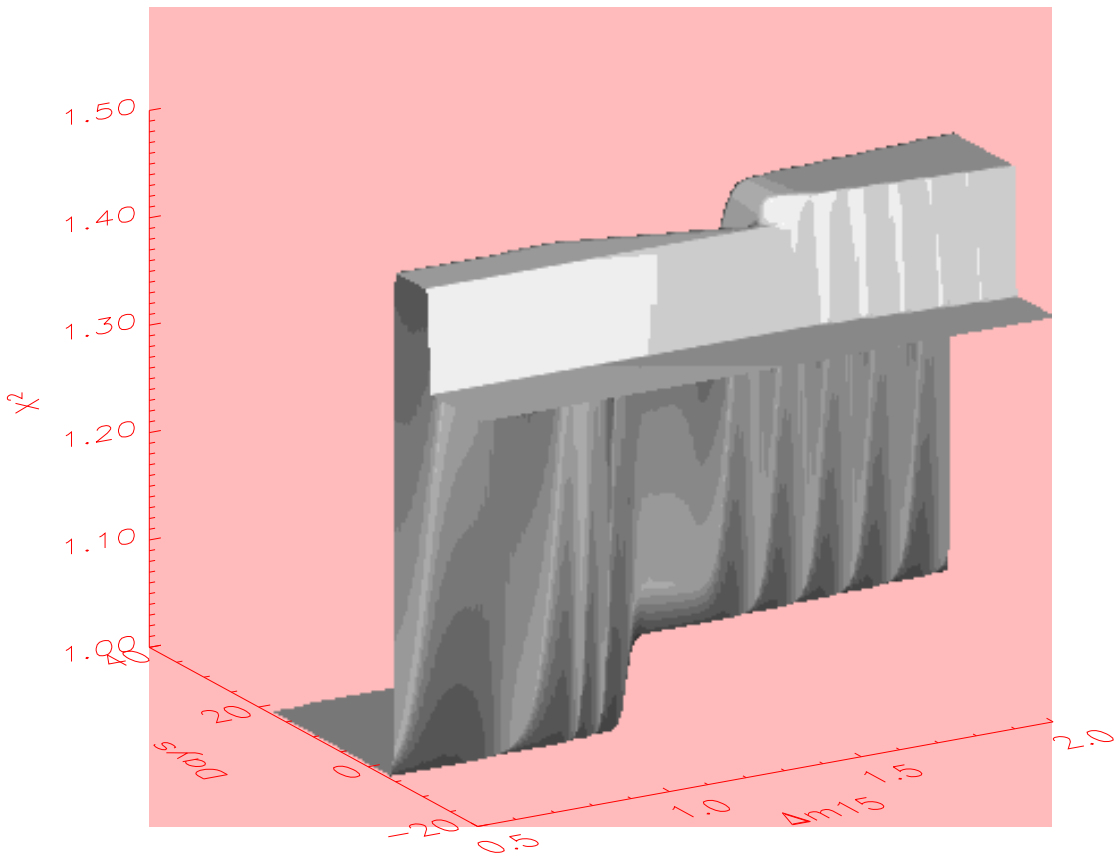
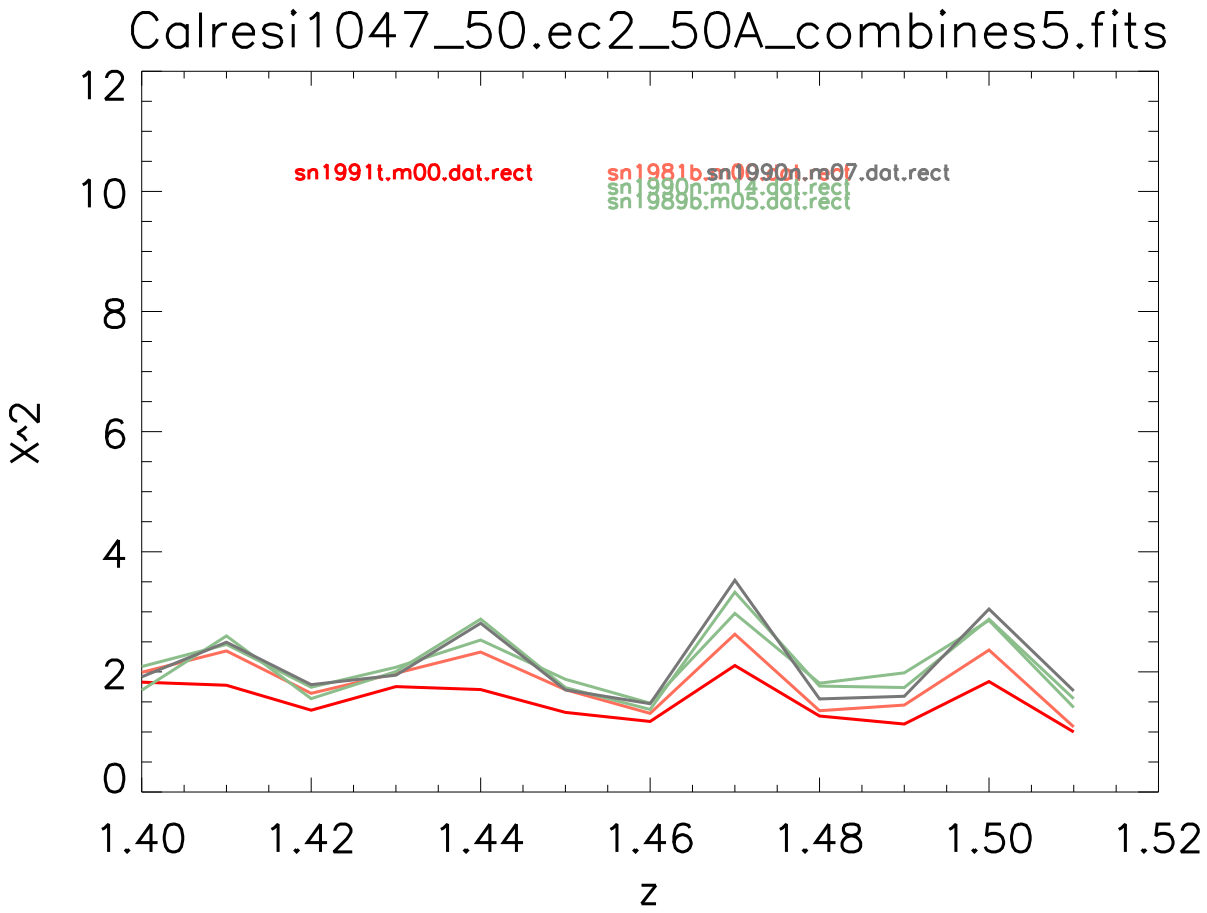
1.0 1.1

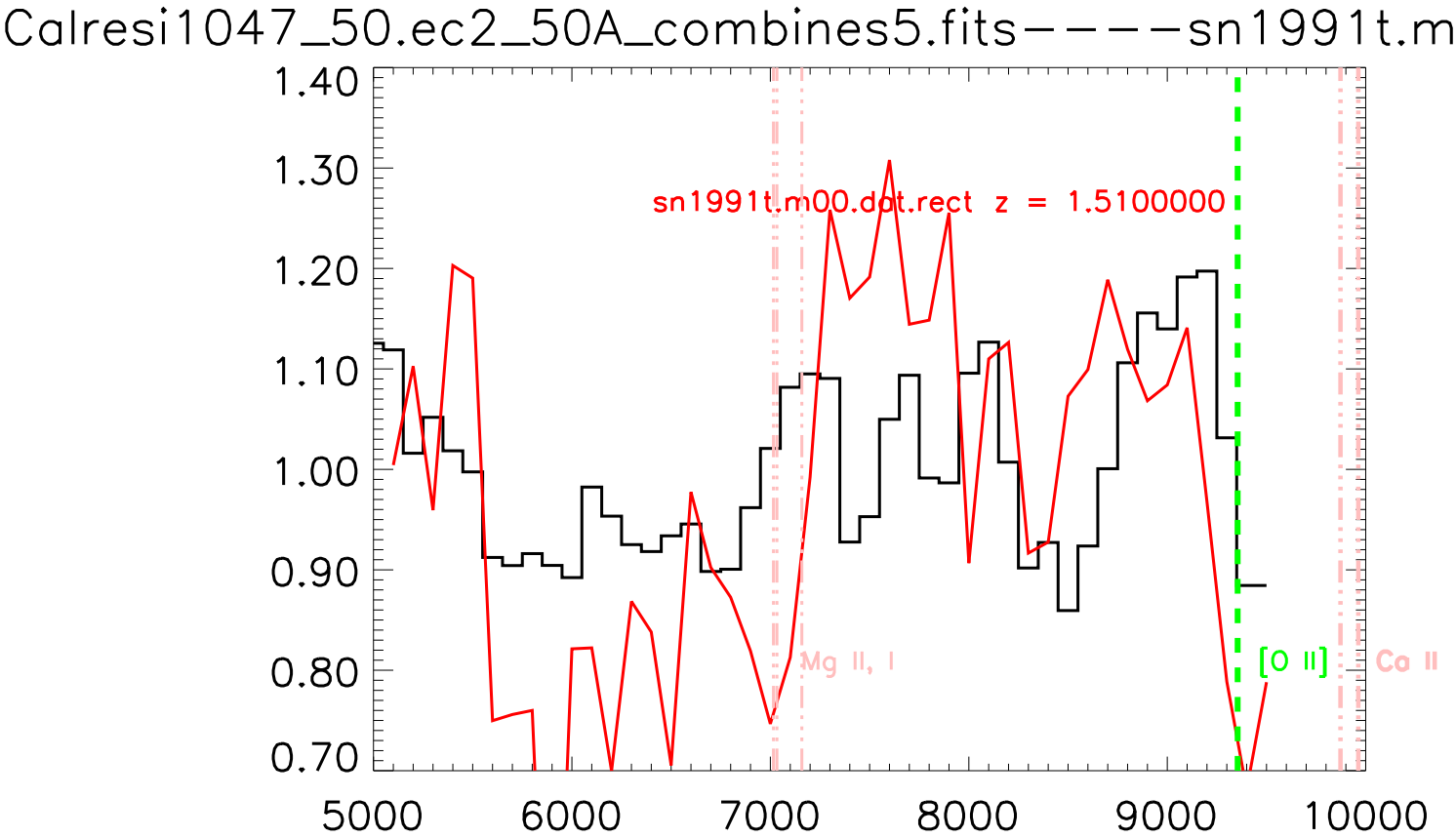
1.4 1.5

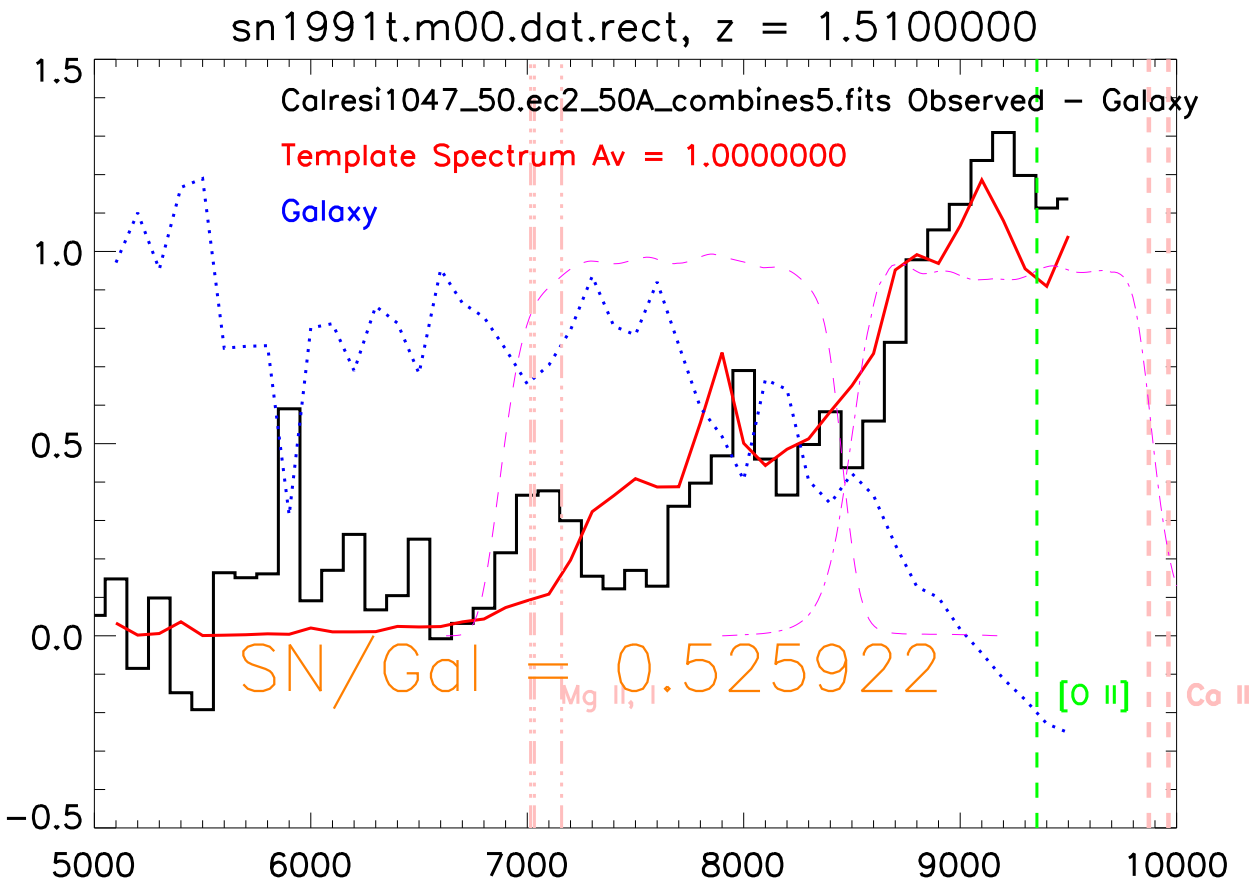
1.5

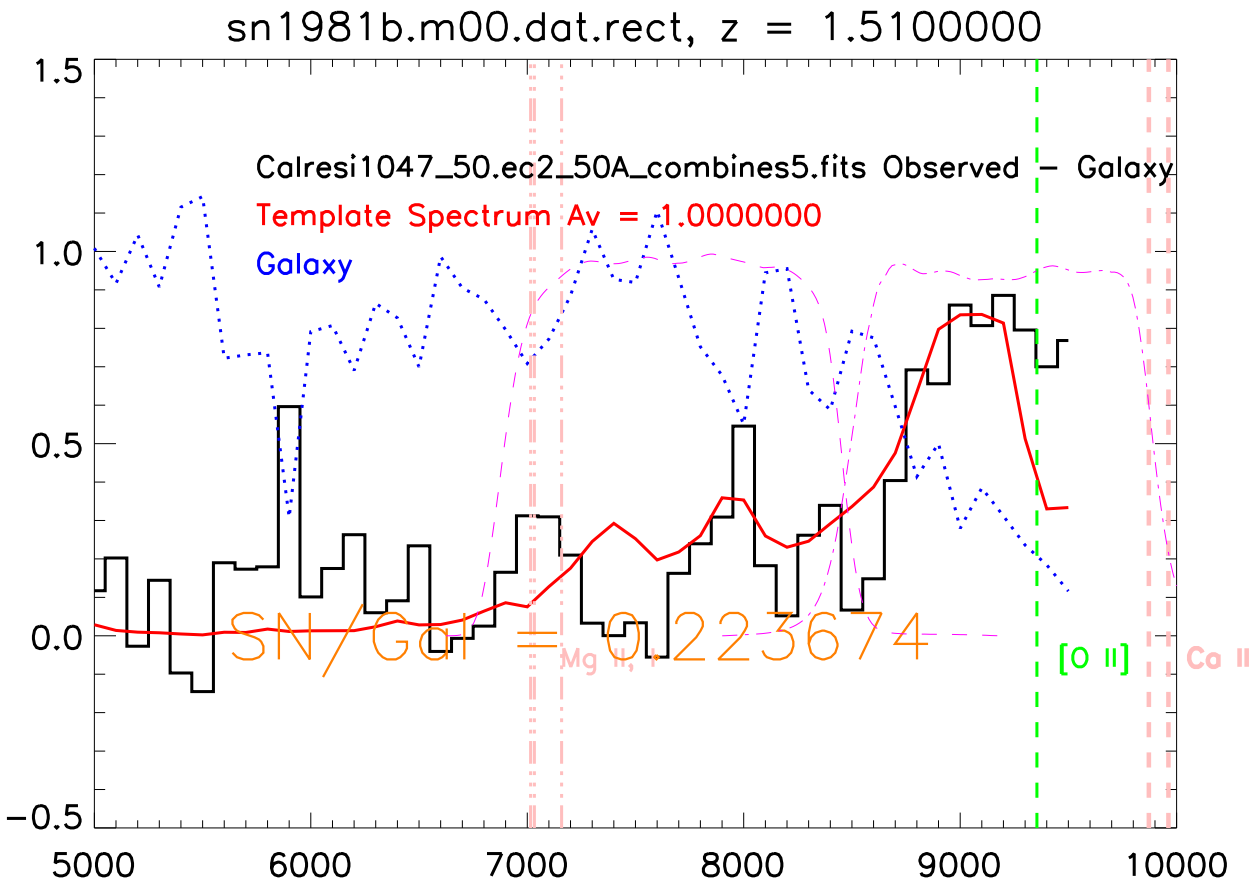
1.4

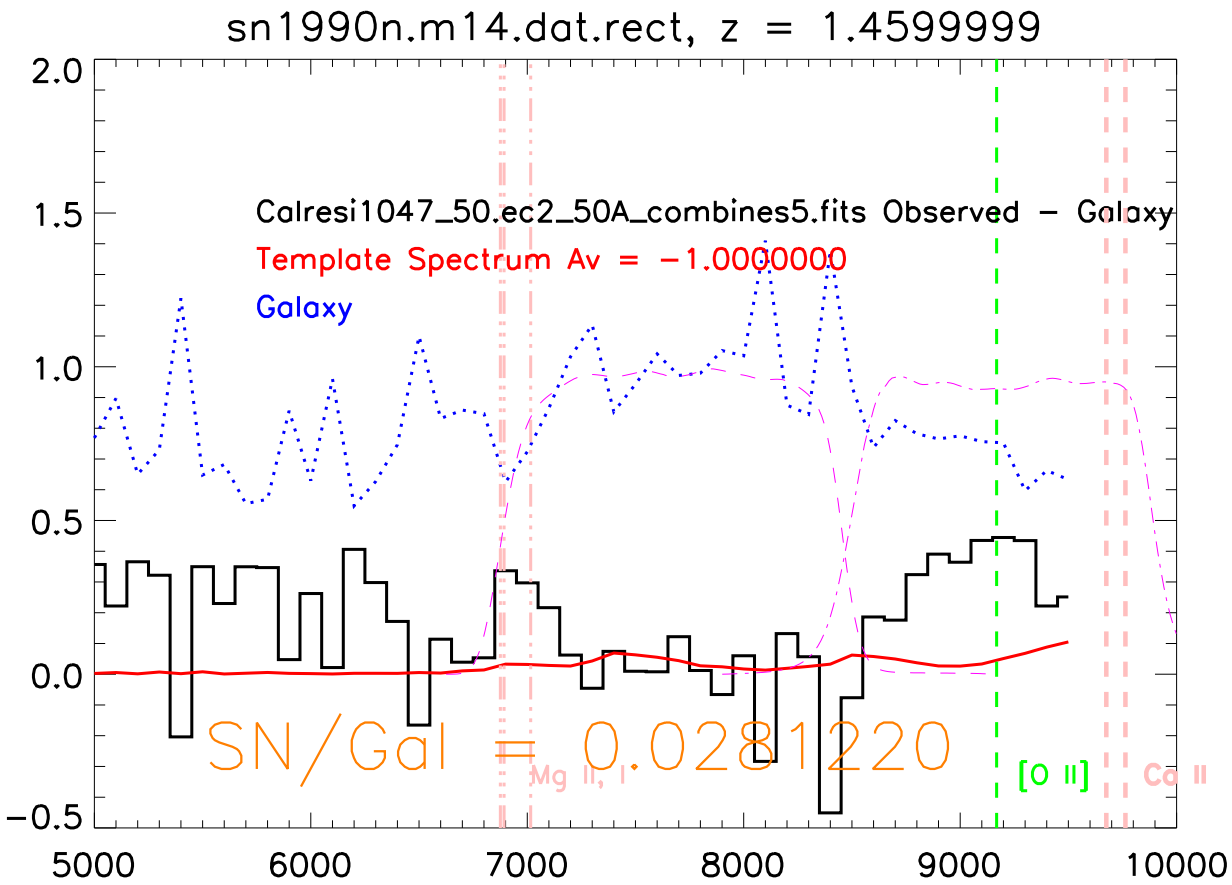

1.50
1.40
1.30
1.20
1.10
1.00
χ²
40
20
0
−20
Δm15
0.5
1.0
1.5
2.0

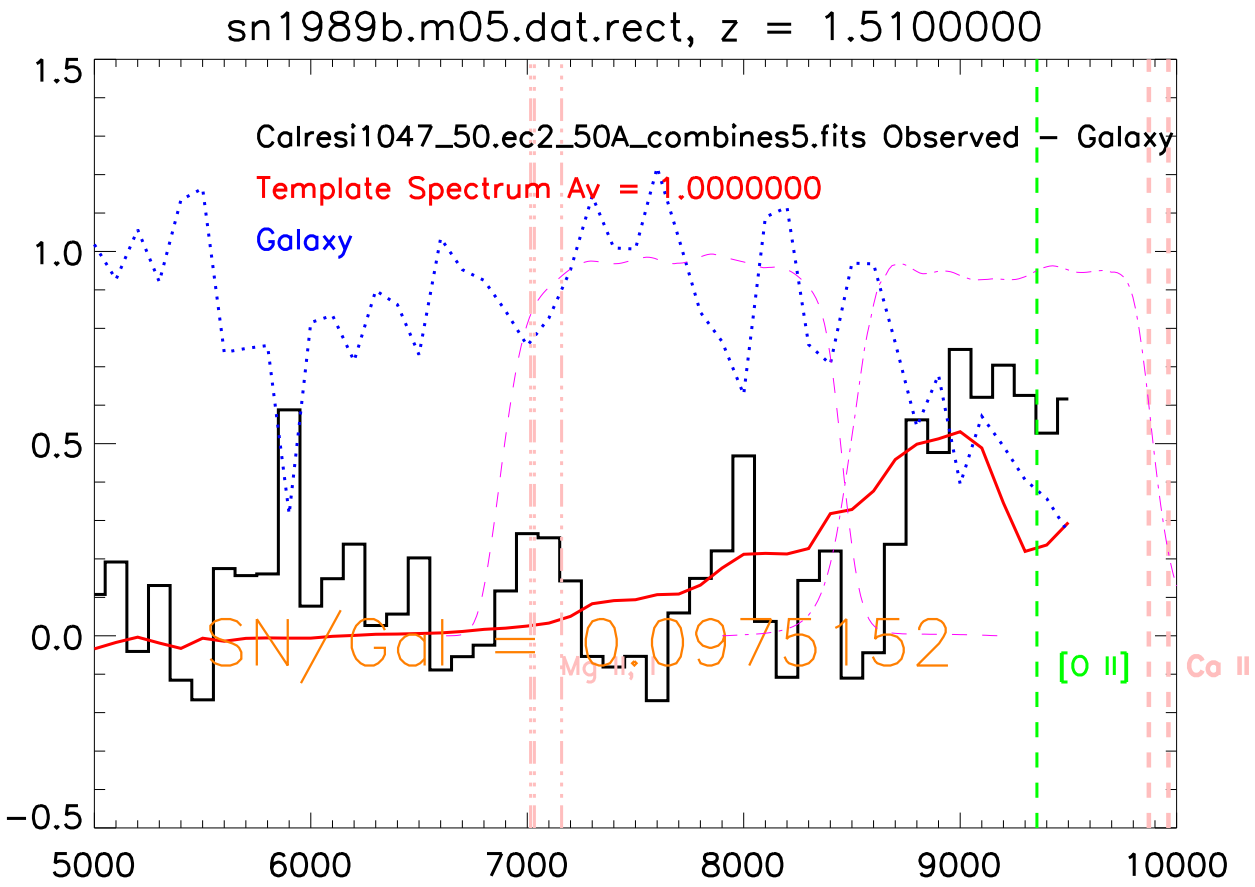

Calresi1047_50.ec2_50A_combines5.fits
sn1991t.m00.dat.rect
sn1981b.sn0990n.m07.dat.rect
sn1990n.m14.dat.rect
sn1989b.m05.dat.rect
X^2
z
0
2
4
6
8
10
12
1.40
1.42
1.44
1.46
1.48
1.50
1.52

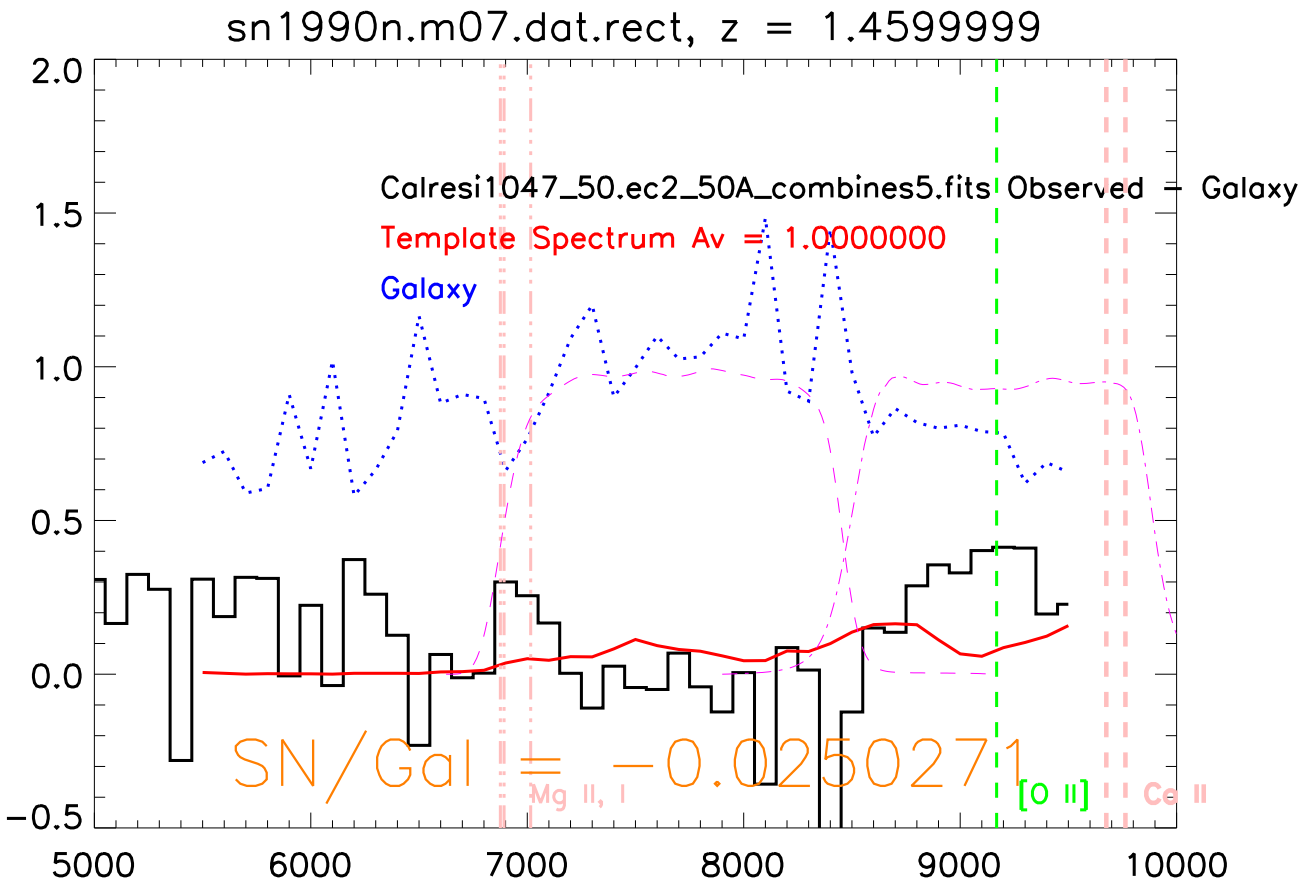

Calresi1047_50.ec2_50A_combines5.fits----sn1991t.m00.do
sn1991t.m00.dat.rect z = 1.5100000
Mg II, I
[O II]
Ca II
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
5000
6000
7000
8000
9000
10000


sn1991t.m00.dat.rect, z = 1.5100000
Calresi1047_50.ec2_50A_combines5.fits Observed − Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.525922
Mg II, I
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1981b.m00.dat.rect, z = 1.5100000
Calresi1047_50.ec2_50A_combines5.fits Observed – Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.223674
Mg II, 1
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1990n.m14.dat.rect, z = 1.4599999
Calresi1047_50.ec2_50A_combines5.fits Observed – Galaxy
Template Spectrum Av = −1.0000000
Galaxy
SN/Gal = 0.0281220
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1989b.m05.dat.rect, z = 1.5100000
Calresi1047_50.ec2_50A_combines5.fits Observed – Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = 0.0975152
[O II]
Ca II
1.5
1.0
0.5
0.0
−0.5
5000
6000
7000
8000
9000
10000


sn1990n.m07.dat.rect, z = 1.4599999
Calresi1047_50.ec2_50A_combines5.fits Observed - Galaxy
Template Spectrum Av = 1.0000000
Galaxy
SN/Gal = -0.0250271
Mg II, I
[O II]
Ca II
2.0
1.5
1.0
0.5
0.0
-0.5
5000
6000
7000
8000
9000
10000