Repeated Measures on Chick Weight unstructured correlation assumption

The Mixed Procedure

Model Information	
Data Set	REPEAT.REPEATDATA
Dependent Variable	weight
Covariance Structure	Unstructured
Subject Effect	Chick(Diet)
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Between-Within

Class Level Information		
Class	**Levels**	**Values**
Diet	4	1 2 3 4
Chick	49	1 10 11 12 13 14 15 16 17 19 2 20 21 22 23 24 25 26 27 28 29 3 30 31 32 33 34 35 36 37 38 39 4 40 41 42 43 44 45 46 47 48 49 5 50 6 7 8 9
Time	3	10 18 21

Dimensions	
Covariance Parameters	6
Columns in X	20
Columns in Z	0
Subjects	49
Max Obs Per Subject	3

Number of Observations	
Number of Observations Read	141
Number of Observations Used	141
Number of Observations Not Used	0

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	1396.07743029	
1	3	1177.78560780	0.00103860
2	1	1177.29205471	0.00004402
3	1	1177.27077572	0.00000009
4	1	1177.27073492	0.00000000

The Mixed Procedure

Convergence criteria met.

Estimated R Correlation Matrix for Chick(Diet) 1 1			
Row	Col1	Col2	Col3
1	1.0000	0.7988	0.6615
2	0.7988	1.0000	0.9632
3	0.6615	0.9632	1.0000

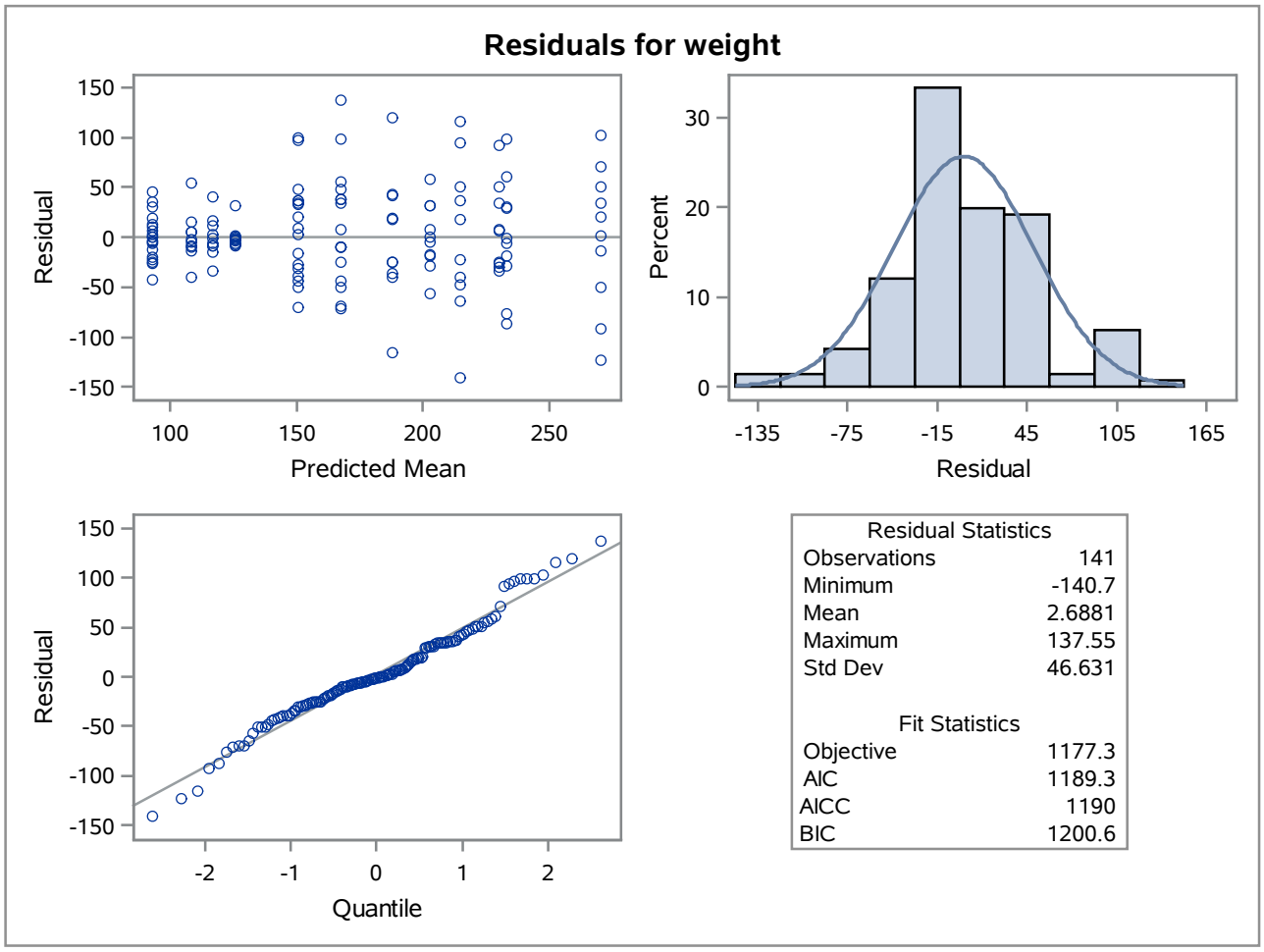
Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
UN(1,1)	Chick(Diet)	428.98
UN(2,1)	Chick(Diet)	882.94
UN(2,2)	Chick(Diet)	2848.34
UN(3,1)	Chick(Diet)	895.29
UN(3,2)	Chick(Diet)	3359.26
UN(3,3)	Chick(Diet)	4270.54

Fit Statistics	
-2 Res Log Likelihood	1177.3
AIC (smaller is better)	1189.3
AICC (smaller is better)	1190.0
BIC (smaller is better)	1200.6

Null Model Likelihood Ratio Test		
DF	Chi-Square	Pr > ChiSq
5	218.81	<.0001

Type 3 Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Diet	3	45	6.03	0.0015
Time	2	45	100.88	<.0001
Diet*Time	6	45	2.47	0.0375

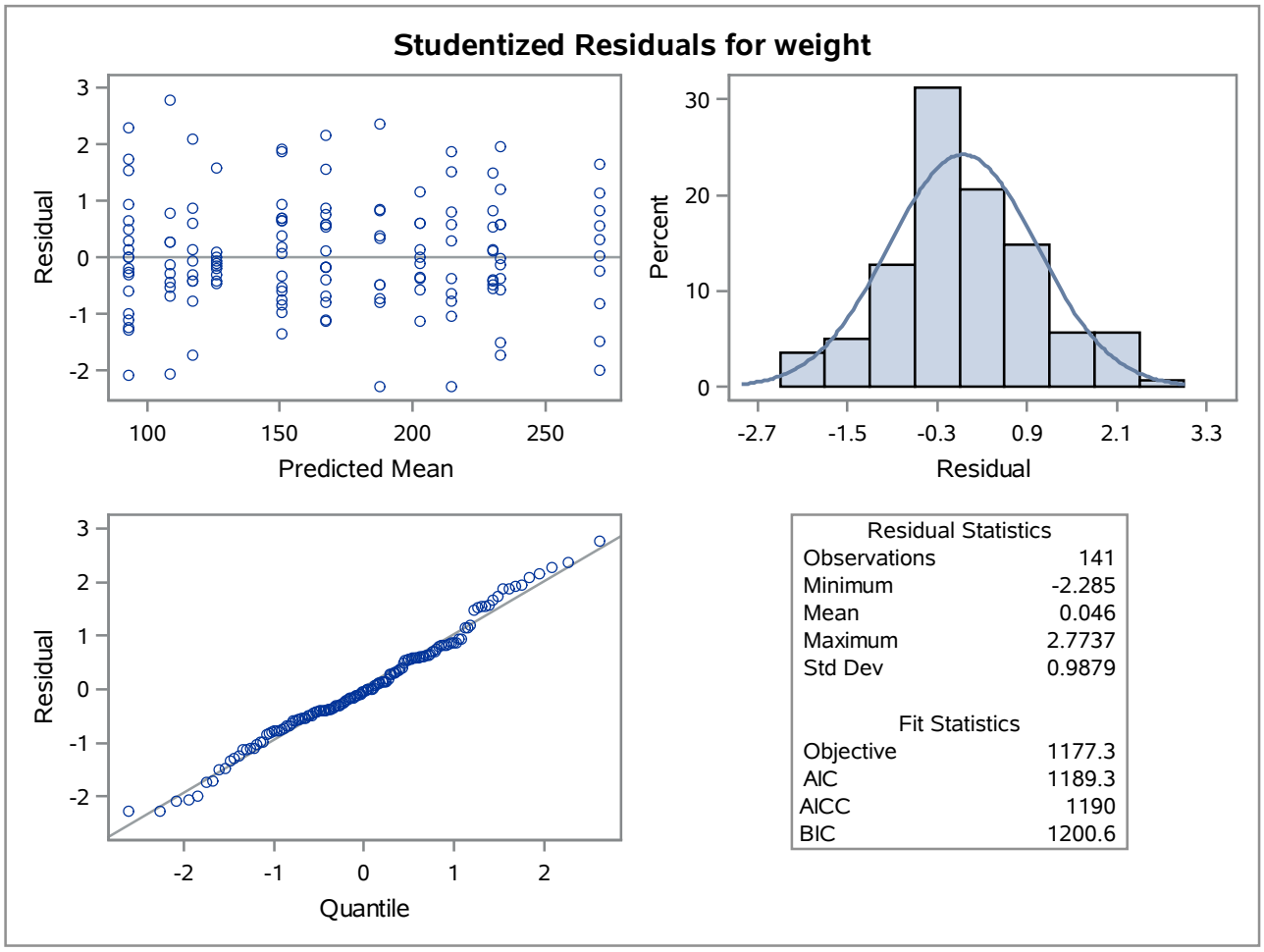
The Mixed Procedure



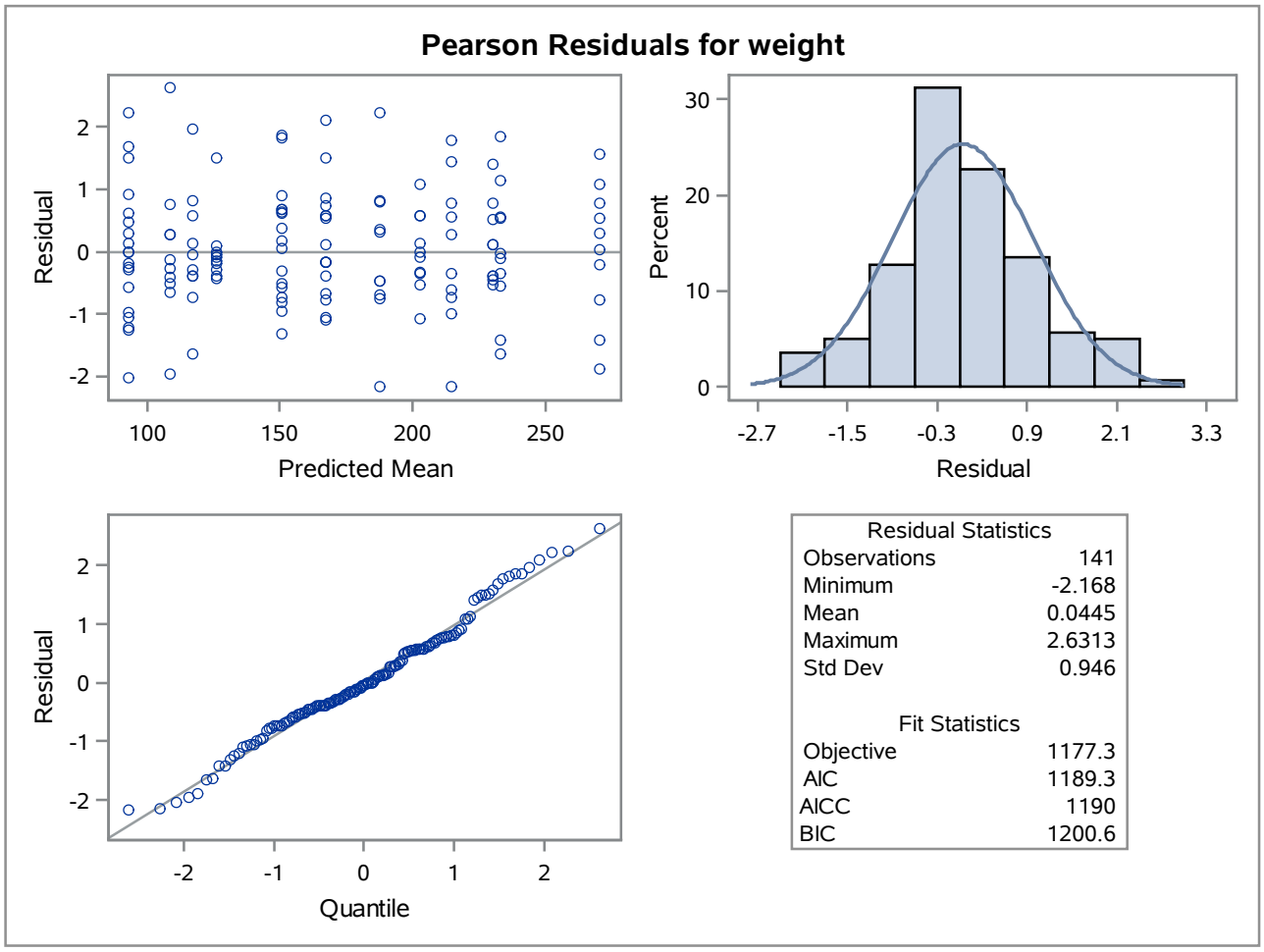
Residual Statistics	
Observations	141
Minimum	-140.7
Mean	2.6881
Maximum	137.55
Std Dev	46.631

Fit Statistics	
Objective	1177.3
AIC	1189.3
AICC	1190
BIC	1200.6

The Mixed Procedure



The Mixed Procedure



Residual Statistics	
Observations	141
Minimum	-2.168
Mean	0.0445
Maximum	2.6313
Std Dev	0.946

Fit Statistics	
Objective	1177.3
AIC	1189.3
AICC	1190
BIC	1200.6