

Supplementary Tables and Figures, Beane and Rentch 2015

Table S1. Average values for the 19 bioclimatic variables used for the SRES-A2 scenario with the range of values for time steps examined (i.e., Current, 2020, 2050, 2080) using 168 overstory red spruce presence localities.

Variable	Description	Current	2020	2050	2080
		Temperature Variables (Units: °C)			
Bio_1	Mean Annual Temperature	7.5	8.7	10.2	12.4
Bio_2	Mean Diurnal Range	11.4	11.4	11.5	11.9
Bio_3	Isothermality	3.4	3.2	3.2	3.1
Bio_4	Temperature Seasonality	N/A	N/A	N/A	N/A
Bio_5	Maximum Temperature of Warmest Month	23.7	25.6	28.3	31.8
Bio_6	Minimum Temperature of Coldest Month	-9.8	-9.7	-7.7	-5.9
Bio_7	Temperature Annual Range (Bio5-Bio6)	33.4	35.3	35.9	37.8
Bio_8	Mean Temperature of Wettest Quarter	15.6	16.9	18.8	11.7
Bio_9	Mean Temperature of Driest Quarter	-0.1	6.9	0.3	11.9
Bio_10	Mean Temperature of Warmest Quarter	17.2	18.6	20.9	23.6
Bio_11	Mean Temperature of Coldest Quarter	-3.2	-2.8	-1.3	0.4
		Precipitation Variables (Units: mm)			
Bio_12	Annual Precipitation	1412	1468	1528	1572
Bio_13	Precipitation of Wettest Month	140	155	156	169
Bio_14	Precipitation of Driest Month	102	100	107	99
Bio_15	Precipitation Seasonality	N/A	N/A	N/A	N/A
Bio_16	Precipitation of Wettest Quarter	394	418	420	489
Bio_17	Precipitation of Driest Quarter	321	323	347	341
Bio_18	Precipitation of Warmest Quarter	384	390	389	388
Bio_19	Precipitation of Coldest Quarter	322	353	361	349

Table S2. Average values for the 19 bioclimatic variables used for the SRES-B2 scenario with the range of values for time steps examined (i.e., Current, 2020, 2050, 2080) using 168 overstory red spruce presence localities.

Variable	Description	Current	2020	2050	2080
		Temperature Variables (Units: °C)			
Bio_1	Mean Annual Temperature	7.5	8.7	9.7	10.9
Bio_2	Mean Diurnal Range	11.4	11.4	11.7	11.7
Bio_3	Isothermality	3.4	3.3	3.2	3.1
Bio_4	Temperature Seasonality	N/A	N/A	N/A	N/A
Bio_5	Maximum Temperature of Warmest Month	23.7	25.5	27.5	28.6
Bio_6	Minimum Temperature of Coldest Month	-9.8	-9.0	-8.2	-8.3
Bio_7	Temperature Annual Range (Bio5-Bio6)	33.4	34.6	35.7	36.9
Bio_8	Mean Temperature of Wettest Quarter	15.6	16.3	16.9	15.5
Bio_9	Mean Temperature of Driest Quarter	-0.1	4.5	1.7	15.4
Bio_10	Mean Temperature of Warmest Quarter	17.2	18.7	20.3	21.6
Bio_11	Mean Temperature of Coldest Quarter	-3.2	-2.4	-1.8	-1.0
		Precipitation Variables (Units: mm)			
Bio_12	Annual Precipitation	1412	1457	1481	1551
Bio_13	Precipitation of Wettest Month	140	141	168	175
Bio_14	Precipitation of Driest Month	102	96	105	101
Bio_15	Precipitation Seasonality	N/A	N/A	N/A	N/A
Bio_16	Precipitation of Wettest Quarter	394	415	423	460
Bio_17	Precipitation of Driest Quarter	321	309	336	345
Bio_18	Precipitation of Warmest Quarter	384	412	371	388
Bio_19	Precipitation of Coldest Quarter	322	334	344	357

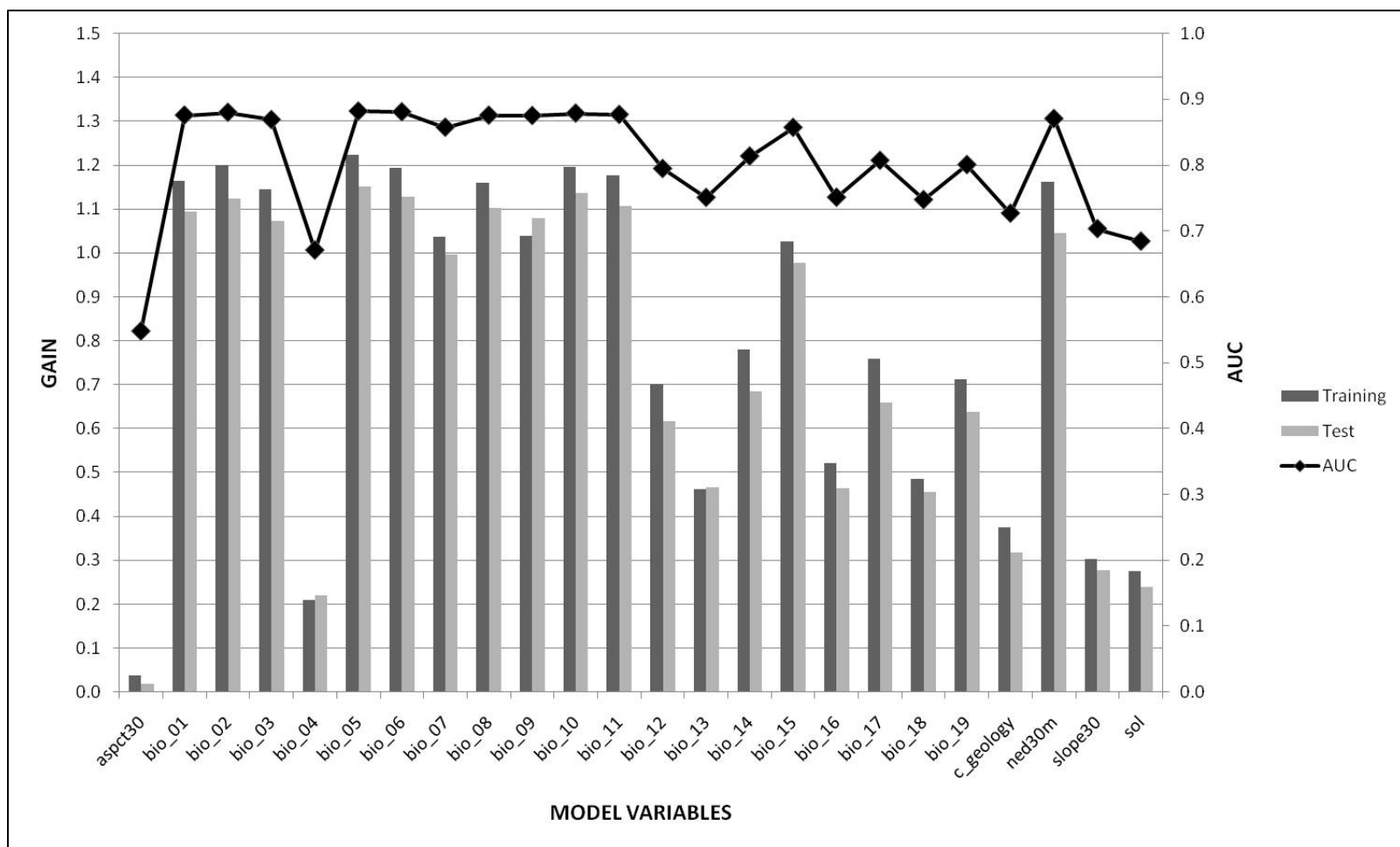


Figure S1. Graph of training gain, test gain, and AUC values using each variable by itself for the SRES-A2 model. This examination is useful when strong variable correlations exist (i.e., climatic data). Additionally, comparison of the training to test gain allows for assessment of how well the model fits the test dataset.

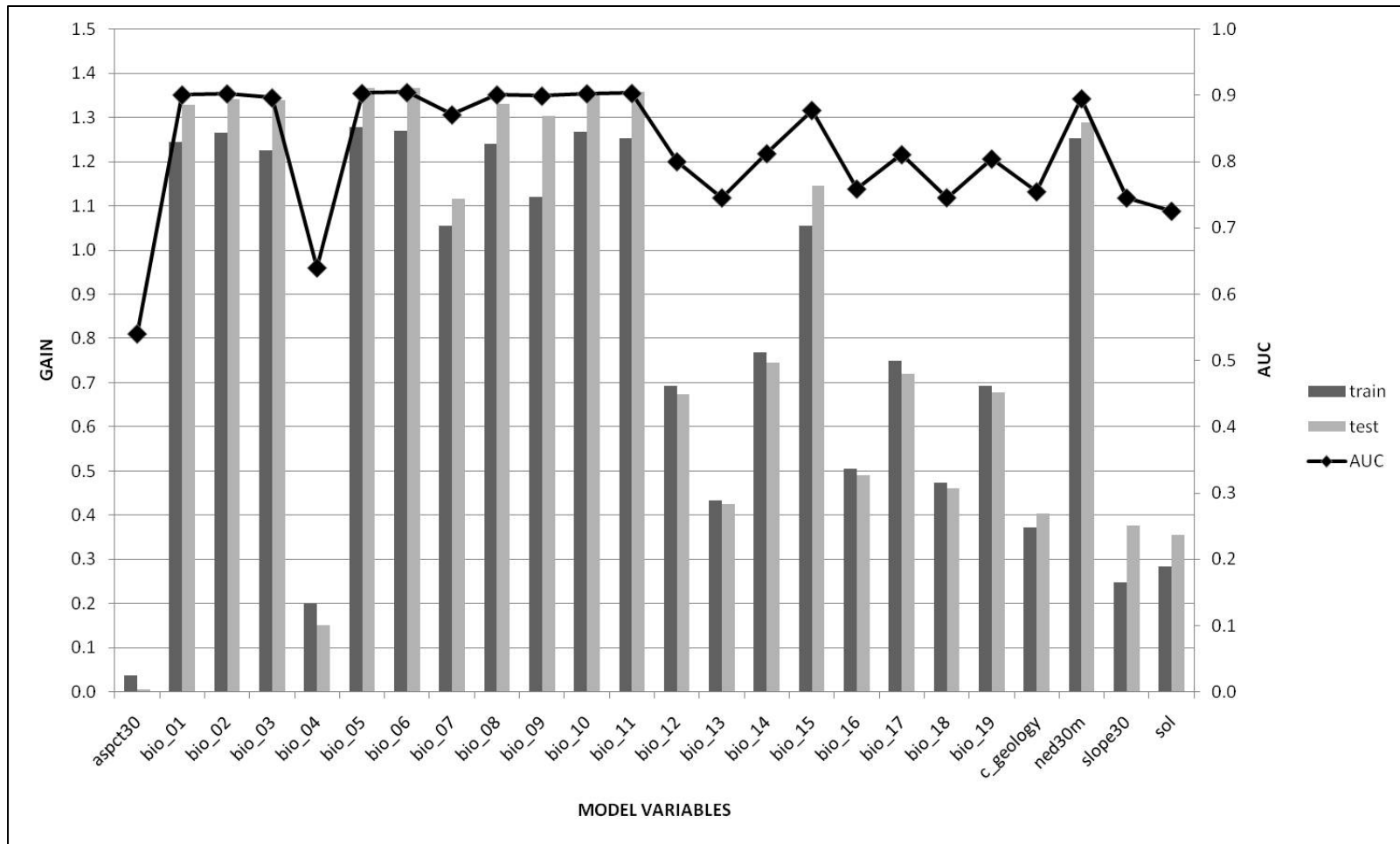


Figure S2. Graph of training gain, test gain, and AUC values using each variable by itself for the SRES-B2 model. This examination is useful when strong variable correlations exist (i.e., climatic data). Additionally, comparison of the training to test gain allows for assessment of how well the model fits the test dataset.