The FREQ Procedure

sex	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	100.00	9	100.00

count
0.28125

probability
0.6

The GENMOD Procedure

Bayesian Analysis

Model Information	
Data Set	WORK.WEAPONS
Burn-In Size	2000
MC Sample Size	10000
Thinning	1
Sampling Algorithm	Conjugate
Distribution	Normal
Link Function	Identity
Dependent Variable	an

Number of Observations Read	32
Number of Observations Used	32

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates					
Parameter	**DF**	**Estimate**	**Standard Error**	**Wald 95% Confidence Limits**	
Intercept	1	30.3081	7.5590	15.4928	45.1234
aw	1	-0.3033	0.2284	-0.7509	0.1443
cxen	1	-0.0441	0.2261	-0.4872	0.3991
aw*cxen	1	0.0149	0.0046	0.0059	0.0238
Scale	1	1.2176	0.1522	0.9531	1.5557

Note: The scale parameter was estimated by maximum likelihood.

The GENMOD Procedure

Bayesian Analysis

Uniform Prior for Regression Coefficients	
Parameter	**Prior**
Intercept	Constant
aw	Constant
cxen	Constant
awcxen	Constant

Algorithm converged.

Independent Prior Distributions for Model Parameters	
Parameter	**Prior Distribution**
Dispersion	Improper

Initial Values of the Chain						
Chain	**Seed**	**Intercept**	**aw**	**cxen**	**awcxen**	**Dispersion**
1	1618146911	30.30807	-0.30328	-0.04405	0.014852	1.395372

Fit Statistics	
DIC (smaller is better)	114.255
pD (effective number of parameters)	5.099

The GENMOD Procedure

Bayesian Analysis

Posterior Summaries						
				Percentiles		
Parameter	N	Mean	Standard Deviation	25%	50%	75%
Intercept	10000	30.1751	8.4208	24.7264	30.1774	35.7133
aw	10000	-0.2986	0.2525	-0.4659	-0.2968	-0.1310
cxen	10000	-0.0429	0.2541	-0.2095	-0.0429	0.1240
awcxen	10000	0.0148	0.00512	0.0114	0.0148	0.0181
Dispersion	10000	1.8242	0.5221	1.4589	1.7413	2.0929

Posterior Intervals					
		Equal-Tail Interval		HPD Interval	
Parameter	Alpha				
Intercept	0.050	13.5945	47.0346	13.5624	46.9448
aw	0.050	-0.7992	0.1935	-0.7913	0.2004
cxen	0.050	-0.5395	0.4616	-0.5486	0.4494
awcxen	0.050	0.00466	0.0250	0.00454	0.0248
Dispersion	0.050	1.0594	3.0888	0.9662	2.8616

Posterior Correlation Matrix					
Parameter	Intercept	aw	cxen	awcxen	Dispersion
Intercept	1.000	-0.839	-0.792	0.973	-0.018
aw	-0.839	1.000	0.350	-0.787	0.007
cxen	-0.792	0.350	1.000	-0.845	0.026
awcxen	0.973	-0.787	-0.845	1.000	-0.022
Dispersion	-0.018	0.007	0.026	-0.022	1.000

The GENMOD Procedure

Bayesian Analysis

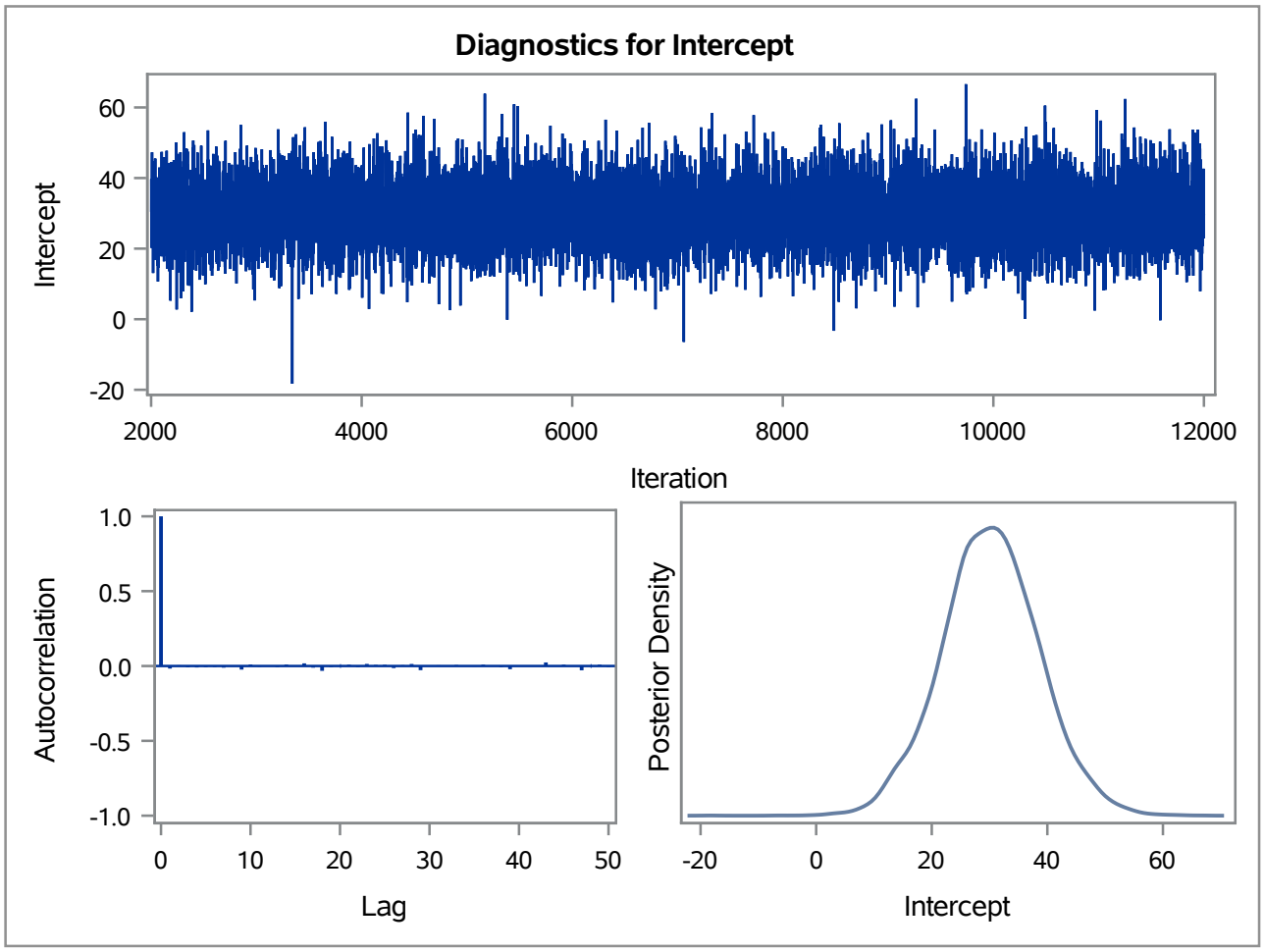
Posterior Autocorrelations				
Parameter	Lag 1	Lag 5	Lag 10	Lag 50
Intercept	-0.0172	-0.0079	0.0102	-0.0060
aw	-0.0152	-0.0077	0.0116	0.0039
cxen	-0.0103	-0.0083	-0.0040	-0.0029
awcxen	-0.0218	-0.0052	0.0105	-0.0048
Dispersion	-0.0096	0.0149	0.0101	0.0130

Geweke Diagnostics		
Parameter	z	Pr > |z|
Intercept	-0.5477	0.5839
aw	0.8393	0.4013
cxen	-0.5224	0.6014
awcxen	0.0921	0.9267
Dispersion	1.2185	0.2230

Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
Intercept	10356.2	0.9656	1.0356
aw	10313.0	0.9697	1.0313
cxen	10209.9	0.9794	1.0210
awcxen	10455.0	0.9565	1.0455
Dispersion	10000.0	1.0000	1.0000

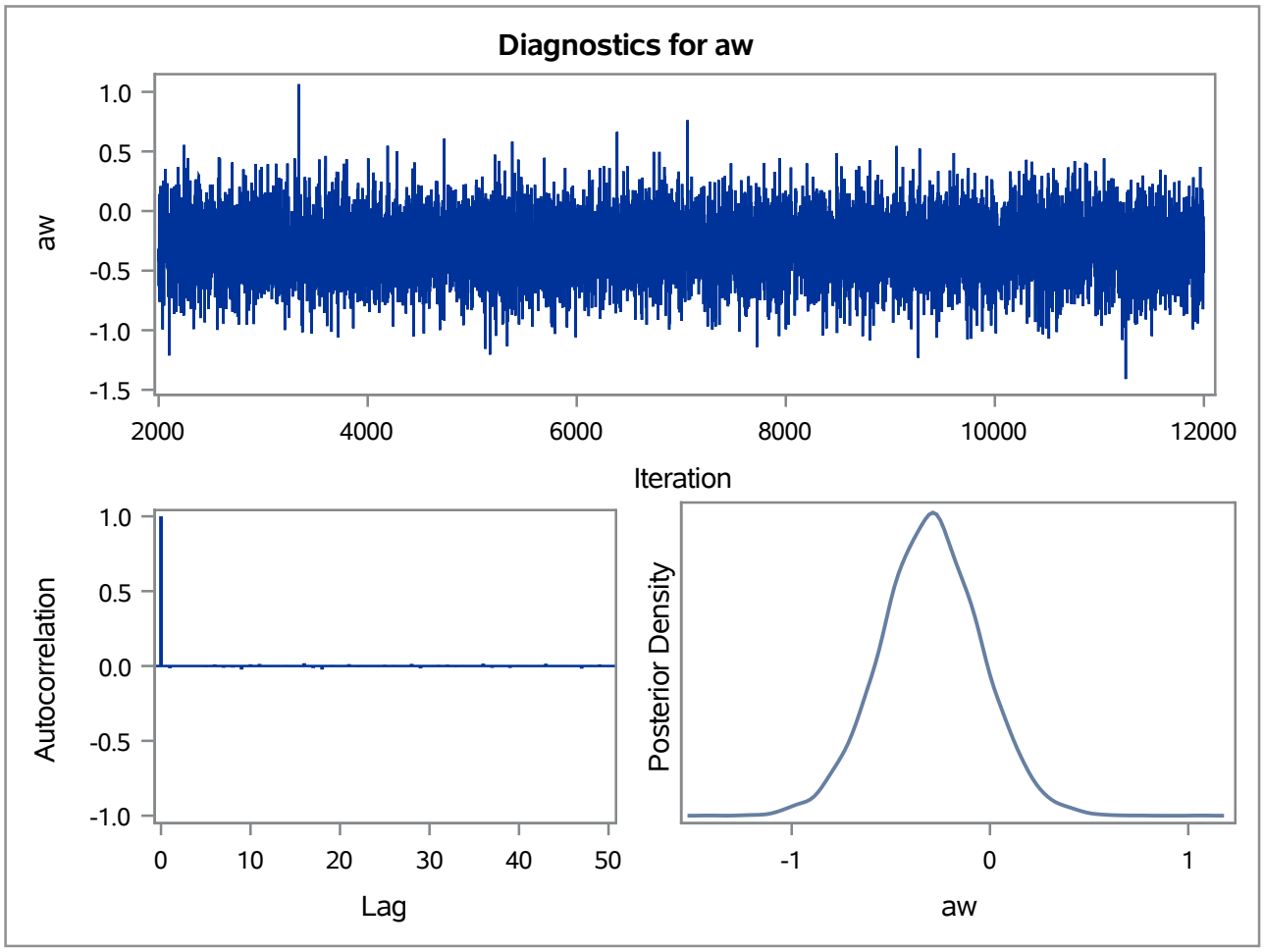
The GENMOD Procedure

Bayesian Analysis



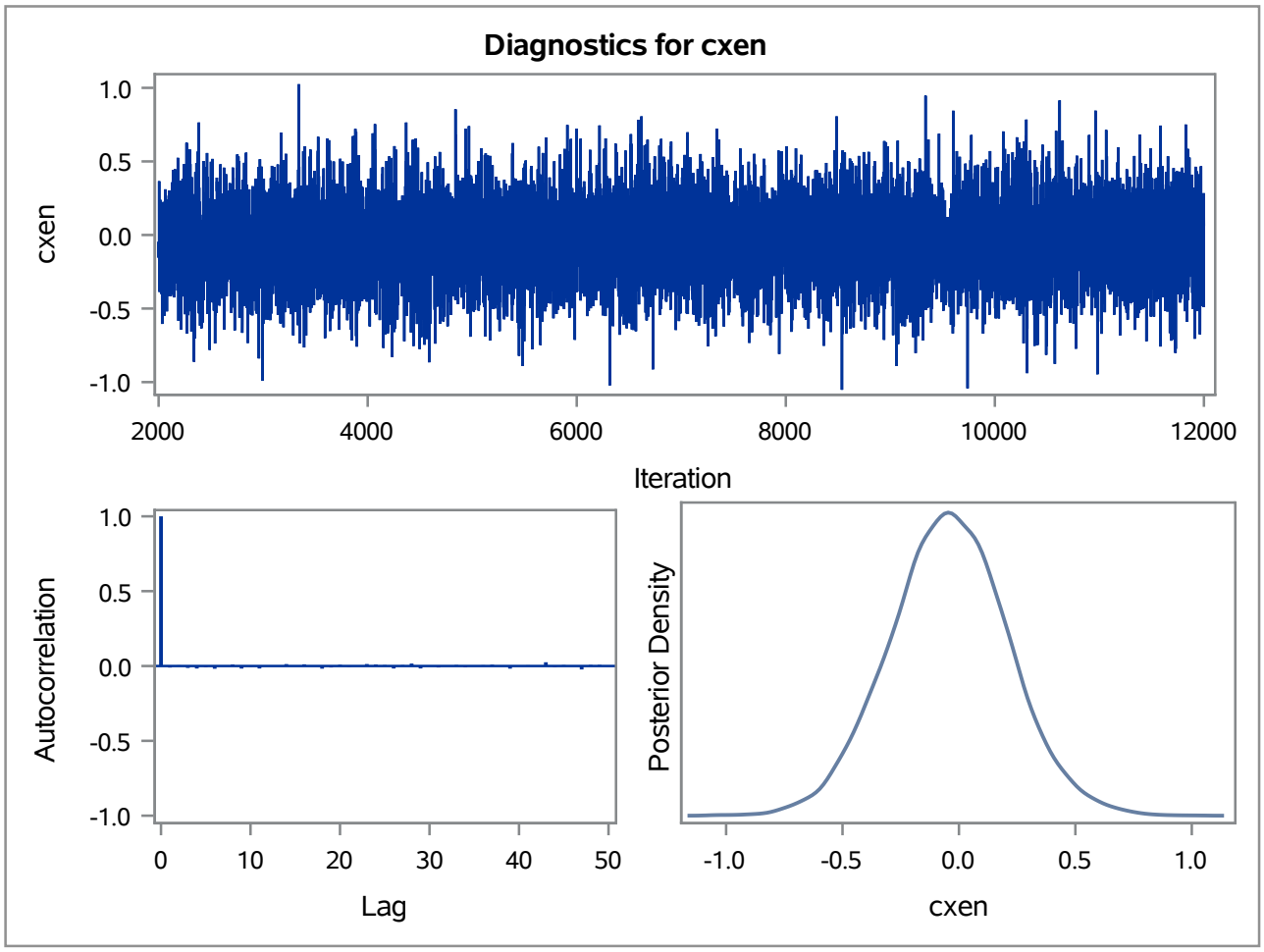
The GENMOD Procedure

Bayesian Analysis



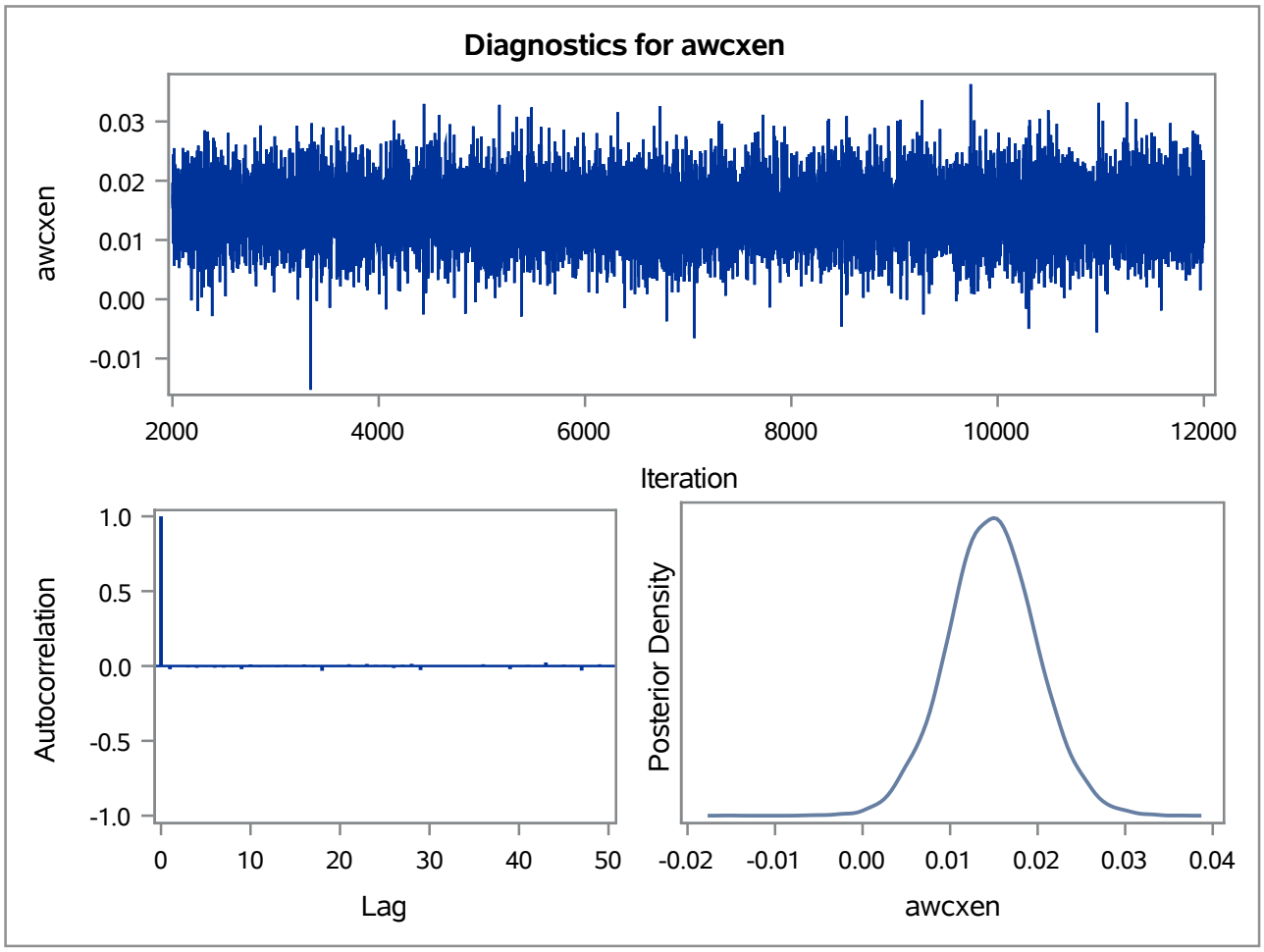
The GENMOD Procedure

Bayesian Analysis



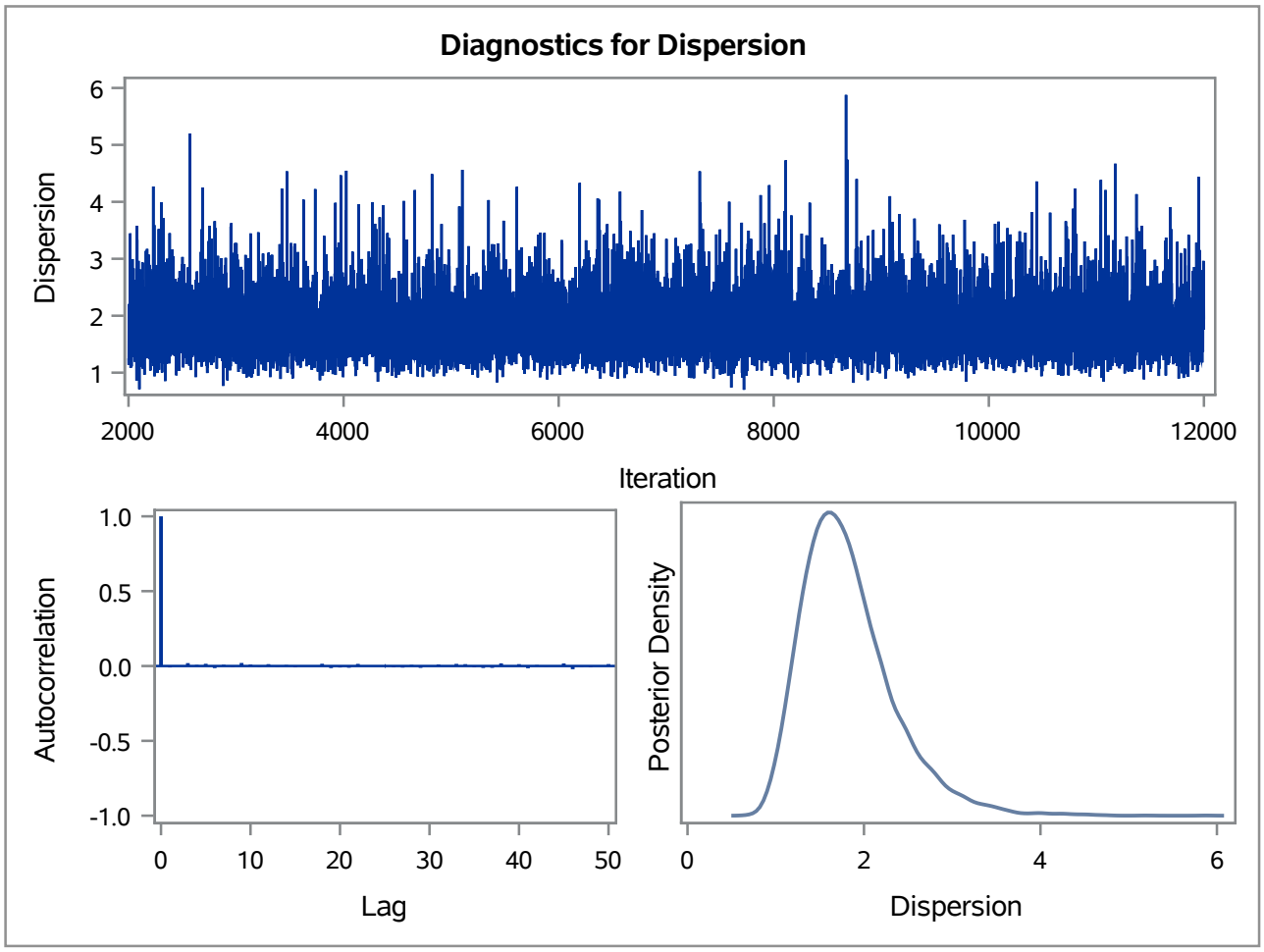
The GENMOD Procedure

Bayesian Analysis



The GENMOD Procedure

Bayesian Analysis



The GENMOD Procedure

Bayesian Analysis

Model Information	
Data Set	WORK.WEAPONS
Burn-In Size	2000
MC Sample Size	10000
Thinning	1
Sampling Algorithm	Conjugate
Distribution	Normal
Link Function	Identity
Dependent Variable	an

Number of Observations Read	32
Number of Observations Used	32

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates					
Parameter	**DF**	**Estimate**	**Standard Error**	**Wald 95% Confidence Limits**	
Intercept	1	6.5158	2.0347	2.5278	10.5037
aw	1	0.2799	0.1617	-0.0370	0.5968
cxen	1	0.5726	0.1403	0.2976	0.8476
Scale	1	1.4029	0.1754	1.0981	1.7924

Note: The scale parameter was estimated by maximum likelihood.

The GENMOD Procedure

Bayesian Analysis

Uniform Prior for Regression Coefficients	
Parameter	**Prior**
Intercept	Constant
aw	Constant
cxen	Constant

Algorithm converged.

Independent Prior Distributions for Model Parameters	
Parameter	**Prior Distribution**
Dispersion	Improper

Initial Values of the Chain					
Chain	**Seed**	**Intercept**	**aw**	**cxen**	**Dispersion**
1	712206201	6.515785	0.279929	0.572617	1.852319

Fit Statistics	
DIC (smaller is better)	121.105
pD (effective number of parameters)	4.101

The GENMOD Procedure

Bayesian Analysis

Posterior Summaries						
				Percentiles		
Parameter	N	Mean	Standard Deviation	25%	50%	75%
Intercept	10000	6.4797	2.2304	5.0009	6.4341	7.9003
aw	10000	0.2802	0.1761	0.1653	0.2806	0.4000
cxen	10000	0.5732	0.1524	0.4736	0.5729	0.6728
Dispersion	10000	2.3261	0.6599	1.8540	2.2163	2.6740

Posterior Intervals					
Parameter	Alpha	Equal-Tail Interval		HPD Interval	
Intercept	0.050	2.1939	11.0062	2.2707	11.0488
aw	0.050	-0.0713	0.6157	-0.0554	0.6303
cxen	0.050	0.2756	0.8793	0.2744	0.8755
Dispersion	0.050	1.3726	3.8880	1.2617	3.6698

Posterior Correlation Matrix				
Parameter	Intercept	aw	cxen	Dispersion
Intercept	1.000	-0.536	0.265	0.001
aw	-0.536	1.000	-0.955	0.010
cxen	0.265	-0.955	1.000	-0.012
Dispersion	0.001	0.010	-0.012	1.000

The GENMOD Procedure

Bayesian Analysis

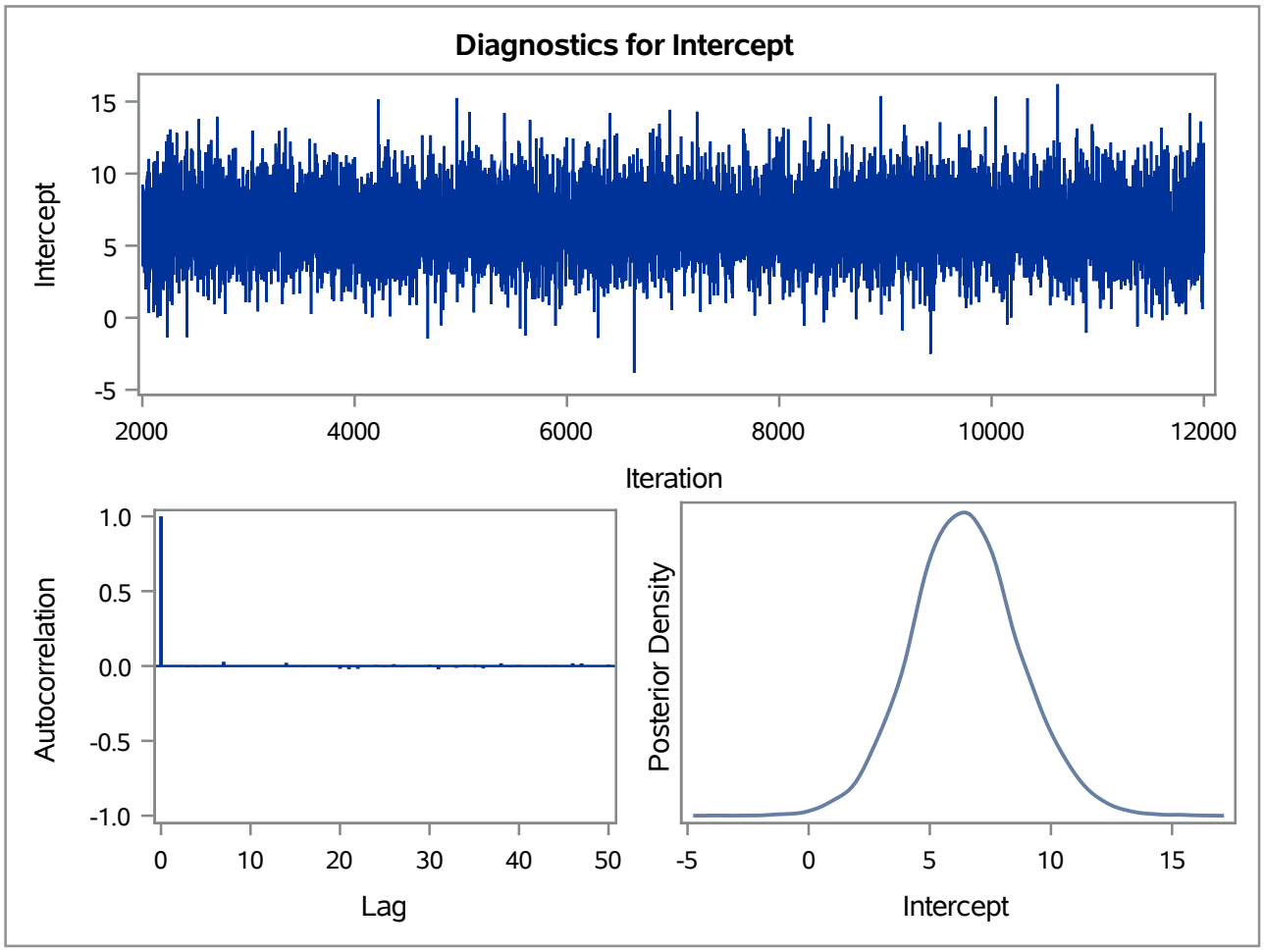
Posterior Autocorrelations				
Parameter	Lag 1	Lag 5	Lag 10	Lag 50
Intercept	-0.0002	-0.0029	-0.0016	0.0096
aw	0.0045	0.0011	0.0069	0.0042
cxen	0.0017	0.0024	0.0073	0.0103
Dispersion	-0.0154	-0.0175	0.0015	0.0044

Geweke Diagnostics		
Parameter	z	Pr > |z|
Intercept	-1.5958	0.1105
aw	0.0418	0.9667
cxen	0.6158	0.5380
Dispersion	-1.2763	0.2018

Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
Intercept	10000.0	1.0000	1.0000
aw	10000.0	1.0000	1.0000
cxen	10000.0	1.0000	1.0000
Dispersion	10318.5	0.9691	1.0318

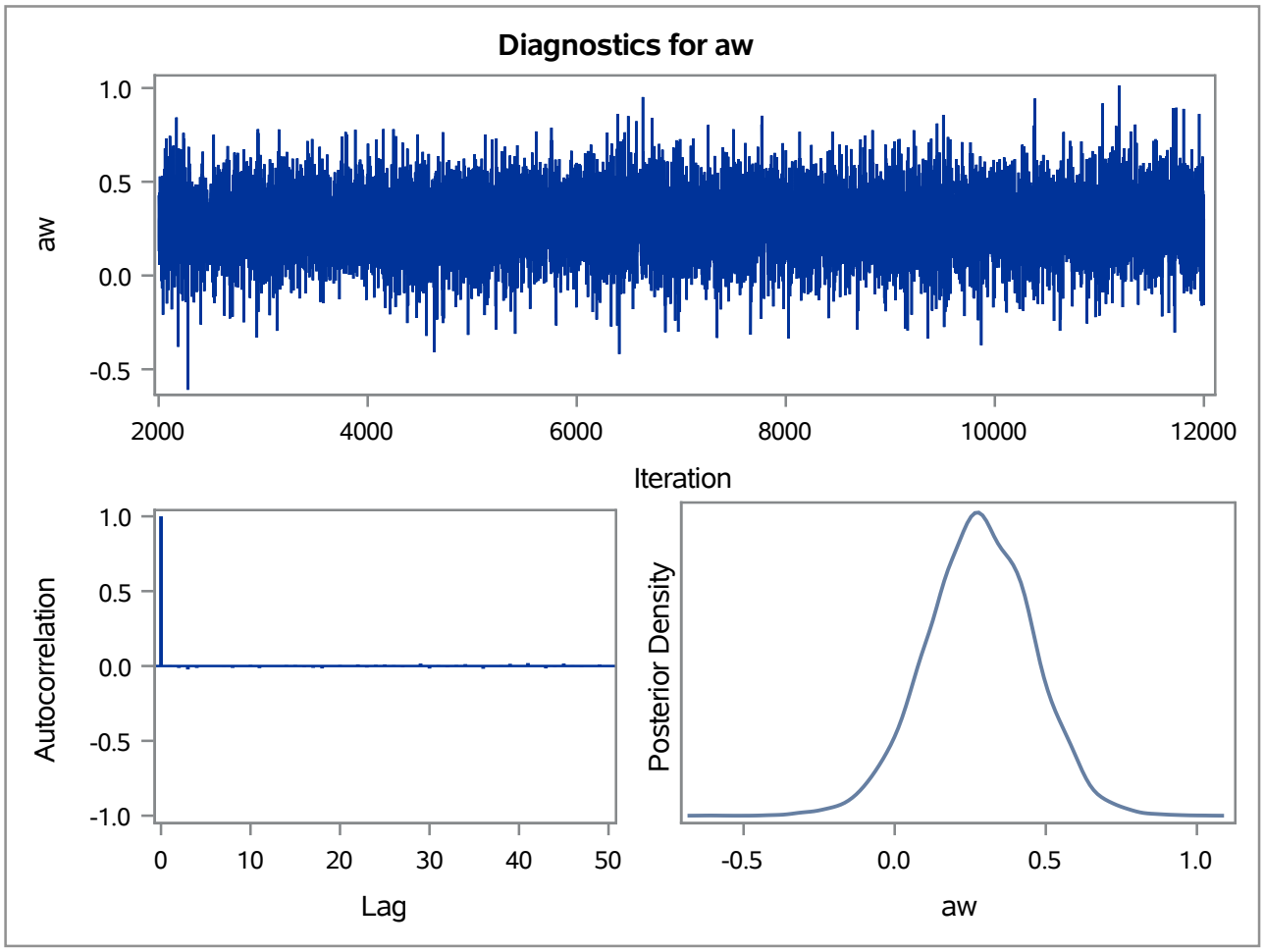
The GENMOD Procedure

Bayesian Analysis



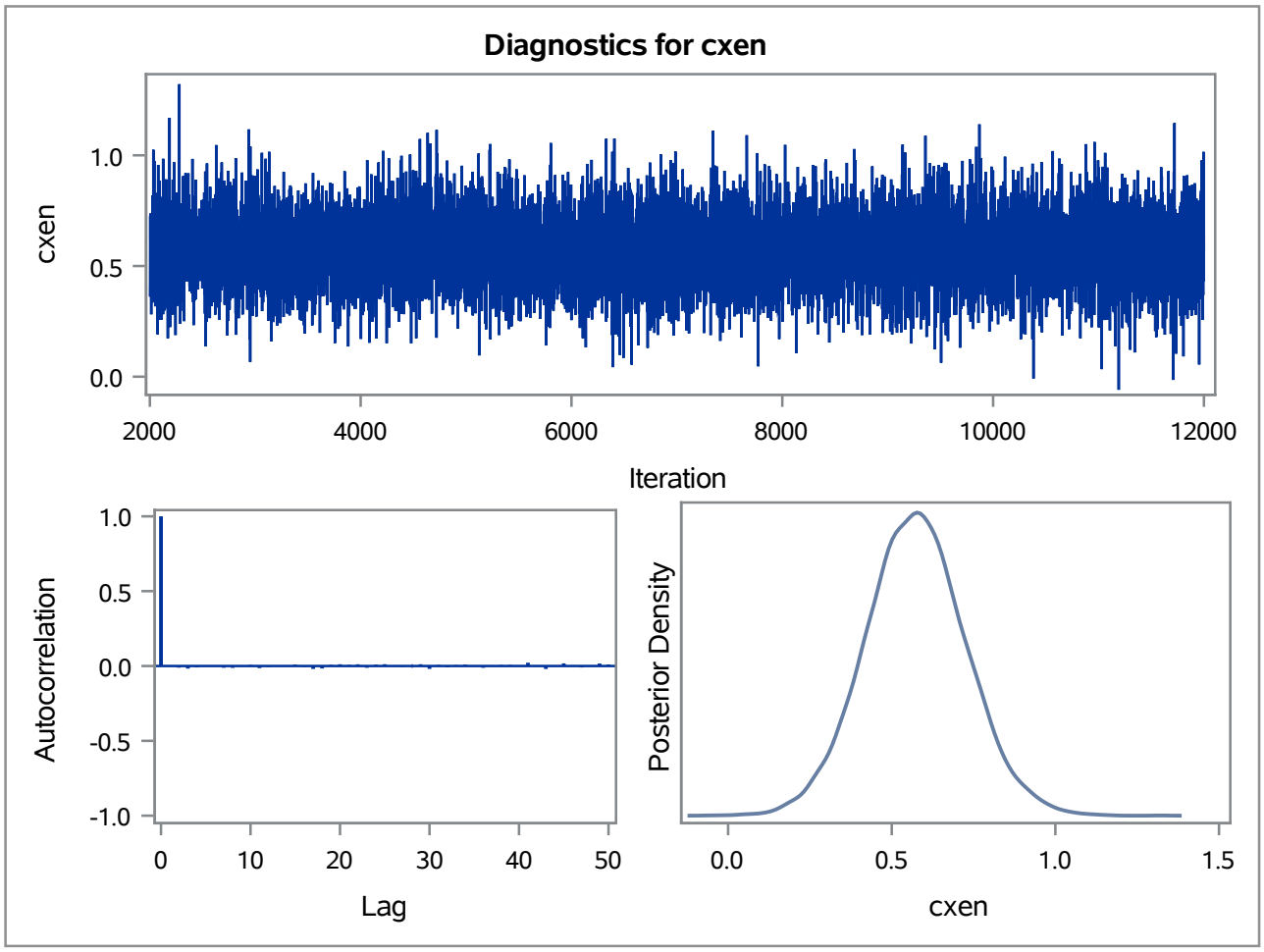
The GENMOD Procedure

Bayesian Analysis



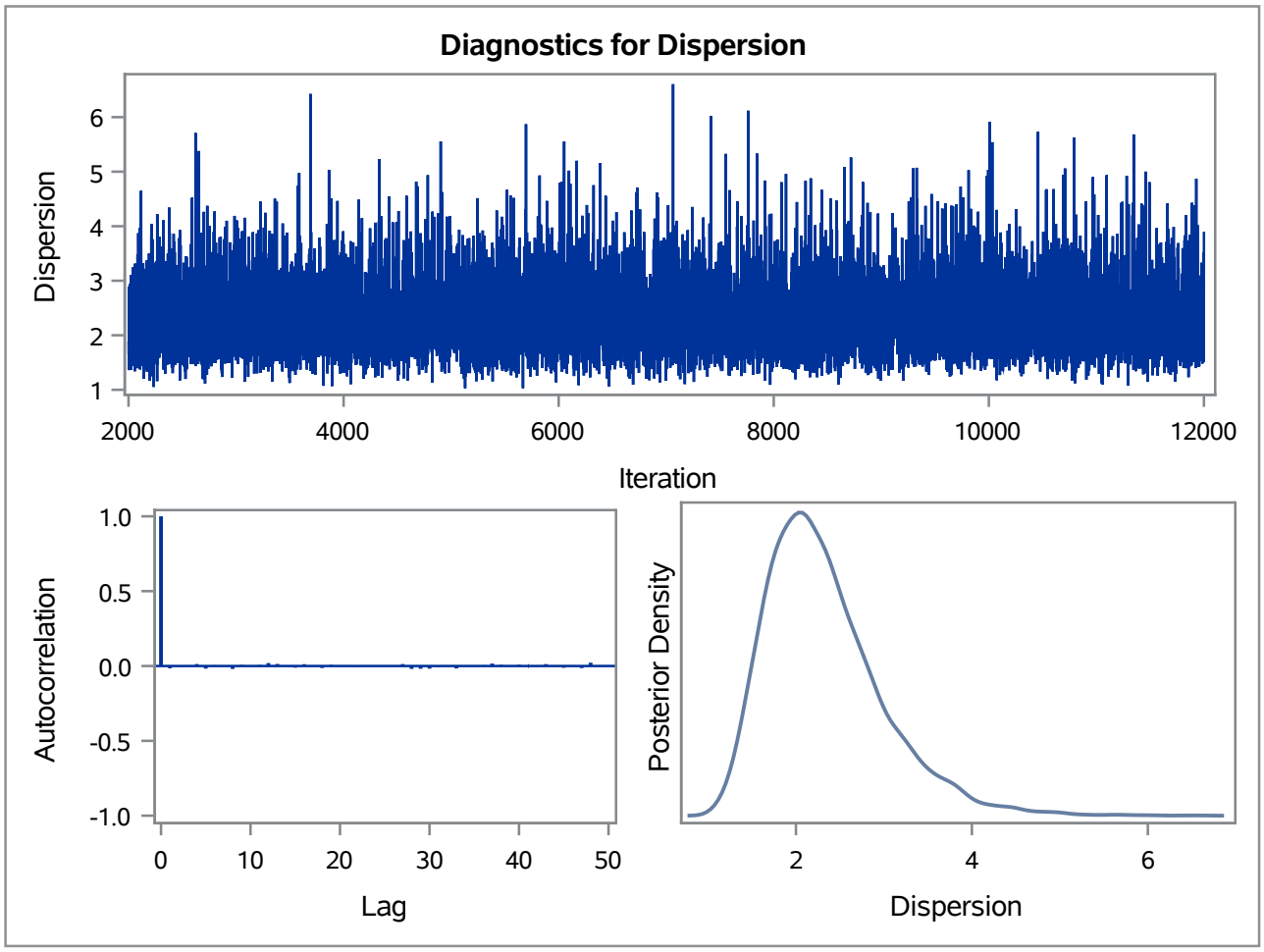
The GENMOD Procedure

Bayesian Analysis



The GENMOD Procedure

Bayesian Analysis



The GENMOD Procedure

Bayesian Analysis

Model Information	
Data Set	WORK.WEAPONS2
Burn-In Size	2000
MC Sample Size	10000
Thinning	1
Sampling Algorithm	Conjugate
Distribution	Normal
Link Function	Identity
Dependent Variable	an

Number of Observations Read	16
Number of Observations Used	16

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates					
Parameter	**DF**	**Estimate**	**Standard Error**	**Wald 95% Confidence Limits**	
Intercept	1	6.8609	3.8517	-0.6883	14.4102
aw	1	0.4697	0.2624	-0.0447	0.9841
cxen	1	0.3762	0.2346	-0.0837	0.8360
Scale	1	1.6066	0.2840	1.1361	2.2718

Note: The scale parameter was estimated by maximum likelihood.

The GENMOD Procedure

Bayesian Analysis

Uniform Prior for Regression Coefficients	
Parameter	**Prior**
Intercept	Constant
aw	Constant
cxen	Constant

Algorithm converged.

Independent Prior Distributions for Model Parameters	
Parameter	**Prior Distribution**
Dispersion	Improper

Initial Values of the Chain					
Chain	**Seed**	**Intercept**	**aw**	**cxen**	**Dispersion**
1	1786997055	6.860927	0.469724	0.376169	2.293173

Fit Statistics	
DIC (smaller is better)	69.727
pD (effective number of parameters)	4.072

The GENMOD Procedure

Bayesian Analysis

Posterior Summaries						
				Percentiles		
Parameter	N	Mean	Standard Deviation	25%	50%	75%
Intercept	10000	6.8229	4.6561	3.8641	6.8957	9.8186
aw	10000	0.4705	0.3130	0.2721	0.4701	0.6721
cxen	10000	0.3763	0.2791	0.1956	0.3743	0.5558
Dispersion	10000	3.7620	1.7501	2.5847	3.3664	4.4802

Posterior Intervals					
		Equal-Tail Interval		HPD Interval	
Parameter	Alpha				
Intercept	0.050	-2.3919	15.8525	-2.4786	15.7438
aw	0.050	-0.1543	1.0874	-0.1448	1.0928
cxen	0.050	-0.1718	0.9313	-0.1631	0.9383
Dispersion	0.050	1.6672	8.1852	1.3422	7.0929

Posterior Correlation Matrix				
Parameter	Intercept	aw	cxen	Dispersion
Intercept	1.000	-0.427	0.065	-0.005
aw	-0.427	1.000	-0.929	0.011
cxen	0.065	-0.929	1.000	-0.010
Dispersion	-0.005	0.011	-0.010	1.000

The GENMOD Procedure

Bayesian Analysis

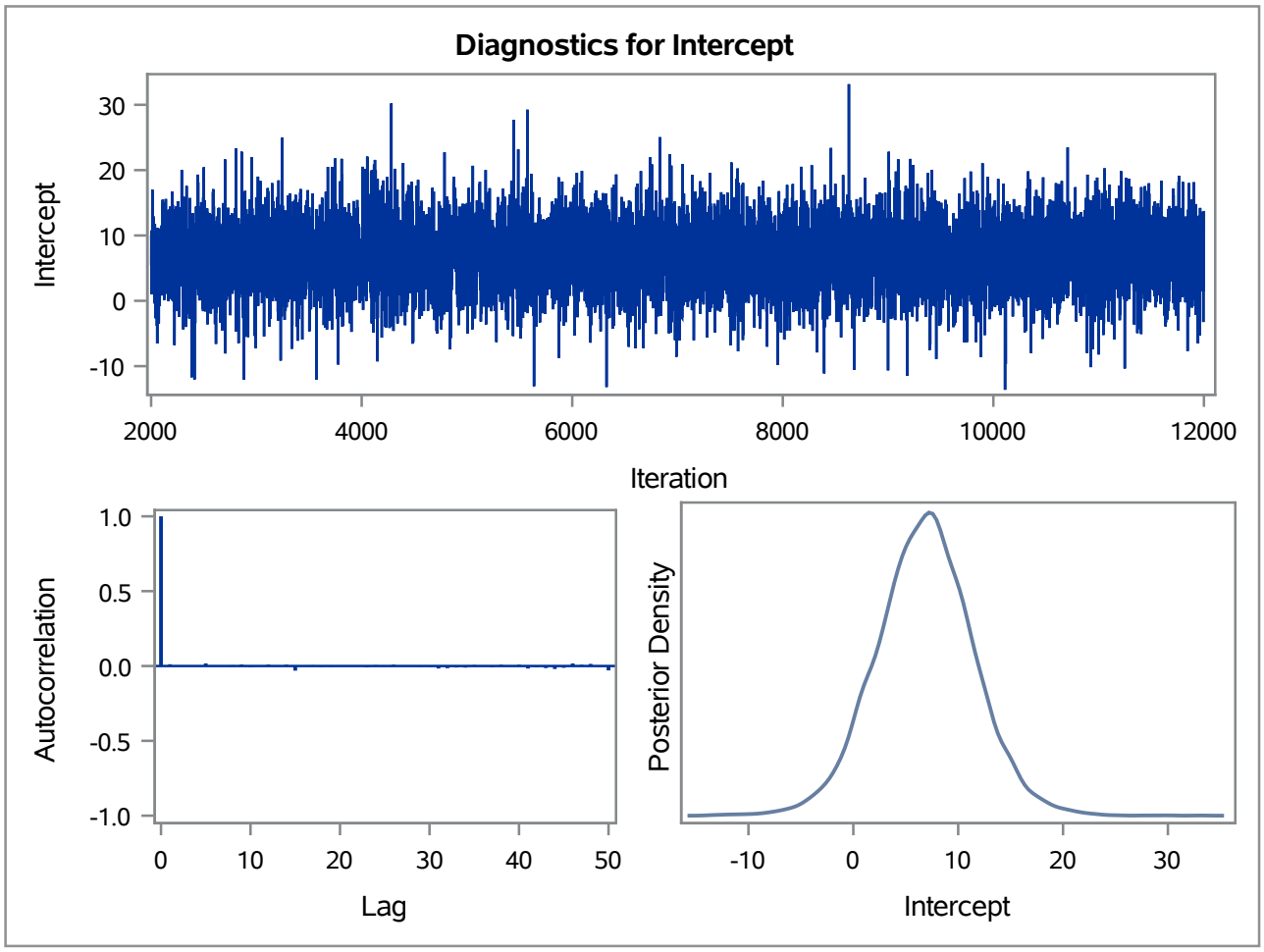
Posterior Autocorrelations				
Parameter	Lag 1	Lag 5	Lag 10	Lag 50
Intercept	0.0118	0.0172	-0.0065	-0.0293
aw	-0.0074	0.0055	-0.0001	-0.0023
cxen	-0.0016	0.0011	-0.0037	0.0036
Dispersion	-0.0061	-0.0180	-0.0028	0.0096

Geweke Diagnostics		
Parameter	z	Pr > |z|
Intercept	-0.2248	0.8221
aw	0.3770	0.7062
cxen	-0.3769	0.7063
Dispersion	0.6577	0.5107

Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
Intercept	9770.2	1.0235	0.9770
aw	10000.0	1.0000	1.0000
cxen	10000.0	1.0000	1.0000
Dispersion	10000.0	1.0000	1.0000

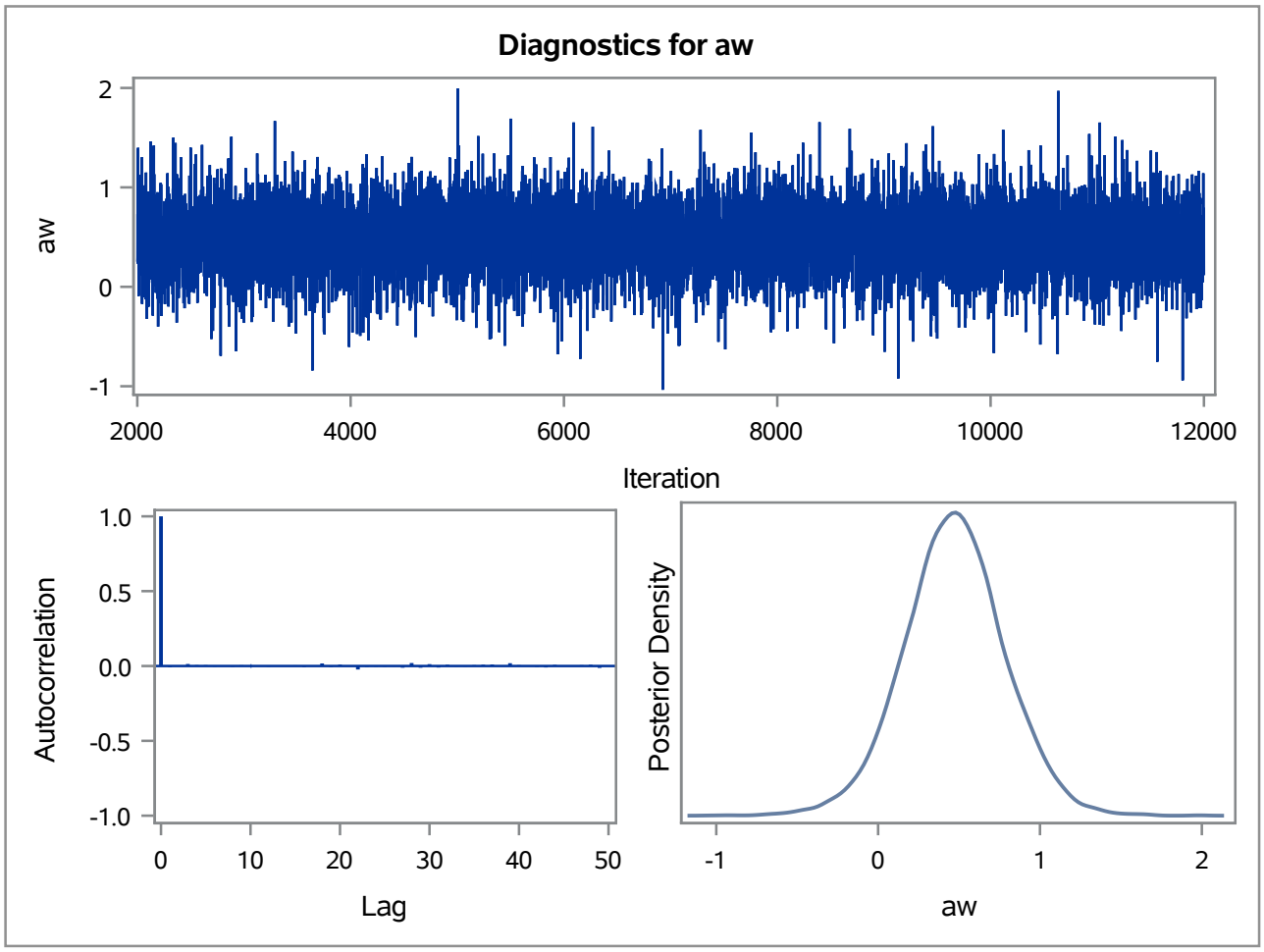
The GENMOD Procedure

Bayesian Analysis



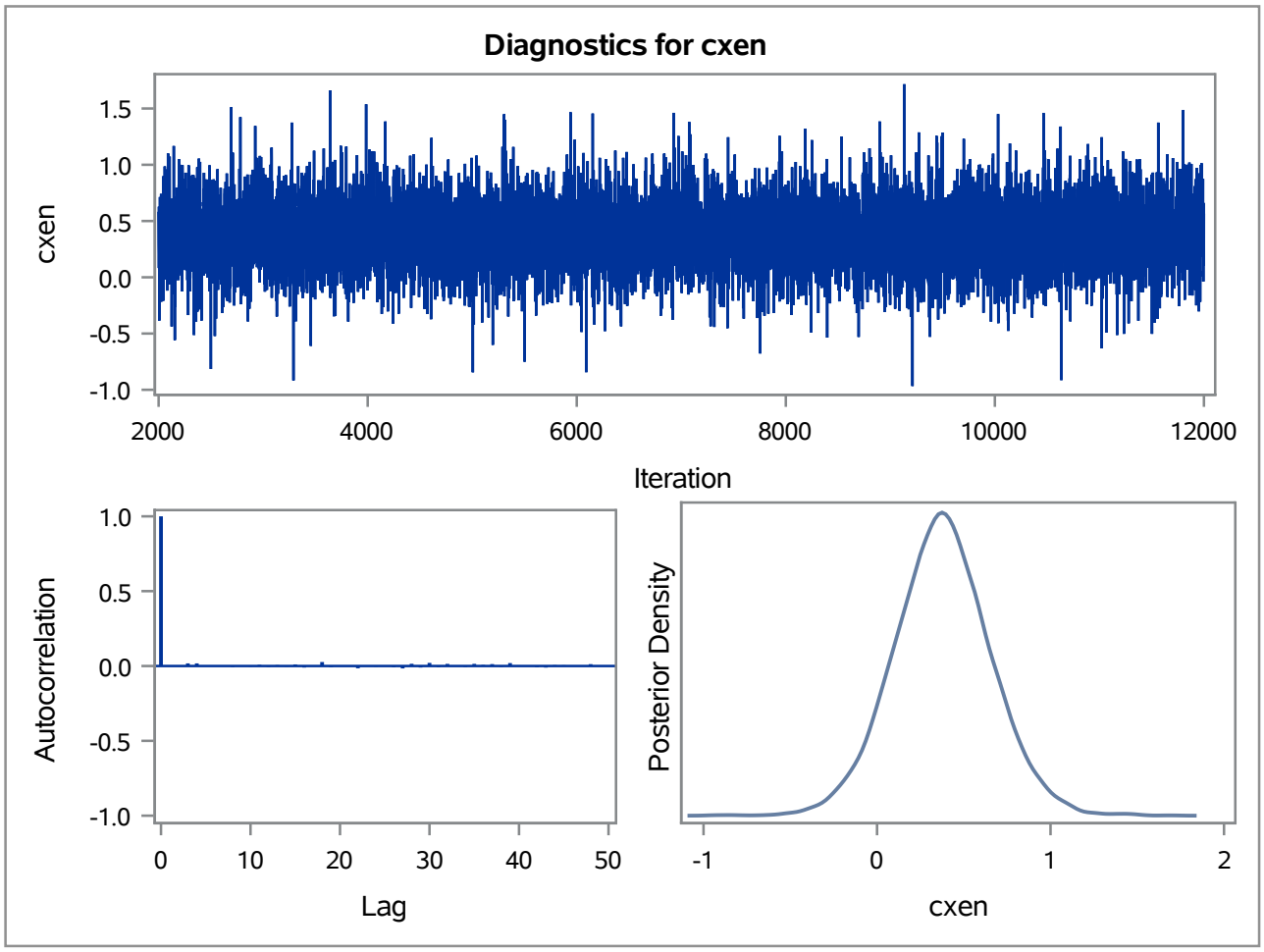
The GENMOD Procedure

Bayesian Analysis



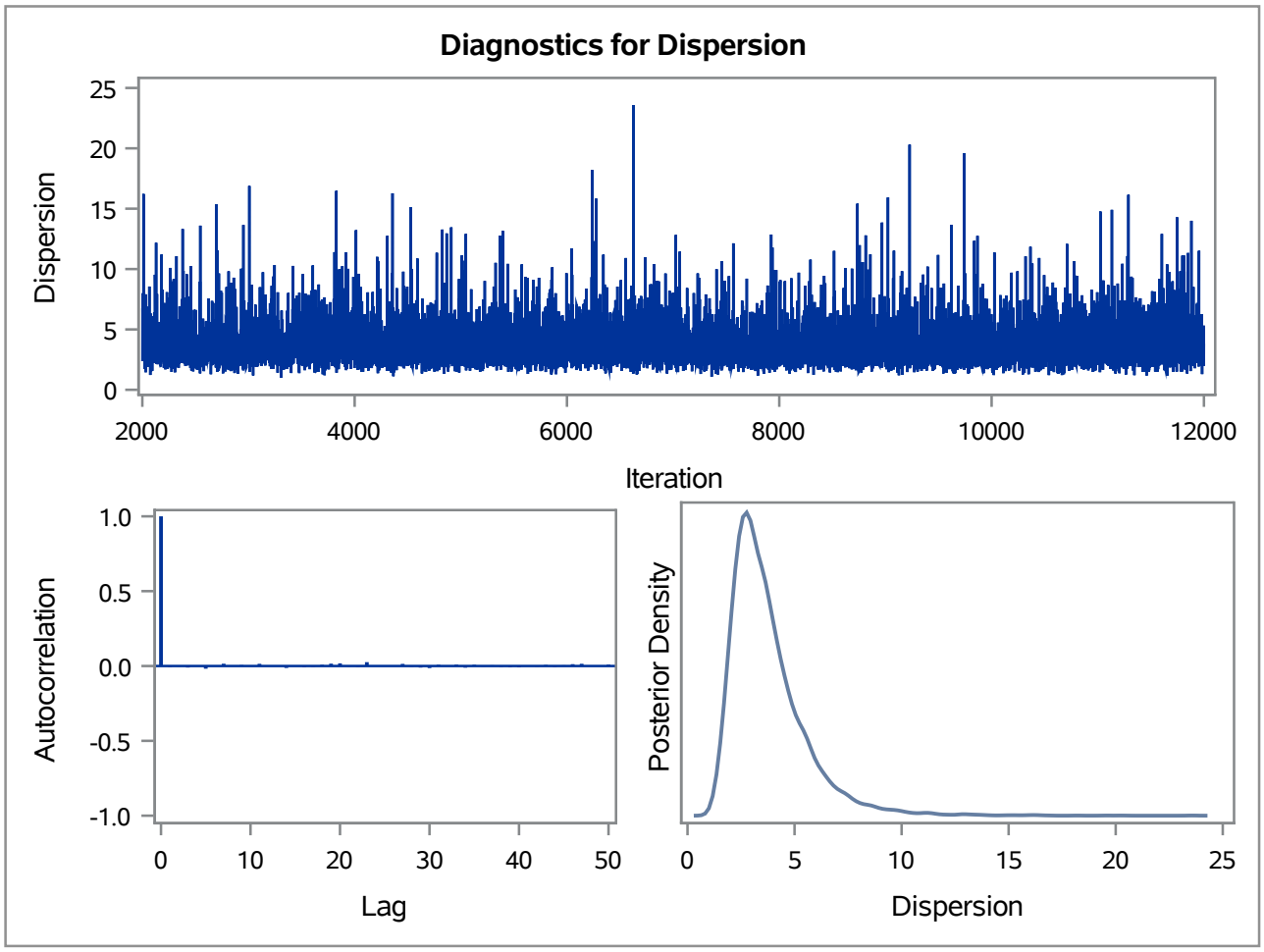
The GENMOD Procedure

Bayesian Analysis



The GENMOD Procedure

Bayesian Analysis



The REG Procedure
Model: MODEL1
Dependent Variable: an

Number of Observations Read	16
Number of Observations Used	16

Analysis of Variance

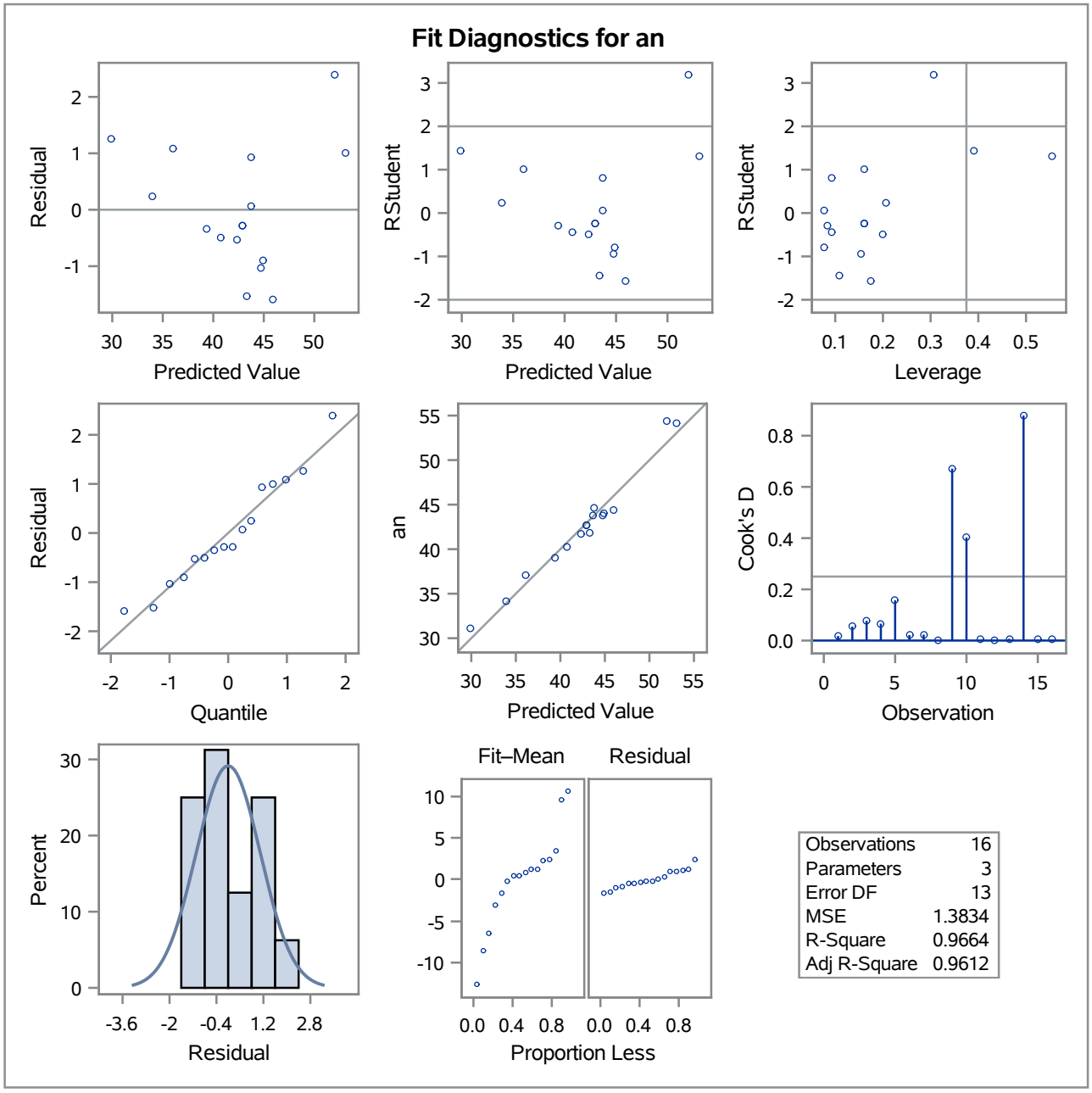
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	516.92607	258.46303	186.84	<.0001
Error	13	17.98381	1.38337		
Corrected Total	15	534.90988			

Root MSE	1.17617	**R-Square**	0.9664
Dependent Mean	42.47380	**Adj R-Sq**	0.9612
Coeff Var	2.76916		

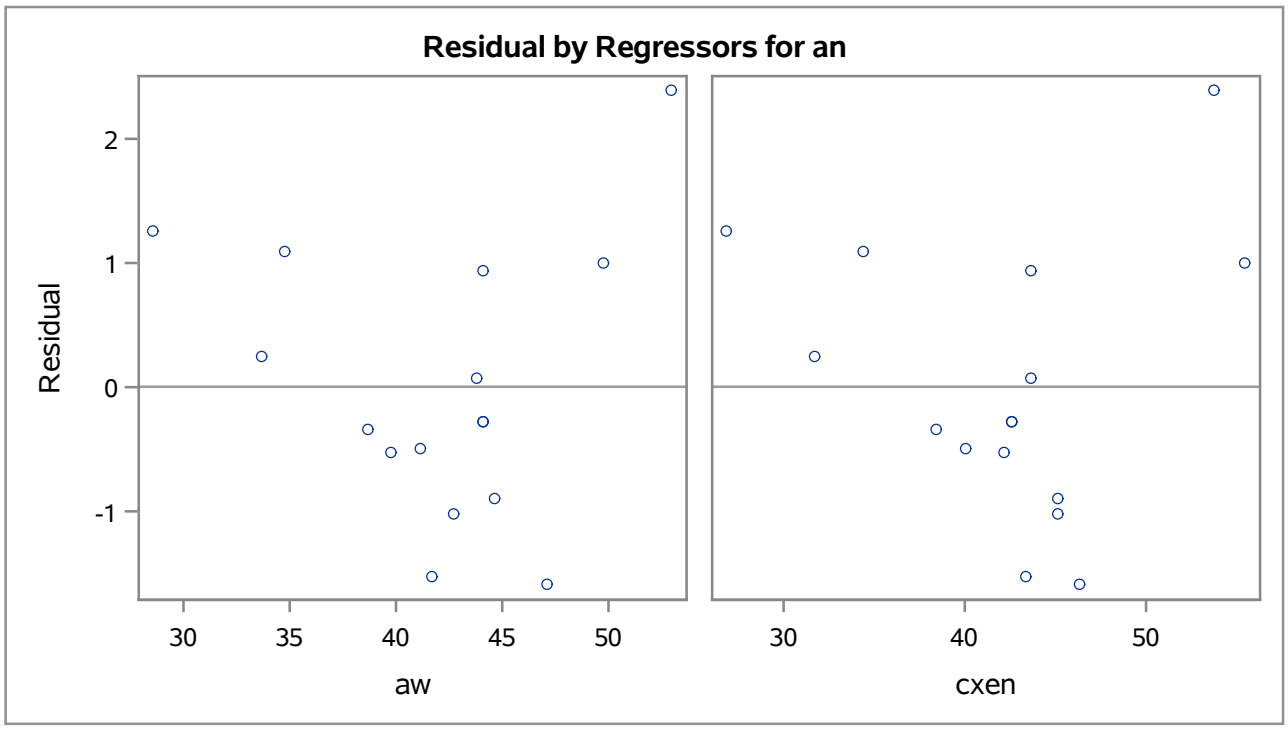
Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	7.50493	2.36379	3.17	0.0073
aw	1	0.06436	0.20170	0.32	0.7547
cxen	1	0.76452	0.16988	4.50	0.0006

The REG Procedure
Model: MODEL1
Dependent Variable: an



The REG Procedure
Model: MODEL1
Dependent Variable: an



The GENMOD Procedure

Bayesian Analysis

Model Information	
Data Set	WORK.WEAPONS2
Burn-In Size	2000
MC Sample Size	10000
Thinning	1
Sampling Algorithm	Conjugate
Distribution	Normal
Link Function	Identity
Dependent Variable	an

Number of Observations Read	16
Number of Observations Used	16

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates					
Parameter	**DF**	**Estimate**	**Standard Error**	**Wald 95% Confidence Limits**	
Intercept	1	6.8609	3.8517	-0.6883	14.4102
aw	1	0.4697	0.2624	-0.0447	0.9841
cxen	1	0.3762	0.2346	-0.0837	0.8360
Scale	1	1.6066	0.2840	1.1361	2.2718

Note: The scale parameter was estimated by maximum likelihood.

The GENMOD Procedure

Bayesian Analysis

Normal Prior for Regression Coefficients				
		Covariance Matrix		
Parameter	Mean	Intercept	aw	cxen
Intercept	.	5.587507	-0.30709	0.175097
aw	.	-0.30709	0.040683	-0.03319
cxen	.	0.175097	-0.03319	0.028861