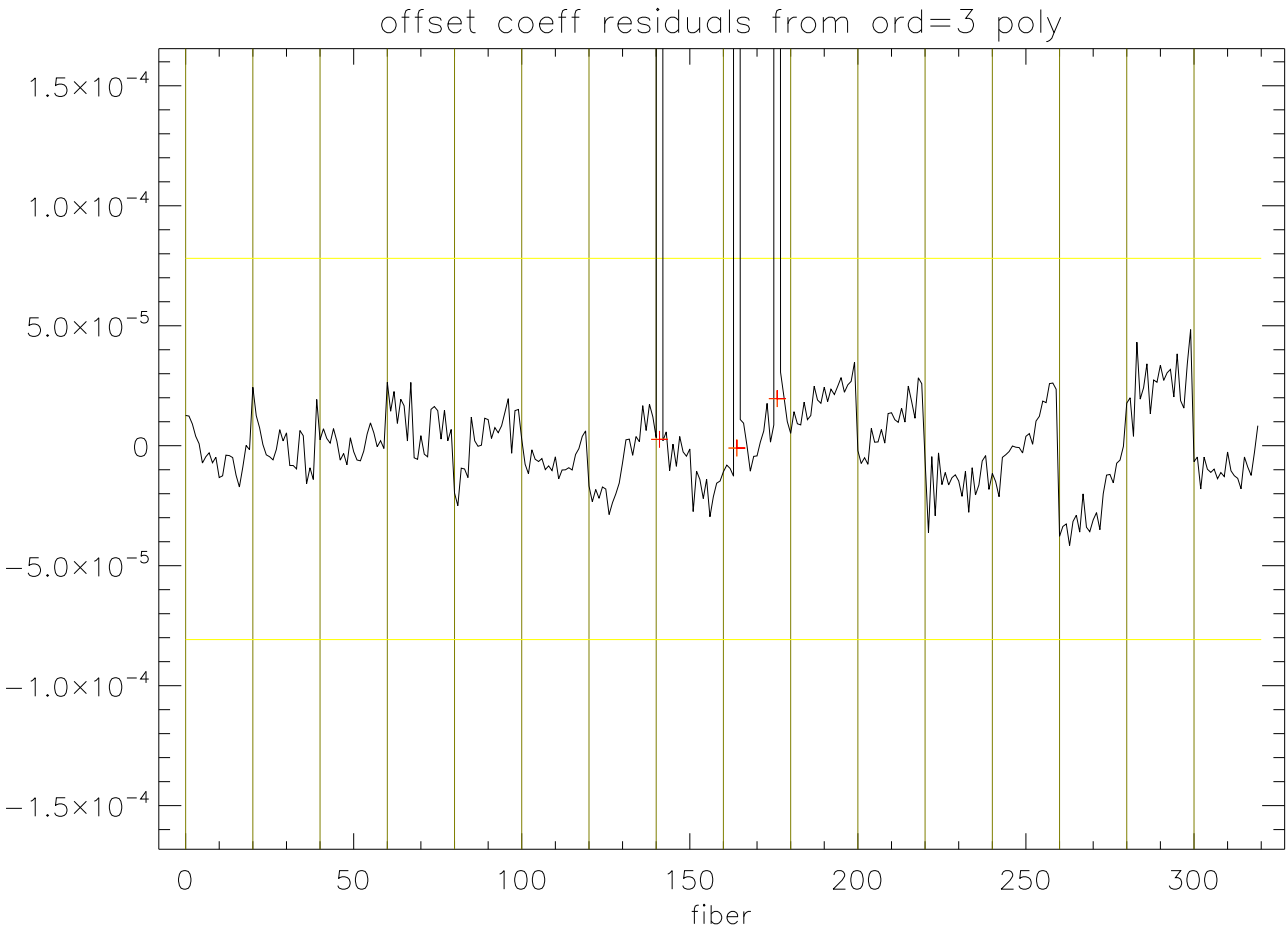
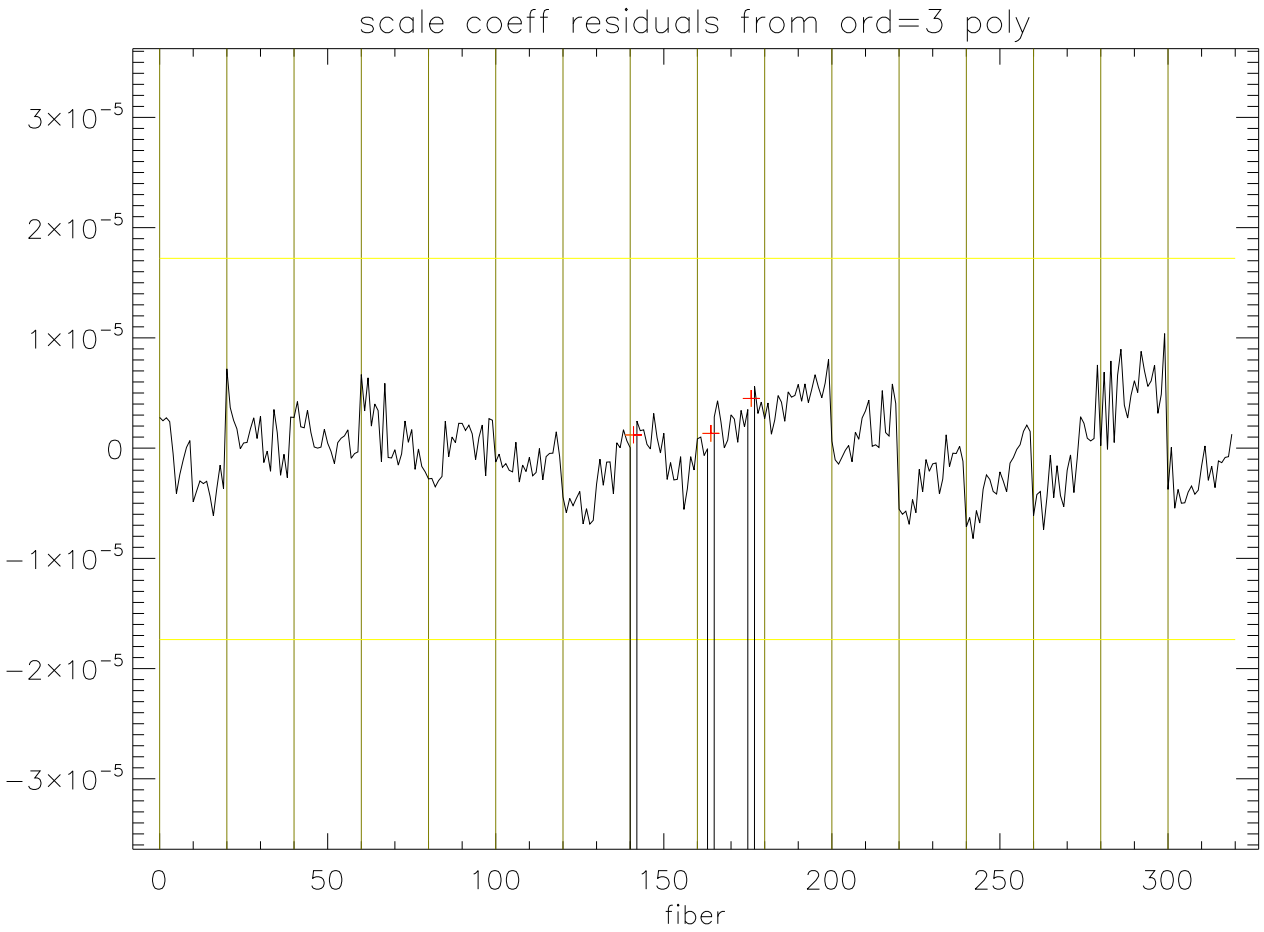
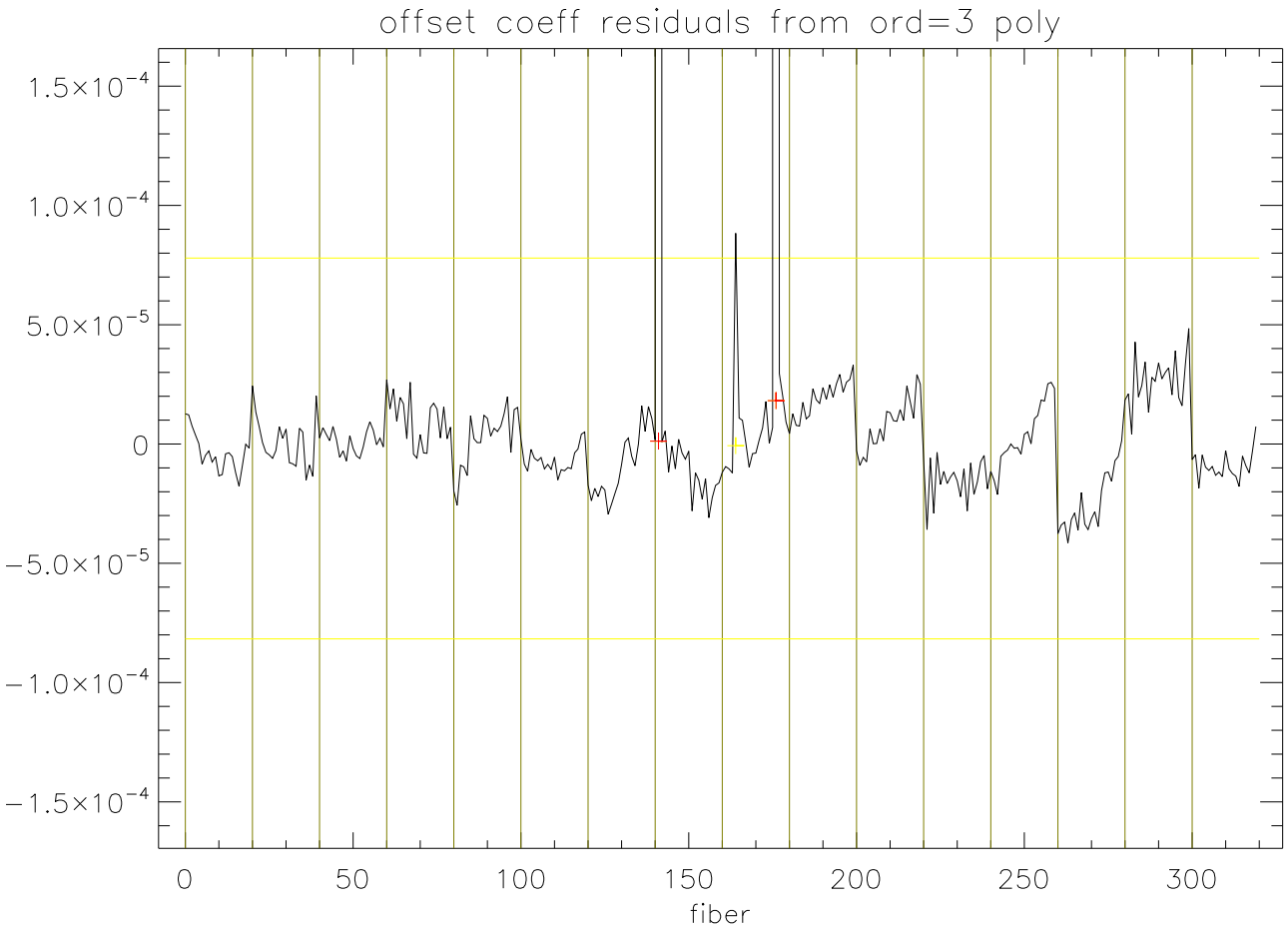
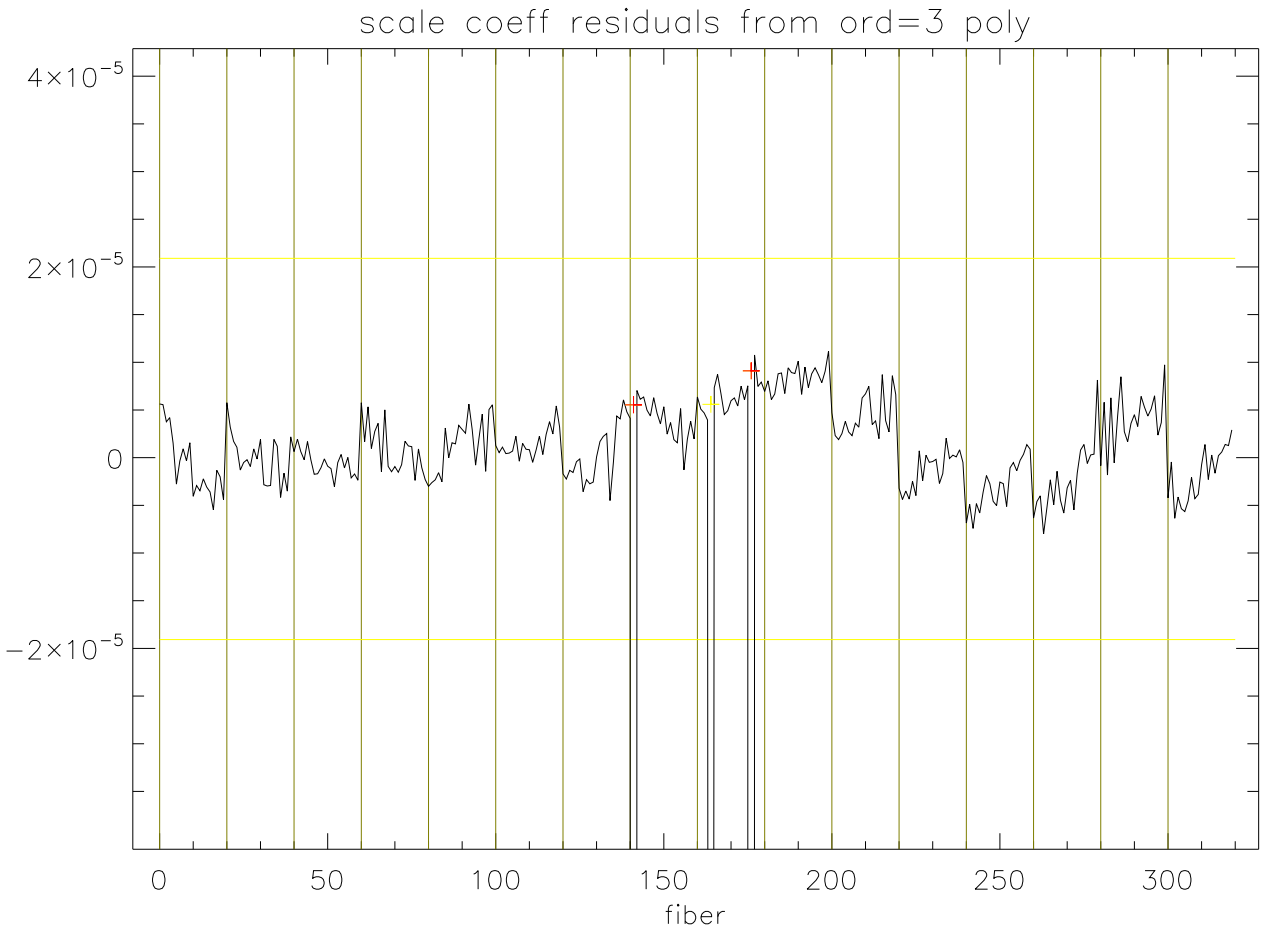
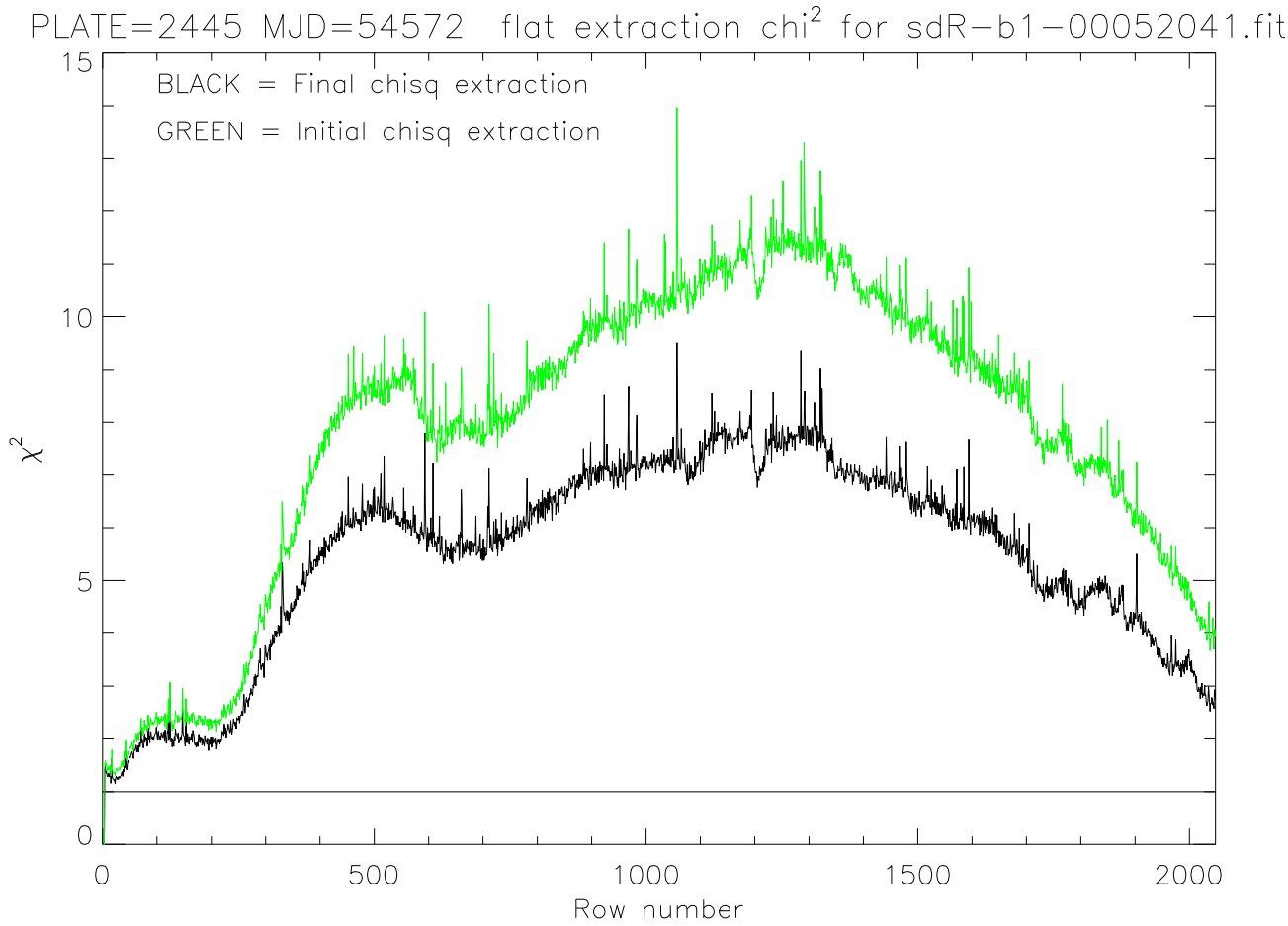
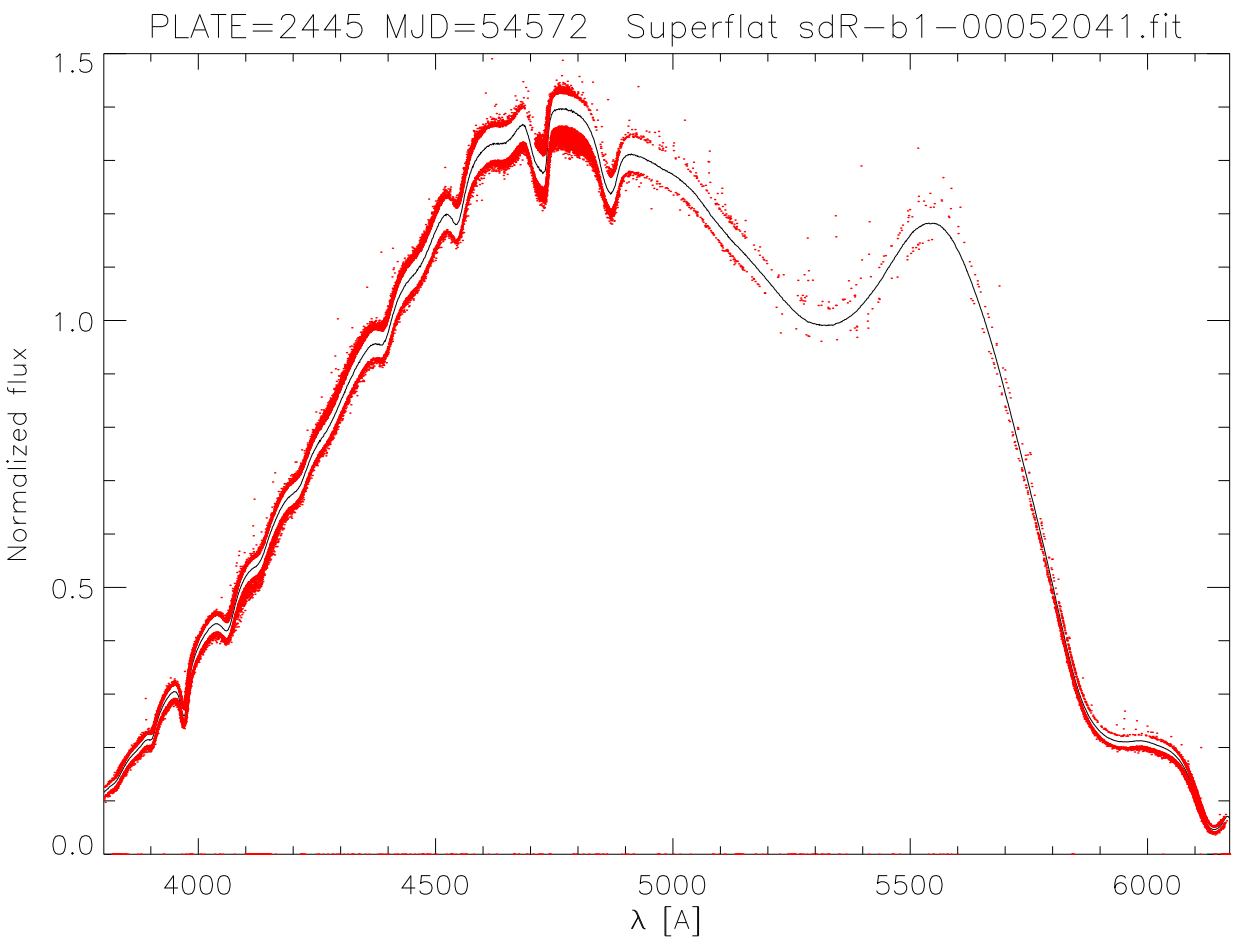

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

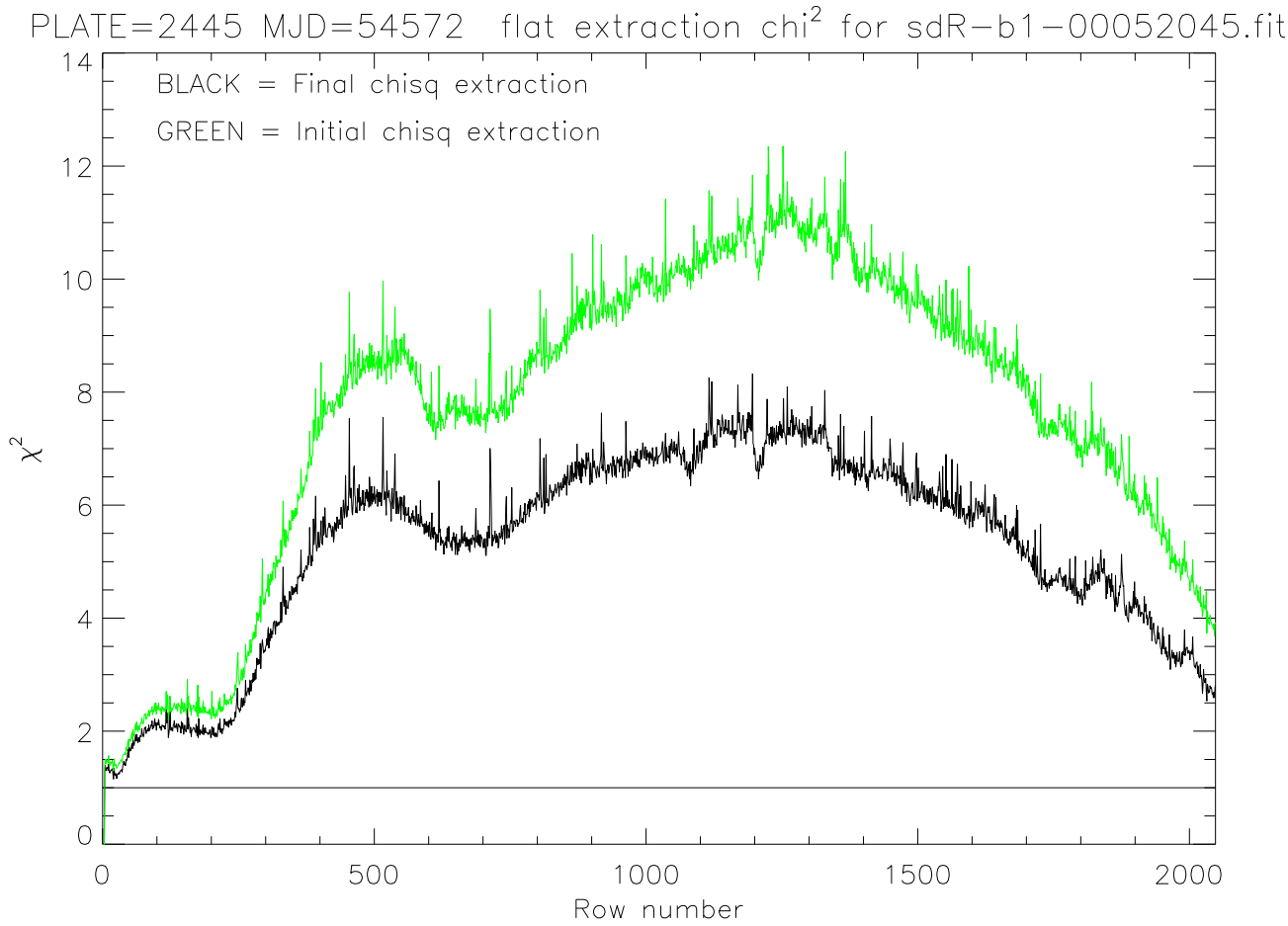

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

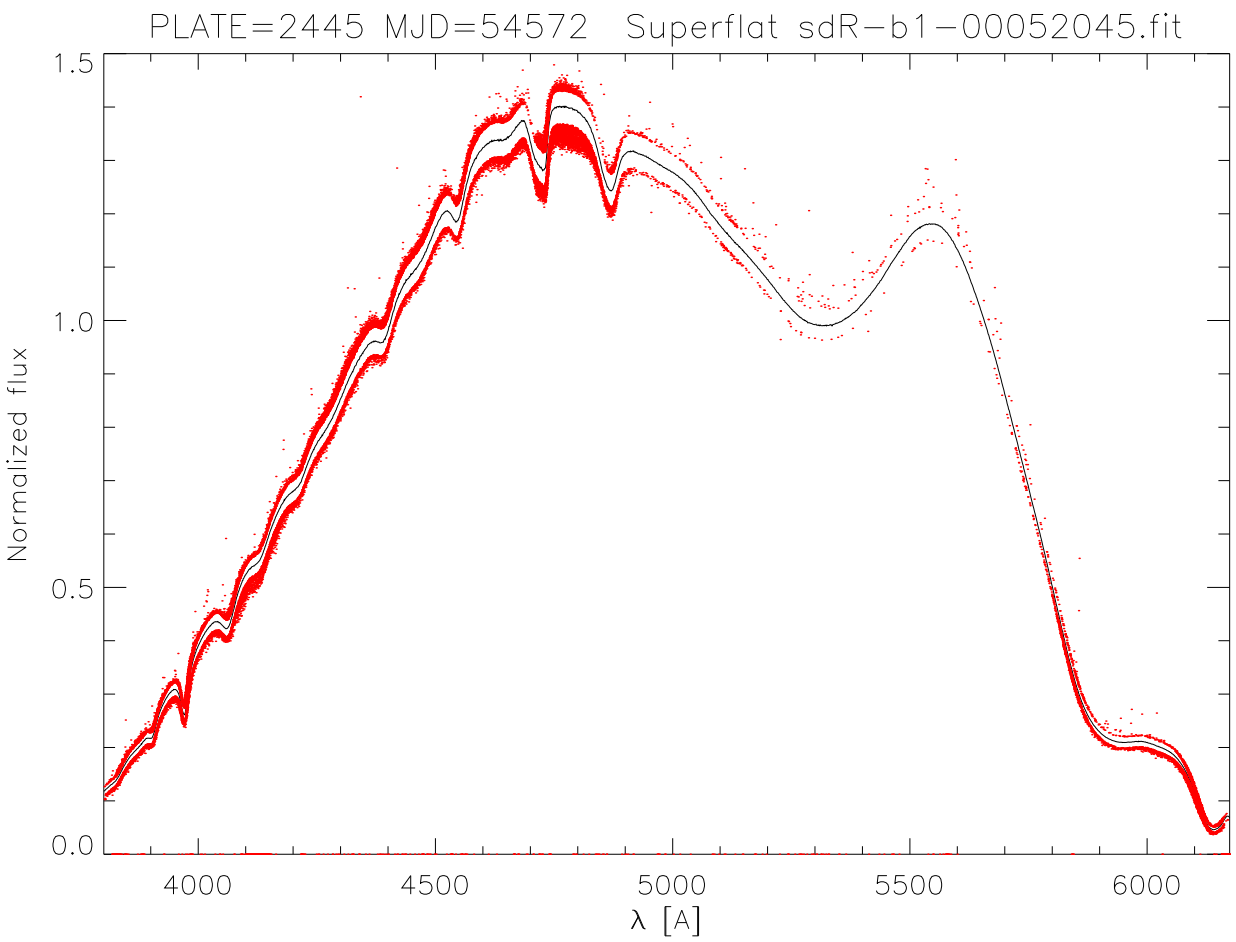

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

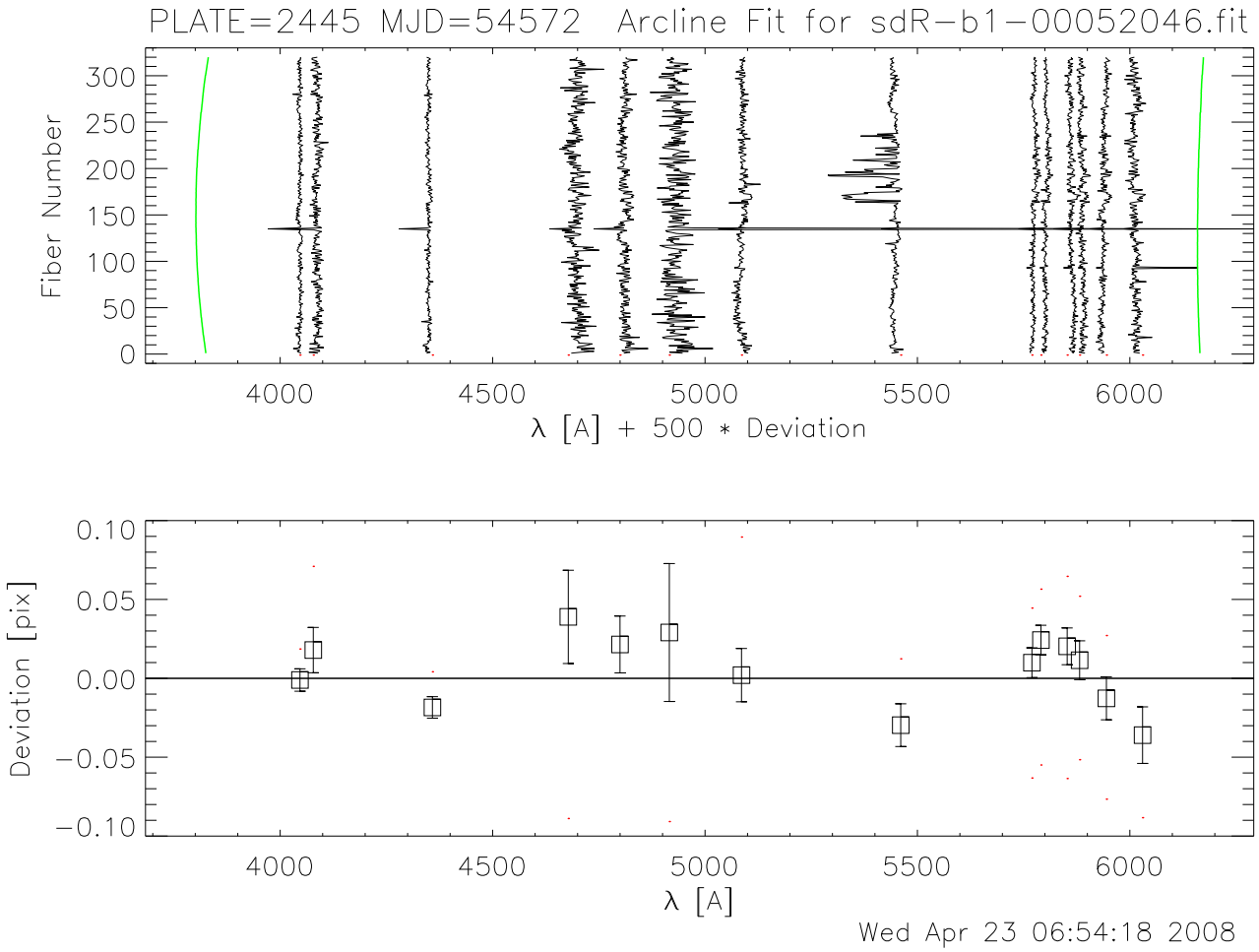

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

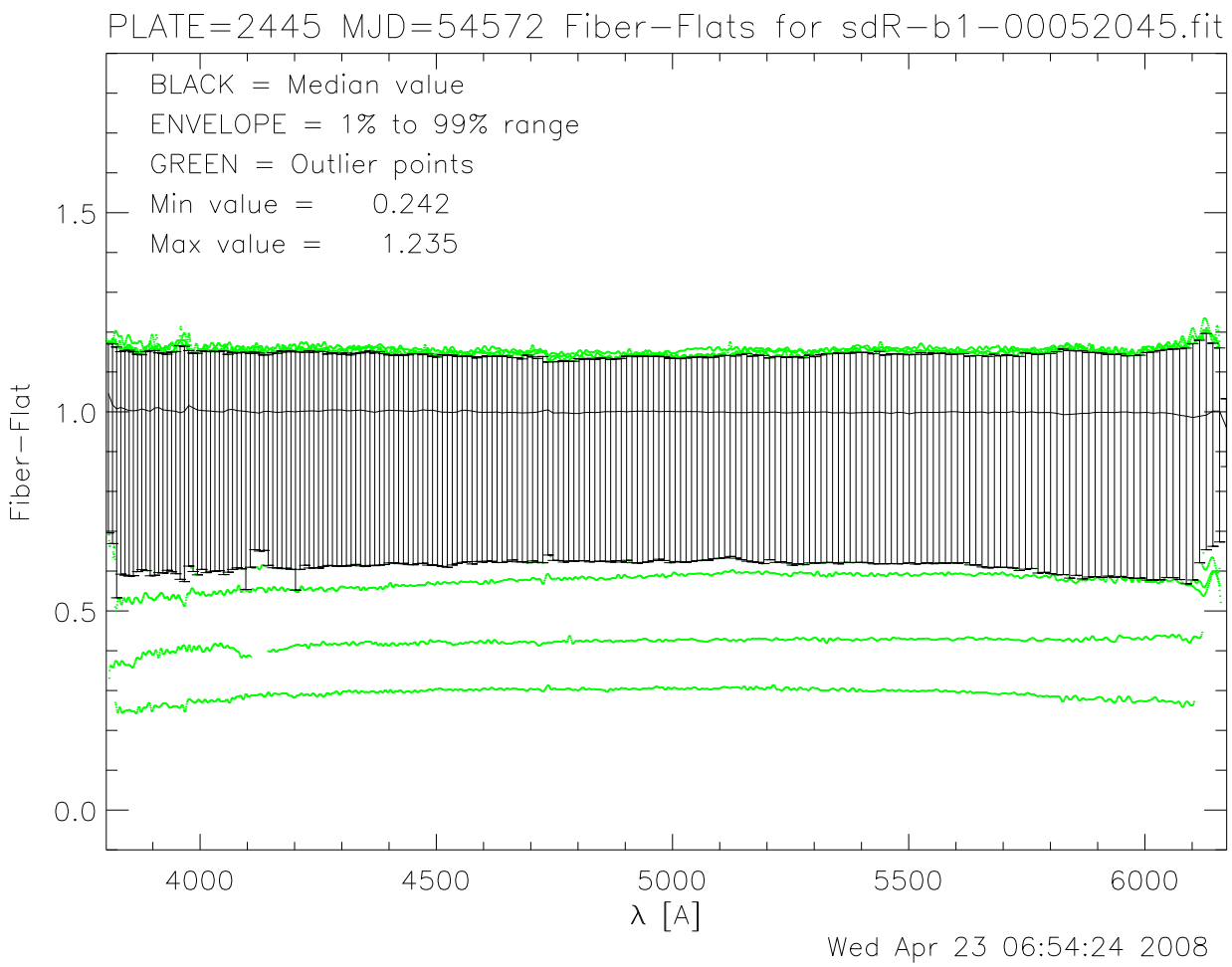

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−b1−00052041.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

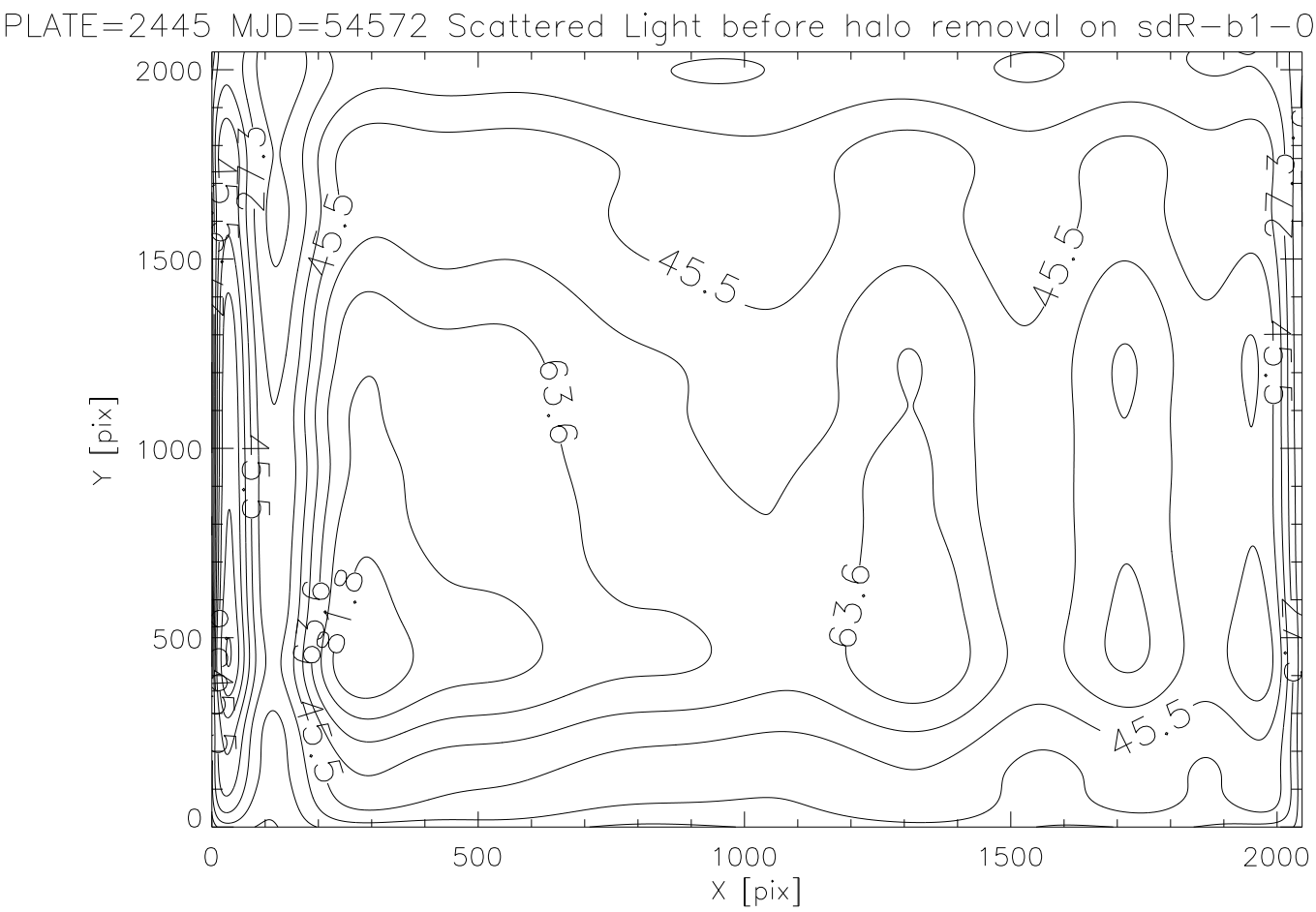

PLATE=2445 MJD=54572 Superflat sdR-b1-00052041.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

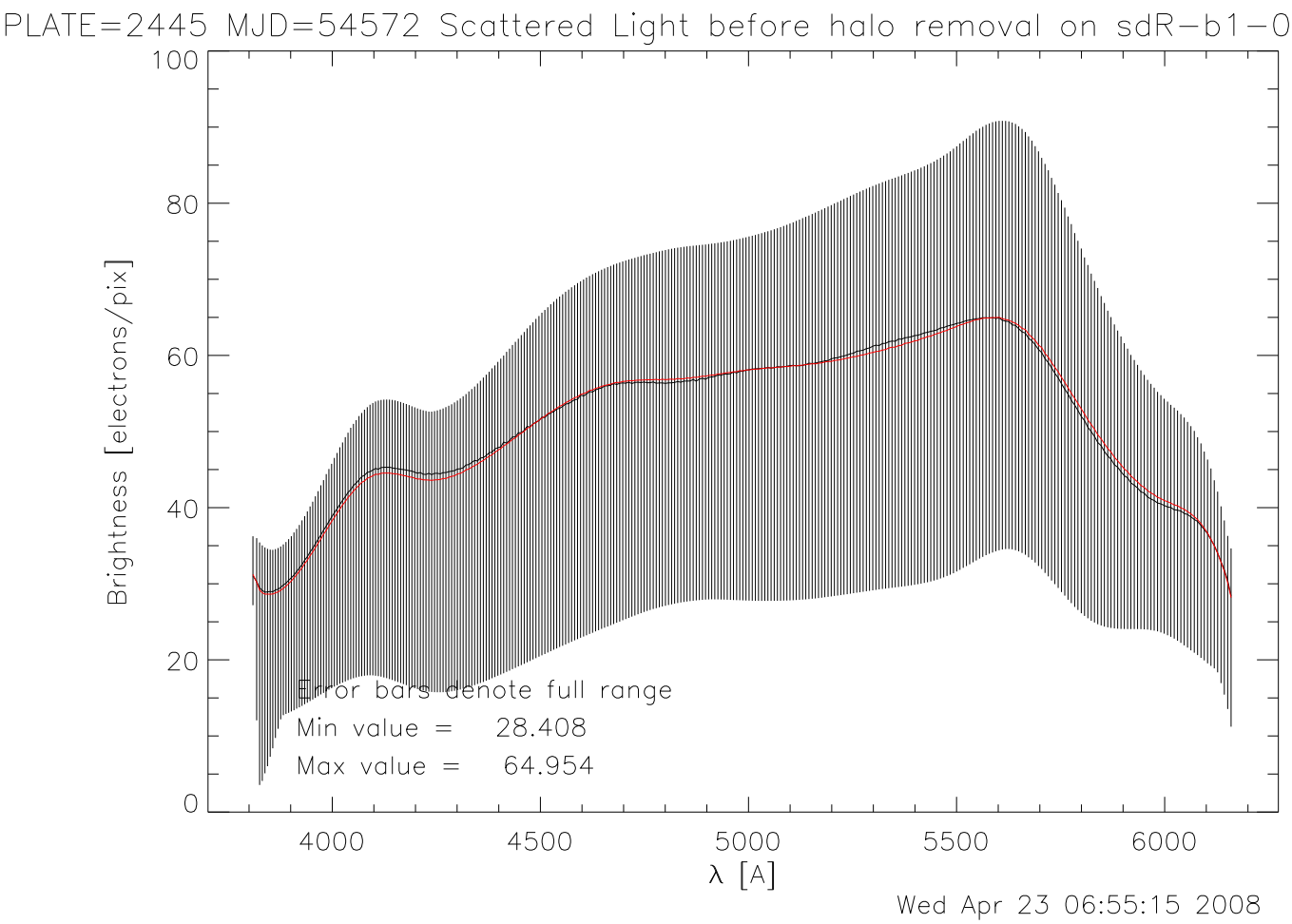

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−b1−00052045.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

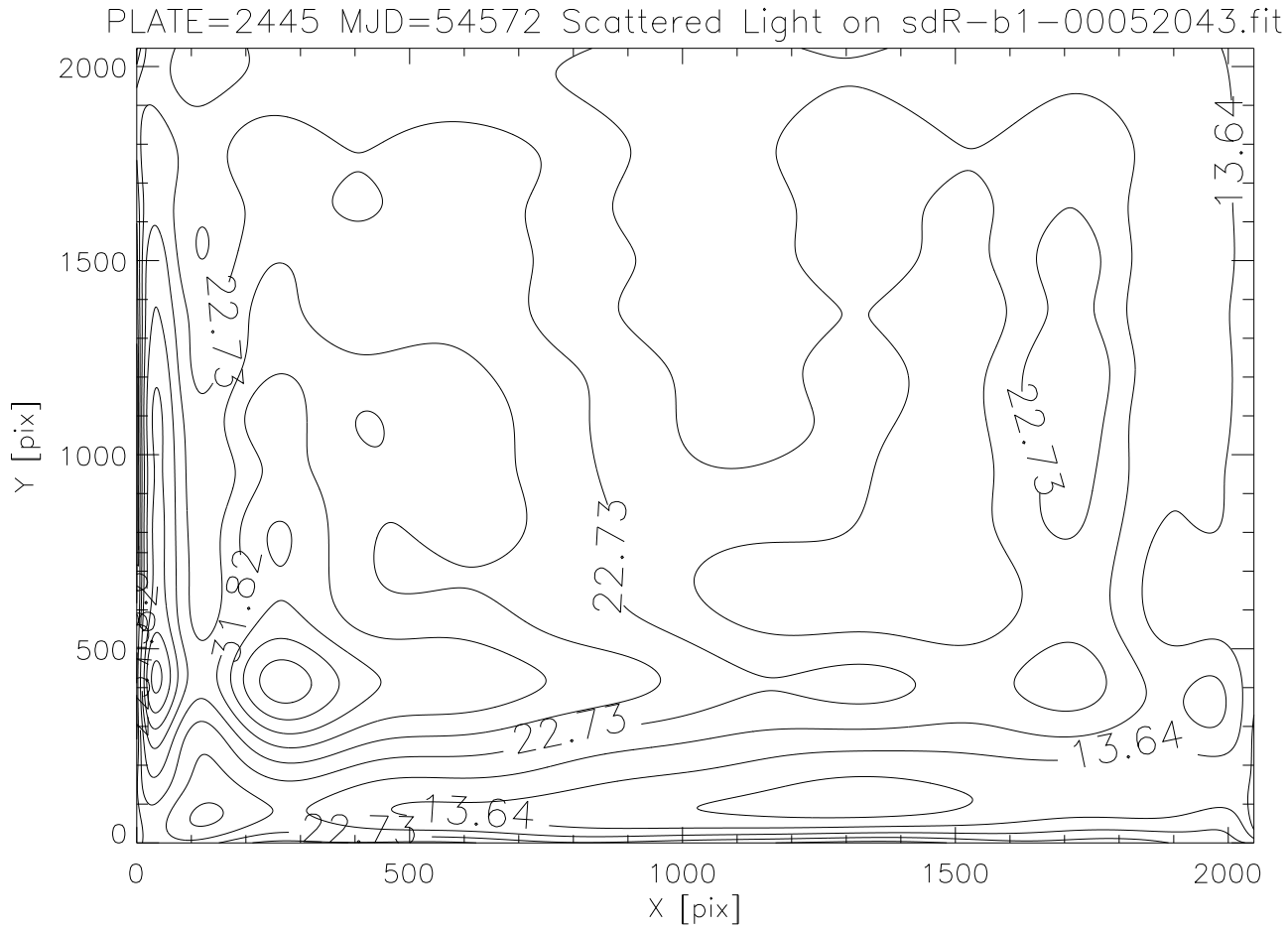

PLATE=2445 MJD=54572 Superflat sdR-b1-00052045.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

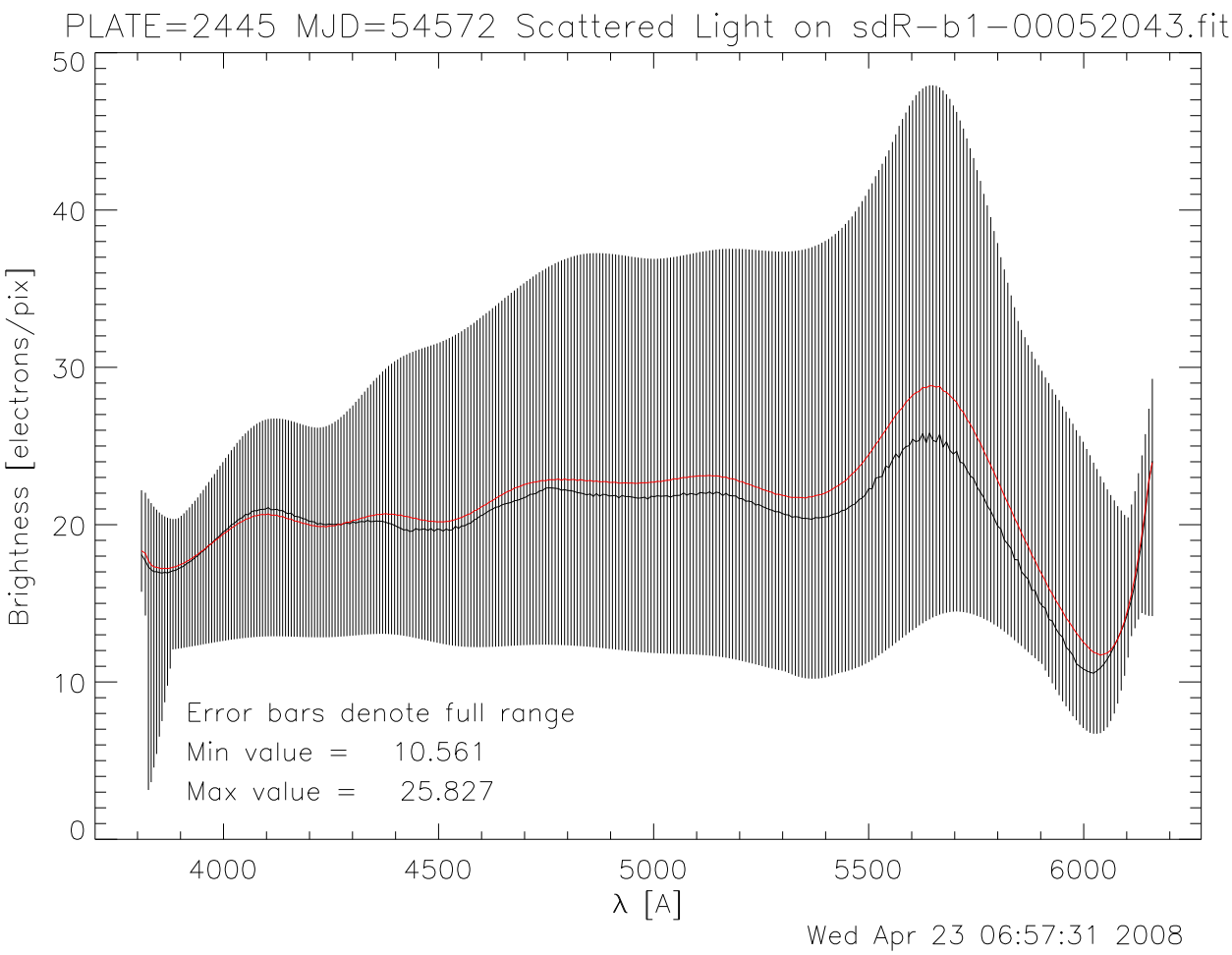

PLATE=2445 MJD=54572 Arcline Fit for sdR-b1-00052046.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 06:54:18 2008

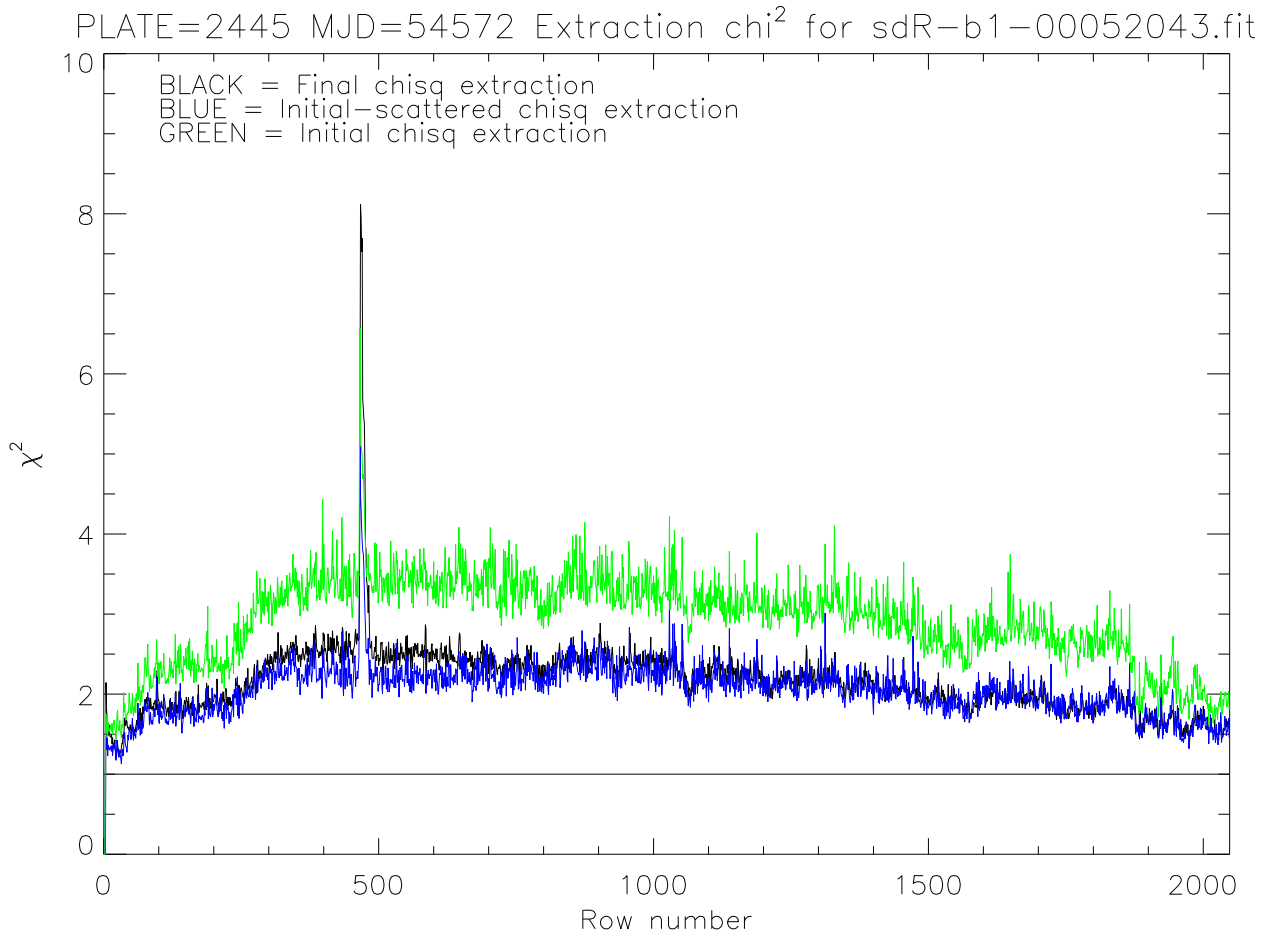

PLATE=2445 MJD=54572 Fiber-Flats for sdR-b1-00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.242
Max value = 1.235
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 06:54:24 2008

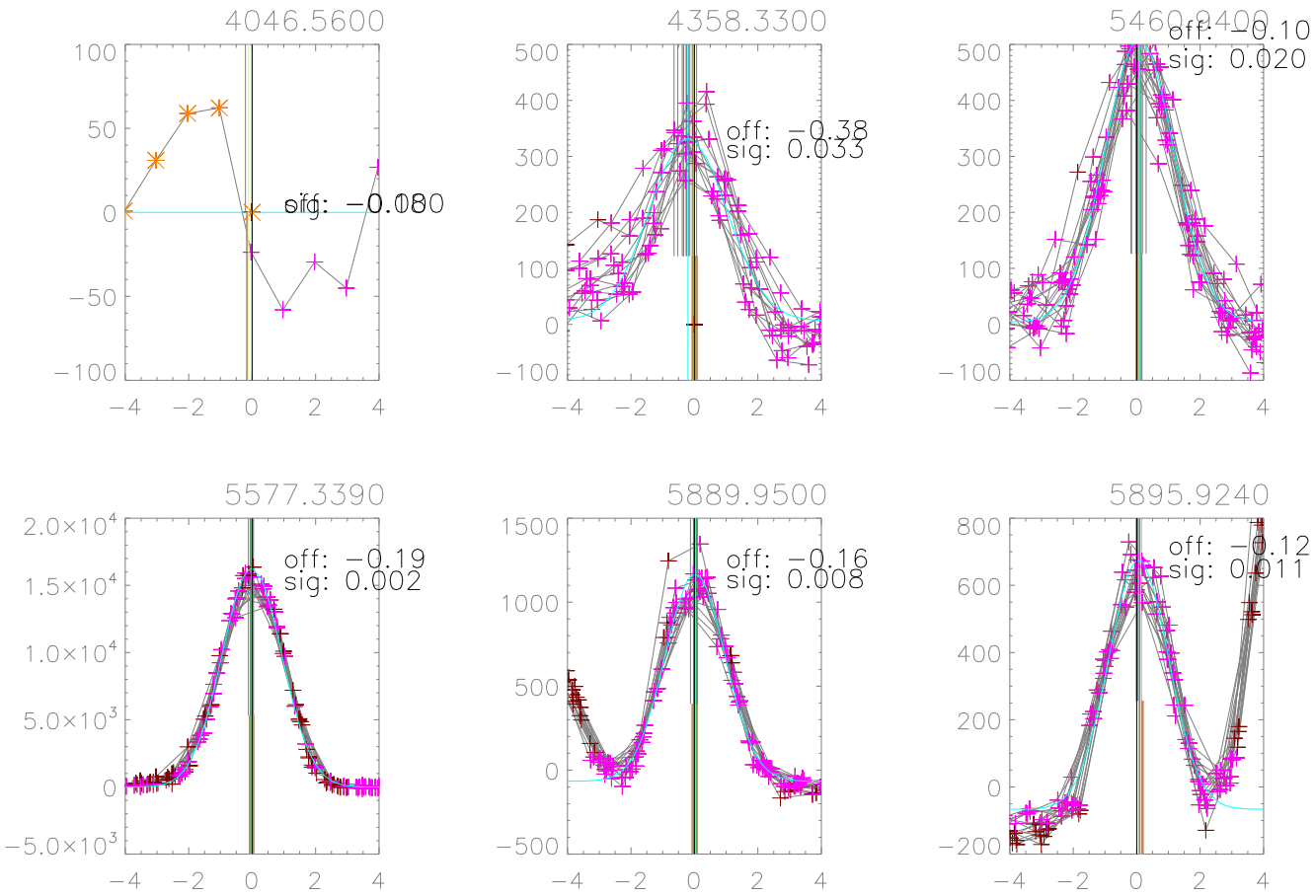

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR−b1−00052043.f
Y [pix]
X [pix]
0
500
1000
1500
2000
45.5
63.6
81.8
27.3

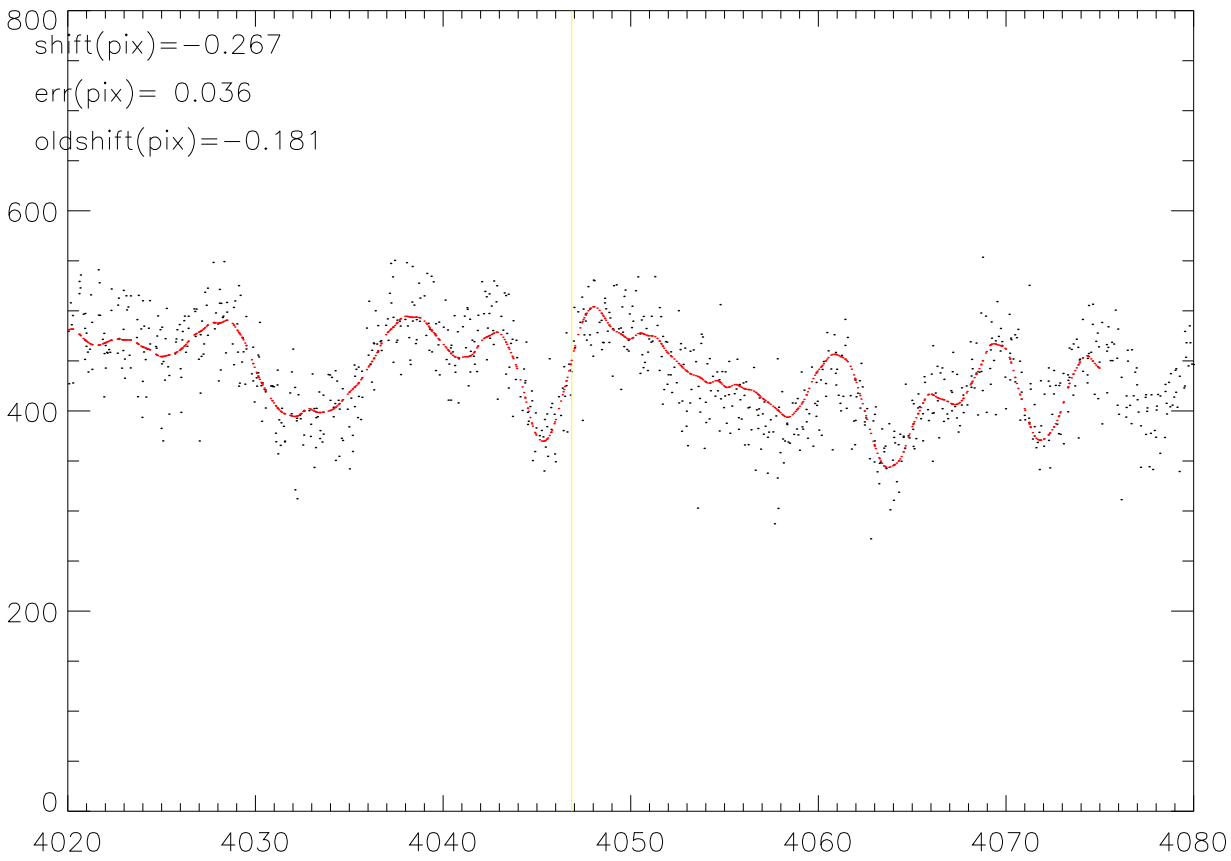

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b1-00052043.f
Brightness [electrons/pix]
100
80
60
40
20
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 28.408
Max value = 64.954
Wed Apr 23 06:55:15 2008

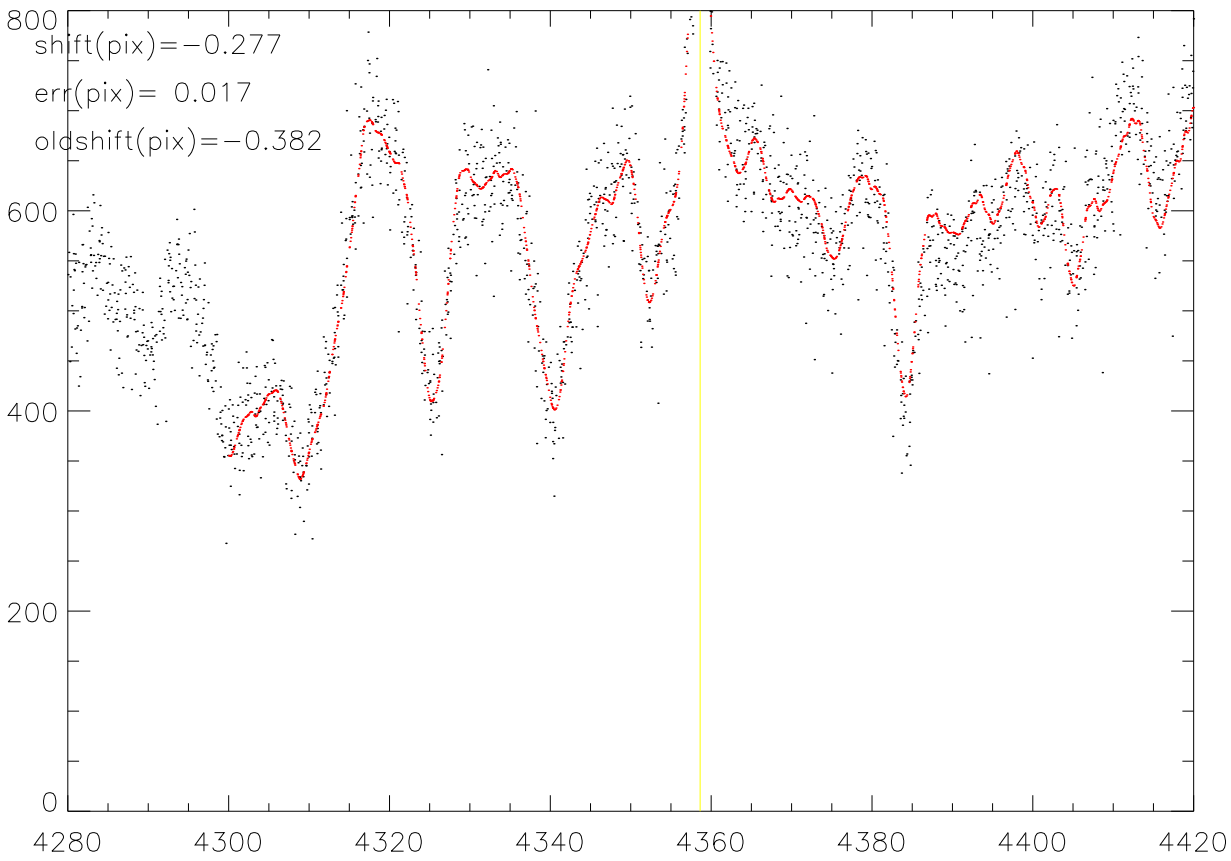

PLATE=2445 MJD=54572 Scattered Light on sdR-b1-00052043.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
31.82
22.73
13.64

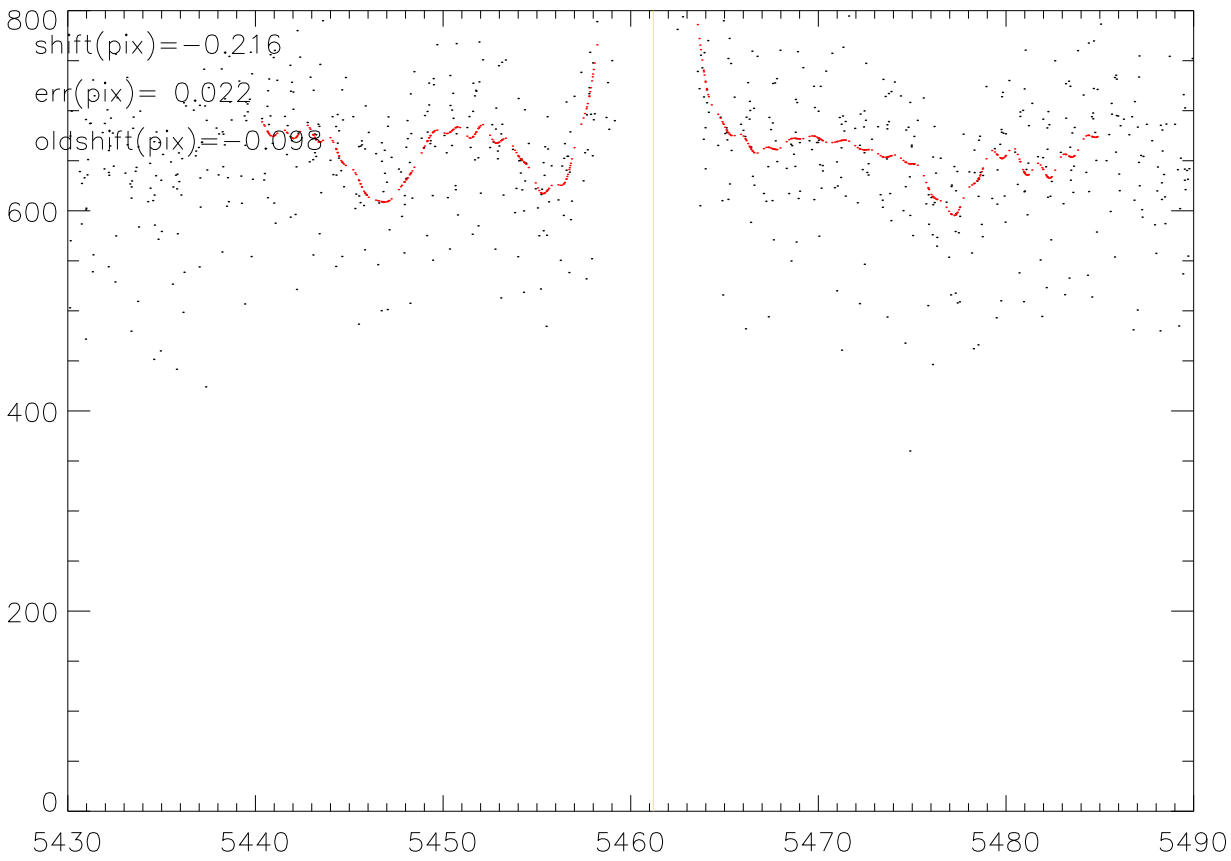

PLATE=2445 MJD=54572 Scattered Light on sdR-b1-00052043.fit
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.561
Max value = 25.827
Wed Apr 23 06:57:31 2008

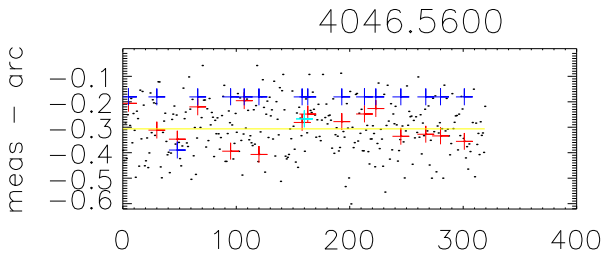

PLATE=2445 MJD=54572 Extraction chi^2 for sdR-b1-00052043.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

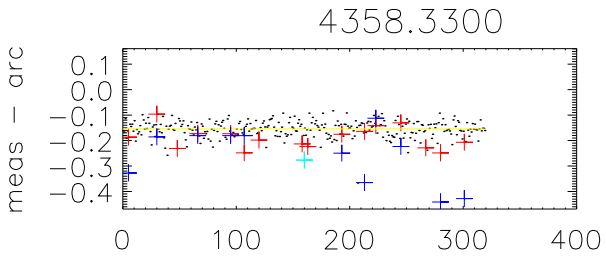

4046.5600
off: −0.080
sig: 0.080
4358.3300
off: −0.38
sig: 0.033
5460.8400
off: −0.10
sig: 0.020
5577.3390
off: −0.19
sig: 0.002
5889.9500
off: −0.16
sig: 0.008
5895.9240
off: −0.12
sig: 0.011

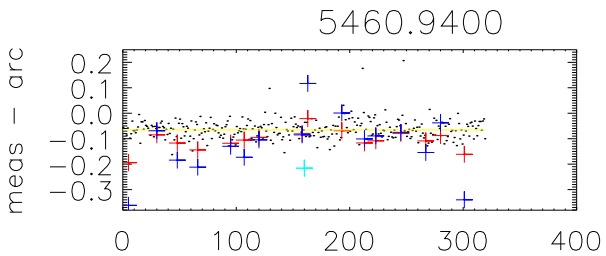

shift(pix)=−0.267
err(pix)= 0.036
oldshift(pix)=−0.181
800
600
400
200
0
4020
4030
4040
4050
4060
4070
4080

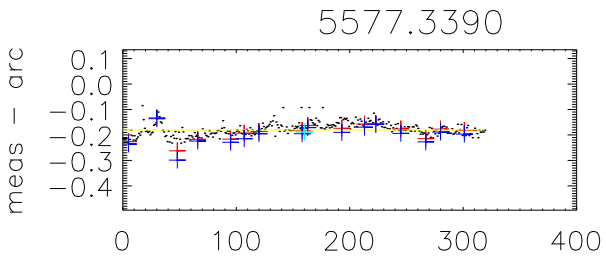

shift(pix)=−0.277
err(pix)= 0.017
oldshift(pix)=−0.382
800
600
400
200
0
4280
4300
4320
4340
4360
4380
4400
4420

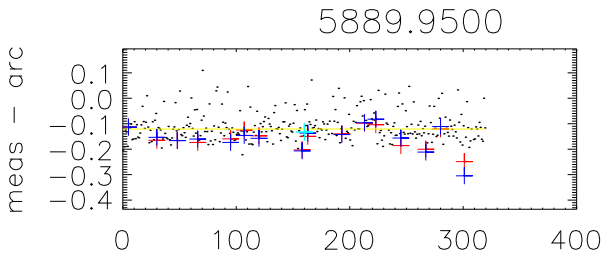

shift(pix)=−0.216
err(pix)= 0.022
oldshift(pix)=−0.098
800
600
400
200
0
5430
5440
5450
5460
5470
5480
5490

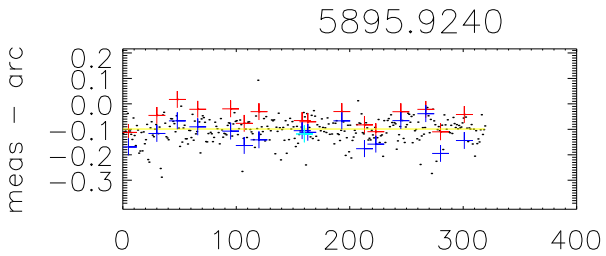

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

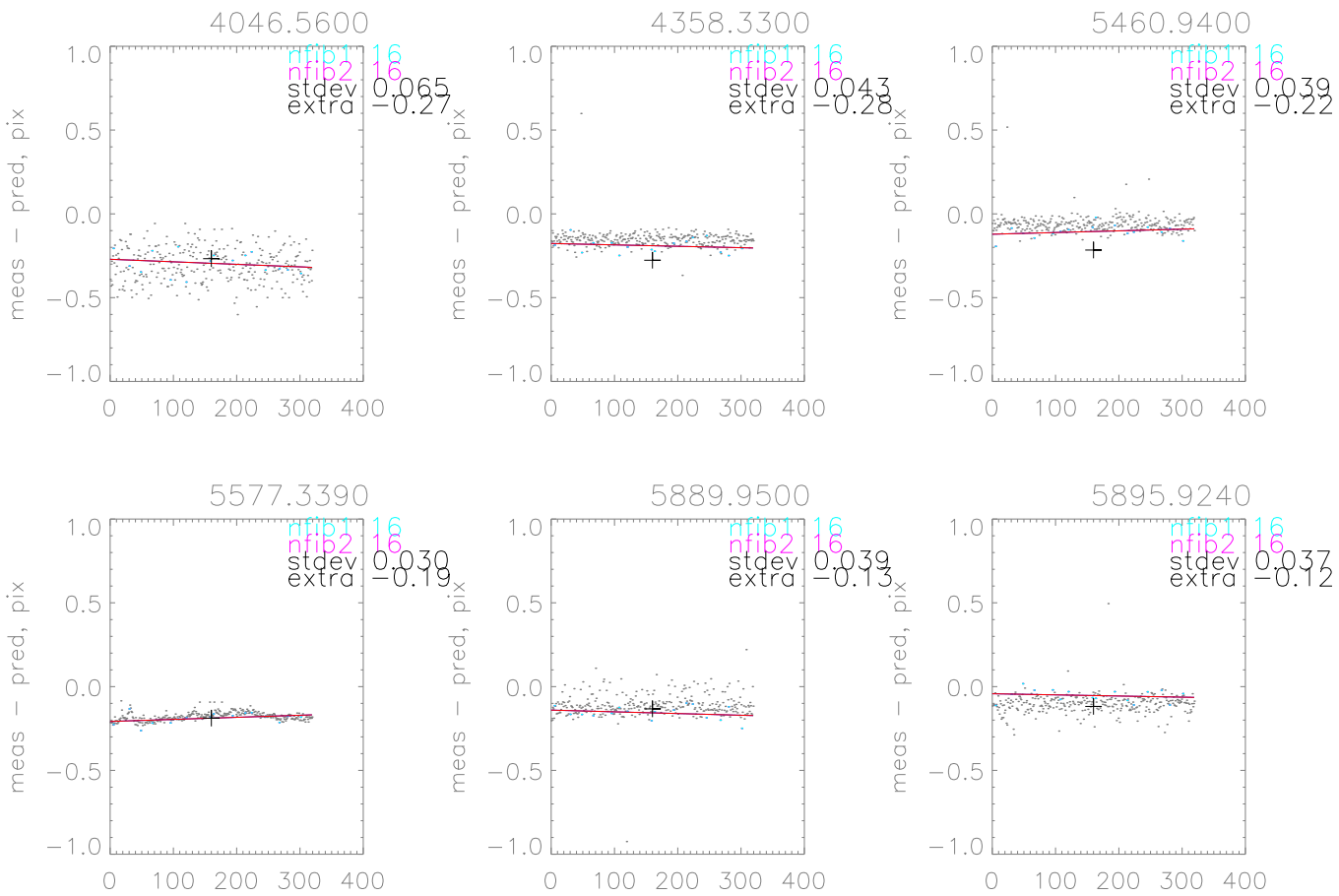

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

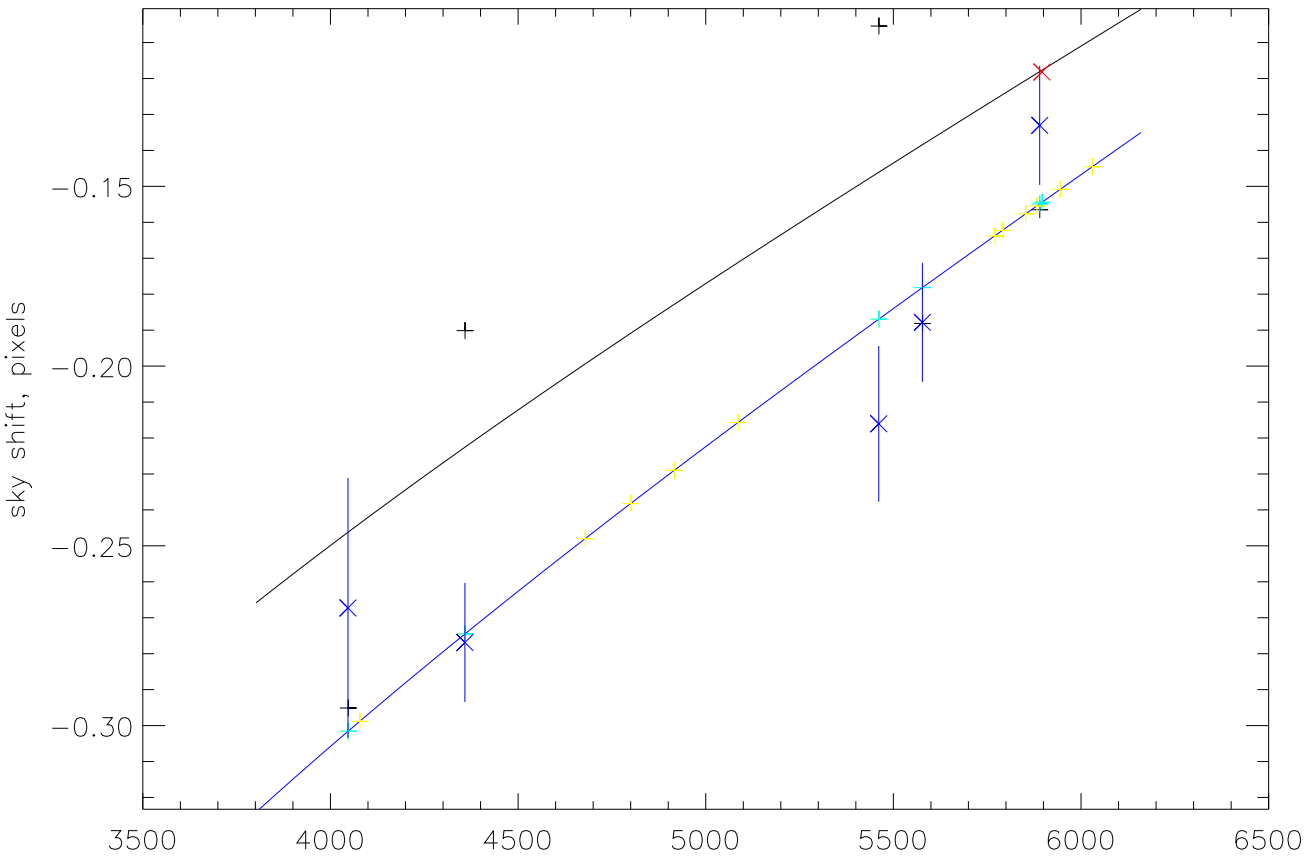

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

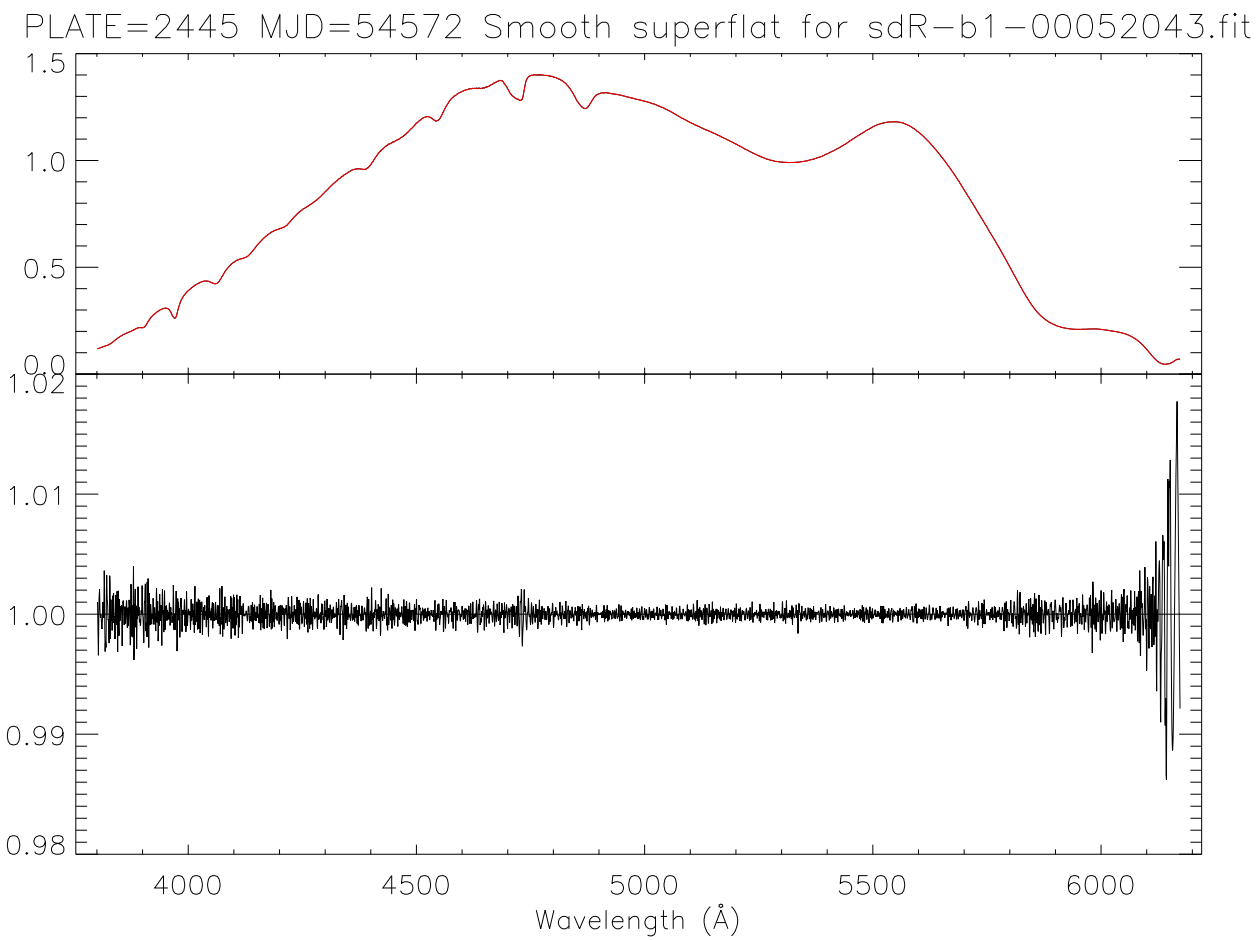

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

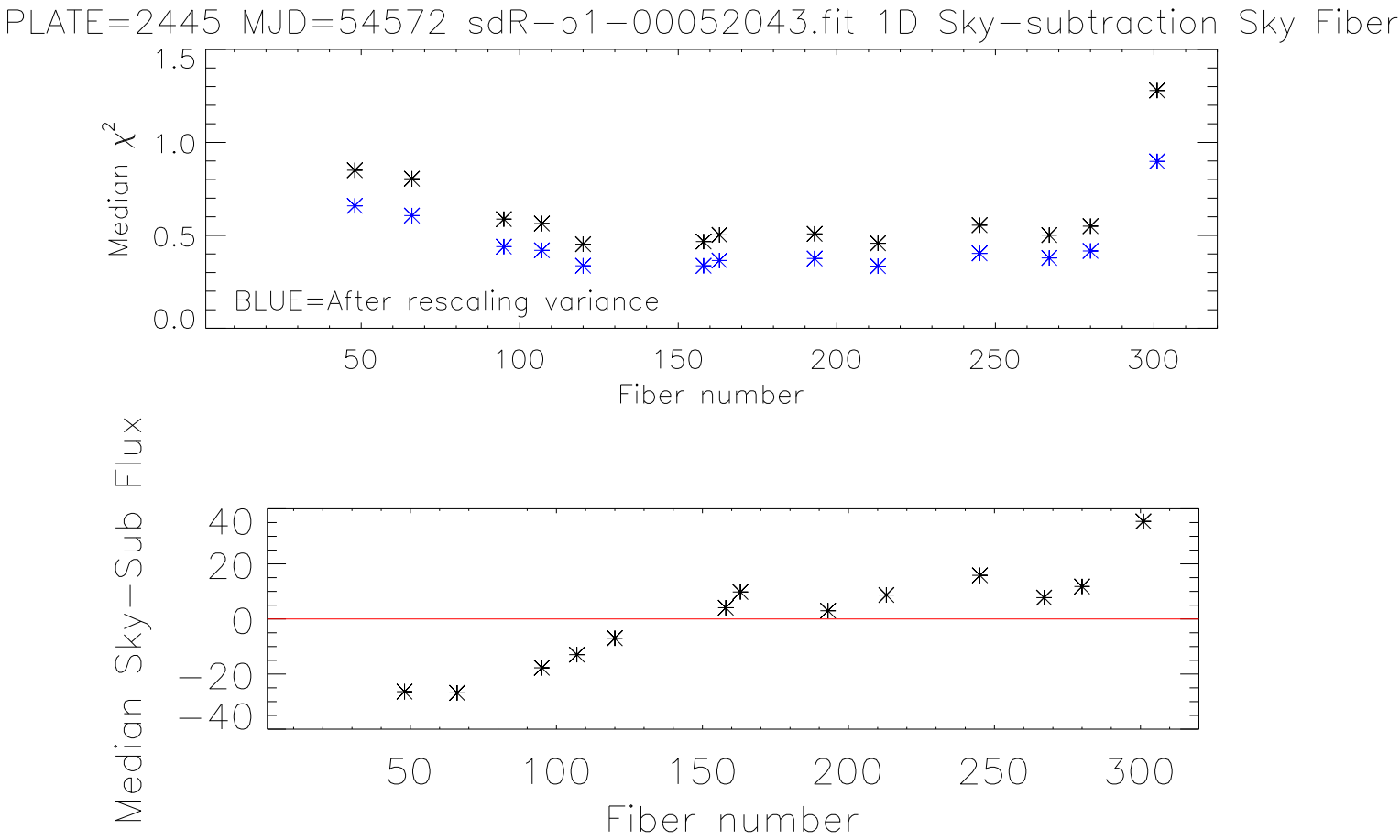

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

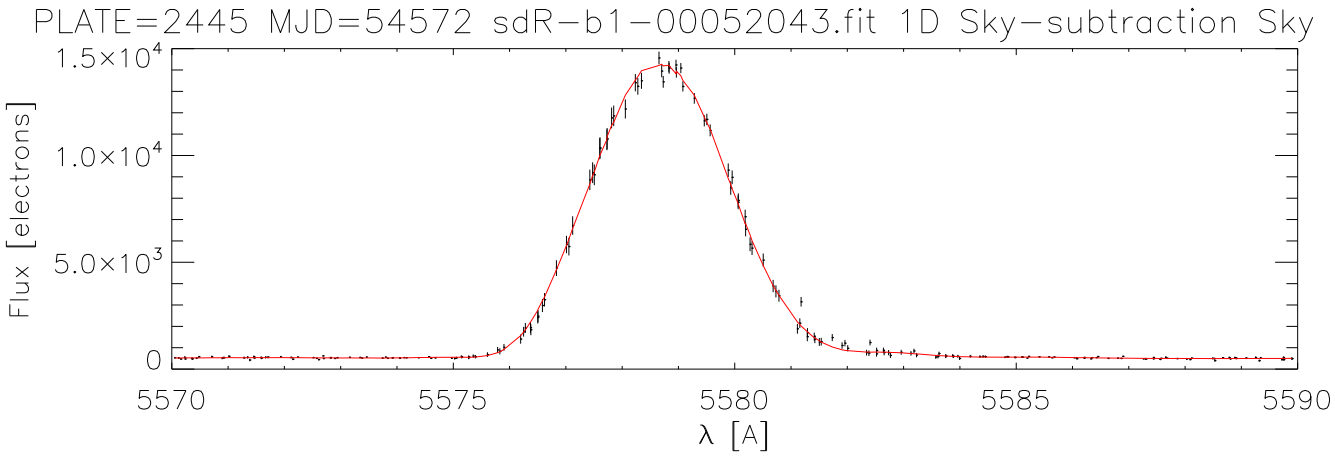

4046.5600
nfib1 16
nfib2 16
stdev 0.065
extra −0.27
4358.3300
nfib1 16
nfib2 16
stdev 0.043
extra −0.28
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.030
extra −0.19
5889.9500
nfib1 16
nfib2 16
stdev 0.039
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

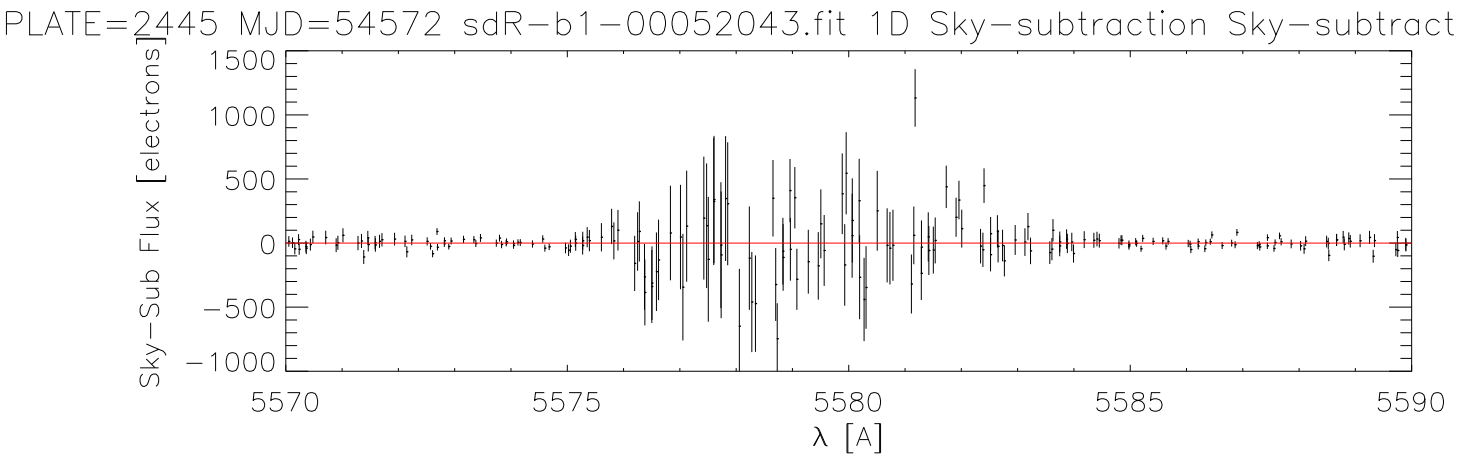

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

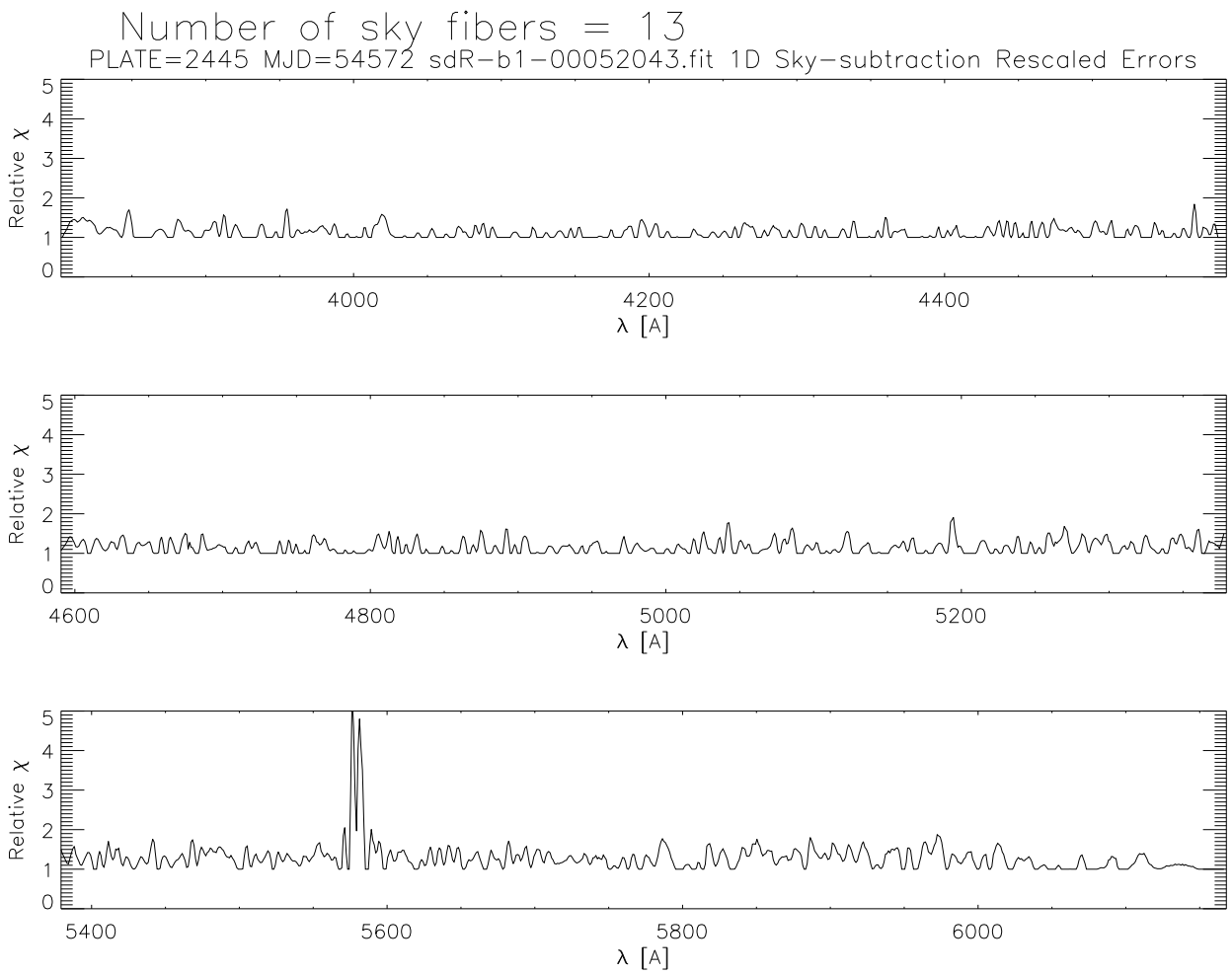
es= −0.0000

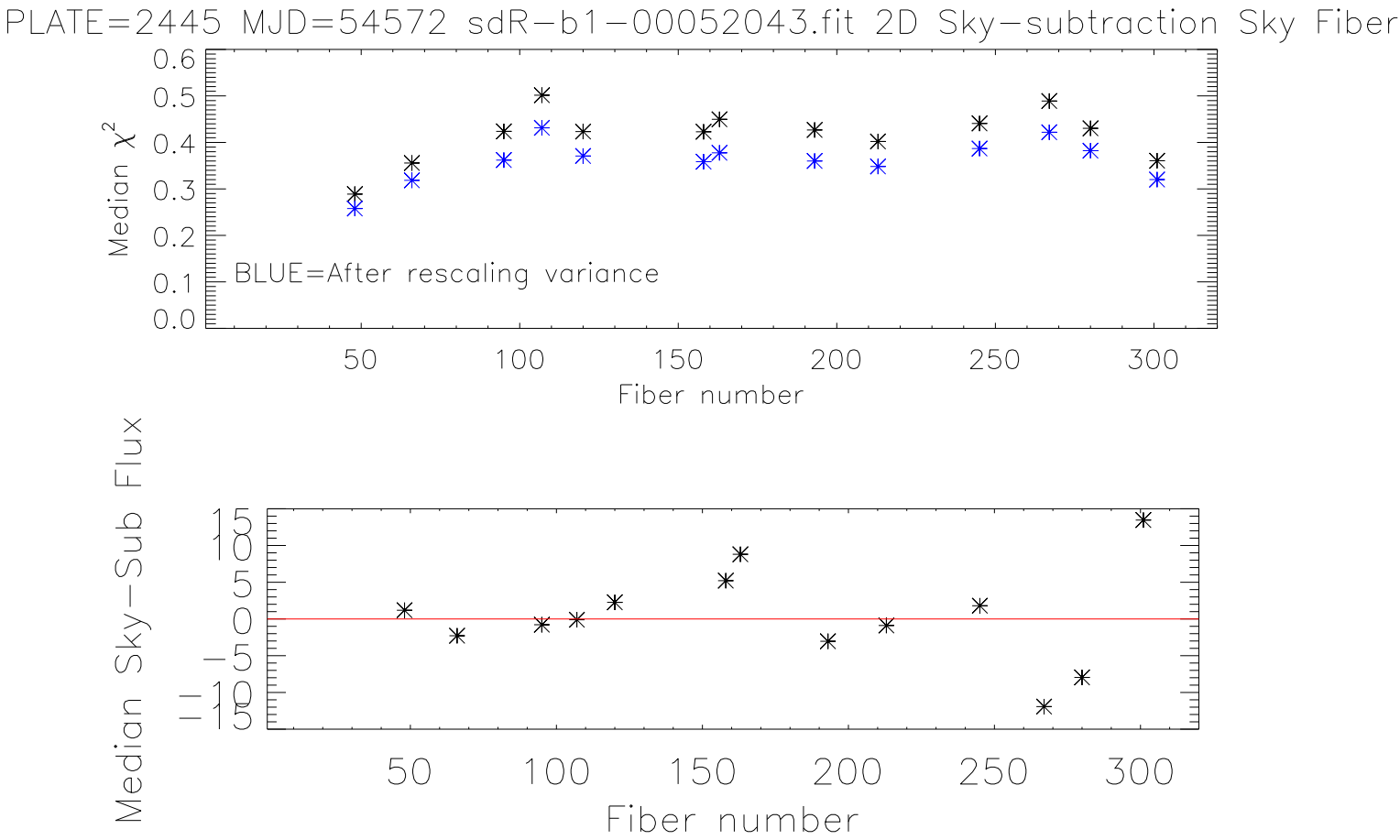

PLATE=2445 MJD=54572 Smooth superflat for sdR−b1−00052043.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

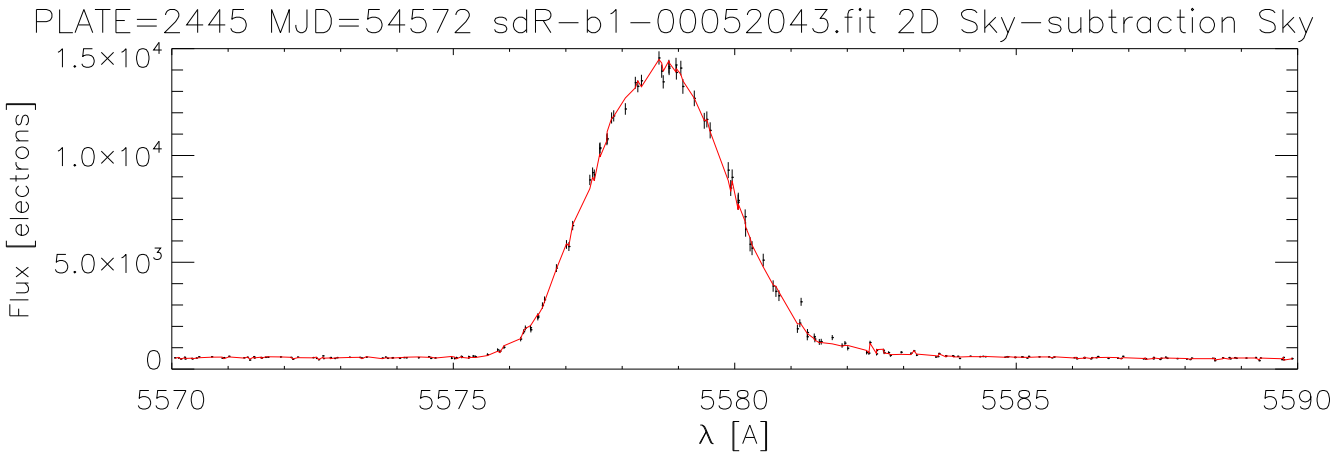

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

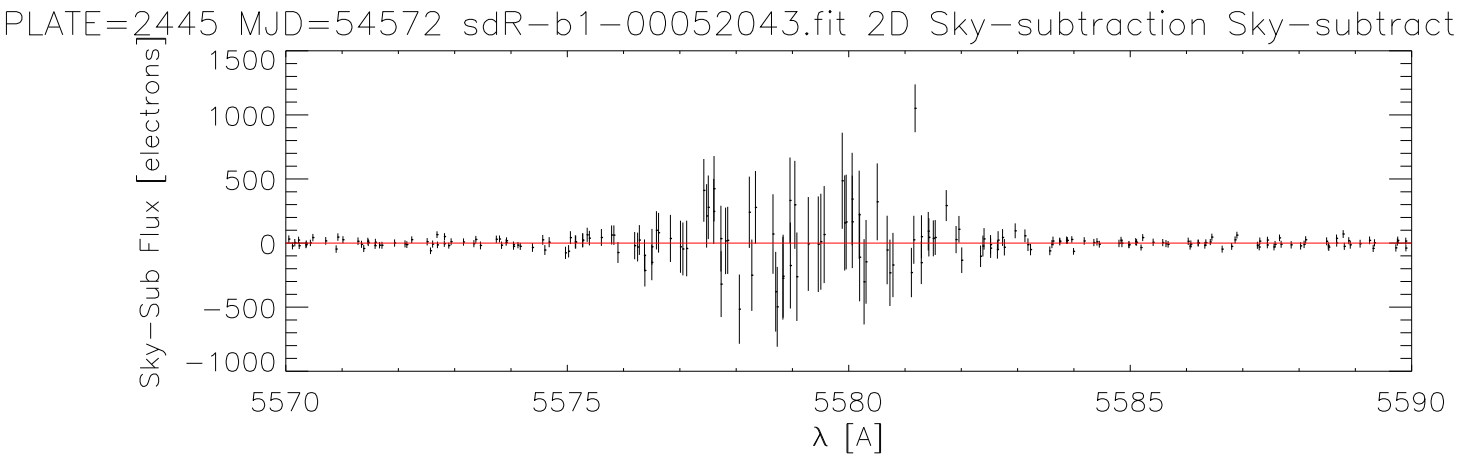

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

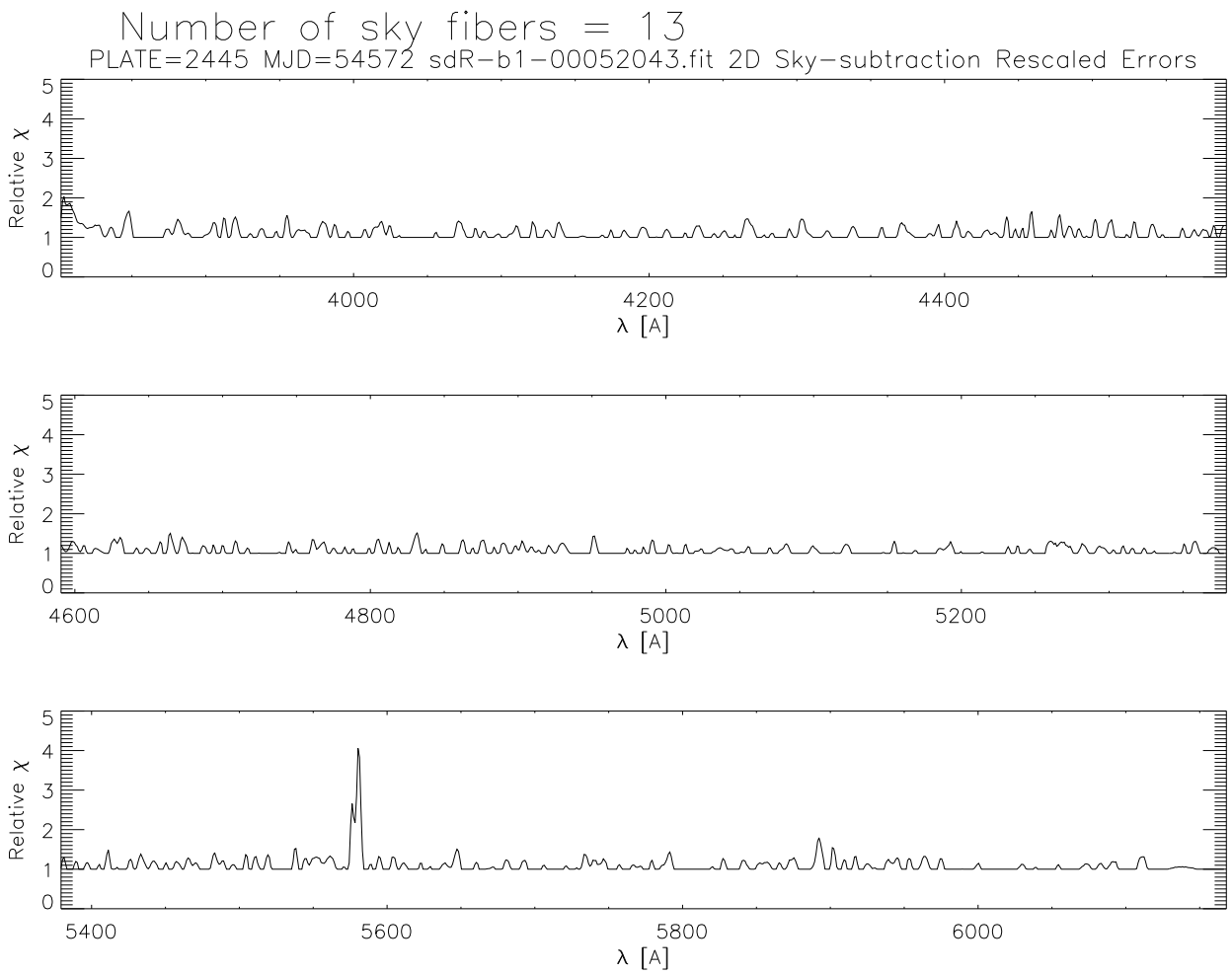

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

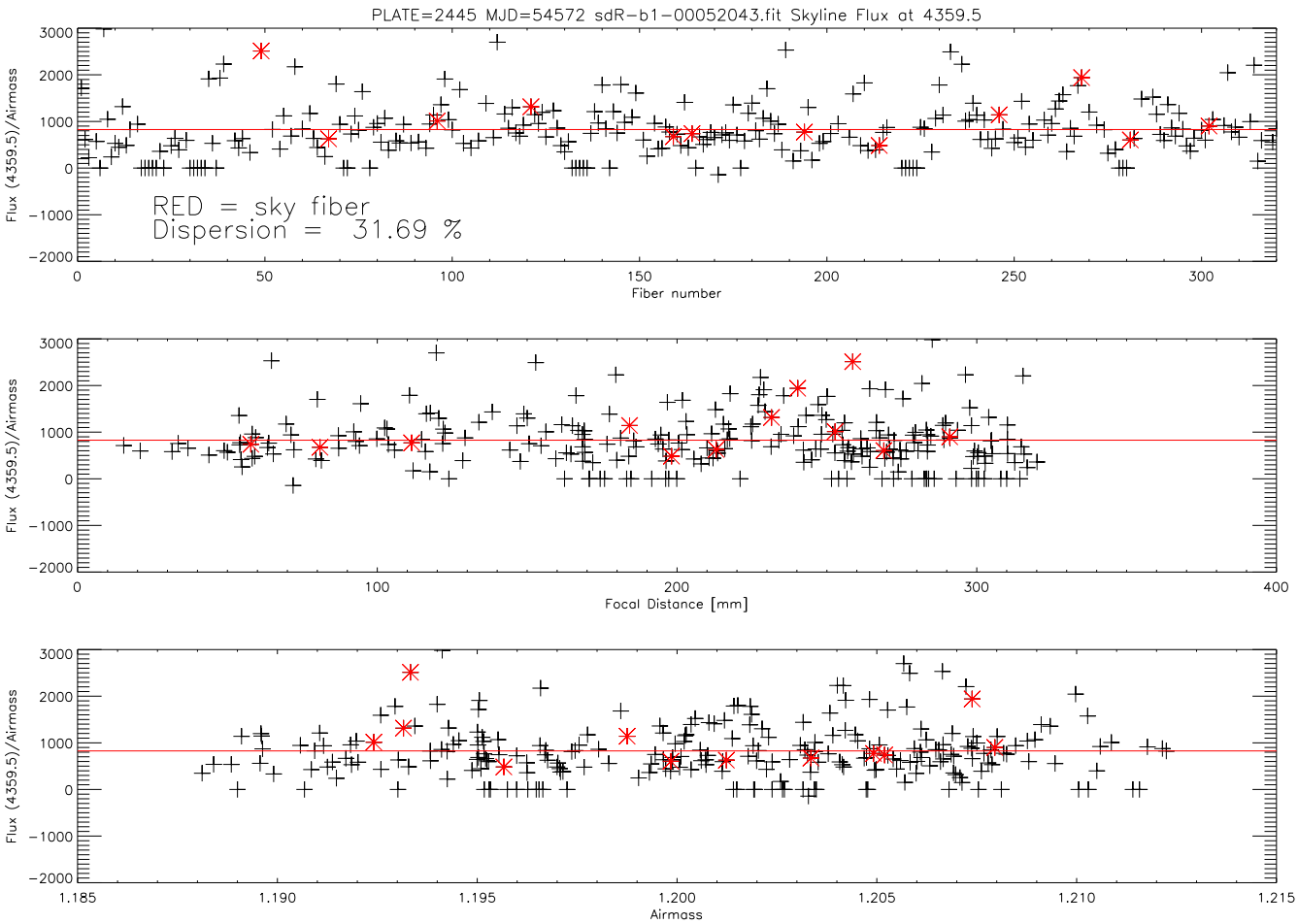

Number of sky fibers = 13
PLATE=2445 MJD=54572 sdR-b1-00052043.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

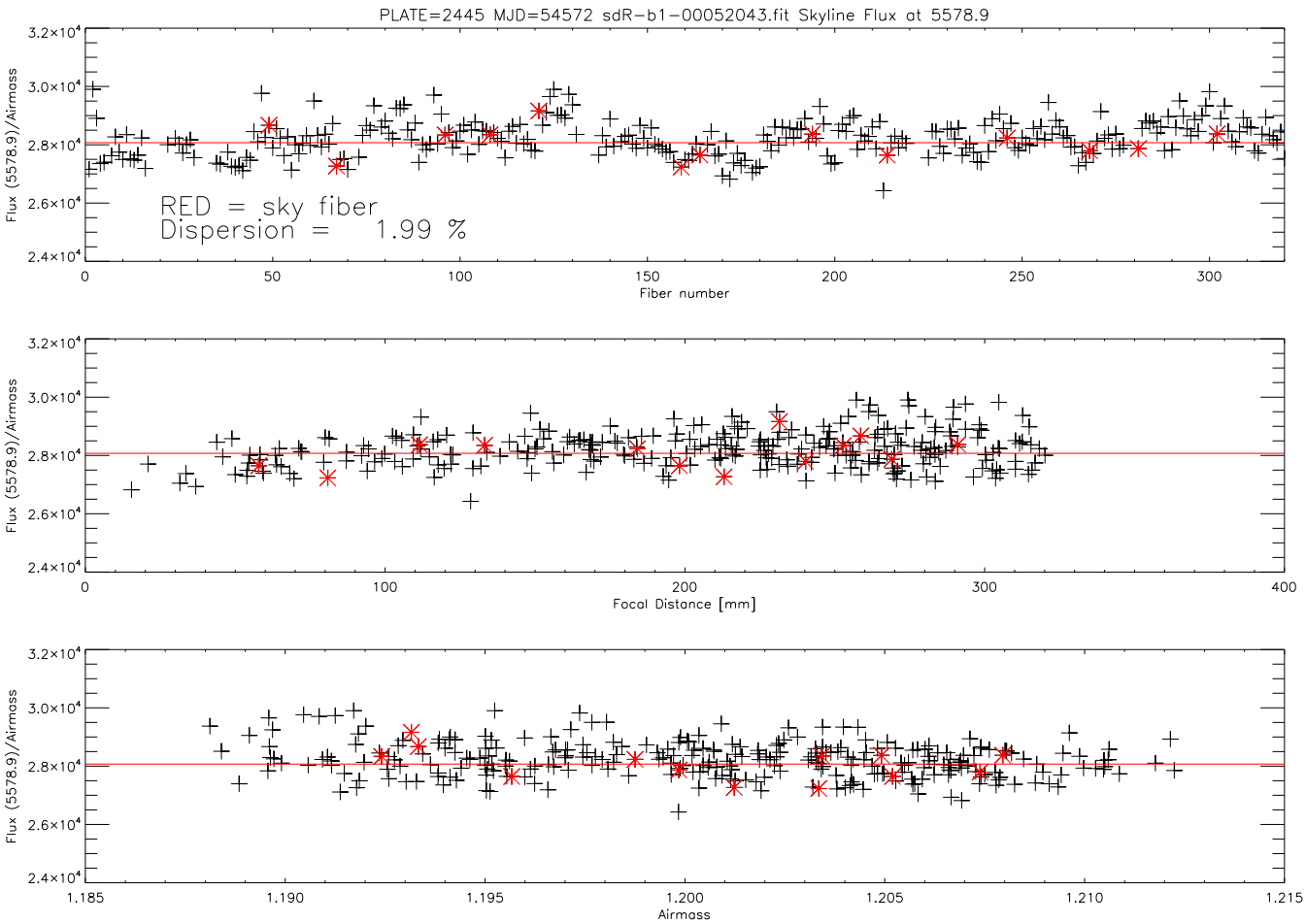

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

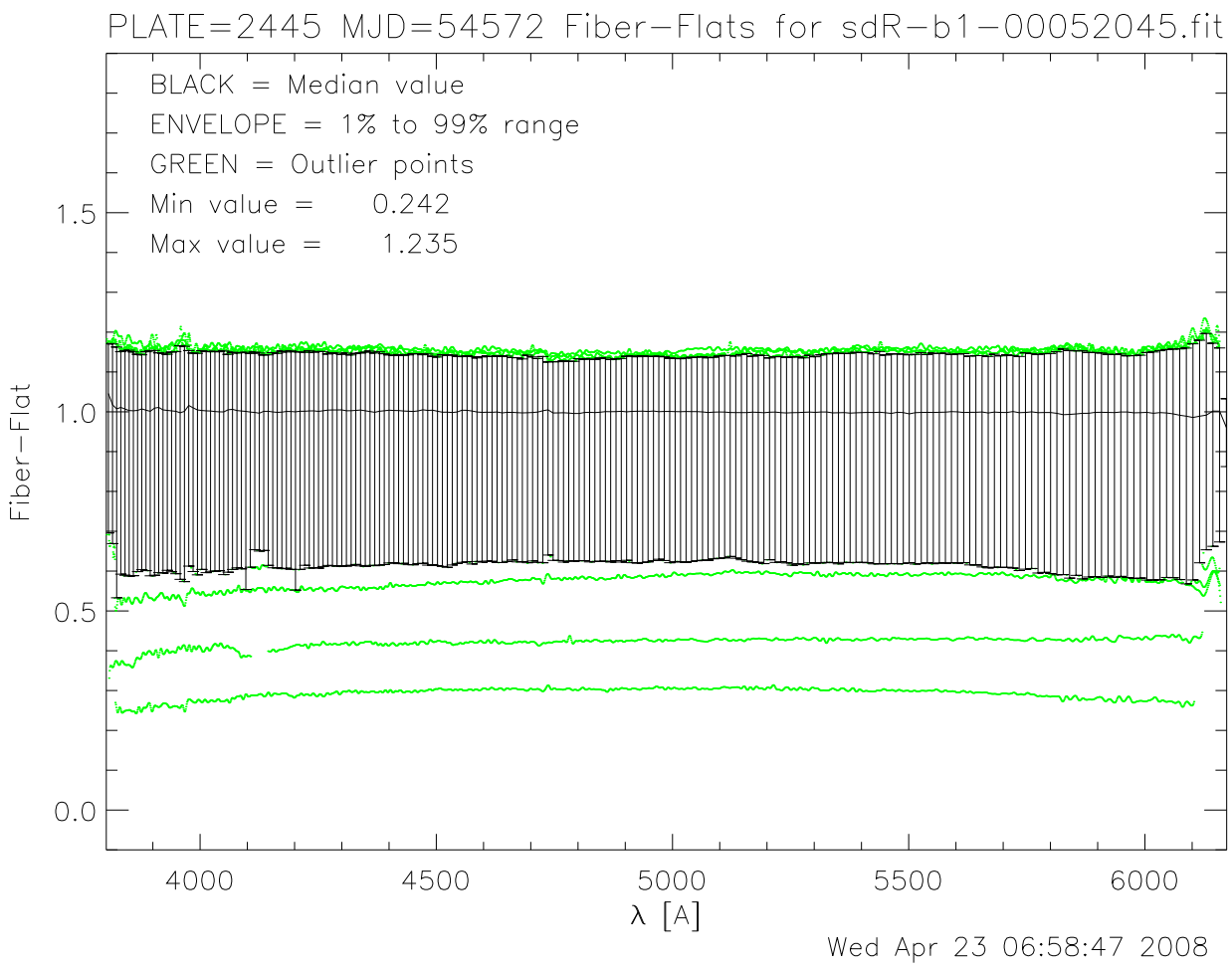

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

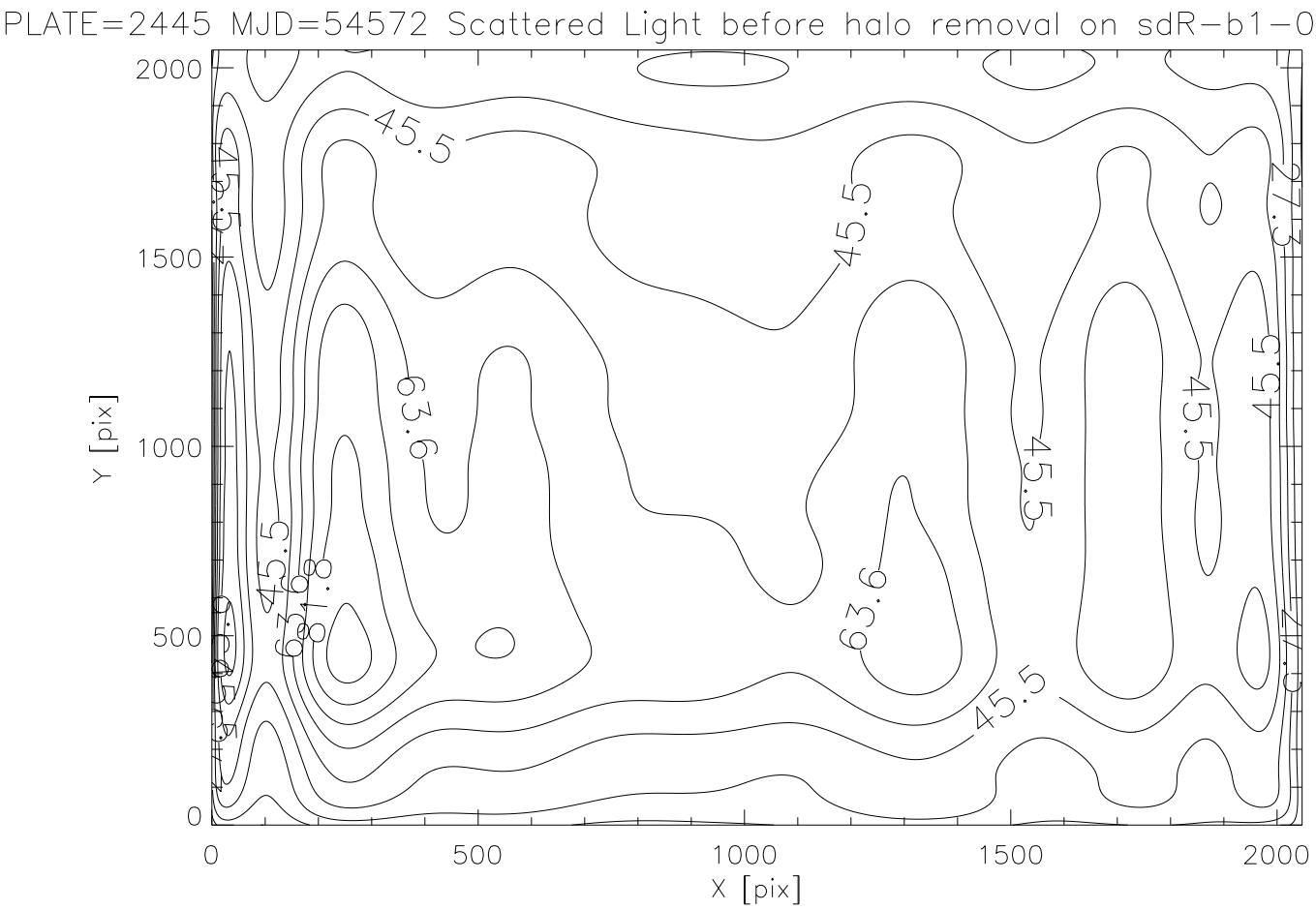

PLATE=2445 MJD=54572 sdR-b1-00052043.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

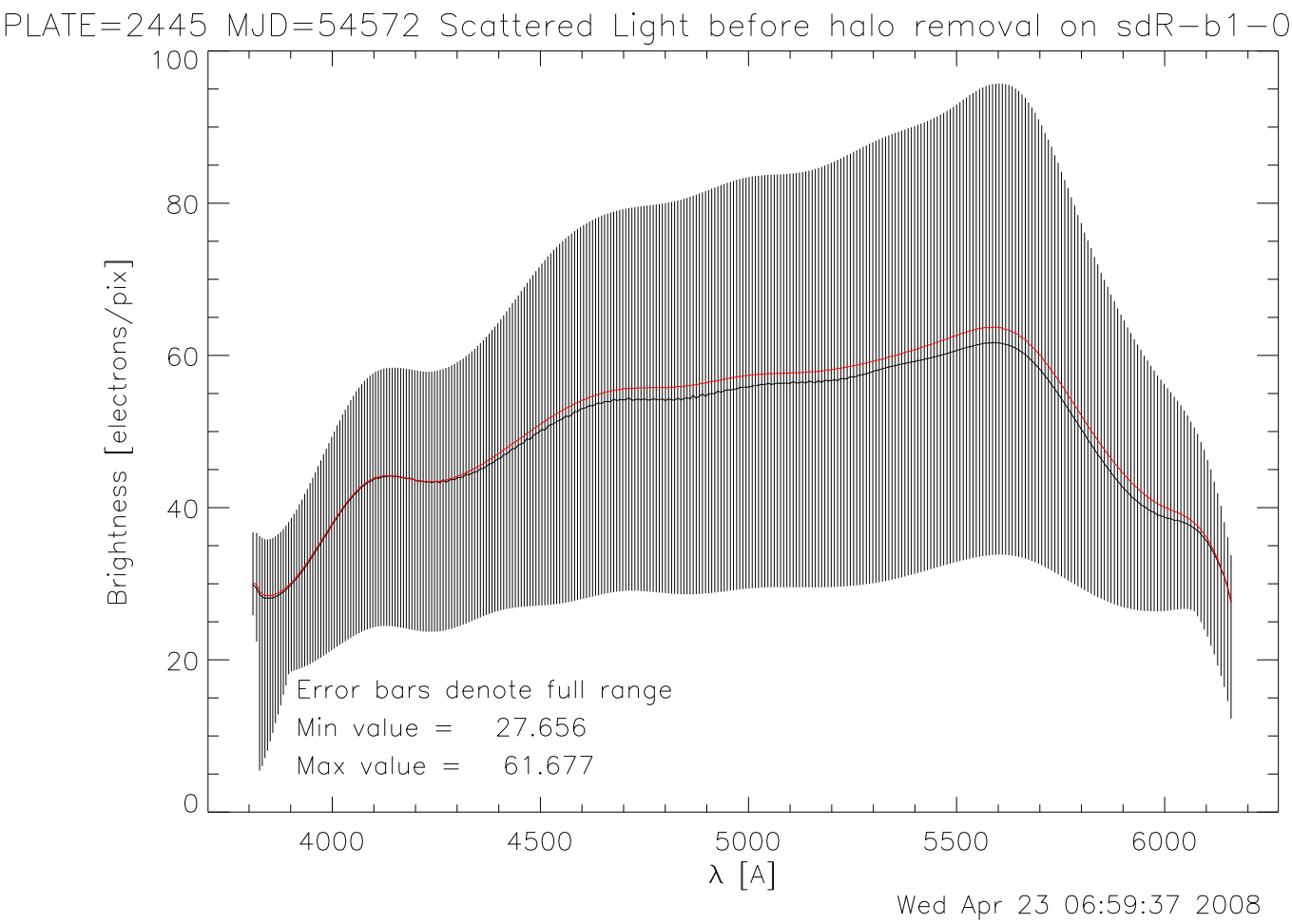

Number of sky fibers = 13
PLATE=2445 MJD=54572 sdR-b1-00052043.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

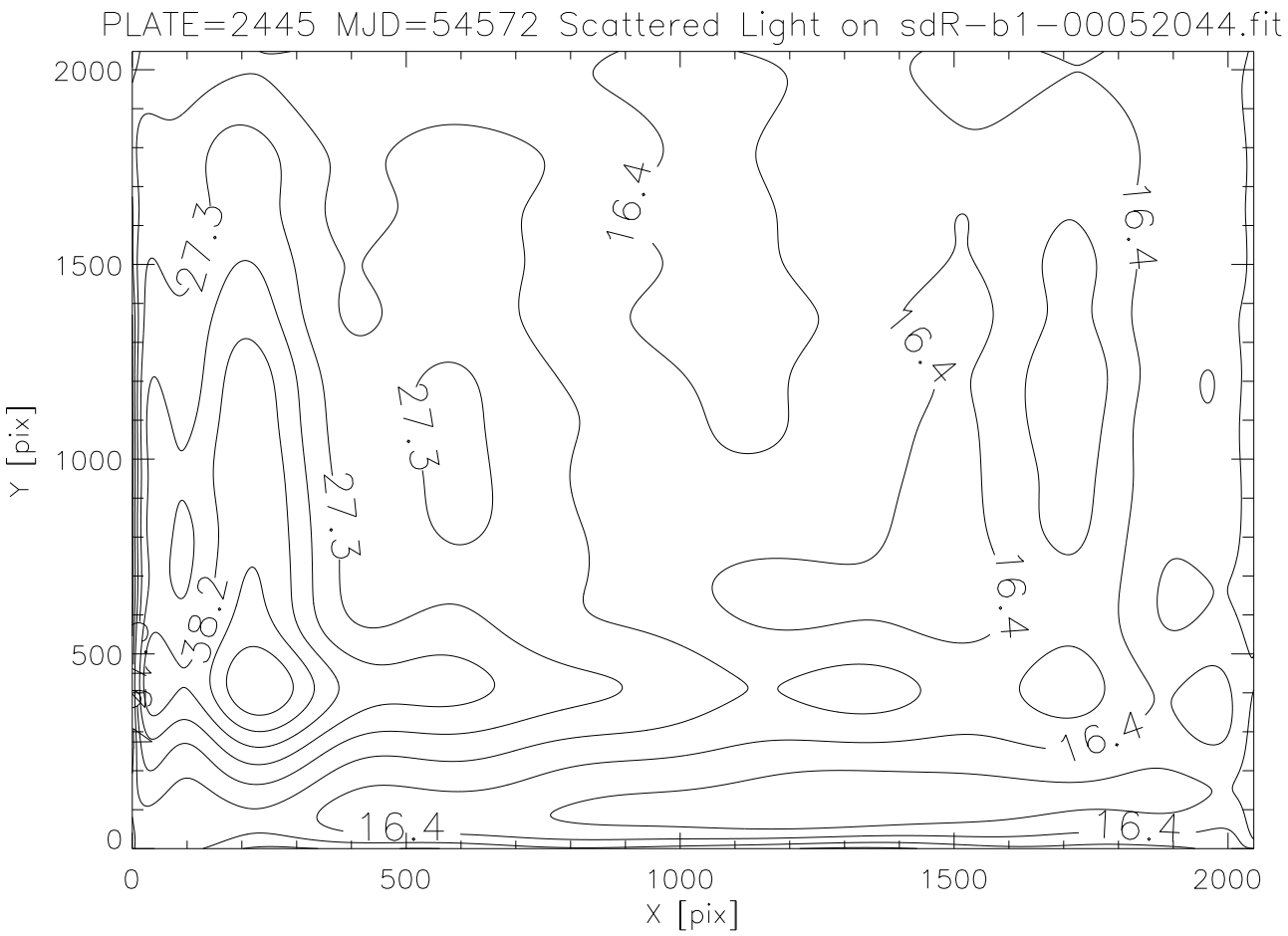

PLATE=2445 MJD=54572 sdR-b1-00052043.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 31.69 %
Fiber number
Focal Distance [mm]
Airmass

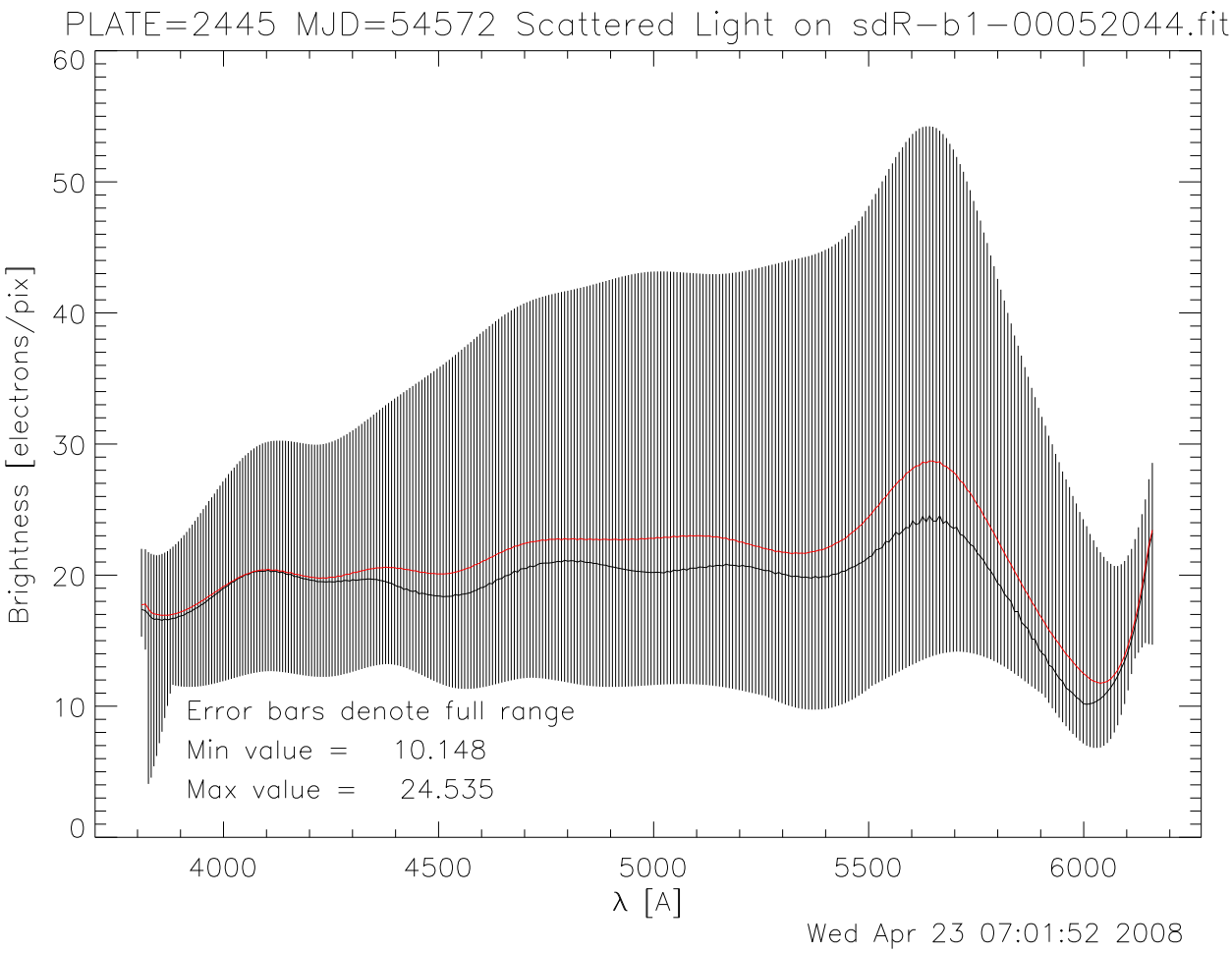

PLATE=2445 MJD=54572 sdR-b1-00052043.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Focal Distance [mm]
Airmass

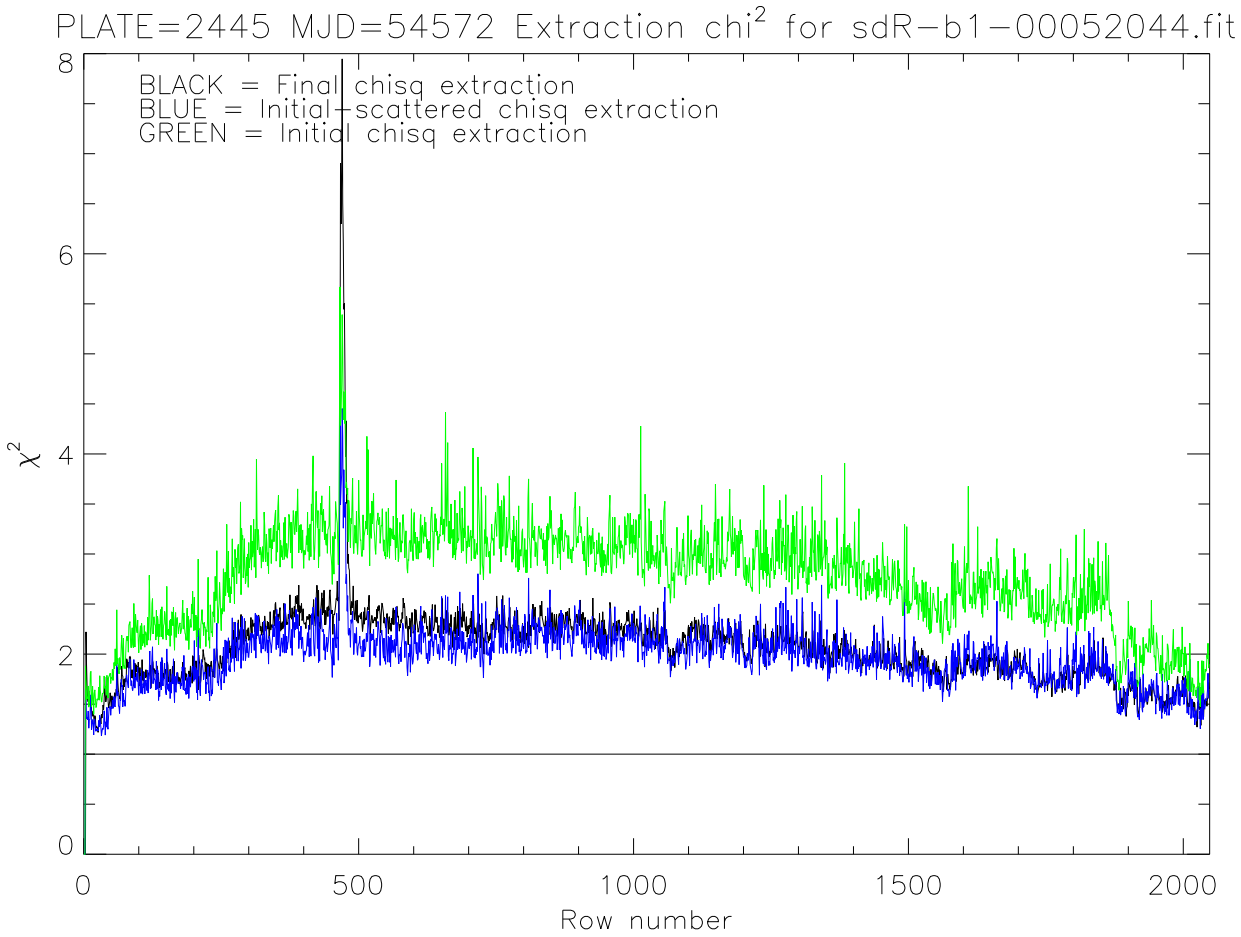

PLATE=2445 MJD=54572 Fiber-Flats for sdR-b1-00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.242
Max value = 1.235
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 06:58:47 2008

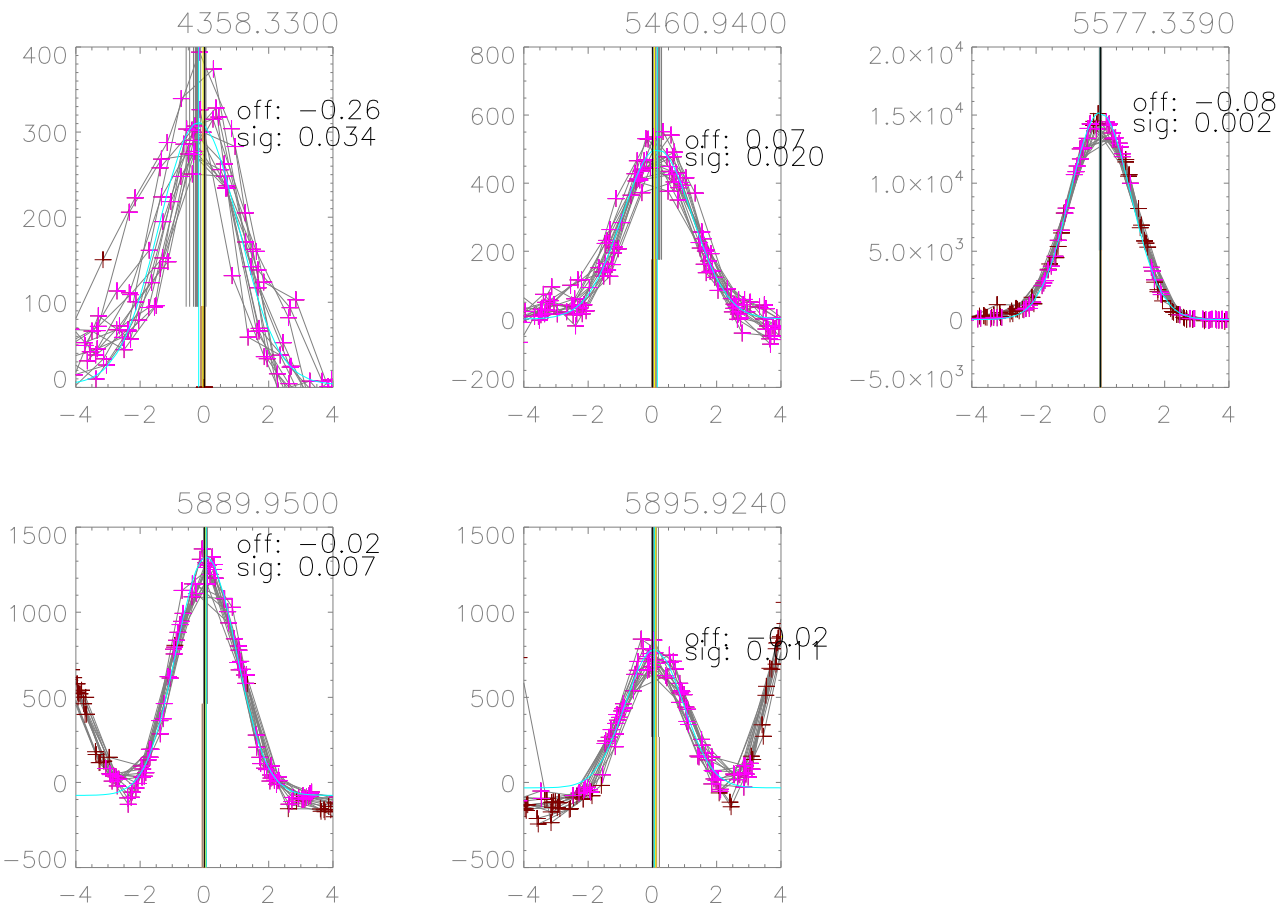

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR−b1−00052044.f
Y [pix]
X [pix]
0
500
1000
1500
2000
45.5
63.6
81.8

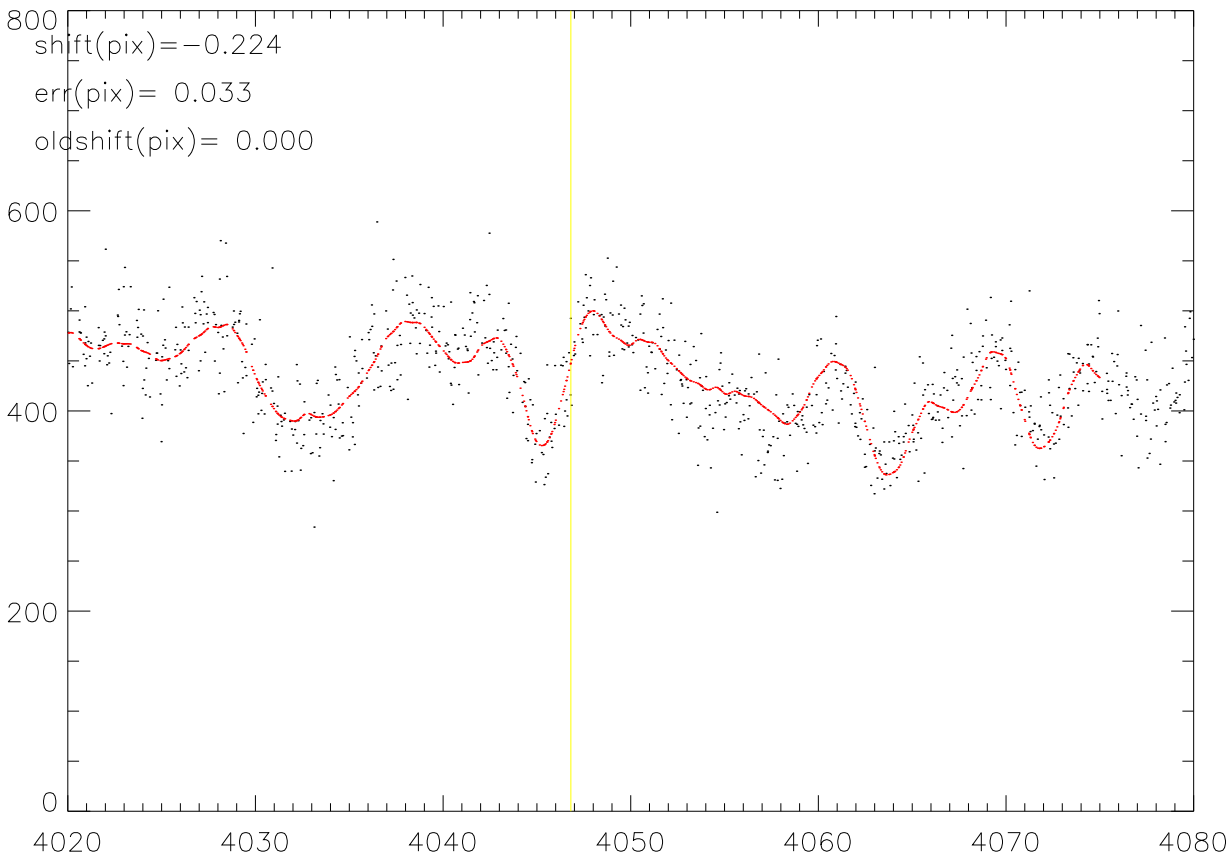

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b1-00052044.f
Brightness [electrons/pix]
100
80
60
40
20
0
Error bars denote full range
Min value = 27.656
Max value = 61.677
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 06:59:37 2008

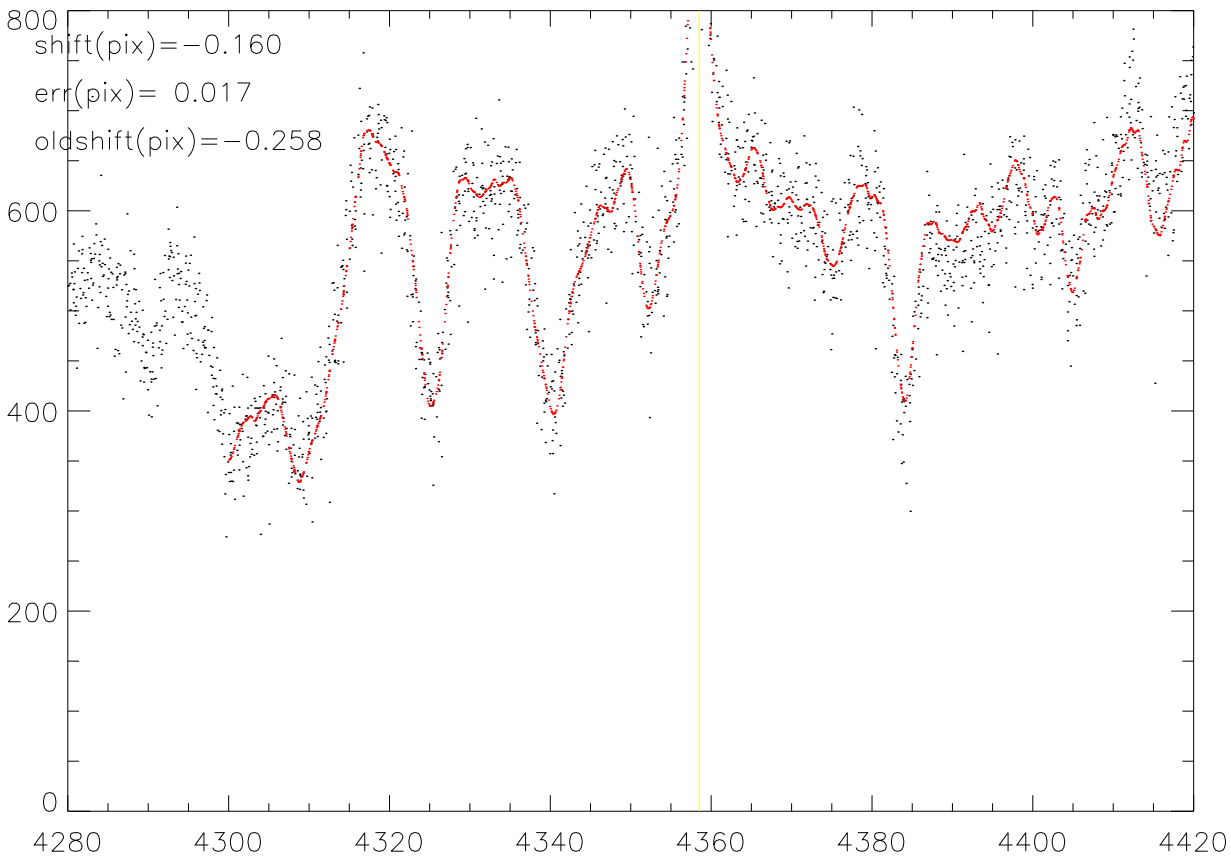

PLATE=2445 MJD=54572 Scattered Light on sdR-b1-00052044.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
38.2
27.3
16.4
0

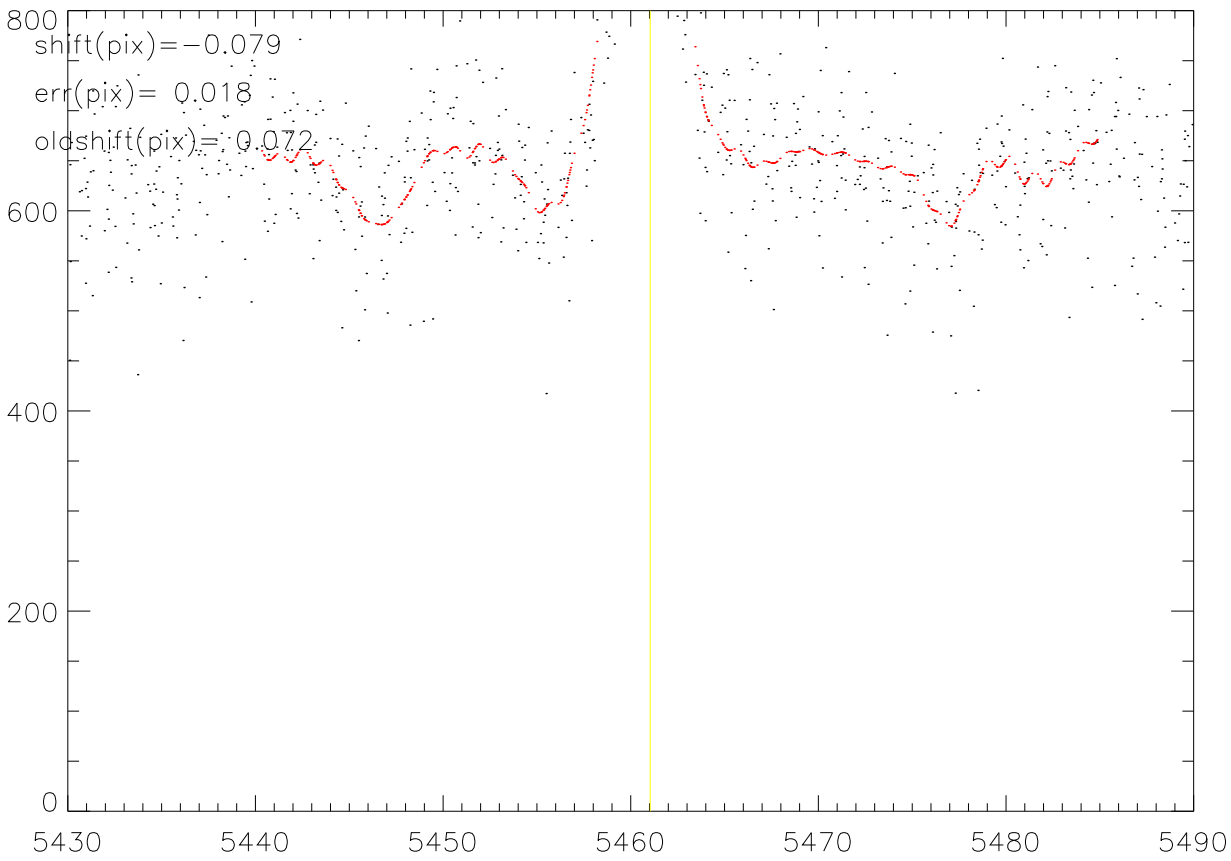

PLATE=2445 MJD=54572 Scattered Light on sdR-b1-00052044.fit
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 10.148
Max value = 24.535
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:01:52 2008

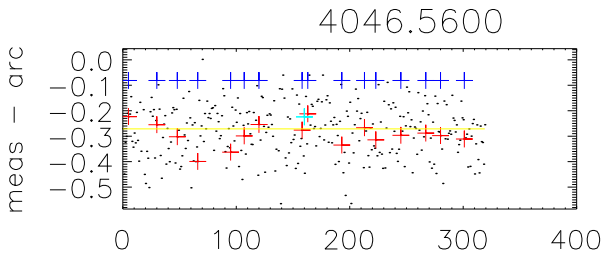

PLATE=2445 MJD=54572 Extraction chi^2 for sdR-b1-00052044.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

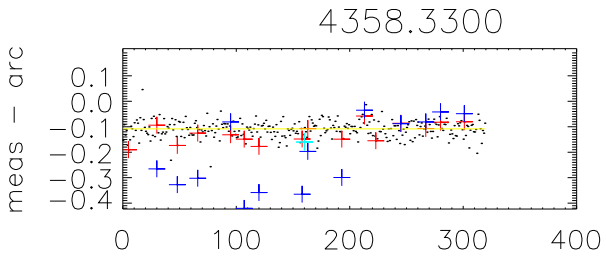

4358.3300
off: −0.26
sig: 0.034
5460.9400
off: 0.07
sig: 0.020
5577.3390
off: −0.08
sig: 0.002
5889.9500
off: −0.02
sig: 0.007
5895.9240
off: −0.02
sig: 0.011

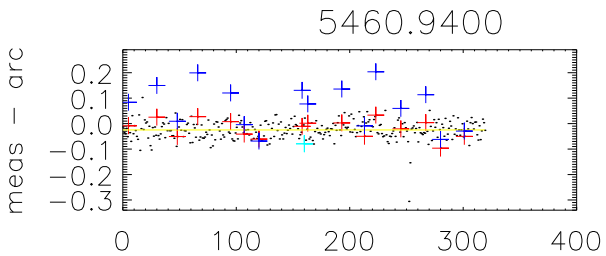

shift(pix)=−0.224
err(pix)= 0.033
oldshift(pix)= 0.000
800
600
400
200
0
4020
4030
4040
4050
4060
4070
4080

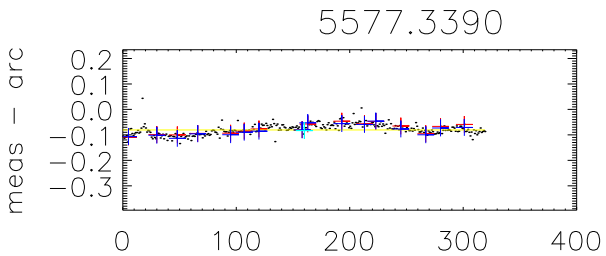

shift(pix)=−0.160
err(pix)= 0.017
oldshift(pix)=−0.258
800
600
400
200
0
4280
4300
4320
4340
4360
4380
4400
4420

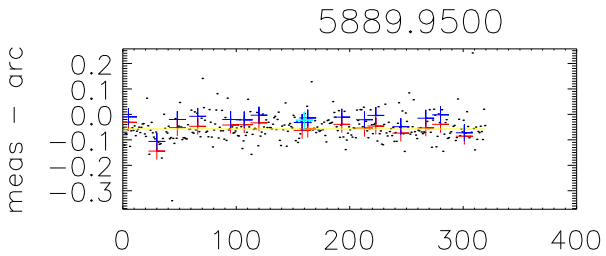

shift(pix)=−0.079
err(pix)= 0.018
oldshift(pix)= 0.072
800
600
400
200
0
5430
5440
5450
5460
5470
5480
5490

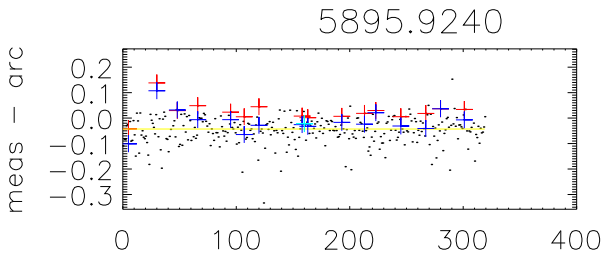

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

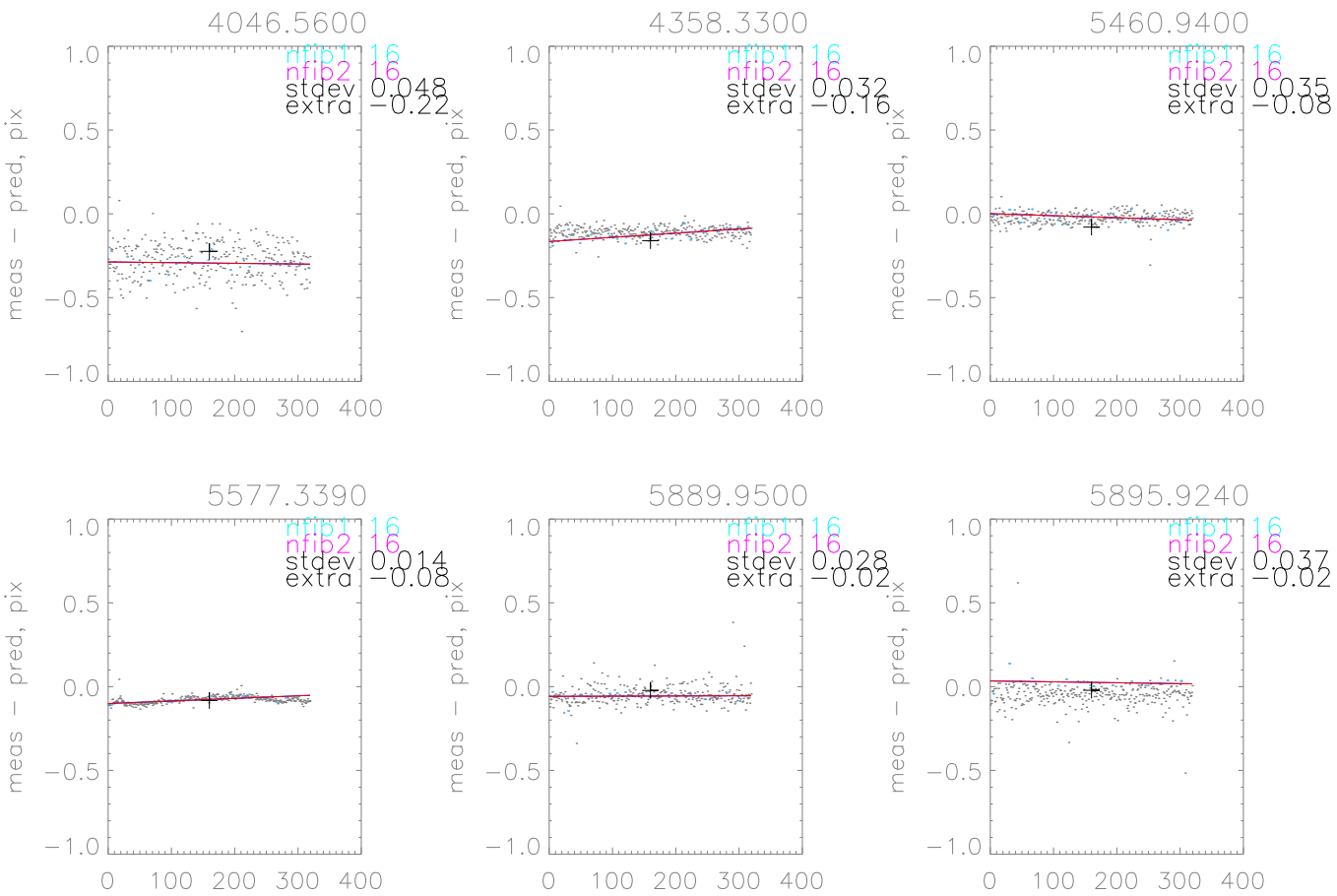

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

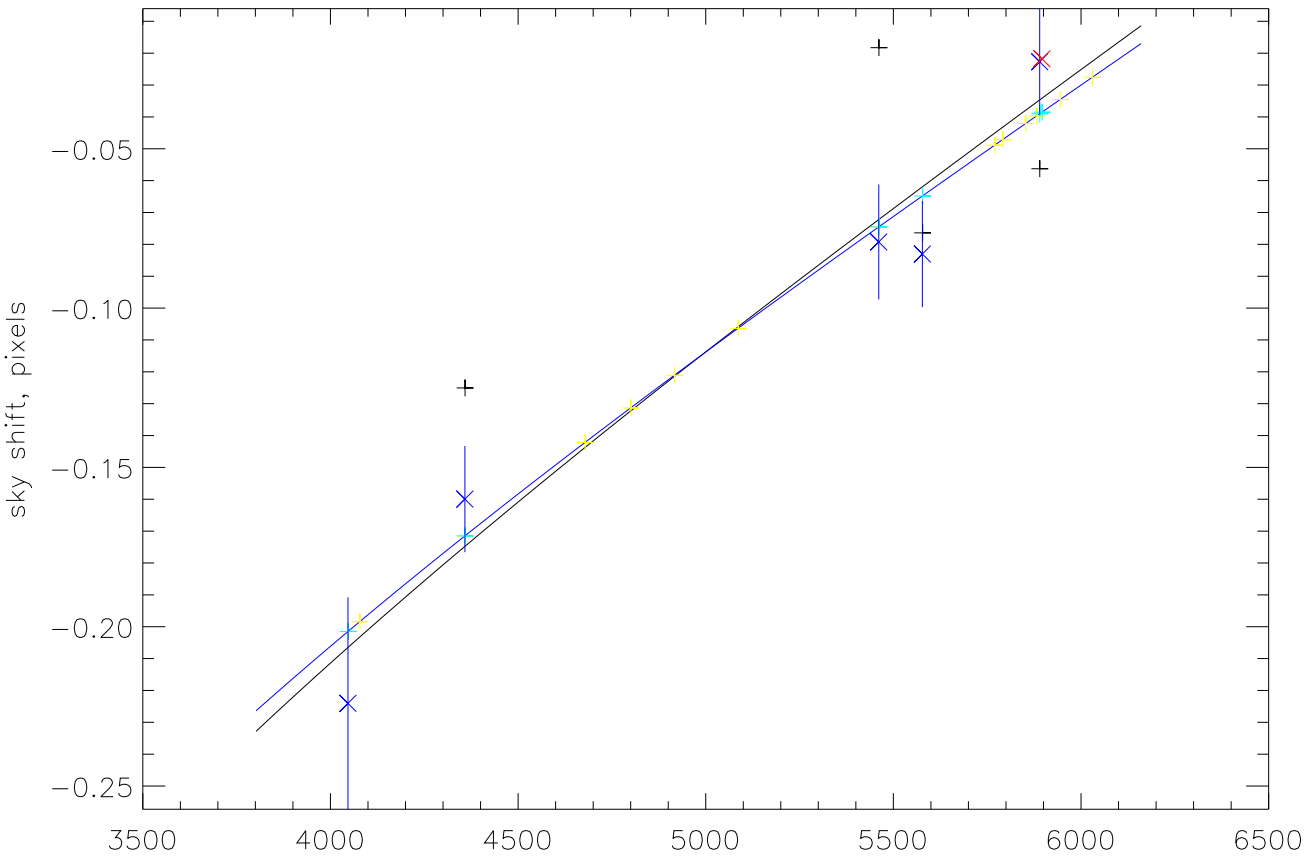

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

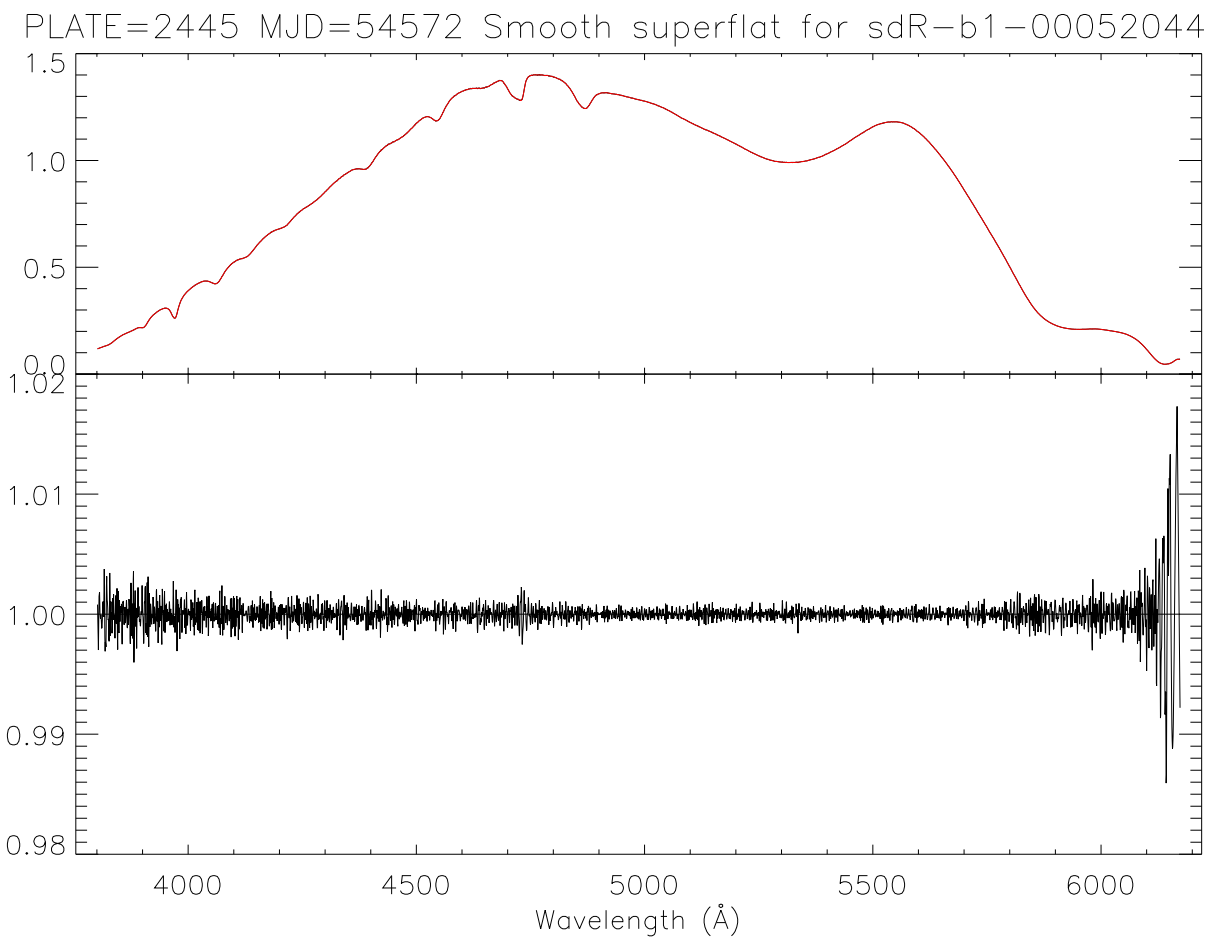

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

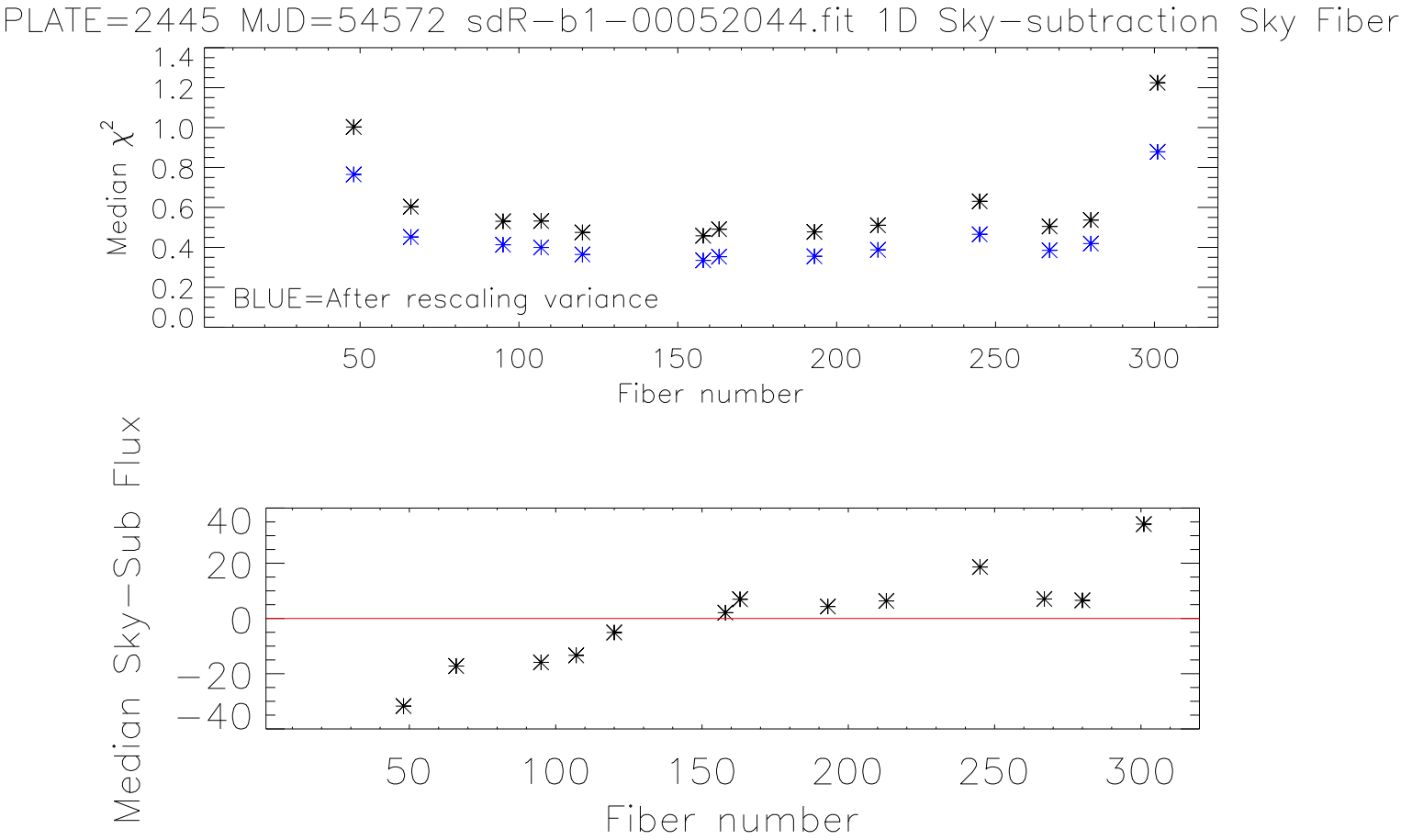

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

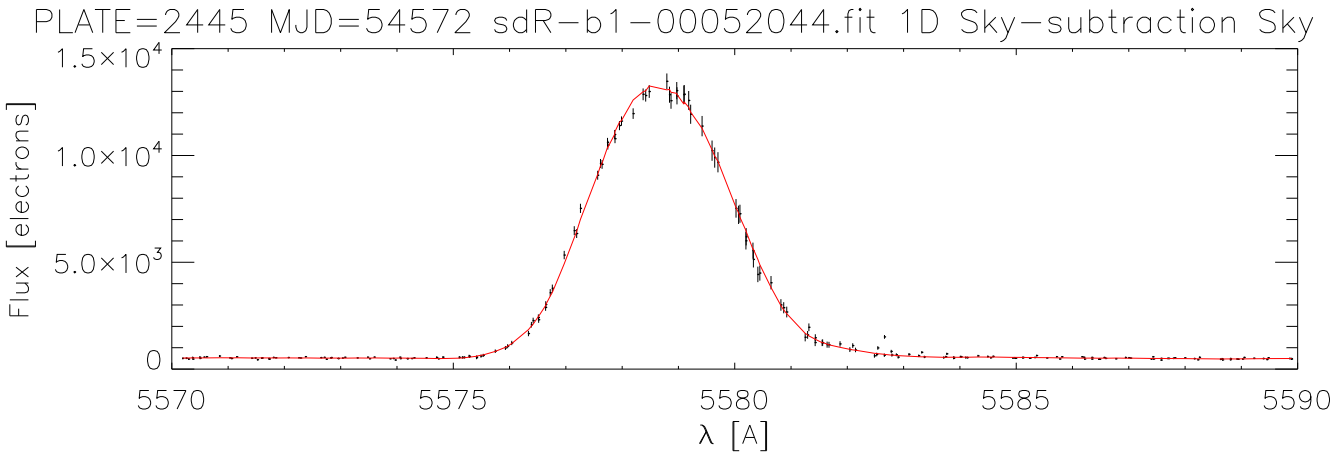

4046.5600
nfib1 16
nfib2 16
stdev 0.048
extra −0.22
4358.3300
nfib1 16
nfib2 16
stdev 0.032
extra −0.16
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra −0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

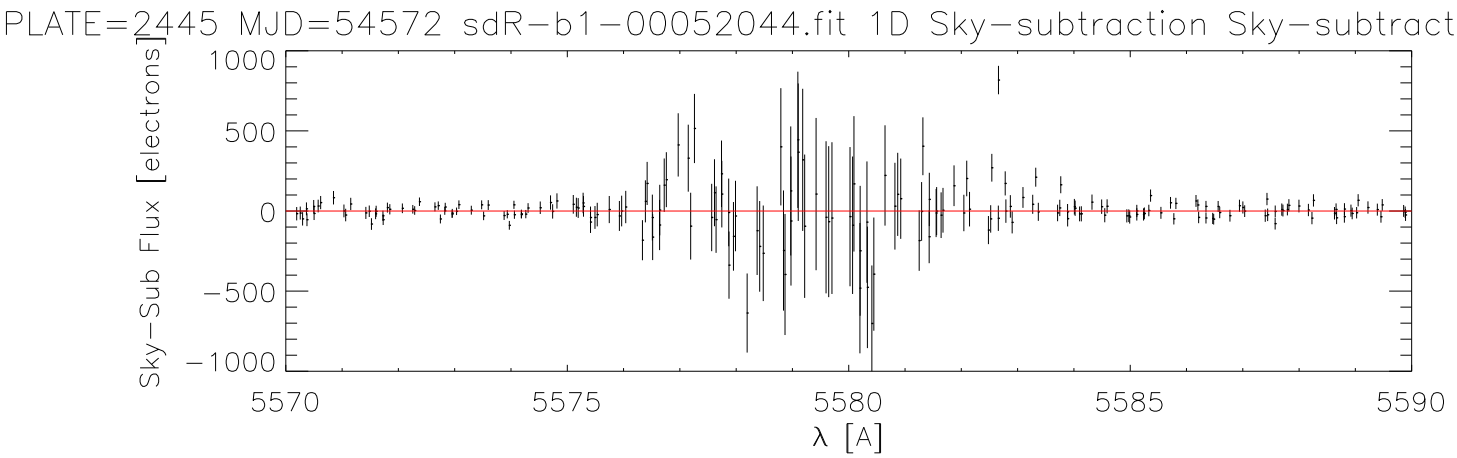

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500

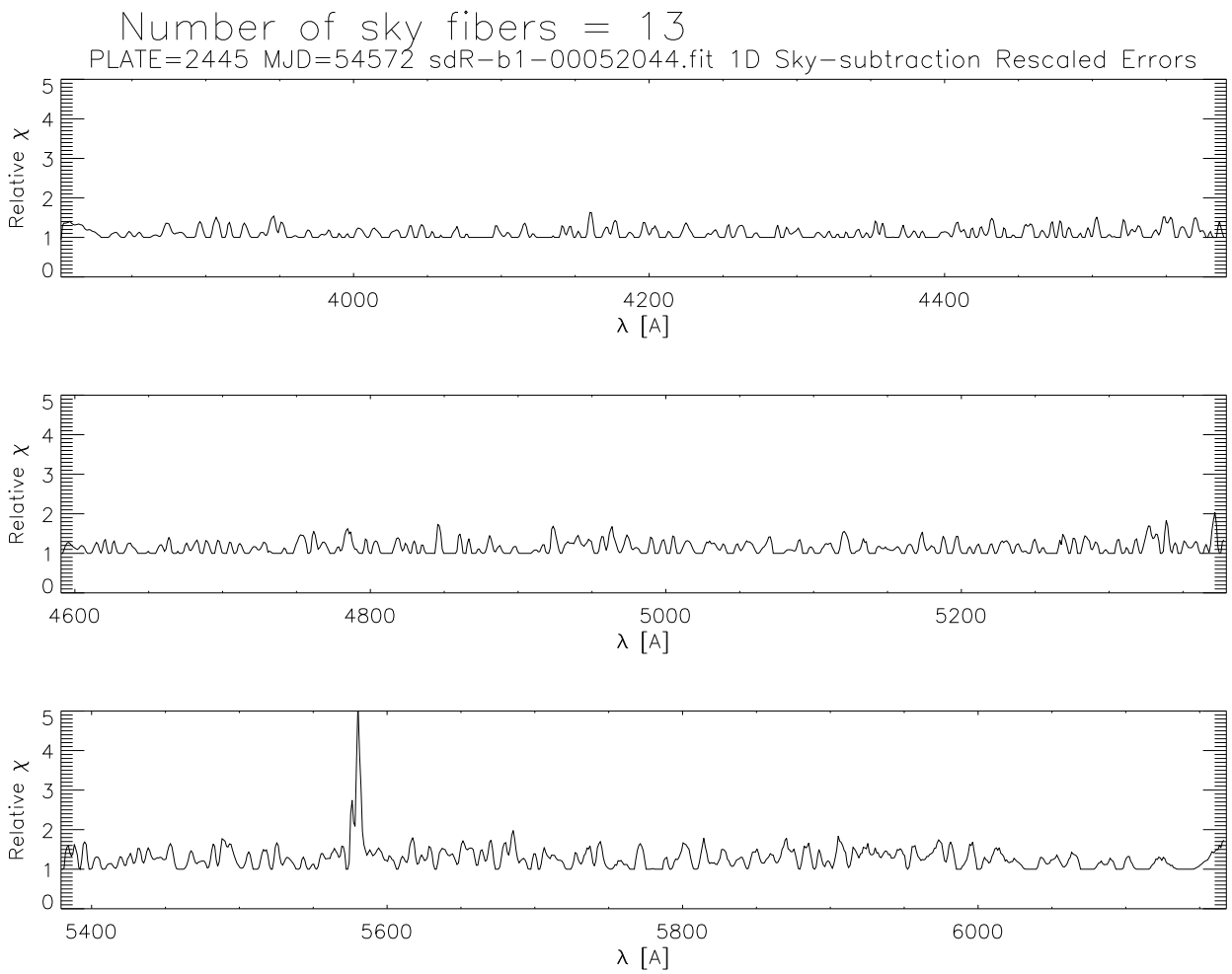
es= −0.0000

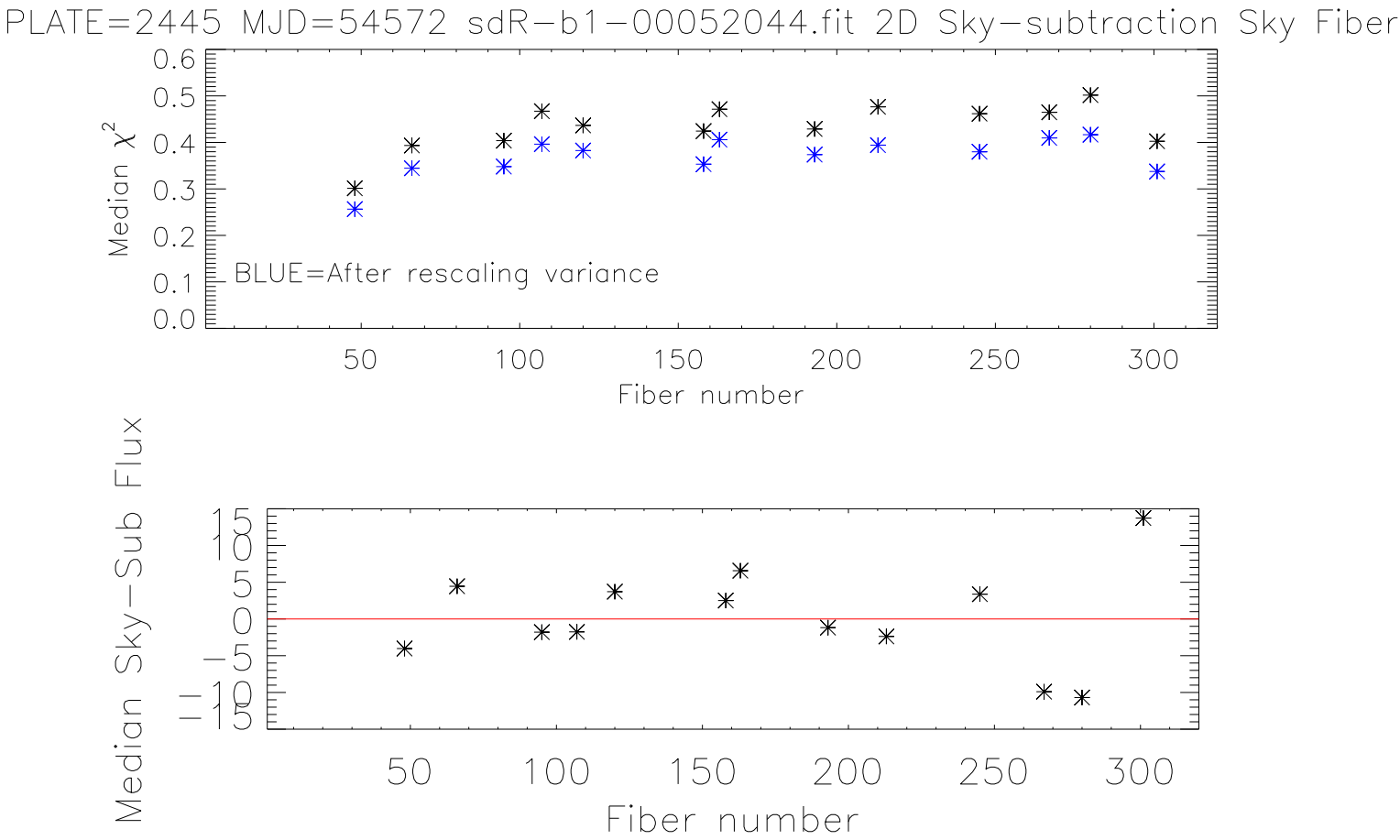

PLATE=2445 MJD=54572 Smooth superflat for sdR−b1−00052044.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

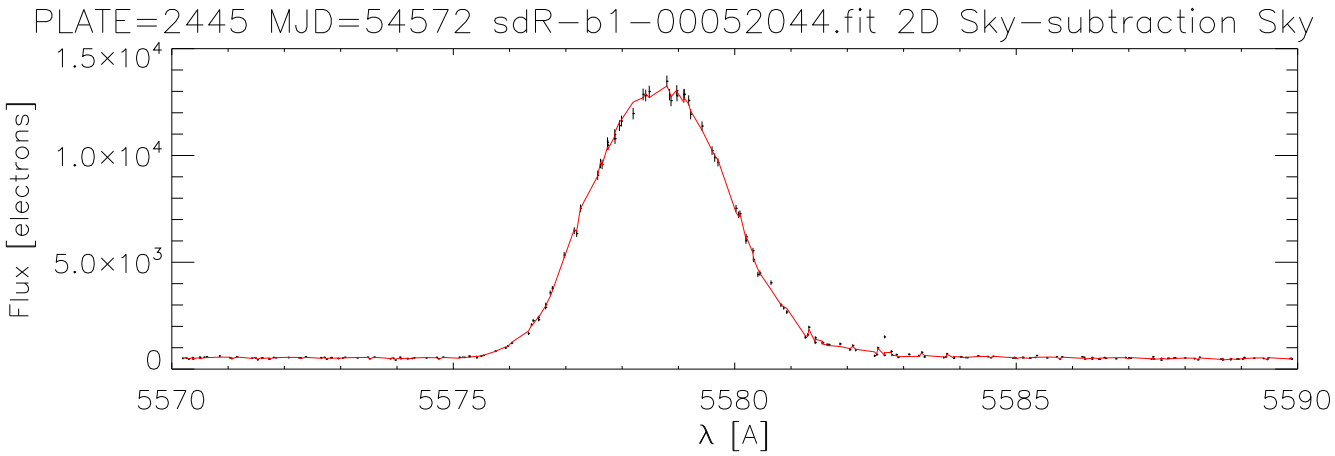

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

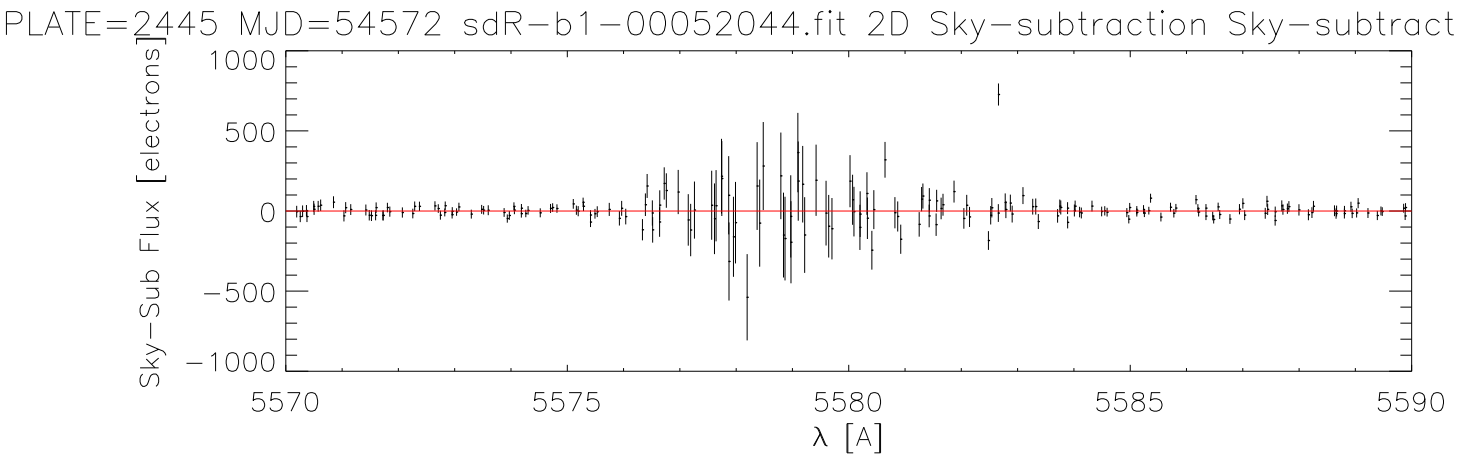

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

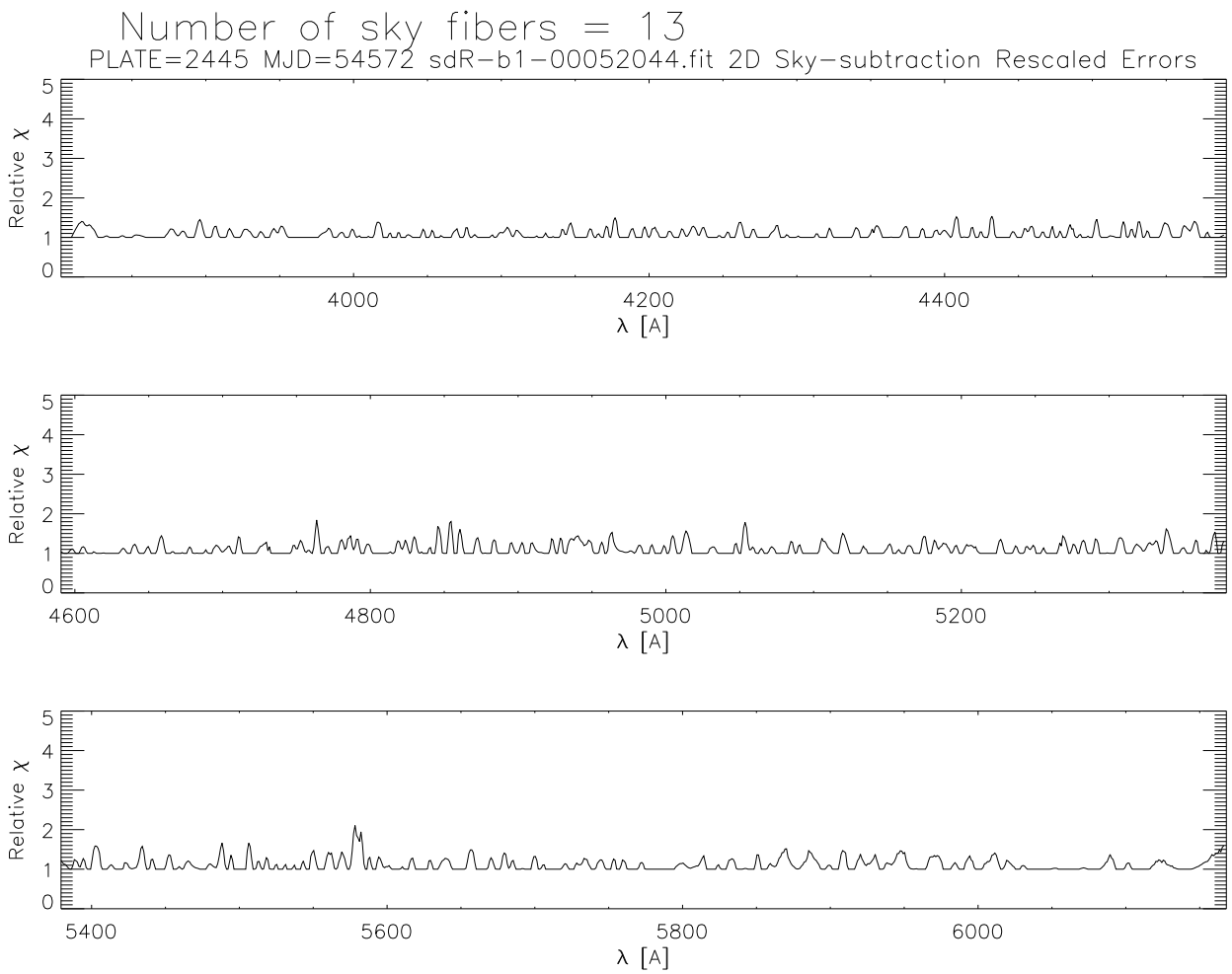

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

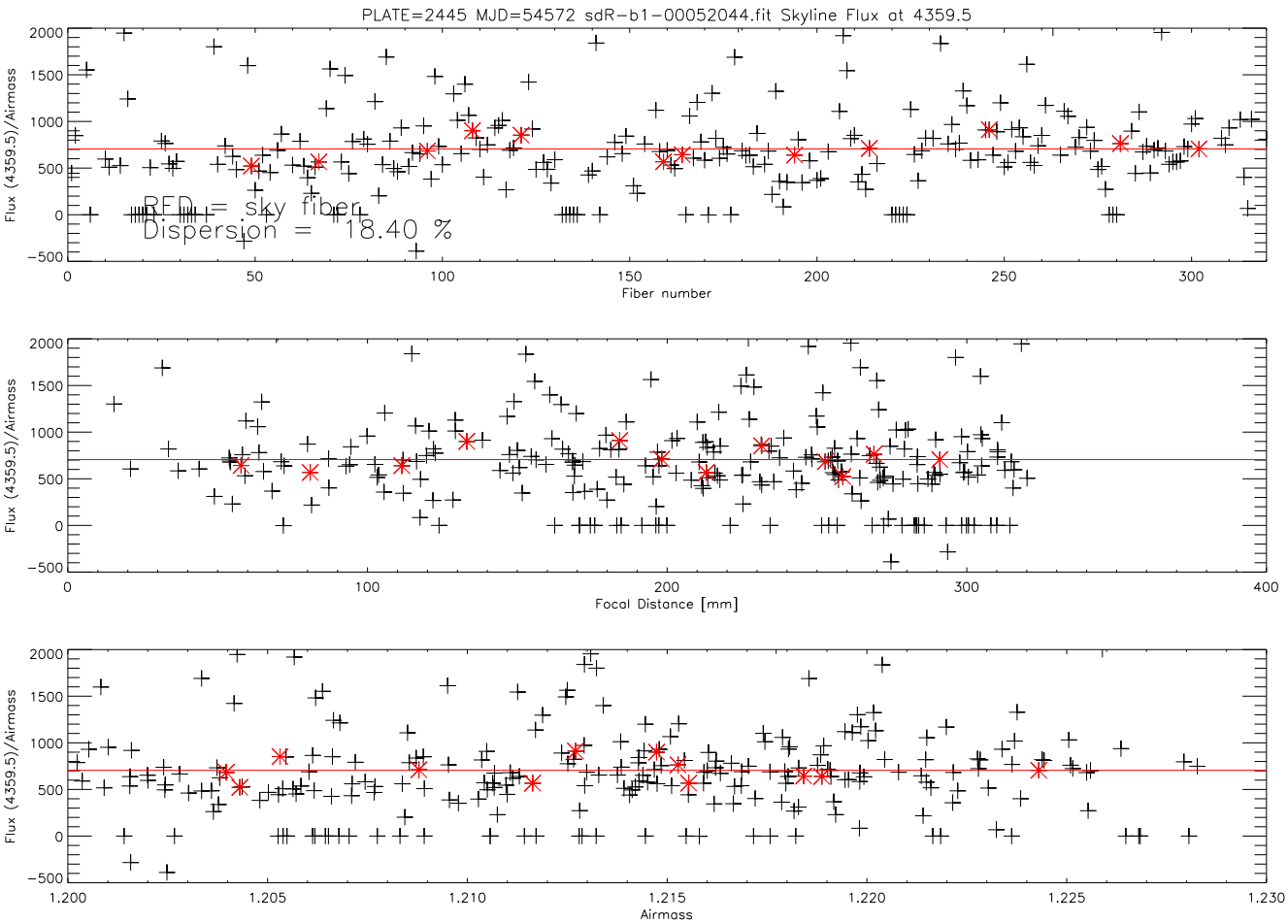

Number of sky fibers = 13
PLATE=2445 MJD=54572 sdR-b1-00052044.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

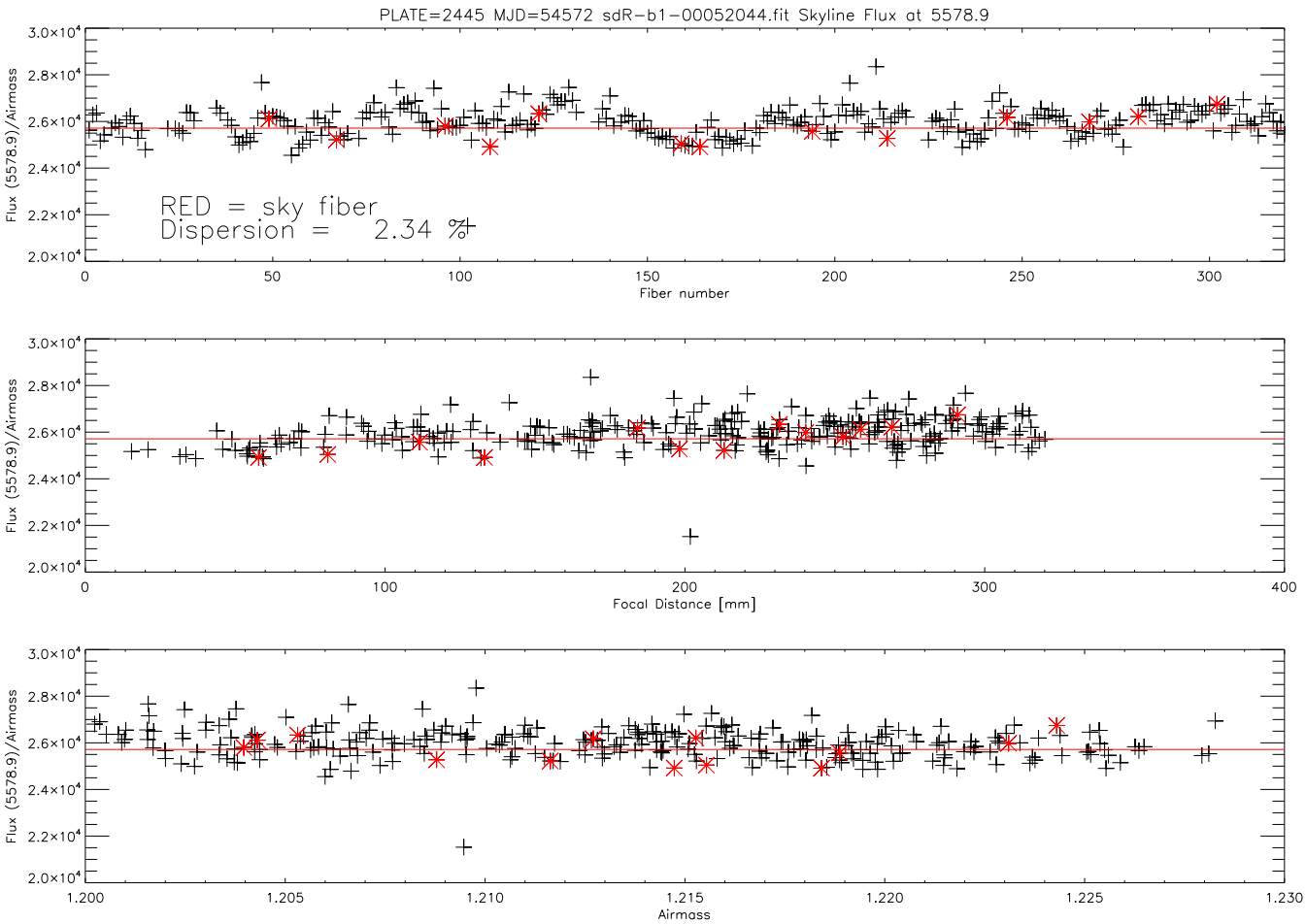

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

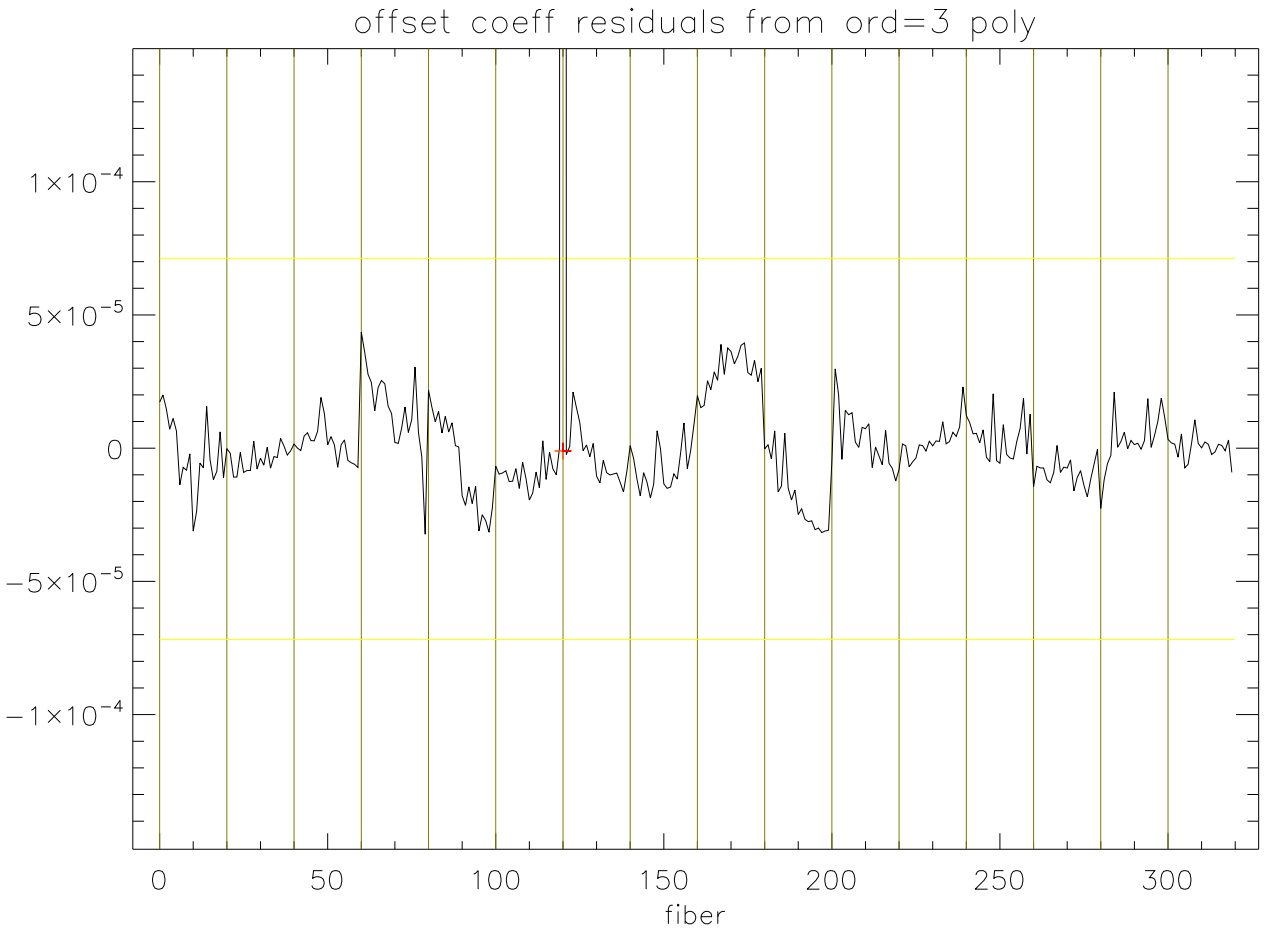

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

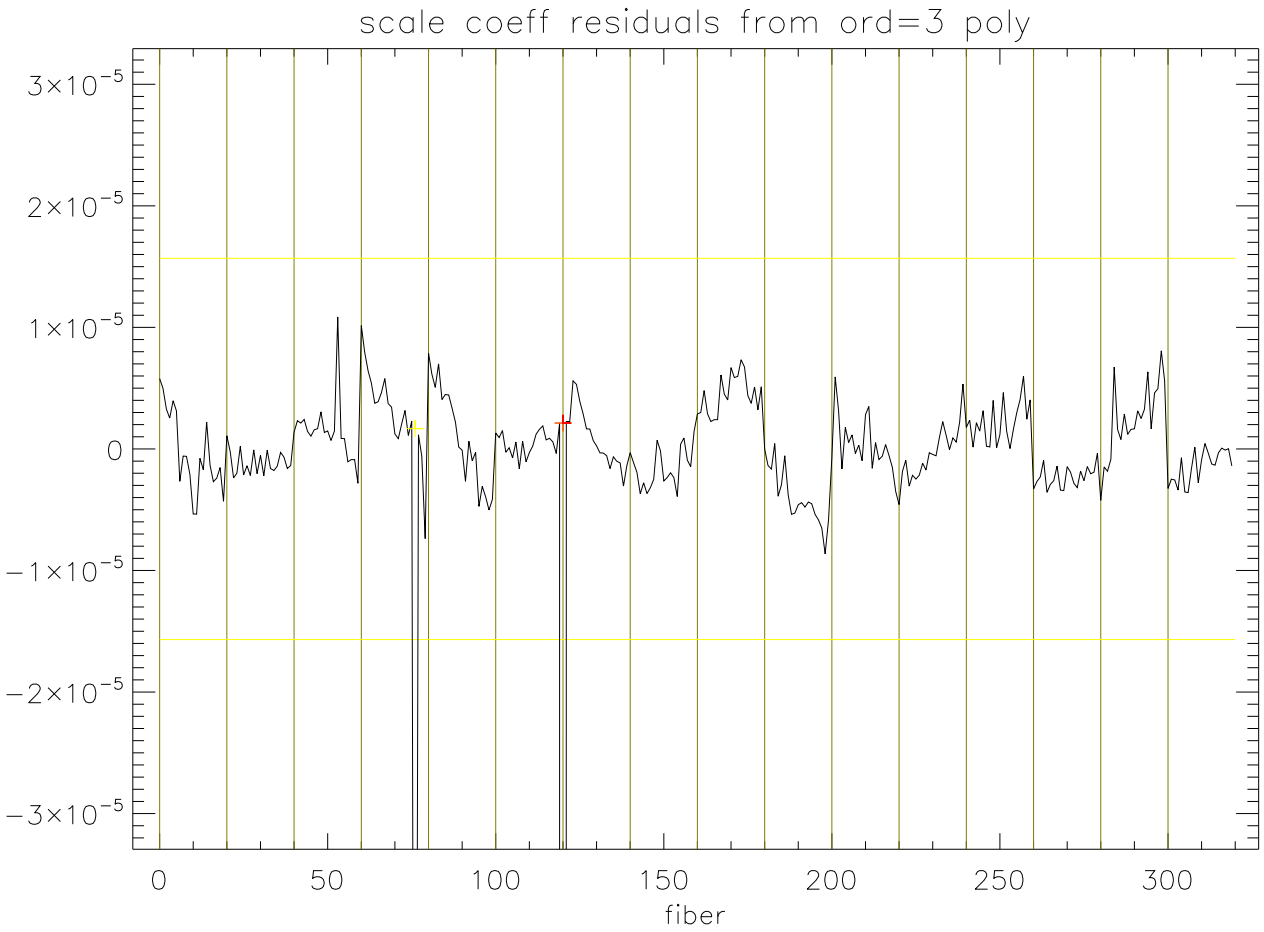

PLATE=2445 MJD=54572 sdR-b1-00052044.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

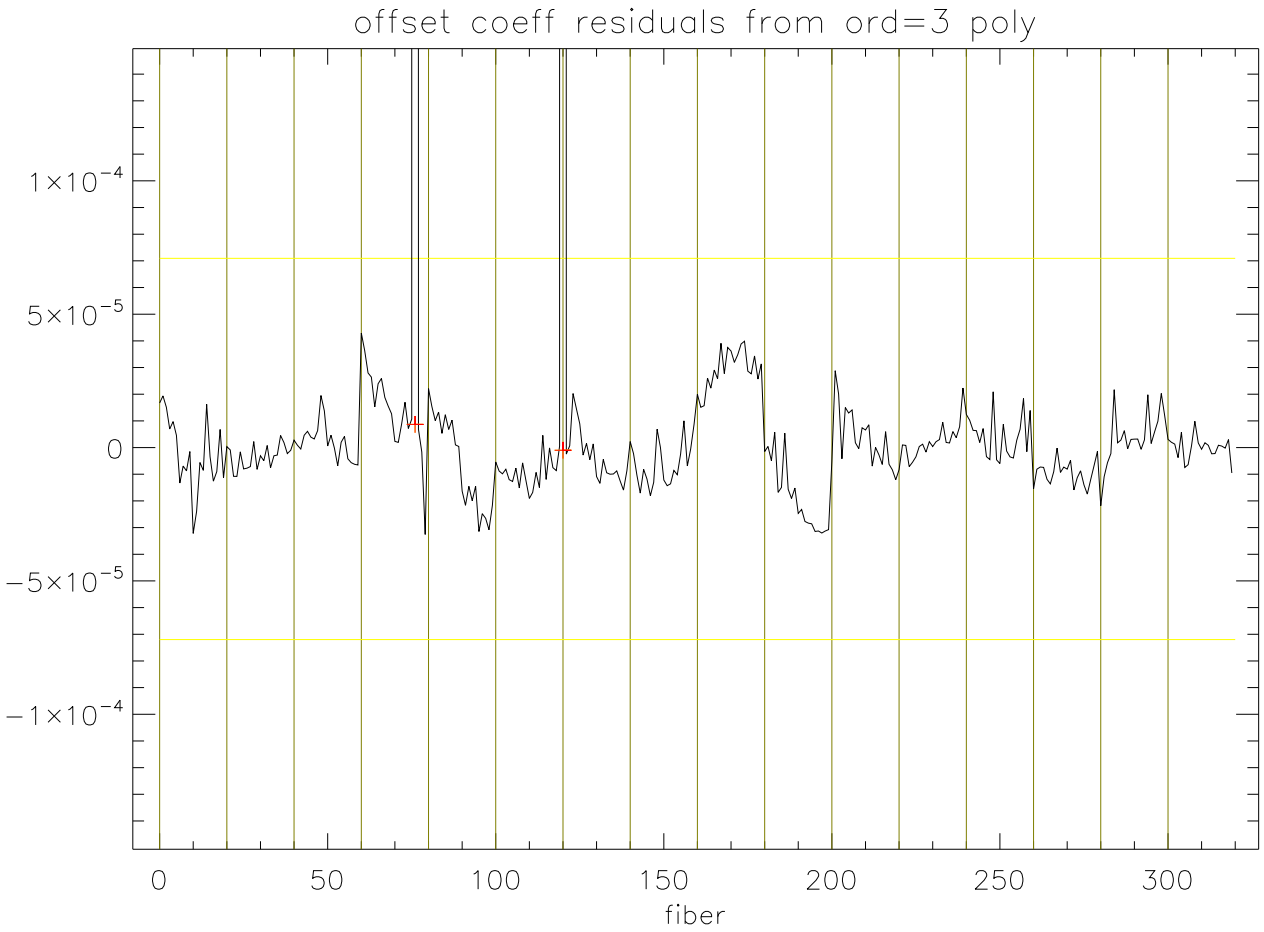

Number of sky fibers = 13
PLATE=2445 MJD=54572 sdR-b1-00052044.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

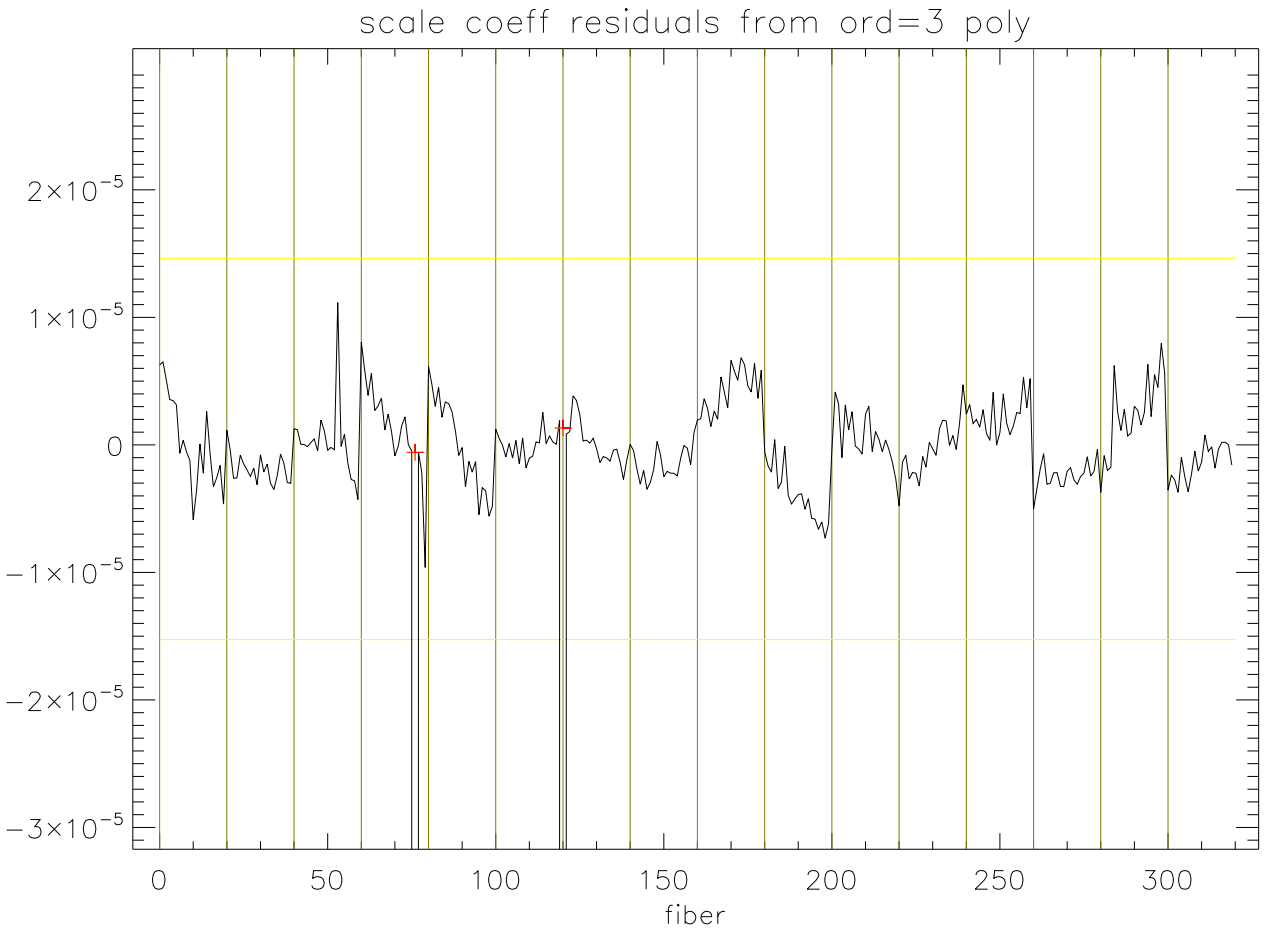

PLATE=2445 MJD=54572 sdR-b1-00052044.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 18.40 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

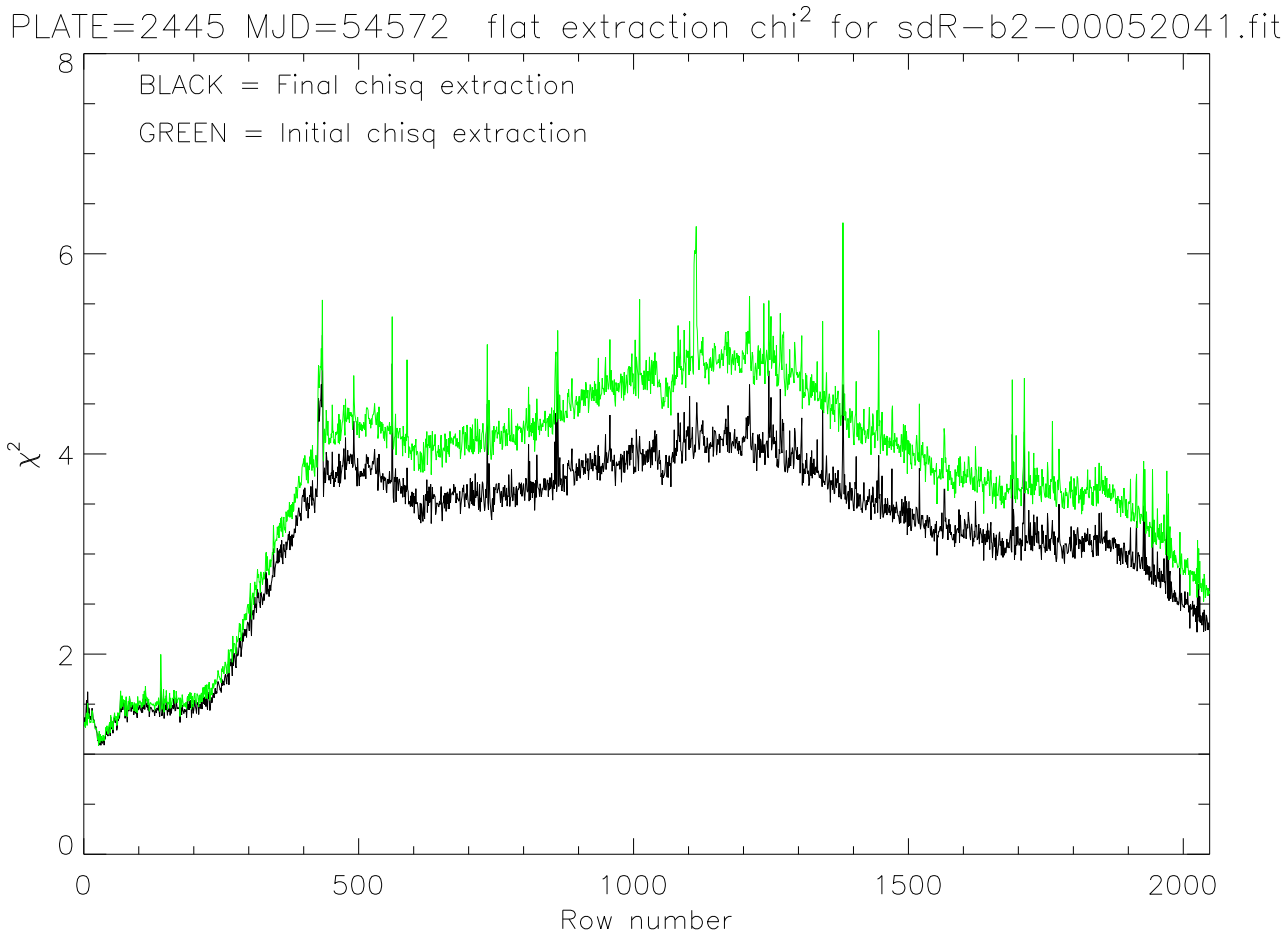

PLATE=2445 MJD=54572 sdR-b1-00052044.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.34 %
Fiber number
Focal Distance [mm]
Airmass

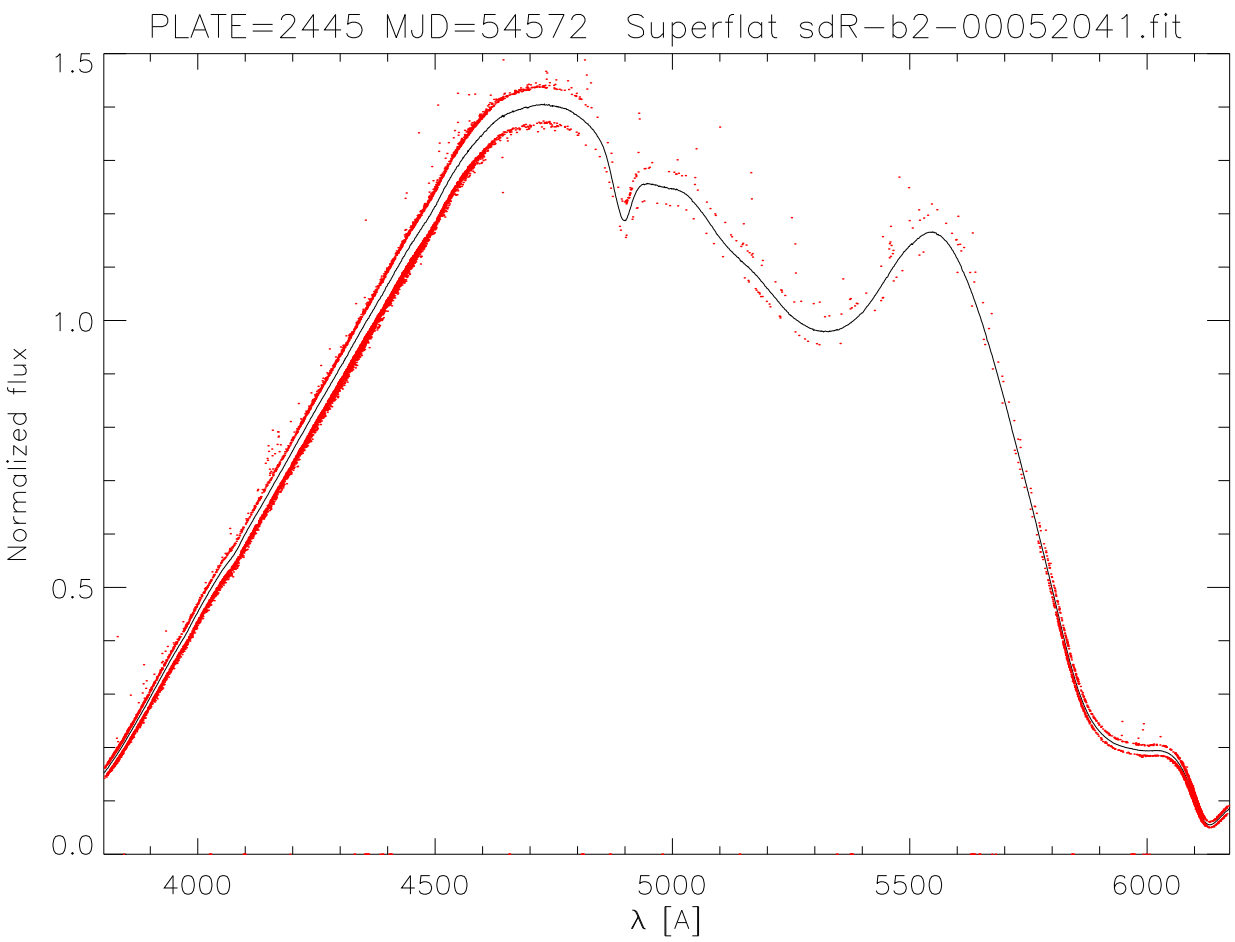

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

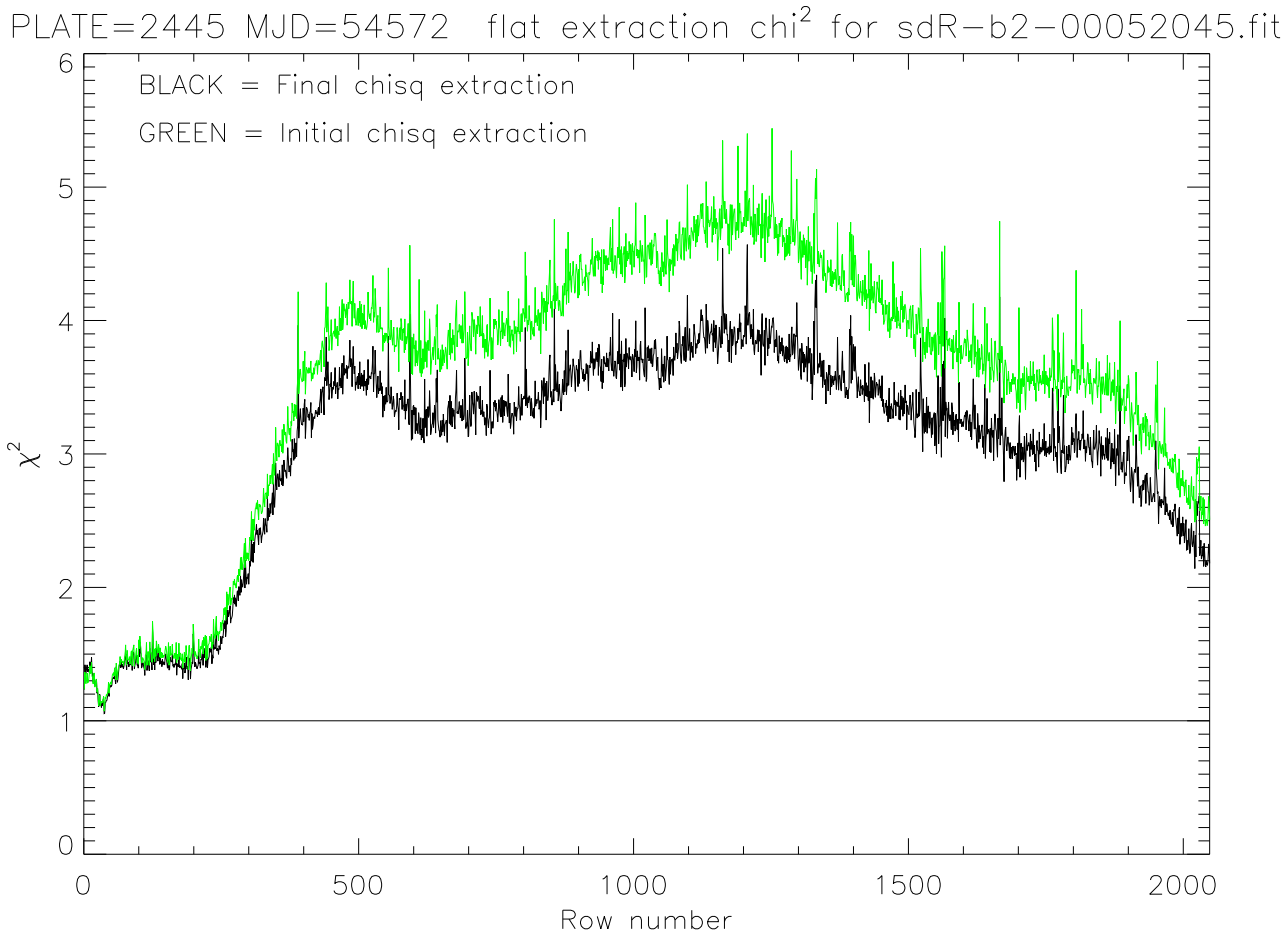

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

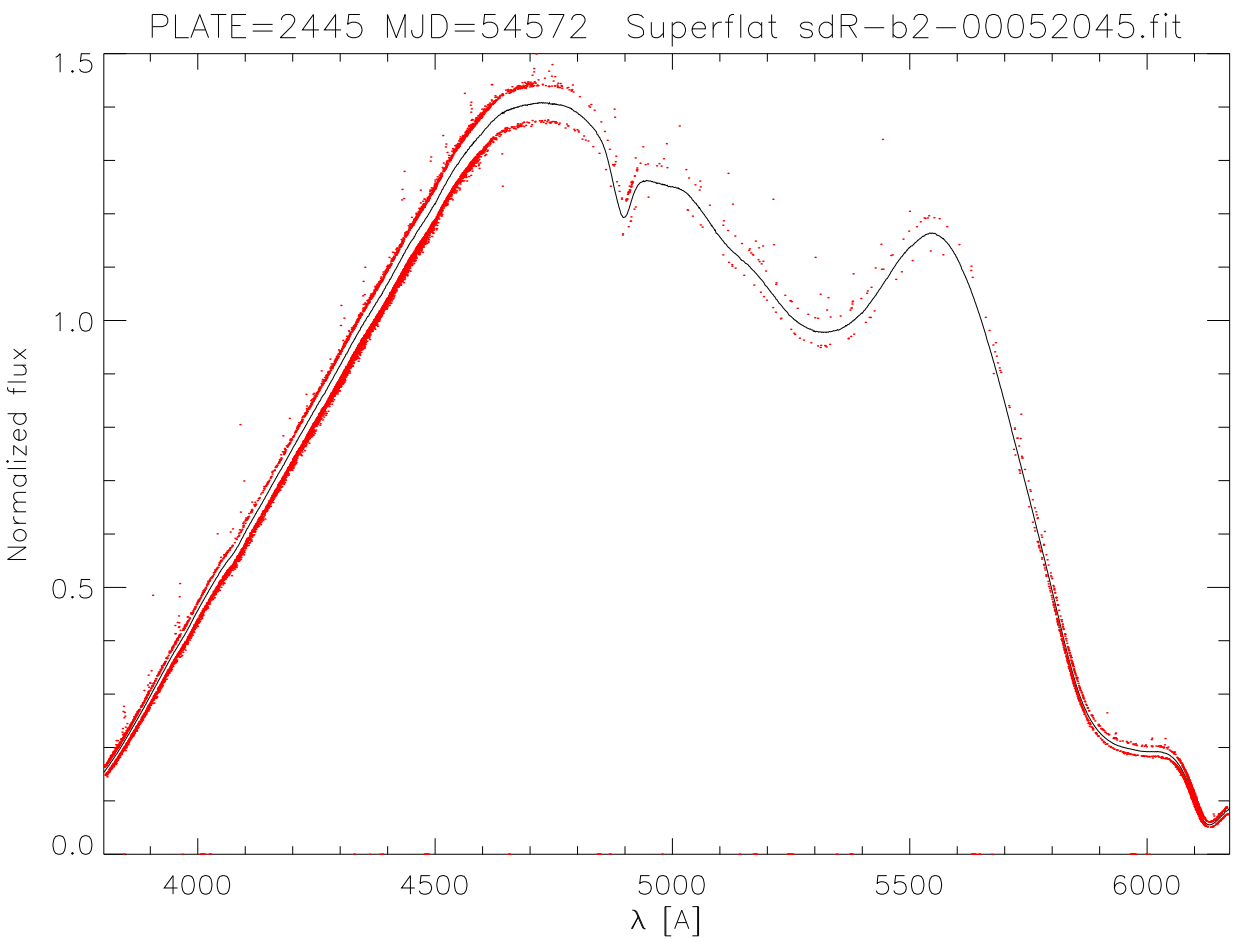

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

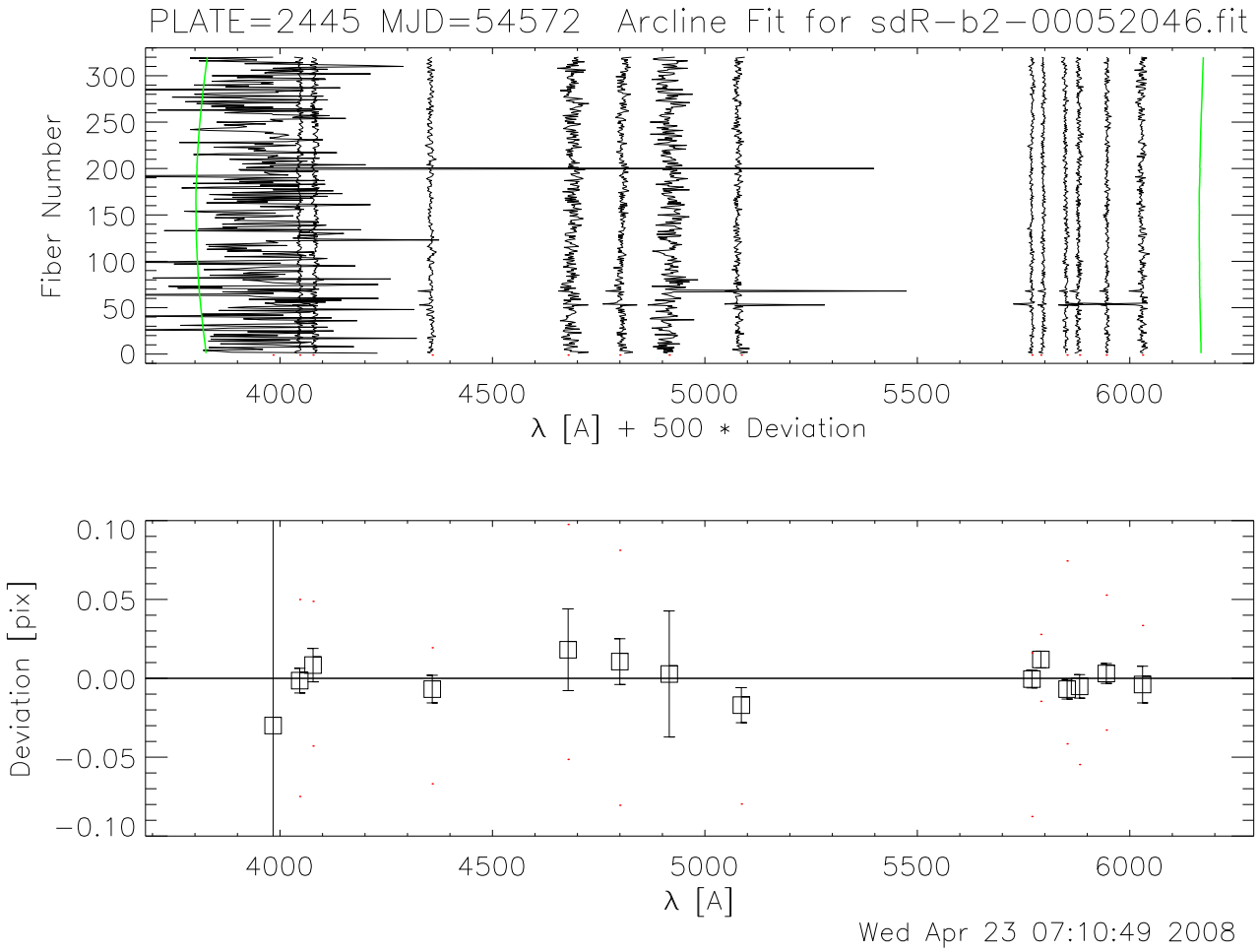

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

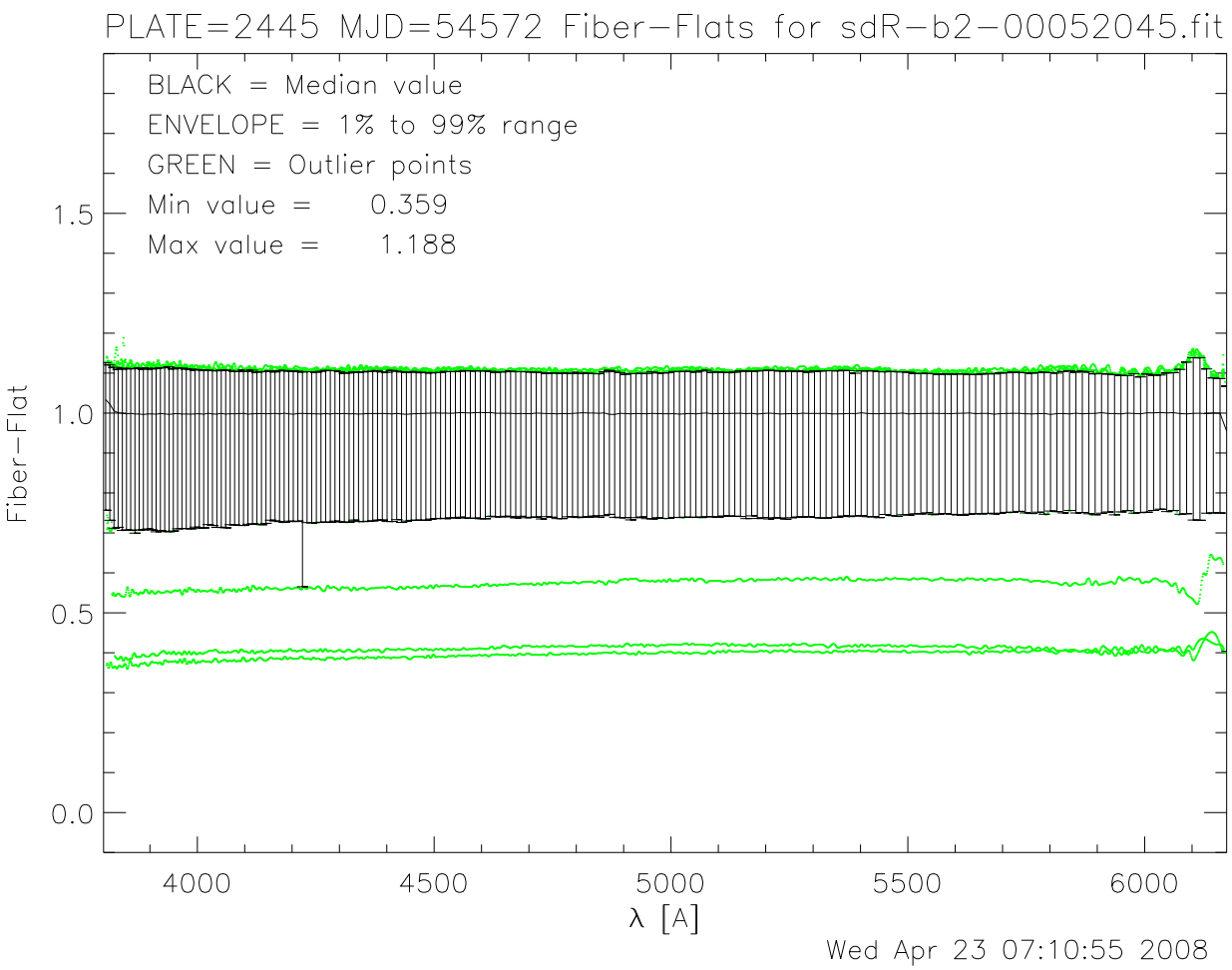

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−b2−00052041.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

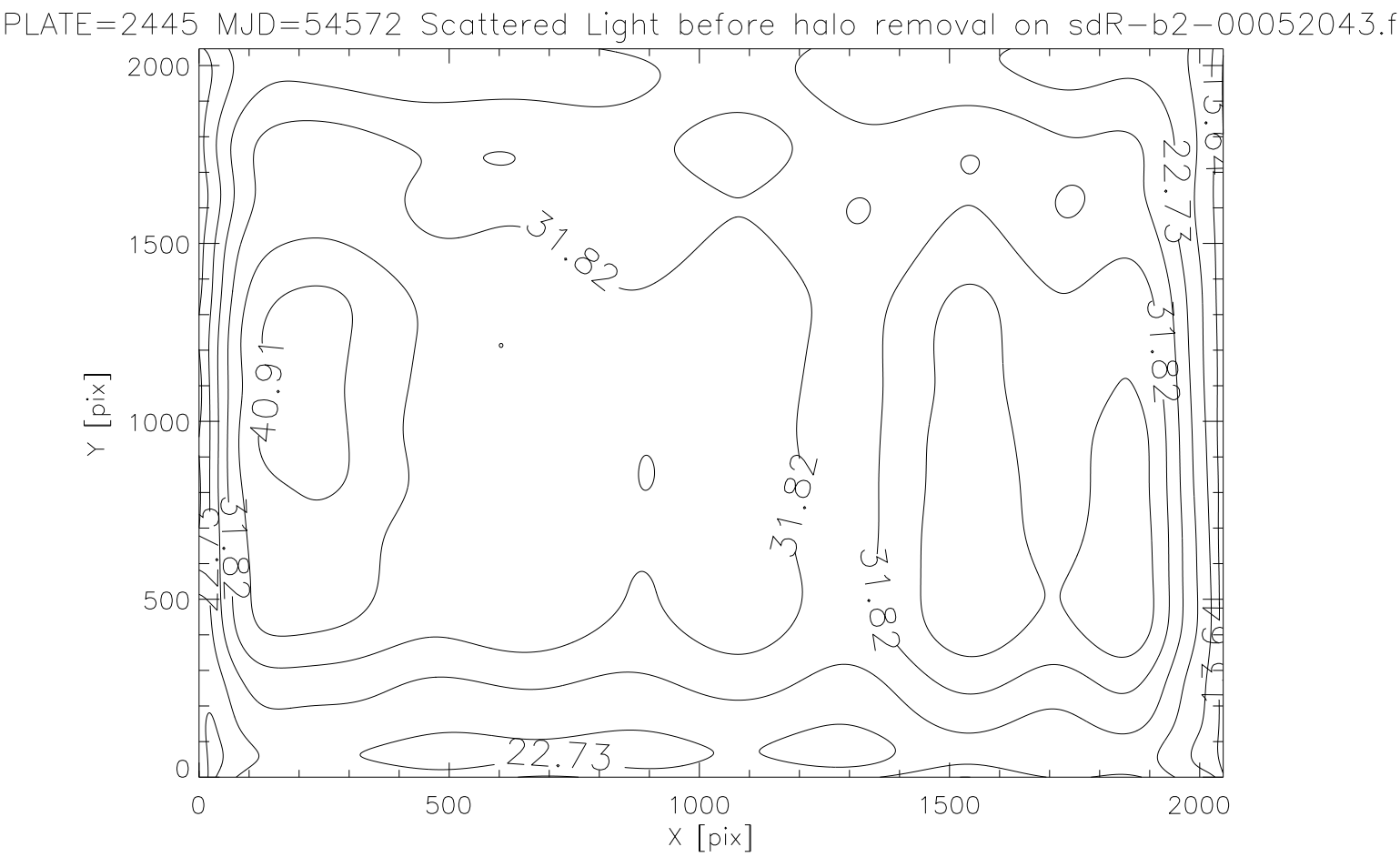

PLATE=2445 MJD=54572 Superflat sdR-b2-00052041.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

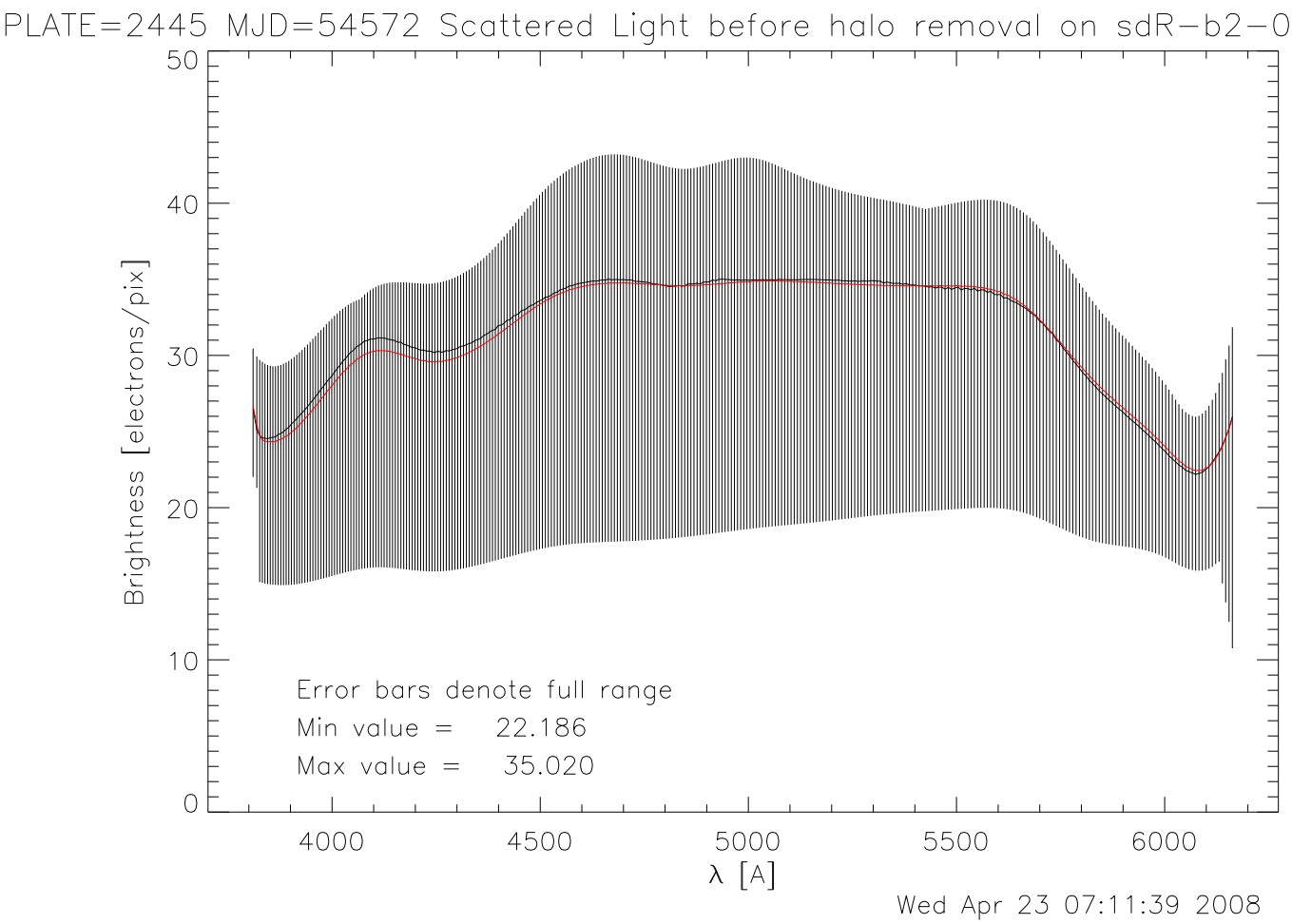

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−b2−00052045.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

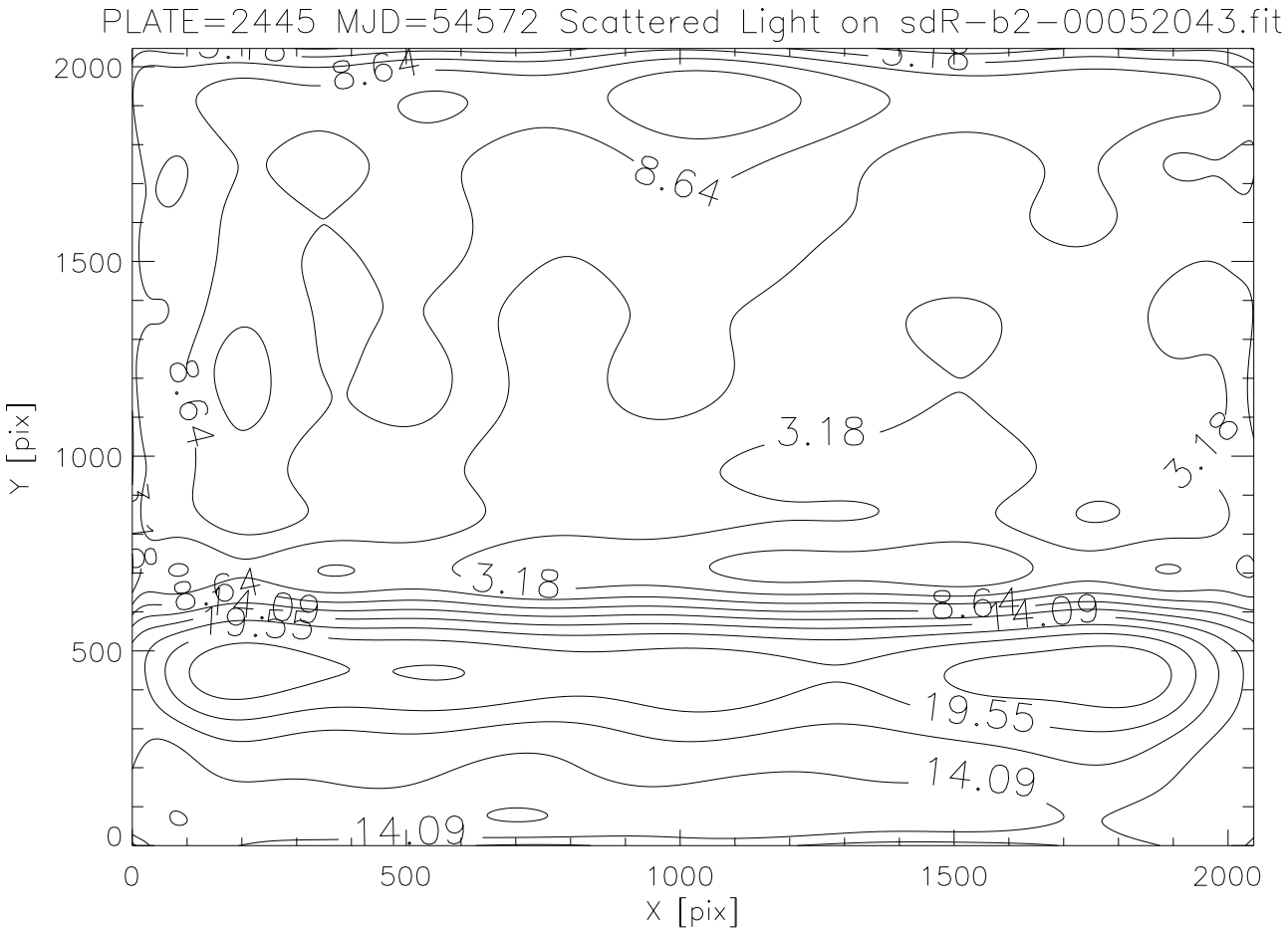

PLATE=2445 MJD=54572 Superflat sdR-b2-00052045.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

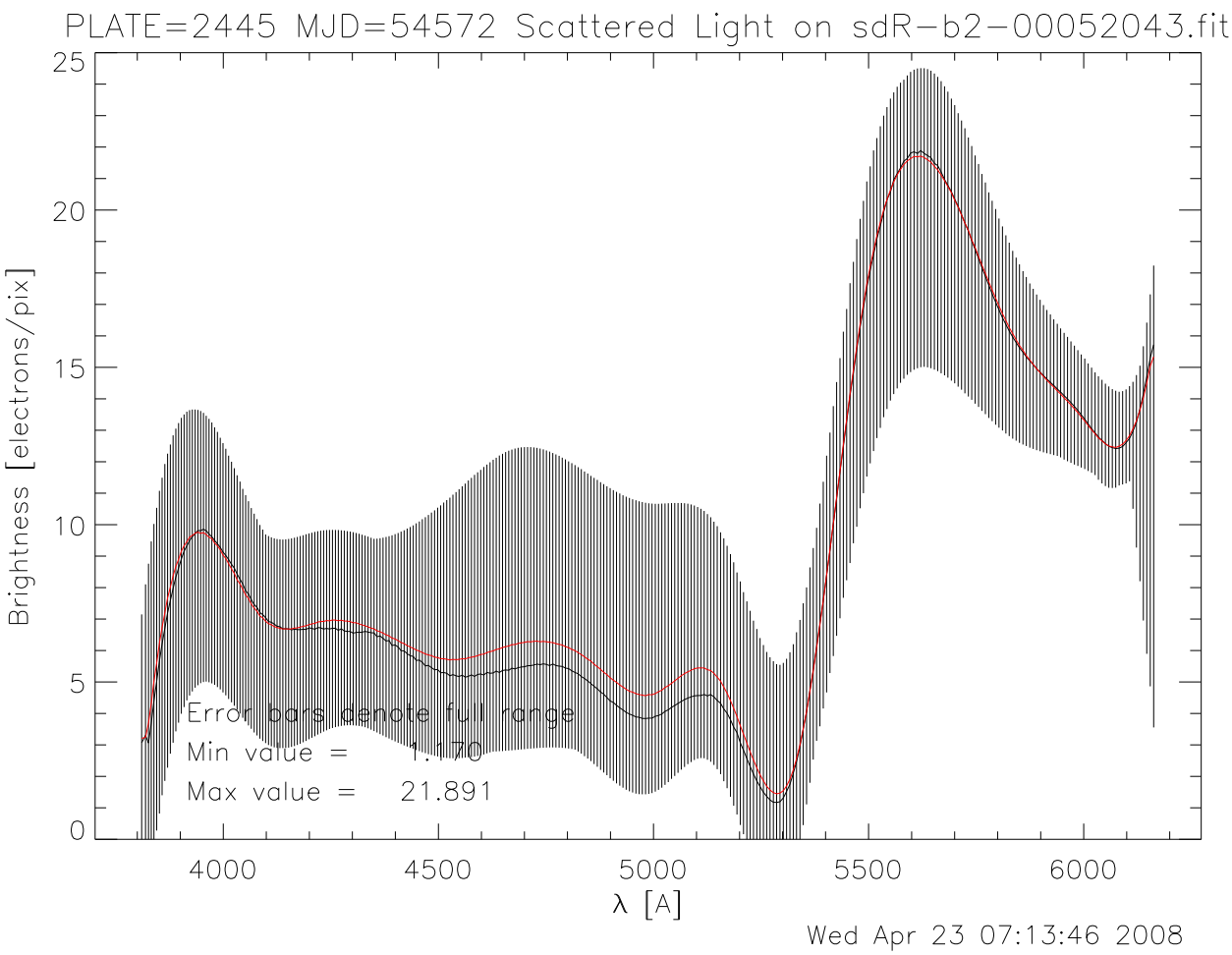

PLATE=2445 MJD=54572 Arcline Fit for sdR-b2-00052046.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:10:49 2008

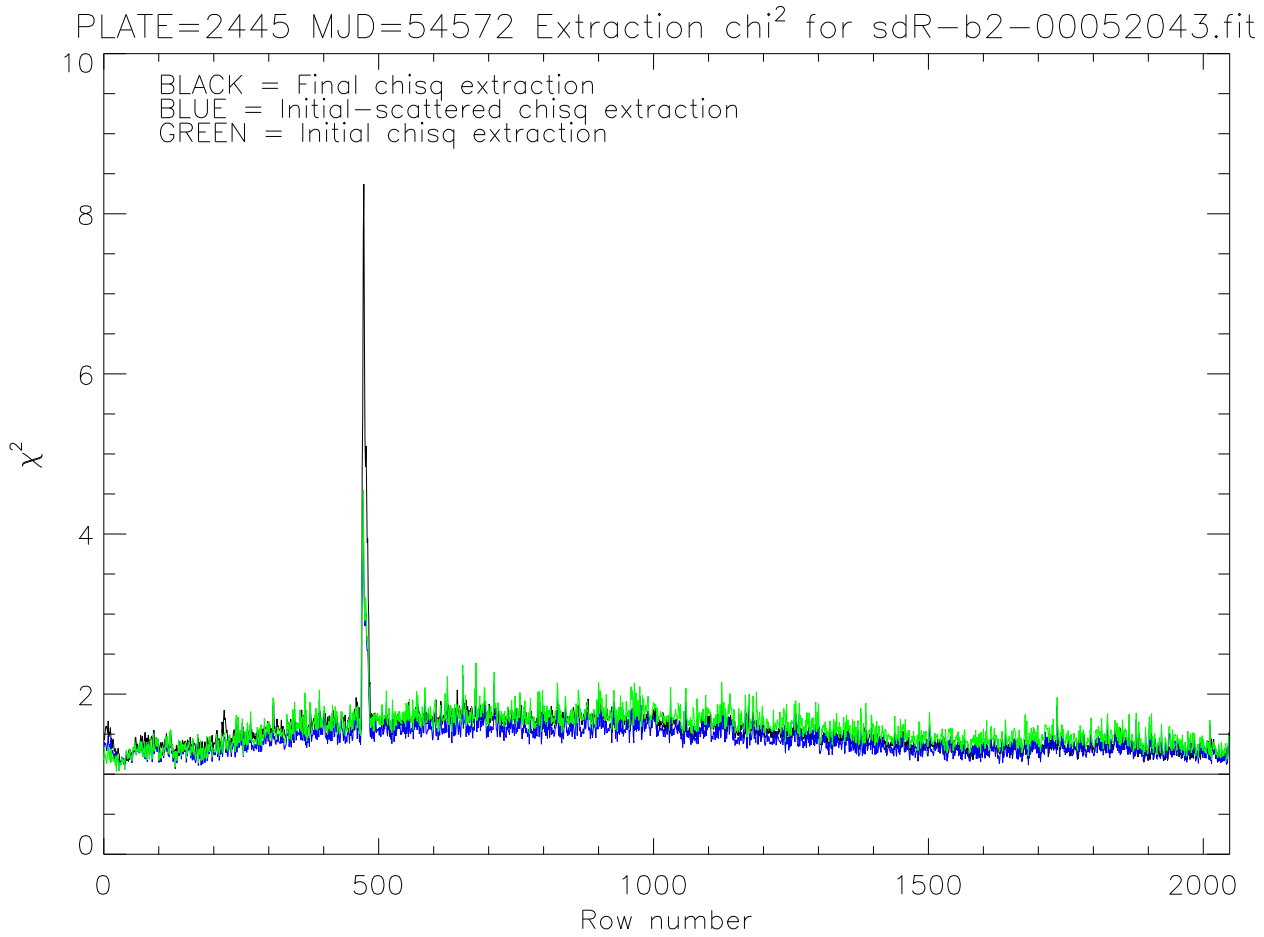

PLATE=2445 MJD=54572 Fiber-Flats for sdR-b2-00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.359
Max value = 1.188
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:10:55 2008

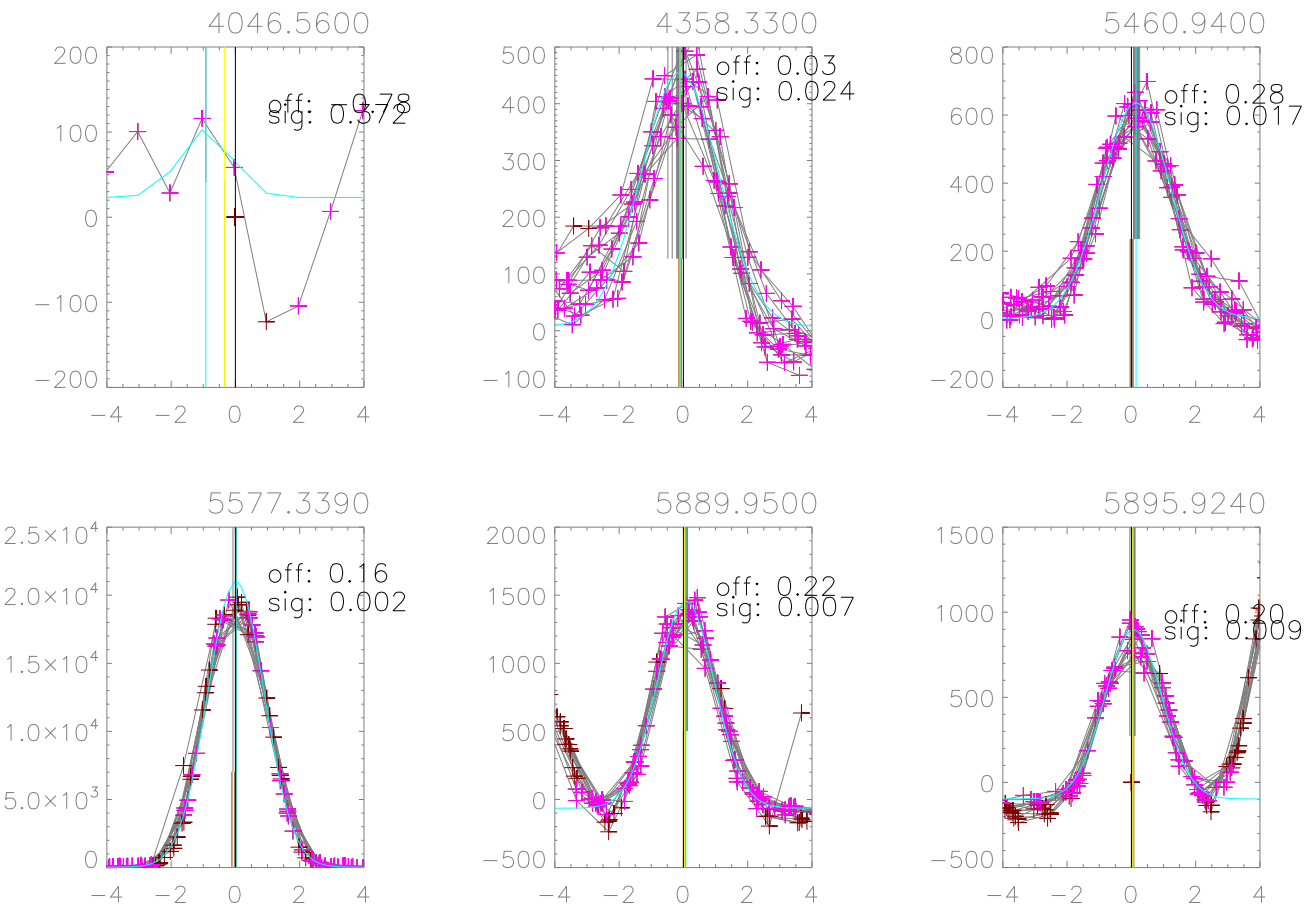

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b2-00052043.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
31.82
40.91
22.73
31.82
0
31.82
31.82
22.73
31.82
0
45.64
49.91

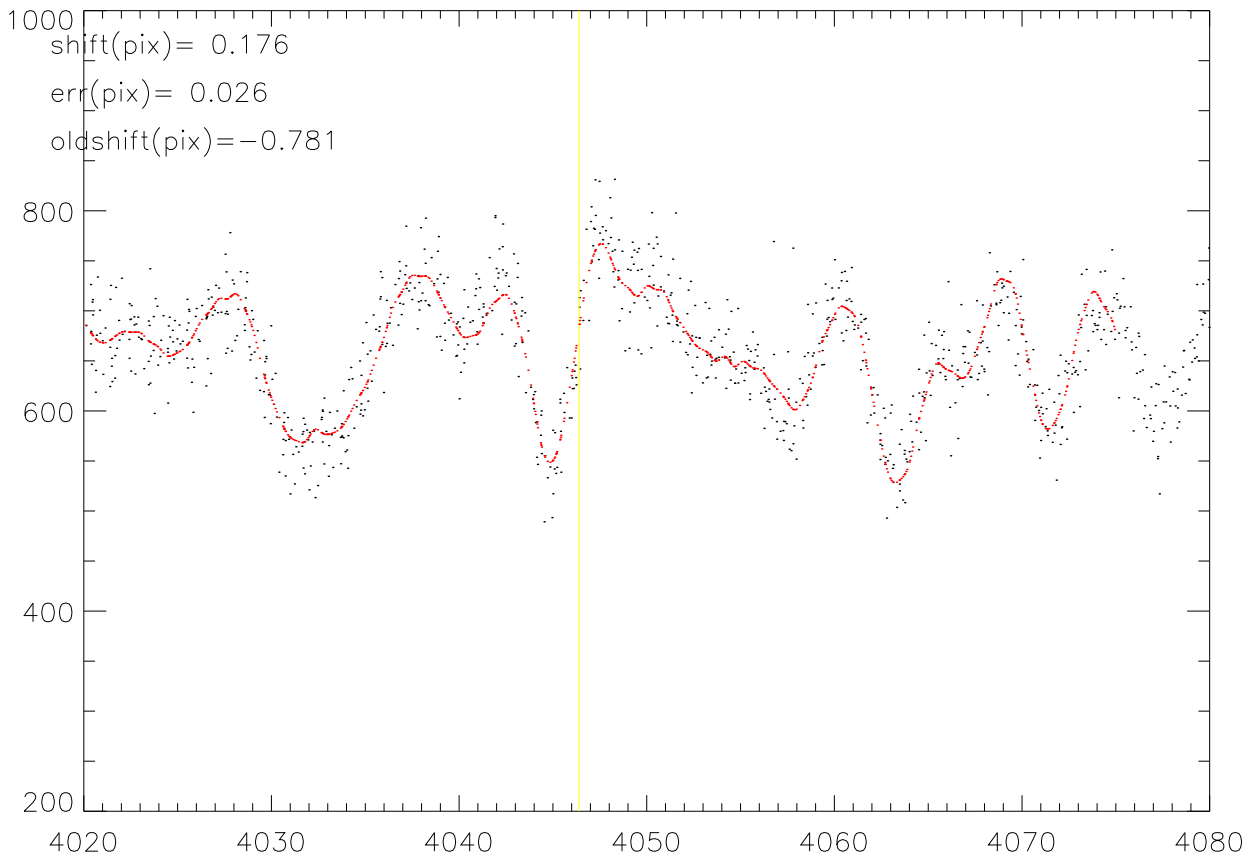

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b2-00052043.f
Brightness [electrons/pix]
50
40
30
20
10
0
Error bars denote full range
Min value = 22.186
Max value = 35.020
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:11:39 2008

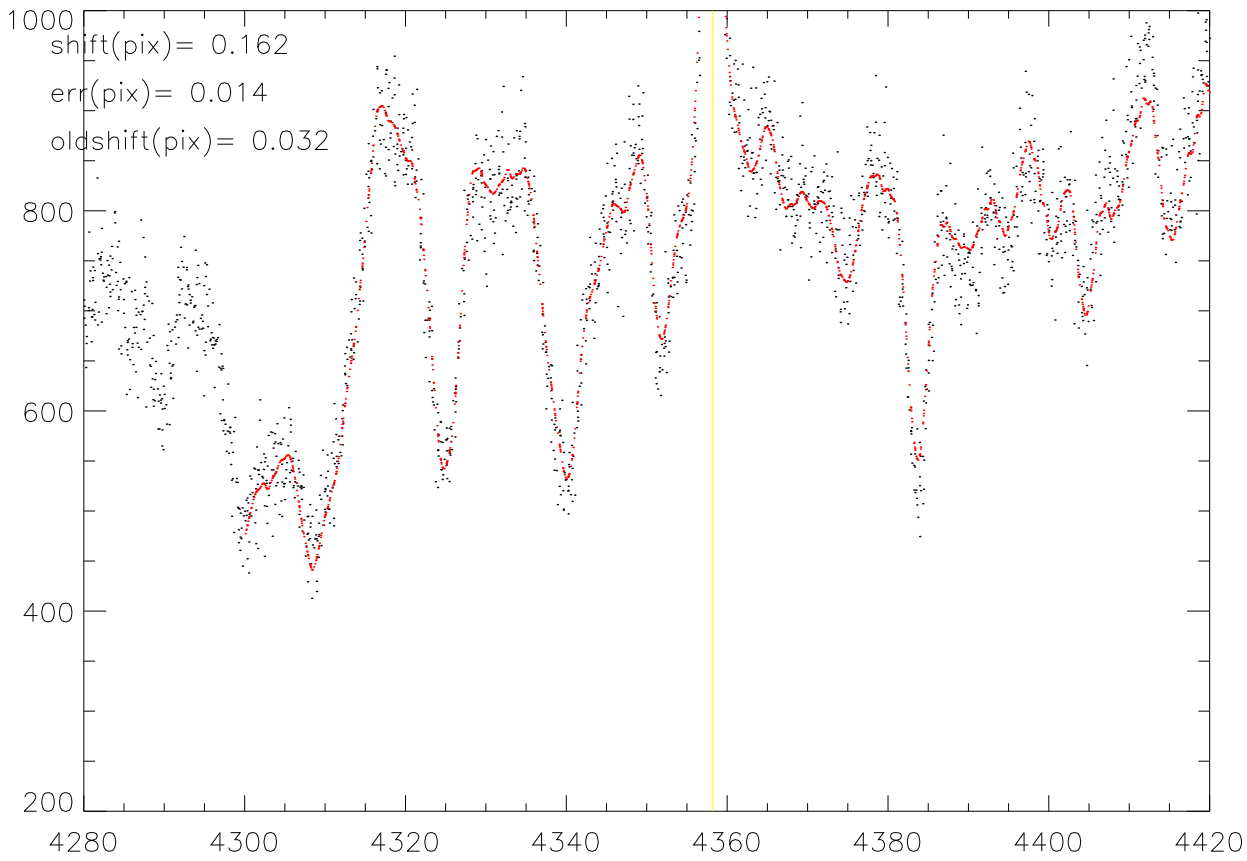

PLATE=2445 MJD=54572 Scattered Light on sdR-b2-00052043.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.64
3.18
14.09
19.55

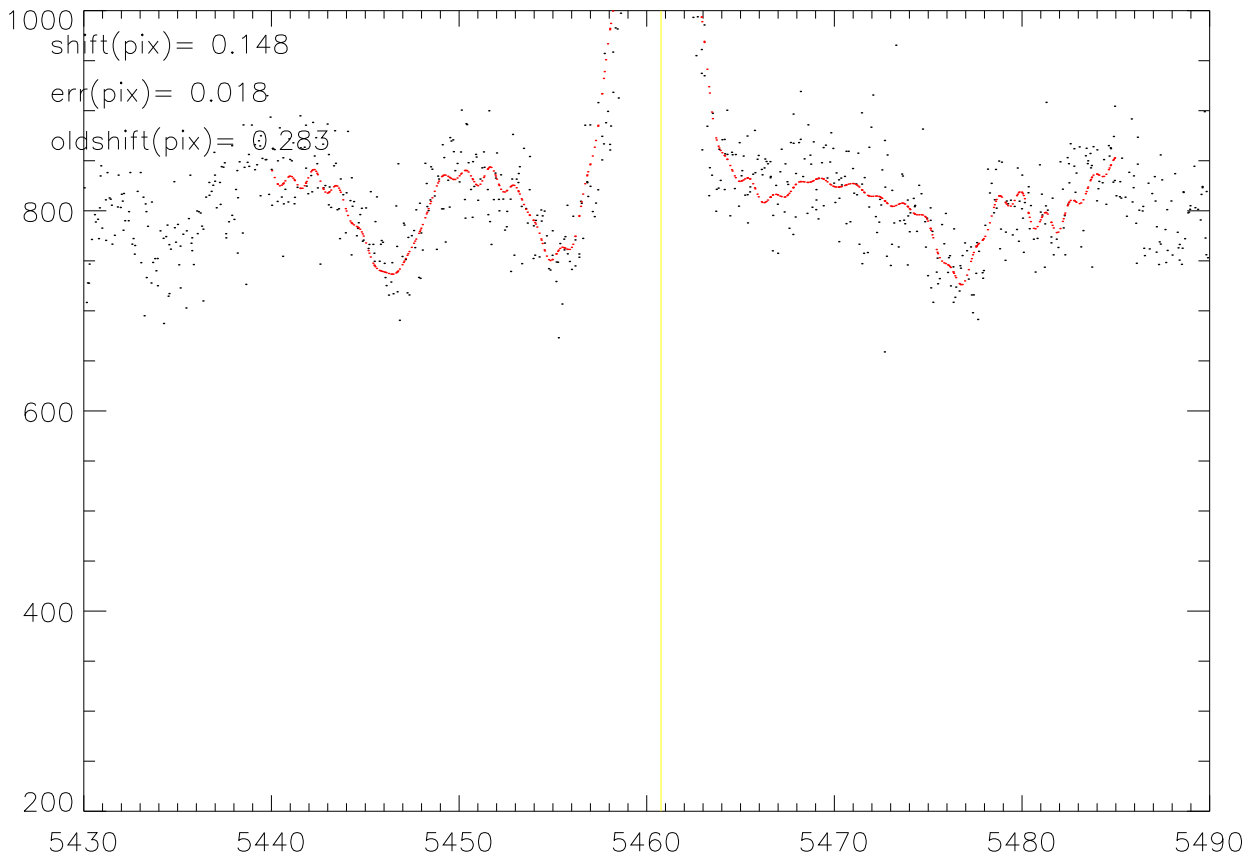

PLATE=2445 MJD=54572 Scattered Light on sdR-b2-00052043.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.170
Max value = 21.891
Wed Apr 23 07:13:46 2008

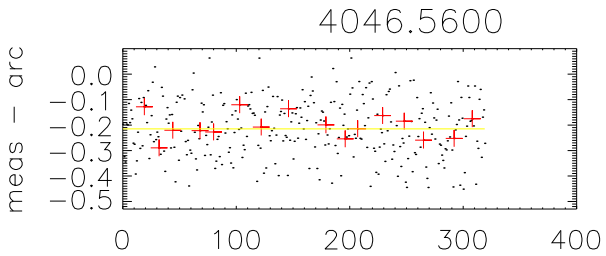

PLATE=2445 MJD=54572 Extraction chi^2 for sdR-b2-00052043.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

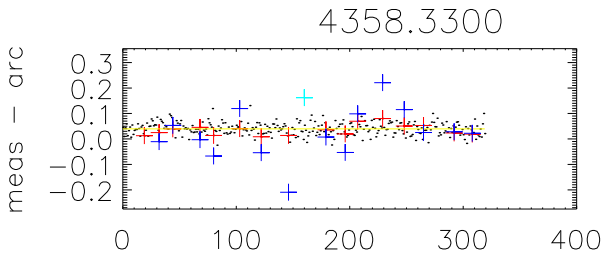

4046.5600
off: -0.78
sig: 0.372
4358.3300
off: 0.03
sig: 0.024
5460.9400
off: 0.28
sig: 0.017
5577.3390
off: 0.16
sig: 0.002
5889.9500
off: 0.22
sig: 0.007
5895.9240
off: 0.20
sig: 0.009

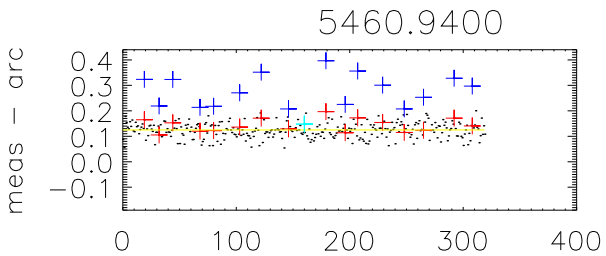

shift(pix)= 0.176
err(pix)= 0.026
oldshift(pix)=-0.781
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

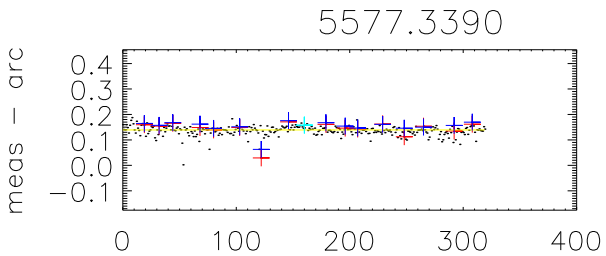

shift(pix)= 0.162
err(pix)= 0.014
oldshift(pix)= 0.032
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

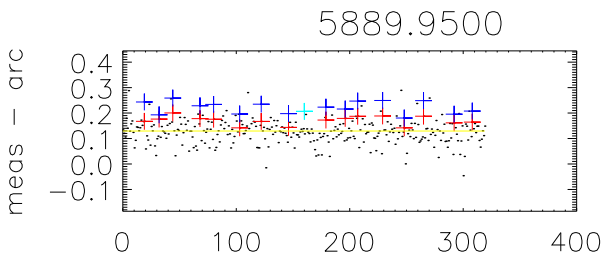

shift(pix)= 0.148
err(pix)= 0.018
oldshift(pix)= 0.283
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

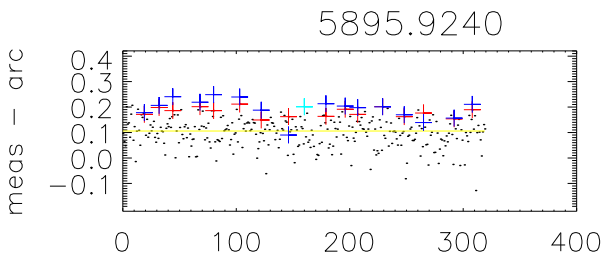

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

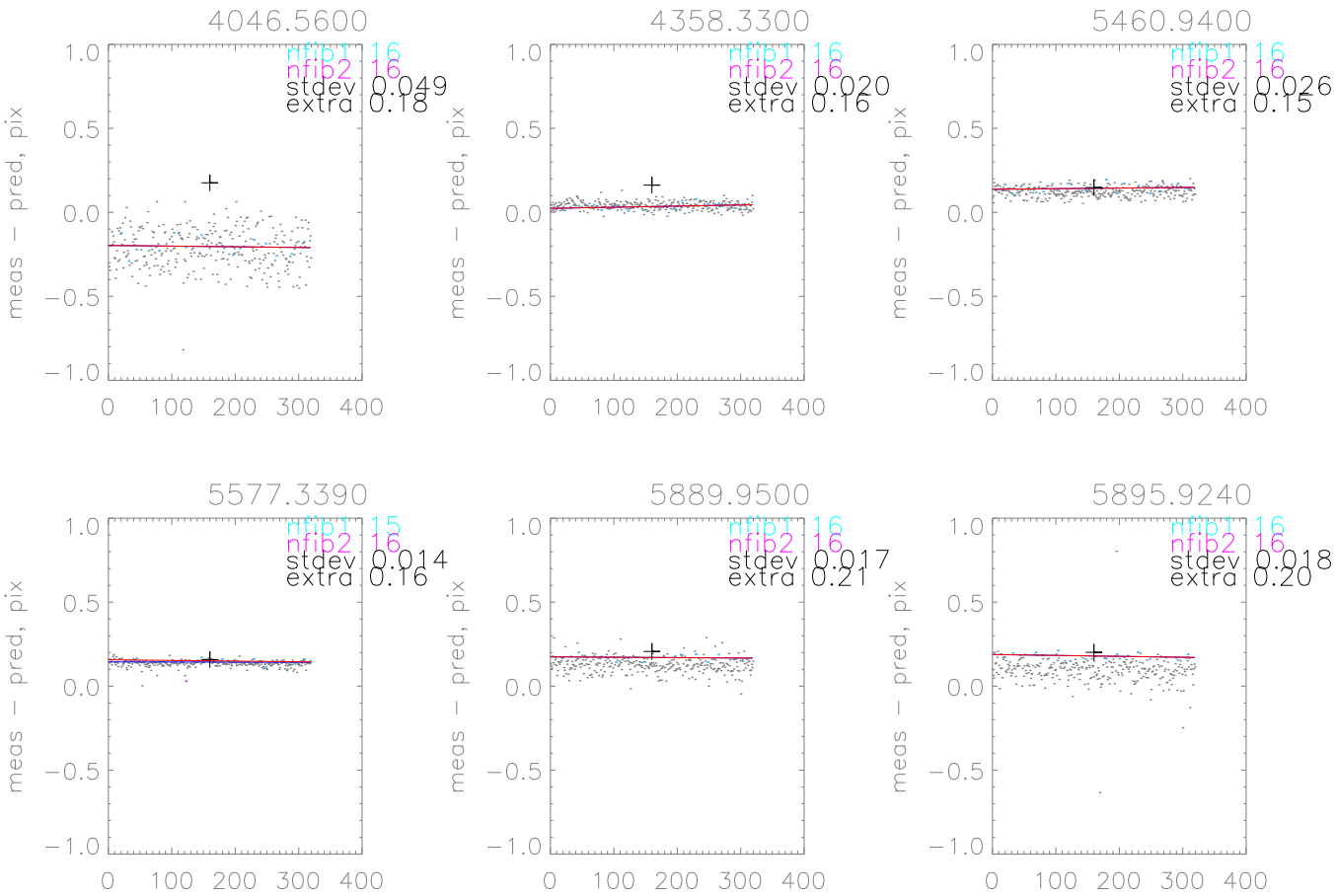

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

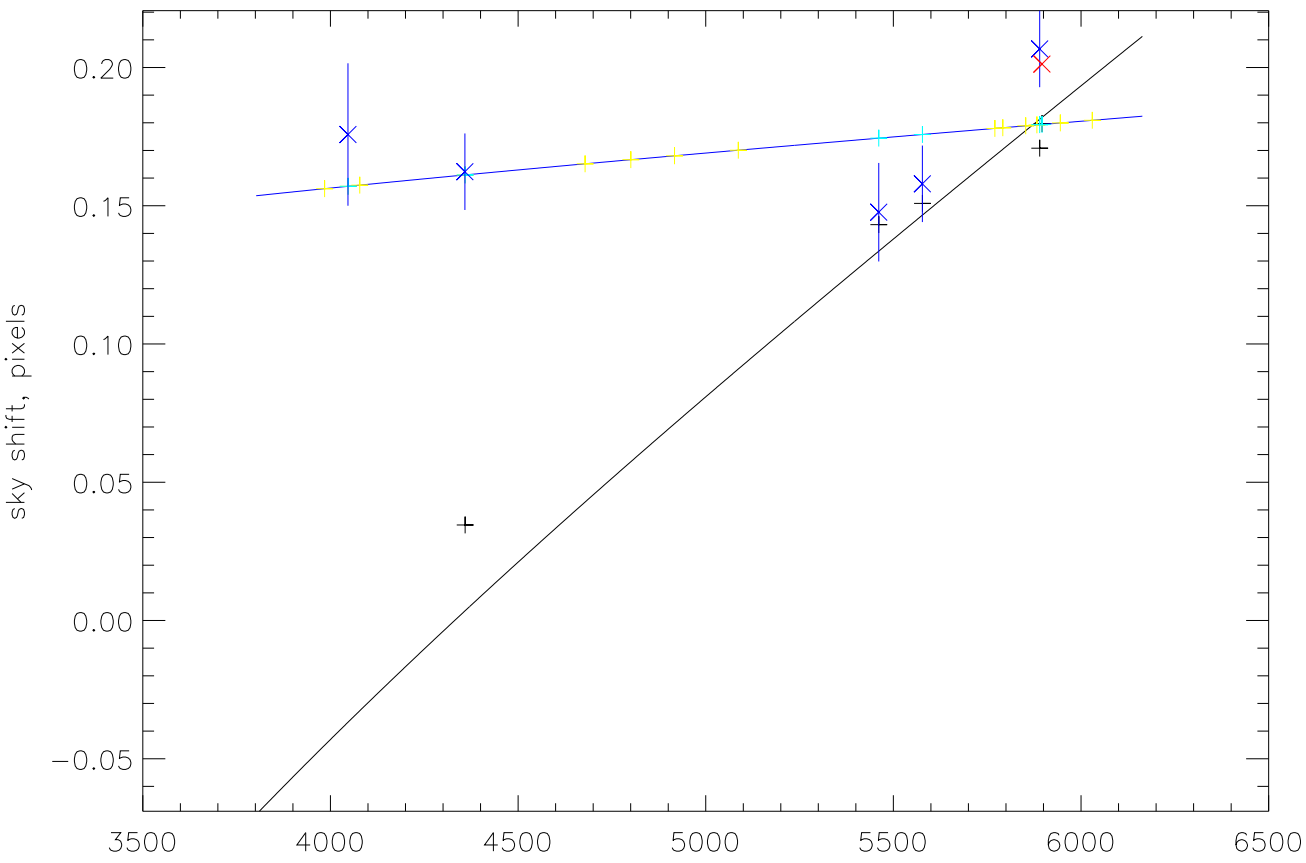

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

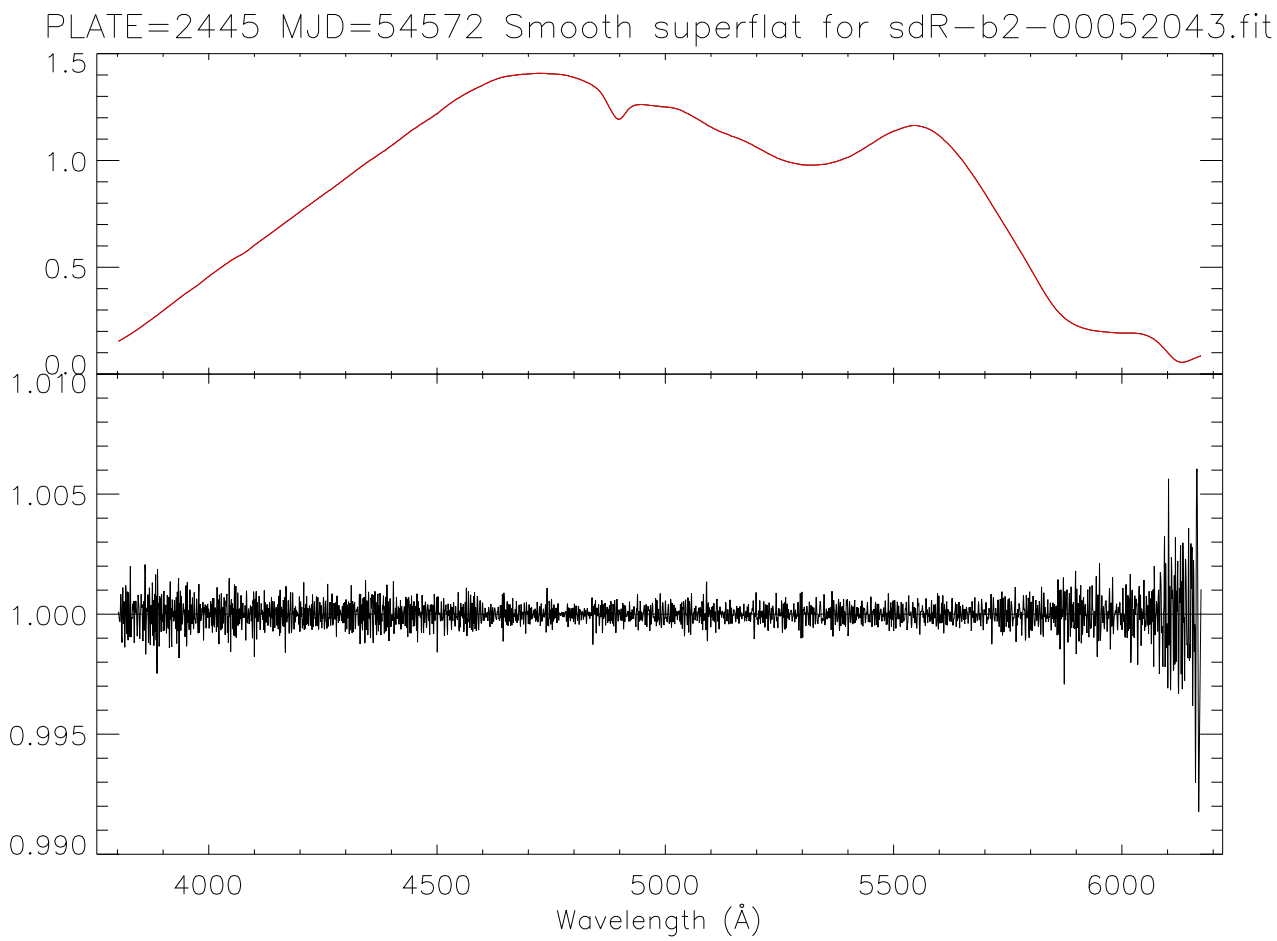

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

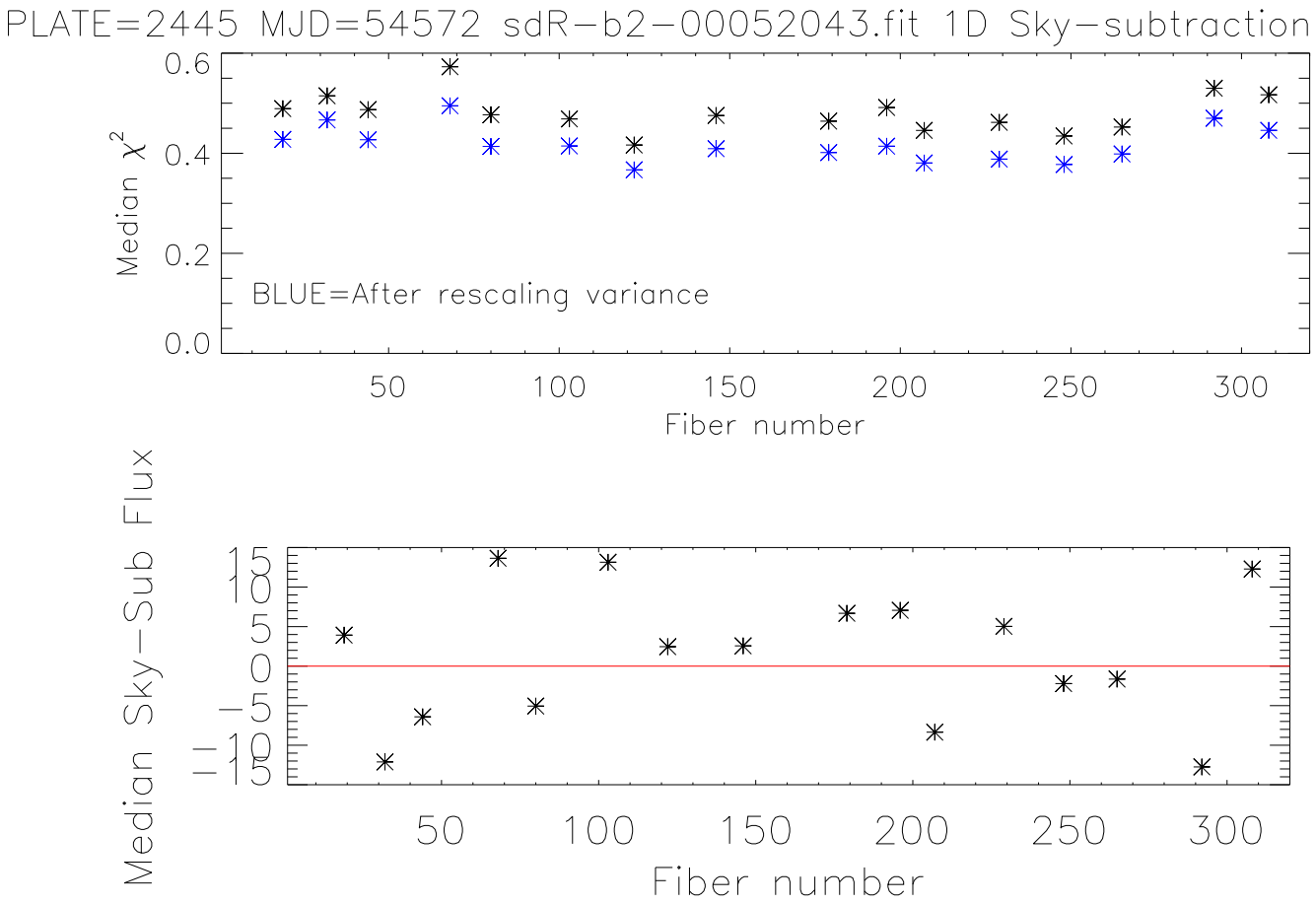

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.049
extra 0.18
4358.3300
nfib1 16
nfib2 16
stdev 0.020
extra 0.16
5460.9400
nfib1 16
nfib2 16
stdev 0.026
extra 0.15
5577.3390
nfib1 15
nfib2 16
stdev 0.014
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.017
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.018
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

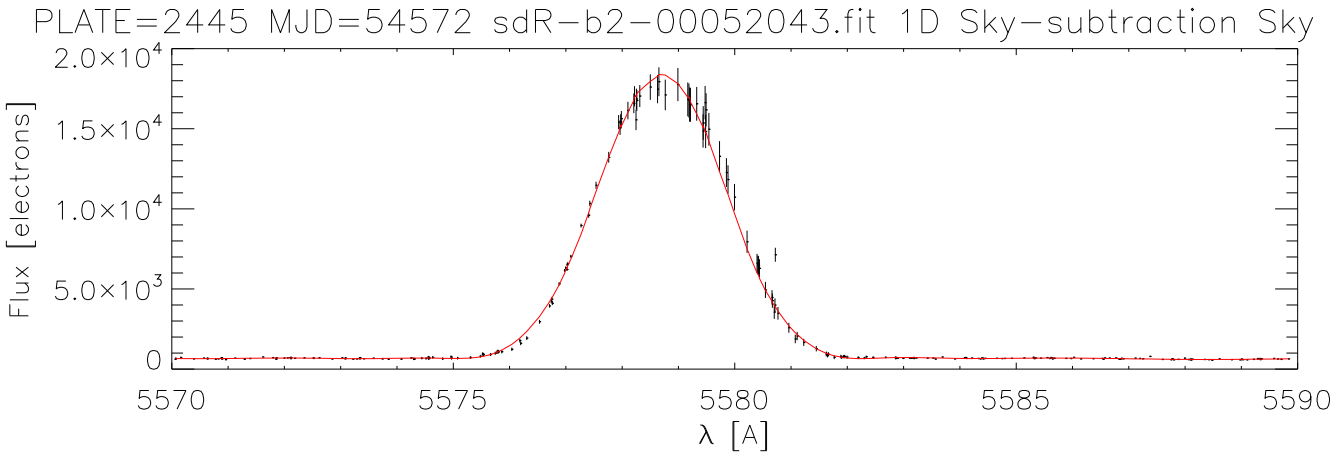

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

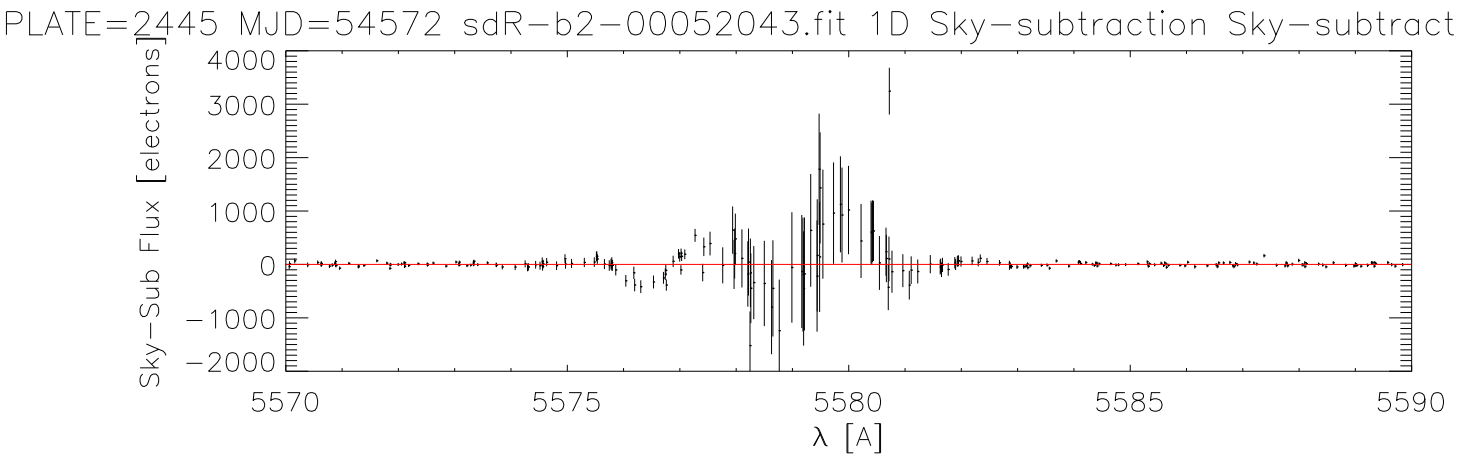
es= −0.0000

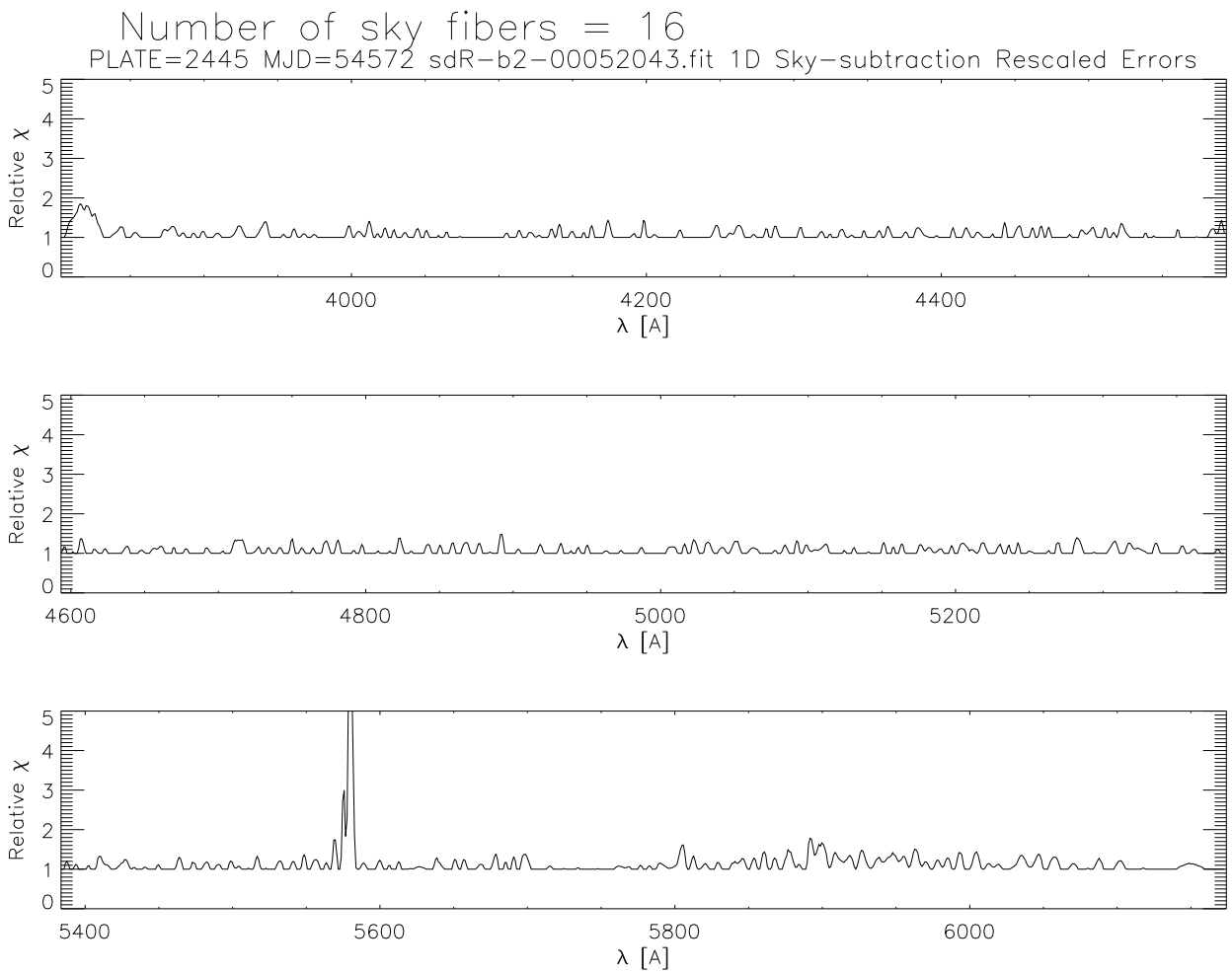

PLATE=2445 MJD=54572 Smooth superflat for sdR−b2−00052043.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

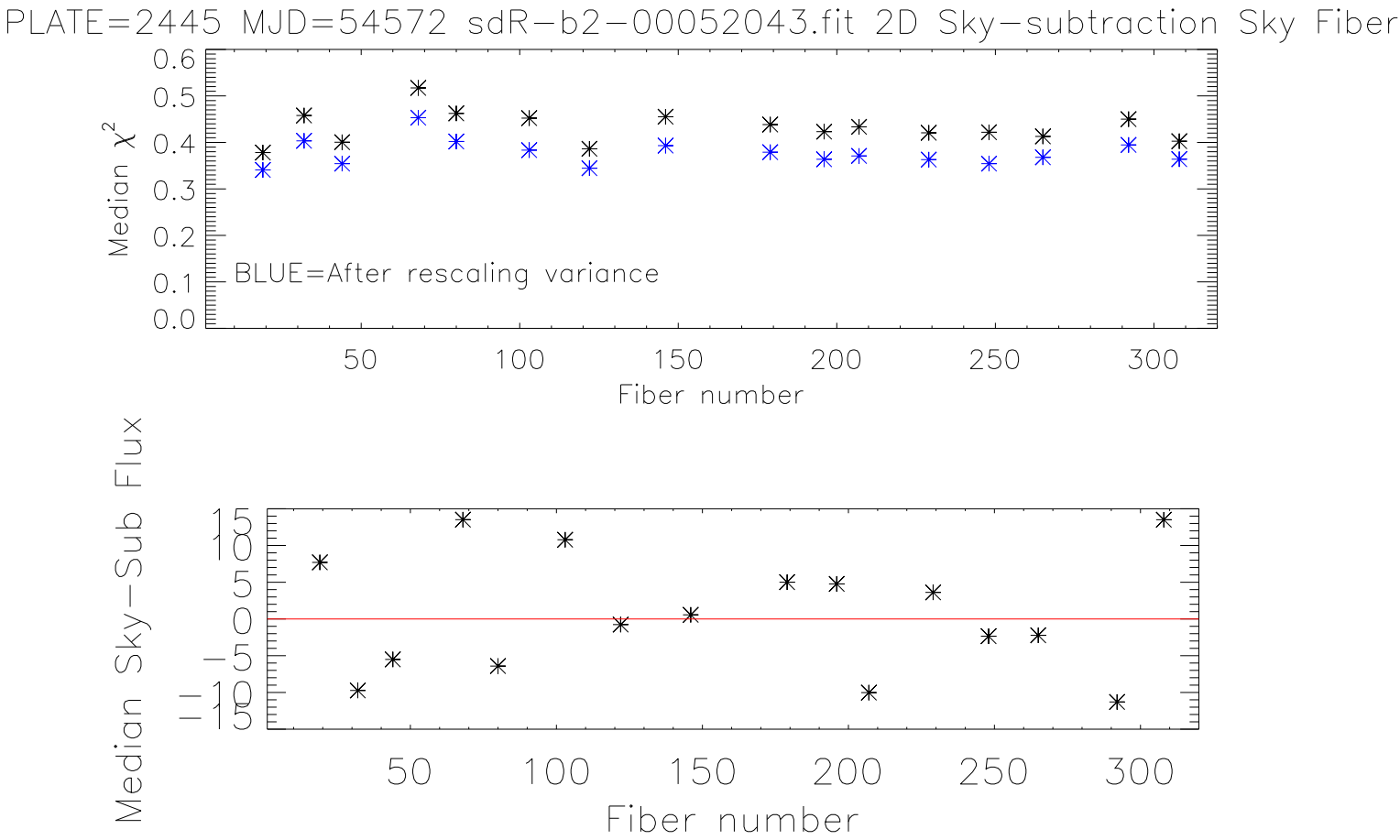

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

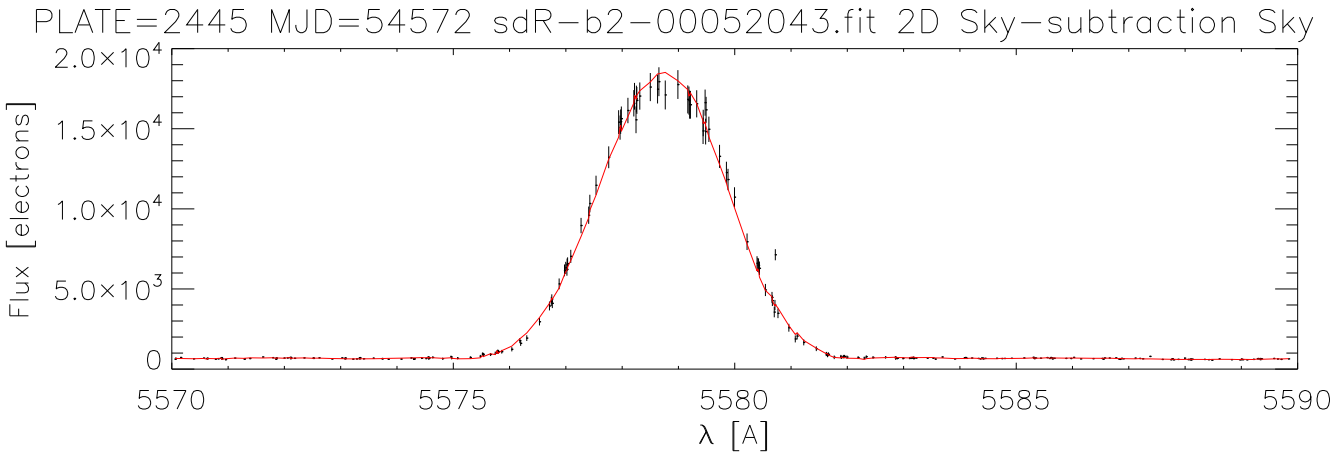
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

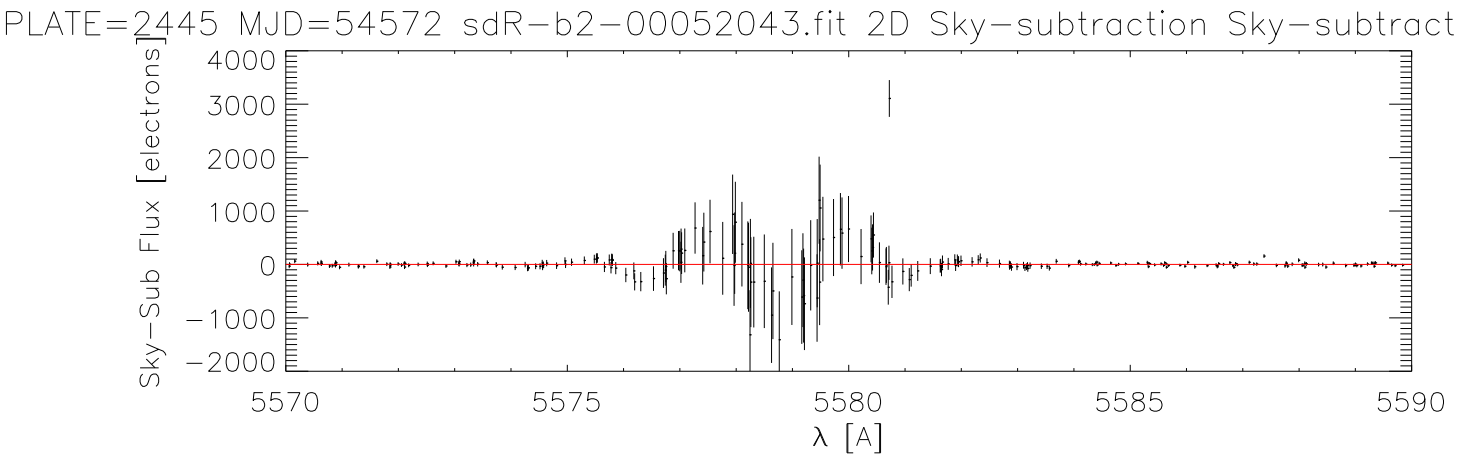

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

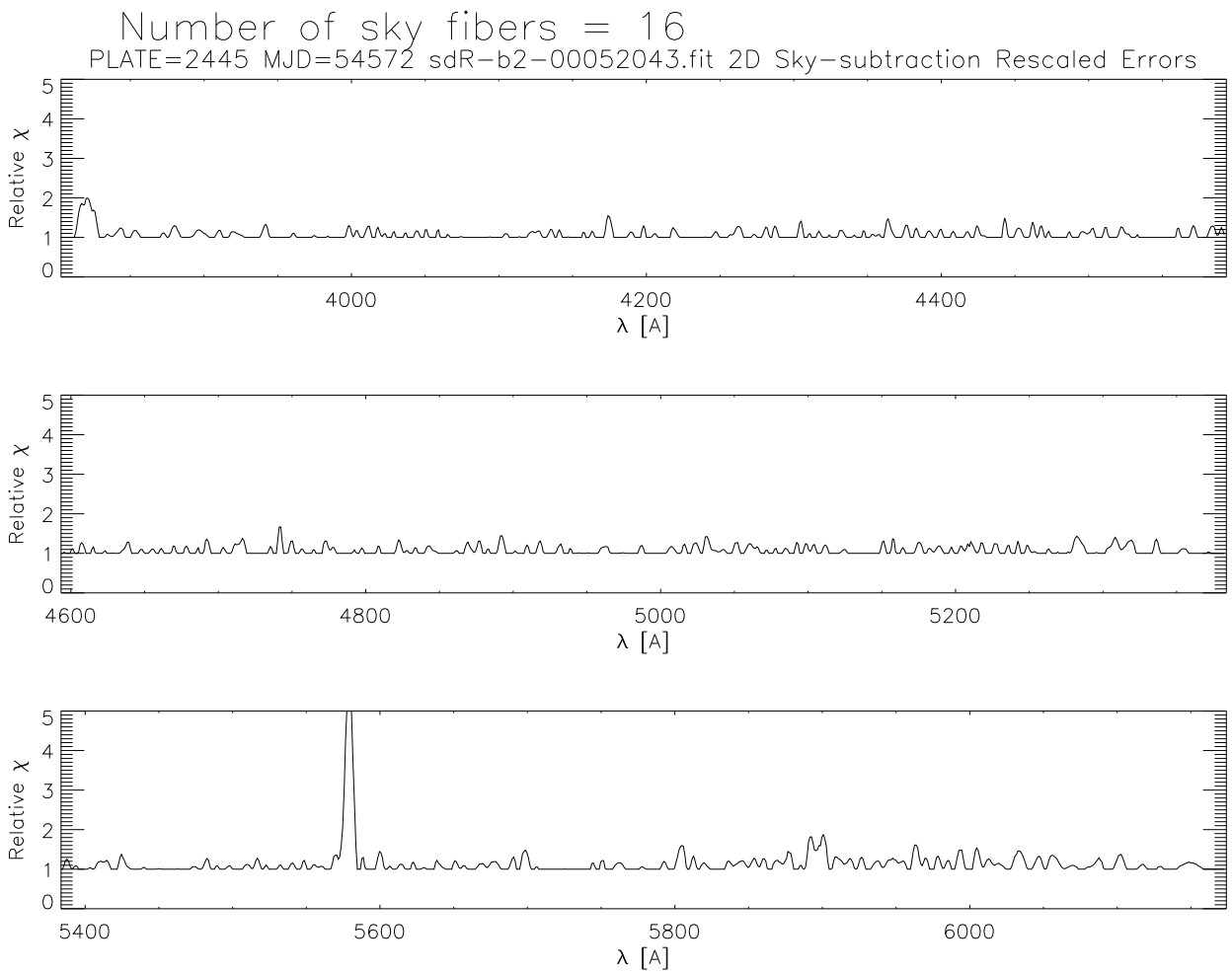

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

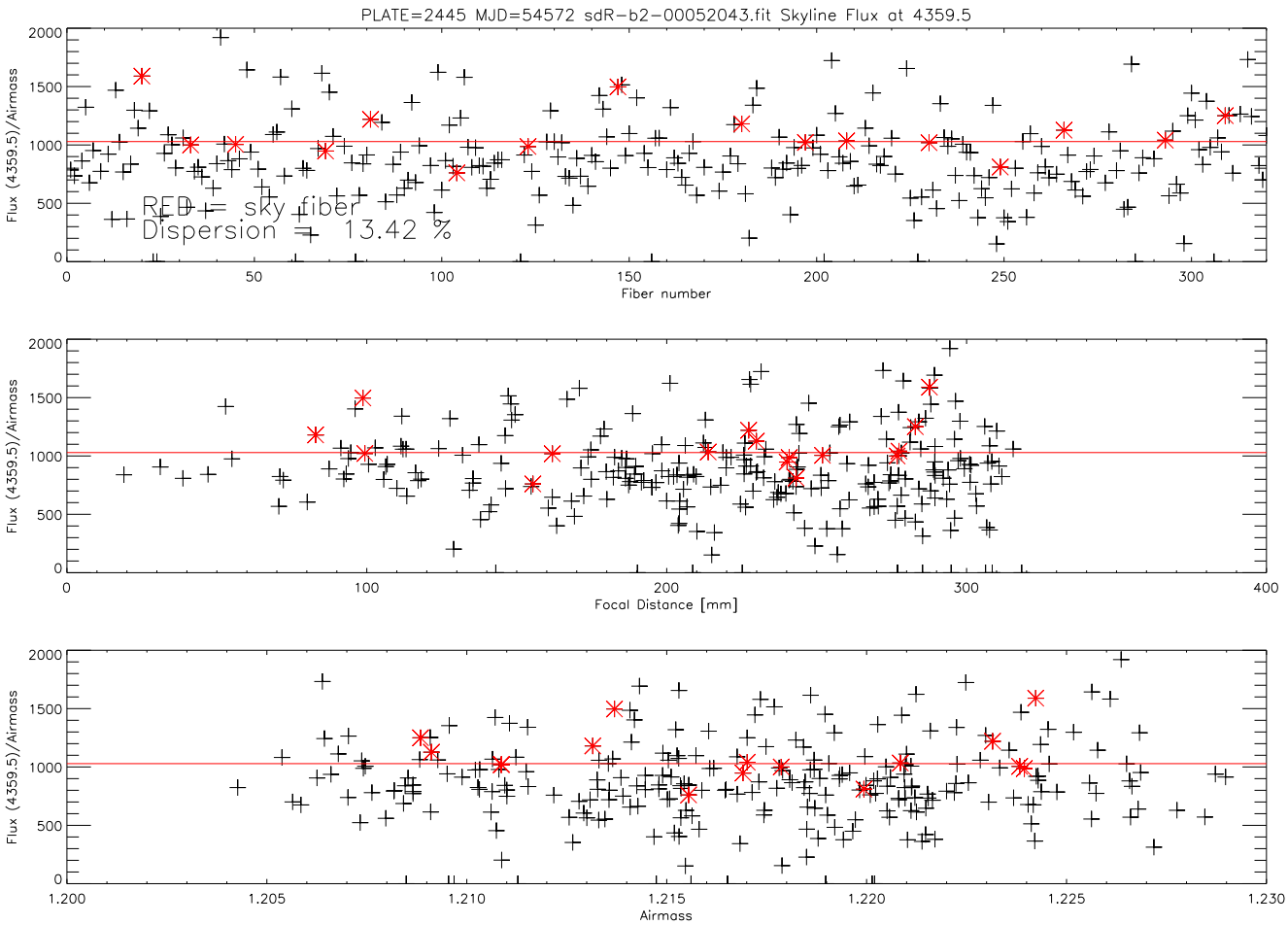

Number of sky fibers = 16
PLATE=2445 MJD=54572 sdR-b2-00052043.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

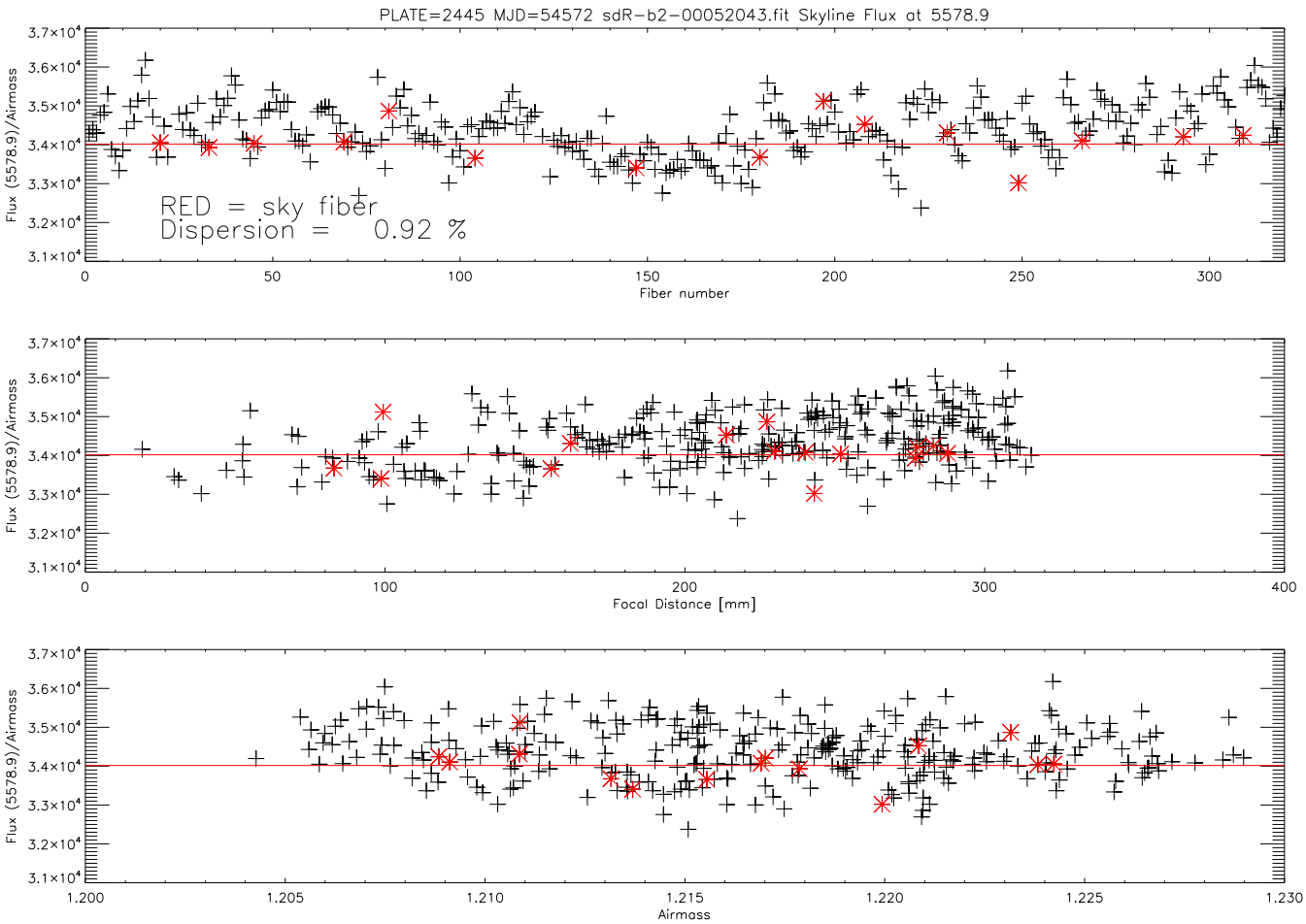

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

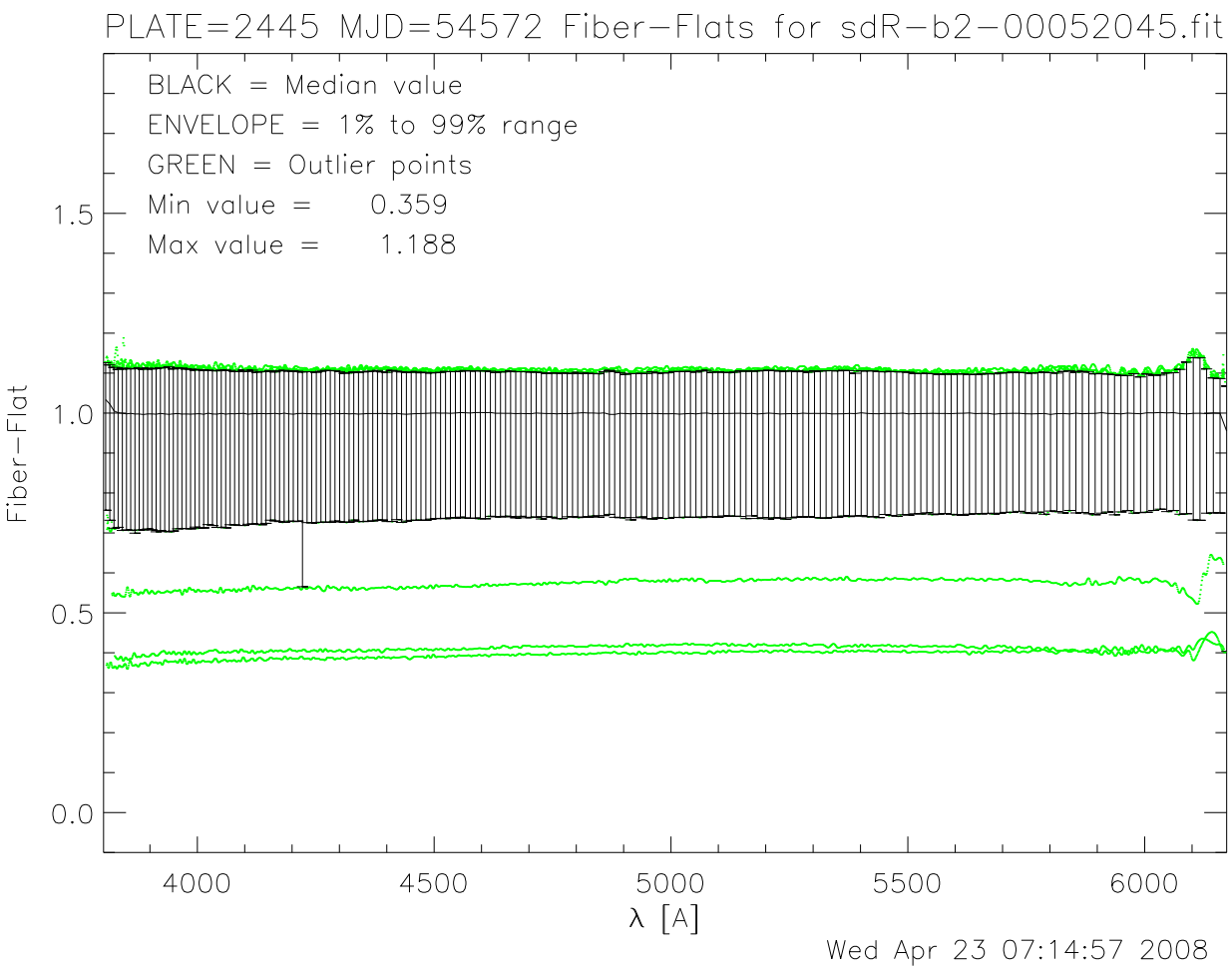

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

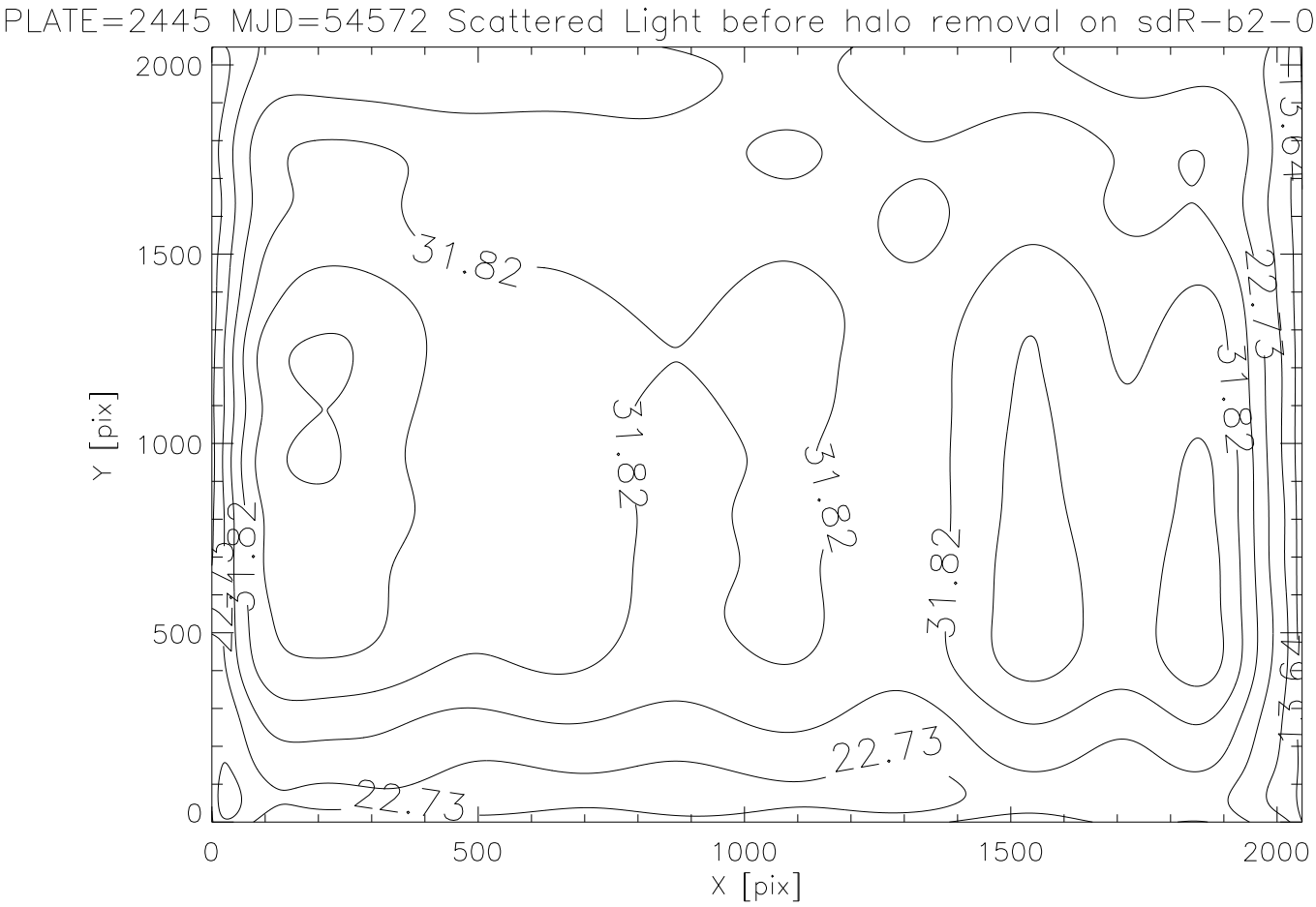

PLATE=2445 MJD=54572 sdR-b2-00052043.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

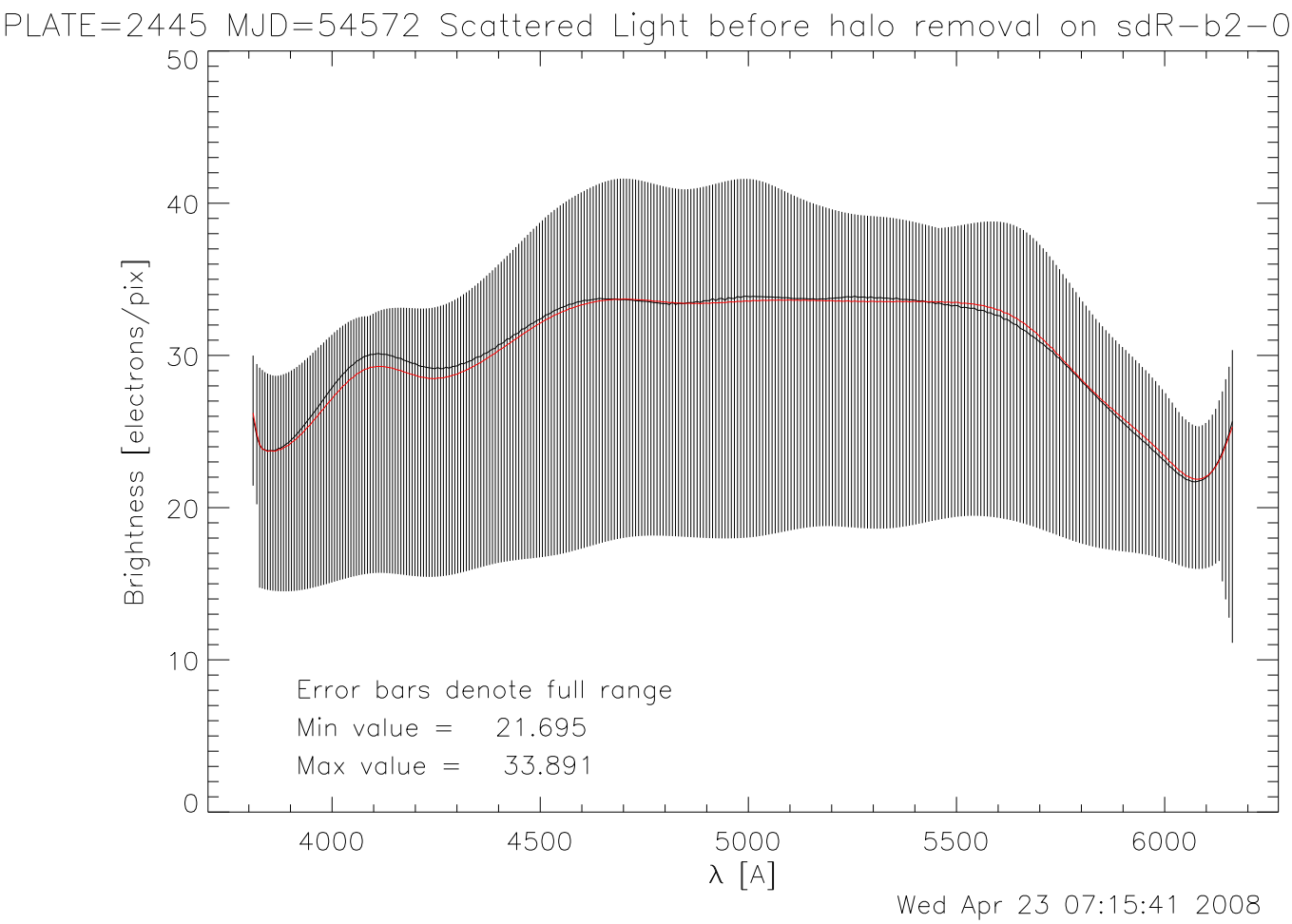

Number of sky fibers = 16
PLATE=2445 MJD=54572 sdR-b2-00052043.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

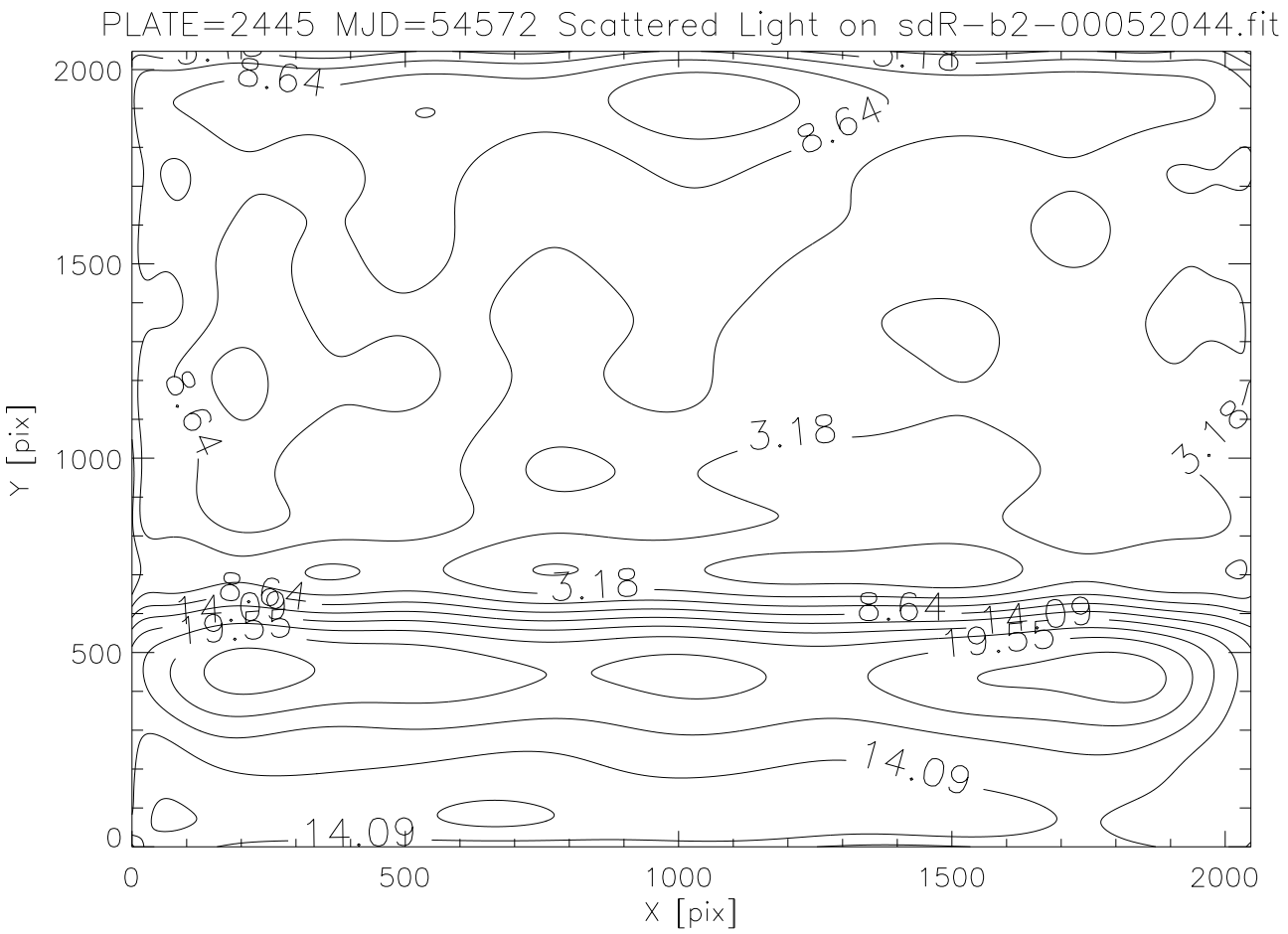

PLATE=2445 MJD=54572 sdR-b2-00052043.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 13.42 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

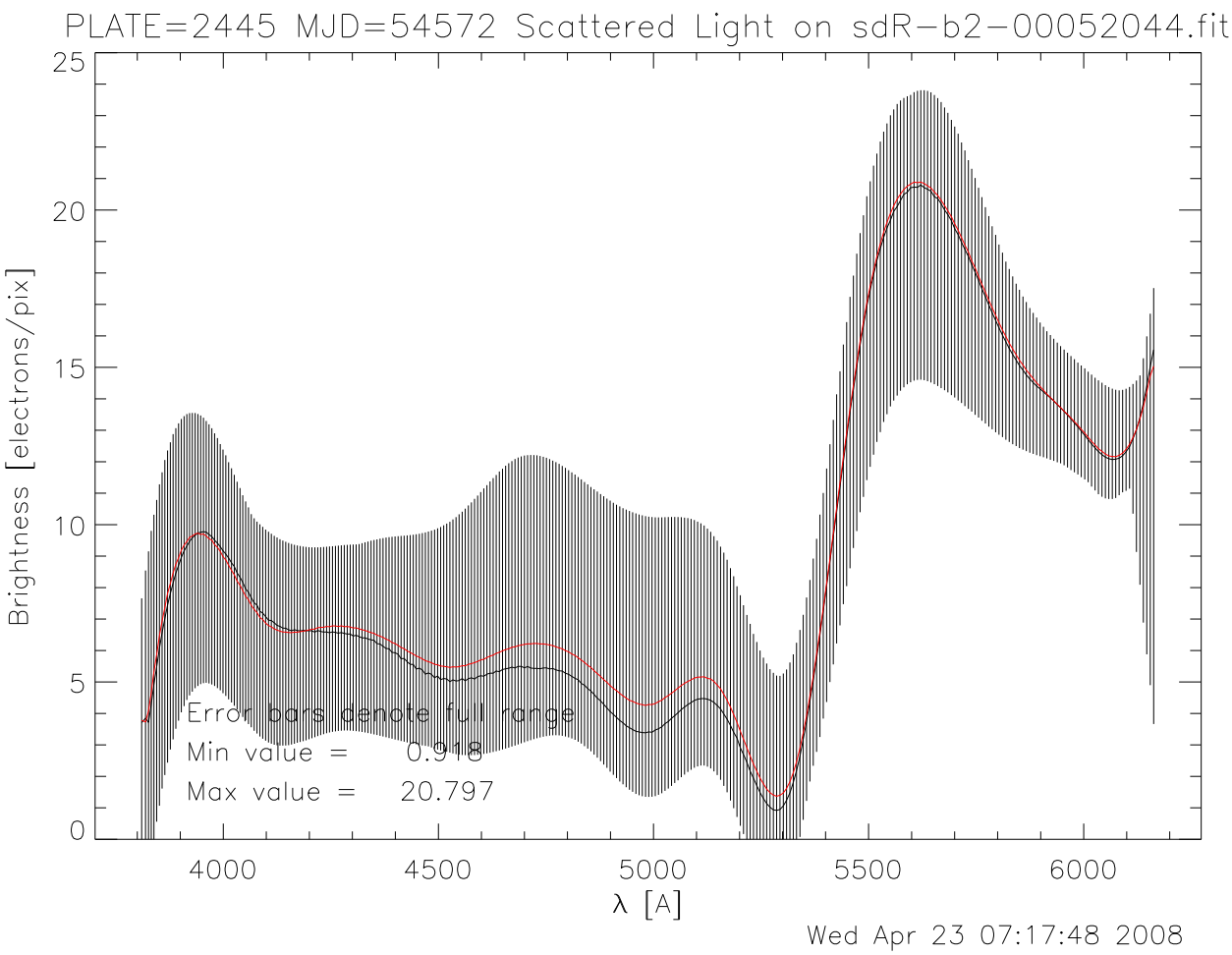

PLATE=2445 MJD=54572 sdR-b2-00052043.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.92 %
Fiber number
Focal Distance [mm]
Airmass

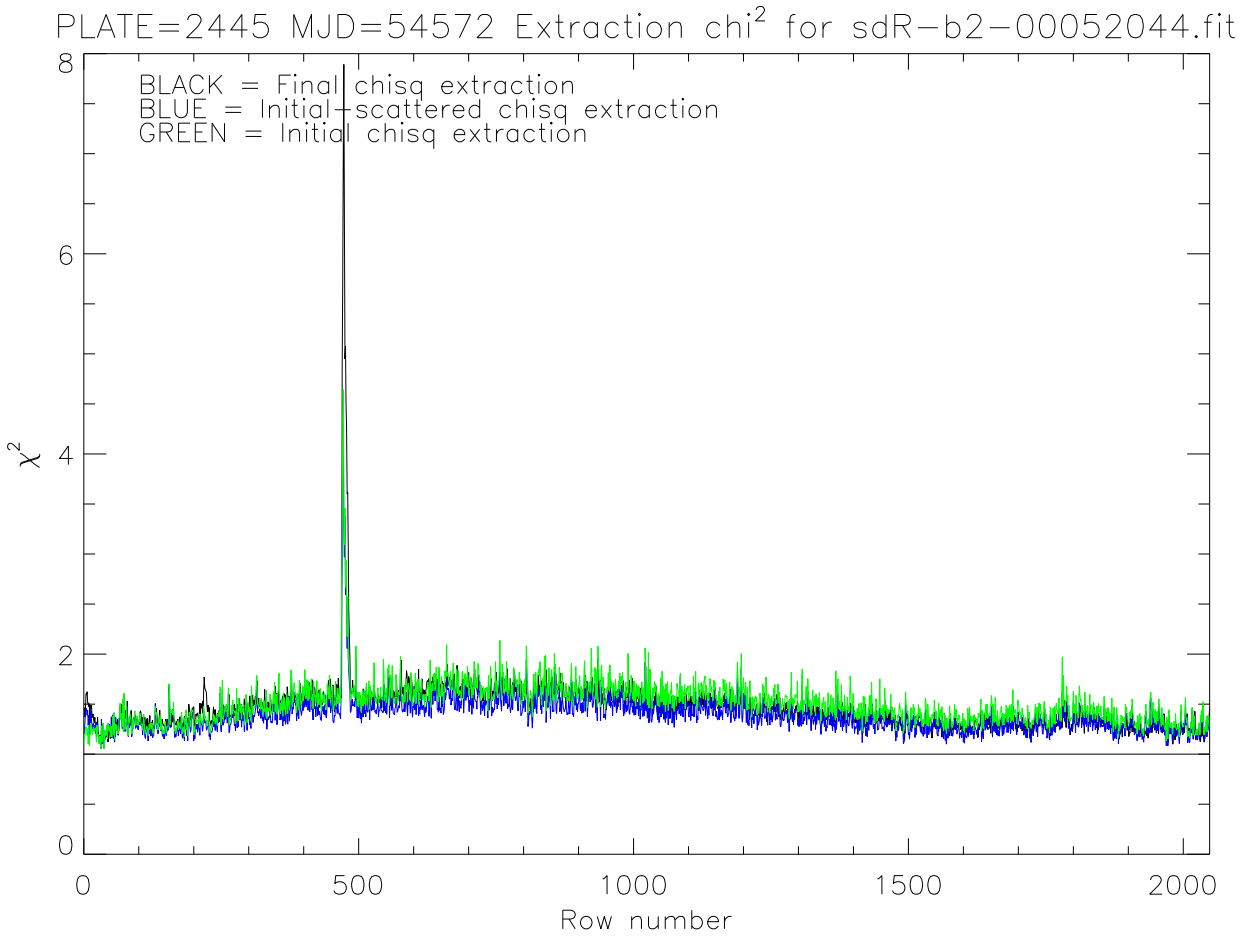

PLATE=2445 MJD=54572 Fiber-Flats for sdR-b2-00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.359
Max value = 1.188
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:14:57 2008

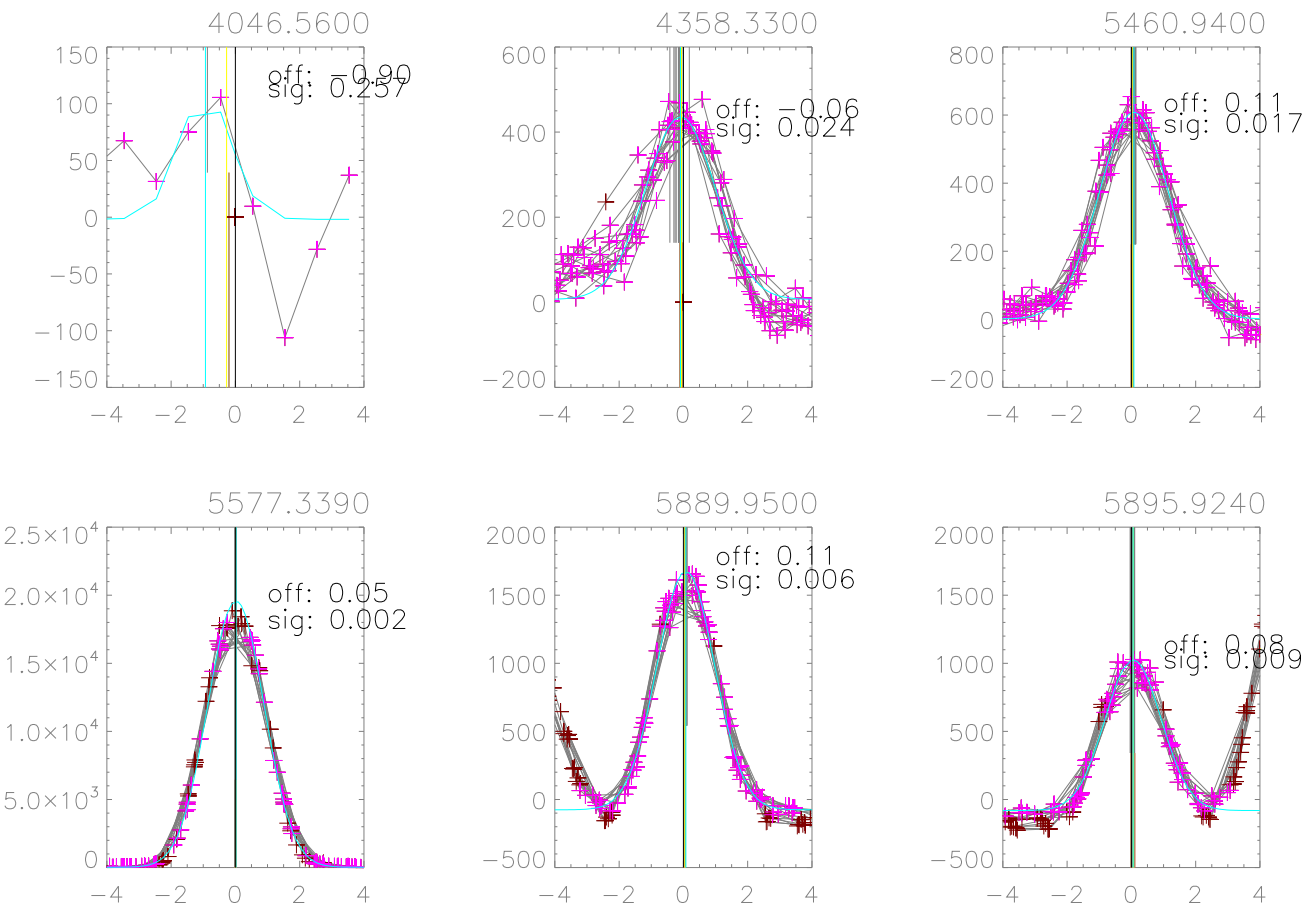

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b2-00052044.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
31.82
22.73
31.82
31.82
31.82
31.82
22.73
22.73
31.82
31.82
31.82
31.82

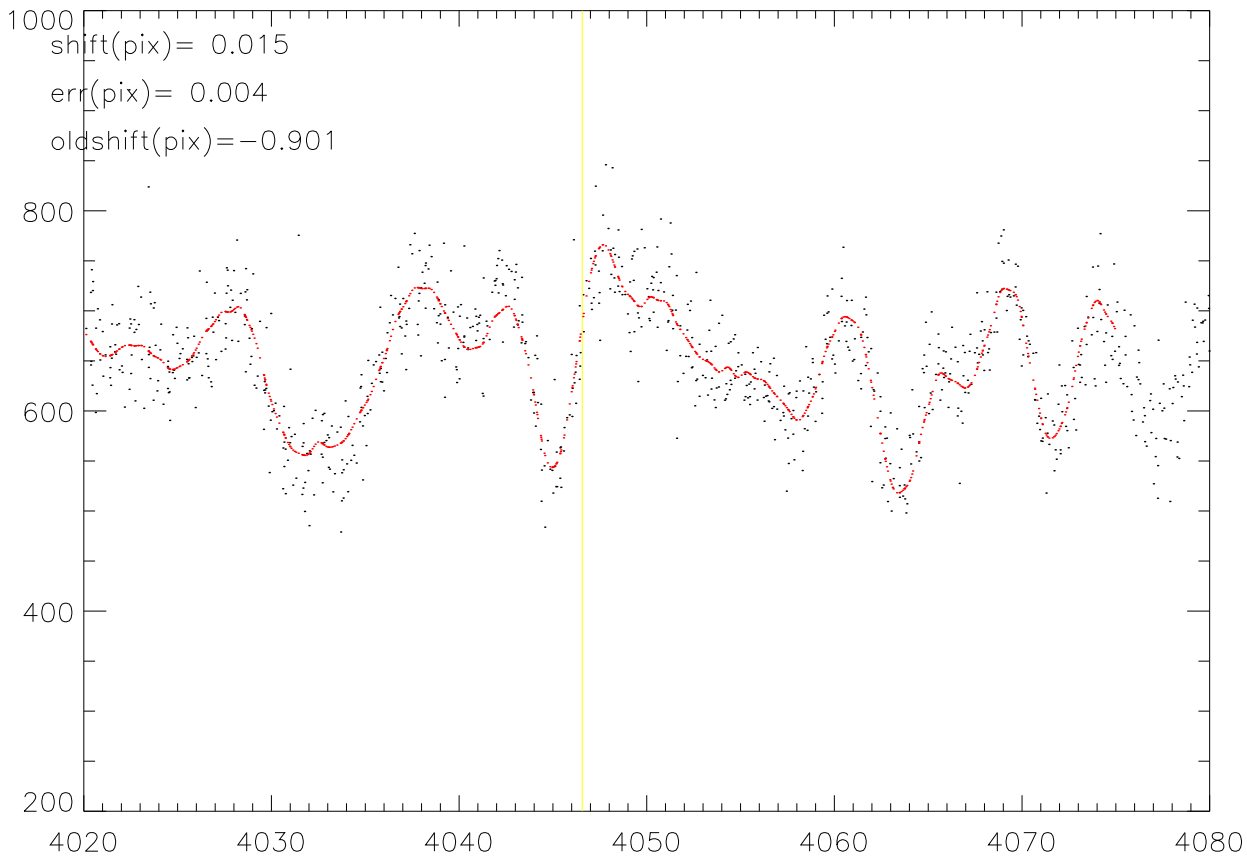

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-b2-00052044.f
Brightness [electrons/pix]
50
40
30
20
10
0
Error bars denote full range
Min value = 21.695
Max value = 33.891
4000
4500
5000
5500
6000
λ [A]
Wed Apr 23 07:15:41 2008

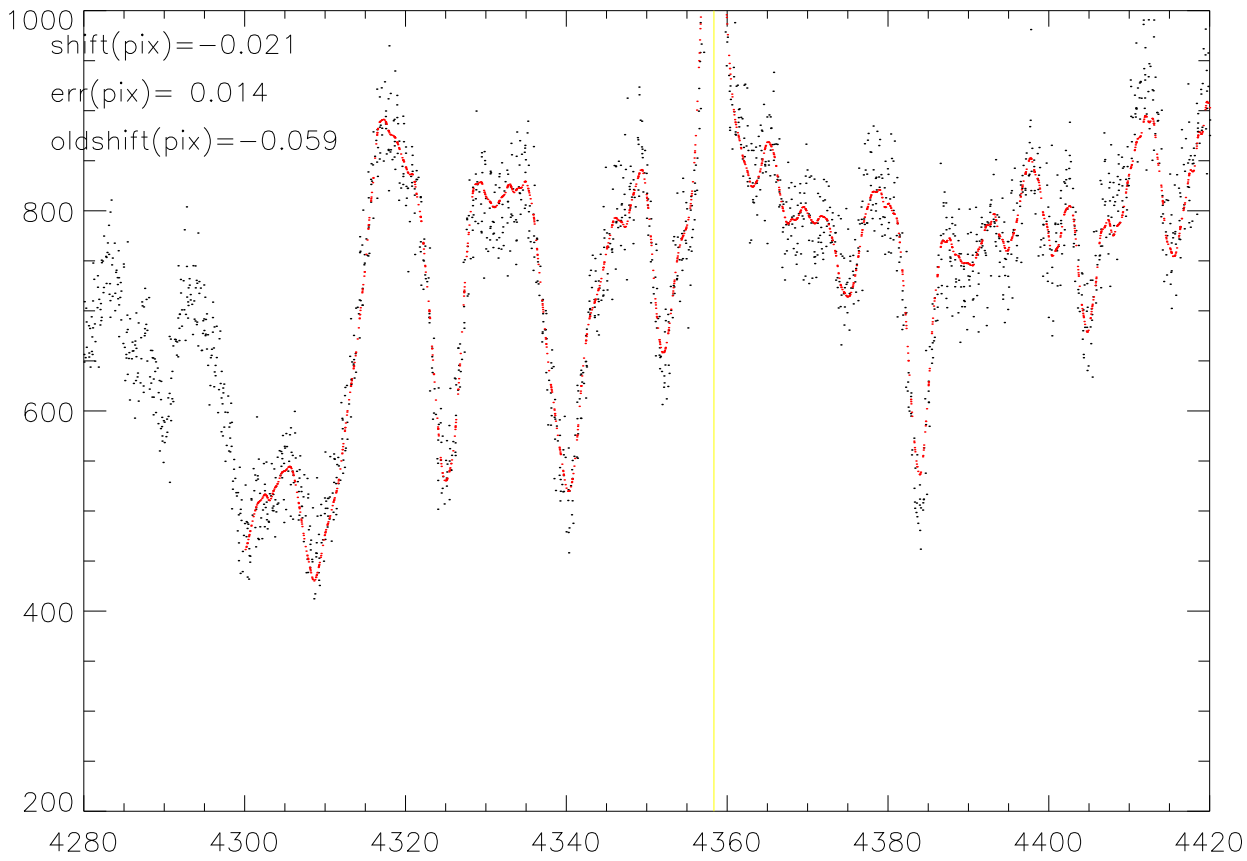

PLATE=2445 MJD=54572 Scattered Light on sdR-b2-00052044.fit
8.64
3.18
14.09
19.55
Y [pix]
X [pix]
0
500
1000
1500
2000

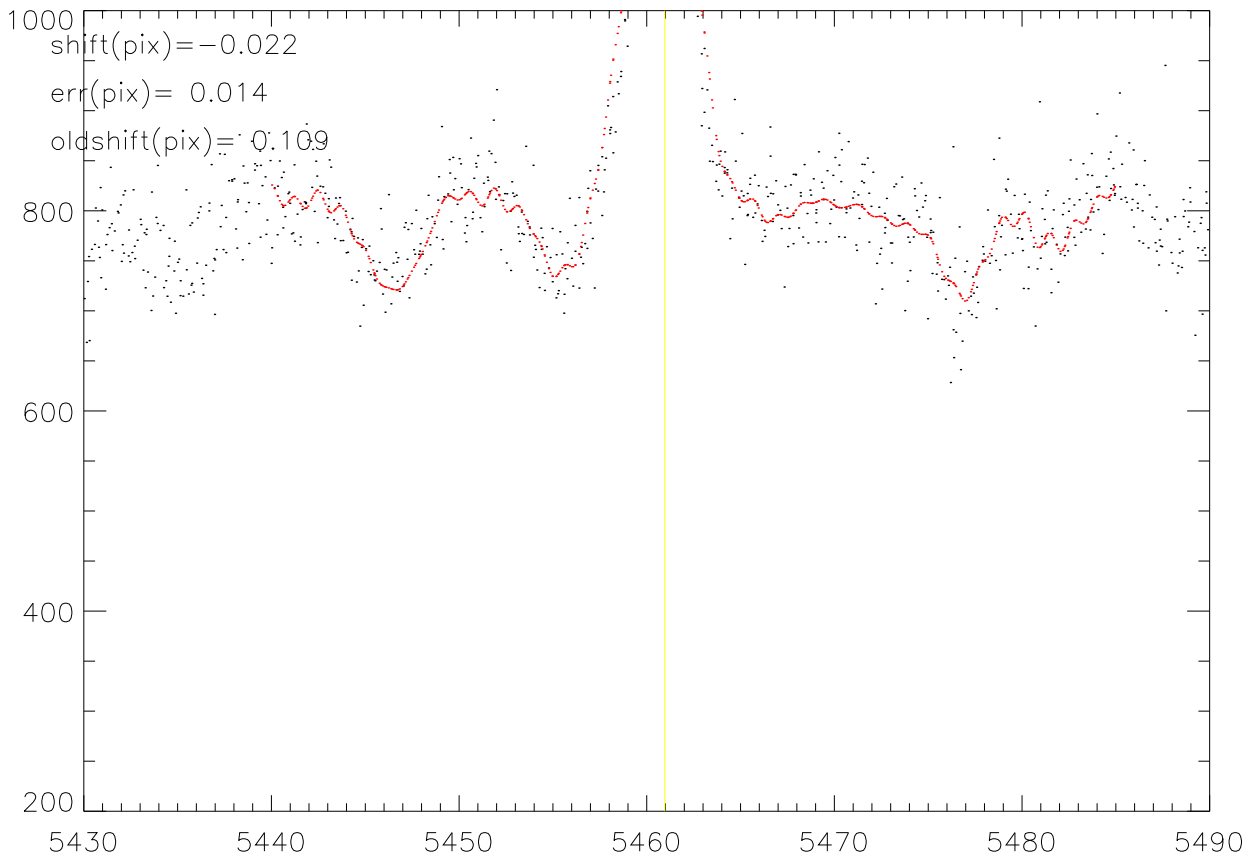

PLATE=2445 MJD=54572 Scattered Light on sdR-b2-00052044.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.918
Max value = 20.797
Wed Apr 23 07:17:48 2008

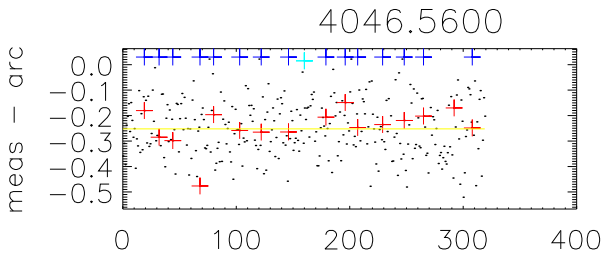

PLATE=2445 MJD=54572 Extraction chi^2 for sdR-b2-00052044.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

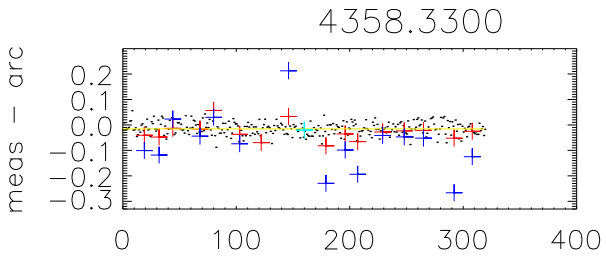

4046.5600
off: −0.90
sig: 0.257
4358.3300
off: −0.06
sig: 0.024
5460.9400
off: 0.11
sig: 0.017
5577.3390
off: 0.05
sig: 0.002
5889.9500
off: 0.11
sig: 0.006
5895.9240
off: 0.08
sig: 0.009

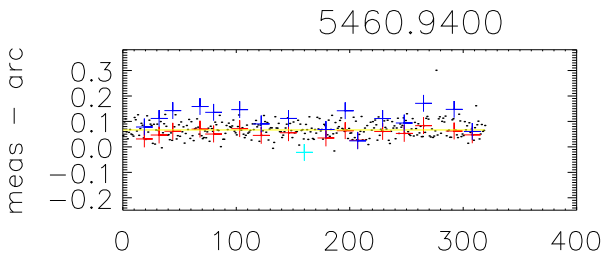

shift(pix)= 0.015
err(pix)= 0.004
oldshift(pix)=-0.901
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

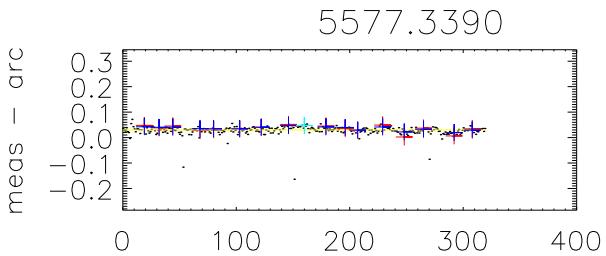

shift(pix)=−0.021
err(pix)= 0.014
oldshift(pix)=−0.059
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

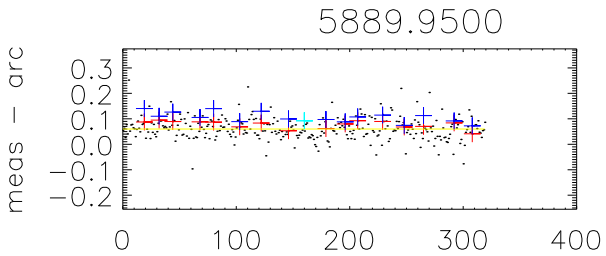

shift(pix)=−0.022
err(pix)= 0.014
oldshift(pix)= 0.109
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

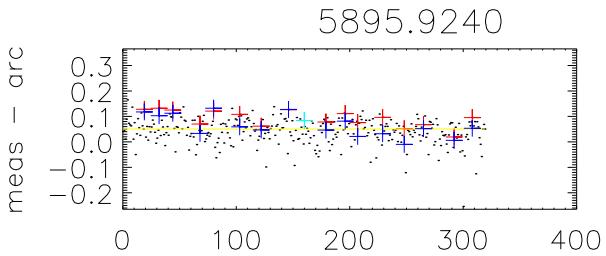

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

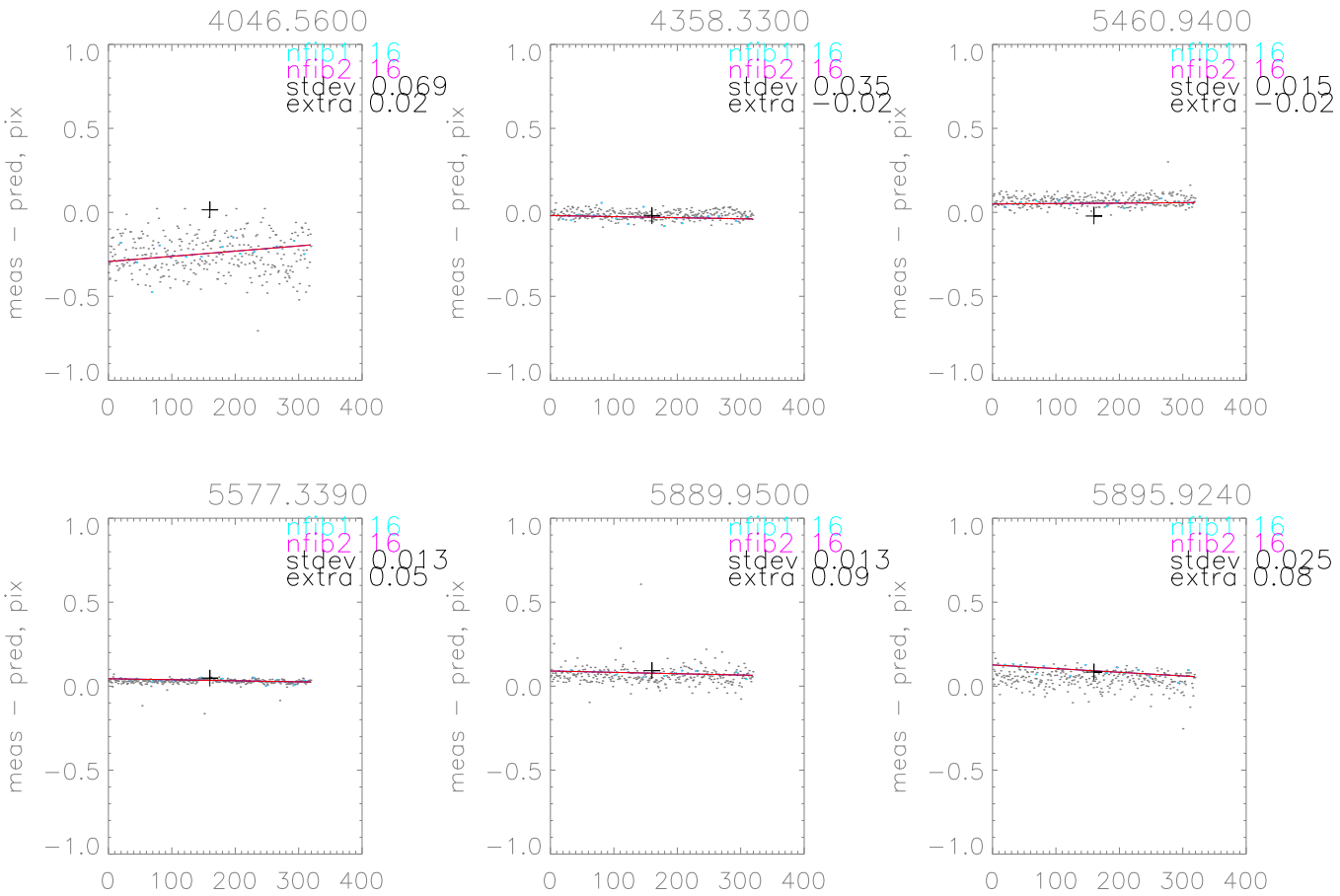

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

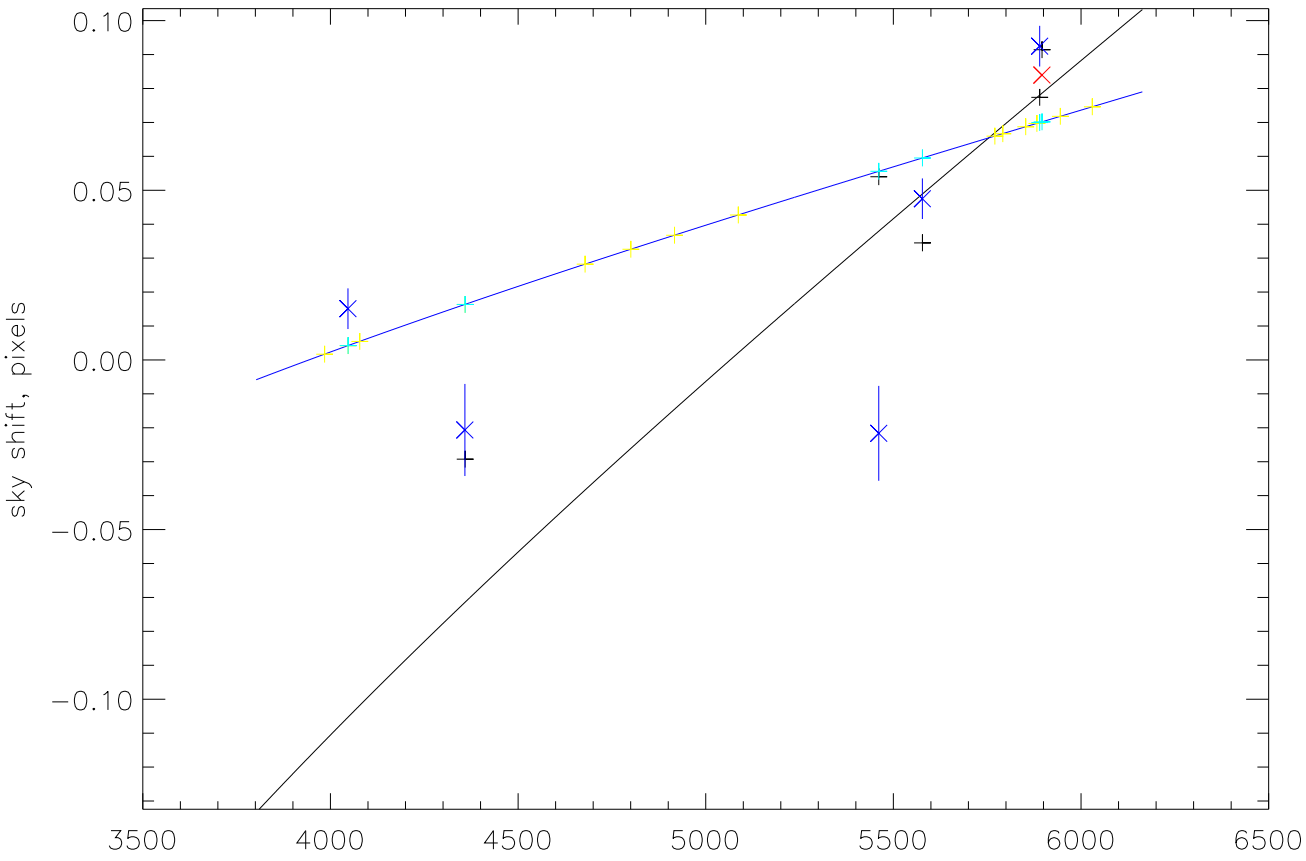

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

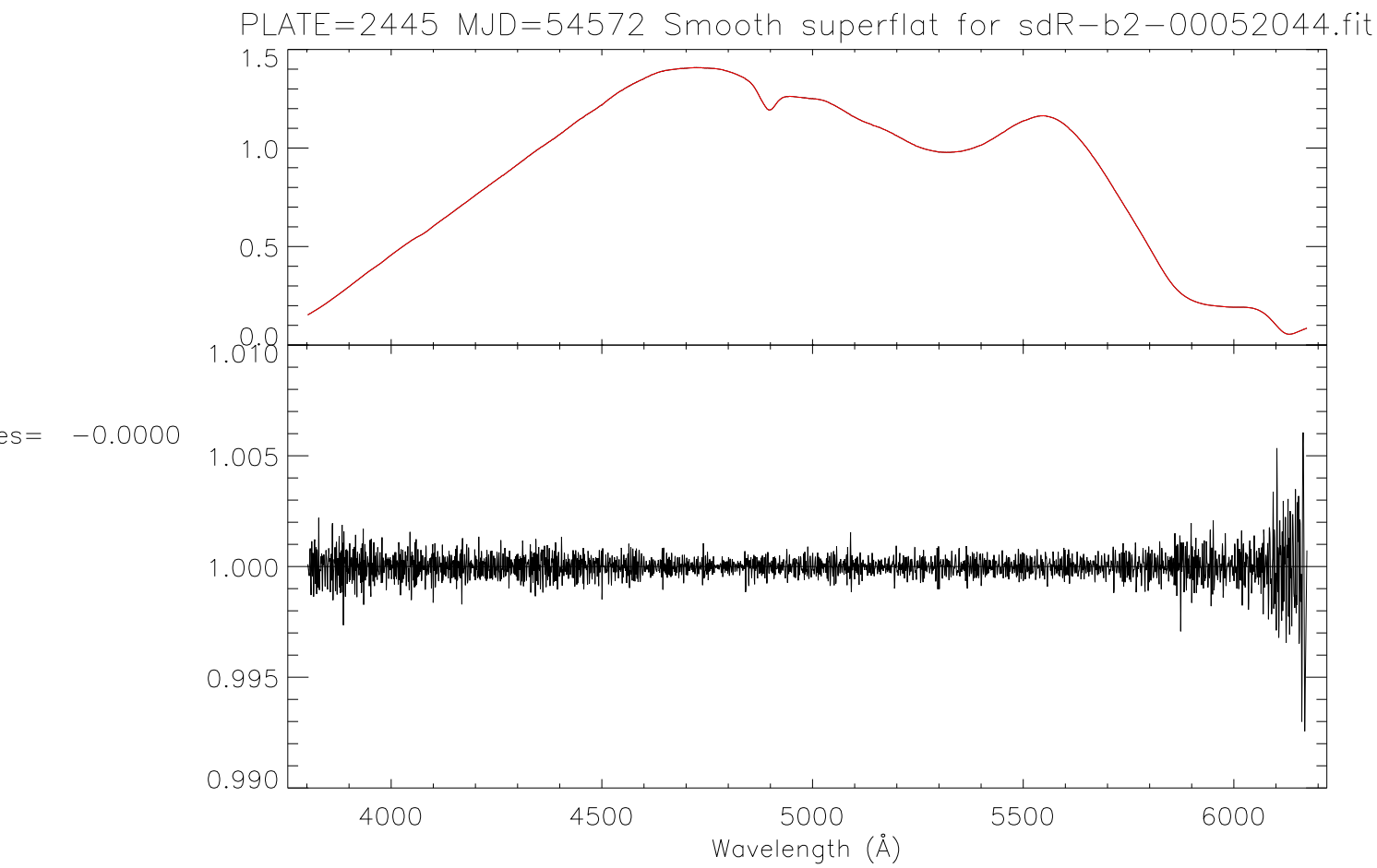

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

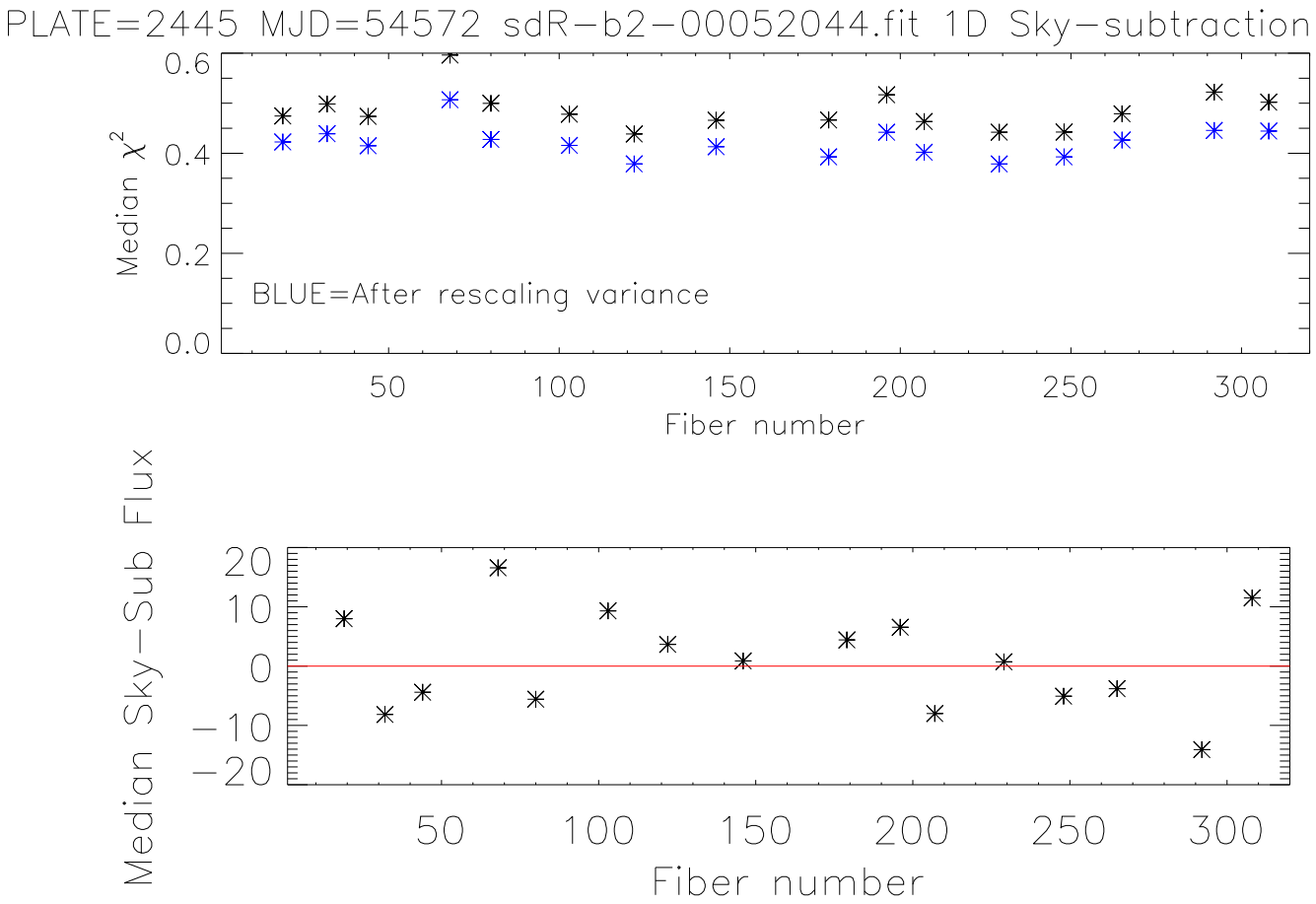

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

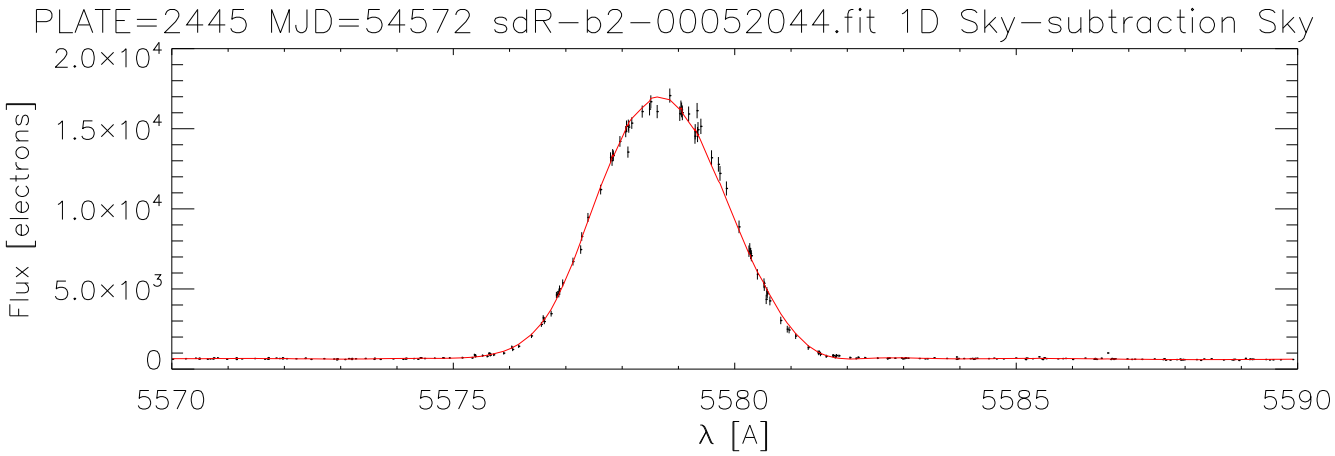

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

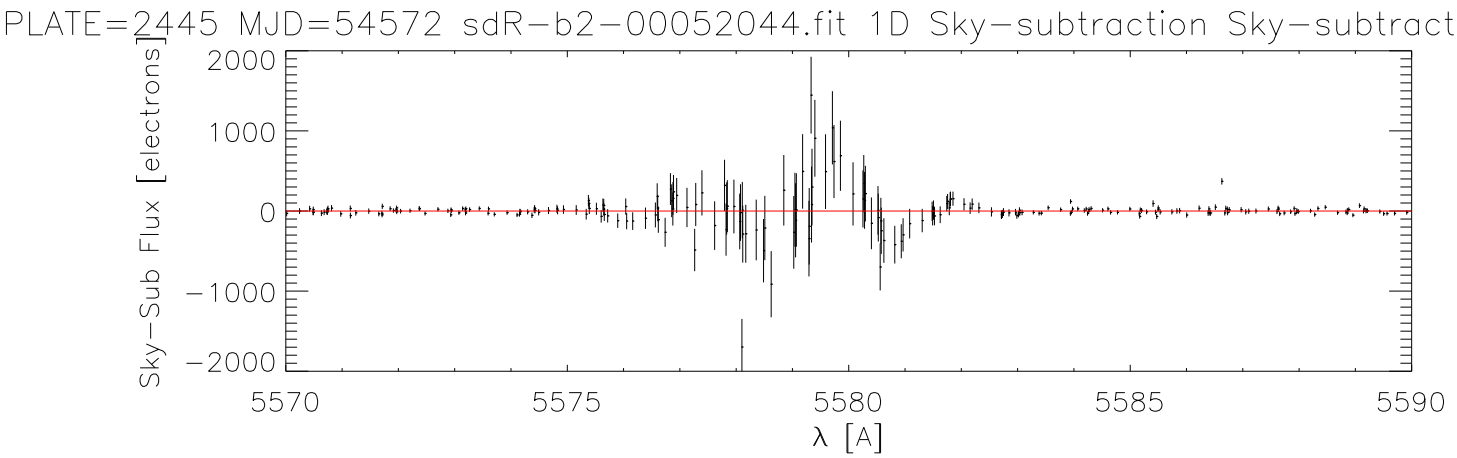

4046.5600
nfib1 16
nfib2 16
stdev 0.069
extra 0.02
4358.3300
nfib1 16
nfib2 16
stdev 0.035
extra −0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.015
extra −0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra 0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.013
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.025
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

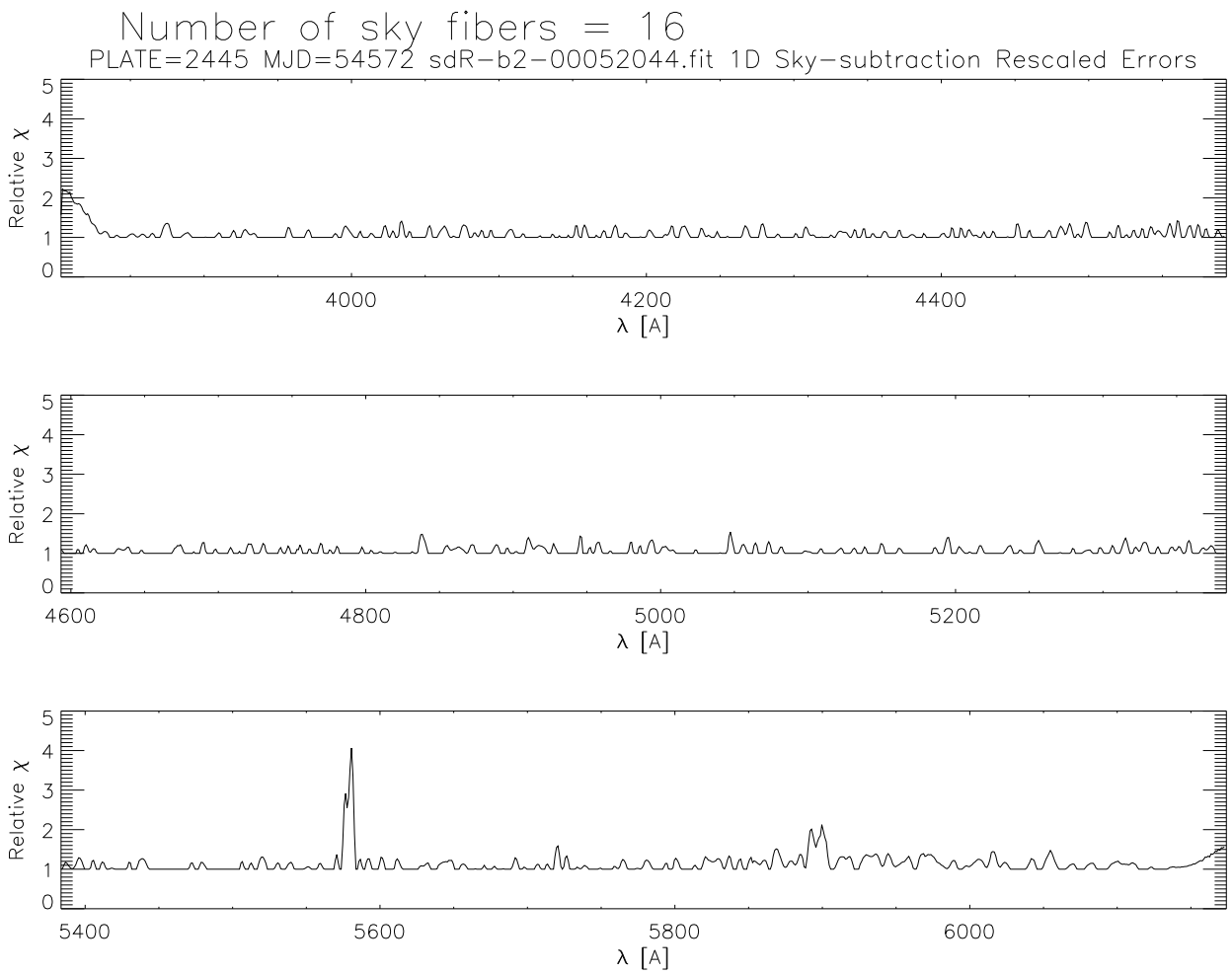

0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

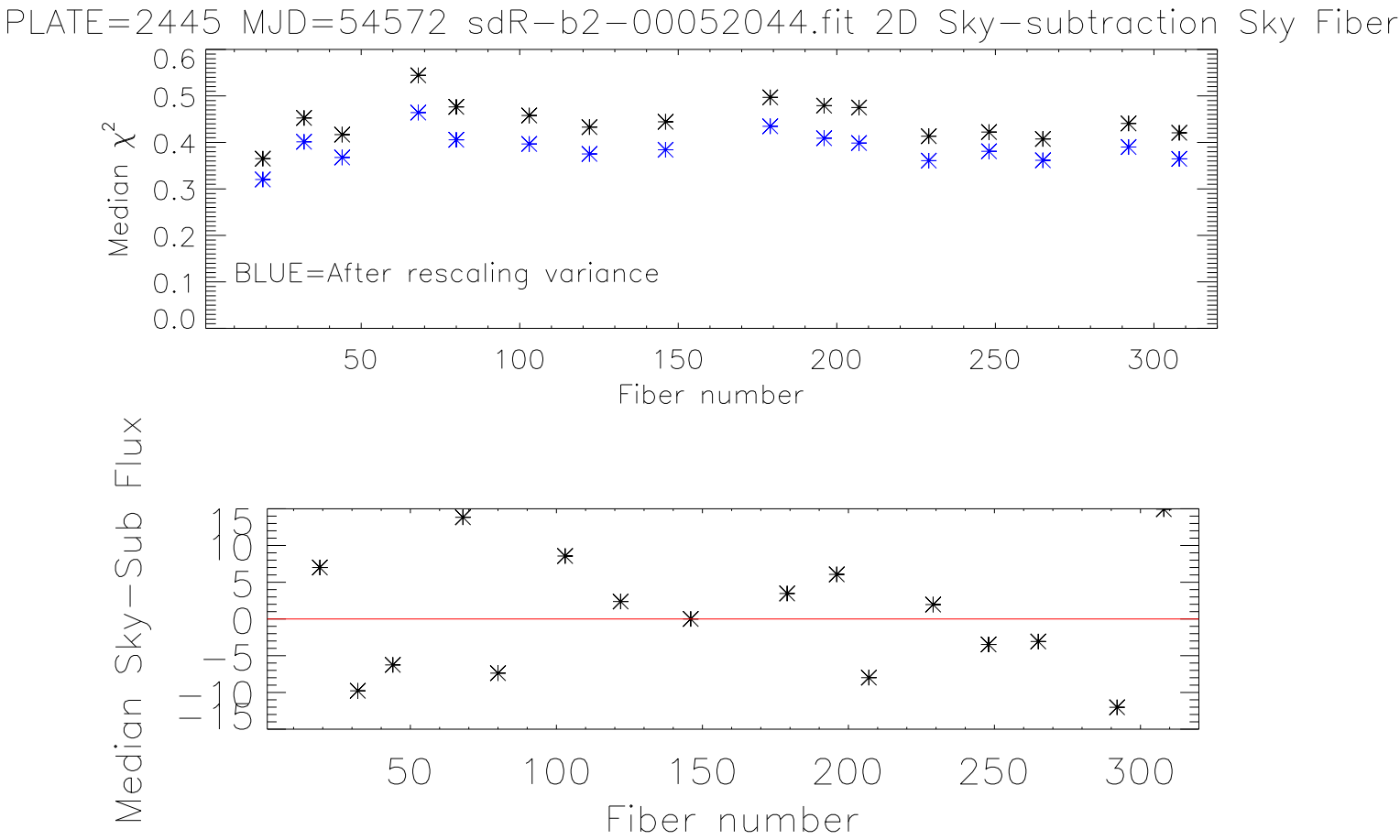

PLATE=2445 MJD=54572 Smooth superflat for sdR-b2-00052044.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

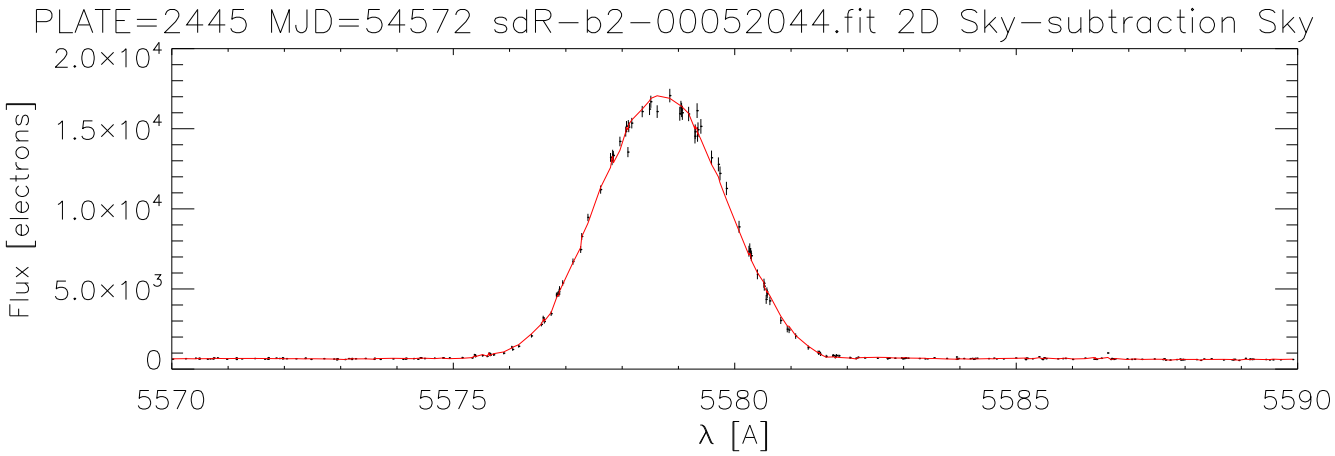

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

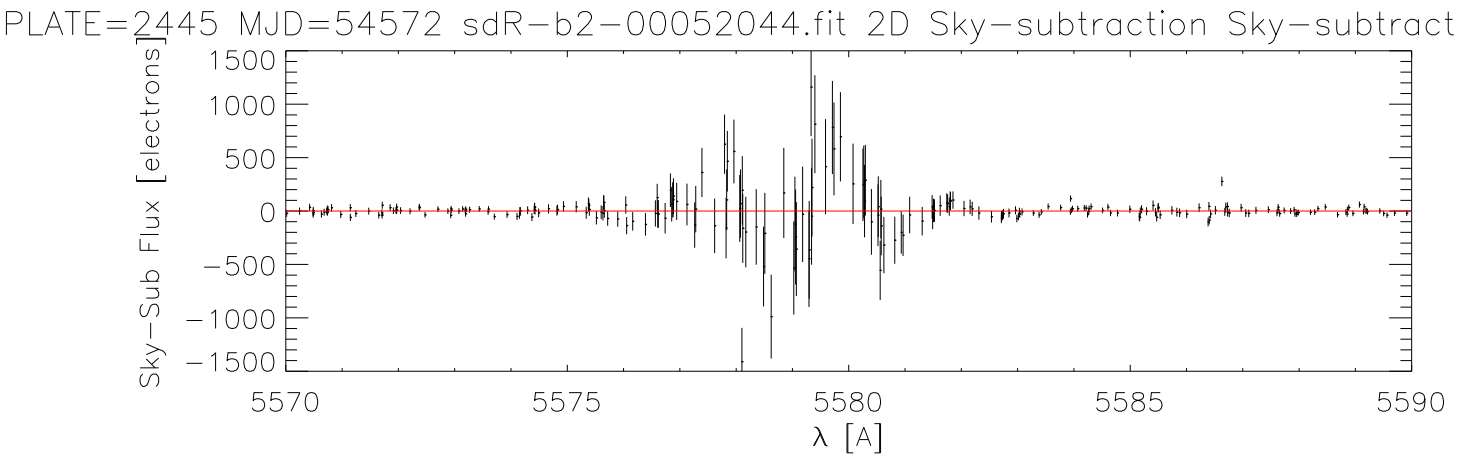

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

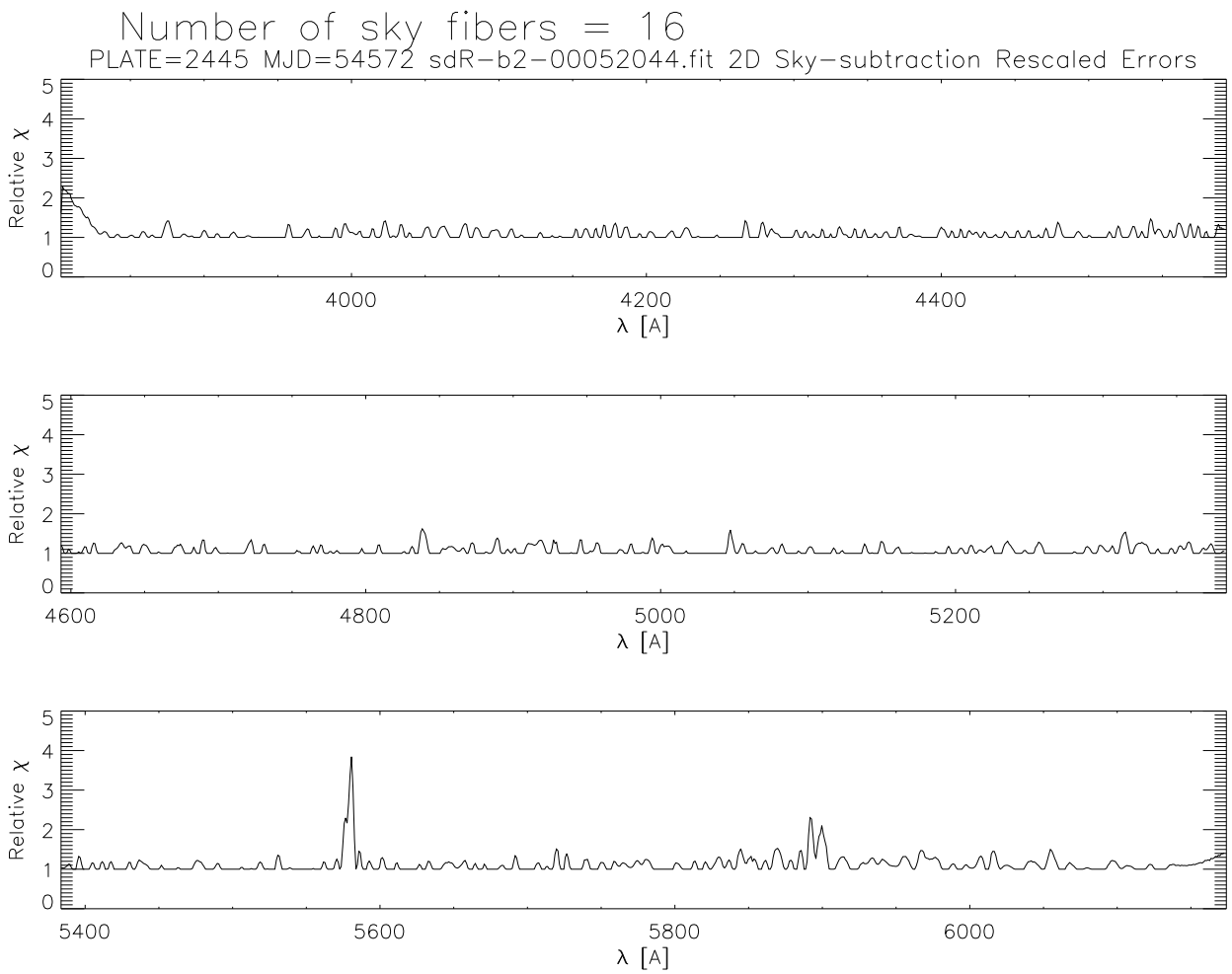

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

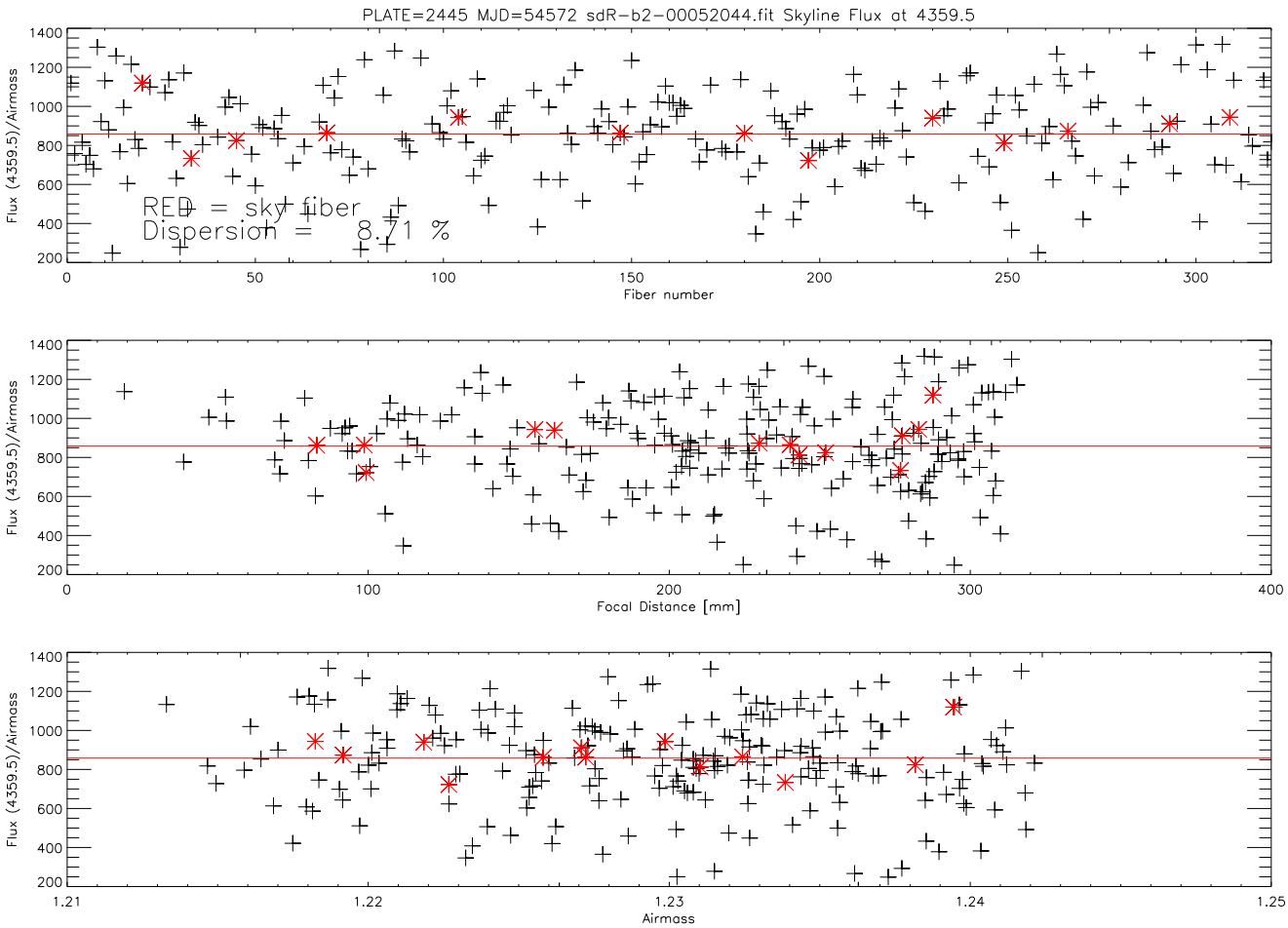

Number of sky fibers = 16
PLATE=2445 MJD=54572 sdR-b2-00052044.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

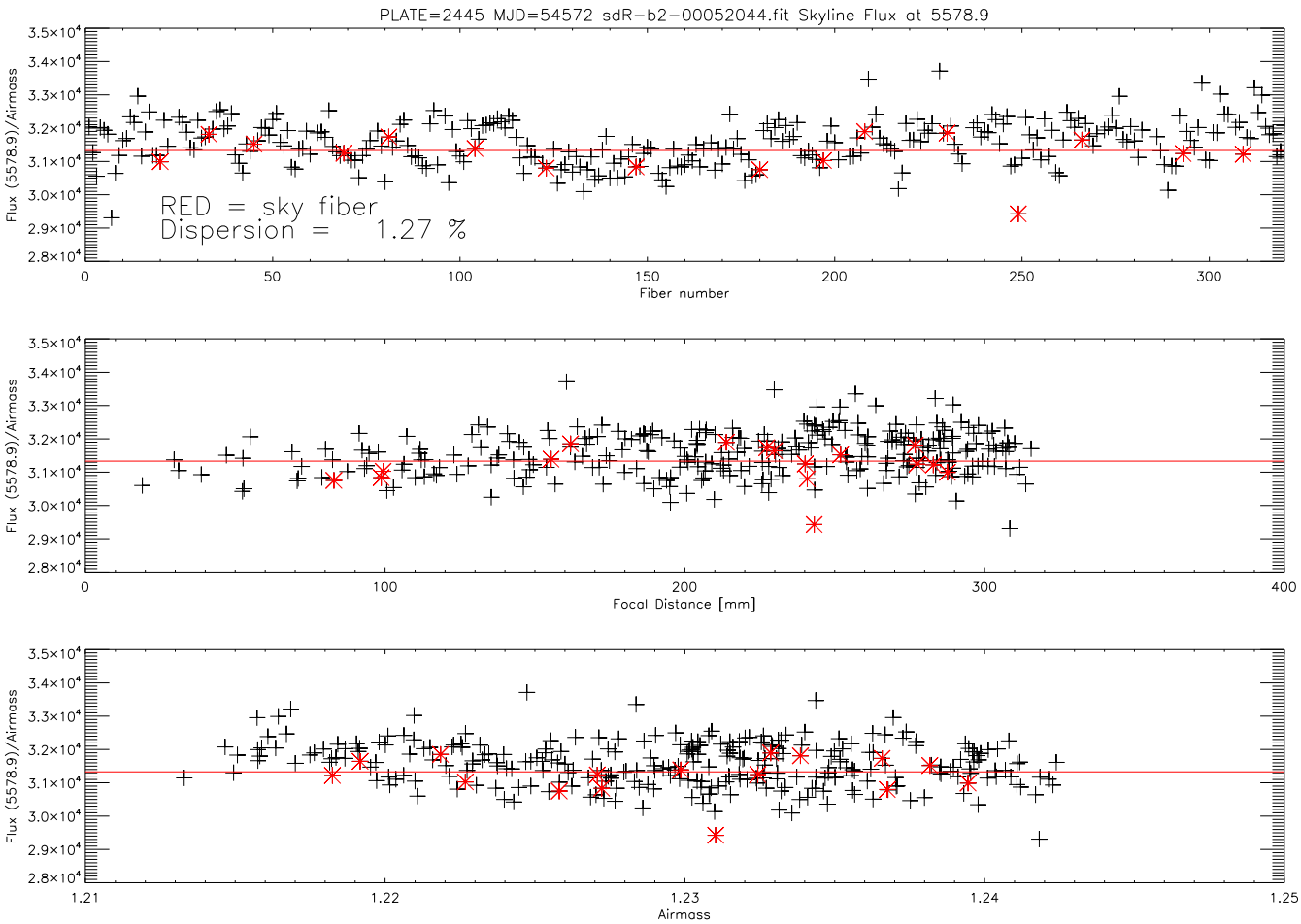

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

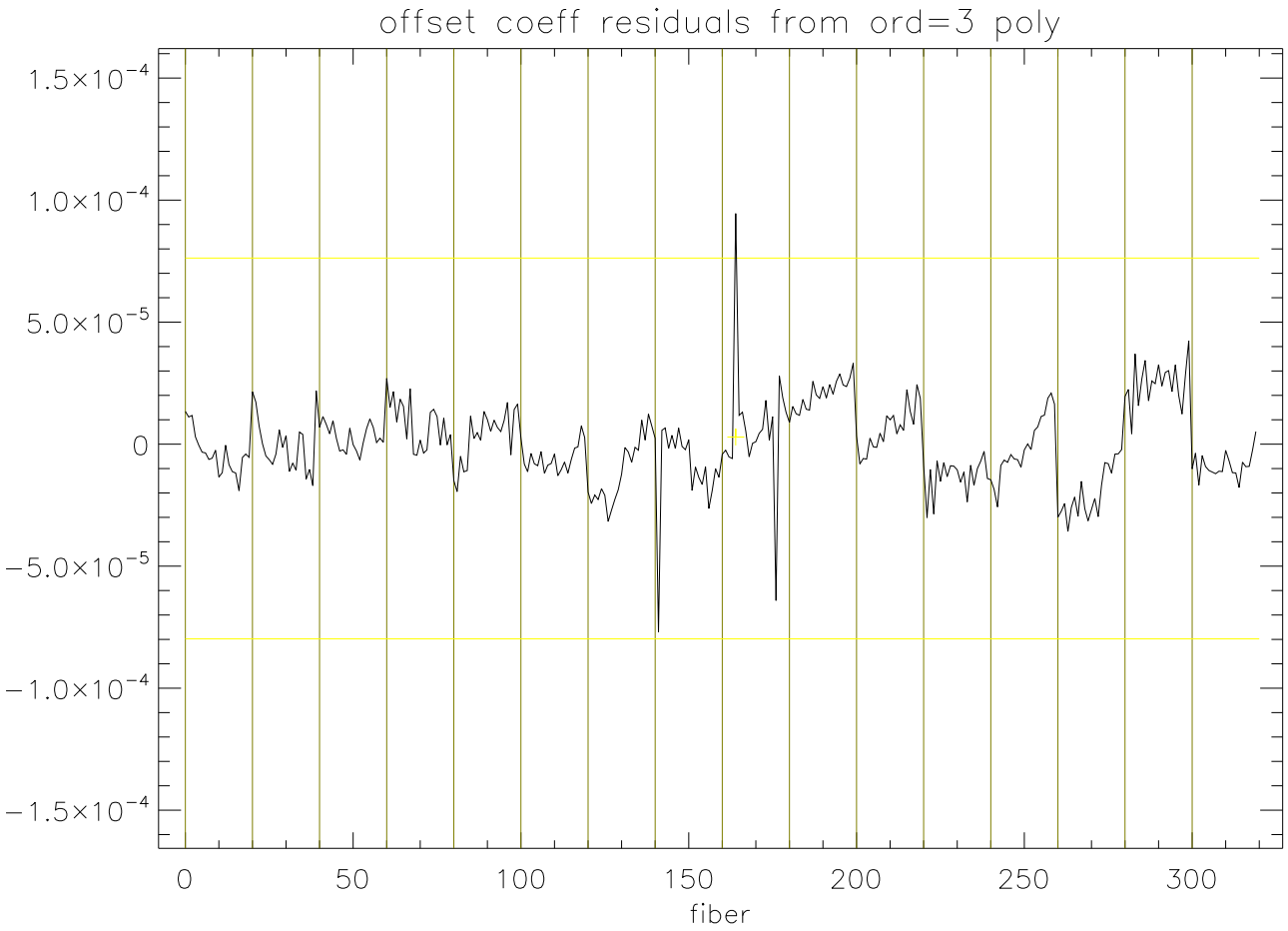

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

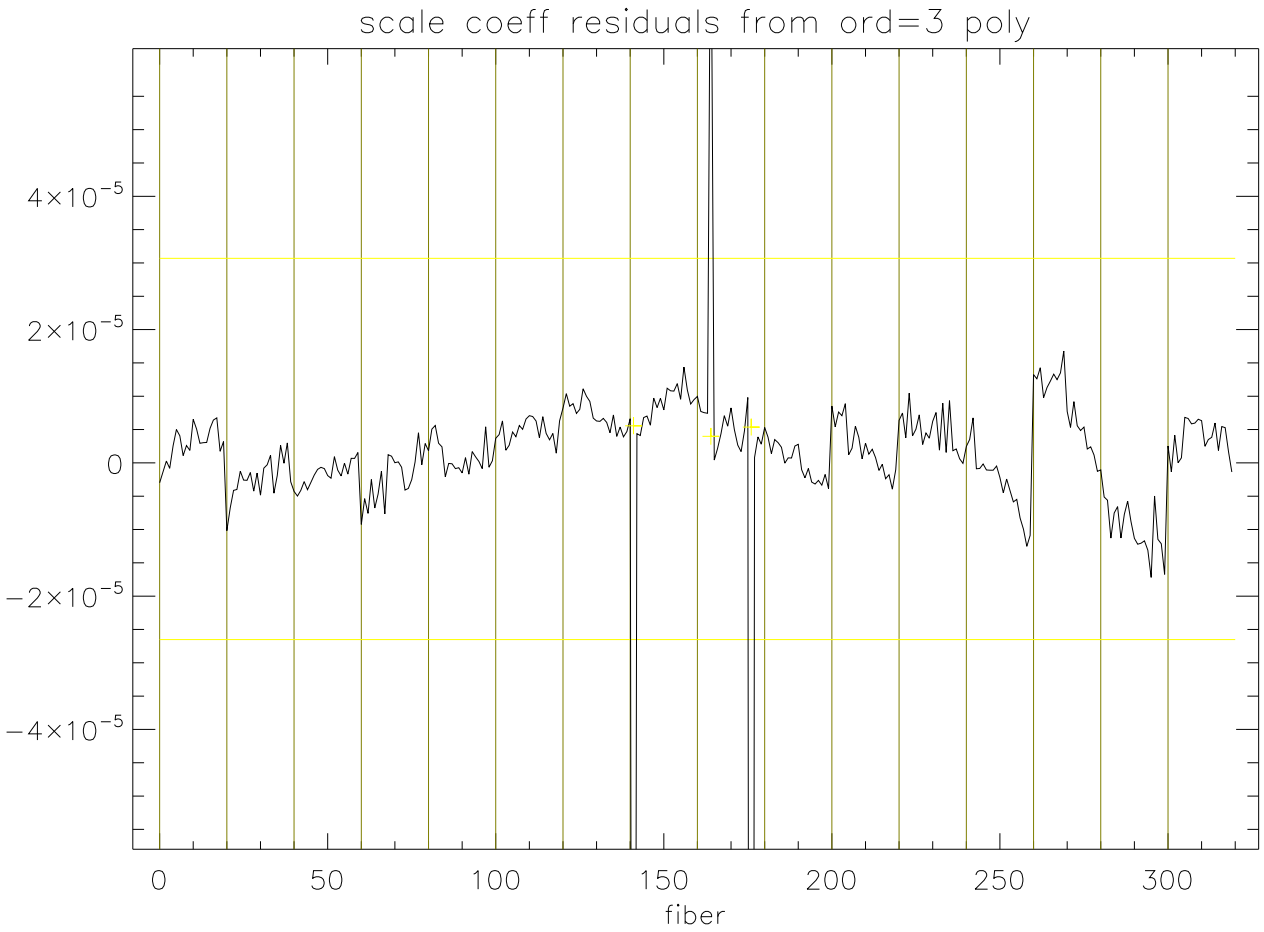

PLATE=2445 MJD=54572 sdR-b2-00052044.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

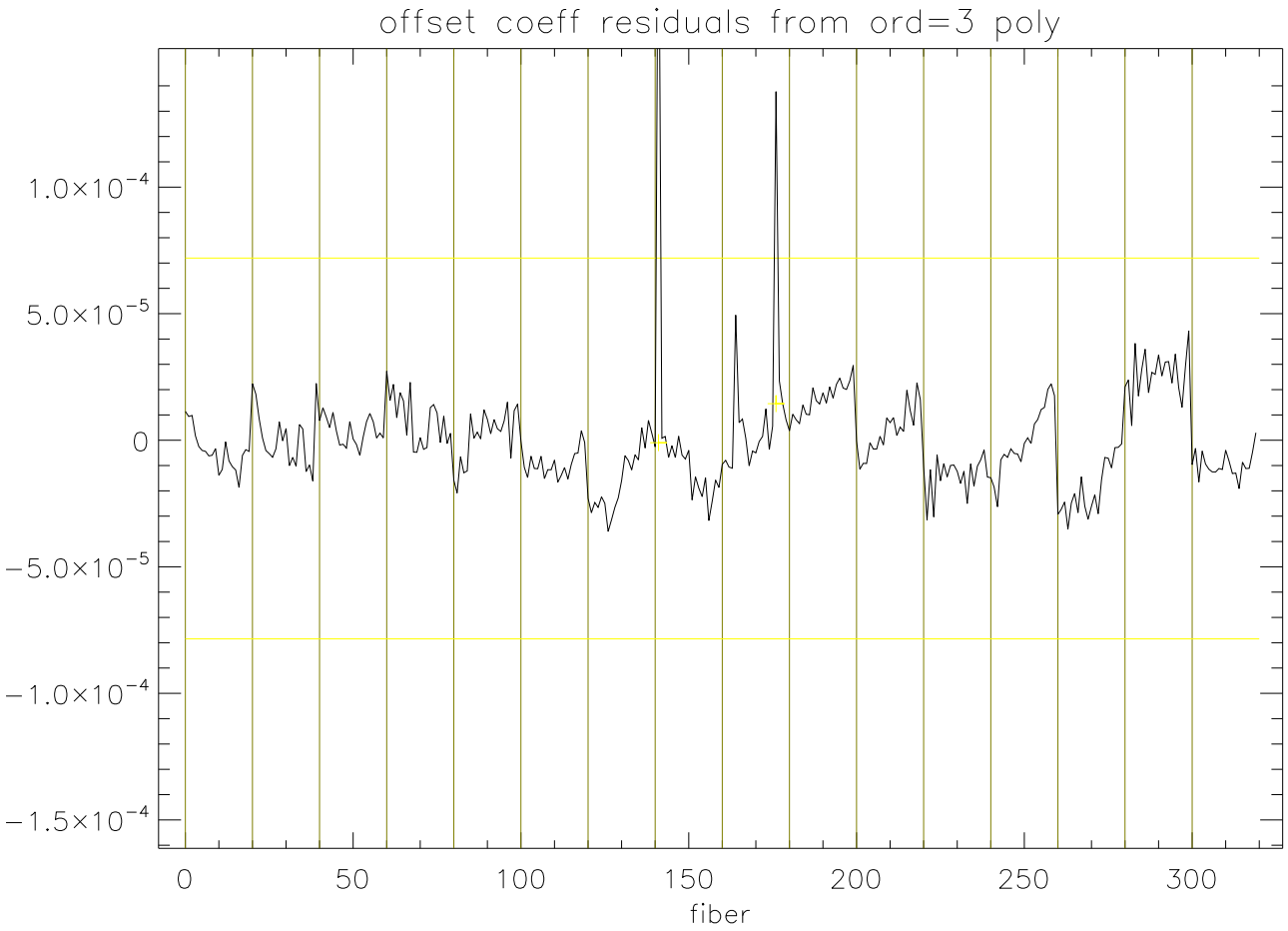

Number of sky fibers = 16
PLATE=2445 MJD=54572 sdR-b2-00052044.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

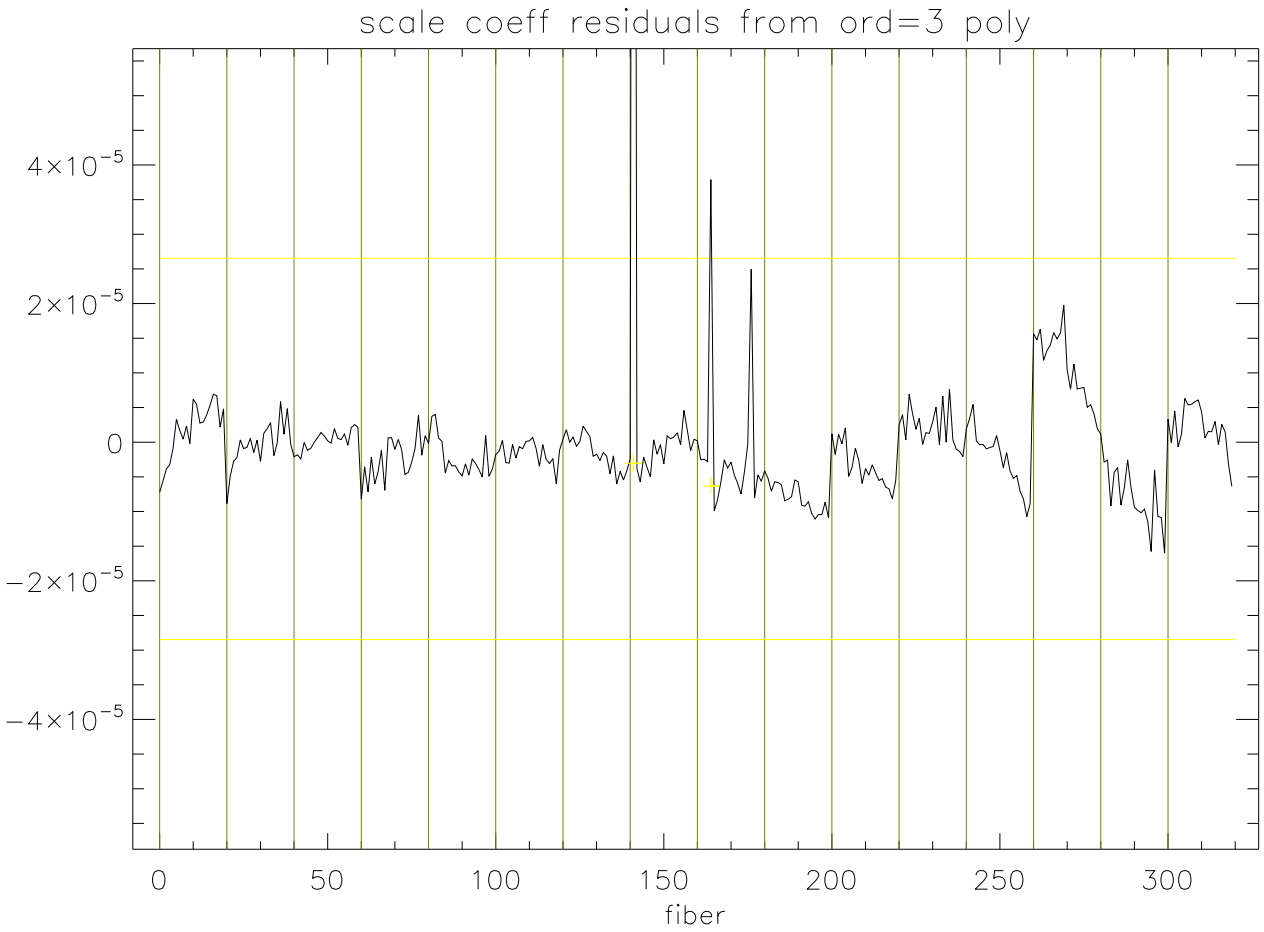

PLATE=2445 MJD=54572 sdR-b2-00052044.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.71 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

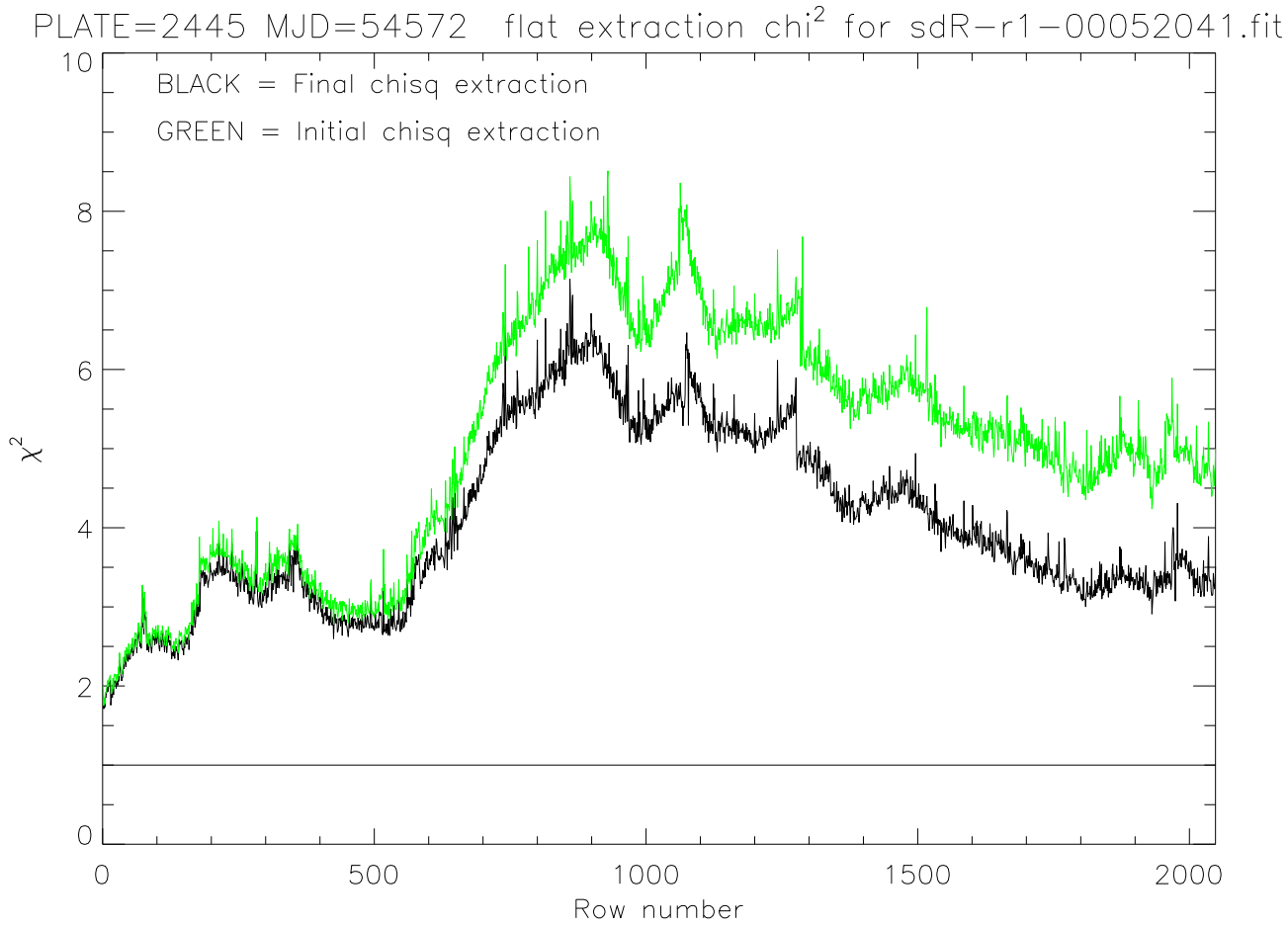

PLATE=2445 MJD=54572 sdR-b2-00052044.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.27 %
Fiber number
Focal Distance [mm]
Airmass

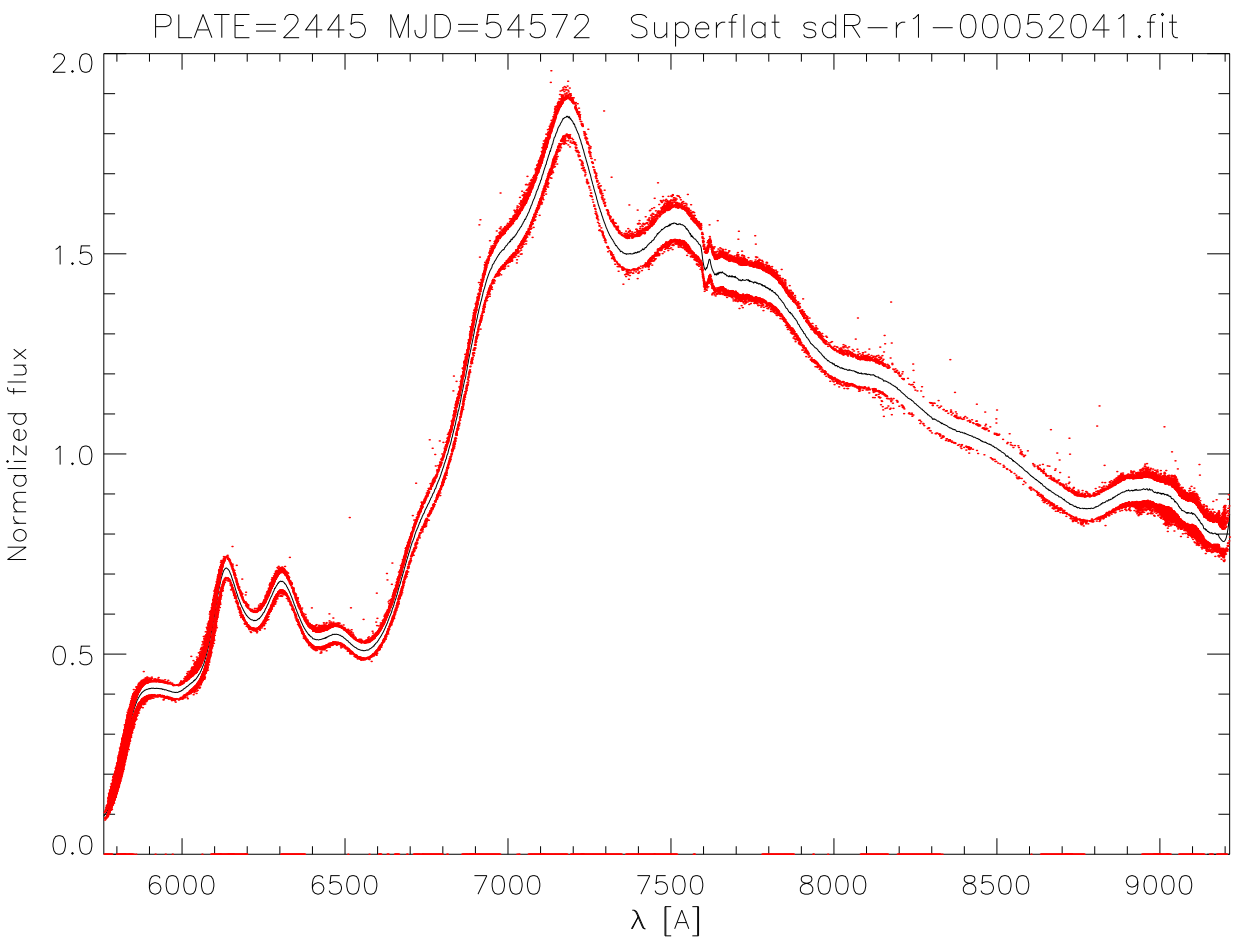

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

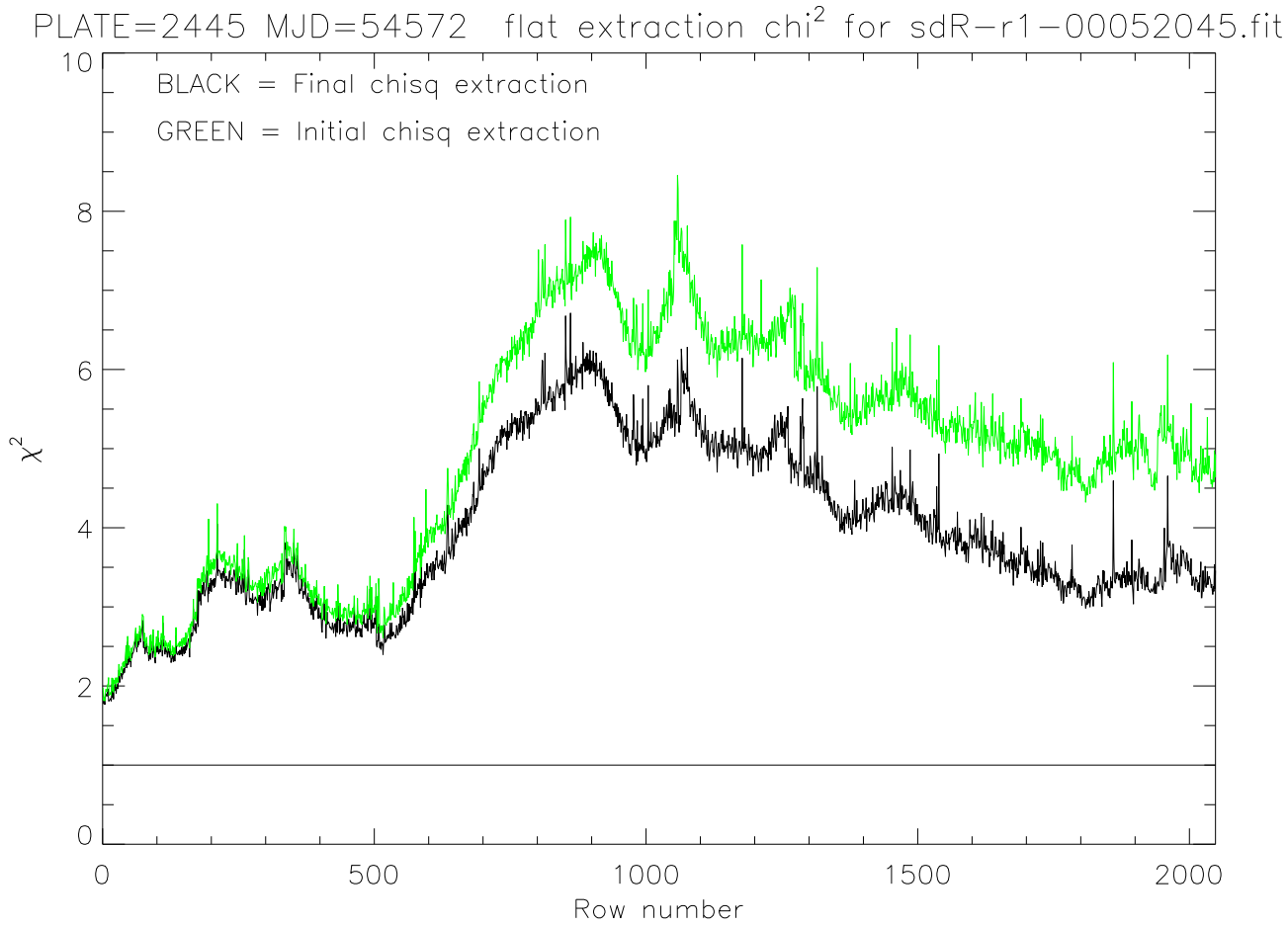

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

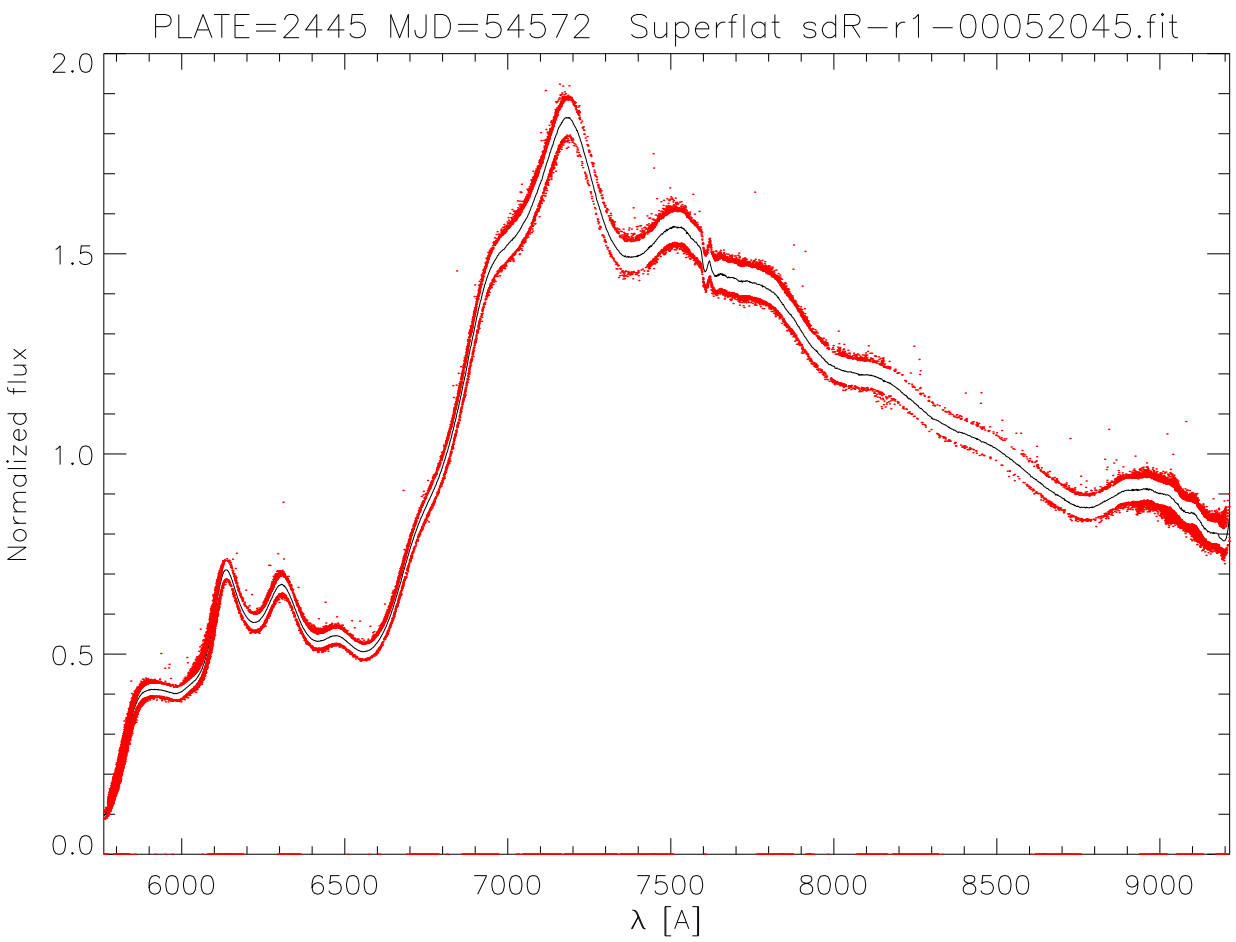

offset coeff residuals from ord=3 poly
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

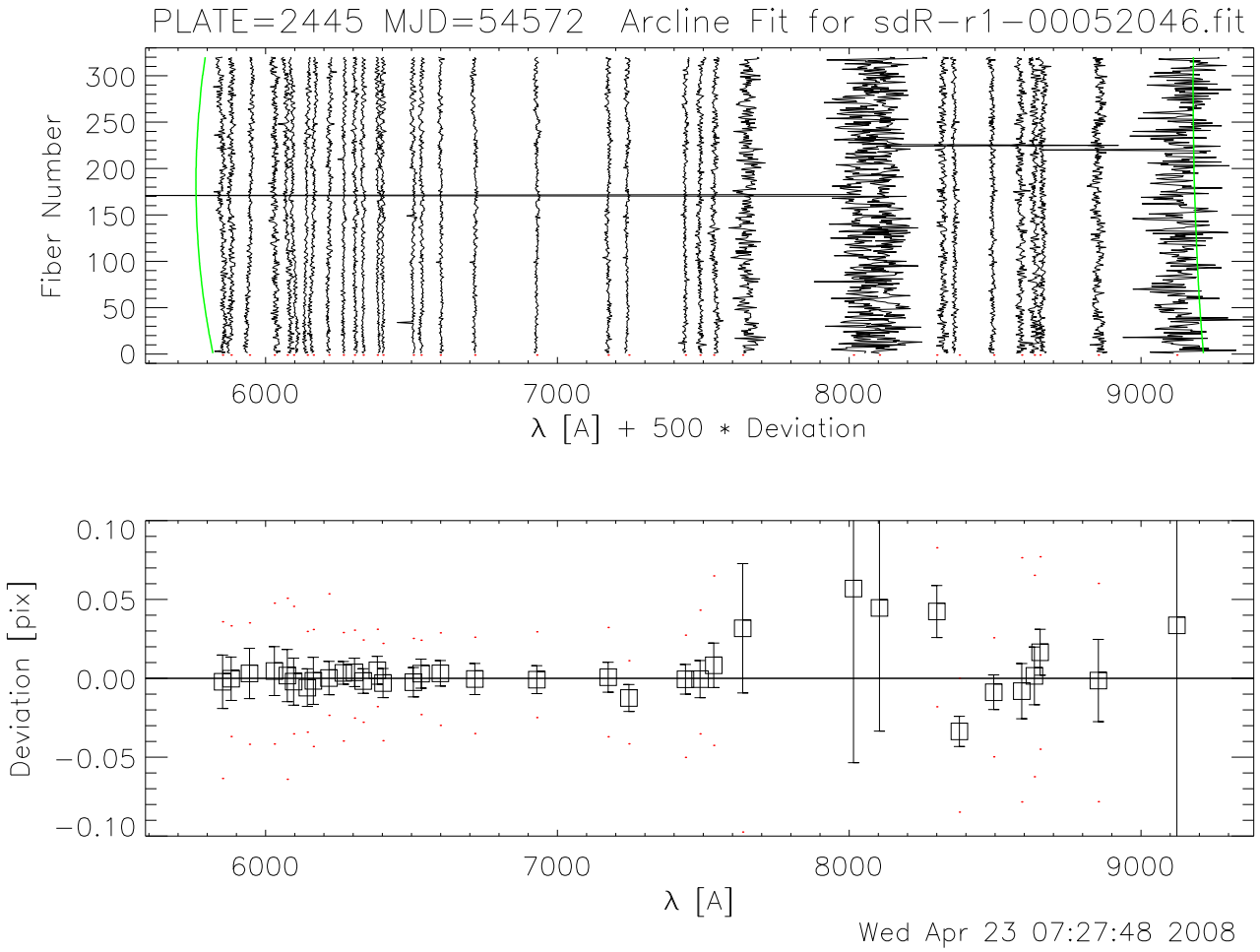

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

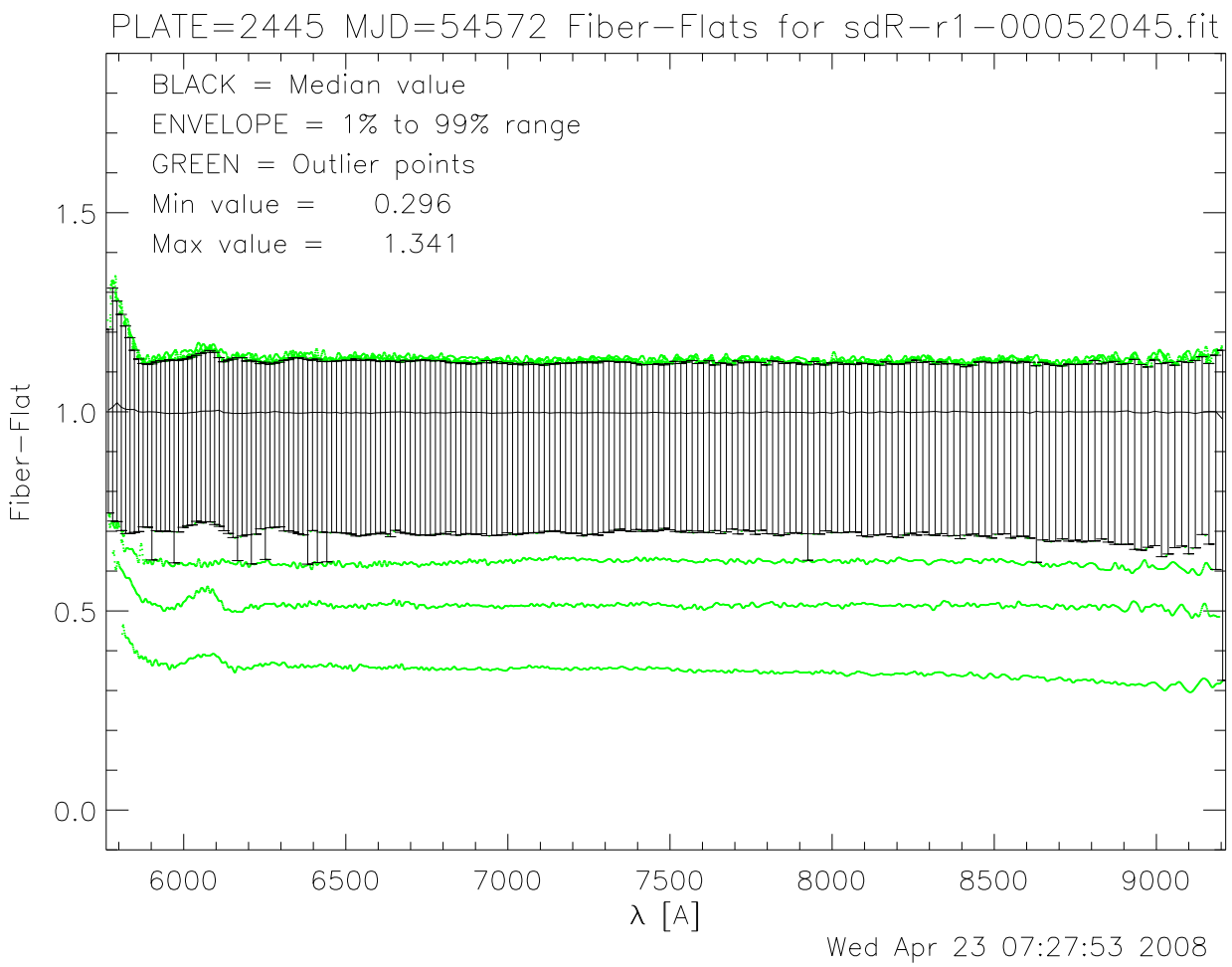

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−r1−00052041.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

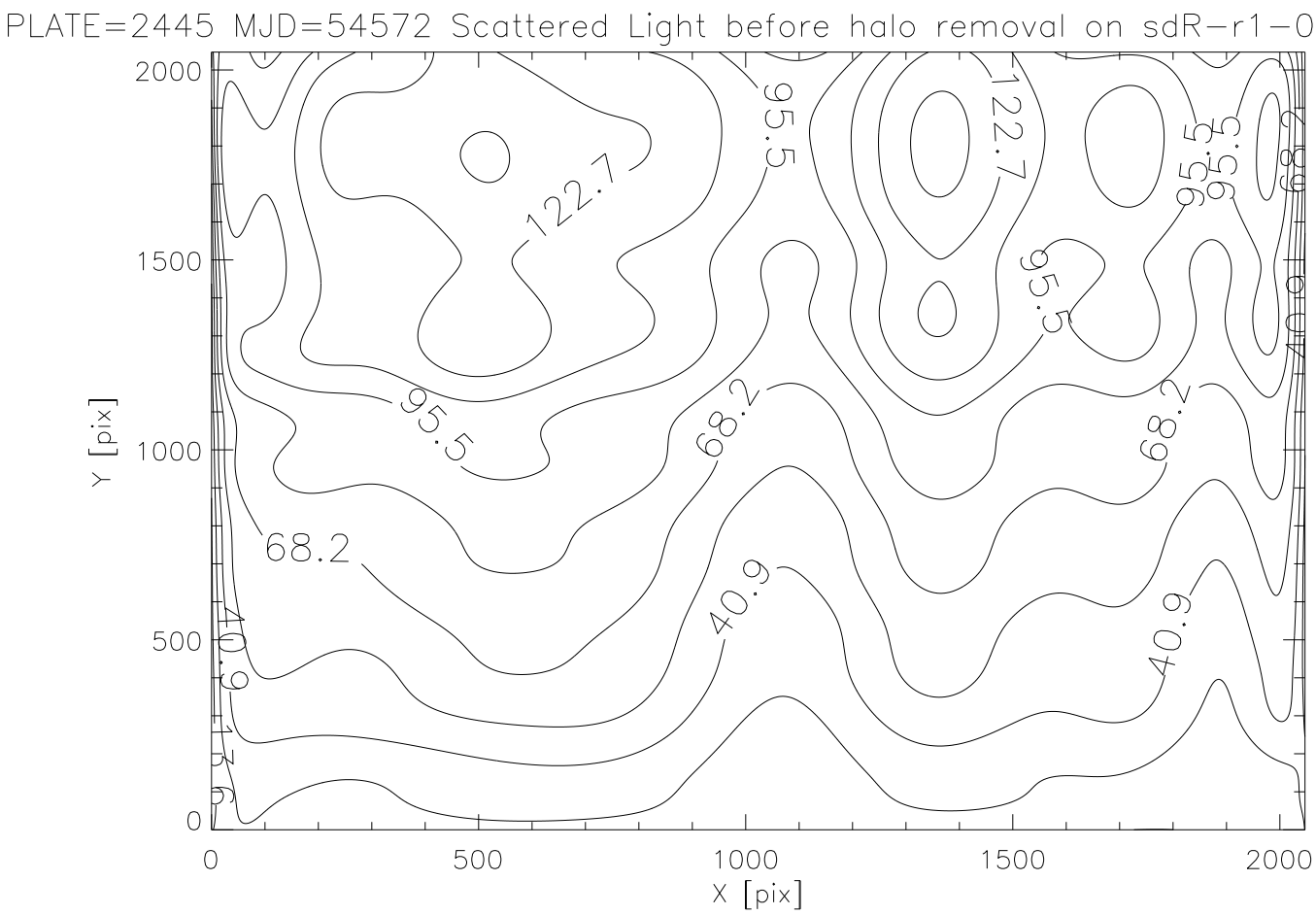

PLATE=2445 MJD=54572 Superflat sdR-r1-00052041.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

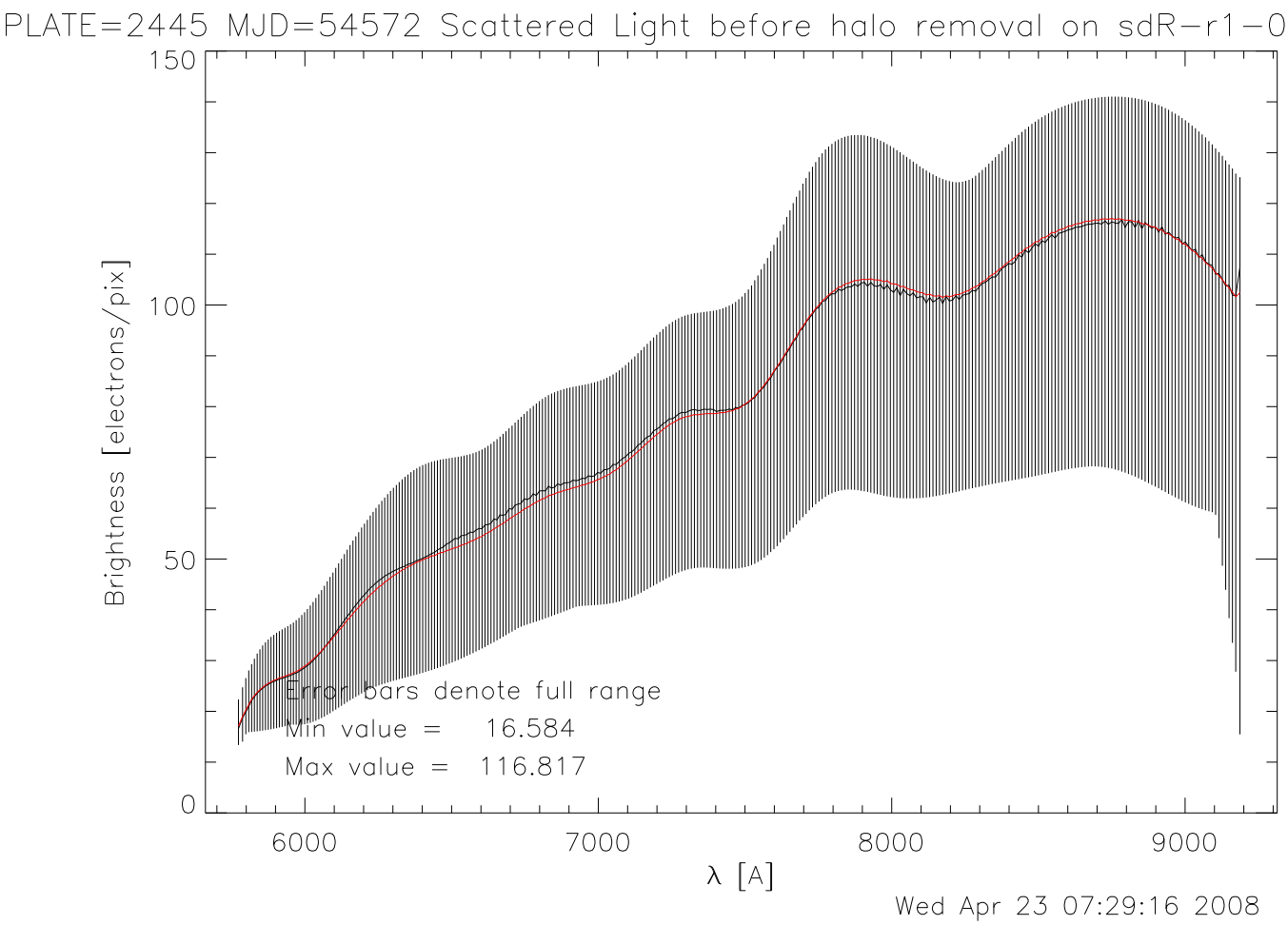

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−r1−00052045.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

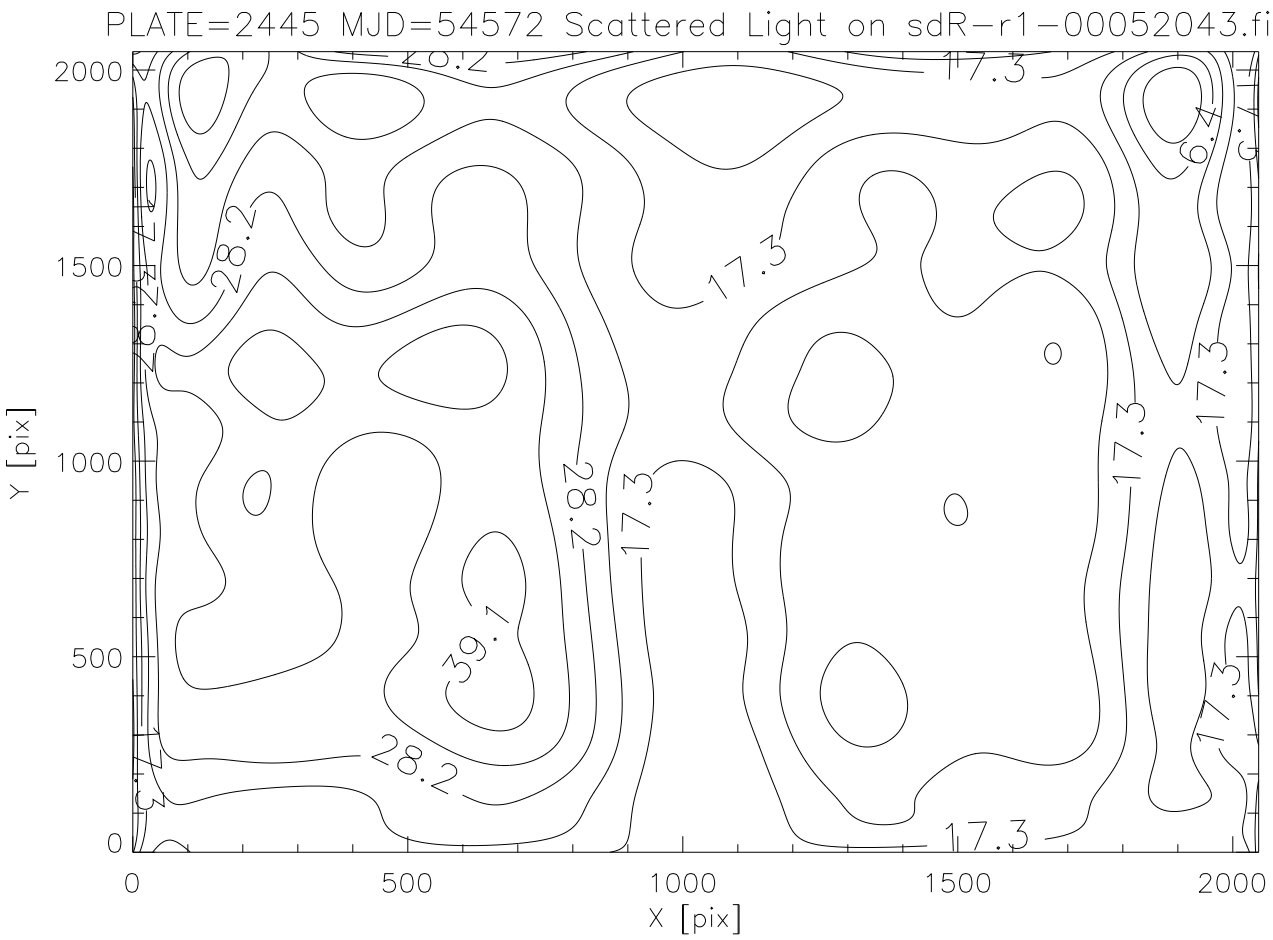

PLATE=2445 MJD=54572 Superflat sdR-r1-00052045.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

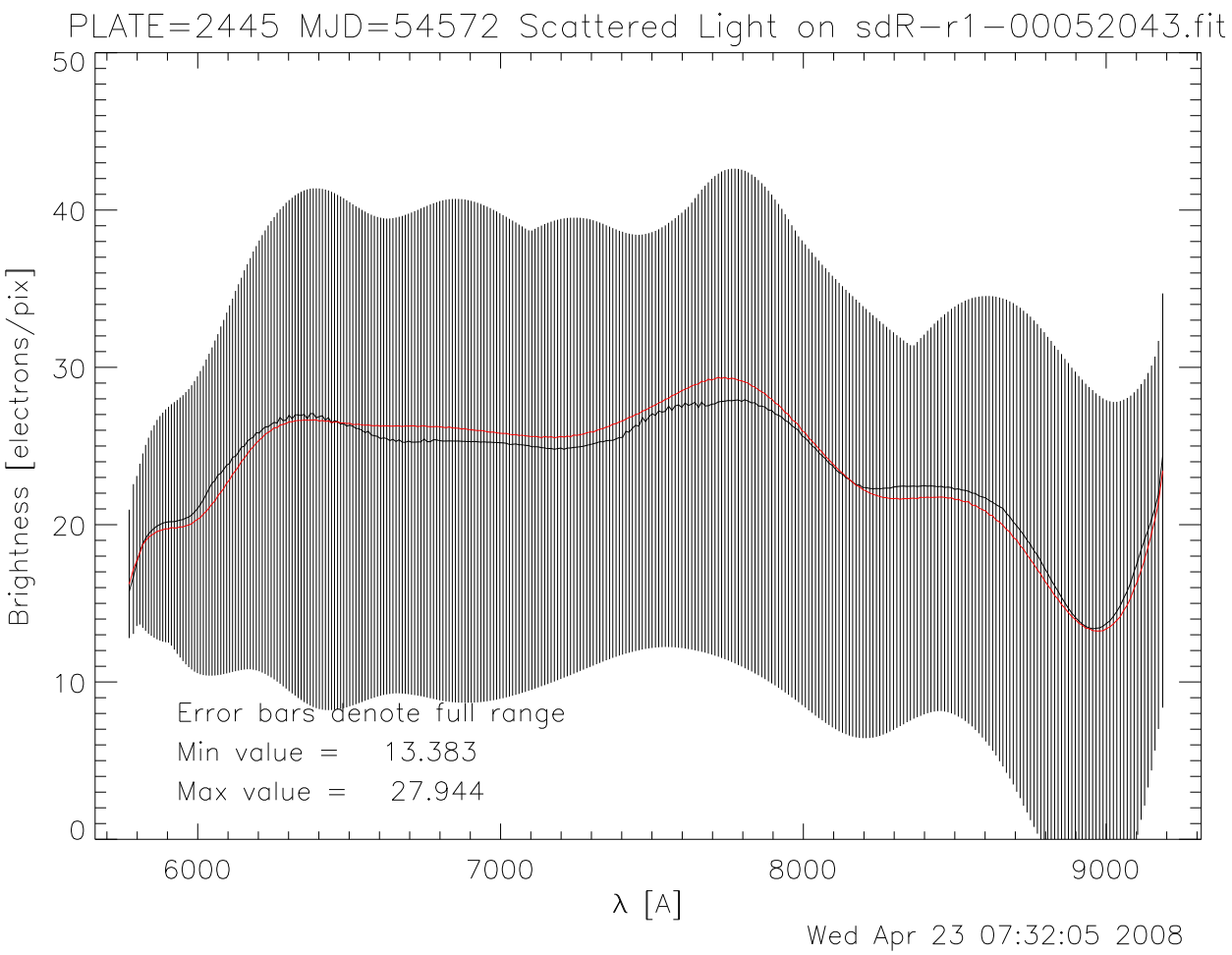

PLATE=2445 MJD=54572 Arcline Fit for sdR-r1-00052046.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:27:48 2008

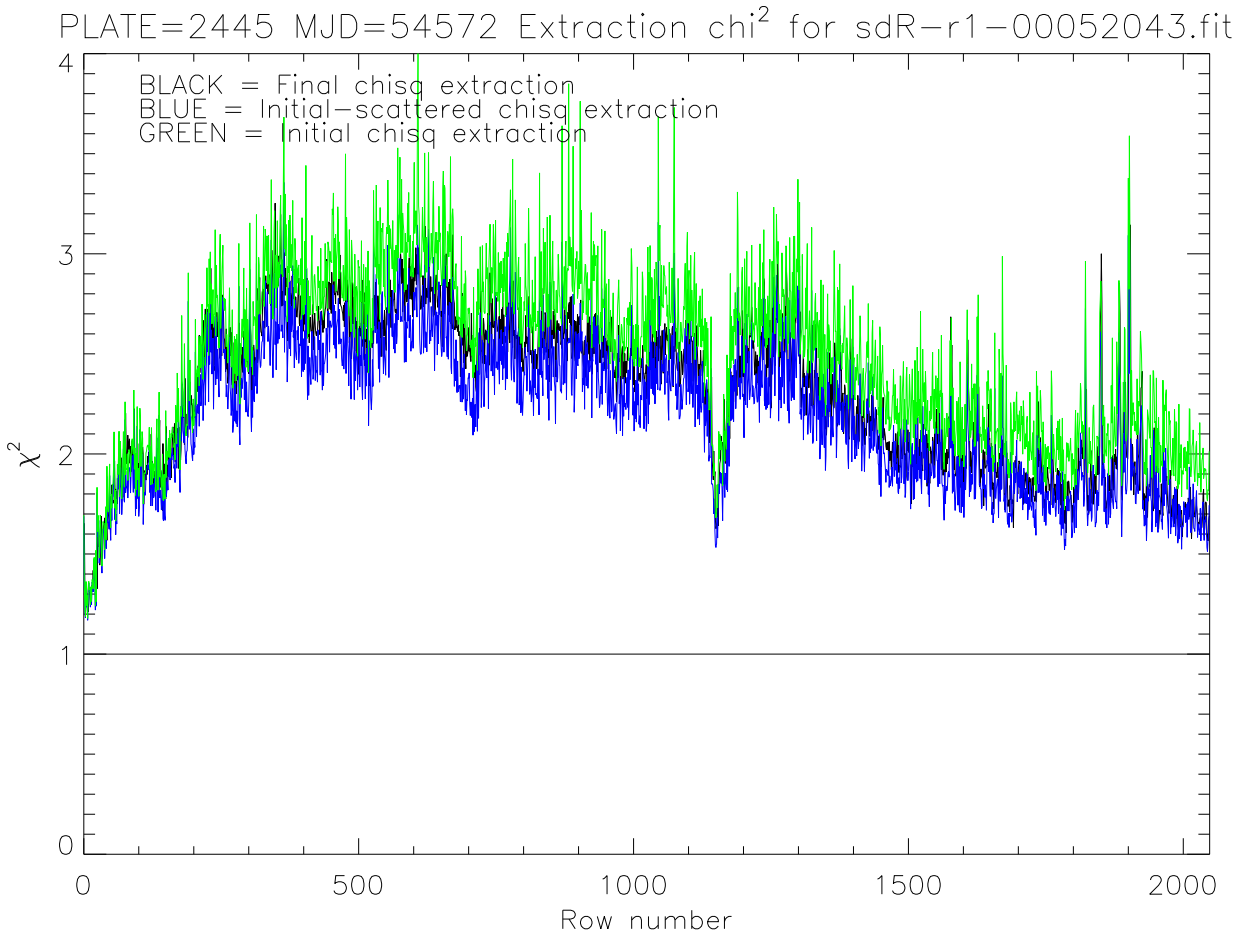

PLATE=2445 MJD=54572 Fiber−Flats for sdR−r1−00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.296
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Apr 23 07:27:53 2008

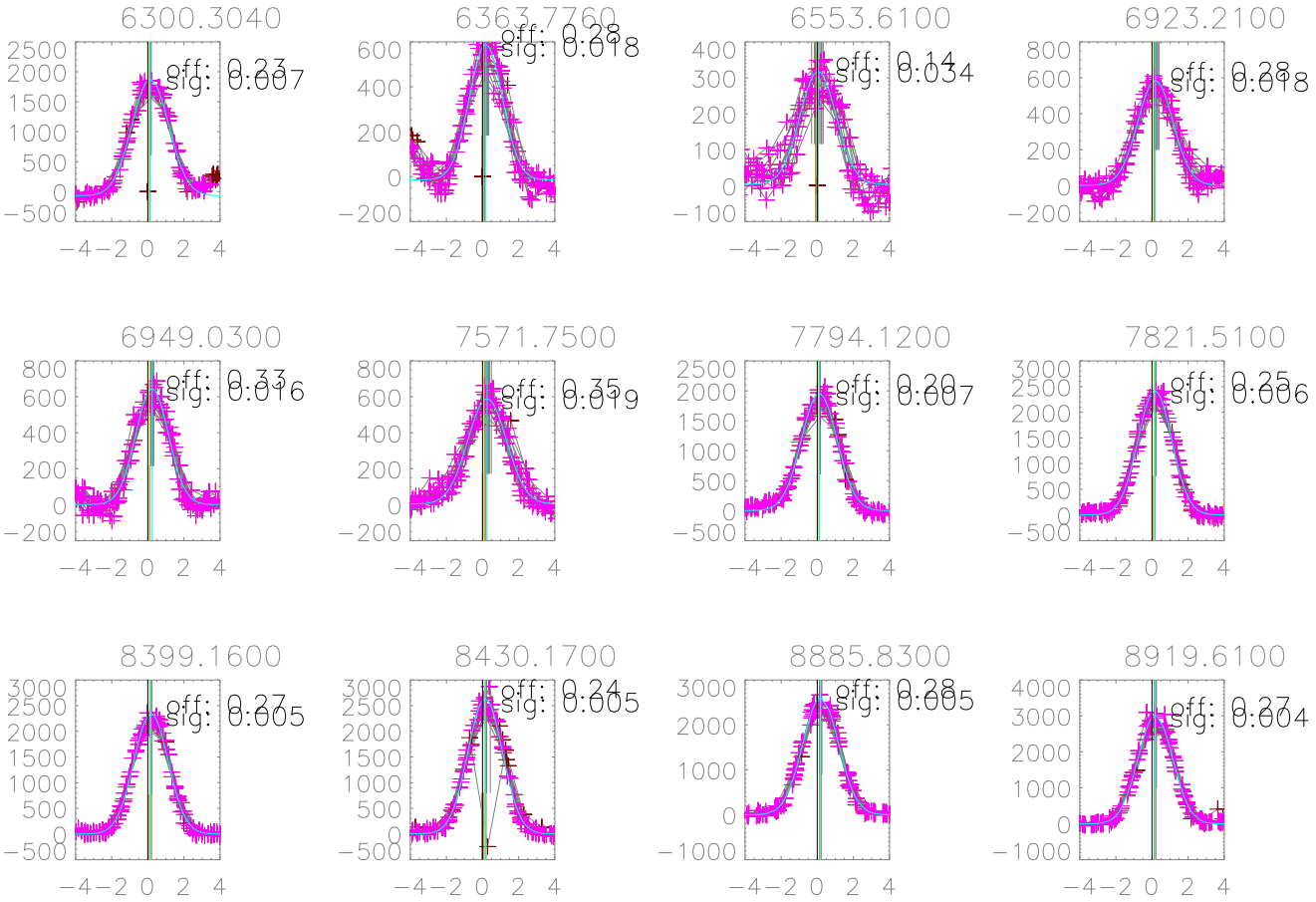

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r1-00052043.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
122.7
95.5
68.2
40.9
13.6

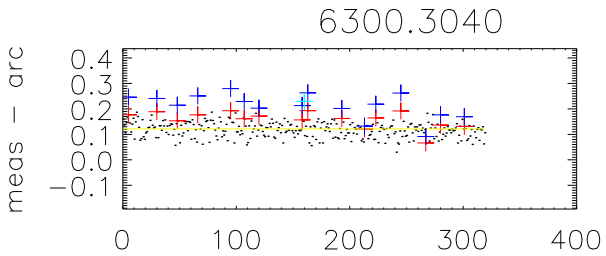

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r1-00052043.fi
150
100
50
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 16.584
Max value = 116.817
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:29:16 2008

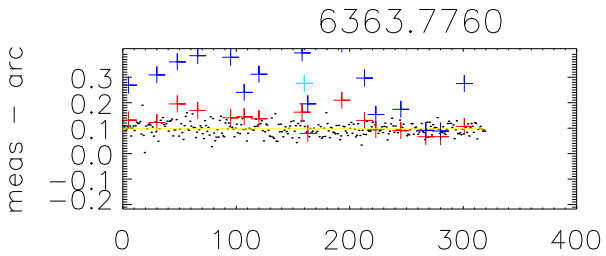

PLATE=2445 MJD=54572 Scattered Light on sdR-r1-00052043.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
28.2
17.3
39.1
6.4
0

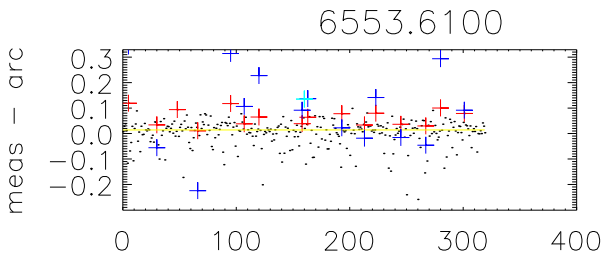

PLATE=2445 MJD=54572 Scattered Light on sdR-r1-00052043.fit
Brightness [electrons/pix]
50
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 13.383
Max value = 27.944
Wed Apr 23 07:32:05 2008

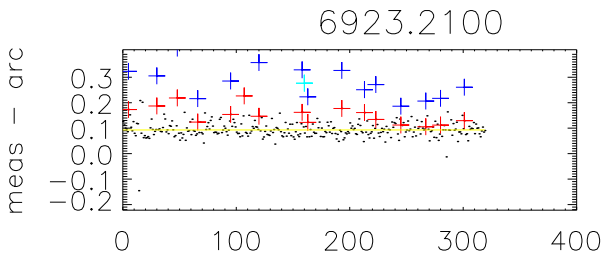

PLATE=2445 MJD=54572 Extraction chi^2 for sdR−r1−00052043.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

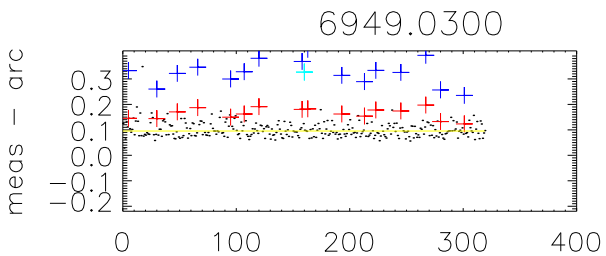

6300.3040
off: 0.23
sig: 0.007
6363.7760
off: 0.28
sig: 0.018
6553.6100
off: 0.14
sig: 0.034
6923.2100
off: 0.28
sig: 0.018
6949.0300
off: 0.33
sig: 0.016
7571.7500
off: 0.35
sig: 0.019
7794.1200
off: 0.20
sig: 0.007
7821.5100
off: 0.25
sig: 0.006
8399.1600
off: 0.27
sig: 0.005
8430.1700
off: 0.24
sig: 0.005
8885.8300
off: 0.28
sig: 0.005
8919.6100
off: 0.27
sig: 0.004

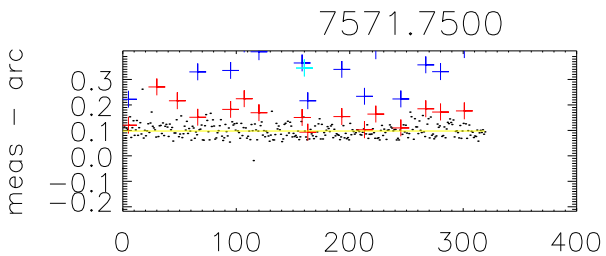

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

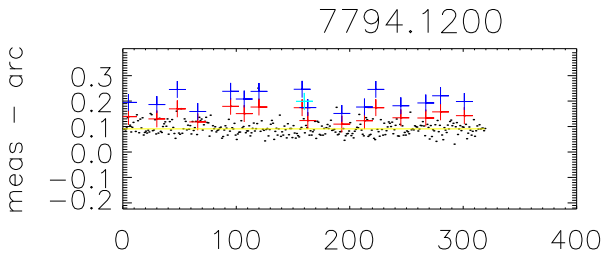

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

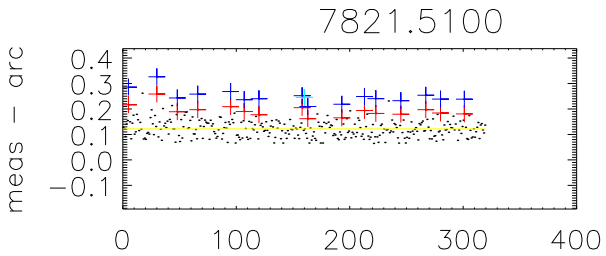

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

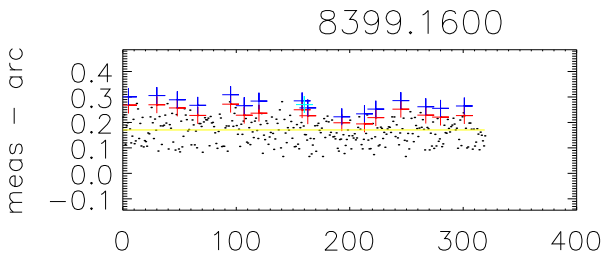

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

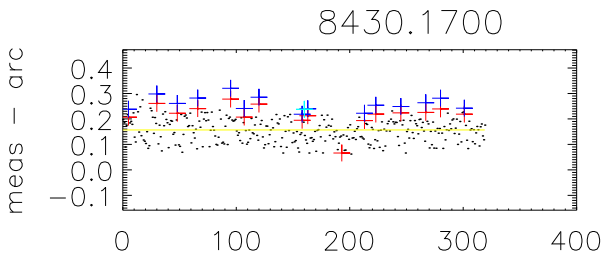

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

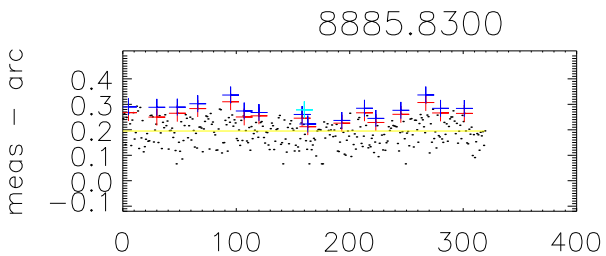

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

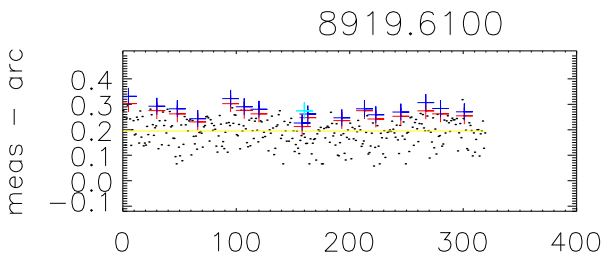

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

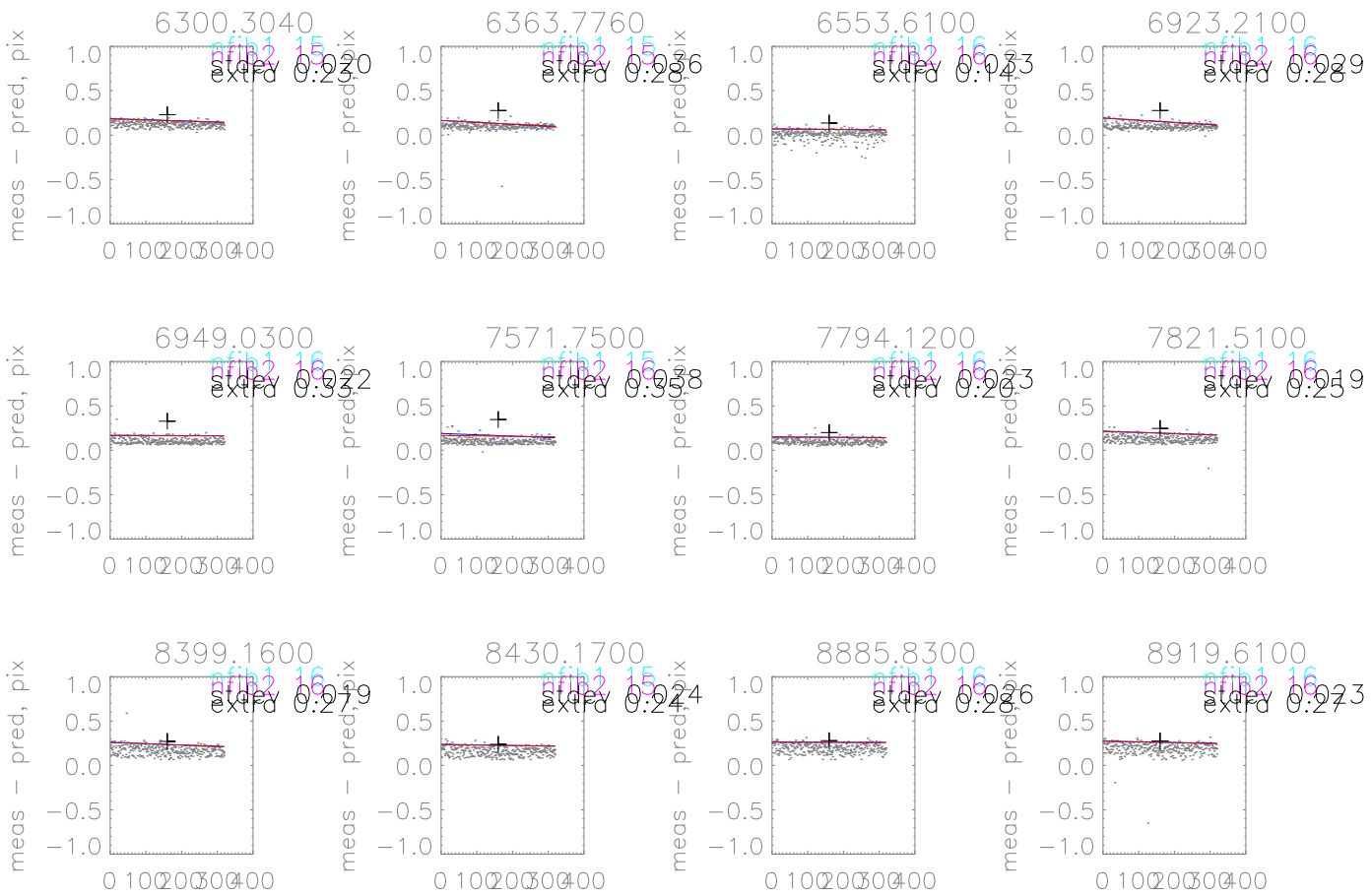

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

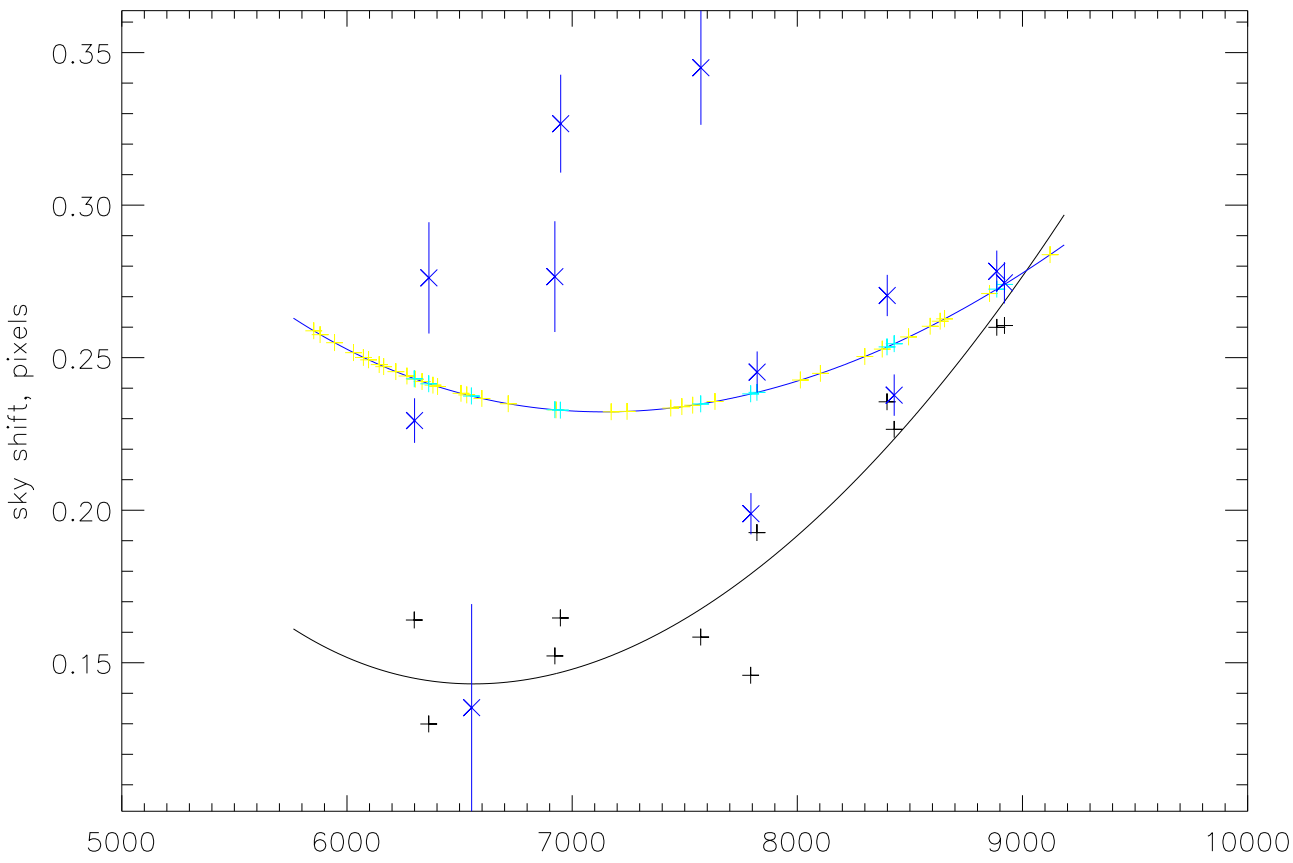

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

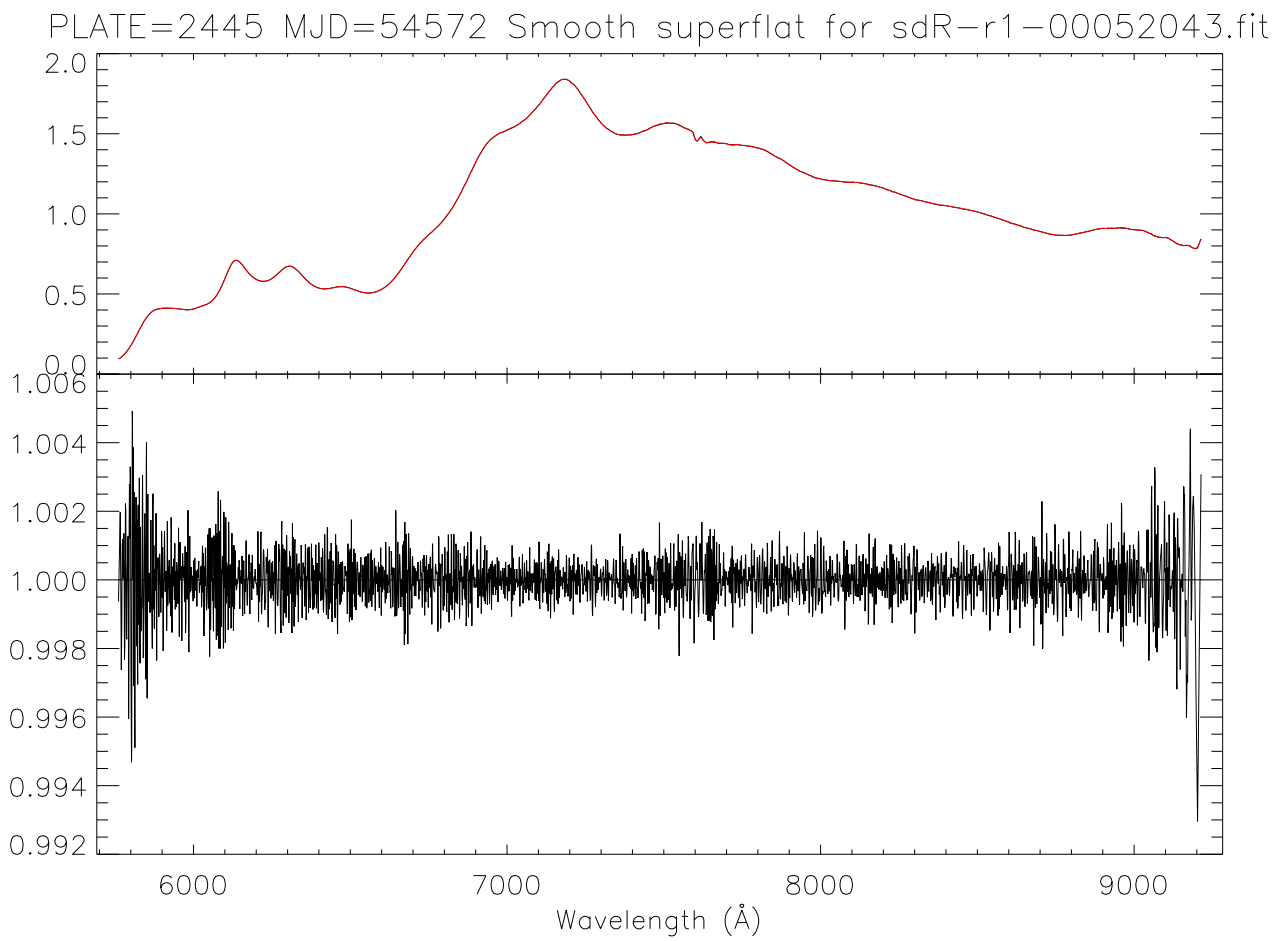

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

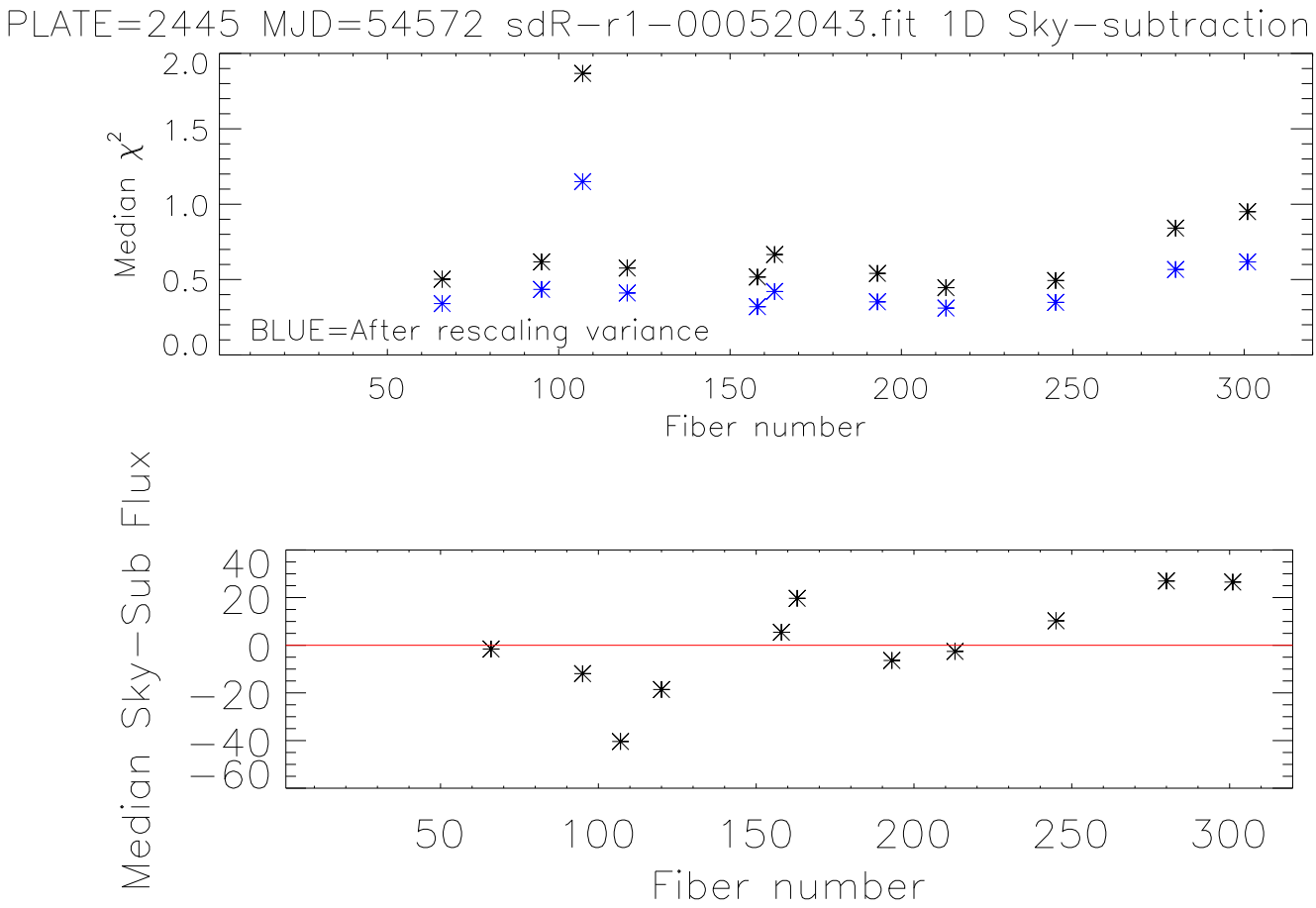

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

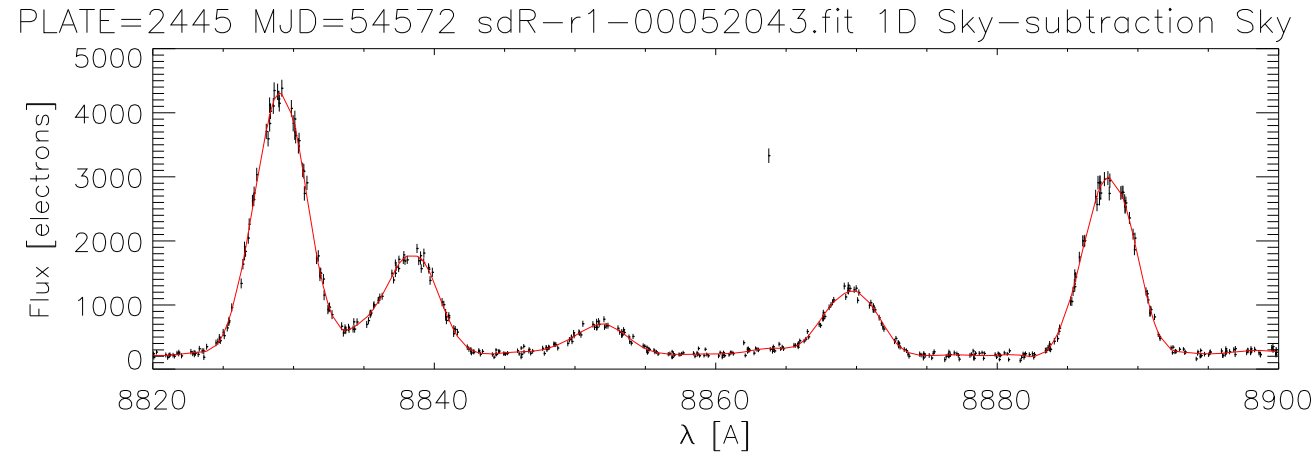

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd1 15
mfhd2 16
stdev 0.020
extra 0.23
stdev 0.036
extra 0.28
stdev 0.033
extra 0.14
stdev 0.029
extra 0.28
stdev 0.022
extra 0.33
stdev 0.038
extra 0.35
stdev 0.023
extra 0.26
stdev 0.019
extra 0.25
stdev 0.029
extra 0.27
stdev 0.024
extra 0.24
stdev 0.026
extra 0.28
stdev 0.023
extra 0.27

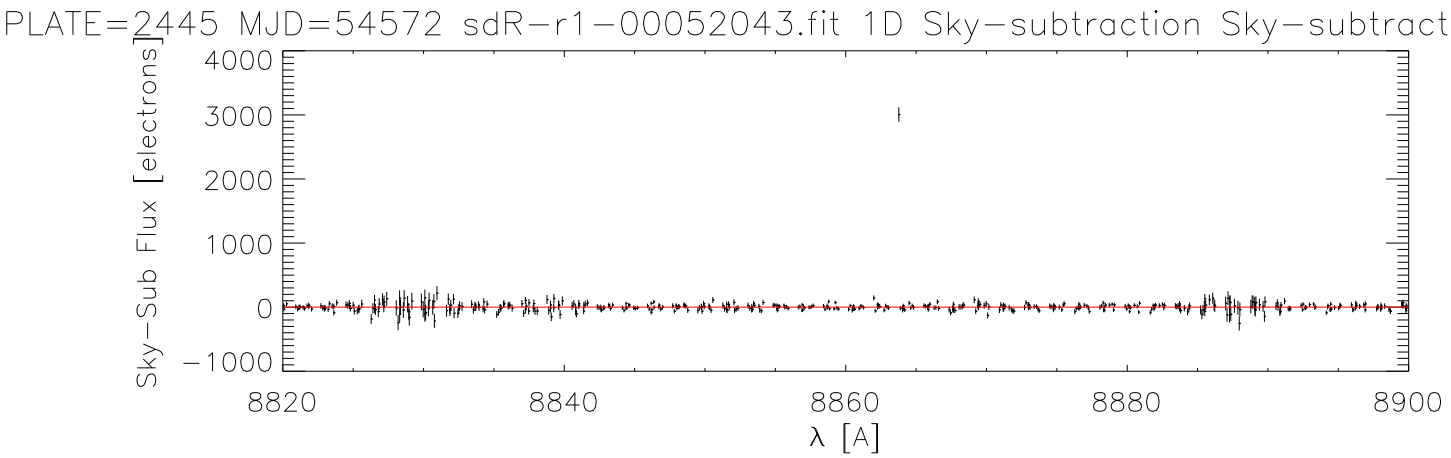

sky shift, pixels
0.35
0.30
0.25
0.20
0.15
5000
6000
7000
8000
9000
10000

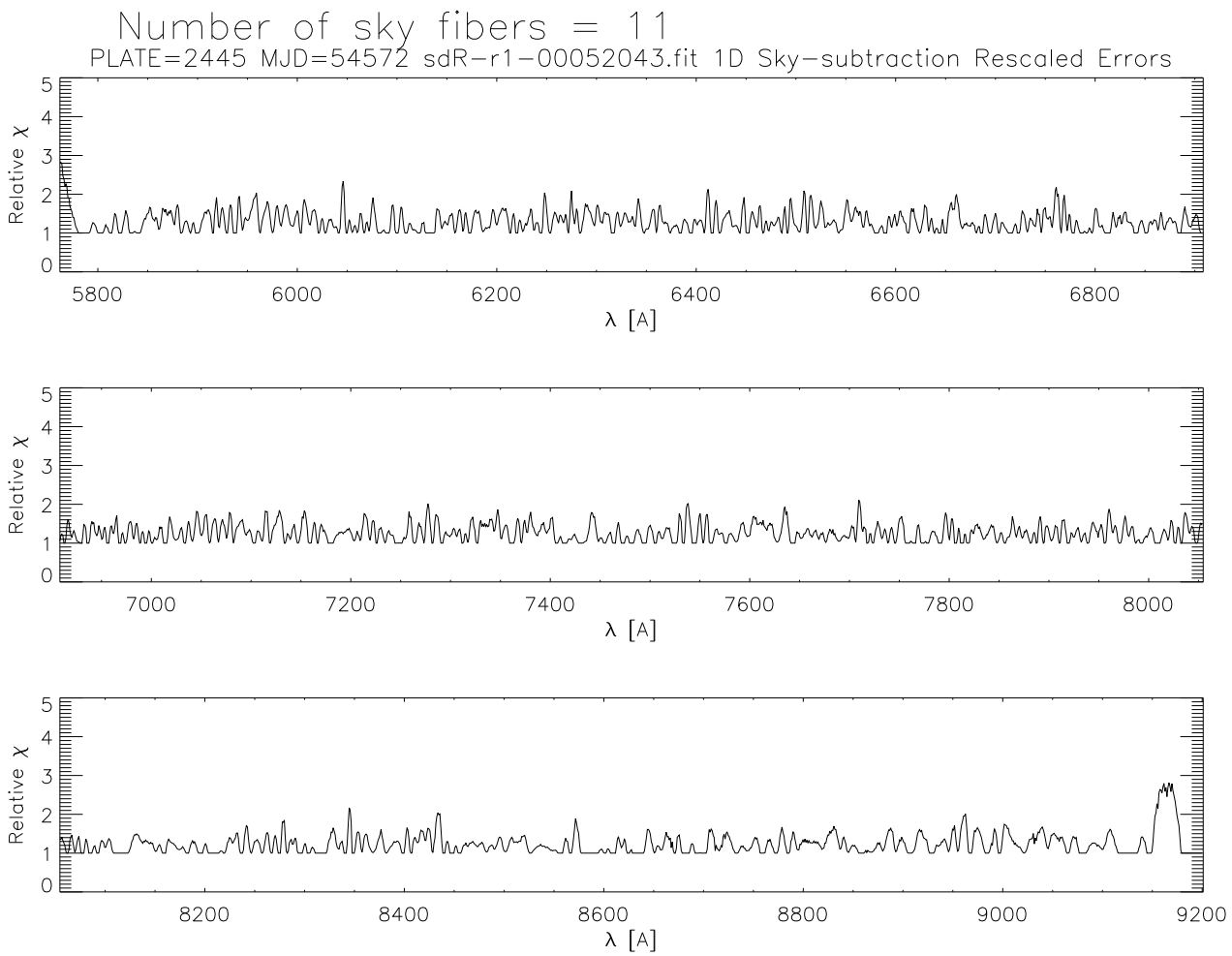
es= 0.0000

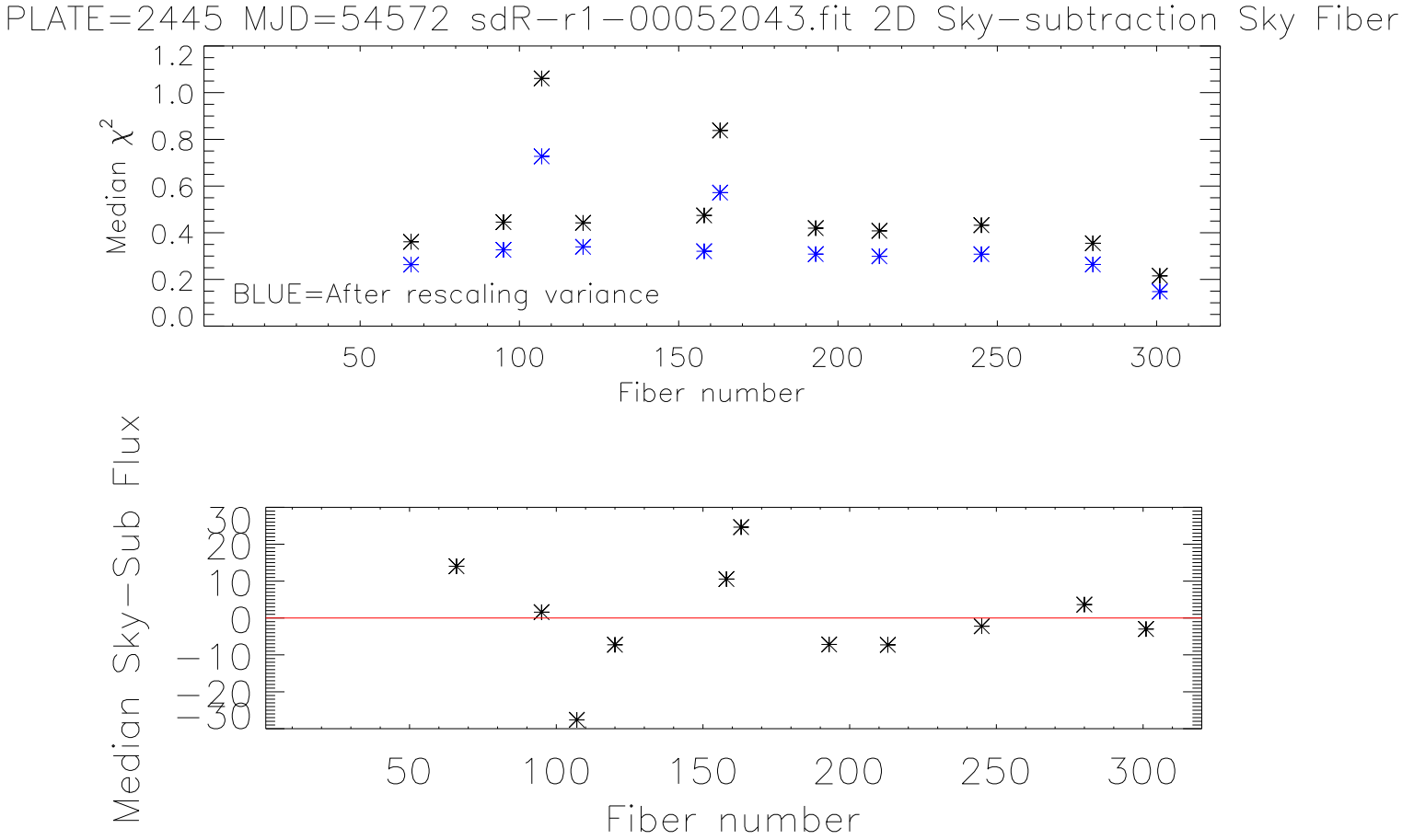

PLATE=2445 MJD=54572 Smooth superflat for sdR-r1-00052043.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

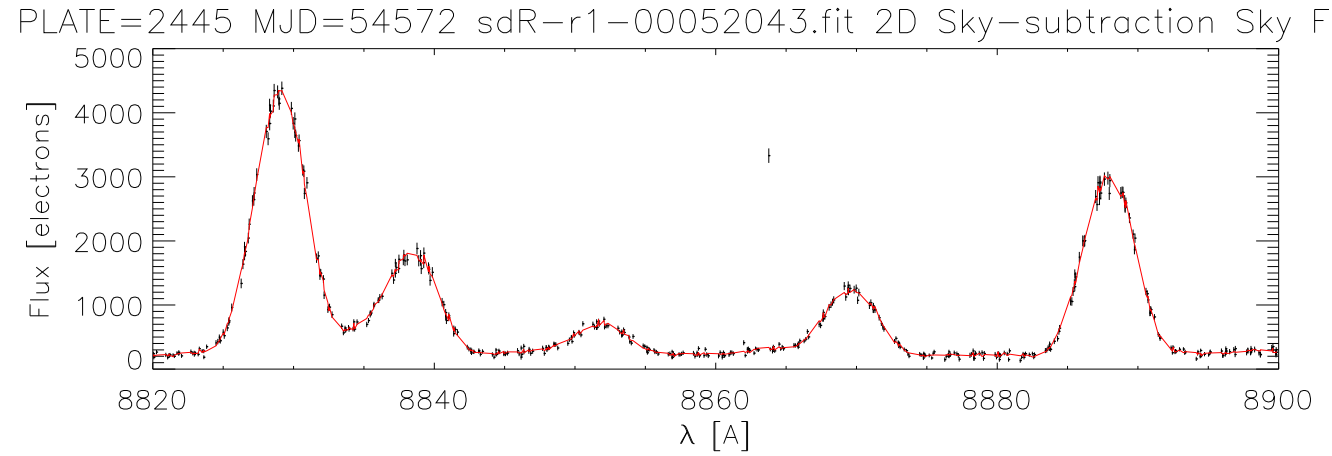

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number

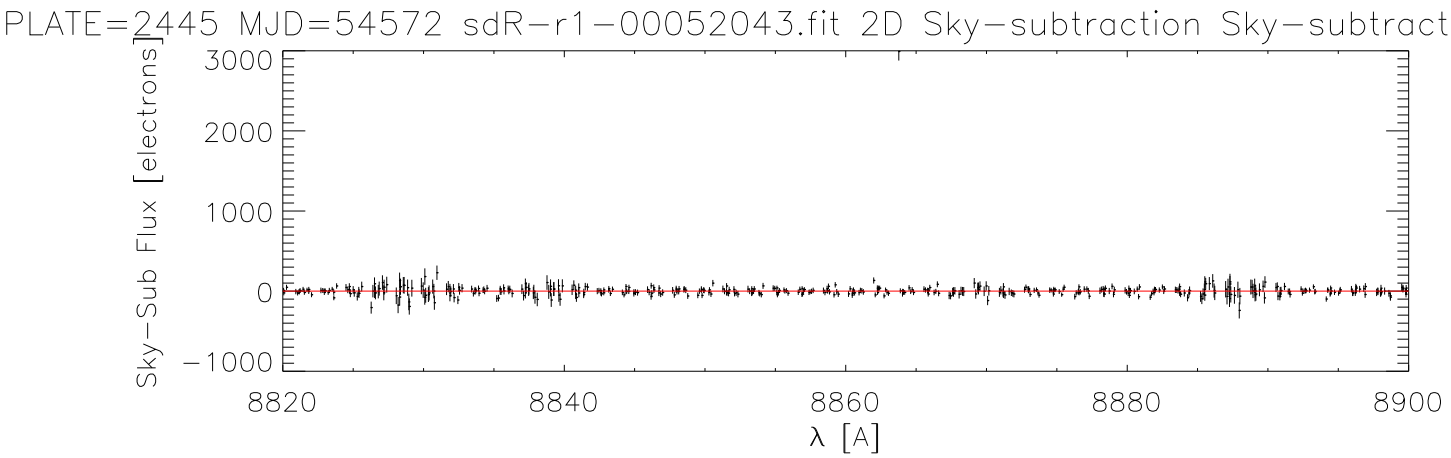

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

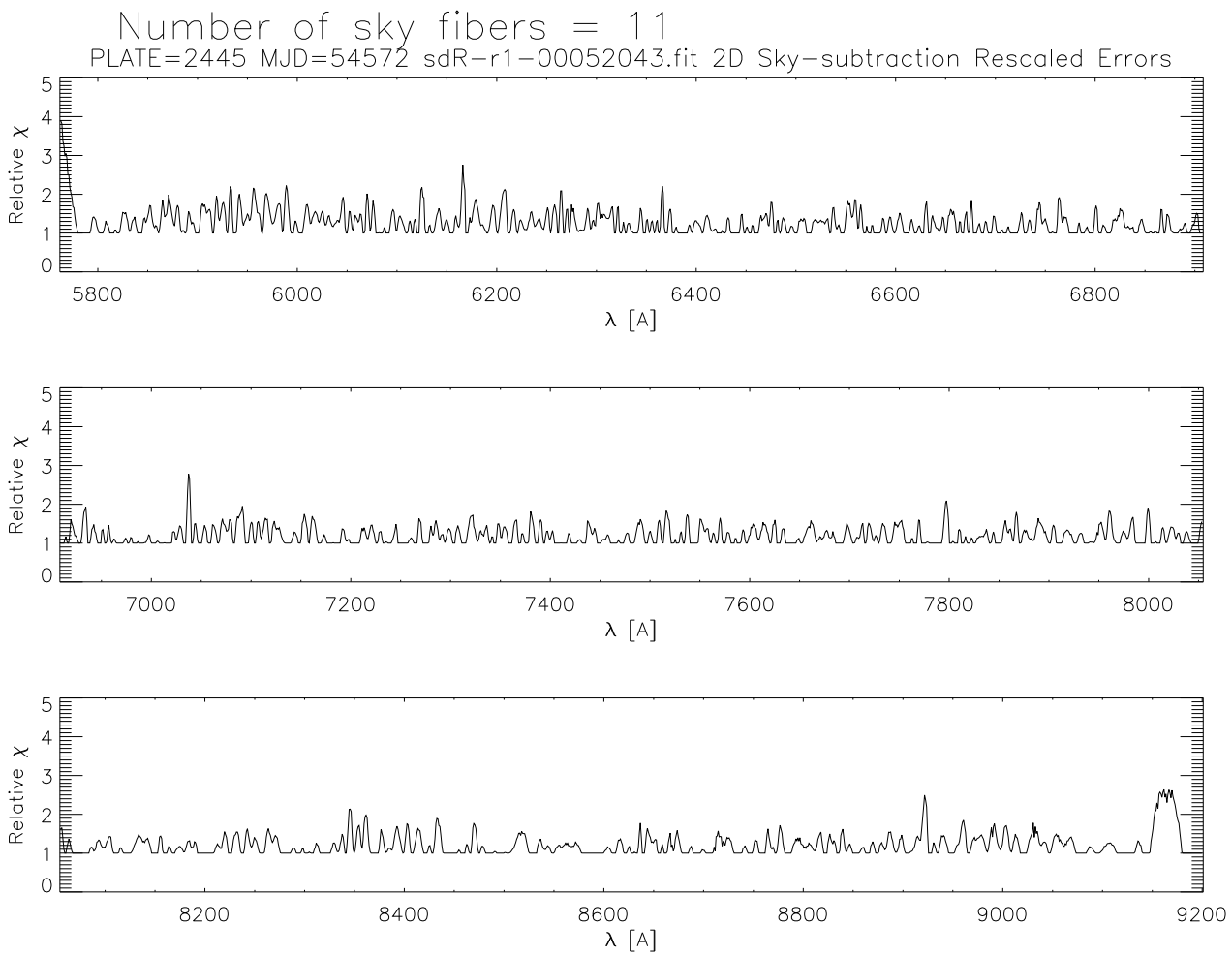

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

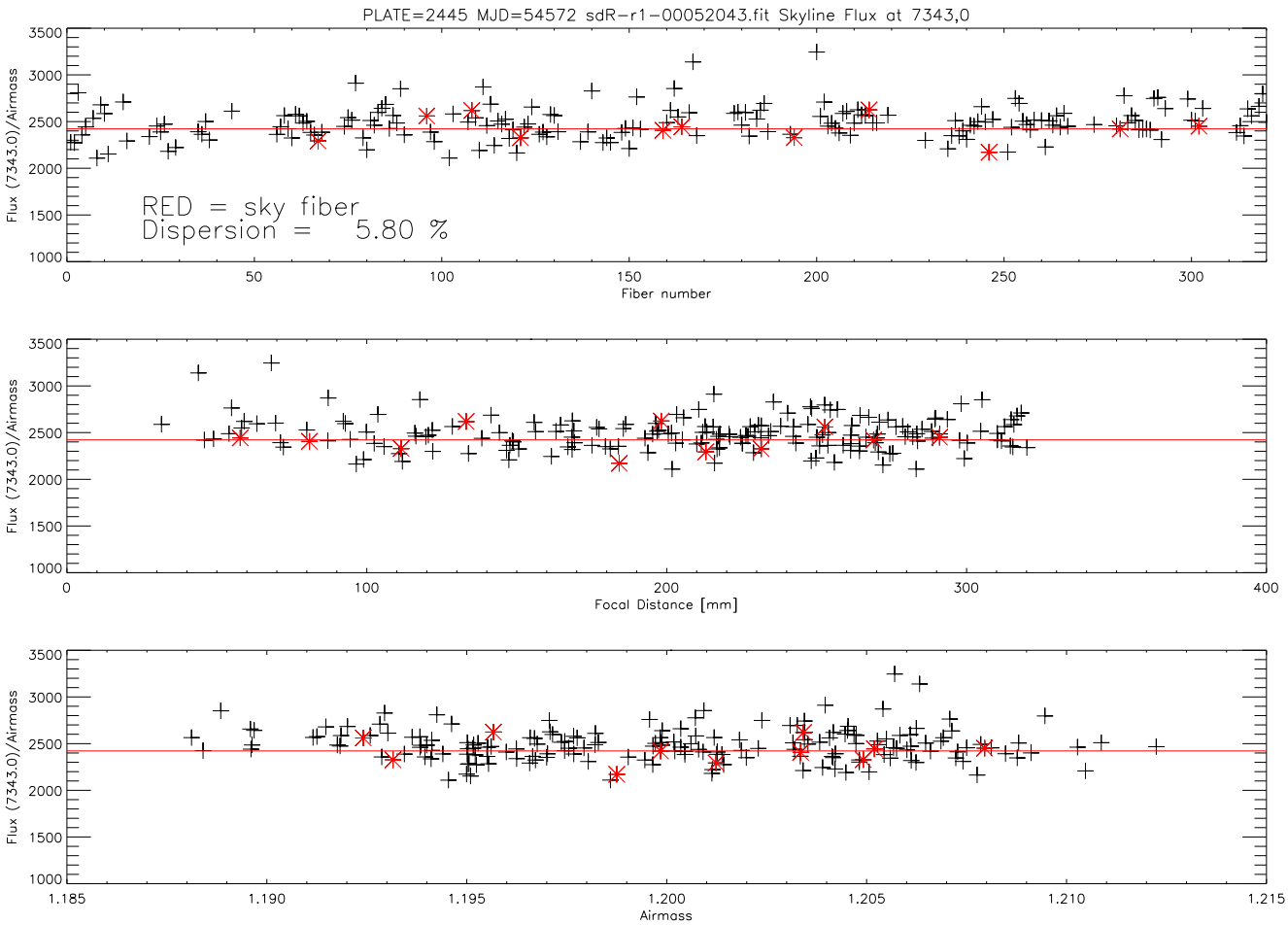

Number of sky fibers = 11
PLATE=2445 MJD=54572 sdR-r1-00052043.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

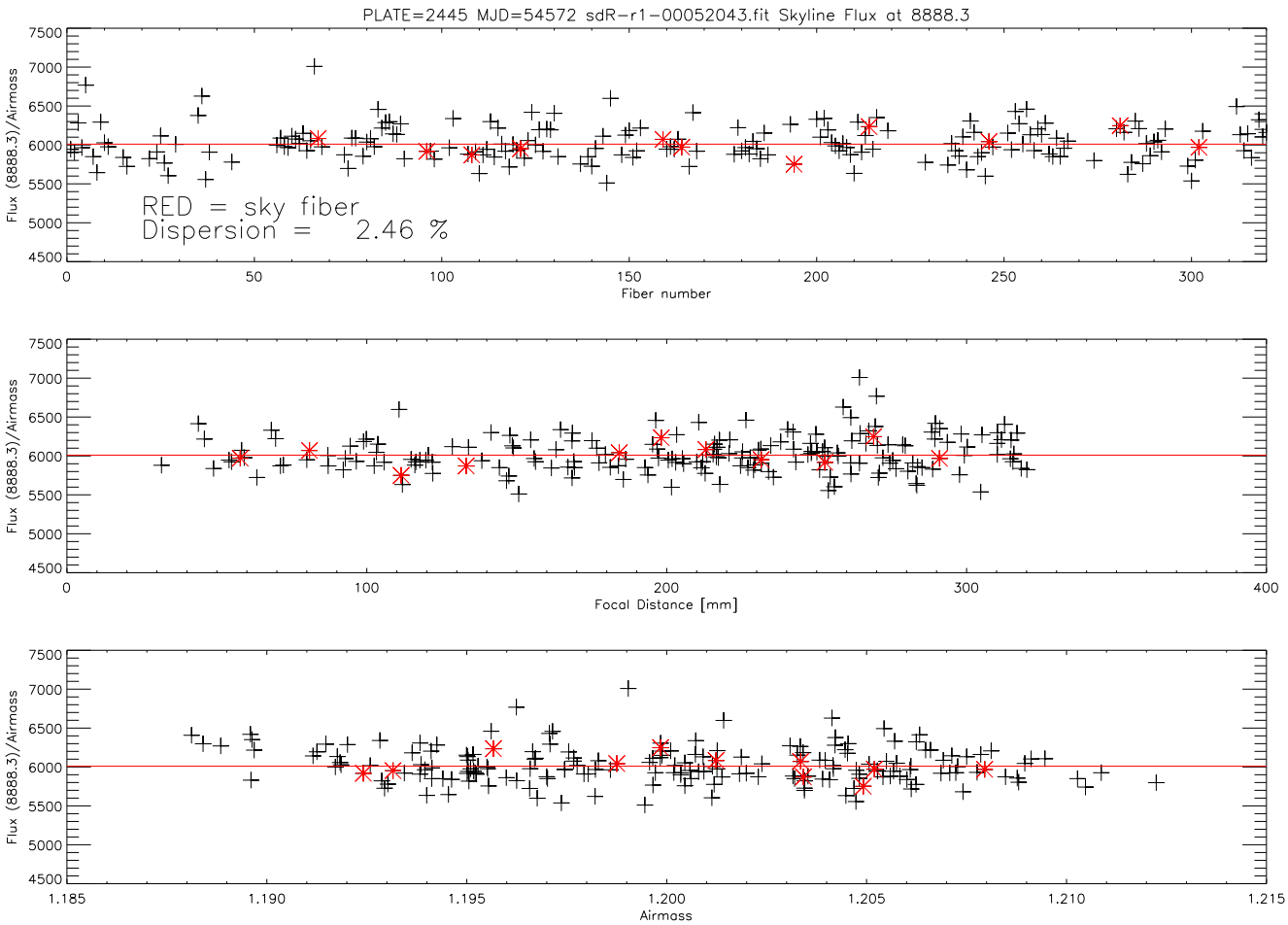

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

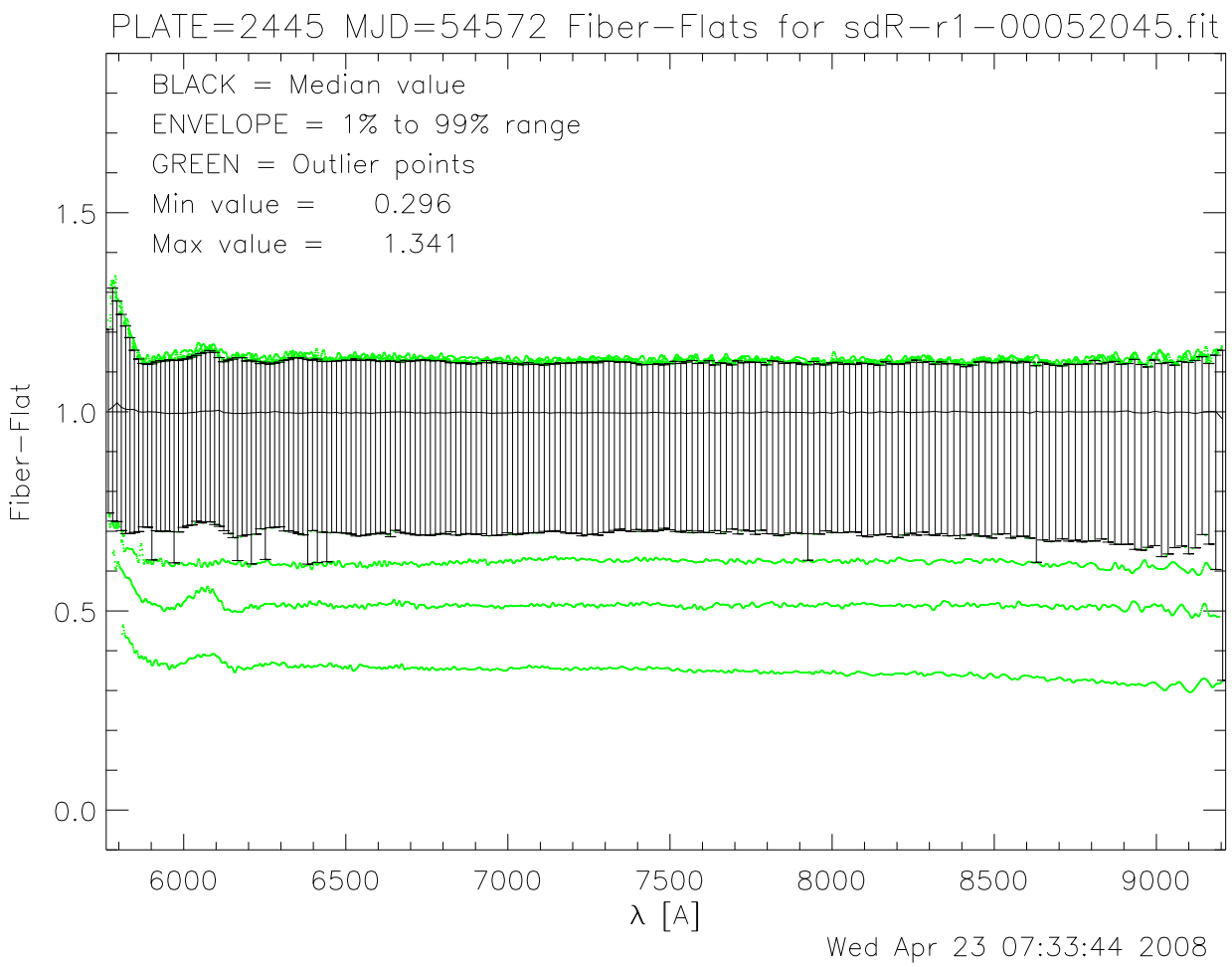

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

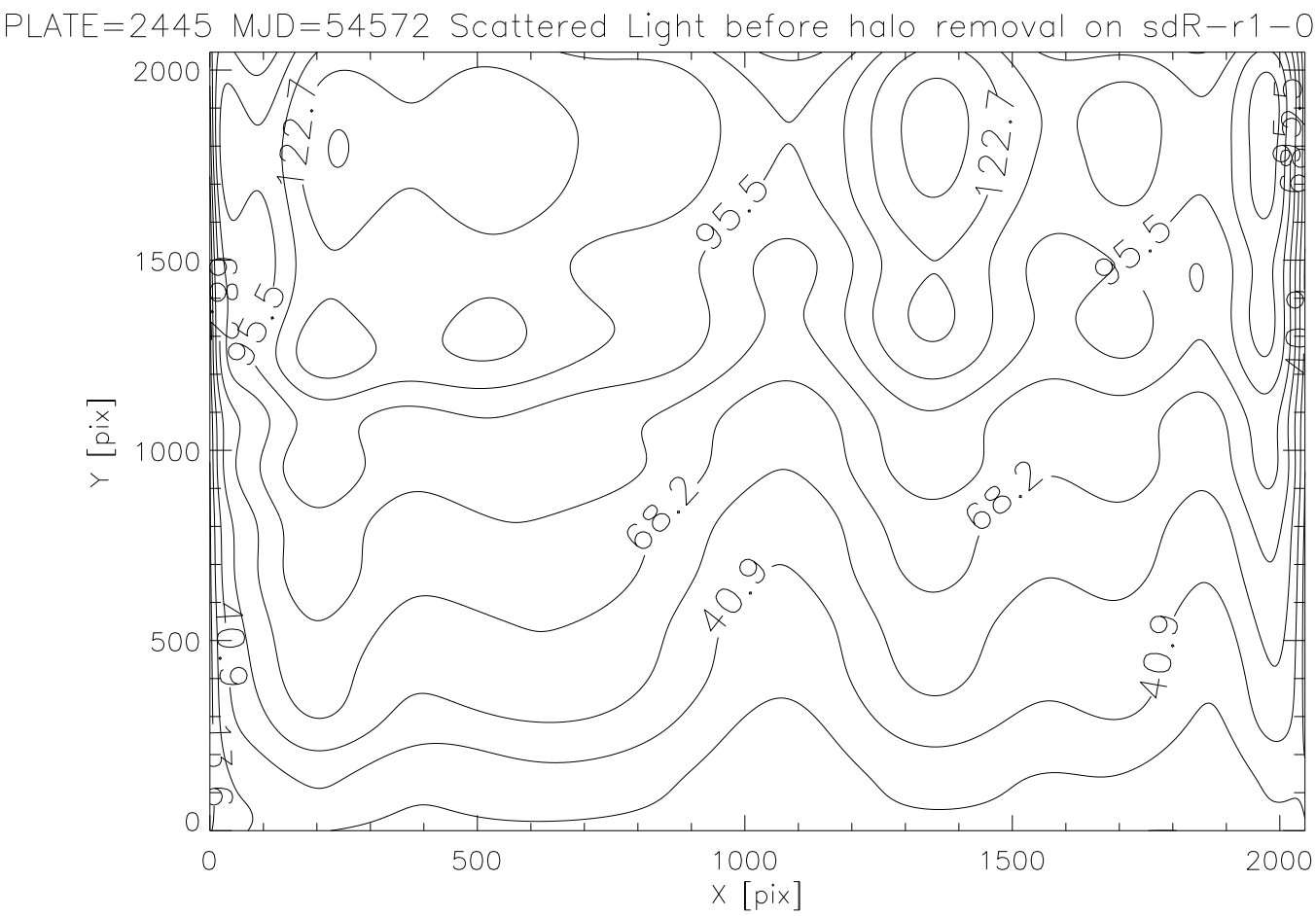

PLATE=2445 MJD=54572 sdR-r1-00052043.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

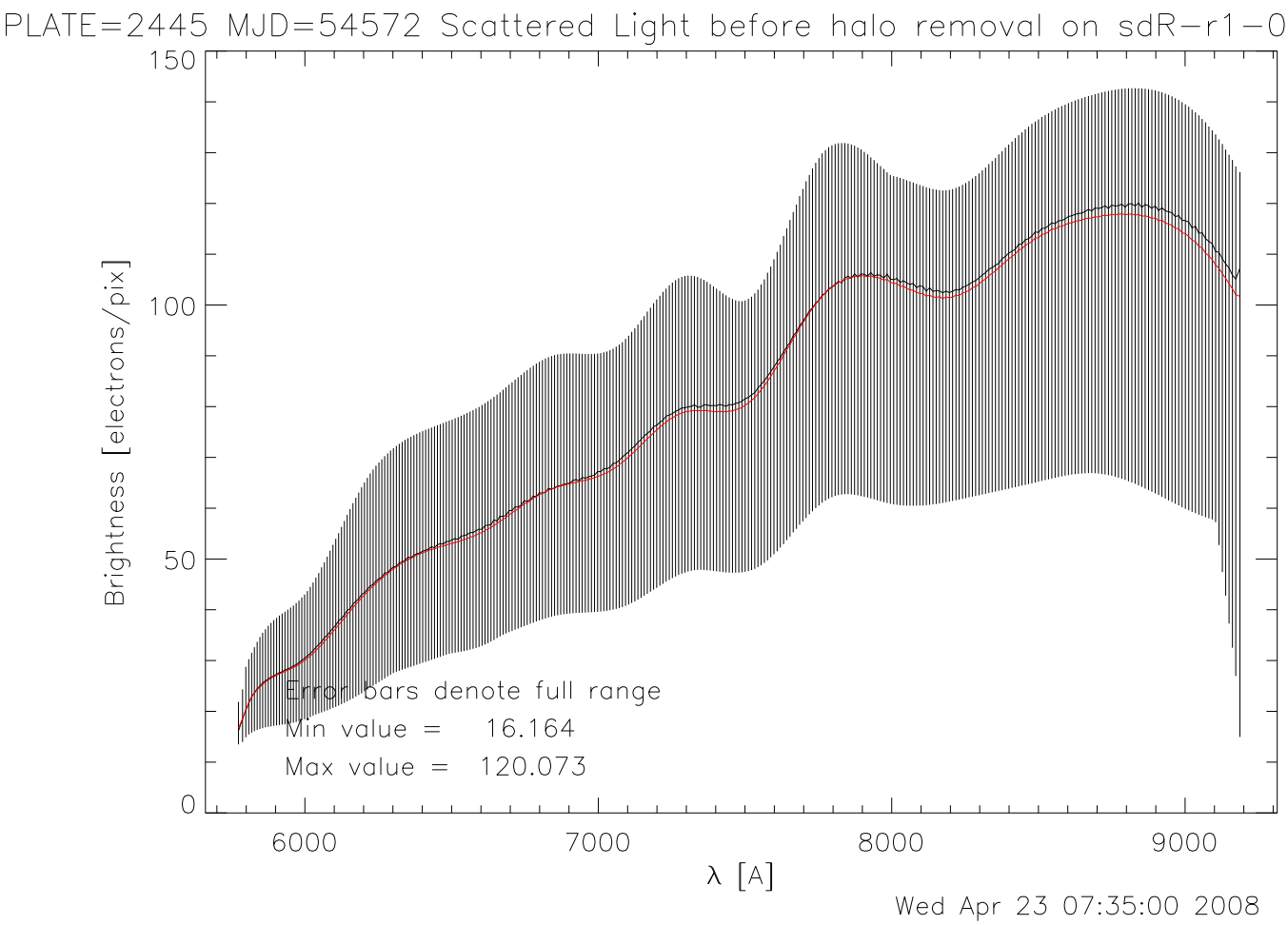

Number of sky fibers = 11
PLATE=2445 MJD=54572 sdR-r1-00052043.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

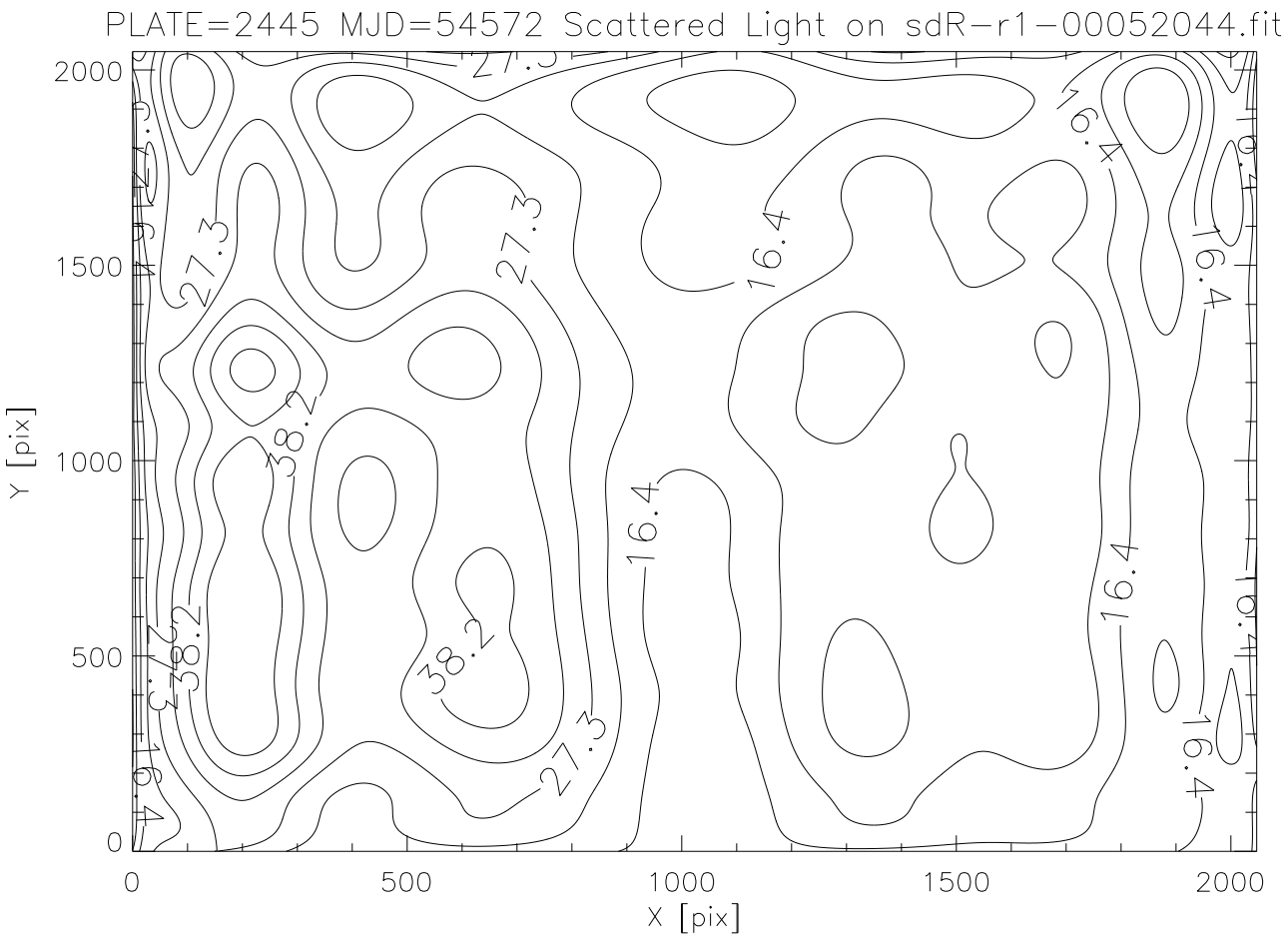

PLATE=2445 MJD=54572 sdR-r1-00052043.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.80 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

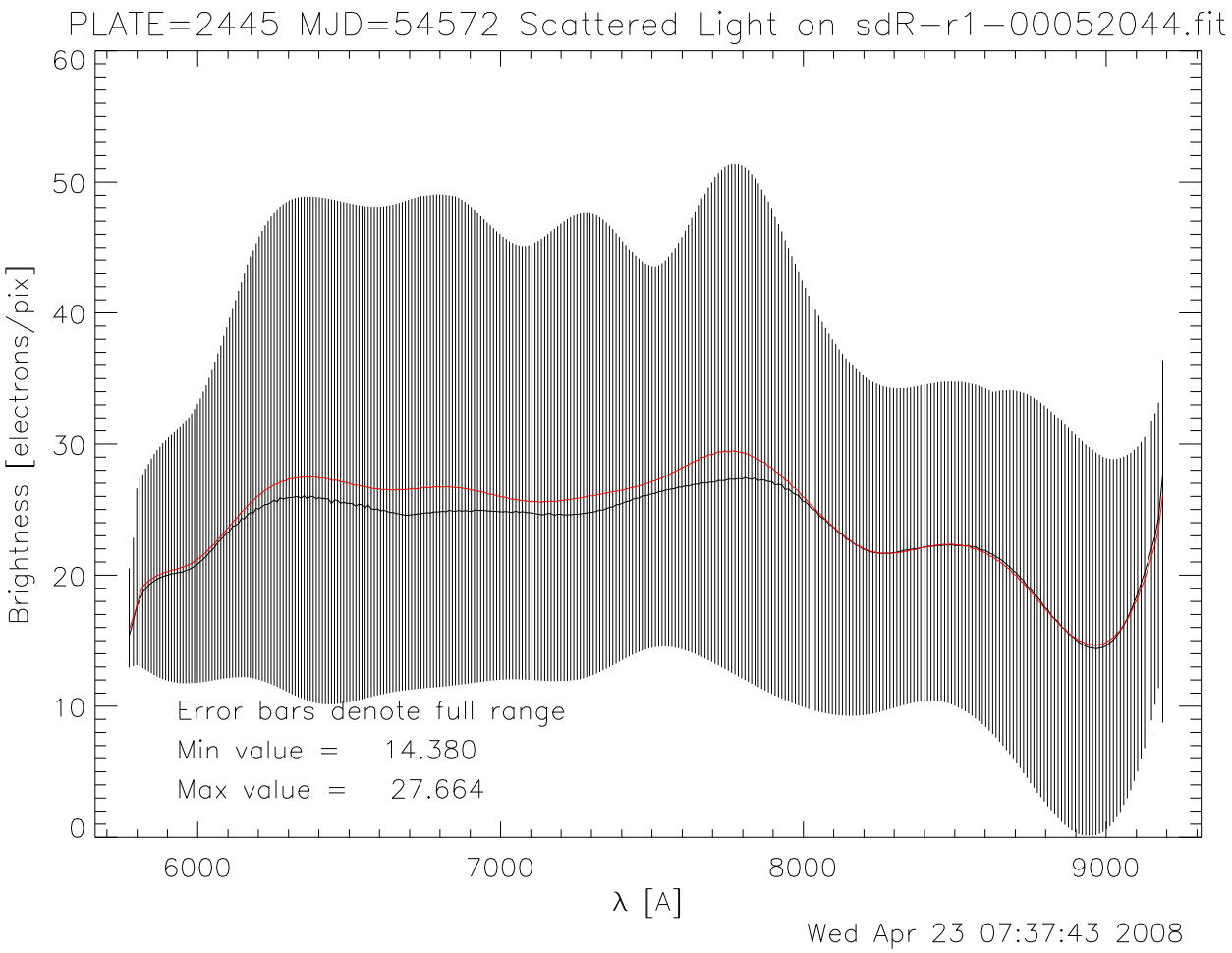

PLATE=2445 MJD=54572 sdR-r1-00052043.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.46 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

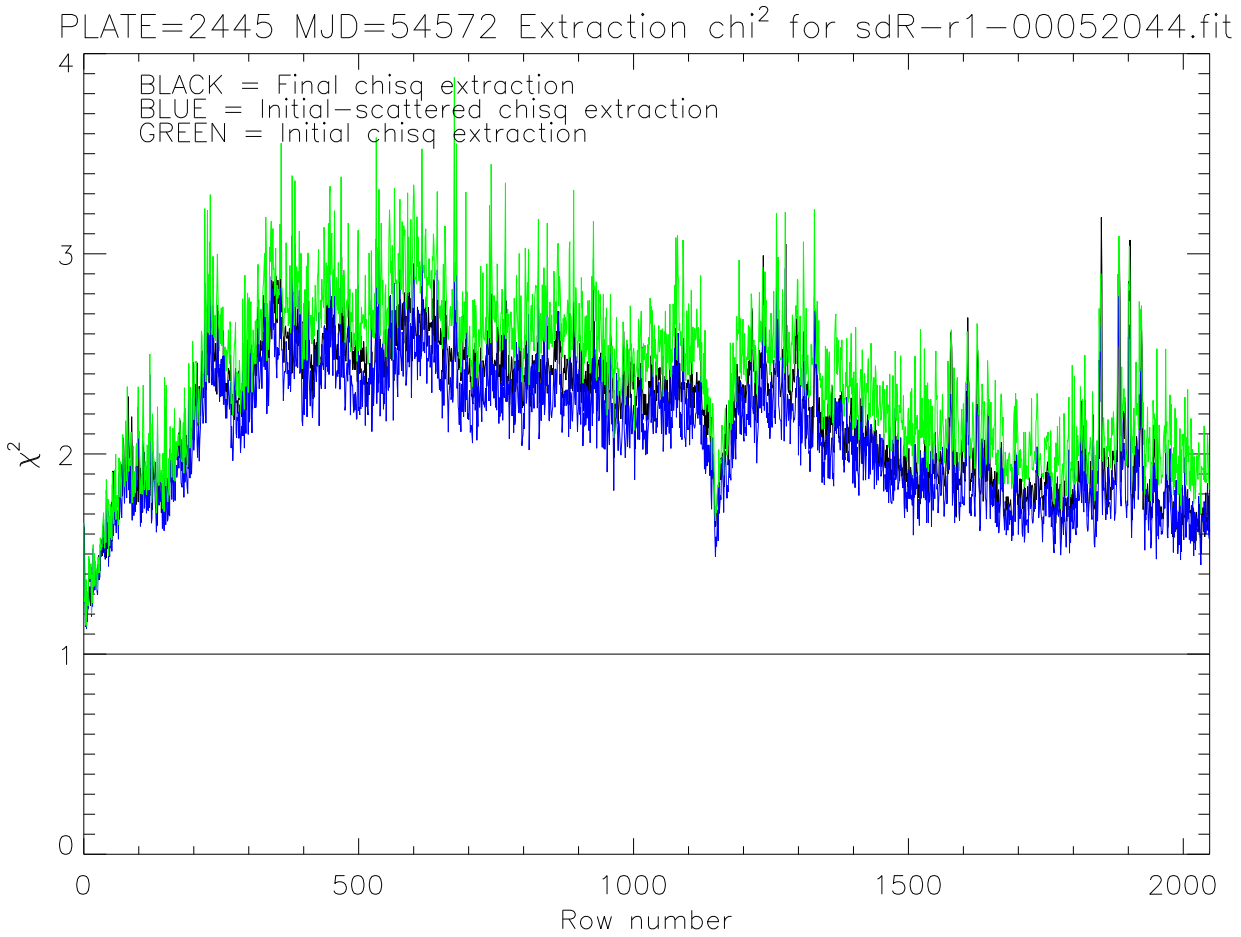

PLATE=2445 MJD=54572 Fiber−Flats for sdR−r1−00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.296
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Apr 23 07:33:44 2008

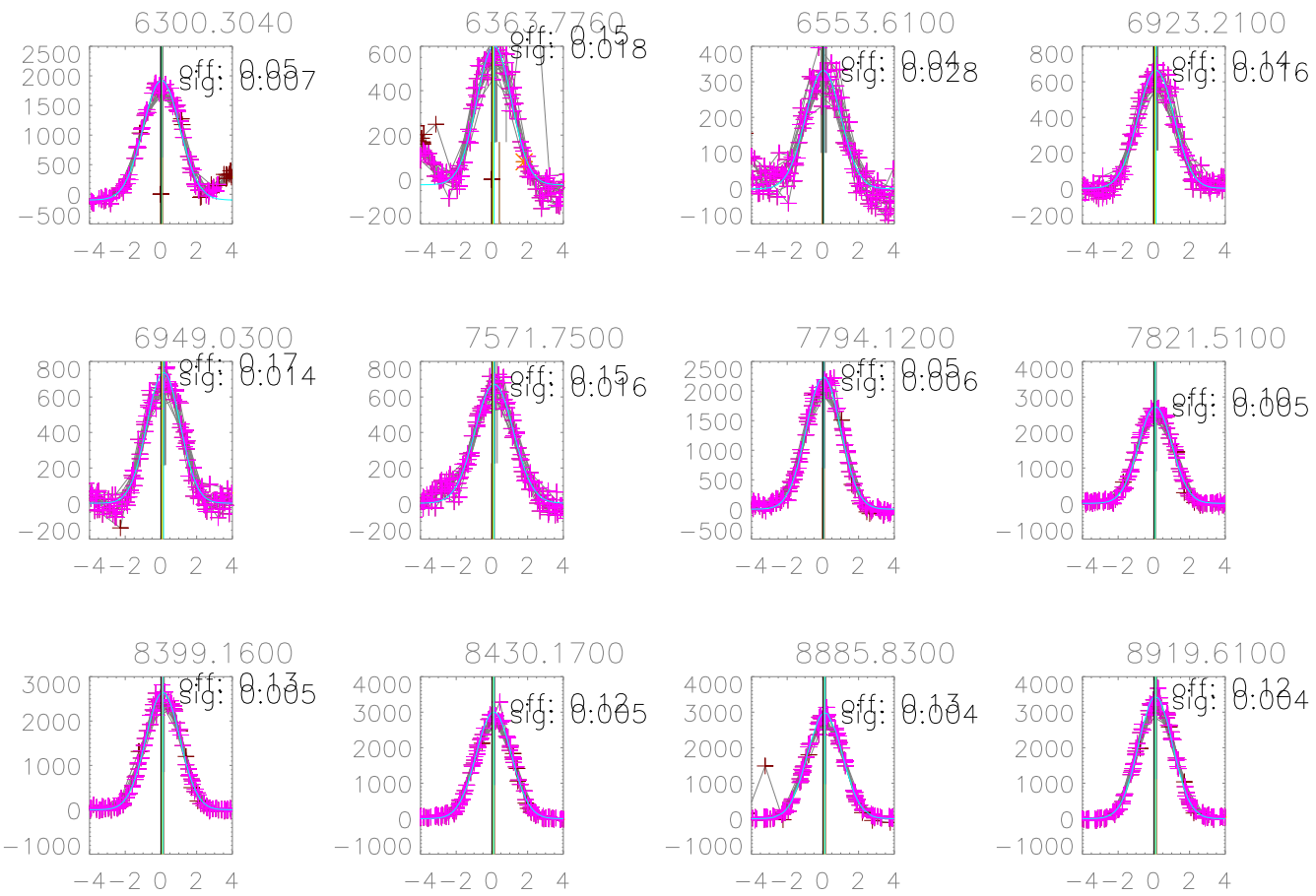

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR−r1−00052044.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
122.7
95.5
68.2
40.9
0

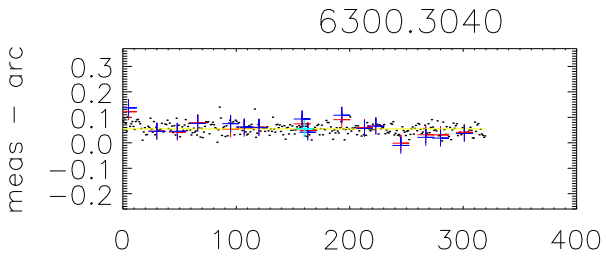

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r1-00052044.fi
150
100
50
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 16.164
Max value = 120.073
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:35:00 2008

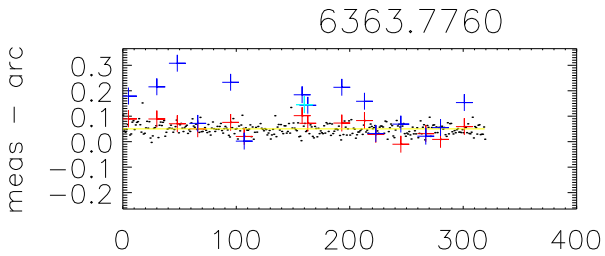

PLATE=2445 MJD=54572 Scattered Light on sdR-r1-00052044.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
38.2
16.4

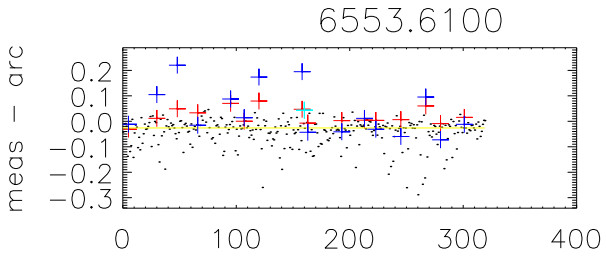

PLATE=2445 MJD=54572 Scattered Light on sdR-r1-00052044.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 14.380
Max value = 27.664
Wed Apr 23 07:37:43 2008

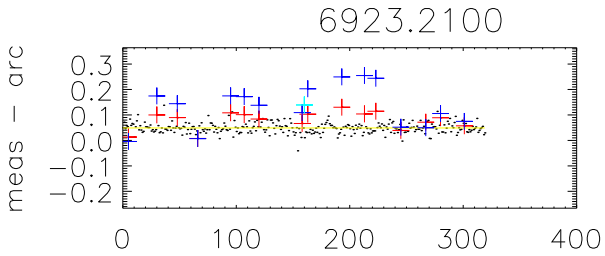

PLATE=2445 MJD=54572 Extraction chi^2 for sdR−r1−00052044.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

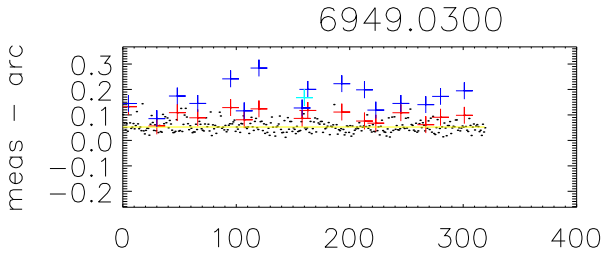

6300.3040
off: 0.05
sig: 0.007
6363.7760
off: 0.15
sig: 0.018
6553.6100
off: 0.04
sig: 0.028
6923.2100
off: 0.14
sig: 0.016
6949.0300
off: 0.17
sig: 0.014
7571.7500
off: 0.15
sig: 0.016
7794.1200
off: 0.05
sig: 0.006
7821.5100
off: 0.10
sig: 0.005
8399.1600
off: 0.13
sig: 0.005
8430.1700
off: 0.12
sig: 0.005
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.12
sig: 0.004

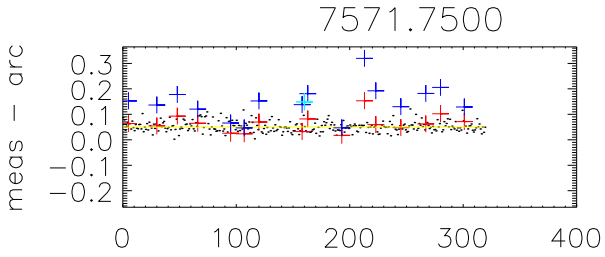

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

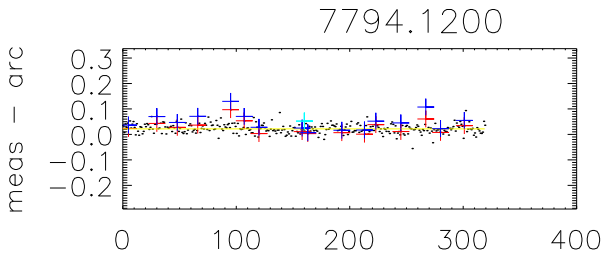

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

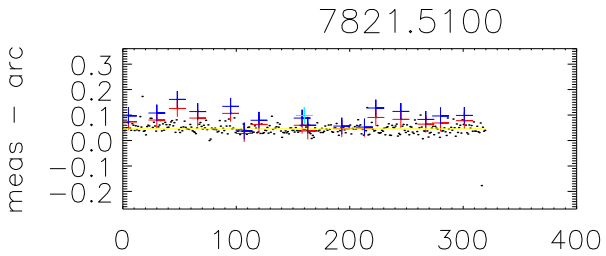

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

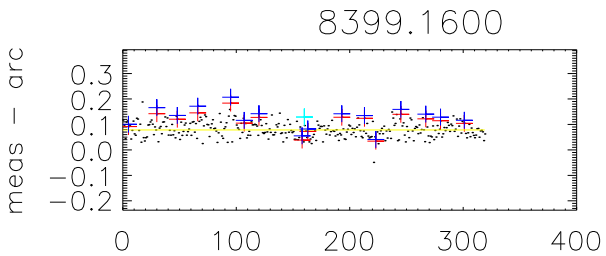

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

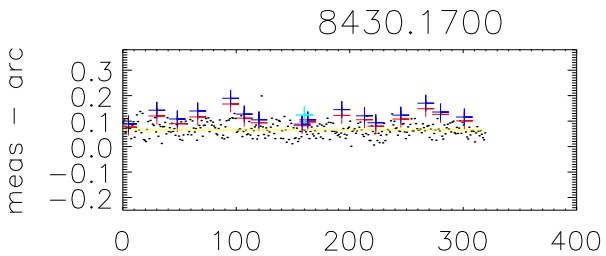

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

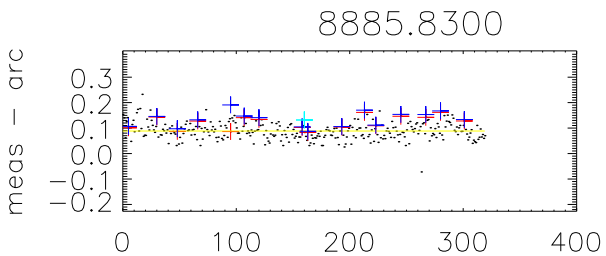

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

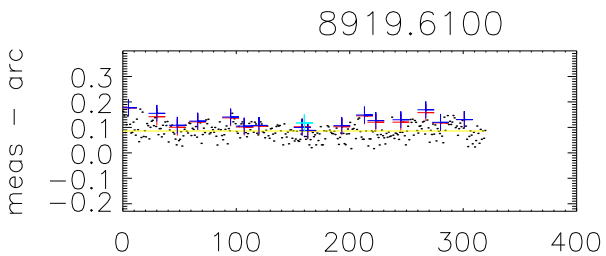

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

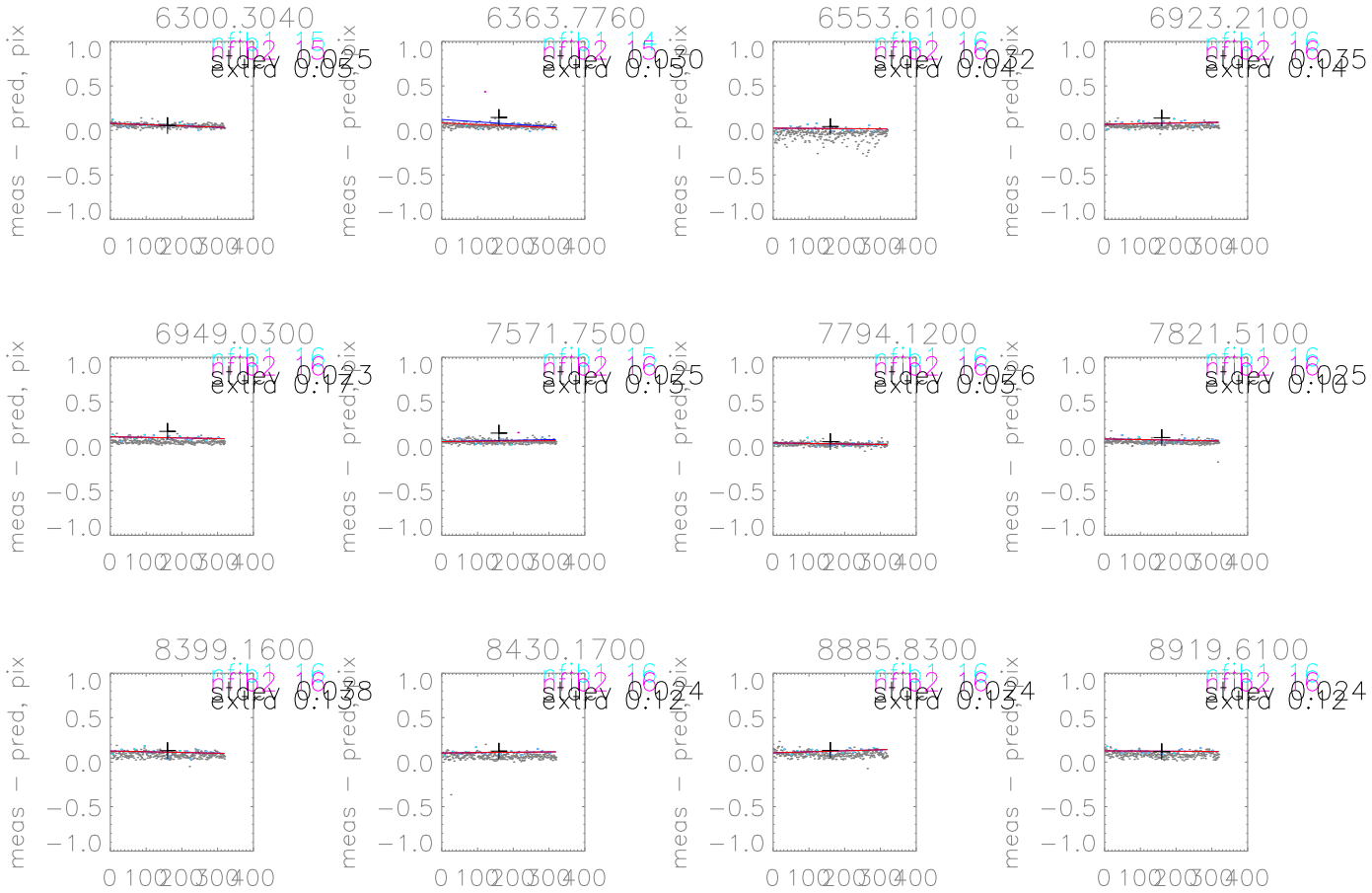

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

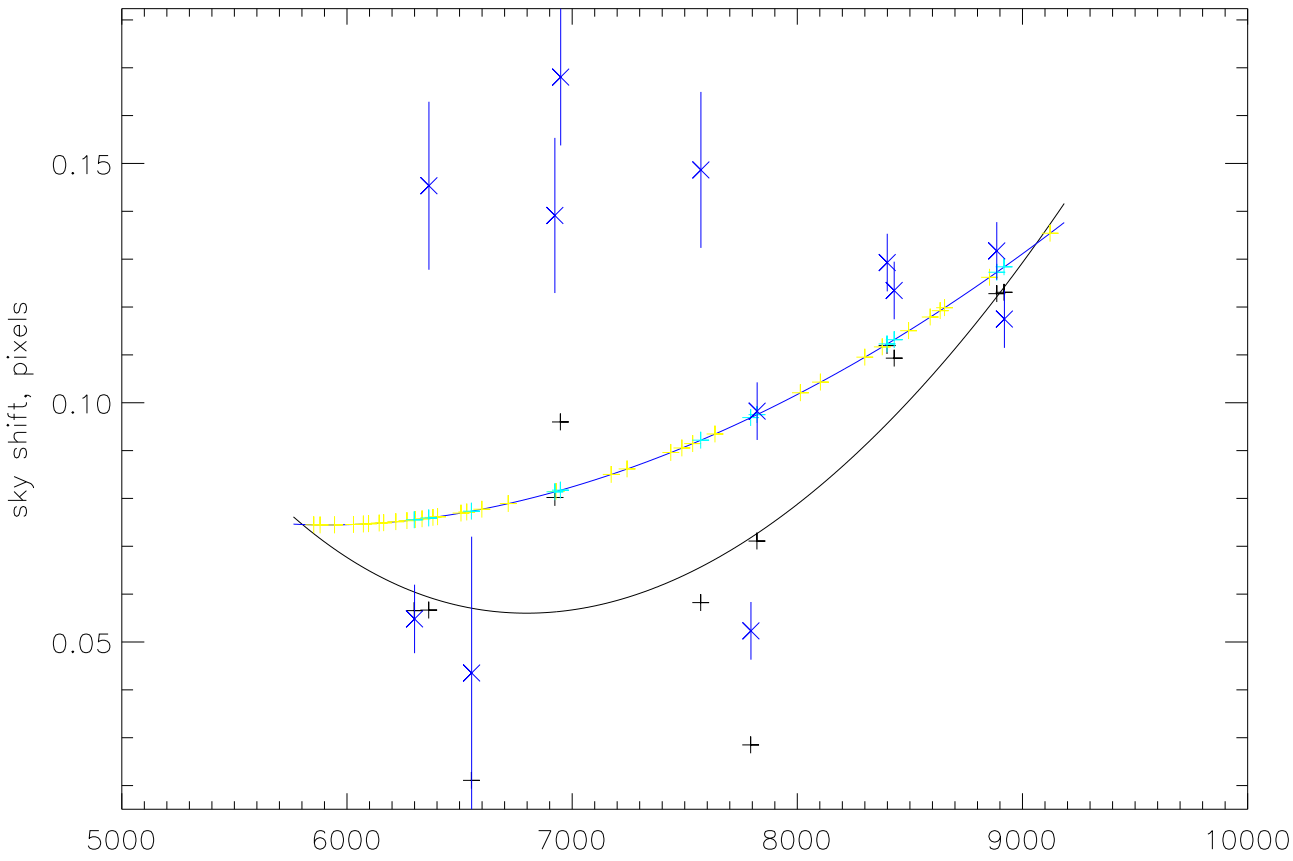

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

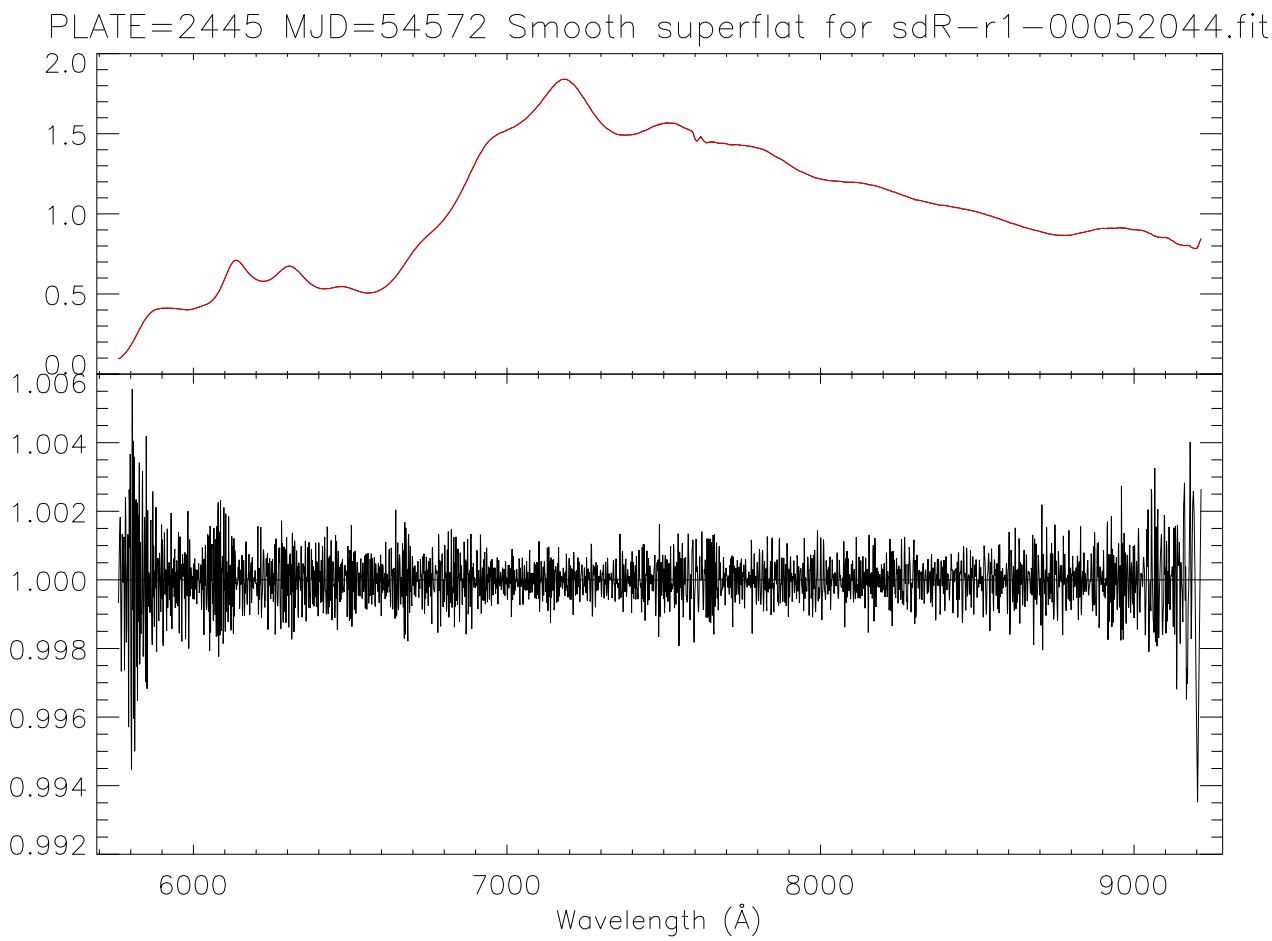

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

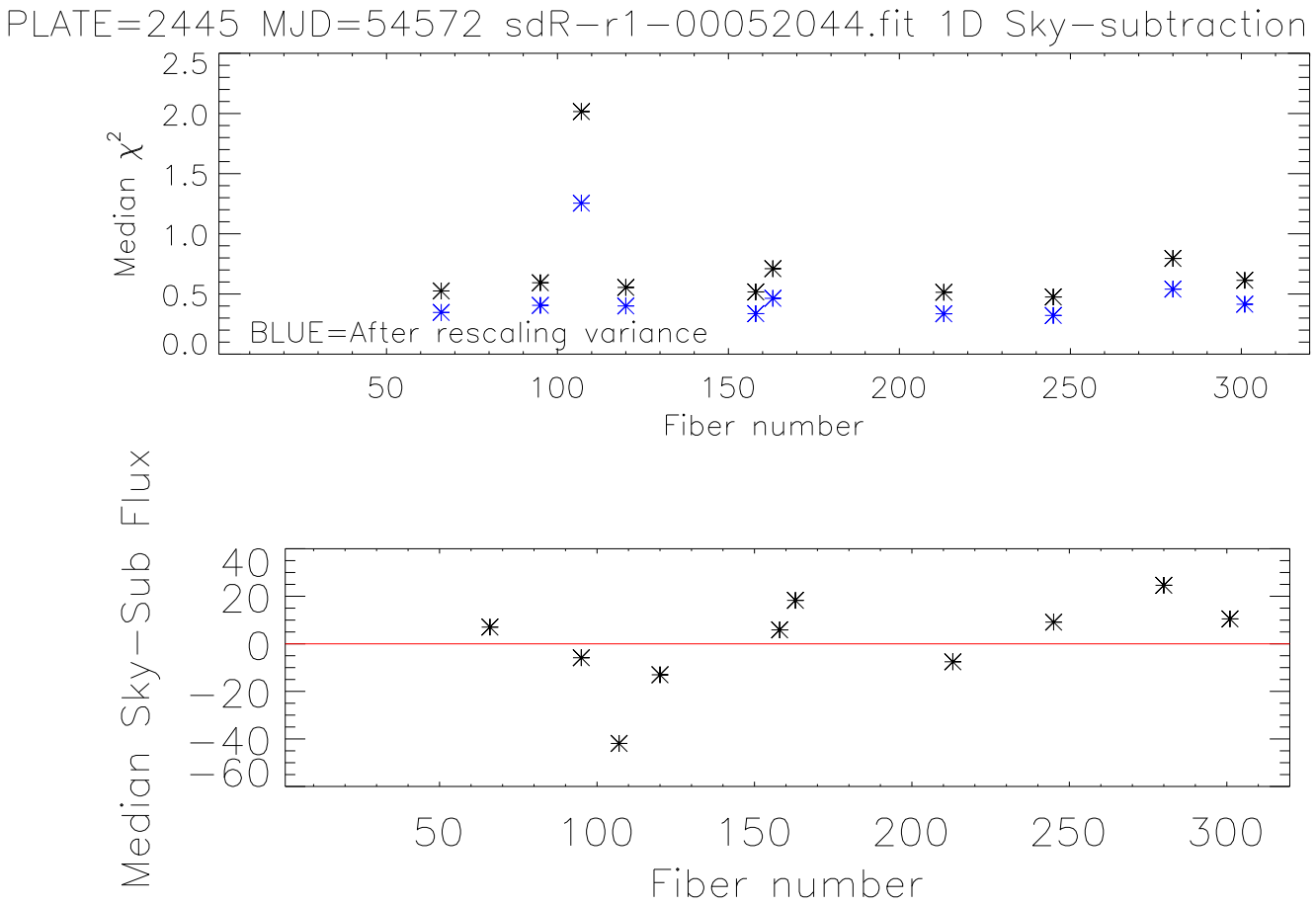

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

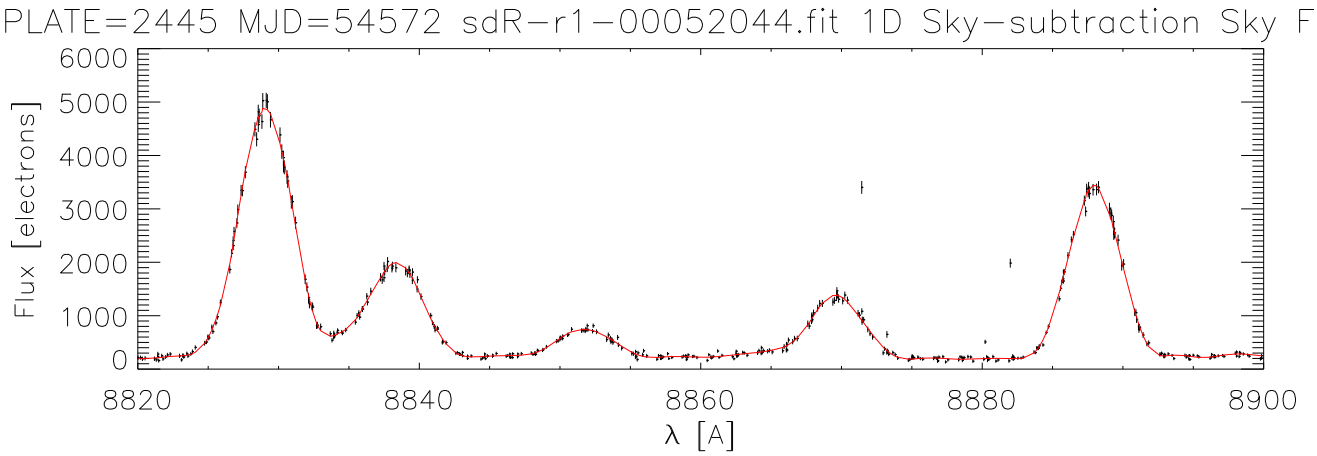

6300.3040
mfib1 15
mfib2 15
stdev 0.025
extra 0.035
6363.7760
mfib1 14
mfib2 15
stdev 0.030
extra 0.150
6553.6100
mfib1 16
mfib2 16
stdev 0.032
extra 0.042
6923.2100
mfib1 16
mfib2 16
stdev 0.035
extra 0.14
6949.0300
mfib1 16
mfib2 16
stdev 0.023
extra 0.172
7571.7500
mfib1 15
mfib2 15
stdev 0.025
extra 0.153
7794.1200
mfib1 16
mfib2 16
stdev 0.026
extra 0.053
7821.5100
mfib1 16
mfib2 16
stdev 0.025
extra 0.16
8399.1600
mfib1 16
mfib2 16
stdev 0.038
extra 0.138
8430.1700
mfib1 16
mfib2 16
stdev 0.024
extra 0.12
8885.8300
mfib1 16
mfib2 16
stdev 0.024
extra 0.13
8919.6100
mfib1 16
mfib2 16
stdev 0.024
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

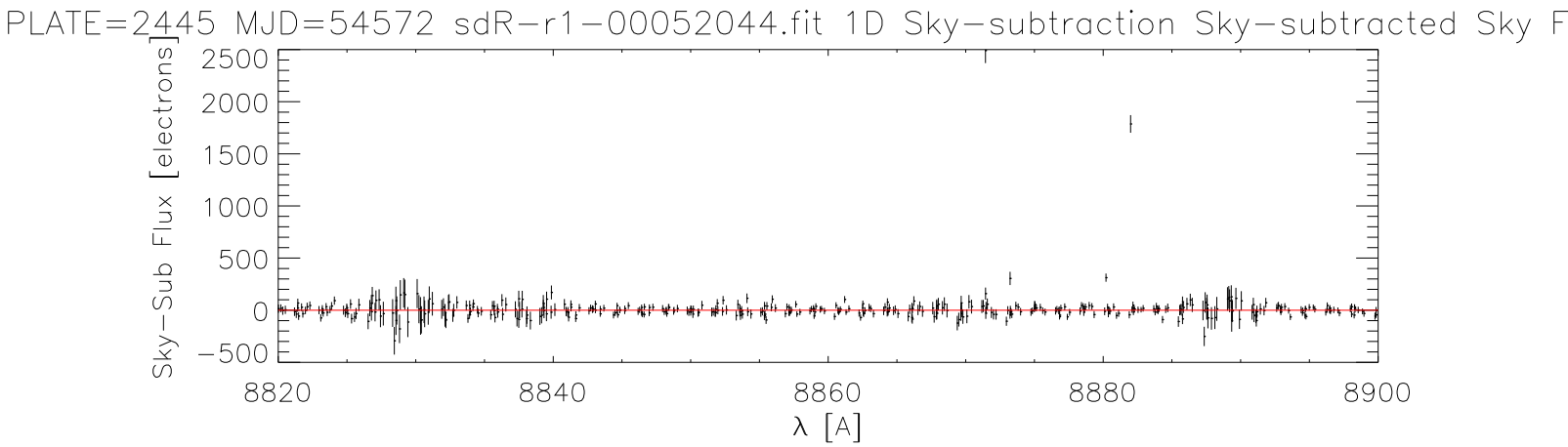

sky shift, pixels
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

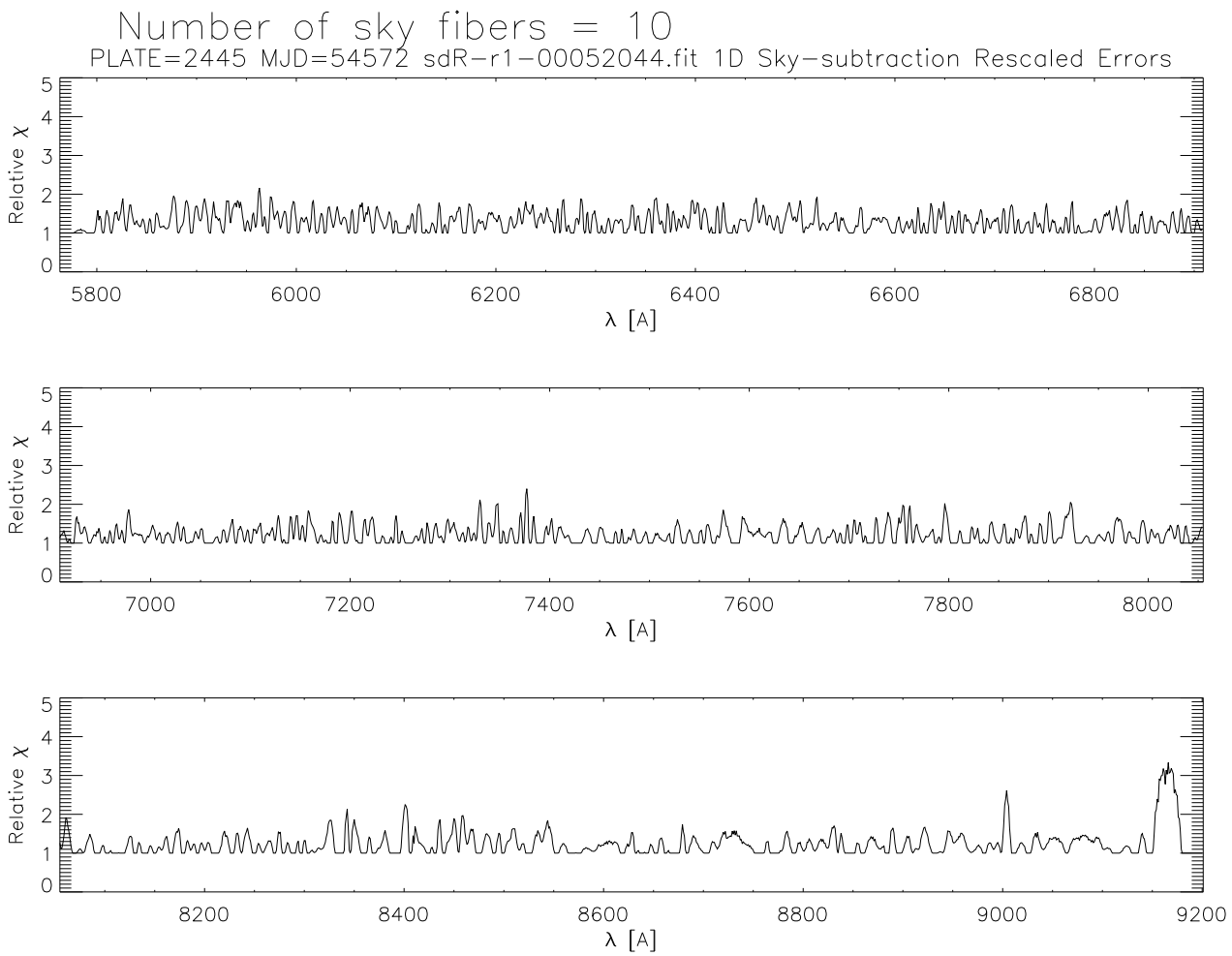
es= 0.0000

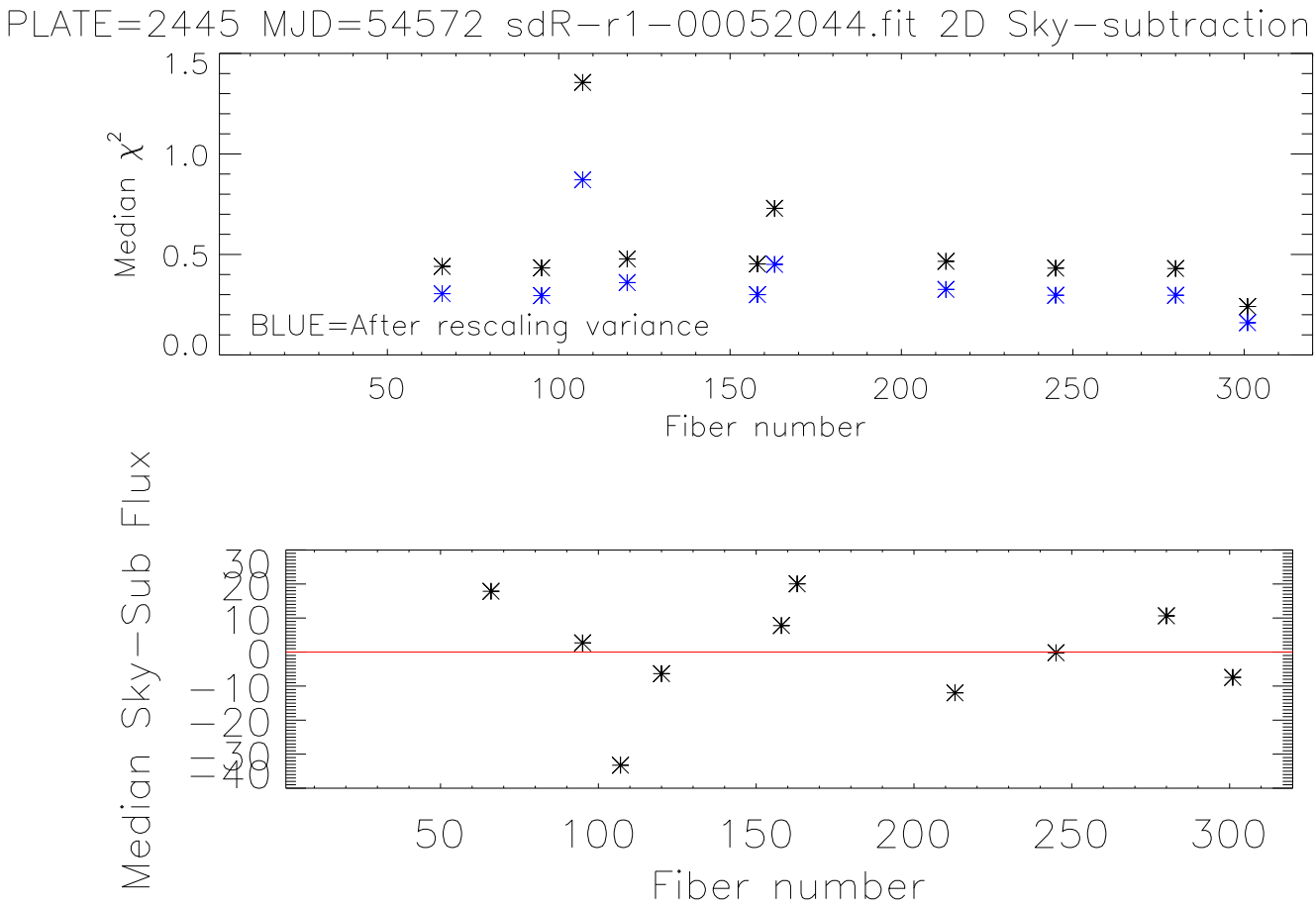

PLATE=2445 MJD=54572 Smooth superflat for sdR-r1-00052044.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

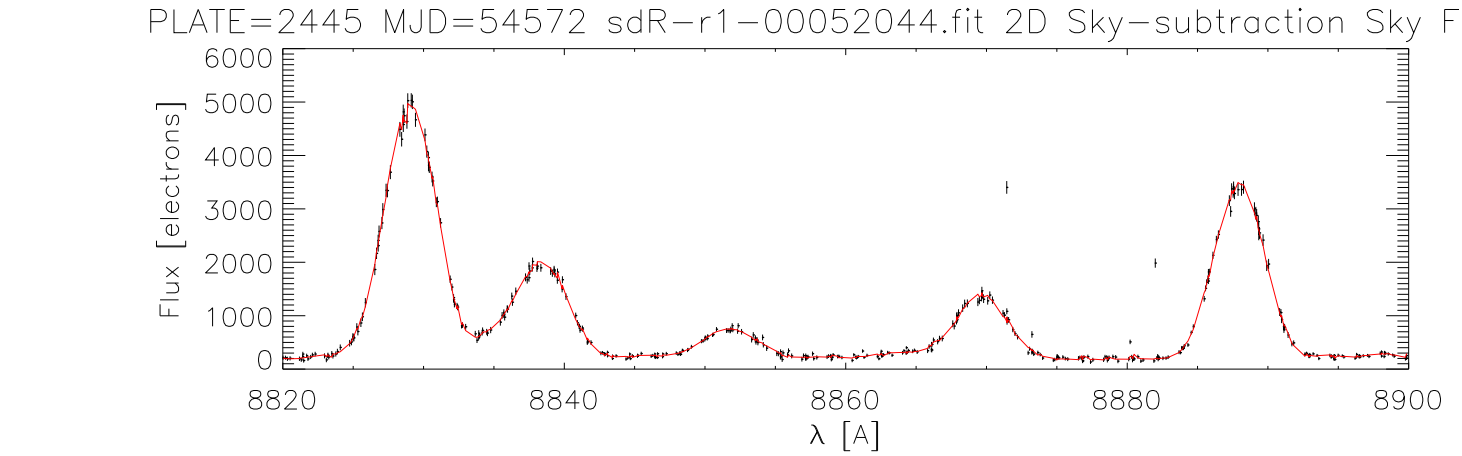

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

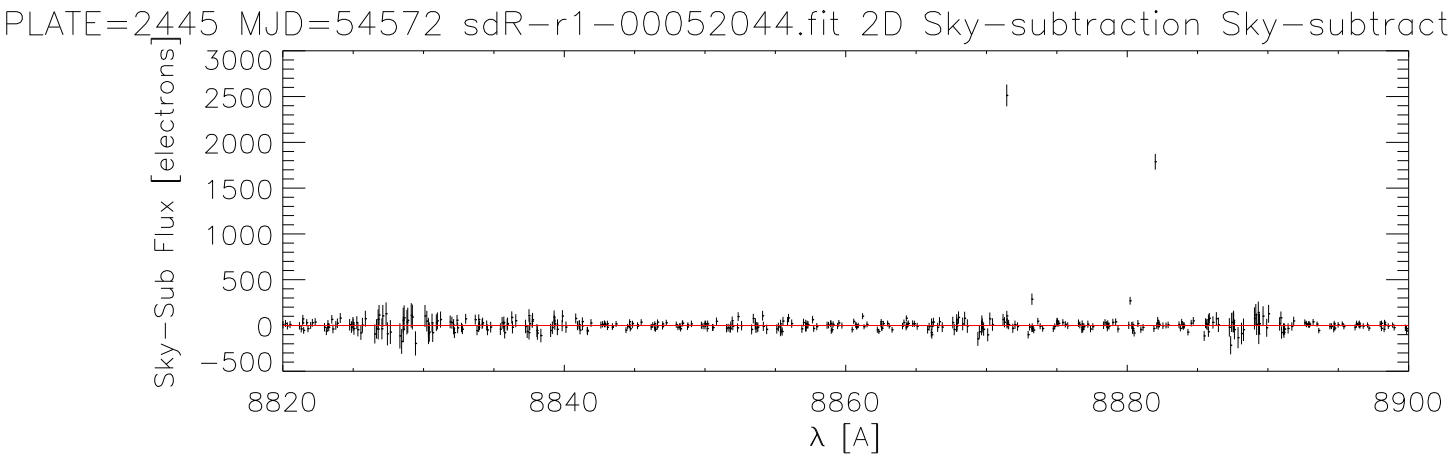

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

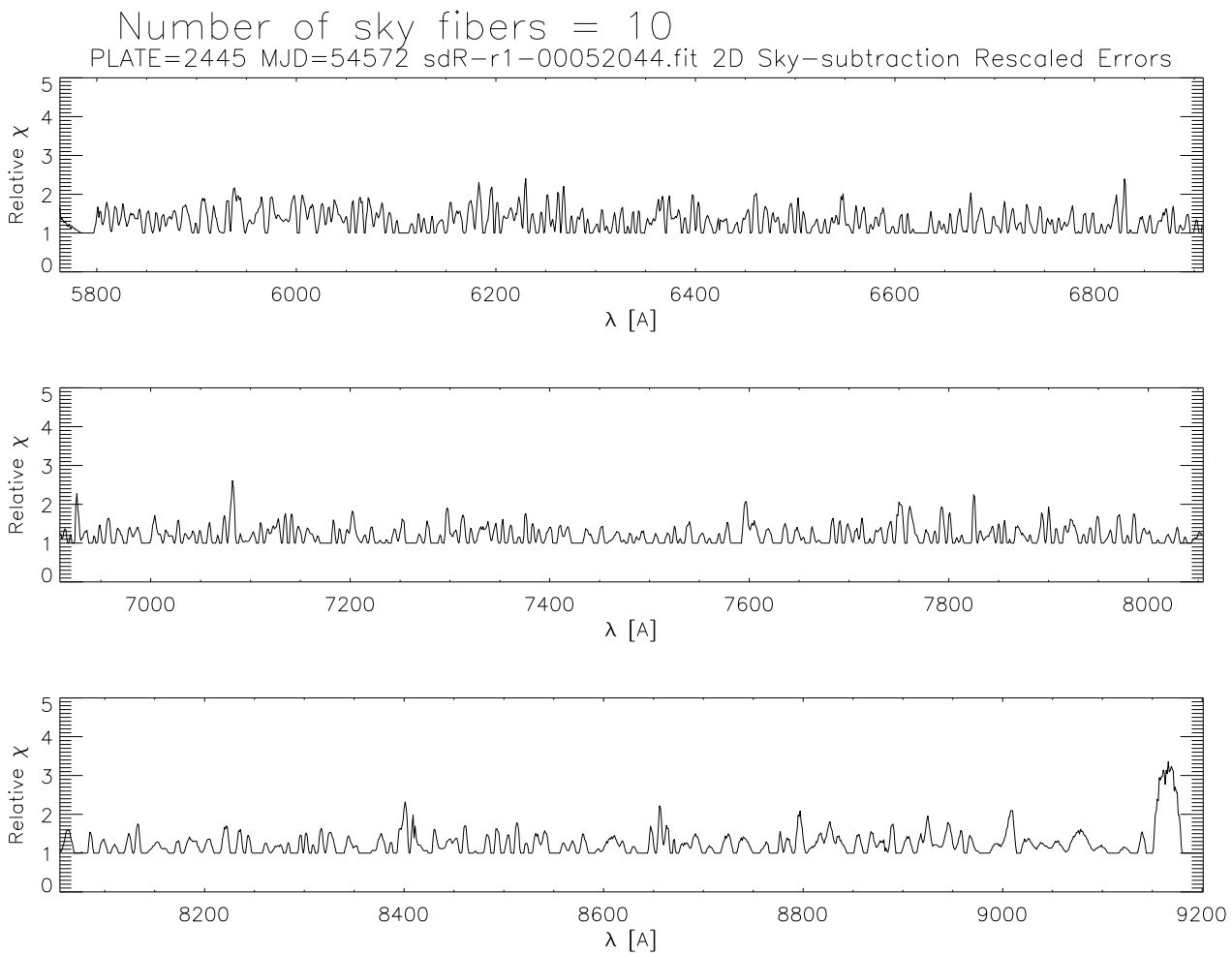

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

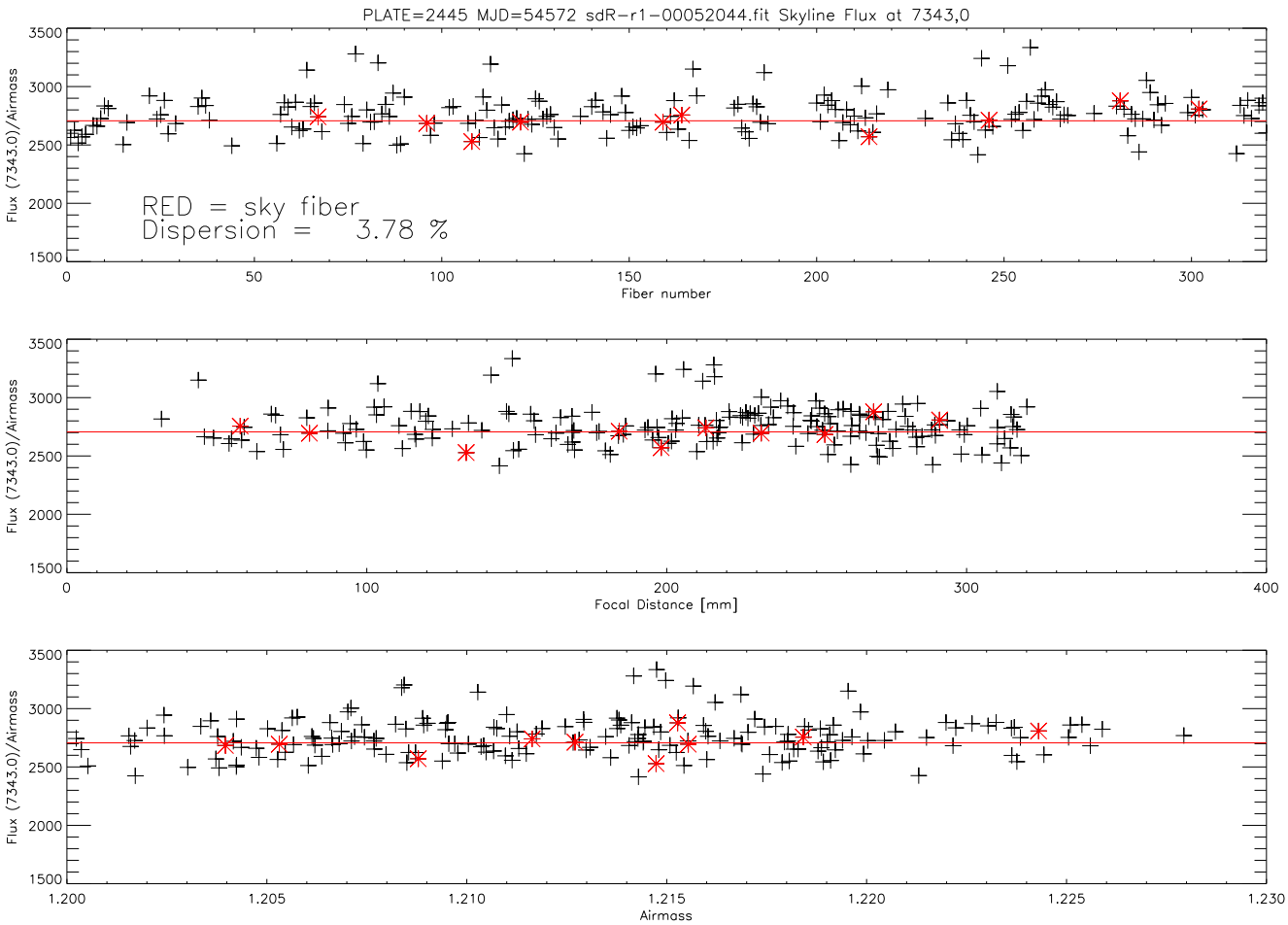

Number of sky fibers = 10
PLATE=2445 MJD=54572 sdR-r1-00052044.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

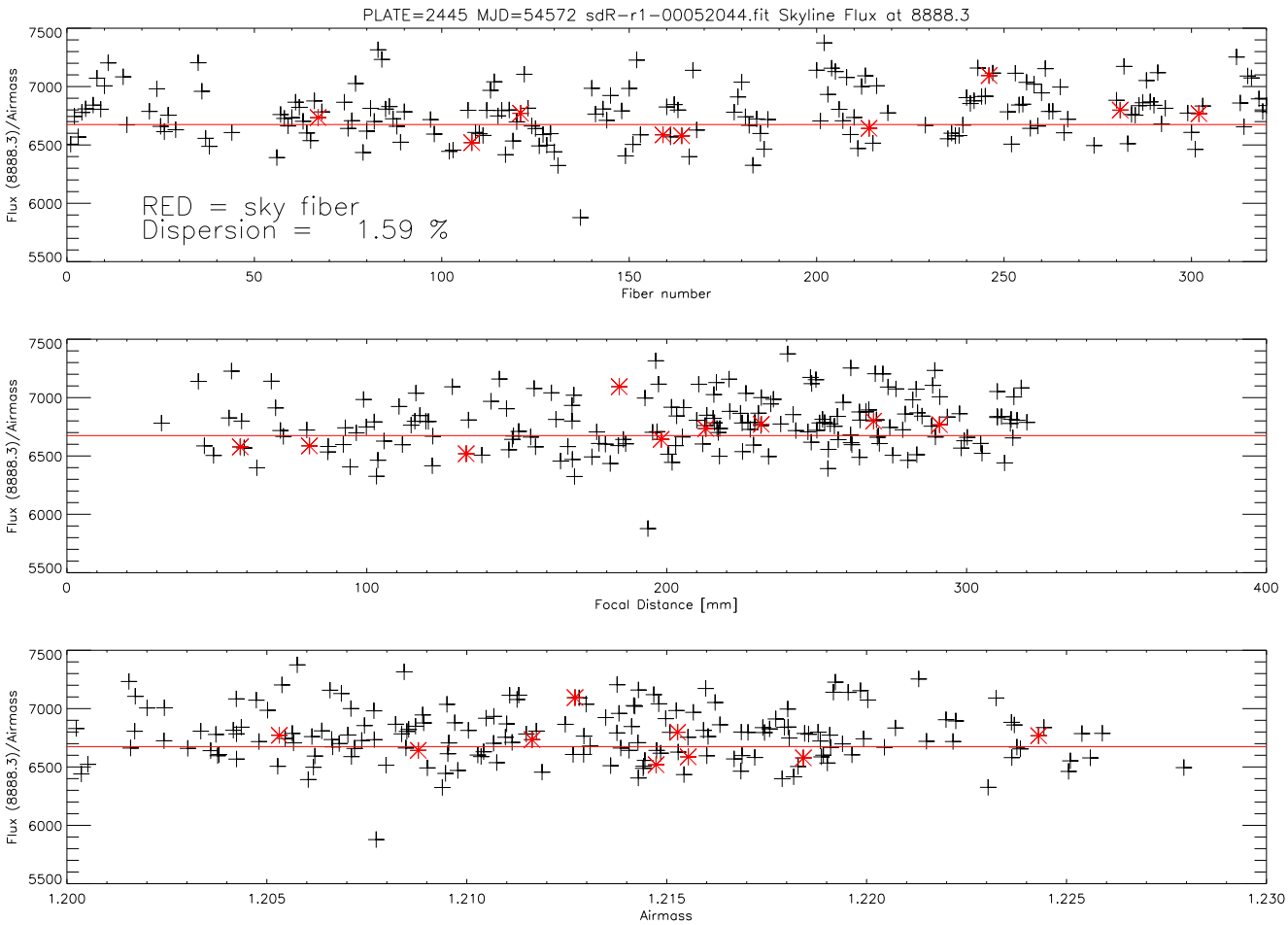

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

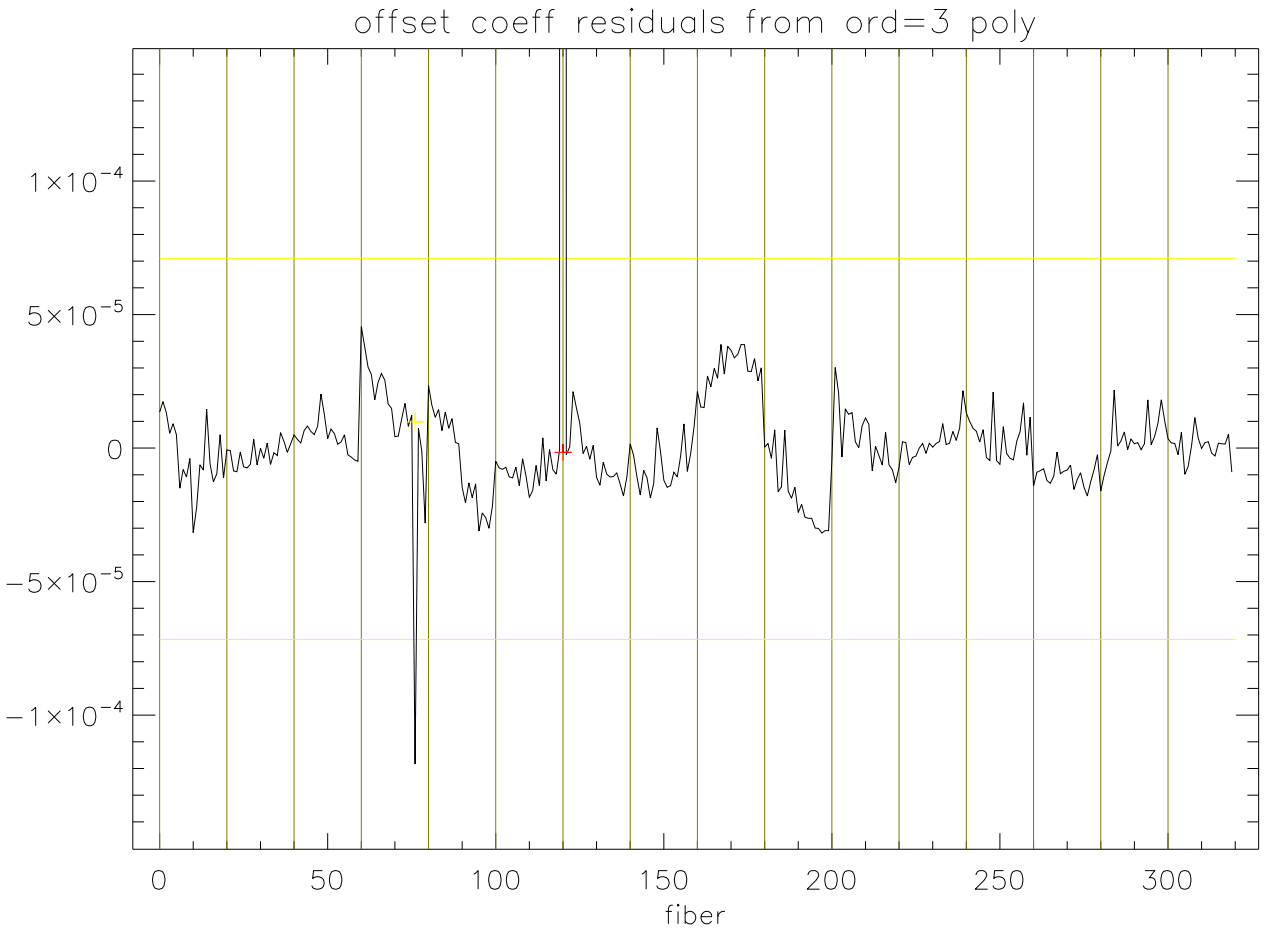

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

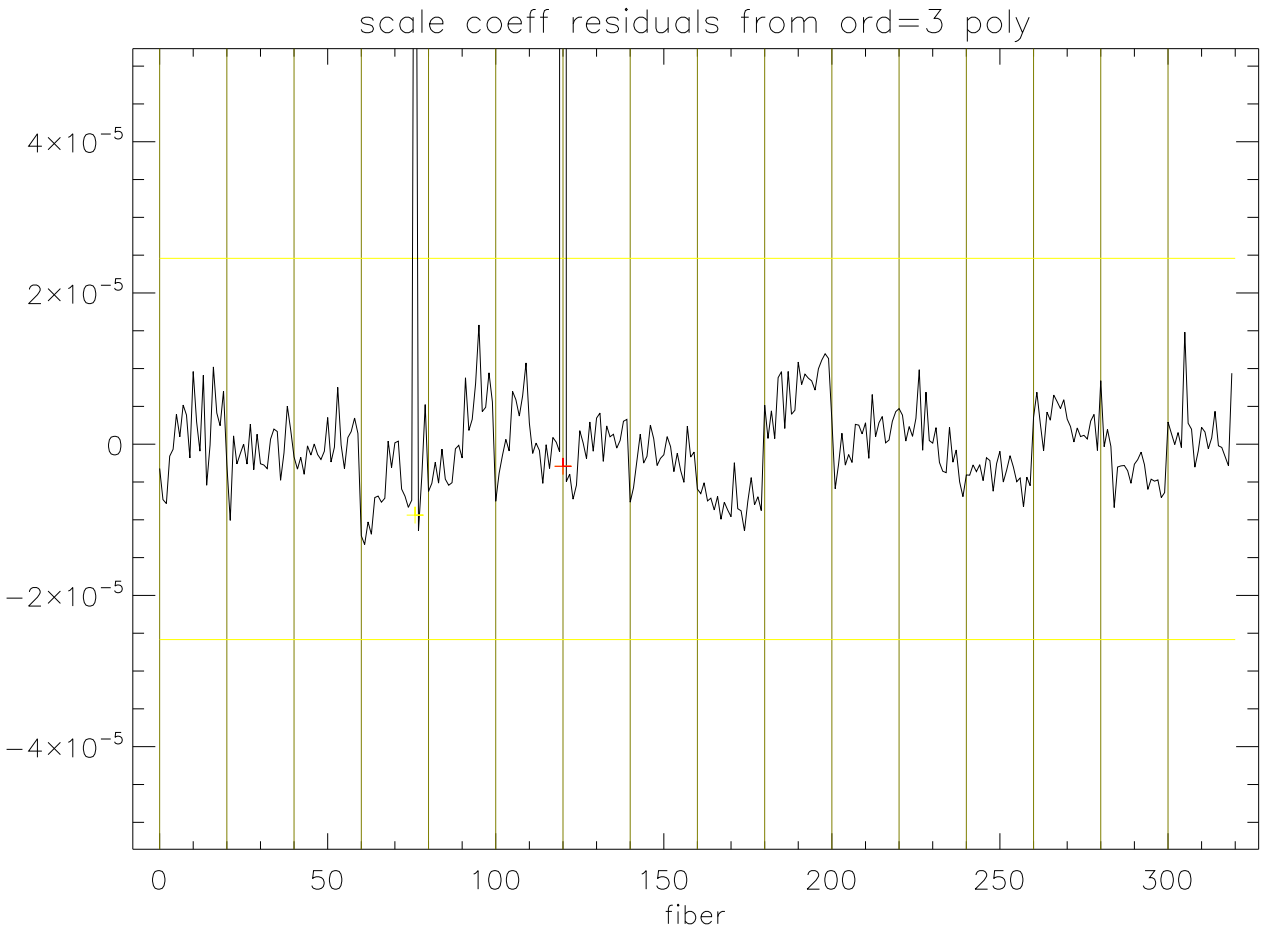

PLATE=2445 MJD=54572 sdR-r1-00052044.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

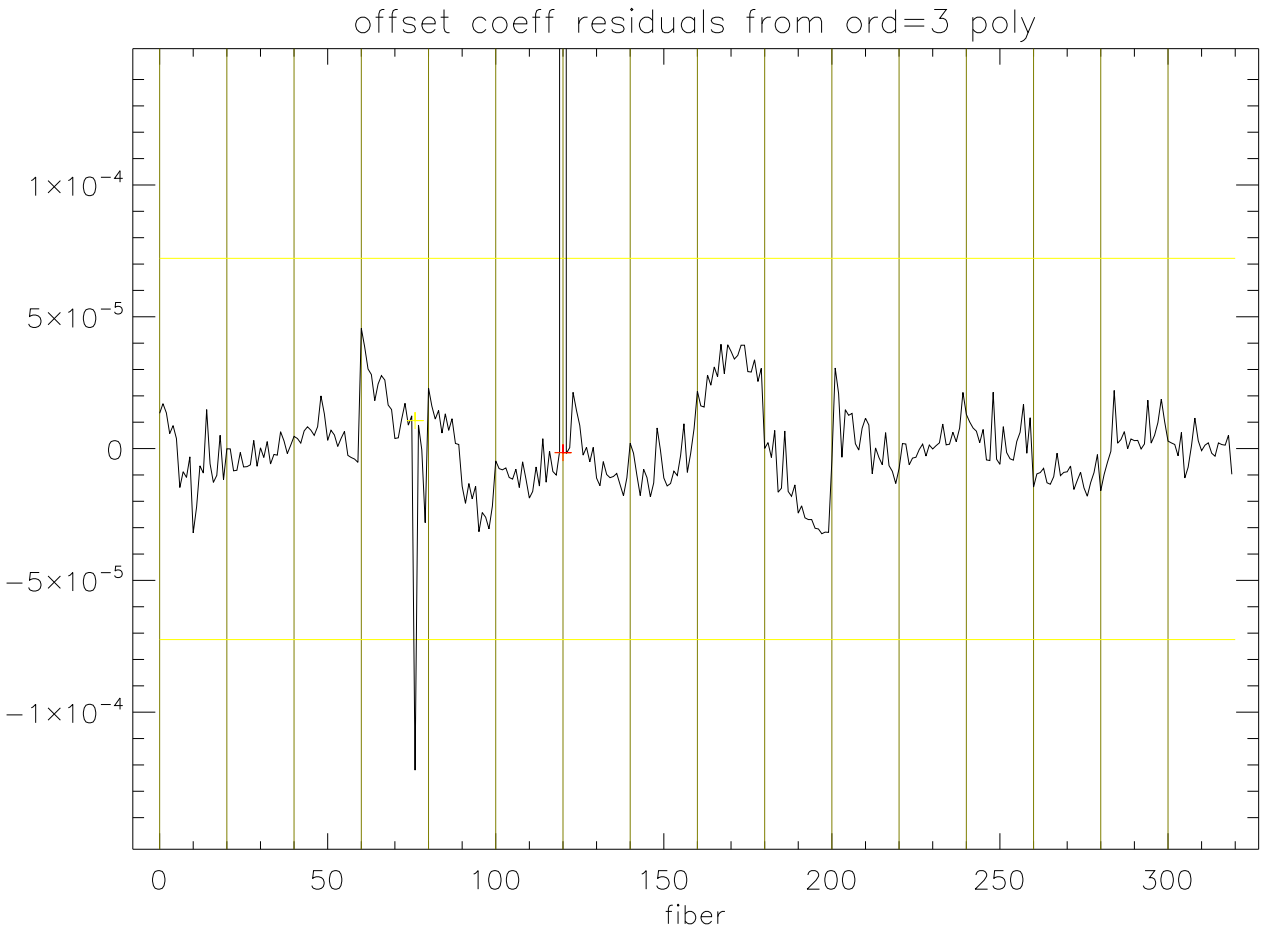

Number of sky fibers = 10
PLATE=2445 MJD=54572 sdR-r1-00052044.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

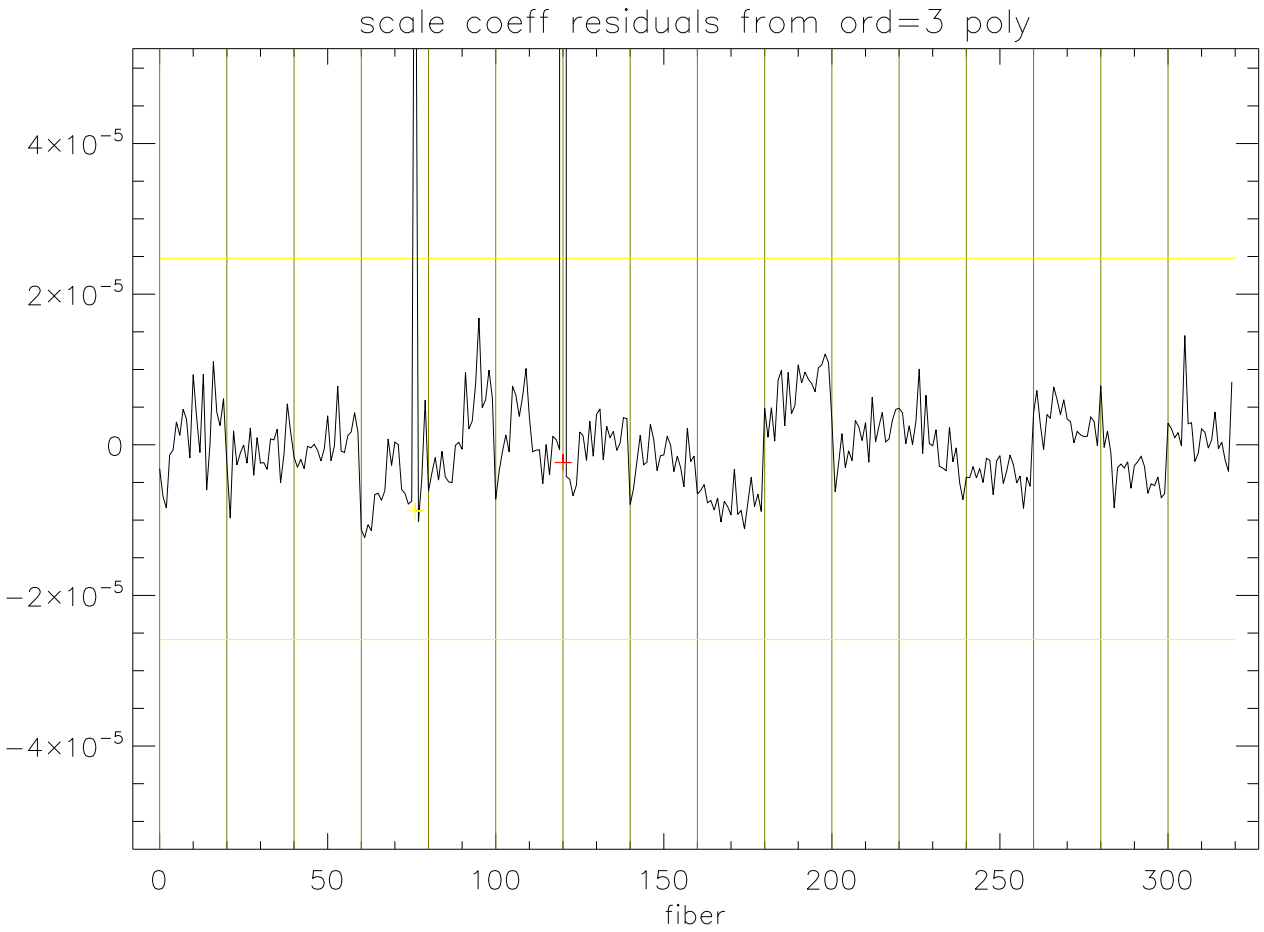

PLATE=2445 MJD=54572 sdR-r1-00052044.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.78 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

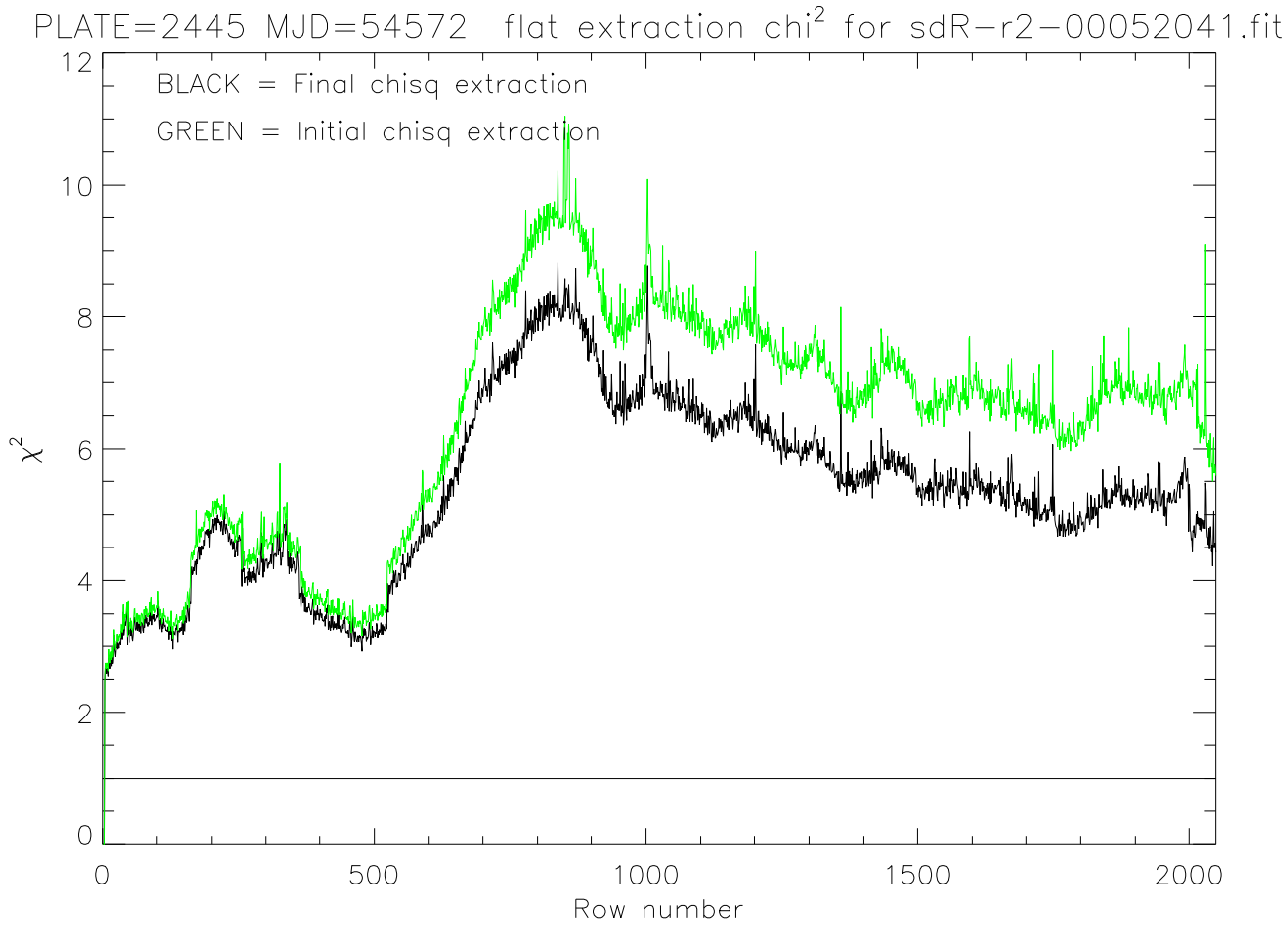

PLATE=2445 MJD=54572 sdR-r1-00052044.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

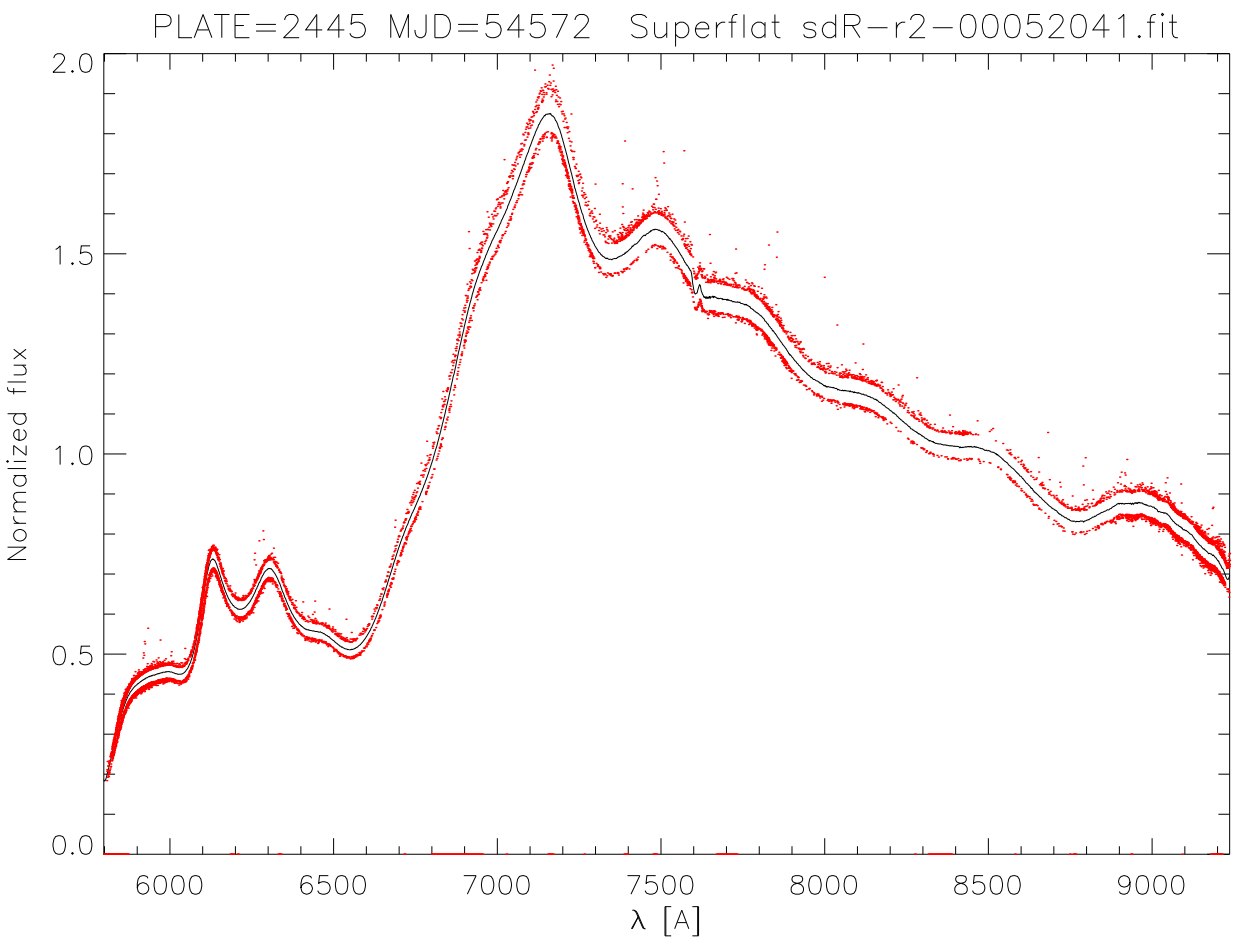

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

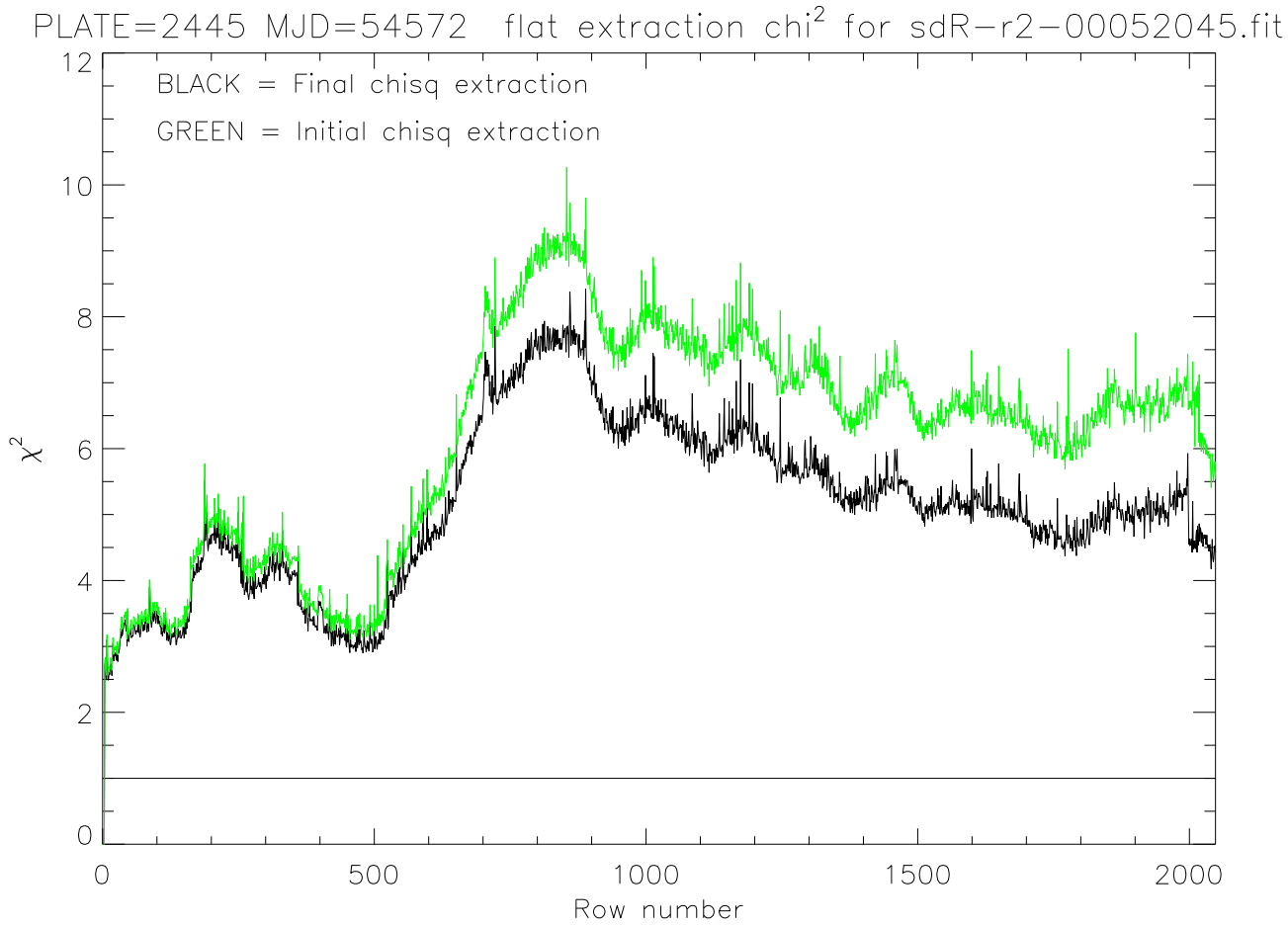

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

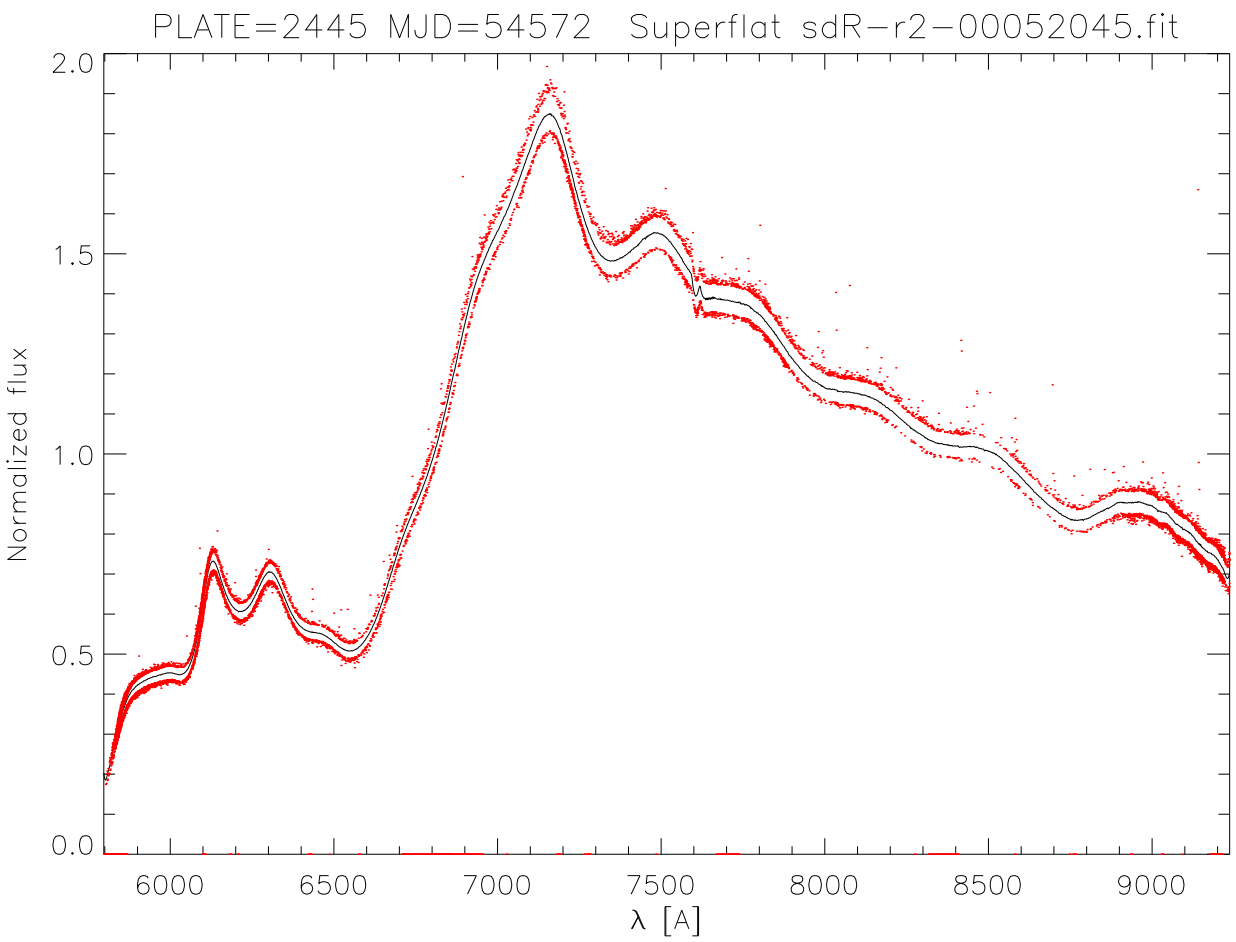

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

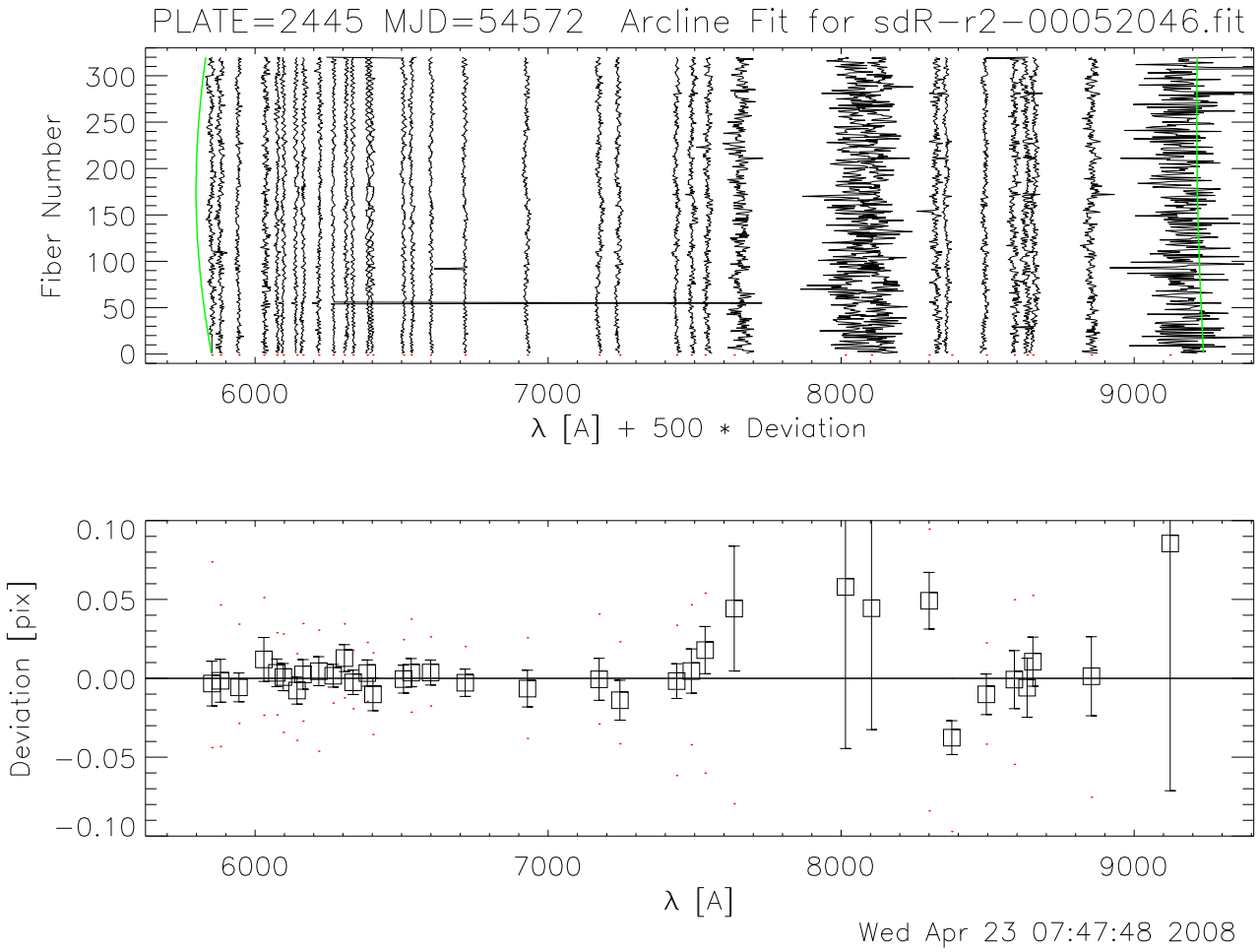

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

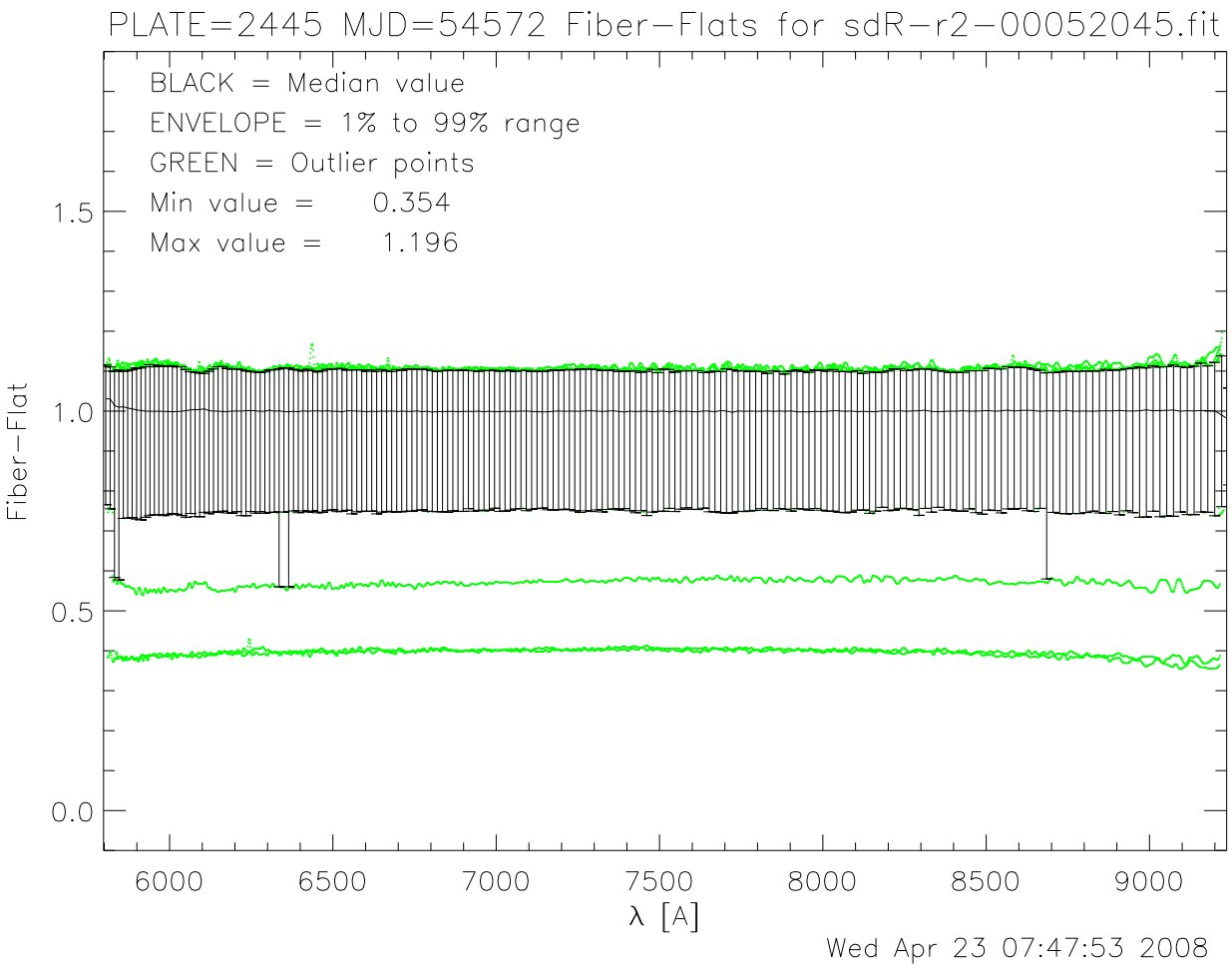

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−r2−00052041.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

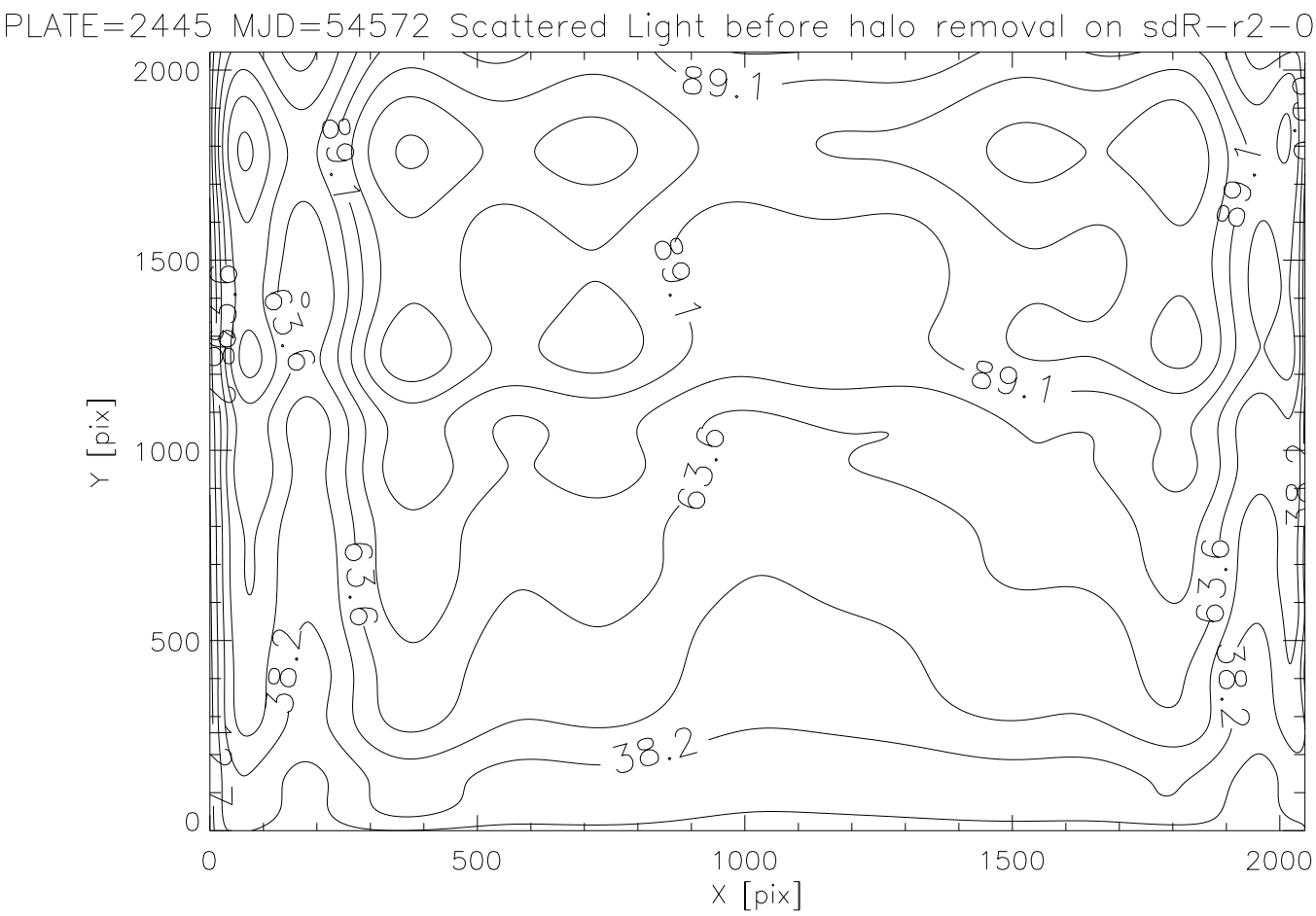

PLATE=2445 MJD=54572 Superflat sdR-r2-00052041.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

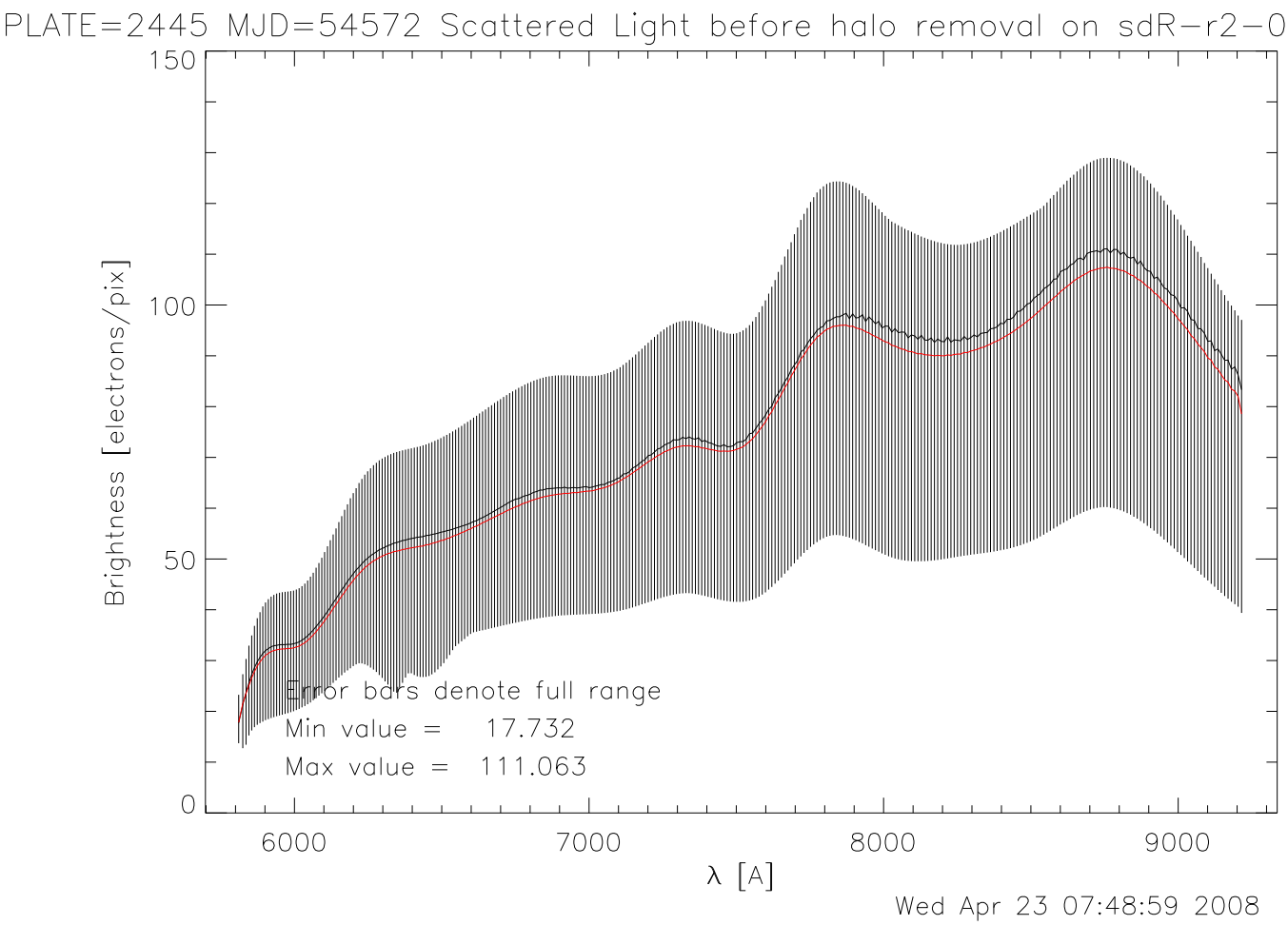

PLATE=2445 MJD=54572 flat extraction chi^2 for sdR−r2−00052045.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

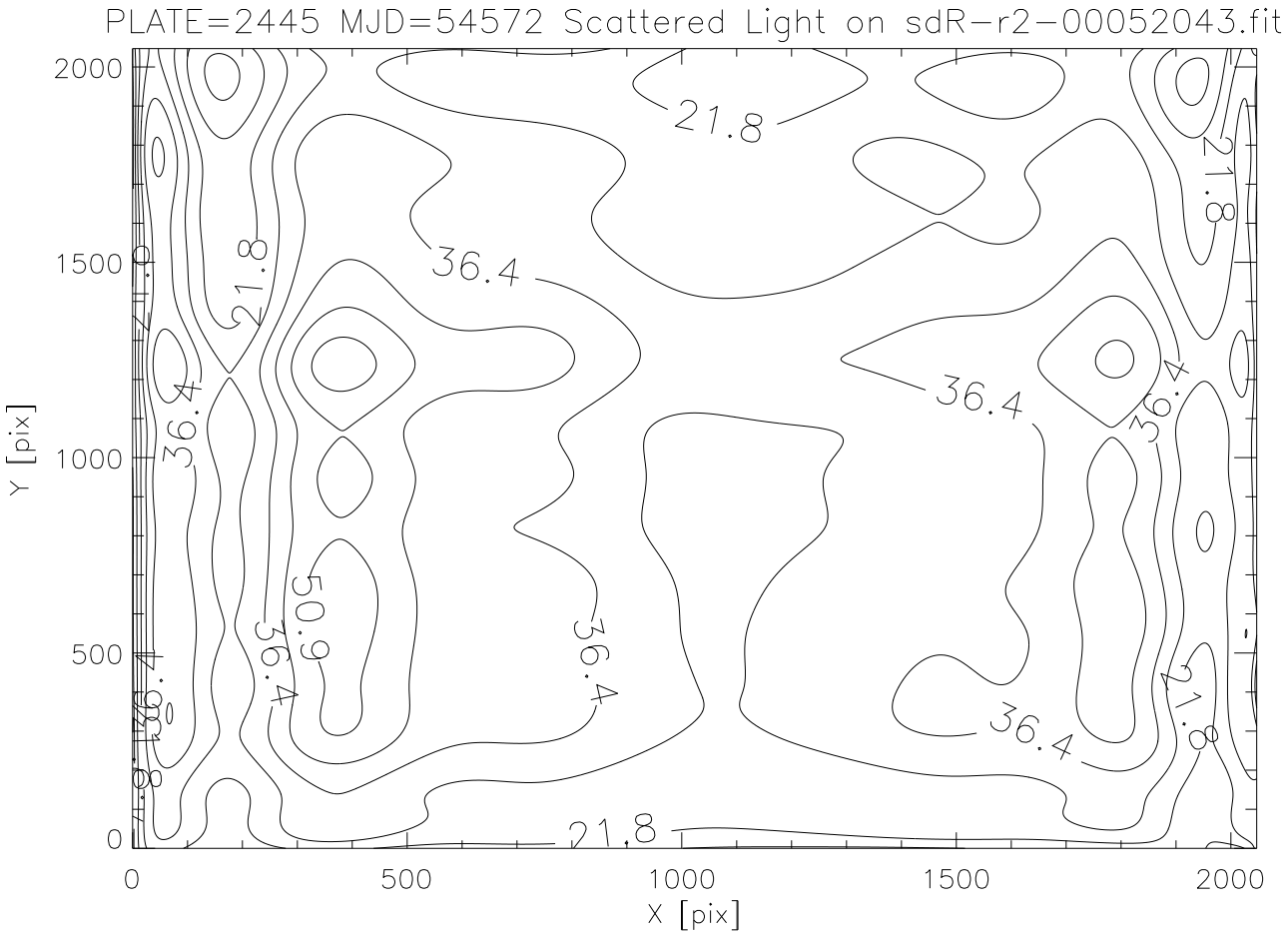

PLATE=2445 MJD=54572 Superflat sdR-r2-00052045.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

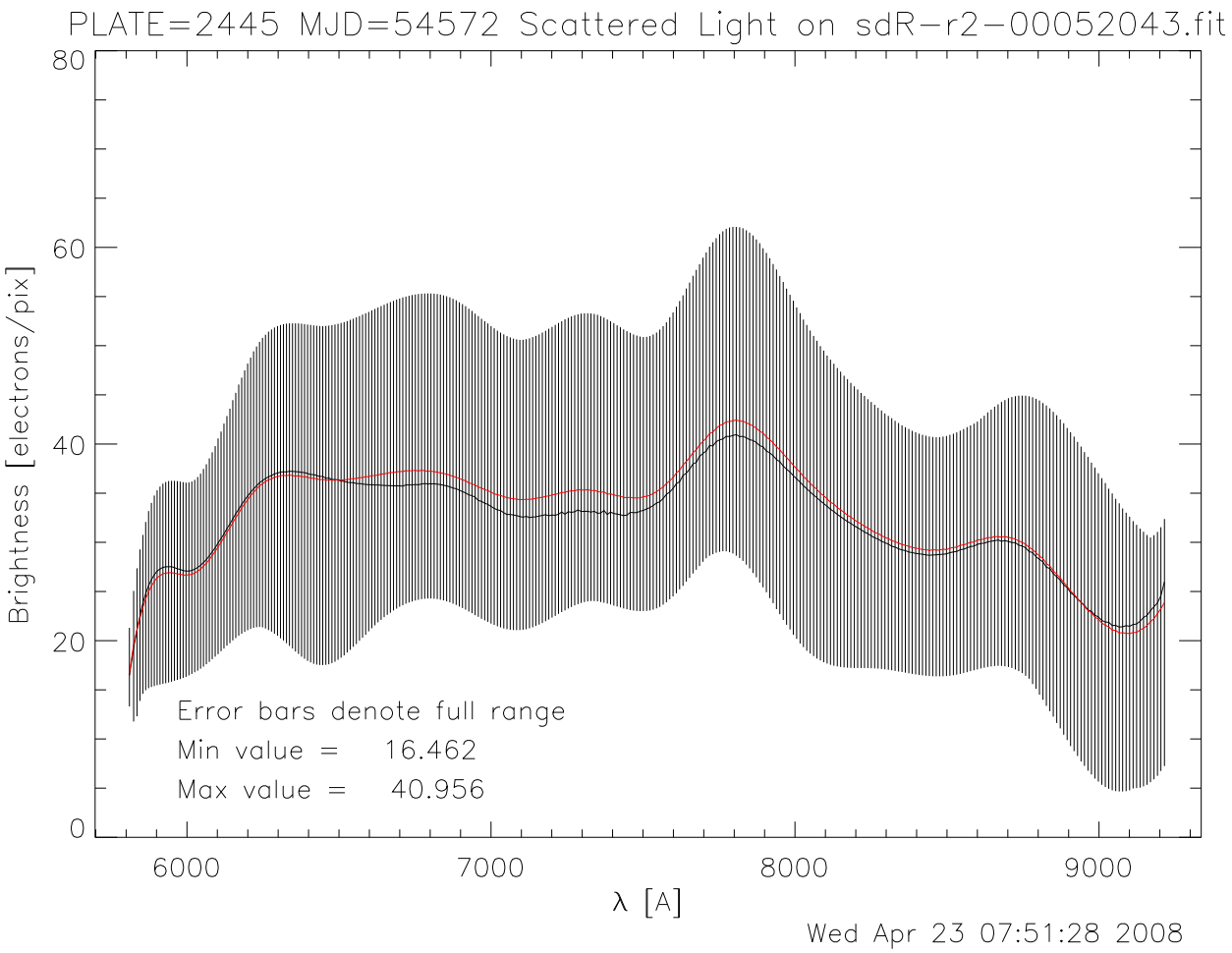

PLATE=2445 MJD=54572 Arcline Fit for sdR-r2-00052046.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:47:48 2008

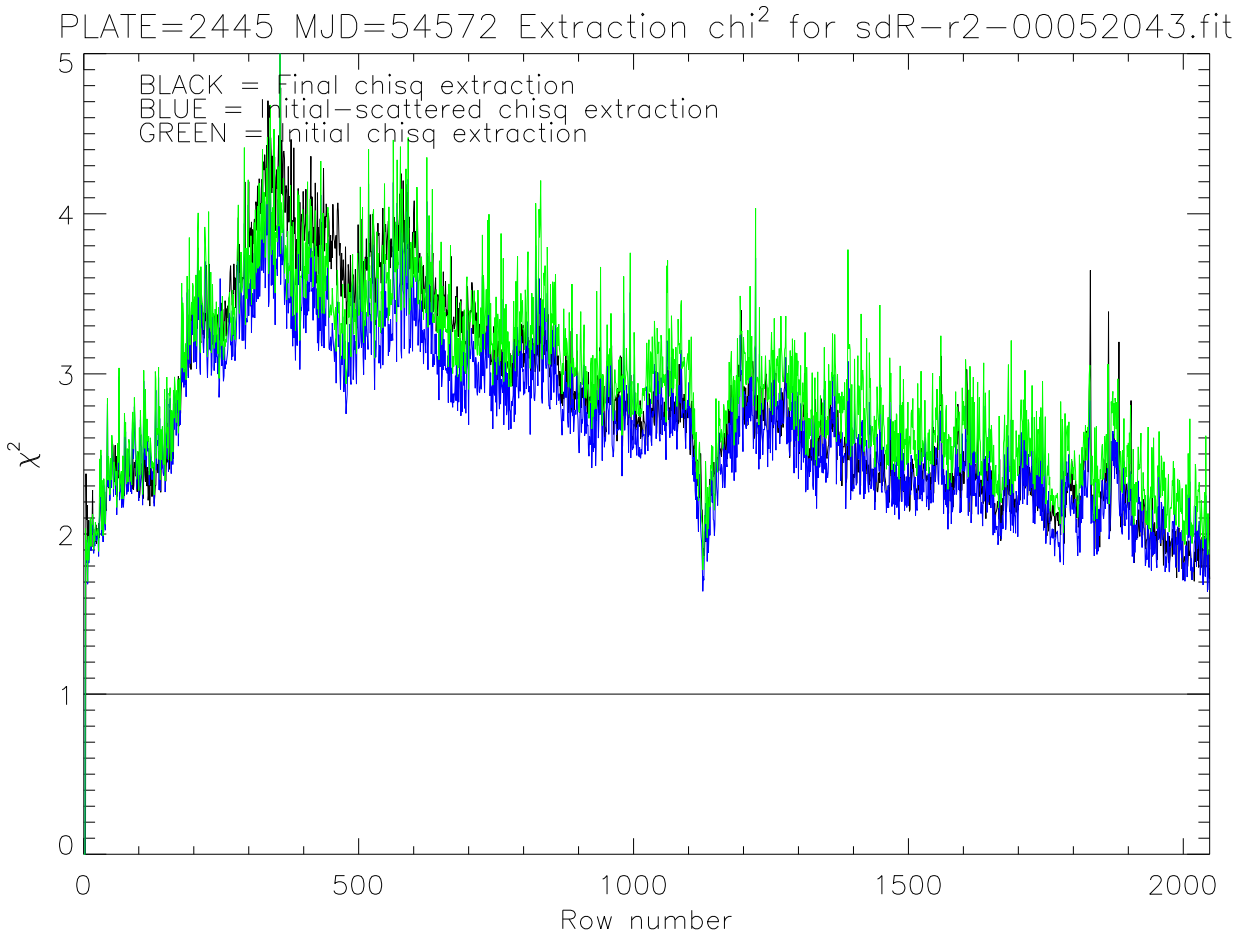

PLATE=2445 MJD=54572 Fiber−Flats for sdR−r2−00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.354
Max value = 1.196
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Apr 23 07:47:53 2008

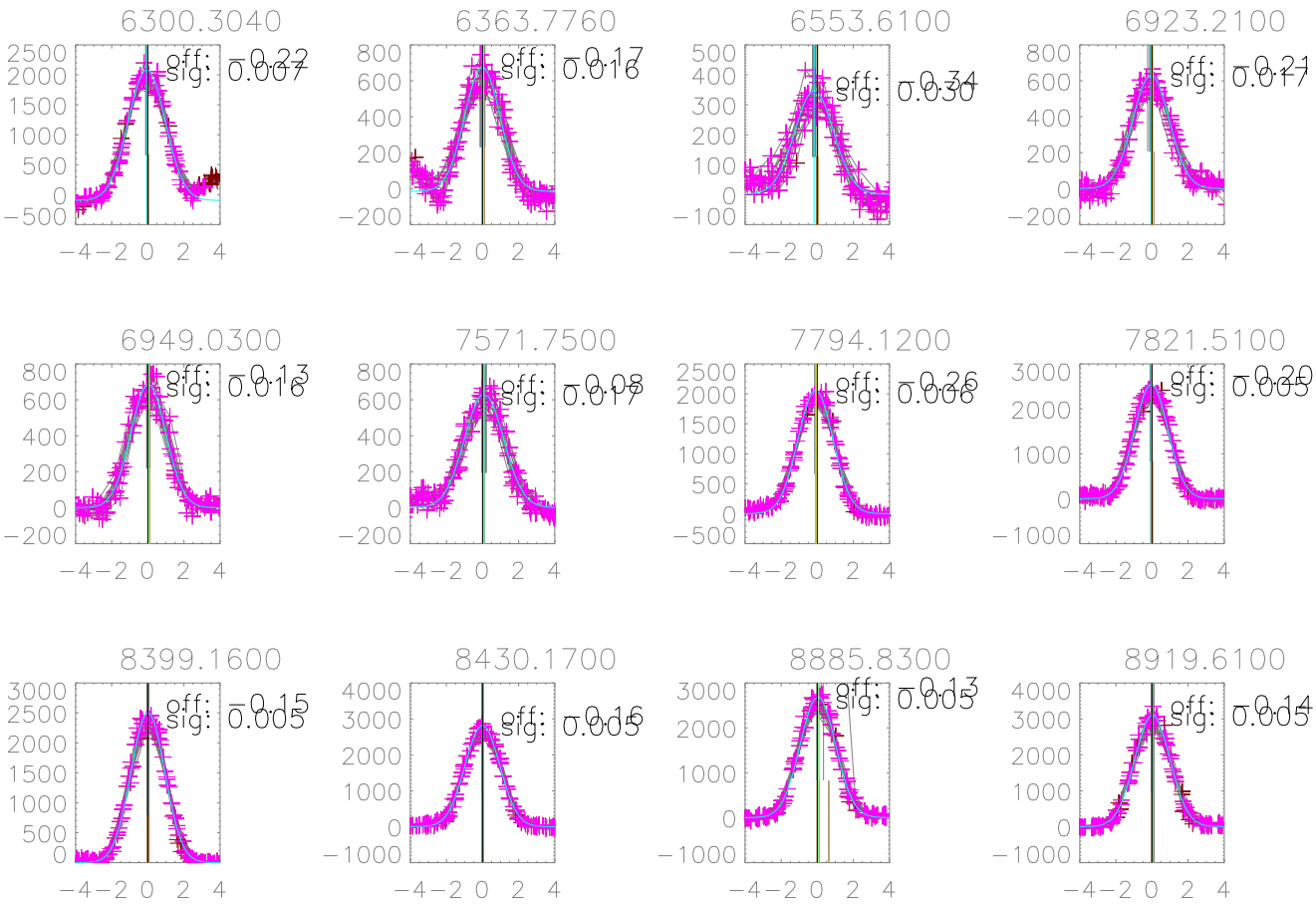

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r2-00052043.fi
89.1
63.6
38.2
Y [pix]
X [pix]
0
500
1000
1500
2000

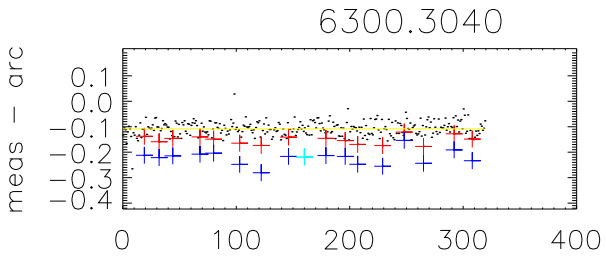

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r2-00052043.fi
150
100
50
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 17.732
Max value = 111.063
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:48:59 2008

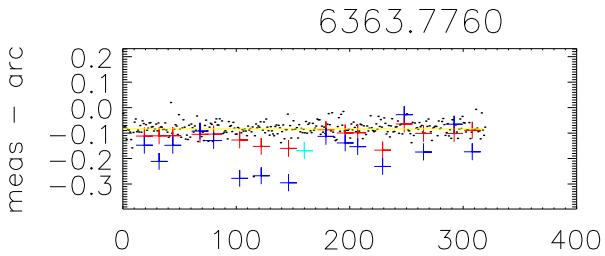

PLATE=2445 MJD=54572 Scattered Light on sdR-r2-00052043.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
21.8
36.4
50.9

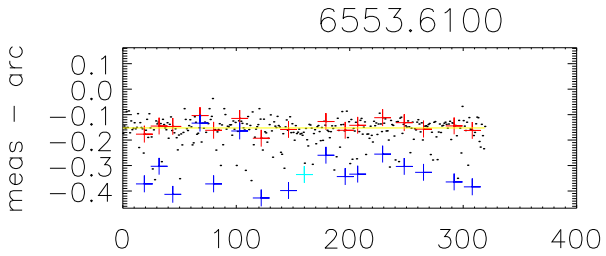

PLATE=2445 MJD=54572 Scattered Light on sdR-r2-00052043.fit
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 16.462
Max value = 40.956
Wed Apr 23 07:51:28 2008

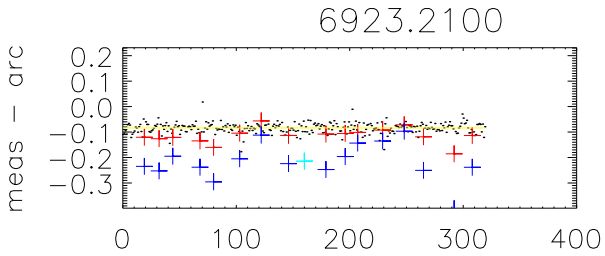

PLATE=2445 MJD=54572 Extraction chi^2 for sdR−r2−00052043.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

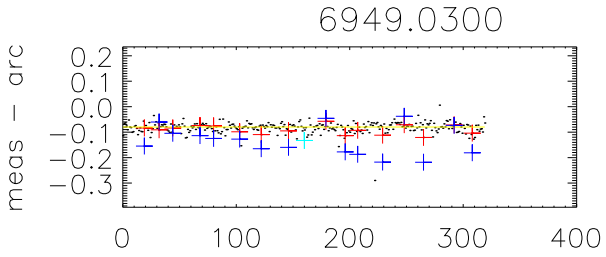

6300.3040
off: −0.22
sig: 0.007
6363.7760
off: −0.17
sig: 0.016
6553.6100
off: −0.34
sig: 0.030
6923.2100
off: −0.21
sig: 0.017
6949.0300
off: −0.13
sig: 0.016
7571.7500
off: −0.08
sig: 0.017
7794.1200
off: −0.26
sig: 0.006
7821.5100
off: −0.20
sig: 0.005
8399.1600
off: −0.15
sig: 0.005
8430.1700
off: −0.16
sig: 0.005
8885.8300
off: −0.13
sig: 0.005
8919.6100
off: −0.14
sig: 0.005

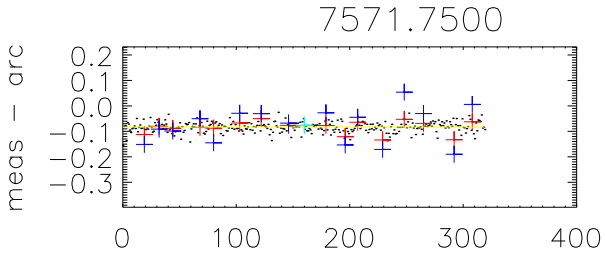

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

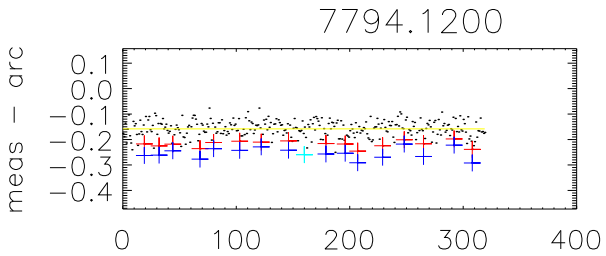

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

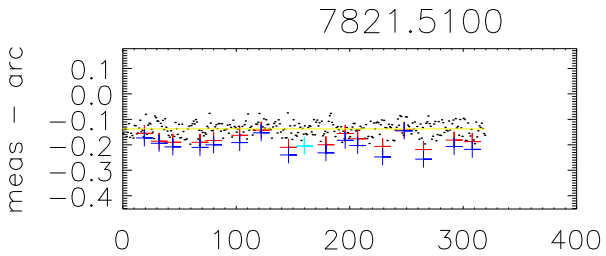

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

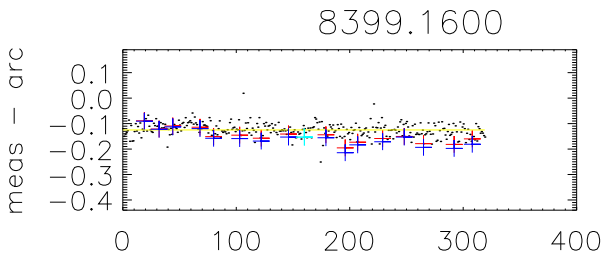

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

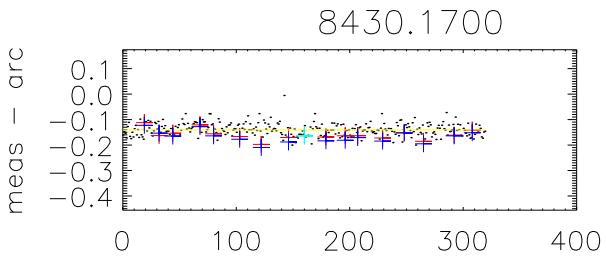

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

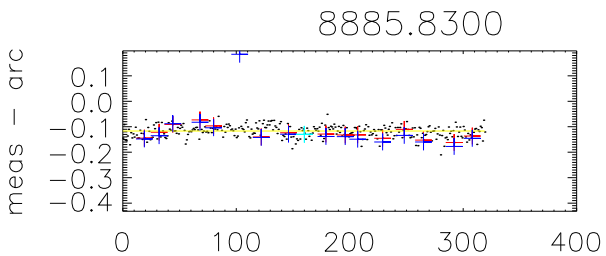

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

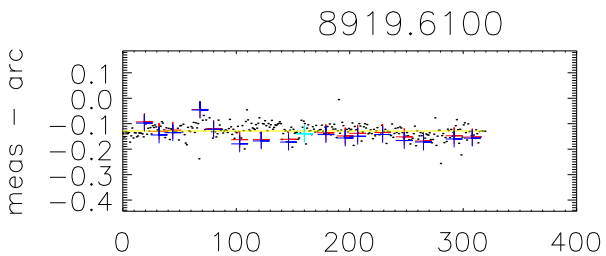

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

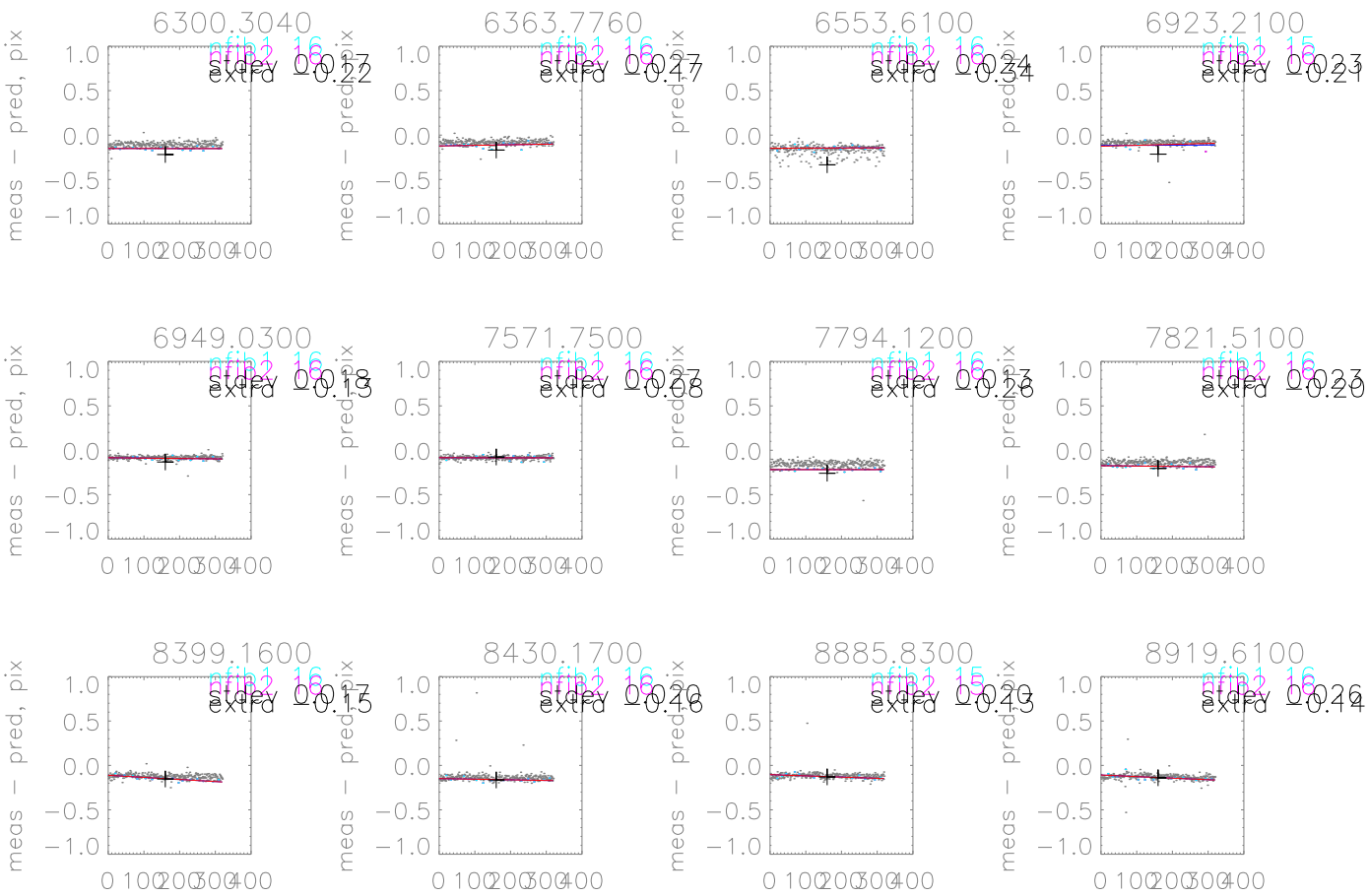

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

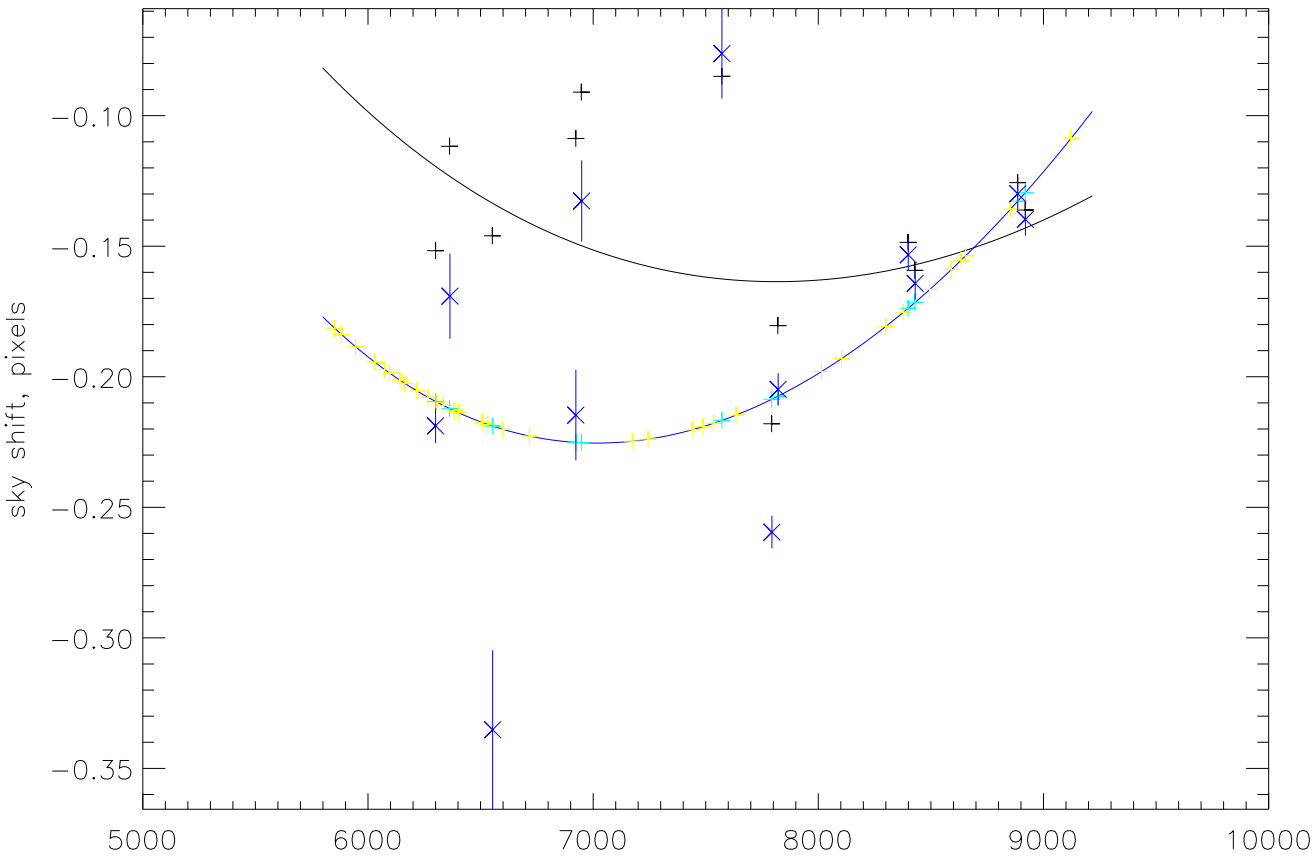

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

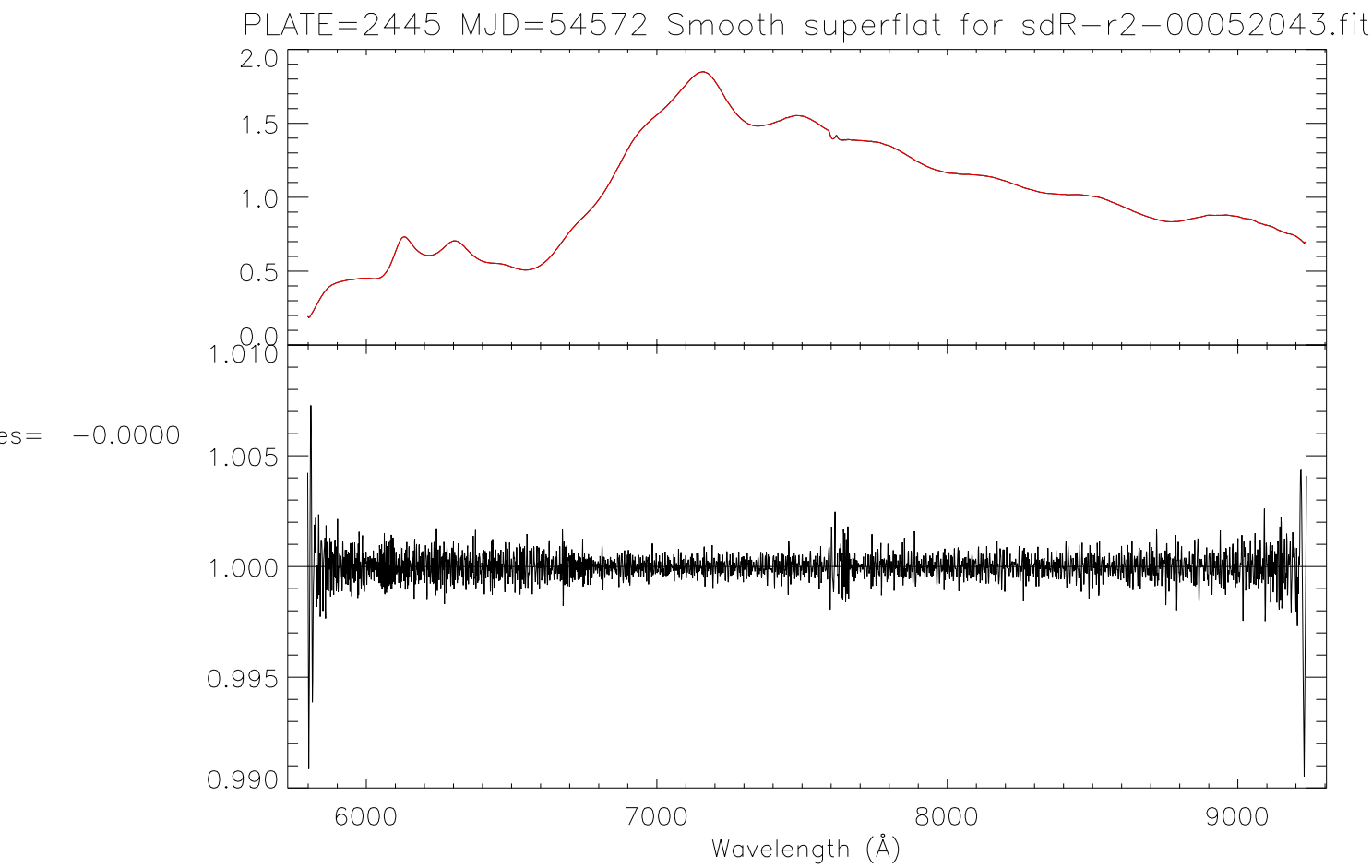

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

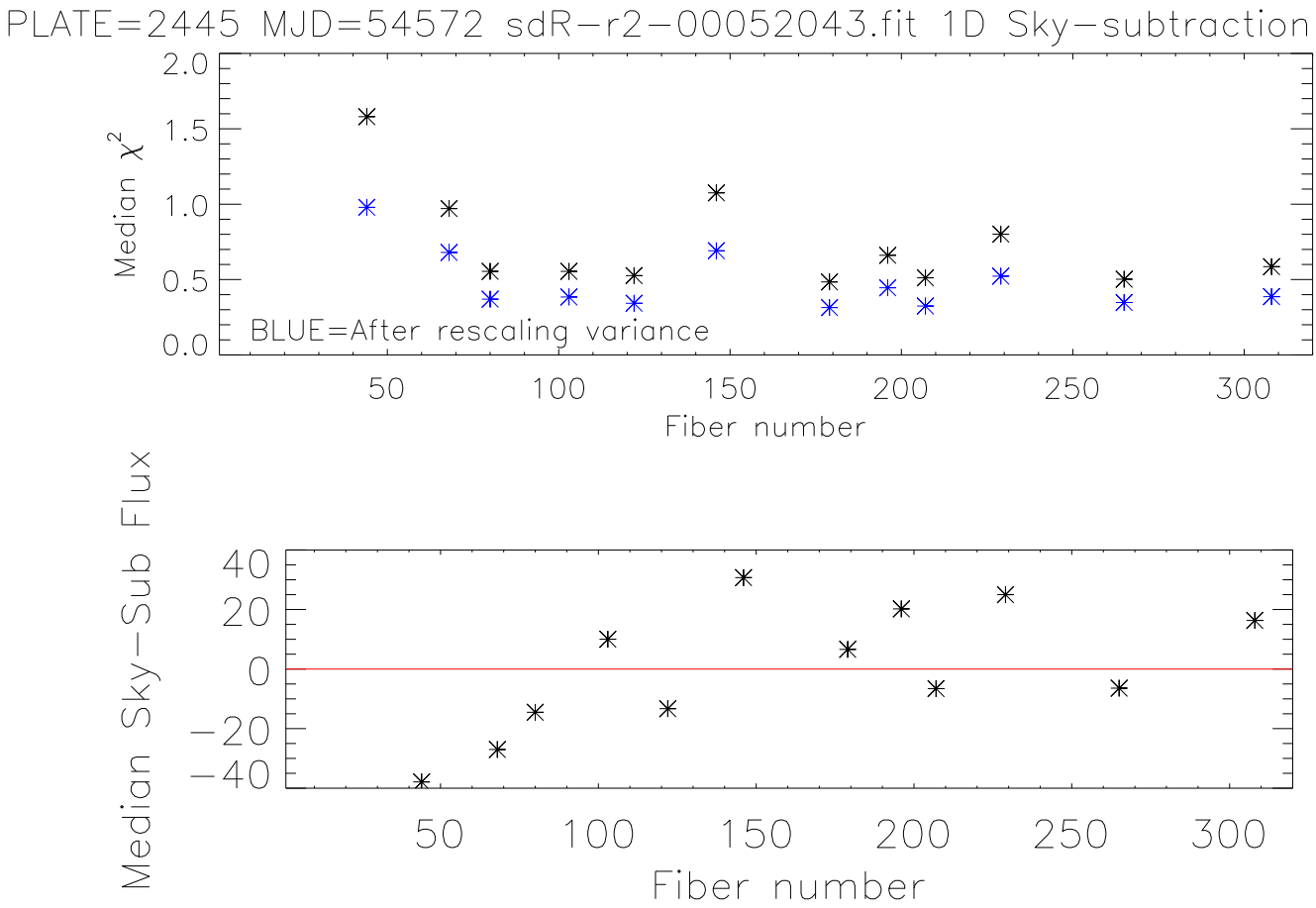

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

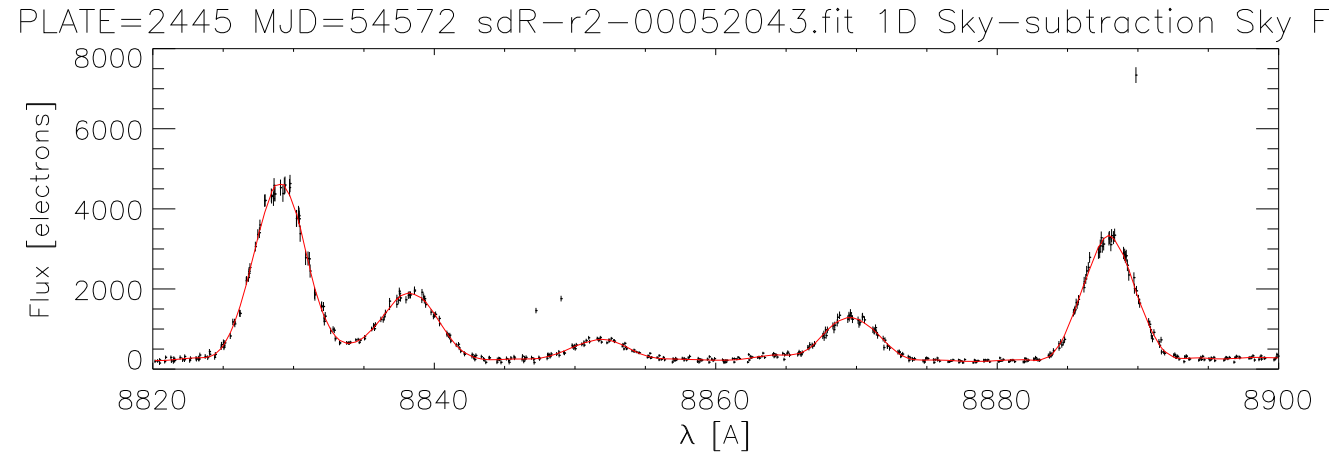

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

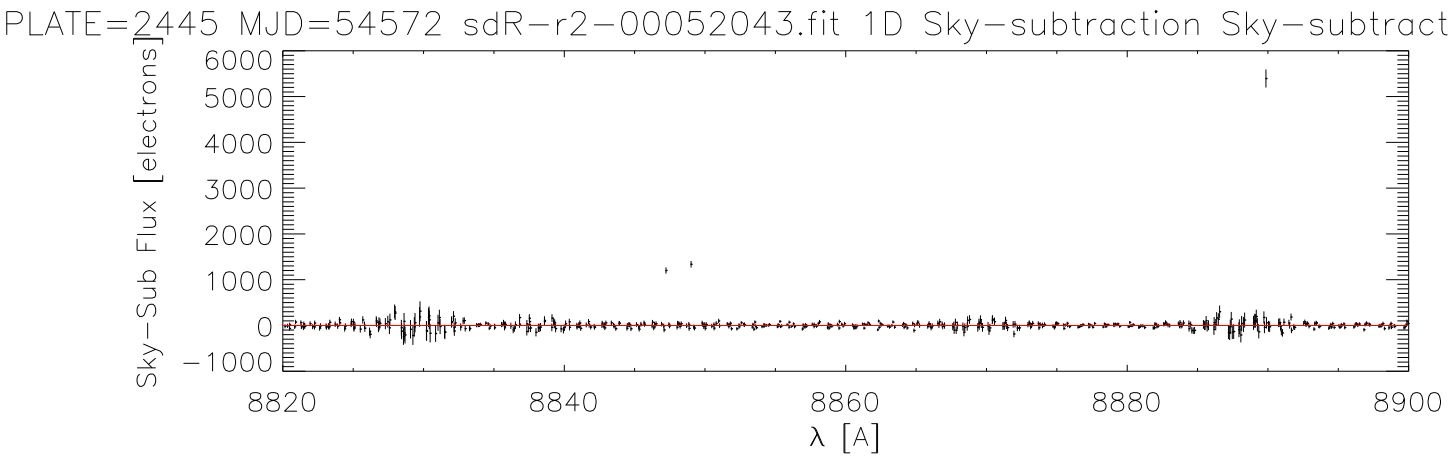

6300.3040
mfhd1 16
mfhd2 16
stdev 0.17
extra 0.22
6363.7760
mfhd1 16
mfhd2 16
stdev 0.27
extra 0.47
6553.6100
mfhd1 16
mfhd2 16
stdev 0.24
extra 0.34
6923.2100
mfhd1 15
mfhd2 16
stdev 0.23
extra 0.21
6949.0300
mfhd1 16
mfhd2 16
stdev 0.18
extra 0.13
7571.7500
mfhd1 16
mfhd2 16
stdev 0.27
extra 0.08
7794.1200
mfhd1 16
mfhd2 16
stdev 0.13
extra 0.28
7821.5100
mfhd1 16
mfhd2 16
stdev 0.23
extra 0.20
8399.1600
mfhd1 16
mfhd2 16
stdev 0.17
extra 0.15
8430.1700
mfhd1 16
mfhd2 16
stdev 0.20
extra 0.46
8885.8300
mfhd1 15
mfhd2 16
stdev 0.20
extra 0.43
8919.6100
mfhd1 16
mfhd2 16
stdev 0.26
extra 0.44
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

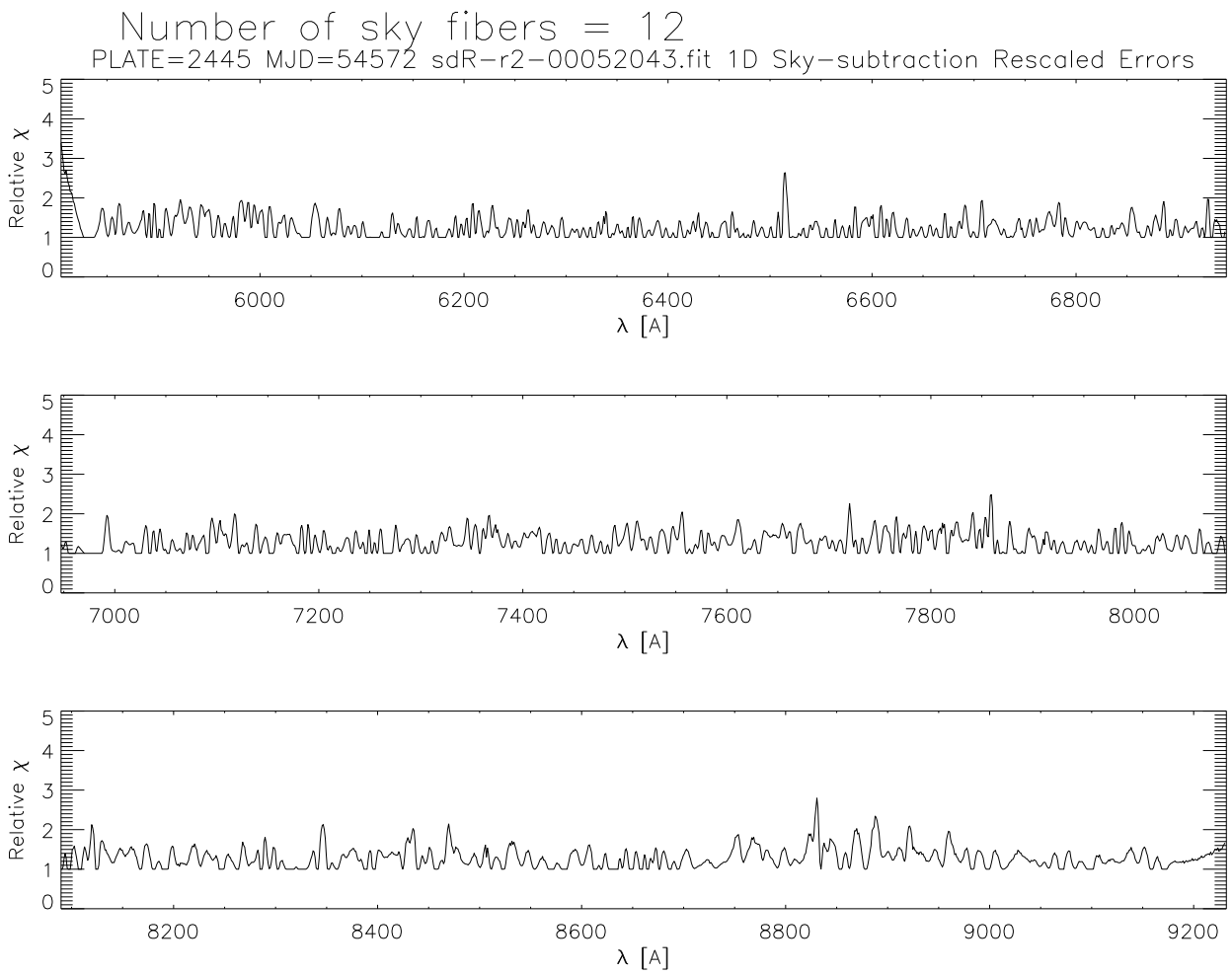

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
5000
6000
7000
8000
9000
10000

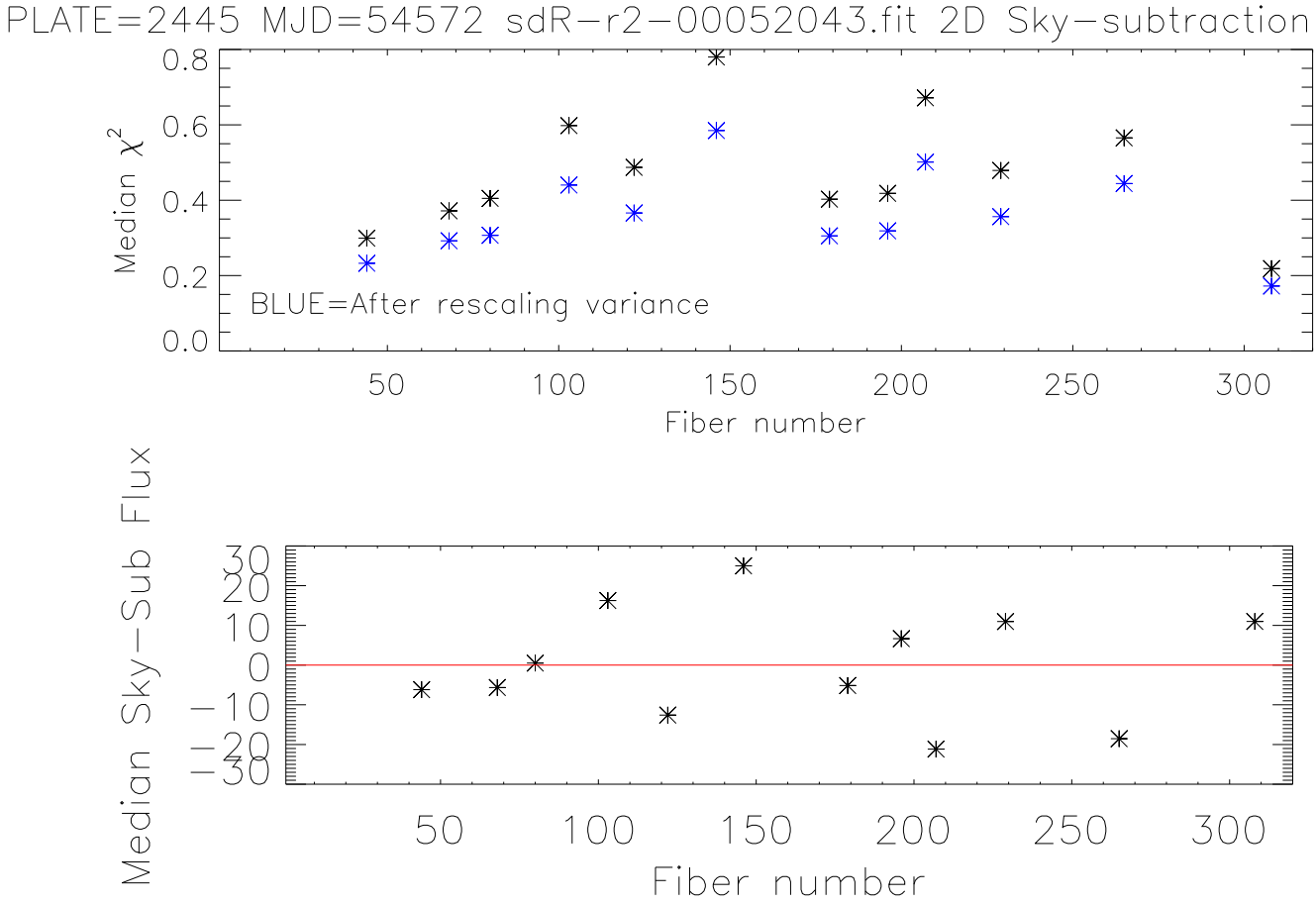

PLATE=2445 MJD=54572 Smooth superflat for sdR-r2-00052043.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

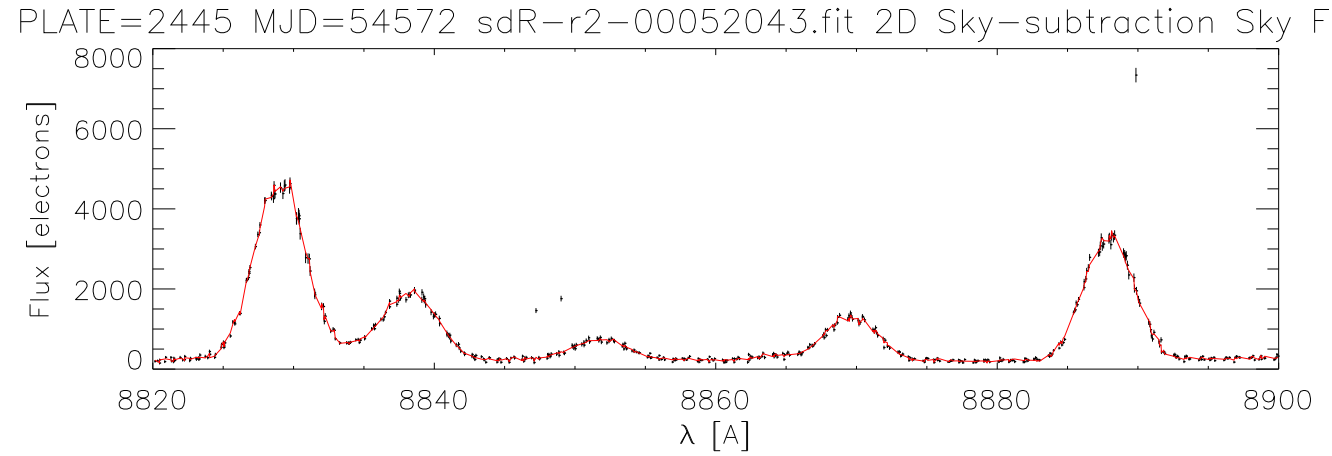

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

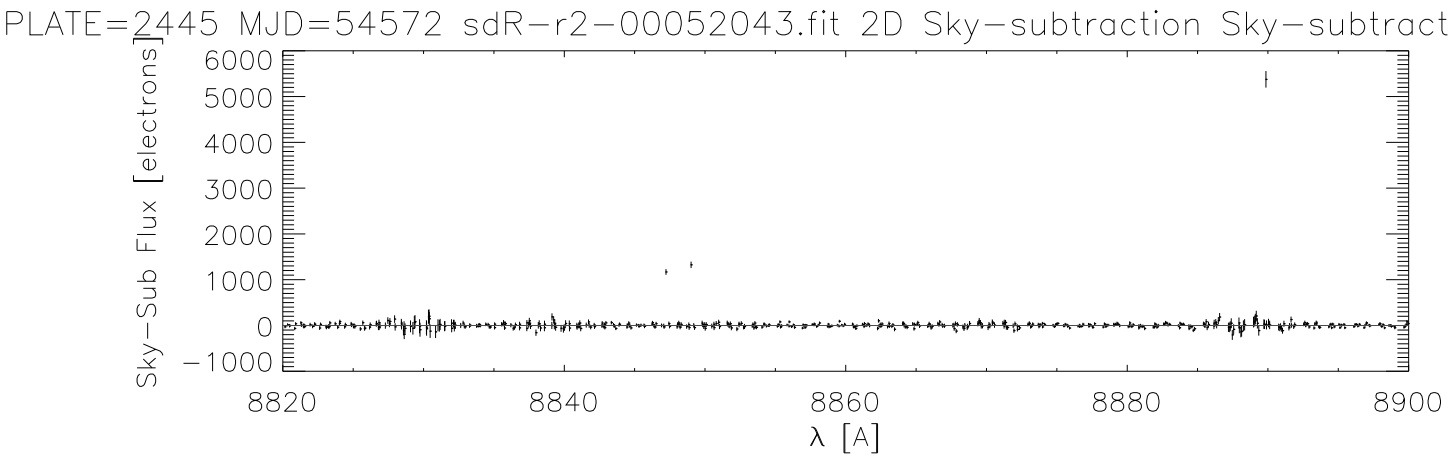

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

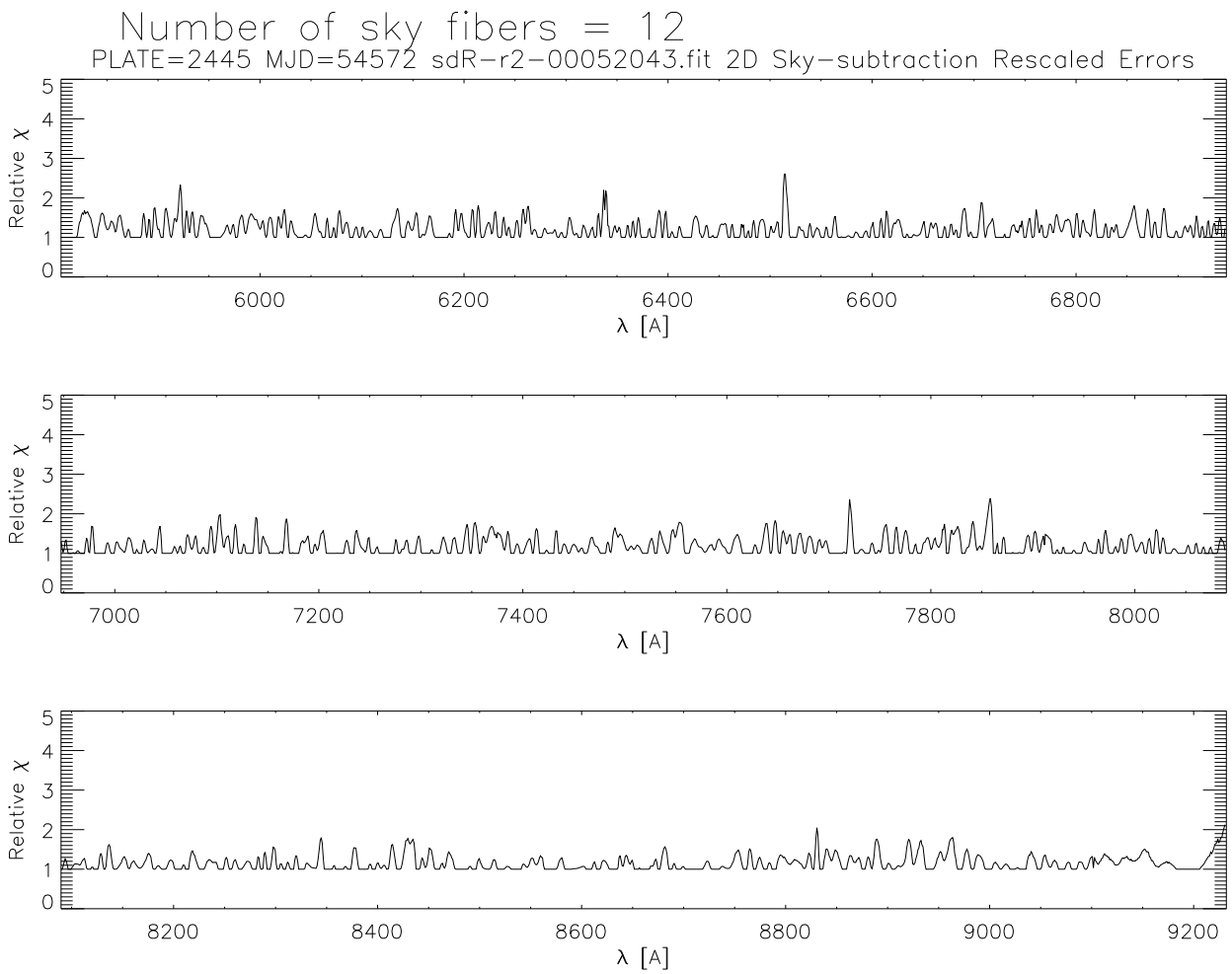

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

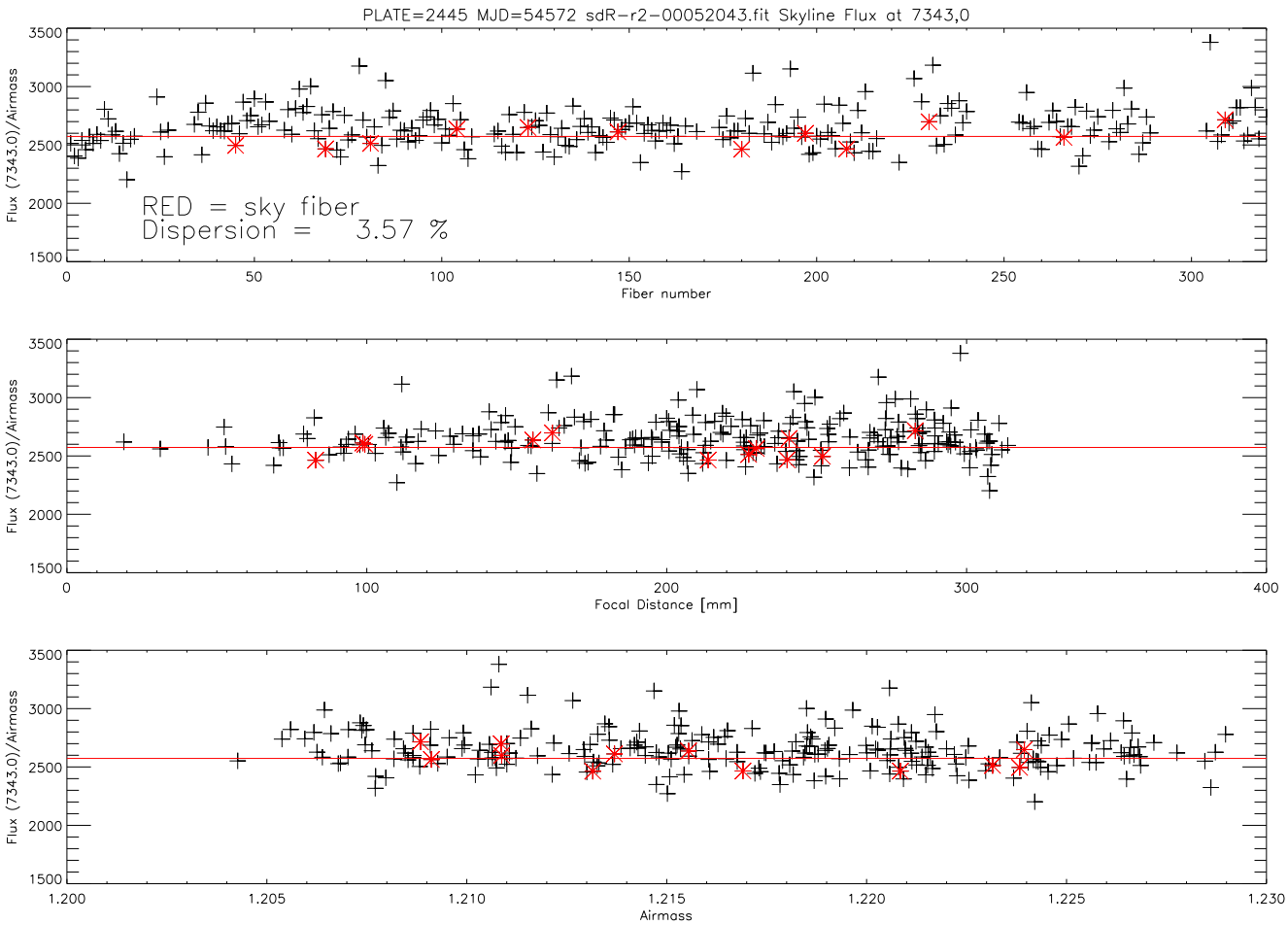

Number of sky fibers = 12
PLATE=2445 MJD=54572 sdR-r2-00052043.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

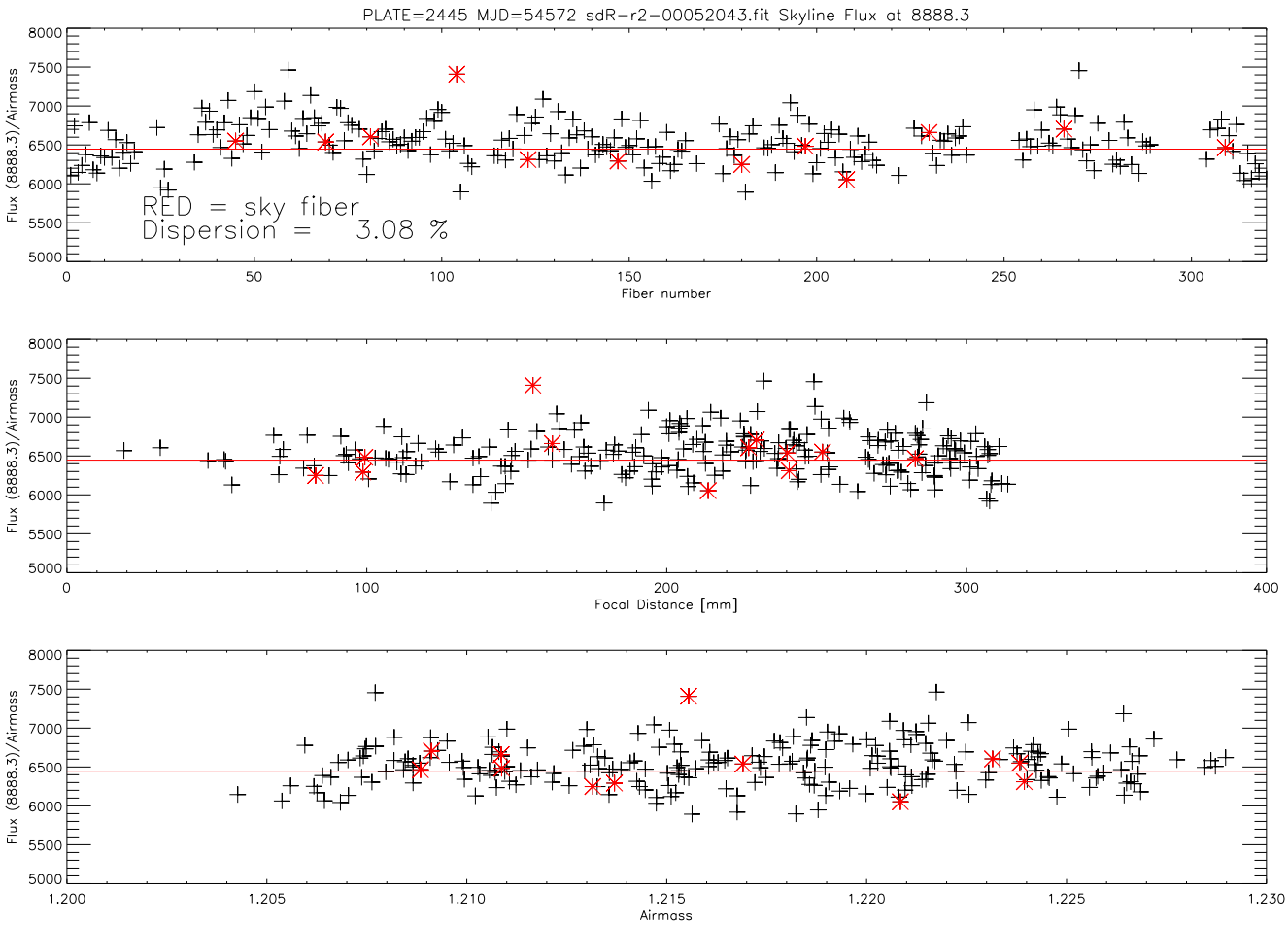

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

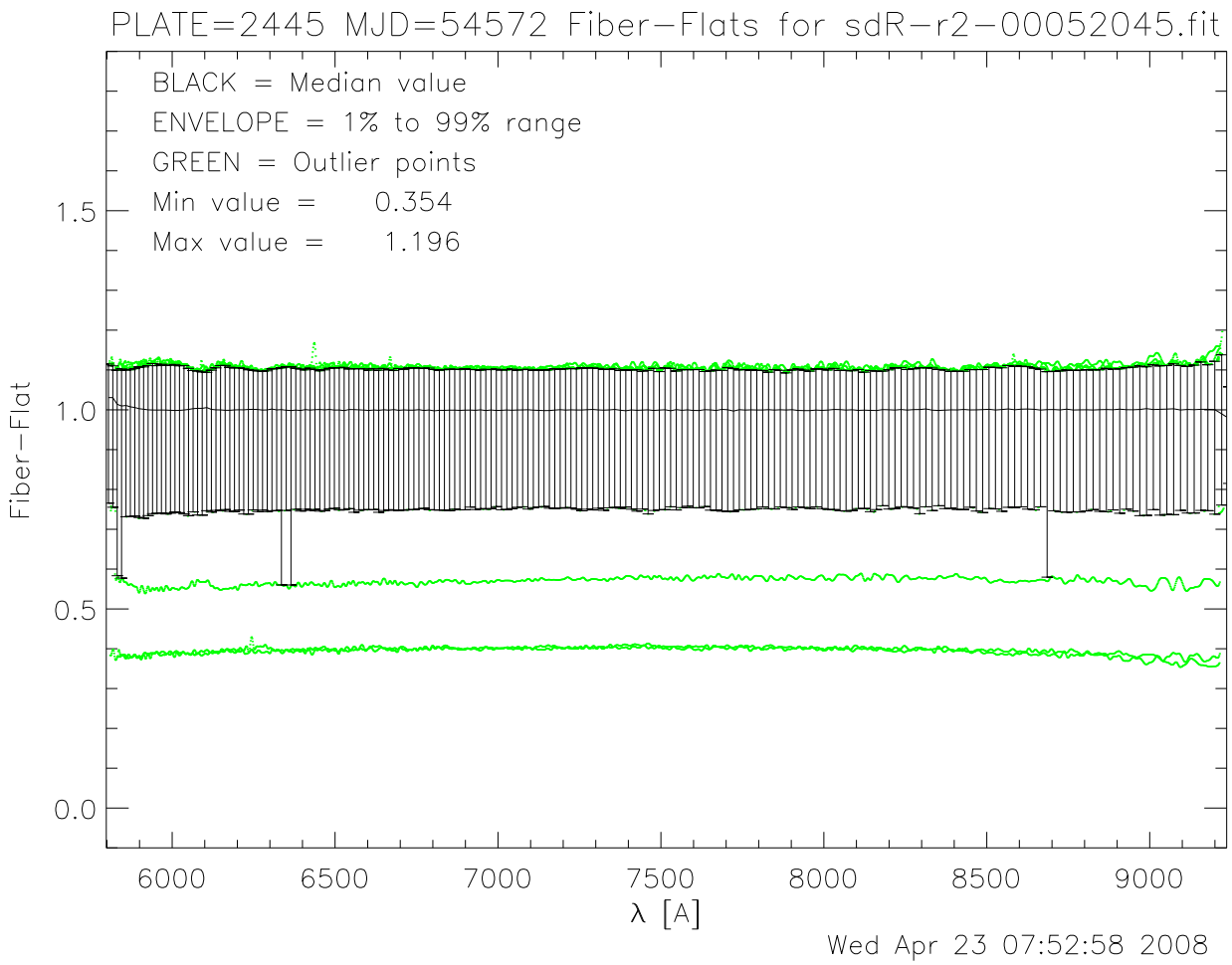

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

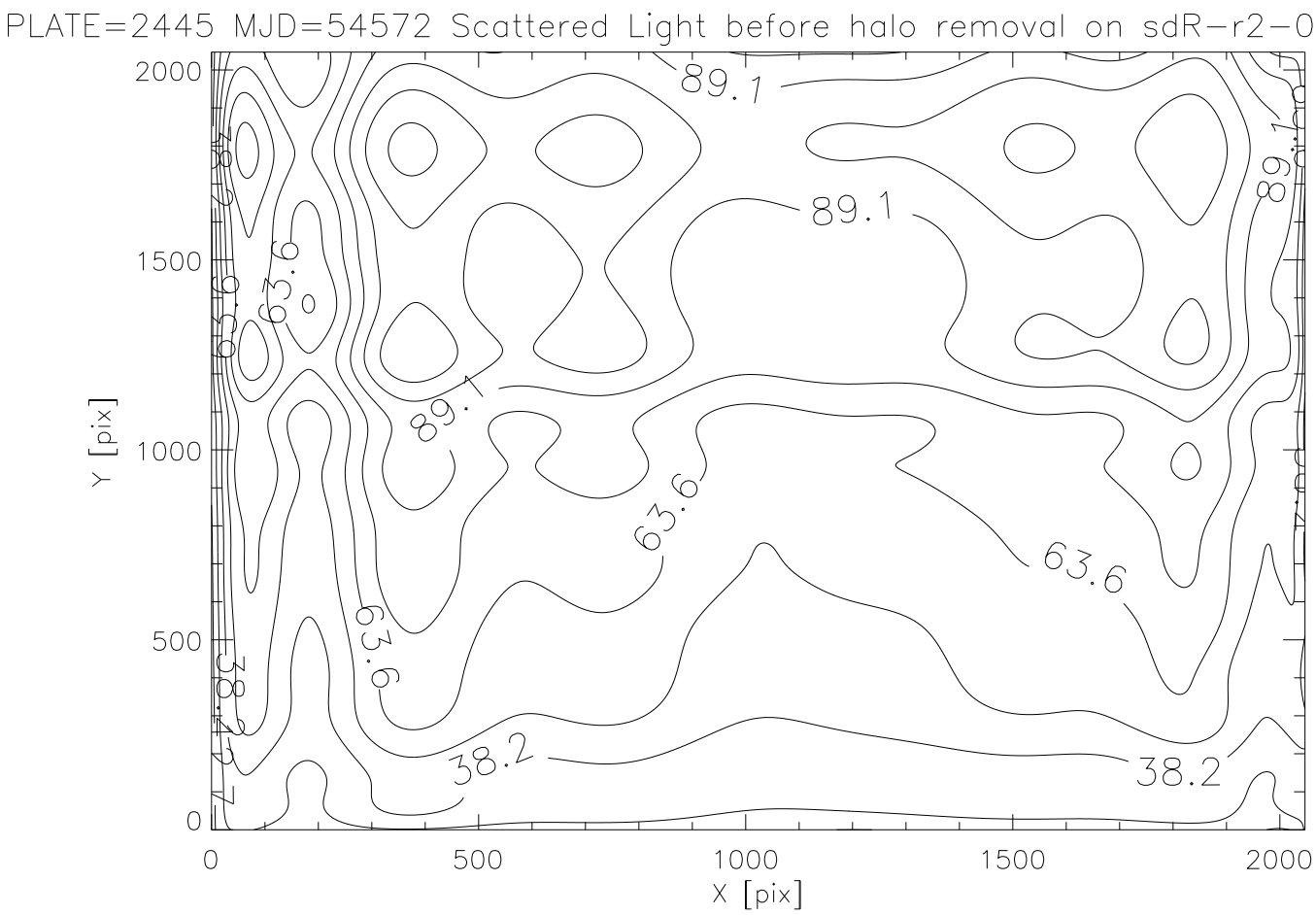

PLATE=2445 MJD=54572 sdR-r2-00052043.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

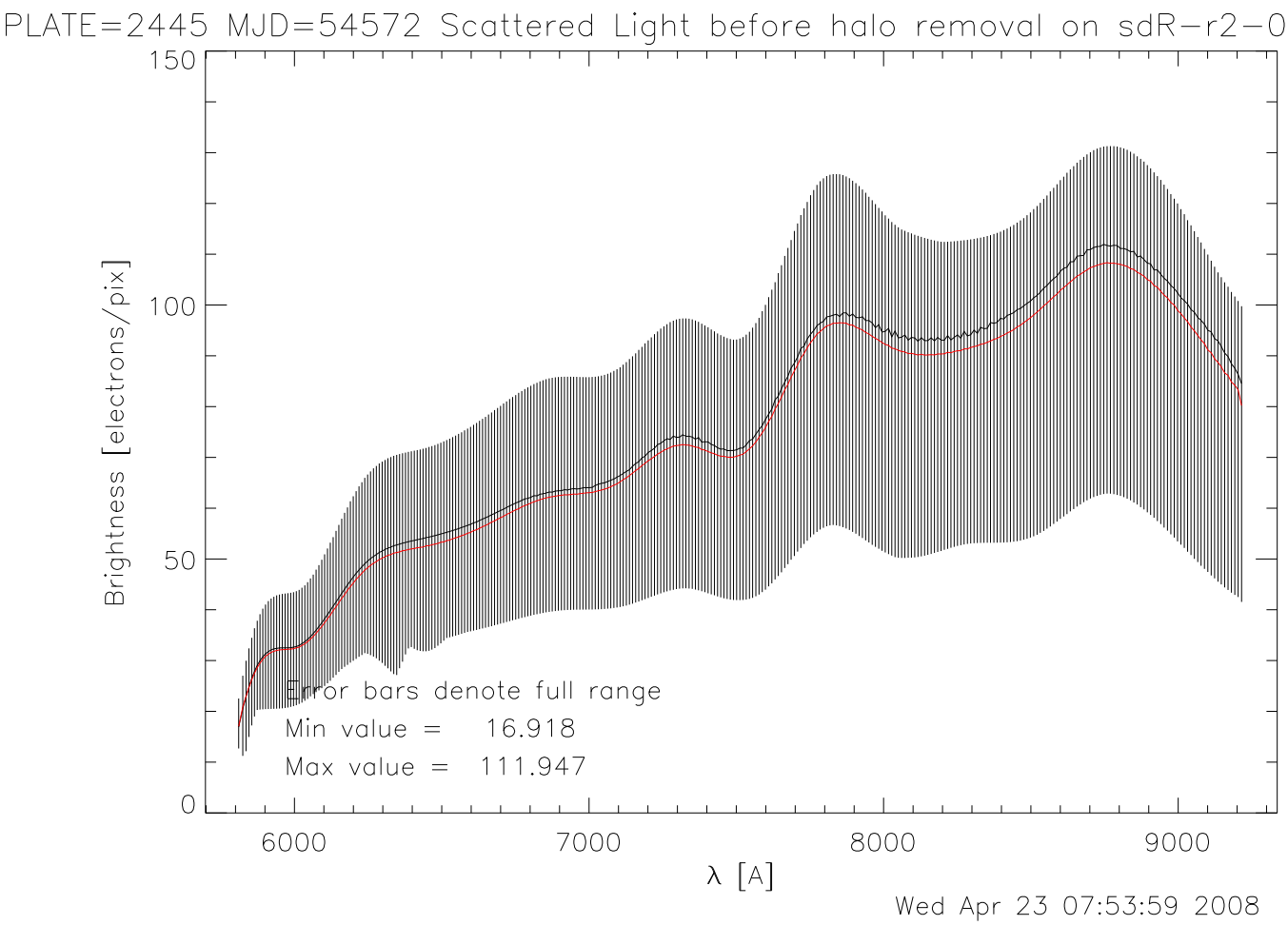

Number of sky fibers = 12
PLATE=2445 MJD=54572 sdR-r2-00052043.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

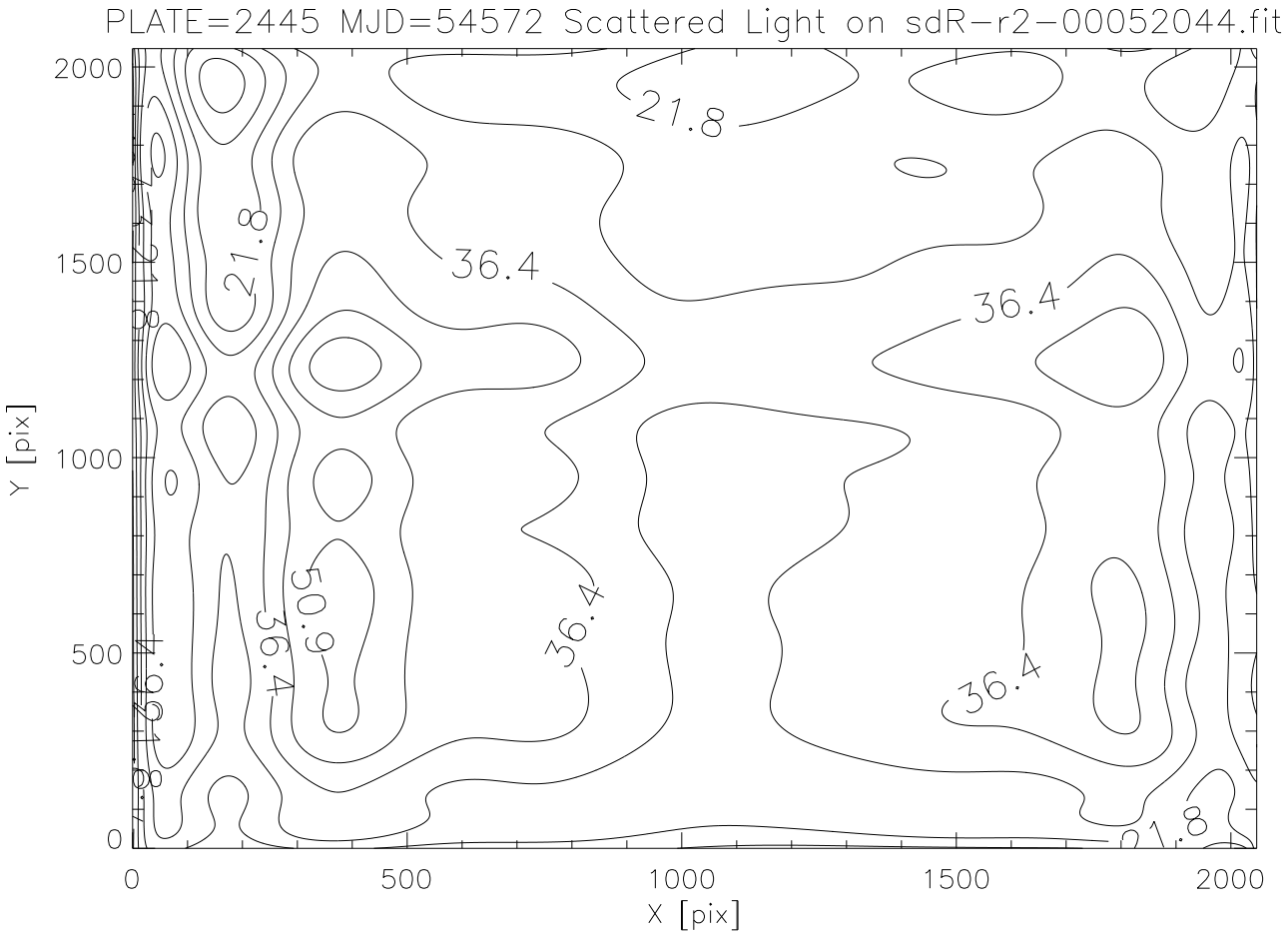

PLATE=2445 MJD=54572 sdR-r2-00052043.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.57 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

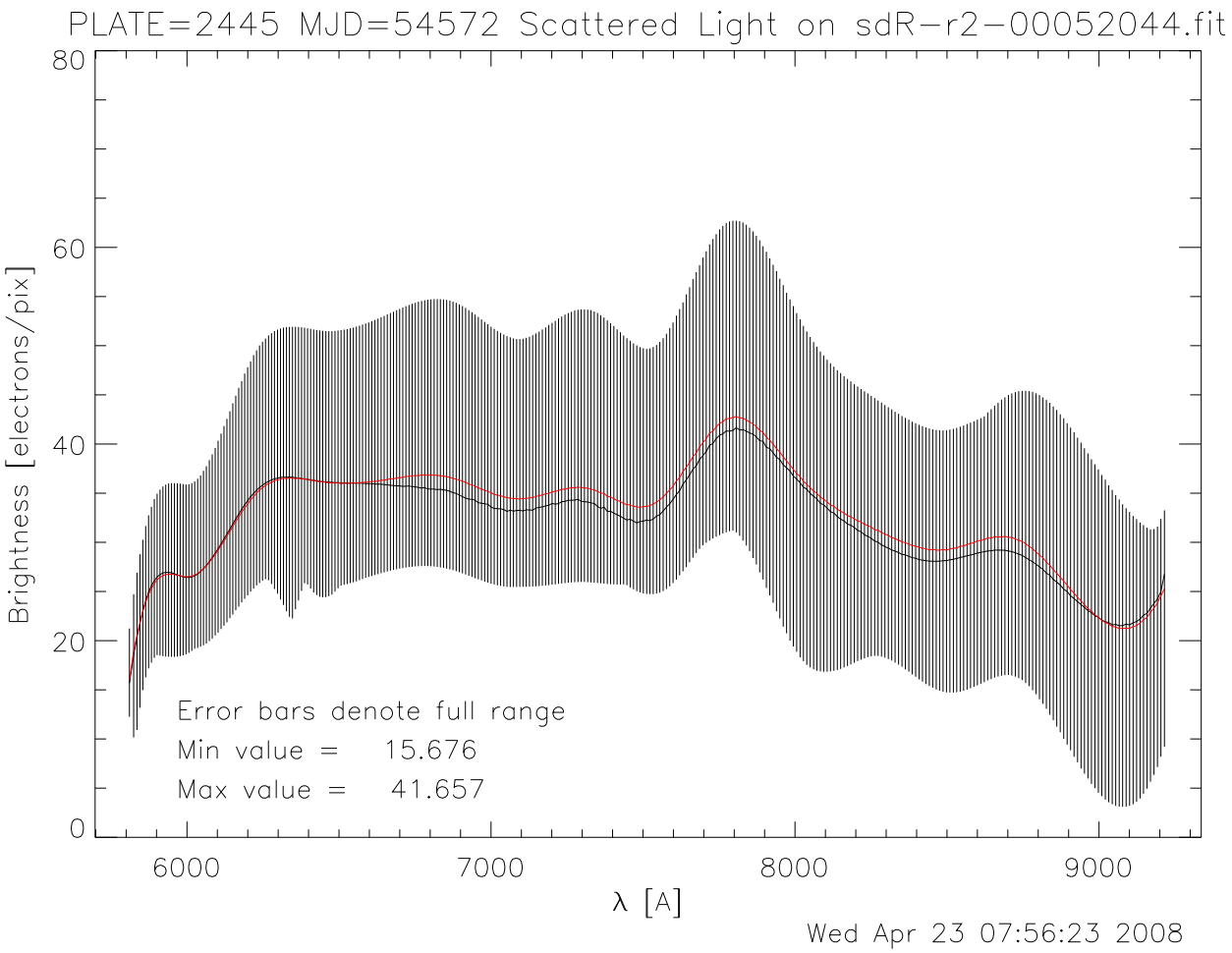

PLATE=2445 MJD=54572 sdR-r2-00052043.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.08 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

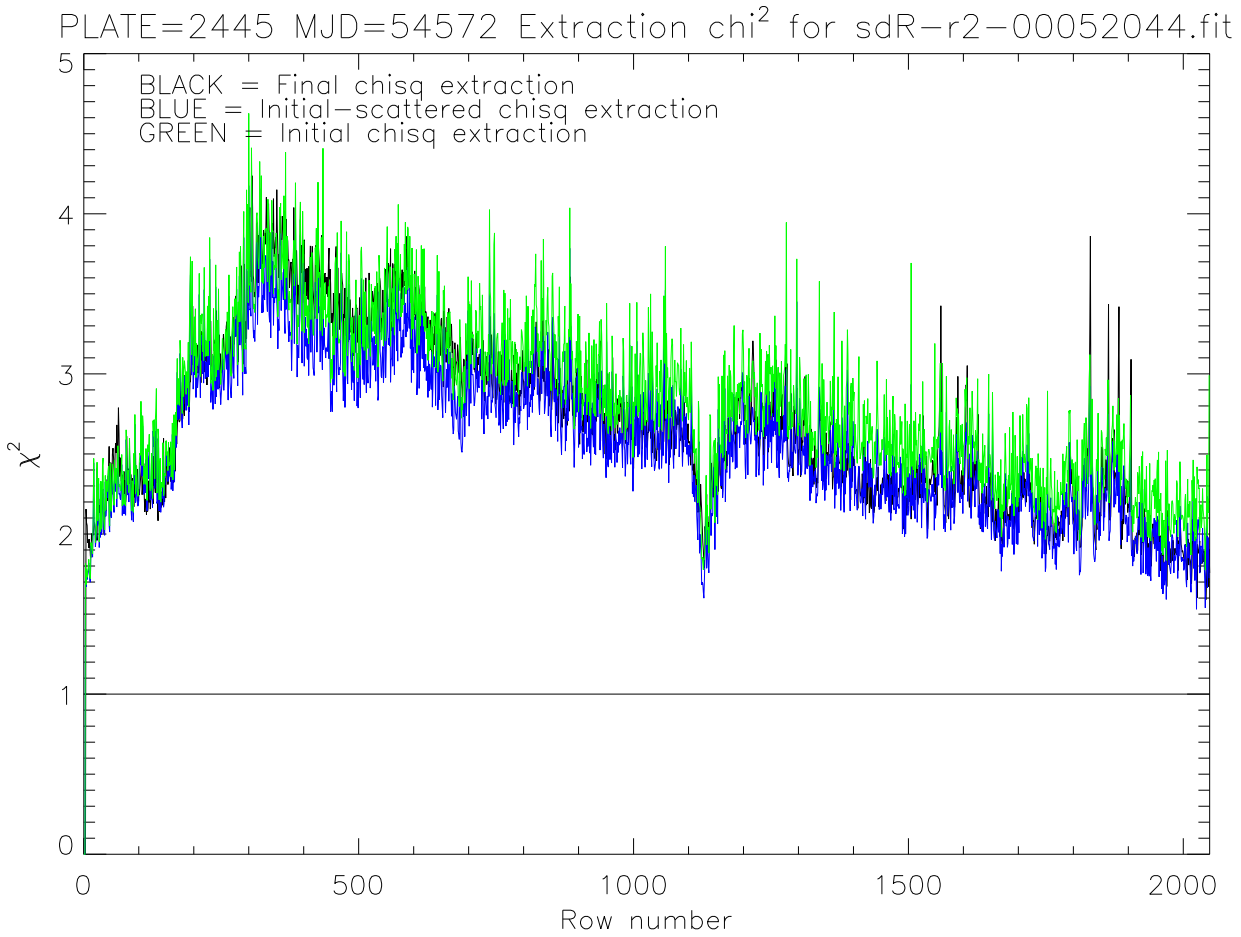

PLATE=2445 MJD=54572 Fiber−Flats for sdR−r2−00052045.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.354
Max value = 1.196
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Apr 23 07:52:58 2008

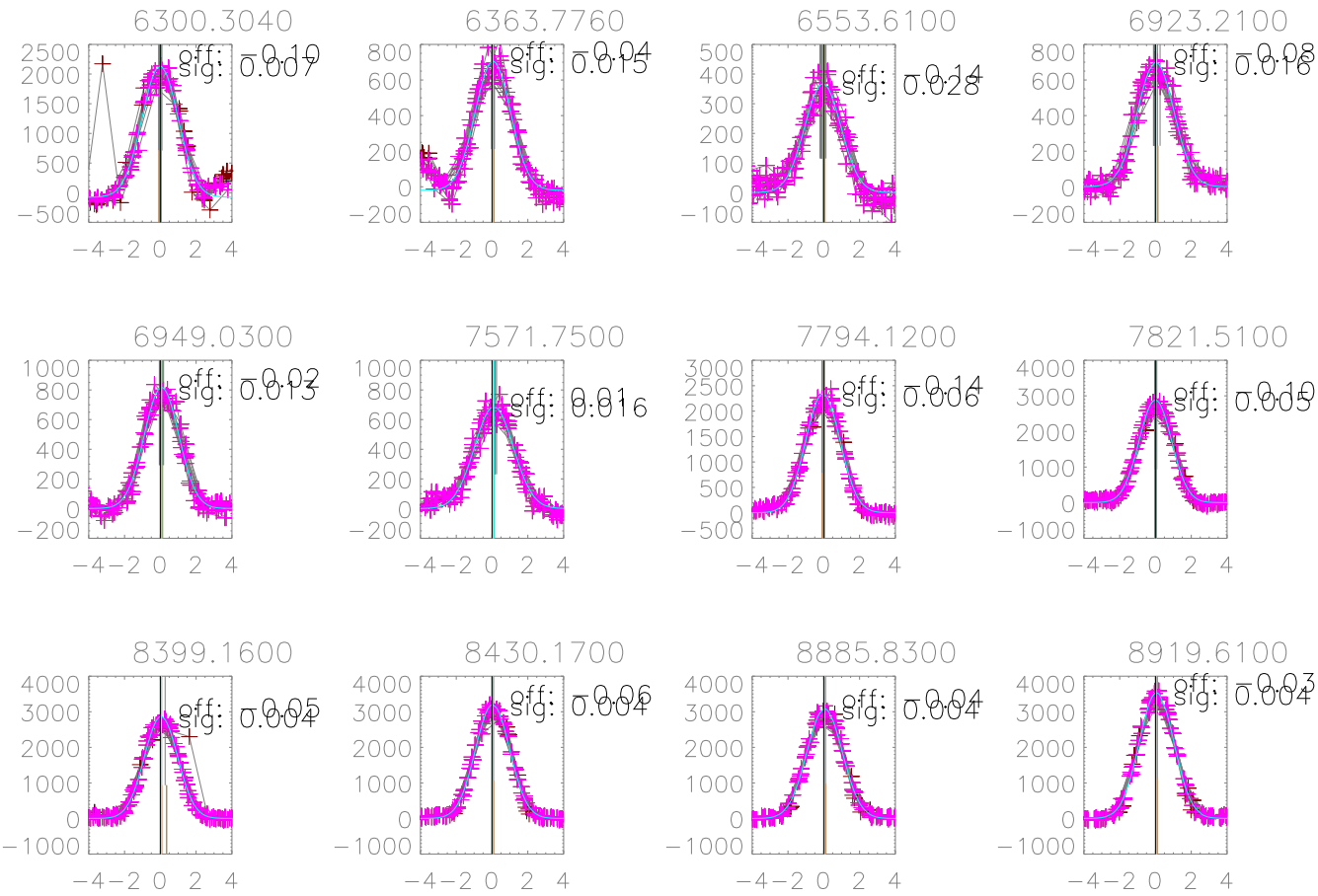

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r2-00052044.fi
89.1
89.1
89.1
89.1
63.6
63.6
63.6
63.6
38.2
38.2
38.2
38.2
Y [pix]
X [pix]
0
500
1000
1500
2000

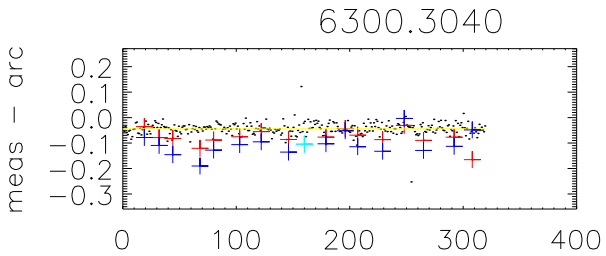

PLATE=2445 MJD=54572 Scattered Light before halo removal on sdR-r2-00052044.fi
150
100
50
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 16.918
Max value = 111.947
6000
7000
8000
9000
λ [A]
Wed Apr 23 07:53:59 2008

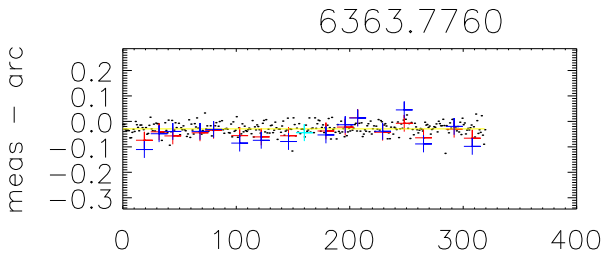

PLATE=2445 MJD=54572 Scattered Light on sdR-r2-00052044.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
21.8
36.4
50.9
0

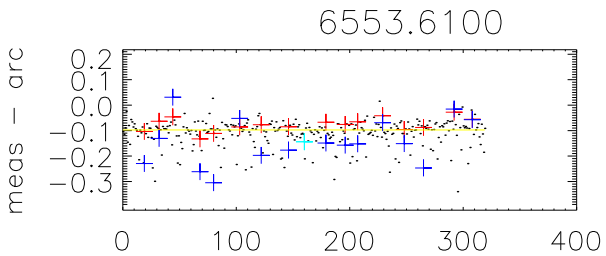

PLATE=2445 MJD=54572 Scattered Light on sdR-r2-00052044.fit
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 15.676
Max value = 41.657
Wed Apr 23 07:56:23 2008

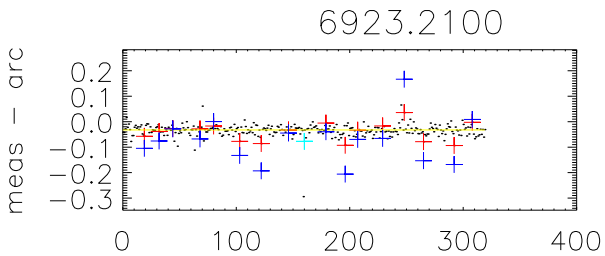

PLATE=2445 MJD=54572 Extraction chi^2 for sdR−r2−00052044.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

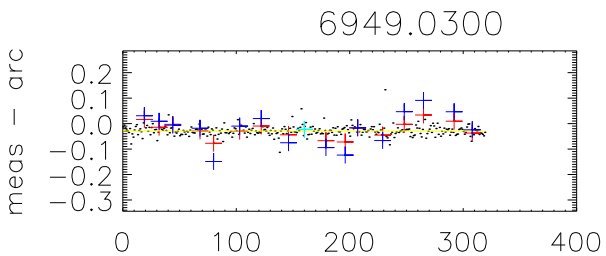

6300.3040
off: -0.19
sig: 0.007
6363.7760
off: -0.04
sig: 0.015
6553.6100
off: -0.14
sig: 0.028
6923.2100
off: -0.08
sig: 0.016
6949.0300
off: -0.02
sig: 0.013
7571.7500
off: 0.01
sig: 0.016
7794.1200
off: -0.14
sig: 0.006
7821.5100
off: -0.10
sig: 0.005
8399.1600
off: -0.05
sig: 0.004
8430.1700
off: -0.06
sig: 0.004
8885.8300
off: -0.04
sig: 0.004
8919.6100
off: -0.03
sig: 0.004

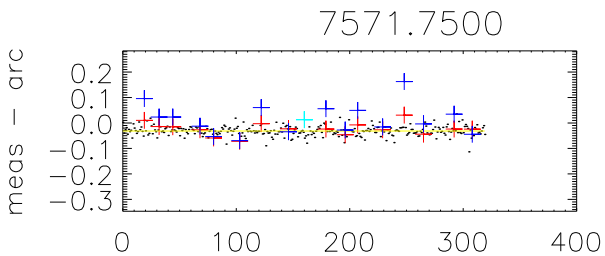

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

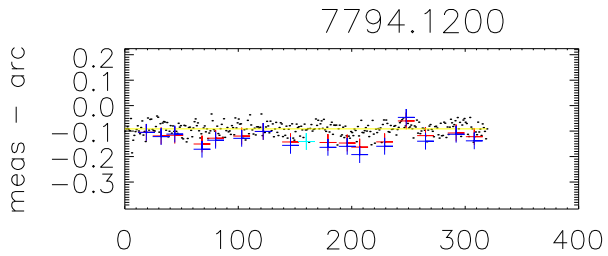

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

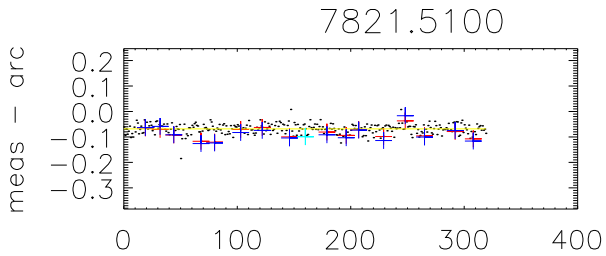

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

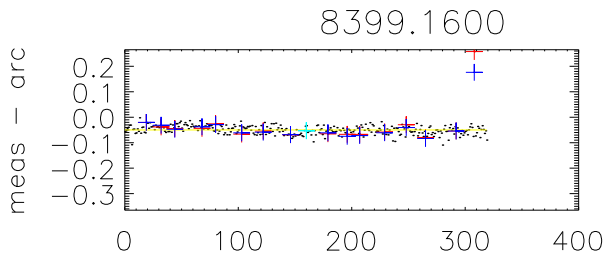

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

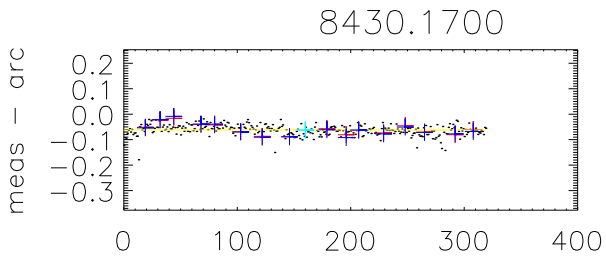

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

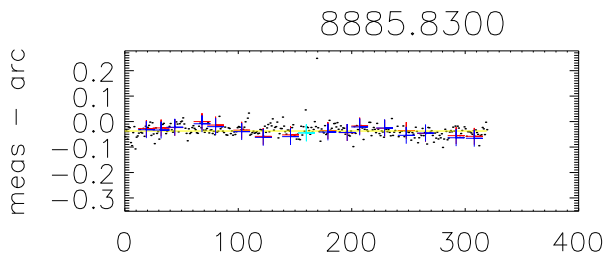

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

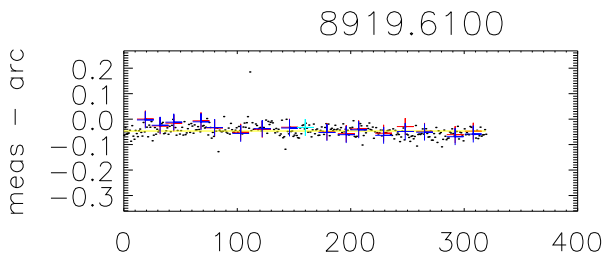

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

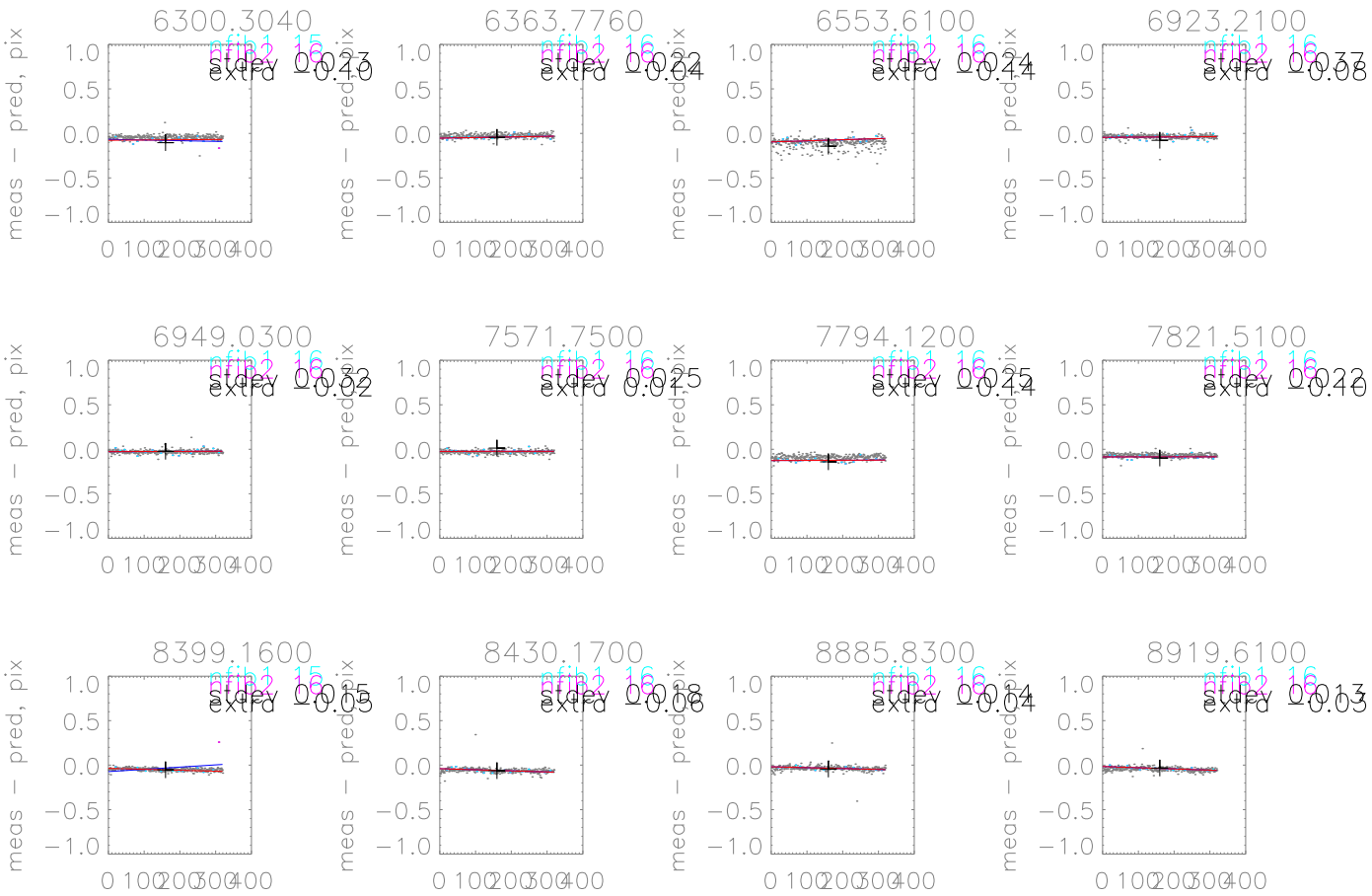

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

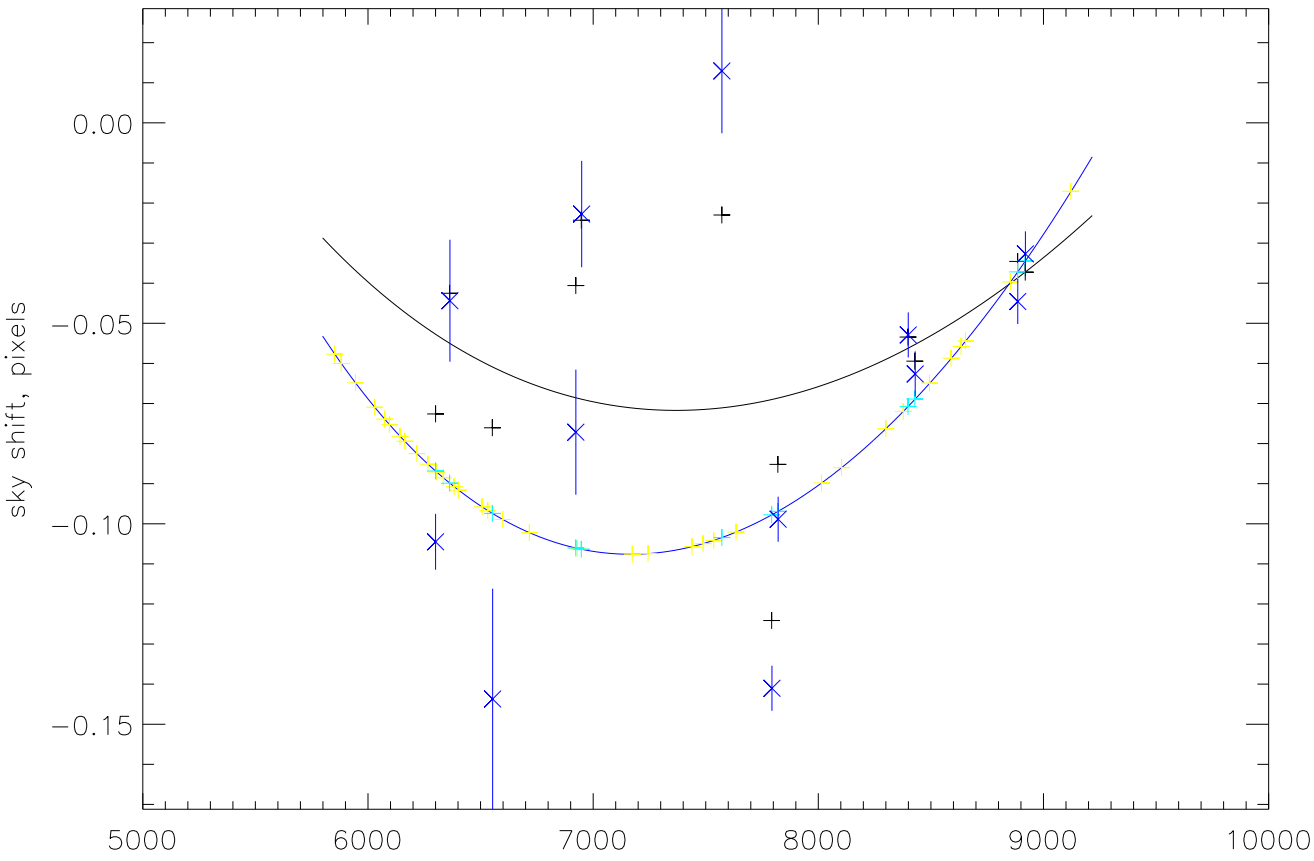

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

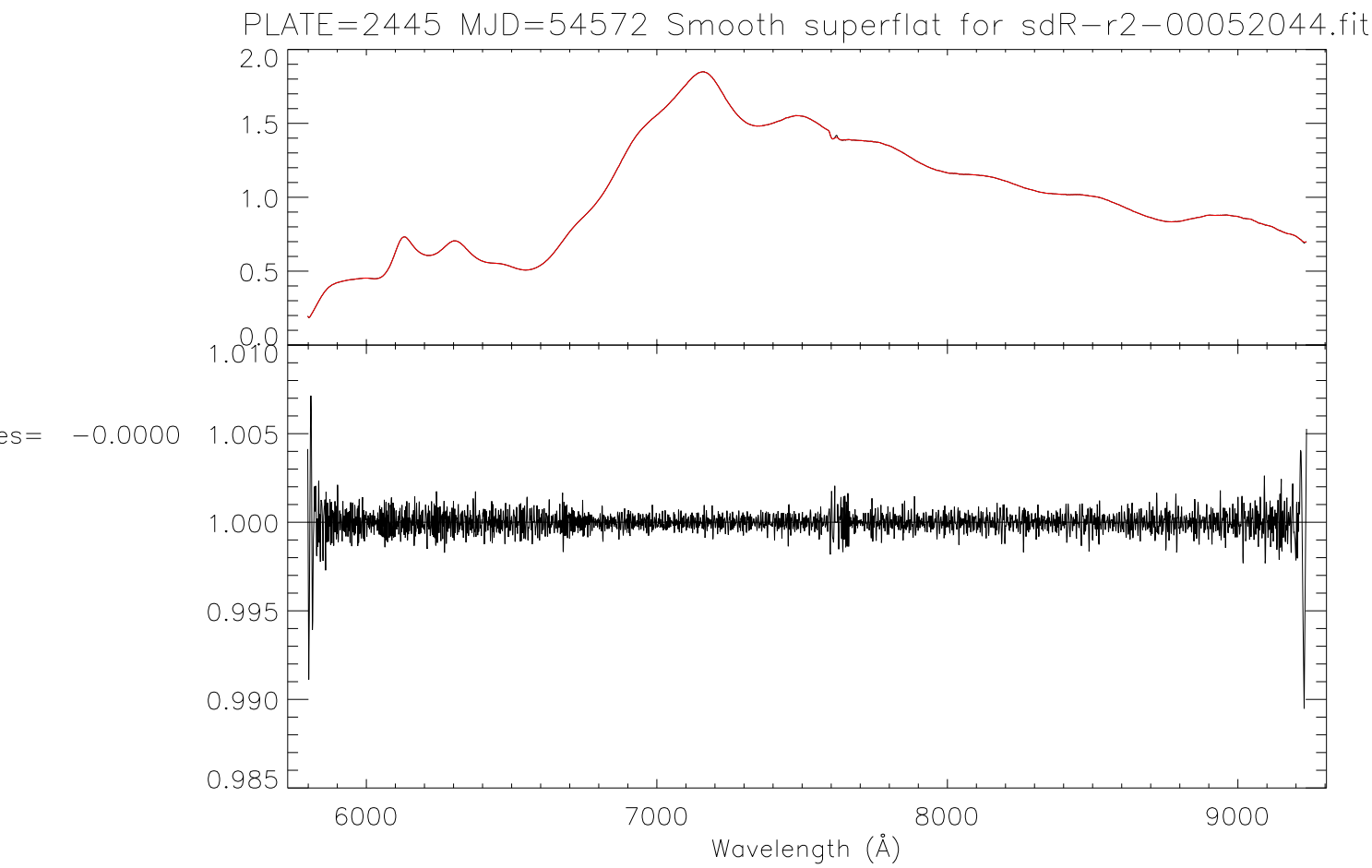

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

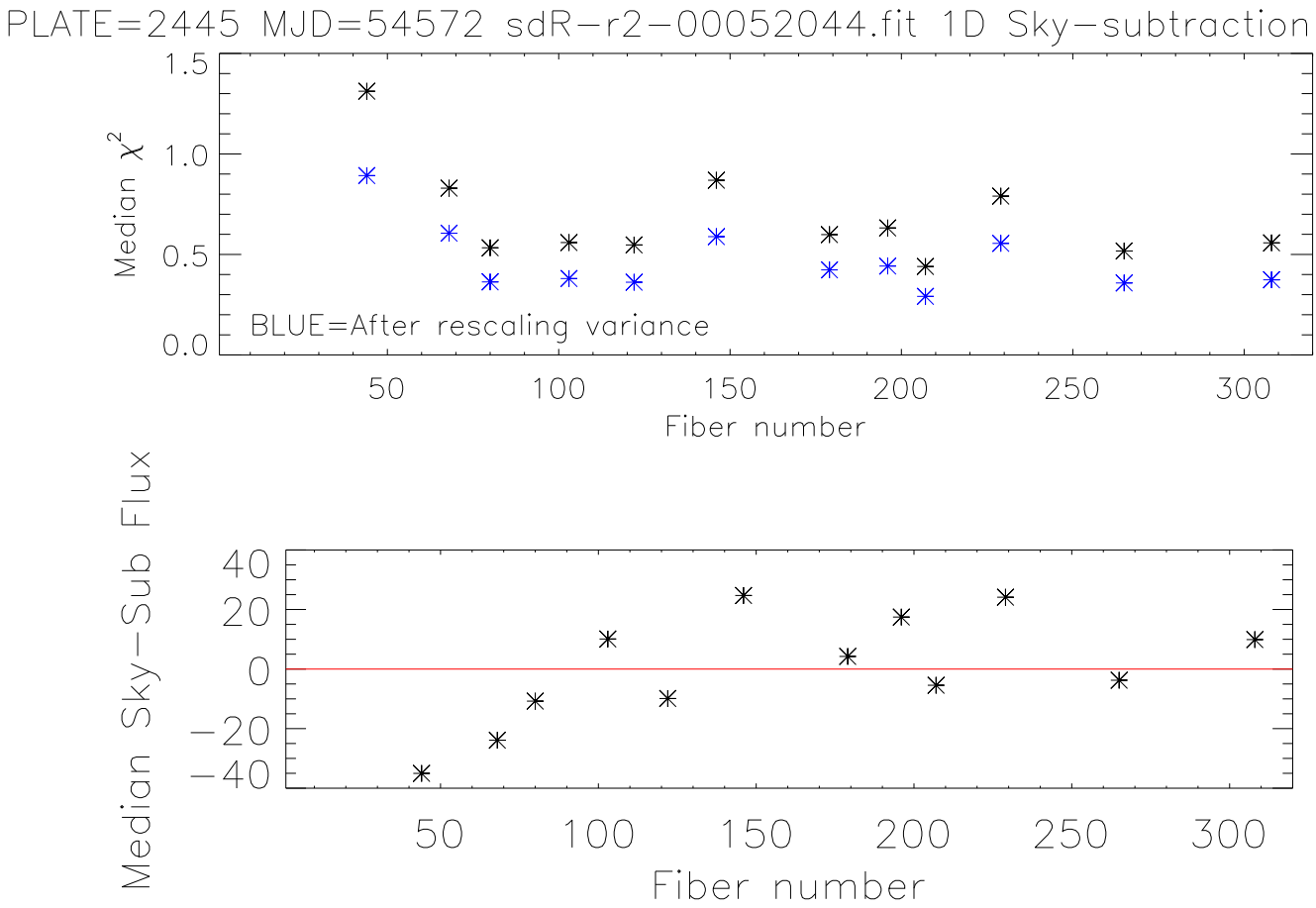

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

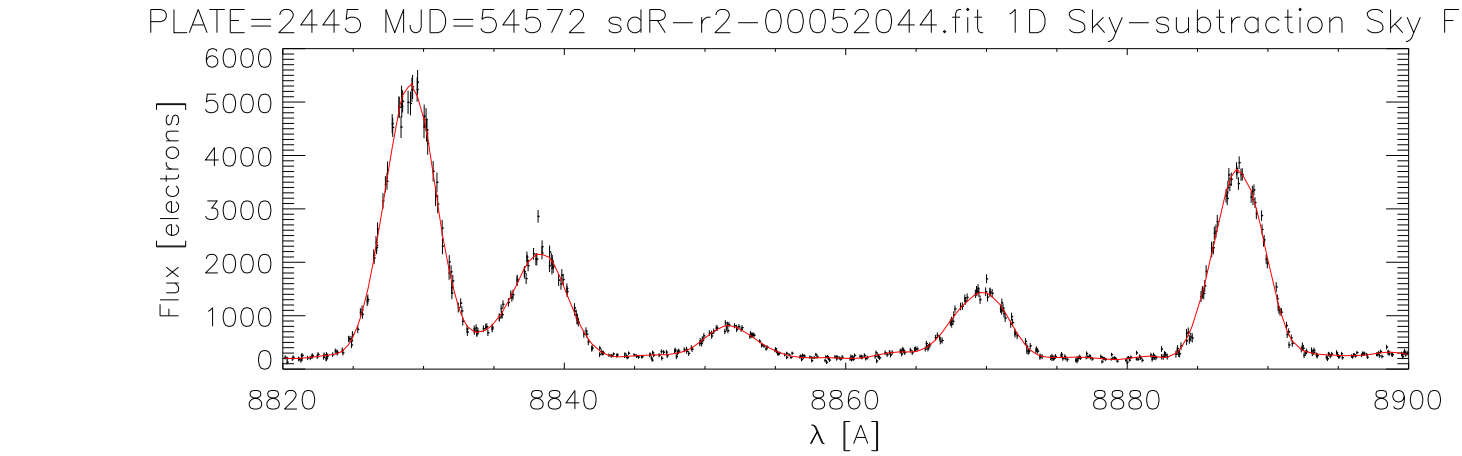

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

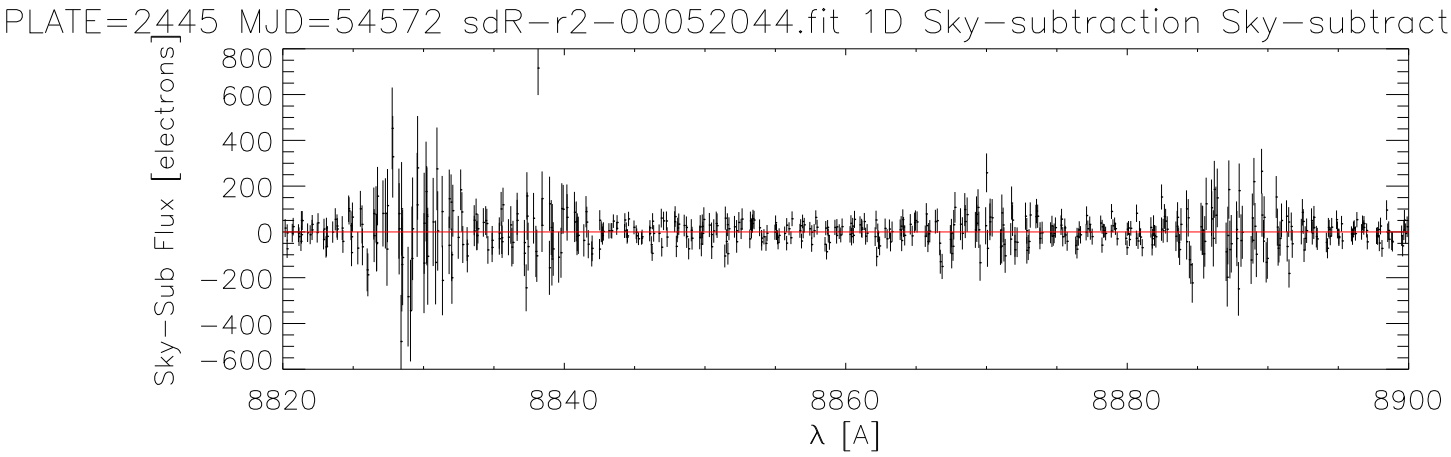

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 15
mfib2 16
stdev 0.023
extrd 0.040
stdev 0.022
extrd 0.004
stdev 0.024
extrd 0.044
stdev 0.037
extrd 0.008
stdev 0.032
extrd 0.002
stdev 0.025
extrd 0.012
stdev 0.025
extrd 0.044
stdev 0.022
extrd 0.010
stdev 0.015
extrd 0.005
stdev 0.018
extrd 0.006
stdev 0.014
extrd 0.004
stdev 0.013
extrd 0.003

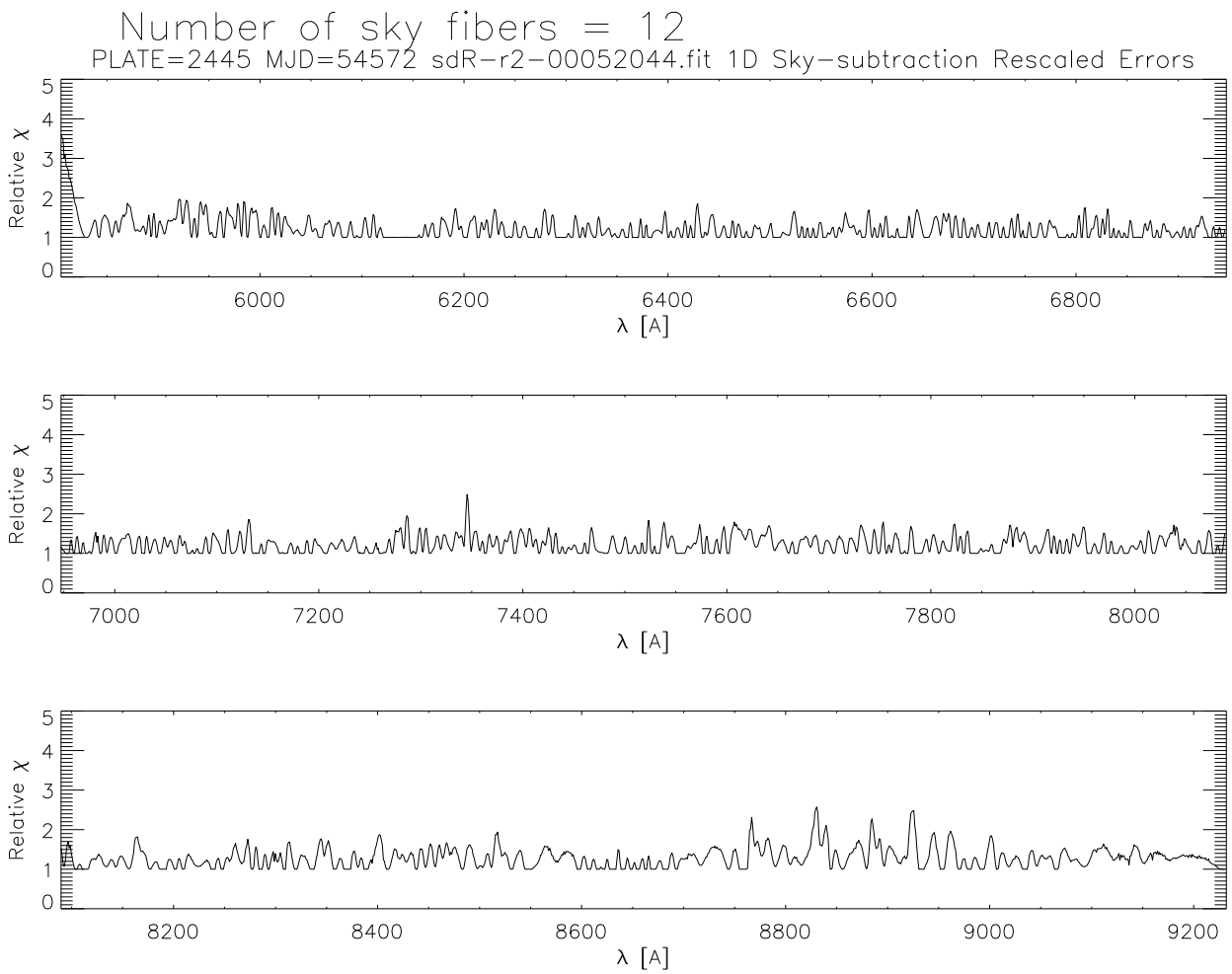

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

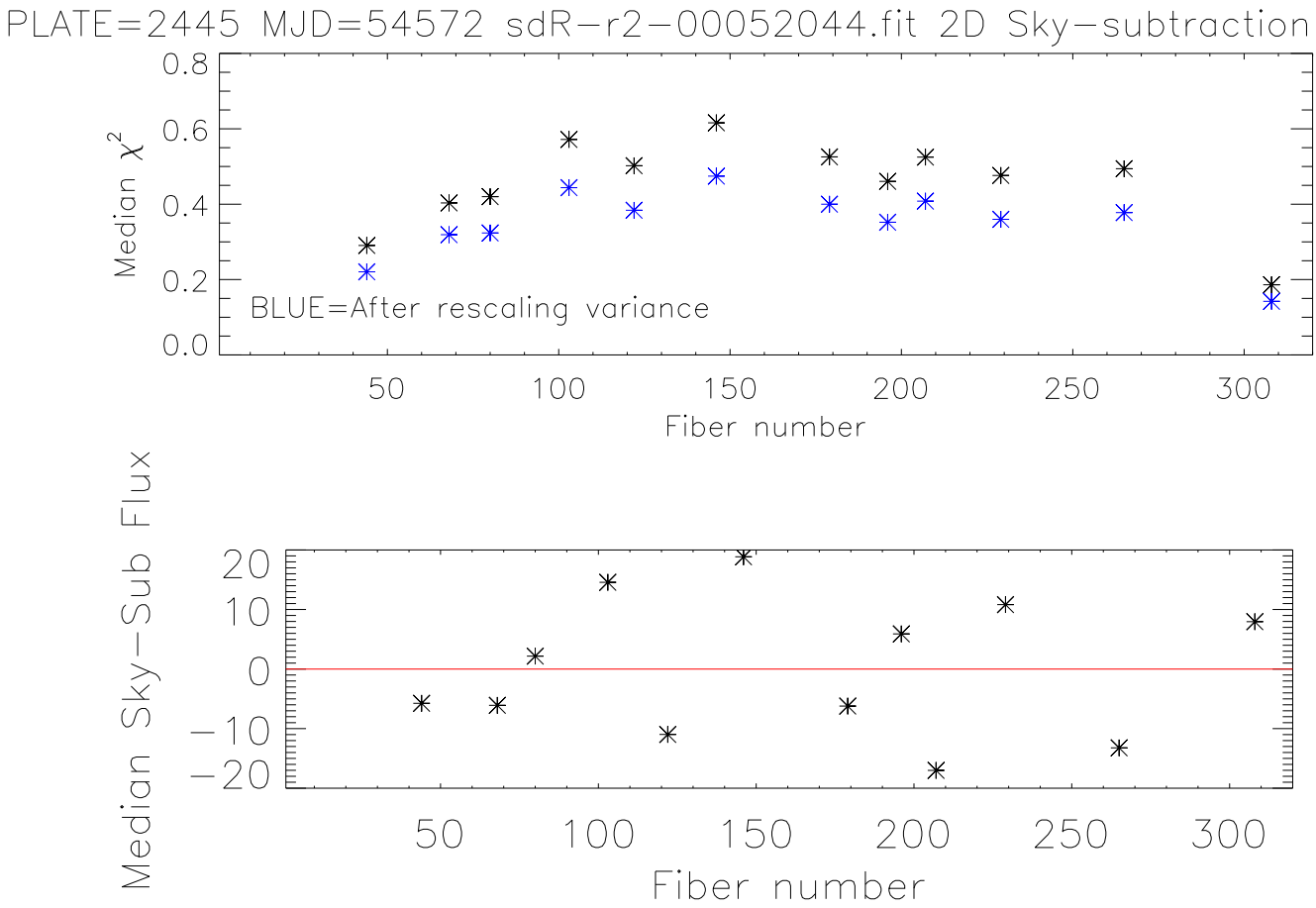

PLATE=2445 MJD=54572 Smooth superflat for sdR-r2-00052044.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

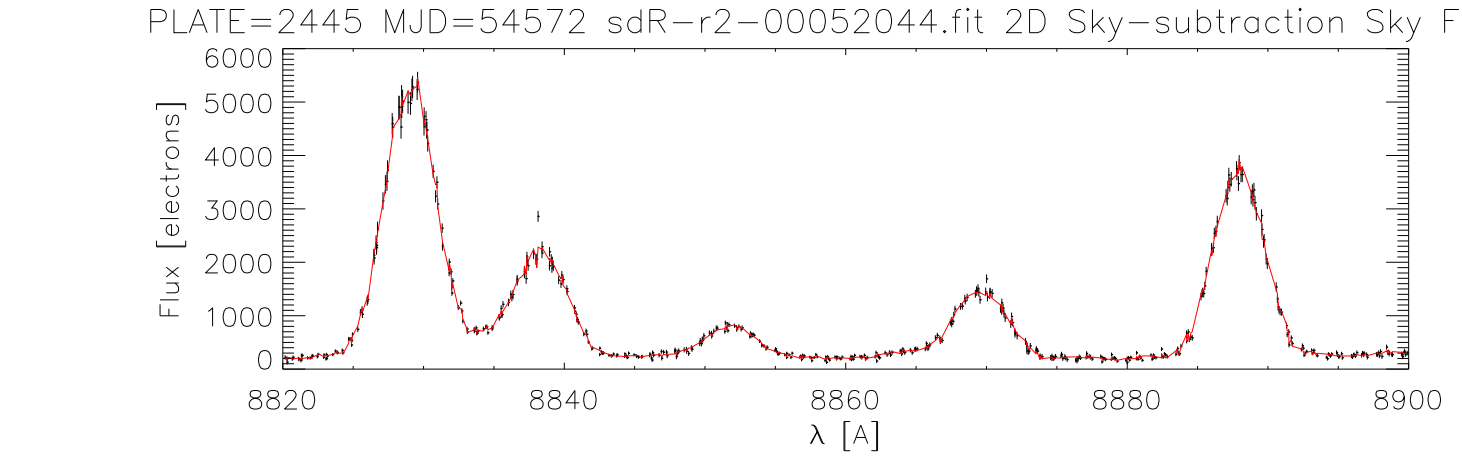

PLATE=2445 MJD=54572 sdR-r2-00052044.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

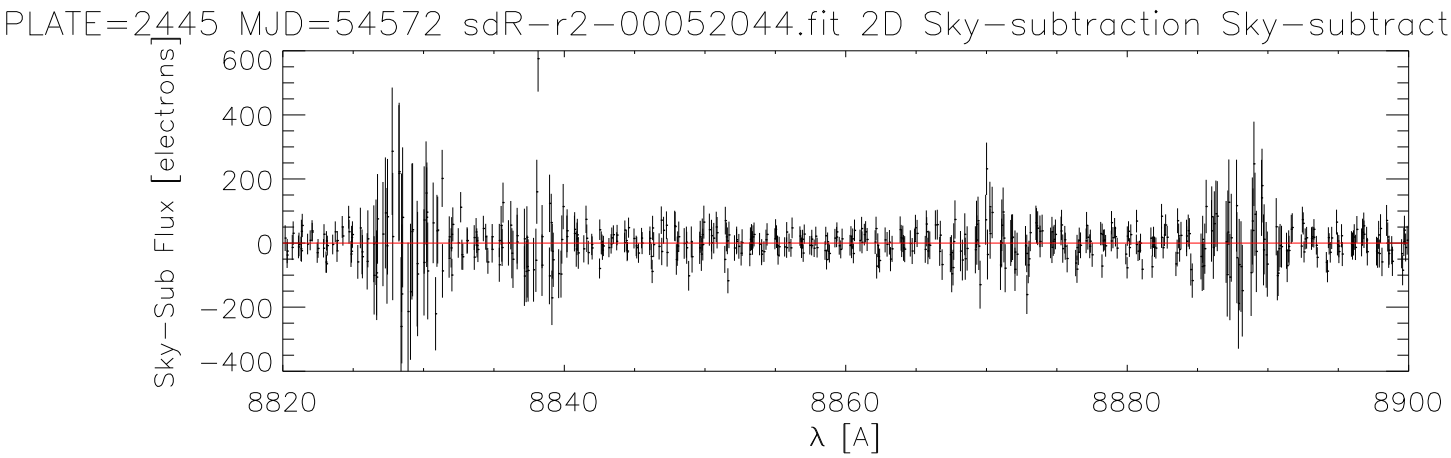

PLATE=2445 MJD=54572 sdR-r2-00052044.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

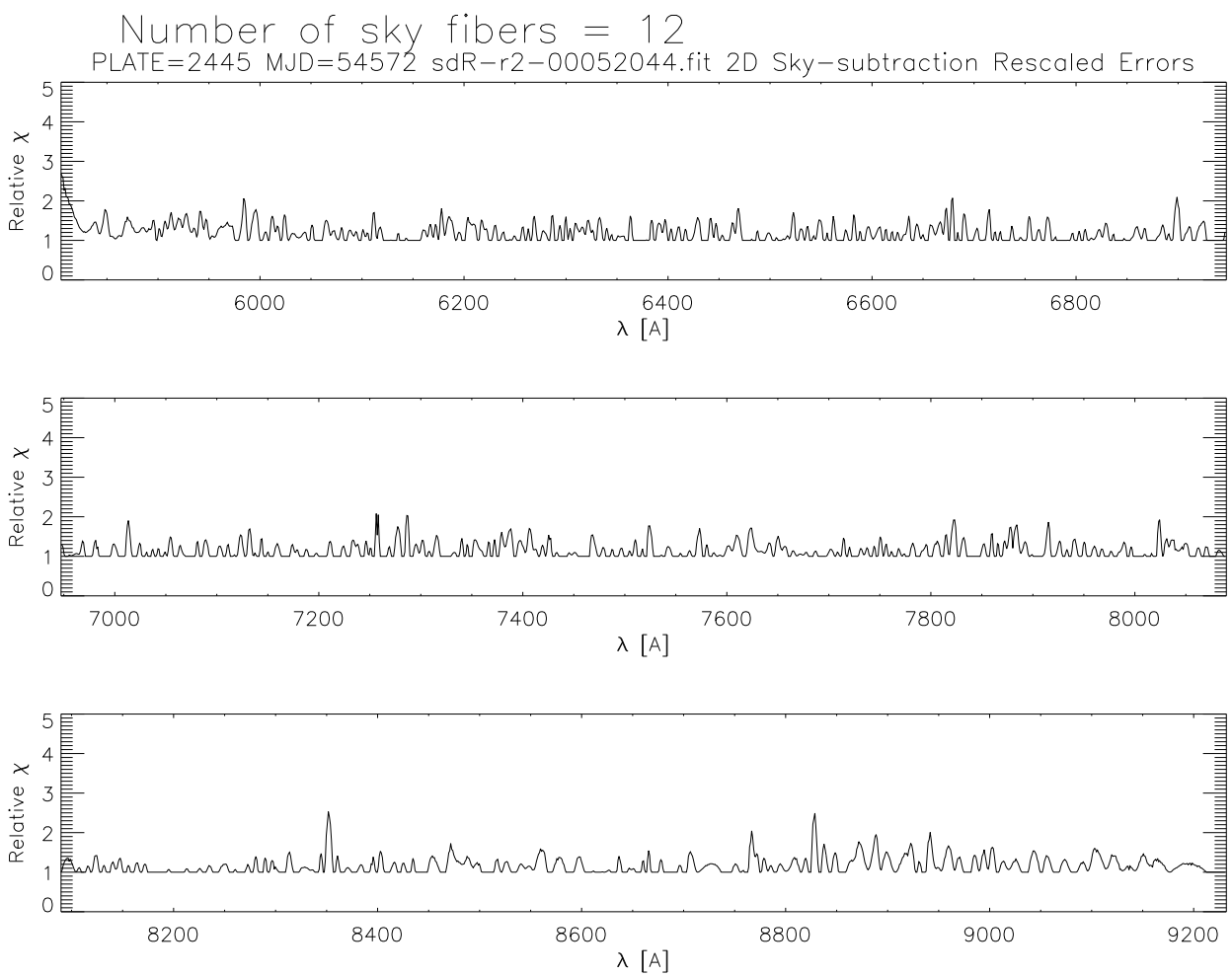

PLATE=2445 MJD=54572 sdR-r2-00052044.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

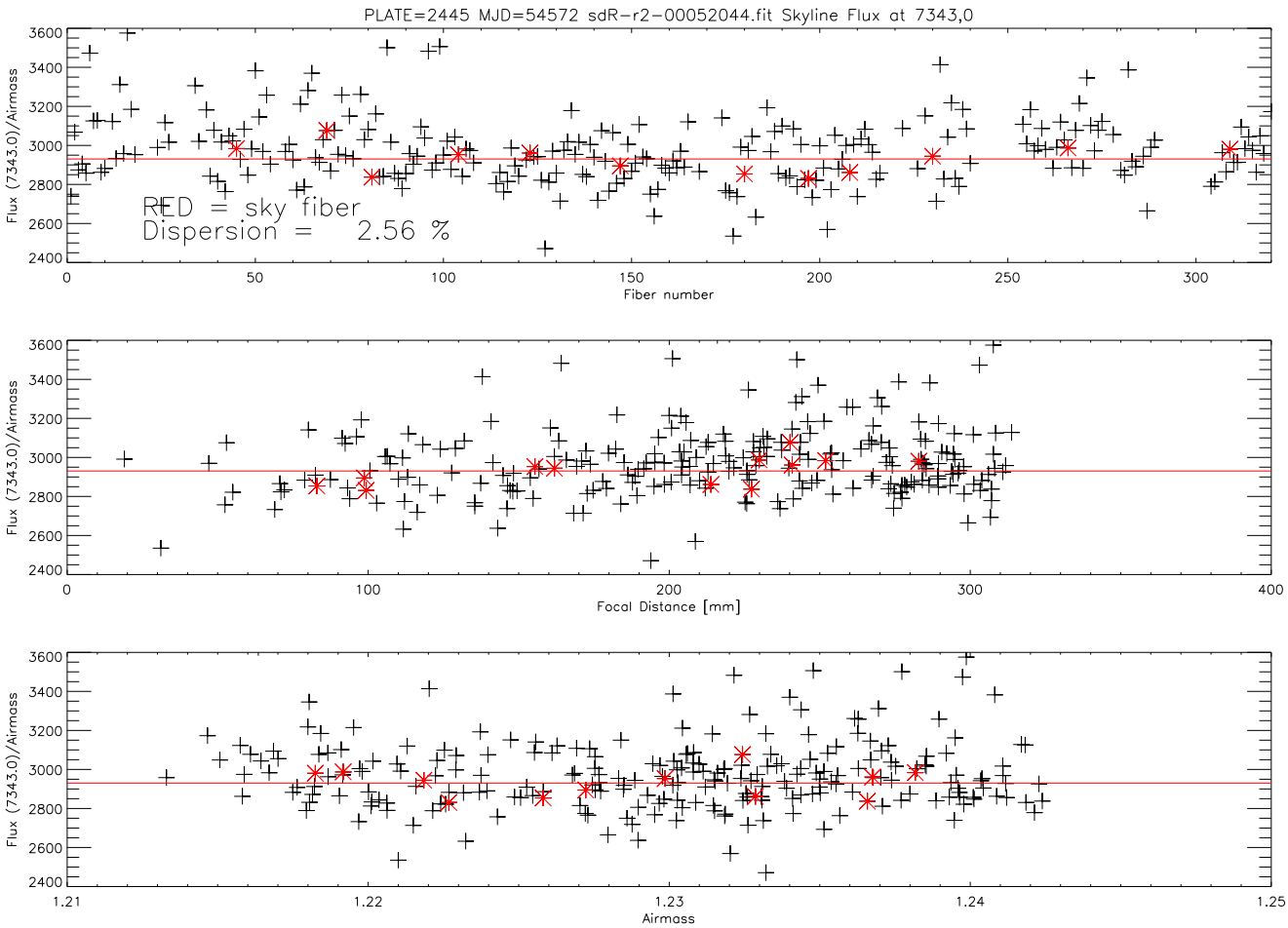

Number of sky fibers = 12
PLATE=2445 MJD=54572 sdR-r2-00052044.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

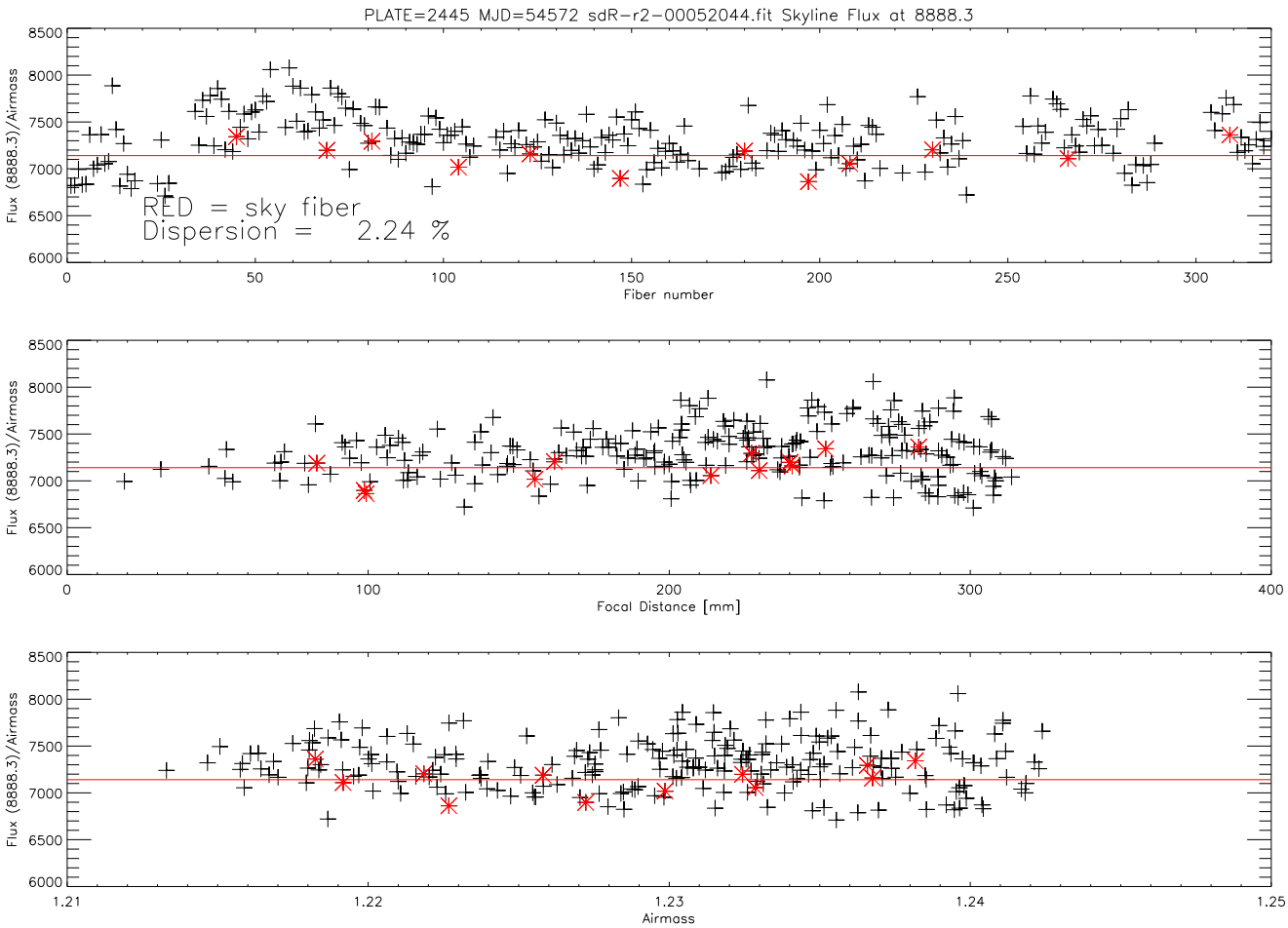

PLATE=2445 MJD=54572 sdR-r2-00052044.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number


PLATE=2445 MJD=54572 sdR-r2-00052044.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2445 MJD=54572 sdR-r2-00052044.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 = 12
PLATE=2445 MJD=54572 sdR-r2-00052044.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=2445 MJD=54572 sdR-r2-00052044.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.56 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2445 MJD=54572 sdR-r2-00052044.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.24 %
Fiber number
Focal Distance [mm]
Airmass