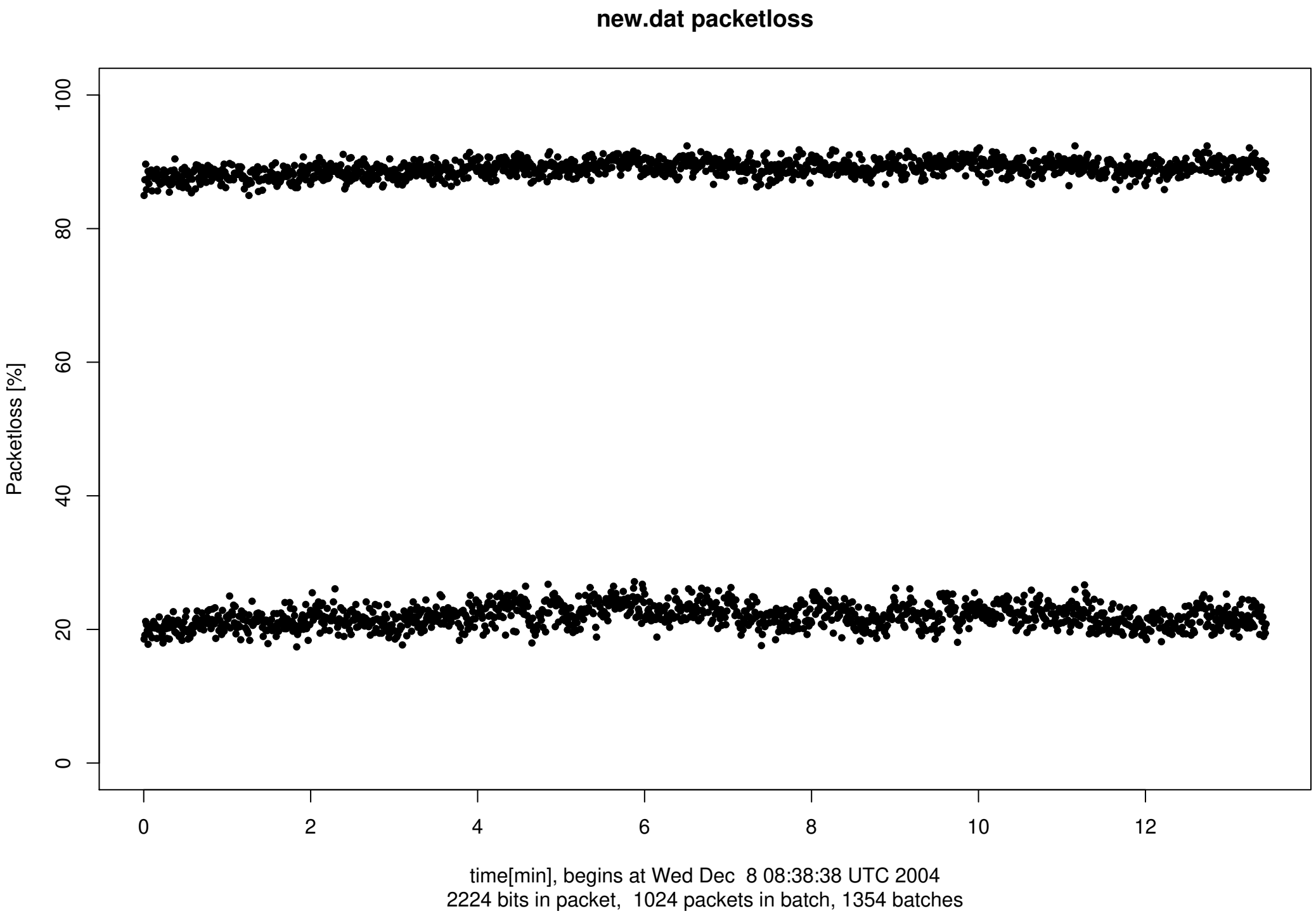
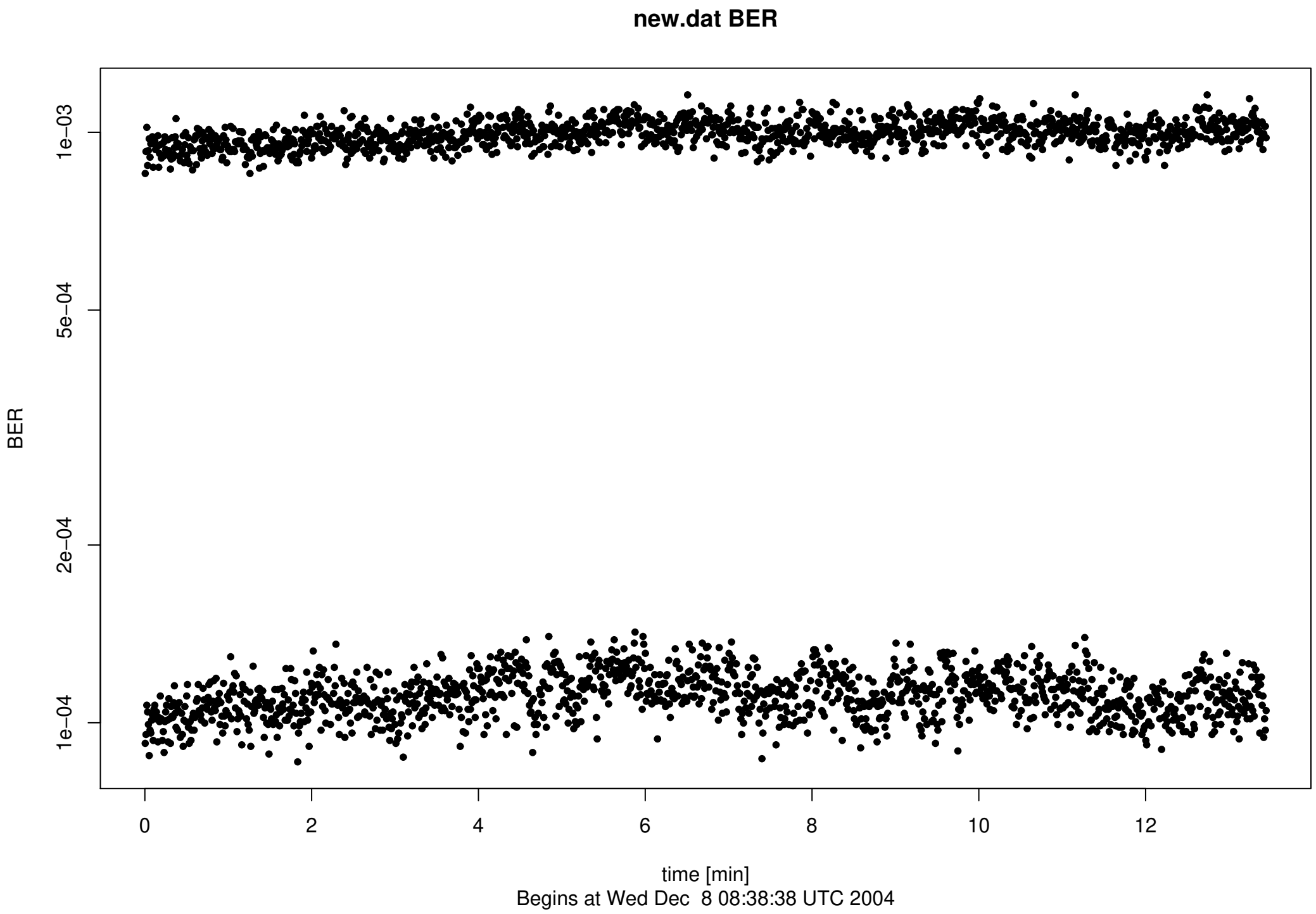
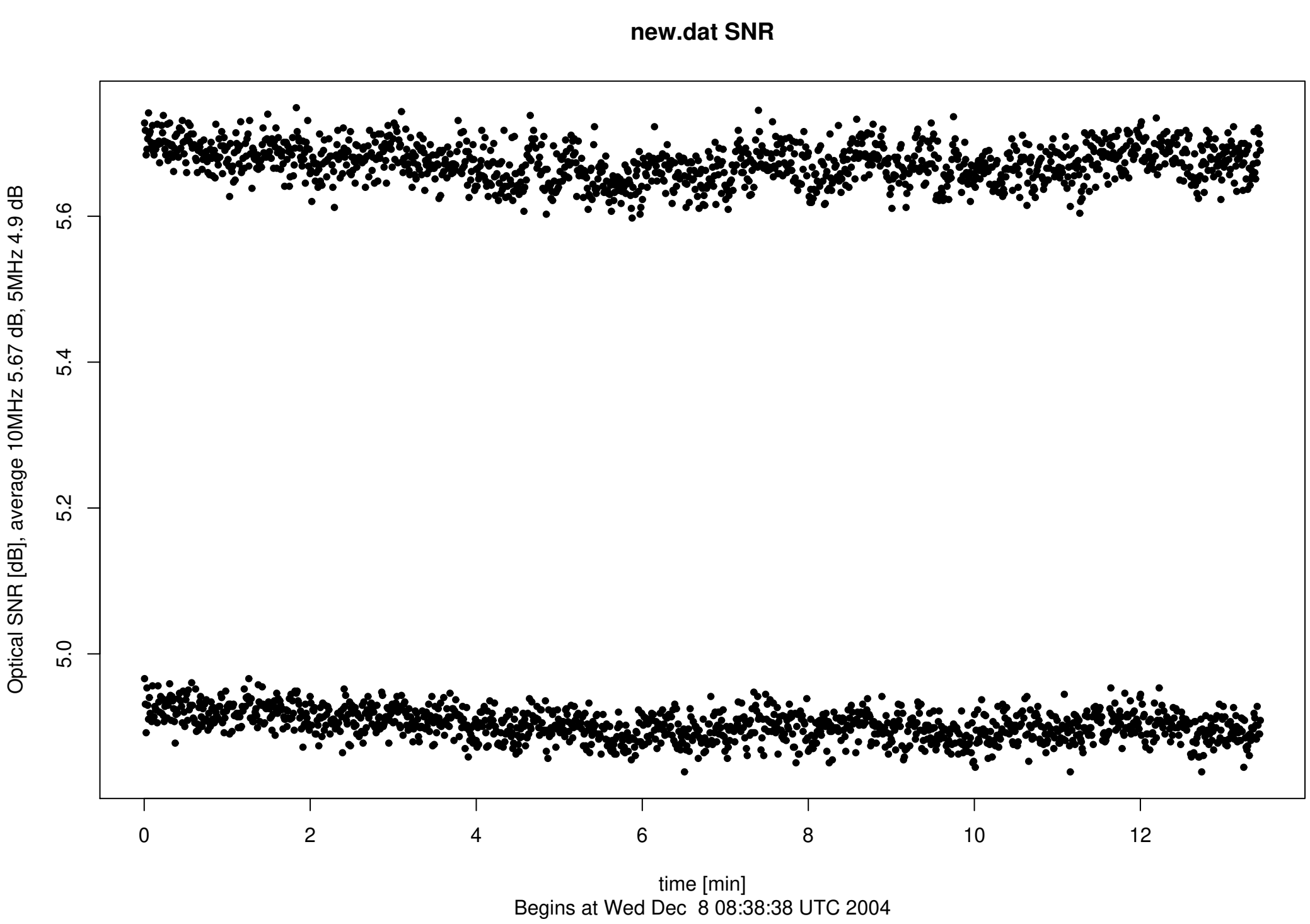
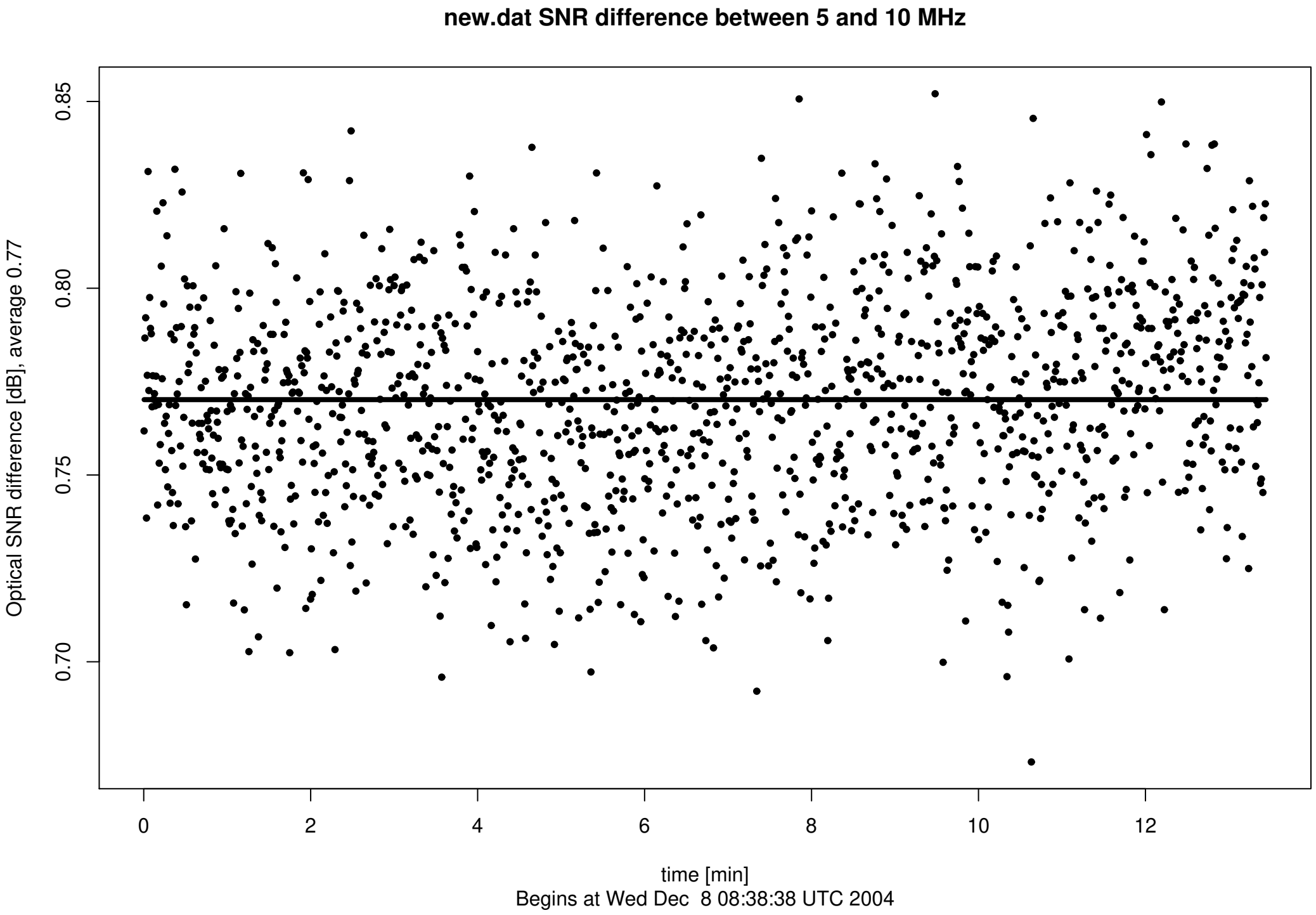
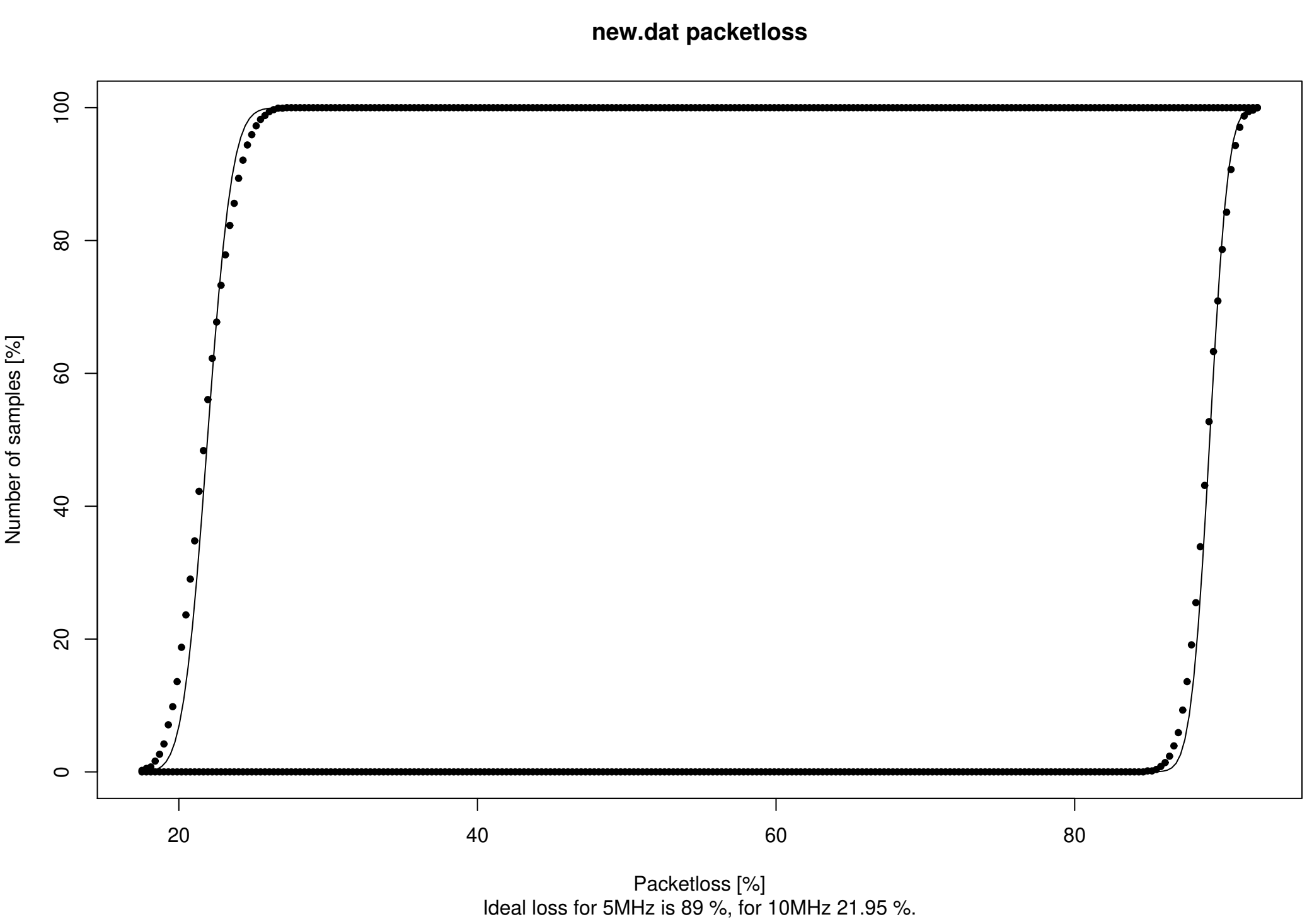
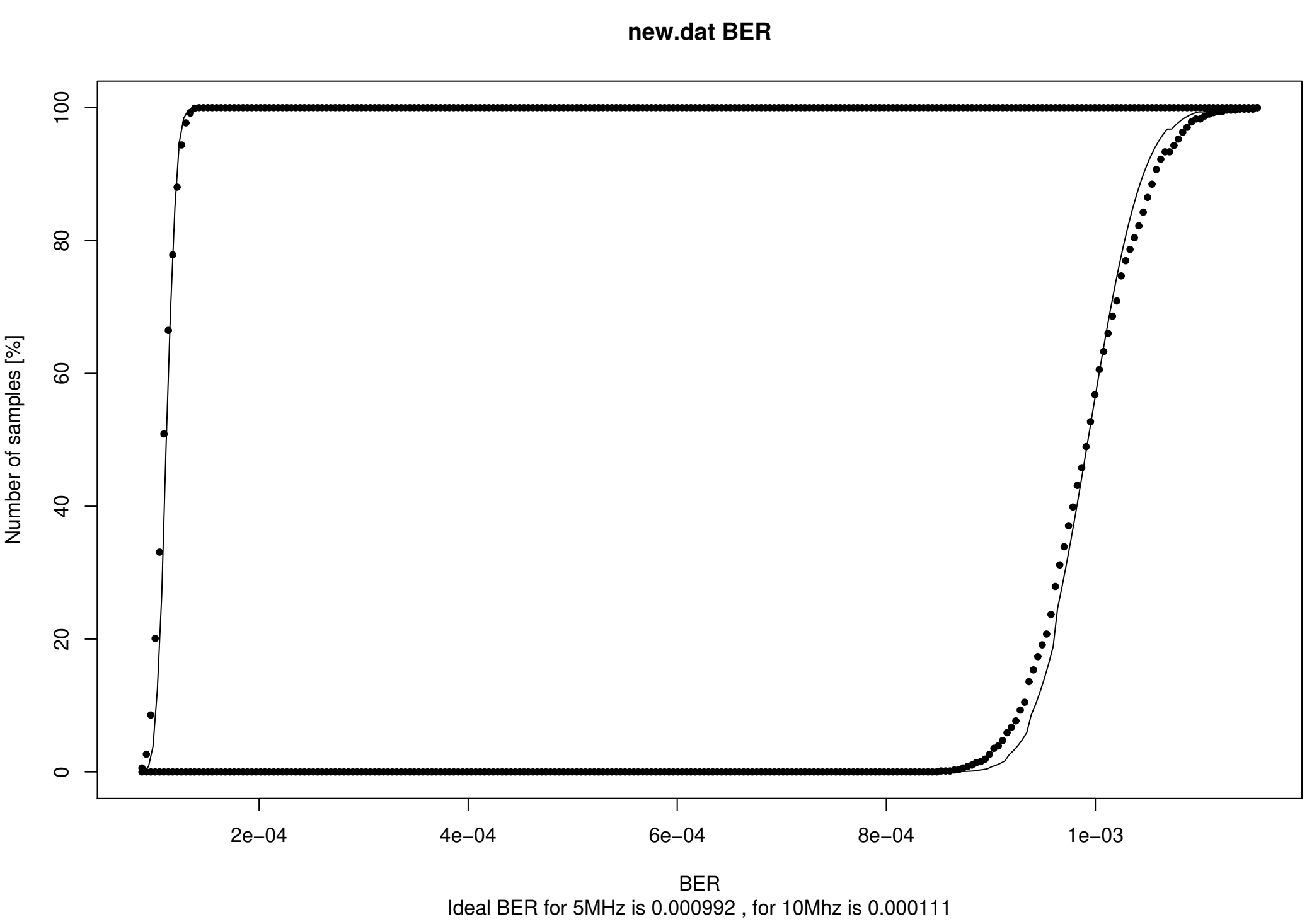

new.dat packetloss
Packetloss [%]
0
20
40
60
80
100
0
2
4
6
8
10
12
time[min], begins at Wed Dec 8 08:38:38 UTC 2004
2224 bits in packet, 1024 packets in batch, 1354 batches

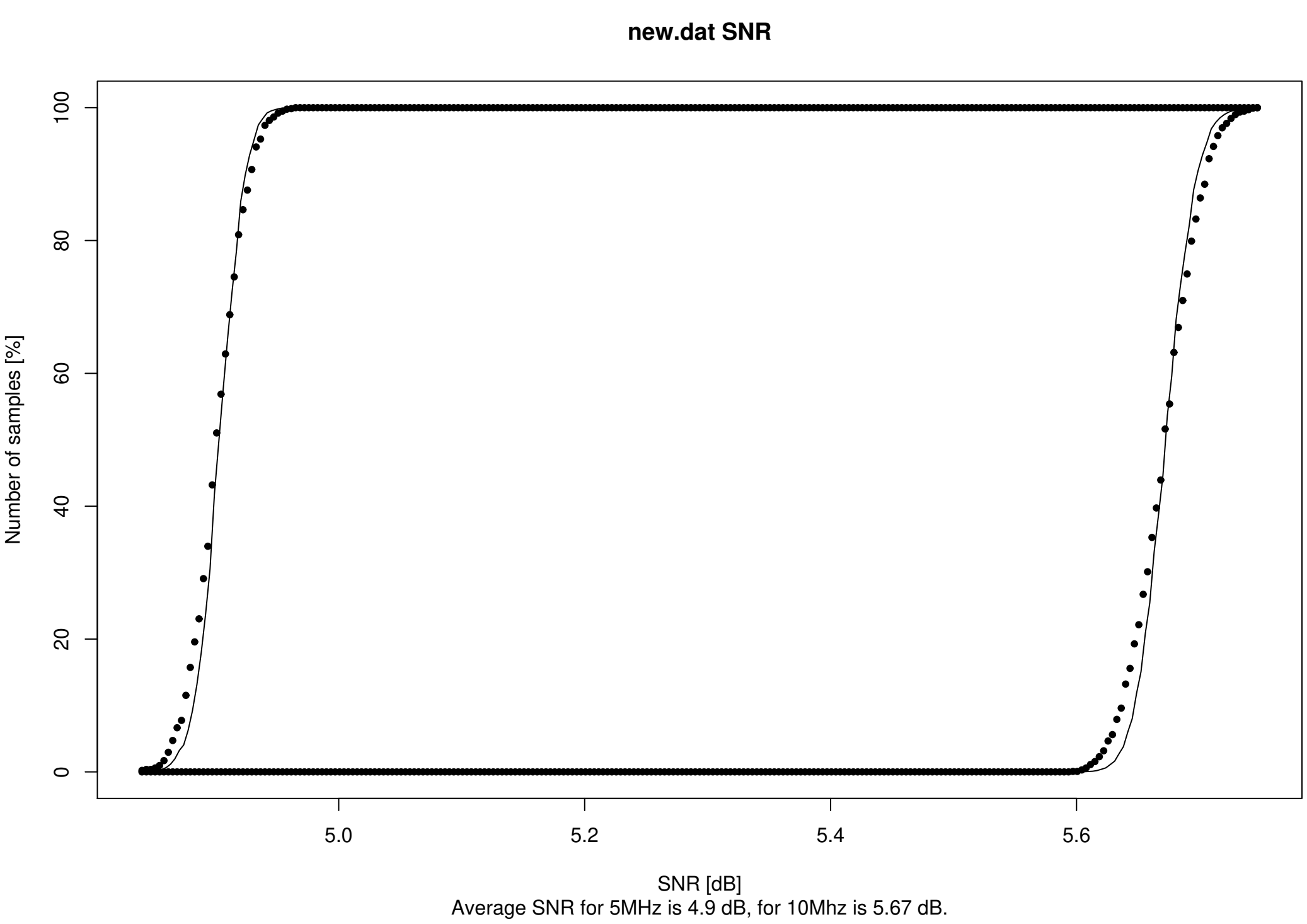

new.dat BER
BER
1e−03
5e−04
2e−04
1e−04
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:38:38 UTC 2004

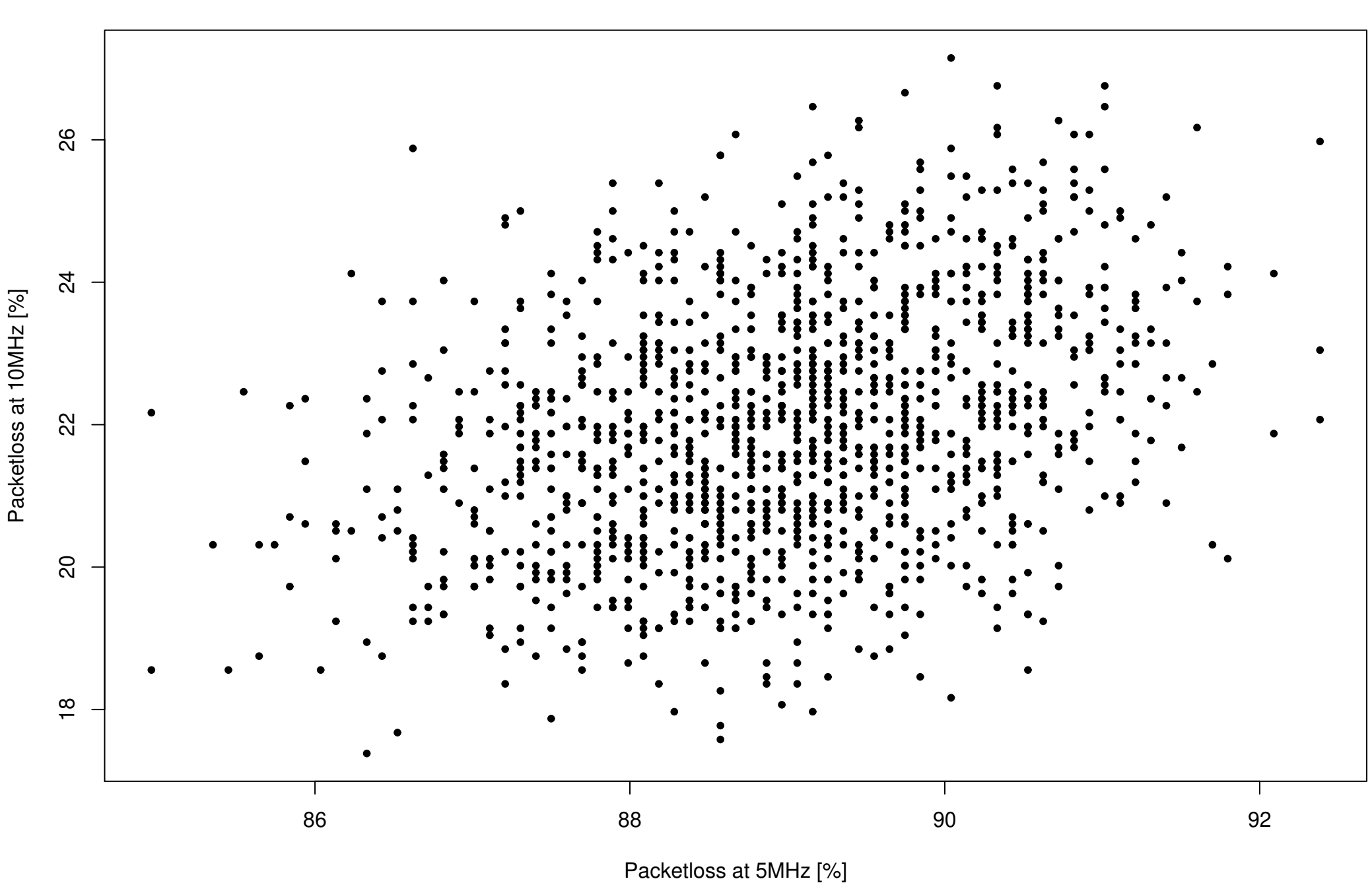

new.dat SNR
Optical SNR [dB], average 10MHz 5.67 dB, 5MHz 4.9 dB
5.0
5.2
5.4
5.6
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:38:38 UTC 2004

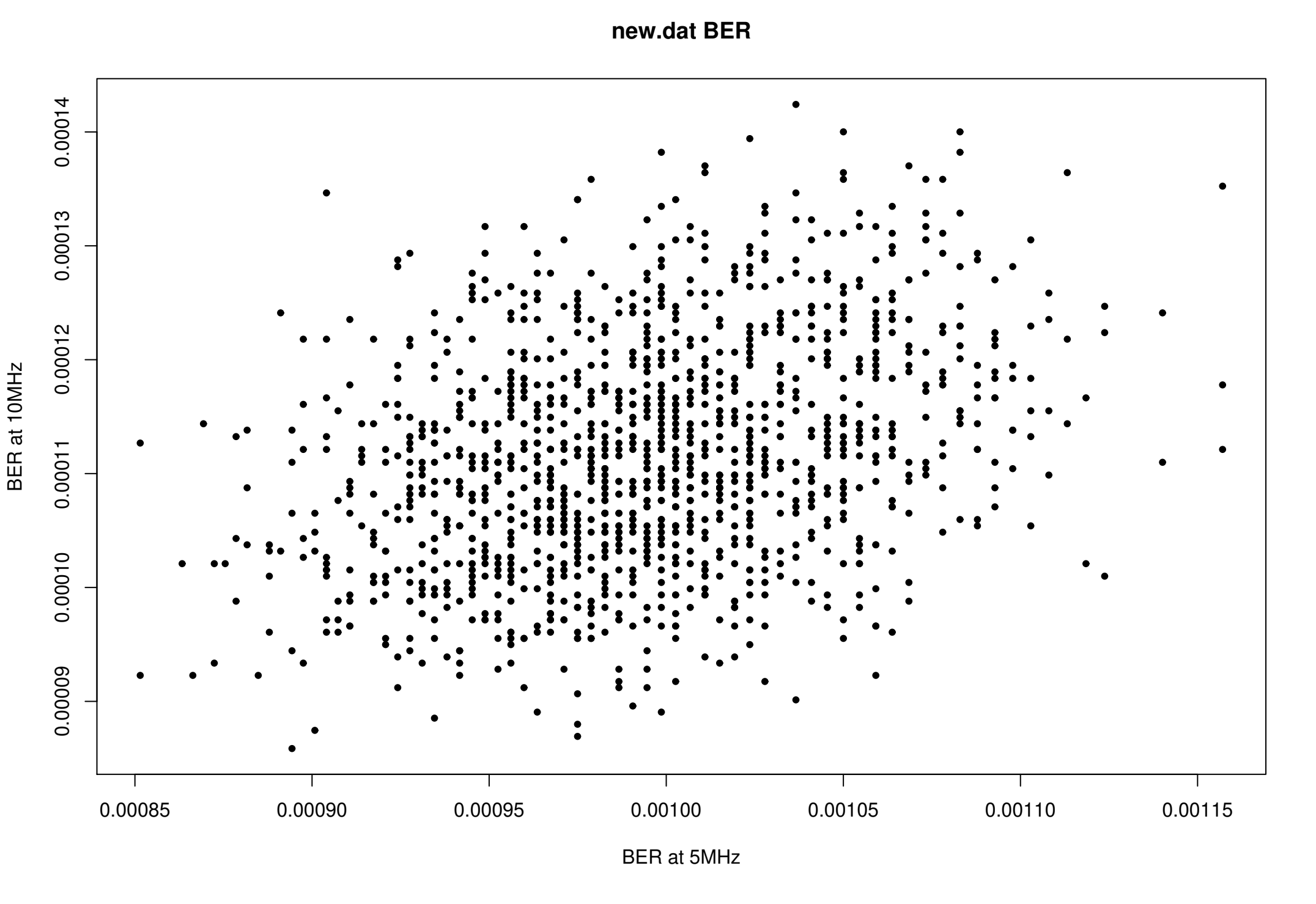

new.dat SNR difference between 5 and 10 MHz
Optical SNR difference [dB], average 0.77
0.70
0.75
0.80
0.85
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:38:38 UTC 2004

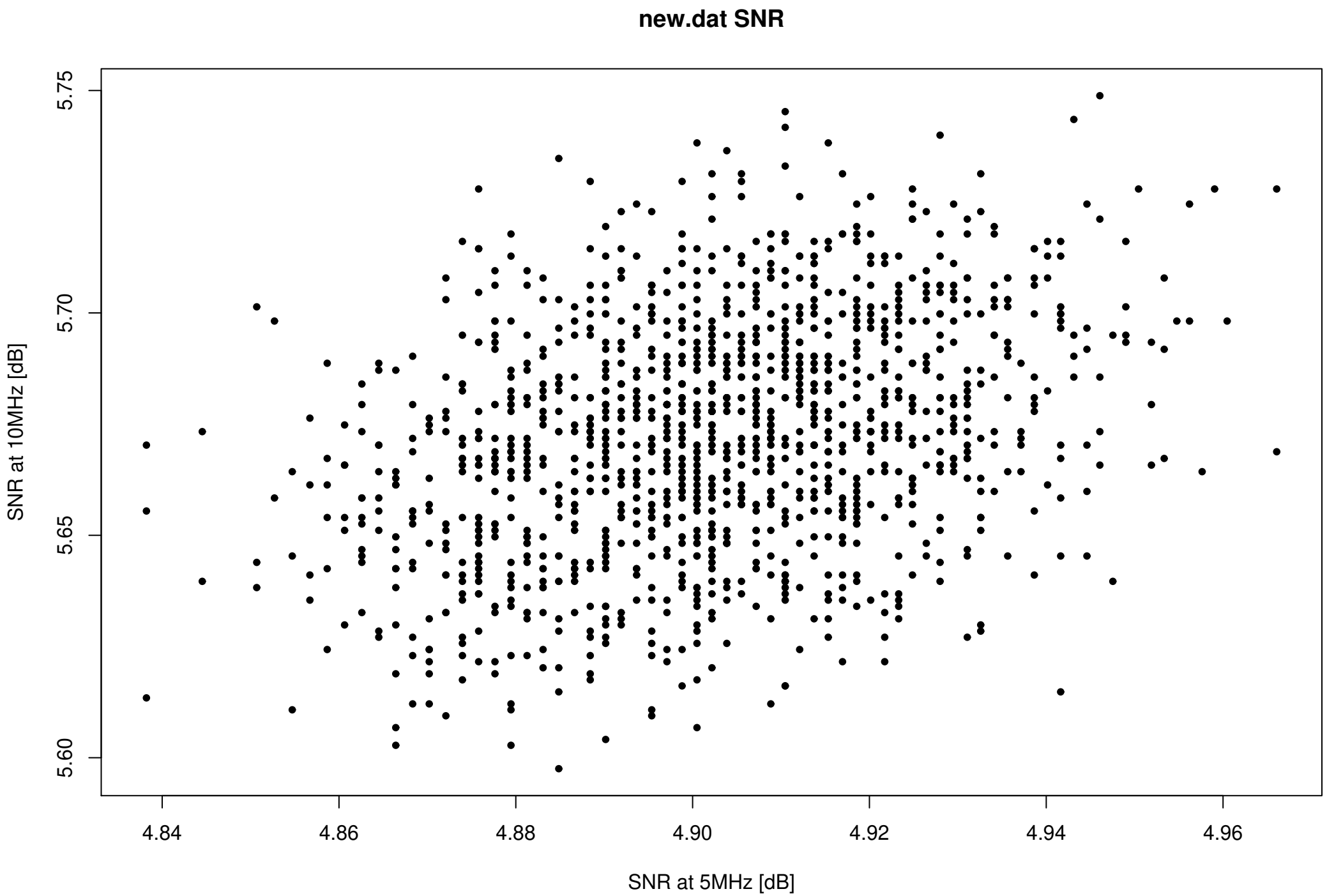

new.dat packetloss
Number of samples [%]
0
20
40
60
80
100
20
40
60
80
Packetloss [%]
Ideal loss for 5MHz is 89 %, for 10MHz 21.95 %.

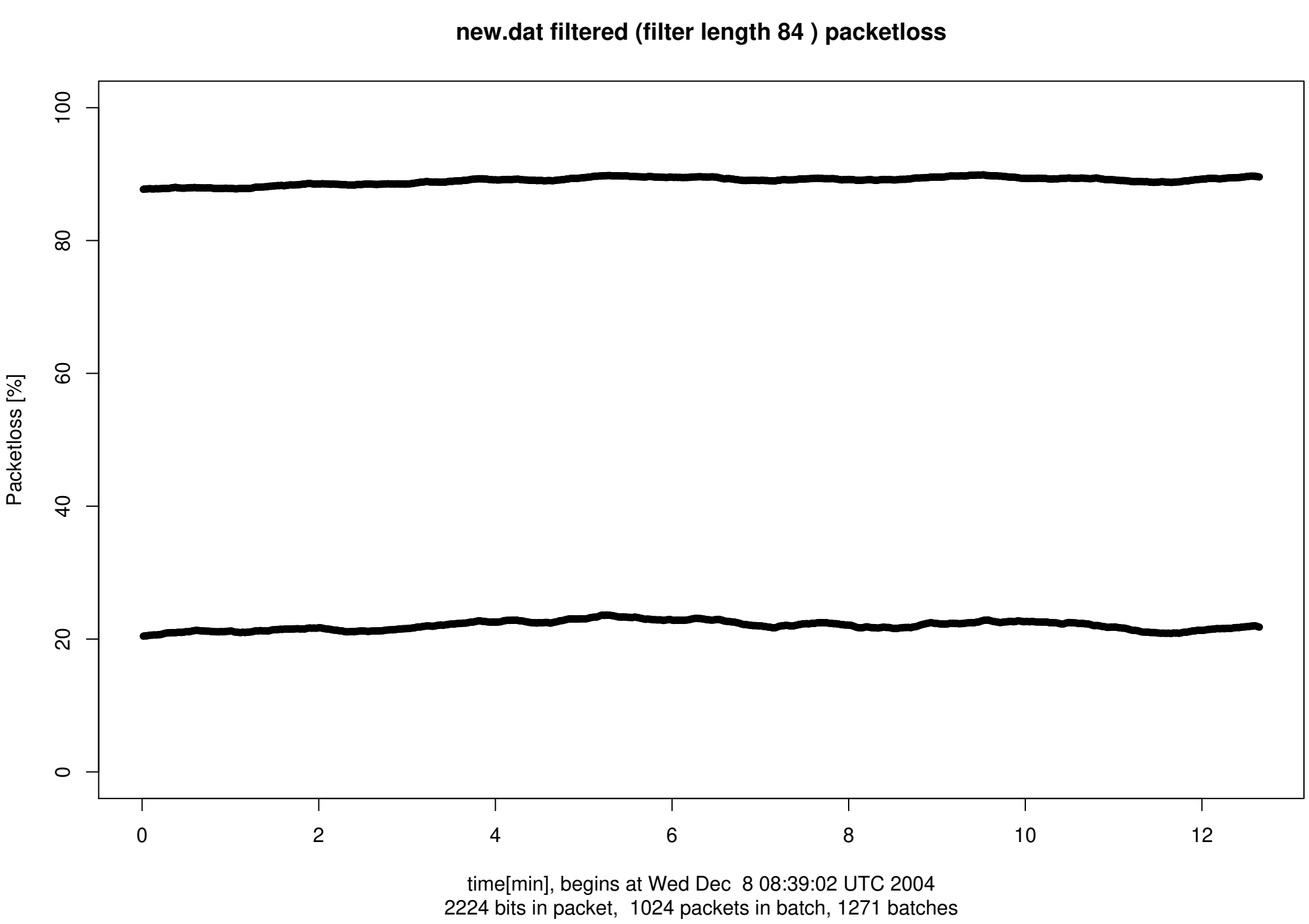

new.dat BER
Number of samples [%]
0
20
40
60
80
100
2e−04
4e−04
6e−04
8e−04
1e−03
BER
Ideal BER for 5MHz is 0.000992 , for 10Mhz is 0.000111

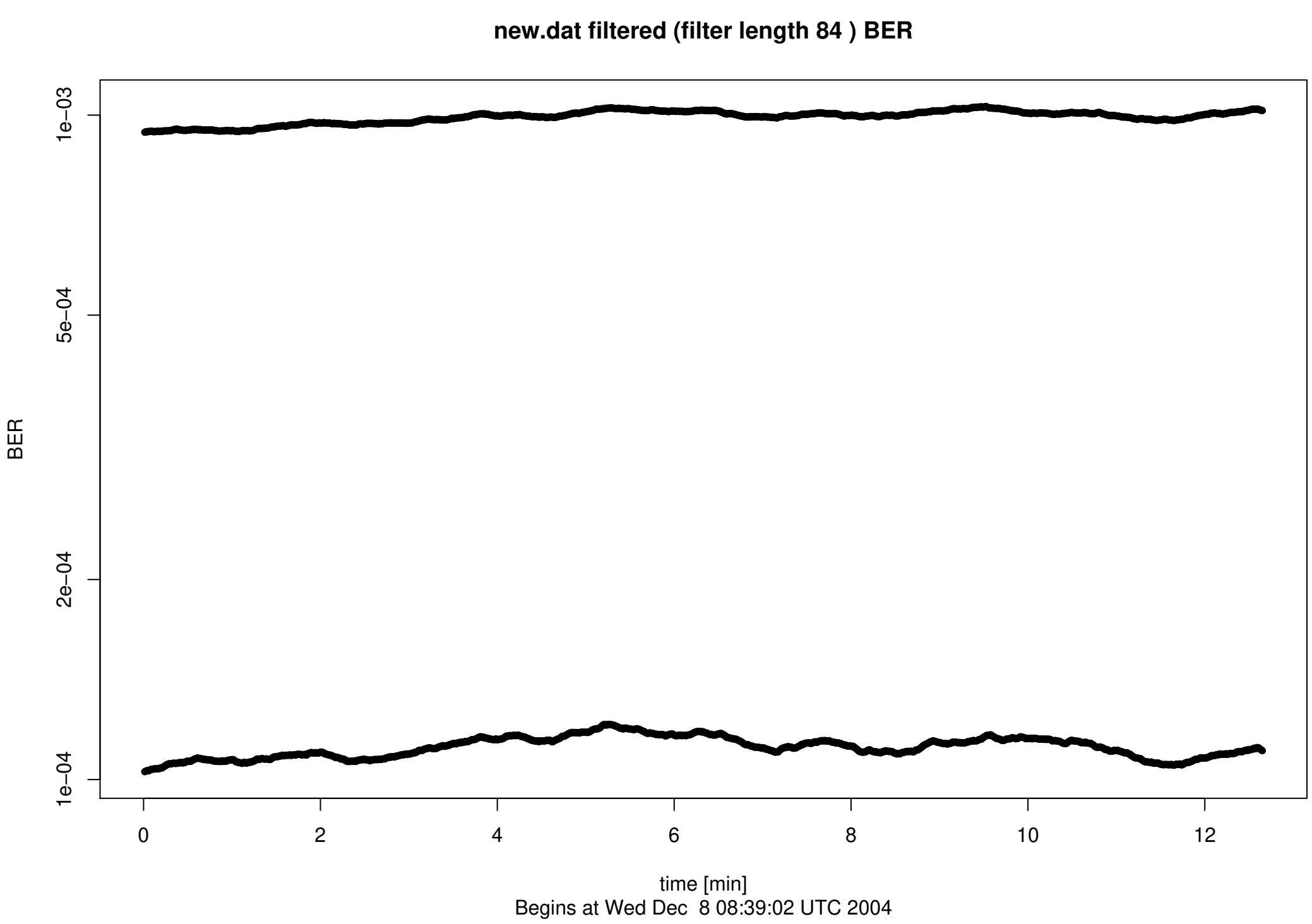

new.dat SNR
Number of samples [%]
0
20
40
60
80
100
5.0
5.2
5.4
5.6
SNR [dB]
Average SNR for 5MHz is 4.9 dB, for 10Mhz is 5.67 dB.

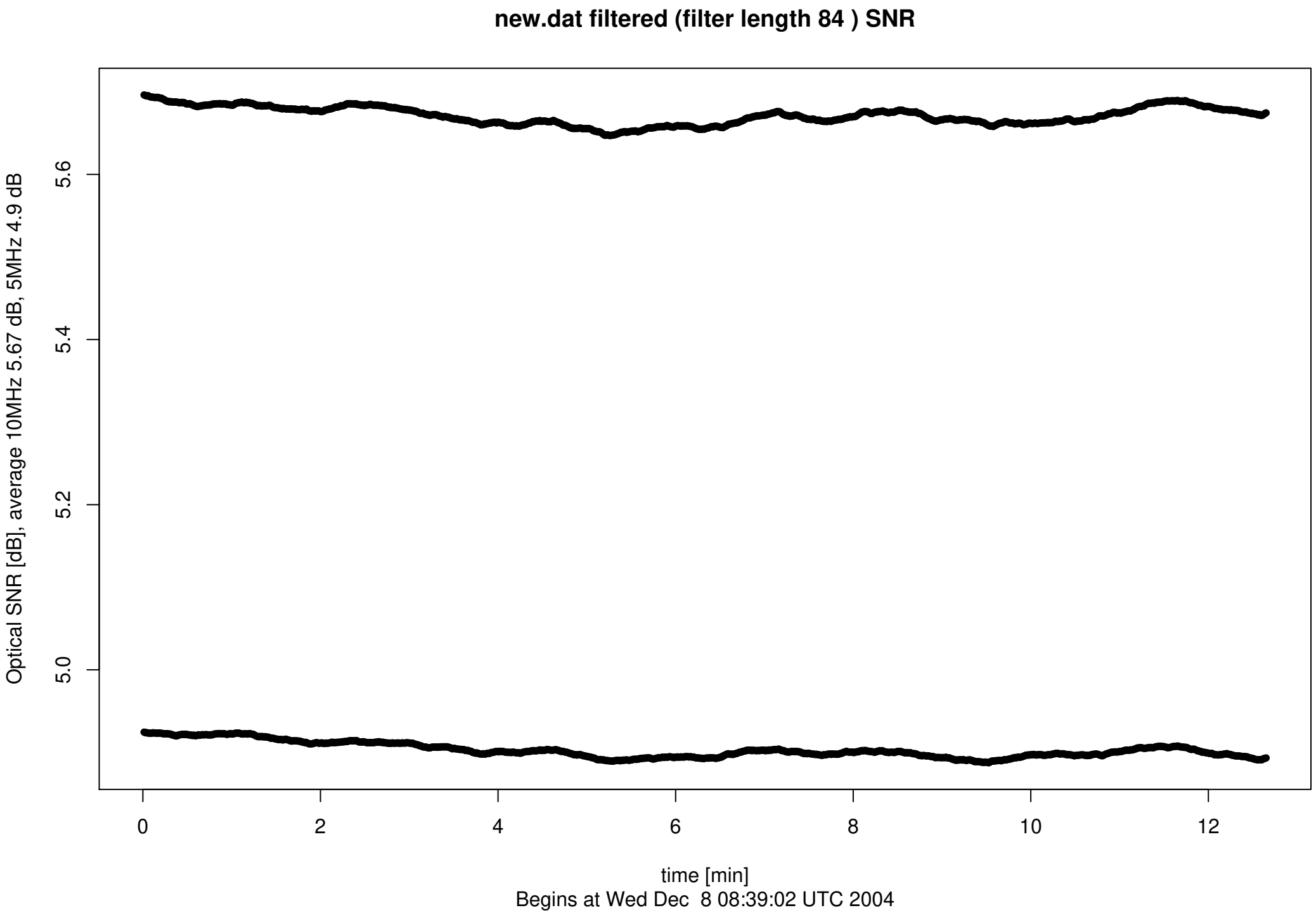

new.dat packetloss
Packetloss at 10MHz [%]
18
20
22
24
26
86
88
90
92
Packetloss at 5MHz [%]

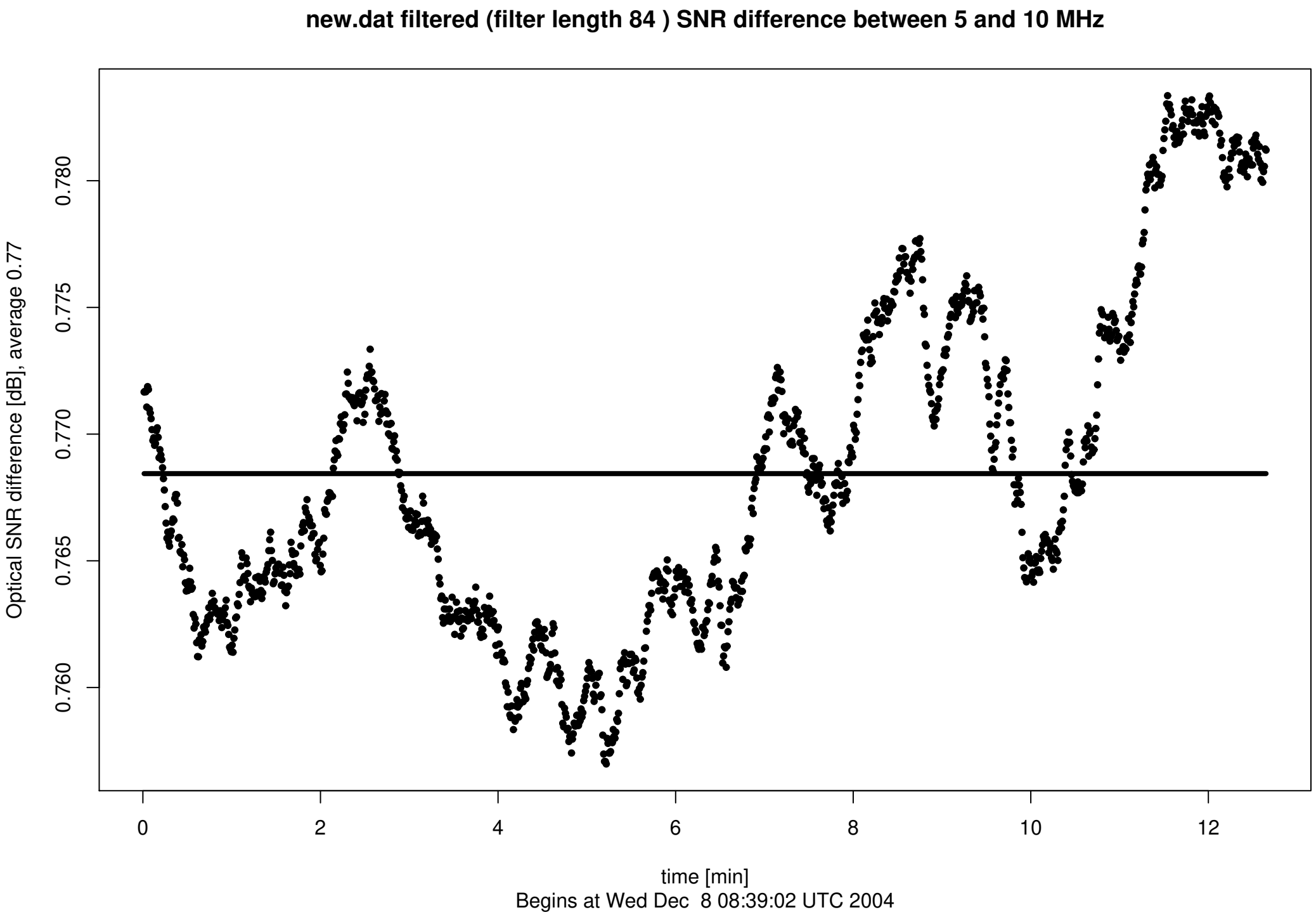

new.dat BER
BER at 10MHz
0.00009
0.00010
0.00011
0.00012
0.00013
0.00014
0.00085
0.00090
0.00095
0.00100
0.00105
0.00110
0.00115
BER at 5MHz

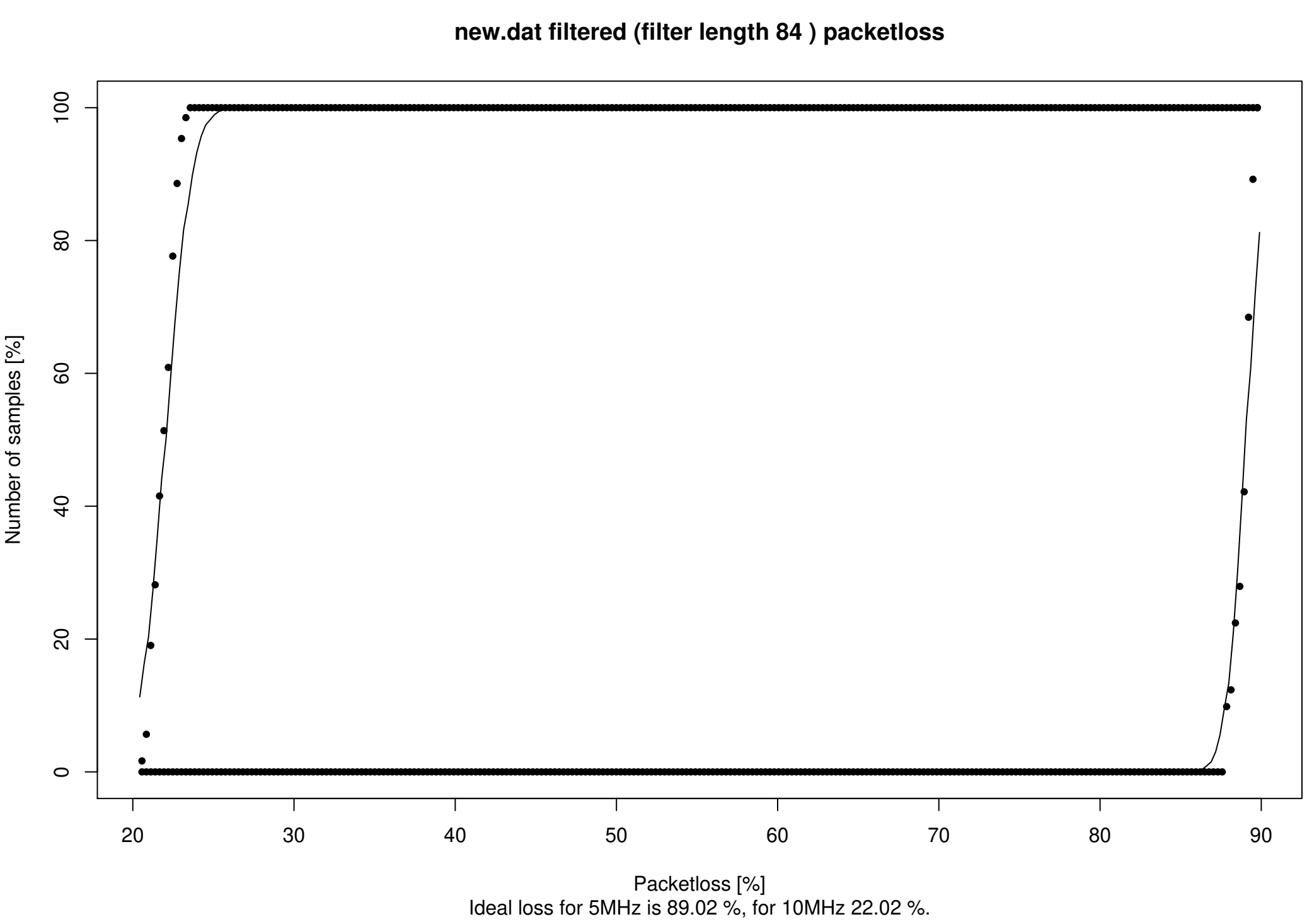

new.dat SNR
SNR at 10MHz [dB]
5.60
5.65
5.70
5.75
4.84
4.86
4.88
4.90
4.92
4.94
4.96
SNR at 5MHz [dB]

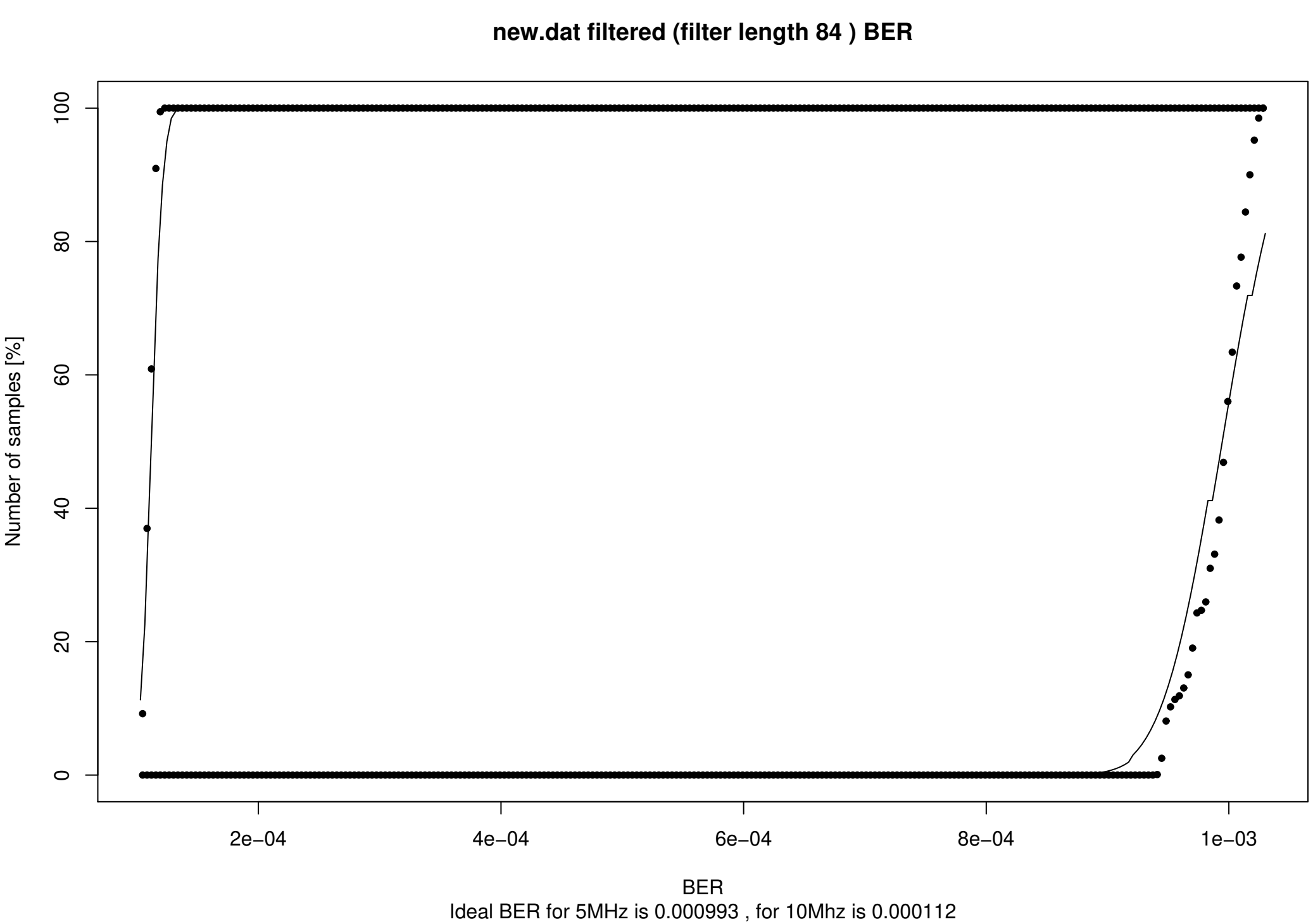

new.dat filtered (filter length 84) packetloss
Packetloss [%]
0
20
40
60
80
100
0
2
4
6
8
10
12
time[min], begins at Wed Dec 8 08:39:02 UTC 2004
2224 bits in packet, 1024 packets in batch, 1271 batches

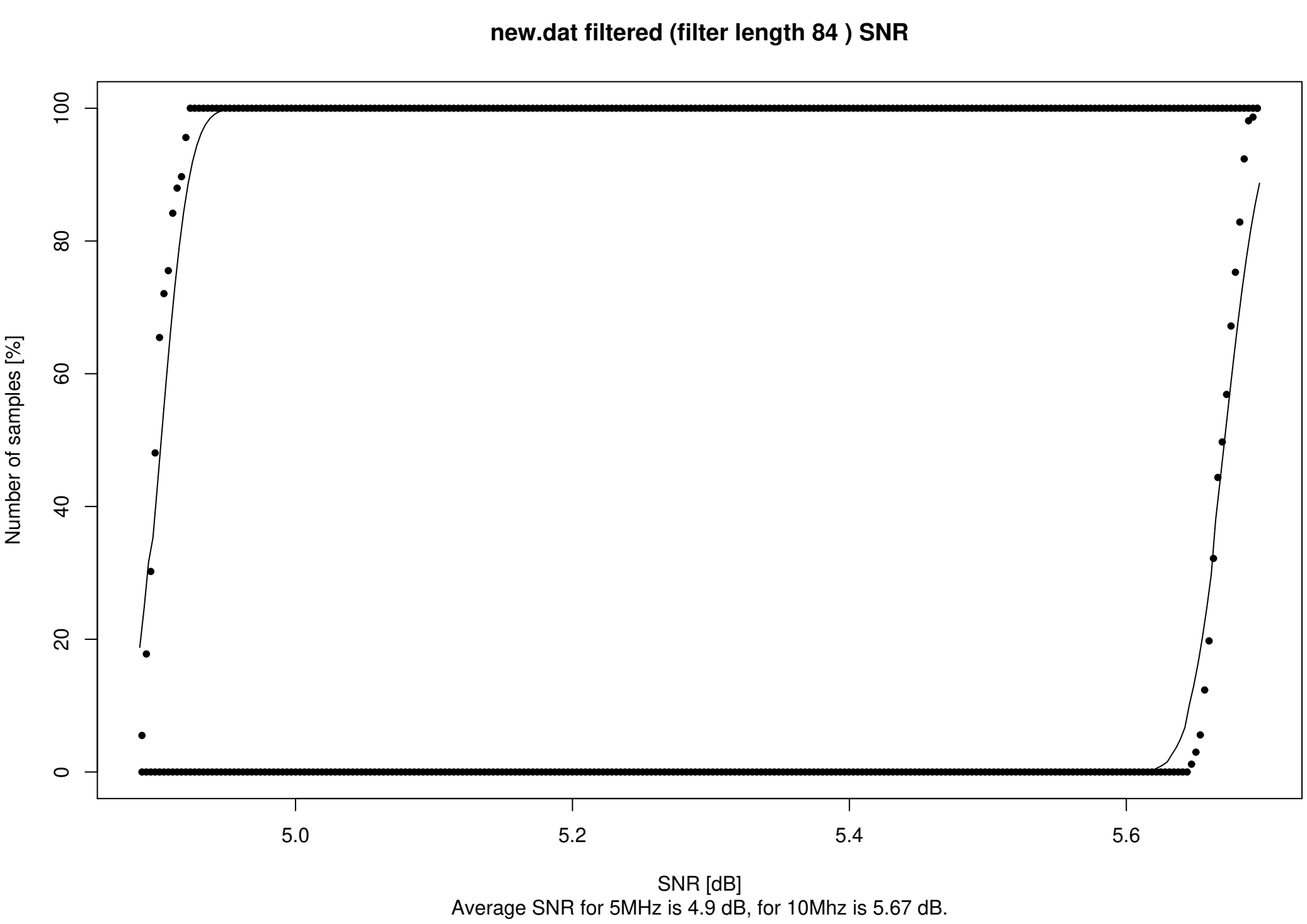

new.dat filtered (filter length 84) BER
BER
1e−03
5e−04
2e−04
1e−04
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:39:02 UTC 2004

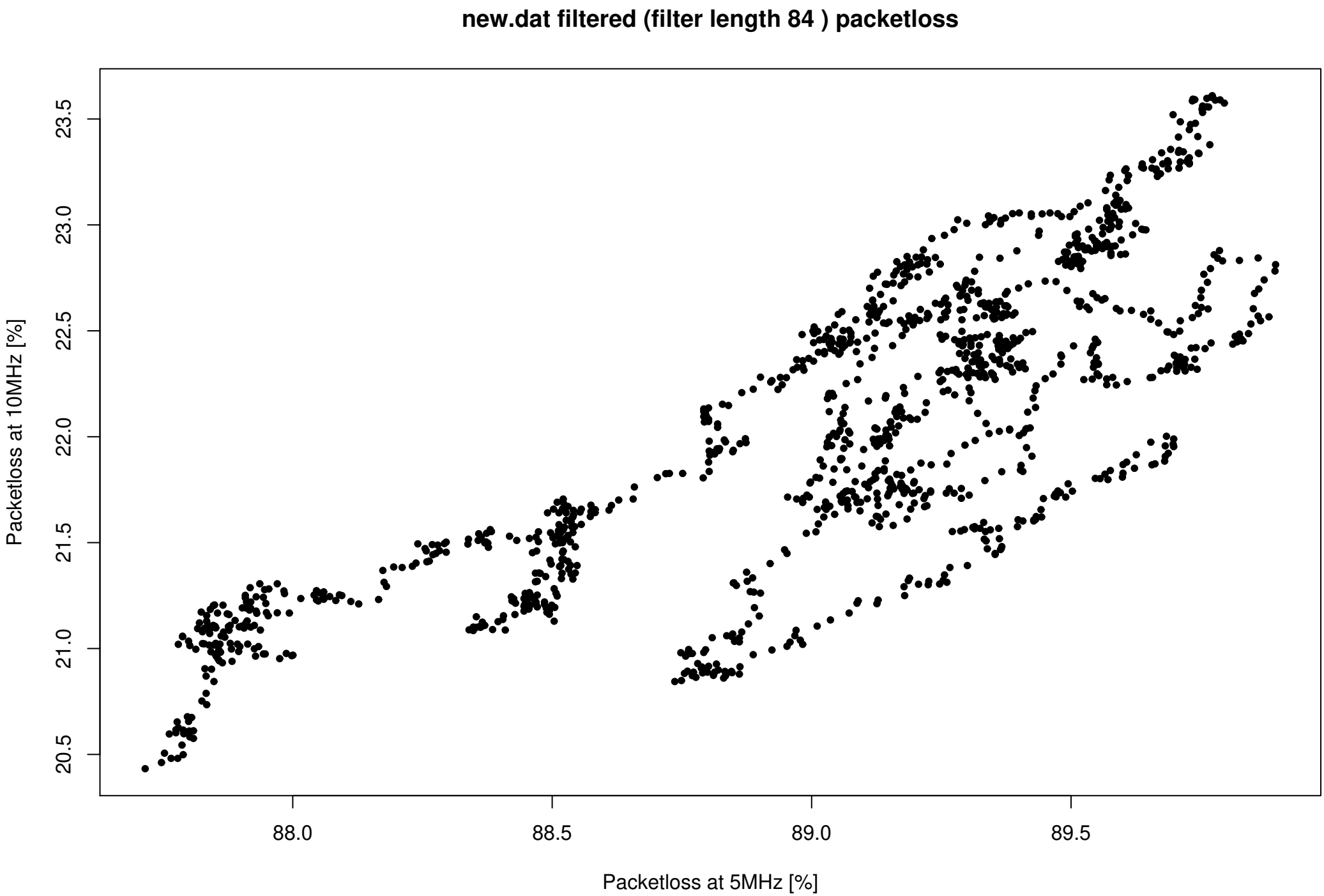

new.dat filtered (filter length 84) SNR
Optical SNR [dB], average 10MHz 5.67 dB, 5MHz 4.9 dB
5.0
5.2
5.4
5.6
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:39:02 UTC 2004

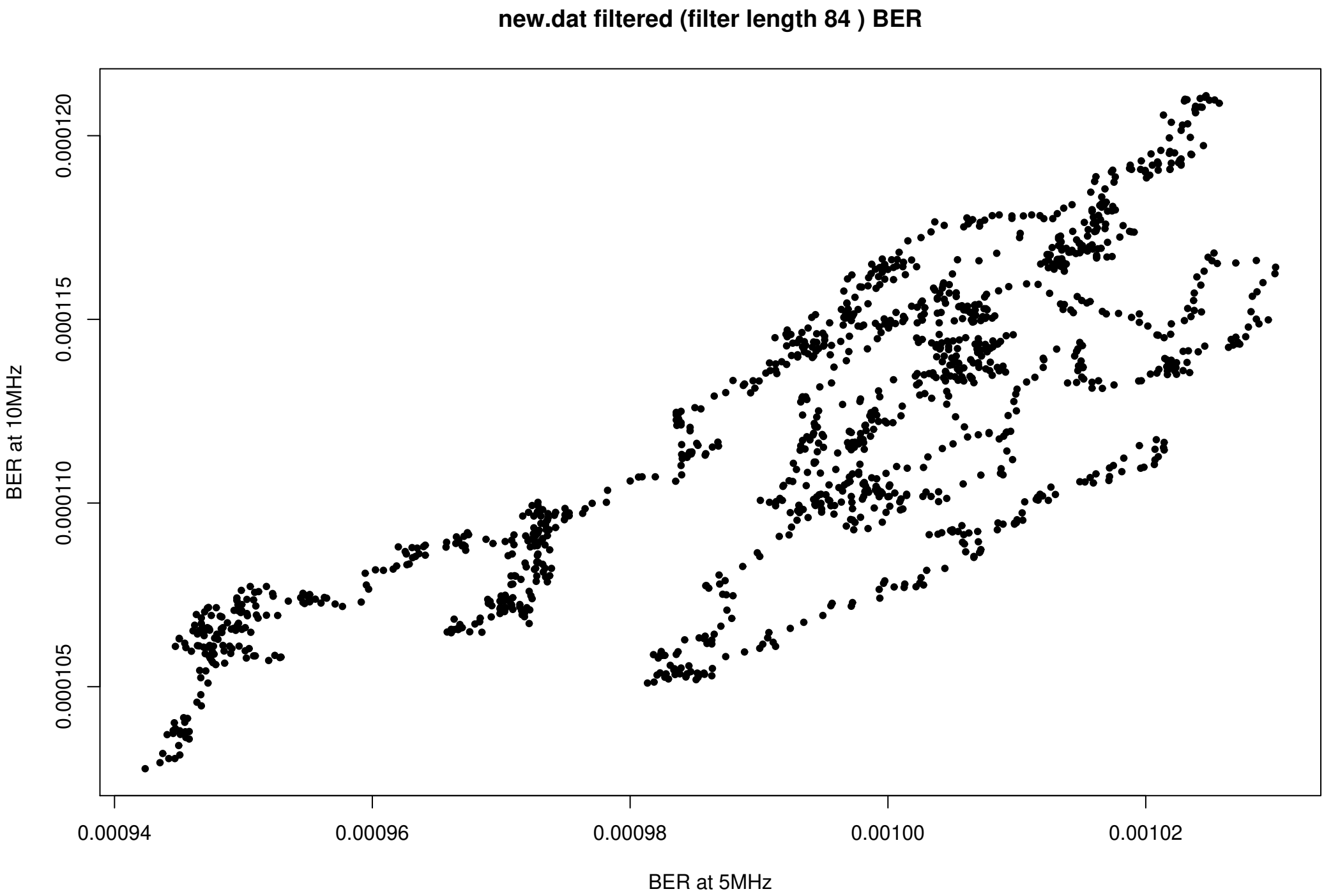

new.dat filtered (filter length 84) SNR difference between 5 and 10 MHz
Optical SNR difference [dB], average 0.77
0.760
0.765
0.770
0.775
0.780
0
2
4
6
8
10
12
time [min]
Begins at Wed Dec 8 08:39:02 UTC 2004

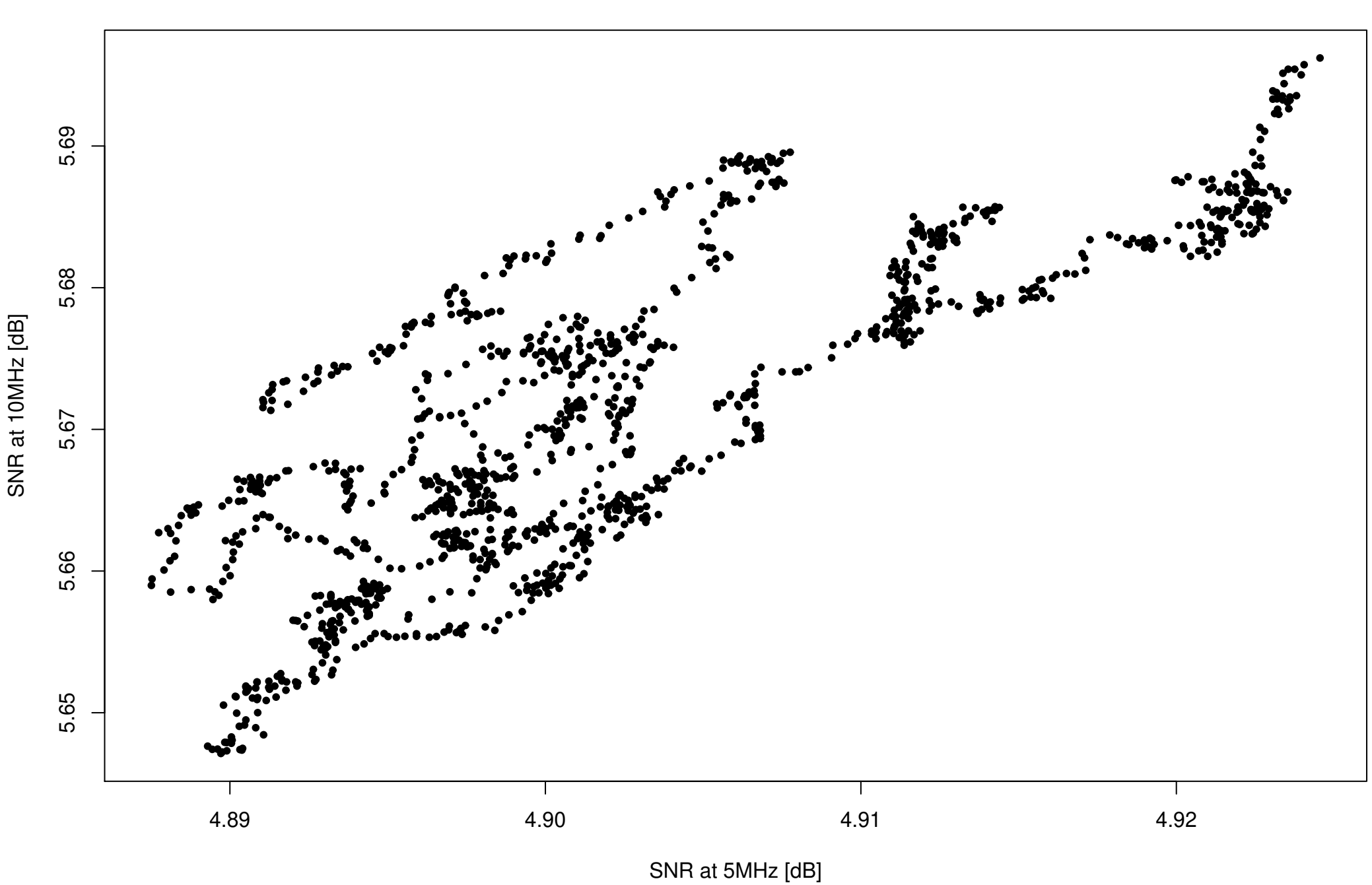

new.dat filtered (filter length 84) packetloss
Number of samples [%]
0
20
40
60
80
100
20
30
40
50
60
70
80
90
Packetloss [%]
Ideal loss for 5MHz is 89.02 %, for 10MHz 22.02 %.


new.dat filtered (filter length 84) BER
Number of samples [%]
0
20
40
60
80
100
2e−04
4e−04
6e−04
8e−04
1e−03
BER
Ideal BER for 5MHz is 0.000993 , for 10Mhz is 0.000112

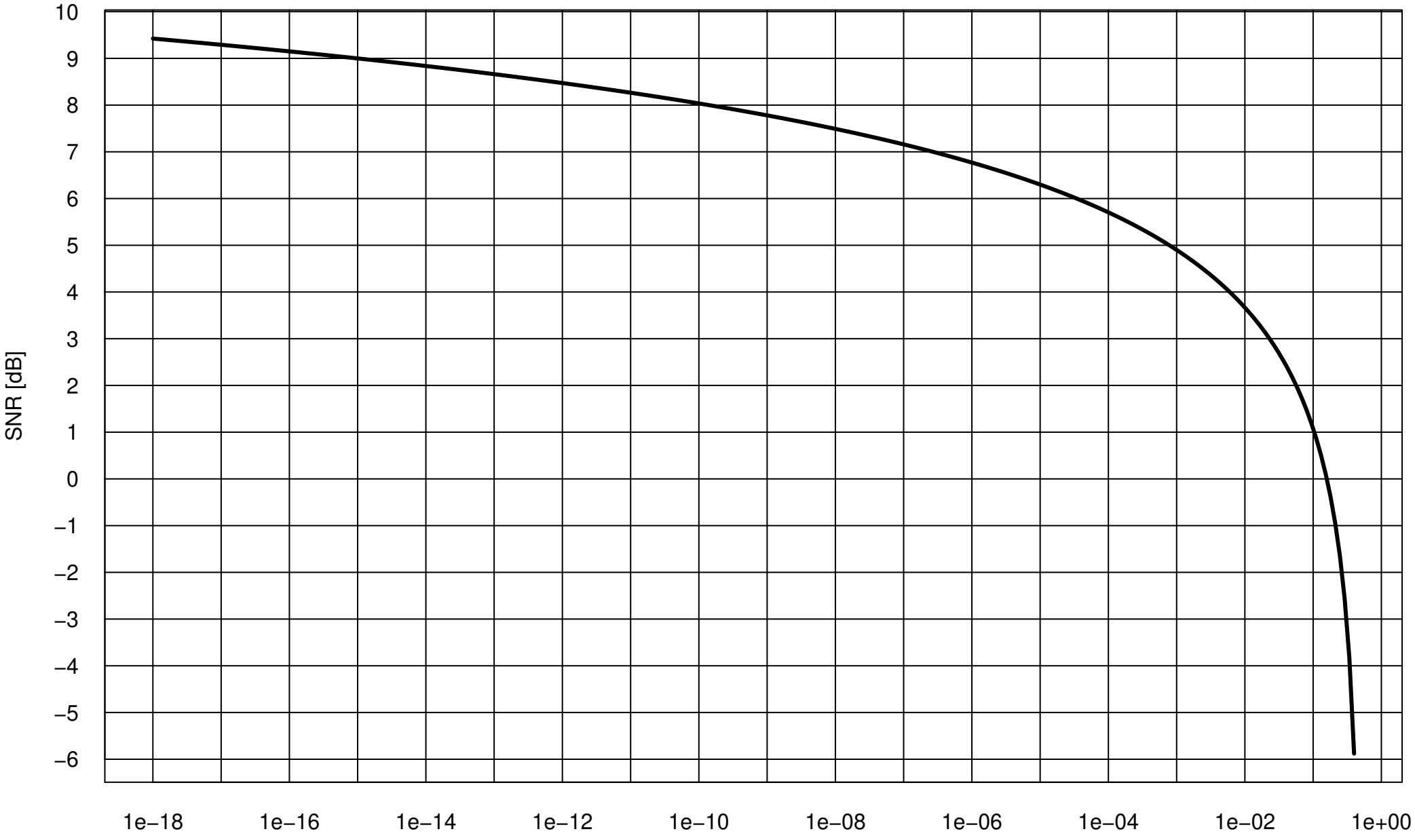

new.dat filtered (filter length 84) SNR
Number of samples [%]
0
20
40
60
80
100
5.0
5.2
5.4
5.6
SNR [dB]
Average SNR for 5MHz is 4.9 dB, for 10Mhz is 5.67 dB.


new.dat filtered (filter length 84) packetloss
Packetloss at 10MHz [%]
20.5
21.0
21.5
22.0
22.5
23.0
23.5
88.0
88.5
89.0
89.5
Packetloss at 5MHz [%]

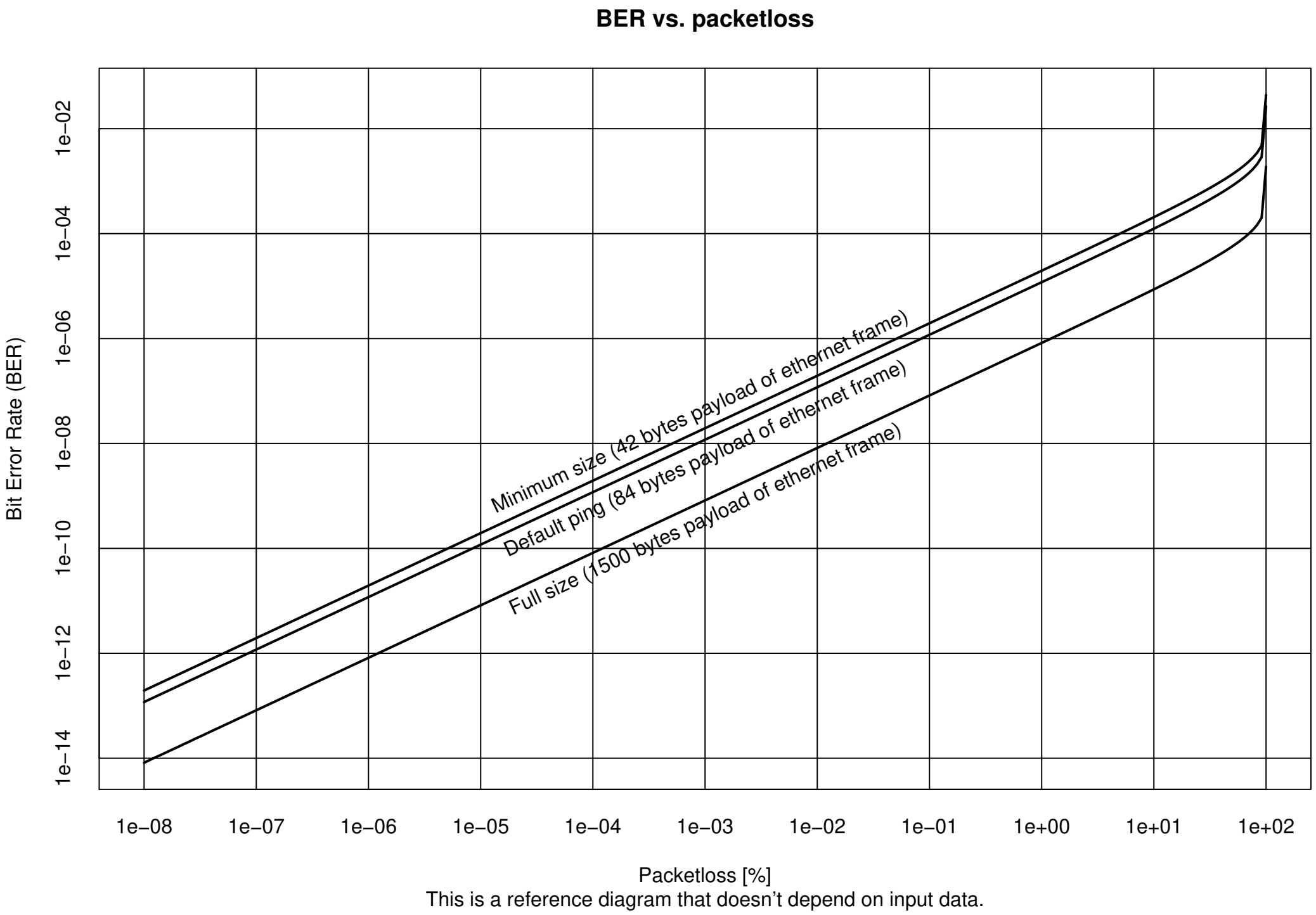

new.dat filtered (filter length 84) BER
BER at 10MHz
0.000105
0.000110
0.000115
0.000120
0.00094
0.00096
0.00098
0.00100
0.00102
BER at 5MHz

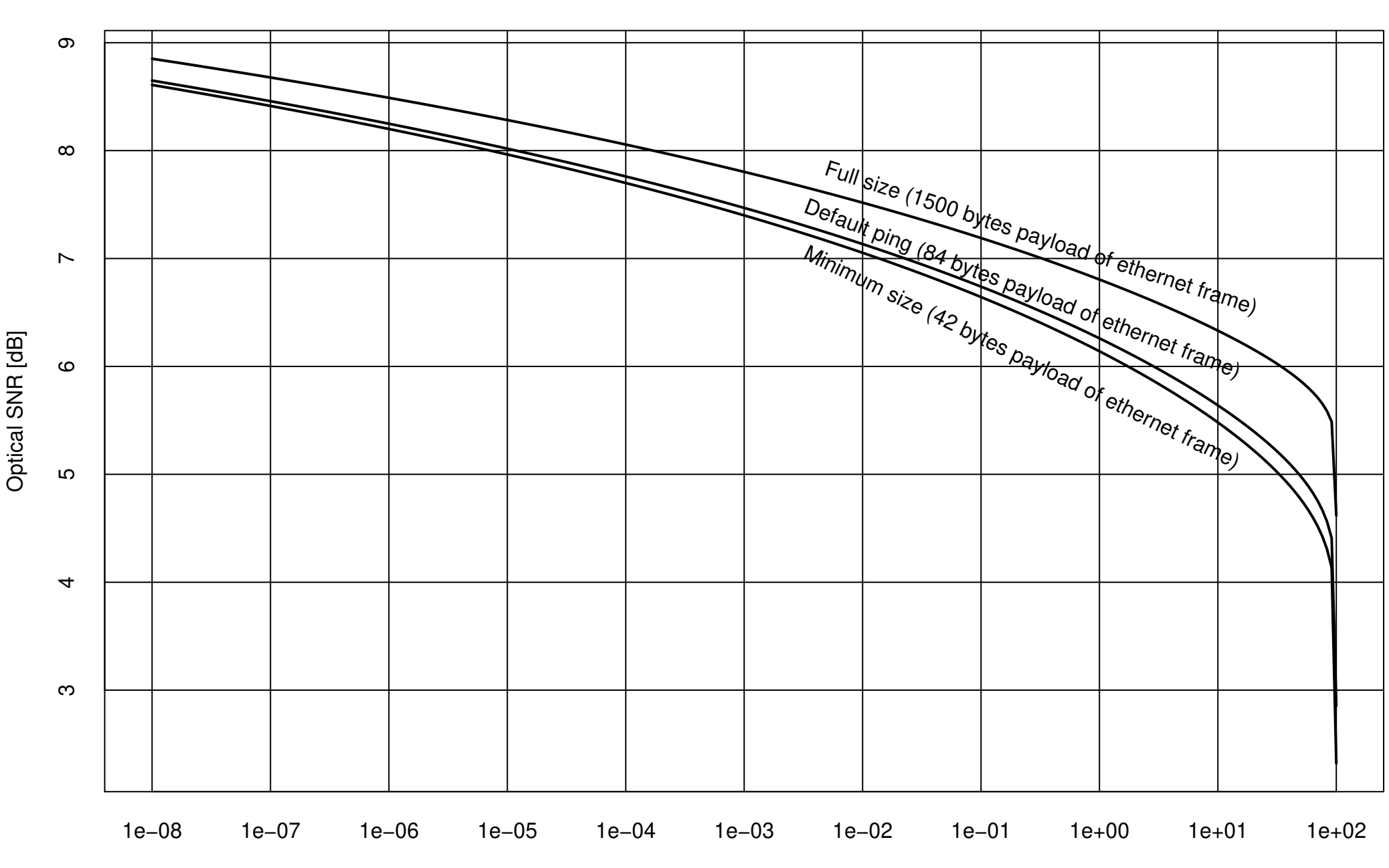

new.dat filtered (filter length 84) SNR
SNR at 10MHz [dB]
5.65
5.66
5.67
5.68
5.69
4.89
4.90
4.91
4.92
SNR at 5MHz [dB]

Signal to Noise Ratio (SNR) vs. Bit Error Rate (BER)



This is a reference diagram that doesn’t depend on input data.


BER vs. packetloss
Bit Error Rate (BER)
1e−02
1e−04
1e−06
1e−08
1e−10
1e−12
1e−14
Minimum size (42 bytes payload of ethernet frame)
Default ping (84 bytes payload of ethernet frame)
Full size (1500 bytes payload of ethernet frame)
1e−08
1e−07
1e−06
1e−05
1e−04
1e−03
1e−02
1e−01
1e+00
1e+01
1e+02
Packetloss [%]
This is a reference diagram that doesn’t depend on input data.


Optical SNR vs. packetloss
Optical SNR [dB]
9
8
7
6
5
4
3
Full size (1500 bytes payload of ethernet frame)
Default ping (84 bytes payload of ethernet frame)
Minimum size (42 bytes payload of ethernet frame)
1e−08
1e−07
1e−06
1e−05
1e−04
1e−03
1e−02
1e−01
1e+00
1e+01
1e+02
Packetloss [%]
This is a reference diagram that doesn’t depend on input data.