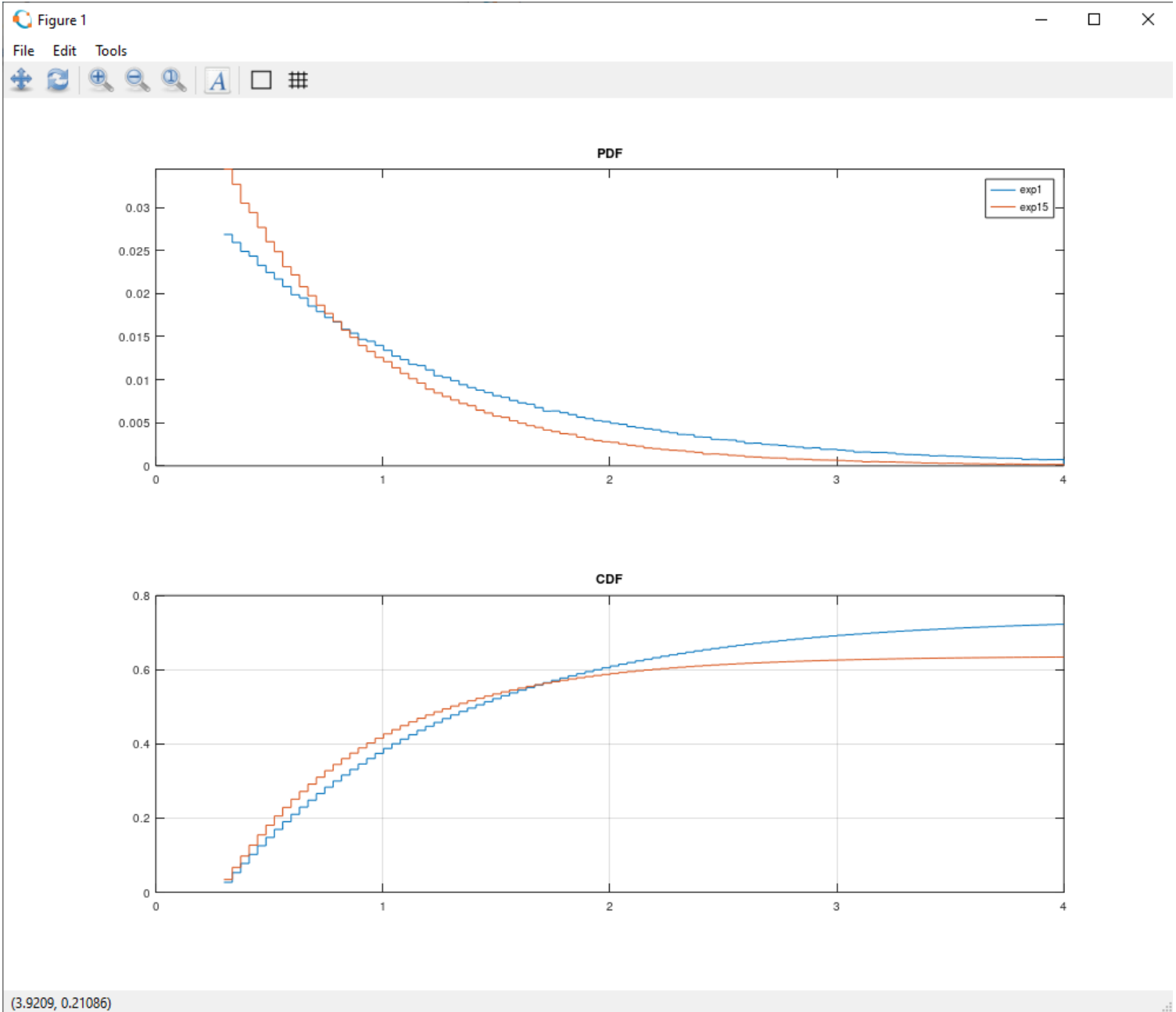


eup = empirical_univariate_plot(s).
Empirical probability distribution plots.



Exponential distribution:

pkg load statistics; #unless loaded already

lambda = single(1);

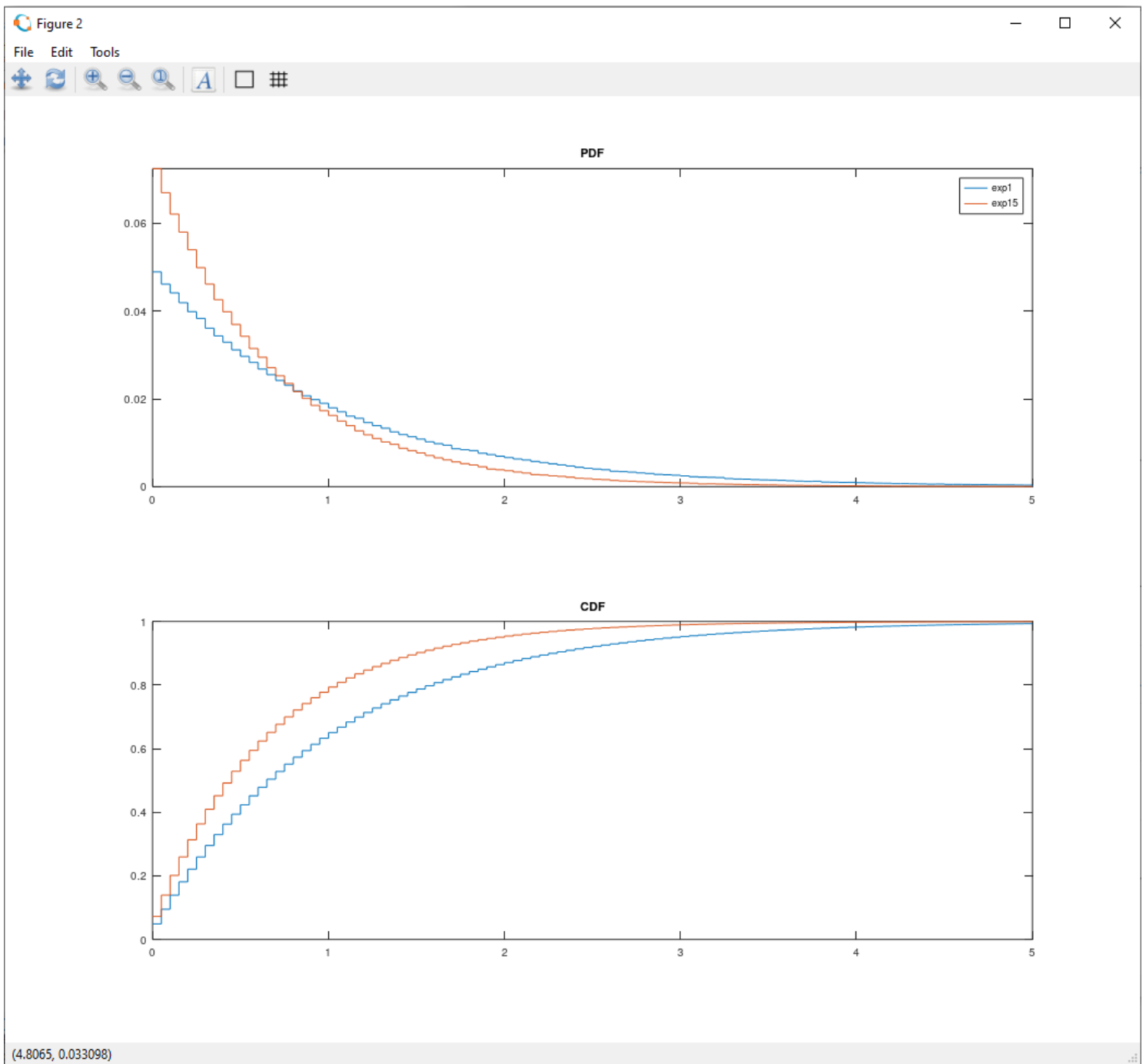
exp1 = exprnd(lambda, 1000); #return 10^6 random samples exponential distributed.

lambda = single(1.5);

exp15 = exprnd(lambda, 1000); #lambda = scale parameter.

eup(exp1, :, :, [0.3 4]); # suppose create figure 1.

eup(exp15, :, 1, [0.3 4]); # plot in figure 1 (3rd param).



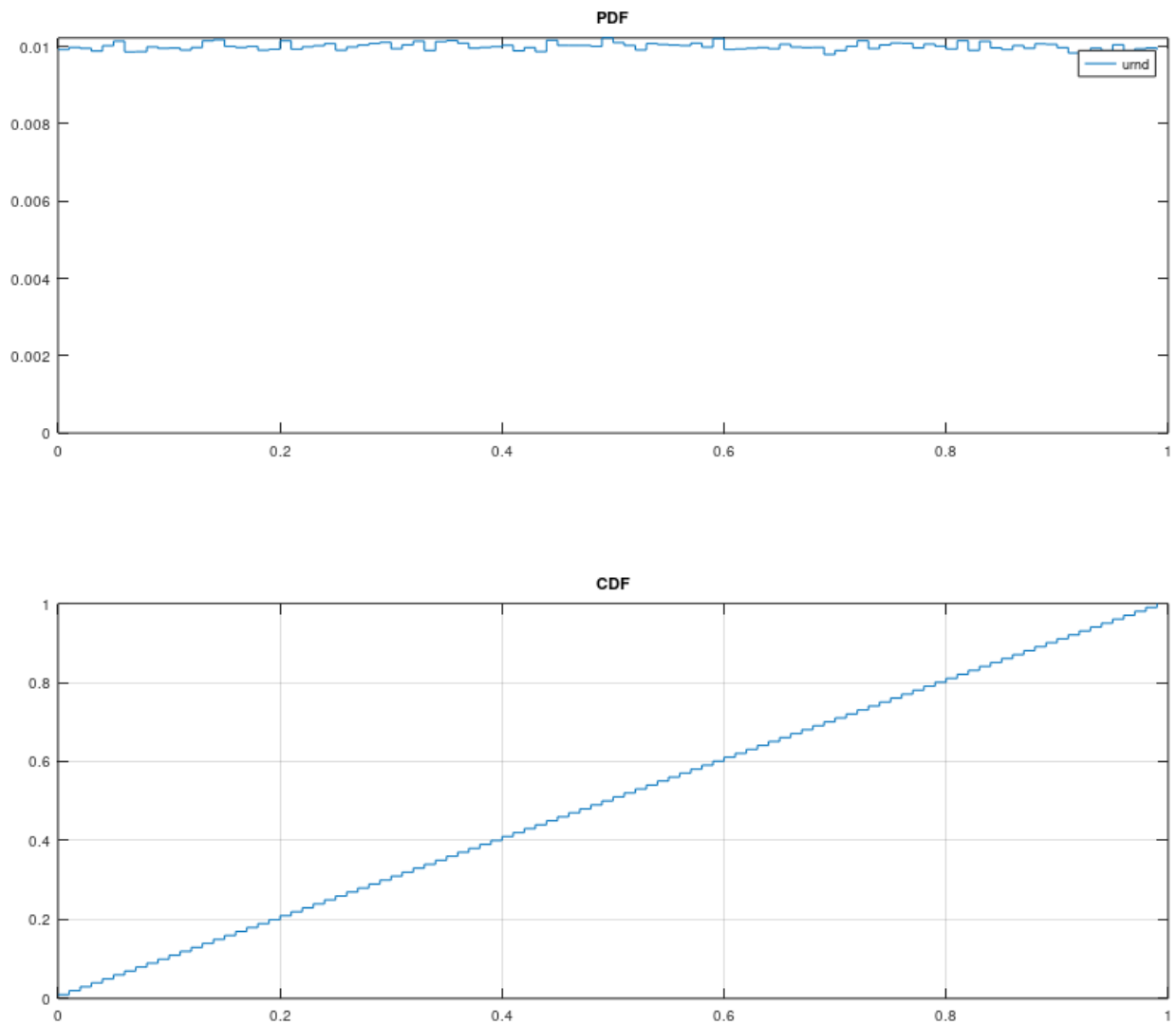
Exponential distribution (2):

`eup(exp1, :, :, [0 5]);` # suppose create figure 2.

`eup(exp15, :, 2, [0 5]);` # plot in figure 2 (3rd param).

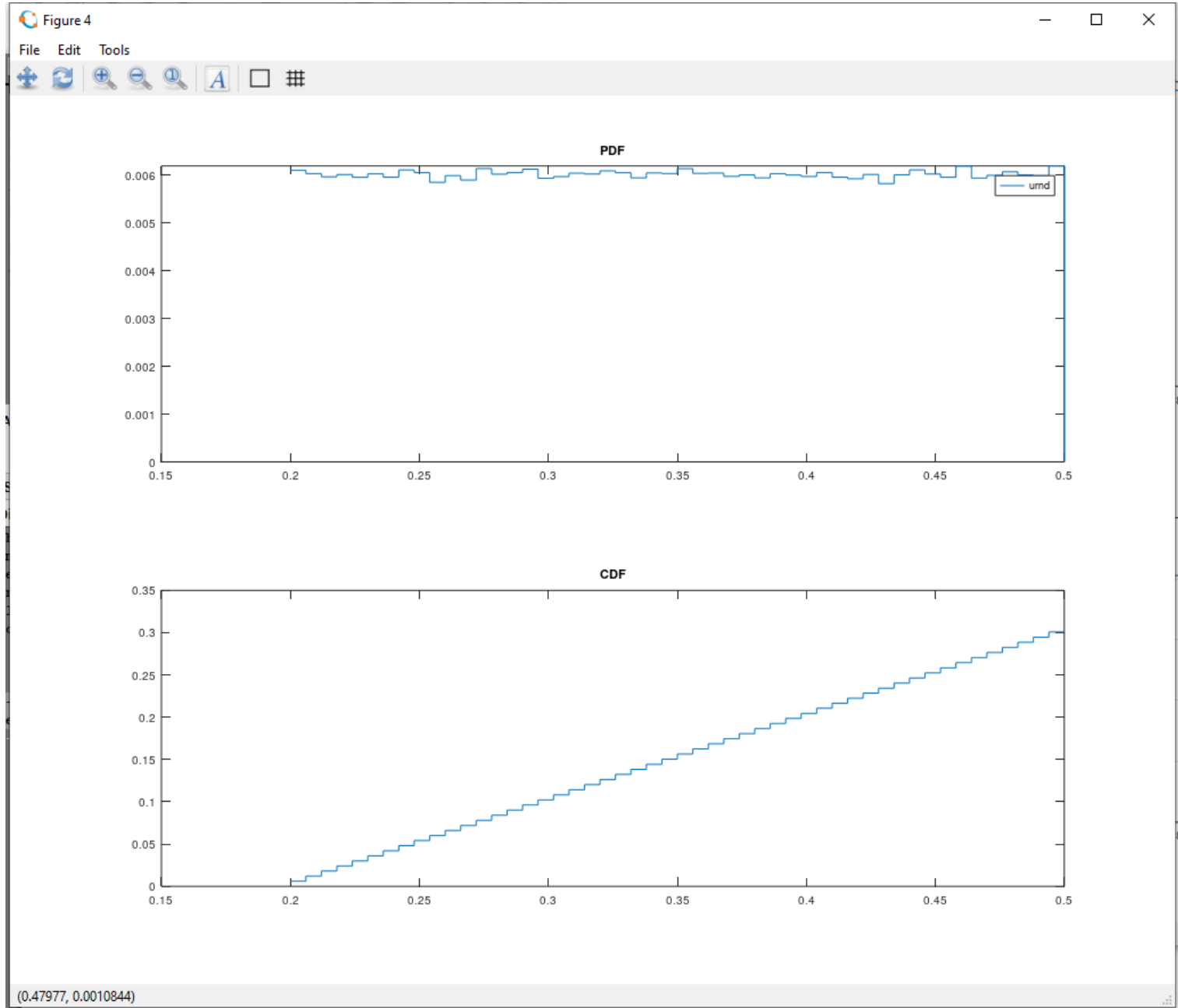
Figure 3

File Edit Tools

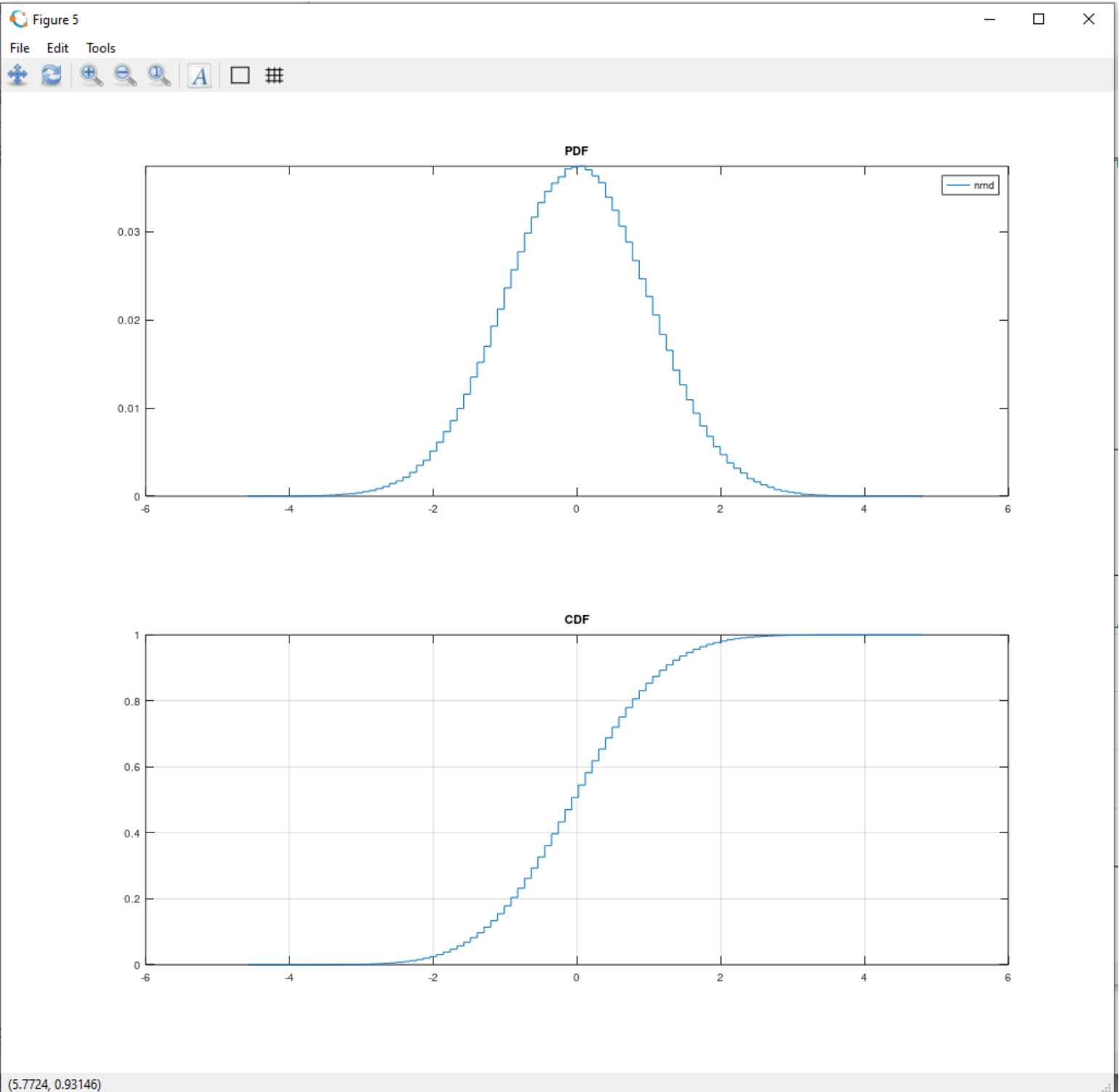


(0.78435, 0.0014205)

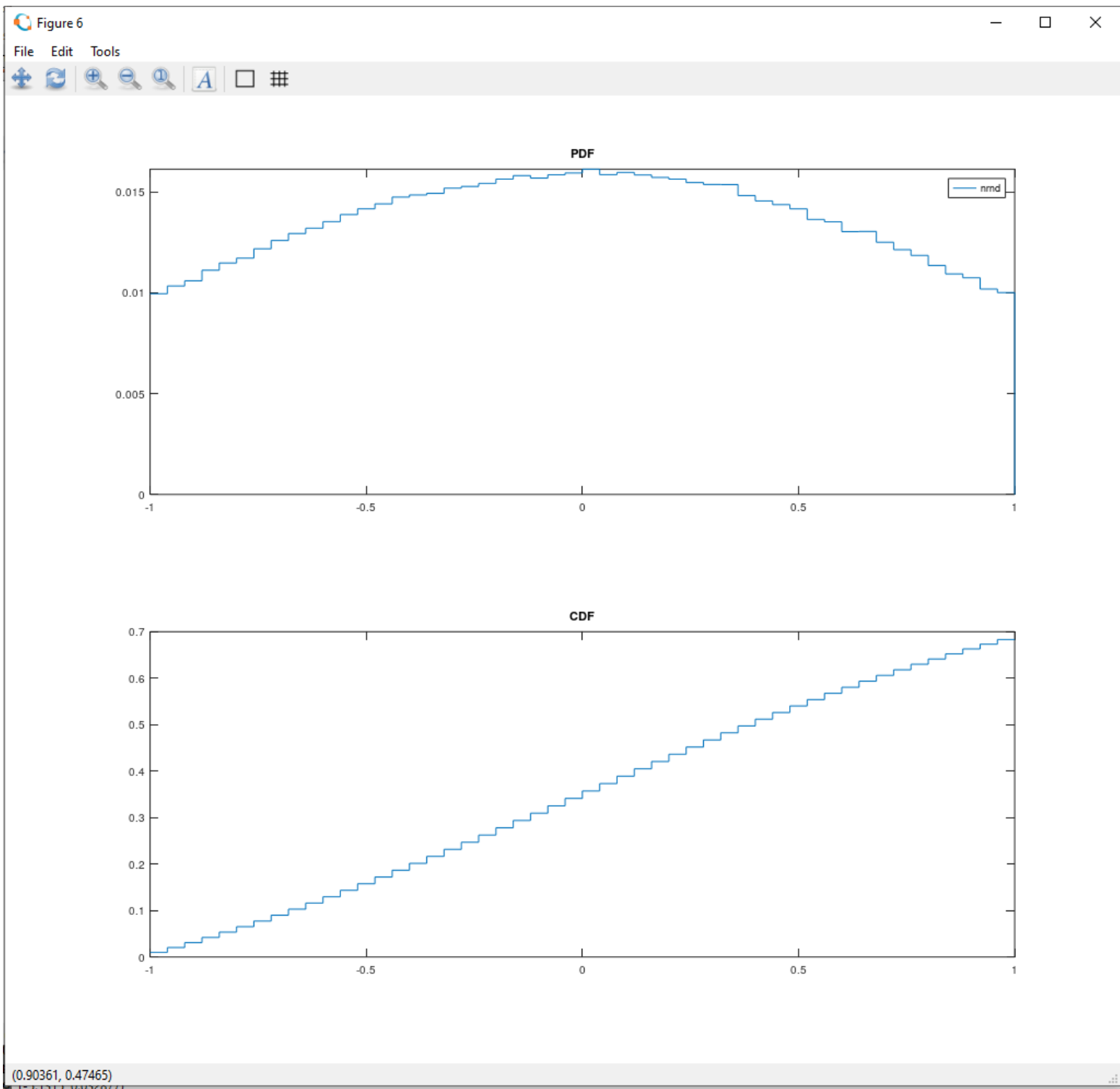
```
## Uniform distribution:  
urnd = rand(1000, "single");  
eup(urnd);
```



```
## Uniform distribution (2):  
urnd = rand(1000, "single");  
eup(urnd, 50, :, [0.2 0.5]);
```



```
## Normal (Gaussian) distribution:  
## (standard) normally distributed random elements (zero mean and variance one):  
nrm1 = randn(1000, "single"); # 106 elements.  
cdf(nrm1);
```



Normal (Gaussian) distribution (2):

`eup(nrnd, 50, :, [-1 1]);` #zone with 68.2% probability (+/-sigma).

Adjusting [xmin xmax] (the 4th eup parameter) we can evaluate the probability associated with different zones of X random variable.