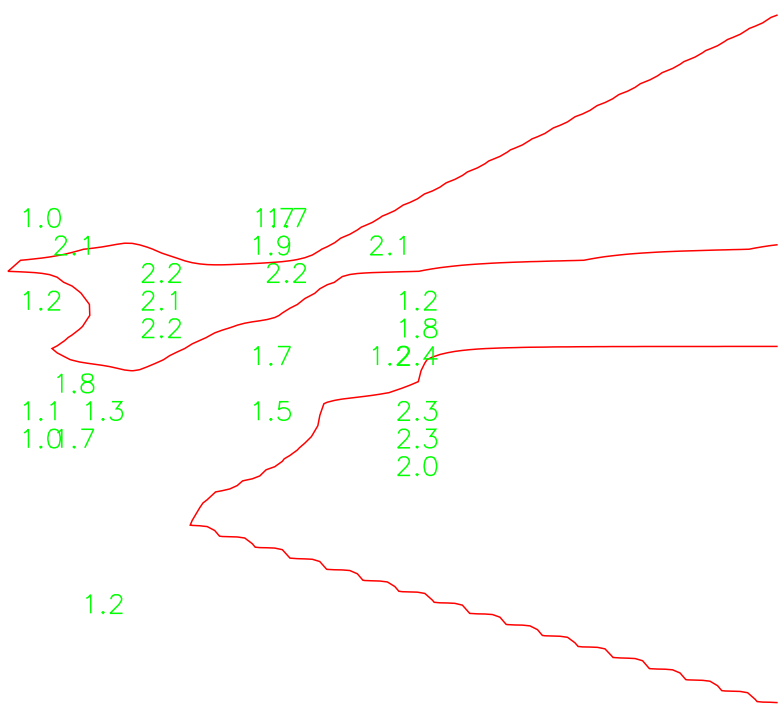
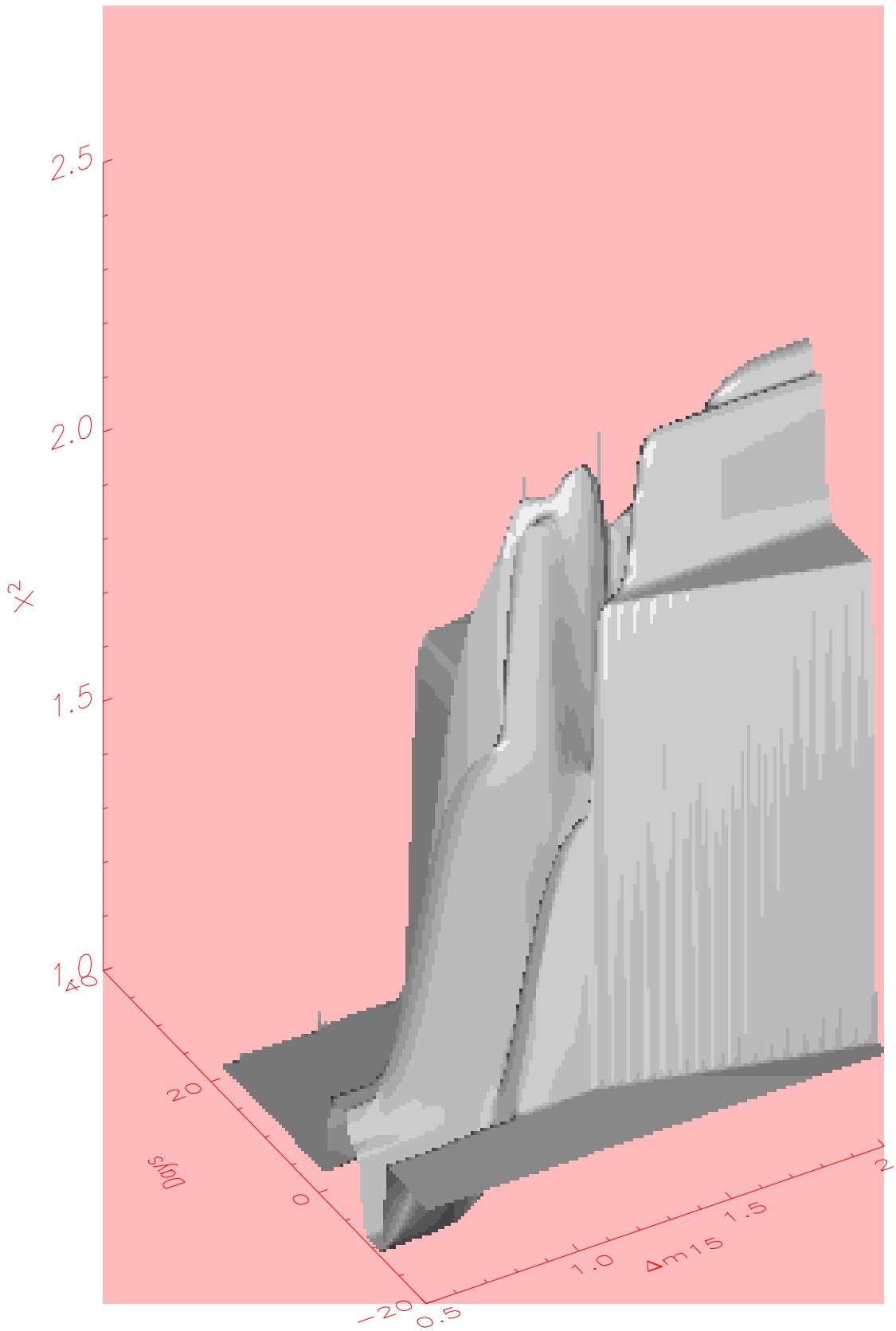
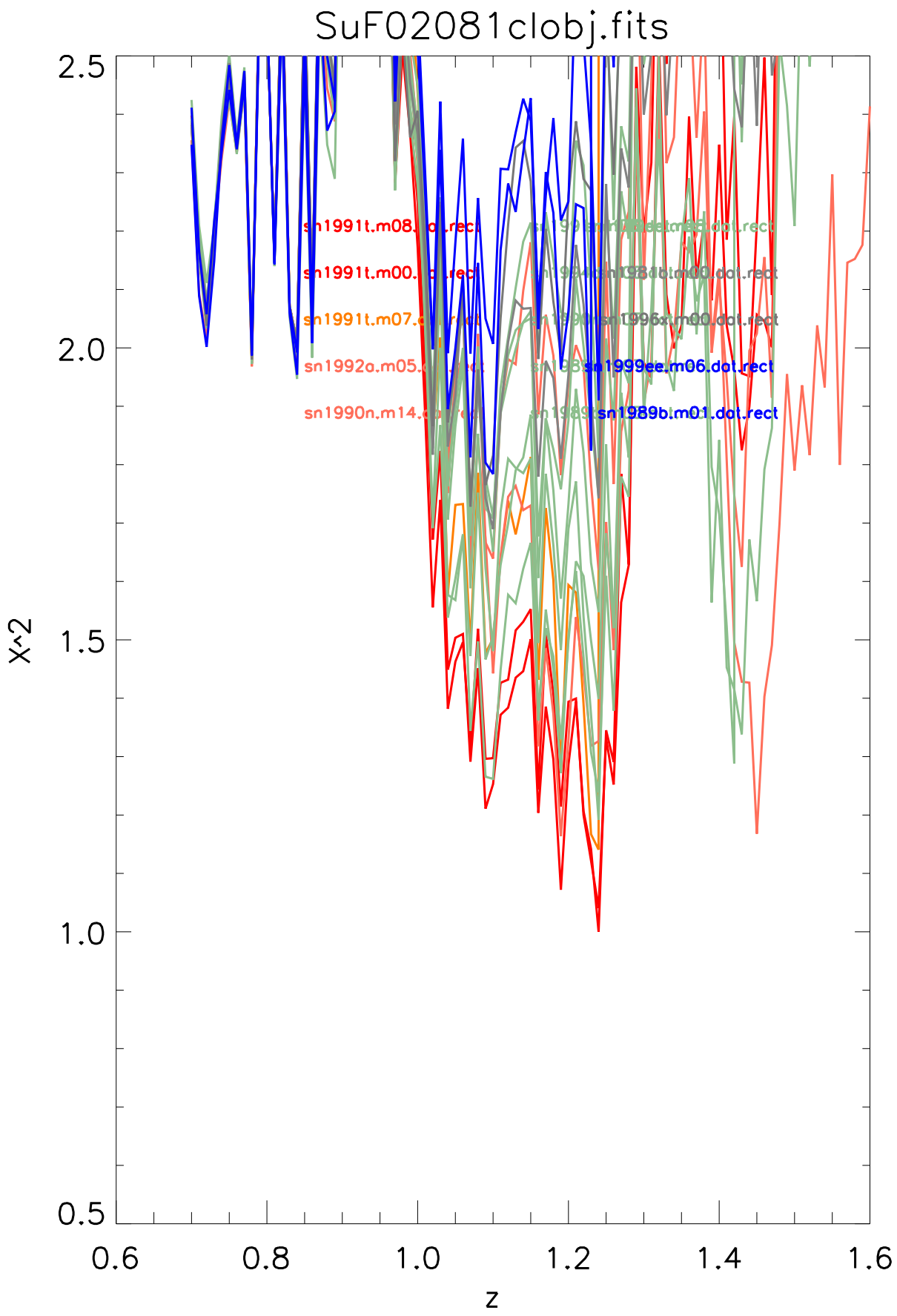
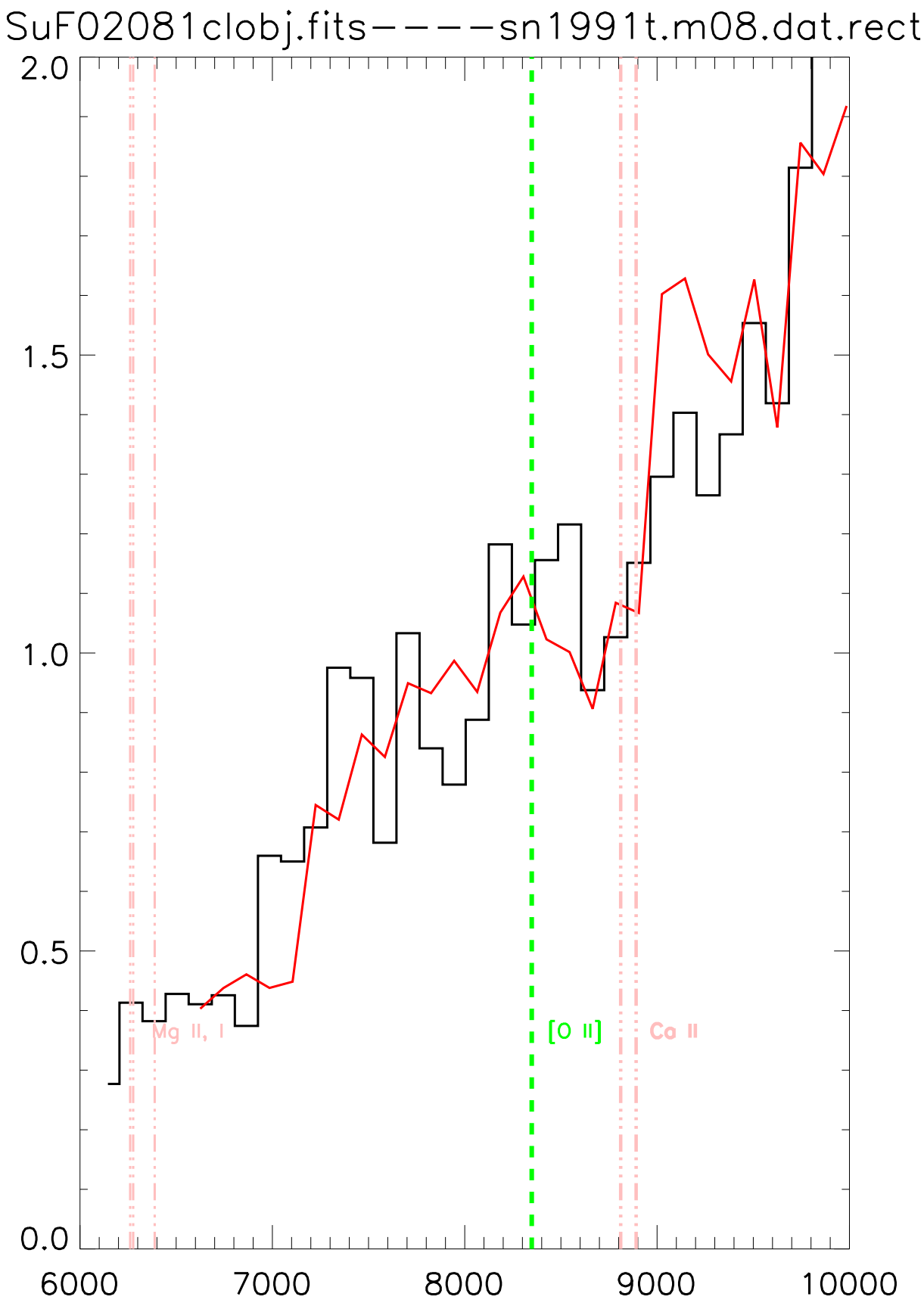

1.0
2.1
1.2
1.8
1.1
1.3
1.0
1.7
1.2
2.2
2.1
2.2
1.7
1.5
1.9
2.2
1.2
1.8
1.2
2.4
2.3
2.3
2.0
2.1

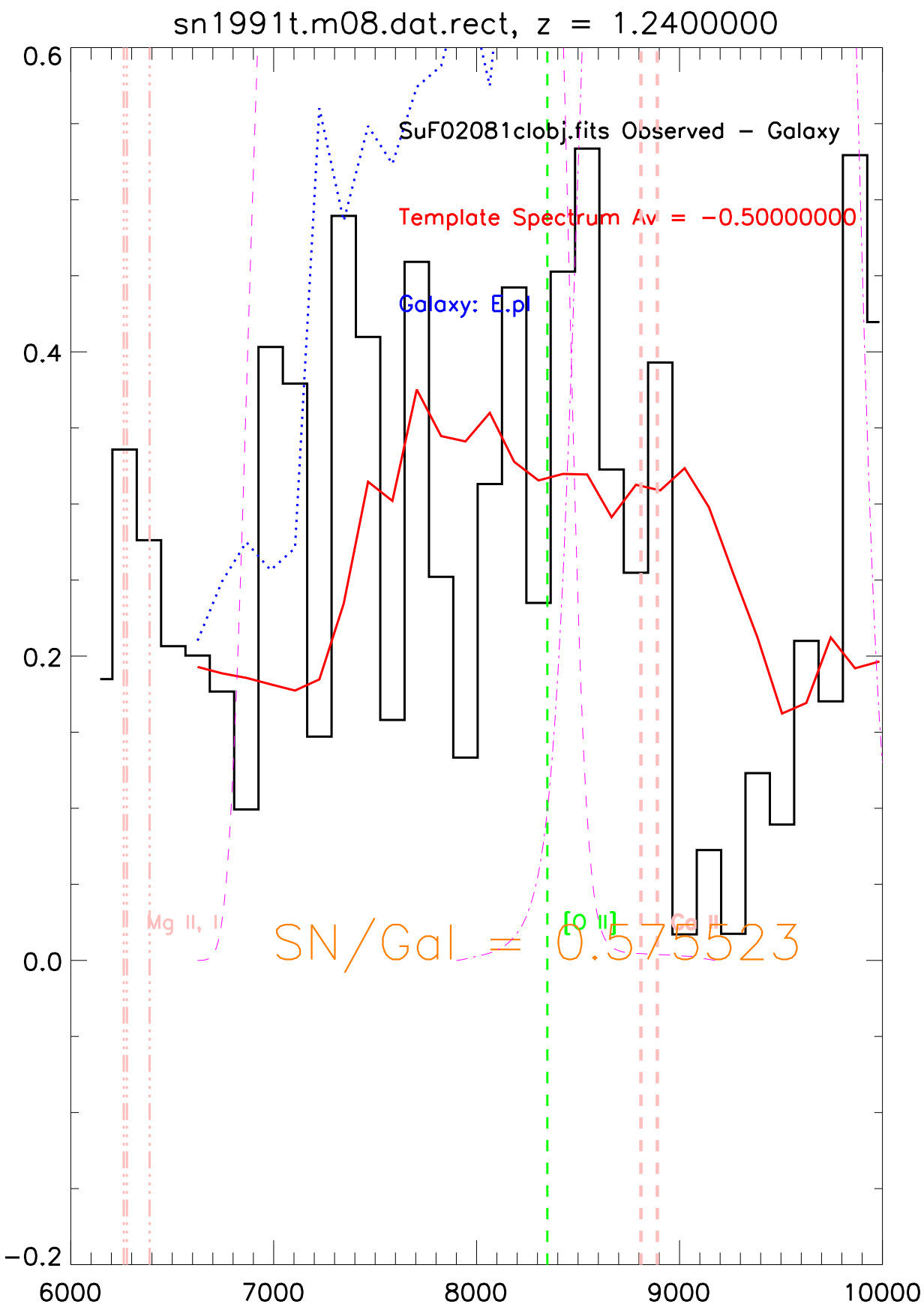


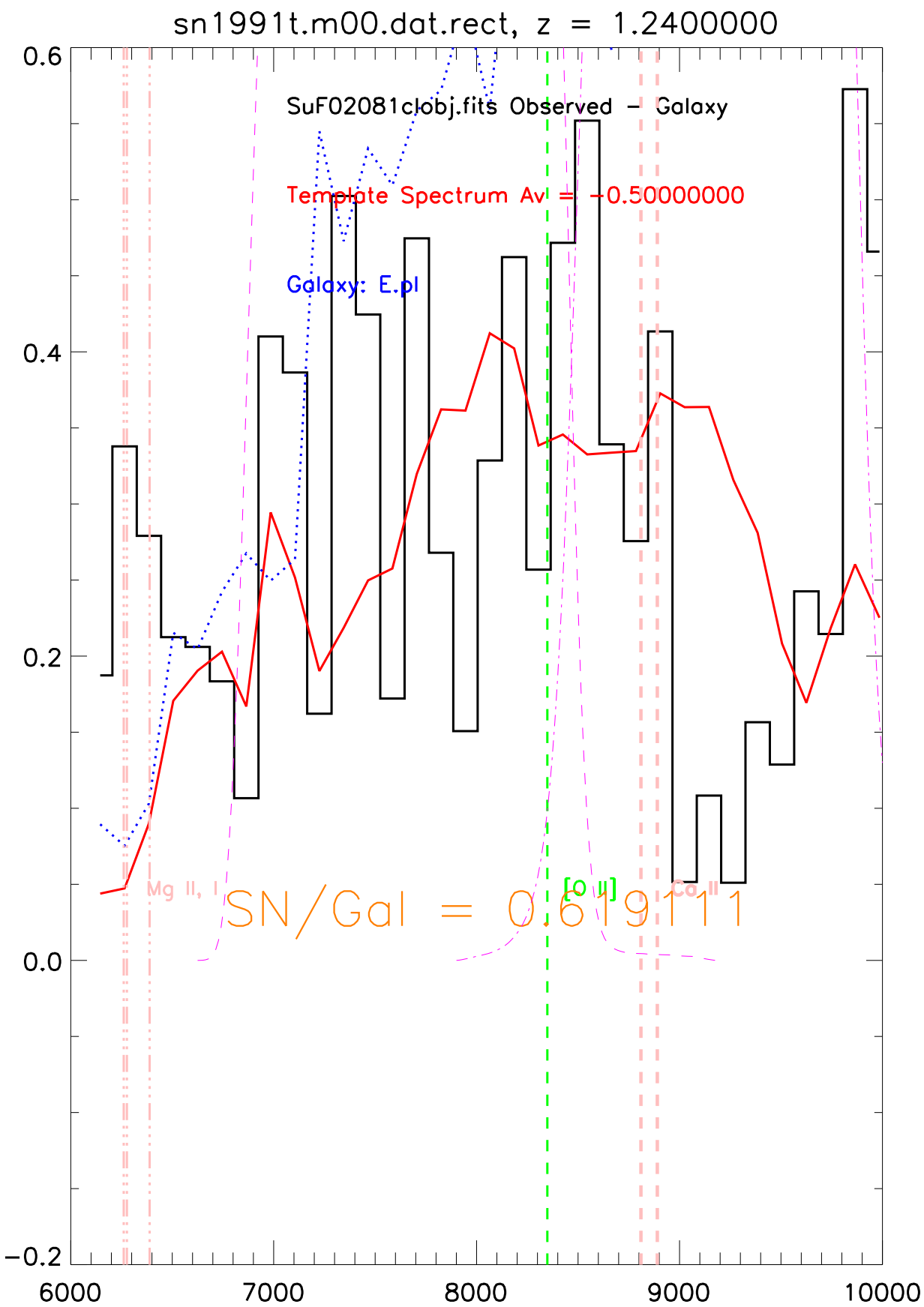
2.5
2.0
1.5
1.0
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

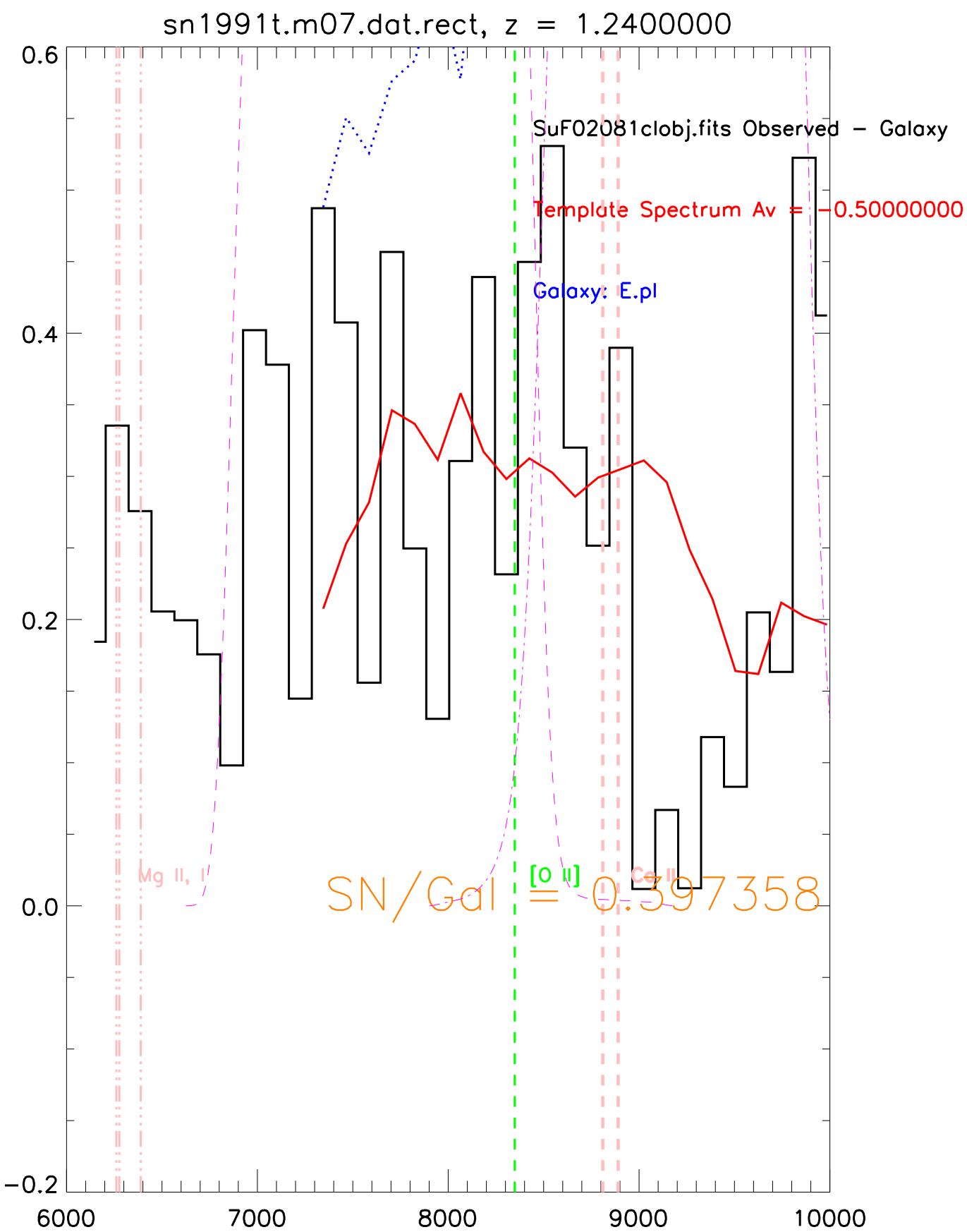

SuF02081clobj.fits
2.5
2.0
1.5
1.0
0.5
X^2
0.6
0.8
1.0
1.2
1.4
1.6
z
sn1991t.m08.dot.rect
sn1991t.m00.dot.rect
sn1991t.m07.dot.rect
sn1992a.m05.dot.rect
sn1990n.m14.dot.rect
sn1999ee.m06.dot.rect
sn1989b.m01.dot.rect

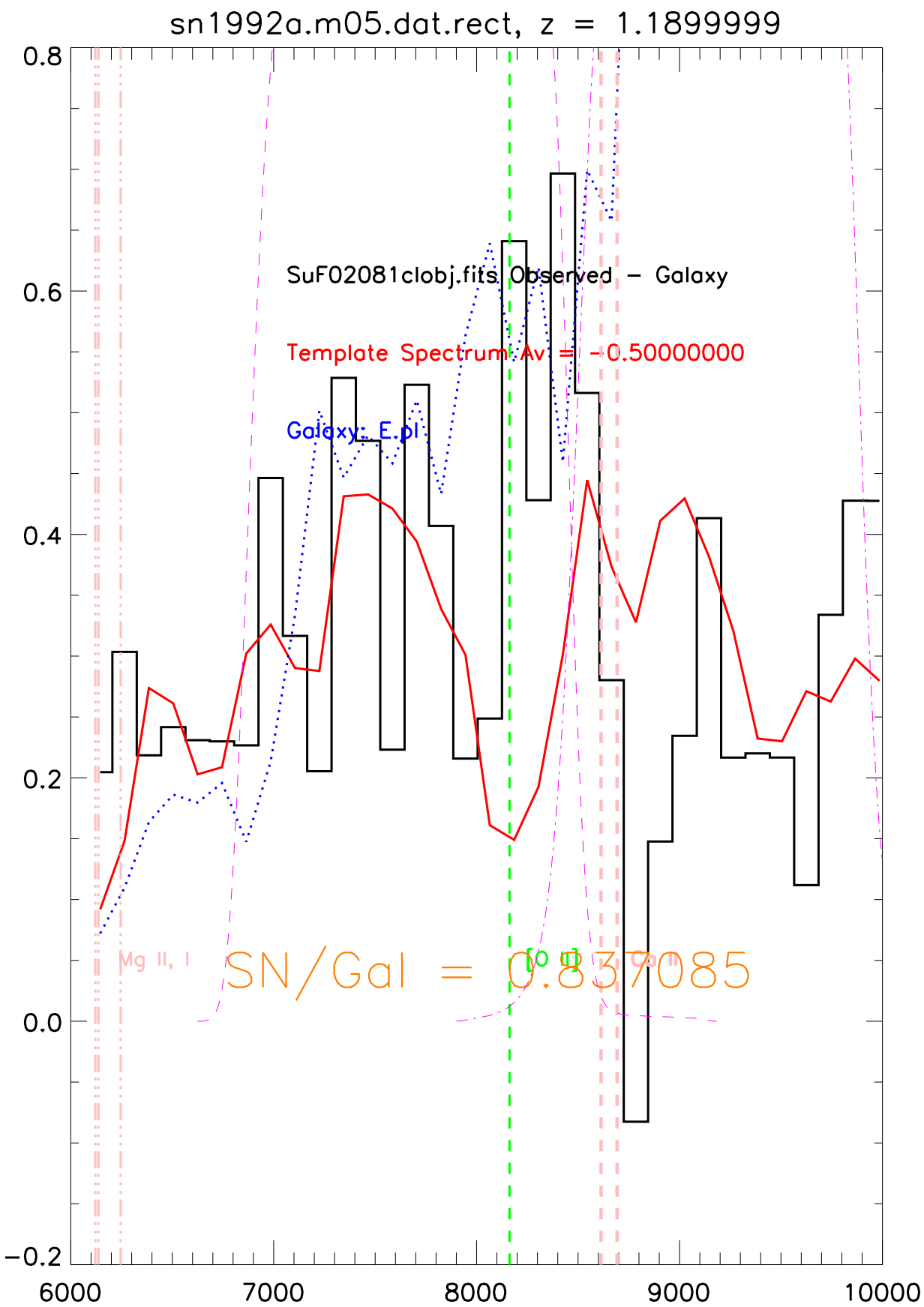
sn1991t.m08.dat.rect

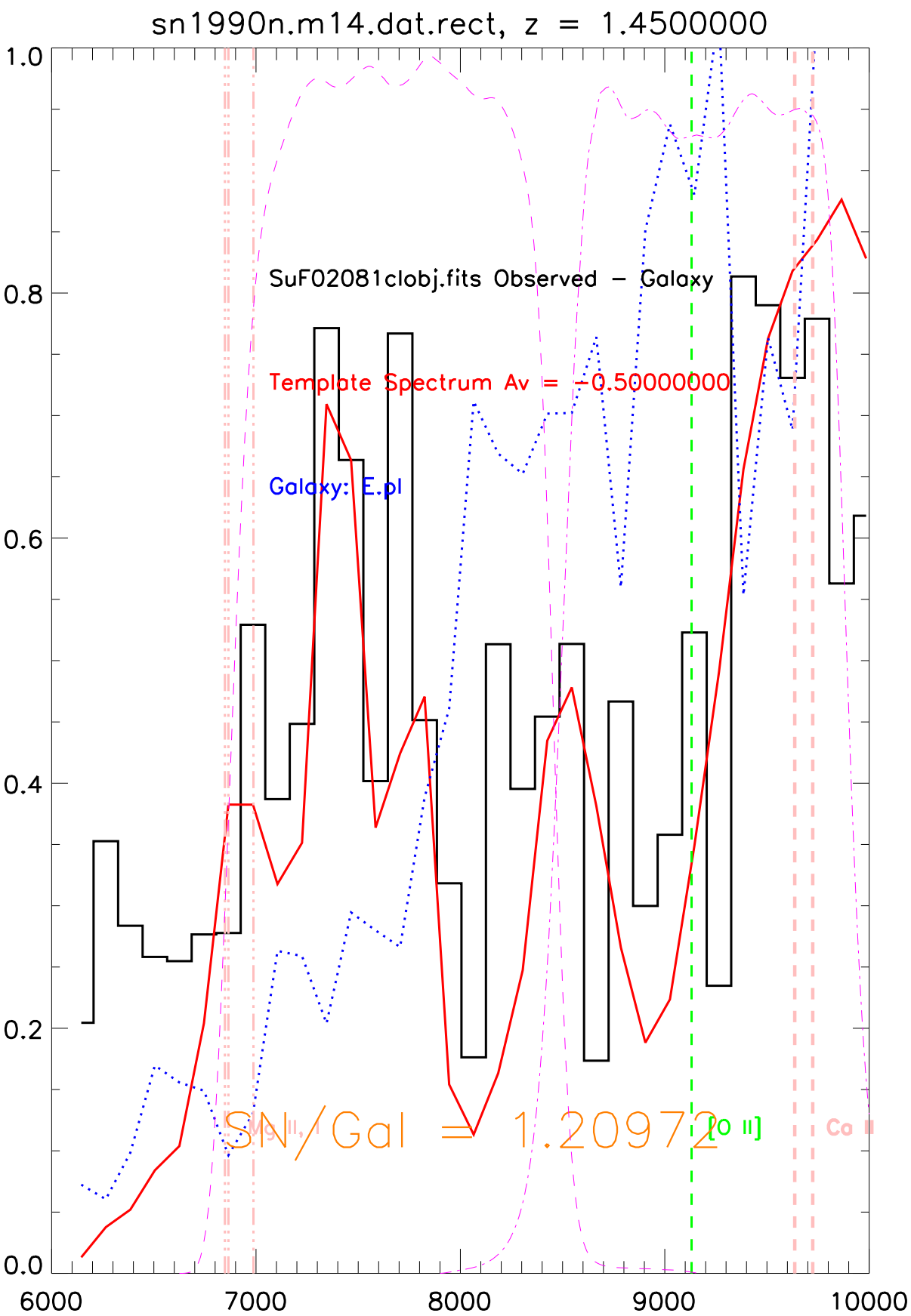


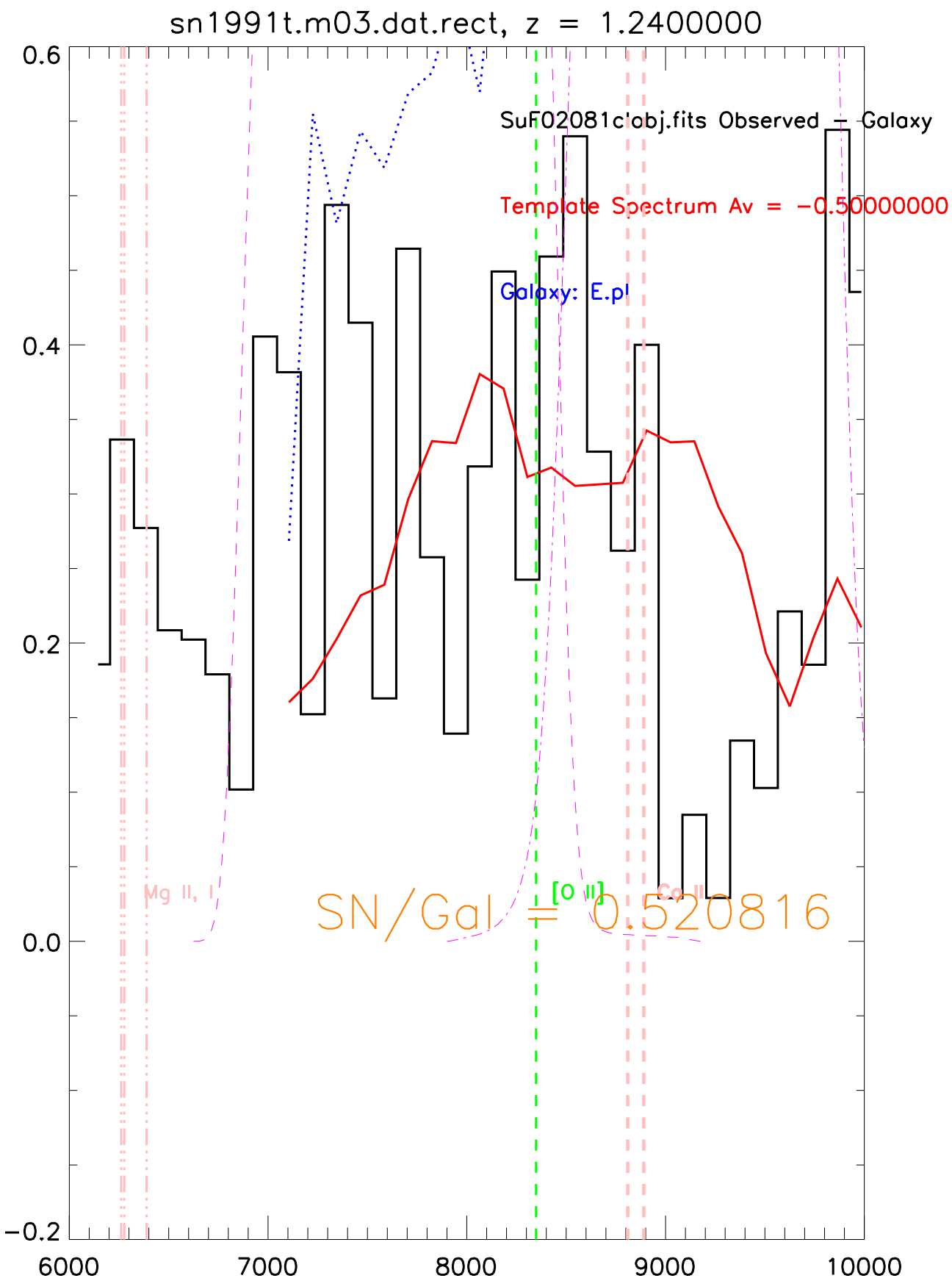

sn1991t.m08.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
Mg II, I
[O II]
Ca II
SN/Gal = 0.575523
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

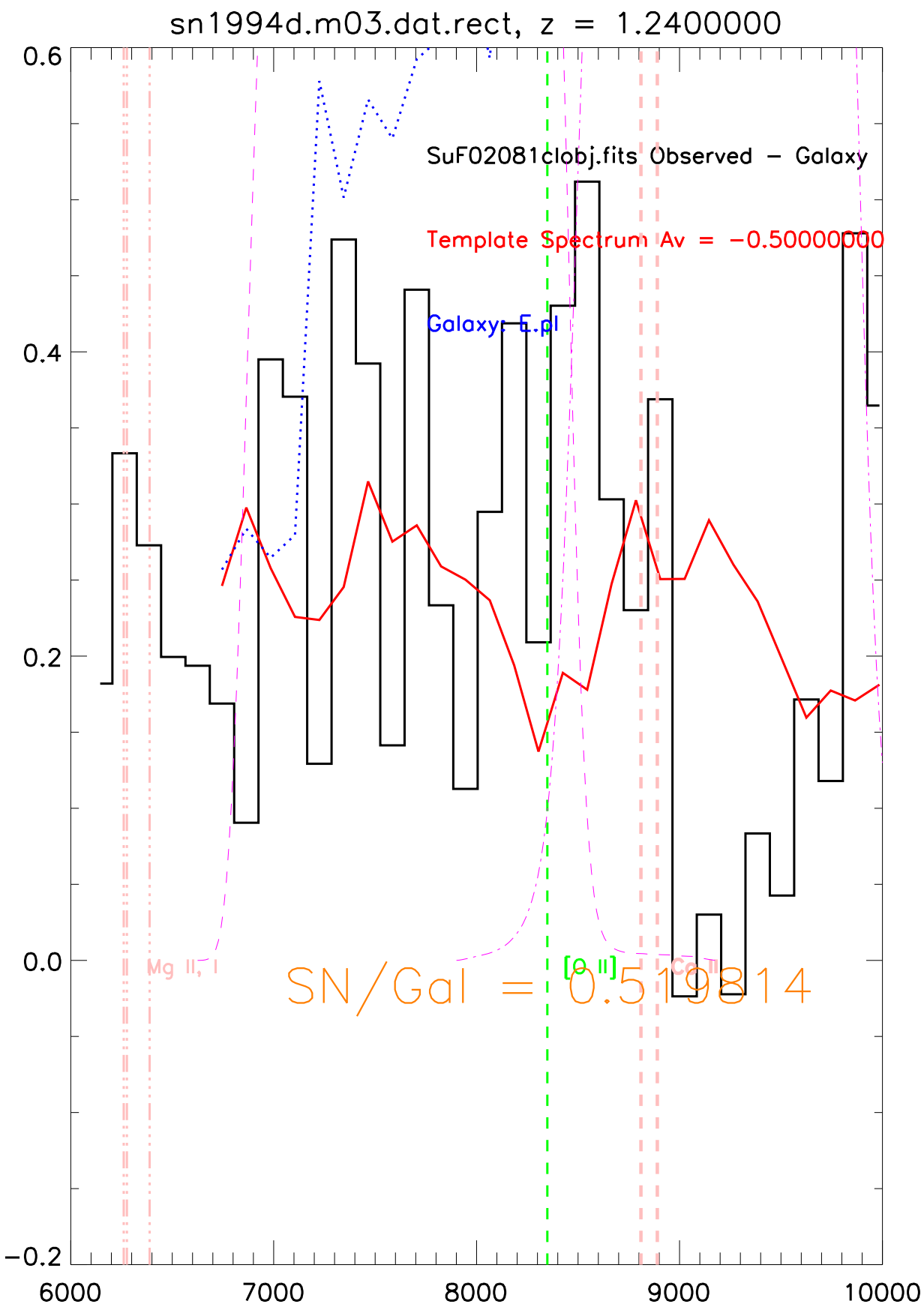

sn1991t.m00.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed – Galaxy
Template Spectrum Av = -0.50000000
Galaxy: E.pl
SN/Gal = 0.619111
Mg II, I
[O II]
Ca II
0.6
0.4
0.2
0.0
-0.2
6000
7000
8000
9000
10000

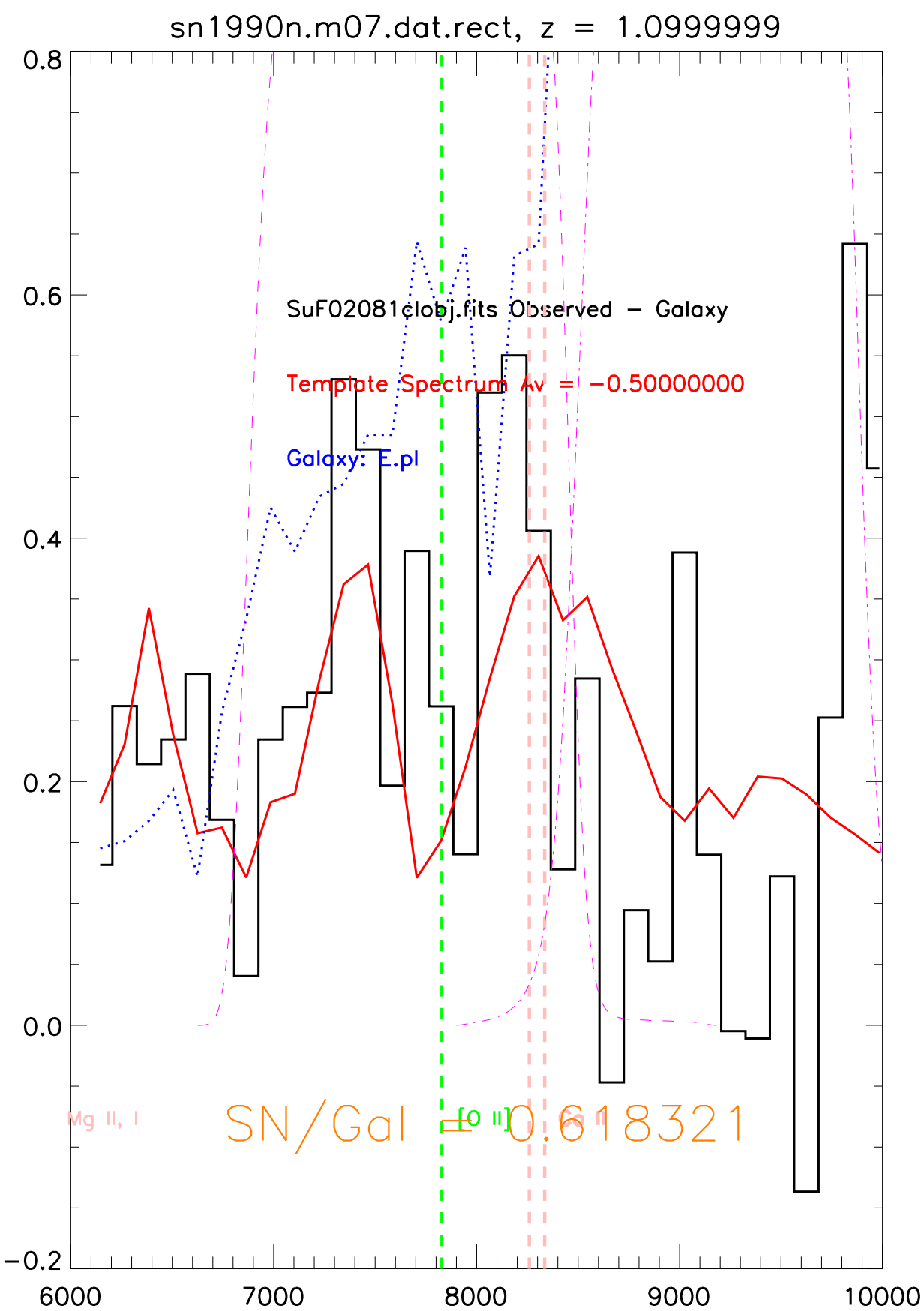

sn1991t.m07.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
Mg II, I
[O II]
Ca II
SN/Gal = 0.397358
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

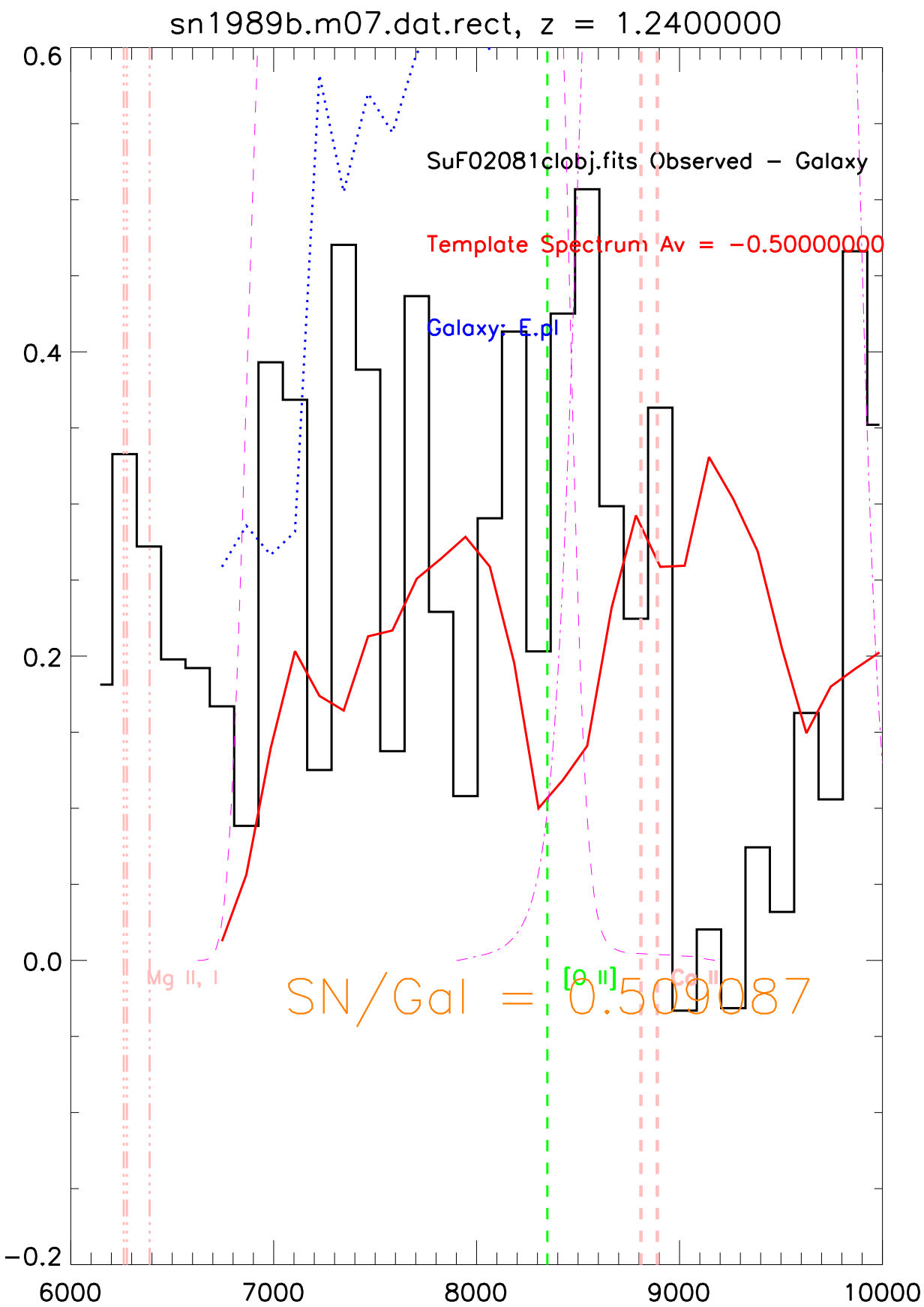

sn1992a.m05.dat.rect, z = 1.1899999
SuF02081clobj.fits Observed – Galaxy
Template Spectrum: Av = -0.50000000
Galaxy: E.pl
SN/Gal = 0.837085
Mg II, I
[O II]
Ca II
0.8
0.6
0.4
0.2
0.0
-0.2
6000
7000
8000
9000
10000

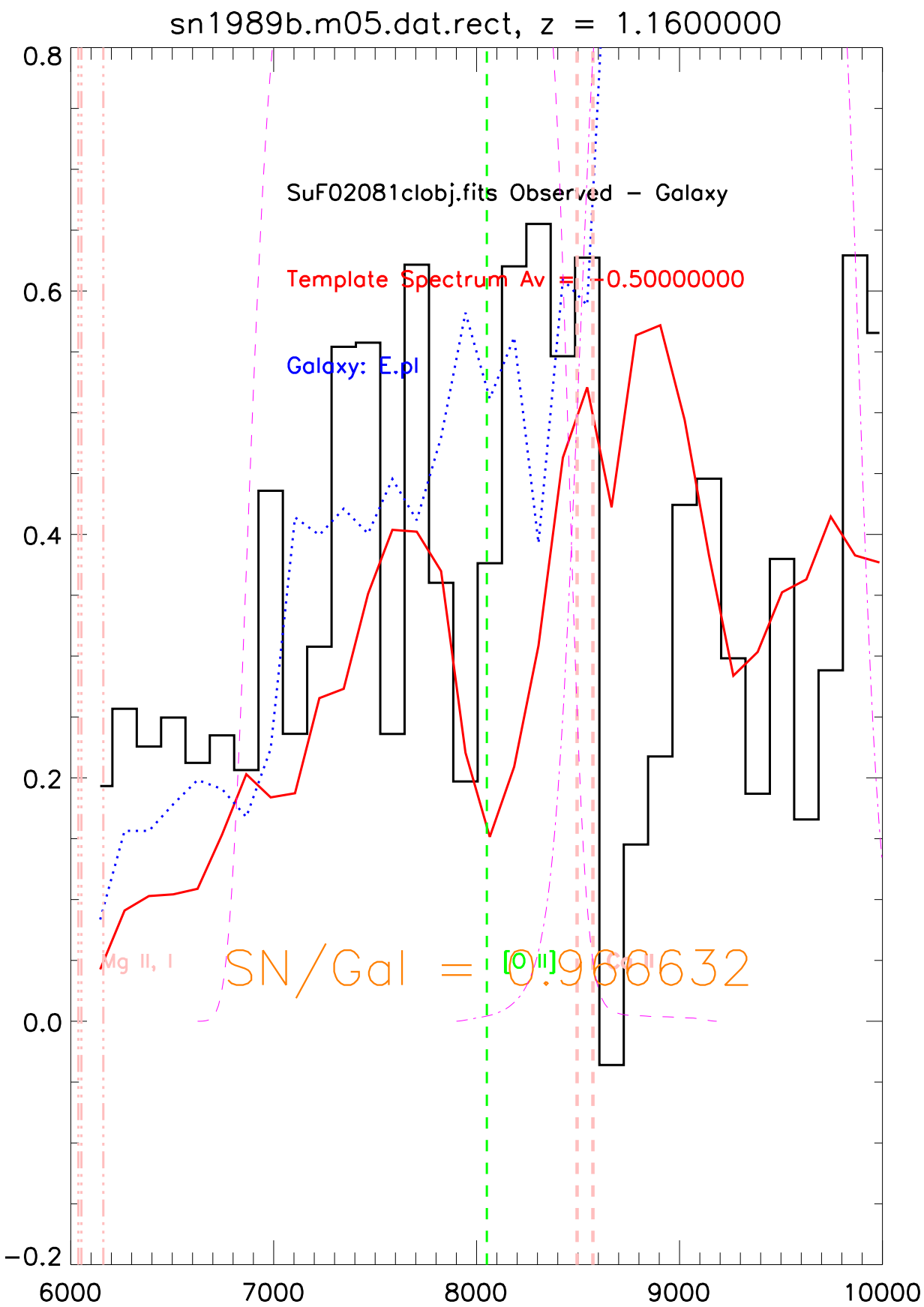

sn1990n.m14.dat.rect, z = 1.4500000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 1.20972
[O II]
Ca II
1.0
0.8
0.6
0.4
0.2
0.0
6000
7000
8000
9000
10000

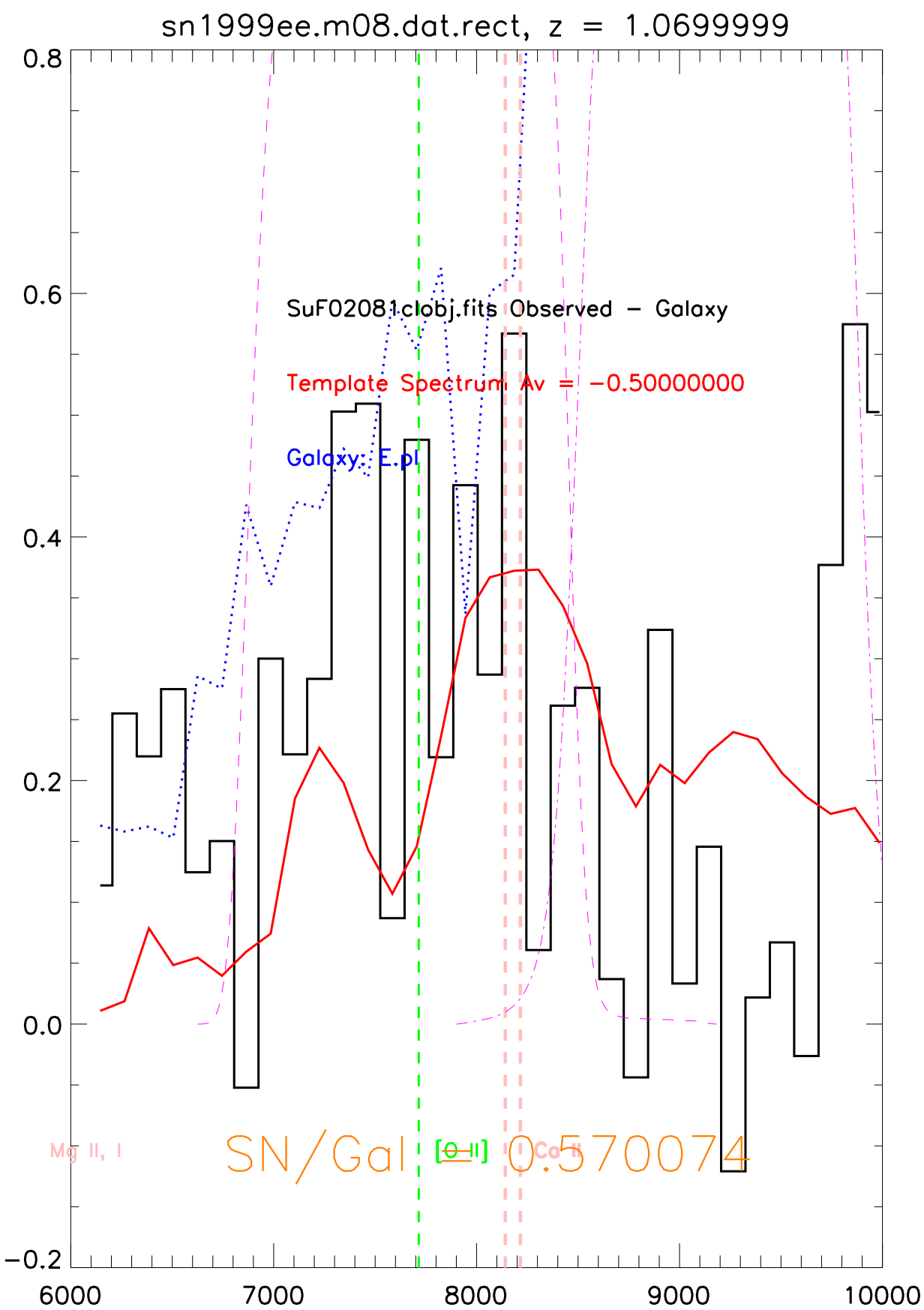

sn1991t.m03.dat.rect, z = 1.2400000
SuF02081c'obj.fits Observed – Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
Mg II, I
[O II]
Ca II
SN/Gal = 0.520816
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

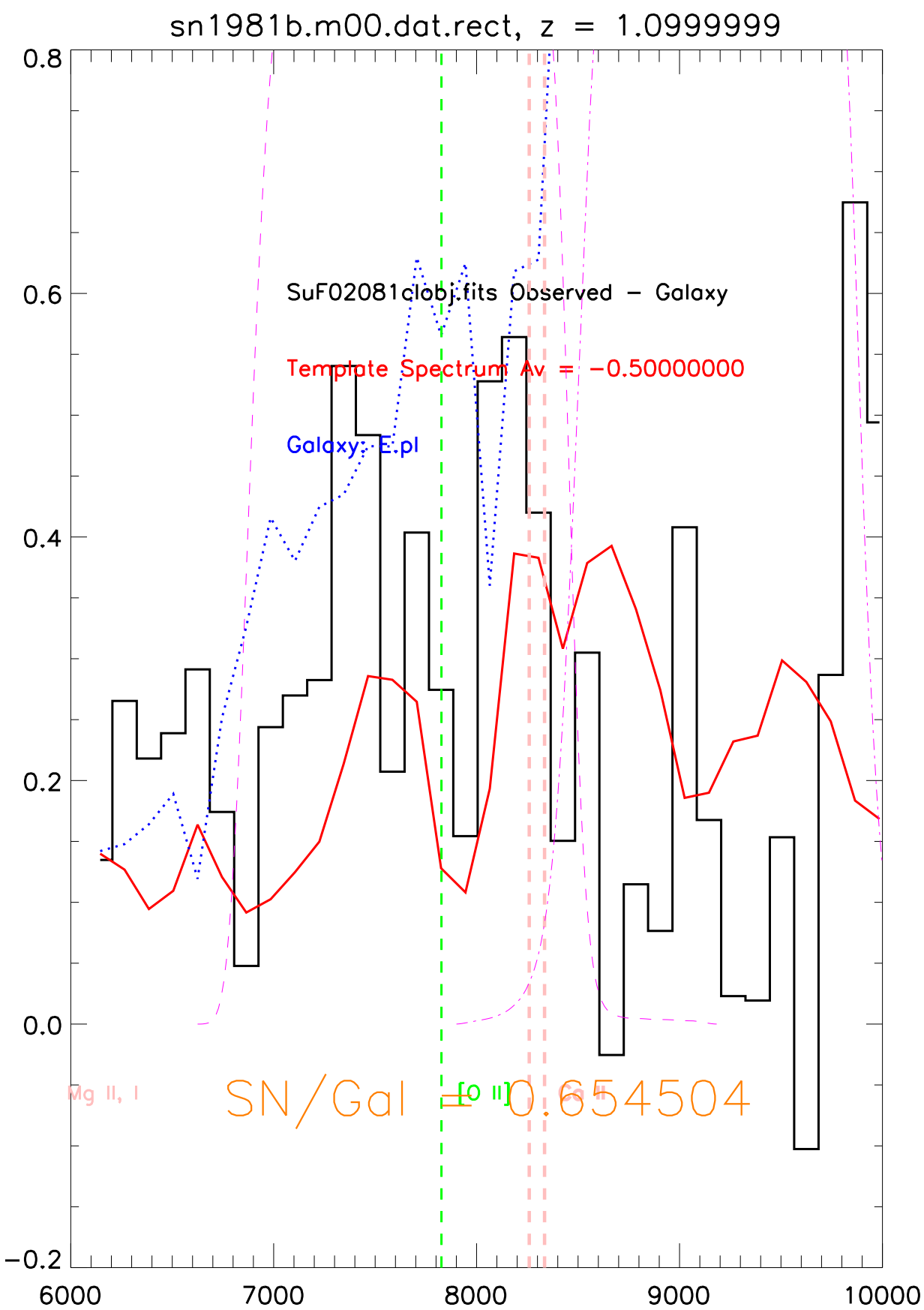

sn1994d.m03.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
Mg II, I
[O II]
Ca II
SN/Gal = 0.519814
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

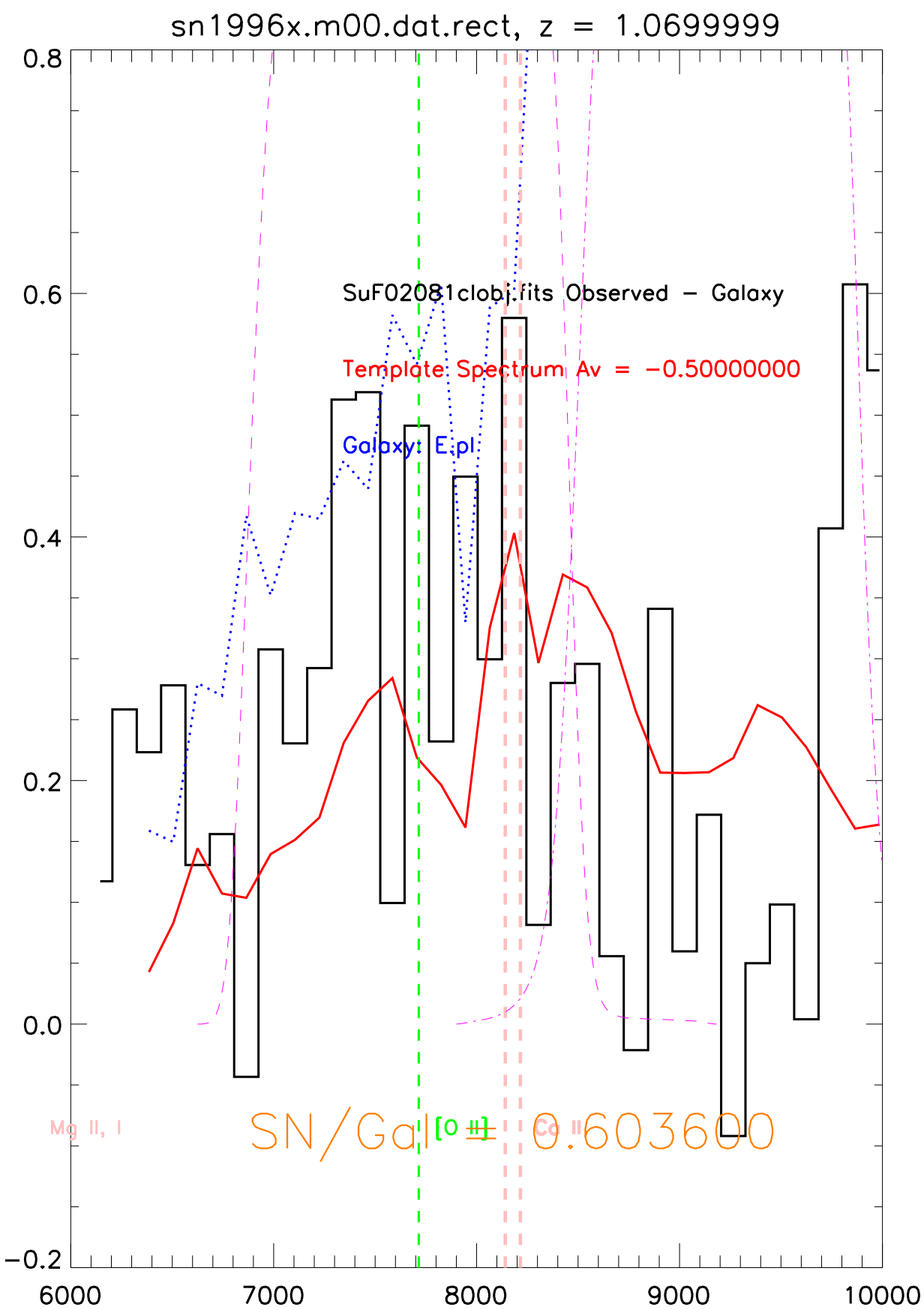

sn1990n.m07.dat.rect, z = 1.0999999
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.618321
Mg II, I
[O II]
[O
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

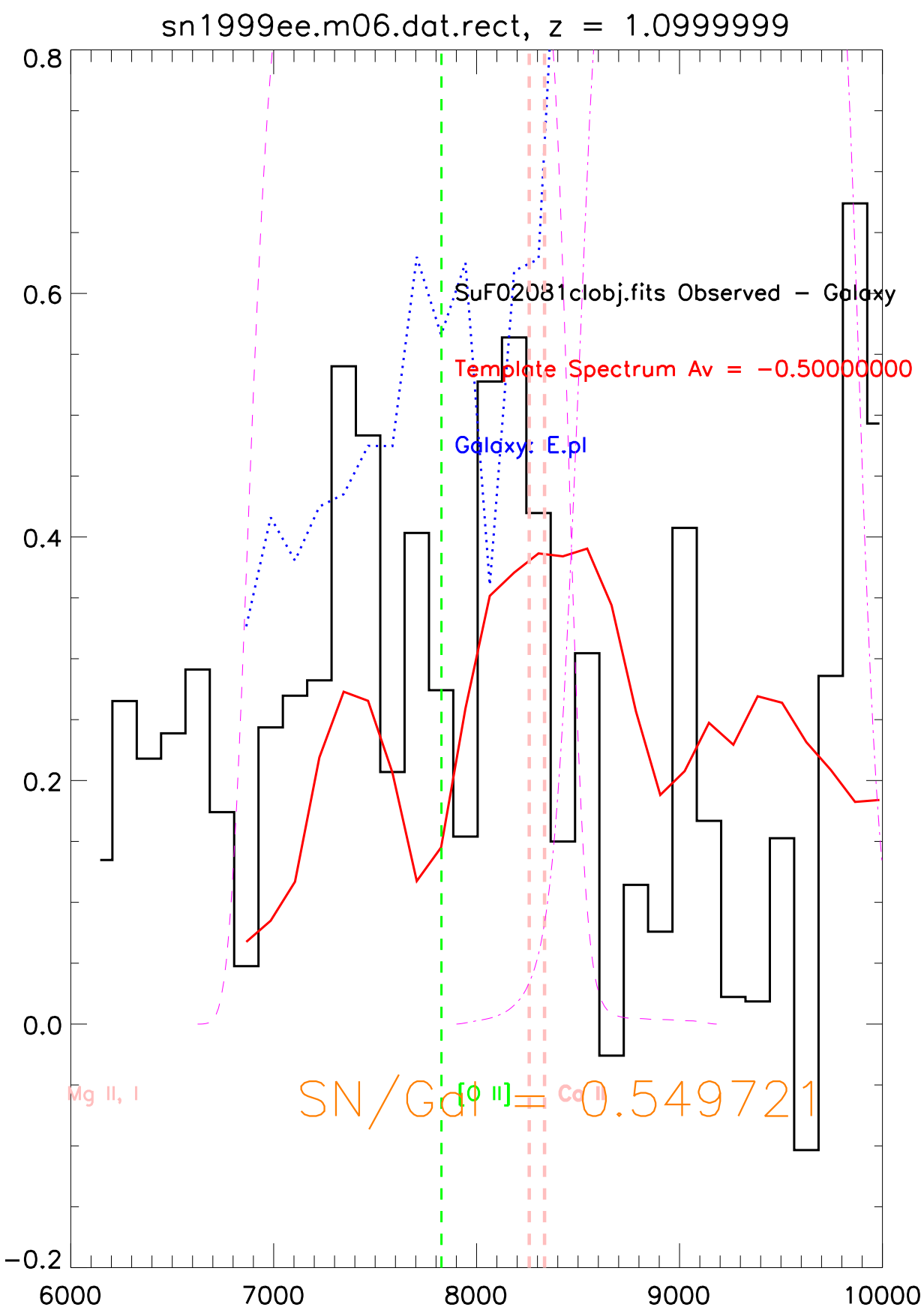

sn1989b.m07.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
Mg II, I
[O II]
Ca II
SN/Gal = 0.5099087
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

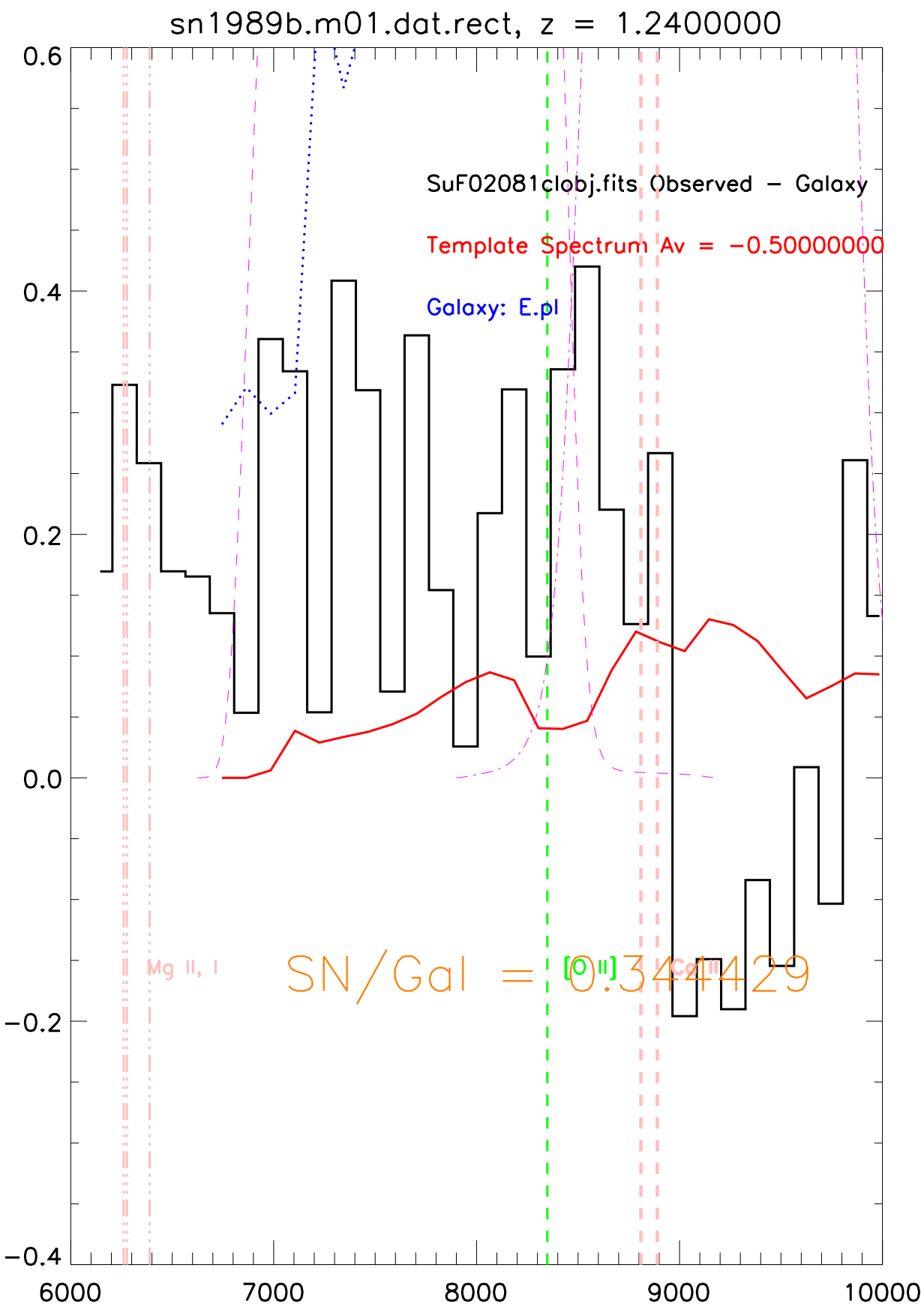

sn1989b.m05.dat.rect, z = 1.1600000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: E.pl
SN/Gal = 0.966632
Mg II, I
[O II]
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1999ee.m08.dat.rect, z = 1.0699999
SuF02081.clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.570074
Mg II, I
[O II]
Co II
[O III]
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.0999999
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.654504
Mg II, I
[O II]
Ca II
[O
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1996x.m00.dat.rect, z = 1.0699999
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.603600
Mg II, I
[O II]
Ca II
[O III]
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1999ee.m06.dat.rect, z = 1.0999999
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.549721
Mg II, I
[O II]
Ca II
[O
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1989b.m01.dat.rect, z = 1.2400000
SuF02081clobj.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: E.pl
SN/Gal = 0.3444429
Mg II, I
[O II]
Ca II
0.6
0.4
0.2
0.0
−0.2
−0.4
6000
7000
8000
9000
10000