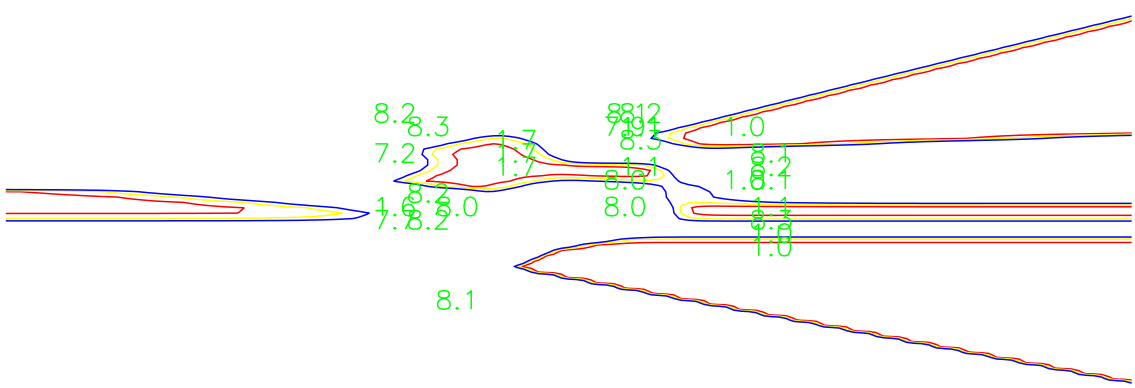
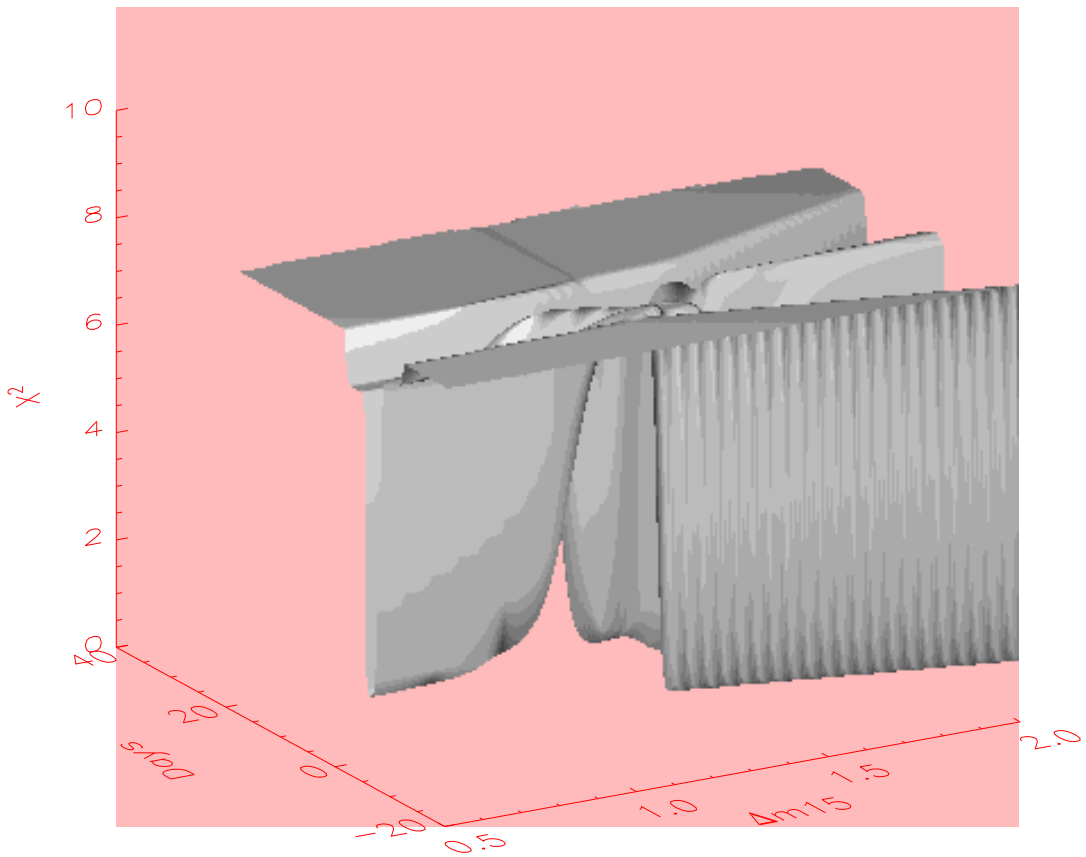
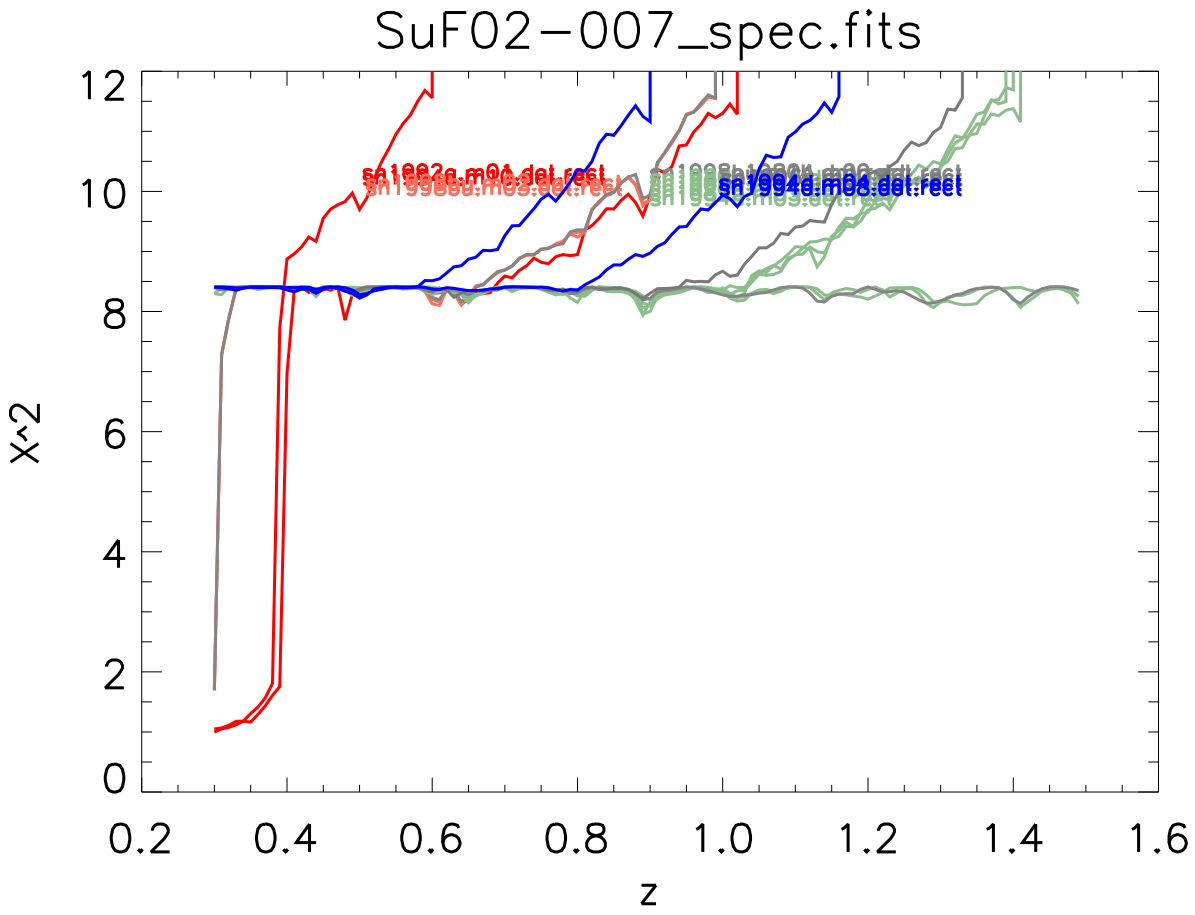
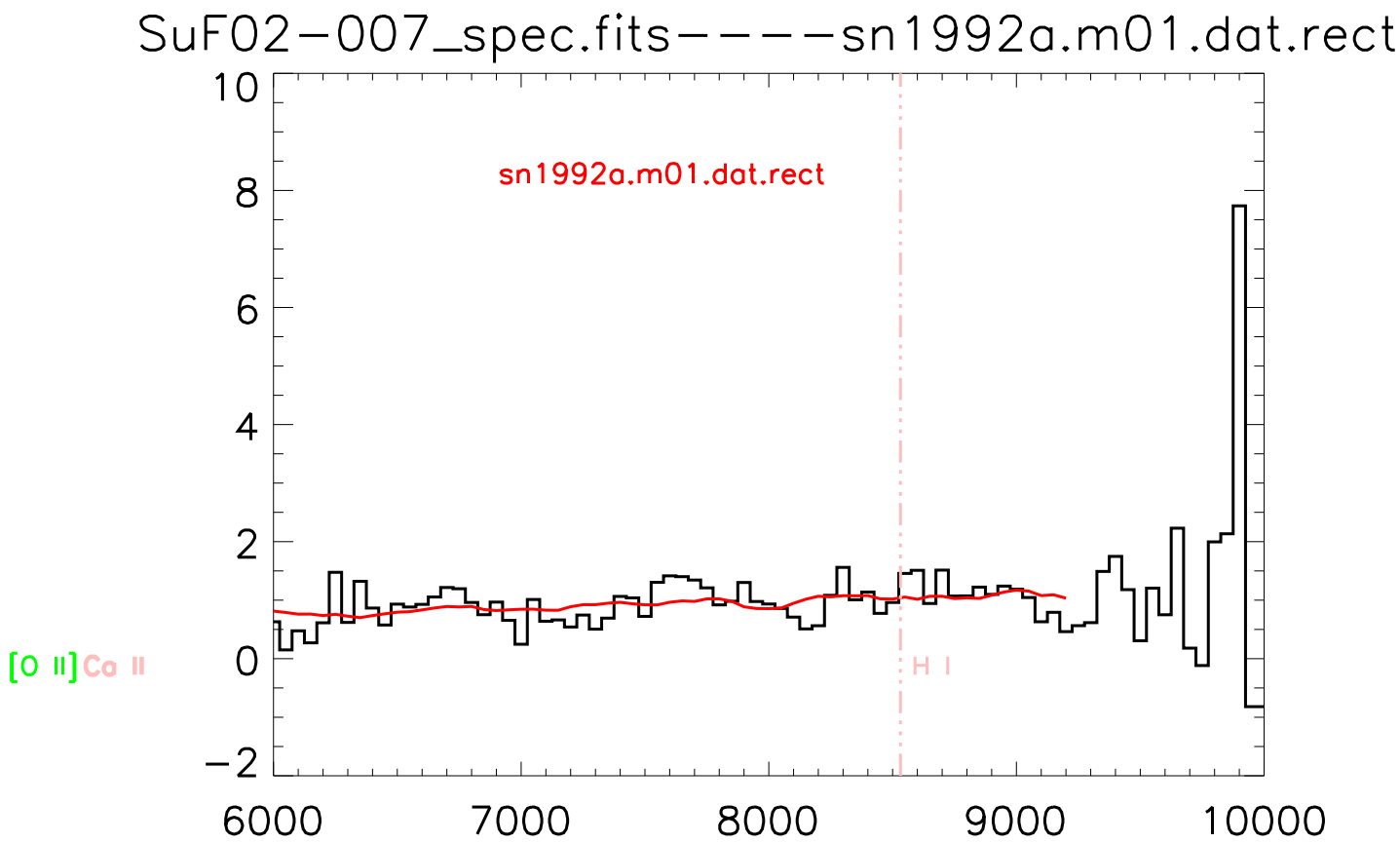
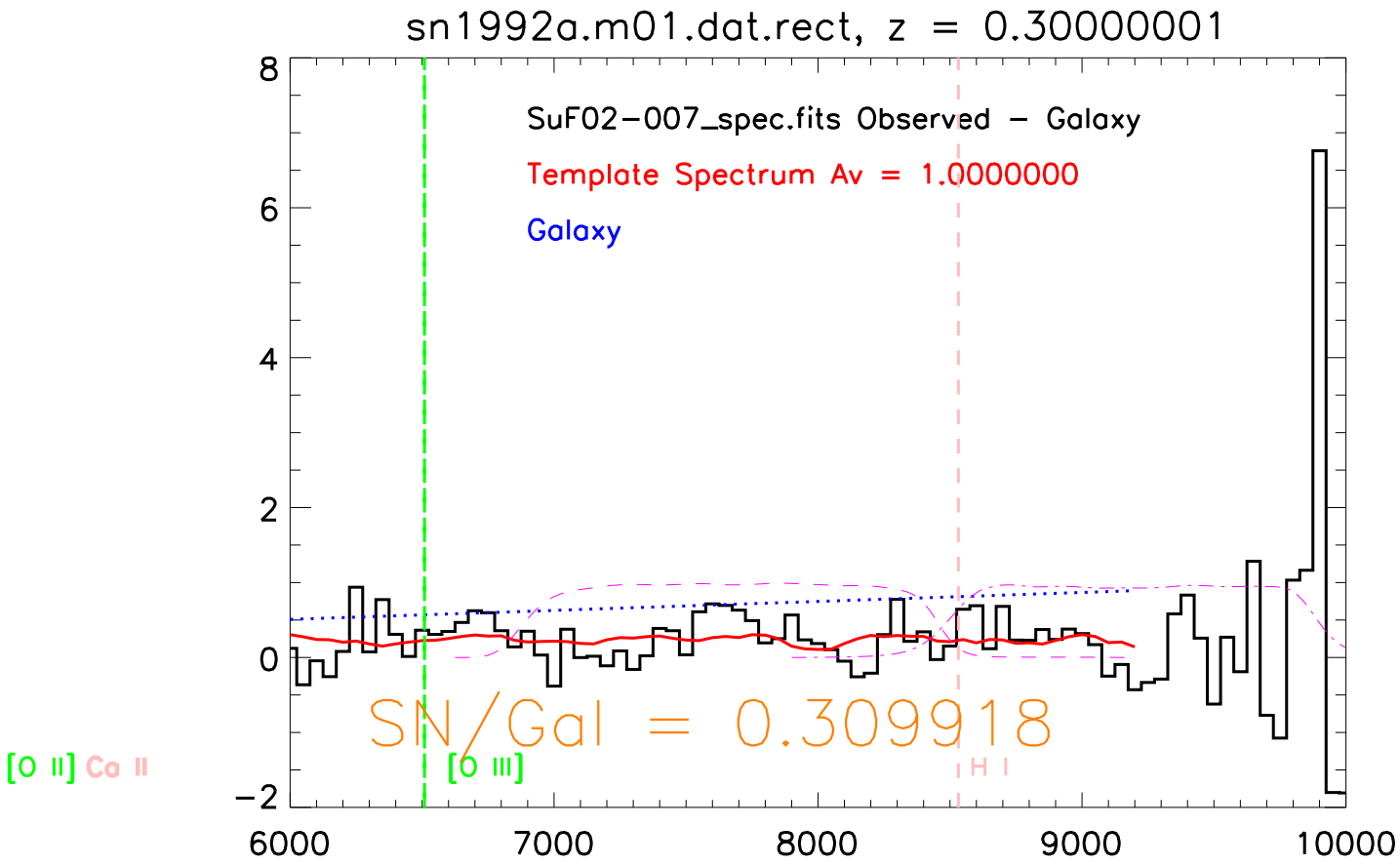
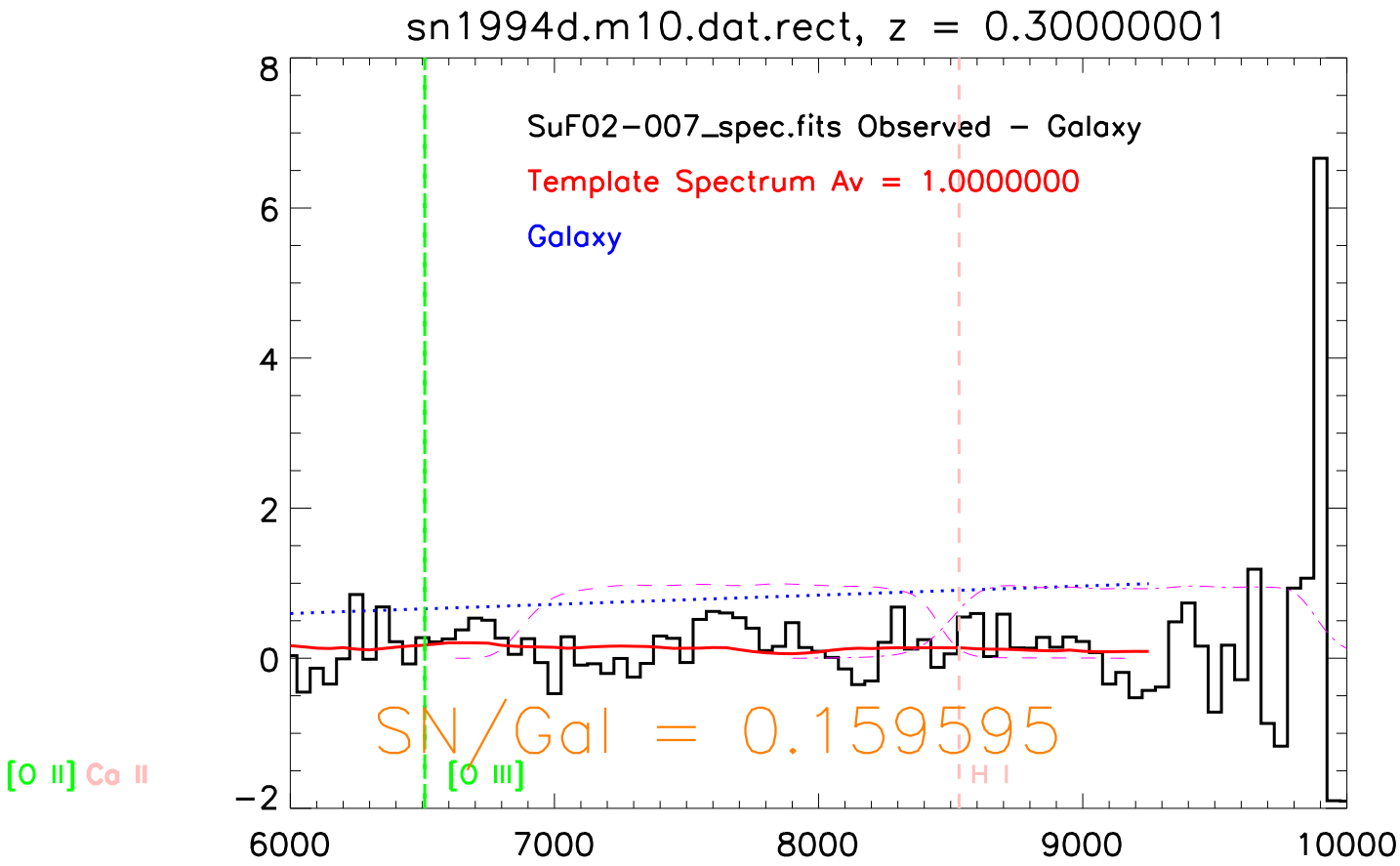

8.2
8.3
7.2
1.7
1.7
1.0
8.0
8.0
1.0
8.1

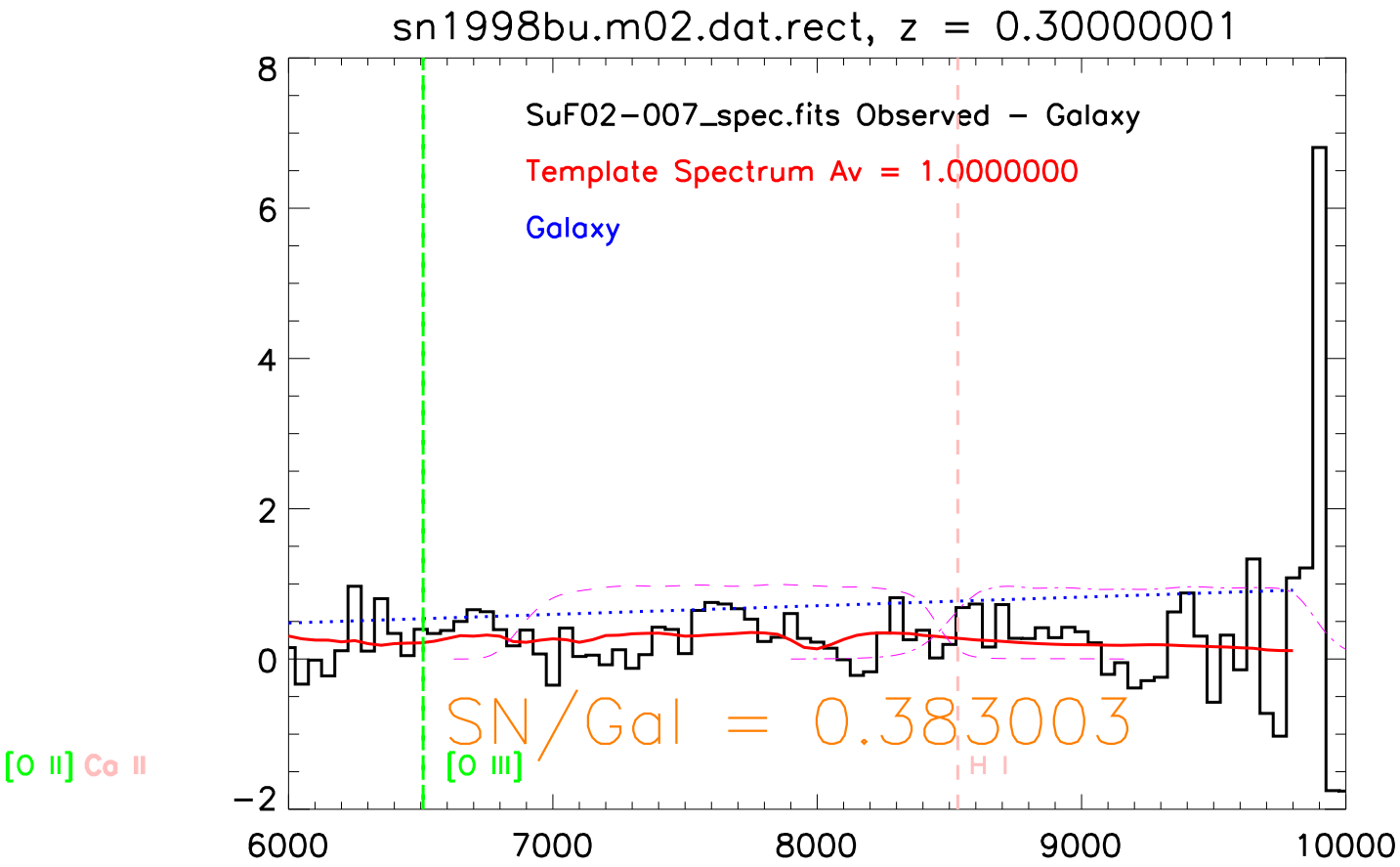

10
8
6
4
2
χ²
40
20
0
−20
days
0.5
1.0
1.5
2.0
Δm15

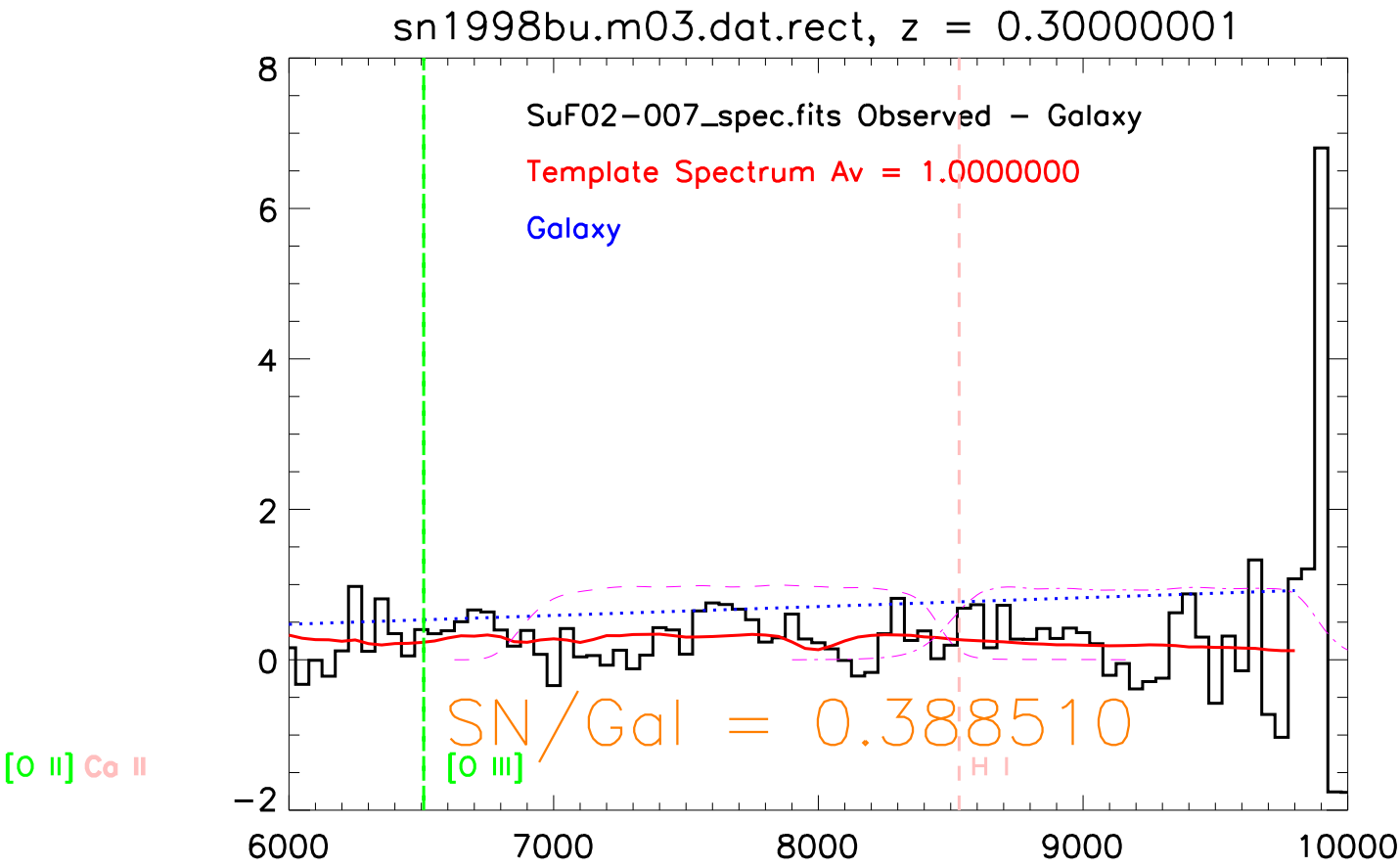

SuF02-007_spec.fits
sn1992a.m04.det.reet
sn1994d.m04.det.reet
X^2
z
0
2
4
6
8
10
12
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6

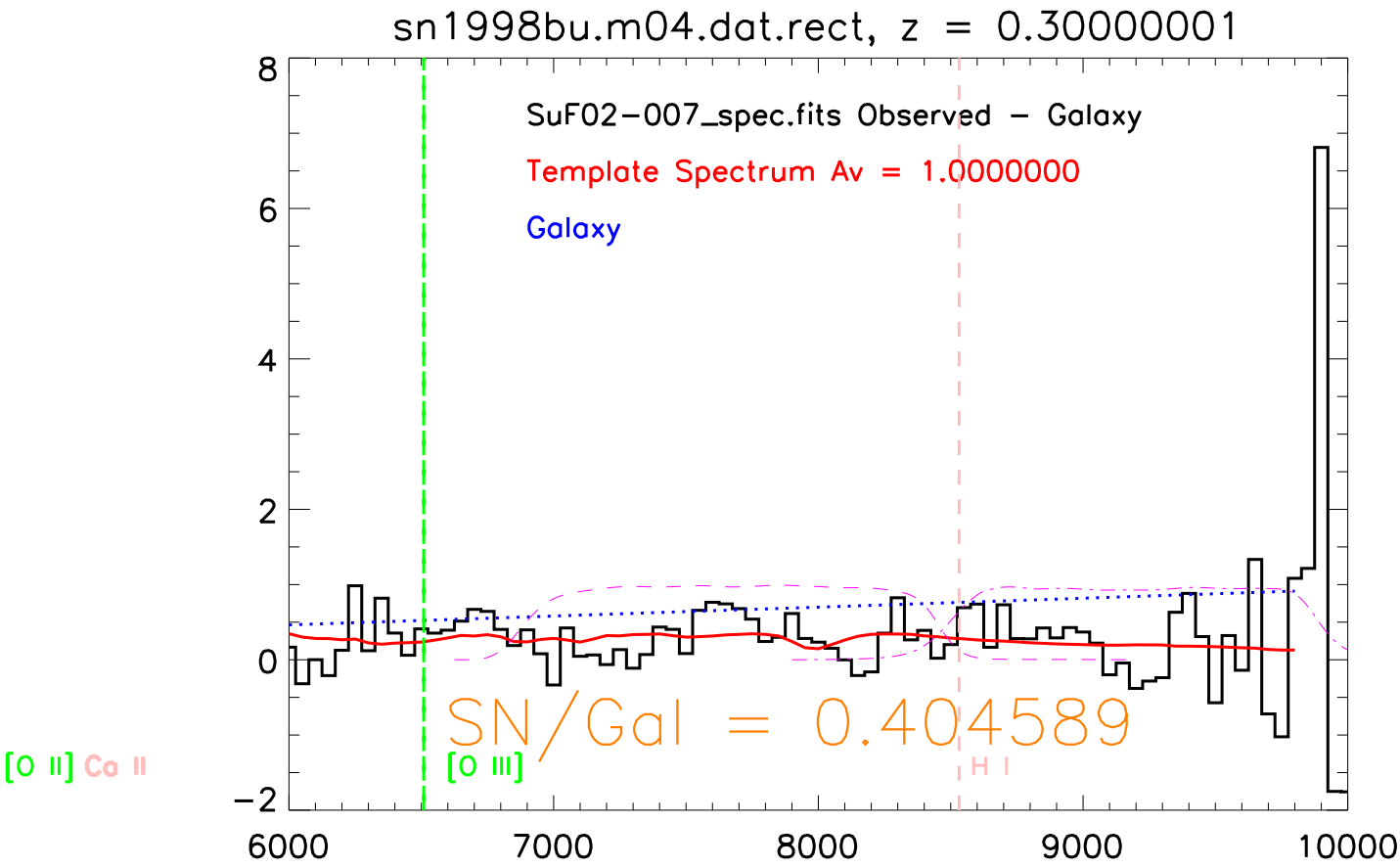

SuF02−007_spec.fits−−−−sn1992a.m01.dat.rect
sn1992a.m01.dat.rect
[O II]
Ca II
H I
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000

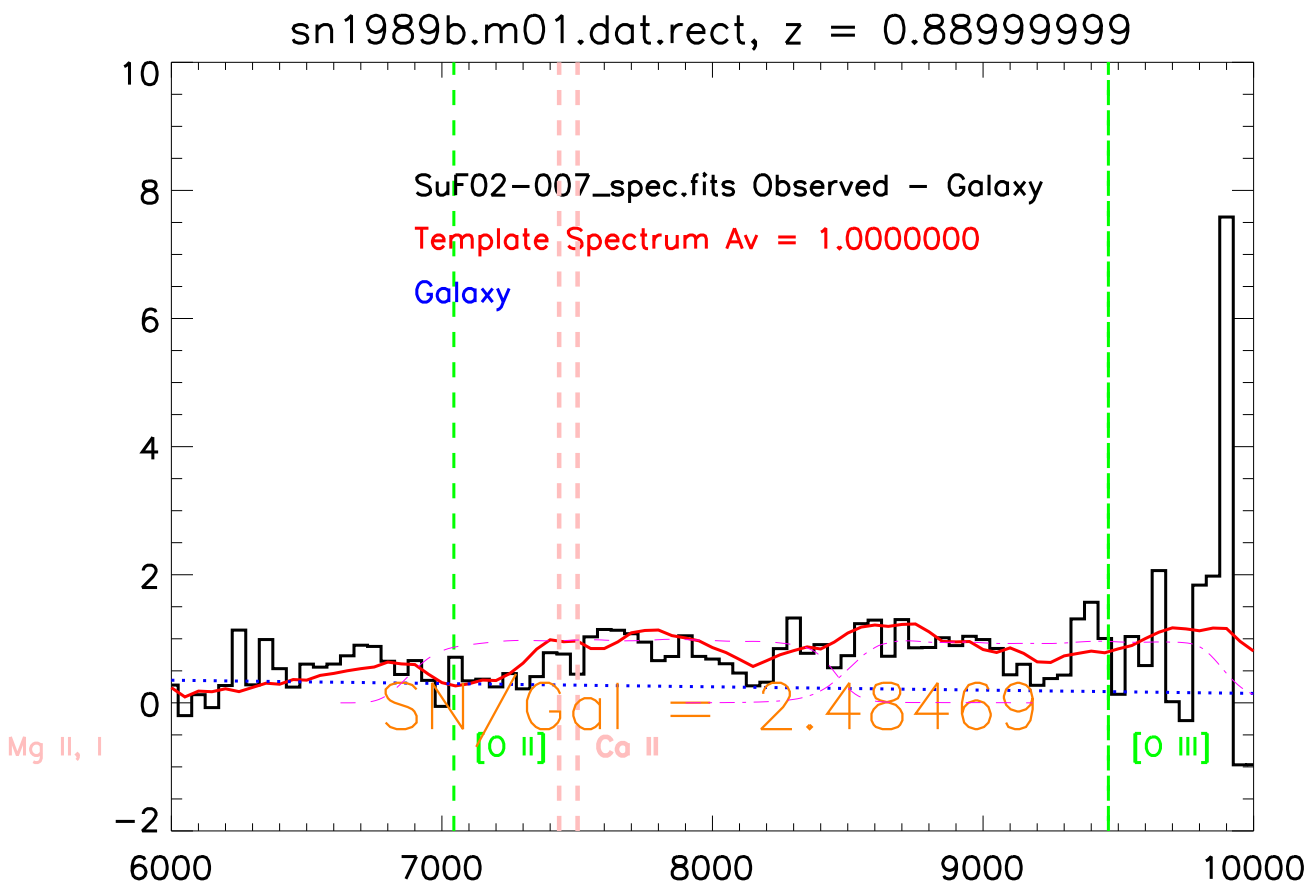

sn1992a.m01.dat.rect, z = 0.30000001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.309918
[O II] Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000

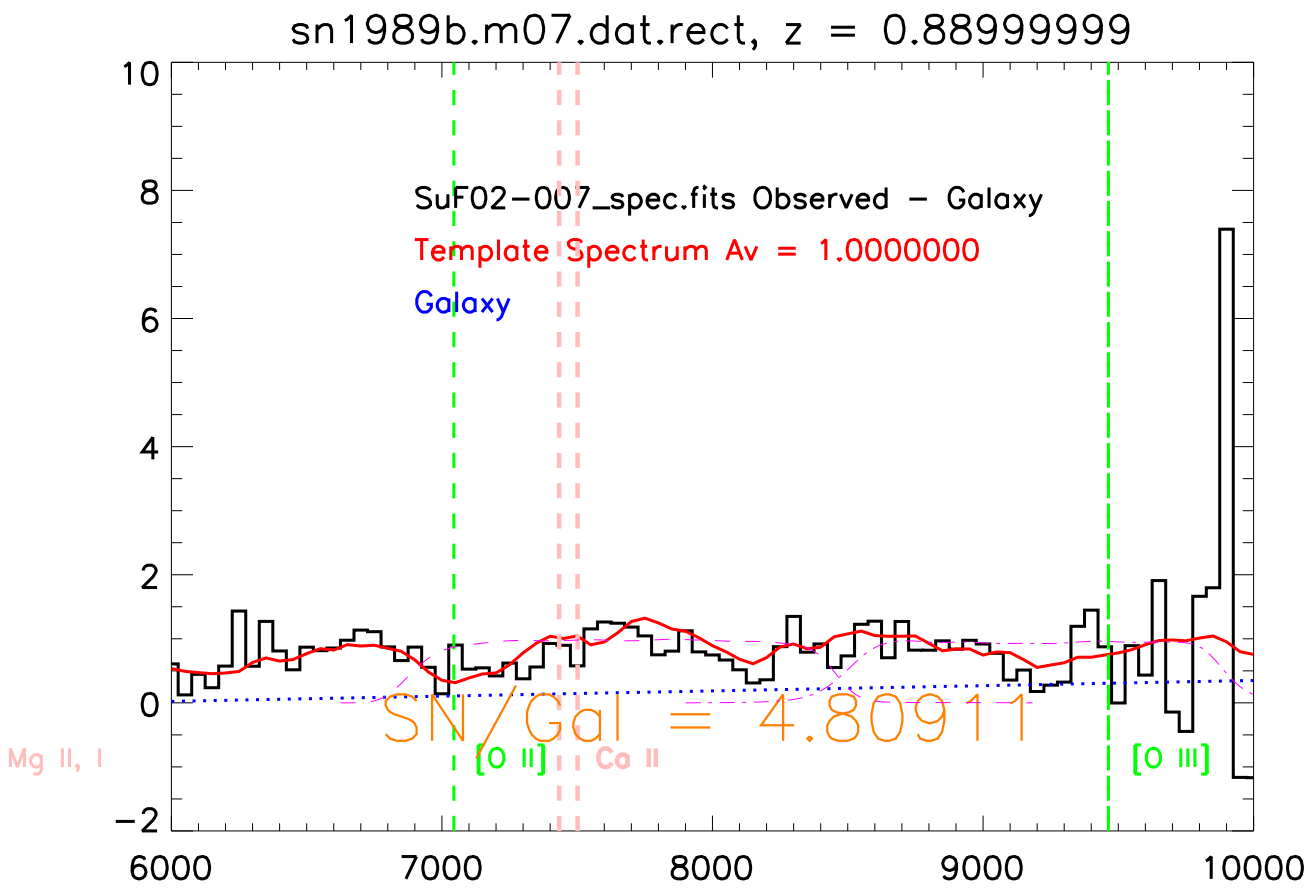

sn1994d.m10.dat.rect, z = 0.30000001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.159595
[O II]
Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000

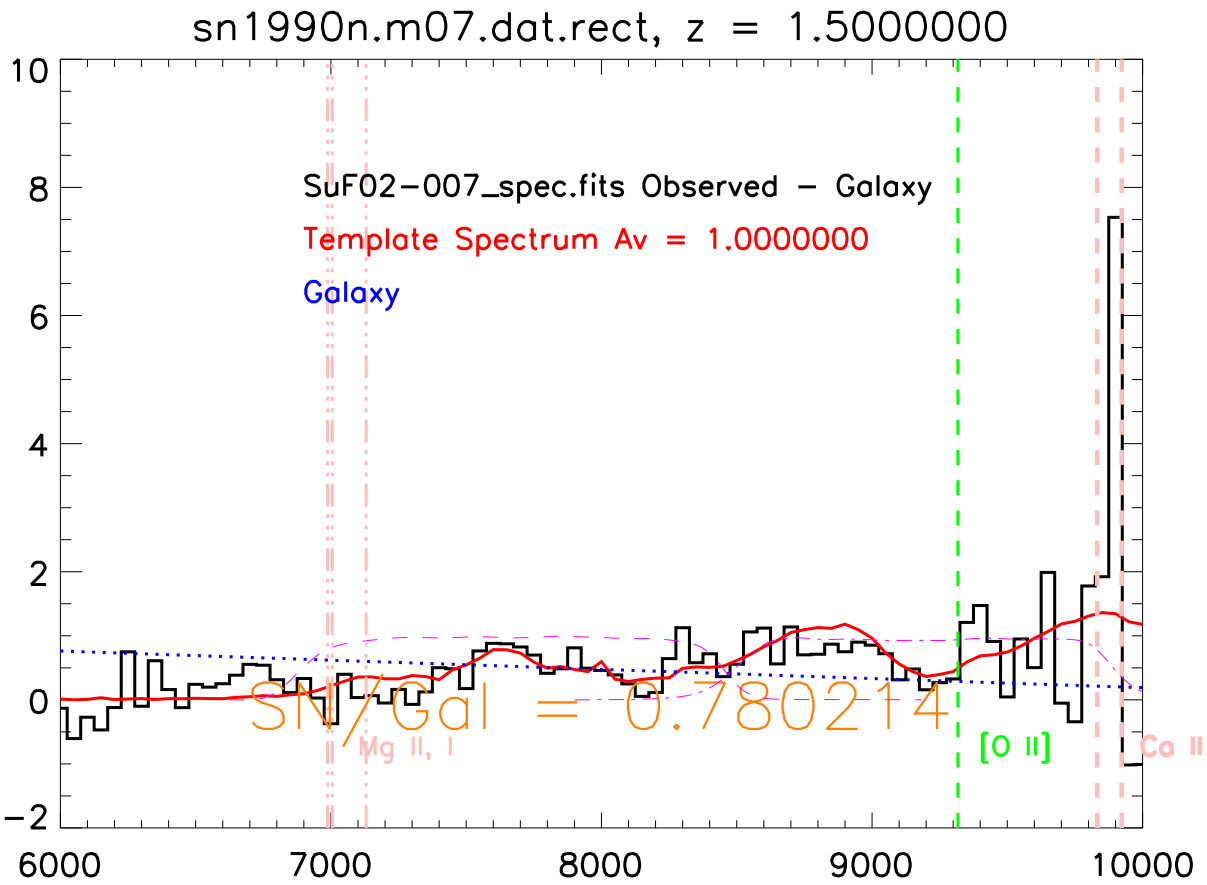

sn1998bu.m02.dat.rect, z = 0.30000001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.383003
[O II]
Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000

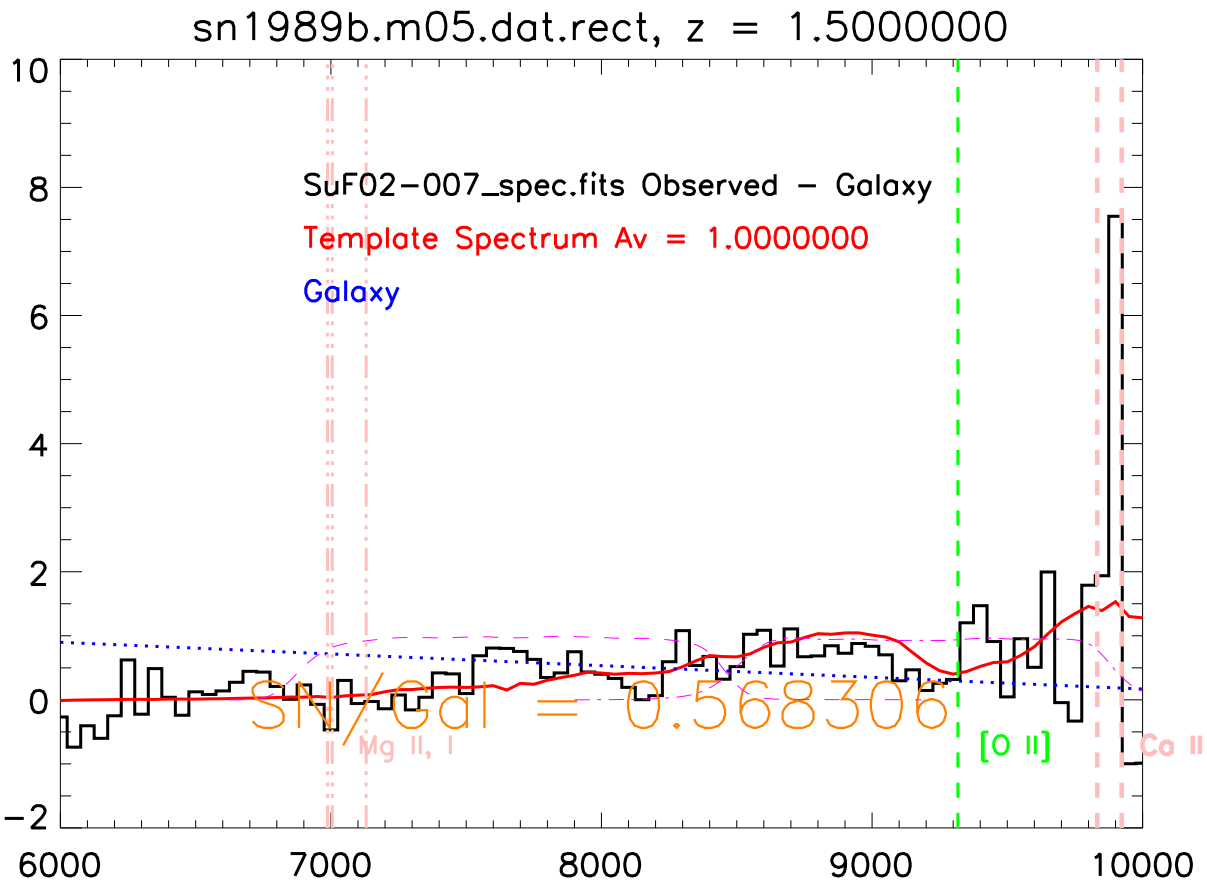

sn1998bu.m03.dat.rect, z = 0.30000001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.388510
[O II] Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000

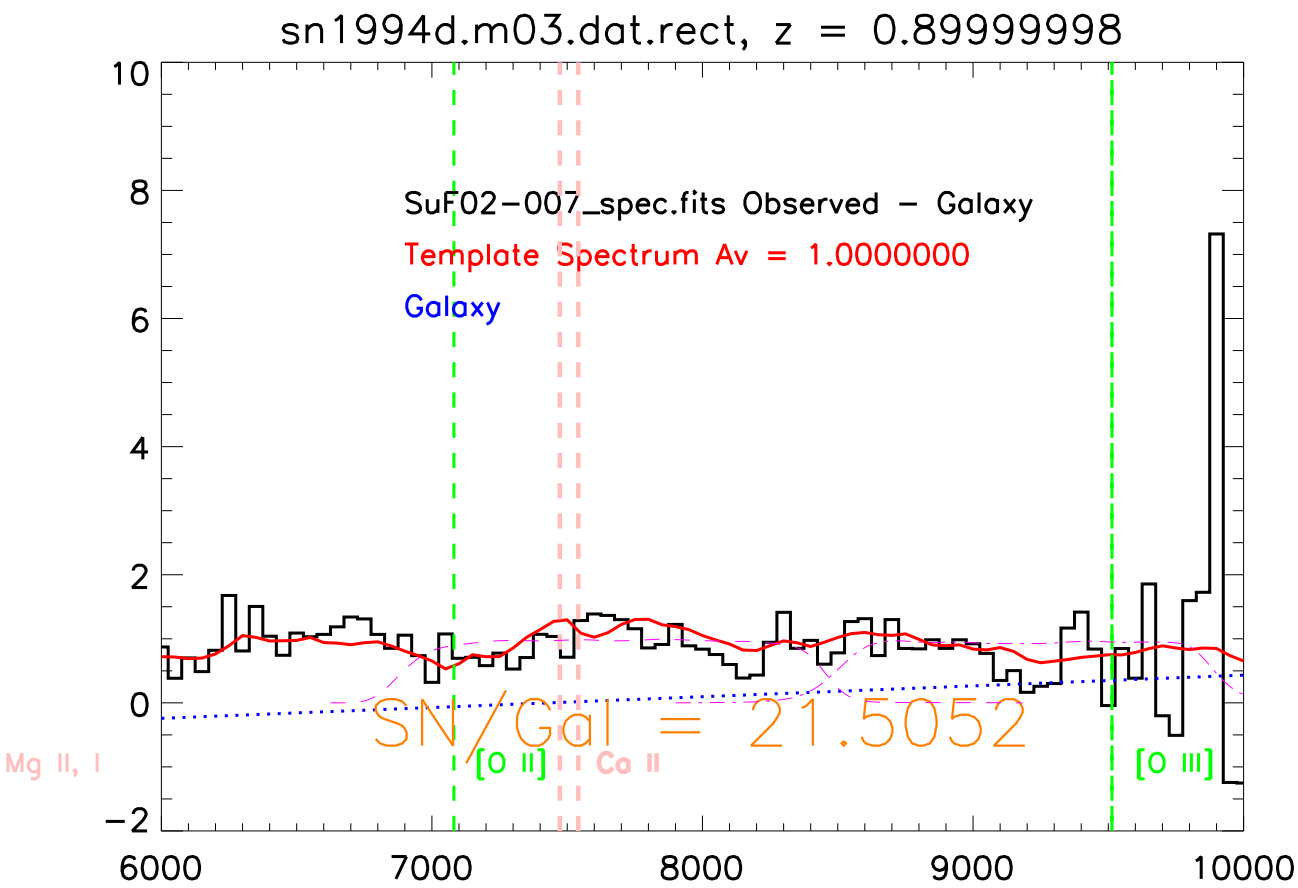

sn1998bu.m04.dat.rect, z = 0.30000001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.404589
[O II]
Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000

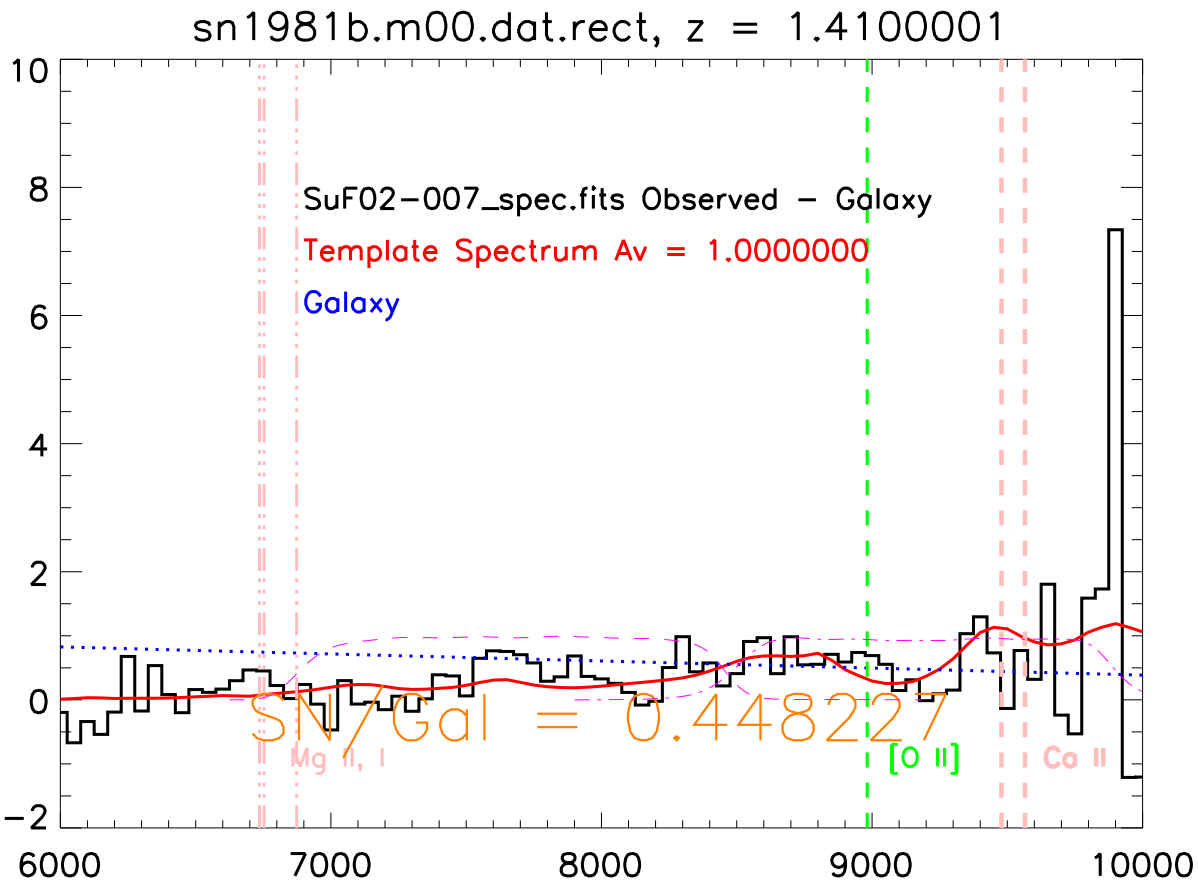

sn1989b.m01.dat.rect, z = 0.88999999
SuF02-007_spec.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 2.48469
Mg II, I
[O II]
Ca II
[O III]
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000

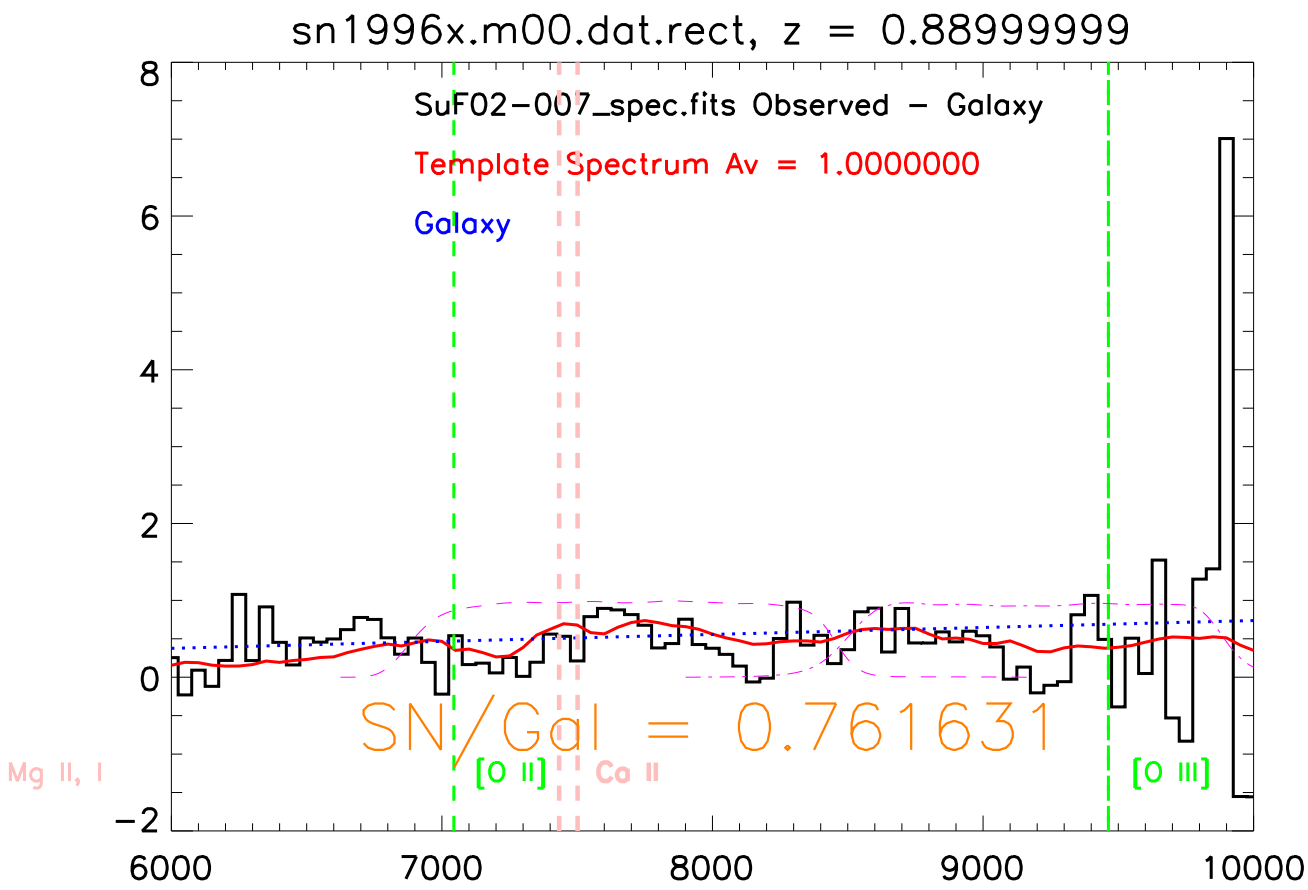

sn1989b.m07.dat.rect, z = 0.88999999
SuF02-007_spec.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 4.80911
Mg II, I
[O II]
Ca II
[O III]
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000

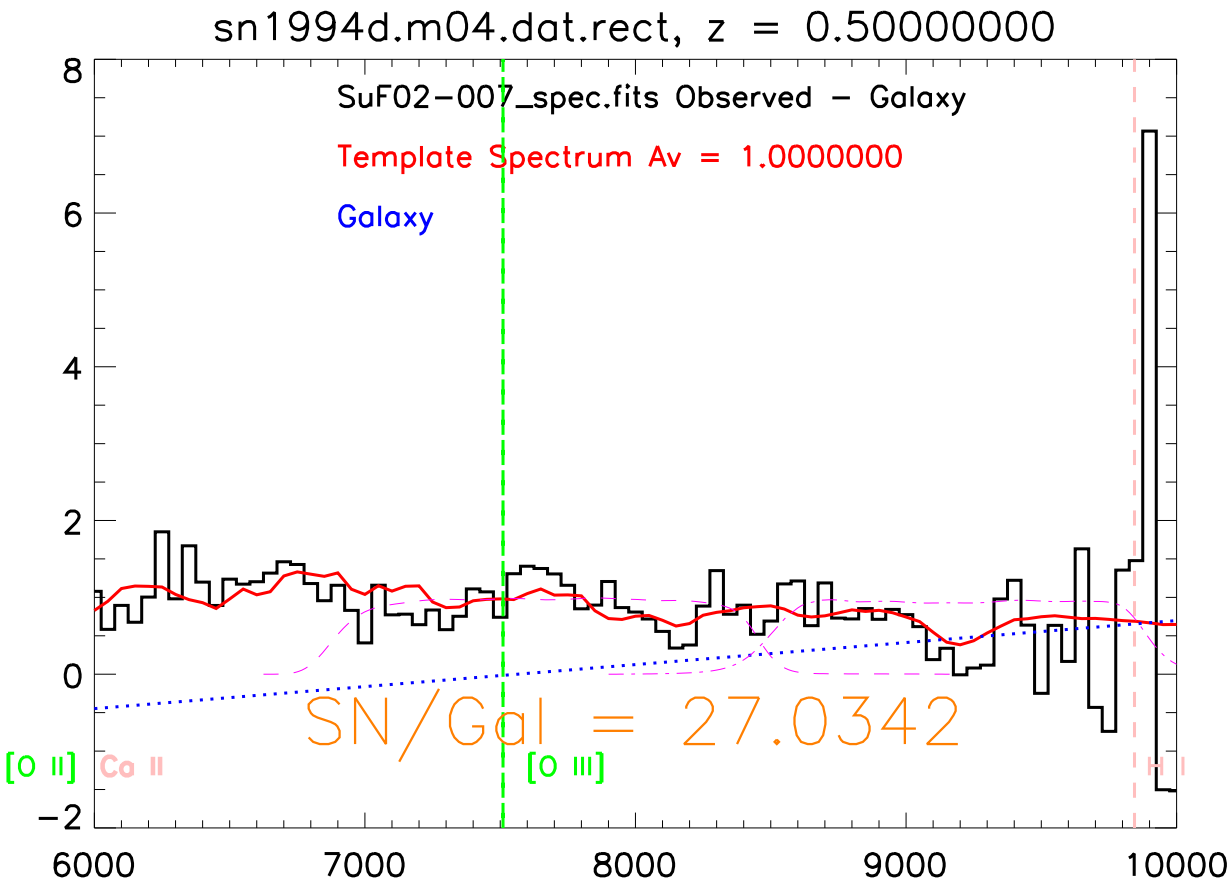

sn1990n.m07.dat.rect, z = 1.5000000
SuF02-007_spec.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
S/N Gal = 0.780214
Mg II, I
[O II]
Ca II
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000

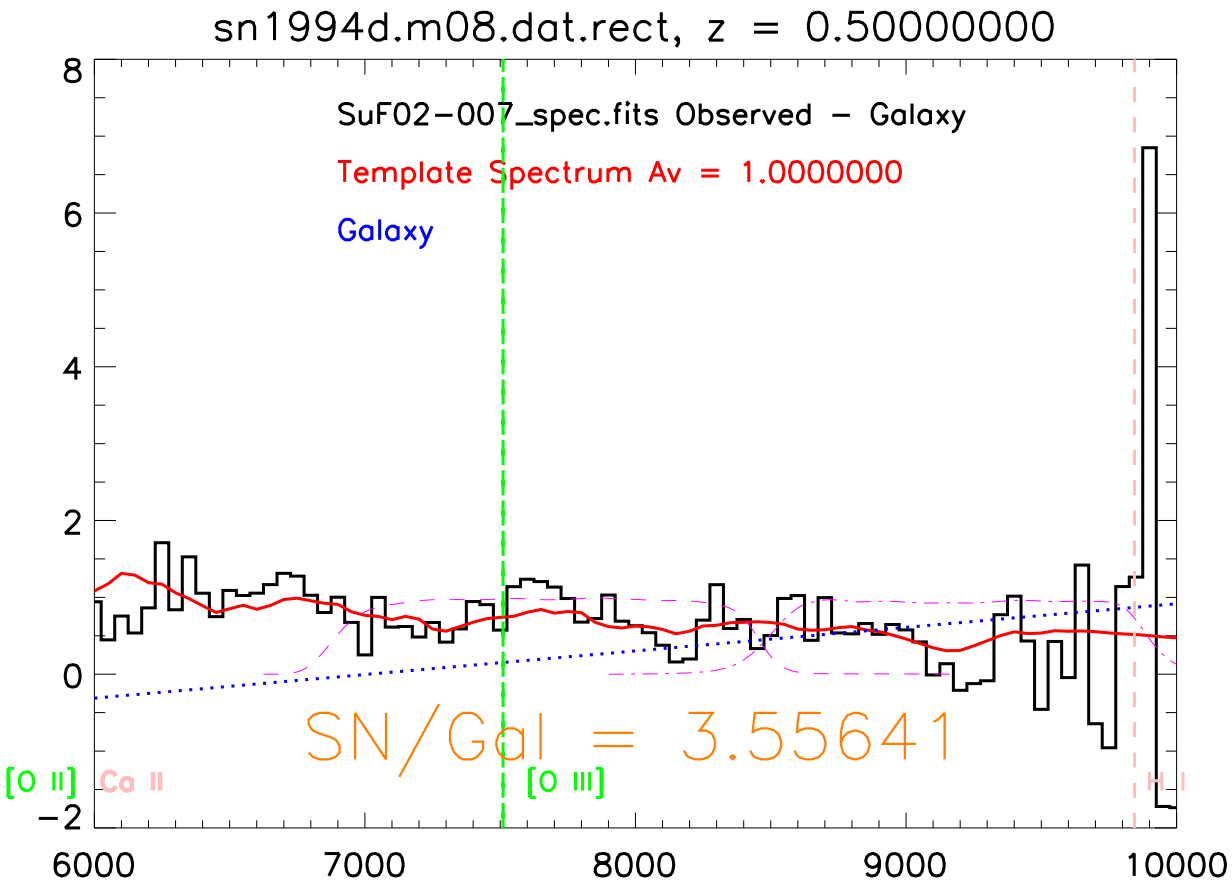

sn1989b.m05.dat.rect, z = 1.5000000
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
S/N/Gal = 0.568306
Mg II, I
[O II]
Ca II
10
8
6
4
2
0
-2
6000
7000
8000
9000
10000


sn1994d.m03.dat.rect, z = 0.89999998
SuF02-007_spec.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 21.5052
Mg II, I
[O II]
Ca II
[O III]
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.4100001
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.448227
Mg II, I
[O II]
Ca II
10
8
6
4
2
0
−2
6000
7000
8000
9000
10000


sn1996x.m00.dat.rect, z = 0.88999999
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.761631
Mg II, I
[O II]
Ca II
[O III]
8
6
4
2
0
−2
6000
7000
8000
9000
10000


sn1994d.m04.dat.rect, z = 0.50000000
SuF02-007_spec.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 27.0342
[O II]
Ca II
[O III]
8
6
4
2
0
−2
6000
7000
8000
9000
10000


sn1994d.m08.dat.rect, z = 0.50000000
SuF02-007_spec.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 3.55641
[O II]
Ca II
[O III]
H I
8
6
4
2
0
-2
6000
7000
8000
9000
10000