SPREADING OF FOREST FIRE

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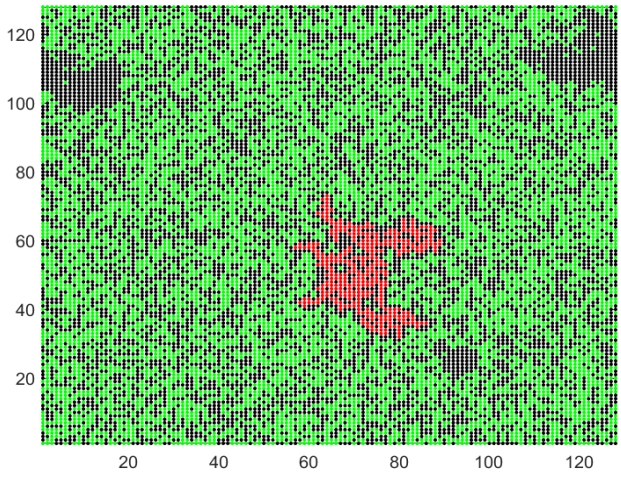
Question 1

All results obtained are form N=128 in this section.

Case 1:

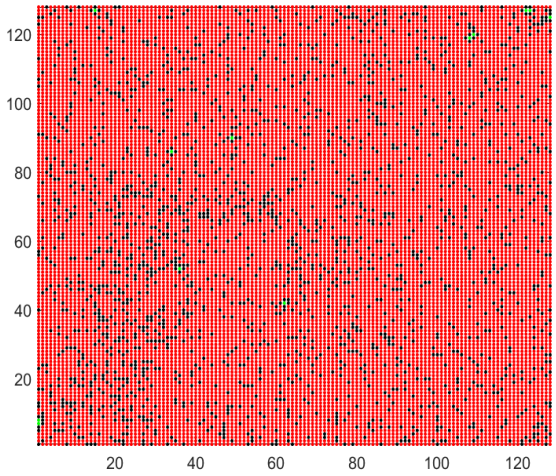
p/f < 1, p = 0.001, f=0.1



This seems to be the reasonable value for p and f

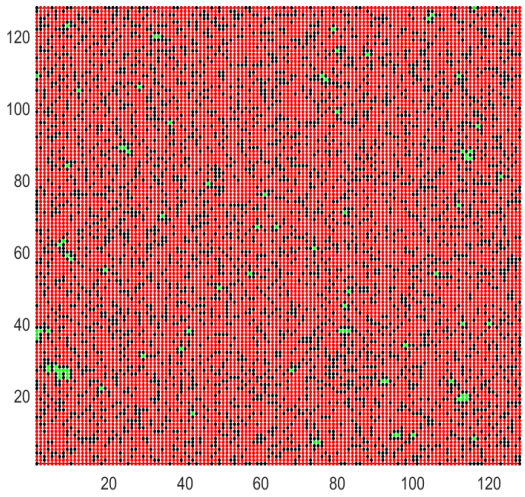
Case 2:

p/f = 1



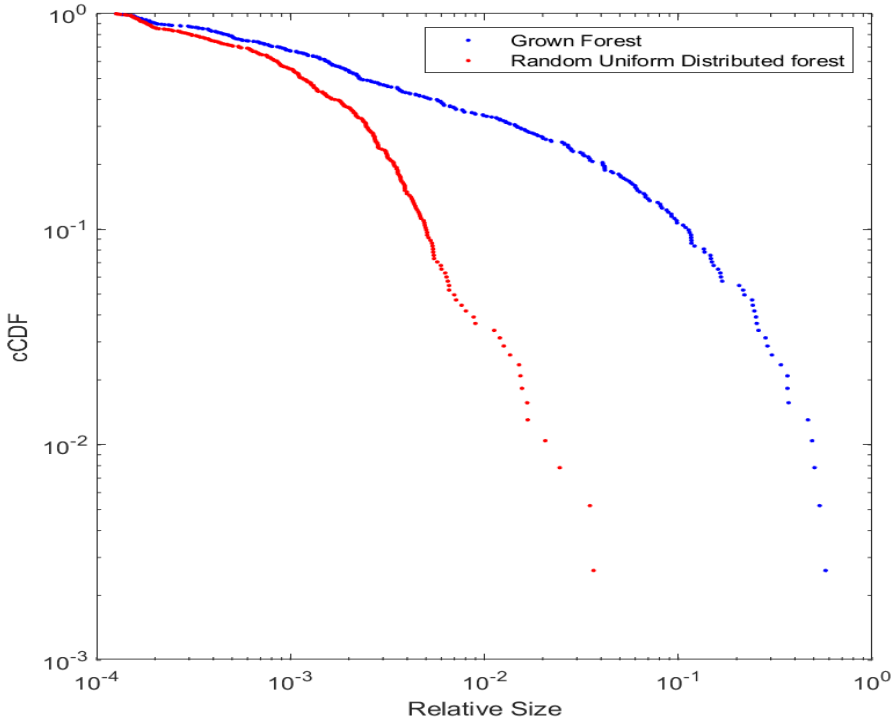
This figure is obtained for p = 0.1, f=0.1

Case 3:
p/f>1



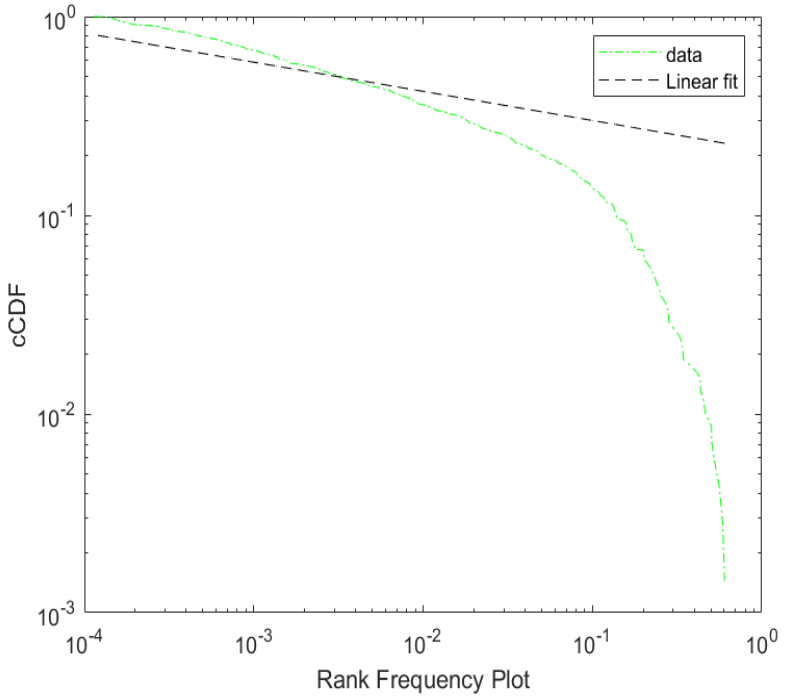
This figure is obtained for p=0.3,f=0.1

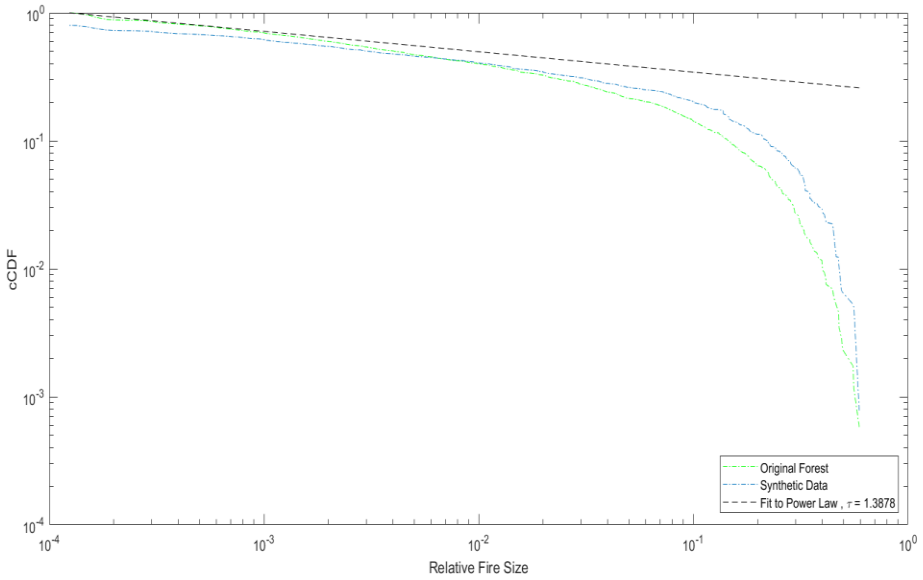
Question 2:



Parameters that are used are p=0.001 and f =0.1.
The slope of the random forest is more than the grown forest as the fire size is small compared to the other forest. The fire size is small because as the trees are uniformly distributed.

Question 3:





The parameters used here is p=0.001, f=0.1.

The tau value that is obtained from the linear fit is 1.38.