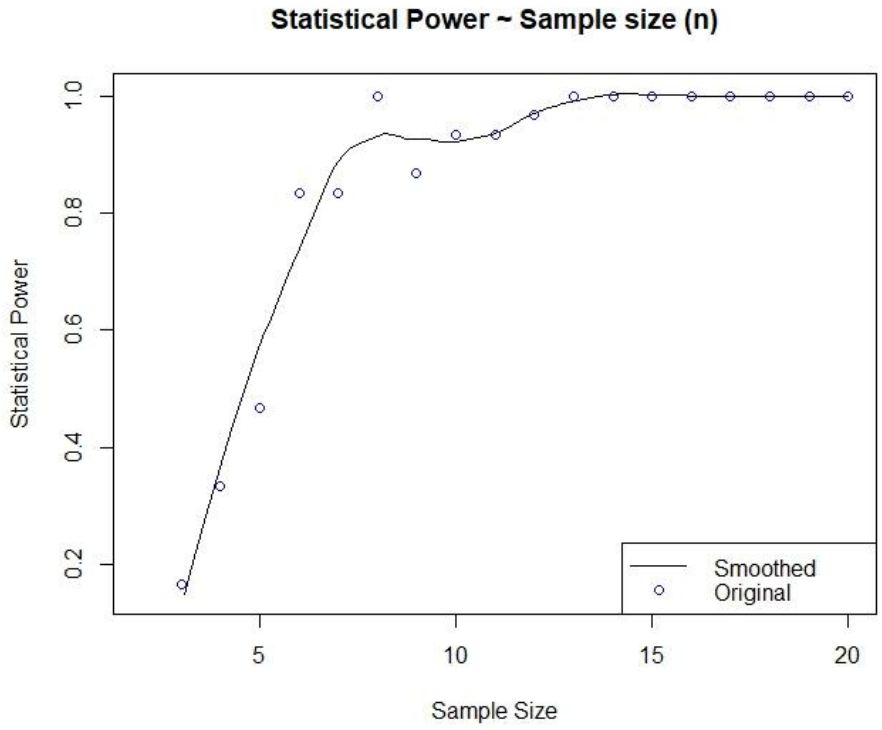
Evan Krause
ECO 634
Prof. Michael Nelson
12/7/2022

1.



2. (I was unable to figure out the NLS model)?

3.

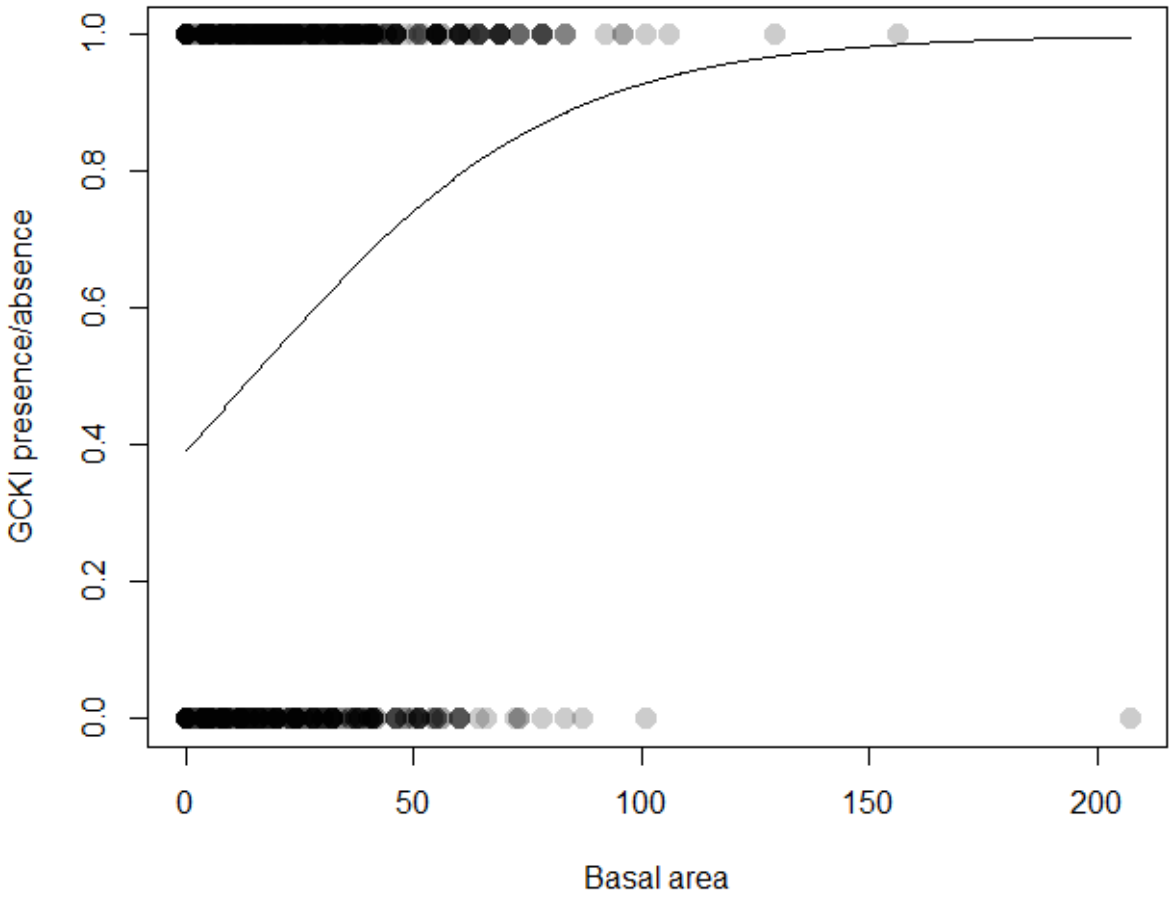
	df	AIC
fit_gcki_slope	2	1432.615
fit_gcki_ba_tot	\2	1369.379
fit_gcki_both_additive	3	1355.951
fit_gcki_both_interactive	4	1353.007

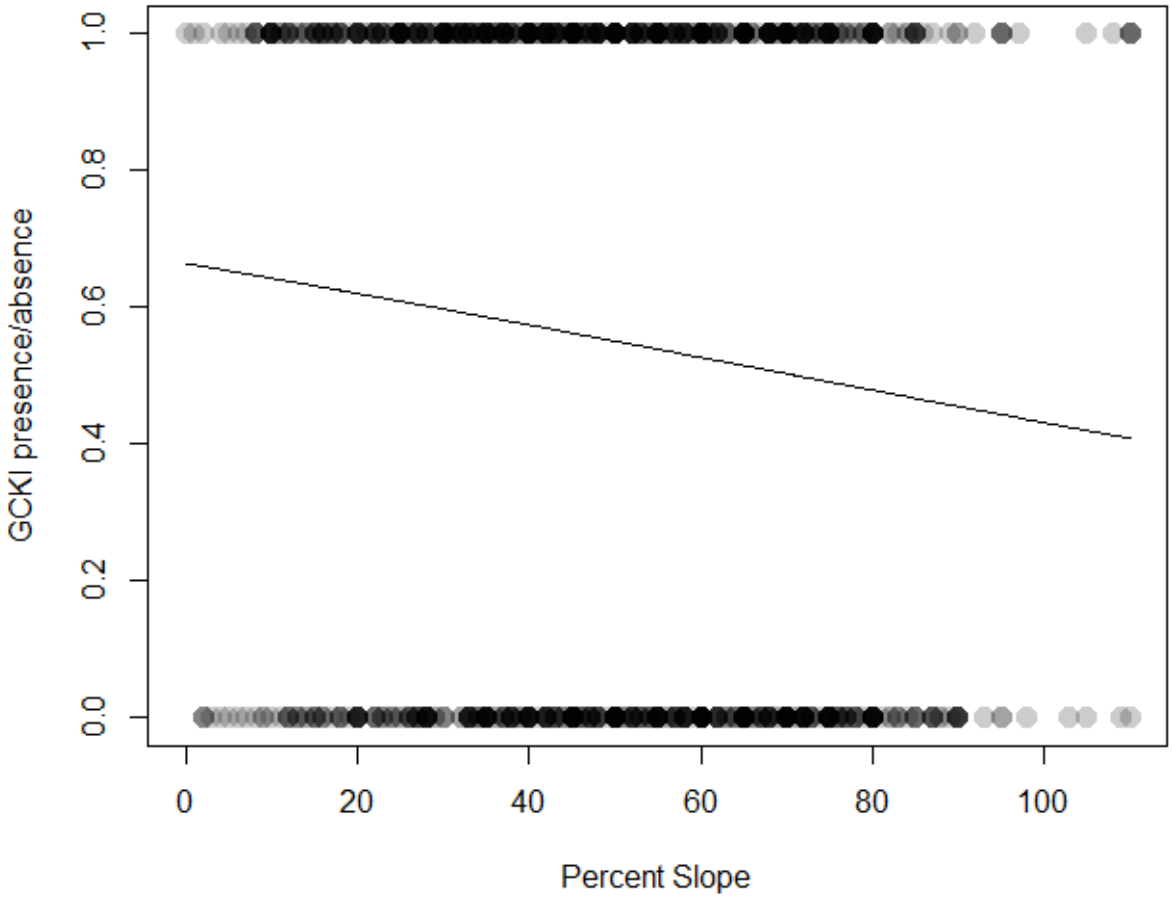
4. I would choose the additive model because of the ease of explanation when compared to the interactive model despite the slightly lower AIC score.

5. There is a statistically-significant slight negative relationship between GCKI presence and slope with a p-value of 1.01e-4. This suggests that observed presence decreases at higher altitudes. There is a slight positive relationship between total basal area and

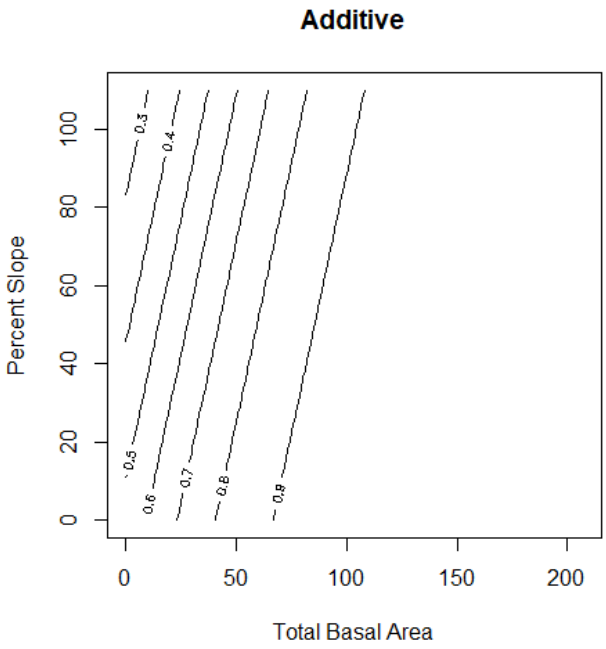
observed presence

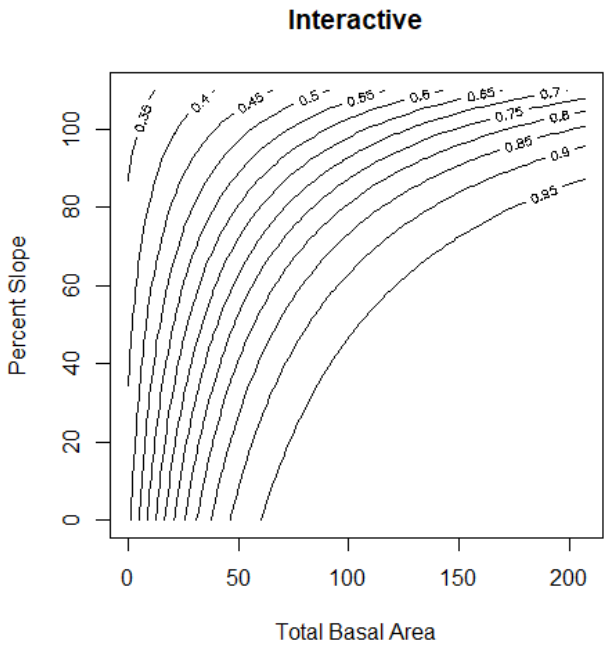
6.


GCKI presence/absence
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
Basal area


GCKI presence/absence
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
Percent Slope

7.


Additive
Percent Slope
Total Basal Area
0
20
40
60
80
100
0
50
100
150
200
0.3
0.4
0.5
0.6
0.7
0.8
0.9


Interactive
Percent Slope
Total Basal Area
0
20
40
60
80
100
0
50
100
150
200
0.35
0.4
0.45
0.5
0.55
0.6
0.65
0.7
0.75
0.8
0.85
0.9
0.95