



Back ward elimination dircriminant analysis

The STEPDISC Procedure

The Method for Selecting Variables is BACKWARD			
Observations	91	Variable(s) in the Analysis	4
Class Levels	3	Variable(s) will be Included	0
		Significance Level to Stay	0.15

Class Level Information				
CLUSTER	Variable Name	Frequency	Weight	Proportion
1	_1	33	33.0000	0.362637
2	_2	10	10.0000	0.109890
3	_3	48	48.0000	0.527473

Back ward elimination dircriminant analysis

*The STEPDISC Procedure
Backward Elimination: Step 0*

All variables have been entered.

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.152218	33.22	8	170	<.0001
Pillai's Trace	1.105146	26.55	8	172	<.0001
Average Squared Canonical Correlation	0.552573				

Back ward elimination dircriminant analysis

*The STEPDISC Procedure
Backward Elimination: Step 1*

Statistics for Removal, DF = 2, 85				
Variable	Label	Partial R-Square	F Value	Pr > F
X2	cyl	0.0208	0.90	0.4097
X4	hp	0.4075	29.23	<.0001
X11	width	0.0589	2.66	0.0758
X15	weight	0.2642	15.26	<.0001

Variable X2 will be removed.

Variable(s) that have been Removed
X2

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.155448	44.04	6	172	<.0001
Pillai's Trace	1.091020	34.81	6	174	<.0001
Average Squared Canonical Correlation	0.545510				

Back ward elimination dircriminant analysis

*The STEPDISC Procedure
Backward Elimination: Step 2*

Statistics for Removal, DF = 2, 86				
Variable	Label	Partial R-Square	F Value	Pr > F
X4	hp	0.5060	44.04	<.0001
X11	width	0.0581	2.65	0.0762
X15	weight	0.2594	15.06	<.0001

No variables can be removed.

No further steps are possible.

Back ward elimination dircriminant analysis

The STEPDISC Procedure

Backward Elimination Summary										
Step	Number In	Removed	Label	Partial R-Square	F Value	Pr > F	Wilks' Lambda	Pr < Lambda	Average Squared Canonical Correlation	Pr > ASCC
0	4			.	.	.	0.15221845	<.0001	0.55257285	<.0001
1	3	X2	cyl	0.0208	0.90	0.4097	0.15544787	<.0001	0.54550988	<.0001

Step-wise selection discriminant analysis

The STEPDISC Procedure

The Method for Selecting Variables is STEPWISE			
Observations	91	Variable(s) in the Analysis	4
Class Levels	3	Variable(s) will be Included	0
		Significance Level to Enter	0.15
		Significance Level to Stay	0.15

Class Level Information				
CLUSTER	Variable Name	Frequency	Weight	Proportion
1	_1	33	33.0000	0.362637
2	_2	10	10.0000	0.109890
3	_3	48	48.0000	0.527473

Step-wise selection discriminant analysis

The STEPDISC Procedure

Stepwise Selection: Step 1

Statistics for Entry, DF = 2, 88					
Variable	Label	R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.4999	43.98	<.0001	1.0000
X4	hp	0.7317	120.00	<.0001	1.0000
X11	width	0.4552	36.76	<.0001	1.0000
X15	weight	0.6733	90.66	<.0001	1.0000

Variable X4 will be entered.

Variable(s) that have been Entered
X4

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.268298	120.00	2	88	<.0001
Pillai's Trace	0.731702	120.00	2	88	<.0001
Average Squared Canonical Correlation	0.365851				

Step-wise selection discriminant analysis

The STEPDISC Procedure

Stepwise Selection: Step 2

Statistics for Removal, DF = 2, 88				
Variable	Label	R-Square	F Value	Pr > F
X4	hp	0.7317	120.00	<.0001

No variables can be removed.

Statistics for Entry, DF = 2, 87					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0412	1.87	0.1606	0.3704
X11	width	0.2176	12.10	<.0001	0.5647
X15	weight	0.3849	27.22	<.0001	0.4202

Variable X15 will be entered.

Variable(s) that have been Entered	
X4	X15

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.165041	63.58	4	174	<.0001
Pillai's Trace	1.074390	51.07	4	176	<.0001
Average Squared Canonical Correlation	0.537195				

Step-wise selection discriminant analysis

The STEPDISC Procedure Stepwise Selection: Step 3

Statistics for Removal, DF = 2, 87				
Variable	Label	Partial R-Square	F Value	Pr > F
X4	hp	0.4949	42.62	<.0001
X15	weight	0.3849	27.22	<.0001

No variables can be removed.

Statistics for Entry, DF = 2, 86					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0200	0.88	0.4200	0.2852
X11	width	0.0581	2.65	0.0762	0.1753

Variable X11 will be entered.

Variable(s) that have been Entered		
X4	X11	X15

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.155448	44.04	6	172	<.0001
Pillai's Trace	1.091020	34.81	6	174	<.0001
Average Squared Canonical Correlation	0.545510				

Step-wise selection discriminant analysis

The STEPDISC Procedure

Stepwise Selection: Step 4

Statistics for Removal, DF = 2, 86				
Variable	Label	Partial R-Square	F Value	Pr > F
X4	hp	0.5060	44.04	<.0001
X11	width	0.0581	2.65	0.0762
X15	weight	0.2594	15.06	<.0001

No variables can be removed.

Statistics for Entry, DF = 2, 85					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0208	0.90	0.4097	0.1747

No variables can be entered.

No further steps are possible.

Step-wise selection discriminant analysis

The STEPDISC Procedure

Stepwise Selection Summary											
Step	Number In	Entered	Removed	Label	Partial R-Square	F Value	Pr > F	Wilks' Lambda	Pr < Lambda	Average Squared Canonical Correlation	Pr > ASCC
1	1	X4		hp	0.7317	120.00	<.0001	0.26829786	<.0001	0.36585107	<.0001
2	2	X15		weight	0.3849	27.22	<.0001	0.16504080	<.0001	0.53719487	<.0001
3	3	X11		width	0.0581	2.65	0.0762	0.15544787	<.0001	0.54550988	<.0001

Forward selection discriminant analysis

The STEPDISC Procedure

The Method for Selecting Variables is FORWARD			
Observations	91	Variable(s) in the Analysis	4
Class Levels	3	Variable(s) will be Included	0
		Significance Level to Enter	0.15

Class Level Information				
CLUSTER	Variable Name	Frequency	Weight	Proportion
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2	_2	10	10.0000	0.109890
3	_3	48	48.0000	0.527473

Forward selection discriminant analysis

The STEPDISC Procedure

Forward Selection: Step 1

Statistics for Entry, DF = 2, 88					
Variable	Label	R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.4999	43.98	<.0001	1.0000
X4	hp	0.7317	120.00	<.0001	1.0000
X11	width	0.4552	36.76	<.0001	1.0000
X15	weight	0.6733	90.66	<.0001	1.0000

Variable X4 will be entered.

Variable(s) that have been Entered
X4

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.268298	120.00	2	88	<.0001
Pillai's Trace	0.731702	120.00	2	88	<.0001
Average Squared Canonical Correlation	0.365851				

Forward selection discriminant analysis

The STEPDISC Procedure

Forward Selection: Step 2

Statistics for Entry, DF = 2, 87					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0412	1.87	0.1606	0.3704
X11	width	0.2176	12.10	<.0001	0.5647
X15	weight	0.3849	27.22	<.0001	0.4202

Variable X15 will be entered.

Variable(s) that have been Entered	
X4	X15

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.165041	63.58	4	174	<.0001
Pillai's Trace	1.074390	51.07	4	176	<.0001
Average Squared Canonical Correlation	0.537195				

Forward selection discriminant analysis

The STEPDISC Procedure

Forward Selection: Step 3

Statistics for Entry, DF = 2, 86					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0200	0.88	0.4200	0.2852
X11	width	0.0581	2.65	0.0762	0.1753

Variable X11 will be entered.

Variable(s) that have been Entered		
X4	X11	X15

Multivariate Statistics					
Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.155448	44.04	6	172	<.0001
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Average Squared Canonical Correlation	0.545510				

Forward selection discriminant analysis

The STEPDISC Procedure

Forward Selection: Step 4

Statistics for Entry, DF = 2, 85					
Variable	Label	Partial R-Square	F Value	Pr > F	Tolerance
X2	cyl	0.0208	0.90	0.4097	0.1747

No variables can be entered.

No further steps are possible.

Forward selection discriminant analysis

The STEPDISC Procedure

Forward Selection Summary										
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1	1	X4	hp	0.7317	120.00	<.0001	0.26829786	<.0001	0.36585107	<.0001
2	2	X15	weight	0.3849	27.22	<.0001	0.16504080	<.0001	0.53719487	<.0001
3	3	X11	width	0.0581	2.65	0.0762	0.15544787	<.0001	0.54550988	<.0001