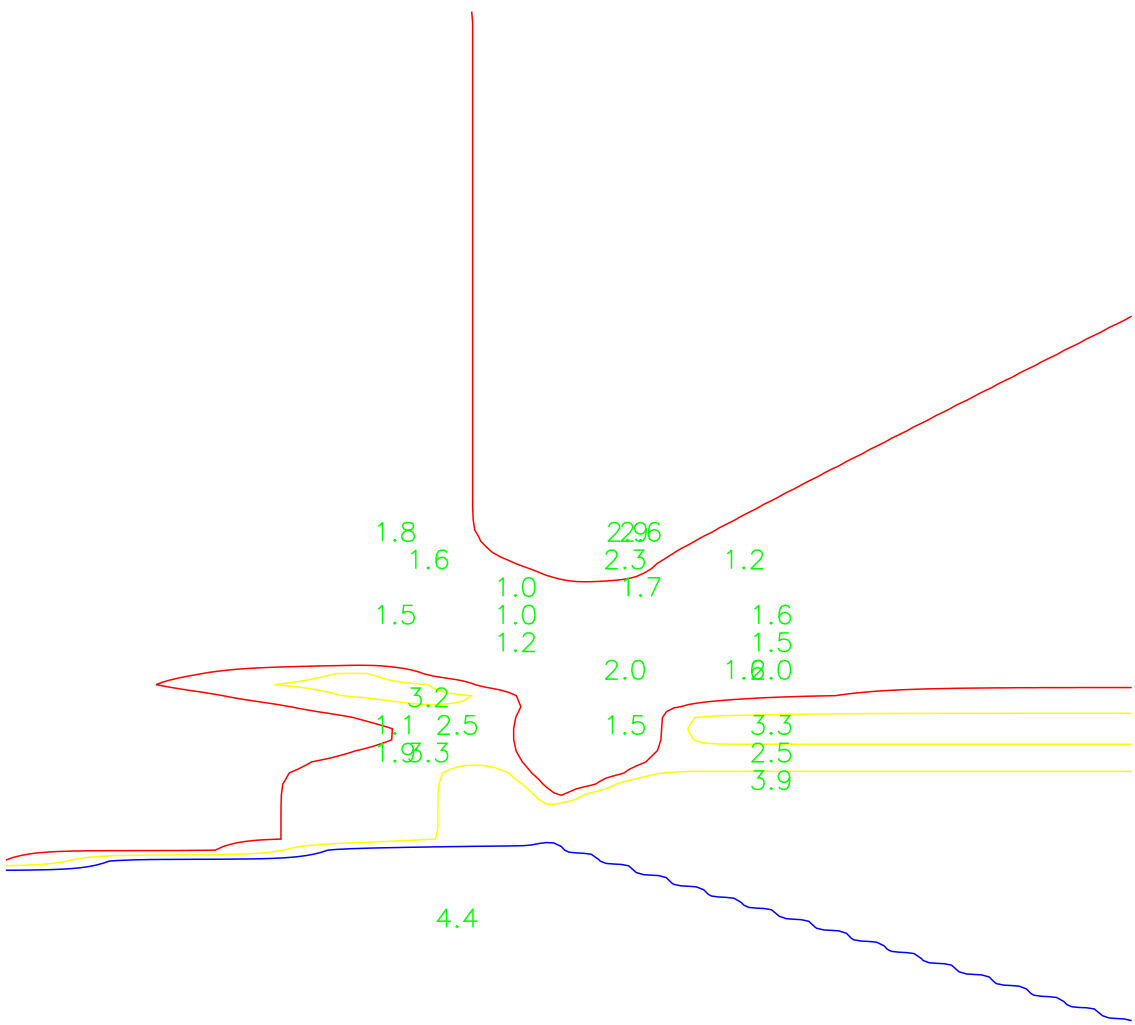
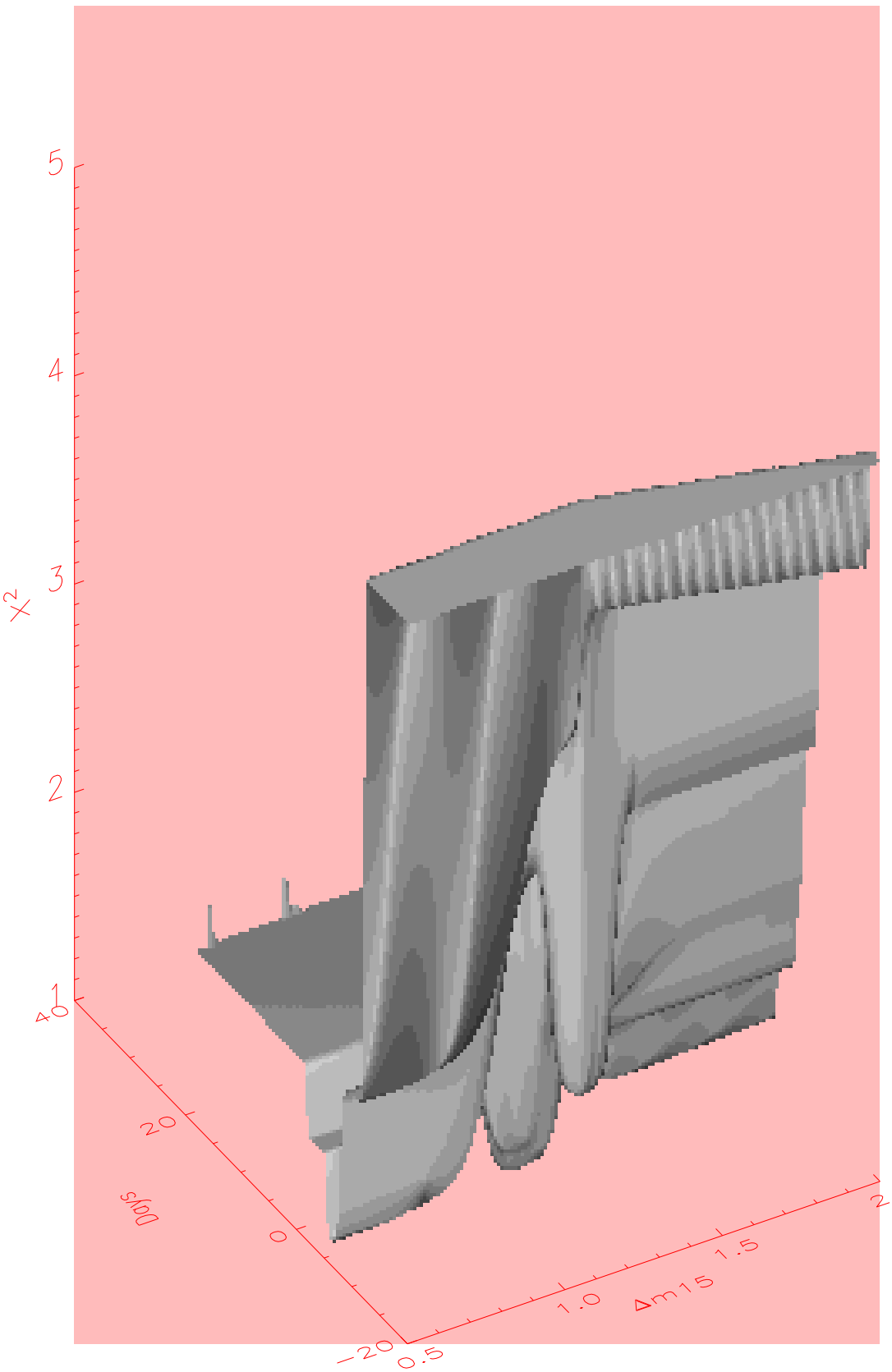
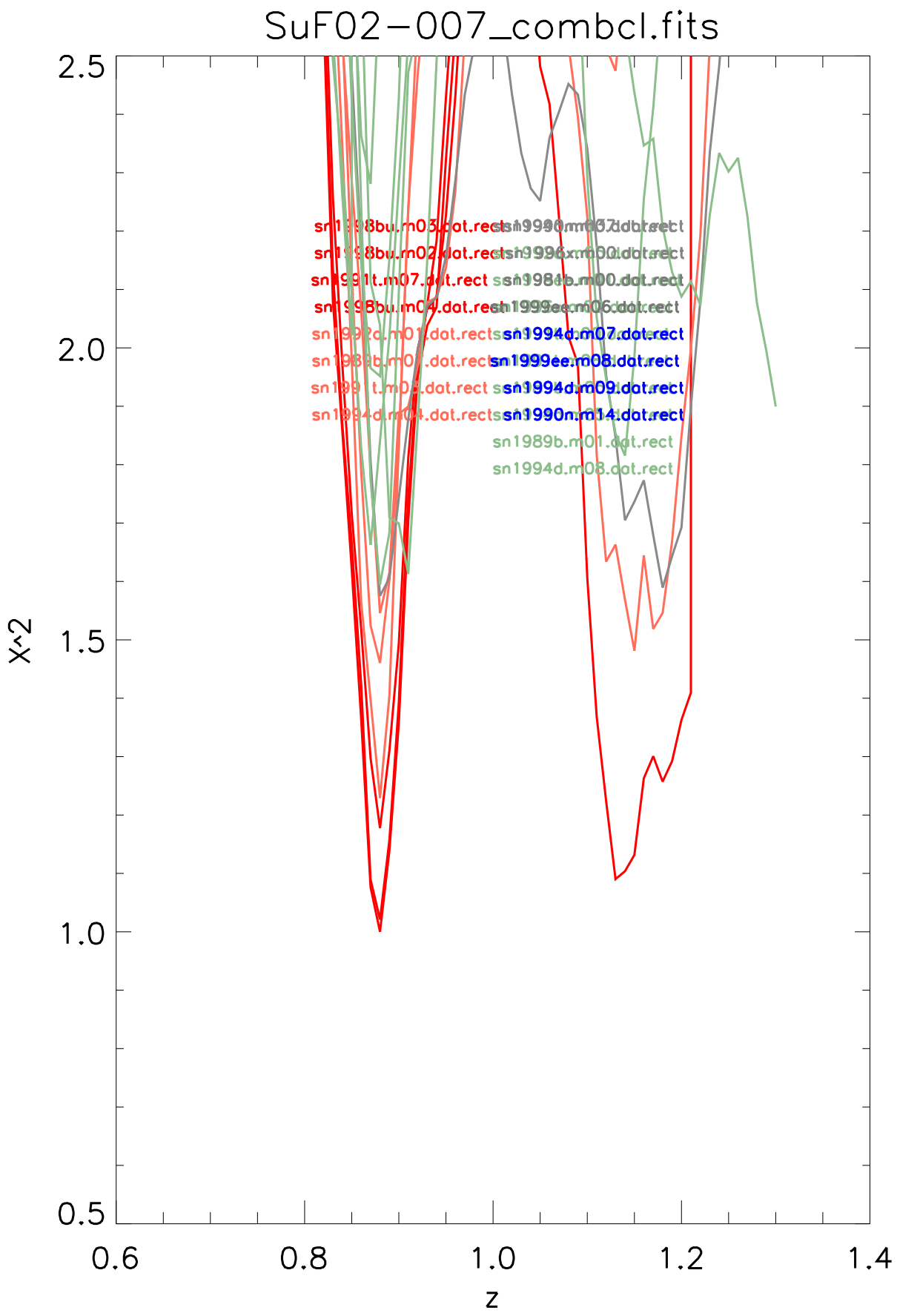
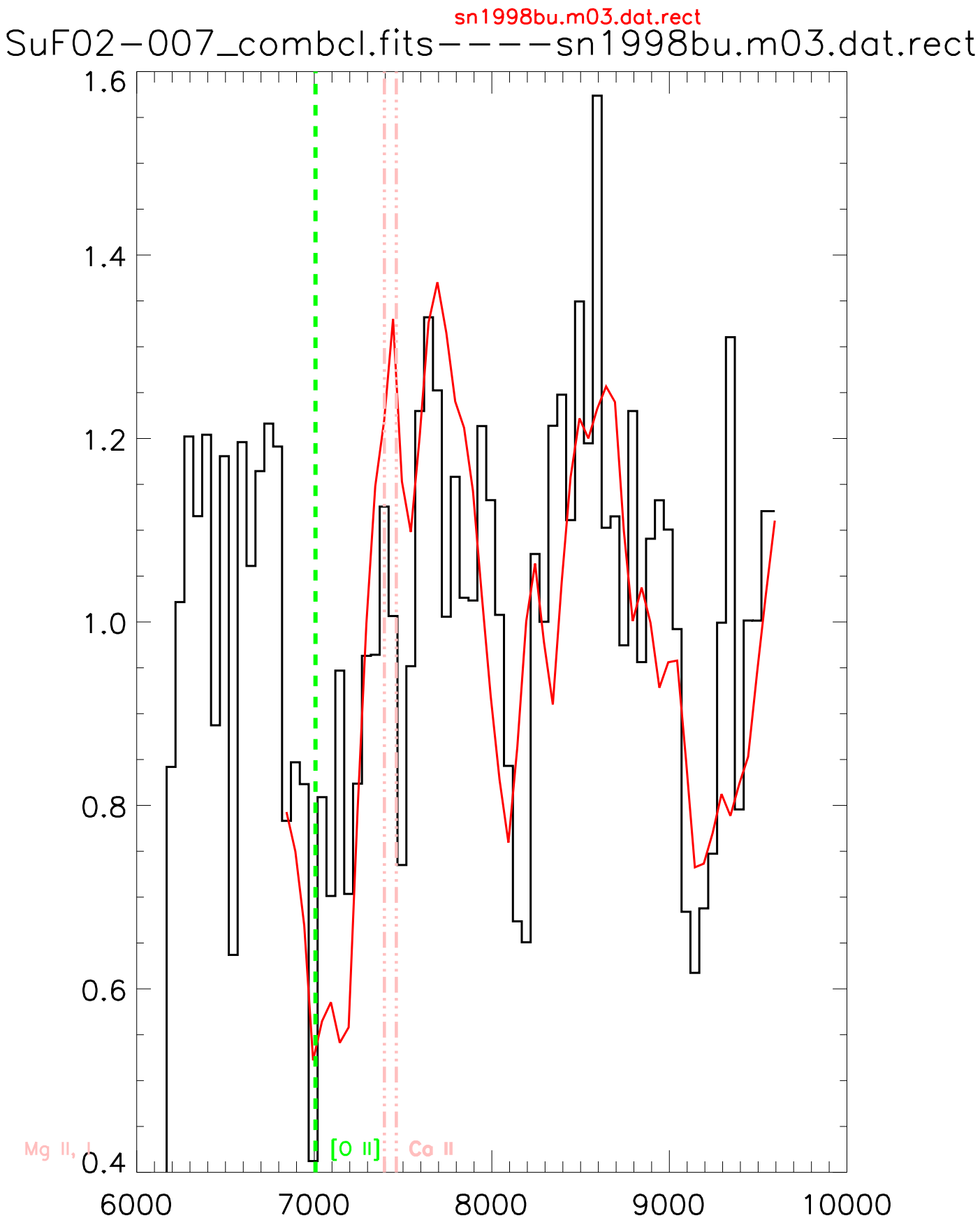
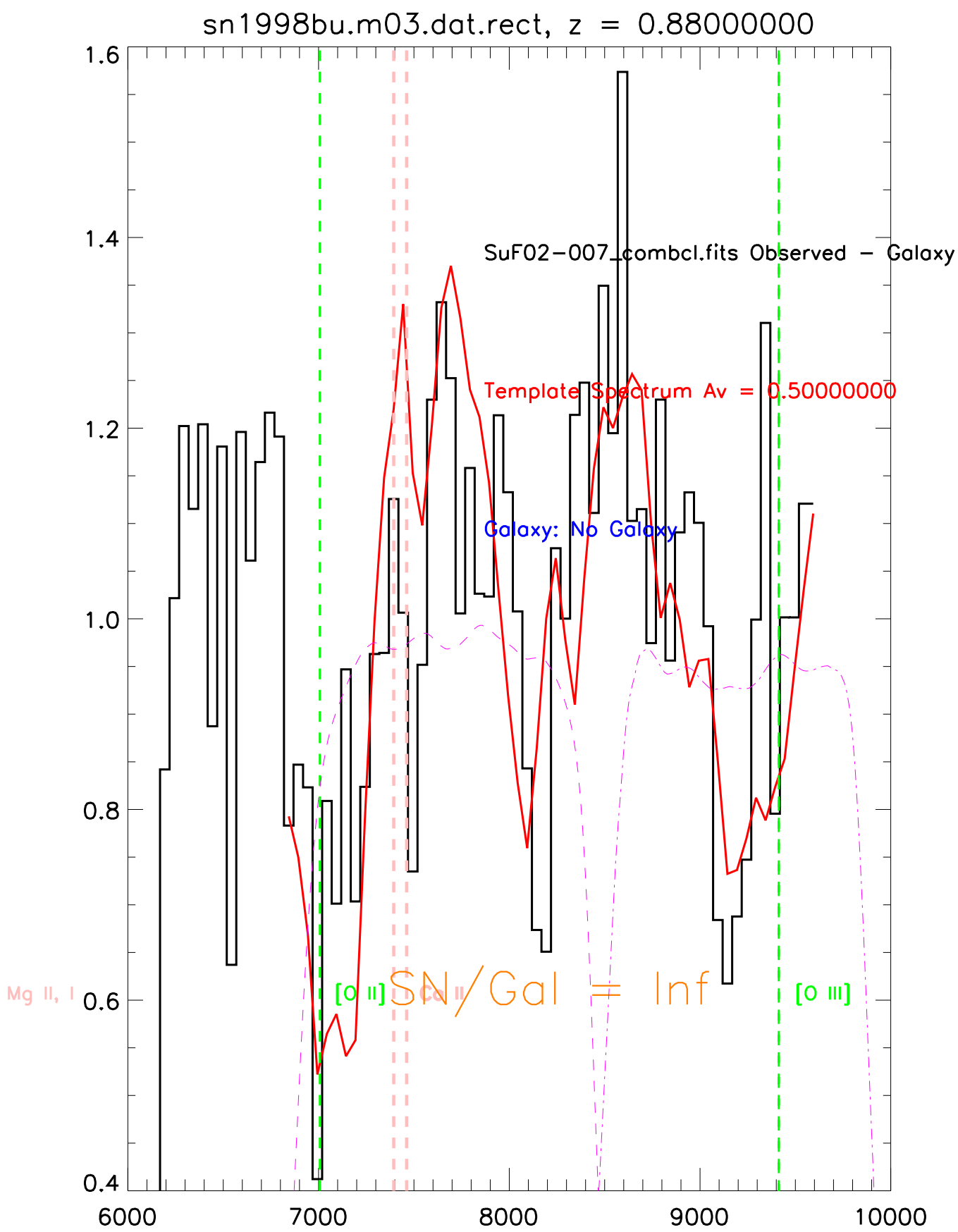
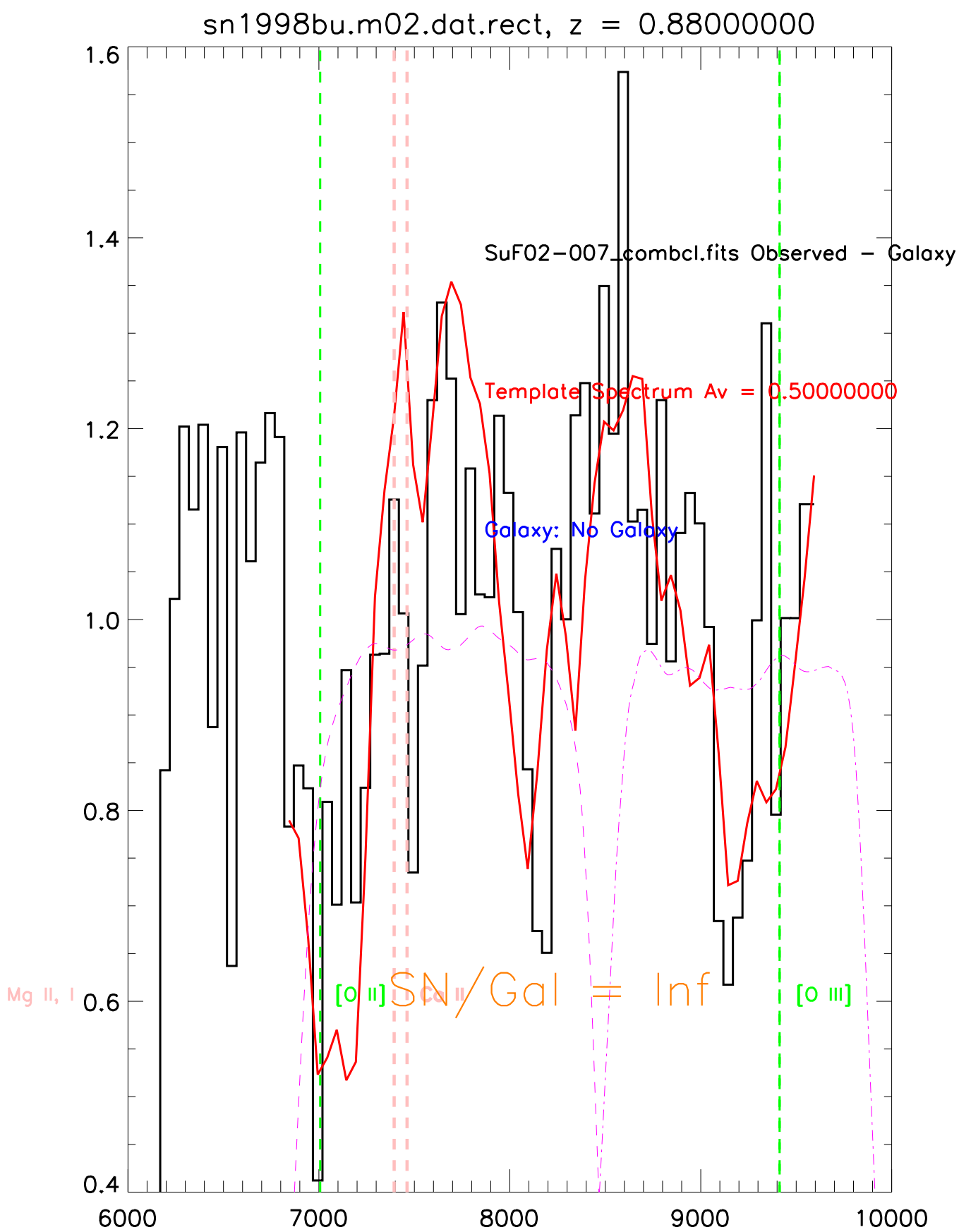

1.8
1.6
1.0
1.5
1.0
1.2
2.0
3.2
1.1
2.5
1.5
3.3
2.5
3.9
4.4

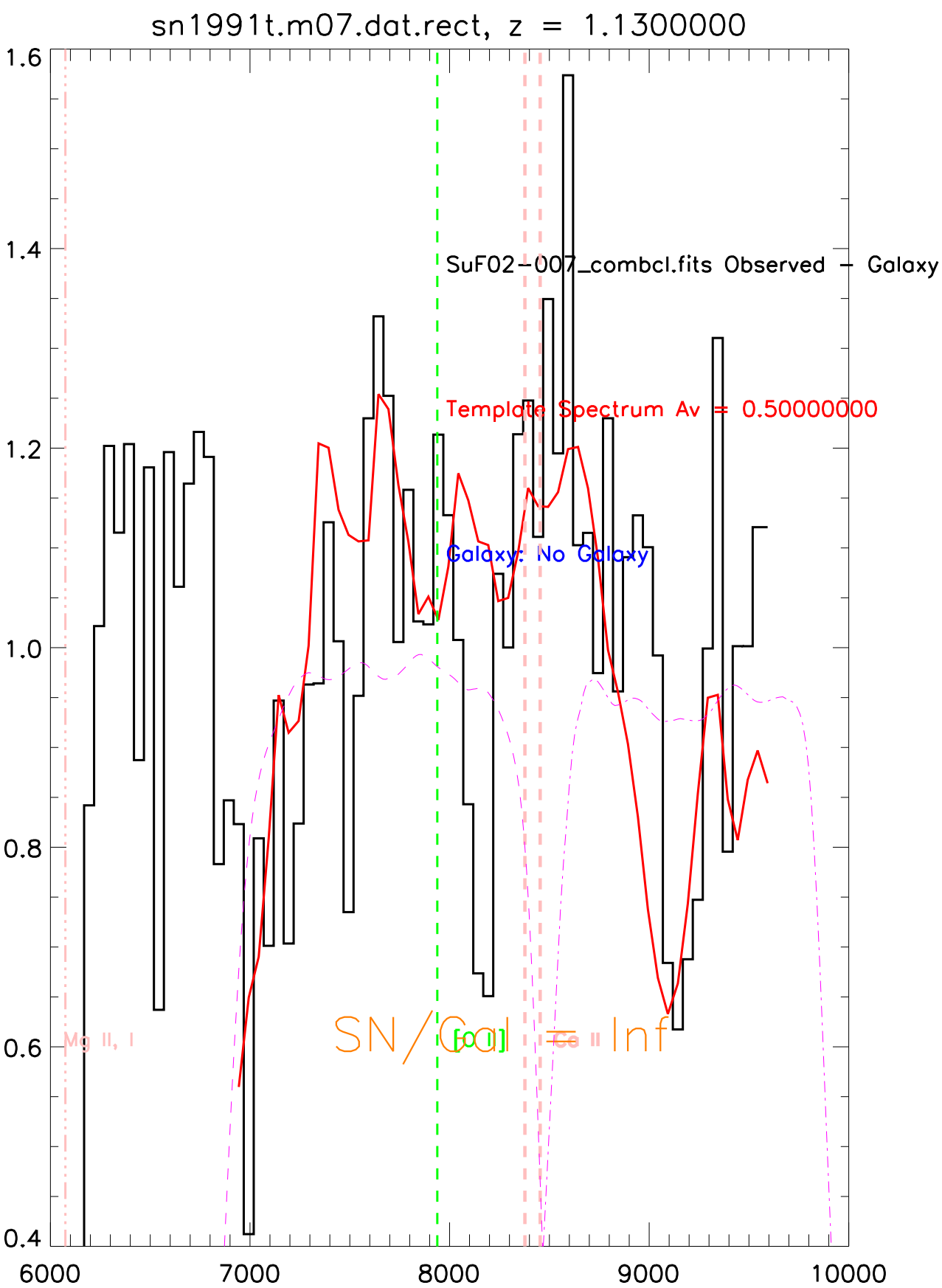

5
4
3
2
1
χ^2
40
20
0
−20
days
0.5
1.0
1.5
2.0
Δm15

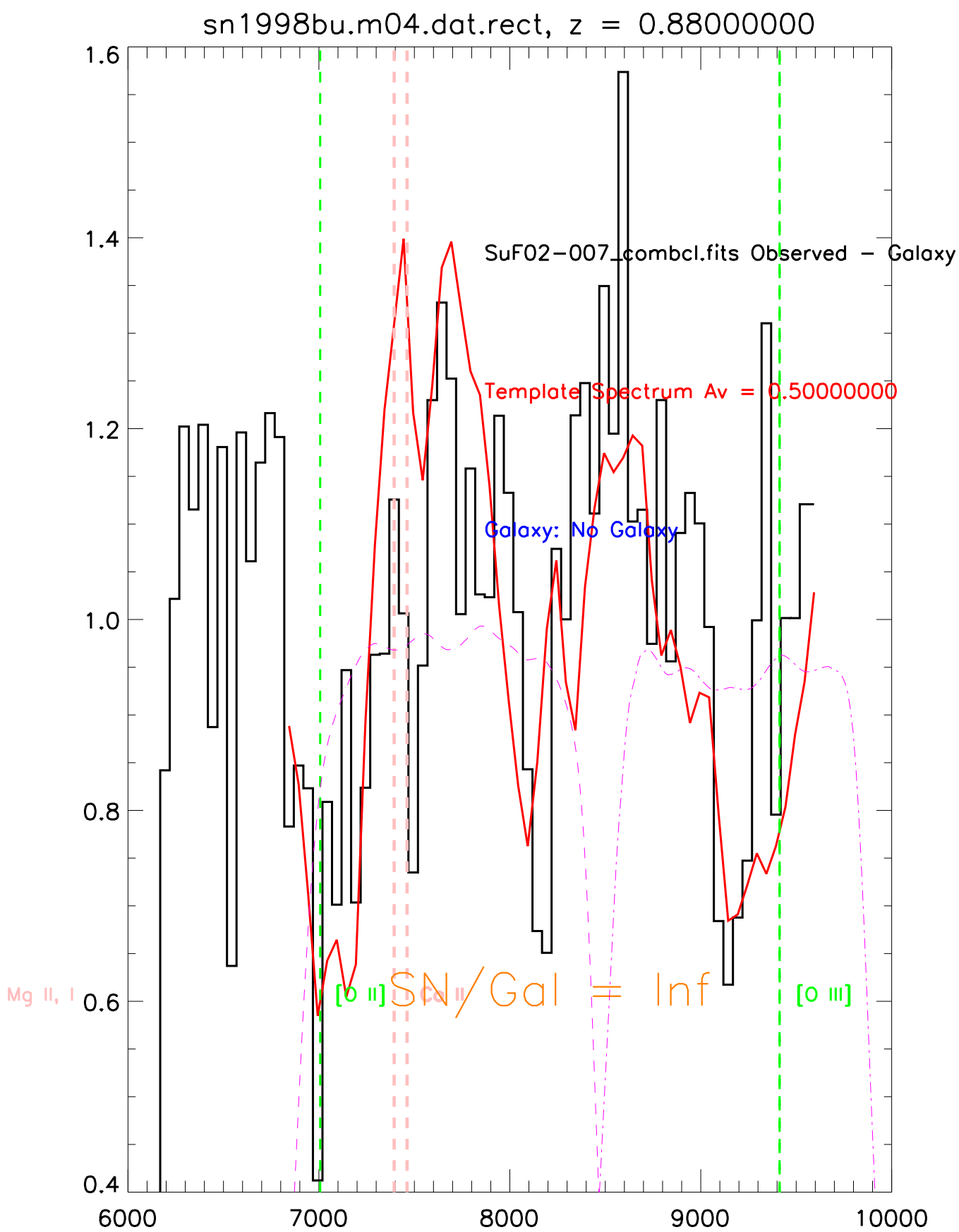

SuF02−007_combcl.fits
2.5
2.0
1.5
1.0
0.5
X^2
0.6
0.8
1.0
1.2
1.4
z
sn1998bu.m03.dat.rect
sn1998bu.m02.dat.rect
sn1991t.m07.dat.rect
sn1998bu.m04.dat.rect
sn1994d.m07.dat.rect
sn1999ee.m08.dat.rect
sn1994d.m09.dat.rect
sn1990n.m14.dat.rect
sn1989b.m01.dat.rect
sn1994d.m08.dat.rect

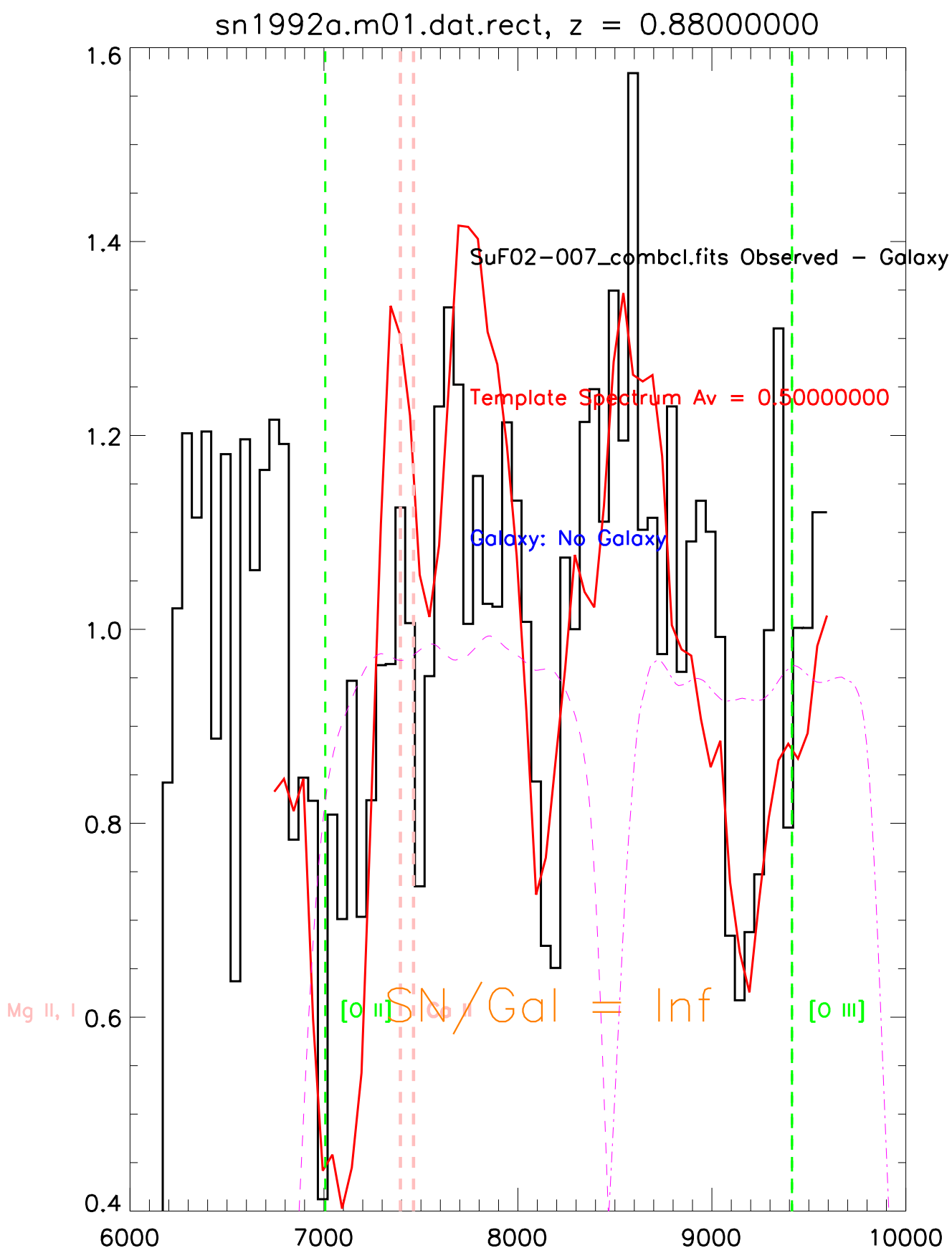

sn1998bu.m03.dat.rect
SuF02−007_combcl.fits−−−−sn1998bu.m03.dat.rect
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000
Mg II,
[O II]
Ca II

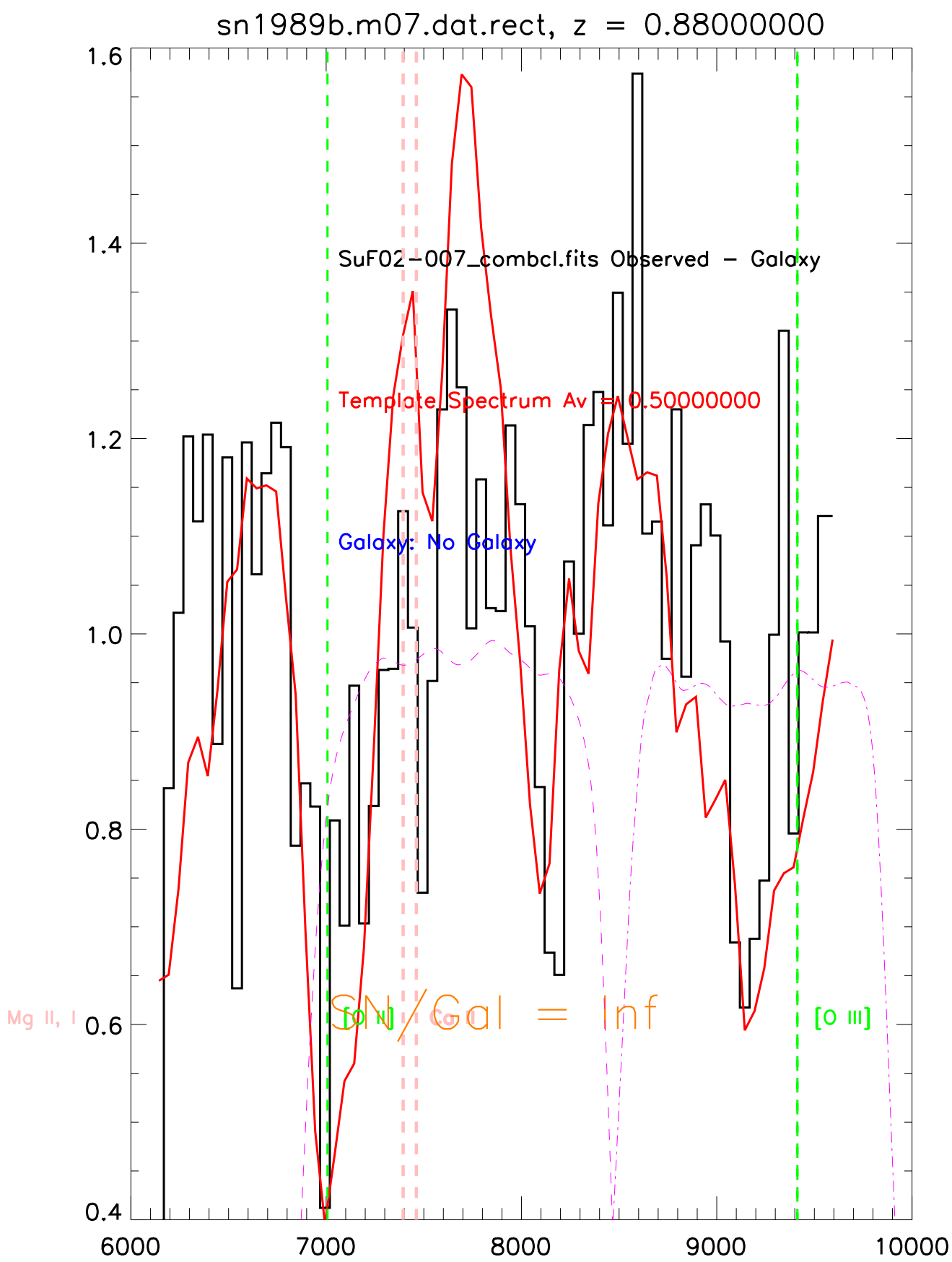

sn1998bu.m03.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

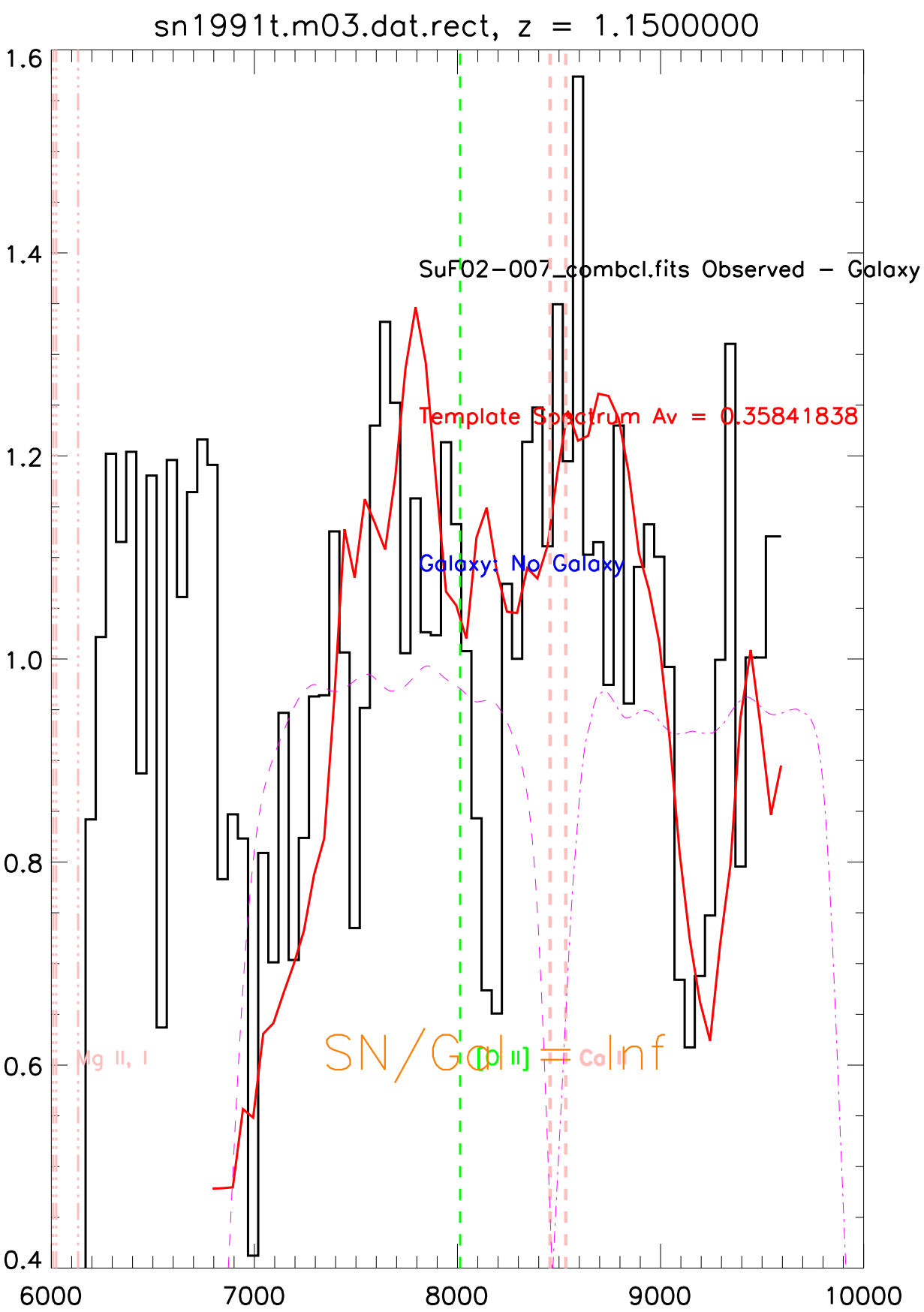

sn1998bu.m02.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

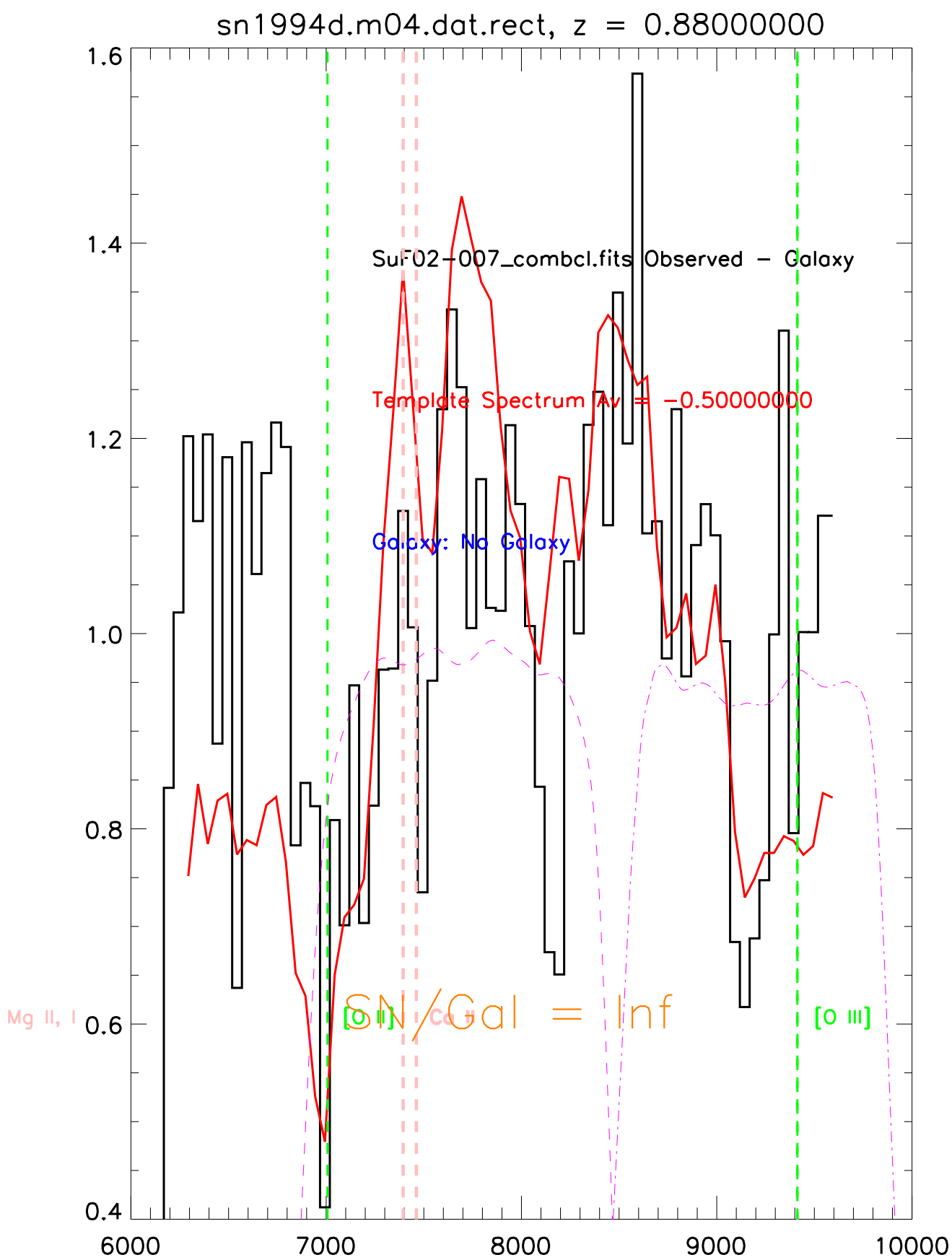

sn1991t.m07.dat.rect, z = 1.1300000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

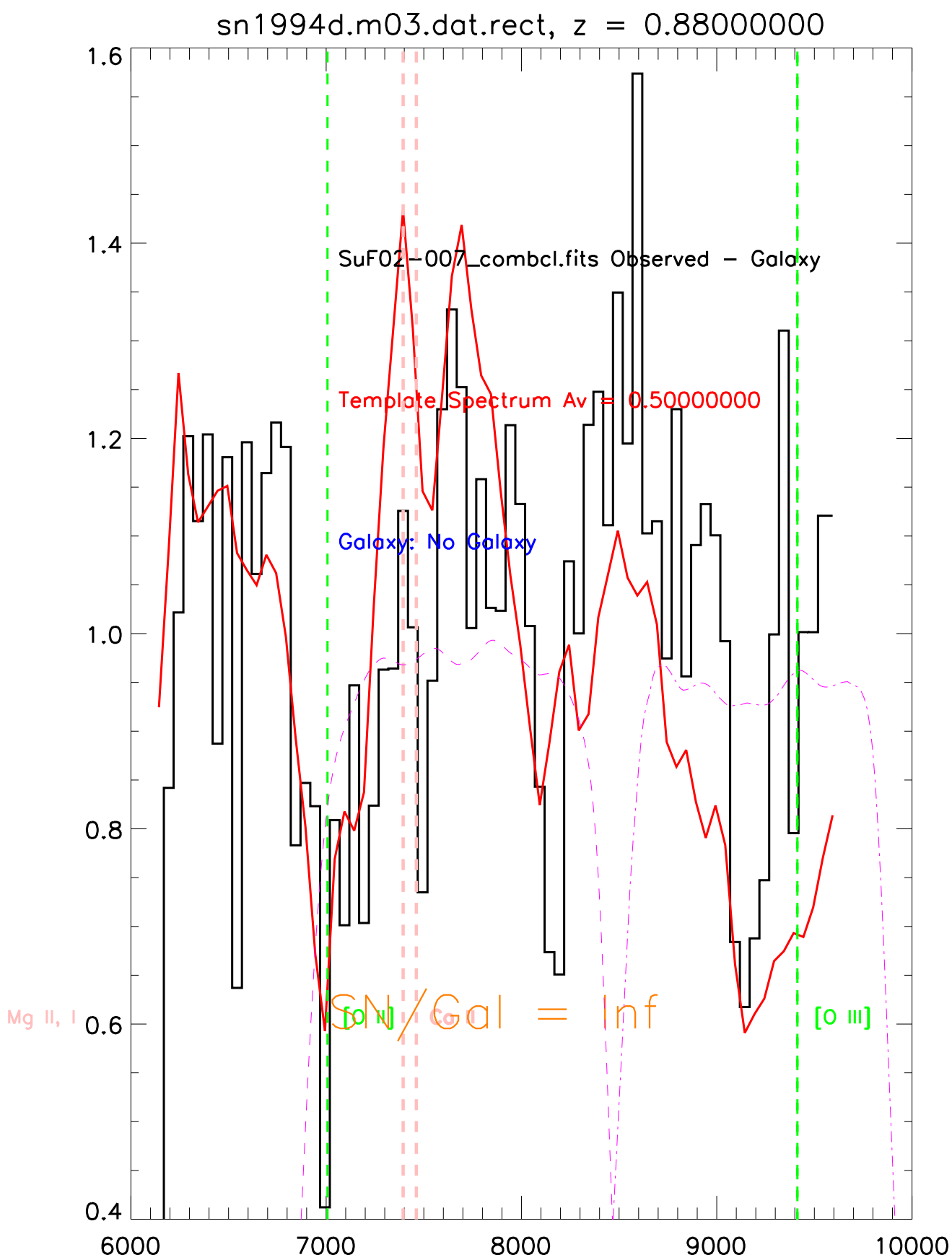

sn1998bu.m04.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

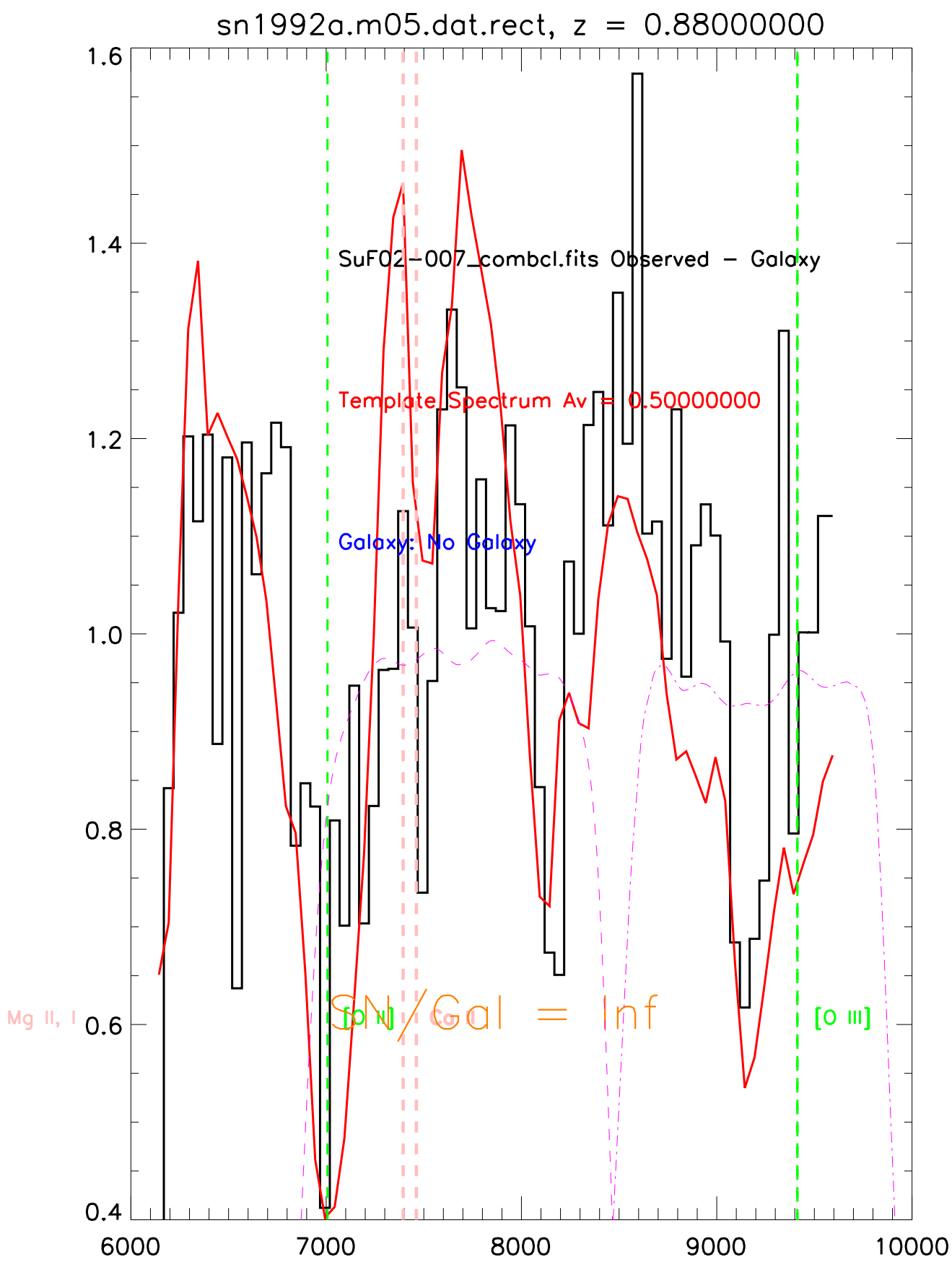

sn1992a.m01.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

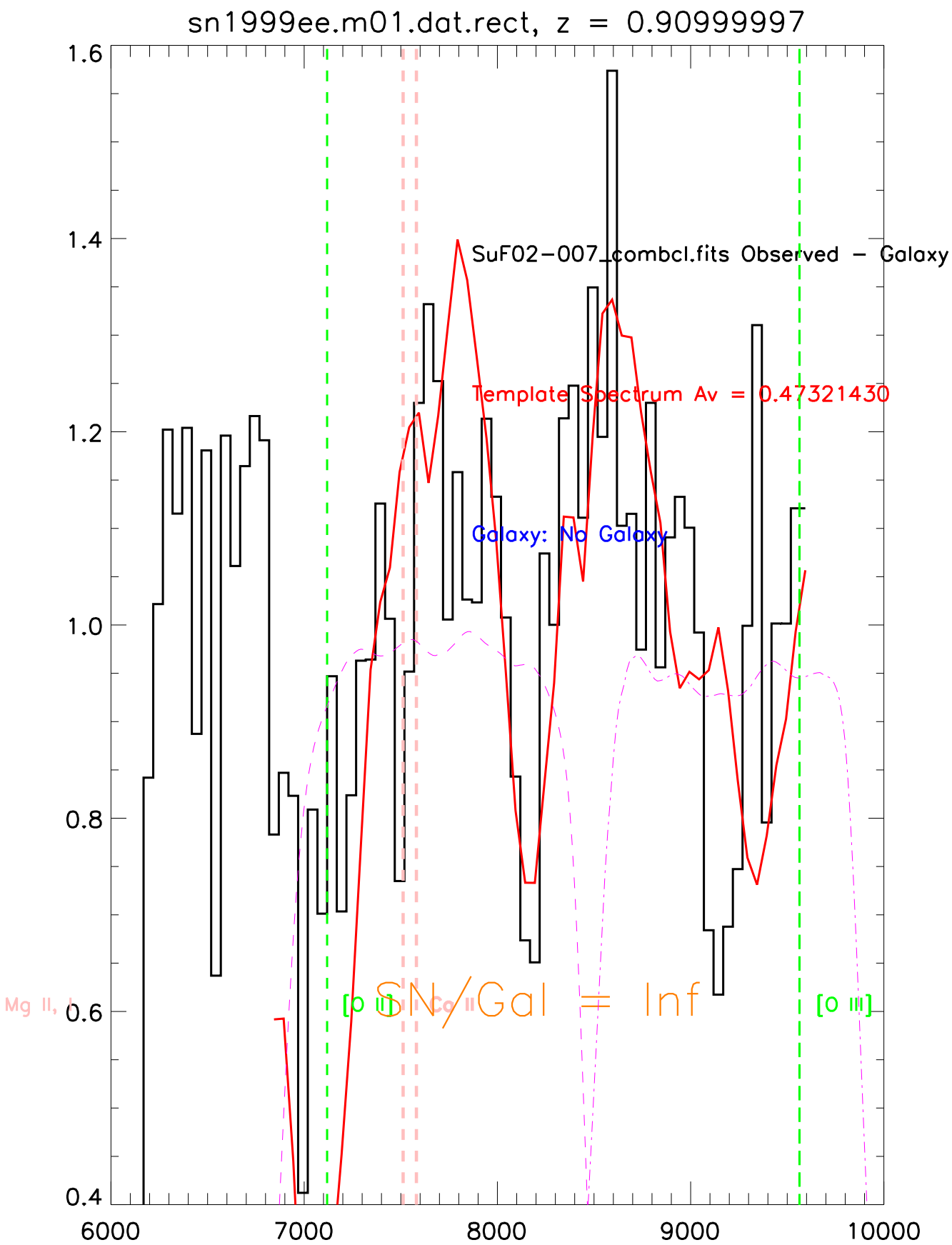

sn1989b.m07.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
S/N/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

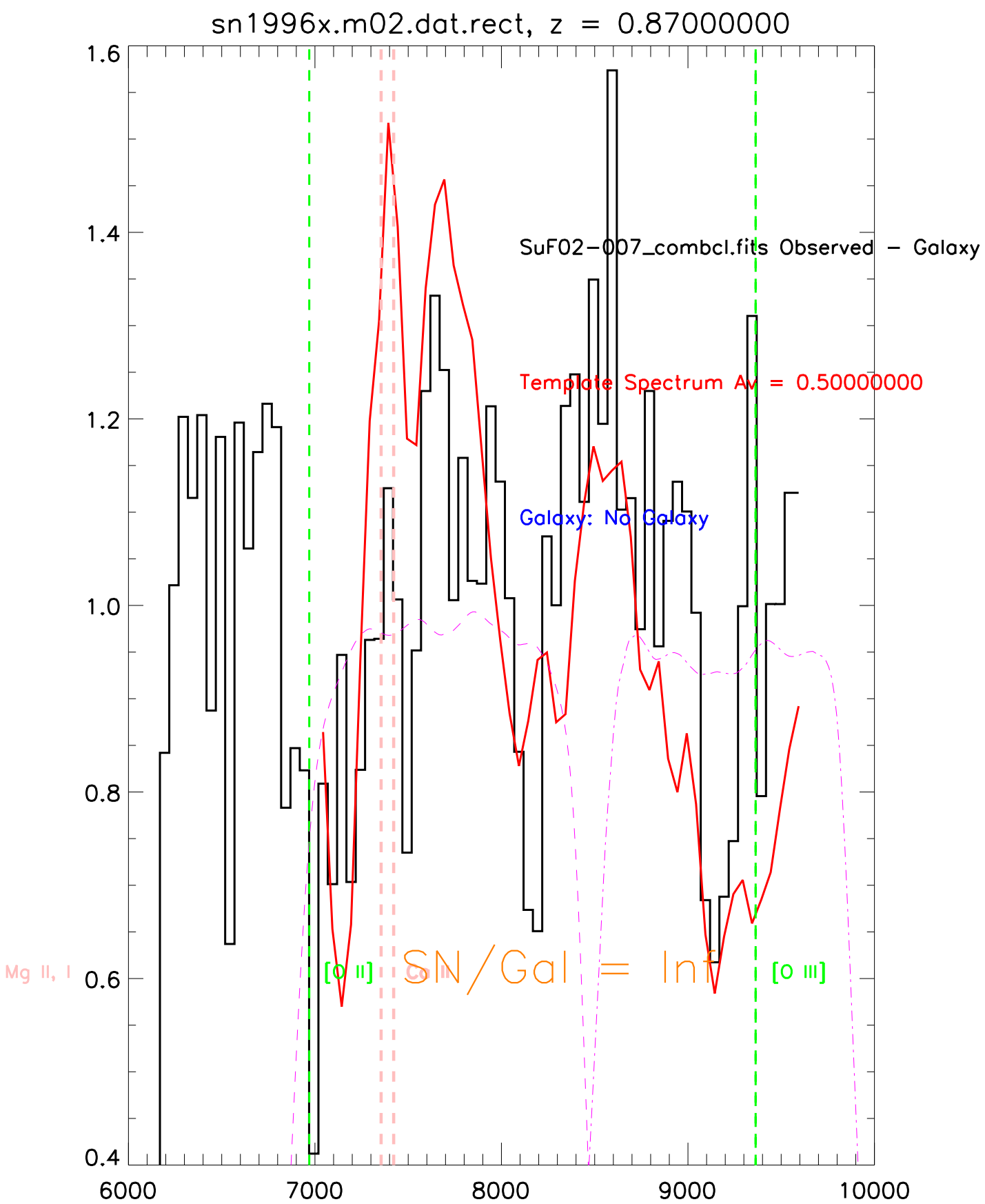

sn1991t.m03.dat.rect, z = 1.1500000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.35841838
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

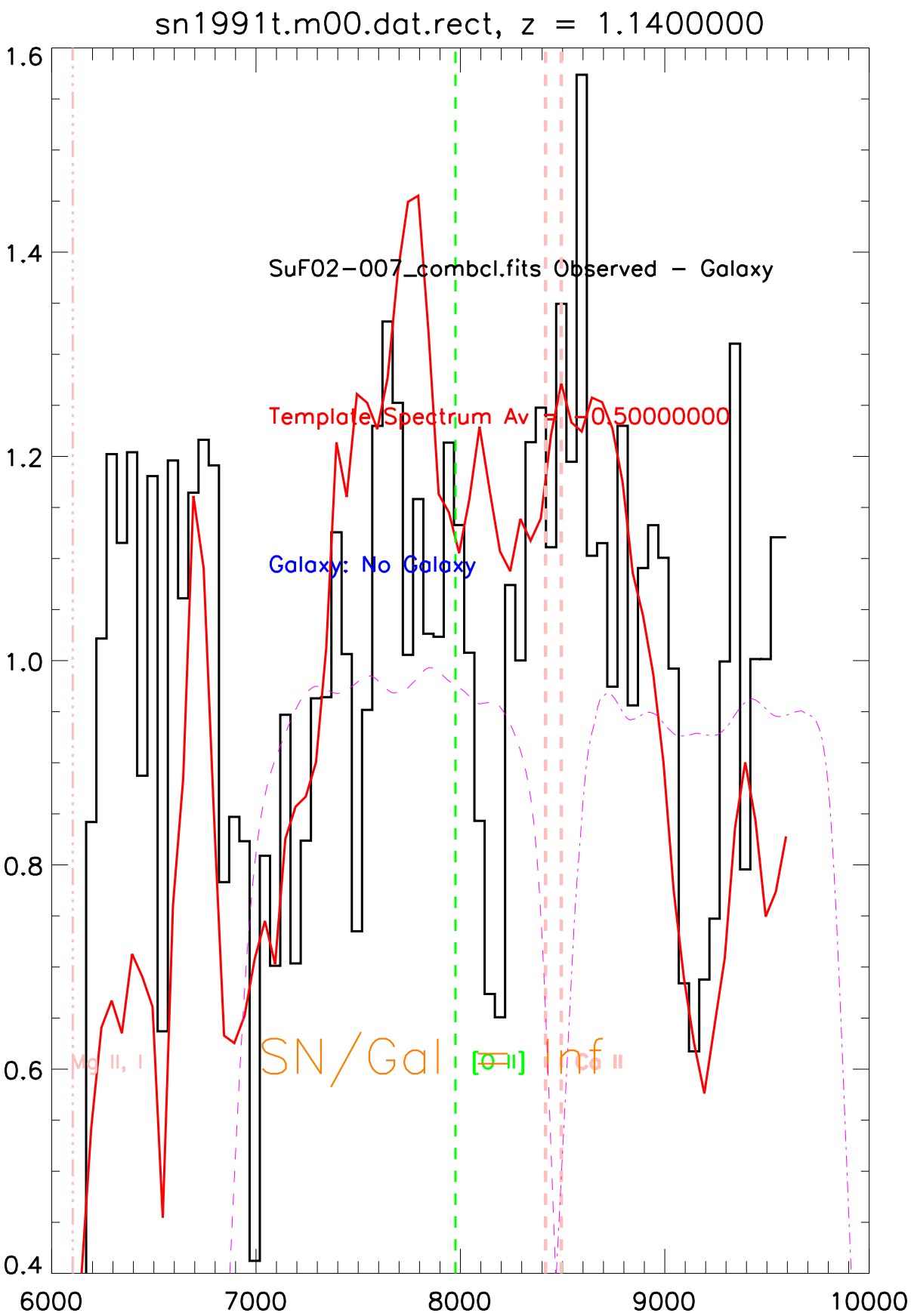

sn1994d.m04.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

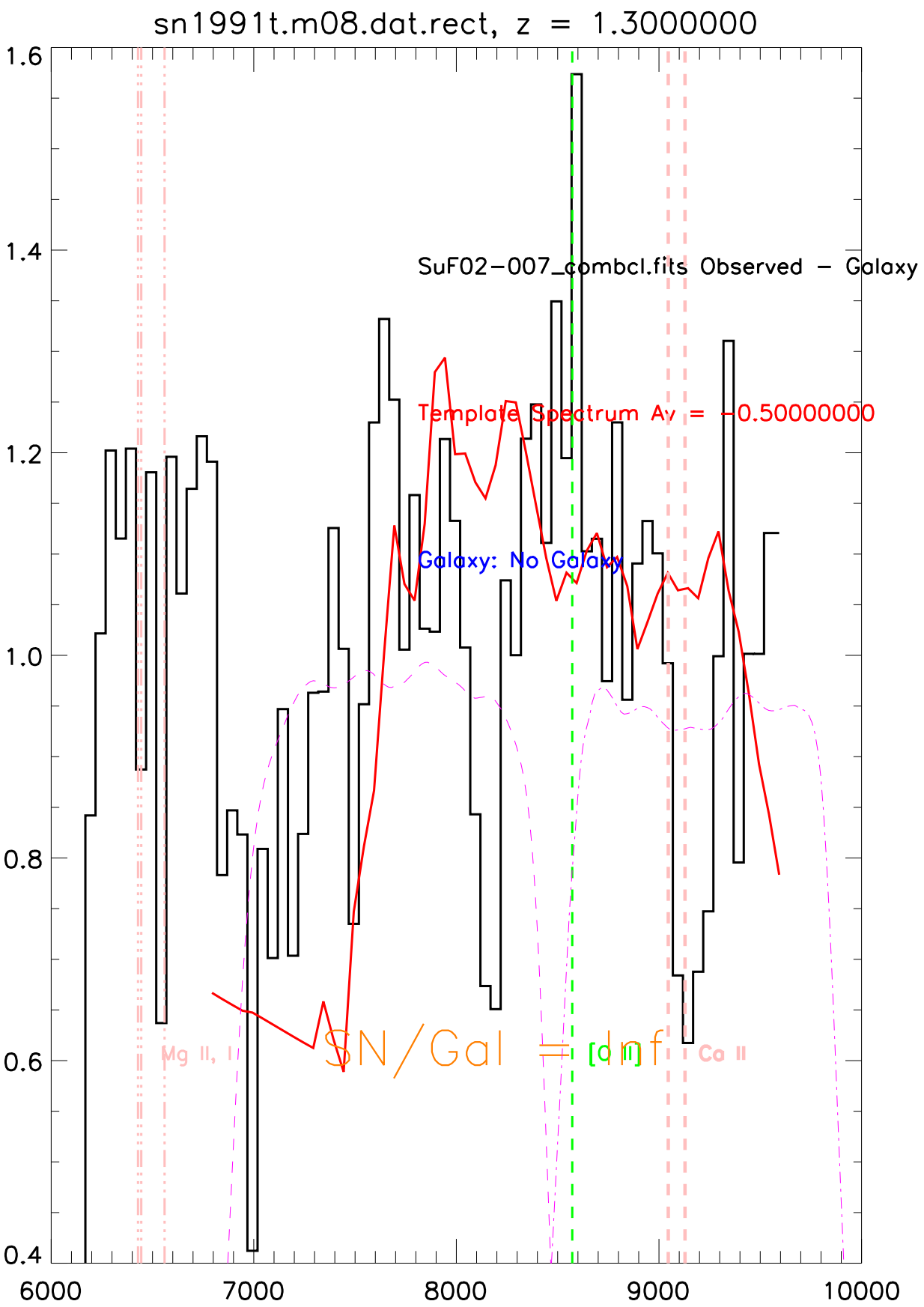

sn1994d.m03.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

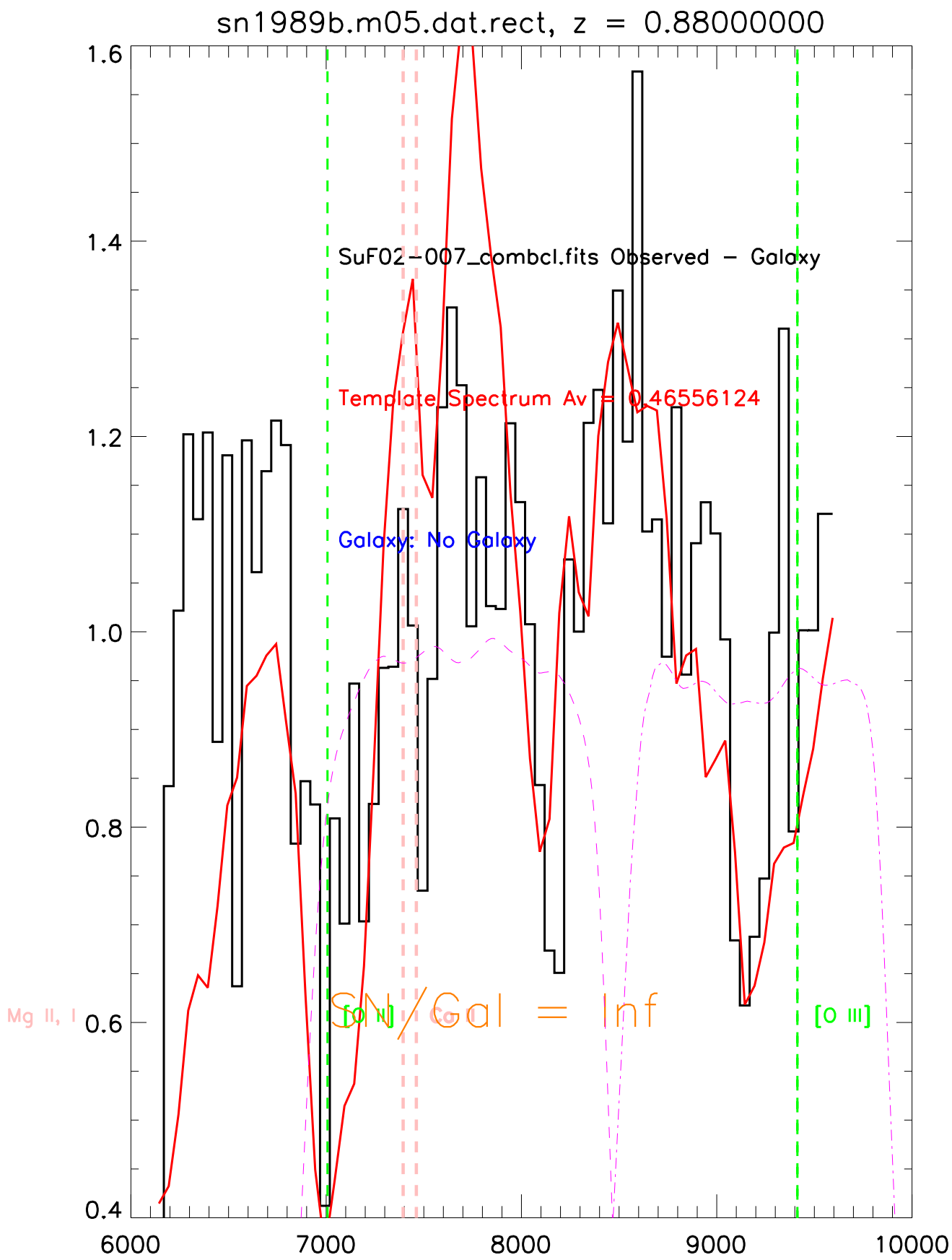

sn1992a.m05.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
S/N/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

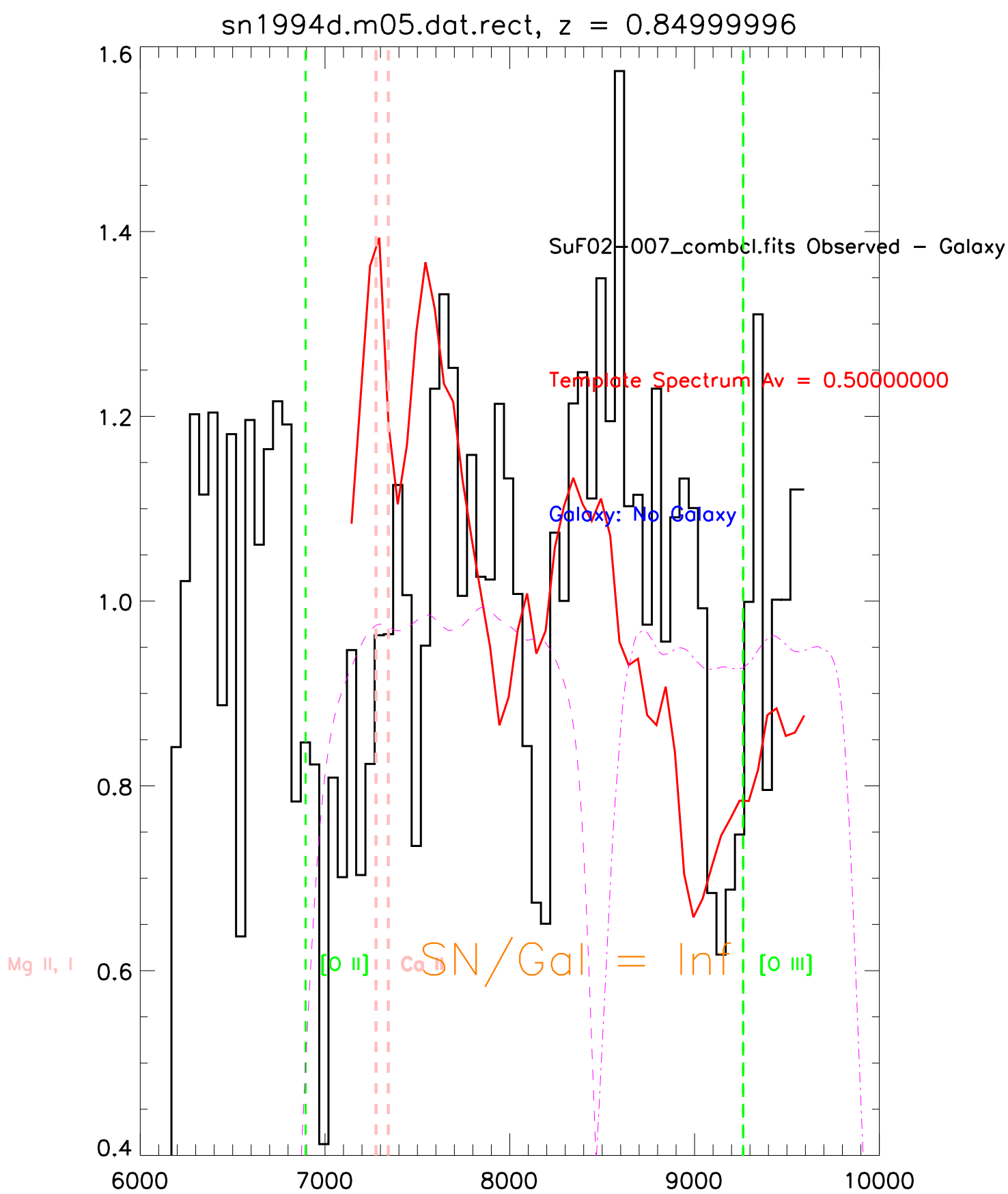

sn1999ee.m01.dat.rect, z = 0.90999997
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.47321430
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

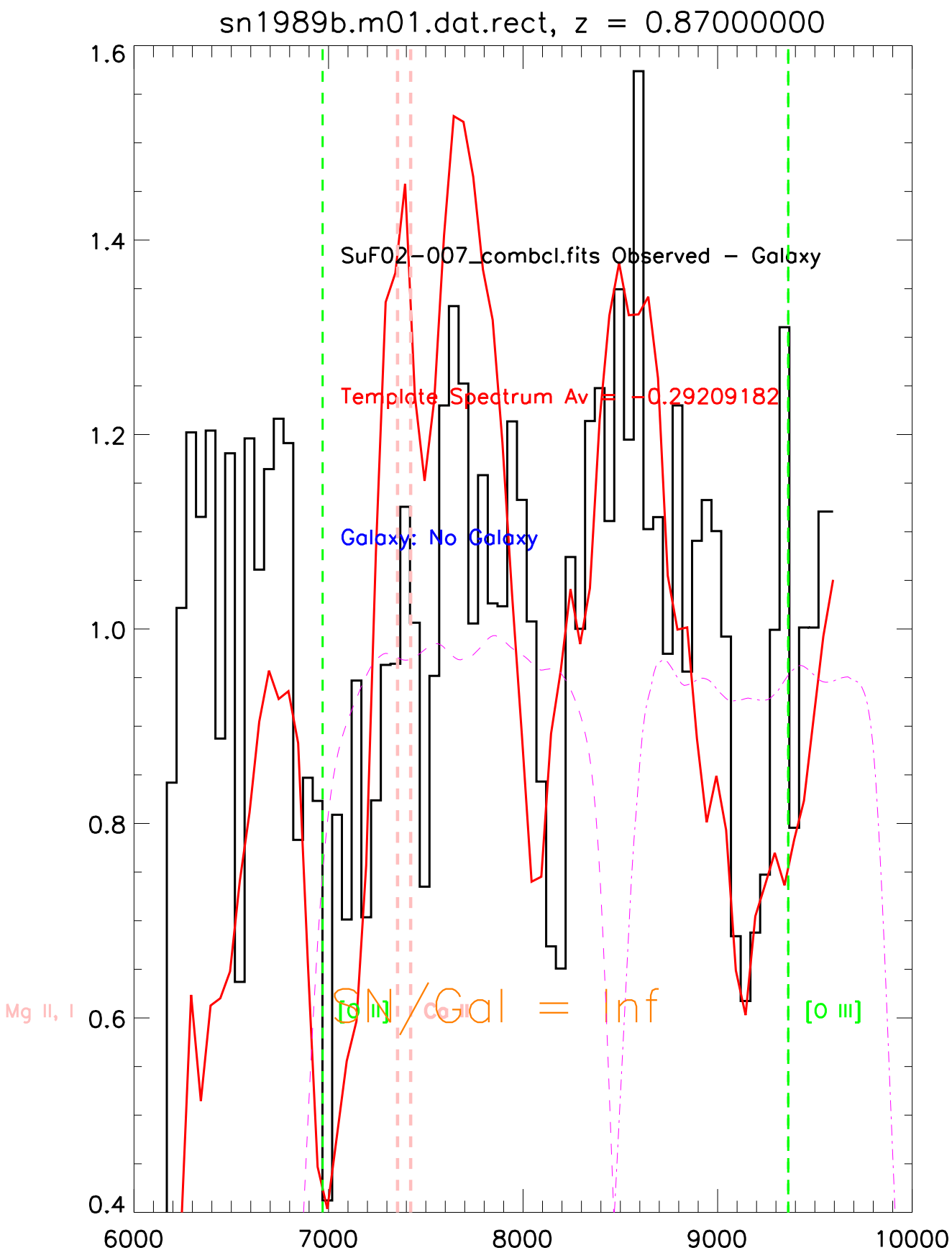

sn1996x.m02.dat.rect, z = 0.87000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

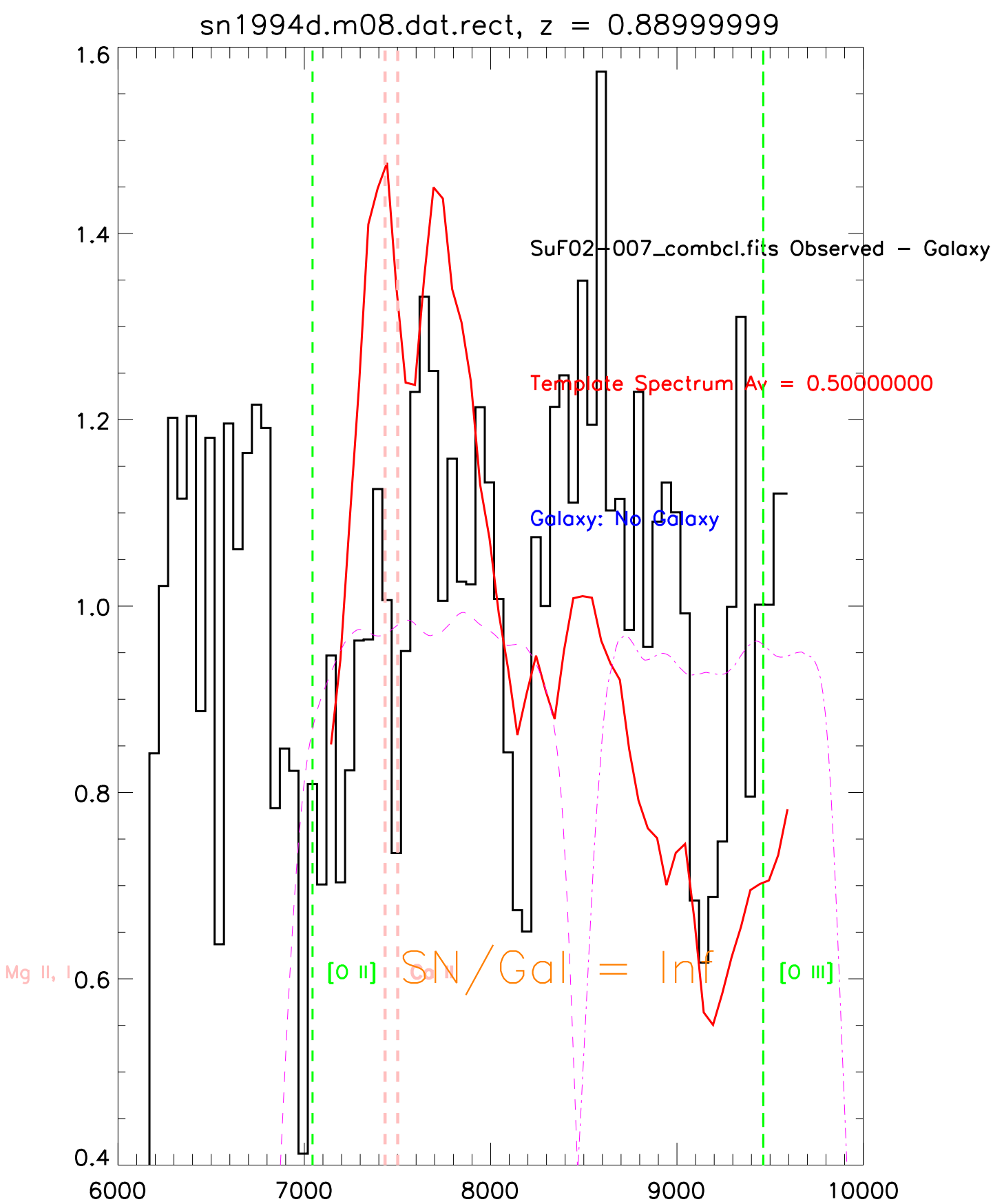

sn1991t.m00.dat.rect, z = 1.1400000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: No Galaxy
SN/Gal [O II] Inf
Mg II, I
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

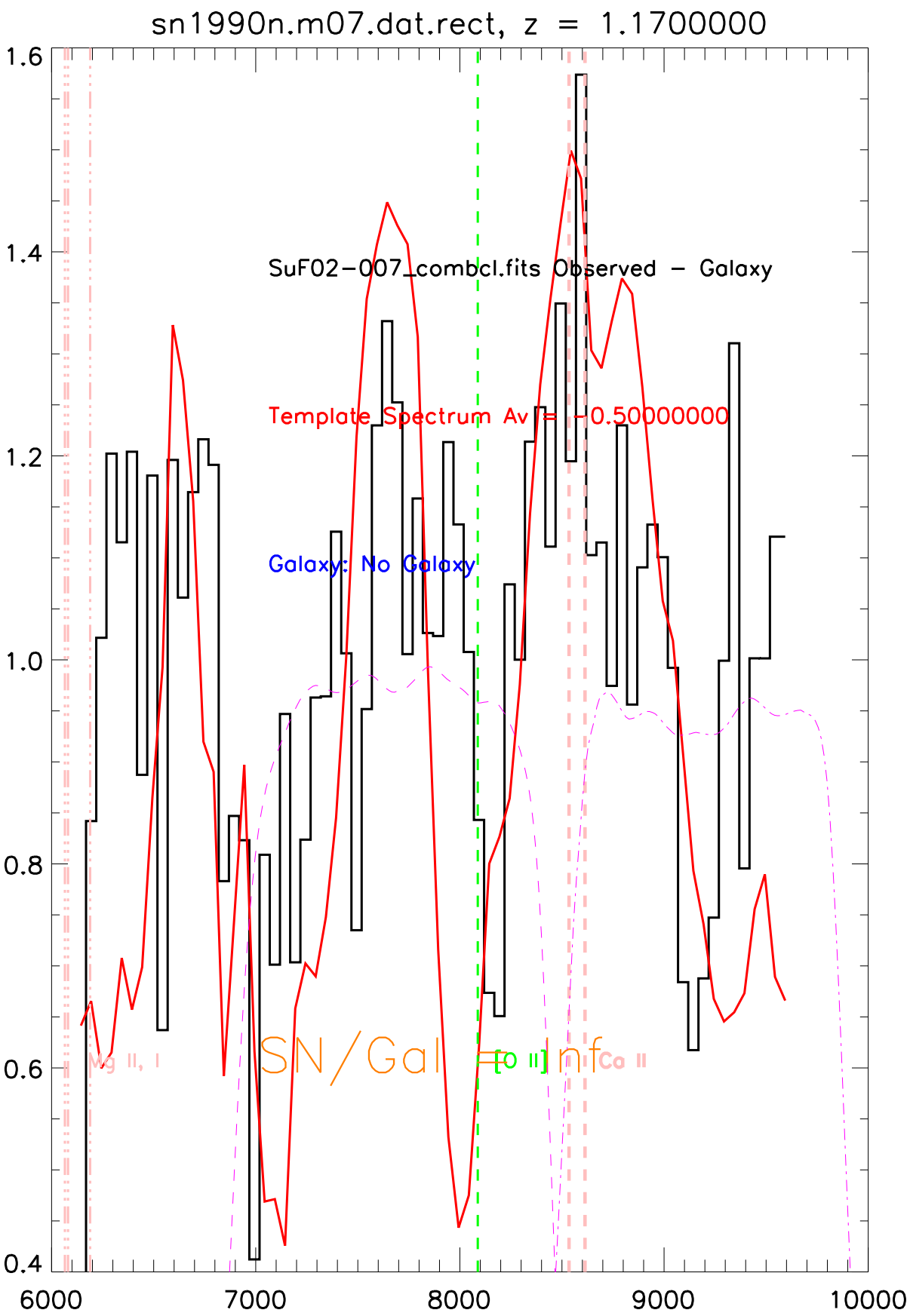

sn1991t.m08.dat.rect, z = 1.3000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: No Galaxy
SN/Gal = [dnf]
Mg II, I
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

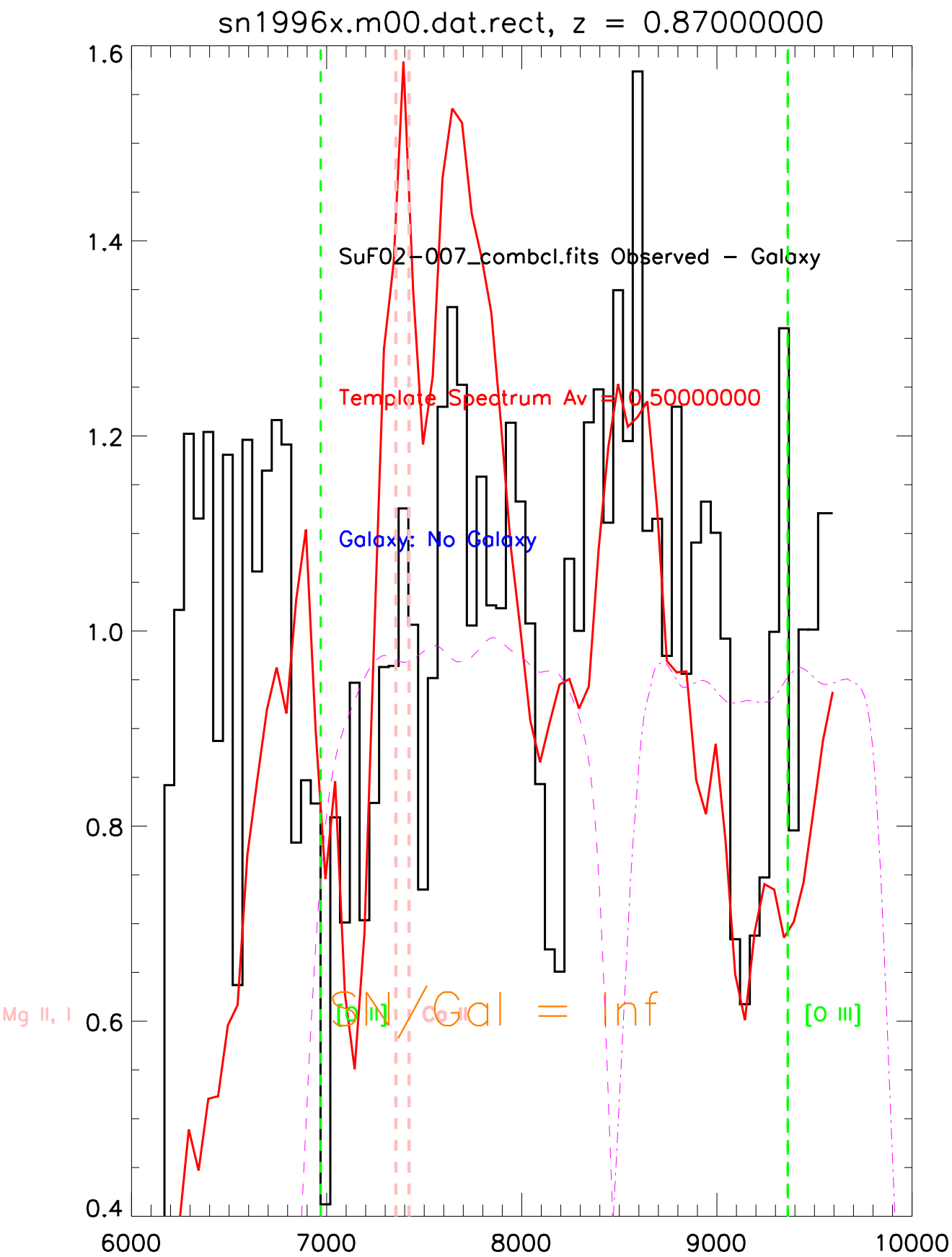

sn1989b.m05.dat.rect, z = 0.88000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.46556124
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

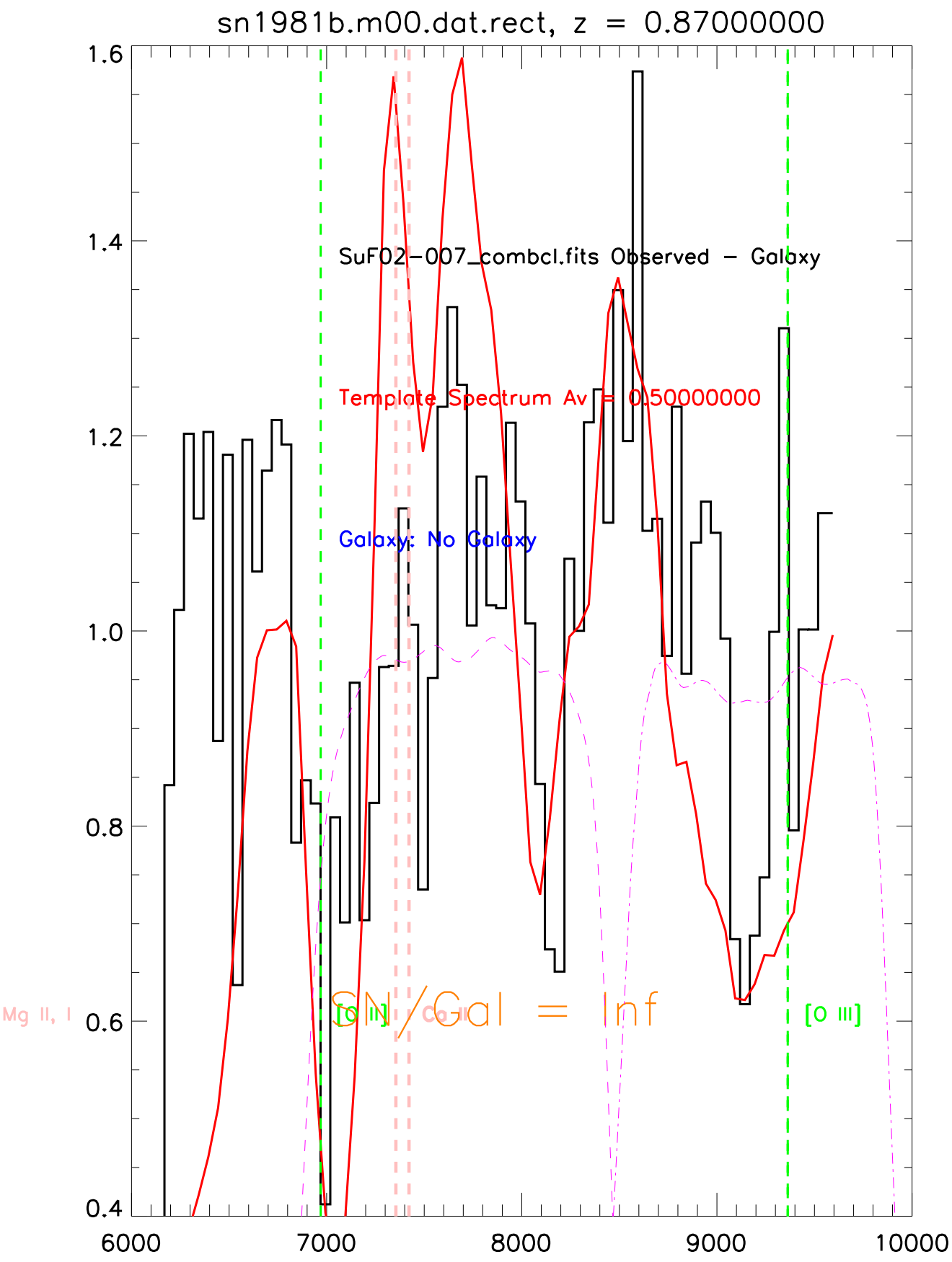

sn1994d.m05.dat.rect, z = 0.84999996
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

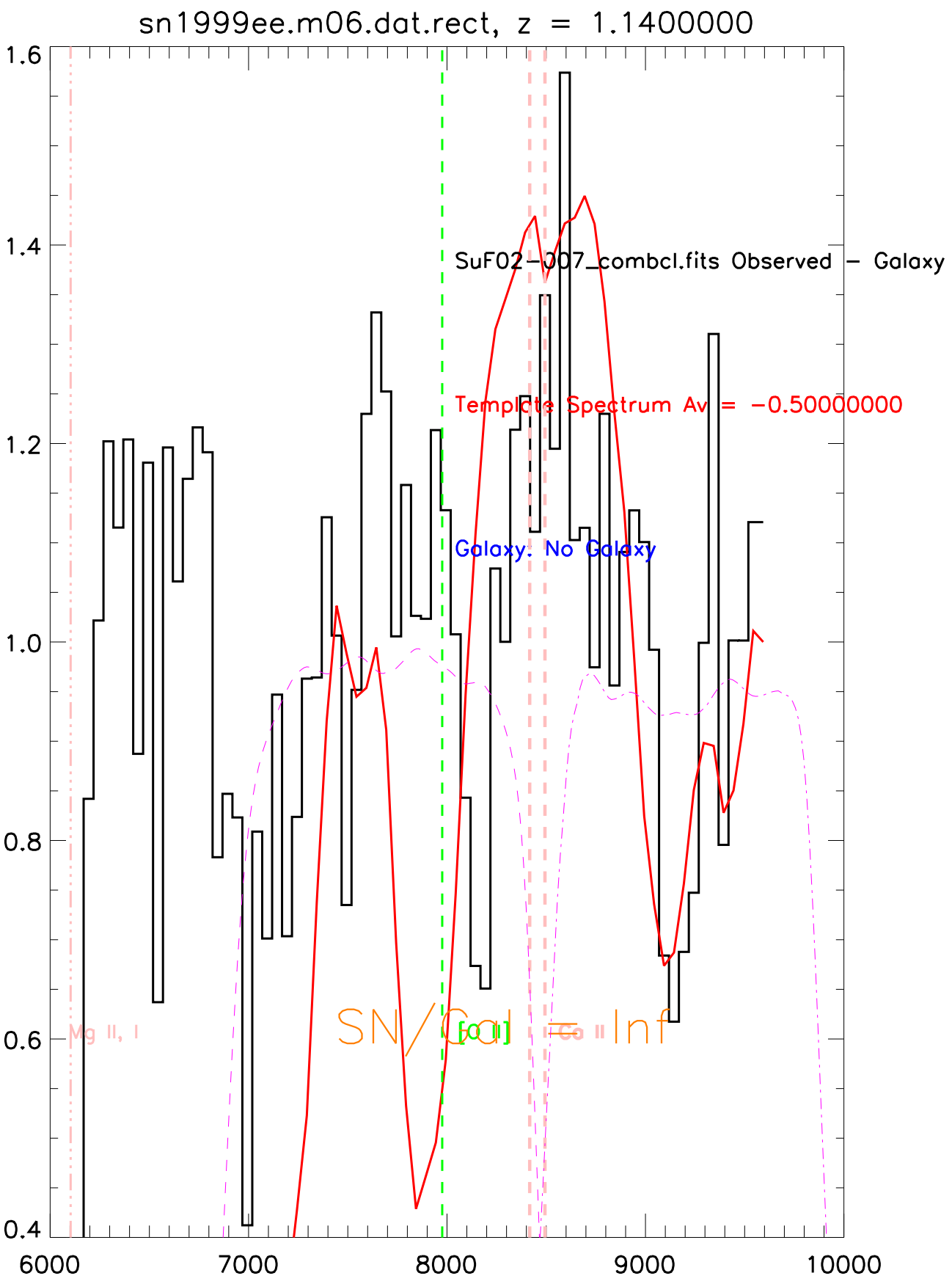

sn1989b.m01.dat.rect, z = 0.87000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = -0.29209182
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O III]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

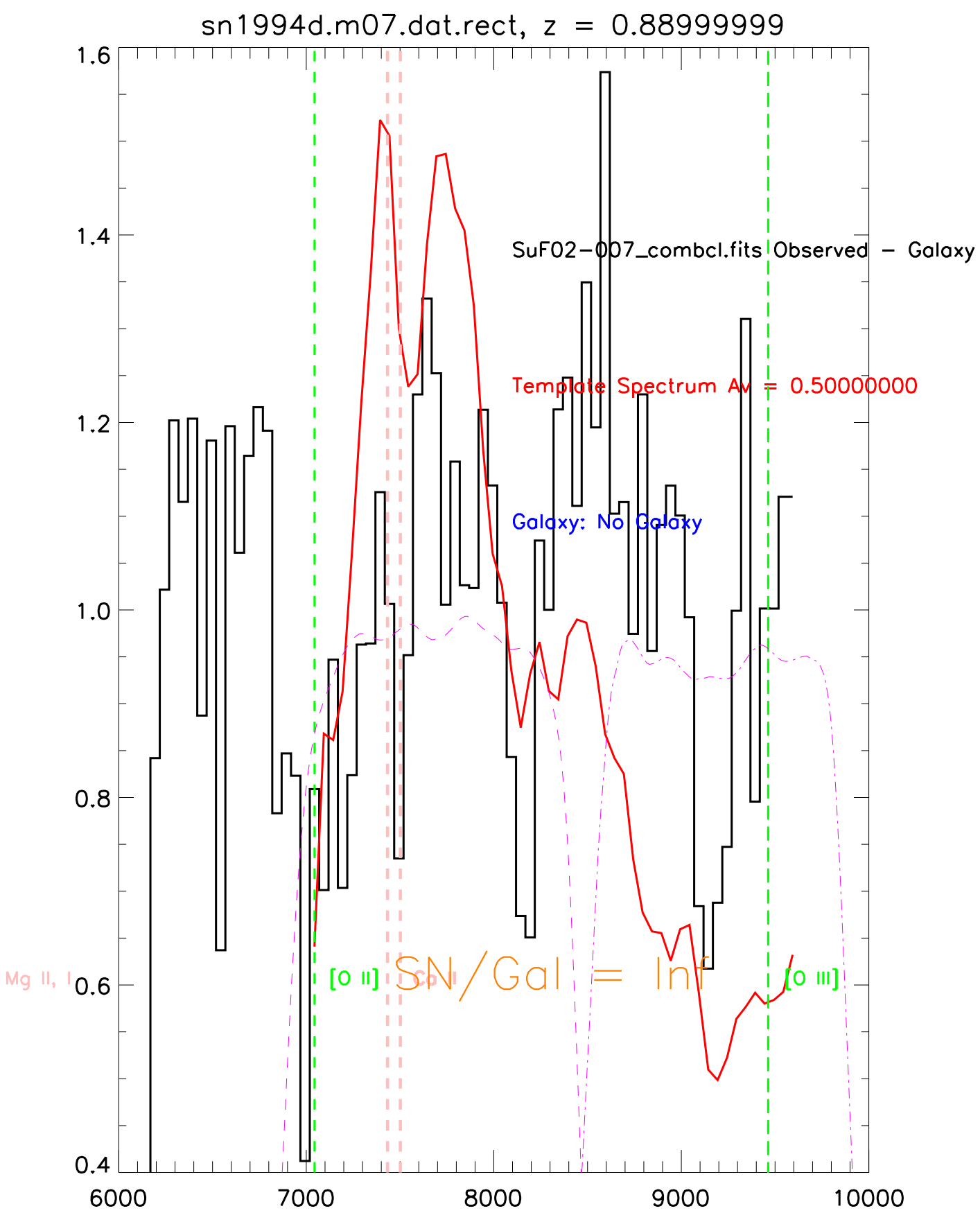

sn1994d.m08.dat.rect, z = 0.88999999
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

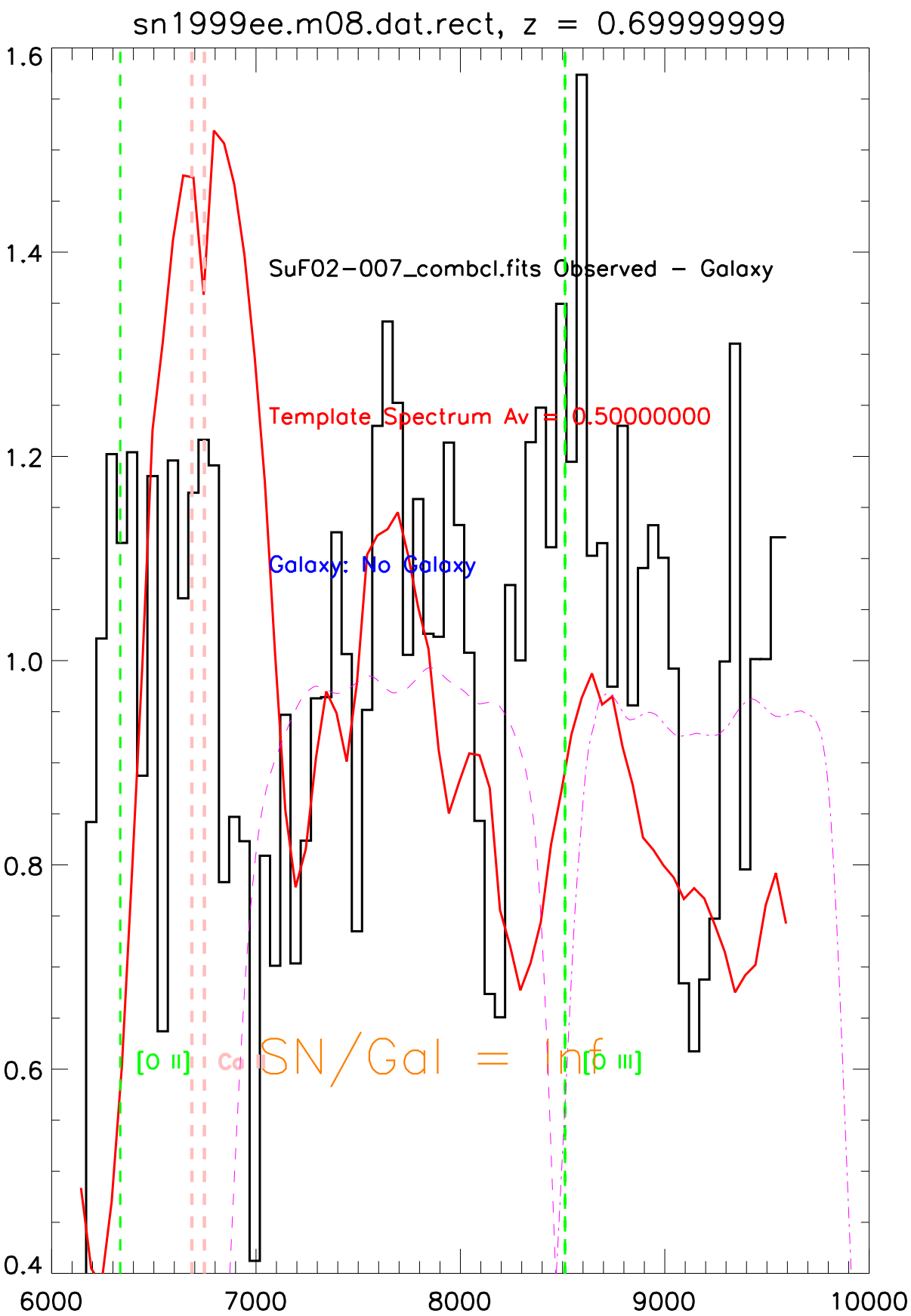

sn1990n.m07.dat.rect, z = 1.1700000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: No Galaxy
SN/Gal
Mg II, I
Ca II
Inf
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

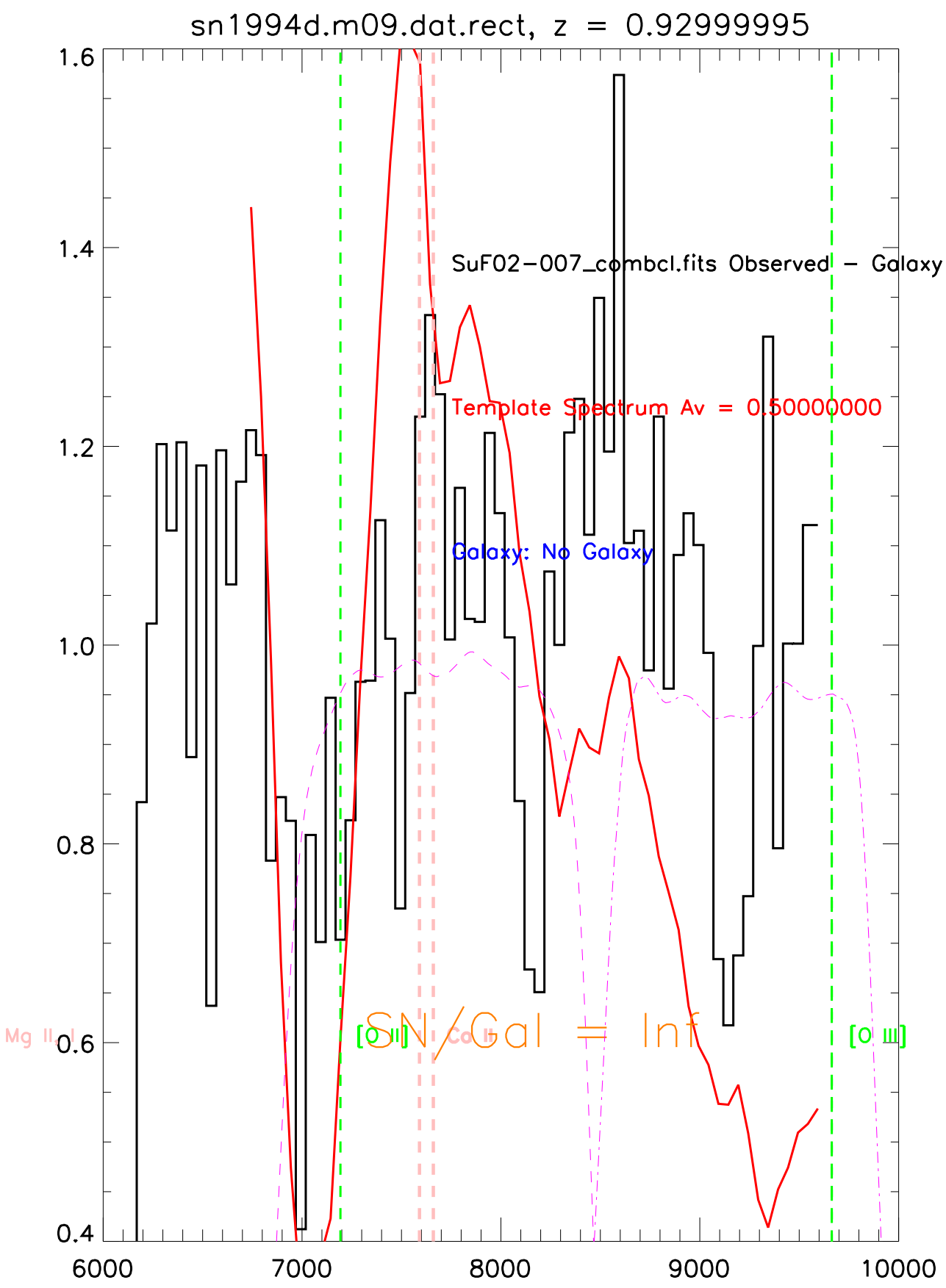

sn1996x.m00.dat.rect, z = 0.87000000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
S/N/Gal = Inf
Mg II, I
[O III]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000

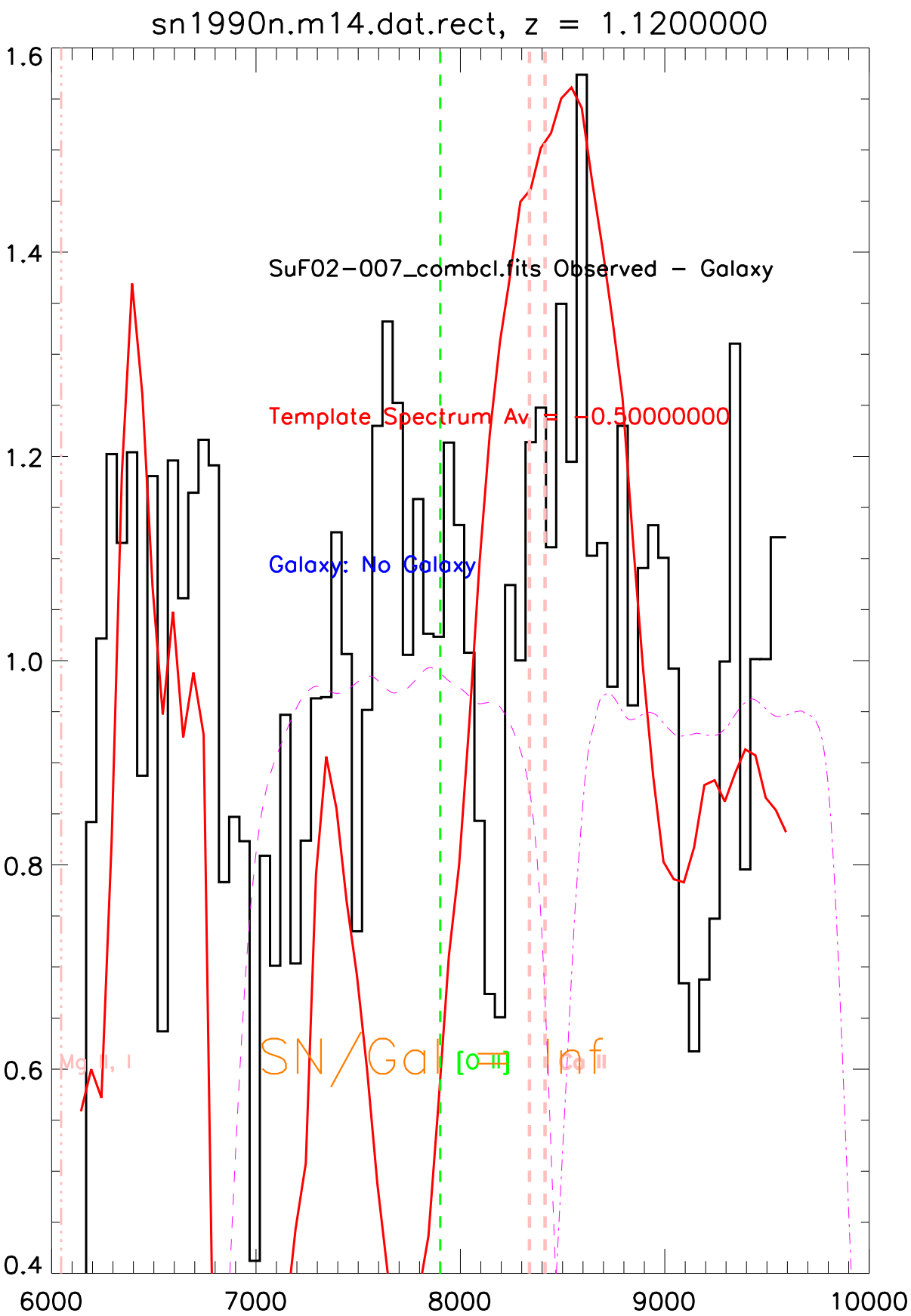

sn1981b.m00.dat.rect, z = 0.87000000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.150000000
Galaxy: No Galaxy
S/N/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000


sn1999ee.m06.dat.rect, z = 1.1400000
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = -0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[Co II]
Co II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000


sn1994d.m07.dat.rect, z = 0.88999999
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000


sn1999ee.m08.dat.rect, z = 0.69999999
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
Mg II, I
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000


sn1994d.m09.dat.rect, z = 0.92999995
SuF02-007_combcl.fits Observed - Galaxy
Template Spectrum Av = 0.50000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
Mg II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000


sn1990n.m14.dat.rect, z = 1.1200000
SuF02-007_combcl.fits Observed − Galaxy
Template Spectrum Av = −0.50000000
Galaxy: No Galaxy
SN/Gal
[O II]
Ca II
1.6
1.4
1.2
1.0
0.8
0.6
0.4
6000
7000
8000
9000
10000