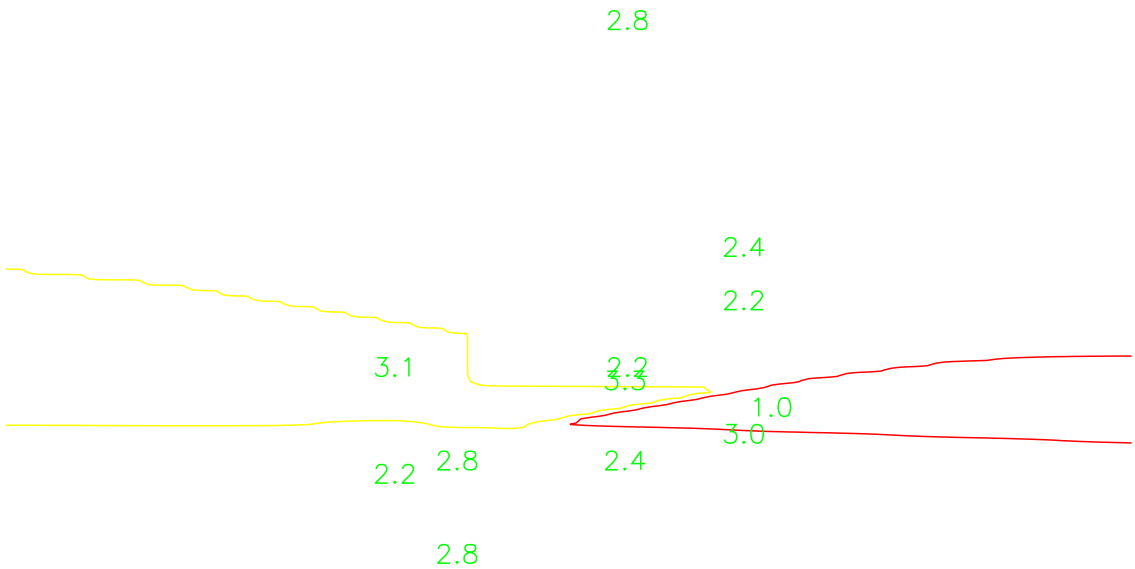
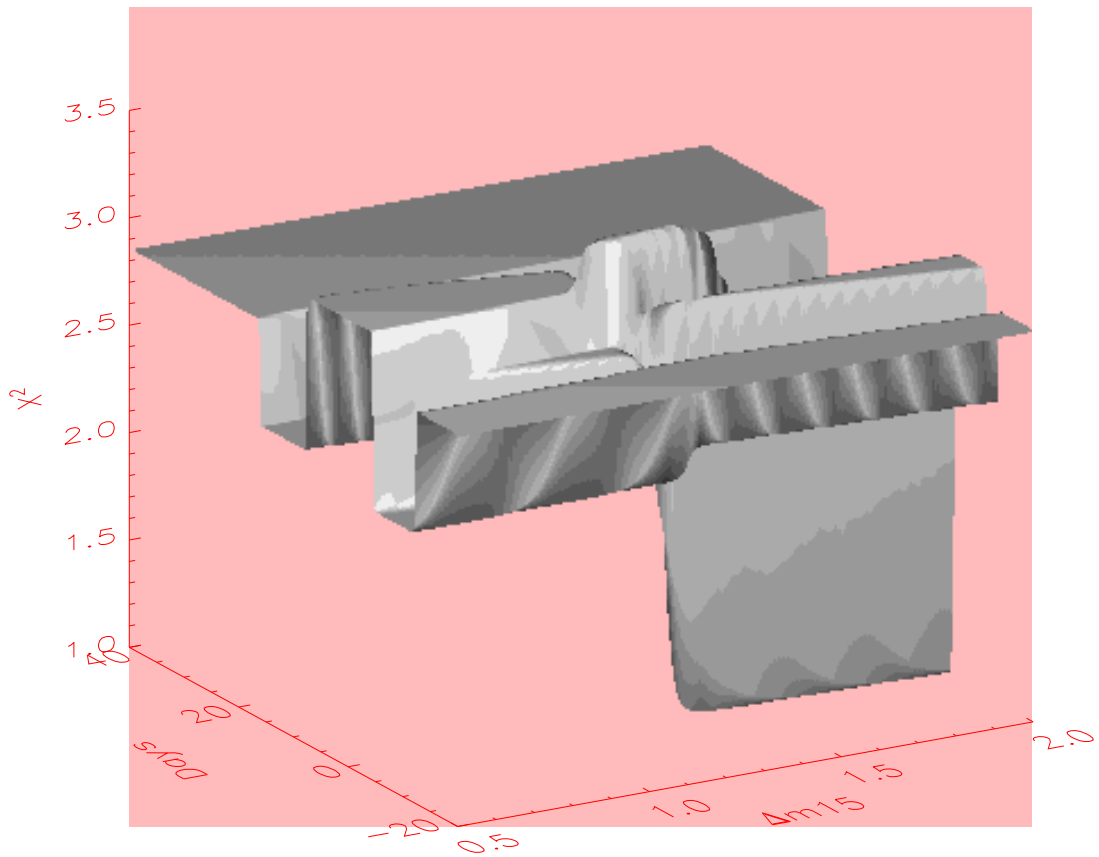
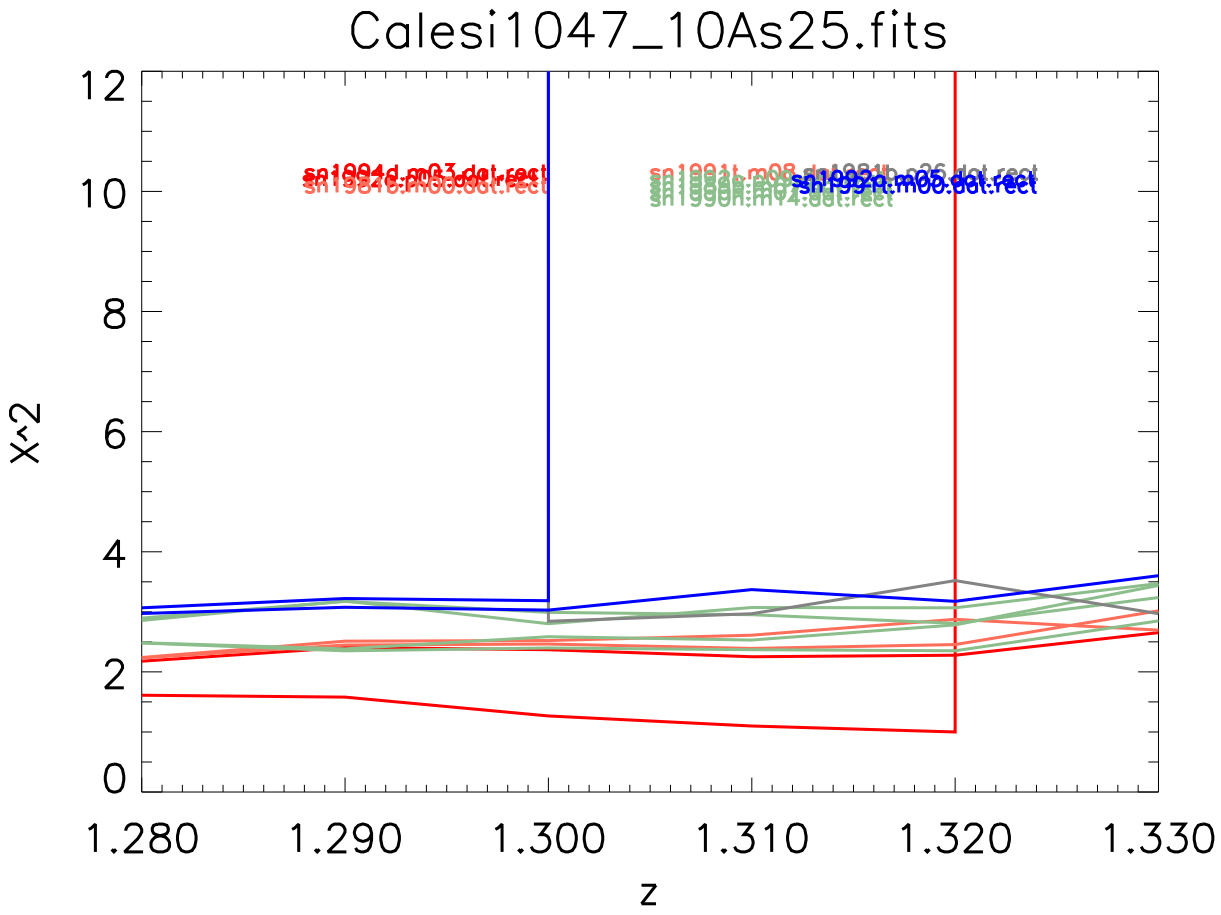
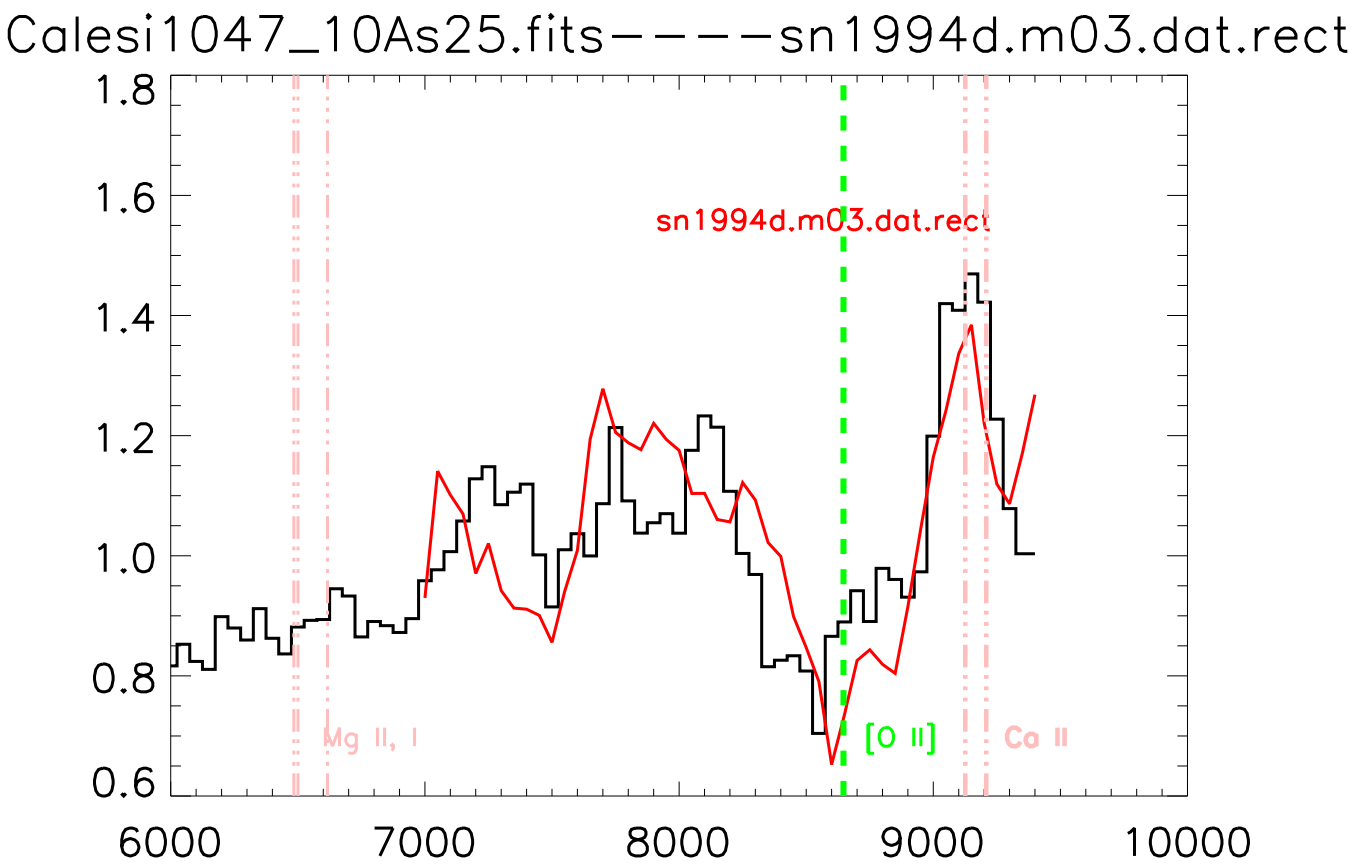
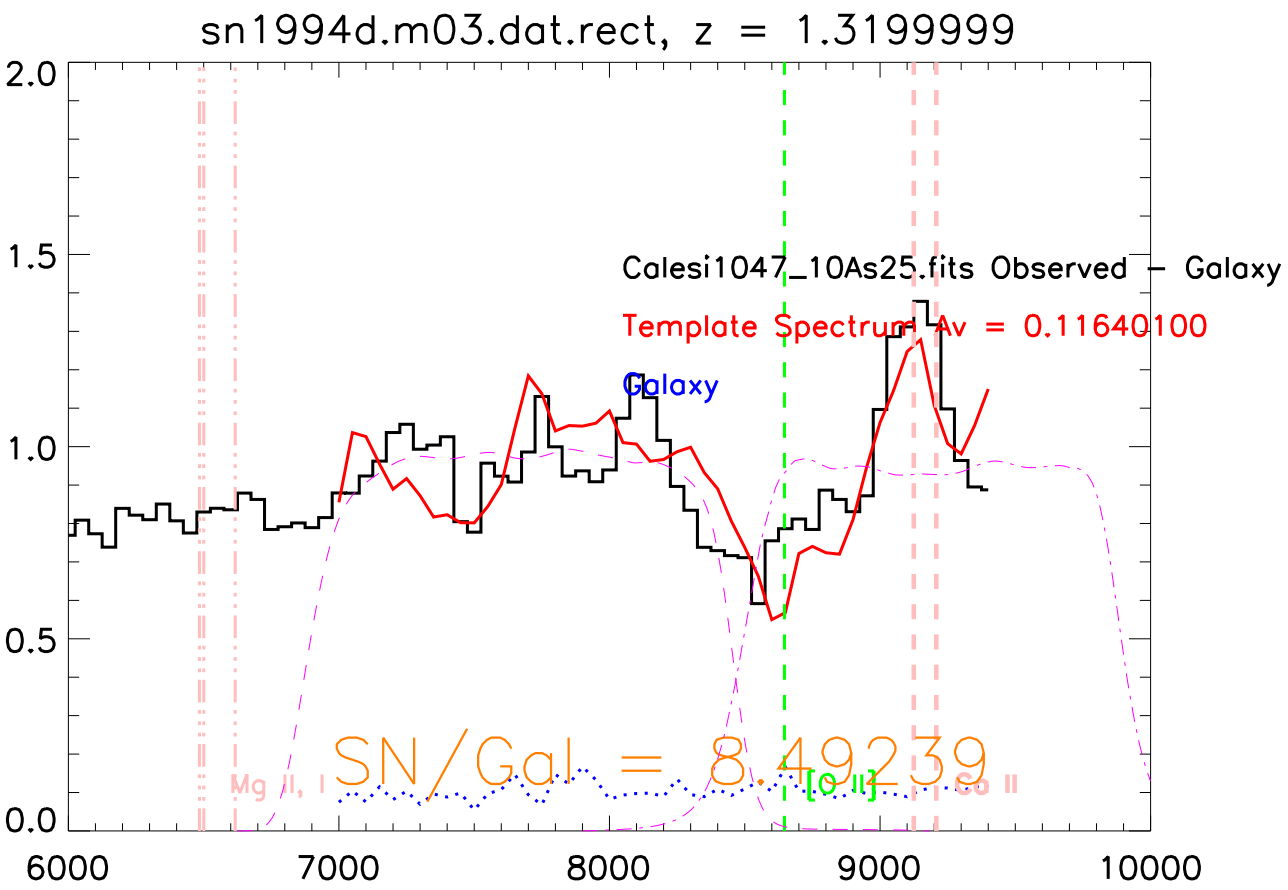
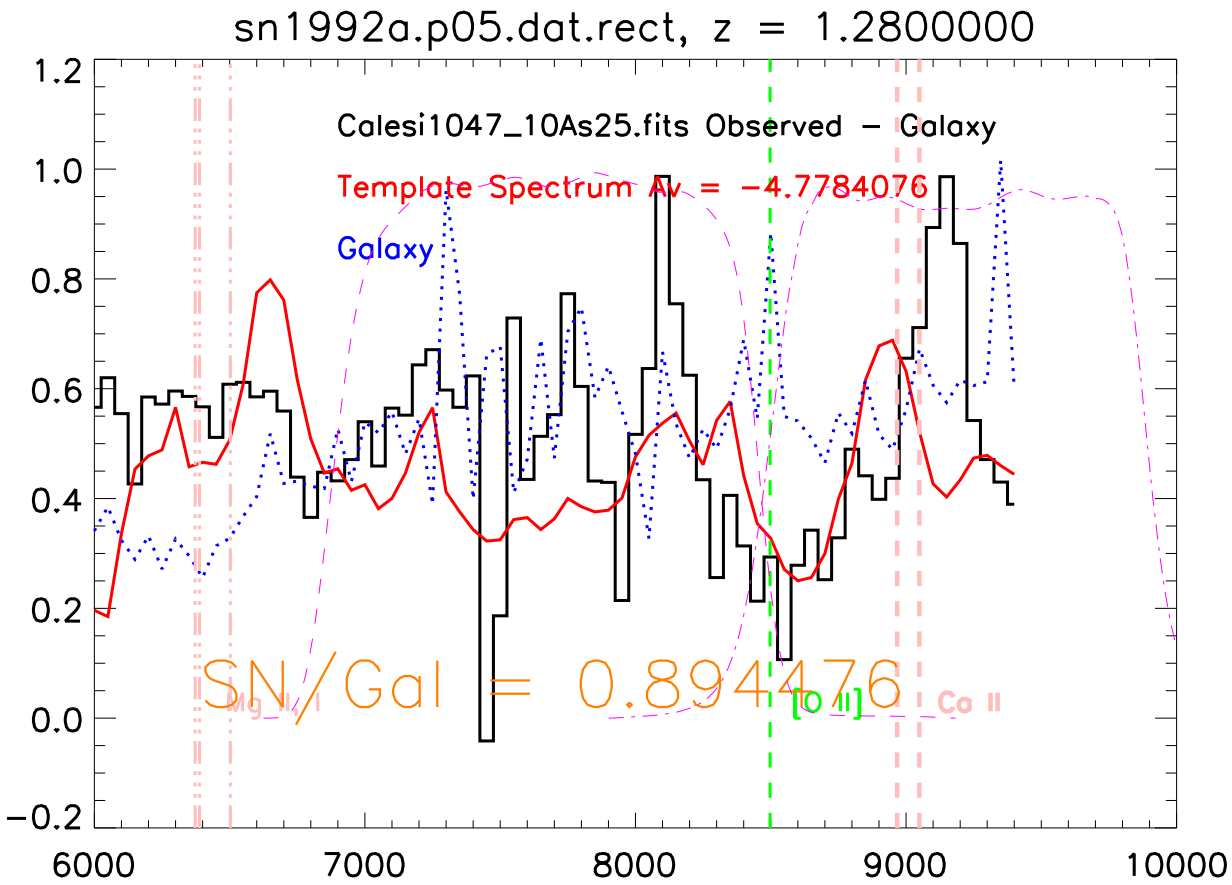

2.8
2.4
2.2
3.1
2.2
3.3
1.0
3.0
2.2
2.8
2.4
2.8

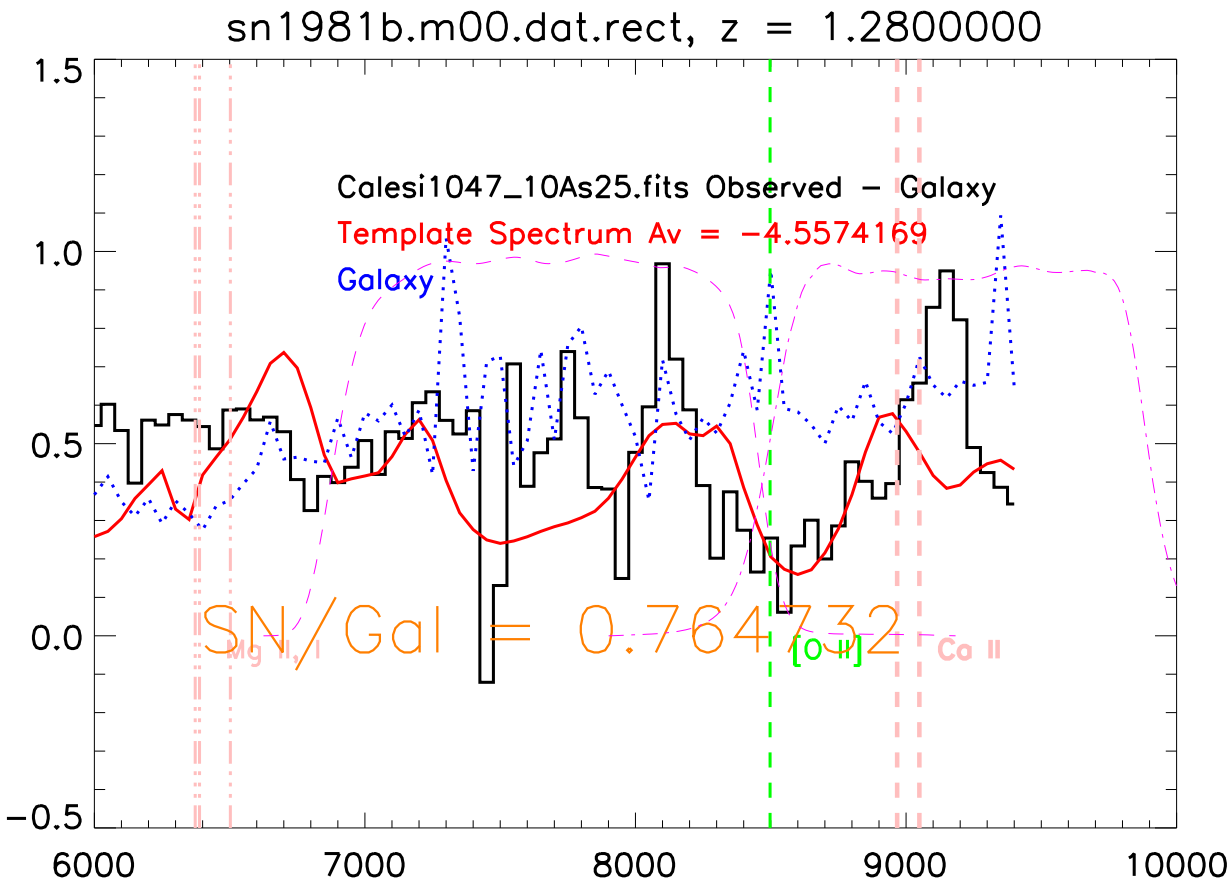

3.5
3.0
2.5
2.0
1.5
1.0
χ²
40
20
0
−20
dφ/s
0.5
1.0
1.5
2.0
Δm15

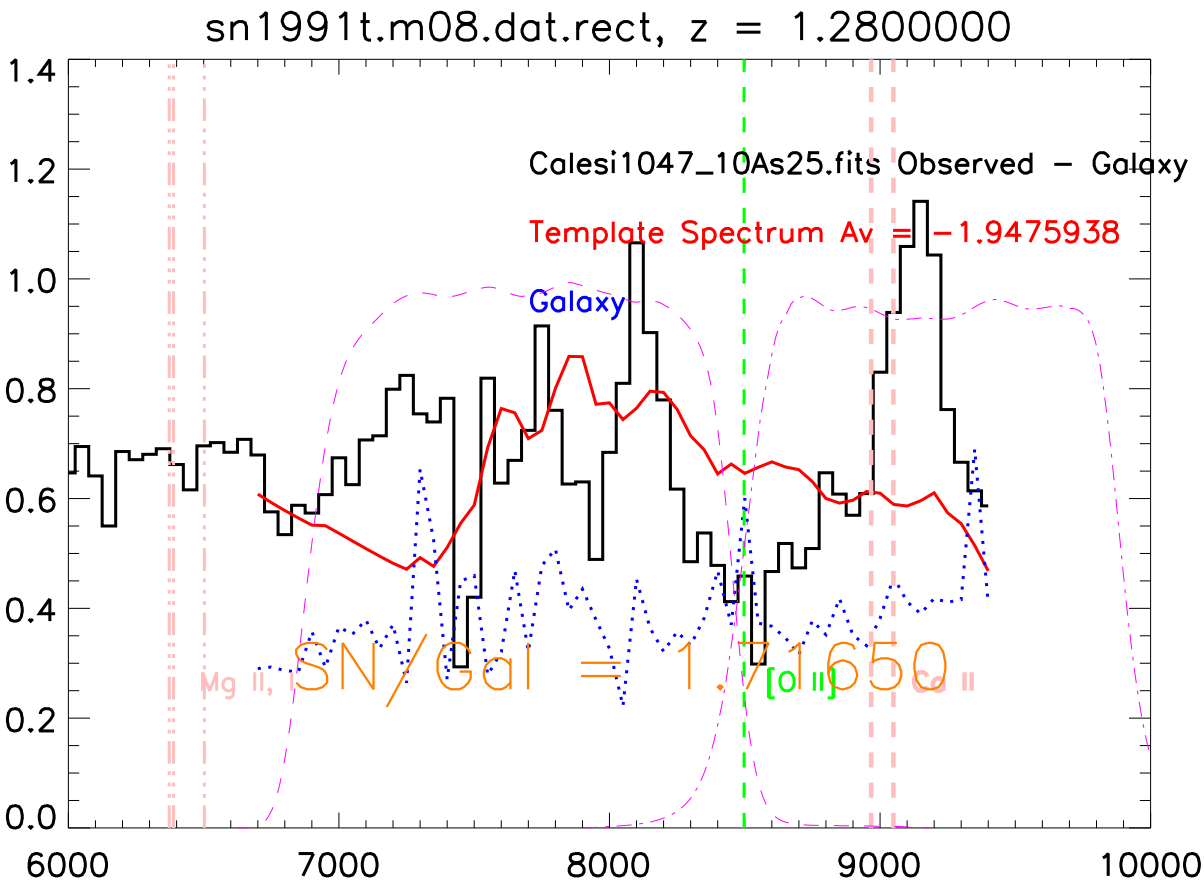

Calesi1047_10As25.fits
X^2
z
0
2
4
6
8
10
12
1.280
1.290
1.300
1.310
1.320
1.330
sn1994d.m03.dat.rect
sn1991t.m08.dat.rect
sn1990n.m00.dat.rect

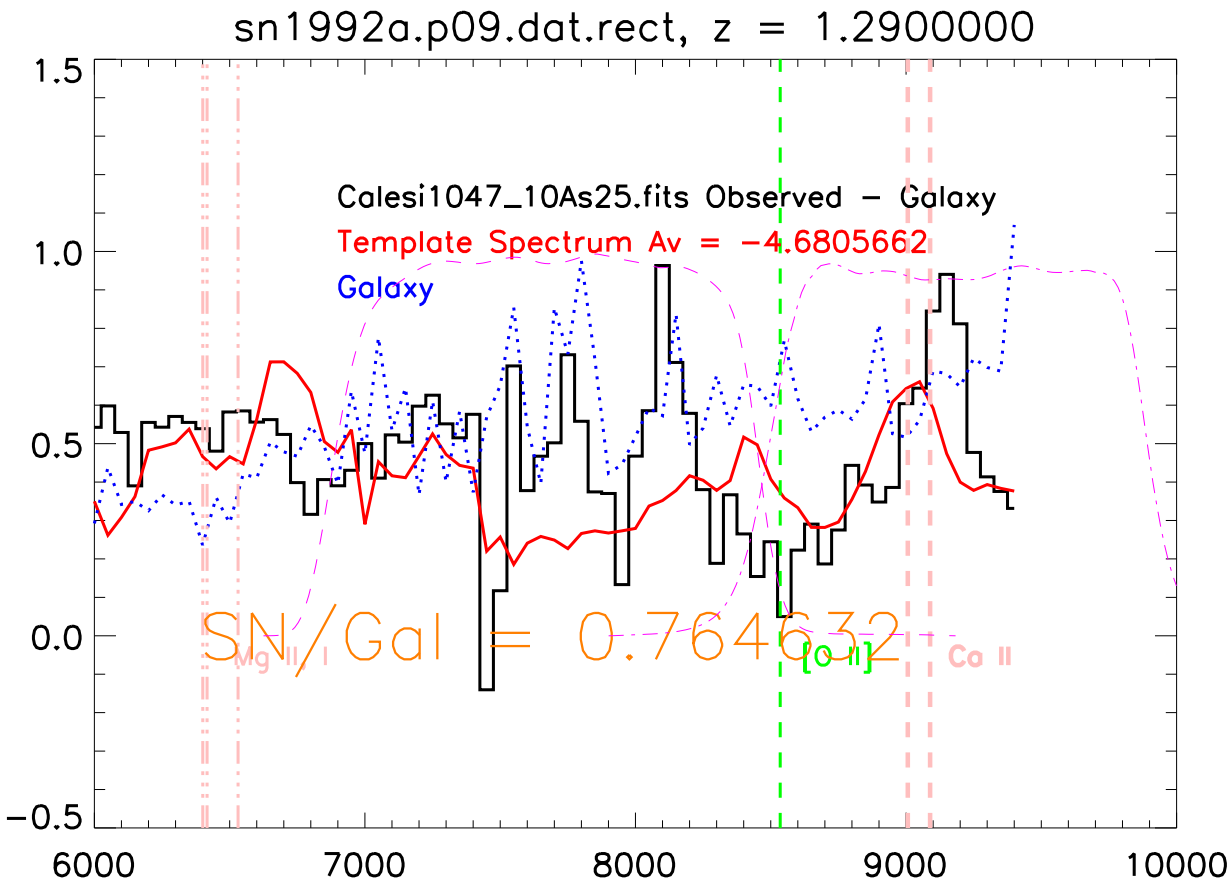

Calesi1047_10As25.fits----sn1994d.m03.dat.rect
sn1994d.m03.dat.rect
Mg II, I
[O II]
Ca II
1.8
1.6
1.4
1.2
1.0
0.8
0.6
6000
7000
8000
9000
10000

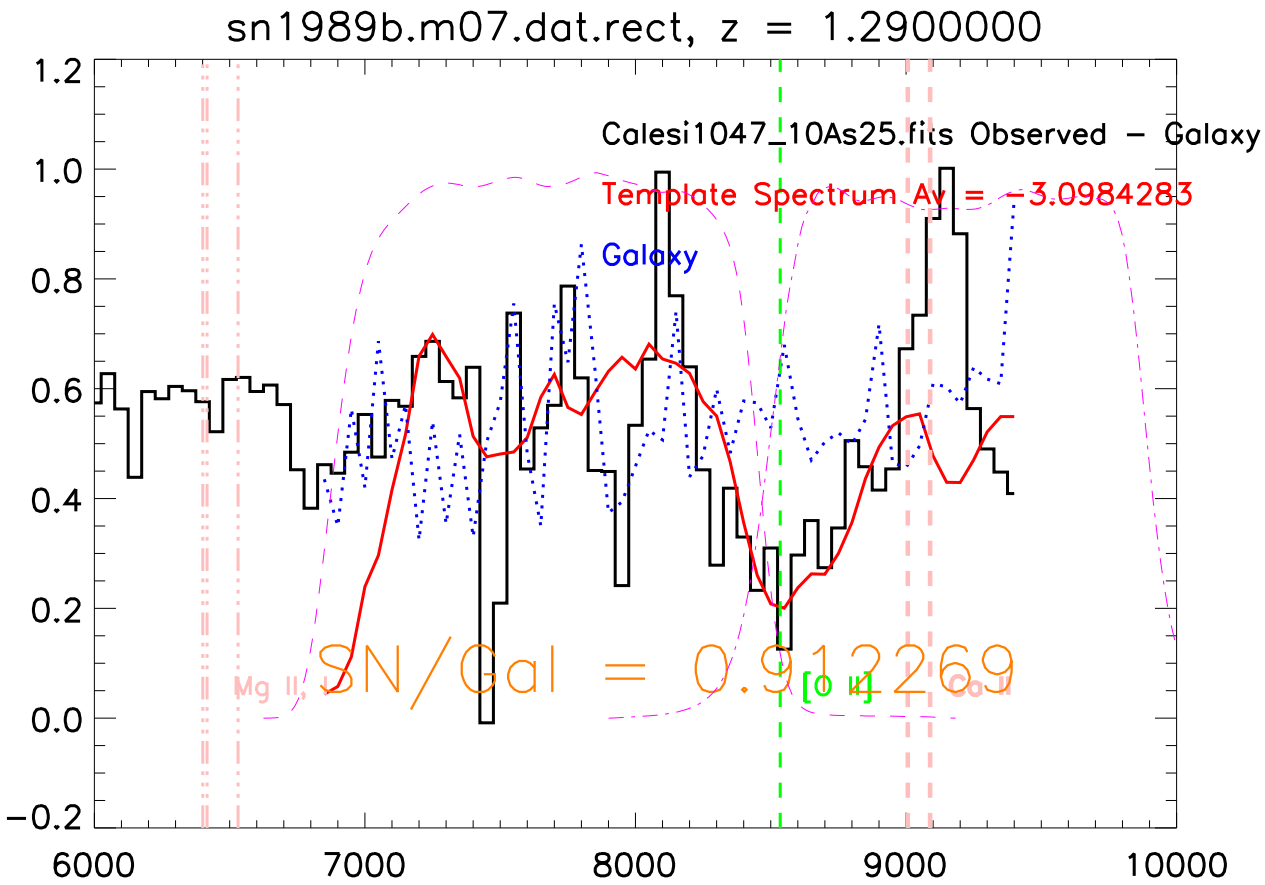

sn1994d.m03.dat.rect, z = 1.3199999
Calesi1047_10As25.fits Observed – Galaxy
Template Spectrum Av = 0.11640100
Galaxy
SN/Gal = 8.49239
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
6000
7000
8000
9000
10000

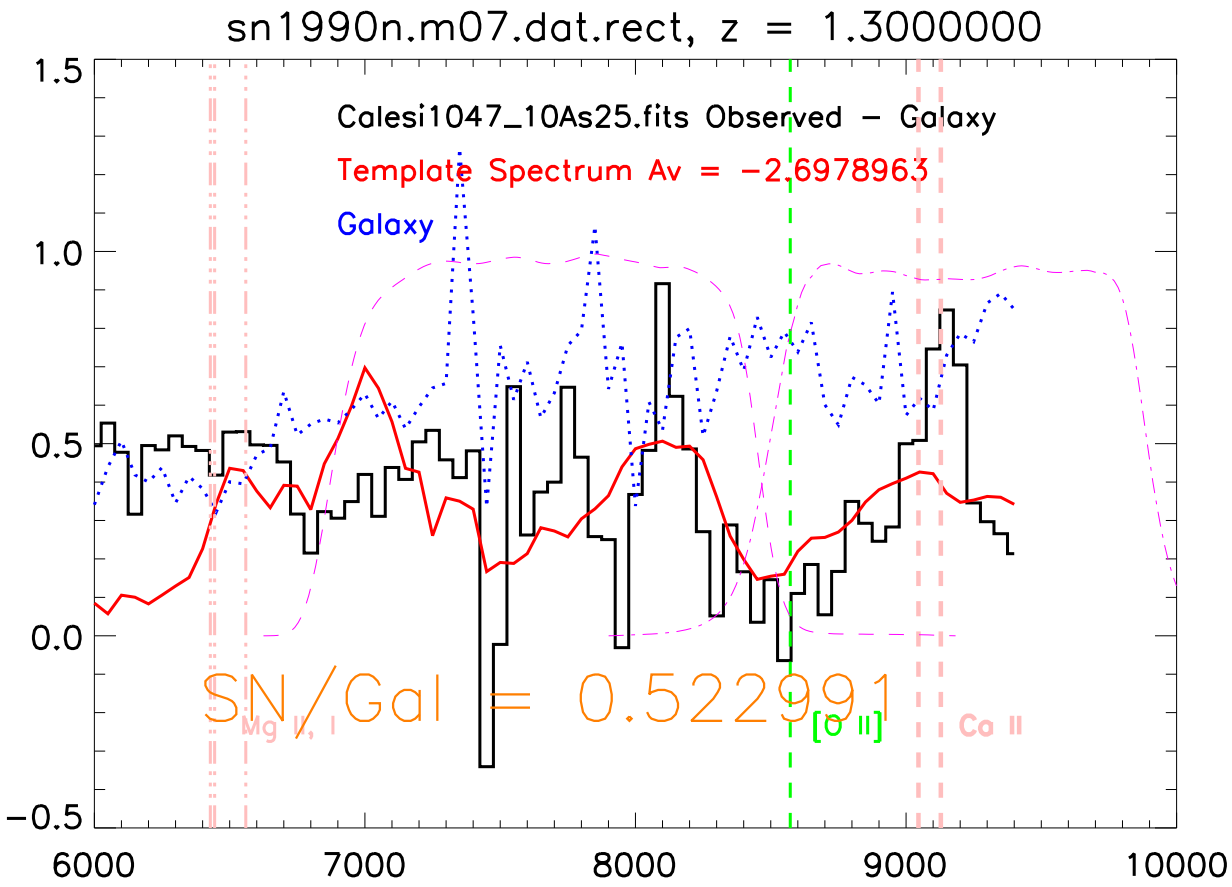

sn1992a.p05.dat.rect, z = 1.2800000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −4.7784076
Galaxy
SN/Gal = 0.8944476
Mg II
[O II]
Ca II
1.2
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000

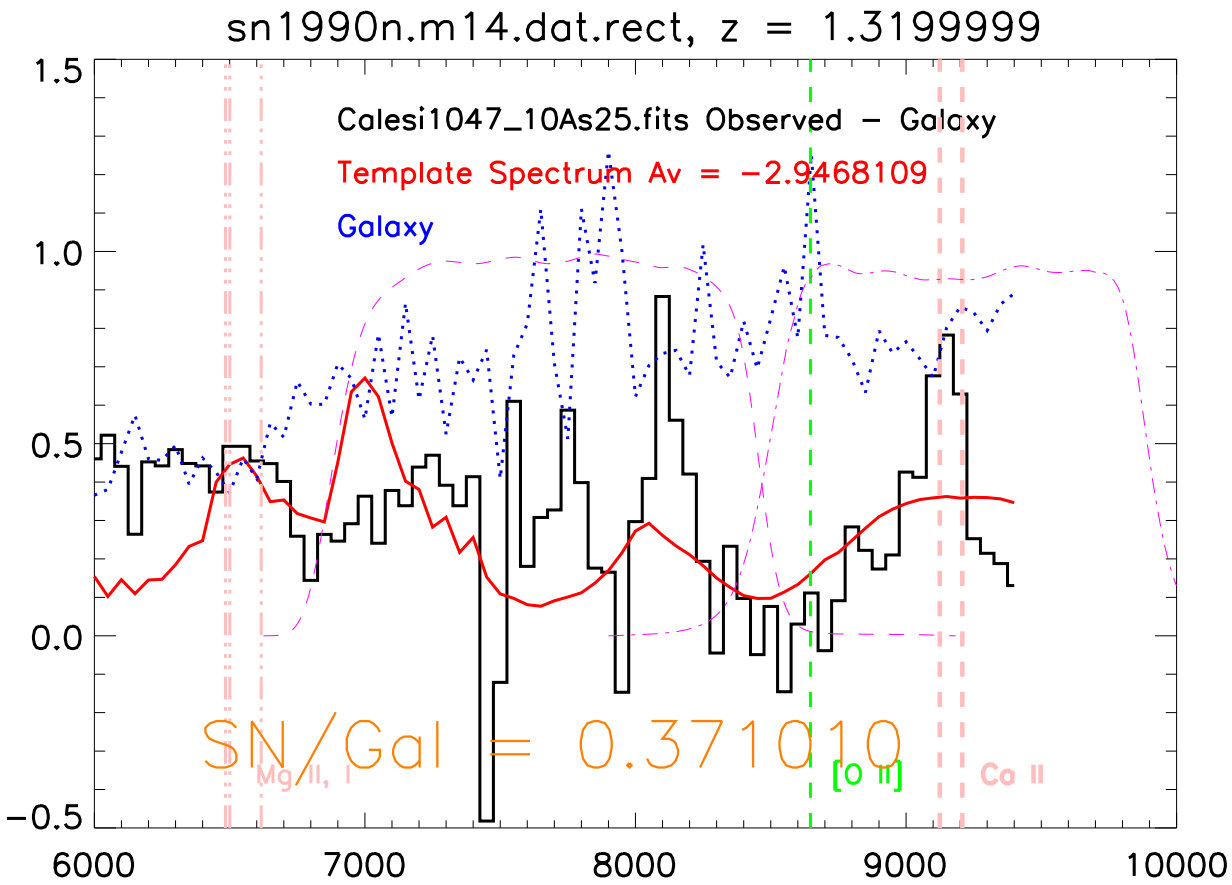

sn1981b.m00.dat.rect, z = 1.2800000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −4.5574169
Galaxy
SN/Gal = 0.764732
Mg II
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

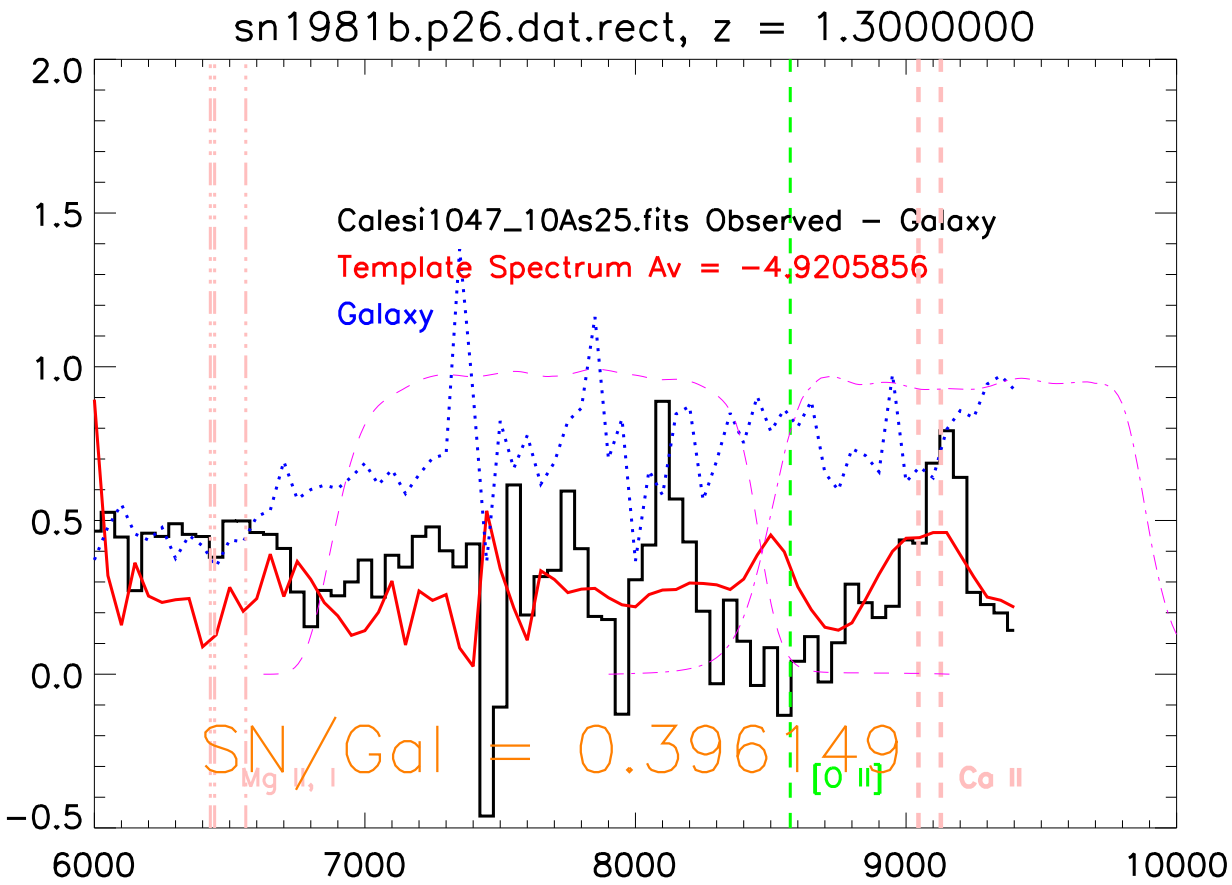

sn1991t.m08.dat.rect, z = 1.2800000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −1.9475938
Galaxy
SN/Gal = 1.71650
Mg II
[O II]
Ca II
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6000
7000
8000
9000
10000

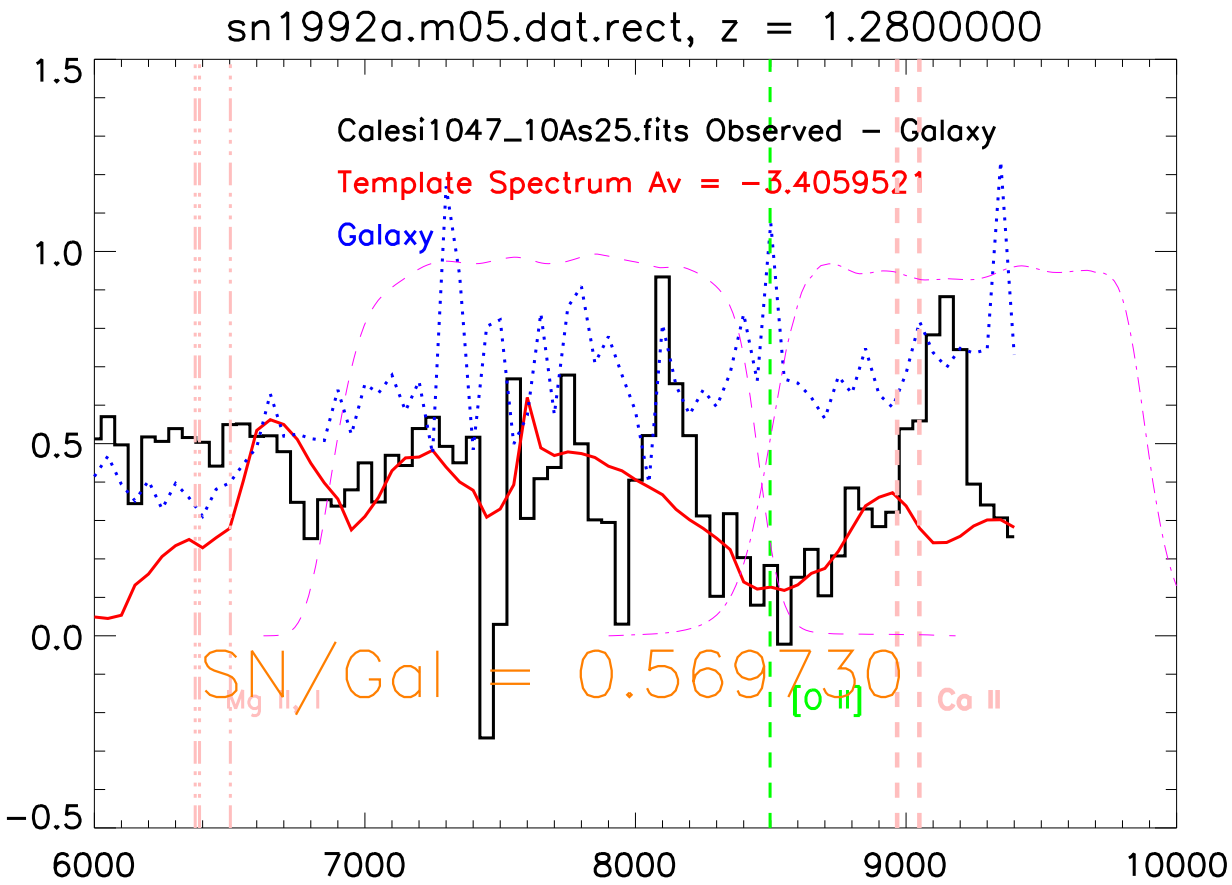

sn1992a.p09.dat.rect, z = 1.2900000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −4.6805662
Galaxy
SN/Gal = 0.764632
Mg II
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000

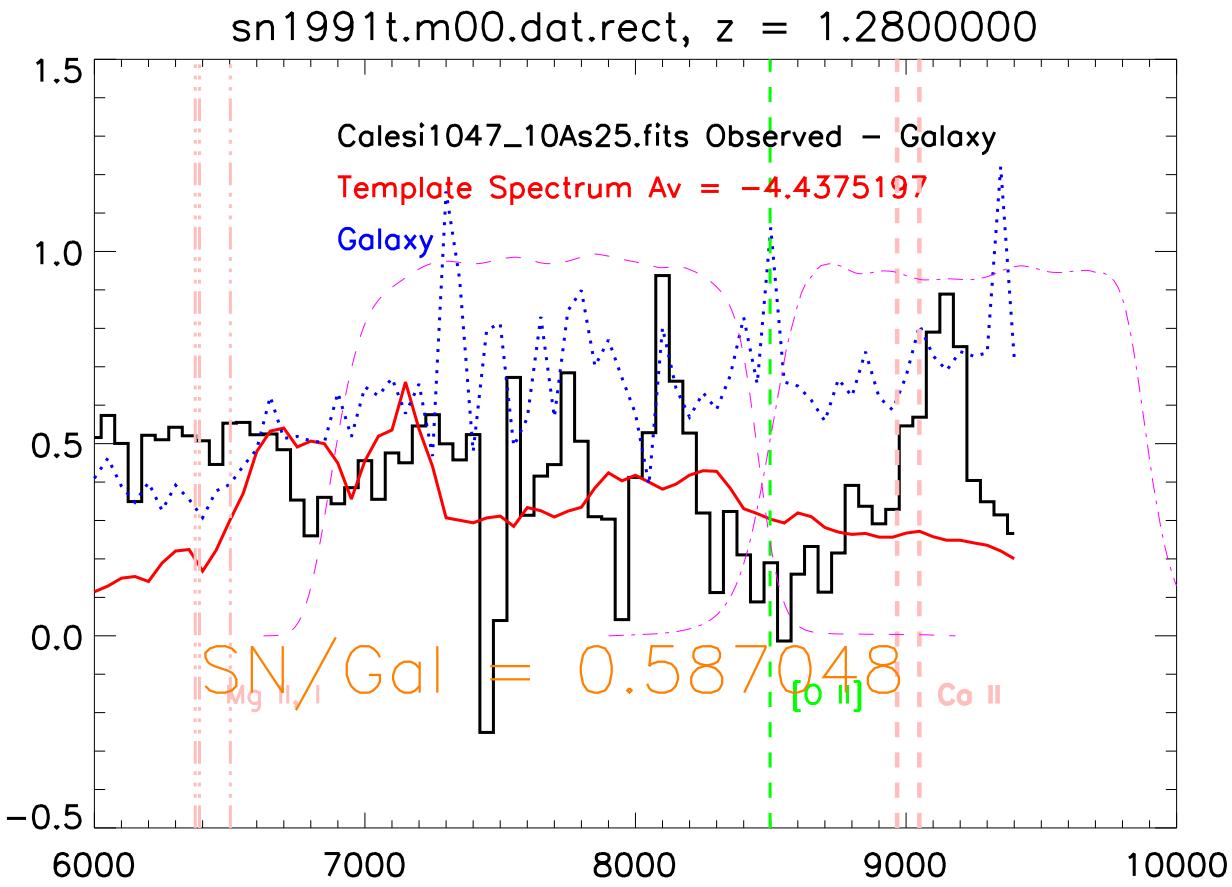

sn1989b.m07.dat.rect, z = 1.2900000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −3.0984283
Galaxy
SN/Gal = 0.9112269
Mg II
[O II]
Ca II
1.2
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
6000
7000
8000
9000
10000


sn1990n.m07.dat.rect, z = 1.3000000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −2.6978963
Galaxy
SN/Gal = 0.522991
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1990n.m14.dat.rect, z = 1.3199999
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −2.9468109
Galaxy
SN/Gal = 0.371010
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1981b.p26.dat.rect, z = 1.3000000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −4.9205856
Galaxy
S/N/Gal = 0.396149
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.m05.dat.rect, z = 1.2800000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −3.4059521
Galaxy
SN/Gal = 0.569730
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000


sn1991t.m00.dat.rect, z = 1.2800000
Calesi1047_10As25.fits Observed − Galaxy
Template Spectrum Av = −4.4375197
Galaxy
SN/Gal = 0.587048
Mg II
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
6000
7000
8000
9000
10000