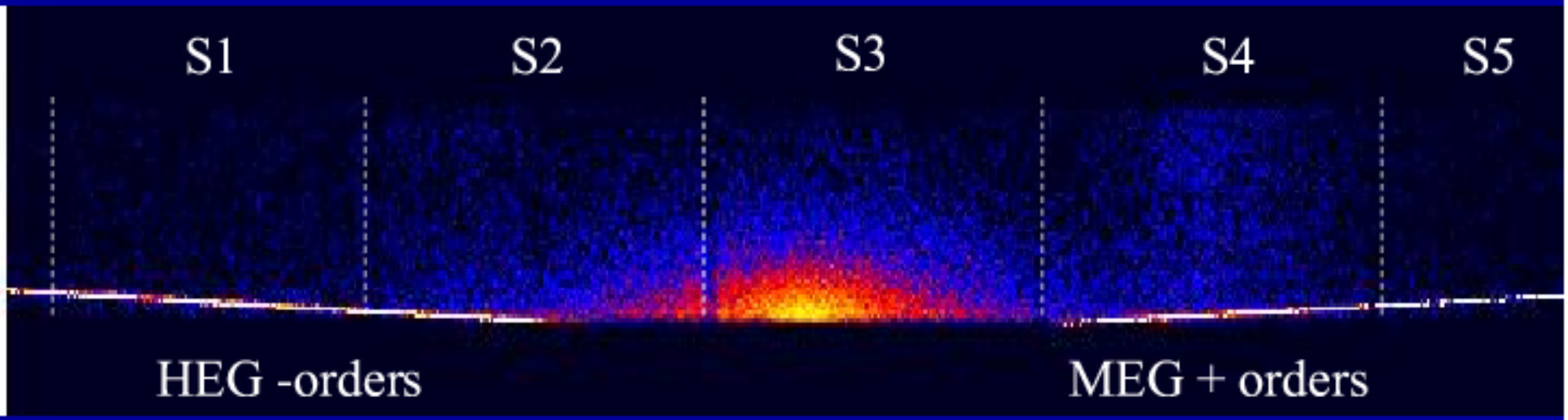
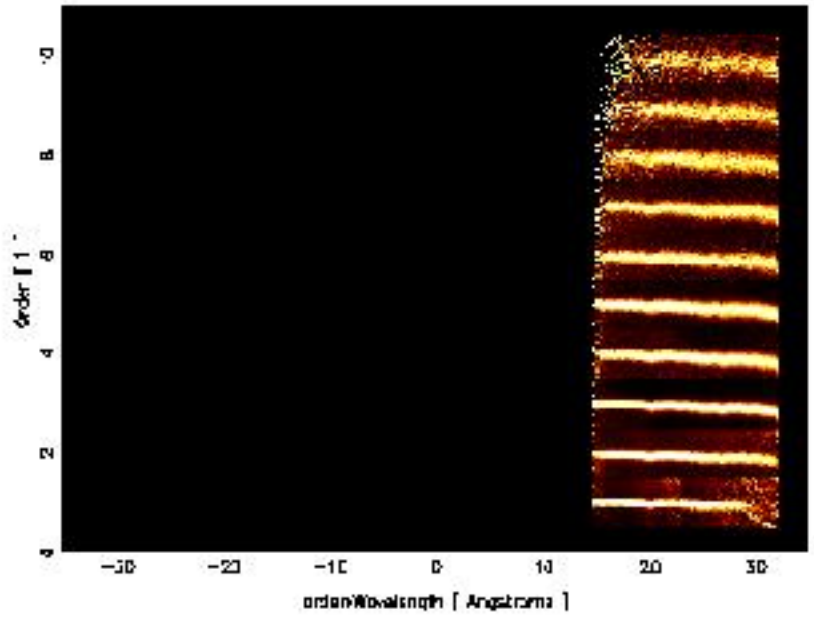
Constraints on higher orders using Sco X-1

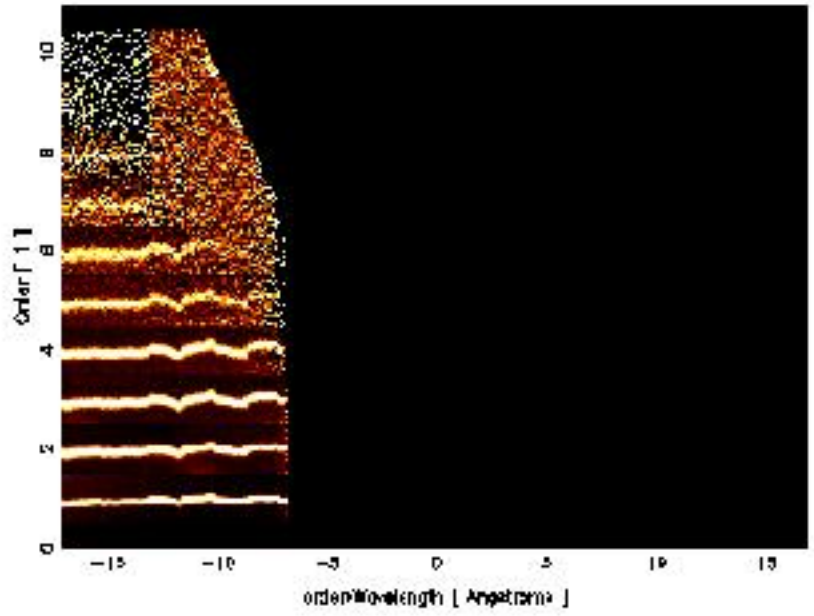


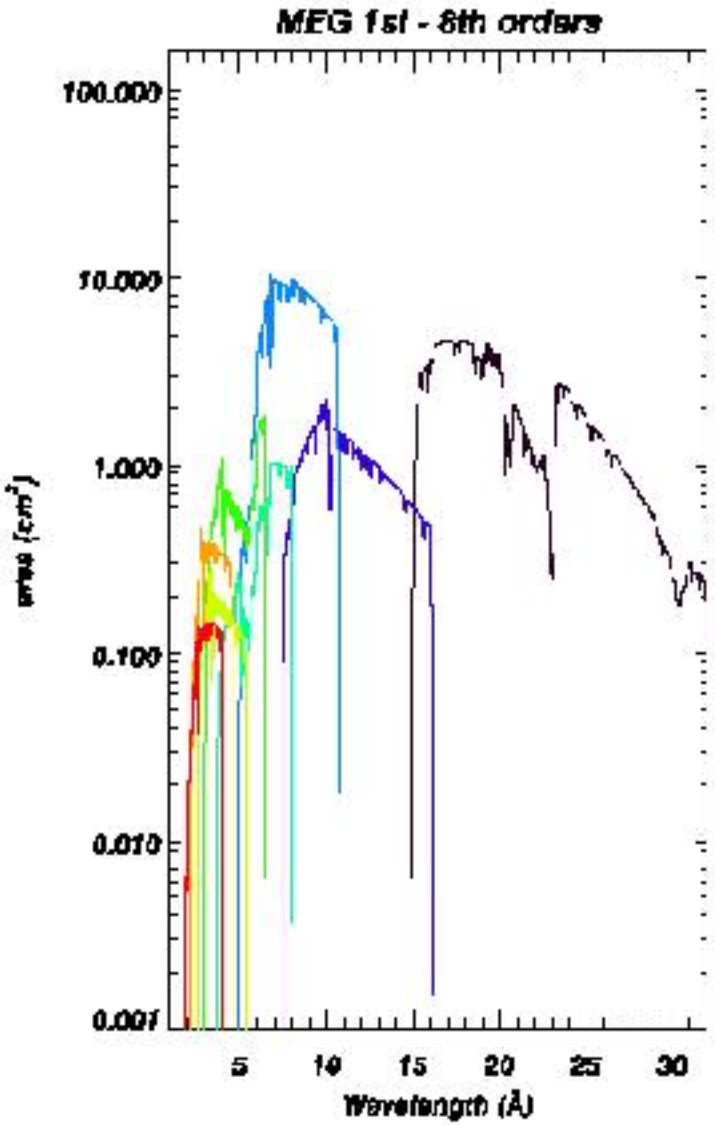
Norbert S. Schulz
&
David P. Huenemoerder

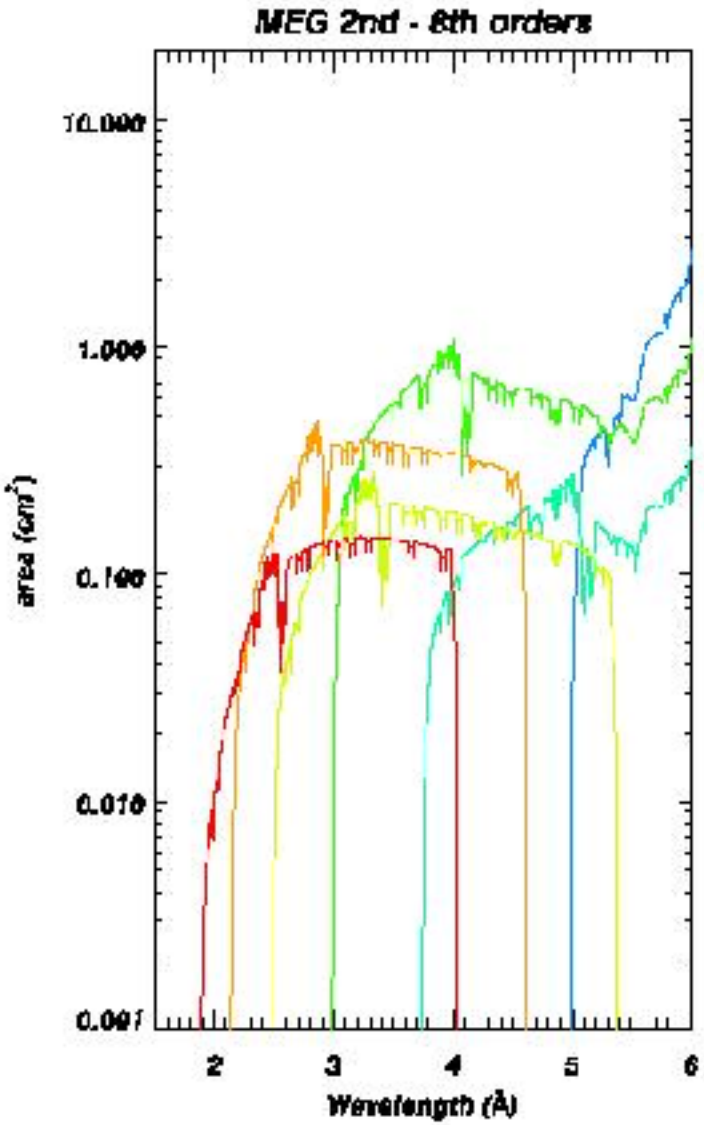
MEG 1–10

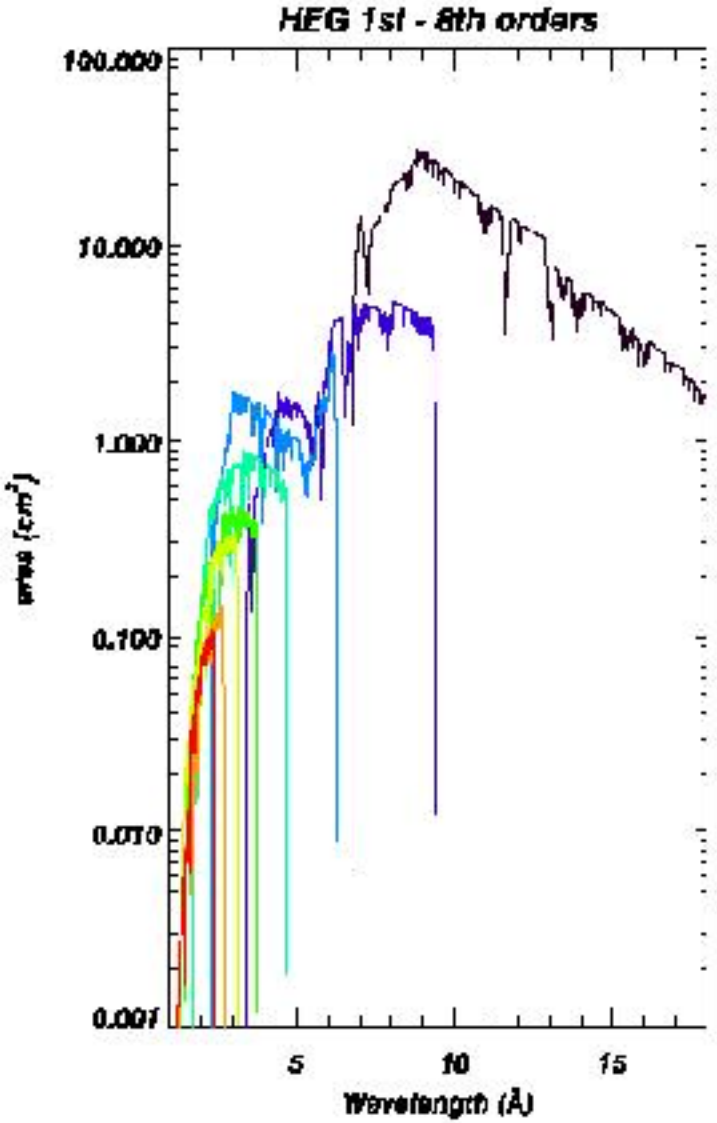


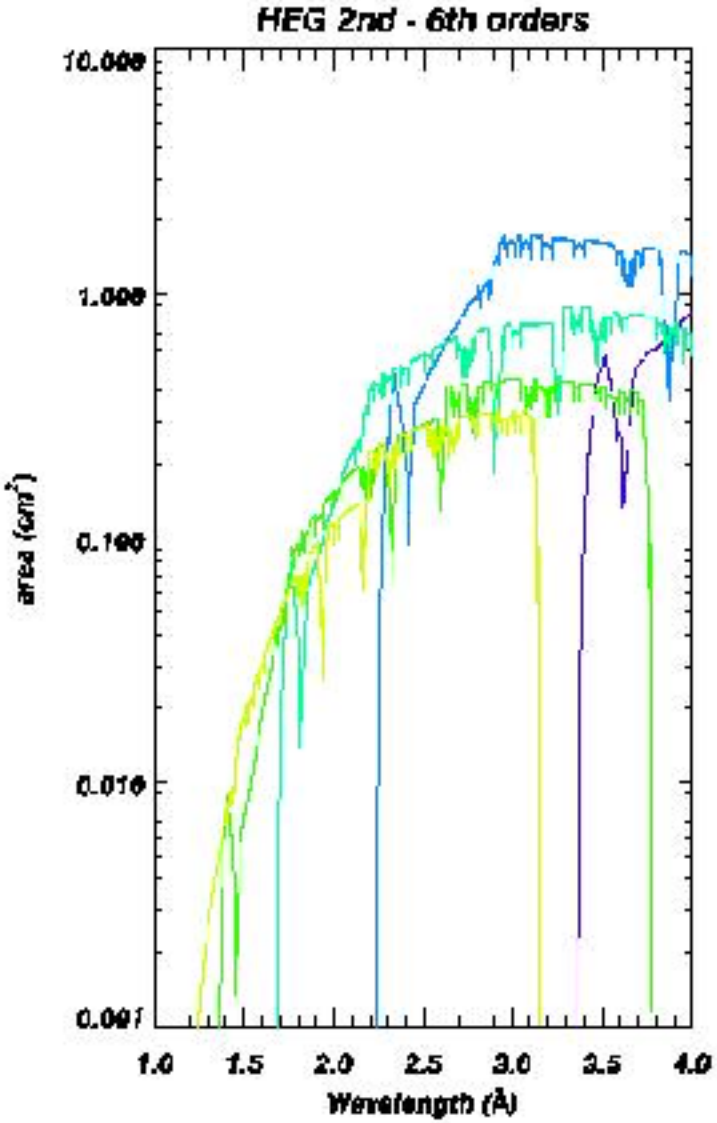
HEG 1–10

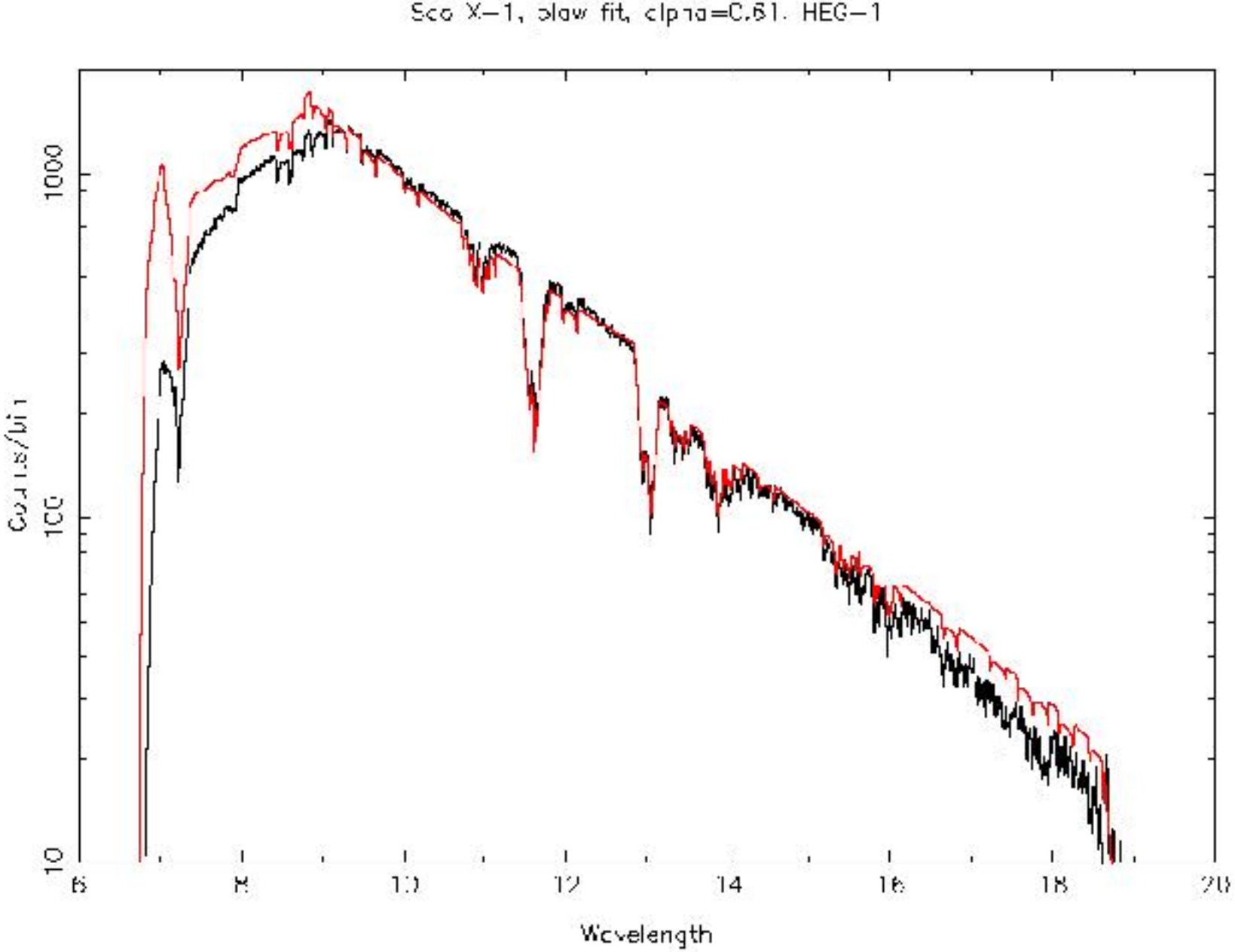


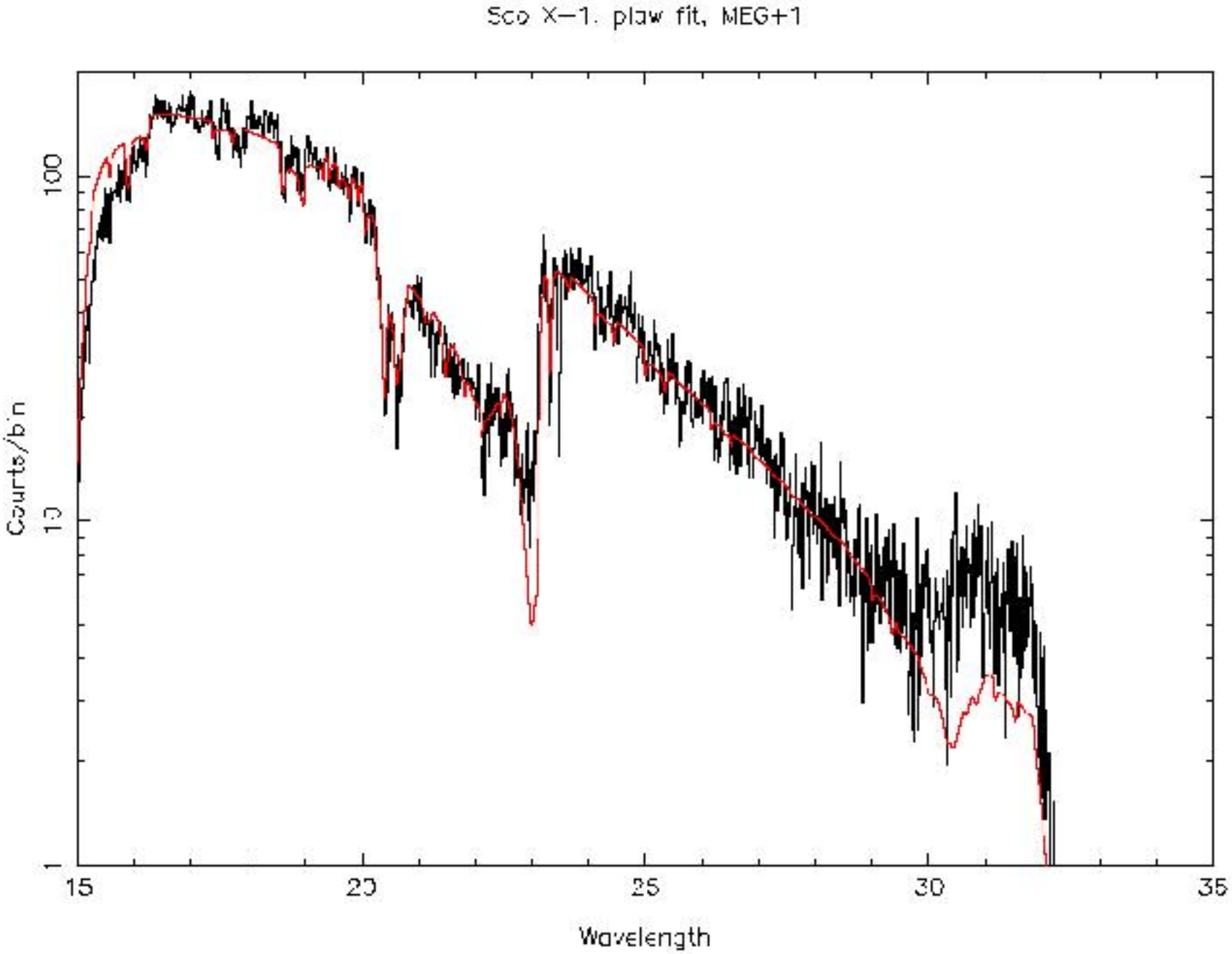

MEG 1st - 6th orders
100.000
10.000
1.000
0.100
0.010
0.001
area (cm²)
5
10
15
20
25
30
Wavelength (Å)

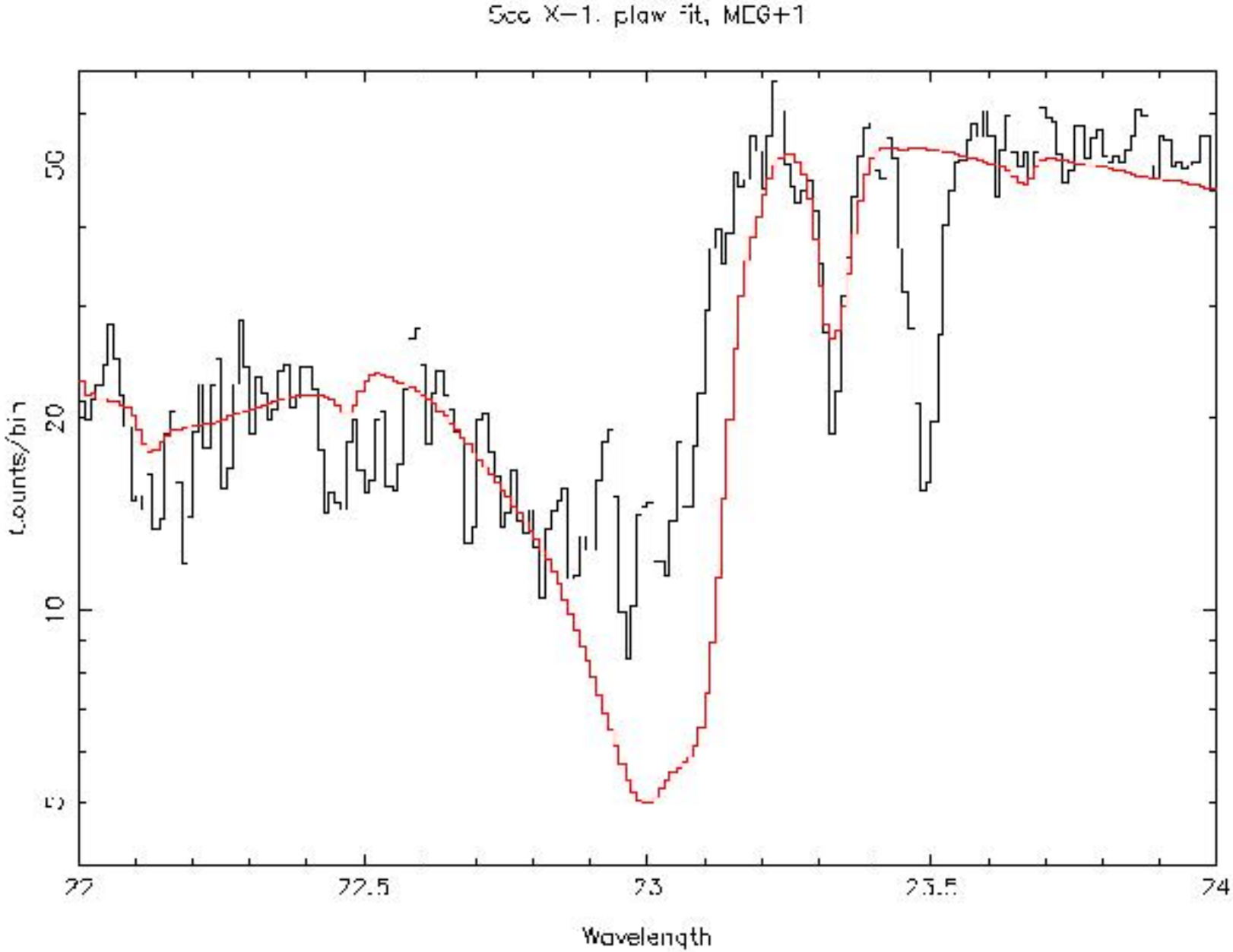

MEG 2nd - 6th orders
10.000
1.000
0.100
0.010
0.001
area (cm²)
2
3
4
5
6
Wavelength (Å)

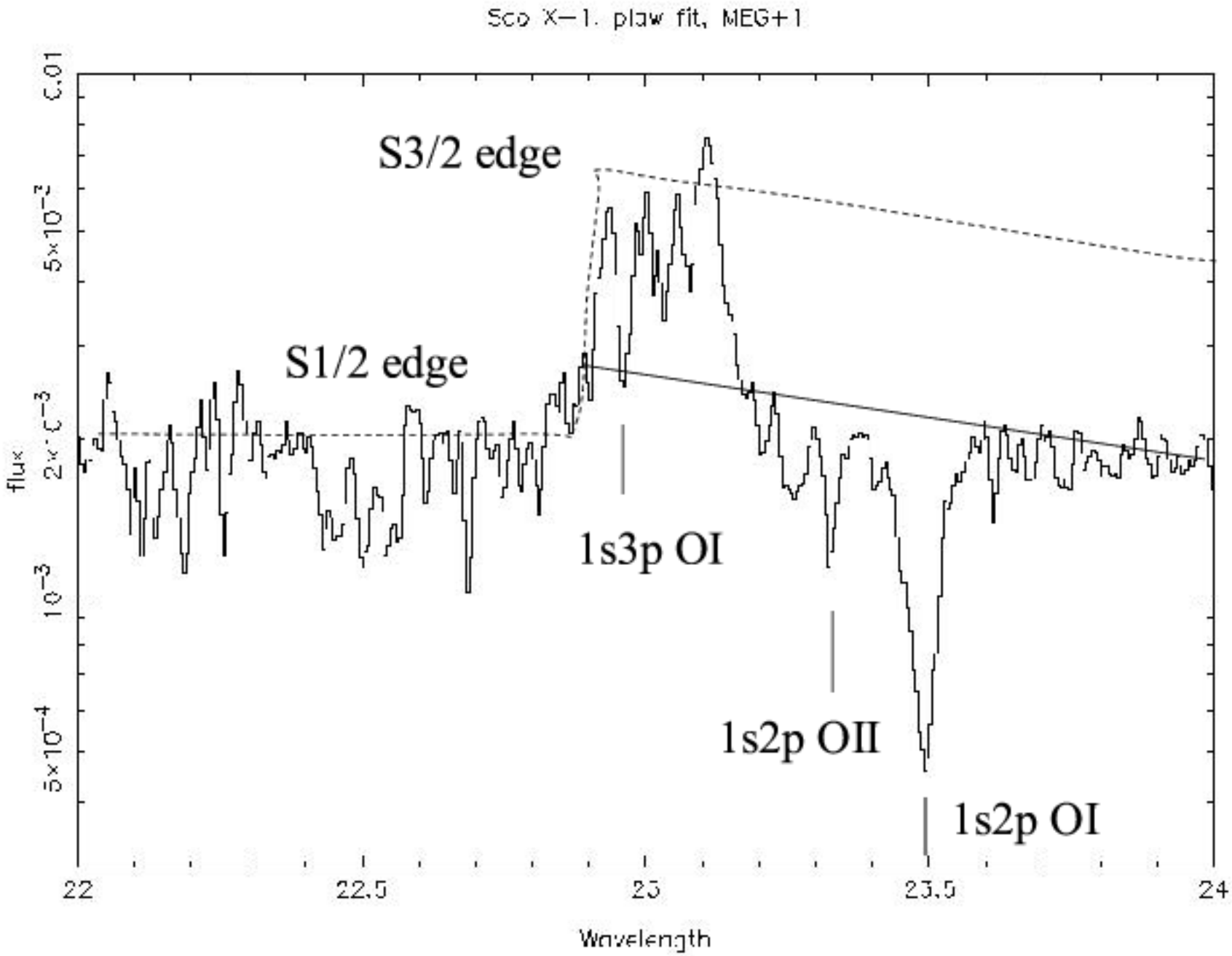

HEG 1st - 8th orders
100.000
10.000
1.000
0.100
0.010
0.001
area (cm²)
5
10
15
Wavelength (Å)

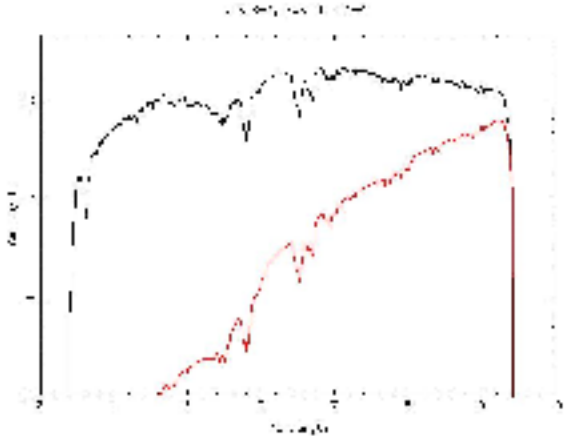

HEG 2nd - 6th orders
10.000
1.000
0.100
0.010
0.001
area (cm²)
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Wavelength (Å)

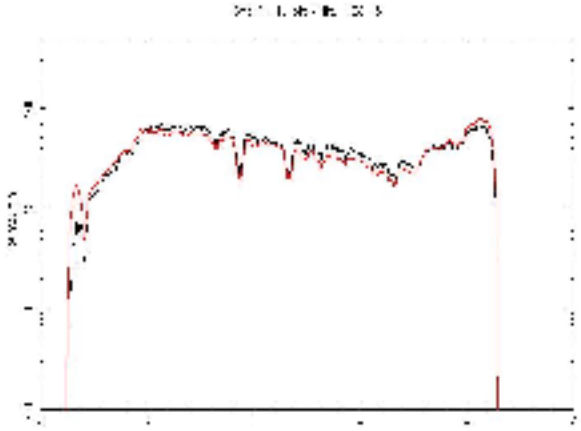

Sco X-1, plaw fit, alpha=0.61. HEG-1
1000
100
10
6
8
10
12
14
16
18
20
Wavelength

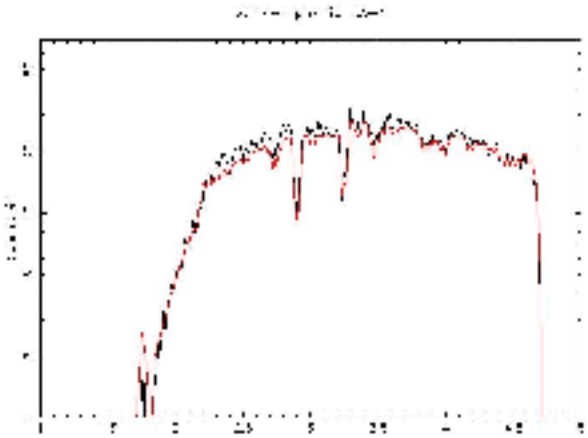

Sco X-1, plaw fit, MEG+1
100
10
1
Counts/bin
15
20
25
30
35
Wavelength

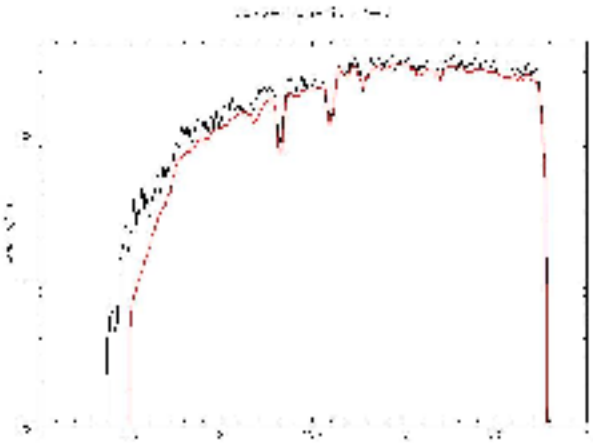

Sco X-1, plaw fit, MEG+1
Counts/bin
50
20
10
5
22
22.5
23
23.5
24
Wavelength

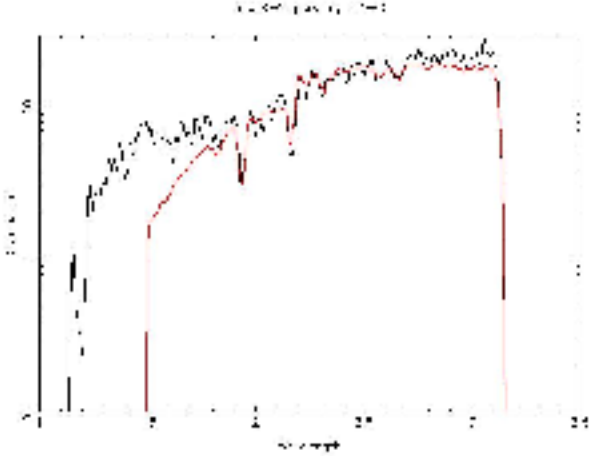

Sco X-1, plaw fit, MEG+1
S3/2 edge
S1/2 edge
1s3p OI
1s2p OII
1s2p OI
flux
Wavelength
22
22.5
23
23.5
24

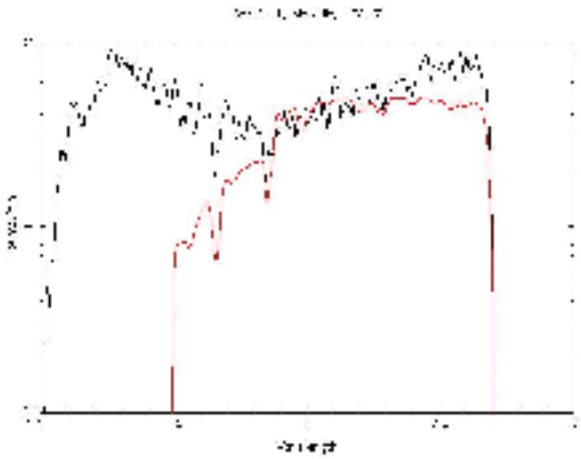


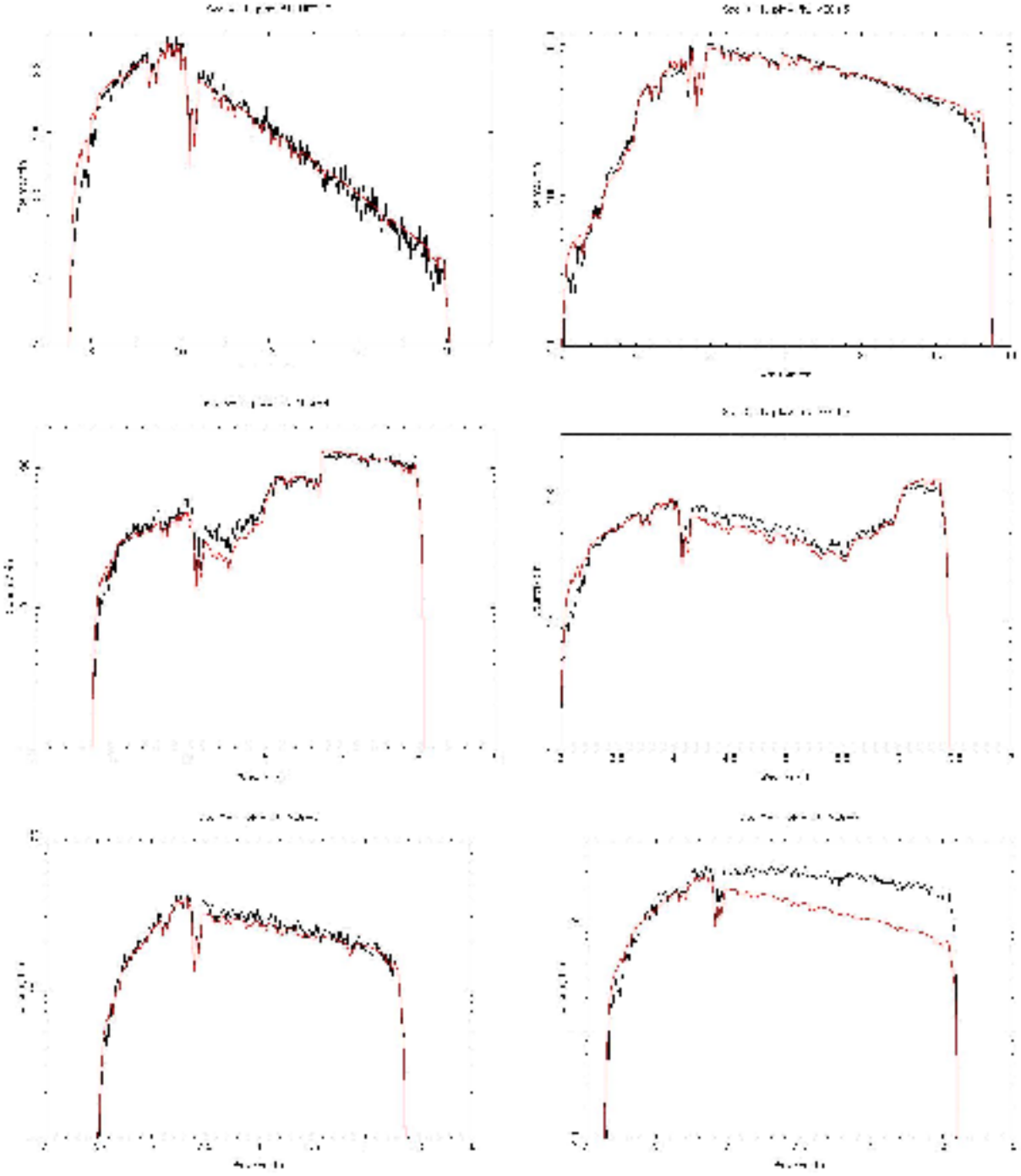


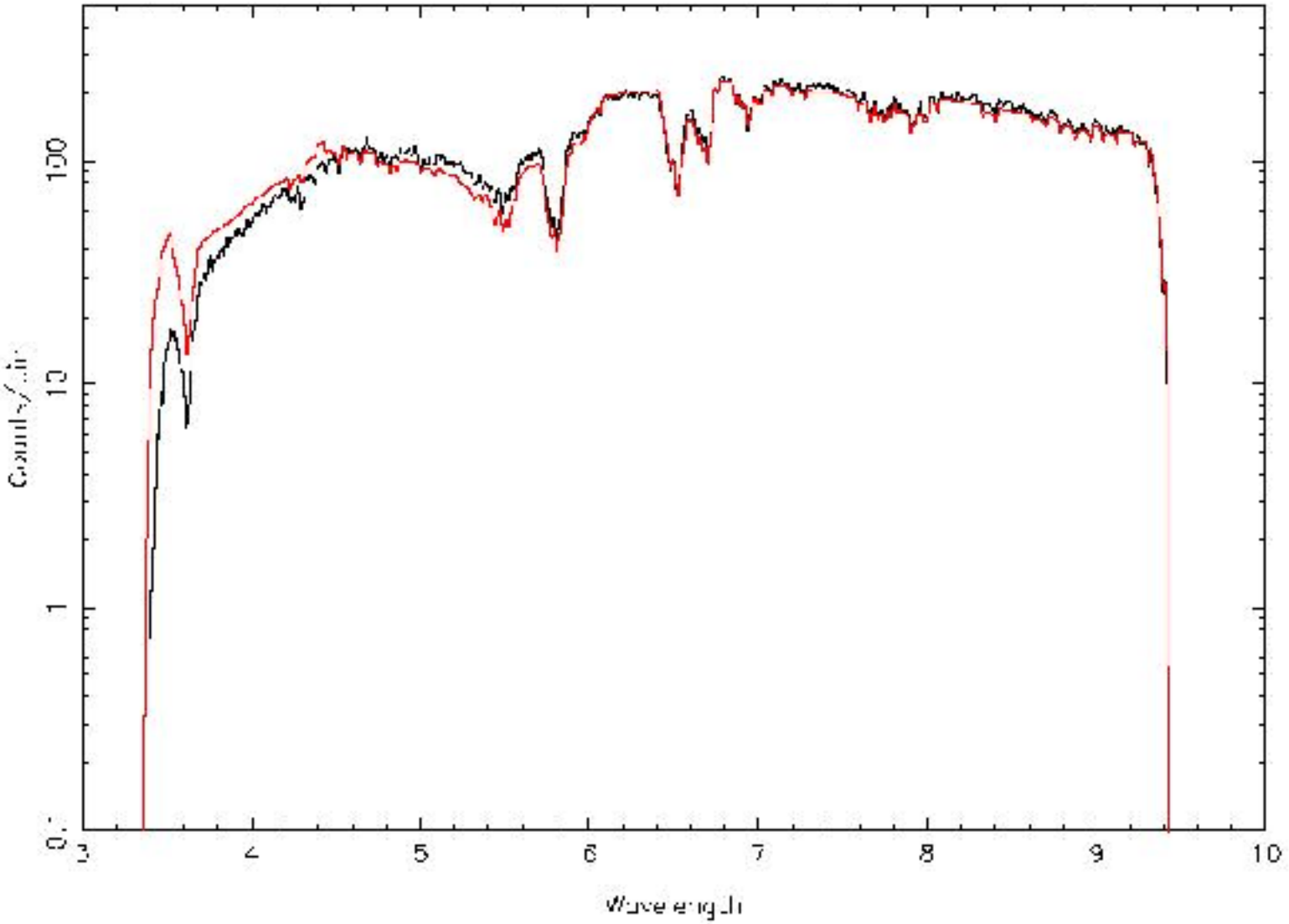




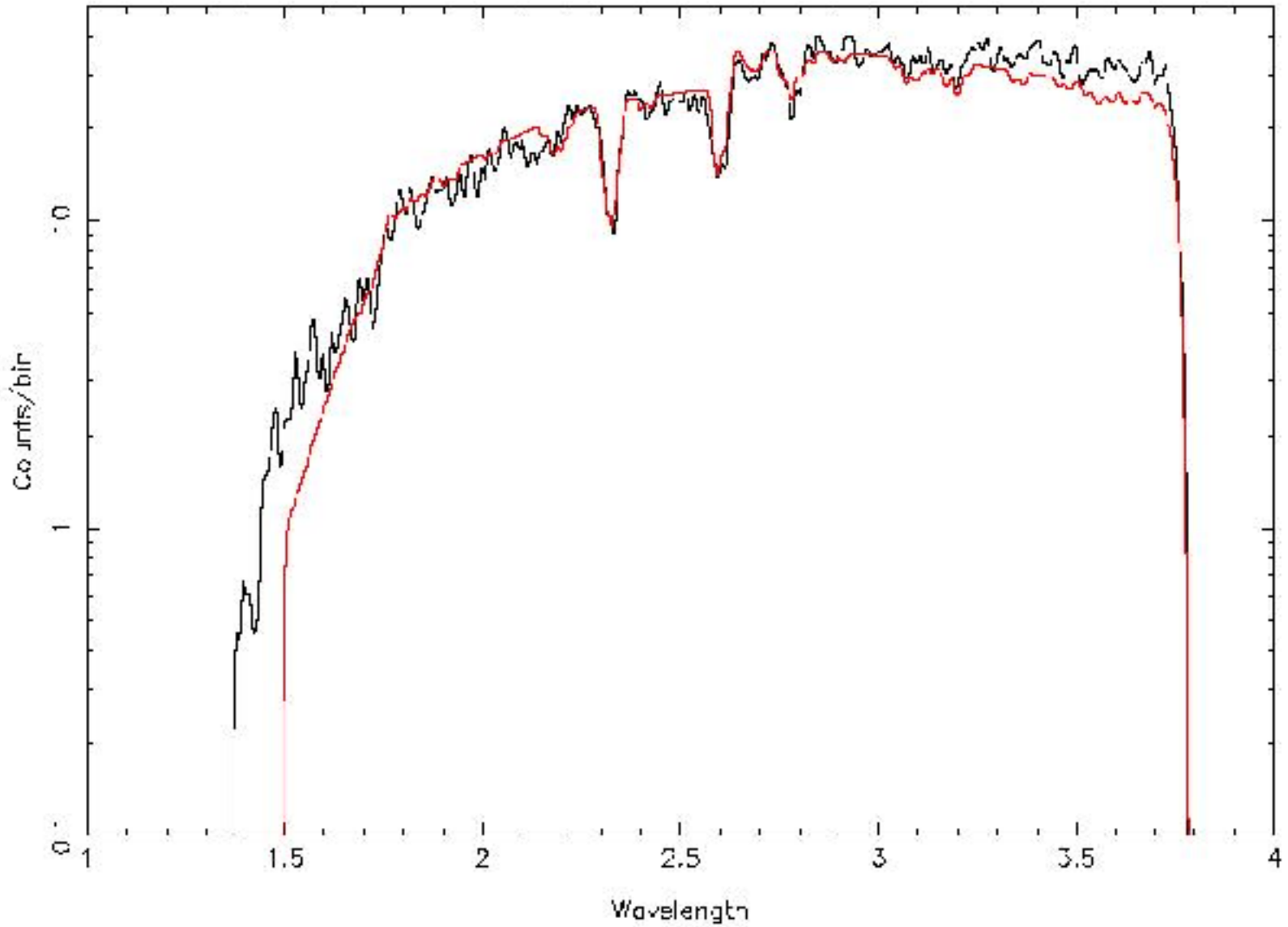




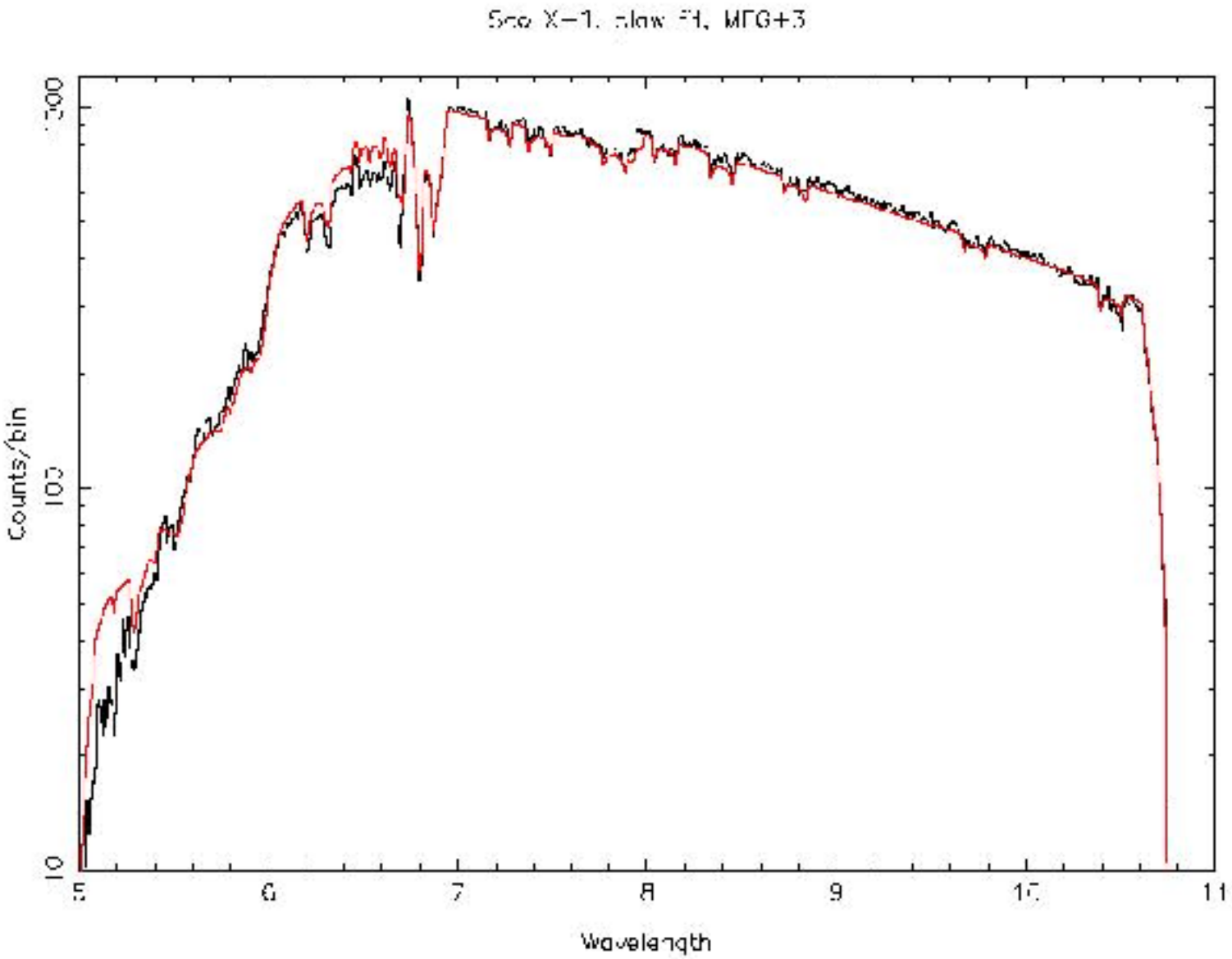




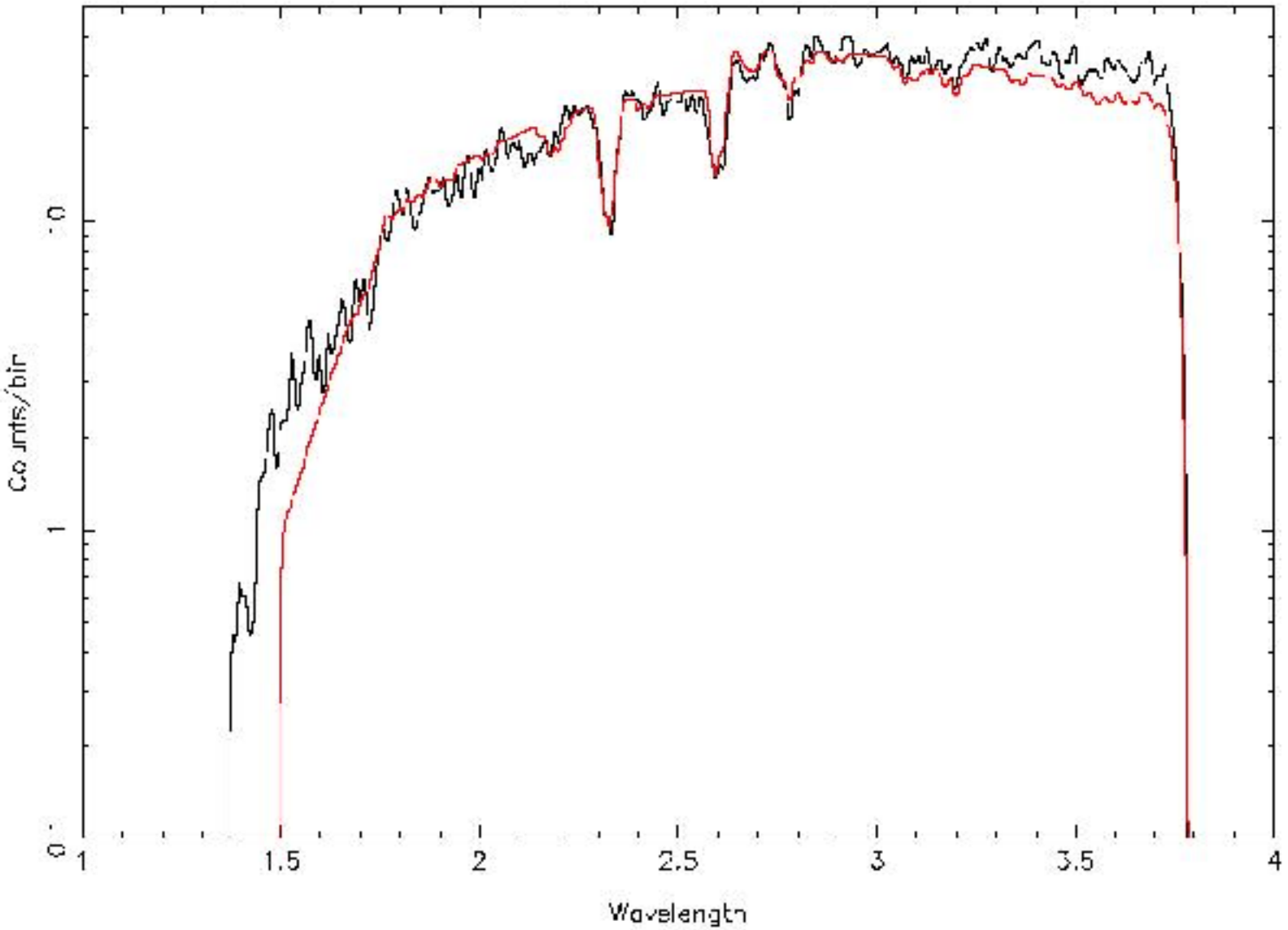
MEG 2nd order, wabs+plaw, index=-1.2, log NH = 21.3



MEG 4th order, wabs+plaw, index=-1.2, log NH = 21.3



HEG 3rd order, wabs+plaw, index=-1.2, log NH = 21.3



HEG 5th order, wabs+plaw, index=-1.2, log NH = 21.3

Fit Luminosities in various MEG and HEG orders: