Assignment Report

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1 Assignment1

Requirment:Reproduce plots 2 a,c and 3 a,c. Results are shown in Figure 1 and Figure 2.

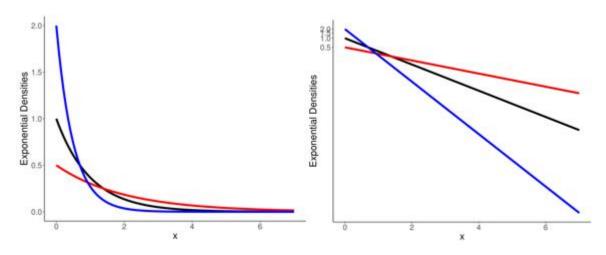


图 1: Exponential Densities and Semilog

2 Assignment2

Requirment:Improve these plots further using ggplot2 and the melt function;take due care of legends.

Results are shown in Figure 3 and Figure 4.

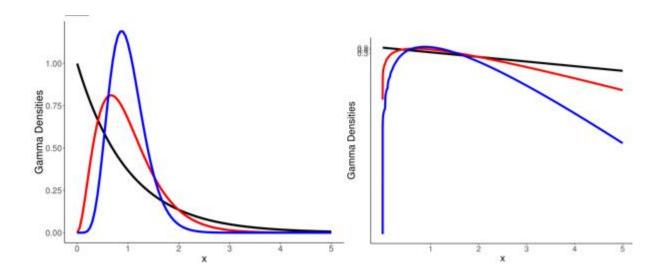


图 2: Gamma Densities and Semilog

3 Assignment3

Requirment:Plot densities of the K and G0 distributions.

Results are shown in Figure 5 and Figure 6.

4 Assignment4

Requirment:Select a sample from either urban or forest from the image shown in Fig. 3.4, and repeat the analysis presented in class.

I chose urban area to analyze and the size of the example is 100*100. The example is shown in Figure 7.

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Min. : 5

1st Qu.: 49397 Median : 139494 Mean : 486161 3rd Qu.: 382280 Max. :34400251

The histogram shows in Figure 8.

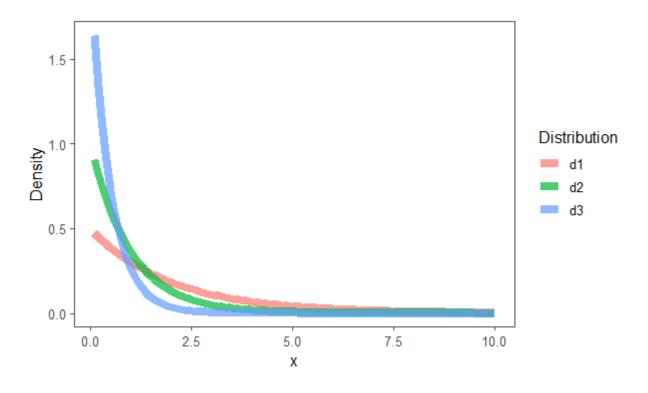


图 3: Exponential Densities

And the result of LogLikelihood is -3.866783e+00 $1.080319\mathrm{e}+06$

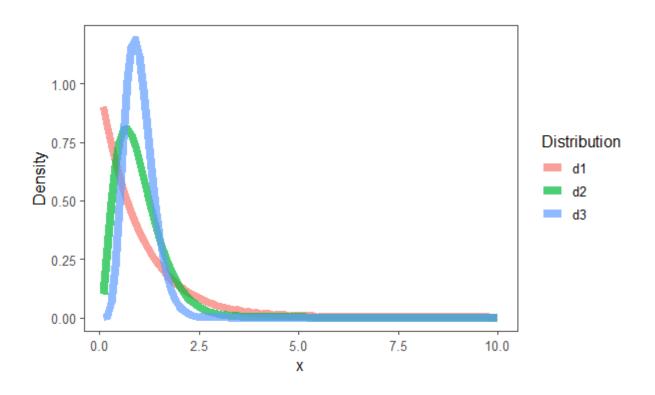


图 4: Gamma Densities

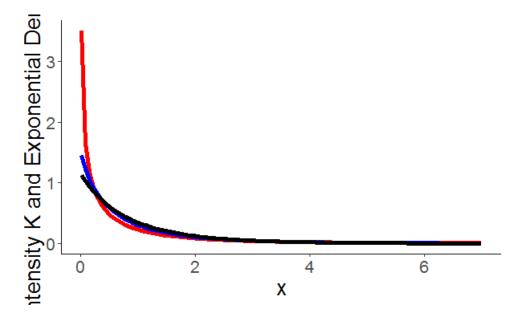


图 5: K distribution

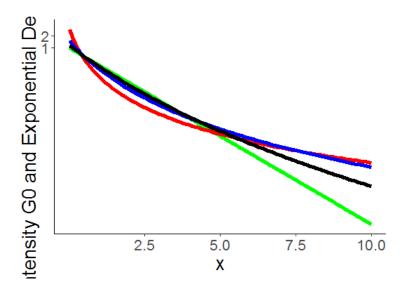


图 6: G0 distribution

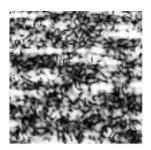


图 7: Urban area

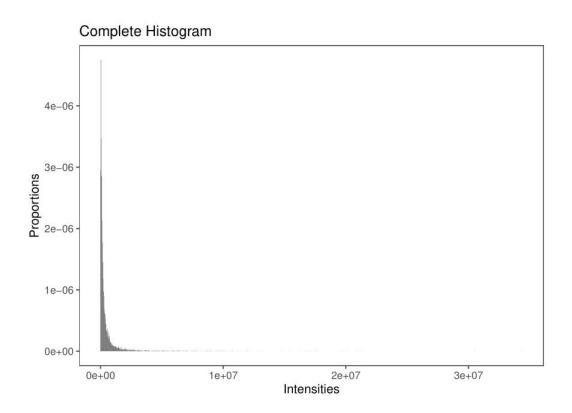


图 8: Histogram