

DIFFERENT MID VALUES - cars93: y2

the mean, Y2	the median, Y2	the most frequent value, Y2	GEOMETRIC MEAN	HARMONIC MEAN	SAMPLE SIZE
19.6315	17.95	15.9	17.7055	16.0933	92

Five Number Summary - y2

the smallest value, Y2	the lower quartile, Y2	the median, Y2	the upper quartile, Y2	the largest value, Y2
7.4	12.35	17.95	23.5	61.9

Measures of Variability - cars93:y2

the range, Y2	the interquartile range, Y2	the standard deviation, Y2
54.5	11.15	9.64023

Two-side 95% CI - y2

Lower 95% limit	LOWER mean 95% CONFIDENCE LEVEL	sample mean	UPPER mean 95% CONFIDENCE LEVEL	Upper 95% limit
0.482	17.635	19.632	21.628	38.781

95% Confidence Intervals for Variance and Std Dev cars93: y2

Statistic	Lower Confidence Limit	Estimate	Upper Confidence Limit
Variance	70.8993	92.9341	127.172
Std Dev	8.4202	9.6402	11.277

95% Confidence Interval for the median

Hutson, A. D. (1999)

Calculating Nonparametric Confidence Intervals for Quantiles Using Fractional Order Statistics.

Journal of Applied Statistics, 26: 343-353.

P50	P40	P60
17.95	15.82	19.46

Measures of central tendencies Trimmed(5%) data -cars93: y2

the mean, Y2	the median, Y2	the most frequent value, Y2	number of nonmissing values, Y2
19.1011	17.95	15.9	88

Five Number Summary Trimmed (5%) data - cars93:y2

the smallest value, Y2	the lower quartile, Y2	the median, Y2	the upper quartile, Y2	the largest value, Y2
8.4	12.9	17.95	23	40.1

Measures of Variability Trimmed (5%) data- cars93: y2

the range, Y2	the interquartile range, Y2	the standard deviation, Y2
31.7	10.1	7.99541

trimmed data: cars93: y2 95% Confidence Intervals

Statistic	Lower Confidence Limit	Estimate	Upper Confidence Limit
Variance	48.4913	63.9266	88.1545
Std Dev	6.9636	7.9954	9.3891

Two-side 95% CI-trimmed data cars93: y2

Lower 95% limit	LOWER mean 95% CONFIDENCE LEVEL	sample mean	UPPER mean 95% CONFIDENCE LEVEL	Upper 95% limit
0.482	17.635	19.632	21.628	38.781

Possible outlier obs: cars93: y2

ID	midrprce
5	61.9
40	47.9

Five Number Summary - minus outlier - cars93:y2

the smallest value, Y2	the lower quartile, Y2	the median, Y2	the upper quartile, Y2	the largest value, Y2
7.4	12.2	17.6	22.7	40.1

Measures of Variability- minus outlier- cars93:y2

the range, Y2	the interquartile range, Y2	the standard deviation, Y2
32.7	10.5	8.08382

95% Confidence Intervals -minus outlier cars93: y2

Statistic	Lower Confidence Limit	Estimate	Upper Confidence Limit
Variance	49.7139	65.3481	89.7620
Std Dev	7.0508	8.0838	9.4743

Two-side 95% CI -outlier minus cars93: y2

Lower 95% limit	LOWER mean 95% CONFIDENCE LEVEL	sample mean	UPPER mean 95% CONFIDENCE LEVEL	Upper 95% limit
2.785	17.155	18.848	20.541	34.910

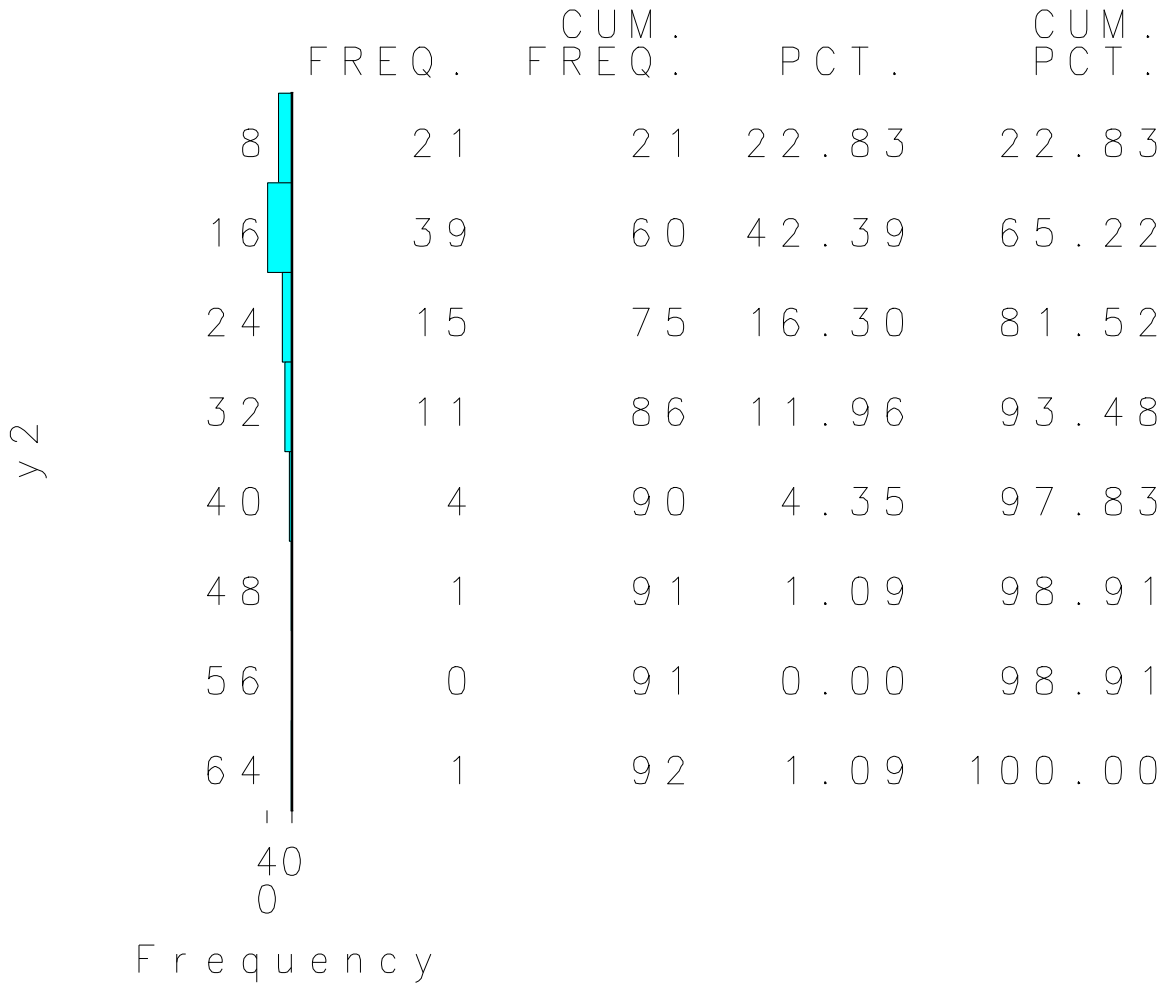
The UNIVARIATE Procedure
Variable: Y2 (midprce)

Basic Confidence Limits Assuming Normality			
Parameter	Estimate	95% Confidence Limits	
Mean	19.63152	17.63509	21.62796
Std Deviation	9.64023	8.42017	11.27704
Variance	92.93405	70.89927	127.17159

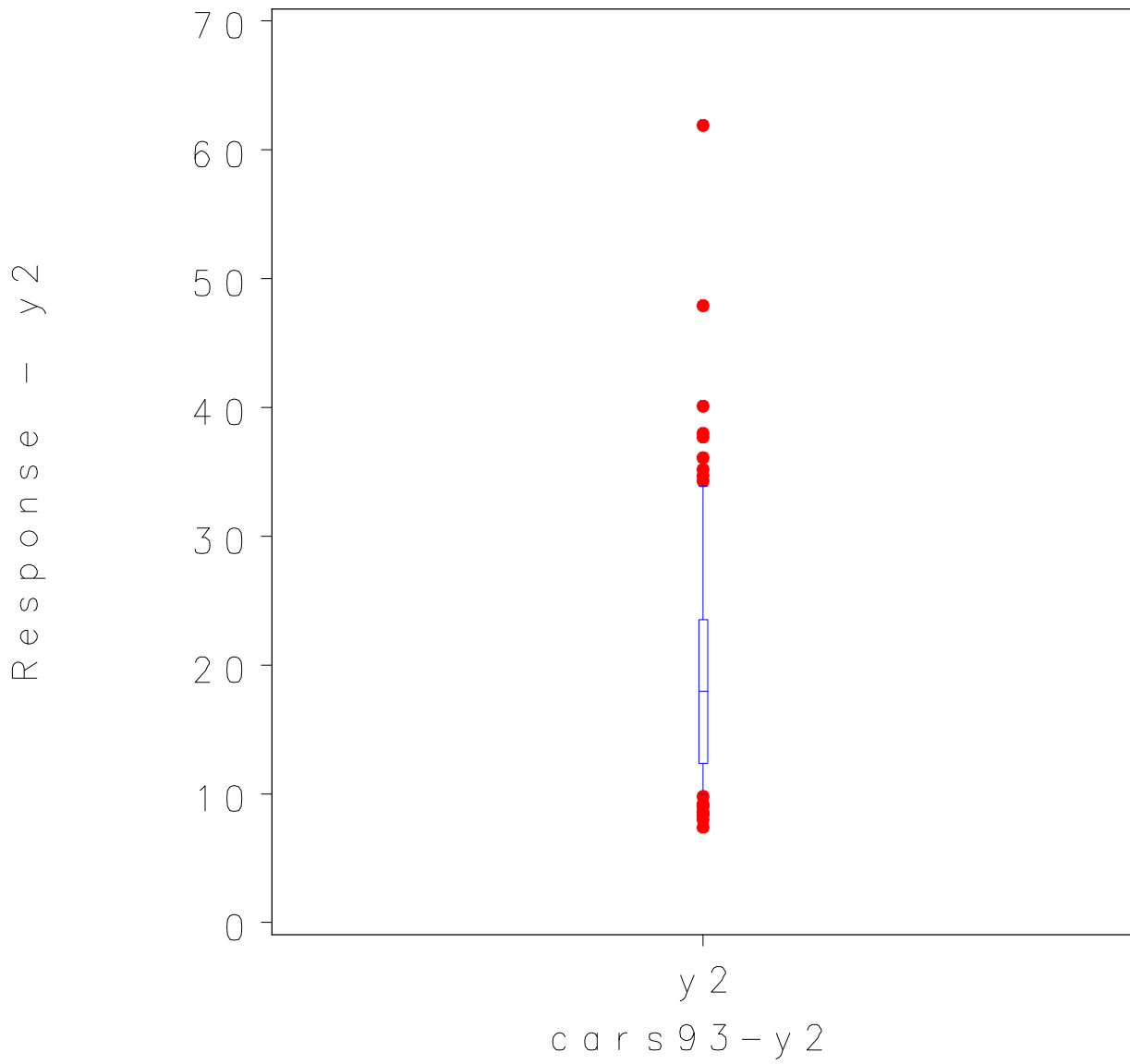
Winsorized Means							
Percent Winsorized in Tail	Number Winsorized in Tail	Winsorized Mean	Std Error Winsorized Mean	95% Confidence Limits		DF	t for H0: Mu0=0.00 Pr > t
5.43	5	19.18696	0.953658	17.28948	21.08444	81	20.11932 <.0001

Quantiles (Definition 5)								
Quantile	Estimate					Order Statistics		
		95% Confidence Limits Assuming Normality		95% Confidence Limits Distribution Free		LCL Rank	UCL Rank	Coverage
100% Max	61.90							
99%	61.90	38.68344	46.43382	40.1	61.9	90	92	53.81
95%	37.70	32.76699	38.93045	34.3	61.9	84	92	95.03
90%	33.90	29.56355	34.97817	28.7	38.0	77	89	96.56
75% Q3	23.50	24.07225	28.50432	20.0	29.1	61	78	96.03
50% Median	17.95	17.63509	21.62796	15.8	19.5	37	56	95.30
25% Q1	12.35	10.75872	15.19079	11.1	14.9	15	32	96.03
10%	10.00	4.28488	9.69950	8.4	11.1	4	16	96.56
5%	8.60	0.33259	6.49605	7.4	9.8	1	9	95.03
1%	7.40	-7.17078	0.57960	7.4	8.4	1	3	53.81
0% Min	7.40							

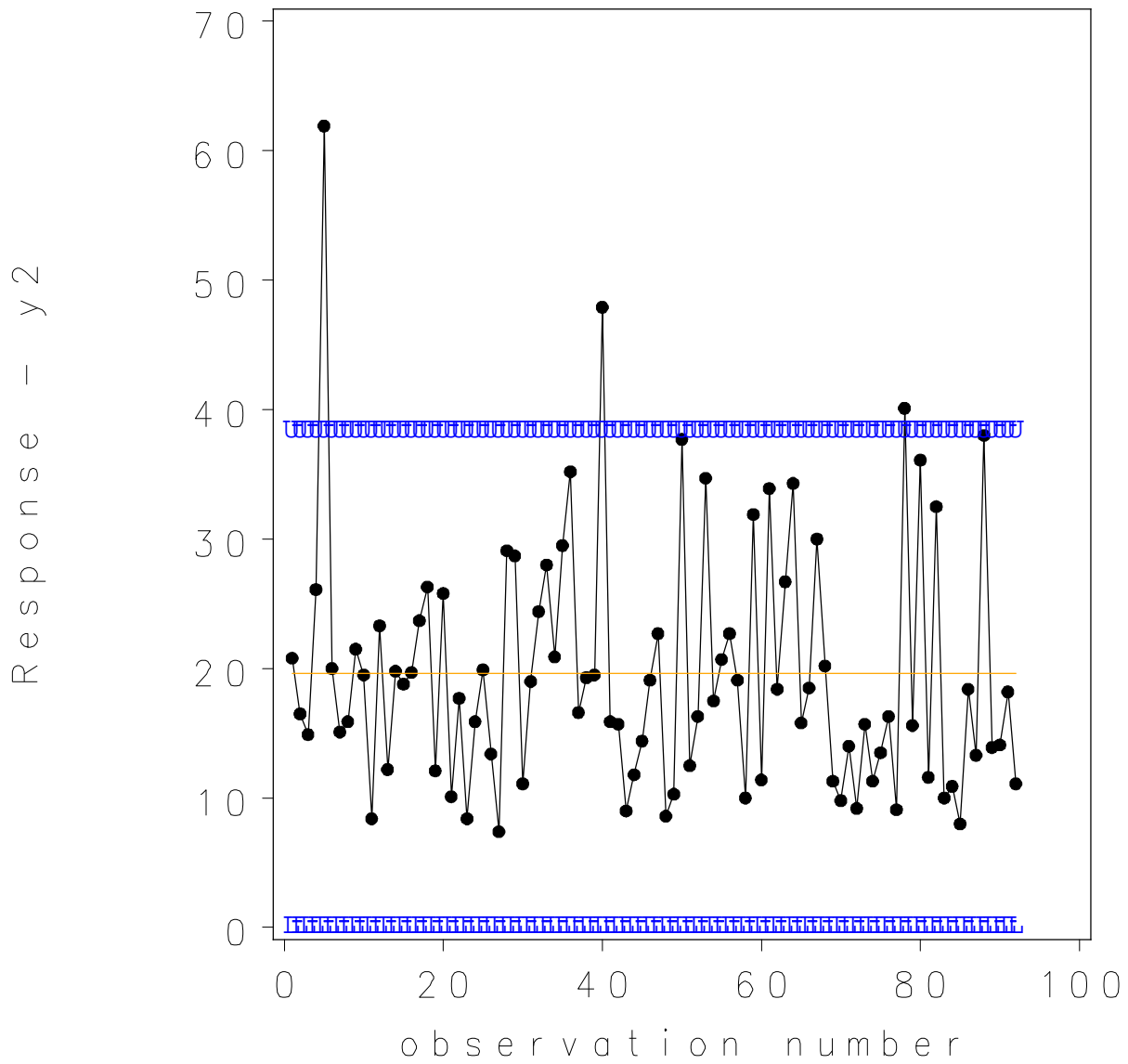
Histogram of response cars93:y2



Box plot of response



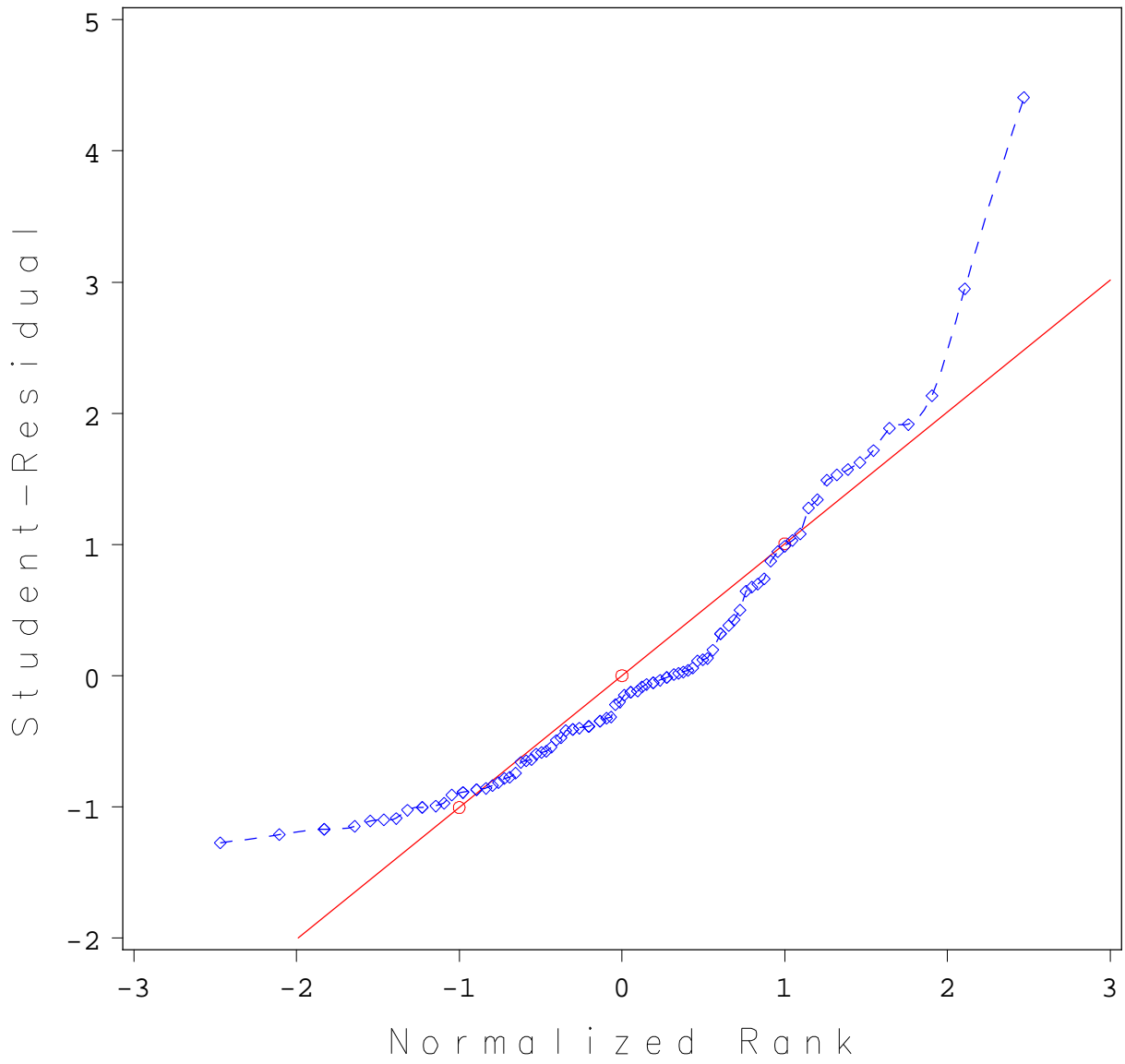
Variation in Response — cars93: y2



Potential outliers- cars93: y2

OBS	ID	Y2	STUDENT	OUTLIER
40	40	47.9	2.94841	*
5	5	61.9	4.40862	****

Normal Probability Plot of Student— cars93: y2



D'AGOSTINO-PEARSON OMNIBUS NORMALITY TEST - y2
Reference: The American Statistician 1990 Vol:44 No:4 page 316-321

Skewness	P-value for Skewness	Kurtosis Statistic	P-value for Kurtosis	CHISQUARE VALUE for omnibus test	P-VALUE - D'AGOSTINO-PEARSON OMNIBUS NORMALITY TEST
1.51328	.000000998	6.20413	.000460333	36.2020	1.3767E-8

Distribution Chart; cars93: y2

