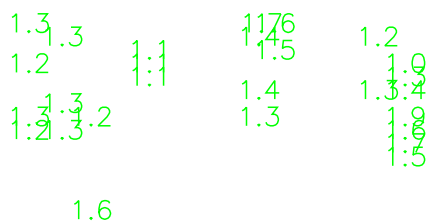
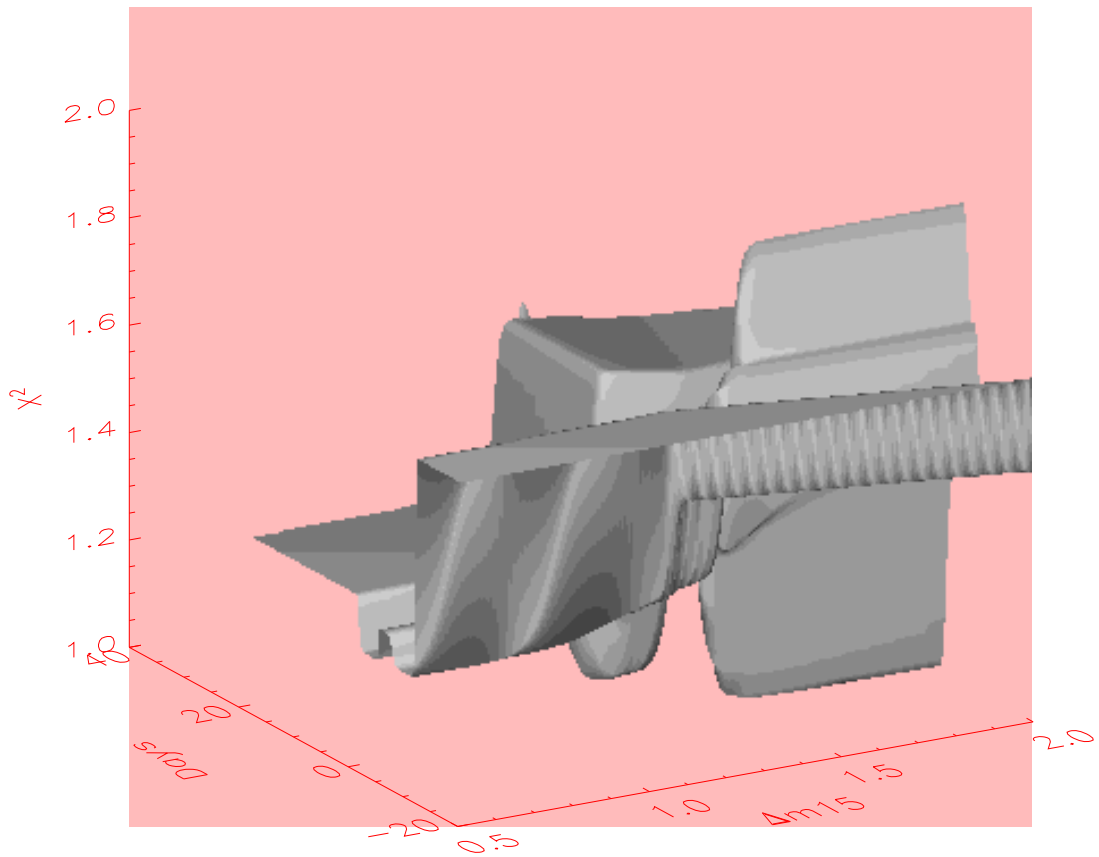
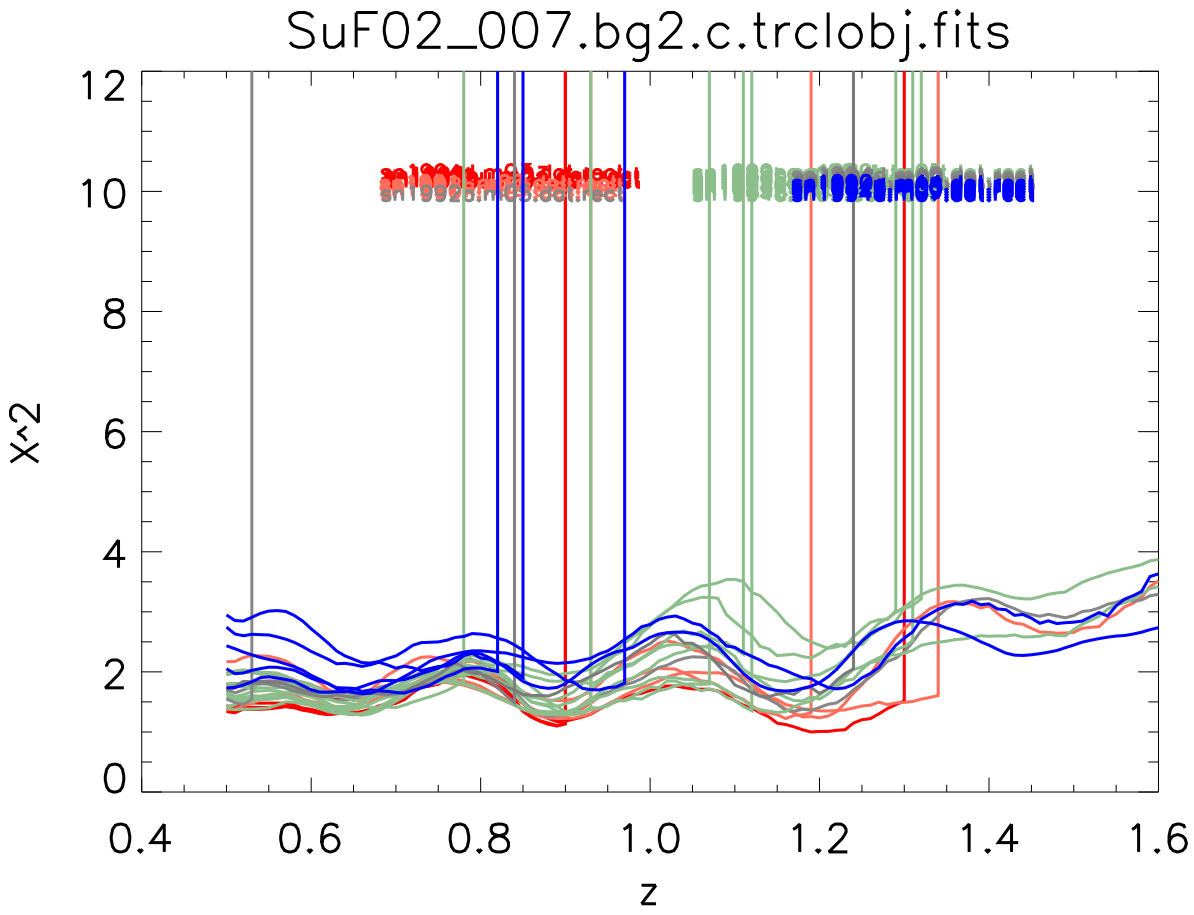
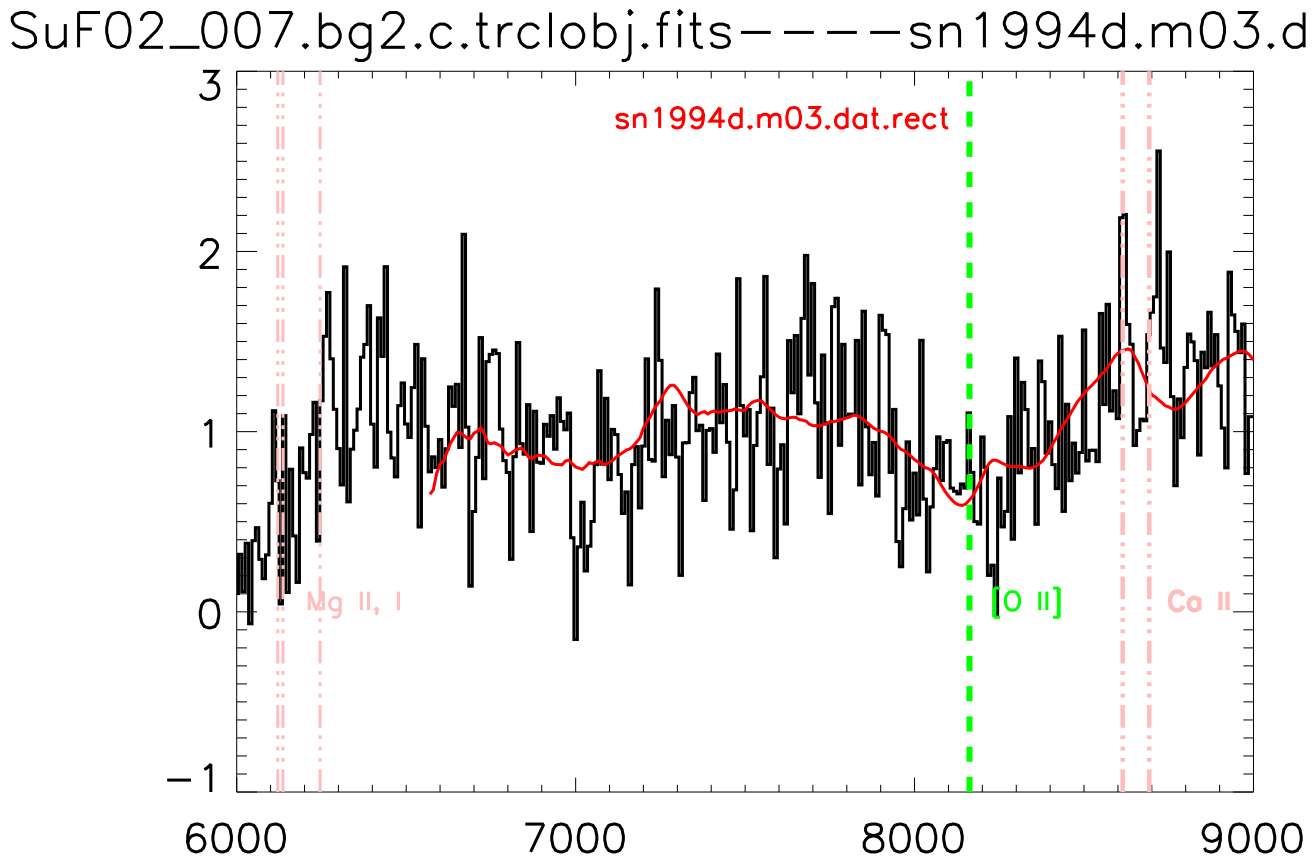
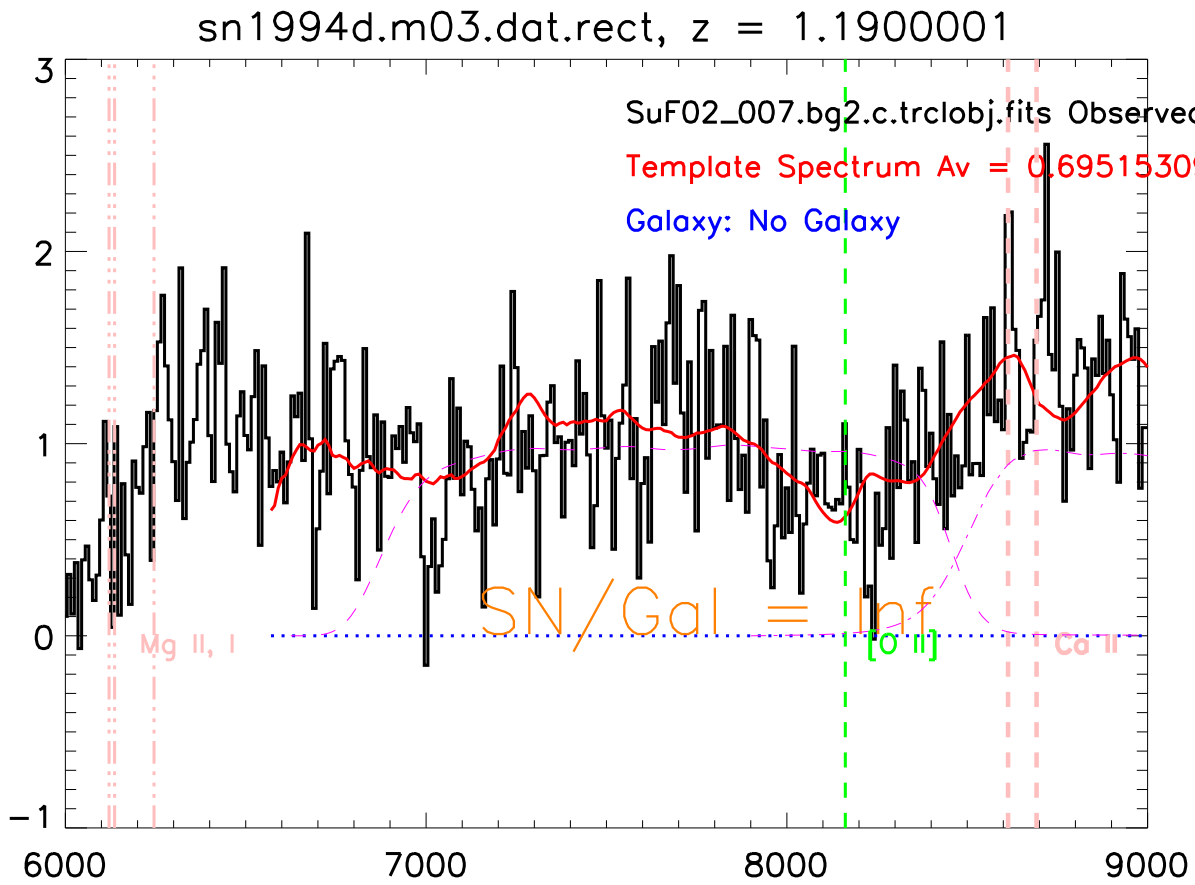


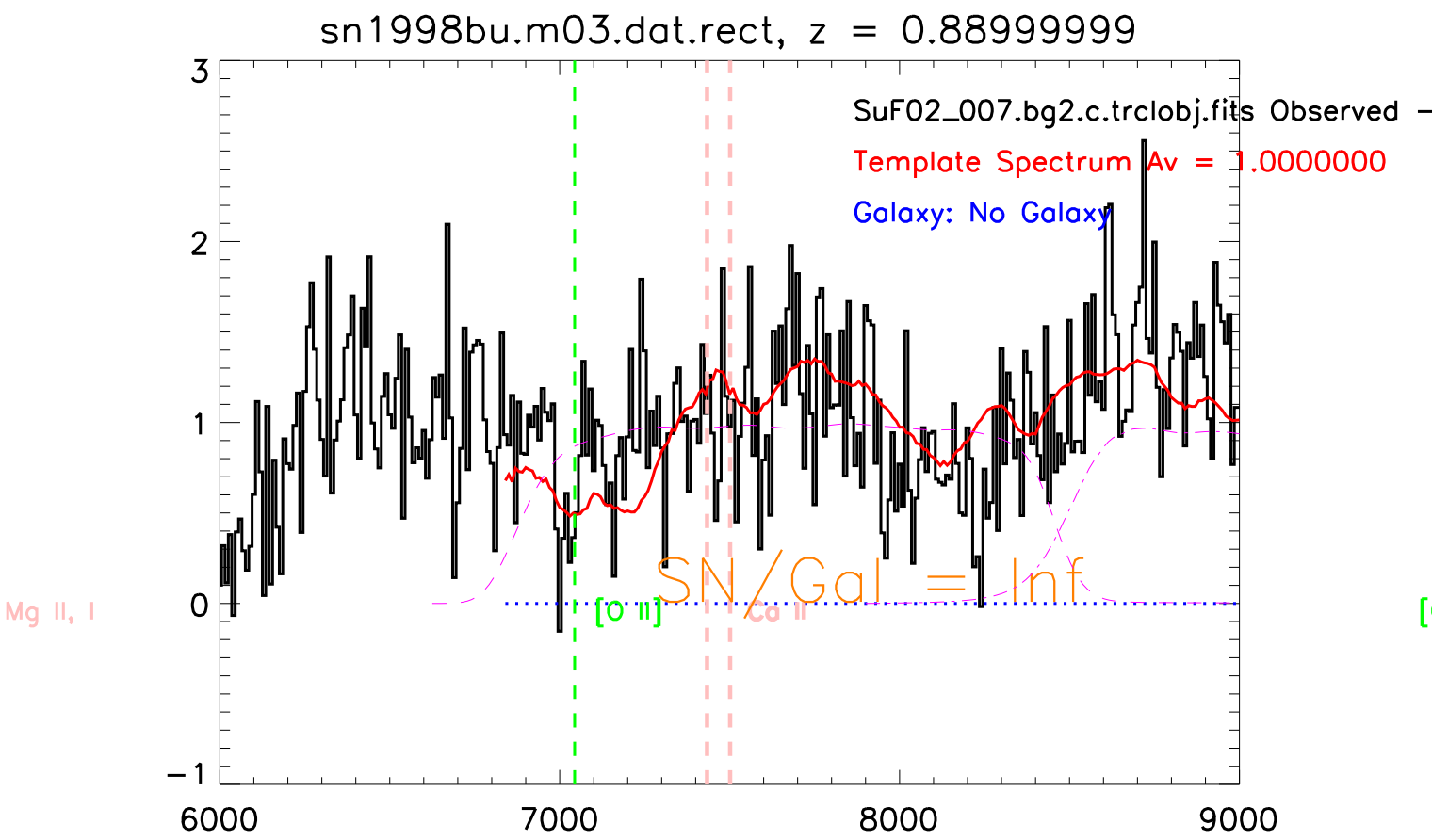


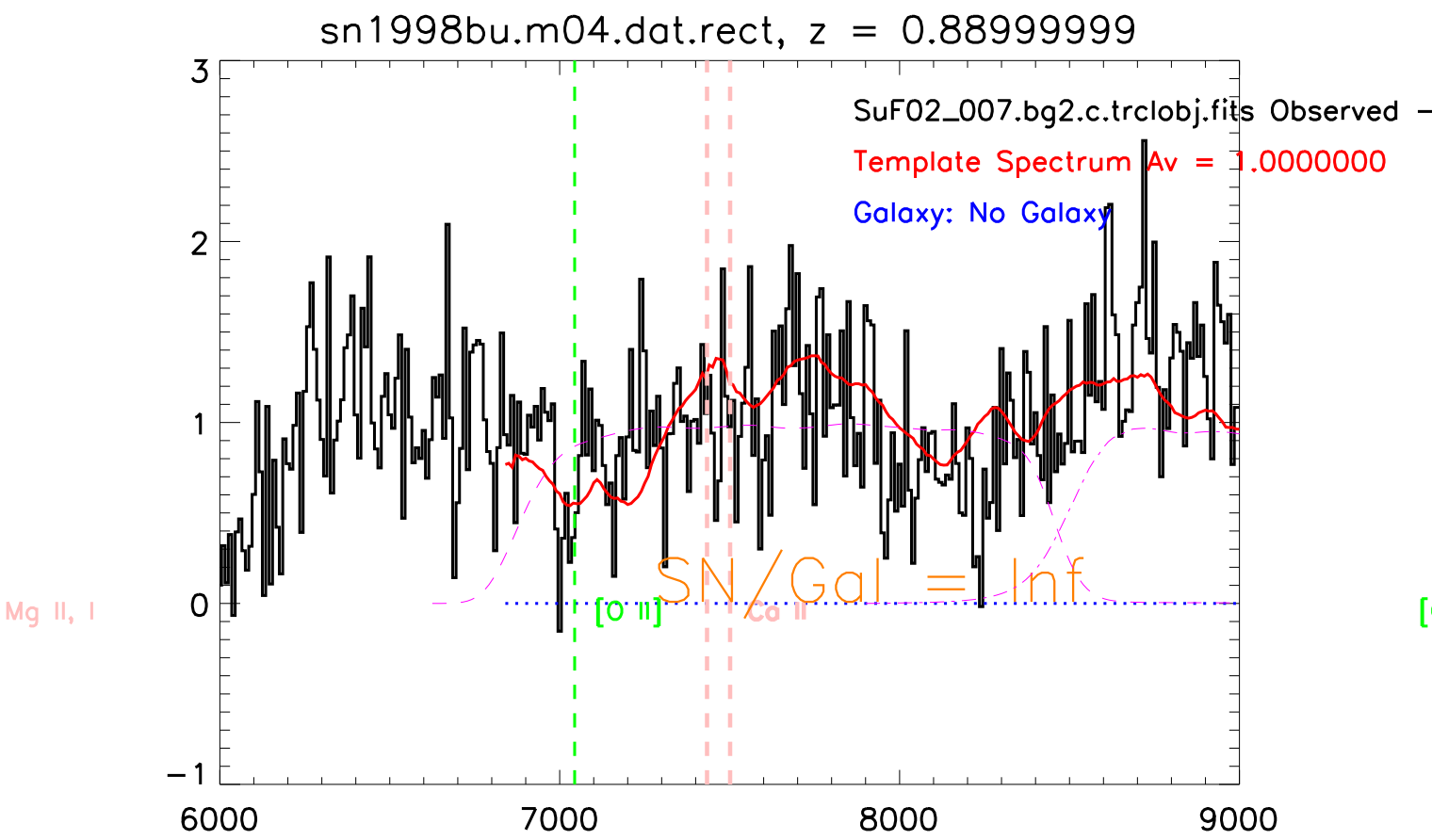
2.0
1.8
1.6
1.4
1.2
1.0
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

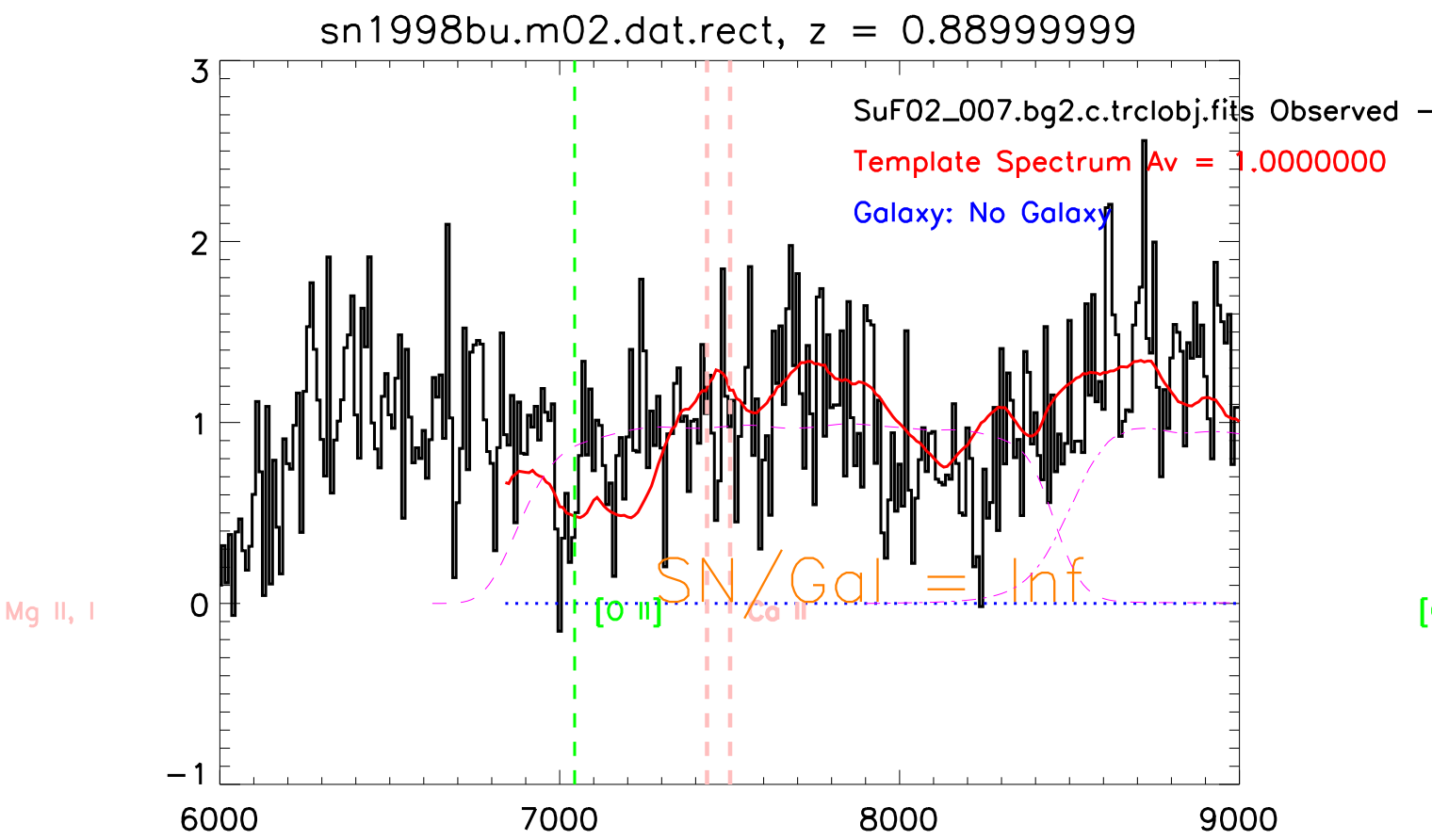

SuF02_007.bg2.c.trclobj.fits
12
10
8
6
4
2
0
X^2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
z

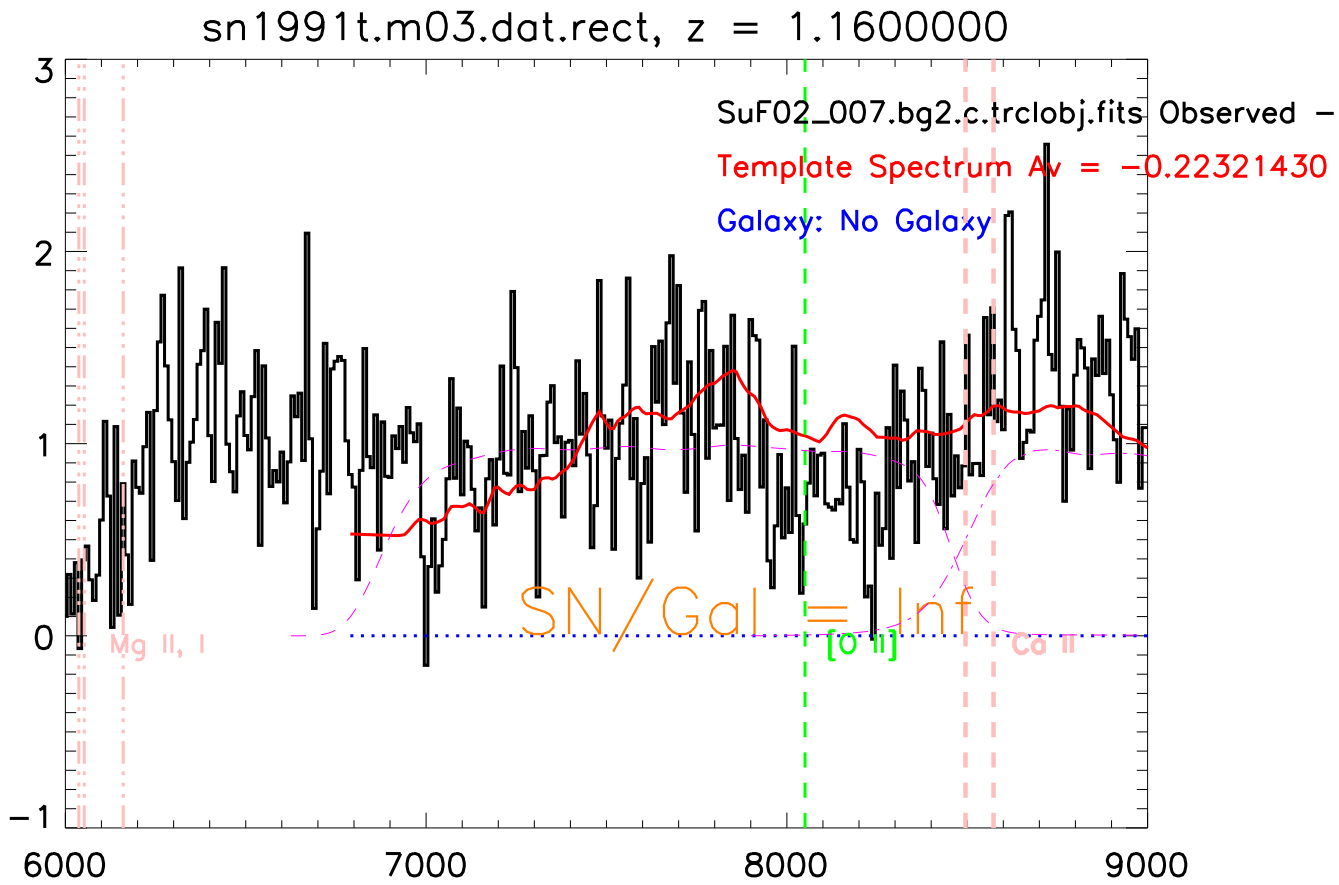

SuF02_007.bg2.c.trclobj.fits----sn1994d.m03.dat.rect
sn1994d.m03.dat.rect
Mg II, I
[O II]
Ca II
3
2
1
0
−1
6000
7000
8000
9000

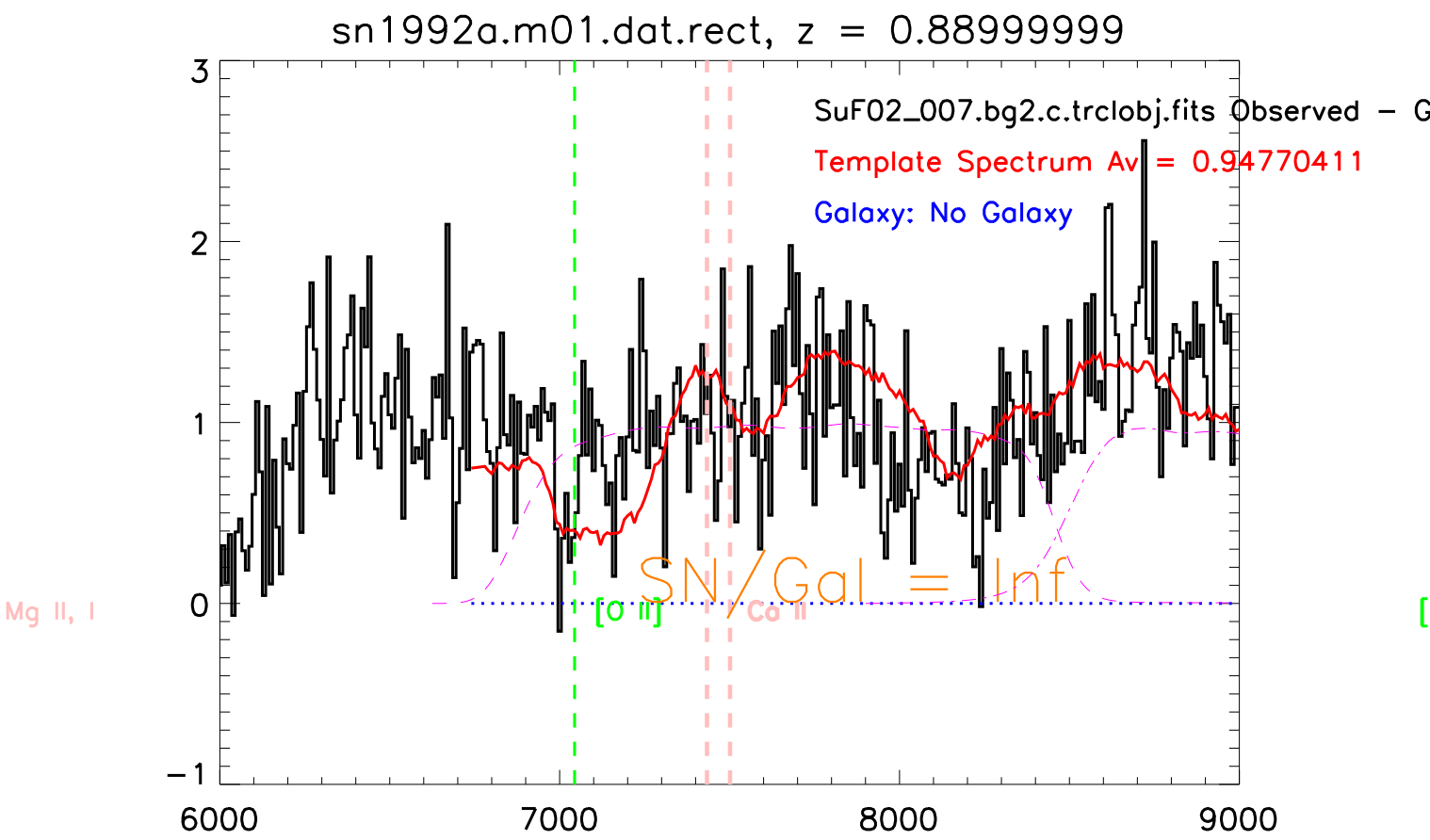

sn1994d.m03.dat.rect, z = 1.1900001
SuF02_007.bg2.c.trclobj.fits Observed – Galaxy
Template Spectrum Av = 0.69515309
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
3
2
1
0
−1
6000
7000
8000
9000

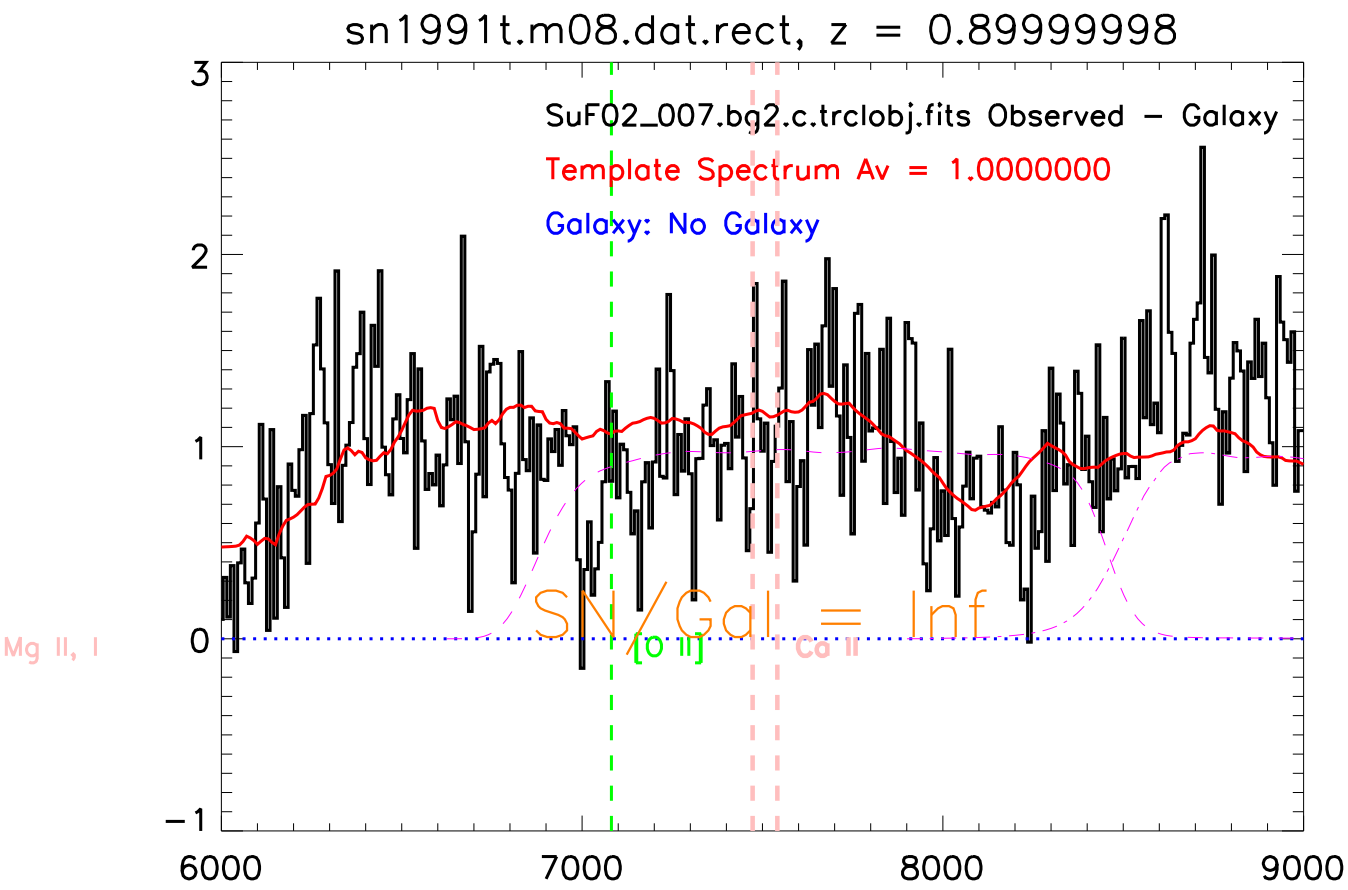

sn1998bu.m03.dat.rect, z = 0.88999999
SuF02_007.bg2.c.trclobj.fits Observed –
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1998bu.m04.dat.rect, z = 0.88999999
SuF02_007.bg2.c.trclobj.fits Observed –
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1998bu.m02.dat.rect, z = 0.88999999
SuF02_007.bg2.c.trclobj.fits Observed –
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1991t.m03.dat.rect, z = 1.1600000
SuF02_007.bg2.c.trclobj.fits Observed –
Template Spectrum Av = –0.22321430
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Mg II, I
Ca II
3
2
1
0
–1
6000
7000
8000
9000


sn1992a.m01.dat.rect, z = 0.88999999
SuF02_007.bg2.c.trclobj.fits Observed – G
Template Spectrum Av = 0.94770411
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
3
2
1
0
−1
6000
7000
8000
9000


sn1991t.m08.dat.rect, z = 0.89999998
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
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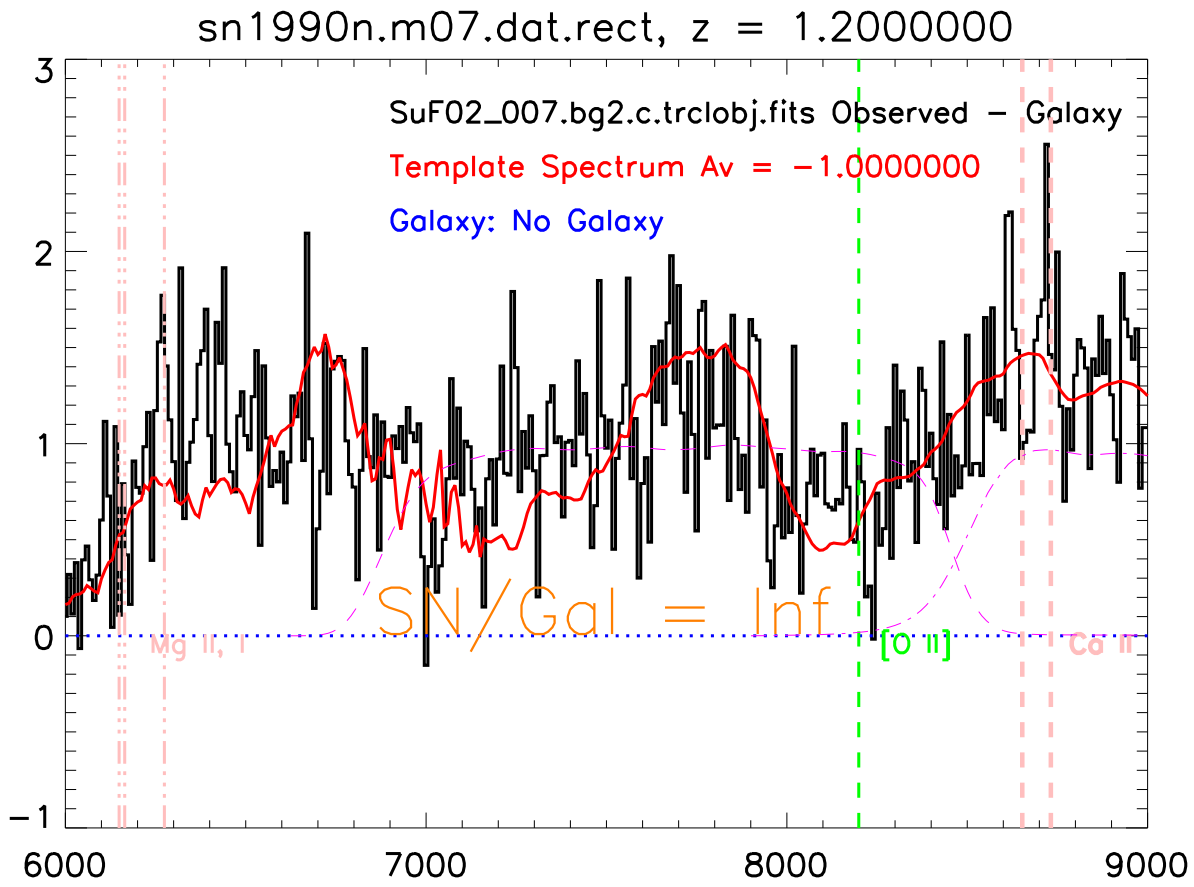
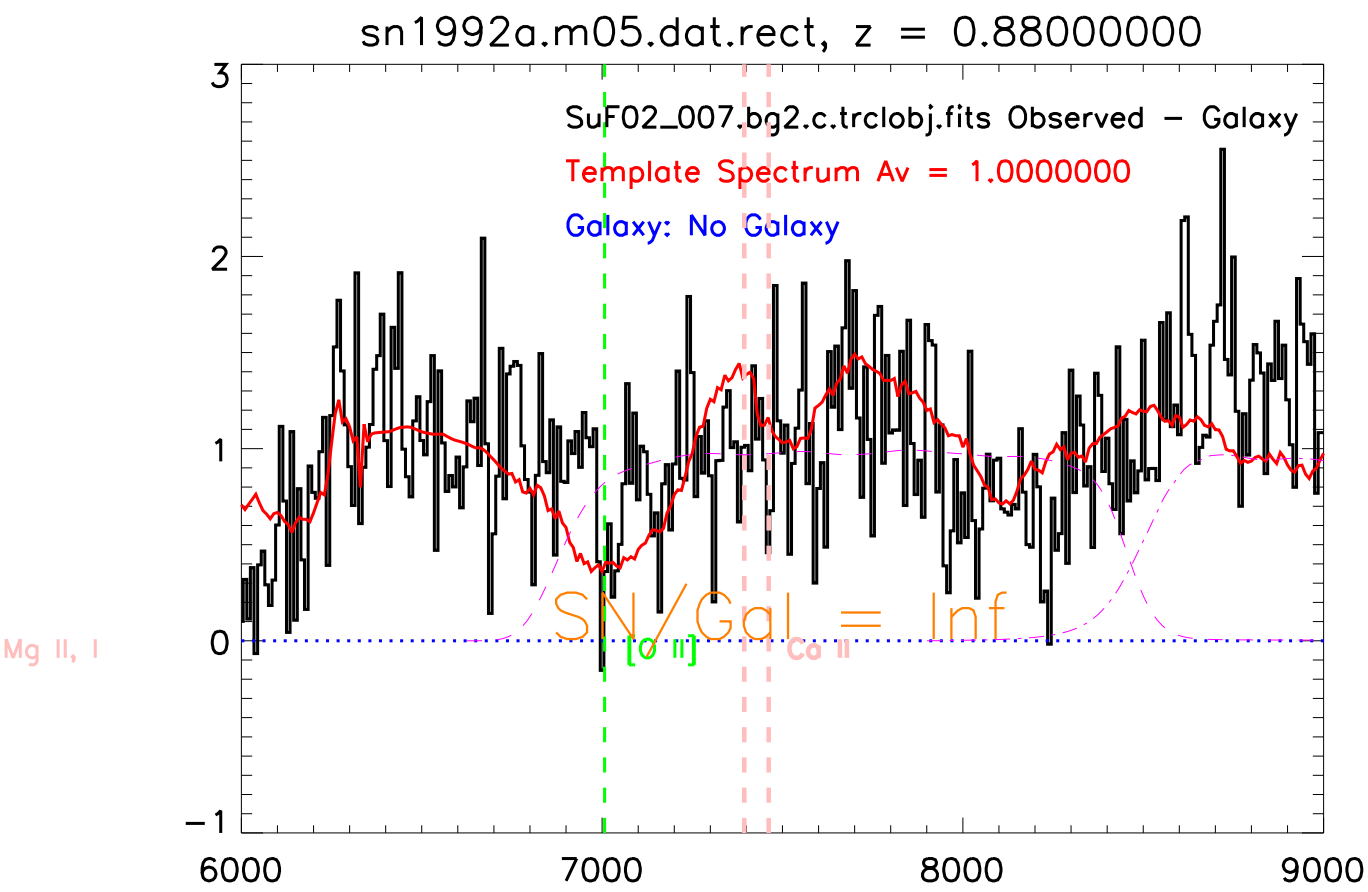
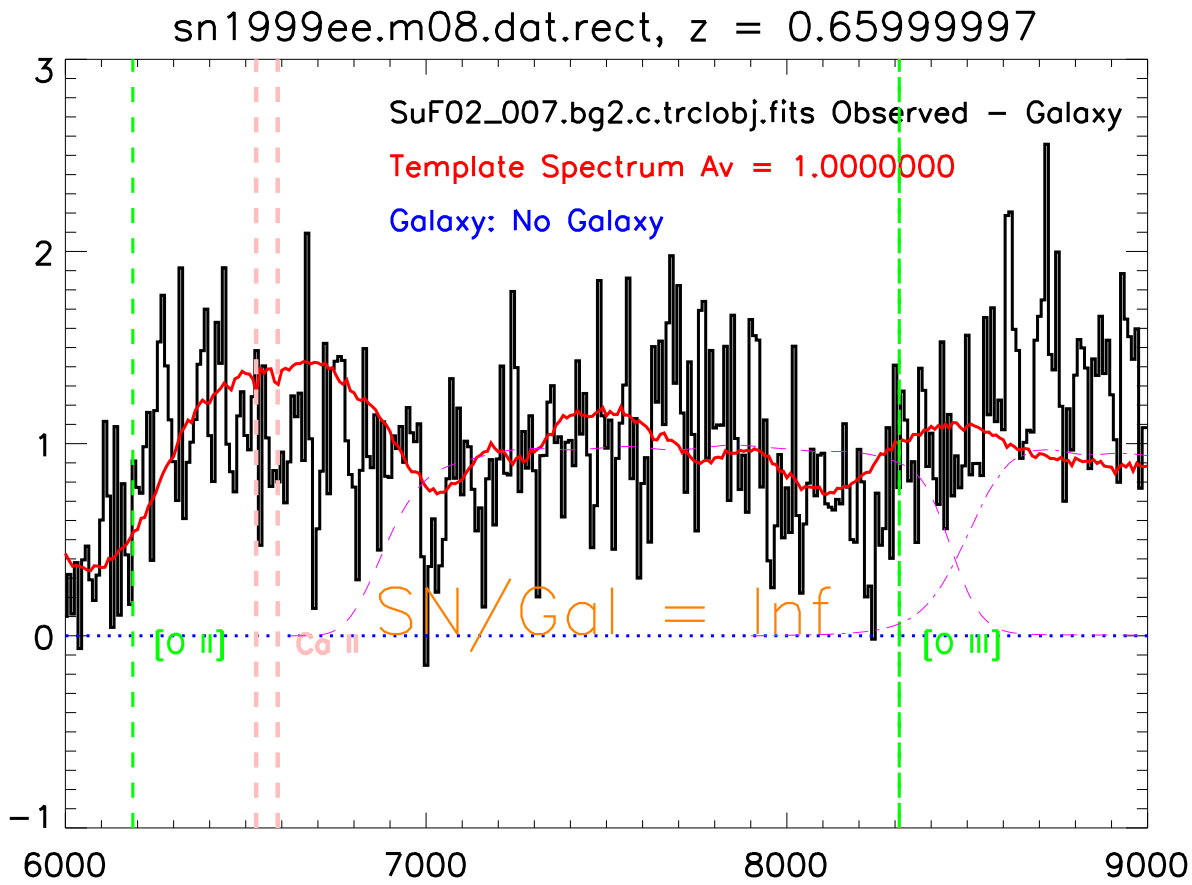
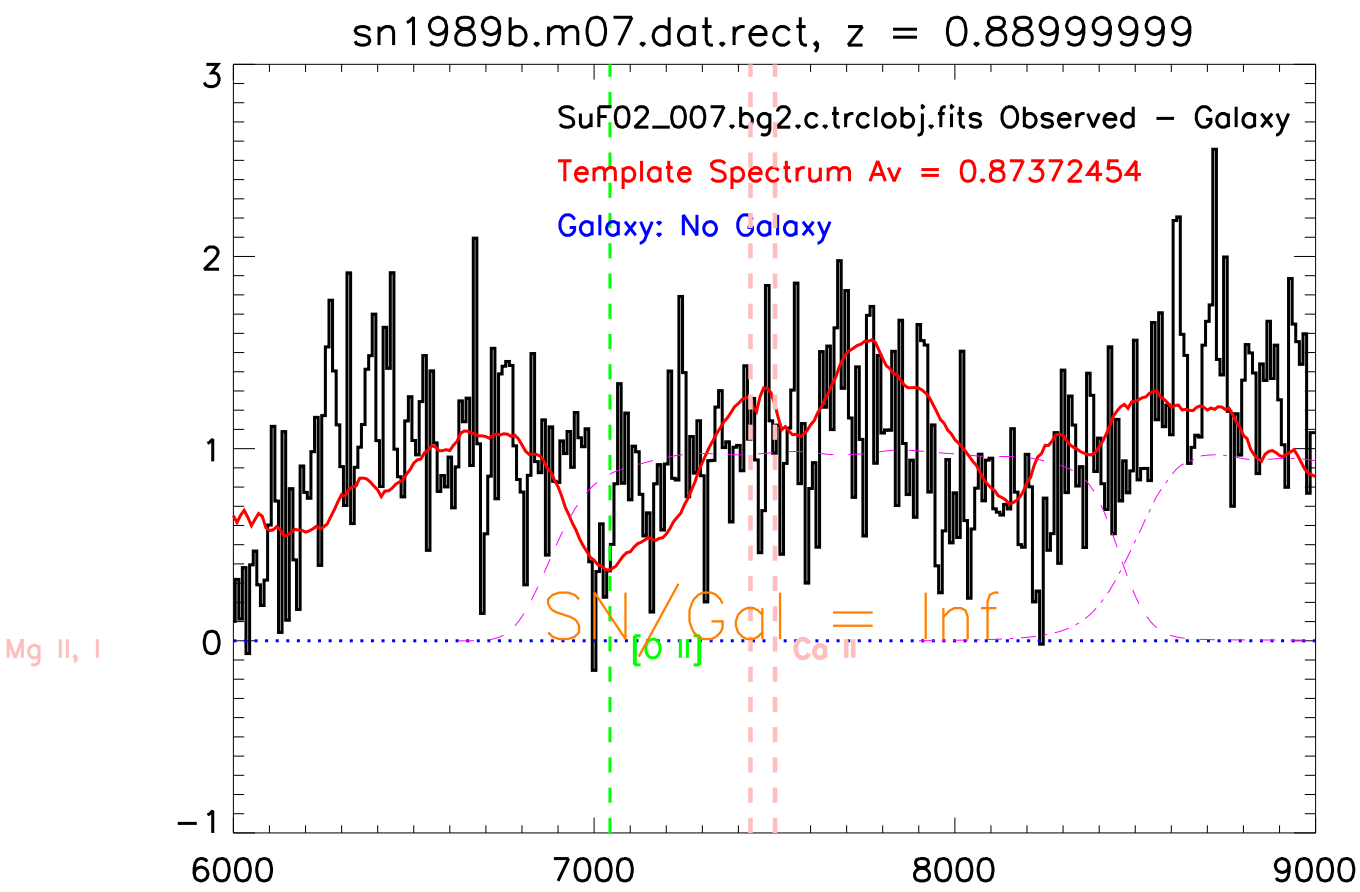
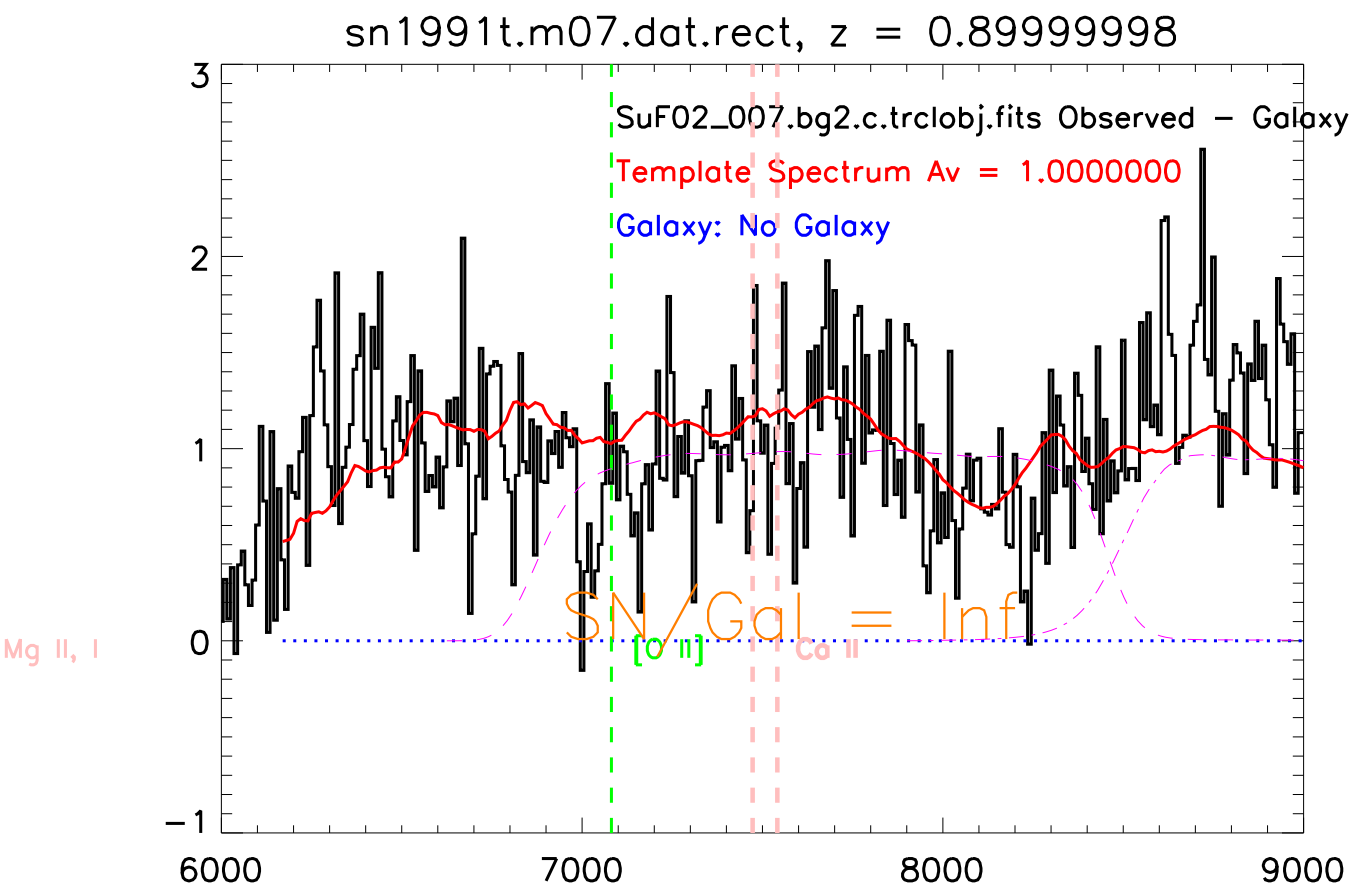
7000
8000
9000

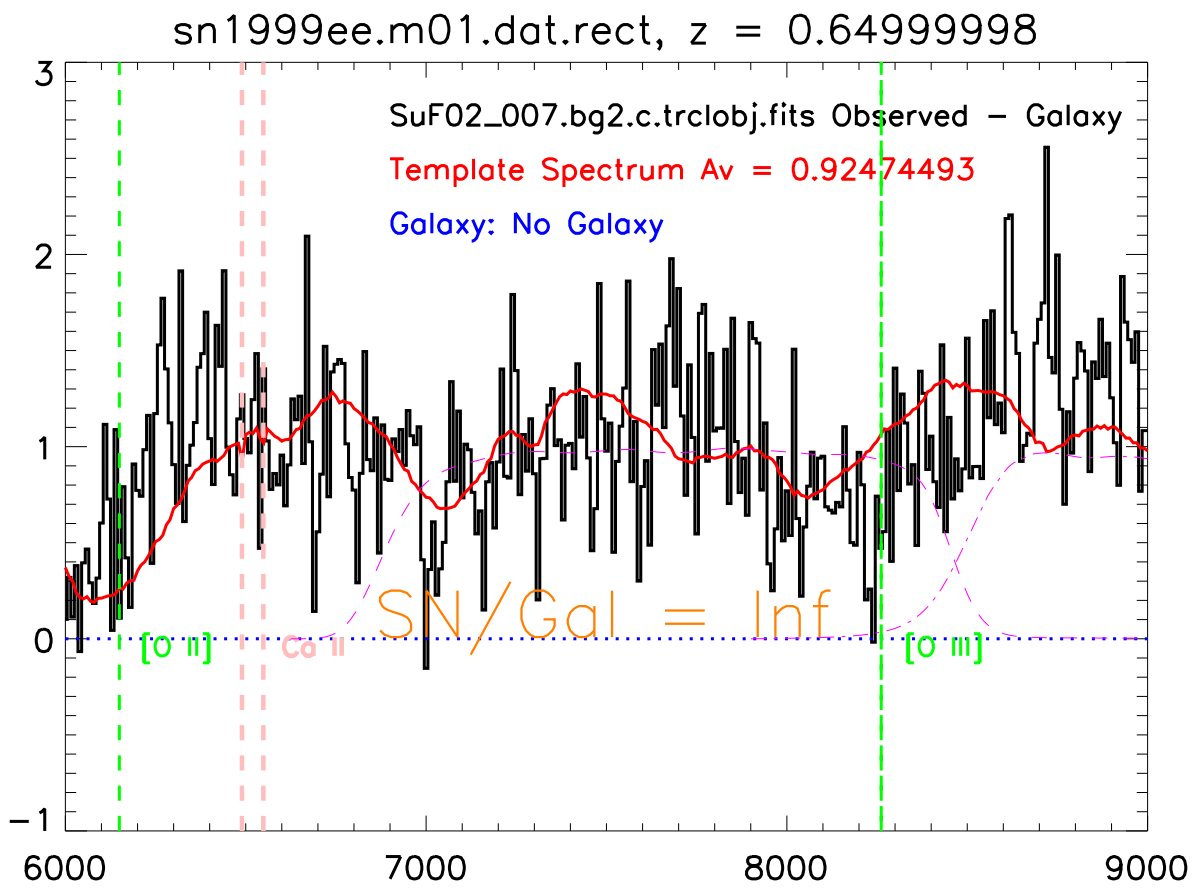

sn1990n.m07.dat.rect, z = 1.2000000
SuF02_007.bg2.c.trclobj.fits Observed – Galaxy
Template Spectrum Av = −1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
3
2
1
0
−1
6000
7000
8000
9000


sn1992a.m05.dat.rect, z = 0.88000000
SuF02_007.bg2.c.trclobj.fits Observed – Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O
3
2
1
0
−1
6000
7000
8000
9000


sn1999ee.m08.dat.rect, z = 0.65999997
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1989b.m07.dat.rect, z = 0.88999999
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 0.87372454
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1991t.m07.dat.rect, z = 0.89999998
SuF02_007.bg2.c.trclobj.fits Observed – Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
S/N/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1999ee.m01.dat.rect, z = 0.64999998
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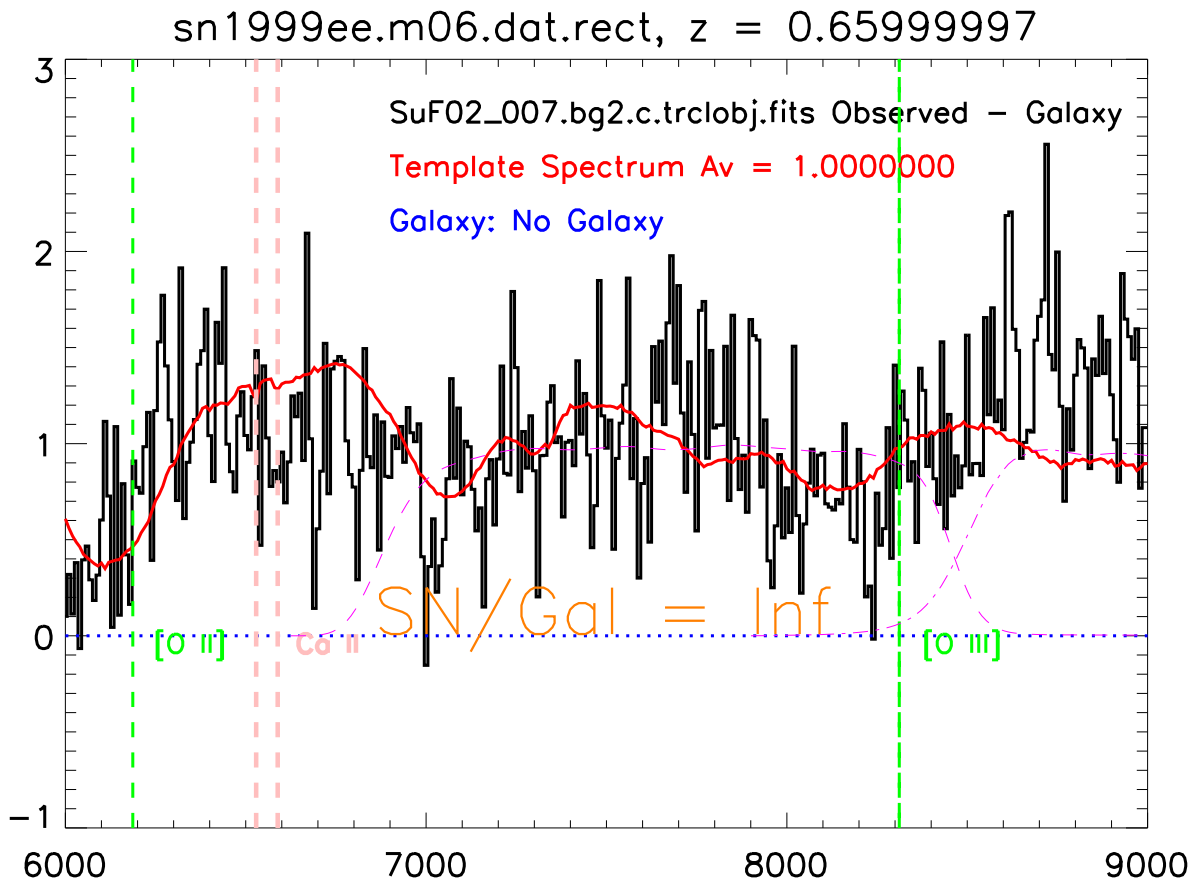
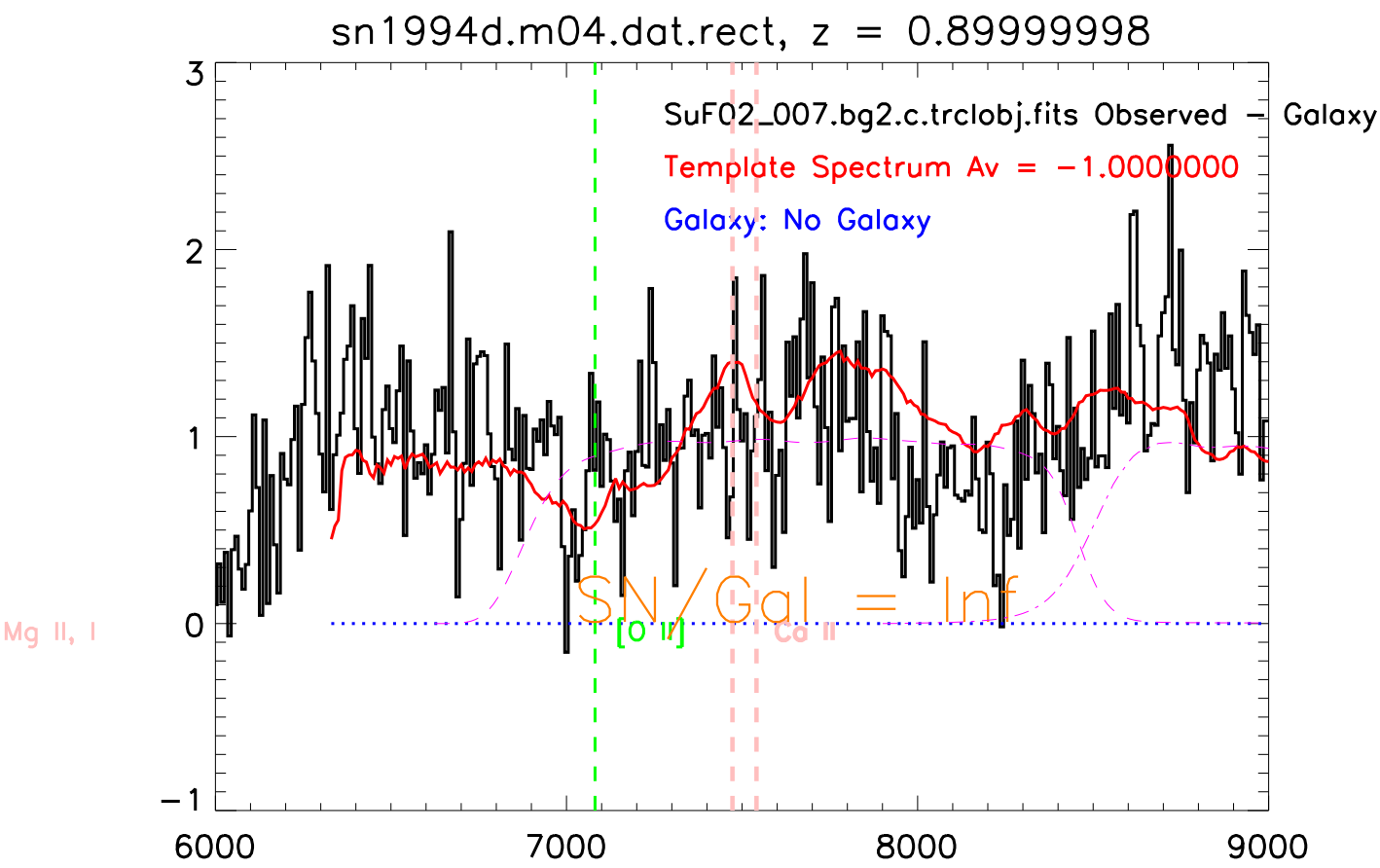
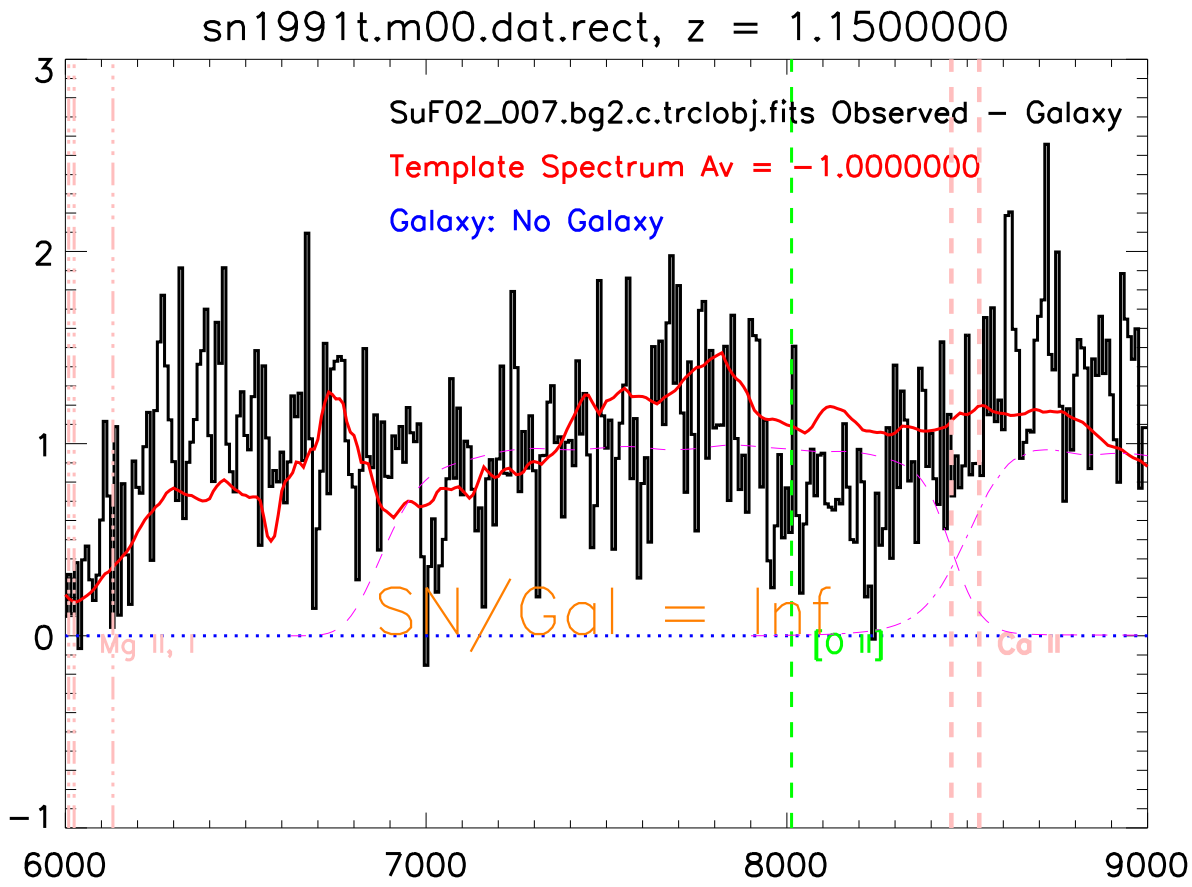
Template Spectrum Av = 0.92474493
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1999ee.m06.dat.rect, z = 0.65999997
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m04.dat.rect, z = 0.89999998
SuF02_007.bg2.c.trclobj.fits Observed
Galaxy
Template Spectrum Av = −1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1991t.m00.dat.rect, z = 1.1500000
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = −1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
3
2
1
0
−1
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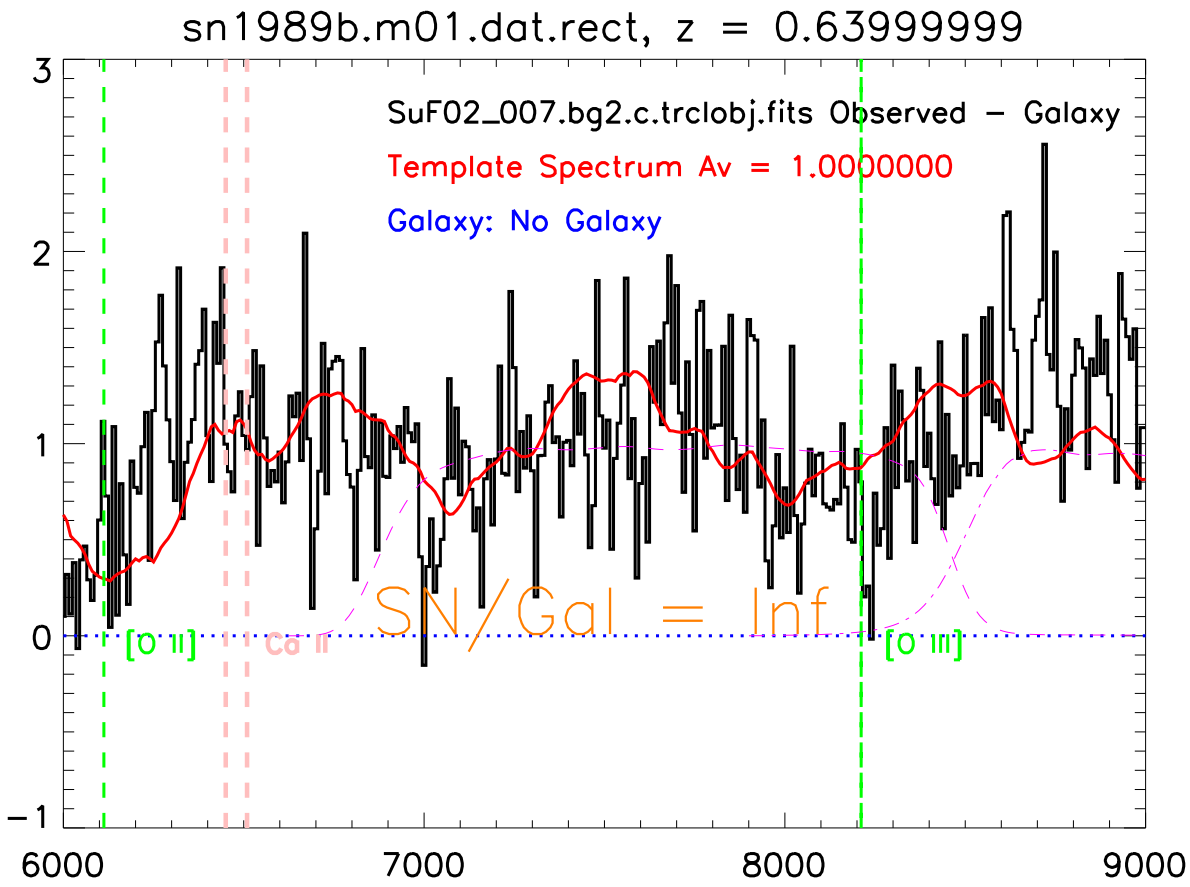
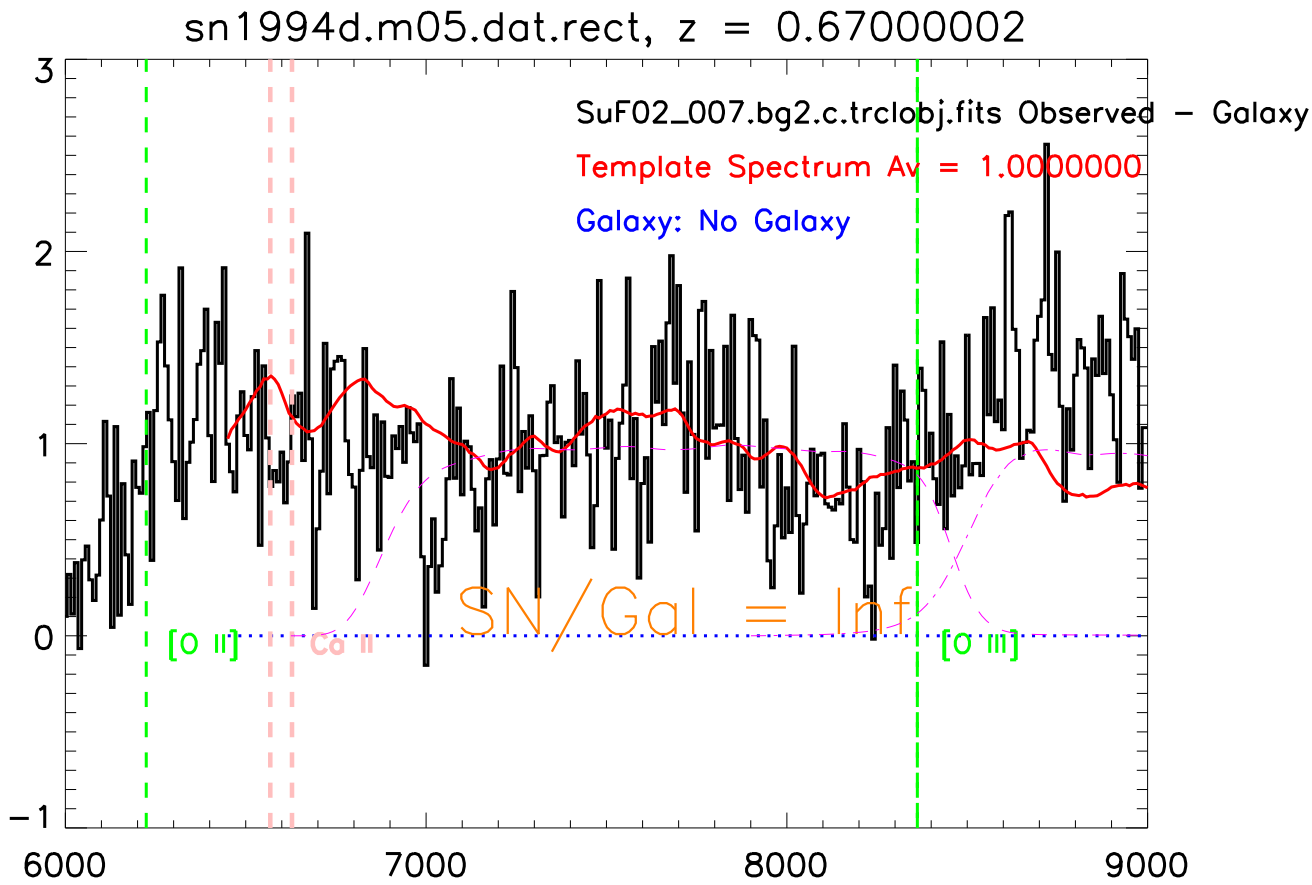
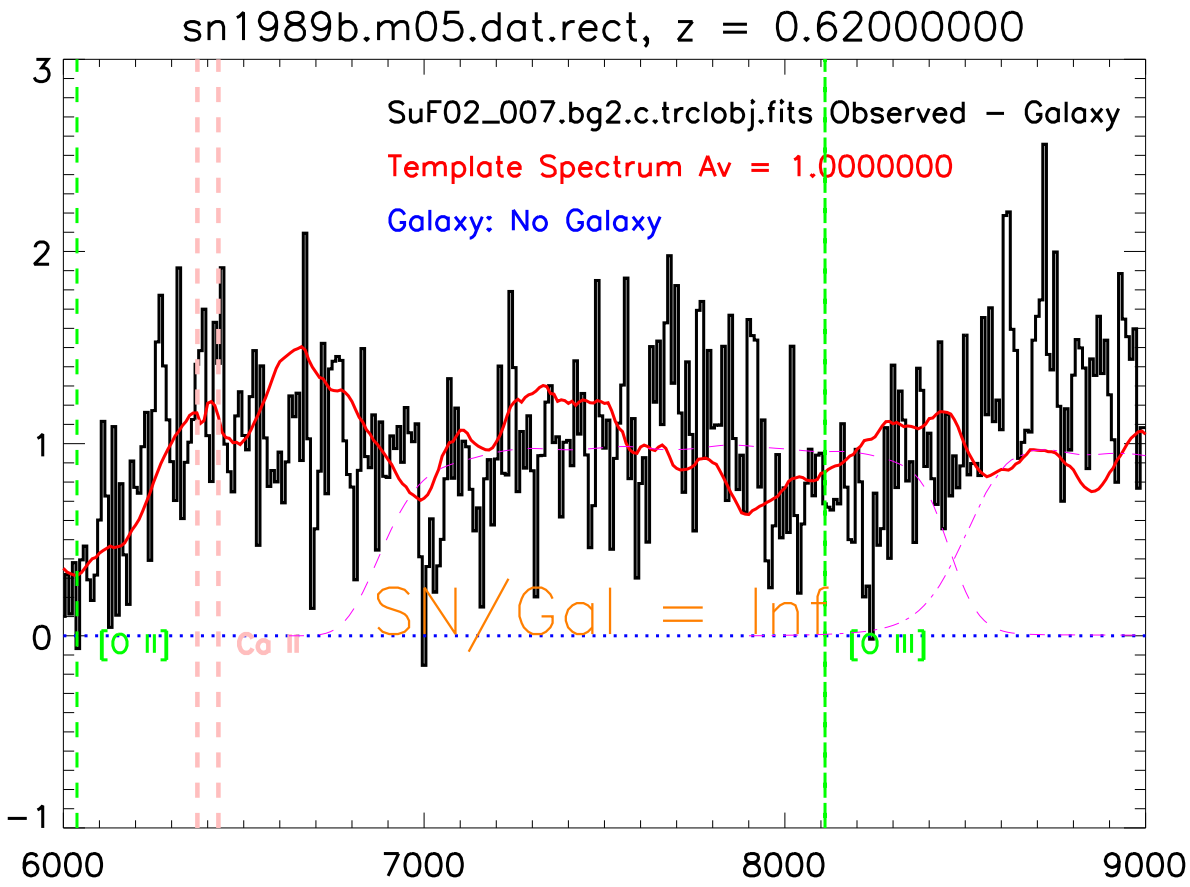
7000
8000
9000


sn1989b.m01.dat.rect, z = 0.63999999
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m05.dat.rect, z = 0.67000002
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1989b.m05.dat.rect, z = 0.62000000
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
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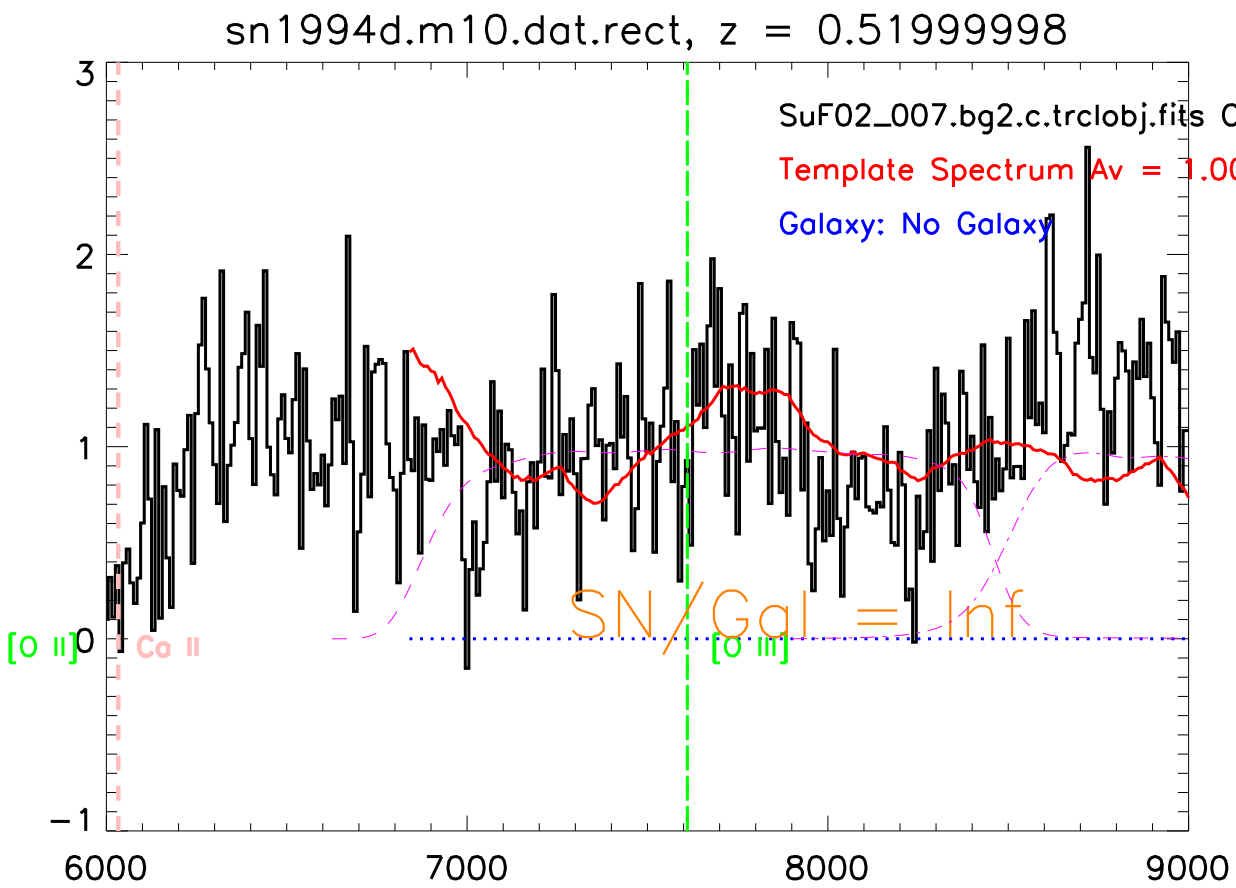
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m10.dat.rect, z = 0.51999998
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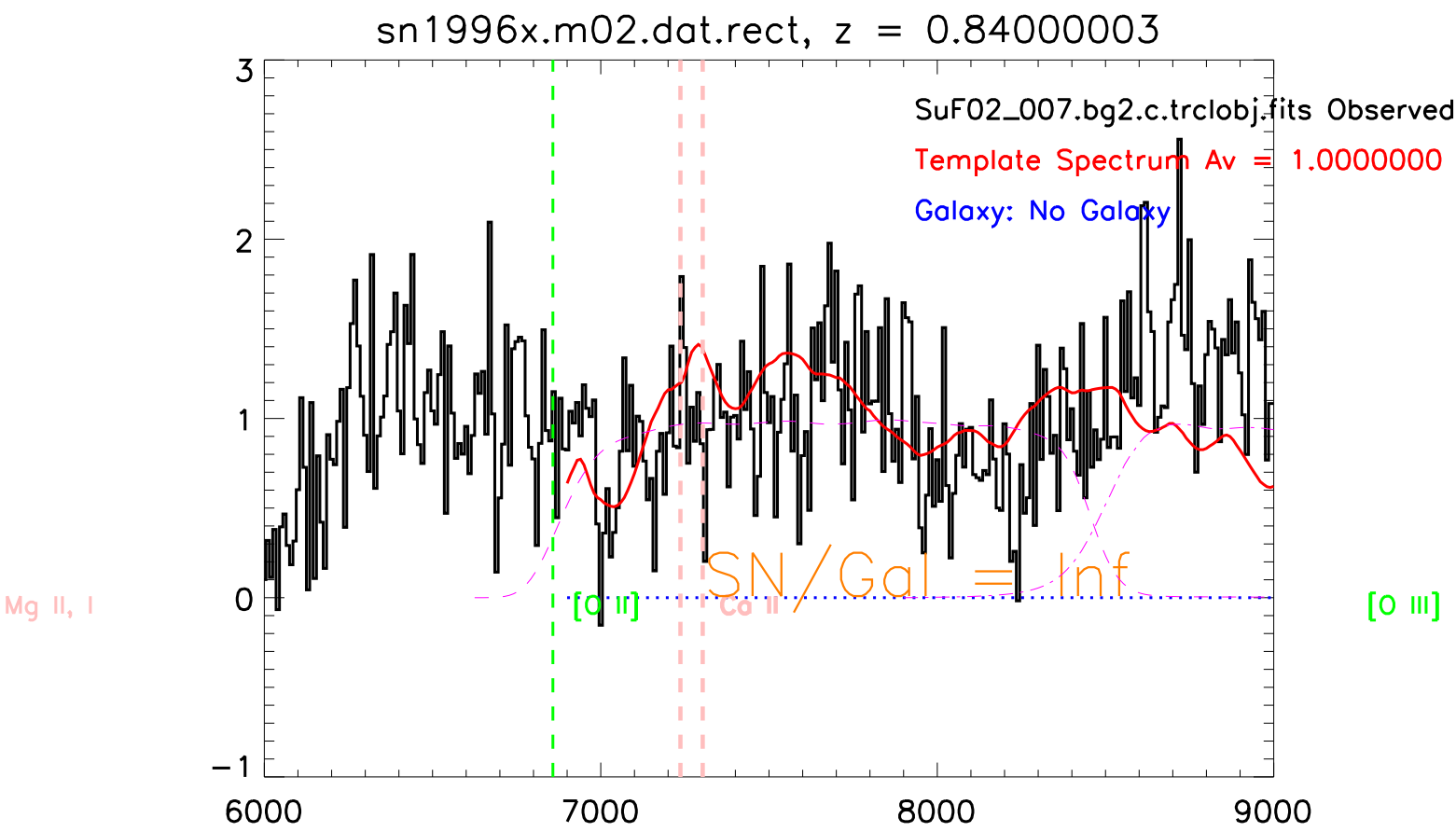
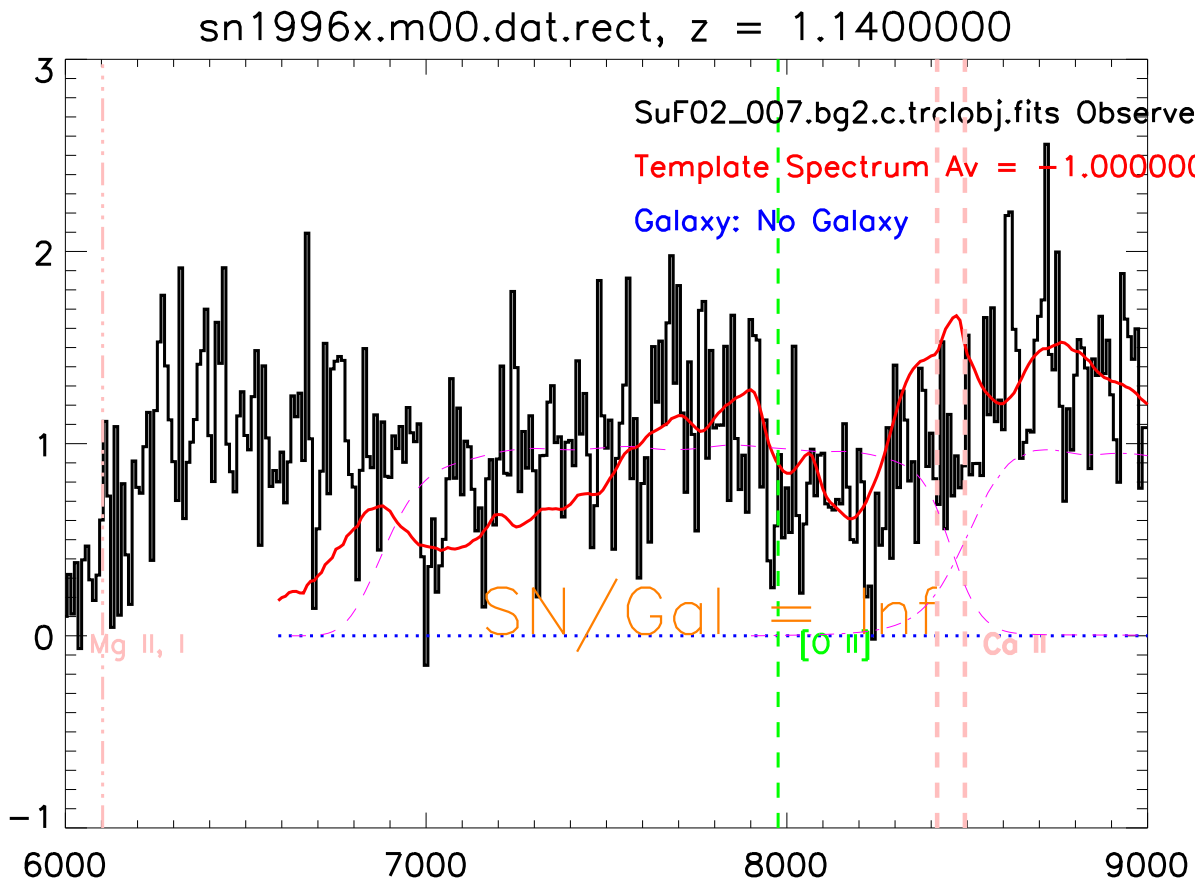
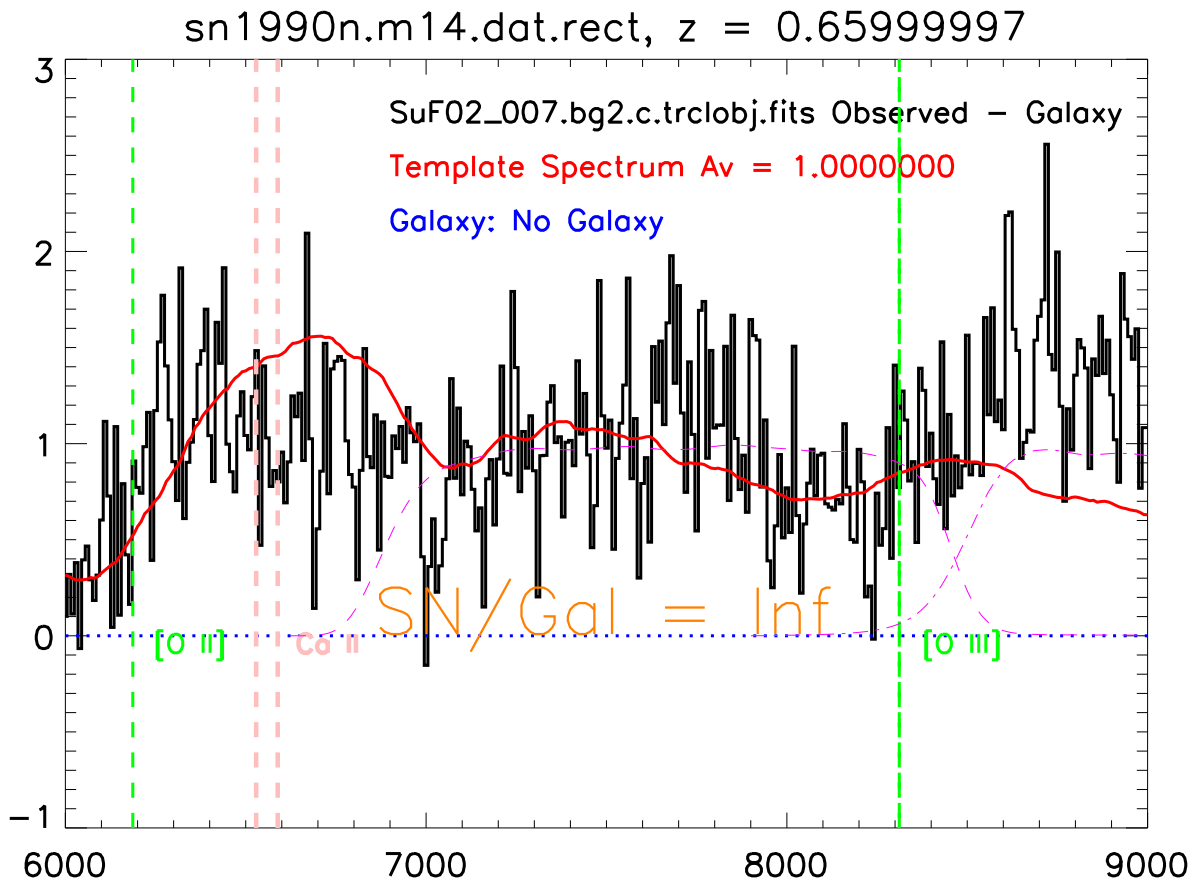
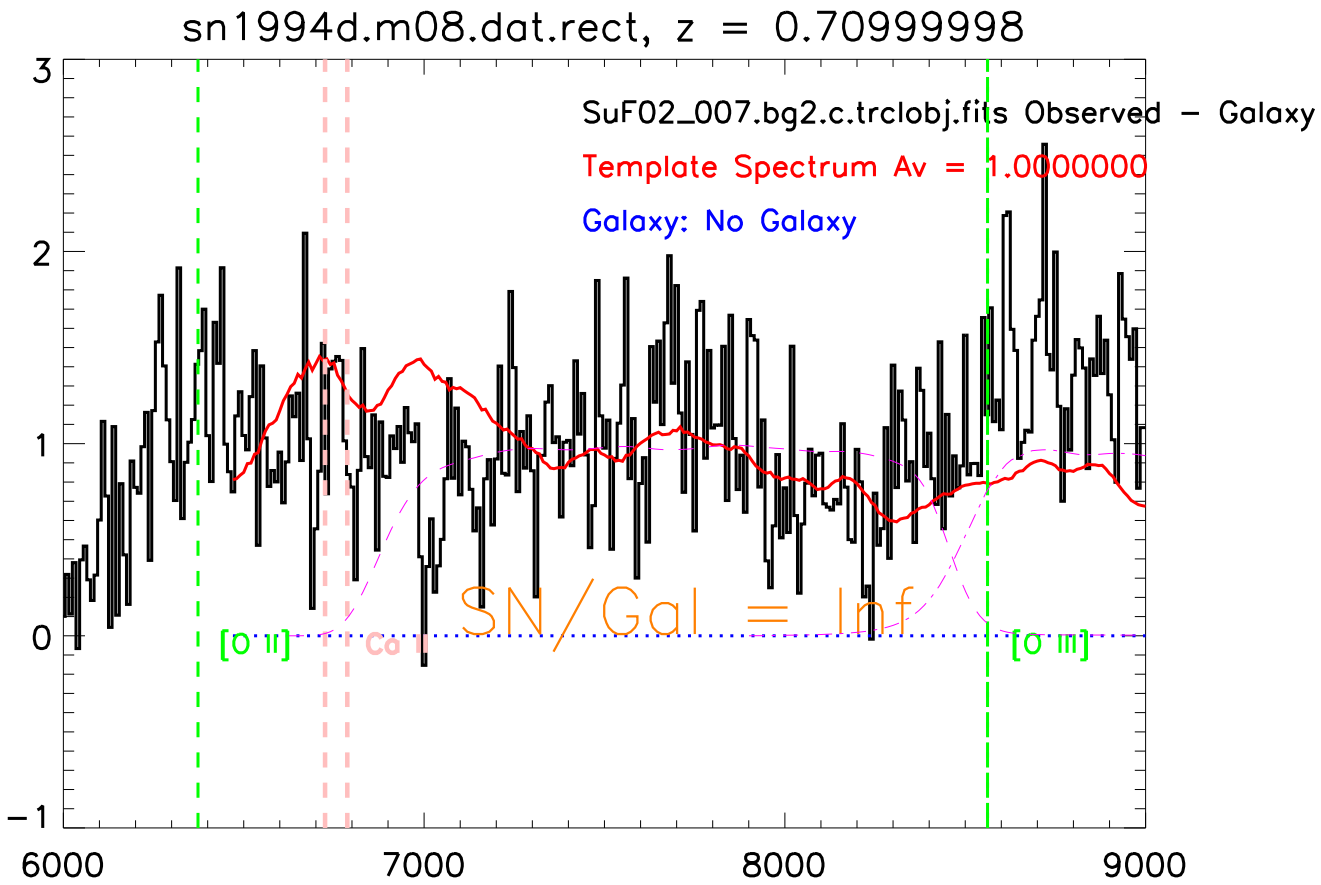
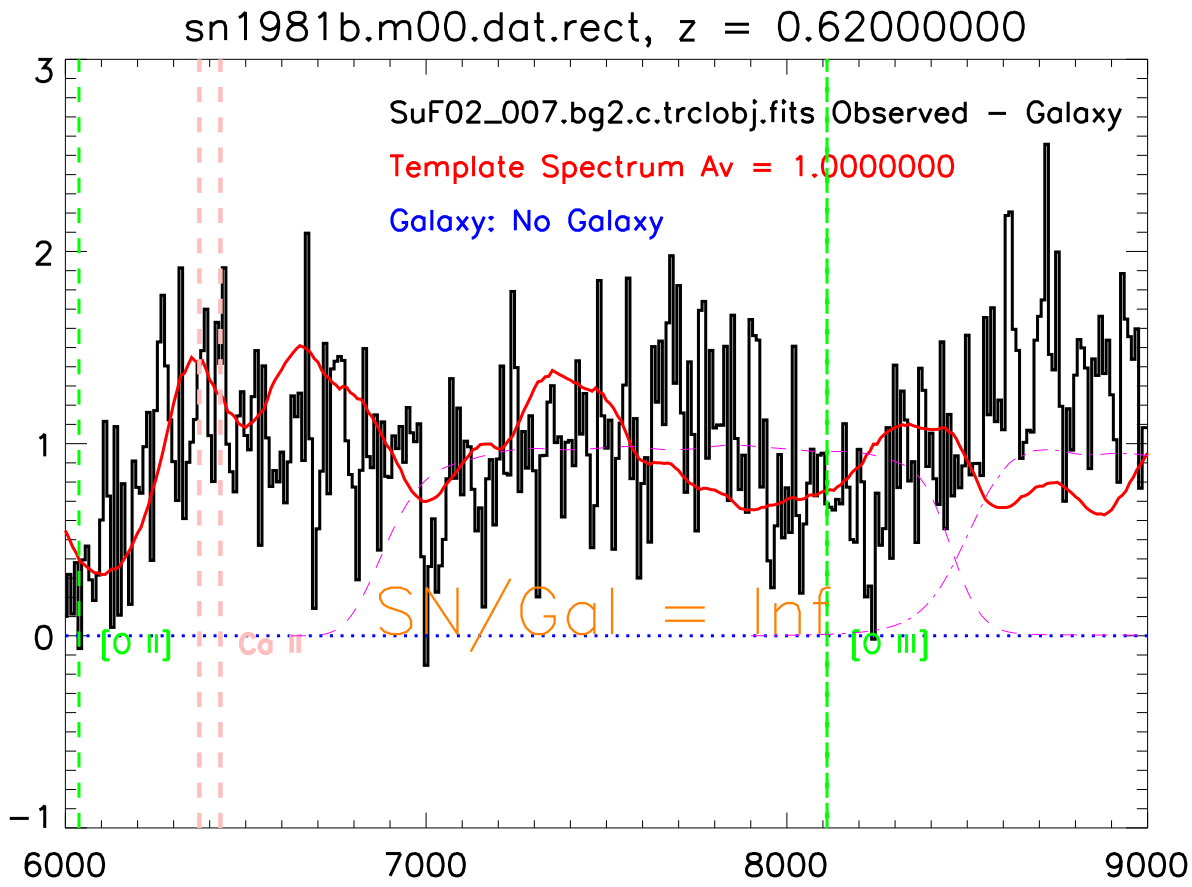
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000

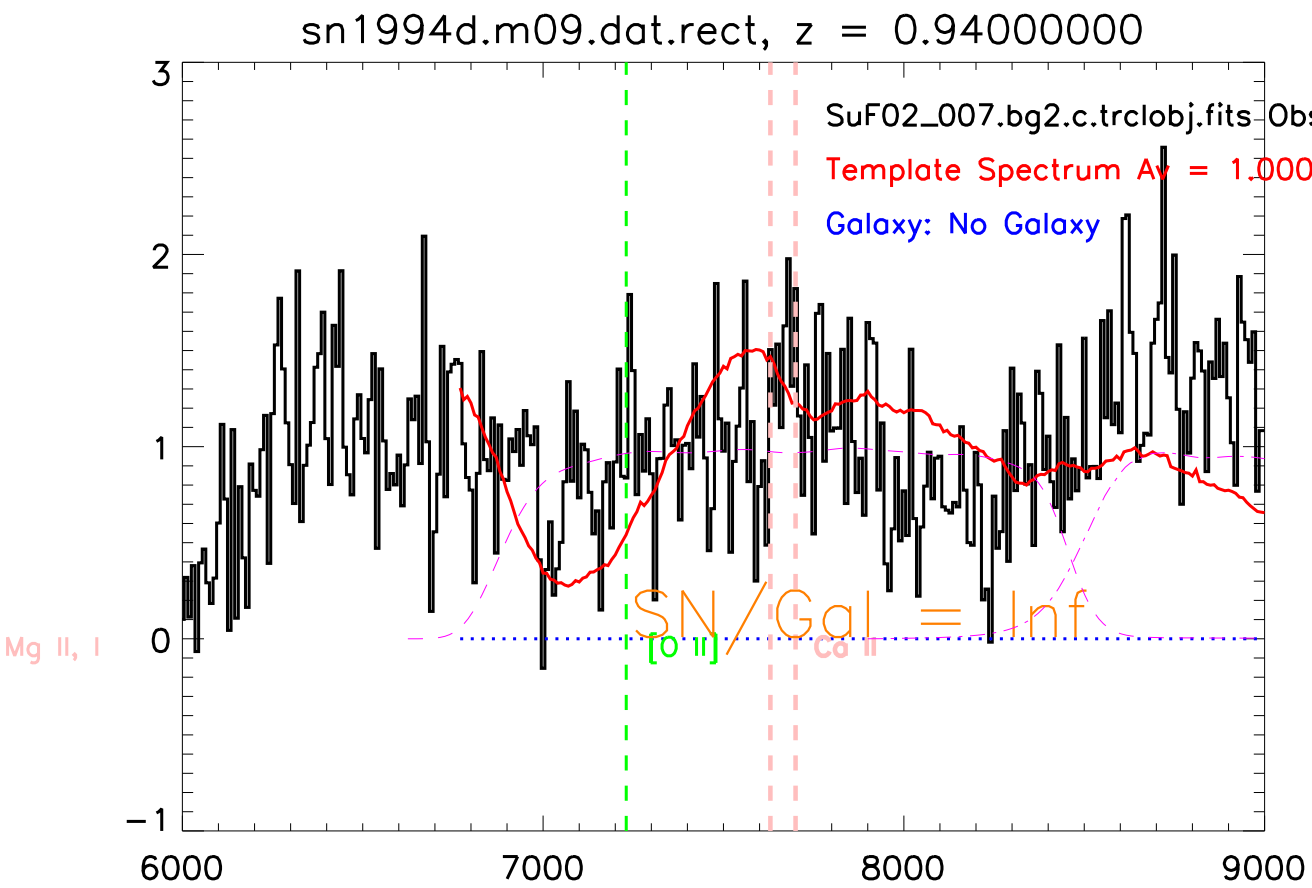

sn1996x.m02.dat.rect, z = 0.84000003
SuF02_007.bg2.c.trclobj.fits Observed
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000

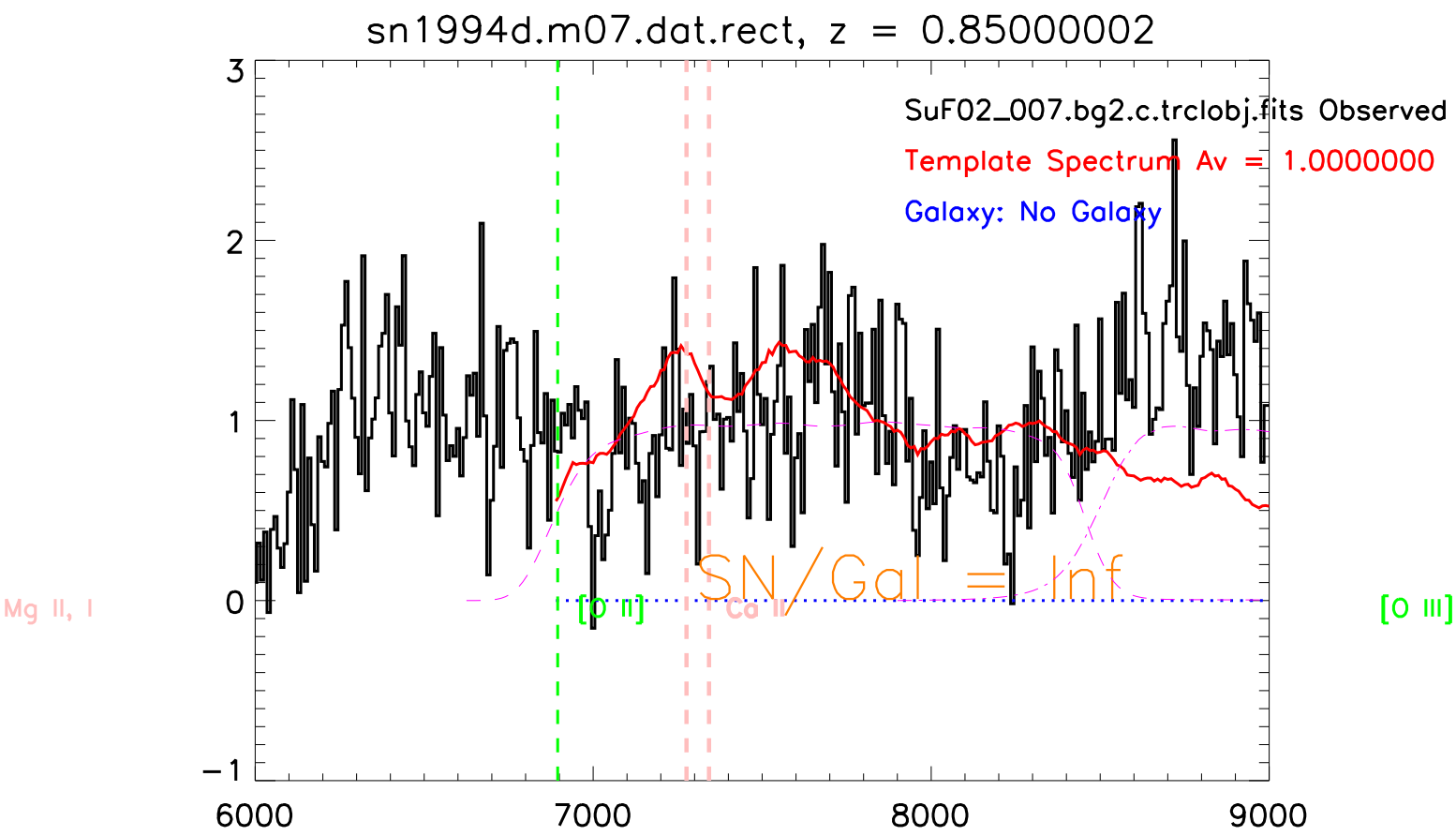

sn1996x.m00.dat.rect, z = 1.1400000
SuF02_007.bg2.c.trclobj.fits Observed – Galax
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
3
2
1
0
−1
6000
7000
8000
9000


sn1990n.m14.dat.rect, z = 0.65999997
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m08.dat.rect, z = 0.70999998
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1981b.m00.dat.rect, z = 0.62000000
SuF02_007.bg2.c.trclobj.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m09.dat.rect, z = 0.94000000
SuF02_007.bg2.c.trclobj.fits Observed – C
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
6000
7000
8000
9000


sn1994d.m07.dat.rect, z = 0.85000002
SuF02_007.bg2.c.trclobj.fits Observed
Template Spectrum Av = 1.0000000
Galaxy: No Galaxy
SN/Gal = Inf
Mg II, I
[O II]
Ca II
[O III]
3
2
1
0
−1
6000
7000
8000
9000