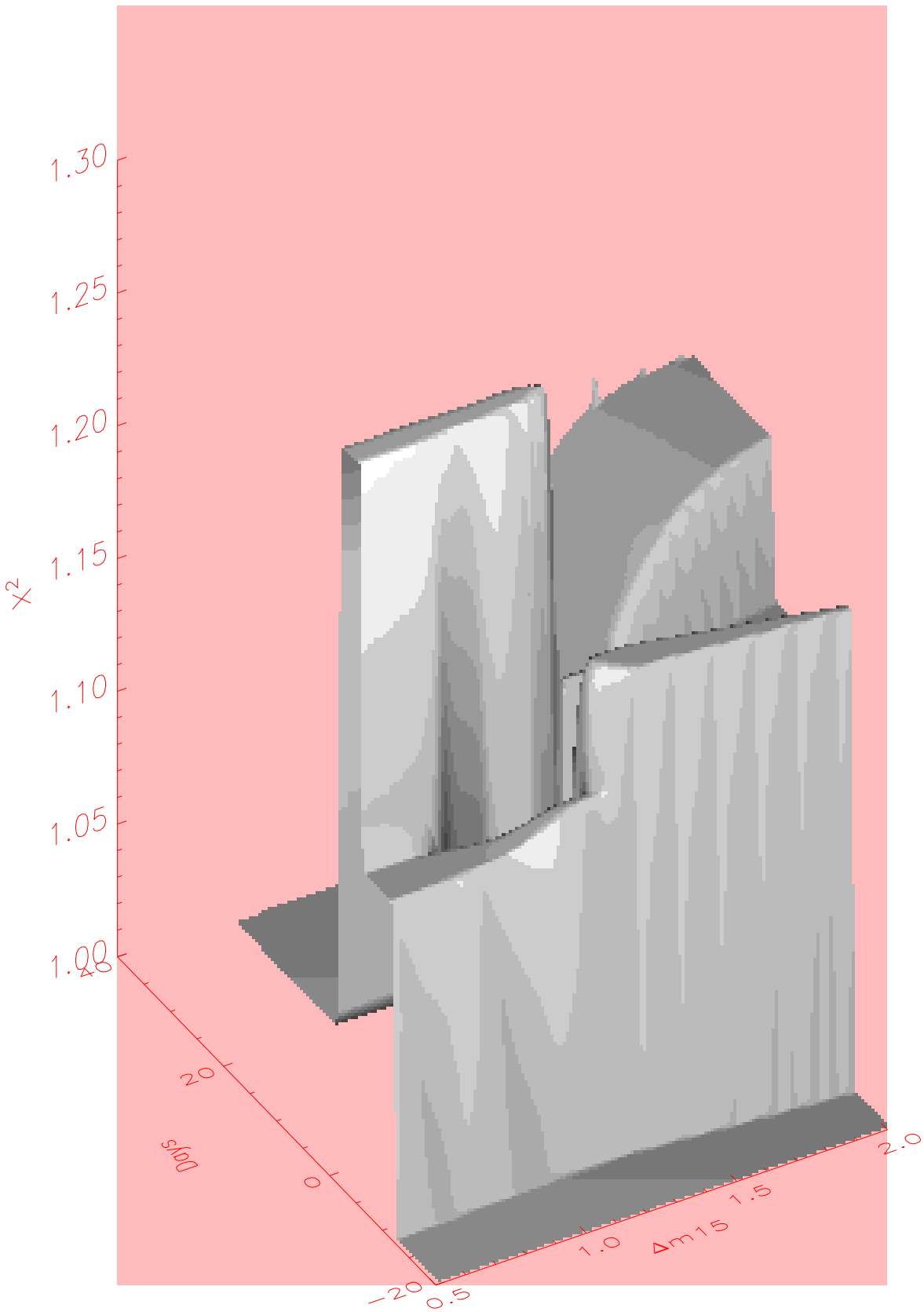
1.1 1112
1.2

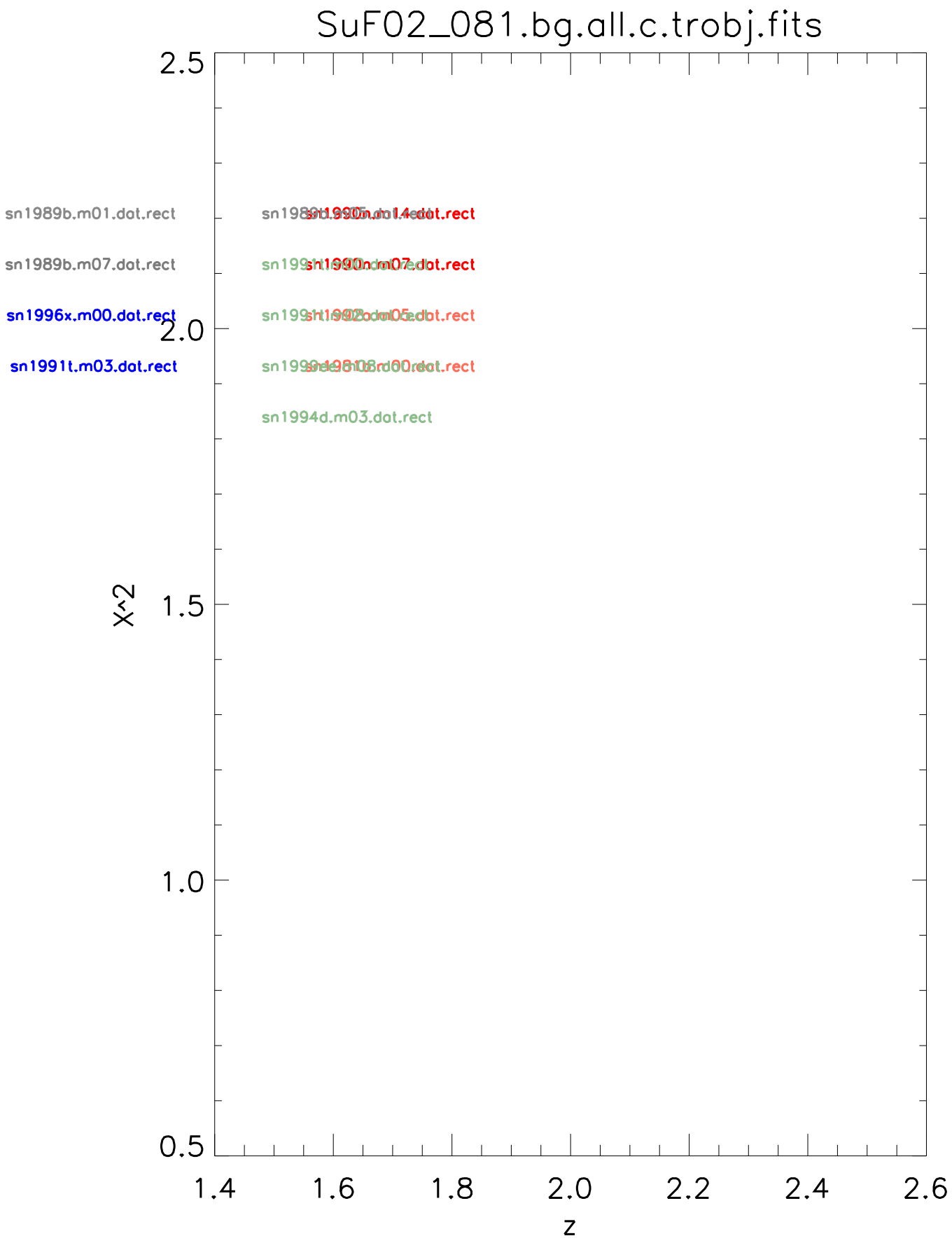
1.3 1.2

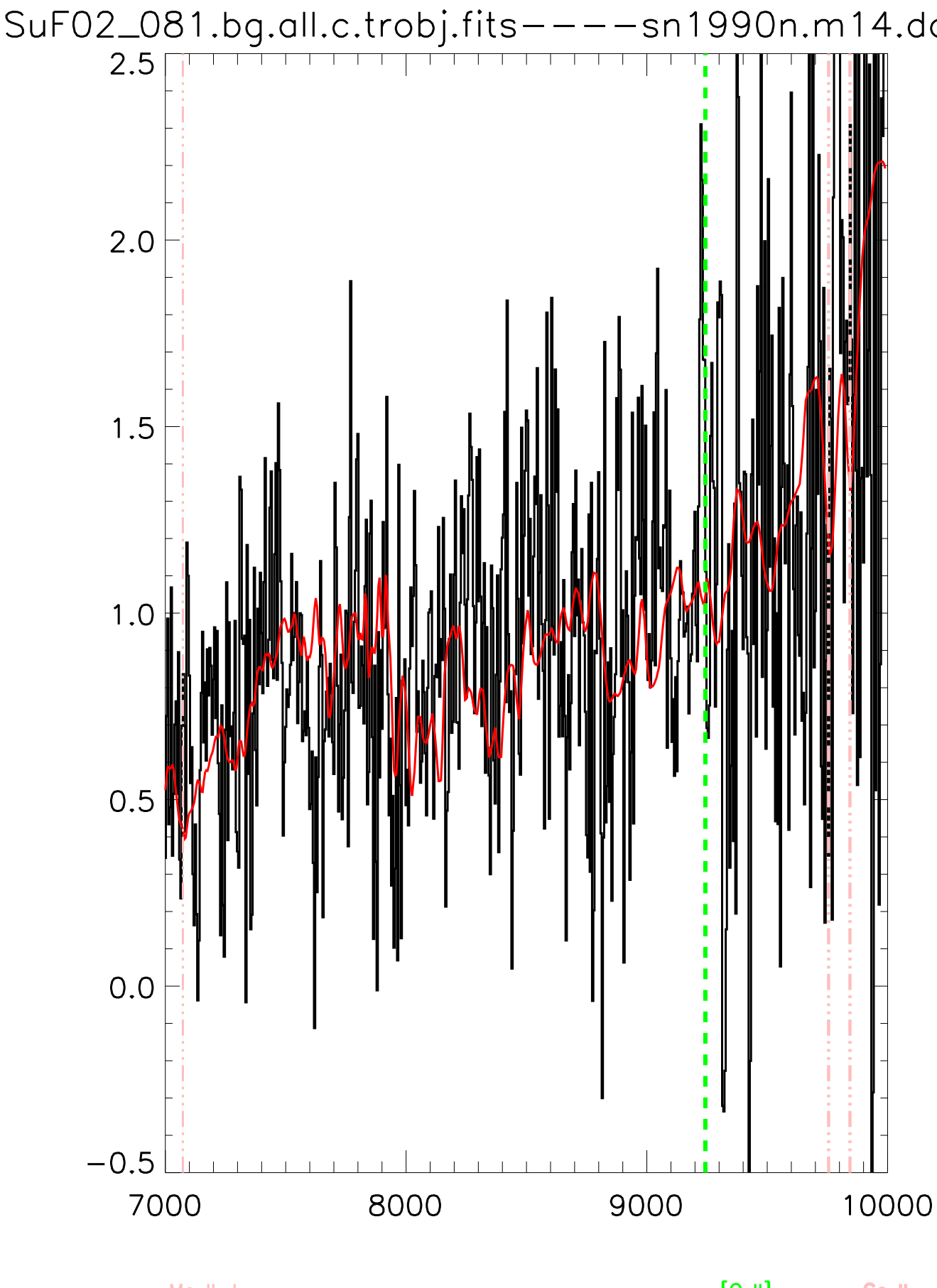
1.1 1.1

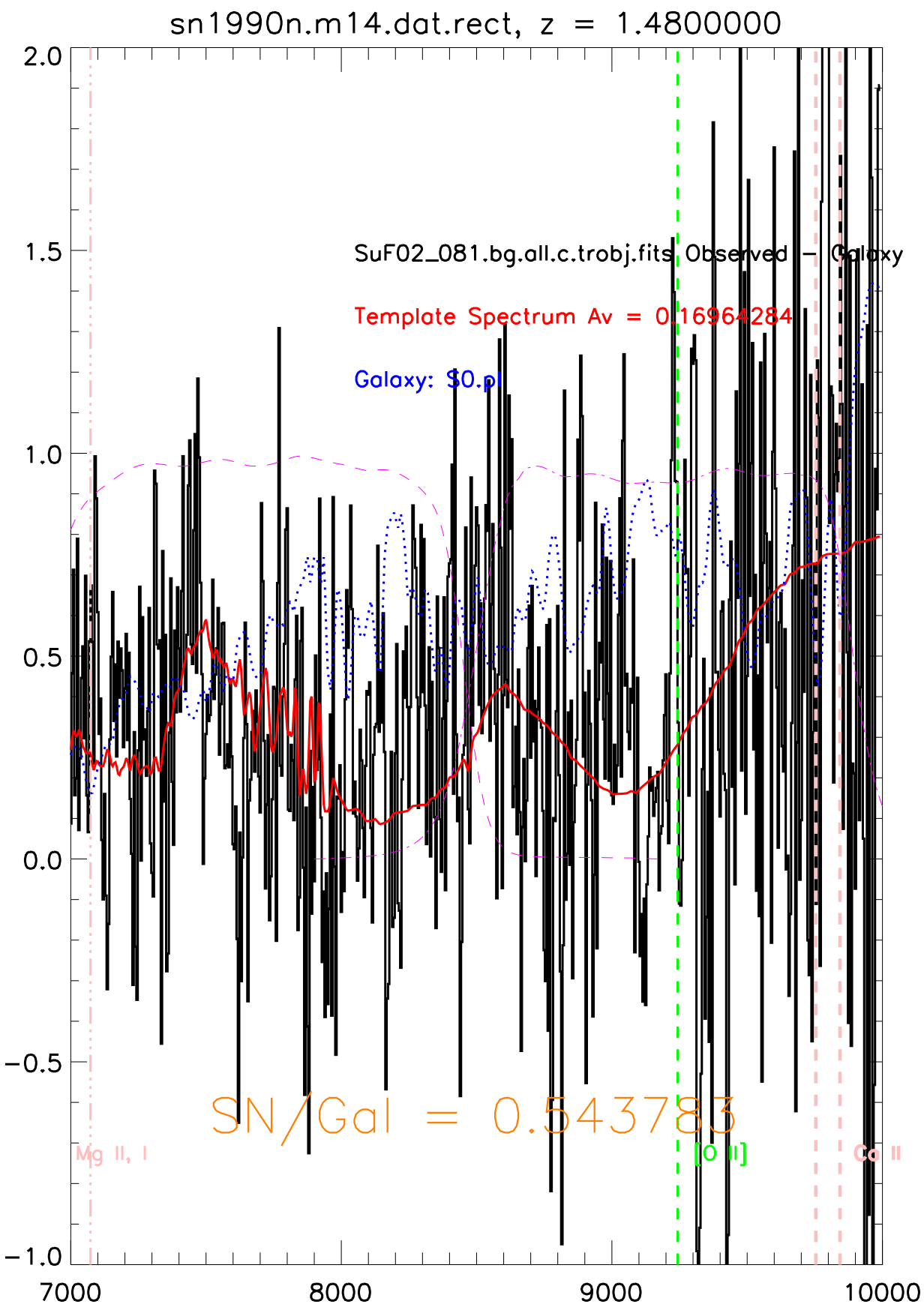
1.0 1.2
1.11.1

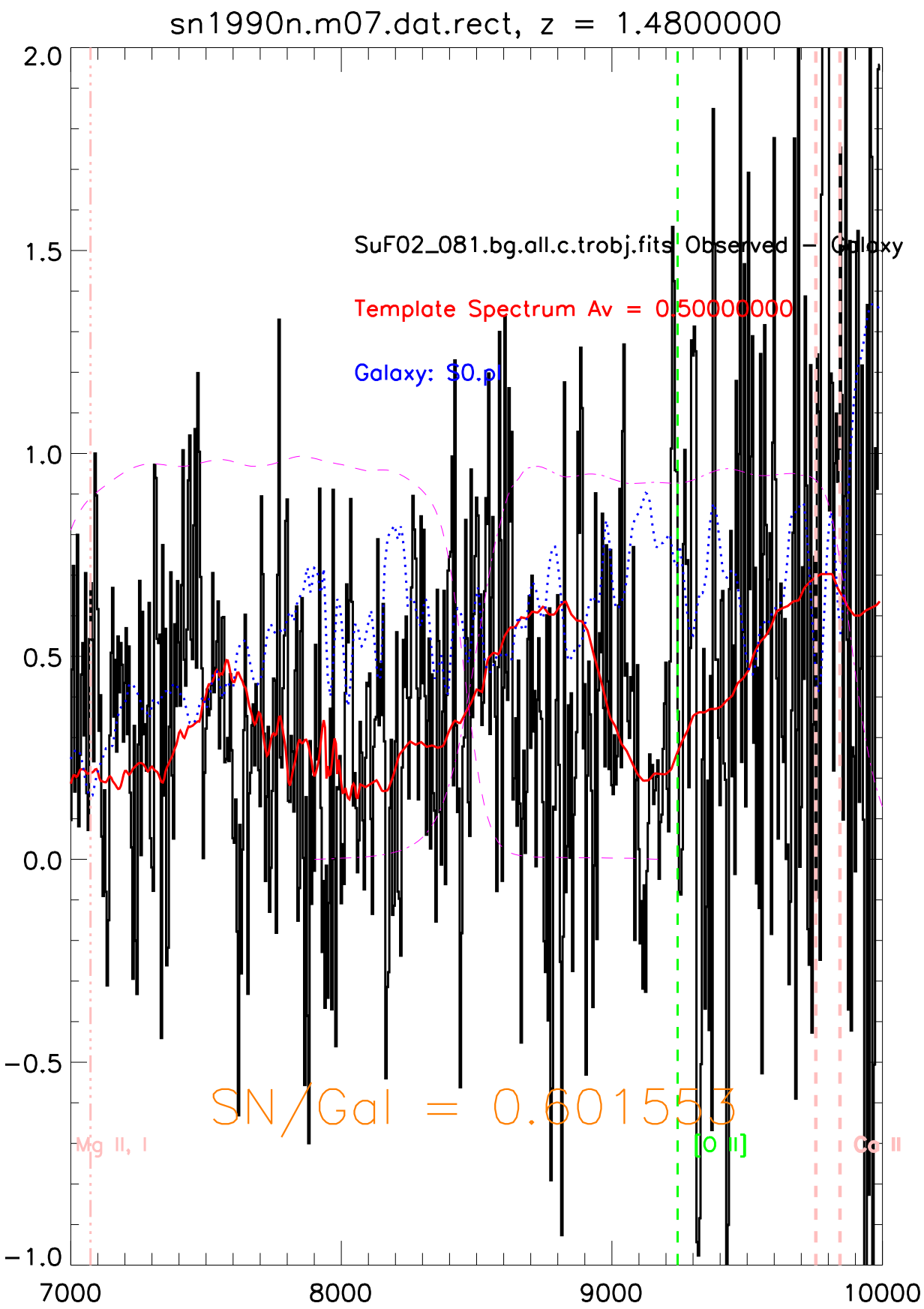
1.0

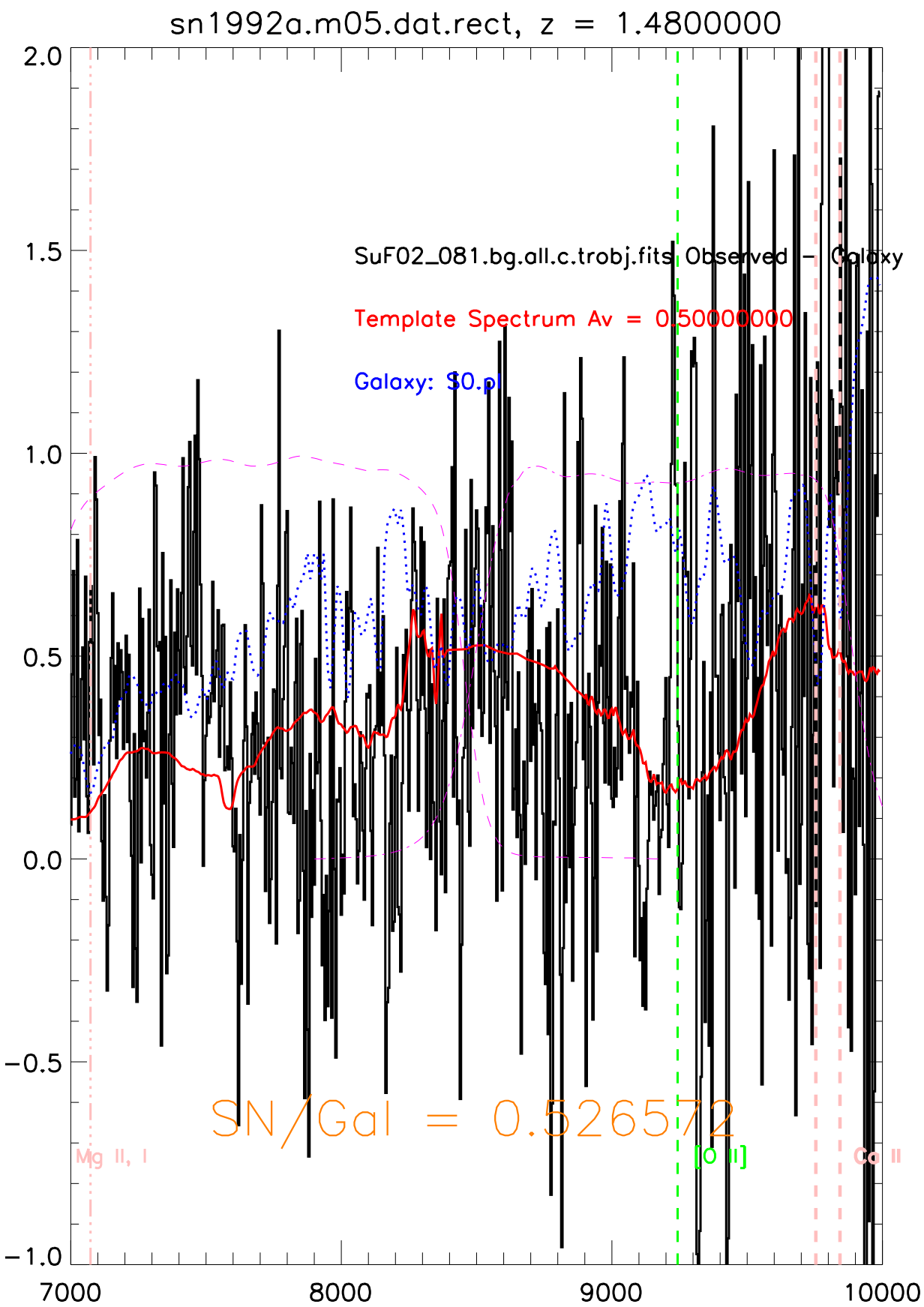

1.30
1.25
1.20
1.15
1.10
1.05
1.00
χ^2
48
20
0
−20
days
0.5
1.0
1.5
2.0
Δm15

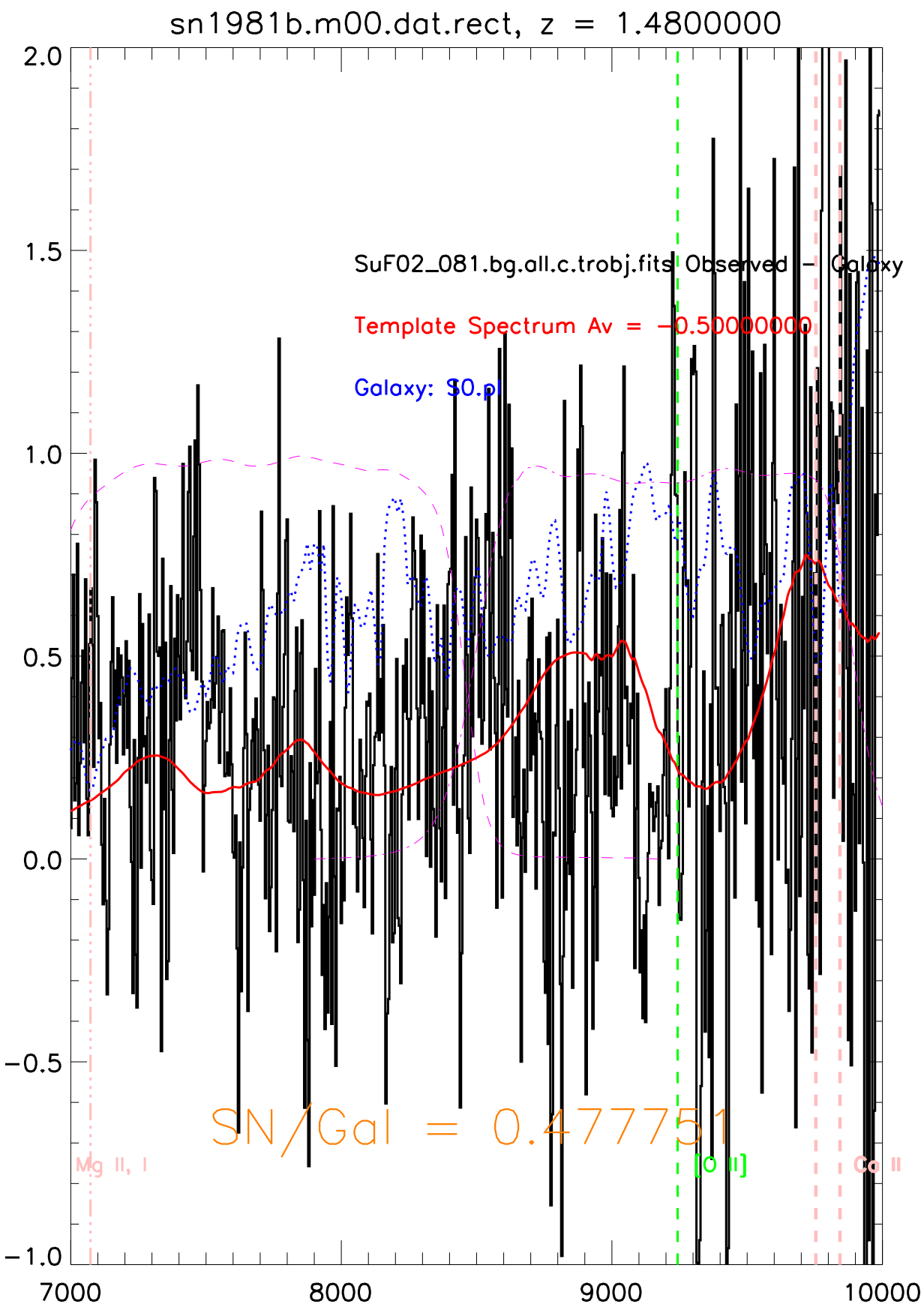

SuF02_081.bg.all.c.trobj.fits
sn1989b.m01.dat.rect
sn1989b.m07.dat.rect
sn1996x.m00.dat.rect
sn1991t.m03.dat.rect
sn1994d.m03.dat.rect
X^2
z
2.5
2.0
1.5
1.0
0.5
1.4
1.6
1.8
2.0
2.2
2.4
2.6

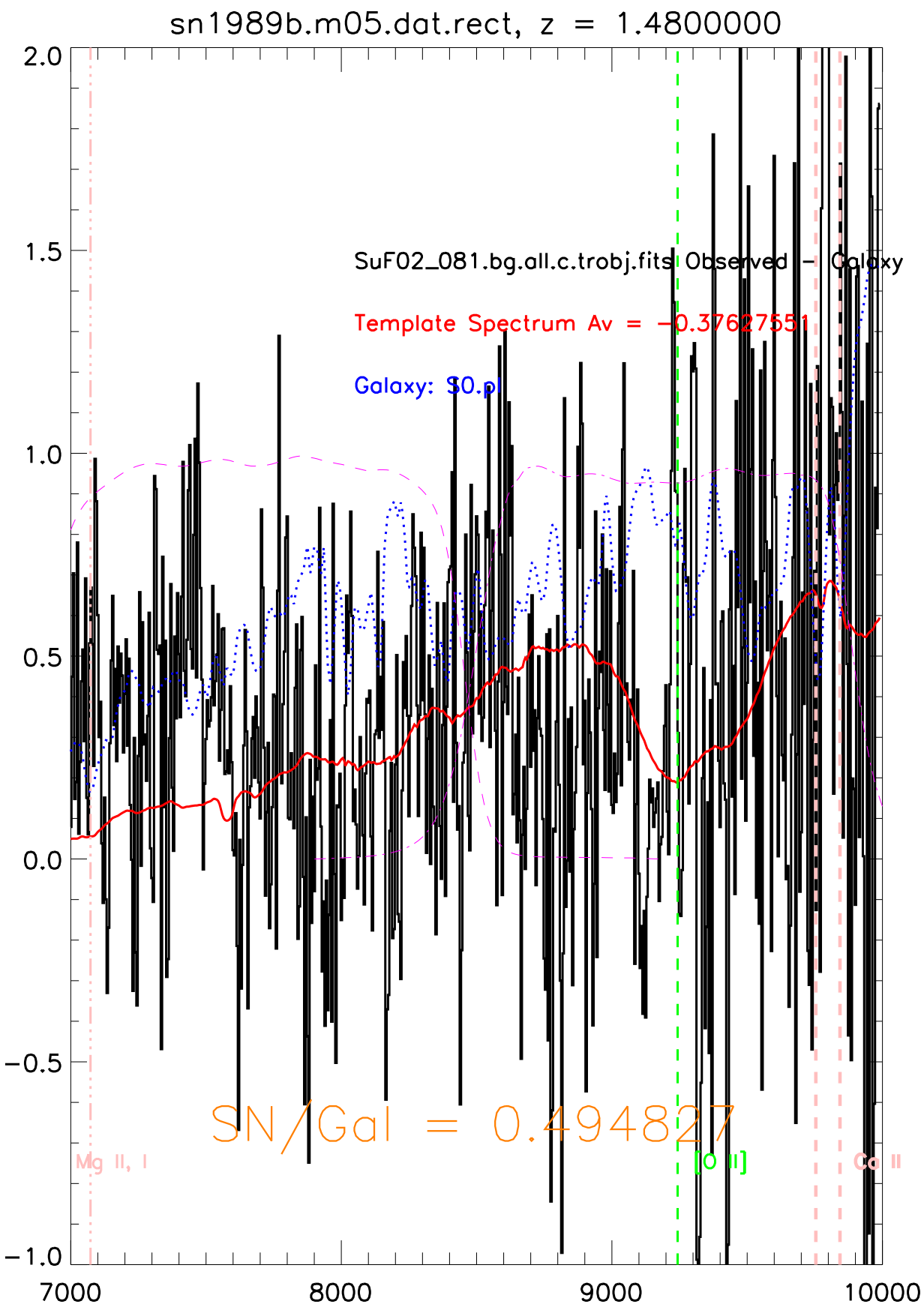

SuF02_081.bg.all.c.trobj.fits----sn1990n.m14.dat.rect
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
7000
8000
9000
10000
Mg II, I
[O II]
Ca II

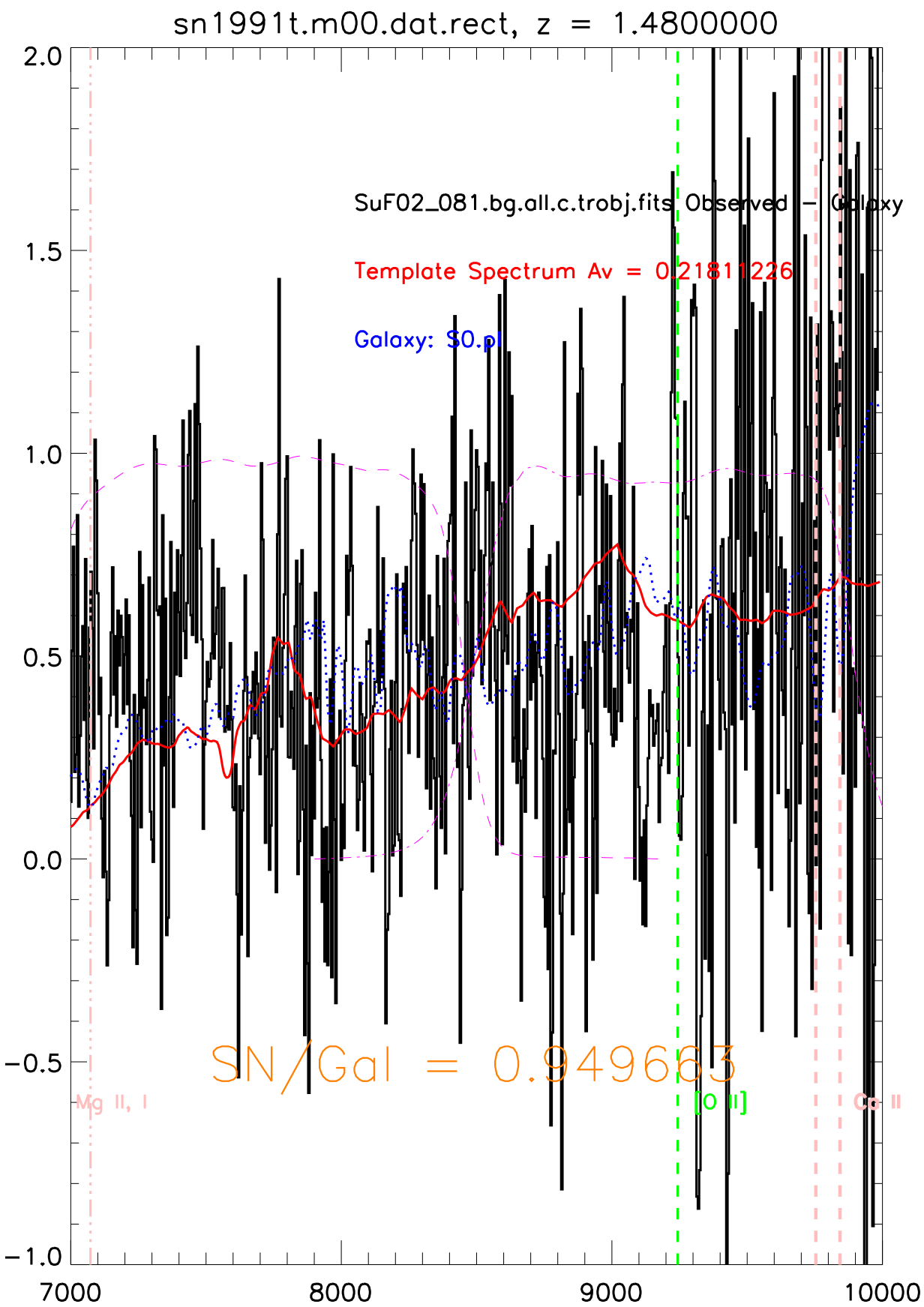

sn1990n.m14.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed − Galaxy
Template Spectrum Av = 0.16964284
Galaxy: S0.pl
SN/Gal = 0.543783
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

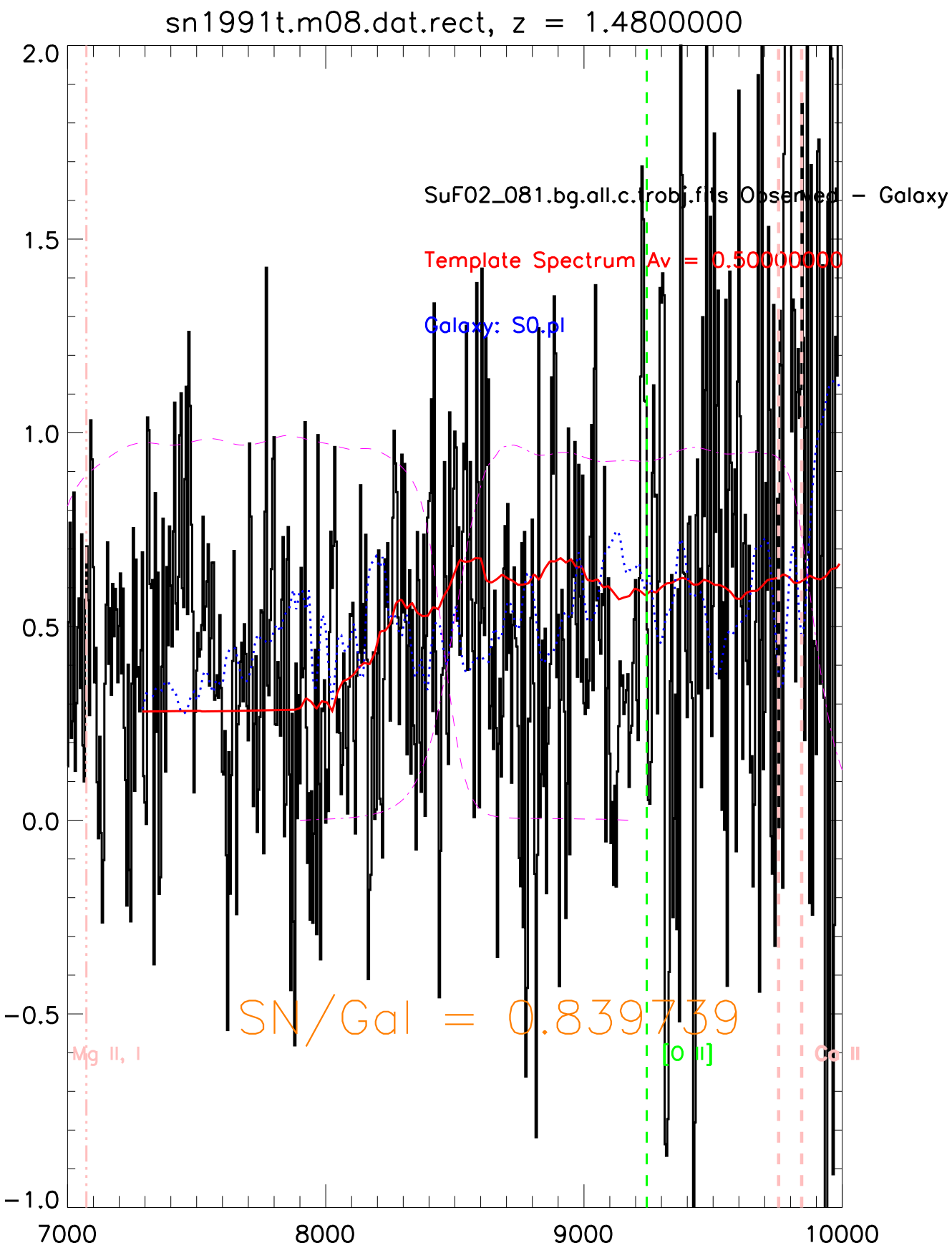

sn1990n.m07.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed – Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.601553
Mg II, I
[O III]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

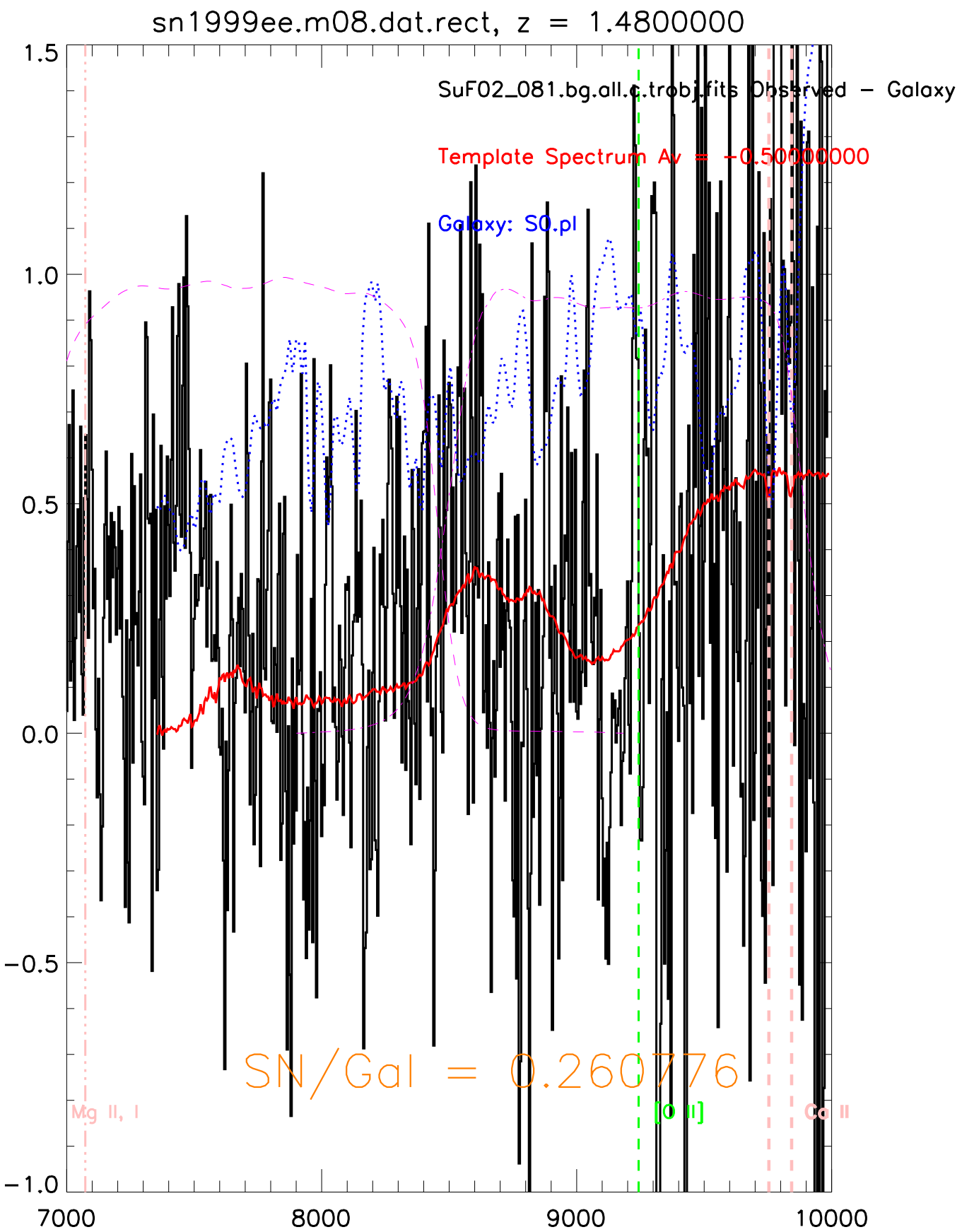

sn1992a.m05.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed – Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.526572
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

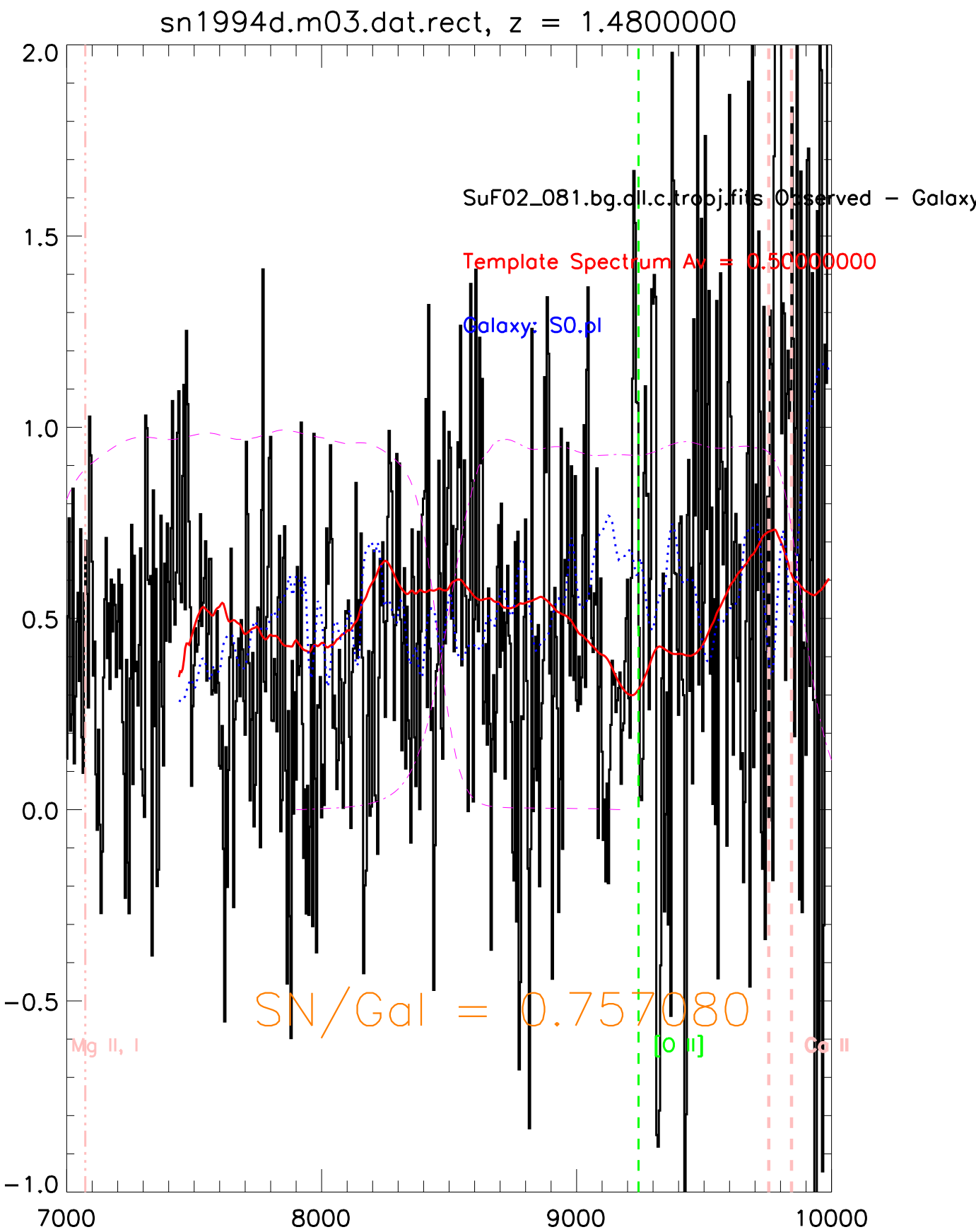

sn1981b.m00.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed - Galaxy
Template Spectrum Av = -0.500000000
Galaxy: S0.pl
SN/Gal = 0.477751
Mg II, I
[O III]
Ca II
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
7000
8000
9000
10000

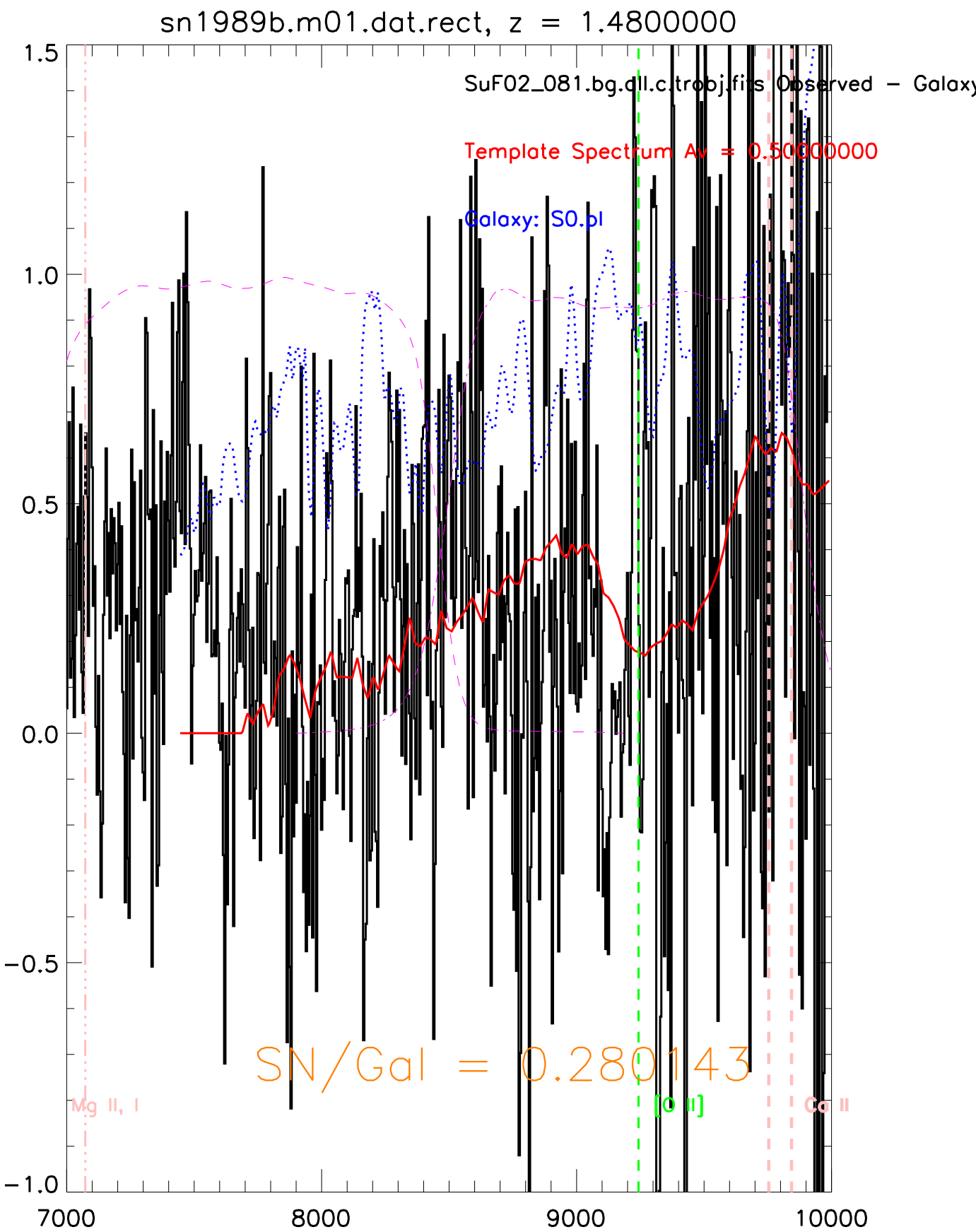

sn1989b.m05.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed − Galaxy
Template Spectrum Av = −0.37627551
Galaxy: S0.pl
SN/Gal = 0.494827
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

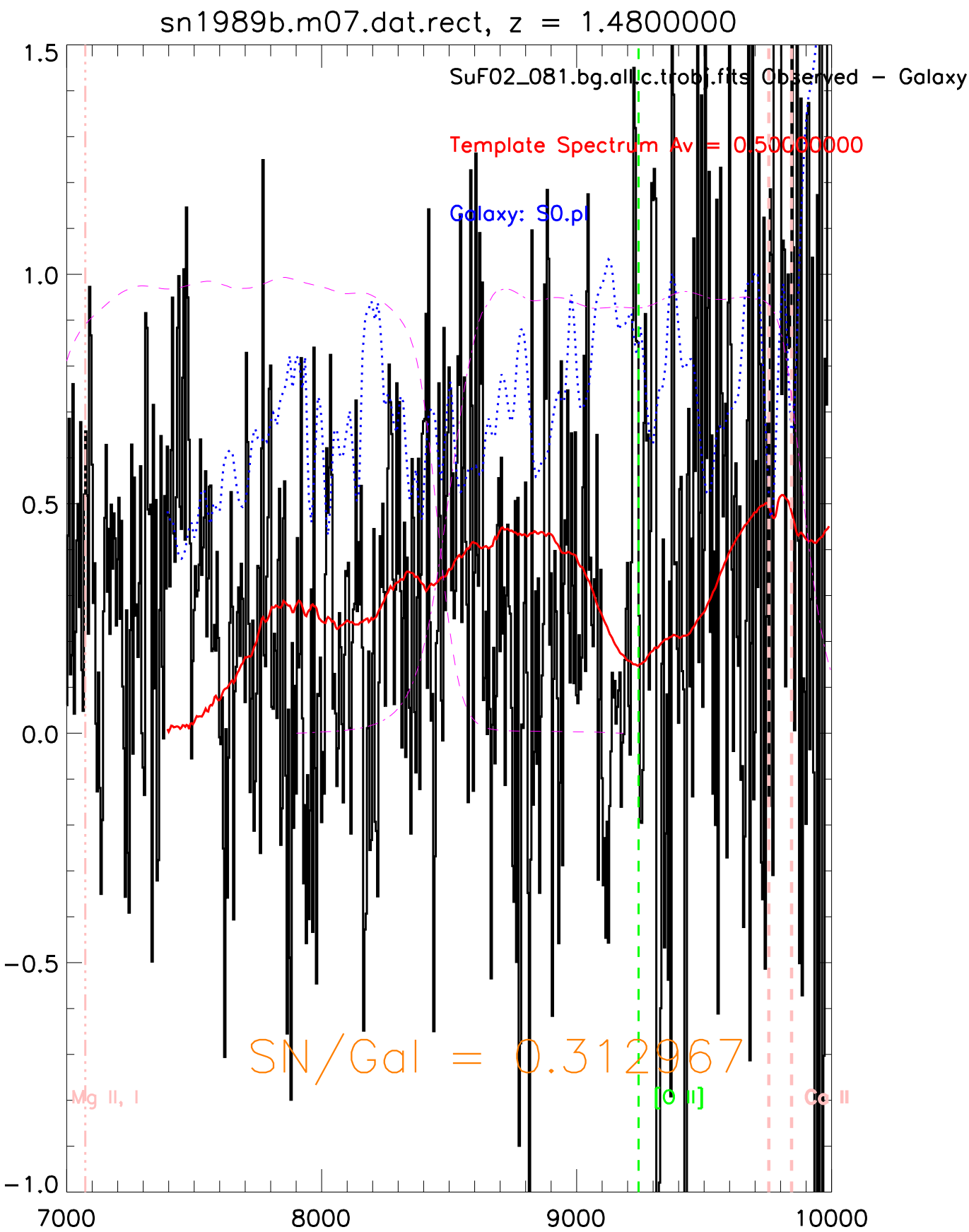

sn1991t.m00.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed − Galaxy
Template Spectrum Av = 0.21811226
Galaxy: S0.pl
SN/Gal = 0.949663
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

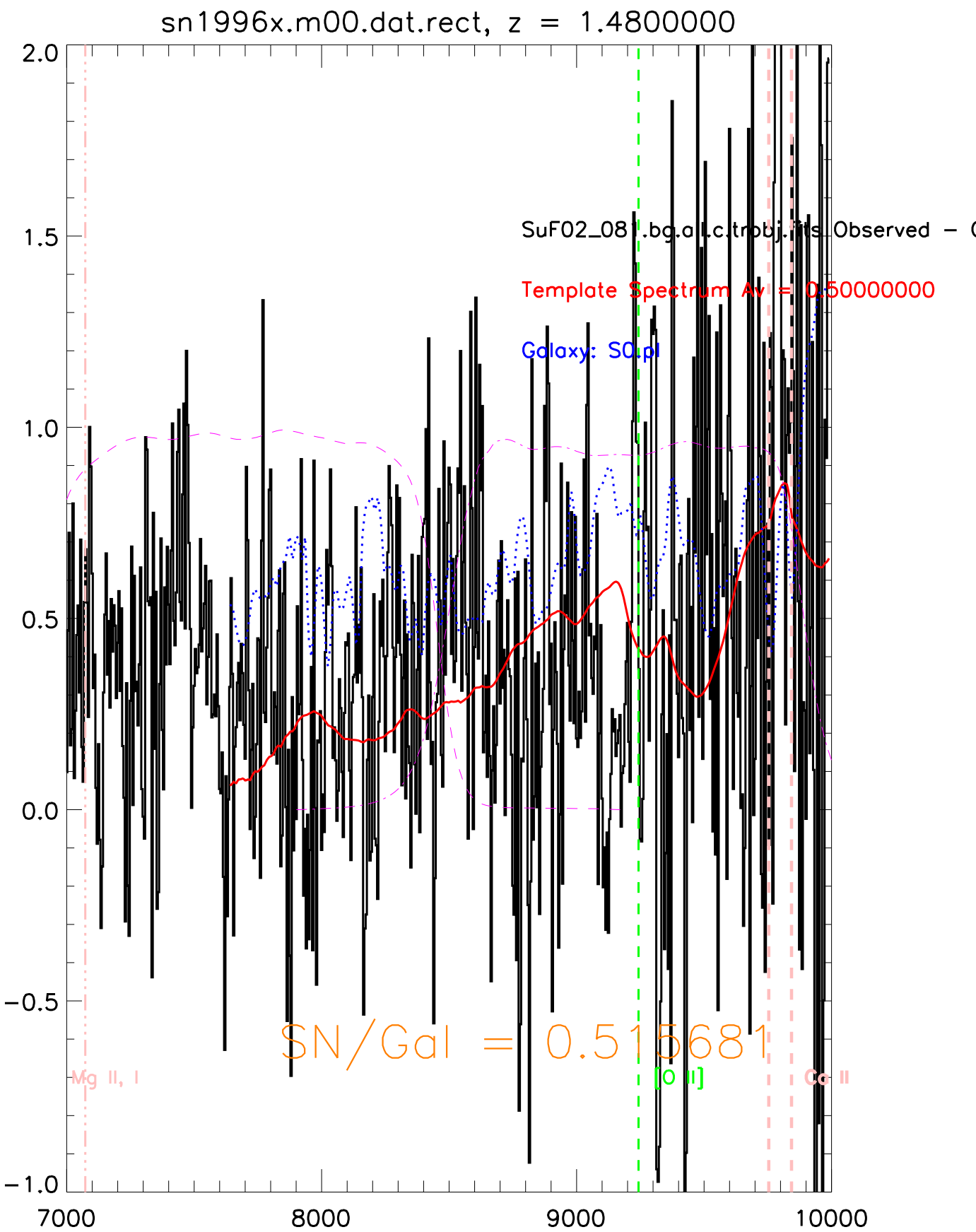

sn1991t.m08.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.frobj.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.839739
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000

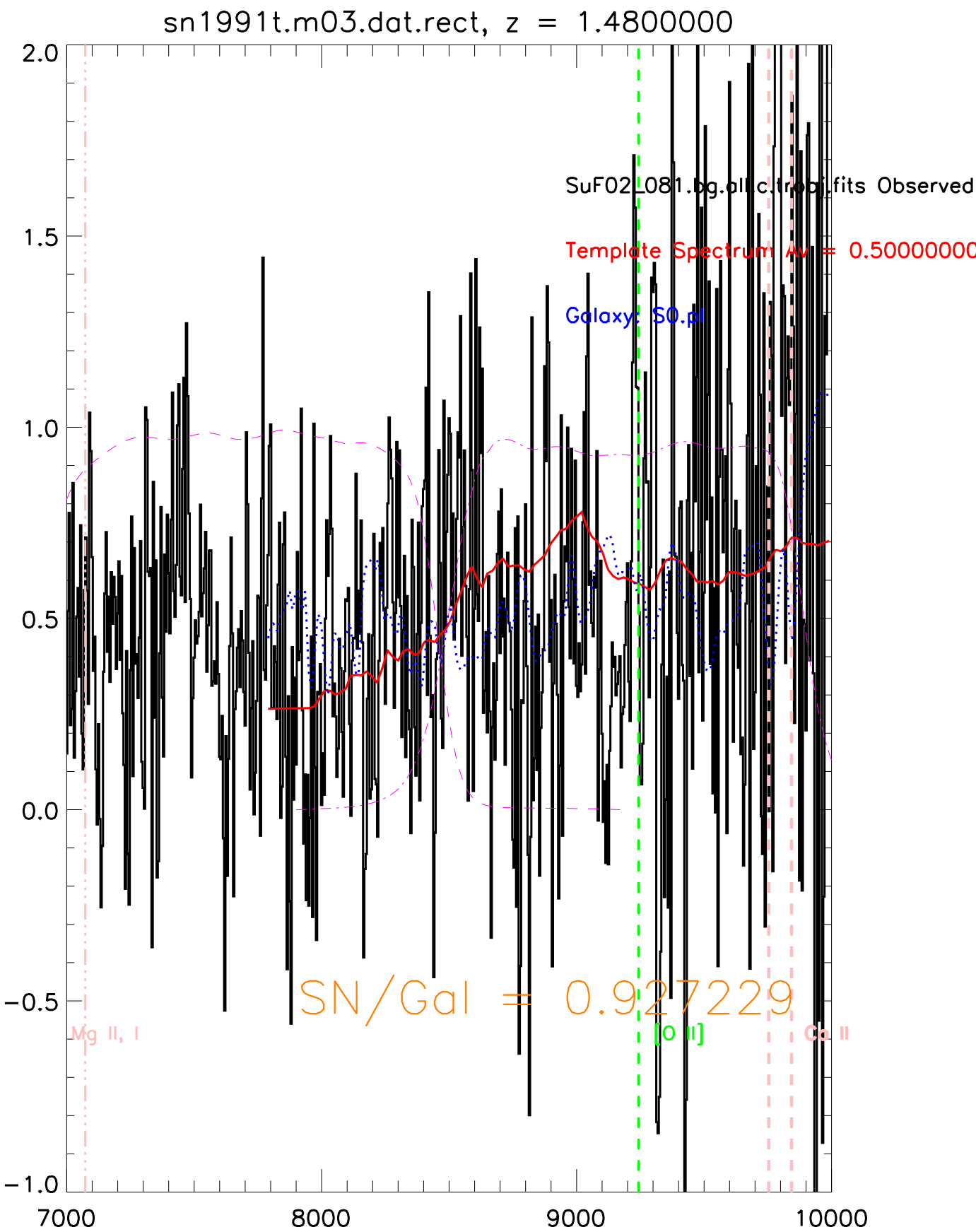

sn1999ee.m08.dat.rect, z = 1.4800000
SuF02_081.bg.all.c.trobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: S0.pl
SN/Gal = 0.260776
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000


sn1994d.m03.dat.rect, z = 1.4800000
SuF02_081.bg.dll.c.trobj.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.757080
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000


sn1989b.m01.dat.rect, z = 1.4800000
SuF02_081.bg.dll.c.trobj.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.280143
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000


sn1989b.m07.dat.rect, z = 1.4800000
SuF02_081.bg.allc.trobj.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.312967
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000


sn1996x.m00.dat.rect, z = 1.4800000
SuF02_08
.bg.all.c.trobj.fits Observed –
Template Spectrum Av = 0.50000000
Galaxy: S0.pl
SN/Gal = 0.515681
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000


sn1991t.m03.dat.rect, z = 1.4800000
SuF02_L081.bg.all.c.trobj.fits Observed
Template Spectrum Av = 0.5000000
Galaxy: S0.pl
SN/Gal = 0.927229
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
7000
8000
9000
10000