

The GLMSELECT Procedure

Data Set	WORK.CARS
Dependent Variable	logmpg
Selection Method	Stepwise
Select Criterion	Significance Level
Stop Criterion	Significance Level
Entry Significance Level (SLE)	0.05
Stay Significance Level (SLS)	0.05
Effect Hierarchy Enforced	None

Number of Observations Read	392
Number of Observations Used	392

Class Level Information		
Class	Levels	Values
cylinders	5	3 4 5 6 8
origin	3	1 2 3
year	13	70 71 72 73 74 75 76 77 78 79 80 81 82

Dimensions	
Number of Effects	11
Number of Parameters	29

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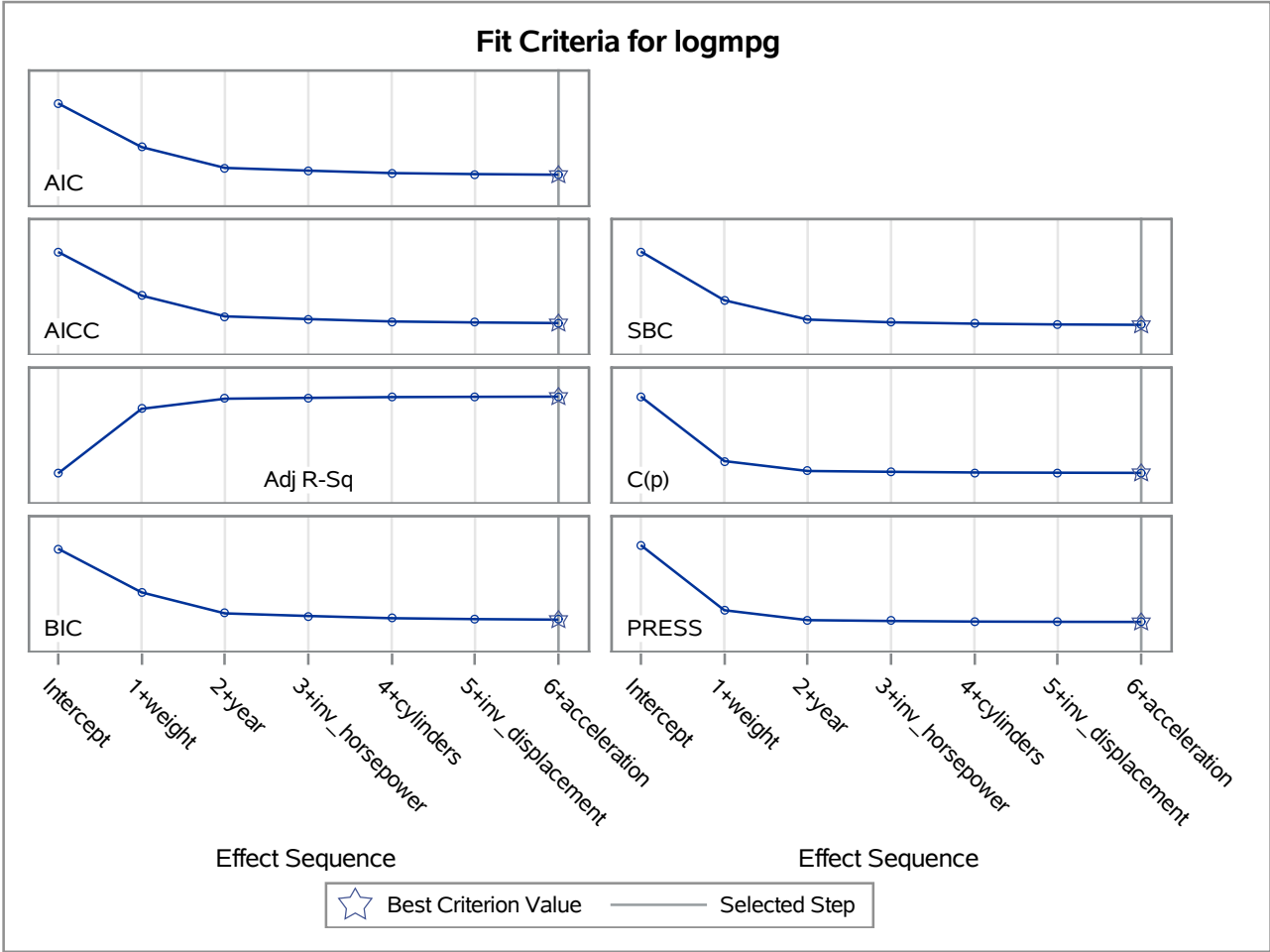
Stepwise Selection Summary										
Step	Effect Entered	Effect Removed	Number Effects In	Number Parm's In	Model R-Square	Adjusted R-Square	AIC	AICC	BIC	CP
0	Intercept		1	1	0.0000	0.0000	-450.6982	-450.6674	-846.1880	4085.6666
1	weight		2	2	0.7668	0.7662	-1019.3566	-1019.2948	-1414.6344	655.8272
2	year		3	14	0.8903	0.8865	-1290.9031	-1289.6265	-1688.6360	127.1277
3	inv_horsepower		4	15	0.9004	0.8967	-1326.7932	-1325.3425	-1722.4474	83.8782
4	cylinders		5	19	0.9099	0.9056	-1358.3497	-1356.0855	-1751.3958	49.0805
5	inv_displacement		6	20	0.9134	0.9089	-1371.4885	-1368.9912	-1763.0566	35.8106
6	acceleration		7	21	0.9156	0.9110*	-1379.7524*	-1377.0099*	-1770.1753*	27.7881*
* Optimal Value of Criterion										

Stepwise Selection Summary							
Step	Effect Entered	Effect Removed	SBC	PRESS	ASE	F Value	Pr > F
0	Intercept		-840.7269	45.4415	0.1153	0.00	1.0000
1	weight		-1405.4141	10.6416	0.0269	1282.22	<.0001
2	year		-1629.3054	5.3302	0.0127	35.45	<.0001
3	inv_horsepower		-1661.2242	4.8847	0.0115	38.26	<.0001
4	cylinders		-1676.8957	4.5746	0.0104	9.90	<.0001
5	inv_displacement		-1686.0632	4.4429	0.0100	14.65	0.0002
6	acceleration		-1690.3559*	4.3685*	0.0097	9.84	0.0018
* Optimal Value of Criterion							

Selection stopped because the candidate for entry has SLE > 0.05 and the candidate for removal has SLS < 0.05.

Stop Details					
Candidate For	Effect	Candidate Significance		Compare Significance	
Entry	horsepower	0.0661	>	0.0500	(SLE)
Removal	acceleration	0.0018	<	0.0500	(SLS)

The GLMSELECT Procedure



The GLMSELECT Procedure Selected Model

The selected model is the model at the last step (Step 6).

Effects:	Intercept cylinders weight acceleration year inv_horsepower inv_displacement
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	20	41.39382	2.06969	201.21
Error	371	3.81614	0.01029	
Corrected Total	391	45.20996		

Root MSE	0.10142
Dependent Mean	3.09831
R-Square	0.9156
Adj R-Sq	0.9110
AIC	-1379.75243
AICC	-1377.00988
BIC	-1770.17527
C(p)	27.78810
PRESS	4.36848
SBC	-1690.35593
ASE	0.00974

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	3.501914	0.094956	36.88
cylinders 3	1	-0.288975	0.070431	-4.10
cylinders 4	1	0.059715	0.033251	1.80
cylinders 5	1	0.102949	0.063903	1.61
cylinders 6	1	0.023162	0.023299	0.99
cylinders 8	0	0	.	.
weight	1	-0.000150	0.000021185	-7.08
acceleration	1	-0.009914	0.003160	-3.14
year 70	1	-0.312099	0.028306	-11.03
year 71	1	-0.271957	0.027696	-9.82
year 72	1	-0.316994	0.027726	-11.43
year 73	1	-0.342320	0.025897	-13.22
year 74	1	-0.259298	0.028188	-9.20
year 75	1	-0.249170	0.026992	-9.23
year 76	1	-0.230452	0.026176	-8.80
year 77	1	-0.164917	0.027338	-6.03

The GLMSELECT Procedure
Selected Model

Parameter Estimates					
Parameter		DF	Estimate	Standard Error	t Value
year	78	1	-0.165733	0.025728	-6.44
year	79	1	-0.070251	0.027185	-2.58
year	80	1	0.026124	0.027345	0.96
year	81	1	-0.047929	0.027065	-1.77
year	82	0	0	.	.
inv_horsepower		1	0.019177	0.004127	4.65
inv_displacement		1	0.021706	0.005495	3.95