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comments & answers on the graphs

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1 - ensemble mean : we note that it approaches zero as we know it is a cos function
and theoritically we integrate over a complete period which has to be zero at the end

2-3D graph : we note that it consists of sinusoidal functions which are merged with
each other so we see it takes the shape of sin and cos to cover the whole space among the threee

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3 - yes due to the values we get, we note that both of them equal zero or approaches
it as we expected we our theoritical calculations as we integrate over a complete period
which has to be zero at the end
- if we always equilibriam among the enseble mean and ACF and time mean and ACF so its perodic

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4 - yes , there is a relation between them both of them takes the value of cos function
for ensemble we get many cos functions as we change tao to cover all sample functions
it show the realtion between the values of the sample function and how they change ,
for the time we get a vlue as we work on a specific sample function

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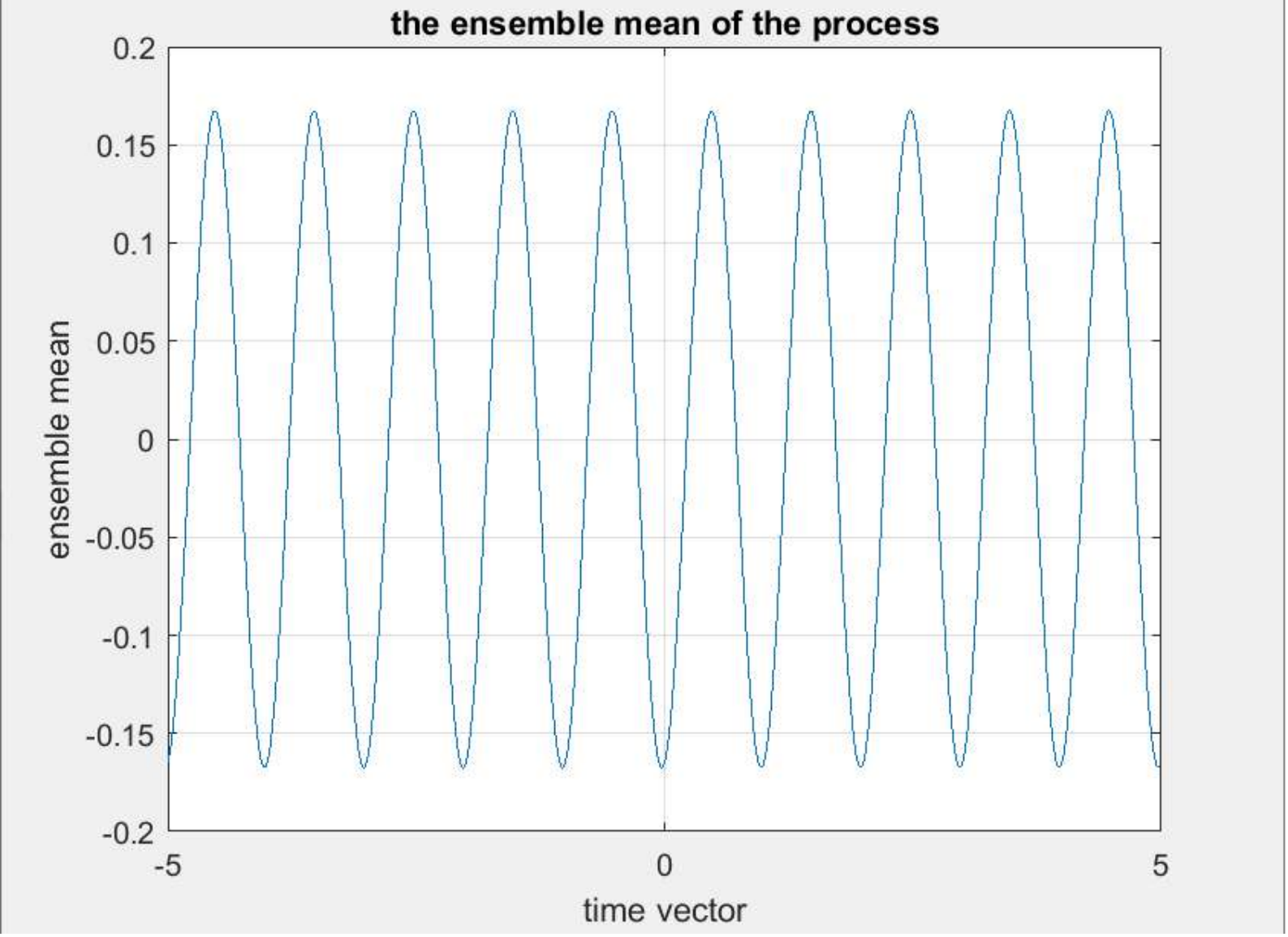
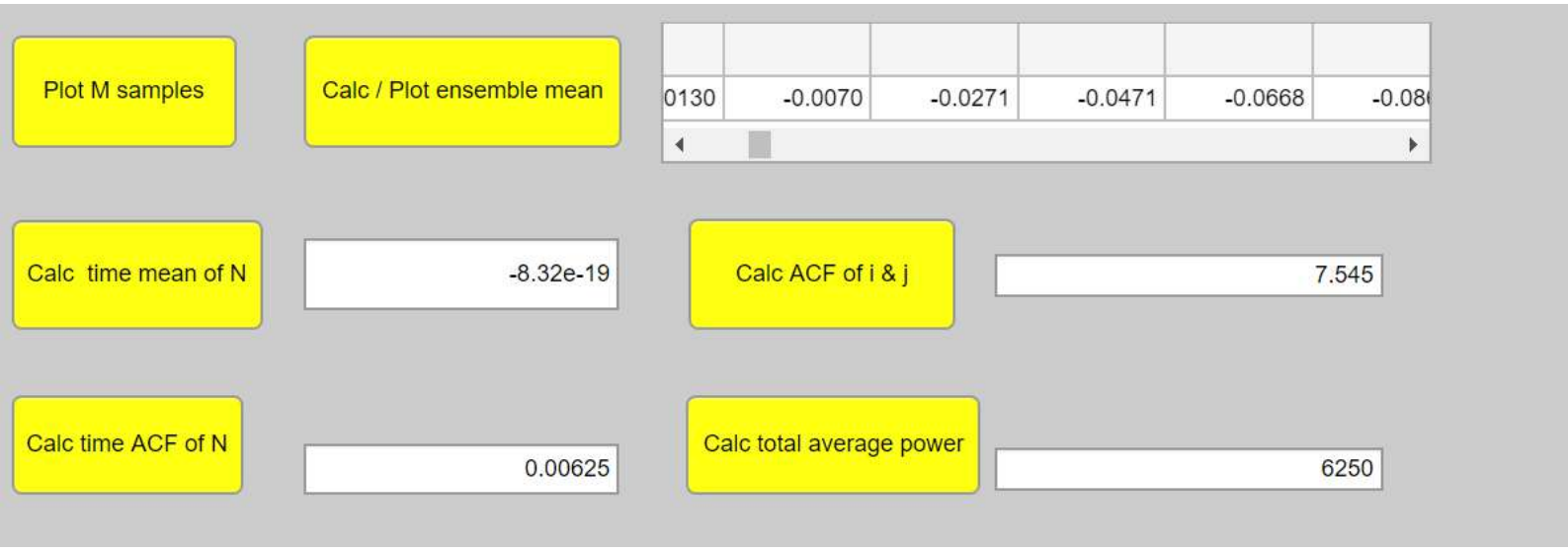
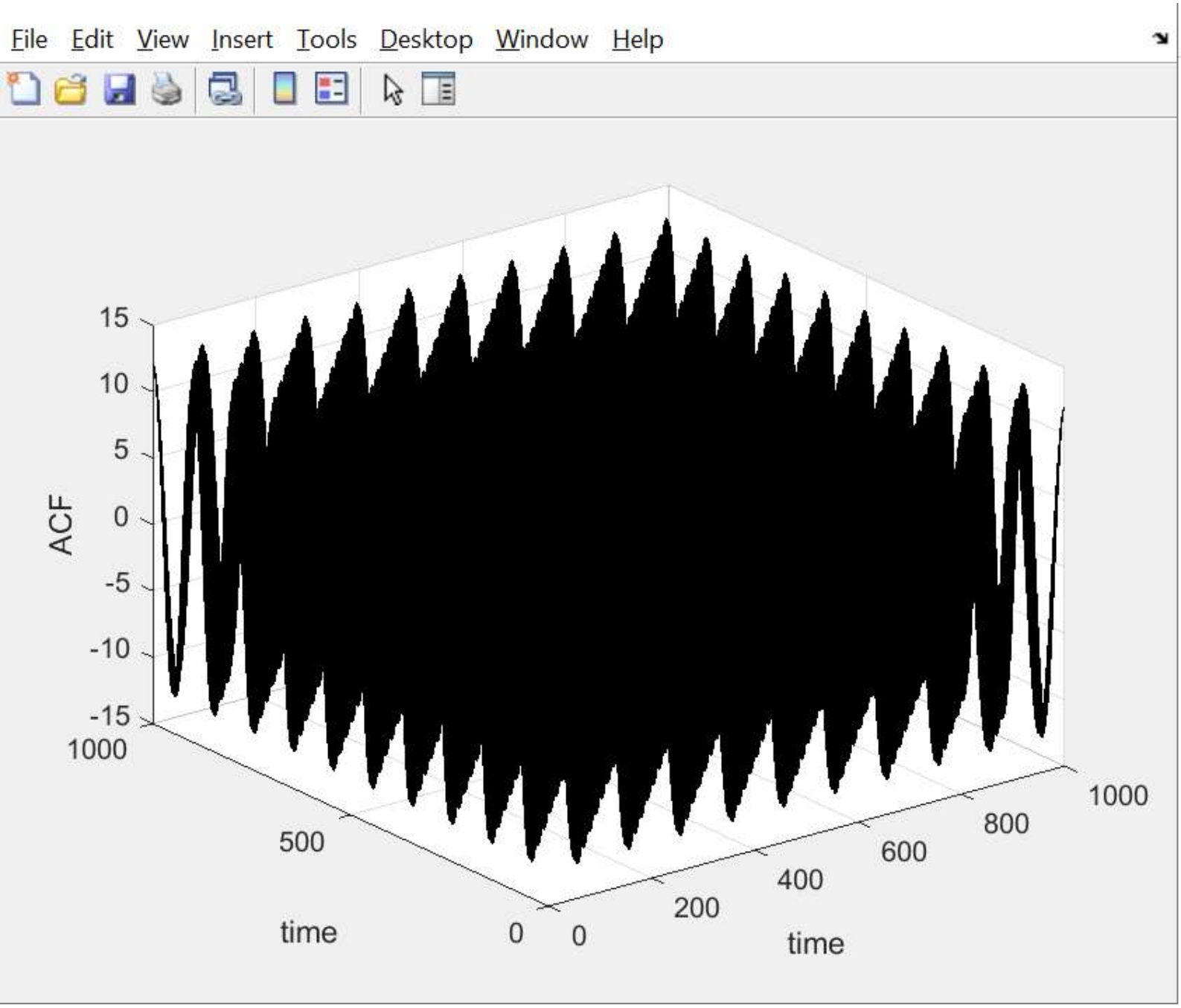



Plot M samples
Calc / Plot ensemble mean
0130
-0.0070
-0.0271
-0.0471
-0.0668
Calc time mean of N
-8.32e-19
Calc ACF of i & j
7.545
Calc time ACF of N
0.00625
Calc total average power
6250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ACF
15
10
5
0
-5
-10
-15
1000
500
time
0
0
200
400
600
800
1000
time

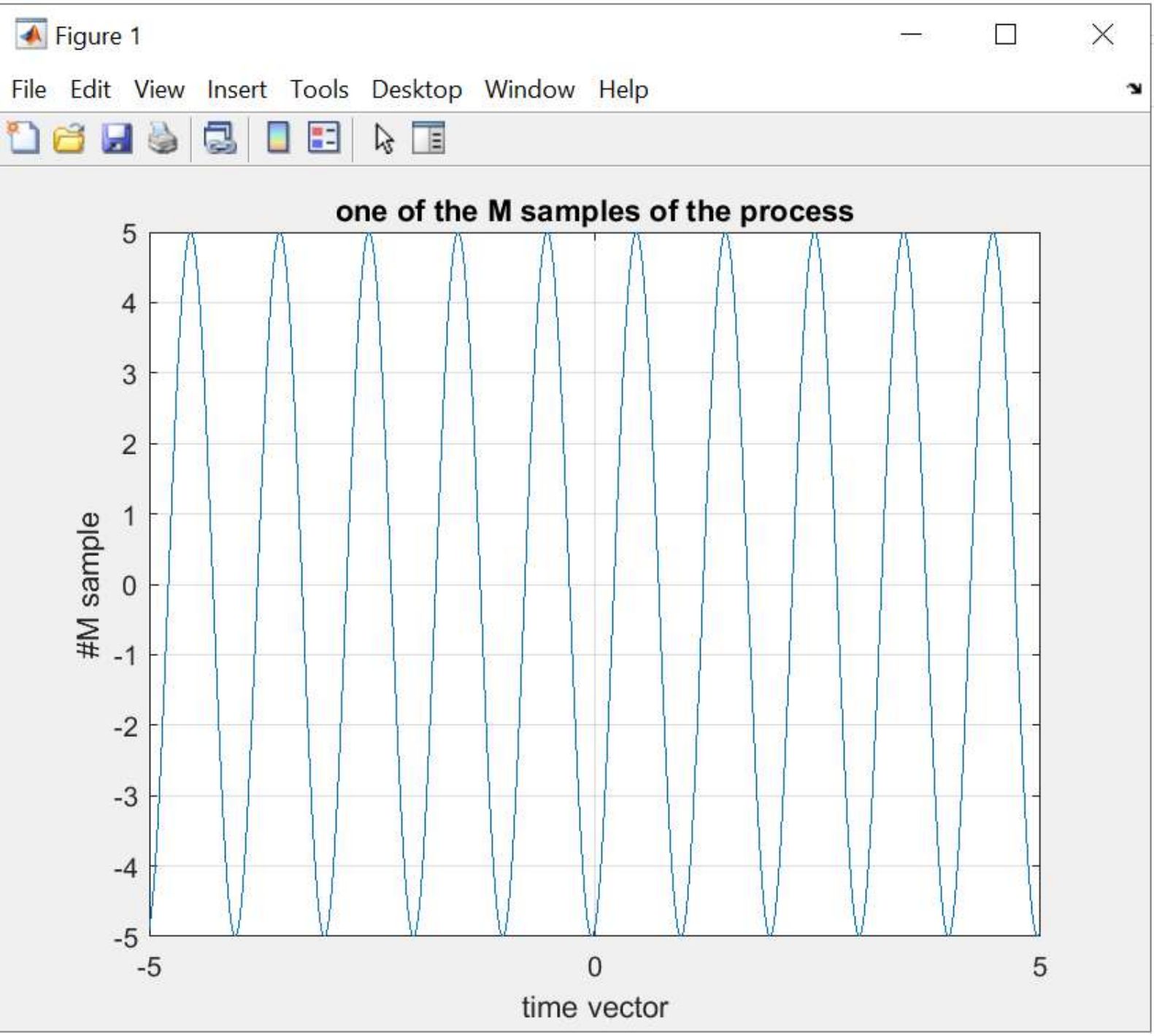
Figure 1
File Edit View Insert Tools Desktop Window Help
one of the M samples of the process
#M sample
time vector
5
4
3
2
1
0
-1
-2
-3
-4
-5
-5
0
5

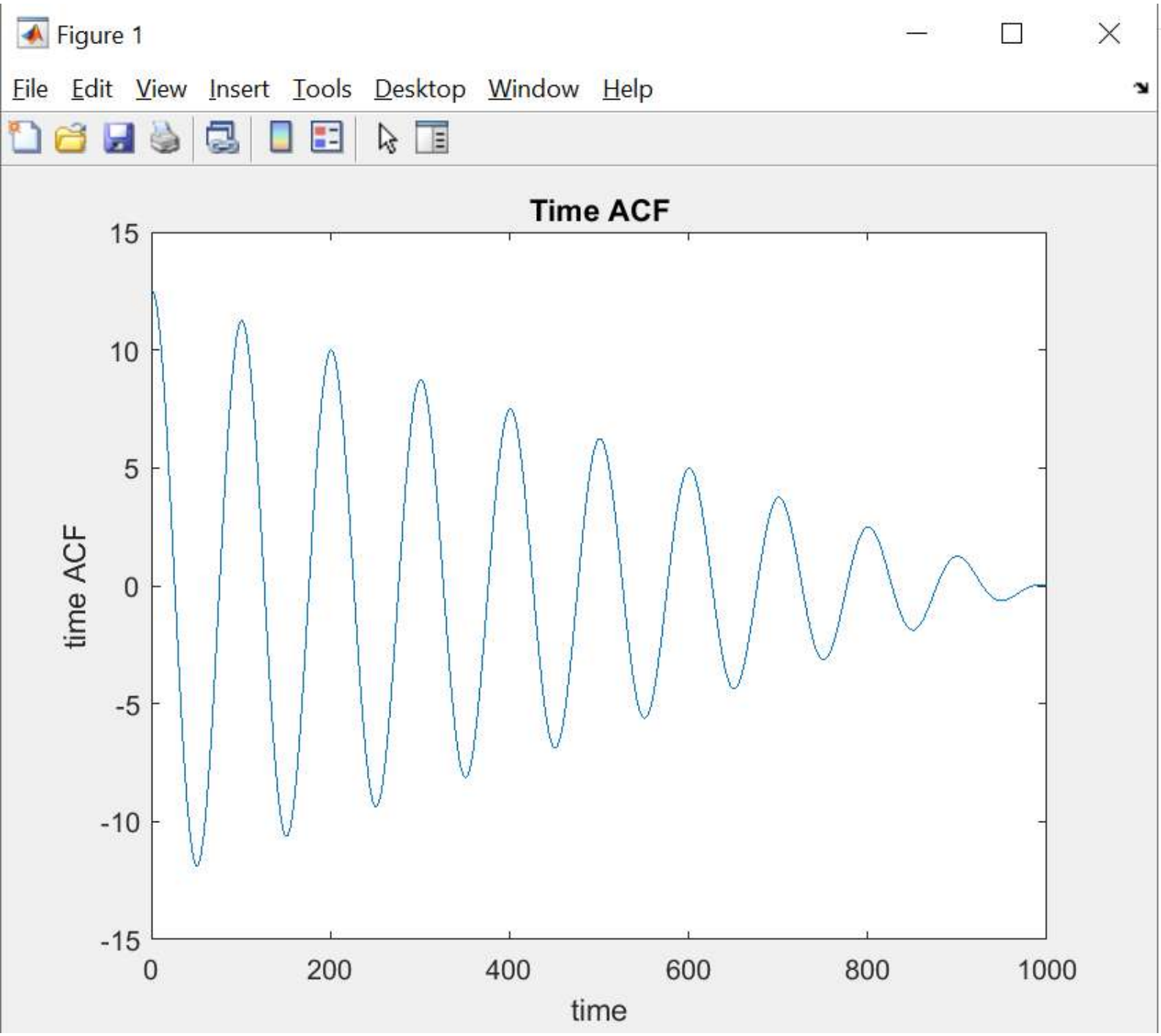
Figure 1
File Edit View Insert Tools Desktop Window Help
Time ACF
15
10
5
0
-5
-10
-15
time ACF
0
200
400
600
800
1000
time

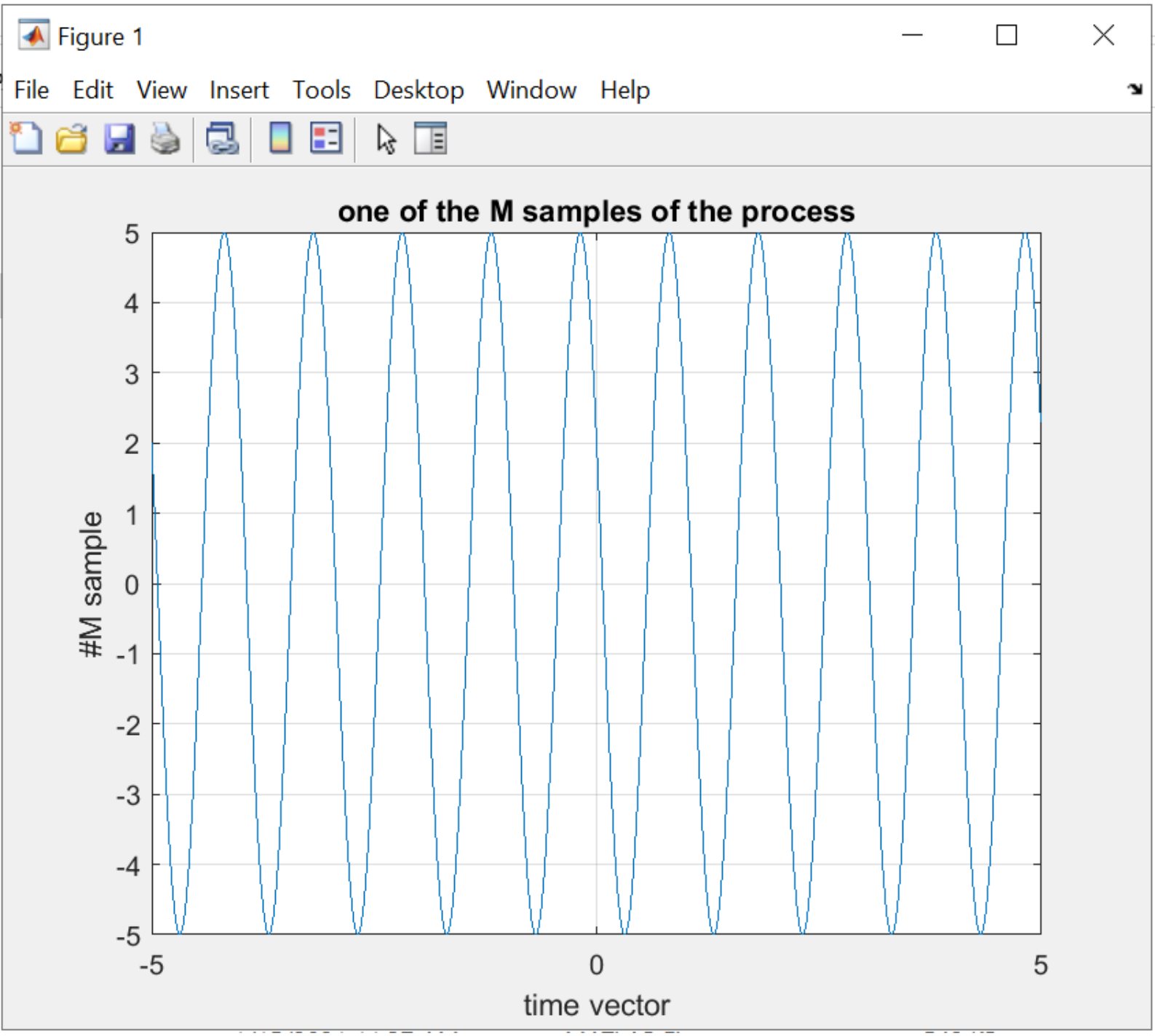
Figure 1
File Edit View Insert Tools Desktop Window Help
one of the M samples of the process
#M sample
time vector
5
4
3
2
1
0
-1
-2
-3
-4
-5
-5
0
5

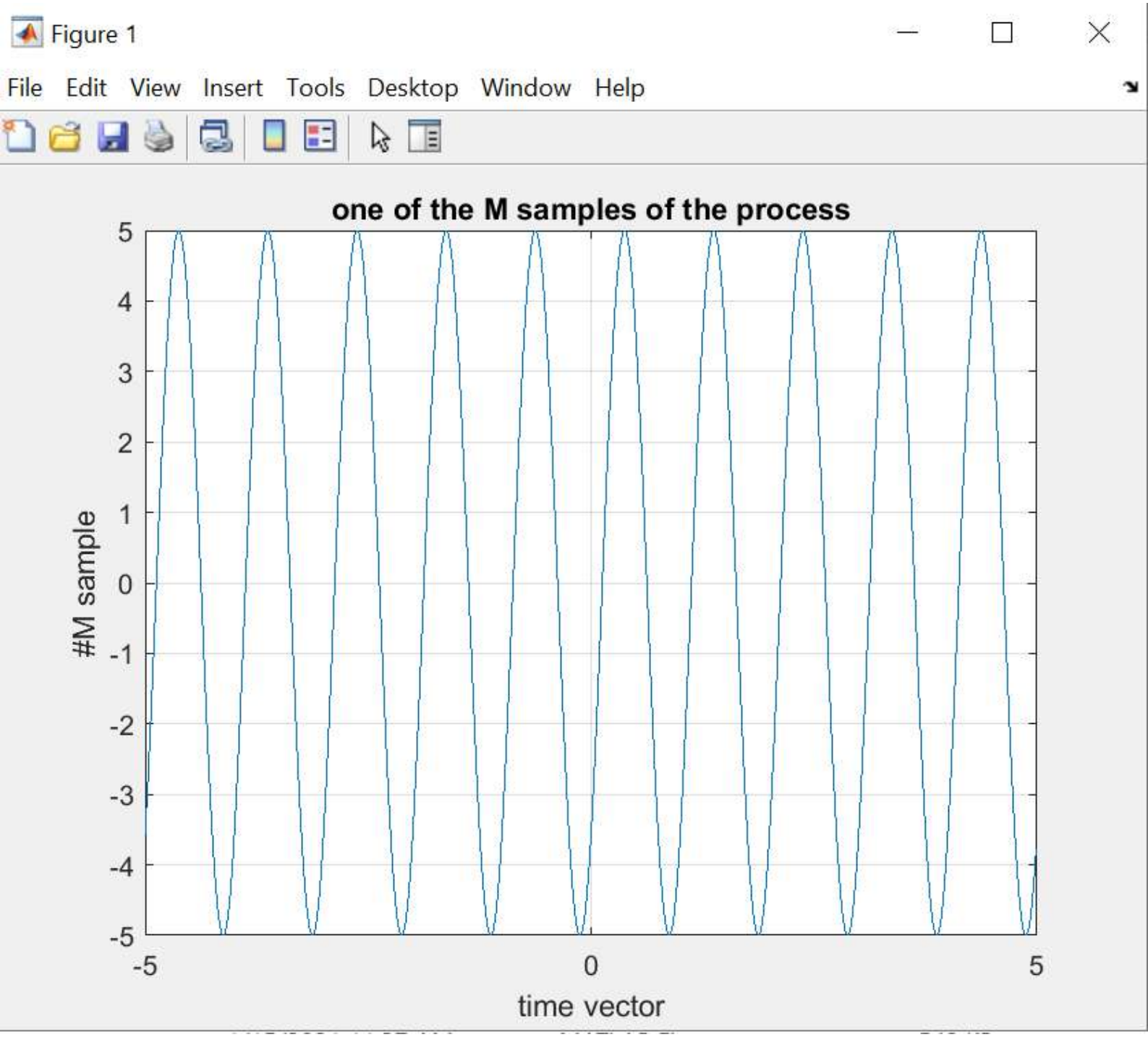
Figure 1
File Edit View Insert Tools Desktop Window Help
one of the M samples of the process
#M sample
time vector
5
4
3
2
1
0
-1
-2
-3
-4
-5
-5
0
5

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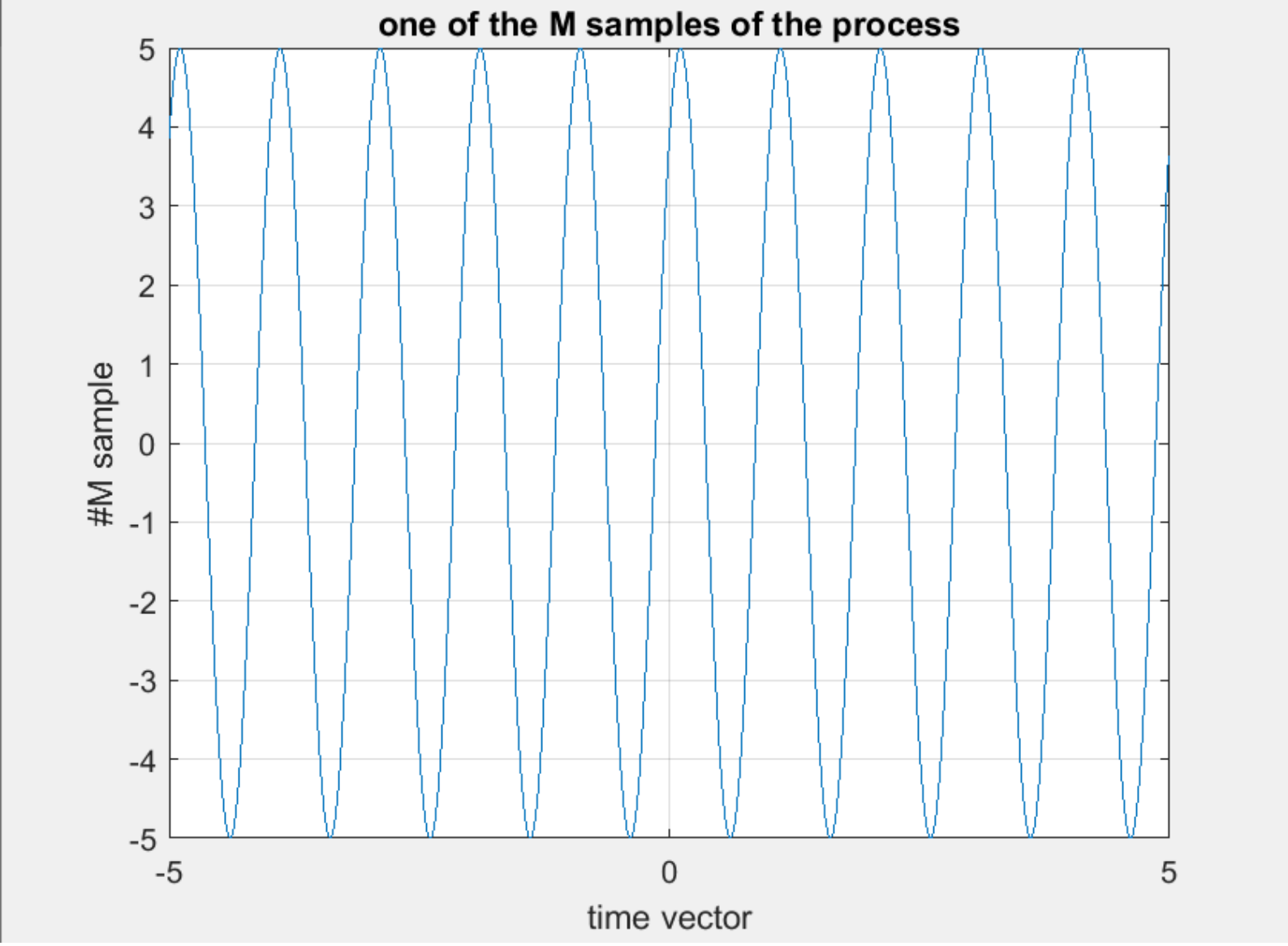

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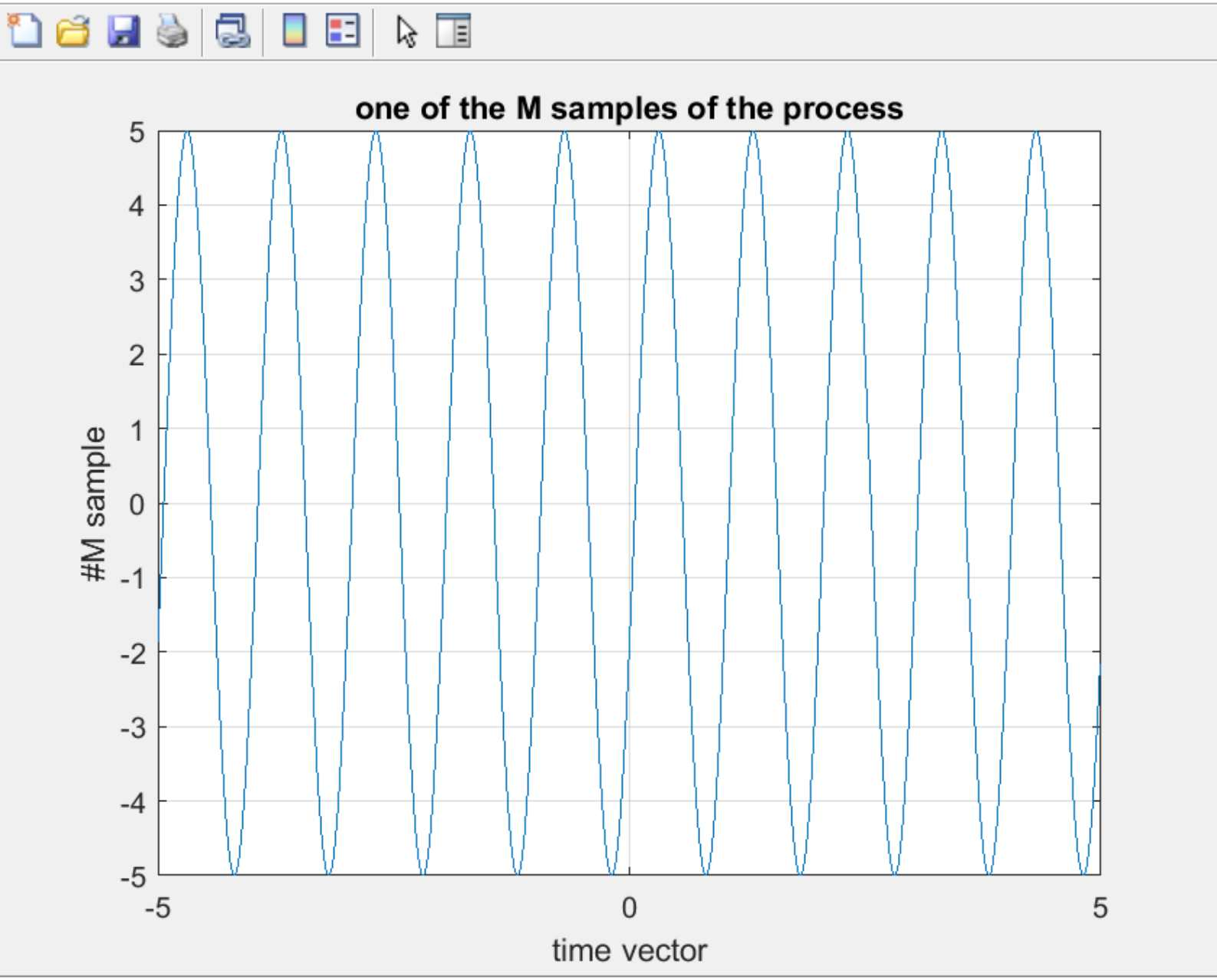

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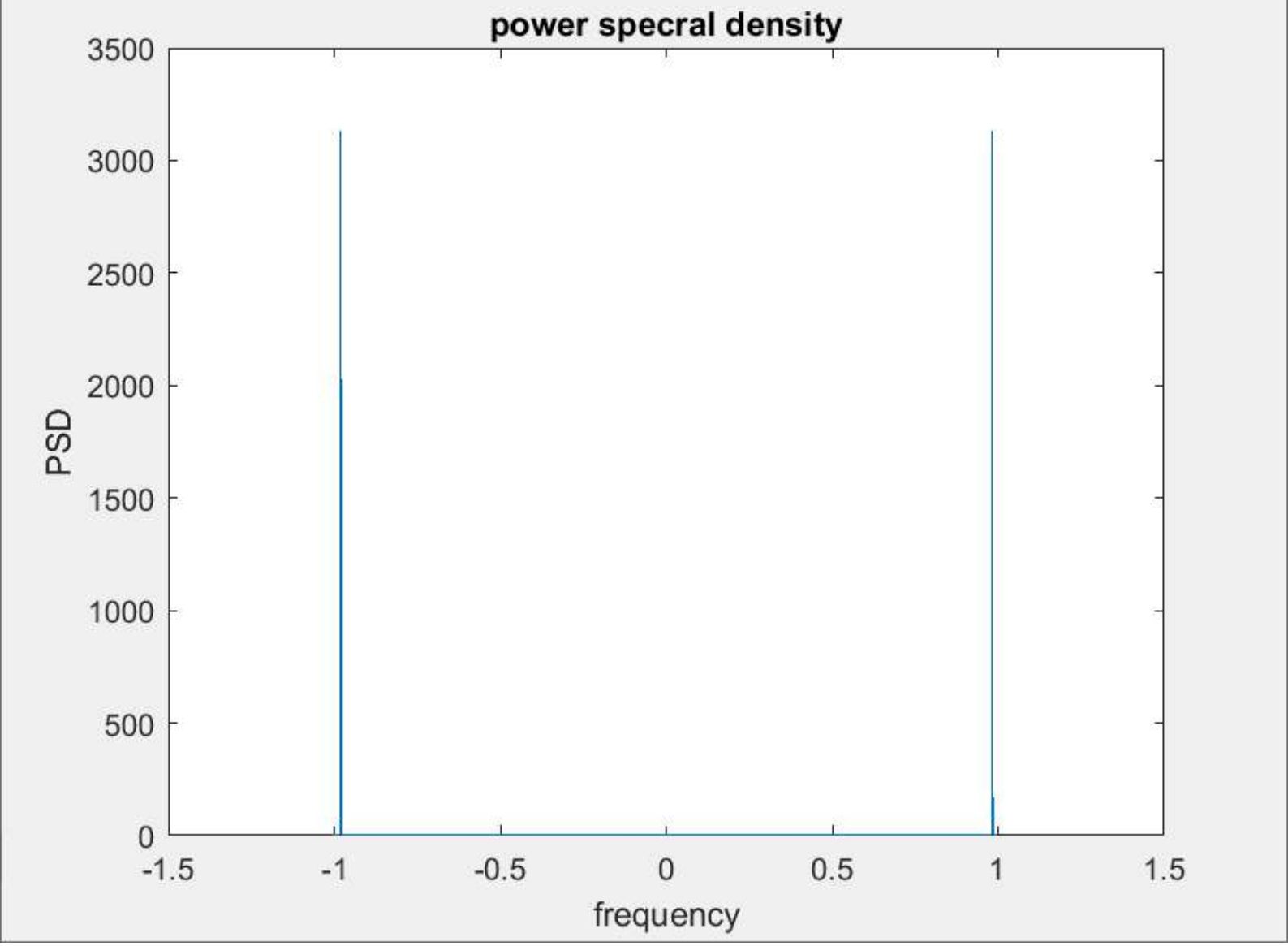

Calc time mean of N

-8.66e-19

Calc time ACF of N

0.00625