# Radar Target Generation and Detection



## Meets Specifications

Great work with the project. All the parts are implemented correctly and giving correct output.
I hope you enjoyed the material, and have a better understanding of the fundamentals of Radar!
I wish you good luck in your future endeavors! 🎉

## FMCW Waveform Design

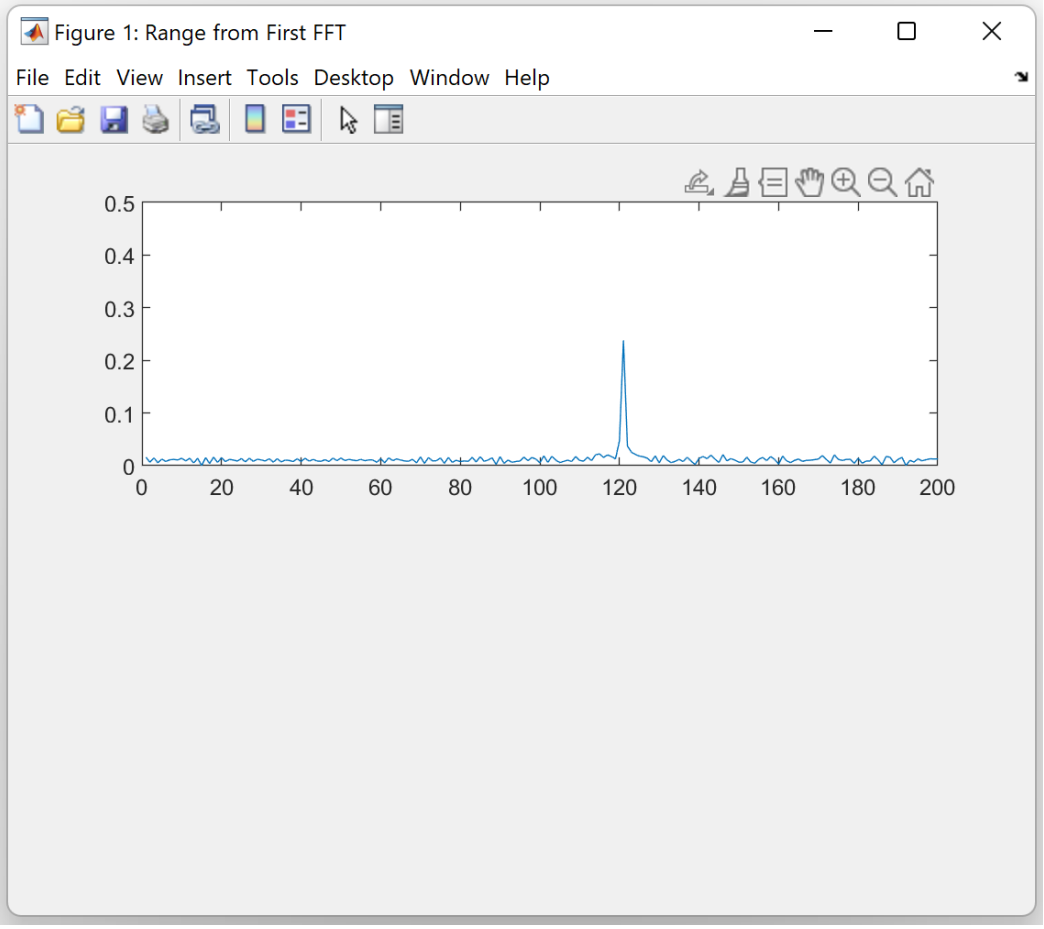
✓ For given system requirements the calculated slope should be around 2e13

Wonderful work getting your slope to return the proper value of 2e13!

## Simulation Loop

✓ A beat signal should be generated such that once range FFT implemented, it gives the correct range i.e the initial position of target assigned with an error margin of +/- 10 meters.

Great work! Your graph illustrates the proper behavior based upon the initial target position of 120, absolutely beautiful work! 🎉 Keep up the wonderful work 👍

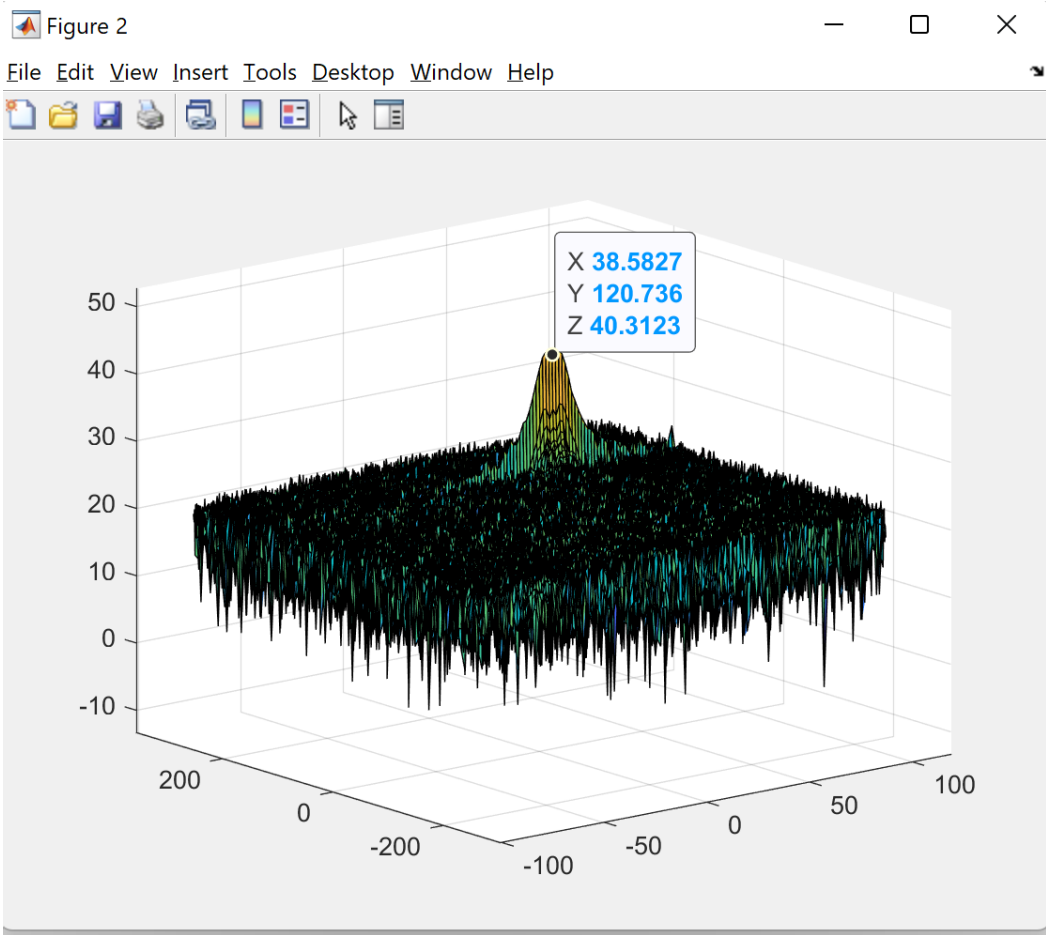


## Range FFT (1st FFT)

A correct implementation should generate a peak at the correct range, i.e the initial position of target assigned with an error margin of +/- 10 meters.

Great work with your FFT implementation, as well as your output!! 👍

Your graph properly matches your selected values of 120 as an initial position, and shows the correct range:

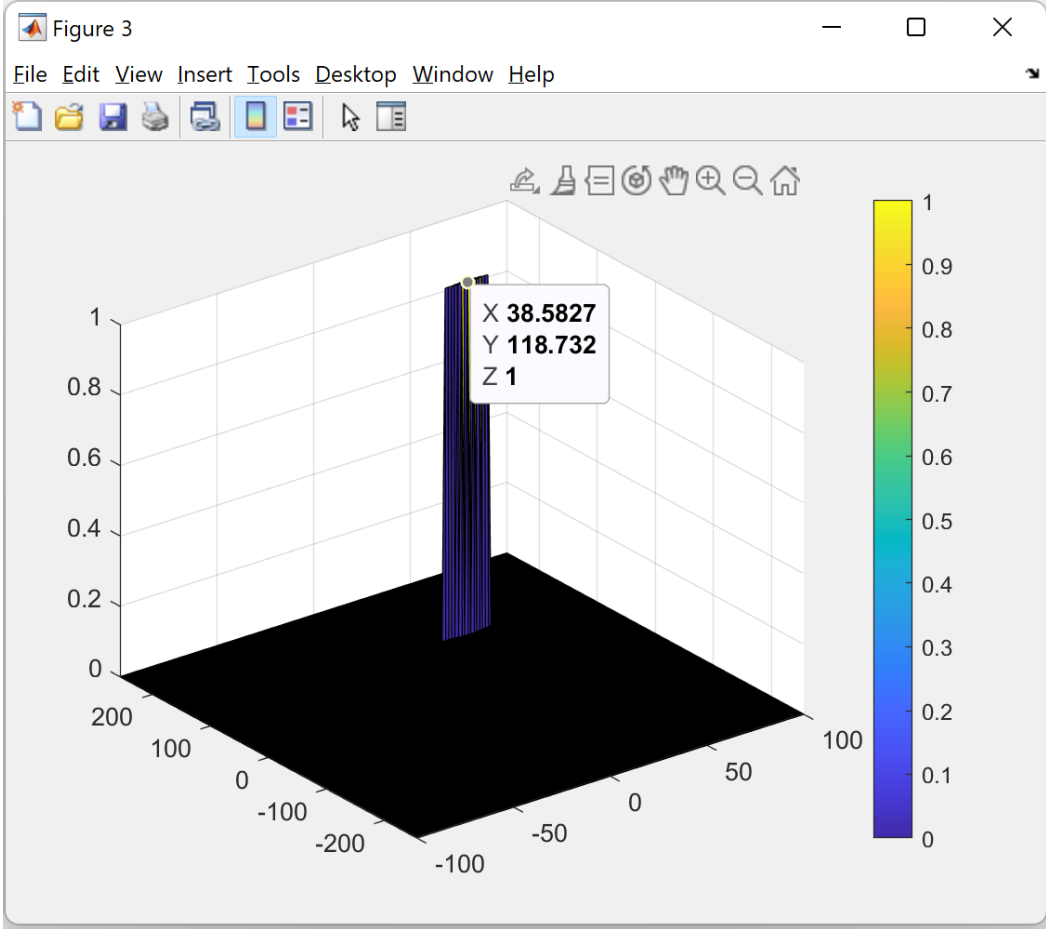



## 2D CFAR

The 2D CFAR processing should be able to suppress the noise and separate the target signal. The output should match the image shared in walkthrough.

Beautiful job on your 2D CFAR processing, and your implementation. Everything is extremely neat, and correctly implemented-- Keep up the awesome job!

Your output looks great:




In a README file, write brief explanations for the following:

- Implementation steps for the 2D CFAR process.
- Selection of Training, Guard cells and offset.
- Steps taken to suppress the non-thresholded cells at the edges.

Great work with your writeup! Your parameter choices were well chosen, and your methodology explained.

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5 CODE REVIEW COMMENTS ❯

RETURN TO PATH