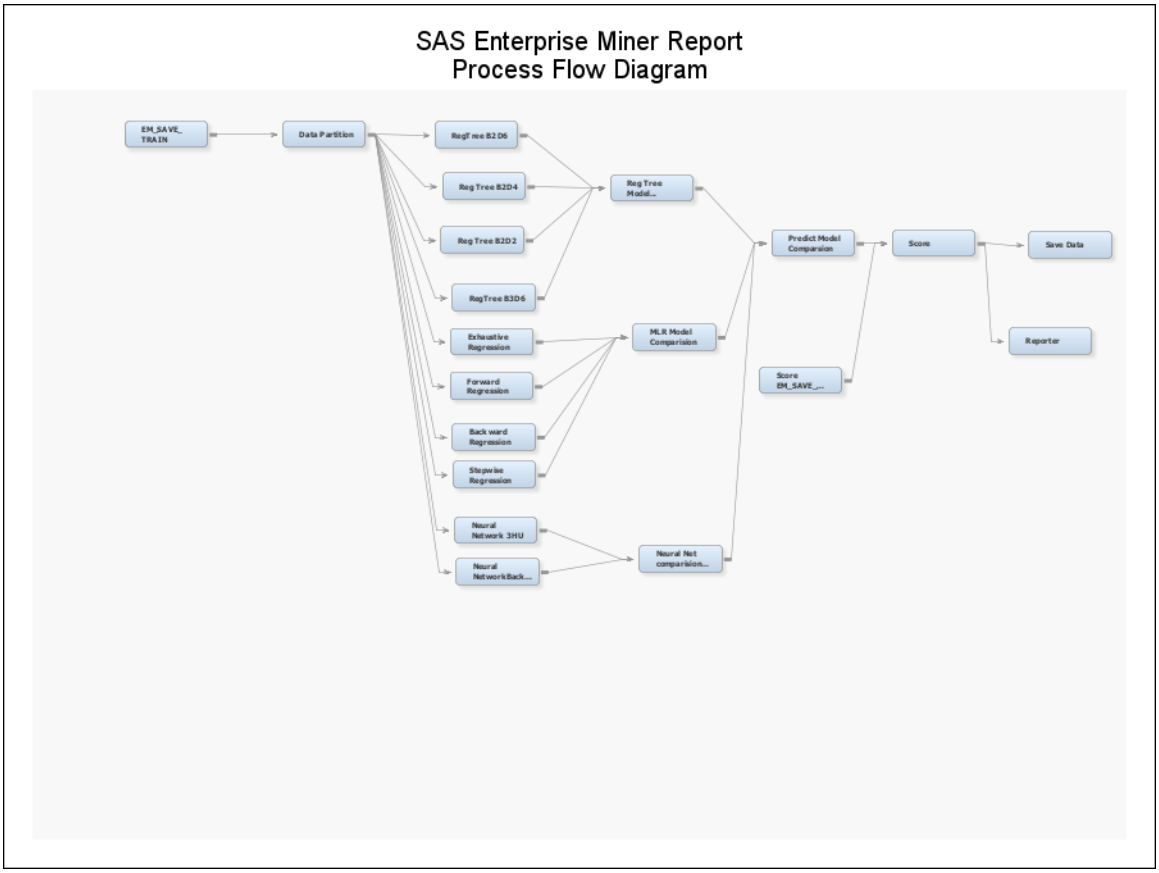
SAS Enterprise Miner Report

User = schel5
Date = 20:35:30 March 09
Project = Data Detectives Predictive
Diagram = DD.Prediction

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

Format = PDF
Style = LISTING



SAS Enterprise Miner Report

Node=EM_SAVE_TRAIN
Summary

Node id = Ids
Node label = EM_SAVE_TRAIN
Meta path = Ids
Notes =

Node=EM_SAVE_TRAIN
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	schel5		NBytes	57541632	.
ApplyIntervalLevelLowerLimit	Y		DsId	emsavetrain		NCols	11	.
ApplyMaxClassLevels	Y		DsModifiedBy	schel5		NObs	166800	.
ApplyMaxPercentMissing	Y		DsModifyDate	2025111425.1		NewTable		
CMeta	WORK.M3CKKQ1W		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	RAW	TRAIN
Data	CSDATA.EM_SAVE_TRAIN		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	emsavetrain		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	CSDATA		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	2025111424.8		MetaAdvisor	BASIC		Table	EM_SAVE_TRAIN	

Node=EM_SAVE_TRAIN
Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	EM_SAVE_TRAIN	Date Created	03Mar2024:18:47:13	Data Size	57541632
Data Type	DATA	Date Modified	03Mar2024:18:47:13	Role	RAW
Data Label		Number Rows	166800	Segment	
Engine	BASE	Number Columns	11	Data Library	CSDATA

Node=EM_SAVE_TRAIN
Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
City	City	REJECTED	NOMINAL	C	24	$24.	
Clean_Alternative_Fuel_Vehicle__		INPUT	NOMINAL	C	60		
Electric_Range		TARGET	INTERVAL	N	8		
Electric_Utility		REJECTED	NOMINAL	C	112		
Electric_Vehicle_Type		INPUT	NOMINAL	C	38		
Legislative_District		INPUT	INTERVAL	N	8		
Make	Make	INPUT	NOMINAL	C	20	$20.	
Model	Model	REJECTED	NOMINAL	C	24	$24.	
Model_Year		TIMEID	INTERVAL	N	8		
State	State	REJECTED	NOMINAL	C	2	$2.	
Vehicle_Location		REJECTED	NOMINAL	C	33		

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
TIMEID	INTERVAL	1	Model_Year
TARGET	INTERVAL	1	Electric_Range
REJECTED	NOMINAL	5	City Electric_Utility Model State Vehicle_Location
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

SAS Enterprise Miner Report

Node=Neural NetworkBack prop Summary

Node id = Neural2
Node label = Neural NetworkBack prop
Meta path = Ids => Part => Neural2
Notes =

Node=Neural NetworkBack prop 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=Neural NetworkBack prop Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

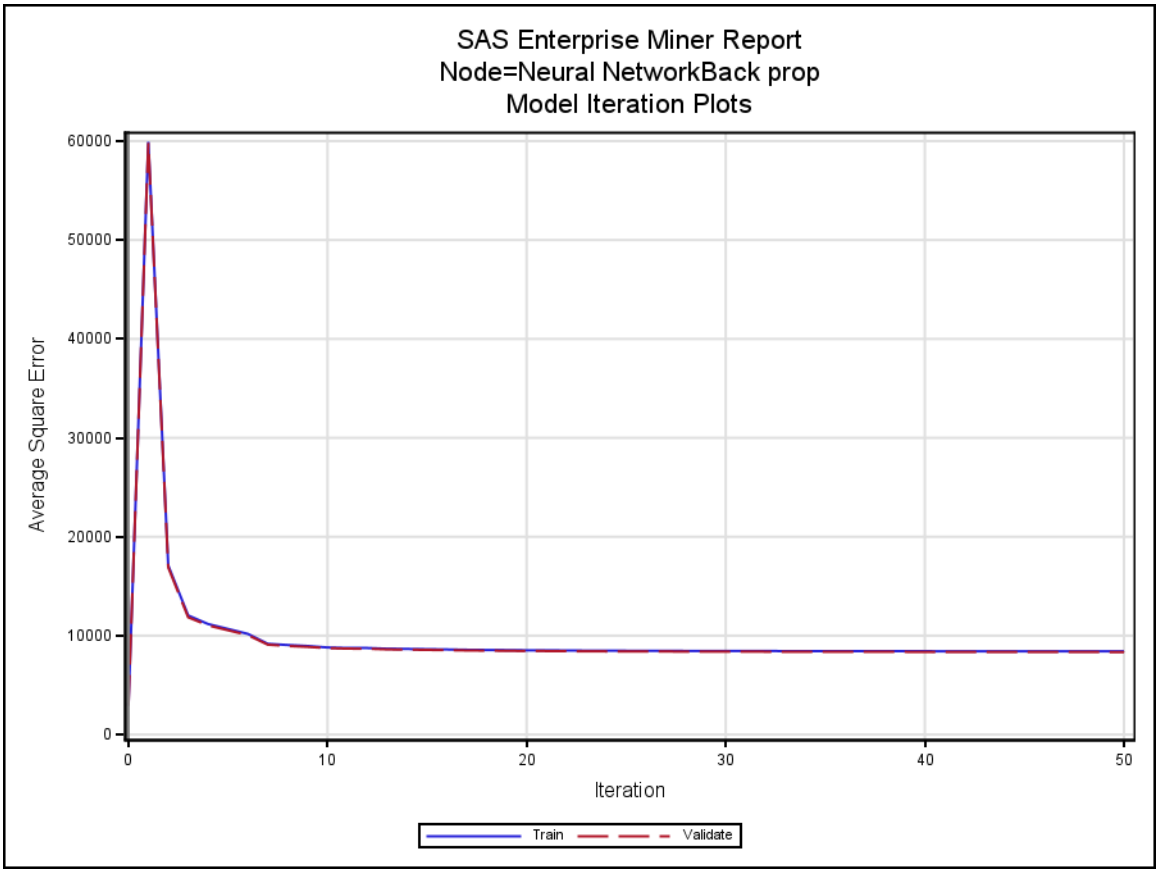
Node=Neural NetworkBack prop Model Fit Statistics

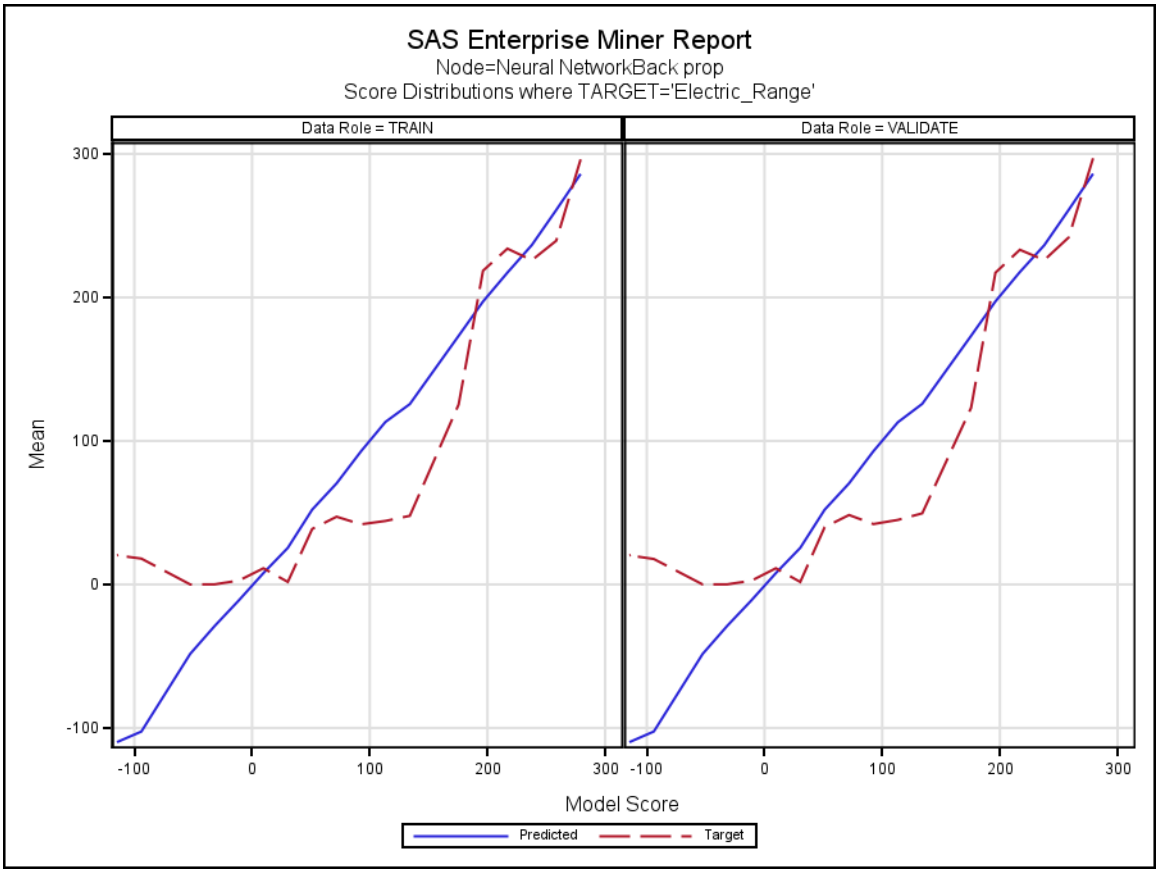
Target=Electric_Range Target Label=' '

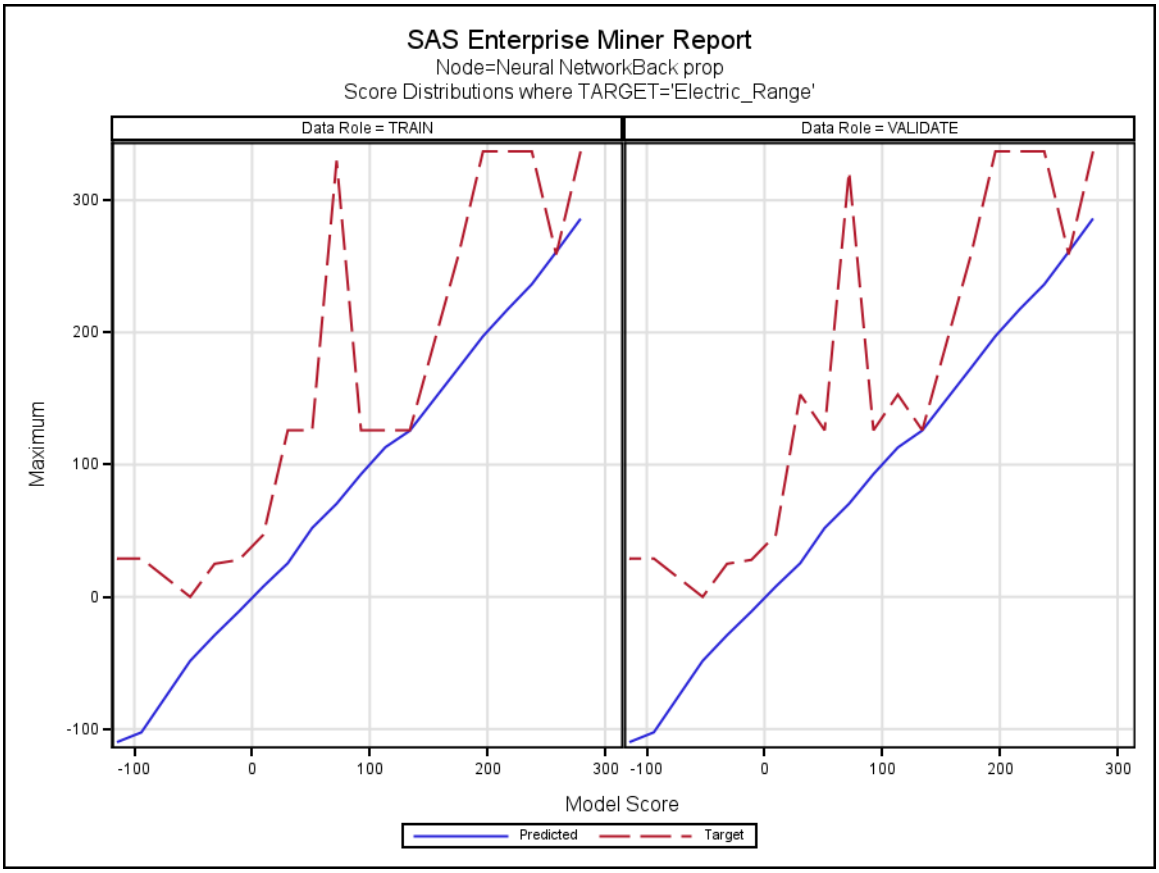
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	66720.00	.	.
Degrees of Freedom for Error	66581.00	.	.
Model Degrees of Freedom	139.00	.	.
Number of Estimated Weights	139.00	.	.
Akaike's Information Criterion	533308.66	.	.

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	534574.71	.	.
Average Squared Error	2948.55	2924.36	2947.24
Maximum Absolute Error	268.31	260.31	229.31
Divisor for ASE	66720.00	50040.00	50040.00
Sum of Frequencies	66720.00	50040.00	50040.00
Root Average Squared Error	54.30	54.08	54.29
Sum of Squared Errors	196727217.86	146335058.32	147479953.26
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00
Final Prediction Error	2960.86	.	.
Mean Squared Error	2954.71	2924.36	2947.24
Root Final Prediction Error	54.41	.	.
Root Mean Squared Error	54.36	54.08	54.29
Average Error Function	2948.55	2924.36	2947.24
Error Function	196727217.86	146335058.32	147479953.26







Node=Neural NetworkBack prop
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
268.795 - 289.527	286.025	289.527	268.853	296.178	337	110
248.062 - 268.795	260.911	268.792	249.190	239.484	259	110
227.330 - 248.062	236.478	247.924	228.155	225.904	337	110
206.598 - 227.330	217.281	227.187	207.405	233.990	337	149
185.866 - 206.598	197.139	206.595	185.948	218.600	337	57
165.134 - 185.866	173.223	185.851	166.161	125.355	259	56
123.669 - 144.402	125.661	127.657	123.774	47.810	126	30
102.937 - 123.669	113.213	123.402	103.035	44.232	126	30
82.205 - 102.937	92.769	102.573	82.674	41.891	126	17
61.473 - 82.205	70.450	81.936	61.528	47.188	330	0
40.741 - 61.473	52.148	61.194	40.929	38.664	126	16
20.009 - 40.741	25.482	40.329	20.121	1.753	126	0
-0.724 - 20.009	7.901	19.885	-0.505	11.251	47	0
-21.456 - -0.724	-10.982	-0.750	-21.406	2.727	28	0
-42.188 - -21.456	-29.008	-21.510	-42.153	0.074	25	0
-62.920 - -42.188	-48.391	-42.213	-58.019	0.000	0	0
-104.384 - -83.652	-102.496	-99.388	-104.351	17.993	29	8
-125.117 - -104.384	-109.894	-104.408	-125.117	20.266	29	6

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
268.795 - 289.527	286.189	289.527	268.853	296.995	337	110
248.062 - 268.795	260.998	268.701	249.488	241.799	259	110
227.330 - 248.062	236.366	247.290	228.155	226.002	337	153
206.598 - 227.330	217.698	227.187	207.405	233.206	337	149
185.866 - 206.598	197.257	206.595	185.906	217.239	337	58
165.134 - 185.866	173.221	185.859	166.161	123.053	259	58
123.669 - 144.402	125.843	127.657	123.774	49.550	126	30
102.937 - 123.669	113.005	123.402	103.035	44.962	153	30
82.205 - 102.937	92.862	102.573	82.308	42.082	126	17
61.473 - 82.205	70.441	81.936	61.528	48.374	322	0
40.741 - 61.473	52.082	61.194	40.929	39.903	126	14
20.009 - 40.741	25.475	40.329	20.121	1.722	153	0
-0.724 - 20.009	7.879	19.951	-0.505	11.272	47	0
-21.456 - -0.724	-11.064	-0.750	-21.406	2.608	28	0
-42.188 - -21.456	-28.997	-21.510	-42.153	0.065	25	0
-62.920 - -42.188	-48.429	-42.213	-58.019	0.000	0	0
-104.384 - -83.652	-102.469	-99.388	-104.351	17.727	29	8
-125.117 - -104.384	-109.895	-104.408	-125.117	20.222	29	6

SAS Enterprise Miner Report

Node=Neural Network 3HU
Summary

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

Node=Neural Network 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=Neural Network 3HU
Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

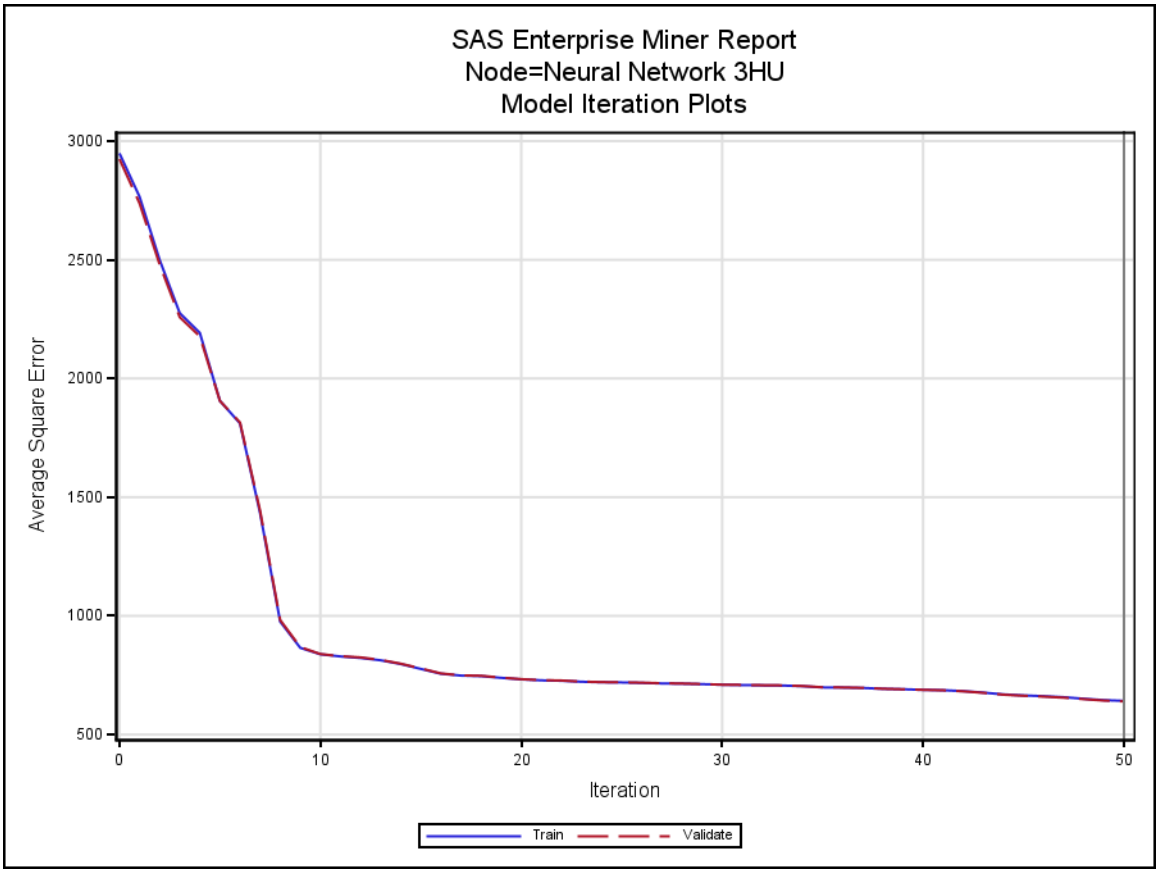
Node=Neural Network 3HU
Model Fit Statistics

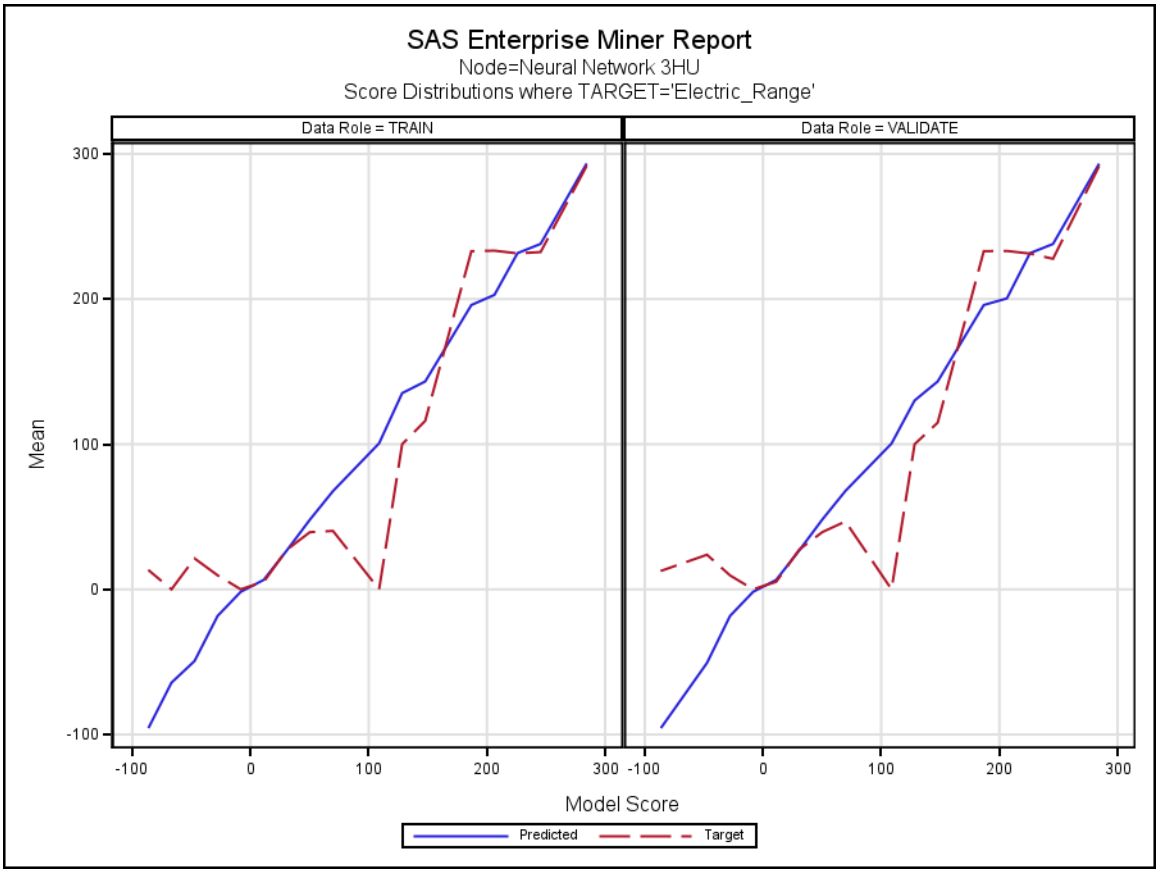
Target=Electric_Range Target Label=' '

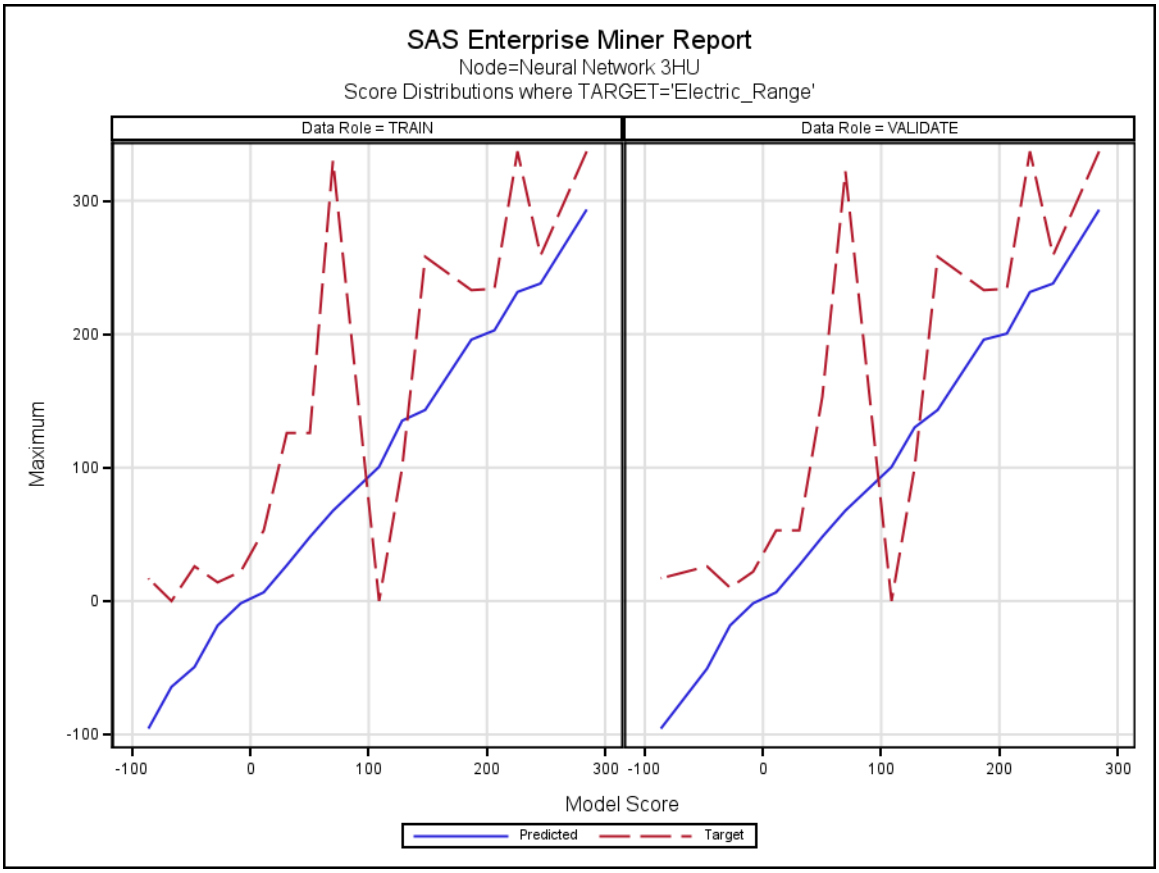
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	66720.00	.	.
Degrees of Freedom for Error	66581.00	.	.
Model Degrees of Freedom	139.00	.	.
Number of Estimated Weights	139.00	.	.
Akaike's Information Criterion	431602.14	.	.

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Schwarz's Bayesian Criterion	432868.18	.	.
Average Squared Error	642.07	639.86	618.08
Maximum Absolute Error	268.31	260.31	229.31
Divisor for ASE	66720.00	50040.00	50040.00
Sum of Frequencies	66720.00	50040.00	50040.00
Root Average Squared Error	25.34	25.30	24.86
Sum of Squared Errors	42838608.29	32018699.71	30928647.51
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00
Final Prediction Error	644.75	.	.
Mean Squared Error	643.41	639.86	618.08
Root Final Prediction Error	25.39	.	.
Root Mean Squared Error	25.37	25.30	24.86
Average Error Function	642.07	639.86	618.08
Error Function	42838608.29	32018699.71	30928647.51







Node=Neural Network 3HU
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
274.631 - 294.146	293.391	294.146	284.948	291.766	337	259
235.602 - 255.117	237.992	253.487	235.654	232.361	259	82
216.087 - 235.602	231.619	235.583	216.414	231.457	337	82
196.573 - 216.087	202.870	215.991	196.675	233.323	234	233
177.058 - 196.573	195.883	196.294	195.450	233.000	233	233
138.029 - 157.544	143.222	152.859	139.808	116.087	258	56
118.514 - 138.029	135.162	135.162	135.162	100.000	100	100
99.000 - 118.514	100.595	100.800	99.862	0.000	0	0
59.970 - 79.485	67.648	79.424	60.267	40.250	330	0
40.456 - 59.970	47.995	59.941	40.476	39.395	126	13
20.941 - 40.456	26.803	40.455	20.956	27.256	126	6
1.426 - 20.941	6.539	20.932	1.456	5.158	53	0
-18.088 - 1.426	-1.753	1.396	-18.052	0.026	22	0
-37.603 - -18.088	-18.312	-18.127	-18.582	9.643	14	8
-57.117 - -37.603	-49.389	-38.088	-52.838	21.273	26	0
-76.632 - -57.117	-64.312	-64.312	-64.312	0.000	0	0
-96.147 - -76.632	-95.615	-94.927	-96.147	13.267	17	12

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
274.631 - 294.146	293.280	294.146	284.948	291.646	337	259
235.602 - 255.117	237.950	253.487	235.654	227.737	259	82
216.087 - 235.602	231.584	235.583	225.929	231.316	337	82
196.573 - 216.087	200.442	213.556	196.675	233.143	234	233
177.058 - 196.573	195.887	195.887	195.887	233.000	233	233
138.029 - 157.544	143.219	152.469	139.808	114.817	258	58
118.514 - 138.029	130.095	130.095	130.095	100.000	100	100
99.000 - 118.514	100.462	100.798	99.862	0.000	0	0
59.970 - 79.485	67.779	79.436	60.525	46.747	322	0
40.456 - 59.970	48.116	59.941	40.476	39.441	153	13
20.941 - 40.456	26.824	40.455	20.980	27.409	53	6
1.426 - 20.941	6.523	20.932	1.456	5.169	53	0
-18.088 - 1.426	-1.724	1.396	-18.052	0.035	22	0
-37.603 - -18.088	-18.315	-18.127	-18.505	9.583	10	8
-57.117 - -37.603	-50.695	-38.057	-52.650	23.833	26	0
-96.147 - -76.632	-95.620	-94.927	-96.147	12.678	17	12

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	
ClParm	N		MaxCPUTime	1 HOUR		SlEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SlStay	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	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

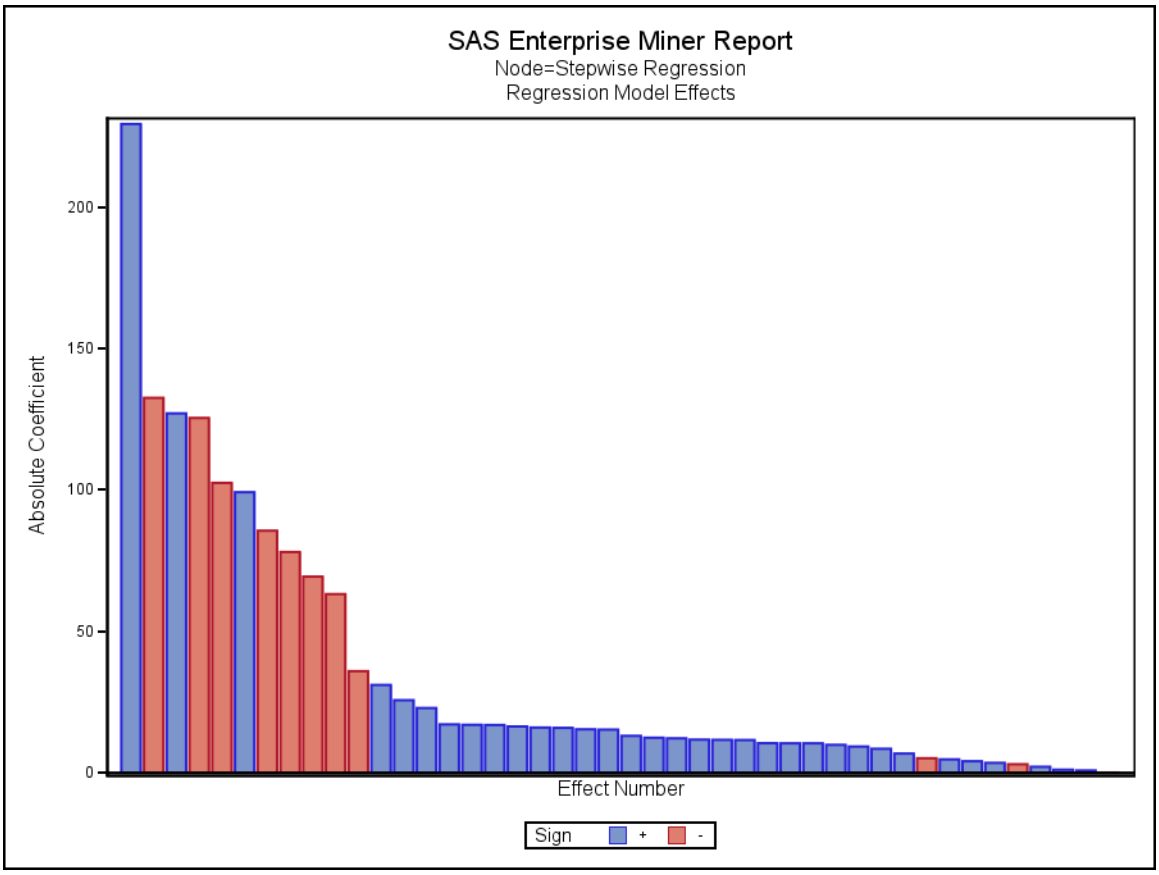
Node=Stepwise Regression Model Fit Statistics

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	441348.07	.	.
Average Squared Error	745.17	727.53	715.40
Average Error Function	745.17	727.53	715.40
Degrees of Freedom for Error	66676.00	.	.
Model Degrees of Freedom	44.00	.	.
Total Degrees of Freedom	66720.00	.	.

Target=Electric_Range Target Label=' '

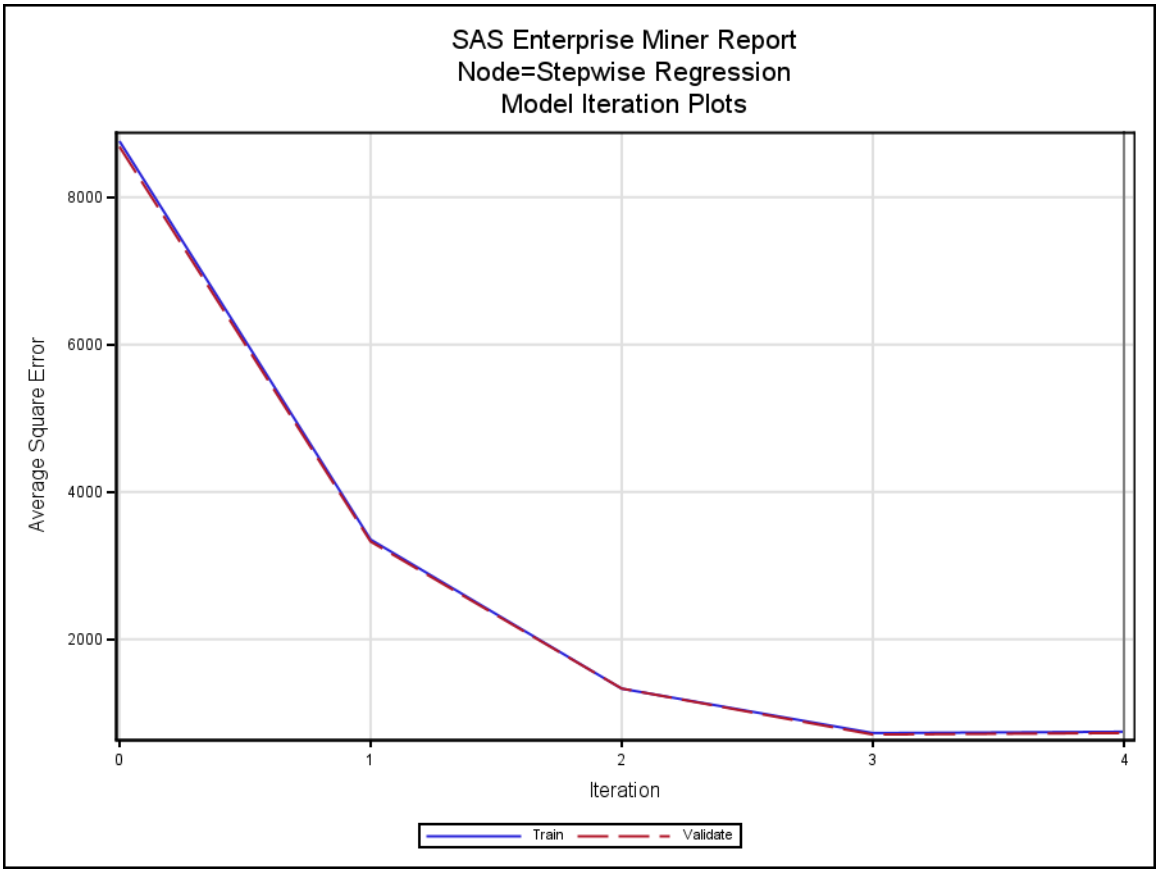
Label of Statistic	Train	Validation	Test
Divisor for ASE	66720.00	50040.00	50040.00
Error Function	49717630.39	36405734.35	35798642.07
Final Prediction Error	746.15	.	.
Maximum Absolute Error	268.31	260.31	229.31
Mean Square Error	745.66	727.53	715.40
Sum of Frequencies	66720.00	50040.00	50040.00
Number of Estimate Weights	44.00	.	.
Root Average Sum of Squares	27.30	26.97	26.75
Root Final Prediction Error	27.32	.	.
Root Mean Squared Error	27.31	26.97	26.75
Schwarz's Bayesian Criterion	441748.83	.	.
Sum of Squared Errors	49717630.39	36405734.35	35798642.07
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00

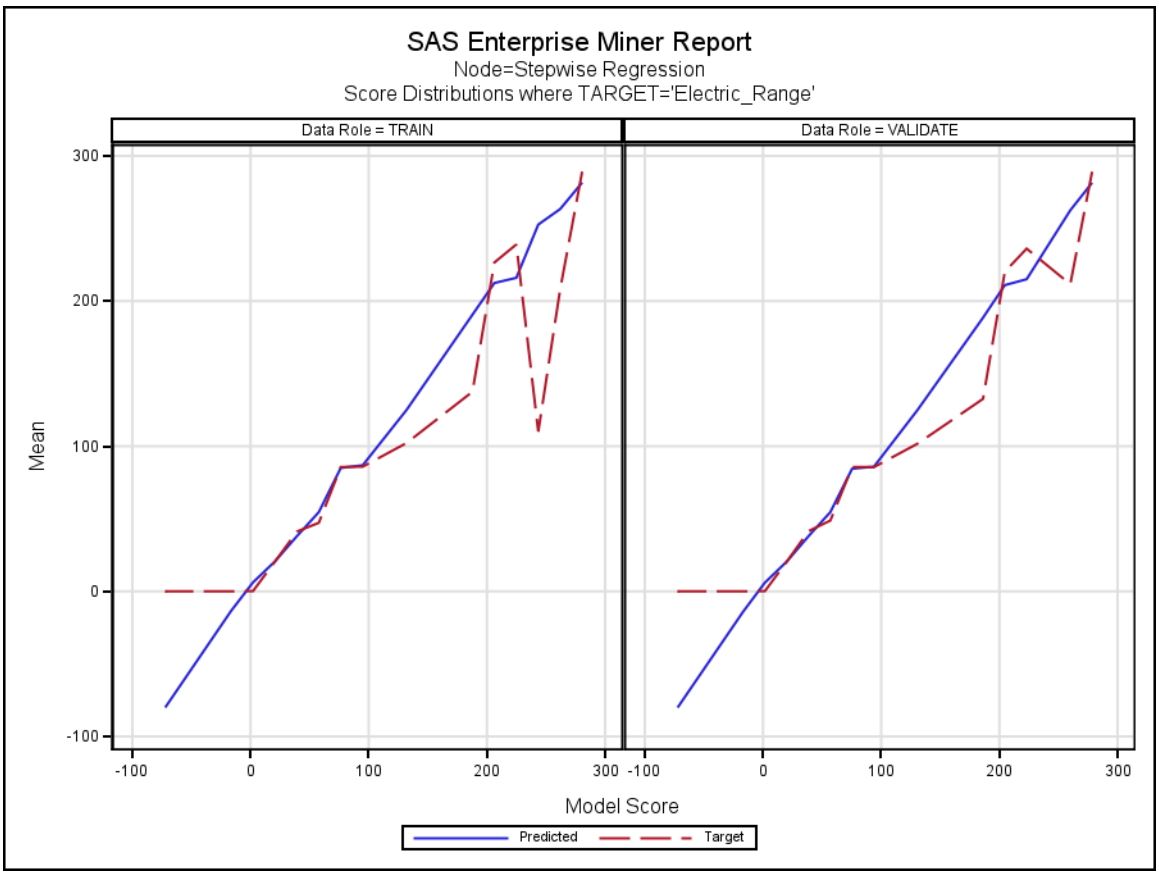


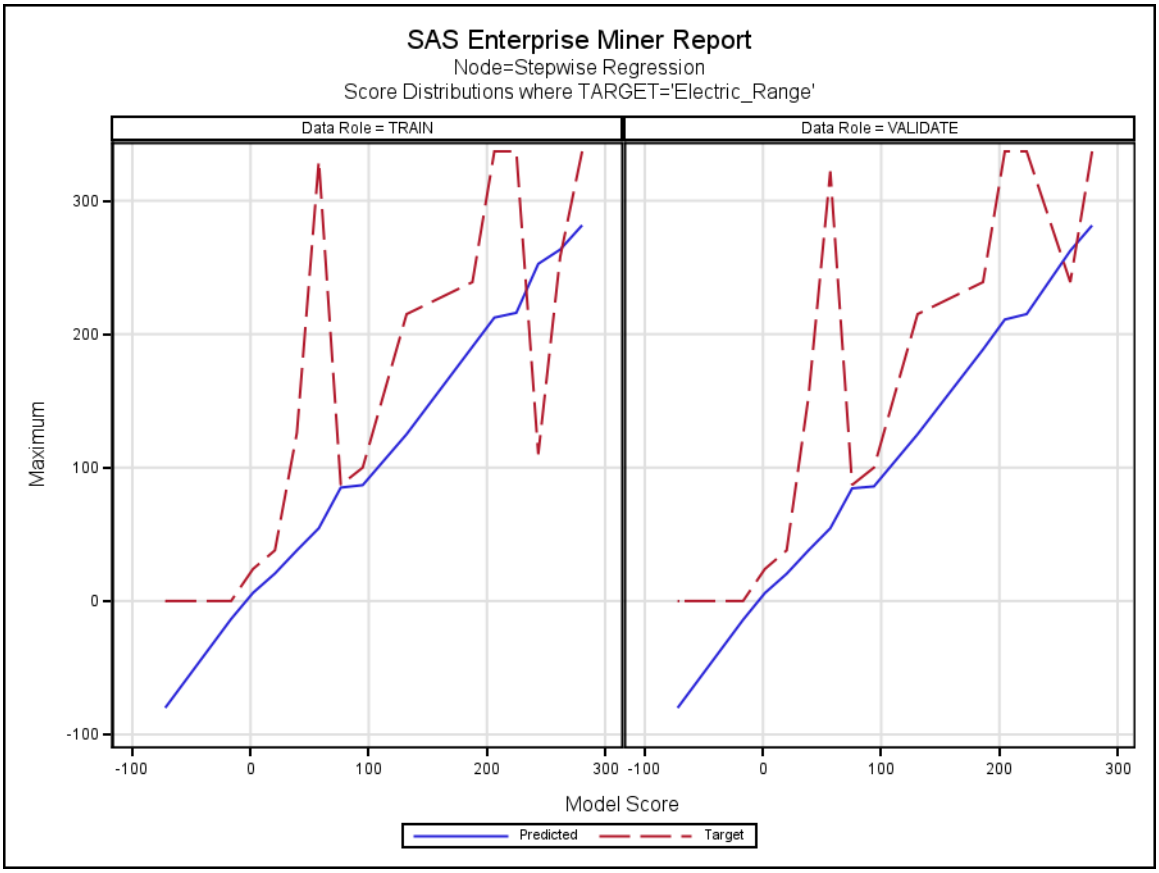
SAS Enterprise Miner Report
Node=Stepwise Regression
Regression Model Effects

Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable
1	Electric_Vehicle_Type	BEV	229.362	246.867	0	23	Make
2	Make	AZURE_DYNAMICS	-132.542	-11.255	2.3263E-29	24	Make
3	Clean_Alternative_Fuel_Vehicle__		127.052	297.703	0	25	Make
4	Make	SMART	-125.439	-44.693	0	26	Make
5	Make	FIAT	-102.480	-54.935	0	27	Make
6	Intercept		99.191	89.706	0	28	Make
7	Clean_Alternative_Fuel_Vehicle__		-85.575	-128.430	0	29	Make
8	Clean_Alternative_Fuel_Vehicle__		-78.032	-177.027	0	30	Make
9	Clean_Alternative_Fuel_Vehicle__		-69.334	-88.967	0	31	Make
10	Make	NISSAN	-63.158	-55.281	0	32	Make
11	Electric_Vehicle_Type	BATTERY_ELE	-35.908	-73.276	0	33	Make
12	Make	JAGUAR	31.034	11.251	2.444E-29	34	Make
13	Make	TESLA	25.645	23.546	4.385E-122	35	Make
14	Make	CHEVROLET	22.873	20.214	1.3733E-90	36	Make
15	Make	LUCID	17.089	5.439	.000000054	37	Make
16	Make	RIVIAN	16.931	13.236	6.1405E-40	38	Make
17	Make	GENESIS	16.869	4.747	.000002066	39	Make
18	Make	HONDA	16.350	8.690	3.7007E-18	40	Make
19	Make	POLESTAR	15.970	9.159	5.3792E-20	41	Make
20	Make	SUBARU	15.869	8.851	8.8443E-19	42	Make
21	Make	MAZDA	15.350	6.491	8.5711E-11	43	Make
22	Make	HYUNDAI	15.241	12.120	9.0037E-34	44	Legislative_District

Level	Coefficient	T-value	P Value
LINCOLN	13.0413	4.6291	0.00000
CADILLAC	12.3735	4.3293	0.00001
AUDI	12.1634	9.4562	0.00000
JEEP	11.7040	9.0370	0.00000
LEXUS	11.6235	4.5122	0.00001
FISKER	11.5596	1.5121	0.13053
TOYOTA	10.4363	8.5637	0.00000
LAND_ROVER	10.3923	1.6982	0.08947
VOLVO	10.3910	8.2813	0.00000
FORD	9.8576	8.5016	0.00000
BMW	9.2577	7.8790	0.00000
BENTLEY	8.4684	0.3226	0.74700
KIA	6.7748	5.7703	0.00000
VOLKSWAGEN	-5.1210	-4.1407	0.00003
MERCEDES_BENZ	4.7200	3.0015	0.00269
PORSCHE	4.0611	2.4898	0.01278
ALFA_ROMEO	3.4878	0.4169	0.67675
MINI	-2.9950	-1.6959	0.08990
CHRYSLER	2.0999	1.5406	0.12343
DODGE	1.0722	0.1457	0.88413
MITSUBISHI	0.8058	0.4701	0.63832
	-0.0723	-10.1550	0.00000


SAS Enterprise Miner Report
Node=Stepwise Regression
Model Iteration Plots
Average Square Error
8000
6000
4000
2000
0
1
2
3
4
Iteration
Train
Validate


SAS Enterprise Miner Report
Node=Stepwise Regression
Score Distributions where TARGET='Electric_Range'
Data Role = TRAIN
Data Role = VALIDATE
Mean
300
200
100
0
-100
-100
0
100
200
300
Model Score
Predicted
Target



Node=Stepwise Regression
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
271.256 - 289.819	281.625	289.819	271.351	289.153	337	170
252.692 - 271.256	263.413	271.238	252.753	208.254	258	110
234.129 - 252.692	252.681	252.681	252.681	110.000	110	110
215.565 - 234.129	216.001	221.297	215.619	238.993	337	200
197.002 - 215.565	212.426	215.546	197.011	226.565	337	58
178.439 - 197.002	190.571	196.990	181.233	137.485	239	29
122.748 - 141.312	125.023	127.106	123.635	102.209	215	73
85.621 - 104.185	86.862	100.578	85.686	85.885	100	84
67.058 - 85.621	85.010	85.614	84.312	85.665	87	84
48.495 - 67.058	54.593	64.824	48.561	47.222	330	0
29.931 - 48.495	37.981	48.489	29.932	41.164	126	30
11.368 - 29.931	20.631	29.917	11.385	20.473	38	0
-7.196 - 11.368	6.143	11.313	-7.178	0.173	24	0
-25.759 - -7.196	-13.520	-7.205	-23.413	0.000	0	0
-81.449 - -62.886	-80.045	-77.979	-81.449	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
269.195 - 287.650	281.482	287.650	269.286	289.126	337	170
250.740 - 269.195	262.516	269.141	252.681	211.605	239	110
213.830 - 232.285	215.040	221.297	213.883	236.114	337	200
195.375 - 213.830	210.967	213.811	195.447	220.219	337	58
176.920 - 195.375	188.534	195.375	181.671	132.604	239	29

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
121.555 - 140.010	124.986	127.106	123.635	101.743	215	73
84.645 - 103.100	85.885	98.988	84.674	85.586	100	84
66.190 - 84.645	84.466	84.601	84.312	85.658	87	84
47.735 - 66.190	54.549	64.824	47.766	48.745	322	0
29.280 - 47.735	37.975	47.693	29.282	41.480	153	30
10.825 - 29.280	20.455	29.209	10.842	20.343	38	0
-7.630 - 10.825	5.979	10.824	-7.612	0.119	24	0
-26.085 - -7.630	-14.089	-7.639	-23.413	0.000	0	0
-81.449 - -62.994	-80.106	-77.979	-81.449	0.000	0	0

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	
ClParm	N		MaxCPUTime	1 HOUR		SlEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SlStay	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	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

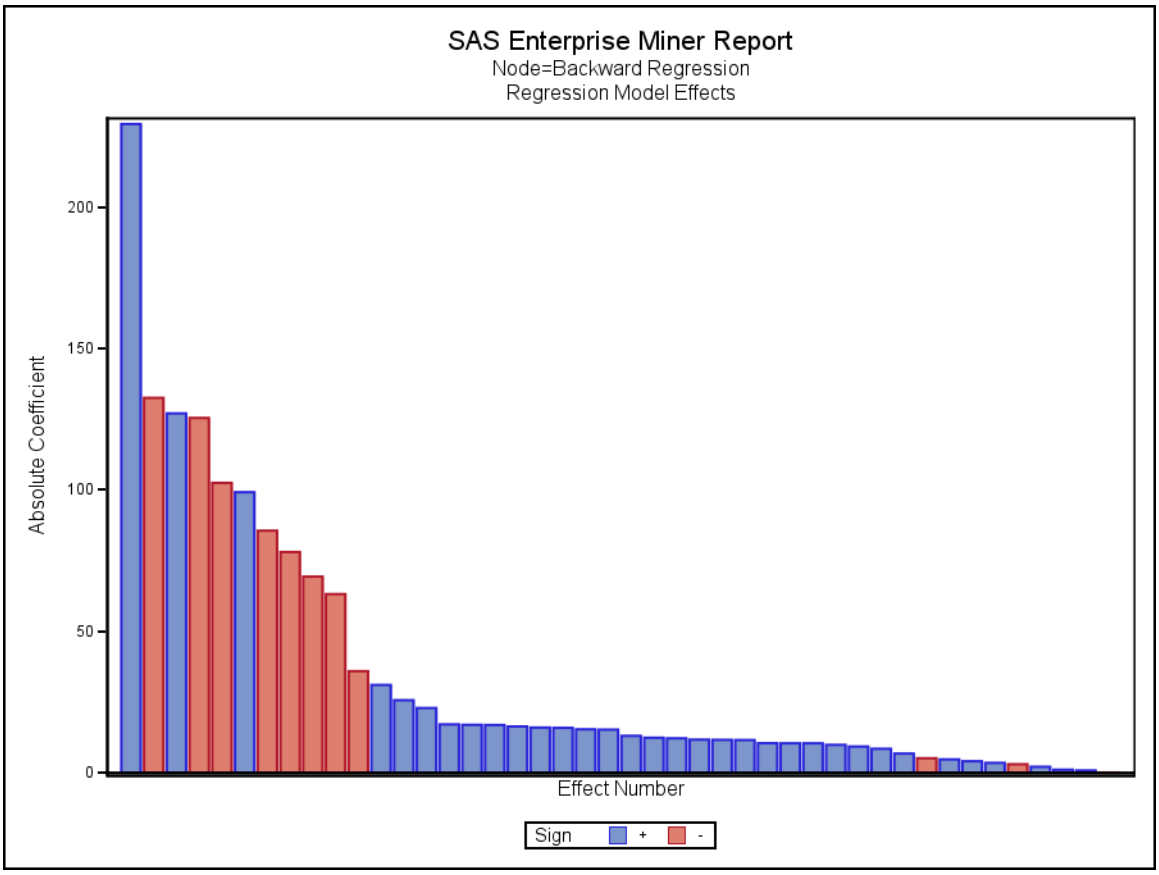
Node=Backward Regression Model Fit Statistics

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	441348.07	.	.
Average Squared Error	745.17	727.53	715.40
Average Error Function	745.17	727.53	715.40
Degrees of Freedom for Error	66676.00	.	.
Model Degrees of Freedom	44.00	.	.
Total Degrees of Freedom	66720.00	.	.

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Divisor for ASE	66720.00	50040.00	50040.00
Error Function	49717630.39	36405734.35	35798642.07
Final Prediction Error	746.15	.	.
Maximum Absolute Error	268.31	260.31	229.31
Mean Square Error	745.66	727.53	715.40
Sum of Frequencies	66720.00	50040.00	50040.00
Number of Estimate Weights	44.00	.	.
Root Average Sum of Squares	27.30	26.97	26.75
Root Final Prediction Error	27.32	.	.
Root Mean Squared Error	27.31	26.97	26.75
Schwarz's Bayesian Criterion	441748.83	.	.
Sum of Squared Errors	49717630.39	36405734.35	35798642.07
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00

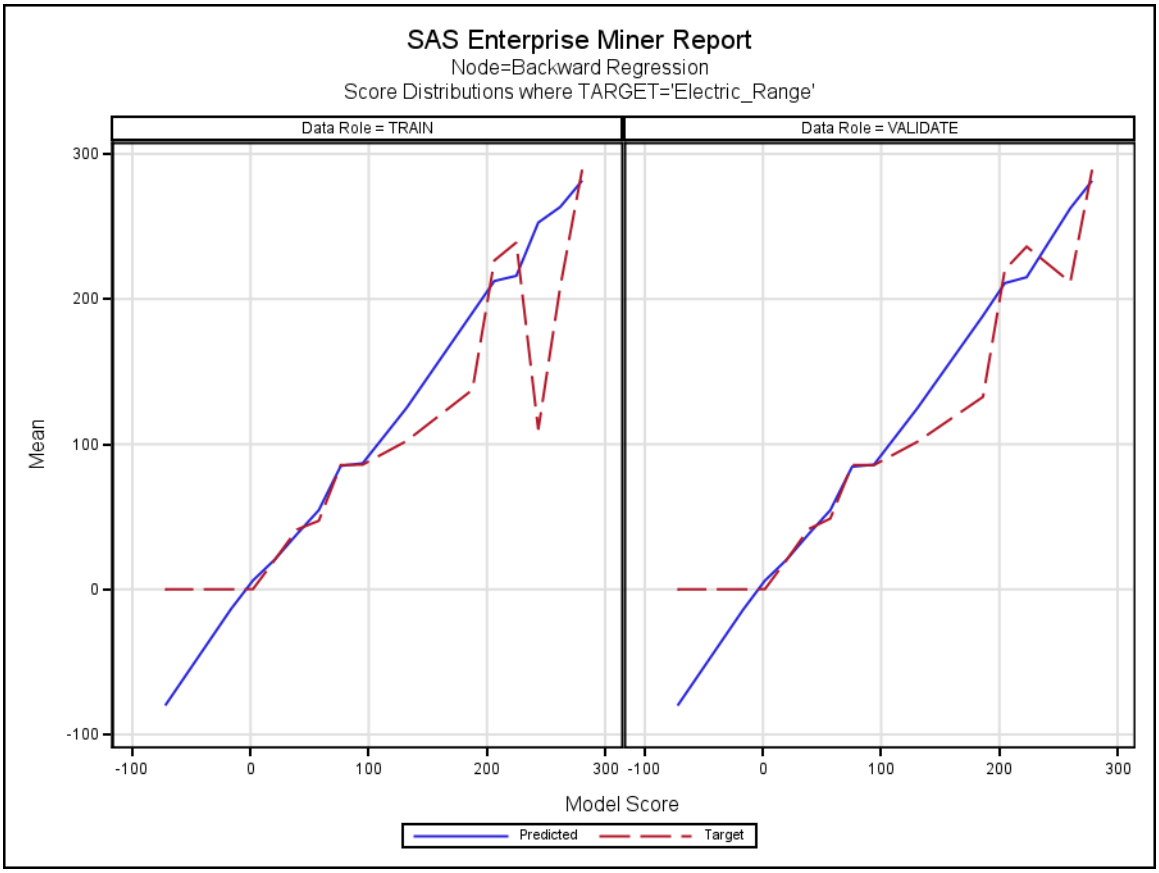


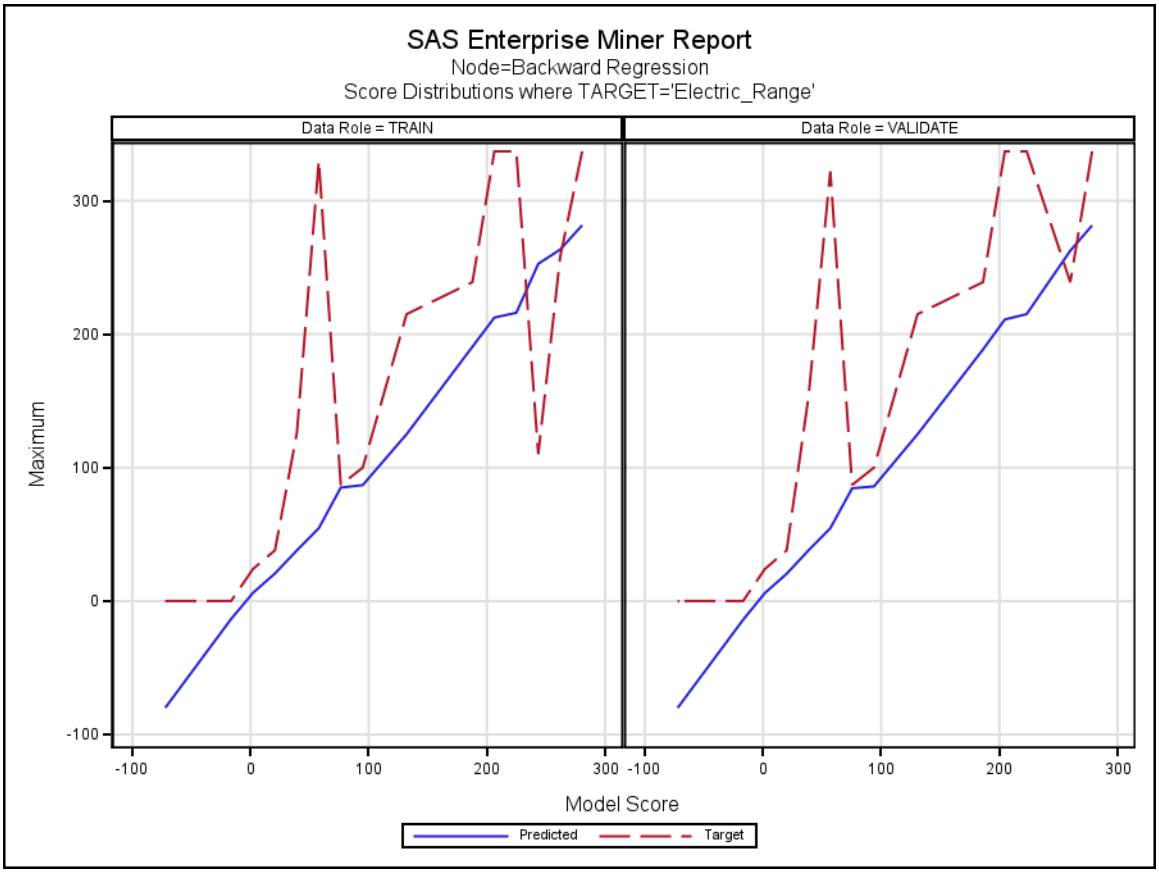
SAS Enterprise Miner Report
Node=Backward Regression
Regression Model Effects

Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable
1	Electric_Vehicle_Type	BEV	229.362	246.867	0	23	Make
2	Make	AZURE_DYNAMICS	-132.542	-11.255	2.3263E-29	24	Make
3	Clean_Alternative_Fuel_Vehicle__		127.052	297.703	0	25	Make
4	Make	SMART	-125.439	-44.693	0	26	Make
5	Make	FIAT	-102.480	-54.935	0	27	Make
6	Intercept		99.191	89.706	0	28	Make
7	Clean_Alternative_Fuel_Vehicle__		-85.575	-128.430	0	29	Make
8	Clean_Alternative_Fuel_Vehicle__		-78.032	-177.027	0	30	Make
9	Clean_Alternative_Fuel_Vehicle__		-69.334	-88.967	0	31	Make
10	Make	NISSAN	-63.158	-55.281	0	32	Make
11	Electric_Vehicle_Type	BATTERY_ELE	-35.908	-73.276	0	33	Make
12	Make	JAGUAR	31.034	11.251	2.444E-29	34	Make
13	Make	TESLA	25.645	23.546	4.385E-122	35	Make
14	Make	CHEVROLET	22.873	20.214	1.3733E-90	36	Make
15	Make	LUCID	17.089	5.439	.000000054	37	Make
16	Make	RIVIAN	16.931	13.236	6.1405E-40	38	Make
17	Make	GENESIS	16.869	4.747	.000002066	39	Make
18	Make	HONDA	16.350	8.690	3.7007E-18	40	Make
19	Make	POLESTAR	15.970	9.159	5.3792E-20	41	Make
20	Make	SUBARU	15.869	8.851	8.8443E-19	42	Make
21	Make	MAZDA	15.350	6.491	8.5711E-11	43	Make
22	Make	HYUNDAI	15.241	12.120	9.0037E-34	44	Legislative_District

Level	Coefficient	T-value	P Value
LINCOLN	13.0413	4.6291	0.00000
CADILLAC	12.3735	4.3293	0.00001
AUDI	12.1634	9.4562	0.00000
JEEP	11.7040	9.0370	0.00000
LEXUS	11.6235	4.5122	0.00001
FISKER	11.5596	1.5121	0.13053
TOYOTA	10.4363	8.5637	0.00000
LAND_ROVER	10.3923	1.6982	0.08947
VOLVO	10.3910	8.2813	0.00000
FORD	9.8576	8.5016	0.00000
BMW	9.2577	7.8790	0.00000
BENTLEY	8.4684	0.3226	0.74700
KIA	6.7748	5.7703	0.00000
VOLKSWAGEN	-5.1210	-4.1407	0.00003
MERCEDES_BENZ	4.7200	3.0015	0.00269
PORSCHE	4.0611	2.4898	0.01278
ALFA_ROMEO	3.4878	0.4169	0.67675
MINI	-2.9950	-1.6959	0.08990
CHRYSLER	2.0999	1.5406	0.12343
DODGE	1.0722	0.1457	0.88413
MITSUBISHI	0.8058	0.4701	0.63832
	-0.0723	-10.1550	0.00000


SAS Enterprise Miner Report
Node=Backward Regression
Model Iteration Plots
745
740
735
730
Average Square Error
0
Iteration
Train
Validate


SAS Enterprise Miner Report
Node=Backward Regression
Score Distributions where TARGET='Electric_Range'
Data Role = TRAIN
Data Role = VALIDATE
300
200
100
0
-100
Mean
-100
0
100
200
300
Model Score
Predicted
Target



Node=Backward Regression
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
271.256 - 289.819	281.625	289.819	271.351	289.153	337	170
252.692 - 271.256	263.413	271.238	252.753	208.254	258	110
234.129 - 252.692	252.681	252.681	252.681	110.000	110	110
215.565 - 234.129	216.001	221.297	215.619	238.993	337	200
197.002 - 215.565	212.426	215.546	197.011	226.565	337	58
178.439 - 197.002	190.571	196.990	181.233	137.485	239	29
122.748 - 141.312	125.023	127.106	123.635	102.209	215	73
85.621 - 104.185	86.862	100.578	85.686	85.885	100	84
67.058 - 85.621	85.010	85.614	84.312	85.665	87	84
48.495 - 67.058	54.593	64.824	48.561	47.222	330	0
29.931 - 48.495	37.981	48.489	29.932	41.164	126	30
11.368 - 29.931	20.631	29.917	11.385	20.473	38	0
-7.196 - 11.368	6.143	11.313	-7.178	0.173	24	0
-25.759 - -7.196	-13.520	-7.205	-23.413	0.000	0	0
-81.449 - -62.886	-80.045	-77.979	-81.449	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
269.195 - 287.650	281.482	287.650	269.286	289.126	337	170
250.740 - 269.195	262.516	269.141	252.681	211.605	239	110
213.830 - 232.285	215.040	221.297	213.883	236.114	337	200
195.375 - 213.830	210.967	213.811	195.447	220.219	337	58
176.920 - 195.375	188.534	195.375	181.671	132.604	239	29

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
121.555 - 140.010	124.986	127.106	123.635	101.743	215	73
84.645 - 103.100	85.885	98.988	84.674	85.586	100	84
66.190 - 84.645	84.466	84.601	84.312	85.658	87	84
47.735 - 66.190	54.549	64.824	47.766	48.745	322	0
29.280 - 47.735	37.975	47.693	29.282	41.480	153	30
10.825 - 29.280	20.455	29.209	10.842	20.343	38	0
-7.630 - 10.825	5.979	10.824	-7.612	0.119	24	0
-26.085 - -7.630	-14.089	-7.639	-23.413	0.000	0	0
-81.449 - -62.994	-80.106	-77.979	-81.449	0.000	0	0

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	
ClParm	N		MaxCPUTime	1 HOUR		SlEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SlStay	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	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

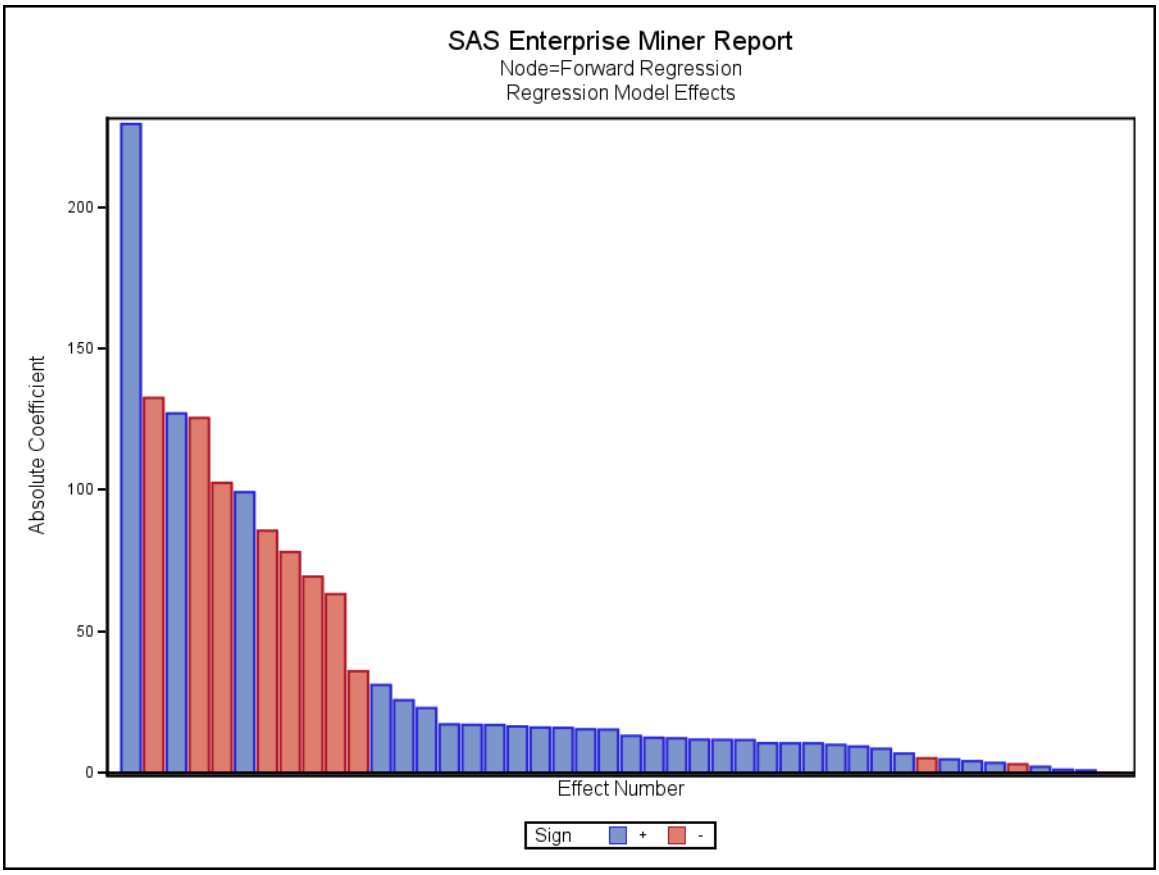
Node=Forward Regression Model Fit Statistics

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	441348.07	.	.
Average Squared Error	745.17	727.53	715.40
Average Error Function	745.17	727.53	715.40
Degrees of Freedom for Error	66676.00	.	.
Model Degrees of Freedom	44.00	.	.
Total Degrees of Freedom	66720.00	.	.

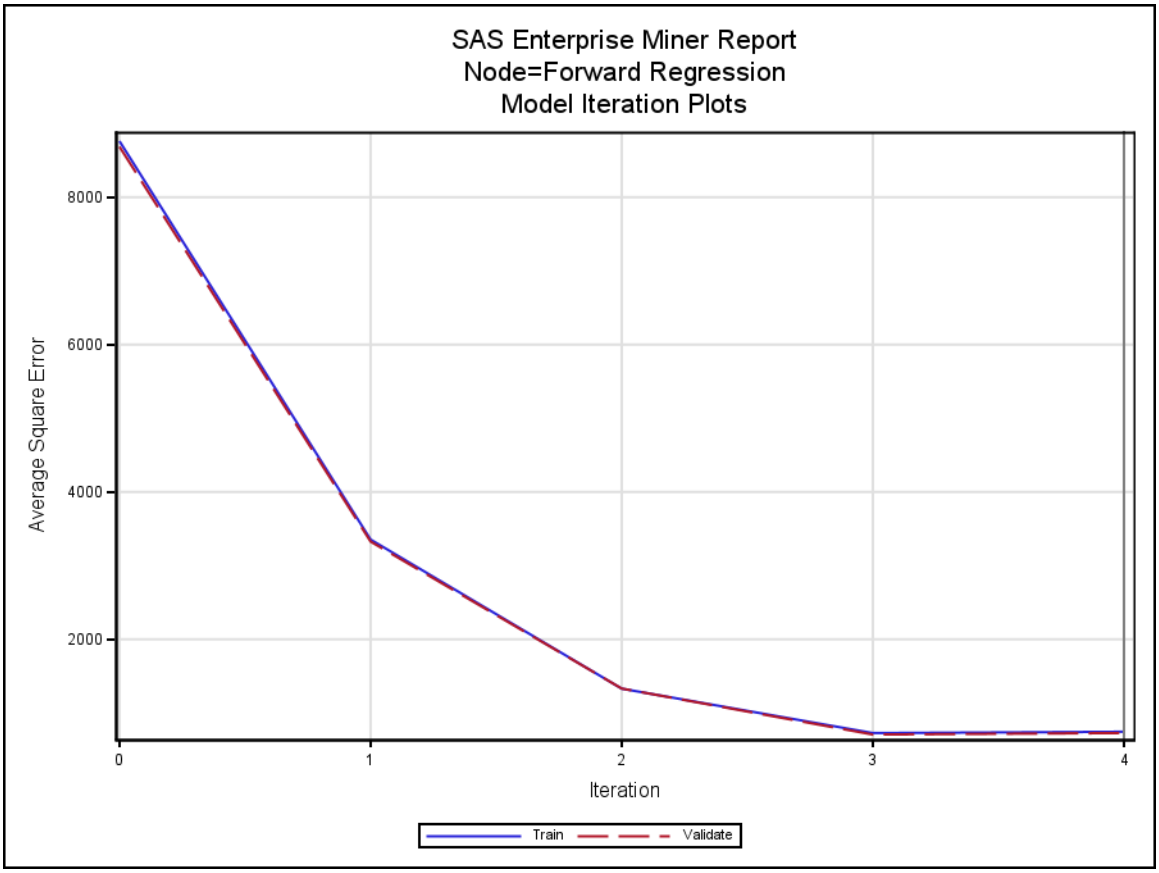
Target=Electric_Range Target Label=' '

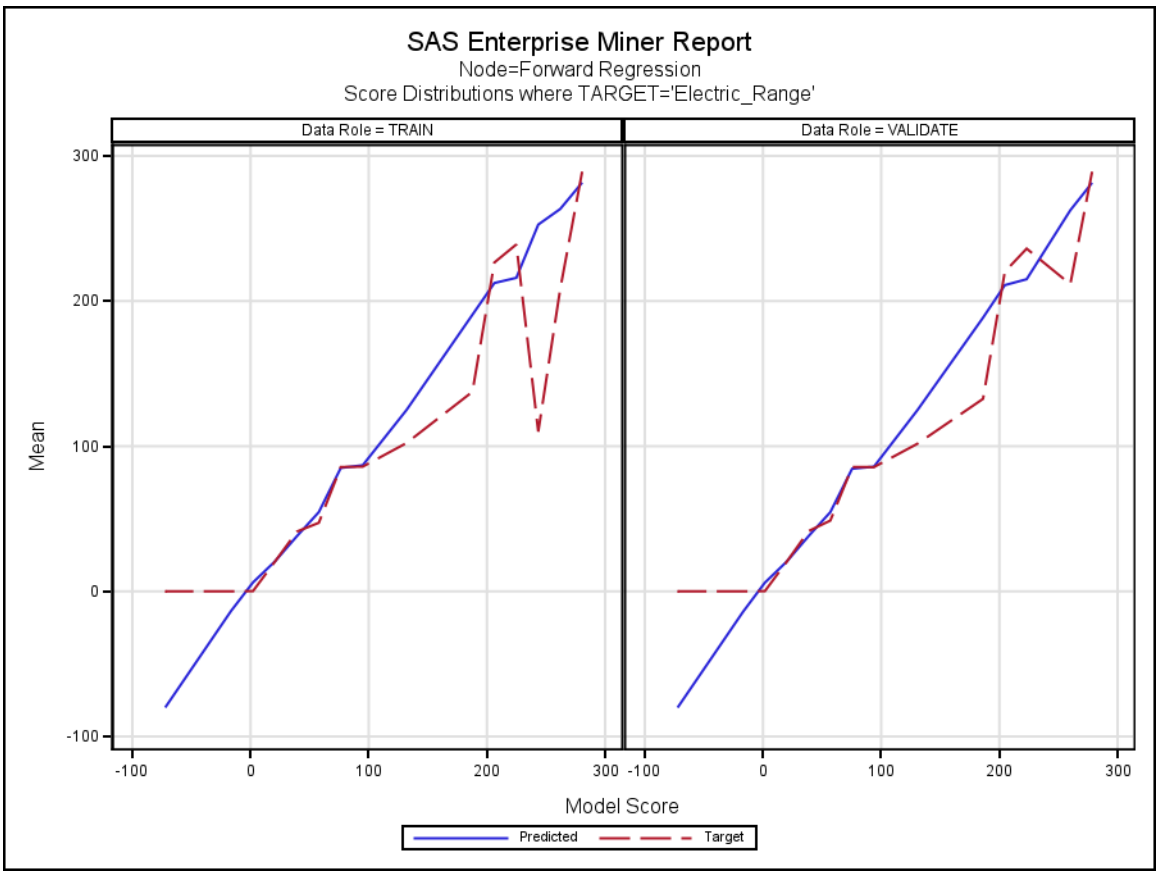
Label of Statistic	Train	Validation	Test
Divisor for ASE	66720.00	50040.00	50040.00
Error Function	49717630.39	36405734.35	35798642.07
Final Prediction Error	746.15	.	.
Maximum Absolute Error	268.31	260.31	229.31
Mean Square Error	745.66	727.53	715.40
Sum of Frequencies	66720.00	50040.00	50040.00
Number of Estimate Weights	44.00	.	.
Root Average Sum of Squares	27.30	26.97	26.75
Root Final Prediction Error	27.32	.	.
Root Mean Squared Error	27.31	26.97	26.75
Schwarz's Bayesian Criterion	441748.83	.	.
Sum of Squared Errors	49717630.39	36405734.35	35798642.07
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00

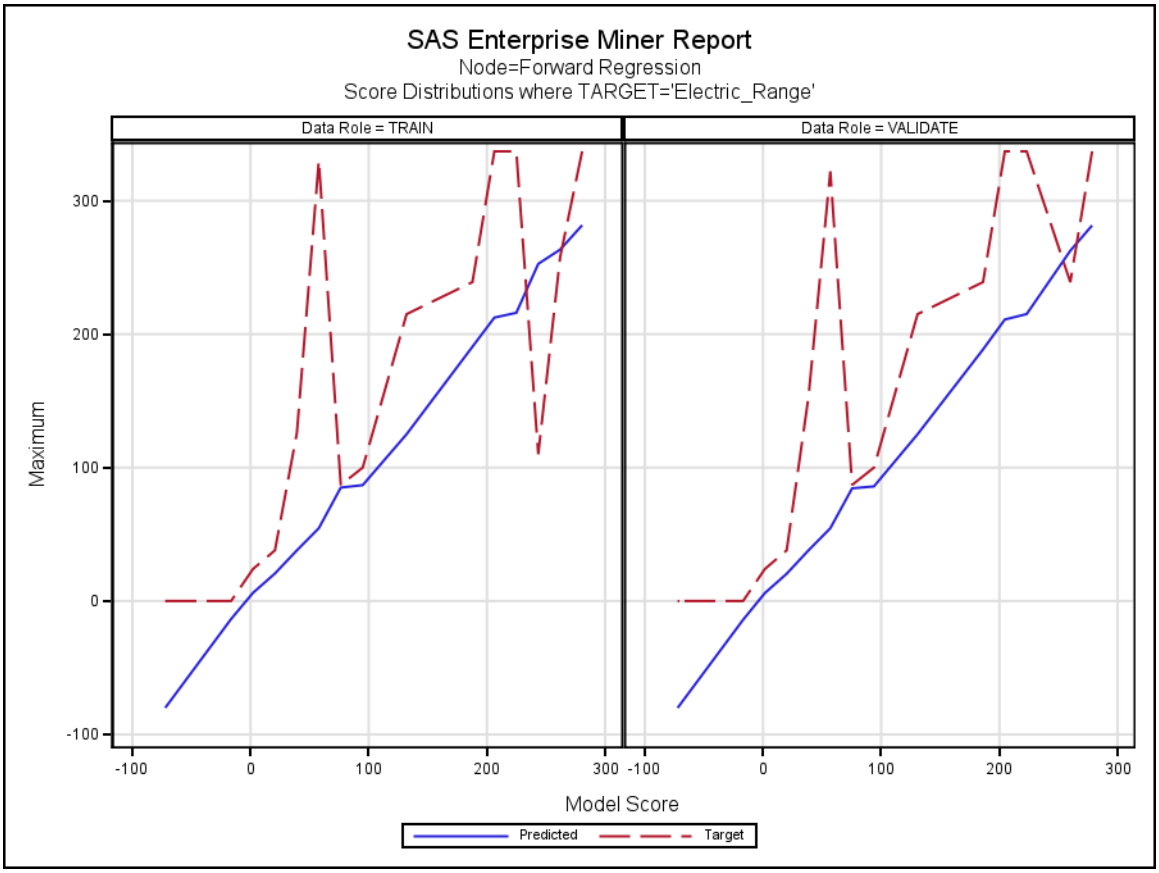


Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable
1	Electric_Vehicle_Type	BEV	229.362	246.867	0	23	Make
2	Make	AZURE_DYNAMICS	-132.542	-11.255	2.3263E-29	24	Make
3	Clean_Alternative_Fuel_Vehicle__		127.052	297.703	0	25	Make
4	Make	SMART	-125.439	-44.693	0	26	Make
5	Make	FIAT	-102.480	-54.935	0	27	Make
6	Intercept		99.191	89.706	0	28	Make
7	Clean_Alternative_Fuel_Vehicle__		-85.575	-128.430	0	29	Make
8	Clean_Alternative_Fuel_Vehicle__		-78.032	-177.027	0	30	Make
9	Clean_Alternative_Fuel_Vehicle__		-69.334	-88.967	0	31	Make
10	Make	NISSAN	-63.158	-55.281	0	32	Make
11	Electric_Vehicle_Type	BATTERY_ELE	-35.908	-73.276	0	33	Make
12	Make	JAGUAR	31.034	11.251	2.444E-29	34	Make
13	Make	TESLA	25.645	23.546	4.385E-122	35	Make
14	Make	CHEVROLET	22.873	20.214	1.3733E-90	36	Make
15	Make	LUCID	17.089	5.439	.000000054	37	Make
16	Make	RIVIAN	16.931	13.236	6.1405E-40	38	Make
17	Make	GENESIS	16.869	4.747	.000002066	39	Make
18	Make	HONDA	16.350	8.690	3.7007E-18	40	Make
19	Make	POLESTAR	15.970	9.159	5.3792E-20	41	Make
20	Make	SUBARU	15.869	8.851	8.8443E-19	42	Make
21	Make	MAZDA	15.350	6.491	8.5711E-11	43	Make
22	Make	HYUNDAI	15.241	12.120	9.0037E-34	44	Legislative_District

Level	Coefficient	T-value	P Value
LINCOLN	13.0413	4.6291	0.00000
CADILLAC	12.3735	4.3293	0.00001
AUDI	12.1634	9.4562	0.00000
JEEP	11.7040	9.0370	0.00000
LEXUS	11.6235	4.5122	0.00001
FISKER	11.5596	1.5121	0.13053
TOYOTA	10.4363	8.5637	0.00000
LAND_ROVER	10.3923	1.6982	0.08947
VOLVO	10.3910	8.2813	0.00000
FORD	9.8576	8.5016	0.00000
BMW	9.2577	7.8790	0.00000
BENTLEY	8.4684	0.3226	0.74700
KIA	6.7748	5.7703	0.00000
VOLKSWAGEN	-5.1210	-4.1407	0.00003
MERCEDES_BENZ	4.7200	3.0015	0.00269
PORSCHE	4.0611	2.4898	0.01278
ALFA_ROMEO	3.4878	0.4169	0.67675
MINI	-2.9950	-1.6959	0.08990
CHRYSLER	2.0999	1.5406	0.12343
DODGE	1.0722	0.1457	0.88413
MITSUBISHI	0.8058	0.4701	0.63832
	-0.0723	-10.1550	0.00000


SAS Enterprise Miner Report
Node=Forward Regression
Model Iteration Plots
Average Square Error
8000
6000
4000
2000
0
1
2
3
4
Iteration
Train
Validate


SAS Enterprise Miner Report
Node=Forward Regression
Score Distributions where TARGET='Electric_Range'
Data Role = TRAIN
Data Role = VALIDATE
Mean
300
200
100
0
-100
-100
0
100
200
300
Model Score
Predicted
Target



Node=Forward Regression
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
271.256 - 289.819	281.625	289.819	271.351	289.153	337	170
252.692 - 271.256	263.413	271.238	252.753	208.254	258	110
234.129 - 252.692	252.681	252.681	252.681	110.000	110	110
215.565 - 234.129	216.001	221.297	215.619	238.993	337	200
197.002 - 215.565	212.426	215.546	197.011	226.565	337	58
178.439 - 197.002	190.571	196.990	181.233	137.485	239	29
122.748 - 141.312	125.023	127.106	123.635	102.209	215	73
85.621 - 104.185	86.862	100.578	85.686	85.885	100	84
67.058 - 85.621	85.010	85.614	84.312	85.665	87	84
48.495 - 67.058	54.593	64.824	48.561	47.222	330	0
29.931 - 48.495	37.981	48.489	29.932	41.164	126	30
11.368 - 29.931	20.631	29.917	11.385	20.473	38	0
-7.196 - 11.368	6.143	11.313	-7.178	0.173	24	0
-25.759 - -7.196	-13.520	-7.205	-23.413	0.000	0	0
-81.449 - -62.886	-80.045	-77.979	-81.449	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
269.195 - 287.650	281.482	287.650	269.286	289.126	337	170
250.740 - 269.195	262.516	269.141	252.681	211.605	239	110
213.830 - 232.285	215.040	221.297	213.883	236.114	337	200
195.375 - 213.830	210.967	213.811	195.447	220.219	337	58
176.920 - 195.375	188.534	195.375	181.671	132.604	239	29

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
121.555 - 140.010	124.986	127.106	123.635	101.743	215	73
84.645 - 103.100	85.885	98.988	84.674	85.586	100	84
66.190 - 84.645	84.466	84.601	84.312	85.658	87	84
47.735 - 66.190	54.549	64.824	47.766	48.745	322	0
29.280 - 47.735	37.975	47.693	29.282	41.480	153	30
10.825 - 29.280	20.455	29.209	10.842	20.343	38	0
-7.630 - 10.825	5.979	10.824	-7.612	0.119	24	0
-26.085 - -7.630	-14.089	-7.639	-23.413	0.000	0	0
-81.449 - -62.994	-80.106	-77.979	-81.449	0.000	0	0

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	
ClParm	N		MaxCPUTime	1 HOUR		SlEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SlStay	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	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make

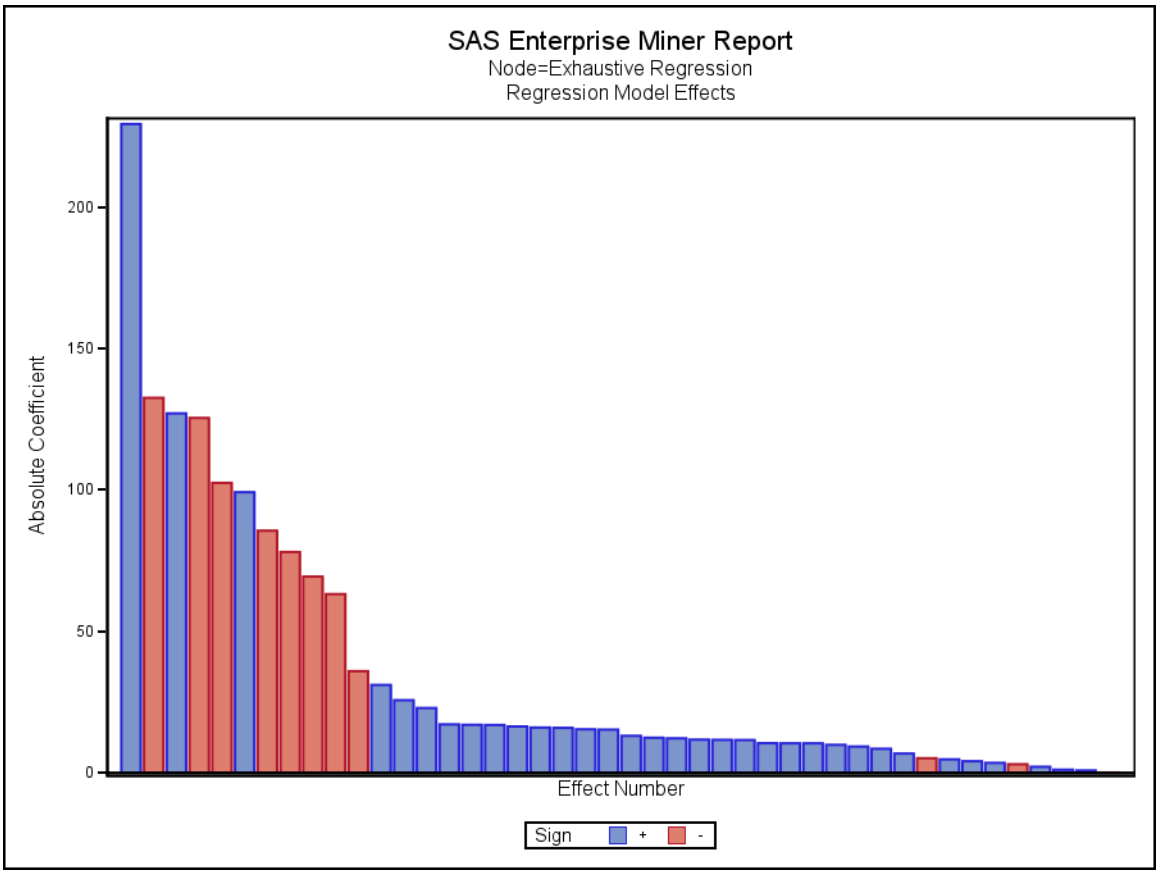
Node=Exhaustive Regression Model Fit Statistics

Target=Electric_Range Target Label=' '

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	441348.07	.	.
Average Squared Error	745.17	727.53	715.40
Average Error Function	745.17	727.53	715.40
Degrees of Freedom for Error	66676.00	.	.
Model Degrees of Freedom	44.00	.	.
Total Degrees of Freedom	66720.00	.	.

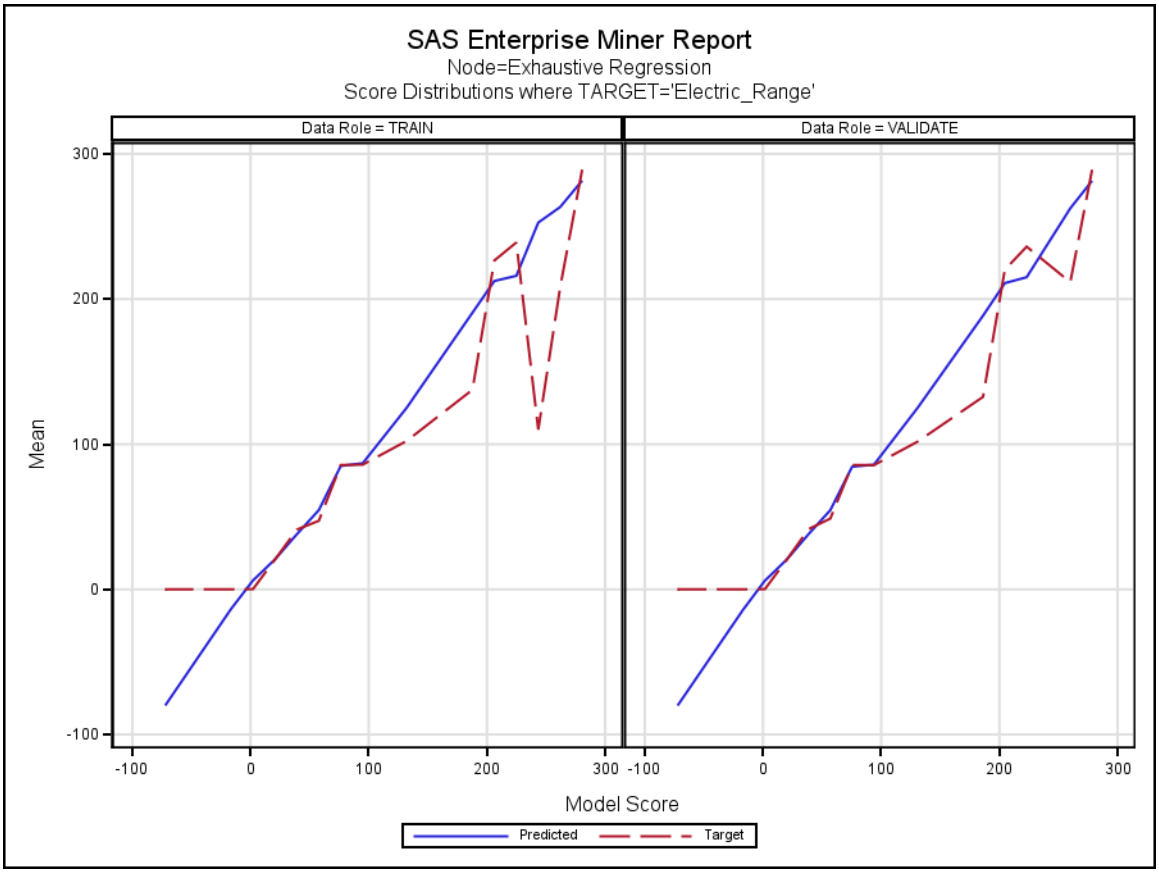
Target=Electric_Range Target Label=' '

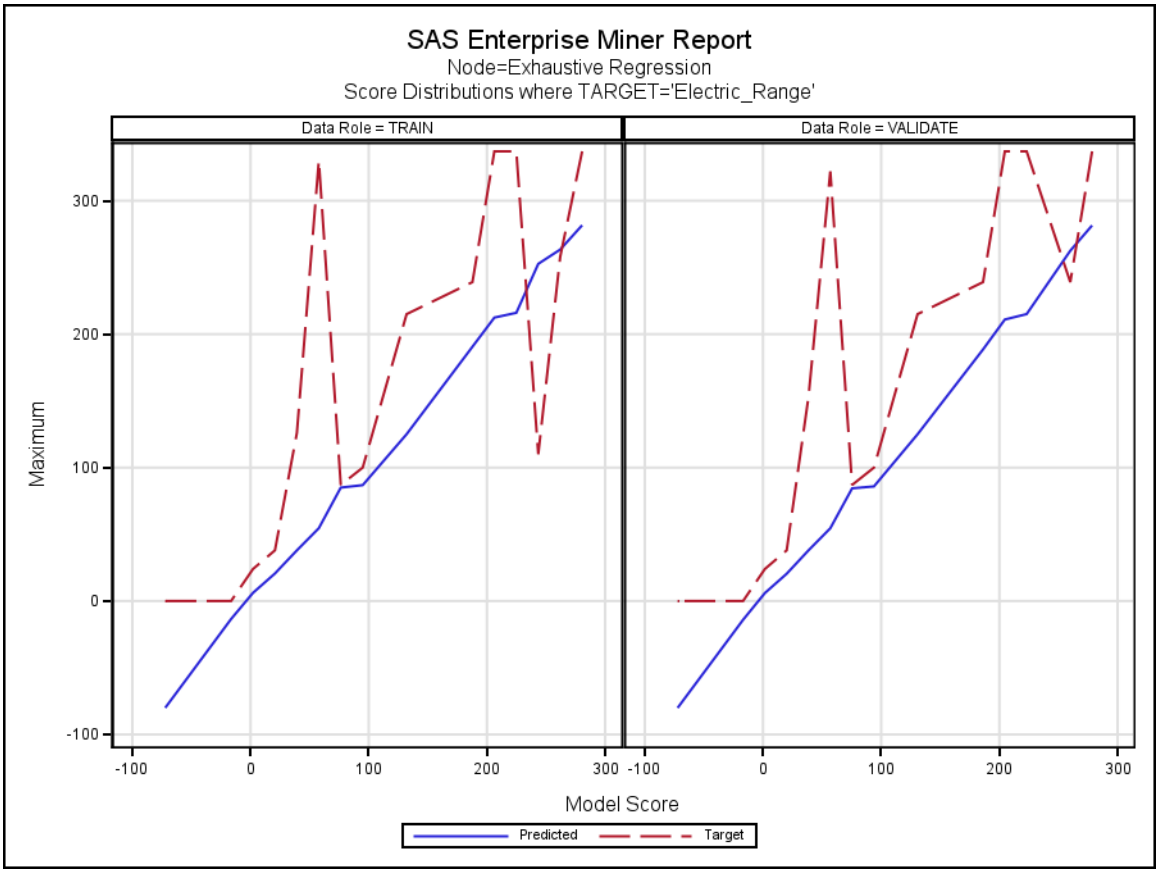
Label of Statistic	Train	Validation	Test
Divisor for ASE	66720.00	50040.00	50040.00
Error Function	49717630.39	36405734.35	35798642.07
Final Prediction Error	746.15	.	.
Maximum Absolute Error	268.31	260.31	229.31
Mean Square Error	745.66	727.53	715.40
Sum of Frequencies	66720.00	50040.00	50040.00
Number of Estimate Weights	44.00	.	.
Root Average Sum of Squares	27.30	26.97	26.75
Root Final Prediction Error	27.32	.	.
Root Mean Squared Error	27.31	26.97	26.75
Schwarz's Bayesian Criterion	441748.83	.	.
Sum of Squared Errors	49717630.39	36405734.35	35798642.07
Sum of Case Weights Times Freq	66720.00	50040.00	50040.00



Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable
1	Electric_Vehicle_Type	BEV	229.362	246.867	0	23	Make
2	Make	AZURE_DYNAMICS	-132.542	-11.255	2.3263E-29	24	Make
3	Clean_Alternative_Fuel_Vehicle__		127.052	297.703	0	25	Make
4	Make	SMART	-125.439	-44.693	0	26	Make
5	Make	FIAT	-102.480	-54.935	0	27	Make
6	Intercept		99.191	89.706	0	28	Make
7	Clean_Alternative_Fuel_Vehicle__		-85.575	-128.430	0	29	Make
8	Clean_Alternative_Fuel_Vehicle__		-78.032	-177.027	0	30	Make
9	Clean_Alternative_Fuel_Vehicle__		-69.334	-88.967	0	31	Make
10	Make	NISSAN	-63.158	-55.281	0	32	Make
11	Electric_Vehicle_Type	BATTERY_ELE	-35.908	-73.276	0	33	Make
12	Make	JAGUAR	31.034	11.251	2.444E-29	34	Make
13	Make	TESLA	25.645	23.546	4.385E-122	35	Make
14	Make	CHEVROLET	22.873	20.214	1.3733E-90	36	Make
15	Make	LUCID	17.089	5.439	.000000054	37	Make
16	Make	RIVIAN	16.931	13.236	6.1405E-40	38	Make
17	Make	GENESIS	16.869	4.747	.000002066	39	Make
18	Make	HONDA	16.350	8.690	3.7007E-18	40	Make
19	Make	POLESTAR	15.970	9.159	5.3792E-20	41	Make
20	Make	SUBARU	15.869	8.851	8.8443E-19	42	Make
21	Make	MAZDA	15.350	6.491	8.5711E-11	43	Make
22	Make	HYUNDAI	15.241	12.120	9.0037E-34	44	Legislative_District

Level	Coefficient	T-value	P Value
LINCOLN	13.0413	4.6291	0.00000
CADILLAC	12.3735	4.3293	0.00001
AUDI	12.1634	9.4562	0.00000
JEEP	11.7040	9.0370	0.00000
LEXUS	11.6235	4.5122	0.00001
FISKER	11.5596	1.5121	0.13053
TOYOTA	10.4363	8.5637	0.00000
LAND_ROVER	10.3923	1.6982	0.08947
VOLVO	10.3910	8.2813	0.00000
FORD	9.8576	8.5016	0.00000
BMW	9.2577	7.8790	0.00000
BENTLEY	8.4684	0.3226	0.74700
KIA	6.7748	5.7703	0.00000
VOLKSWAGEN	-5.1210	-4.1407	0.00003
MERCEDES_BENZ	4.7200	3.0015	0.00269
PORSCHE	4.0611	2.4898	0.01278
ALFA_ROMEO	3.4878	0.4169	0.67675
MINI	-2.9950	-1.6959	0.08990
CHRYSLER	2.0999	1.5406	0.12343
DODGE	1.0722	0.1457	0.88413
MITSUBISHI	0.8058	0.4701	0.63832
	-0.0723	-10.1550	0.00000





Node=Exhaustive Regression
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
271.256 - 289.819	281.625	289.819	271.351	289.153	337	170
252.692 - 271.256	263.413	271.238	252.753	208.254	258	110
234.129 - 252.692	252.681	252.681	252.681	110.000	110	110
215.565 - 234.129	216.001	221.297	215.619	238.993	337	200
197.002 - 215.565	212.426	215.546	197.011	226.565	337	58
178.439 - 197.002	190.571	196.990	181.233	137.485	239	29
122.748 - 141.312	125.023	127.106	123.635	102.209	215	73
85.621 - 104.185	86.862	100.578	85.686	85.885	100	84
67.058 - 85.621	85.010	85.614	84.312	85.665	87	84
48.495 - 67.058	54.593	64.824	48.561	47.222	330	0
29.931 - 48.495	37.981	48.489	29.932	41.164	126	30
11.368 - 29.931	20.631	29.917	11.385	20.473	38	0
-7.196 - 11.368	6.143	11.313	-7.178	0.173	24	0
-25.759 - -7.196	-13.520	-7.205	-23.413	0.000	0	0
-81.449 - -62.886	-80.045	-77.979	-81.449	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
269.195 - 287.650	281.482	287.650	269.286	289.126	337	170
250.740 - 269.195	262.516	269.141	252.681	211.605	239	110
213.830 - 232.285	215.040	221.297	213.883	236.114	337	200
195.375 - 213.830	210.967	213.811	195.447	220.219	337	58
176.920 - 195.375	188.534	195.375	181.671	132.604	239	29
121.555 - 140.010	124.986	127.106	123.635	101.743	215	73
84.645 - 103.100	85.885	98.988	84.674	85.586	100	84
66.190 - 84.645	84.466	84.601	84.312	85.658	87	84
47.735 - 66.190	54.549	64.824	47.766	48.745	322	0
29.280 - 47.735	37.975	47.693	29.282	41.480	153	30
10.825 - 29.280	20.455	29.209	10.842	20.343	38	0
-7.630 - 10.825	5.979	10.824	-7.612	0.119	24	0
-26.085 - -7.630	-14.089	-7.639	-23.413	0.000	0	0
-81.449 - -62.994	-80.106	-77.979	-81.449	0.000	0	0

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	

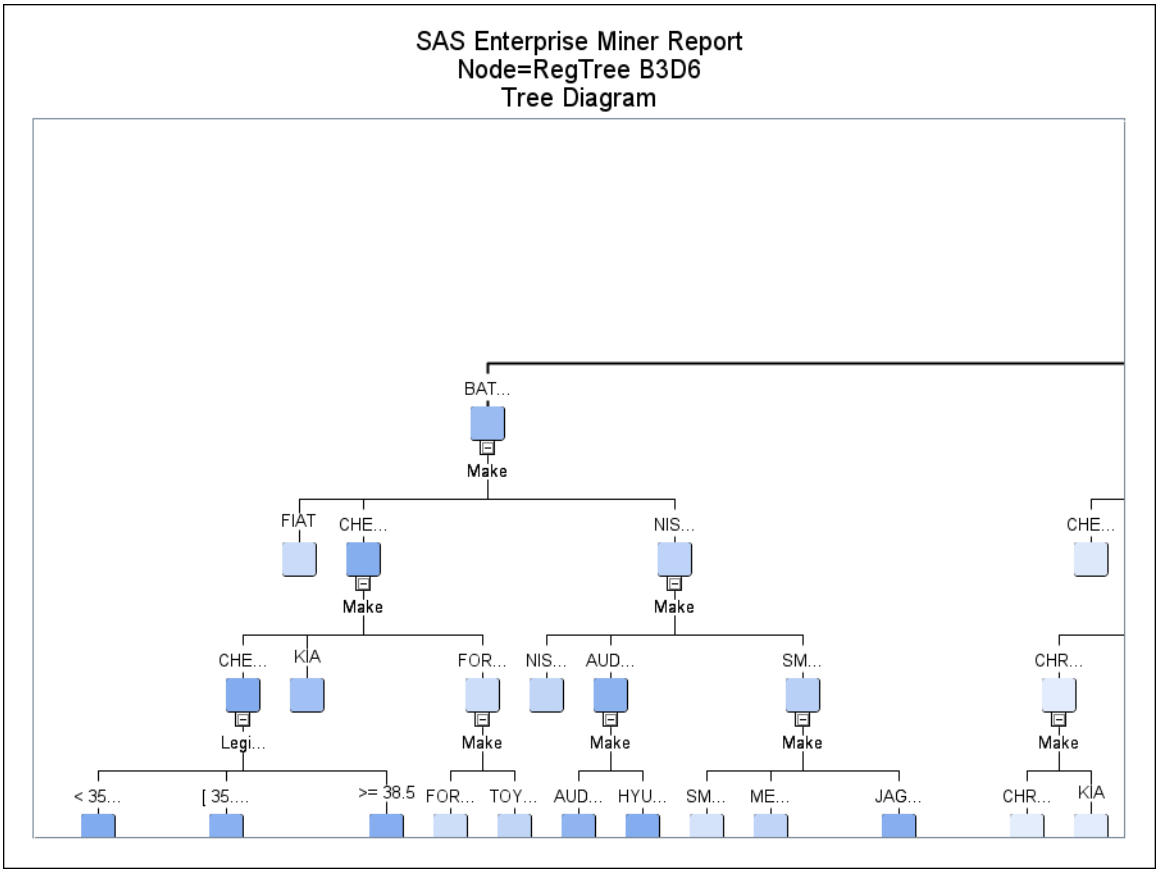
Node=RegTree B3D6
Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make
ID	INTERVAL	1	_dataobs_

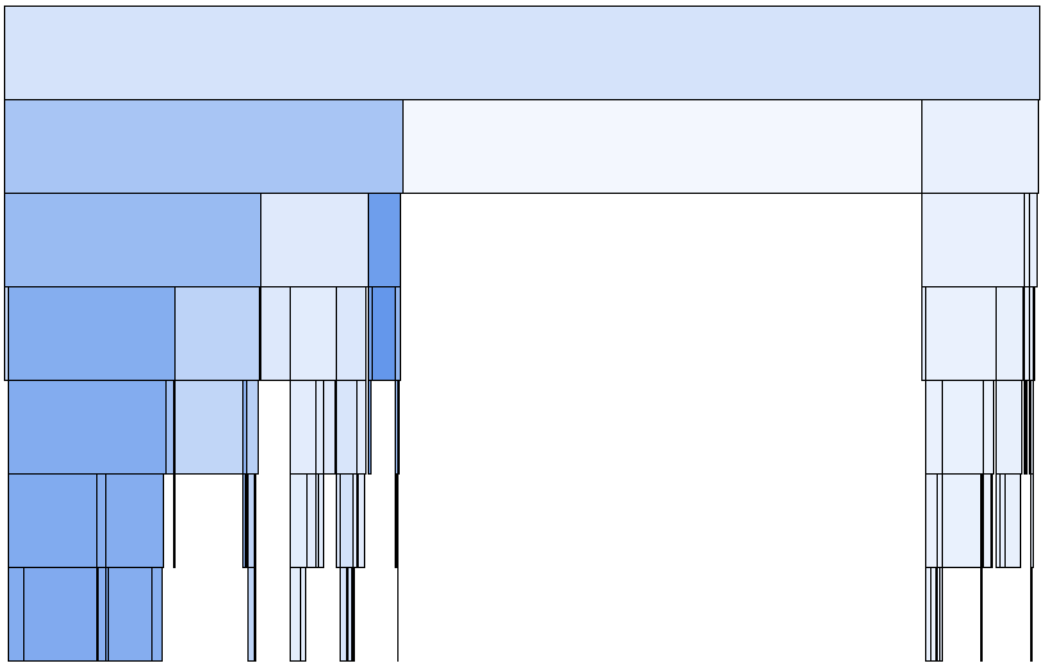
Node=RegTree B3D6
Model Fit Statistics

Target=Electric_Range Target Label=' '

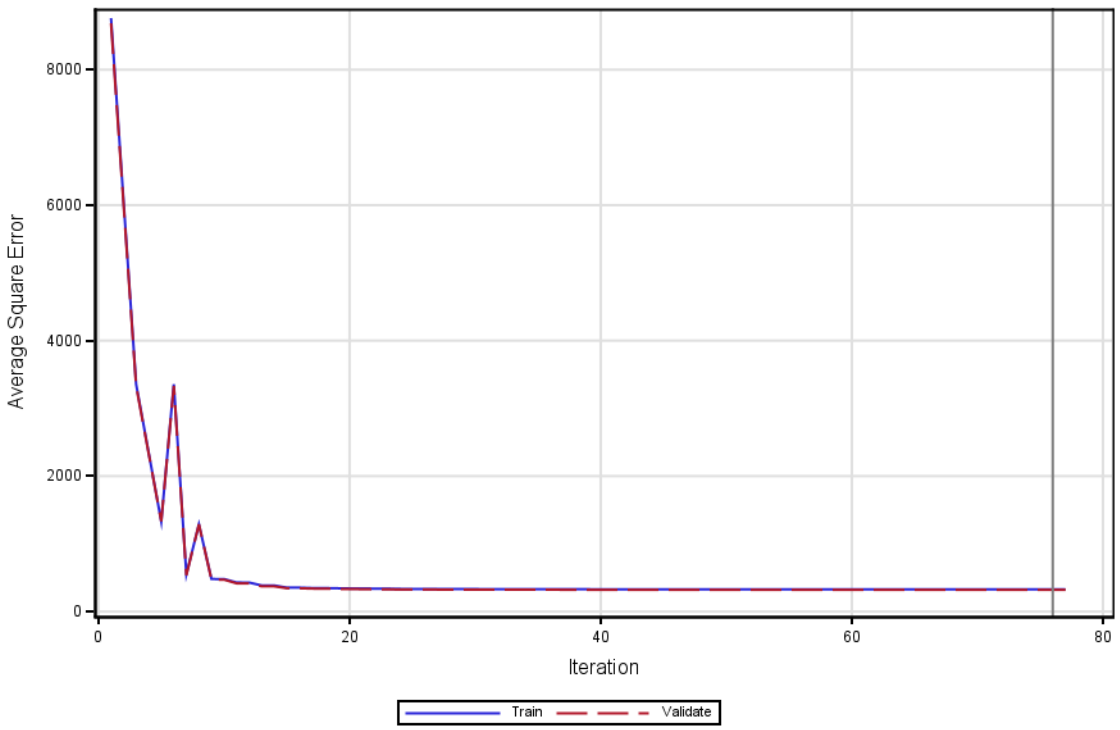
Label of Statistic	Train	Validation	Test
Sum of Frequencies	66720.00	50040.00	50040.00
Maximum Absolute Error	158.05	158.05	187.76
Sum of Squared Errors	21881319.59	16042934.78	15688103.83
Average Squared Error	327.96	320.60	313.51
Root Average Squared Error	18.11	17.91	17.71
Divisor for ASE	66720.00	50040.00	50040.00
Total Degrees of Freedom	66720.00	.	.

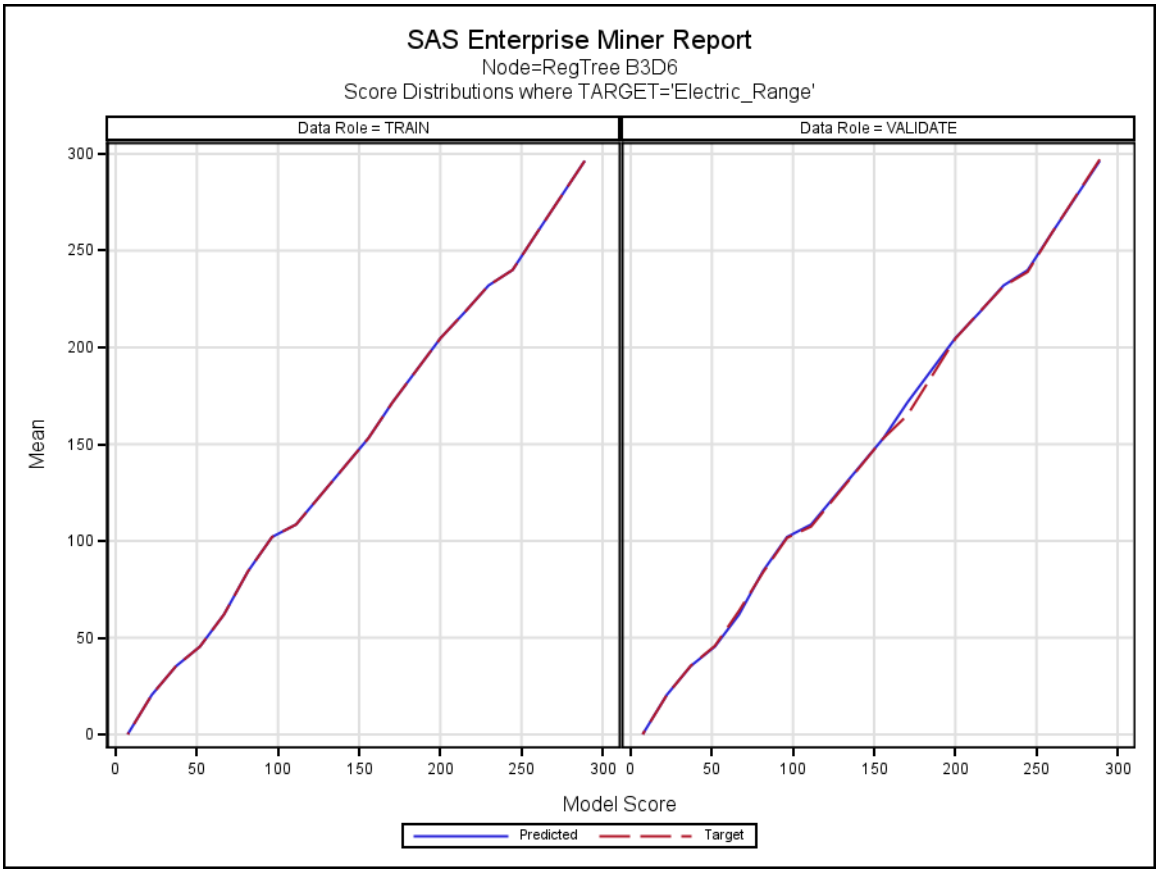


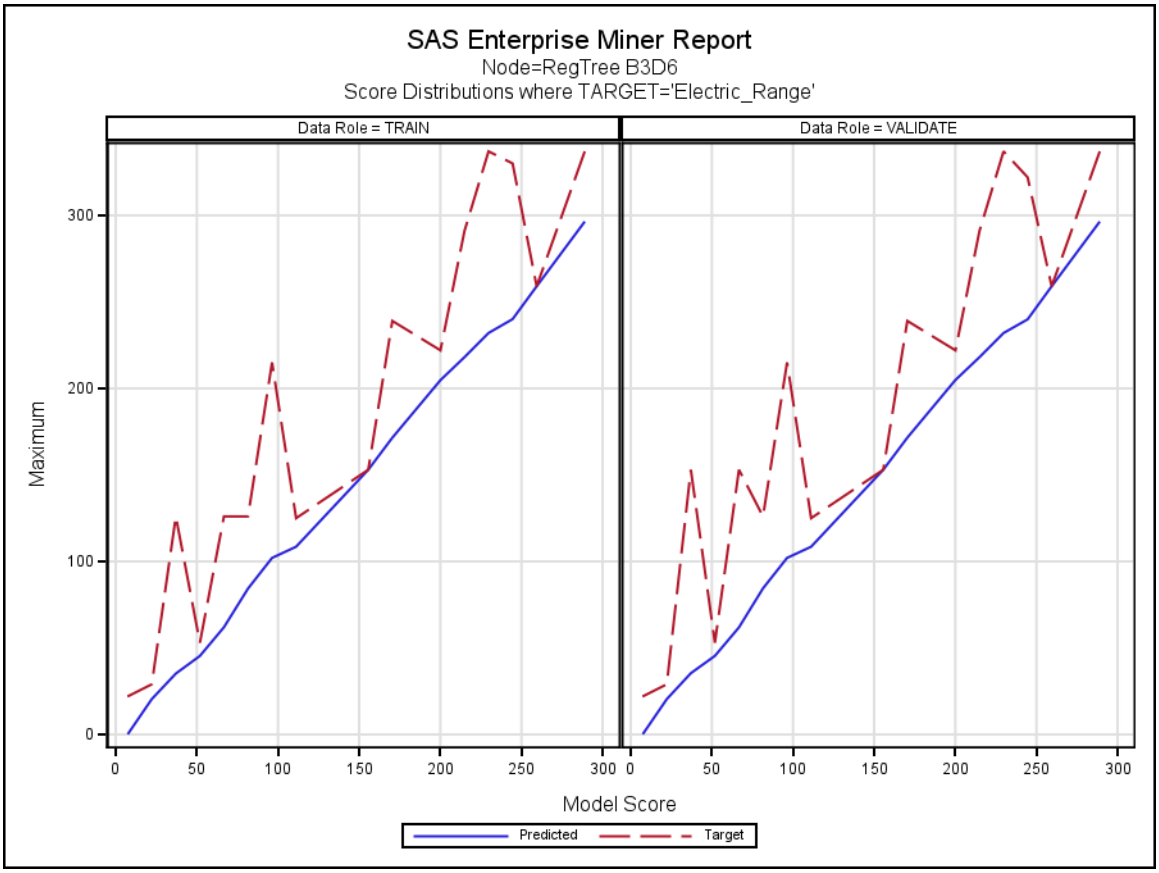
SAS Enterprise Miner Report
Node=RegTree B3D6
Treemap



SAS Enterprise Miner Report
Node=RegTree B3D6
Model Iteration Plots







Node=RegTree B3D6
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	296.425	337	266
251.961 - 266.783	259.000	259.000	259.000	259.000	259	259
237.140 - 251.961	240.038	241.396	239.000	240.038	330	82
222.319 - 237.140	232.020	236.446	222.708	232.020	337	82
207.498 - 222.319	218.067	220.809	217.826	218.067	291	200
192.676 - 207.498	204.756	207.084	198.000	204.756	222	192
163.034 - 177.855	171.494	177.210	170.085	171.494	239	93
148.213 - 163.034	153.000	153.000	153.000	153.000	153	153
103.749 - 118.570	108.506	110.000	108.423	108.506	125	83
88.928 - 103.749	102.038	103.000	102.034	102.038	215	73
74.106 - 88.928	84.313	87.000	77.204	84.313	126	30
59.285 - 74.106	61.978	64.215	60.483	61.978	126	30
44.464 - 59.285	45.386	47.007	45.132	45.386	53	35
29.643 - 44.464	35.201	41.847	31.860	35.201	126	30
14.821 - 29.643	20.453	28.475	15.252	20.453	29	6
0.000 - 14.821	0.127	14.472	0.000	0.127	22	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	297.166	337	266
251.961 - 266.783	259.000	259.000	259.000	259.000	259	259
237.140 - 251.961	239.899	241.396	239.000	238.992	322	82
222.319 - 237.140	232.001	236.446	222.708	231.636	337	82
207.498 - 222.319	218.056	220.809	217.826	218.295	291	200
192.676 - 207.498	204.869	207.084	198.000	204.601	222	192
163.034 - 177.855	171.535	177.210	170.085	164.952	239	93
148.213 - 163.034	153.000	153.000	153.000	153.000	153	153
103.749 - 118.570	108.494	110.000	108.423	107.432	125	83
88.928 - 103.749	102.037	103.000	102.034	101.589	215	73
74.106 - 88.928	84.443	87.000	77.204	83.732	126	30
59.285 - 74.106	61.879	64.215	60.483	63.838	153	30
44.464 - 59.285	45.419	47.007	45.132	45.795	53	35
29.643 - 44.464	35.399	41.847	31.860	35.549	153	30
14.821 - 29.643	20.430	28.475	15.252	20.366	29	6
0.000 - 14.821	0.132	14.472	0.000	0.132	22	0

SAS Enterprise Miner Report

Node=Reg Tree B2D2
Summary

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

Node=Reg Tree 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	

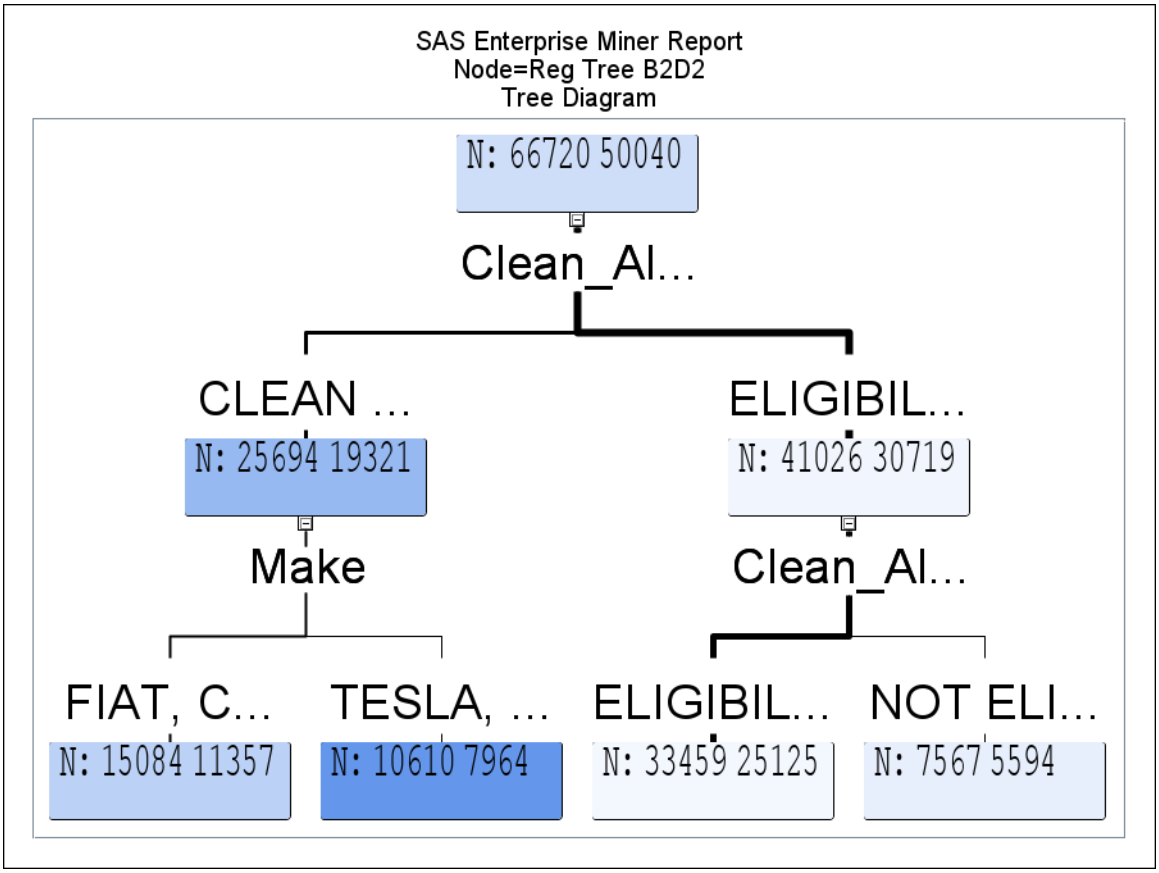
Node=Reg Tree B2D2
Variable Summary

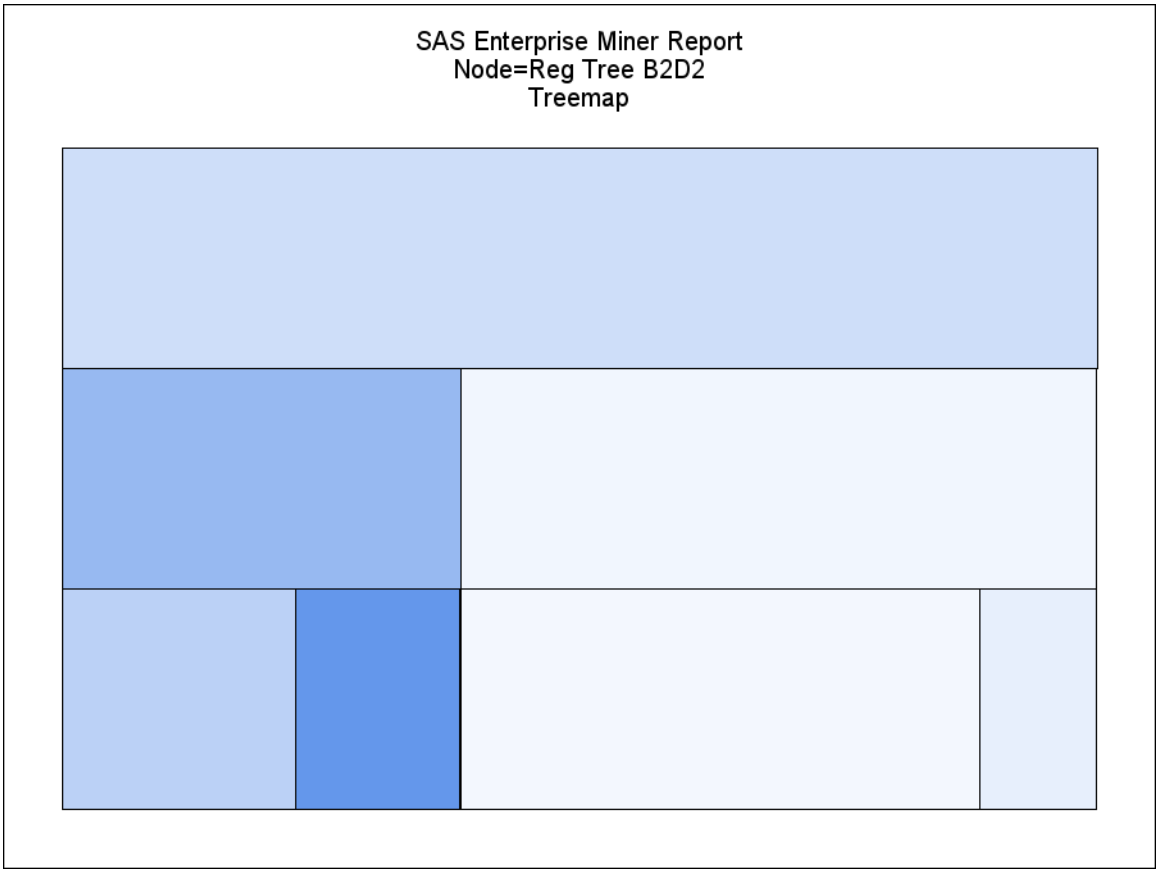
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make
ID	INTERVAL	1	_dataobs_

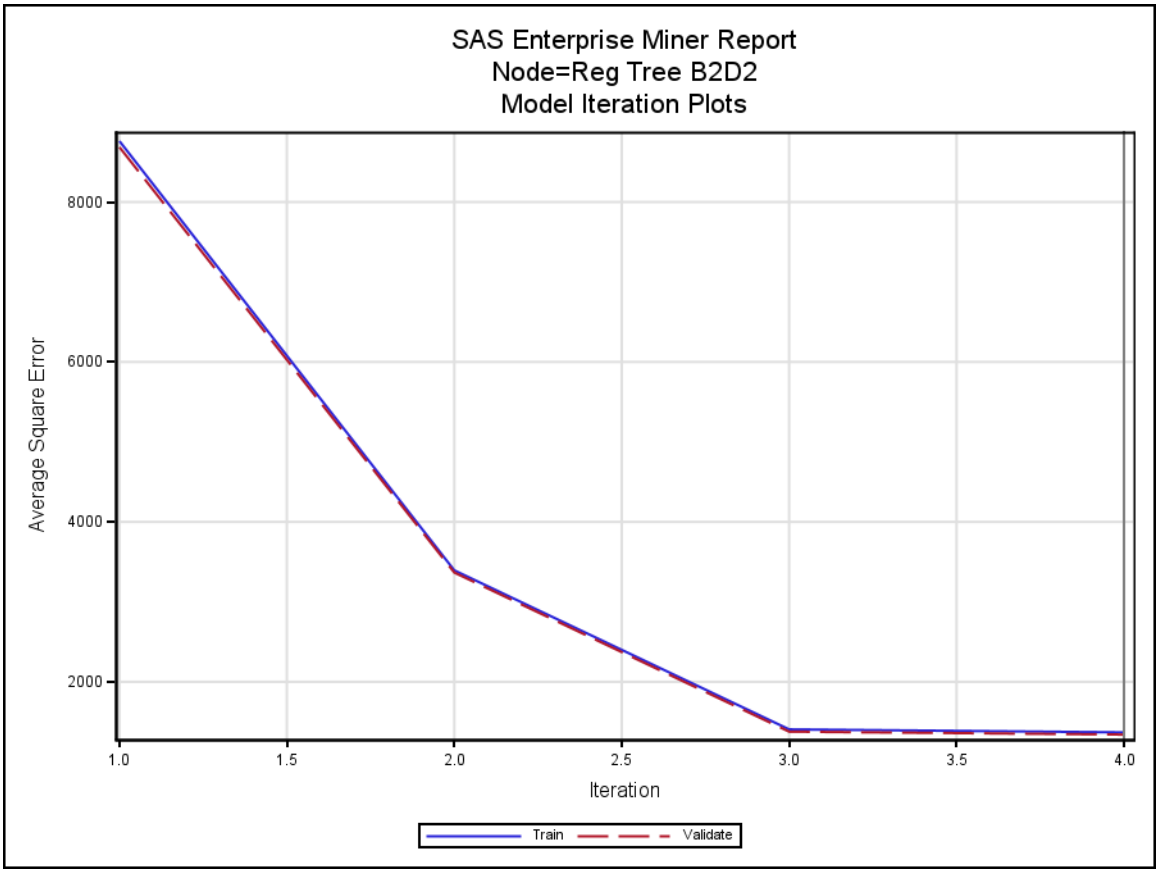
Node=Reg Tree B2D2
Model Fit Statistics

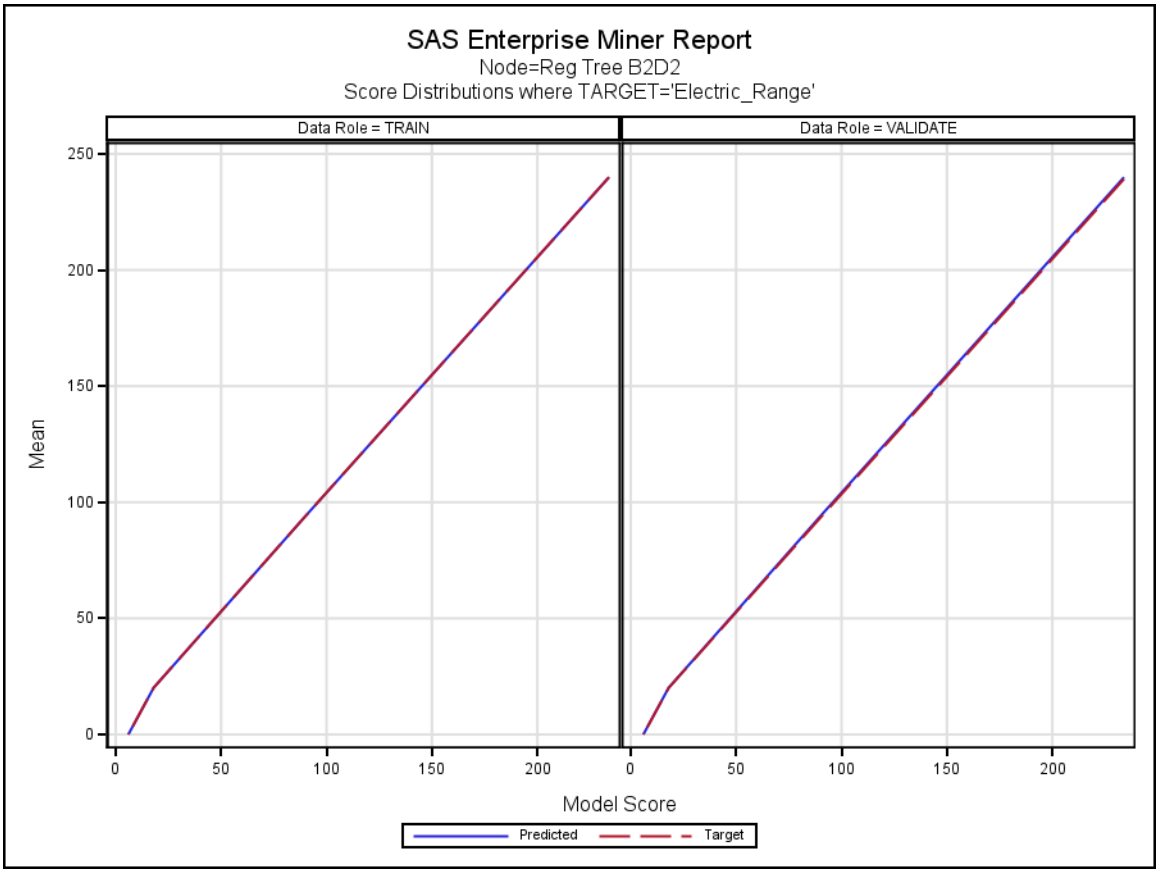
Target=Electric_Range Target Label=' '

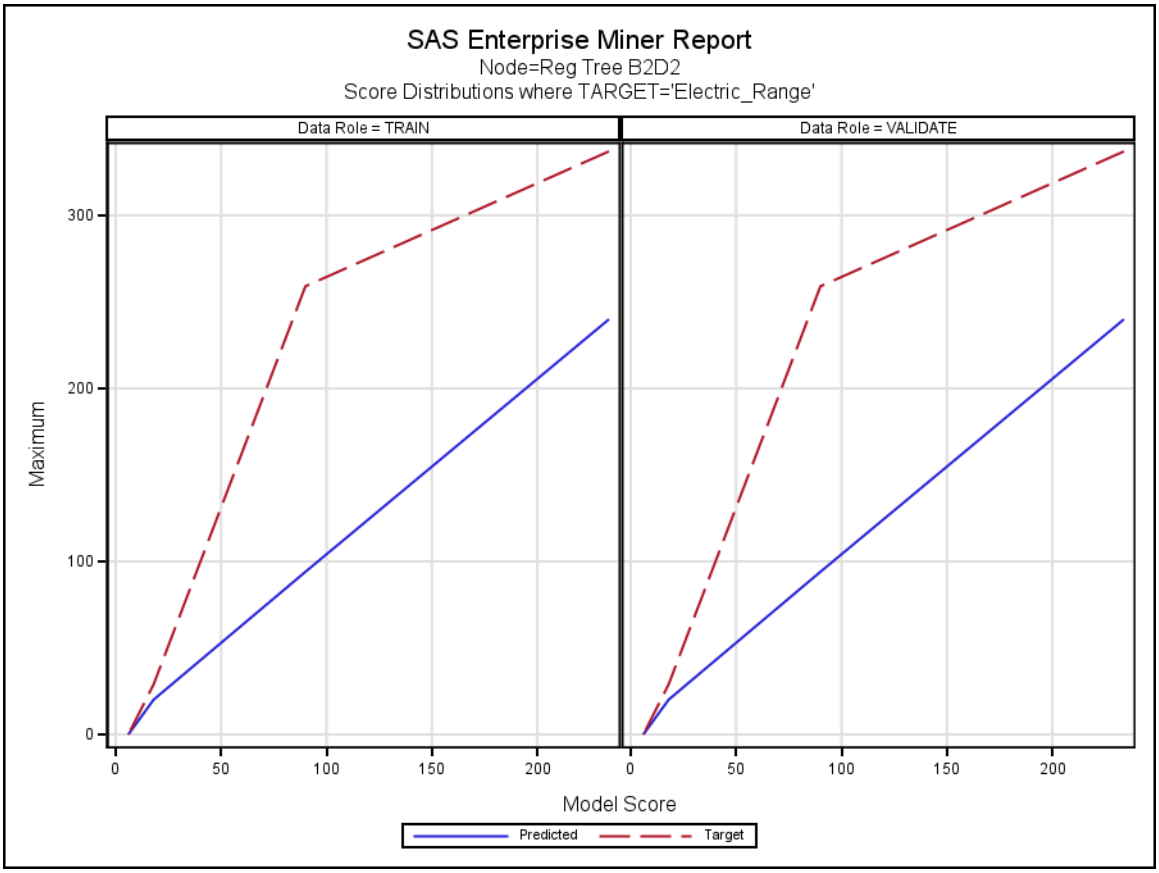
Label of Statistic	Train	Validation	Test
Sum of Frequencies	66720.00	50040.00	50040.00
Maximum Absolute Error	165.00	165.00	165.00
Sum of Squared Errors	91269341.84	67066898.42	66437149.22
Average Squared Error	1367.95	1340.27	1327.68
Root Average Squared Error	36.99	36.61	36.44
Divisor for ASE	66720.00	50040.00	50040.00
Total Degrees of Freedom	66720.00	.	.




SAS Enterprise Miner Report
Node=Reg Tree B2D2
Treemap


SAS Enterprise Miner Report
Node=Reg Tree B2D2
Model Iteration Plots
Average Square Error
8000
6000
4000
2000
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Iteration
Train
Validate





Node=Reg Tree B2D2
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
227.955 - 239.953	239.953	239.953	239.953	239.953	337	192
83.983 - 95.981	94.001	94.001	94.001	94.001	259	30
11.998 - 23.995	20.123	20.123	20.123	20.123	29	6
-0.000 - 11.998	0.000	0.000	0.000	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
227.955 - 239.953	239.953	239.953	239.953	239.173	337	192
83.983 - 95.981	94.001	94.001	94.001	93.349	259	30
11.998 - 23.995	20.123	20.123	20.123	20.019	29	6
-0.000 - 11.998	0.000	0.000	0.000	0.000	0	0

SAS Enterprise Miner Report

Node=Reg Tree B2D4
Summary

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

Node=Reg Tree 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	

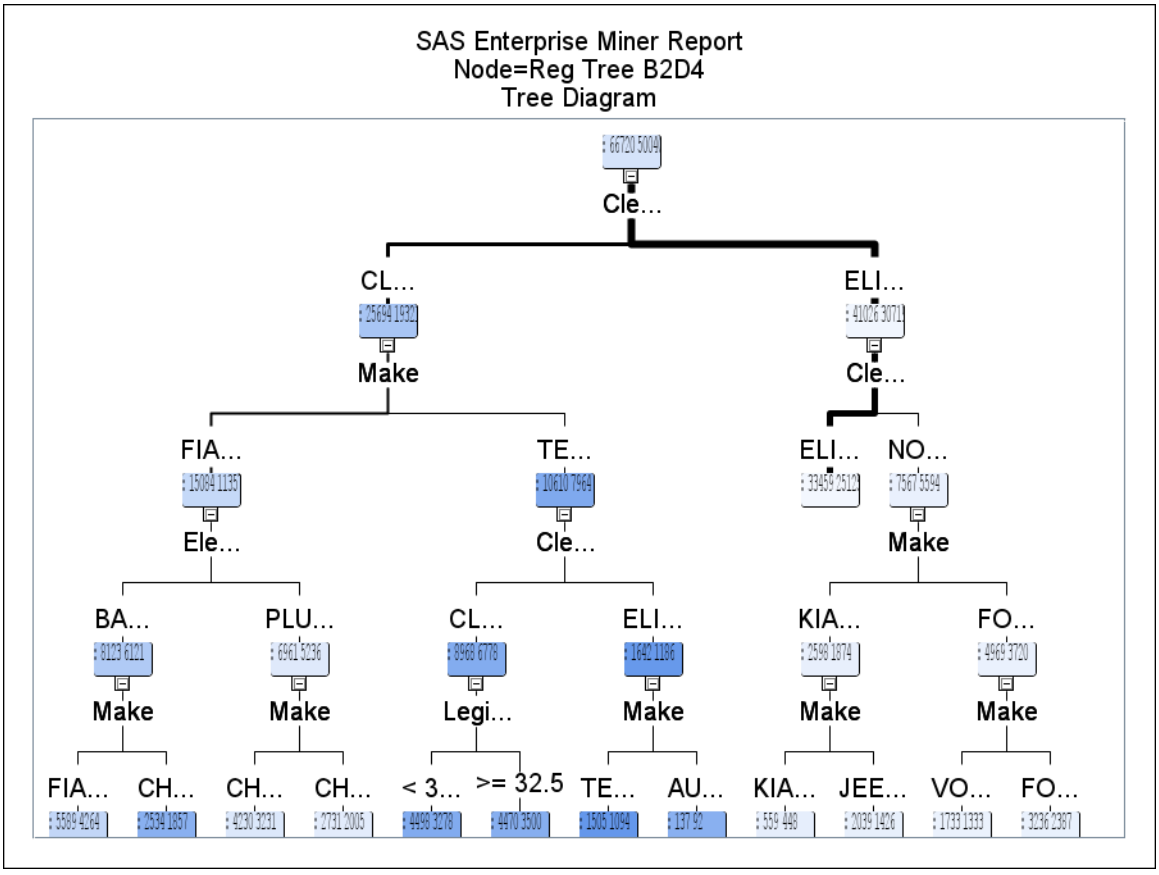
Node=Reg Tree B2D4
Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make
ID	INTERVAL	1	_dataobs_

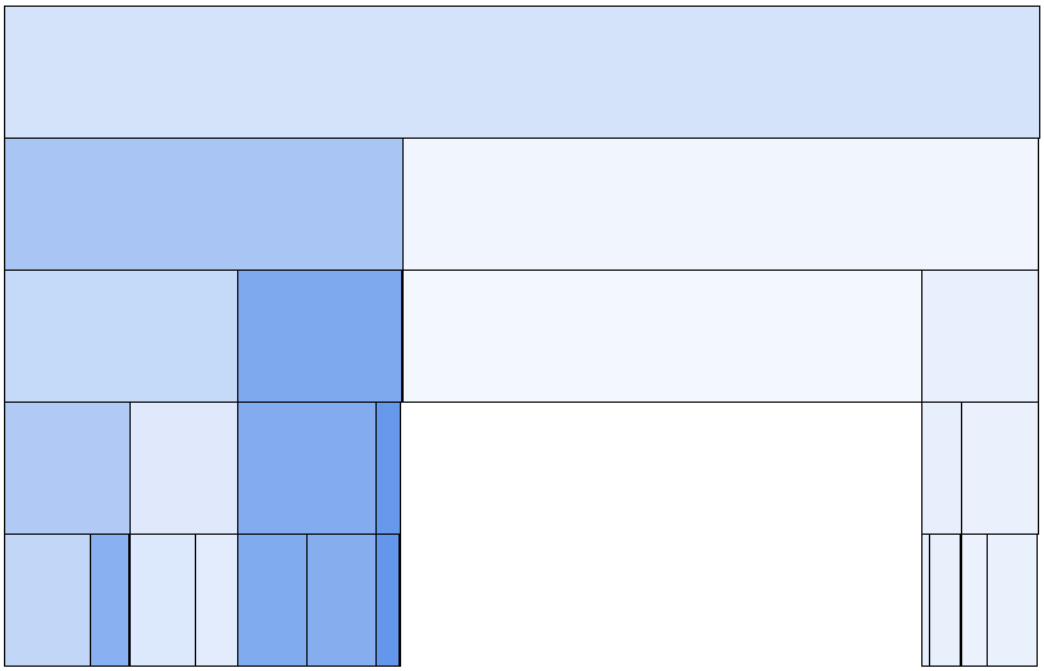
Node=Reg Tree B2D4
Model Fit Statistics

Target=Electric_Range Target Label=' '

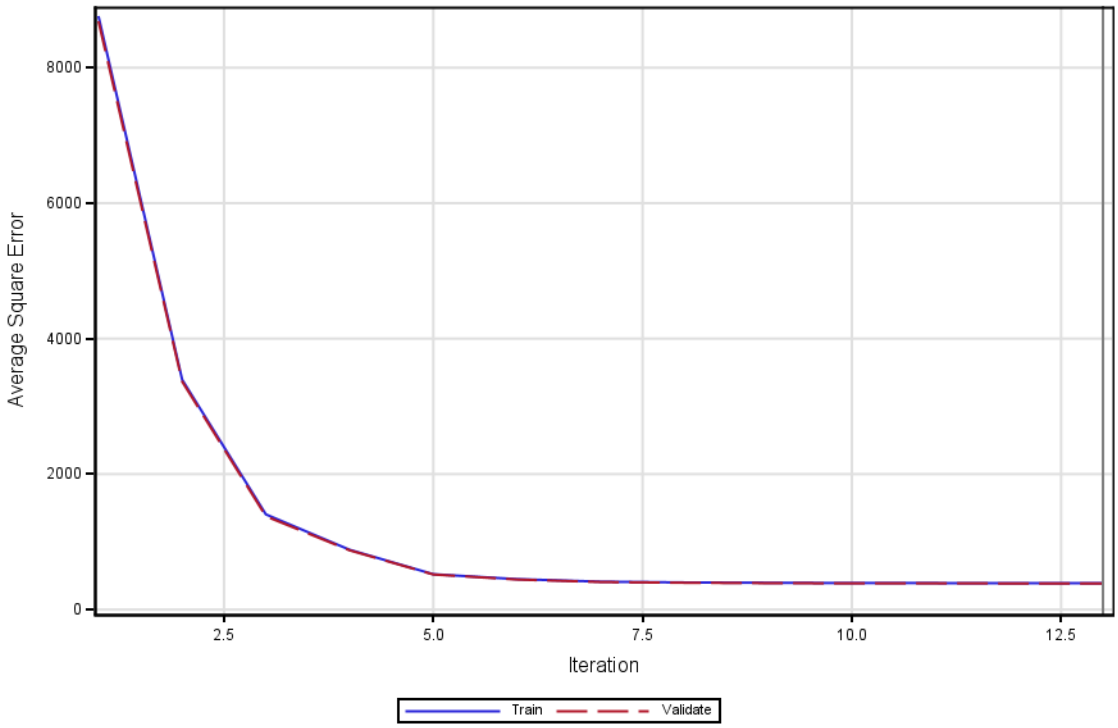
Label of Statistic	Train	Validation	Test
Sum of Frequencies	66720.00	50040.00	50040.00
Maximum Absolute Error	137.38	137.38	180.38
Sum of Squared Errors	26064278.43	19319684.19	18818353.00
Average Squared Error	390.65	386.08	376.07
Root Average Squared Error	19.76	19.65	19.39
Divisor for ASE	66720.00	50040.00	50040.00
Total Degrees of Freedom	66720.00	.	.

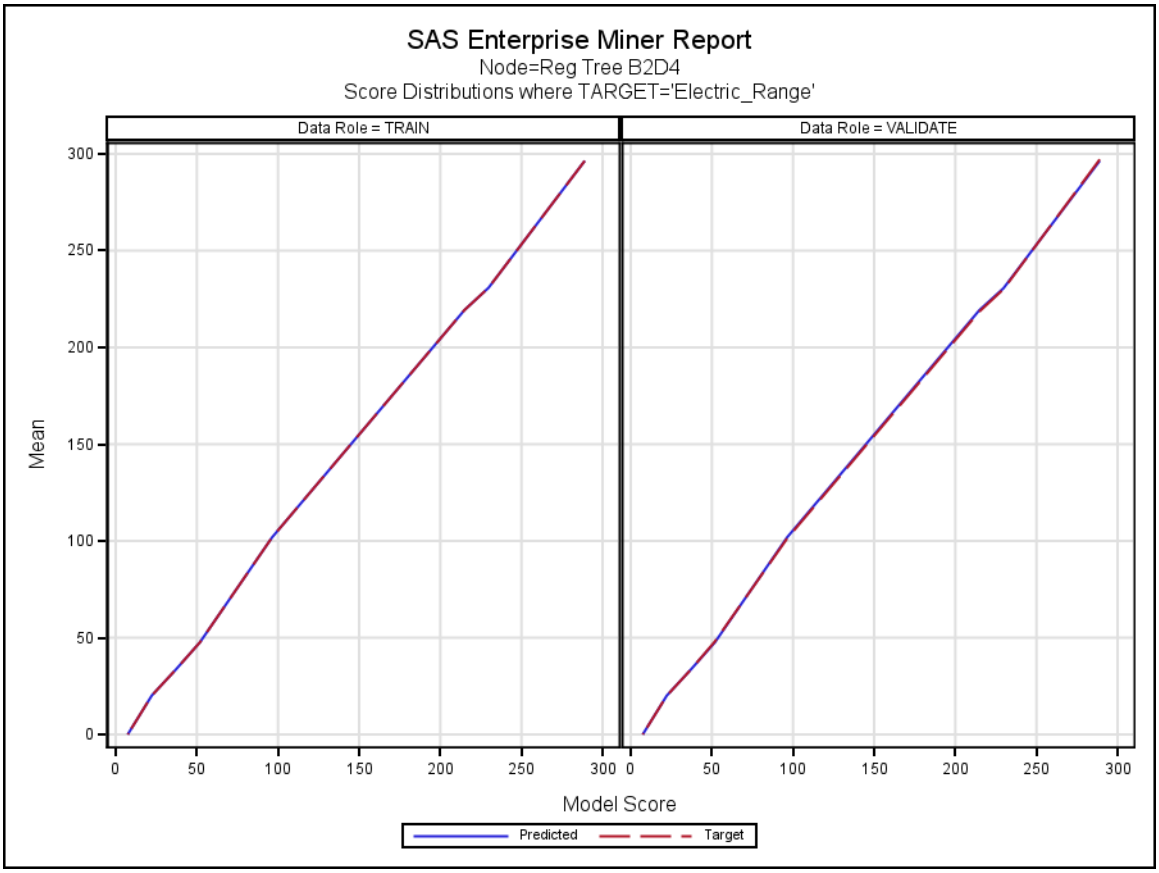


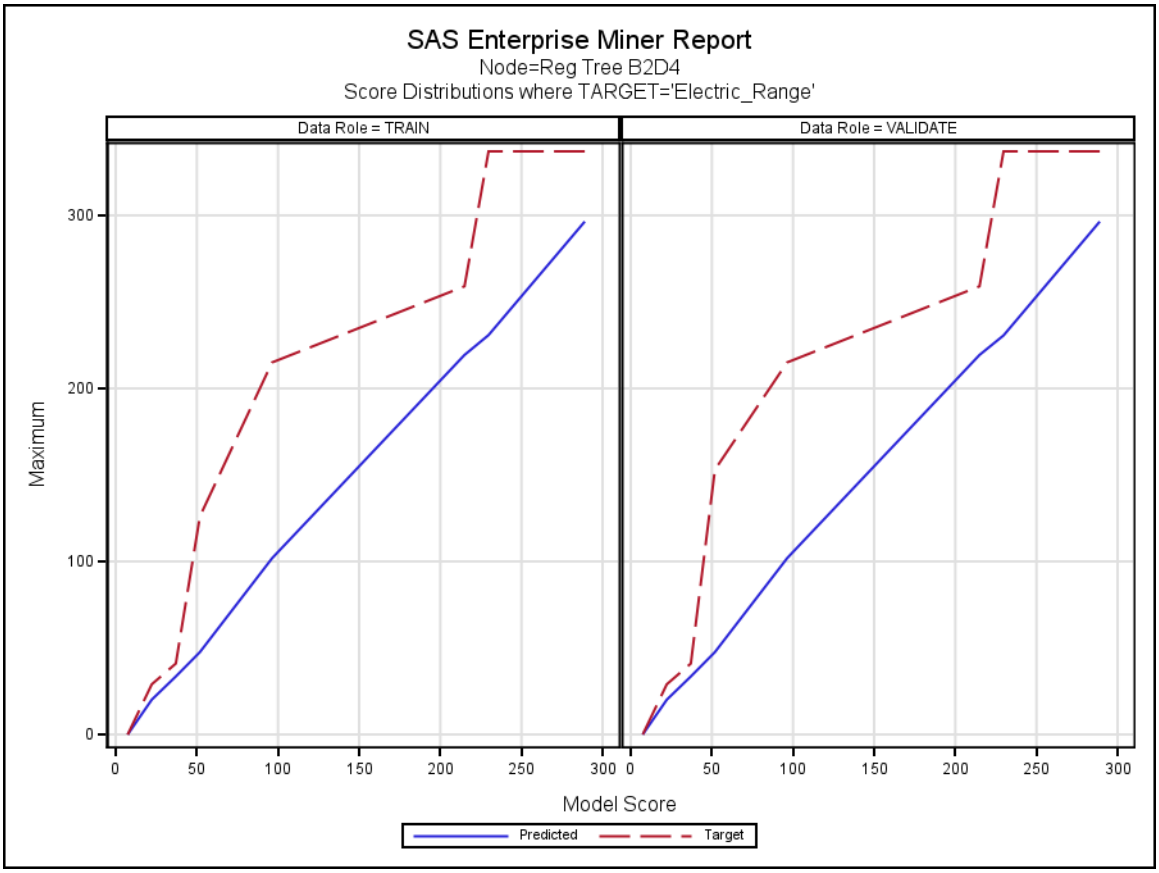
SAS Enterprise Miner Report
Node=Reg Tree B2D4
Treemap



SAS Enterprise Miner Report
Node=Reg Tree B2D4
Model Iteration Plots







Node=Reg Tree B2D4
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	296.425	337	266
222.319 - 237.140	230.808	236.123	225.460	230.808	337	192
207.498 - 222.319	219.319	219.380	218.175	219.319	259	82
88.928 - 103.749	101.826	101.826	101.826	101.826	215	56
44.464 - 59.285	47.590	47.590	47.590	47.590	126	30
29.643 - 44.464	33.539	33.539	33.539	33.539	41	30
14.821 - 29.643	20.123	26.562	15.998	20.123	29	6
0.000 - 14.821	0.000	0.000	0.000	0.000	0	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	297.166	337	266
222.319 - 237.140	230.617	236.123	225.460	230.126	337	192
207.498 - 222.319	219.324	219.380	218.175	218.574	259	82
88.928 - 103.749	101.826	101.826	101.826	101.215	215	58
44.464 - 59.285	47.590	47.590	47.590	48.050	153	30
29.643 - 44.464	33.539	33.539	33.539	33.523	41	30
14.821 - 29.643	20.091	26.562	15.998	20.019	29	6
0.000 - 14.821	0.000	0.000	0.000	0.000	0	0

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	

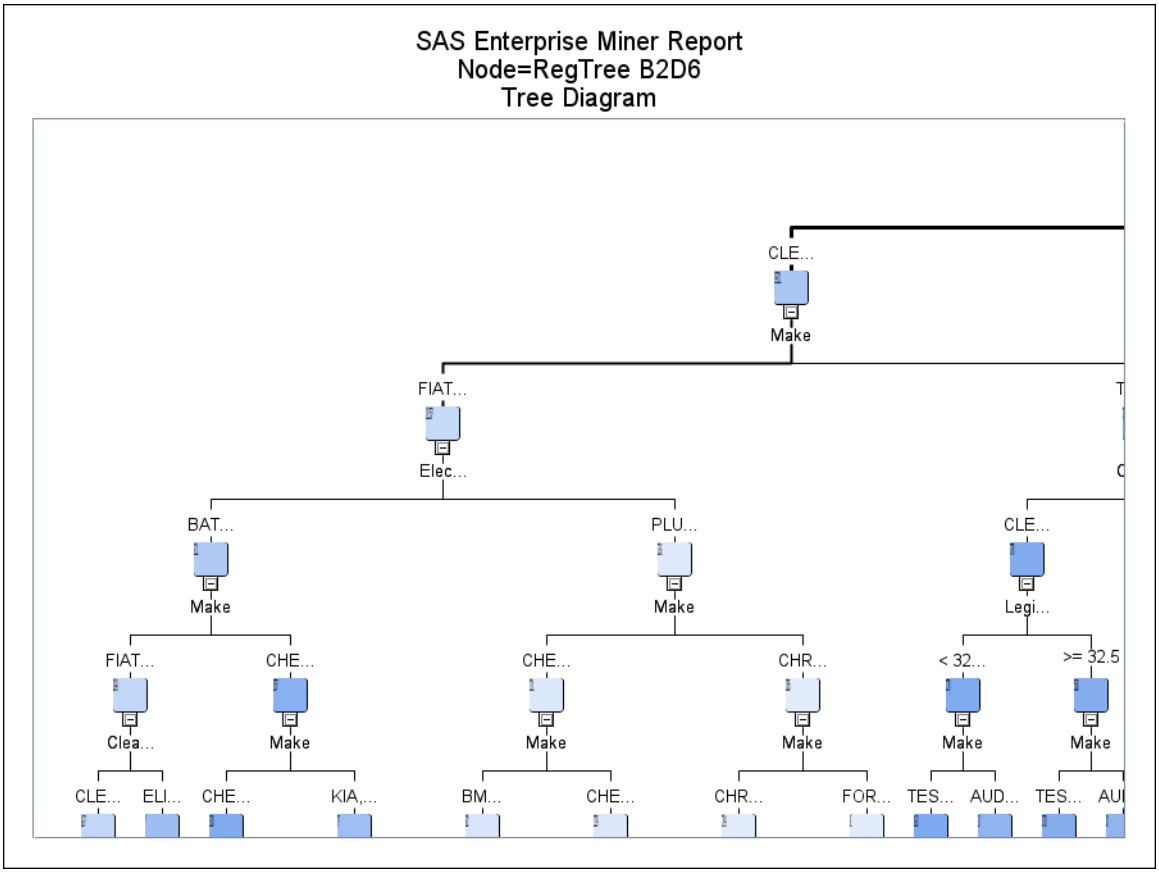
Node=RegTree B2D6
Variable Summary

Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range
INPUT	INTERVAL	1	Legislative_District
INPUT	NOMINAL	3	Clean_Alternative_Fuel_Vehicle__ Electric_Vehicle_Type Make
ID	INTERVAL	1	_dataobs_

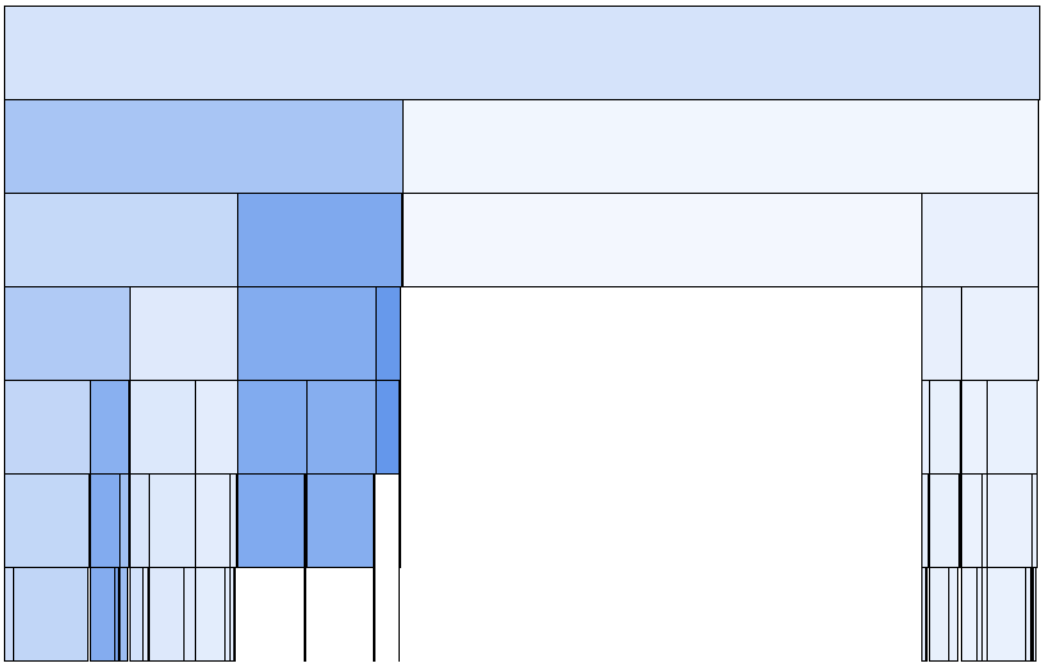
Node=RegTree B2D6
Model Fit Statistics

Target=Electric_Range Target Label=' '

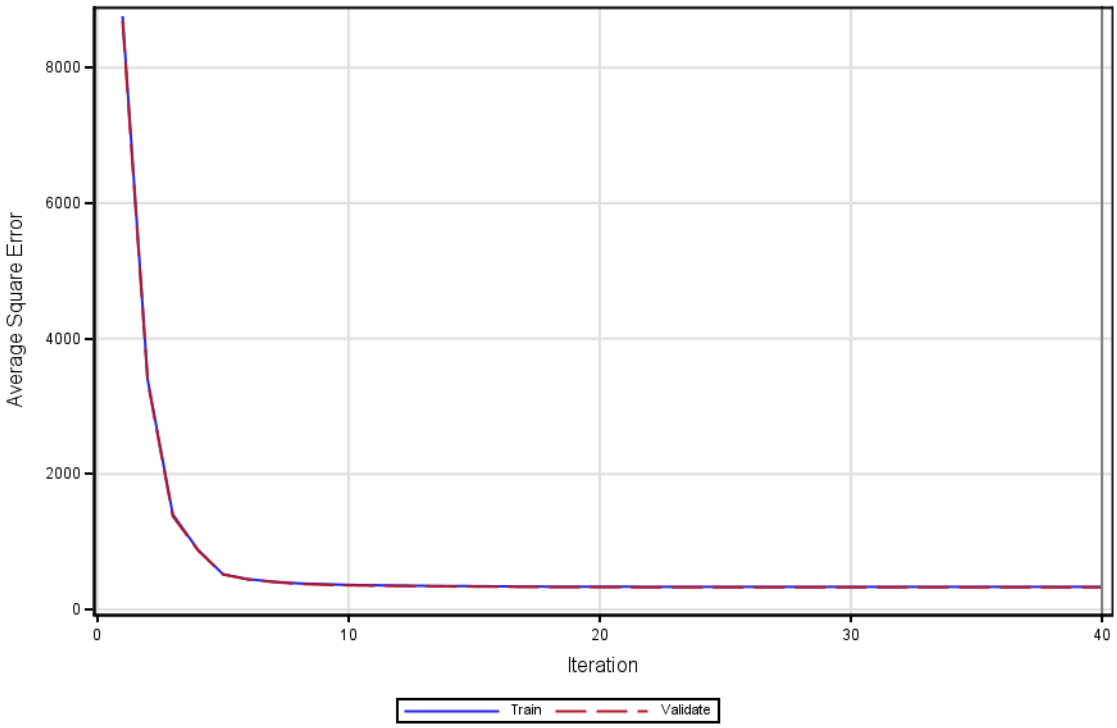
Label of Statistic	Train	Validation	Test
Sum of Frequencies	66720.00	50040.00	50040.00
Maximum Absolute Error	148.56	148.56	191.56
Sum of Squared Errors	22406875.45	16440597.77	16102001.09
Average Squared Error	335.83	328.55	321.78
Root Average Squared Error	18.33	18.13	17.94
Divisor for ASE	66720.00	50040.00	50040.00
Total Degrees of Freedom	66720.00	.	.

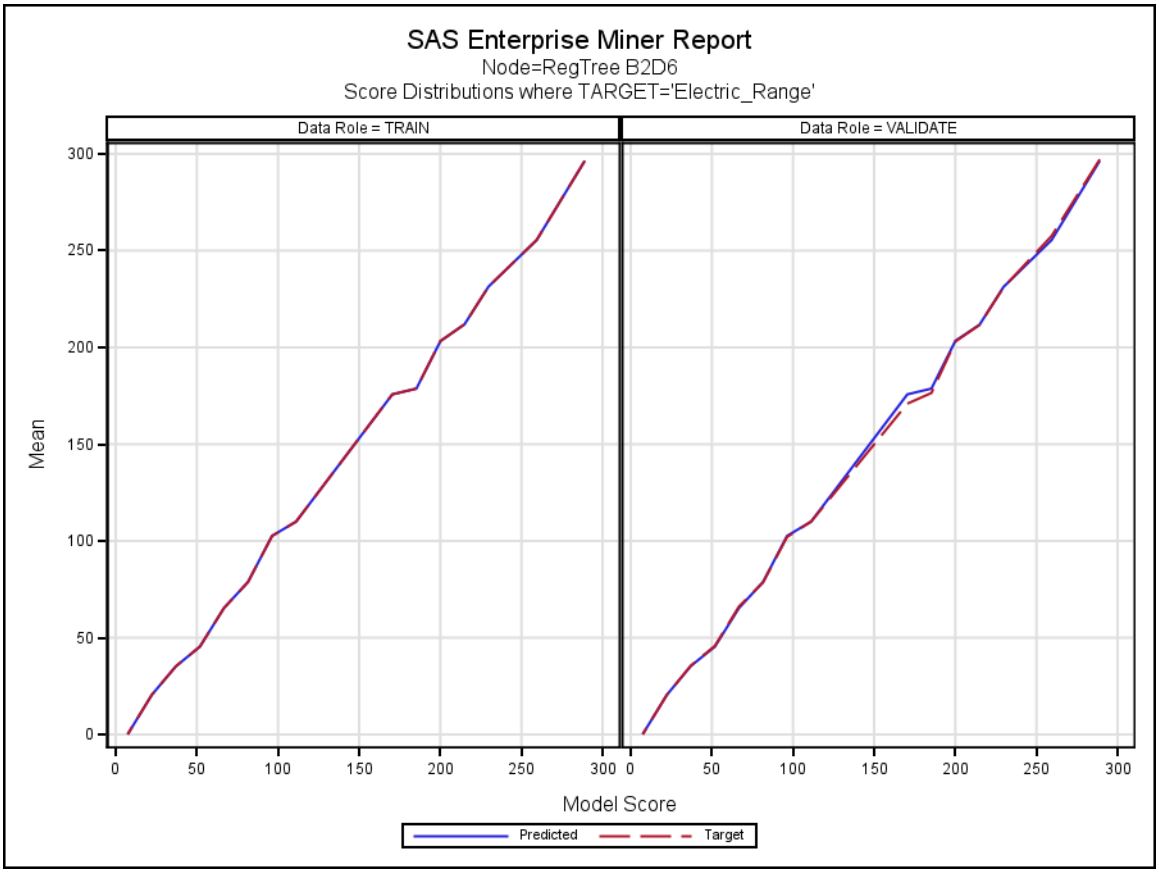


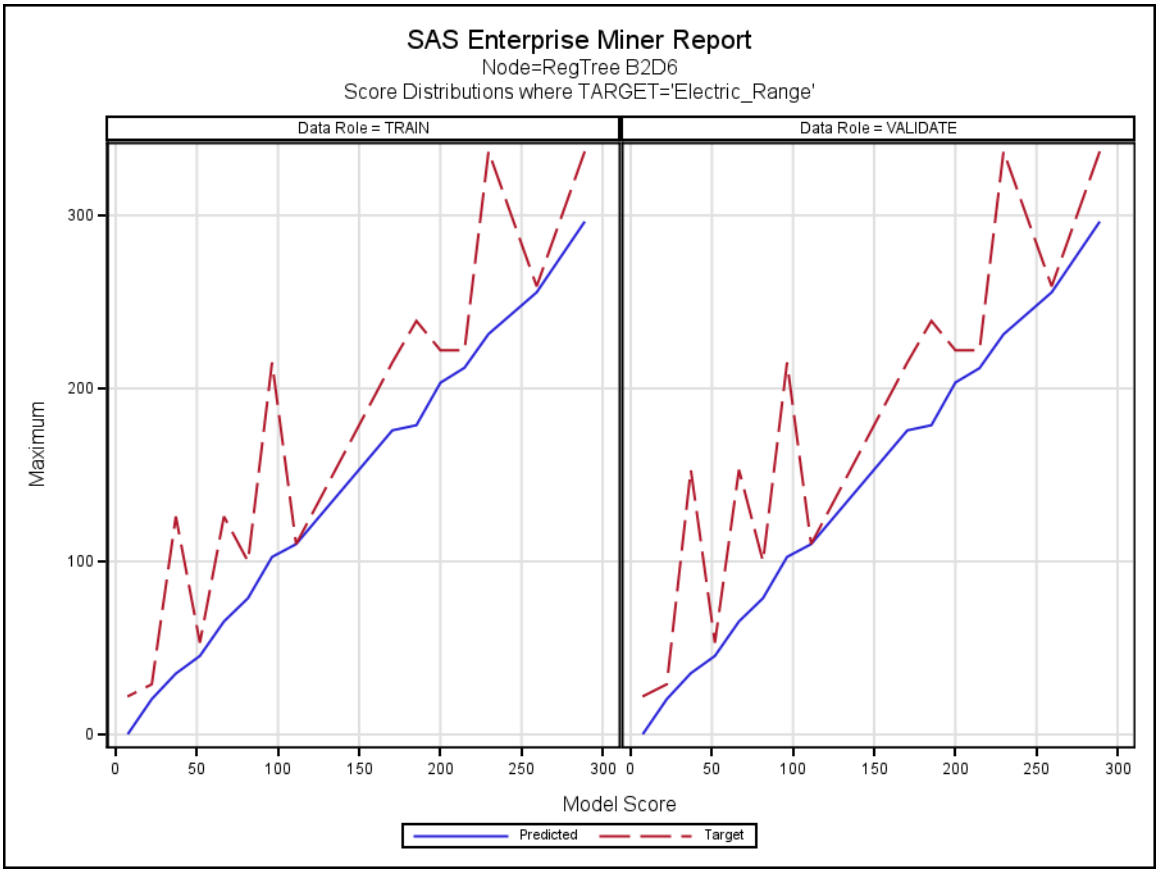
SAS Enterprise Miner Report
Node=RegTree B2D6
Treemap



SAS Enterprise Miner Report
Node=RegTree B2D6
Model Iteration Plots







Node=RegTree B2D6
Score Distributions

Target Variable=Electric_Range Data Role=TRAIN

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	296.425	337	266
251.961 - 266.783	255.506	255.506	255.506	255.506	259	170
222.319 - 237.140	231.438	237.005	226.128	231.438	337	82
207.498 - 222.319	211.933	220.809	207.843	211.933	222	204
192.676 - 207.498	203.277	206.464	196.889	203.277	222	192
177.855 - 192.676	178.715	178.715	178.715	178.715	239	93
163.034 - 177.855	175.742	175.742	175.742	175.742	215	149
103.749 - 118.570	110.000	110.000	110.000	110.000	110	110
88.928 - 103.749	102.595	102.595	102.595	102.595	215	73
74.106 - 88.928	78.780	78.780	78.780	78.780	100	56
59.285 - 74.106	65.311	65.311	65.311	65.311	126	30
44.464 - 59.285	45.386	45.386	45.386	45.386	53	35
29.643 - 44.464	35.201	41.847	32.419	35.201	126	30
14.821 - 29.643	20.453	28.475	16.098	20.453	29	6
0.000 - 14.821	0.127	12.922	0.000	0.127	22	0

Target Variable=Electric_Range Data Role=VALIDATE

Range for Predicted	Mean Predicted	Max Predicted	Min Predicted	Mean Target	Max Target	Min Target
281.604 - 296.425	296.425	296.425	296.425	297.166	337	266
251.961 - 266.783	255.506	255.506	255.506	257.634	259	170
222.319 - 237.140	231.278	237.005	226.128	231.013	337	82
207.498 - 222.319	211.681	220.809	207.843	211.632	222	204
192.676 - 207.498	203.427	206.464	196.889	203.070	222	192
177.855 - 192.676	178.715	178.715	178.715	176.456	239	93
163.034 - 177.855	175.742	175.742	175.742	170.938	215	149
103.749 - 118.570	110.000	110.000	110.000	110.000	110	110
88.928 - 103.749	102.595	102.595	102.595	102.095	215	73
74.106 - 88.928	78.780	78.780	78.780	78.553	100	58
59.285 - 74.106	65.311	65.311	65.311	66.119	153	30
44.464 - 59.285	45.386	45.386	45.386	45.795	53	35
29.643 - 44.464	35.398	41.847	32.419	35.549	153	30
14.821 - 29.643	20.429	28.475	16.098	20.366	29	6
0.000 - 14.821	0.132	12.922	0.000	0.132	22	0

SAS Enterprise Miner Report

Node=Neural Net comparision Model Summary

Node id = MdlComp4
Node label = Neural Net comparision Model
Meta path = Ids => Part => Neural => MdlComp4
Notes =

Node=Neural Net comparision Model Properties

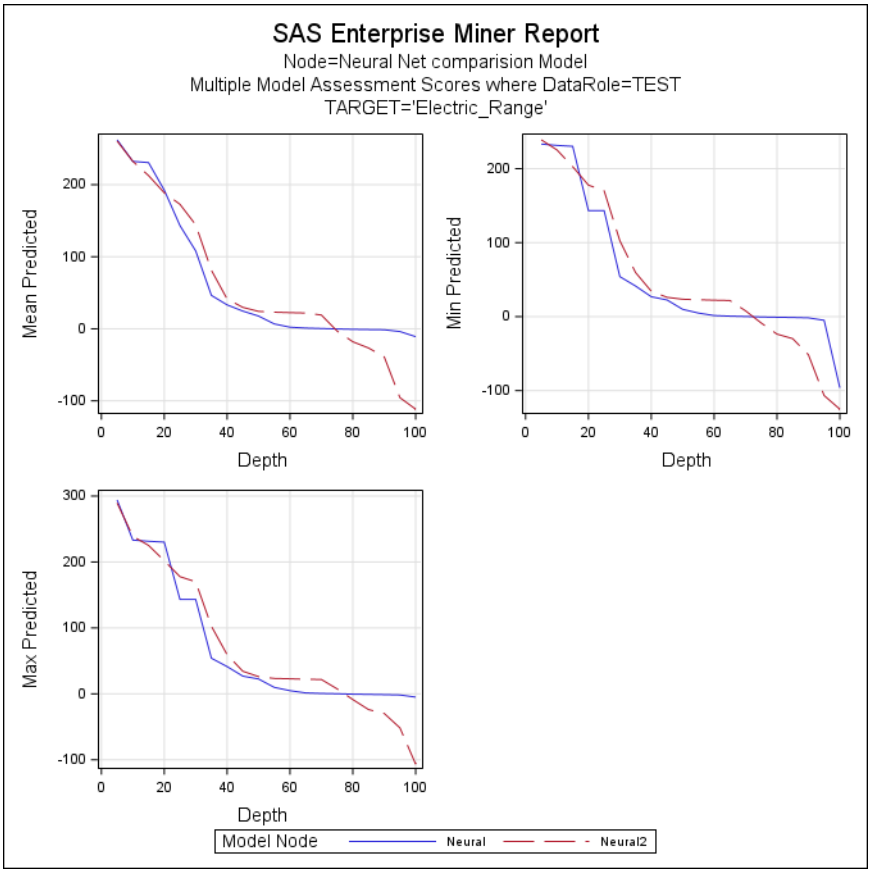
Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_VASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel		
ModelCriteria	Valid: Average Squared Error		RocEpsilon	0.01		TargetName	Electric_Range	
ModelDescription	Neural Network 3HU		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Neural		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	DEFAULT				

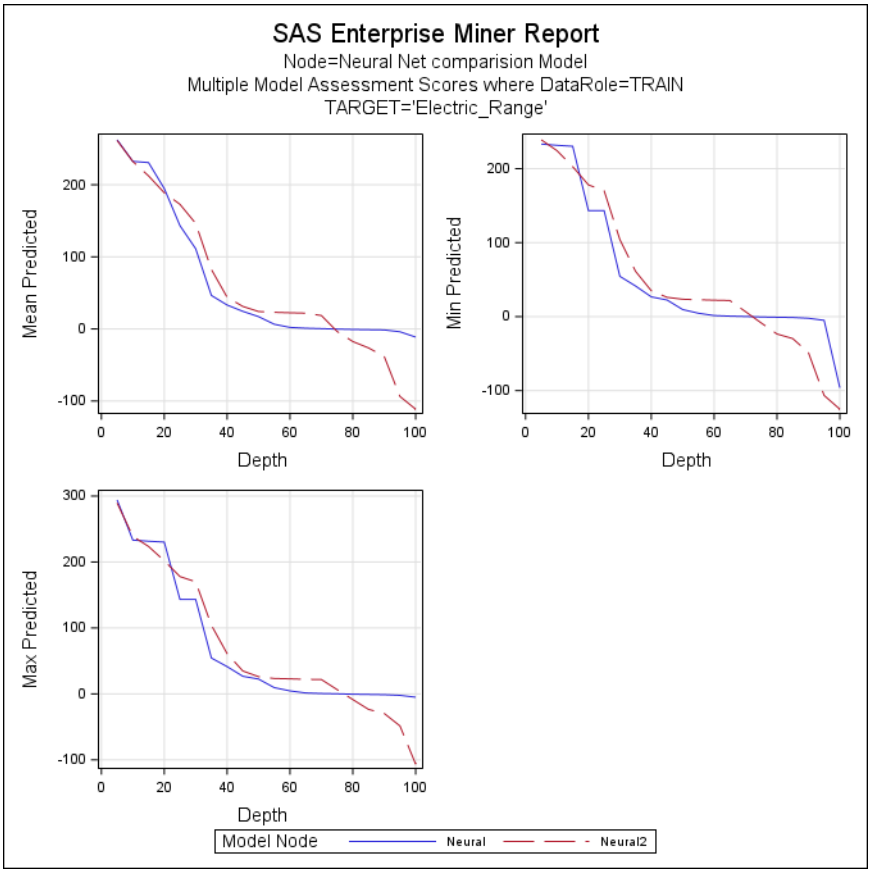
Node=Neural Net comparision Model Variable Summary

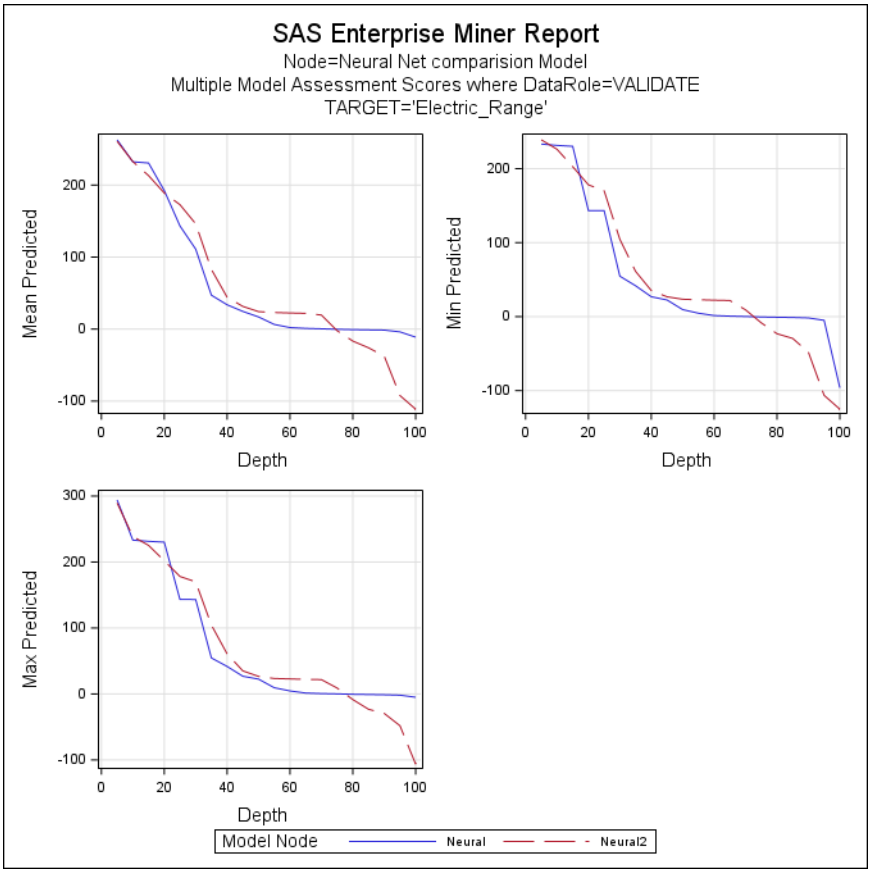
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range

Node=Neural Net comparision Model 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	Neural	Neural	Neural Network 3HU	Electric_Range		639.86	642.07
	Neural2	Neural2	Neural NetworkBack prop	Electric_Range		2924.36	2948.55


SAS Enterprise Miner Report
Node=Neural Net comparision Model
Multiple Model Assessment Scores where DataRole=TEST
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Neural
Neural2


SAS Enterprise Miner Report
Node=Neural Net comparision Model
Multiple Model Assessment Scores where DataRole=TRAIN
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Neural
Neural2


SAS Enterprise Miner Report
Node=Neural Net comparision Model
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Depth
Depth
Model Node
Neural
Neural2

SAS Enterprise Miner Report

Node=MLR Model Comparision Summary

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

Node=MLR Model Comparision Properties

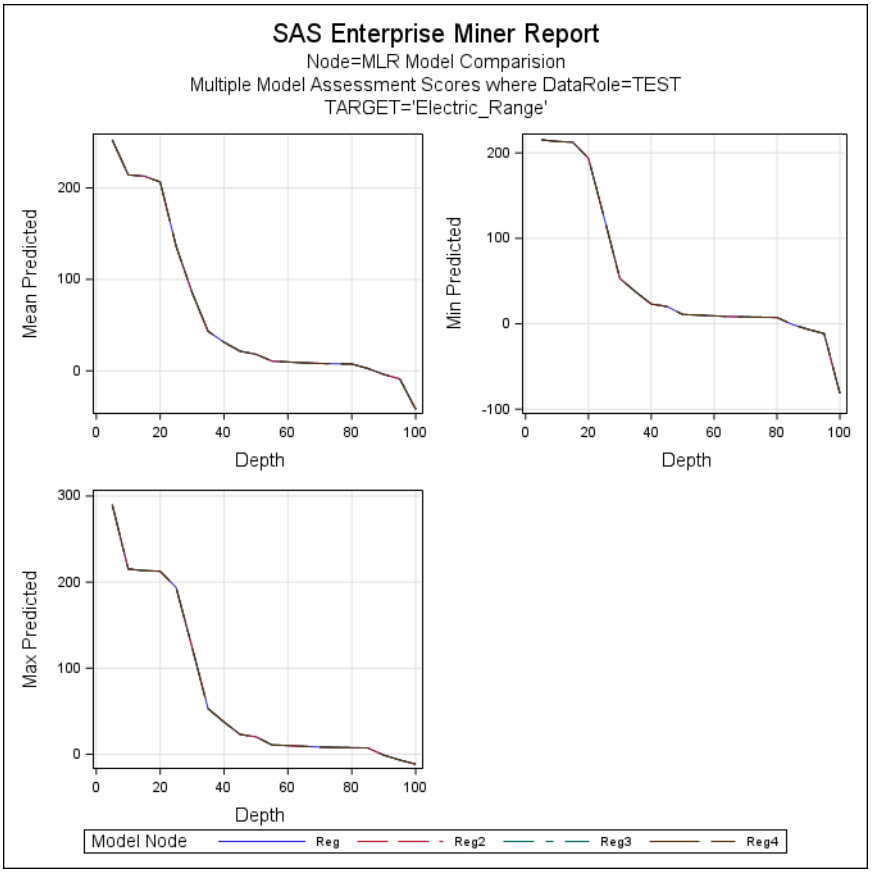
Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess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

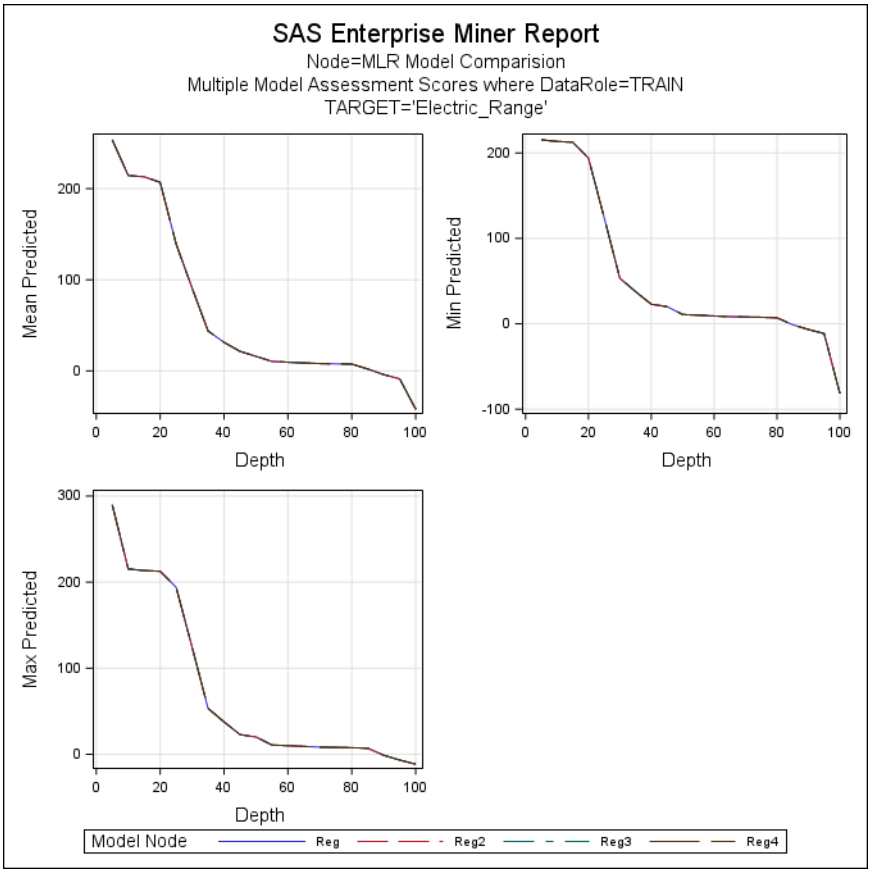
Node=MLR Model Comparision Variable Summary

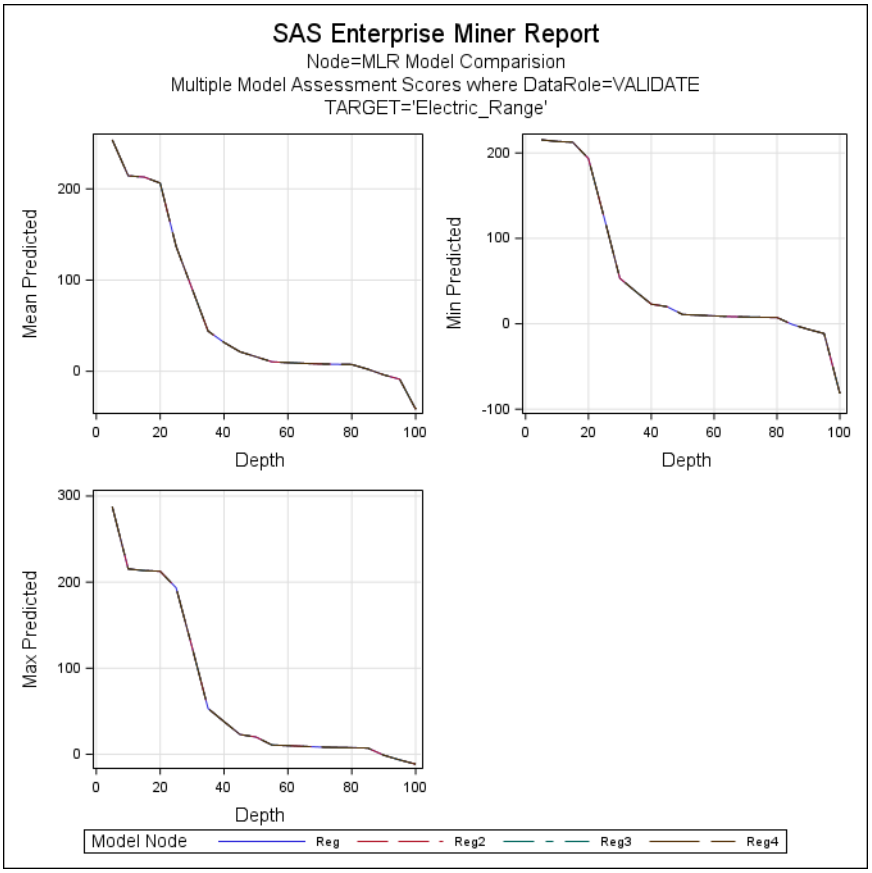
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range

Node=MLR Model Comparision 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	Electric_Range		727.533	745.168
	Reg2	Reg2	Forward Regression	Electric_Range		727.533	745.168
	Reg3	Reg3	Backward Regression	Electric_Range		727.533	745.168
	Reg4	Reg4	Stepwise Regression	Electric_Range		727.533	745.168


SAS Enterprise Miner Report
Node=MLR Model Comparision
Multiple Model Assessment Scores where DataRole=TEST
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Reg
Reg2
Reg3
Reg4


SAS Enterprise Miner Report
Node=MLR Model Comparision
Multiple Model Assessment Scores where DataRole=TRAIN
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Reg
Reg2
Reg3
Reg4


SAS Enterprise Miner Report
Node=MLR Model Comparision
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Depth
Depth
Model Node
Reg
Reg2
Reg3
Reg4

SAS Enterprise Miner Report

Node=Reg Tree Model Comparision Summary

Node id = MdlComp
Node label = Reg Tree Model Comparision
Meta path = Ids => Part => Tree4 => MdlComp
Notes =

Node=Reg Tree Model Comparision Properties

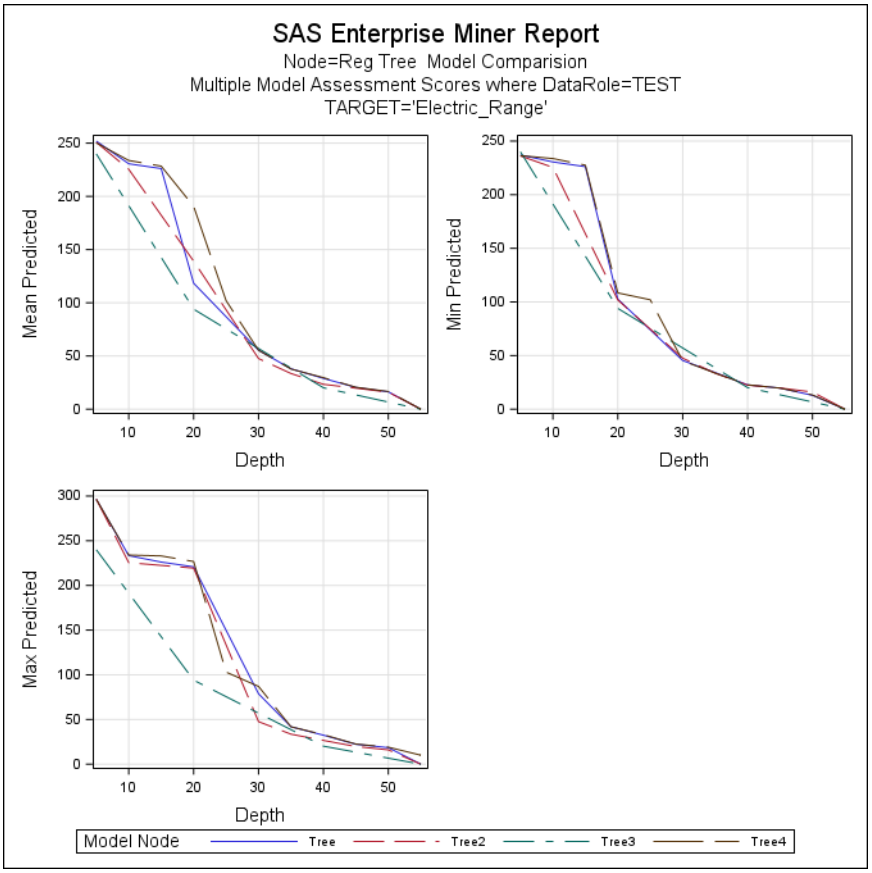
Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess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

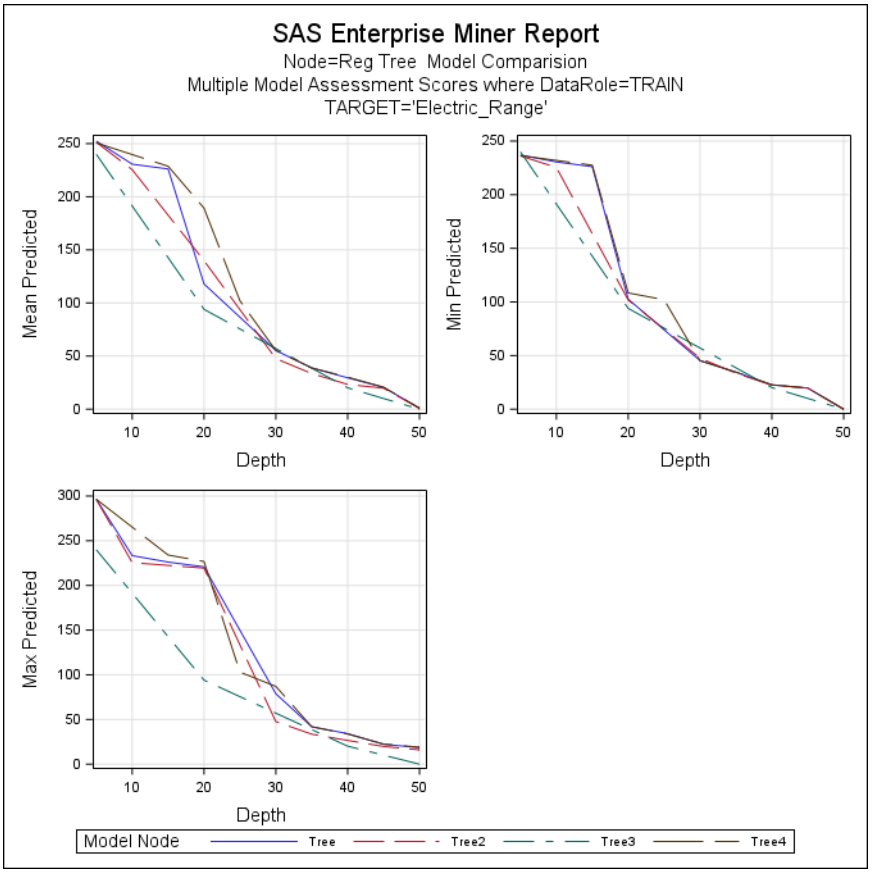
Node=Reg Tree Model Comparision Variable Summary

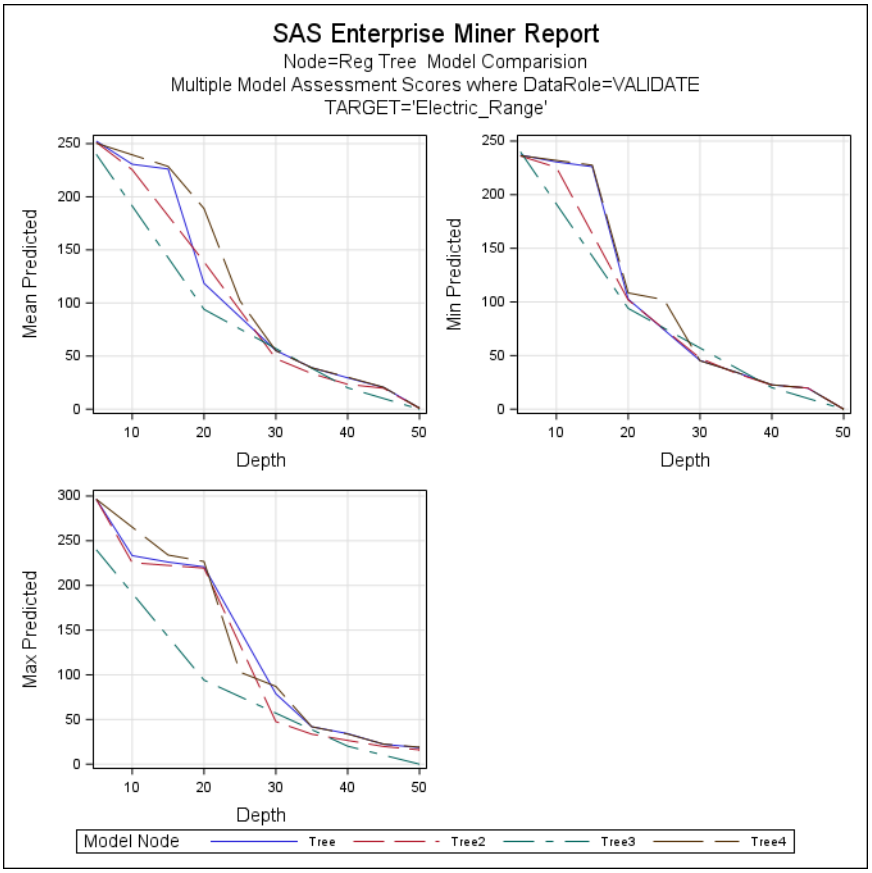
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range

Node=Reg Tree Model Comparision 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	Electric_Range		320.60	327.96
	Tree	Tree	RegTree B2D6	Electric_Range		328.55	335.83
	Tree2	Tree2	Reg Tree B2D4	Electric_Range		386.08	390.65
	Tree3	Tree3	Reg Tree B2D2	Electric_Range		1340.27	1367.95


SAS Enterprise Miner Report
Node=Reg Tree Model Comparision
Multiple Model Assessment Scores where DataRole=TEST
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Tree
Tree2
Tree3
Tree4


SAS Enterprise Miner Report
Node=Reg Tree Model Comparision
Multiple Model Assessment Scores where DataRole=TRAIN
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Tree
Tree2
Tree3
Tree4


SAS Enterprise Miner Report
Node=Reg Tree Model Comparision
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Tree
Tree2
Tree3
Tree4

SAS Enterprise Miner Report

Node=Score EM_SAVE_TRAIN Summary

Node id = Ids2
Node label = Score EM_SAVE_TRAIN
Meta path = Ids2
Notes =

Node=Score EM_SAVE_TRAIN Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	schel5		NBytes	57541632	.
ApplyIntervalLevelLowerLimit	Y		DsId	scoreemsavetrain		NCols	11	.
ApplyMaxClassLevels	Y		DsModifiedBy	schel5		NObs	166800	.
ApplyMaxPercentMissing	Y		DsModifyDate	2025169128.9		NewTable		
CMeta	WORK.M0K_J9RB		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	SCORE	TRAIN
Data	CSDATA.EM_SAVE_TRAIN		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	scoreemsavetrain		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	CSDATA		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	2025169128.6		MetaAdvisor	BASIC		Table	EM_SAVE_TRAIN	

Node=Score EM_SAVE_TRAIN Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	EM_SAVE_TRAIN	Date Created	03Mar2024:18:47:13	Data Size	57541632
Data Type	DATA	Date Modified	03Mar2024:18:47:13	Role	RAW
Data Label		Number Rows	166800	Segment	
Engine	BASE	Number Columns	11	Data Library	CSDATA

Node=Score EM_SAVE_TRAIN Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
City	City	INPUT	NOMINAL	C	24	$24.	
Clean_Alternative_Fuel_Vehicle__		INPUT	NOMINAL	C	60		
Electric_Range		INPUT	INTERVAL	N	8		
Electric_Utility		TEXT	NOMINAL	C	112		
Electric_Vehicle_Type		INPUT	NOMINAL	C	38		
Legislative_District		INPUT	INTERVAL	N	8		
Make	Make	INPUT	NOMINAL	C	20	$20.	
Model	Model	INPUT	NOMINAL	C	24	$24.	
Model_Year		INPUT	INTERVAL	N	8		
State	State	INPUT	NOMINAL	C	2	$2.	
Vehicle_Location		INPUT	NOMINAL	C	33		

SAS Enterprise Miner Report

Node=Predict Model Comparsion Summary

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

Node=Predict Model Comparsion Properties

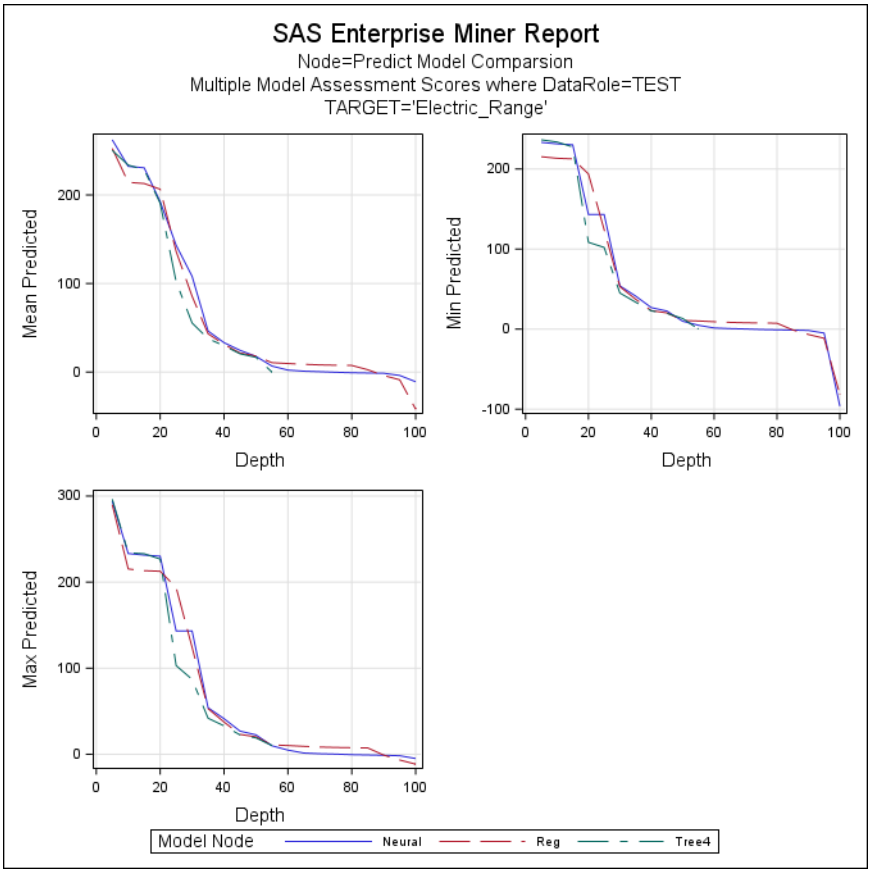
Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess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

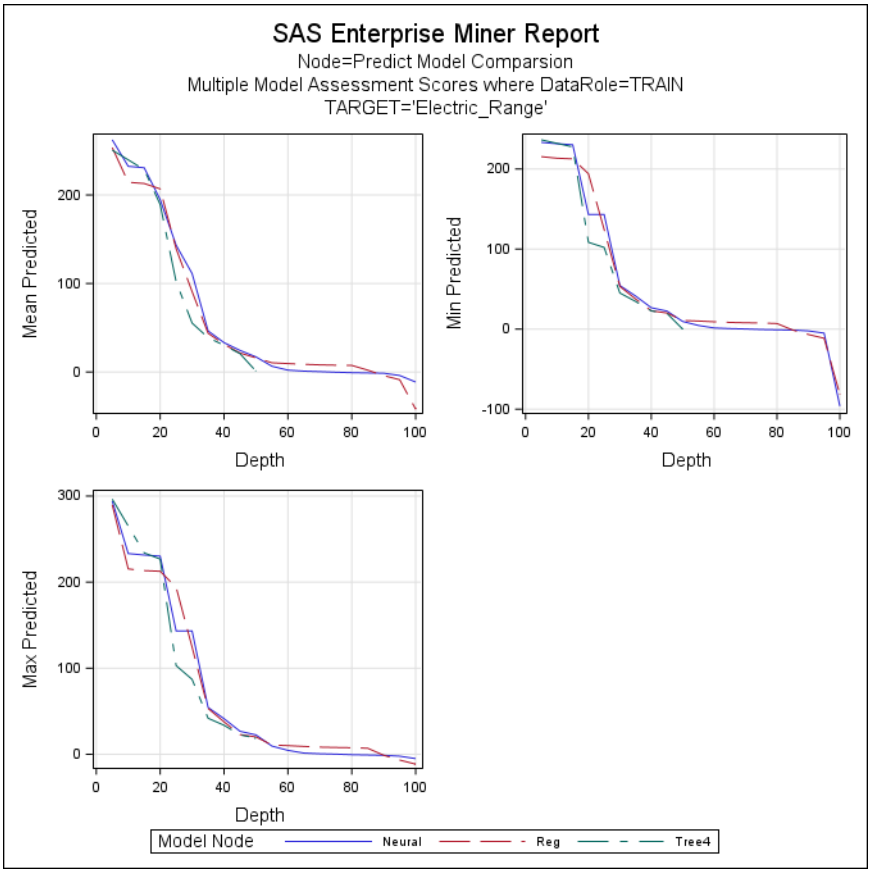
Node=Predict Model Comparsion Variable Summary

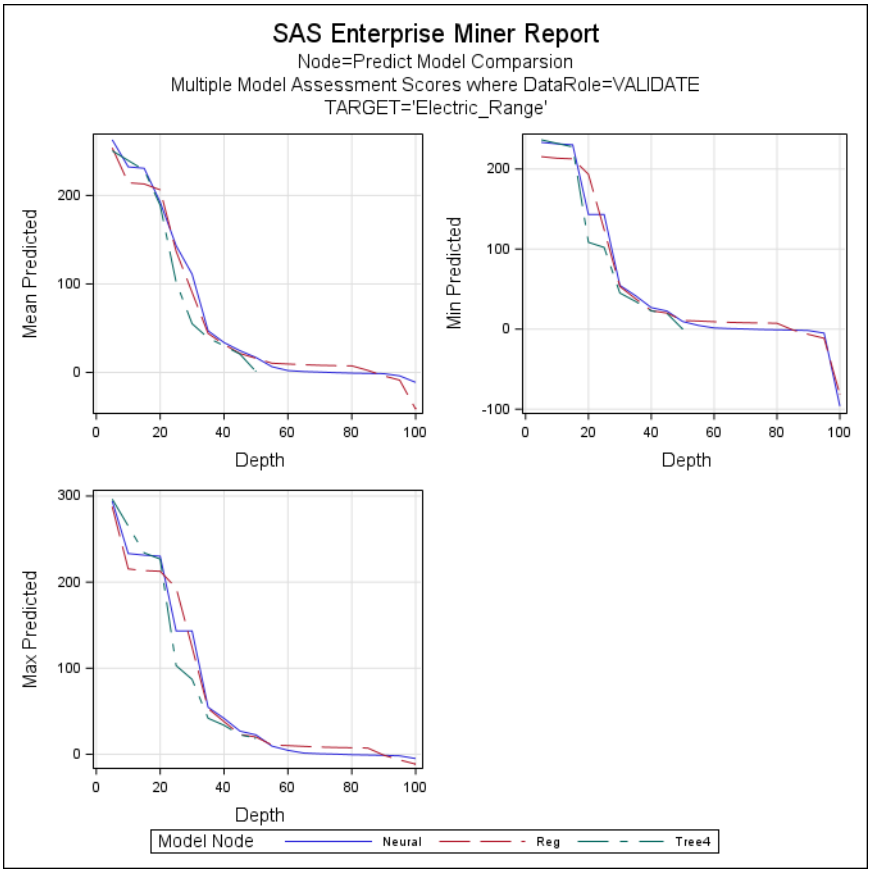
Role	Level	Frequency Count	Name
TARGET	INTERVAL	1	Electric_Range

Node=Predict Model Comparsion 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	Electric_Range		320.602	327.957
	MdlComp4	Neural	Neural Network 3HU	Electric_Range		639.862	642.065
	MdlComp2	Reg	Exhaustive Regression	Electric_Range		727.533	745.168


SAS Enterprise Miner Report
Node=Predict Model Comparsion
Multiple Model Assessment Scores where DataRole=TEST
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Neural
Reg
Tree4


SAS Enterprise Miner Report
Node=Predict Model Comparsion
Multiple Model Assessment Scores where DataRole=TRAIN
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Model Node
Neural
Reg
Tree4


SAS Enterprise Miner Report
Node=Predict Model Comparsion
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Electric_Range'
Mean Predicted
Min Predicted
Max Predicted
Depth
Depth
Depth
Model Node
Neural
Reg
Tree4

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	Electric_Range
SEGMENT	NOMINAL	1	_NODE_

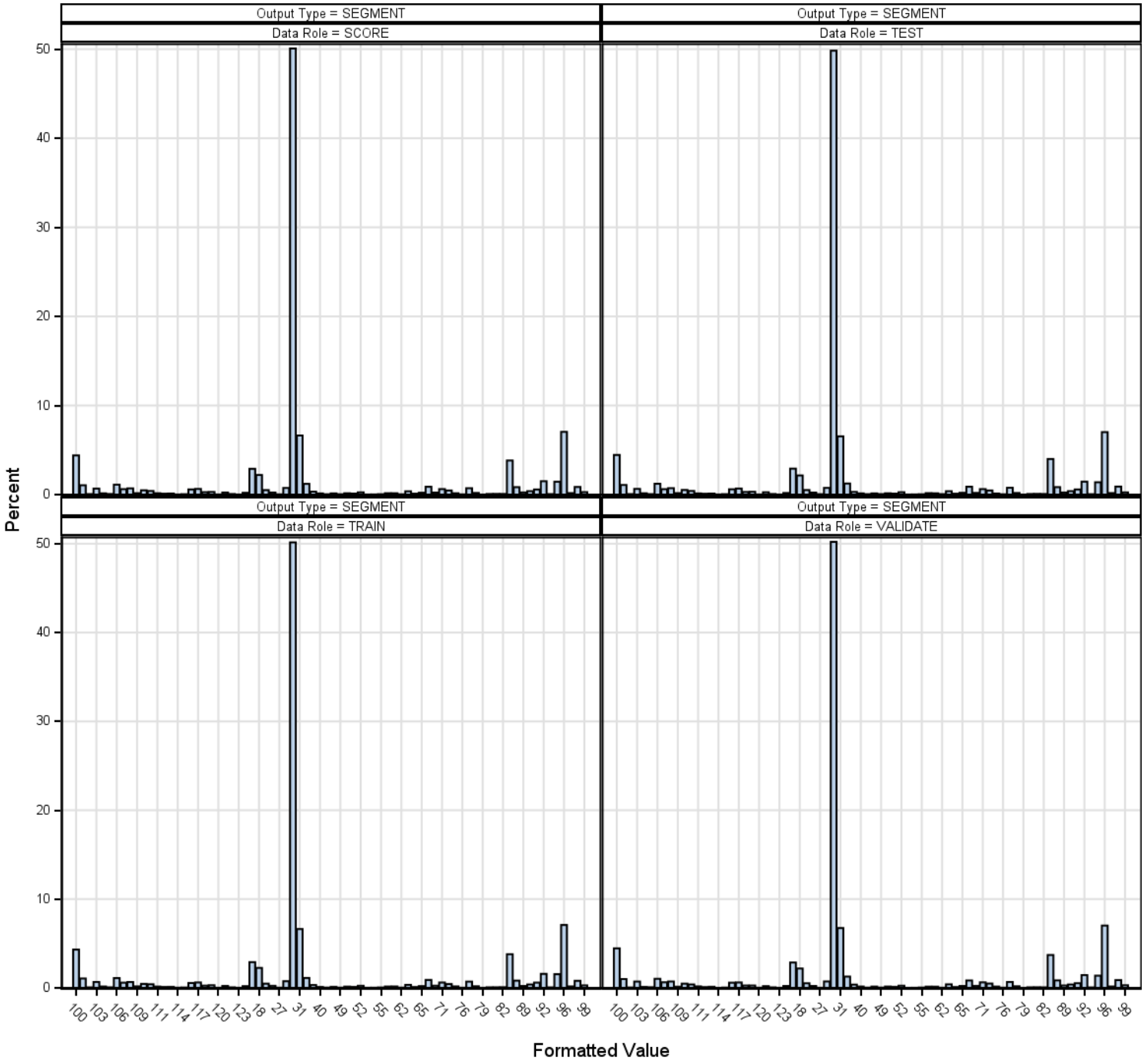
Node=Score
Output Variables

Variable Name	Creator	Variable Label	Function	Type
EM_PREDICTION	Score	Prediction for Electric_Range	PREDICT	N
EM_SEGMENT	Score	Node	TRANSFORM	N
P_Electric_Range	Tree4	Predicted: Electric_Range	PREDICT	N
V_Electric_Range	Tree4	Validated: Electric_Range	PREDICT	N
NODE	Tree4	Node	TRANSFORM	N
WARN	Tree4	Warnings	ASSESS	C

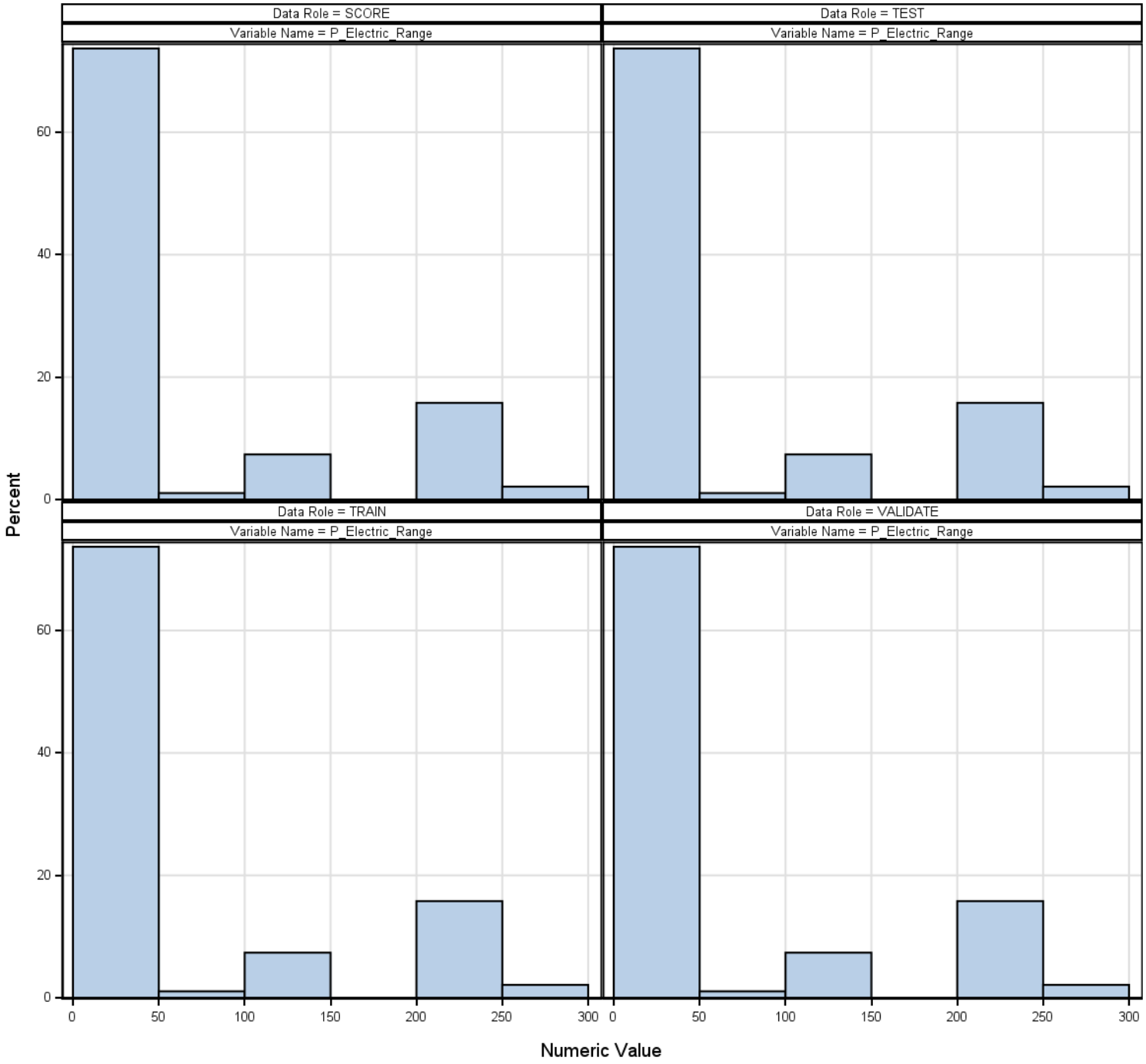
SAS Enterprise Miner Report

Node=Score

Bar Chart



SAS Enterprise Miner Report
Node=Score
Histogram



End of Report