

# Noramlity test on residuals compound symmetry assumption

23:48 Wednesday, October 21, 2015 1

## The UNIVARIATE Procedure Variable: Resid (Residual)

Moments			
<b>N</b>	141	<b>Sum Weights</b>	141
<b>Mean</b>	0.87741402	<b>Sum Observations</b>	123.715377
<b>Std Deviation</b>	46.4638738	<b>Variance</b>	2158.89157
<b>Skewness</b>	0.09585474	<b>Kurtosis</b>	0.97181334
<b>Uncorrected SS</b>	302353.37	<b>Corrected SS</b>	302244.82
<b>Coeff Variation</b>	5295.5472	<b>Std Error Mean</b>	3.91296406

Basic Statistical Measures			
Location		Variability	
<b>Mean</b>	0.8774	<b>Std Deviation</b>	46.46387
<b>Median</b>	-1.1000	<b>Variance</b>	2159
<b>Mode</b>	-17.4135	<b>Range</b>	271.28652
		<b>Interquartile Range</b>	54.60000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
<b>Student's t</b>	<b>t</b>	0.224233	<b>Pr &gt;  t </b>	0.8229
<b>Sign</b>	<b>M</b>	-4.5	<b>Pr &gt;=  M </b>	0.5006
<b>Signed Rank</b>	<b>S</b>	-51.5	<b>Pr &gt;=  S </b>	0.9160

Tests for Normality				
Test	Statistic		p Value	
<b>Shapiro-Wilk</b>	<b>W</b>	0.977752	<b>Pr &lt; W</b>	0.0212
<b>Kolmogorov-Smirnov</b>	<b>D</b>	0.080669	<b>Pr &gt; D</b>	0.0235
<b>Cramer-von Mises</b>	<b>W-Sq</b>	0.187511	<b>Pr &gt; W-Sq</b>	0.0078
<b>Anderson-Darling</b>	<b>A-Sq</b>	1.136853	<b>Pr &gt; A-Sq</b>	0.0056

Quantiles (Definition 5)	
Quantile	Estimate
<b>100% Max</b>	130.5865
<b>99%</b>	119.3000
<b>95%</b>	91.6745
<b>90%</b>	50.7000
<b>75% Q3</b>	29.9000
<b>50% Median</b>	-1.1000

**The UNIVARIATE Procedure  
Variable: Resid (Residual)**

Quantiles (Definition 5)	
Quantile	Estimate
25% Q1	-24.7000
10%	-50.3000
5%	-76.1000
1%	-123.3000
0% Min	-140.7000

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-140.7	64	98.900	96
-123.3	91	102.700	97
-115.7	63	116.300	55
-92.3	103	119.300	54
-87.1	90	130.587	21