

The CONTENTS Procedure

Data Set Name	WORK.TZ	Observations	5209
Member Type	DATA	Variables	10
Engine	V9	Indexes	0
Created	09/03/2019 16:38:45	Observation Length	88
Last Modified	09/03/2019 16:38:45	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	65536
Number of Data Set Pages	8
First Data Page	1
Max Obs per Page	743
Obs in First Data Page	708
Number of Data Set Repairs	0
Filename	/tmp/SAS_workA90700000986_localhost.localdomain/SAS_work575E00000986_localhost.localdomain/tz.sas7bdat
Release Created	9.0401M6
Host Created	Linux
Inode Number	672150
Access Permission	rw-rw-r--
Owner Name	sasdemo
File Size	576KB
File Size (bytes)	589824

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
6	agects0	Num	8	BEST12.	BEST32.
10	agects1	Num	8	BEST12.	BEST32.
5	agedys0	Num	8	BEST12.	BEST32.
9	agedys1	Num	8	BEST12.	BEST32.
3	agemnth0	Num	8	BEST12.	BEST32.
7	agemnth1	Num	8	BEST12.	BEST32.
2	subjid	Char	10	\$10.	\$10.
1	subjidN	Num	8	BEST12.	BEST32.
4	zwfl0	Num	8	BEST12.	BEST32.
8	zwfl1	Num	8	BEST12.	BEST32.

The NLMIXED Procedure

Specifications	
Data Set	WORK.TZ
Dependent Variable	zwfl1
Distribution for Dependent Variable	Normal
Optimization Technique	Dual Quasi-Newton

Integration Method	None
--------------------	------

Dimensions	
Observations Used	5209
Observations Not Used	0
Total Observations	5209
Parameters	3

Initial Parameters			
sigma2	theta	mu	Negative Log Likelihood
10	5	0.5	6784.13483

Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
1	6	6621.4342	162.7006	222.142	-1779.55
2	10	6233.9427	387.4915	45.7802	-1653.08
3	14	6100.4405	133.5022	59.6538	-73.9320
4	16	6089.6968	10.74377	26.7010	-19.7470
5	18	6087.5843	2.112438	4.61093	-3.37527
6	21	6087.4325	0.151862	0.87468	-0.29761
7	24	6087.4286	0.003866	0.98151	-0.00352
8	27	6087.4273	0.001363	0.010524	-0.00195
9	30	6087.4273	2.17E-6	0.000071	-4.34E-6

NOTE: GCONV convergence criterion satisfied.

Fit Statistics	
-2 Log Likelihood	12175
AIC (smaller is better)	12181
AICC (smaller is better)	12181
BIC (smaller is better)	12201

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
sigma2	20.6396	0.4795	5209	43.04	<.0001	19.6995	21.5797	2.811E-6
theta	8.7987	0.3396	5209	25.91	<.0001	8.1329	9.4645	-3.01E-6
mu	0.2439	0.03523	5209	6.92	<.0001	0.1749	0.3130	0.000071

The NLMIXED Procedure

Specifications	
Data Set	WORK.TZ
Dependent Variable	zwfl1
Distribution for Dependent Variable	Normal
Optimization Technique	Dual Quasi-Newton
Integration Method	None

Dimensions	
Observations Used	5209
Observations Not Used	0
Total Observations	5209
Parameters	3

Initial Parameters			
sigma2	a1	a2	Negative Log Likelihood
10	1	1	11523.6617

Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
1	4	11115.9043	407.7573	226.565	-5830.04
2	11	10022.0389	1093.865	933.189	-853.401
3	19	9672.9576	349.0813	1881.34	-3342.65
4	24	9257.1059	415.8516	2698.73	-2809.39
5	26	8961.6236	295.4824	3402.39	-4485.52
6	30	7911.9826	1049.641	859.842	-4869.56
7	33	7813.5679	98.41473	568.468	-831.333
8	35	7762.7168	50.85109	283.871	-132.432
9	38	7731.1274	31.58942	89.2283	-78.0377
10	41	7724.3033	6.824013	41.9660	-18.3628
11	44	7723.7956	0.507696	7.83368	-0.55851
12	47	7723.7731	0.022498	0.32930	-0.04033
13	50	7723.7731	0.000034	0.003032	-0.00007

NOTE: GCONV convergence criterion satisfied.

Fit Statistics	
-2 Log Likelihood	15448
AIC (smaller is better)	15454
AICC (smaller is better)	15454
BIC (smaller is better)	15473

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
sigma2	1.1362	0.02226	5209	51.03	<.0001	1.0925	1.1798	-0.00166
a1	0.7319	0.03032	5209	24.14	<.0001	0.6725	0.7914	0.003032
a2	-0.8082	0.05148	5209	-15.70	<.0001	-0.9091	-0.7073	0.000100

The NL MIXED Procedure

Specifications	
Data Set	WORK.TZ
Dependent Variable	zwf1
Distribution for Dependent Variable	Normal
Random Effects	b1 b2

Distribution for Random Effects	Normal
Subject Variable	subjid
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	5209
Observations Not Used	0
Total Observations	5209
Subjects	224
Max Obs per Subject	24
Parameters	6
Quadrature Points	1

Initial Parameters						
sigma2	theta	mu	s2b1	cb12	s2b2	Negative Log Likelihood
10	9	0	1	1	1	6717.36264

Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
1	6	6251.1499	466.2127	145.521	-1258.97
2	11	6107.0402	144.1097	90.2065	-1143.48
3	15	6003.0750	103.9652	41.4921	-105.112
4	20	5920.6810	82.39404	42.7891	-95.7612
5	22	5910.2201	10.46088	243.346	-52.7983
6	26	5869.0756	41.14447	91.5244	-225.712
7	28	5841.2786	27.79704	86.1675	-60.0692
8	30	5829.8366	11.442	88.0361	-27.1118
9	32	5815.5070	14.32961	24.2221	-24.6275
10	35	5806.2925	9.214457	13.3916	-4.39036
11	38	5805.5818	0.710659	7.81910	-0.76704
12	40	5804.5405	1.041295	4.39772	-0.79146
13	43	5804.2210	0.319542	8.41173	-0.32056
14	47	5803.3887	0.832267	5.31076	-0.26358
15	51	5801.6182	1.77054	5.03523	-0.88704
16	53	5799.3041	2.314101	16.6806	-1.40945
17	57	5787.1105	12.19355	31.0200	-2.73511
18	59	5771.3798	15.73078	16.6651	-6.99443
19	347	5768.7879	2.59183	3.85334	-3.46951
20	349	5766.7891	1.9988	22.2315	-3.01700
21	352	5765.9766	0.812513	1.44799	-1.31524
22	355	5765.9128	0.063848	1.59010	-0.06204
23	358	5765.9077	0.005087	0.12435	-0.00981
24	361	5765.9073	0.000353	0.15264	-0.00033
25	363	5765.9071	0.000224	0.12637	-0.00023
26	366	5765.9070	0.0001	0.018622	-0.00018
27	369	5765.9070	7.455E-6	0.000761	-8.32E-6

NOTE: GCONV convergence criterion satisfied.

Fit Statistics	
-2 Log Likelihood	11532
AIC (smaller is better)	11544
AICC (smaller is better)	11544
BIC (smaller is better)	11564

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
sigma2	27.0367	0.8525	222	31.71	<.0001	25.3567	28.7167	-0.00034
theta	26.4382	1.2413	222	21.30	<.0001	23.9920	28.8845	0.000085
mu	0.2852	0.05497	222	5.19	<.0001	0.1769	0.3935	0.000431
s2b1	0.5785	0.06201	222	9.33	<.0001	0.4563	0.7007	-0.00076
cb12	1.7657	0.8195	222	2.15	0.0323	0.1508	3.3806	-0.00008
s2b2	91.1924	19.2121	222	4.75	<.0001	53.3309	129.05	-4.39E-6

The NLMIXED Procedure

Specifications	
Data Set	WORK.TZ
Dependent Variable	zwf1
Distribution for Dependent Variable	Normal
Random Effects	b1 b2
Distribution for Random Effects	Normal
Subject Variable	subjid
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	5209
Observations Not Used	0
Total Observations	5209
Subjects	224
Max Obs per Subject	24
Parameters	6
Quadrature Points	1

Initial Parameters						
sigma2	a1	a2	s2b1	cb12	s2b2	Negative Log Likelihood
1	1	1	1	1	1	6910.10003

Iteration History					
Iteration	Calls	Negative Log Likelihood	Difference	Maximum Gradient	Slope
1	13	6107.8191	802.281	414.236	-16275.3
2	17	6070.1021	37.71697	938.480	-2994.47
3	21	5877.2113	192.8908	89.6691	-629.969
4	26	5837.9373	39.27399	243.213	-48.4944

5	31	5820.6395	17.29785	341.306	-130.956
6	33	5812.0982	8.541256	328.424	-79.4149
7	35	5801.6202	10.47807	191.017	-99.7737
8	38	5798.3772	3.242962	20.8663	-11.4441
9	41	5797.6248	0.752379	11.4524	-1.91686
10	44	5797.5358	0.089053	8.96991	-0.13173
11	47	5797.5181	0.017636	5.40814	-0.02957
12	50	5797.5101	0.00799	0.88270	-0.00751
13	52	5797.5016	0.008517	2.46677	-0.00493
14	55	5797.5000	0.00158	0.14788	-0.00251
15	58	5797.5000	0.000021	0.005490	-0.00004

NOTE: GCONV convergence criterion satisfied.

Fit Statistics	
-2 Log Likelihood	11595
AIC (smaller is better)	11607
AICC (smaller is better)	11607
BIC (smaller is better)	11627

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > t	95% Confidence Limits		Gradient
sigma2	0.4325	0.008864	222	48.79	<.0001	0.4150	0.4499	-0.00549
a1	0.7302	0.06691	222	10.91	<.0001	0.5983	0.8620	-0.00049
a2	-0.8049	0.07615	222	-10.57	<.0001	-0.9549	-0.6548	0.000599
s2b1	0.9240	0.09472	222	9.76	<.0001	0.7373	1.1106	-0.00071
cb12	-0.5767	0.08915	222	-6.47	<.0001	-0.7524	-0.4010	-0.00216
s2b2	1.0697	0.1228	222	8.71	<.0001	0.8278	1.3116	-0.00089