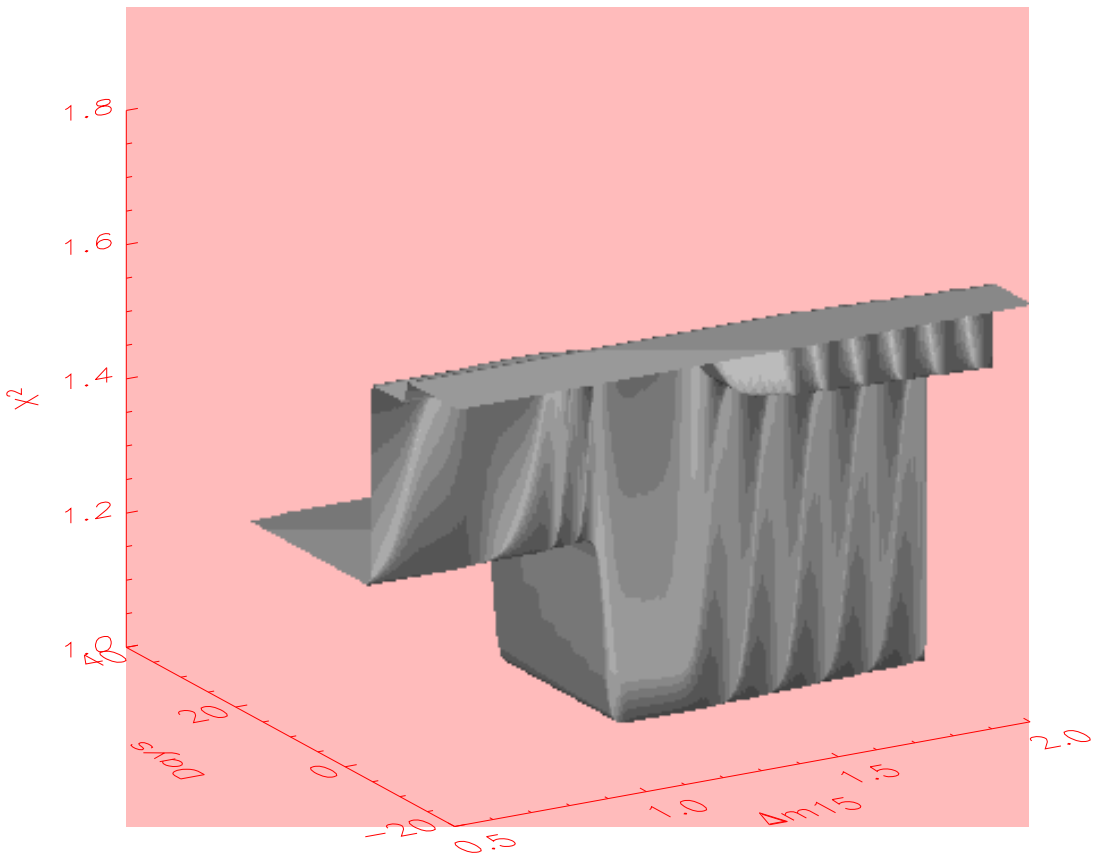
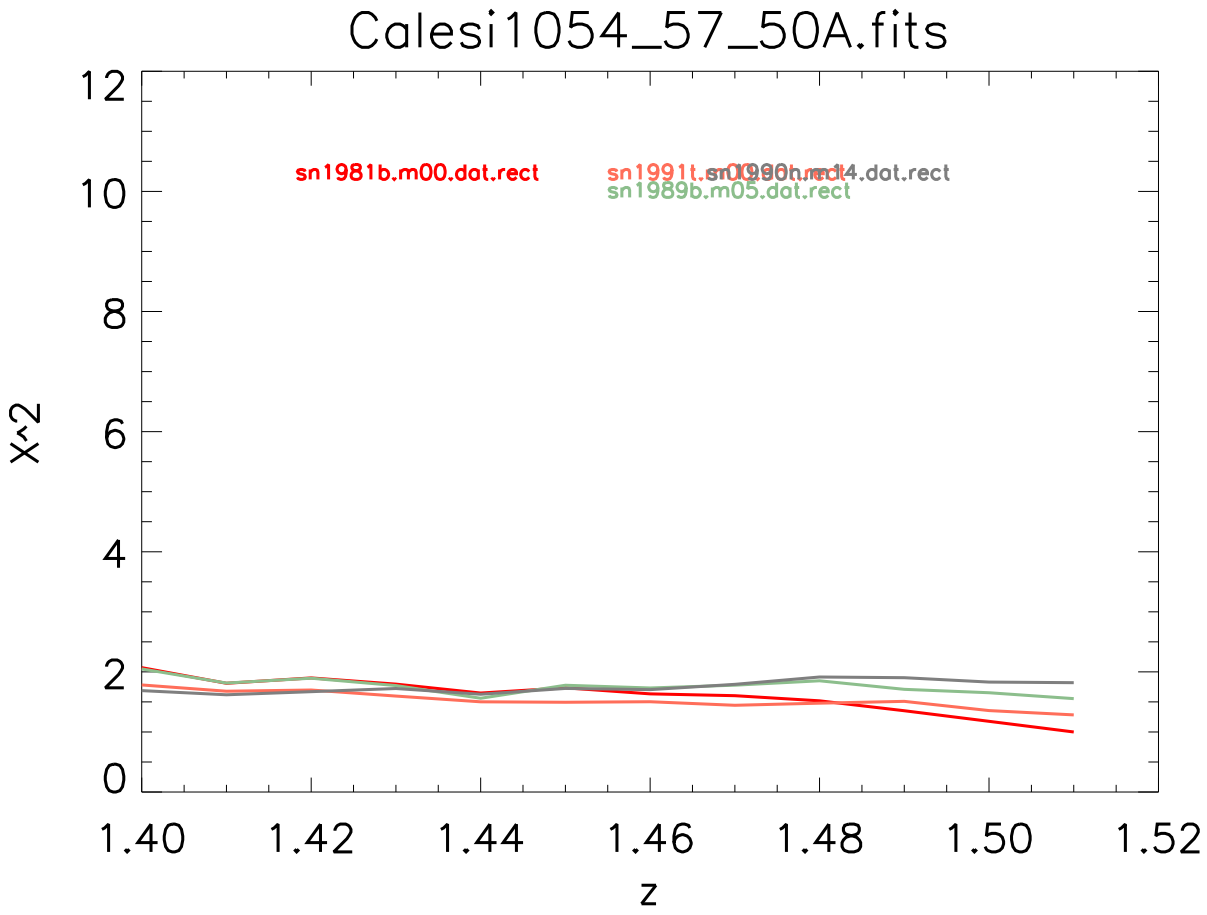
1.3 1.0

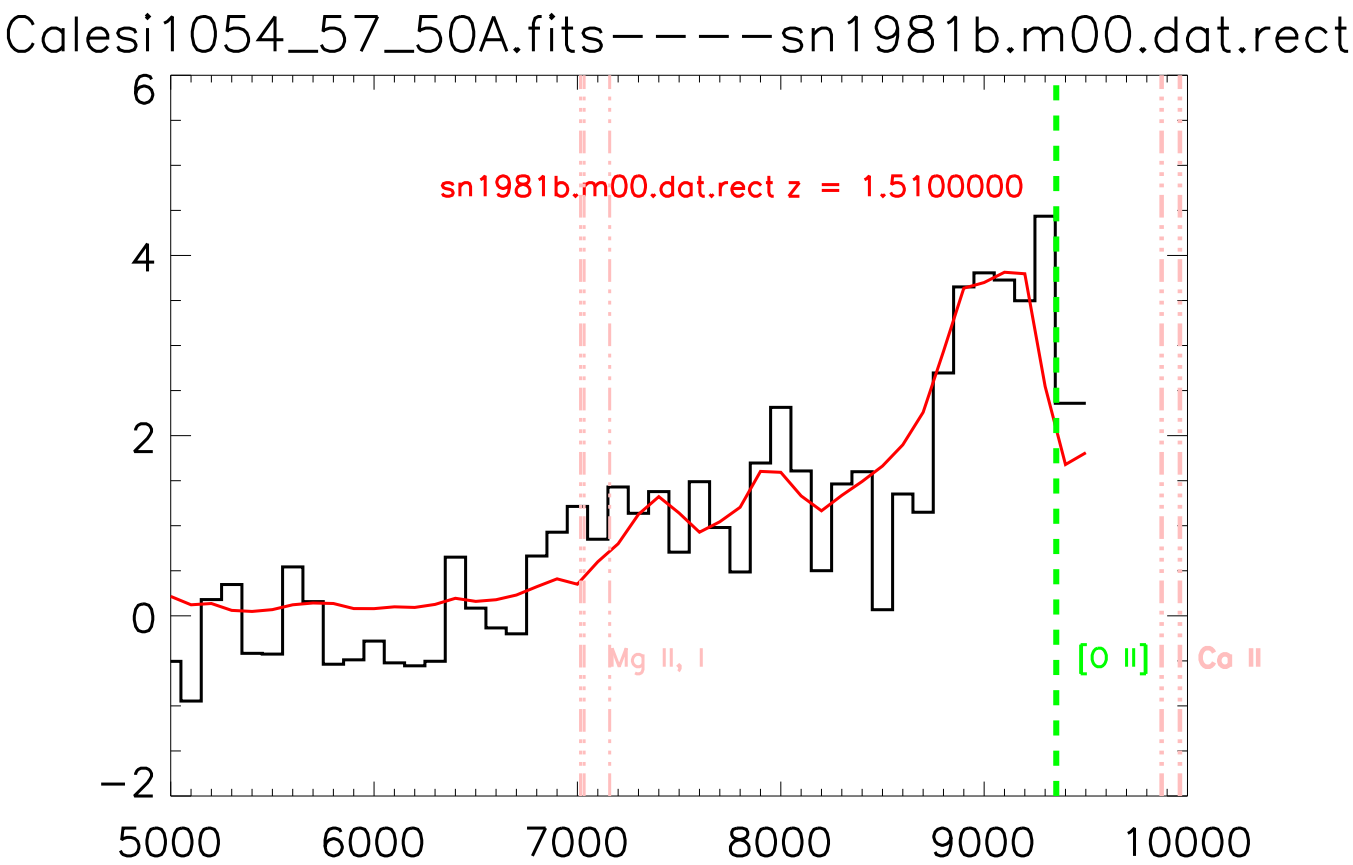
1.6 1.5

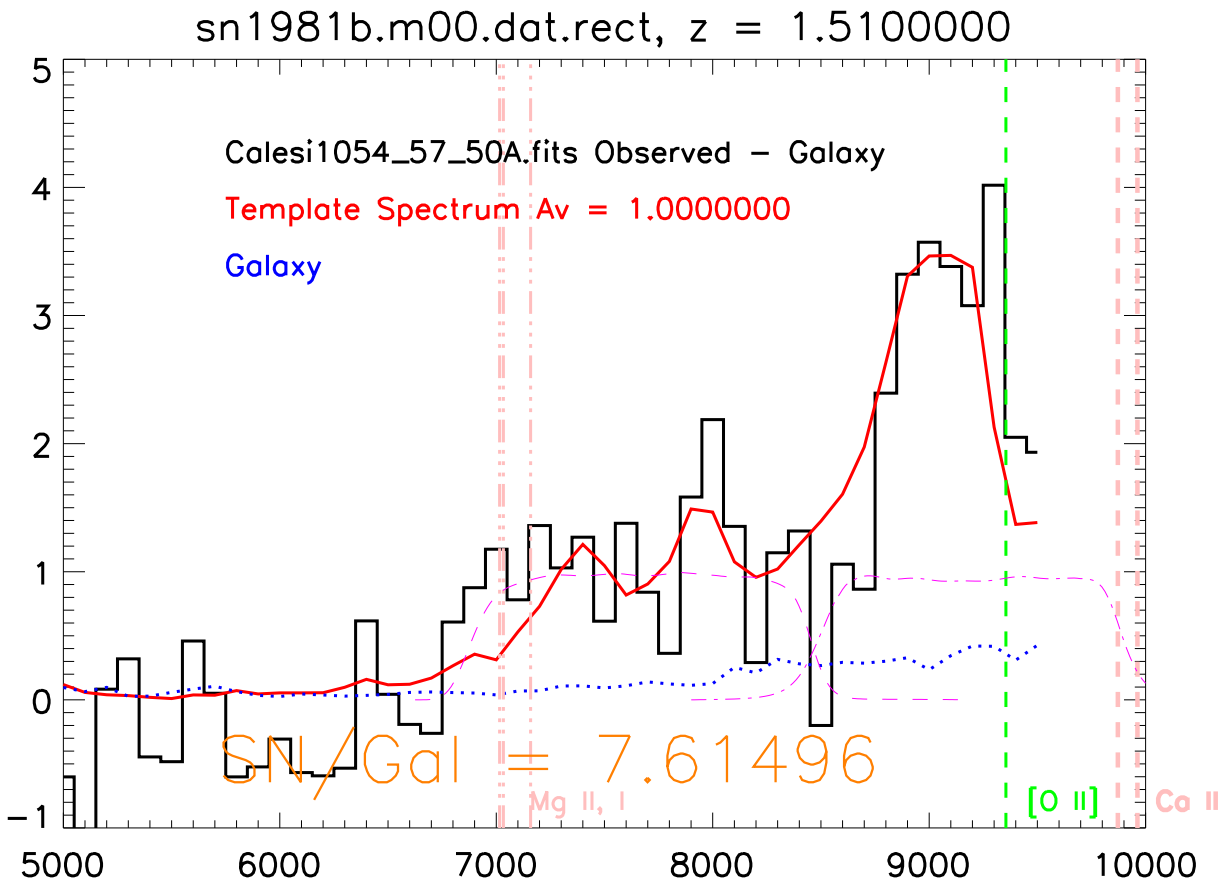
1.6

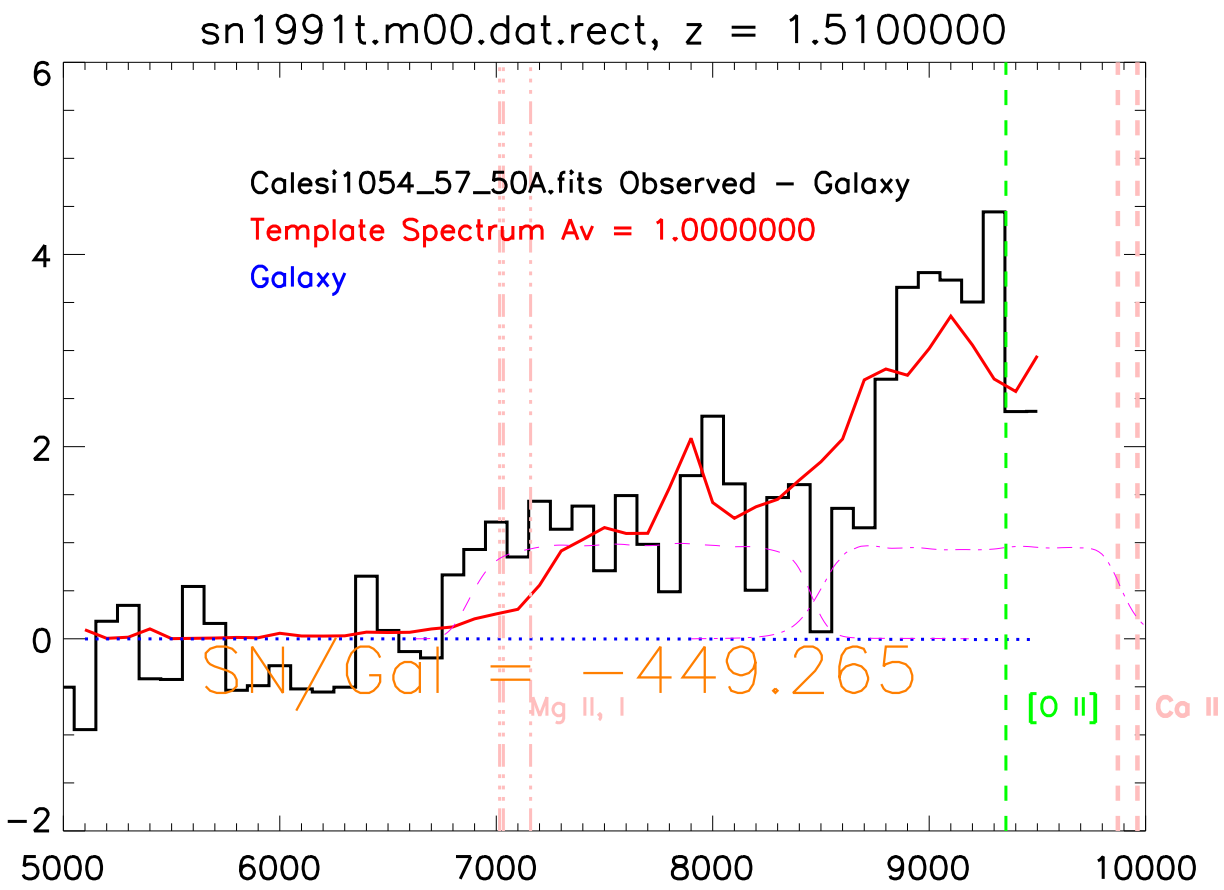
1.6

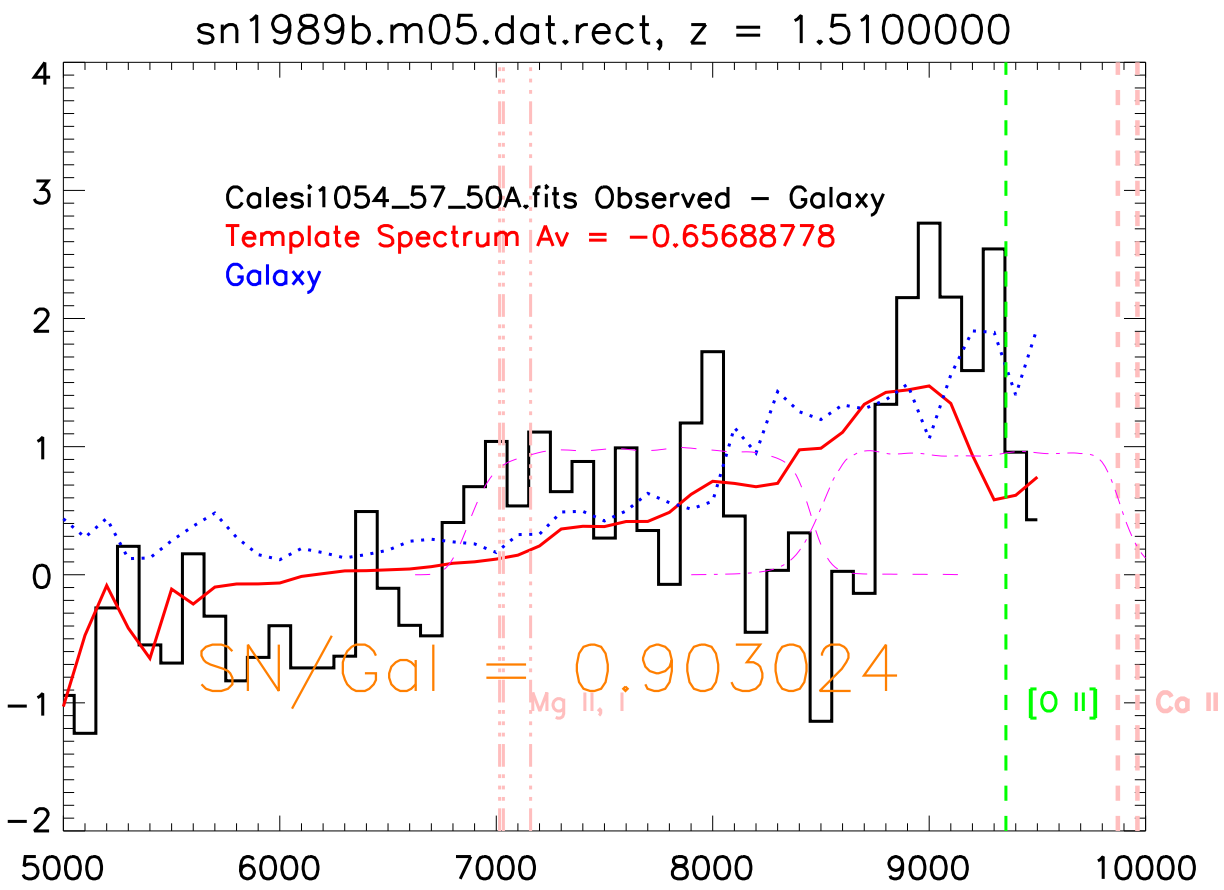

1.8
1.6
1.4
1.2
1.0
χ²
40
20
0
−20
Dδ/s
0.5
1.0
1.5
2.0
Δm15

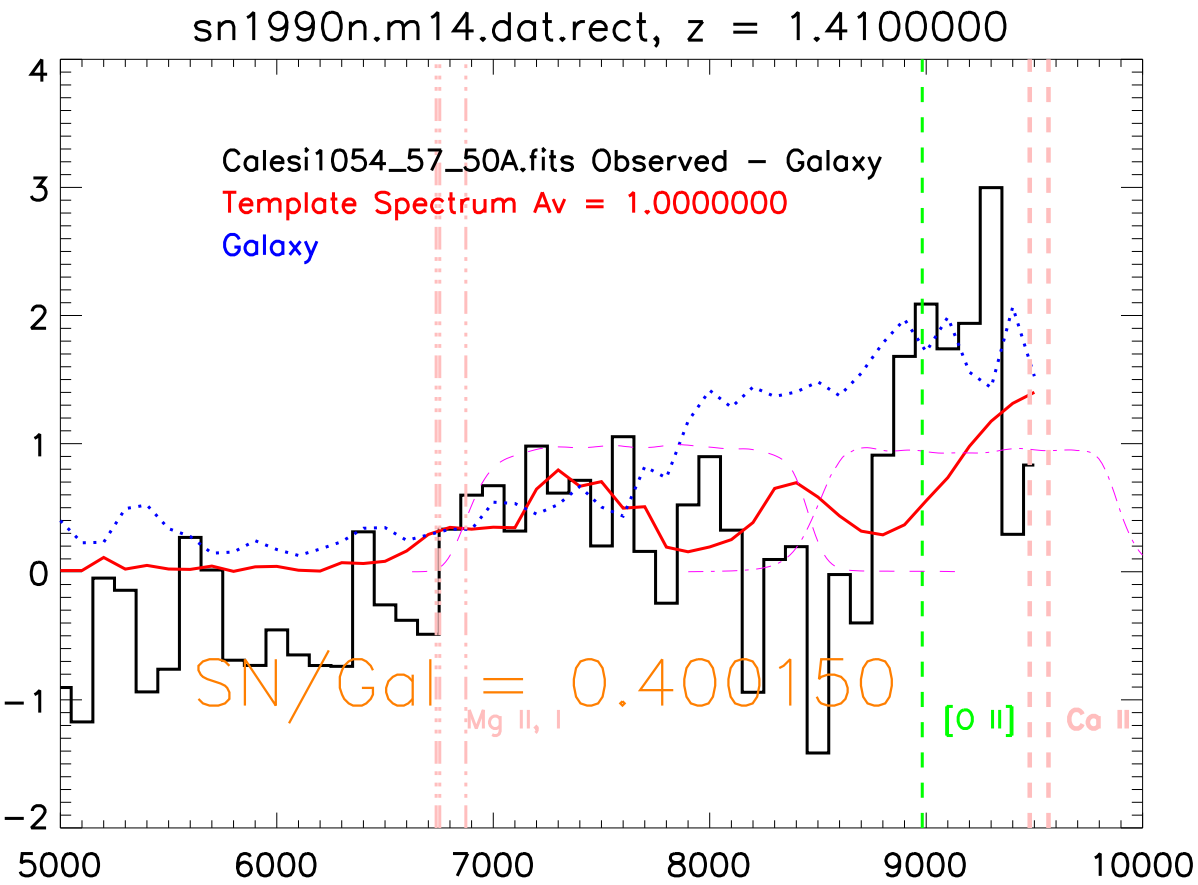

Calesi1054_57_50A.fits
sn1981b.m00.dat.rect
sn1989b.m05.dat.rect
X^2
z
0
2
4
6
8
10
12
1.40
1.42
1.44
1.46
1.48
1.50
1.52


Calesi1054_57_50A.fits----sn1981b.m00.dat.rect
sn1981b.m00.dat.rect z = 1.5100000
Mg II, I
[O II]
Ca II
6
4
2
0
−2
5000
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.5100000
Calesi1054_57_50A.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
S/N Gal = 7.61496
Mg II, I
[O II]
Ca II
5
4
3
2
1
0
−1
5000
6000
7000
8000
9000
10000


sn1991t.m00.dat.rect, z = 1.5100000
Calesi1054_57_50A.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = −449.265
Mg II, I
[O II]
Ca II
6
4
2
0
−2
5000
6000
7000
8000
9000
10000


sn1989b.m05.dat.rect, z = 1.5100000
Calesi1054_57_50A.fits Observed − Galaxy
Template Spectrum Av = −0.65688778
Galaxy
SN/Gal = 0.903024
Mg II, I
[O II]
Ca II
4
3
2
1
0
−1
−2
5000
6000
7000
8000
9000
10000


sn1990n.m14.dat.rect, z = 1.4100000
Calesi1054_57_50A.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.400150
Mg II, I
[O II]
Ca II
4
3
2
1
0
−1
−2
5000
6000
7000
8000
9000
10000