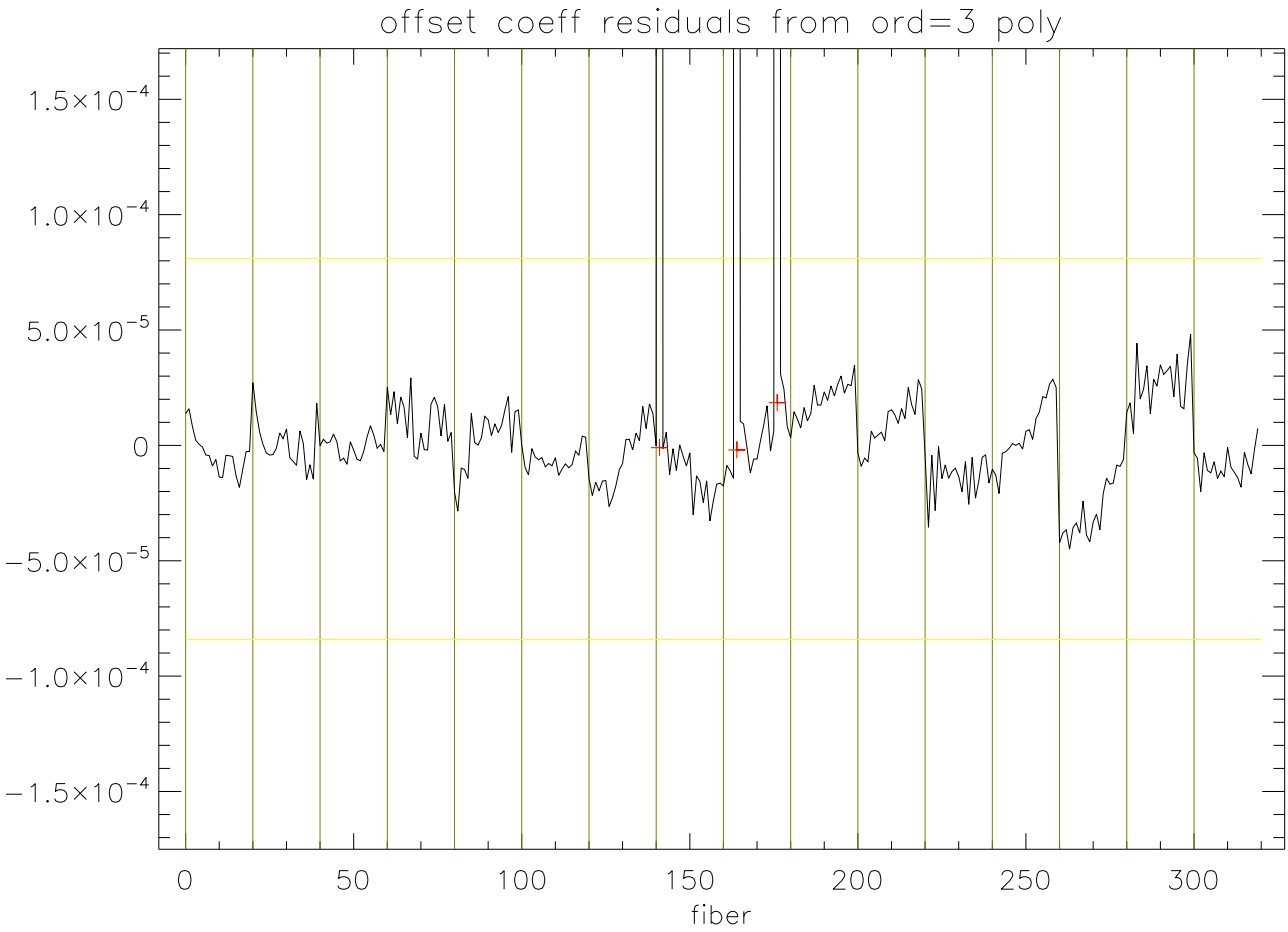
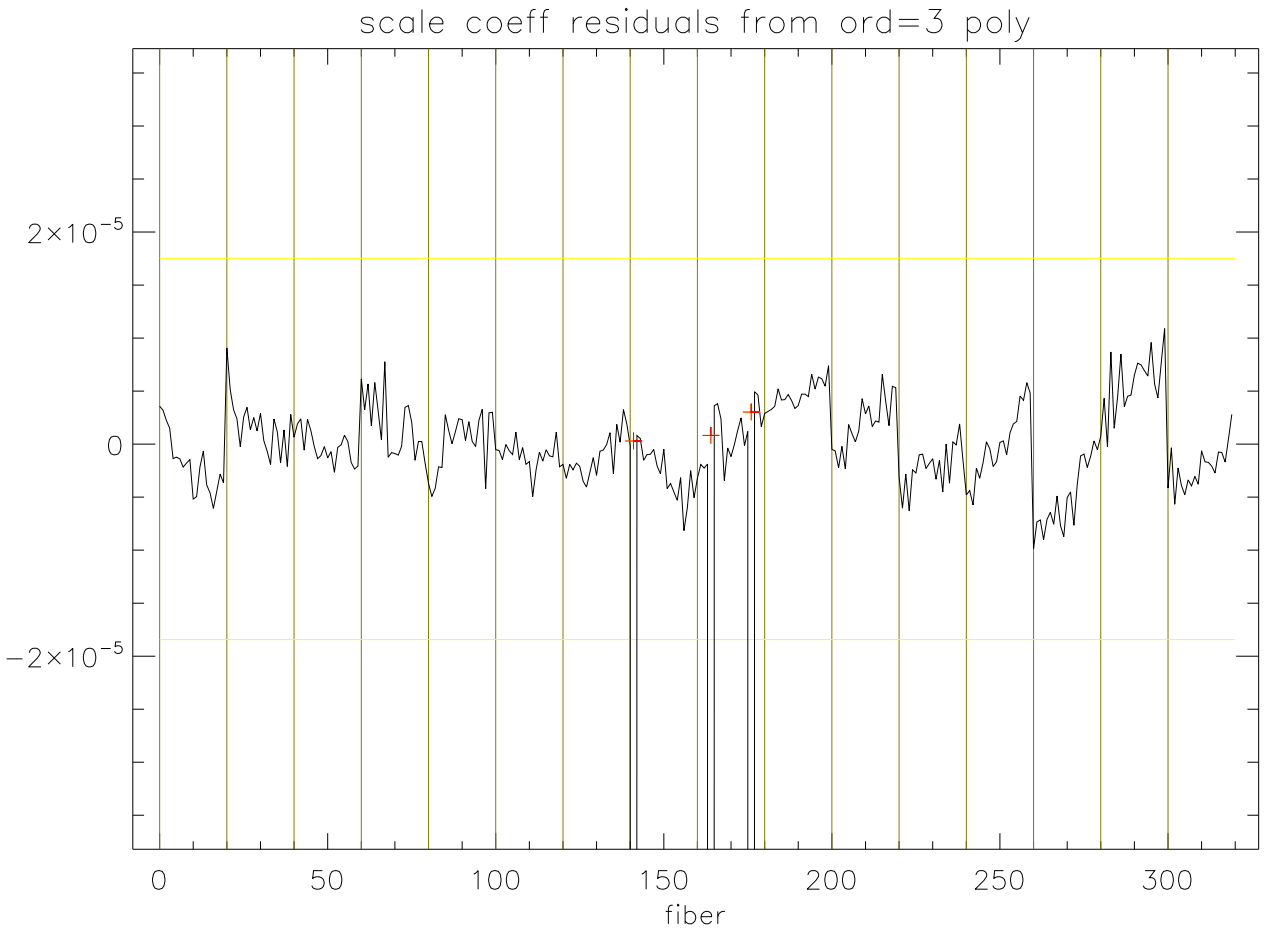
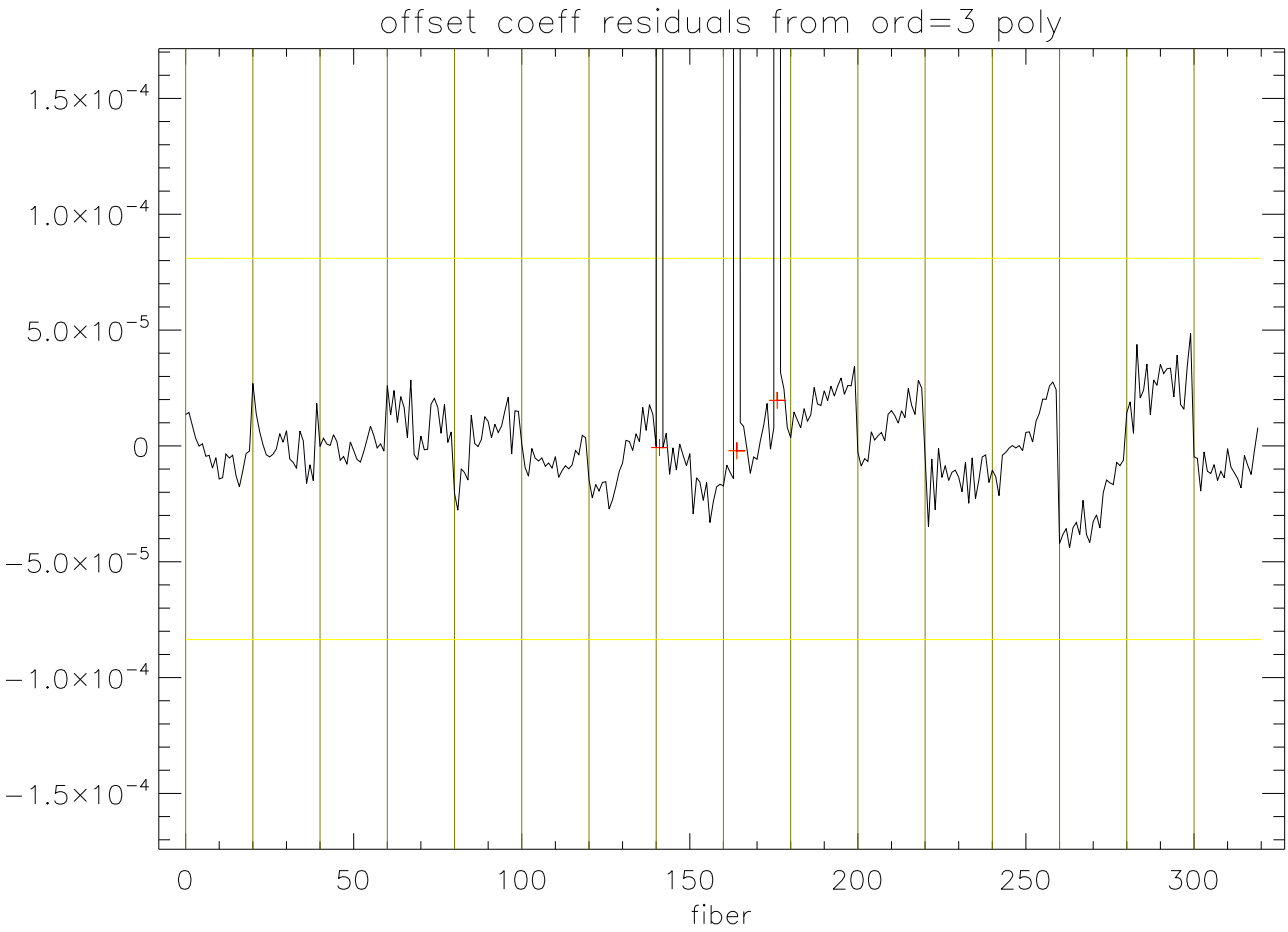
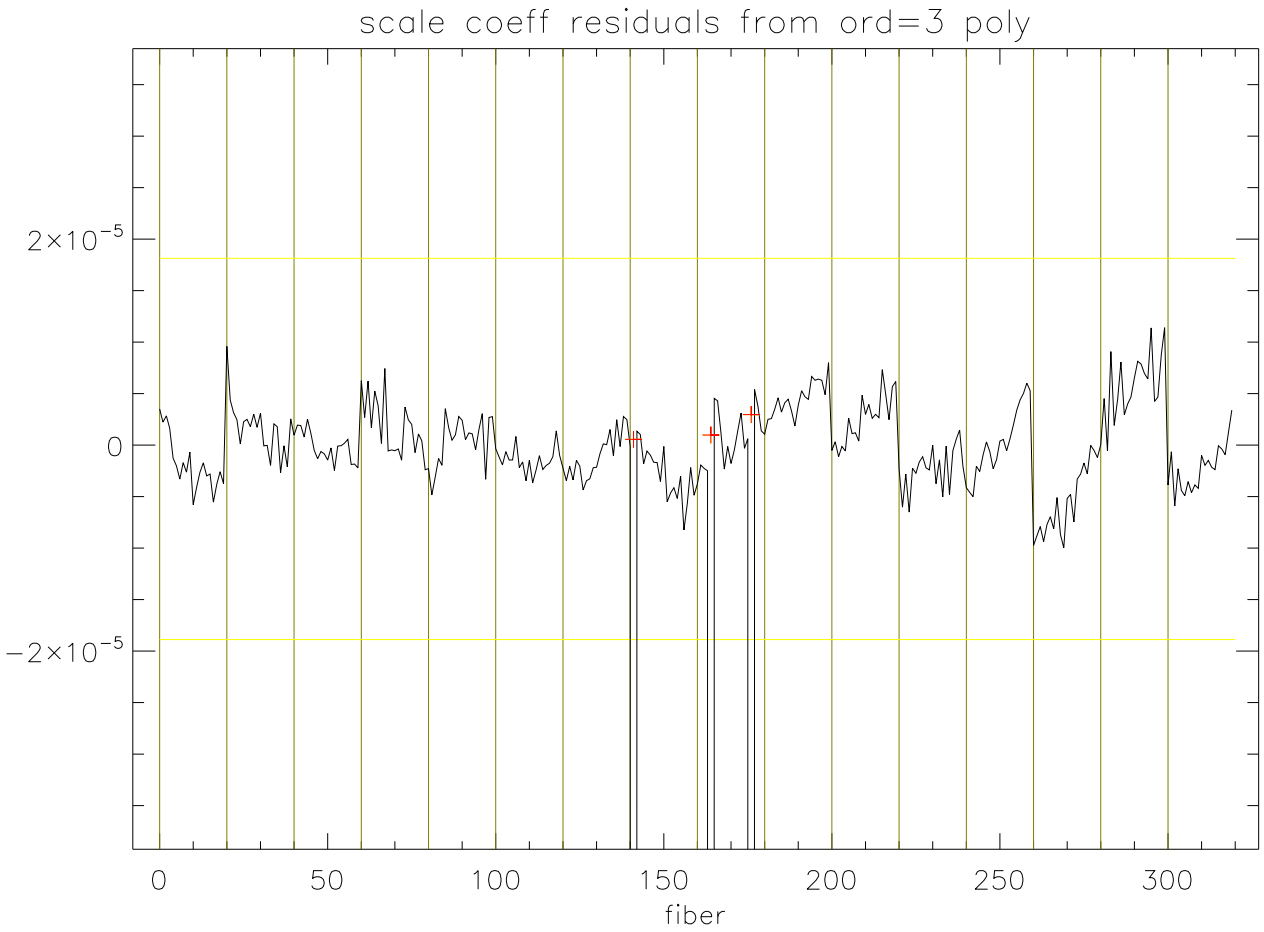
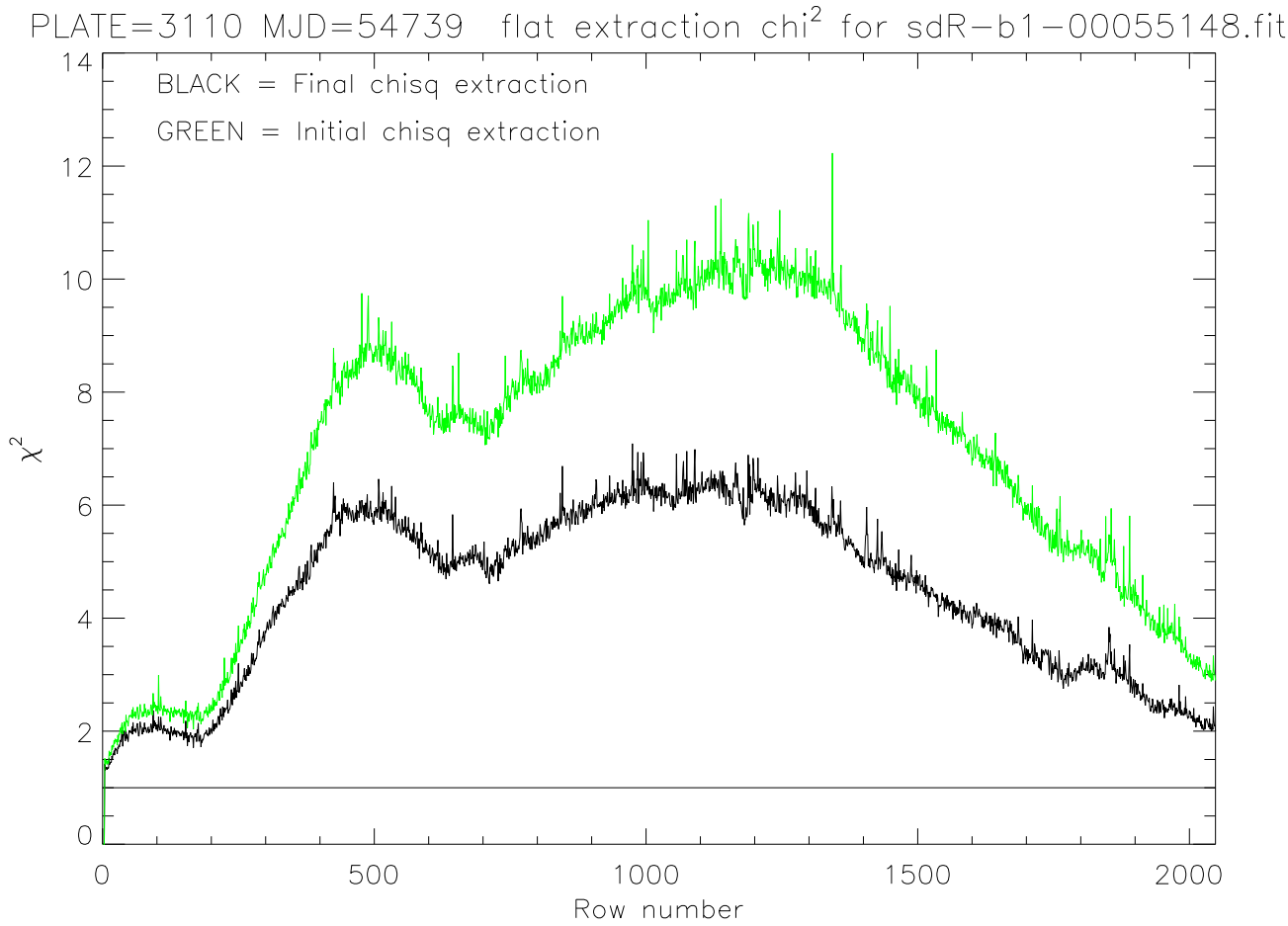
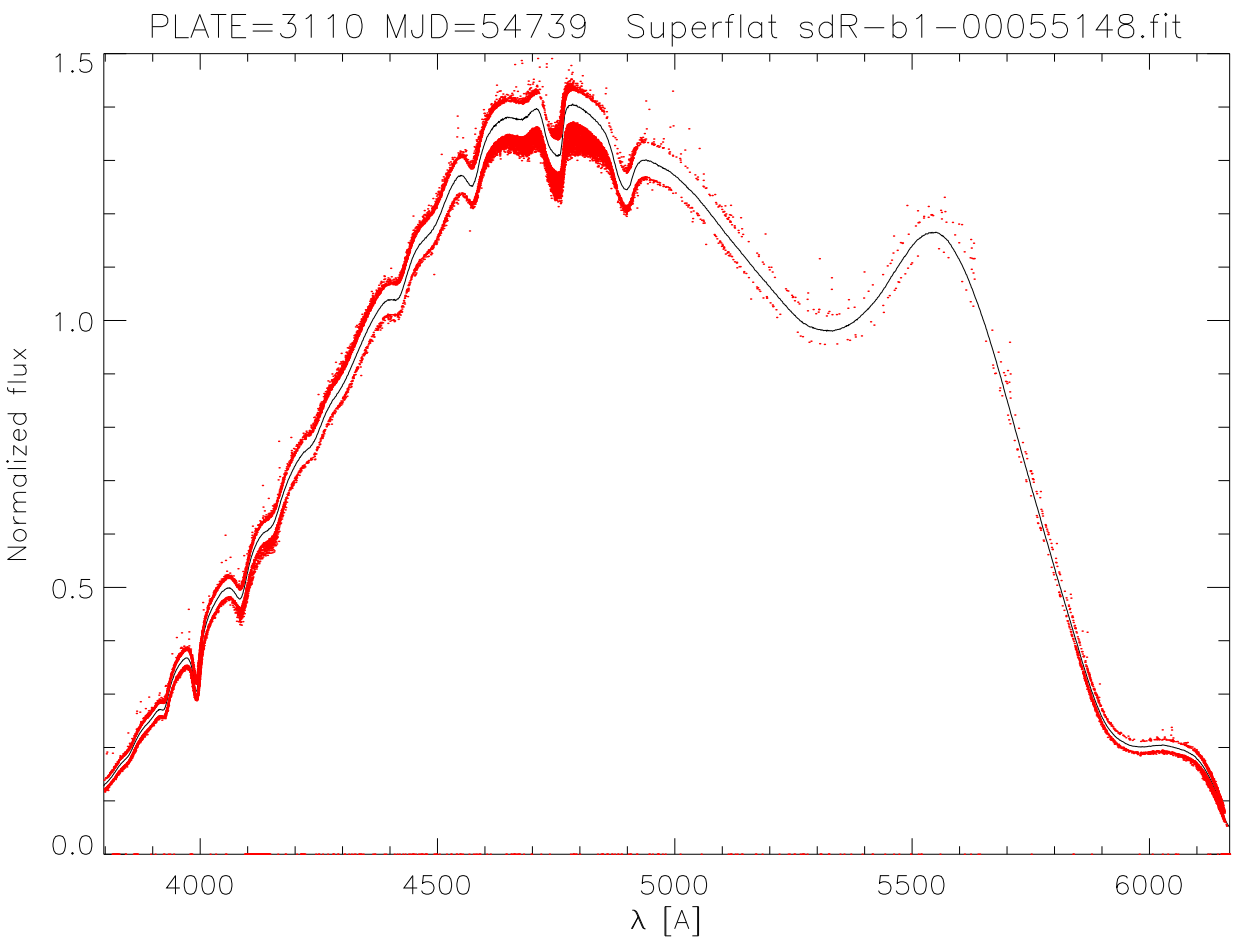

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

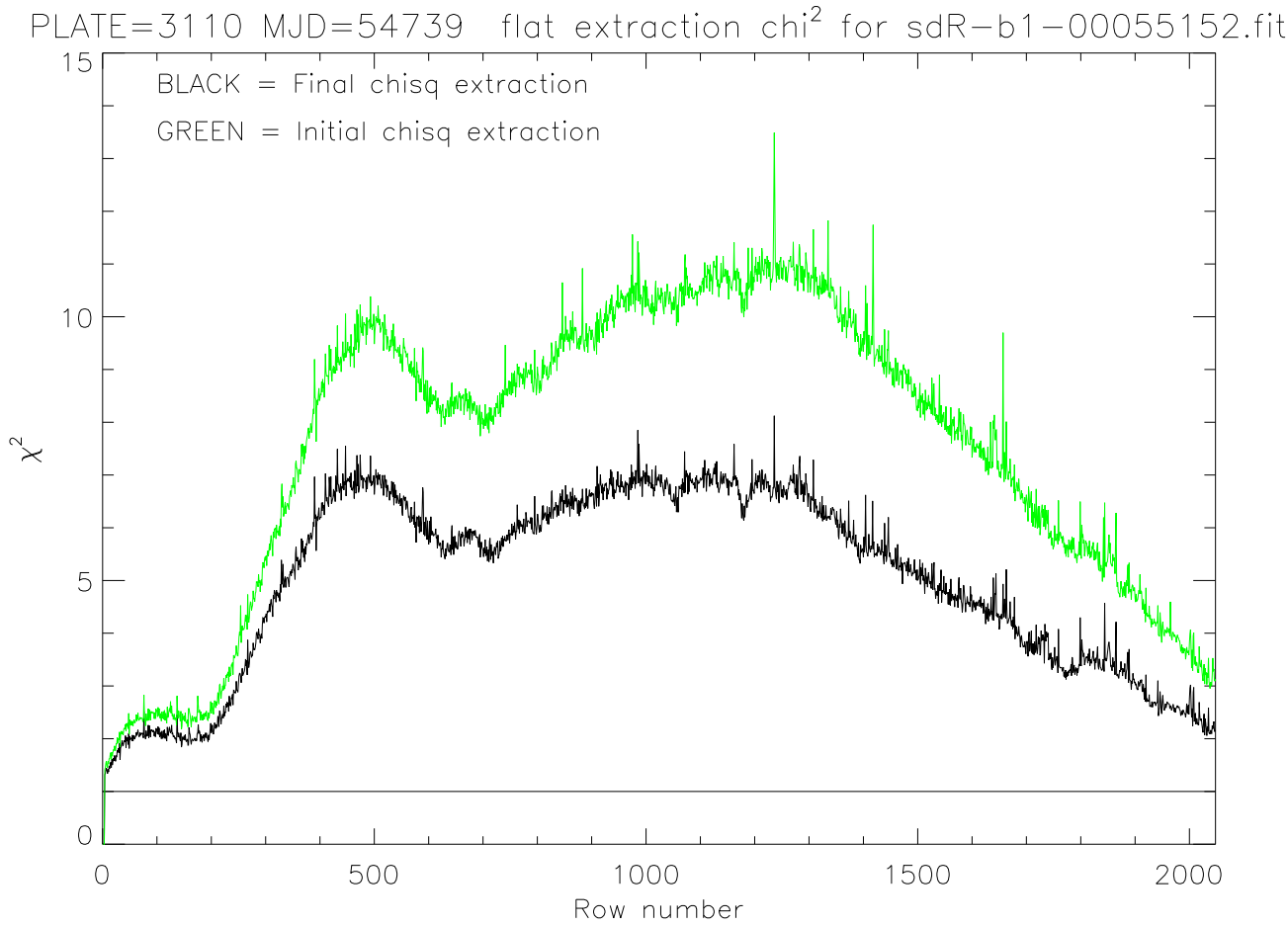

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

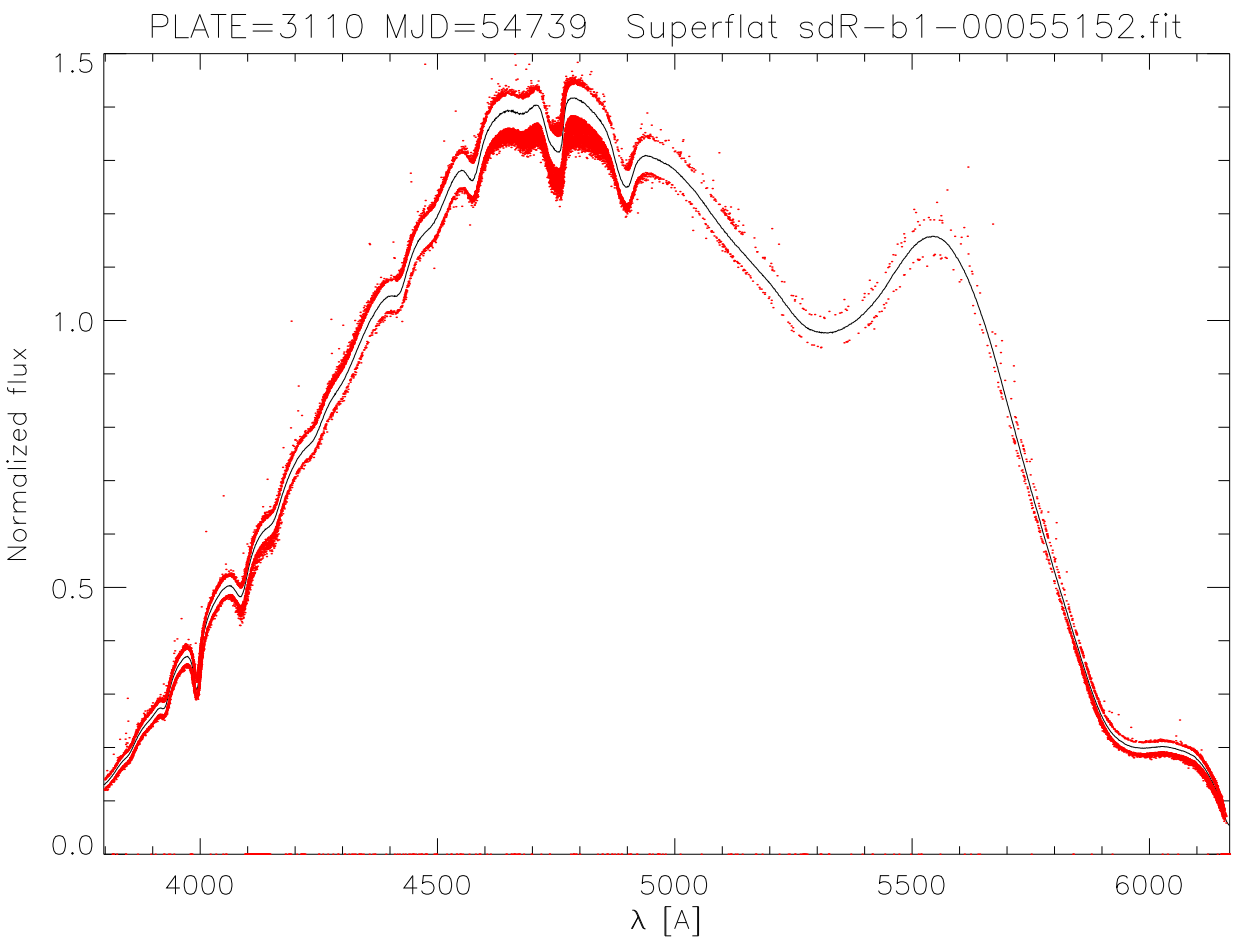

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

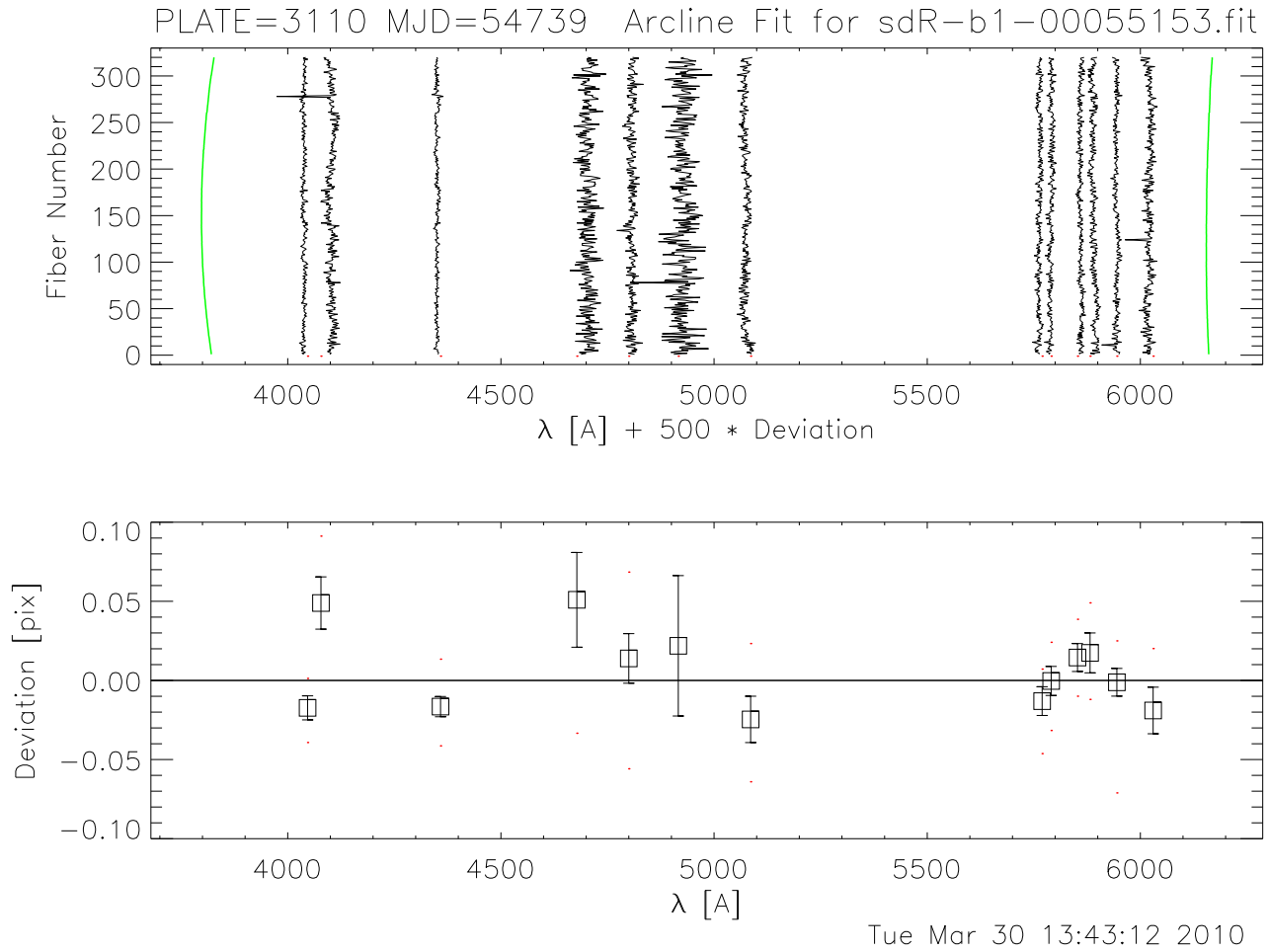

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

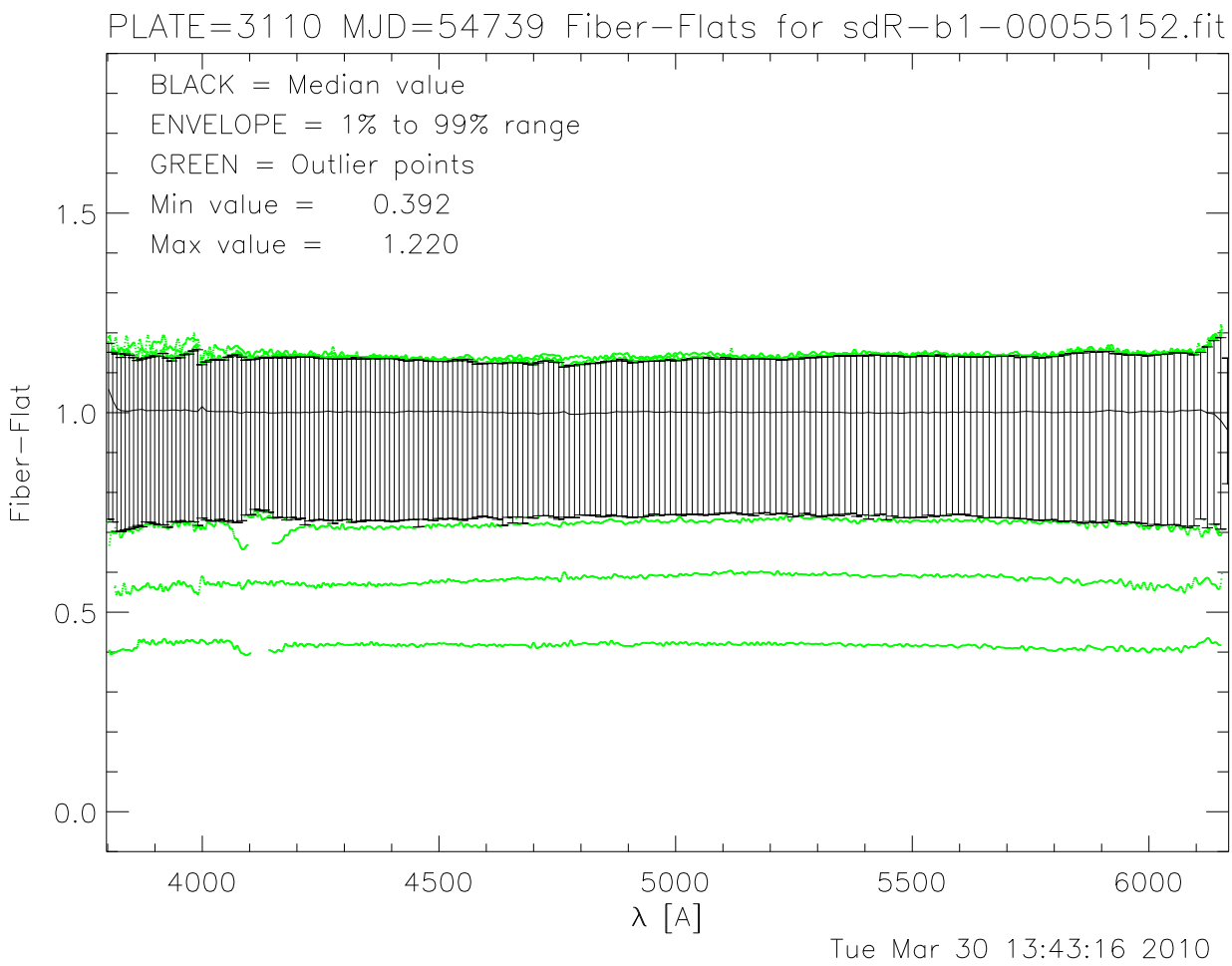

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−b1−00055148.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

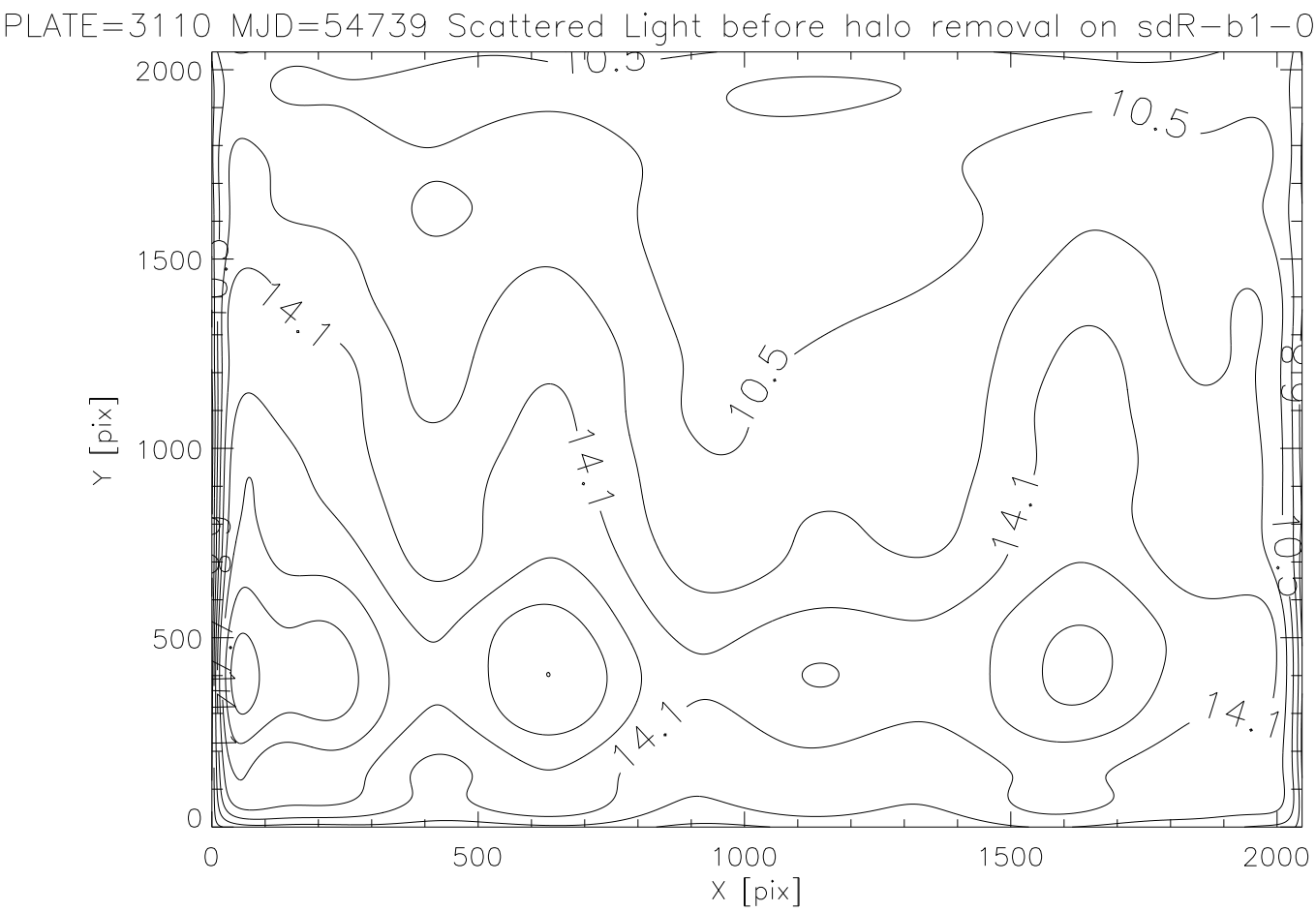

PLATE=3110 MJD=54739 Superflat sdR-b1-00055148.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

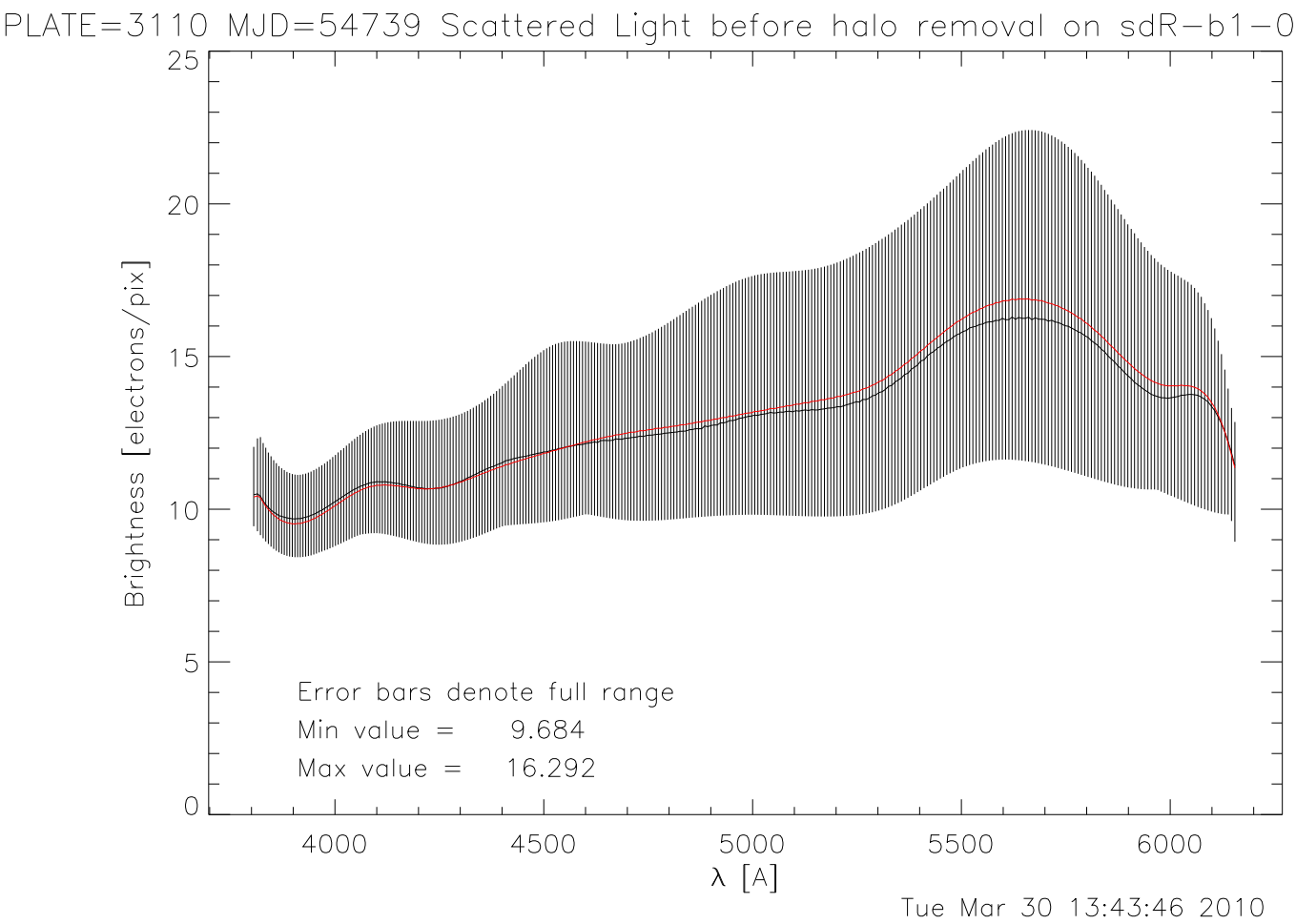

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−b1−00055152.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

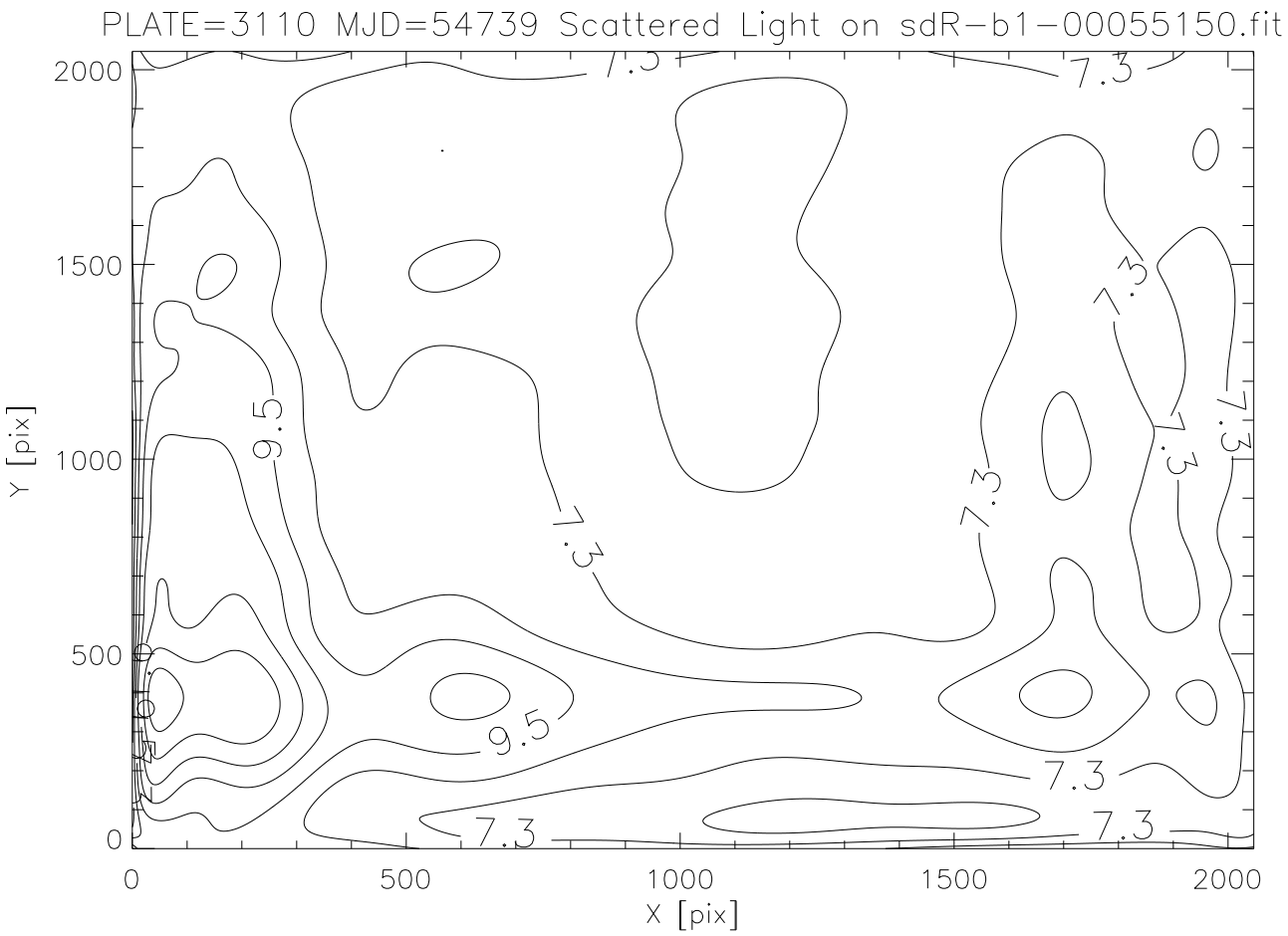

PLATE=3110 MJD=54739 Superflat sdR-b1-00055152.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

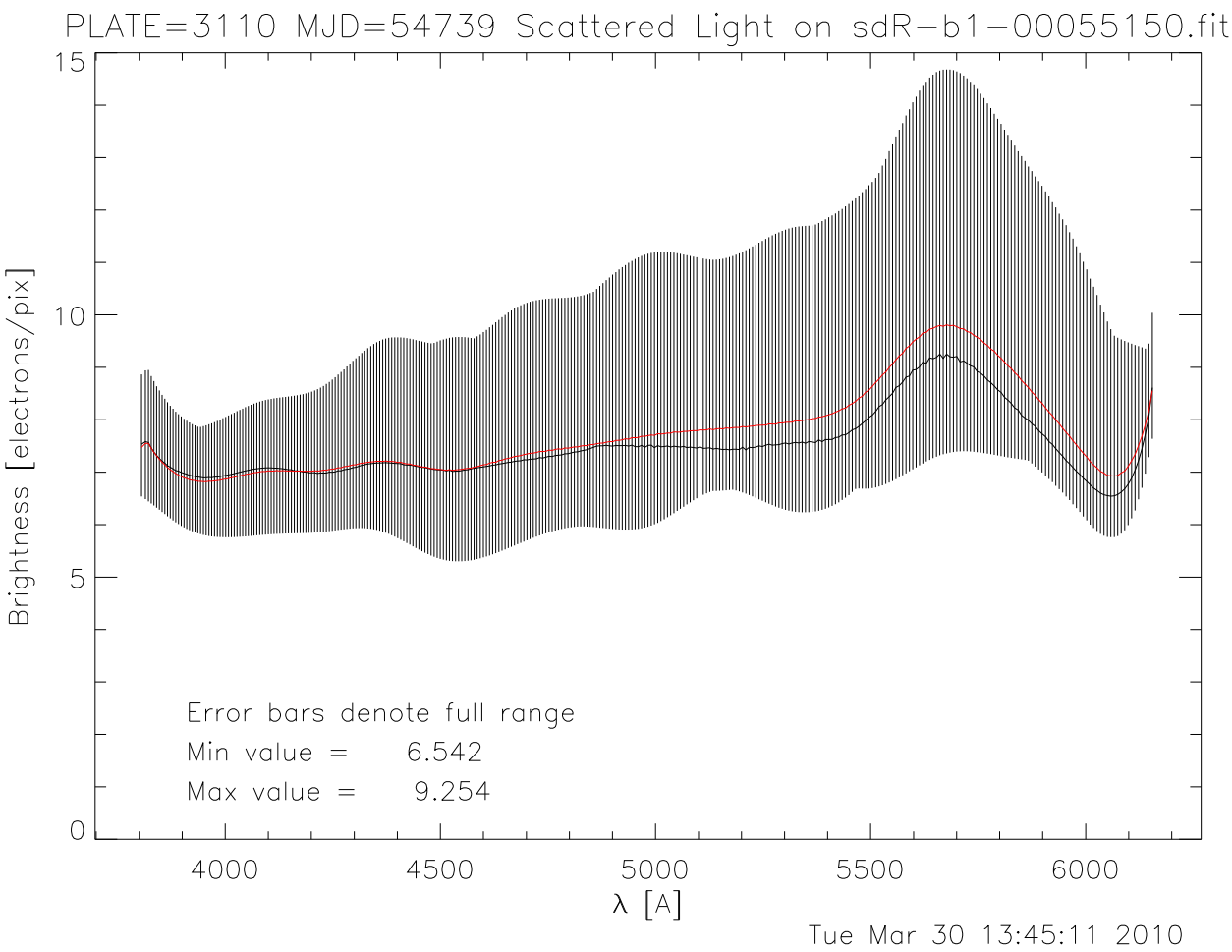

PLATE=3110 MJD=54739 Arcline Fit for sdR-b1-00055153.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:43:12 2010

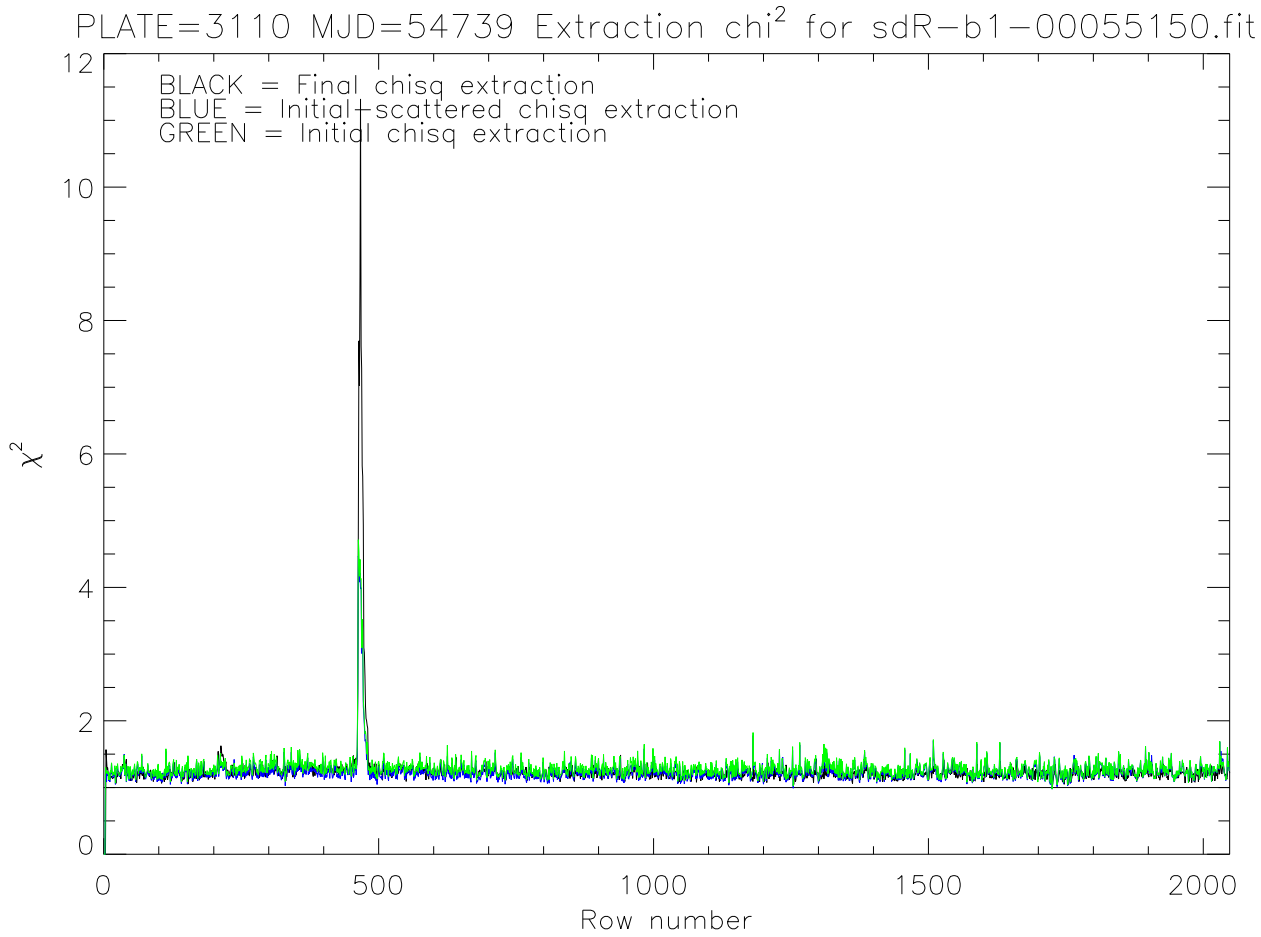

PLATE=3110 MJD=54739 Fiber-Flats for sdR-b1-00055152.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.392
Max value = 1.220
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:43:16 2010

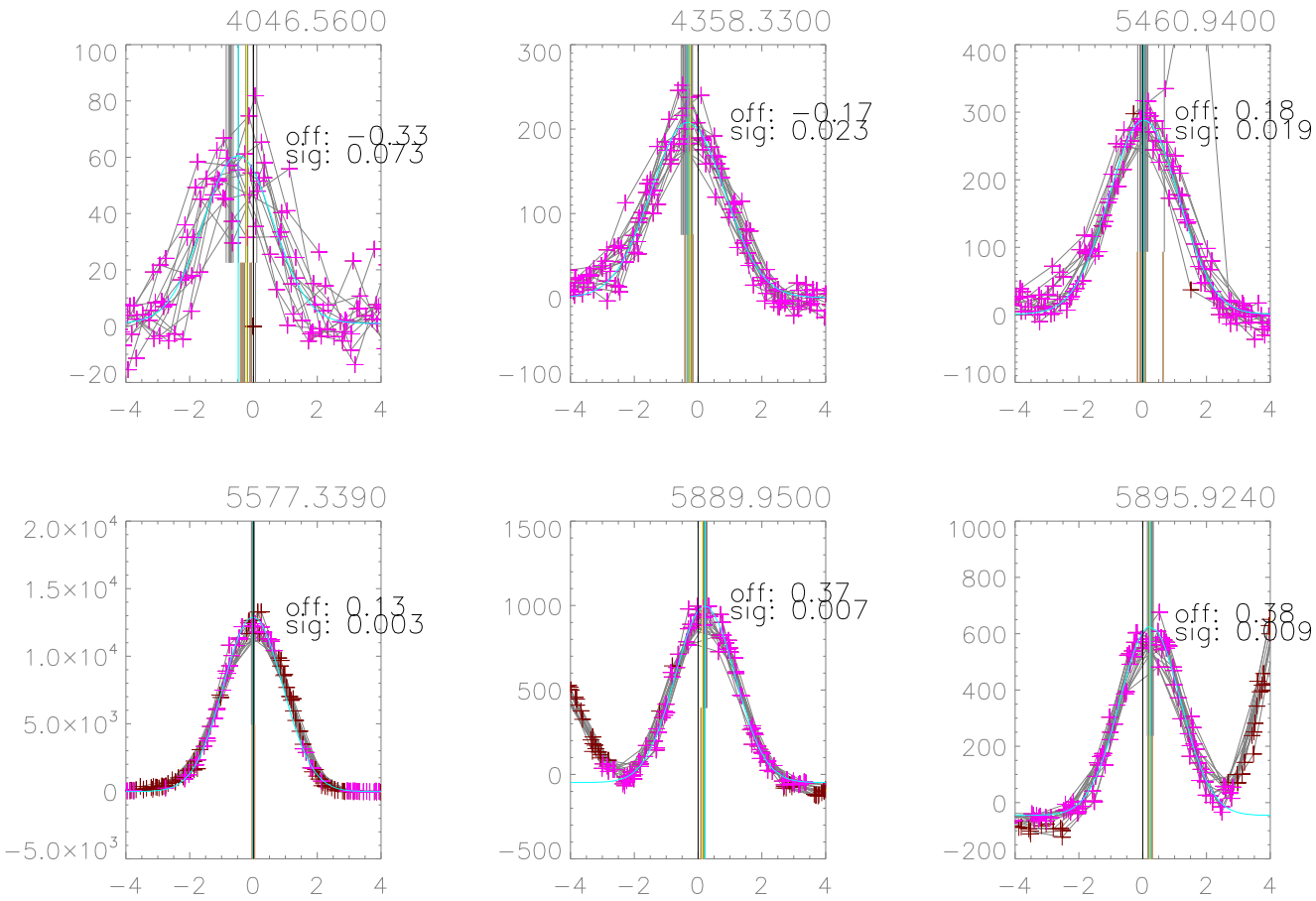

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b1-00055150.f
10.5
14.1
Y [pix]
X [pix]
0
500
1000
1500
2000

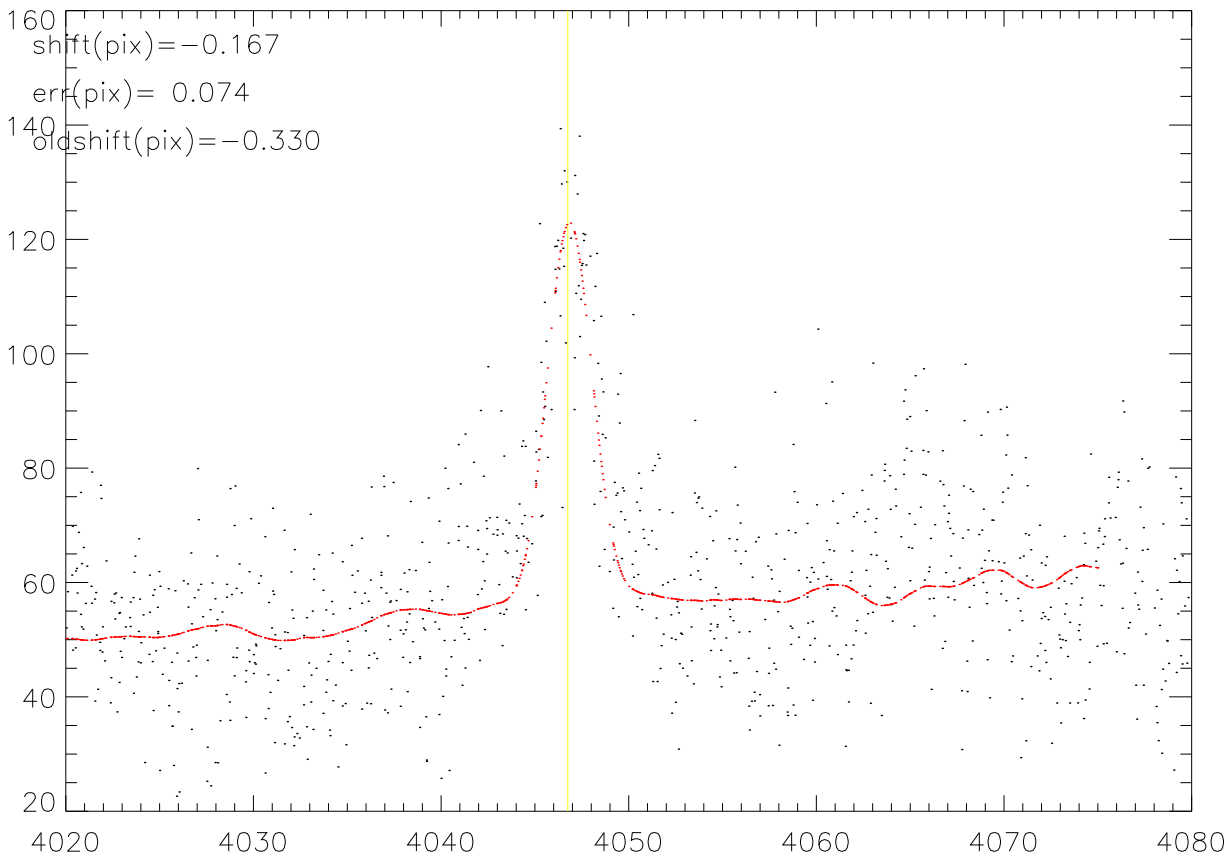

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b1-00055150.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 9.684
Max value = 16.292
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:43:46 2010

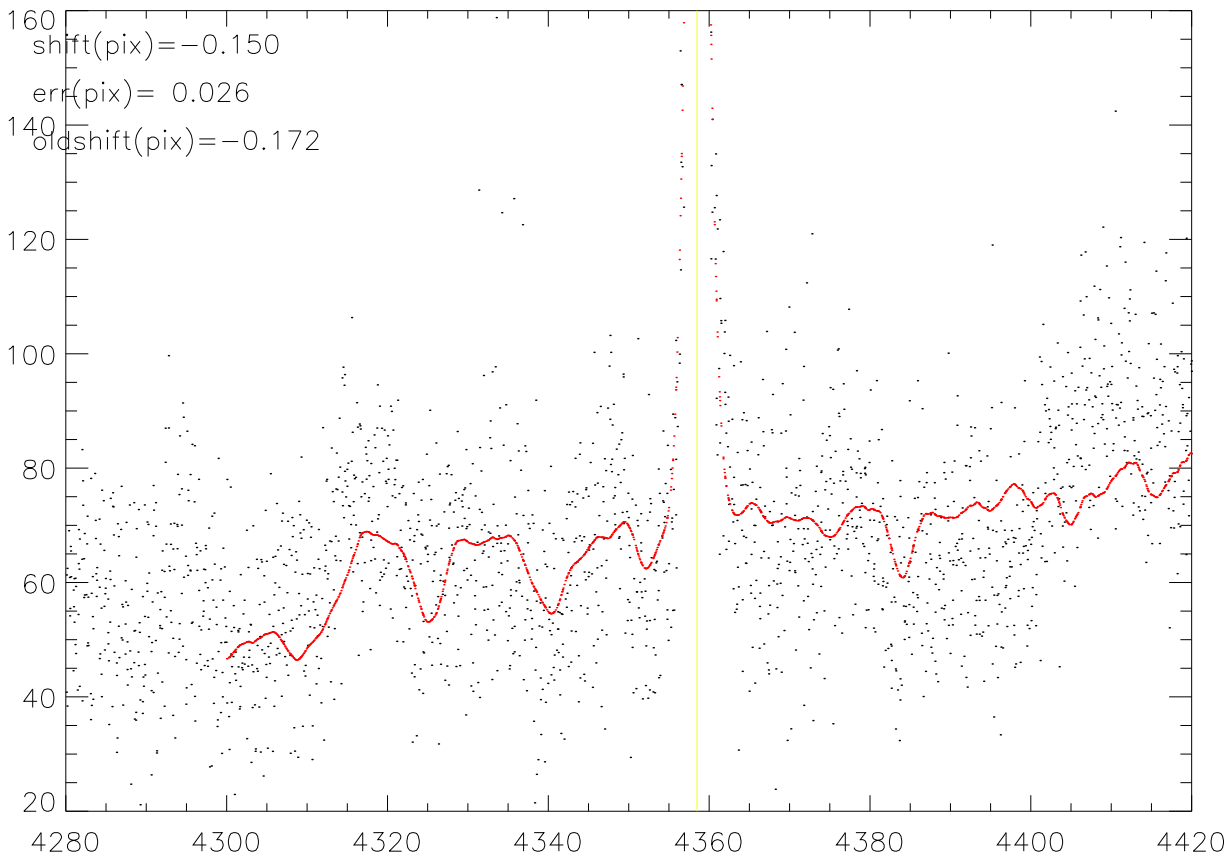

PLATE=3110 MJD=54739 Scattered Light on sdR−b1−00055150.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5

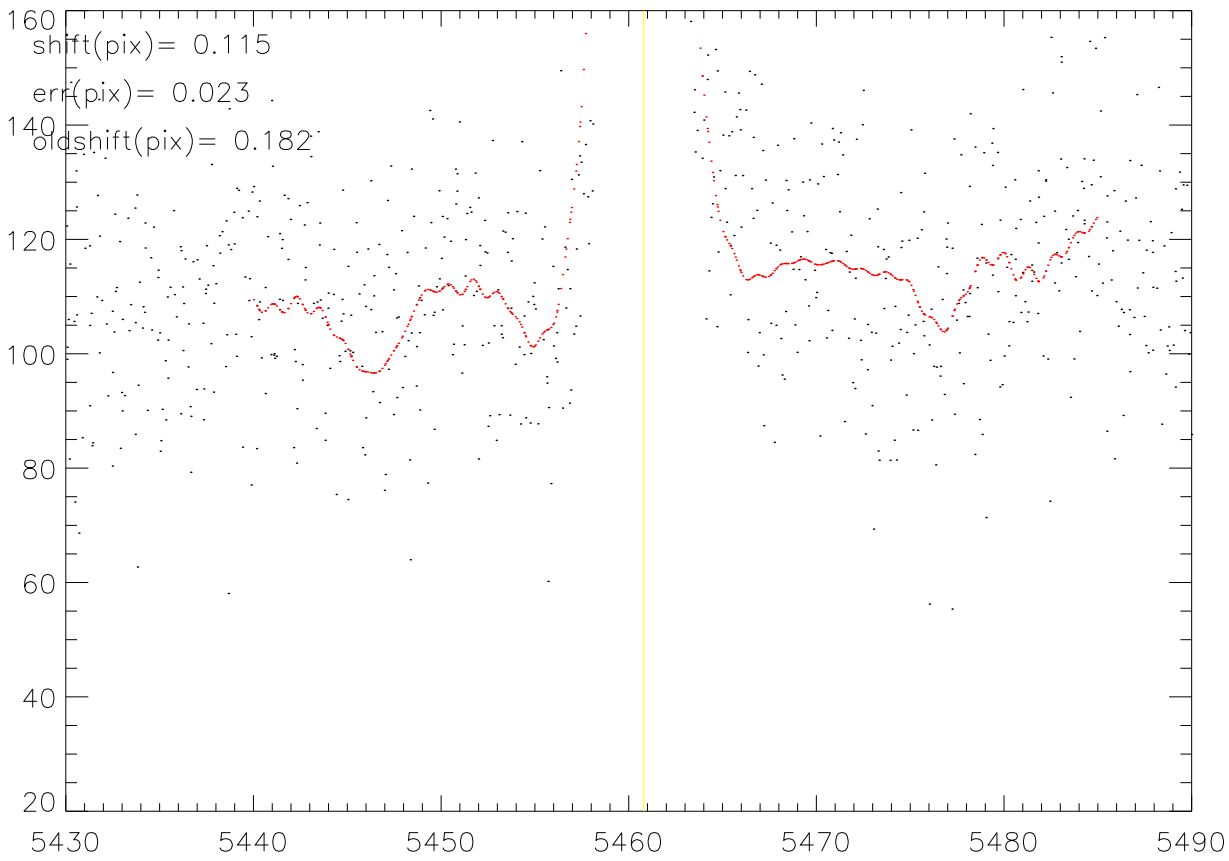

PLATE=3110 MJD=54739 Scattered Light on sdR-b1-00055150.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.542
Max value = 9.254
Tue Mar 30 13:45:11 2010

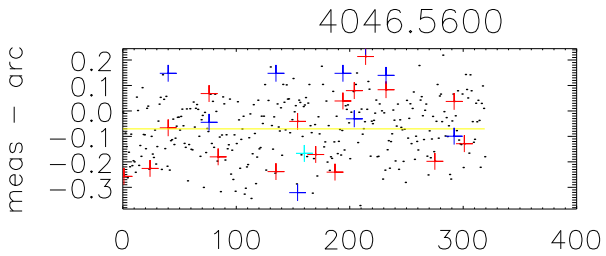

PLATE=3110 MJD=54739 Extraction chi^2 for sdR-b1-00055150.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

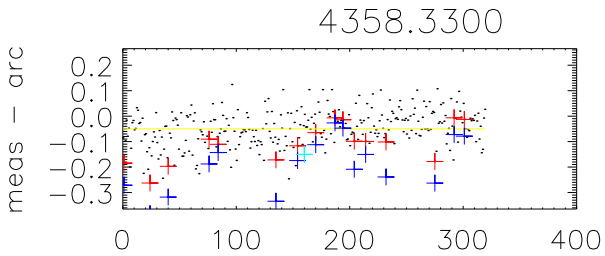

4046.5600
off: −0.33
sig: 0.073
4358.3300
off: −0.17
sig: 0.023
5460.9400
off: 0.18
sig: 0.019
5577.3390
off: 0.13
sig: 0.003
5889.9500
off: 0.37
sig: 0.007
5895.9240
off: 0.38
sig: 0.009

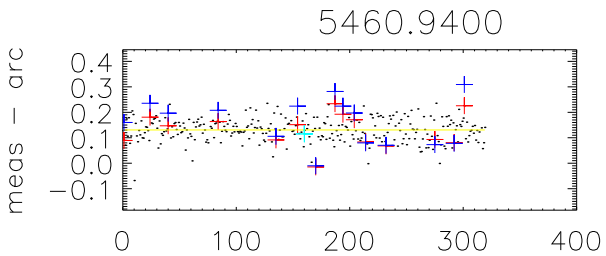

shift(pix)=−0.167
err(pix)= 0.074
oldshift(pix)=−0.330
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

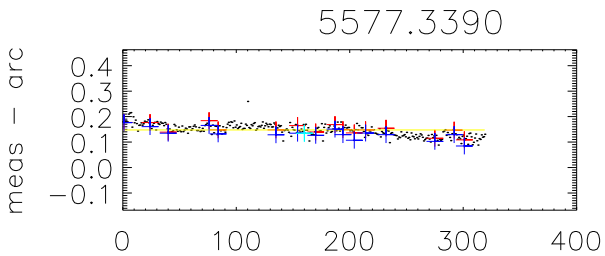

shift(pix)=−0.150
err(pix)= 0.026
oldshift(pix)=−0.172
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

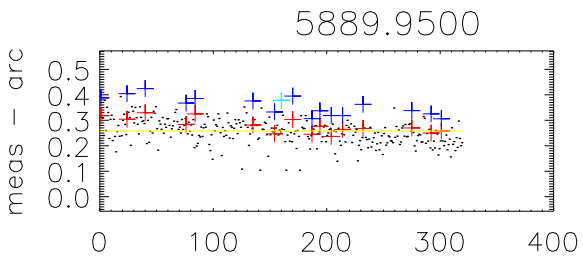

shift(pix)= 0.115
err(pix)= 0.023
oldshift(pix)= 0.182
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

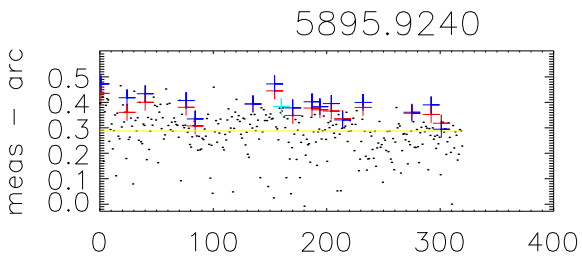

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

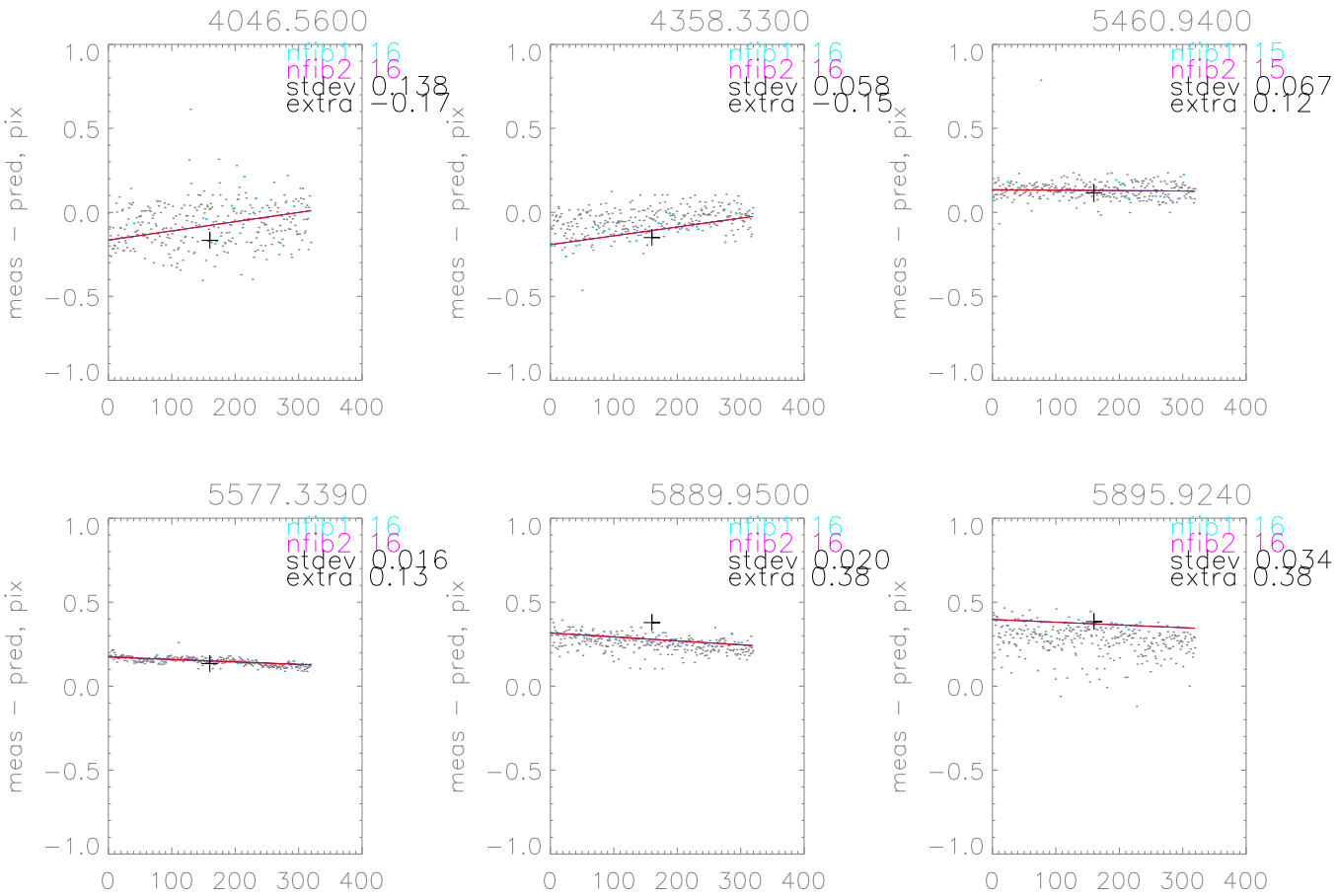

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

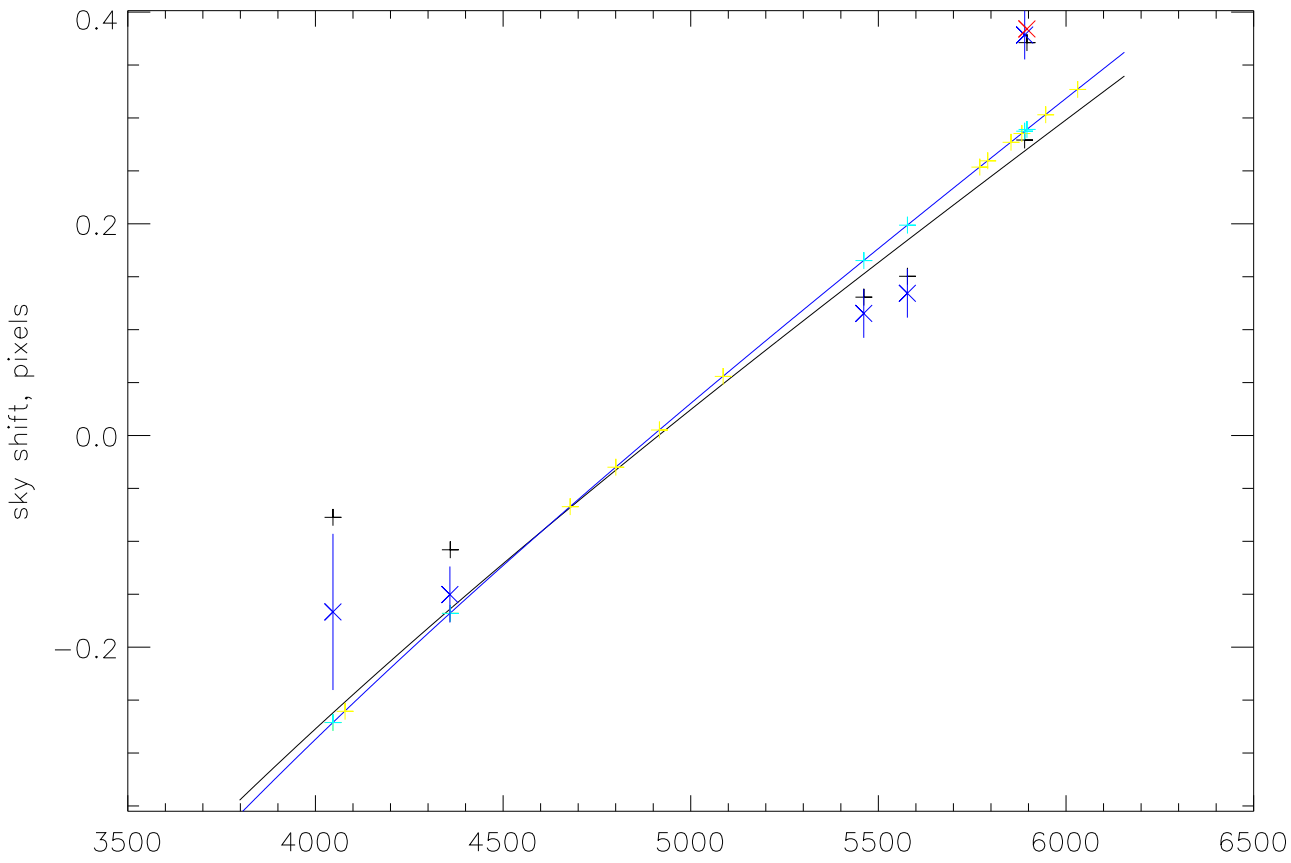

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

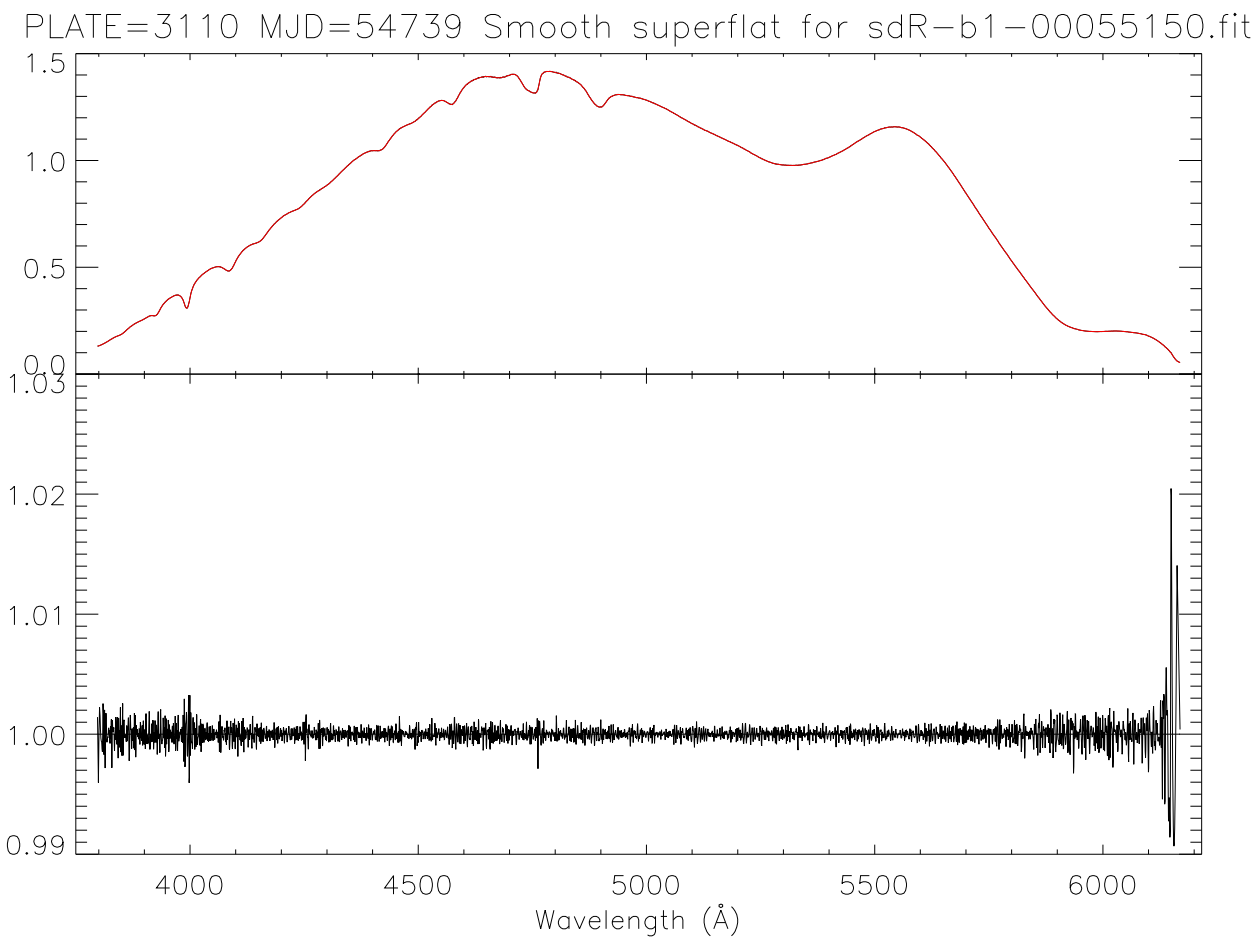

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

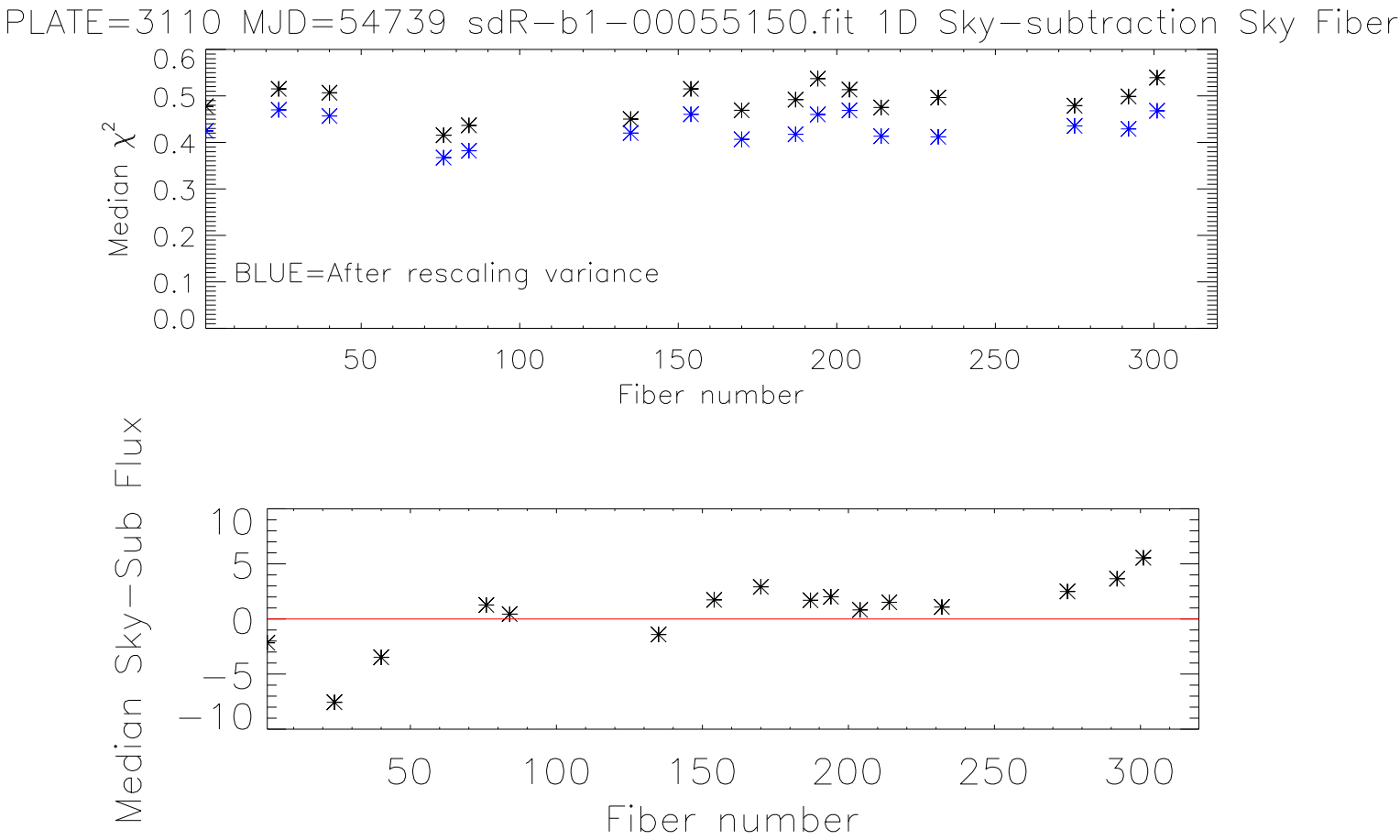

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

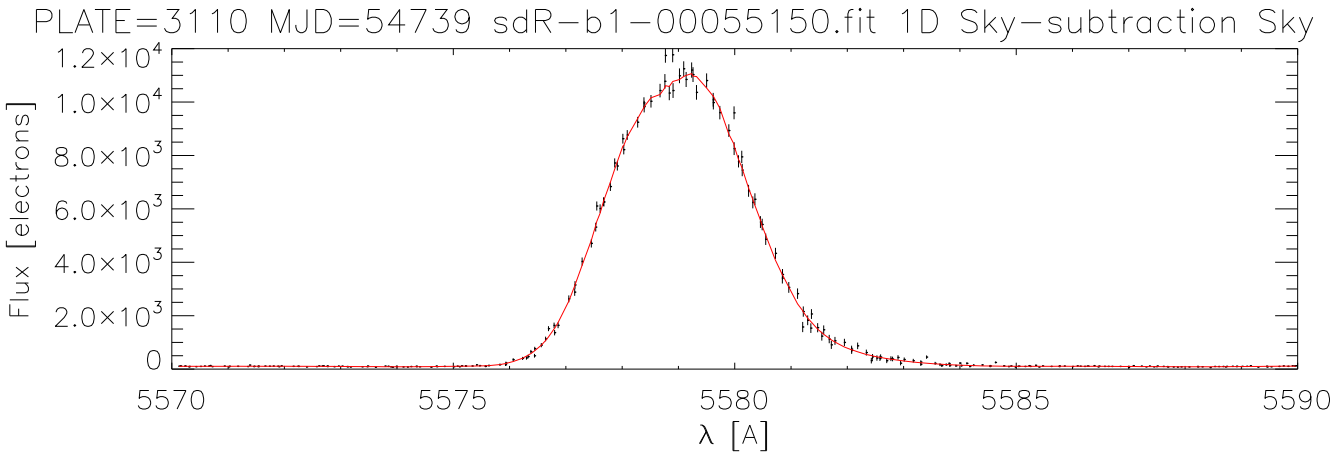

4046.5600
nfib1 16
nfib2 16
stdev 0.138
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.058
extra −0.15
5460.9400
nfib1 15
nfib2 15
stdev 0.067
extra 0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.020
extra 0.38
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.38
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

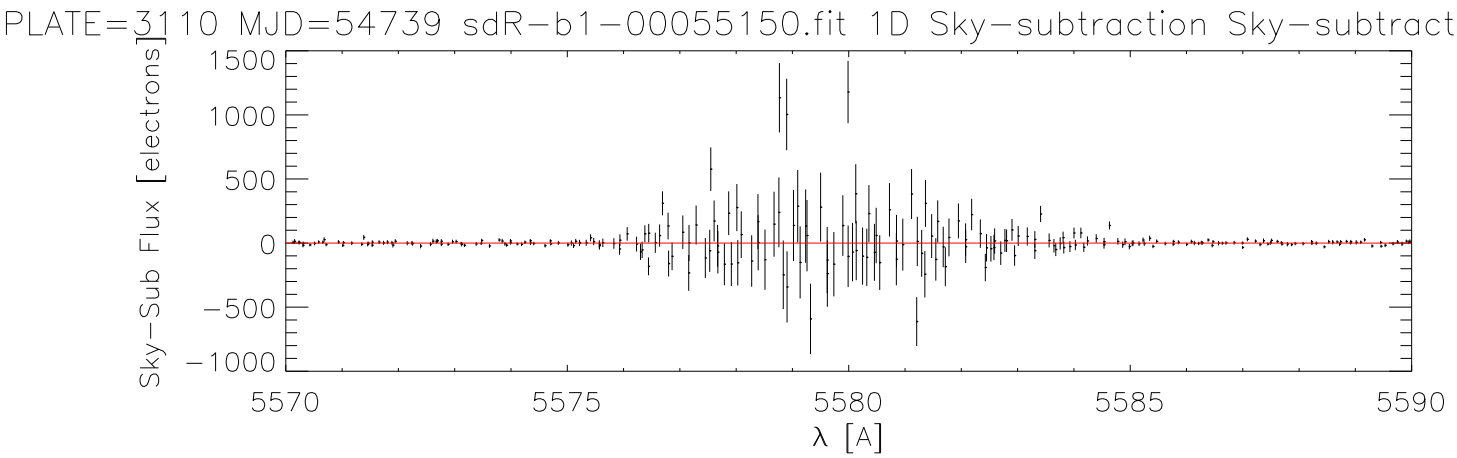

0.4
0.2
0.0
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

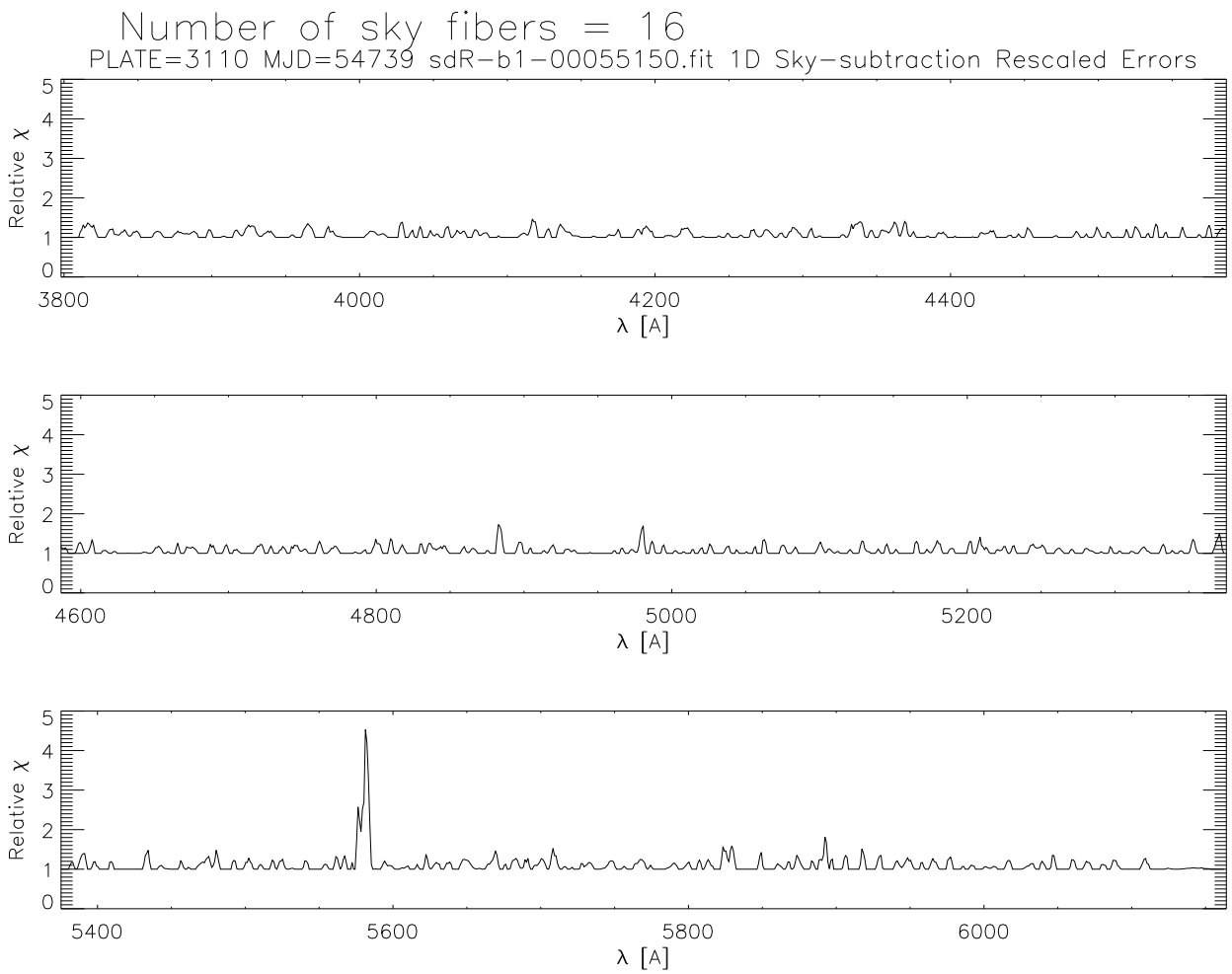
es= −0.0001

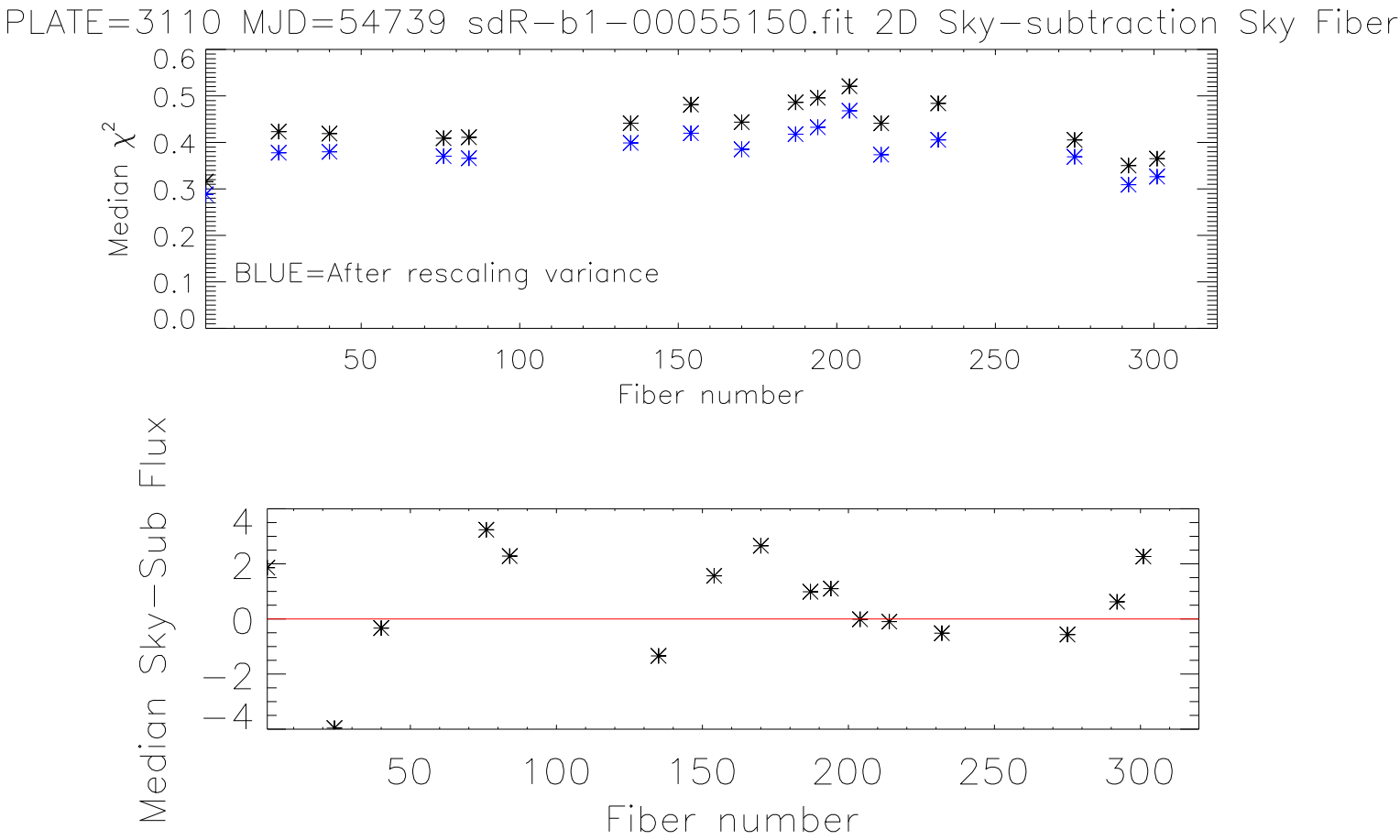

PLATE=3110 MJD=54739 Smooth superflat for sdR−b1−00055150.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
4000
4500
5000
5500
6000
Wavelength (Å)

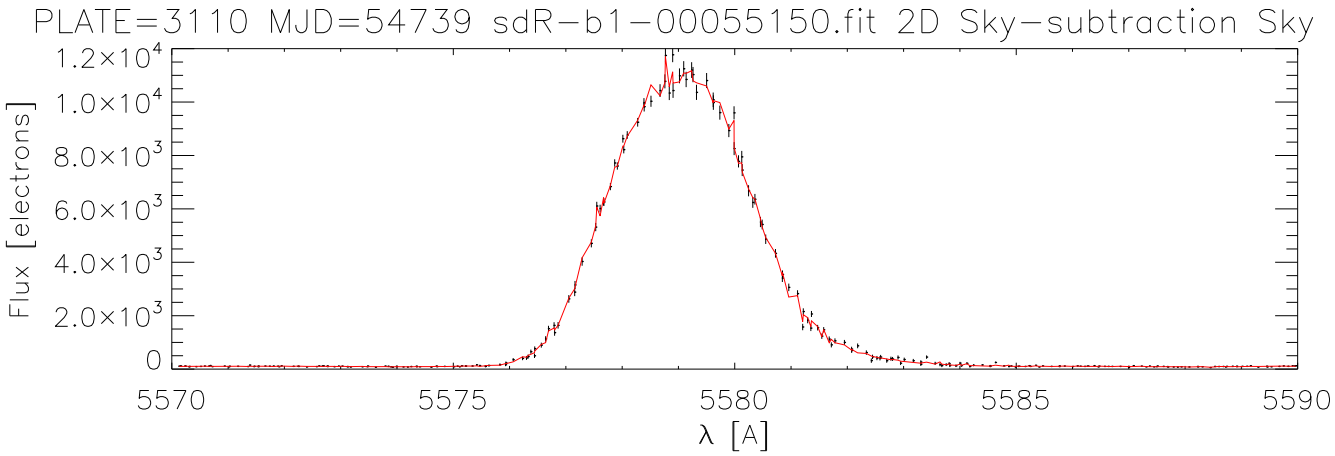

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

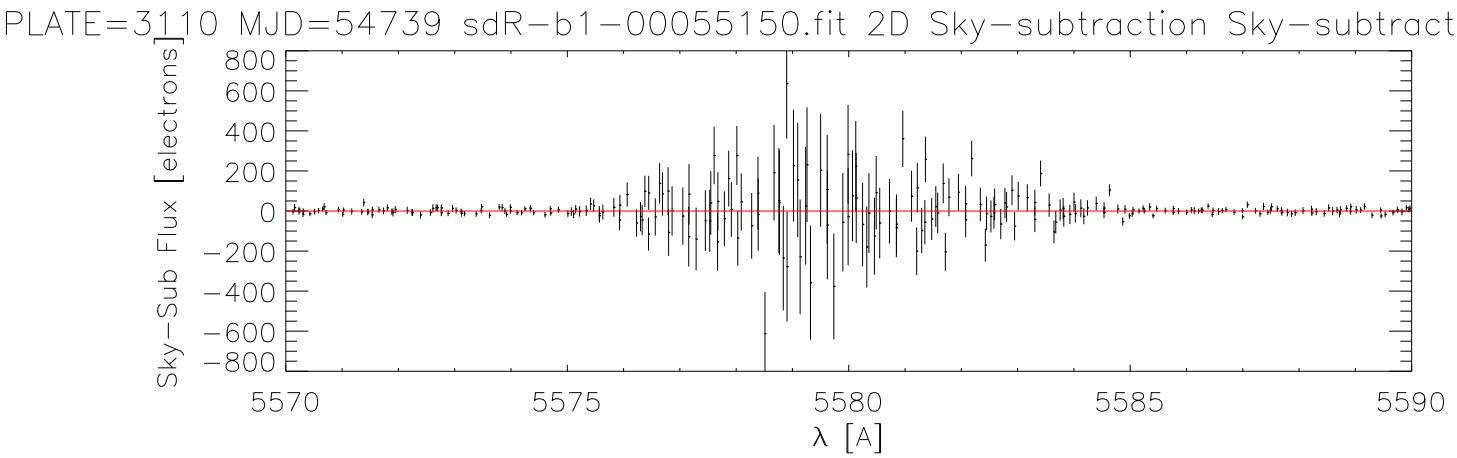

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

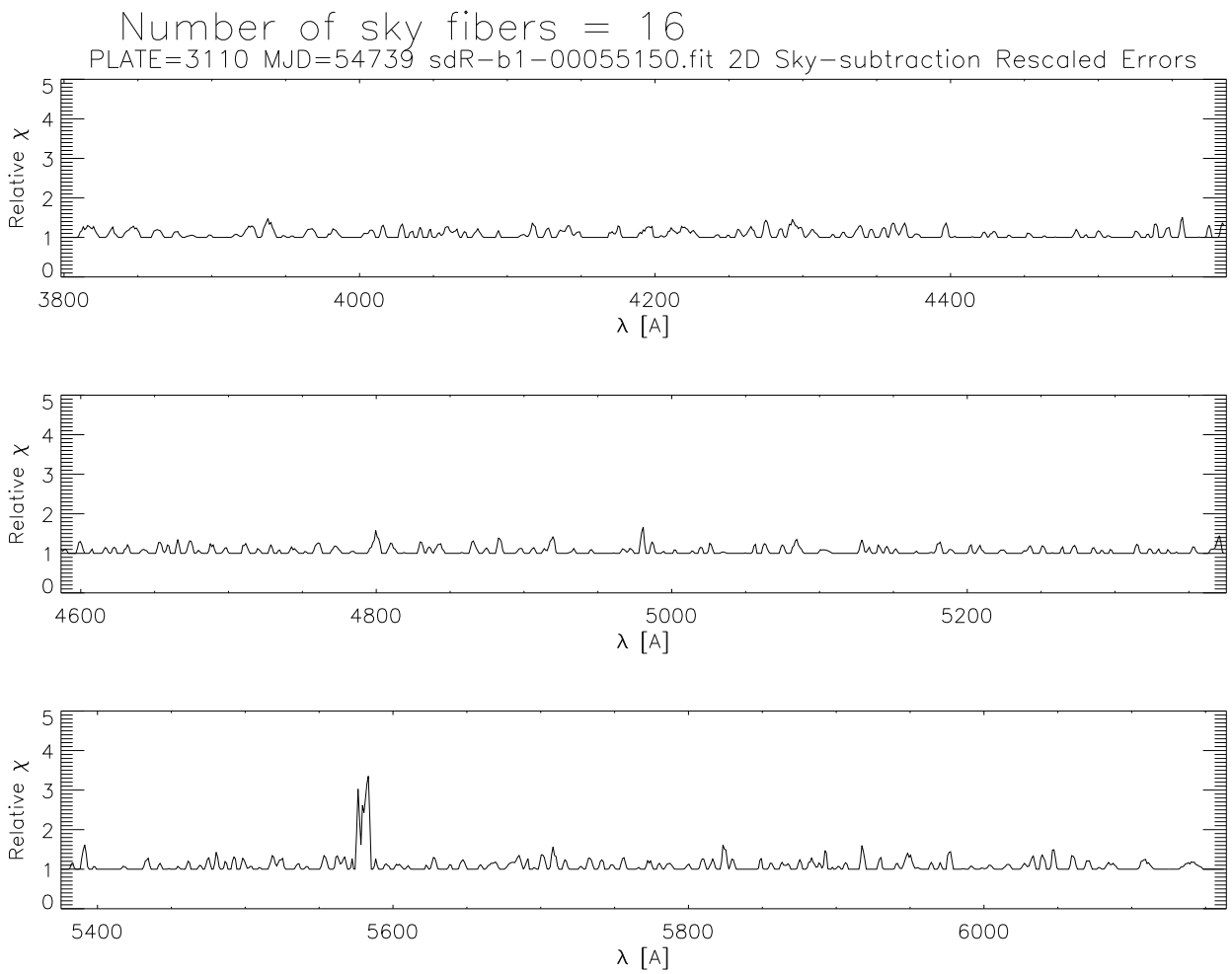

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

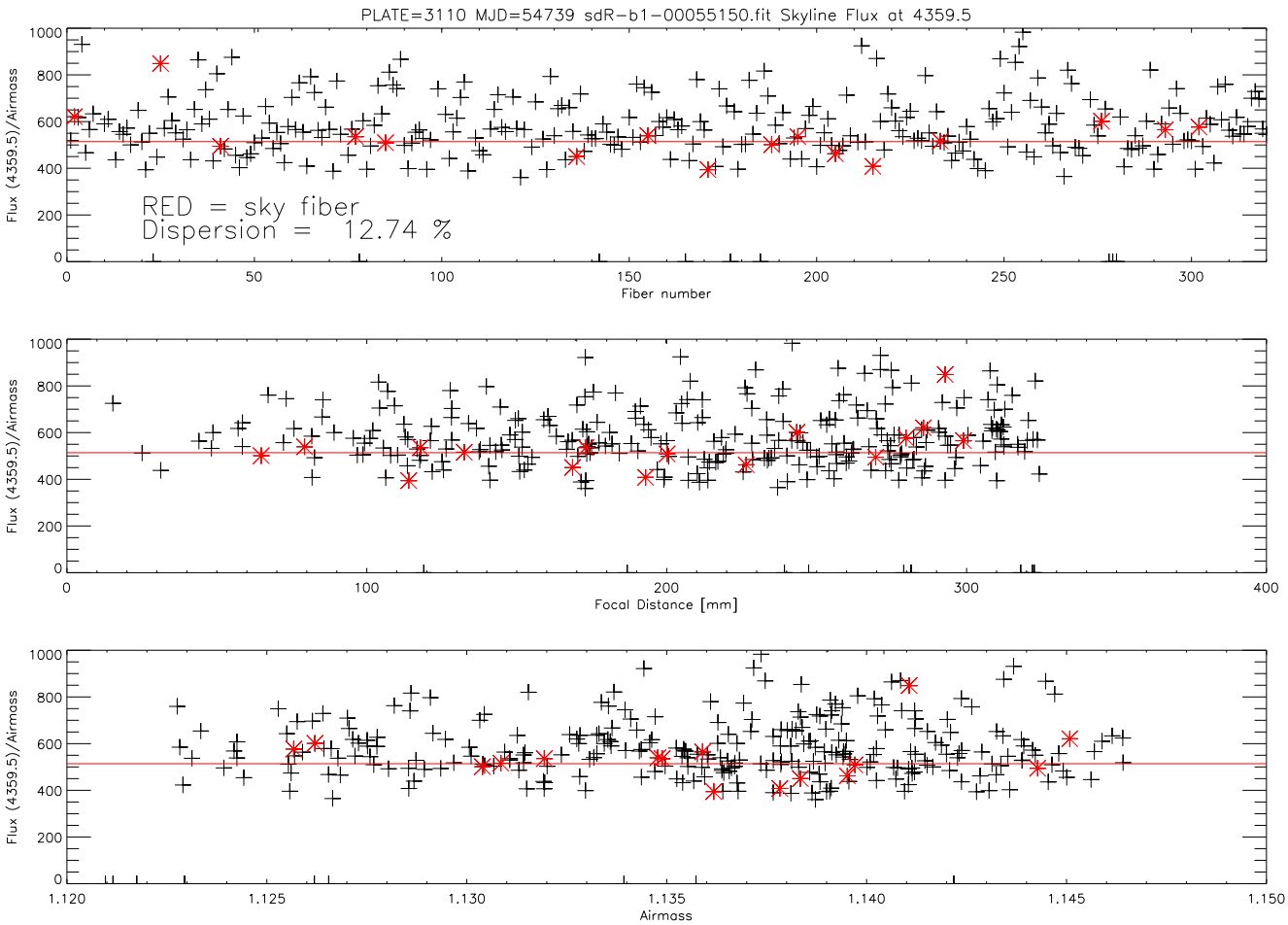

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b1-00055150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

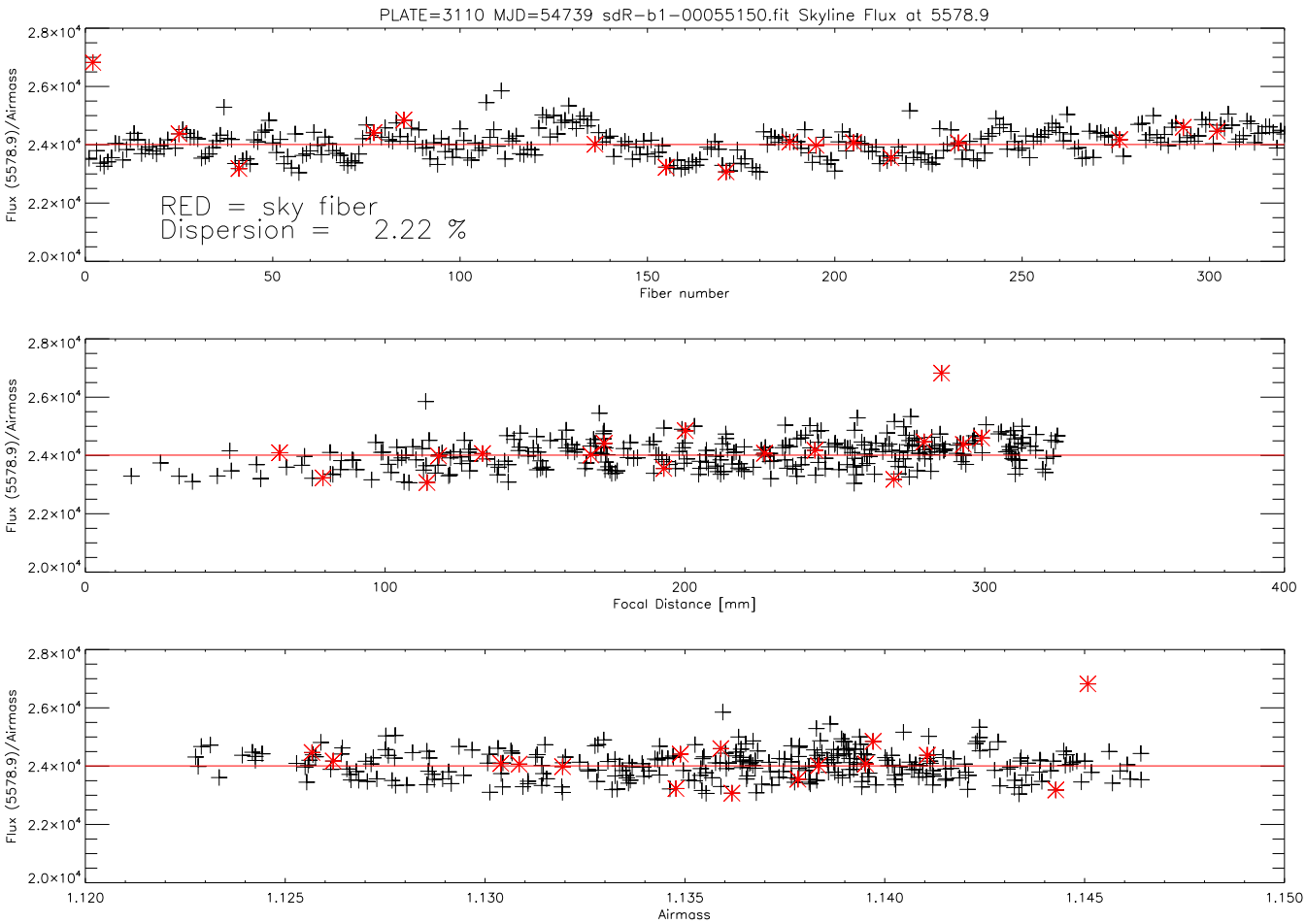

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

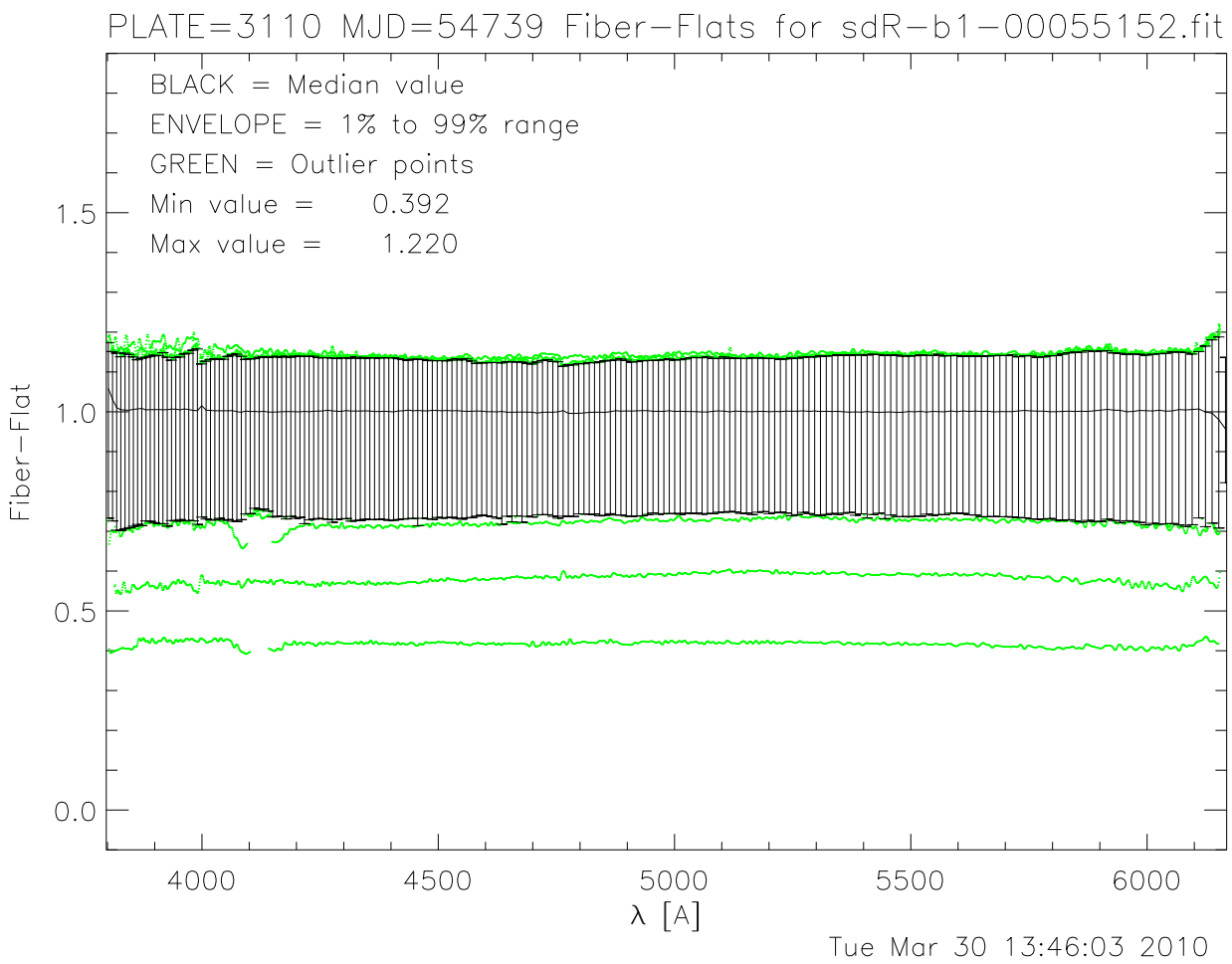

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

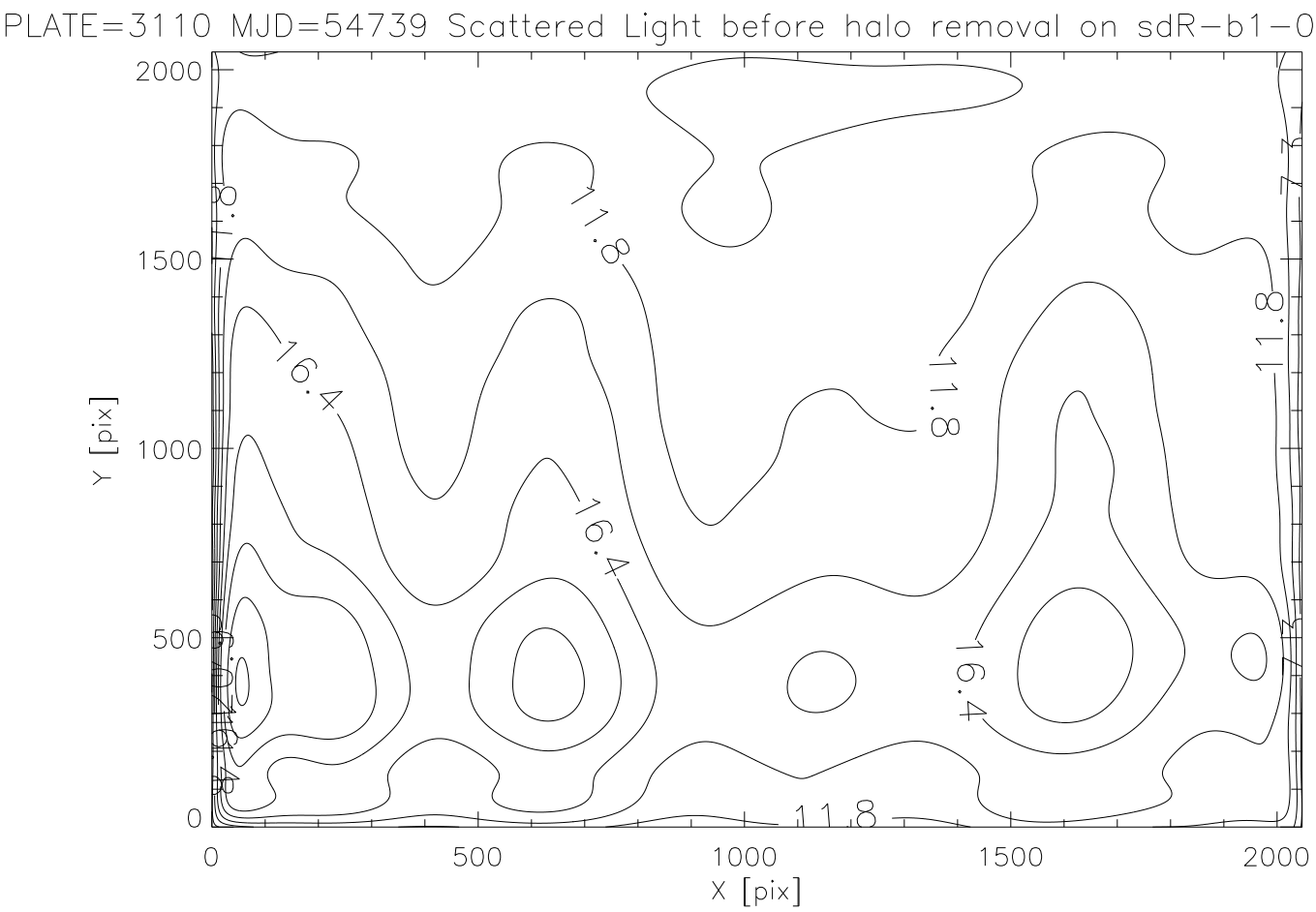

PLATE=3110 MJD=54739 sdR-b1-00055150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

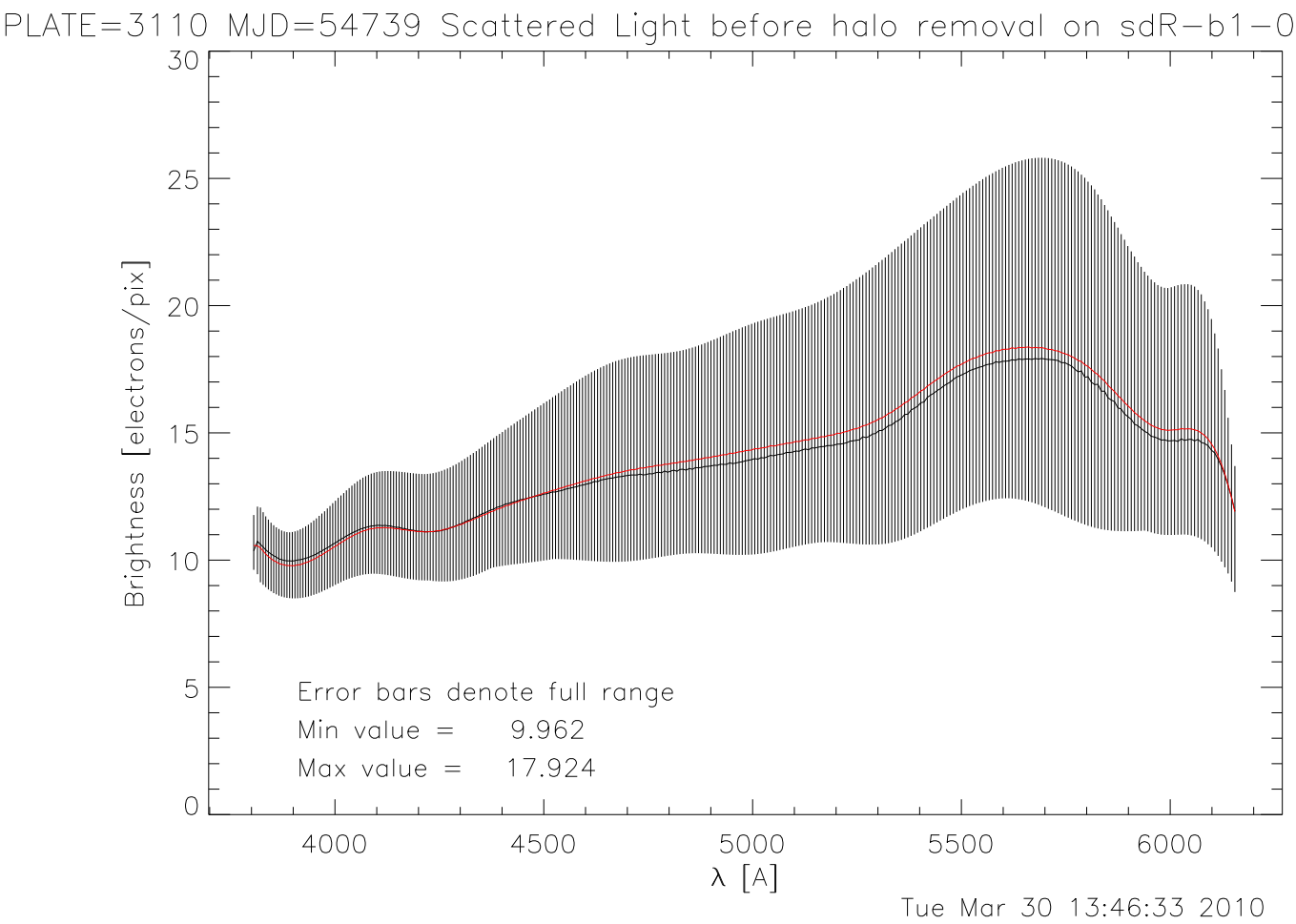

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b1-00055150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

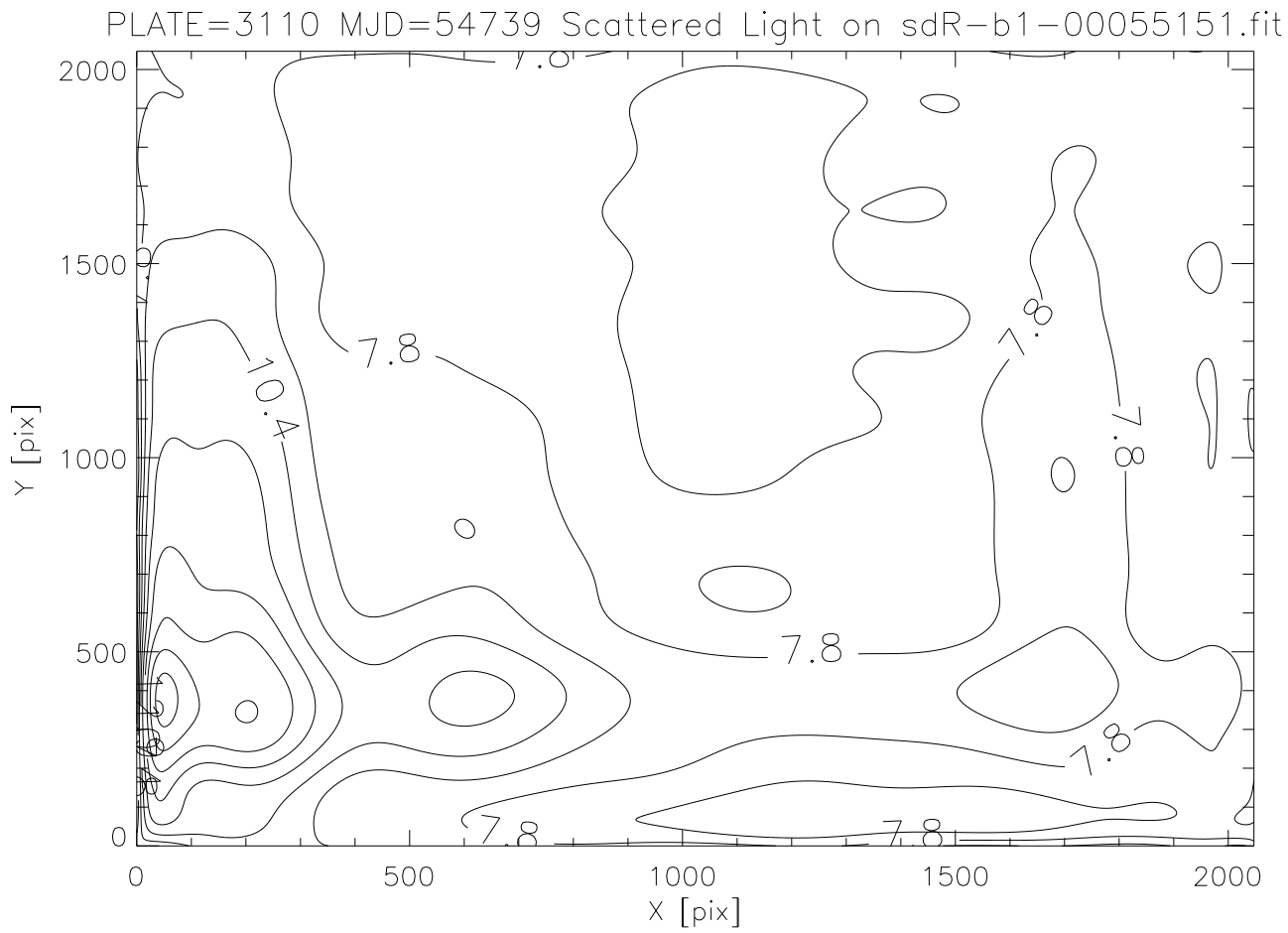

PLATE=3110 MJD=54739 sdR-b1-00055150.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.74 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

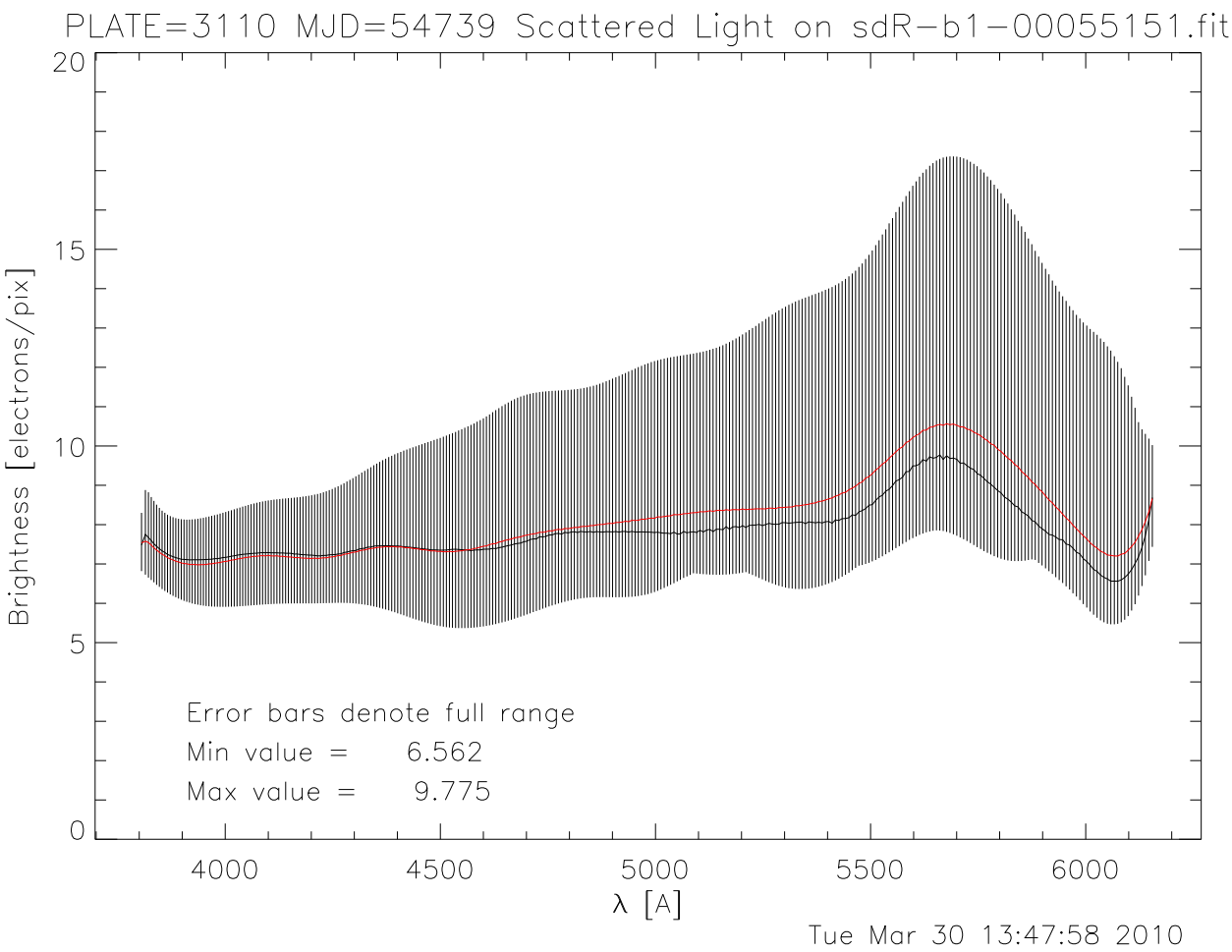

PLATE=3110 MJD=54739 sdR-b1-00055150.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.22 %
Fiber number
Focal Distance [mm]
Airmass

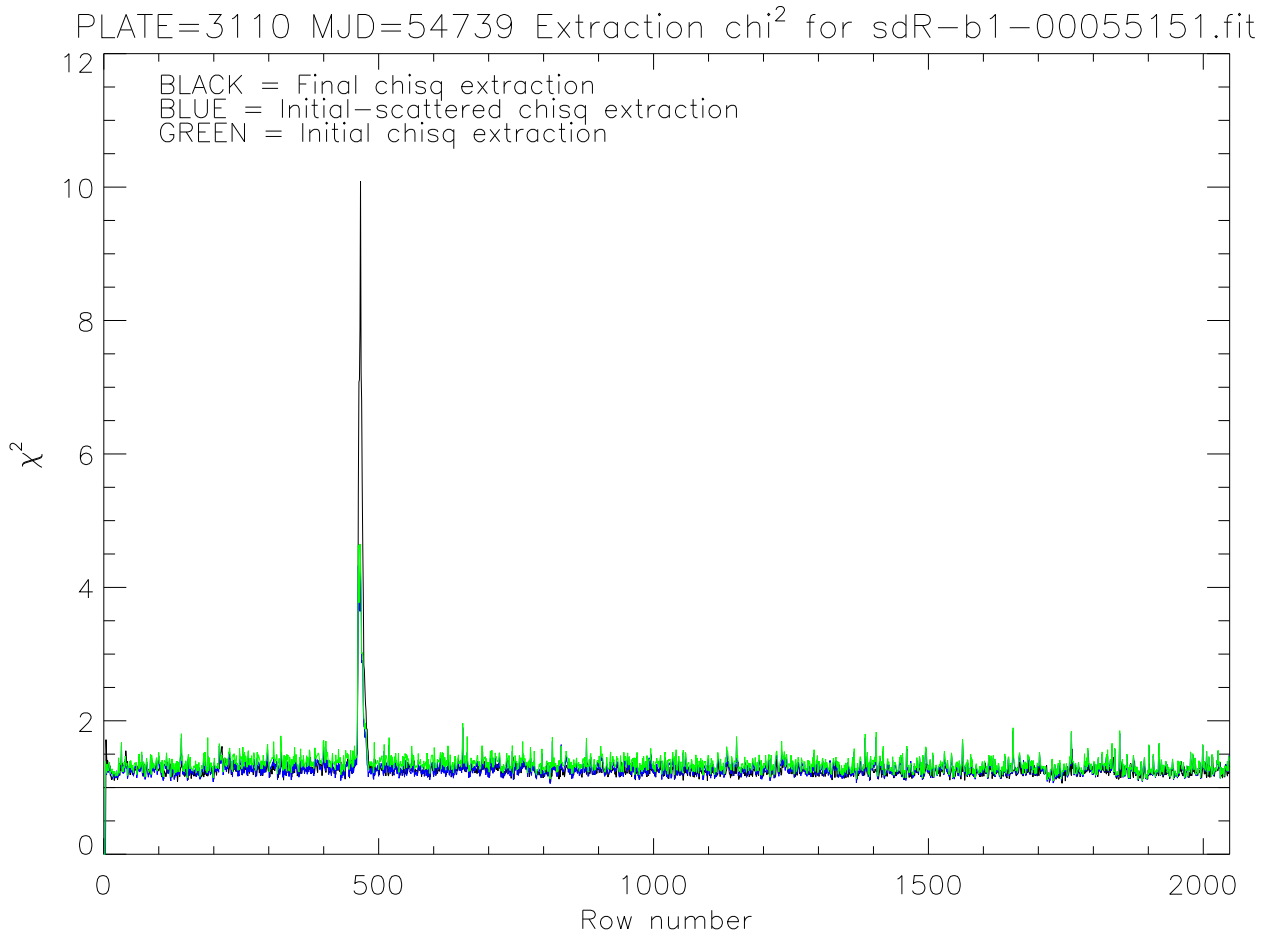

PLATE=3110 MJD=54739 Fiber-Flats for sdR-b1-00055152.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.392
Max value = 1.220
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:46:03 2010

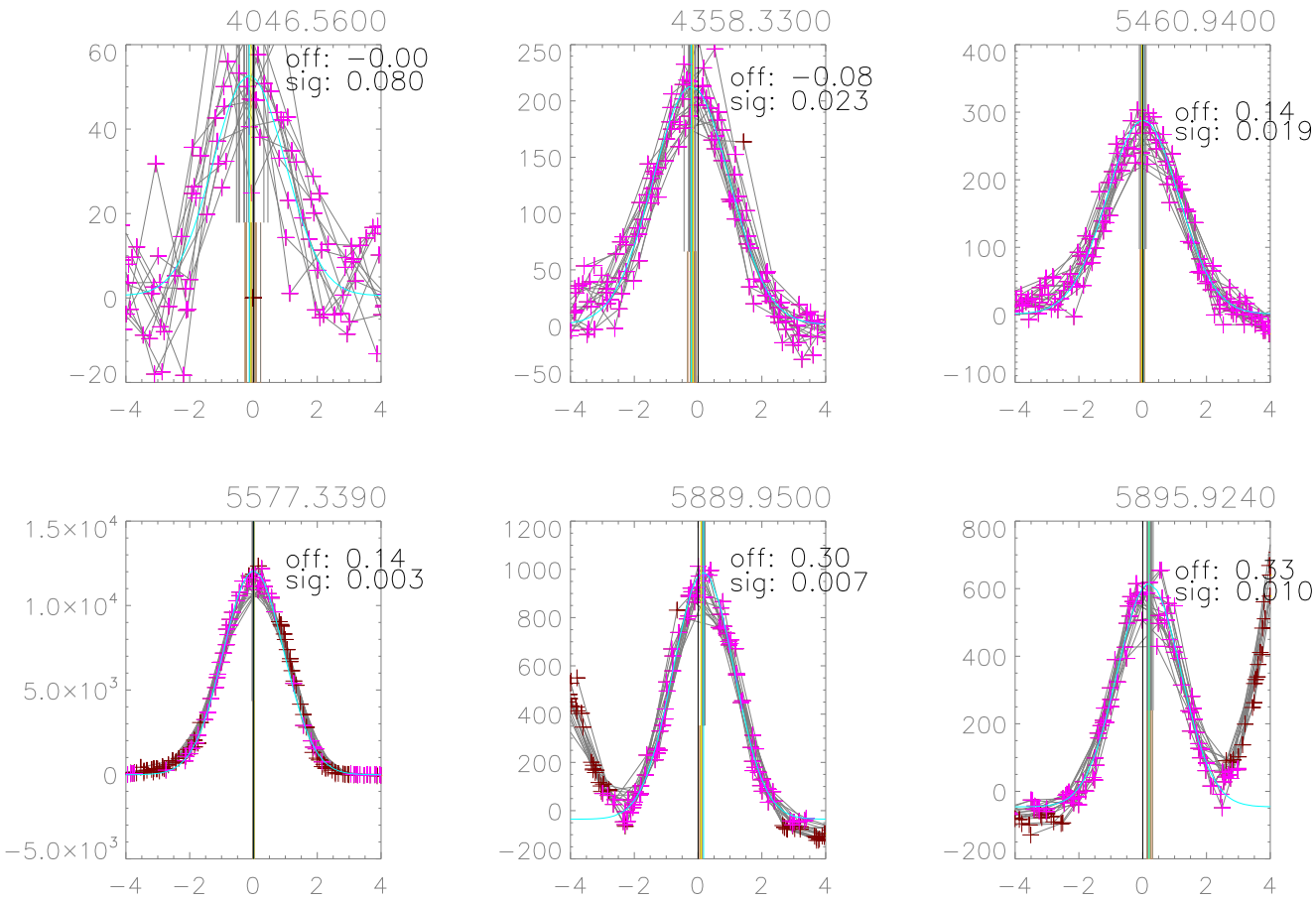

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR−b1−00055151.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.8
16.4
11.8
16.4
11.8
16.4
11.8

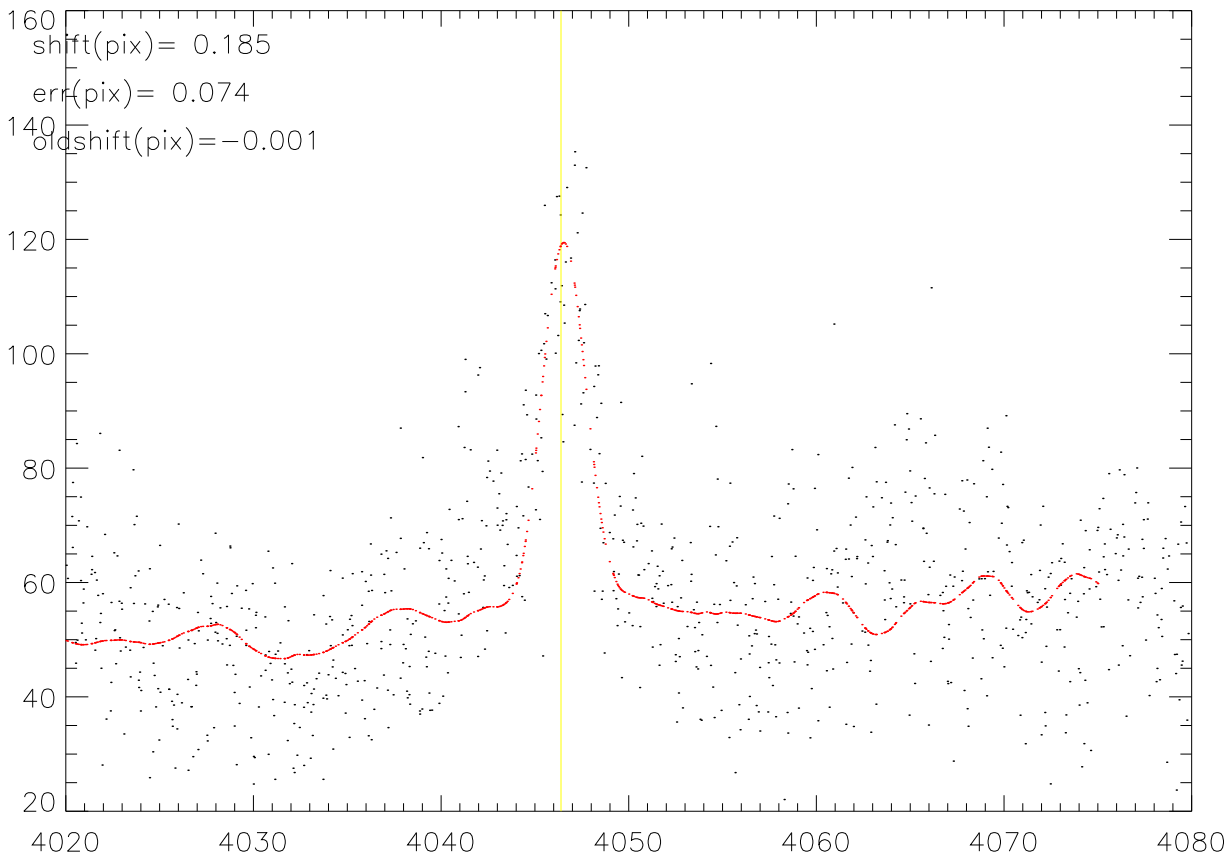

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b1-00055151.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 9.962
Max value = 17.924
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:46:33 2010

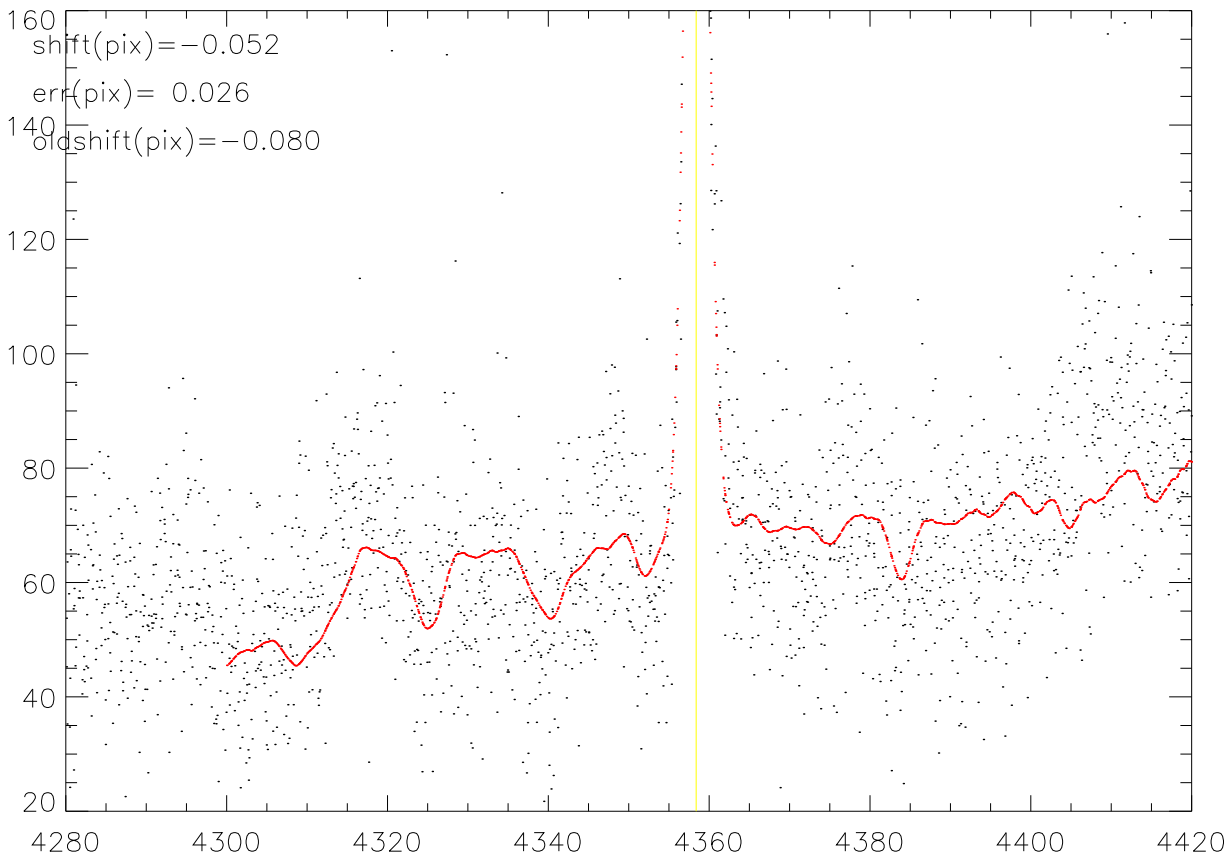

PLATE=3110 MJD=54739 Scattered Light on sdR-b1-00055151.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4

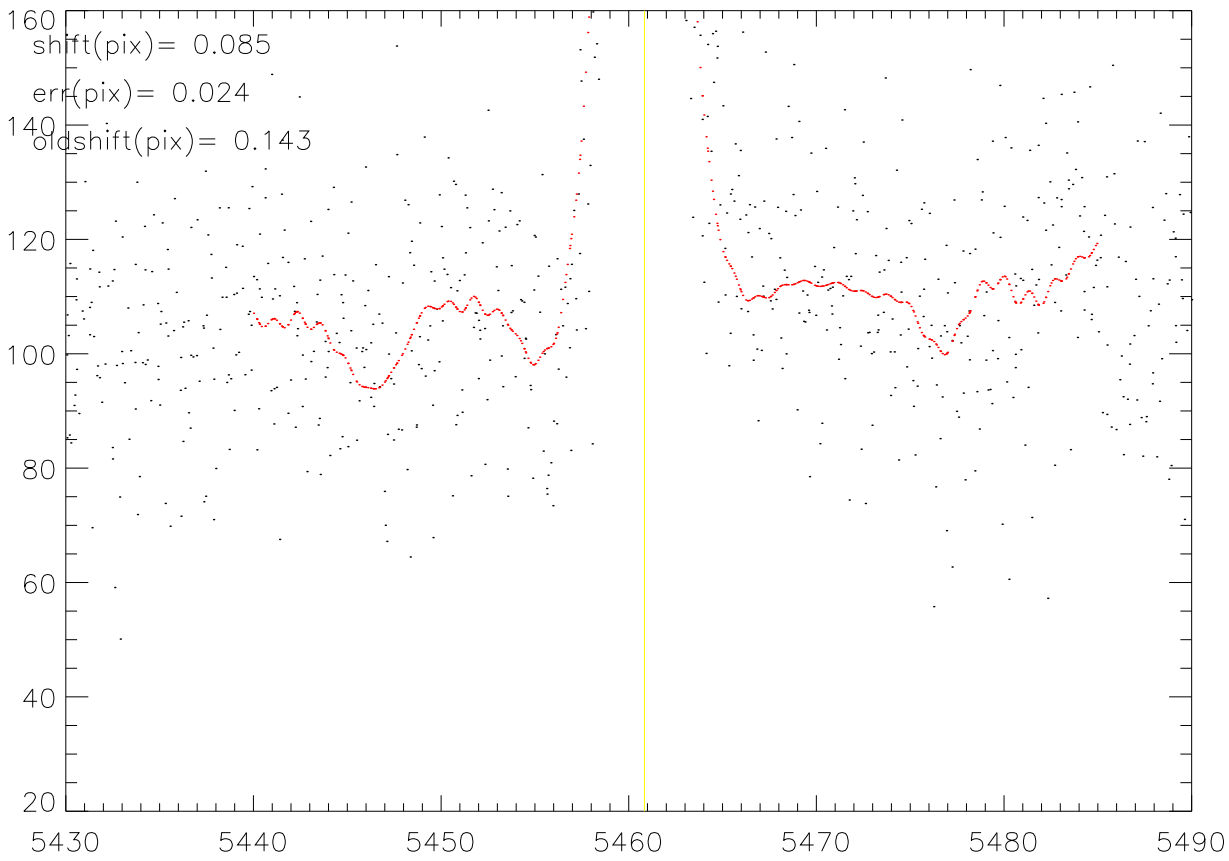

PLATE=3110 MJD=54739 Scattered Light on sdR-b1-00055151.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.562
Max value = 9.775
Tue Mar 30 13:47:58 2010

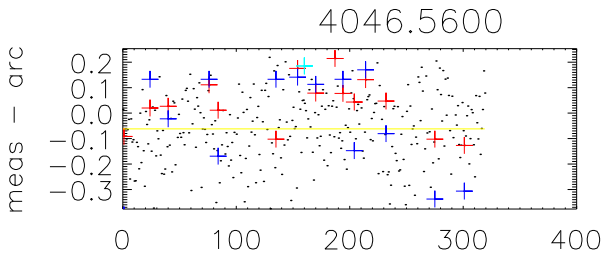

PLATE=3110 MJD=54739 Extraction chi^2 for sdR-b1-00055151.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

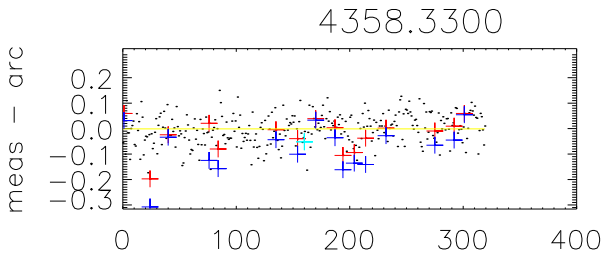

4046.5600
off: −0.00
sig: 0.080
4358.3300
off: −0.08
sig: 0.023
5460.9400
off: 0.14
sig: 0.019
5577.3390
off: 0.14
sig: 0.003
5889.9500
off: 0.30
sig: 0.007
5895.9240
off: 0.33
sig: 0.010

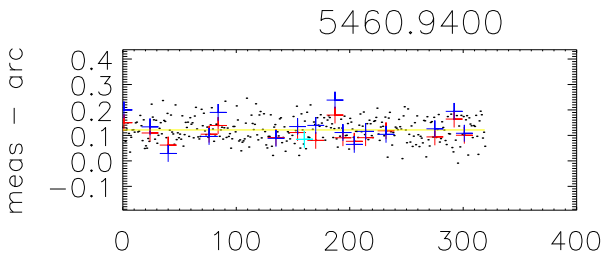

shift(pix)= 0.185
err(pix)= 0.074
oldshift(pix)=-0.001
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

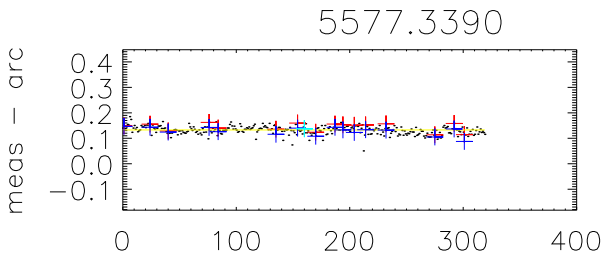

shift(pix)=−0.052
err(pix)= 0.026
oldshift(pix)=−0.080
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

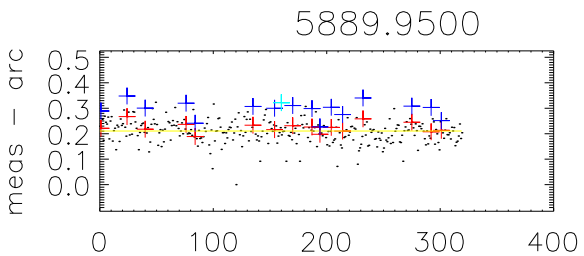

shift(pix)= 0.085
err(pix)= 0.024
oldshift(pix)= 0.143
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

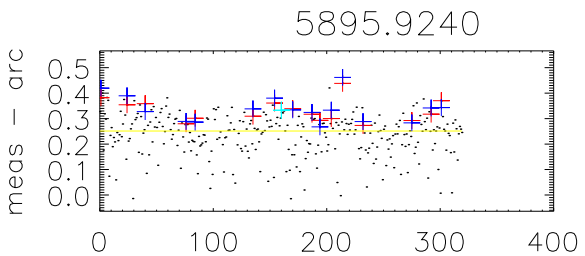

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

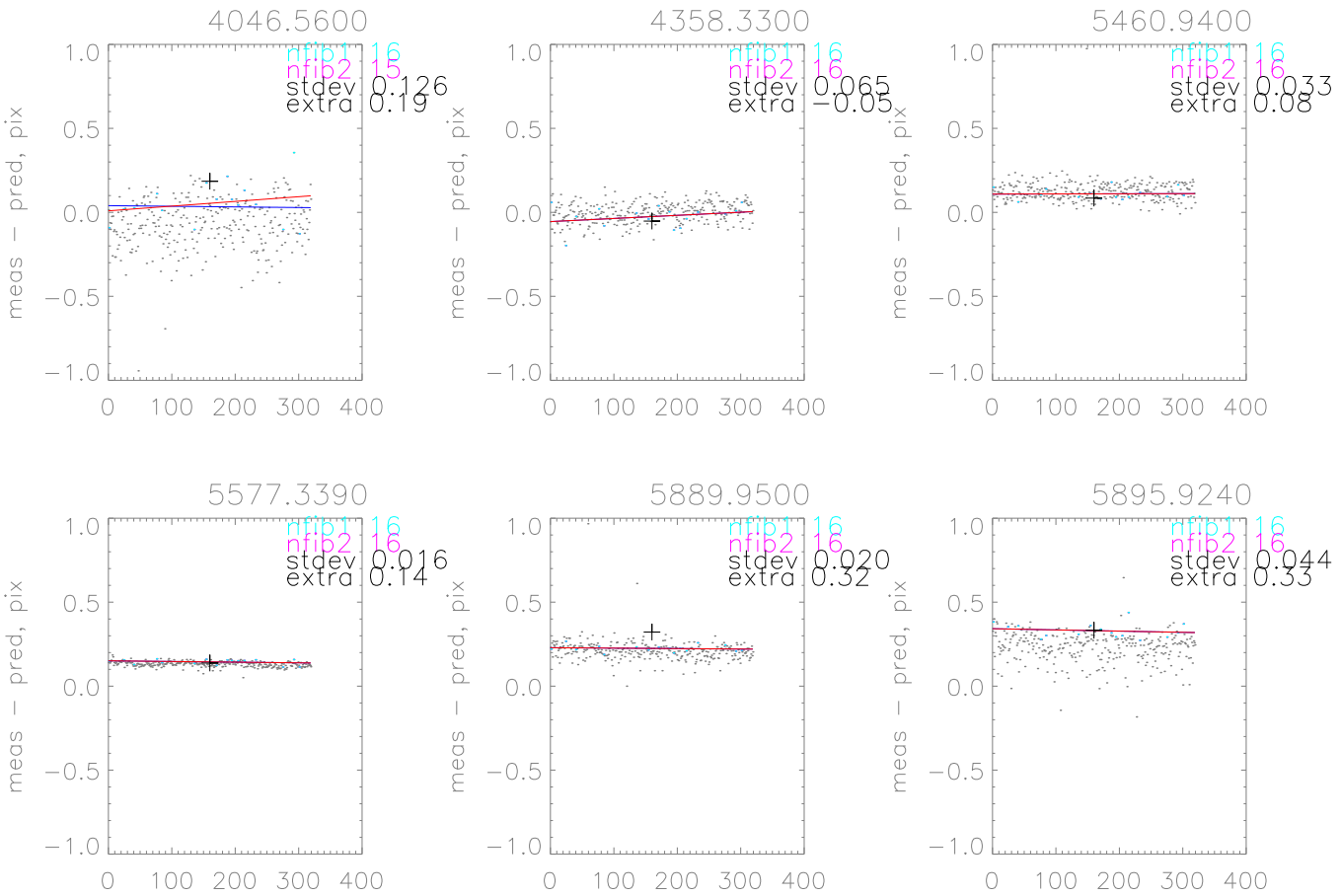

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

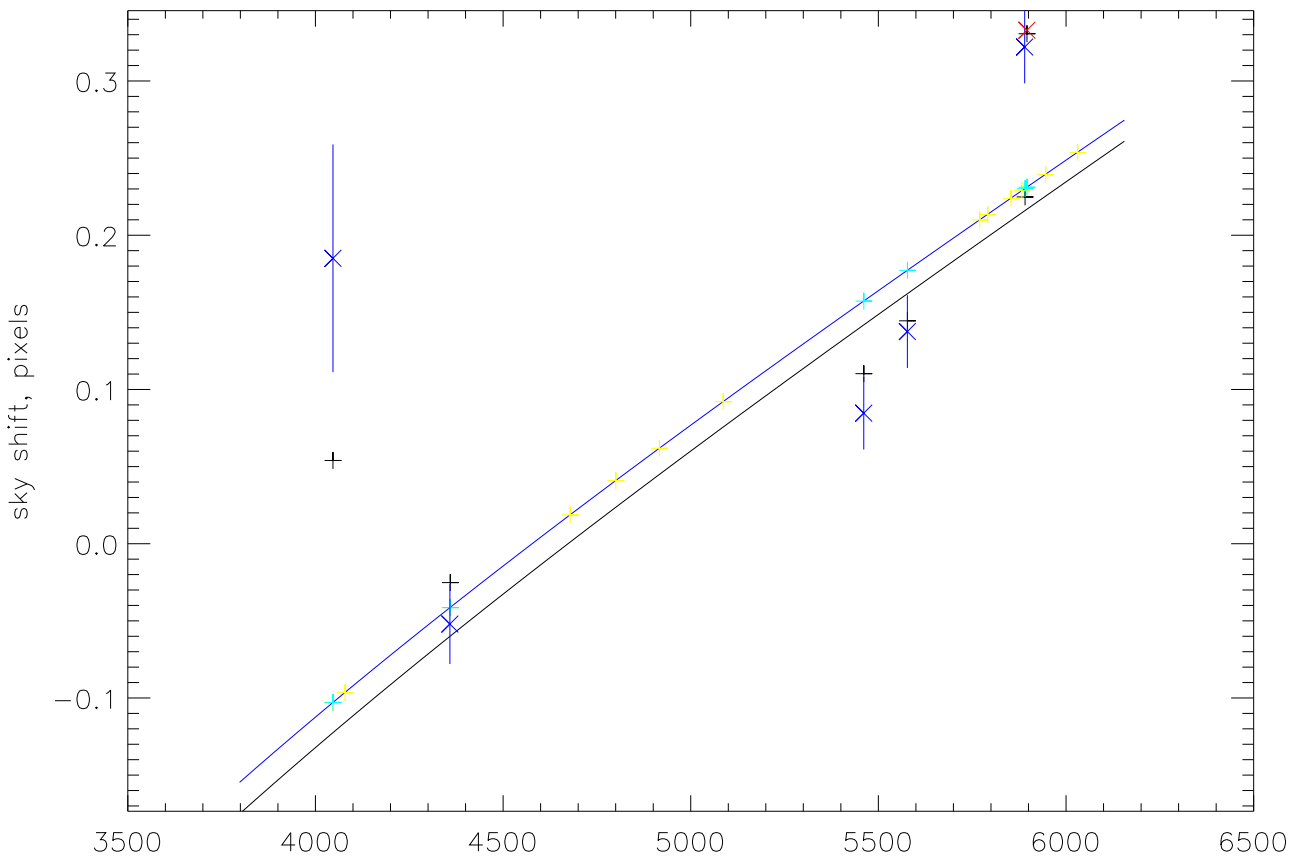

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

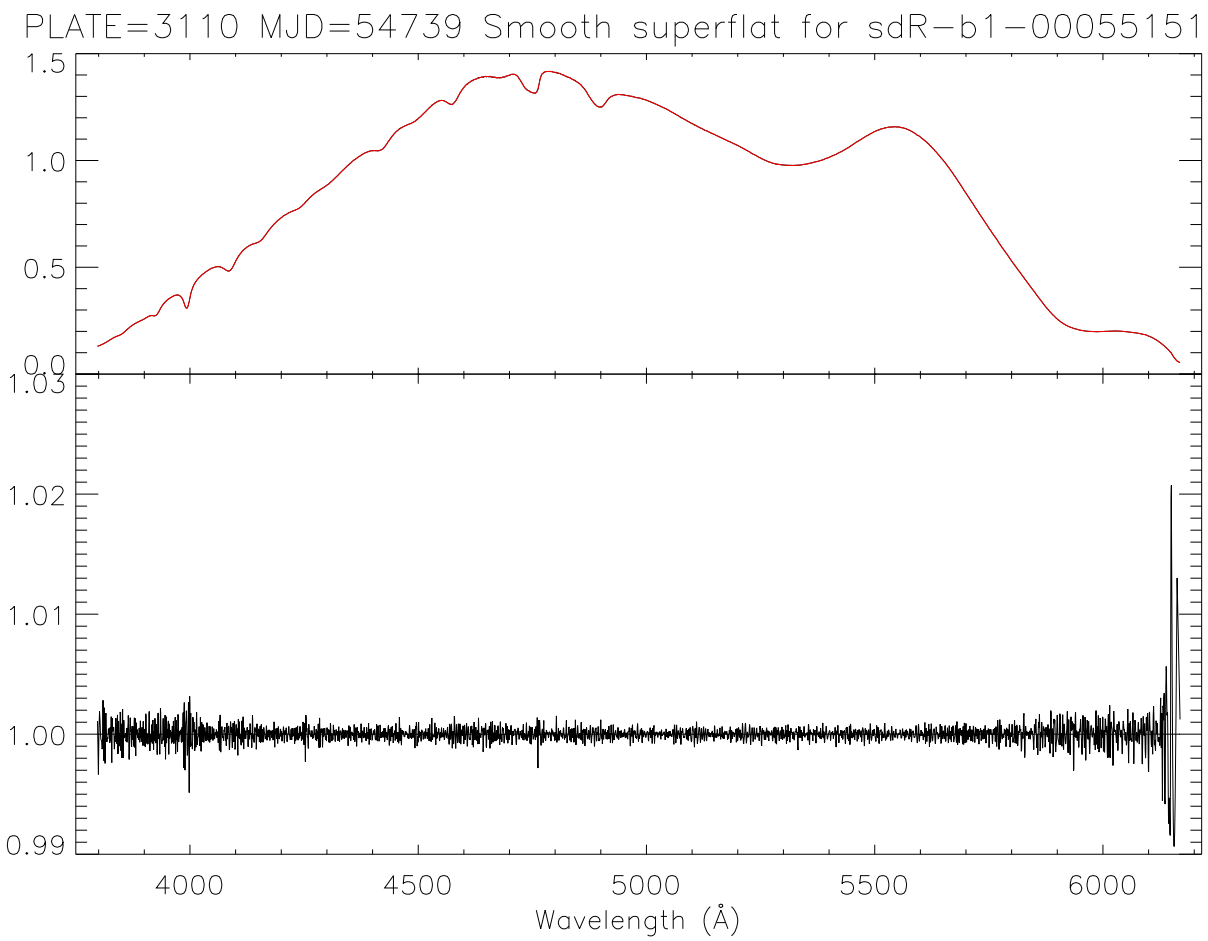

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

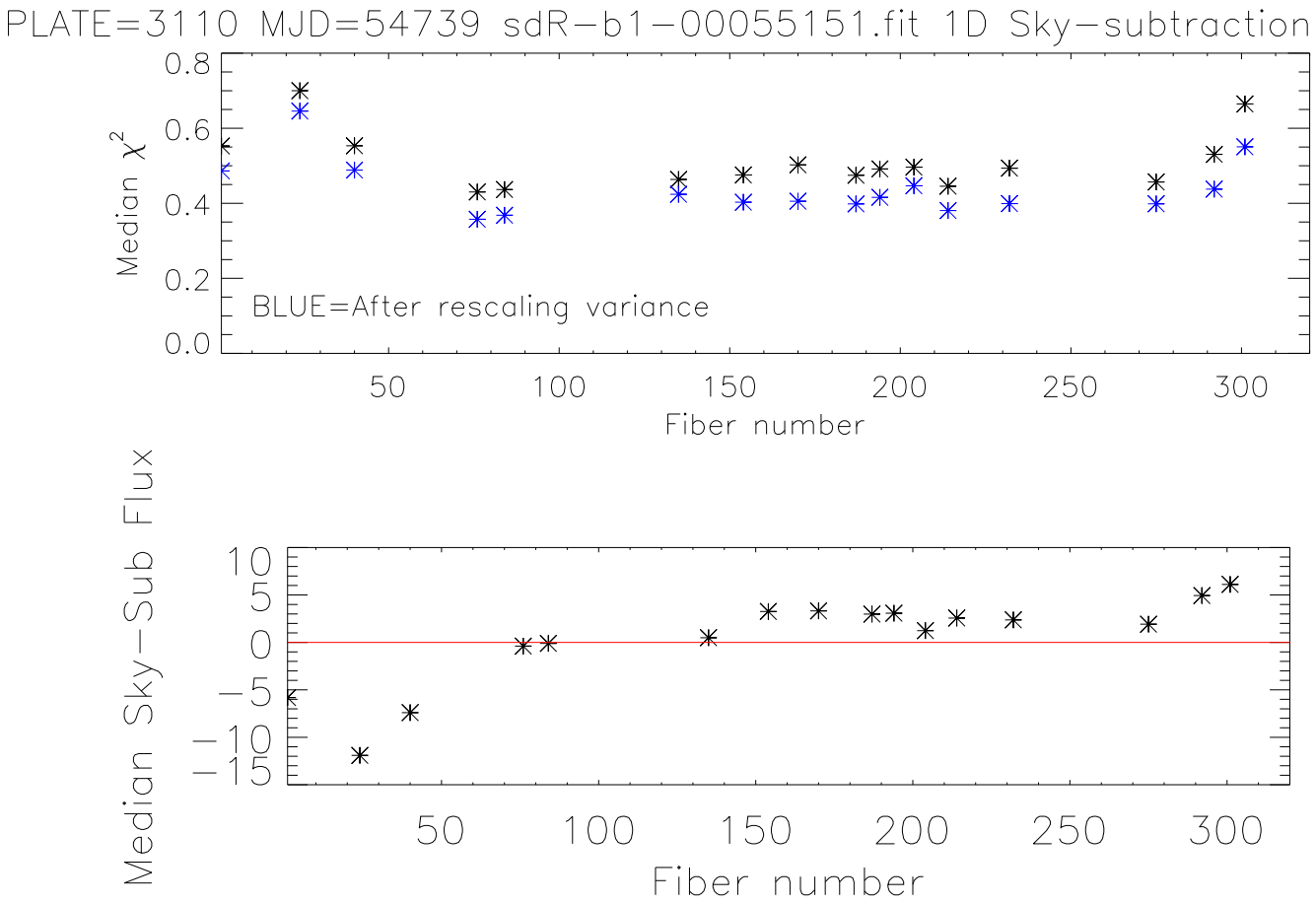

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

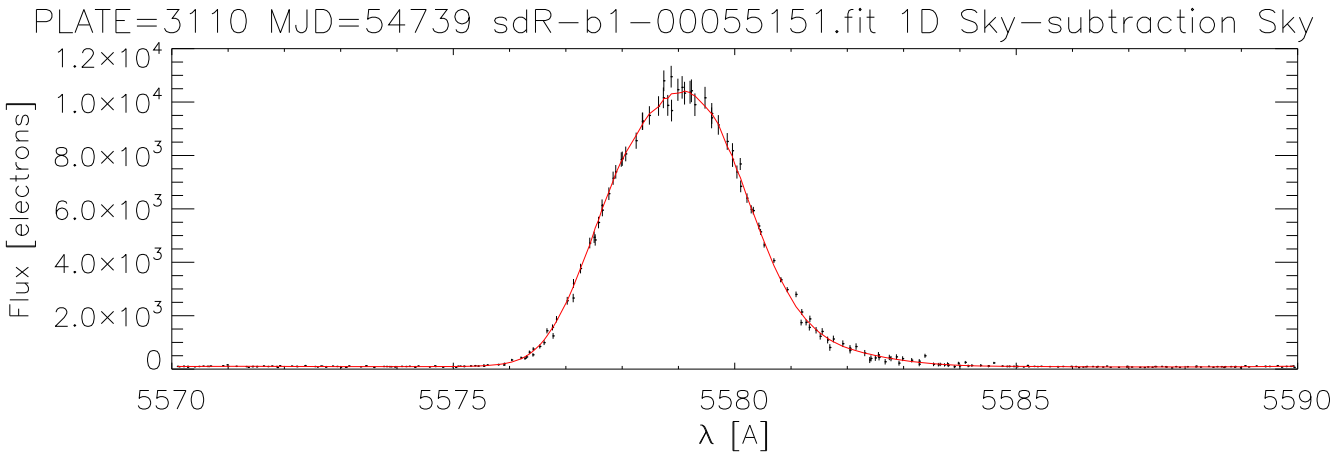

4046.5600
nfib1 16
nfib2 15
stdev 0.126
extra 0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.065
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.033
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.020
extra 0.32
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

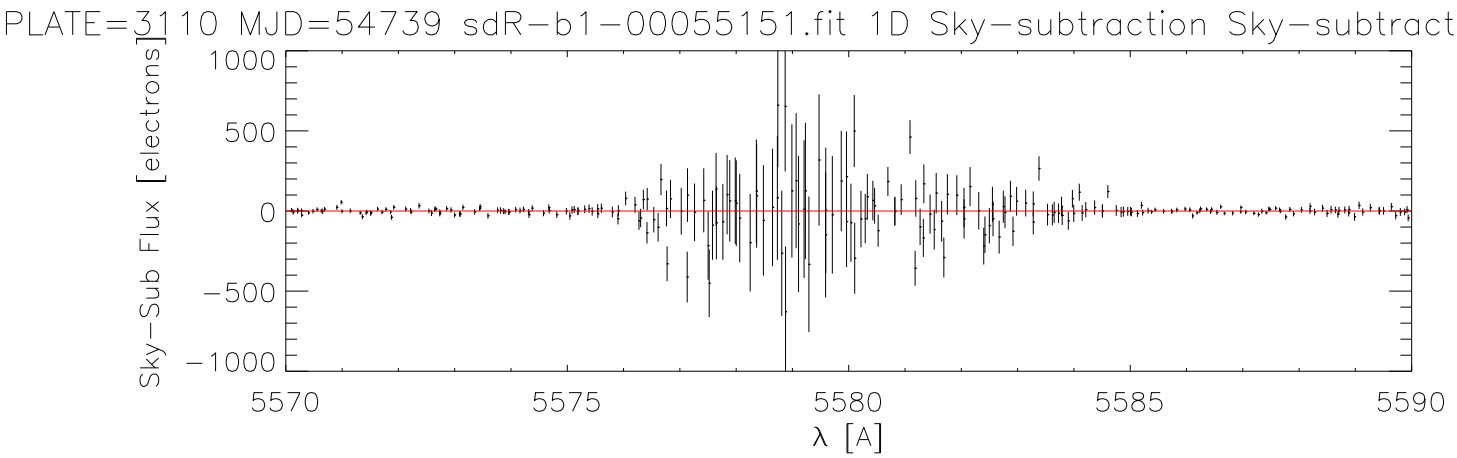

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

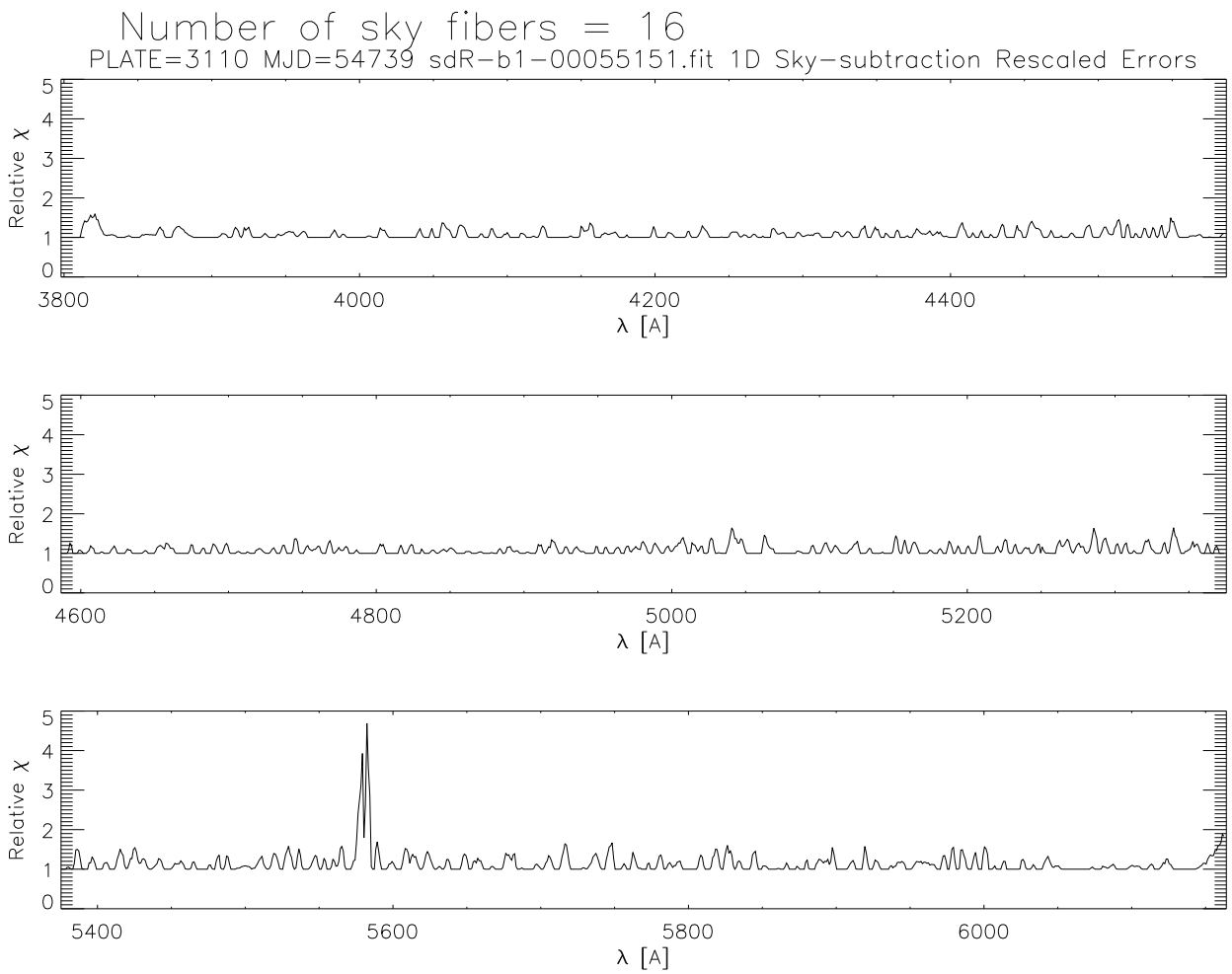
es= −0.0001

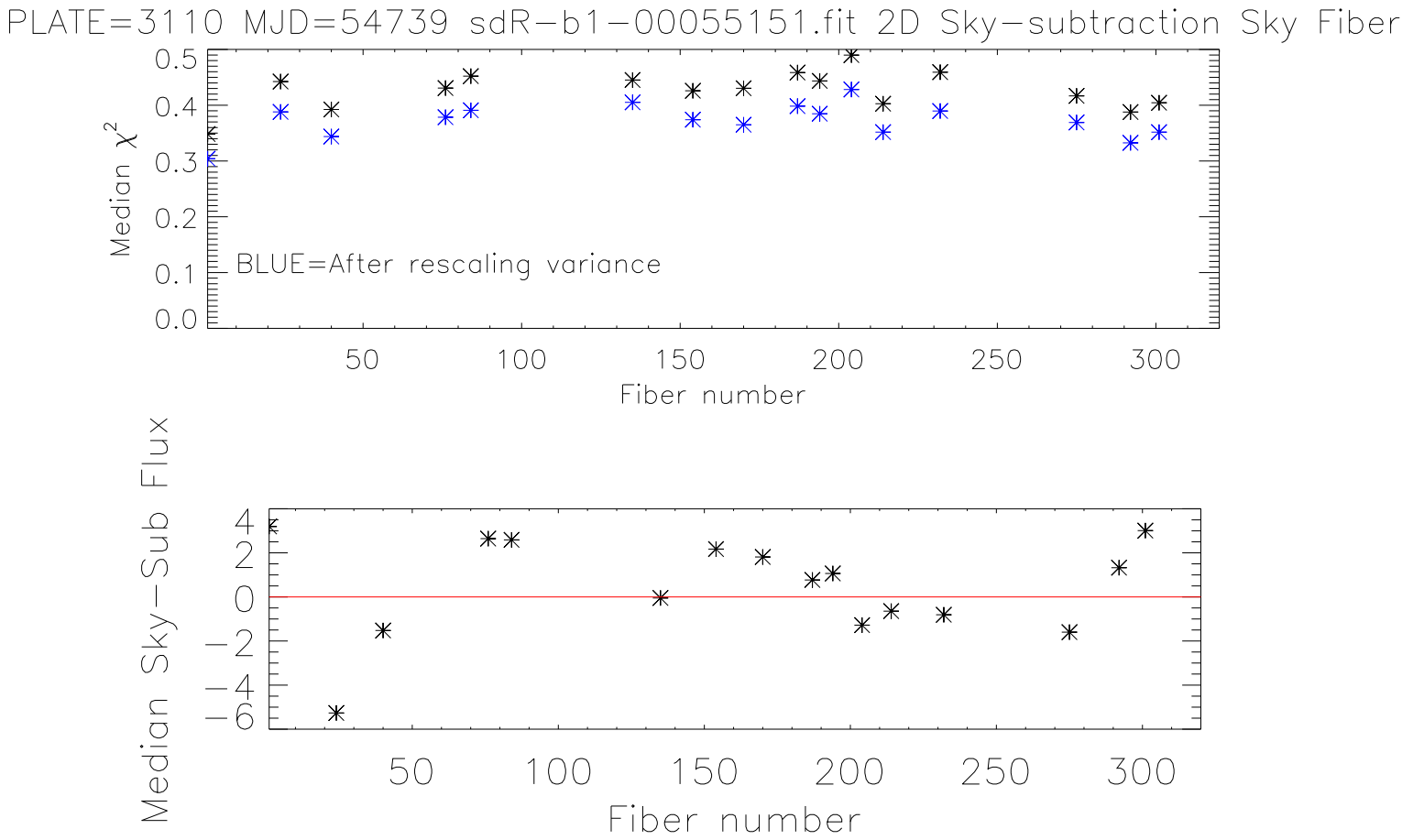

PLATE=3110 MJD=54739 Smooth superflat for sdR−b1−00055151.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
4000
4500
5000
5500
6000
Wavelength (Å)

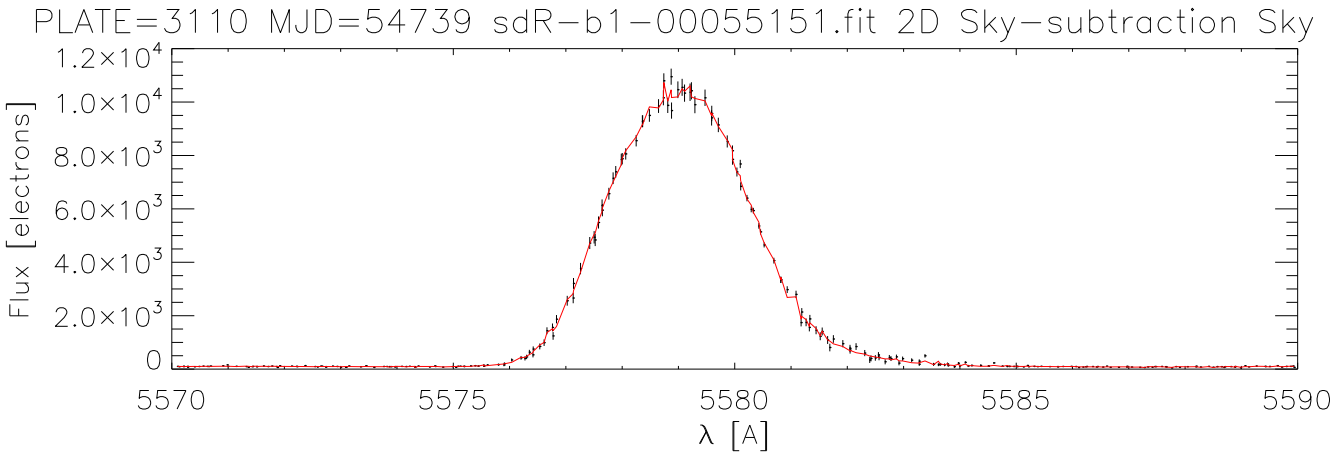

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

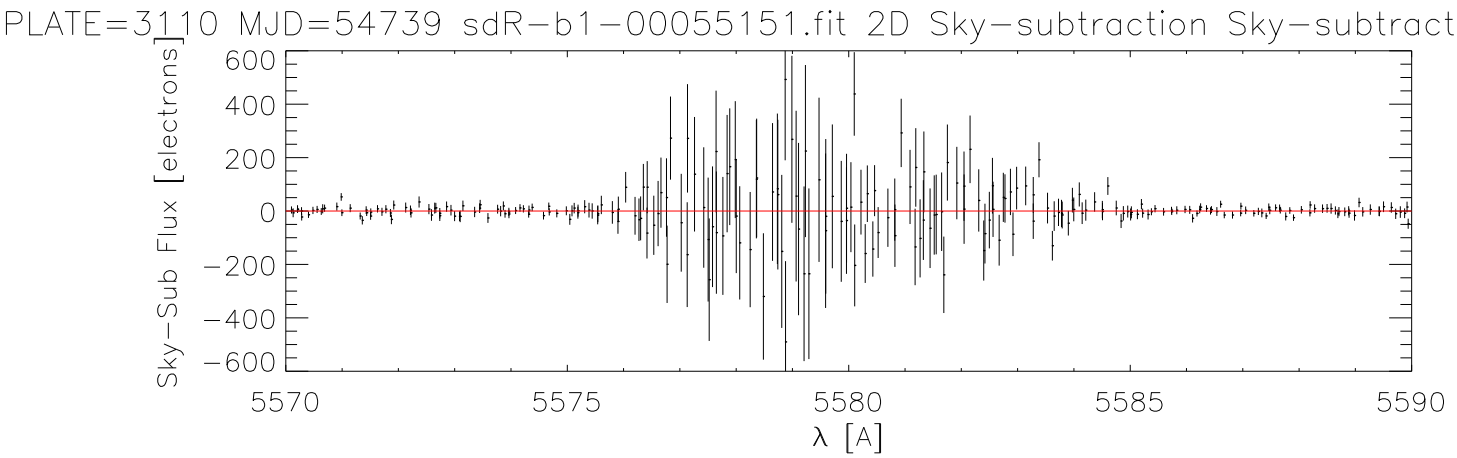

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

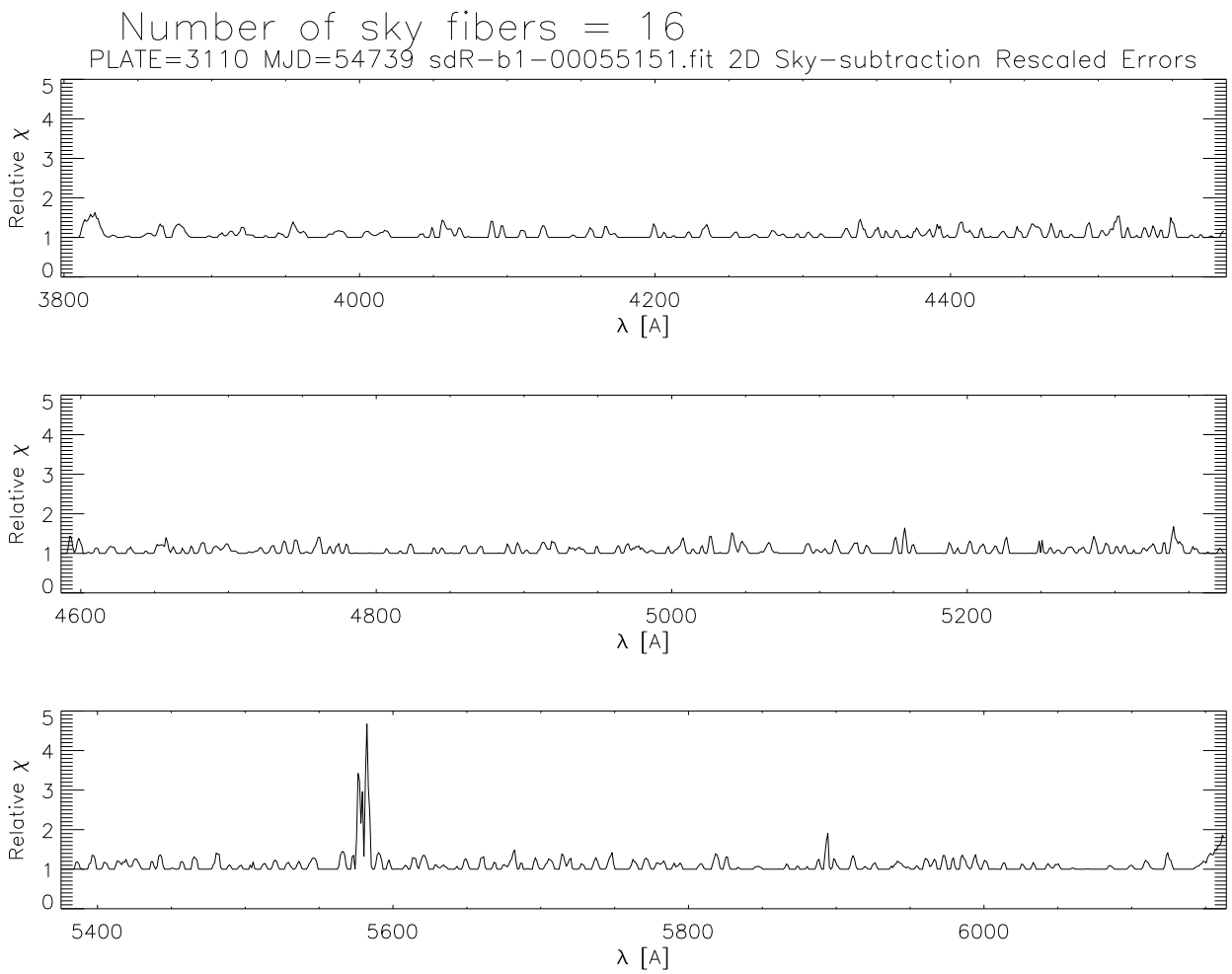

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

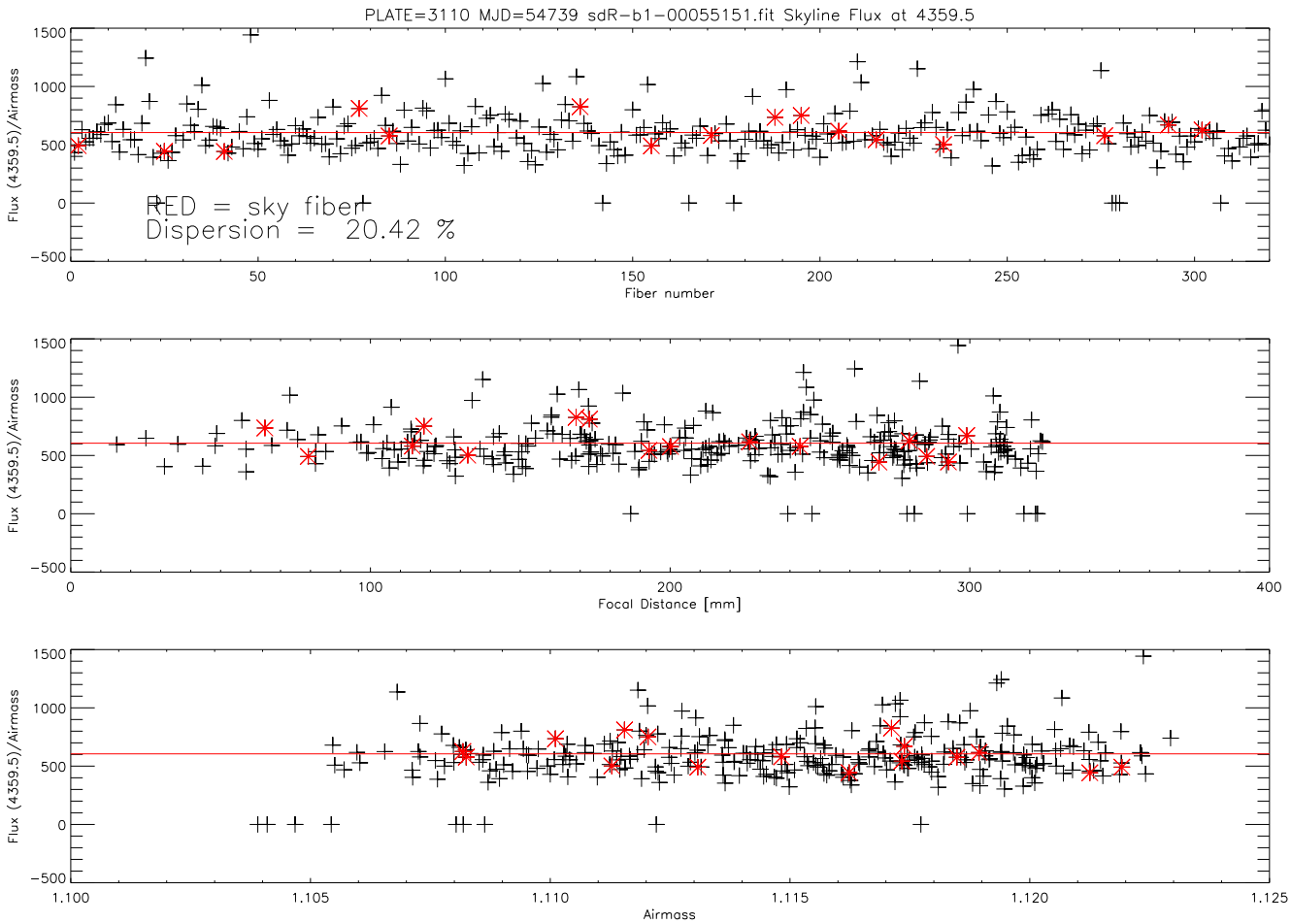

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b1-00055151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

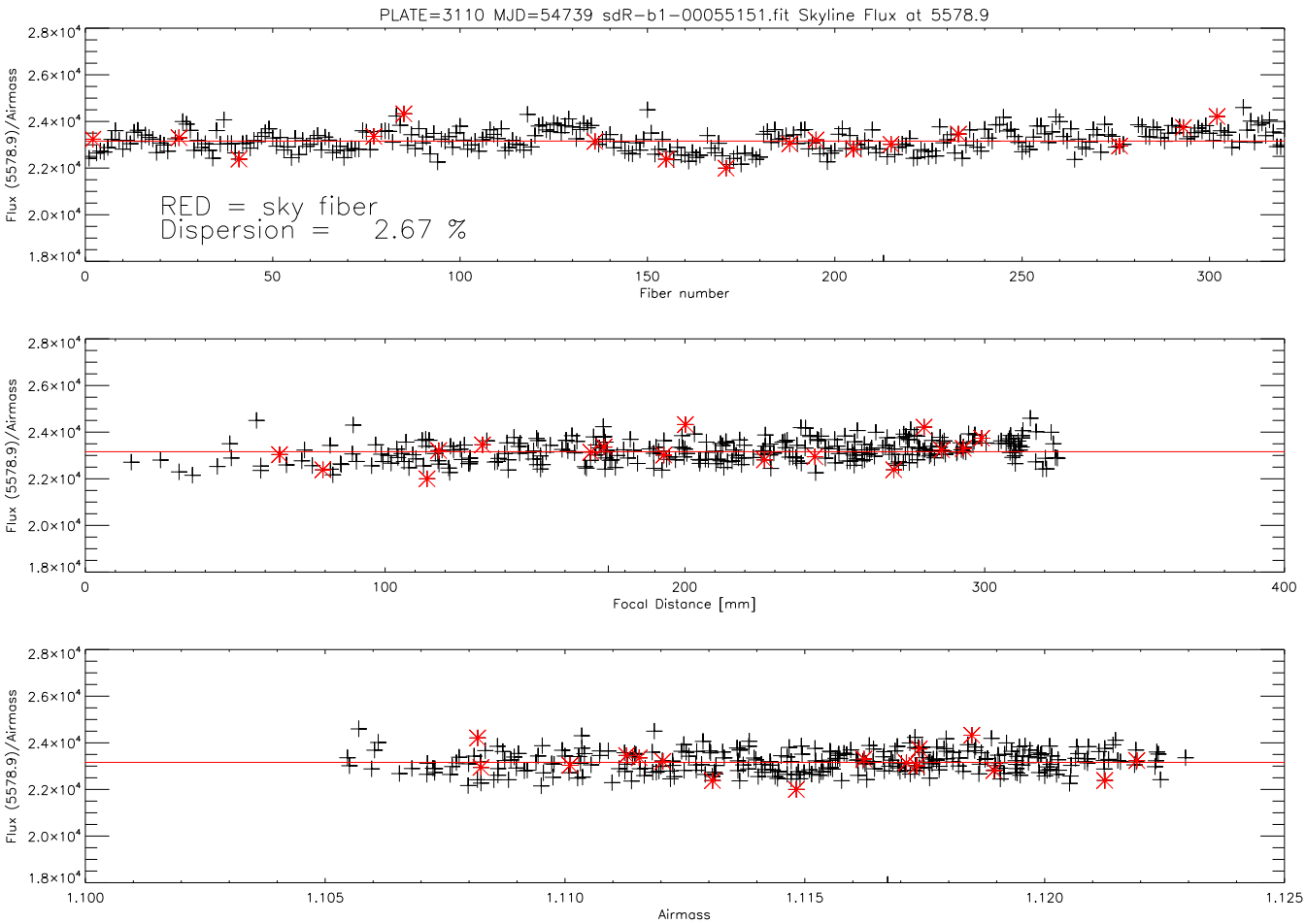

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

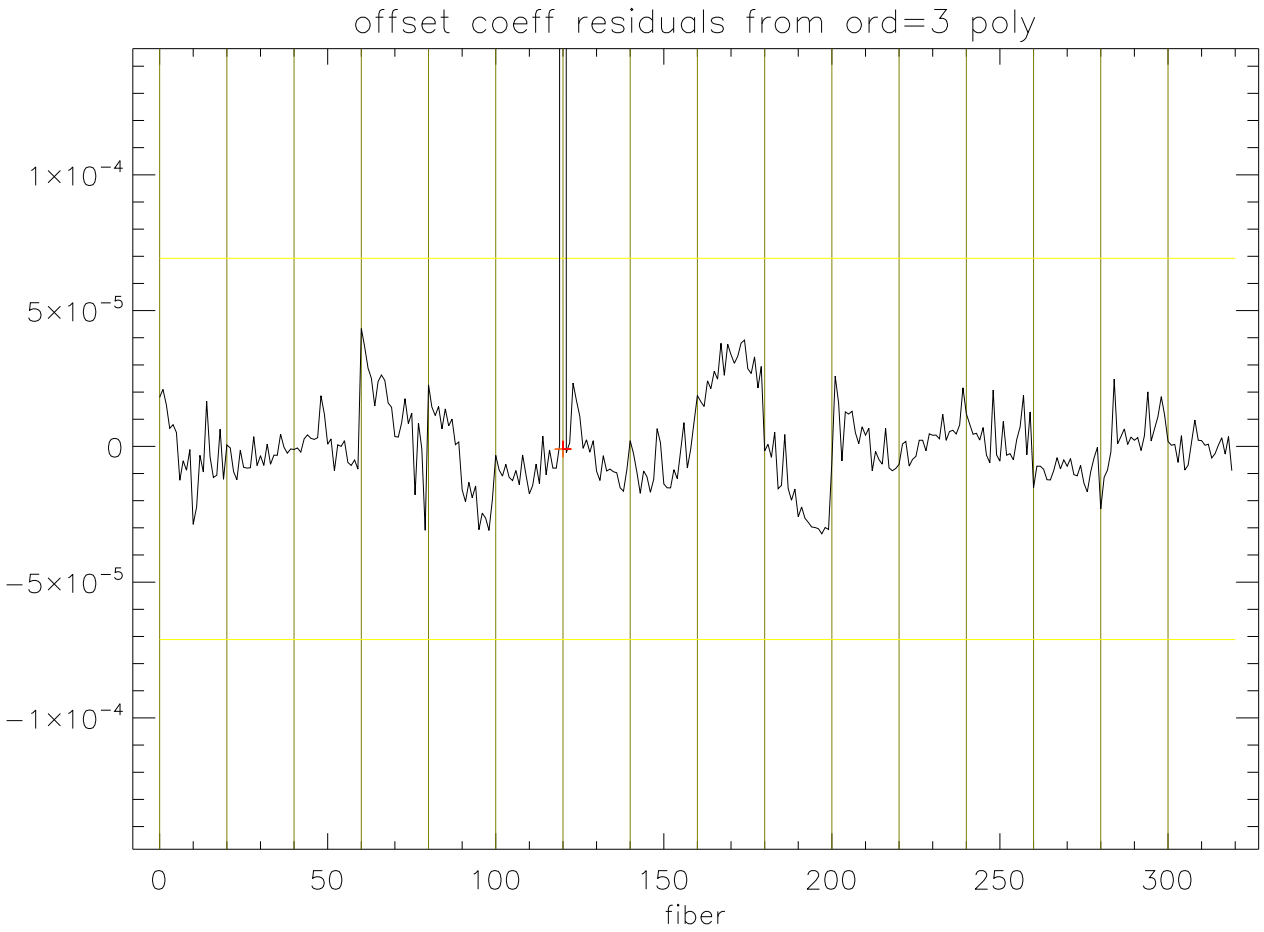

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

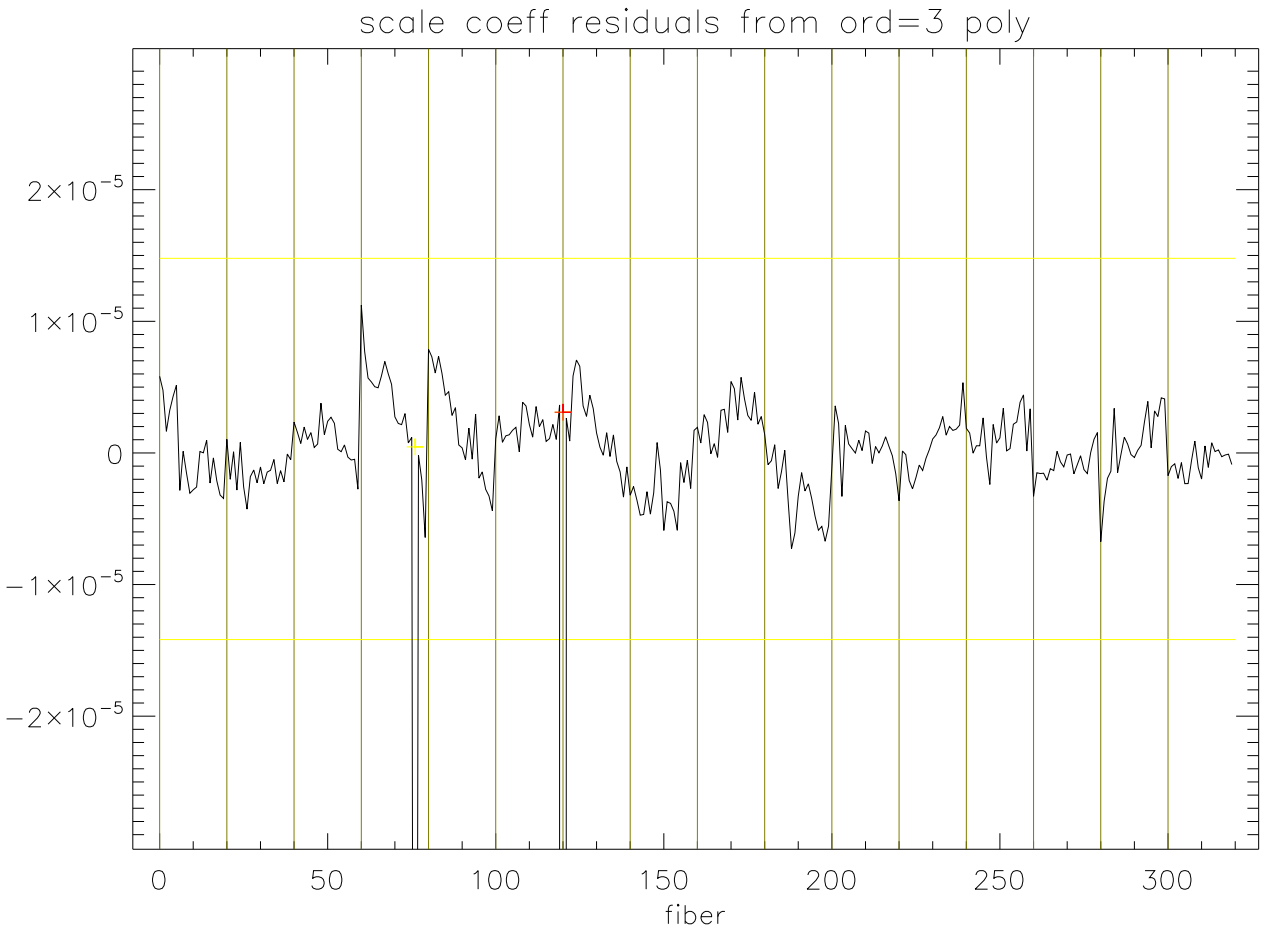

PLATE=3110 MJD=54739 sdR-b1-00055151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

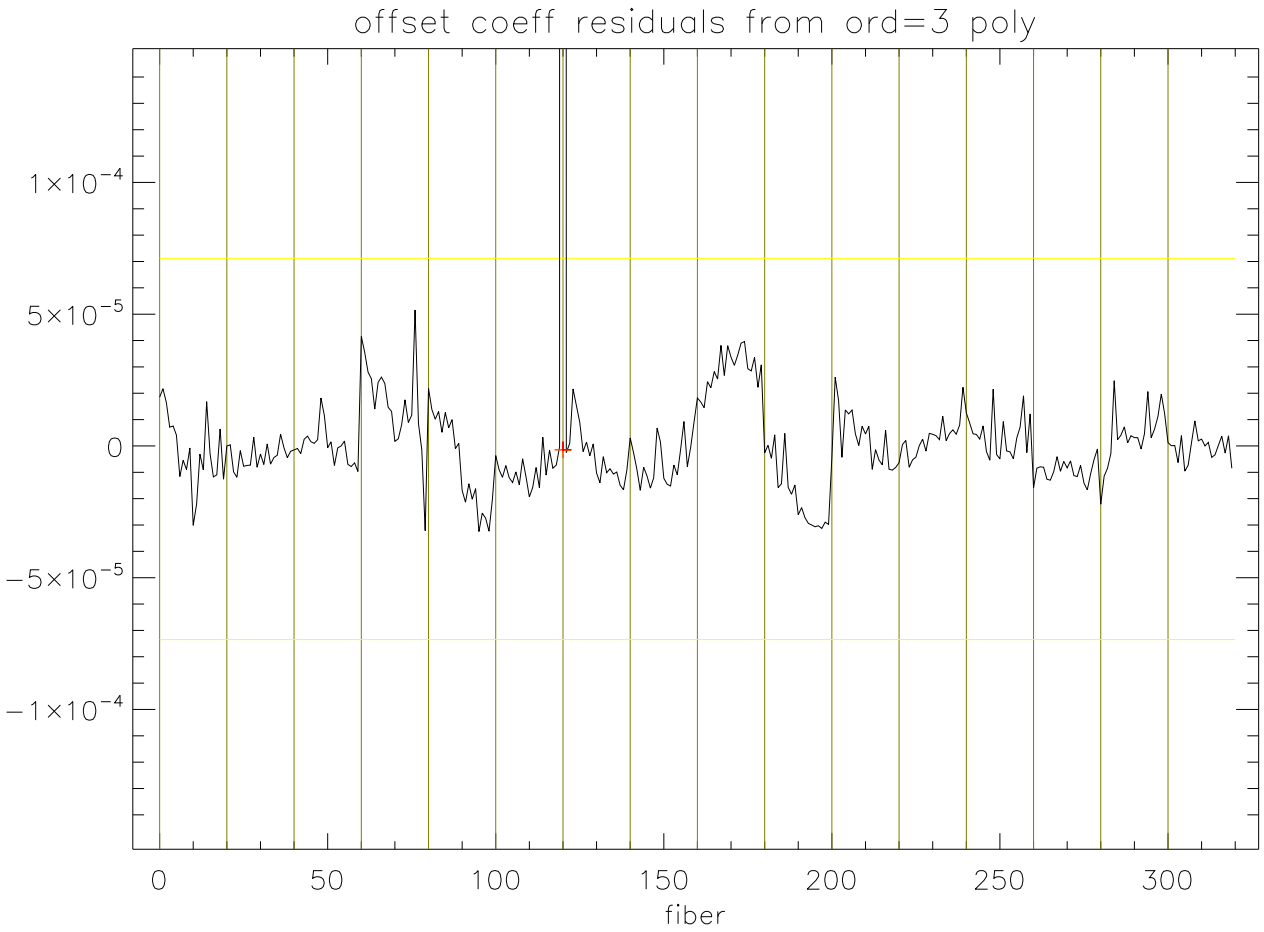

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b1-00055151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

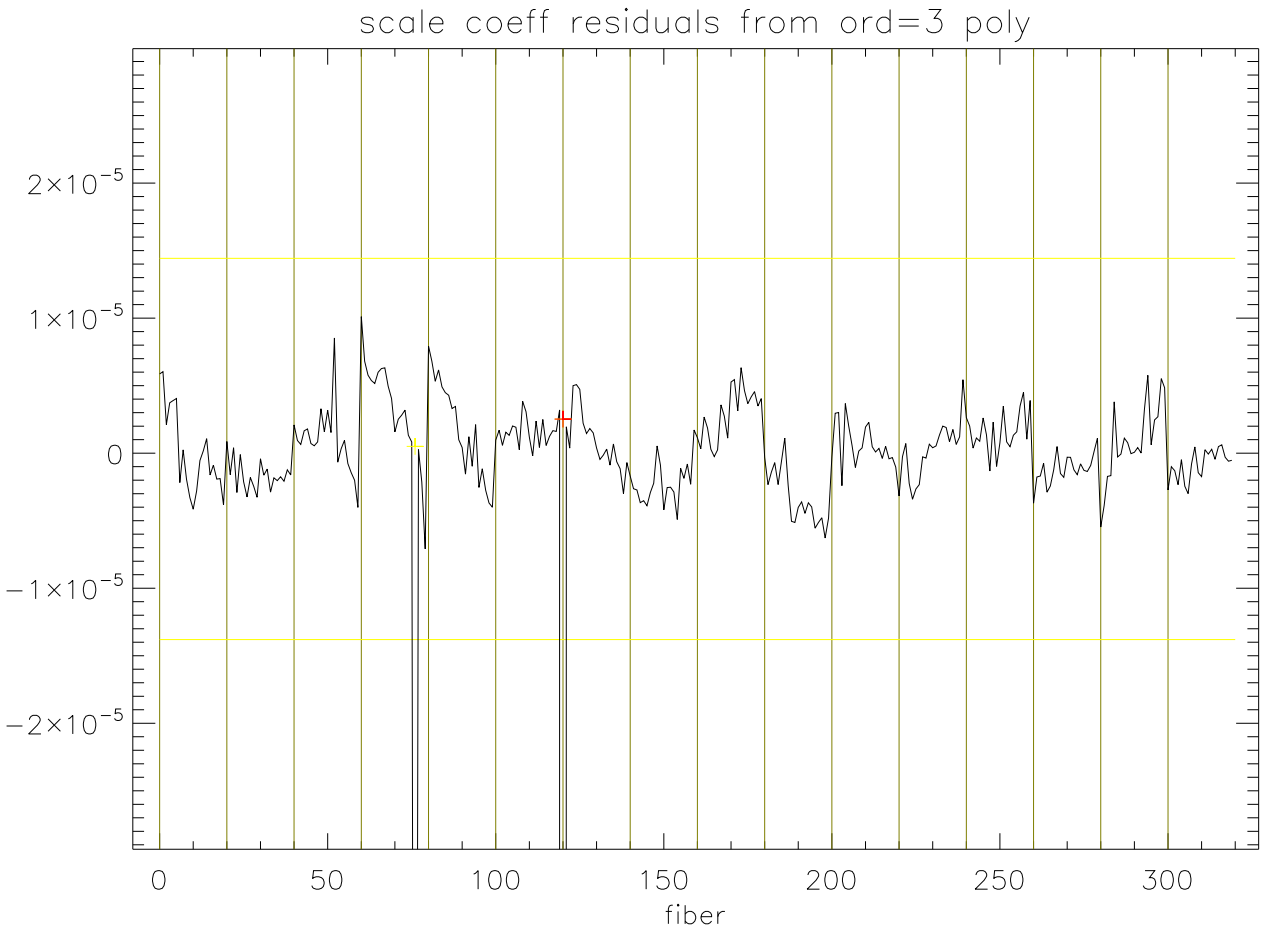

PLATE=3110 MJD=54739 sdR-b1-00055151.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 20.42 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

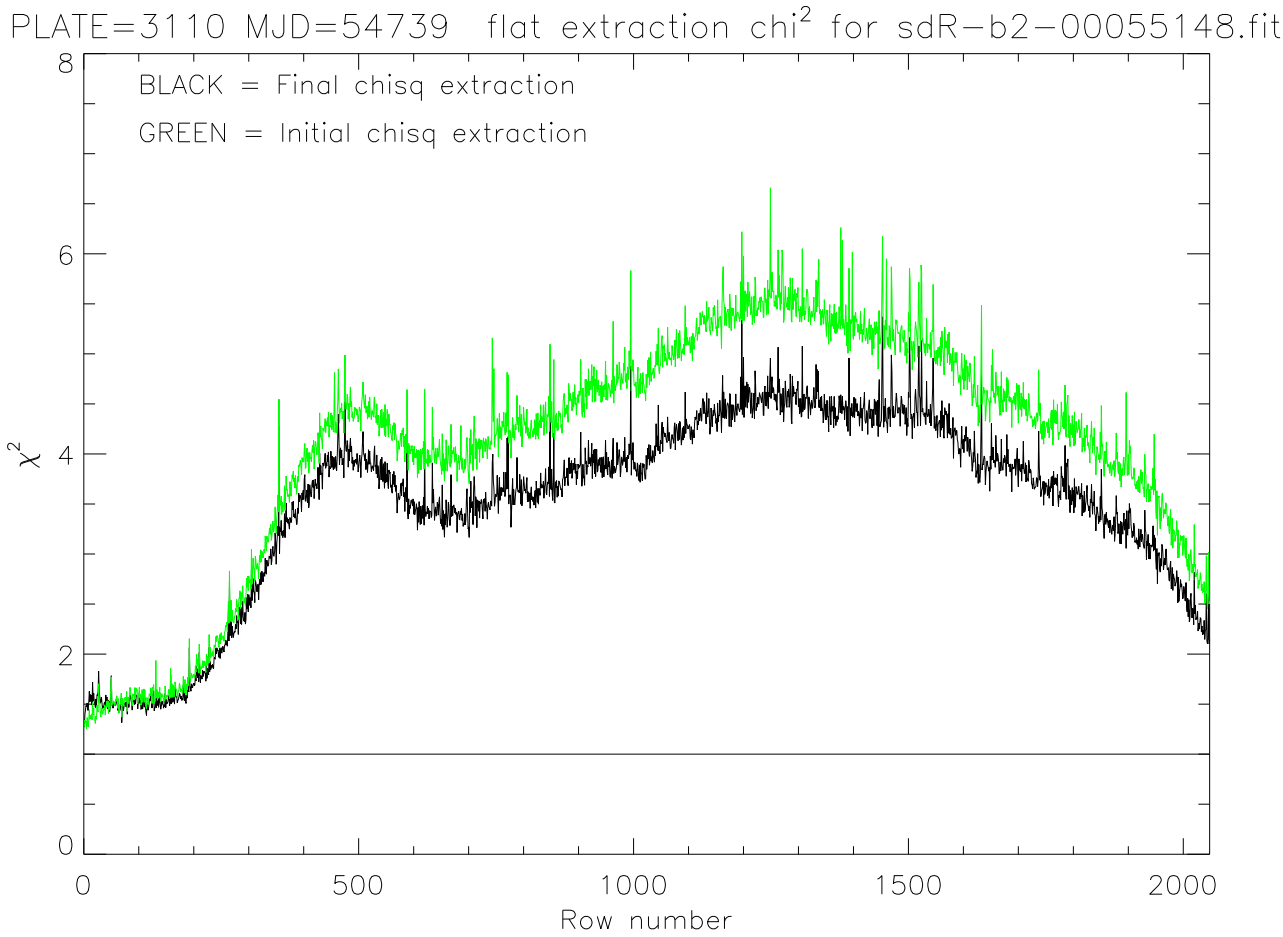

PLATE=3110 MJD=54739 sdR-b1-00055151.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.67 %
Fiber number
Focal Distance [mm]
Airmass

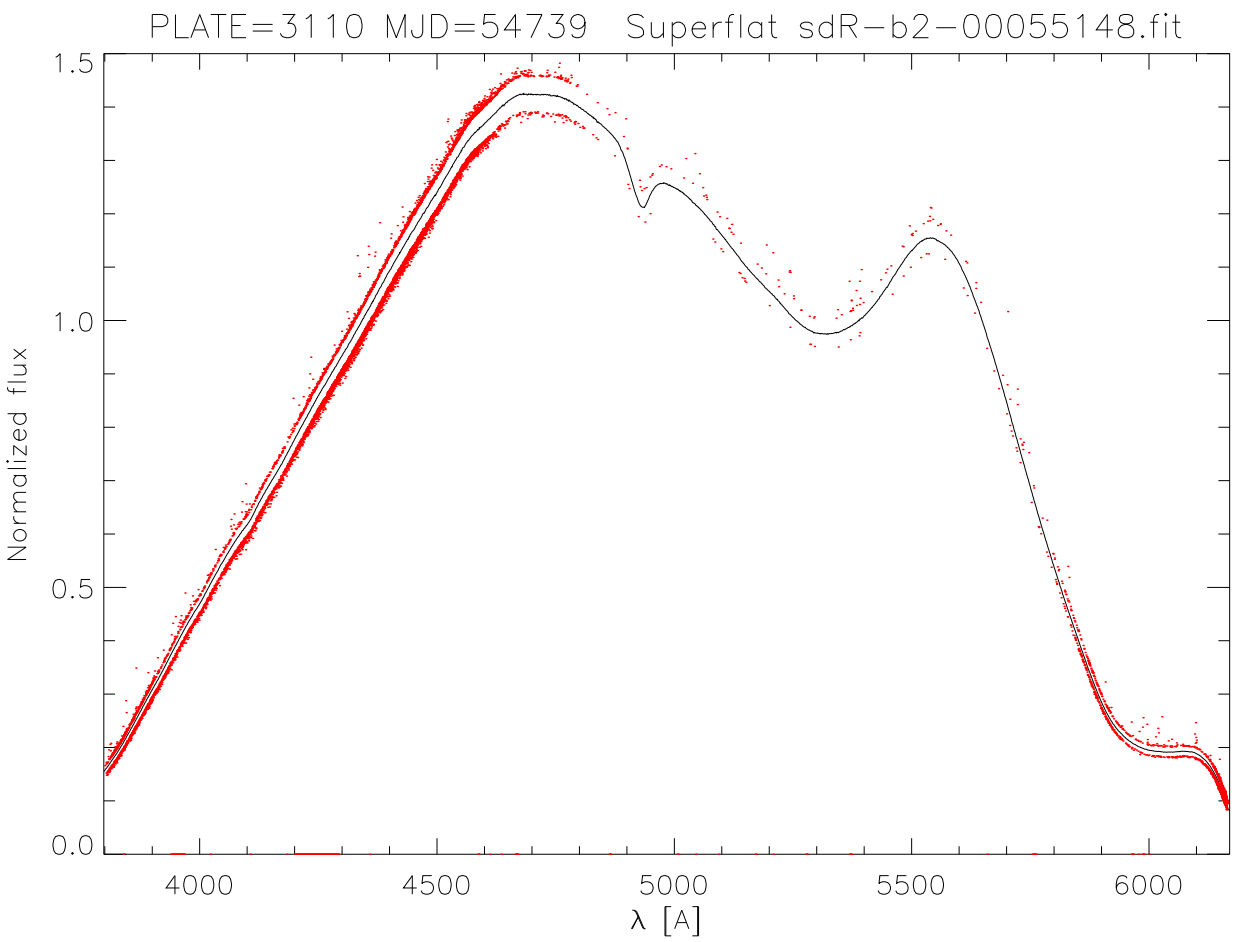

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

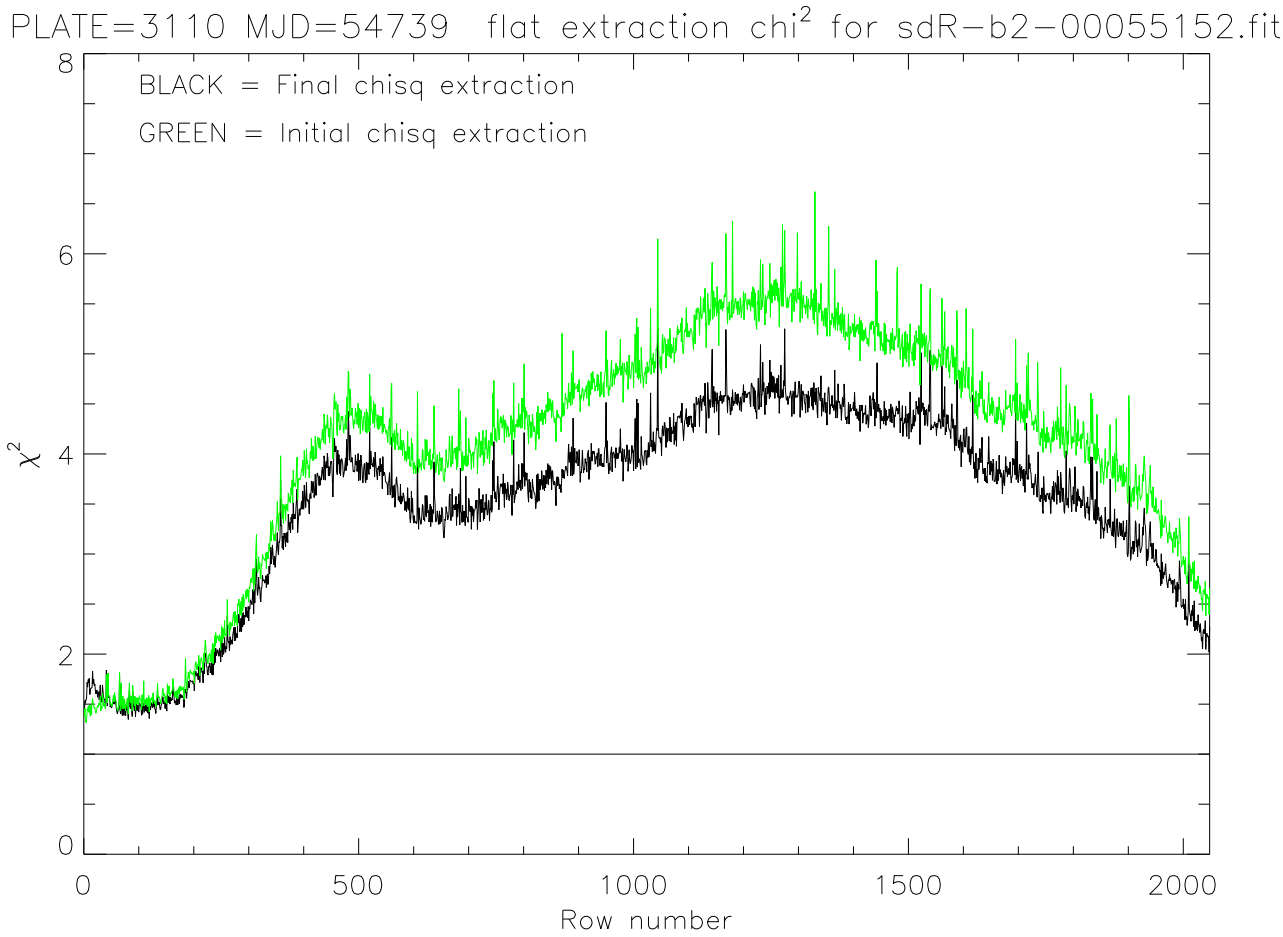

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

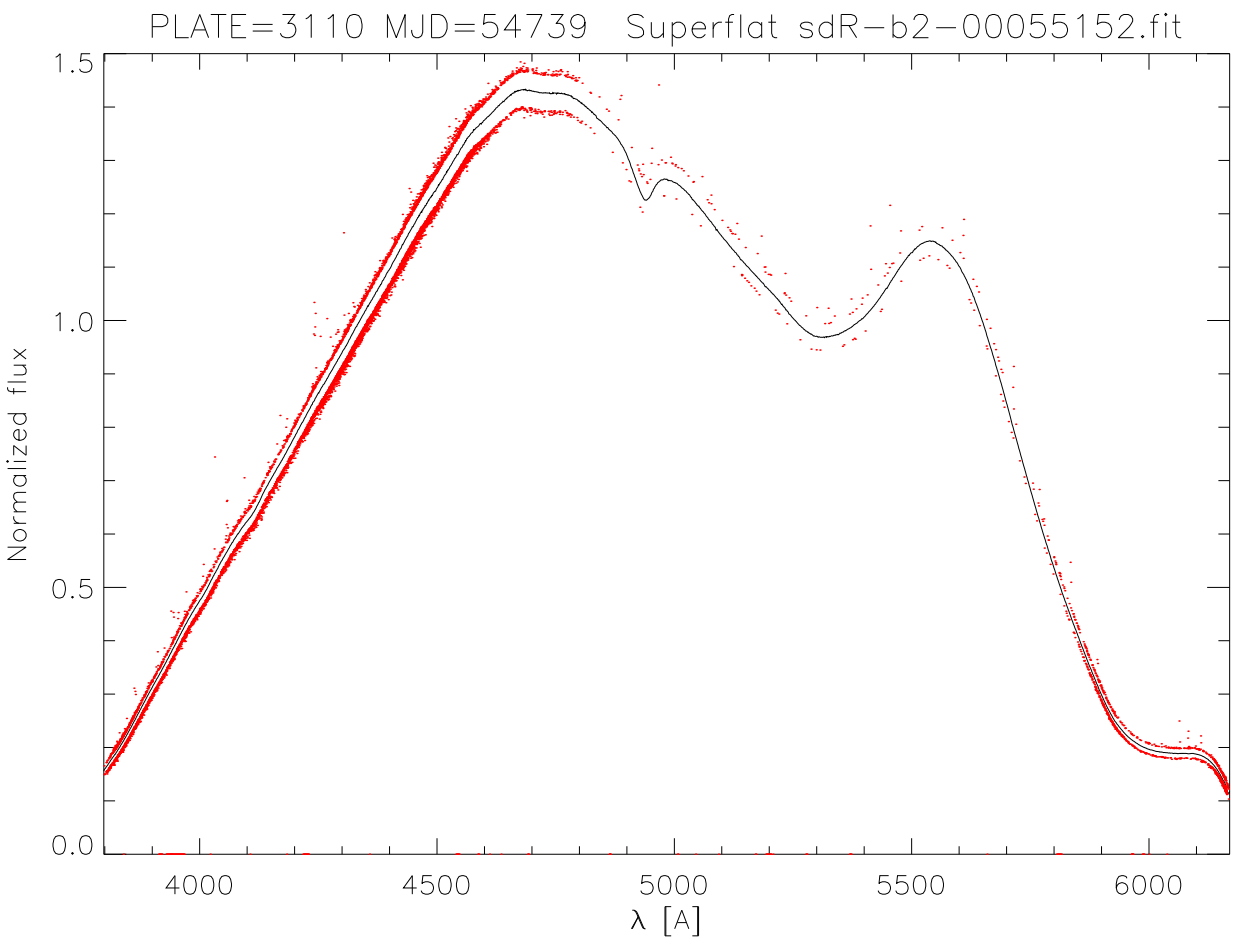

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

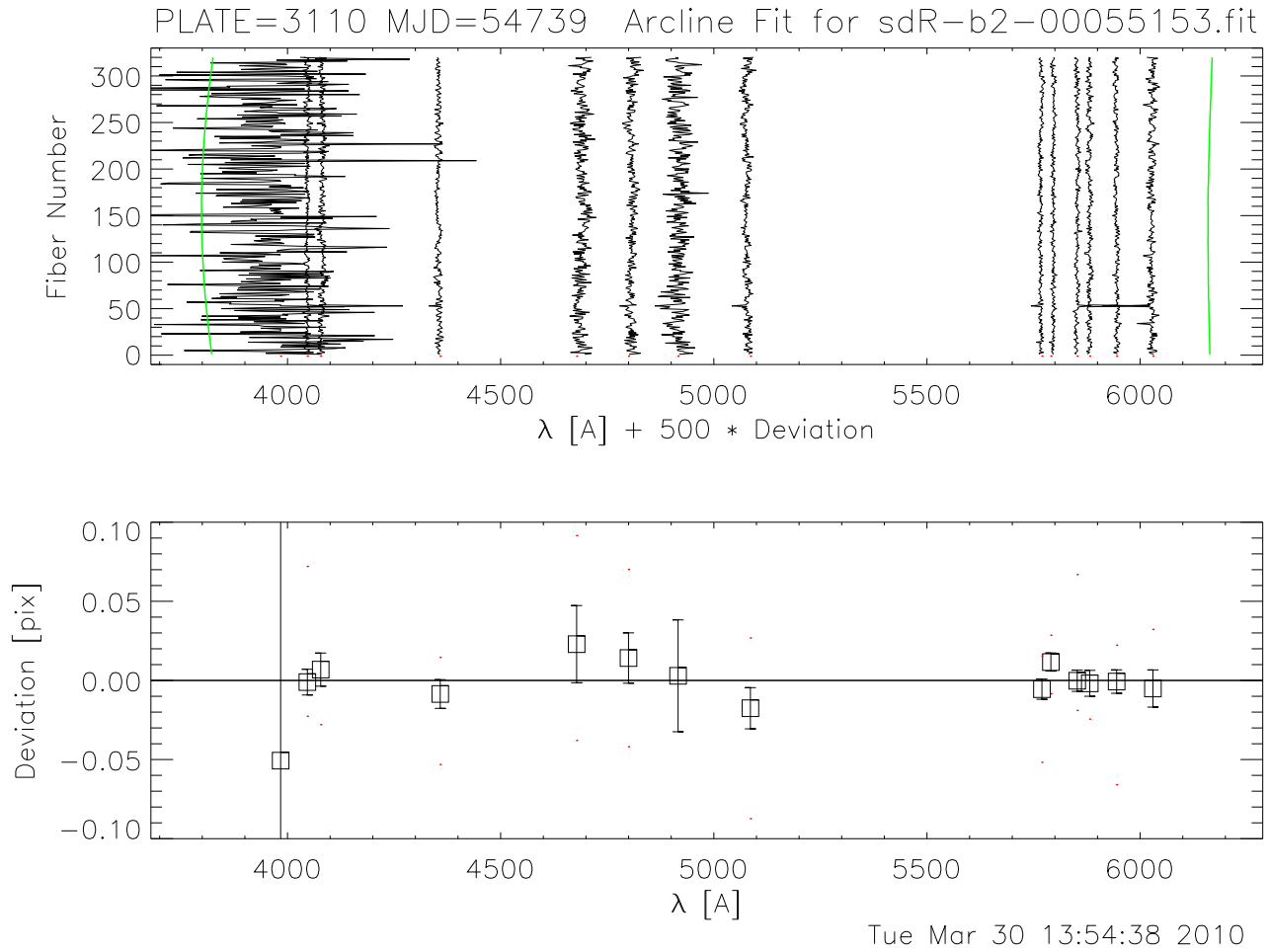

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

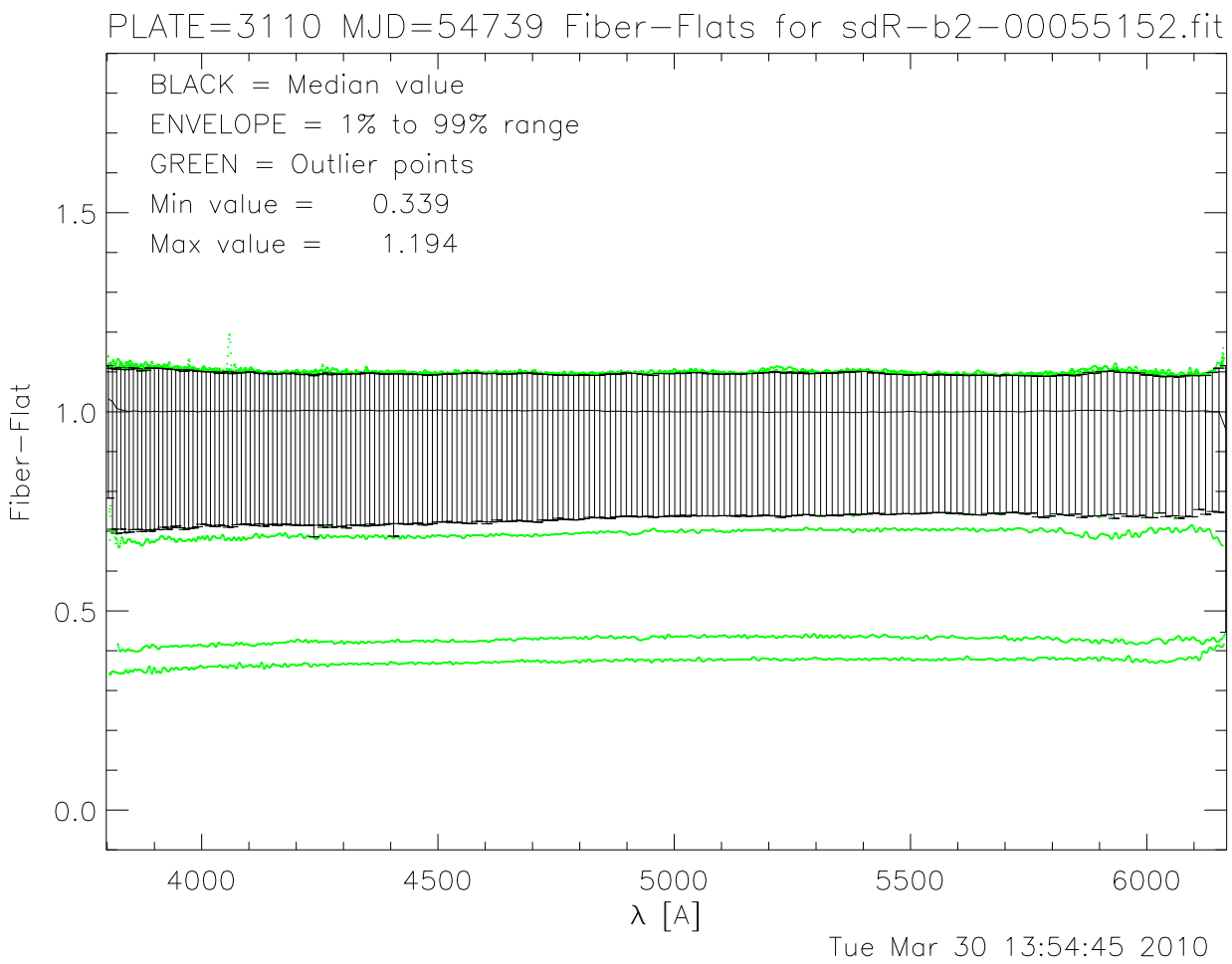

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−b2−00055148.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
0
500
1000
1500
2000

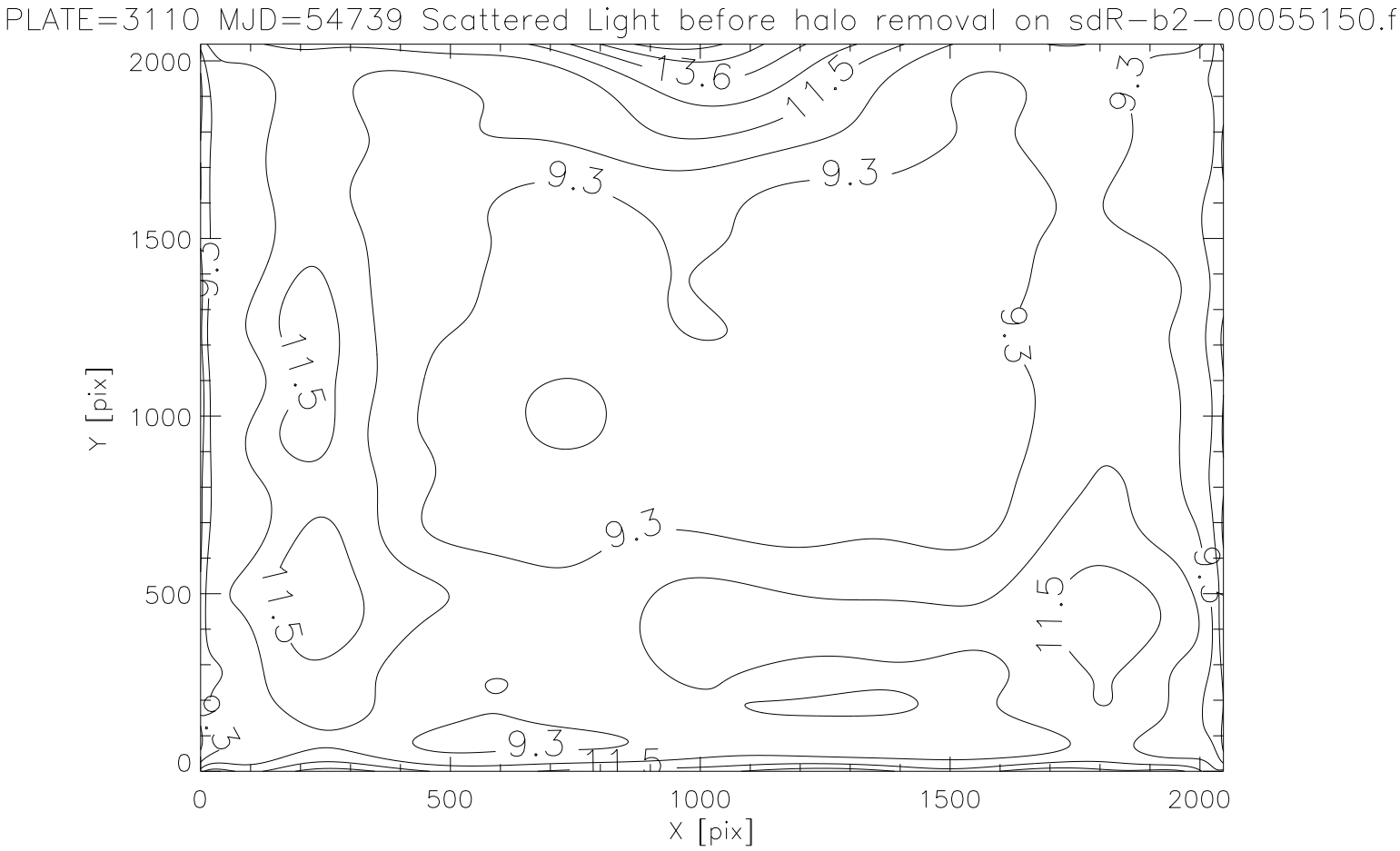

PLATE=3110 MJD=54739 Superflat sdR-b2-00055148.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

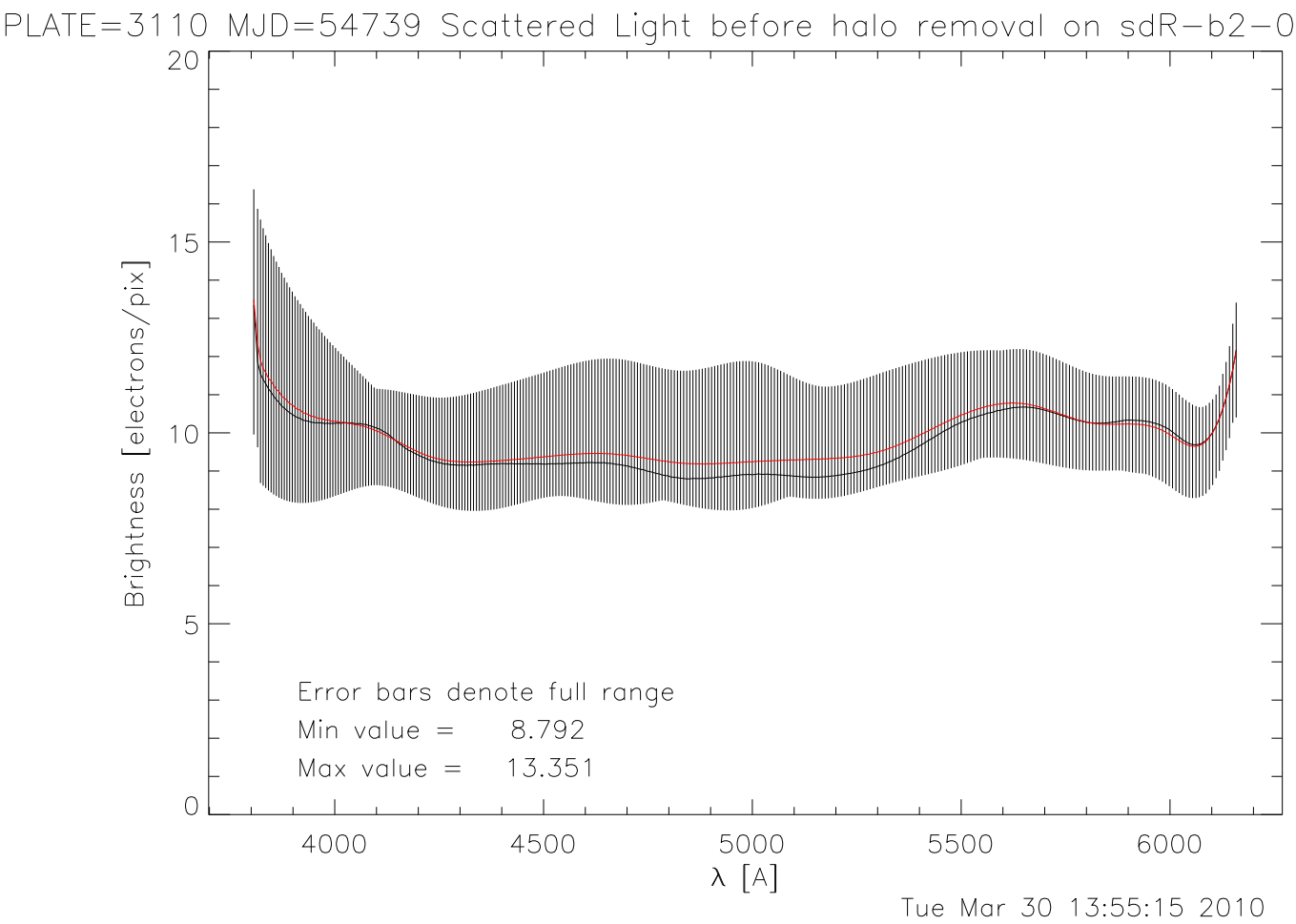

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−b2−00055152.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

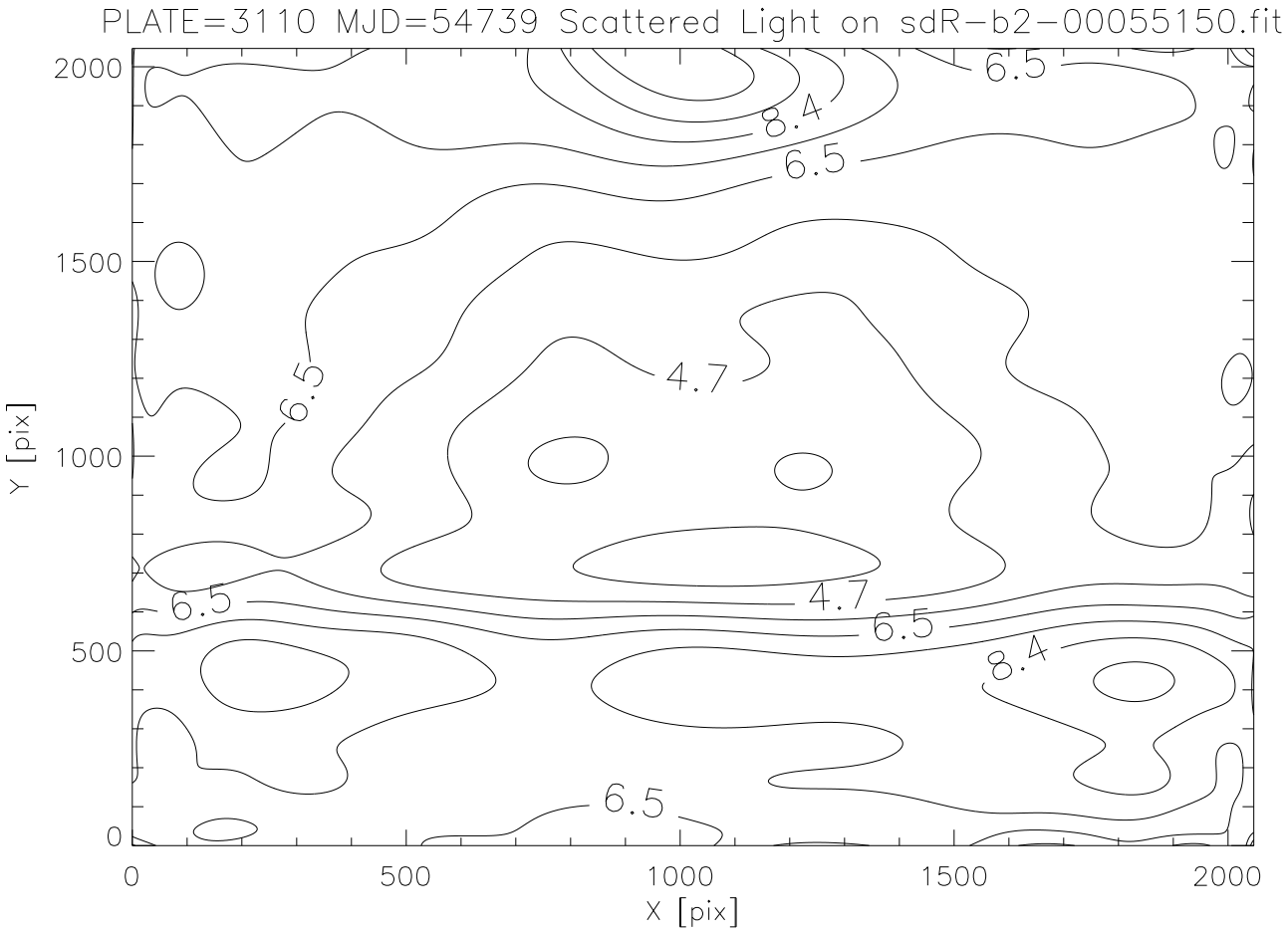

PLATE=3110 MJD=54739 Superflat sdR-b2-00055152.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

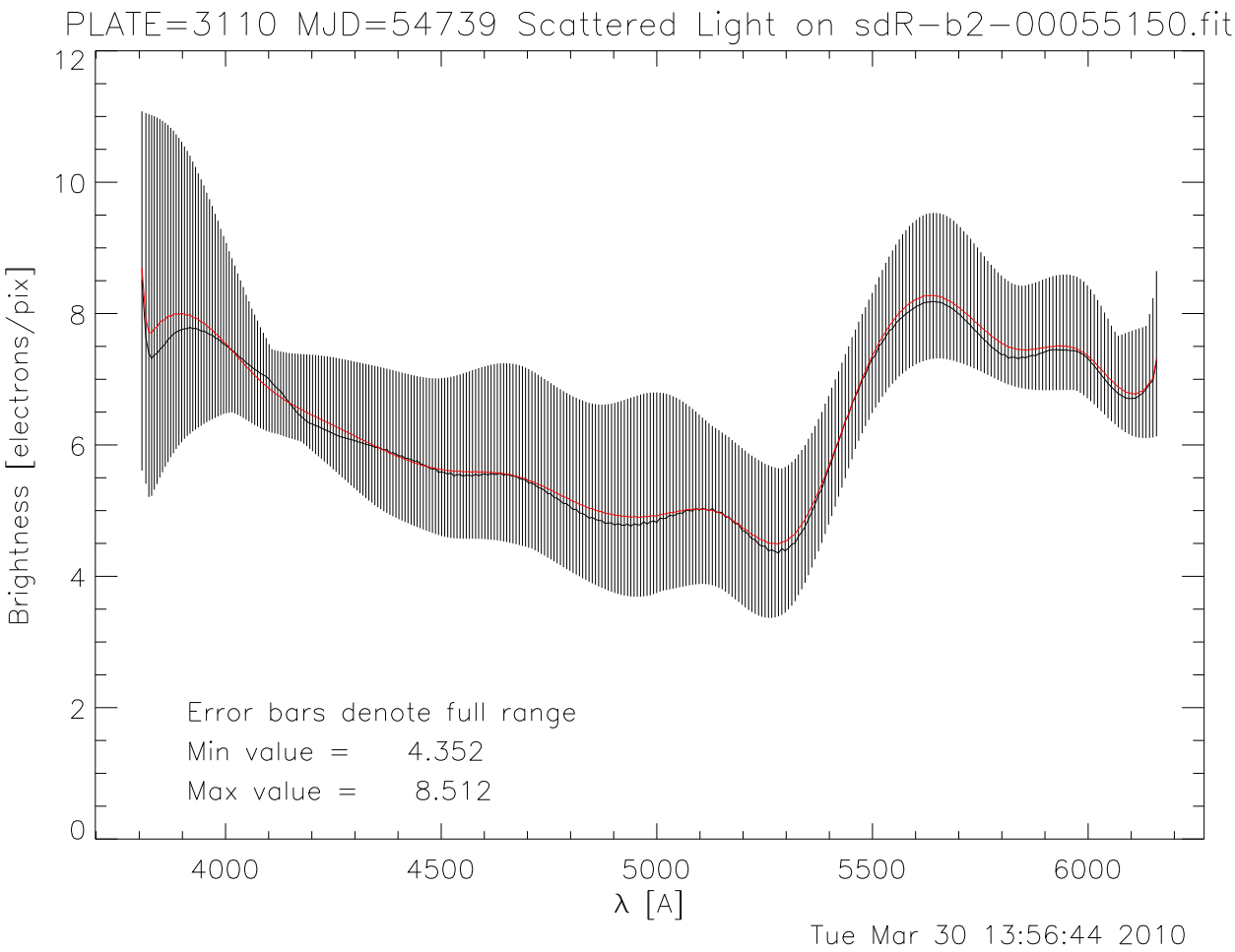

PLATE=3110 MJD=54739 Arcline Fit for sdR-b2-00055153.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:54:38 2010

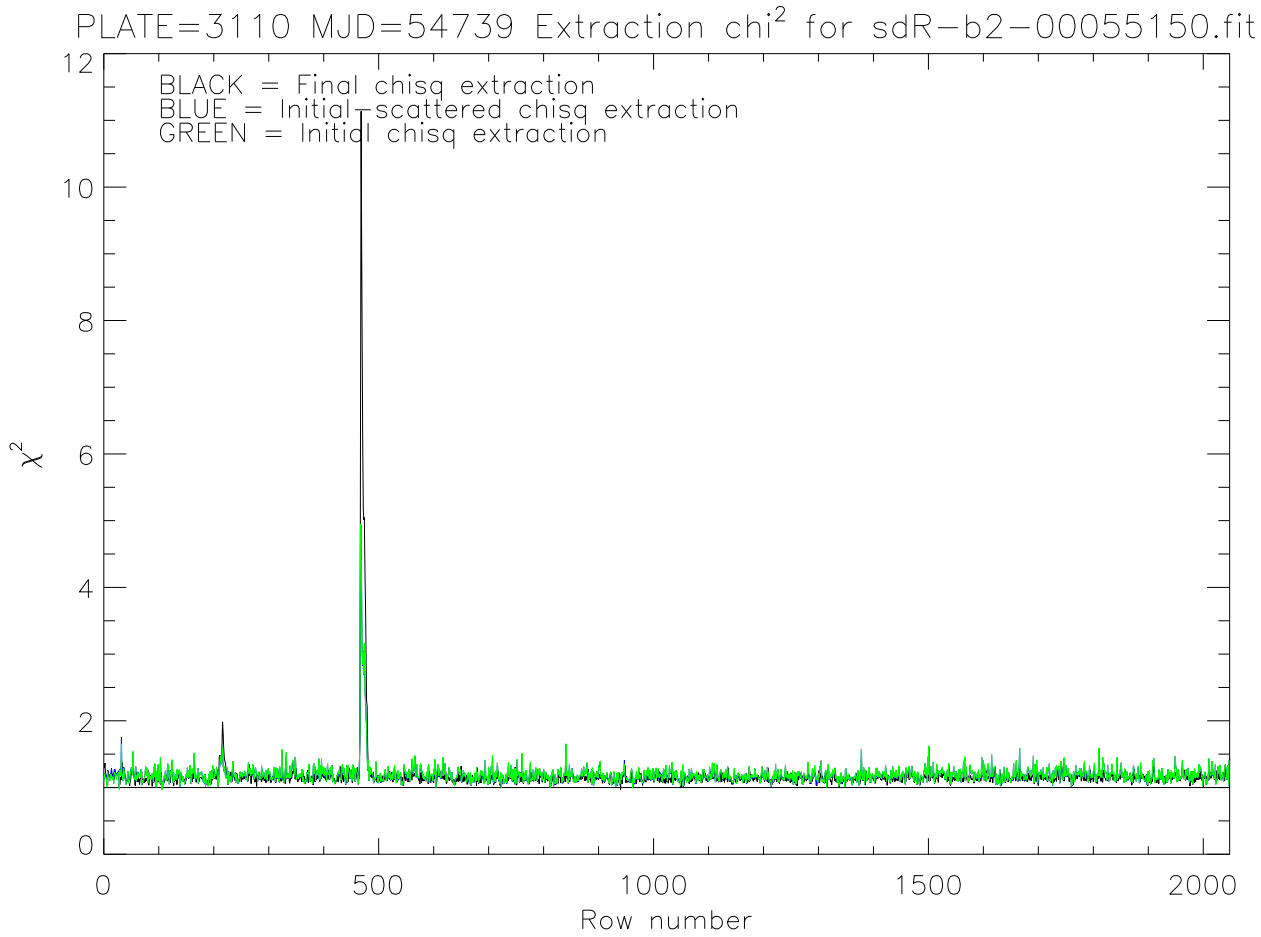

PLATE=3110 MJD=54739 Fiber−Flats for sdR−b2−00055152.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.339
Max value = 1.194
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:54:45 2010

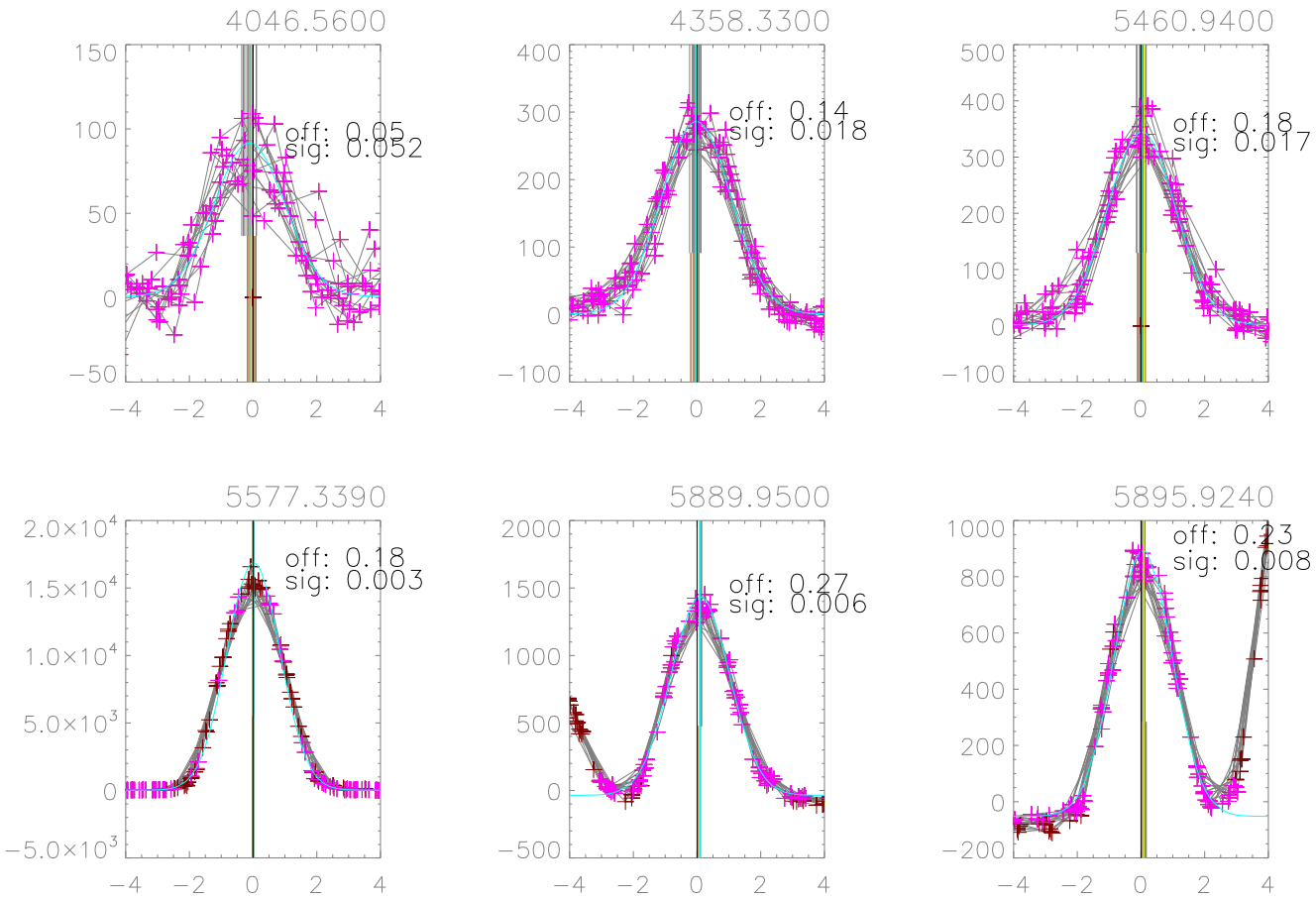

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b2-00055150.f
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
11.5
9.3

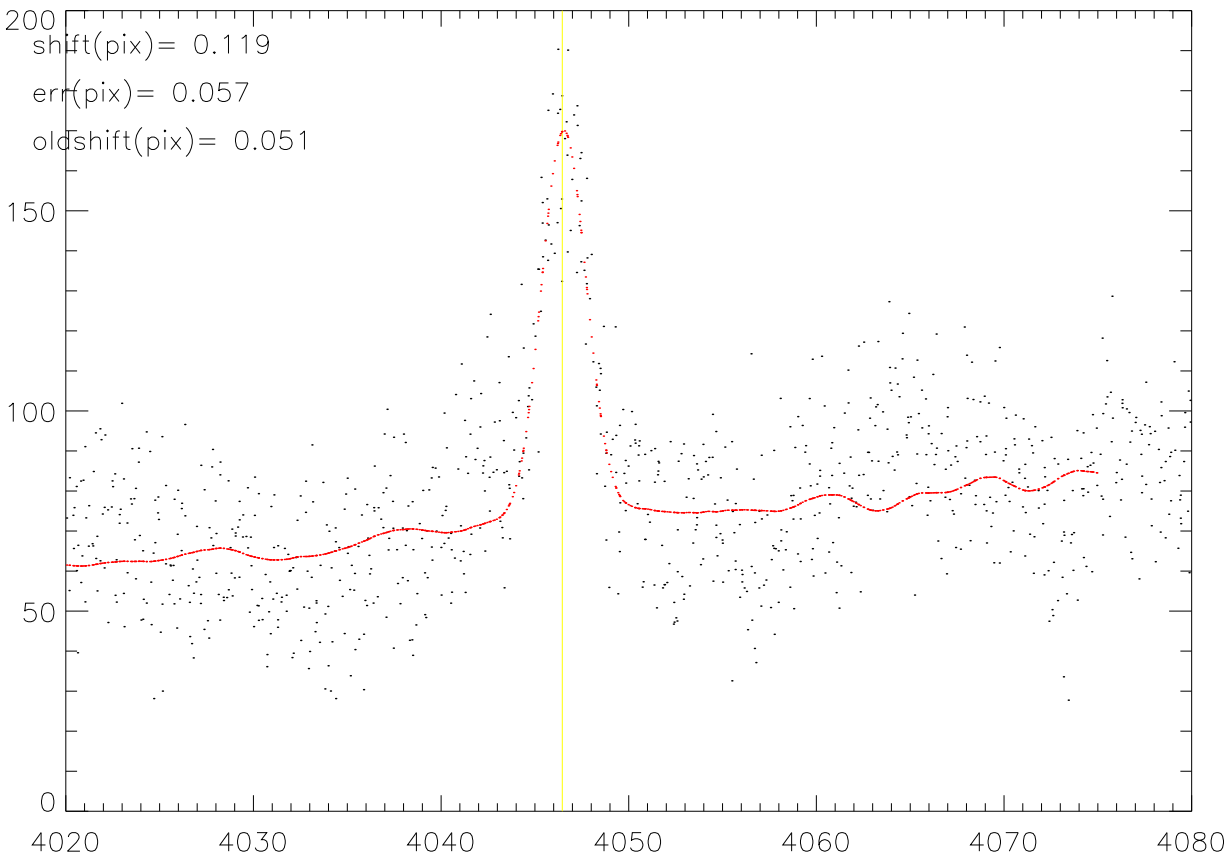

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b2-00055150.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.792
Max value = 13.351
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:55:15 2010

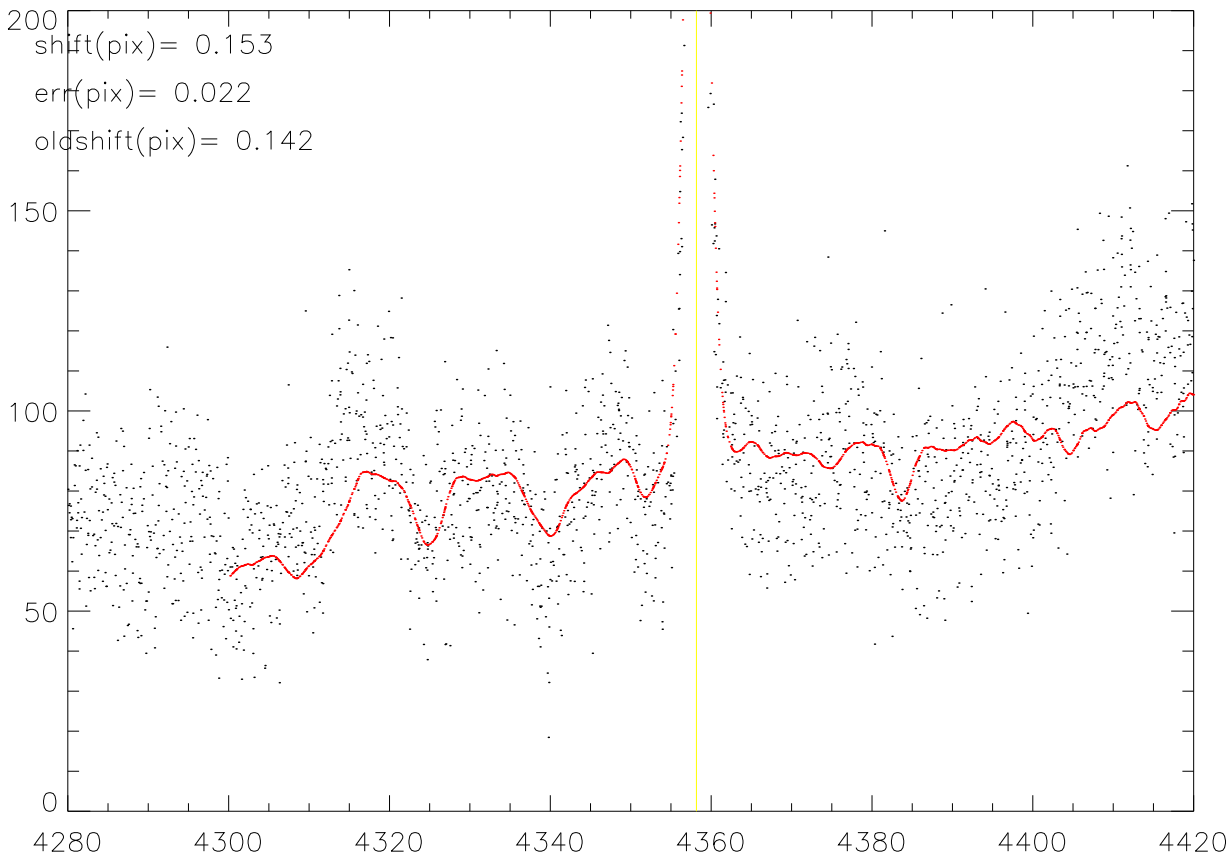

PLATE=3110 MJD=54739 Scattered Light on sdR-b2-00055150.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
4.7

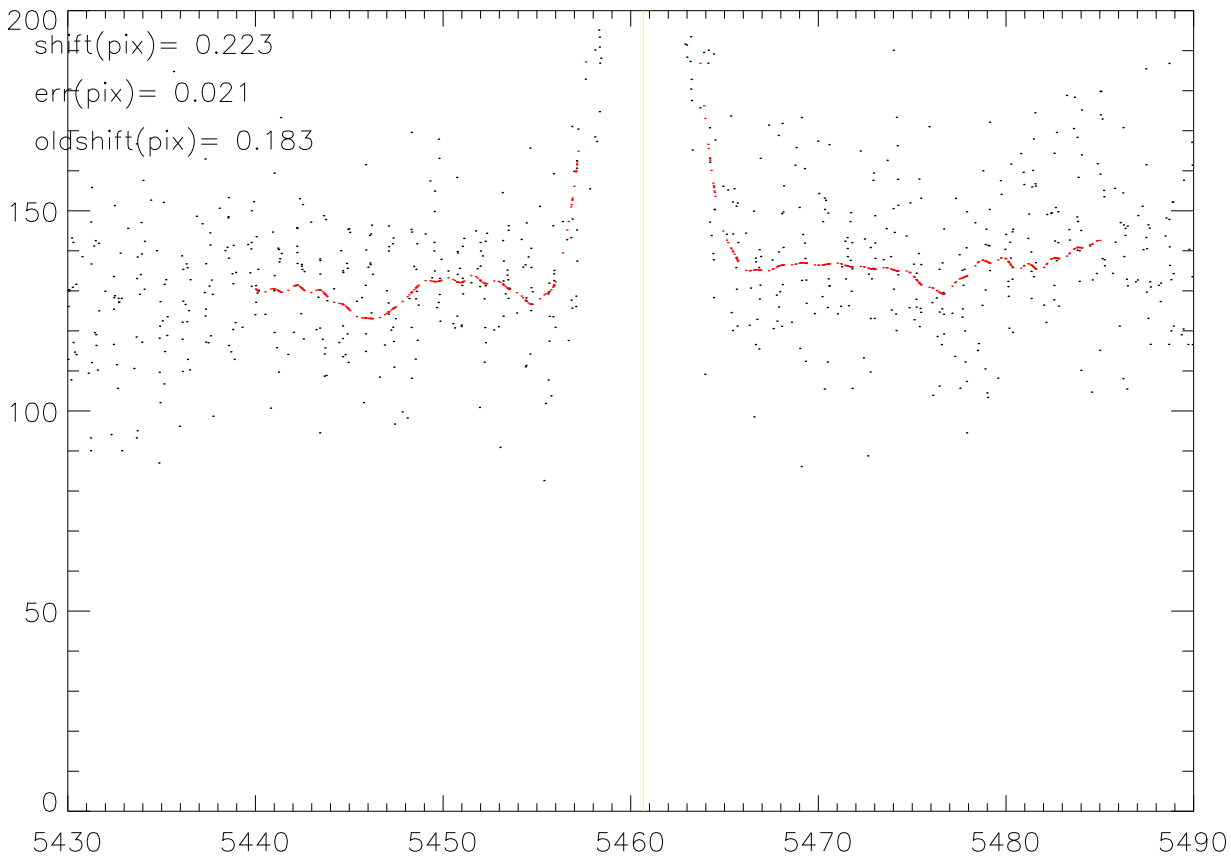

PLATE=3110 MJD=54739 Scattered Light on sdR-b2-00055150.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.352
Max value = 8.512
Tue Mar 30 13:56:44 2010

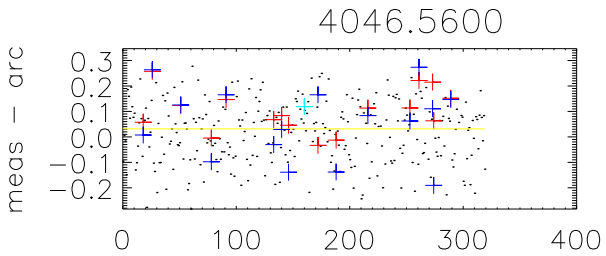

PLATE=3110 MJD=54739 Extraction chi^2 for sdR-b2-00055150.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

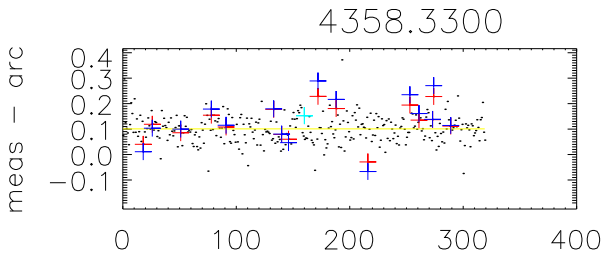

4046.5600
off: 0.05
sig: 0.052
4358.3300
off: 0.14
sig: 0.018
5460.9400
off: 0.18
sig: 0.017
5577.3390
off: 0.18
sig: 0.003
5889.9500
off: 0.27
sig: 0.006
5895.9240
off: 0.23
sig: 0.008

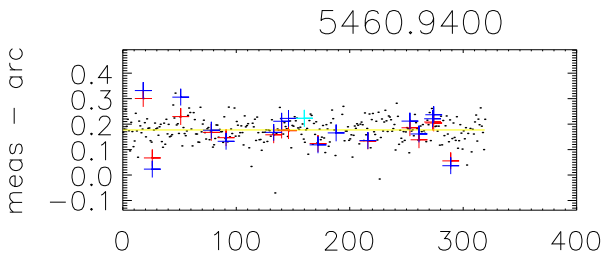

shift(pix)= 0.119
err(pix)= 0.057
oldshift(pix)= 0.051
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

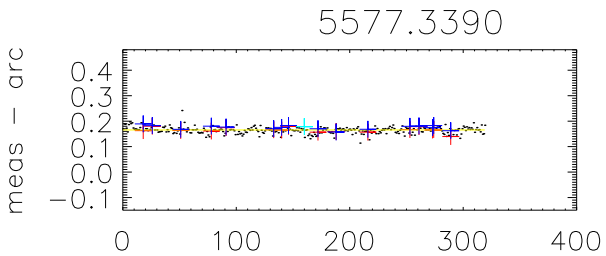

shift(pix)= 0.153
err(pix)= 0.022
oldshift(pix)= 0.142
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

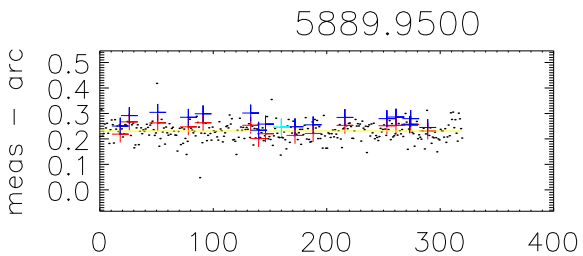

shift(pix)= 0.223
err(pix)= 0.021
oldshift(pix)= 0.183
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

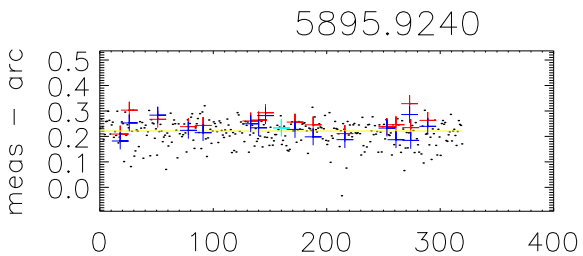

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

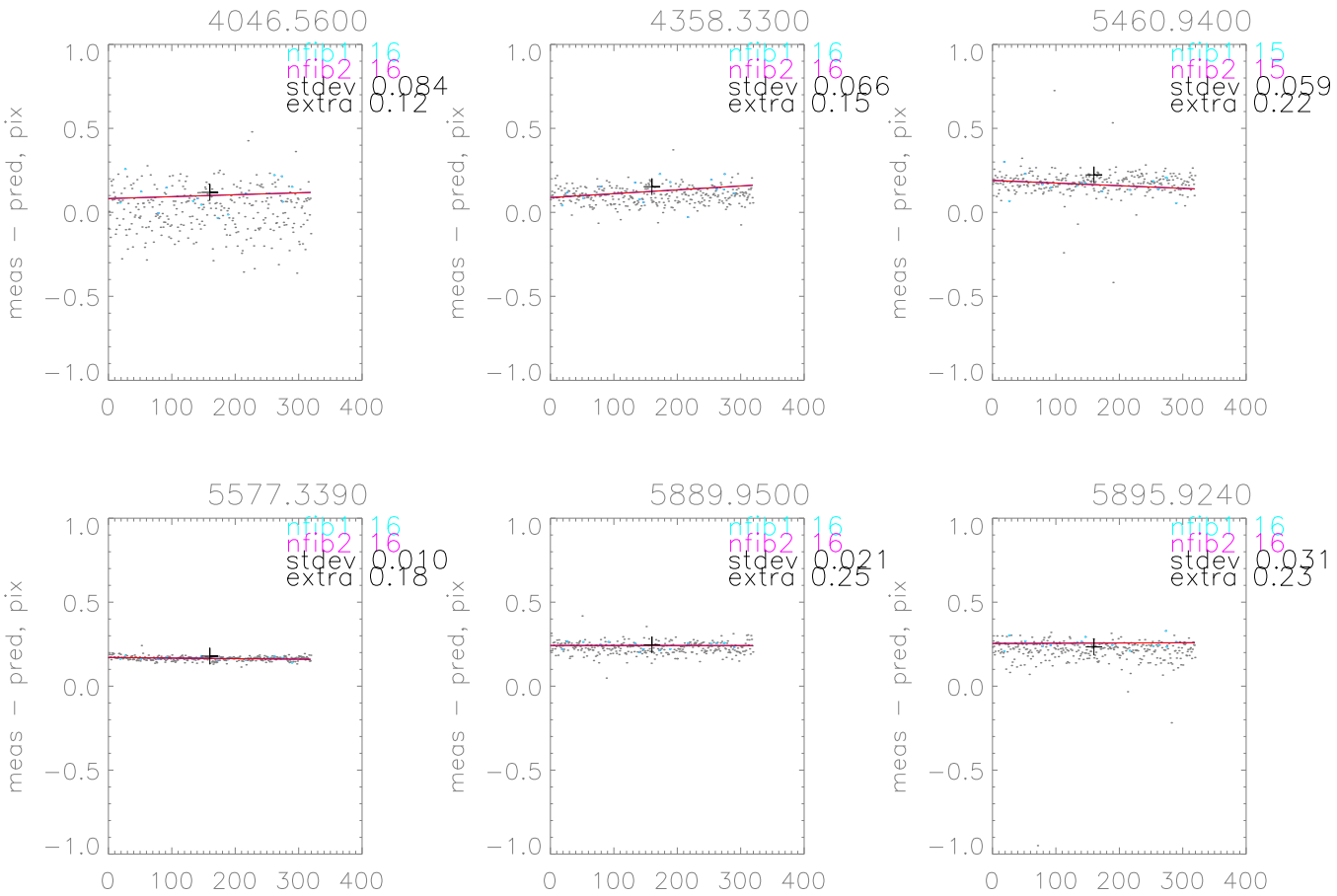

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

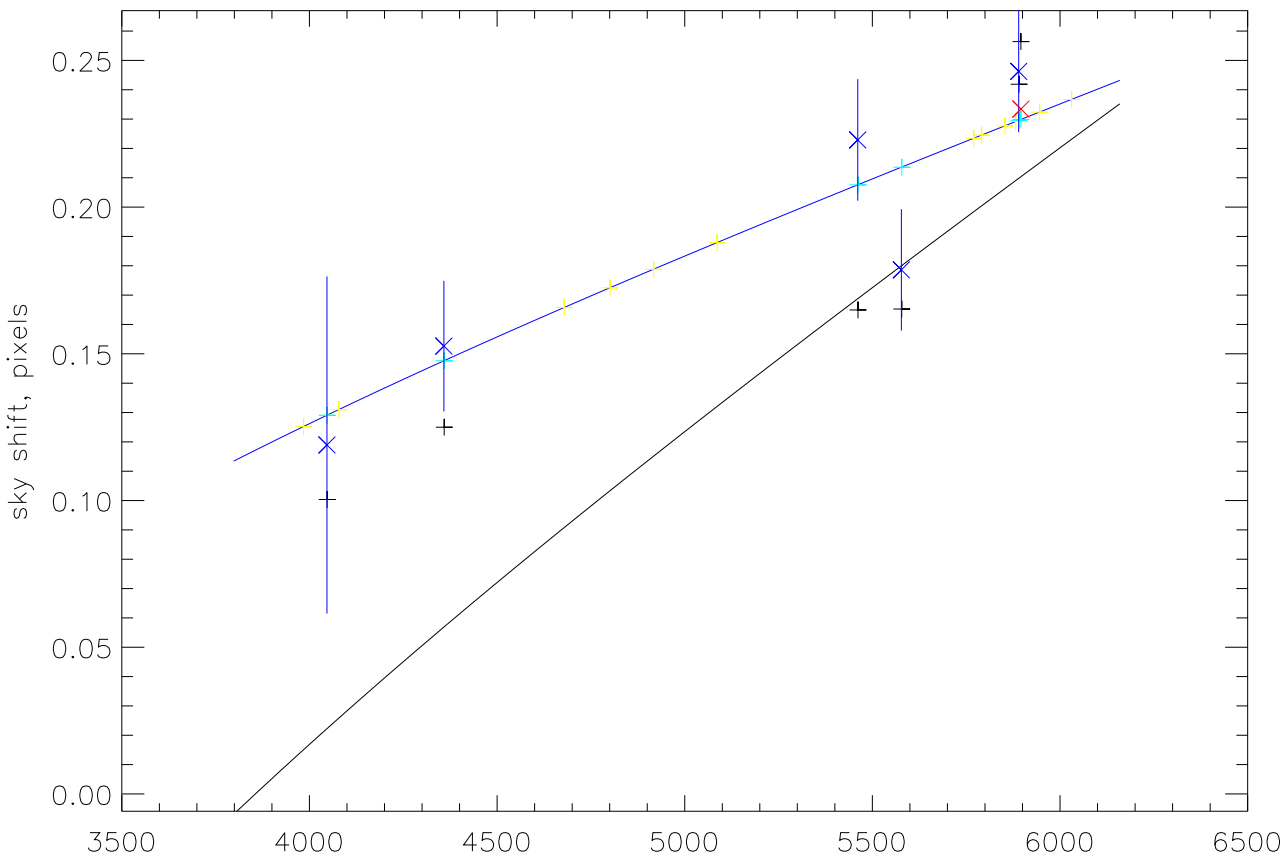

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

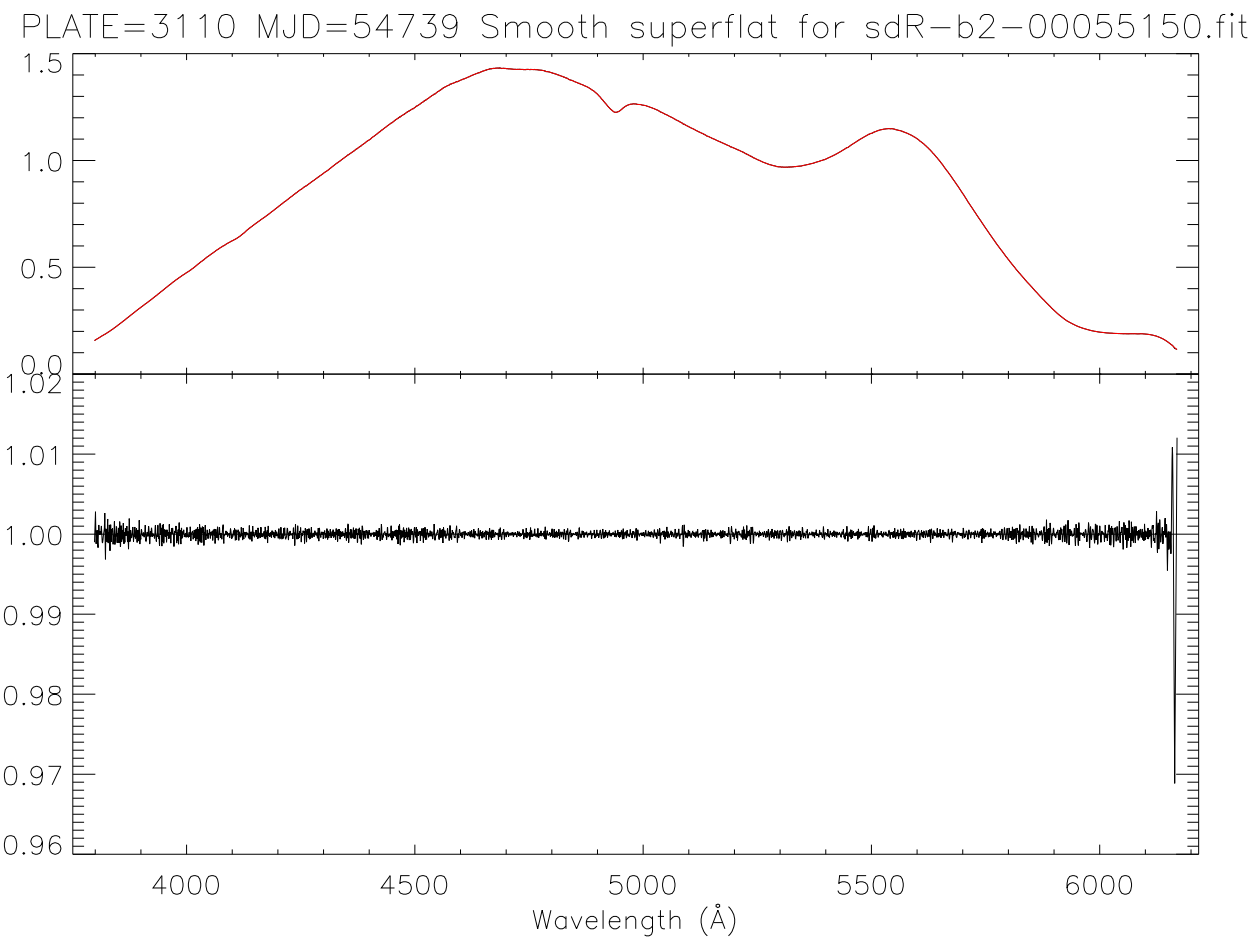

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

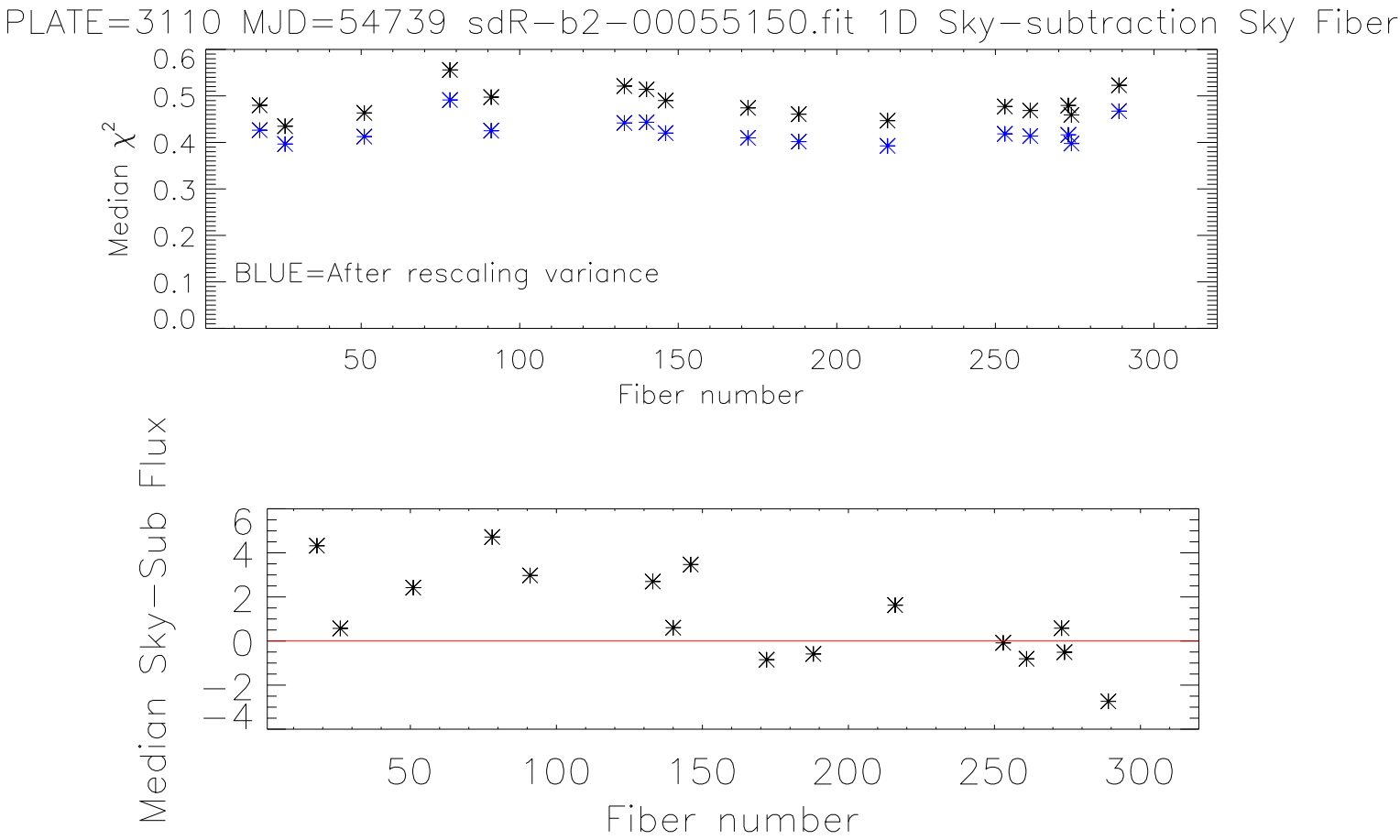

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

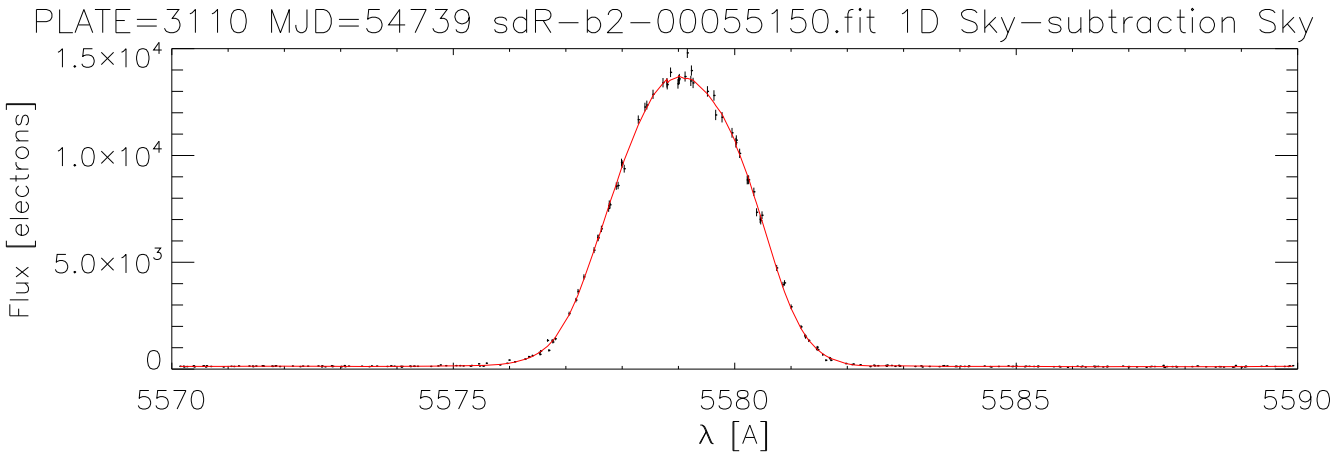

4046.5600
nfib1 16
nfib2 16
stdev 0.084
extra 0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.066
extra 0.15
5460.9400
nfib1 15
nfib2 15
stdev 0.059
extra 0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra 0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

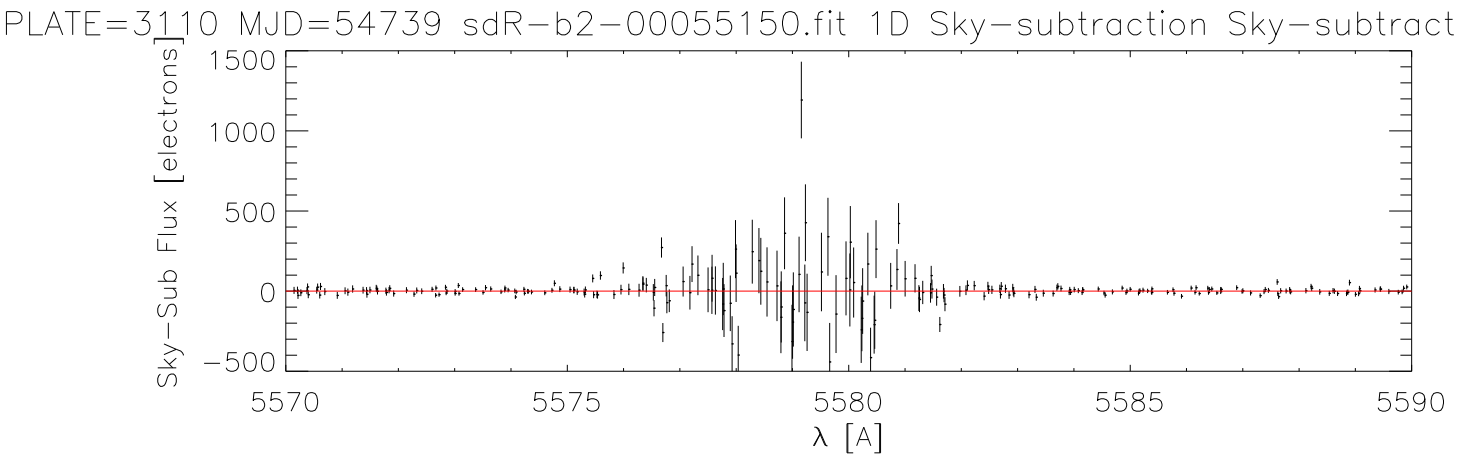

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
3500
4000
4500
5000
5500
6000
6500

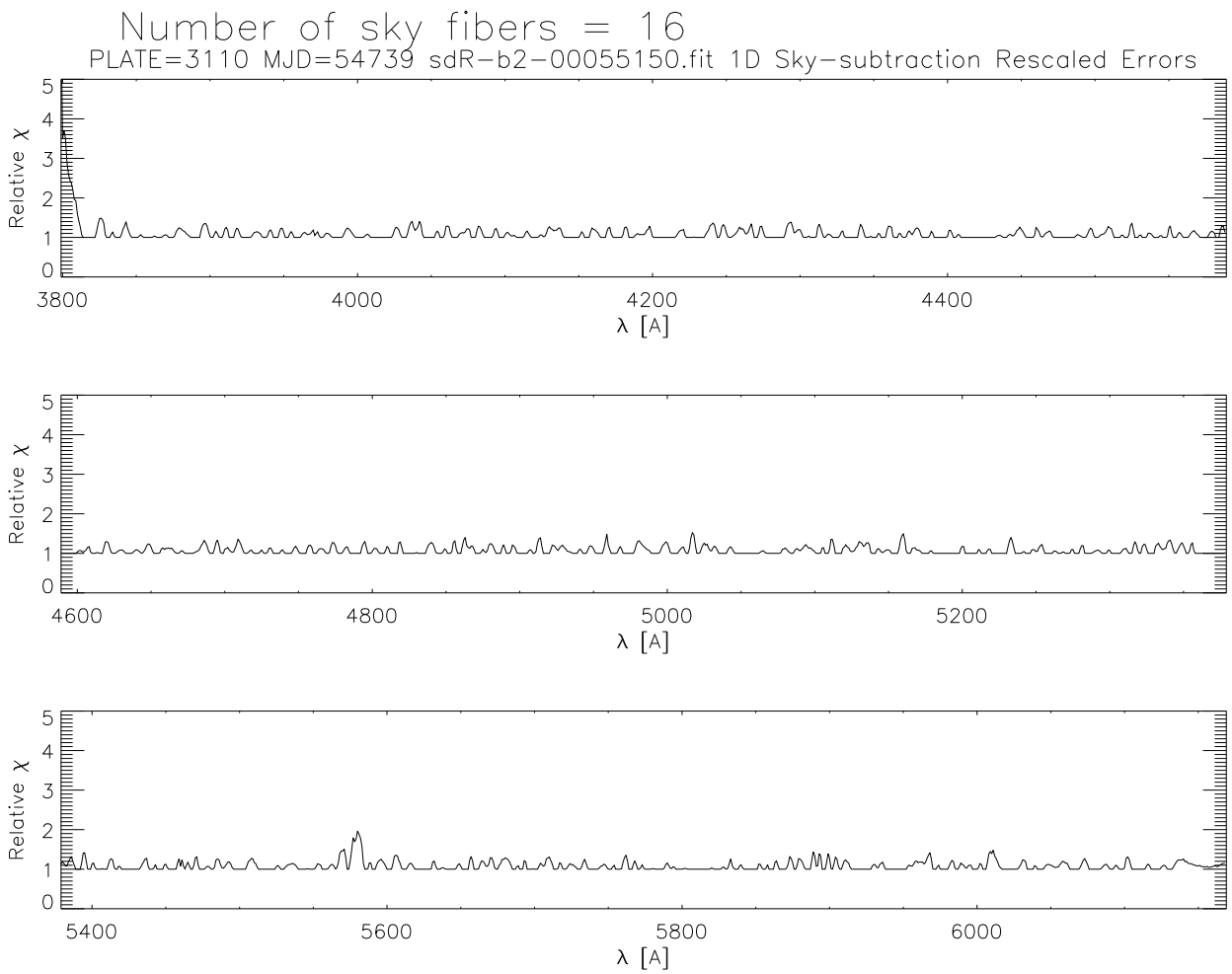
es= −0.0000

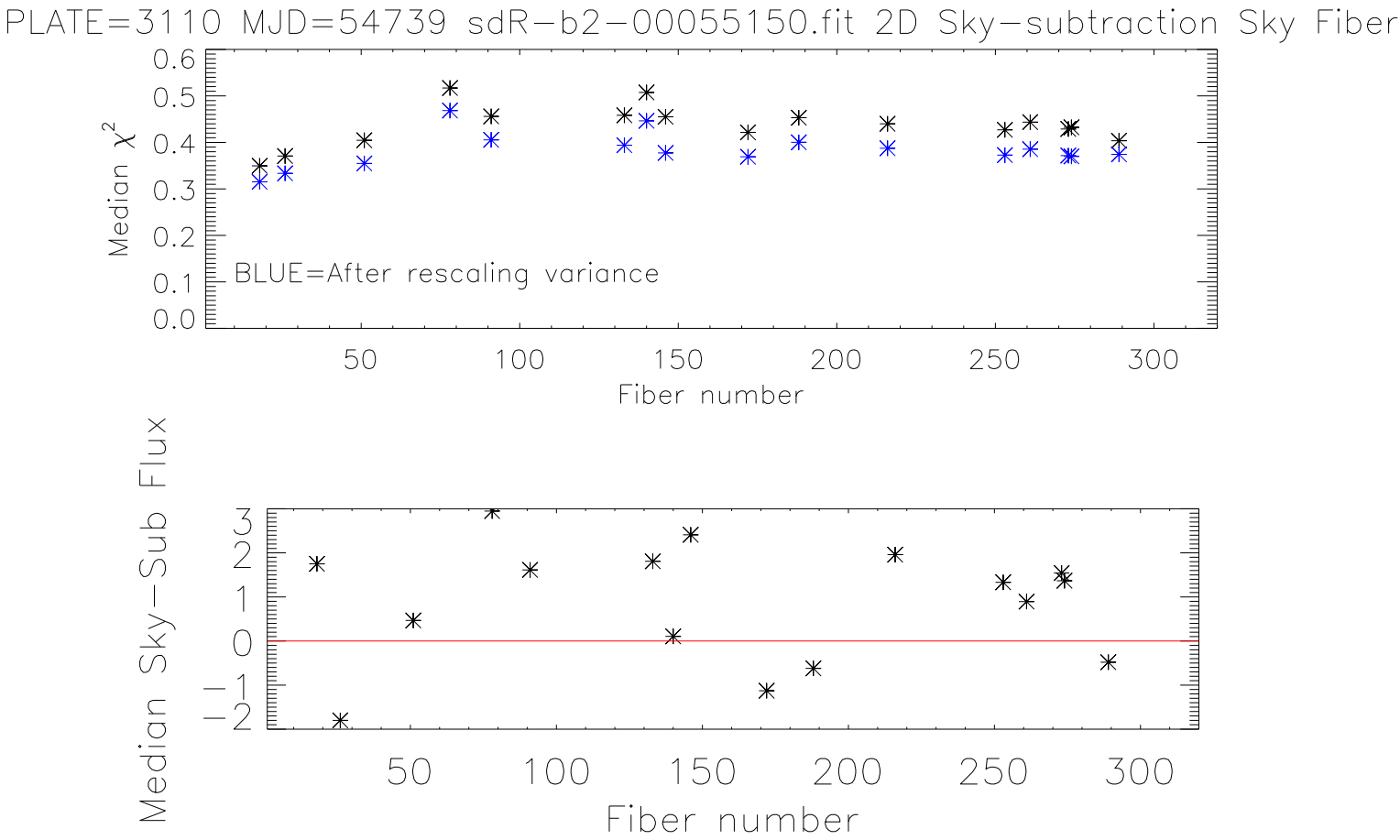

PLATE=3110 MJD=54739 Smooth superflat for sdR−b2−00055150.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

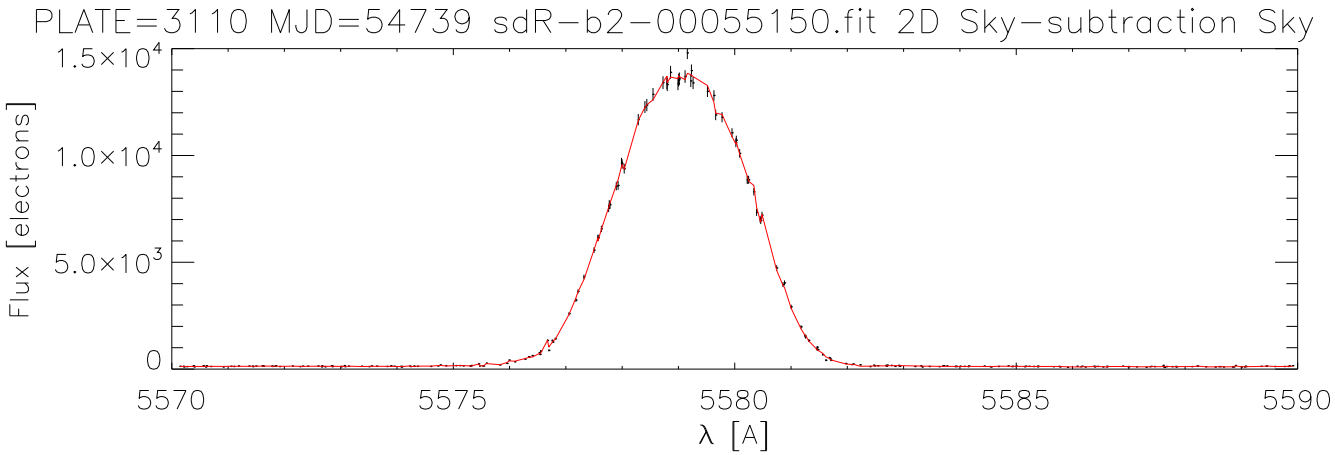

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

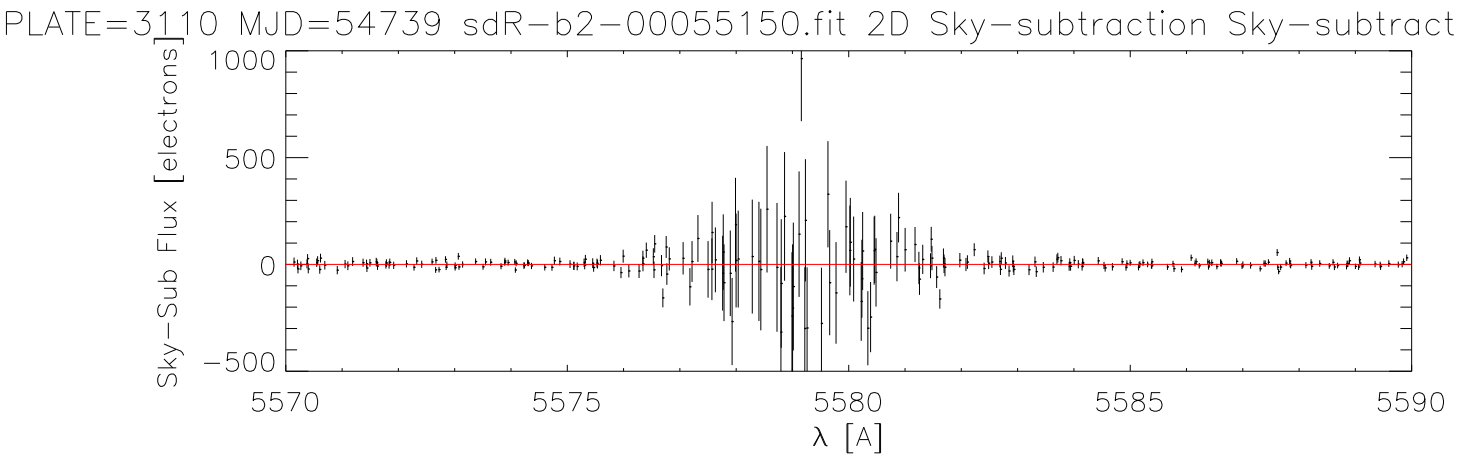

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

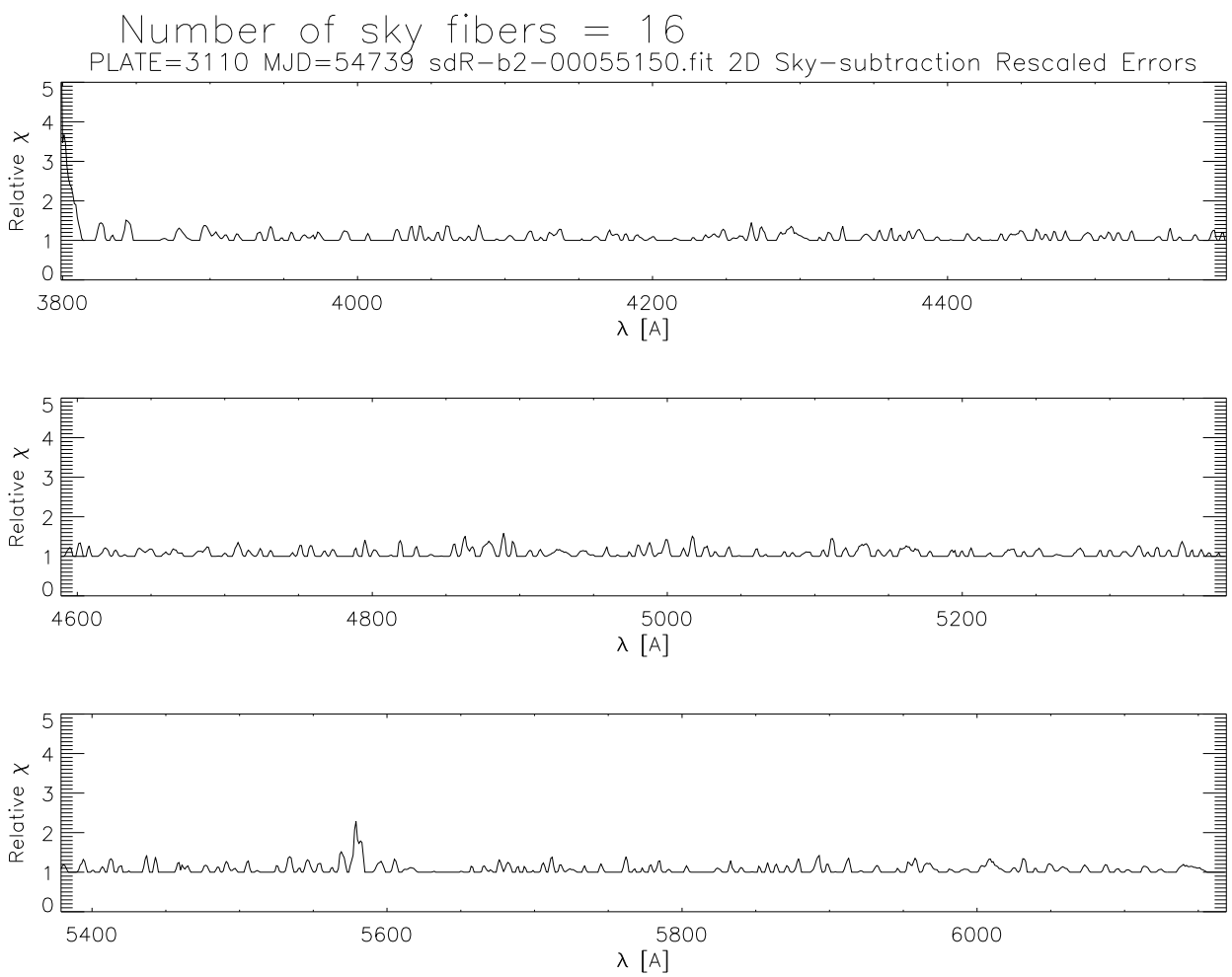

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

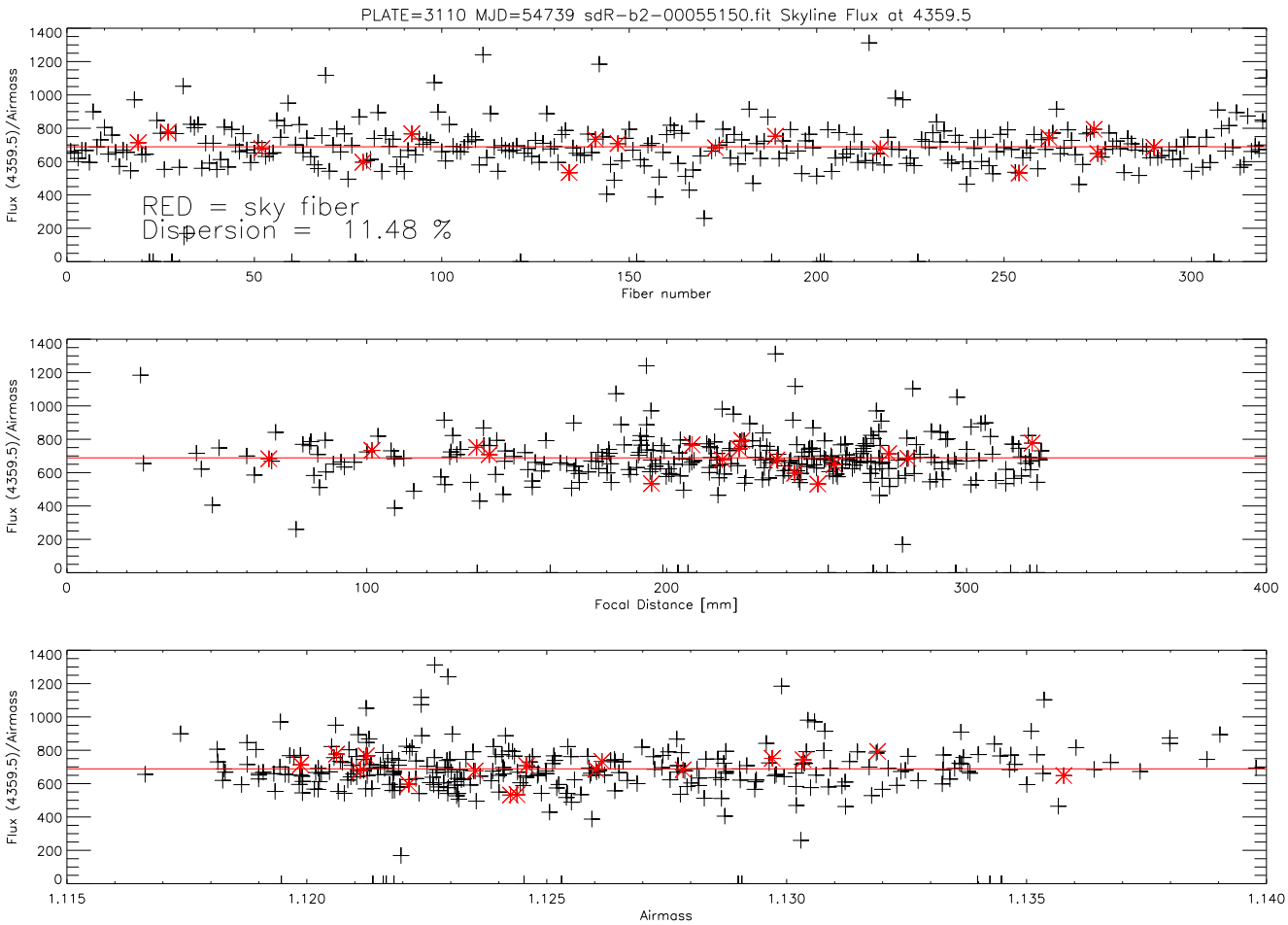

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b2-00055150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

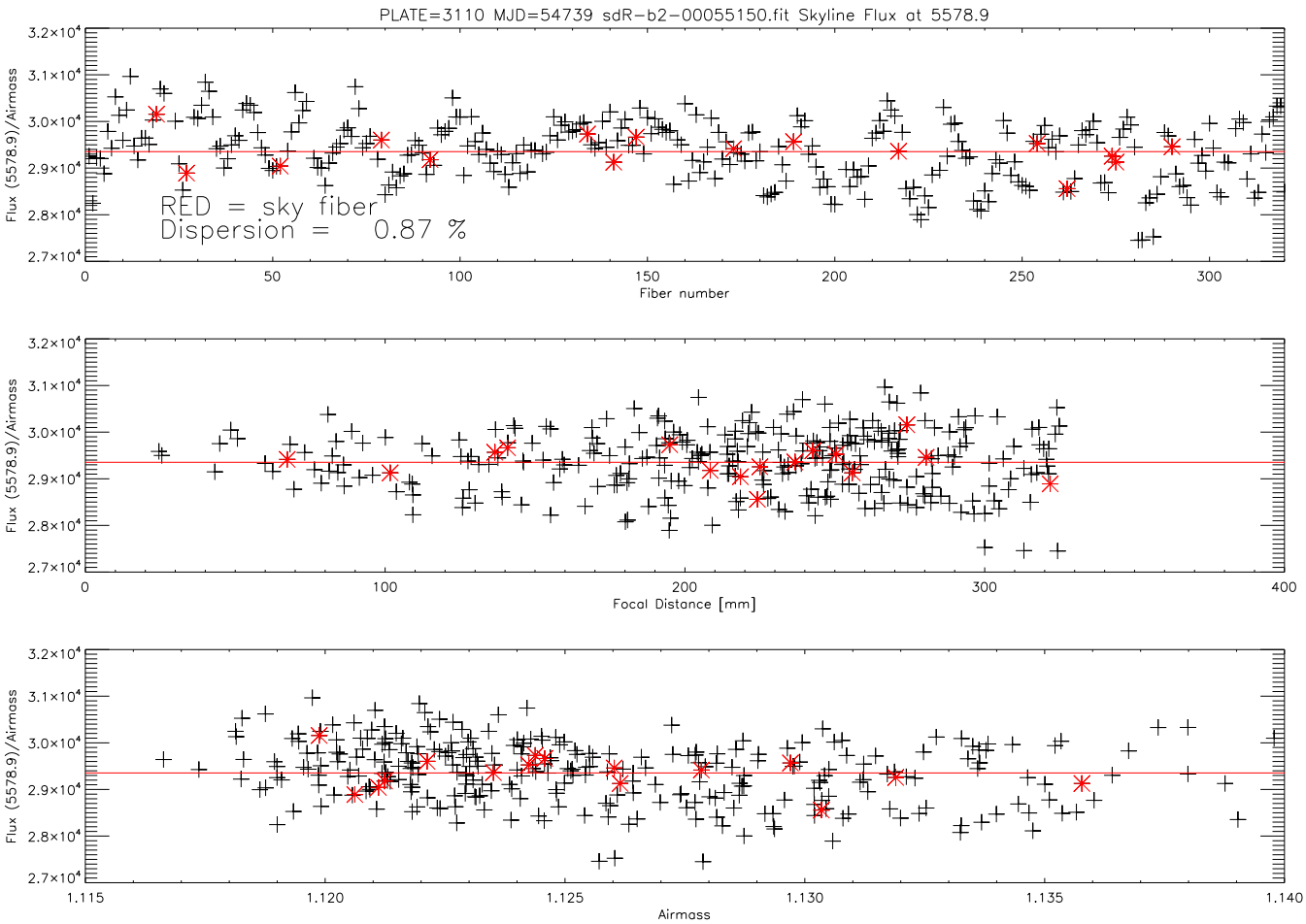

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

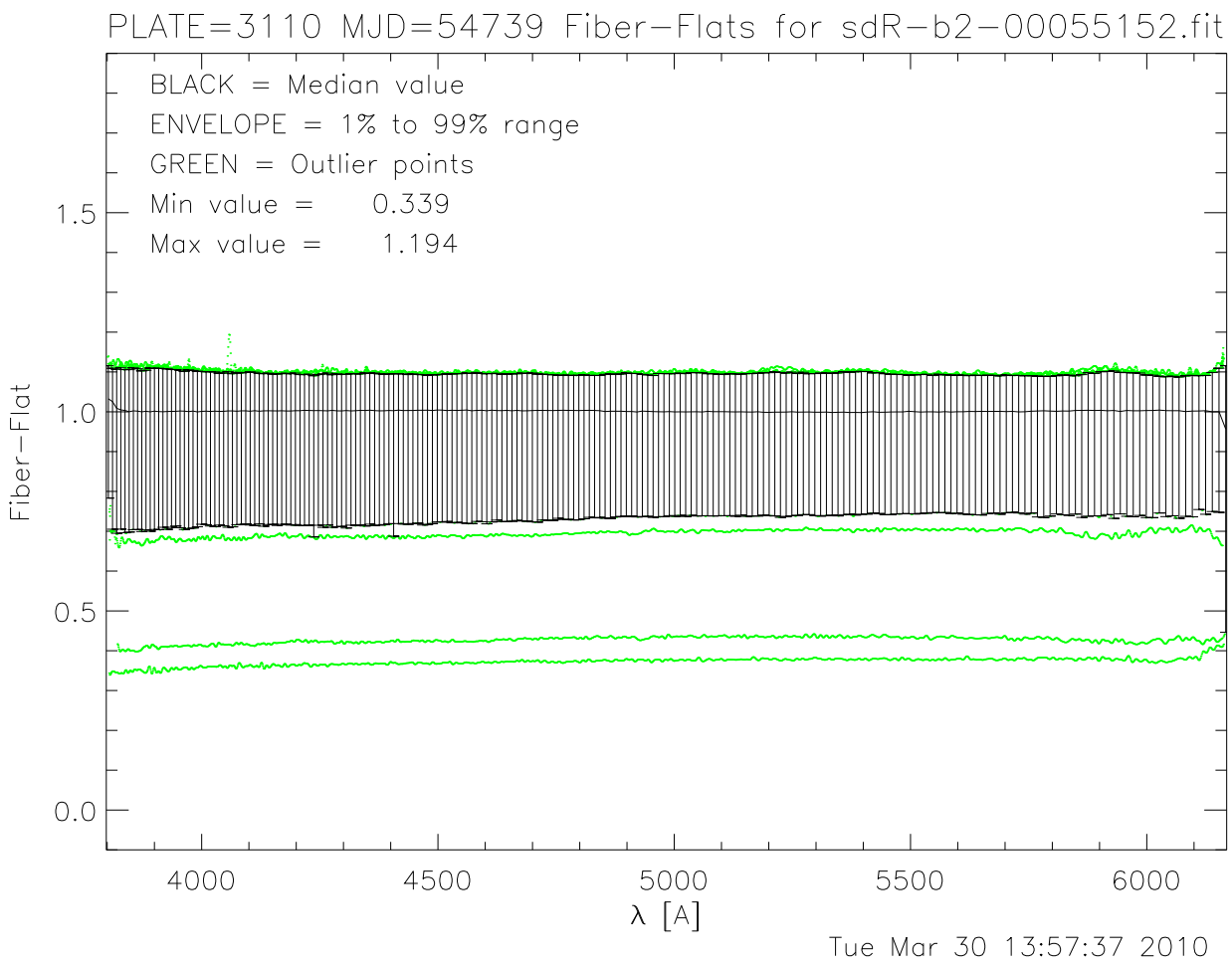

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

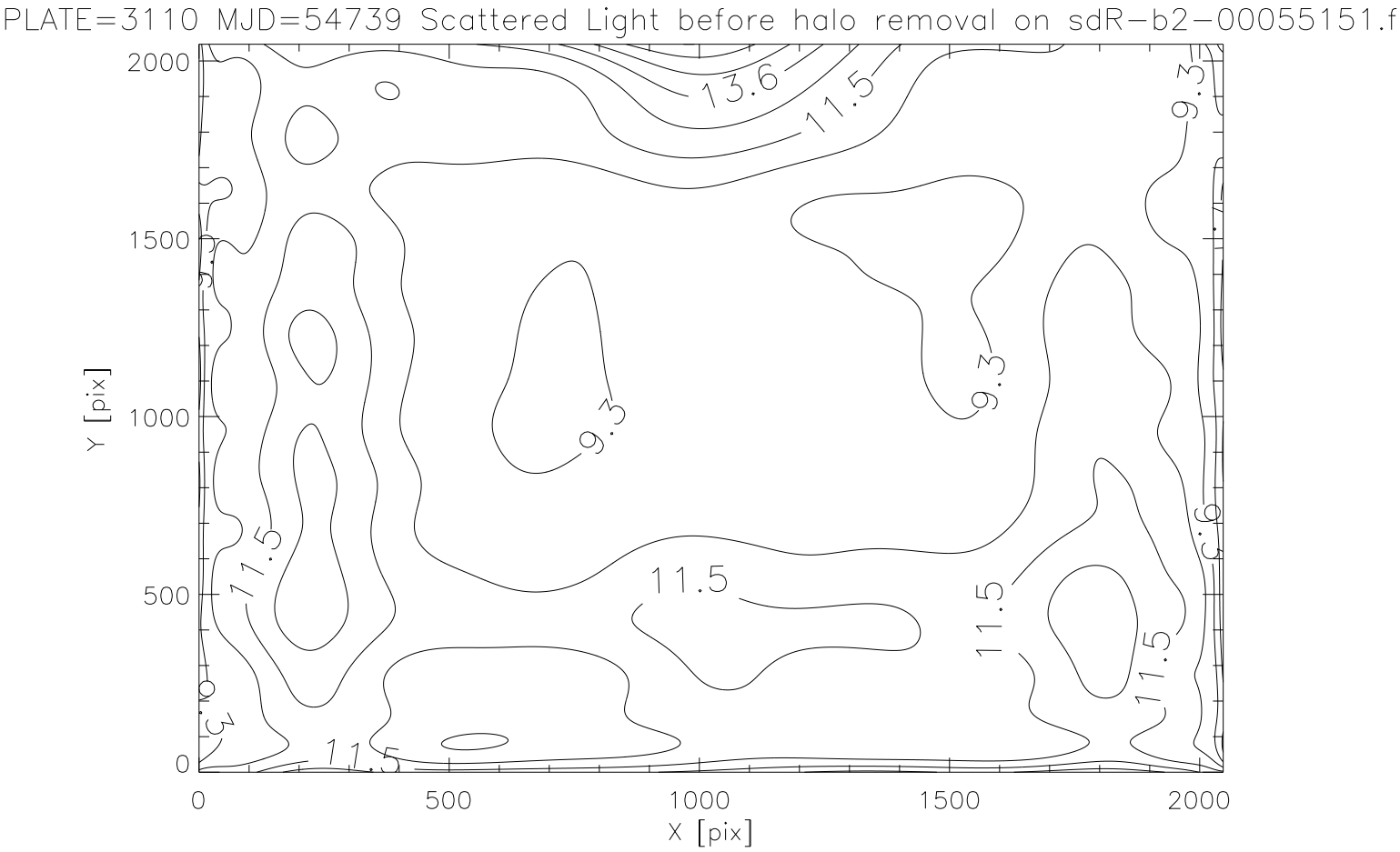

PLATE=3110 MJD=54739 sdR-b2-00055150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

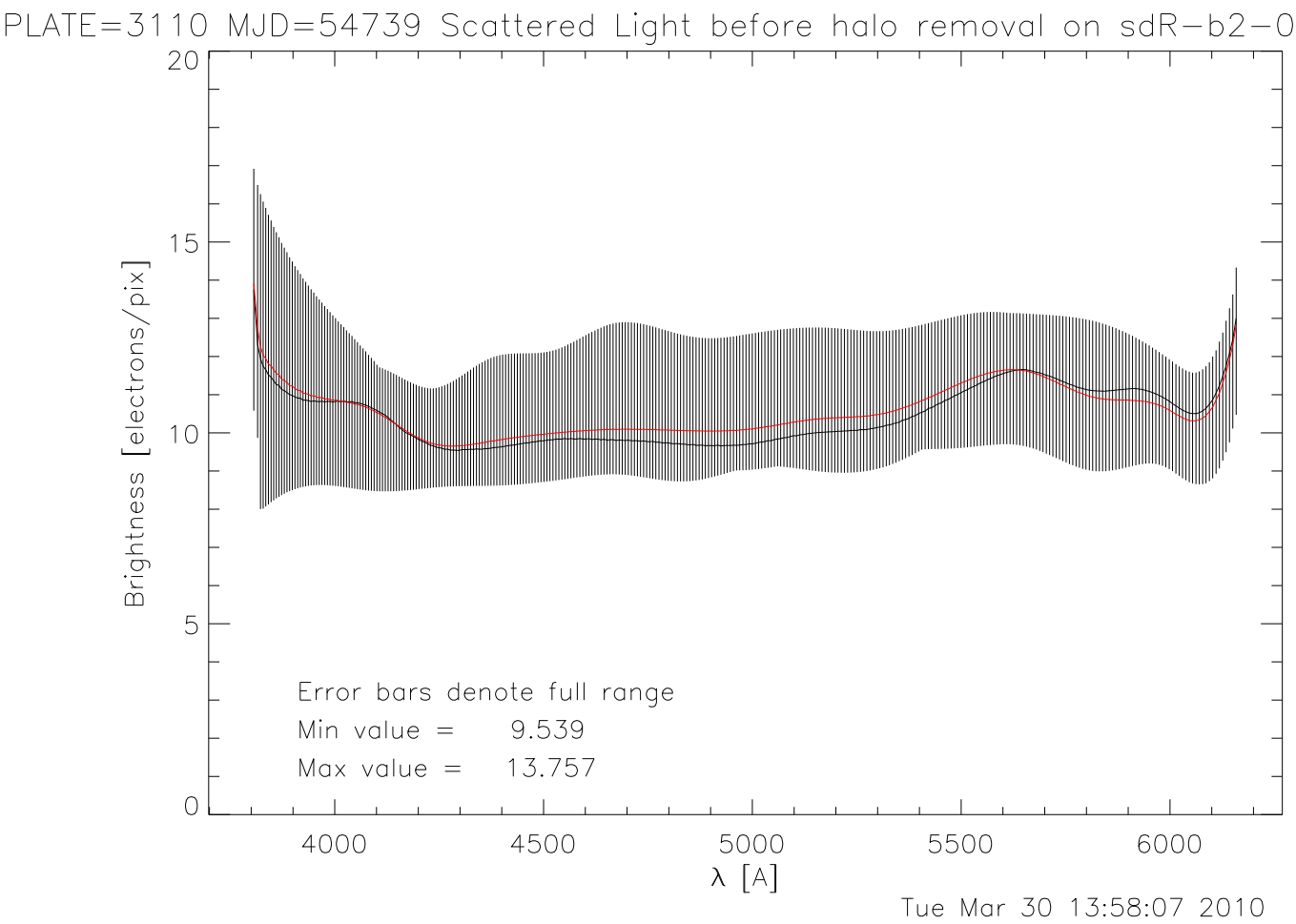

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b2-00055150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

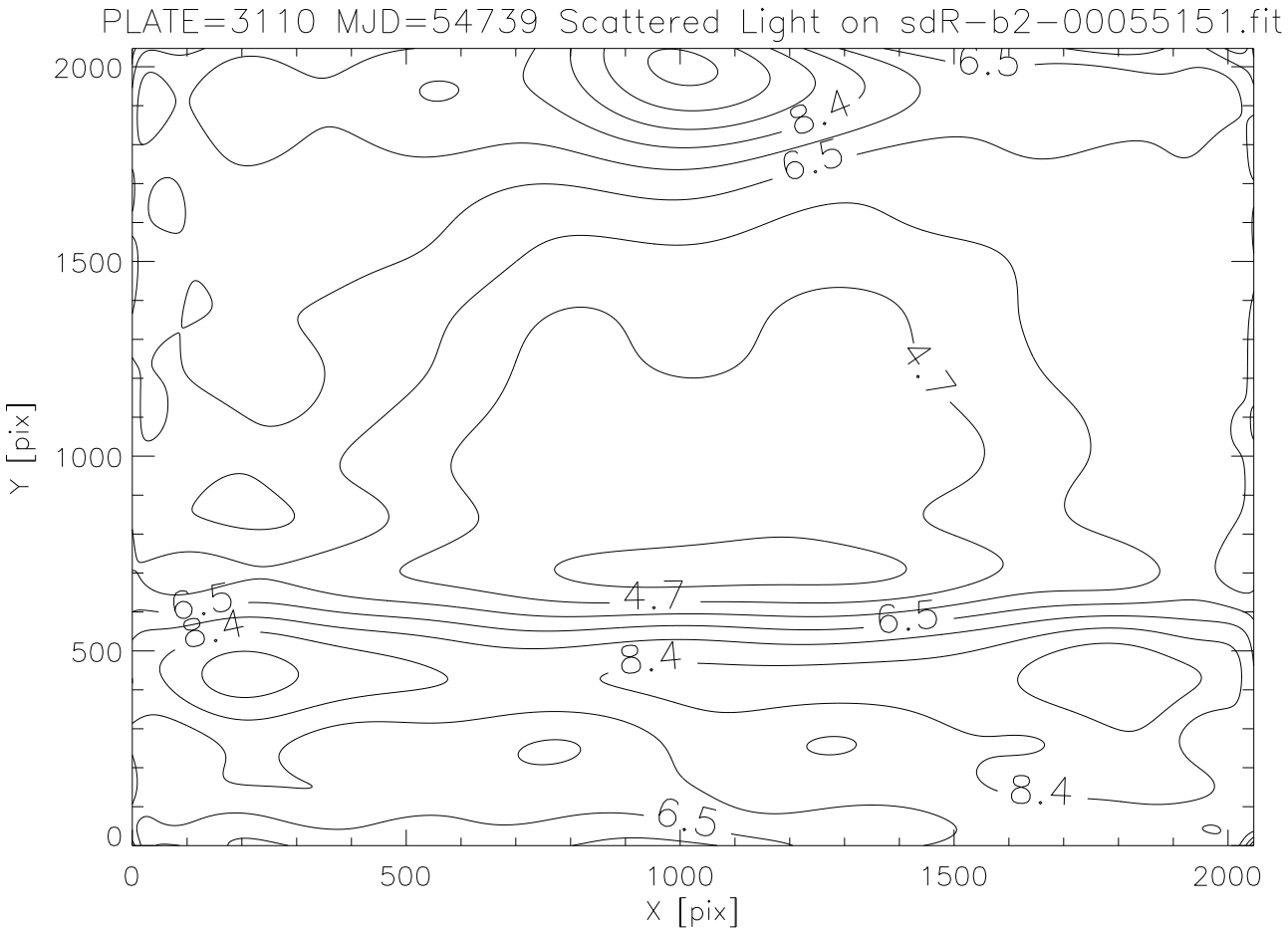

PLATE=3110 MJD=54739 sdR-b2-00055150.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.48 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

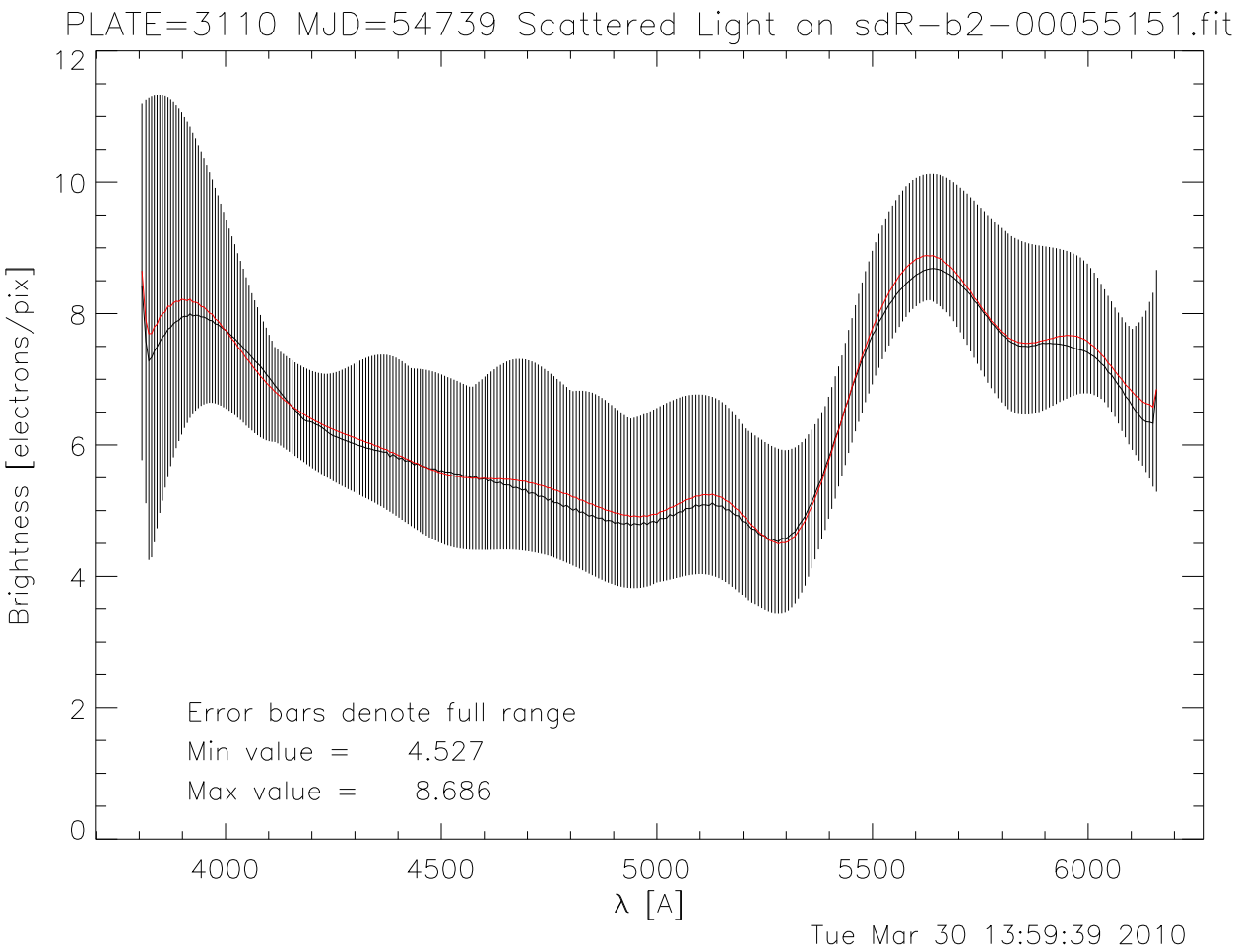

PLATE=3110 MJD=54739 sdR-b2-00055150.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.87 %
Fiber number
Focal Distance [mm]
Airmass

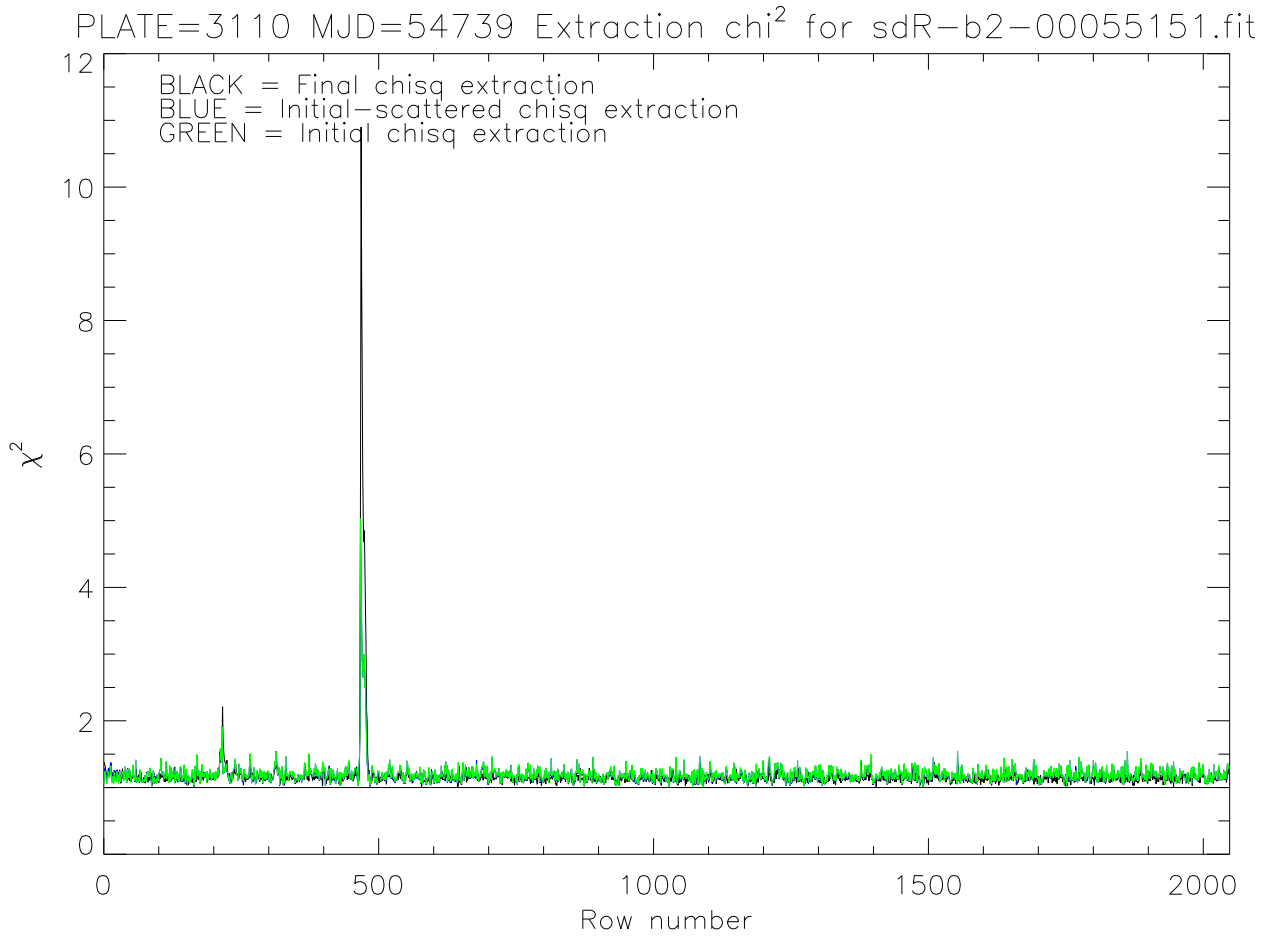

PLATE=3110 MJD=54739 Fiber−Flats for sdR−b2−00055152.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.339
Max value = 1.194
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:57:37 2010

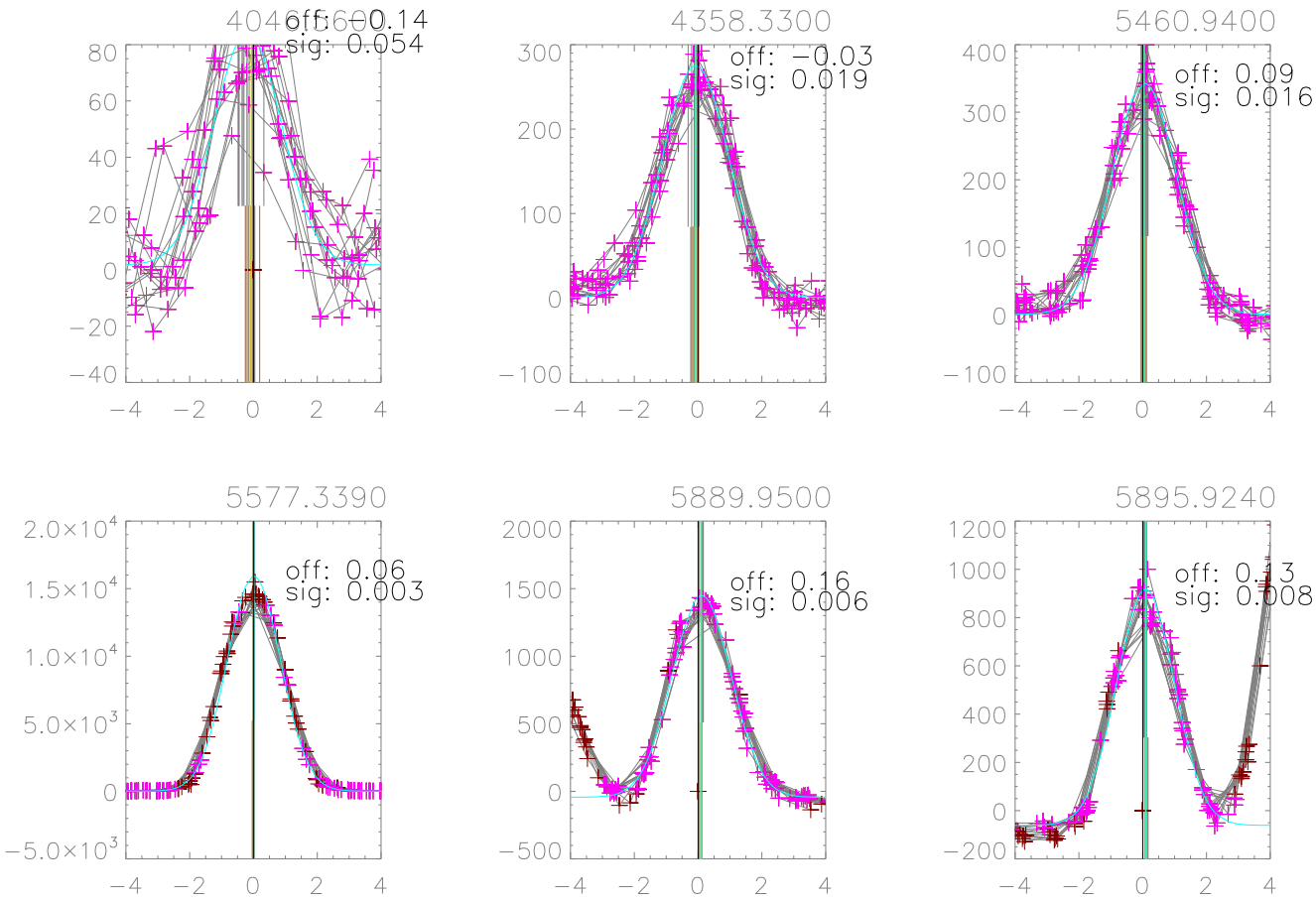

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b2-00055151.f
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
11.5
9.3

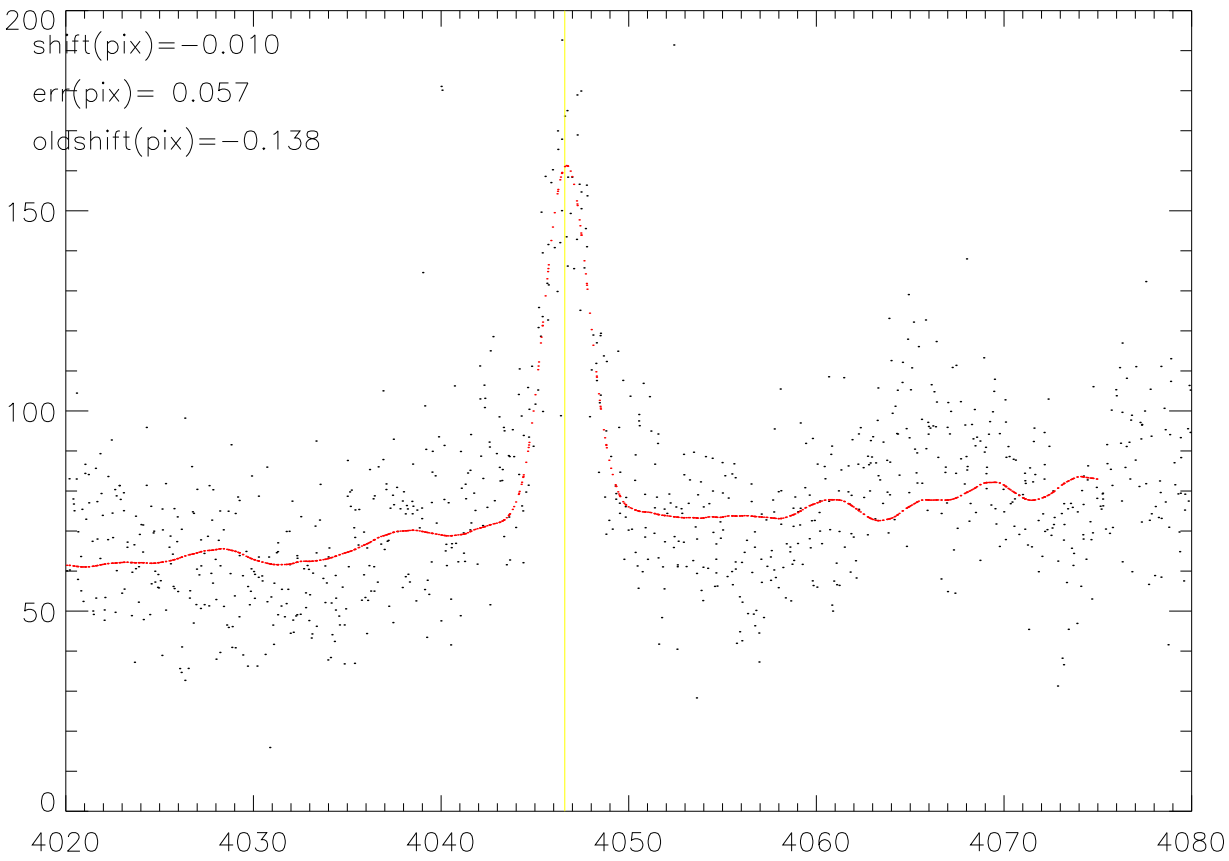

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-b2-00055151.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.539
Max value = 13.757
4000
4500
5000
5500
6000
λ [A]
Tue Mar 30 13:58:07 2010

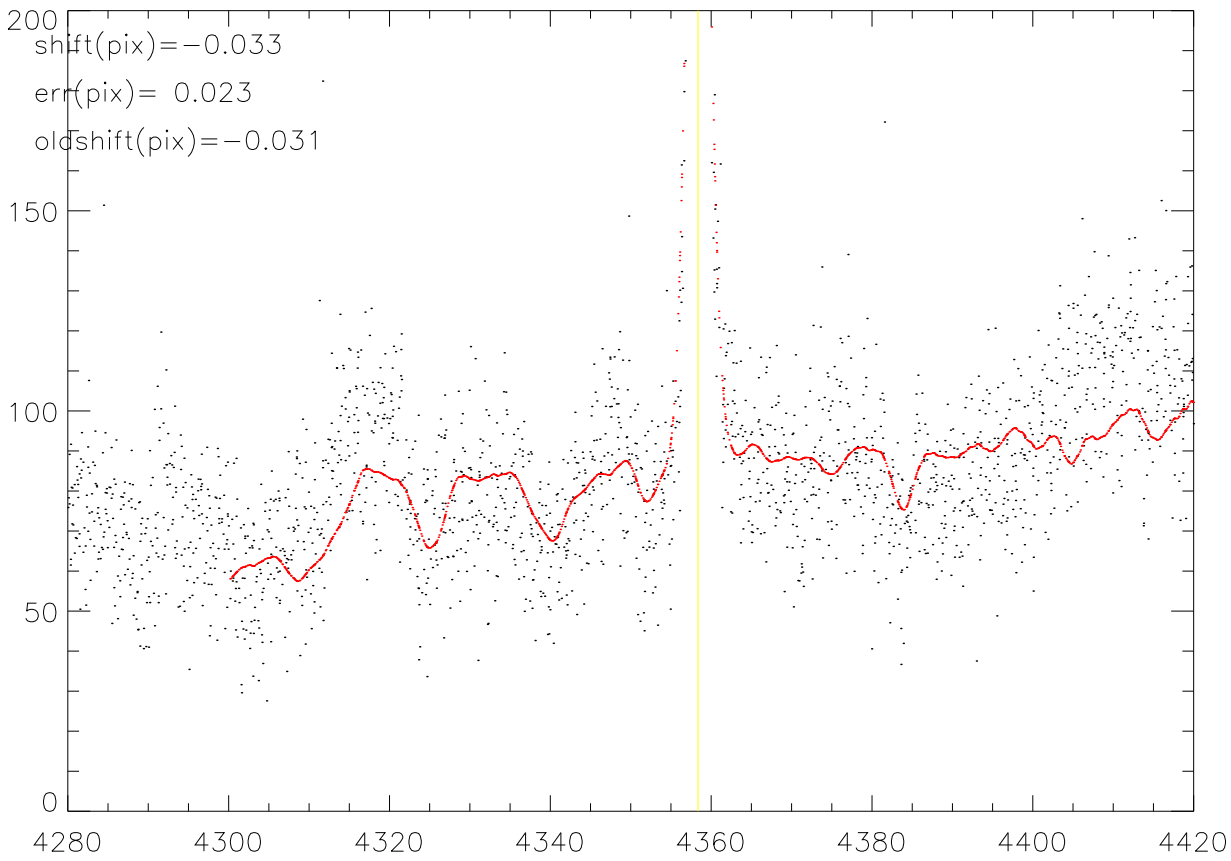

PLATE=3110 MJD=54739 Scattered Light on sdR-b2-00055151.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
4.7

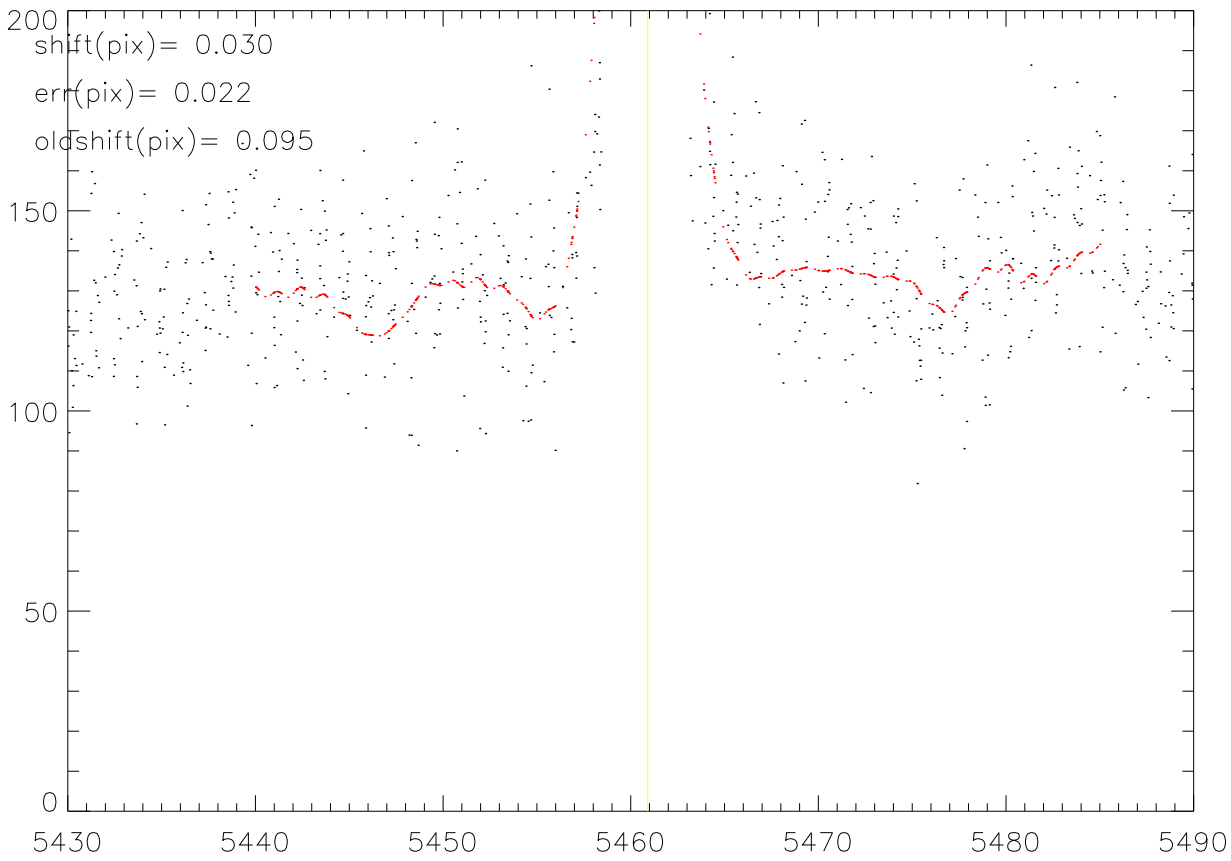

PLATE=3110 MJD=54739 Scattered Light on sdR-b2-00055151.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.527
Max value = 8.686
Tue Mar 30 13:59:39 2010

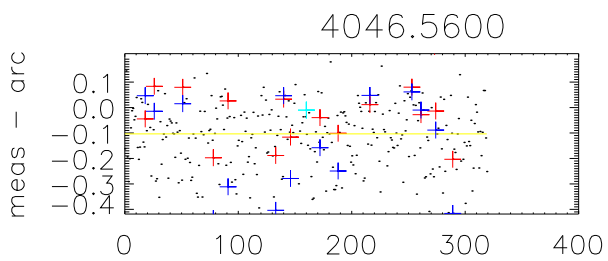

PLATE=3110 MJD=54739 Extraction chi^2 for sdR-b2-00055151.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

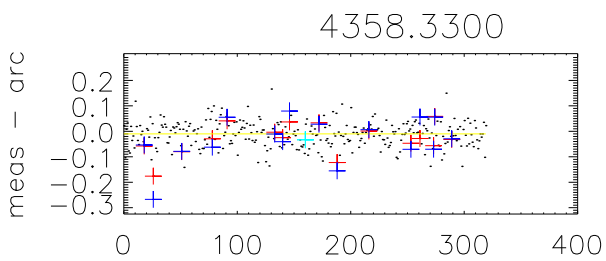

4046.5600
off: −0.14
sig: 0.054
4358.3300
off: −0.03
sig: 0.019
5460.9400
off: 0.09
sig: 0.016
5577.3390
off: 0.06
sig: 0.003
5889.9500
off: 0.16
sig: 0.006
5895.9240
off: 0.13
sig: 0.008

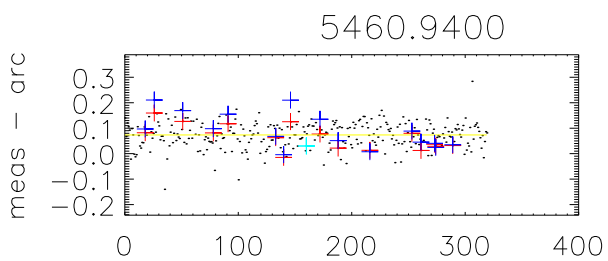

shift(pix)=−0.010
err(pix)= 0.057
oldshift(pix)=−0.138
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

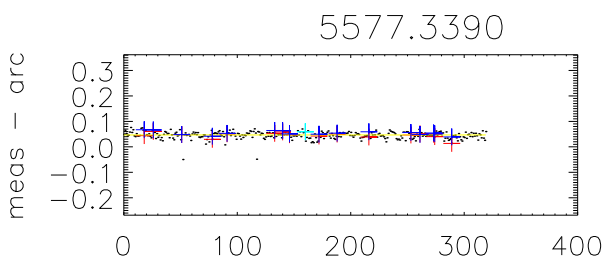

shift(pix)=−0.033
err(pix)= 0.023
oldshift(pix)=−0.031
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

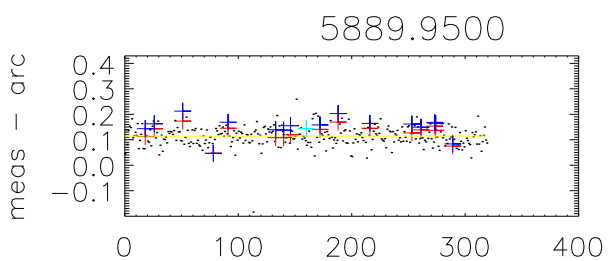

shift(pix)= 0.030
err(pix)= 0.022
oldshift(pix)= 0.095
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

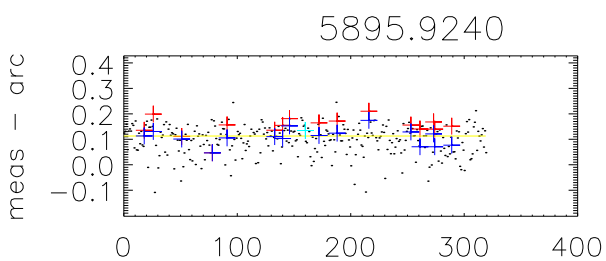

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

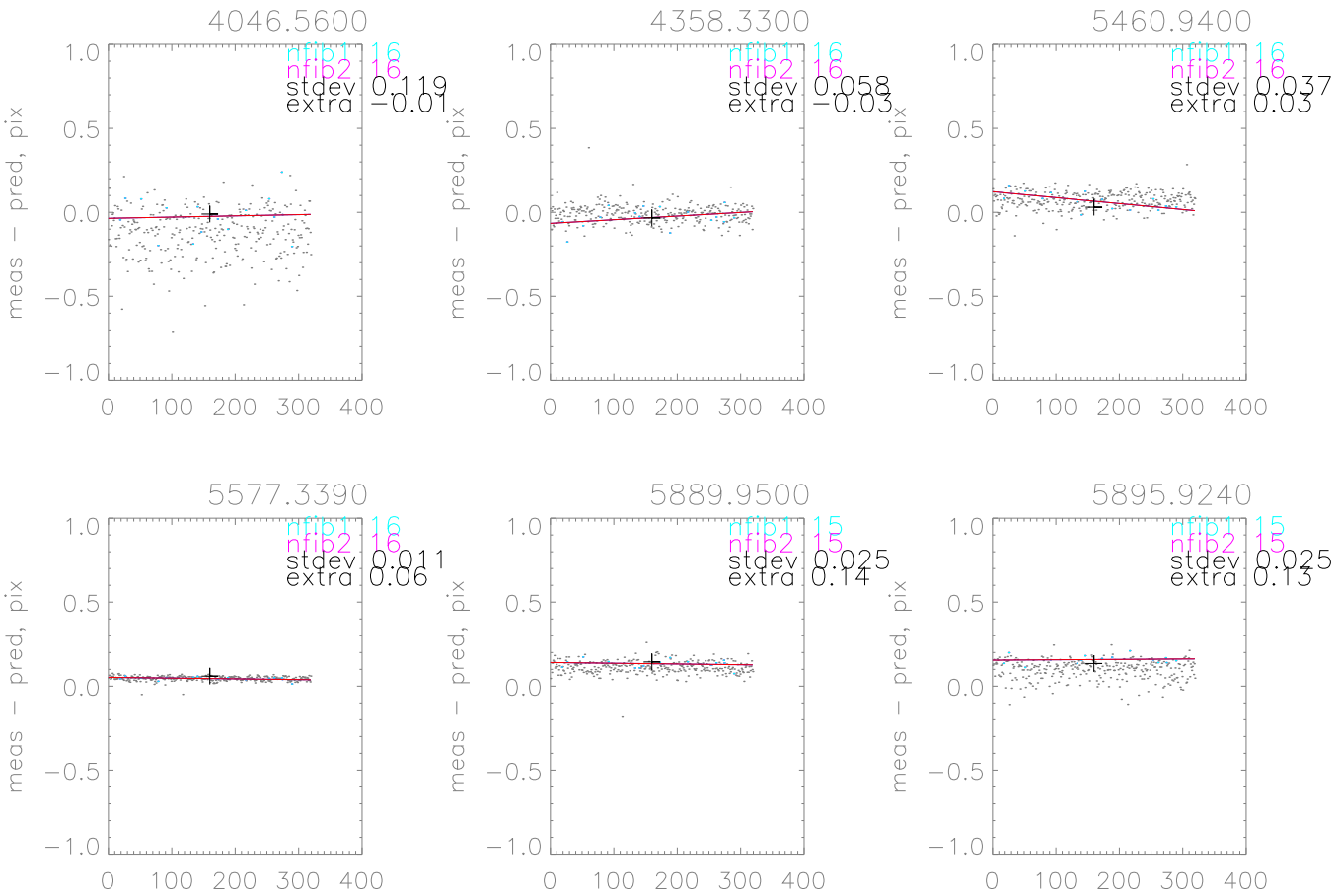

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

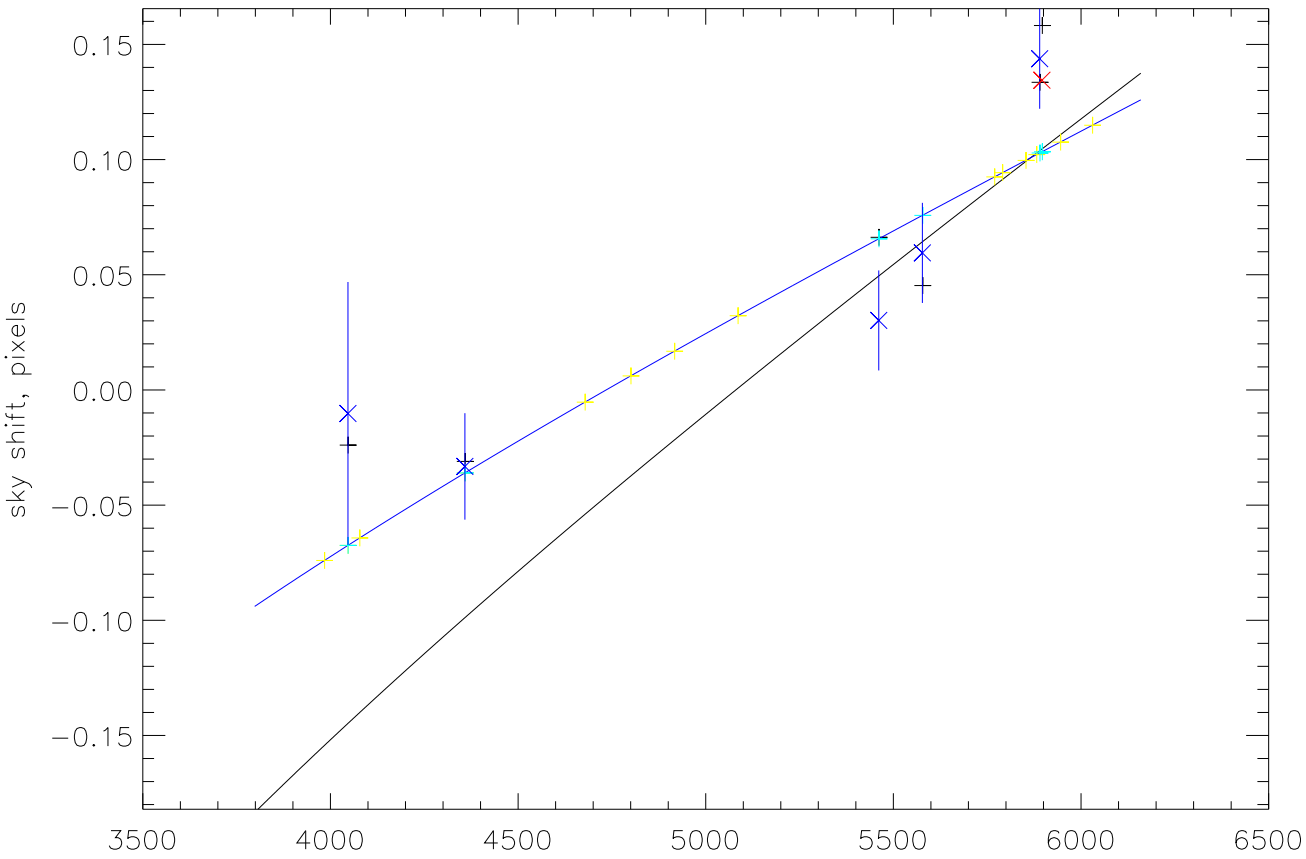

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

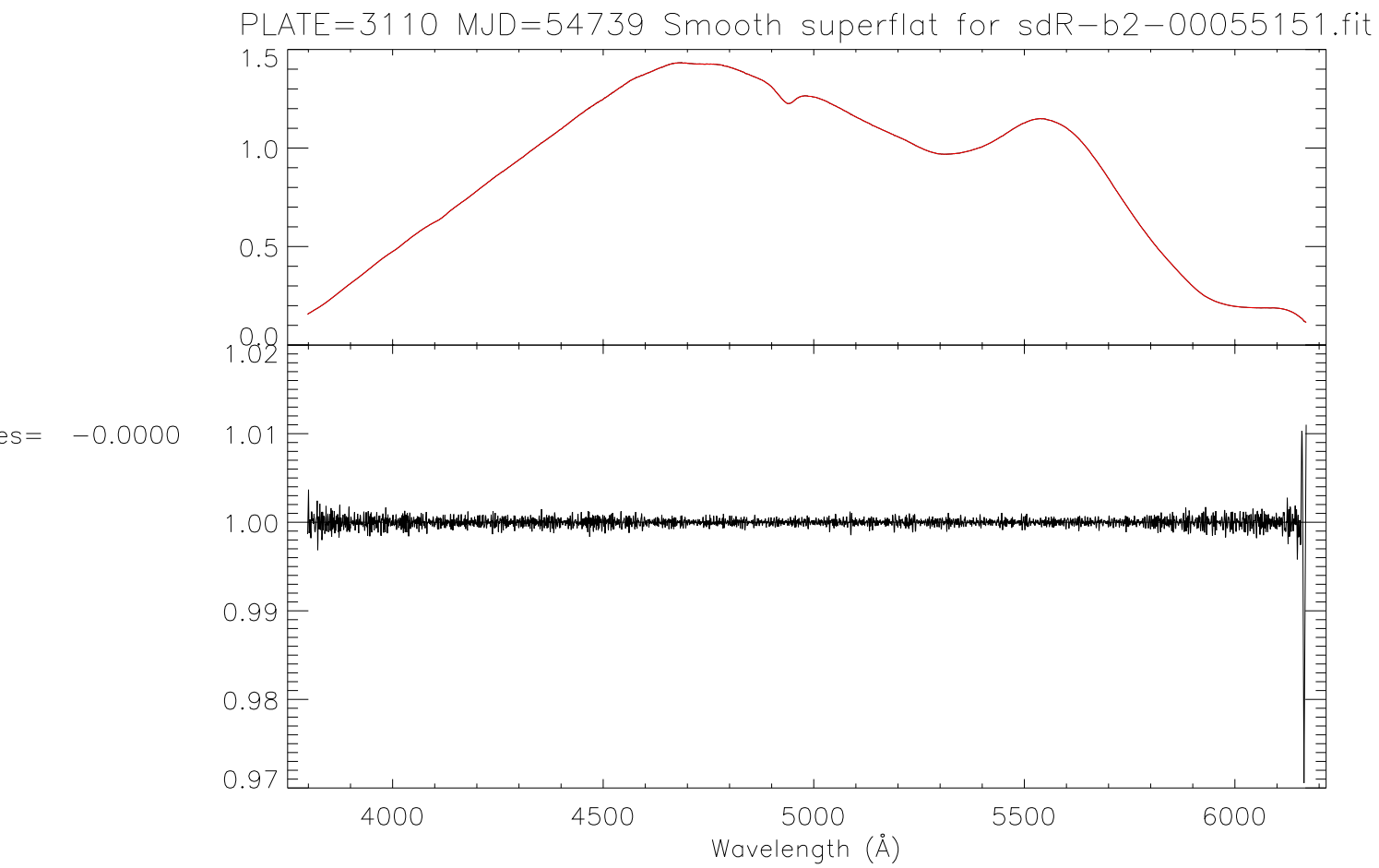

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

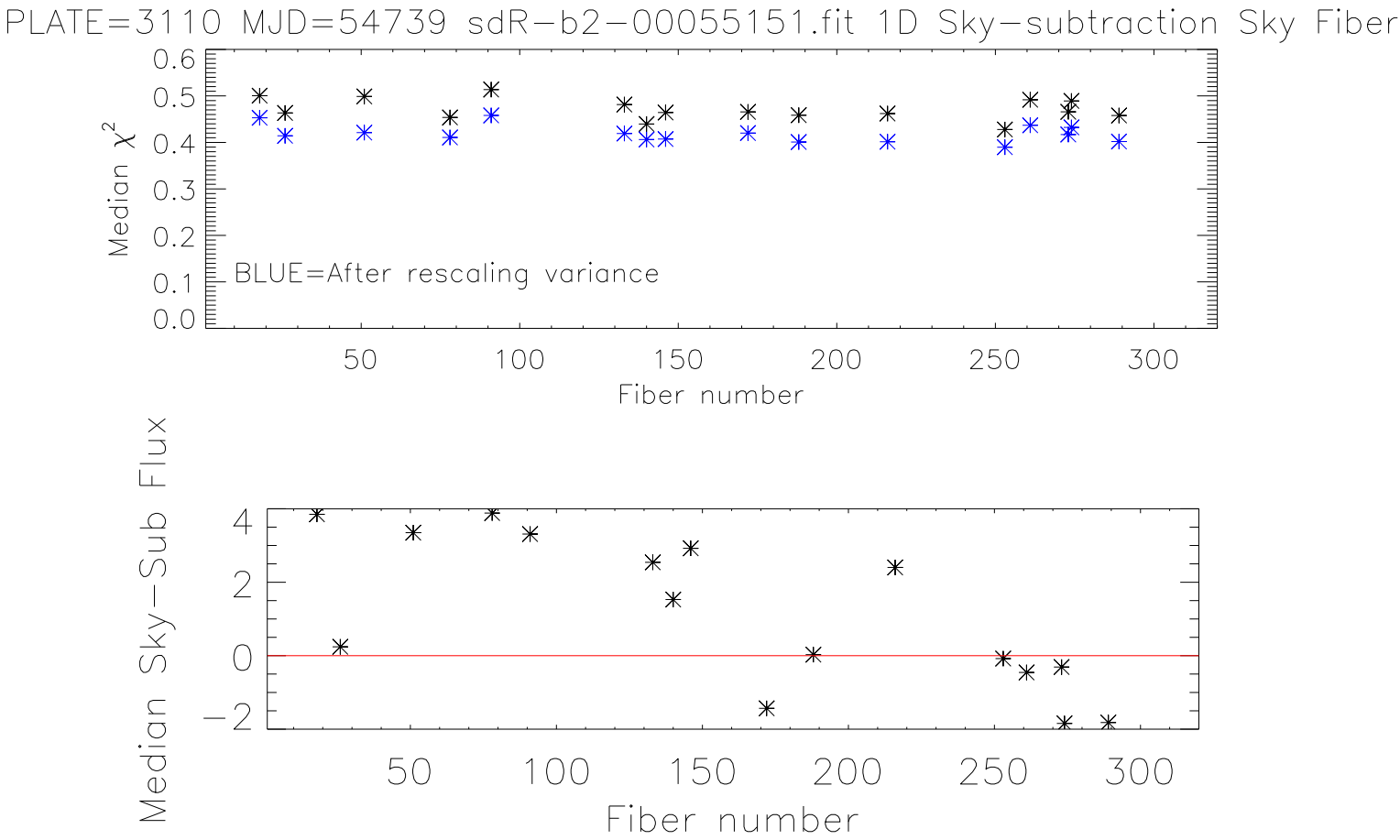

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

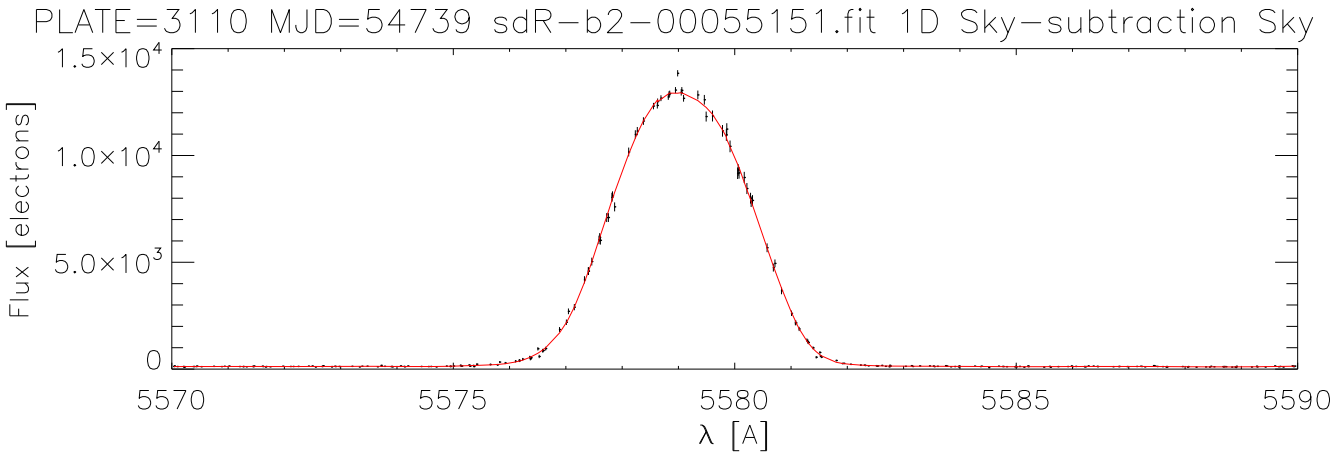

4046.5600
nfib1 16
nfib2 16
stdev 0.119
extra −0.01
4358.3300
nfib1 16
nfib2 16
stdev 0.058
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra 0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.06
5889.9500
nfib1 15
nfib2 15
stdev 0.025
extra 0.14
5895.9240
nfib1 15
nfib2 15
stdev 0.025
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

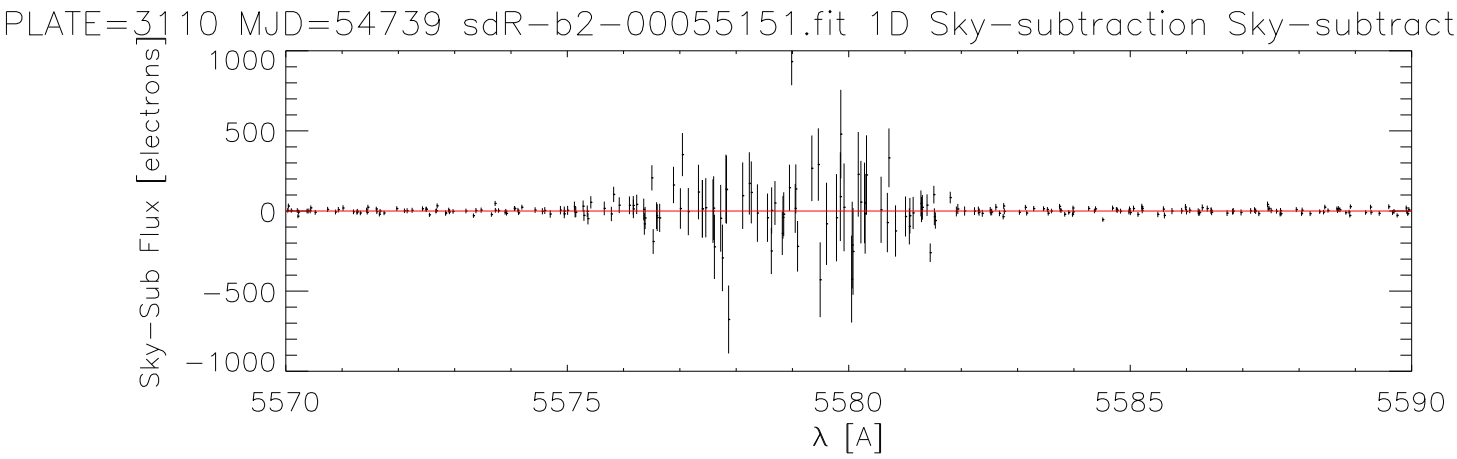

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

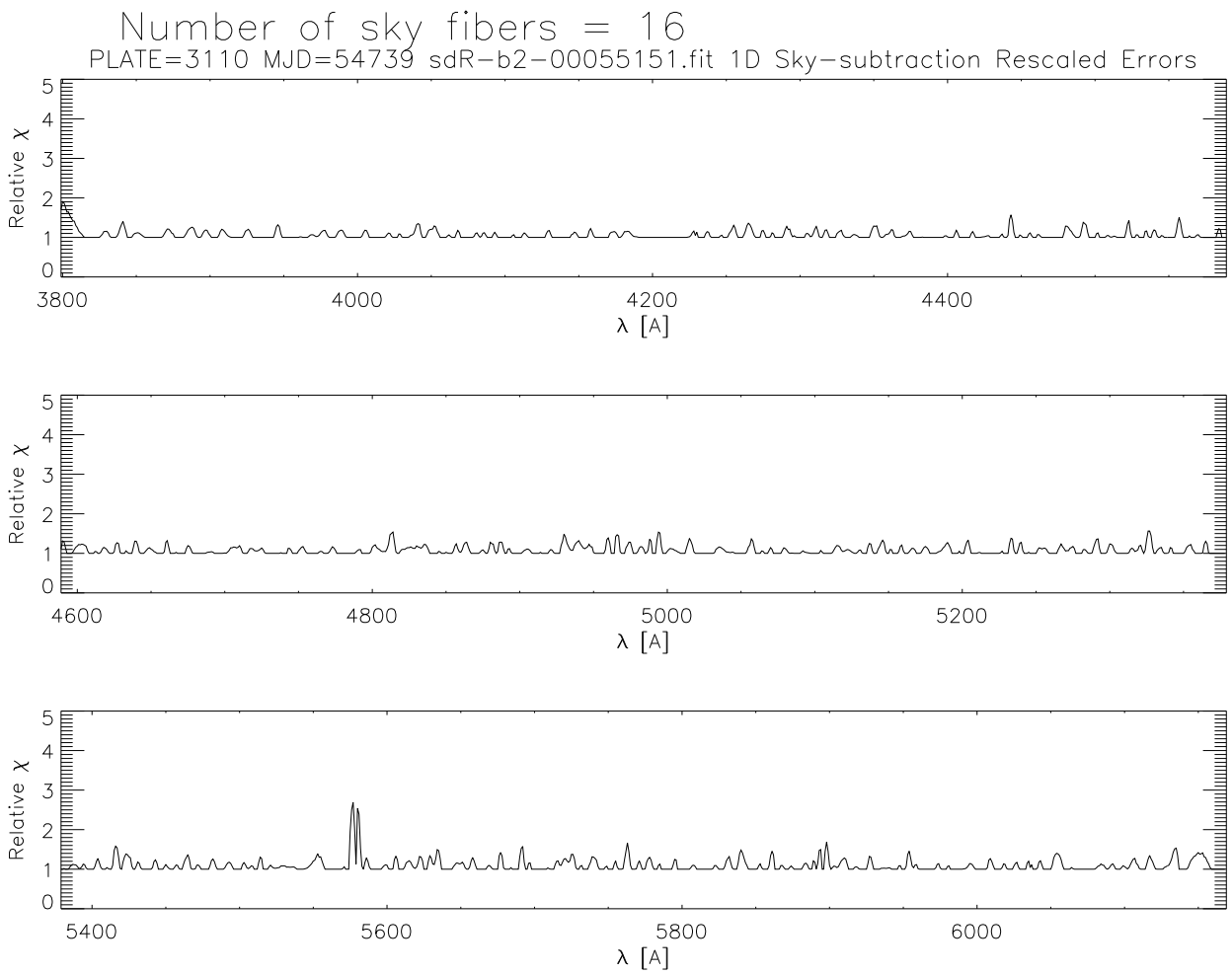

PLATE=3110 MJD=54739 Smooth superflat for sdR-b2-00055151.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

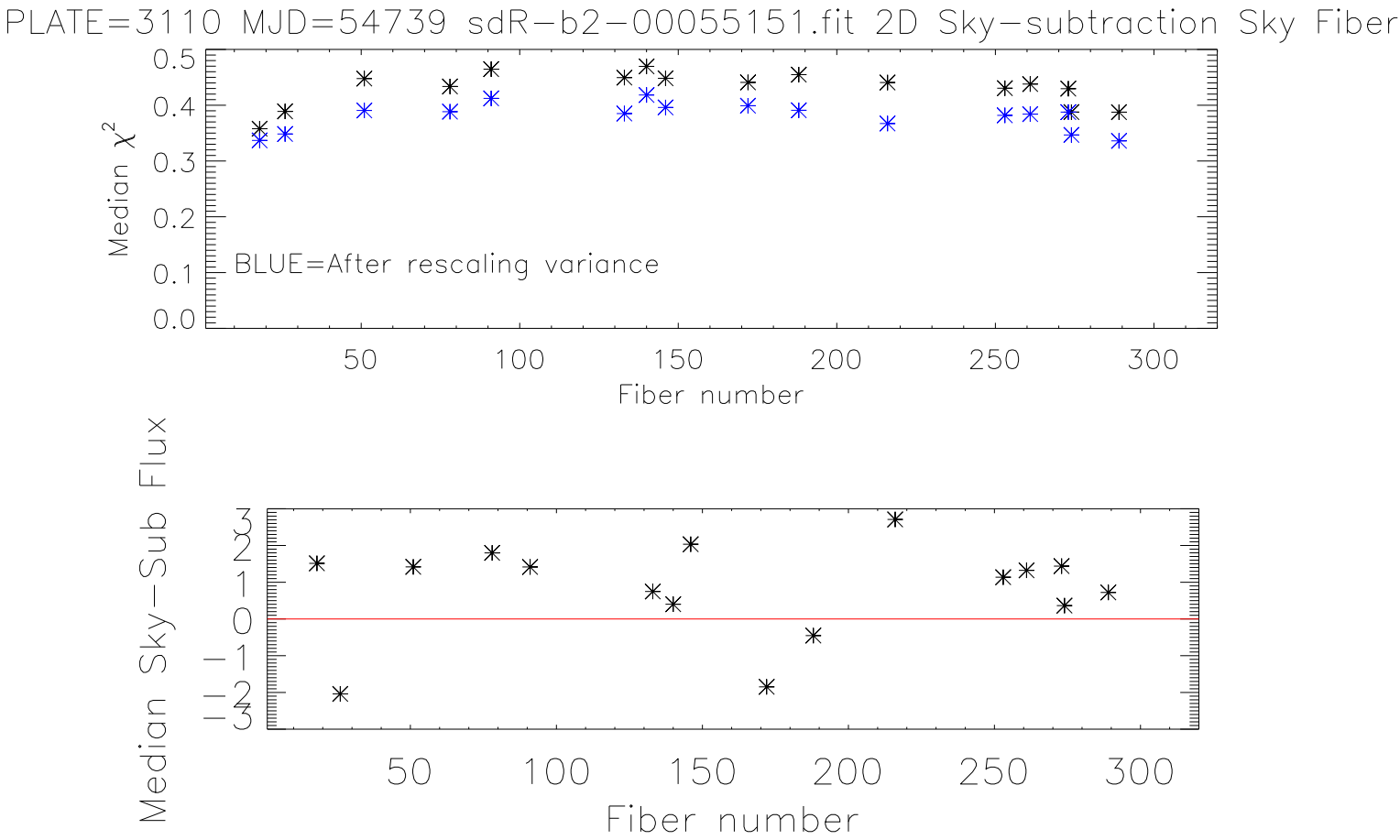
es= −0.0000

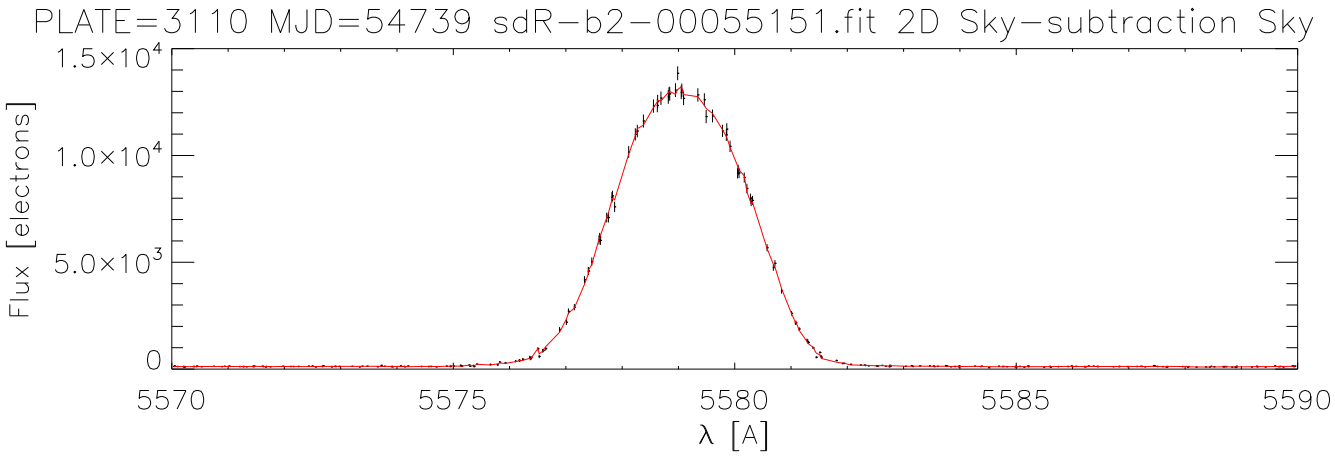

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

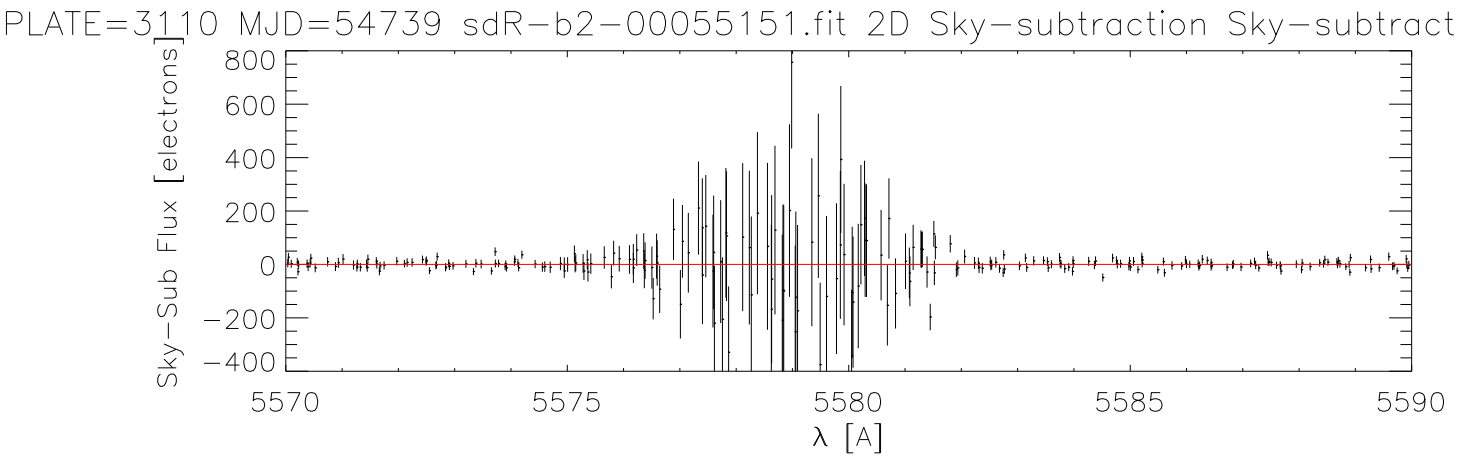

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

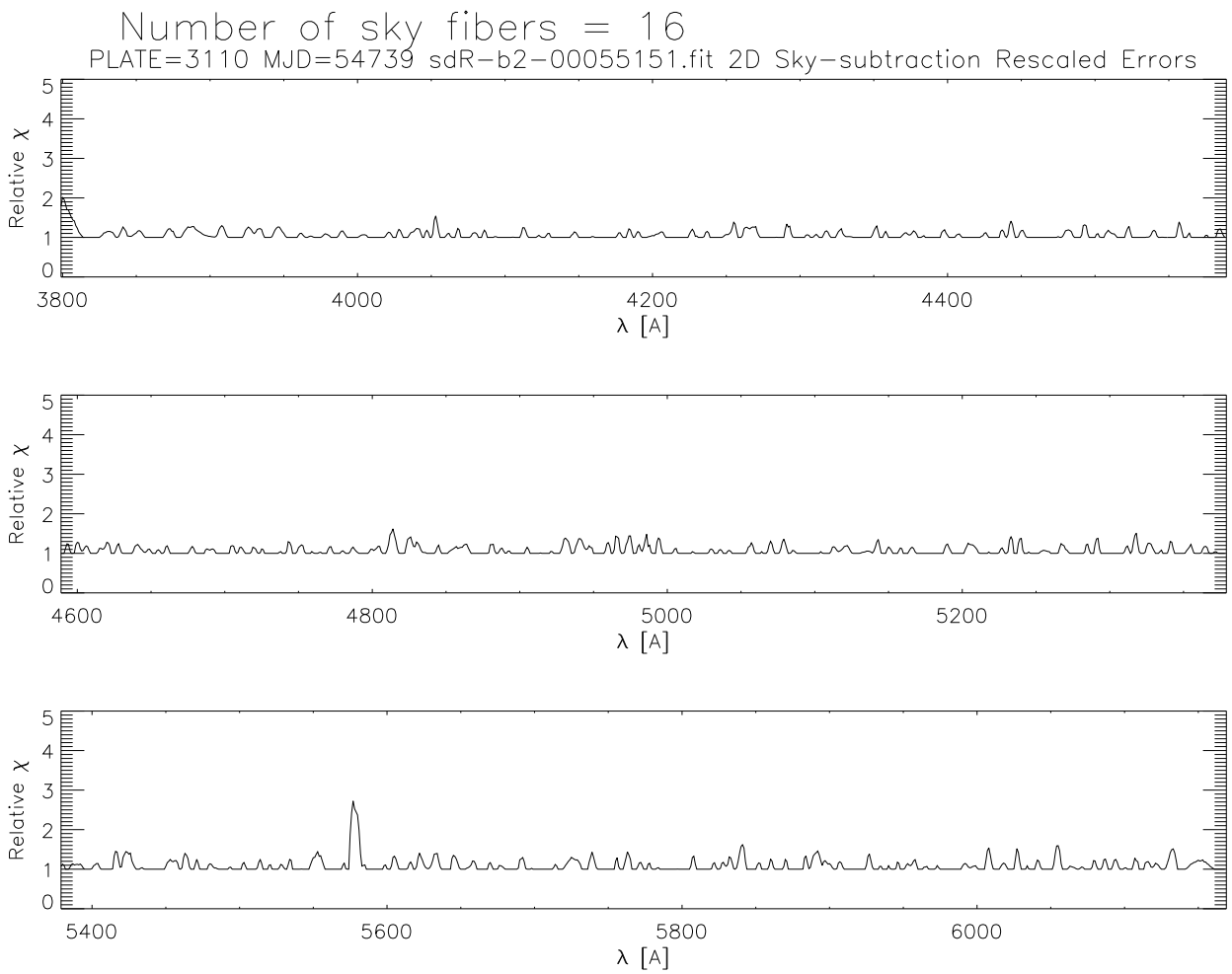

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

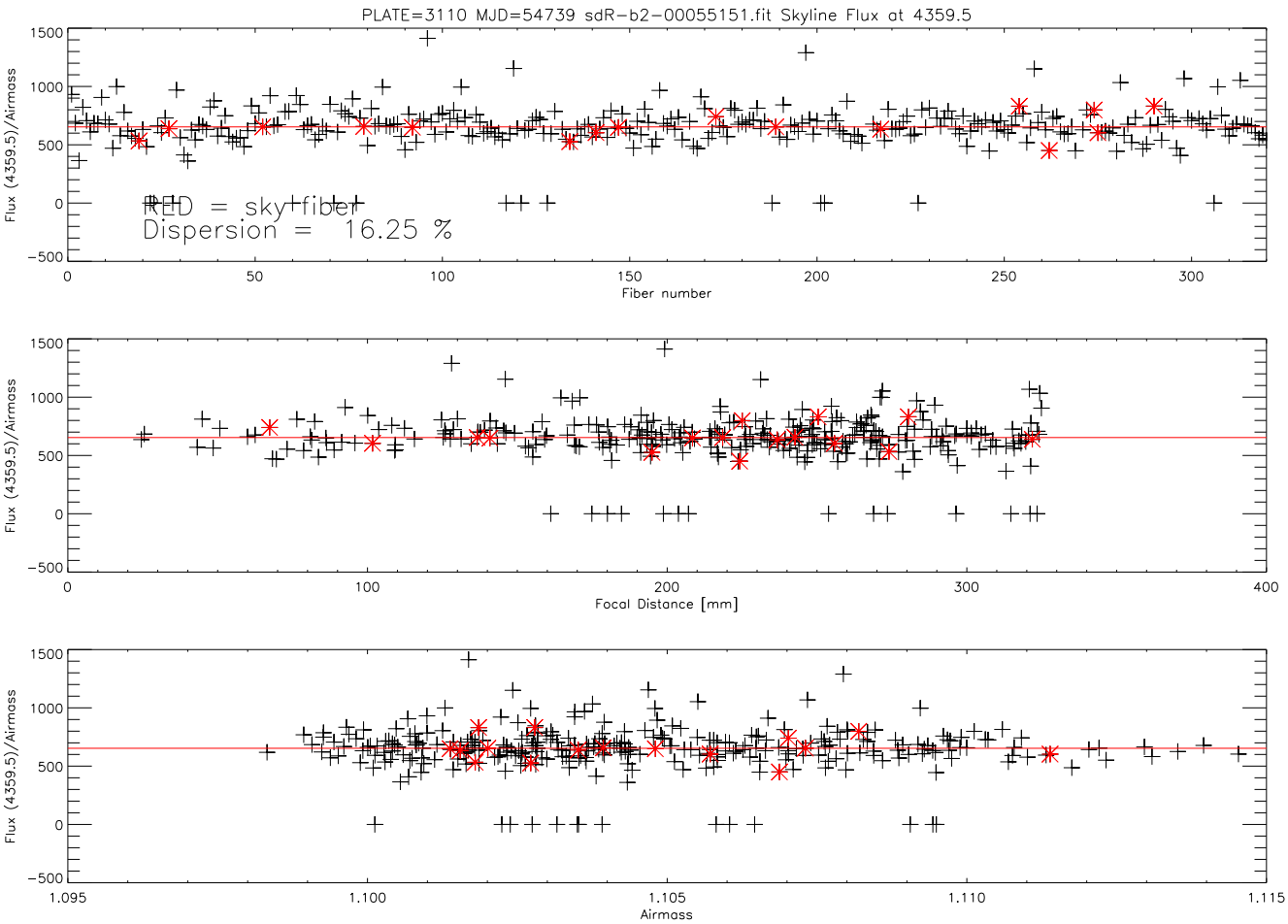

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b2-00055151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

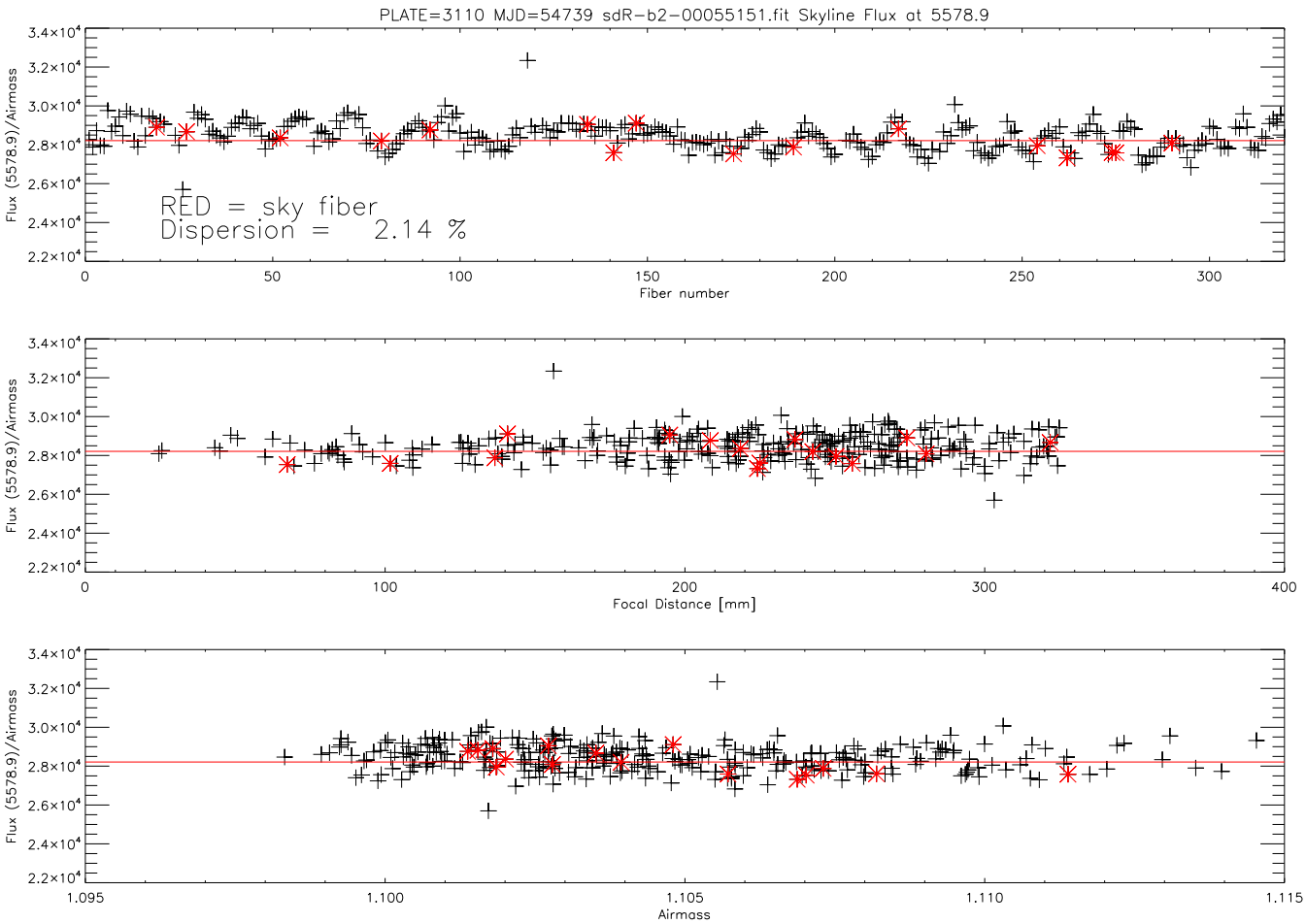

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

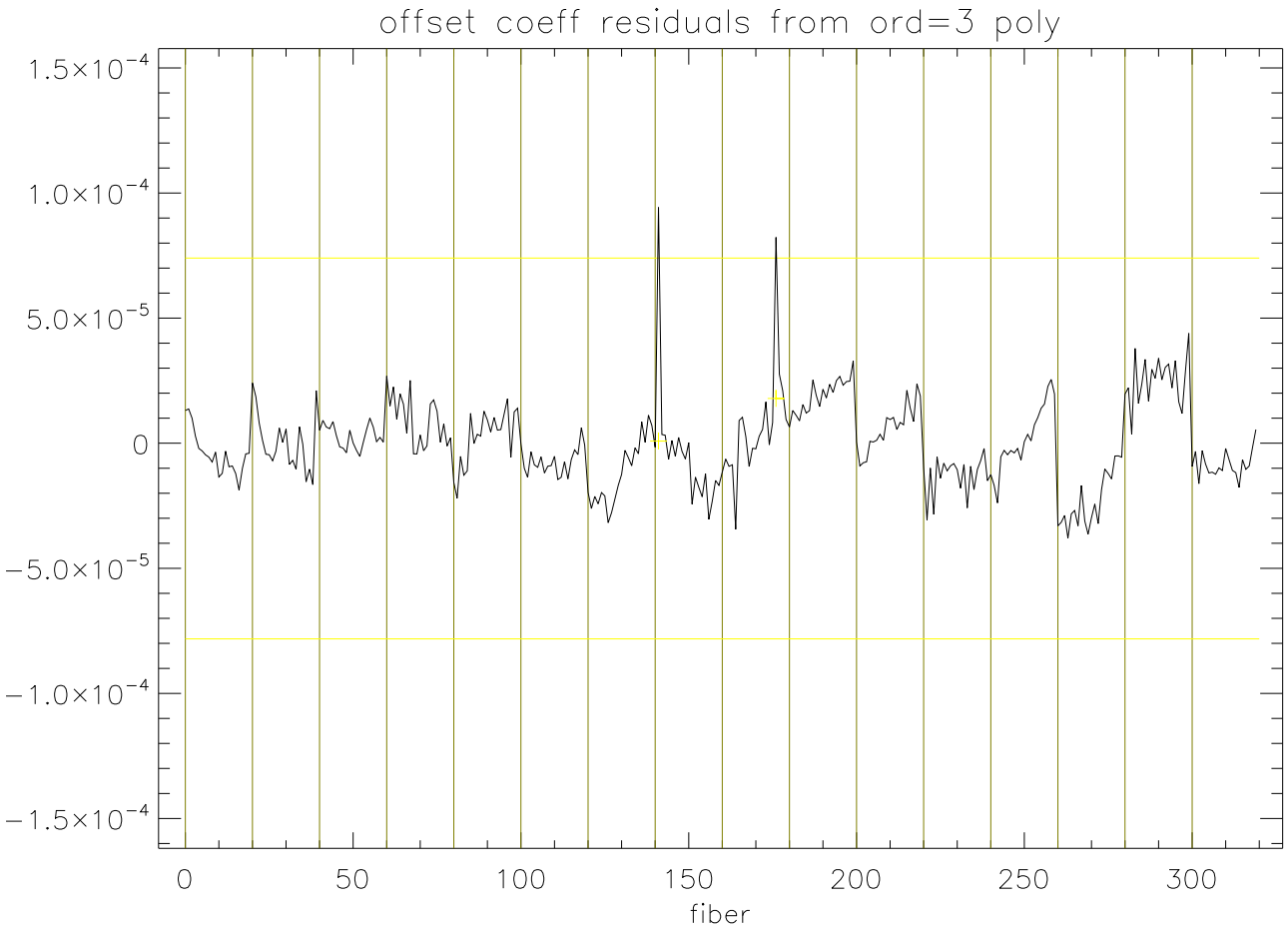

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

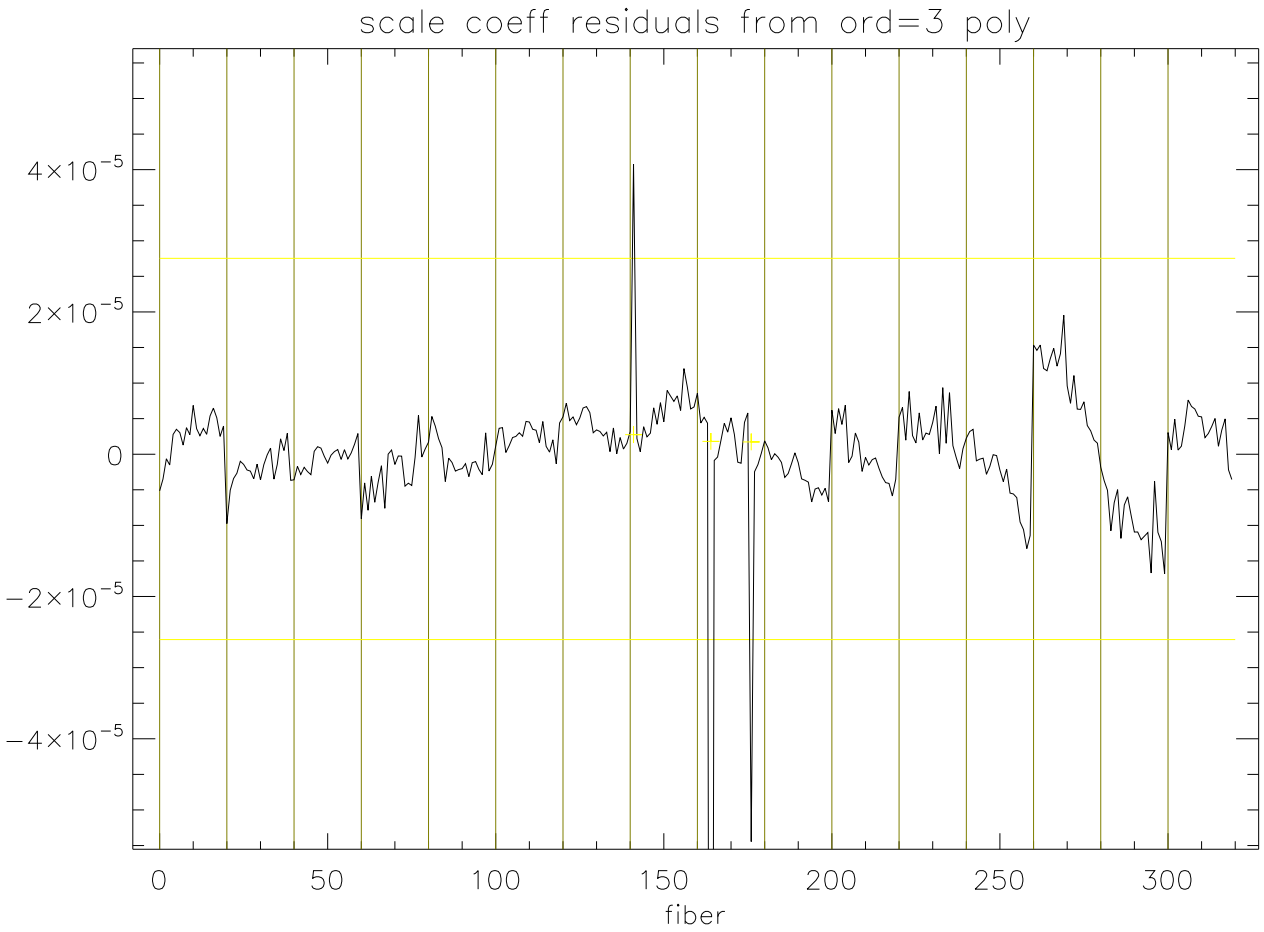

PLATE=3110 MJD=54739 sdR-b2-00055151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

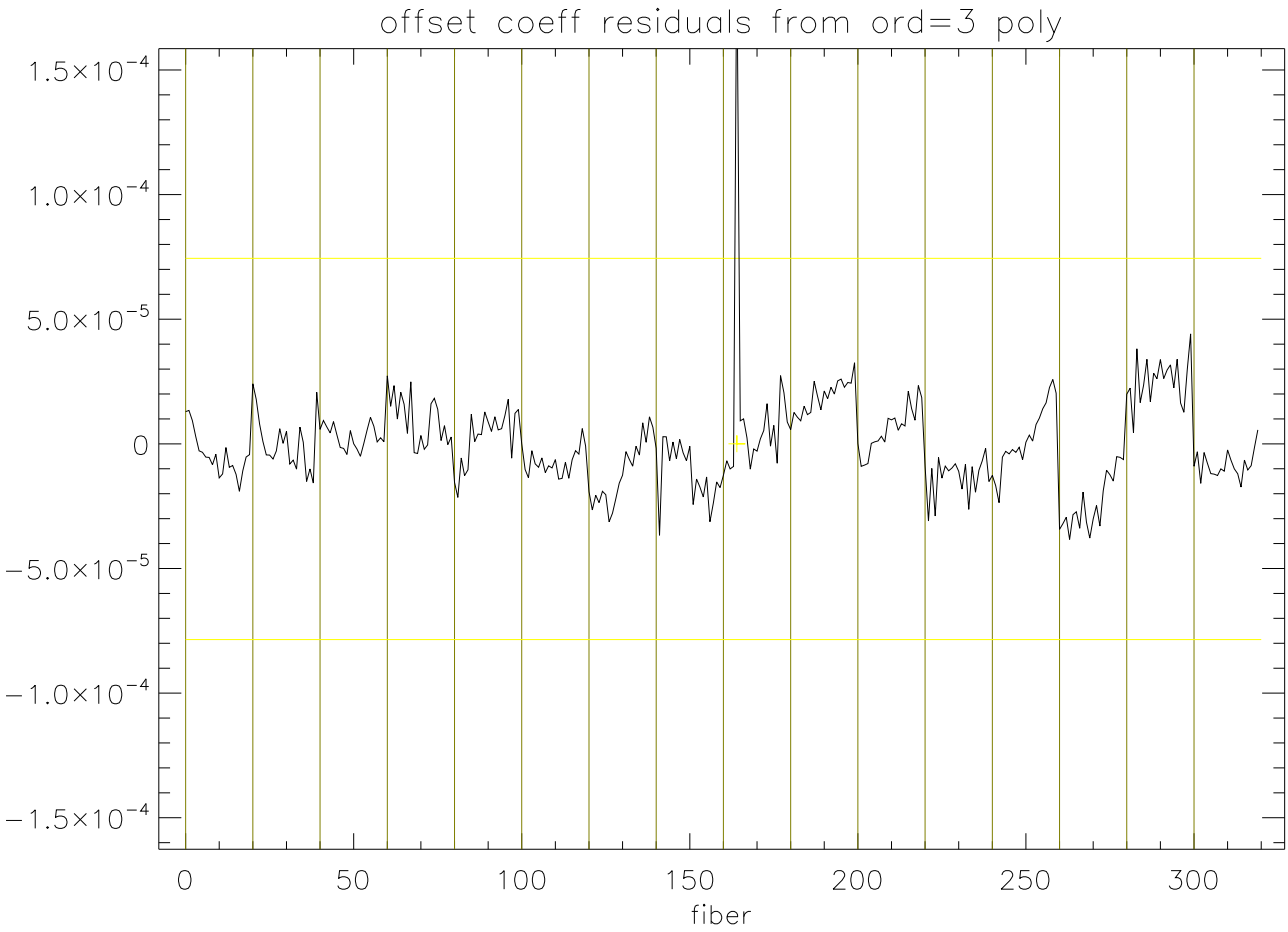

Number of sky fibers = 16
PLATE=3110 MJD=54739 sdR-b2-00055151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

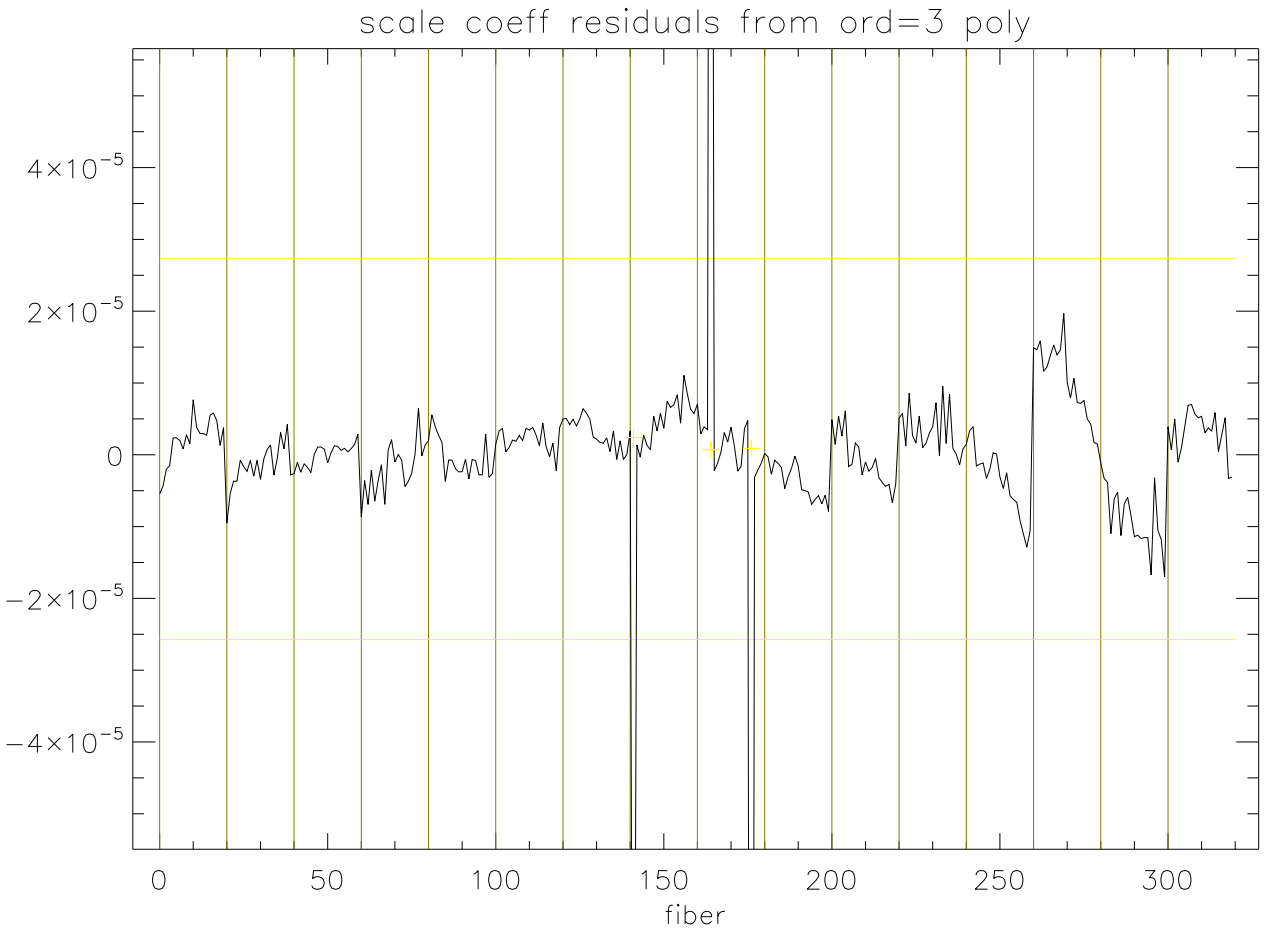

PLATE=3110 MJD=54739 sdR-b2-00055151.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 16.25 %
Flux (4359.5)/Airmass
Fiber number
Focal Distance [mm]
Airmass

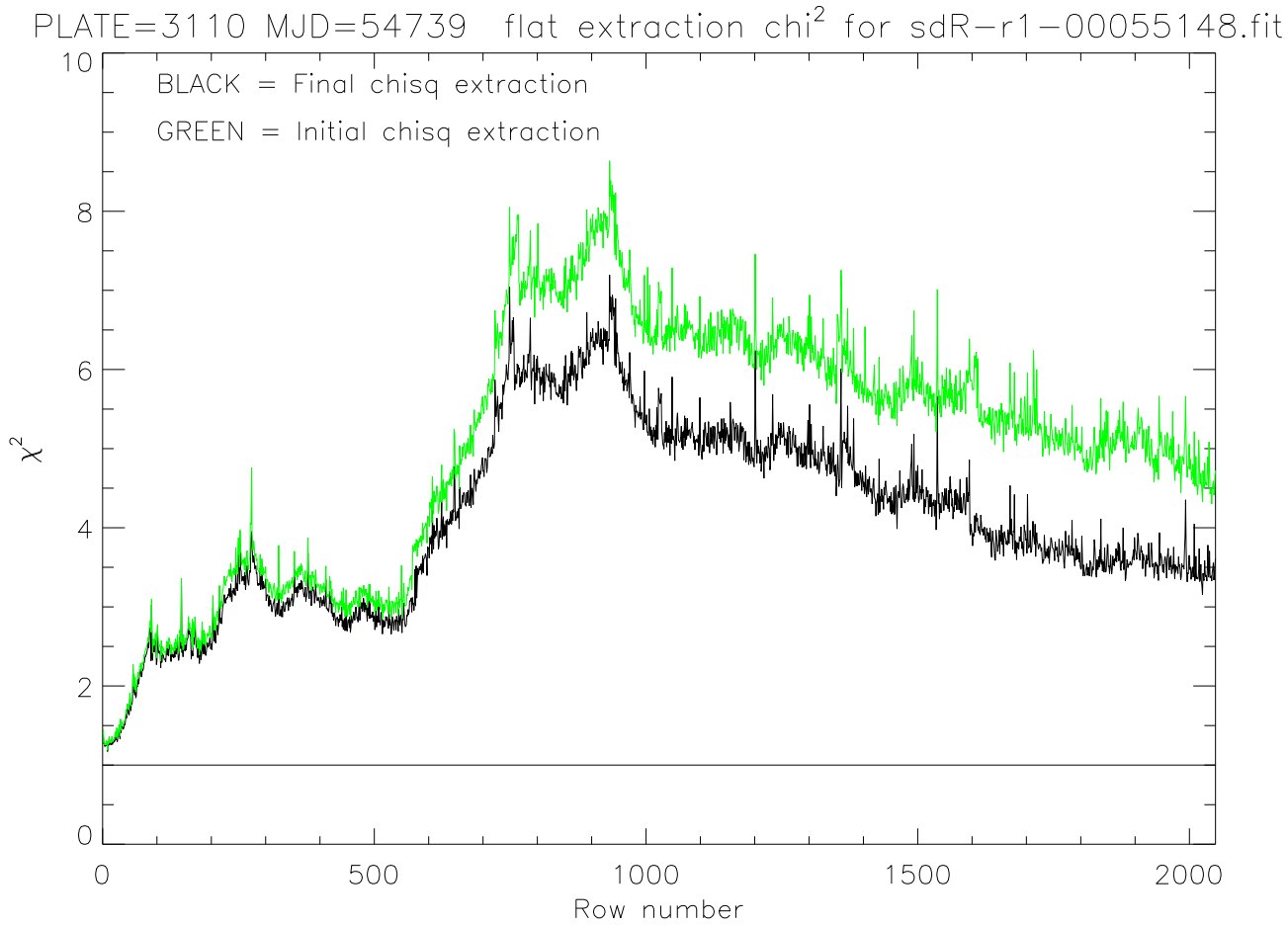

PLATE=3110 MJD=54739 sdR-b2-00055151.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.14 %
Fiber number
Focal Distance [mm]
Airmass

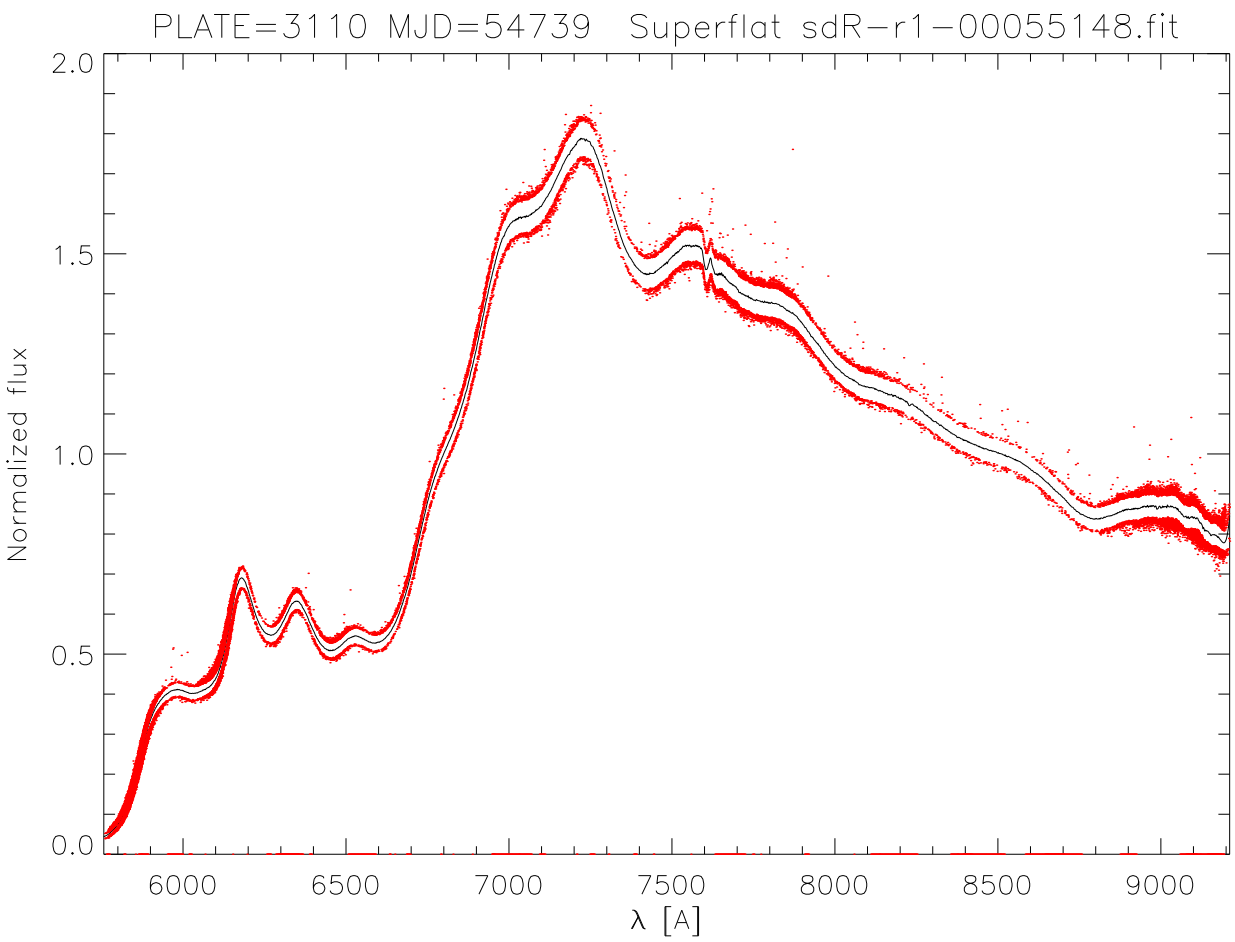

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

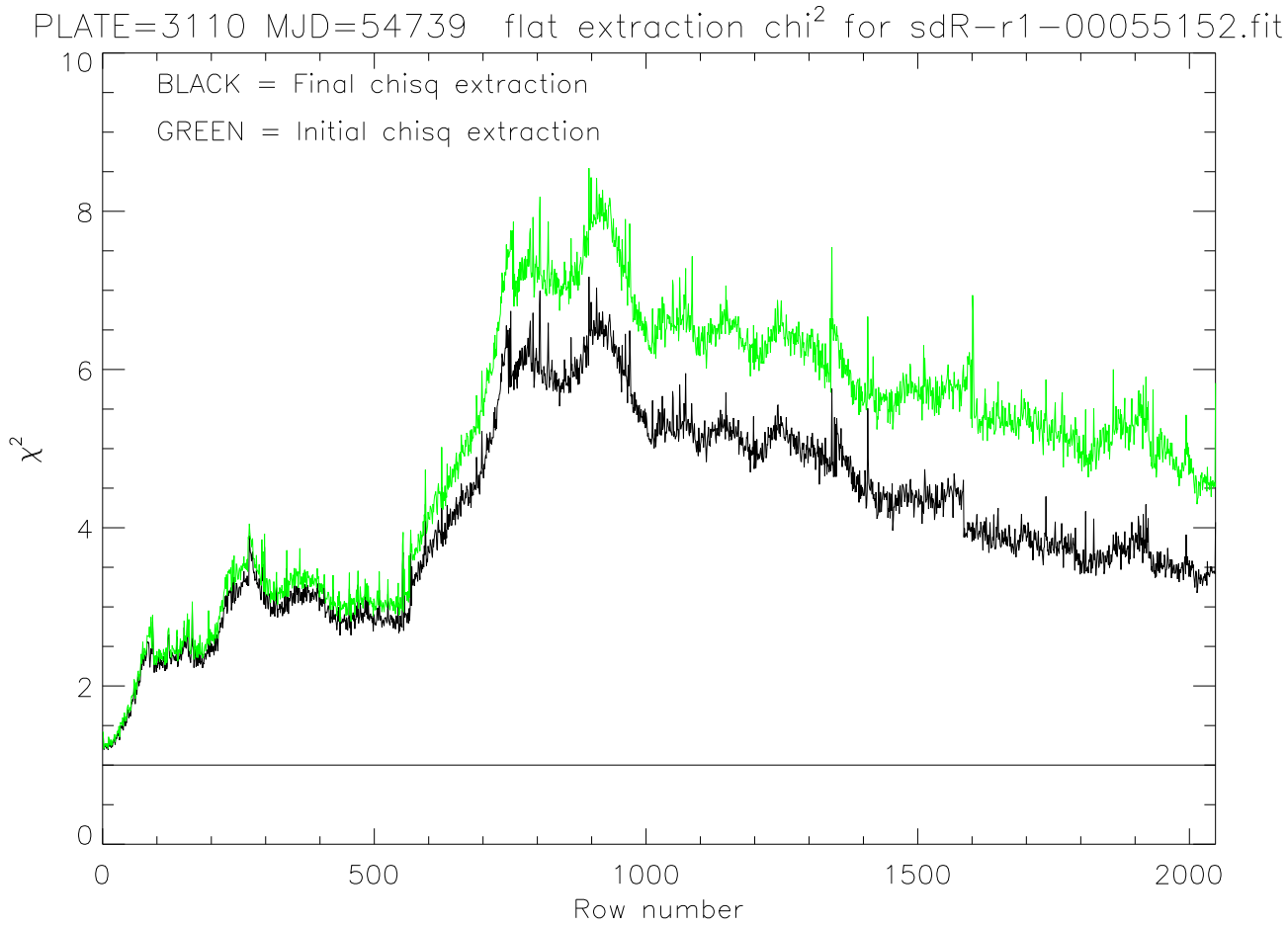

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

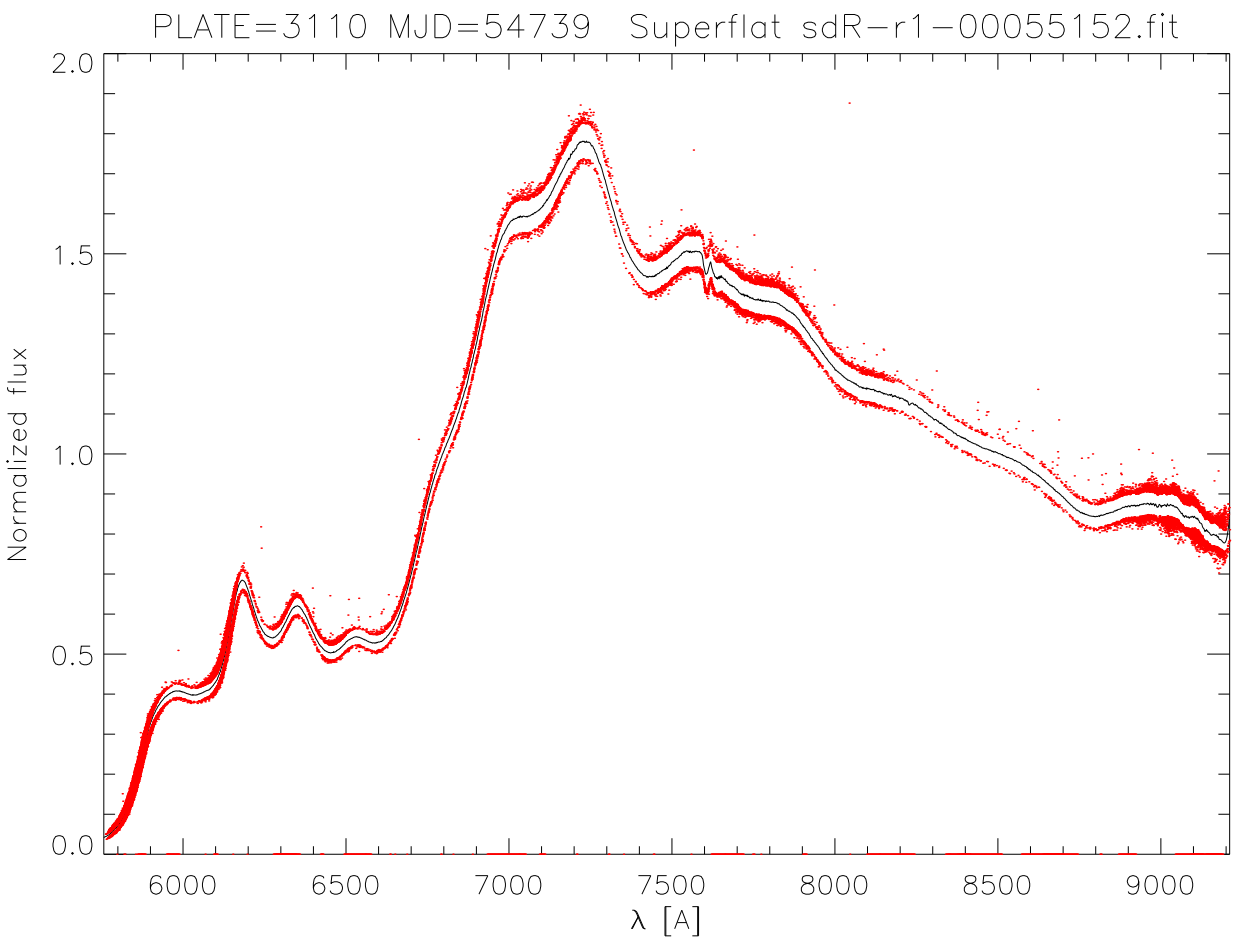

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

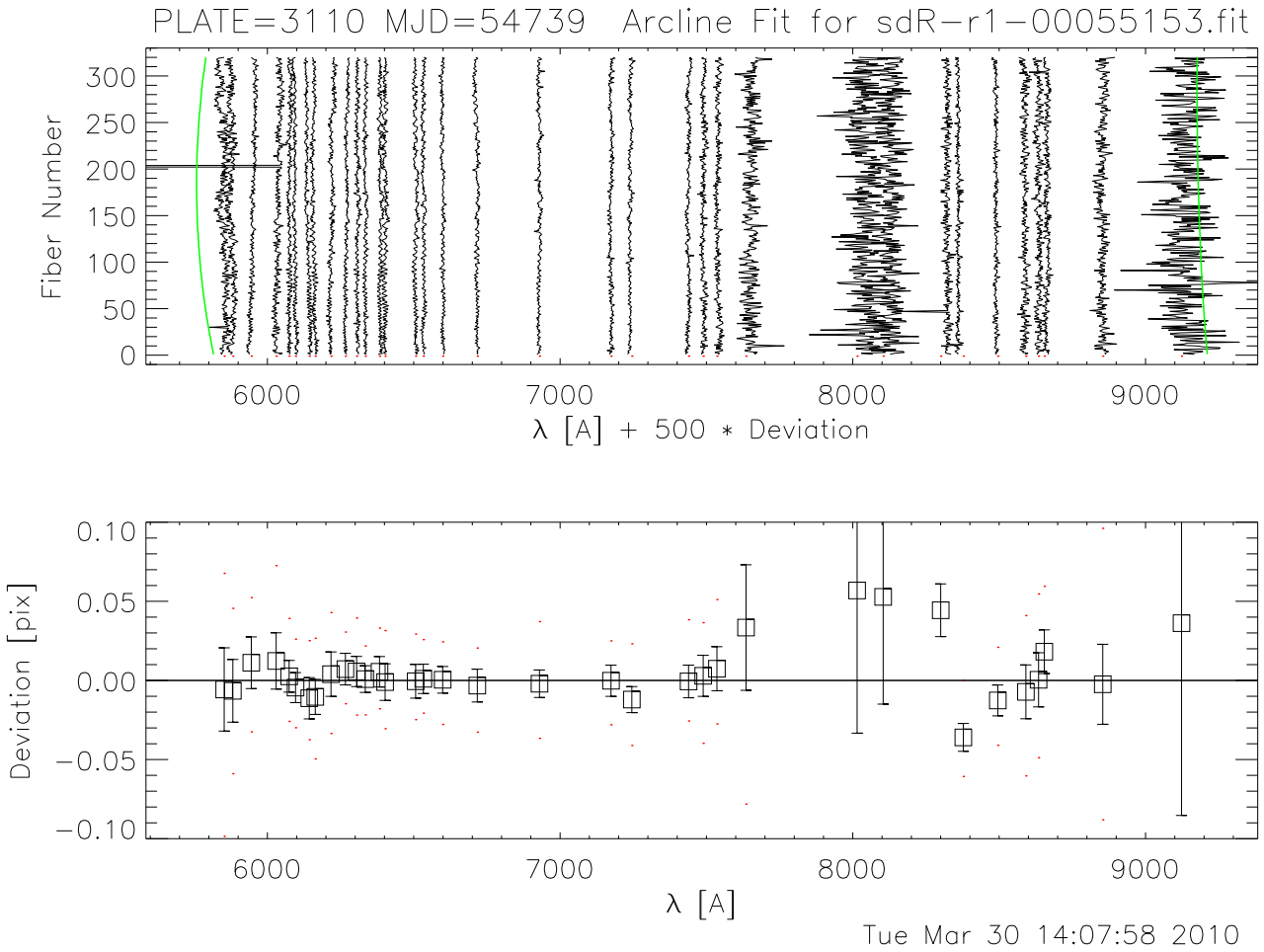

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

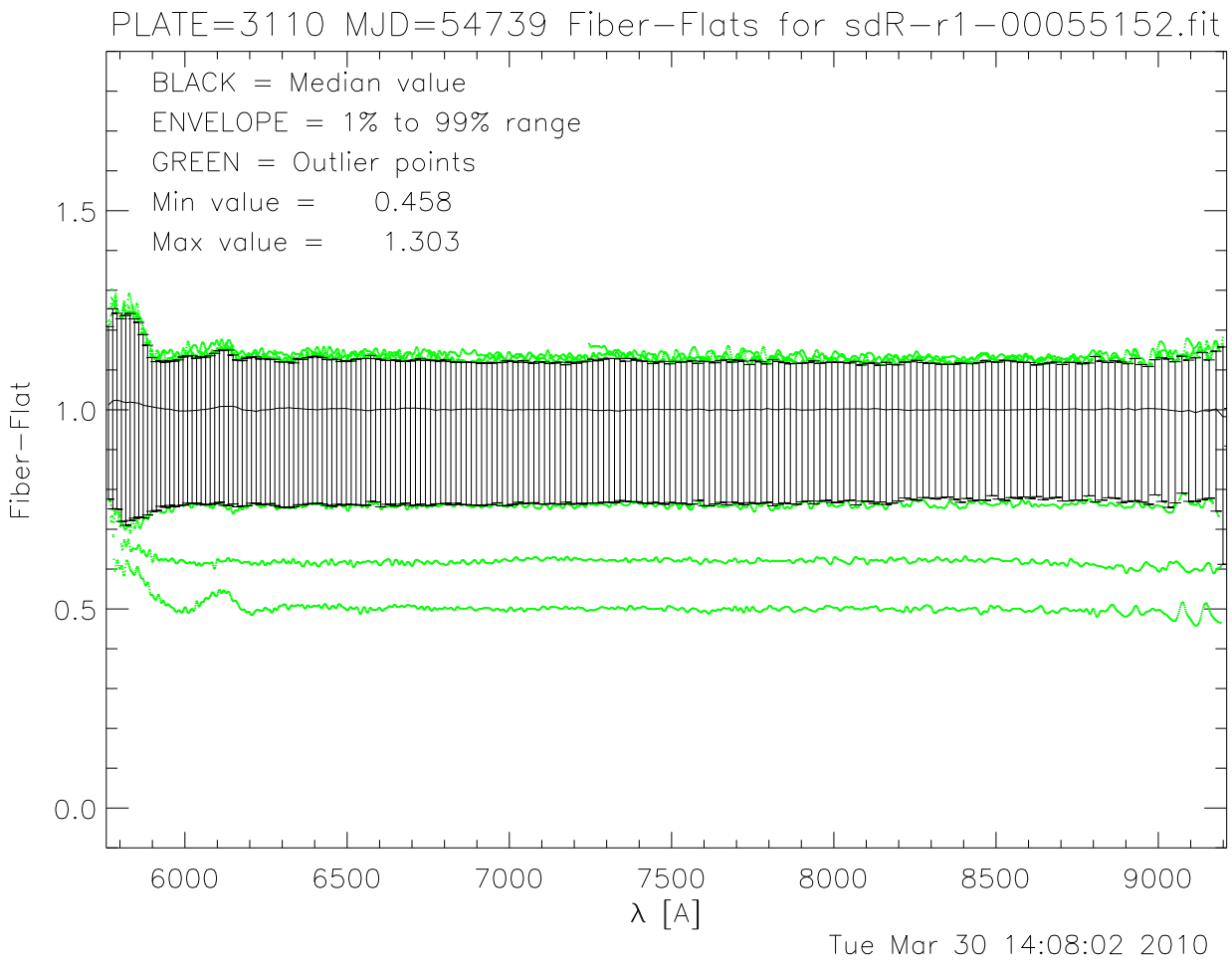

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−r1−00055148.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

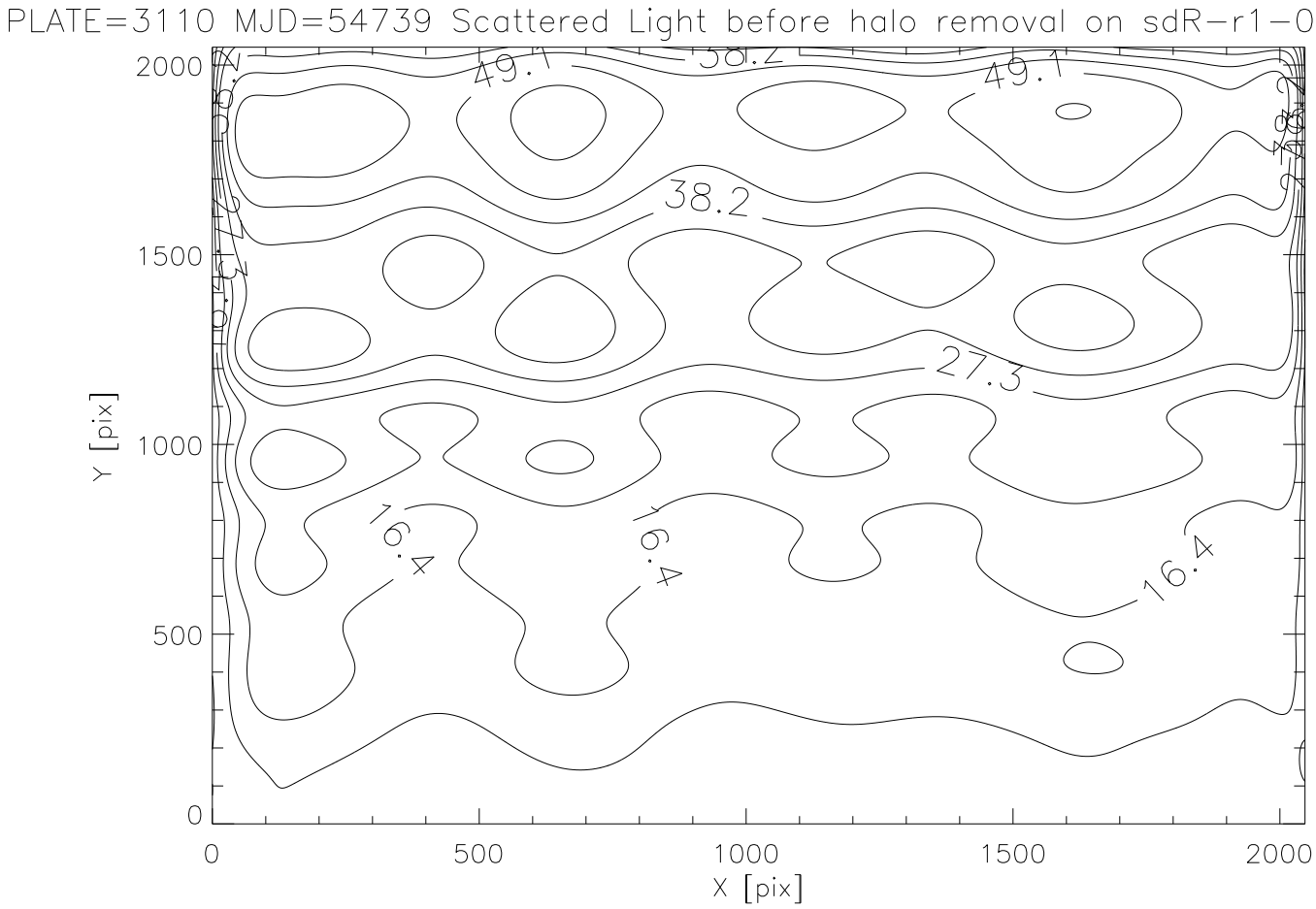

PLATE=3110 MJD=54739 Superflat sdR-r1-00055148.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

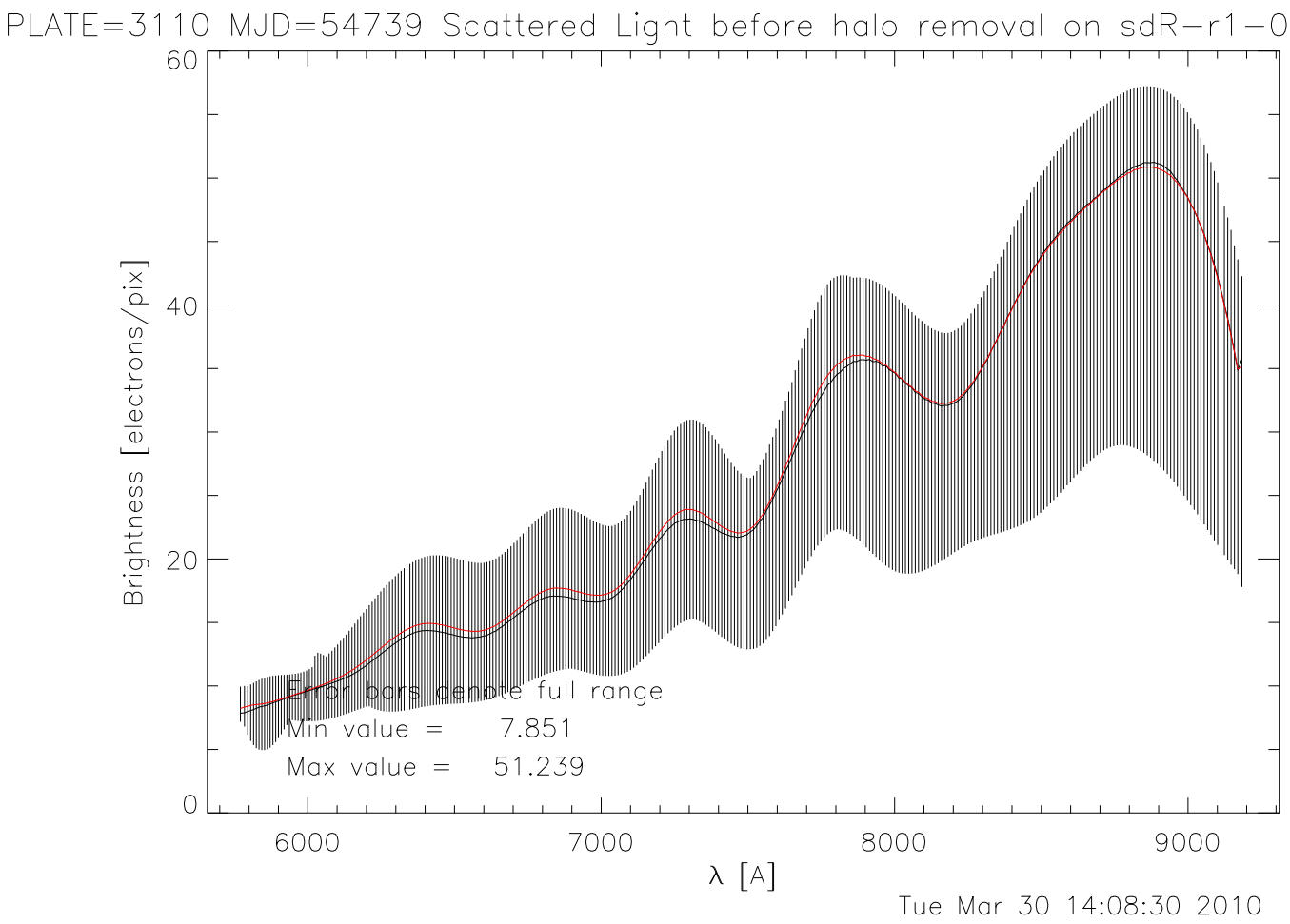

PLATE=3110 MJD=54739 flat extraction chi^2 for sdR−r1−00055152.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

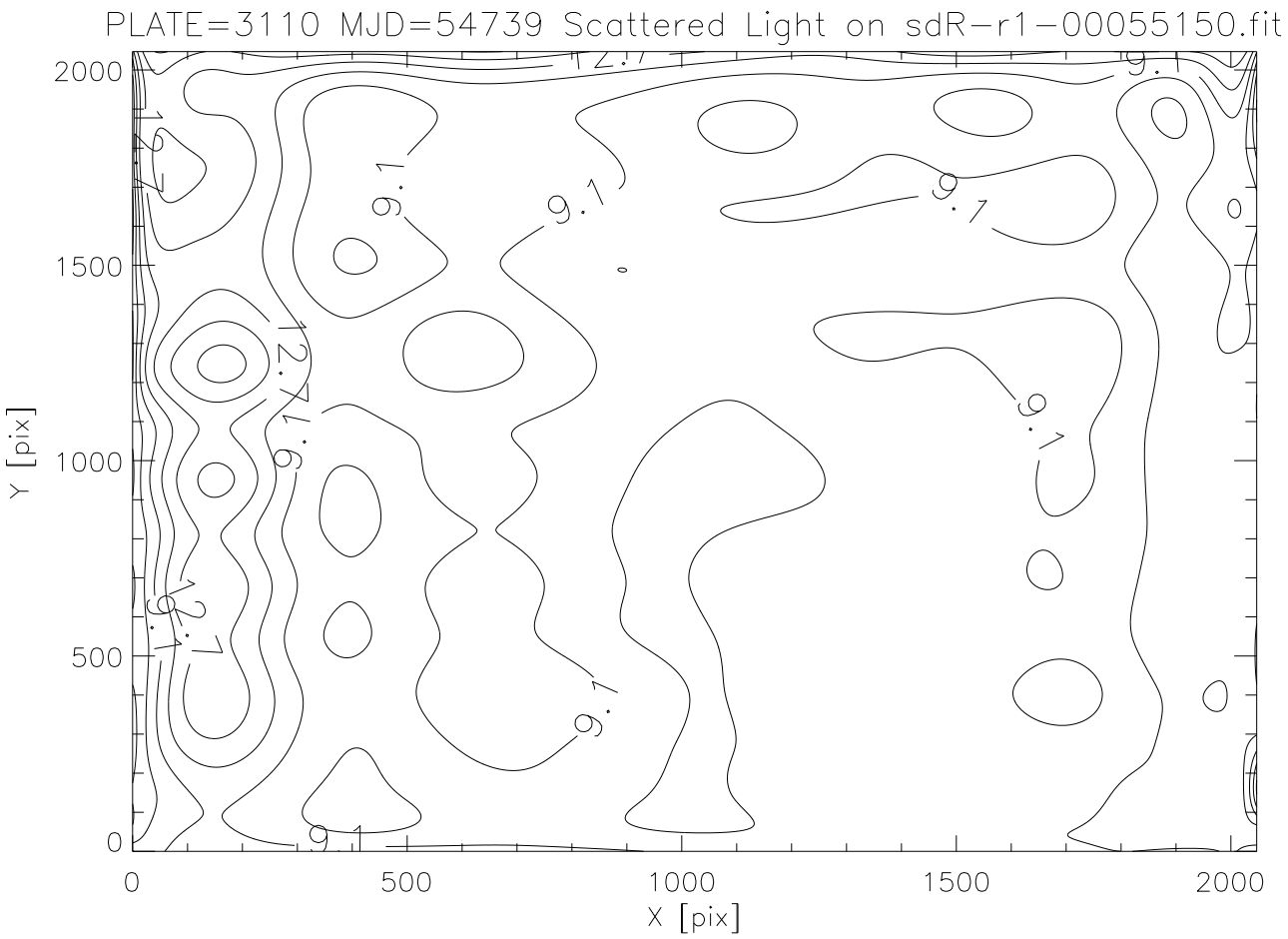

PLATE=3110 MJD=54739 Superflat sdR-r1-00055152.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

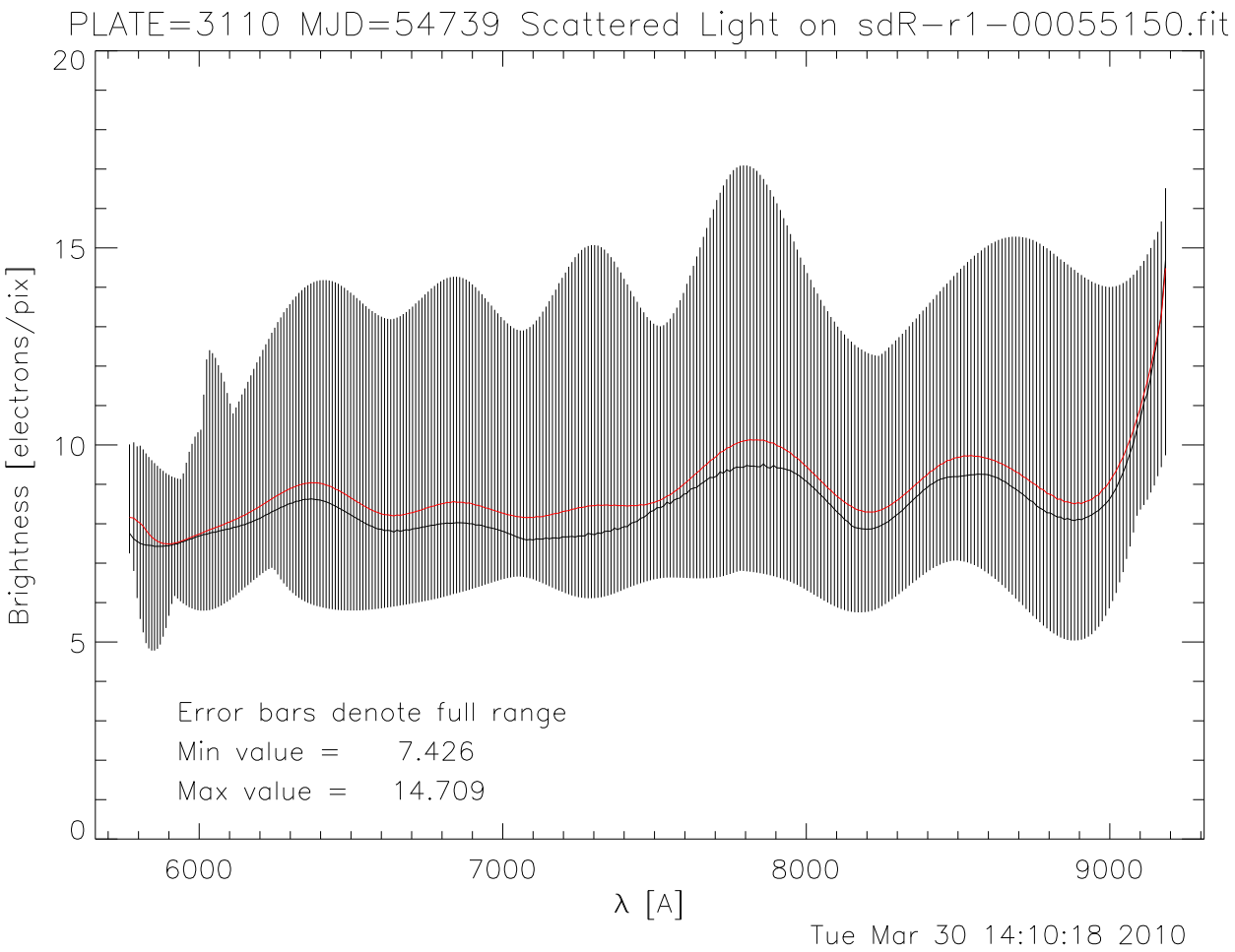

PLATE=3110 MJD=54739 Arcline Fit for sdR-r1-00055153.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Mar 30 14:07:58 2010

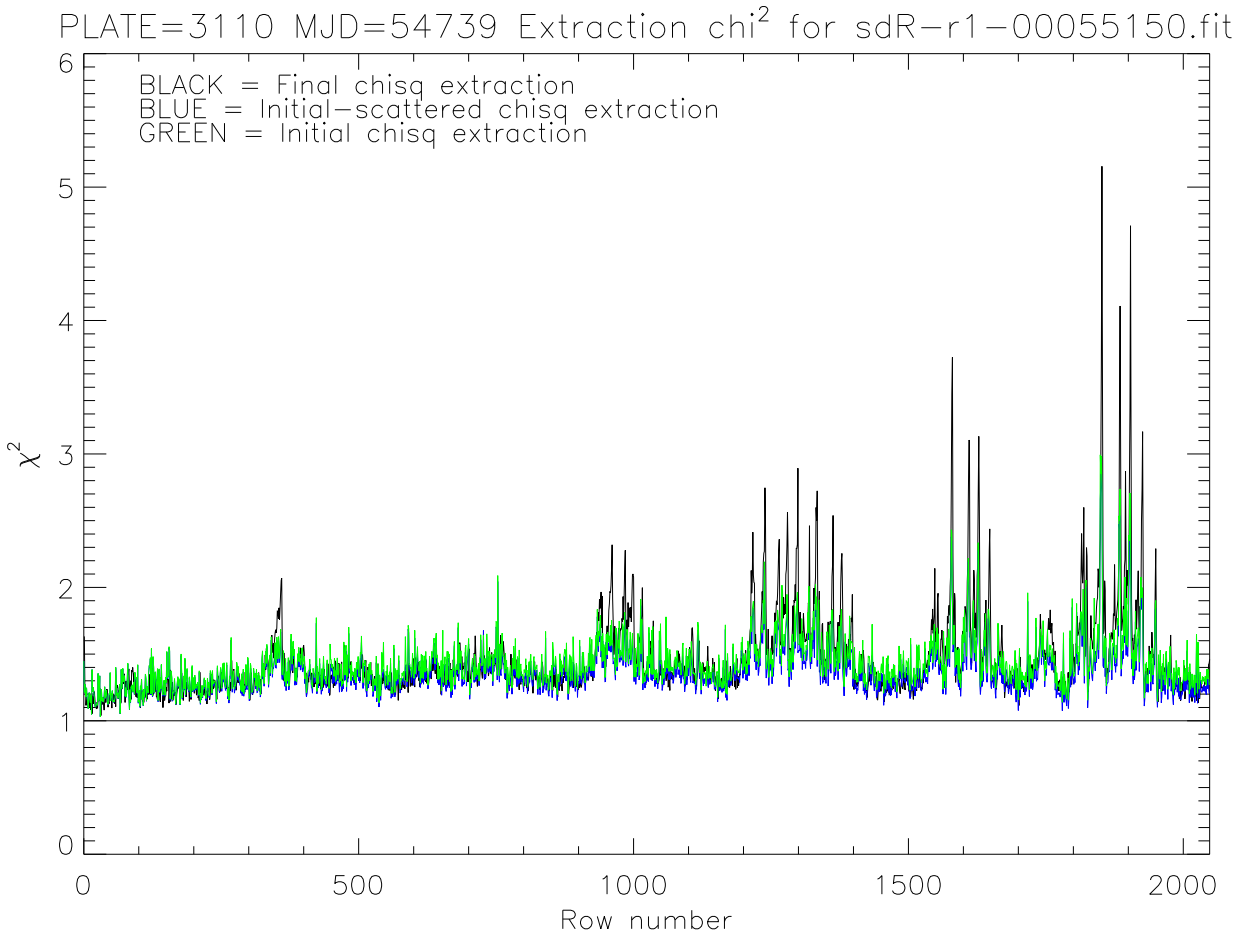

PLATE=3110 MJD=54739 Fiber-Flats for sdR-r1-00055152.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.458
Max value = 1.303
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 30 14:08:02 2010

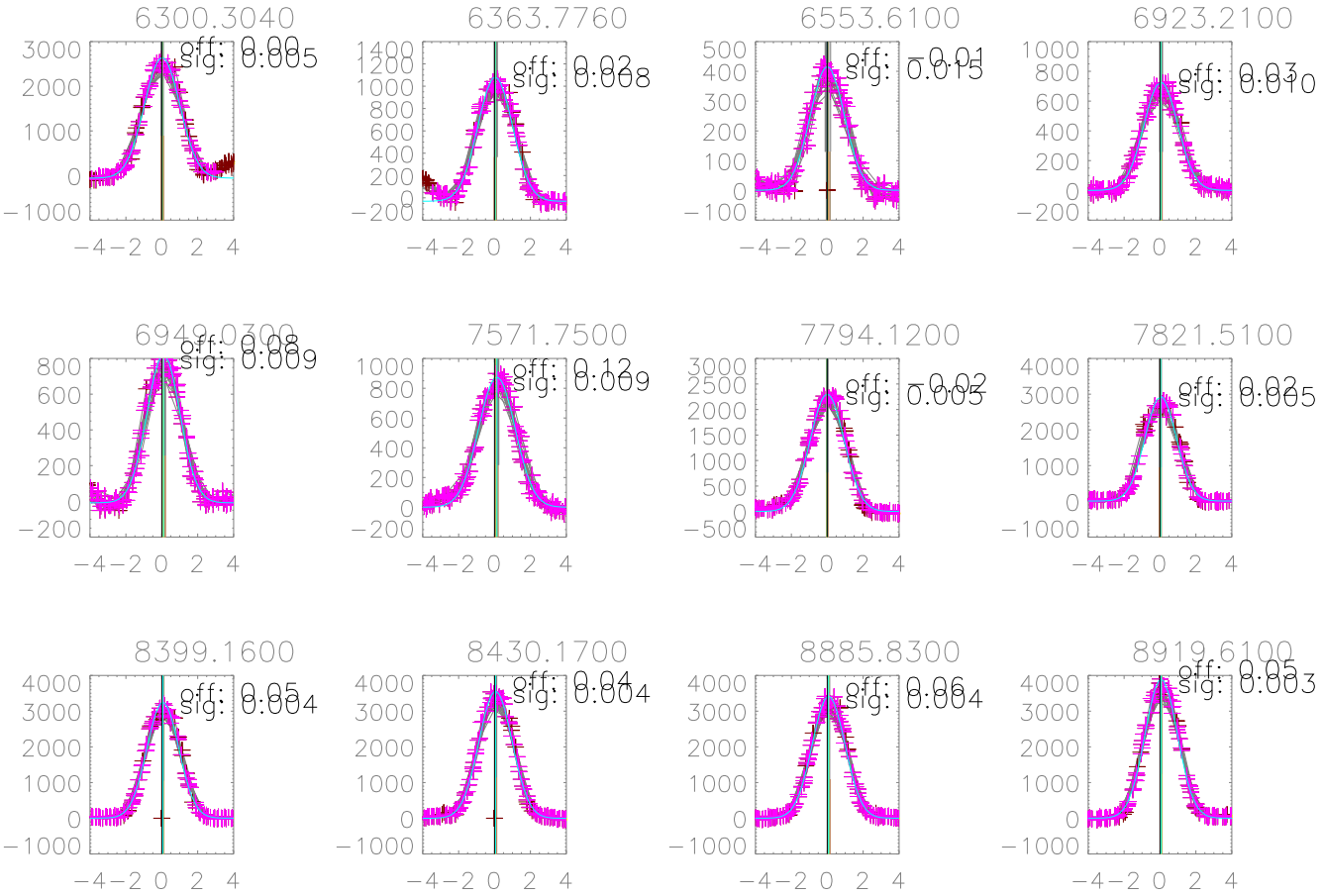

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-r1-00055150.fi
49.1
38.2
49.1
27.3
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

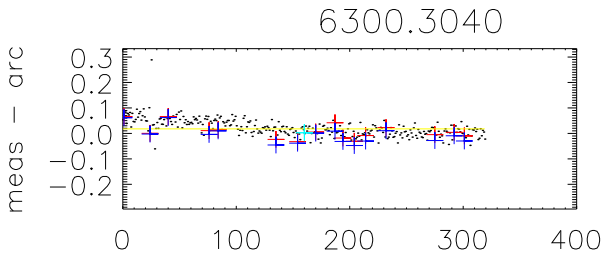

PLATE=3110 MJD=54739 Scattered Light before halo removal on sdR-r1-00055150.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.851
Max value = 51.239
Tue Mar 30 14:08:30 2010

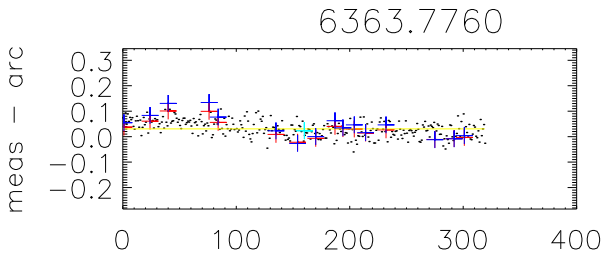

PLATE=3110 MJD=54739 Scattered Light on sdR-r1-00055150.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1

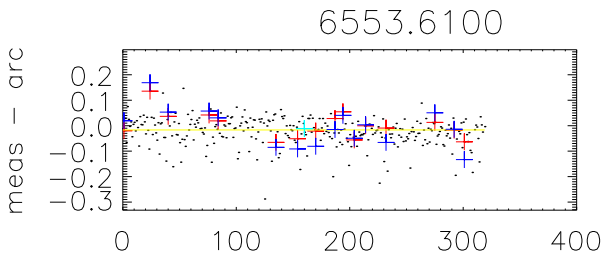

PLATE=3110 MJD=54739 Scattered Light on sdR-r1-00055150.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.426
Max value = 14.709
Tue Mar 30 14:10:18 2010

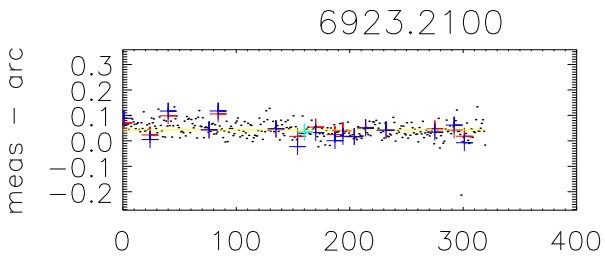

PLATE=3110 MJD=54739 Extraction chi^2 for sdR−r1−00055150.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

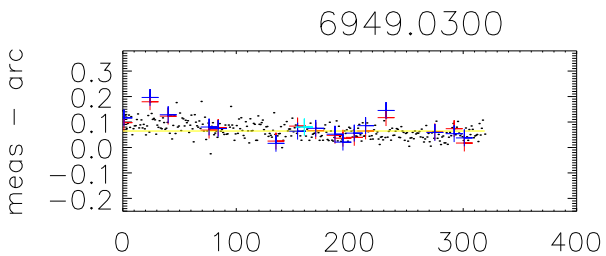

6300.3040
off: 0.00
sig: 0.005
6363.7760
off: 0.02
sig: 0.008
6553.6100
off: -0.01
sig: 0.015
6923.2100
off: 0.03
sig: 0.010
6949.0300
off: 0.08
sig: 0.009
7571.7500
off: 0.12
sig: 0.009
7794.1200
off: -0.02
sig: 0.005
7821.5100
off: 0.02
sig: 0.005
8399.1600
off: 0.05
sig: 0.004
8430.1700
off: 0.04
sig: 0.004
8885.8300
off: 0.06
sig: 0.004
8919.6100
off: 0.05
sig: 0.003

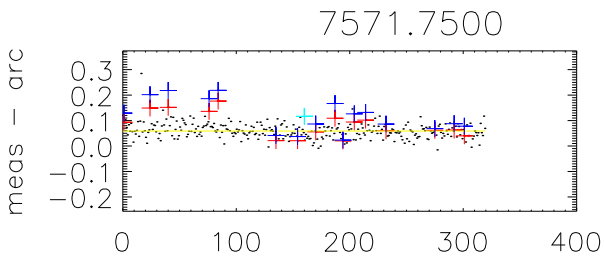

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

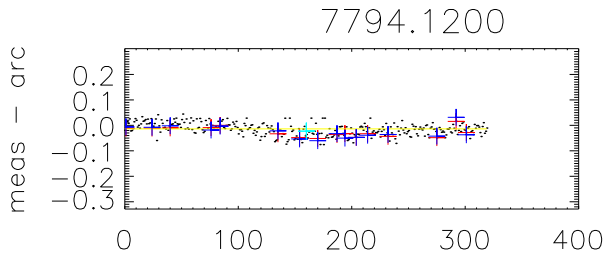

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

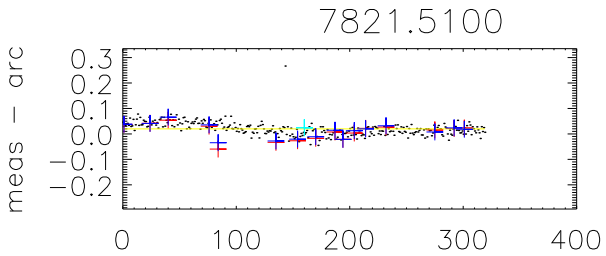

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

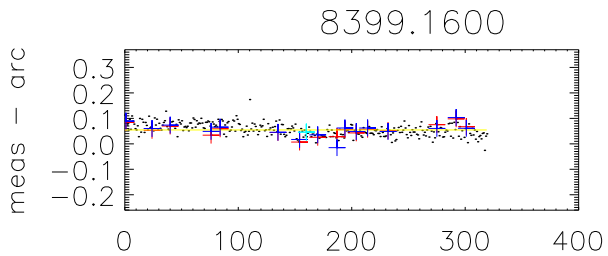

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

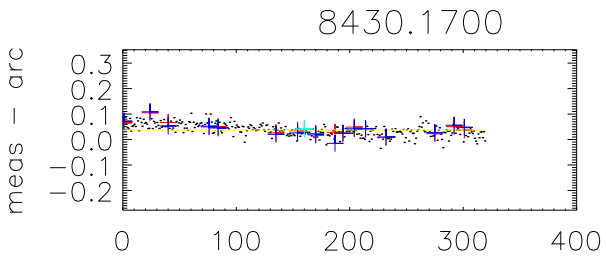

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

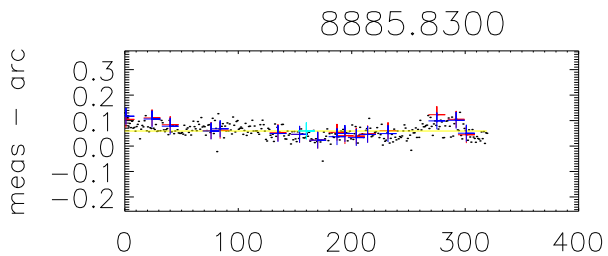

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

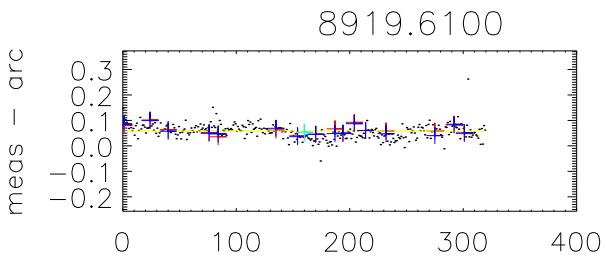

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

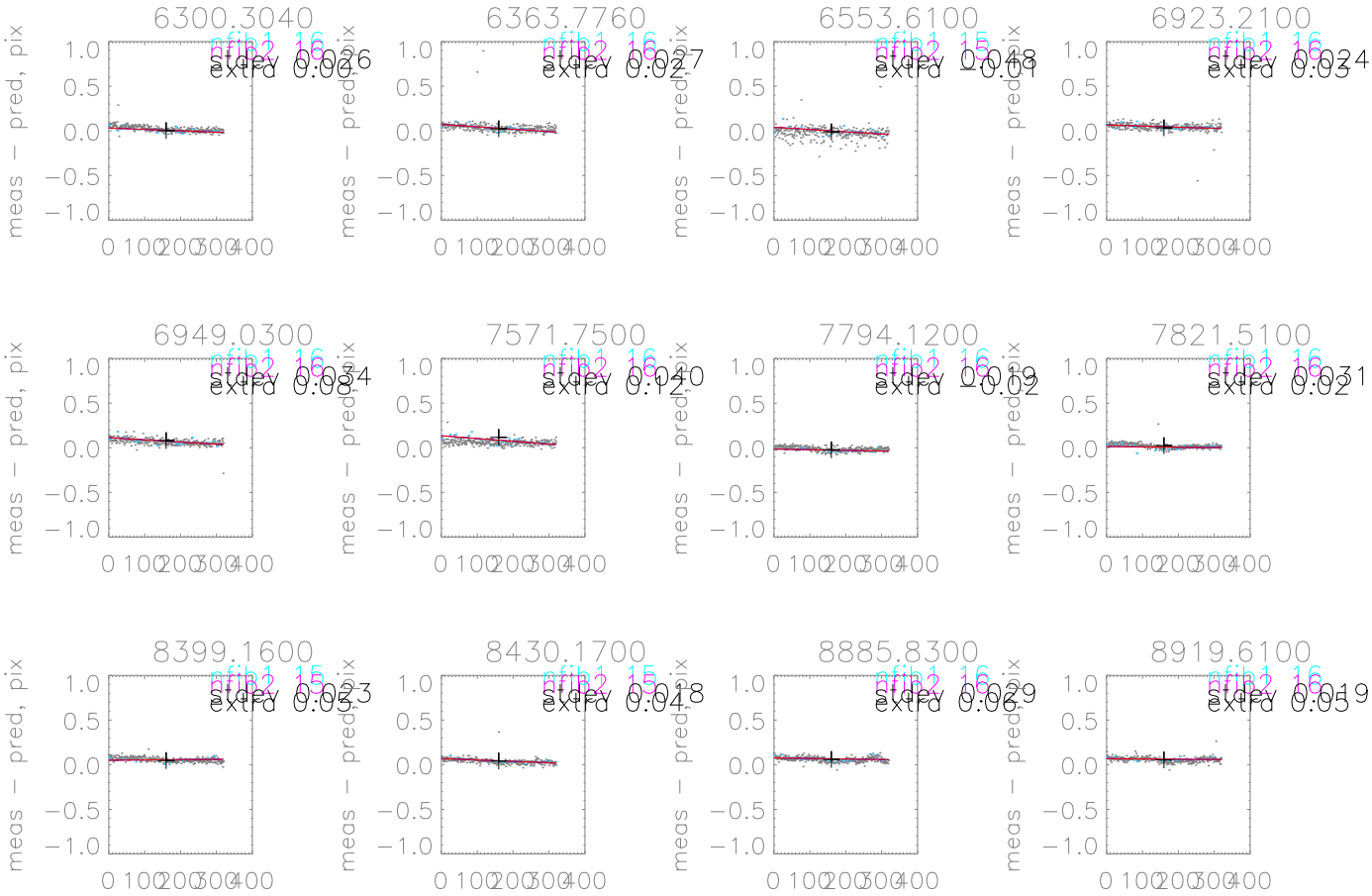

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

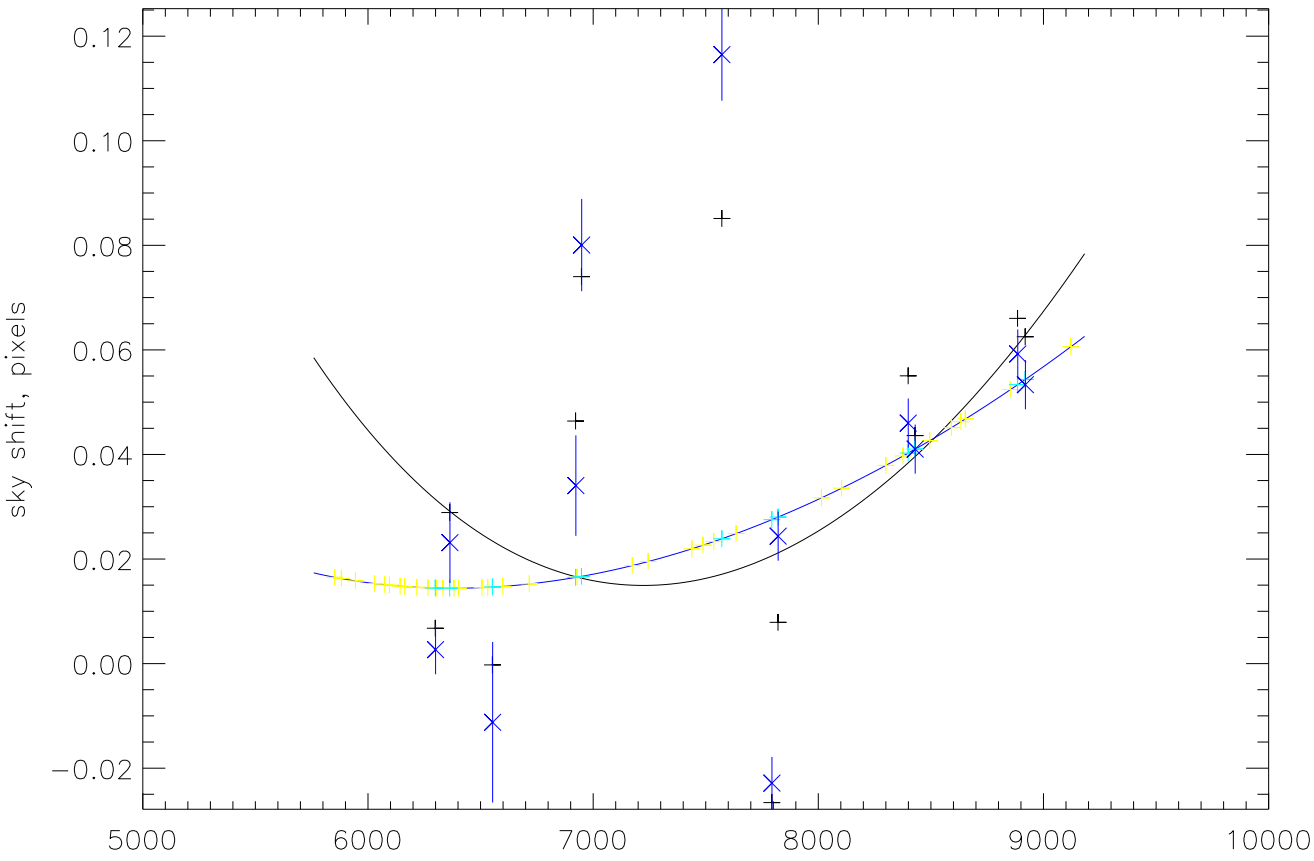

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

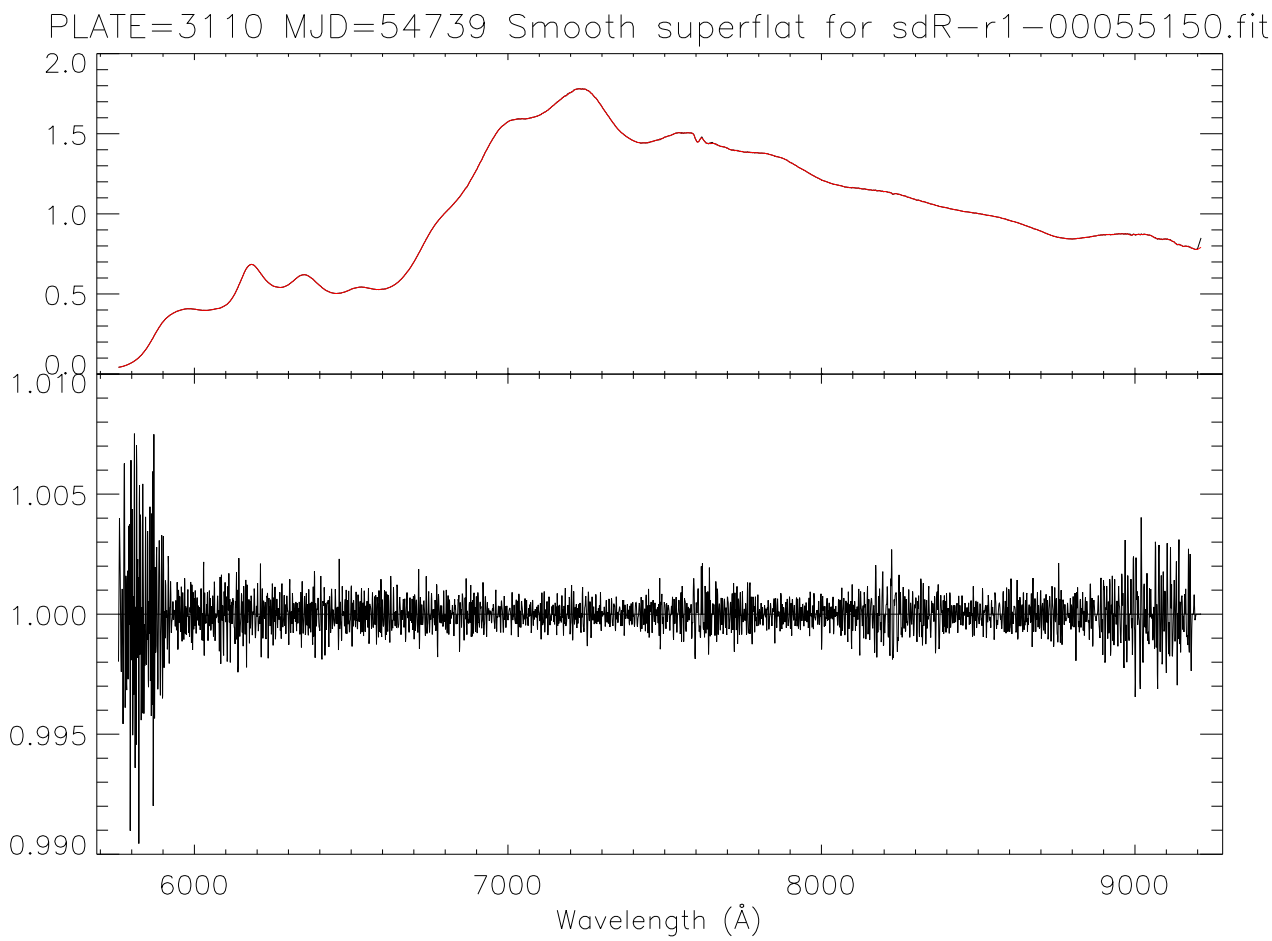

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

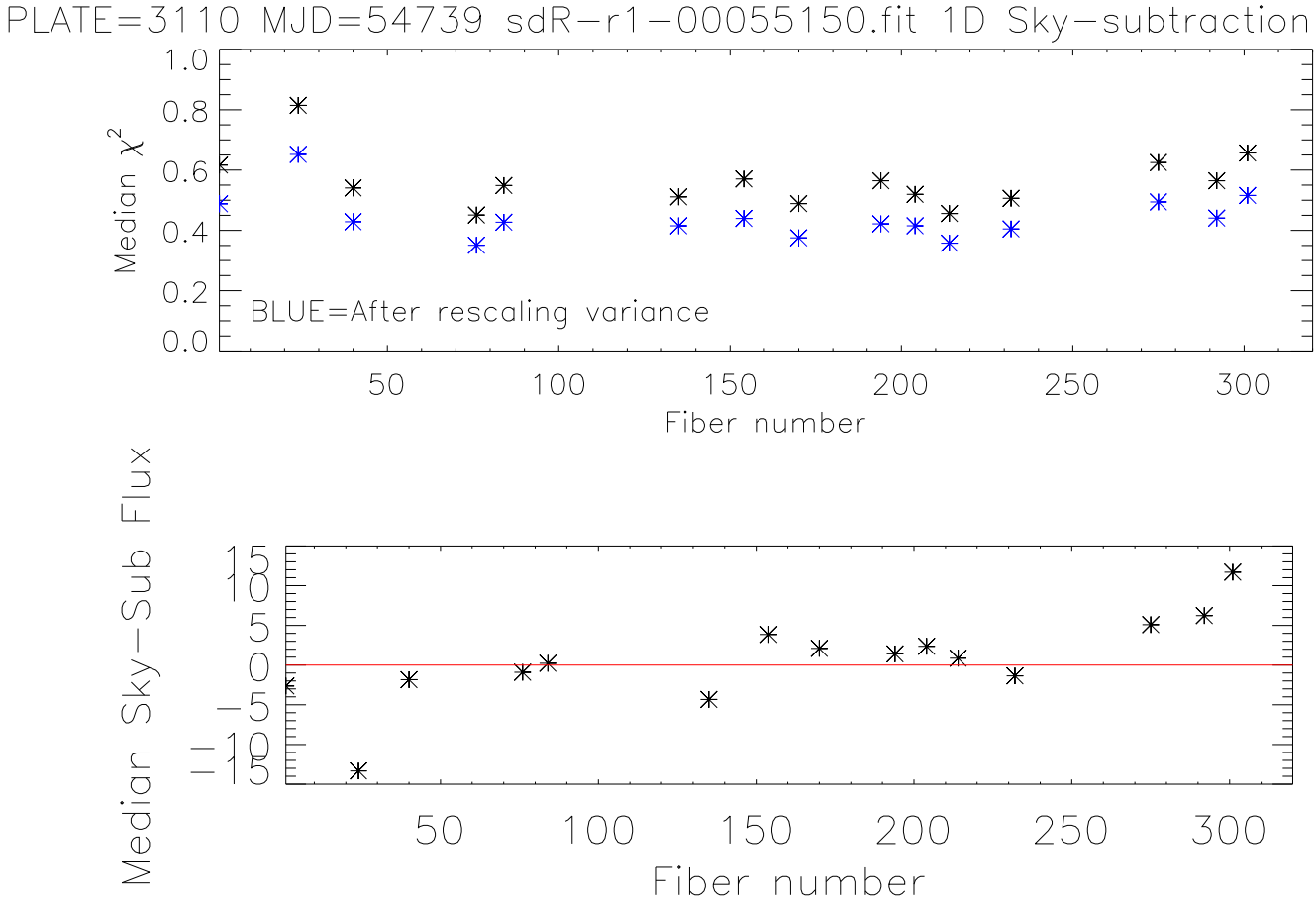

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

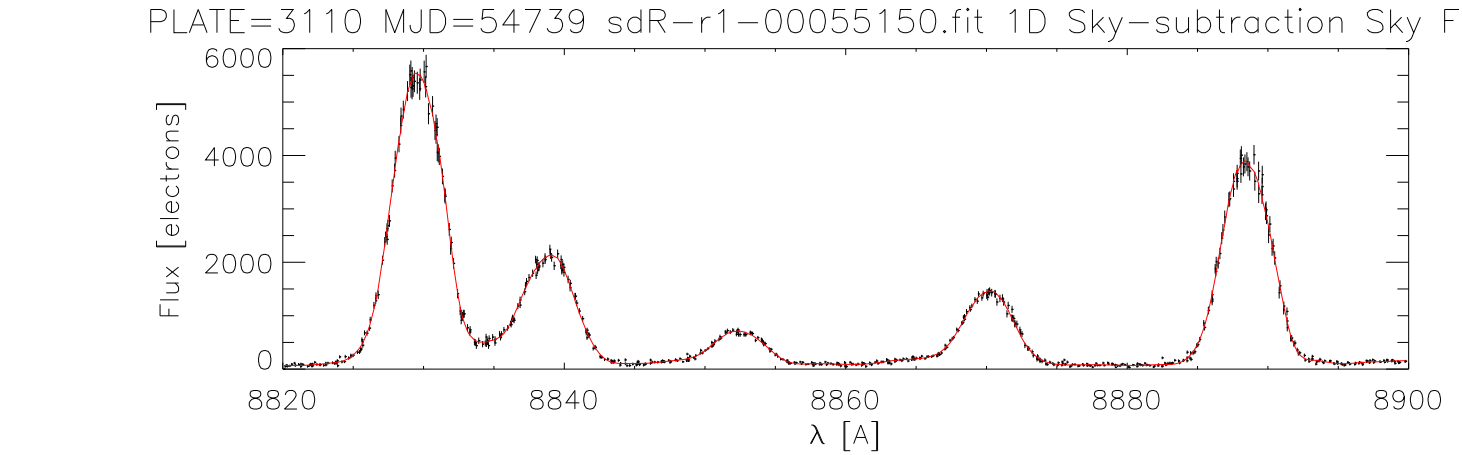

6300.3040
mfib1 16
mfib2 16
stdev 0.026
extra 0.06
6363.7760
mfib1 16
mfib2 16
stdev 0.027
extra 0.02
6553.6100
mfib1 15
mfib2 16
stdev 0.048
extra −0.01
6923.2100
mfib1 16
mfib2 16
stdev 0.024
extra 0.03
6949.0300
mfib1 16
mfib2 16
stdev 0.034
extra 0.08
7571.7500
mfib1 16
mfib2 16
stdev 0.040
extra 0.12
7794.1200
mfib1 16
mfib2 16
stdev 0.019
extra −0.02
7821.5100
mfib1 16
mfib2 16
stdev 0.031
extra 0.02
8399.1600
mfib1 15
mfib2 16
stdev 0.023
extra 0.03
8430.1700
mfib1 15
mfib2 16
stdev 0.048
extra 0.04
8885.8300
mfib1 16
mfib2 16
stdev 0.029
extra 0.06
8919.6100
mfib1 16
mfib2 16
stdev 0.019
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

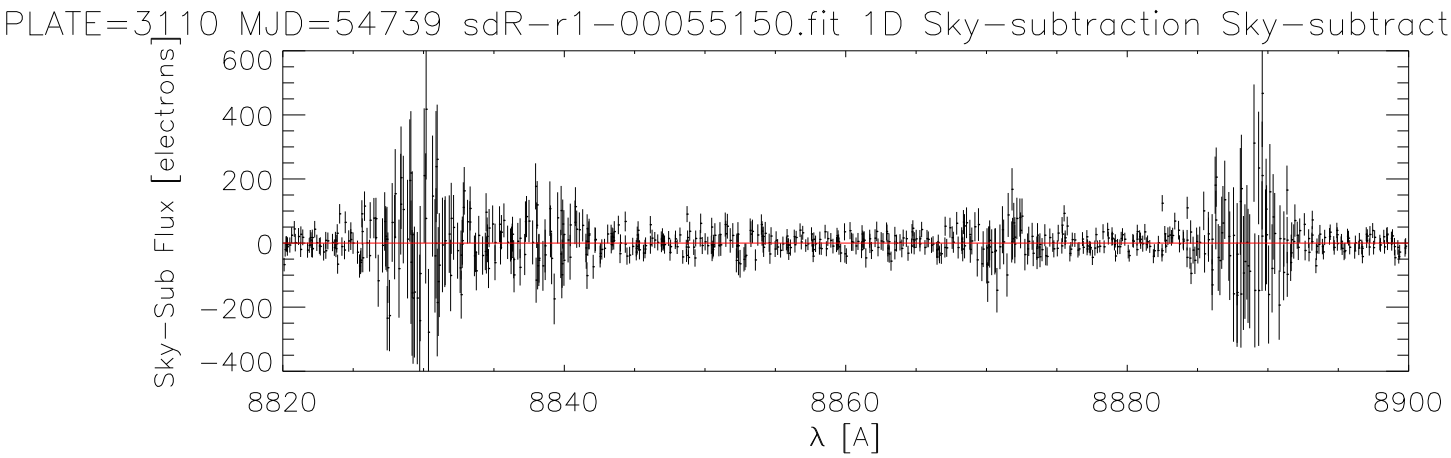

0.12
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
sky shift, pixels
5000
6000
7000
8000
9000
10000

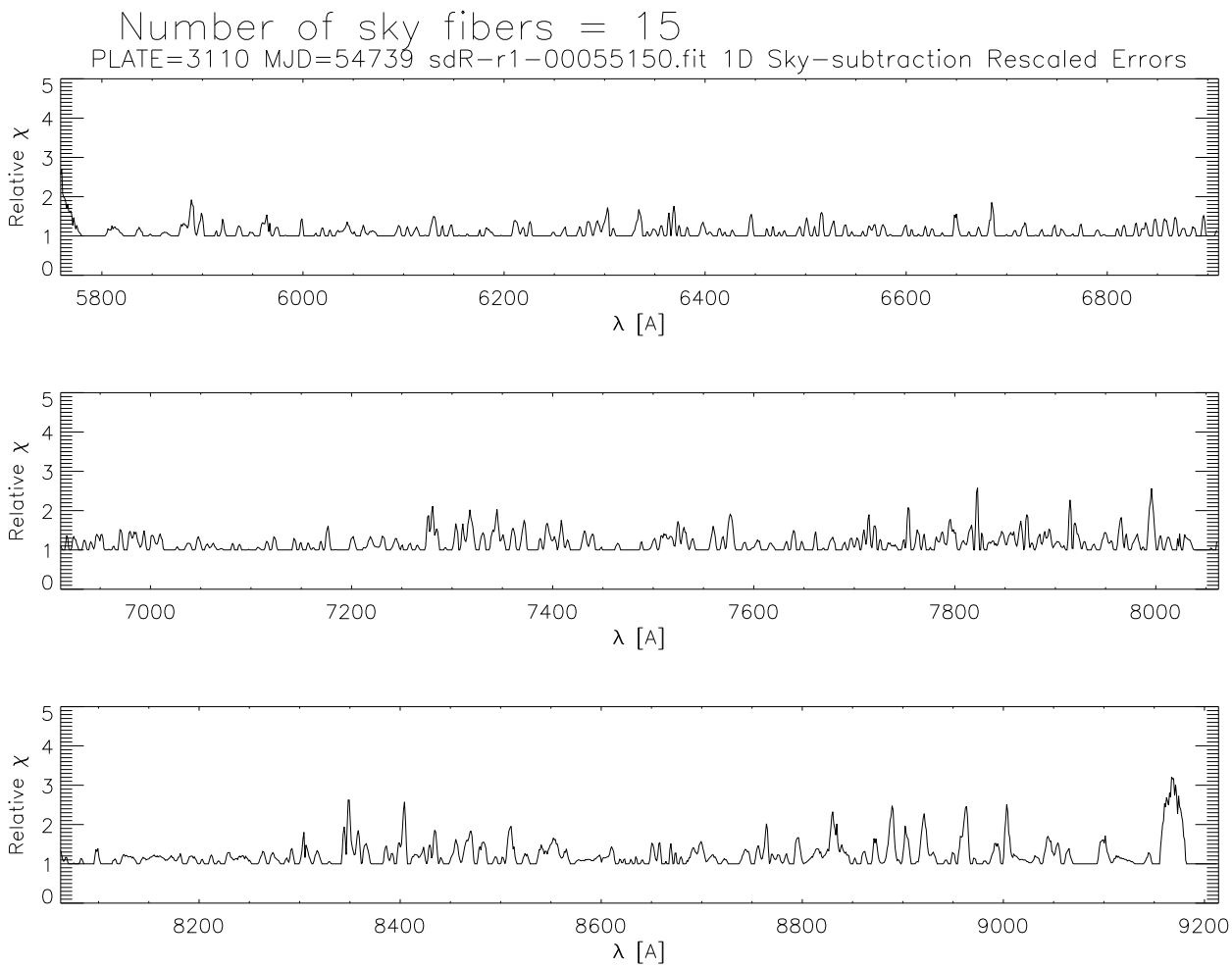
es= 0.0000

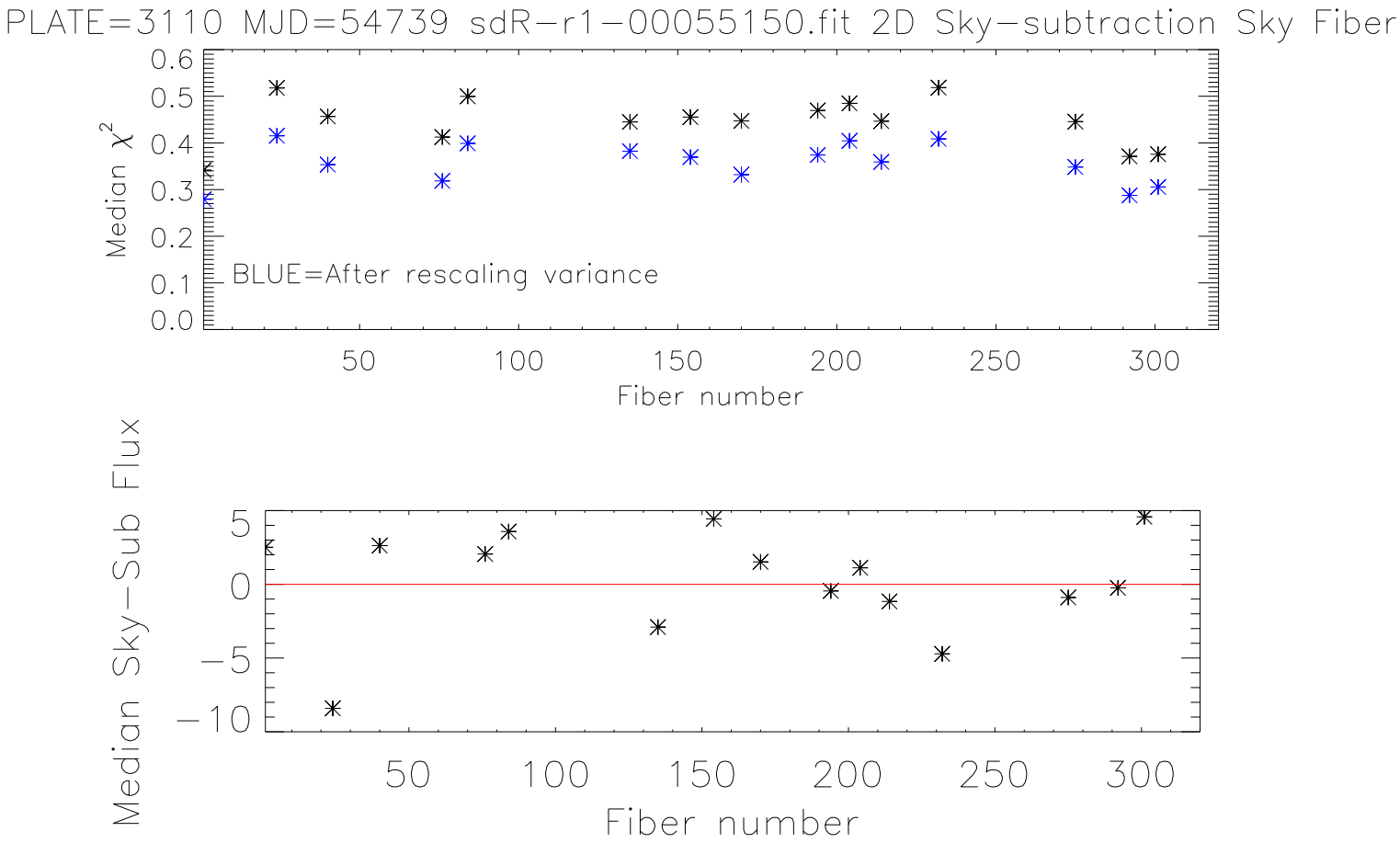

PLATE=3110 MJD=54739 Smooth superflat for sdR-r1-00055150.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

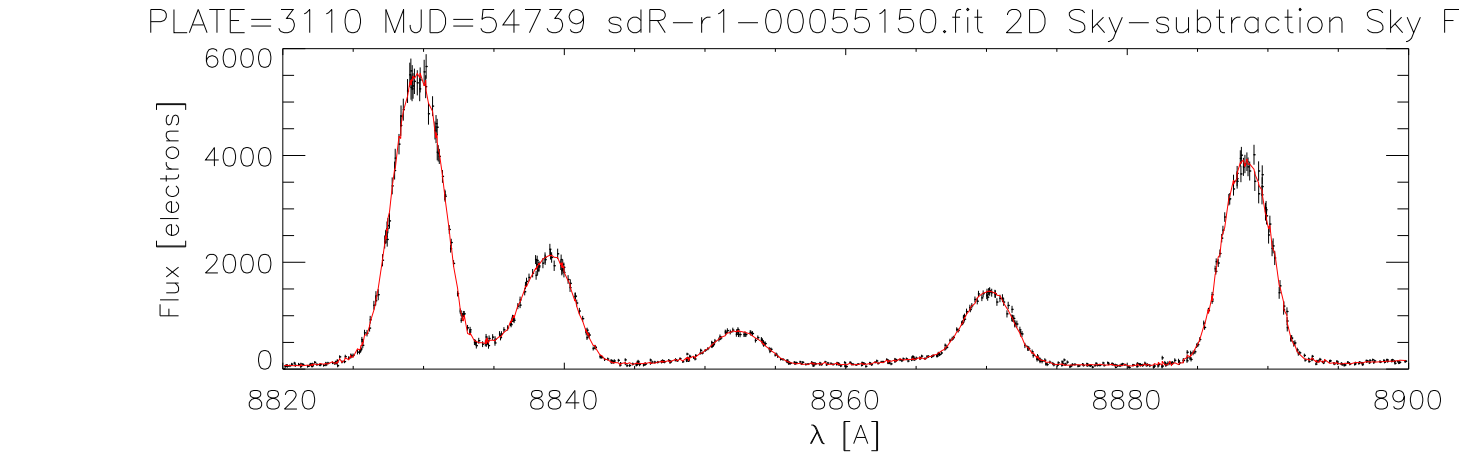

PLATE=3110 MJD=54739 sdR-r1-00055150.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

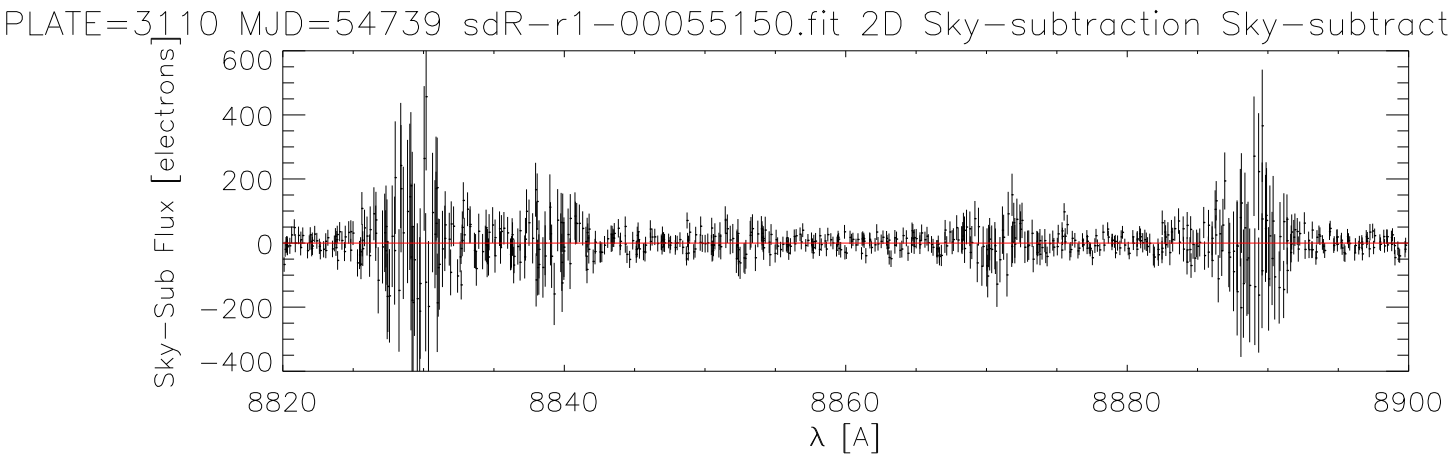

PLATE=3110 MJD=54739 sdR-r1-00055150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

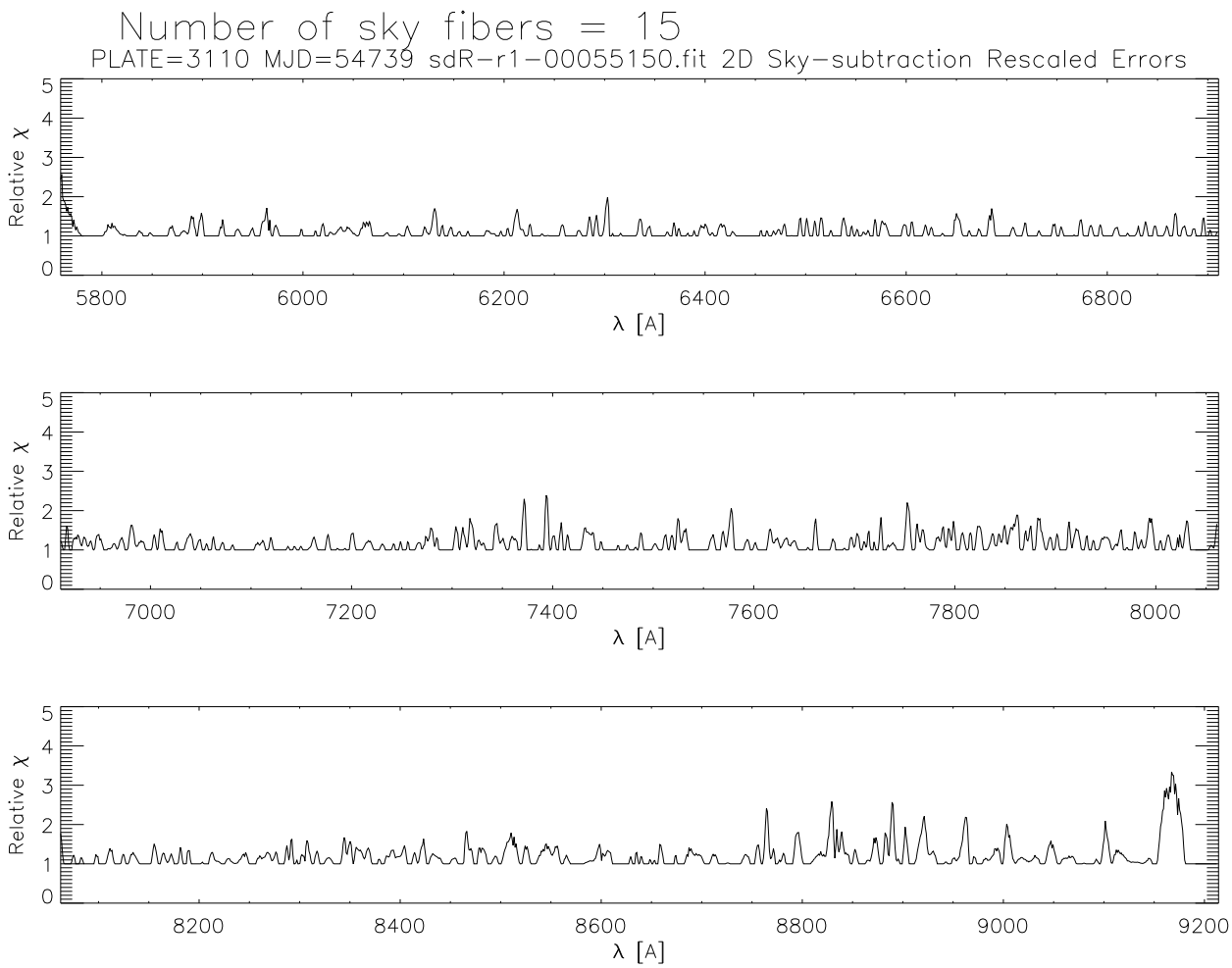

PLATE=3110 MJD=54739 sdR-r1-00055150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

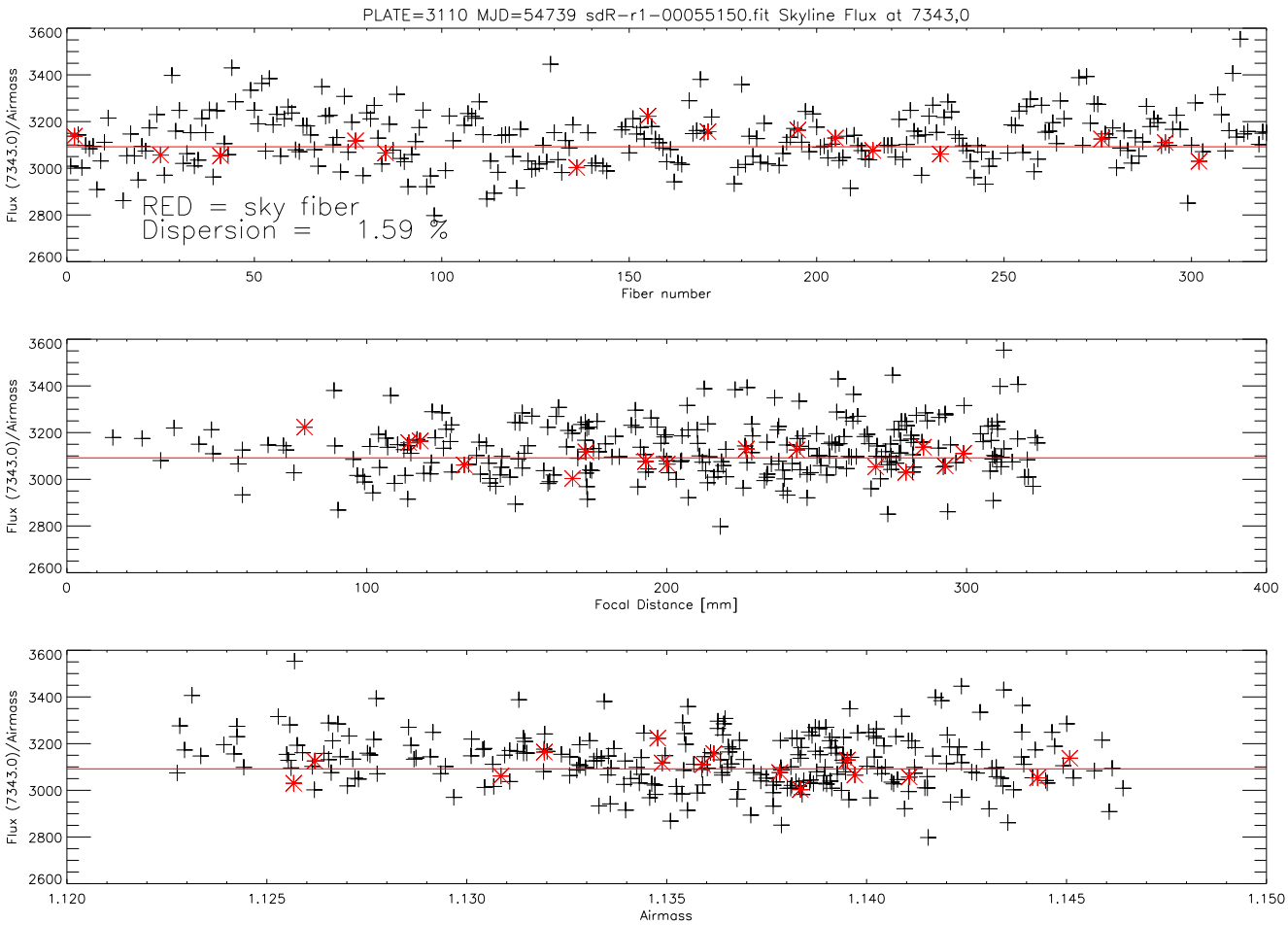

Number of sky fibers = 15
PLATE=3110 MJD=54739 sdR-r1-00055150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

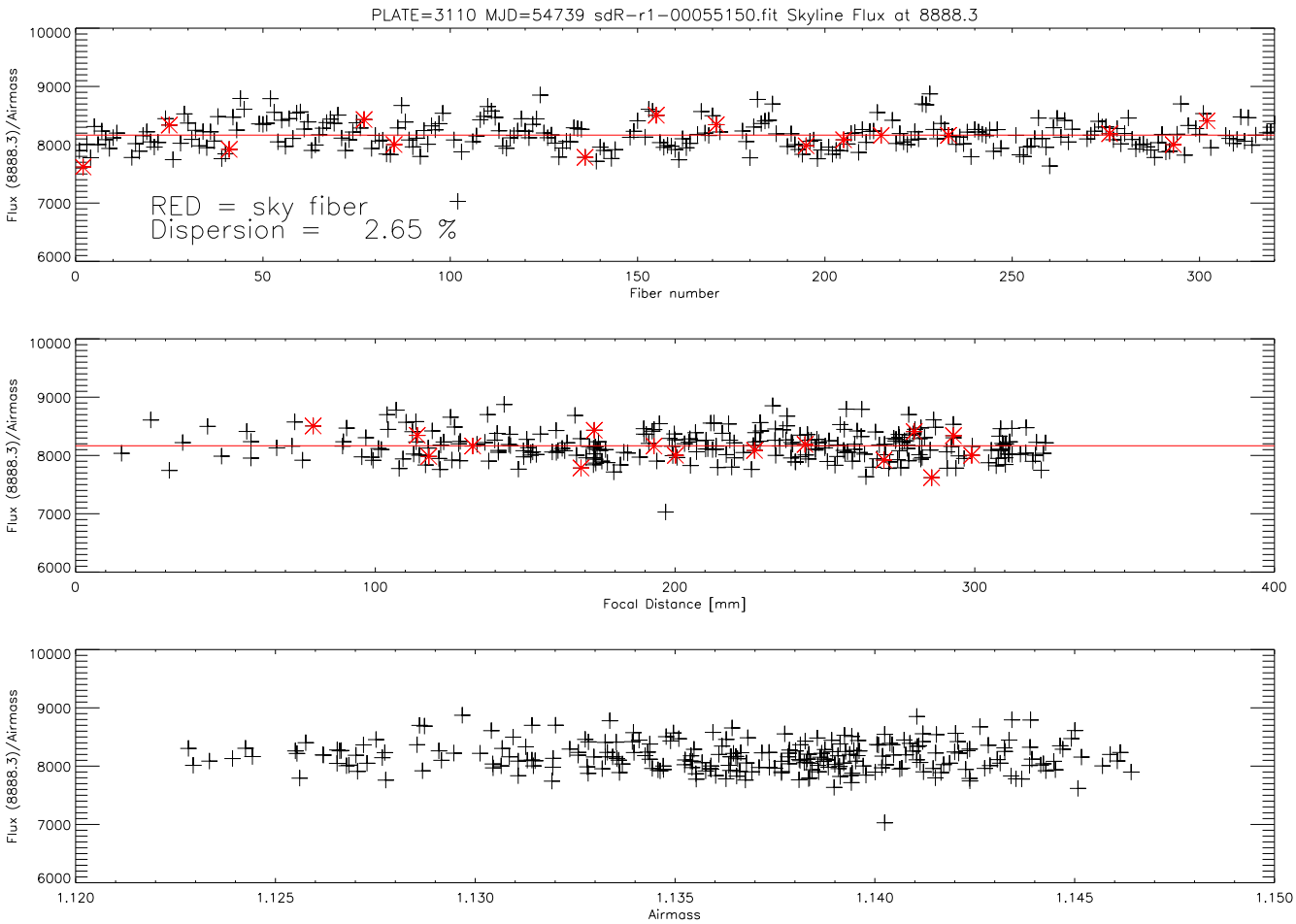

PLATE=3110 MJD=54739 sdR-r1-00055150.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=3110 MJD=54739 sdR-r1-00055150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3110 MJD=54739 sdR-r1-00055150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=3110 MJD=54739 sdR-r1-00055150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=3110 MJD=54739 sdR-r1-00055150.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=3110 MJD=54739 sdR-r1-00055150.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.65 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass