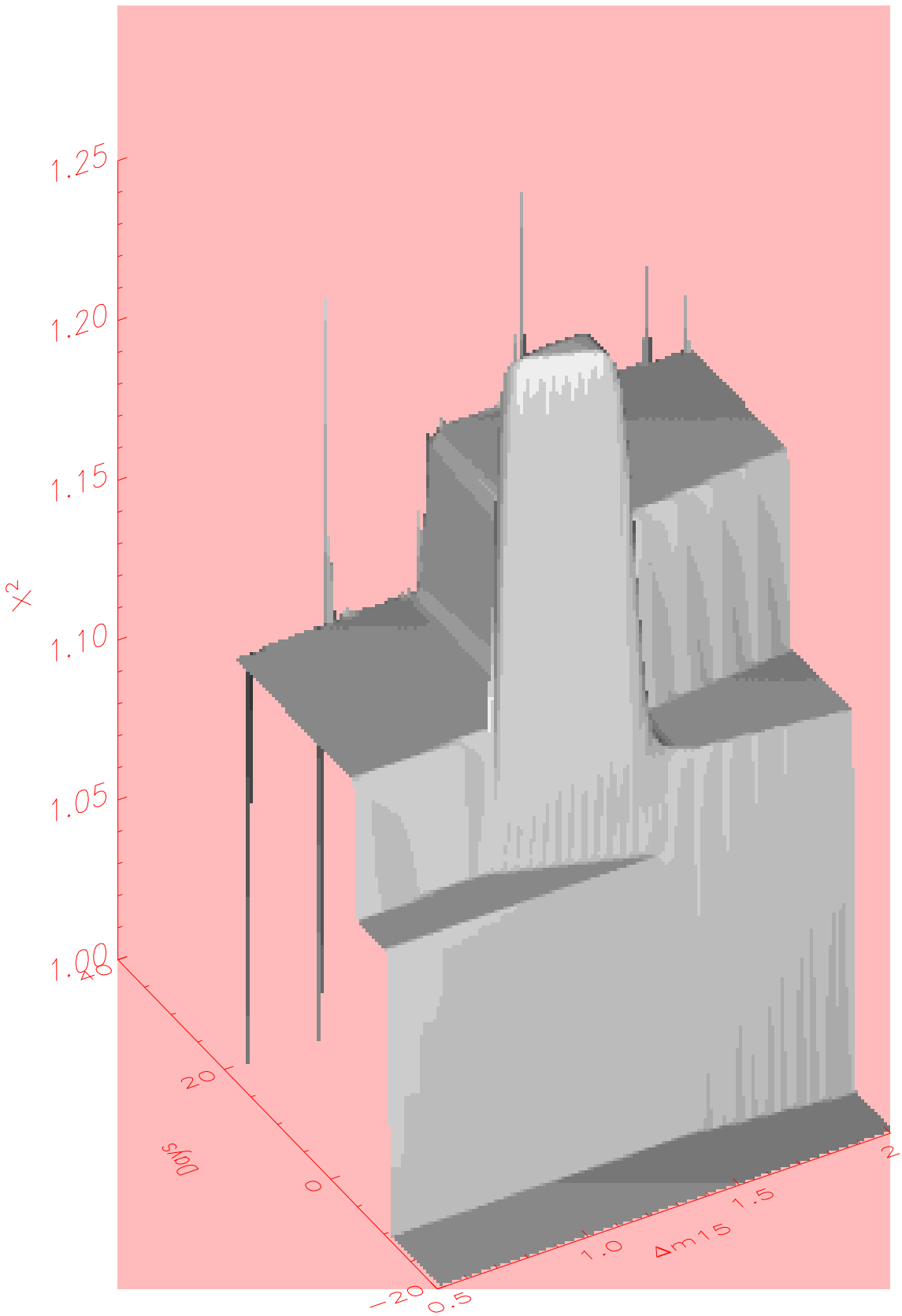
1.1 1.2

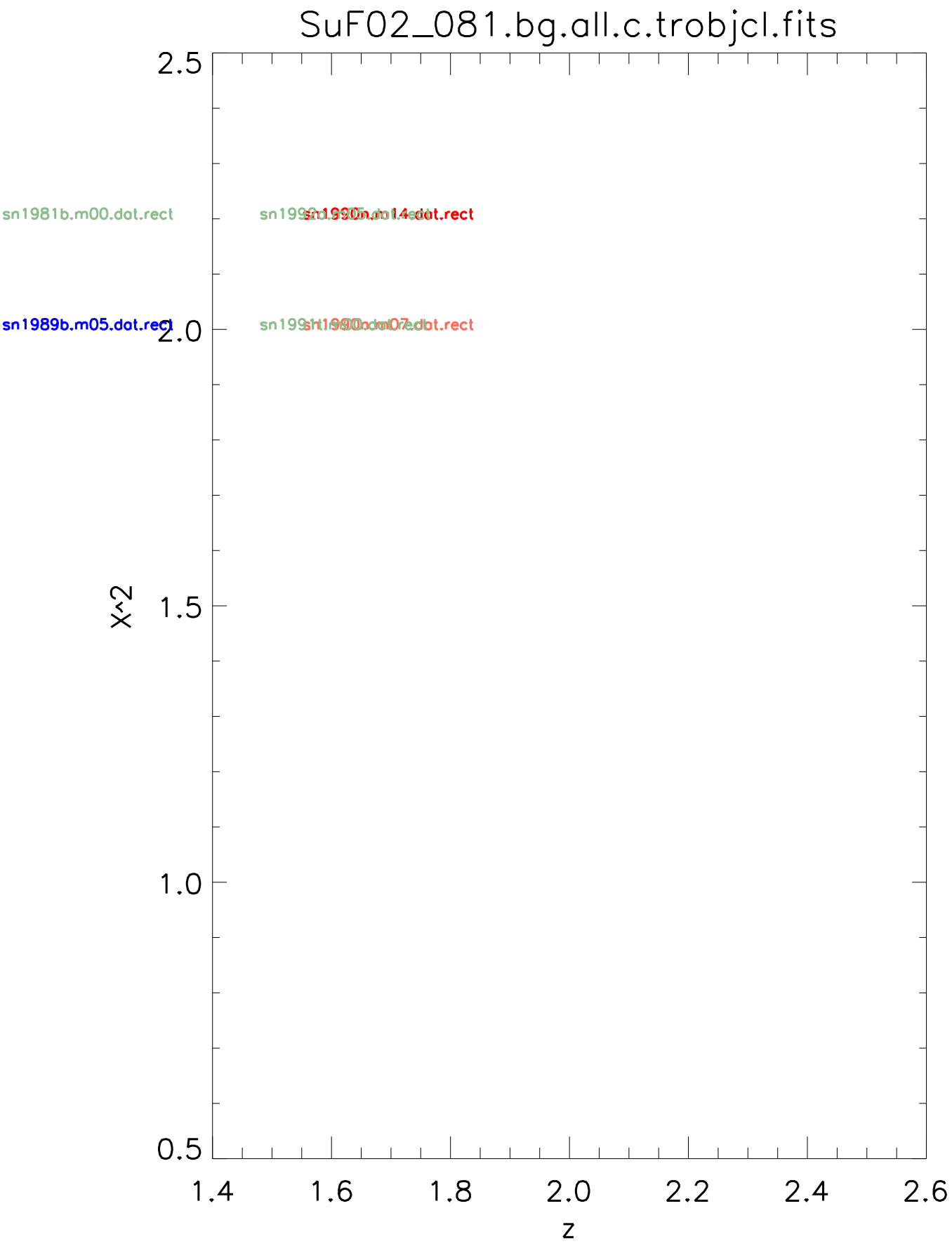
1.2 1.1

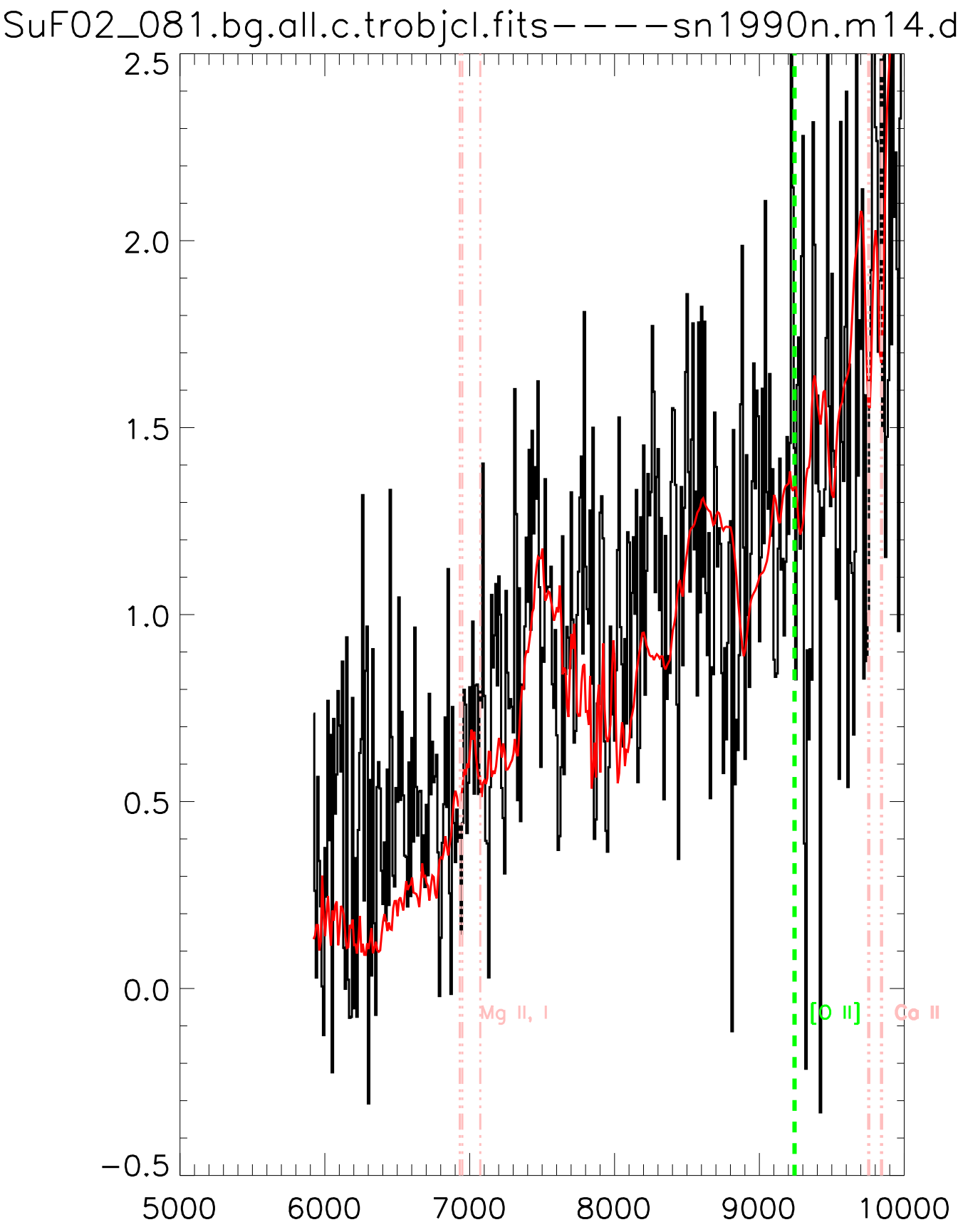
1.1

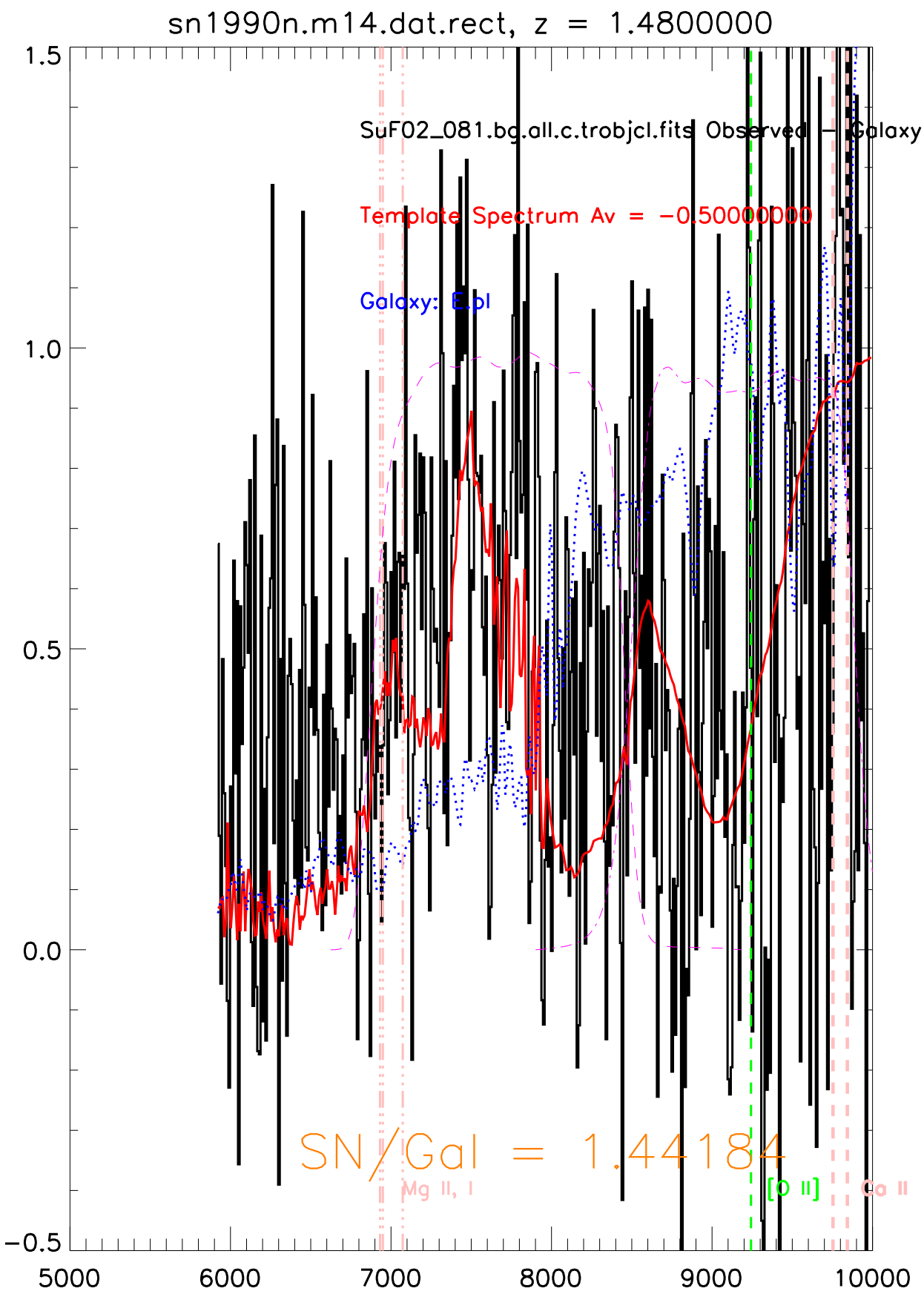
1.0

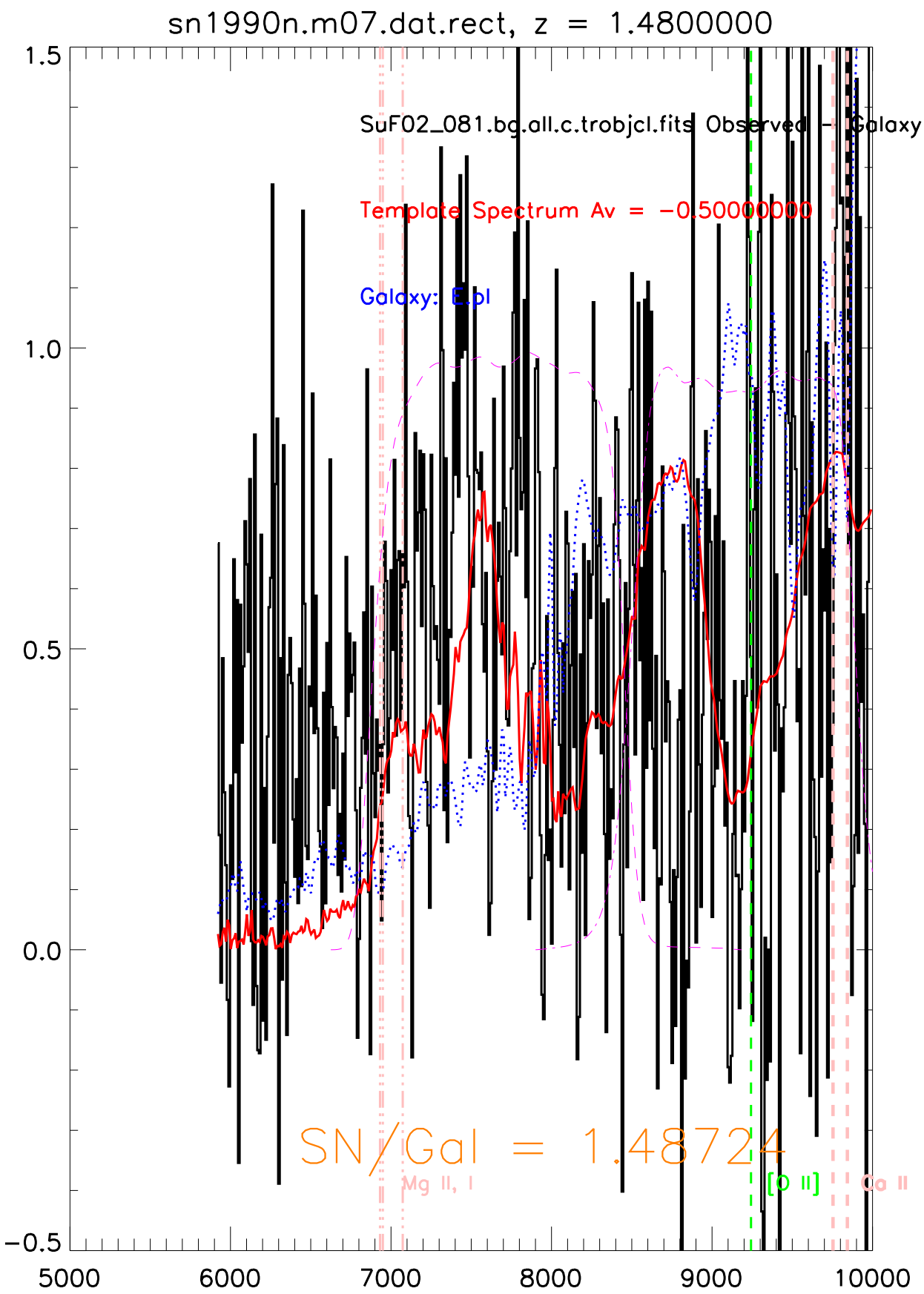


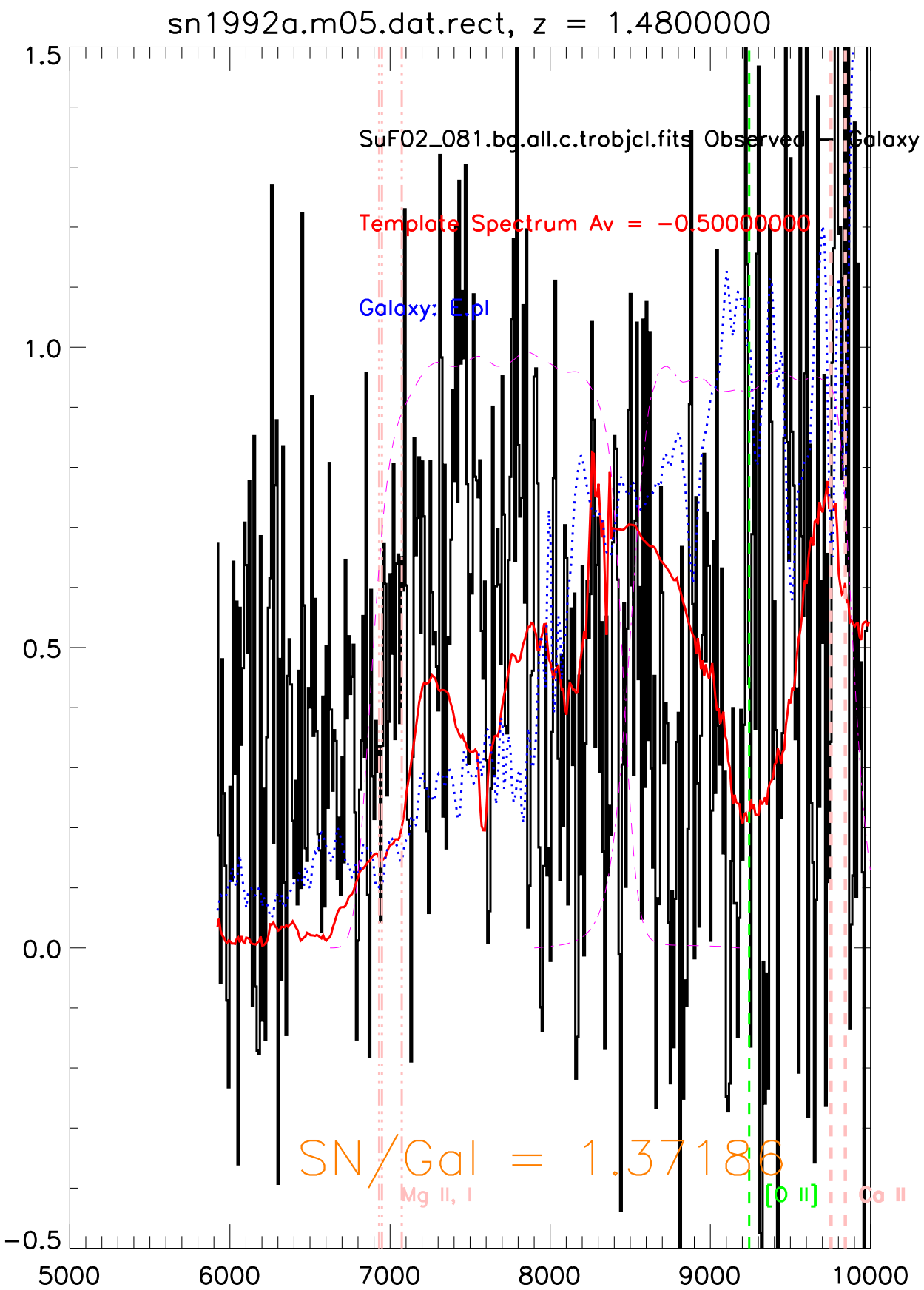
1.25
1.20
1.15
1.10
1.05
1.00
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

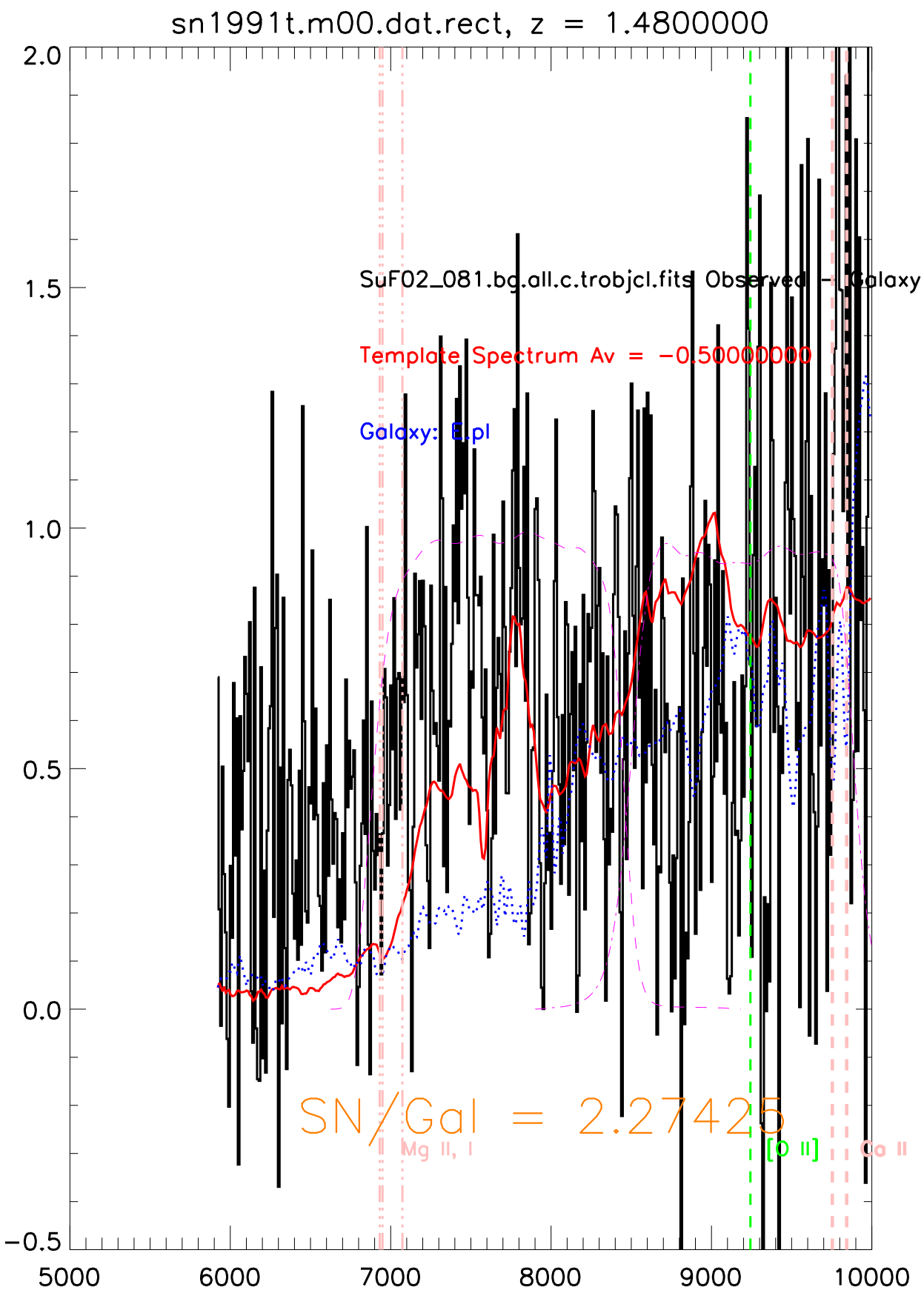

SuF02_081.bg.all.c.trobjcl.fits
sn1981b.m00.dot.rect
sn1989b.m05.dot.rect
2.5
2.0
1.5
1.0
0.5
X^2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
z

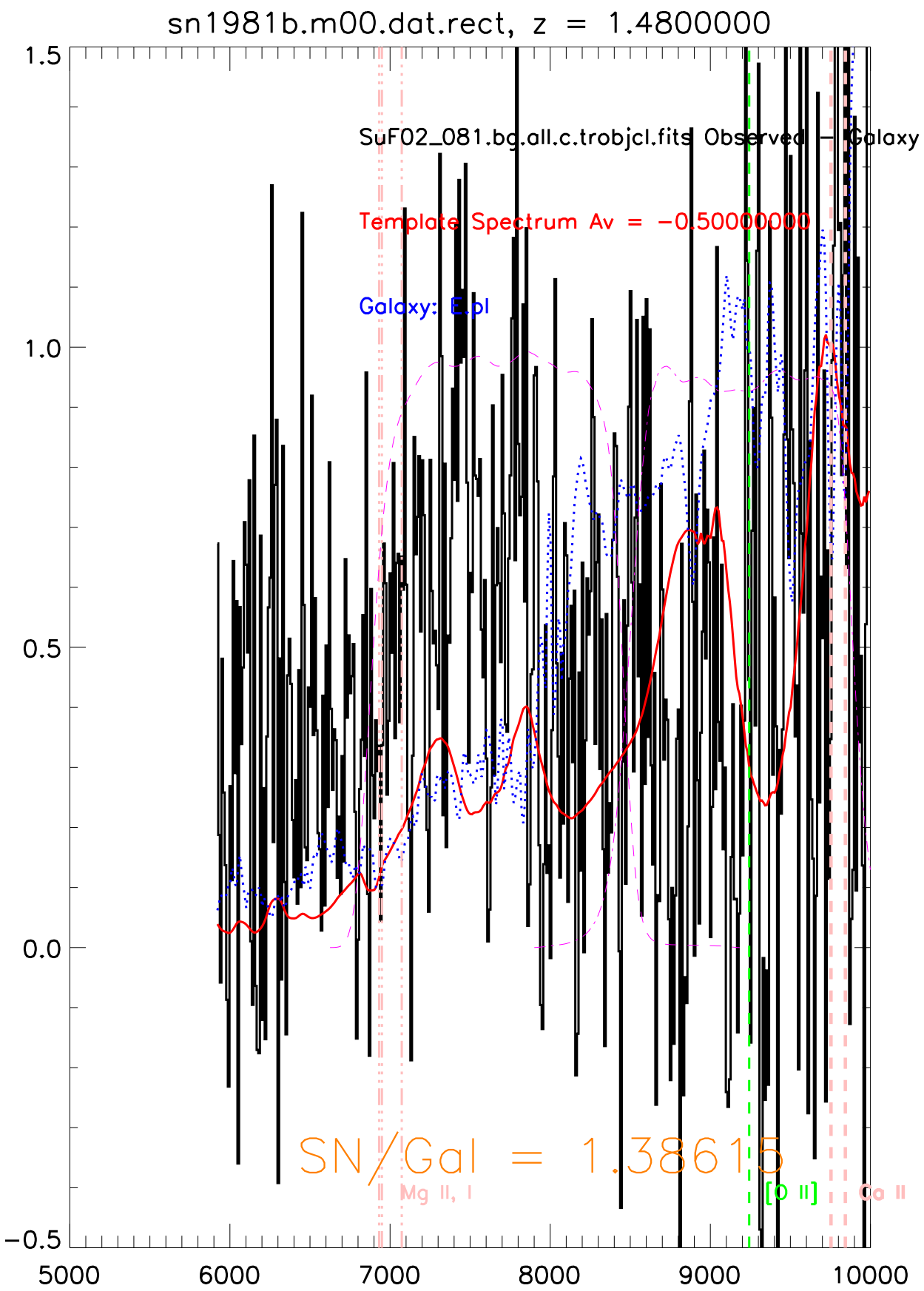

SuF02_081.bg.all.c.trobjcl.fits----sn1990n.m14.dat.rec
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000
Mg II, I
[O II]
Ca II

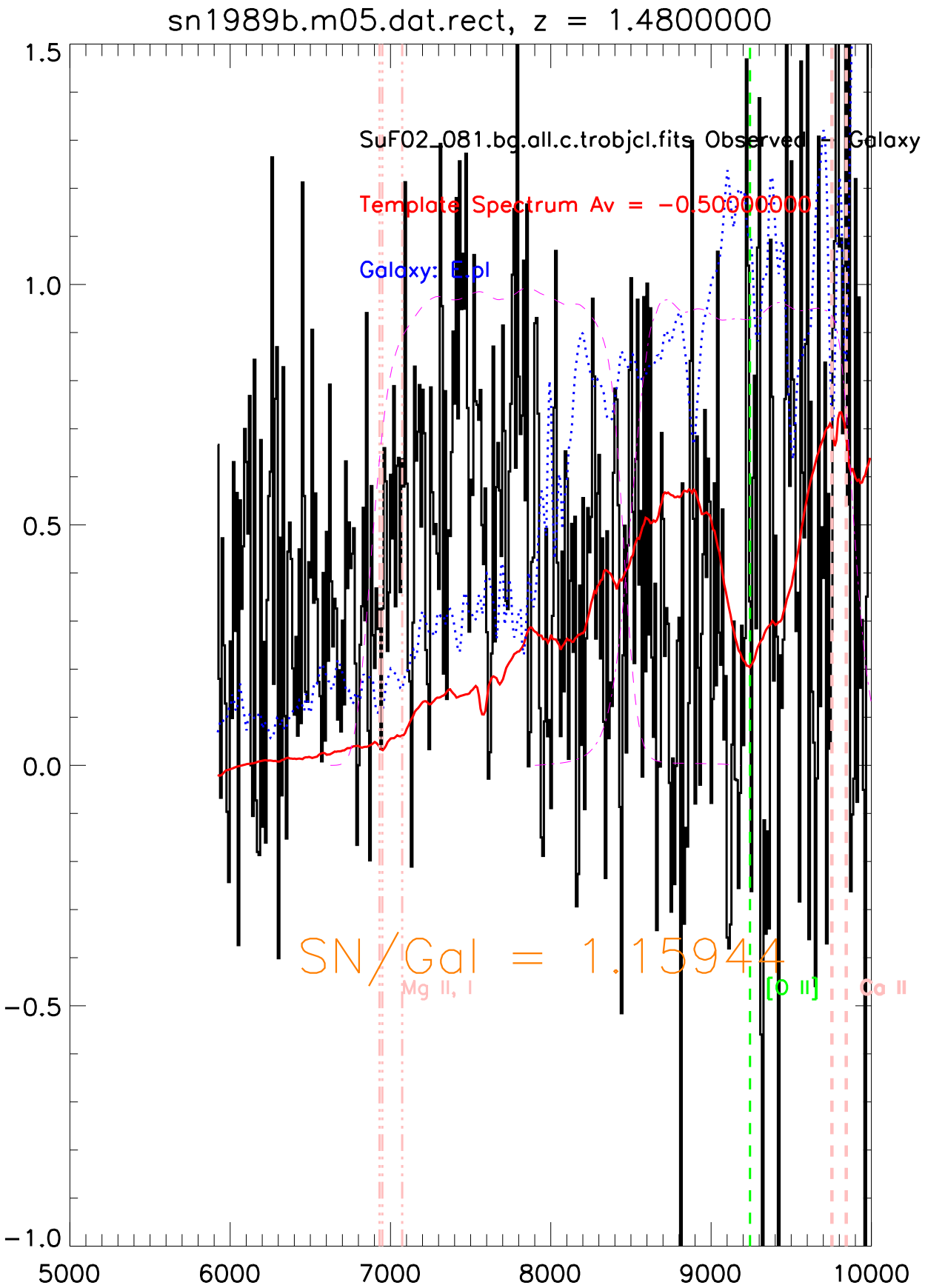

sn1990n.m14.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 1.44184
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1990n.m07.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: E.pl
SN/Gal = 1.48724
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
-0.5
5000
6000
7000
8000
9000
10000


sn1992a.m05.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 1.37186
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1991t.m00.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: E.pl
SN/Gal = 2.27425
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
-0.5
5000
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 1.38615
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1989b.m05.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobjcl.fits Observed - Galaxy
Template Spectrum Av = -0.500000000
Galaxy: E.pl
SN/Gal = 1.15944
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
−1.0
5000
6000
7000
8000
9000
10000