EXAMINE VARIABLES=angle circle\_area vertical\_bar horizontal\_curve horizontal\_direction horizont

/PLOT BOXPLOT STEMLEAF NPPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

### **Explore**

#### Notes

Output Created		03-Jul-2015 13:47:00
Comments		
Input	Active Dataset	DataSet0
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	32
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=angle circle_area vertical_bar horizontal_curve horizontal_direction horizontal_slider vertical_curve square_area texture vertical_direction vertical_direction vertical_slider horizontal_bar /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00 00:00:04.306
	Elapsed Time	00 00:00:04.306

[DataSet0]

### **Case Processing Summary**

	Cases					
	Va	lid	Miss	sing	Total	
	N	Percent	N	Percent	N	Percent
angle	32	100.0%	0	.0%	32	100.0%
circle_area	32	100.0%	0	.0%	32	100.0%
vertical_bar	32	100.0%	0	.0%	32	100.0%
horizontal_curve	32	100.0%	.0% 0 .0% 32	32	100.0%	
horizontal_direction	32	100.0%	0	.0%	32	100.0%
horizontal_slider	32	100.0%	0	.0%	32	100.0%
vertical_curve	32	100.0%	0	.0%	32	100.0%
square_area	32	100.0%	0	.0%	32	100.0%
texture	32	100.0%	0	.0%	32	100.0%
vertical_direction	32	100.0%	0	.0%	32	100.0%
vertical_slider	32	100.0%	0	.0%	32	100.0%
horizontal_bar	32	100.0%	0	.0%	32	100.0%

			Statistic	Std. Error
angle	Mean			4.27717
	95% Confidence Interval	Lower Bound	80.8501	
	for Mean	Upper Bound	98.2968	
	5% Trimmed Mean		93.9938	
	Median		96.4500	
	Variance		585.413	
	Std. Deviation		24.19532	
	Minimum		-33.92	
	Maximum		99.45	
	Range		133.37	
	Interquartile Range		4.93	
	Skewness		-4.649	.414
	Kurtosis		23.410	.809
circle_area	Mean		82.0897	2.75180
	95% Confidence Interval for Mean	Lower Bound	76.4774	
	ioi ivieari	Upper Bound	87.7020	
	5% Trimmed Mean		84.1864	
	Median		87.3050	
	Variance		242.317	
	Std. Deviation		15.56654	
	Minimum		24.49	
	Maximum		97.88	
	Range		73.39	
	Interquartile Range		9.29	
	Skewness		-2.529	.414
	Kurtosis		6.921	.809

			Statistic	Std. Error
vertical_bar	Mean		89.2513	2.42768
	95% Confidence Interval for Mean	Lower Bound	84.3000	
	for Mean	Upper Bound	94.2025	
	5% Trimmed Mean		91.0963	
	Median		94.6350	
	Variance		188.596	
	Std. Deviation		13.73304	
	Minimum		38.90	
	Maximum		99.24	
	Range		60.34	
	Interquartile Range		8.89	
	Skewness		-2.274	.414
	Kurtosis		5.346	.809
horizontal_curve	Mean		93.6513	.96928
	95% Confidence Interval for Mean	Lower Bound	91.6744	
	ior weari	Upper Bound	95.6281	
	5% Trimmed Mean		94.0751	
	Median		95.6450	
	Variance		30.064	
	Std. Deviation		5.48305	
	Minimum		78.49	
	Maximum		99.71	
	Range		21.22	
	Interquartile Range		6.40	
	Skewness		-1.184	.414
	Kurtosis		.757	.809

			Statistic	Std. Error
horizontal_direction	Mean		95.5016	.60108
	95% Confidence Interval	Lower Bound	94.2757	
	for Mean	Upper Bound	96.7275	
	5% Trimmed Mean		95.8168	
	Median		96.2300	
	Variance		11.561	
	Std. Deviation		3.40021	
	Minimum		84.92	
	Maximum		99.70	
	Range		14.78	
	Interquartile Range		4.51	
	Skewness		-1.372	.414
	Kurtosis		2.419	.809
horizontal_slider	Mean		97.7178	.60516
	95% Confidence Interval for Mean	Lower Bound	96.4836	
	ior weari	Upper Bound	98.9520	
	5% Trimmed Mean		98.2557	
	Median		98.9250	
	Variance		11.719	
	Std. Deviation		3.42332	
	Minimum		85.70	
	Maximum		99.96	
	Range		14.26	
	Interquartile Range		2.58	
	Skewness		-2.847	.414
	Kurtosis		8.203	.809

			Statistic	Std. Error
vertical_curve	Mean		81.8338	8.16839
	95% Confidence Interval	Lower Bound	65.1742	
	for Mean	Upper Bound	98.4933	
	5% Trimmed Mean		90.2599	
	Median		91.5900	
	Variance		2135.124	
	Std. Deviation		46.20741	
	Minimum		-164.91	
	Maximum		98.93	
	Range		263.84	
	Interquartile Range		10.59	
	Skewness		-5.241	.414
	Kurtosis		28.548	.809
square_area	Mean		88.3134	2.11900
	95% Confidence Interval	Lower Bound	83.9917	
	for Mean	Upper Bound	92.6352	
	5% Trimmed Mean		89.8701	
	Median		90.5050	
	Variance		143.686	
	Std. Deviation		11.98689	
	Minimum		36.27	
	Maximum		99.73	
	Range		63.46	
	Interquartile Range		9.63	
	Skewness		-2.863	.414
	Kurtosis		11.078	.809

			Statistic	Std. Error
texture	Mean		.1359	11.09481
	95% Confidence Interval	Lower Bound	-22.4921	
	for Mean	Upper Bound	22.7639	
	5% Trimmed Mean		3.0397	
	Median		-8.6250	
	Variance		3939.031	
	Std. Deviation		62.76170	
	Minimum		-170.47	
	Maximum		93.96	
	Range		264.43	
	Interquartile Range		94.19	
	Skewness		408	.414
	Kurtosis		.283	.809
vertical_direction	Mean		96.9509	.73284
	95% Confidence Interval for Mean	Lower Bound	95.4563	
	ior weari	Upper Bound	98.4456	
	5% Trimmed Mean		97.5800	
	Median		98.5100	
	Variance		17.186	
	Std. Deviation		4.14557	
	Minimum		80.83	
	Maximum		99.99	
	Range		19.16	
	Interquartile Range		3.05	
	Skewness		-2.702	.414
	Kurtosis		8.002	.809

			Statistic	Std. Error
vertical_slider	Mean		94.8150	2.25077
	95% Confidence Interval	Lower Bound	90.2245	
	for Mean	Upper Bound	99.4055	
	5% Trimmed Mean		97.0542	
	Median		98.0400	
	Variance		162.111	
	Std. Deviation		12.73228	
	Minimum		27.72	
	Maximum		99.94	
	Range		72.22	
	Interquartile Range		2.78	
	Skewness		-5.038	.414
	Kurtosis		26.907	.809
horizontal_bar	Mean		94.1188	1.97928
	95% Confidence Interval for Mean	Lower Bound	90.0820	
	ioi ivieari	Upper Bound	98.1555	
	5% Trimmed Mean		96.0249	
	Median		97.4000	
	Variance		125.362	
	Std. Deviation		11.19652	
	Minimum		50.59	
	Maximum		99.92	
	Range		49.33	
	Interquartile Range		2.96	
	Skewness		-3.084	.414
	Kurtosis		9.256	.809

#### **Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.
angle	.398	32	.000	.385	32	.000
circle_area	.277	32	.000	.702	32	.000
vertical_bar	.309	32	.000	.686	32	.000
horizontal_curve	.166	32	.025	.877	32	.002
horizontal_direction	.109	32	.200*	.888 .604	32	.003
horizontal_slider	.256	32	.000		32	
vertical_curve	.398	32 .000 .320	.320	32	.000	
square_area	.196	32	.003	.730	32	.000
texture	.122	32	.200*	.949	32	.135
vertical_direction	.232	32	.000	.665	32	.000
vertical_slider	.395	32	.000	.352	32	.000
horizontal_bar	.408	32	.000	.498	32	.000

## angle

angle Stem-and-Leaf Plot

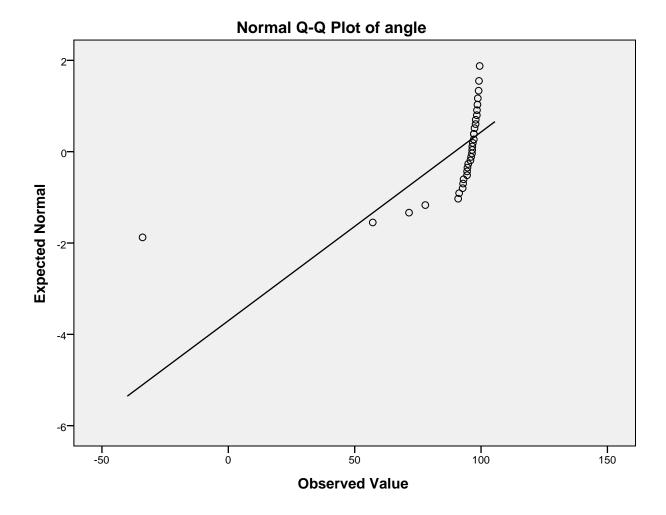
Frequency Stem & Leaf

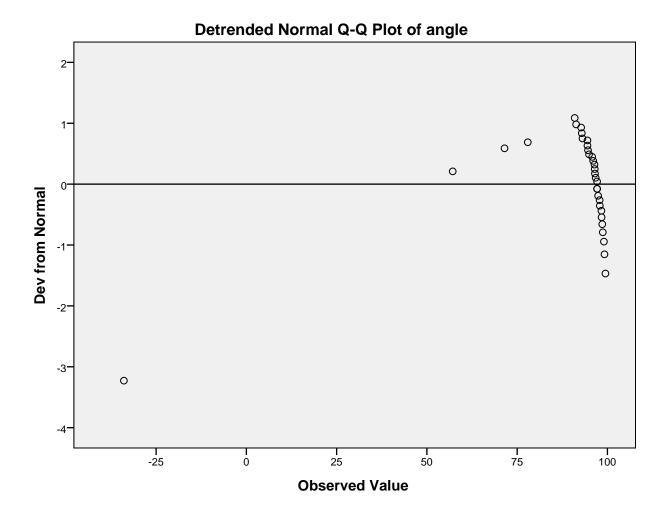
4.00	Extremes		(=<77.9)
1.00	90		9
1.00	91		3
2.00	92	•	79
1.00	93	•	0
4.00	94		4469
1.00	95	•	7
5.00	96		04457
6.00	97		111488
4.00	98		3357
3.00	99		014

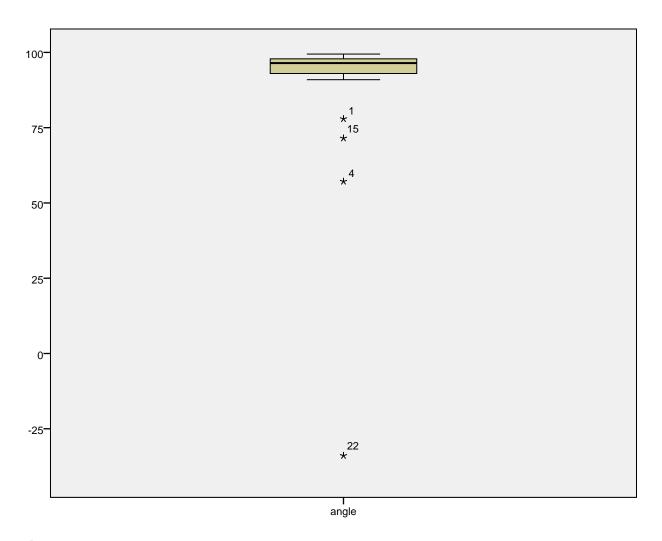
Stem width: 1.00

Each leaf: 1 case(s)

a. Lilliefors Significance Correction\*. This is a lower bound of the true significance.







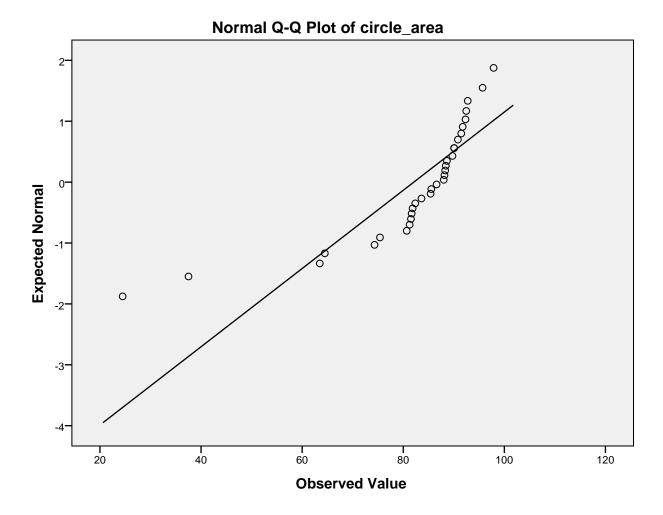
## circle\_area

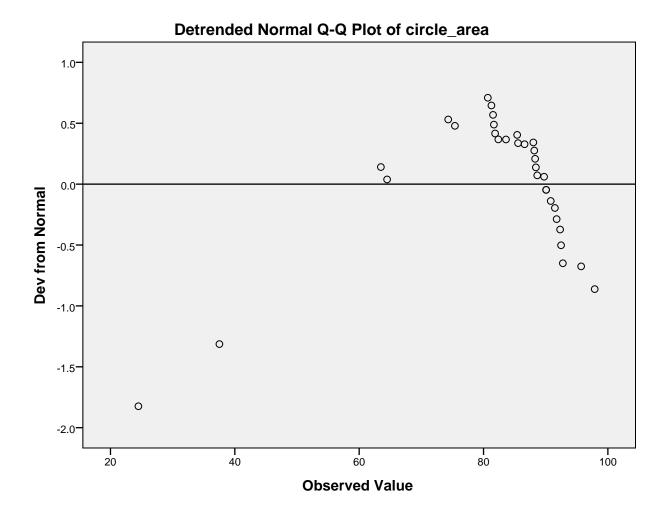
circle\_area Stem-and-Leaf Plot

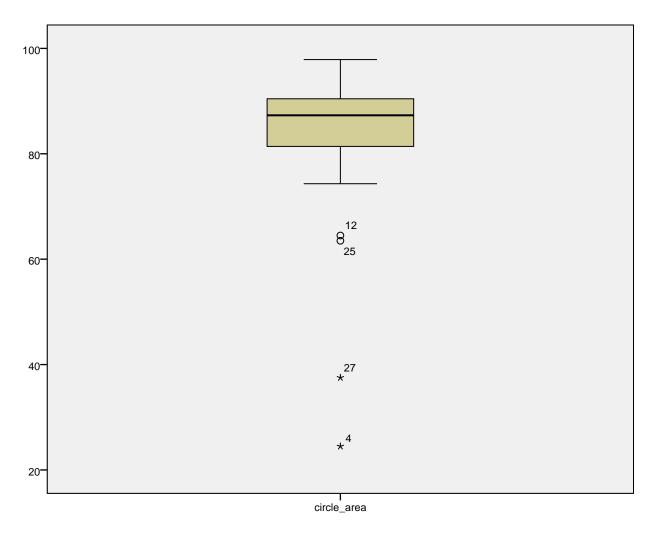
```
Frequency Stem & Leaf
```

4.00	Extremes		(=<64)
1.00	7		4
1.00	7		5
7.00	8		0111123
9.00	8		556888889
8.00	9		00011222
2.00	9		57

Stem width: 10.00
Each leaf: 1 case(s)





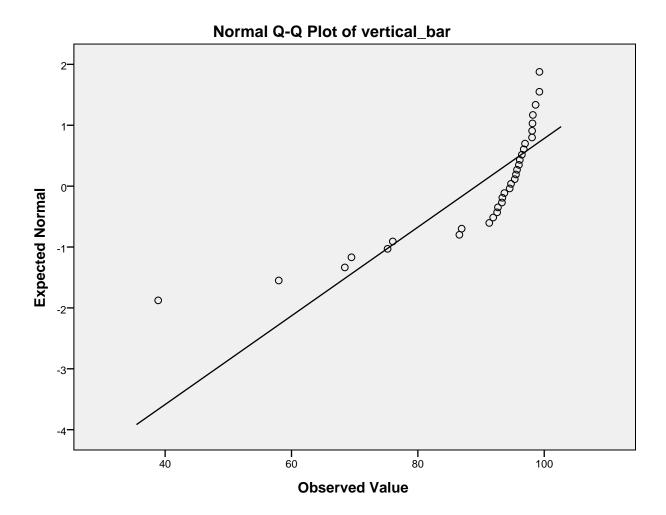


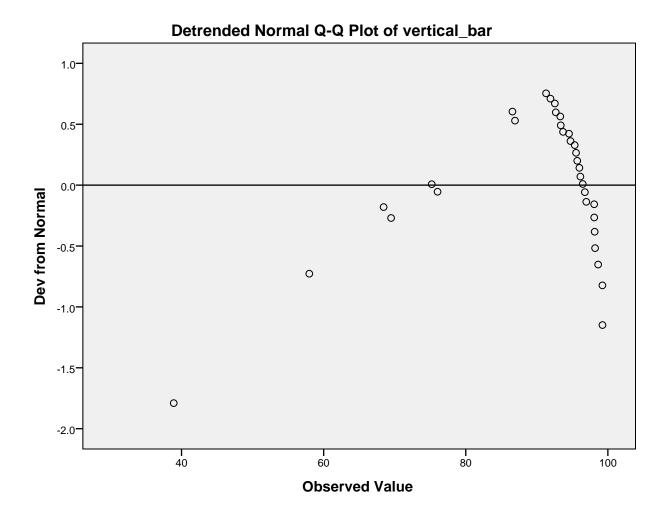
## vertical\_bar

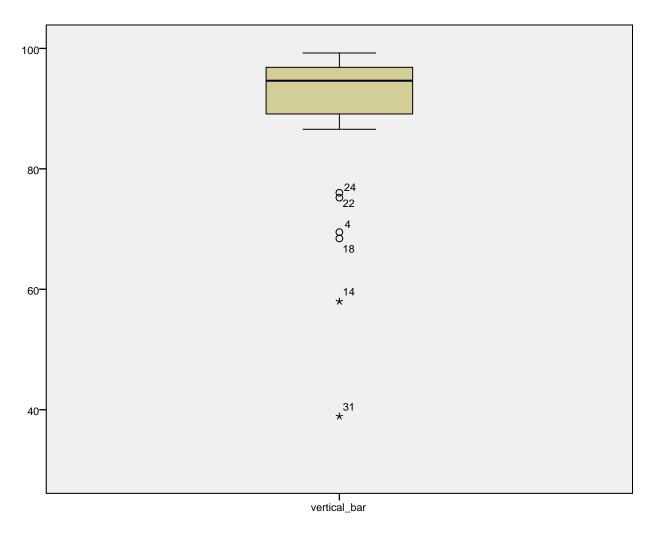
vertical\_bar Stem-and-Leaf Plot

Frequency	y Stem	&	Leaf
6.00	Extremes		(=<76)
2.00	8		66
.00	8		
2.00	9		11
5.00	9		22333
6.00	9		445555
4.00	9		6666
7.00	9		8888899

Stem width: 10.00





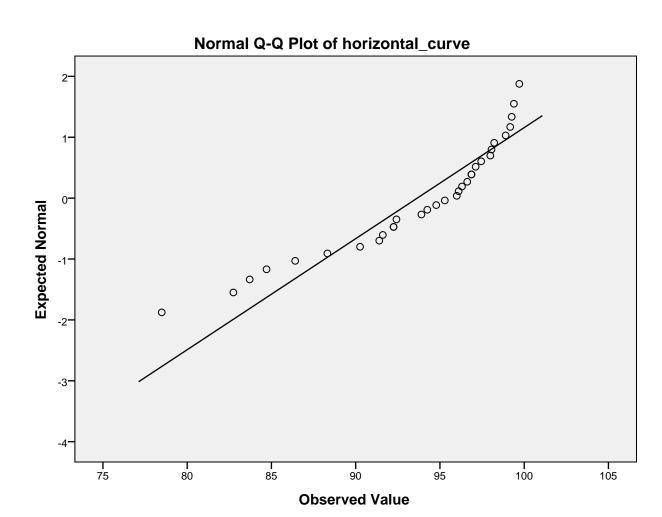


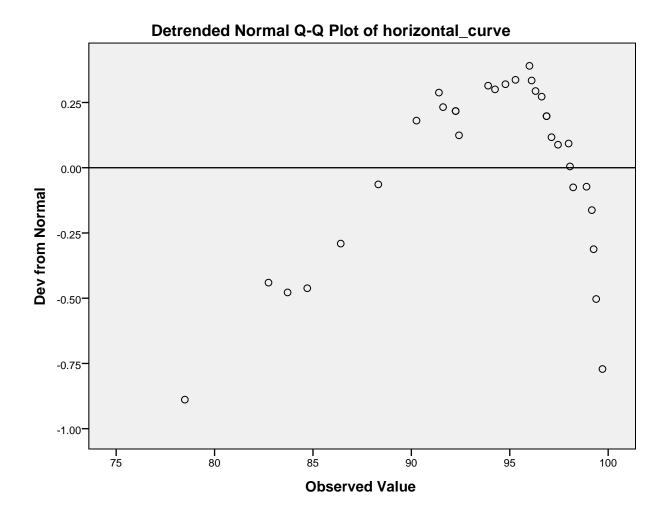
## horizontal\_curve

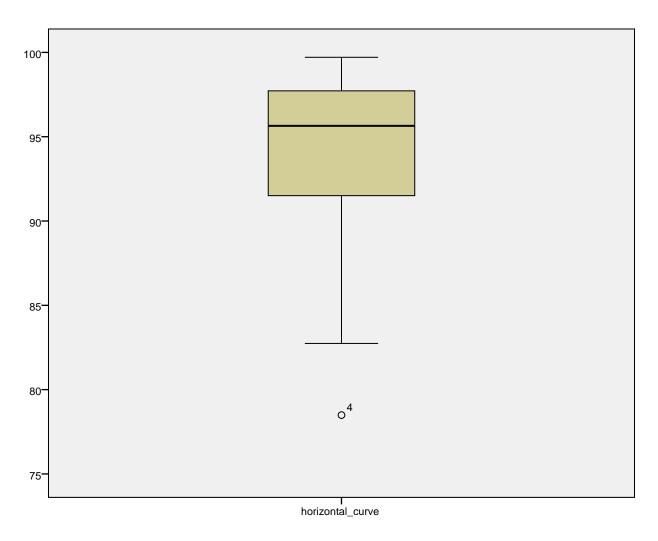
horizontal\_curve Stem-and-Leaf Plot

Frequency	Stem	&	Leaf
1 00			( 50)
1.00	Extremes		(=<78)
2.00	8	•	23
1.00	8		4
1.00	8		6
1.00	8	•	8
3.00	9	•	011
4.00	9	•	2223
3.00	9	•	445
9.00	9		666666777
7.00	9		8889999

Stem width: 10.00 Each leaf: 1 case(s)





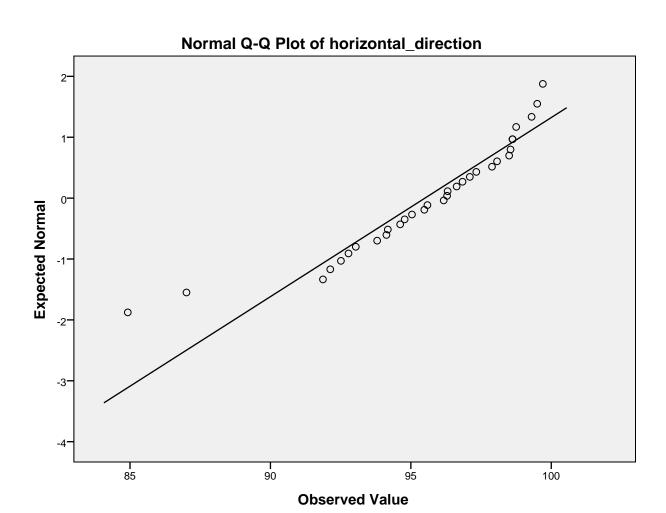


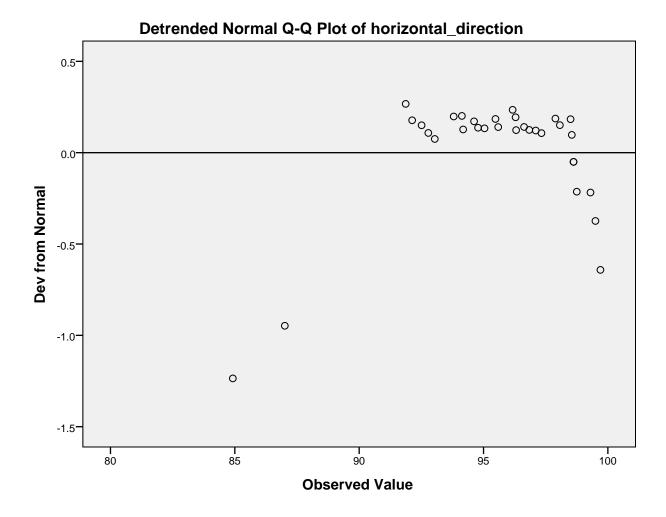
# horizontal\_direction

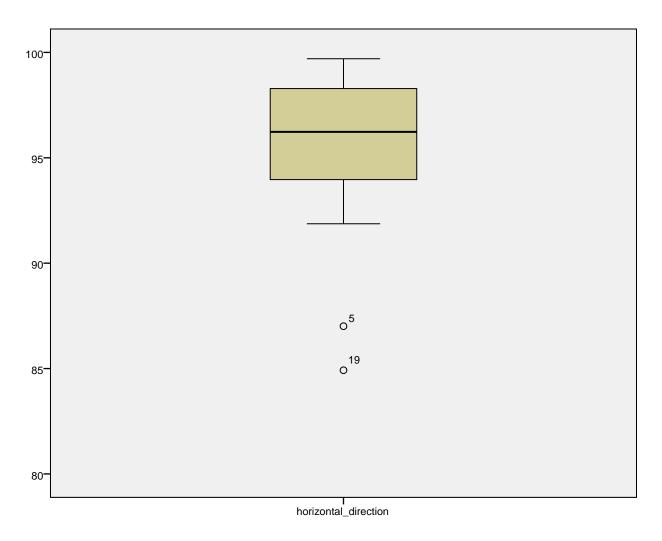
horizontal\_direction Stem-and-Leaf Plot

Frequency	Stem	&	Leaf
2.00	Extremes		(=<87.0)
1.00	91		8
3.00	92		157
2.00	93		08
4.00	94		1167
3.00	95		045
5.00	96		12368
3.00	97		138
6.00	98		055667
3.00	99	_	357

Stem width: 1.00
Each leaf: 1 case(s)





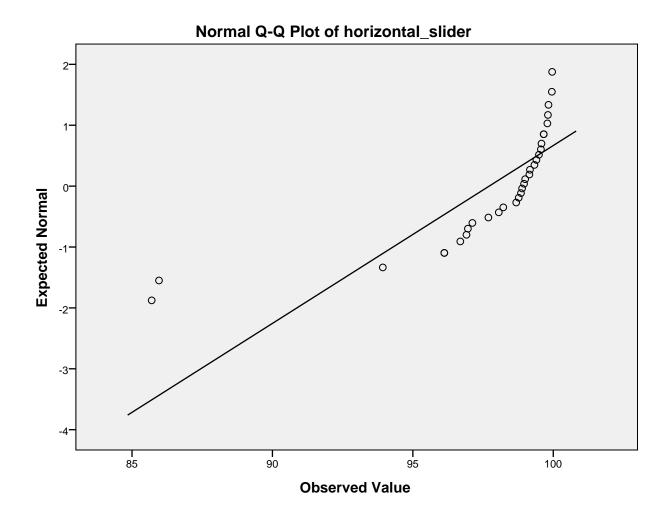


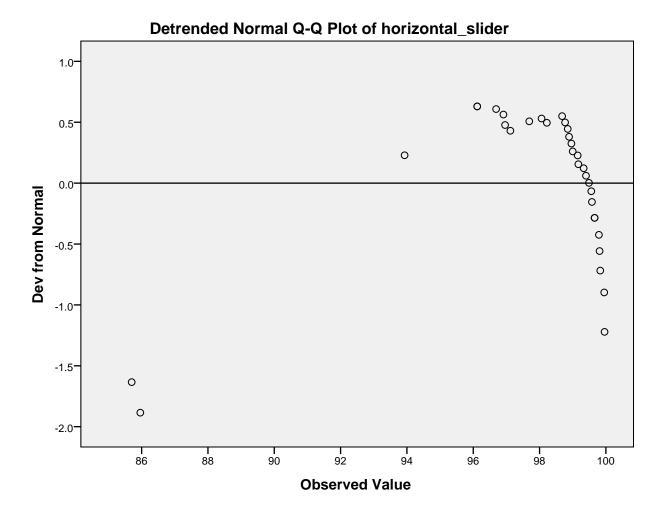
## horizontal\_slider

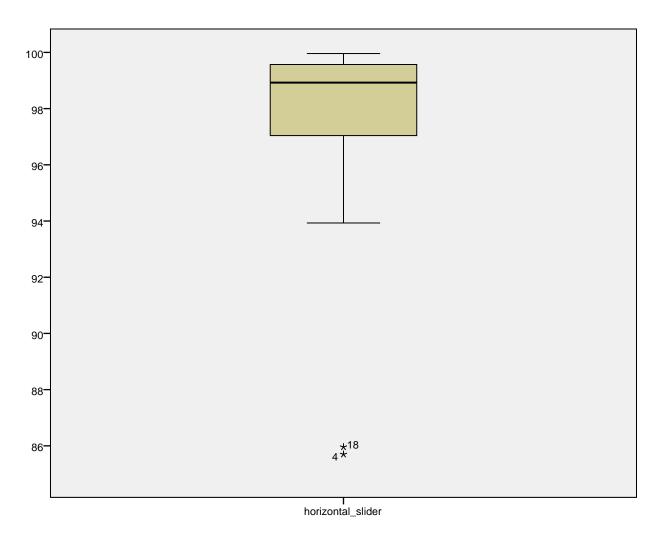
horizontal\_slider Stem-and-Leaf Plot

```
Frequency
            Stem & Leaf
                    (=<86.0)
    2.00 Extremes
   1.00
              93 .
    .00
              94 .
              95 .
    .00
   5.00
              96 . 11699
    2.00
              97 . 16
   7.00
              98 . 0267889
  15.00
              99 . 011344556678899
```

Stem width: 1.00





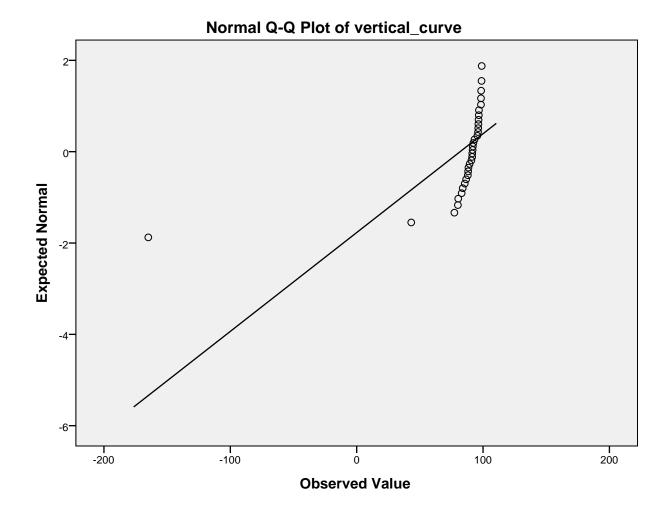


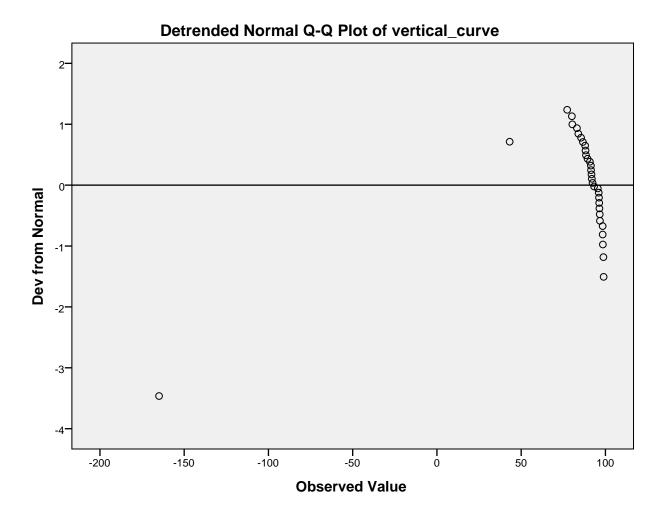
## vertical\_curve

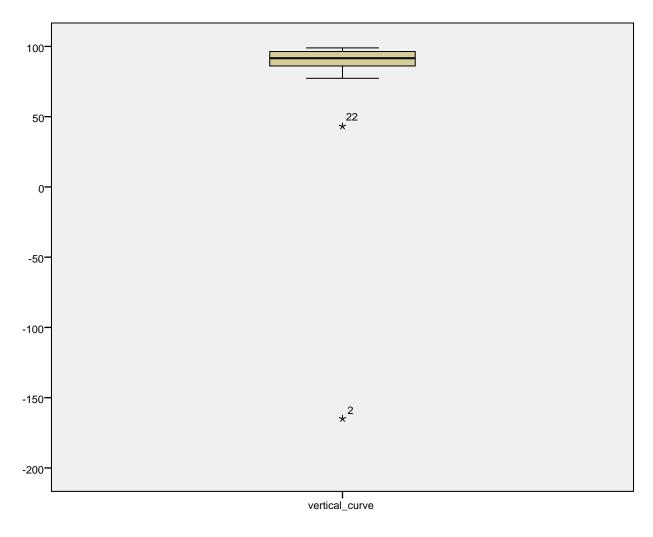
vertical\_curve Stem-and-Leaf Plot

Frequency	y Stem	&	Leaf
2.00	Extremes		(=<43)
1.00	7		7
4.00	8		0033
6.00	8		567889
7.00	9		0111123
12.00	9		566666688888

Stem width: 10.00
Each leaf: 1 case(s)





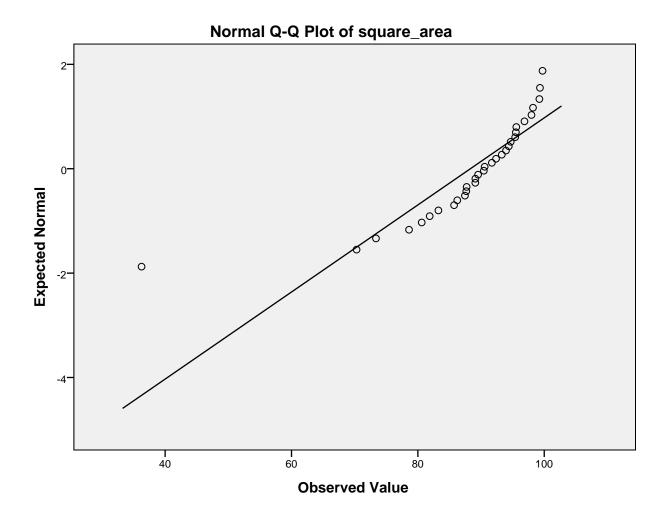


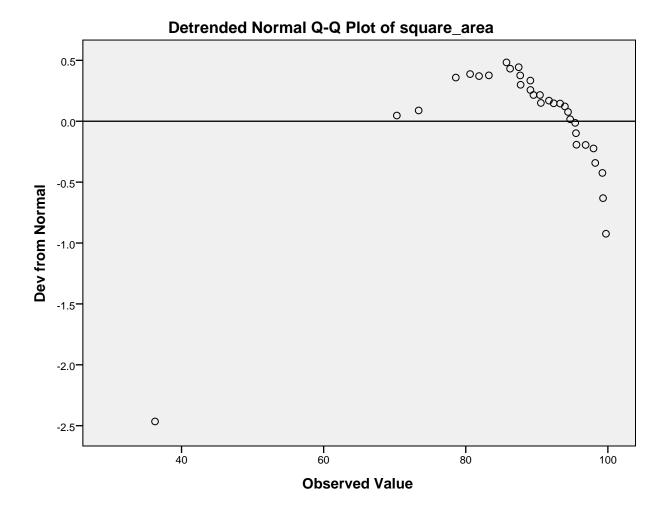
### square\_area

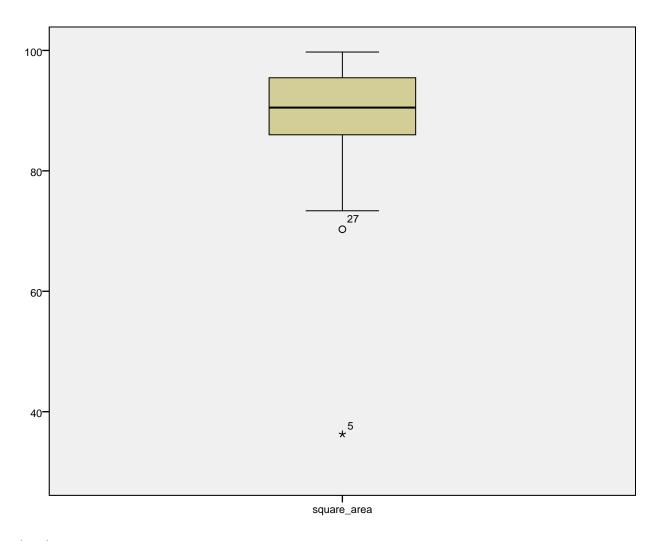
square\_area Stem-and-Leaf Plot

Frequency	Stem &	Leaf
2.00 Ext	remes	(=<70)
1.00	7.	3
1.00	7.	8
3.00	8.	013
8.00	8.	56777999
8.00	9.	00123344
9.00	9.	555678999

Stem width: 10.00 Each leaf: 1 case(s)







### texture

texture Stem-and-Leaf Plot

Frequency Stem & Leaf

1.00 Extremes (=<-170)

1.00 -1 . 0

4.00 -0 . 5577

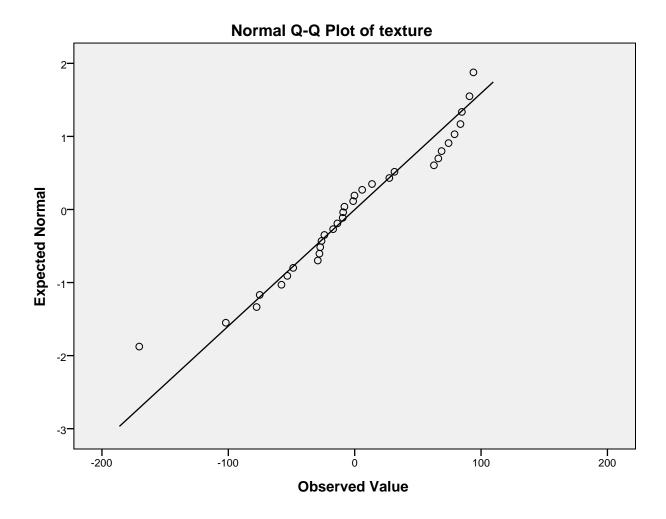
13.00 -0 . 0000011222224

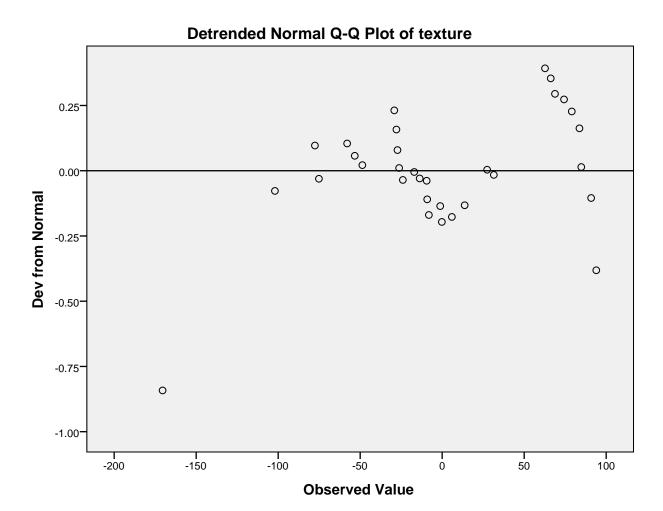
4.00 0 . 0123

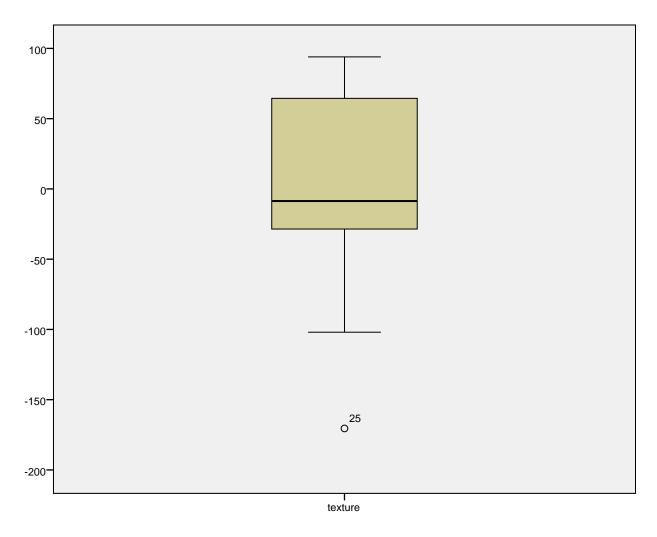
9.00 0 . 666778899

Stem width: 100.00

Each leaf: 1 case(s)







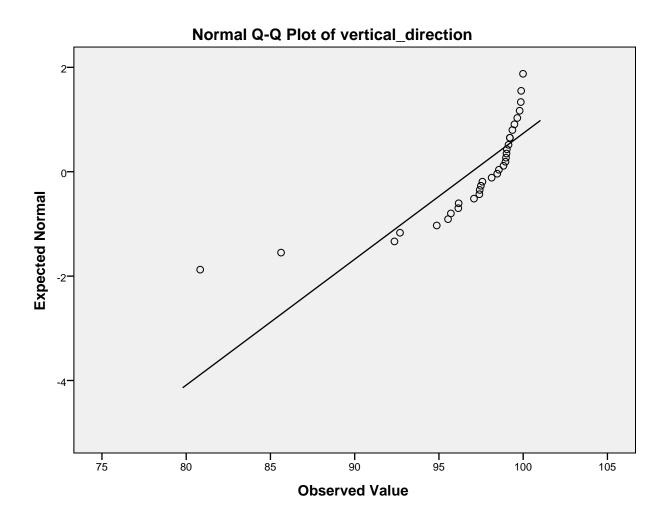
# vertical\_direction

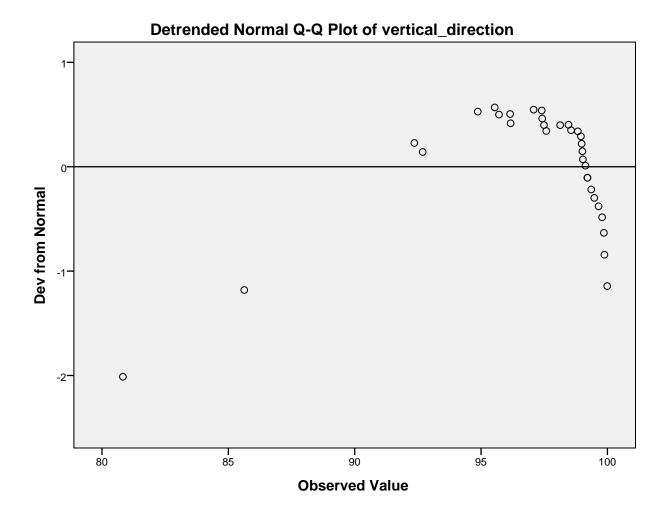
vertical\_direction Stem-and-Leaf Plot

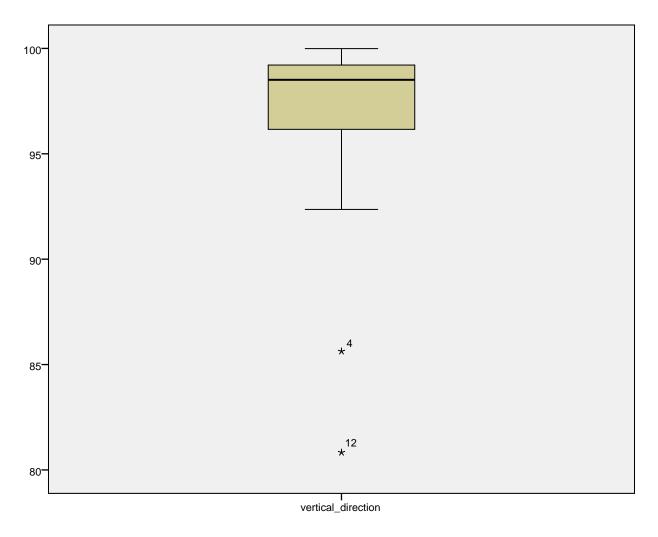
Frequency	7 Stem	&	Leaf
2.00	Extremes		(=<85.6)
2.00	92		36
.00	93		
1.00	94		8
2.00	95		57
2.00	96		11
5.00	97		04445
6.00	98		145899
12.00	99		001223467889

Stem width: 1.00

Each leaf: 1 case(s)







# vertical\_slider

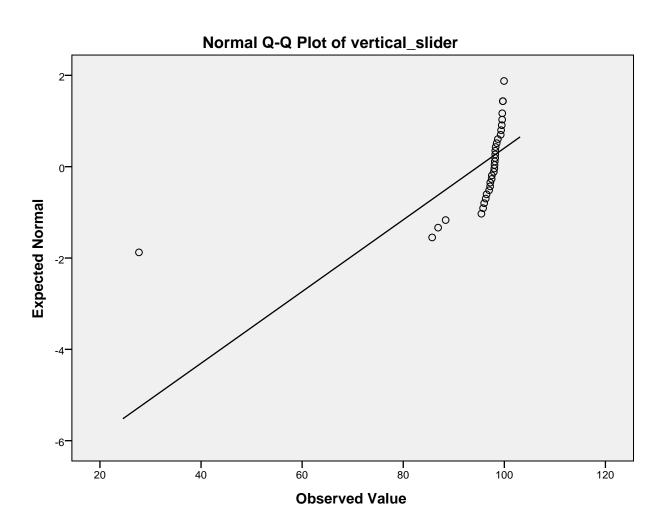
vertical\_slider Stem-and-Leaf Plot

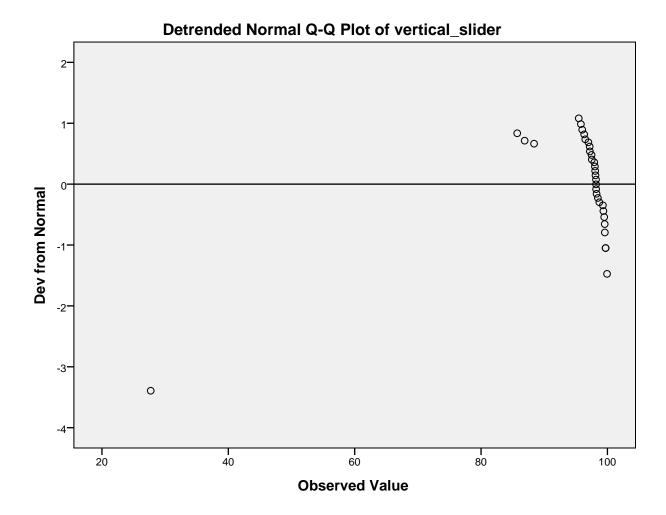
Frequency	Stem	&	Leaf
4 00	B 6		( .00 4)
4.00	Extremes		(=<88.4)
1.00	95		4
1.00	95		8
3.00	96		034
1.00	96		9
3.00	97		124
2.00	97		59
8.00	98		00112224
1.00	98		7
3.00	99		234

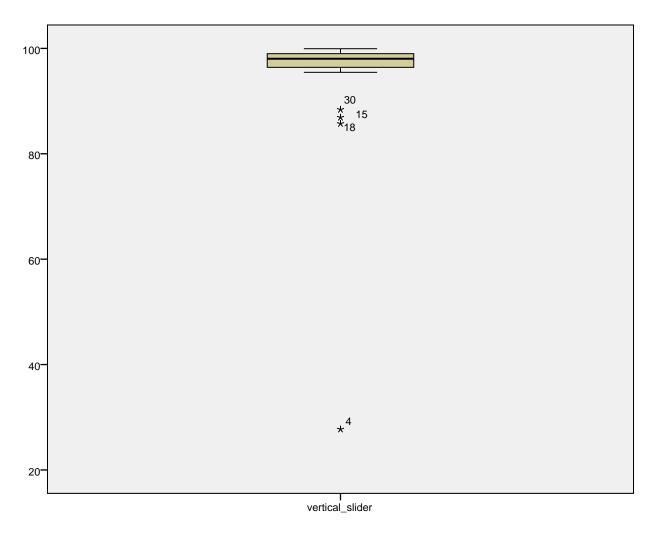
5.00 99 . 55779

Stem width: 1.00

Each leaf: 1 case(s)







# horizontal\_bar

horizontal\_bar Stem-and-Leaf Plot

Frequency	y Stem	&	Leaf
4.00	Extremes		(=<83.3)
2.00	95		02
1.00	95		7
2.00	96		04
3.00	96		778
5.00	97		23334
3.00	97		589
1.00	98		4
3.00	98		699
5.00	99		13444

3.00 99. 569

Stem width: 1.00

Each leaf: 1 case(s)

