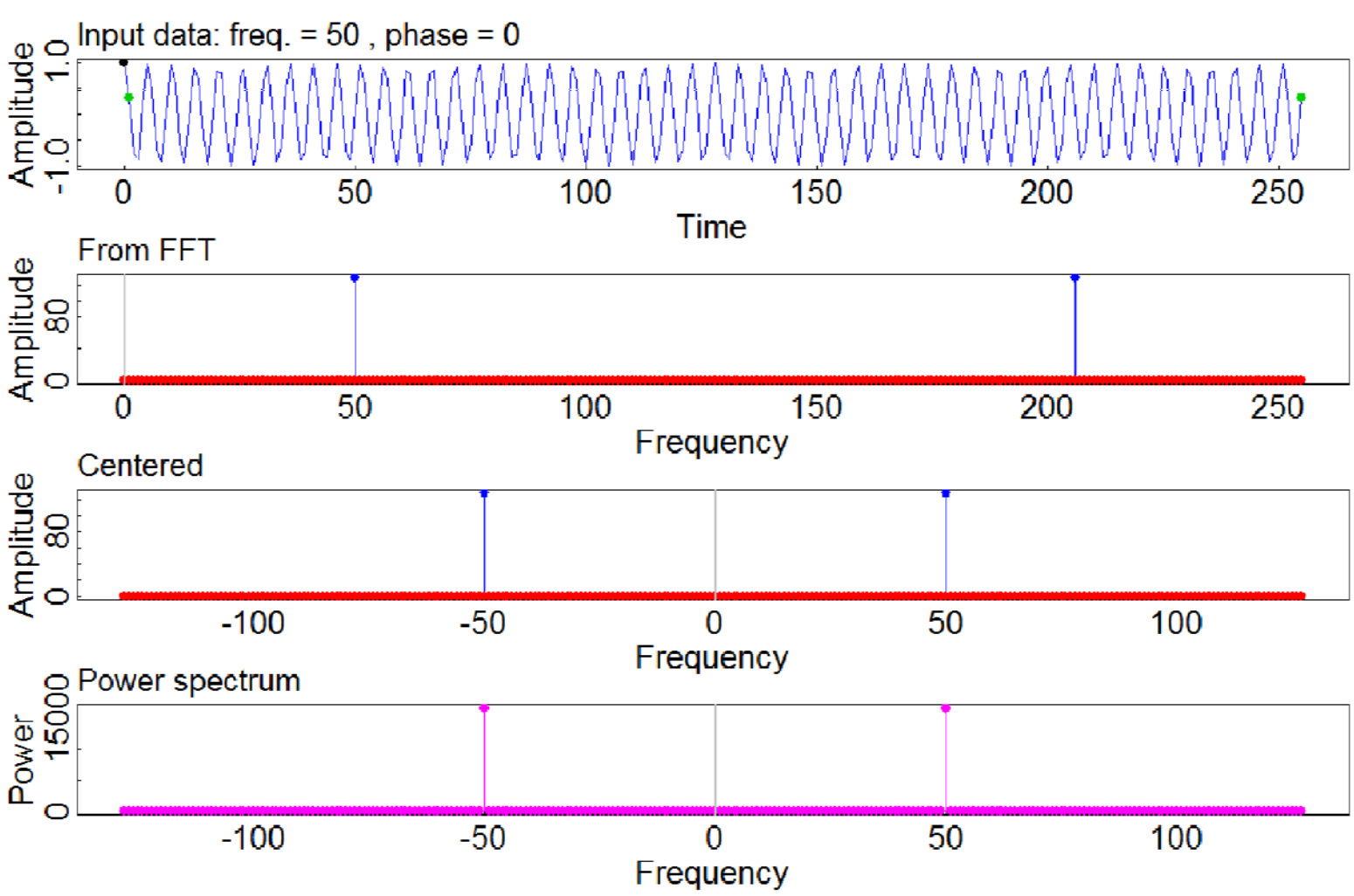
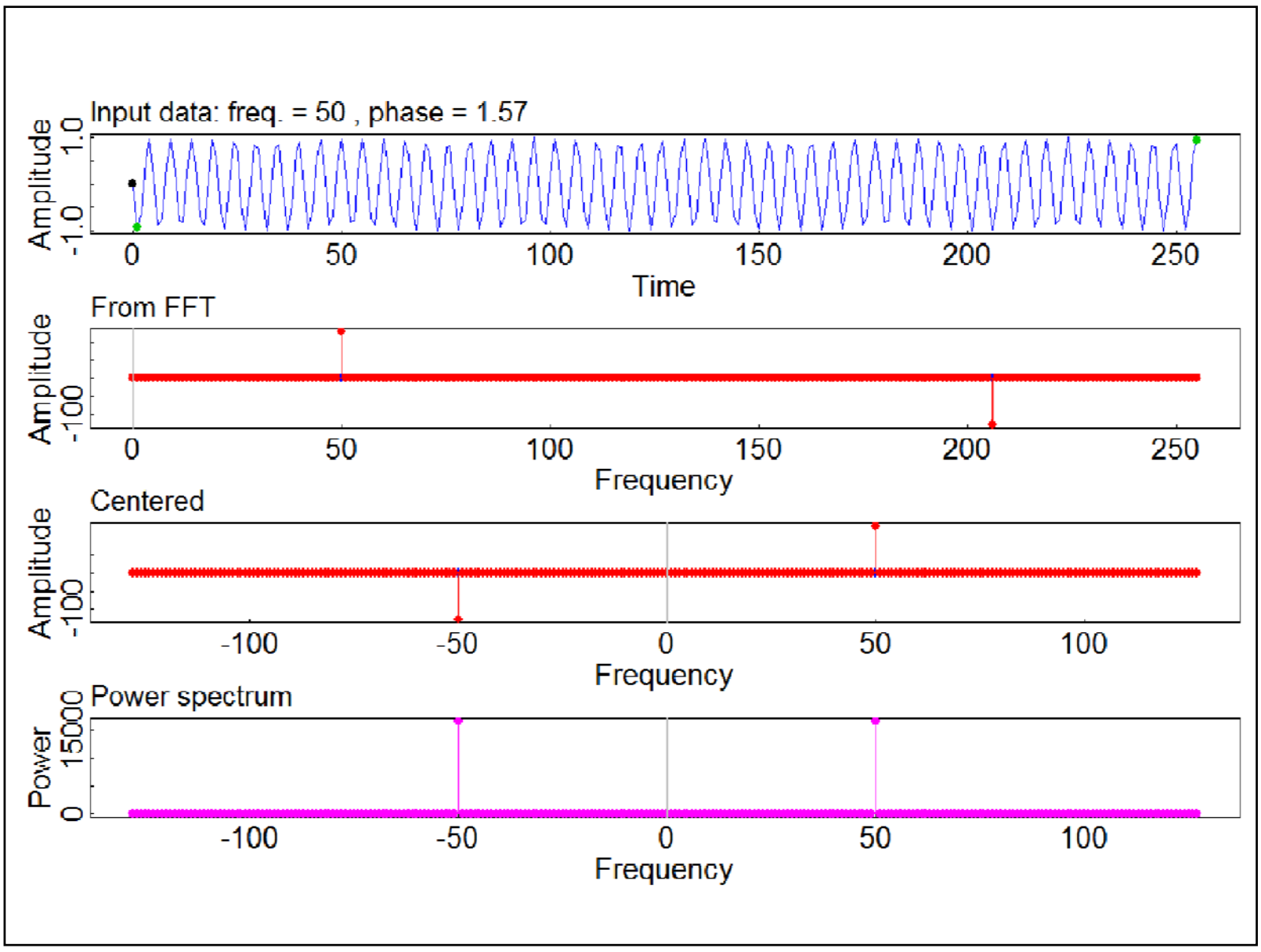
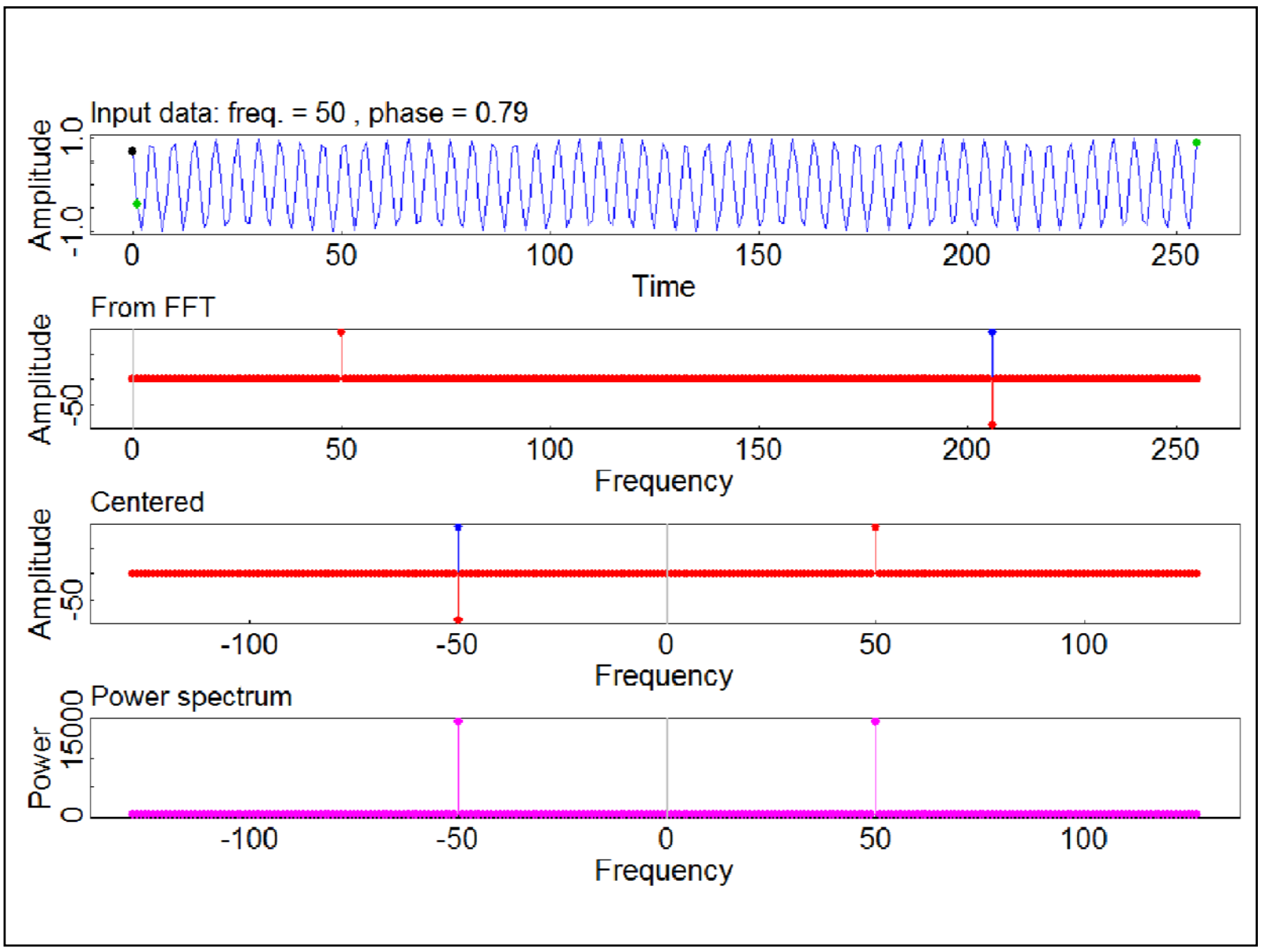
FFT demo

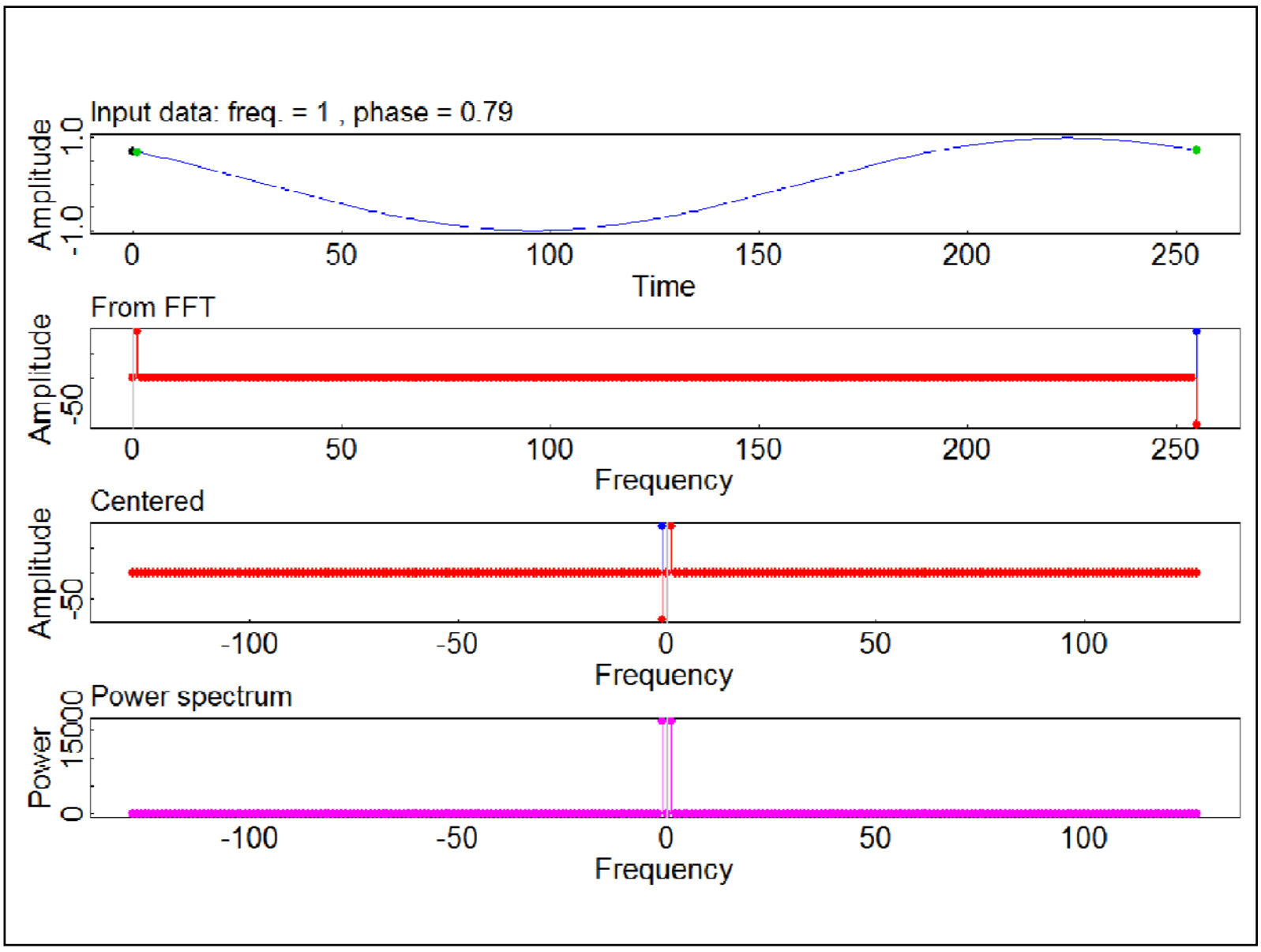
cosFFTdemo.f

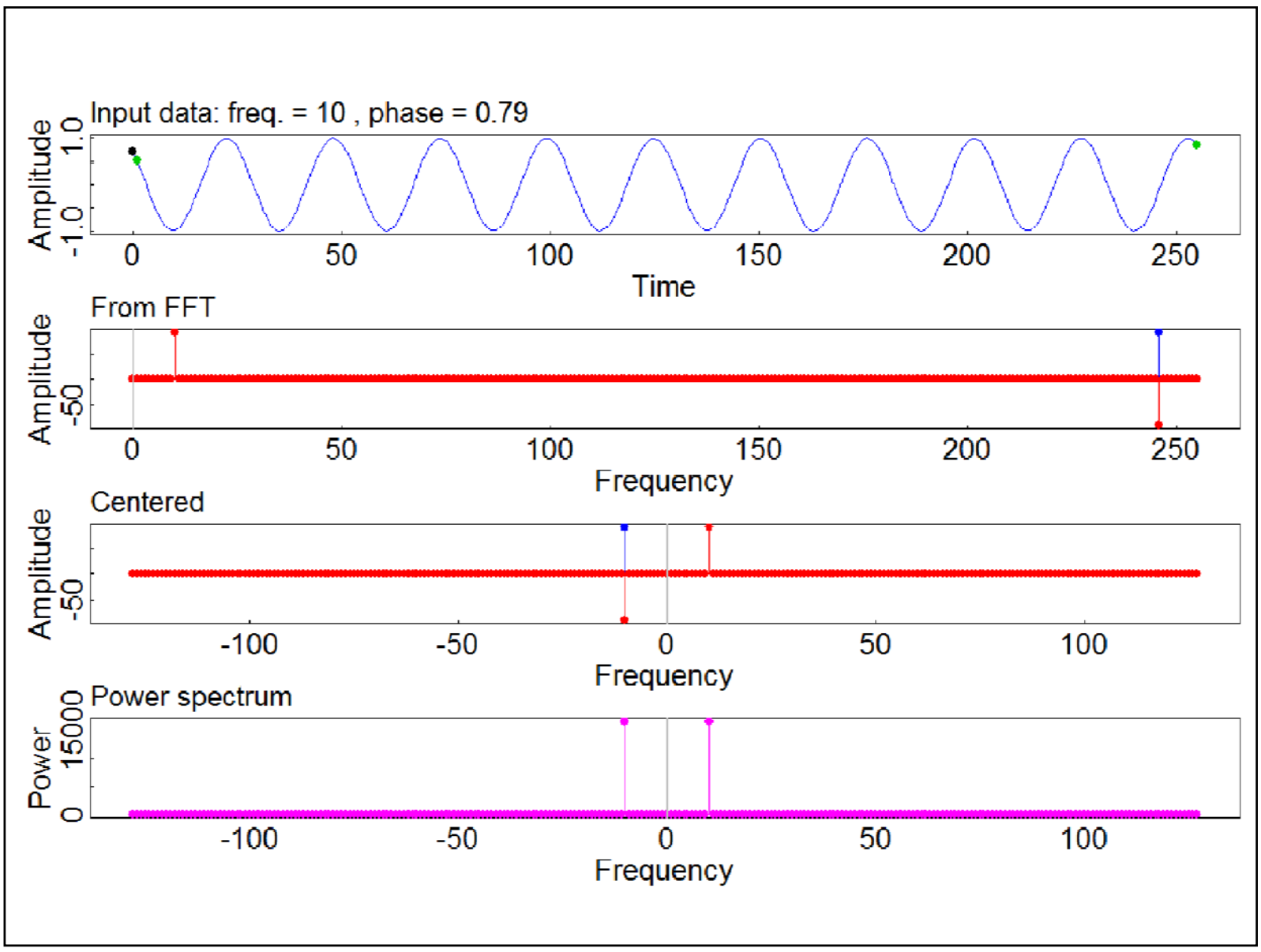
cosFFTdemoSlides.f

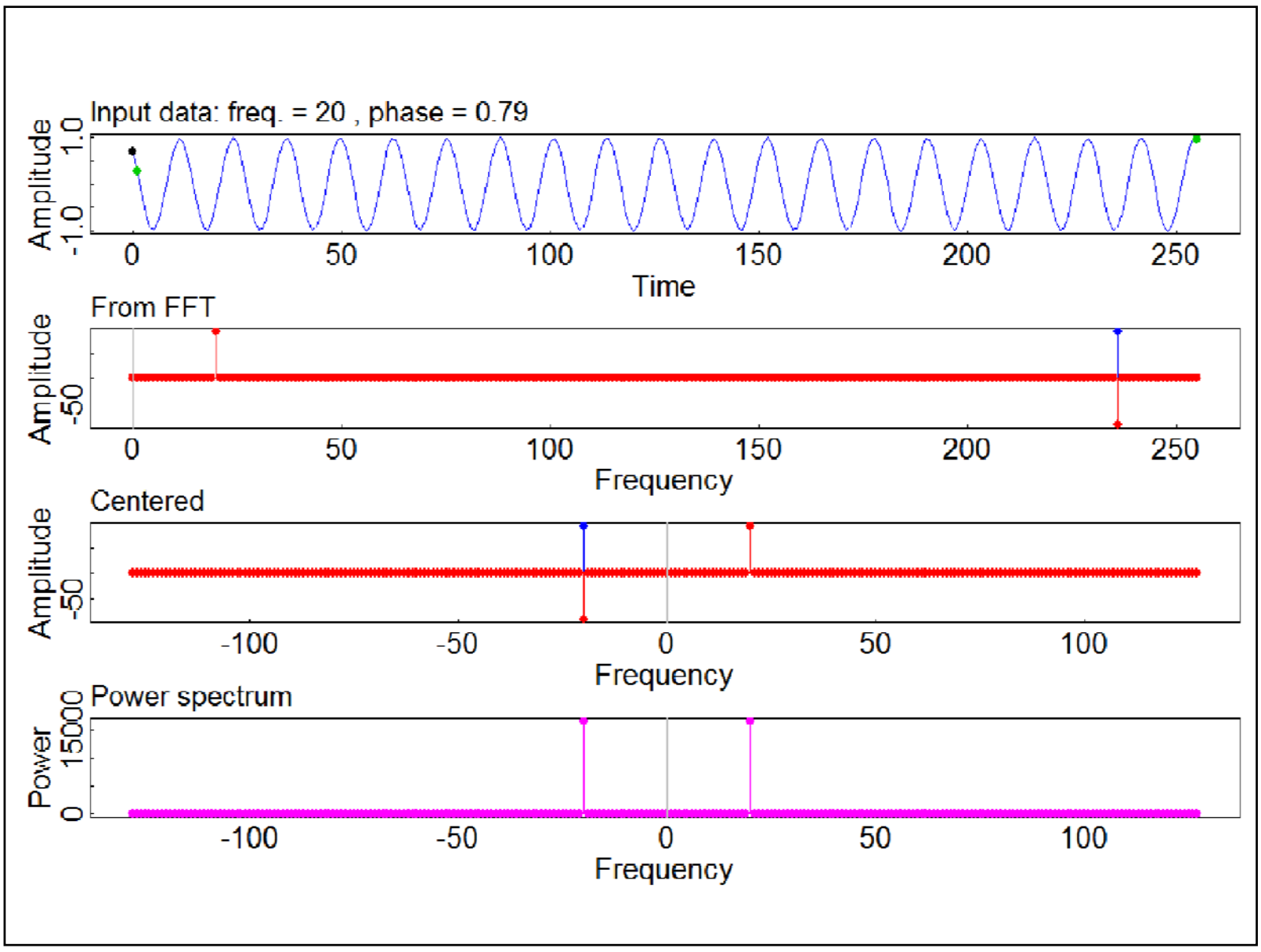


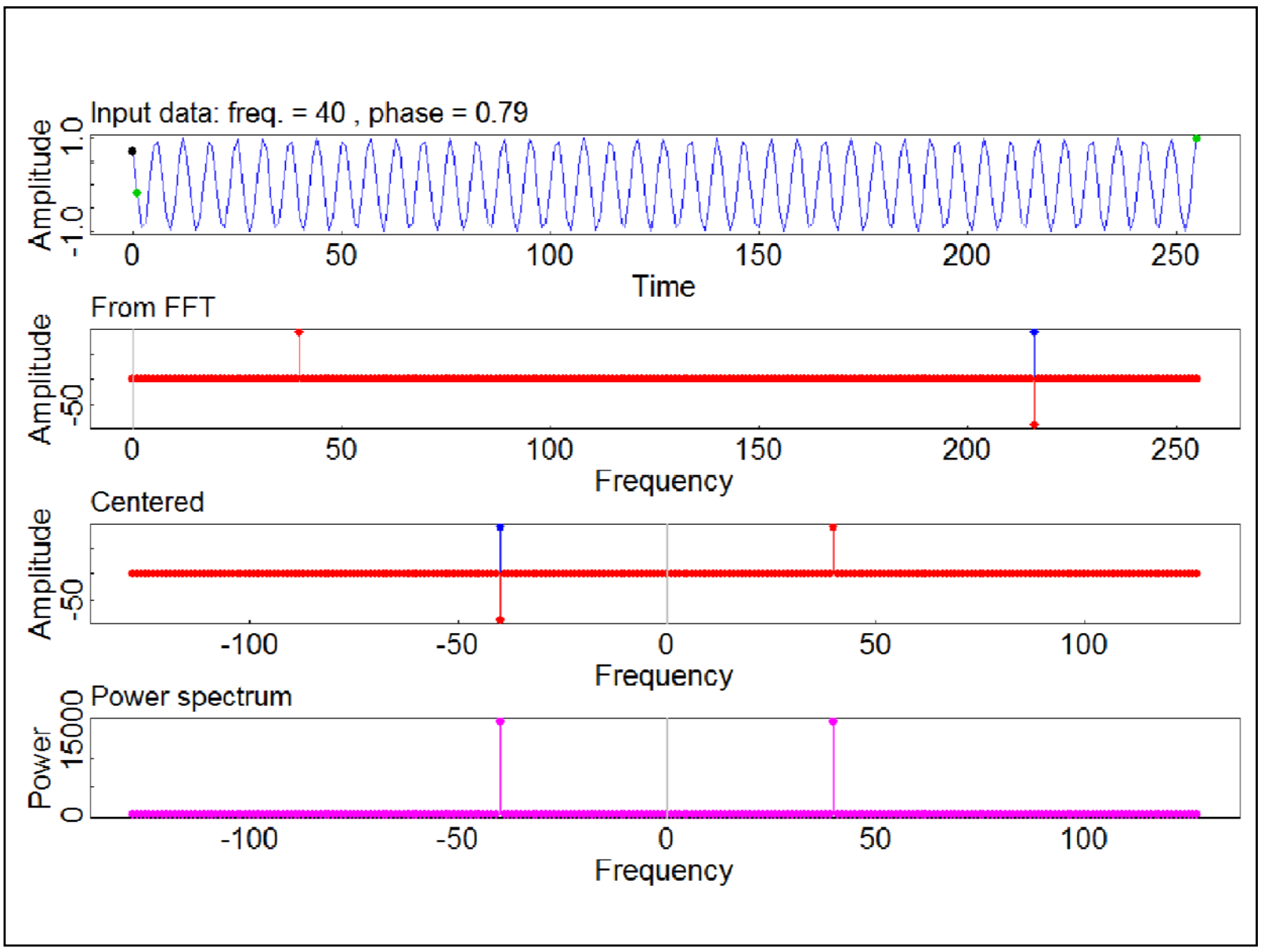

Input data: freq. = 50 , phase = 1.57
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-100
0
50
100
150
200
250
Frequency
Centered
Amplitude
-100
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

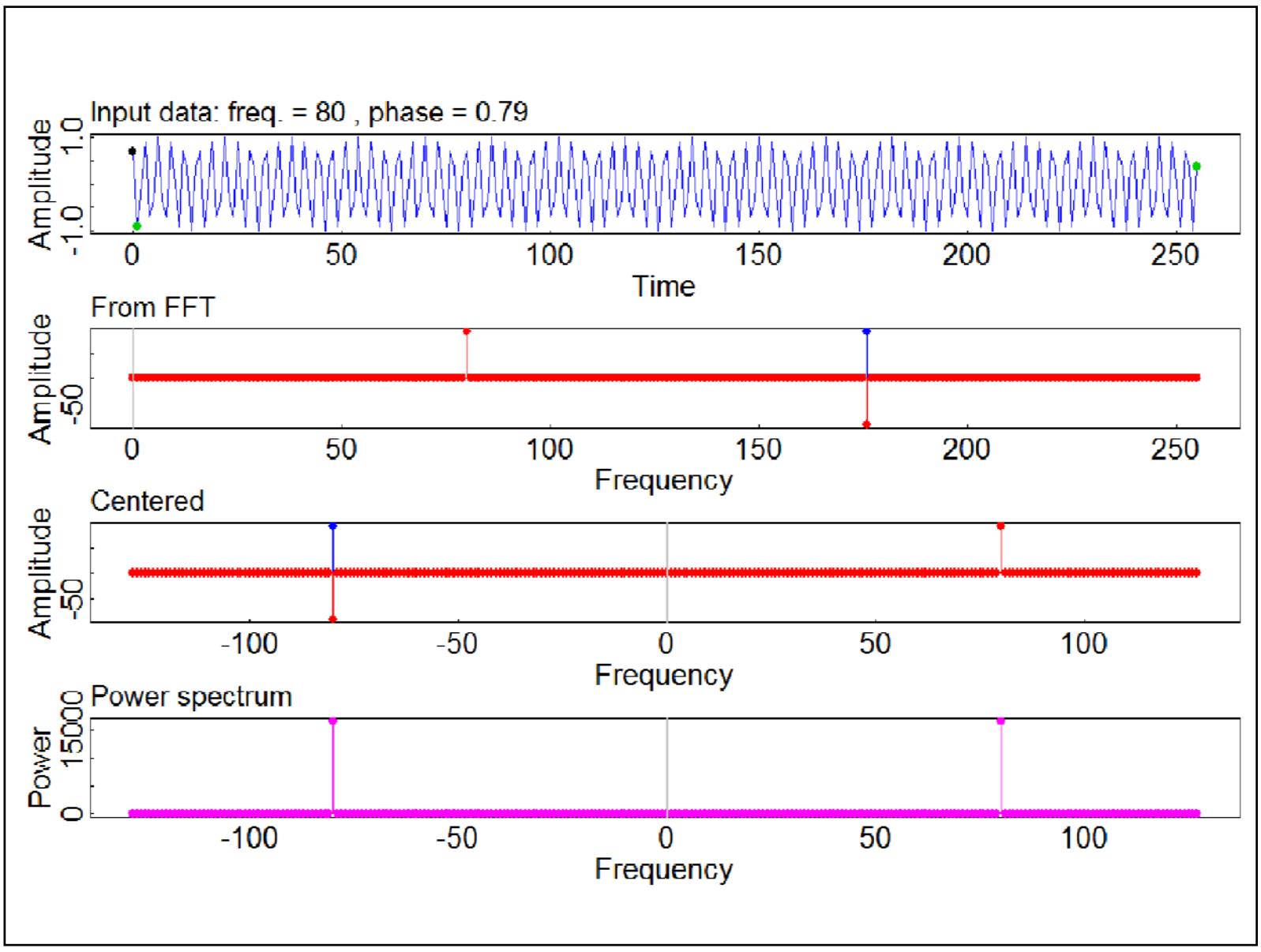

Input data: freq. = 50 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

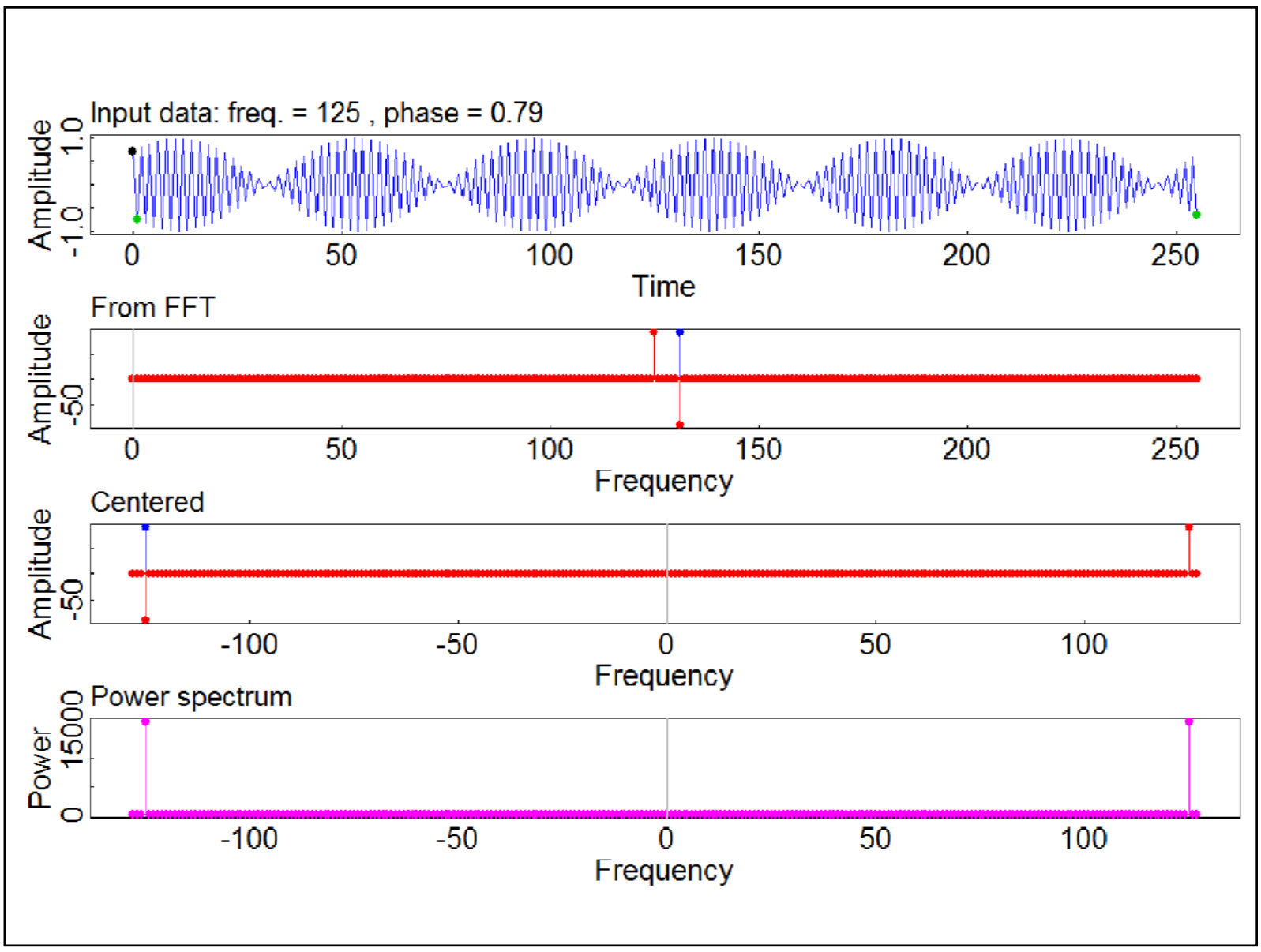

Input data: freq. = 1 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

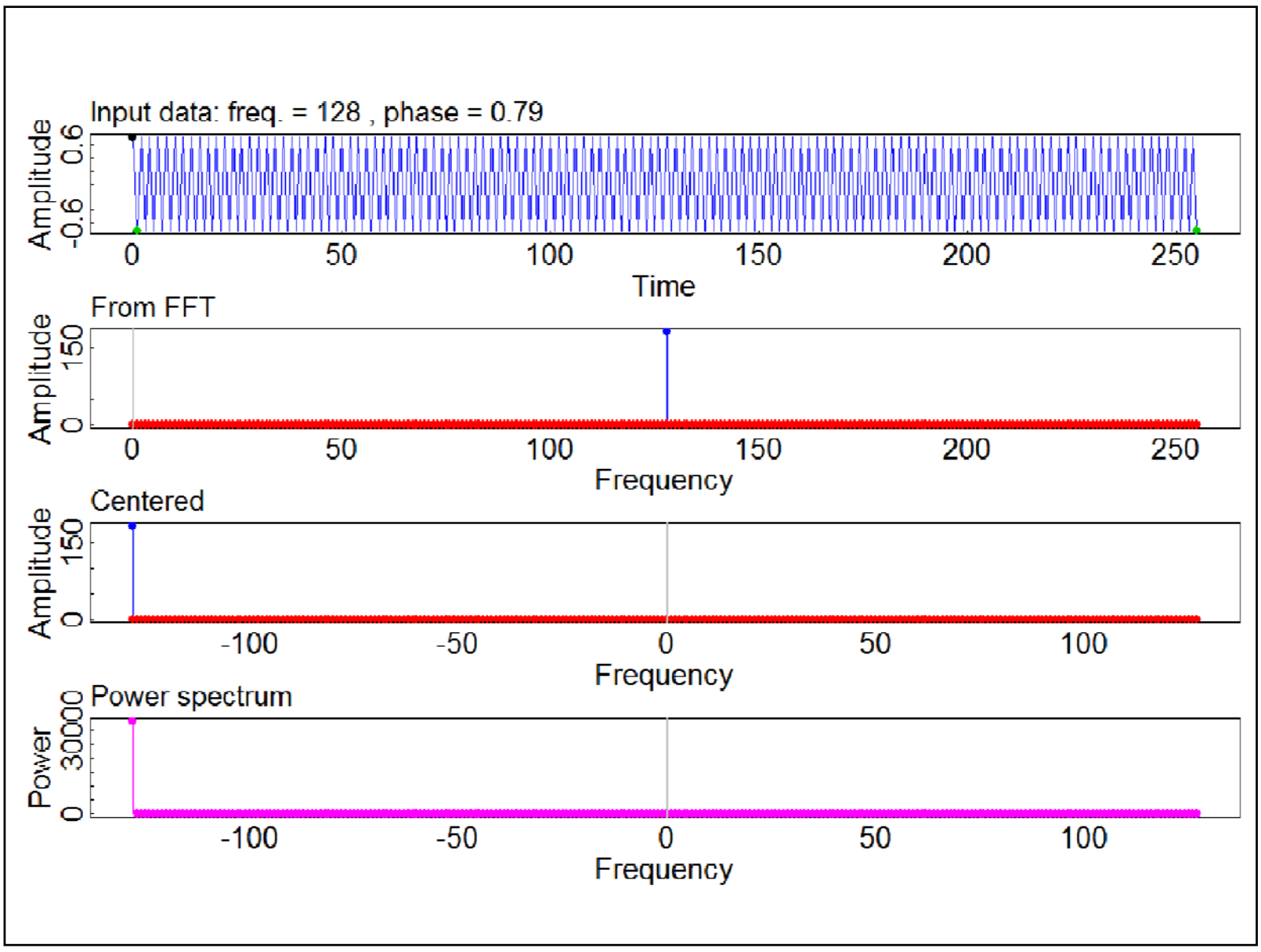

Input data: freq. = 10 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

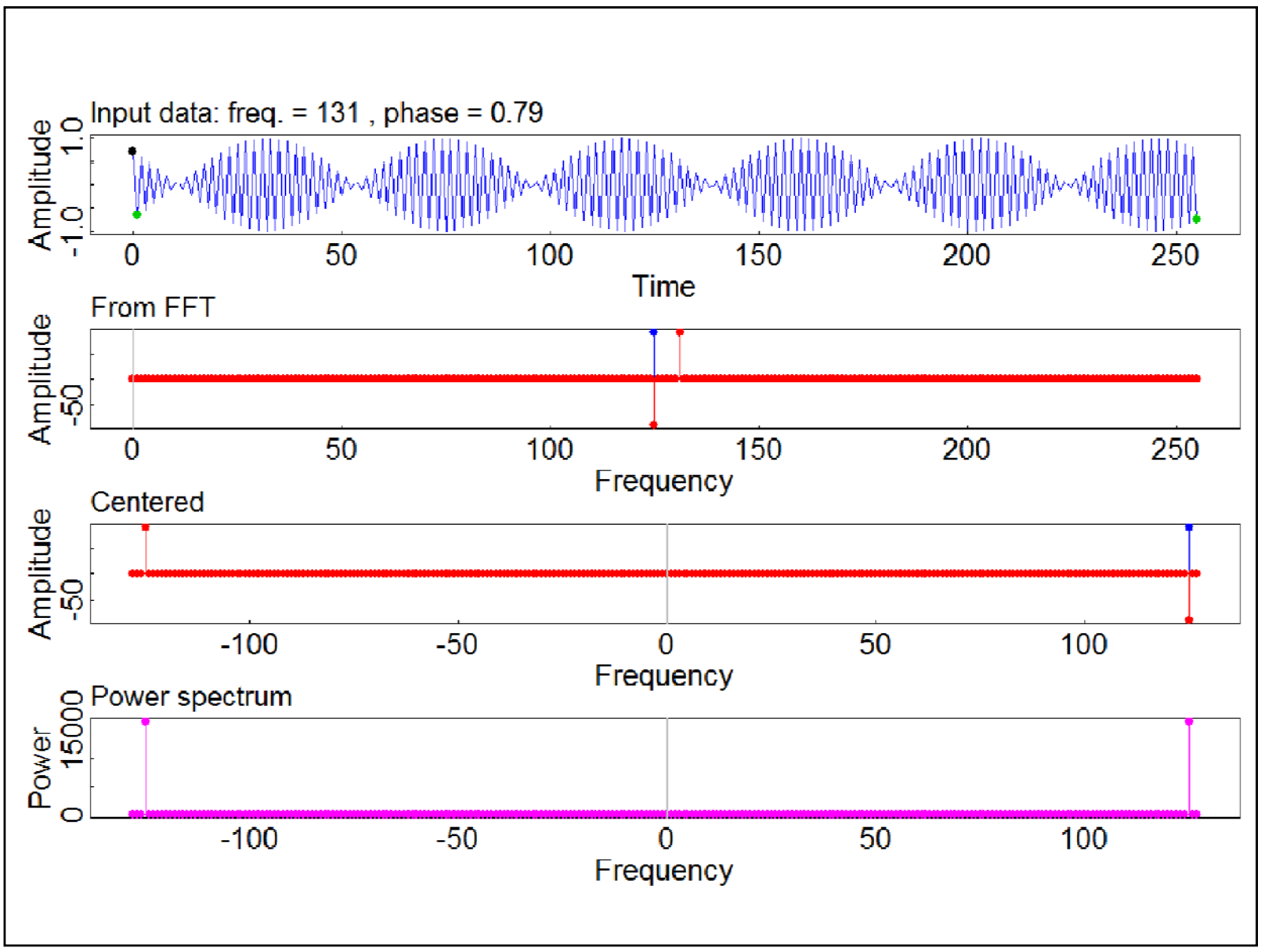

Input data: freq. = 20 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

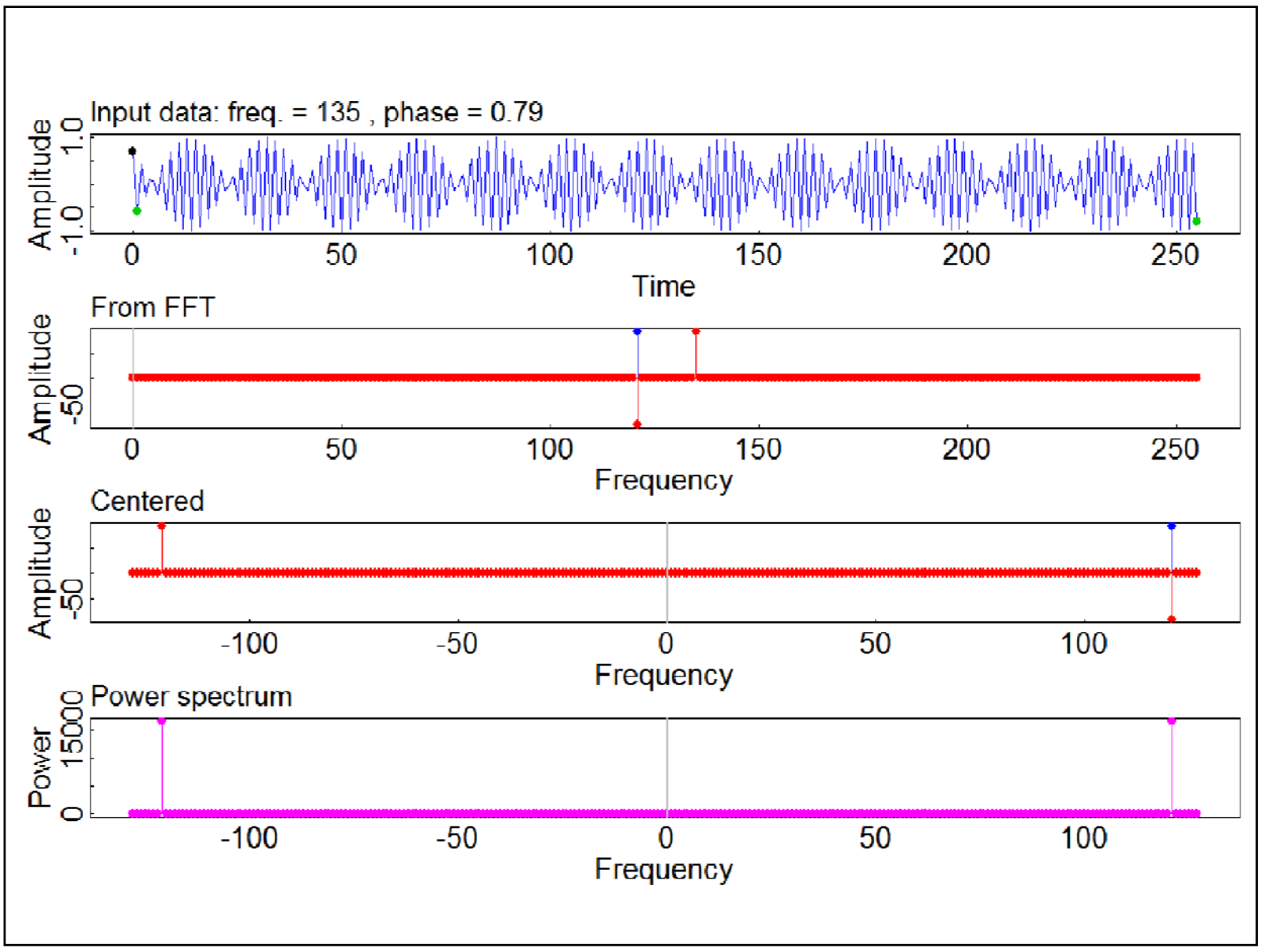

Input data: freq. = 40 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

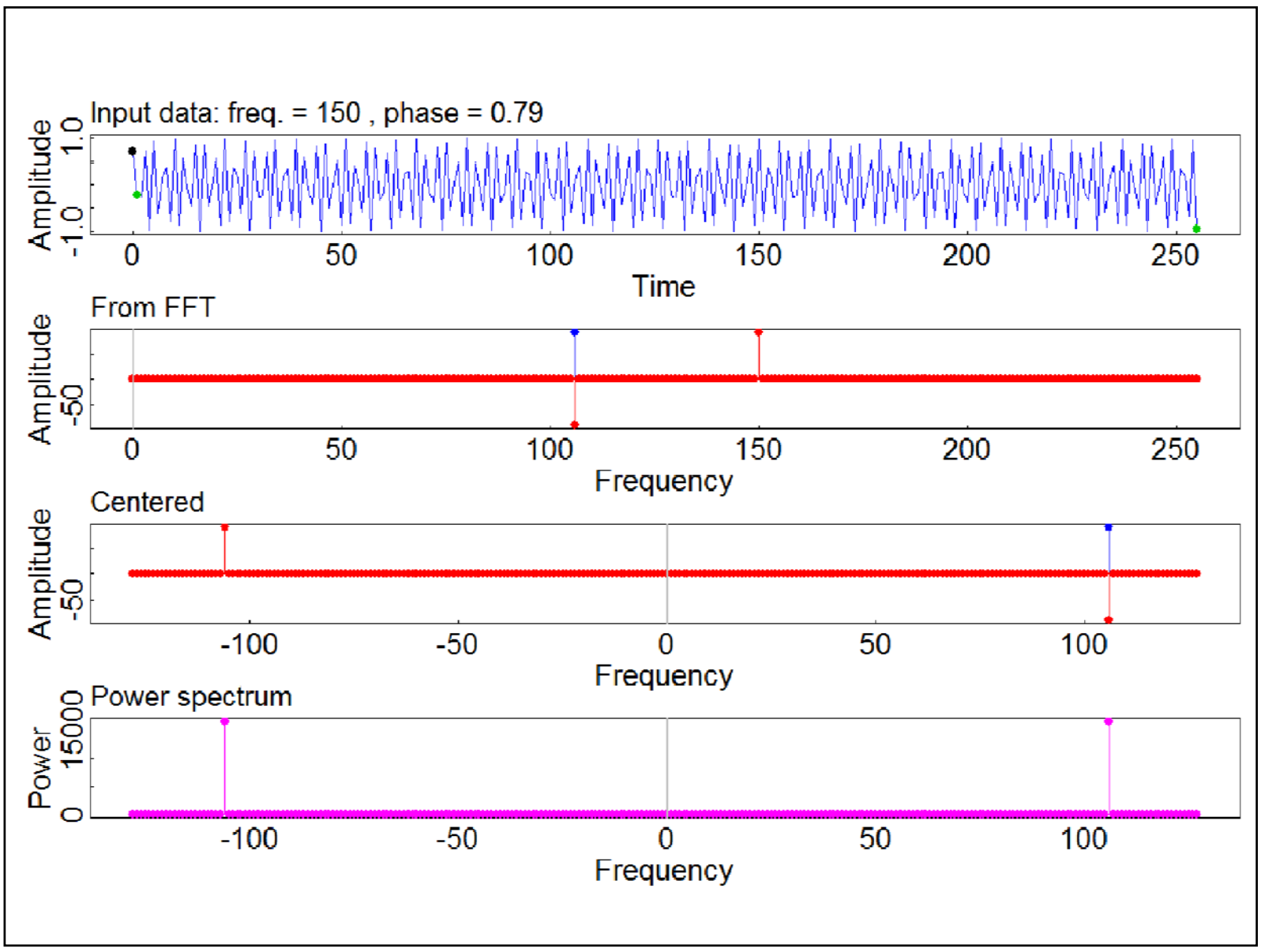

Input data: freq. = 80 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

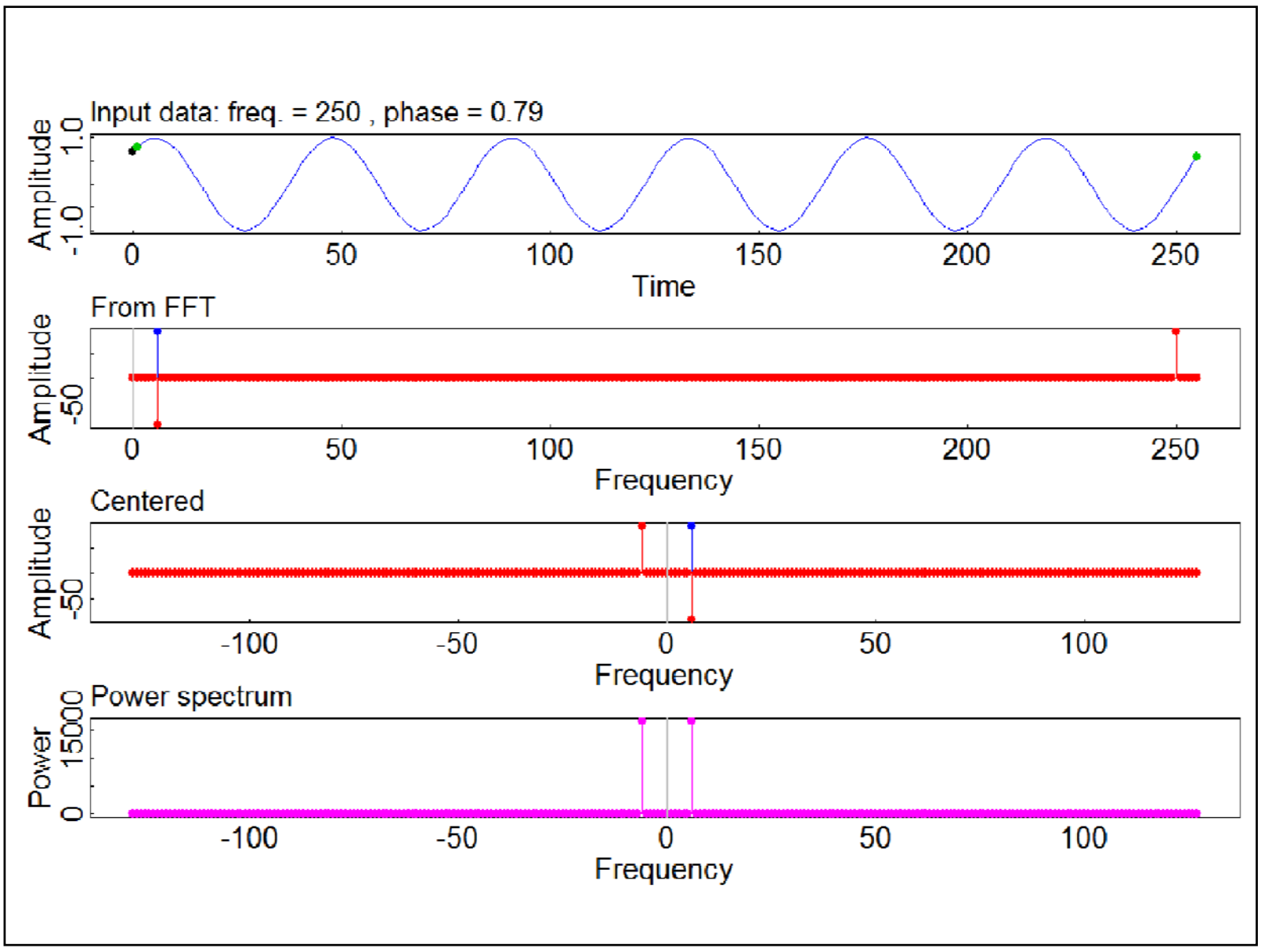

Input data: freq. = 125 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

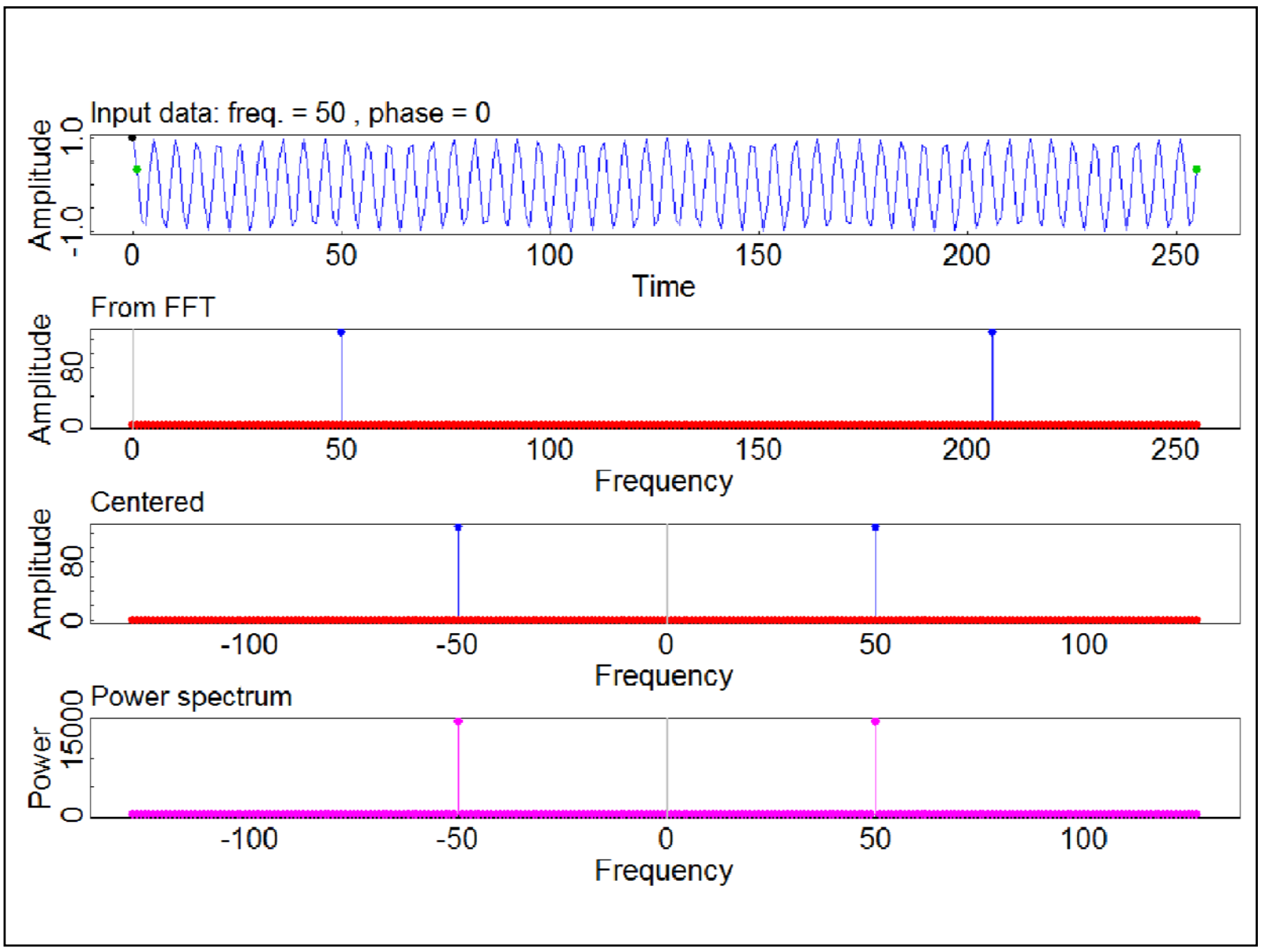

Input data: freq. = 128 , phase = 0.79
Amplitude
0.6
-0.6
0
50
100
150
200
250
Time
From FFT
Amplitude
150
0
0
50
100
150
200
250
Frequency
Centered
Amplitude
150
0
-100
-50
0
50
100
Frequency
Power spectrum
Power
30000
0
-100
-50
0
50
100
Frequency

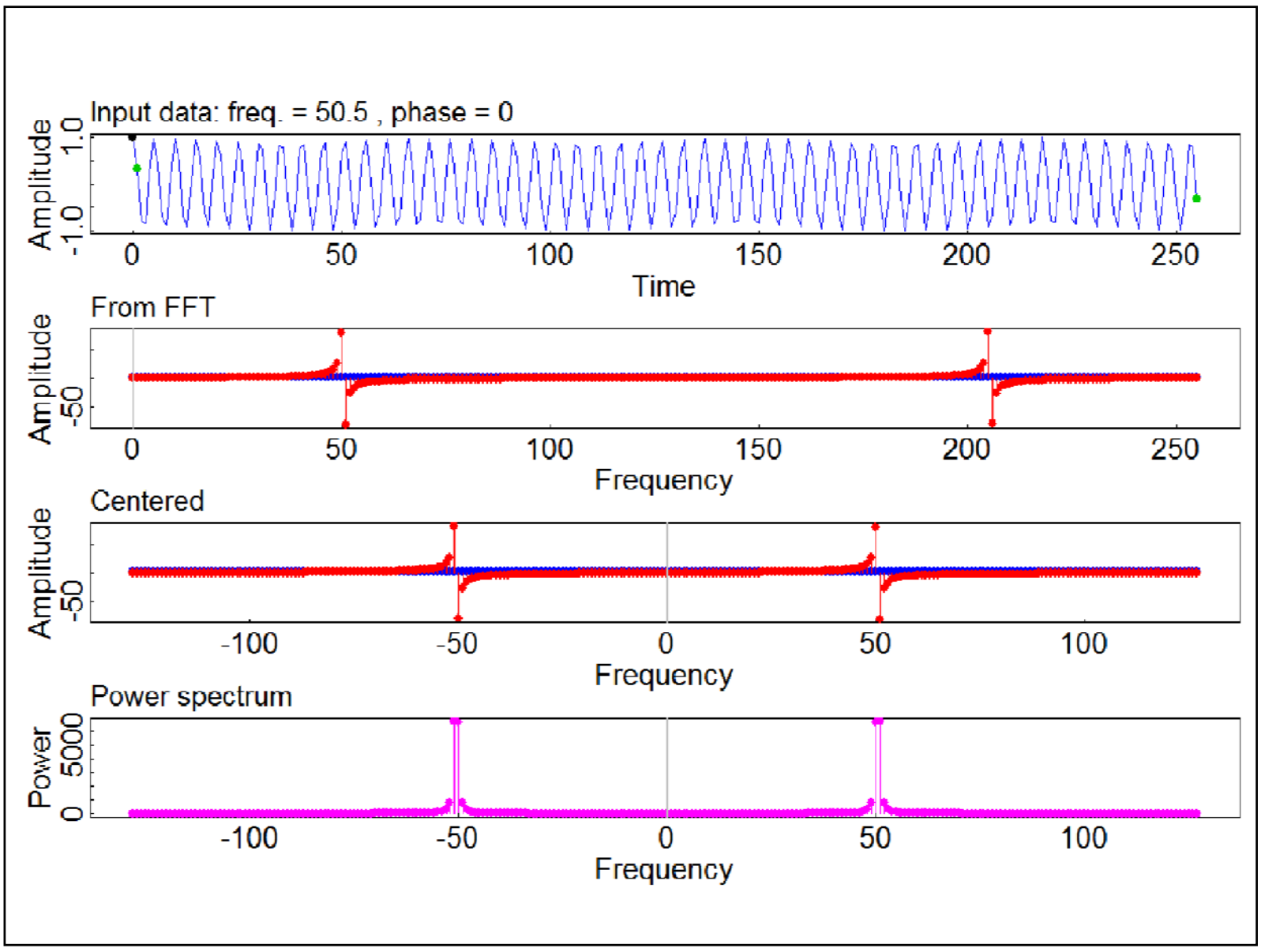

Input data: freq. = 131 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency

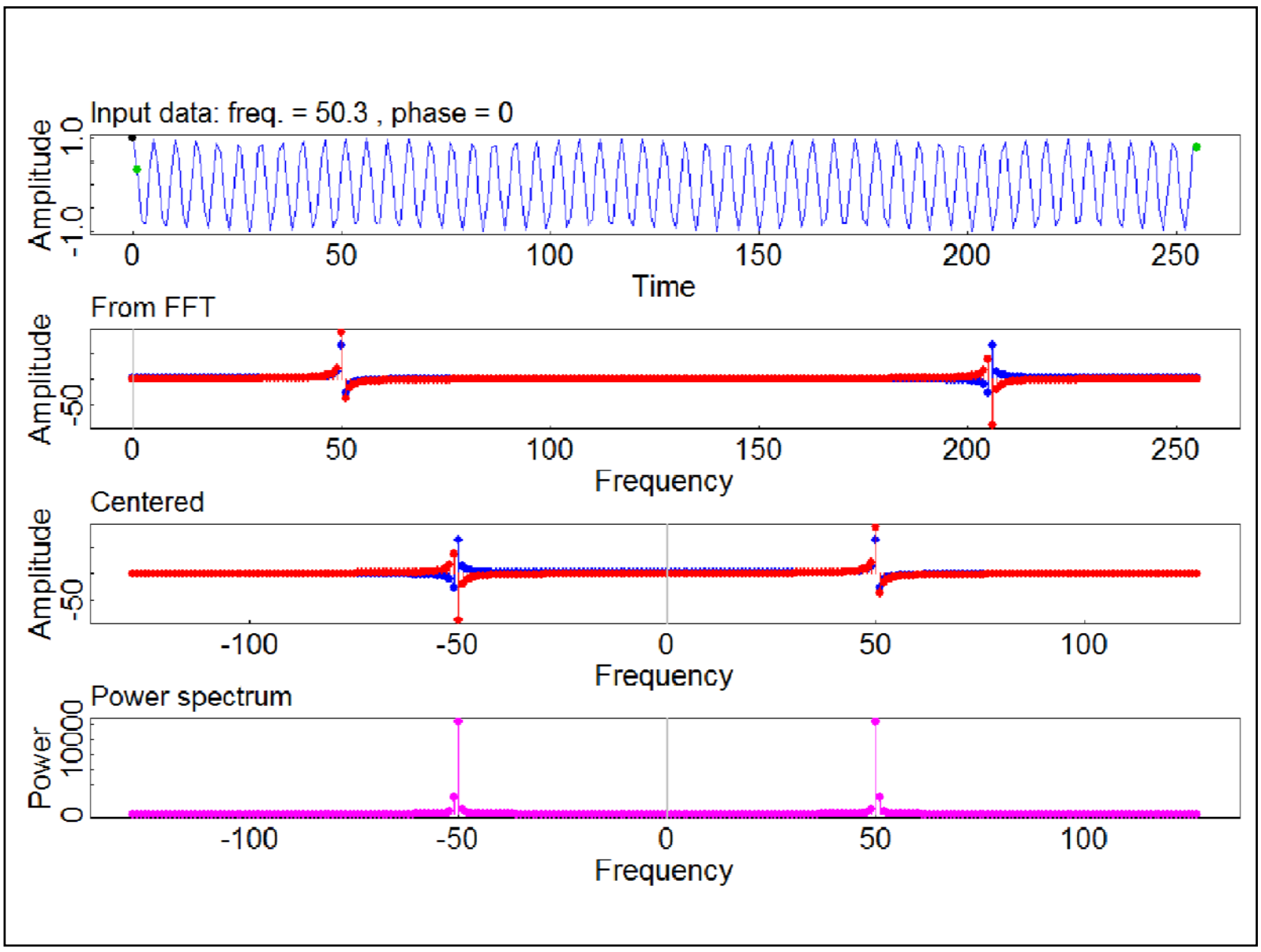

Input data: freq. = 135 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency


Input data: freq. = 150 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency


Input data: freq. = 250 , phase = 0.79
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency


Input data: freq. = 50 , phase = 0
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
80
0
0
50
100
150
200
250
Frequency
Centered
Amplitude
80
0
-100
-50
0
50
100
Frequency
Power spectrum
Power
15000
0
-100
-50
0
50
100
Frequency


Input data: freq. = 50.5 , phase = 0
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
5000
0
-100
-50
0
50
100
Frequency


Input data: freq. = 50.3 , phase = 0
Amplitude
1.0
-1.0
0
50
100
150
200
250
Time
From FFT
Amplitude
-50
0
50
100
150
200
250
Frequency
Centered
Amplitude
-50
-100
-50
0
50
100
Frequency
Power spectrum
Power
10000
0
-100
-50
0
50
100
Frequency