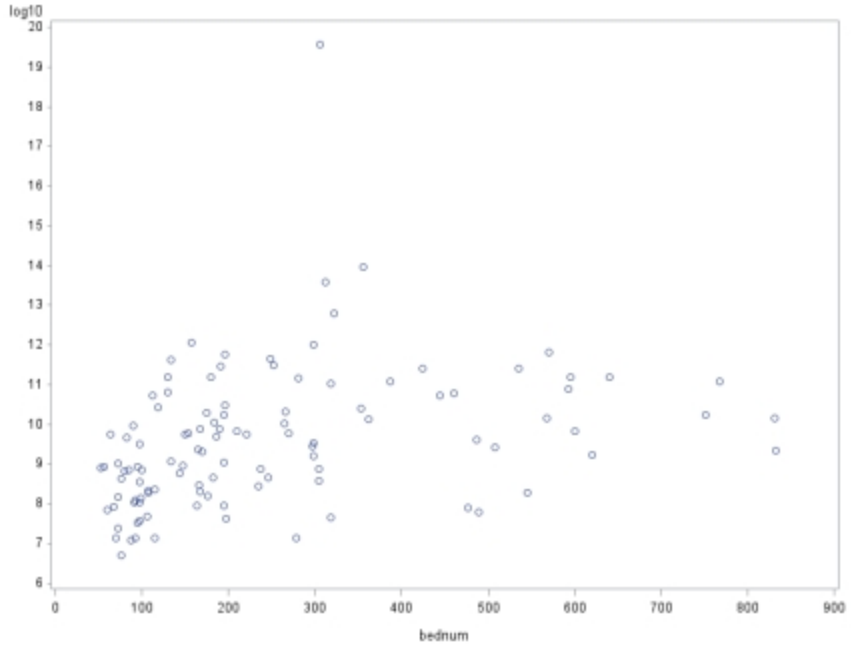

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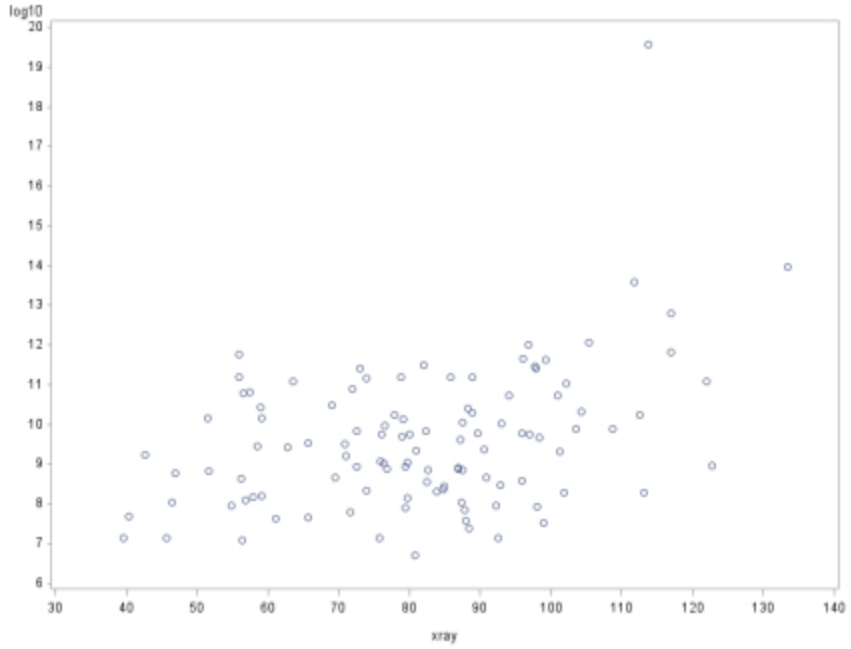

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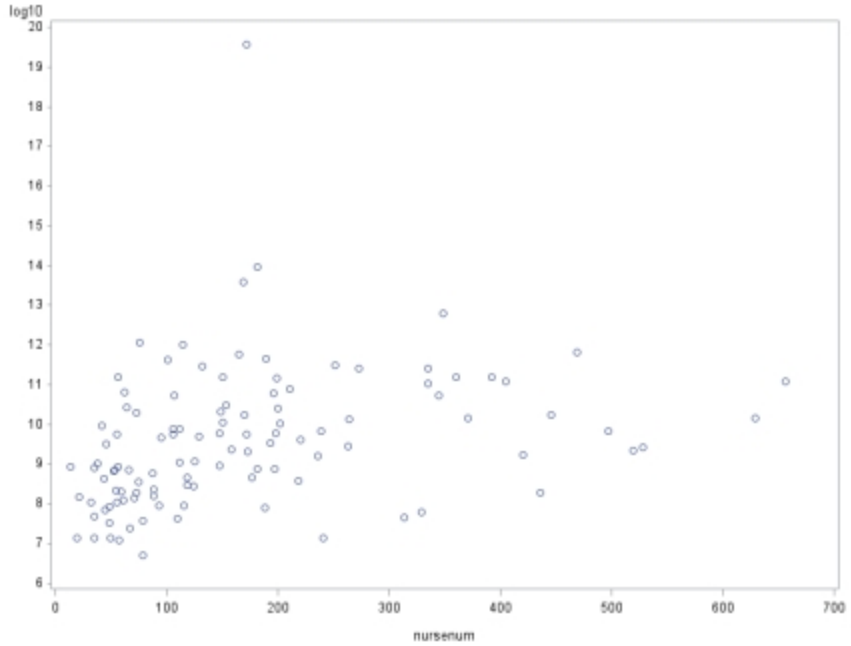

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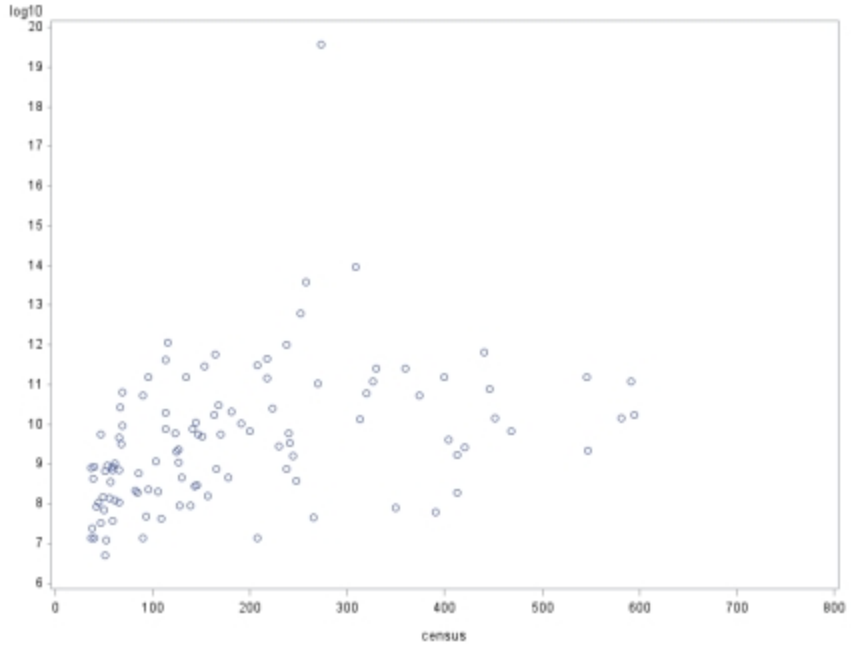

Scatter Plot