

## PSA-NSA mixtures: SAR-SMA

The UNIVARIATE Procedure  
Variable: y

Moments			
<b>N</b>	533	<b>Sum Weights</b>	533
<b>Mean</b>	0	<b>Sum Observations</b>	0
<b>Std Deviation</b>	0.00412903	<b>Variance</b>	0.00001705
<b>Skewness</b>	0.01527935	<b>Kurtosis</b>	0.75574667
<b>Uncorrected SS</b>	0.00907001	<b>Corrected SS</b>	0.00907001
<b>Coeff Variation</b>	.	<b>Std Error Mean</b>	0.00017885

Basic Statistical Measures			
Location		Variability	
<b>Mean</b>	0.00000	<b>Std Deviation</b>	0.00413
<b>Median</b>	-0.00003	<b>Variance</b>	0.0000170
<b>Mode</b>	-0.00171	<b>Range</b>	0.02782
		<b>Interquartile Range</b>	0.00463

Note: The mode displayed is the smallest of 6 modes with a count of 2.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
<b>Student's t</b>	<b>t</b>	0	<b>Pr &gt;  t </b>	1.0000
<b>Sign</b>	<b>M</b>	-3.5	<b>Pr &gt;=  M </b>	0.7950
<b>Signed Rank</b>	<b>S</b>	146.5	<b>Pr &gt;=  S </b>	0.9672

Tests for Normality				
Test	Statistic		p Value	
<b>Shapiro-Wilk</b>	<b>W</b>	0.990556	<b>Pr &lt; W</b>	0.0017
<b>Kolmogorov-Smirnov</b>	<b>D</b>	0.048079	<b>Pr &gt; D</b>	<0.0100
<b>Cramer-von Mises</b>	<b>W-Sq</b>	0.314329	<b>Pr &gt; W-Sq</b>	<0.0050
<b>Anderson-Darling</b>	<b>A-Sq</b>	1.771786	<b>Pr &gt; A-Sq</b>	<0.0050

Quantiles (Definition 5)	
Level	Quantile
<b>100% Max</b>	1.39945E-02

<b>99%</b>	1.13051E-02
<b>95%</b>	7.06875E-03
<b>90%</b>	4.85032E-03
<b>75% Q3</b>	2.37866E-03
<b>50% Median</b>	-2.82031E-05
<b>25% Q1</b>	-2.25288E-03
<b>10%</b>	-5.22858E-03
<b>5%</b>	-7.02592E-03
<b>1%</b>	-1.07906E-02
<b>0% Min</b>	-1.38244E-02

<b>Extreme Observations</b>			
<b>Lowest</b>		<b>Highest</b>	
<b>Value</b>	<b>Obs</b>	<b>Value</b>	<b>Obs</b>
-0.0138244	467	0.0113059	342
-0.0138160	216	0.0115354	442
-0.0111864	485	0.0115461	214
-0.0110119	72	0.0116175	217
-0.0108840	52	0.0139945	320

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### The SPATIALREG Procedure

Model: MODEL 1  
Dependent Variable: y

Model Fit Summary	
Dependent Variable	y
Number of Observations	533
Data Set	WORK.STEP1
Spatial Weights	WORK.SWM
Model	SAR
Log Likelihood	2317
Maximum Absolute Gradient	2.32852E-7
Number of Iterations	8
Optimization Method	Newton-Raphson
AIC	-4628
SBC	-4615

Algorithm converged.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Approx Pr >  t
Intercept	1	0.000025536	0.000126	0.20	0.8393
_rho	1	0.761854	0.032346	23.55	<.0001
_sigma2	0	0.000008452	.	.	.

Correlation of Parameter Estimates			
	Intercept	_rho	_sigma2
Intercept	1.0000	0.0086	0.0000
_rho	0.0086	1.0000	0.0000
_sigma2	0.0000	0.0000	1.0000

## PSA-NSA mixtures: SAR-SMA

### The SPATIALREG Procedure

Model: MODEL 1  
Dependent Variable: y

Model Fit Summary	
Dependent Variable	y
Number of Observations	533
Data Set	WORK.STEP1
Spatial Weights	WORK.SWM
Model	SARMA
Log Likelihood	2320
Maximum Absolute Gradient	1.25263E-7
Number of Iterations	11
Optimization Method	Newton-Raphson
AIC	-4631
SBC	-4614

Algorithm converged.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Approx Pr >  t
Intercept	1	0.000020489	0.000085338	0.24	0.8103
_rho	1	0.877937	0.043867	20.01	<.0001
_lambda	1	0.298832	0.114447	2.61	0.0090
_sigma2	0	0.000007890	.	.	.

Correlation of Parameter Estimates				
	Intercept	_rho	_lambda	_sigma2
Intercept	1.0000	-0.0159	-0.0241	0.0000
_rho	-0.0159	1.0000	0.8578	0.0000
_lambda	-0.0241	0.8578	1.0000	0.0000
_sigma2	0.0000	0.0000	0.0000	1.0000

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Obs	rho	theta
1	0.87794	0.29883

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**PSA-NSA mixtures: SAR-SMA**

<b>sumc</b>	<b>sumc2</b>
2934	16982

<b>mc</b>	<b>emc</b>	<b>semc</b>	<b>zmc</b>	<b>pr</b>
0.0050661	-0.00188	0.0261087	0.2660357	0.3951058

<b>gro</b>	<b>segr</b>	<b>z</b>	<b>pr</b>
0.9242442	0.068023	-1.113678	0.1327086

<b>mc</b>	<b>emc</b>	<b>semc</b>	<b>zmc</b>	<b>pr</b>
-0.100161	-0.00188	0.0261087	-3.76433	0.0000835

<b>gro</b>	<b>segr</b>	<b>z</b>	<b>pr</b>
1.0240749	0.068023	0.3539235	0.3616981