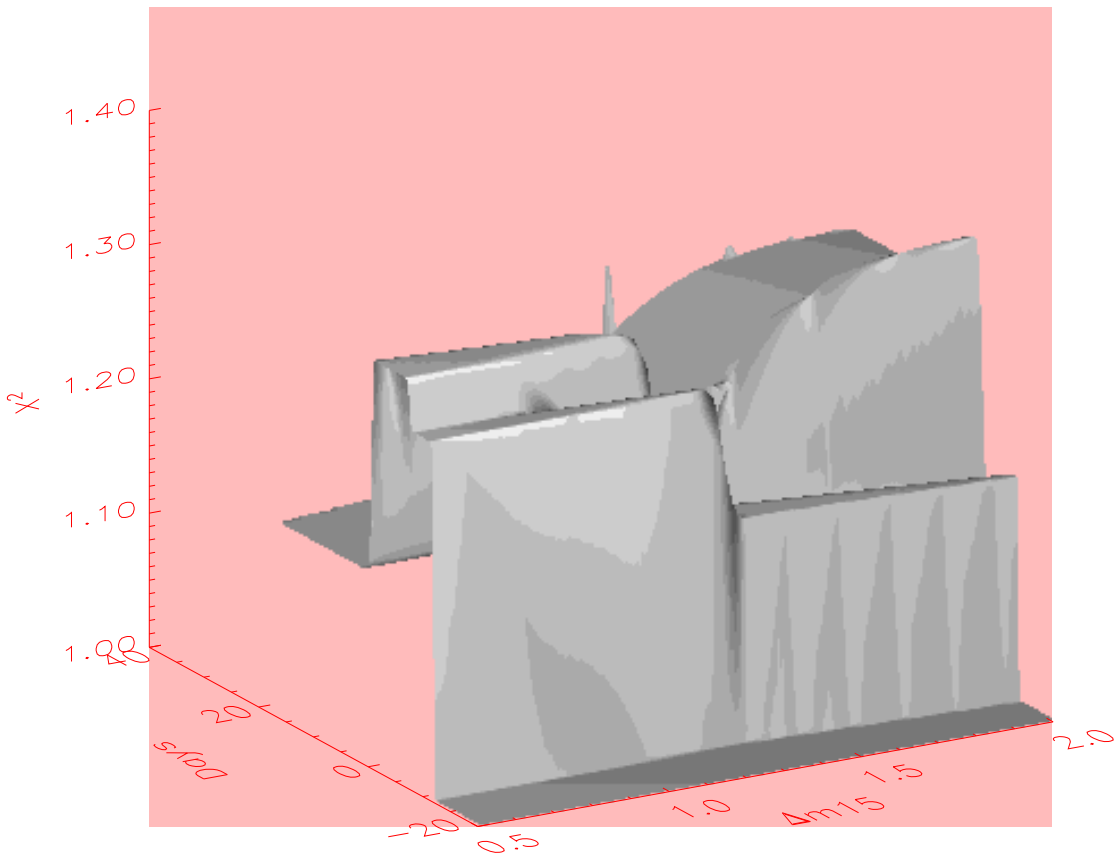
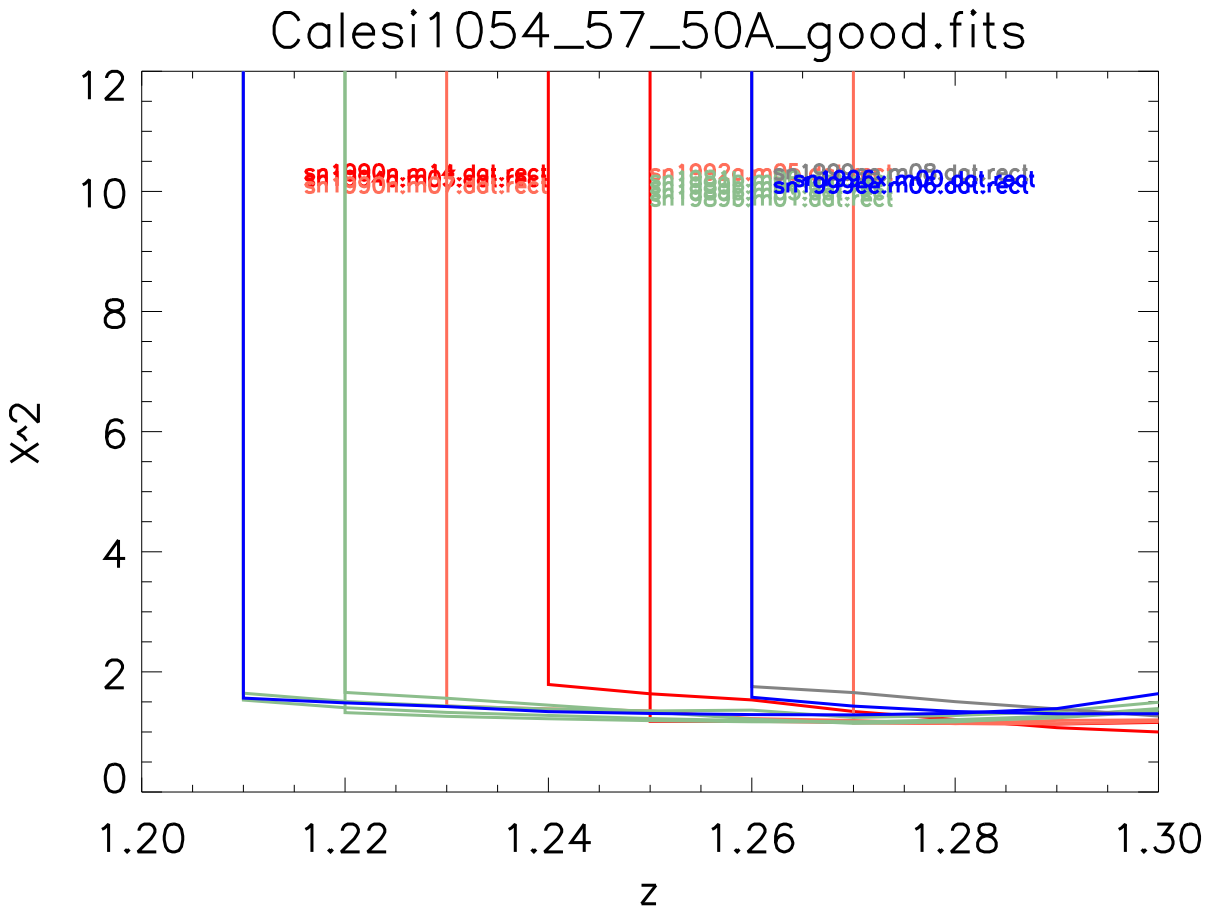
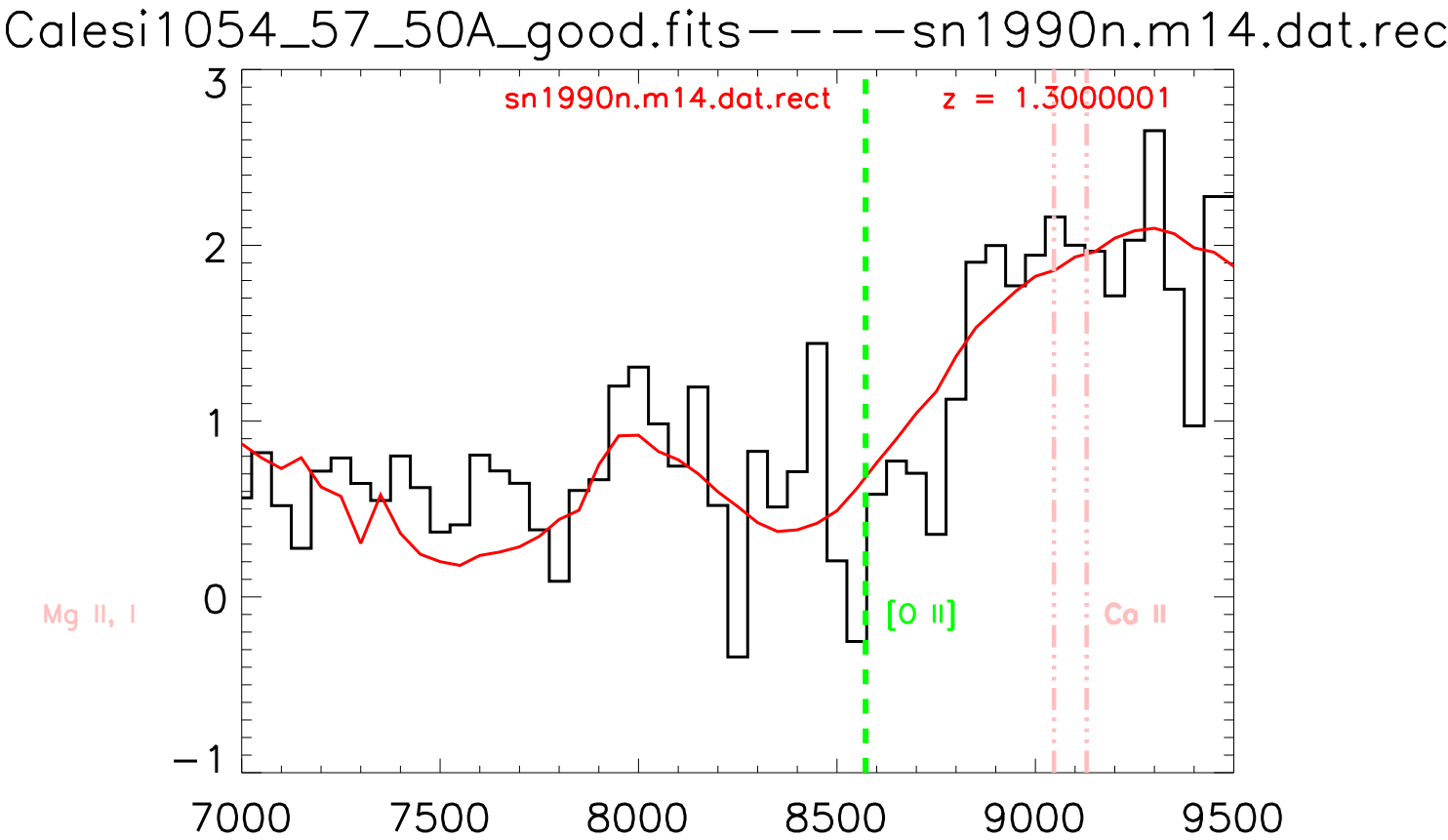
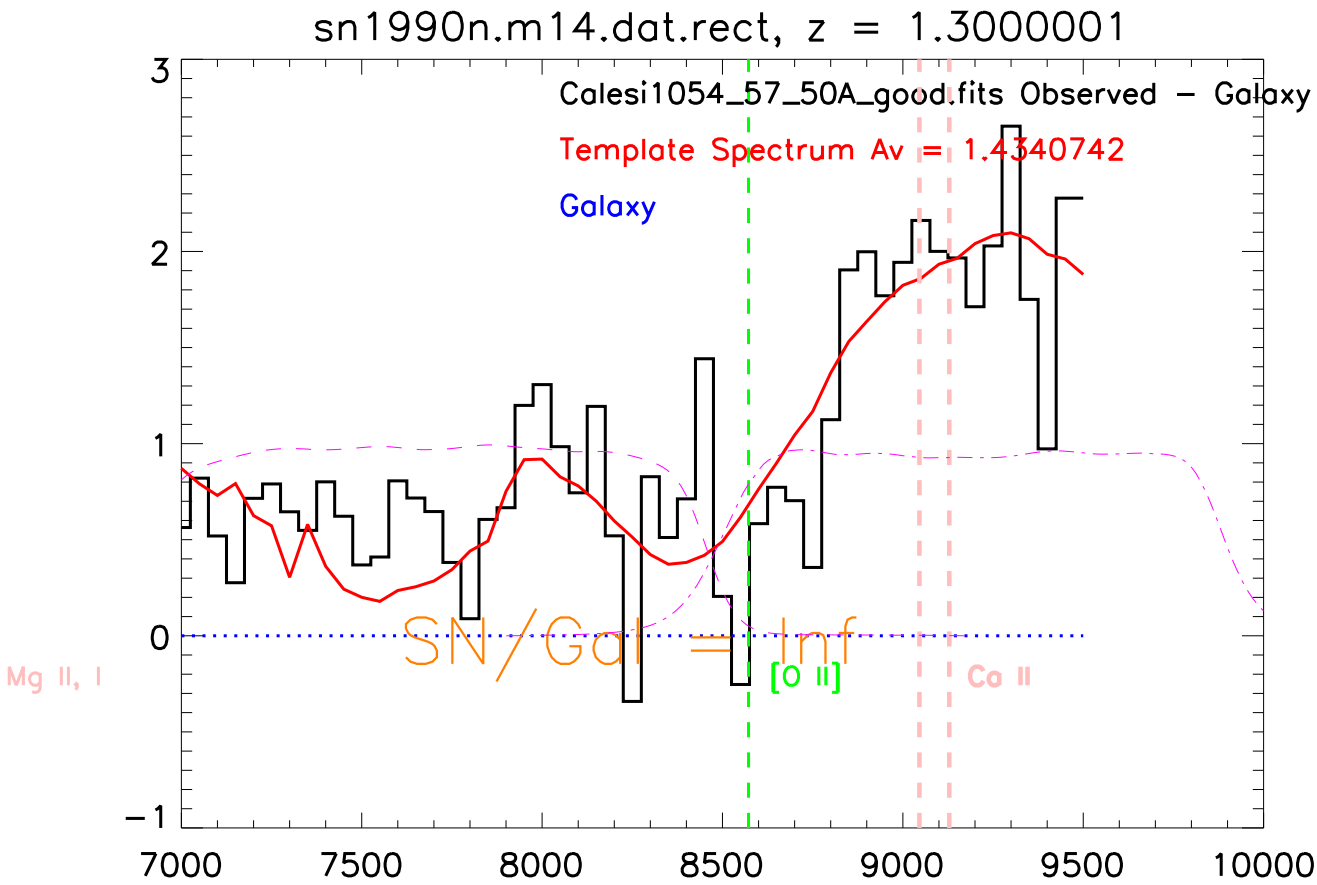
1.3
1.2
1.1
1.3
1.2
1.1
1.2
1.3
1.3
1.1
1.0

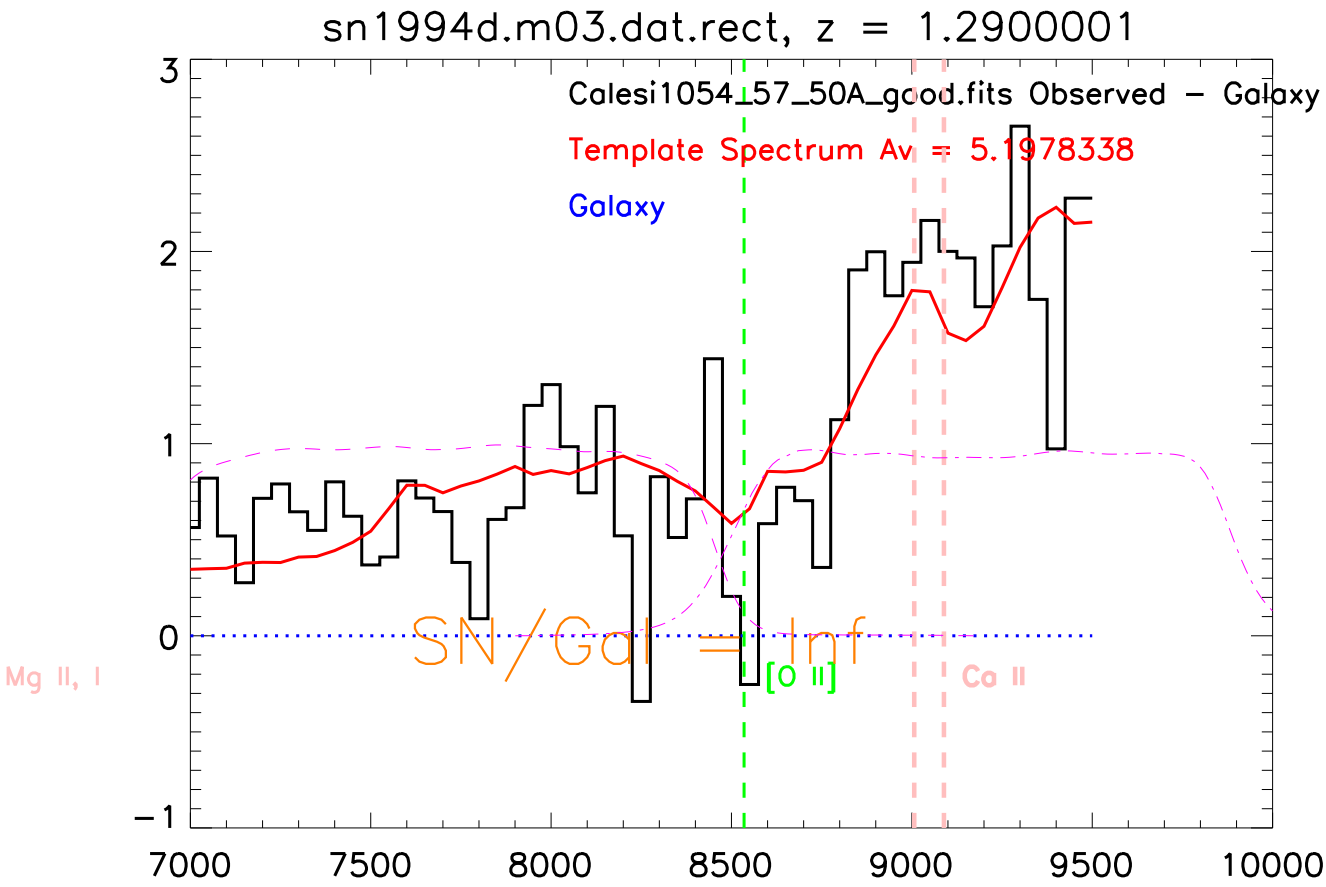


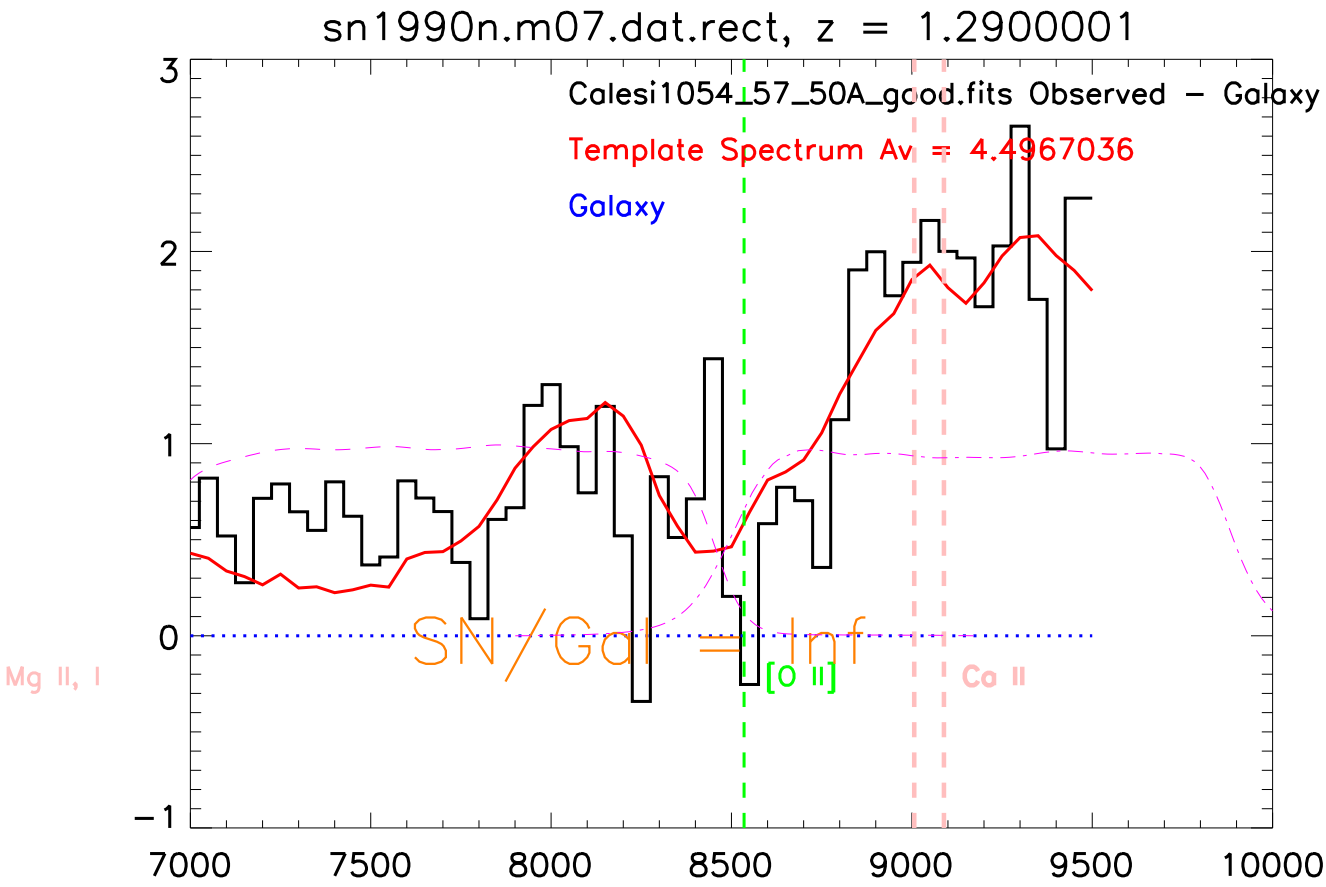
1.40
1.30
1.20
1.10
1.00
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

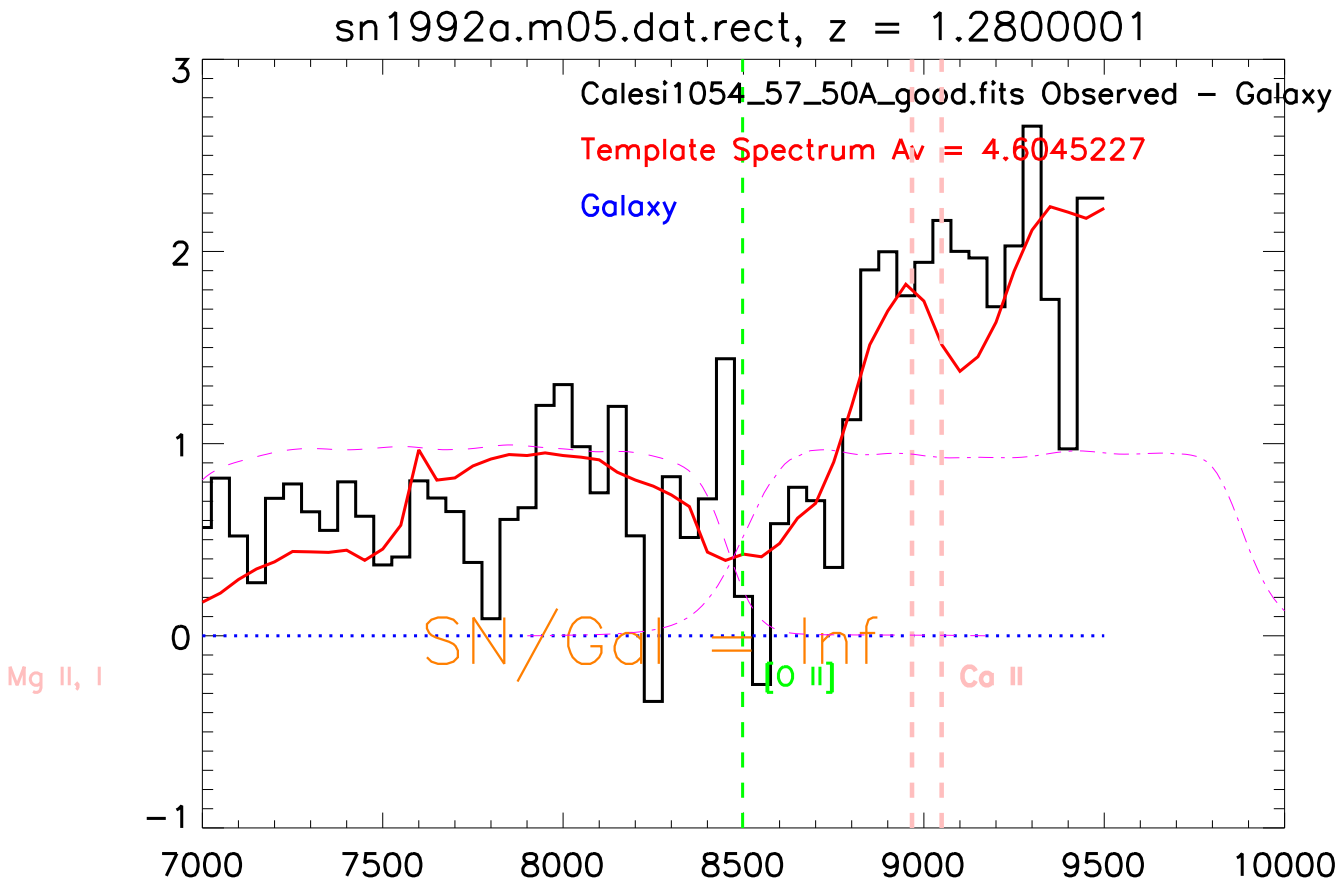

Calesi1054_57_50A_good.fits
X^2
z
0
2
4
6
8
10
12
1.20
1.22
1.24
1.26
1.28
1.30

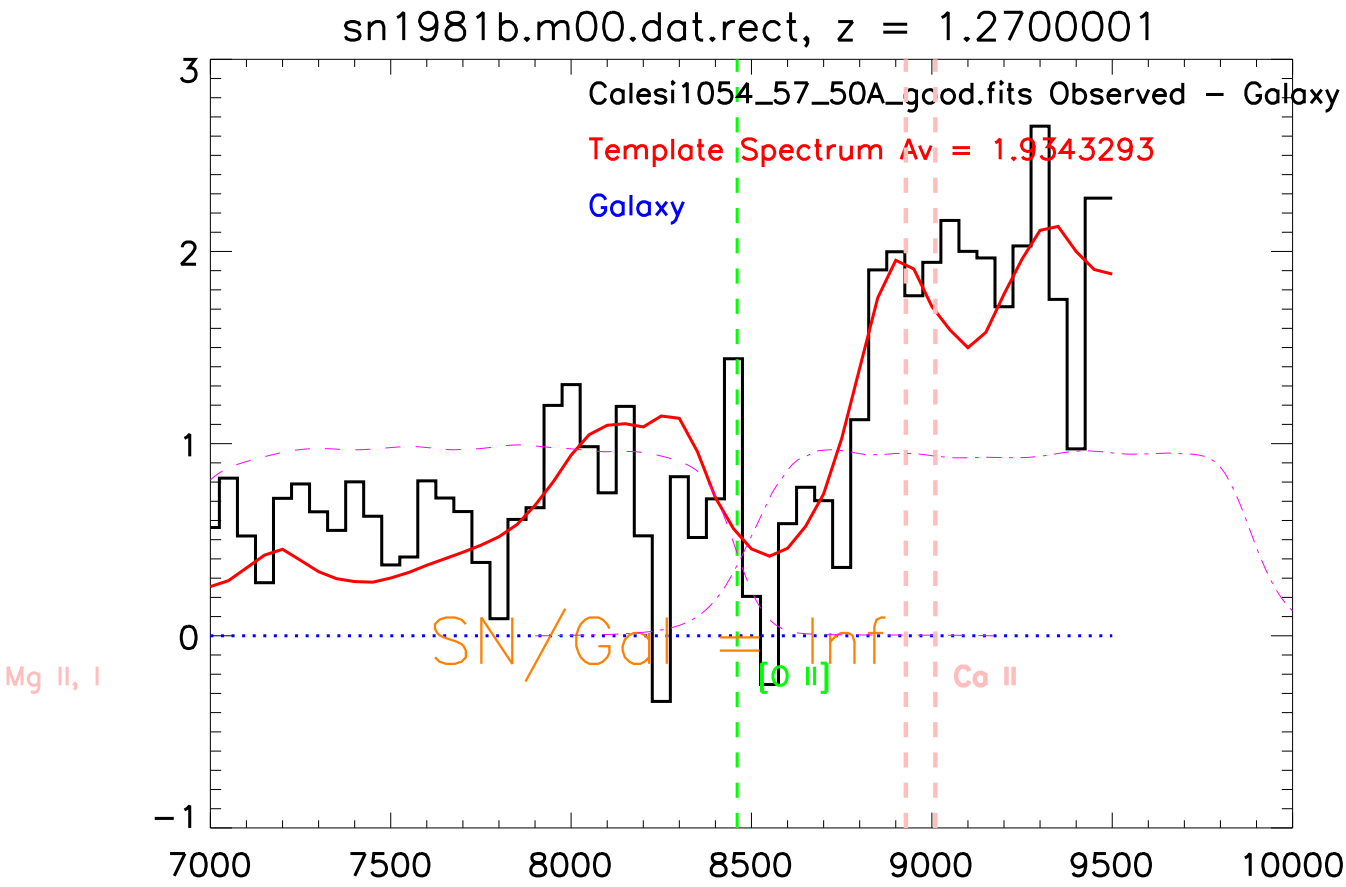

Calesi1054_57_50A_good.fits----sn1990n.m14.dat.rec
sn1990n.m14.dat.rect
z = 1.3000001
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500

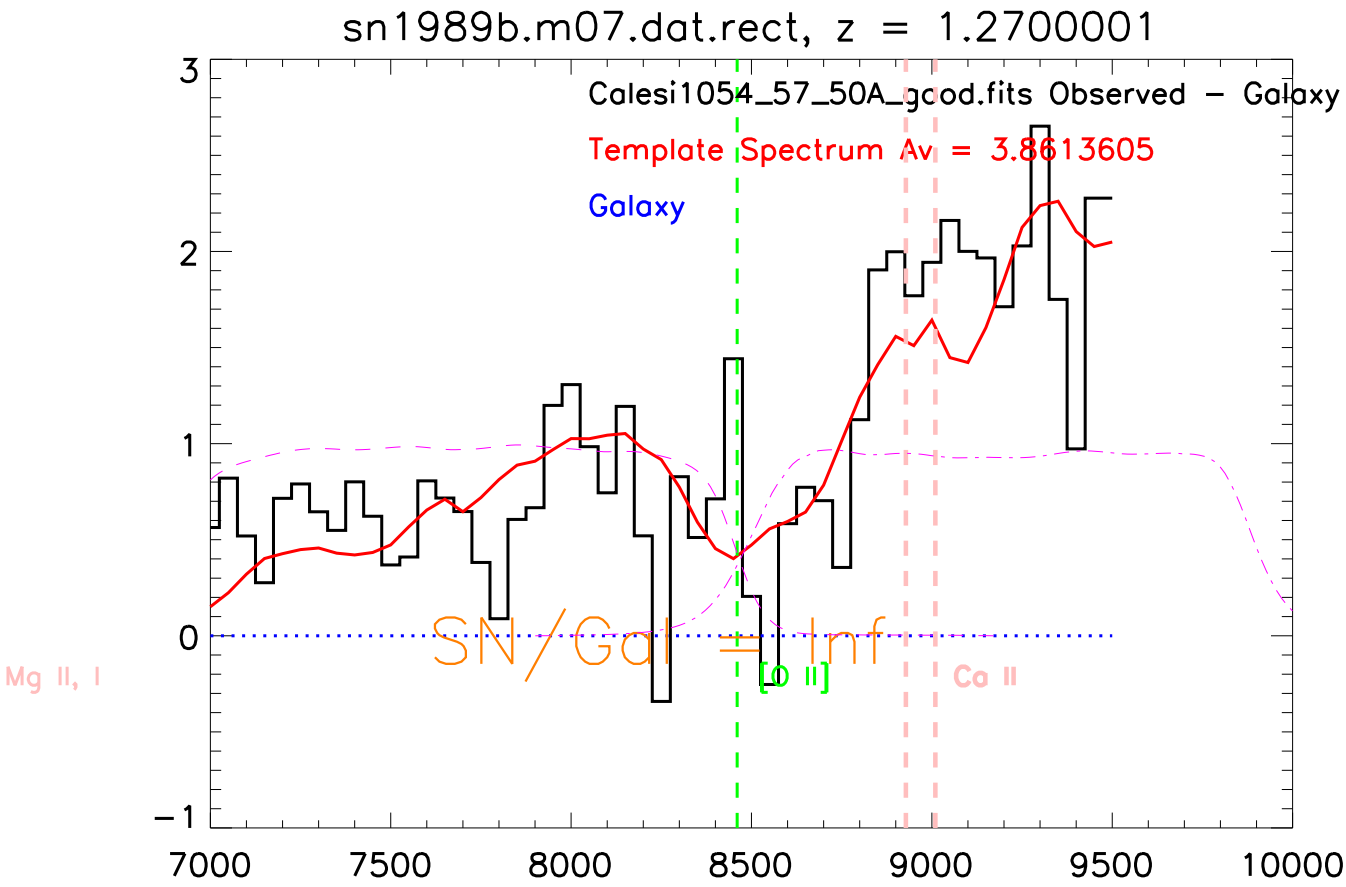

sn1990n.m14.dat.rect, z = 1.3000001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 1.4340742
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000

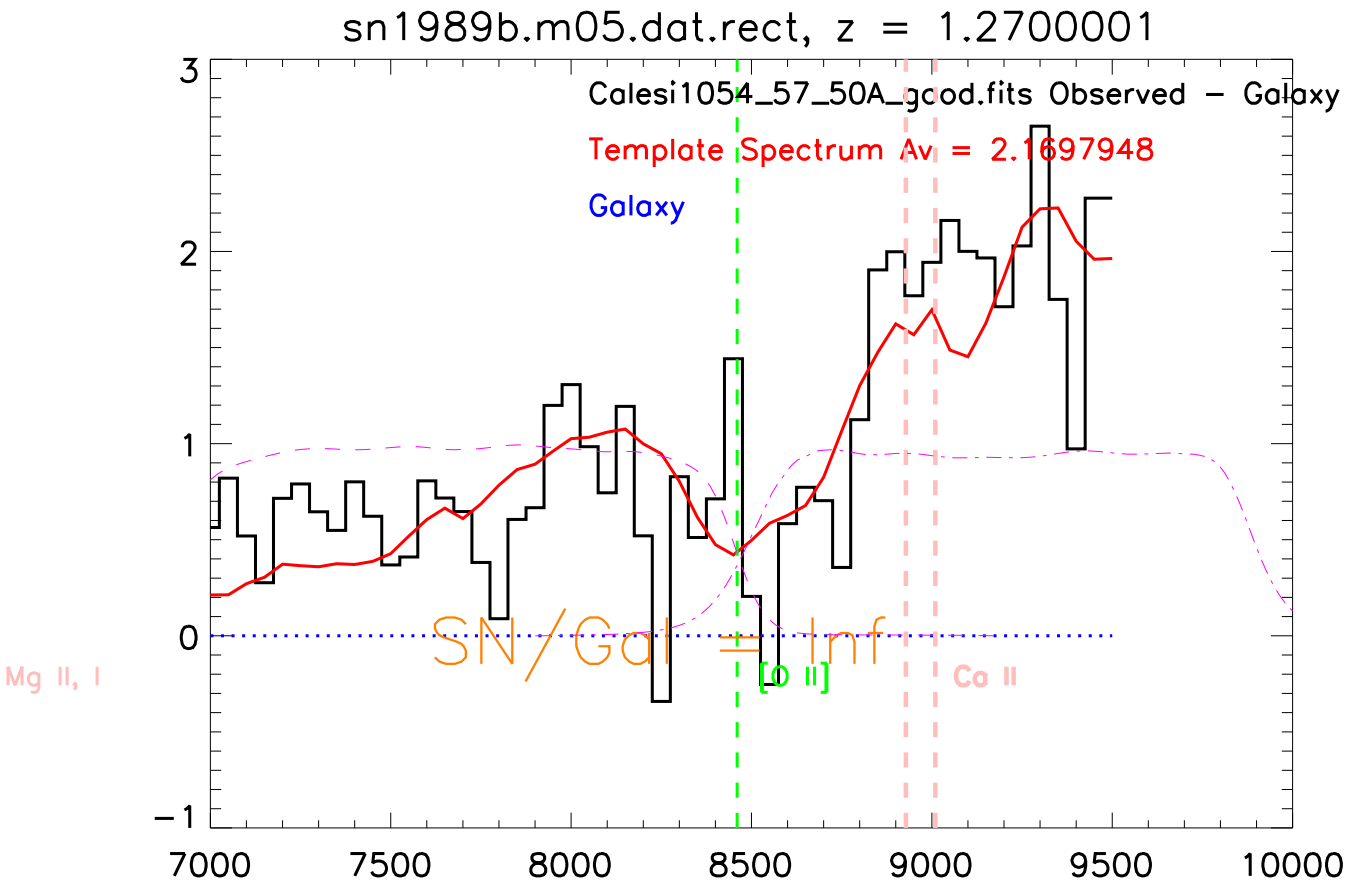

sn1994d.m03.dat.rect, z = 1.2900001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 5.1978338
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000

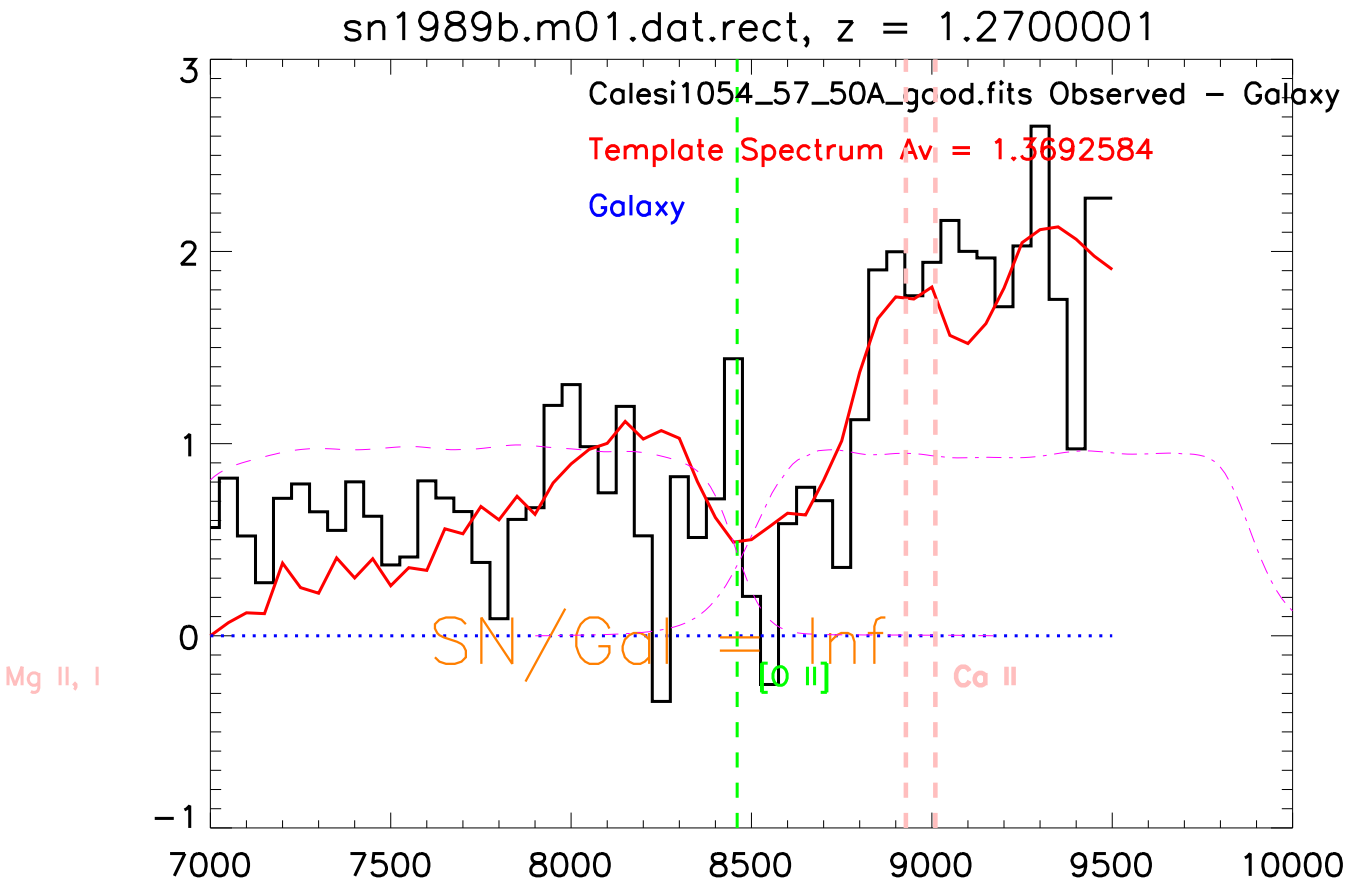

sn1990n.m07.dat.rect, z = 1.2900001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 4.4967036
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000

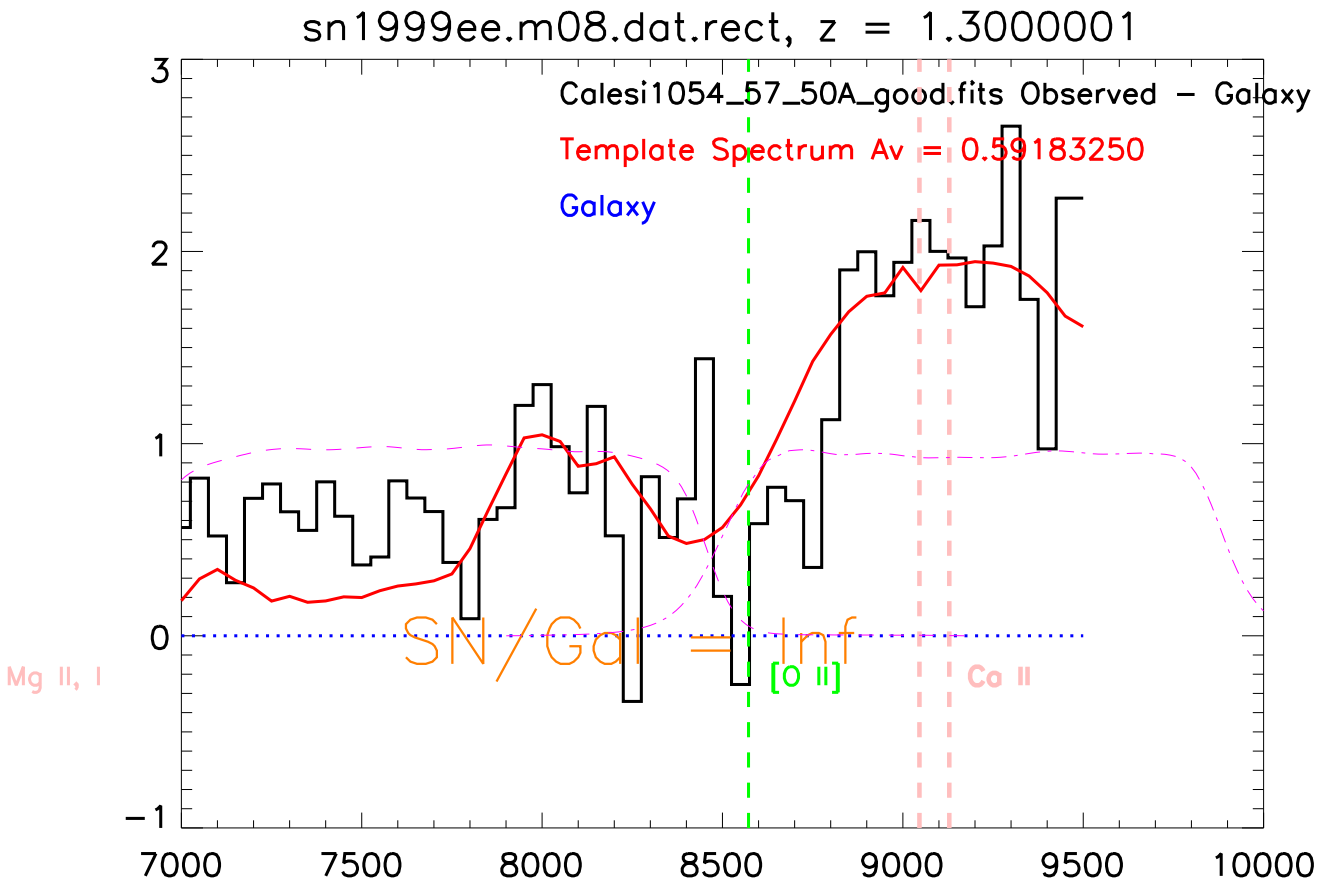

sn1992a.m05.dat.rect, z = 1.2800001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 4.6045227
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000

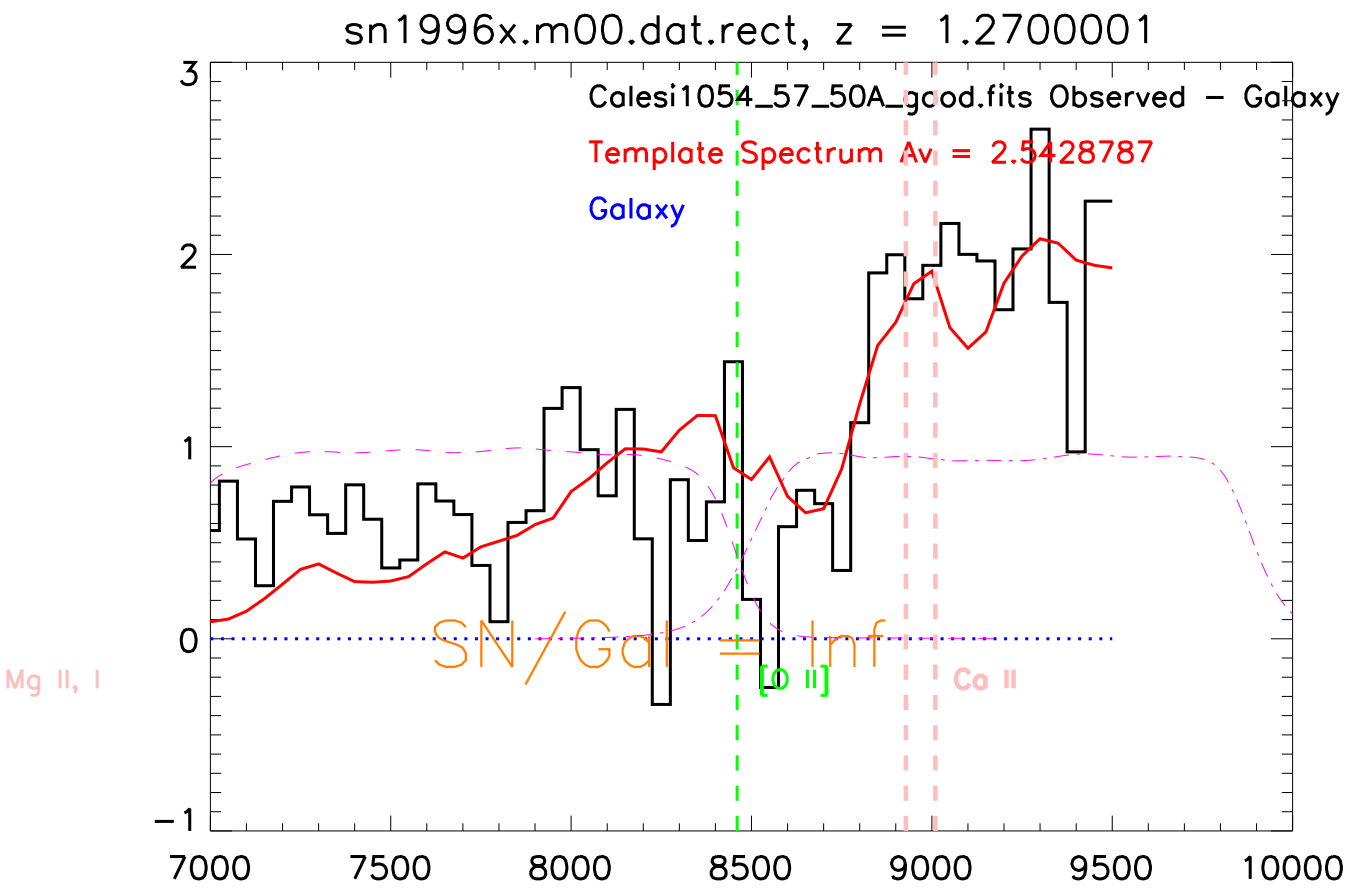

sn1981b.m00.dat.rect, z = 1.2700001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 1.9343293
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000

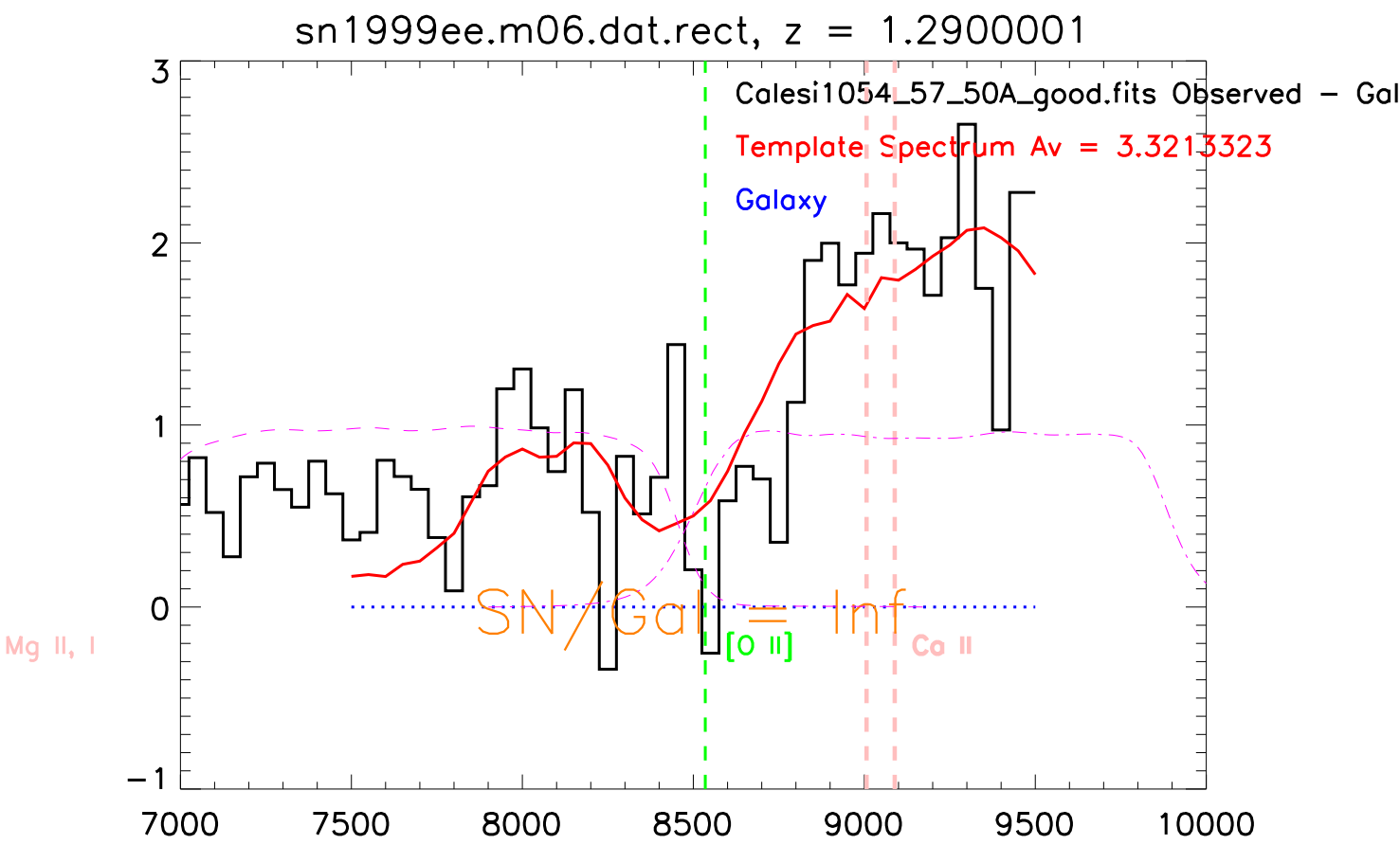

sn1989b.m07.dat.rect, z = 1.2700001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 3.8613605
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000


sn1989b.m05.dat.rect, z = 1.2700001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 2.1697948
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000


sn1989b.m01.dat.rect, z = 1.2700001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 1.3692584
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000


sn1999ee.m08.dat.rect, z = 1.3000001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 0.59183250
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000


sn1996x.m00.dat.rect, z = 1.2700001
Calesi1054_57_50A_good.fits Observed − Galaxy
Template Spectrum Av = 2.5428787
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000


sn1999ee.m06.dat.rect, z = 1.2900001
Calesi1054_57_50A_good.fits Observed – Gal
Template Spectrum Av = 3.3213323
Galaxy
SN/Gal = Inf
[O II]
Ca II
Mg II, I
3
2
1
0
−1
7000
7500
8000
8500
9000
9500
10000