

Fitting the normal to elytra data

The UNIVARIATE Procedure
Variable: length
sex = F

Moments			
N	60	Sum Weights	60
Mean	4.94	Sum Observations	296.4
Std Deviation	0.48544929	Variance	0.23566102
Skewness	-0.521146	Kurtosis	0.16125847
Uncorrected SS	1478.12	Corrected SS	13.904
Coeff Variation	9.82690878	Std Error Mean	0.06267123

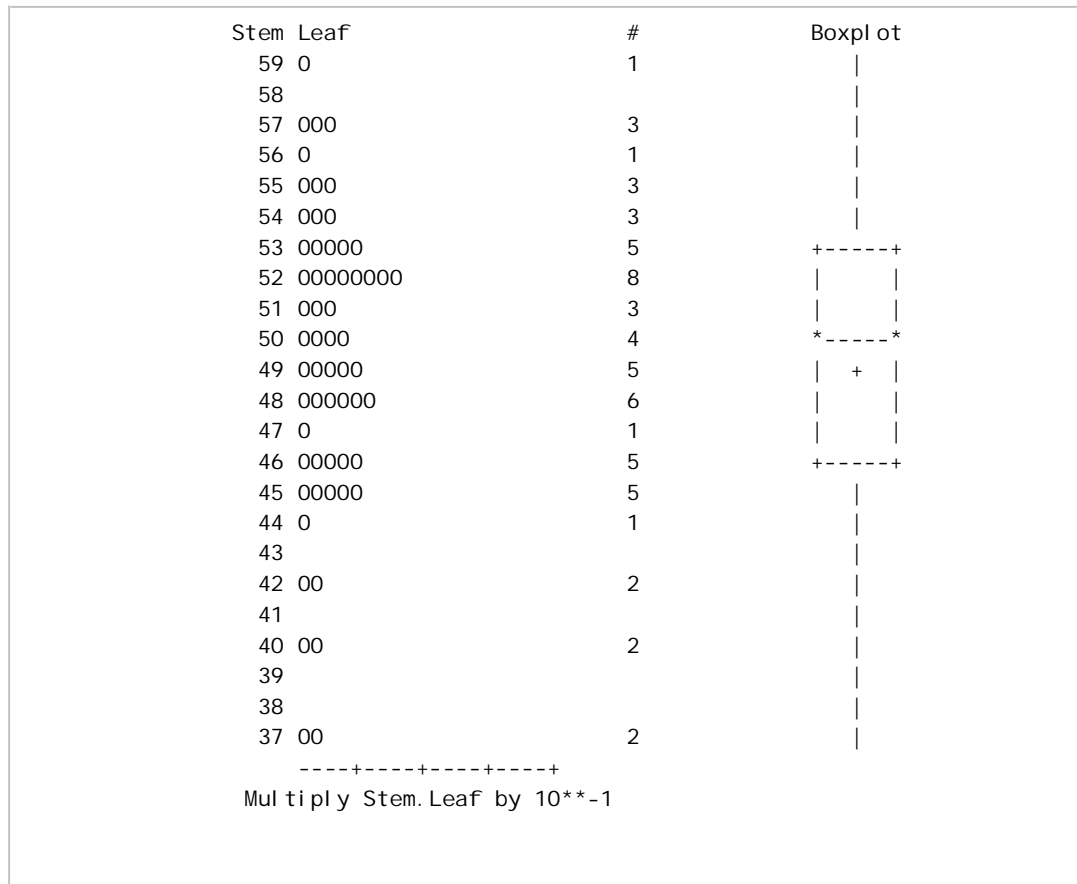
Basic Statistical Measures			
Location		Variability	
Mean	4.940000	Std Deviation	0.48545
Median	5.000000	Variance	0.23566
Mode	5.200000	Range	2.20000
		Interquartile Range	0.70000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	78.82404	Pr > t 	<.0001
Sign	M	30	Pr >= M 	<.0001
Signed Rank	S	915	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	5.9
99%	5.9
95%	5.7
90%	5.5
75% Q3	5.3
50% Median	5.0
25% Q1	4.6
10%	4.3
5%	4.0
1%	3.7
0% Min	3.7

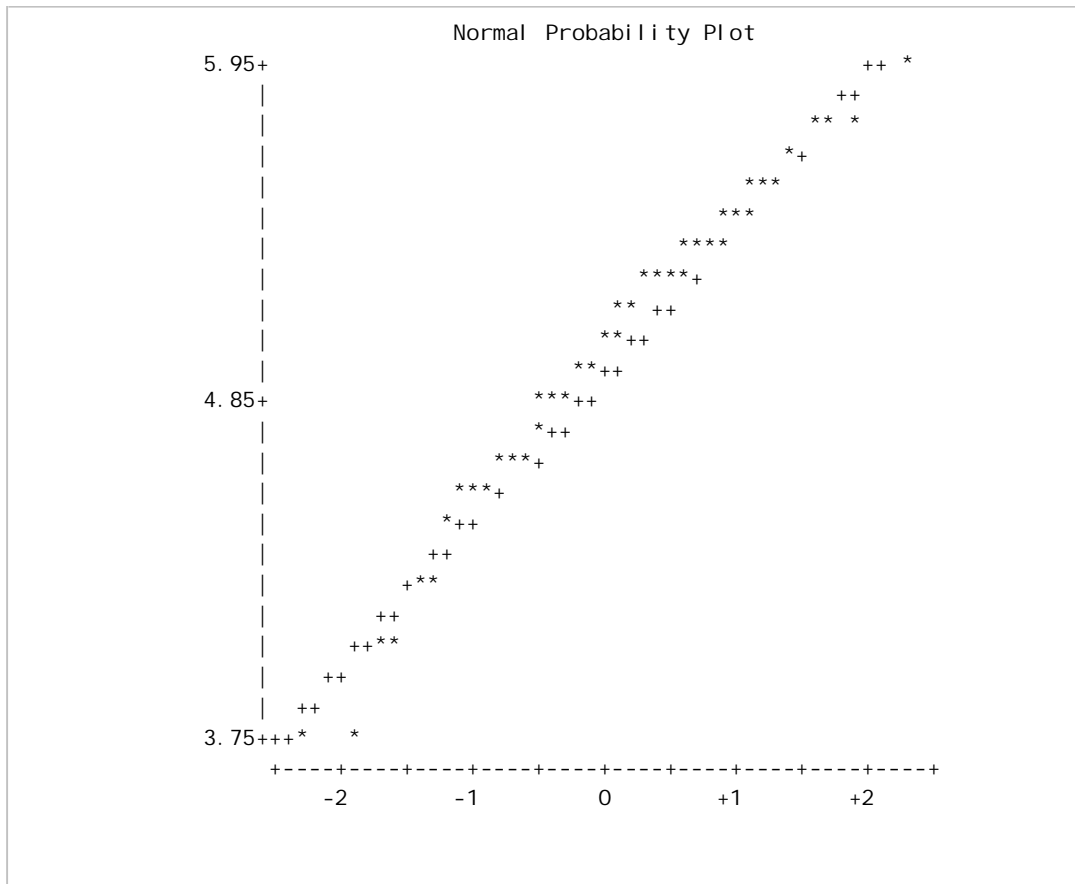
Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
3.7	130	5.6	95
3.7	53	5.7	5

4.0	19	5.7	15
4.0	9	5.7	71
4.2	14	5.9	77



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Moments			
N	70	Sum Weights	70
Mean	4.71285714	Sum Observations	329.9
Std Deviation	0.44977335	Variance	0.20229607
Skewness	-0.896502	Kurtosis	1.00307174
Uncorrected SS	1568.73	Corrected SS	13.9584286
Coeff Variation	9.5435388	Std Error Mean	0.0537582

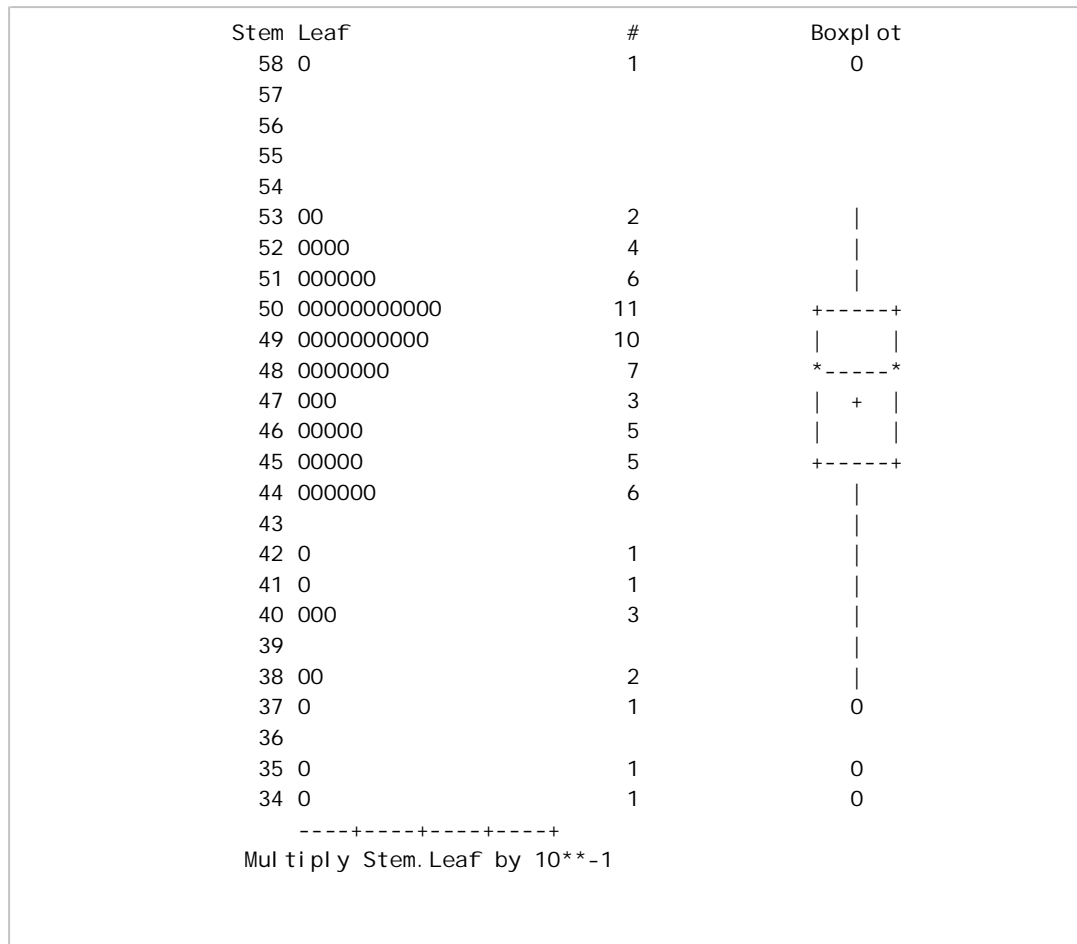
Basic Statistical Measures			
Location		Variability	
Mean	4.712857	Std Deviation	0.44977
Median	4.800000	Variance	0.20230
Mode	5.000000	Range	2.40000
		Interquartile Range	0.50000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	87.66769	Pr > t 	<.0001
Sign	M	35	Pr >= M 	<.0001
Signed Rank	S	1242.5	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	5.80
99%	5.80
95%	5.20
90%	5.15
75% Q3	5.00
50% Median	4.80
25% Q1	4.50
10%	4.00
5%	3.80
1%	3.40
0% Min	3.40

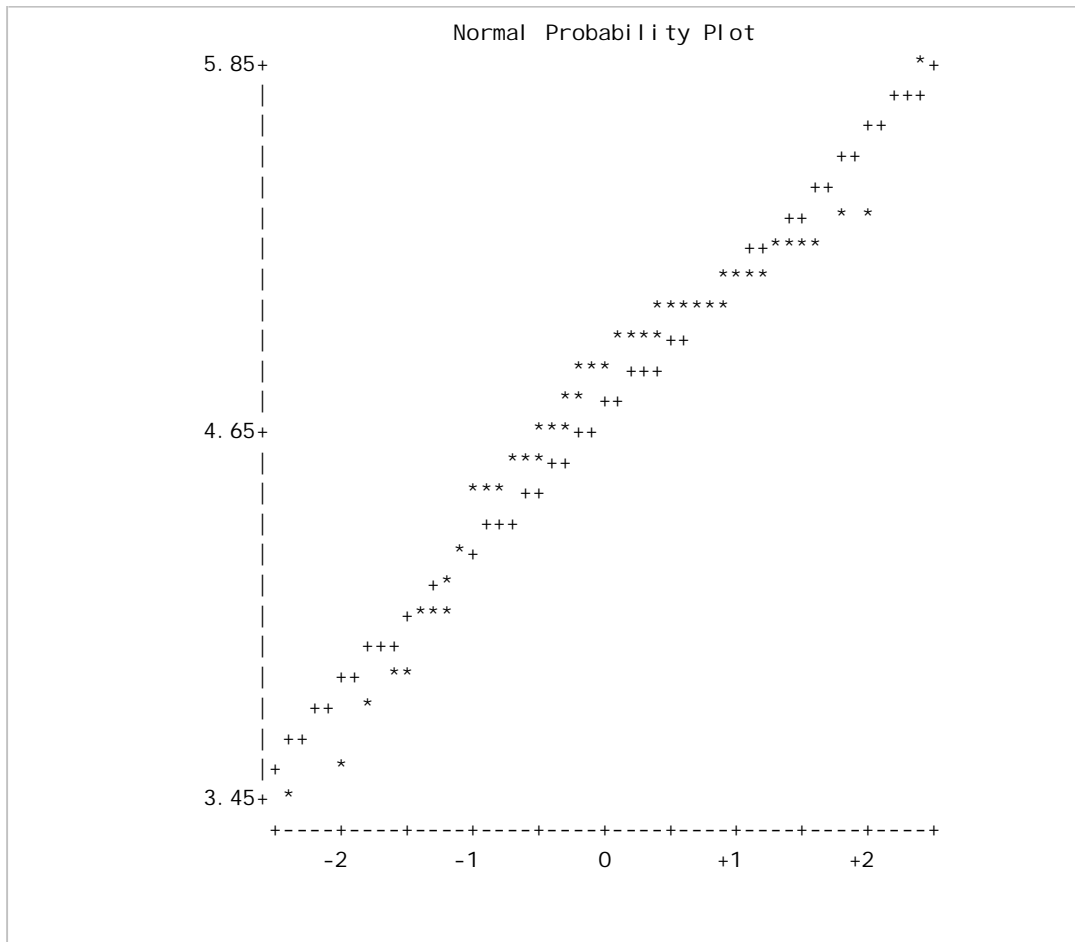
Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
3.4	48	5.2	90

3.5	84	5.2	93
3.7	123	5.3	54
3.8	17	5.3	92
3.8	7	5.8	70



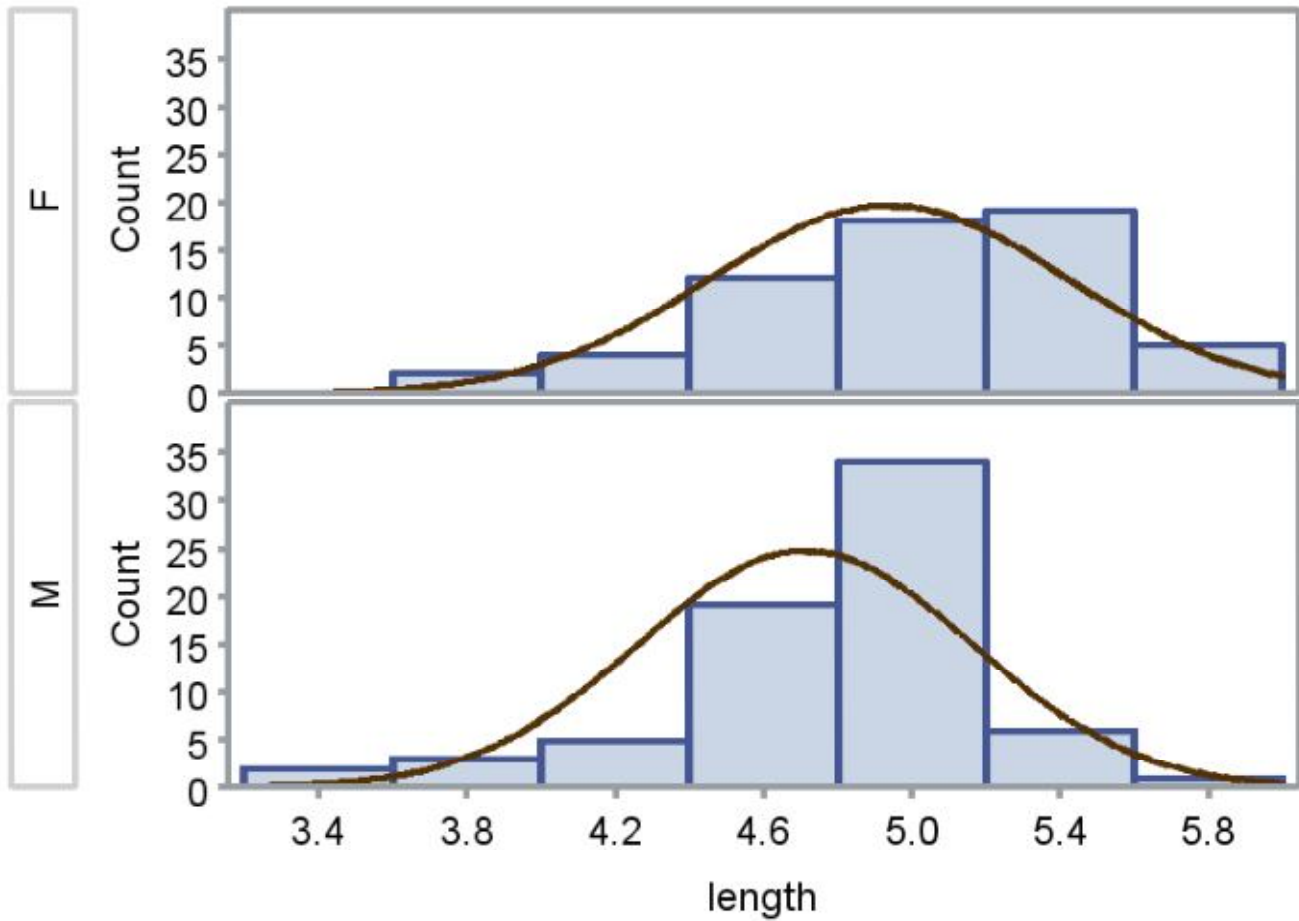
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The UNIVARIATE Procedure
sex = F
Fitted Normal Distribution for length

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	4.94
Std Dev	Sigma	0.485449

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.10387776	Pr > D	0.105
Cramer-von Mises	W-Sq	0.07705508	Pr > W-Sq	0.228
Anderson-Darling	A-Sq	0.50377430	Pr > A-Sq	0.206

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	3.70000	3.81068
5.0	4.00000	4.14151
10.0	4.30000	4.31787
25.0	4.60000	4.61257
50.0	5.00000	4.94000
75.0	5.30000	5.26743
90.0	5.50000	5.56213
95.0	5.70000	5.73849
99.0	5.90000	6.06932

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The UNIVARIATE Procedure
sex = M
Fitted Normal Distribution for length

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	4.712857
Std Dev	Sigma	0.449773

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.16252783	Pr > D	<0.010
Cramer-von Mises	W-Sq	0.34087445	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	1.99478432	Pr > A-Sq	<0.005

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	3.40000	3.66653
5.0	3.80000	3.97305
10.0	4.00000	4.13645
25.0	4.50000	4.40949
50.0	4.80000	4.71286
75.0	5.00000	5.01622
90.0	5.15000	5.28926
95.0	5.20000	5.45267
99.0	5.80000	5.75919

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