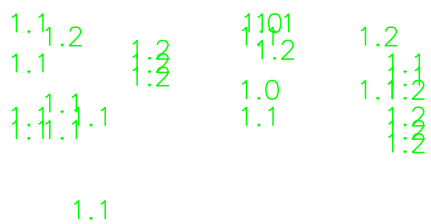
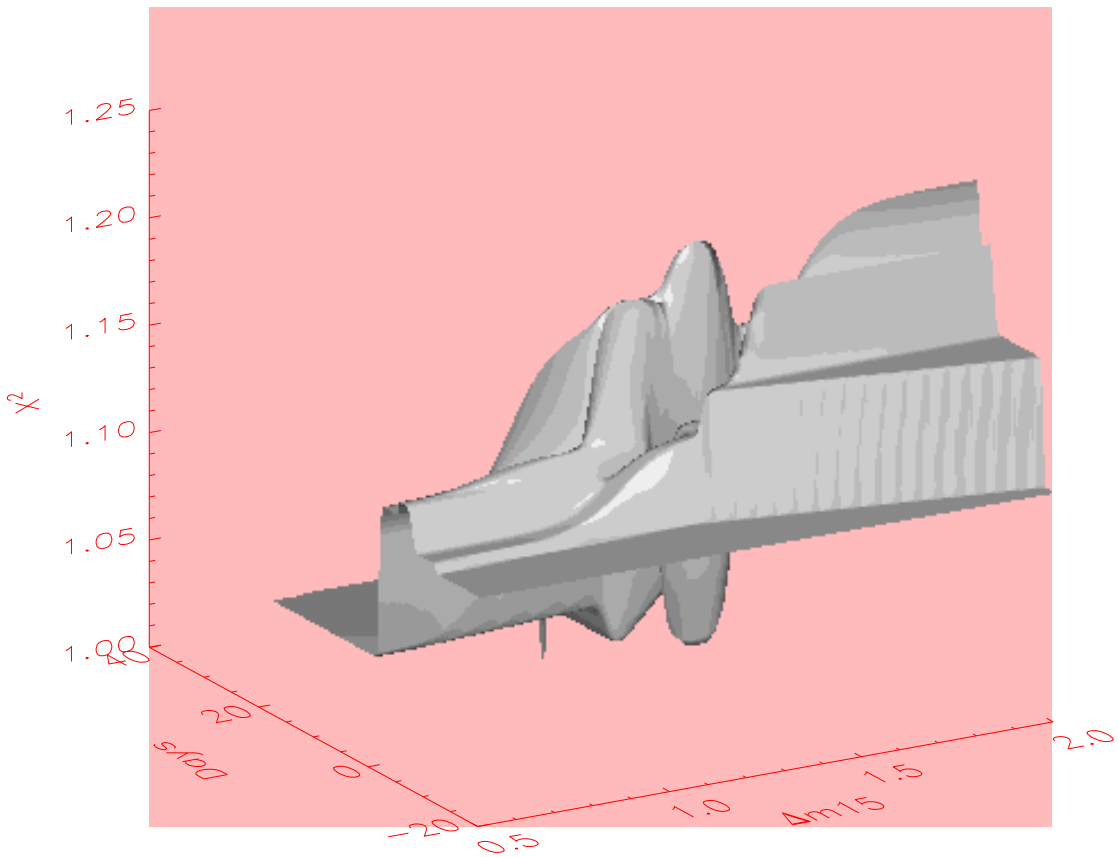
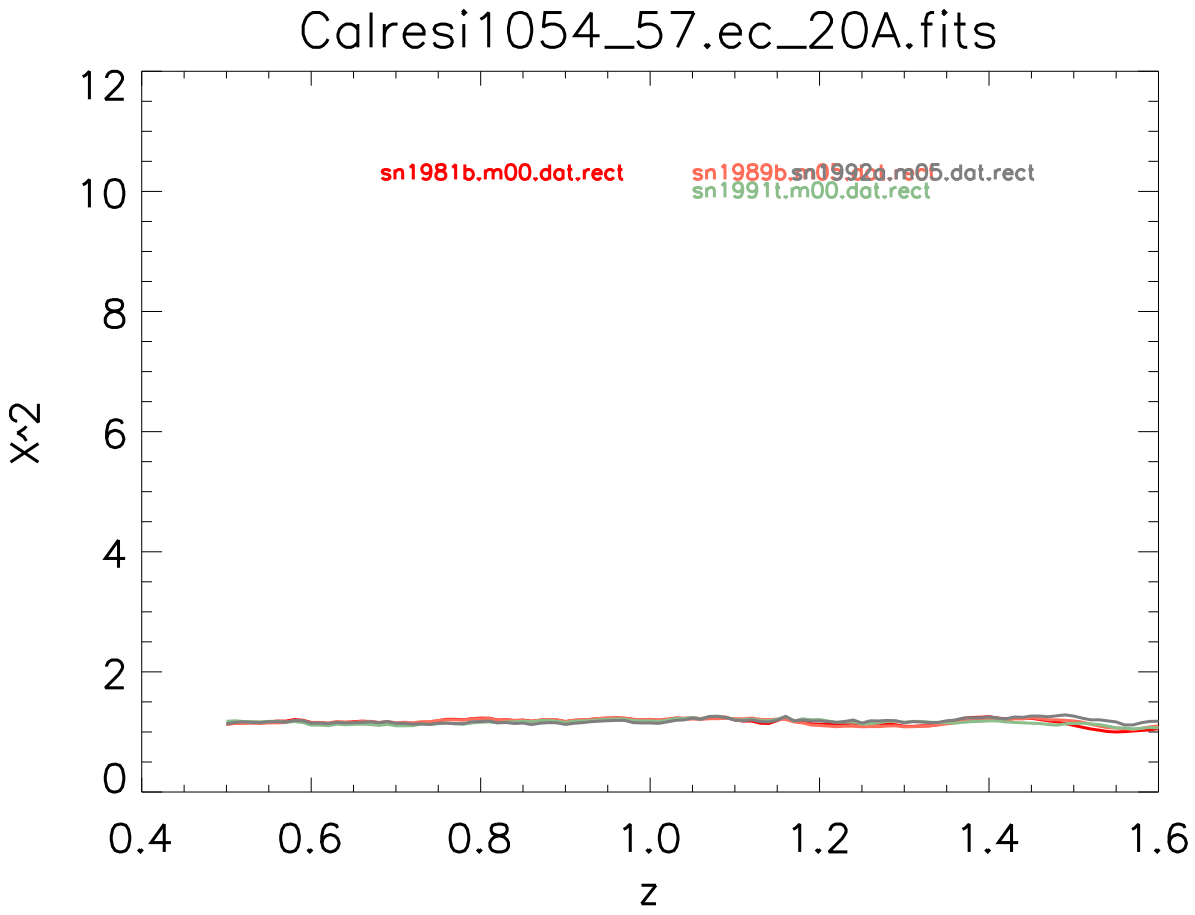
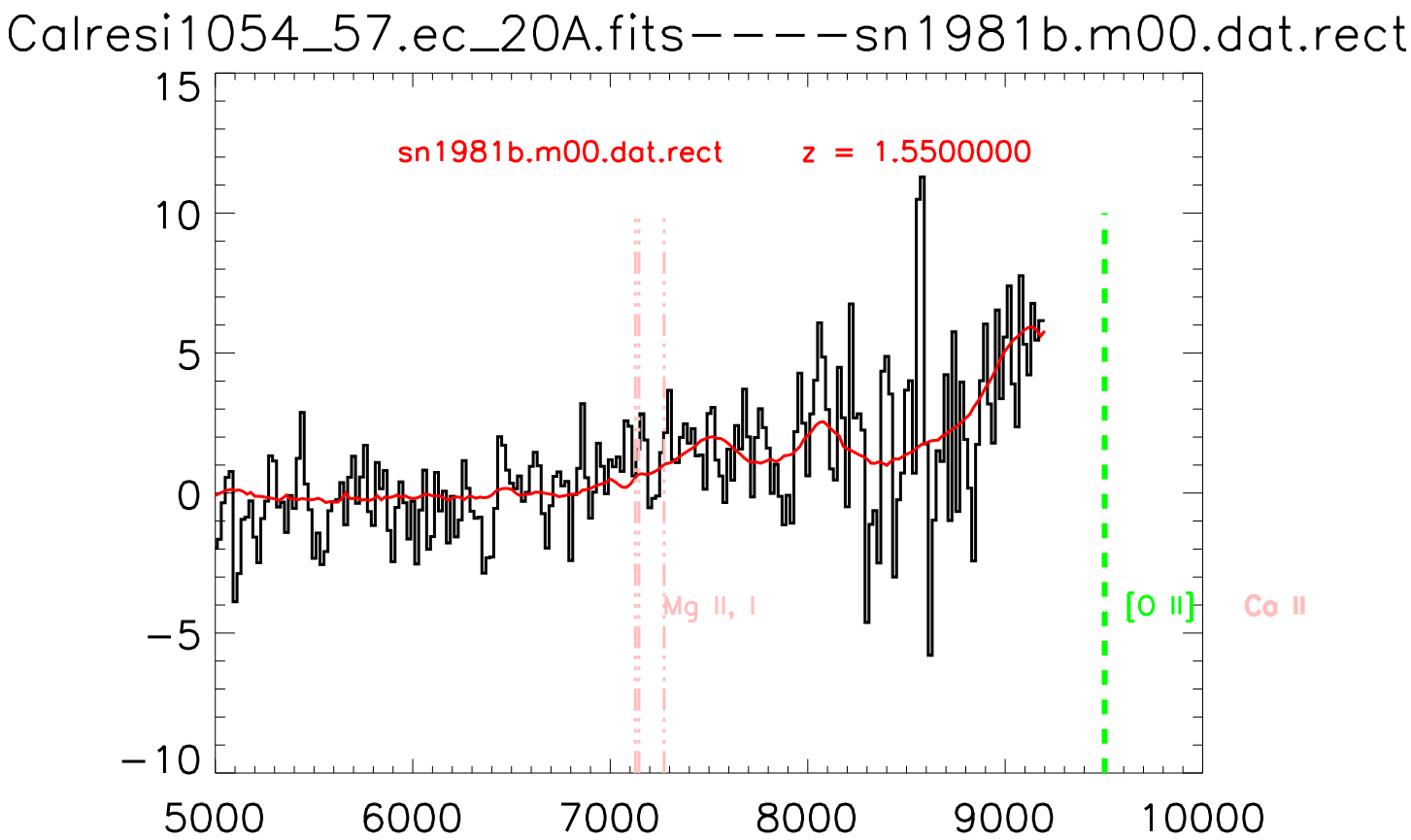
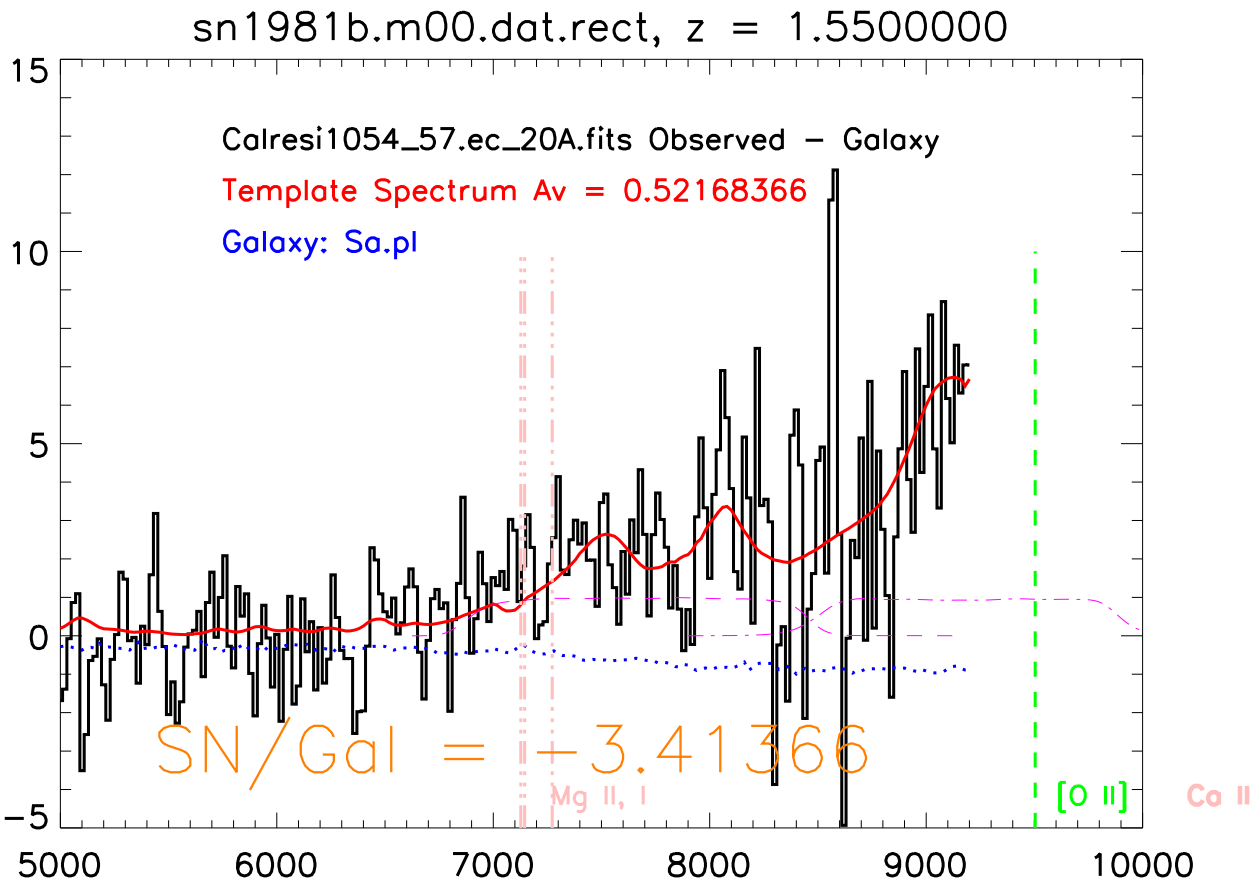


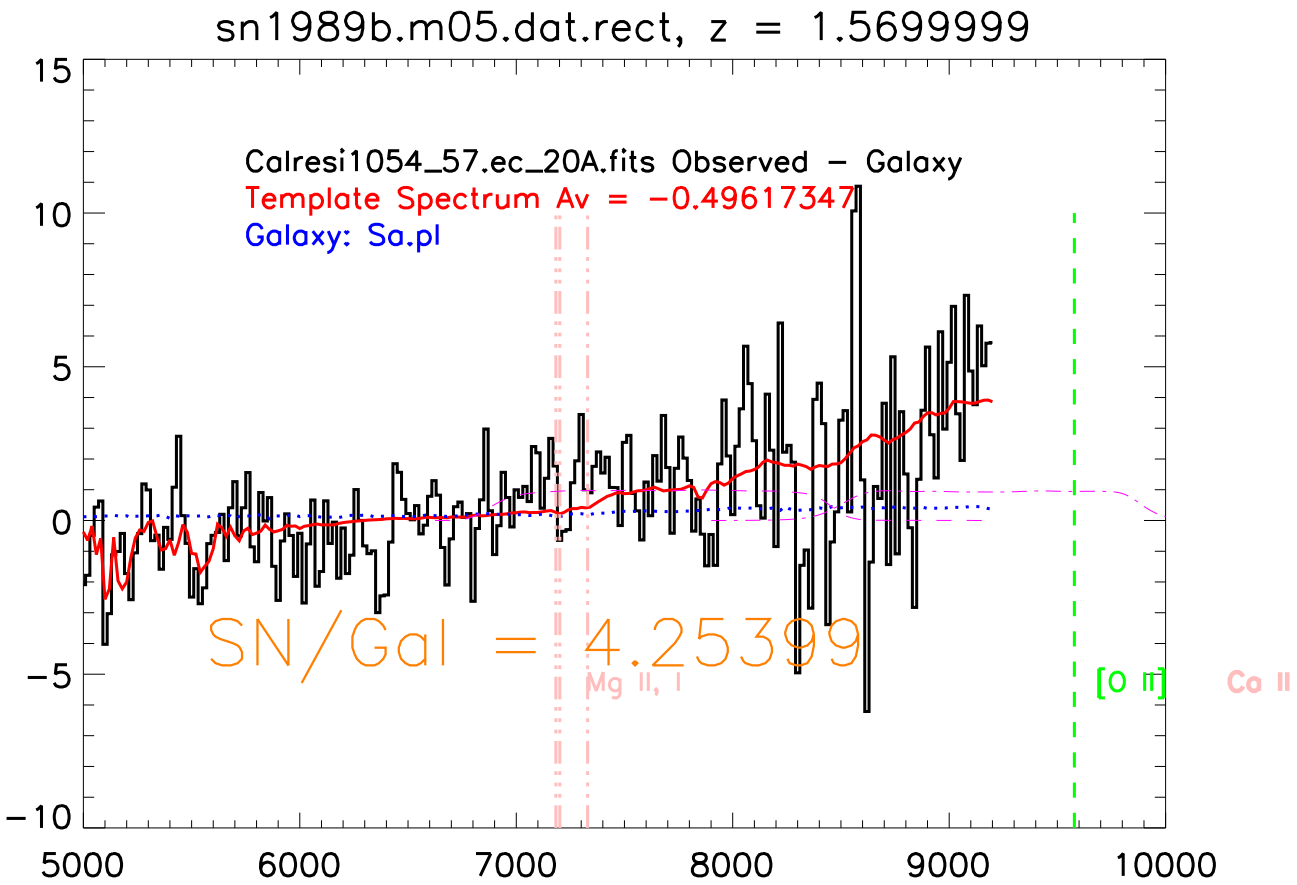


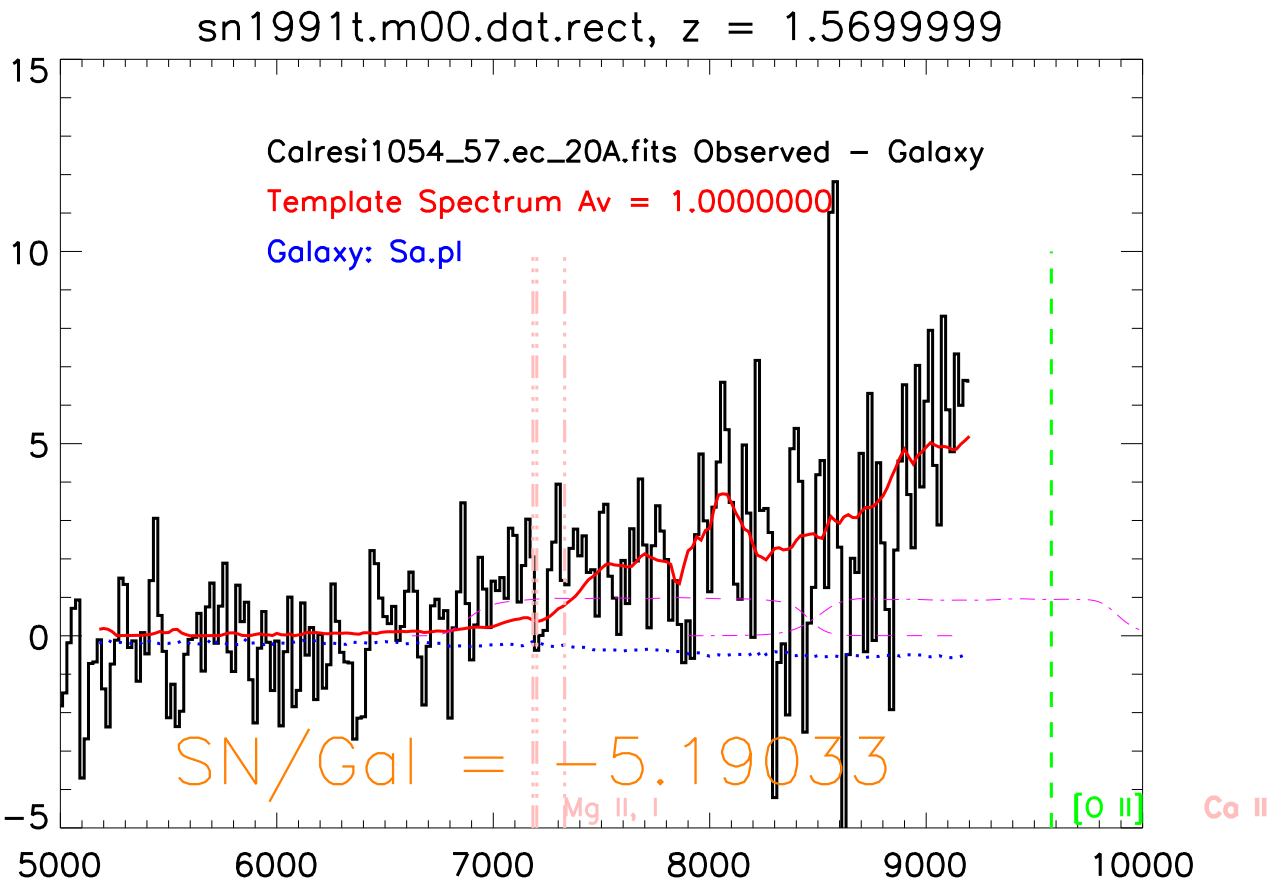
1.25
1.20
1.15
1.10
1.05
1.00
χ^2
40
20
0
−20
Days
0.5
1.0
1.5
2.0
Δm15

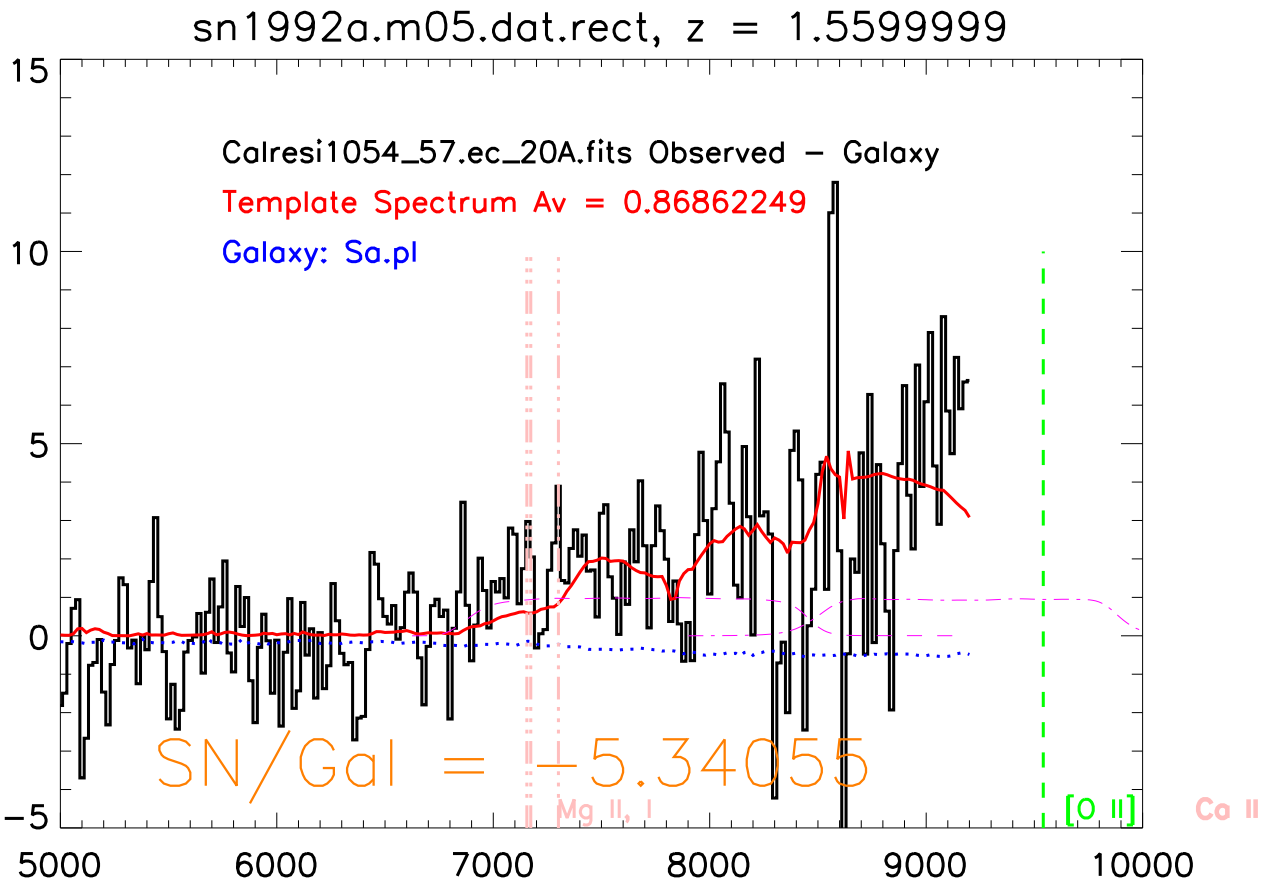

Calresi1054_57.ec_20A.fits
sn1981b.m00.dat.rect
sn1991t.m00.dat.rect
X^2
z
0
2
4
6
8
10
12
0.4
0.6
0.8
1.0
1.2
1.4
1.6


Calresi1054_57.ec_20A.fits----sn1981b.m00.dat.rect
sn1981b.m00.dat.rect
z = 1.5500000
Mg II, I
[O II]
Ca II
15
10
5
0
−5
−10
5000
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.5500000
Calresi1054_57.ec_20A.fits Observed − Galaxy
Template Spectrum Av = 0.52168366
Galaxy: Sa.pl
SN/Gal = −3.41366
Mg II, I
[O II]
Ca II
15
10
5
0
−5
5000
6000
7000
8000
9000
10000


sn1989b.m05.dat.rect, z = 1.5699999
Calresi1054_57.ec_20A.fits Observed − Galaxy
Template Spectrum Av = −0.49617347
Galaxy: Sa.pl
SN/Gal = 4.25399
Mg II, 1
[O II]
Ca II
15
10
5
0
−5
−10
5000
6000
7000
8000
9000
10000


sn1991t.m00.dat.rect, z = 1.5699999
Calresi1054_57.ec_20A.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy: Sa.pl
SN/Gal = −5.19033
Mg II, I
[O II]
Ca II
15
10
5
0
−5
5000
6000
7000
8000
9000
10000


sn1992a.m05.dat.rect, z = 1.5599999
Calresi1054_57.ec_20A.fits Observed − Galaxy
Template Spectrum Av = 0.86862249
Galaxy: Sa.pl
SN/Gal = −5.34055
Mg II, I
[O II]
Ca II
15
10
5
0
−5
5000
6000
7000
8000
9000
10000