Sistemas de Comunicaciones Digitales
03/01/20

Tarea 06

UNIPOLAR

Fc LPF	Img	Error
0.394		NO ERROR
0.1594		NO ERROR
0.094		NO ERROR

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 After doing some test, if the Fc of the Low pass filter we have a lower value then we will have an error.

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Uni Polar Fc 0.1594

Scatter plot

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Uni Polar Fc 0.094

Scatter plot
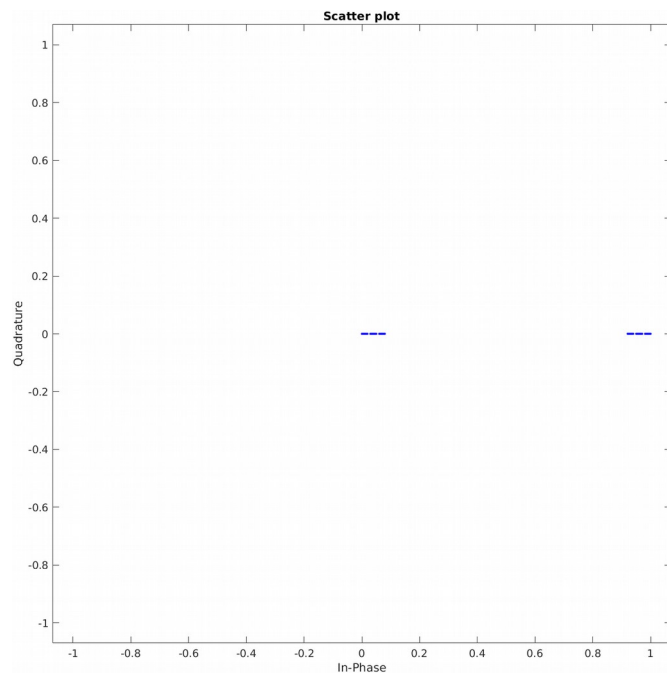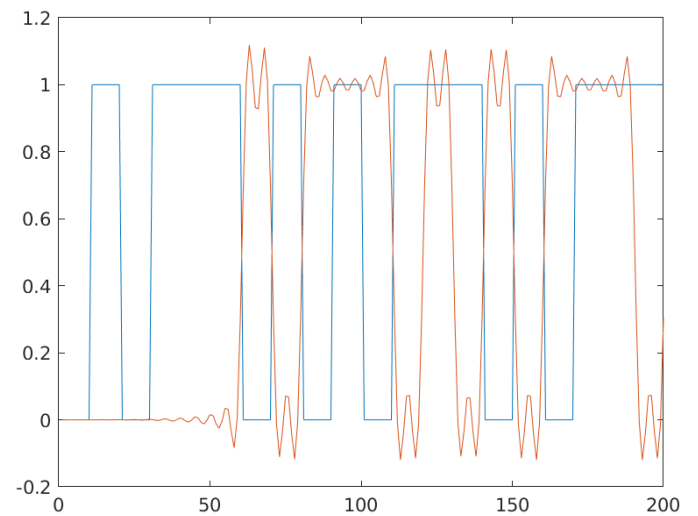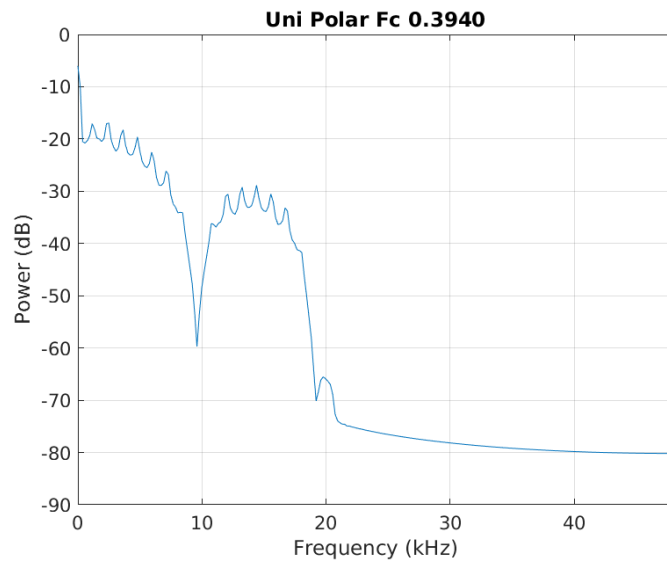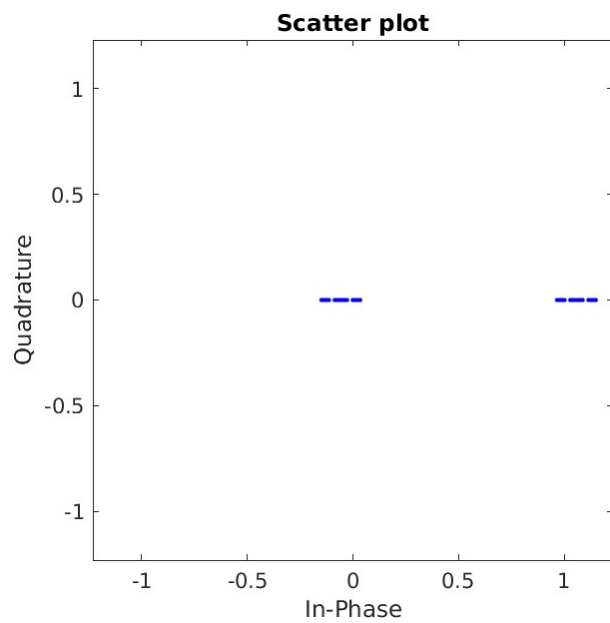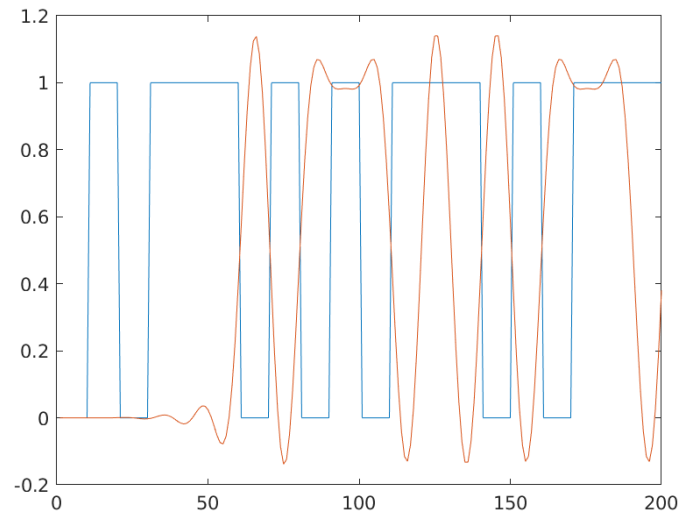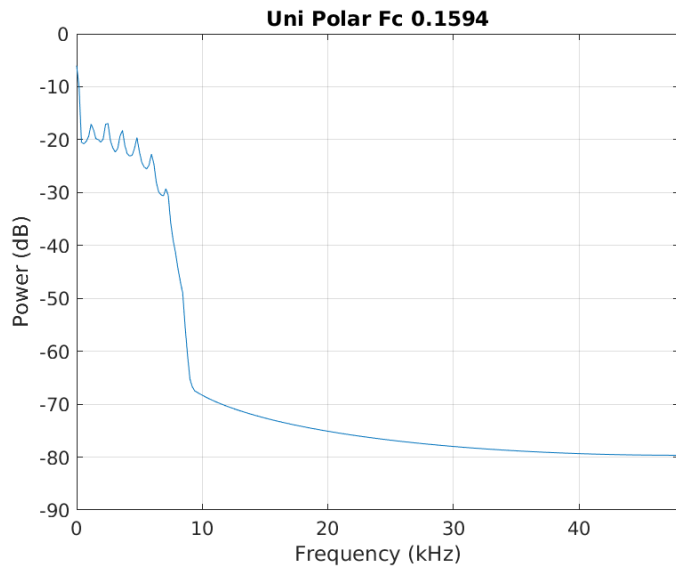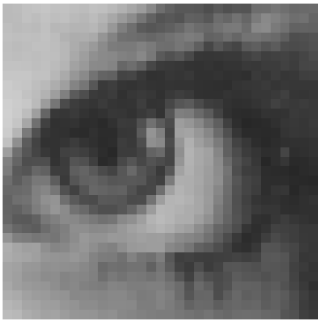
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POLAR

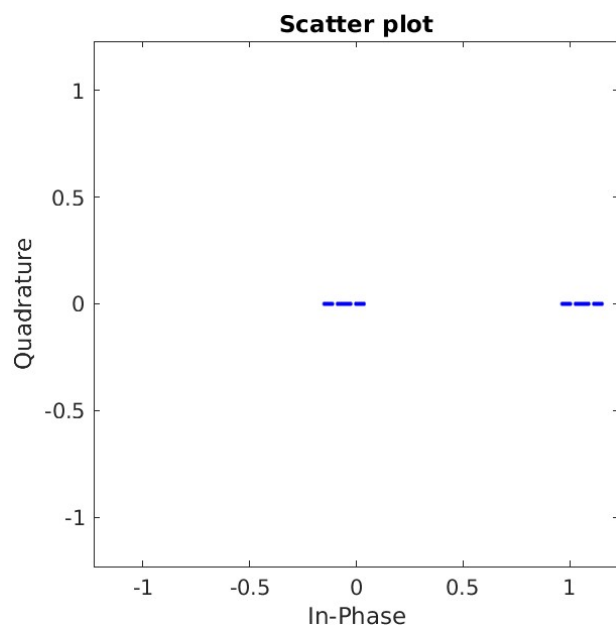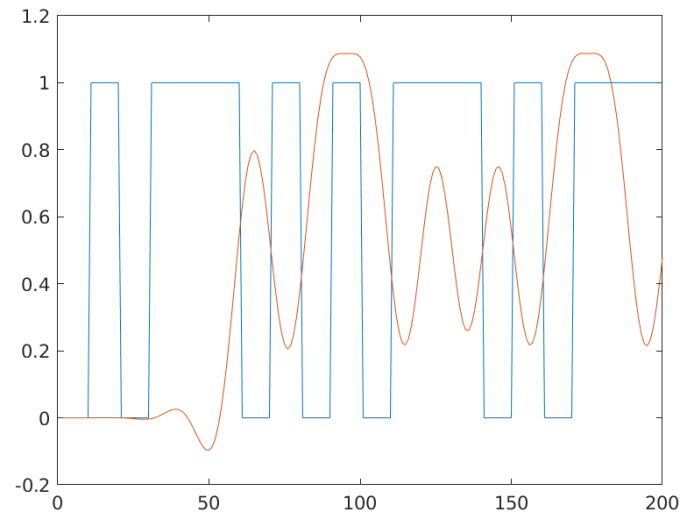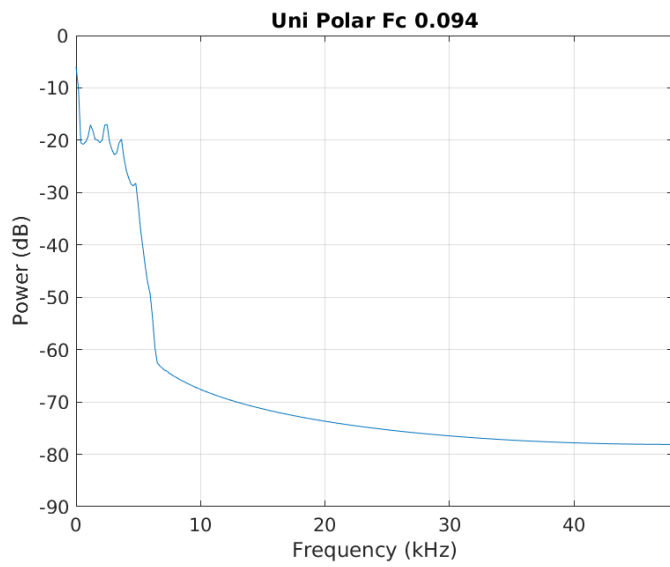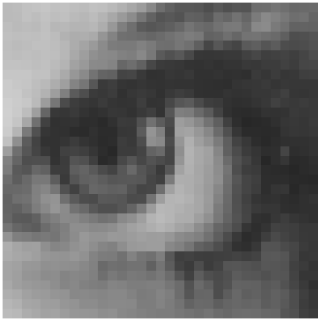| Fc LPF	Img	Error
0.394		NO ERROR
0.1594		NO ERROR
0.094		NO ERROR

Sistemas de Comunicaciones Digitales
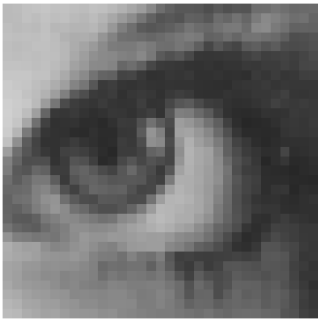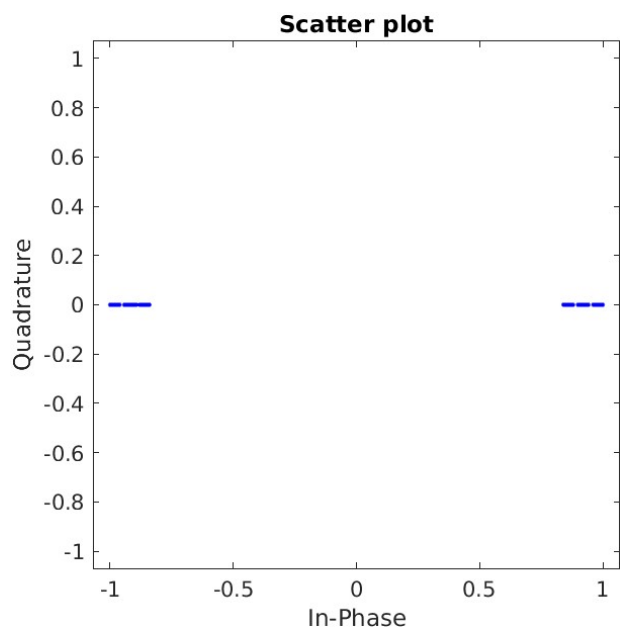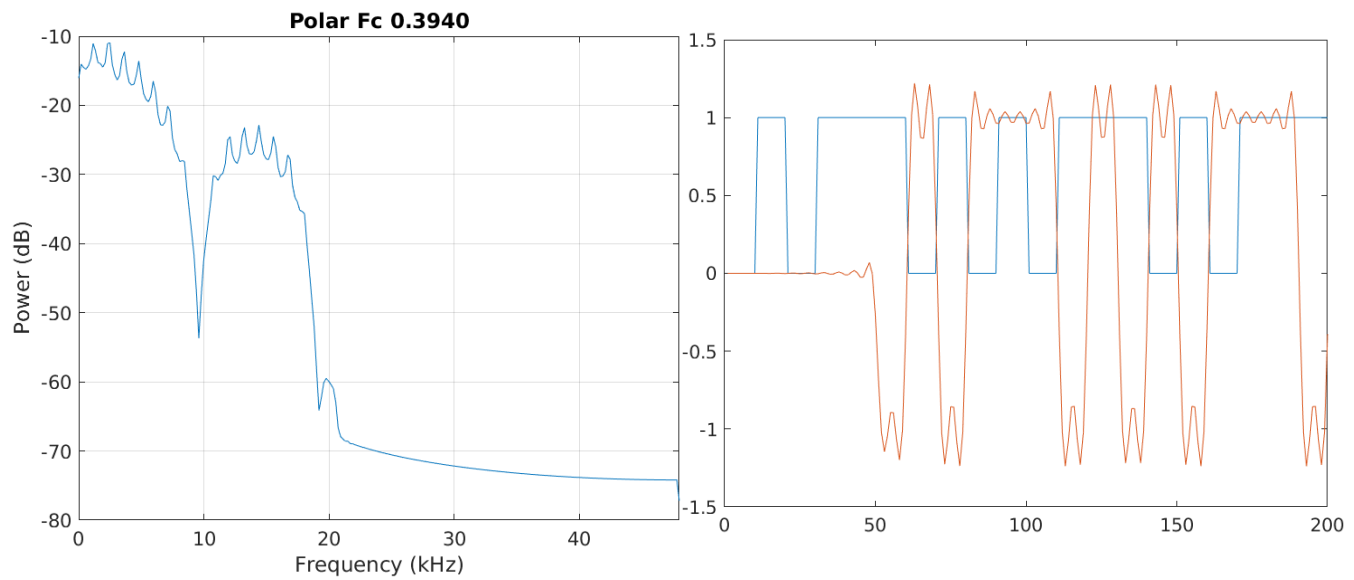03/01/20

Polar Fc 0.3940

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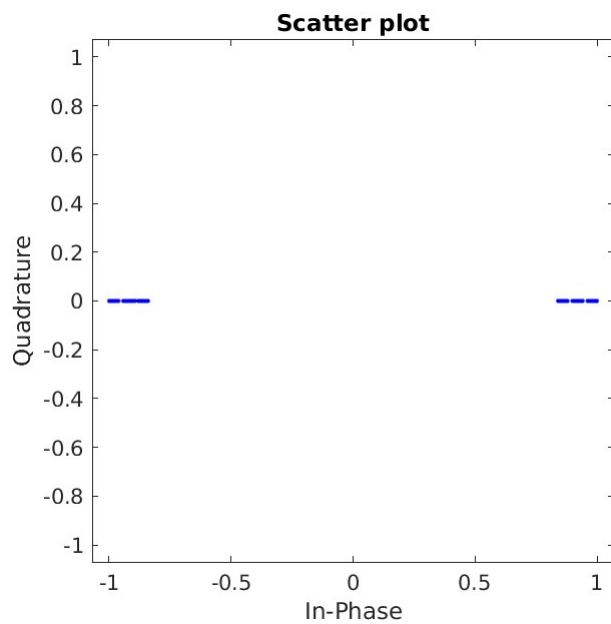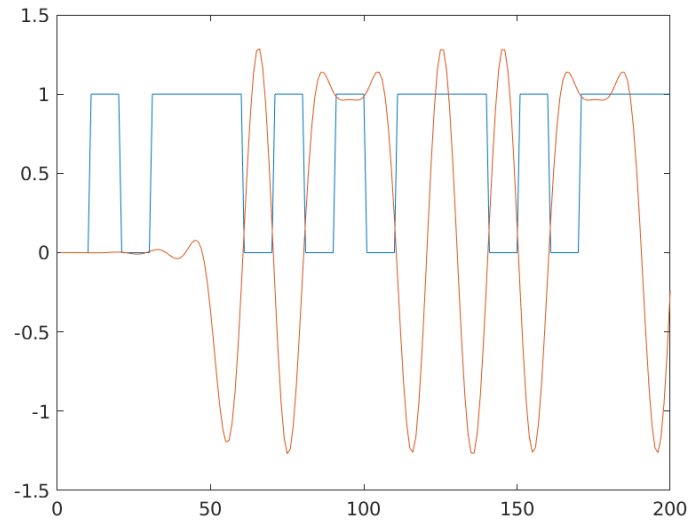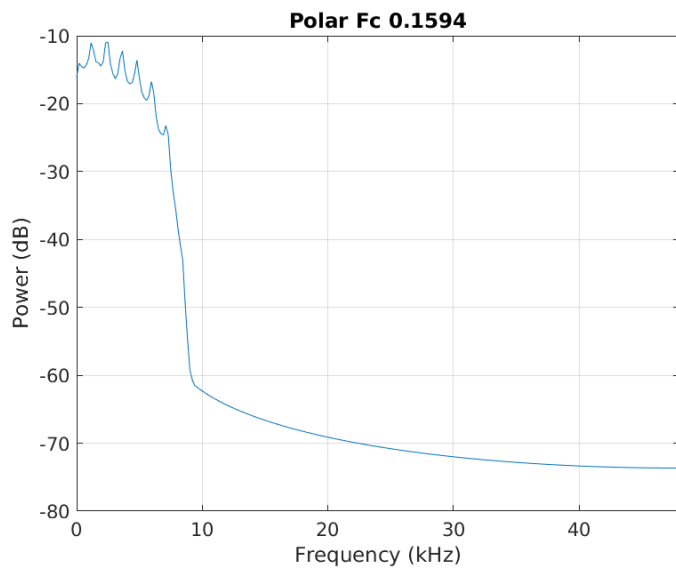
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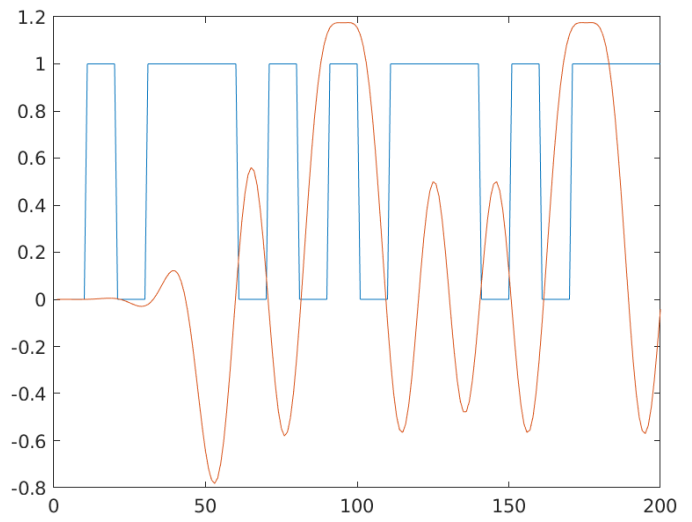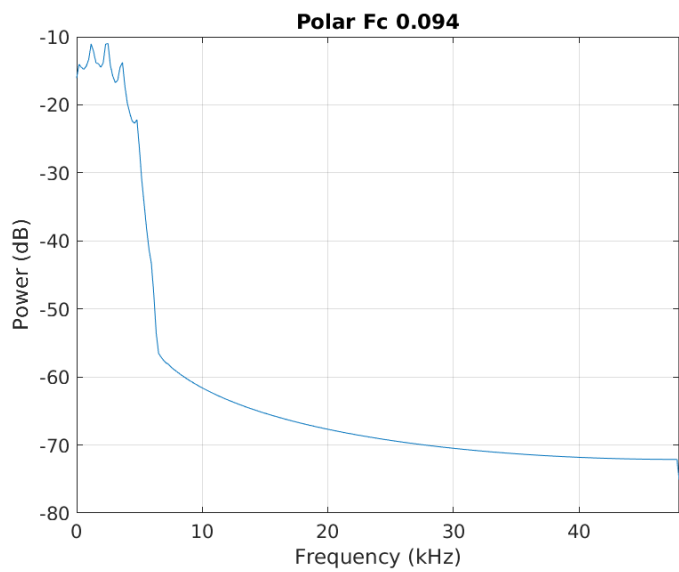
MANCHESTER

Fc LPF	Img	Error
0.394		NO ERROR
0.1594		ERROR FOUND 673 bits
0.094		ERROR FOUND 3411 bits

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Manchester Fc 0.3940

Scatter plot

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Manchester Fc 0.1594

Scatter plot
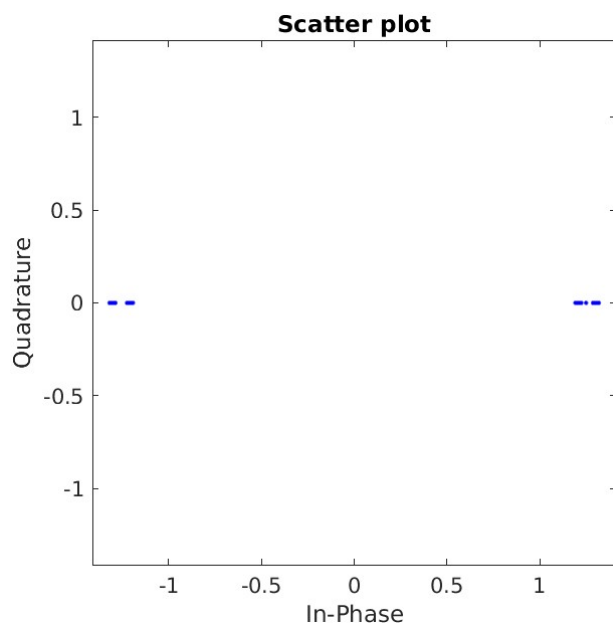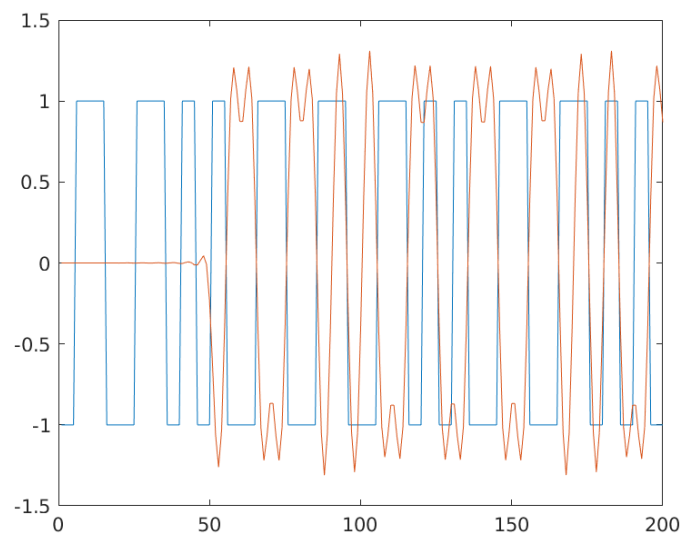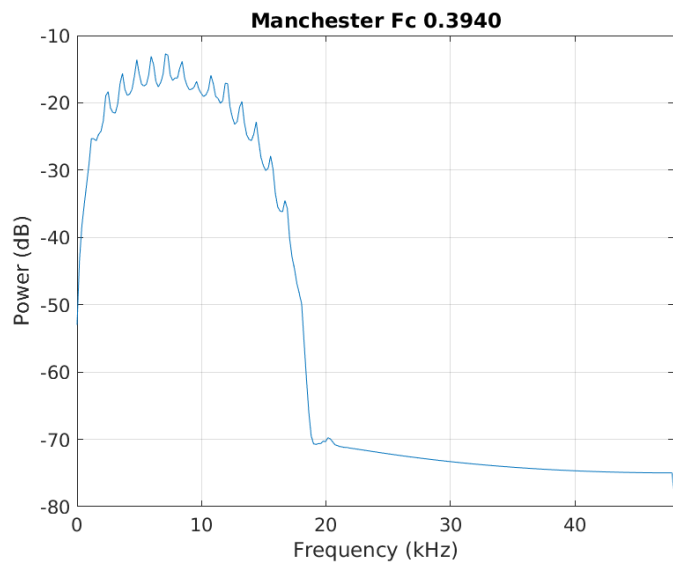
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Sistemas de Comunicaciones Digitales
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BIPOLAR

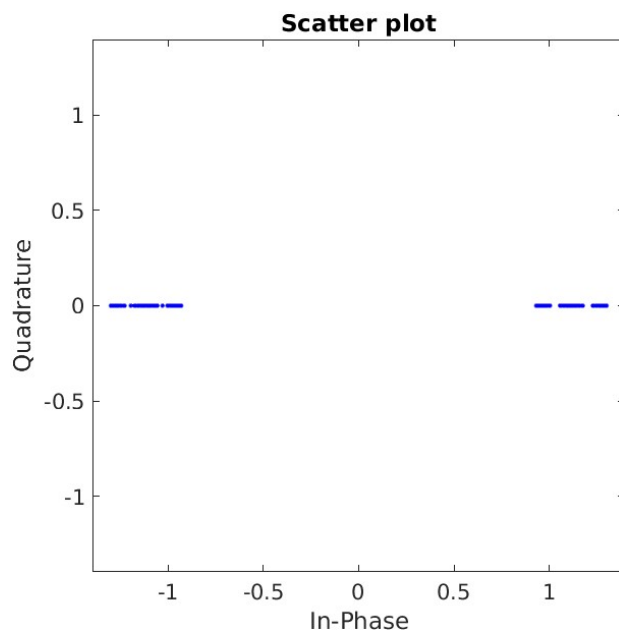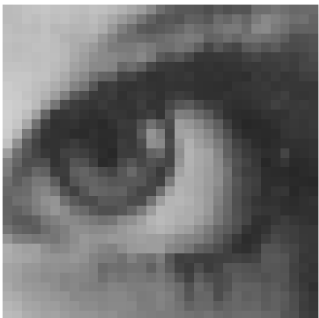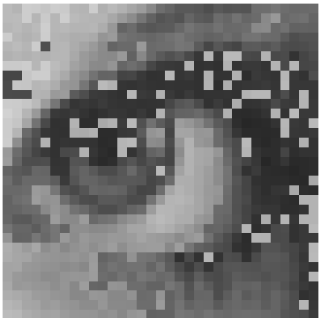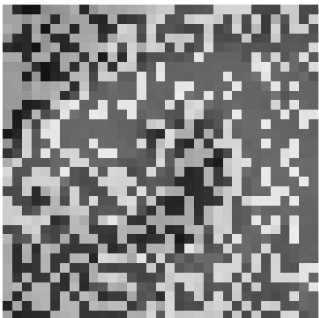| Fc LPF	Img	Error
0.394		NO ERROR
0.1594		ERROR FOUND 673 bits
0.094		ERROR FOUND 3411 bits

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Bi-Polar Fc 0.394

Scatter plot

Sistemas de Comunicaciones Digitales
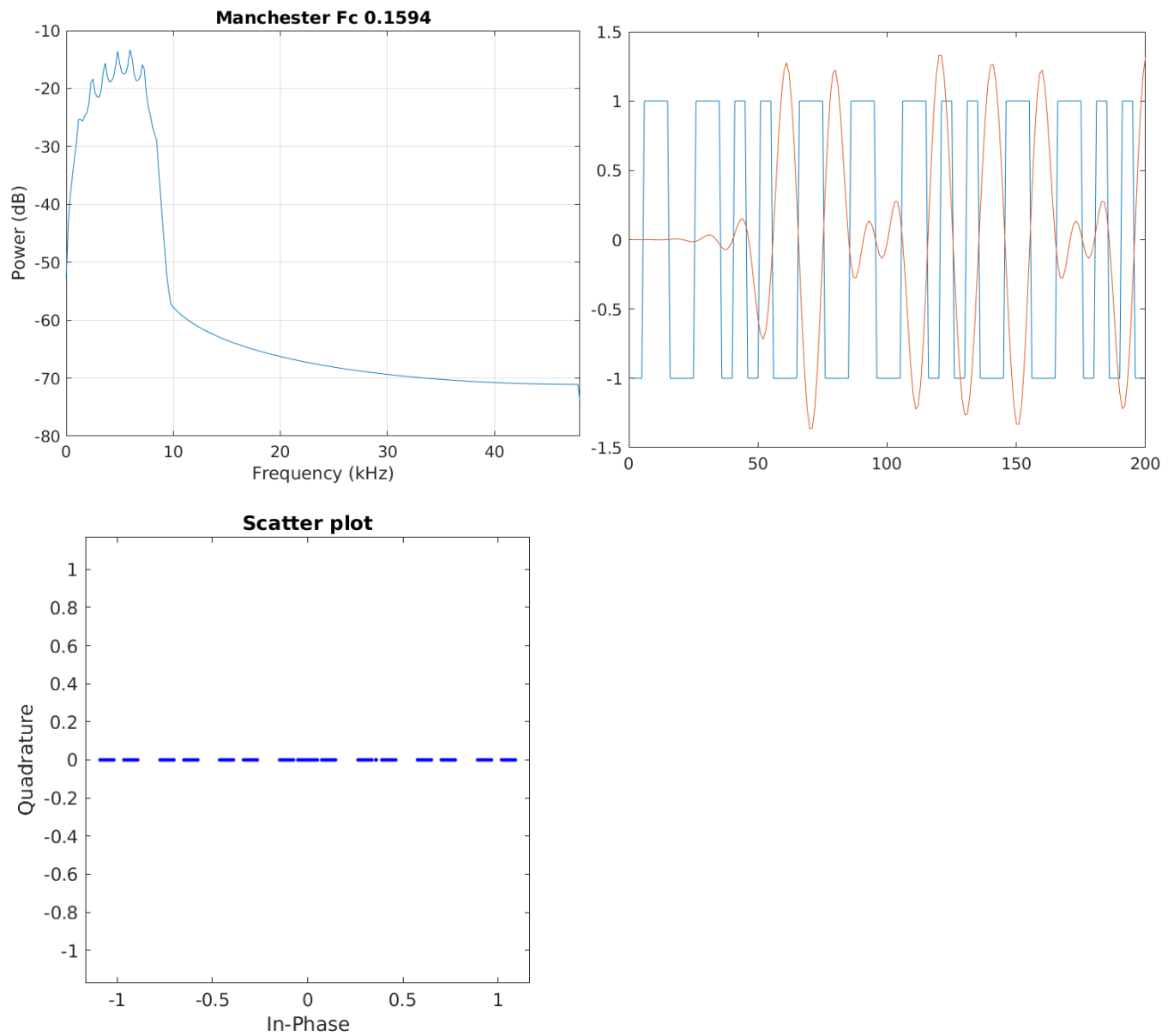03/01/20

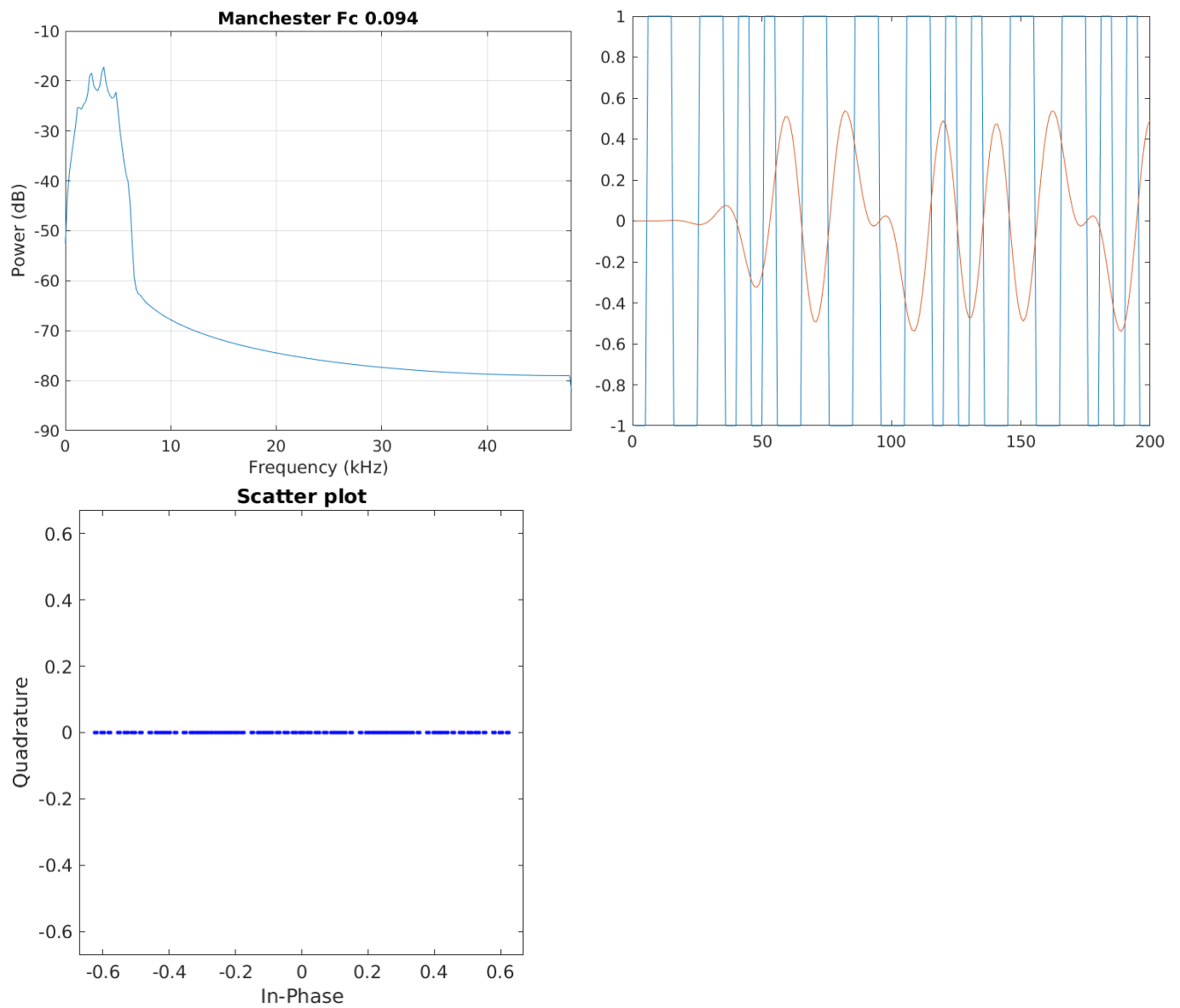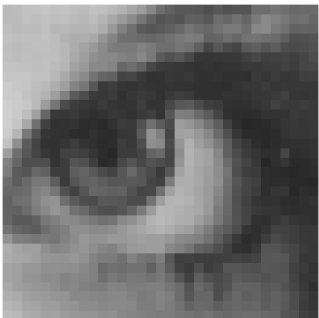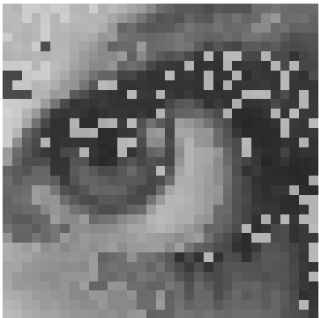**Bi-Polar Fc 0.1594**

Scatter plot

Sistemas de Comunicaciones Digitales
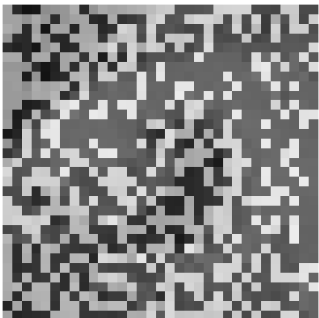03/01/20

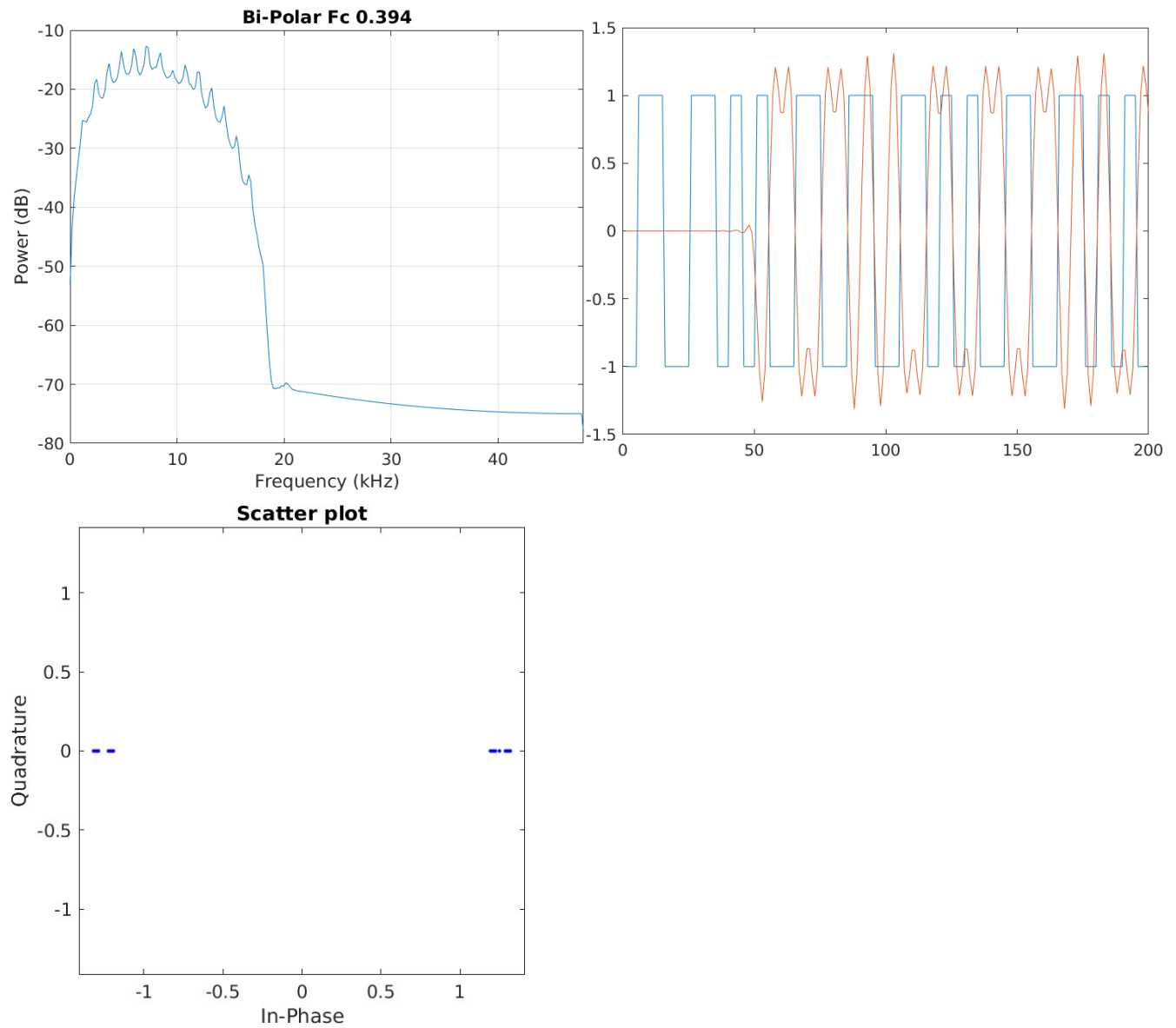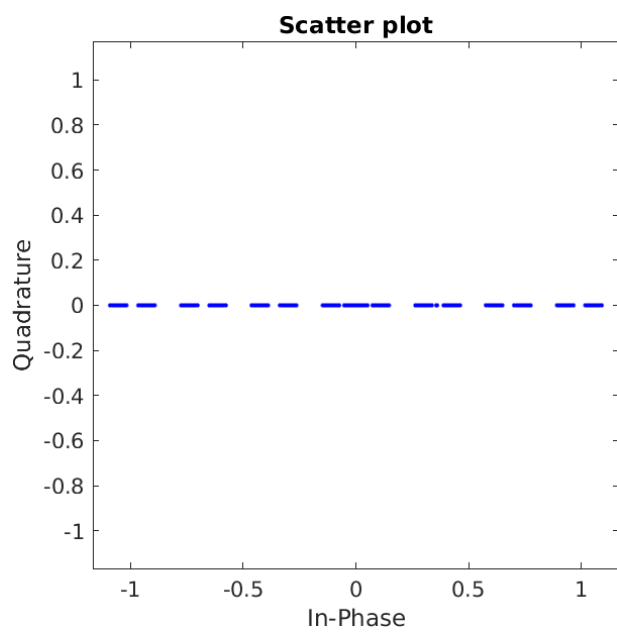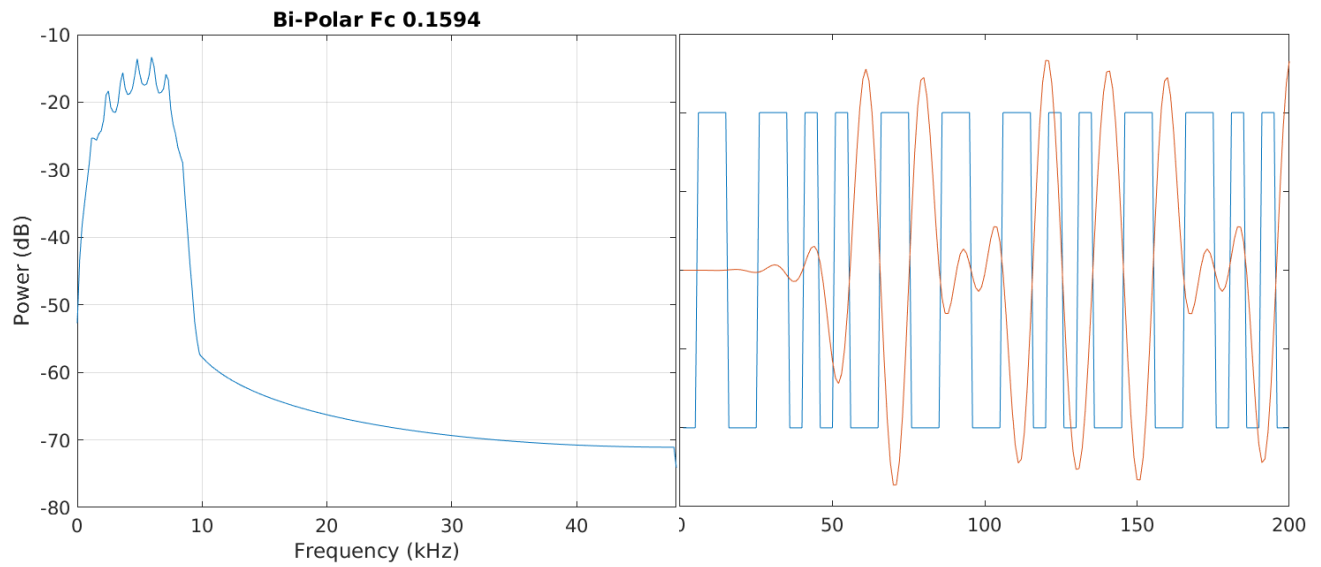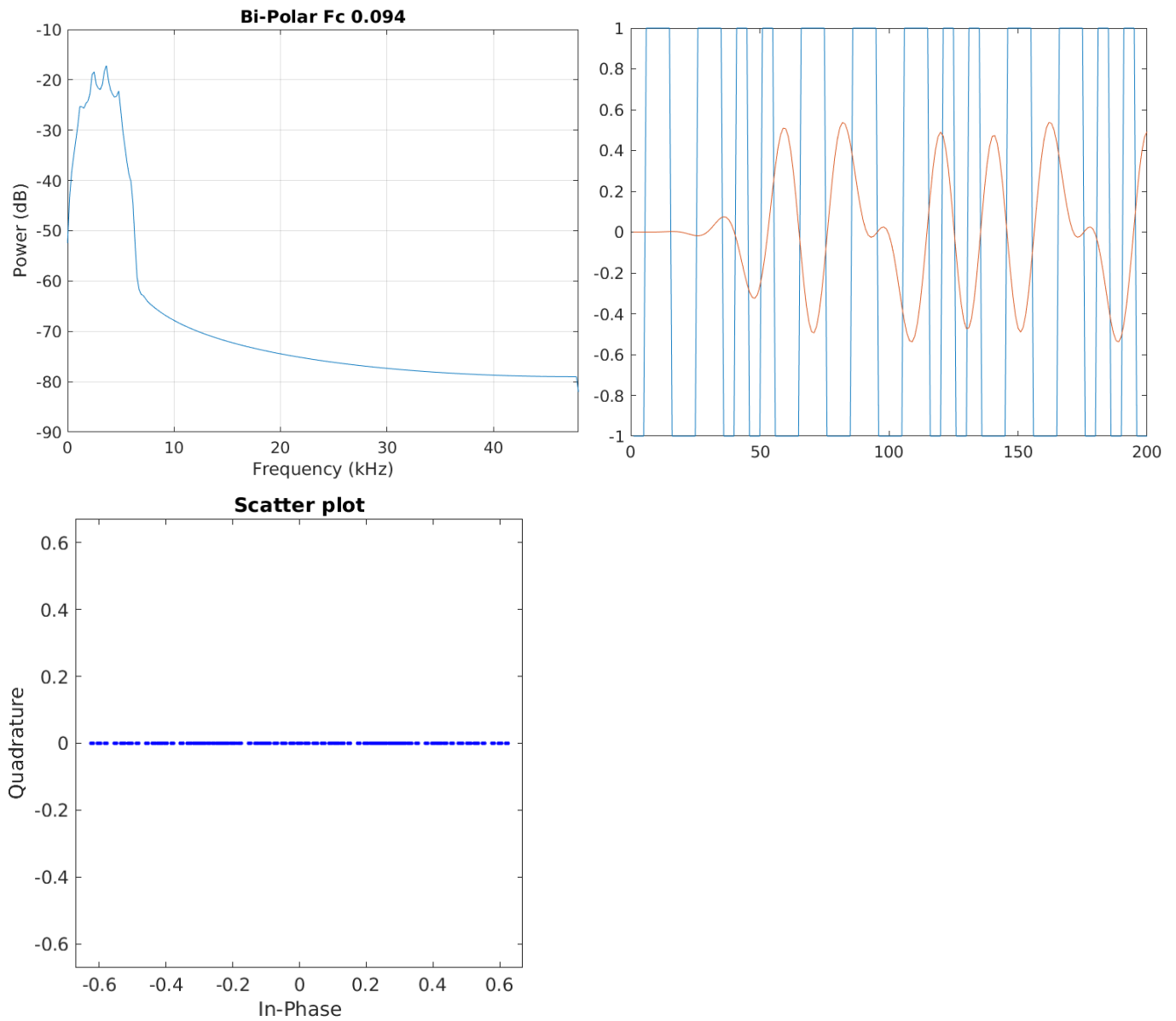Sistemas de Comunicaciones Digitales
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Exercise 4
As intended the correlation is a process that is certain way can be used to be a pulse detector, same way
as a peak detectors for frequency operations. One of the applications it is for signal to calculate the
frequency of this signals by the correlation.