The Mixed Procedure

Model Information	
Data Set	WORK.DD8_HAND1
Dependent Variable	AREA
Covariance Structures	Unstructured, Autoregressive
Subject Effects	ID, ID
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Satterthwaite

Class Level Information		
Class	**Levels**	**Values**
ID	103	2 3 7 12 14 20 26 27 28 30 33 34 35 36 40 41 42 44 46 47 48 50 51 52 53 57 58 59 62 63 64 67 70 71 72 73 79 82 84 88 93 94 95 96 102 103 104 108 109 115 116 120 124 125 127 130 131 132 134 136 138 140 143 145 149 151 157 158 159 170 172 173 178 180 182 185 188 189 193 196 197 208 212 213 216 220 224 226 229 230 231 232 233 235 237 240 241 243 249 250 251 254 256
SEX	2	1 0
FU	12	1 2 3 4 5 6 7 8 9 10 11 0
CAGE	4	1 2 3 0
SMOKE	2	1 0
ALC	2	1 0
INJ	2	1 0
REL	2	1 0
DIA	2	1 0
EPI	2	1 0
LIV	2	1 0

Dimensions	
Covariance Parameters	5
Columns in X	8
Columns in Z per Subject	2
Subjects	103
Max Obs per Subject	12

Number of Observations	
Number of Observations Read	1014
Number of Observations Used	1014
Number of Observations Not Used	0

The Mixed Procedure

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	5058.49469764	
1	3	3041.36917083	0.15550007
2	1	3023.76028976	0.01665434
3	1	3014.86649917	0.00028867
4	1	3014.69855579	0.00000031
5	1	3014.69837283	0.00000000

Convergence criteria met.

Estimated R Correlation Matrix for ID 2										
Row	**Col1**	**Col2**	**Col3**	**Col4**	**Col5**	**Col6**	**Col7**	**Col8**	**Col9**	**Col10**
1	1.0000	0.000937	0.001767	0.003330	0.006277	0.01183	0.02230	0.04203	0.07922	0.1493
2	0.000937	1.0000	0.5305	0.2815	0.1493	0.07922	0.04203	0.02230	0.01183	0.006277
3	0.001767	0.5305	1.0000	0.5305	0.2815	0.1493	0.07922	0.04203	0.02230	0.01183
4	0.003330	0.2815	0.5305	1.0000	0.5305	0.2815	0.1493	0.07922	0.04203	0.02230
5	0.006277	0.1493	0.2815	0.5305	1.0000	0.5305	0.2815	0.1493	0.07922	0.04203
6	0.01183	0.07922	0.1493	0.2815	0.5305	1.0000	0.5305	0.2815	0.1493	0.07922
7	0.02230	0.04203	0.07922	0.1493	0.2815	0.5305	1.0000	0.5305	0.2815	0.1493
8	0.04203	0.02230	0.04203	0.07922	0.1493	0.2815	0.5305	1.0000	0.5305	0.2815
9	0.07922	0.01183	0.02230	0.04203	0.07922	0.1493	0.2815	0.5305	1.0000	0.5305
10	0.1493	0.006277	0.01183	0.02230	0.04203	0.07922	0.1493	0.2815	0.5305	1.0000

Estimated G Matrix				
Row	**Effect**	**ID**	**Col1**	**Col2**
1	Intercept	2	4.7191	0.007100
2	MONTH	2	0.007100	0.002742

Estimated V Matrix for ID 2										
Row	**Col1**	**Col2**	**Col3**	**Col4**	**Col5**	**Col6**	**Col7**	**Col8**	**Col9**	**Col10**
1	5.5950	4.7608	4.8040	4.8495	4.8946	4.9403	4.9954	5.0498	5.1249	5.2306
2	4.7608	5.7675	5.4931	5.4171	5.4382	5.5084	5.6240	5.7263	5.8540	5.9920
3	4.8040	5.4931	6.1393	5.9722	5.9891	6.0993	6.2923	6.4651	6.6828	6.9190
4	4.8495	5.4171	5.9722	6.7333	6.6591	6.7649	7.0139	7.2469	7.5513	7.8858
5	4.8946	5.4382	5.9891	6.6591	7.5054	7.5126	7.7654	8.0298	8.4035	8.8252
6	4.9403	5.5084	6.0993	6.7649	7.5126	8.4329	8.5949	8.8393	9.2531	9.7444

The Mixed Procedure

Estimated V Matrix for ID 2										
Row	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9	Col10
7	4.9954	5.6240	6.2923	7.0139	7.7654	8.5949	9.6942	9.8384	10.2560	10.8040
8	5.0498	5.7263	6.4651	7.2469	8.0298	8.8393	9.8384	10.8799	11.1902	11.7253
9	5.1249	5.8540	6.6828	7.5513	8.4035	9.2531	10.2560	11.1902	12.4211	12.8656
10	5.2306	5.9920	6.9190	7.8858	8.8252	9.7444	10.8040	11.7253	12.8656	14.2394

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	ID	4.7191
UN(2,1)	ID	0.007100
UN(2,2)	ID	0.002742
AR(1)	ID	0.5305
Residual		0.8759

Fit Statistics	
-2 Res Log Likelihood	3014.7
AIC (Smaller is Better)	3024.7
AICC (Smaller is Better)	3024.8
BIC (Smaller is Better)	3037.9

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
4	2043.80	<.0001

Solution for Fixed Effects							
Effect	SEX	CAGE	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept			3.0287	0.4439	98	6.82	<.0001
CAGE		1	-0.3835	0.6252	98.1	-0.61	0.5410
CAGE		2	-0.6695	0.5972	98	-1.12	0.2650
CAGE		3	-0.3134	0.6326	98	-0.50	0.6214
CAGE		0	0	.	.	.	.
MONTH			0.04383	0.005531	104	7.92	<.0001
SEX	1		-1.3307	0.4577	98.1	-2.91	0.0045
SEX	0		0	.	.	.	.

The Mixed Procedure

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
CAGE	3	98	0.42	0.7359
MONTH	1	104	62.79	<.0001
SEX	1	98.1	8.45	0.0045

The UNIVARIATE Procedure
Variable: Resid (Residual)

Moments			
N	1014	**Sum Weights**	1014
Mean	-0.0054704	**Sum Observations**	-5.5469776
Std Deviation	0.75728394	**Variance**	0.57347896
Skewness	1.07437784	**Kurtosis**	11.249035
Uncorrected SS	580.964529	**Corrected SS**	580.934185
Coeff Variation	-13843.321	**Std Error Mean**	0.02378153

Basic Statistical Measures			
Location		**Variability**	
Mean	-0.00547	**Std Deviation**	0.75728
Median	-0.06345	**Variance**	0.57348
Mode	.	**Range**	10.87969
		Interquartile Range	0.60222

Tests for Location: Mu0=0				
Test	**Statistic**		**p Value**	
Student's t	**t**	-0.23003	**Pr > |t|**	0.8181
Sign	**M**	-82	**Pr >= |M|**	<.0001
Signed Rank	**S**	-23130.5	**Pr >= |S|**	0.0131

Tests for Normality				
Test	**Statistic**		**p Value**	
Shapiro-Wilk	**W**	0.888891	**Pr < W**	<0.0001
Kolmogorov-Smirnov	**D**	0.112602	**Pr > D**	<0.0100
Cramer-von Mises	**W-Sq**	5.527208	**Pr > W-Sq**	<0.0050
Anderson-Darling	**A-Sq**	28.58329	**Pr > A-Sq**	<0.0050

Quantiles (Definition 5)	
Level	**Quantile**
100% Max	7.3369385
99%	2.1518513
95%	1.2906864
90%	0.8187988
75% Q3	0.2769824
50% Median	-0.0634487
25% Q1	-0.3252368

The UNIVARIATE Procedure
Variable: Resid (Residual)

Quantiles (Definition 5)	
Level	**Quantile**
10%	-0.7307530
5%	-1.1279238
1%	-2.0752063
0% Min	-3.5427492

Extreme Observations			
Lowest		**Highest**	
Value	**Obs**	**Value**	**Obs**
-3.54275	354	2.67477	389
-2.94470	421	2.90628	758
-2.93792	387	3.23829	42
-2.70517	41	3.32901	579
-2.70061	162	7.33694	425