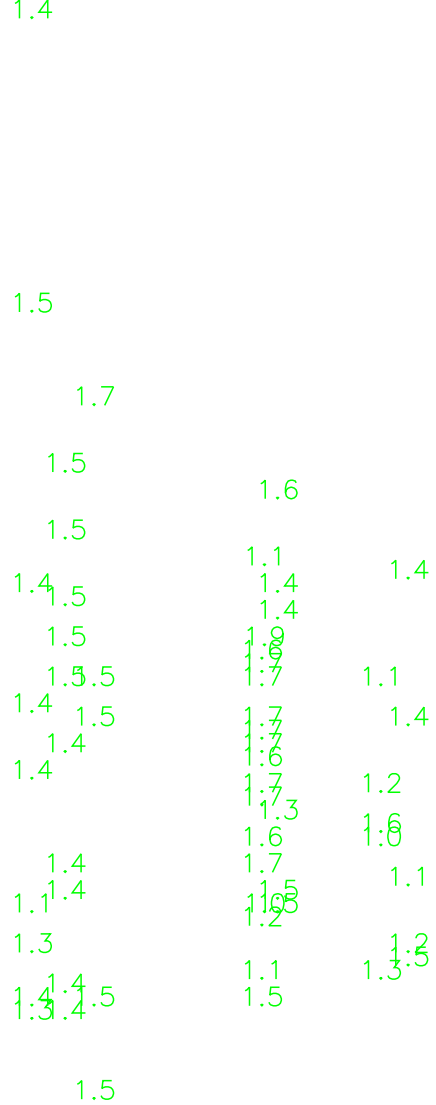
1.4
1.5
1.7
1.5
1.6
1.5
1.1
1.4
1.4
1.5
1.4
1.5
1.9
1.6
1.7
1.5
1.5
1.7
1.1
1.4
1.5
1.7
1.4
1.7
1.4
1.6
1.4
1.7
1.2
1.7
1.3
1.6
1.6
1.0
1.4
1.7
1.1
1.4
1.5
1.1
1.6
1.2
1.3
1.2
1.5
1.1
1.3
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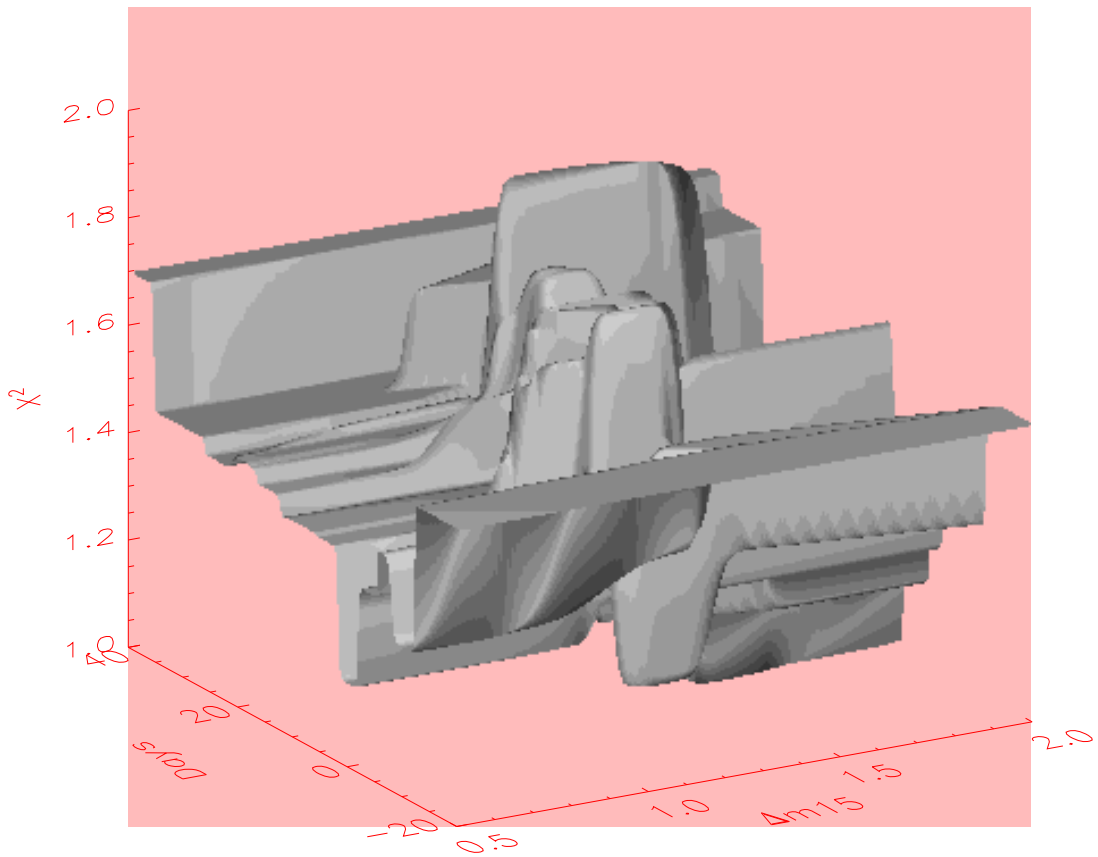
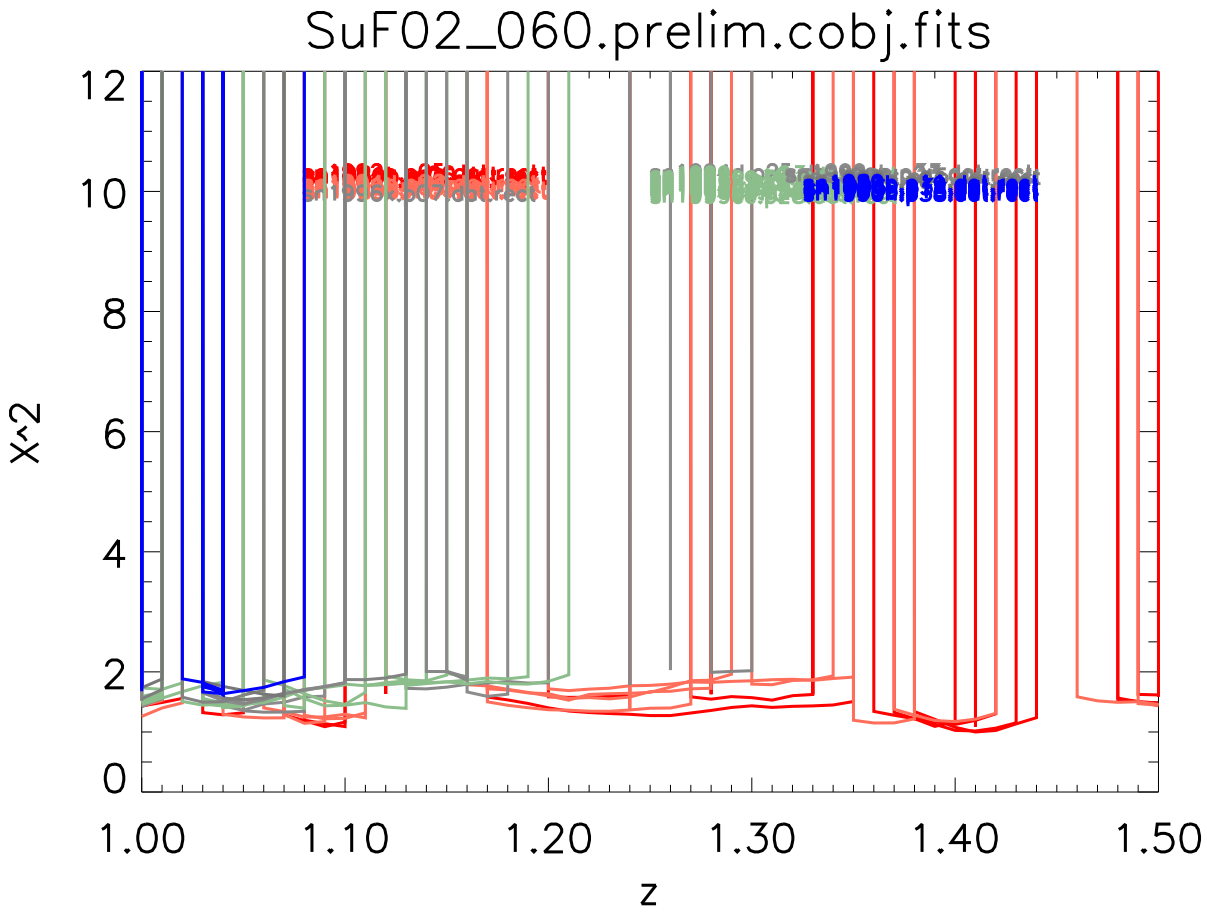
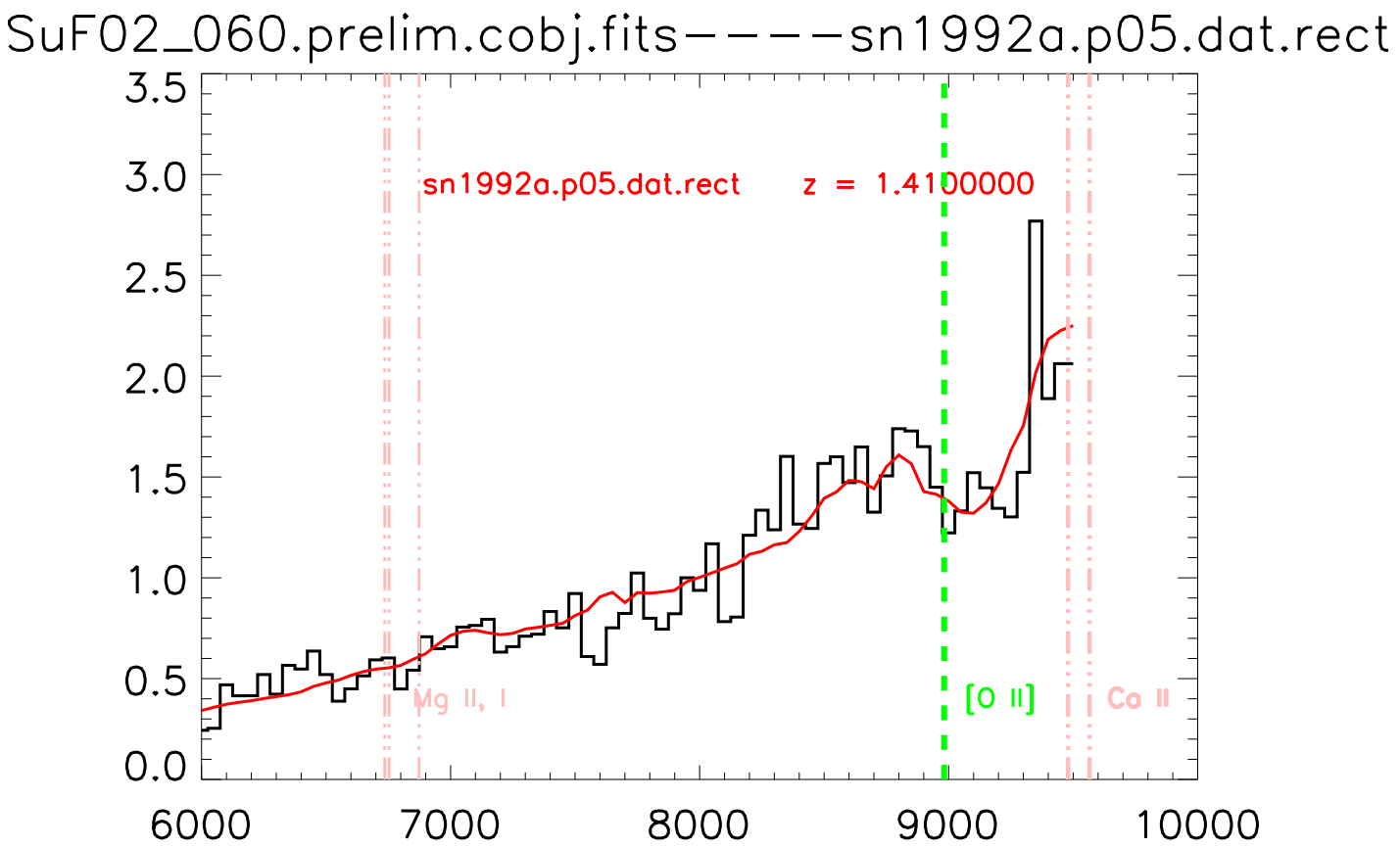
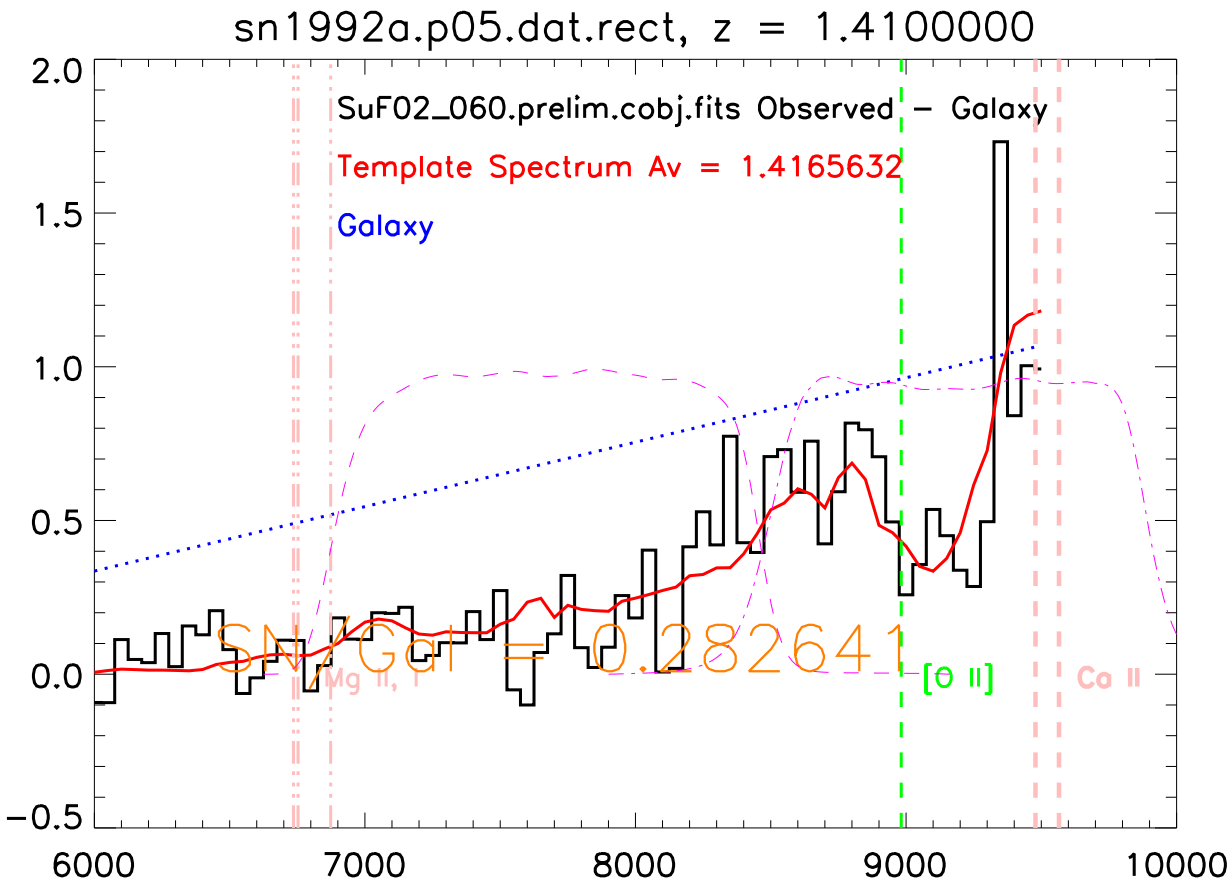
1.3
1.4
1.5

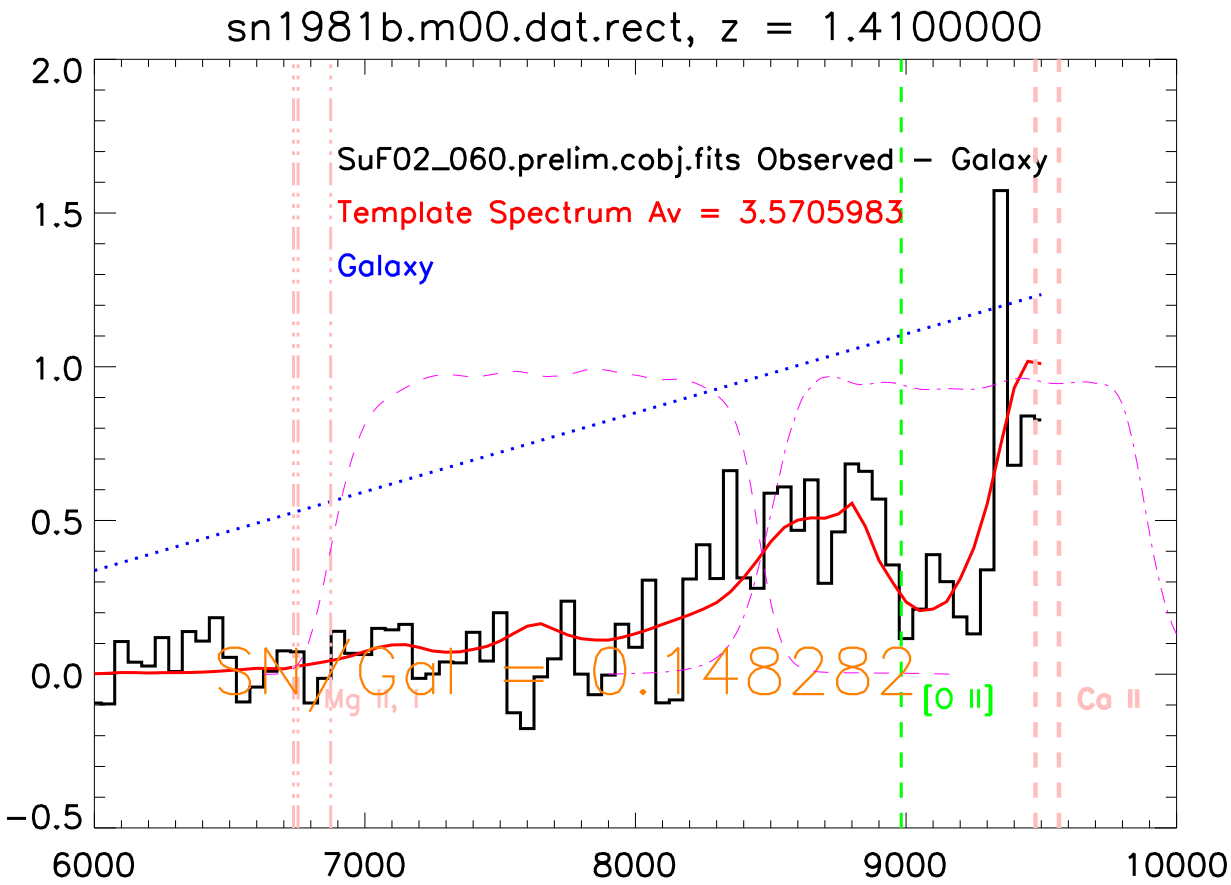


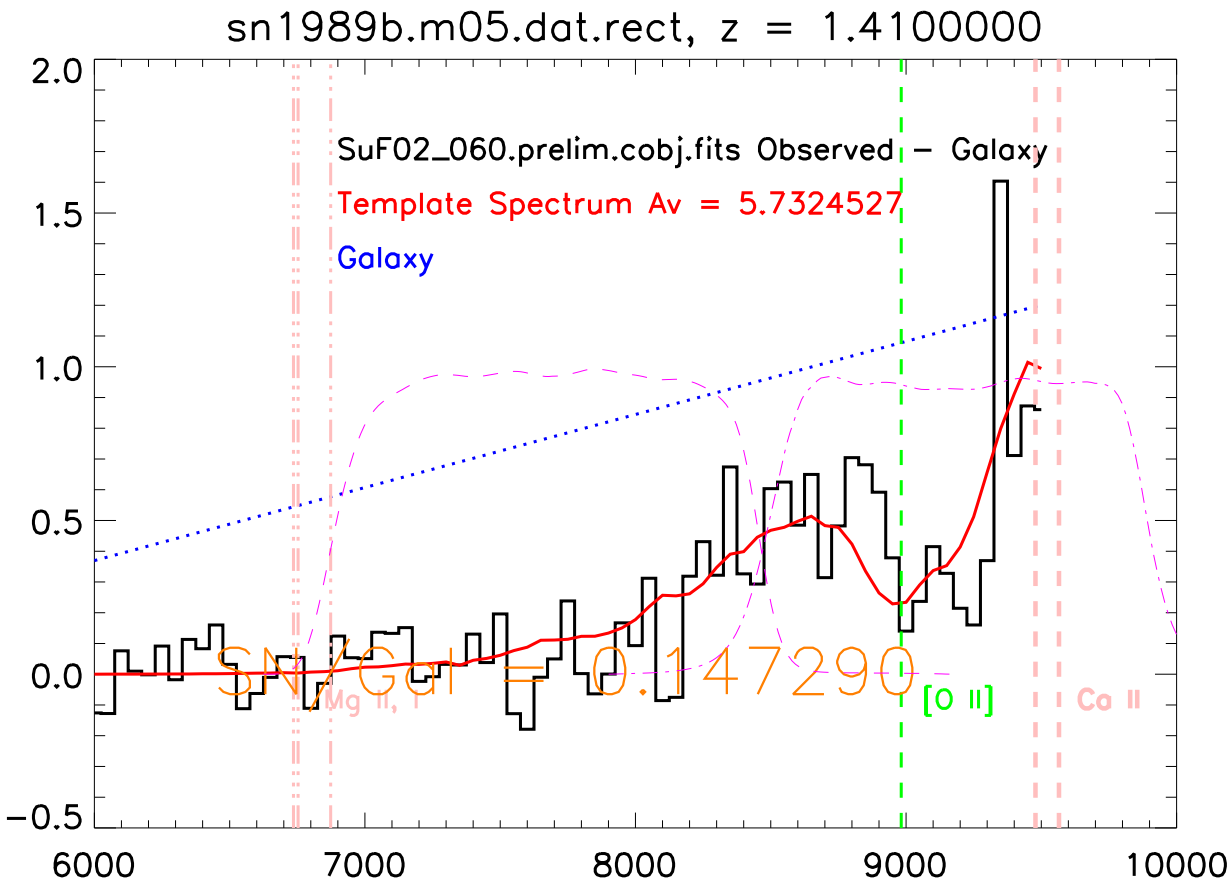
2.0
1.8
1.6
1.4
1.2
1.0
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

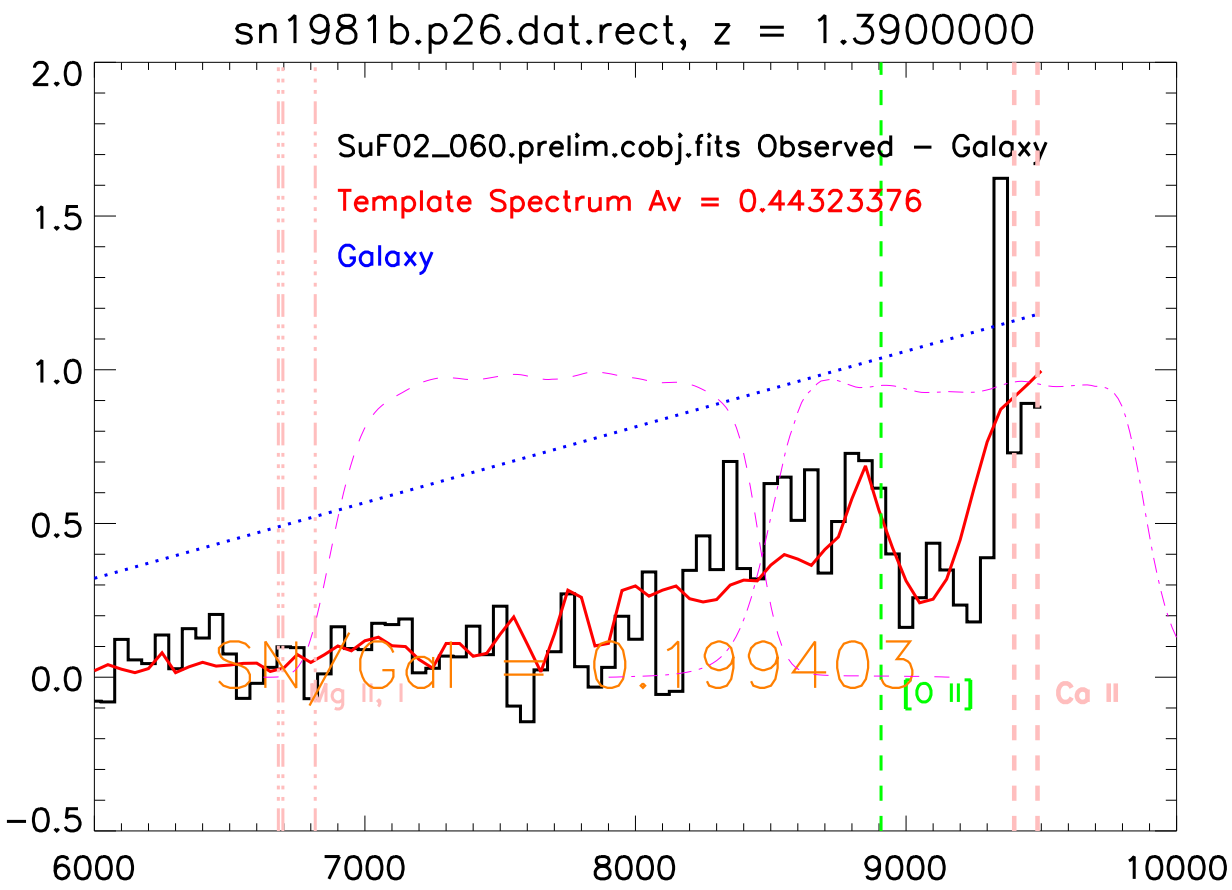

SuF02_060.prelim.cobj.fits
X^2
z
0
2
4
6
8
10
12
1.00
1.10
1.20
1.30
1.40
1.50

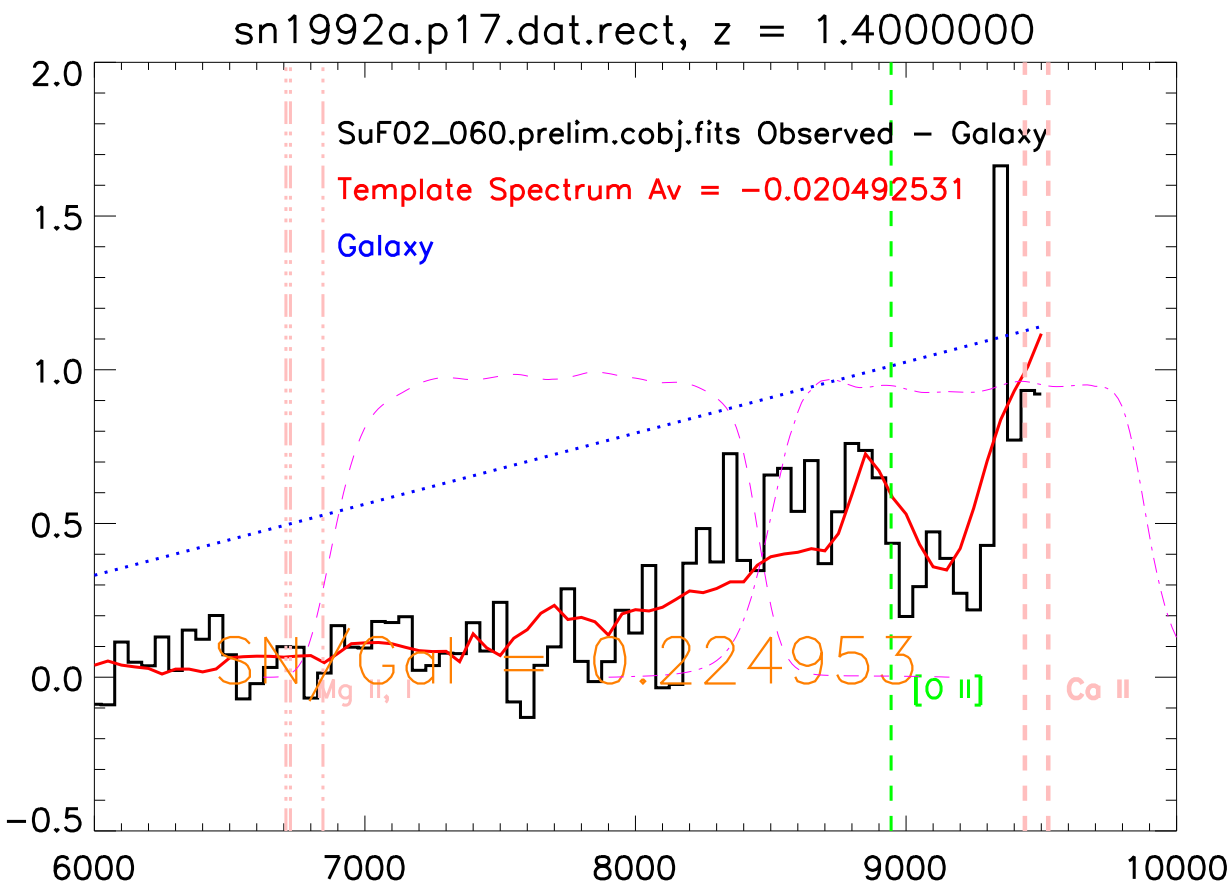

SuF02_060.prelim.cobj.fits----sn1992a.p05.dat.rect
sn1992a.p05.dat.rect
z = 1.4100000
Mg II, I
[O II]
Ca II
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
7000
8000
9000
10000

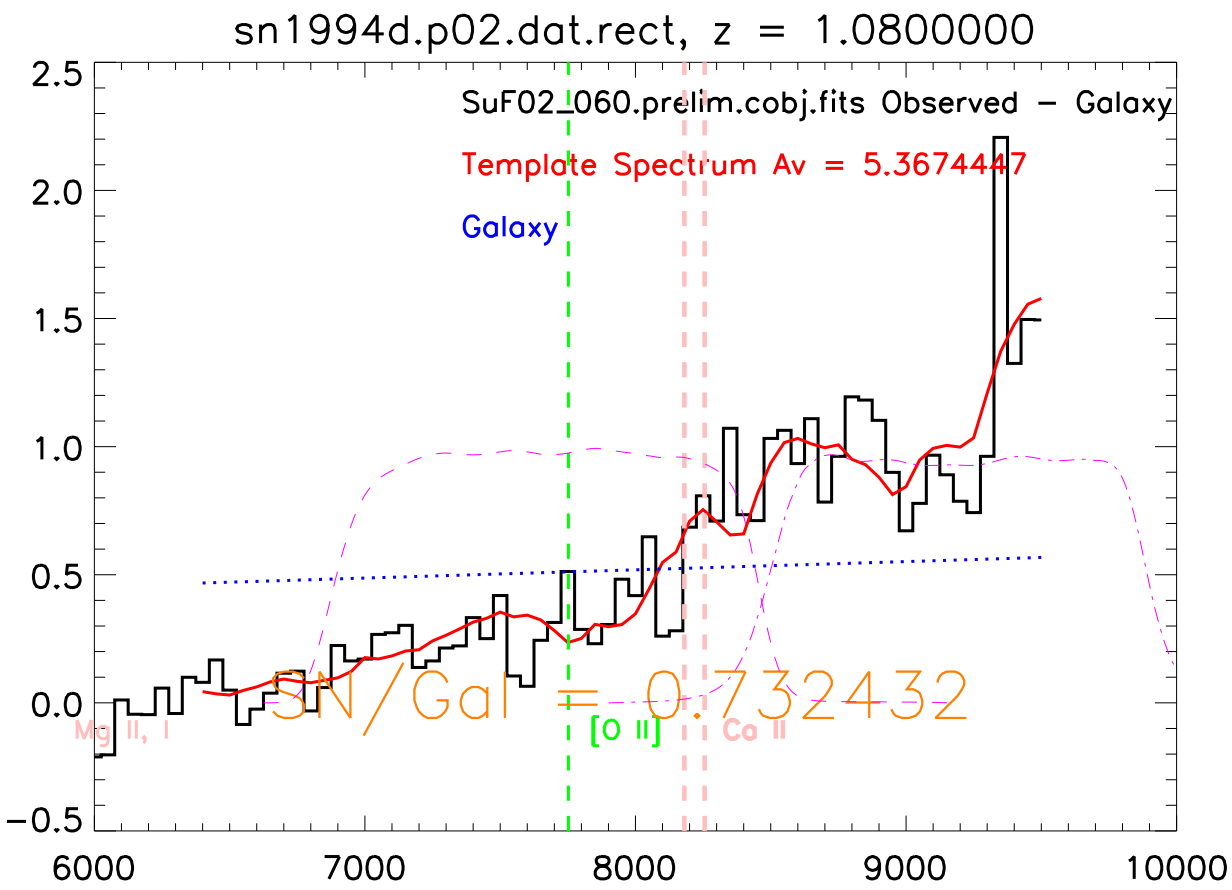

sn1992a.p05.dat.rect, z = 1.4100000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 1.4165632
Galaxy
SN/Gal = 0.282641
Mg II, f
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

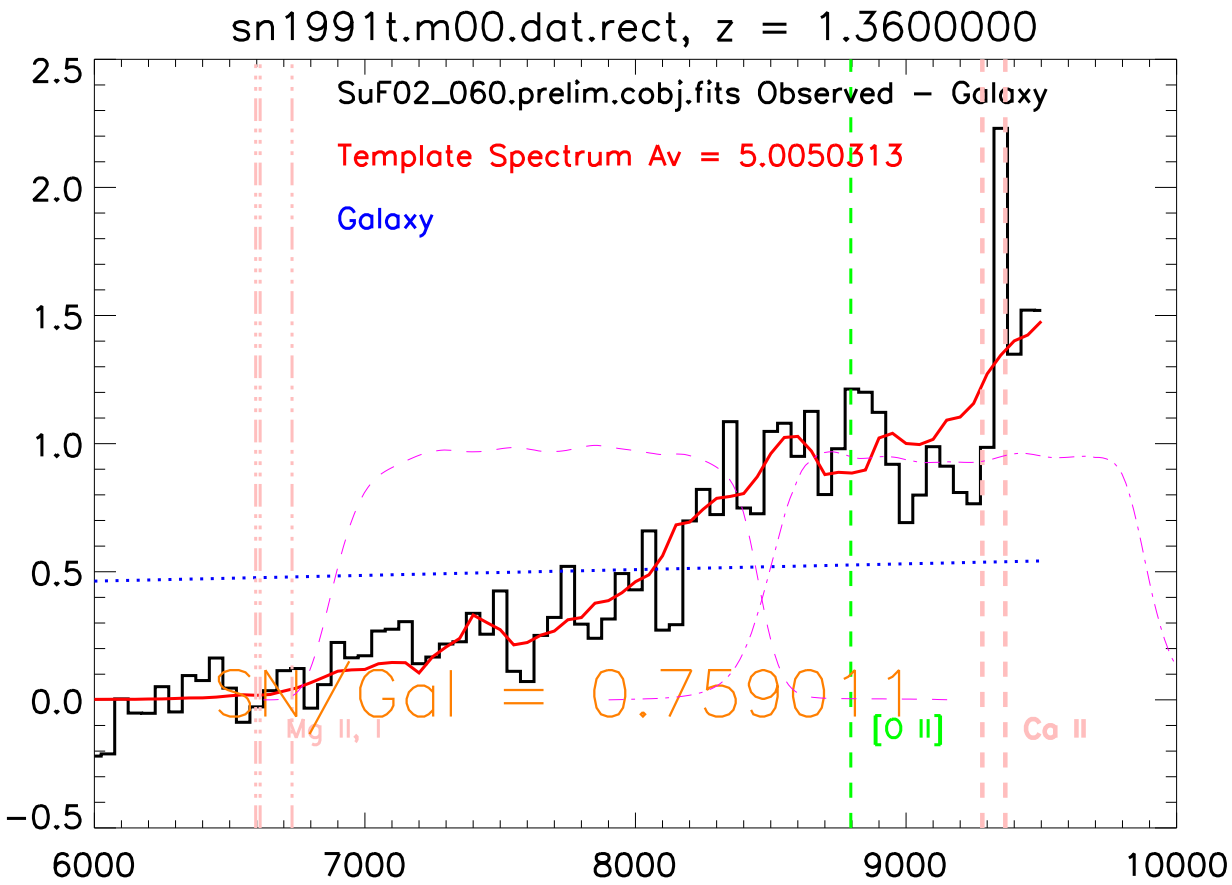

sn1981b.m00.dat.rect, z = 1.4100000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 3.5705983
Galaxy
SN/Gal = 0.148282
Mg II, ?
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

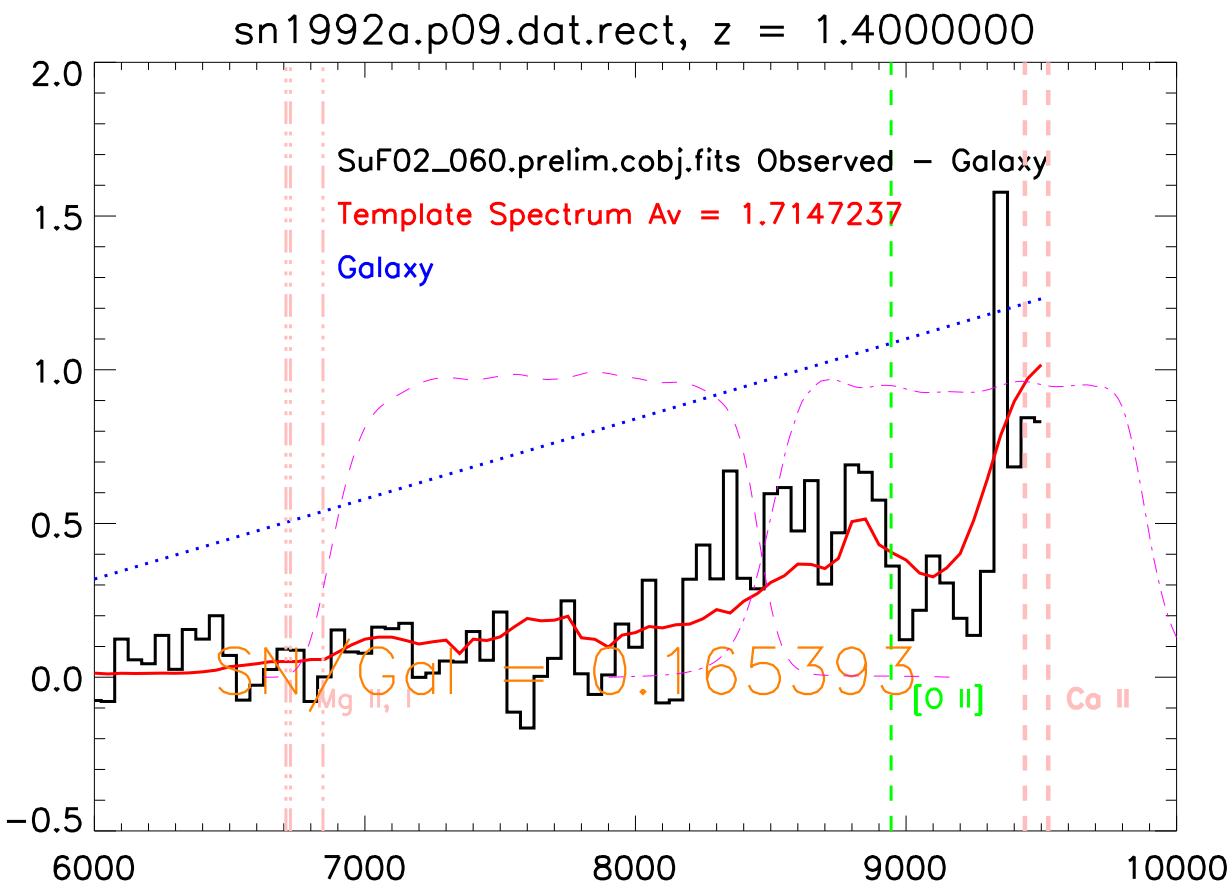

sn1989b.m05.dat.rect, z = 1.4100000
SuF02_060.prelim.cobj.fits Observed – Galaxy
Template Spectrum Av = 5.7324527
Galaxy
SN/Gal = 0.147290
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

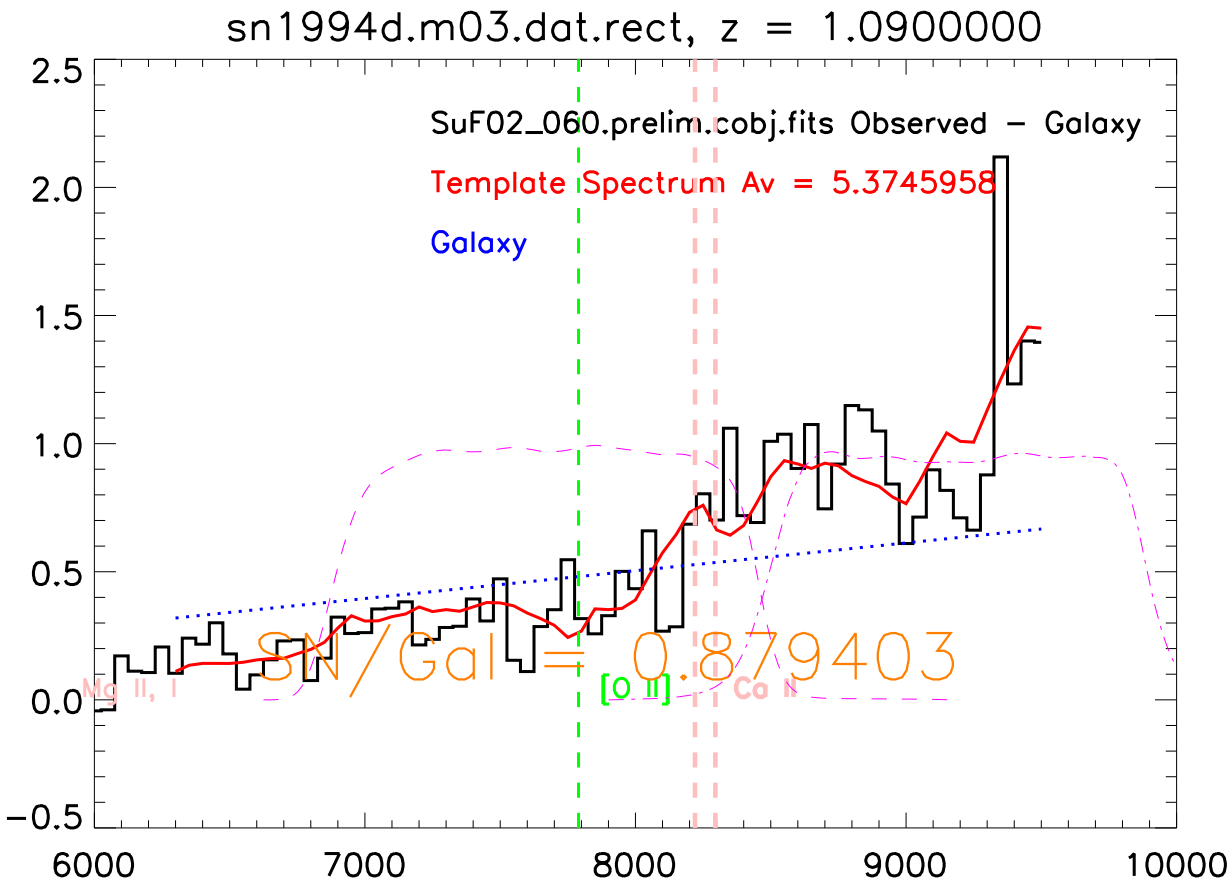

sn1981b.p26.dat.rect, z = 1.3900000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 0.44323376
Galaxy
SN/Gal = 0.199403
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

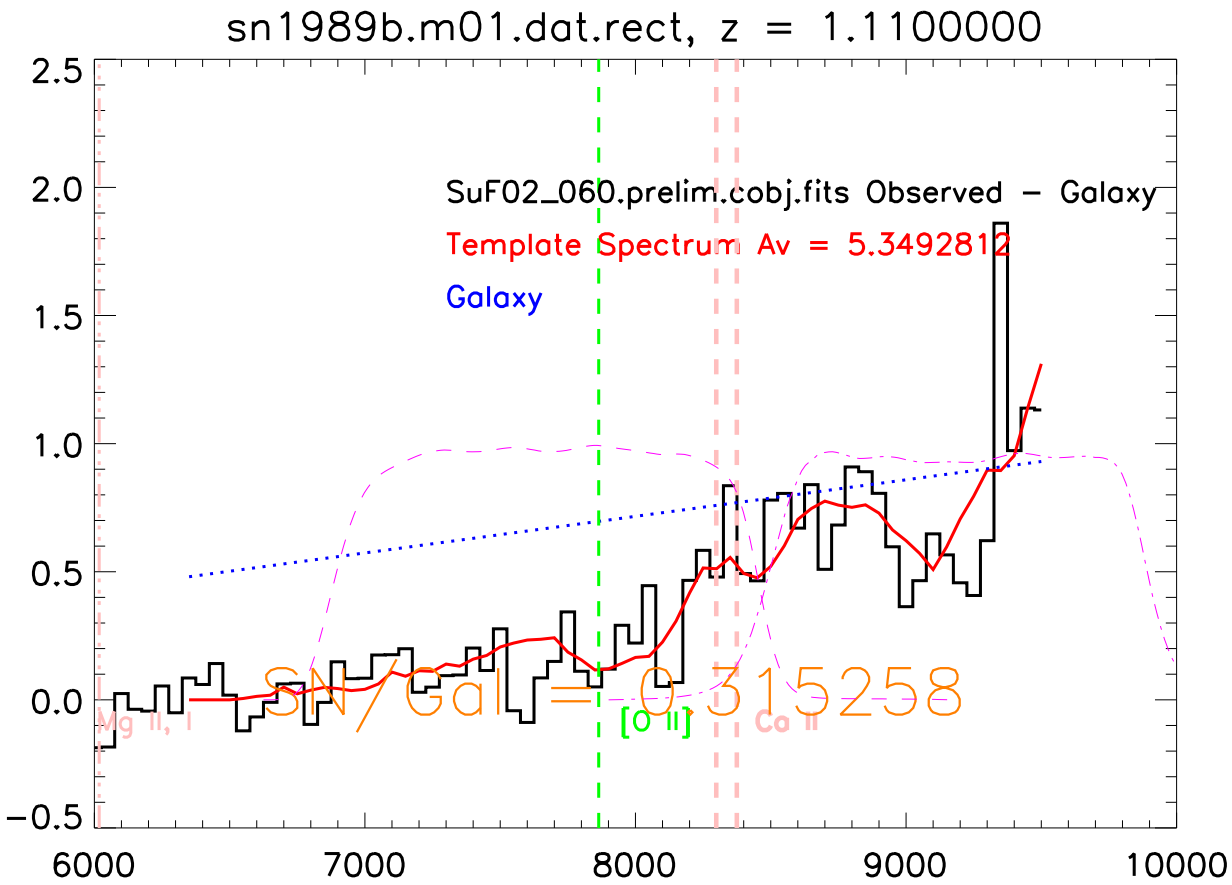

sn1992a.p17.dat.rect, z = 1.4000000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = −0.020492531
Galaxy
SN/Gal = 0.224953
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

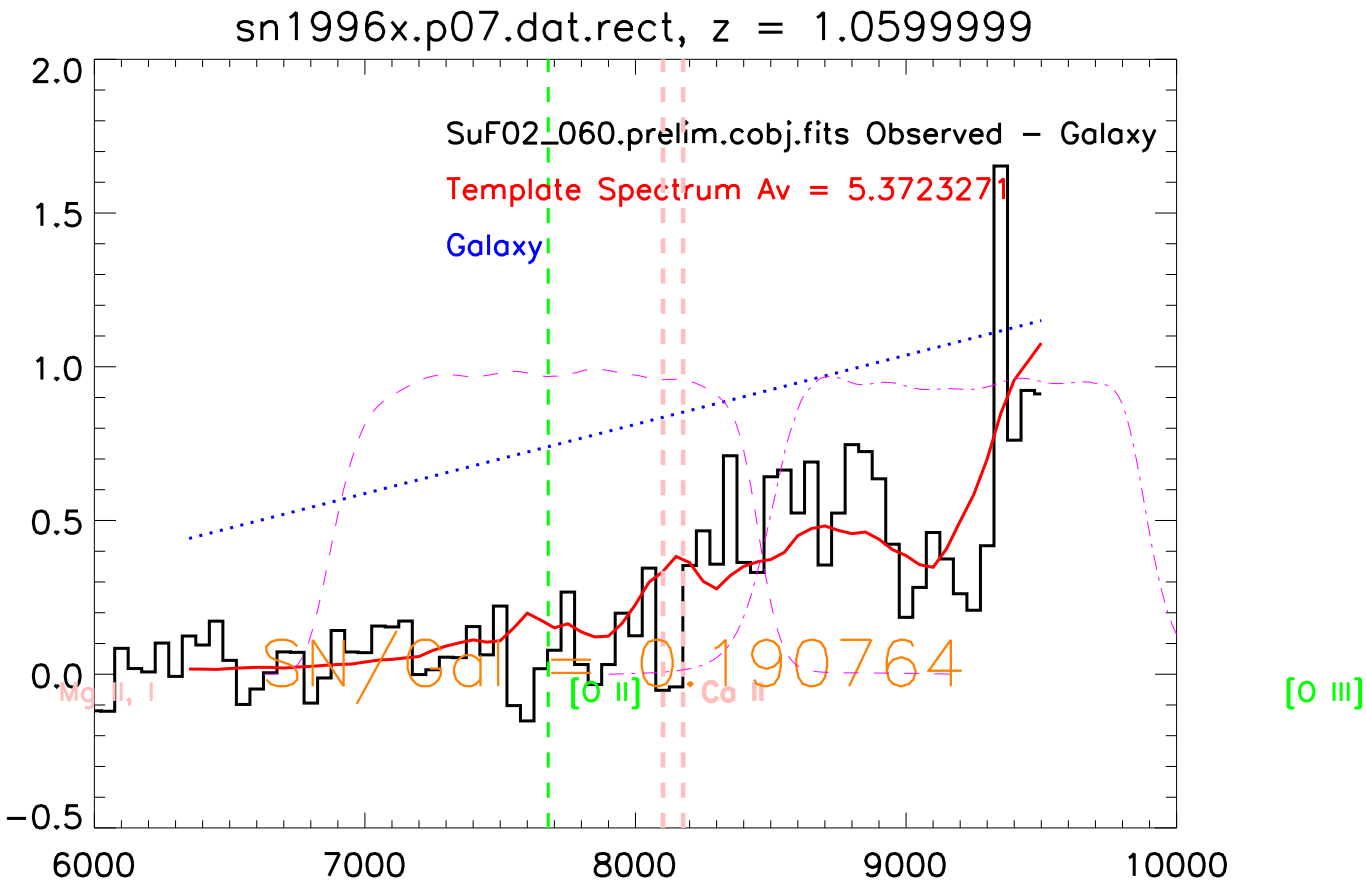

sn1994d.p02.dat.rect, z = 1.0800000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.3674447
Galaxy
S/N/Gal = 0.732432
Mg II, I
[O II]
Ca II
[O III
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

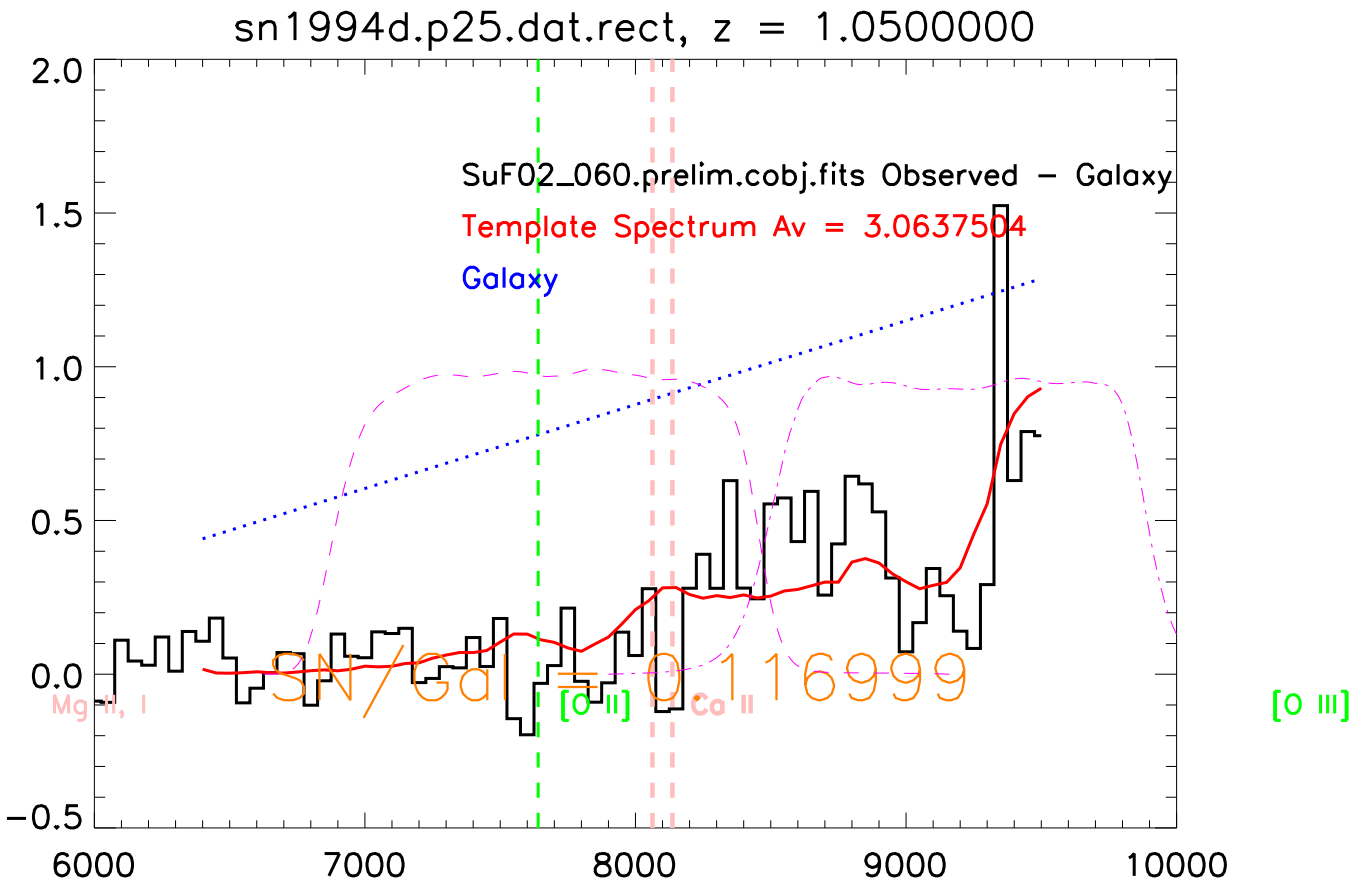

sn1991t.m00.dat.rect, z = 1.3600000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.0050313
Galaxy
S/N Gal = 0.759011
Mg II, I
[O II]
Ca II
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

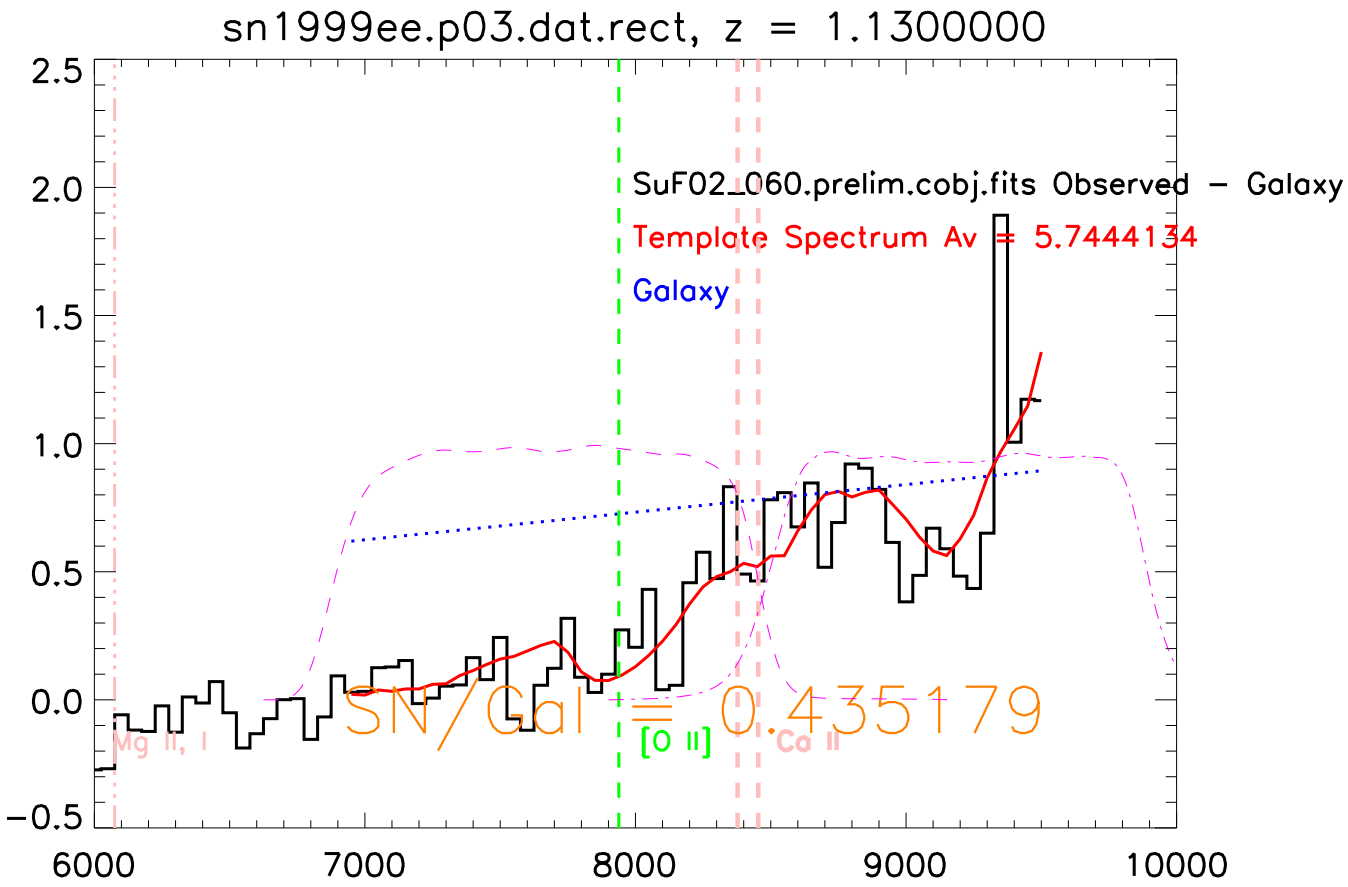

sn1992a.p09.dat.rect, z = 1.4000000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 1.7147237
Galaxy
SN/Gal = 0.165393
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

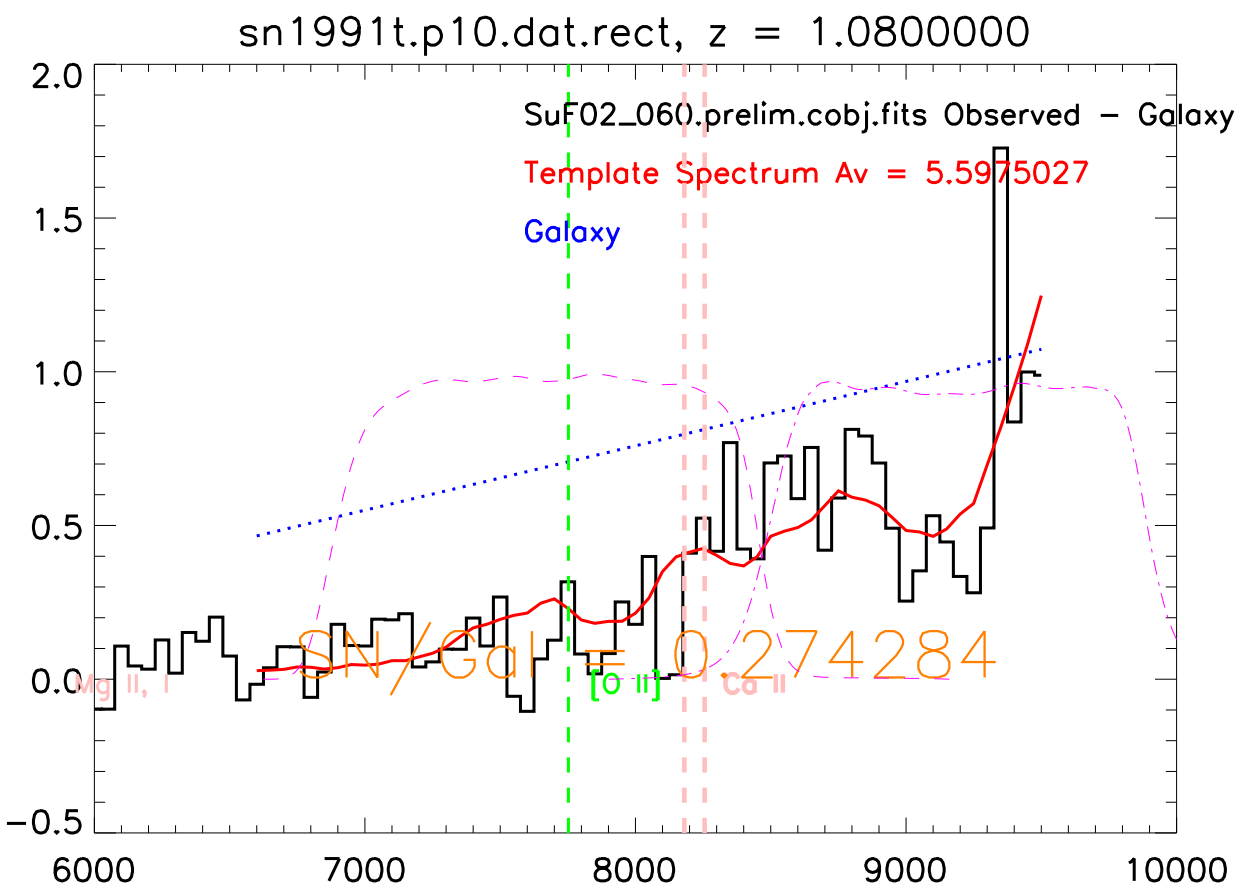

sn1994d.m03.dat.rect, z = 1.0900000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.3745958
Galaxy
SN/Gal = 0.879403
Mg II, I
[O II]
Ca II
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

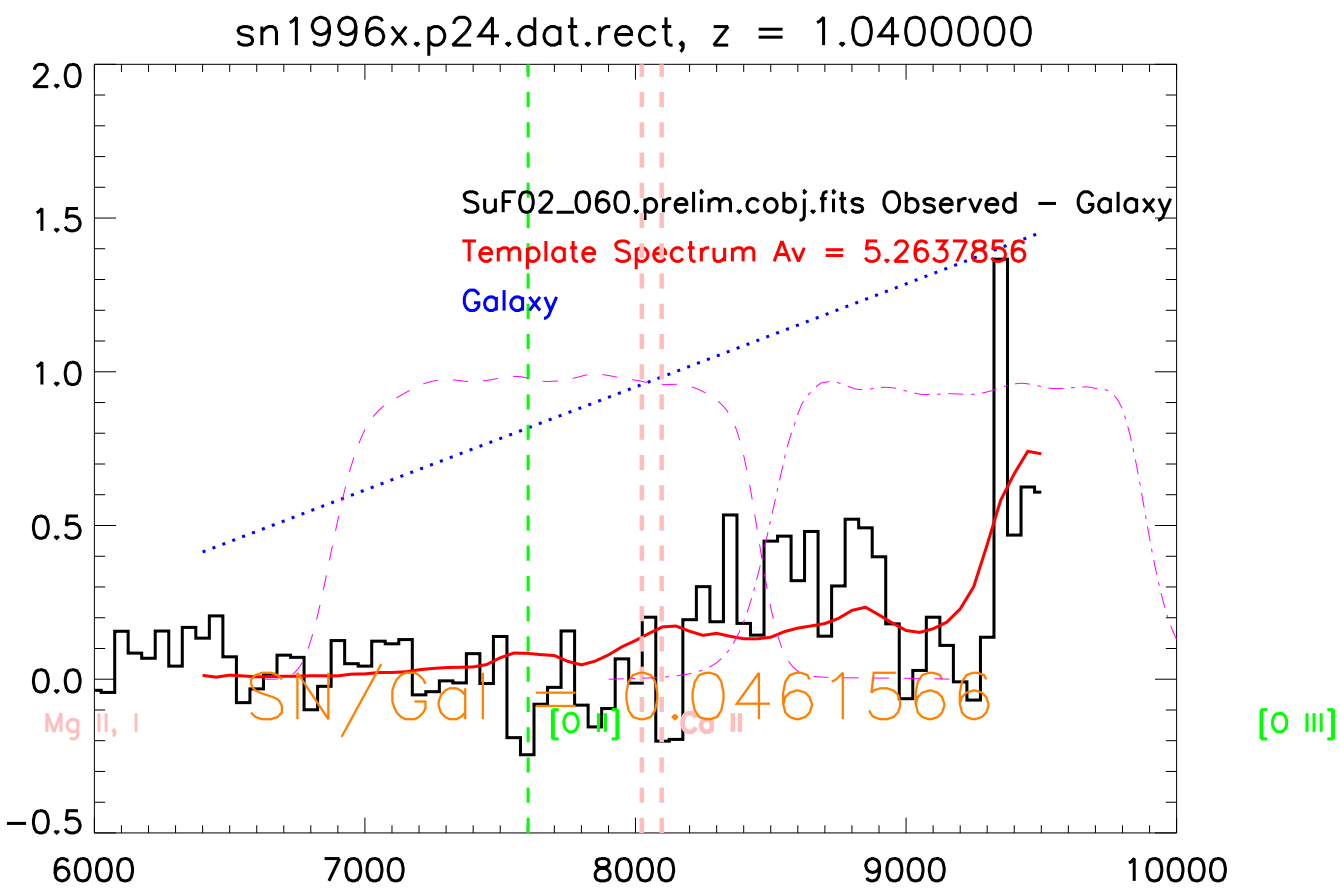

sn1989b.m01.dat.rect, z = 1.1100000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.3492812
Galaxy
SN/Gal = 0.315258
Mg II, I
[O II]
Ca II
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

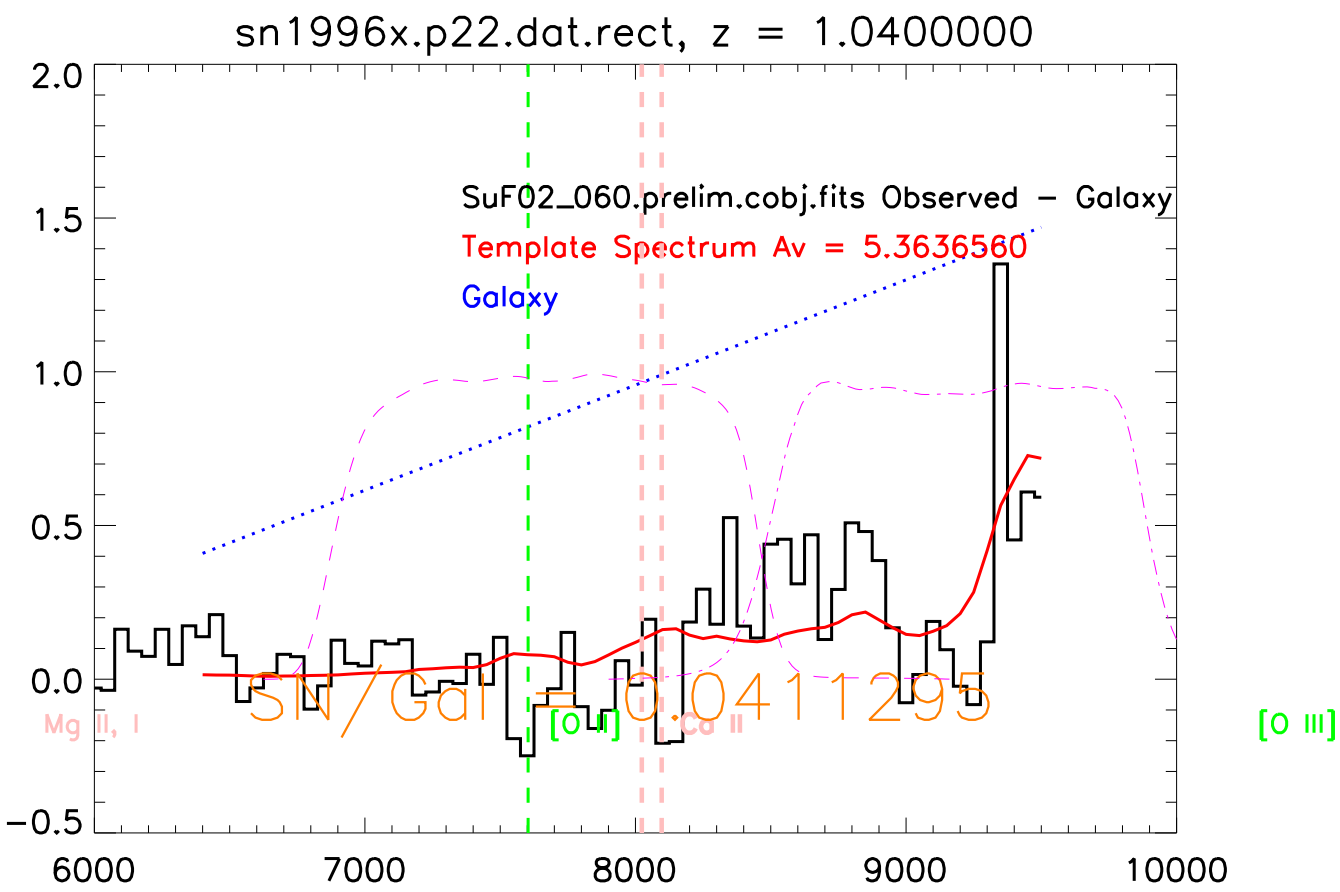

sn1996x.p07.dat.rect, z = 1.0599999
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.3723271
Galaxy
SN/Gal = 0.190764
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

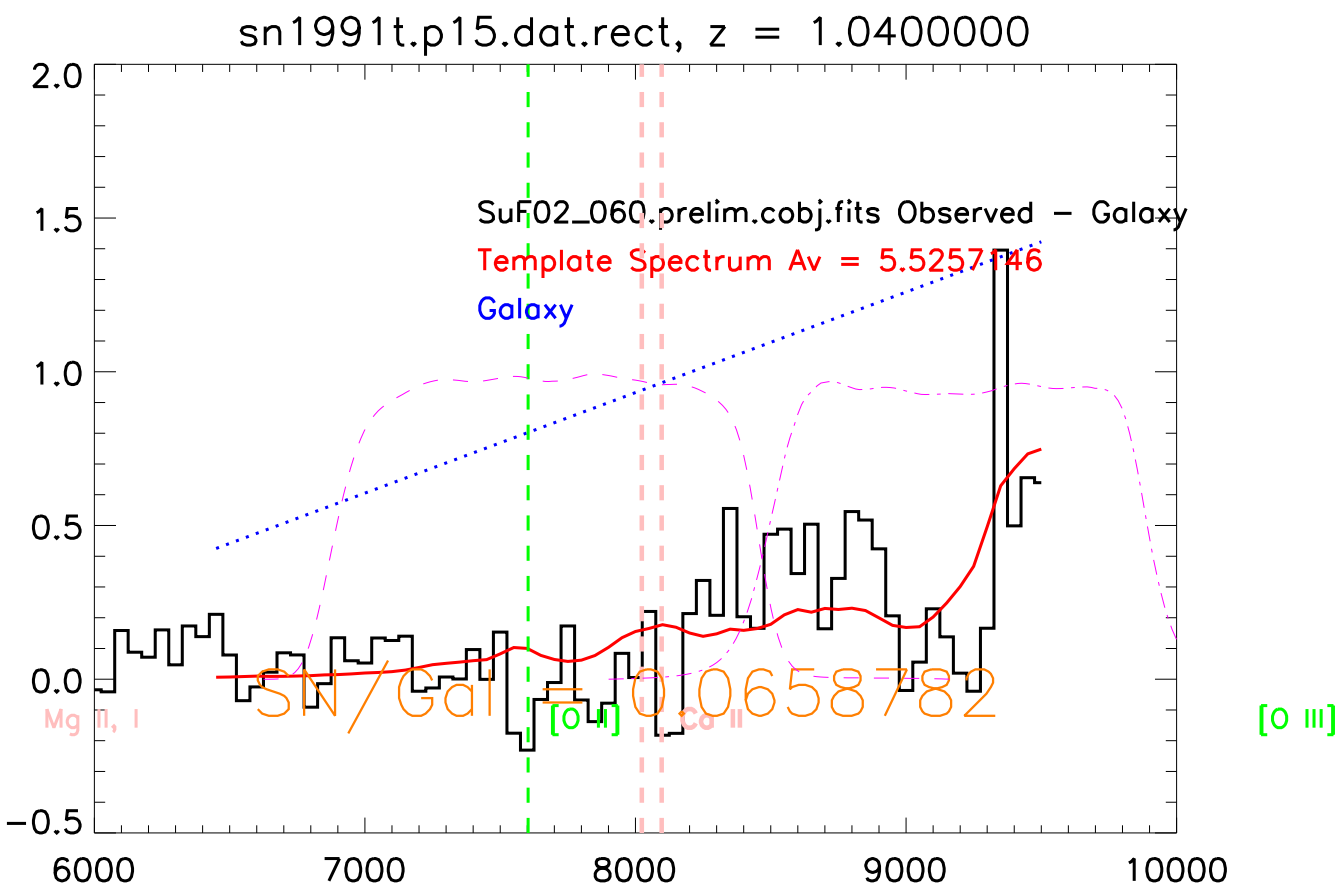

sn1994d.p25.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 3.0637504
Galaxy
SN/Gal = 0.116999
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

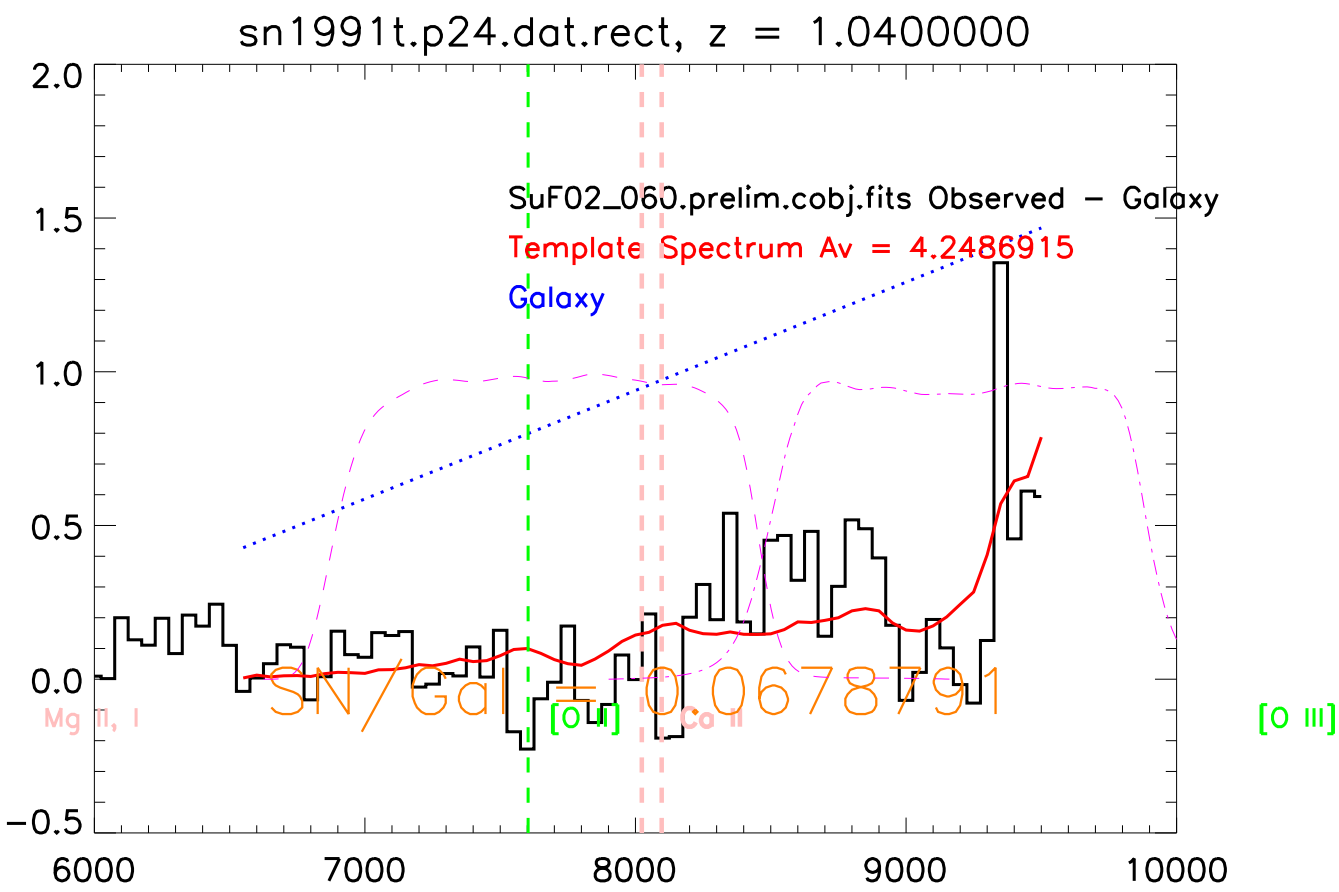

sn1999ee.p03.dat.rect, z = 1.1300000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.7444134
Galaxy
SN/Gal = 0.435179
Mg II, I
[O II]
Ca II
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

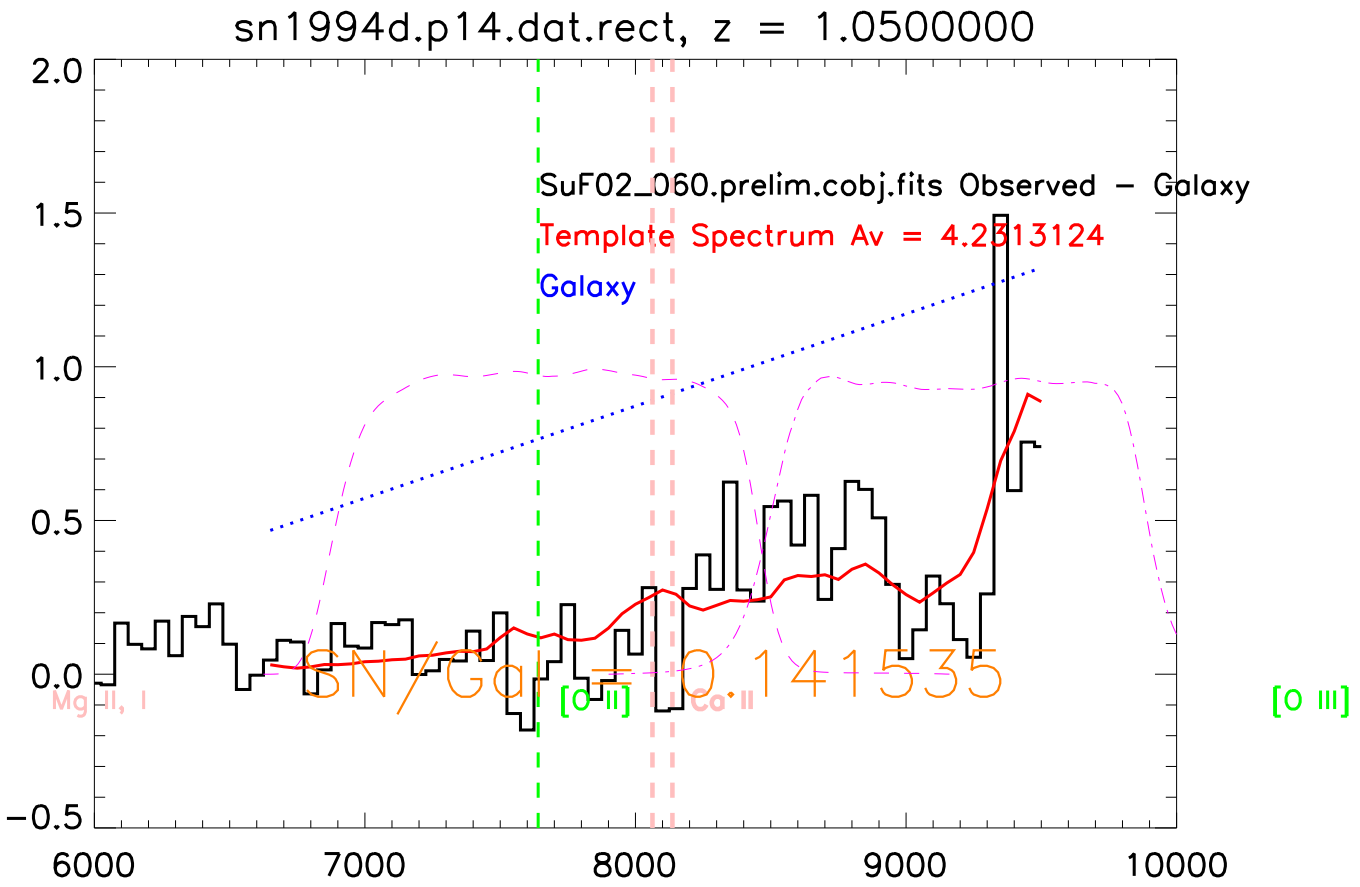

sn1991t.p10.dat.rect, z = 1.0800000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.5975027
Galaxy
SN/Gal F 0.274284
[O II]
[O III
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

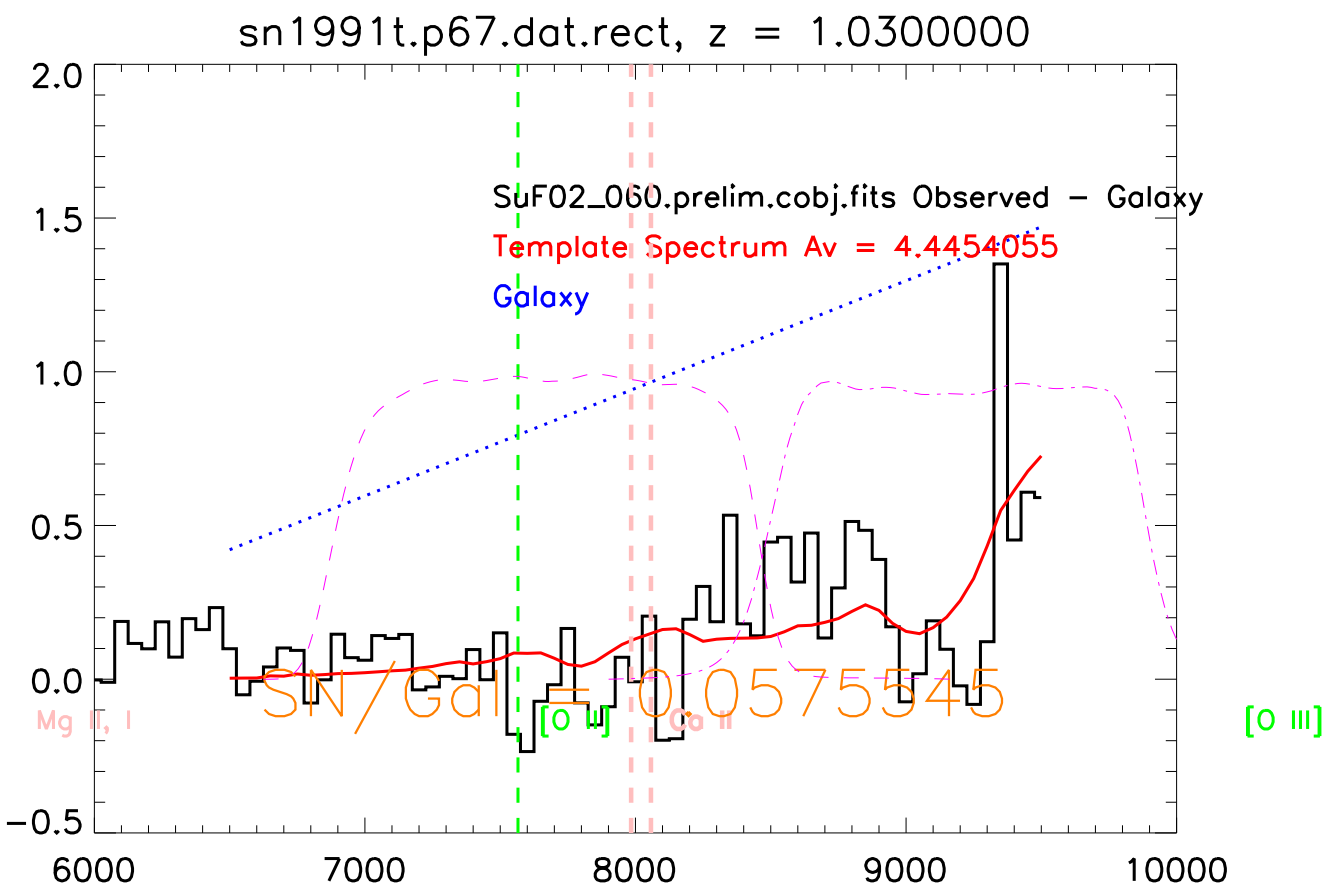

sn1996x.p24.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.2637856
Galaxy
SN/Gal F=0.0461566
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

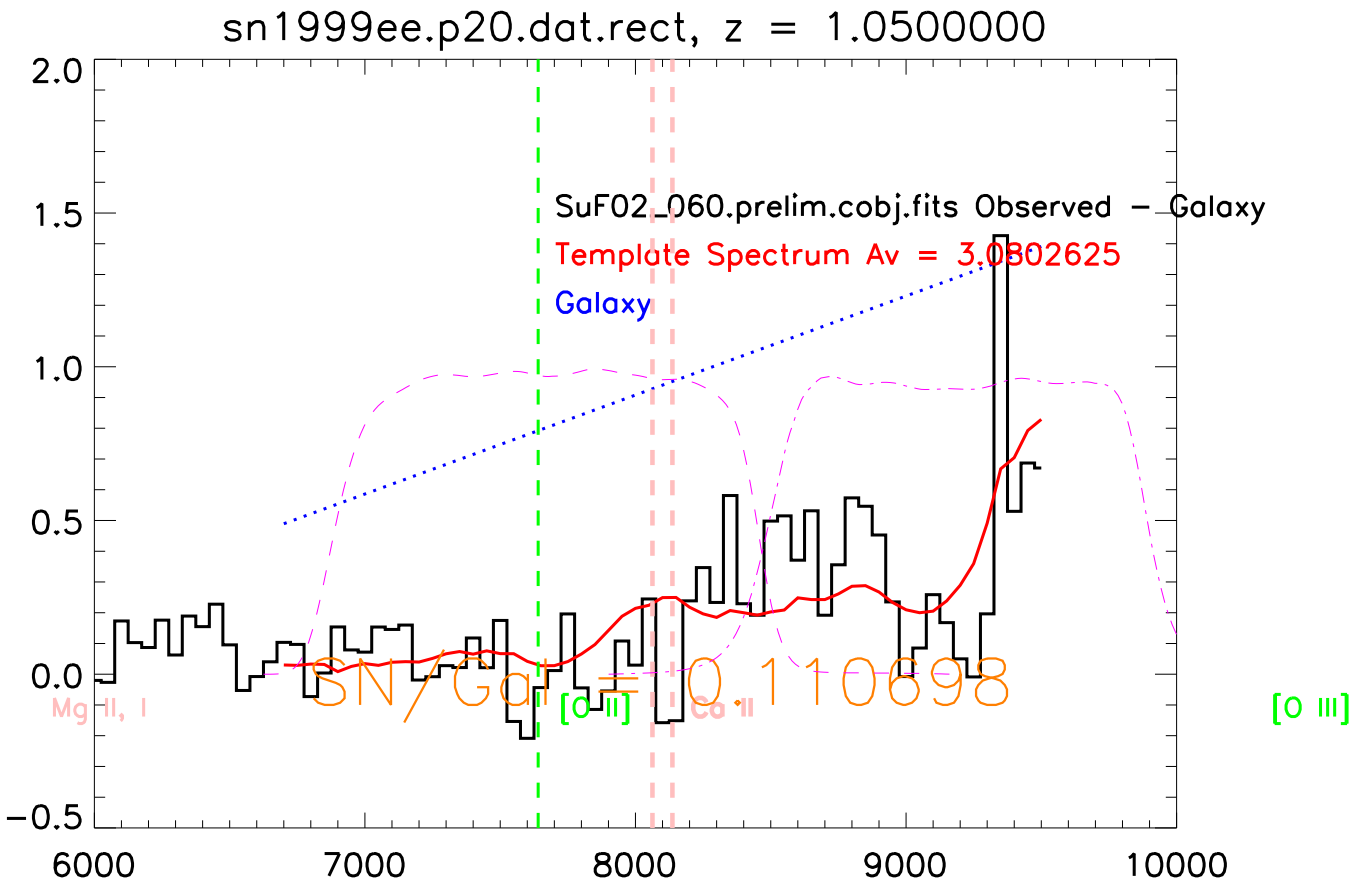

sn1996x.p22.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.3636560
Galaxy
SN/Gal F=0.041129
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

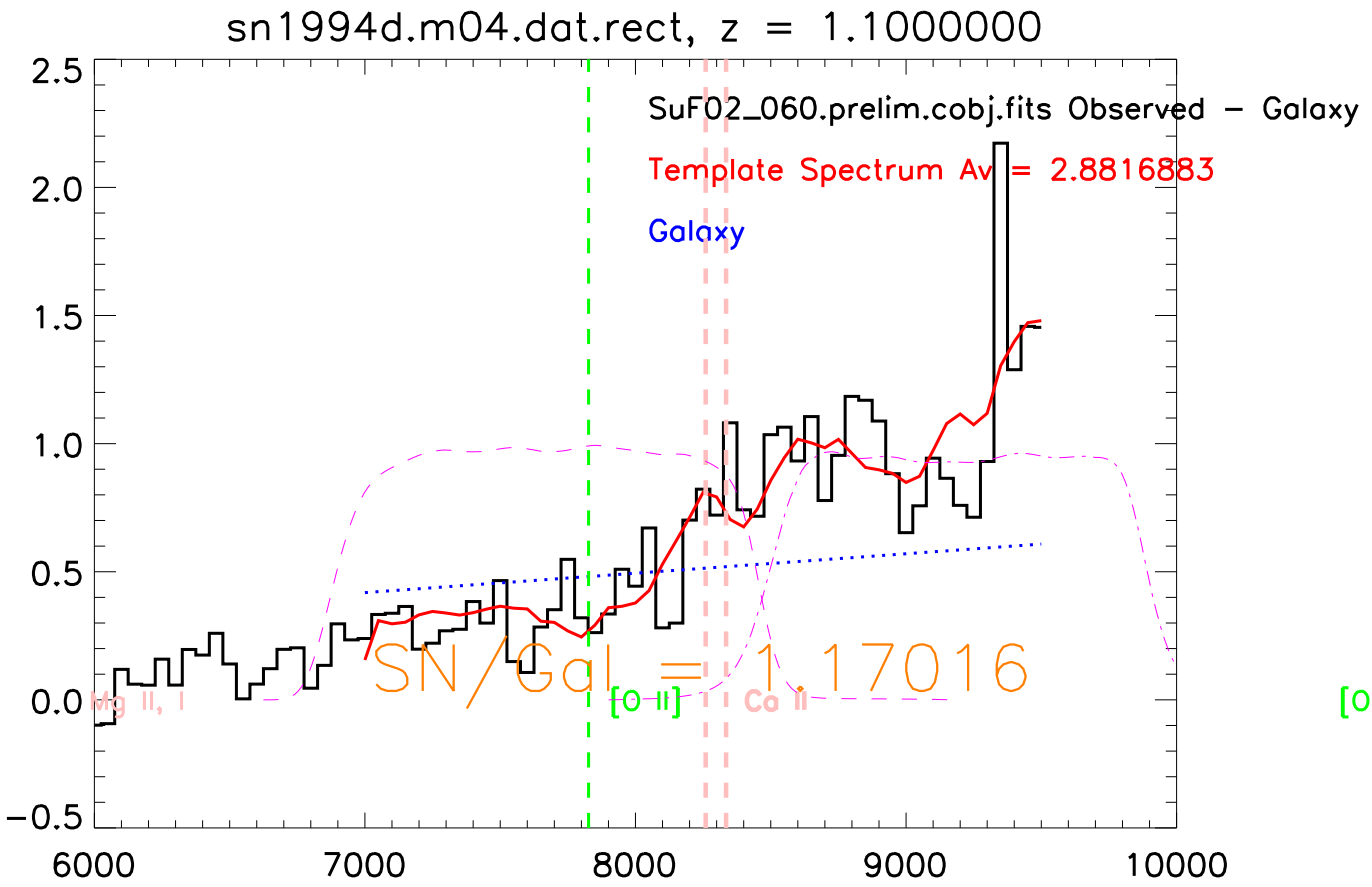

sn1991t.p15.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 5.5257746
Galaxy
SN/Gal F: 0.0658782
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

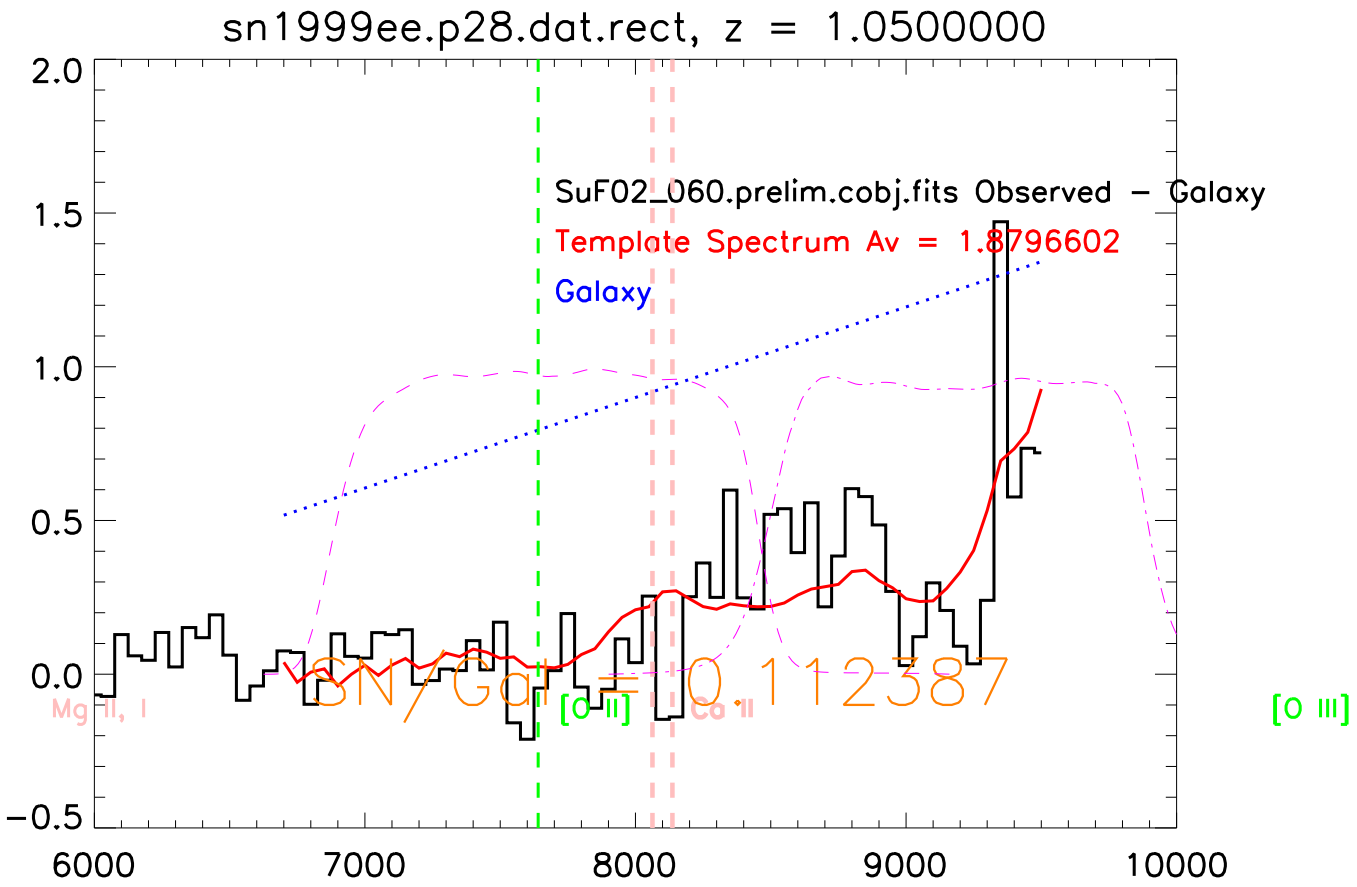

sn1991t.p24.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 4.2486915
Galaxy
SN/Gal=+0.0678791
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

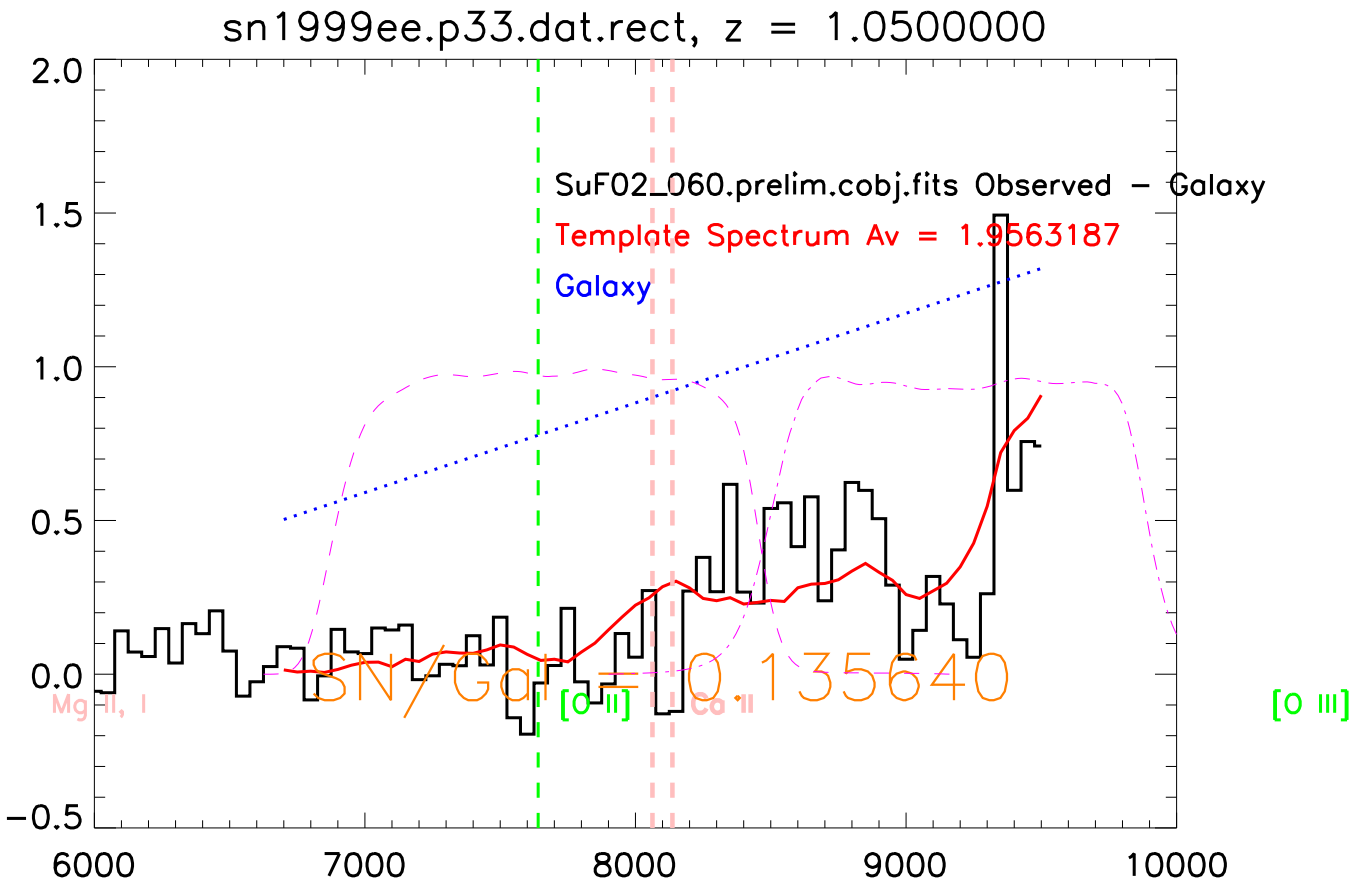

sn1994d.p14.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 4.2313124
Galaxy
SN/Gal = 0.141535
Mg II, I
[O II]
Co II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

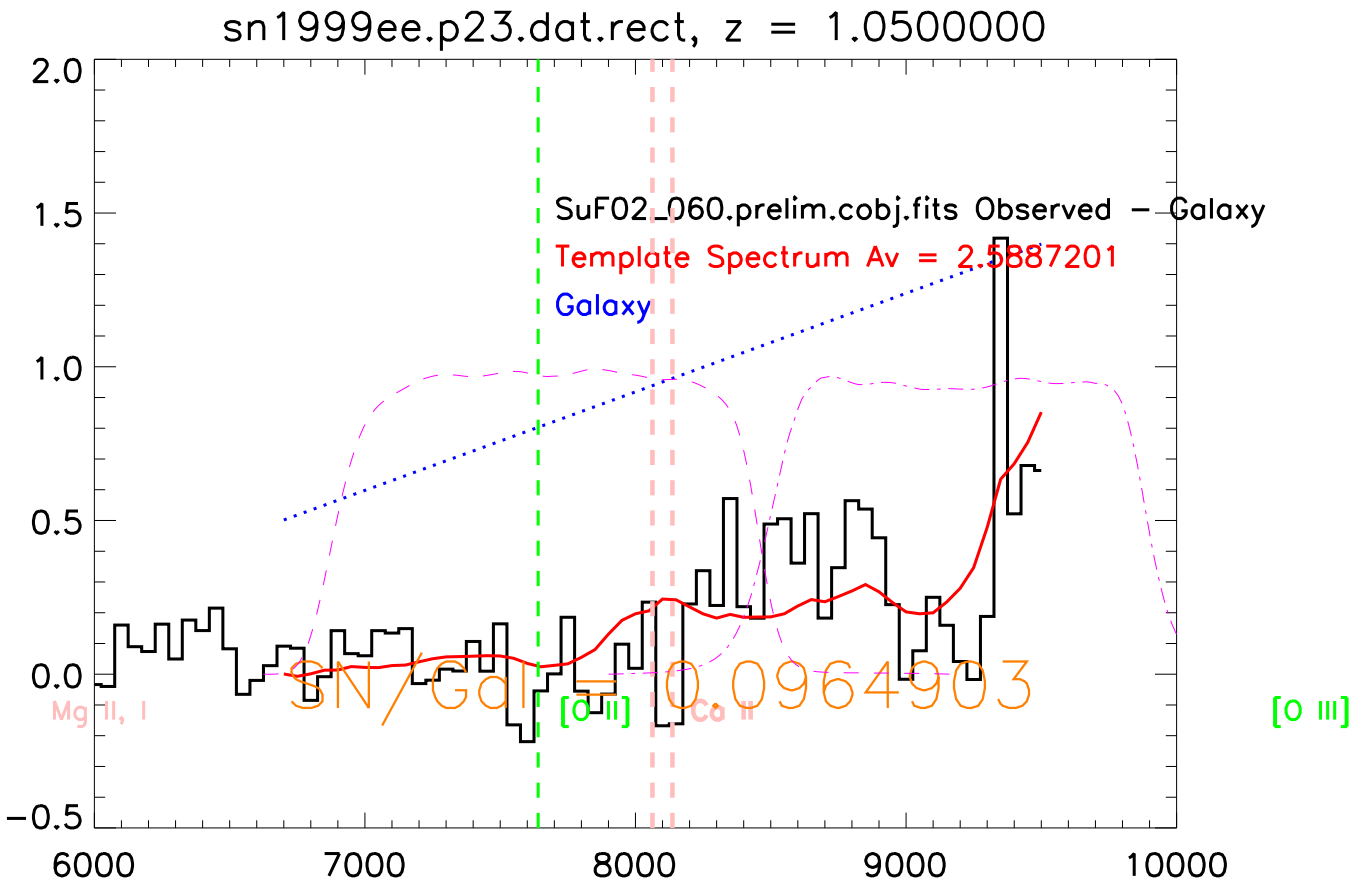

sn1991t.p67.dat.rect, z = 1.0300000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 4.4454055
Galaxy
SN/Gal = 0.05755545
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

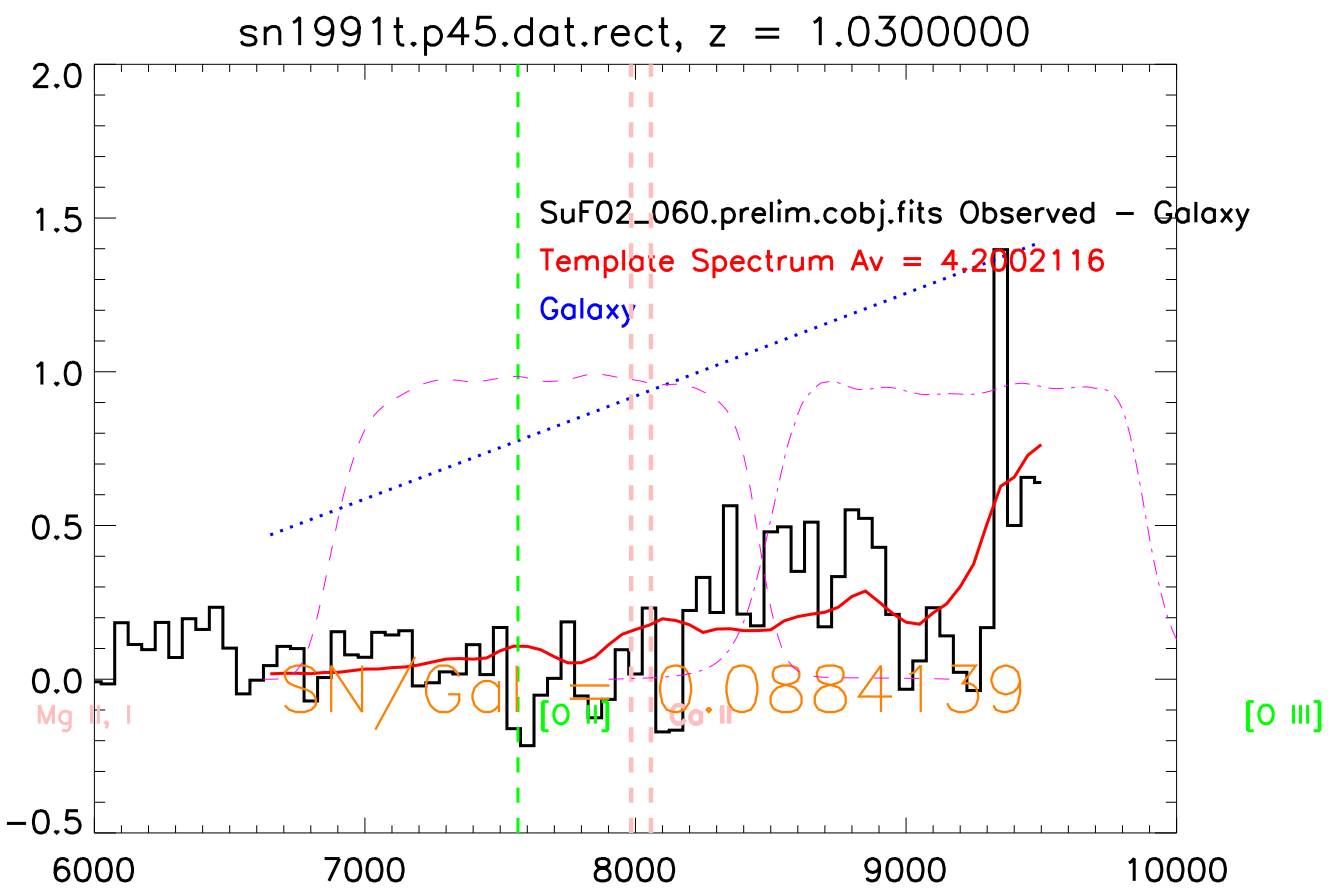

sn1999ee.p20.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 3.0802625
Galaxy
SN/Gal = 0.110698
Mg II, I
[O III]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

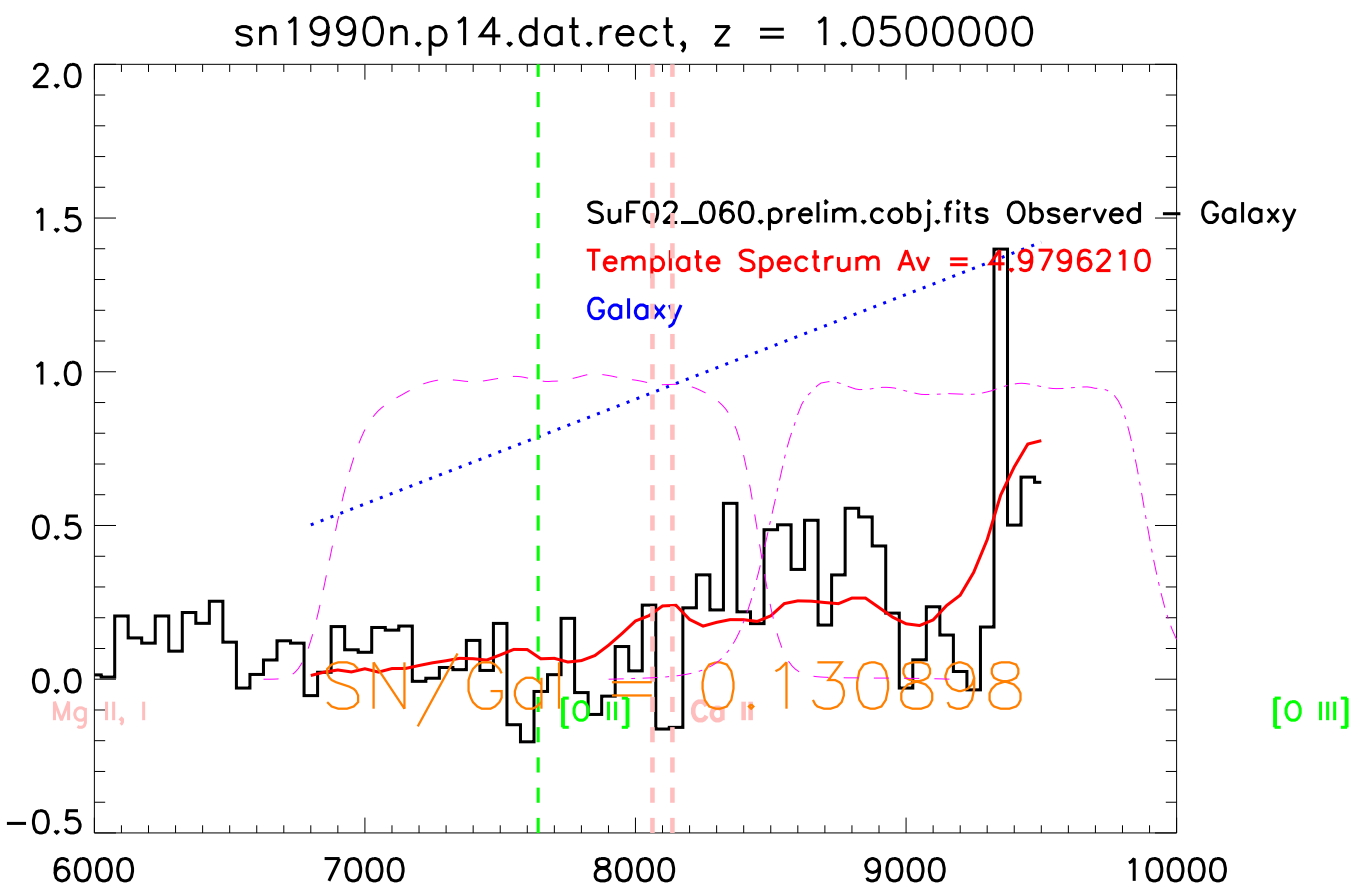

sn1994d.m04.dat.rect, z = 1.1000000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 2.8816883
Galaxy
SN/Gal = 1.17016
Mg II, I
[O II]
Ca II
[O
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

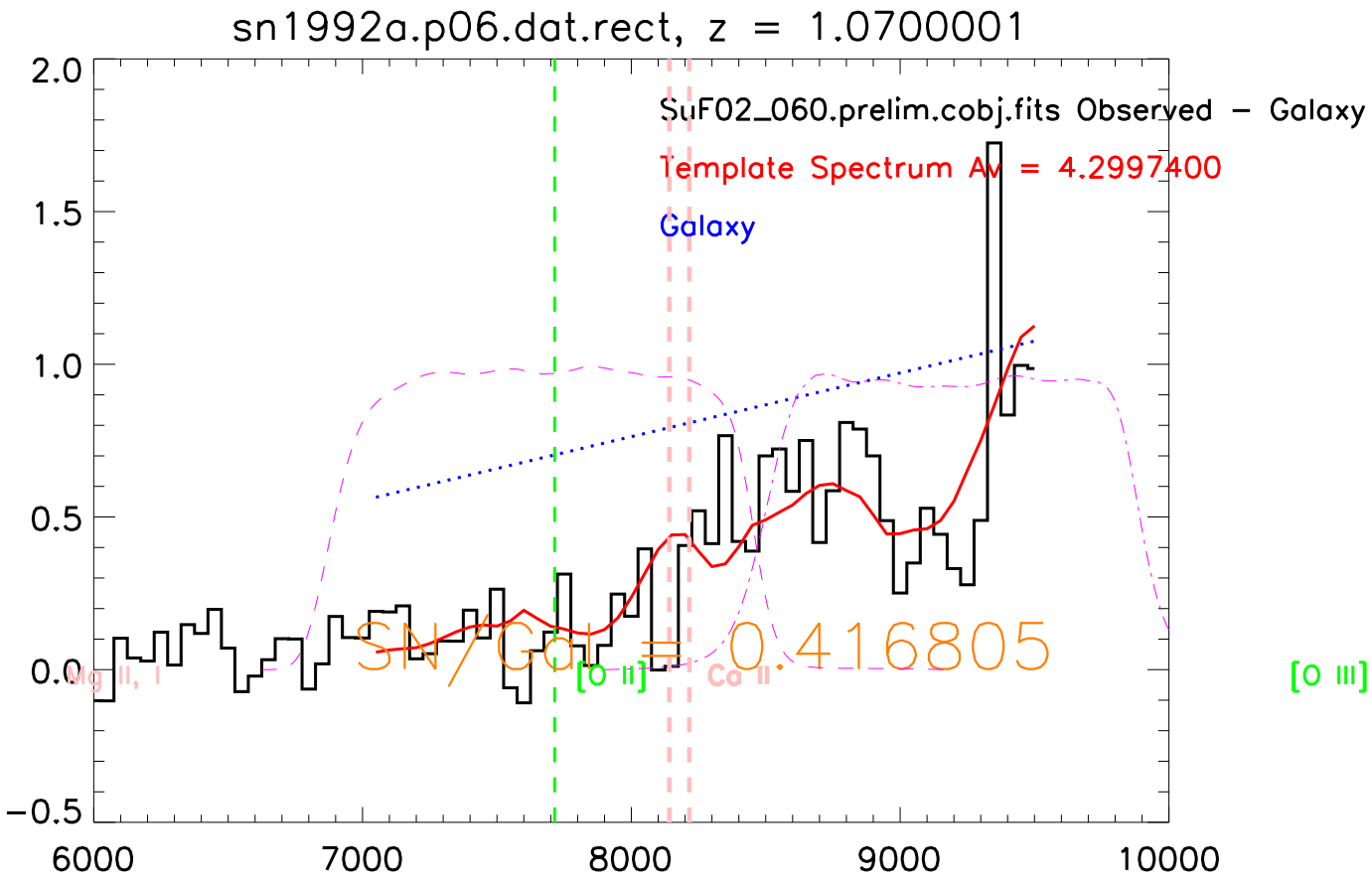

sn1999ee.p28.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed – Galaxy
Template Spectrum Av = 1.8796602
Galaxy
vSN/Gal = 0.112387
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

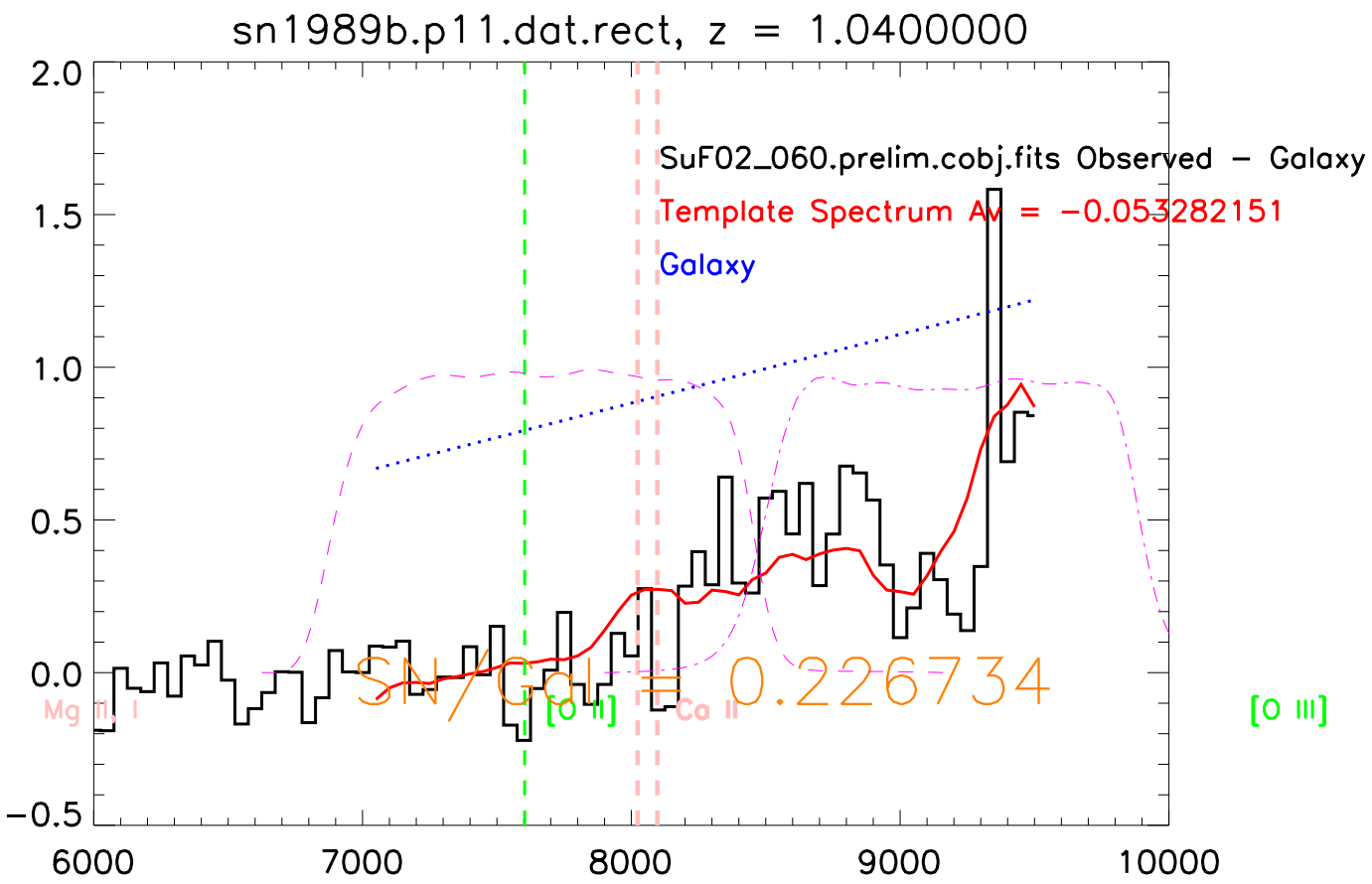

sn1999ee.p33.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 1.9563187
Galaxy
SN/Gal = 0.135640
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

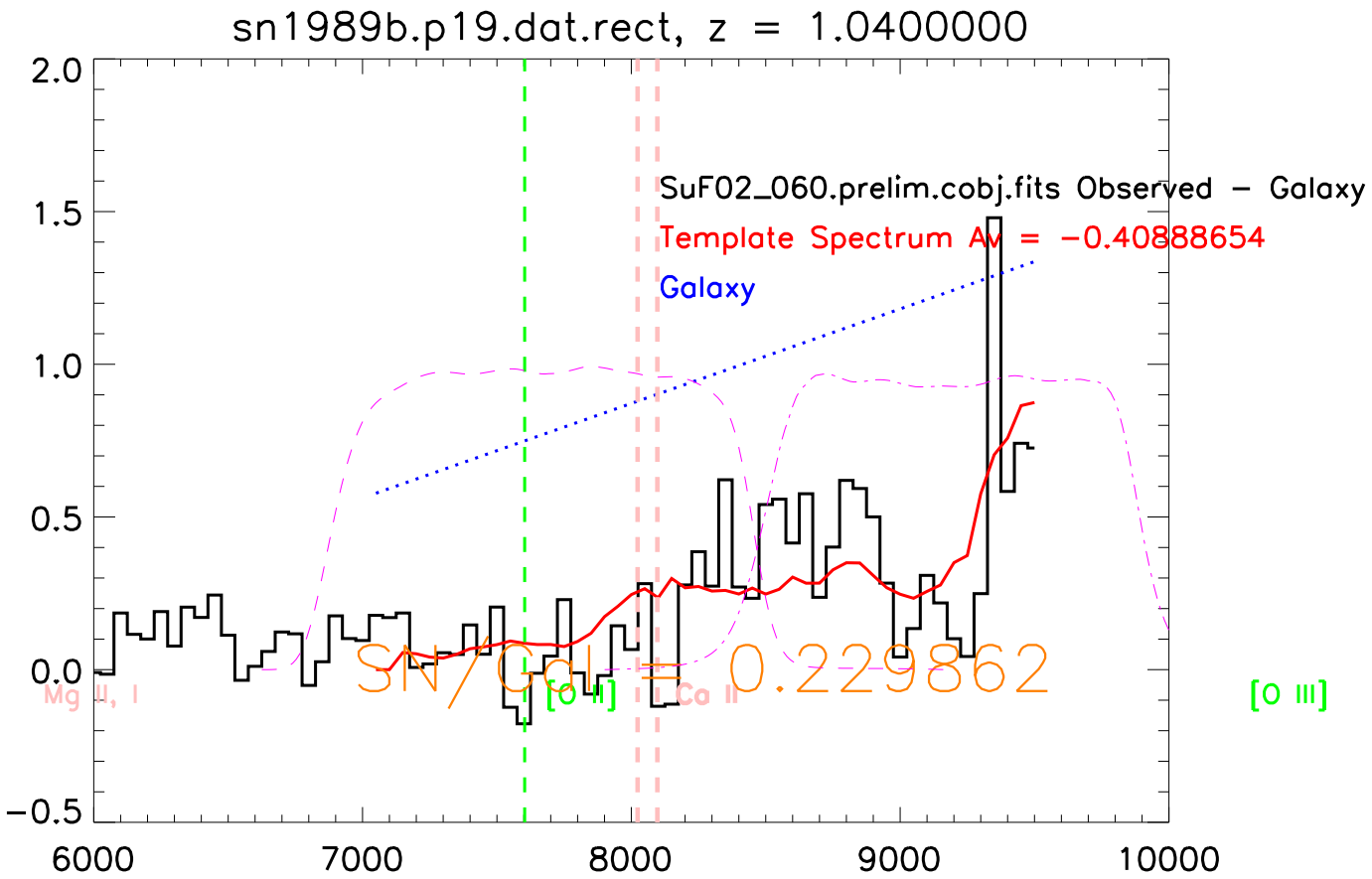

sn1999ee.p23.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed – Galaxy
Template Spectrum Av = 2.5887201
Galaxy
SN/Gal = 0.0964903
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

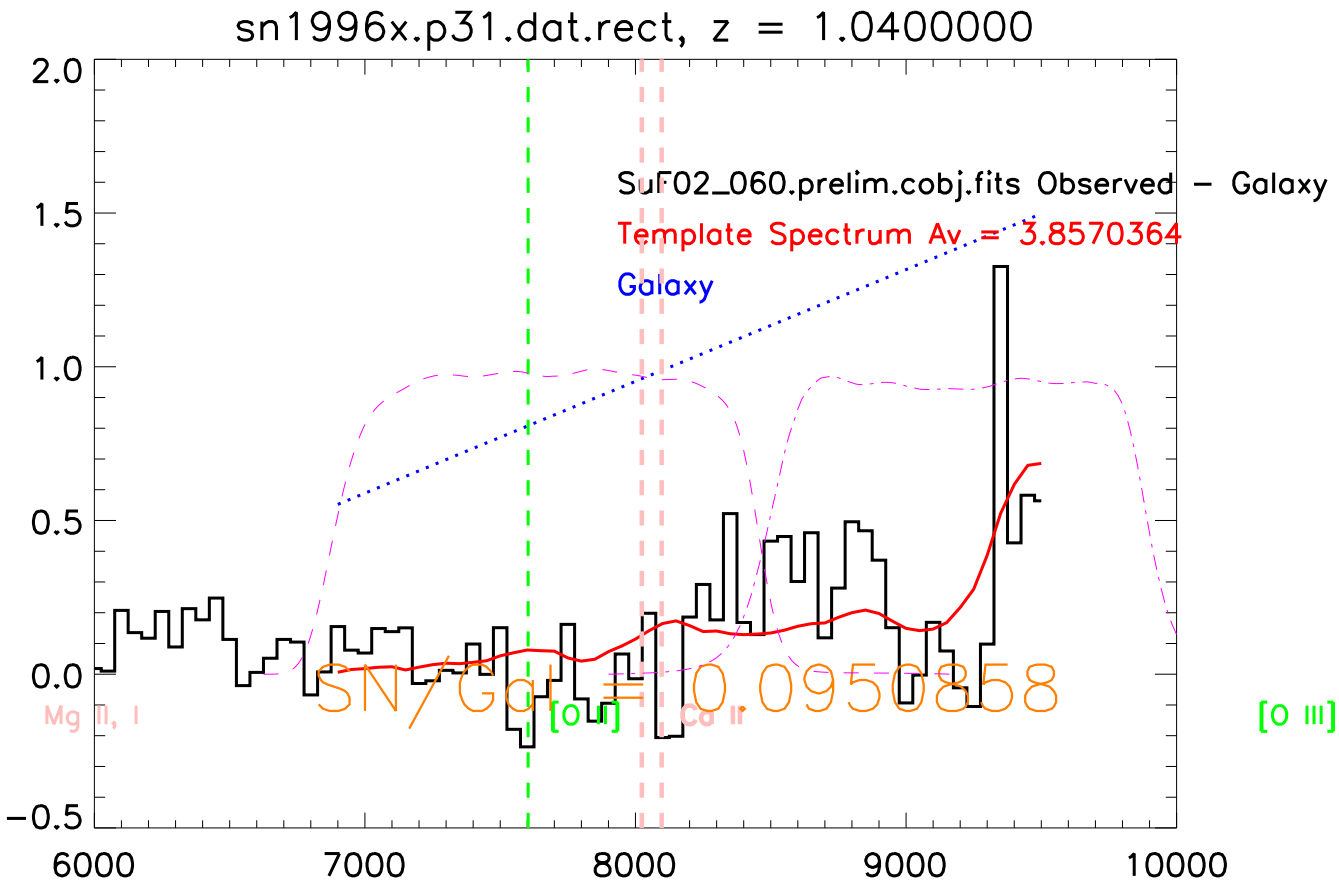

sn1991t.p45.dat.rect, z = 1.0300000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 4.2002116
Galaxy
SN/Gal = 0.0884139
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

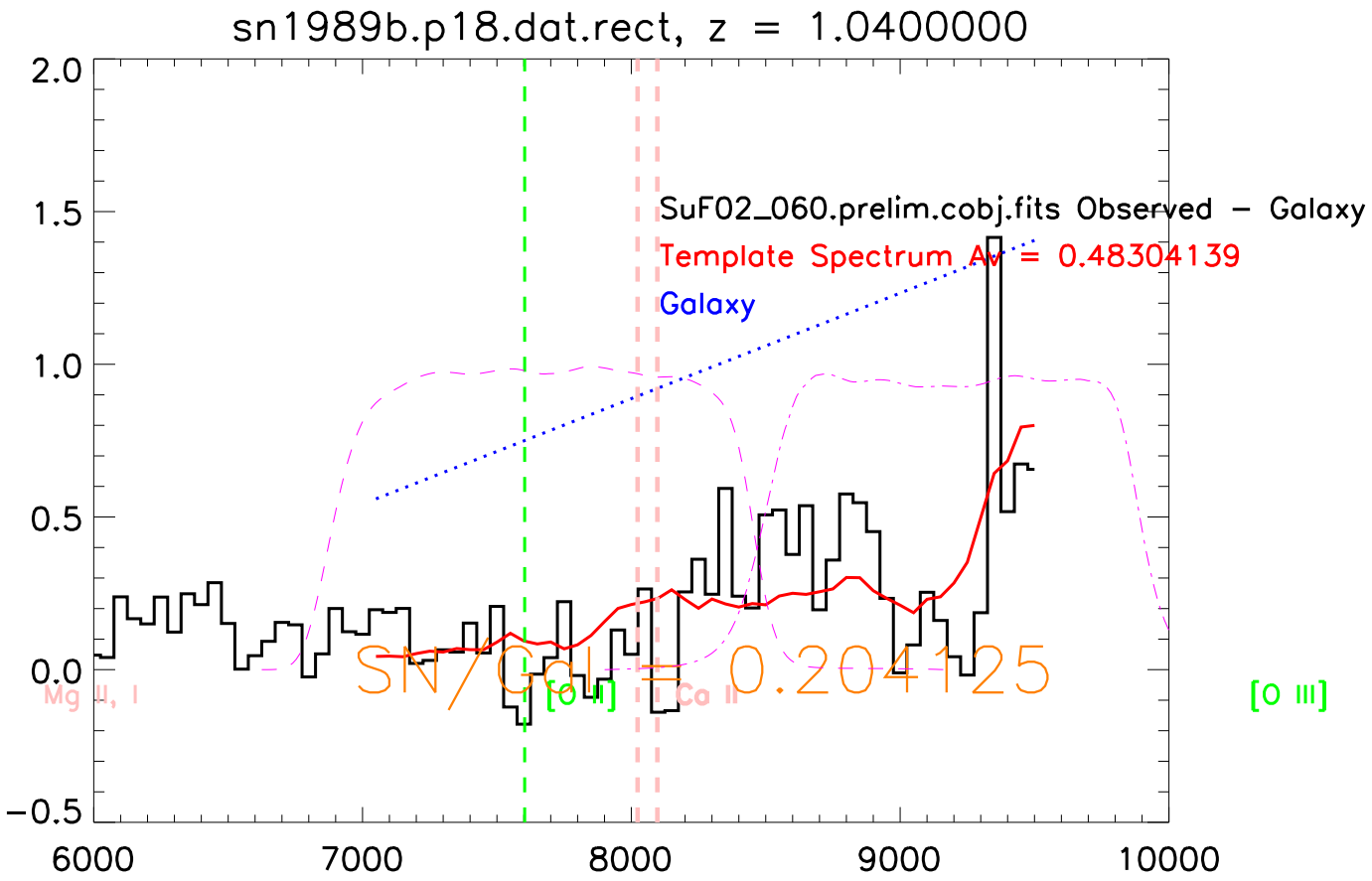

sn1990n.p14.dat.rect, z = 1.0500000
SuF02_060.prelim.cobj.fits Observed – Galaxy
Template Spectrum Av = 4.9796210
Galaxy
SN/Gal=0.130898
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

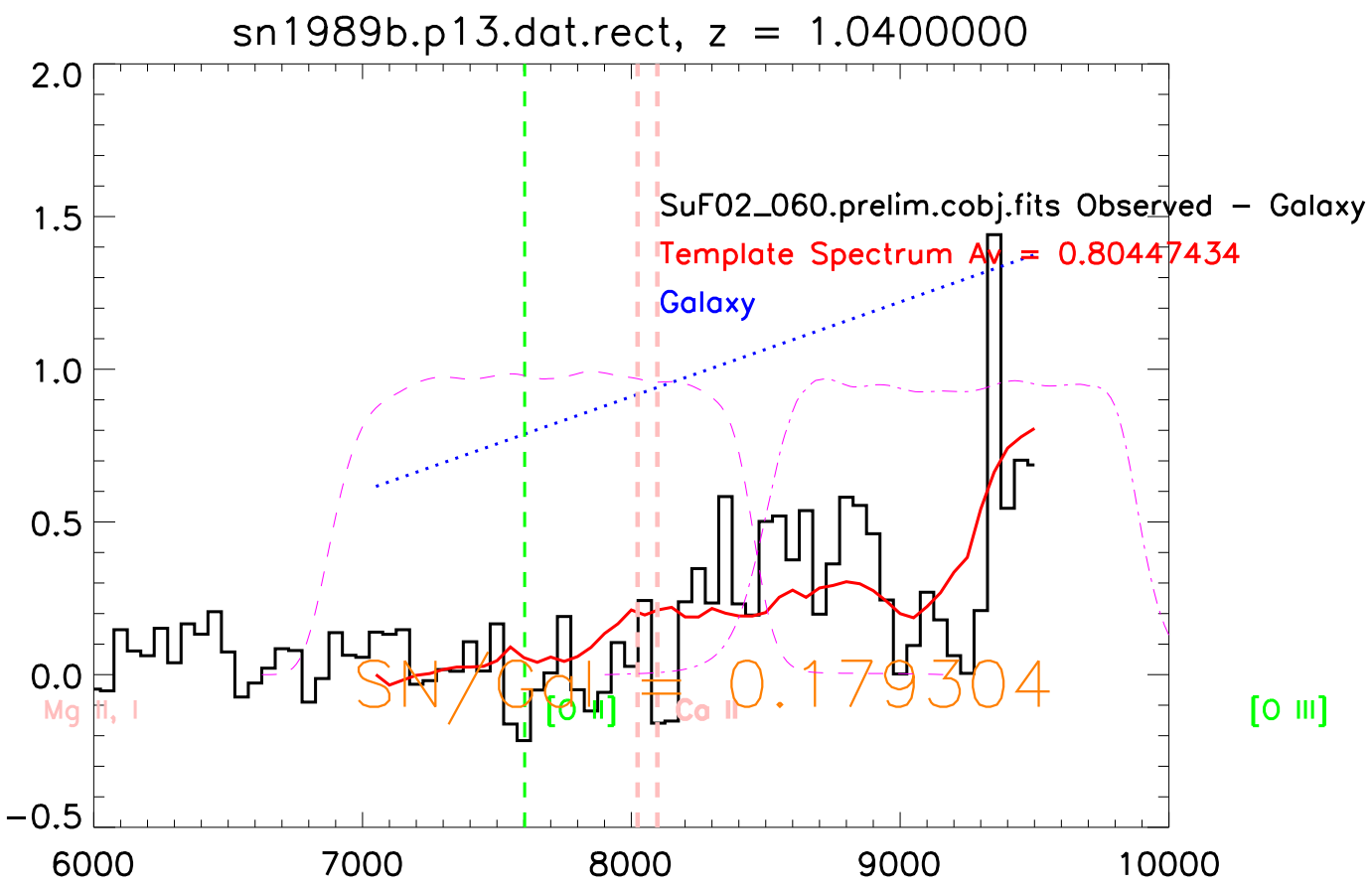

sn1992a.p06.dat.rect, z = 1.0700001
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 4.2997400
Galaxy
S/N(Gal) = 0.416805
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

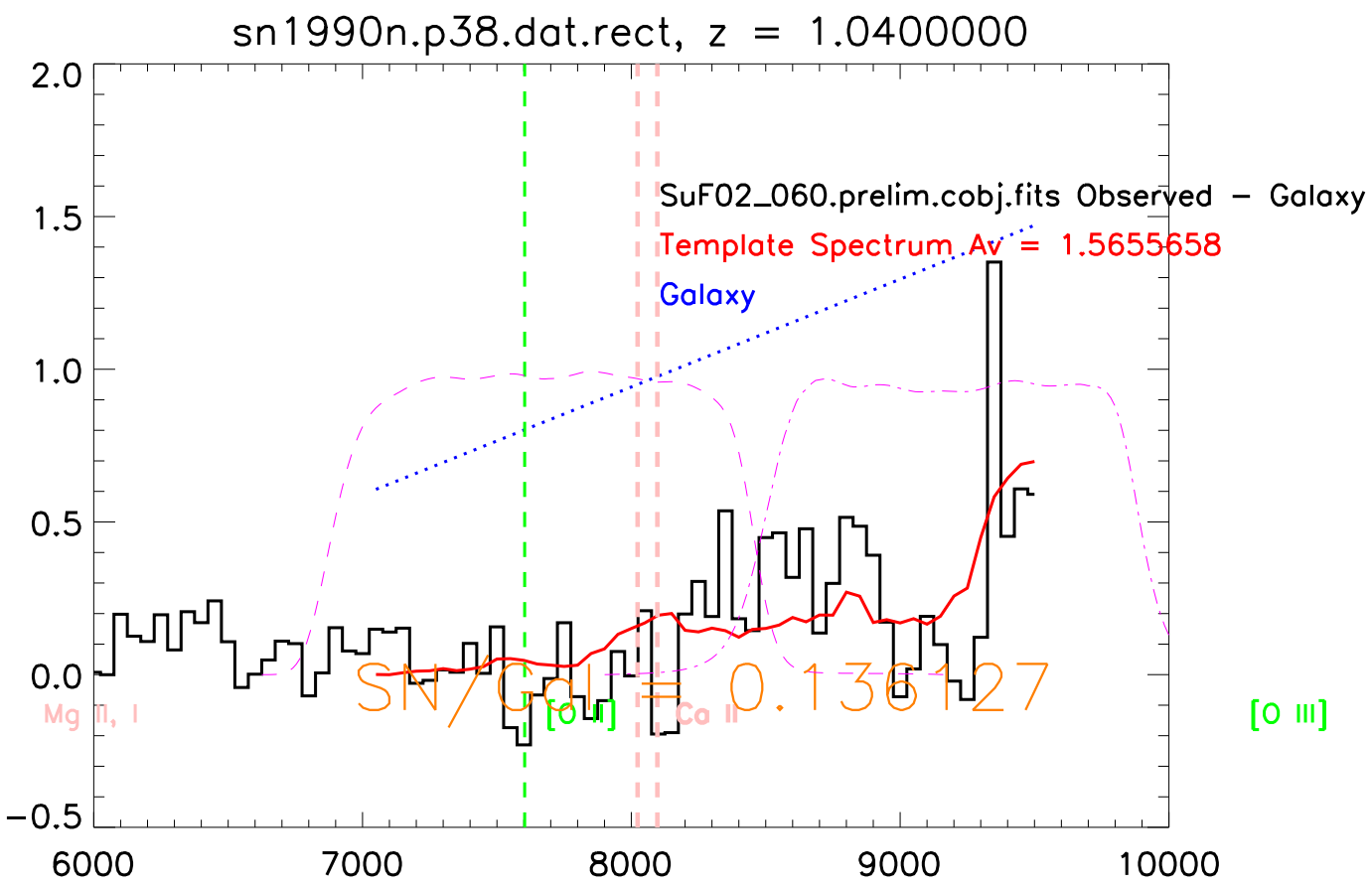

sn1989b.p11.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum AV = −0.053282151
Galaxy
S/N/GOL = 0.226734
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1989b.p19.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = −0.40888654
Galaxy
SN/Gal = 0.229862
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1996x.p31.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 3.8570364
Galaxy
SN/Gal = 0.09508858
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1989b.p18.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 0.48304139
Galaxy
SN/Gal = 0.204125
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1989b.p13.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum AV = 0.80447434
Galaxy
SN/GAL = 0.179304
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1990n.p38.dat.rect, z = 1.0400000
SuF02_060.prelim.cobj.fits Observed − Galaxy
Template Spectrum Av = 1.5655658
Galaxy
SN/Gal = 0.136127
Mg II, I
[O II]
Ca II
[O III]
2.0
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000