SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure

Data Set	STAT1.BODYFAT2
Dependent Variable	PctBodyFat2
Selection Method	Stepwise
Select Criterion	Significance Level
Stop Criterion	Significance Level
Entry Significance Level (SLE)	0.15
Stay Significance Level (SLS)	0.15
Effect Hierarchy Enforced	None

Number of Observations Read	252
Number of Observations Used	252

Dimensions	
Number of Effects	14
Number of Parameters	14

SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure

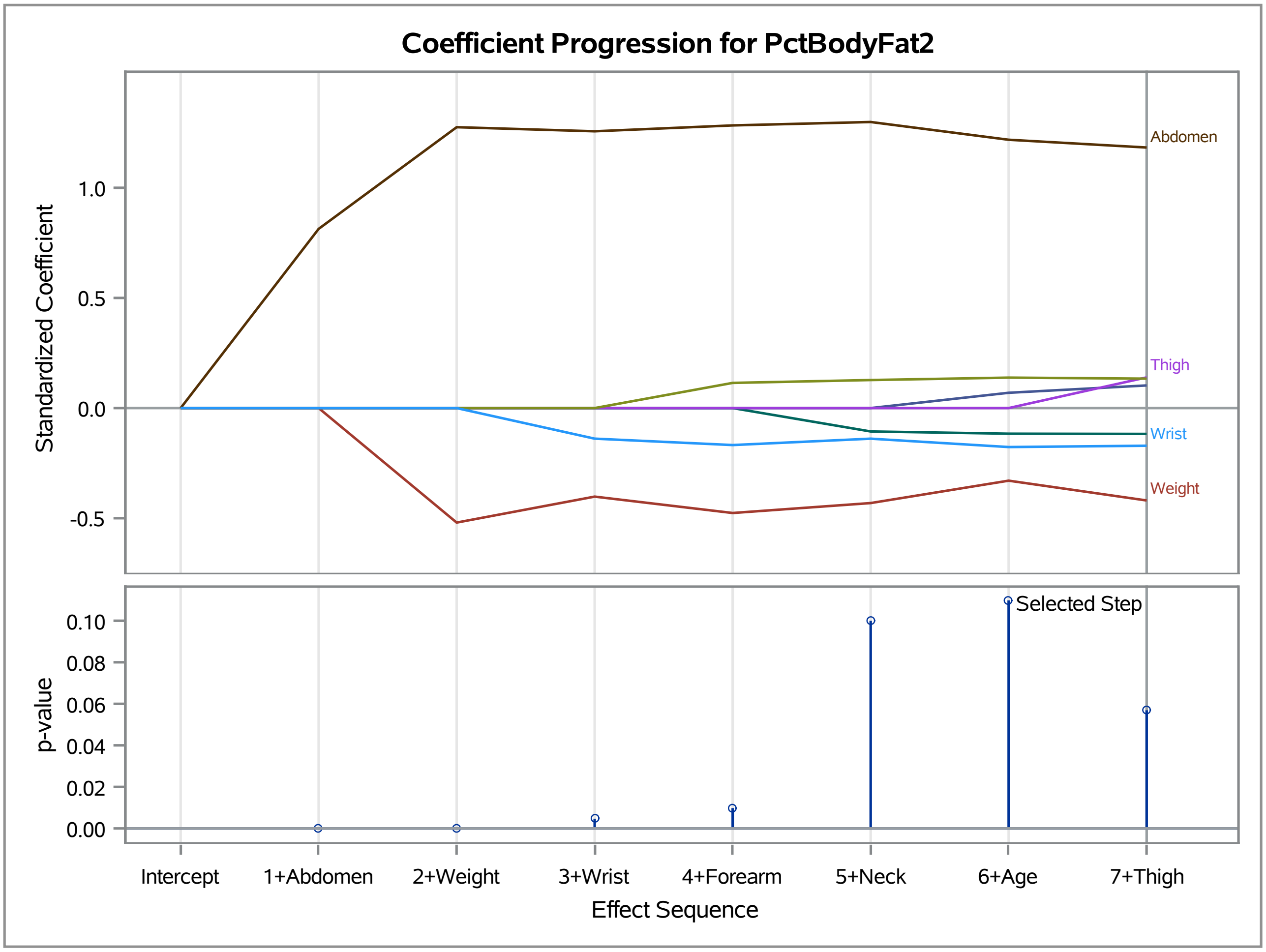
Stepwise Selection Summary					
Step	**Effect Entered**	**Effect Removed**	**Number Effects In**	**F Value**	**Pr > F**
0	**Intercept**		1	0.00	1.0000
1	**Abdomen**		2	488.93	<.0001
2	**Weight**		3	50.58	<.0001
3	**Wrist**		4	8.15	0.0047
4	**Forearm**		5	6.78	0.0098
5	**Neck**		6	2.73	0.1000
6	**Age**		7	2.58	0.1098
7	**Thigh**		8	3.66	0.0569

Selection stopped because the candidate for entry has SLE > 0.15 and the candidate for removal has SLS < 0.15.

Stop Details					
Candidate For	**Effect**	**Candidate Significance**		**Compare Significance**	
Entry	Hip	0.1594	>	0.1500	(SLE)
Removal	Neck	0.0684	<	0.1500	(SLS)

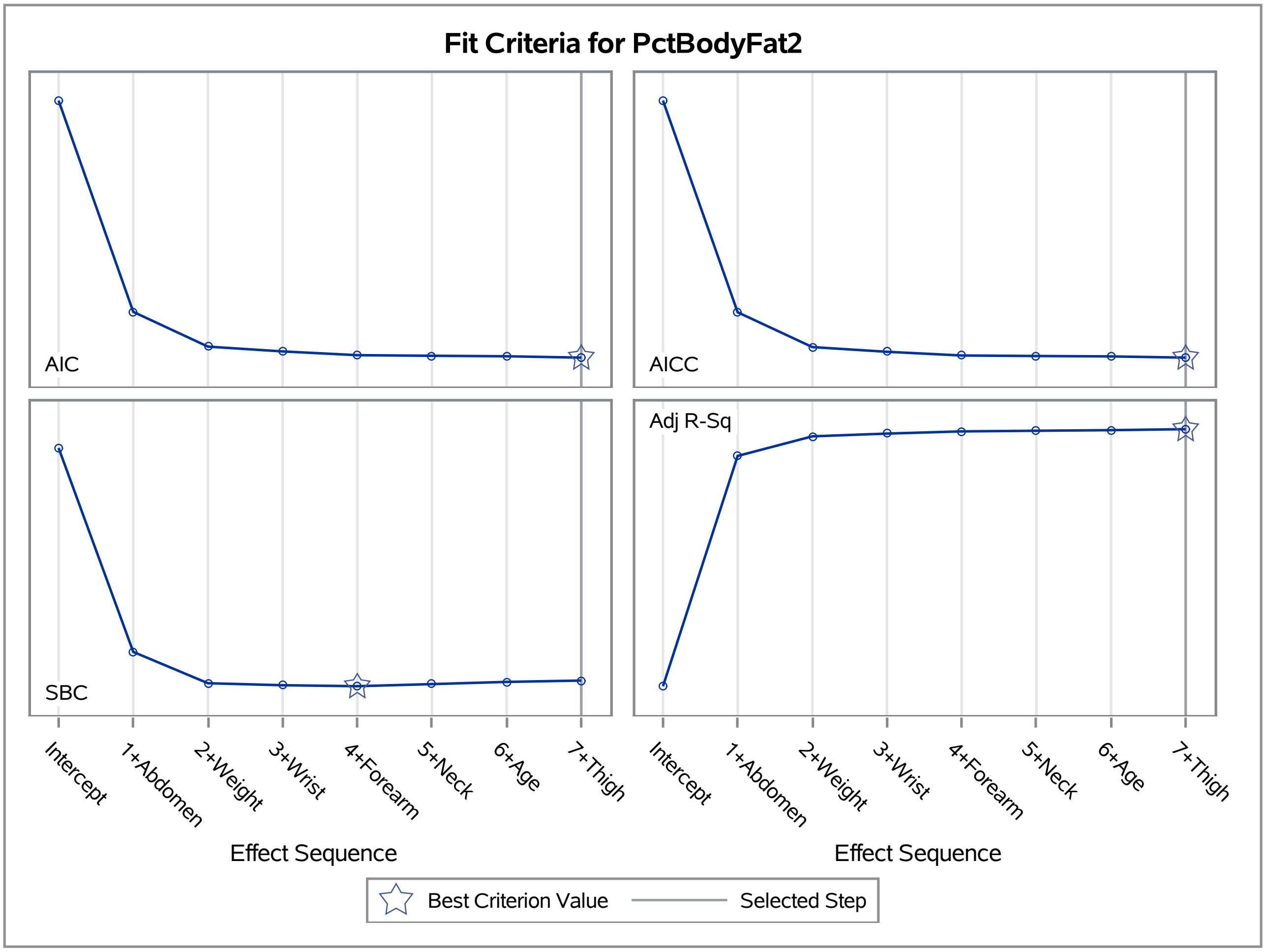
SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure



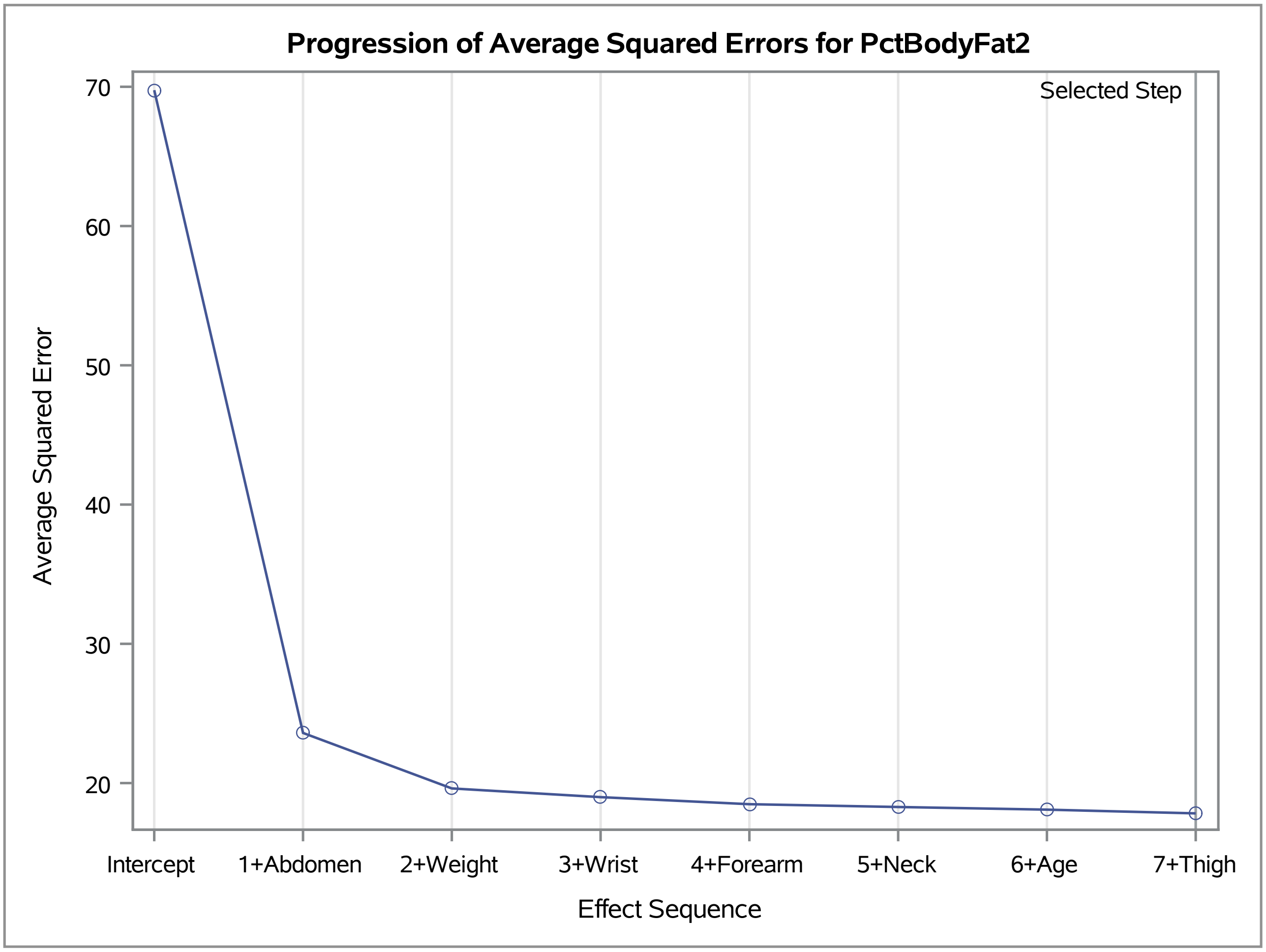
SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure



SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure



SL STEPWISE Selection with PctBodyFat2

The GLMSELECT Procedure
Selected Model

The selected model is the model at the last step (Step 7).

Effects:	Intercept Age Weight Neck Abdomen Thigh Forearm Wrist

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value
Model	7	13087	1869.59160	101.56
Error	244	4491.84861	18.40922	
Corrected Total	251	17579		

Root MSE	4.29060
Dependent Mean	19.15079
R-Square	0.7445
Adj R-Sq	0.7371
AIC	995.90881
AICC	996.65261
SBC	770.14425

Parameter Estimates

Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	-33.257991	9.006812	-3.69
Age	1	0.068166	0.030792	2.21
Weight	1	-0.119441	0.034025	-3.51
Neck	1	-0.403802	0.220620	-1.83
Abdomen	1	0.917885	0.069499	13.21
Thigh	1	0.221960	0.116013	1.91
Forearm	1	0.553139	0.184788	2.99
Wrist	1	-1.532401	0.510415	-3.00

SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure

Data Set	STAT1.BODYFAT2
Dependent Variable	PctBodyFat2
Selection Method	Forward
Select Criterion	Significance Level
Stop Criterion	Significance Level
Entry Significance Level (SLE)	0.5
Effect Hierarchy Enforced	None

Number of Observations Read	252
Number of Observations Used	252

Dimensions	
Number of Effects	14
Number of Parameters	14

SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure

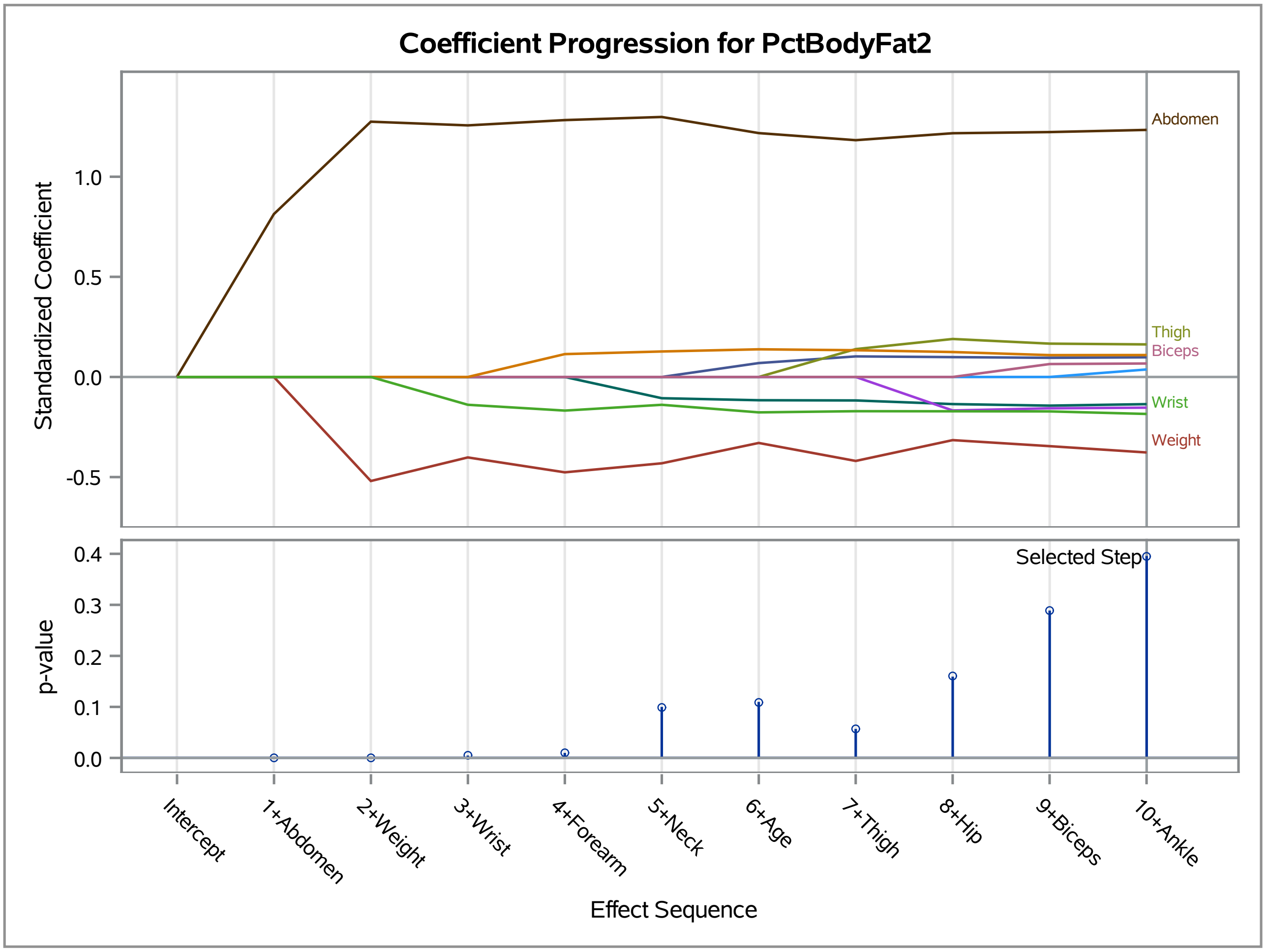
Forward Selection Summary				
Step	**Effect Entered**	**Number Effects In**	**F Value**	**Pr > F**
0	**Intercept**	1	0.00	1.0000
1	**Abdomen**	2	488.93	<.0001
2	**Weight**	3	50.58	<.0001
3	**Wrist**	4	8.15	0.0047
4	**Forearm**	5	6.78	0.0098
5	**Neck**	6	2.73	0.1000
6	**Age**	7	2.58	0.1098
7	**Thigh**	8	3.66	0.0569
8	**Hip**	9	1.99	0.1594
9	**Biceps**	10	1.13	0.2888
10	**Ankle**	11	0.72	0.3957

Selection stopped as the candidate for entry has SLE > 0.5.

Stop Details					
Candidate For	**Effect**	**Candidate Significance**		**Compare Significance**	
Entry	Height	0.8473	>	0.5000	(SLE)

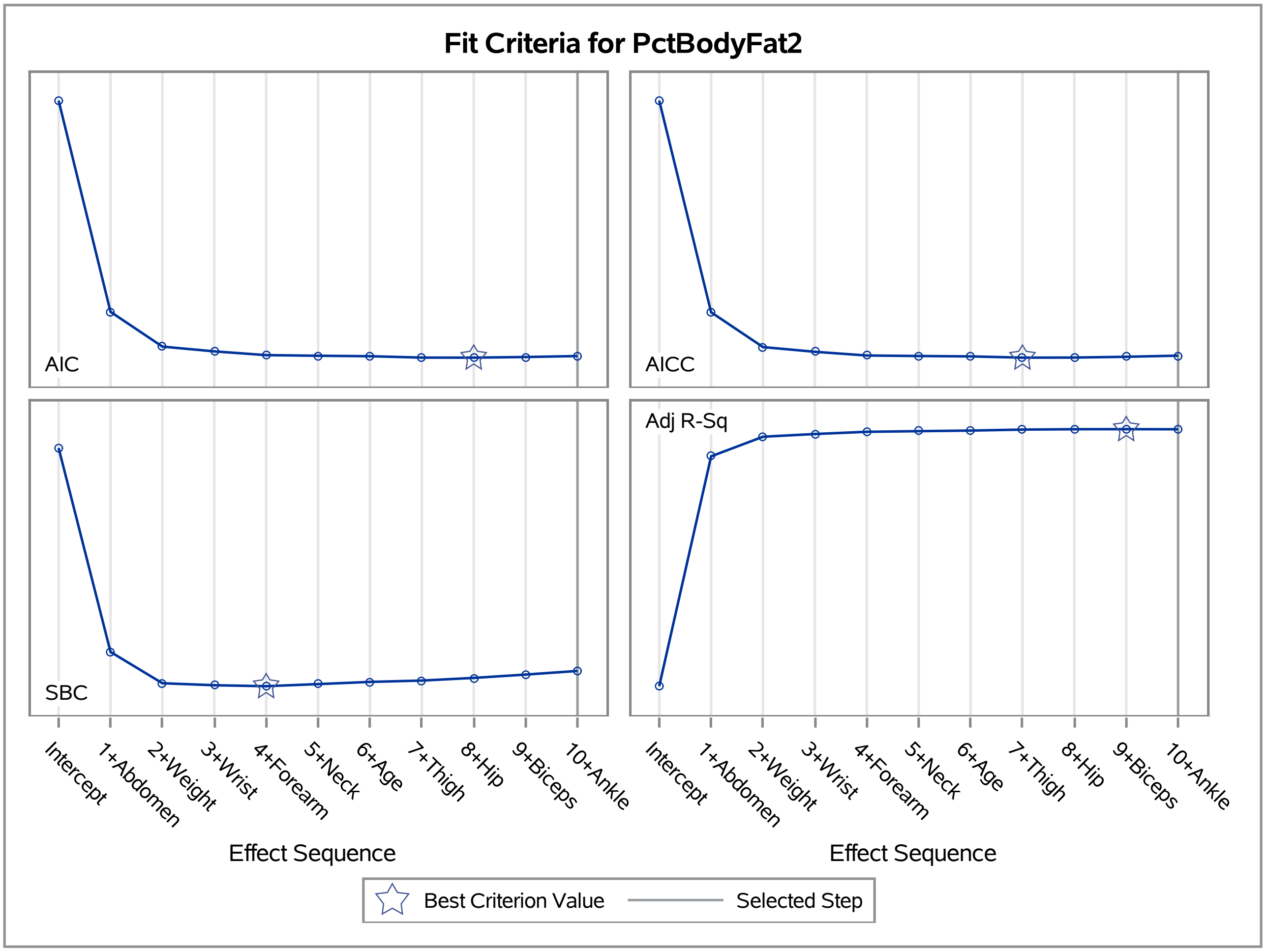
SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure



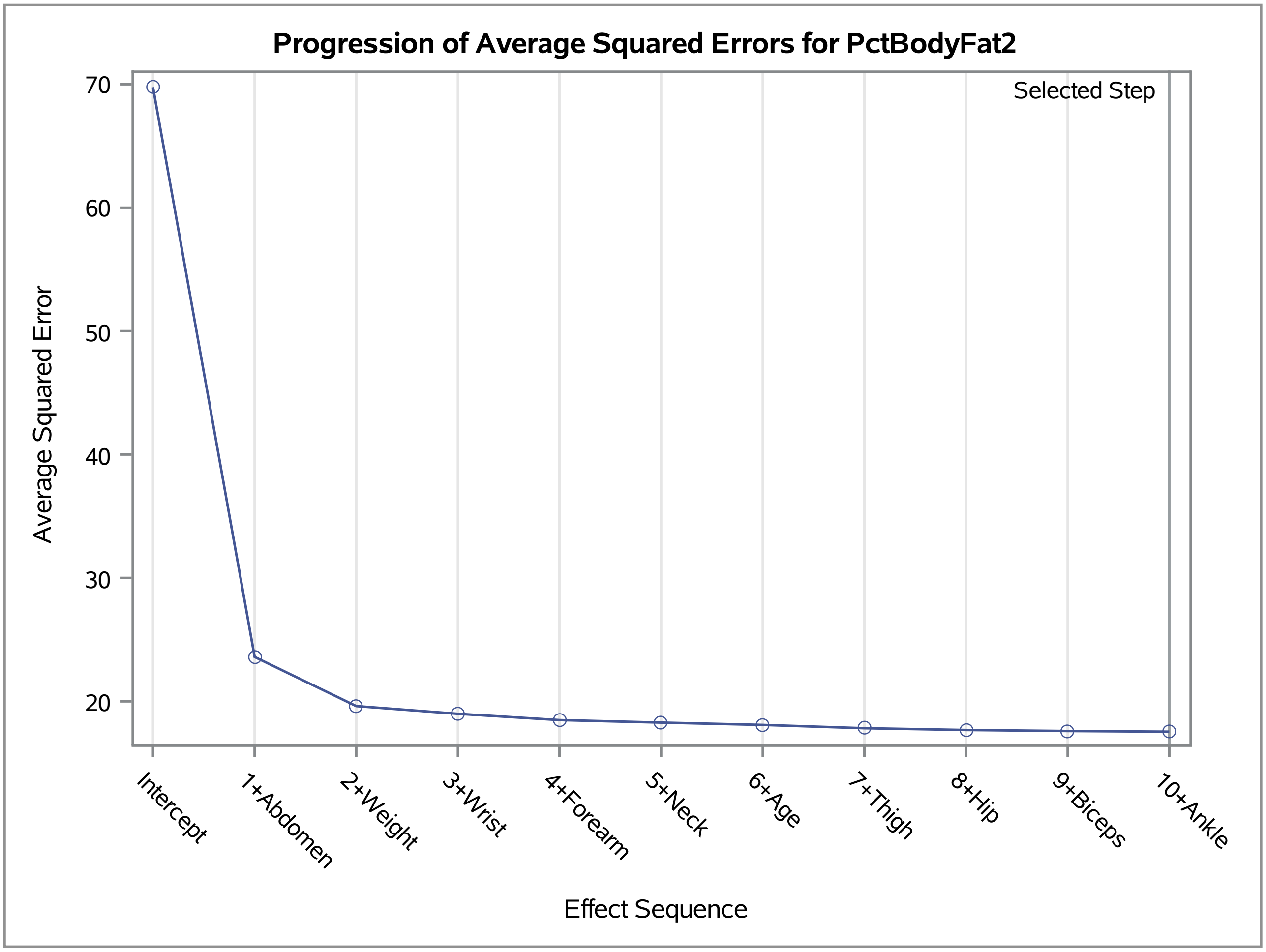
SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure



SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure



SL FORWARD Selection with PctBodyFat2

The GLMSELECT Procedure
Selected Model

The selected model is the model at the last step (Step 10).

Effects:	Intercept Age Weight Neck Abdomen Hip Thigh Ankle Biceps Forearm Wrist

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value
Model	10	13158	1315.76595	71.72
Error	241	4421.33035	18.34577	
Corrected Total	251	17579		

Root MSE	4.28320
Dependent Mean	19.15079
R-Square	0.7485
Adj R-Sq	0.7381
AIC	997.92124
AICC	999.22668
SBC	782.74496

Parameter Estimates

Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	-25.999624	12.153156	-2.14
Age	1	0.065093	0.030919	2.11
Weight	1	-0.107396	0.042068	-2.55
Neck	1	-0.467490	0.228115	-2.05
Abdomen	1	0.957721	0.072760	13.16
Hip	1	-0.179124	0.139083	-1.29
Thigh	1	0.259259	0.133892	1.94
Ankle	1	0.184526	0.216864	0.85
Biceps	1	0.186171	0.168580	1.10
Forearm	1	0.453031	0.195932	2.31
Wrist	1	-1.656662	0.527061	-3.14

SL FORWARD (0.05) Selection with PctBodyFat2

The GLMSELECT Procedure

Data Set	STAT1.BODYFAT2
Dependent Variable	PctBodyFat2
Selection Method	Forward
Select Criterion	Significance Level
Stop Criterion	Significance Level
Entry Significance Level (SLE)	0.05
Effect Hierarchy Enforced	None

Number of Observations Read	252
Number of Observations Used	252

Dimensions	
Number of Effects	14
Number of Parameters	14

SL FORWARD (0.05) Selection with PctBodyFat2

The GLMSELECT Procedure

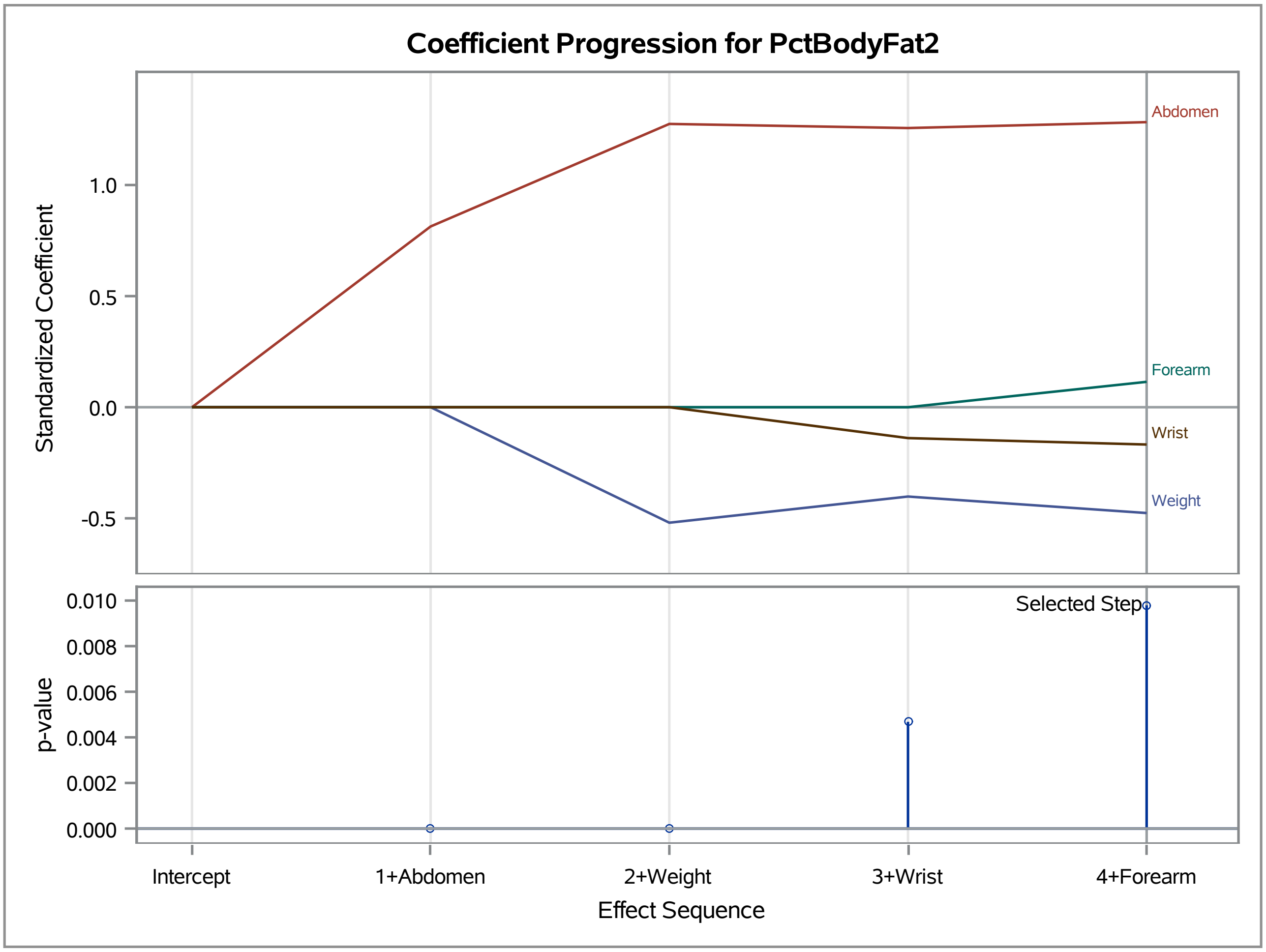
Forward Selection Summary

Step	Effect Entered	Number Effects In	F Value	Pr > F
0	**Intercept**	1	0.00	1.0000
1	**Abdomen**	2	488.93	<.0001
2	**Weight**	3	50.58	<.0001
3	**Wrist**	4	8.15	0.0047
4	**Forearm**	5	6.78	0.0098

Selection stopped as the candidate for entry has SLE > 0.05.

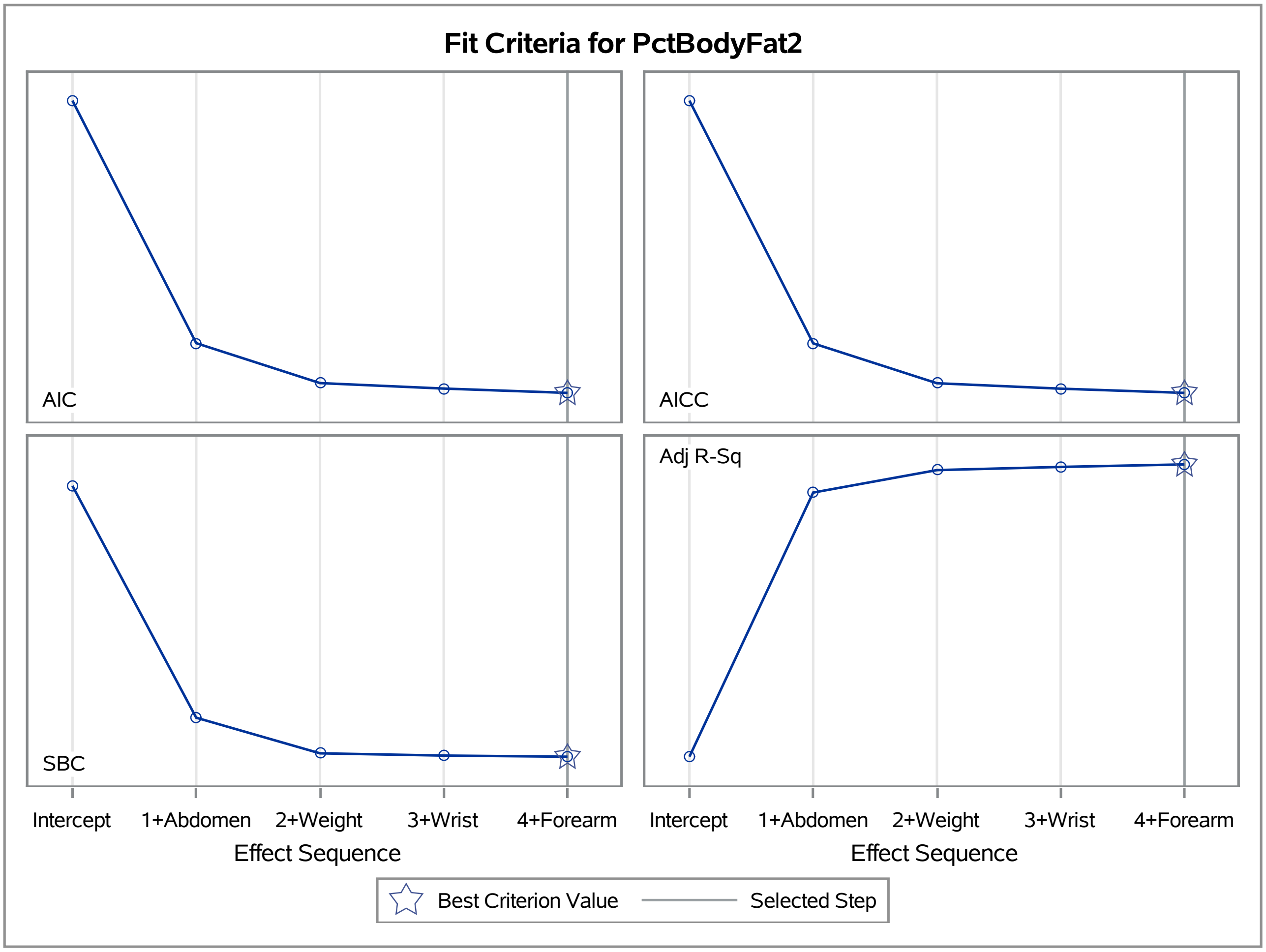
Stop Details

Candidate For	Effect	Candidate Significance		Compare Significance	
Entry	Neck	0.1000	>	0.0500	(SLE)



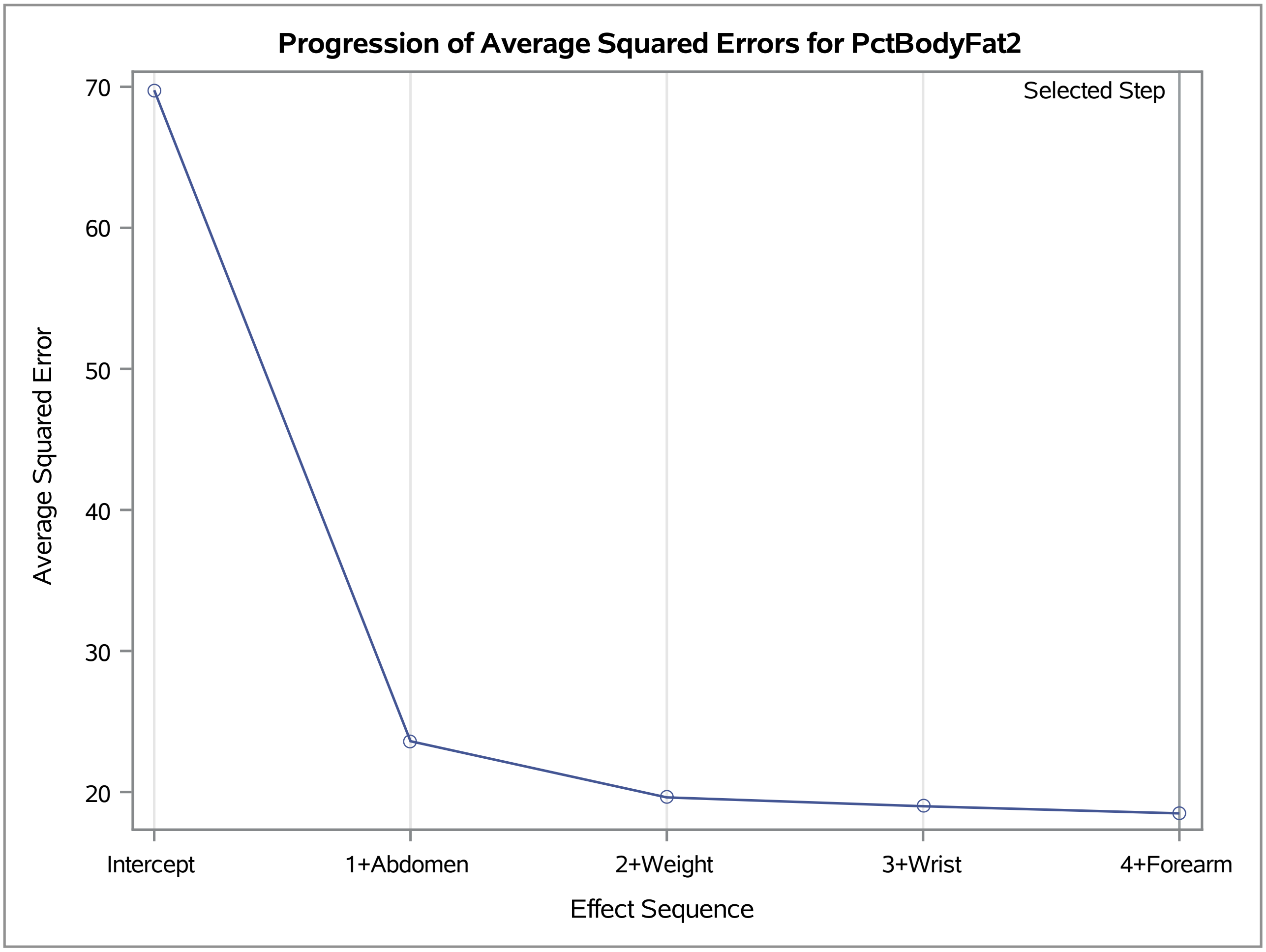
SL FORWARD (0.05) Selection with PctBodyFat2

The GLMSELECT Procedure



SL FORWARD (0.05) Selection with PctBodyFat2

The GLMSELECT Procedure



SL FORWARD (0.05) Selection with PctBodyFat2

The GLMSELECT Procedure
Selected Model

The selected model is the model at the last step (Step 4).

Effects:	Intercept Weight Abdomen Forearm Wrist

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value
Model	4	12921	3230.18852	171.28
Error	247	4658.23577	18.85925	
Corrected Total	251	17579		

Root MSE	4.34272
Dependent Mean	19.15079
R-Square	0.7350
Adj R-Sq	0.7307
AIC	999.07467
AICC	999.41753
SBC	762.72182

Parameter Estimates

Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	-34.854074	7.245005	-4.81
Weight	1	-0.135631	0.024748	-5.48
Abdomen	1	0.995751	0.056066	17.76
Forearm	1	0.472928	0.181661	2.60
Wrist	1	-1.505562	0.442666	-3.40