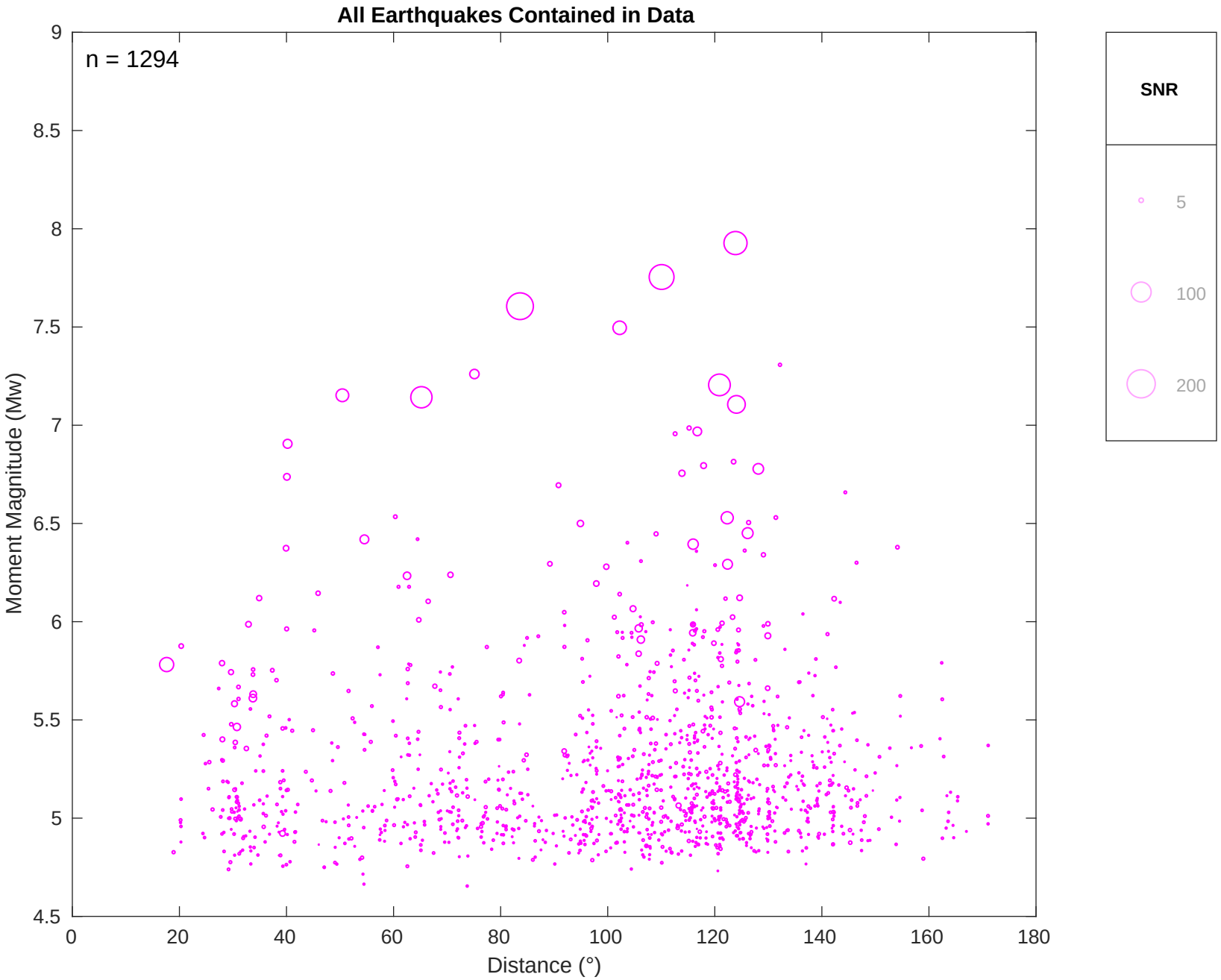
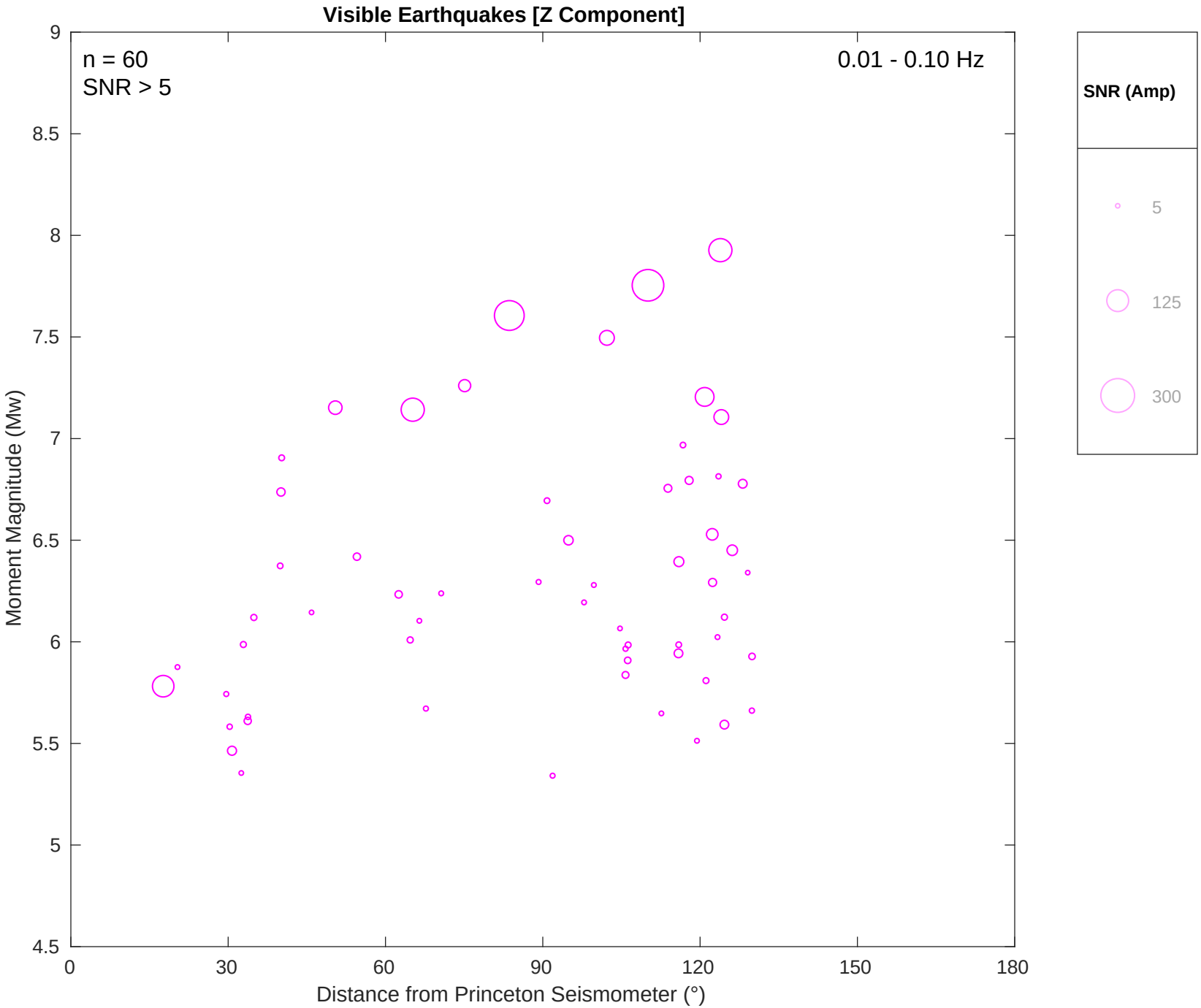
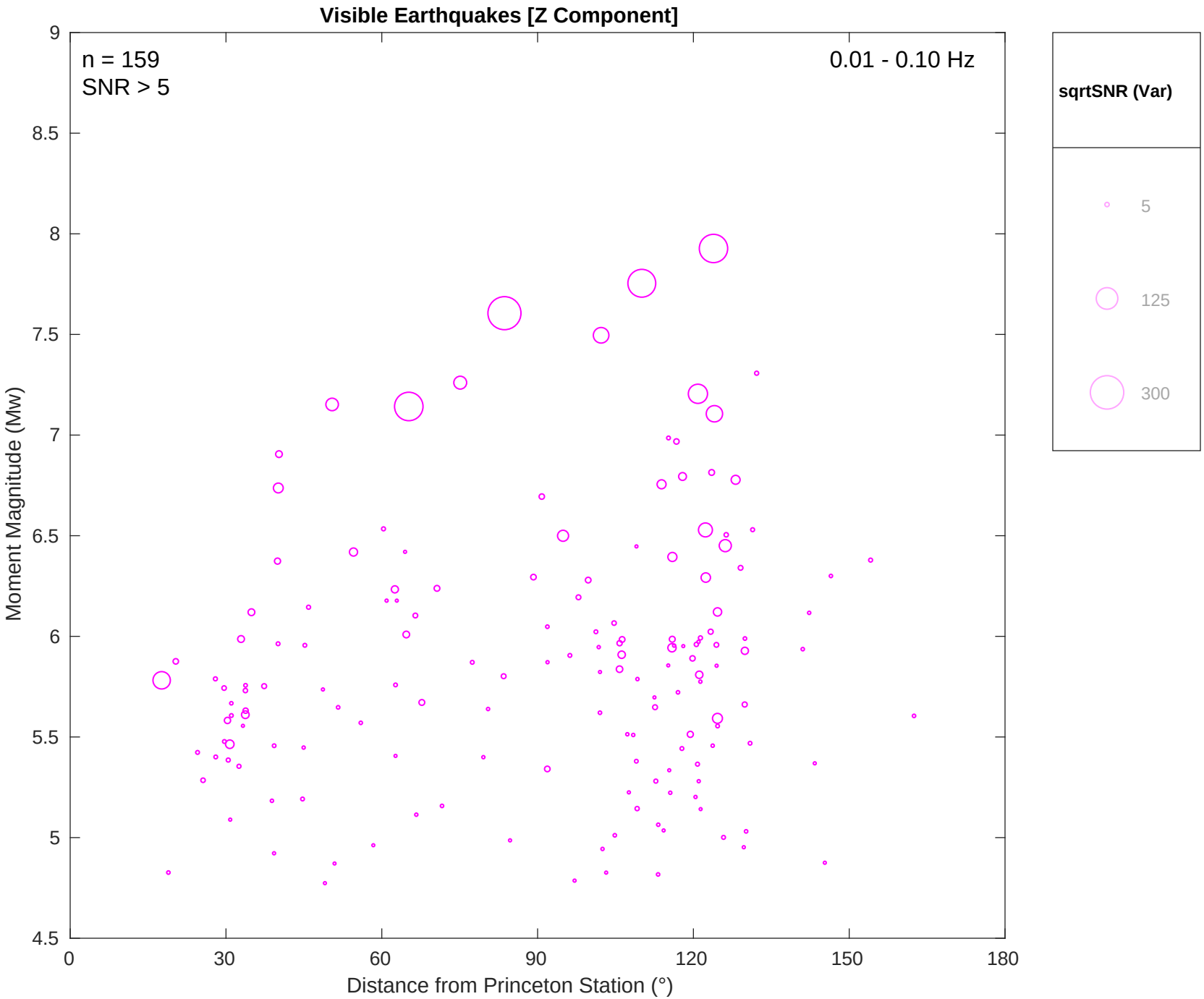
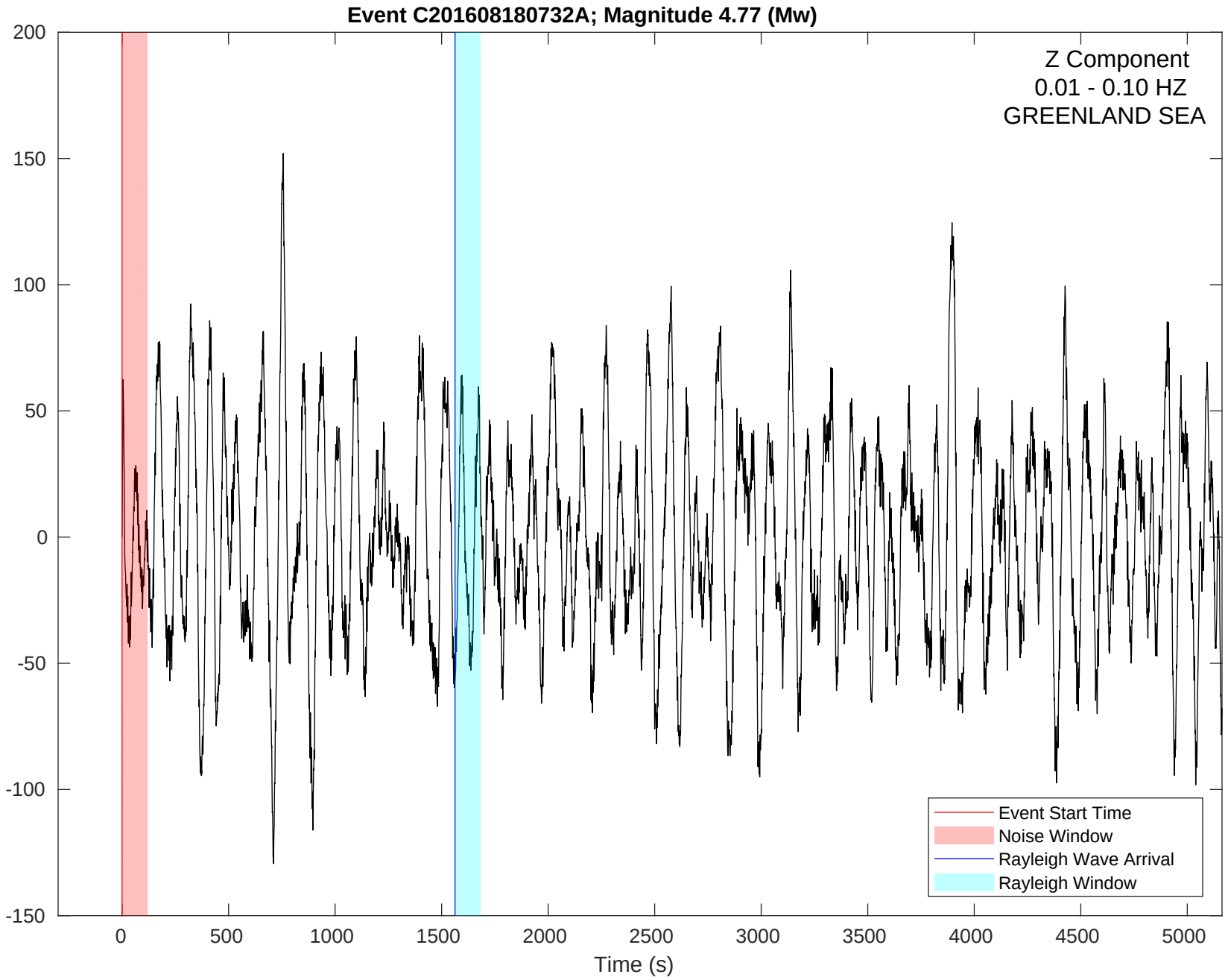
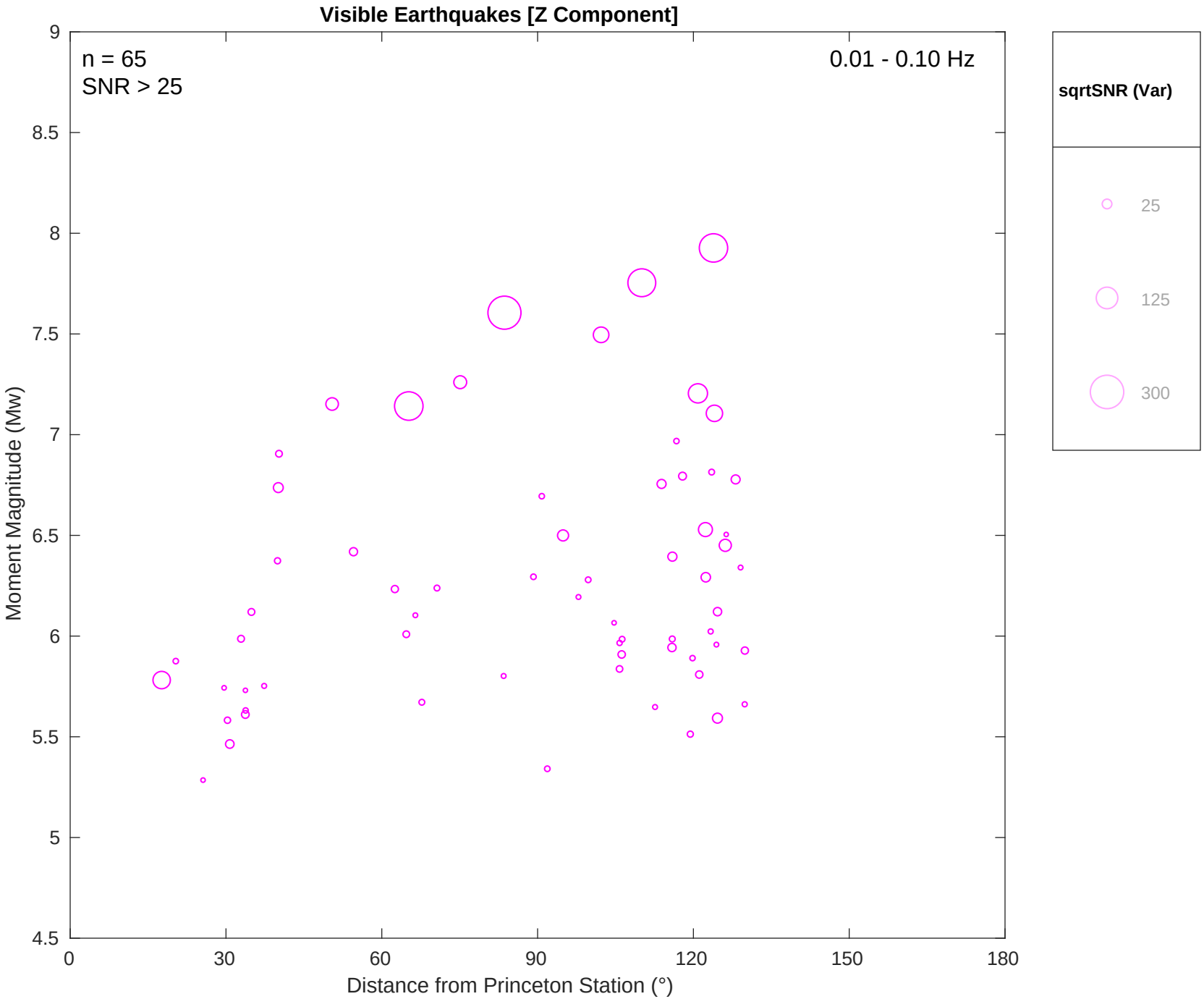
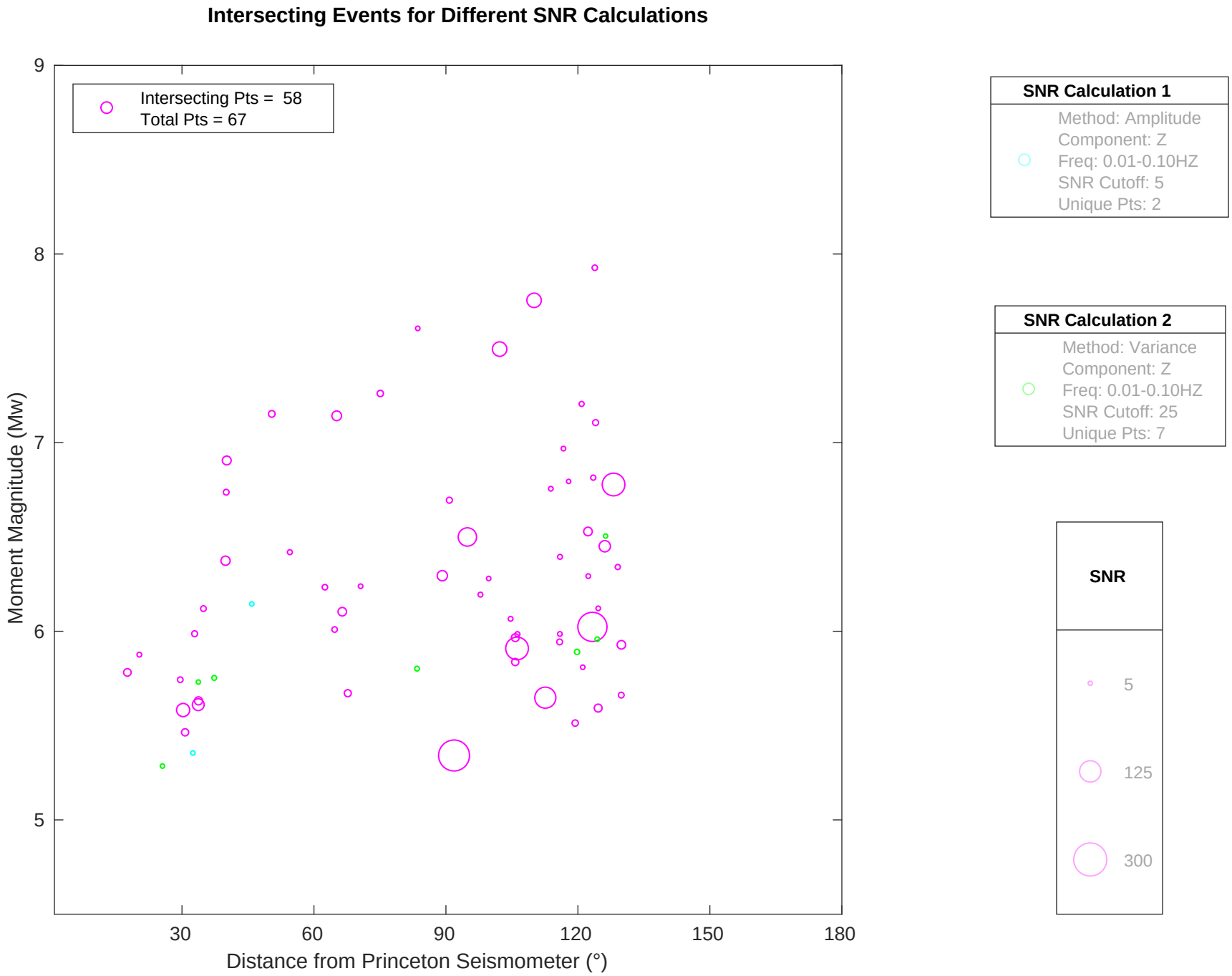

All Earthquakes Contained in Data
n = 1294
Moment Magnitude (Mw)
Distance (°)
9
8.5
8
7.5
7
6.5
6
5.5
5
4.5
0
20
40
60
80
100
120
140
160
180
SNR
5
100
200

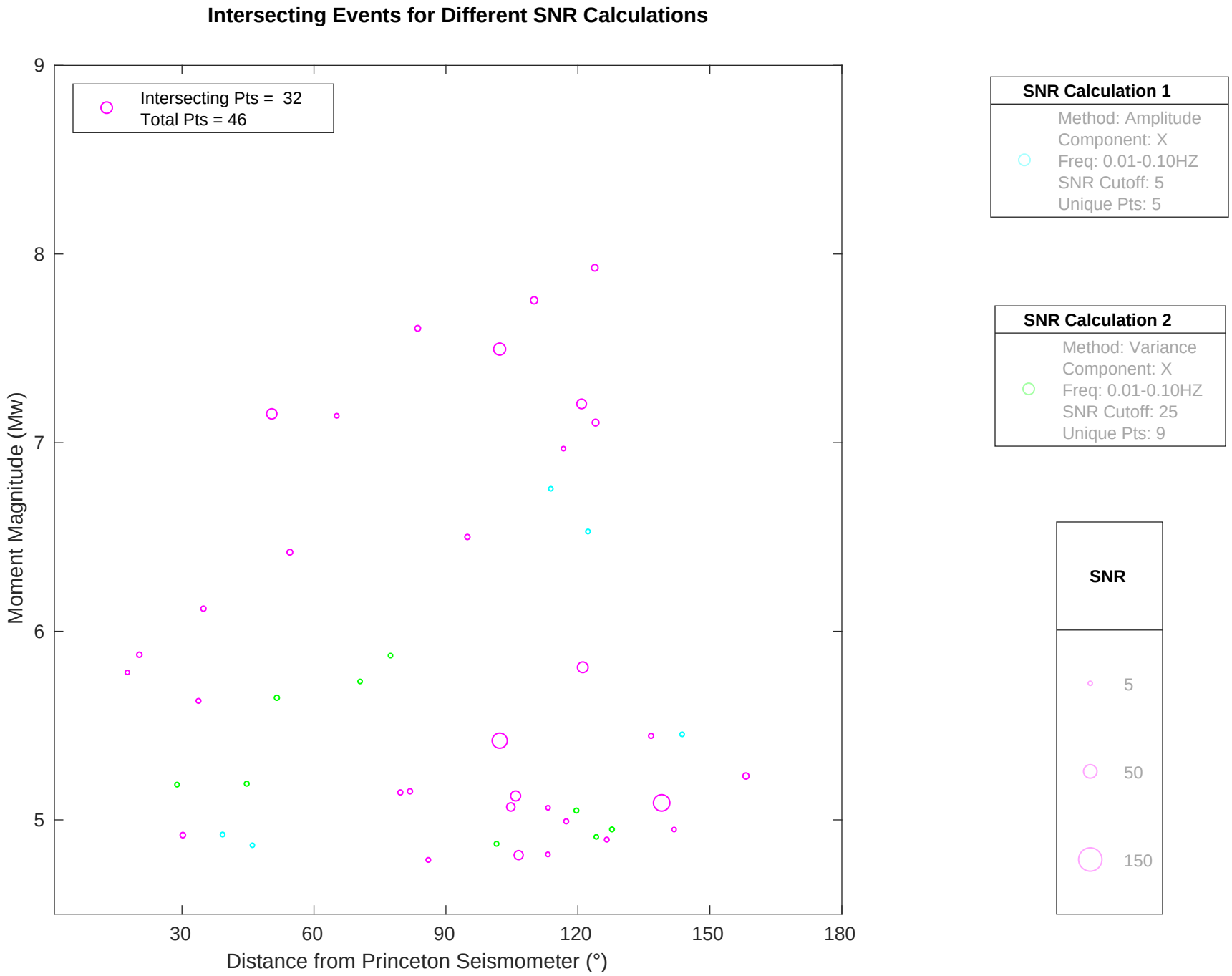

Visible Earthquakes [Z Component]
n = 60
SNR > 5
0.01 - 0.10 Hz
SNR (Amp)
5
125
300
Moment Magnitude (Mw)
Distance from Princeton Seismometer (°)
9
8.5
8
7.5
7
6.5
6
5.5
5
4.5
0
30
60
90
120
150
180

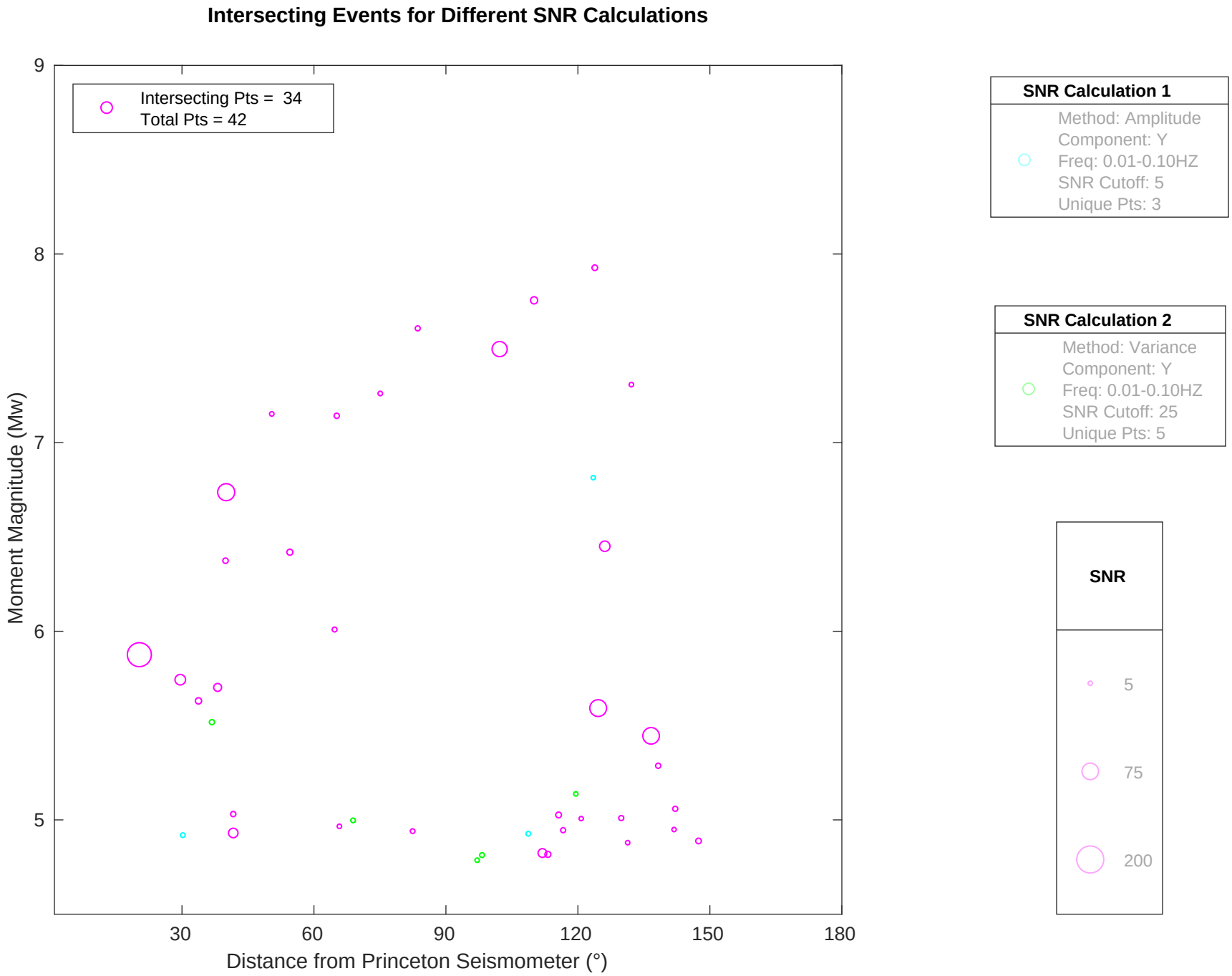

Visible Earthquakes [Z Component]
n = 159
SNR > 5
0.01 - 0.10 Hz
sqrtSNR (Var)
5
125
300
Moment Magnitude (Mw)
Distance from Princeton Station (°)
9
8.5
8
7.5
7
6.5
6
5.5
5
4.5
0
30
60
90
120
150
180

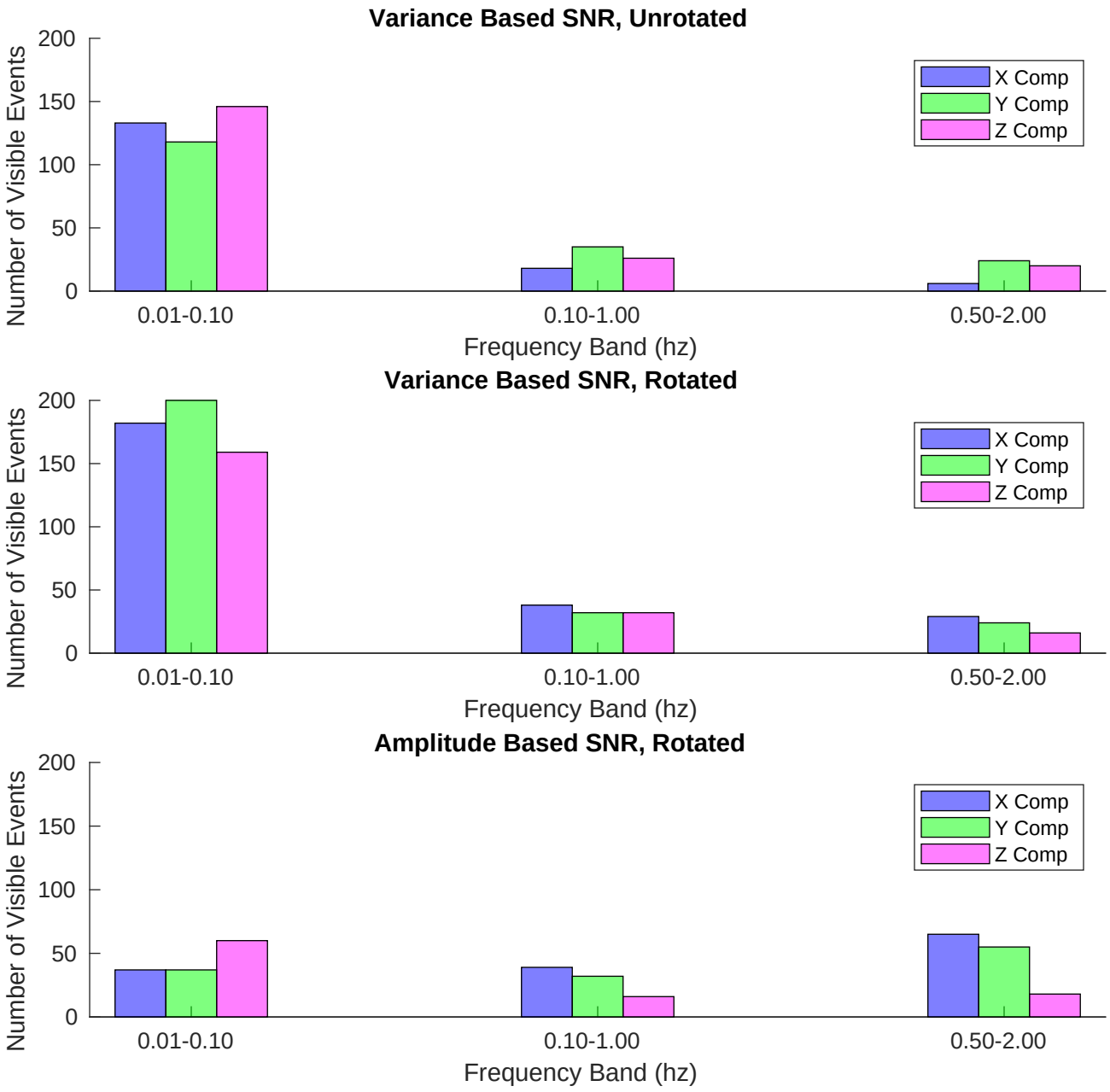

Event C201608180732A; Magnitude 4.77 (Mw)
Z Component
0.01 - 0.10 HZ
GREENLAND SEA
Event Start Time
Noise Window
Rayleigh Wave Arrival
Rayleigh Window
Time (s)
200
150
100
50
0
-50
-100
-150
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000

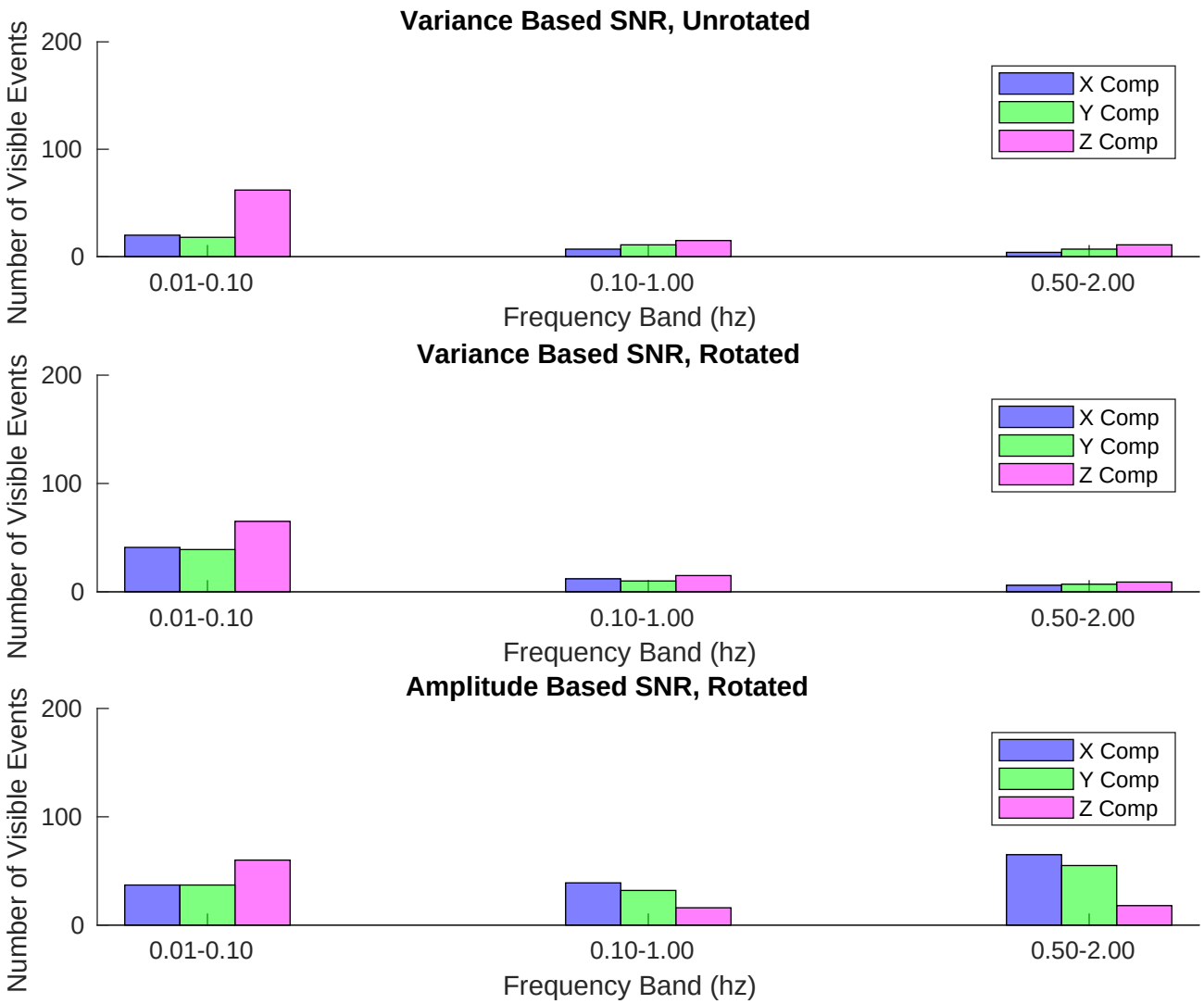

Visible Earthquakes [Z Component]
n = 65
SNR > 25
0.01 - 0.10 Hz
sqrtSNR (Var)
25
125
300
Moment Magnitude (Mw)
Distance from Princeton Station (°)
9
8.5
8
7.5
7
6.5
6
5.5
5
4.5
0
30
60
90
120
150
180


Intersecting Events for Different SNR Calculations
Intersecting Pts = 58
Total Pts = 67
Moment Magnitude (Mw)
Distance from Princeton Seismometer (°)
9
8
7
6
5
30
60
90
120
150
180
SNR Calculation 1
Method: Amplitude
Component: Z
Freq: 0.01-0.10HZ
SNR Cutoff: 5
Unique Pts: 2
SNR Calculation 2
Method: Variance
Component: Z
Freq: 0.01-0.10HZ
SNR Cutoff: 25
Unique Pts: 7
SNR
5
125
300


Intersecting Events for Different SNR Calculations
Intersecting Pts = 32
Total Pts = 46
Moment Magnitude (Mw)
Distance from Princeton Seismometer (°)
9
8
7
6
5
30
60
90
120
150
180
SNR Calculation 1
Method: Amplitude
Component: X
Freq: 0.01-0.10HZ
SNR Cutoff: 5
Unique Pts: 5
SNR Calculation 2
Method: Variance
Component: X
Freq: 0.01-0.10HZ
SNR Cutoff: 25
Unique Pts: 9
SNR
5
50
150


Intersecting Events for Different SNR Calculations
Intersecting Pts = 34
Total Pts = 42
Moment Magnitude (Mw)
Distance from Princeton Seismometer (°)
9
8
7
6
5
30
60
90
120
150
180
SNR Calculation 1
Method: Amplitude
Component: Y
Freq: 0.01-0.10HZ
SNR Cutoff: 5
Unique Pts: 3
SNR Calculation 2
Method: Variance
Component: Y
Freq: 0.01-0.10HZ
SNR Cutoff: 25
Unique Pts: 5
SNR
5
75
200


Variance Based SNR, Unrotated
Number of Visible Events
200
150
100
50
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)
Variance Based SNR, Rotated
Number of Visible Events
200
150
100
50
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)
Amplitude Based SNR, Rotated
Number of Visible Events
200
150
100
50
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)


Variance Based SNR, Unrotated
Number of Visible Events
200
100
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)
Variance Based SNR, Rotated
Number of Visible Events
200
100
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)
Amplitude Based SNR, Rotated
Number of Visible Events
200
100
0
X Comp
Y Comp
Z Comp
0.01-0.10
0.10-1.00
0.50-2.00
Frequency Band (hz)