

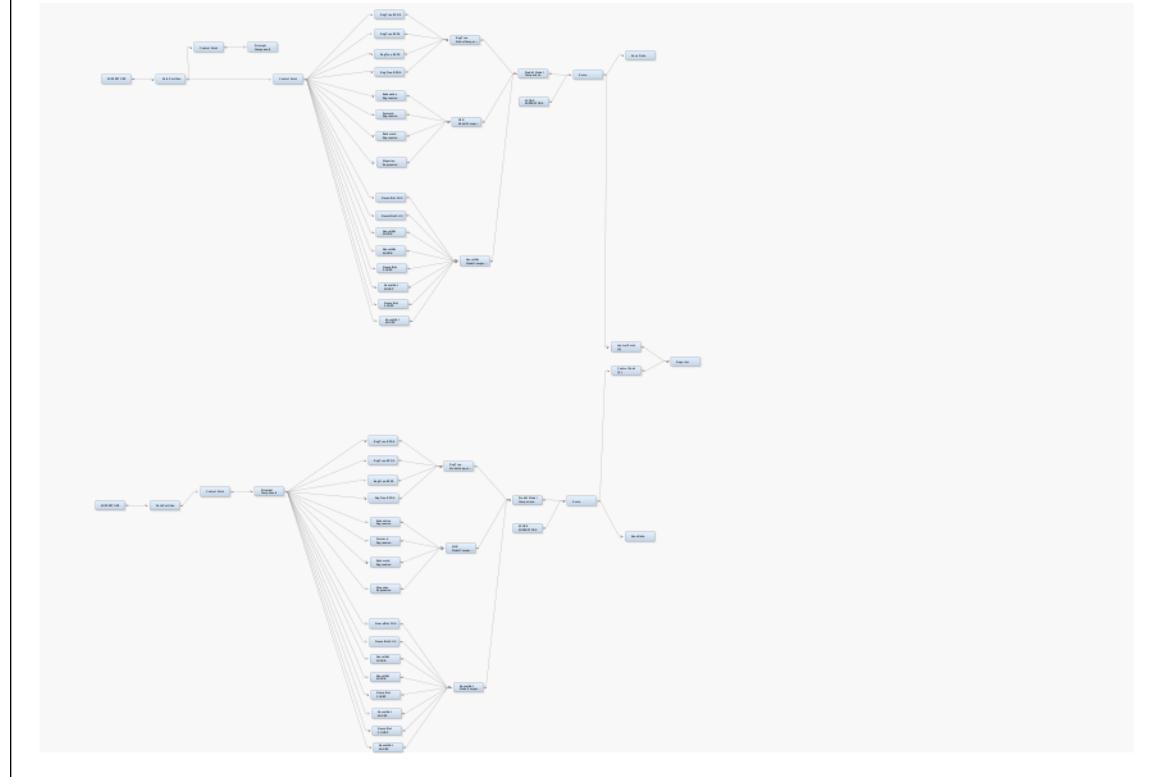
SAS Enterprise Miner Report

User = tboll4
Date = 17:54:45 May 13
Project = DatavizSuperstore
Diagram = Dataviz.PredictiveAnalysis

Start Node = Report
Node label = Reporter
Nodes = PATH
Showall = N

Format = PDF
Style = LISTING

SAS Enterprise Miner Report
Process Flow Diagram



SAS Enterprise Miner Report

Node=SUPERSTORE Summary

Node id = lds3
 Node label = SUPERSTORE
 Meta path = lds3
 Notes =

Node=SUPERSTORE Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	tball4		NBytes	3671040	.
ApplyIntervalLevelLowerLimit	Y		DsId	superstore		NCols	21	.
ApplyMaxClassLevels	Y		DsModifiedBy	tball4		NObs	9994	.
ApplyMaxPercentMissing	Y		DsModifyDate	1998814780.1		NewTable		
CMeta	WORK.M3KXYU85		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	RAW	TRAIN
Data	STDATA.SUPERSTORE_TRAIN		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	superstore		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	STDATA		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	1998814779.8		MetaAdvisor	BASIC		Table	SUPERSTORE_TRAIN	

Node=SUPERSTORE

Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	SUPERSTORE_TRAIN	Date Created	04May2023:10:15:41	Data Size	3671040
Data Type	DATA	Date Modified	04May2023:10:15:41	Role	RAW
Data Label		Number Rows	9994	Segment	
Engine	BASE	Number Columns	21	Data Library	STDATA

Node=SUPERSTORE

Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Category	Category	INPUT	NOMINAL	C	15	\$15.	
City	City	REJECTED	NOMINAL	C	17	\$17.	
Country	Country	REJECTED	NOMINAL	C	13	\$13.	
CustomerID	CustomerID	REJECTED	NOMINAL	C	8	\$8.	
CustomerName	CustomerName	REJECTED	NOMINAL	C	22	\$22.	
Discount	Discount	INPUT	INTERVAL	N	8	BEST.	
OrderDate	OrderDate	REJECTED	INTERVAL	N	8	MMDDYY10.0	
OrderID	OrderID	REJECTED	NOMINAL	C	14	\$14.	
PostalCode	PostalCode	REJECTED	INTERVAL	N	8	BEST.	
ProductID	ProductID	ID	NOMINAL	C	15	\$15.	
ProductName	ProductName	REJECTED	NOMINAL	C	127	\$127.	

Name	Label	Role	Level	Type	Length	Format	Creator
Profit	Profit	TARGET	INTERVAL	N	8	BEST.	
Quantity	Quantity	INPUT	INTERVAL	N	8	BEST.	
Region	Region	INPUT	NOMINAL	C	7	\$7.	
RowID	RowID	REJECTED	INTERVAL	N	8	BEST.	
Sales	Sales	INPUT	INTERVAL	N	8	BEST.	
Segment	Segment	SEGMENT	NOMINAL	C	11	\$11.	
ShipDate	ShipDate	INPUT	INTERVAL	N	8	MMDDYY10.0	
ShipMode	ShipMode	INPUT	NOMINAL	C	14	\$14.	
State	State	REJECTED	NOMINAL	C	20	\$20.	
SubCategory	SubCategory	INPUT	NOMINAL	C	11	\$11.	

SAS Enterprise Miner Report

Node=Data Partition Summary

Node id = Part2
 Node label = Data Partition
 Meta path = lds3 => Part2
 Notes =

Node=Data Partition Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Partition		Method	DEFAULT		TestPct	30	
ClassDistribution	Y		OutputType	DATA		TrainPct	40	
IntervalDistribution	Y		RandomSeed	12345		ValidatePct	30	

Node=Data Partition Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
REJECTED	INTERVAL	3	OrderDate PostalCode RowID
REJECTED	NOMINAL	7	City Country CustomerID CustomerName OrderID ProductName State
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	NOMINAL	1	ProductID

SAS Enterprise Miner Report

Node=Principal Components Summary

Node id = PRINCOMP2
 Node label = Principal Components
 Meta path = Ids3 => Part2 => PRINCOMP2
 Notes =

Node=Principal Components Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	PrinComp		EigenSource	CORR		PrincompLabel	PRINCOMPLABEL	
ApplyMaxPrincomp	Y		HideOriginalInputVariables	Y		PrincompPrefix	PC	
CumEigenCutoff	0.99		MaxPrincomp	20		PrintEigenSourceMatrix	N	
EigenIncreCutoff	0.001		NUserSelectedPrincomp	8	1	RejectOriginalInputVariables	Y	

Node=Principal Components Variable Summary

Role	Level	Frequency Count	Name
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

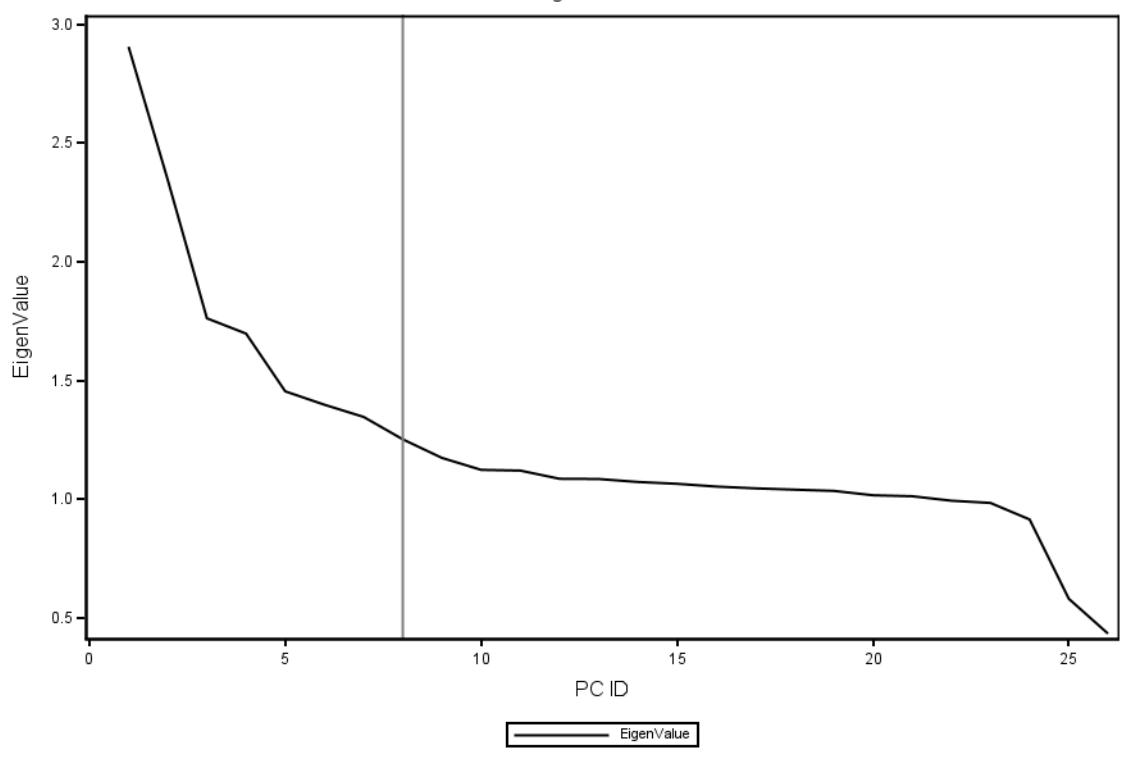
Node=Principal Components Created Variables Summary

Role	Level	Frequency Count	Name
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

SAS Enterprise Miner Report

Node=Principal Components

Eigenvalue Plot



SAS Enterprise Miner Report

Node=NeuralNet 5HURP Summary

Node id = Neural16
 Node label = NeuralNet 5HURP
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural16
 Notes =

Node=NeuralNet 5HURP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	RPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HURP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

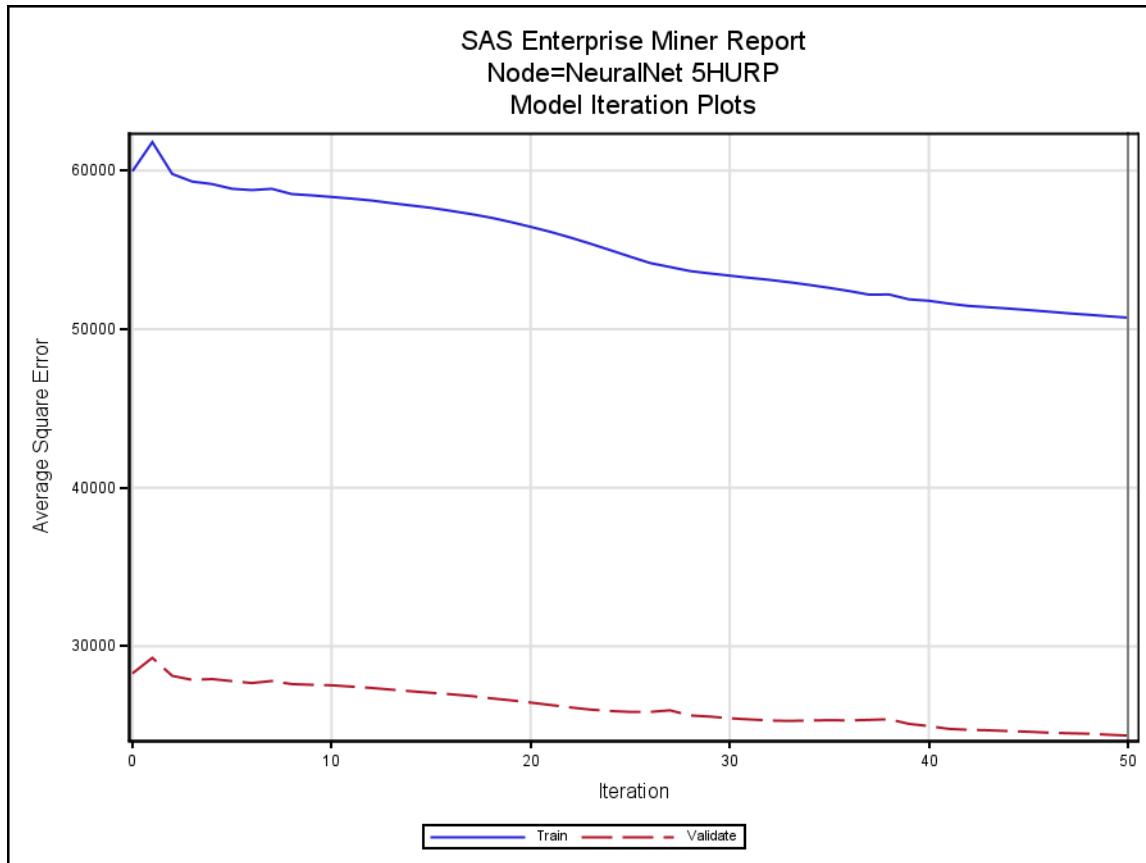
Node=NeuralNet 5HURP Model Fit Statistics

Target=Profit Target Label=Profit

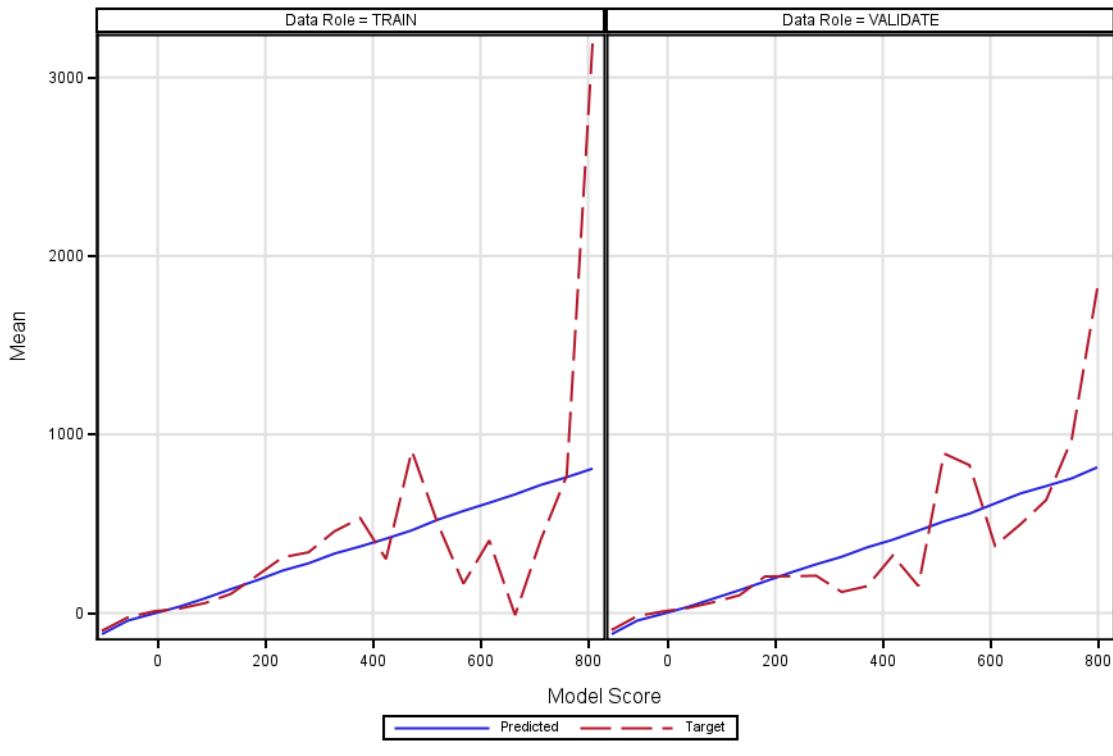
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3947.00	.	.
Model Degrees of Freedom	51.00	.	.
Number of Estimated Weights	51.00	.	.
Akaike's Information Criterion	43417.03	.	.
Schwarz's Bayesian Criterion	43738.00	.	.

Target=Profit Target Label=Profit

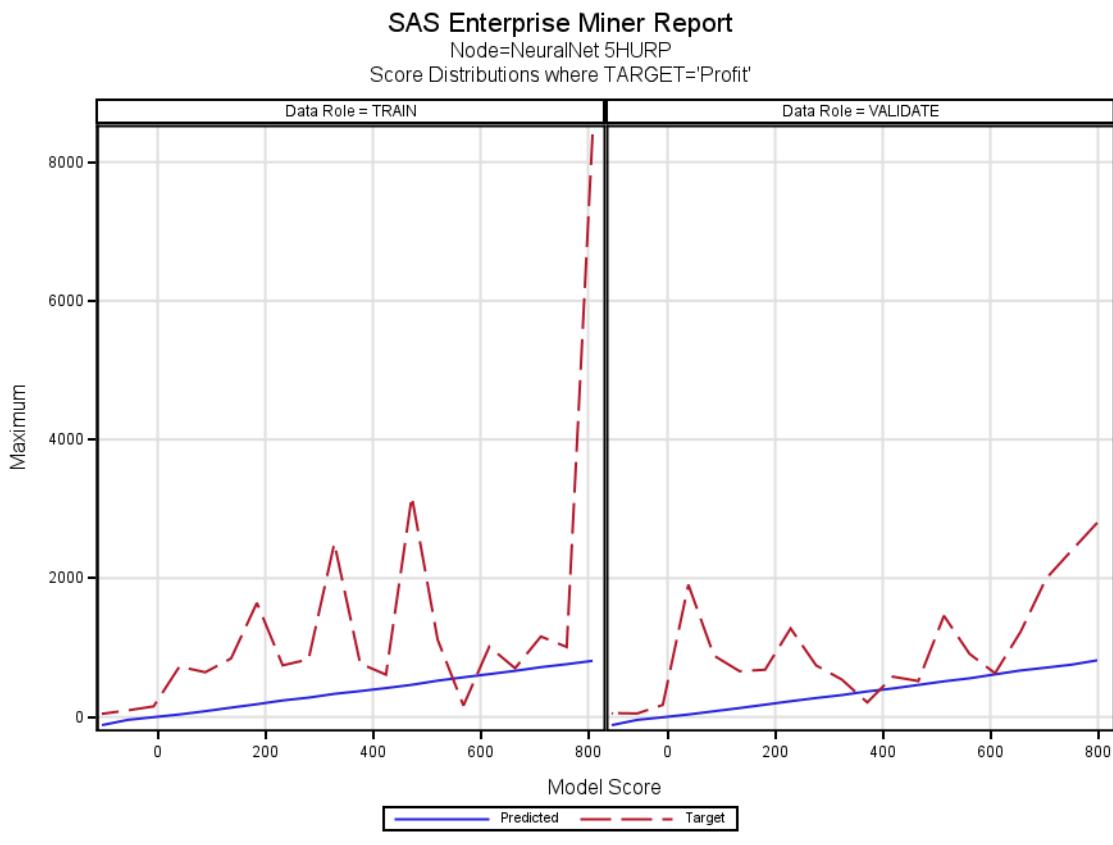
Label of Statistic	Train	Validation	Test
Average Squared Error	50725.04	24370.71	49753.59
Maximum Absolute Error	7567.97	3574.57	6667.16
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	225.22	156.11	223.06
Sum of Squared Errors	202798727.69	73063387.97	149161276.14
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	52035.90		
Mean Squared Error	51380.47	24370.71	49753.59
Root Final Prediction Error	228.11		
Root Mean Squared Error	226.67	156.11	223.06
Average Error Function	50725.04	24370.71	49753.59
Error Function	202798727.69	73063387.97	149161276.14



SAS Enterprise Miner Report
 Node=NeuralNet 5HURP
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 5HURP
 Score Distributions where TARGET='Profit'



Node=NeuralNet 5HURP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
784.366 - 832.362	808.688	832.362	787.853	3190.97	8399.98	839.99
736.370 - 784.366	760.547	778.324	748.442	769.49	1007.98	569.99
688.373 - 736.370	717.516	733.074	699.348	412.19	1159.99	120.00
640.377 - 688.373	664.473	688.090	644.014	-11.85	701.99	-1811.08
592.381 - 640.377	617.343	628.172	598.705	406.66	1013.13	110.00
544.384 - 592.381	571.484	571.484	571.484	163.79	163.79	163.79
496.388 - 544.384	522.578	536.725	505.698	502.02	1114.51	70.00
448.392 - 496.388	463.126	475.186	451.066	908.74	3177.48	-1359.99
400.395 - 448.392	416.133	434.797	403.353	302.07	609.72	83.28
352.399 - 400.395	372.633	388.686	365.697	531.75	770.35	107.99
304.403 - 352.399	332.567	350.405	307.401	457.24	2504.22	-1049.34
256.406 - 304.403	278.235	299.325	258.729	339.98	829.38	31.01
208.410 - 256.406	237.803	254.059	209.892	312.06	743.99	0.00
160.414 - 208.410	183.126	207.950	162.833	209.21	1644.29	-337.81
112.417 - 160.414	134.012	160.395	112.473	107.52	843.17	-94.51
64.421 - 112.417	82.665	112.099	64.445	55.82	643.98	-944.99
16.425 - 64.421	35.551	64.420	16.453	24.36	726.56	-217.05
-31.572 - 16.425	-3.169	16.407	-31.529	9.11	152.02	-766.01
-79.568 - -31.572	-42.651	-31.655	-79.375	-24.61	94.49	-376.69
-127.565 - -79.568	-118.262	-79.752	-127.565	-99.28	44.87	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
775.004 - 822.507	816.037	822.507	809.337	1818.23	2799.98	1049.99
727.500 - 775.004	753.905	773.626	745.041	972.58	2400.97	224.99
679.997 - 727.500	710.959	723.330	695.414	632.79	1995.99	215.99
632.493 - 679.997	669.967	679.074	654.102	497.63	1228.18	90.00
584.989 - 632.493	613.708	622.122	603.723	376.99	629.99	126.00
537.486 - 584.989	556.712	575.529	537.896	828.19	909.98	746.41
489.982 - 537.486	513.082	533.838	492.326	893.35	1459.20	327.51
442.479 - 489.982	461.683	475.381	446.817	151.16	517.48	-630.88
394.975 - 442.479	410.525	418.960	403.326	321.93	580.54	-50.10
347.471 - 394.975	367.892	385.378	349.818	150.61	209.58	97.19
299.968 - 347.471	315.001	336.539	303.063	117.71	539.93	-786.01
252.464 - 299.968	272.741	298.657	254.629	208.87	742.63	-1862.31
204.961 - 252.464	226.472	249.980	205.827	205.44	1276.49	-510.00
157.457 - 204.961	176.808	200.433	158.492	205.02	680.00	-135.77
109.953 - 157.457	127.864	154.936	110.201	99.36	659.98	-299.81
62.450 - 109.953	81.566	109.928	62.463	60.90	884.06	-167.27
14.946 - 62.450	35.097	62.313	14.962	28.47	1906.49	-377.99
-32.557 - 14.946	-4.806	14.889	-32.525	8.67	173.24	-386.39
-80.061 - -32.557	-42.667	-32.560	-76.104	-17.13	49.76	-264.00
-127.565 - -80.061	-118.412	-81.221	-127.565	-94.98	56.00	-3701.89

SAS Enterprise Miner Report

Node=NeuralNet 3HURP Summary

Node id = Neural15
 Node label = NeuralNet 3HURP
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural15
 Notes =

Node=NeuralNet 3HURP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	RPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HURP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

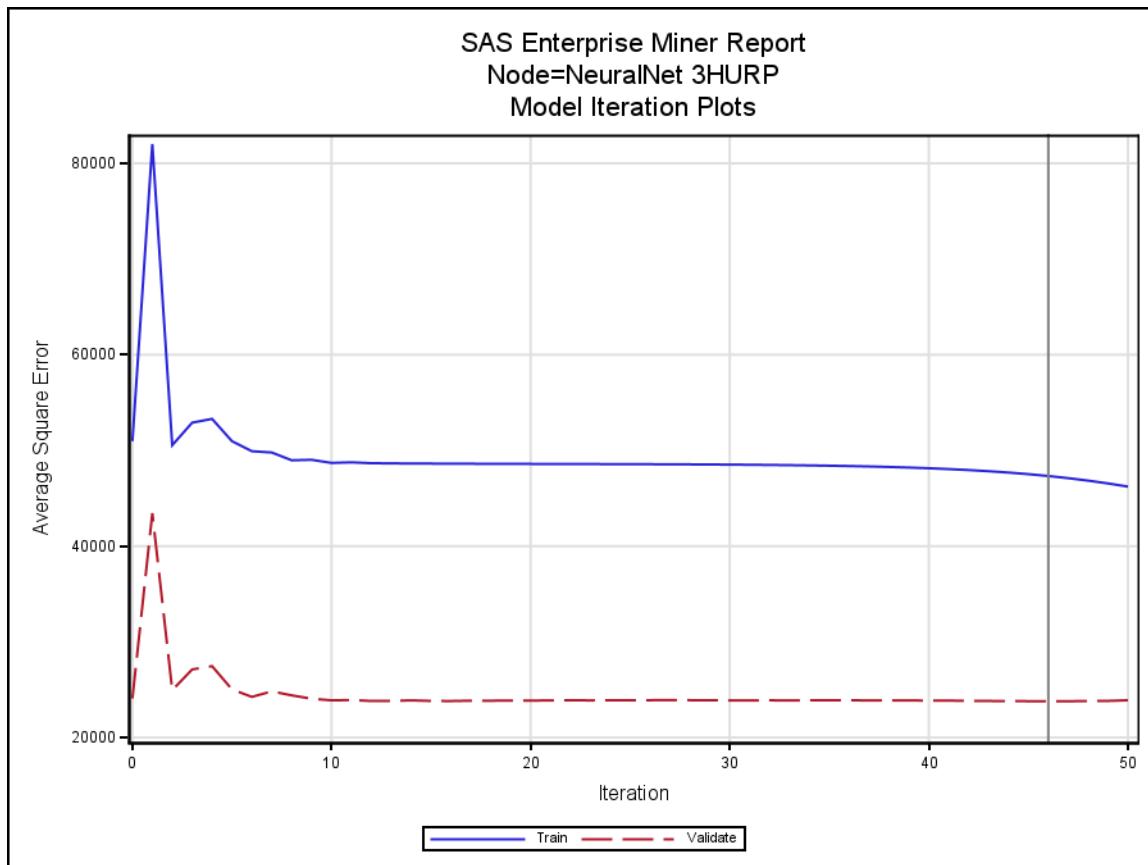
Node=NeuralNet 3HURP Model Fit Statistics

Target=Profit Target Label=Profit

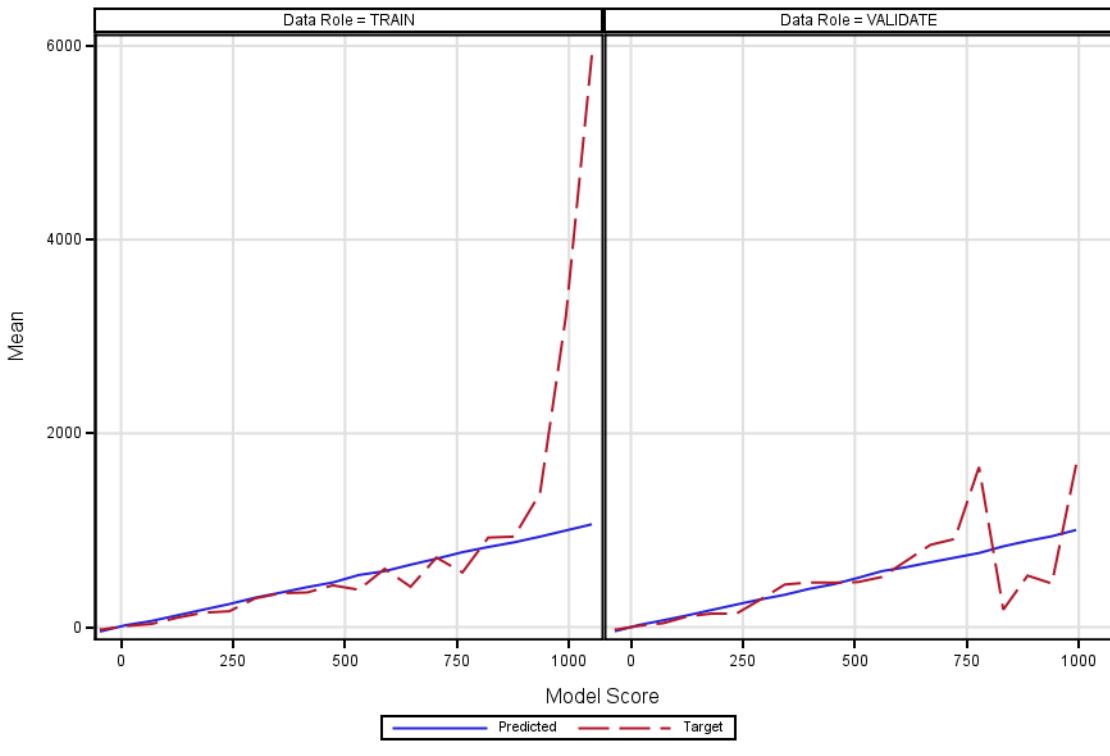
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3967.00	.	.
Model Degrees of Freedom	31.00	.	.
Number of Estimated Weights	31.00	.	.
Akaike's Information Criterion	43100.00	.	.
Schwarz's Bayesian Criterion	43295.10	.	.

Target=Profit Target Label=Profit

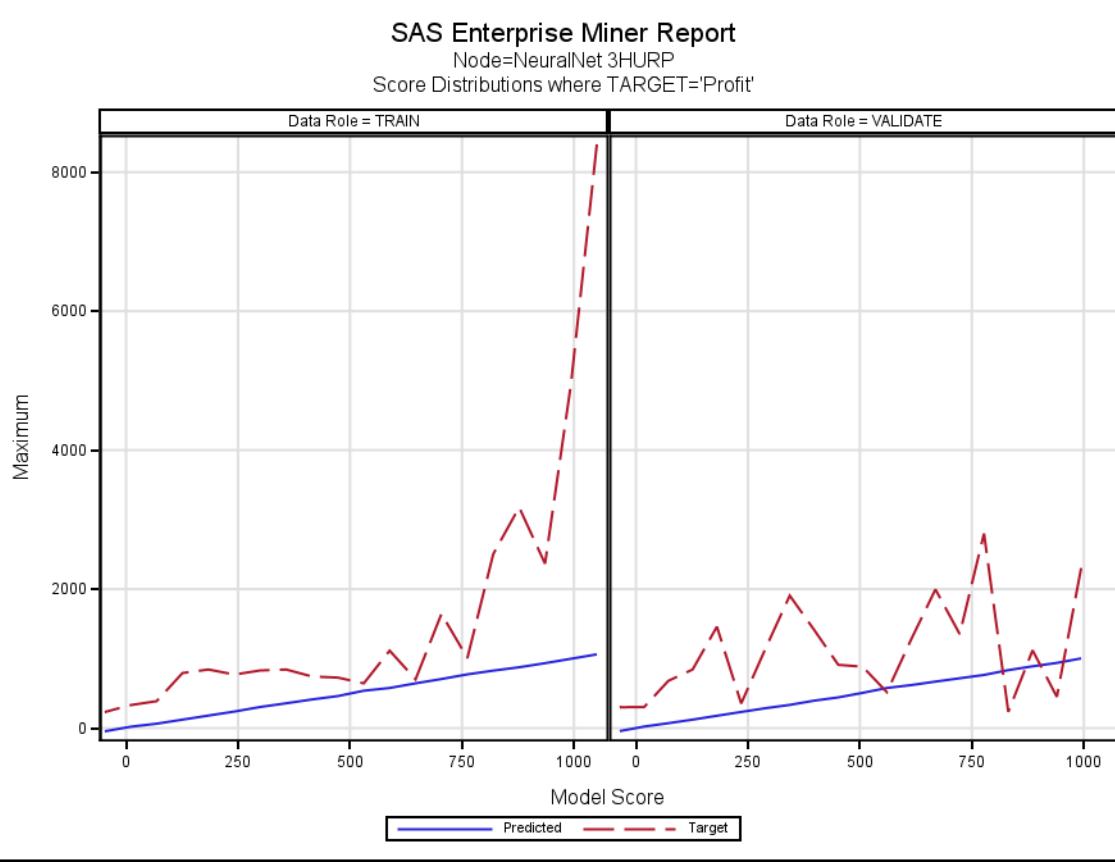
Label of Statistic	Train	Validation	Test
Average Squared Error	47329.18	23799.50	46510.34
Maximum Absolute Error	7320.02	3713.16	6638.08
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	217.55	154.27	215.66
Sum of Squared Errors	189222079.04	71350907.81	139437986.45
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	48068.89		
Mean Squared Error	47699.04	23799.50	46510.34
Root Final Prediction Error	219.25		
Root Mean Squared Error	218.40	154.27	215.66
Average Error Function	47329.18	23799.50	46510.34
Error Function	189222079.04	71350907.81	139437986.45



SAS Enterprise Miner Report
 Node=NeuralNet 3HURP
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 3HURP
 Score Distributions where TARGET='Profit'



Node=NeuralNet 3HURP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1022.148 - 1079.959	1061.09	1079.96	1028.39	5903.97	8399.98	2591.96
964.336 - 1022.148	997.66	1004.54	990.77	3213.42	4946.37	1480.47
906.525 - 964.336	934.14	961.70	910.83	1382.73	2365.98	839.99
848.714 - 906.525	875.37	905.80	862.56	934.29	3177.48	329.99
790.903 - 848.714	826.97	841.78	798.28	924.36	2504.22	90.00
733.092 - 790.903	773.31	779.06	767.55	563.99	1007.98	120.00
675.281 - 733.092	706.17	727.69	682.85	718.28	1644.29	110.00
617.470 - 675.281	644.32	665.47	623.91	416.31	701.99	70.00
559.659 - 617.470	577.48	582.68	567.90	602.00	1114.51	118.37
501.848 - 559.659	537.81	557.97	516.76	385.86	643.98	163.79
444.037 - 501.848	461.04	493.06	446.55	431.04	726.56	31.01
386.225 - 444.037	412.16	434.87	388.79	357.43	742.63	80.78
328.414 - 386.225	356.84	383.28	339.01	350.22	843.17	87.20
270.603 - 328.414	303.80	327.06	272.97	297.35	829.38	56.39
212.792 - 270.603	238.03	268.19	213.84	163.64	770.35	-1811.08
154.981 - 212.792	180.28	212.22	156.37	148.72	843.17	3.76
97.170 - 154.981	122.02	154.89	97.34	97.49	792.27	-1049.34
39.359 - 97.170	63.47	96.90	39.53	32.98	387.57	-1665.05
-18.452 - 39.359	19.99	38.87	-18.39	10.98	331.19	-3399.98
-76.263 - -18.452	-46.11	-18.47	-76.26	-27.46	231.41	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
966.854 - 1021.066	1002.73	1021.07	984.400	1676.48	2302.97	1049.99
912.643 - 966.854	938.11	938.11	938.109	449.99	449.99	449.99
858.431 - 912.643	889.15	911.23	868.578	531.99	1120.00	224.99
804.220 - 858.431	834.02	856.94	815.588	179.99	234.00	90.00
750.008 - 804.220	764.92	787.39	750.383	1652.28	2799.98	180.00
695.796 - 750.008	717.05	733.03	701.077	909.99	1351.99	467.99
641.585 - 695.796	669.30	684.26	658.349	849.24	1995.99	126.00
587.373 - 641.585	618.95	641.31	596.599	683.24	1276.49	90.00
533.162 - 587.373	577.70	577.70	577.702	517.48	517.48	517.48
478.950 - 533.162	507.32	528.75	487.543	464.61	884.06	97.19
424.739 - 478.950	442.10	472.51	426.062	458.52	909.98	161.97
370.527 - 424.739	394.58	422.53	374.917	460.97	1415.43	209.98
316.316 - 370.527	334.01	355.56	316.921	439.52	1906.49	70.49
262.104 - 316.316	286.25	313.56	263.528	284.26	1143.89	-50.10
207.892 - 262.104	232.33	252.46	210.196	137.99	353.58	-630.88
153.681 - 207.892	177.57	206.35	154.329	139.53	1459.20	-786.01
99.469 - 153.681	121.97	153.59	99.727	110.99	843.17	-167.27
45.258 - 99.469	70.55	99.47	45.602	40.79	680.00	-1862.31
-8.954 - 45.258	22.07	44.79	-8.949	13.60	301.97	-3701.89
-63.165 - -8.954	-42.78	-9.14	-63.165	-27.94	300.74	-2287.78

SAS Enterprise Miner Report

Node=NeuralNet 5HUBP Summary

Node id = Neural14
 Node label = NeuralNet 5HUBP
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural14
 Notes =

Node=NeuralNet 5HUBP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	BPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HUBP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

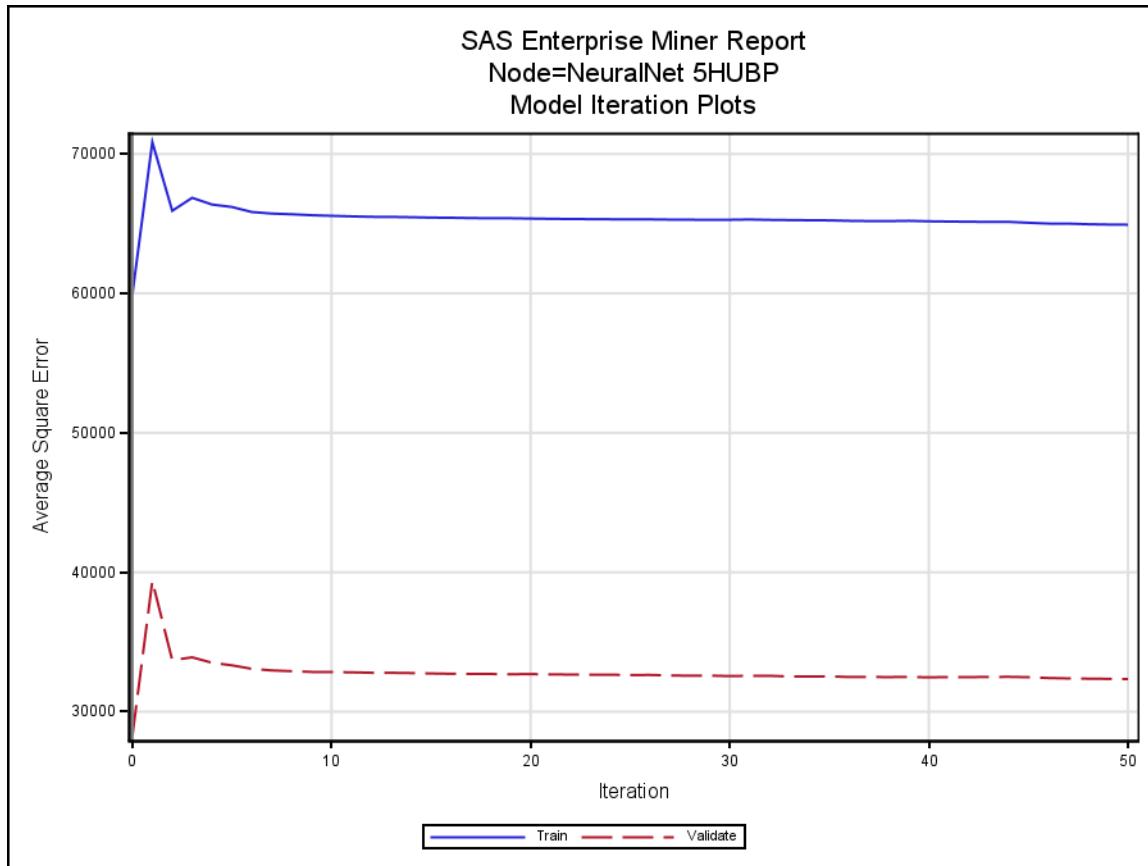
Node=NeuralNet 5HUBP Model Fit Statistics

Target=Profit Target Label=Profit

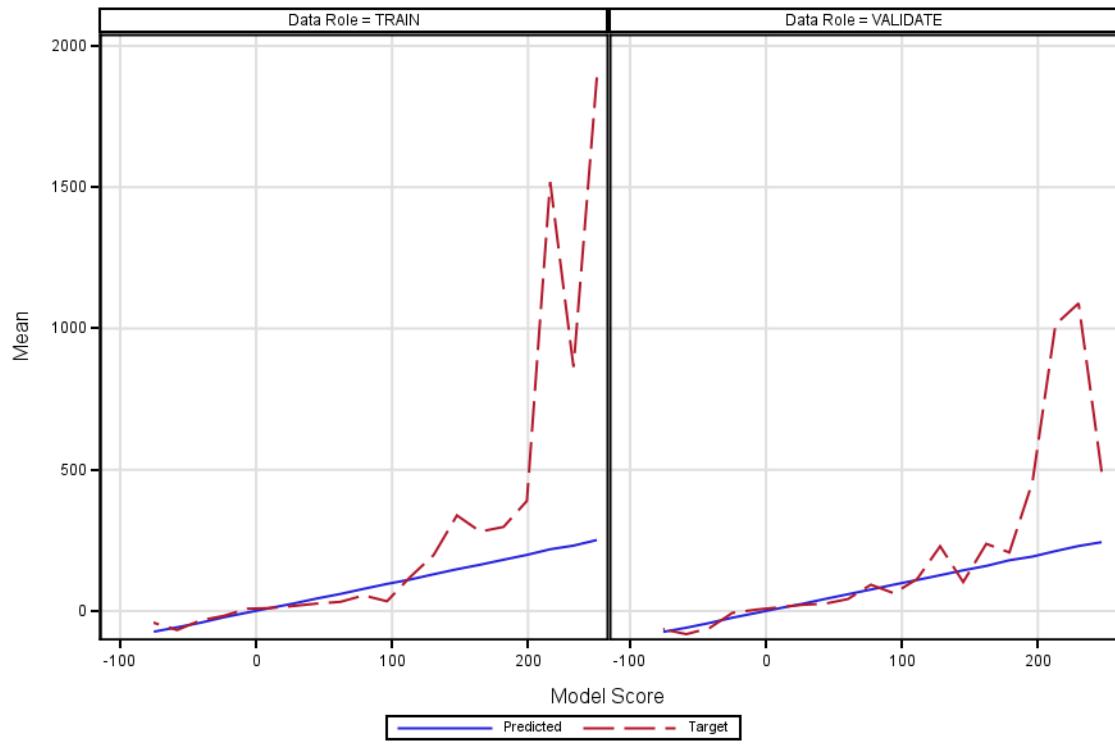
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3947.00	.	.
Model Degrees of Freedom	51.00	.	.
Number of Estimated Weights	51.00	.	.
Akaike's Information Criterion	44085.57	.	.
Schwarz's Bayesian Criterion	44406.54	.	.

Target=Profit Target Label=Profit

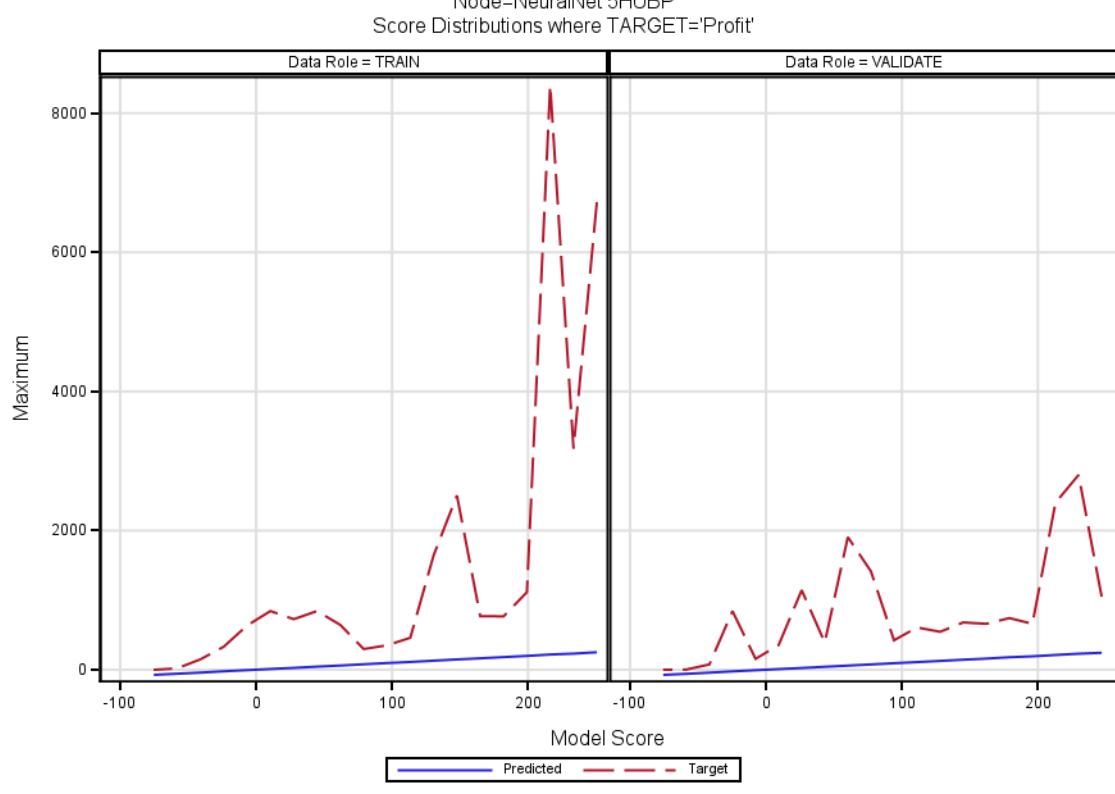
Label of Statistic	Train	Validation	Test
Average Squared Error	59957.56	28288.24	56169.69
Maximum Absolute Error	8176.82	3666.12	6720.60
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	244.86	168.19	237.00
Sum of Squared Errors	239710333.25	84808145.67	168396744.91
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	61507.01		
Mean Squared Error	60732.29	28288.24	56169.69
Root Final Prediction Error	248.01		
Root Mean Squared Error	246.44	168.19	237.00
Average Error Function	59957.56	28288.24	56169.69
Error Function	239710333.25	84808145.67	168396744.91



SAS Enterprise Miner Report
 Node=NeuralNet 5HUBP
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 5HUBP
 Score Distributions where TARGET='Profit'



Node=NeuralNet 5HUBP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
242.044 - 259.195	251.375	259.195	244.160	1888.67	6719.98	449.99
224.893 - 242.044	231.602	237.730	226.187	863.57	3177.48	120.00
207.741 - 224.893	218.722	224.581	212.897	1518.84	8399.98	-1811.08
190.590 - 207.741	198.808	207.100	190.618	389.91	1114.51	-1359.99
173.439 - 190.590	181.725	190.464	173.444	297.75	767.20	-944.99
156.288 - 173.439	164.094	173.229	156.309	281.36	770.35	-337.81
139.137 - 156.288	148.042	156.084	139.340	338.60	2504.22	-572.00
121.986 - 139.137	130.203	138.854	122.283	198.25	1644.29	-337.81
104.835 - 121.986	111.648	121.882	105.275	120.92	459.40	-219.16
87.684 - 104.835	96.062	104.802	87.762	34.69	350.43	-3399.98
70.533 - 87.684	78.618	87.638	70.564	55.43	297.64	-950.40
53.382 - 70.533	60.590	70.520	53.415	32.59	643.98	-1665.05
36.231 - 53.382	44.643	53.284	36.355	26.60	843.17	-968.88
19.080 - 36.231	26.832	36.217	19.095	17.97	726.56	-2639.99
1.929 - 19.080	10.984	19.075	1.933	10.79	843.17	-935.96
-15.222 - 1.929	-5.540	1.901	-15.184	8.19	635.50	-420.00
-32.373 - -15.222	-22.132	-15.275	-32.079	-16.93	331.19	-1306.55
-49.524 - -32.373	-41.311	-32.710	-49.388	-33.03	149.38	-553.65
-66.675 - -49.524	-57.438	-49.620	-66.518	-67.11	20.12	-1141.47
-83.826 - -66.675	-72.995	-66.740	-83.826	-41.54	-0.99	-470.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
238.407 - 255.378	243.766	255.378	238.649	492.92	1049.99	90.00
221.435 - 238.407	230.256	236.567	221.991	1088.99	2799.98	90.00
204.463 - 221.435	212.196	219.639	205.686	1014.07	2400.97	97.19
187.491 - 204.463	192.753	197.382	187.533	456.13	659.98	239.99
170.519 - 187.491	179.836	186.723	171.169	207.52	742.63	-786.01
153.547 - 170.519	159.784	168.090	154.399	238.04	659.98	-630.88
136.575 - 153.547	144.248	152.975	137.398	102.68	680.00	-1862.31
119.603 - 136.575	126.840	136.030	119.820	229.35	545.19	13.20
102.631 - 119.603	109.949	119.595	103.004	113.18	607.61	-161.69
85.659 - 102.631	93.552	102.505	85.694	62.91	423.01	-272.58
68.687 - 85.659	76.259	85.604	68.701	93.22	1415.43	-167.27
51.715 - 68.687	59.479	68.448	51.846	42.43	1906.49	-386.39
34.743 - 51.715	42.582	51.711	34.780	26.04	390.98	-619.60
17.771 - 34.743	25.144	34.740	17.791	21.88	1143.89	-643.71
0.799 - 17.771	9.523	17.763	0.800	13.19	353.58	-251.99
-16.173 - 0.799	-7.090	0.788	-16.062	4.75	156.75	-458.15
-33.145 - -16.173	-23.405	-16.203	-33.045	-6.23	843.17	-913.18
-50.117 - -33.145	-42.210	-33.265	-49.984	-60.25	76.40	-3701.89
-67.089 - -50.117	-58.876	-50.301	-67.044	-81.65	3.31	-1850.95
-84.061 - -67.089	-73.637	-67.233	-84.061	-64.61	-0.76	-2287.78

SAS Enterprise Miner Report

Node=NeuralNet 3HUBP Summary

Node id = Neural13
 Node label = NeuralNet 3HUBP
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural13
 Notes =

Node=NeuralNet 3HUBP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	BPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HUBP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

Node=NeuralNet 3HUBP Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3967.00	.	.
Model Degrees of Freedom	31.00	.	.
Number of Estimated Weights	31.00	.	.
Akaike's Information Criterion	43396.40	.	.
Schwarz's Bayesian Criterion	43591.50	.	.

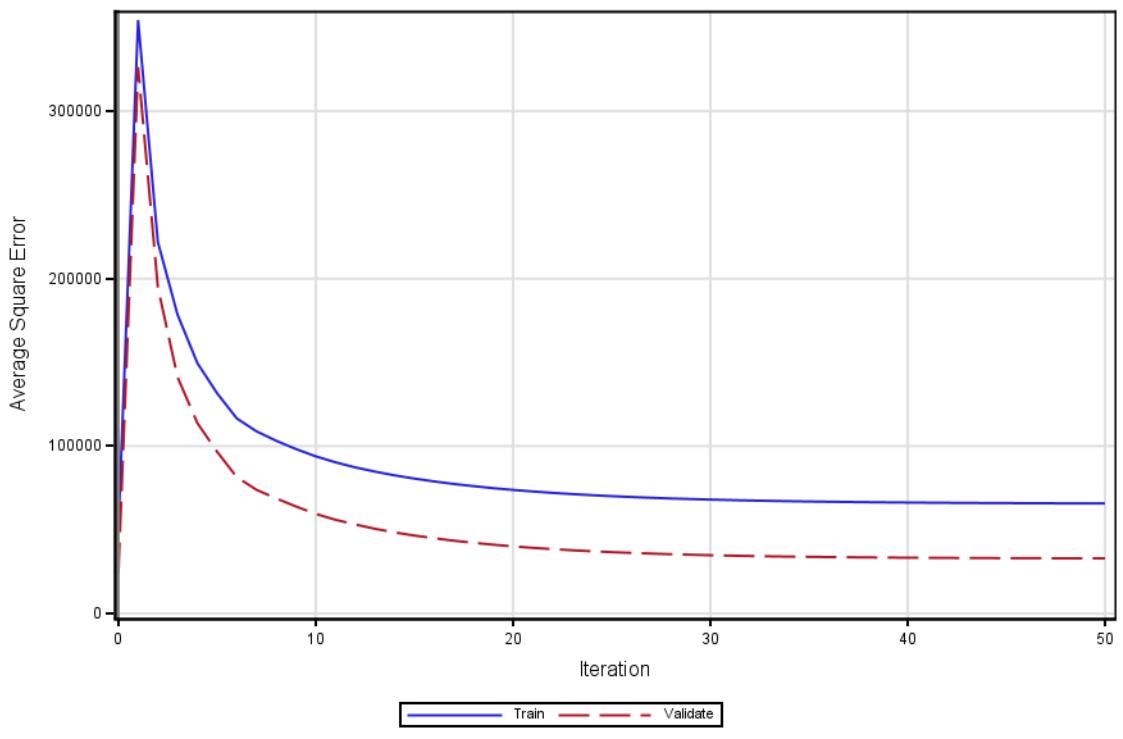
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Average Squared Error	50971.32	24085.83	49001.42
Maximum Absolute Error	7521.08	3732.61	6634.35
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	225.77	155.20	221.36
Sum of Squared Errors	203783342.52	72209308.07	146906265.95
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	51767.95		
Mean Squared Error	51369.64	24085.83	49001.42
Root Final Prediction Error	227.53		
Root Mean Squared Error	226.65	155.20	221.36
Average Error Function	50971.32	24085.83	49001.42
Error Function	203783342.52	72209308.07	146906265.95

SAS Enterprise Miner Report

Node=NeuralNet 3HUBP

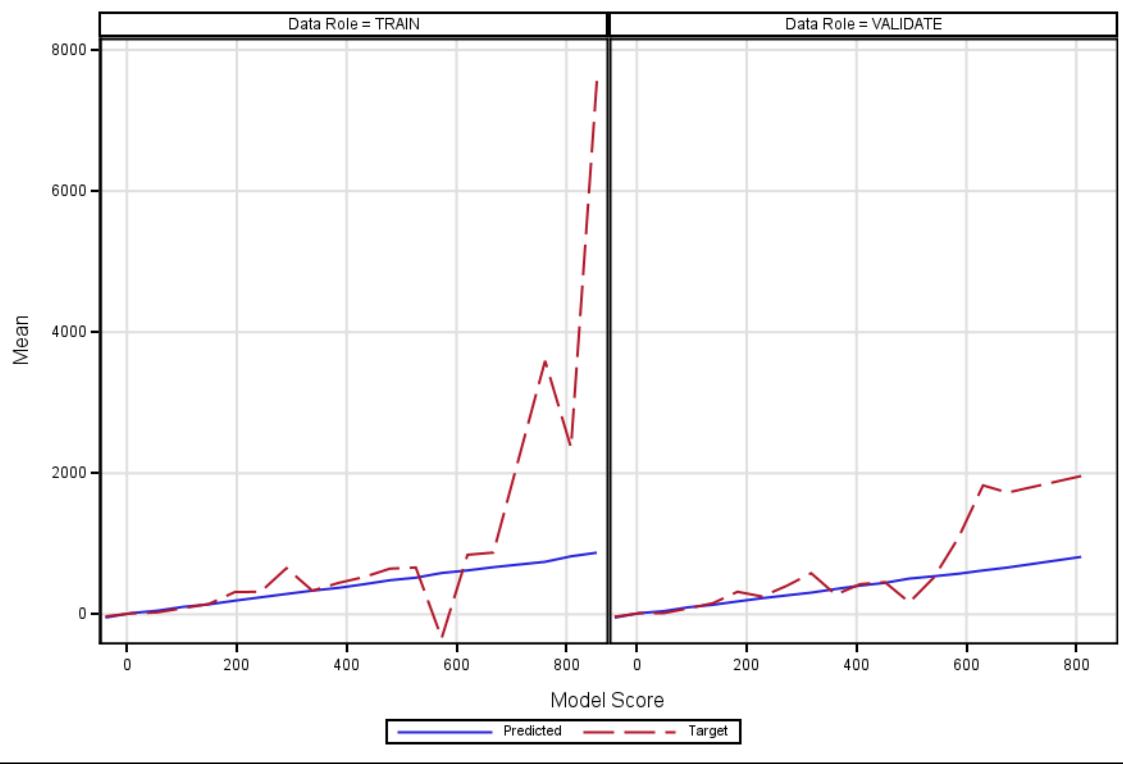
Model Iteration Plots



SAS Enterprise Miner Report

Node=NeuralNet 3HUBP

Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet 3HUBP

Score Distributions where TARGET='Profit'



Node=NeuralNet 3HUBP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
831.819 - 878.892	873.270	878.892	867.648	7559.98	8399.98	6719.98
784.747 - 831.819	821.973	821.973	821.973	2365.98	2365.98	2365.98
737.675 - 784.747	744.037	748.428	739.646	3593.18	4946.37	2239.99
643.530 - 690.602	668.051	668.051	668.051	874.99	874.99	874.99
596.458 - 643.530	622.032	642.620	597.215	843.55	1480.47	120.00
549.386 - 596.458	585.851	588.445	581.411	-337.70	485.99	-1811.08
502.313 - 549.386	519.117	540.903	503.632	663.00	3177.48	110.00
455.241 - 502.313	482.901	499.415	455.298	647.36	2504.22	70.00
408.169 - 455.241	426.339	450.371	410.440	528.59	1644.29	118.37
361.096 - 408.169	374.452	384.463	363.405	443.70	609.72	327.59
314.024 - 361.096	335.779	356.904	315.352	334.58	653.30	31.01
266.952 - 314.024	288.470	313.437	267.147	654.48	2591.96	80.78
219.880 - 266.952	241.067	264.116	220.585	319.09	829.38	87.20
172.807 - 219.880	193.520	216.210	173.413	315.44	843.17	22.65
125.735 - 172.807	140.963	170.156	126.696	147.03	843.17	-219.16
78.663 - 125.735	105.564	125.200	78.740	86.33	792.27	-1359.99
31.590 - 78.663	50.901	78.486	31.610	27.61	421.59	-3399.98
-15.482 - 31.590	17.313	31.565	-15.327	13.07	456.59	-2639.99
-62.554 - -15.482	-46.454	-15.546	-62.554	-29.19	168.47	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
786.674 - 831.370	814.362	831.370	797.354	1959.99	2799.98	1120.00
652.586 - 697.282	663.234	673.641	652.827	1725.48	2400.97	1049.99
607.890 - 652.586	621.656	627.373	615.938	1827.48	2302.97	1351.99
563.194 - 607.890	575.288	580.945	569.630	1087.99	1995.99	180.00
518.498 - 563.194	539.474	550.635	524.947	522.83	1228.18	126.00
473.802 - 518.498	506.500	517.111	495.889	170.00	250.00	90.00
429.106 - 473.802	445.844	463.944	429.771	456.32	909.98	224.99
384.410 - 429.106	407.065	421.719	397.388	428.08	746.41	215.99
339.714 - 384.410	358.592	381.588	339.950	278.83	517.48	145.07
295.019 - 339.714	307.233	328.207	297.310	582.42	1276.49	97.19
250.323 - 295.019	268.224	291.431	250.814	403.01	1906.49	-50.10
205.627 - 250.323	228.203	248.041	206.871	252.77	1415.43	-630.88
160.931 - 205.627	182.636	203.052	161.045	319.51	1459.20	29.88
116.235 - 160.931	134.950	159.919	116.309	157.61	762.59	-786.01
71.539 - 116.235	99.748	116.193	71.844	84.03	621.97	-167.27
26.843 - 71.539	44.966	71.373	26.917	17.10	843.17	-3701.89
-17.853 - 26.843	16.533	26.802	-17.815	16.25	300.74	-453.85
-62.549 - -17.853	-46.824	-18.065	-62.549	-34.45	173.24	-2287.78

SAS Enterprise Miner Report

Node=NeuralNet 5HUBD Summary

Node id = Neural12
 Node label = NeuralNet 5HUBD
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural12
 Notes =

Node=NeuralNet 5HUBD Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DBLDOG	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HUBD Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

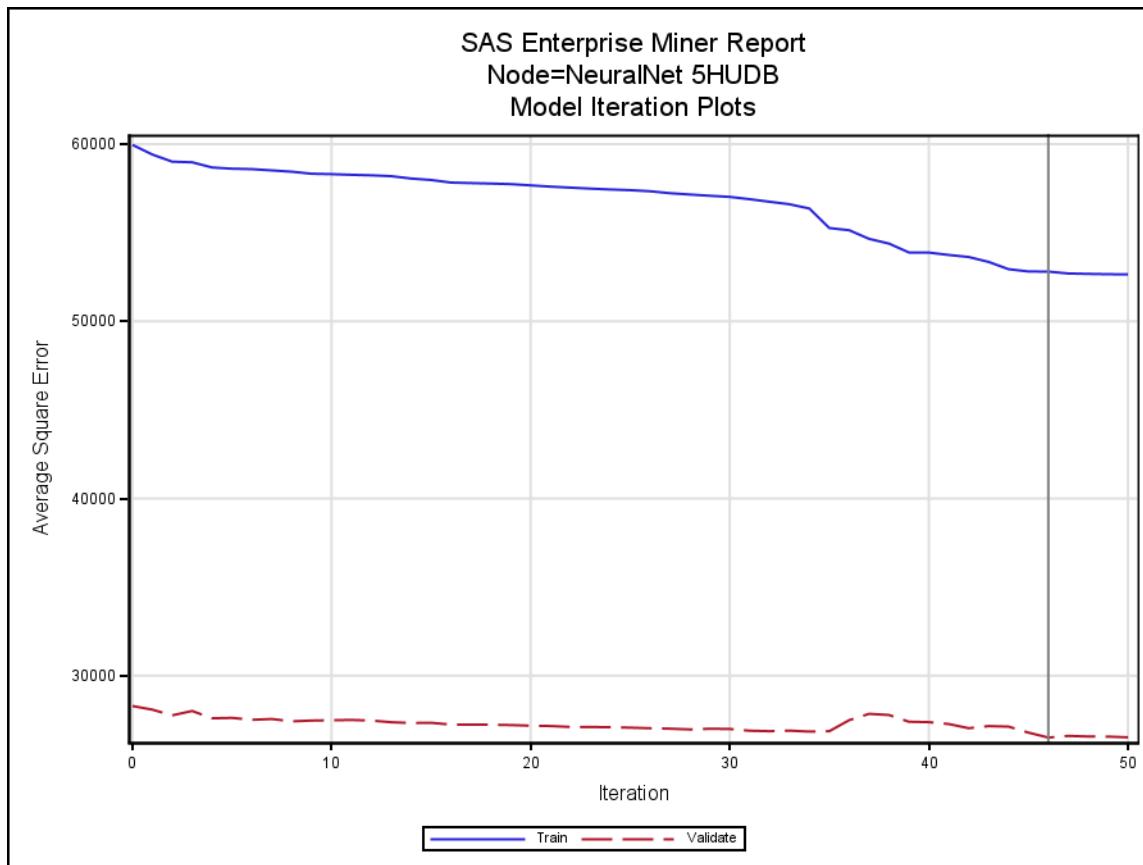
Node=NeuralNet 5HUBD Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3947.00	.	.
Model Degrees of Freedom	51.00	.	.
Number of Estimated Weights	51.00	.	.
Akaike's Information Criterion	43577.61	.	.
Schwarz's Bayesian Criterion	43898.58	.	.

Target=Profit Target Label=Profit

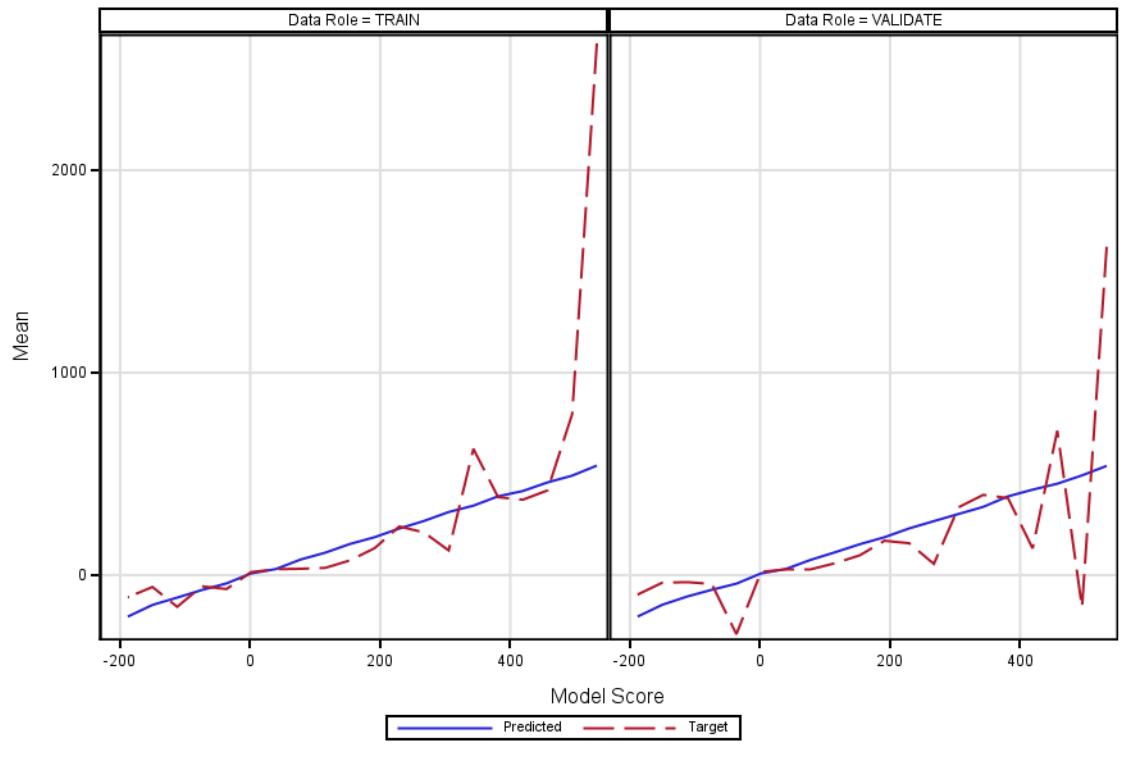
Label of Statistic	Train	Validation	Test
Average Squared Error	52803.87	26507.35	52181.08
Maximum Absolute Error	7847.88	3657.20	6749.01
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	229.79	162.81	228.43
Sum of Squared Errors	211109868.78	79469024.63	156438874.17
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	54168.45		
Mean Squared Error	53486.16	26507.35	52181.08
Root Final Prediction Error	232.74		
Root Mean Squared Error	231.27	162.81	228.43
Average Error Function	52803.87	26507.35	52181.08
Error Function	211109868.78	79469024.63	156438874.17



SAS Enterprise Miner Report

Node=NeuralNet 5HUBD

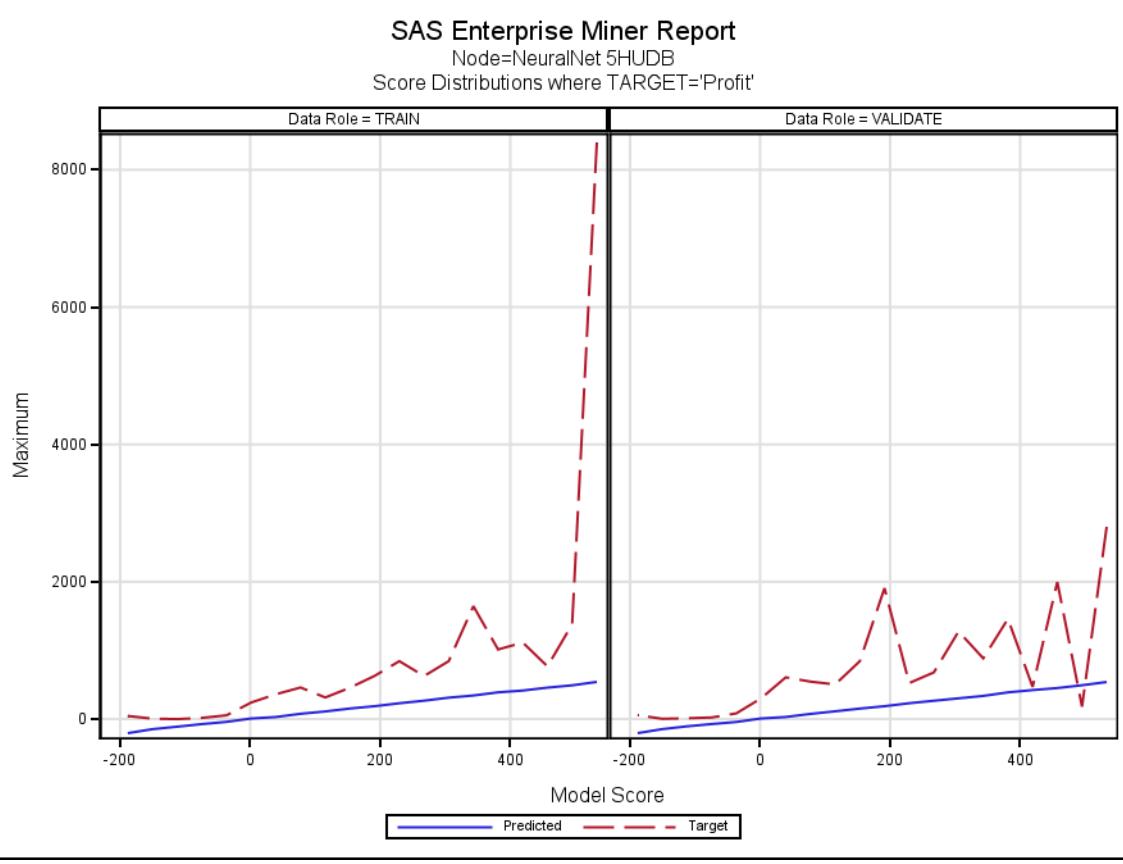
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet 5HUBD

Score Distributions where TARGET='Profit'



Node=NeuralNet 5HUBD
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
514.130 - 552.099	540.801	552.099	517.721	2626.79	8399.98	-1049.34
476.162 - 514.130	491.224	507.613	477.632	794.53	1379.98	70.00
438.193 - 476.162	457.558	470.486	446.740	418.12	767.20	83.28
400.225 - 438.193	415.112	436.950	401.061	372.21	1114.51	90.00
362.257 - 400.225	389.022	397.918	373.055	384.88	1013.13	31.01
324.288 - 362.257	342.865	357.093	326.111	623.68	1644.29	77.82
286.320 - 324.288	311.470	322.792	291.561	121.60	843.17	-1811.08
248.351 - 286.320	267.301	285.889	252.700	210.53	626.19	6.98
210.383 - 248.351	230.052	248.324	211.308	240.19	843.17	-35.18
172.414 - 210.383	187.128	210.174	172.439	132.90	629.01	-18.19
134.446 - 172.414	153.578	172.286	135.105	72.45	456.59	-1359.99
96.478 - 134.446	110.635	134.289	96.478	35.58	314.27	-337.81
58.509 - 96.478	76.723	96.436	58.931	30.98	459.40	-337.81
20.541 - 58.509	29.695	58.495	20.598	28.90	361.30	-219.16
-17.428 - 20.541	8.260	20.531	-17.035	14.72	240.86	-944.99
-55.396 - -17.428	-41.159	-18.688	-55.120	-69.05	54.40	-1141.47
-93.365 - -55.396	-73.808	-55.458	-93.292	-55.54	16.79	-1306.55
-131.333 - -93.365	-111.346	-93.645	-131.174	-156.87	-1.11	-3399.98
-169.301 - -131.333	-147.487	-133.180	-167.202	-58.82	5.52	-938.28
-207.270 - -169.301	-205.373	-178.622	-207.270	-109.58	44.87	-1665.05

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
514.076 - 552.042	539.389	552.042	520.153	1621.91	2799.98	327.51
476.110 - 514.076	492.345	513.567	480.564	-160.01	180.00	-786.01
438.145 - 476.110	451.262	465.703	438.735	713.41	1995.99	224.99
400.179 - 438.145	421.932	437.606	405.893	131.71	467.99	-630.88
362.213 - 400.179	388.619	398.403	370.722	380.58	1459.20	49.27
324.247 - 362.213	337.010	357.528	329.216	396.25	884.06	21.02
286.281 - 324.247	301.789	319.267	286.678	334.89	1276.49	-135.77
248.316 - 286.281	266.459	285.483	250.016	55.14	680.00	-1862.31
210.350 - 248.316	230.554	248.067	211.550	157.28	523.71	6.77
172.384 - 210.350	186.970	209.617	172.816	169.54	1906.49	2.73
134.418 - 172.384	152.393	170.639	134.849	97.55	843.17	-55.30
96.453 - 134.418	112.698	134.287	96.731	58.63	503.78	-21.21
58.487 - 96.453	74.844	96.315	58.754	28.07	545.19	-510.00
20.521 - 58.487	29.932	58.401	20.536	28.22	607.61	-377.99
-17.445 - 20.521	8.288	20.427	-16.844	15.92	301.97	-386.39
-55.411 - -17.445	-42.456	-17.707	-54.698	-291.84	83.05	-3701.89
-93.376 - -55.411	-72.812	-55.633	-93.323	-43.82	23.00	-913.18
-131.342 - -93.376	-106.089	-93.964	-123.995	-34.99	11.58	-393.60
-169.308 - -131.342	-146.681	-132.570	-167.493	-37.55	3.45	-383.99
-207.274 - -169.308	-205.044	-175.007	-207.274	-96.06	56.00	-814.48

SAS Enterprise Miner Report

Node=NeuralNet 3HUBD Summary

Node id = Neural11
 Node label = NeuralNet 3HUBD
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural11
 Notes =

Node=NeuralNet 3HUBD Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DBLDOG	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HUBD Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

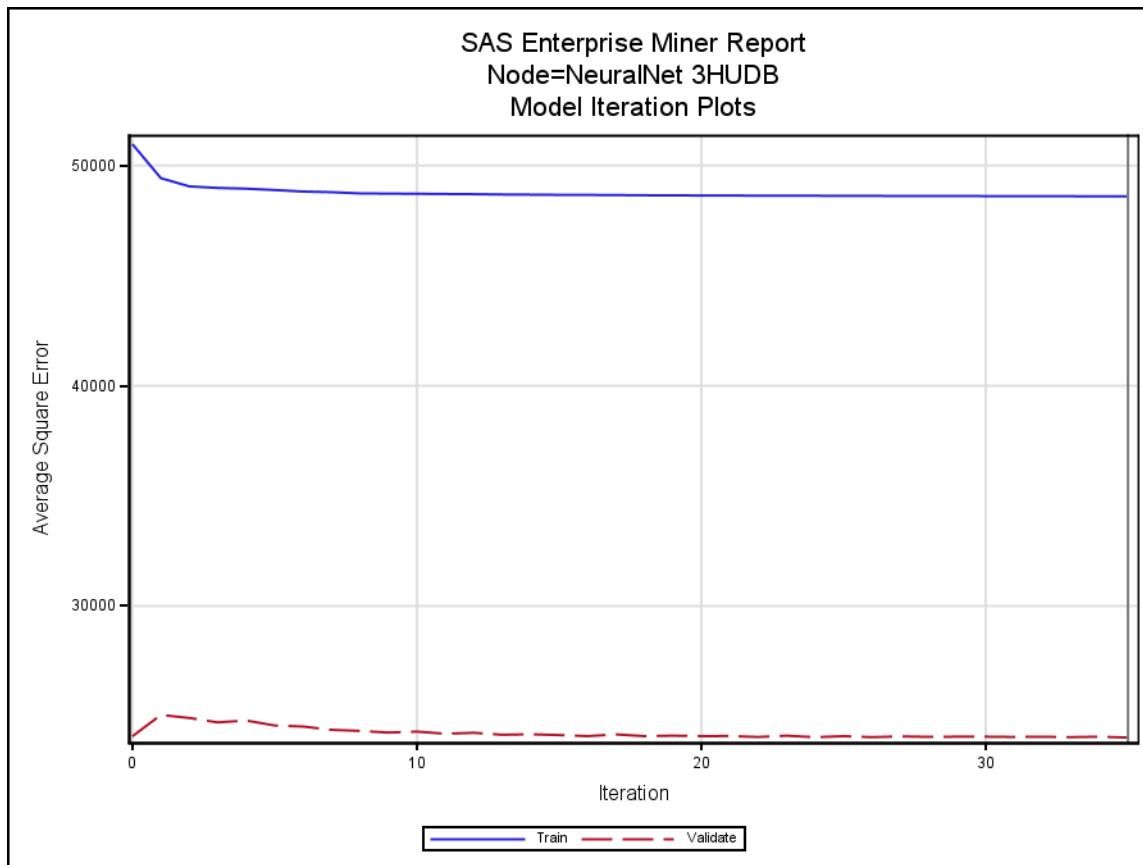
Node=NeuralNet 3HUBD Model Fit Statistics

Target=Profit Target Label=Profit

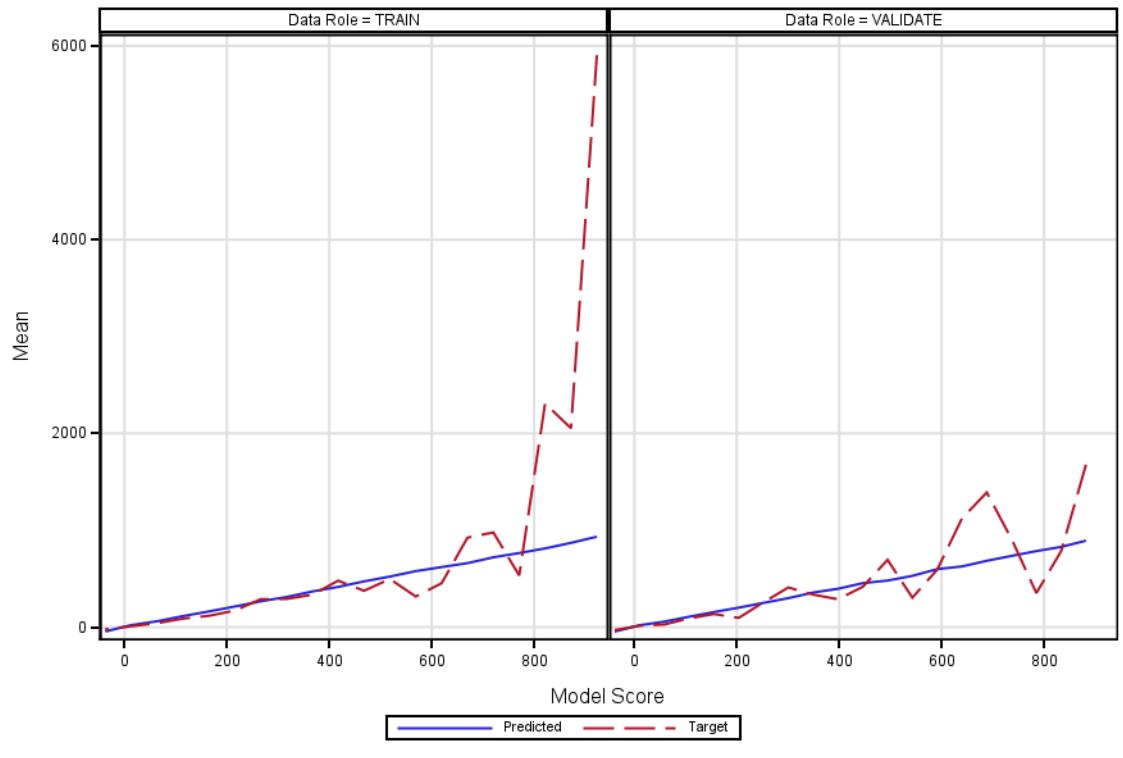
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3967.00	.	.
Model Degrees of Freedom	31.00	.	.
Number of Estimated Weights	31.00	.	.
Akaike's Information Criterion	43205.83	.	.
Schwarz's Bayesian Criterion	43400.93	.	.

Target=Profit Target Label=Profit

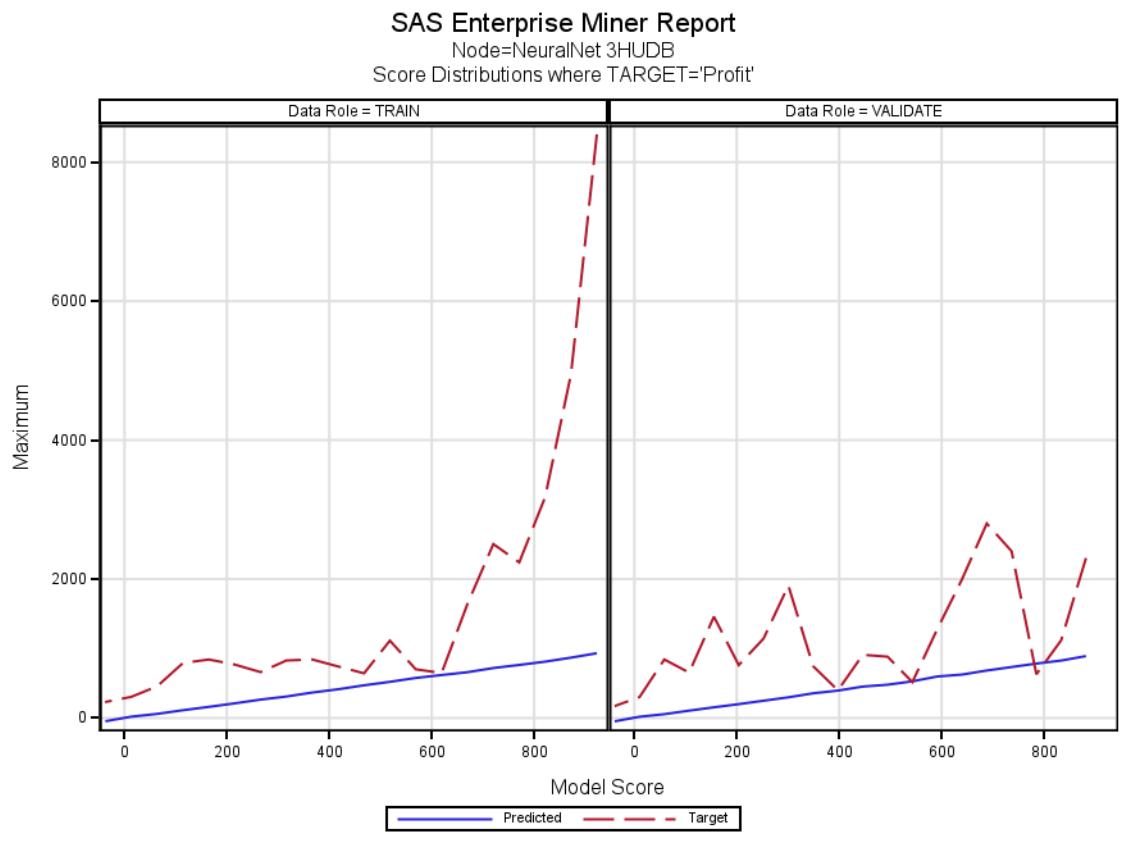
Label of Statistic	Train	Validation	Test
Average Squared Error	48598.73	24028.35	47197.59
Maximum Absolute Error	7452.36	3732.52	6633.65
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	220.45	155.01	217.25
Sum of Squared Errors	194297734.06	72037000.64	141498375.04
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	49358.28		
Mean Squared Error	48978.51	24028.35	47197.59
Root Final Prediction Error	222.17		
Root Mean Squared Error	221.31	155.01	217.25
Average Error Function	48598.73	24028.35	47197.59
Error Function	194297734.06	72037000.64	141498375.04



SAS Enterprise Miner Report
 Node=NeuralNet 3HUBD
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 3HUBD
 Score Distributions where TARGET='Profit'



Node=NeuralNet 3HUBD
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
897.107 - 947.616	933.006	947.616	907.674	5903.97	8399.98	2591.96
846.597 - 897.107	869.521	890.993	847.435	2052.95	4946.37	839.99
796.088 - 846.597	811.937	823.471	801.793	2307.81	3177.48	1379.98
745.578 - 796.088	764.706	788.872	749.224	532.62	2239.99	90.00
695.069 - 745.578	720.221	745.117	700.496	976.80	2504.22	120.00
644.559 - 695.069	660.188	674.923	647.181	923.25	1644.29	311.99
594.050 - 644.559	619.511	642.438	603.973	452.91	648.56	110.00
543.541 - 594.050	577.533	590.790	568.872	315.66	701.99	70.00
493.031 - 543.541	521.482	542.386	498.130	496.26	1114.51	118.37
442.522 - 493.031	471.596	492.925	452.794	374.62	643.98	31.01
392.012 - 442.522	414.644	434.127	396.625	479.22	742.63	140.69
341.503 - 392.012	367.639	391.193	348.519	333.44	843.17	80.78
290.993 - 341.503	310.250	338.331	292.549	290.85	829.38	87.20
240.484 - 290.993	266.023	287.620	240.528	287.42	661.46	22.74
189.974 - 240.484	212.021	238.630	190.941	169.79	770.35	-1811.08
139.465 - 189.974	161.251	189.104	139.756	116.20	843.17	-219.16
88.955 - 139.465	113.282	138.588	89.543	87.46	792.27	-1049.34
38.446 - 88.955	60.082	88.155	38.467	40.65	456.59	-1665.05
-12.063 - 38.446	20.407	38.419	-11.996	9.09	305.13	-3399.98
-62.573 - -12.063	-45.413	-12.101	-62.573	-24.71	231.41	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
857.686 - 906.121	892.170	906.121	878.219	1676.48	2302.97	1049.99
809.252 - 857.686	827.822	837.704	817.941	784.99	1120.00	449.99
760.817 - 809.252	784.570	804.636	764.030	351.19	629.99	215.99
712.383 - 760.817	734.738	747.977	716.416	908.32	2400.97	90.00
663.948 - 712.383	684.418	703.807	668.969	1390.04	2799.98	180.00
615.514 - 663.948	626.026	629.889	621.387	1121.32	1995.99	467.99
567.079 - 615.514	598.335	607.496	582.541	592.49	1276.49	126.00
518.645 - 567.079	528.807	537.088	520.525	303.74	517.48	90.00
470.210 - 518.645	480.141	487.810	475.572	694.68	884.06	517.48
421.776 - 470.210	453.413	465.000	445.981	415.64	909.98	97.19
373.341 - 421.776	395.459	412.698	386.069	287.40	399.30	161.97
324.907 - 373.341	356.677	372.673	328.529	335.29	746.41	49.27
276.472 - 324.907	298.665	321.604	278.001	408.98	1906.49	46.73
228.038 - 276.472	249.819	275.541	230.238	256.16	1143.89	-50.10
179.603 - 228.038	200.645	227.030	181.832	94.83	762.59	-786.01
131.169 - 179.603	154.995	178.510	132.322	134.36	1459.20	-99.62
82.734 - 131.169	106.942	131.020	82.796	90.28	654.76	-167.27
34.300 - 82.734	56.250	82.467	34.310	26.92	843.17	-1862.31
-14.135 - 34.300	19.343	34.298	-14.089	13.35	301.97	-3701.89
-62.569 - -14.135	-46.458	-14.154	-62.569	-31.11	173.24	-2287.78

SAS Enterprise Miner Report

Node=NeuralNet 5HU Summary

Node id = Neural10
 Node label = NeuralNet 5HU
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural10
 Notes =

Node=NeuralNet 5HU Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DEFAULT	
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HU Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

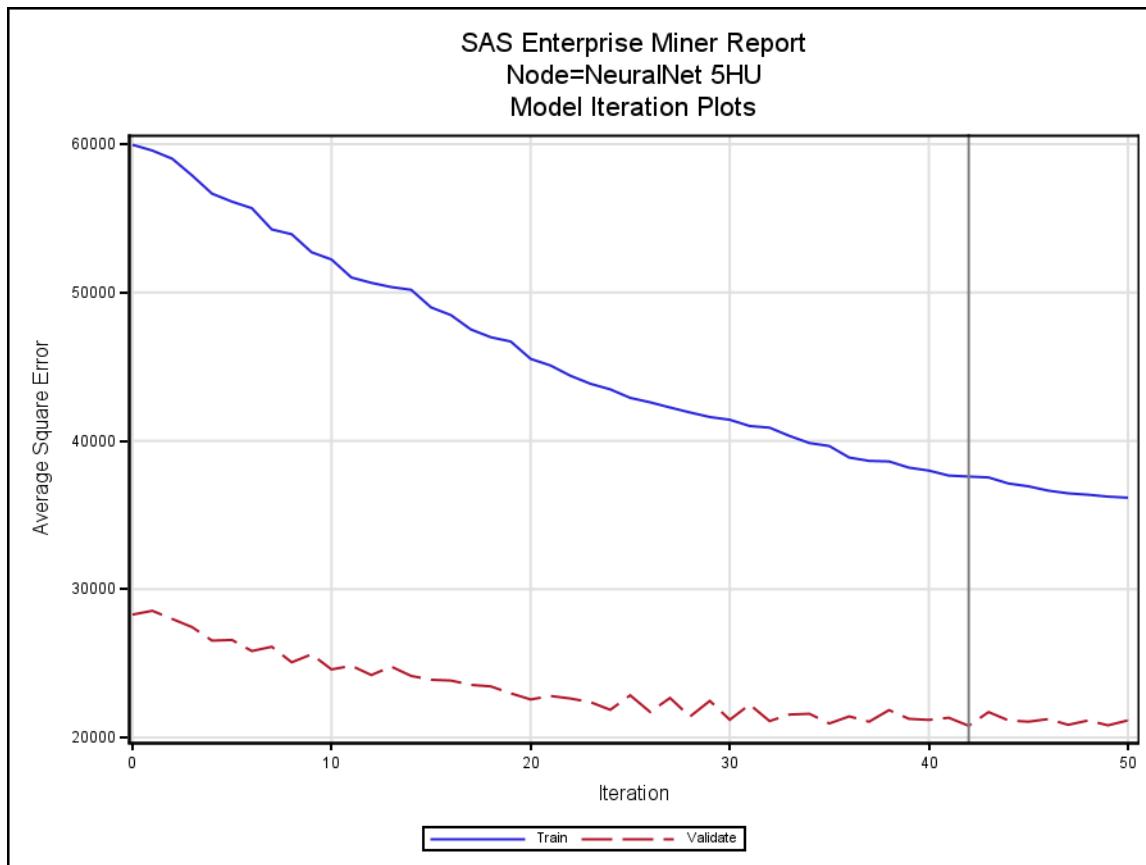
Node=NeuralNet 5HU Model Fit Statistics

Target=Profit Target Label=Profit

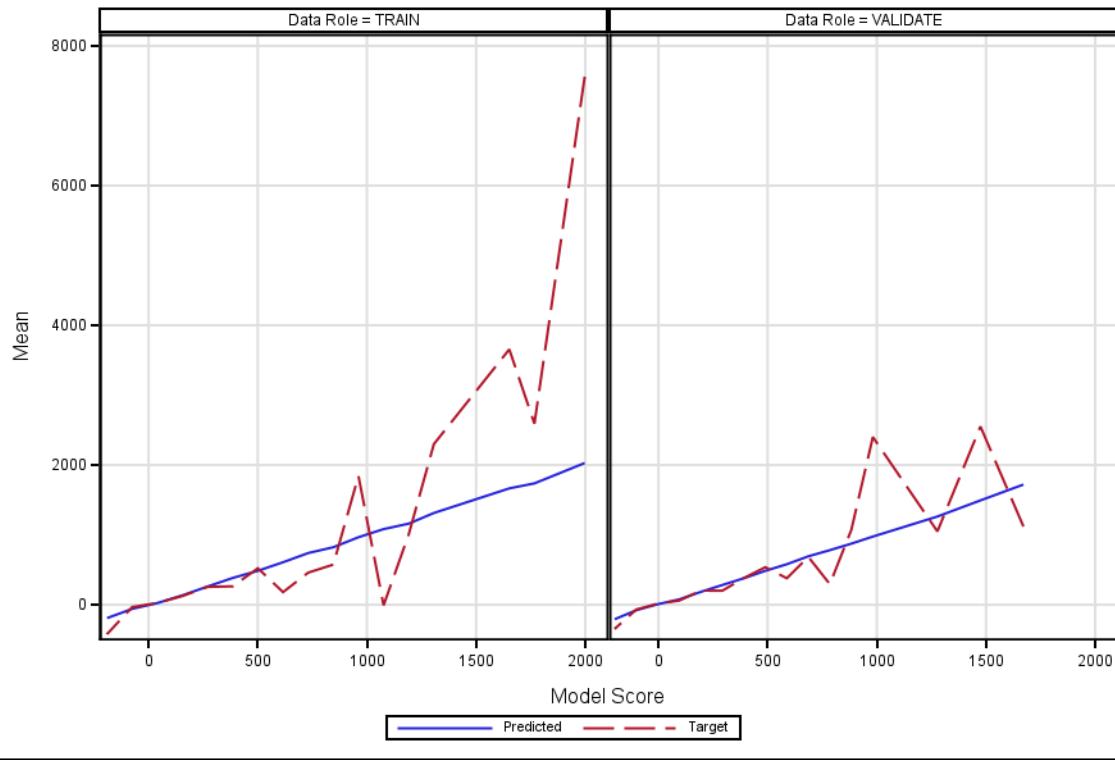
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3947.00	.	.
Model Degrees of Freedom	51.00	.	.
Number of Estimated Weights	51.00	.	.
Akaike's Information Criterion	42219.35	.	.
Schwarz's Bayesian Criterion	42540.32	.	.

Target=Profit Target Label=Profit

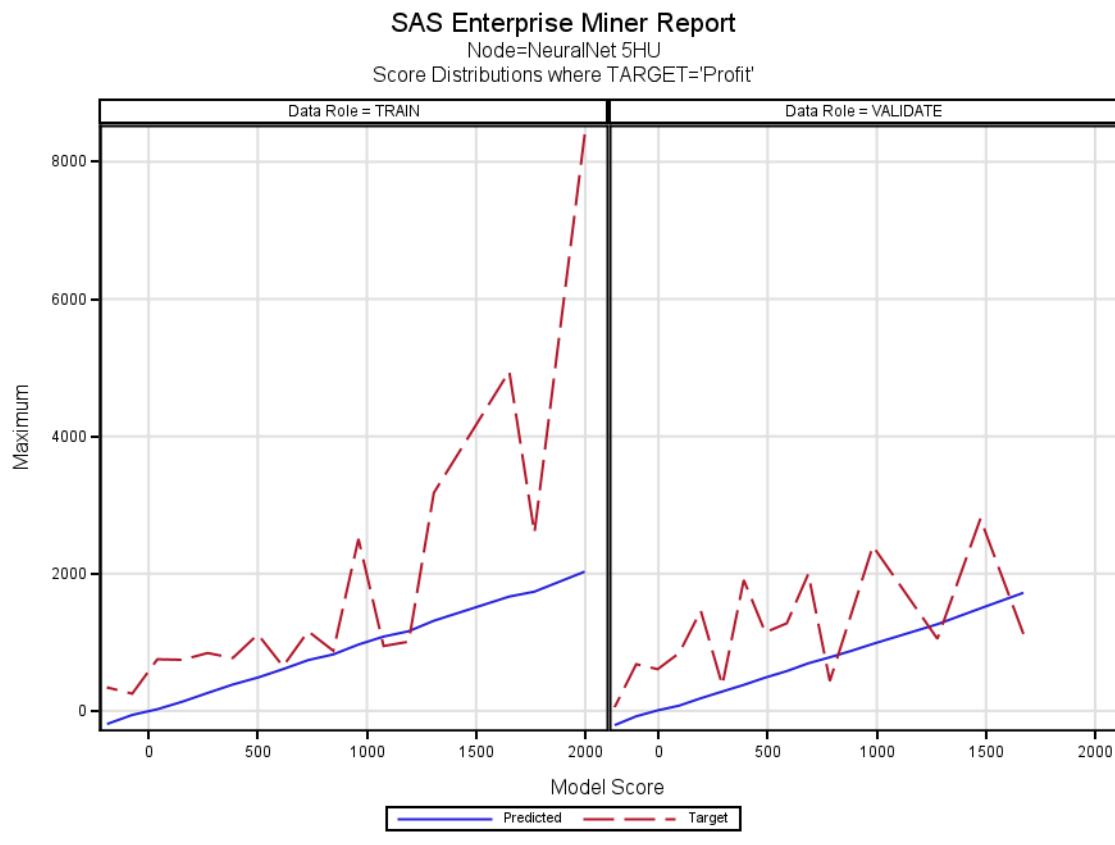
Label of Statistic	Train	Validation	Test
Average Squared Error	37594.19	20793.80	39669.25
Maximum Absolute Error	6345.27	3476.62	6446.46
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	193.89	144.20	199.17
Sum of Squared Errors	150301572.90	62339798.75	118928424.19
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	38565.71		
Mean Squared Error	38079.95	20793.80	39669.25
Root Final Prediction Error	196.38		
Root Mean Squared Error	195.14	144.20	199.17
Average Error Function	37594.19	20793.80	39669.25
Error Function	150301572.90	62339798.75	118928424.19



SAS Enterprise Miner Report
 Node=NeuralNet 5HU
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 5HU
 Score Distributions where TARGET='Profit'



Node=NeuralNet 5HU
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1939.581 - 2054.701	2028.61	2054.70	2002.53	7559.98	8399.98	6719.98
1709.341 - 1824.461	1737.05	1737.05	1737.05	2591.96	2591.96	2591.96
1594.221 - 1709.341	1665.65	1675.25	1656.04	3656.18	4946.37	2365.98
1248.861 - 1363.981	1313.25	1331.01	1296.56	2299.31	3177.48	1480.47
1133.741 - 1248.861	1160.66	1160.66	1160.66	1007.98	1007.98	1007.98
1018.621 - 1133.741	1082.60	1119.93	1031.01	-8.70	944.99	-1811.08
903.501 - 1018.621	966.25	1013.62	922.56	1842.83	2504.22	1379.98
788.381 - 903.501	822.98	841.89	804.07	574.99	874.99	275.00
673.261 - 788.381	739.64	787.65	681.03	459.31	1159.99	90.00
558.141 - 673.261	608.09	655.83	575.86	180.21	648.56	-1049.34
443.020 - 558.141	485.77	549.07	443.57	522.09	1114.51	118.37
327.900 - 443.020	383.67	439.58	329.42	263.34	770.35	-1359.99
212.780 - 327.900	261.04	327.57	212.96	255.57	843.17	-337.81
97.660 - 212.780	134.72	211.46	97.76	124.90	743.99	-337.81
-17.460 - 97.660	23.90	97.51	-17.44	24.40	751.76	-165.77
-132.580 - -17.460	-59.40	-17.46	-132.40	-33.01	250.40	-1665.05
-247.700 - -132.580	-191.56	-133.14	-247.70	-421.04	341.99	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1622.143 - 1720.656	1720.66	1720.66	1720.66	1120.00	1120.00	1120.00
1425.117 - 1523.630	1493.59	1511.75	1475.43	2551.48	2799.98	2302.97
1228.091 - 1326.604	1262.62	1262.62	1262.62	1049.99	1049.99	1049.99
932.551 - 1031.064	975.80	975.80	975.80	2400.97	2400.97	2400.97
834.038 - 932.551	874.55	899.61	840.10	1072.47	1415.43	449.99
735.525 - 834.038	780.95	819.21	739.32	294.12	434.99	180.00
637.012 - 735.525	693.19	734.10	655.46	684.88	1995.99	90.00
538.499 - 637.012	579.65	625.31	547.26	378.90	1276.49	-630.88
439.986 - 538.499	485.41	516.37	455.15	537.36	1143.89	-50.10
341.473 - 439.986	378.92	428.63	342.07	381.45	1906.49	-786.01
242.960 - 341.473	282.07	334.75	244.27	200.41	374.63	7.95
144.447 - 242.960	183.84	240.40	145.31	202.56	1459.20	-161.69
45.934 - 144.447	76.61	143.64	46.22	58.95	843.17	-167.27
-52.579 - 45.934	7.43	45.86	-52.27	15.97	607.61	-1862.31
-151.093 - -52.579	-78.79	-52.75	-142.23	-69.24	680.00	-2287.78
-249.606 - -151.093	-207.79	-158.18	-249.61	-344.90	56.00	-3701.89

SAS Enterprise Miner Report

Node=NeuralNet 3HU Summary

Node id = Neural9
 Node label = NeuralNet 3HU
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural9
 Notes =

Node=NeuralNet 3HU Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DEFAULT	
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HU Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

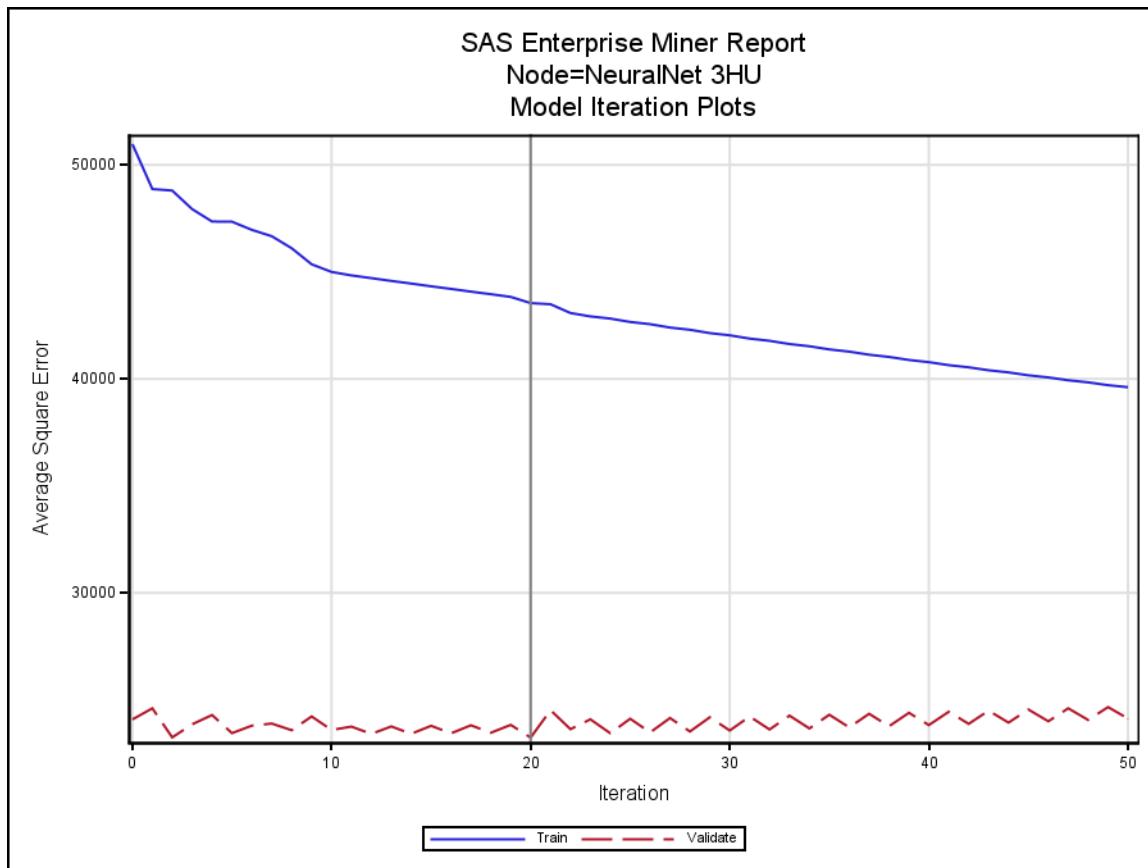
Node=NeuralNet 3HU Model Fit Statistics

Target=Profit Target Label=Profit

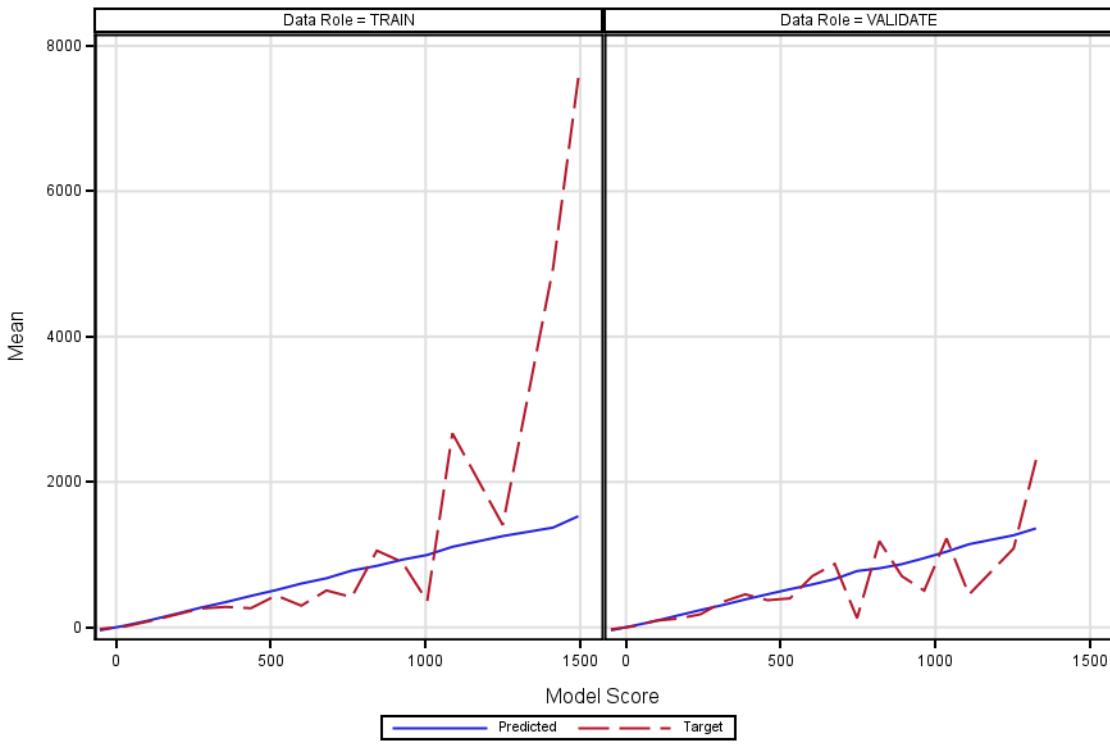
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3967.00	.	.
Model Degrees of Freedom	31.00	.	.
Number of Estimated Weights	31.00	.	.
Akaike's Information Criterion	42766.49	.	.
Schwarz's Bayesian Criterion	42961.59	.	.

Target=Profit Target Label=Profit

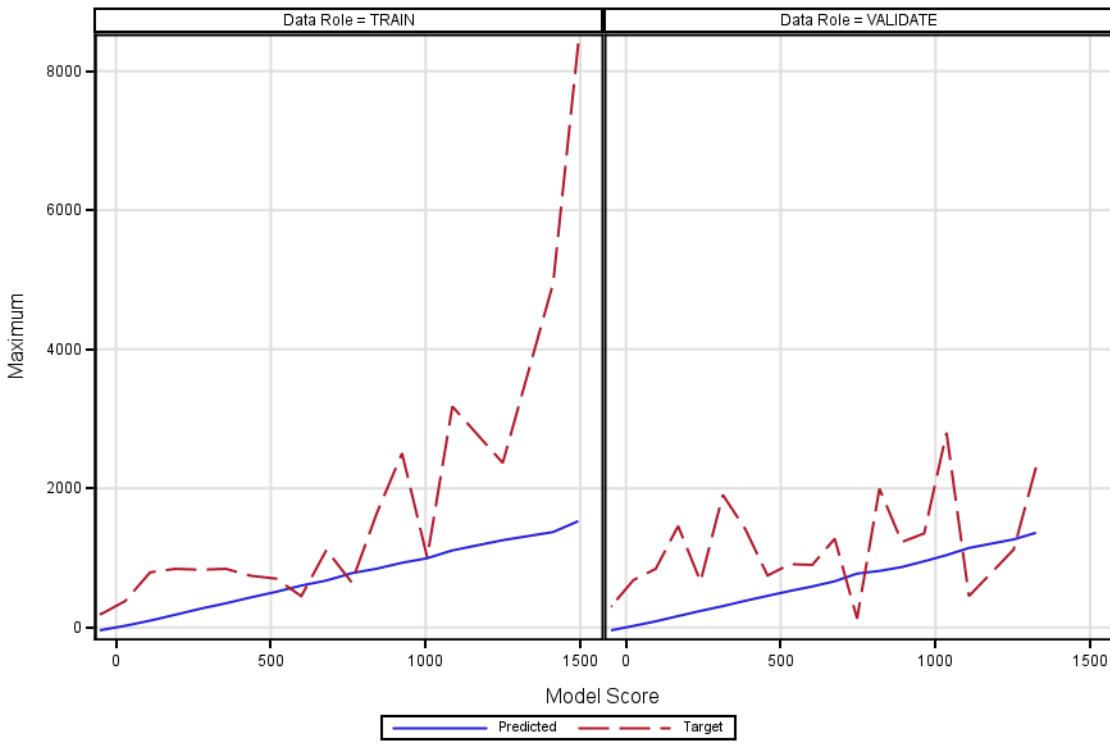
Label of Statistic	Train	Validation	Test
Average Squared Error	43541.20	23237.68	44076.54
Maximum Absolute Error	6865.84	3693.66	6609.04
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	208.67	152.44	209.94
Sum of Squared Errors	174077726.17	69666555.30	132141465.19
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	44221.70		
Mean Squared Error	43881.45	23237.68	44076.54
Root Final Prediction Error	210.29		
Root Mean Squared Error	209.48	152.44	209.94
Average Error Function	43541.20	23237.68	44076.54
Error Function	174077726.17	69666555.30	132141465.19



SAS Enterprise Miner Report
 Node=NeuralNet 3HU
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 3HU
 Score Distributions where TARGET='Profit'



Node=NeuralNet 3HU
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1452.774 - 1534.138	1528.58	1534.14	1523.01	7559.98	8399.98	6719.98
1371.410 - 1452.774	1372.19	1372.19	1372.19	4946.37	4946.37	4946.37
1208.681 - 1290.045	1254.93	1284.17	1214.30	1407.86	2365.98	839.99
1045.953 - 1127.317	1107.56	1109.87	1105.69	2669.81	3177.48	2239.99
964.589 - 1045.953	995.38	1039.96	970.36	359.24	1007.98	90.00
883.225 - 964.589	929.83	960.91	889.65	900.20	2504.22	275.00
801.861 - 883.225	845.37	879.27	807.09	1054.81	1644.29	569.99
720.497 - 801.861	779.84	789.42	766.11	414.85	648.56	110.00
639.133 - 720.497	674.78	714.17	655.25	506.92	1114.51	70.00
557.769 - 639.133	601.88	632.29	577.38	297.75	449.99	118.37
476.405 - 557.769	512.34	543.89	476.95	438.47	701.99	31.01
395.041 - 476.405	432.07	456.65	416.76	262.59	742.63	-1811.08
313.677 - 395.041	346.77	392.02	320.34	280.40	843.17	56.39
232.312 - 313.677	269.72	311.51	232.75	258.28	829.38	22.74
150.948 - 232.312	182.59	227.07	151.91	172.12	843.17	5.43
69.584 - 150.948	98.11	150.80	69.60	86.59	792.27	-1049.34
-11.780 - 69.584	23.45	69.37	-11.59	12.28	377.73	-3399.98
-93.144 - -11.780	-41.13	-11.81	-93.14	-22.72	182.36	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1288.784 - 1361.057	1361.06	1361.06	1361.06	2302.97	2302.97	2302.97
1216.510 - 1288.784	1266.36	1269.38	1263.35	1084.99	1120.00	1049.99
1071.964 - 1144.237	1142.89	1142.89	1142.89	449.99	449.99	449.99
999.690 - 1071.964	1040.25	1062.19	1023.94	1222.19	2799.98	224.99
927.417 - 999.690	951.64	980.03	931.02	504.39	1351.99	90.00
855.144 - 927.417	868.73	873.73	863.73	704.09	1228.18	180.00
782.870 - 855.144	812.38	822.50	802.27	1185.49	1995.99	374.99
710.597 - 782.870	774.02	774.02	774.02	126.00	126.00	126.00
638.324 - 710.597	663.78	665.88	661.68	872.24	1276.49	467.99
566.050 - 638.324	589.27	605.98	567.65	704.75	899.98	517.48
493.777 - 566.050	524.46	544.66	513.70	397.79	909.98	90.00
421.504 - 493.777	454.49	484.05	425.95	373.05	746.41	161.97
349.231 - 421.504	383.22	403.91	362.57	453.79	1415.43	145.07
276.957 - 349.231	306.53	341.98	277.45	350.26	1906.49	21.02
204.684 - 276.957	237.07	272.65	205.05	178.61	659.98	-50.10
132.411 - 204.684	163.32	204.61	133.84	119.24	1459.20	-786.01
60.137 - 132.411	87.90	131.91	60.21	90.65	843.17	-167.27
-12.136 - 60.137	22.11	59.49	-12.02	13.39	680.00	-3701.89
-84.409 - -12.136	-41.30	-12.21	-84.41	-27.60	300.74	-2287.78

SAS Enterprise Miner Report

Node=RegTree B2D6 Summary

Node id = Tree5
 Node label = RegTree B2D6
 Meta path = Ids3 => Part2 => PRINCOMP2 => Tree5
 Notes =

Node=RegTree B2D6 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	6		SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=RegTree B2D6 Variable Summary

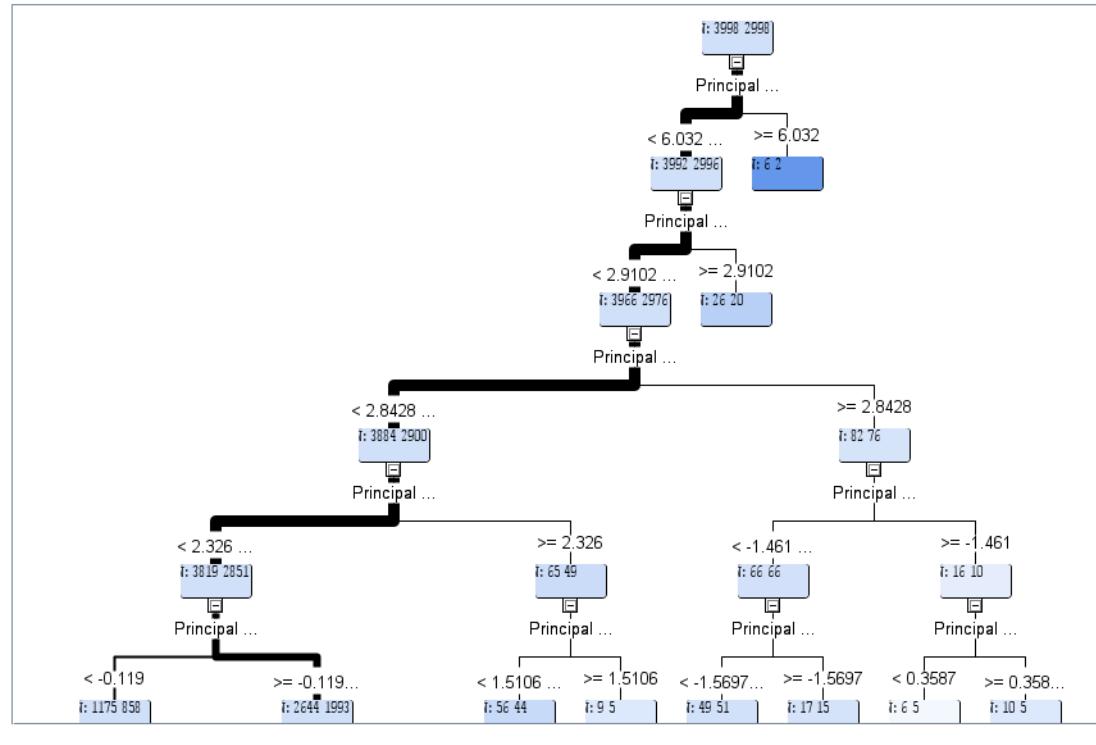
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8
ID	INTERVAL	1	_dataobs_

Node=RegTree B2D6 Model Fit Statistics

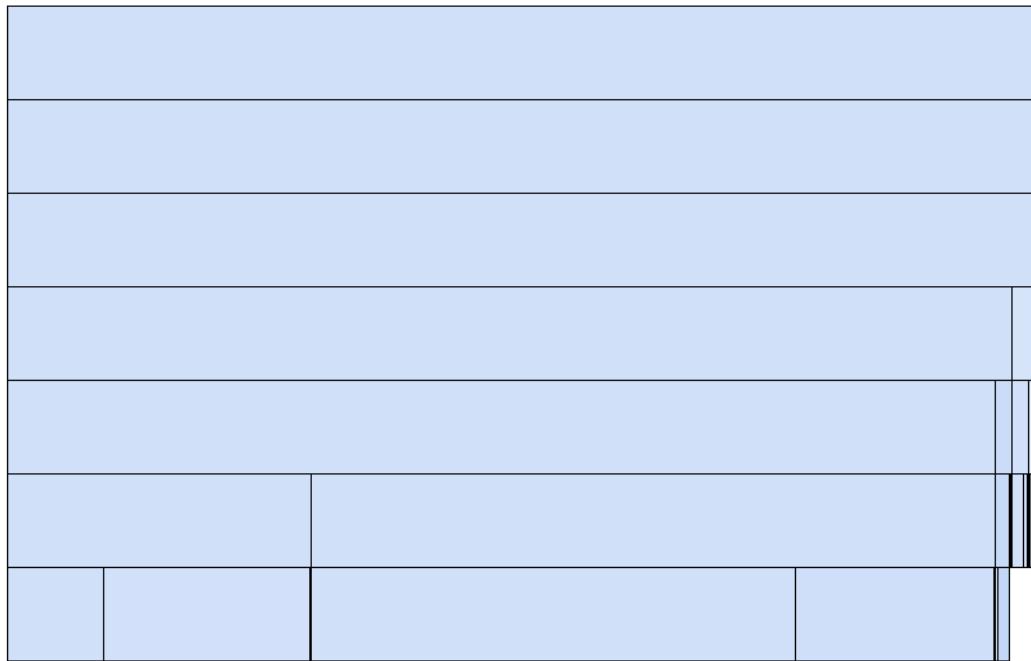
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5228.88	2642.18	7257.79
Sum of Squared Errors	162517662.02	77404517.83	154355253.50
Average Squared Error	40649.74	25818.72	51486.08
Root Average Squared Error	201.62	160.68	226.91
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.

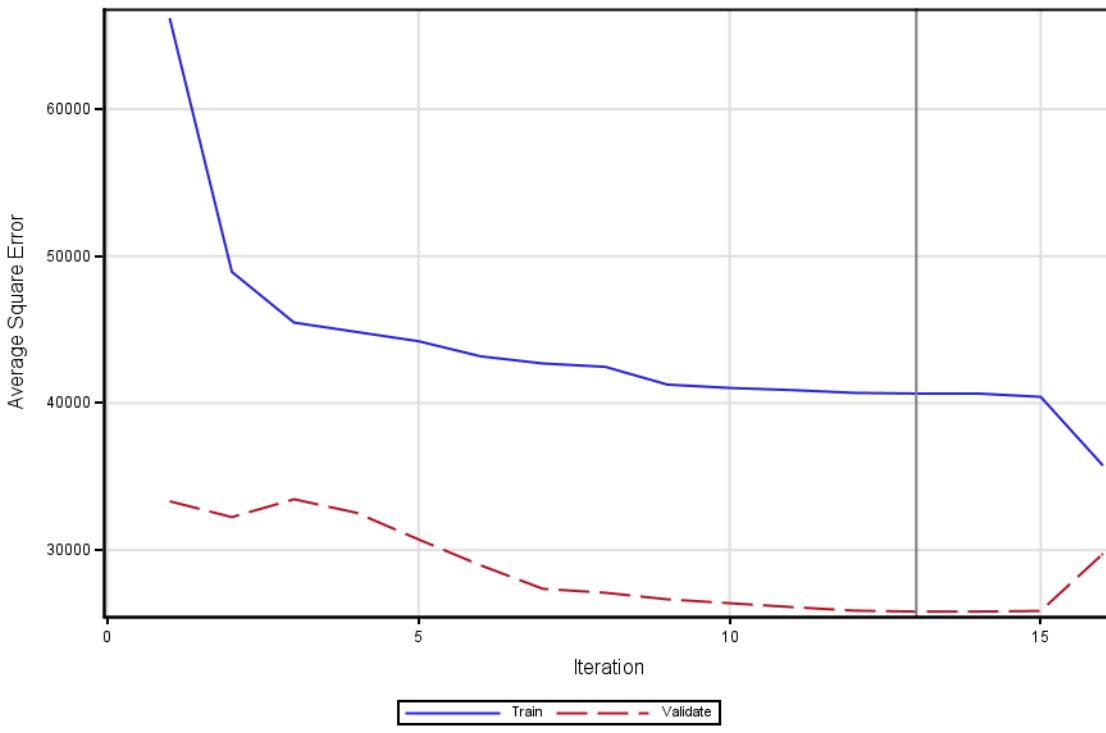
SAS Enterprise Miner Report
Node=RegTree B2D6
Tree Diagram



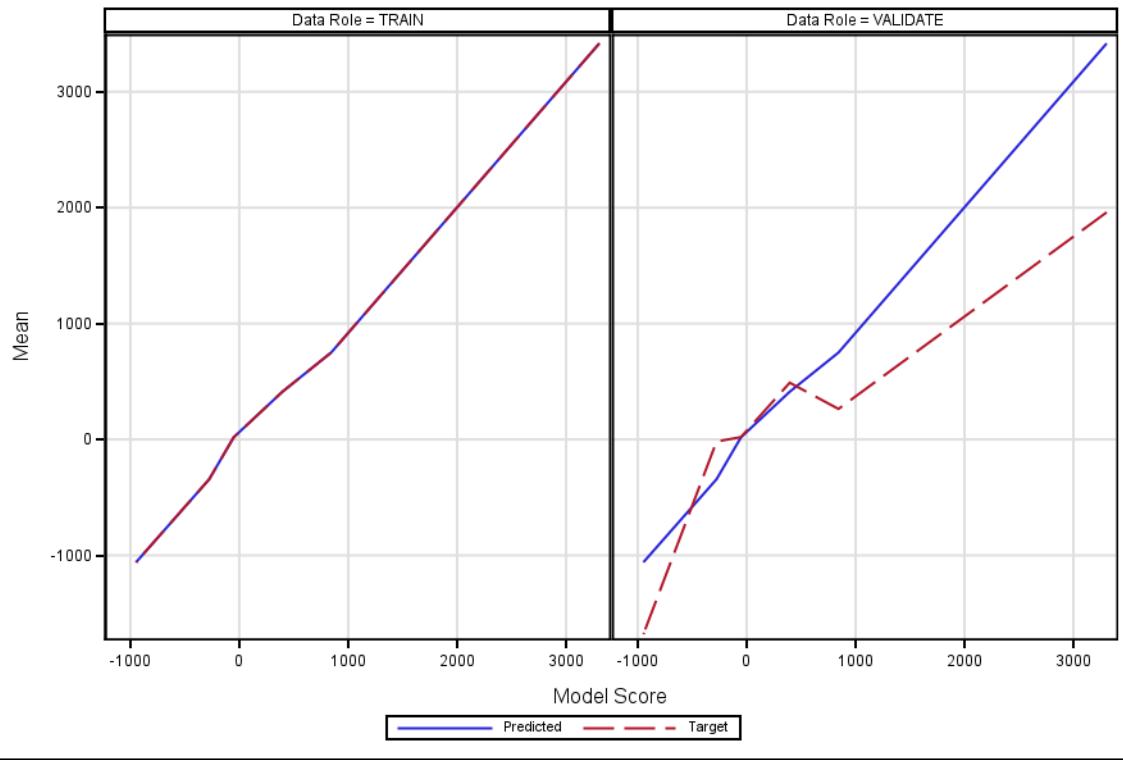
SAS Enterprise Miner Report
Node=RegTree B2D6
Treemap



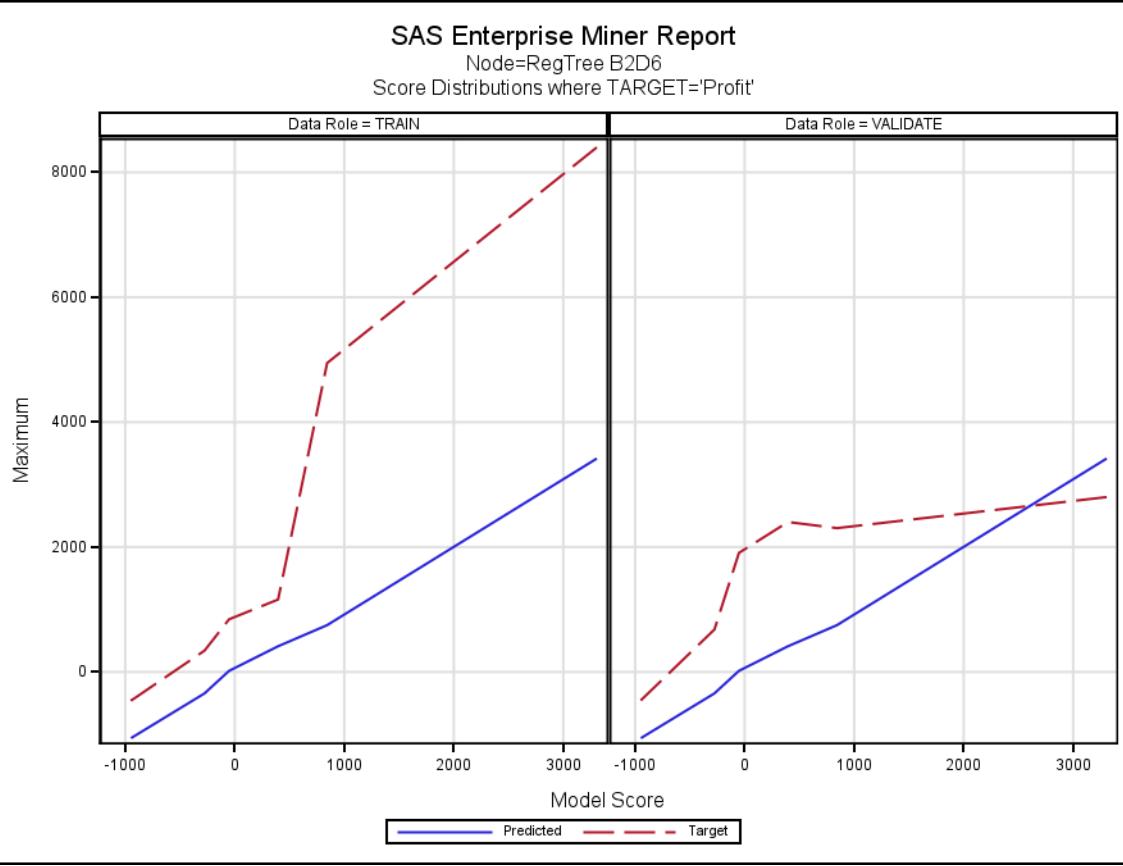
SAS Enterprise Miner Report
Node=RegTree B2D6
Model Iteration Plots



SAS Enterprise Miner Report
 Node=RegTree B2D6
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=RegTree B2D6
 Score Distributions where TARGET='Profit'



Node=RegTree B2D6
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3193.925 - 3417.801	3417.80	3417.80	3417.80	3417.80	8399.98	-1811.08
731.291 - 955.167	749.76	749.76	749.76	749.76	4946.37	-3399.98
283.539 - 507.415	411.50	411.50	411.50	411.50	1159.99	-182.64
-164.212 - 59.663	17.70	52.62	-137.13	17.70	843.17	-1665.05
-388.088 - -164.212	-342.84	-340.93	-344.97	-342.84	341.99	-2639.99
-1059.716 - -835.840	-1059.72	-1059.72	-1059.72	-1059.72	-459.61	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3193.925 - 3417.801	3417.80	3417.80	3417.80	1959.99	2799.98	1120.00
731.291 - 955.167	749.76	749.76	749.76	263.31	2302.97	-1862.31
283.539 - 507.415	411.50	411.50	411.50	489.37	2400.97	-630.88
-164.212 - 59.663	18.07	52.62	-137.13	20.20	1906.49	-2287.78
-388.088 - -164.212	-342.95	-340.93	-344.97	-17.92	680.00	-510.00
-1059.716 - -835.840	-1059.72	-1059.72	-1059.72	-1679.98	-453.85	-3701.89

SAS Enterprise Miner Report

Node=RegTree B2D4 Summary

Node id = Tree6
 Node label = RegTree B2D4
 Meta path = Ids3 => Part2 => PRINCOMP2 => Tree6
 Notes =

Node=RegTree B2D4 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	4	6	SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=RegTree B2D4 Variable Summary

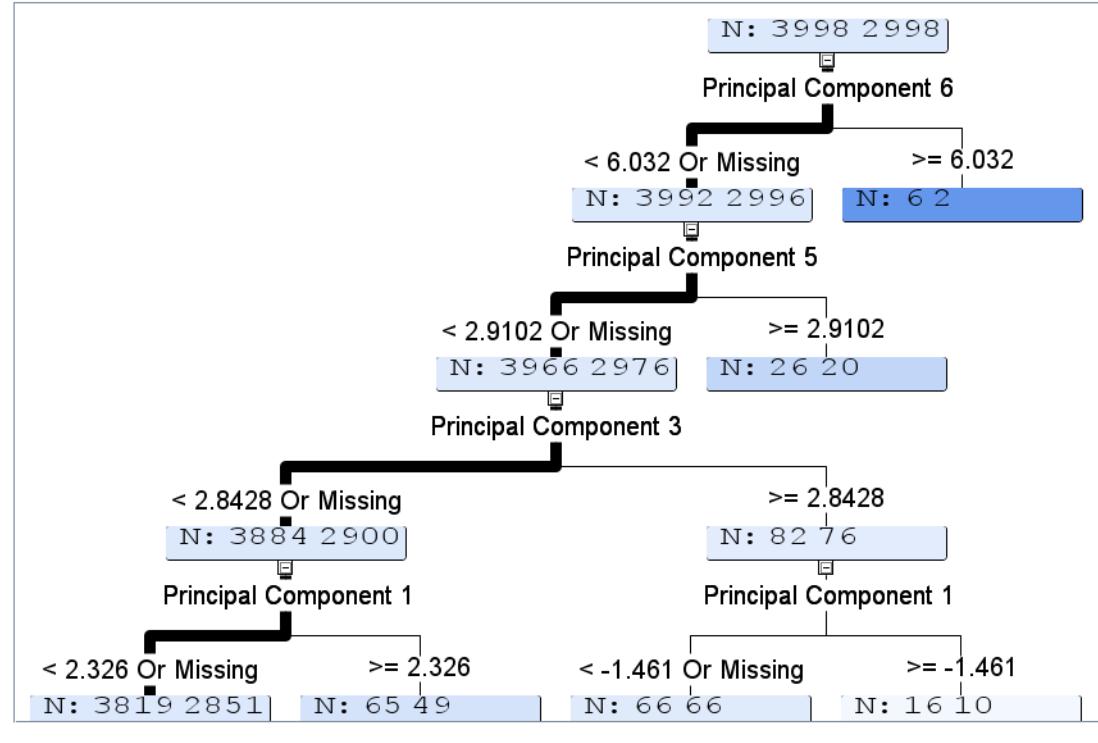
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8
ID	INTERVAL	1	_dataobs_

Node=RegTree B2D4 Model Fit Statistics

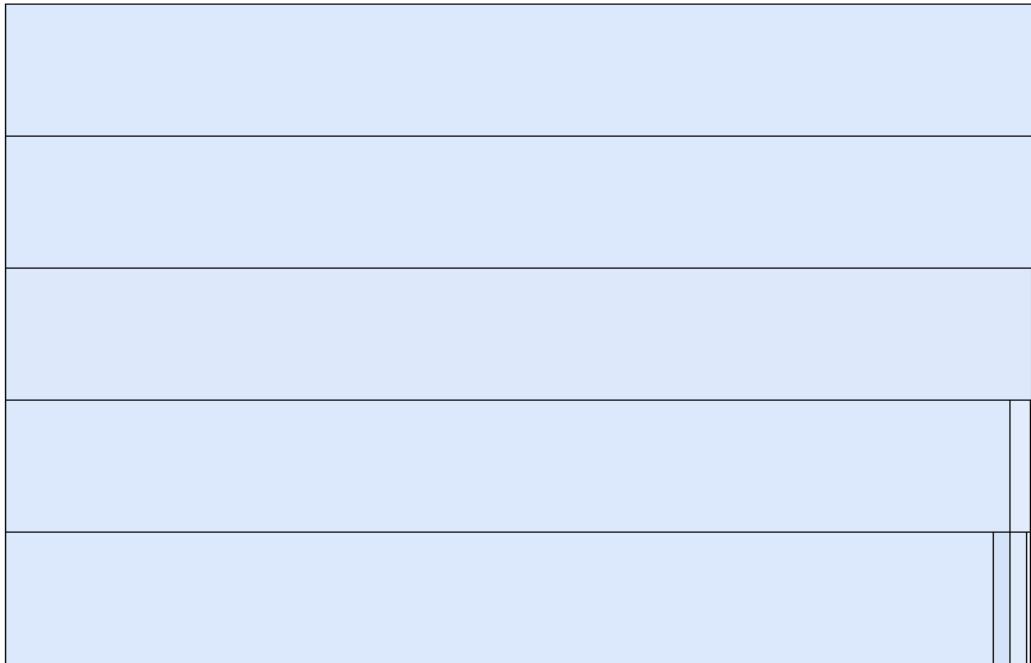
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5228.88	3091.42	7257.79
Sum of Squared Errors	172639872.43	86826023.09	158245048.45
Average Squared Error	43181.56	28961.32	52783.54
Root Average Squared Error	207.80	170.18	229.75
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.

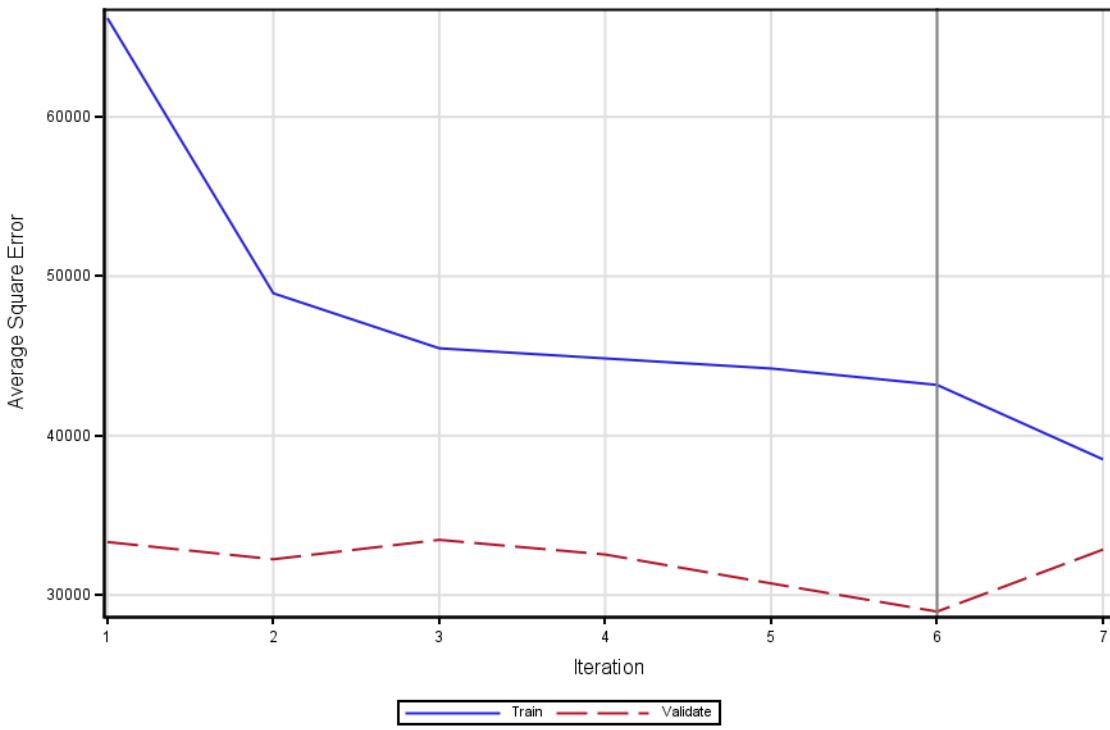
SAS Enterprise Miner Report
Node=RegTree B2D4
Tree Diagram



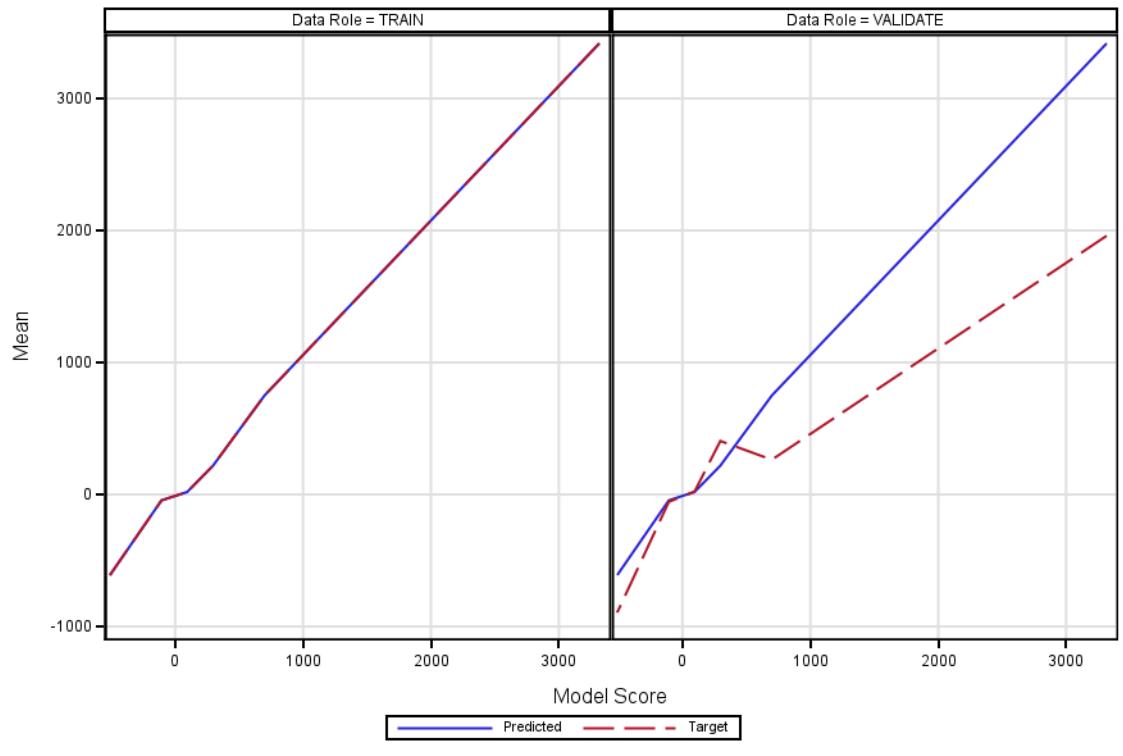
SAS Enterprise Miner Report
Node=RegTree B2D4
Treemap



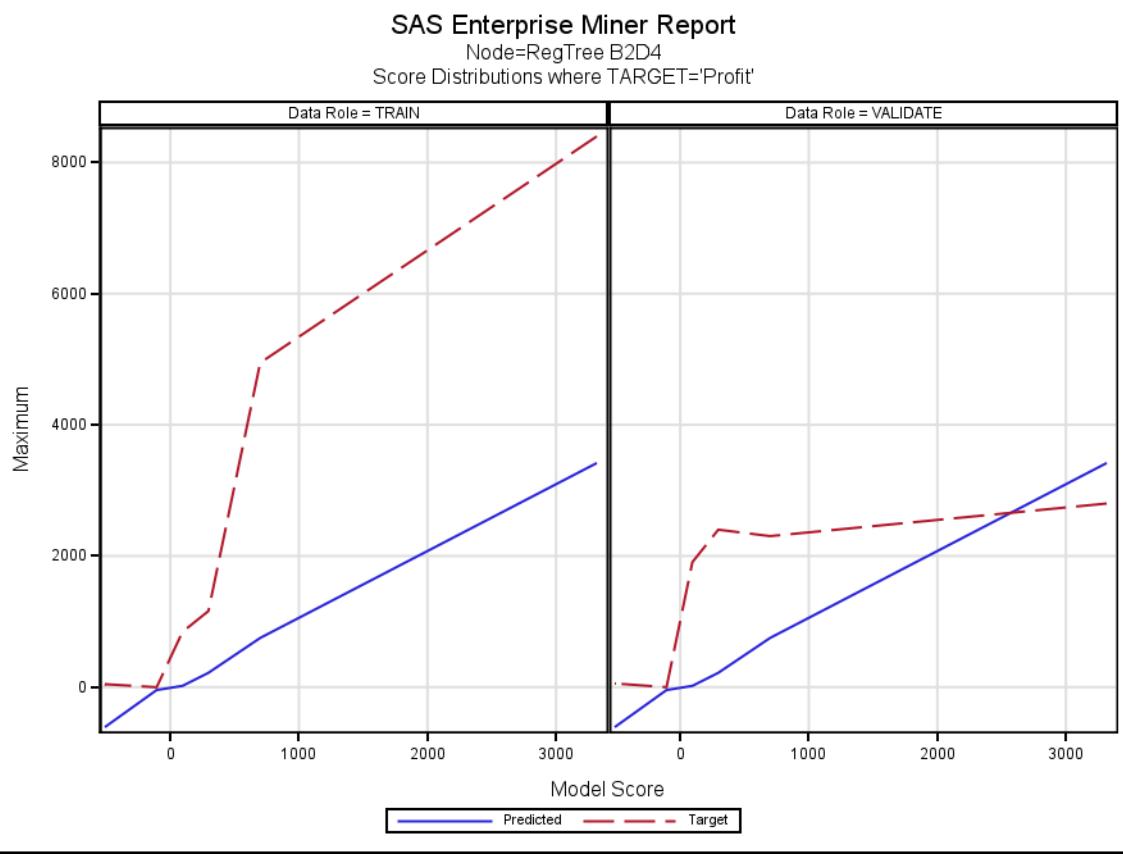
SAS Enterprise Miner Report
Node=RegTree B2D4
Model Iteration Plots



SAS Enterprise Miner Report
 Node=RegTree B2D4
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=RegTree B2D4
 Score Distributions where TARGET='Profit'



Node=RegTree B2D4
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3216.387 - 3417.801	3417.80	3417.80	3417.80	3417.80	8399.98	-1811.08
598.010 - 799.423	749.76	749.76	749.76	749.76	4946.37	-3399.98
195.183 - 396.596	218.01	218.01	218.01	218.01	1159.99	-2639.99
-6.231 - 195.183	19.16	19.16	19.16	19.16	843.17	-1049.34
-207.645 - -6.231	-44.89	-44.89	-44.89	-44.89	-1.83	-533.73
-610.472 - -409.058	-610.47	-610.47	-610.47	-610.47	44.87	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3216.387 - 3417.801	3417.80	3417.80	3417.80	1959.99	2799.98	1120.00
598.010 - 799.423	749.76	749.76	749.76	263.31	2302.97	-1862.31
195.183 - 396.596	218.01	218.01	218.01	405.21	2400.97	-630.88
-6.231 - 195.183	19.16	19.16	19.16	22.02	1906.49	-2287.78
-207.645 - -6.231	-44.89	-44.89	-44.89	-55.84	-1.34	-512.15
-610.472 - -409.058	-610.47	-610.47	-610.47	-893.62	56.00	-3701.89

SAS Enterprise Miner Report

Node=RegTree B2D2 Summary

Node id = Tree7
 Node label = RegTree B2D2
 Meta path = Ids3 => Part2 => PRINCOMP2 => Tree7
 Notes =

Node=RegTree B2D2 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	2	6	SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

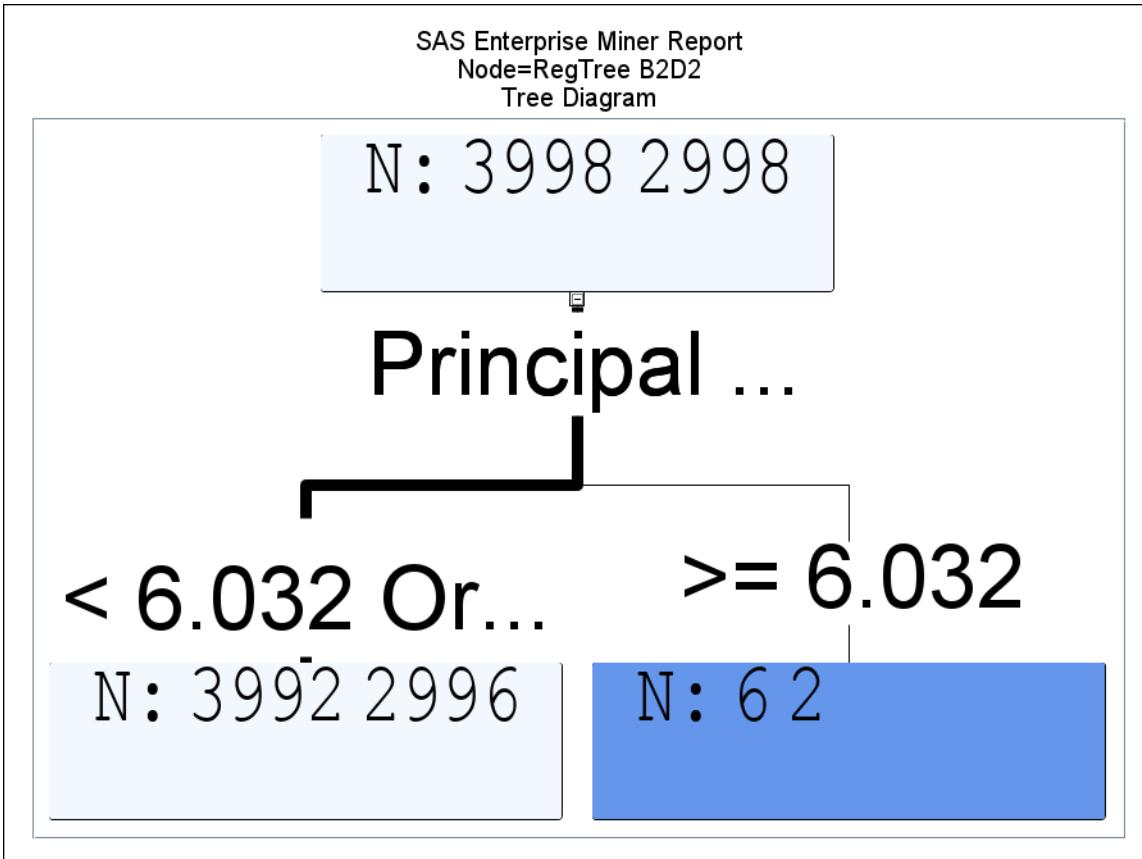
Node=RegTree B2D2 Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8
ID	INTERVAL	1	_dataobs_

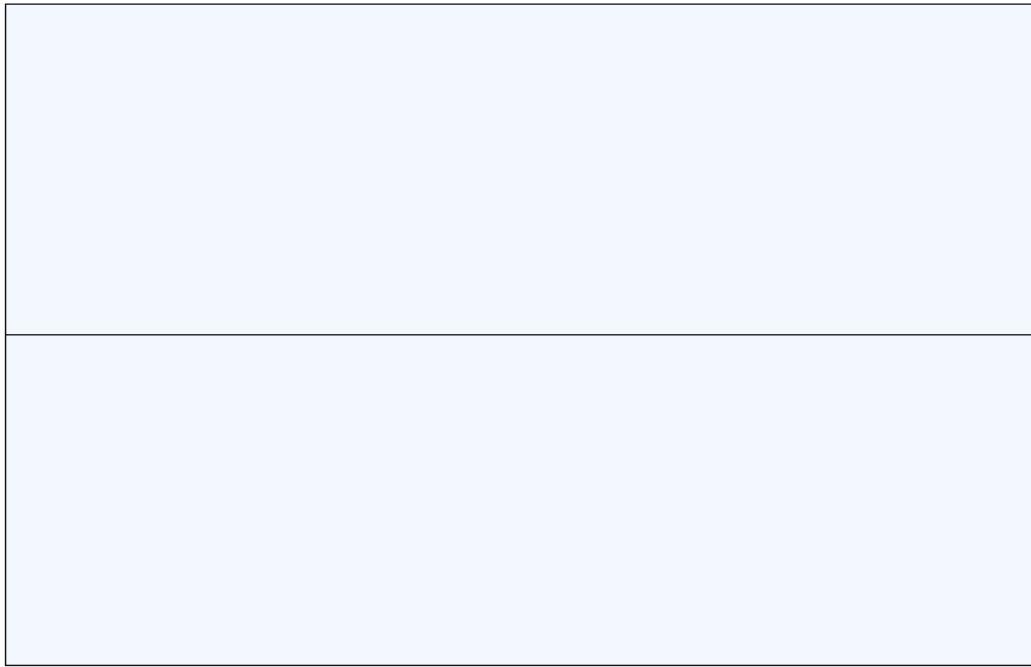
Node=RegTree B2D2 Model Fit Statistics

Target=Profit Target Label=Profit

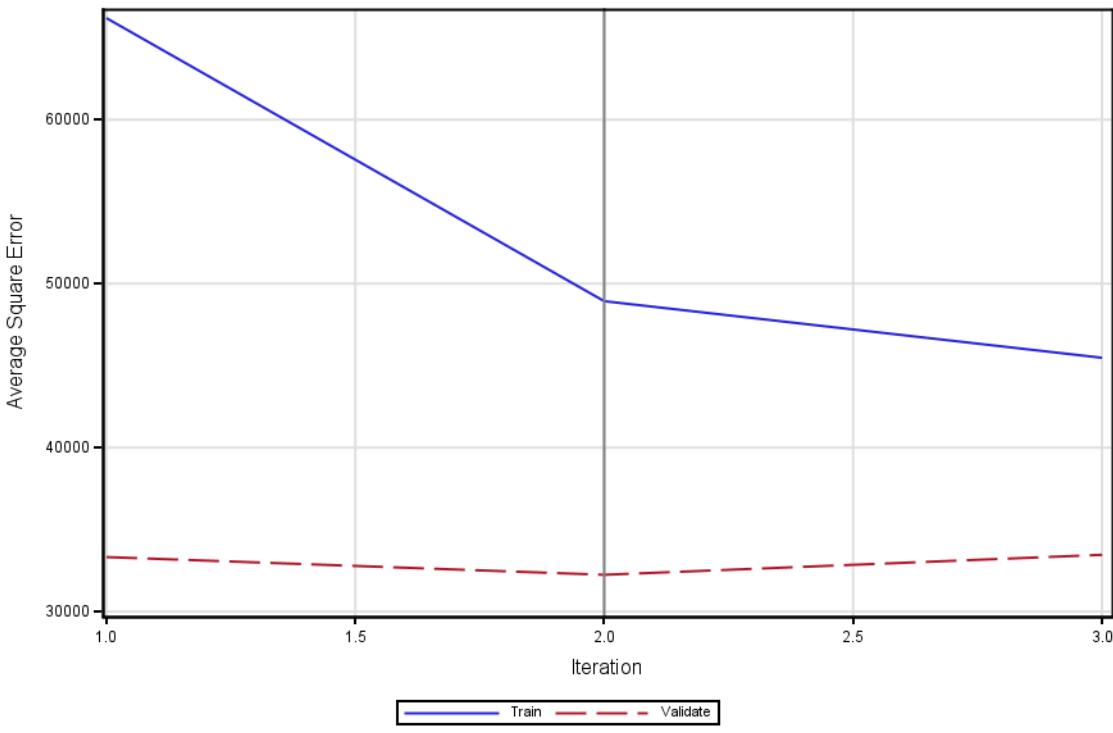
Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5228.88	3725.46	7257.79
Sum of Squared Errors	195624356.44	96664884.88	184274962.22
Average Squared Error	48930.55	32243.12	61465.96
Root Average Squared Error	221.20	179.56	247.92
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.



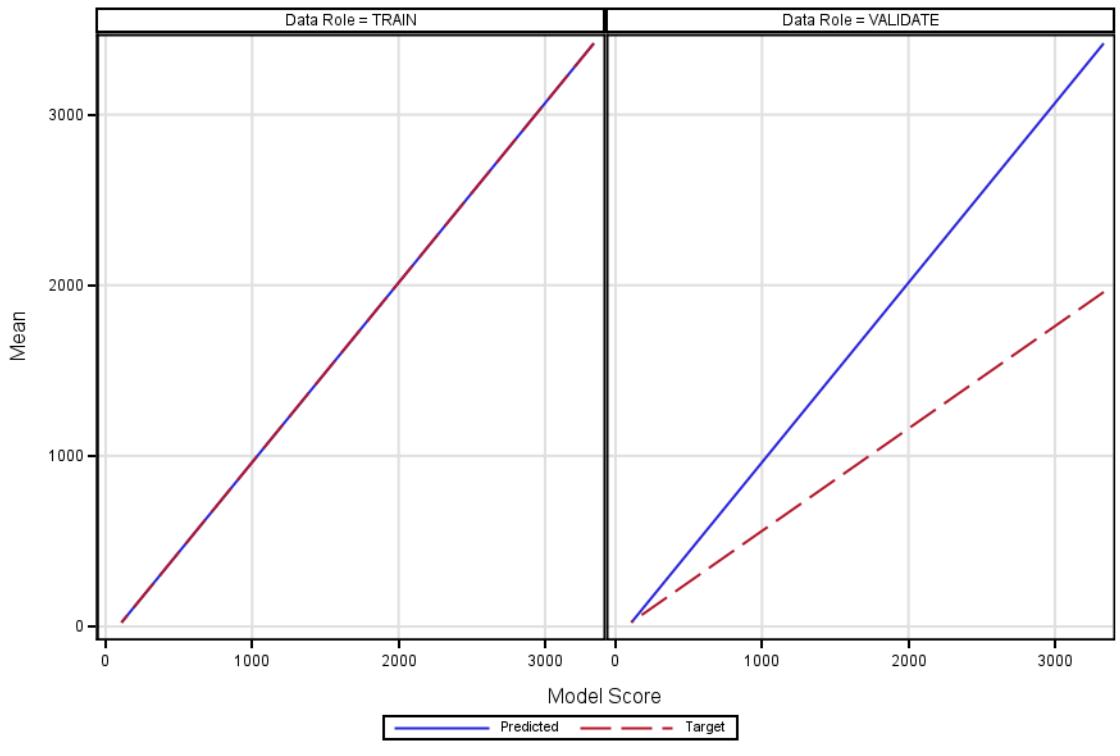
SAS Enterprise Miner Report
Node=RegTree B2D2
Treemap



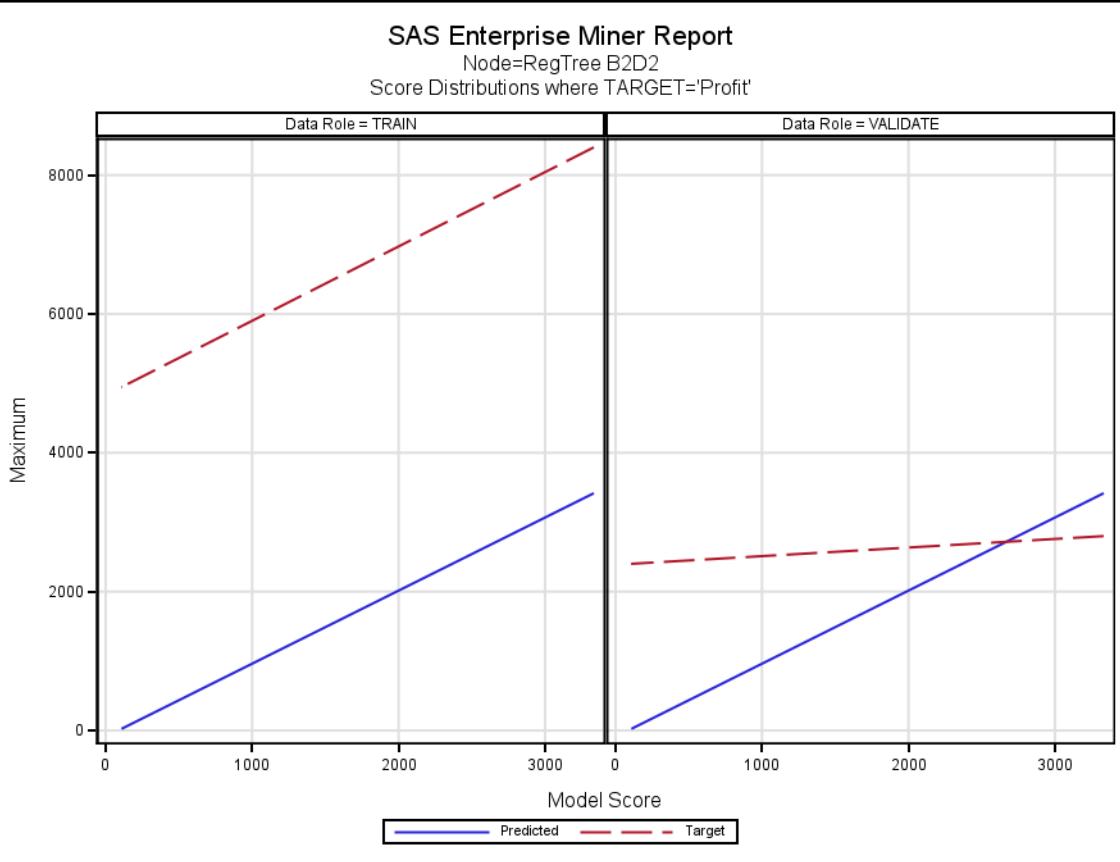
SAS Enterprise Miner Report
Node=RegTree B2D2
Model Iteration Plots



SAS Enterprise Miner Report
 Node=RegTree B2D2
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=RegTree B2D2
 Score Distributions where TARGET='Profit'



Node=RegTree B2D2
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3248.089 - 3417.801	3417.80	3417.80	3417.80	3417.80	8399.98	-1811.08
23.570 - 193.282	23.57	23.57	23.57	23.57	4946.37	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3248.089 - 3417.801	3417.80	3417.80	3417.80	1959.99	2799.98	1120.00
23.570 - 193.282	23.57	23.57	23.57	25.13	2400.97	-3701.89

SAS Enterprise Miner Report

Node=RegTree B3D6 Summary

Node id = Tree8
 Node label = RegTree B3D6
 Meta path = Ids3 => Part2 => PRINCOMP2 => Tree8
 Notes =

Node=RegTree B3D6 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	3	2	SampleMethod	RANDOM	
CVNIter	10		Maxdepth	6		SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=RegTree B3D6 Variable Summary

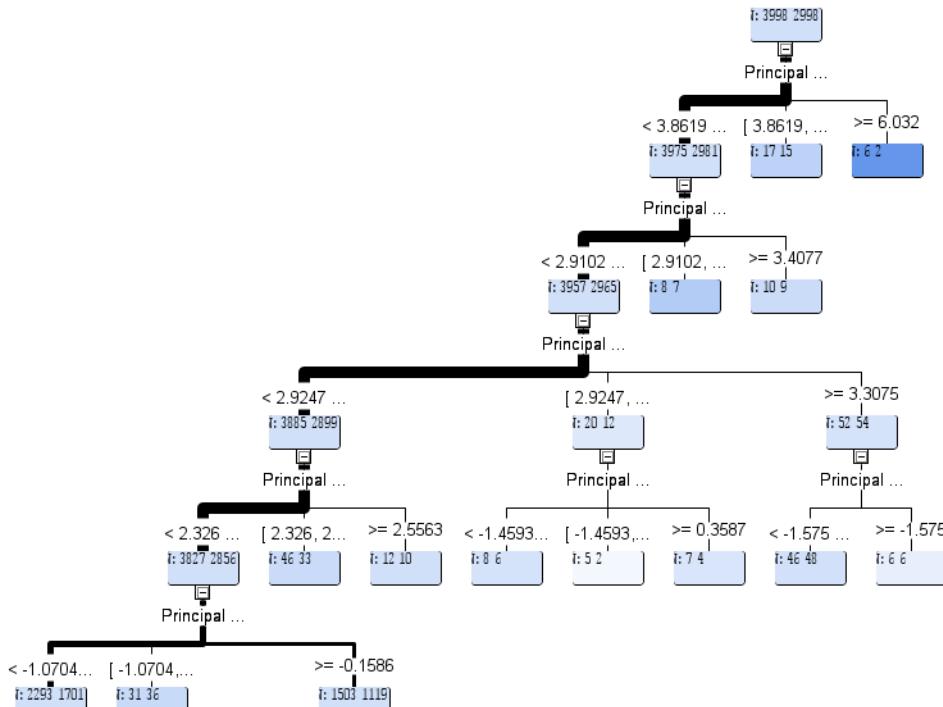
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8
ID	INTERVAL	1	_dataobs_

Node=RegTree B3D6 Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5228.88	3017.07	7257.79
Sum of Squared Errors	164644632.22	77419595.80	174432540.04
Average Squared Error	41181.75	25823.75	58182.97
Root Average Squared Error	202.93	160.70	241.21
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.

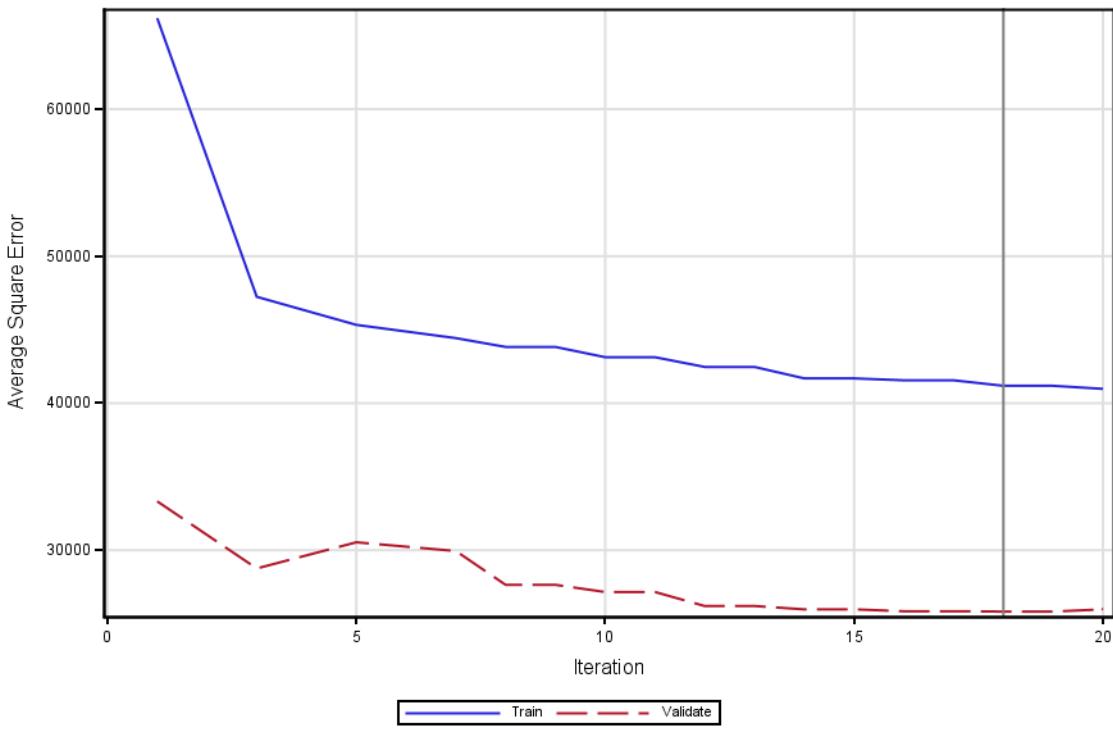
SAS Enterprise Miner Report
Node=RegTree B3D6
Tree Diagram



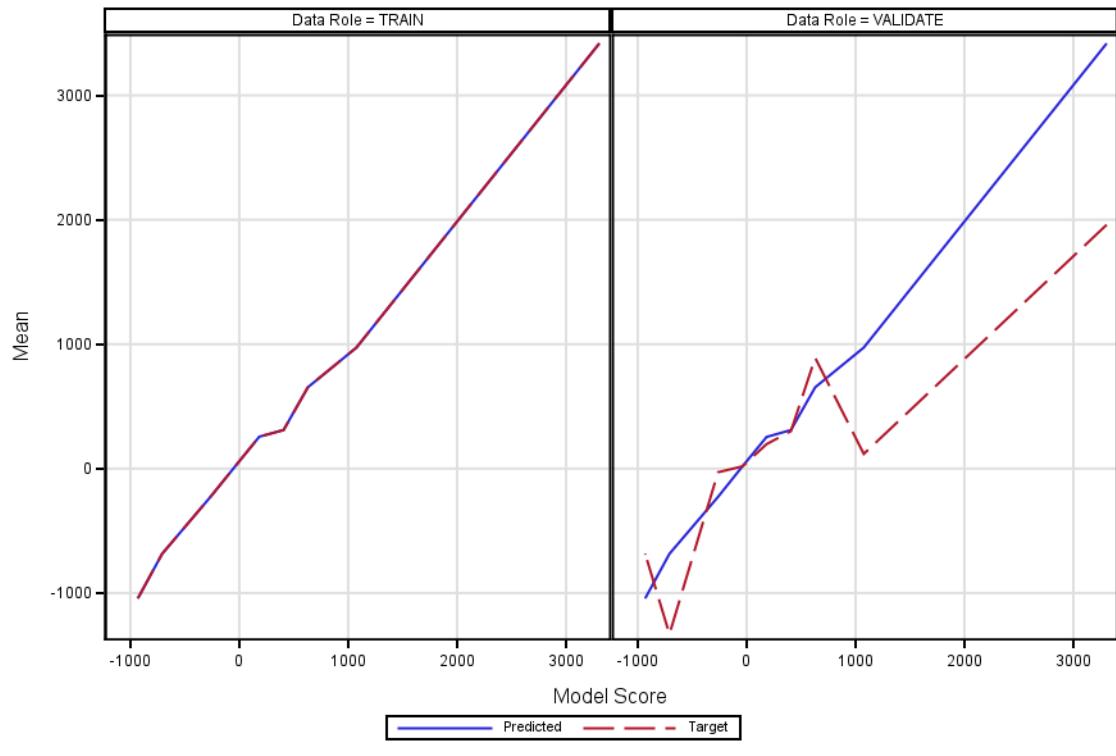
SAS Enterprise Miner Report
Node=RegTree B3D6
Treemap



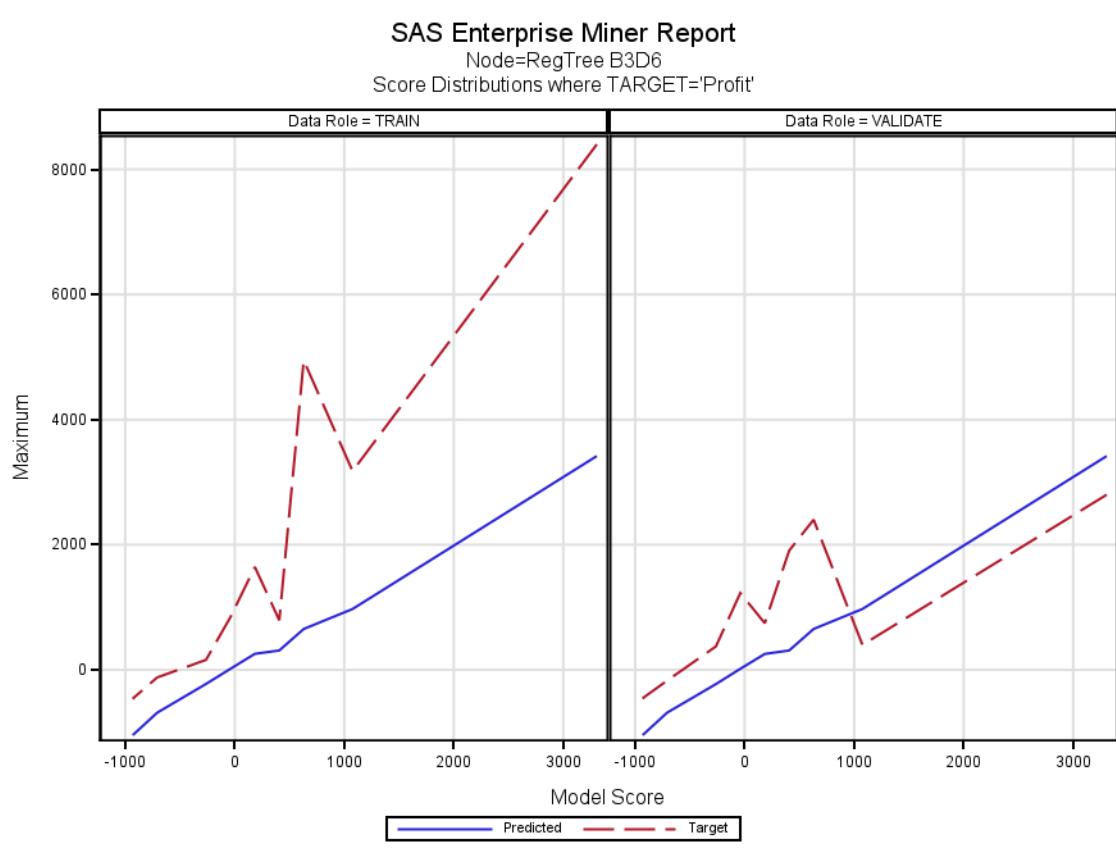
SAS Enterprise Miner Report
Node=RegTree B3D6
Model Iteration Plots



SAS Enterprise Miner Report
 Node=RegTree B3D6
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=RegTree B3D6
 Score Distributions where TARGET='Profit'



Node=RegTree B3D6
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3194.742 - 3417.801	3417.80	3417.80	3417.80	3417.80	8399.98	-1811.08
964.160 - 1187.218	973.06	973.06	973.06	973.06	3177.48	160.31
518.043 - 741.101	653.64	653.64	653.64	653.64	4946.37	-2639.99
294.985 - 518.043	310.10	310.10	310.10	310.10	792.27	-337.81
71.926 - 294.985	256.54	266.83	209.17	256.54	1644.29	-3399.98
-151.132 - 71.926	16.83	42.70	-86.30	16.83	843.17	-1665.05
-374.190 - -151.132	-224.74	-198.94	-239.79	-224.74	160.16	-1049.34
-820.307 - -597.248	-684.83	-684.83	-684.83	-684.83	-121.27	-1141.47
-1043.365 - -820.307	-1043.36	-1043.36	-1043.36	-1043.36	-459.61	-1306.55

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3194.742 - 3417.801	3417.80	3417.80	3417.80	1959.99	2799.98	1120.00
964.160 - 1187.218	973.06	973.06	973.06	118.24	399.30	-252.00
518.043 - 741.101	653.64	653.64	653.64	890.28	2400.97	-383.99
294.985 - 518.043	310.10	310.10	310.10	300.79	1906.49	-2287.78
71.926 - 294.985	254.48	266.83	209.17	196.76	746.41	-1862.31
-151.132 - 71.926	17.02	42.70	-86.30	18.00	1228.18	-814.48
-374.190 - -151.132	-227.22	-198.94	-239.79	-29.51	374.63	-643.71
-820.307 - -597.248	-684.83	-684.83	-684.83	-1330.26	-172.56	-3701.89
-1043.365 - -820.307	-1043.36	-1043.36	-1043.36	-683.51	-453.85	-913.18

SAS Enterprise Miner Report

Node=Exhaustive Regression Summary

Node id = Reg5
 Node label = Exhaustive Regression
 Meta path = Ids3 => Part2 => PRINCOMP2 => Reg5
 Notes =

Node=Exhaustive Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SISStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	NONE		SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Exhaustive Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

Node=Exhaustive Regression Model Fit Statistics

Target=Profit Target Label=Profit

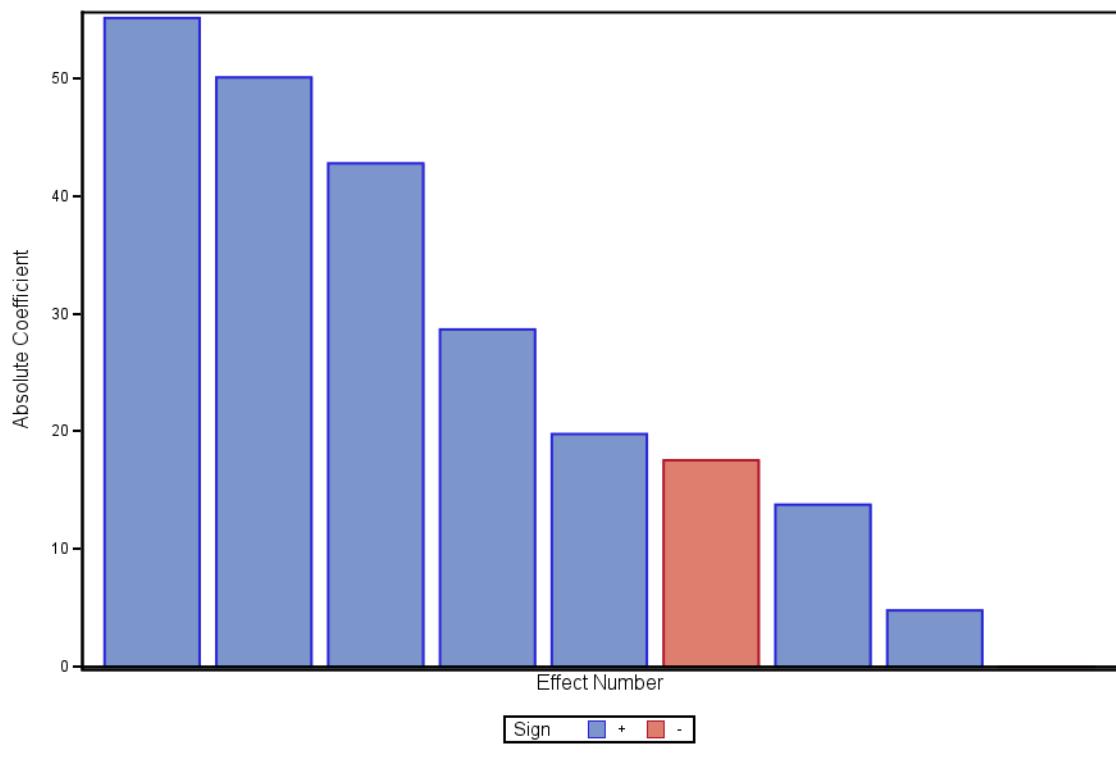
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	43577.02	.	.
Average Squared Error	53917.02	28718.79	54430.40
Average Error Function	53917.02	28718.79	54430.40
Degrees of Freedom for Error	3989.00	.	.
Model Degrees of Freedom	9.00	.	.
Total Degrees of Freedom	3998.00	.	.
Divisor for ASE	3998.00	2998.00	2998.00

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Error Function	215560255.47	86098941.90	163182350.35
Final Prediction Error	54160.32	.	.
Maximum Absolute Error	6509.25	3826.09	7220.87
Mean Square Error	54038.67	28718.79	54430.40
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	9.00	.	.
Root Average Sum of Squares	232.20	169.47	233.30
Root Final Prediction Error	232.72	.	.
Root Mean Squared Error	232.46	169.47	233.30
Schwarz's Bayesian Criterion	43633.66	.	.
Sum of Squared Errors	215560255.47	86098941.90	163182350.35
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

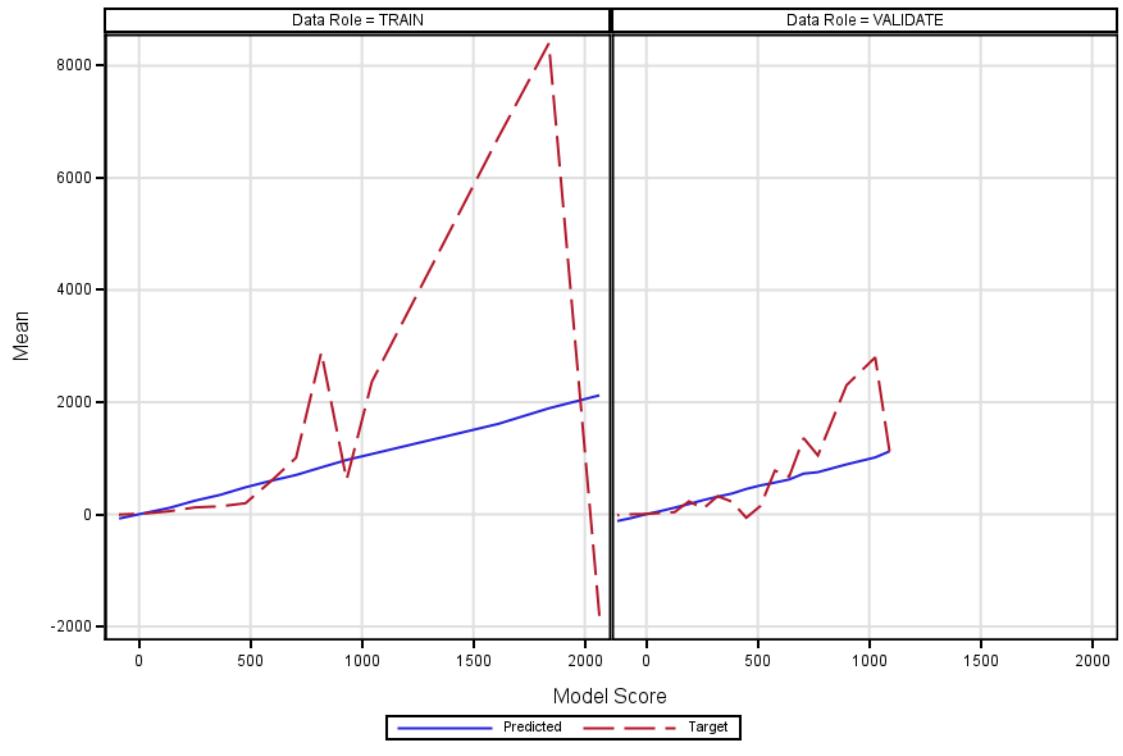
SAS Enterprise Miner Report

Node=Exhaustive Regression
Regression Model Effects

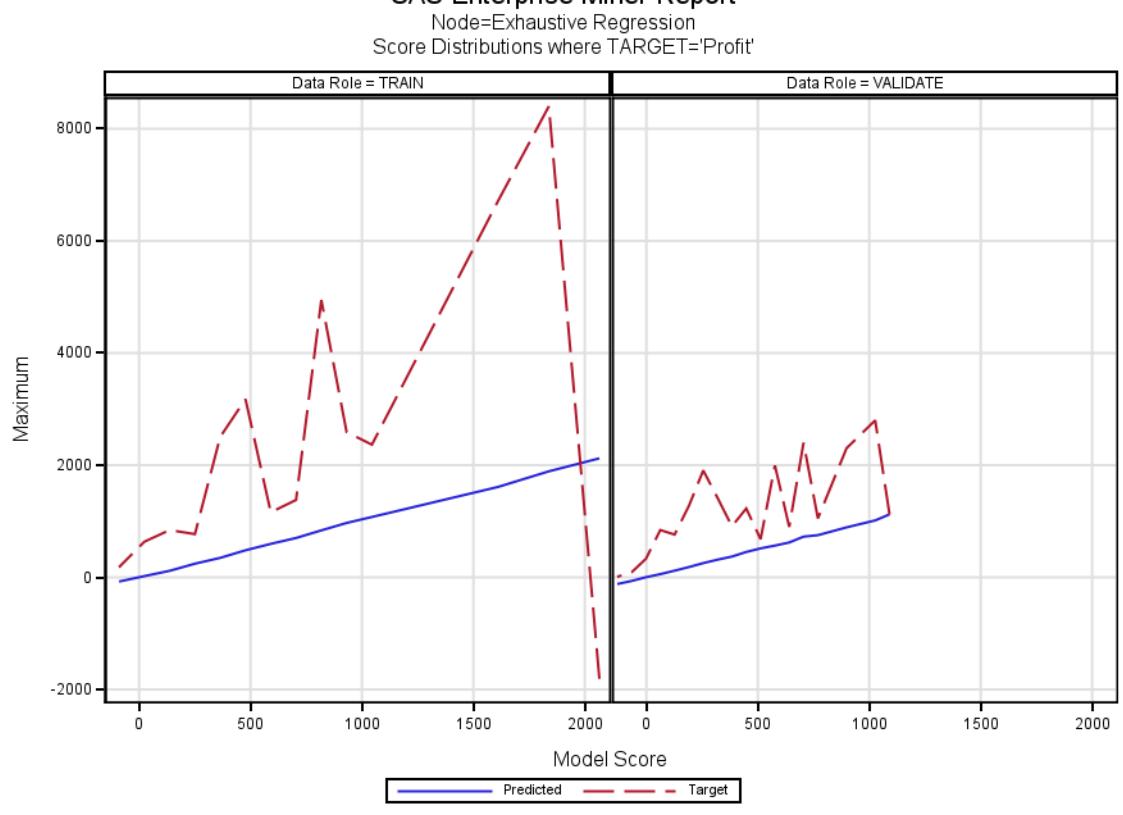


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	PC_7		55.1283	17.3990	2.0654E-65	6	PC_4		-17.5470	-6.21789	0.00000
2	PC_6		50.0814	16.1049	1.3837E-56	7	PC_1		13.7708	6.38495	0.00000
3	PC_5		42.7768	14.0303	1.094E-43	8	PC_8		4.7863	1.45665	0.14529
4	Intercept		28.6641	7.7966	8.0565E-15	9	PC_3		-0.0047	-0.00171	0.99863
5	PC_2		19.7745	8.2365	2.3789E-16

SAS Enterprise Miner Report
 Node=Exhaustive Regression
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=Exhaustive Regression
 Score Distributions where TARGET='Profit'



Node=Exhaustive Regression
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2008.718 - 2122.148	2122.15	2122.15	2122.15	-1811.08	-1811.08	-1811.08
1781.859 - 1895.289	1890.72	1890.72	1890.72	8399.98	8399.98	8399.98
1554.999 - 1668.429	1613.22	1613.22	1613.22	6719.98	6719.98	6719.98
987.850 - 1101.280	1075.99	1075.99	1075.99	2365.98	2365.98	2365.98
874.421 - 987.850	969.68	970.05	969.31	615.98	2591.96	-1359.99
760.991 - 874.421	837.61	871.70	771.72	2888.94	4946.37	1480.47
647.561 - 760.991	701.55	726.62	675.46	1009.58	1379.98	839.99
534.131 - 647.561	596.89	643.89	549.16	587.52	1159.99	192.00
420.701 - 534.131	482.18	527.89	423.66	197.84	3177.48	-3399.98
307.272 - 420.701	347.20	420.68	307.27	142.61	2504.22	-2639.99
193.842 - 307.272	243.30	302.83	194.75	123.44	770.35	-1665.05
80.412 - 193.842	116.29	193.71	80.43	55.69	843.17	-968.88
-33.018 - 80.412	21.78	80.35	-33.01	13.77	635.50	-1306.55
-146.447 - -33.018	-75.25	-33.10	-146.45	-4.52	182.36	-1141.47

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1058.797 - 1123.095	1123.09	1123.09	1123.09	1120.00	1120.00	1120.00
994.500 - 1058.797	1015.02	1015.02	1015.02	2799.98	2799.98	2799.98
865.905 - 930.202	890.99	890.99	890.99	2302.97	2302.97	2302.97
737.310 - 801.607	751.99	751.99	751.99	1049.99	1049.99	1049.99
673.012 - 737.310	725.76	734.19	717.40	1360.15	2400.97	327.51
608.715 - 673.012	621.64	634.07	609.21	674.98	899.98	449.99
544.417 - 608.715	566.02	602.40	545.38	779.24	1995.99	224.99
480.120 - 544.417	516.03	538.63	495.39	151.95	680.00	-510.00
415.822 - 480.120	452.01	467.20	427.98	-61.08	1228.18	-1862.31
351.525 - 415.822	370.25	396.51	352.50	226.10	909.98	-264.00
287.227 - 351.525	315.26	339.58	294.94	323.09	1415.43	-786.01
222.930 - 287.227	253.60	287.12	225.22	102.47	1906.49	-643.71
158.632 - 222.930	183.36	222.47	159.53	231.40	1276.49	-386.39
94.335 - 158.632	118.84	157.77	94.45	39.37	762.59	-3701.89
30.037 - 94.335	56.69	94.20	30.07	23.94	843.17	-2287.78
-34.260 - 30.037	2.25	30.00	-34.02	5.45	331.19	-1850.95
-98.558 - -34.260	-64.72	-34.35	-98.55	1.36	89.95	-512.15
-162.855 - -98.558	-119.59	-99.27	-162.86	-15.87	10.10	-320.24

SAS Enterprise Miner Report

Node=Forward Regression Summary

Node id = Reg6
 Node label = Forward Regression
 Meta path = Ids3 => Part2 => PRINCOMP2 => Reg6
 Notes =

Node=Forward Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SIStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	FORWARD	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Forward Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

Node=Forward Regression Model Fit Statistics

Target=Profit Target Label=Profit

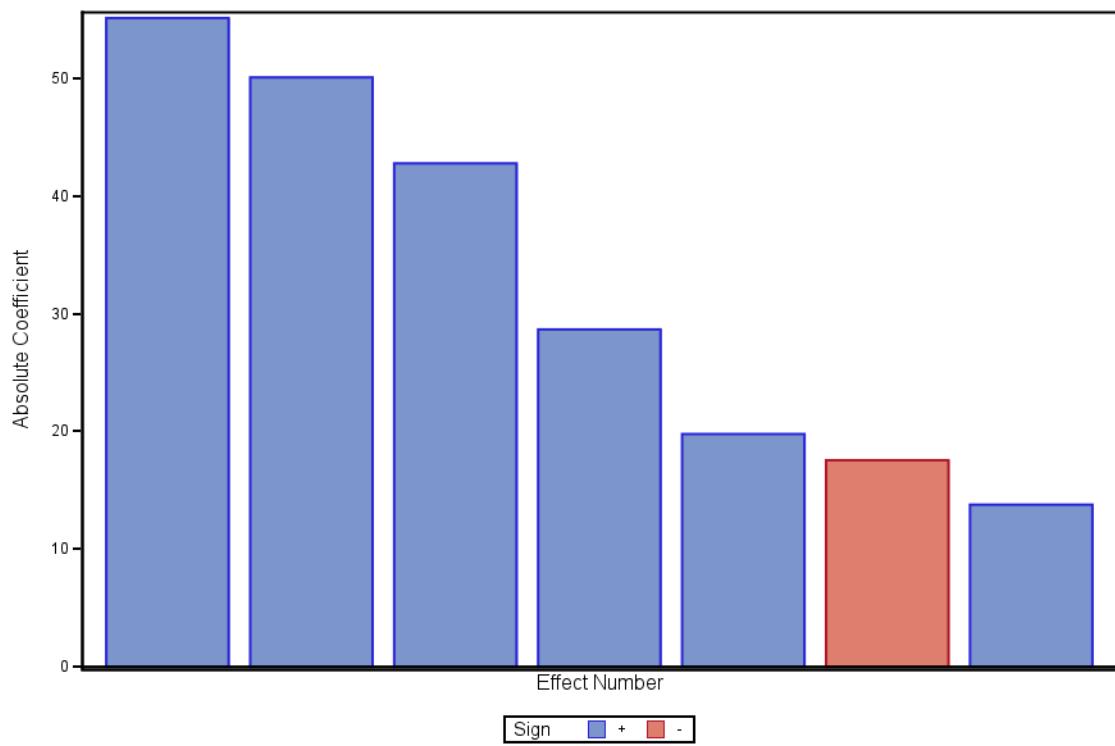
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	43575.14	.	.
Average Squared Error	53945.70	28835.83	54496.13
Average Error Function	53945.70	28835.83	54496.13
Degrees of Freedom for Error	3991.00	.	.
Model Degrees of Freedom	7.00	.	.
Total Degrees of Freedom	3998.00	.	.
Divisor for ASE	3998.00	2998.00	2998.00

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Error Function	215674916.64	86449806.95	163379402.51
Final Prediction Error	54134.94	.	.
Maximum Absolute Error	6516.27	3825.95	7218.75
Mean Square Error	54040.32	28835.83	54496.13
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	7.00	.	.
Root Average Sum of Squares	232.26	169.81	233.44
Root Final Prediction Error	232.67	.	.
Root Mean Squared Error	232.47	169.81	233.44
Schwarz's Bayesian Criterion	43619.20	.	.
Sum of Squared Errors	215674916.64	86449806.95	163379402.51
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Forward Regression
Regression Model Effects

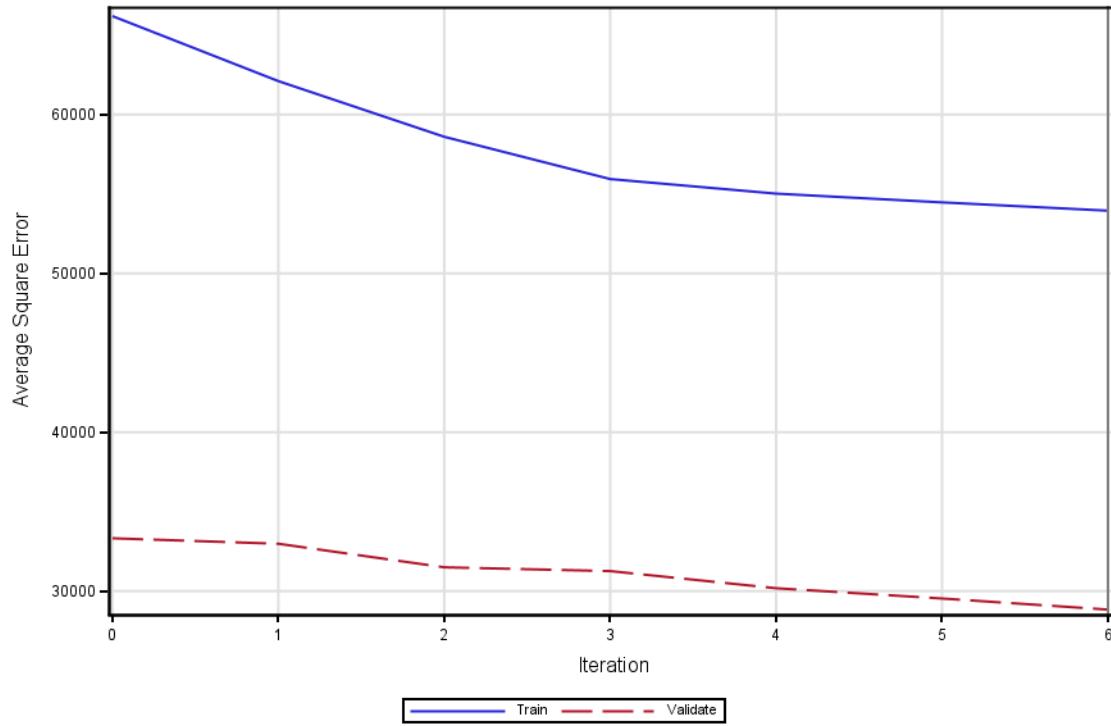


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	PC_7		55.1283	17.3987	2.0688E-65	5	PC_2		19.7745	8.23634	2.381E-16
2	PC_6		50.0814	16.1047	1.3861E-56	6	PC_4		-17.5470	-6.21780	5.5599E-10
3	PC_5		42.7768	14.0301	1.0959E-43	7	PC_1		13.7708	6.38486	1.9121E-10
4	Intercept		28.6641	7.7965	8.063E-15

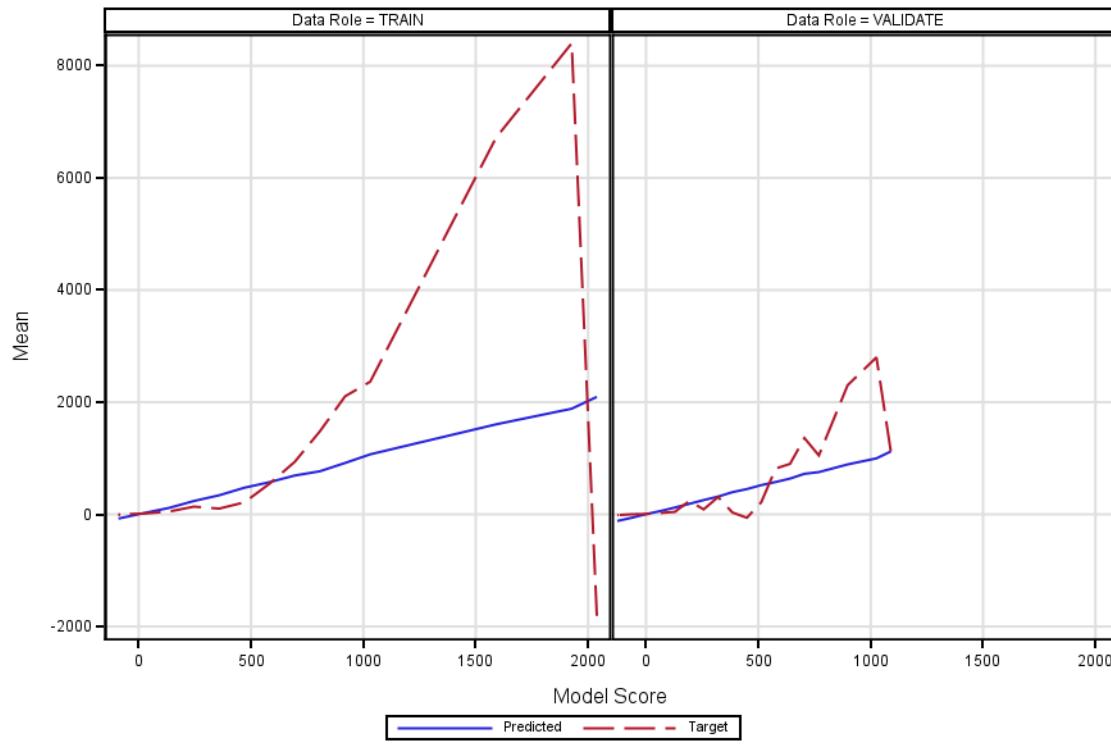
SAS Enterprise Miner Report
Node=Forward Regression
Model Iteration Plots

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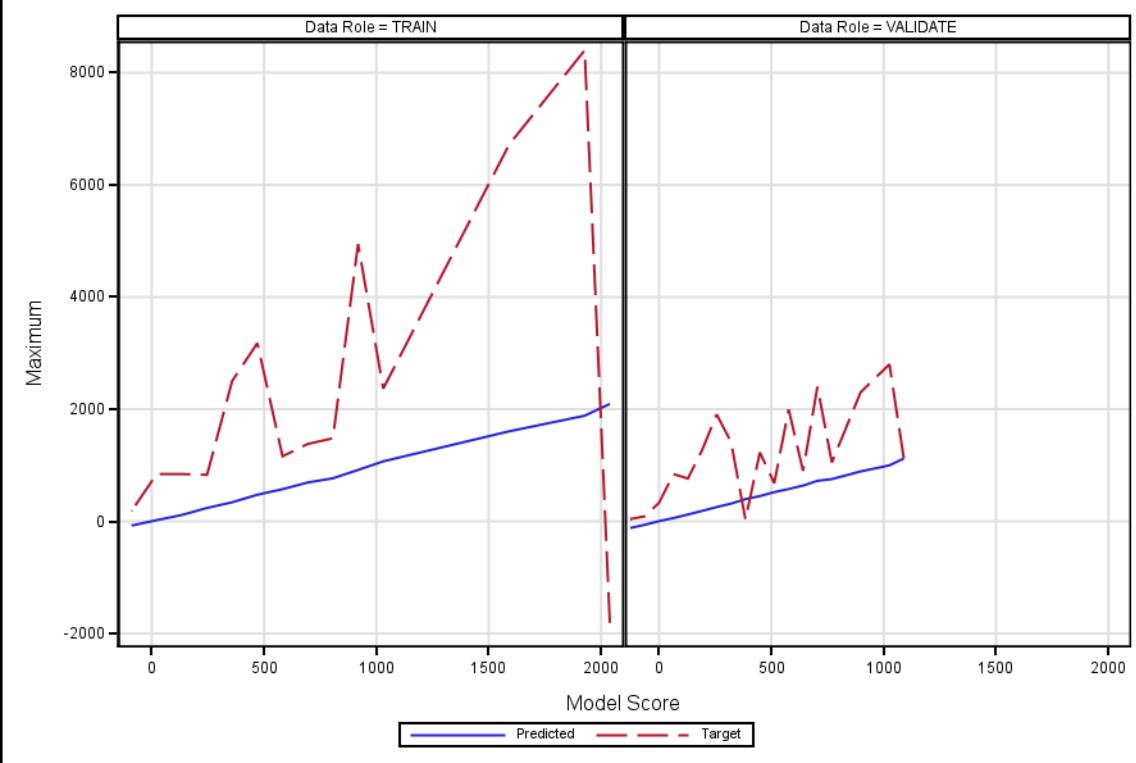
SAS Enterprise Miner Report
Node=Forward Regression
Model Iteration Plots



SAS Enterprise Miner Report
Node=Forward Regression
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
Node=Forward Regression
Score Distributions where TARGET='Profit'



Node=Forward Regression
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1982.919 - 2094.962	2094.96	2094.96	2094.96	-1811.08	-1811.08	-1811.08
1870.876 - 1882.919	1883.71	1883.71	1883.71	8399.98	8399.98	8399.98
1534.747 - 1646.790	1605.05	1605.05	1605.05	6719.98	6719.98	6719.98
974.531 - 1086.574	1070.16	1070.16	1070.16	2365.98	2365.98	2365.98
862.488 - 974.531	916.01	969.30	864.92	2104.58	4946.37	-1359.99
750.445 - 862.488	767.98	767.98	767.98	1480.47	1480.47	1480.47
638.402 - 750.445	692.19	727.90	645.76	936.32	1379.98	569.99
526.359 - 638.402	573.58	633.24	528.24	546.33	1159.99	192.00
414.316 - 526.359	474.47	518.82	419.31	213.16	3177.48	-3399.98
302.273 - 414.316	339.98	403.38	303.19	102.54	2504.22	-2639.99
190.229 - 302.273	238.30	300.46	191.14	137.13	829.38	-1665.05
78.186 - 190.229	113.40	190.03	78.21	48.53	843.17	-968.88
-33.857 - 78.186	21.35	78.18	-33.80	13.62	843.17	-1306.55
-145.900 - -33.857	-75.82	-34.10	-145.90	-2.52	182.36	-533.73

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1057.515 - 1121.586	1121.59	1121.59	1121.59	1120.00	1120.00	1120.00
993.443 - 1057.515	998.03	998.03	998.03	2799.98	2799.98	2799.98
865.300 - 929.372	890.27	890.27	890.27	2302.97	2302.97	2302.97
737.157 - 801.228	753.17	753.17	753.17	1049.99	1049.99	1049.99
673.085 - 737.157	722.76	730.66	715.14	1360.15	2400.97	327.51
609.013 - 673.085	637.69	637.69	637.69	899.98	899.98	899.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
544.942 - 609.013	576.28	607.49	548.05	816.61	1995.99	224.99
480.870 - 544.942	520.89	544.17	494.26	215.69	680.00	-510.00
416.799 - 480.870	450.24	469.93	428.45	-61.08	1228.18	-1862.31
352.727 - 416.799	395.60	395.60	395.60	32.30	32.30	32.30
288.655 - 352.727	316.29	352.49	288.96	307.90	1415.43	-786.01
224.584 - 288.655	254.46	283.78	225.67	88.18	1906.49	-643.71
160.512 - 224.584	186.81	223.77	160.91	238.07	1276.49	-386.39
96.440 - 160.512	120.98	160.42	96.63	43.64	762.59	-3701.89
32.369 - 96.440	58.53	96.27	32.47	24.80	843.17	-2287.78
-31.703 - 32.369	3.77	32.33	-31.46	5.69	331.19	-1850.95
-95.774 - -31.703	-61.72	-31.71	-95.73	0.42	89.95	-729.91
-159.846 - -95.774	-118.64	-95.78	-159.85	-14.25	40.92	-320.24

SAS Enterprise Miner Report

Node=Backward Regression Summary

Node id = Reg7
 Node label = Backward Regression
 Meta path = Ids3 => Part2 => PRINCOMP2 => Reg7
 Notes =

Node=Backward Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SISStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	BACKWARD	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Backward Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

Node=Backward Regression Model Fit Statistics

Target=Profit Target Label=Profit

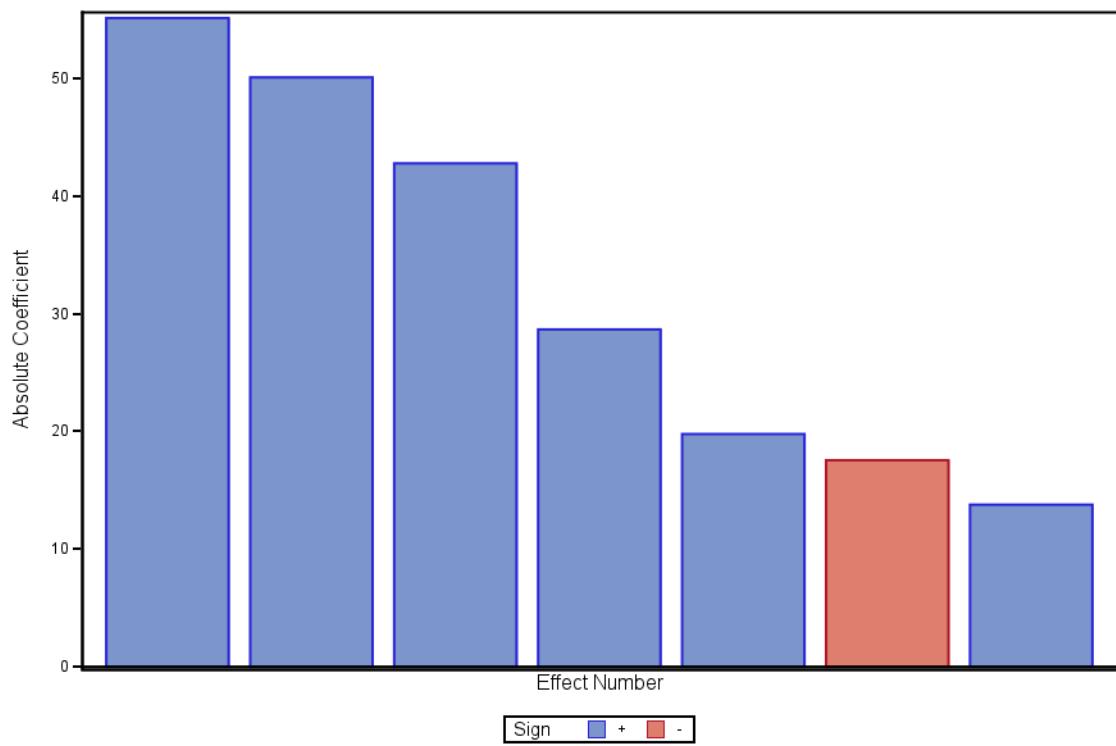
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	43575.14	.	.
Average Squared Error	53945.70	28835.83	54496.13
Average Error Function	53945.70	28835.83	54496.13
Degrees of Freedom for Error	3991.00	.	.
Model Degrees of Freedom	7.00	.	.
Total Degrees of Freedom	3998.00	.	.
Divisor for ASE	3998.00	2998.00	2998.00

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Error Function	215674916.64	86449806.95	163379402.51
Final Prediction Error	54134.94	.	.
Maximum Absolute Error	6516.27	3825.95	7218.75
Mean Square Error	54040.32	28835.83	54496.13
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	7.00	.	.
Root Average Sum of Squares	232.26	169.81	233.44
Root Final Prediction Error	232.67	.	.
Root Mean Squared Error	232.47	169.81	233.44
Schwarz's Bayesian Criterion	43619.20	.	.
Sum of Squared Errors	215674916.64	86449806.95	163379402.51
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Backward Regression
Regression Model Effects

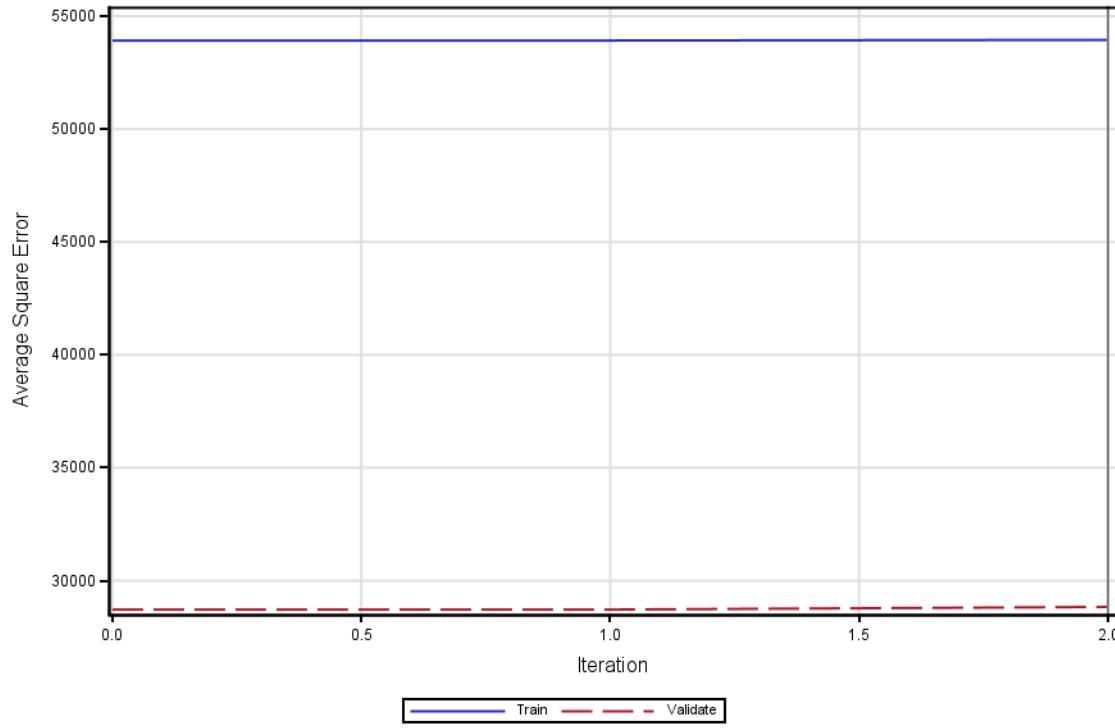


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	PC_7		55.1283	17.3987	2.0688E-65	5	PC_2		19.7745	8.23634	2.381E-16
2	PC_6		50.0814	16.1047	1.3861E-56	6	PC_4		-17.5470	-6.21780	5.5599E-10
3	PC_5		42.7768	14.0301	1.0959E-43	7	PC_1		13.7708	6.38486	1.9121E-10
4	Intercept		28.6641	7.7965	8.063E-15

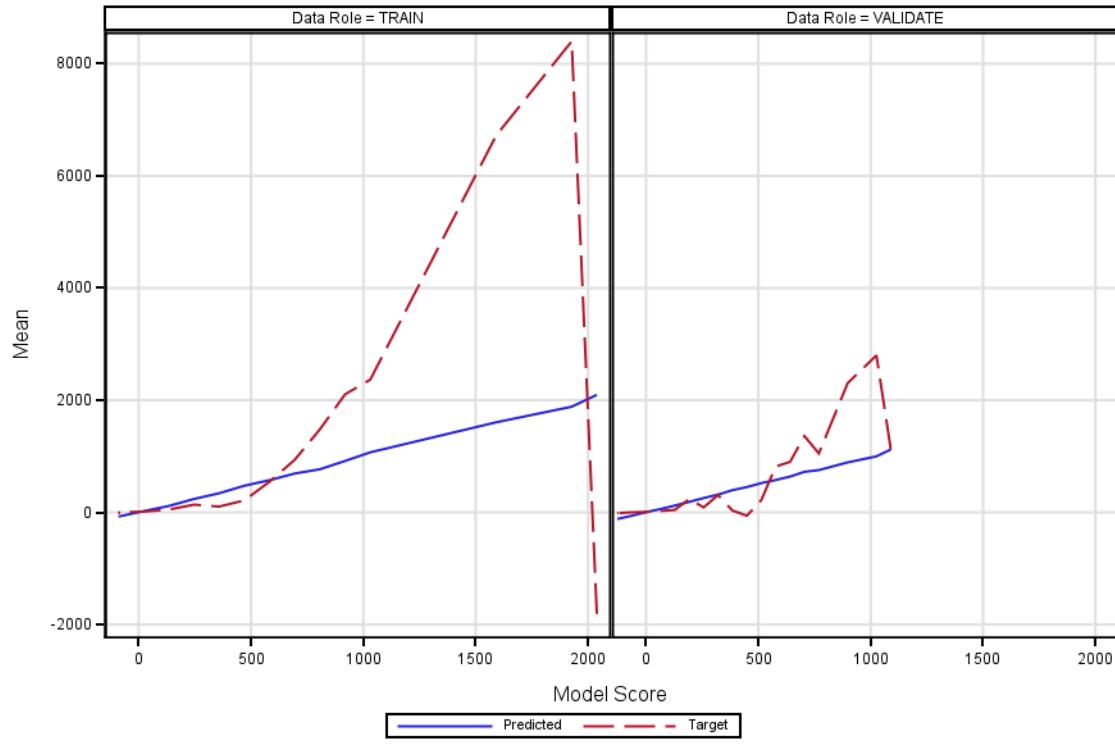
SAS Enterprise Miner Report
Node=Backward Regression
Model Iteration Plots

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SAS Enterprise Miner Report
Node=Backward Regression
Model Iteration Plots

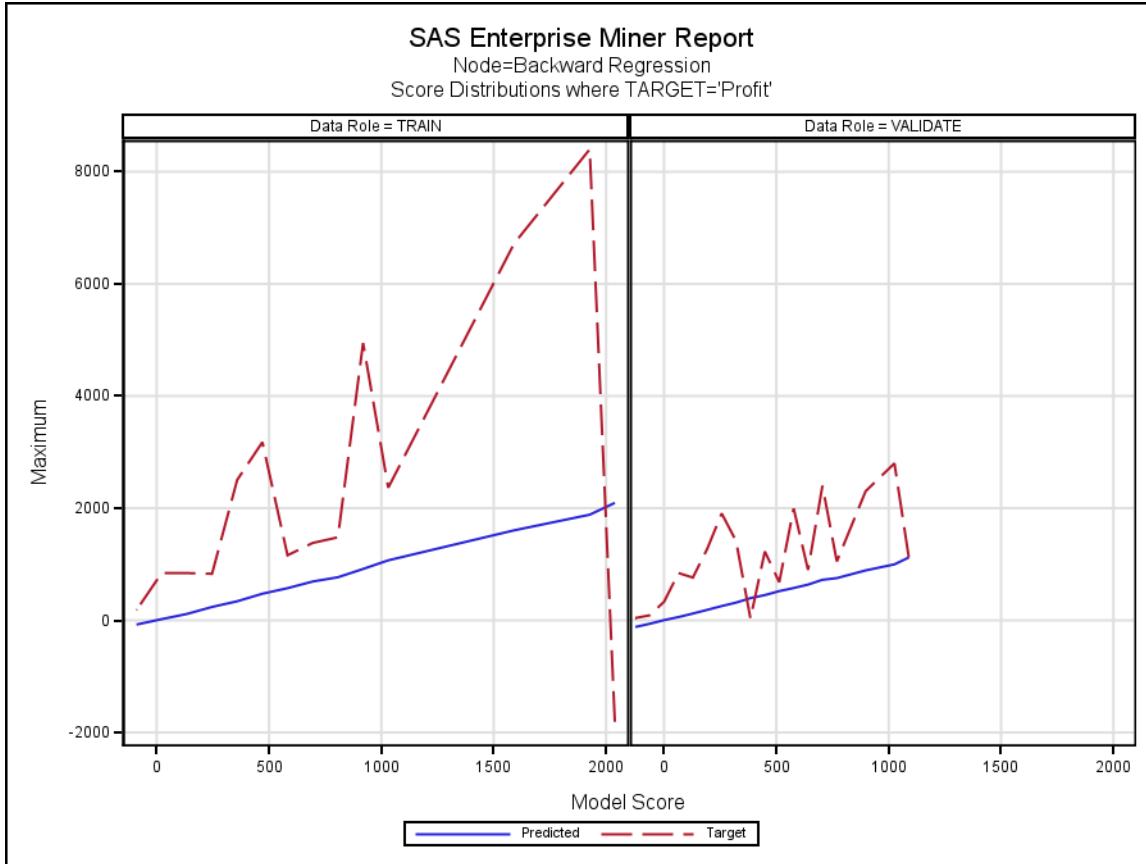


SAS Enterprise Miner Report
Node=Backward Regression
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=Backward Regression
Score Distributions where TARGET='Profit'



Node=Backward Regression

Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1982.919 - 2094.962	2094.96	2094.96	2094.96	-1811.08	-1811.08	-1811.08
1870.876 - 1882.919	1883.71	1883.71	1883.71	8399.98	8399.98	8399.98
1534.747 - 1646.790	1605.05	1605.05	1605.05	6719.98	6719.98	6719.98
974.531 - 1086.574	1070.16	1070.16	1070.16	2365.98	2365.98	2365.98
862.488 - 974.531	916.01	969.30	864.92	2104.58	4946.37	-1359.99
750.445 - 862.488	767.98	767.98	767.98	1480.47	1480.47	1480.47
638.402 - 750.445	692.19	727.90	645.76	936.32	1379.98	569.99
526.359 - 638.402	573.58	633.24	528.24	546.33	1159.99	192.00
414.316 - 526.359	474.47	518.82	419.31	213.16	3177.48	-3399.98
302.273 - 414.316	339.98	403.38	303.19	102.54	2504.22	-2639.99
190.229 - 302.273	238.30	300.46	191.14	137.13	829.38	-1665.05
78.186 - 190.229	113.40	190.03	78.21	48.53	843.17	-968.88
-33.857 - 78.186	21.35	78.18	-33.80	13.62	843.17	-1306.55
-145.900 - -33.857	-75.82	-34.10	-145.90	-2.52	182.36	-533.73

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1057.515 - 1121.586	1121.59	1121.59	1121.59	1120.00	1120.00	1120.00
993.443 - 1057.515	998.03	998.03	998.03	2799.98	2799.98	2799.98
865.300 - 929.372	890.27	890.27	890.27	2302.97	2302.97	2302.97
737.157 - 801.228	753.17	753.17	753.17	1049.99	1049.99	1049.99
673.085 - 737.157	722.76	730.66	715.14	1360.15	2400.97	327.51
609.013 - 673.085	637.69	637.69	637.69	899.98	899.98	899.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
544.942 - 609.013	576.28	607.49	548.05	816.61	1995.99	224.99
480.870 - 544.942	520.89	544.17	494.26	215.69	680.00	-510.00
416.799 - 480.870	450.24	469.93	428.45	-61.08	1228.18	-1862.31
352.727 - 416.799	395.60	395.60	395.60	32.30	32.30	32.30
288.655 - 352.727	316.29	352.49	288.96	307.90	1415.43	-786.01
224.584 - 288.655	254.46	283.78	225.67	88.18	1906.49	-643.71
160.512 - 224.584	186.81	223.77	160.91	238.07	1276.49	-386.39
96.440 - 160.512	120.98	160.42	96.63	43.64	762.59	-3701.89
32.369 - 96.440	58.53	96.27	32.47	24.80	843.17	-2287.78
-31.703 - 32.369	3.77	32.33	-31.46	5.69	331.19	-1850.95
-95.774 - -31.703	-61.72	-31.71	-95.73	0.42	89.95	-729.91
-159.846 - -95.774	-118.64	-95.78	-159.85	-14.25	40.92	-320.24

SAS Enterprise Miner Report

Node=Stepwise Regression Summary

Node id = Reg8
 Node label = Stepwise Regression
 Meta path = Ids3 => Part2 => PRINCOMP2 => Reg8
 Notes =

Node=Stepwise Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SISStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	STEPWISE	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Stepwise Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	8	PC_1 PC_2 PC_3 PC_4 PC_5 PC_6 PC_7 PC_8

Node=Stepwise Regression Model Fit Statistics

Target=Profit Target Label=Profit

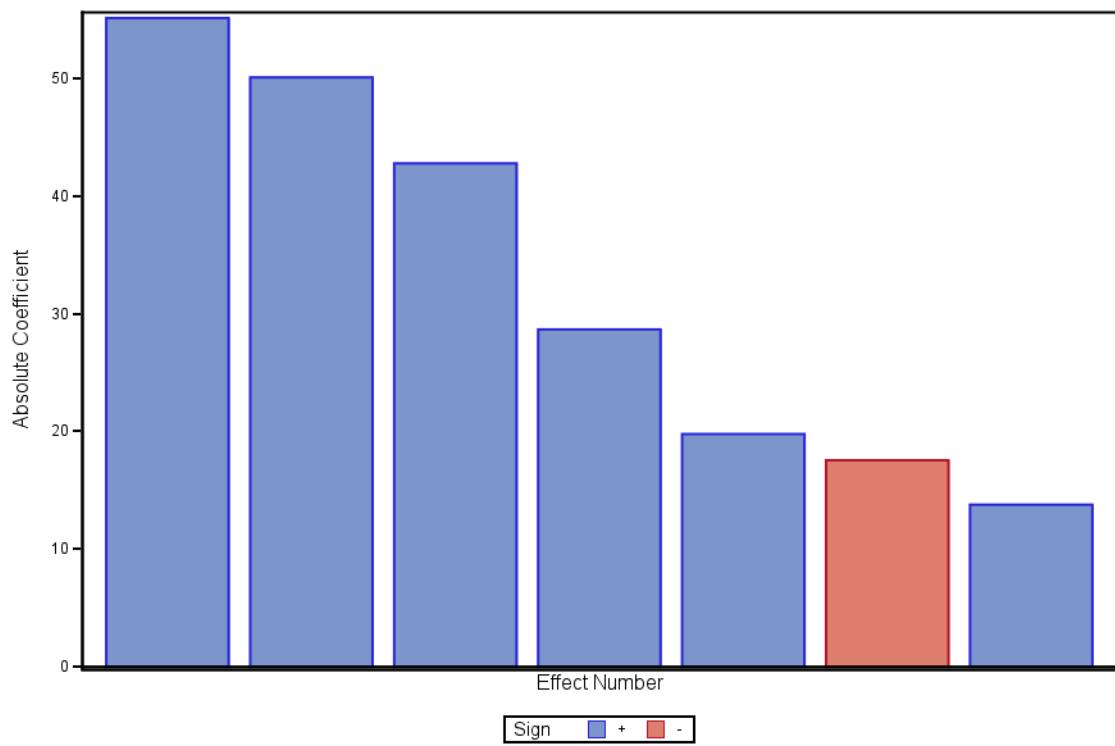
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	43575.14	.	.
Average Squared Error	53945.70	28835.83	54496.13
Average Error Function	53945.70	28835.83	54496.13
Degrees of Freedom for Error	3991.00	.	.
Model Degrees of Freedom	7.00	.	.
Total Degrees of Freedom	3998.00	.	.
Divisor for ASE	3998.00	2998.00	2998.00

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Error Function	215674916.64	86449806.95	163379402.51
Final Prediction Error	54134.94	.	.
Maximum Absolute Error	6516.27	3825.95	7218.75
Mean Square Error	54040.32	28835.83	54496.13
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	7.00	.	.
Root Average Sum of Squares	232.26	169.81	233.44
Root Final Prediction Error	232.67	.	.
Root Mean Squared Error	232.47	169.81	233.44
Schwarz's Bayesian Criterion	43619.20	.	.
Sum of Squared Errors	215674916.64	86449806.95	163379402.51
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Stepwise Regression
Regression Model Effects

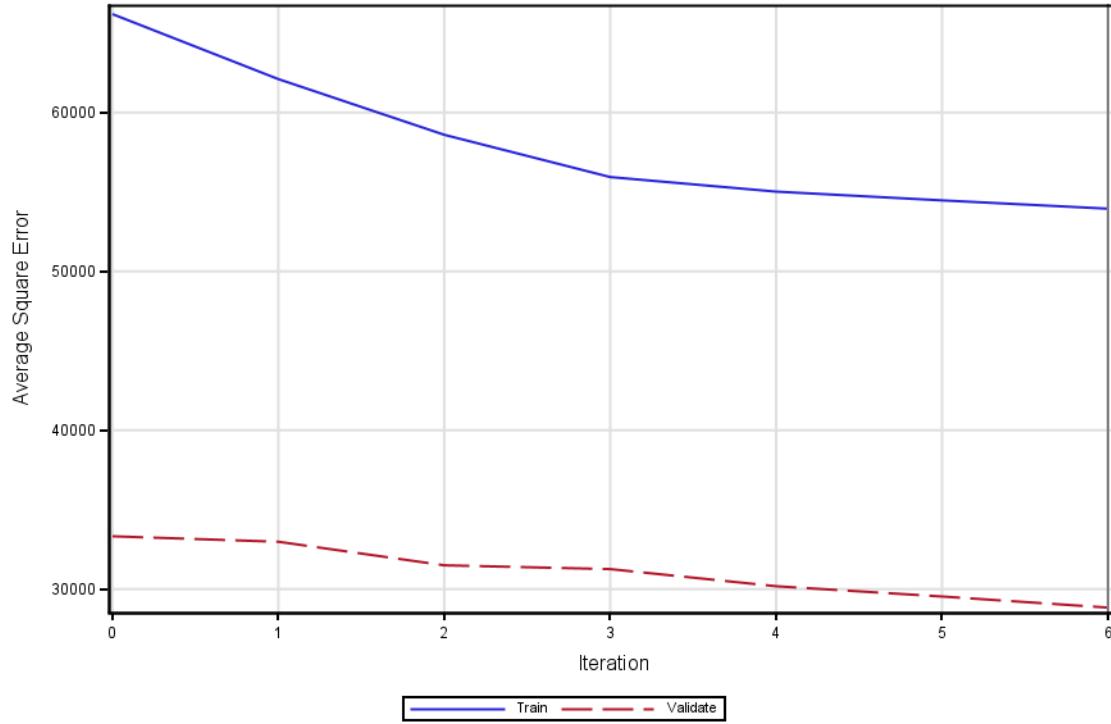


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	PC_7		55.1283	17.3987	2.0688E-65	5	PC_2		19.7745	8.23634	2.381E-16
2	PC_6		50.0814	16.1047	1.3861E-56	6	PC_4		-17.5470	-6.21780	5.5599E-10
3	PC_5		42.7768	14.0301	1.0959E-43	7	PC_1		13.7708	6.38486	1.9121E-10
4	Intercept		28.6641	7.7965	8.063E-15

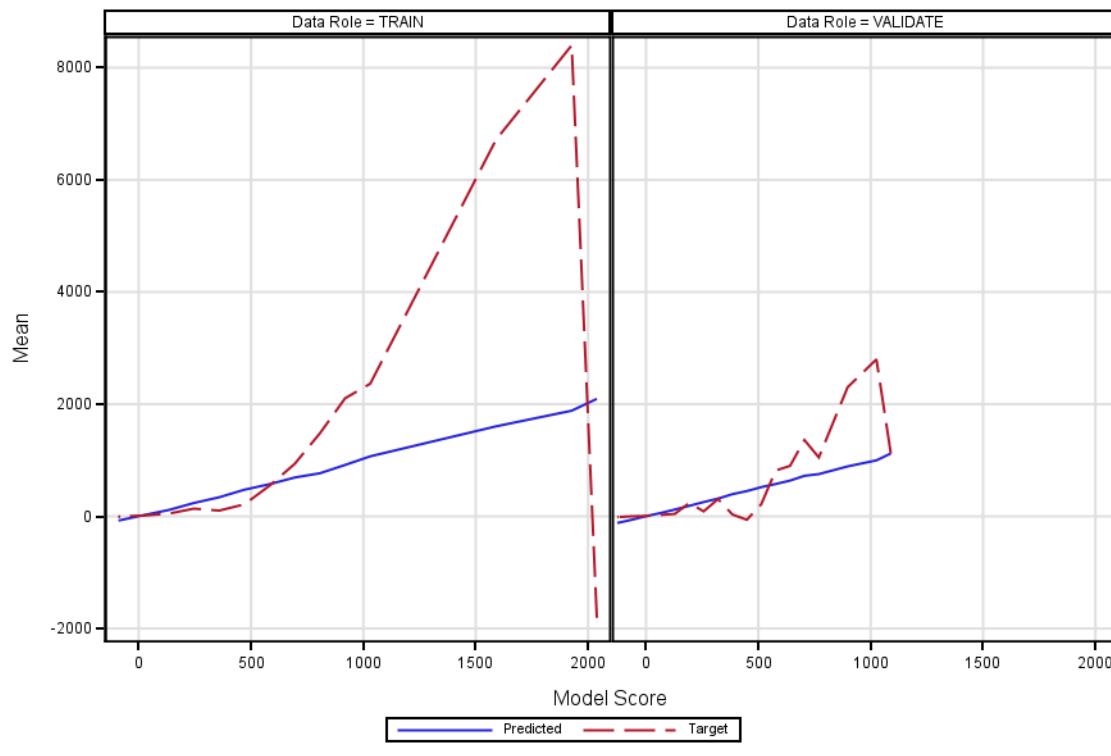
SAS Enterprise Miner Report
Node=Stepwise Regression
Model Iteration Plots

75

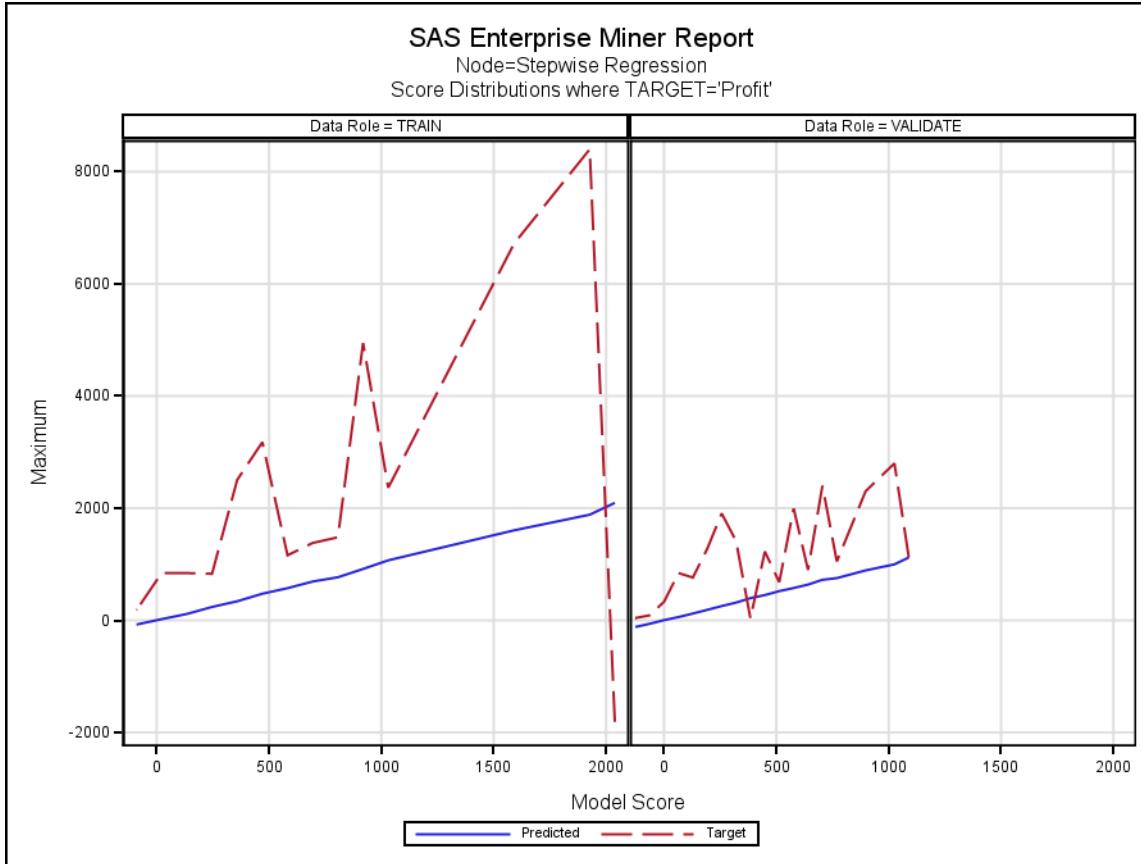
SAS Enterprise Miner Report
Node=Stepwise Regression
Model Iteration Plots



SAS Enterprise Miner Report
Node=Stepwise Regression
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
Node=Stepwise Regression
Score Distributions where TARGET='Profit'



Node=Stepwise Regression
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1982.919 - 2094.962	2094.96	2094.96	2094.96	-1811.08	-1811.08	-1811.08
1870.876 - 1882.919	1883.71	1883.71	1883.71	8399.98	8399.98	8399.98
1534.747 - 1646.790	1605.05	1605.05	1605.05	6719.98	6719.98	6719.98
974.531 - 1086.574	1070.16	1070.16	1070.16	2365.98	2365.98	2365.98
862.488 - 974.531	916.01	969.30	864.92	2104.58	4946.37	-1359.99
750.445 - 862.488	767.98	767.98	767.98	1480.47	1480.47	1480.47
638.402 - 750.445	692.19	727.90	645.76	936.32	1379.98	569.99
526.359 - 638.402	573.58	633.24	528.24	546.33	1159.99	192.00
414.316 - 526.359	474.47	518.82	419.31	213.16	3177.48	-3399.98
302.273 - 414.316	339.98	403.38	303.19	102.54	2504.22	-2639.99
190.229 - 302.273	238.30	300.46	191.14	137.13	829.38	-1665.05
78.186 - 190.229	113.40	190.03	78.21	48.53	843.17	-968.88
-33.857 - 78.186	21.35	78.18	-33.80	13.62	843.17	-1306.55
-145.900 - -33.857	-75.82	-34.10	-145.90	-2.52	182.36	-533.73

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1057.515 - 1121.586	1121.59	1121.59	1121.59	1120.00	1120.00	1120.00
993.443 - 1057.515	998.03	998.03	998.03	2799.98	2799.98	2799.98
865.300 - 929.372	890.27	890.27	890.27	2302.97	2302.97	2302.97
737.157 - 801.228	753.17	753.17	753.17	1049.99	1049.99	1049.99
673.085 - 737.157	722.76	730.66	715.14	1360.15	2400.97	327.51
609.013 - 673.085	637.69	637.69	637.69	899.98	899.98	899.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
544.942 - 609.013	576.28	607.49	548.05	816.61	1995.99	224.99
480.870 - 544.942	520.89	544.17	494.26	215.69	680.00	-510.00
416.799 - 480.870	450.24	469.93	428.45	-61.08	1228.18	-1862.31
352.727 - 416.799	395.60	395.60	395.60	32.30	32.30	32.30
288.655 - 352.727	316.29	352.49	288.96	307.90	1415.43	-786.01
224.584 - 288.655	254.46	283.78	225.67	88.18	1906.49	-643.71
160.512 - 224.584	186.81	223.77	160.91	238.07	1276.49	-386.39
96.440 - 160.512	120.98	160.42	96.63	43.64	762.59	-3701.89
32.369 - 96.440	58.53	96.27	32.47	24.80	843.17	-2287.78
-31.703 - 32.369	3.77	32.33	-31.46	5.69	331.19	-1850.95
-95.774 - -31.703	-61.72	-31.71	-95.73	0.42	89.95	-729.91
-159.846 - -95.774	-118.64	-95.78	-159.85	-14.25	40.92	-320.24

SAS Enterprise Miner Report

Node=NeuralNet ModelComparison Summary

Node id = MdlComp8
 Node label = NeuralNet ModelComparison
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural10 => MdlComp8
 Notes =

Node=NeuralNet ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	NeuralNet 5HU		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Neural10		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=NeuralNet ModelComparison Variable Summary

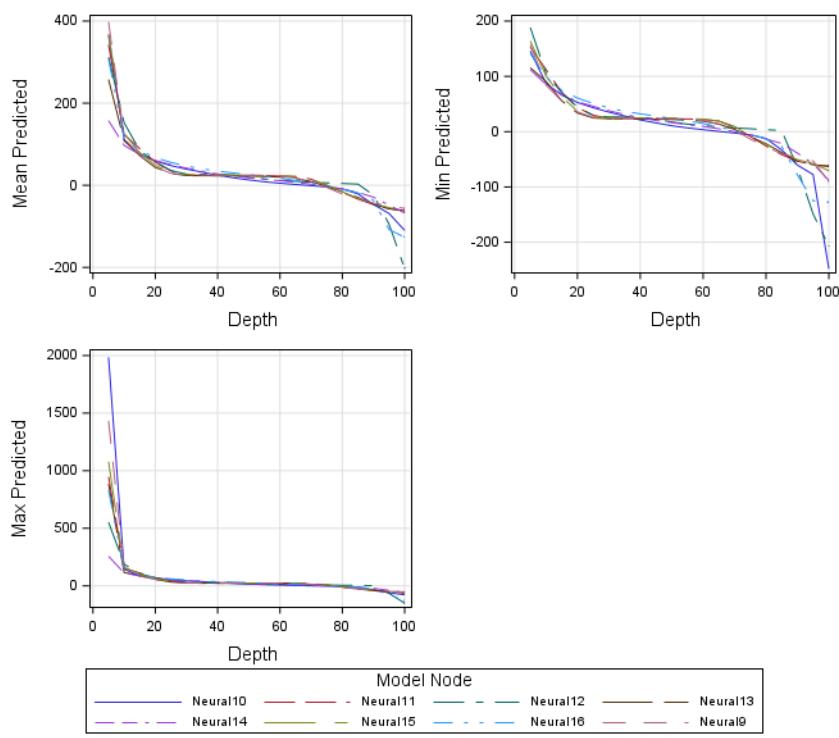
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=NeuralNet ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Neural10	Neural10	NeuralNet 5HU	Profit	Profit	20793.80	37594.19
	Neural9	Neural9	NeuralNet 3HU	Profit	Profit	23237.68	43541.20
	Neural15	Neural15	NeuralNet 3HURP	Profit	Profit	23799.50	47329.18
	Neural11	Neural11	NeuralNet 3HUBD	Profit	Profit	24028.35	48598.73
	Neural13	Neural13	NeuralNet 3HUBP	Profit	Profit	24085.83	50971.32
	Neural16	Neural16	NeuralNet 5HURP	Profit	Profit	24370.71	50725.04
	Neural12	Neural12	NeuralNet 5HUBD	Profit	Profit	26507.35	52803.87
	Neural14	Neural14	NeuralNet 5HUBP	Profit	Profit	28288.24	59957.56

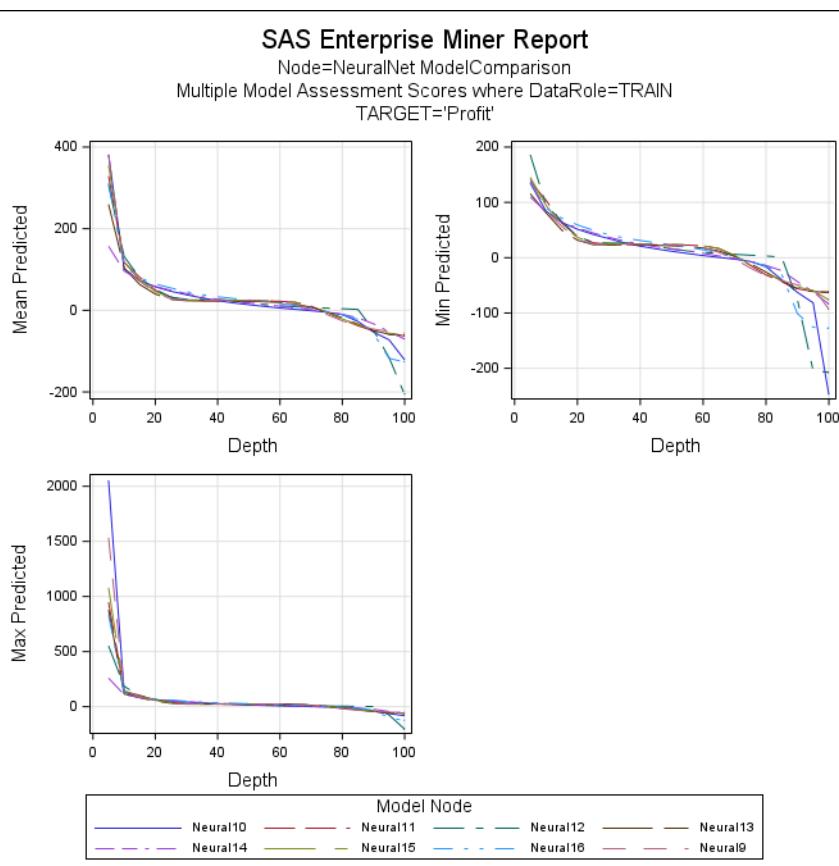
SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



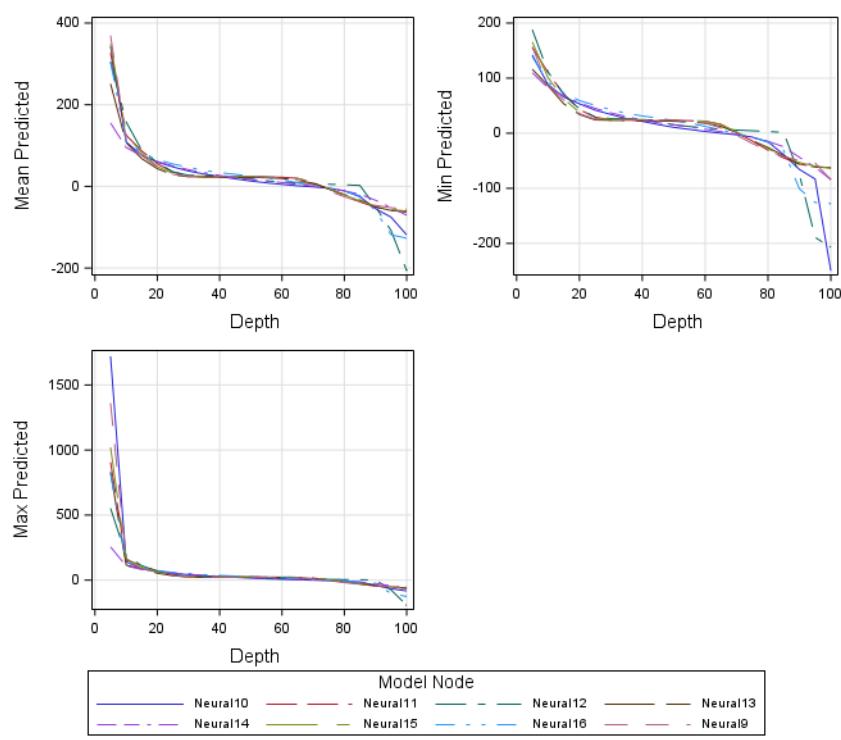
SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree ModelComparison Summary

Node id = MdlComp5
 Node label = RegTree ModelComparison
 Meta path = Ids3 => Part2 => PRINCOMP2 => Tree5 => MdlComp5
 Notes =

Node=RegTree ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	RegTree B2D6		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Tree5		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=RegTree ModelComparison Variable Summary

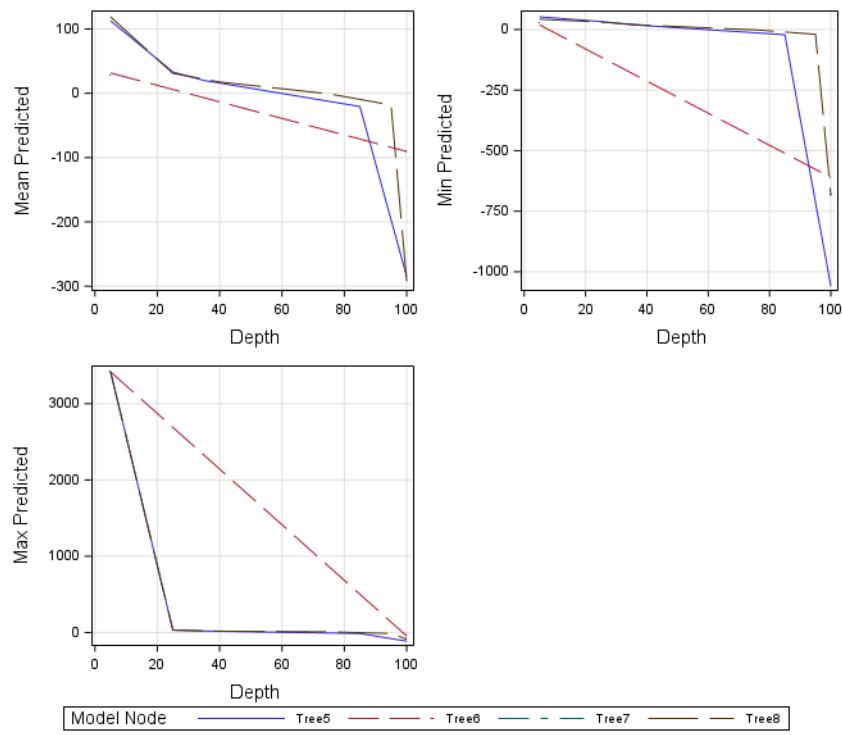
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=RegTree ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Tree5	Tree5	RegTree B2D6	Profit	Profit	25818.72	40649.74
	Tree8	Tree8	RegTree B3D6	Profit	Profit	25823.75	41181.75
	Tree6	Tree6	RegTree B2D4	Profit	Profit	28961.32	43181.56
	Tree7	Tree7	RegTree B2D2	Profit	Profit	32243.12	48930.55

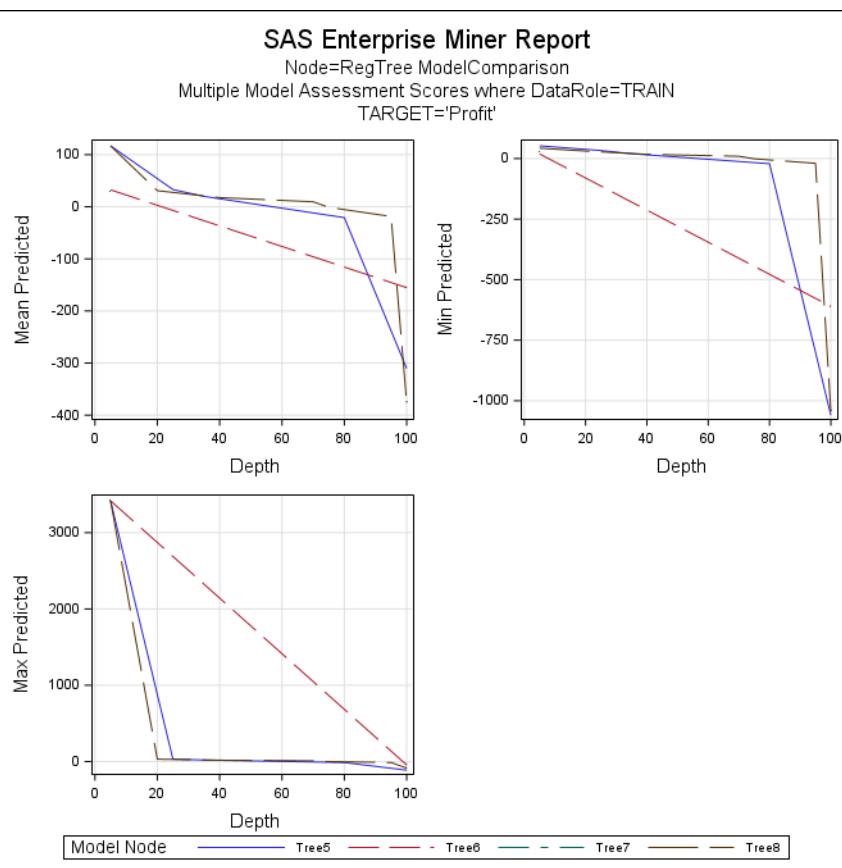
SAS Enterprise Miner Report

Node=RegTree ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



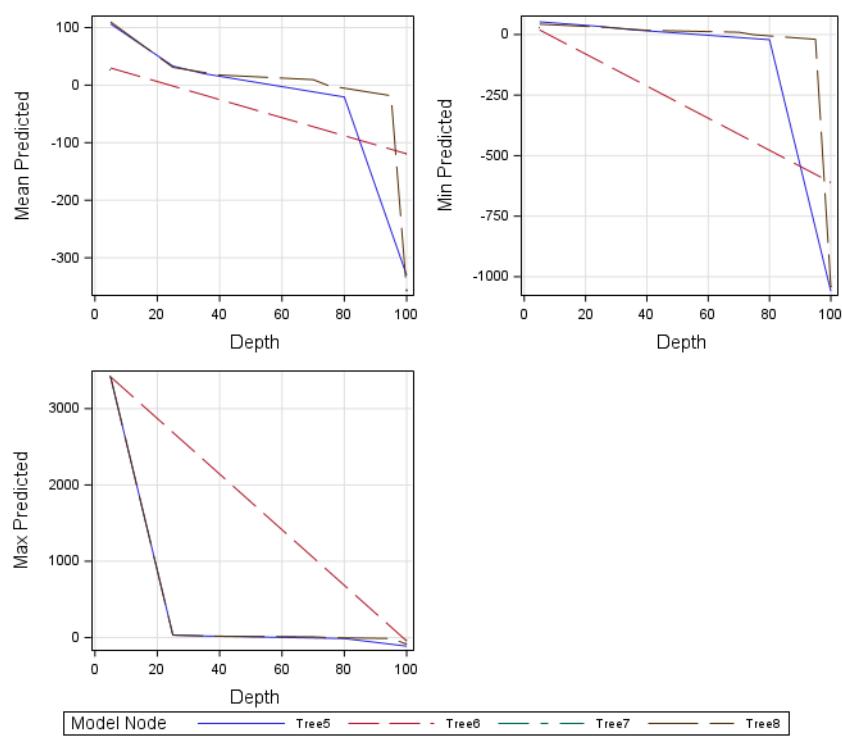
SAS Enterprise Miner Report

Node=RegTree ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree ModelComparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=MLR ModelComparison Summary

Node id = MdlComp6
 Node label = MLR ModelComparison
 Meta path = Ids3 => Part2 => PRINCOMP2 => Reg5 => MdlComp6
 Notes =

Node=MLR ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	Exhaustive Regression		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Reg5		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=MLR ModelComparison Variable Summary

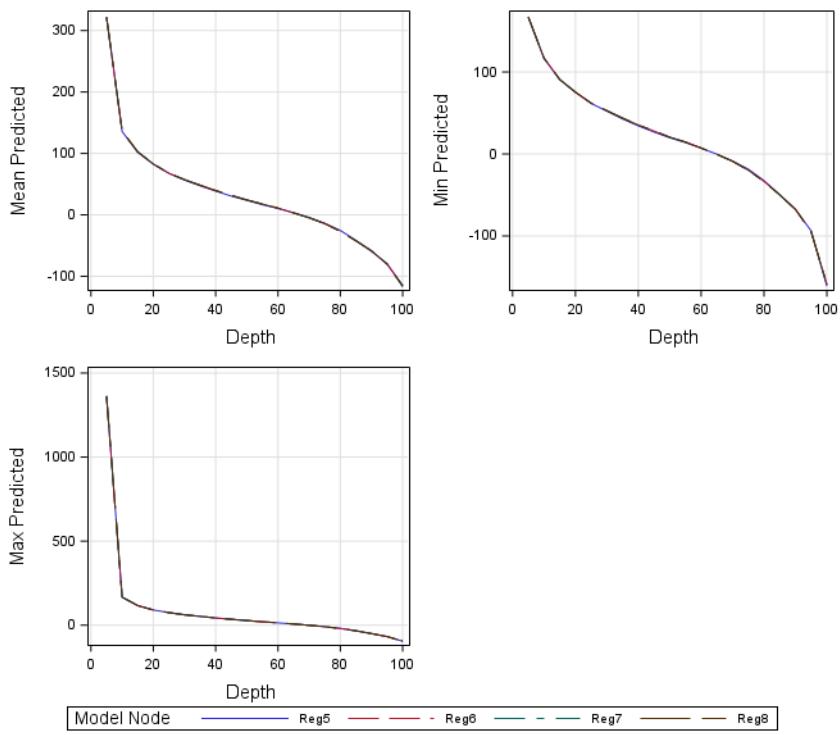
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=MLR ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Reg5	Reg5	Exhaustive Regression	Profit	Profit	28718.79	53917.02
	Reg6	Reg6	Forward Regression	Profit	Profit	28835.83	53945.70
	Reg7	Reg7	Backward Regression	Profit	Profit	28835.83	53945.70
	Reg8	Reg8	Stepwise Regression	Profit	Profit	28835.83	53945.70

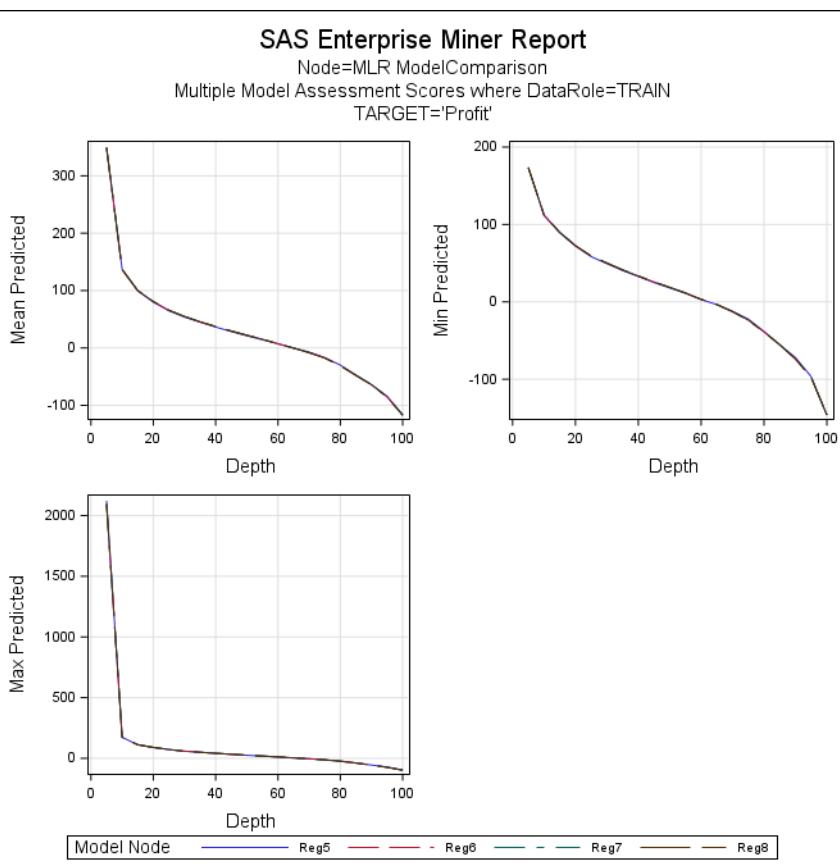
SAS Enterprise Miner Report

Node=MLR ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



SAS Enterprise Miner Report

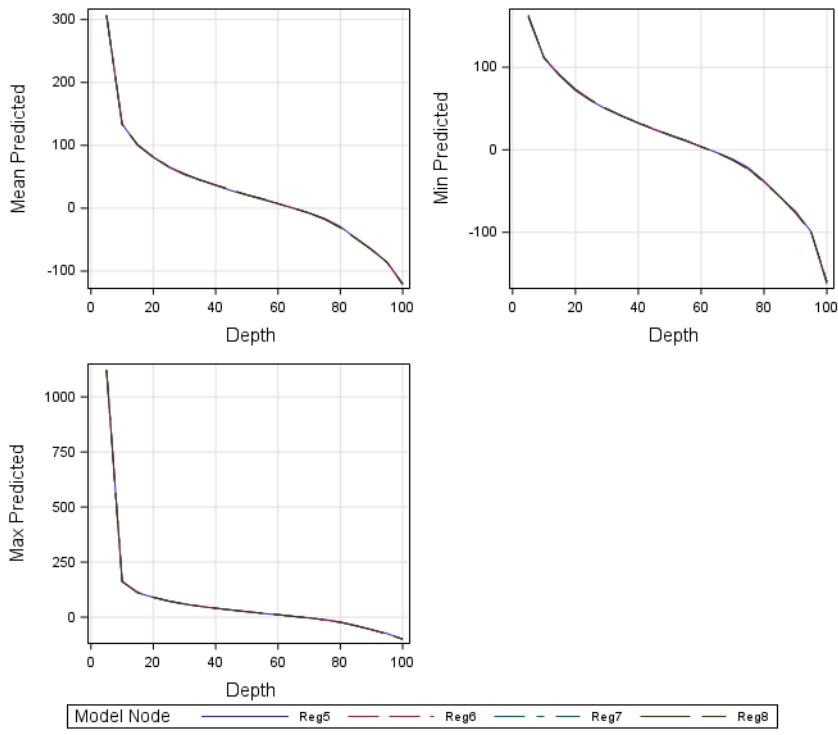
Node=MLR ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=MLR ModelComparison

Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=SCORE SUPERSTORE Summary

Node id = lds4
 Node label = SCORE SUPERSTORE
 Meta path = lds4
 Notes =

Node=SCORE SUPERSTORE Properties

Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	tbold4	
ApplyIntervalLevelLowerLimit	Y		DsId	scoresuperstore	
ApplyMaxClassLevels	Y		DsModifiedBy	tbold4	
ApplyMaxPercentMissing	Y		DsModifyDate	1998957436.4	
CMeta	WORK.M0CFJVRI		DsSampleName		
ComputeStatistics	N		DsSampleSize		
DBPassThrough	Y		DsSampleSizeType		
Data	STDATA.SUPERSTORESCORE_TRAIN		DsScope	LOCAL	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y	
DataSource	scoresuperstore		IntervalLowerLimit	20	
DataSourceRole	RAW		Library	STDATA	
Description			MaxClassLevels	20	
DropMapVariables	Y		MaxPercentMissing	50	
DsCreateDate	1998957425.1		MetaAdvisor	BASIC	

Property	Value	Default
NBytes	787456	.
NCols	22	.
NObs	1999	.
NewTable		
NewVariableRole	REJECT	
OutputType	VIEW	
Role	SCORE	TRAIN
Sample	D	
SampleSizeObs	10000	
SampleSizePercent	20	
SampleSizeType	PERCENT	
Scope	LOCAL	
Segment		
Table	SUPERSTORESCORE_TRAIN	

Node=SCORE SUPERSTORE Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	SUPERSTORESCORE_TRAIN	Date Created	04May2023:10:34:48	Data Size	787456
Data Type	DATA	Date Modified	04May2023:10:34:48	Role	RAW
Data Label		Number Rows	1999	Segment	
Engine	BASE	Number Columns	22	Data Library	STDATA

Node=SCORE SUPERSTORE

Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Category	Category	INPUT	NOMINAL	C	15	\$15.	
City	City	INPUT	NOMINAL	C	17	\$17.	
Country	Country	INPUT	NOMINAL	C	13	\$13.	
CustomerID	CustomerID	INPUT	NOMINAL	C	8	\$8.	
CustomerName	CustomerName	INPUT	NOMINAL	C	22	\$22.	
Discount	Discount	INPUT	INTERVAL	N	8	BEST.	
OrderDate	OrderDate	TIMEID	INTERVAL	N	8	MMDDYY10.0	
OrderID	OrderID	INPUT	NOMINAL	C	14	\$14.	
PostalCode	PostalCode	INPUT	INTERVAL	N	8	BEST.	
ProductID	ProductID	INPUT	NOMINAL	C	15	\$15.	
ProductName	ProductName	TEXT	NOMINAL	C	127	\$127.	
Profit	Profit	INPUT	INTERVAL	N	8	BEST.	
Quantity	Quantity	INPUT	INTERVAL	N	8	BEST.	
Region	Region	INPUT	NOMINAL	C	7	\$7.	
RowID	RowID	INPUT	INTERVAL	N	8	BEST.	
Sales	Sales	INPUT	INTERVAL	N	8	BEST.	
Segment	Segment	SEGMENT	NOMINAL	C	11	\$11.	
ShipDate	ShipDate	TIMEID	INTERVAL	N	8	MMDDYY10.0	
ShipMode	ShipMode	INPUT	NOMINAL	C	14	\$14.	
State	State	INPUT	NOMINAL	C	20	\$20.	
SubCategory	SubCategory	INPUT	NOMINAL	C	11	\$11.	
dataobs	Observation Number	INPUT	INTERVAL	N	8		

SAS Enterprise Miner Report

Node=Predict Model Comparison Summary

Node id = MdlComp7
 Node label = Predict Model Comparison
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural10 => MdlComp8 => MdlComp7
 Notes =

Node=Predict Model Comparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	NeuralNet 5HU		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Neural10		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=Predict Model Comparison Variable Summary

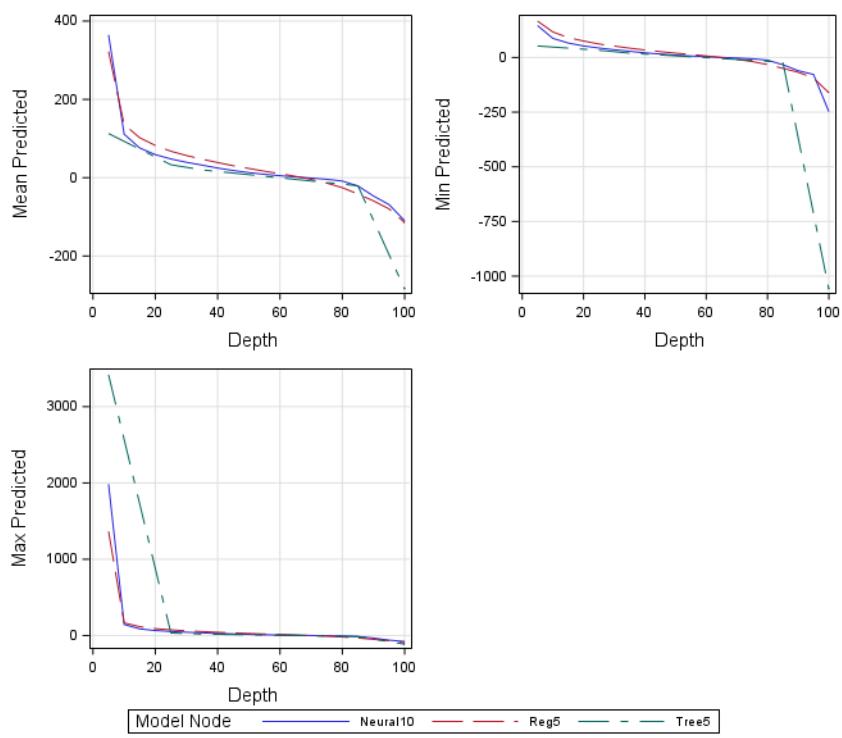
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=Predict Model Comparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	MdlComp8	Neural10	NeuralNet 5HU	Profit	Profit	20793.80	37594.19
	MdlComp5	Tree5	RegTree B2D6	Profit	Profit	25818.72	40649.74
	MdlComp6	Reg5	Exhaustive Regression	Profit	Profit	28718.79	53917.02

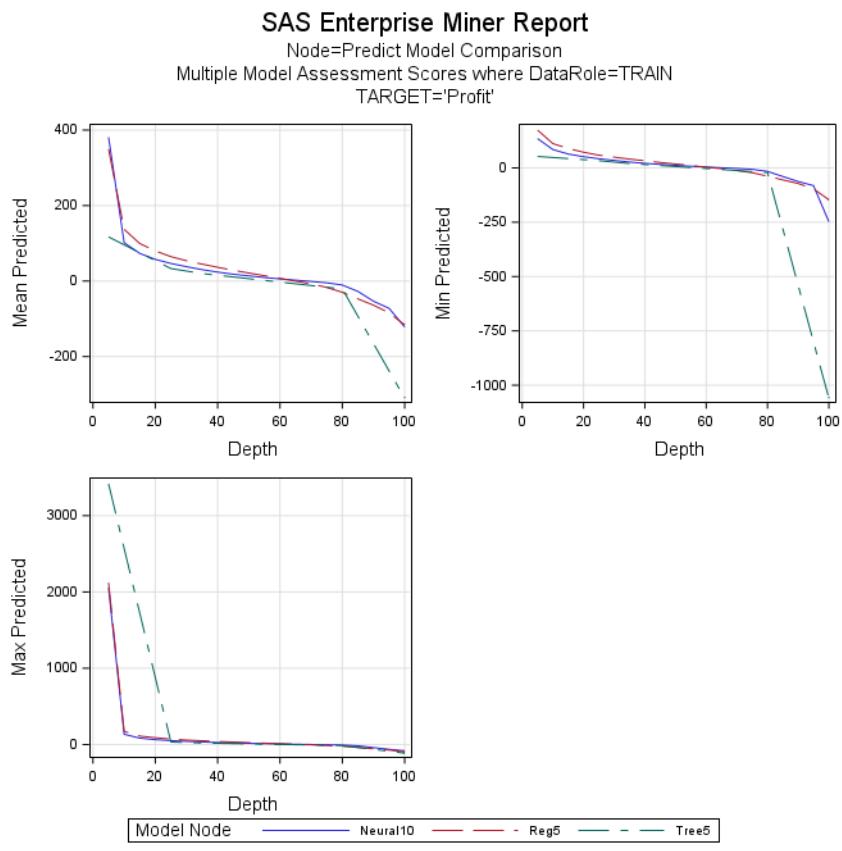
SAS Enterprise Miner Report

Node=Predict Model Comparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



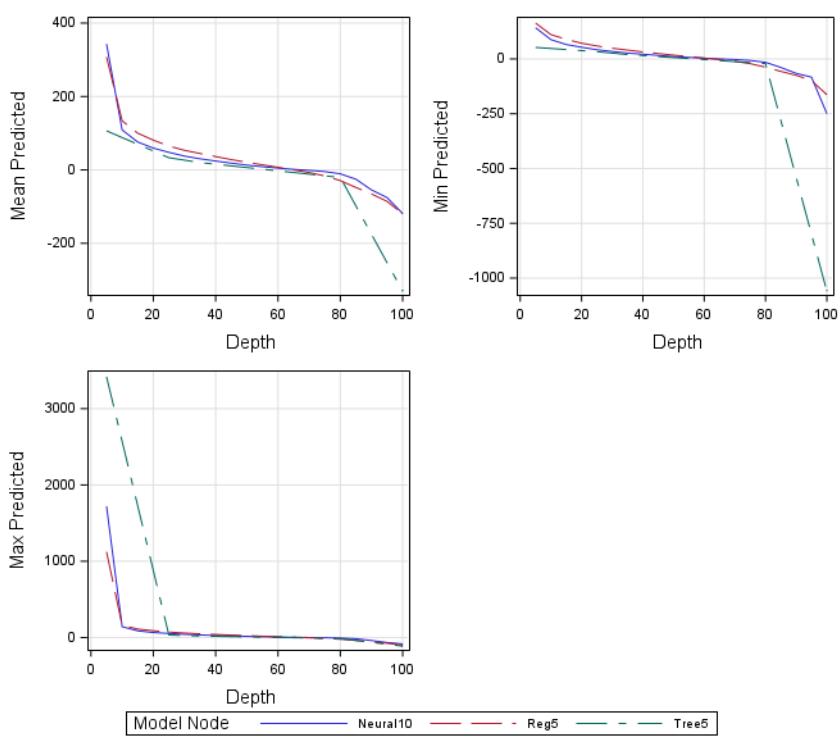
SAS Enterprise Miner Report

Node=Predict Model Comparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=Predict Model Comparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=Score Summary

Node id = Score2
 Node label = Score
 Meta path = Ids3 => Part2 => PRINCOMP2 => Neural10 => MdIComp8 => MdIComp7 => Score2
 Notes =

Node=Score Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Score		HideInput	Y		JScore	N	
CScore	N		HideOther	Y		OptimizedCode	Y	
FixedOutputNames	Y		HidePredict	Y		OutputType	VIEW	
GraphReports	Y		HideRejected	Y		PackageName	DEFAULT	
HideAssess	Y		HideResidual	Y		PreferenceName		
HideClassification	Y		HideTarget	Y		ScoreTest	N	
HideFreq	Y		HideVariables	N		ScoreValidate	N	

Node=Score Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment

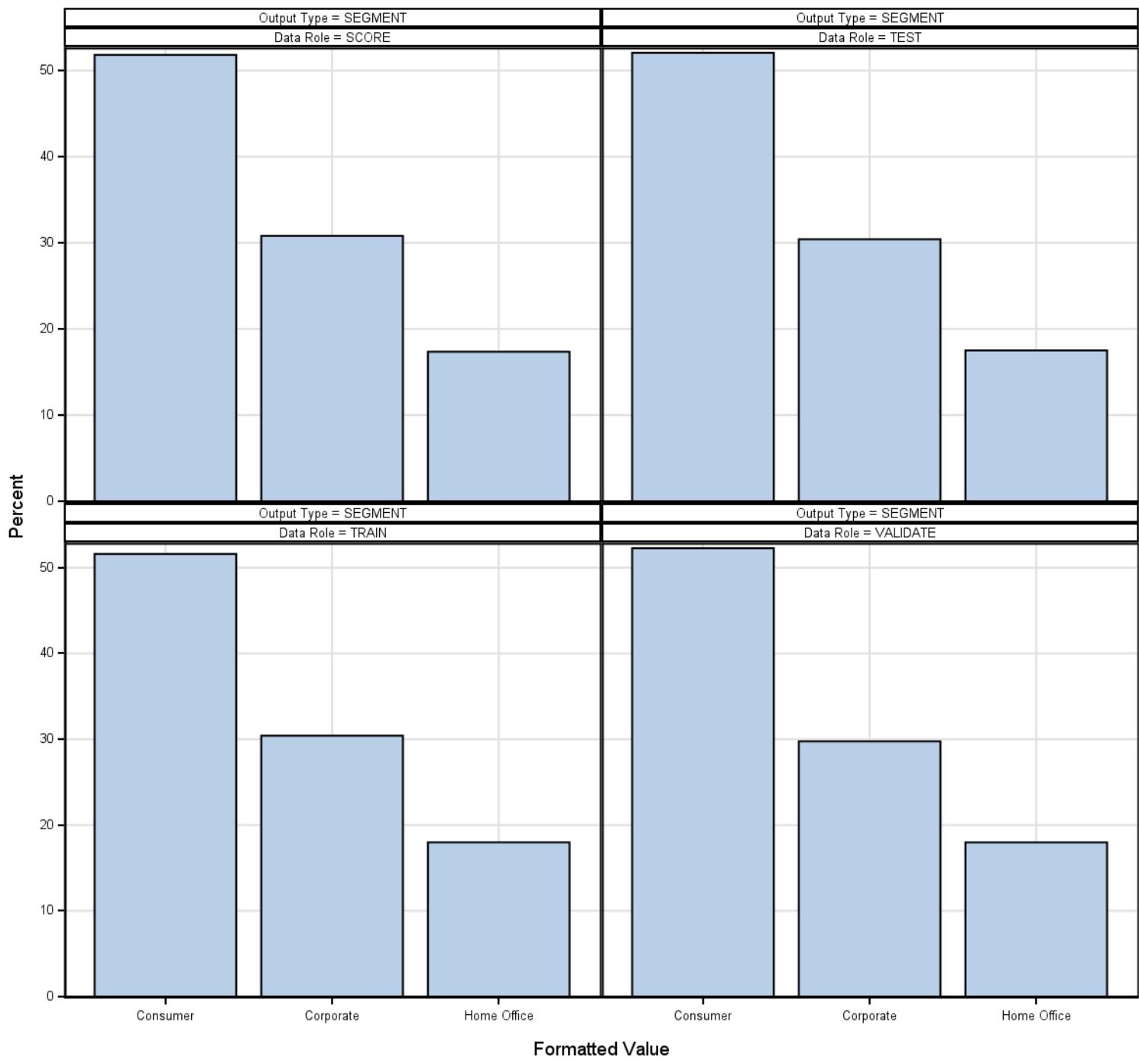
Node=Score Output Variables

Variable Name	Creator	Variable Label	Function	Type
EM_PREDICTION	Score2	Prediction for Profit	PREDICT	N
EM_SEGMENT	Score2	Segment	TRANSFORM	C
PC_1	PRINCOMP2	Principal Component 1	TRANSFORM	N
PC_2	PRINCOMP2	Principal Component 2	TRANSFORM	N
PC_3	PRINCOMP2	Principal Component 3	TRANSFORM	N
PC_4	PRINCOMP2	Principal Component 4	TRANSFORM	N
PC_5	PRINCOMP2	Principal Component 5	TRANSFORM	N
PC_6	PRINCOMP2	Principal Component 6	TRANSFORM	N
PC_7	PRINCOMP2	Principal Component 7	TRANSFORM	N
PC_8	PRINCOMP2	Principal Component 8	TRANSFORM	N
P_Profit	Neural10	Predicted: Profit	PREDICT	N
WARN	Neural10	Warnings	ASSESS	C

SAS Enterprise Miner Report

Node=Score

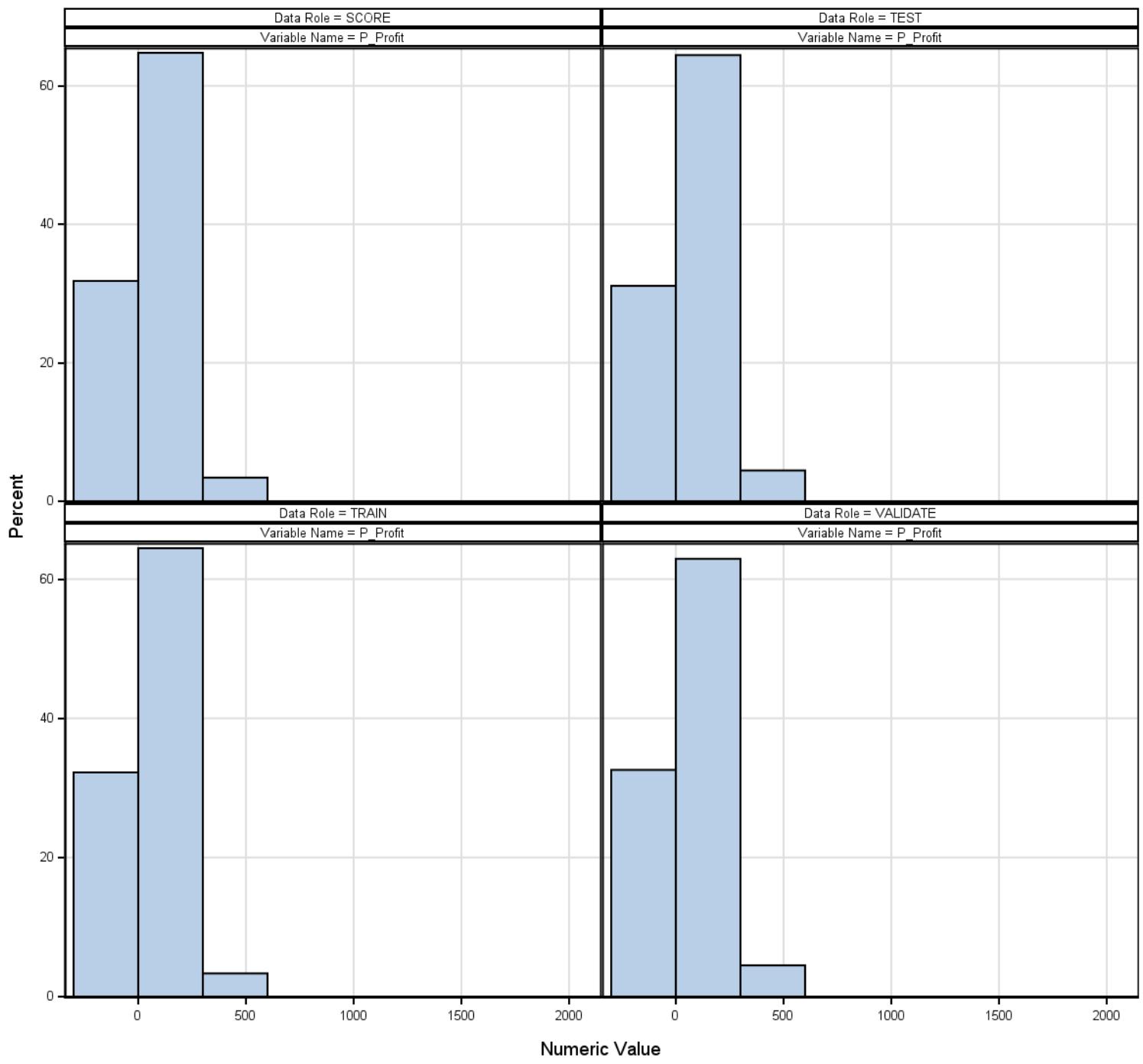
Bar Chart



SAS Enterprise Miner Report

Node=Score

Histogram



SAS Enterprise Miner Report

Node=SUPERSTORE Summary

Node id = lds
 Node label = SUPERSTORE
 Meta path = lds
 Notes =

Node=SUPERSTORE Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	tball4		NBytes	3671040	.
ApplyIntervalLevelLowerLimit	Y		DsId	superstore		NCols	21	.
ApplyMaxClassLevels	Y		DsModifiedBy	tball4		NObs	9994	.
ApplyMaxPercentMissing	Y		DsModifyDate	1998814780.1		NewTable		
CMeta	WORK.M2G8EE5J		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	RAW	TRAIN
Data	STDATA.SUPERSTORE_TRAIN		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	superstore		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	STDATA		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	1998814779.8		MetaAdvisor	BASIC		Table	SUPERSTORE_TRAIN	

Node=SUPERSTORE

Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	SUPERSTORE_TRAIN	Date Created	04May2023:10:15:41	Data Size	3671040
Data Type	DATA	Date Modified	04May2023:10:15:41	Role	RAW
Data Label		Number Rows	9994	Segment	
Engine	BASE	Number Columns	21	Data Library	STDATA

Node=SUPERSTORE

Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Category	Category	INPUT	NOMINAL	C	15	\$15.	
City	City	REJECTED	NOMINAL	C	17	\$17.	
Country	Country	REJECTED	NOMINAL	C	13	\$13.	
CustomerID	CustomerID	REJECTED	NOMINAL	C	8	\$8.	
CustomerName	CustomerName	REJECTED	NOMINAL	C	22	\$22.	
Discount	Discount	INPUT	INTERVAL	N	8	BEST.	
OrderDate	OrderDate	REJECTED	INTERVAL	N	8	MMDDYY10.0	
OrderID	OrderID	REJECTED	NOMINAL	C	14	\$14.	
PostalCode	PostalCode	REJECTED	INTERVAL	N	8	BEST.	
ProductID	ProductID	ID	NOMINAL	C	15	\$15.	
ProductName	ProductName	REJECTED	NOMINAL	C	127	\$127.	

Name	Label	Role	Level	Type	Length	Format	Creator
Profit	Profit	TARGET	INTERVAL	N	8	BEST.	
Quantity	Quantity	INPUT	INTERVAL	N	8	BEST.	
Region	Region	INPUT	NOMINAL	C	7	\$7.	
RowID	RowID	REJECTED	INTERVAL	N	8	BEST.	
Sales	Sales	INPUT	INTERVAL	N	8	BEST.	
Segment	Segment	SEGMENT	NOMINAL	C	11	\$11.	
ShipDate	ShipDate	INPUT	INTERVAL	N	8	MMDDYY10.0	
ShipMode	ShipMode	INPUT	NOMINAL	C	14	\$14.	
State	State	REJECTED	NOMINAL	C	20	\$20.	
SubCategory	SubCategory	INPUT	NOMINAL	C	11	\$11.	

SAS Enterprise Miner Report

Node=Data Partition Summary

Node id = Part
 Node label = Data Partition
 Meta path = Ids => Part
 Notes =

Node=Data Partition Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Partition		Method	DEFAULT		TestPct	30	
ClassDistribution	Y		OutputType	DATA		TrainPct	40	
IntervalDistribution	Y		RandomSeed	12345		ValidatePct	30	

Node=Data Partition Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
REJECTED	INTERVAL	3	OrderDate PostalCode RowID
REJECTED	NOMINAL	7	City Country CustomerID CustomerName OrderID ProductName State
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	NOMINAL	1	ProductID

SAS Enterprise Miner Report

Node=NeuralNet 5HURP Summary

Node id = Neural8
 Node label = NeuralNet 5HURP
 Meta path = Ids => Part => Neural8
 Notes =

Node=NeuralNet 5HURP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	RPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HURP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

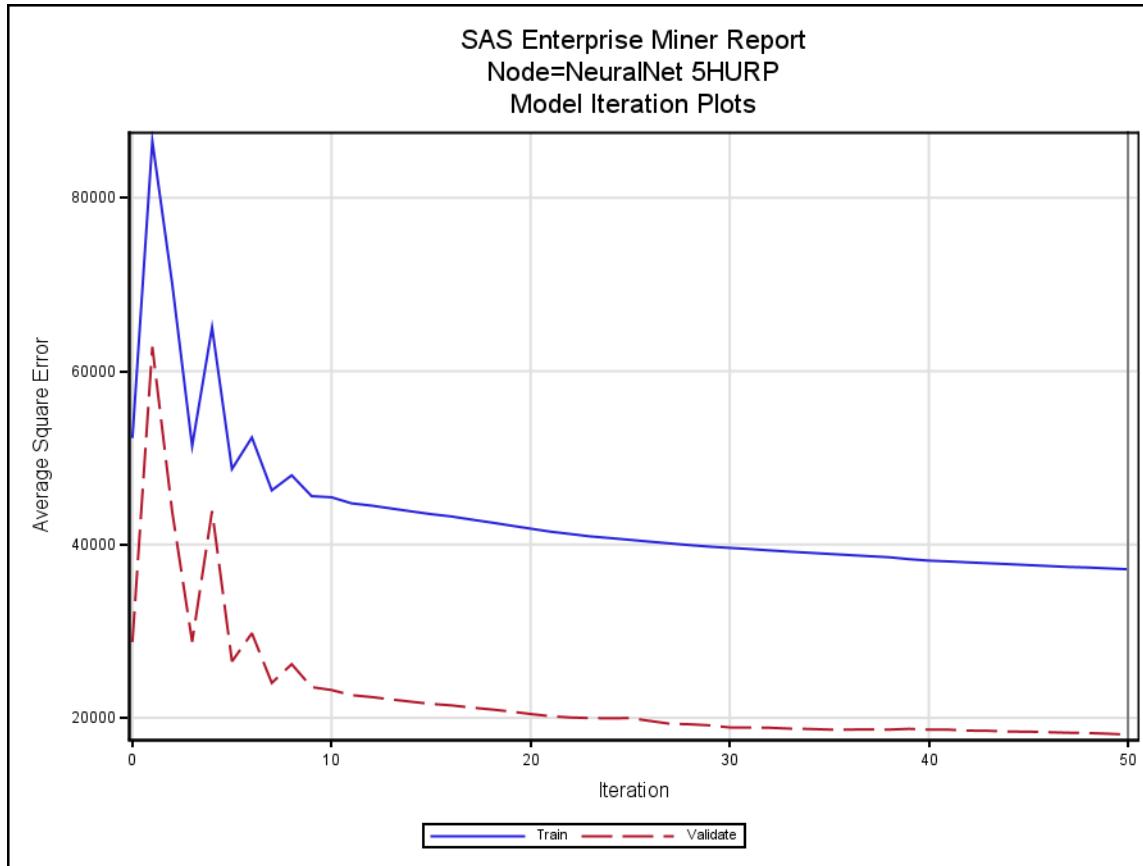
Node=NeuralNet 5HURP Model Fit Statistics

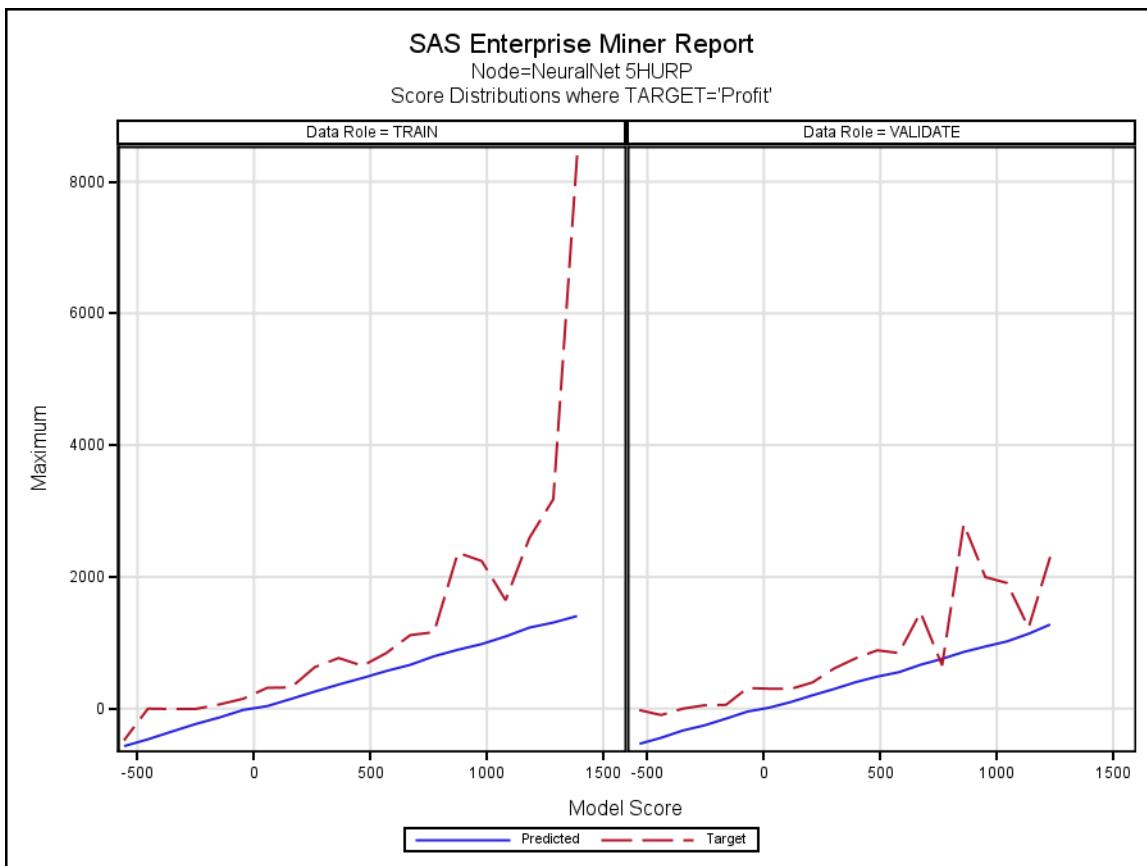
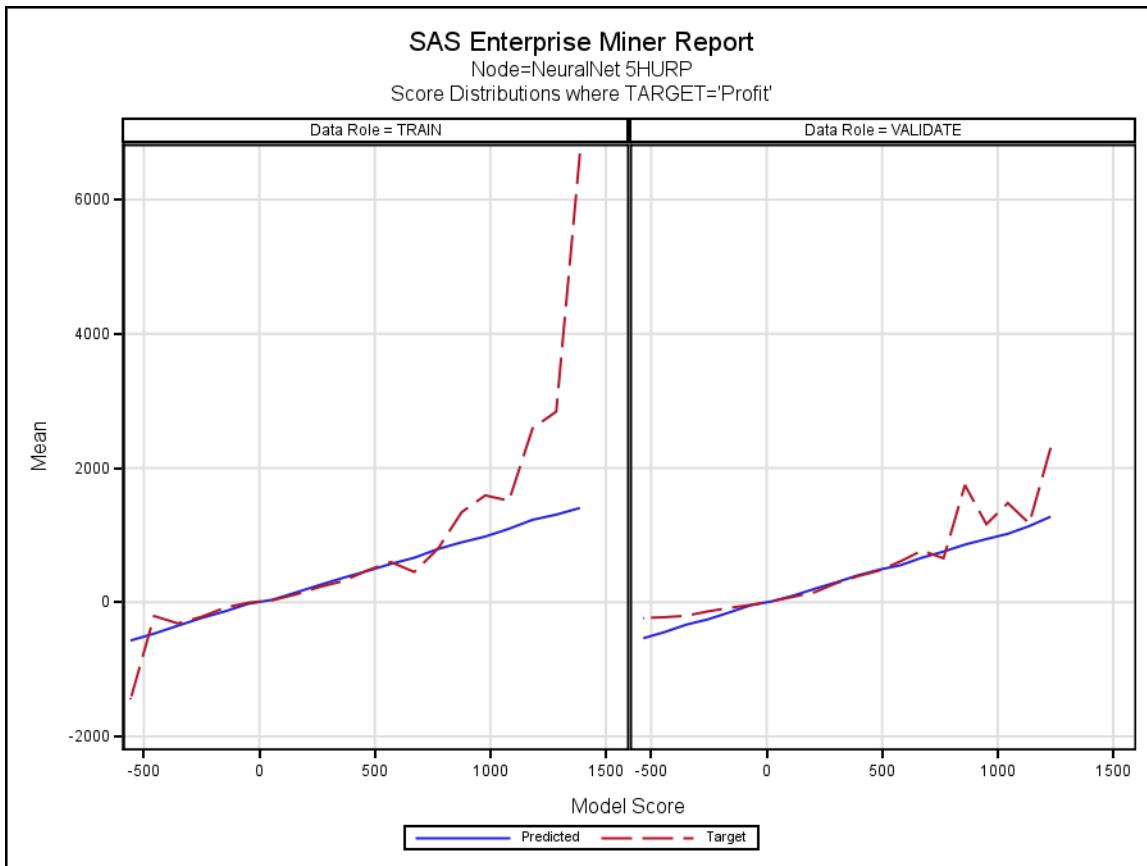
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3847.00	.	.
Model Degrees of Freedom	151.00	.	.
Number of Estimated Weights	151.00	.	.
Akaike's Information Criterion	42370.96	.	.

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	43321.29		
Average Squared Error	37141.91	18071.59	37549.65
Maximum Absolute Error	6961.30	3589.64	6119.10
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	192.72	134.43	193.78
Sum of Squared Errors	148493366.61	54178631.41	112573841.94
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	40057.65		
Mean Squared Error	38599.78	18071.59	37549.65
Root Final Prediction Error	200.14		
Root Mean Squared Error	196.47	134.43	193.78
Average Error Function	37141.91	18071.59	37549.65
Error Function	148493366.61	54178631.41	112573841.94





Node=NeuralNet 5HURP Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1336.303 - 1438.679	1404.60	1438.68	1336.97	6688.78	8399.98	4946.37
1233.926 - 1336.303	1305.33	1322.56	1288.09	2840.85	3177.48	2504.22
1131.550 - 1233.926	1228.99	1228.99	1228.99	2591.96	2591.96	2591.96
1029.173 - 1131.550	1094.63	1105.30	1083.95	1512.13	1644.29	1379.98
926.797 - 1029.173	979.06	1005.09	953.03	1592.49	2239.99	944.99
824.420 - 926.797	892.77	918.89	868.29	1341.51	2365.98	839.99
722.044 - 824.420	793.41	799.81	788.53	797.65	1159.99	420.59
619.667 - 722.044	663.68	701.55	624.89	450.93	1114.51	-1811.08
517.291 - 619.667	570.26	619.33	518.94	599.60	843.17	83.28
414.914 - 517.291	464.12	509.57	415.80	472.79	648.56	241.10
312.538 - 414.914	364.78	414.45	313.79	315.70	767.20	-1359.99
210.161 - 312.538	257.47	312.41	211.03	227.78	629.01	-350.49
107.785 - 210.161	145.83	207.70	108.03	117.65	320.32	-1049.34
5.408 - 107.785	36.78	107.77	5.42	29.64	314.27	-1002.78
-96.968 - 5.408	-21.02	5.41	-95.88	-5.79	148.85	-1306.55
-199.345 - -96.968	-135.31	-98.90	-198.98	-79.54	63.11	-968.88
-301.721 - -199.345	-235.06	-200.35	-292.51	-217.20	-6.34	-1181.28
-404.098 - -301.721	-349.89	-305.67	-401.89	-315.42	-7.20	-1665.05
-506.474 - -404.098	-466.92	-405.69	-502.33	-205.86	-1.98	-559.36
-608.851 - -506.474	-570.91	-512.41	-608.85	-1447.33	-479.99	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1183.047 - 1275.856	1275.86	1275.86	1275.86	2302.97	2302.97	2302.97
1090.238 - 1183.047	1135.17	1177.15	1093.19	1174.09	1228.18	1120.00
997.429 - 1090.238	1019.50	1029.26	1009.75	1478.24	1906.49	1049.99
904.620 - 997.429	941.66	996.98	912.21	1162.23	1995.99	327.51
811.811 - 904.620	859.04	877.80	834.03	1745.88	2799.98	899.98
719.002 - 811.811	754.87	754.87	754.87	654.76	654.76	654.76
626.193 - 719.002	664.49	691.47	630.55	770.30	1459.20	467.99
533.384 - 626.193	552.01	571.81	533.52	611.03	843.17	449.99
440.575 - 533.384	485.03	527.75	443.84	471.64	884.06	97.19
347.766 - 440.575	400.46	434.35	369.50	387.11	762.59	135.41
254.957 - 347.766	296.38	346.89	258.29	284.12	607.61	33.31
162.148 - 254.957	200.86	253.81	162.22	149.87	395.96	-1862.31
69.339 - 162.148	98.97	161.56	69.59	81.43	297.69	-299.81
-23.470 - 69.339	13.60	69.28	-23.38	15.26	300.74	-178.85
-116.279 - -23.470	-45.65	-23.53	-115.62	-40.69	311.65	-3701.89
-209.088 - -116.279	-153.28	-117.51	-205.48	-84.39	56.00	-459.99
-301.897 - -209.088	-255.98	-214.20	-295.09	-137.25	49.76	-458.15
-394.706 - -301.897	-334.06	-303.18	-373.15	-201.02	-1.83	-619.60
-487.515 - -394.706	-443.92	-407.33	-475.87	-223.14	-98.80	-356.96
-580.324 - -487.515	-535.88	-489.47	-580.32	-234.37	-24.28	-643.71

SAS Enterprise Miner Report

Node=NeuralNet 3HURP Summary

Node id = Neural7
 Node label = NeuralNet 3HURP
 Meta path = Ids => Part => Neural7
 Notes =

Node=NeuralNet 3HURP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	RPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HURP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

Node=NeuralNet 3HURP Model Fit Statistics

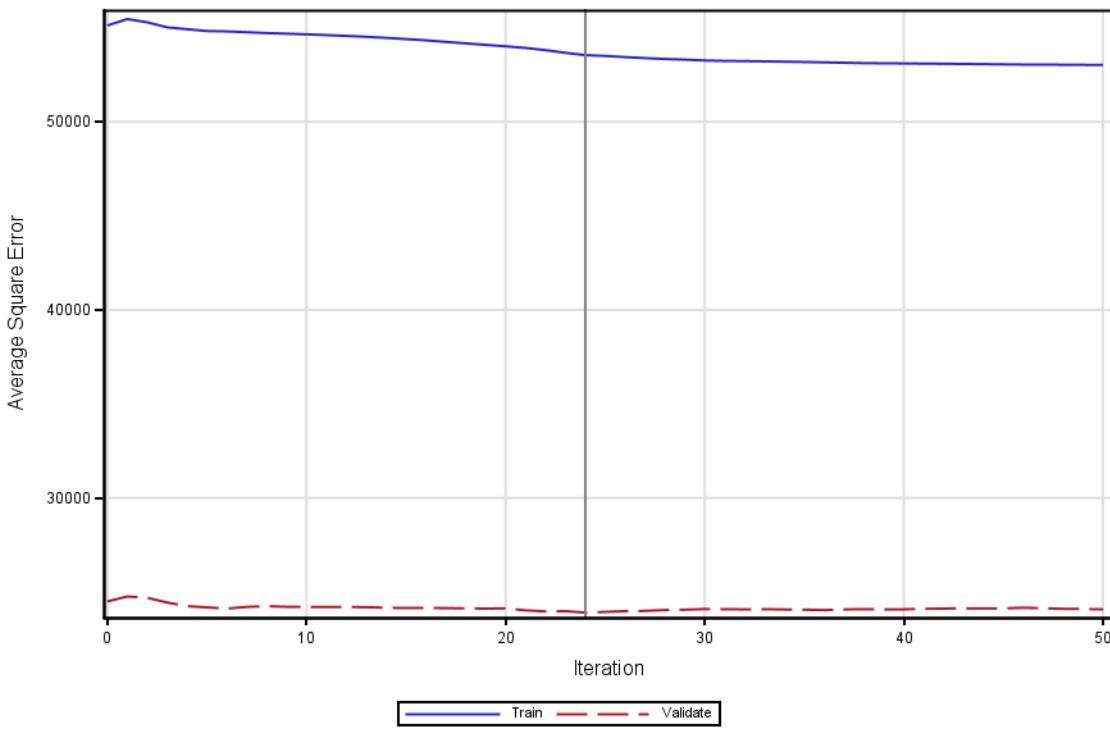
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3907.00	.	.
Model Degrees of Freedom	91.00	.	.
Number of Estimated Weights	91.00	.	.
Akaike's Information Criterion	43713.48	.	.

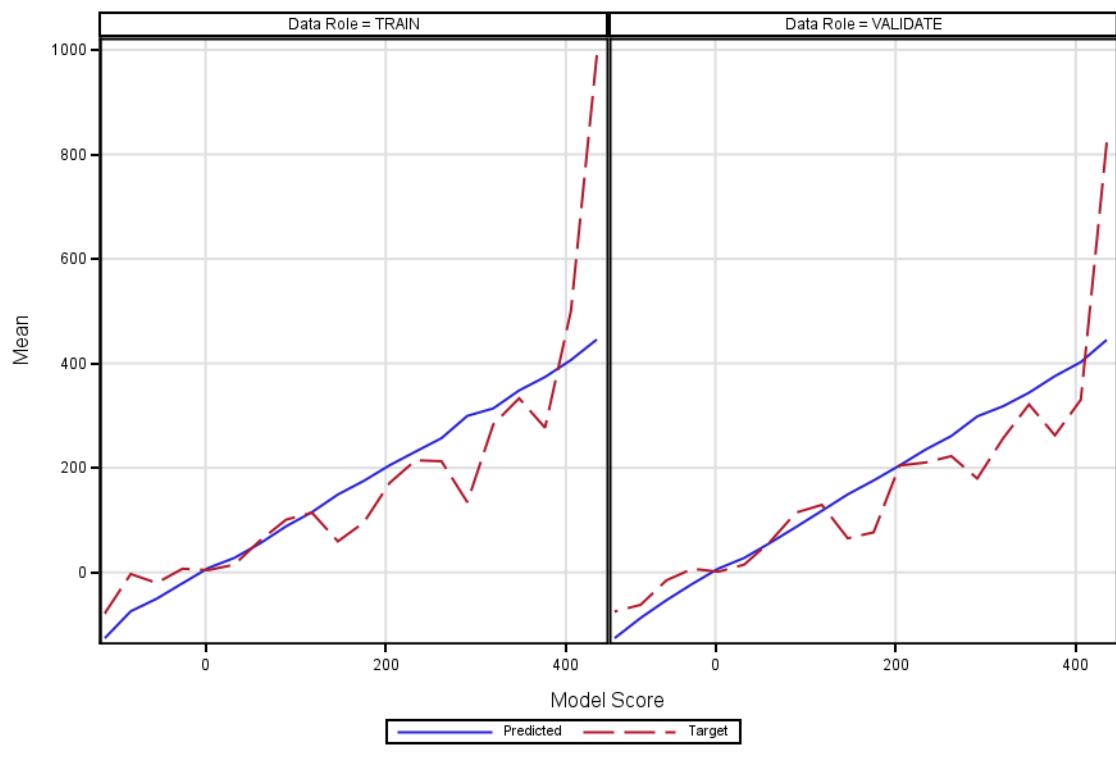
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	44286.19		
Average Squared Error	53546.98	23901.11	51222.58
Maximum Absolute Error	7951.29	3575.78	6621.05
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	231.40	154.60	226.32
Sum of Squared Errors	214080817.58	71655515.18	153565294.21
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	56041.36		
Mean Squared Error	54794.17	23901.11	51222.58
Root Final Prediction Error	236.73		
Root Mean Squared Error	234.08	154.60	226.32
Average Error Function	53546.98	23901.11	51222.58
Error Function	214080817.58	71655515.18	153565294.21

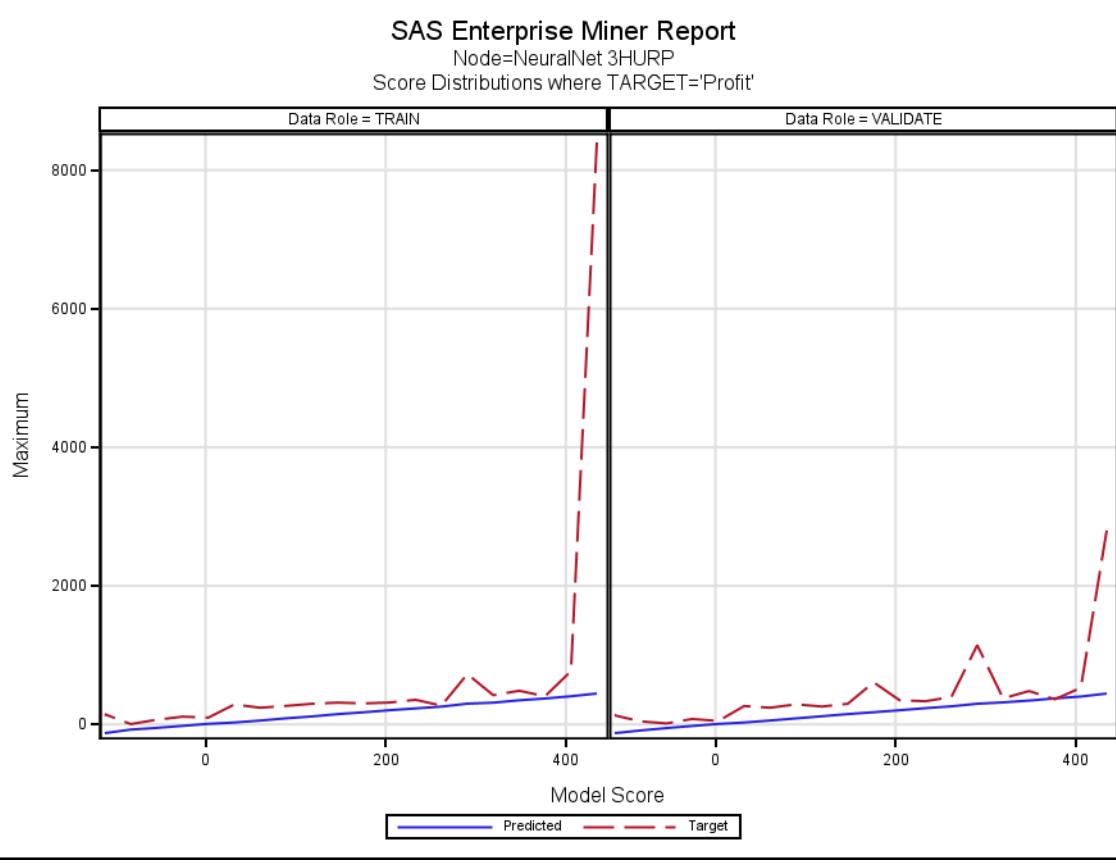
SAS Enterprise Miner Report
Node=NeuralNet 3HURP
Model Iteration Plots



SAS Enterprise Miner Report
 Node=NeuralNet 3HURP
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 3HURP
 Score Distributions where TARGET='Profit'



Node=NeuralNet 3HURP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
419.950 - 448.690	445.752	448.690	424.368	989.904	8399.98	-1811.08
391.210 - 419.950	406.410	418.813	395.044	500.261	767.20	285.99
362.470 - 391.210	373.848	390.651	366.089	276.791	406.72	0.00
333.730 - 362.470	348.228	360.040	342.228	333.127	485.99	224.27
304.990 - 333.730	313.787	326.193	307.034	283.018	421.59	140.69
276.249 - 304.990	299.510	304.732	280.226	134.285	726.56	1.80
247.509 - 276.249	256.773	273.030	247.735	212.699	271.42	146.77
218.769 - 247.509	231.141	244.974	221.142	214.531	355.45	124.68
190.029 - 218.769	205.011	218.027	190.188	171.252	315.83	55.90
161.289 - 190.029	175.029	189.950	161.736	95.310	303.34	-1049.34
132.549 - 161.289	148.999	160.882	133.405	59.290	314.84	1.41
103.809 - 132.549	115.318	131.620	104.590	114.143	297.69	0.00
75.069 - 103.809	88.118	102.171	75.178	100.843	267.71	-350.49
46.329 - 75.069	55.622	75.021	46.335	61.255	240.86	-337.81
17.588 - 46.329	27.606	46.328	17.650	14.610	287.98	-1665.05
-11.152 - 17.588	8.442	17.569	-9.908	4.376	98.52	-56.31
-39.892 - -11.152	-20.881	-11.559	-39.731	6.922	111.77	-14.70
-68.632 - -39.892	-50.508	-41.915	-60.784	-20.355	67.06	-119.19
-97.372 - -68.632	-74.544	-72.179	-78.441	-3.143	5.13	-15.72
-126.112 - -97.372	-125.918	-97.788	-126.112	-78.297	146.79	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
419.950 - 448.690	445.014	448.690	423.182	823.016	2799.98	-630.88
391.210 - 419.950	402.477	419.477	394.367	330.347	527.98	119.69
362.470 - 391.210	375.654	390.029	362.566	262.307	362.84	77.58
333.730 - 362.470	343.879	360.343	333.810	321.444	481.87	171.36
304.990 - 333.730	317.994	331.598	306.660	256.589	375.74	121.76
276.249 - 304.990	298.476	304.123	278.037	179.629	1143.89	-50.10
247.509 - 276.249	261.019	276.218	247.895	222.457	395.99	75.68
218.769 - 247.509	234.870	247.370	221.527	210.199	334.55	80.37
190.029 - 218.769	204.563	216.359	191.059	204.565	349.34	56.30
161.289 - 190.029	175.877	189.603	162.116	76.576	607.61	-1862.31
132.549 - 161.289	149.290	160.921	135.065	65.232	297.69	1.36
103.809 - 132.549	117.816	132.135	103.976	129.144	257.99	48.12
75.069 - 103.809	86.788	102.441	75.829	114.331	290.01	7.95
46.329 - 75.069	56.407	74.218	46.507	58.635	240.86	0.55
17.588 - 46.329	27.579	46.279	17.610	14.778	265.42	-510.00
-11.152 - 17.588	7.159	17.554	-10.994	1.245	49.26	-264.00
-39.892 - -11.152	-22.042	-11.797	-37.267	6.777	78.75	-15.18
-68.632 - -39.892	-53.180	-46.443	-62.752	-15.161	14.69	-105.32
-97.372 - -68.632	-87.279	-80.936	-92.398	-62.147	43.20	-252.00
-126.112 - -97.372	-125.882	-98.287	-126.112	-74.996	130.76	-3701.89

SAS Enterprise Miner Report

Node=NeuralNet 5HUBP Summary

Node id = Neural6
 Node label = NeuralNet 5HUBP
 Meta path = Ids => Part => Neural6
 Notes =

Node=NeuralNet 5HUBP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	BPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HUBP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

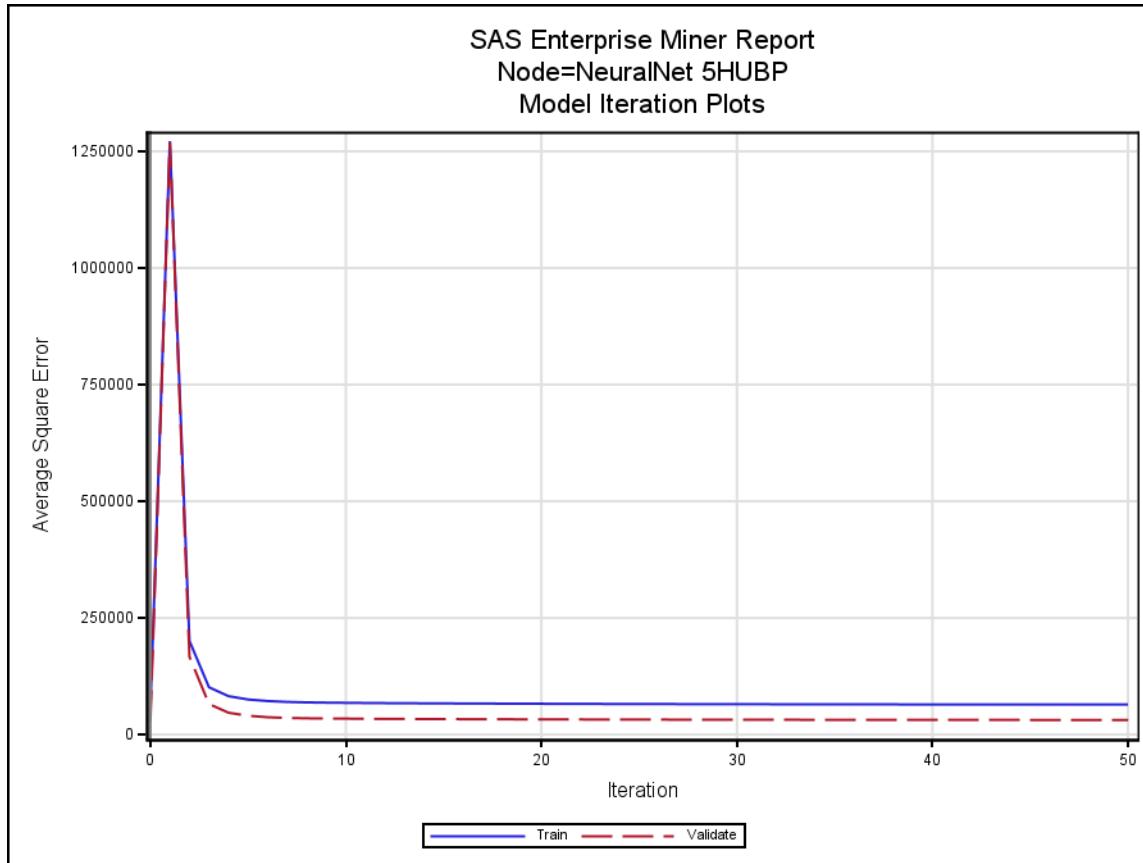
Node=NeuralNet 5HUBP Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3847.00	.	.
Model Degrees of Freedom	151.00	.	.
Number of Estimated Weights	151.00	.	.
Akaike's Information Criterion	43738.11	.	.

Target=Profit Target Label=Profit

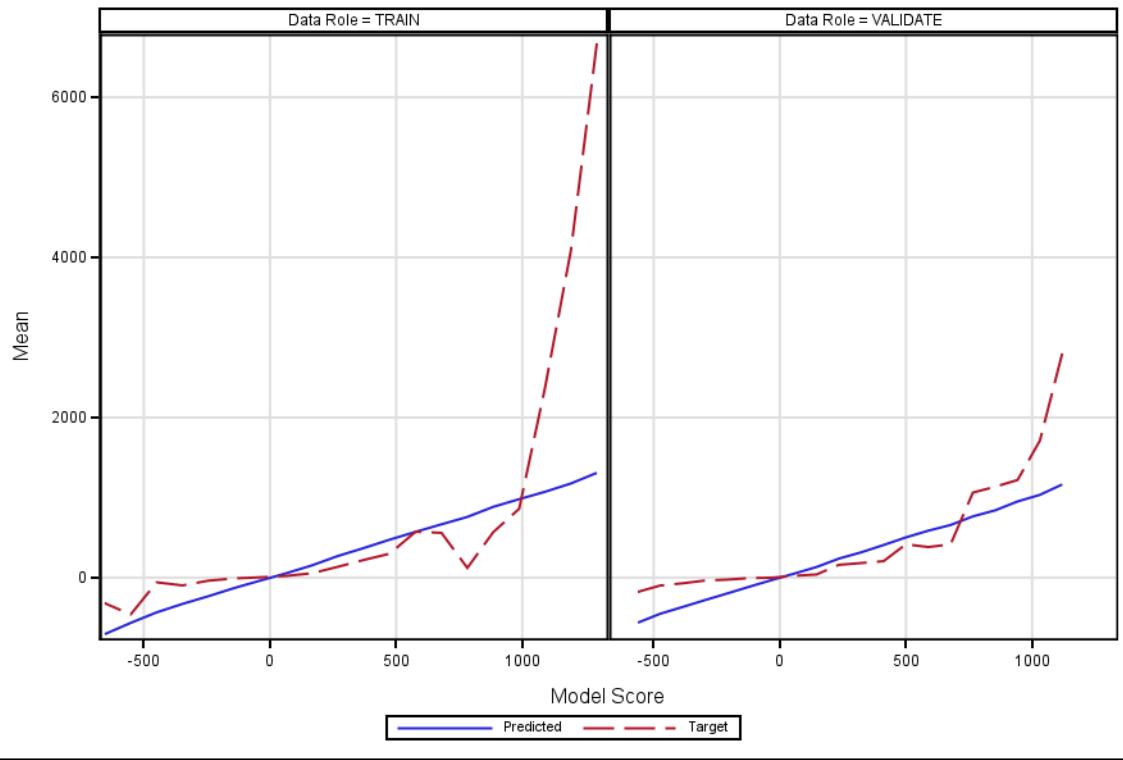
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	44688.44		
Average Squared Error	52284.74	28746.34	52730.10
Maximum Absolute Error	7052.94	3849.45	6946.08
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	228.66	169.55	229.63
Sum of Squared Errors	209034378.81	86181522.77	158084850.75
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	56389.23		
Mean Squared Error	54336.98	28746.34	52730.10
Root Final Prediction Error	237.46		
Root Mean Squared Error	233.10	169.55	229.63
Average Error Function	52284.74	28746.34	52730.10
Error Function	209034378.81	86181522.77	158084850.75



SAS Enterprise Miner Report

Node=NeuralNet 5HUBP

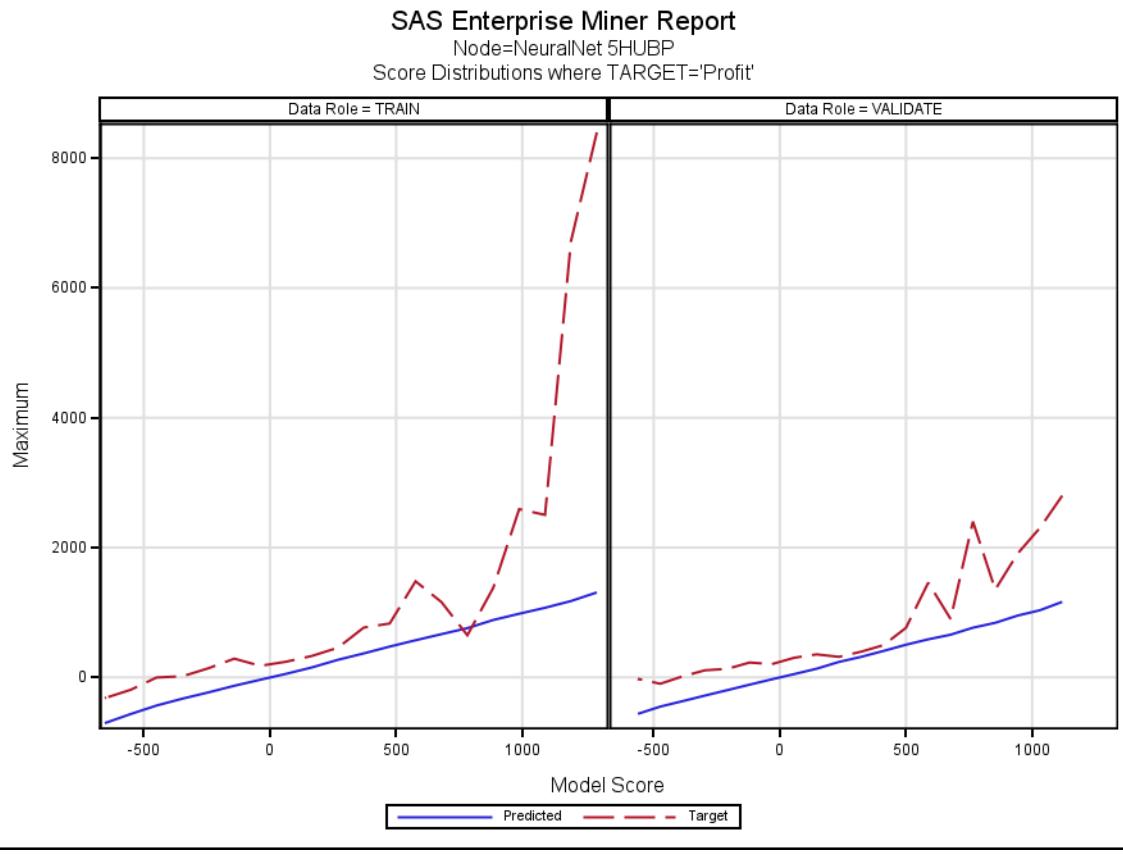
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet 5HUBP

Score Distributions where TARGET='Profit'



Node=NeuralNet 5HUBP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1244.388 - 1347.038	1308.64	1347.04	1270.25	6673.17	8399.98	4946.37
1141.737 - 1244.388	1175.79	1194.98	1156.91	4087.81	6719.98	2365.98
1039.087 - 1141.737	1072.17	1098.64	1045.71	2372.10	2504.22	2239.99
936.437 - 1039.087	980.06	1007.64	951.46	859.57	2591.96	-1811.08
833.786 - 936.437	883.94	914.18	851.97	568.12	1379.98	83.28
731.136 - 833.786	758.09	795.72	733.98	121.09	647.89	-1049.34
628.486 - 731.136	665.60	728.26	629.91	559.30	1159.99	-1359.99
525.836 - 628.486	571.69	620.61	529.42	572.98	1480.47	231.41
423.185 - 525.836	474.03	525.72	428.02	298.36	829.38	-1665.05
320.535 - 423.185	369.00	421.71	321.27	220.71	767.20	-337.81
217.885 - 320.535	270.07	319.92	219.76	135.34	456.59	-1002.78
115.234 - 217.885	153.03	217.87	115.66	54.45	329.99	-1306.55
12.584 - 115.234	54.02	115.15	12.63	21.25	240.86	-3399.98
-90.066 - 12.584	-37.33	12.57	-90.05	3.55	177.20	-1141.47
-192.716 - -90.066	-129.91	-90.08	-191.95	-9.89	287.98	-2639.99
-295.367 - -192.716	-232.16	-192.86	-295.09	-38.25	139.99	-1181.28
-398.017 - -295.367	-328.16	-295.44	-388.77	-97.29	16.52	-786.74
-500.667 - -398.017	-434.24	-403.32	-499.03	-59.05	-1.98	-152.98
-603.317 - -500.667	-565.14	-533.41	-600.72	-459.24	-191.65	-938.28
-705.968 - -603.317	-705.97	-705.97	-705.97	-320.60	-320.60	-320.60

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1075.151 - 1163.677	1163.68	1163.68	1163.68	2799.98	2799.98	2799.98
986.624 - 1075.151	1034.08	1059.46	1008.71	1711.48	2302.97	1120.00
898.097 - 986.624	951.46	975.64	922.54	1219.40	1906.49	327.51
809.570 - 898.097	840.50	859.68	830.23	1135.29	1351.99	909.98
721.043 - 809.570	764.87	788.27	735.07	1062.19	2400.97	-786.01
632.517 - 721.043	657.16	717.27	637.50	415.81	899.98	-630.88
543.990 - 632.517	585.93	620.43	544.77	381.71	1459.20	-1862.31
455.463 - 543.990	502.52	539.37	456.06	416.83	762.59	33.31
366.936 - 455.463	407.22	450.97	367.96	205.59	496.79	-619.60
278.410 - 366.936	316.06	360.13	278.76	182.03	395.96	-510.00
189.883 - 278.410	237.57	277.76	190.96	159.84	316.14	-299.81
101.356 - 189.883	132.75	189.85	101.42	39.28	353.58	-3701.89
12.829 - 101.356	50.31	101.34	12.87	22.89	301.97	-913.18
-75.697 - 12.829	-29.92	12.81	-75.58	-0.97	204.07	-2287.78
-164.224 - -75.697	-112.66	-75.73	-164.04	-6.30	228.08	-1480.03
-252.751 - -164.224	-197.57	-164.38	-251.92	-24.92	130.76	-566.56
-341.278 - -252.751	-281.06	-252.97	-325.44	-36.56	108.74	-643.71
-429.804 - -341.278	-366.97	-342.67	-399.87	-70.91	14.75	-383.99
-518.331 - -429.804	-451.00	-451.00	-451.00	-98.80	-98.80	-98.80
-606.858 - -518.331	-562.55	-535.61	-606.86	-177.50	-23.72	-356.96

SAS Enterprise Miner Report

Node=NeuralNet 3HUBP Summary

Node id = Neural5
 Node label = NeuralNet 3HUBP
 Meta path = Ids => Part => Neural5
 Notes =

Node=NeuralNet 3HUBP Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	BPROP	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HUBP Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

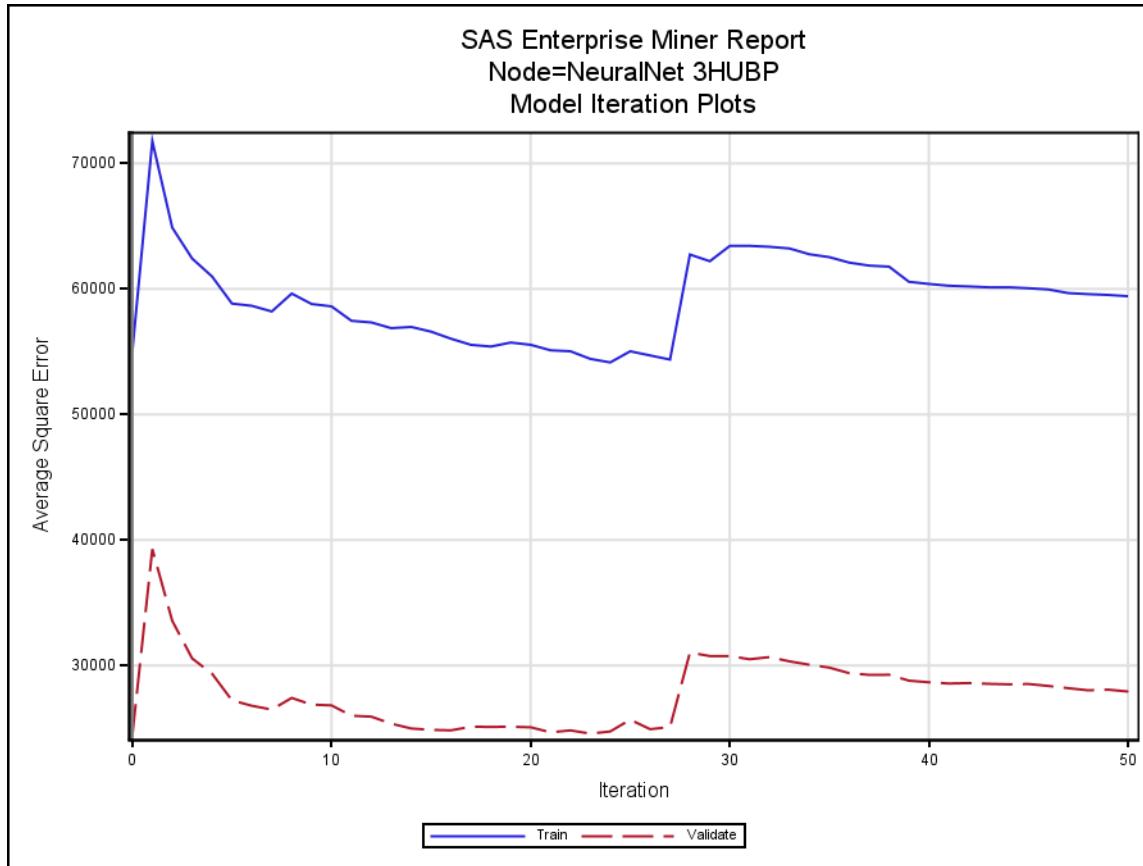
Node=NeuralNet 3HUBP Model Fit Statistics

Target=Profit Target Label=Profit

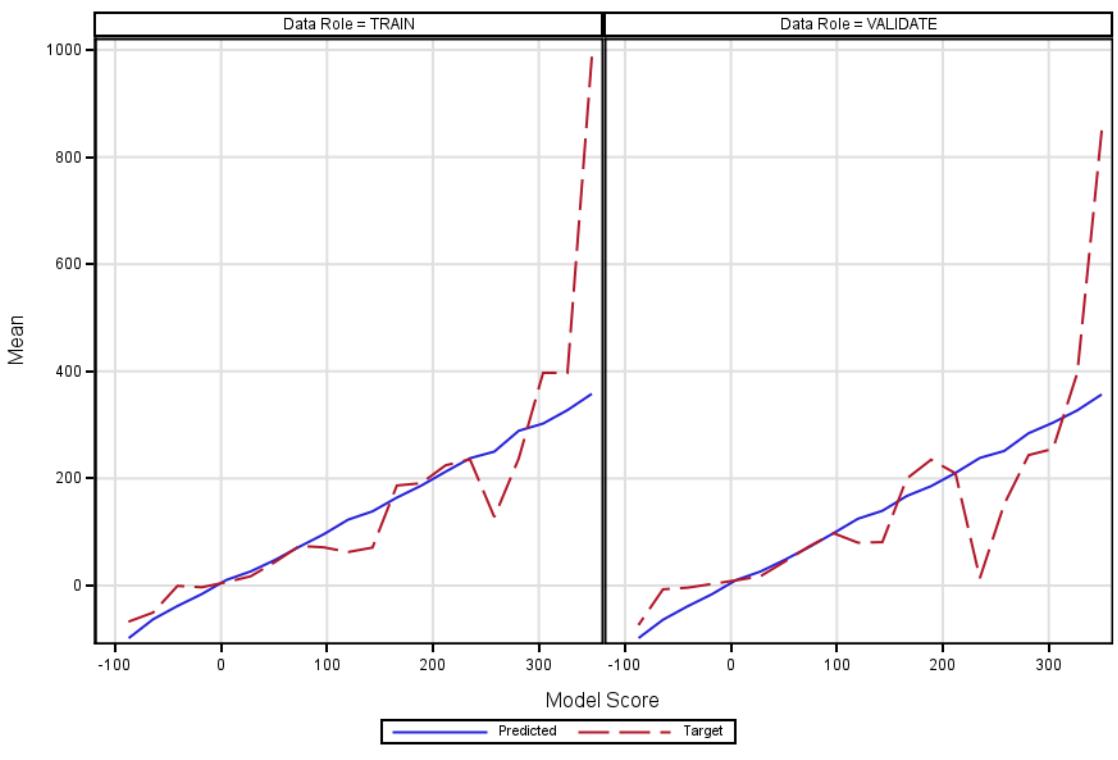
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3907.00	.	.
Model Degrees of Freedom	91.00	.	.
Number of Estimated Weights	91.00	.	.
Akaike's Information Criterion	43829.54	.	.

Target=Profit Target Label=Profit

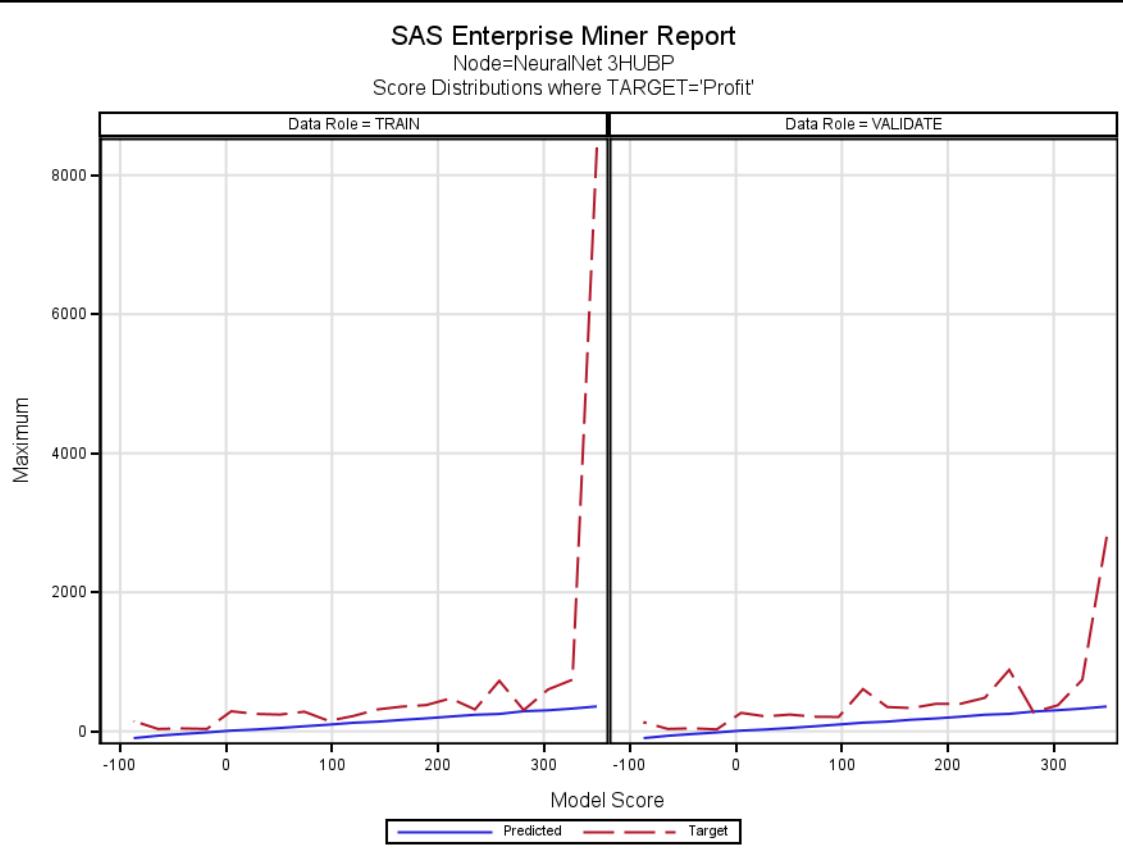
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	44402.25		
Average Squared Error	55124.15	24495.04	51748.67
Maximum Absolute Error	8038.42	3603.19	6613.03
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	234.79	156.51	227.48
Sum of Squared Errors	220386334.14	73436128.82	155142504.06
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	57692.00		
Mean Squared Error	56408.07	24495.04	51748.67
Root Final Prediction Error	240.19		
Root Mean Squared Error	237.50	156.51	227.48
Average Error Function	55124.15	24495.04	51748.67
Error Function	220386334.14	73436128.82	155142504.06



SAS Enterprise Miner Report
 Node=NeuralNet 3HUBP
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 3HUBP
 Score Distributions where TARGET='Profit'



Node=NeuralNet 3HUBP
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
338.541 - 361.554	357.964	361.554	343.107	987.402	8399.98	-1811.08
315.528 - 338.541	327.503	336.057	319.745	397.037	742.63	224.27
292.515 - 315.528	302.440	306.323	296.703	396.974	601.97	281.02
269.503 - 292.515	288.951	291.738	286.416	237.119	305.13	180.44
246.490 - 269.503	250.100	265.699	246.552	127.957	726.56	1.80
223.477 - 246.490	237.688	246.370	224.147	235.571	314.27	44.71
200.464 - 223.477	212.592	222.067	202.441	224.519	473.61	148.11
177.451 - 200.464	186.531	200.102	178.677	191.076	377.73	135.98
154.438 - 177.451	164.248	176.661	154.813	186.799	355.45	0.00
131.426 - 154.438	138.557	153.942	131.456	70.915	314.84	0.00
108.413 - 131.426	123.015	131.292	109.059	62.585	219.44	-1049.34
85.400 - 108.413	95.825	106.324	85.942	71.388	149.91	-337.81
62.387 - 85.400	72.455	84.822	62.890	73.996	282.21	3.41
39.374 - 62.387	47.784	61.969	39.389	43.842	240.86	-35.99
16.362 - 39.374	26.347	39.361	16.414	17.297	250.40	-14.79
-6.651 - 16.362	10.359	16.281	-6.637	6.265	287.98	-3399.98
-29.664 - -6.651	-15.805	-6.727	-29.021	-3.124	34.21	-572.00
-52.677 - -29.664	-38.116	-29.776	-52.229	-0.592	41.79	-44.20
-75.690 - -52.677	-62.956	-55.075	-74.016	-50.350	33.85	-1002.78
-98.703 - -75.690	-98.129	-76.799	-98.703	-67.249	146.79	-2639.99

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
338.541 - 361.554	356.907	361.554	339.570	849.719	2799.98	-50.10
315.528 - 338.541	327.165	338.258	317.054	397.190	742.63	97.19
292.515 - 315.528	304.023	314.119	296.341	255.151	375.74	77.58
269.503 - 292.515	284.412	286.595	283.208	243.607	274.39	220.48
246.490 - 269.503	251.302	269.480	247.036	152.080	884.06	2.59
223.477 - 246.490	238.258	246.303	224.795	13.706	481.87	-1862.31
200.464 - 223.477	210.365	219.762	200.707	209.639	395.96	75.37
177.451 - 200.464	185.616	198.758	177.995	235.019	395.99	107.04
154.438 - 177.451	167.169	176.273	155.548	199.699	334.50	134.99
131.426 - 154.438	139.567	154.360	131.437	81.121	349.34	1.36
108.413 - 131.426	124.760	131.359	110.323	80.026	607.61	-786.01
85.400 - 108.413	97.863	108.250	87.508	97.755	206.32	17.75
62.387 - 85.400	71.996	85.142	62.413	73.276	209.98	13.80
39.374 - 62.387	48.142	61.390	39.467	44.752	240.86	1.51
16.362 - 39.374	26.278	39.146	16.364	17.451	214.76	-252.00
-6.651 - 16.362	10.263	16.353	-6.494	9.777	265.42	-386.39
-29.664 - -6.651	-16.337	-6.660	-29.510	2.967	27.99	-28.36
-52.677 - -29.664	-38.866	-30.196	-50.465	-3.991	43.20	-136.49
-75.690 - -52.677	-63.795	-53.865	-75.607	-6.920	33.85	-110.02
-98.703 - -75.690	-97.977	-76.538	-98.703	-73.295	130.76	-3701.89

SAS Enterprise Miner Report

Node=NeuralNet 5HUBD Summary

Node id = Neural4
 Node label = NeuralNet 5HUBD
 Meta path = Ids => Part => Neural4
 Notes =

Node=NeuralNet 5HUBD Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DBLDOG	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HUBD Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

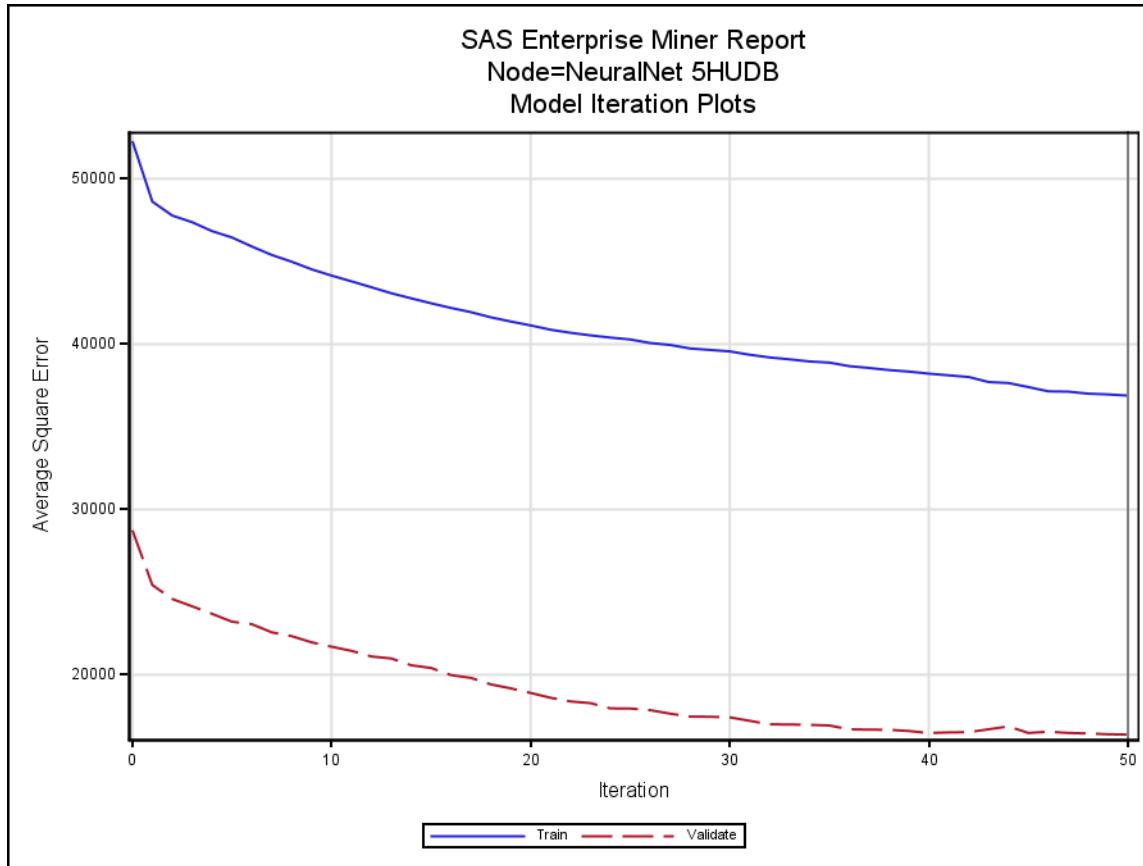
Node=NeuralNet 5HUBD Model Fit Statistics

Target=Profit Target Label=Profit

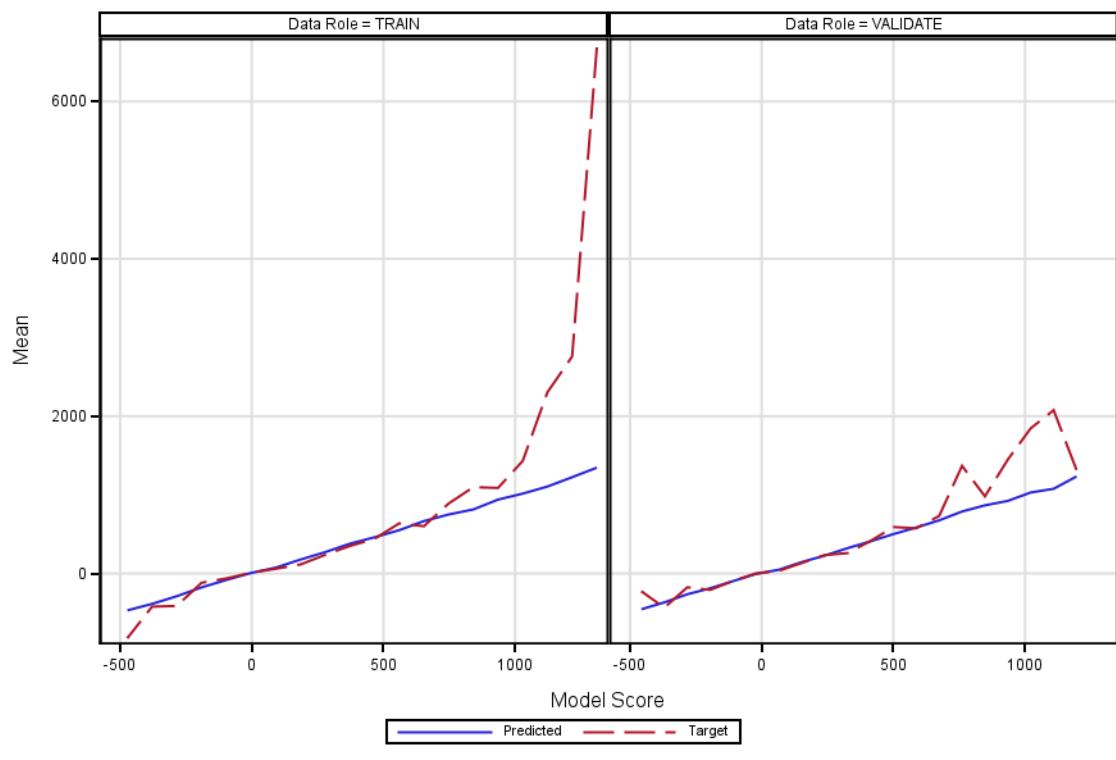
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3847.00	.	.
Model Degrees of Freedom	151.00	.	.
Number of Estimated Weights	151.00	.	.
Akaike's Information Criterion	42343.68	.	.

Target=Profit Target Label=Profit

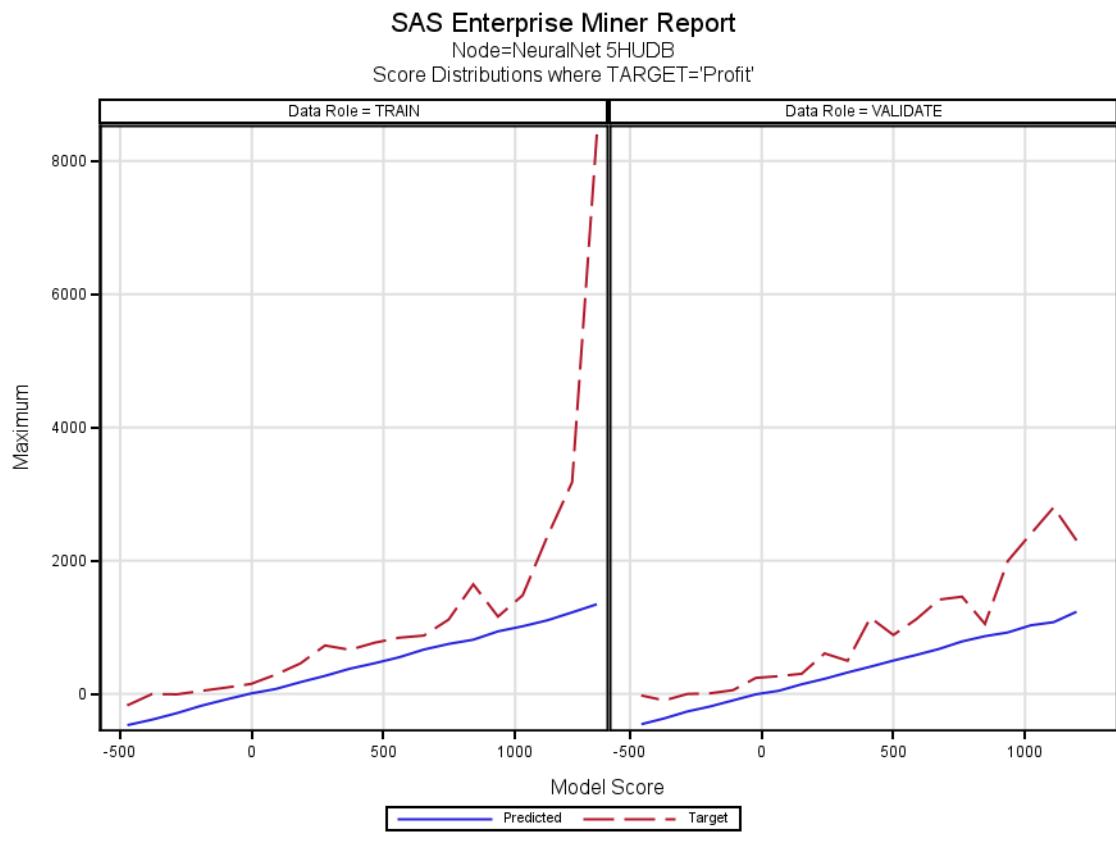
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	43294.00		
Average Squared Error	36889.30	16383.24	38053.76
Maximum Absolute Error	7044.09	3540.39	6269.73
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	192.07	128.00	195.07
Sum of Squared Errors	147483407.18	49116959.72	114085162.39
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	39785.21		
Mean Squared Error	38337.25	16383.24	38053.76
Root Final Prediction Error	199.46		
Root Mean Squared Error	195.80	128.00	195.07
Average Error Function	36889.30	16383.24	38053.76
Error Function	147483407.18	49116959.72	114085162.39



SAS Enterprise Miner Report
 Node=NeuralNet 5HUB
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=NeuralNet 5HUB
 Score Distributions where TARGET='Profit'



Node=NeuralNet 5HUB
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1263.388 - 1357.226	1345.12	1357.23	1322.25	6688.78	8399.98	4946.37
1169.550 - 1263.388	1223.39	1243.71	1202.71	2757.88	3177.48	2504.22
1075.712 - 1169.550	1104.46	1121.35	1087.58	2302.98	2365.98	2239.99
981.874 - 1075.712	1014.81	1037.98	991.63	1430.22	1480.47	1379.98
888.036 - 981.874	938.47	968.52	908.41	1086.56	1159.99	1013.13
794.198 - 888.036	813.19	825.09	802.16	1097.09	1644.29	701.99
700.360 - 794.198	749.50	772.53	713.75	888.30	1114.51	735.03
606.522 - 700.360	665.29	692.67	614.81	600.09	874.99	83.28
512.684 - 606.522	549.71	593.76	525.53	635.96	843.17	241.10
418.846 - 512.684	459.35	512.38	425.06	439.80	767.20	129.29
325.008 - 418.846	377.45	416.41	327.96	348.36	661.46	-1049.34
231.170 - 325.008	270.29	321.35	231.28	235.26	726.56	0.00
137.332 - 231.170	175.60	230.60	137.41	113.31	456.59	-1811.08
43.494 - 137.332	72.99	136.99	43.52	59.01	287.98	-350.49
-50.344 - 43.494	5.73	43.42	-50.14	8.27	148.85	-462.86
-144.182 - -50.344	-83.47	-50.98	-143.10	-63.91	94.49	-1306.55
-238.020 - -144.182	-177.53	-144.87	-237.07	-119.08	44.87	-766.01
-331.858 - -238.020	-289.42	-240.29	-330.46	-413.10	-7.20	-1665.05
-425.696 - -331.858	-387.02	-345.45	-418.49	-421.80	-1.98	-2639.99
-519.534 - -425.696	-469.54	-430.67	-519.53	-822.69	-172.49	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1152.241 - 1239.213	1232.75	1239.21	1226.30	1315.24	2302.97	327.51
1065.269 - 1152.241	1076.21	1081.61	1070.82	2075.99	2799.98	1351.99
978.297 - 1065.269	1029.26	1042.75	1013.27	1845.21	2400.97	1228.18
891.324 - 978.297	922.16	946.14	898.18	1447.99	1995.99	899.98
804.352 - 891.324	865.91	874.97	856.84	979.98	1049.99	909.98
717.380 - 804.352	787.11	789.38	784.83	1367.84	1459.20	1276.49
630.408 - 717.380	674.51	702.64	640.55	730.39	1415.43	517.48
543.436 - 630.408	584.04	629.64	546.70	573.96	1120.00	239.91
456.463 - 543.436	499.77	542.77	464.62	589.64	884.06	97.19
369.491 - 456.463	408.26	454.37	370.34	411.76	1143.89	116.87
282.519 - 369.491	321.02	368.57	286.28	258.47	496.79	-786.01
195.547 - 282.519	226.35	275.13	195.81	233.14	607.61	55.90
108.575 - 195.547	144.17	194.32	108.77	132.83	301.97	-630.88
21.602 - 108.575	46.90	108.44	21.63	33.10	265.42	-510.00
-65.370 - 21.602	-6.59	21.56	-65.30	-0.03	239.98	-1850.95
-152.342 - -65.370	-97.82	-65.54	-152.33	-95.28	56.00	-2287.78
-239.314 - -152.342	-189.00	-153.89	-230.12	-209.17	8.39	-3701.89
-326.286 - -239.314	-264.95	-242.13	-292.18	-176.72	-1.83	-525.64
-413.259 - -326.286	-367.99	-330.83	-411.35	-435.81	-98.80	-1862.31
-500.231 - -413.259	-455.49	-414.18	-500.23	-227.68	-24.28	-383.99

SAS Enterprise Miner Report

Node=NeuralNet 3HUBD Summary

Node id = Neural3
 Node label = NeuralNet 3HUBD
 Meta path = Ids => Part => Neural3
 Notes =

Node=NeuralNet 3HUBD Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DBLDOG	DEFAULT
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HUBD Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

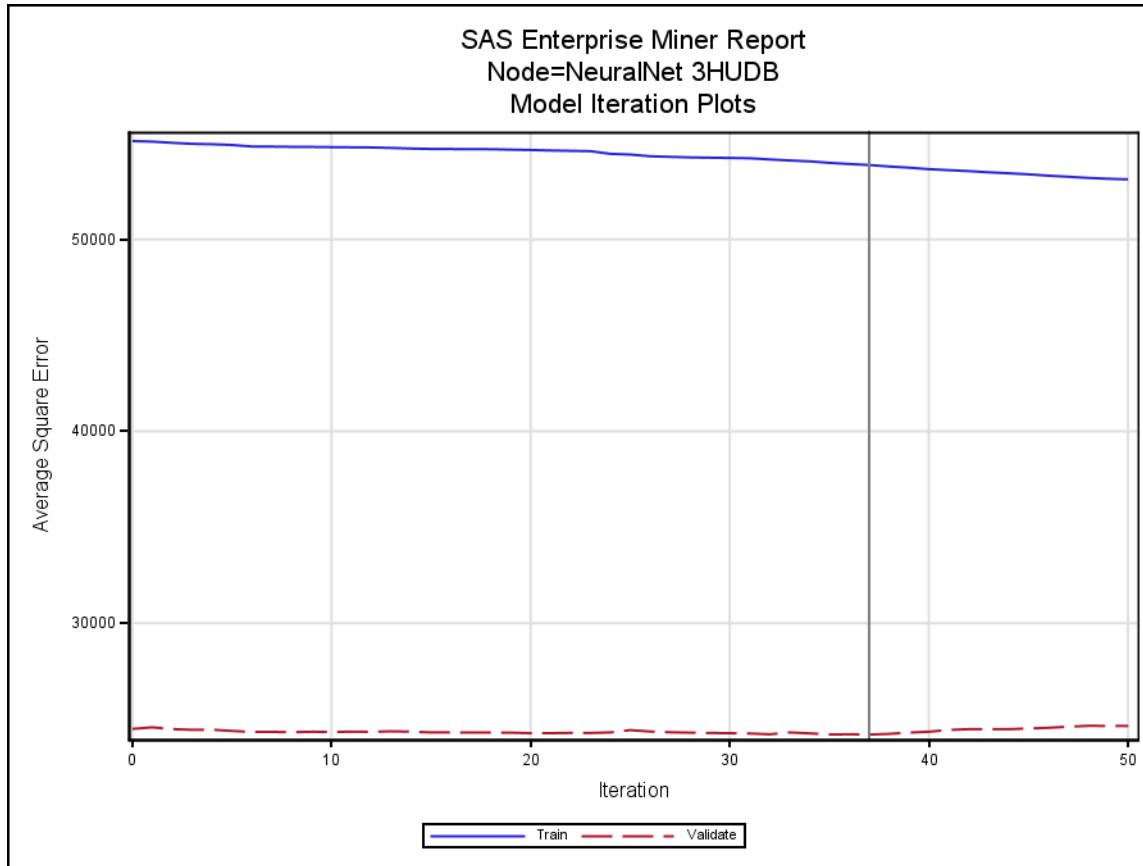
Node=NeuralNet 3HUBD Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3907.00	.	.
Model Degrees of Freedom	91.00	.	.
Number of Estimated Weights	91.00	.	.
Akaike's Information Criterion	43738.11	.	.

Target=Profit Target Label=Profit

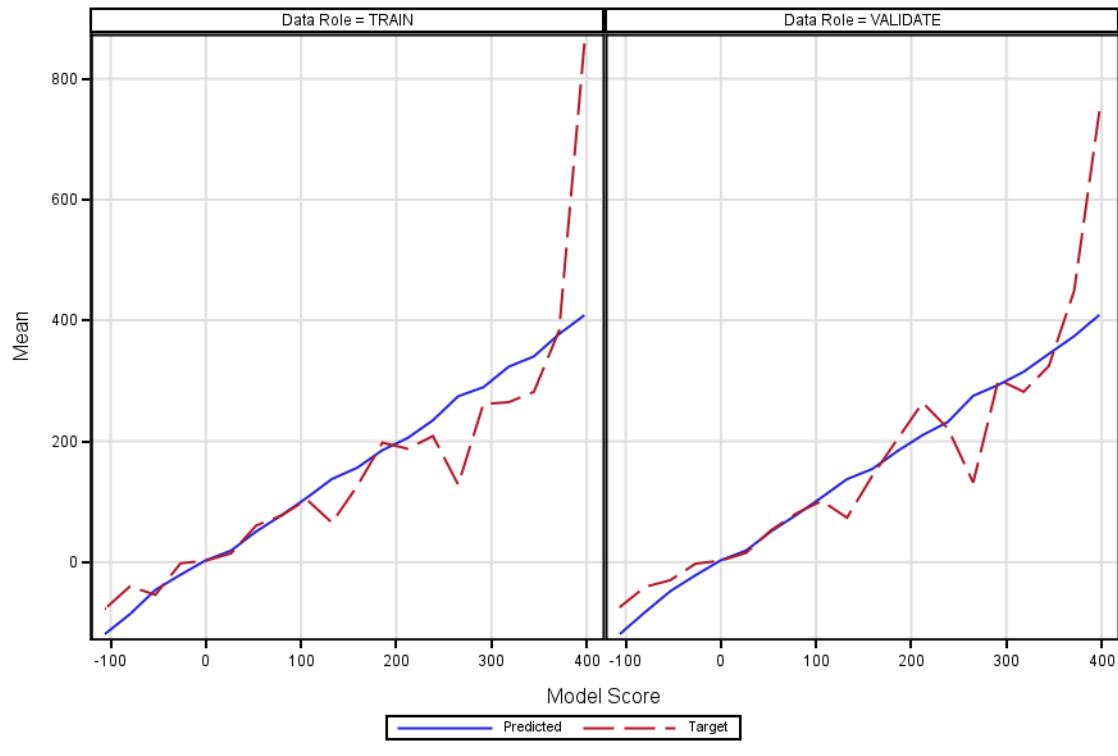
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	44310.83		
Average Squared Error	53877.90	24197.01	52439.69
Maximum Absolute Error	7989.04	3582.41	6841.43
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	232.12	155.55	229.00
Sum of Squared Errors	215403839.04	72542625.48	157214201.55
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	56387.70		
Mean Squared Error	55132.80	24197.01	52439.69
Root Final Prediction Error	237.46		
Root Mean Squared Error	234.80	155.55	229.00
Average Error Function	53877.90	24197.01	52439.69
Error Function	215403839.04	72542625.48	157214201.55



SAS Enterprise Miner Report

Node=NeuralNet 3HUBD

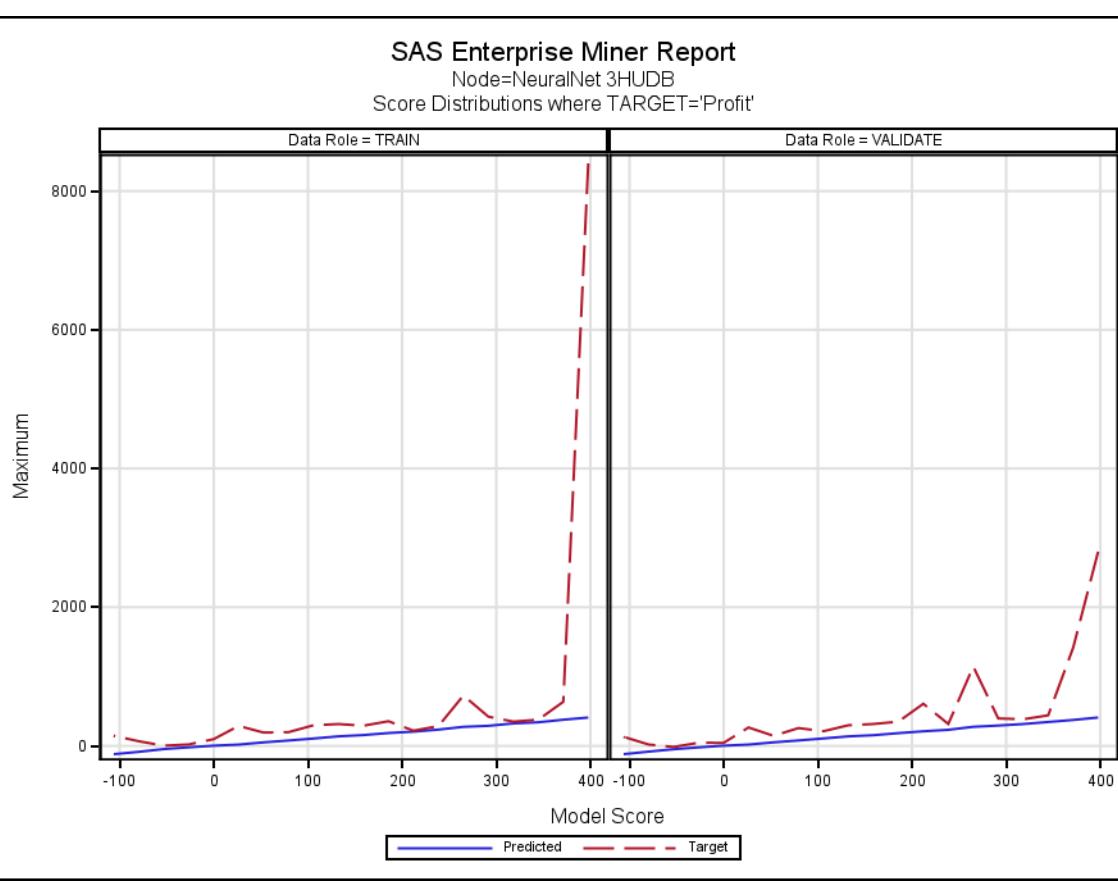
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet 3HUBD

Score Distributions where TARGET='Profit'



Node=NeuralNet 3HUBD
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
384.412 - 410.933	408.675	410.933	388.907	858.417	8399.98	-1811.08
357.891 - 384.412	377.465	384.290	370.083	383.408	635.50	274.39
331.370 - 357.891	340.445	345.595	337.678	281.880	377.99	231.41
304.850 - 331.370	323.410	330.345	316.475	264.669	350.43	178.91
278.329 - 304.850	289.505	300.701	281.703	261.733	421.59	120.00
251.808 - 278.329	274.542	276.789	254.511	128.311	726.56	1.80
225.287 - 251.808	234.907	244.695	226.324	208.738	284.98	88.73
198.767 - 225.287	205.537	211.095	198.878	187.726	219.45	152.12
172.246 - 198.767	185.402	194.595	172.272	197.759	355.45	100.12
145.725 - 172.246	156.282	170.903	146.904	125.965	291.38	-1049.34
119.204 - 145.725	137.705	144.511	119.352	65.287	314.84	-337.81
92.683 - 119.204	106.528	118.607	92.707	103.902	297.69	8.98
66.163 - 92.683	77.671	90.427	66.381	77.172	198.46	0.00
39.642 - 66.163	50.904	66.025	39.760	60.826	192.00	0.00
13.121 - 39.642	19.178	39.612	13.145	14.528	287.98	-1665.05
-13.400 - 13.121	3.092	13.098	-13.330	2.615	97.19	-115.50
-39.920 - -13.400	-20.726	-13.591	-39.092	-1.870	20.85	-258.50
-66.441 - -39.920	-45.940	-41.236	-51.466	-54.018	3.16	-119.19
-92.962 - -66.441	-85.791	-72.693	-92.156	-39.846	67.06	-217.05
-119.483 - -92.962	-118.995	-100.126	-119.483	-77.317	146.79	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
384.412 - 410.933	409.148	410.933	392.151	746.187	2799.98	-630.88
357.891 - 384.412	373.948	379.055	361.925	449.001	1415.43	119.69
331.370 - 357.891	344.806	356.238	331.534	324.675	440.76	171.36
304.850 - 331.370	315.012	329.764	305.920	281.984	383.93	220.48
278.329 - 304.850	293.391	304.540	278.335	302.056	395.99	219.51
251.808 - 278.329	275.276	277.903	258.382	131.814	1143.89	-1862.31
225.287 - 251.808	232.120	249.712	225.430	221.225	316.14	175.52
198.767 - 225.287	210.361	222.515	199.922	263.936	607.61	89.95
172.246 - 198.767	183.849	193.906	174.293	203.783	349.34	121.76
145.725 - 172.246	154.177	172.164	145.732	142.692	315.74	-786.01
119.204 - 145.725	137.377	144.782	120.624	73.630	297.69	1.36
92.683 - 119.204	107.407	118.475	93.279	101.506	211.50	0.00
66.163 - 92.683	78.338	91.924	66.316	80.900	256.78	5.41
39.642 - 66.163	51.258	65.950	39.771	53.270	145.07	-252.00
13.121 - 39.642	19.258	39.522	13.179	15.444	265.42	-386.39
-13.400 - 13.121	3.177	13.100	-13.357	2.622	43.20	-264.00
-39.920 - -13.400	-21.533	-13.492	-37.616	-2.495	45.29	-137.98
-66.441 - -39.920	-47.951	-43.685	-56.614	-29.762	-14.87	-49.44
-92.962 - -66.441	-82.607	-69.978	-92.637	-40.816	19.78	-178.85
-119.483 - -92.962	-118.905	-93.260	-119.483	-74.283	130.76	-3701.89

SAS Enterprise Miner Report

Node=NeuralNet 5HU Summary

Node id = Neural2
 Node label = NeuralNet 5HU
 Meta path = Ids => Part => Neural2
 Notes =

Node=NeuralNet 5HU Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	5	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	0.00001		InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	0.00001		TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DEFAULT	
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 5HU Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

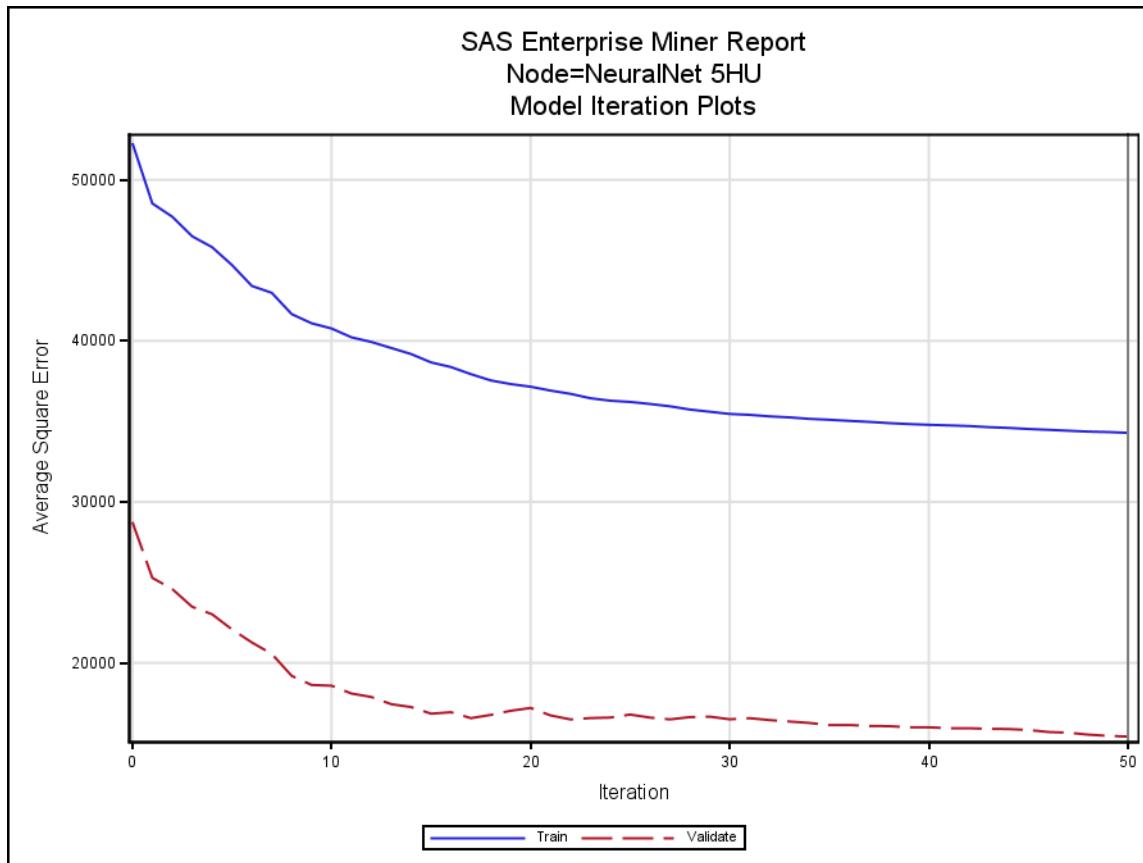
Node=NeuralNet 5HU Model Fit Statistics

Target=Profit Target Label=Profit

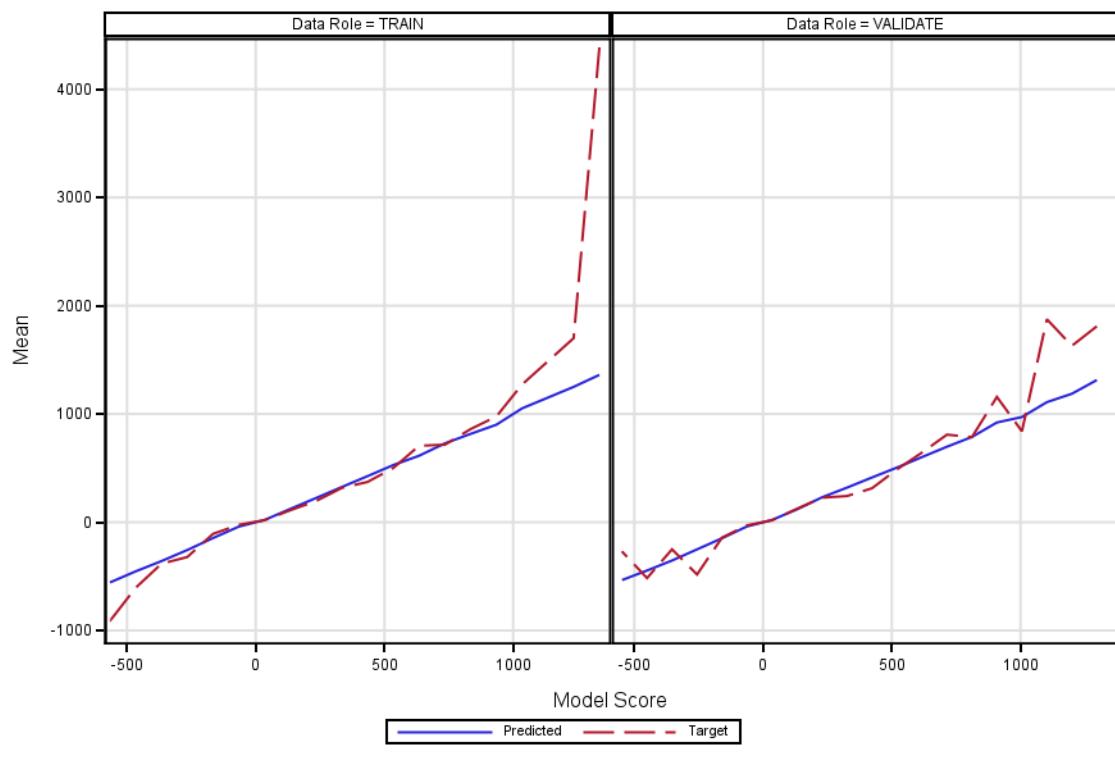
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3847.00	.	.
Model Degrees of Freedom	151.00	.	.
Number of Estimated Weights	151.00	.	.
Akaike's Information Criterion	42051.32	.	.

Target=Profit Target Label=Profit

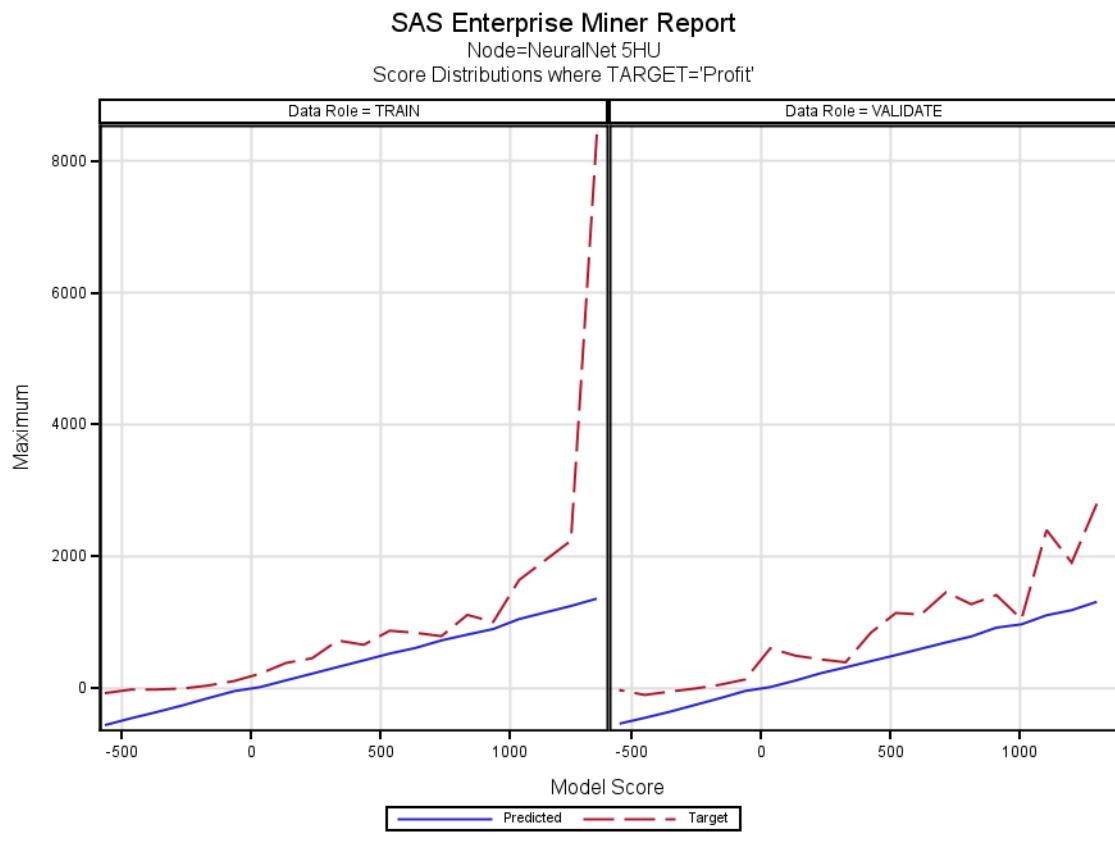
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	43001.64		
Average Squared Error	34287.98	15422.95	35877.68
Maximum Absolute Error	7026.32	3456.95	6055.89
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	185.17	124.19	189.41
Sum of Squared Errors	137083351.32	46238003.42	107561274.80
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	36979.68		
Mean Squared Error	35633.83	15422.95	35877.68
Root Final Prediction Error	192.30		
Root Mean Squared Error	188.77	124.19	189.41
Average Error Function	34287.98	15422.95	35877.68
Error Function	137083351.32	46238003.42	107561274.80



SAS Enterprise Miner Report
Node=NeuralNet 5HU
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
Node=NeuralNet 5HU
Score Distributions where TARGET='Profit'



Node=NeuralNet 5HU
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1284.914 - 1384.977	1361.14	1384.98	1306.36	4386.57	8399.98	2365.98
1184.852 - 1284.914	1250.13	1262.96	1230.86	1700.14	2239.99	1379.98
984.726 - 1084.789	1051.84	1075.99	1013.99	1272.47	1644.29	1013.13
884.663 - 984.726	900.48	907.05	893.91	976.48	1007.98	944.99
784.601 - 884.663	816.01	831.61	794.16	860.23	1114.51	626.19
684.538 - 784.601	728.06	759.40	687.04	715.87	792.27	592.79
584.475 - 684.538	613.81	626.19	599.68	706.35	843.17	449.99
484.412 - 584.475	528.09	578.05	488.73	500.90	874.99	83.28
384.350 - 484.412	425.63	472.91	384.54	372.00	661.46	140.69
284.287 - 384.350	325.00	383.09	286.98	316.73	726.56	107.99
184.224 - 284.287	223.46	280.62	184.58	195.55	456.59	0.00
84.161 - 184.224	122.84	181.78	84.18	110.43	386.84	-1049.34
-15.901 - 84.161	20.41	83.72	-15.86	18.95	224.07	-1811.08
-115.964 - -15.901	-40.72	-15.94	-115.32	-24.14	112.39	-1141.47
-216.027 - -115.964	-146.47	-116.40	-207.36	-107.68	44.87	-553.65
-316.090 - -216.027	-257.04	-217.77	-310.63	-321.83	-1.98	-1306.55
-416.152 - -316.090	-358.99	-326.85	-412.33	-383.17	-16.43	-1359.99
-516.215 - -416.152	-453.68	-419.51	-509.32	-605.43	-18.04	-1665.05
-616.278 - -516.215	-556.58	-520.01	-616.28	-911.72	-71.40	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1248.160 - 1345.232	1313.46	1345.23	1259.09	1810.15	2799.98	327.51
1151.087 - 1248.160	1186.61	1189.68	1183.55	1629.24	1906.49	1351.99
1054.015 - 1151.087	1109.10	1135.92	1082.25	1875.04	2400.97	1228.18
956.942 - 1054.015	971.45	980.03	962.86	839.99	1049.99	629.99
859.870 - 956.942	921.19	949.13	893.26	1157.71	1415.43	899.98
762.797 - 859.870	787.58	802.79	769.05	786.24	1276.49	467.99
665.725 - 762.797	697.26	709.77	679.11	808.89	1459.20	449.99
568.652 - 665.725	601.33	639.59	569.92	643.02	1120.00	503.78
471.580 - 568.652	505.00	556.15	478.95	487.40	1143.89	90.00
374.508 - 471.580	413.07	447.33	376.24	313.18	843.17	77.58
277.435 - 374.508	319.36	368.20	278.07	241.84	395.96	33.31
180.363 - 277.435	229.76	273.79	180.69	226.73	440.76	34.76
83.290 - 180.363	118.97	178.67	83.39	123.92	496.79	-786.01
-13.782 - 83.290	20.59	83.09	-13.61	17.75	607.61	-459.99
-110.855 - -13.782	-38.78	-13.79	-108.39	-28.74	135.41	-1850.95
-207.927 - -110.855	-147.93	-113.66	-205.12	-142.14	56.00	-2287.78
-305.000 - -207.927	-251.05	-213.71	-300.03	-483.15	-1.83	-3701.89
-402.072 - -305.000	-353.82	-308.10	-387.87	-250.12	-48.70	-814.48
-499.145 - -402.072	-446.13	-410.46	-498.99	-516.30	-98.80	-1862.31
-596.217 - -499.145	-534.33	-500.61	-596.22	-270.79	-24.28	-643.71

SAS Enterprise Miner Report

Node=NeuralNet 3HU Summary

Node id = Neural
 Node label = NeuralNet 3HU
 Meta path = Ids => Part => Neural
 Notes =

Node=NeuralNet 3HU Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	3		Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	50		TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DEFAULT	
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=NeuralNet 3HU Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

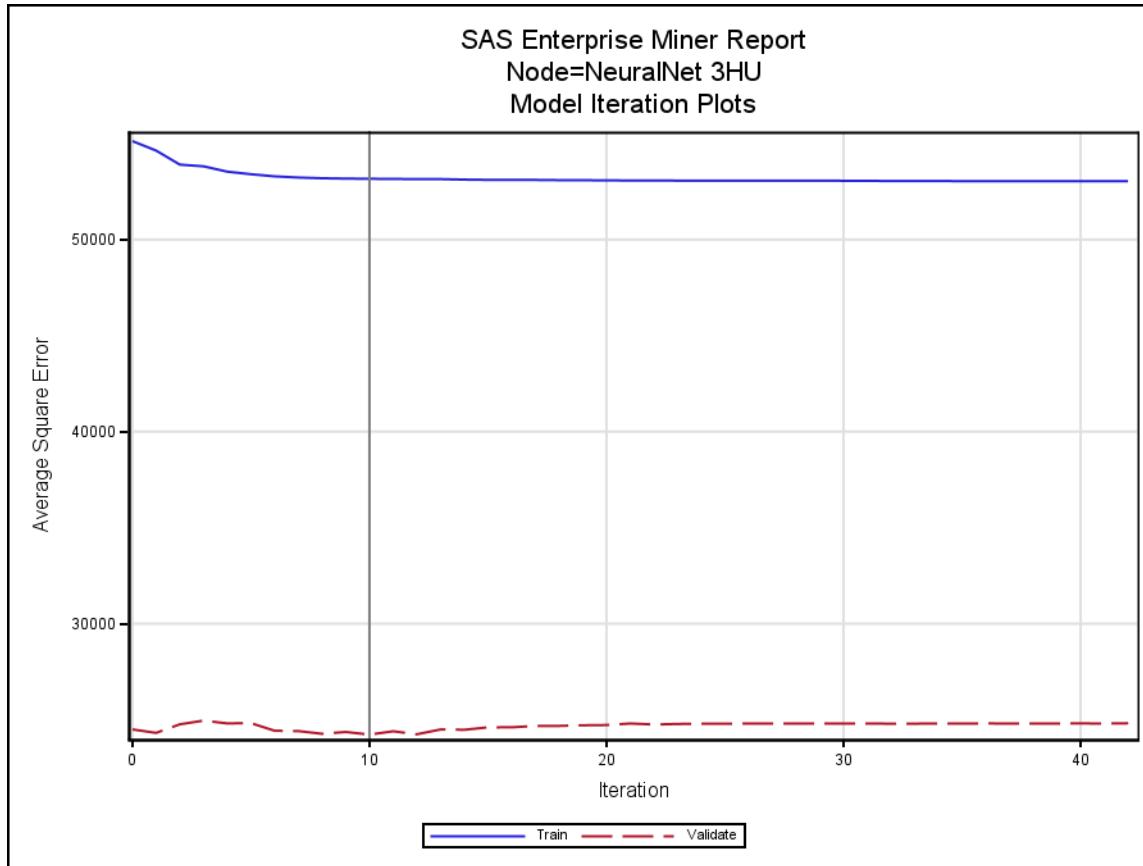
Node=NeuralNet 3HU Model Fit Statistics

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	3998.00	.	.
Degrees of Freedom for Error	3907.00	.	.
Model Degrees of Freedom	91.00	.	.
Number of Estimated Weights	91.00	.	.
Akaike's Information Criterion	43684.60	.	.

Target=Profit Target Label=Profit

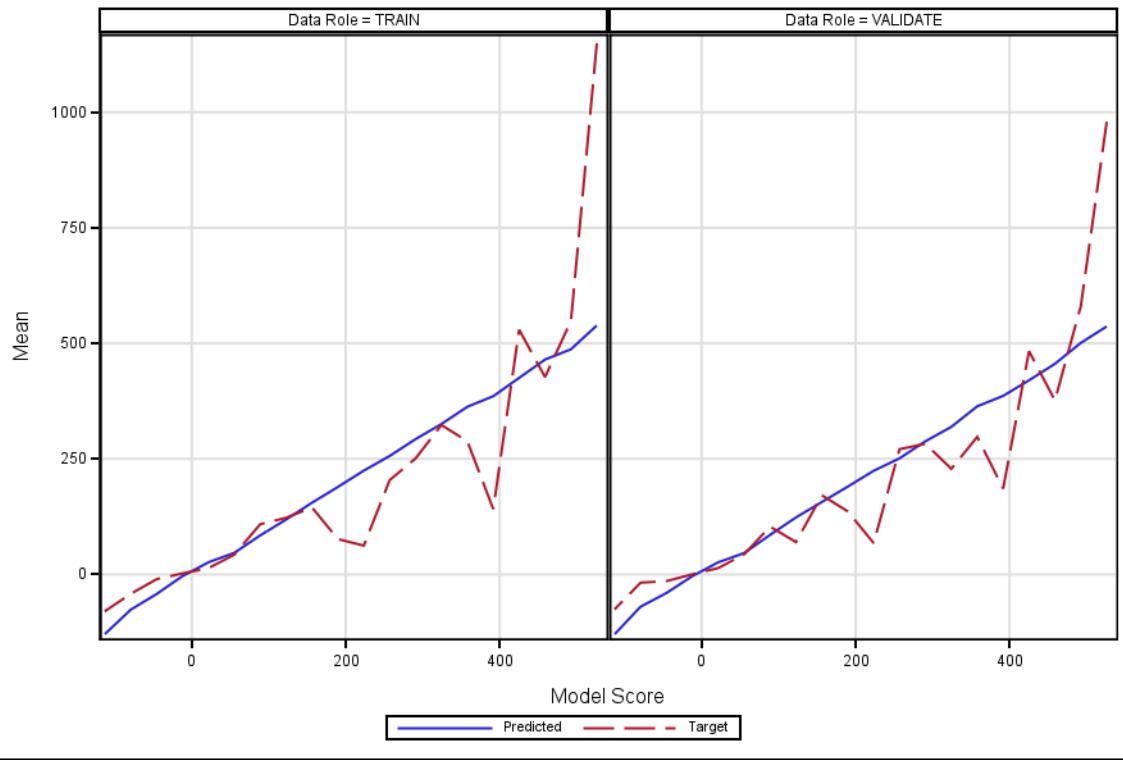
Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	44257.31		
Average Squared Error	53161.50	24227.79	51512.29
Maximum Absolute Error	7857.00	3572.19	6626.48
Divisor for ASE	3998.00	2998.00	2998.00
Sum of Frequencies	3998.00	2998.00	2998.00
Root Average Squared Error	230.57	155.65	226.96
Sum of Squared Errors	212539684.45	72634905.48	154433847.57
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00
Final Prediction Error	55637.93		
Mean Squared Error	54399.71	24227.79	51512.29
Root Final Prediction Error	235.88		
Root Mean Squared Error	233.24	155.65	226.96
Average Error Function	53161.50	24227.79	51512.29
Error Function	212539684.45	72634905.48	154433847.57



SAS Enterprise Miner Report

Node=NeuralNet 3HU

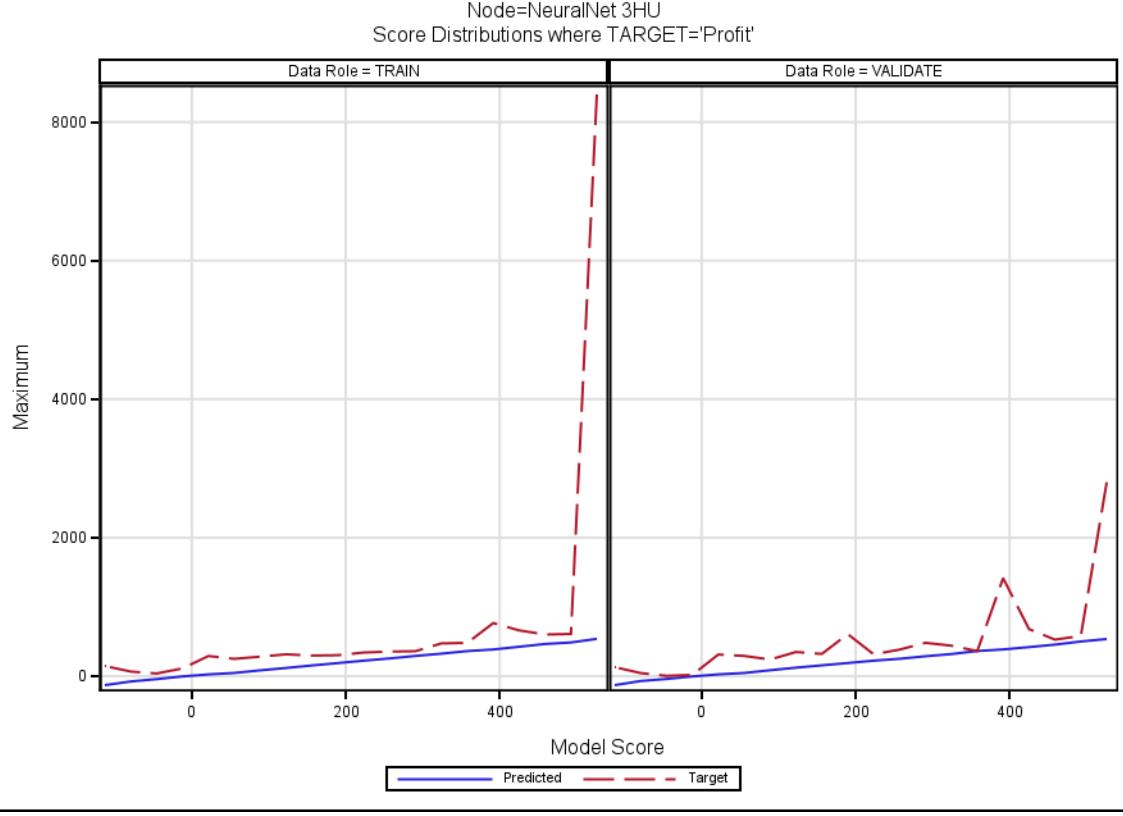
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet 3HU

Score Distributions where TARGET='Profit'



Node=NeuralNet 3HU
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
509.343 - 542.977	538.793	542.977	516.488	1149.00	8399.98	-1811.08
475.709 - 509.343	487.119	492.061	478.540	548.42	609.72	449.99
442.075 - 475.709	465.008	474.855	445.057	427.06	601.97	163.79
408.441 - 442.075	425.261	440.377	408.822	529.50	661.46	386.84
374.807 - 408.441	385.628	404.196	375.240	141.47	767.20	1.80
341.173 - 374.807	362.782	371.286	349.585	288.19	481.47	158.53
307.539 - 341.173	325.507	339.798	312.701	323.34	473.61	180.44
273.905 - 307.539	292.764	306.897	275.264	251.07	361.30	152.12
240.271 - 273.905	256.363	267.860	241.090	204.16	355.45	124.68
206.637 - 240.271	224.634	237.853	207.555	62.42	341.99	1.41
173.003 - 206.637	189.278	204.457	173.911	76.57	303.34	-1049.34
139.369 - 173.003	155.277	170.565	140.653	144.97	297.64	66.64
105.735 - 139.369	118.849	139.062	105.920	122.63	315.83	0.00
72.102 - 105.735	84.503	105.163	72.417	108.69	282.21	10.96
38.468 - 72.102	46.780	70.781	38.508	42.89	250.40	-219.16
4.834 - 38.468	26.290	38.458	4.933	13.55	291.38	-1665.05
-28.800 - 4.834	-3.564	4.827	-27.897	2.29	111.77	-56.34
-62.434 - -28.800	-42.244	-28.976	-56.354	-10.17	39.44	-119.23
-96.068 - -62.434	-76.190	-64.763	-90.096	-41.88	67.06	-225.10
-129.702 - -96.068	-129.096	-96.132	-129.702	-79.56	146.79	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
509.343 - 542.977	536.615	542.977	511.574	979.364	2799.98	90.00
475.709 - 509.343	501.018	501.018	501.018	580.539	580.54	580.54
442.075 - 475.709	455.725	474.093	444.304	376.496	527.98	224.99
408.441 - 442.075	420.058	430.210	410.699	483.162	680.00	334.50
374.807 - 408.441	386.290	404.826	378.833	185.786	1415.43	2.59
341.173 - 374.807	363.802	372.728	349.288	297.723	362.84	171.36
307.539 - 341.173	319.343	334.734	308.470	228.509	440.76	-630.88
273.905 - 307.539	288.222	302.014	278.629	282.694	481.87	80.37
240.271 - 273.905	251.241	266.935	241.563	270.987	383.93	119.69
206.637 - 240.271	224.332	238.434	211.904	67.846	316.14	-50.10
173.003 - 206.637	190.025	204.679	173.467	136.416	607.61	-786.01
139.369 - 173.003	156.811	169.691	143.547	171.397	321.84	66.95
105.735 - 139.369	123.350	138.891	107.855	70.037	349.34	-1862.31
72.102 - 105.735	85.689	103.883	73.697	103.508	240.86	-131.50
38.468 - 72.102	46.361	71.981	38.476	43.692	292.78	1.06
4.834 - 38.468	26.347	38.456	4.928	13.939	312.68	-510.00
-28.800 - 4.834	-3.519	4.812	-26.907	0.417	19.78	-178.85
-62.434 - -28.800	-40.019	-28.936	-57.186	-14.397	5.40	-137.98
-96.068 - -62.434	-69.673	-63.993	-77.390	-17.722	45.29	-70.10
-129.702 - -96.068	-128.967	-97.820	-129.702	-75.120	130.76	-3701.89

SAS Enterprise Miner Report

Node=RegTree B2D6 Summary

Node id = Tree
 Node label = RegTree B2D6
 Meta path = Ids => Part => Tree
 Notes =

Node=RegTree B2D6 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	6		SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

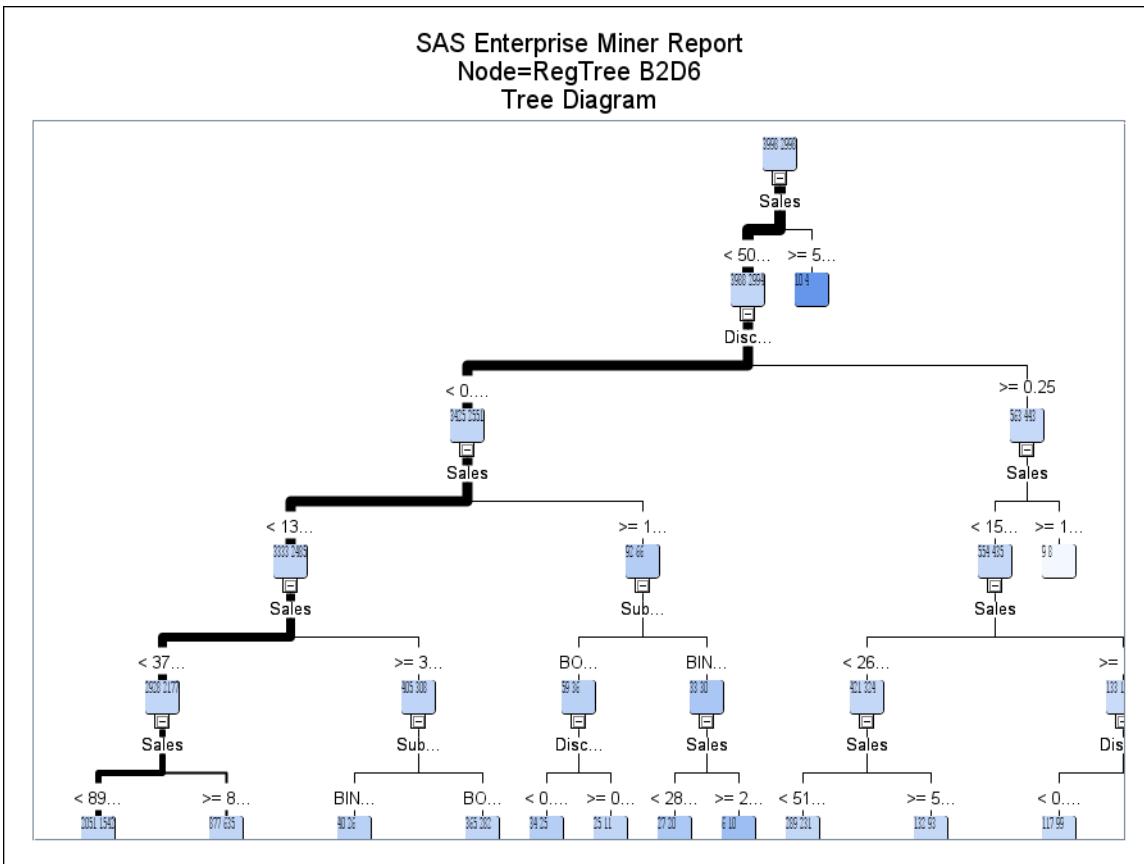
Node=RegTree B2D6 Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	INTERVAL	1	_dataobs_

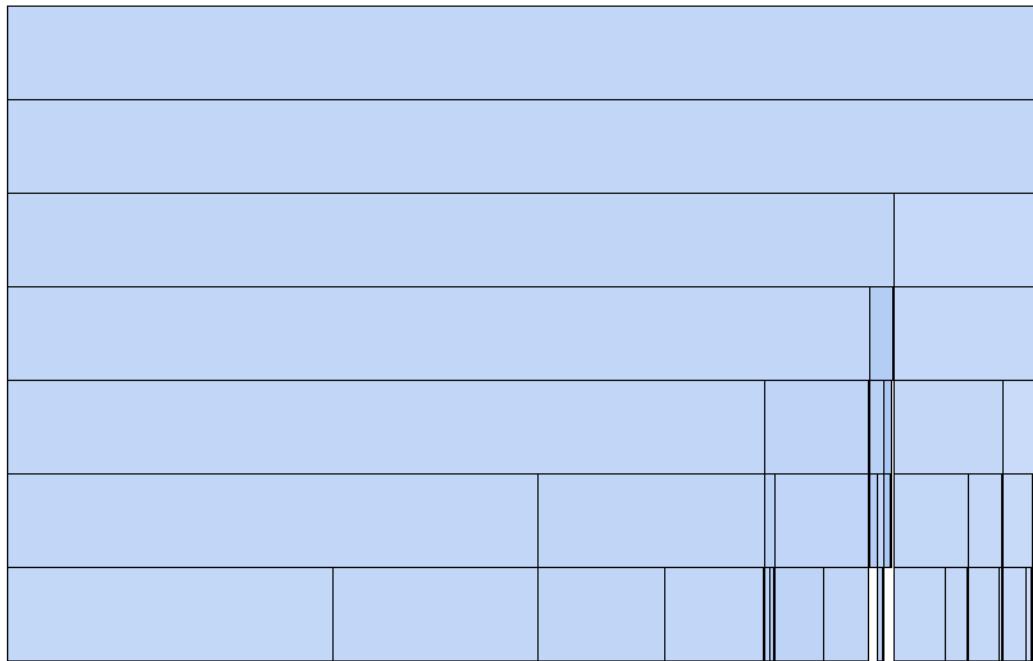
Node=RegTree B2D6 Model Fit Statistics

Target=Profit Target Label=Profit

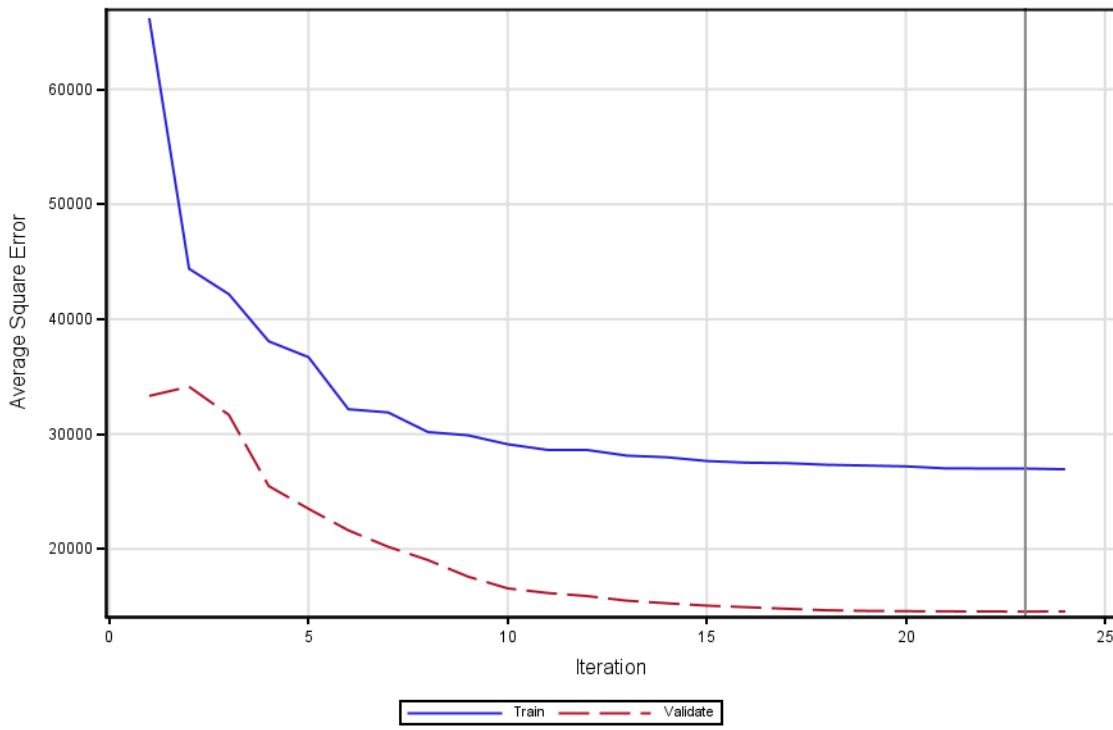
Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5422.49	2649.98	6817.48
Sum of Squared Errors	107957048.20	43654720.78	104757898.18
Average Squared Error	27002.76	14561.28	34942.59
Root Average Squared Error	164.33	120.67	186.93
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00		



SAS Enterprise Miner Report
Node=RegTree B2D6
Treemap



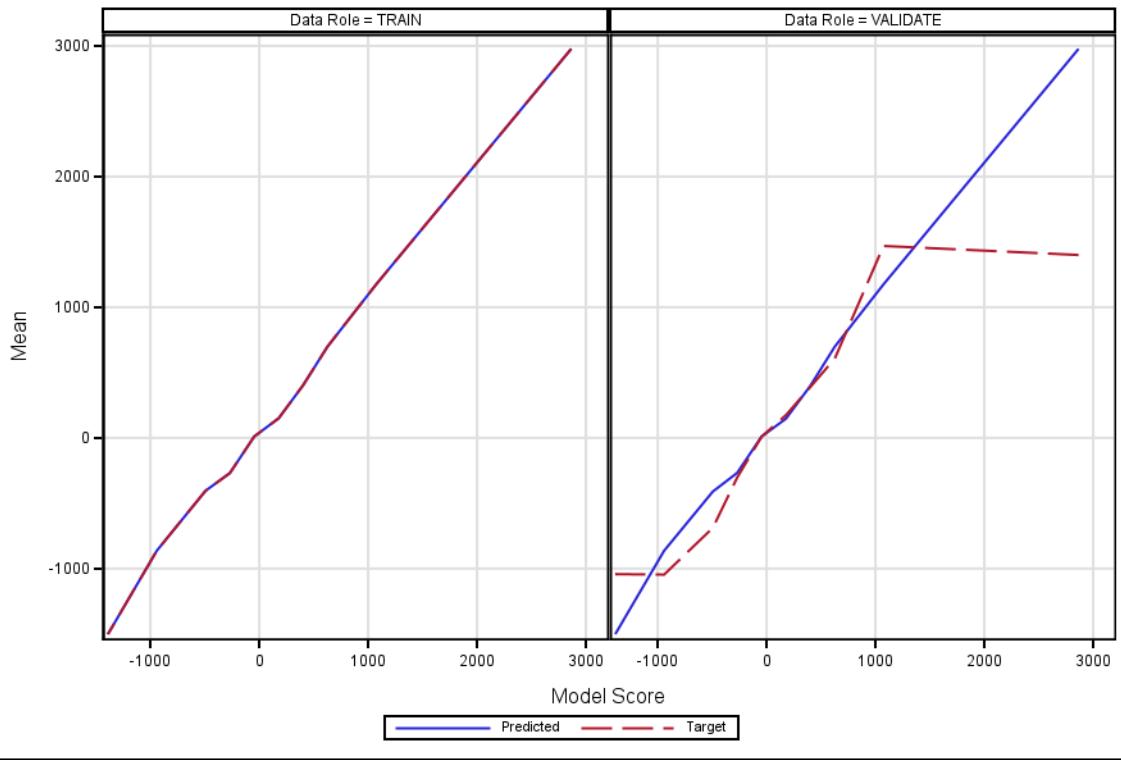
SAS Enterprise Miner Report
Node=RegTree B2D6
Model Iteration Plots



SAS Enterprise Miner Report

Node=RegTree B2D6

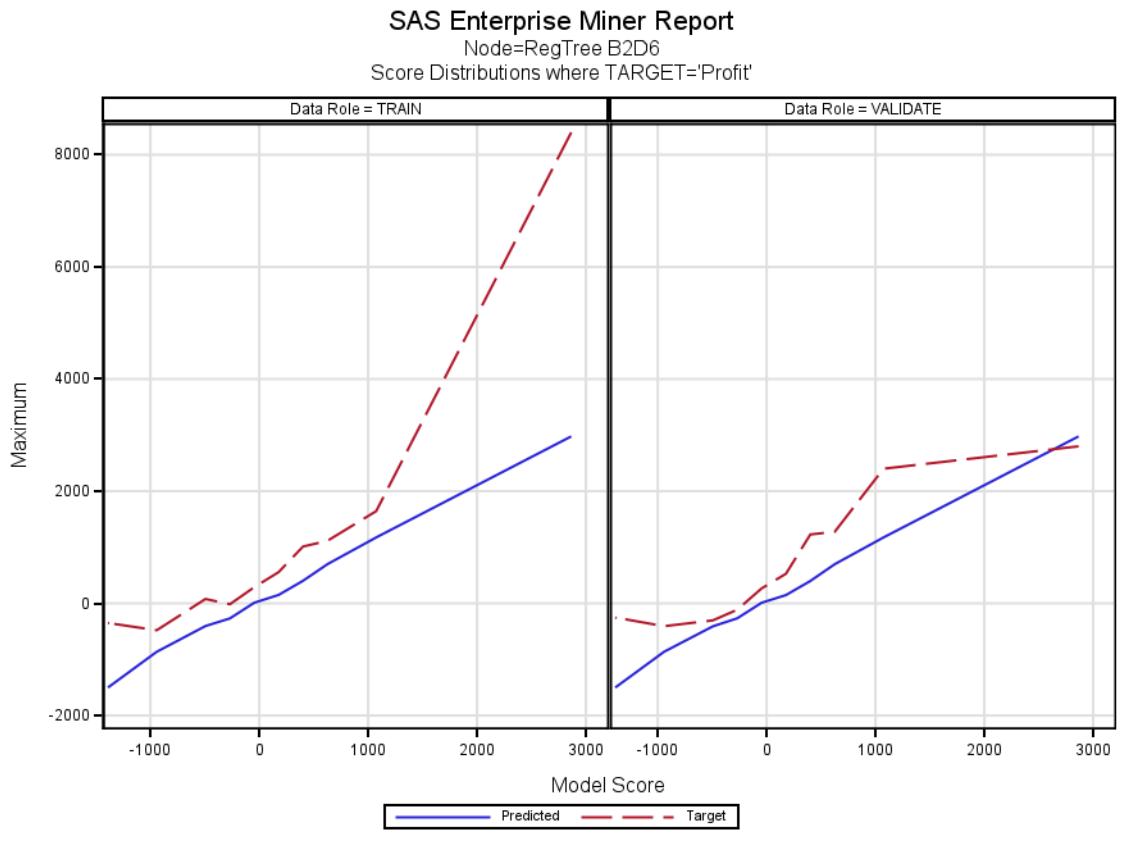
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree B2D6

Score Distributions where TARGET='Profit'



Node=RegTree B2D6
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2753.521 - 2977.488	2977.49	2977.49	2977.49	2977.49	8399.98	-1811.08
961.790 - 1185.756	1175.07	1175.07	1175.07	1175.07	1644.29	377.73
513.857 - 737.823	697.83	697.83	697.83	697.83	1114.51	459.40
289.890 - 513.857	402.28	429.70	353.19	402.28	1013.13	83.28
65.924 - 289.890	149.86	185.08	143.36	149.86	556.97	-25.05
-158.043 - 65.924	10.87	54.51	-98.65	10.87	287.98	-553.65
-382.009 - -158.043	-269.19	-262.37	-272.45	-269.19	-16.43	-572.00
-605.975 - -382.009	-405.02	-397.00	-413.03	-405.02	77.75	-1049.34
-1053.908 - -829.942	-864.22	-864.22	-864.22	-864.22	-479.99	-1181.28
-1501.841 - -1277.875	-1501.84	-1501.84	-1501.84	-1501.84	-350.49	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2753.521 - 2977.488	2977.49	2977.49	2977.49	1399.87	2799.98	327.51
961.790 - 1185.756	1175.07	1175.07	1175.07	1468.94	2400.97	334.50
513.857 - 737.823	697.83	697.83	697.83	606.40	1276.49	97.19
289.890 - 513.857	398.73	429.70	353.19	389.45	1228.18	33.31
65.924 - 289.890	147.16	185.08	143.36	174.66	527.98	-50.10
-158.043 - 65.924	10.12	54.51	-98.65	9.47	265.42	-374.99
-382.009 - -158.043	-267.41	-262.37	-272.45	-303.23	-114.35	-814.48
-605.975 - -382.009	-410.74	-397.00	-413.03	-688.41	-304.39	-1850.95
-1053.908 - -829.942	-864.22	-864.22	-864.22	-1046.48	-407.98	-2287.78
-1501.841 - -1277.875	-1501.84	-1501.84	-1501.84	-1042.63	-252.00	-3701.89

SAS Enterprise Miner Report

Node=RegTree B2D4 Summary

Node id = Tree2
 Node label = RegTree B2D4
 Meta path = Ids => Part => Tree2
 Notes =

Node=RegTree B2D4 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	4	6	SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=RegTree B2D4 Variable Summary

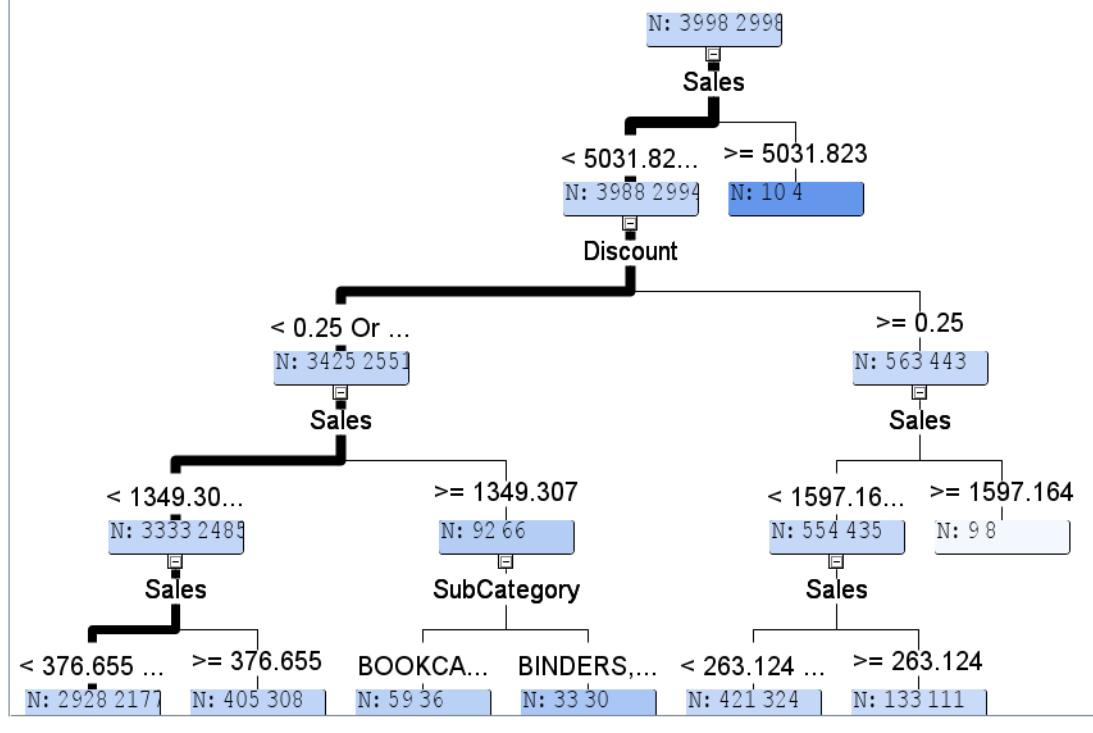
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	INTERVAL	1	_dataobs_

Node=RegTree B2D4 Model Fit Statistics

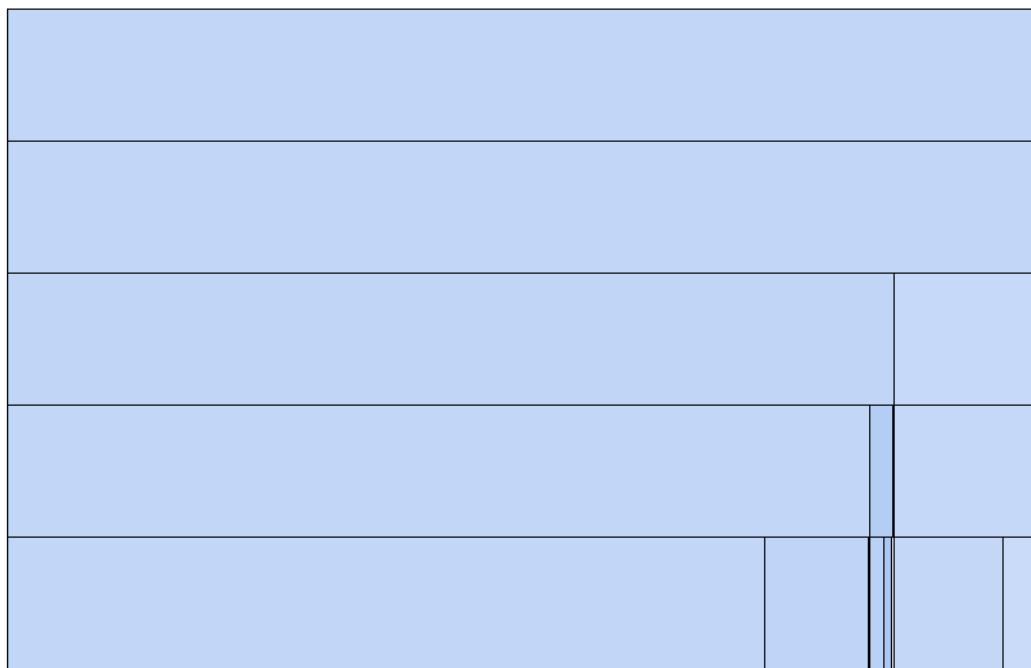
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5422.49	2649.98	6817.48
Sum of Squared Errors	122439967.02	59671047.21	112077148.79
Average Squared Error	30625.30	19903.62	37383.97
Root Average Squared Error	175.00	141.08	193.35
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.

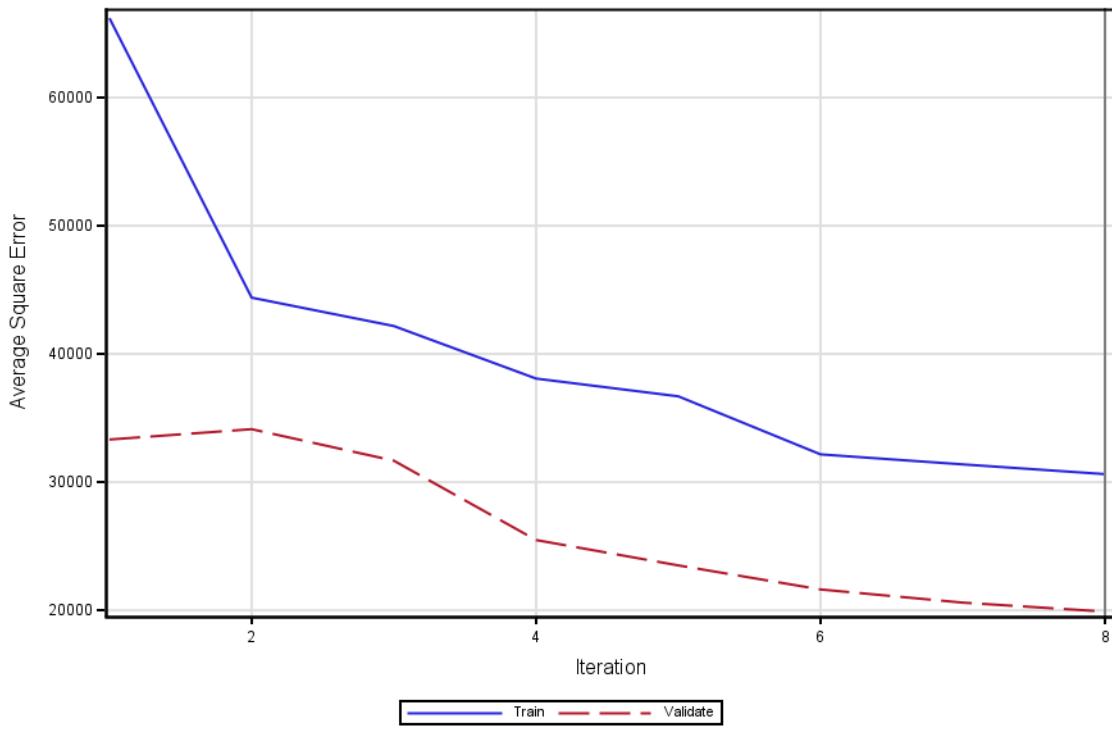
SAS Enterprise Miner Report
Node=RegTree B2D4
Tree Diagram



SAS Enterprise Miner Report
Node=RegTree B2D4
Treemap



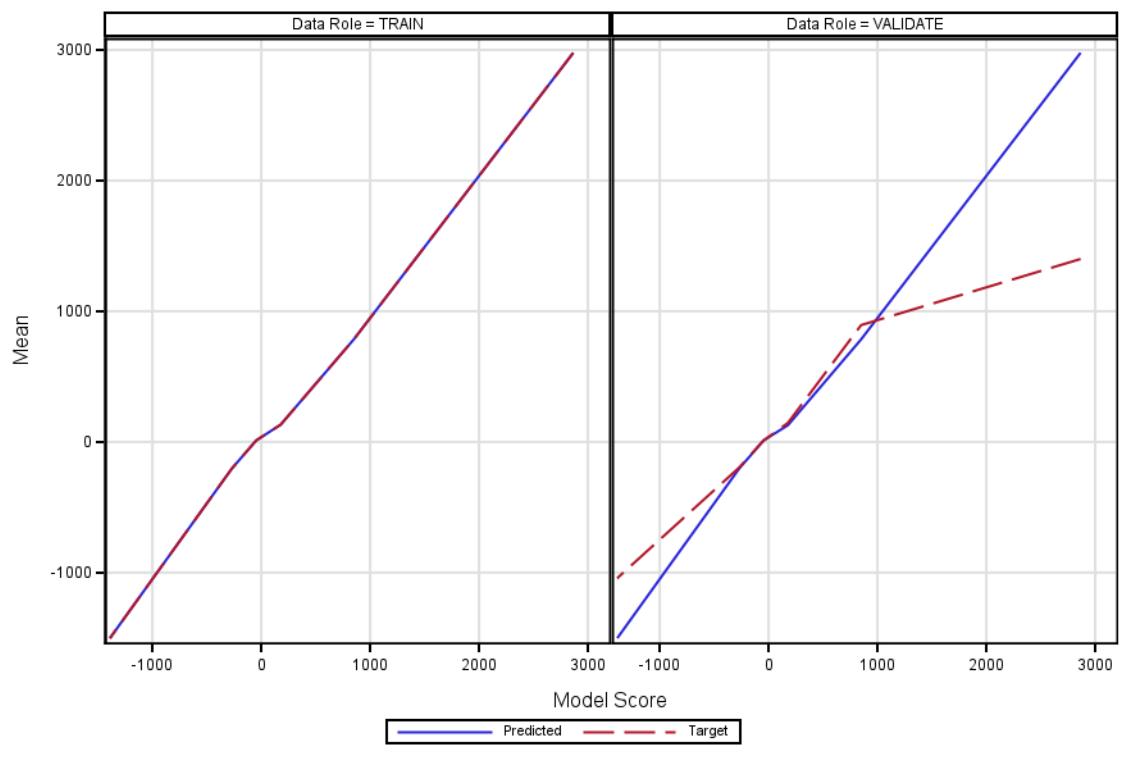
SAS Enterprise Miner Report
Node=RegTree B2D4
Model Iteration Plots



SAS Enterprise Miner Report

Node=RegTree B2D4

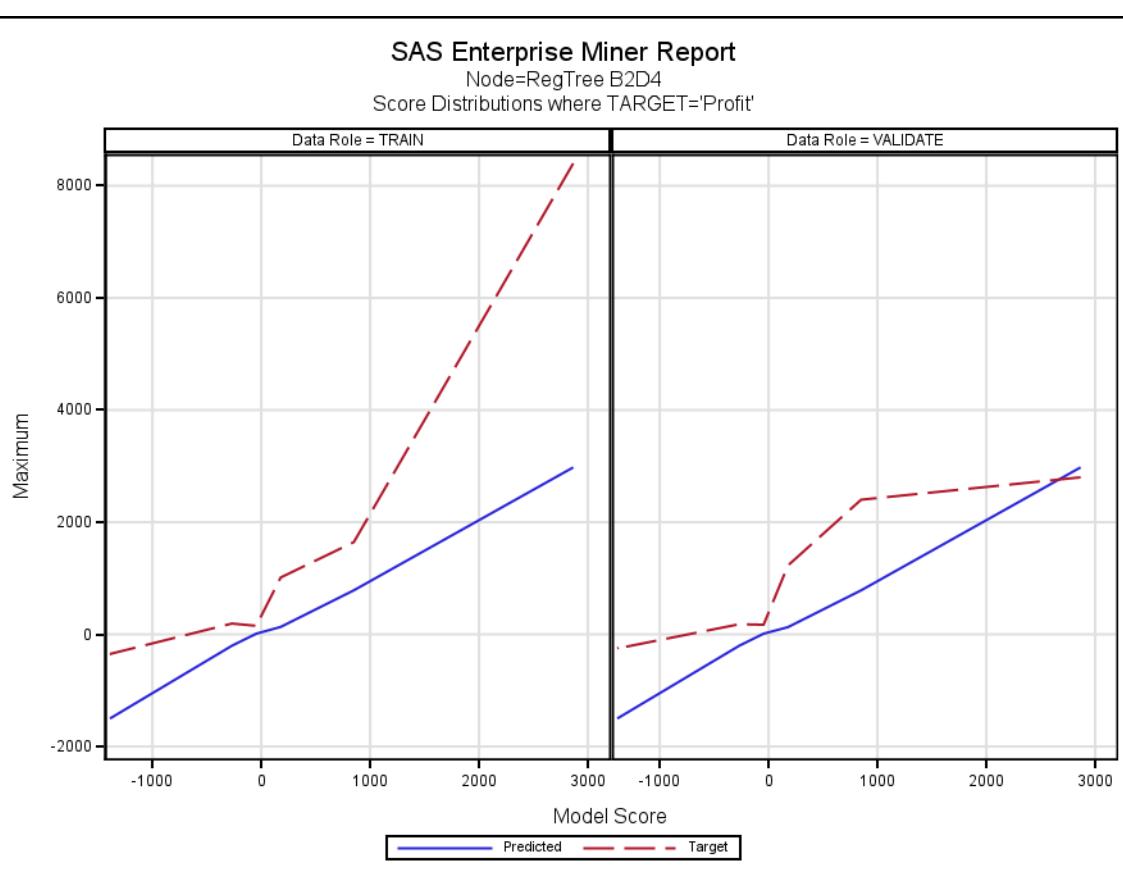
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree B2D4

Score Distributions where TARGET='Profit'



Node=RegTree B2D4
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2753.521 - 2977.488	2977.49	2977.49	2977.49	2977.49	8399.98	-1811.08
737.823 - 961.790	784.60	784.60	784.60	784.60	1644.29	377.73
65.924 - 289.890	131.75	273.15	111.15	131.75	1013.13	-1049.34
-158.043 - 65.924	11.48	17.51	-30.51	11.48	152.09	-470.55
-382.009 - -158.043	-203.84	-203.84	-203.84	-203.84	192.00	-1181.28
-1501.841 - -1277.875	-1501.84	-1501.84	-1501.84	-1501.84	-350.49	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2753.521 - 2977.488	2977.49	2977.49	2977.49	1399.87	2799.98	327.51
737.823 - 961.790	784.60	784.60	784.60	893.91	2400.97	97.19
65.924 - 289.890	128.10	273.15	111.15	146.07	1228.18	-786.01
-158.043 - 65.924	11.29	17.51	-30.51	10.65	170.93	-453.85
-382.009 - -158.043	-203.84	-203.84	-203.84	-195.98	180.00	-2287.78
-1501.841 - -1277.875	-1501.84	-1501.84	-1501.84	-1042.63	-252.00	-3701.89

SAS Enterprise Miner Report

Node=RegTree B2D2 Summary

Node id = Tree3
 Node label = RegTree B2D2
 Meta path = Ids => Part => Tree3
 Notes =

Node=RegTree B2D2 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	2	6	SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

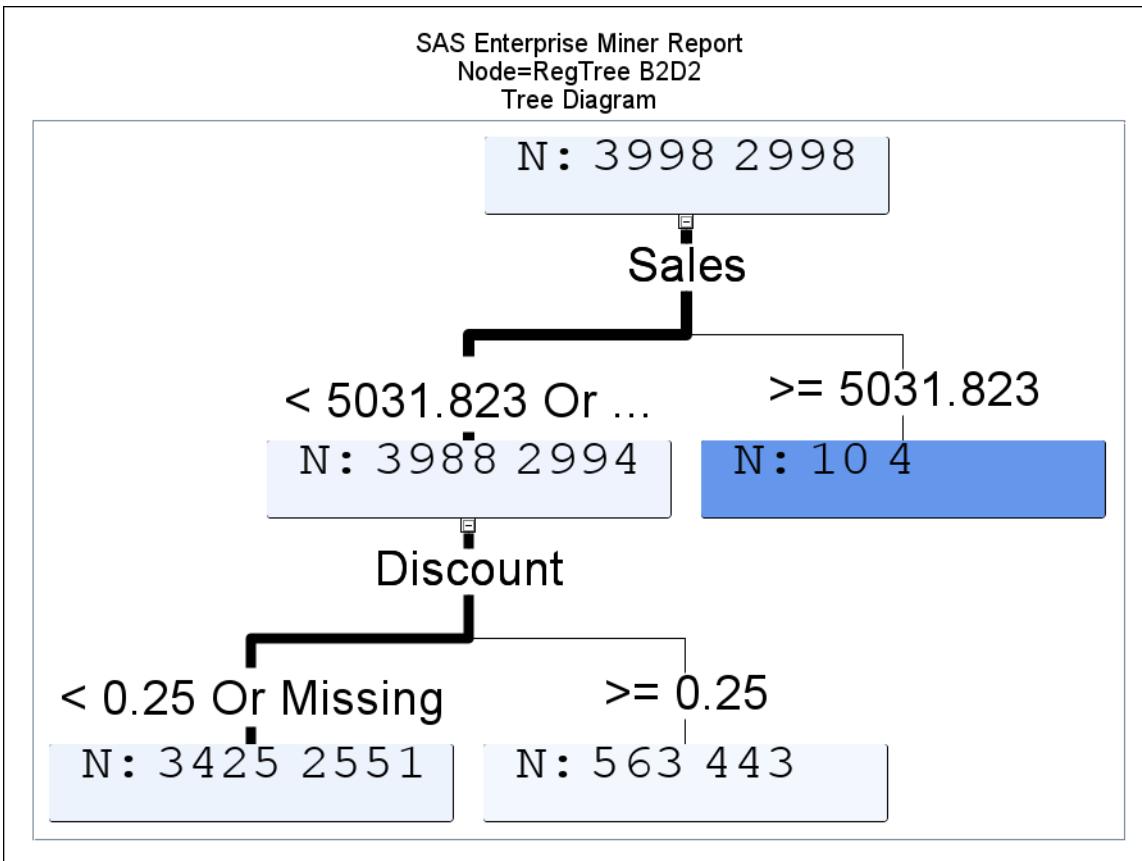
Node=RegTree B2D2 Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	INTERVAL	1	_dataobs_

Node=RegTree B2D2 Model Fit Statistics

Target=Profit Target Label=Profit

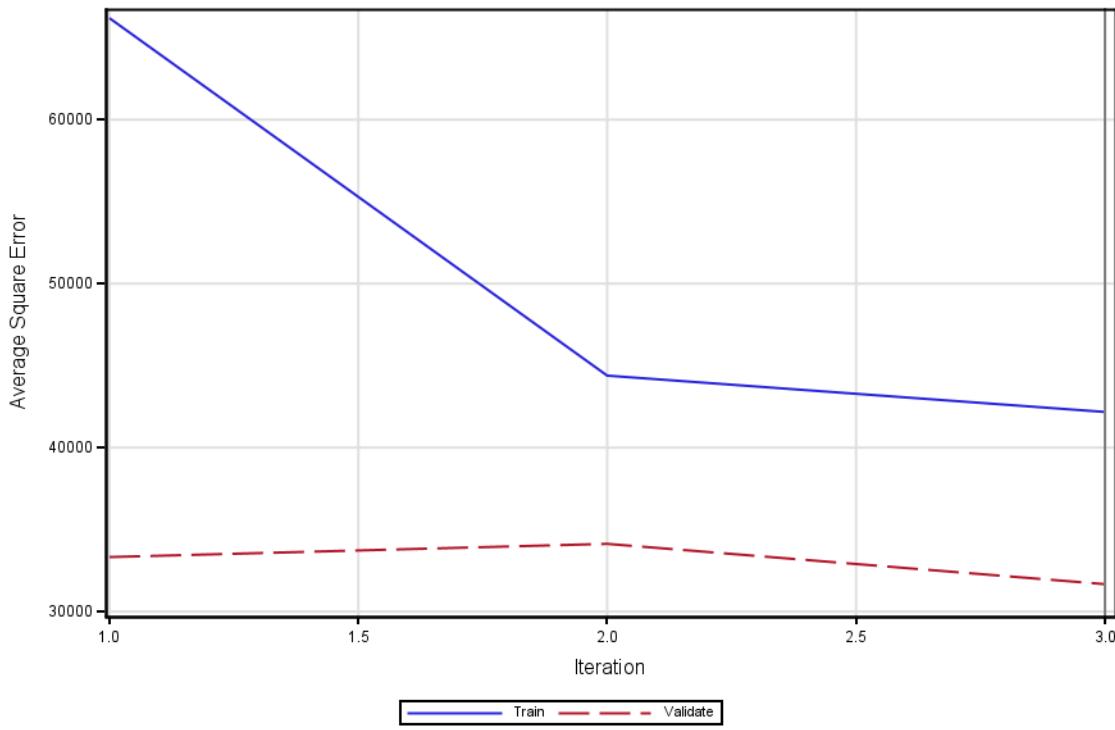
Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5422.49	3606.91	6817.48
Sum of Squared Errors	168612692.70	94951332.30	153555054.07
Average Squared Error	42174.26	31671.56	51219.16
Root Average Squared Error	205.36	177.97	226.32
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.



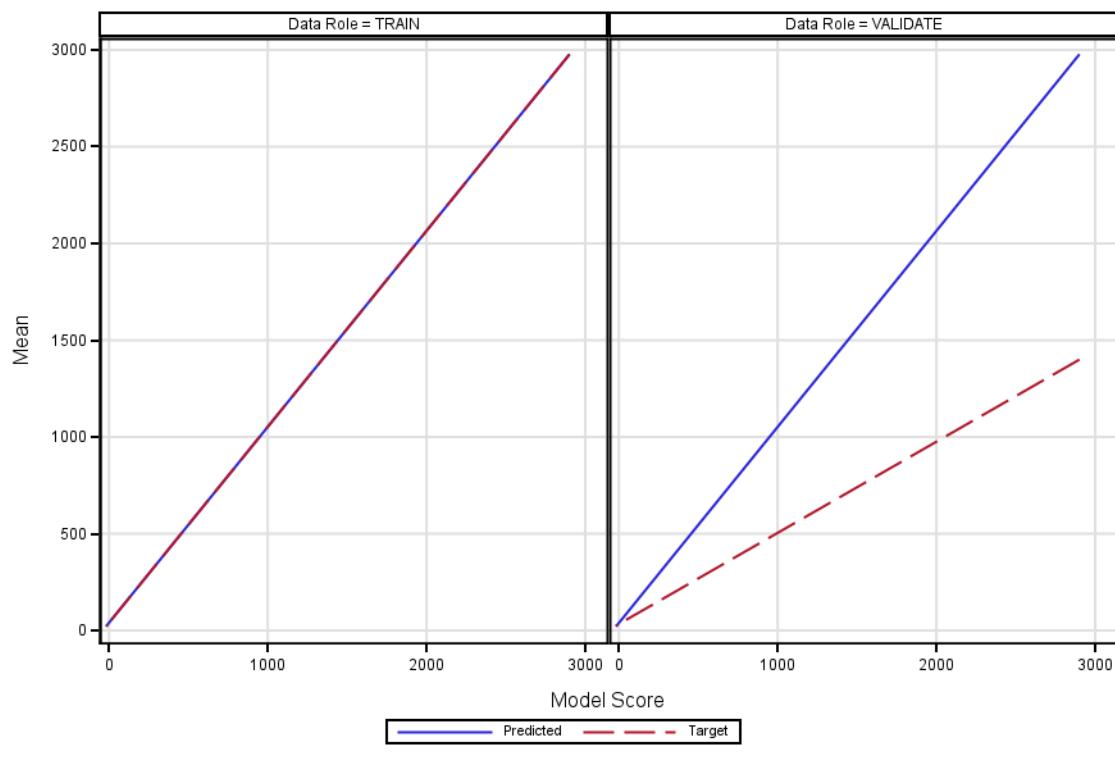
SAS Enterprise Miner Report
Node=RegTree B2D2
Treemap



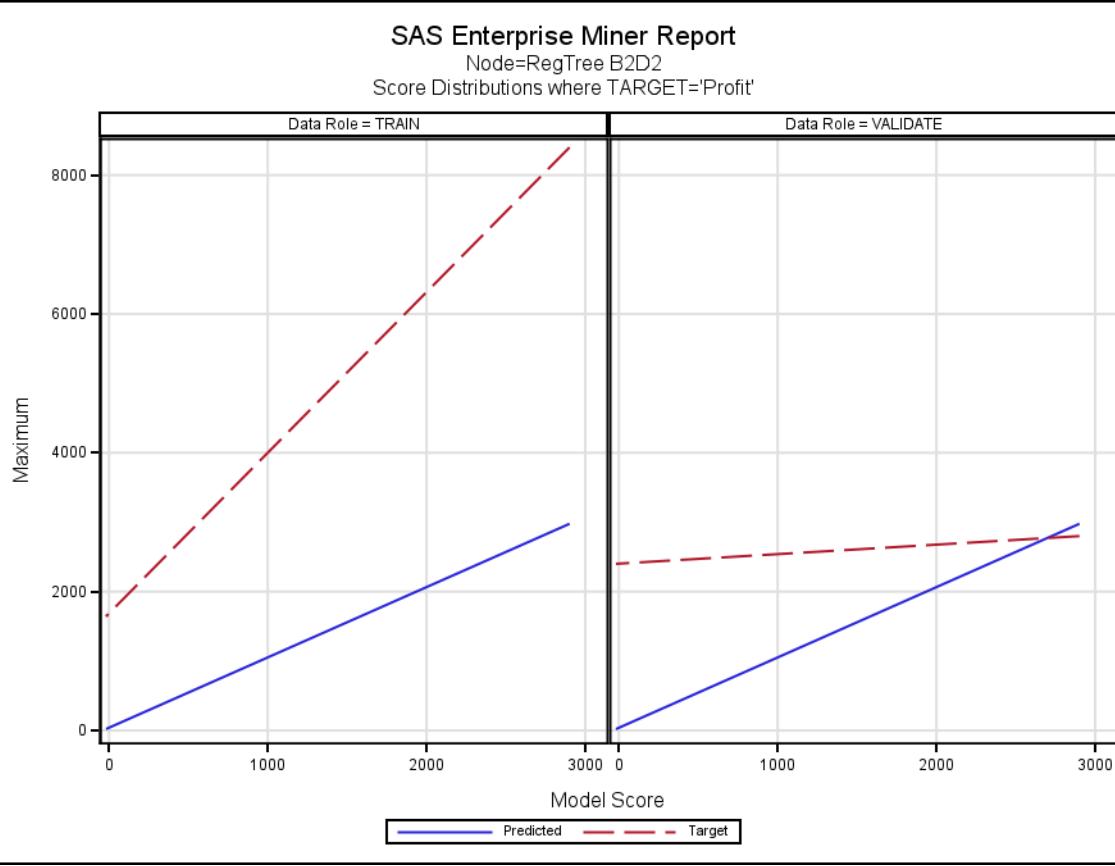
SAS Enterprise Miner Report
Node=RegTree B2D2
Model Iteration Plots



SAS Enterprise Miner Report
 Node=RegTree B2D2
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=RegTree B2D2
 Score Distributions where TARGET='Profit'



Node=RegTree B2D2
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2823.864 - 2977.488	2977.49	2977.49	2977.49	2977.49	8399.98	-1811.08
-94.980 - 58.643	21.27	40.38	-94.98	21.27	1644.29	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
2823.864 - 2977.488	2977.49	2977.49	2977.49	1399.87	2799.98	327.51
-94.980 - 58.643	20.35	40.38	-94.98	24.58	2400.97	-3701.89

SAS Enterprise Miner Report

Node=RegTree B3D6 Summary

Node id = Tree4
 Node label = RegTree B3D6
 Meta path = Ids => Part => Tree4
 Notes =

Node=RegTree B3D6 Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	3	2	SampleMethod	RANDOM	
CVNIter	10		Maxdepth	6		SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=RegTree B3D6 Variable Summary

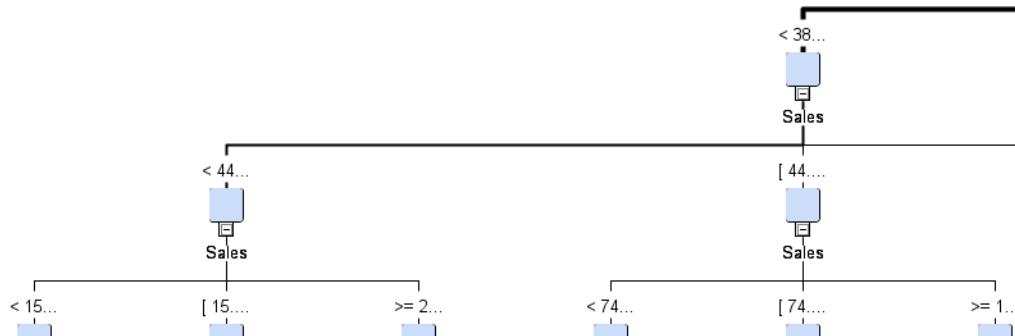
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory
ID	INTERVAL	1	_dataobs_

Node=RegTree B3D6 Model Fit Statistics

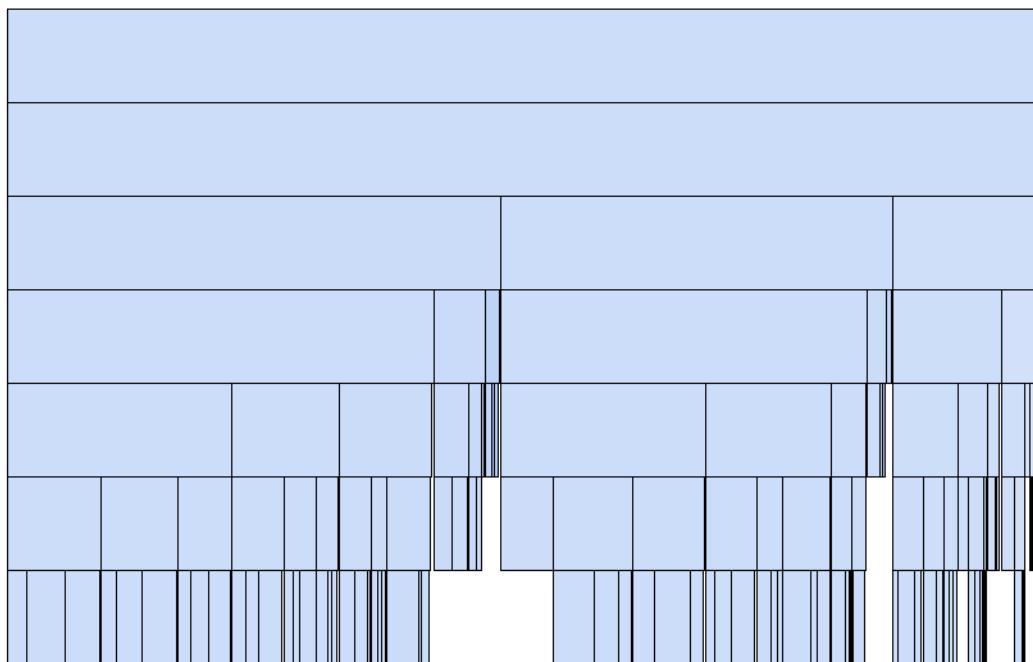
Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Sum of Frequencies	3998.00	2998.00	2998.00
Maximum Absolute Error	5935.32	2200.05	5670.72
Sum of Squared Errors	97385029.89	40483747.48	84237582.29
Average Squared Error	24358.44	13503.58	28097.93
Root Average Squared Error	156.07	116.20	167.62
Divisor for ASE	3998.00	2998.00	2998.00
Total Degrees of Freedom	3998.00	.	.

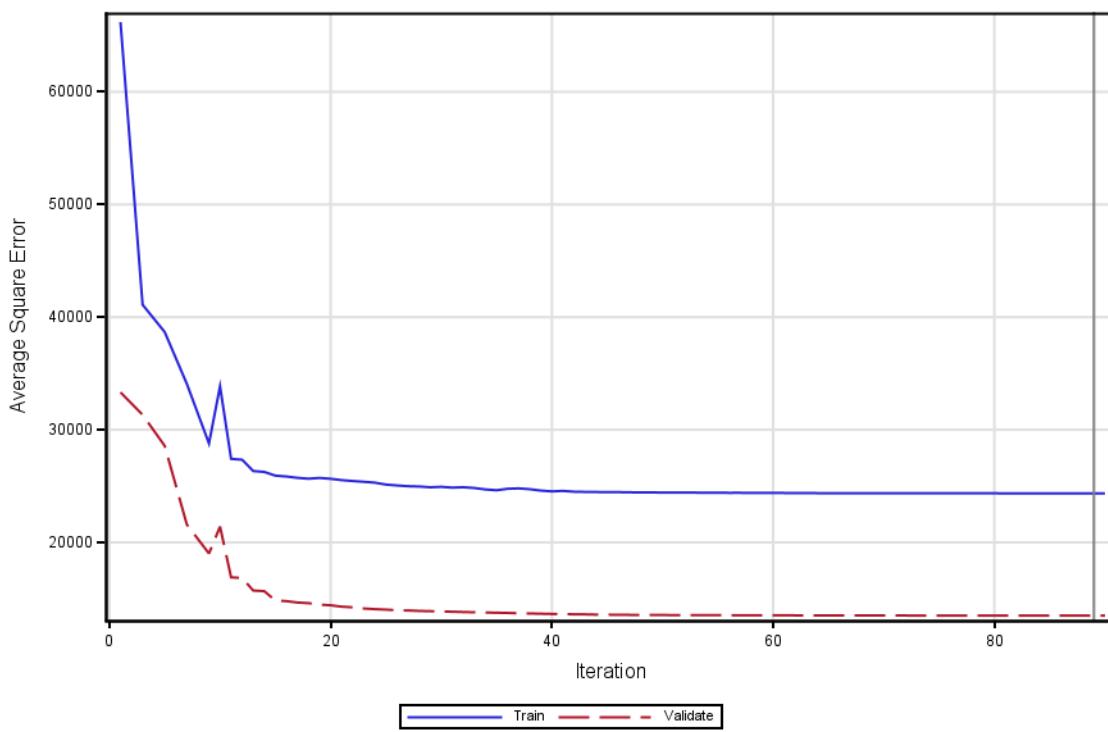
SAS Enterprise Miner Report
Node=RegTree B3D6
Tree Diagram



SAS Enterprise Miner Report
Node=RegTree B3D6
Treemap



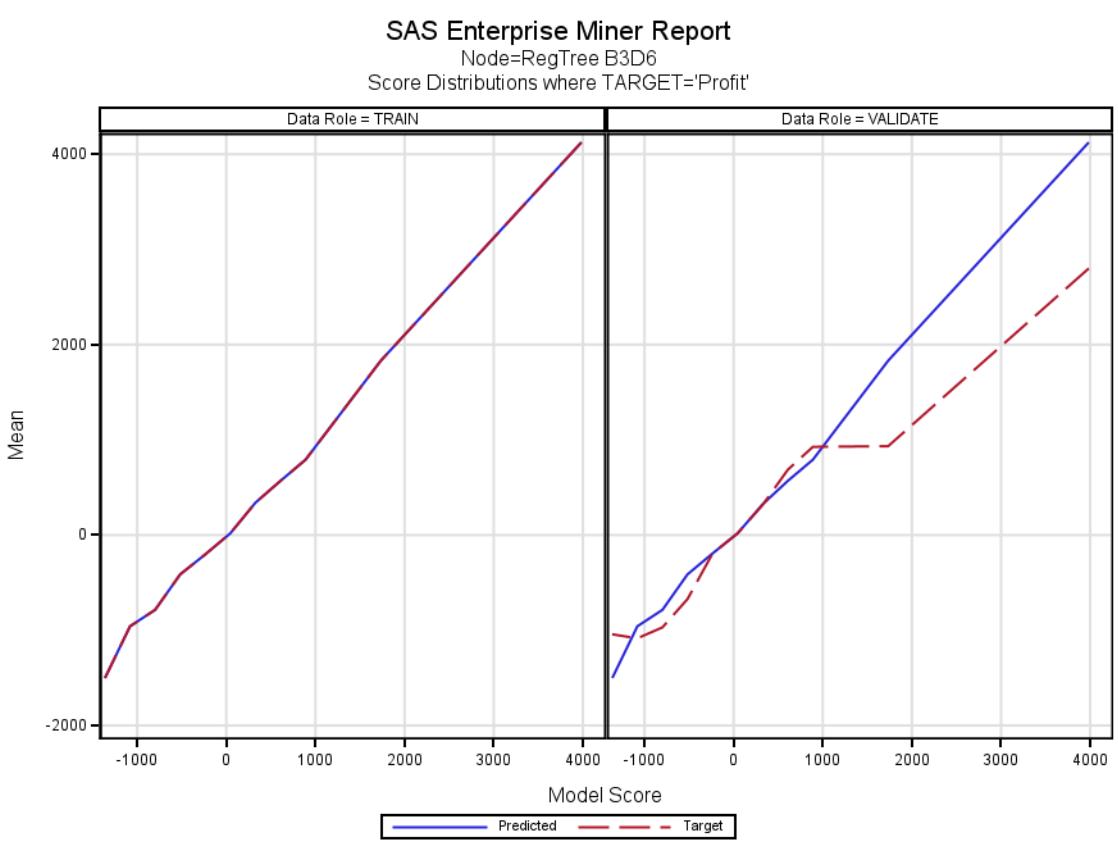
SAS Enterprise Miner Report
Node=RegTree B3D6
Model Iteration Plots



SAS Enterprise Miner Report

Node=RegTree B3D6

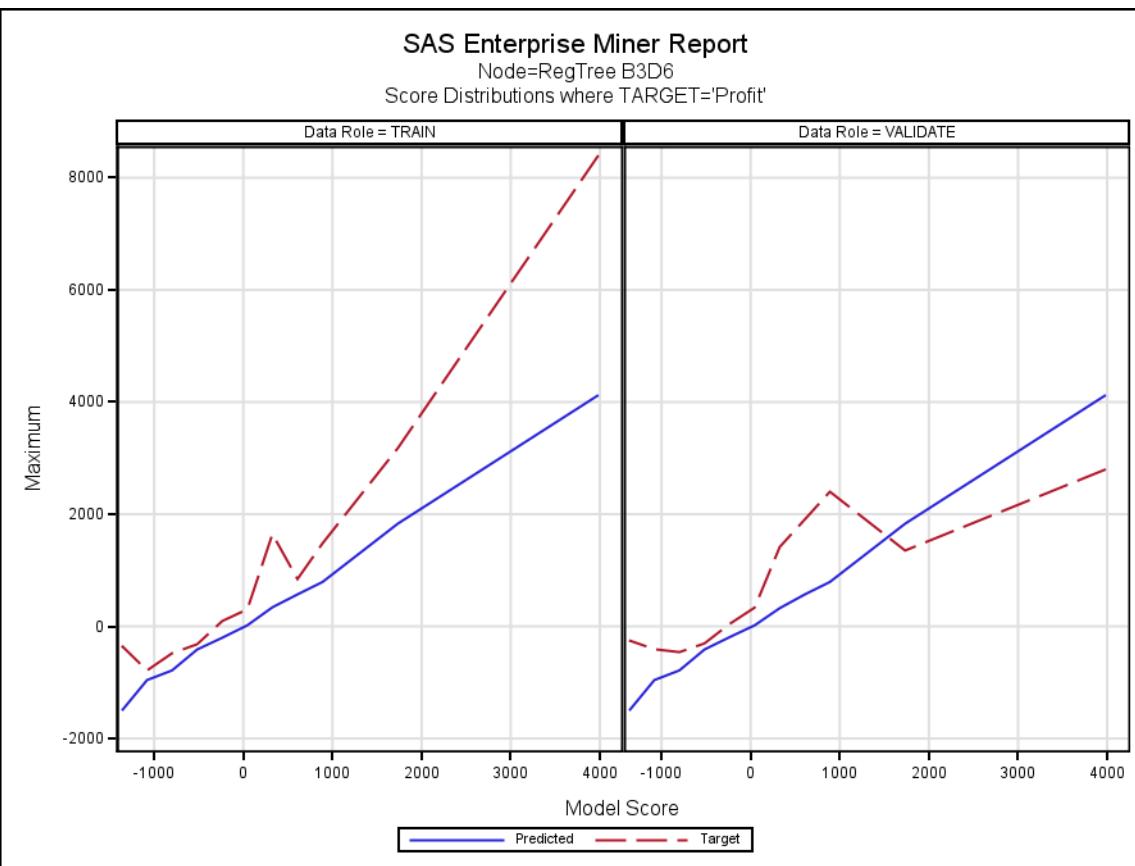
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree B3D6

Score Distributions where TARGET='Profit'



Node=RegTree B3D6
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3842.942 - 4124.246	4124.25	4124.25	4124.25	4124.25	8399.98	-1811.08
1592.507 - 1873.811	1830.73	1830.73	1830.73	1830.73	3177.48	-1359.99
748.594 - 1029.898	791.49	791.49	791.49	791.49	1480.47	374.38
467.289 - 748.594	569.02	569.02	569.02	569.02	843.17	83.28
185.985 - 467.289	339.61	426.22	216.95	339.61	1644.29	-1049.34
-95.319 - 185.985	18.22	153.86	-90.11	18.22	303.34	-337.81
-376.624 - -95.319	-203.28	-105.32	-352.42	-203.28	94.49	-572.00
-657.928 - -376.624	-413.03	-413.03	-413.03	-413.03	-319.19	-559.36
-939.233 - -657.928	-785.62	-785.62	-785.62	-785.62	-479.99	-1141.47
-1220.537 - -939.233	-958.53	-958.53	-958.53	-958.53	-786.74	-1181.28
-1501.841 - -1220.537	-1501.84	-1501.84	-1501.84	-1501.84	-350.49	-3399.98

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3842.942 - 4124.246	4124.25	4124.25	4124.25	2799.98	2799.98	2799.98
1592.507 - 1873.811	1830.73	1830.73	1830.73	933.16	1351.99	327.51
748.594 - 1029.898	791.49	791.49	791.49	926.30	2400.97	97.19
467.289 - 748.594	569.02	569.02	569.02	686.02	1906.49	33.31
185.985 - 467.289	324.07	426.22	216.95	317.93	1415.43	-786.01
-95.319 - 185.985	18.10	153.86	-90.11	19.12	334.55	-299.81
-376.624 - -95.319	-193.02	-105.32	-352.42	-193.40	41.93	-814.48
-657.928 - -376.624	-413.03	-413.03	-413.03	-672.14	-304.39	-1850.95
-939.233 - -657.928	-785.62	-785.62	-785.62	-970.01	-459.99	-1480.03
-1220.537 - -939.233	-958.53	-958.53	-958.53	-1084.71	-407.98	-2287.78
-1501.841 - -1220.537	-1501.84	-1501.84	-1501.84	-1042.63	-252.00	-3701.89

SAS Enterprise Miner Report

Node=Exhaustive Regression Summary

Node id = Reg
 Node label = Exhaustive Regression
 Meta path = Ids => Part => Reg
 Notes =

Node=Exhaustive Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SISStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	NONE		SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Exhaustive Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

Node=Exhaustive Regression Model Fit Statistics

Target=Profit Target Label=Profit

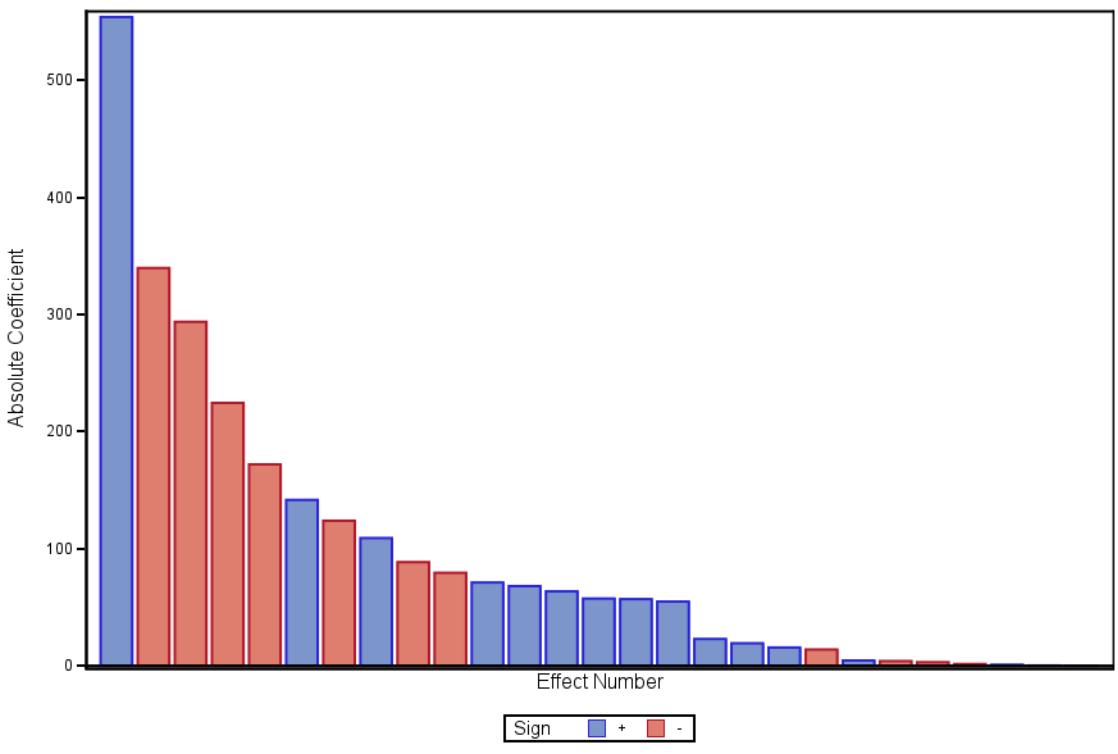
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	42377.84	.	.
Average Squared Error	39586.91	25494.38	44497.01
Average Error Function	39586.91	25494.38	44497.01
Degrees of Freedom for Error	3971.00	.	.
Model Degrees of Freedom	27.00	.	.
Total Degrees of Freedom	3998.00	.	.

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Divisor for ASE	3998.00	2998.00	2998.00
Error Function	158268460.81	76432147.77	133402035.15
Final Prediction Error	40125.23	.	.
Maximum Absolute Error	5622.35	3997.69	6923.66
Mean Square Error	39856.07	25494.38	44497.01
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	27.00	.	.
Root Average Sum of Squares	198.96	159.67	210.94
Root Final Prediction Error	200.31	.	.
Root Mean Squared Error	199.64	159.67	210.94
Schwarz's Bayesian Criterion	42547.77	.	.
Sum of Squared Errors	158268460.81	76432147.77	133402035.15
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Exhaustive Regression
Regression Model Effects

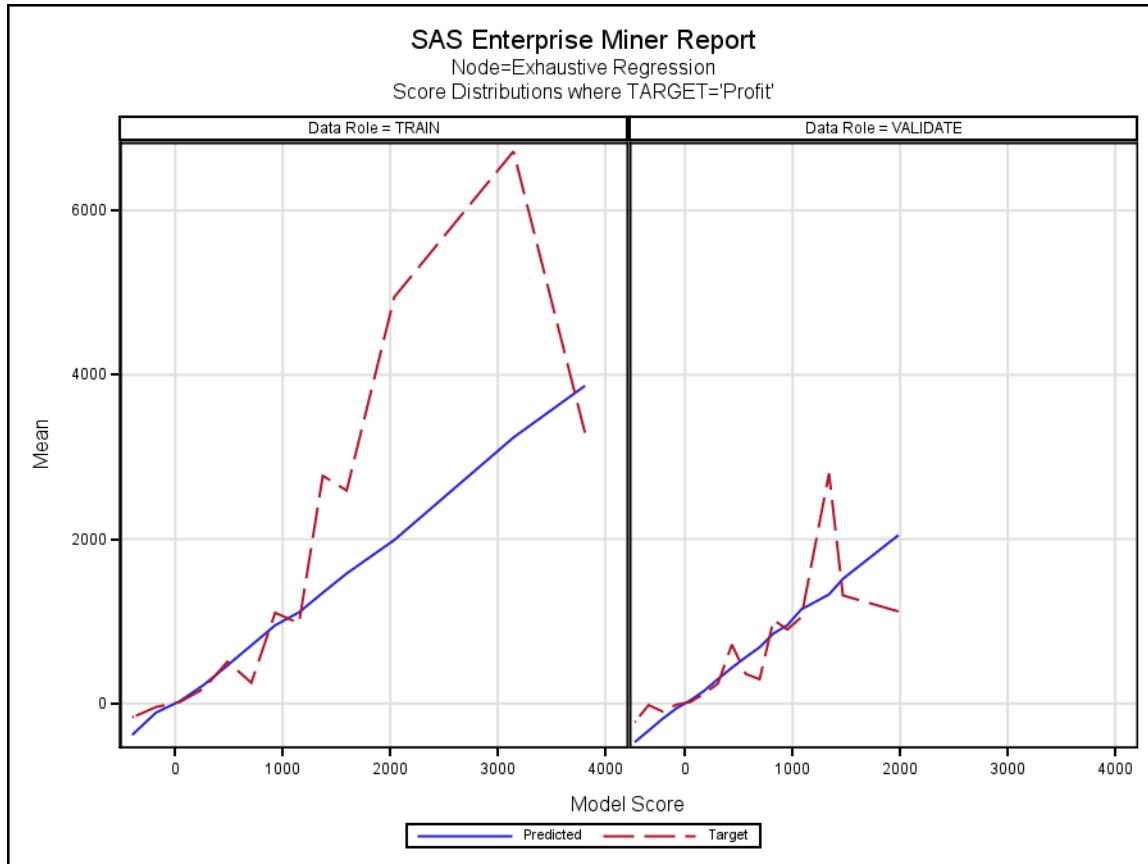


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	SubCategory	COPIERS	554.136	14.2612	0.00000	15	SubCategory	FASTENERS	56.9228	1.8099	0.07039
2	SubCategory	MACHINES	-339.753	-10.9848	0.00000	16	SubCategory	ART	54.7953	2.2088	0.02724
3	Discount		-293.781	-15.7160	0.00000	17	Region	CENTRAL	22.8616	3.8901	0.00010
4	SubCategory	BOOKCASES	-224.490	-4.4606	0.00001	18	SubCategory	STORAGE	19.1914	0.7862	0.43177
5	SubCategory	CHAIRS	-171.992	-3.5128	0.00045	19	SubCategory	ACCESSORIES	15.5575	0.9931	0.32073
6	SubCategory	BINDERS	141.641	5.8758	0.00000	20	Region	SOUTH	-13.8478	-2.1455	0.03197
7	SubCategory	FURNISHINGS	-123.844	-2.5348	0.01129	21	ShipMode	SAME_DAY	4.4756	0.4347	0.66382
8	Category	FURNITURE	109.066	2.7527	0.00594	22	Region	EAST	-3.9662	-0.7452	0.45622
9	Intercept		-88.511	-0.5668	0.57091	23	Quantity		-3.0174	-2.0271	0.04272
10	Category	OFFICE_SUPPLIES	-79.390	-2.6492	0.00810	24	ShipMode	SECOND_CLASS	-1.4609	-0.2147	0.82997
11	SubCategory	APPLIANCES	71.085	2.6886	0.00721	25	ShipMode	FIRST_CLASS	0.8793	0.1226	0.90246

SAS Enterprise Miner Report
Node=Exhaustive Regression
Regression Model Effects

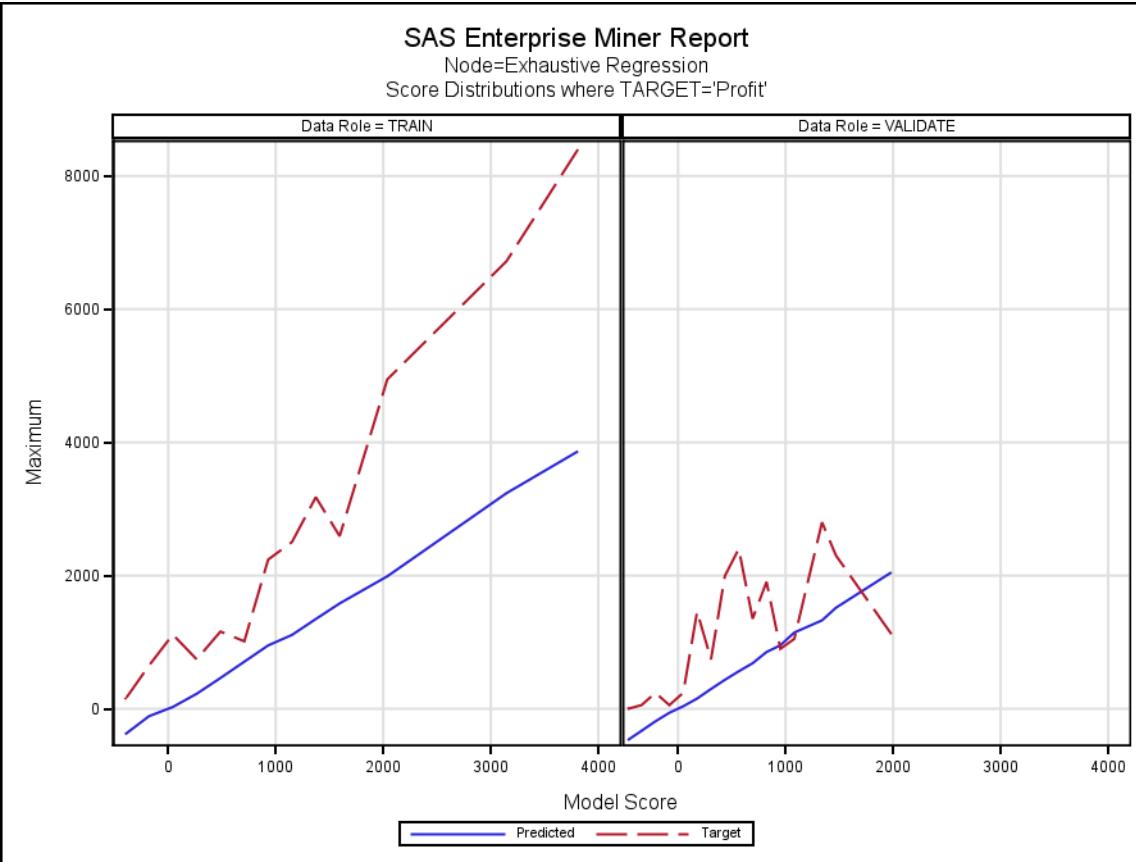
152

Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
12	SubCategory	ENVELOPES	68.002	2.3208	0.02035	26	Sales		0.1902	38.1258	0.00000
13	SubCategory	PAPER	63.522	2.6917	0.00714	27	ShipDate		0.0074	0.9805	0.32691
14	SubCategory	LABELS	57.384	2.1157	0.03443



SAS Enterprise Miner Report

Node=Exhaustive Regression
Score Distributions where TARGET='Profit'



Node=Exhaustive Regression Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3699.991 - 3921.602	3866.44	3921.60	3811.27	3294.45	8399.98	-1811.08
3035.158 - 3256.769	3237.20	3237.20	3237.20	6719.98	6719.98	6719.98
1927.103 - 2148.714	1989.28	1989.28	1989.28	4946.37	4946.37	4946.37
1483.880 - 1705.491	1581.87	1581.87	1581.87	2591.96	2591.96	2591.96
1262.269 - 1483.880	1347.77	1396.30	1299.24	2771.73	3177.48	2365.98
1040.658 - 1262.269	1108.85	1173.14	1047.83	976.09	2504.22	-1359.99
819.047 - 1040.658	951.18	1002.43	910.14	1103.54	2239.99	569.99
597.436 - 819.047	706.94	808.05	604.55	252.00	1013.13	-1049.34
375.825 - 597.436	462.64	581.59	386.35	509.14	1159.99	-350.49
154.214 - 375.825	224.89	369.17	154.47	178.89	742.63	-1665.05
-67.397 - 154.214	27.22	153.93	-67.09	17.13	1114.51	-3399.98
-289.008 - -67.397	-111.49	-67.44	-281.64	-43.63	648.56	-2639.99
-510.620 - -289.008	-383.38	-303.57	-510.62	-170.36	139.99	-950.40

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1919.848 - 2048.909	2048.91	2048.91	2048.91	1120.00	1120.00	1120.00
1403.607 - 1532.667	1516.55	1517.55	1515.55	1315.24	2302.97	327.51
1274.547 - 1403.607	1327.77	1327.77	1327.77	2799.98	2799.98	2799.98
1016.426 - 1145.486	1144.79	1144.79	1144.79	1049.99	1049.99	1049.99
887.366 - 1016.426	953.48	953.48	953.48	899.98	899.98	899.98
758.305 - 887.366	852.24	881.84	807.61	1016.34	1906.49	449.99
629.245 - 758.305	684.18	744.93	630.40	294.28	1351.99	-786.01

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
500.185 - 629.245	563.11	610.40	502.45	359.00	2400.97	-1862.31
371.124 - 500.185	434.77	489.92	377.28	716.39	1995.99	239.91
242.064 - 371.124	297.37	356.88	244.56	242.88	742.63	-3701.89
113.004 - 242.064	153.77	241.27	113.27	118.60	1459.20	-2287.78
-16.057 - 113.004	37.98	112.87	-16.04	17.99	240.26	-1850.95
-145.117 - -16.057	-60.00	-16.15	-141.69	-14.69	54.59	-729.91
-274.178 - -145.117	-187.65	-145.58	-270.17	-97.73	239.99	-453.85
-403.238 - -274.178	-330.17	-293.41	-358.25	-20.19	56.00	-272.58
-532.298 - -403.238	-470.78	-435.46	-532.30	-226.80	-1.83	-643.71

SAS Enterprise Miner Report

Node=Forward Regression Summary

Node id = Reg2
 Node label = Forward Regression
 Meta path = Ids => Part => Reg2
 Notes =

Node=Forward Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SIStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	FORWARD	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Forward Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

Node=Forward Regression Model Fit Statistics

Target=Profit Target Label=Profit

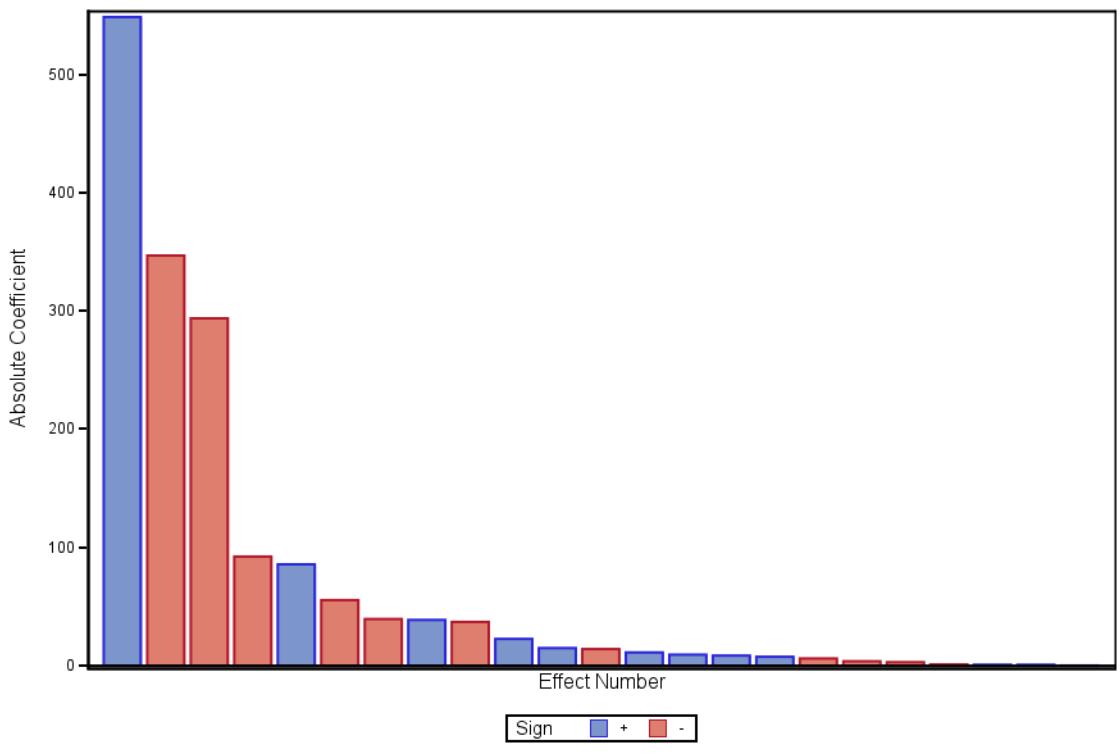
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	42371.47	.	.
Average Squared Error	39602.98	25514.60	44458.91
Average Error Function	39602.98	25514.60	44458.91
Degrees of Freedom for Error	3975.00	.	.
Model Degrees of Freedom	23.00	.	.
Total Degrees of Freedom	3998.00	.	.

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Divisor for ASE	3998.00	2998.00	2998.00
Error Function	158332733.16	76492785.68	133287819.04
Final Prediction Error	40061.28	.	.
Maximum Absolute Error	5626.07	4003.83	6922.75
Mean Square Error	39832.13	25514.60	44458.91
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	23.00	.	.
Root Average Sum of Squares	199.00	159.73	210.85
Root Final Prediction Error	200.15	.	.
Root Mean Squared Error	199.58	159.73	210.85
Schwarz's Bayesian Criterion	42516.22	.	.
Sum of Squared Errors	158332733.16	76492785.68	133287819.04
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Forward Regression
Regression Model Effects

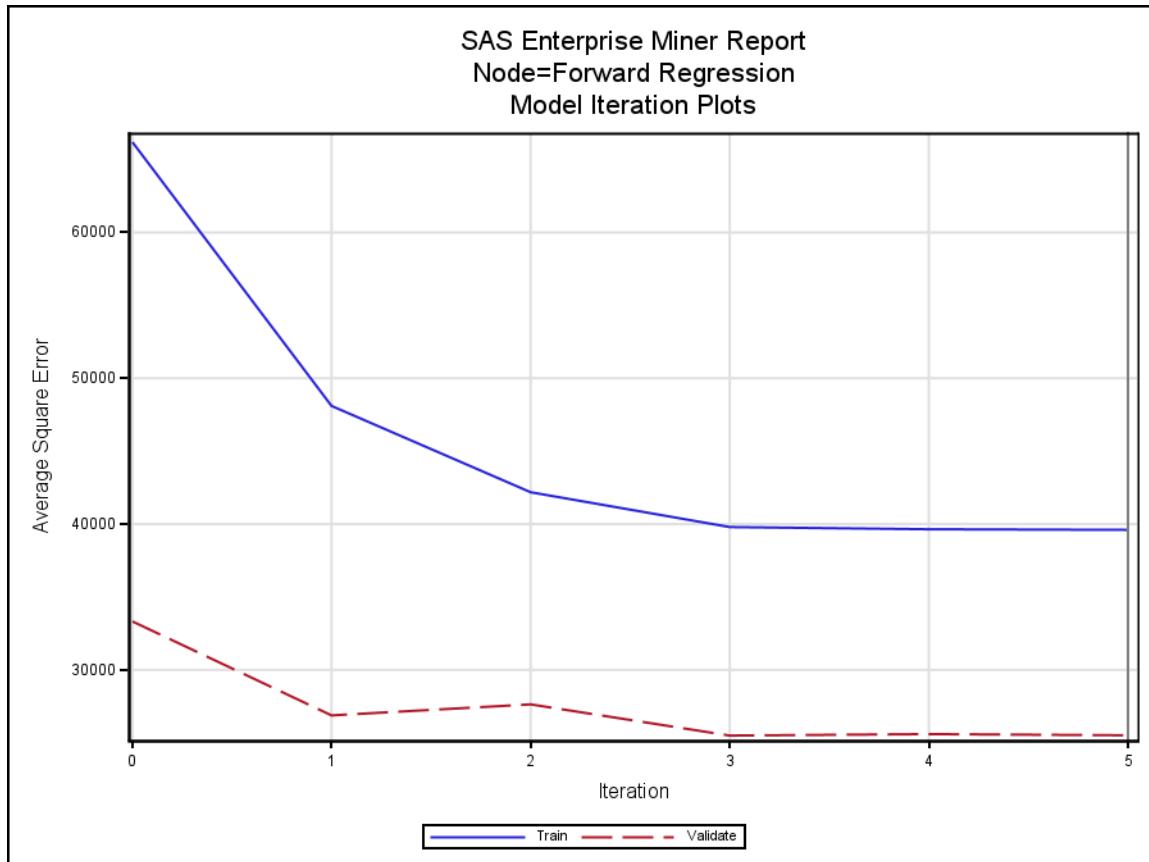


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	SubCategory	COPIERS	548.362	15.4817	0.00000	13	SubCategory	ENVELOPES	11.2350	0.5950	0.55189
2	SubCategory	MACHINES	-346.718	-12.5616	0.00000	14	SubCategory	ACCESSORIES	9.3582	0.8063	0.42013
3	Discount		-293.653	-15.7349	0.00000	15	SubCategory	FURNISHINGS	8.5792	0.8142	0.41556
4	SubCategory	BOOKCASES	-92.279	-4.5769	0.00000	16	SubCategory	PAPER	7.5830	0.7938	0.42735
5	SubCategory	BINDERS	85.723	8.6800	0.00000	17	SubCategory	PHONES	-6.1378	-0.5577	0.57710
6	SubCategory	SUPPLIES	-55.465	-2.6235	0.00874	18	Region	EAST	-3.7719	-0.7097	0.47795
7	SubCategory	CHAIRS	-39.500	-3.0577	0.00224	19	Quantity		-3.0089	-2.0233	0.04311
8	Intercept		38.738	5.0311	0.00000	20	SubCategory	ART	-1.0761	-0.0900	0.92825
9	SubCategory	STORAGE	-37.023	-3.3430	0.00084	21	SubCategory	LABELS	0.8747	0.0554	0.95579
10	Region	CENTRAL	22.664	3.8637	0.00011	22	SubCategory	FASTENERS	0.8544	0.0394	0.96858

SAS Enterprise Miner Report
Node=Forward Regression
Regression Model Effects

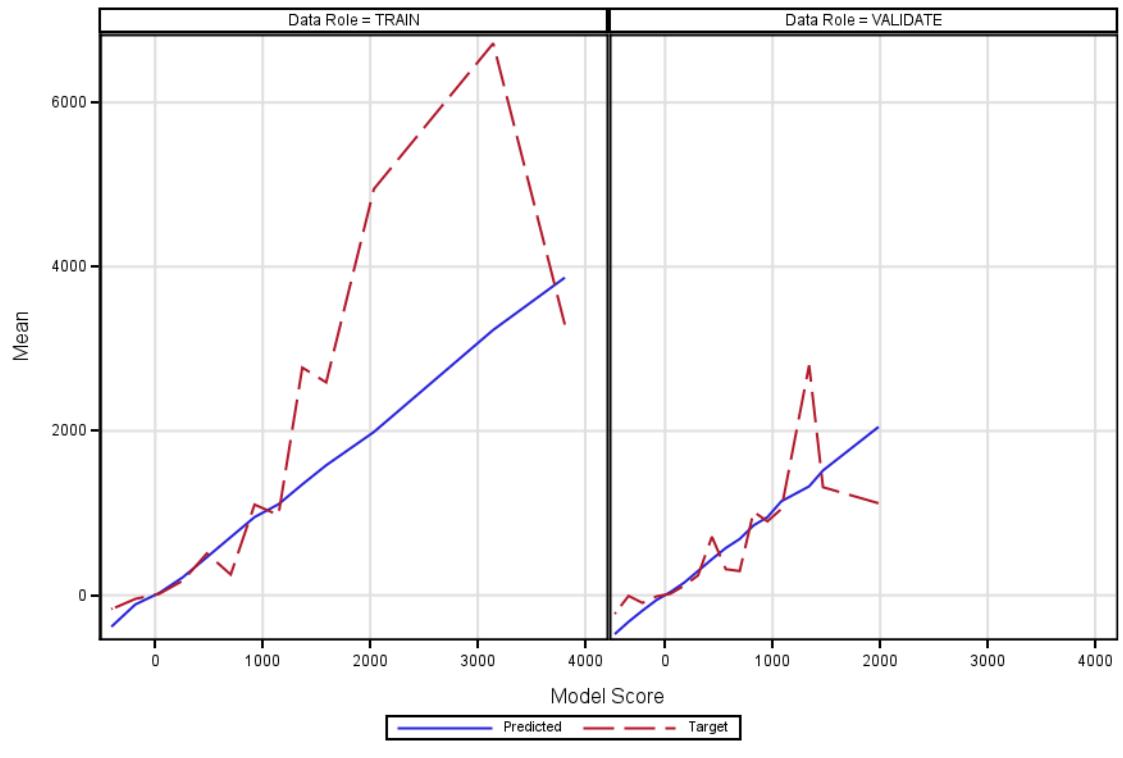
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Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
11	SubCategory	APPLIANCES	14.929	1.0341	0.30113	23	Sales		0.1900	38.1210	0.00000
12	Region	SOUTH	-14.095	-2.1867	0.02882



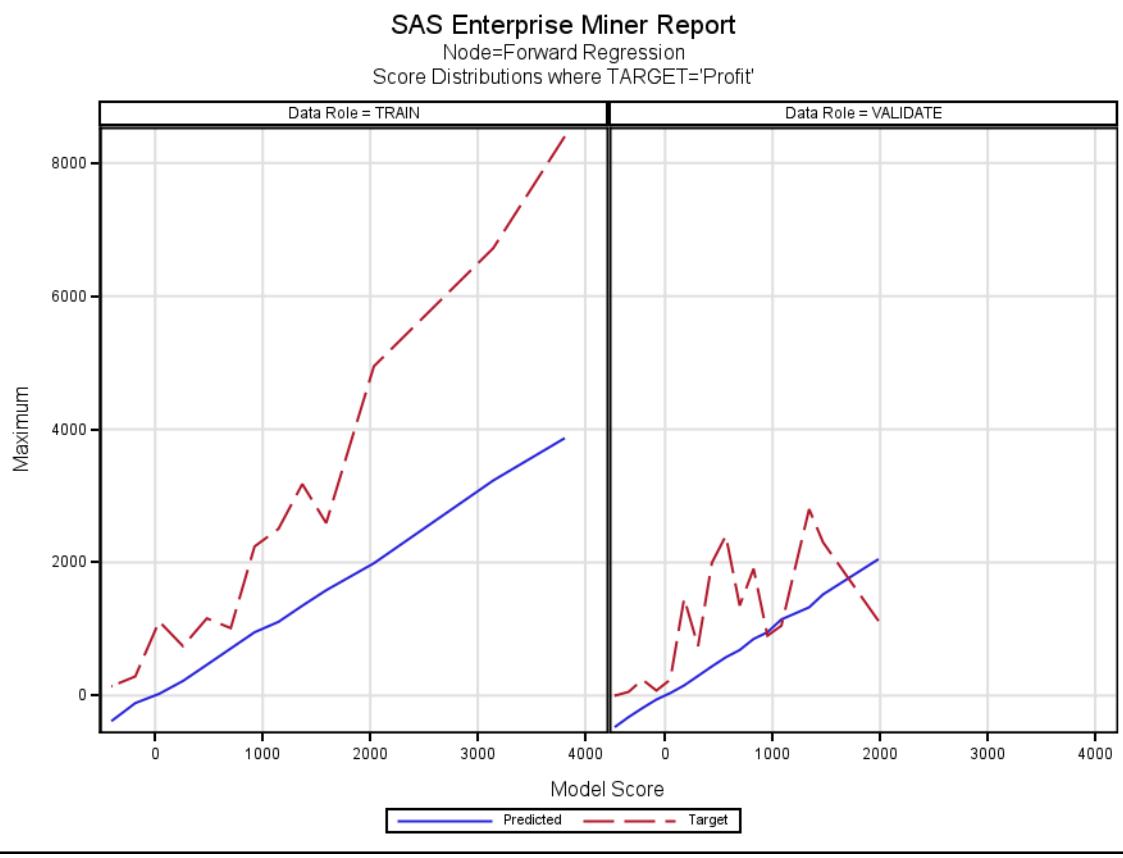
SAS Enterprise Miner Report

Node=Forward Regression
Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report

Node=Forward Regression
Score Distributions where TARGET='Profit'



Node=Forward Regression Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3698.294 - 3920.201	3867.60	3920.20	3814.99	3294.45	8399.98	-1811.08
3032.575 - 3254.482	3230.65	3230.65	3230.65	6719.98	6719.98	6719.98
1923.044 - 2144.950	1987.91	1987.91	1987.91	4946.37	4946.37	4946.37
1479.231 - 1701.137	1582.38	1582.38	1582.38	2591.96	2591.96	2591.96
1257.325 - 1479.231	1349.68	1396.43	1302.94	2771.73	3177.48	2365.98
1035.418 - 1257.325	1107.42	1169.59	1040.60	976.09	2504.22	-1359.99
813.512 - 1035.418	951.38	1006.40	913.87	1103.54	2239.99	569.99
591.606 - 813.512	707.55	812.63	605.75	252.00	1013.13	-1049.34
369.699 - 591.606	462.68	585.27	384.98	509.14	1159.99	-350.49
147.793 - 369.699	220.15	369.21	149.43	177.76	742.63	-1665.05
-74.114 - 147.793	26.33	147.65	-73.81	16.58	1114.51	-3399.98
-296.020 - -74.114	-112.88	-74.40	-284.33	-44.86	287.98	-2639.99
-517.926 - -296.020	-383.59	-298.42	-517.93	-170.36	139.99	-950.40

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1920.929 - 2050.062	2050.06	2050.06	2050.06	1120.00	1120.00	1120.00
1404.395 - 1533.529	1519.57	1519.83	1519.32	1315.24	2302.97	327.51
1275.262 - 1404.395	1325.62	1325.62	1325.62	2799.98	2799.98	2799.98
1016.995 - 1146.129	1144.00	1144.00	1144.00	1049.99	1049.99	1049.99
887.862 - 1016.995	951.34	951.34	951.34	899.98	899.98	899.98
758.729 - 887.862	850.50	877.53	805.34	1016.34	1906.49	449.99
629.595 - 758.729	684.81	742.57	632.59	294.28	1351.99	-786.01
500.462 - 629.595	575.24	615.47	515.97	316.75	2400.97	-1862.31
371.328 - 500.462	438.83	500.34	379.46	711.99	1995.99	239.91
242.195 - 371.328	295.26	361.95	242.80	241.30	742.63	-3701.89
113.062 - 242.195	152.87	239.60	113.18	116.12	1459.20	-2287.78
-16.072 - 113.062	38.02	112.82	-16.02	18.02	239.98	-1850.95
-145.205 - -16.072	-59.48	-16.14	-141.21	-14.74	75.74	-729.91
-274.338 - -145.205	-187.02	-146.13	-262.71	-93.45	239.99	-363.53
-403.472 - -274.338	-322.56	-276.29	-357.09	-7.94	56.00	-272.58
-532.605 - -403.472	-473.81	-437.69	-532.61	-226.80	-1.83	-643.71

SAS Enterprise Miner Report

Node=Backward Regression Summary

Node id = Reg3
 Node label = Backward Regression
 Meta path = Ids => Part => Reg3
 Notes =

Node=Backward Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SISStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	BACKWARD	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Backward Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

Node=Backward Regression Model Fit Statistics

Target=Profit Target Label=Profit

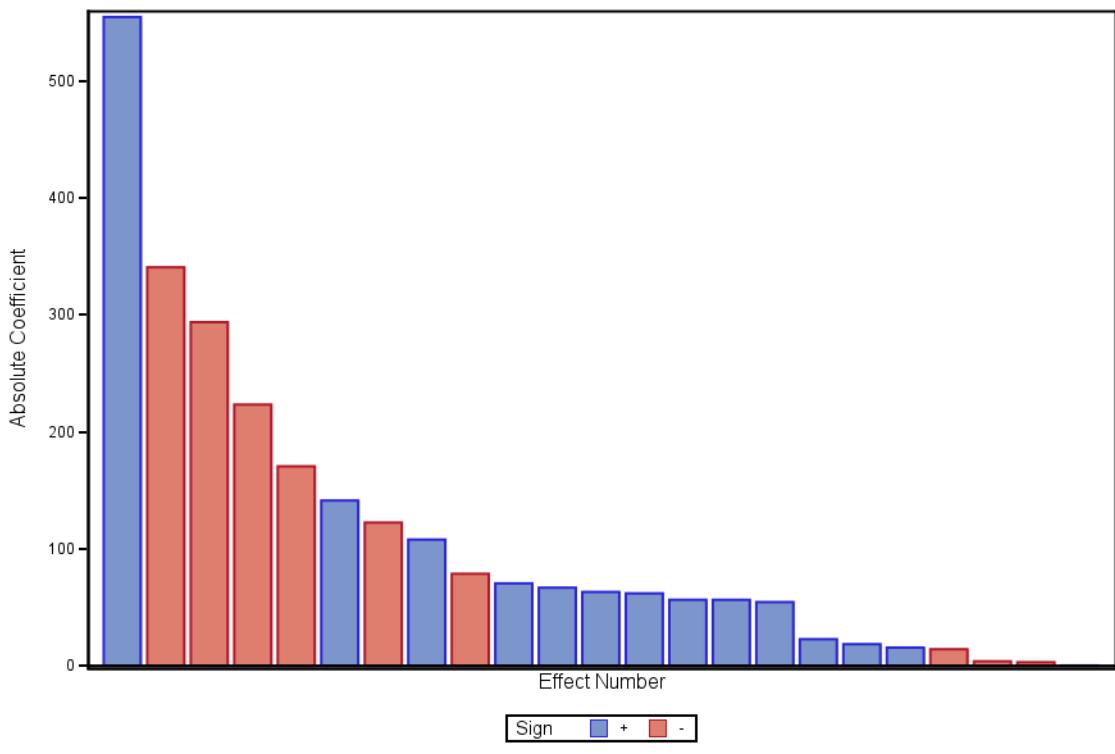
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	42371.47	.	.
Average Squared Error	39602.98	25514.60	44458.91
Average Error Function	39602.98	25514.60	44458.91
Degrees of Freedom for Error	3975.00	.	.
Model Degrees of Freedom	23.00	.	.
Total Degrees of Freedom	3998.00	.	.

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Divisor for ASE	3998.00	2998.00	2998.00
Error Function	158332733.16	76492785.68	133287819.04
Final Prediction Error	40061.28	.	.
Maximum Absolute Error	5626.07	4003.83	6922.75
Mean Square Error	39832.13	25514.60	44458.91
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	23.00	.	.
Root Average Sum of Squares	199.00	159.73	210.85
Root Final Prediction Error	200.15	.	.
Root Mean Squared Error	199.58	159.73	210.85
Schwarz's Bayesian Criterion	42516.22	.	.
Sum of Squared Errors	158332733.16	76492785.68	133287819.04
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Backward Regression
Regression Model Effects

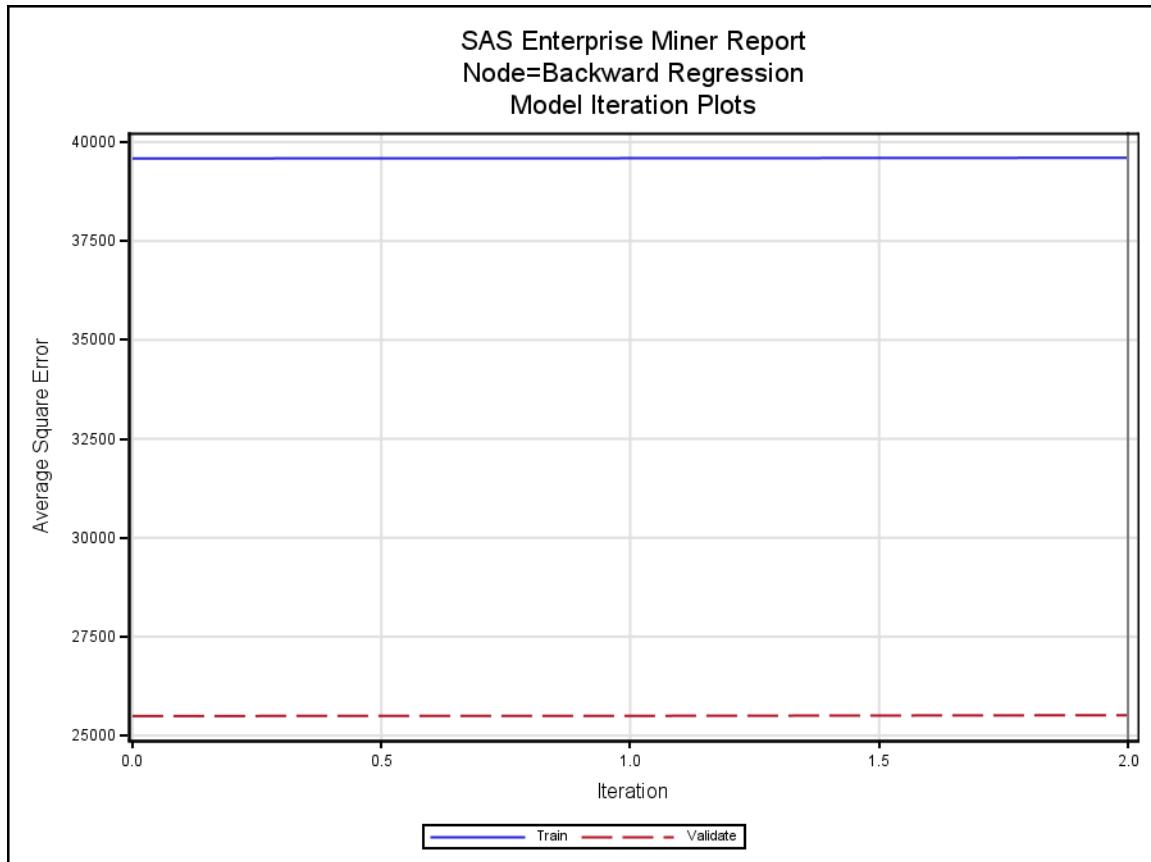


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	SubCategory	COPIERS	554.499	14.2782	0.000000	13	Intercept		61.8487	5.2595	0.000000
2	SubCategory	MACHINES	-340.580	-11.0209	0.000000	14	SubCategory	LABELS	56.3393	2.0789	0.03769
3	Discount		-293.653	-15.7349	0.000000	15	SubCategory	FASTENERS	56.3190	1.7929	0.07306
4	SubCategory	BOOKCASES	-223.212	-4.4390	0.000009	16	SubCategory	ART	54.3885	2.1933	0.02834
5	SubCategory	CHAIRS	-170.433	-3.4835	0.000500	17	Region	CENTRAL	22.6638	3.8637	0.00011
6	SubCategory	BINDERS	141.188	5.8597	0.000000	18	SubCategory	STORAGE	18.4412	0.7561	0.44963
7	SubCategory	FURNISHINGS	-122.354	-2.5062	0.012245	19	SubCategory	ACCESSORIES	15.4960	0.9897	0.32239
8	Category	FURNITURE	107.823	2.7234	0.006490	20	Region	SOUTH	-14.0945	-2.1867	0.02882
9	Category	OFFICE_SUPPLIES	-78.575	-2.6235	0.008736	21	Region	EAST	-3.7719	-0.7097	0.47795
10	SubCategory	APPLIANCES	70.394	2.6643	0.007746	22	Quantity		-3.0089	-2.0233	0.04311

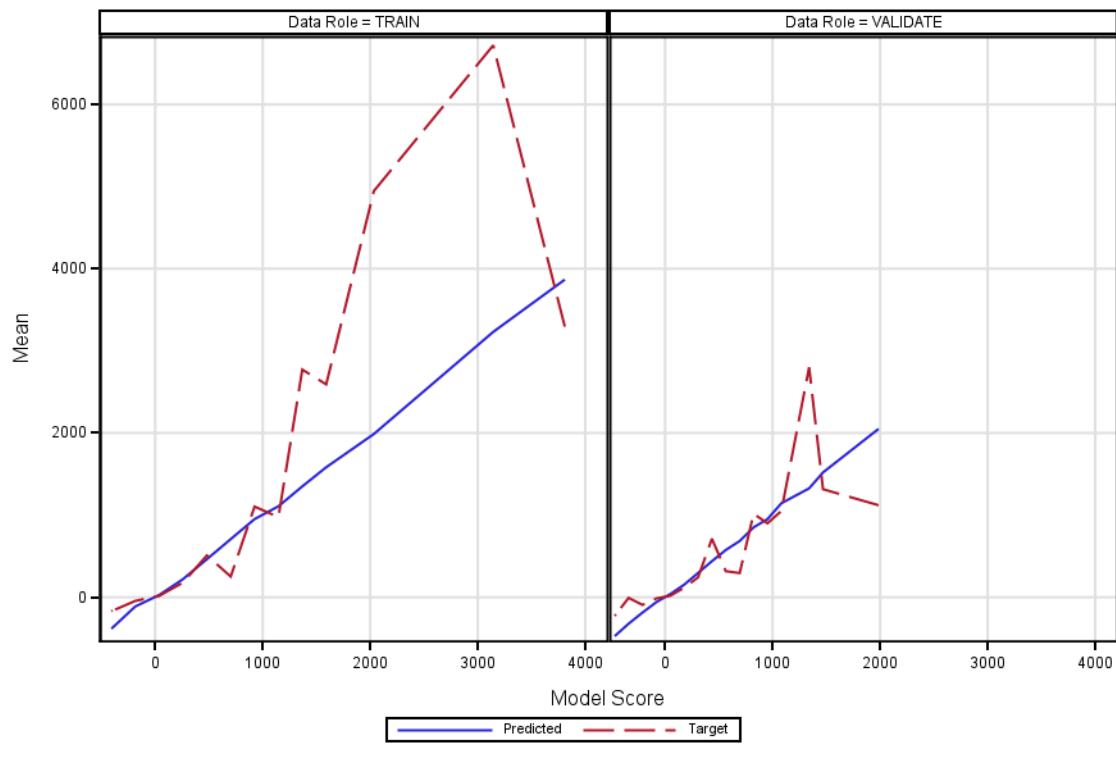
SAS Enterprise Miner Report
Node=Backward Regression
Regression Model Effects

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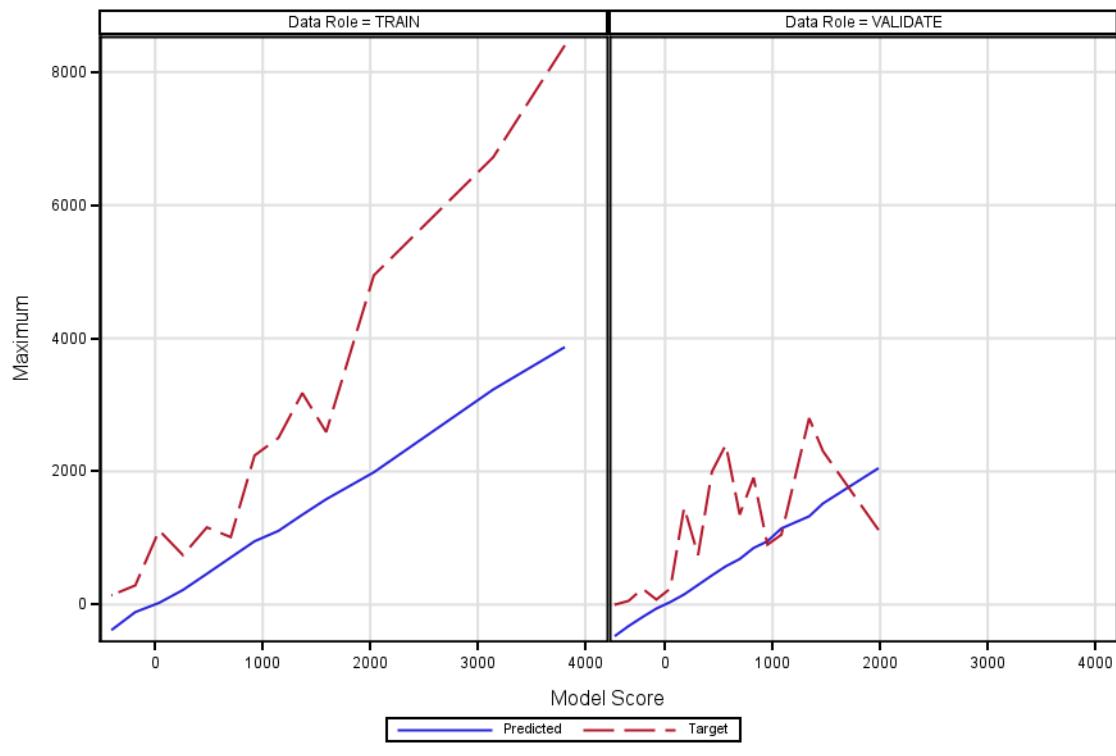
Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
11	SubCategory	ENVELOPES	66.700	2.2787	0.022740	23	Sales		0.1900	38.1210	0.00000
12	SubCategory	PAPER	63.048	2.6730	0.007547



SAS Enterprise Miner Report
 Node=Backward Regression
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=Backward Regression
 Score Distributions where TARGET='Profit'



Node=Backward Regression
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3698.294 - 3920.201	3867.60	3920.20	3814.99	3294.45	8399.98	-1811.08
3032.575 - 3254.482	3230.65	3230.65	3230.65	6719.98	6719.98	6719.98
1923.044 - 2144.950	1987.91	1987.91	1987.91	4946.37	4946.37	4946.37
1479.231 - 1701.137	1582.38	1582.38	1582.38	2591.96	2591.96	2591.96
1257.325 - 1479.231	1349.68	1396.43	1302.94	2771.73	3177.48	2365.98
1035.418 - 1257.325	1107.42	1169.59	1040.60	976.09	2504.22	-1359.99
813.512 - 1035.418	951.38	1006.40	913.87	1103.54	2239.99	569.99
591.606 - 813.512	707.55	812.63	605.75	252.00	1013.13	-1049.34
369.699 - 591.606	462.68	585.27	384.98	509.14	1159.99	-350.49
147.793 - 369.699	220.15	369.21	149.43	177.76	742.63	-1665.05
-74.114 - 147.793	26.33	147.65	-73.81	16.58	1114.51	-3399.98
-296.020 - -74.114	-112.88	-74.40	-284.33	-44.86	287.98	-2639.99
-517.926 - -296.020	-383.59	-298.42	-517.93	-170.36	139.99	-950.40

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1920.929 - 2050.062	2050.06	2050.06	2050.06	1120.00	1120.00	1120.00
1404.395 - 1533.529	1519.57	1519.83	1519.32	1315.24	2302.97	327.51
1275.262 - 1404.395	1325.62	1325.62	1325.62	2799.98	2799.98	2799.98
1016.995 - 1146.129	1144.00	1144.00	1144.00	1049.99	1049.99	1049.99
887.862 - 1016.995	951.34	951.34	951.34	899.98	899.98	899.98
758.729 - 887.862	850.50	877.53	805.34	1016.34	1906.49	449.99
629.595 - 758.729	684.81	742.57	632.59	294.28	1351.99	-786.01
500.462 - 629.595	575.24	615.47	515.97	316.75	2400.97	-1862.31
371.328 - 500.462	438.83	500.34	379.46	711.99	1995.99	239.91
242.195 - 371.328	295.26	361.95	242.80	241.30	742.63	-3701.89
113.062 - 242.195	152.87	239.60	113.18	116.12	1459.20	-2287.78
-16.072 - 113.062	38.02	112.82	-16.02	18.02	239.98	-1850.95
-145.205 - -16.072	-59.48	-16.14	-141.21	-14.74	75.74	-729.91
-274.338 - -145.205	-187.02	-146.13	-262.71	-93.45	239.99	-363.53
-403.472 - -274.338	-322.56	-276.29	-357.09	-7.94	56.00	-272.58
-532.605 - -403.472	-473.81	-437.69	-532.61	-226.80	-1.83	-643.71

SAS Enterprise Miner Report

Node=Stepwise Regression Summary

Node id = Reg4
 Node label = Stepwise Regression
 Meta path = Ids => Part => Reg4
 Notes =

Node=Stepwise Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SIStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	STEPWISE	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Stepwise Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
INPUT	INTERVAL	4	Discount Quantity Sales ShipDate
INPUT	NOMINAL	4	Category Region ShipMode SubCategory

Node=Stepwise Regression Model Fit Statistics

Target=Profit Target Label=Profit

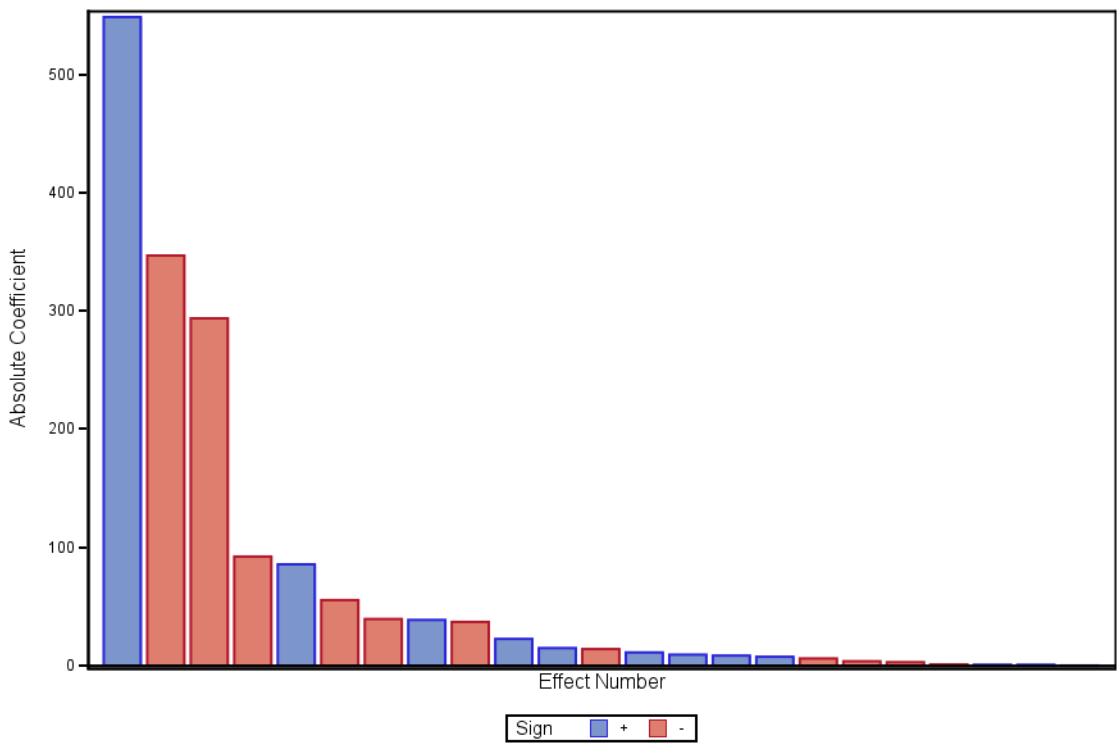
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	42371.47	.	.
Average Squared Error	39602.98	25514.60	44458.91
Average Error Function	39602.98	25514.60	44458.91
Degrees of Freedom for Error	3975.00	.	.
Model Degrees of Freedom	23.00	.	.
Total Degrees of Freedom	3998.00	.	.

Target=Profit Target Label=Profit

Label of Statistic	Train	Validation	Test
Divisor for ASE	3998.00	2998.00	2998.00
Error Function	158332733.16	76492785.68	133287819.04
Final Prediction Error	40061.28	.	.
Maximum Absolute Error	5626.07	4003.83	6922.75
Mean Square Error	39832.13	25514.60	44458.91
Sum of Frequencies	3998.00	2998.00	2998.00
Number of Estimate Weights	23.00	.	.
Root Average Sum of Squares	199.00	159.73	210.85
Root Final Prediction Error	200.15	.	.
Root Mean Squared Error	199.58	159.73	210.85
Schwarz's Bayesian Criterion	42516.22	.	.
Sum of Squared Errors	158332733.16	76492785.68	133287819.04
Sum of Case Weights Times Freq	3998.00	2998.00	2998.00

SAS Enterprise Miner Report

Node=Stepwise Regression
Regression Model Effects

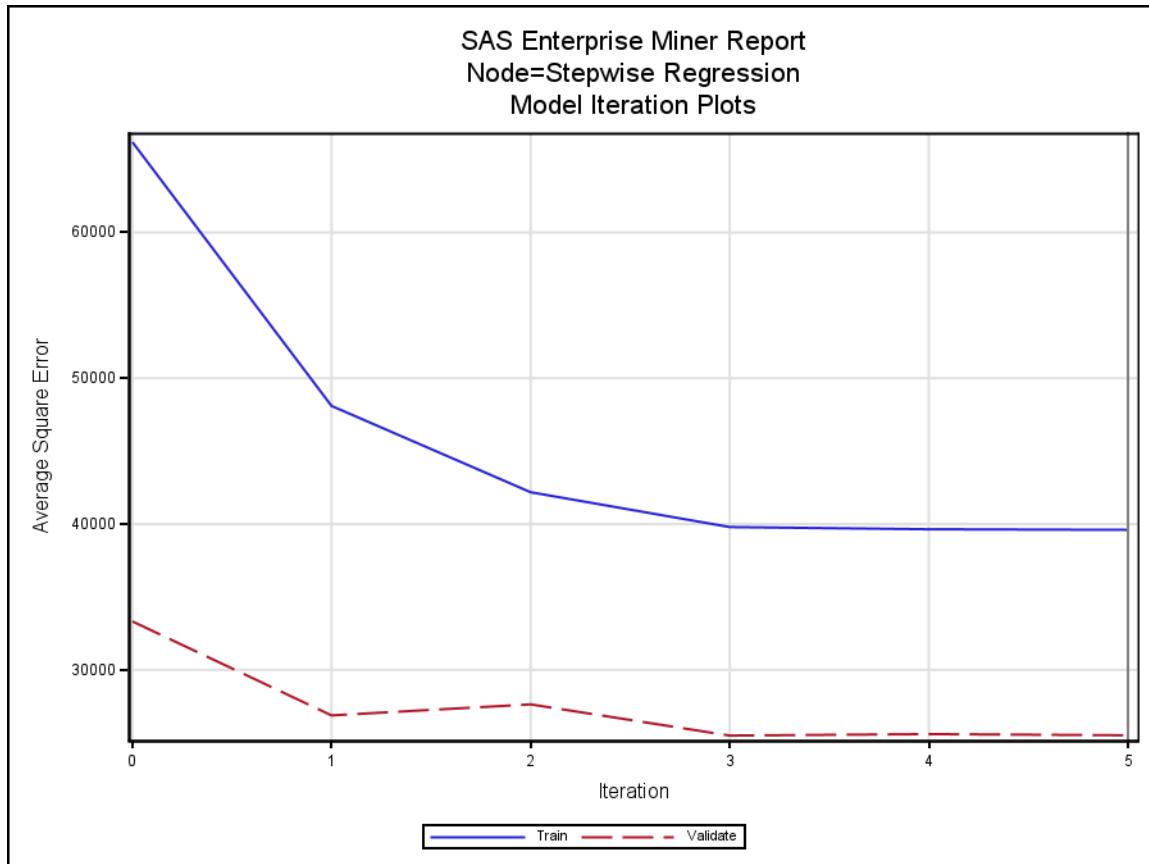


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	SubCategory	COPIERS	548.362	15.4817	0.00000	13	SubCategory	ENVELOPES	11.2350	0.5950	0.55189
2	SubCategory	MACHINES	-346.718	-12.5616	0.00000	14	SubCategory	ACCESSORIES	9.3582	0.8063	0.42013
3	Discount		-293.653	-15.7349	0.00000	15	SubCategory	FURNISHINGS	8.5792	0.8142	0.41556
4	SubCategory	BOOKCASES	-92.279	-4.5769	0.00000	16	SubCategory	PAPER	7.5830	0.7938	0.42735
5	SubCategory	BINDERS	85.723	8.6800	0.00000	17	SubCategory	PHONES	-6.1378	-0.5577	0.57710
6	SubCategory	SUPPLIES	-55.465	-2.6235	0.00874	18	Region	EAST	-3.7719	-0.7097	0.47795
7	SubCategory	CHAIRS	-39.500	-3.0577	0.00224	19	Quantity		-3.0089	-2.0233	0.04311
8	Intercept		38.738	5.0311	0.00000	20	SubCategory	ART	-1.0761	-0.0900	0.92825
9	SubCategory	STORAGE	-37.023	-3.3430	0.00084	21	SubCategory	LABELS	0.8747	0.0554	0.95579
10	Region	CENTRAL	22.664	3.8637	0.00011	22	SubCategory	FASTENERS	0.8544	0.0394	0.96858

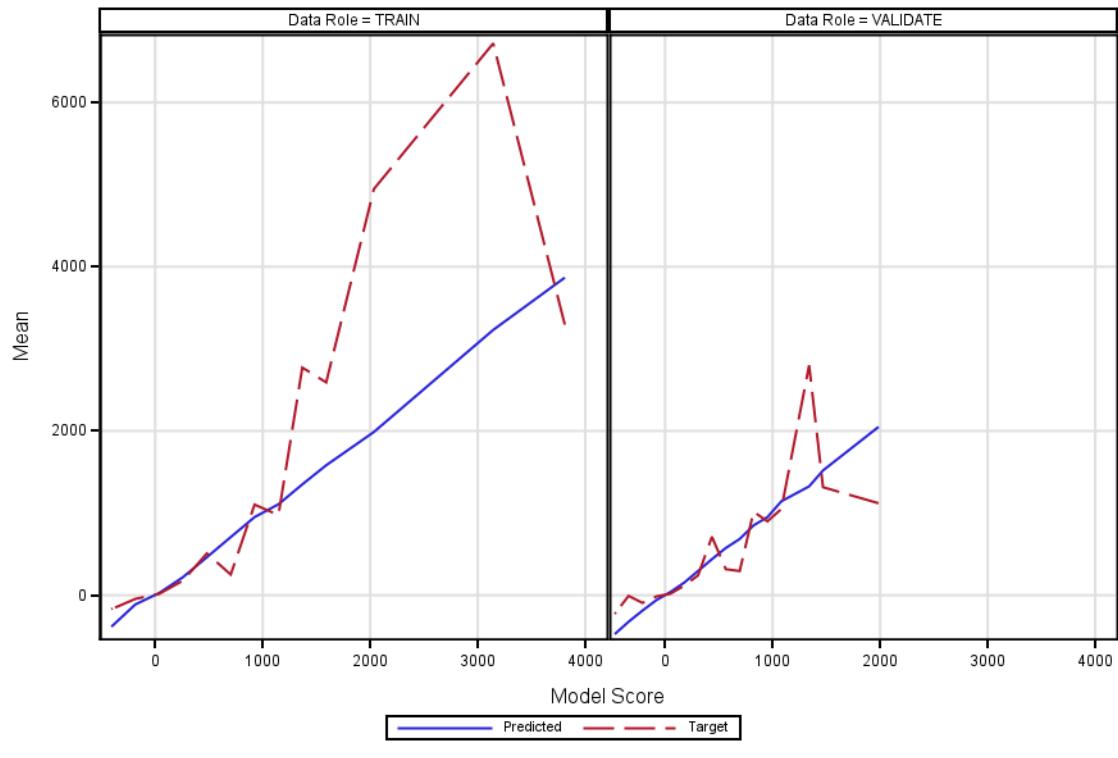
SAS Enterprise Miner Report
Node=Stepwise Regression
Regression Model Effects

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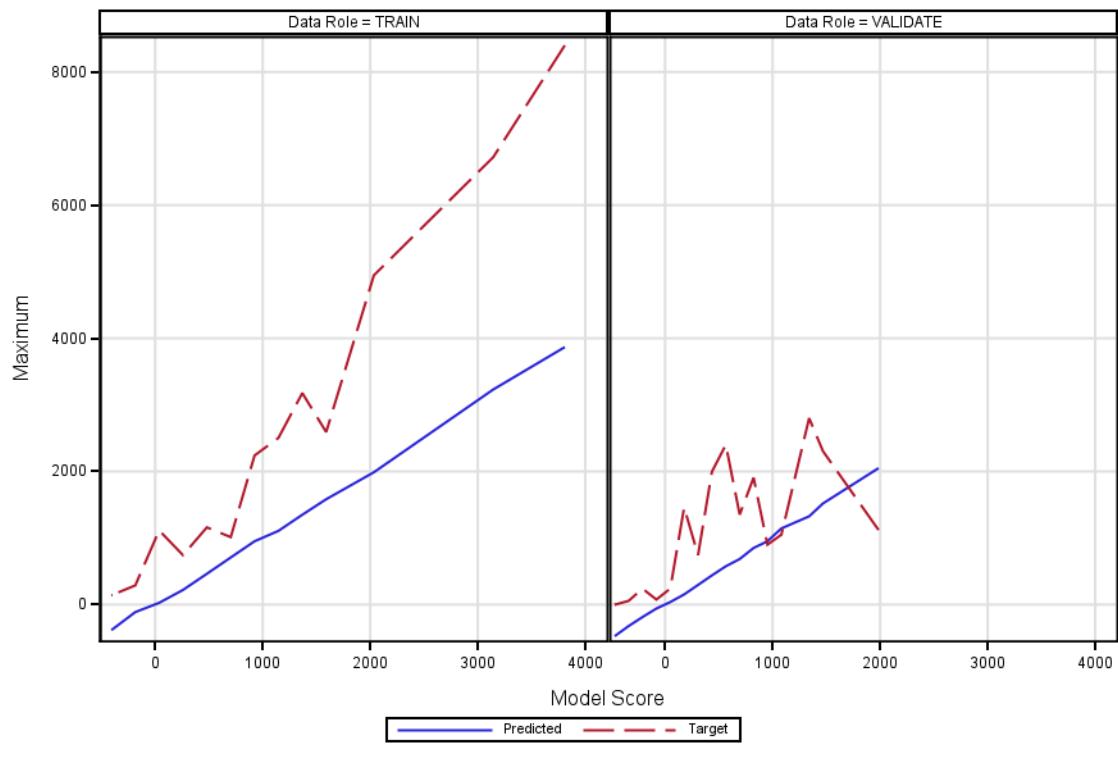
Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
11	SubCategory	APPLIANCES	14.929	1.0341	0.30113	23	Sales		0.1900	38.1210	0.00000
12	Region	SOUTH	-14.095	-2.1867	0.02882



SAS Enterprise Miner Report
 Node=Stepwise Regression
 Score Distributions where TARGET='Profit'



SAS Enterprise Miner Report
 Node=Stepwise Regression
 Score Distributions where TARGET='Profit'



Node=Stepwise Regression
Score Distributions

Target Variable=Profit Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
3698.294 - 3920.201	3867.60	3920.20	3814.99	3294.45	8399.98	-1811.08
3032.575 - 3254.482	3230.65	3230.65	3230.65	6719.98	6719.98	6719.98
1923.044 - 2144.950	1987.91	1987.91	1987.91	4946.37	4946.37	4946.37
1479.231 - 1701.137	1582.38	1582.38	1582.38	2591.96	2591.96	2591.96
1257.325 - 1479.231	1349.68	1396.43	1302.94	2771.73	3177.48	2365.98
1035.418 - 1257.325	1107.42	1169.59	1040.60	976.09	2504.22	-1359.99
813.512 - 1035.418	951.38	1006.40	913.87	1103.54	2239.99	569.99
591.606 - 813.512	707.55	812.63	605.75	252.00	1013.13	-1049.34
369.699 - 591.606	462.68	585.27	384.98	509.14	1159.99	-350.49
147.793 - 369.699	220.15	369.21	149.43	177.76	742.63	-1665.05
-74.114 - 147.793	26.33	147.65	-73.81	16.58	1114.51	-3399.98
-296.020 - -74.114	-112.88	-74.40	-284.33	-44.86	287.98	-2639.99
-517.926 - -296.020	-383.59	-298.42	-517.93	-170.36	139.99	-950.40

Target Variable=Profit Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
1920.929 - 2050.062	2050.06	2050.06	2050.06	1120.00	1120.00	1120.00
1404.395 - 1533.529	1519.57	1519.83	1519.32	1315.24	2302.97	327.51
1275.262 - 1404.395	1325.62	1325.62	1325.62	2799.98	2799.98	2799.98
1016.995 - 1146.129	1144.00	1144.00	1144.00	1049.99	1049.99	1049.99
887.862 - 1016.995	951.34	951.34	951.34	899.98	899.98	899.98
758.729 - 887.862	850.50	877.53	805.34	1016.34	1906.49	449.99
629.595 - 758.729	684.81	742.57	632.59	294.28	1351.99	-786.01
500.462 - 629.595	575.24	615.47	515.97	316.75	2400.97	-1862.31
371.328 - 500.462	438.83	500.34	379.46	711.99	1995.99	239.91
242.195 - 371.328	295.26	361.95	242.80	241.30	742.63	-3701.89
113.062 - 242.195	152.87	239.60	113.18	116.12	1459.20	-2287.78
-16.072 - 113.062	38.02	112.82	-16.02	18.02	239.98	-1850.95
-145.205 - -16.072	-59.48	-16.14	-141.21	-14.74	75.74	-729.91
-274.338 - -145.205	-187.02	-146.13	-262.71	-93.45	239.99	-363.53
-403.472 - -274.338	-322.56	-276.29	-357.09	-7.94	56.00	-272.58
-532.605 - -403.472	-473.81	-437.69	-532.61	-226.80	-1.83	-643.71

SAS Enterprise Miner Report

Node=NeuralNet ModelComparison Summary

Node id = MdlComp4
 Node label = NeuralNet ModelComparison
 Meta path = Ids => Part => Neural2 => MdlComp4
 Notes =

Node=NeuralNet ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	NeuralNet 5HU		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Neural2		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=NeuralNet ModelComparison Variable Summary

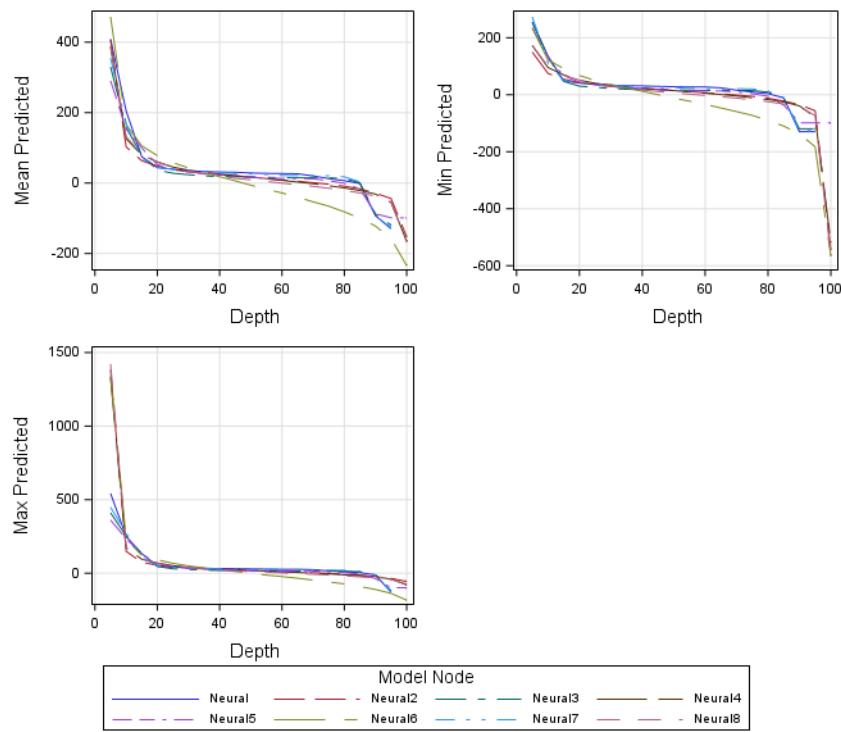
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=NeuralNet ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Neural2	Neural2	NeuralNet 5HU	Profit	Profit	15422.95	34287.98
	Neural4	Neural4	NeuralNet 5HUBD	Profit	Profit	16383.24	36889.30
	Neural8	Neural8	NeuralNet 5HURP	Profit	Profit	18071.59	37141.91
	Neural7	Neural7	NeuralNet 3HURP	Profit	Profit	23901.11	53546.98
	Neural3	Neural3	NeuralNet 3HUBD	Profit	Profit	24197.01	53877.90
	Neural	Neural	NeuralNet 3HU	Profit	Profit	24227.79	53161.50
	Neural5	Neural5	NeuralNet 3HUBP	Profit	Profit	24495.04	55124.15
	Neural6	Neural6	NeuralNet 5HUBP	Profit	Profit	28746.34	52284.74

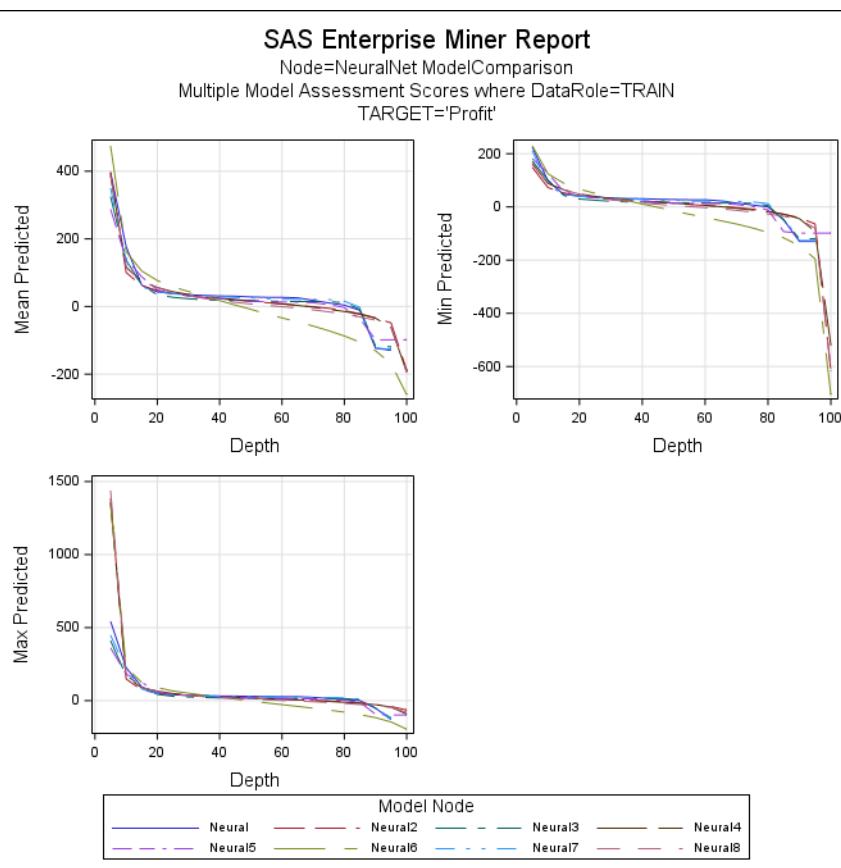
SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



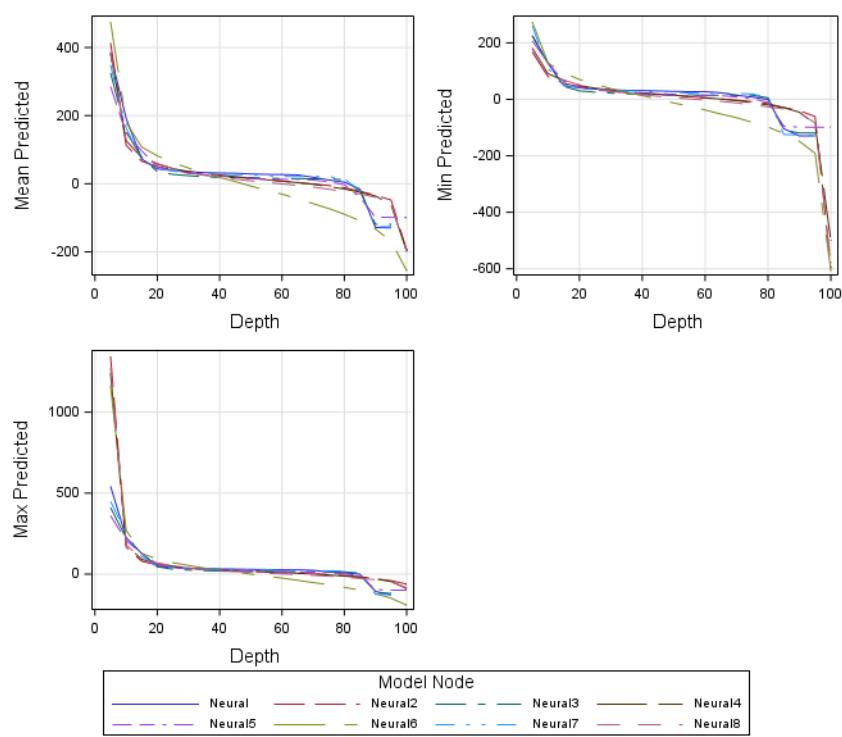
SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=NeuralNet ModelComparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree ModelComparison Summary

Node id = MdlComp
 Node label = RegTree ModelComparison
 Meta path = Ids => Part => Tree4 => MdlComp
 Notes =

Node=RegTree ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	RegTree B3D6		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Tree4		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=RegTree ModelComparison Variable Summary

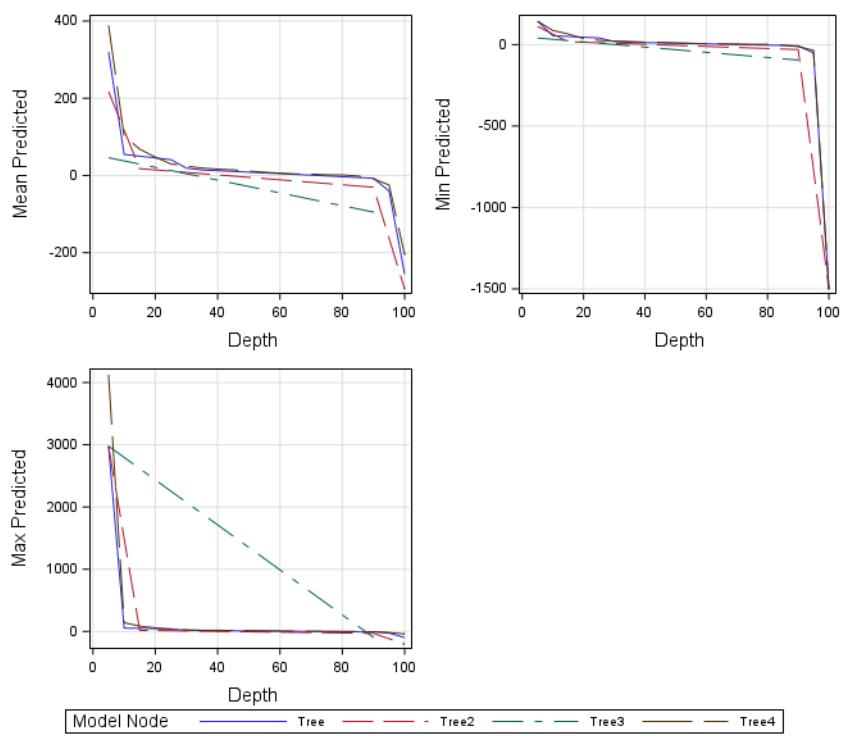
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=RegTree ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Tree4	Tree4	RegTree B3D6	Profit	Profit	13503.58	24358.44
	Tree	Tree	RegTree B2D6	Profit	Profit	14561.28	27002.76
	Tree2	Tree2	RegTree B2D4	Profit	Profit	19903.62	30625.30
	Tree3	Tree3	RegTree B2D2	Profit	Profit	31671.56	42174.26

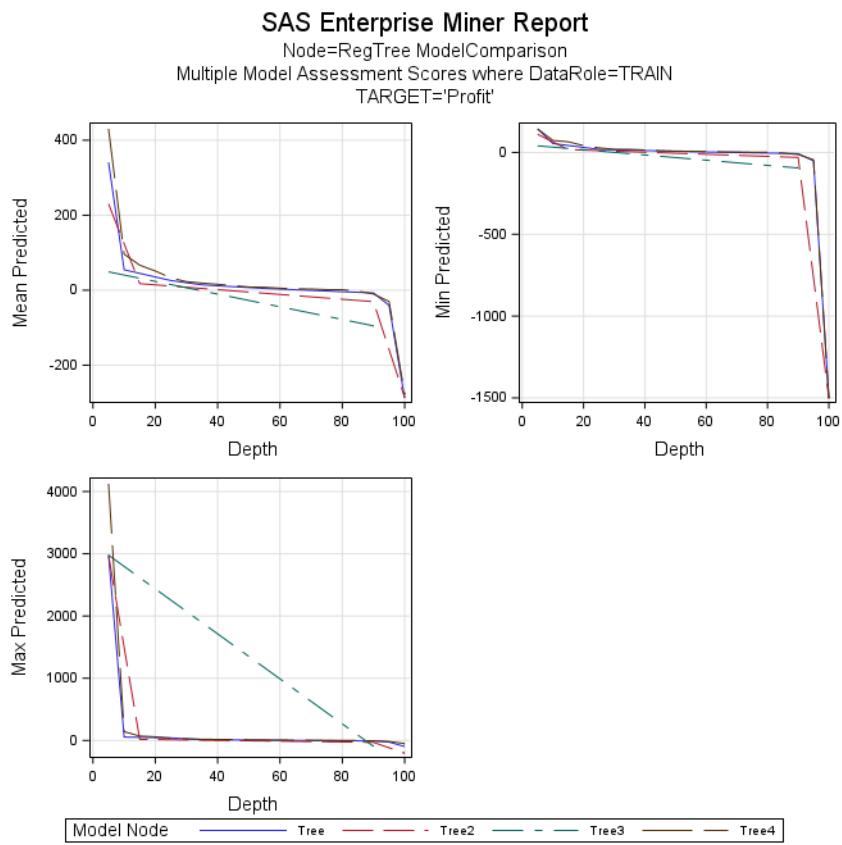
SAS Enterprise Miner Report

Node=RegTree ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



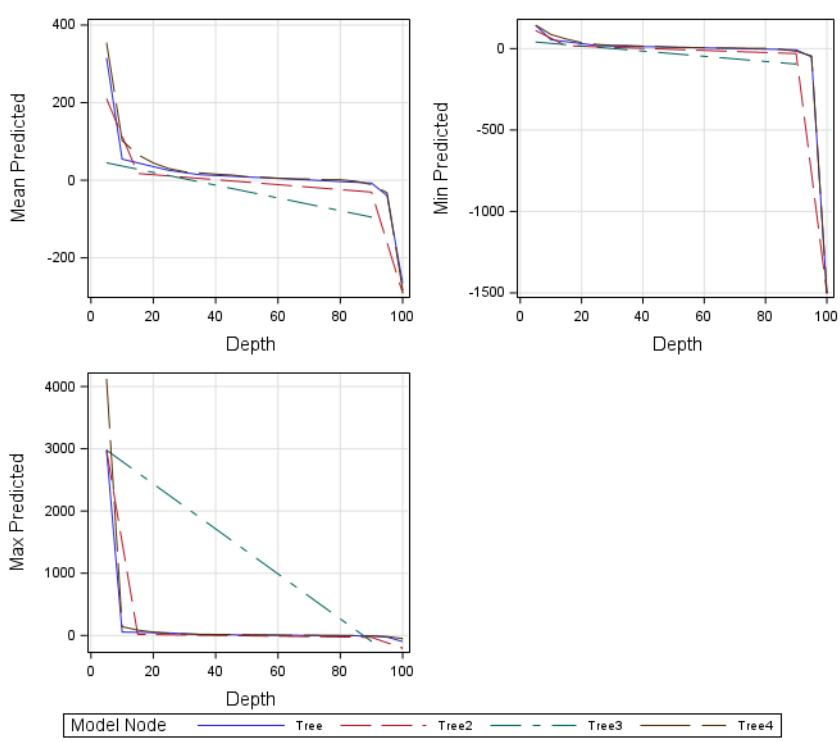
SAS Enterprise Miner Report

Node=RegTree ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=RegTree ModelComparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=MLR ModelComparison Summary

Node id = MdlComp2
 Node label = MLR ModelComparison
 Meta path = Ids => Part => Reg => MdlComp2
 Notes =

Node=MLR ModelComparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	Exhaustive Regression		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Reg		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=MLR ModelComparison Variable Summary

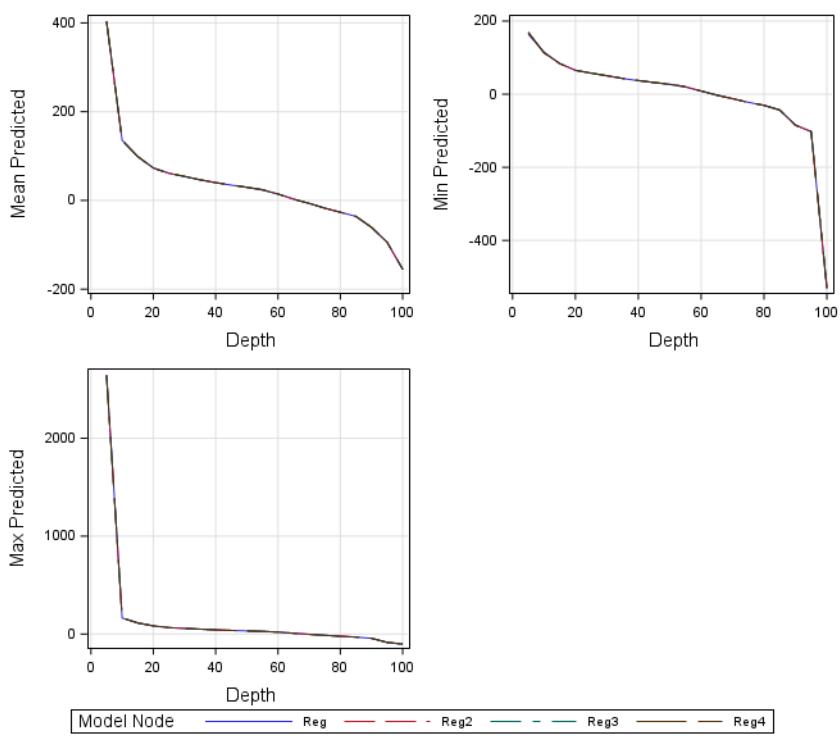
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=MLR ModelComparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	Reg	Reg	Exhaustive Regression	Profit	Profit	25494.38	39586.91
	Reg3	Reg3	Backward Regression	Profit	Profit	25514.60	39602.98
	Reg2	Reg2	Forward Regression	Profit	Profit	25514.60	39602.98
	Reg4	Reg4	Stepwise Regression	Profit	Profit	25514.60	39602.98

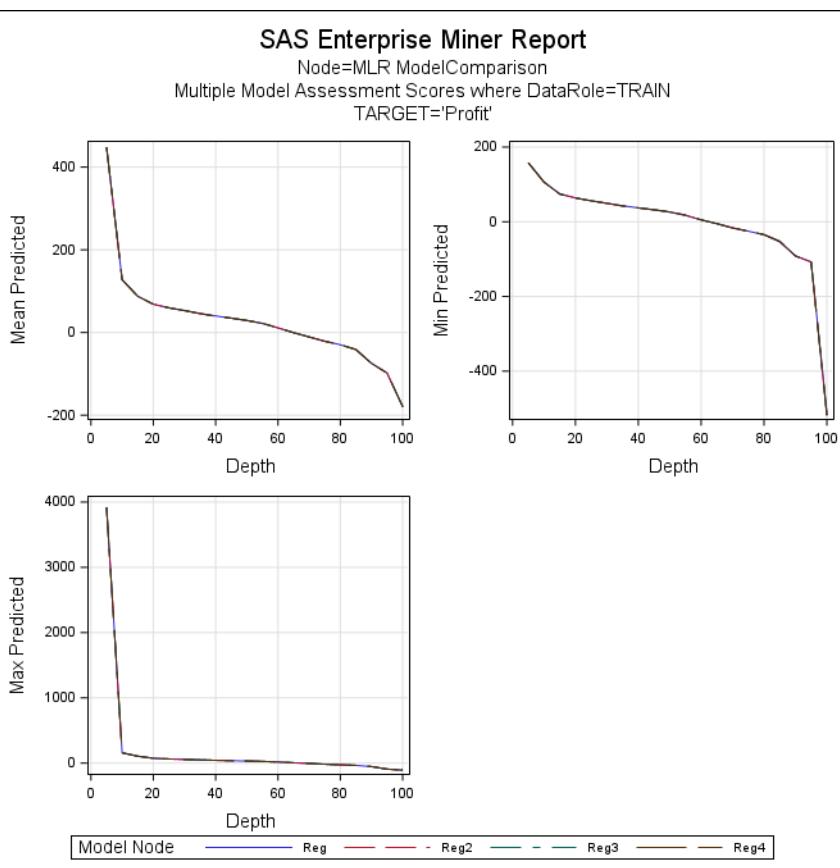
SAS Enterprise Miner Report

Node=MLR ModelComparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



SAS Enterprise Miner Report

Node=MLR ModelComparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'

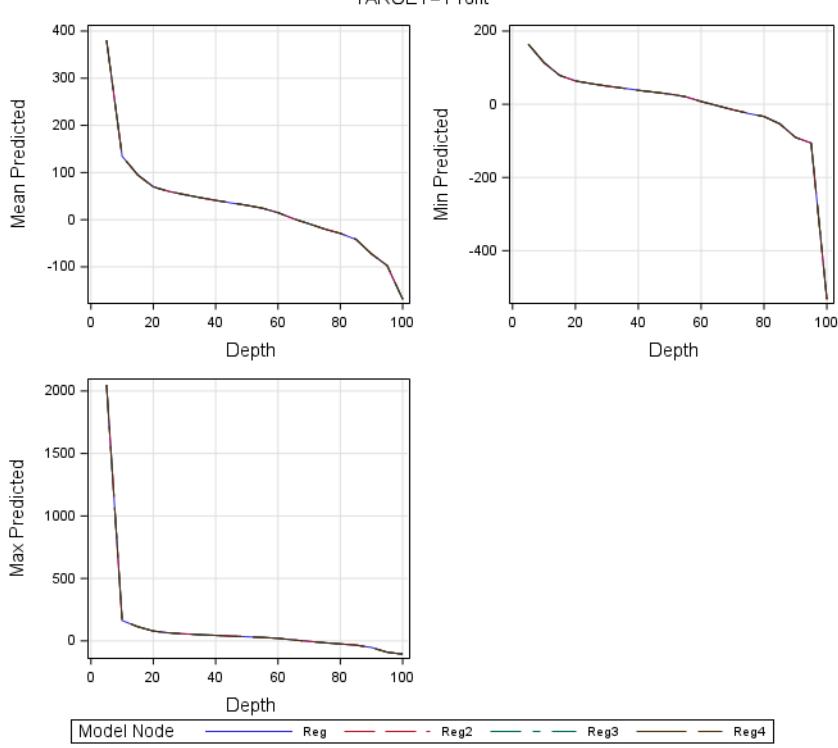


SAS Enterprise Miner Report

Node=MLR ModelComparison

Multiple Model Assessment Scores where DataRole=VALIDATE

TARGET='Profit'



SAS Enterprise Miner Report

Node=SCORE SUPERSTORE Summary

Node id = lds2
 Node label = SCORE SUPERSTORE
 Meta path = lds2
 Notes =

Node=SCORE SUPERSTORE Properties

Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	tbold4	
ApplyIntervalLevelLowerLimit	Y		DsId	scoresuperstore	
ApplyMaxClassLevels	Y		DsModifiedBy	tbold4	
ApplyMaxPercentMissing	Y		DsModifyDate	1998957436.4	
CMeta	WORK.M372CE1W		DsSampleName		
ComputeStatistics	N		DsSampleSize		
DBPassThrough	Y		DsSampleSizeType		
Data	STDATA.SUPERSTORESCORE_TRAIN		DsScope	LOCAL	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y	
DataSource	scoresuperstore		IntervalLowerLimit	20	
DataSourceRole	RAW		Library	STDATA	
Description			MaxClassLevels	20	
DropMapVariables	Y		MaxPercentMissing	50	
DsCreateDate	1998957425.1		MetaAdvisor	BASIC	

Property	Value	Default
NBytes	787456	.
NCols	22	.
NObs	1999	.
NewTable		
NewVariableRole	REJECT	
OutputType	VIEW	
Role	SCORE	TRAIN
Sample	D	
SampleSizeObs	10000	
SampleSizePercent	20	
SampleSizeType	PERCENT	
Scope	LOCAL	
Segment		
Table	SUPERSTORESCORE_TRAIN	

Node=SCORE SUPERSTORE Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	SUPERSTORESCORE_TRAIN	Date Created	04May2023:10:34:48	Data Size	787456
Data Type	DATA	Date Modified	04May2023:10:34:48	Role	RAW
Data Label		Number Rows	1999	Segment	
Engine	BASE	Number Columns	22	Data Library	STDATA

Node=SCORE SUPERSTORE

Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Category	Category	INPUT	NOMINAL	C	15	\$15.	
City	City	INPUT	NOMINAL	C	17	\$17.	
Country	Country	INPUT	NOMINAL	C	13	\$13.	
CustomerID	CustomerID	INPUT	NOMINAL	C	8	\$8.	
CustomerName	CustomerName	INPUT	NOMINAL	C	22	\$22.	
Discount	Discount	INPUT	INTERVAL	N	8	BEST.	
OrderDate	OrderDate	TIMEID	INTERVAL	N	8	MMDDYY10.0	
OrderID	OrderID	INPUT	NOMINAL	C	14	\$14.	
PostalCode	PostalCode	INPUT	INTERVAL	N	8	BEST.	
ProductID	ProductID	INPUT	NOMINAL	C	15	\$15.	
ProductName	ProductName	TEXT	NOMINAL	C	127	\$127.	
Profit	Profit	INPUT	INTERVAL	N	8	BEST.	
Quantity	Quantity	INPUT	INTERVAL	N	8	BEST.	
Region	Region	INPUT	NOMINAL	C	7	\$7.	
RowID	RowID	INPUT	INTERVAL	N	8	BEST.	
Sales	Sales	INPUT	INTERVAL	N	8	BEST.	
Segment	Segment	SEGMENT	NOMINAL	C	11	\$11.	
ShipDate	ShipDate	TIMEID	INTERVAL	N	8	MMDDYY10.0	
ShipMode	ShipMode	INPUT	NOMINAL	C	14	\$14.	
State	State	INPUT	NOMINAL	C	20	\$20.	
SubCategory	SubCategory	INPUT	NOMINAL	C	11	\$11.	
dataobs	Observation Number	INPUT	INTERVAL	N	8		

SAS Enterprise Miner Report

Node=Predict Model Comparison Summary

Node id = MdlComp3
 Node label = Predict Model Comparison
 Meta path = Ids => Part => Tree4 => MdlComp => MdlComp3
 Notes =

Node=Predict Model Comparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel	Profit	
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Profit	
ModelDescription	RegTree B3D6		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Tree4		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

Node=Predict Model Comparison Variable Summary

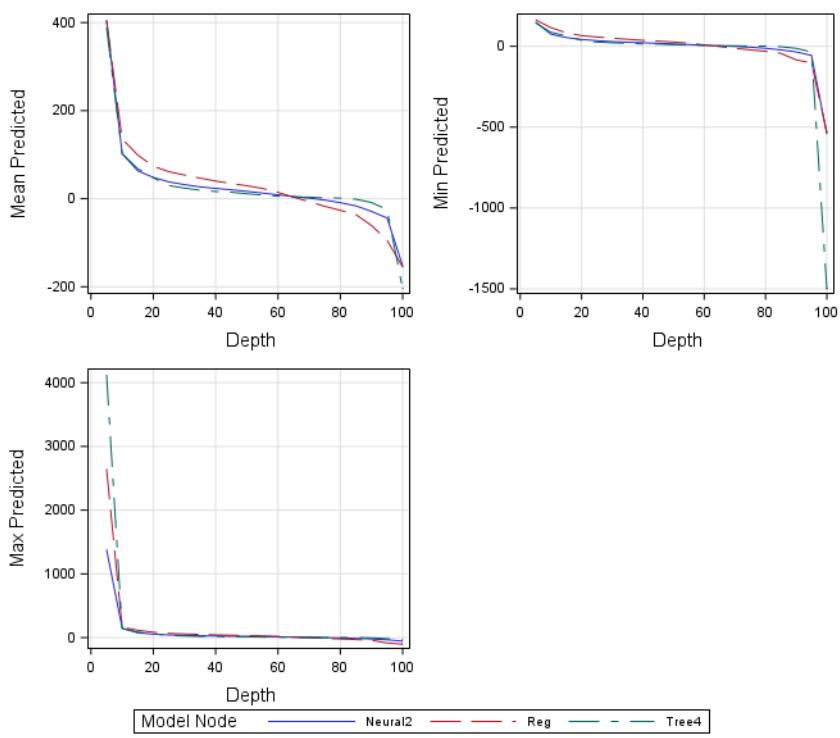
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit

Node=Predict Model Comparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Valid: Average Squared Error	Train: Average Squared Error
Y	MdlComp	Tree4	RegTree B3D6	Profit	Profit	13503.58	24358.44
	MdlComp4	Neural2	NeuralNet 5HU	Profit	Profit	15422.95	34287.98
	MdlComp2	Reg	Exhaustive Regression	Profit	Profit	25494.38	39586.91

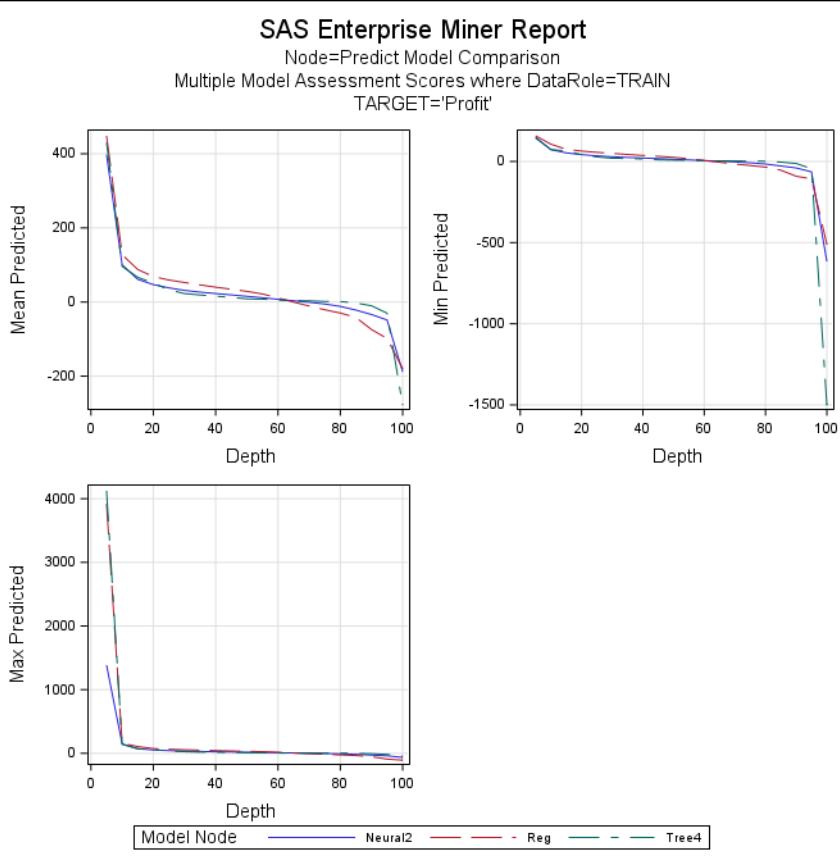
SAS Enterprise Miner Report

Node=Predict Model Comparison
 Multiple Model Assessment Scores where DataRole=TEST
 TARGET='Profit'



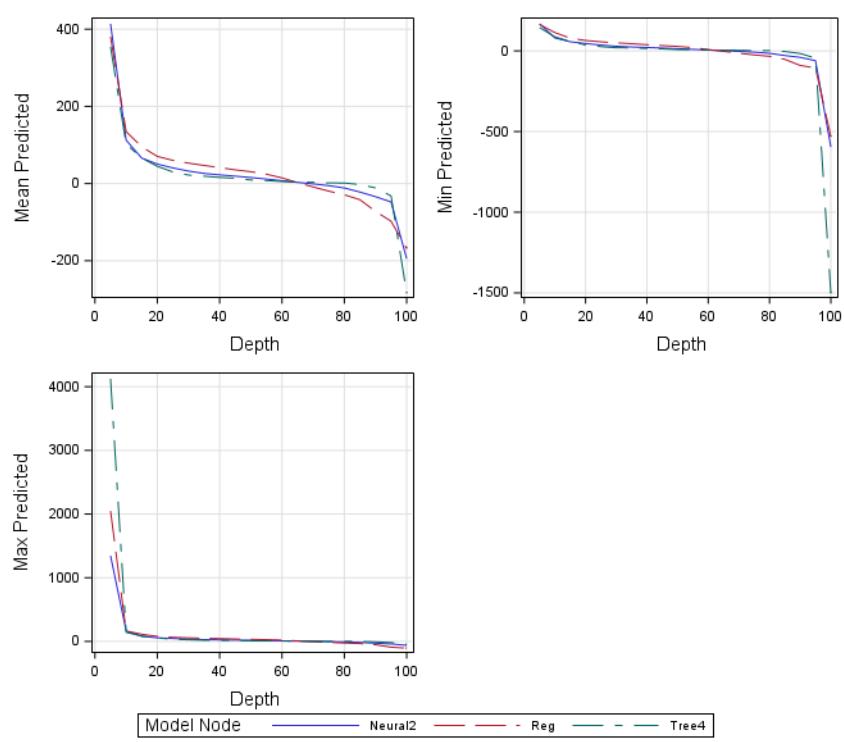
SAS Enterprise Miner Report

Node=Predict Model Comparison
 Multiple Model Assessment Scores where DataRole=TRAIN
 TARGET='Profit'



SAS Enterprise Miner Report

Node=Predict Model Comparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Profit'



SAS Enterprise Miner Report

Node=Score Summary

Node id = Score
 Node label = Score
 Meta path = Ids => Part => Tree4 => MdlComp => MdlComp3 => Score
 Notes =

Node=Score Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Score		HideInput	Y		JScore	N	
CScore	N		HideOther	Y		OptimizedCode	Y	
FixedOutputNames	Y		HidePredict	Y		OutputType	VIEW	
GraphReports	Y		HideRejected	Y		PackageName	DEFAULT	
HideAssess	Y		HideResidual	Y		PreferenceName		
HideClassification	Y		HideTarget	Y		ScoreTest	N	
HideFreq	Y		HideVariables	N		ScoreValidate	N	

Node=Score Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Profit
SEGMENT	NOMINAL	1	Segment

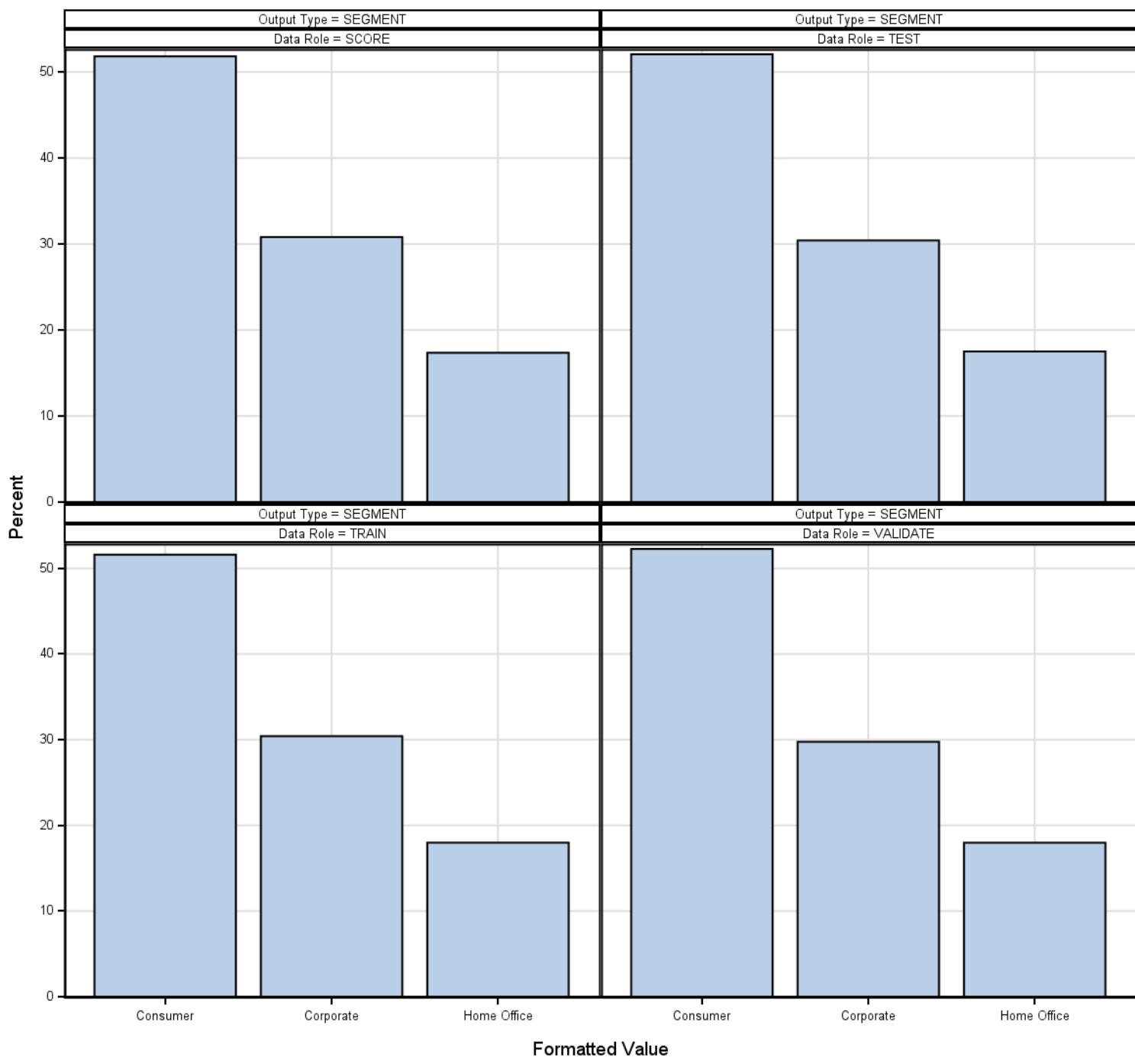
Node=Score Output Variables

Variable Name	Creator	Variable Label	Function	Type
EM_PREDICTION	Score	Prediction for Profit	PREDICT	N
EM_SEGMENT	Score	Segment	TRANSFORM	C
P_Profit	Tree4	Predicted: Profit	PREDICT	N
V_Profit	Tree4	Validated: Profit	PREDICT	N
NODE	Tree4	Node	TRANSFORM	N
WARN	Tree4	Warnings	ASSESS	C

SAS Enterprise Miner Report

Node=Score

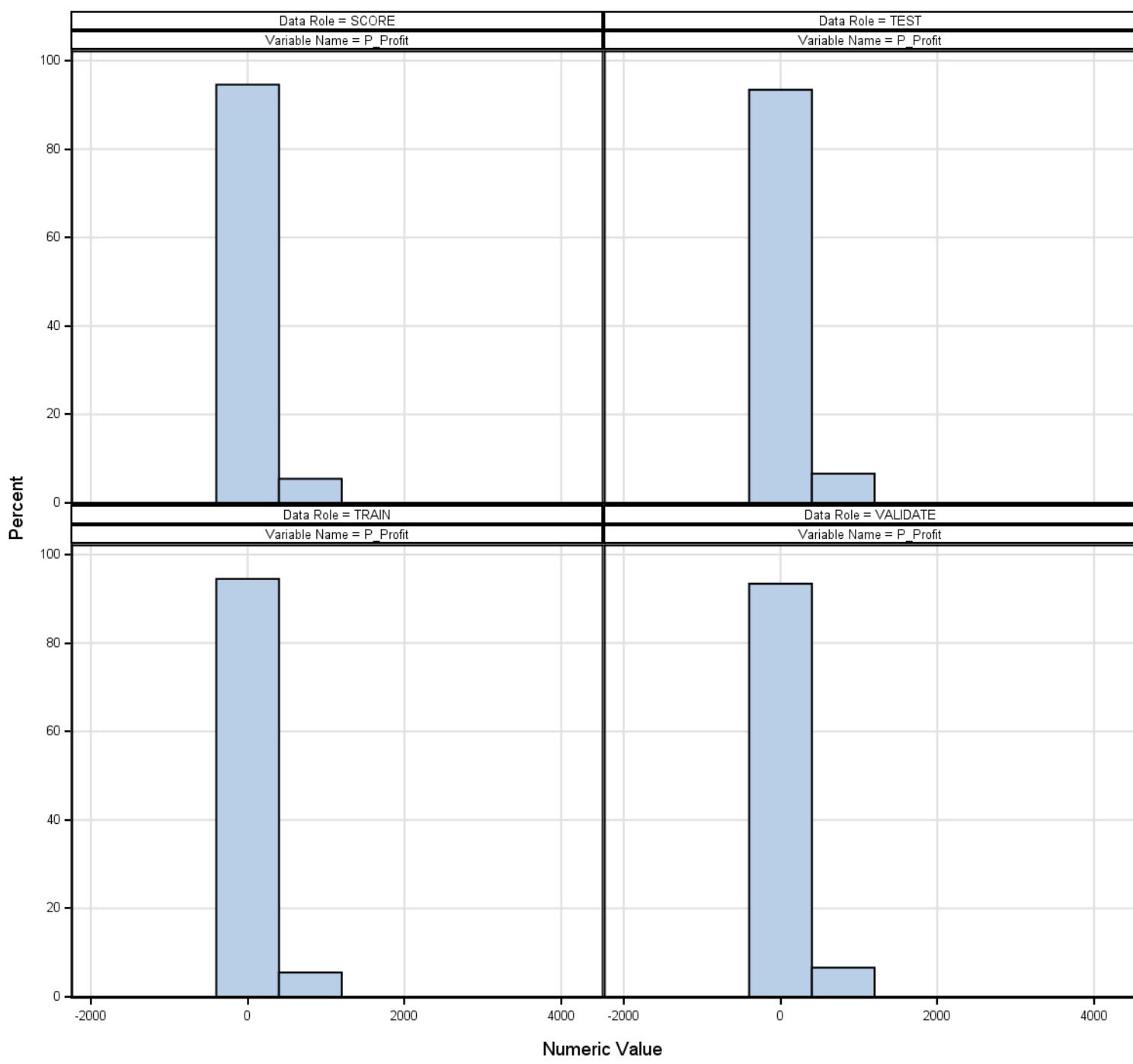
Bar Chart



SAS Enterprise Miner Report

Node=Score

Histogram



End of Report