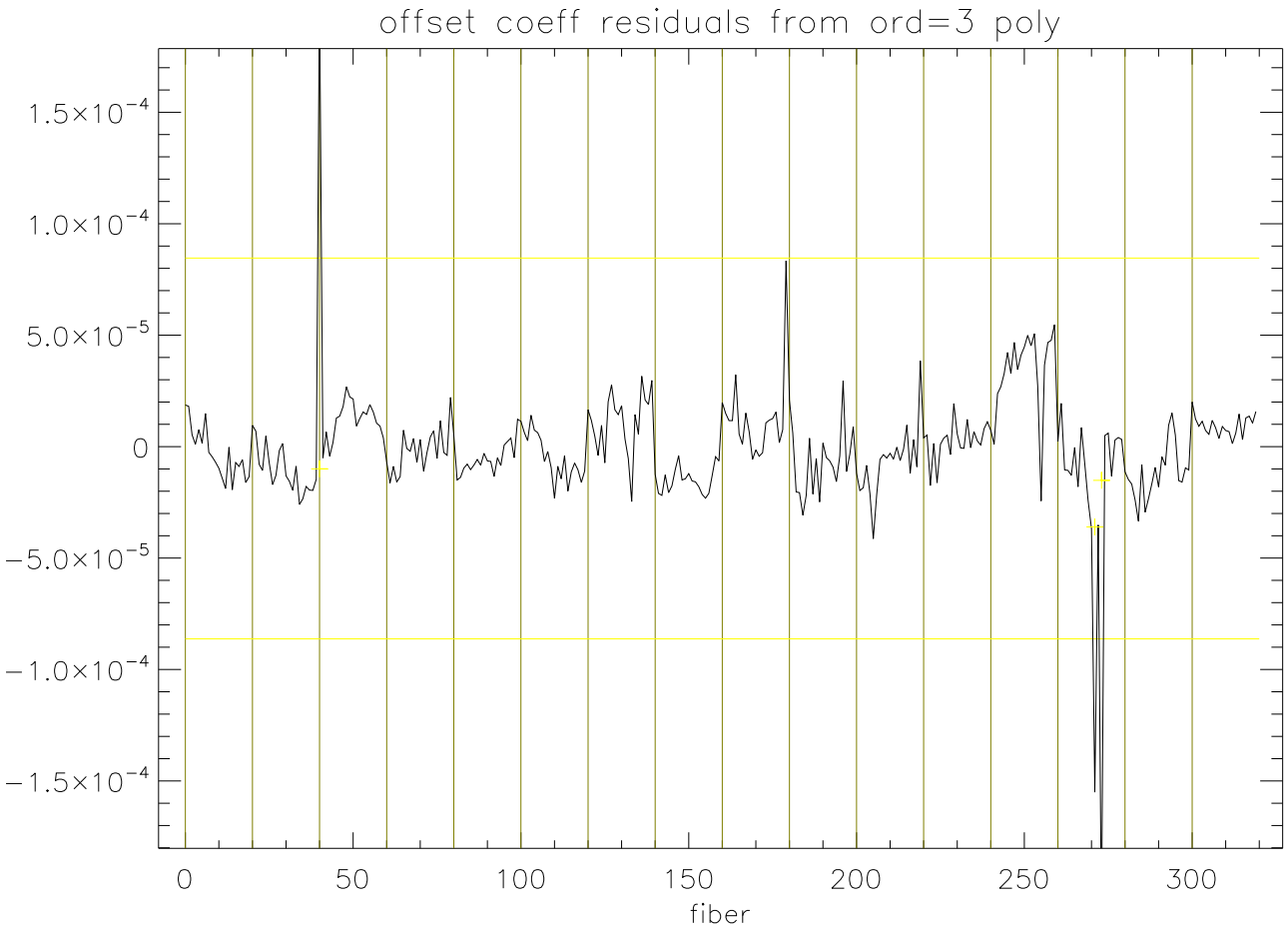
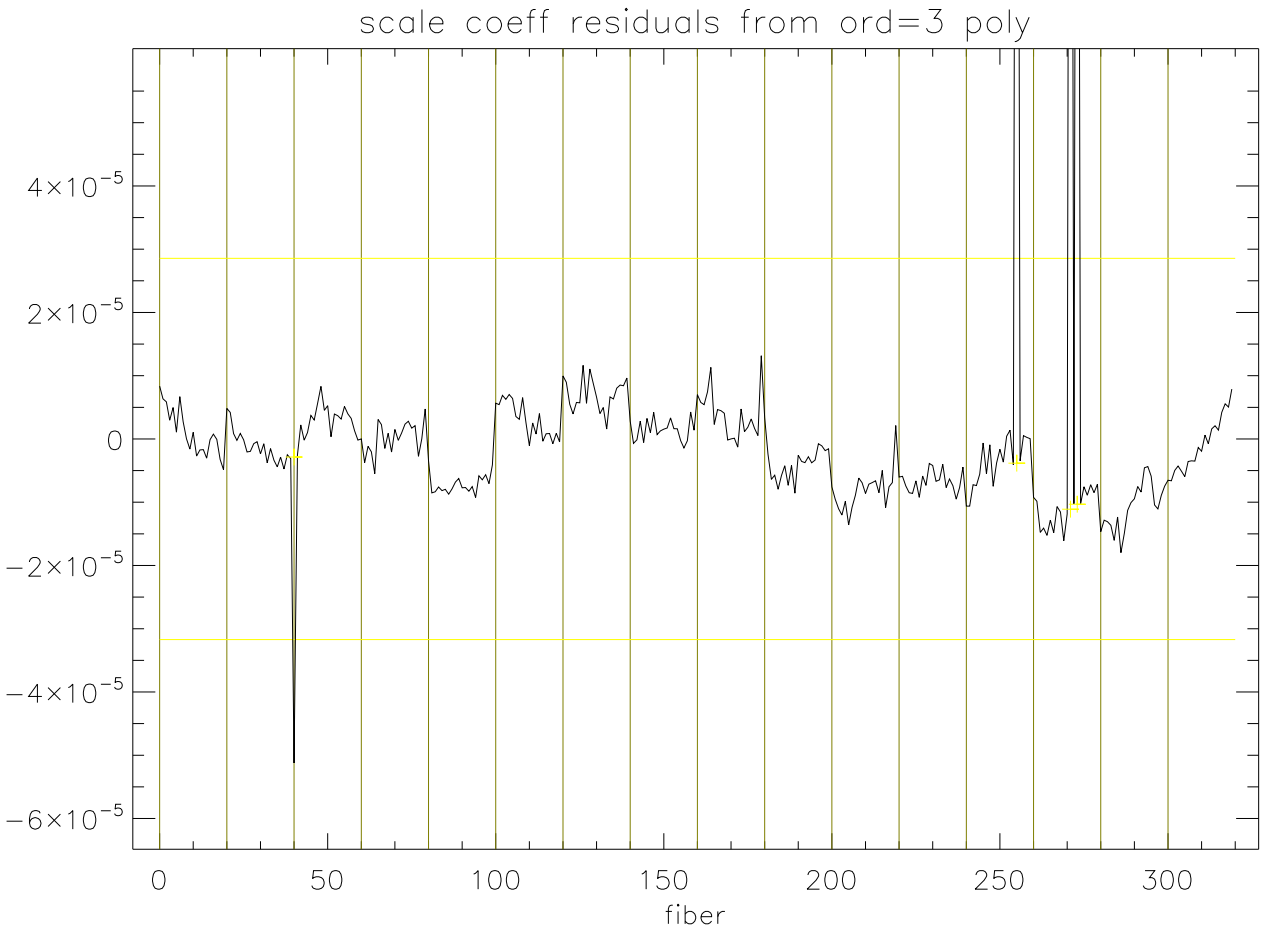
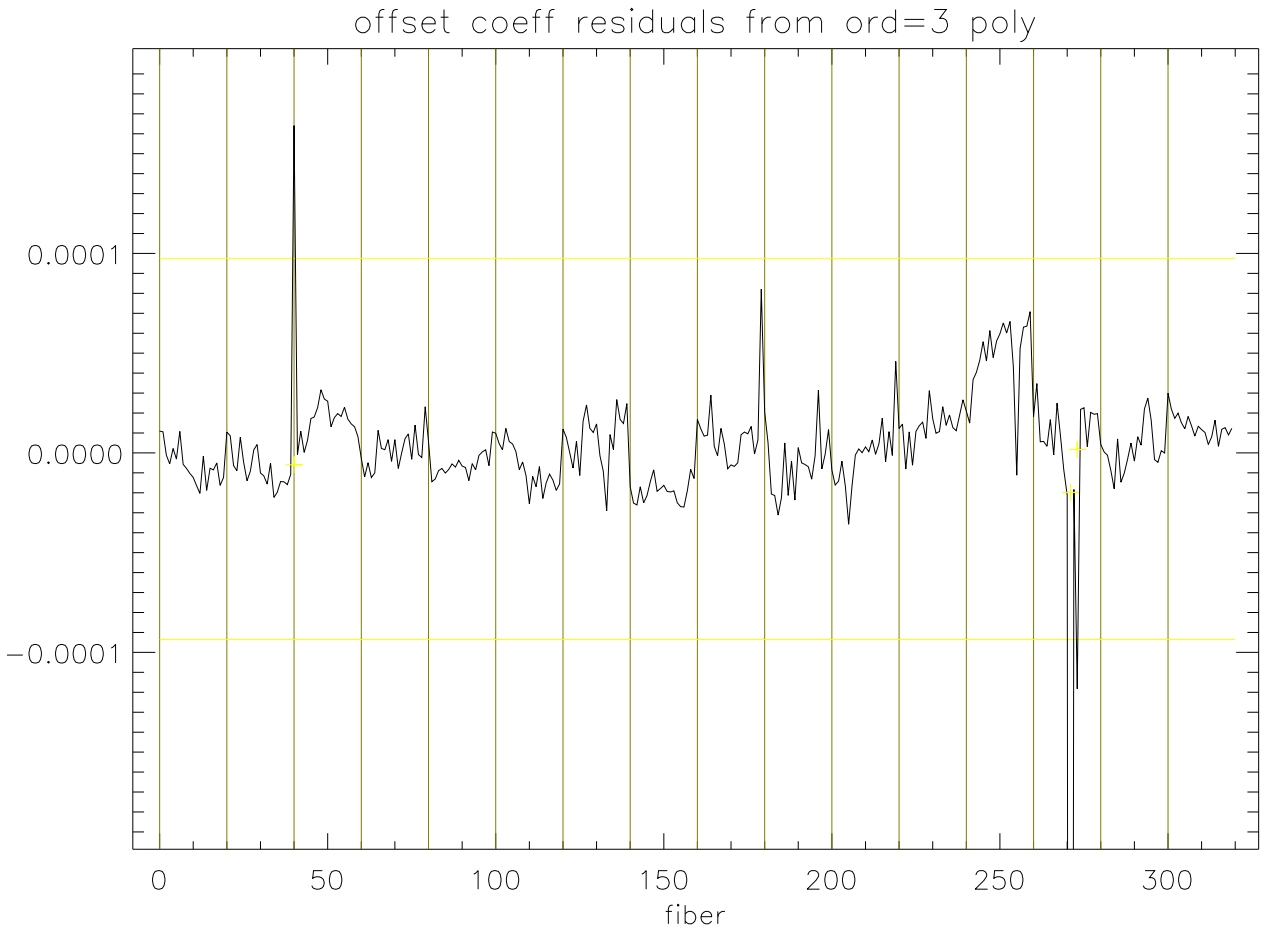
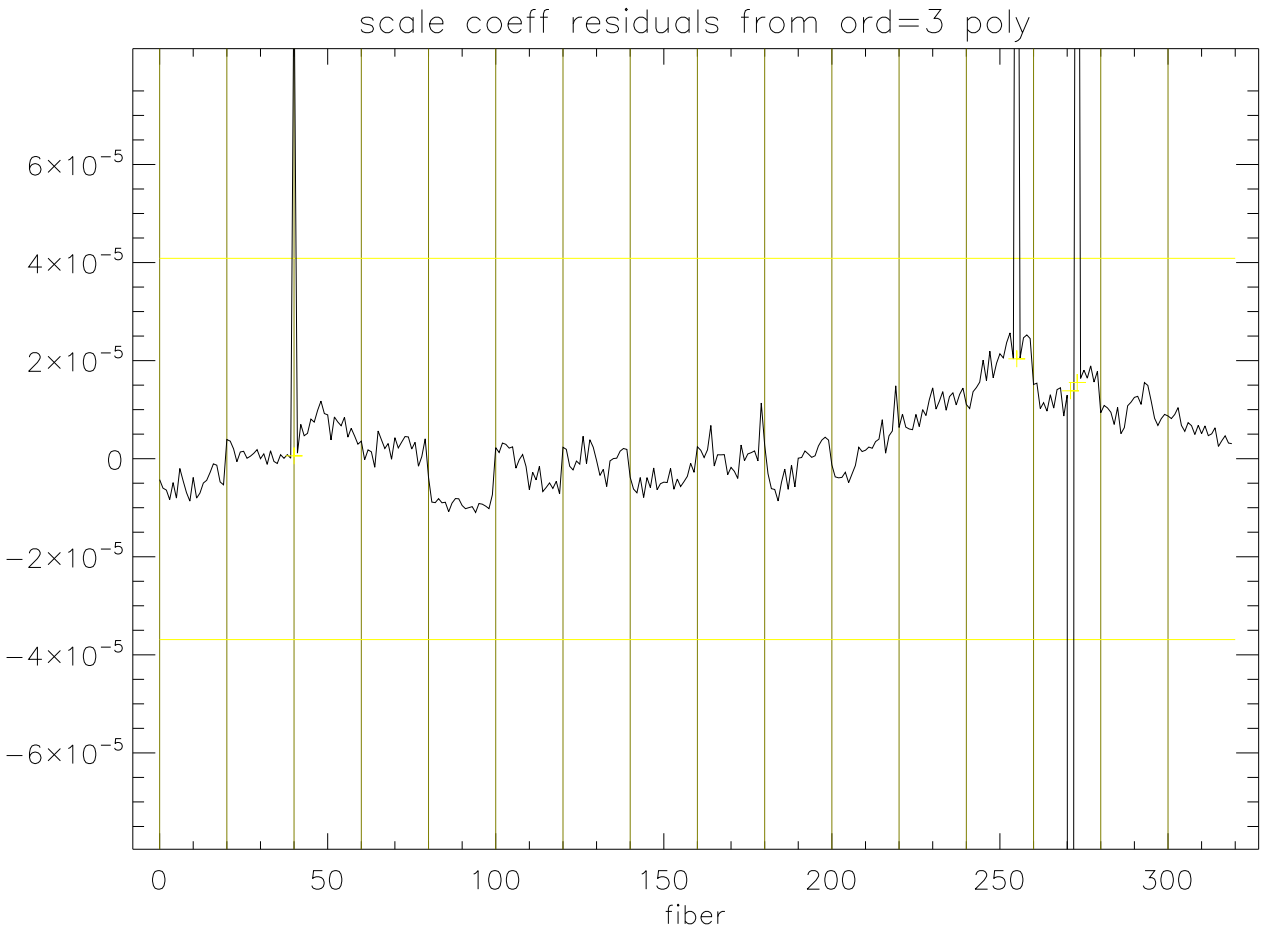
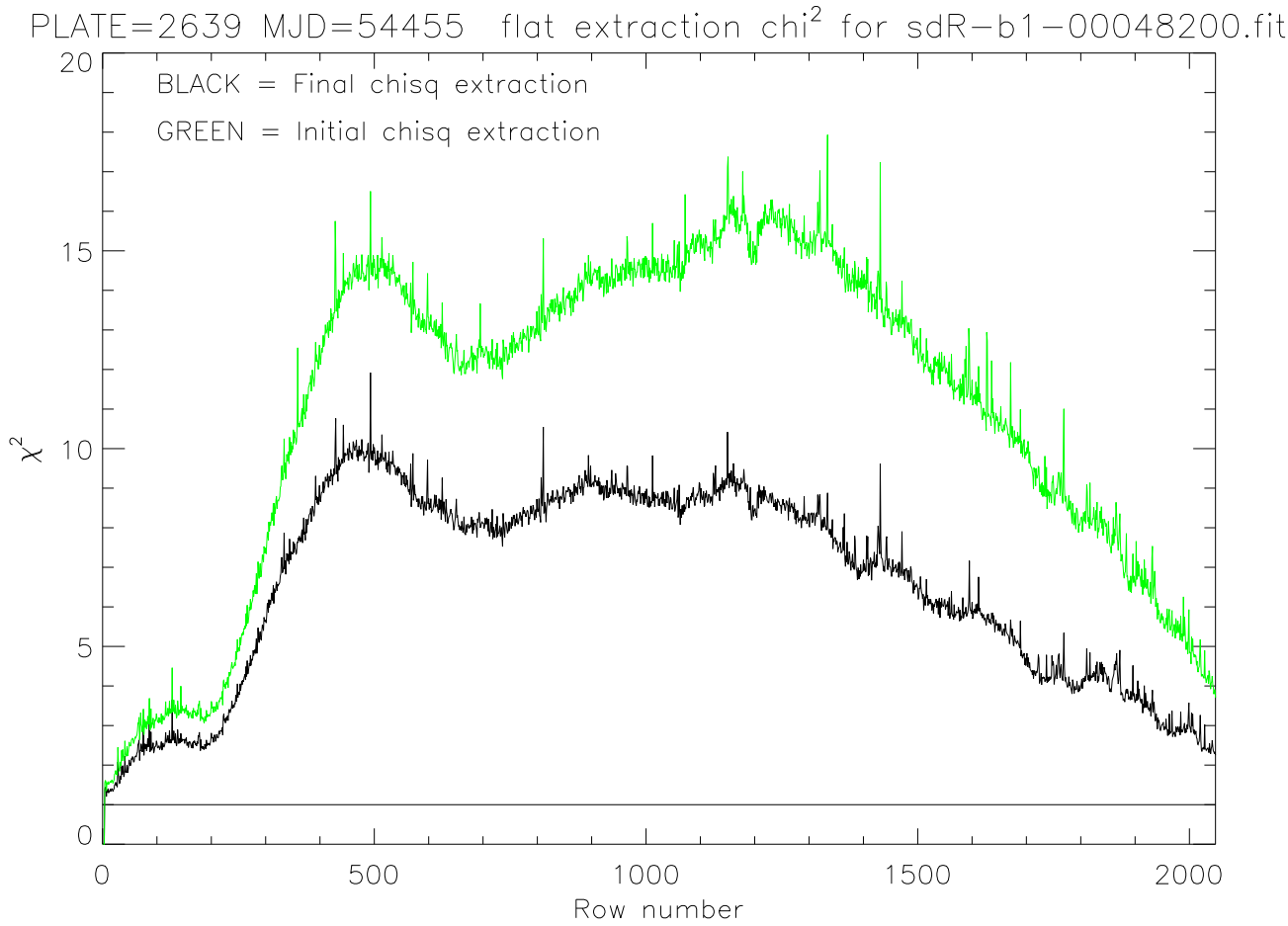
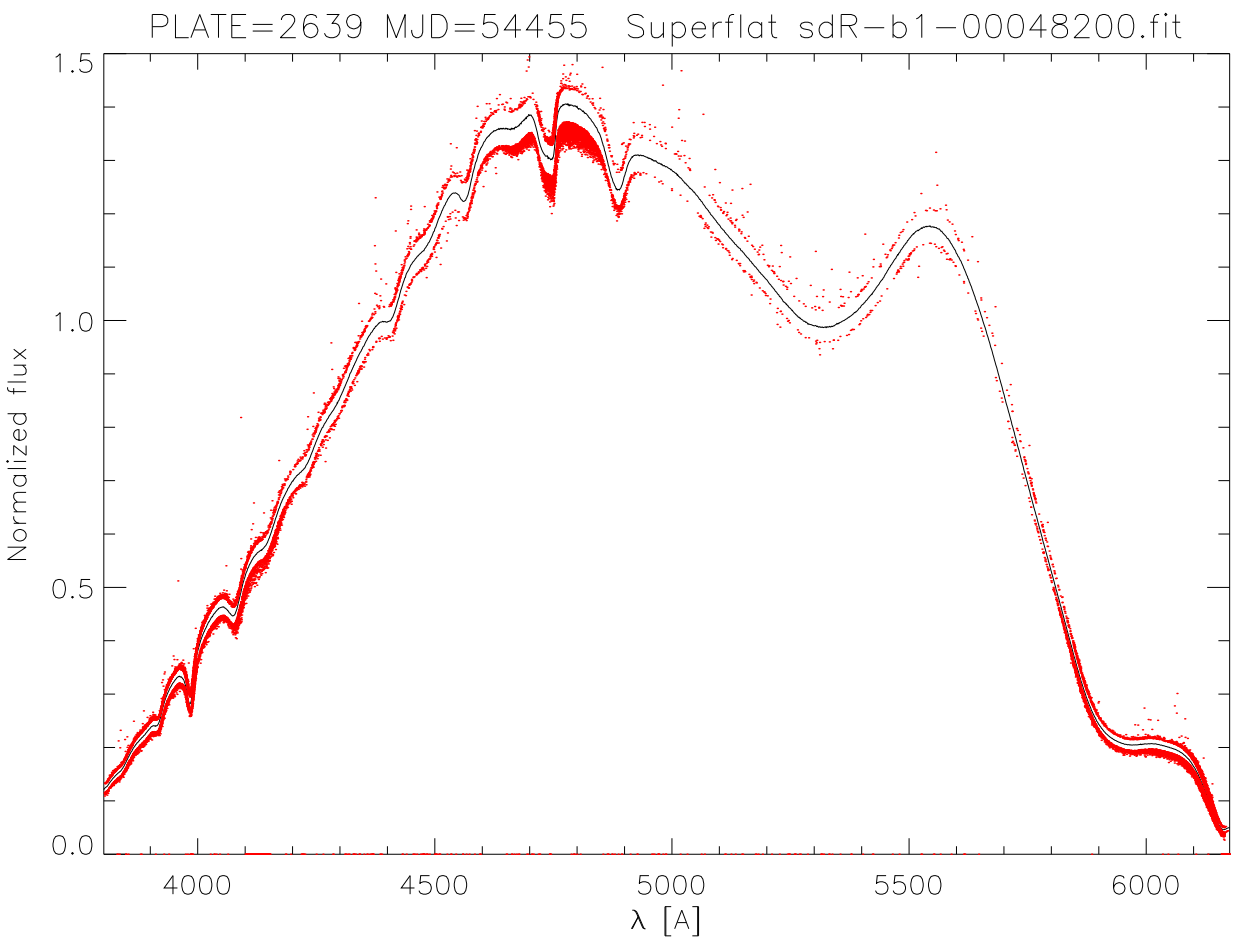

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

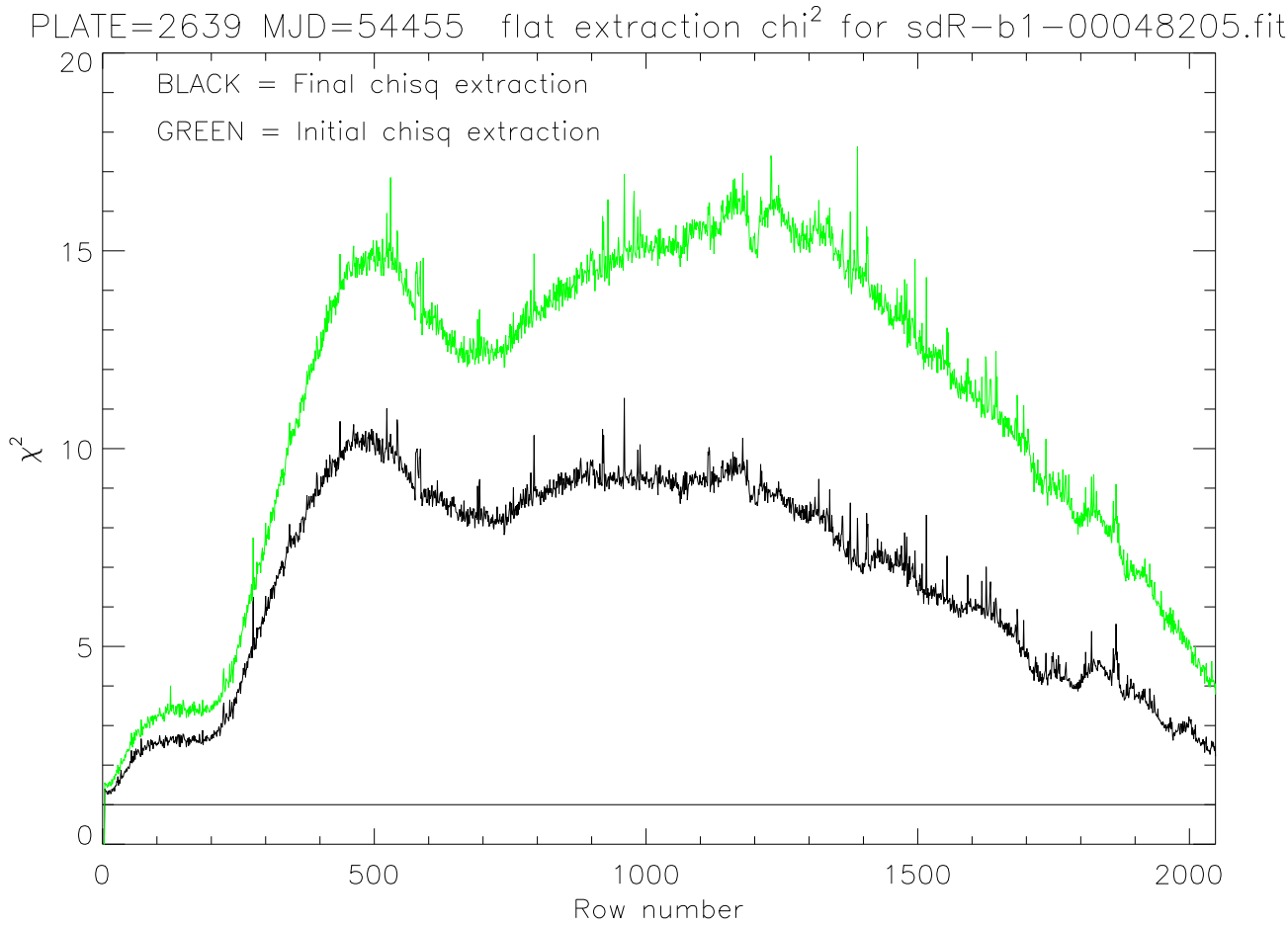

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

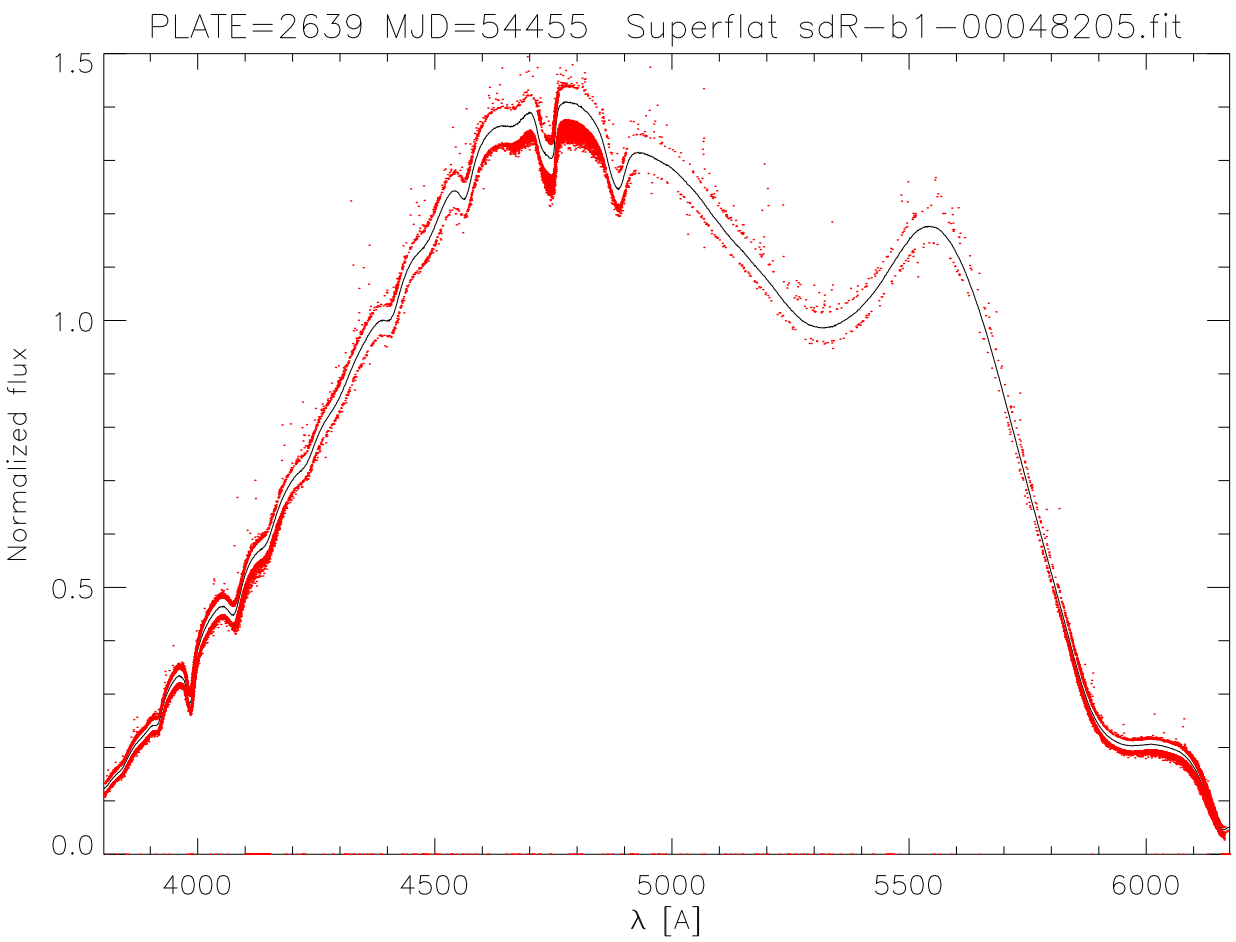

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

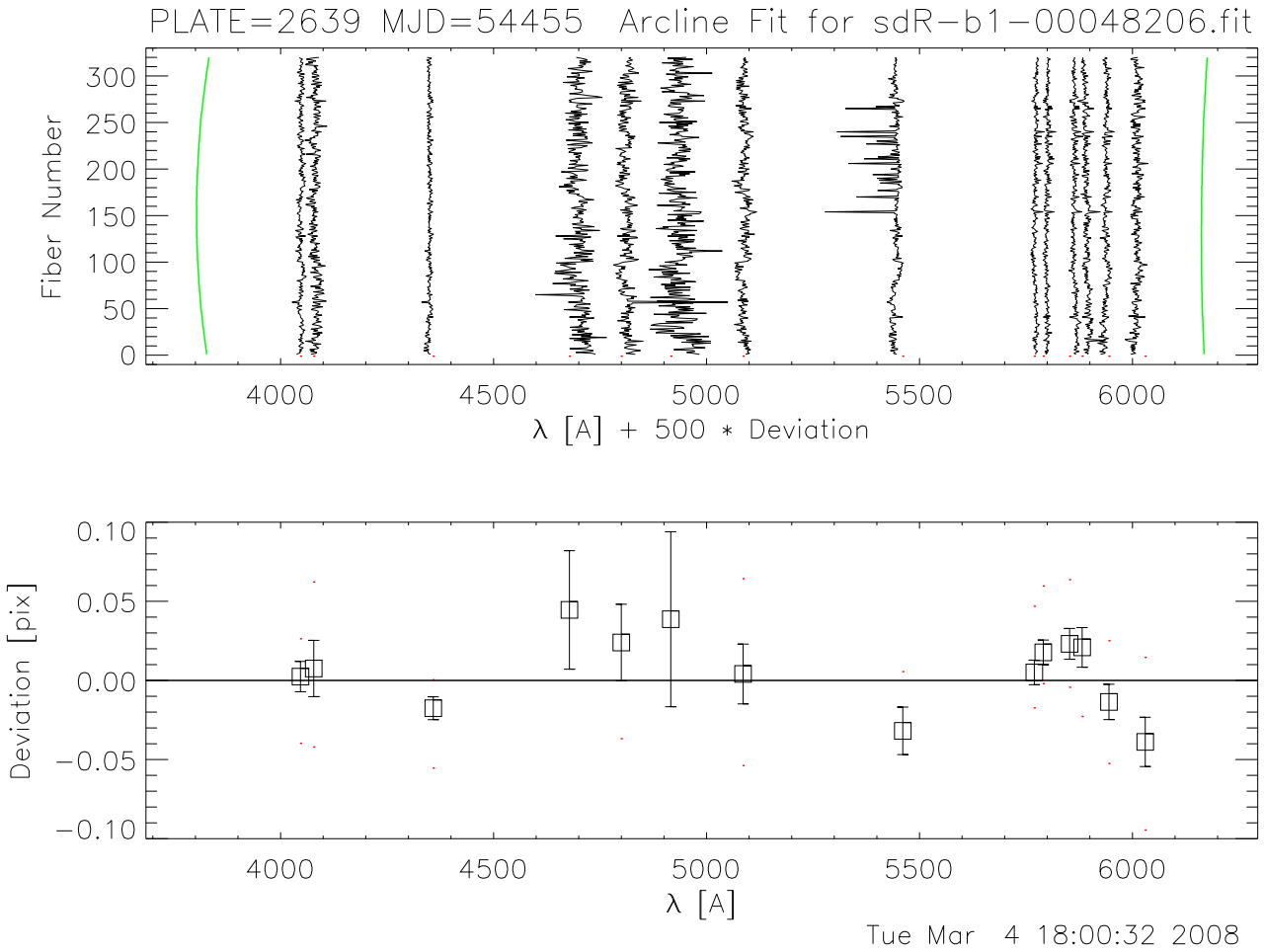

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

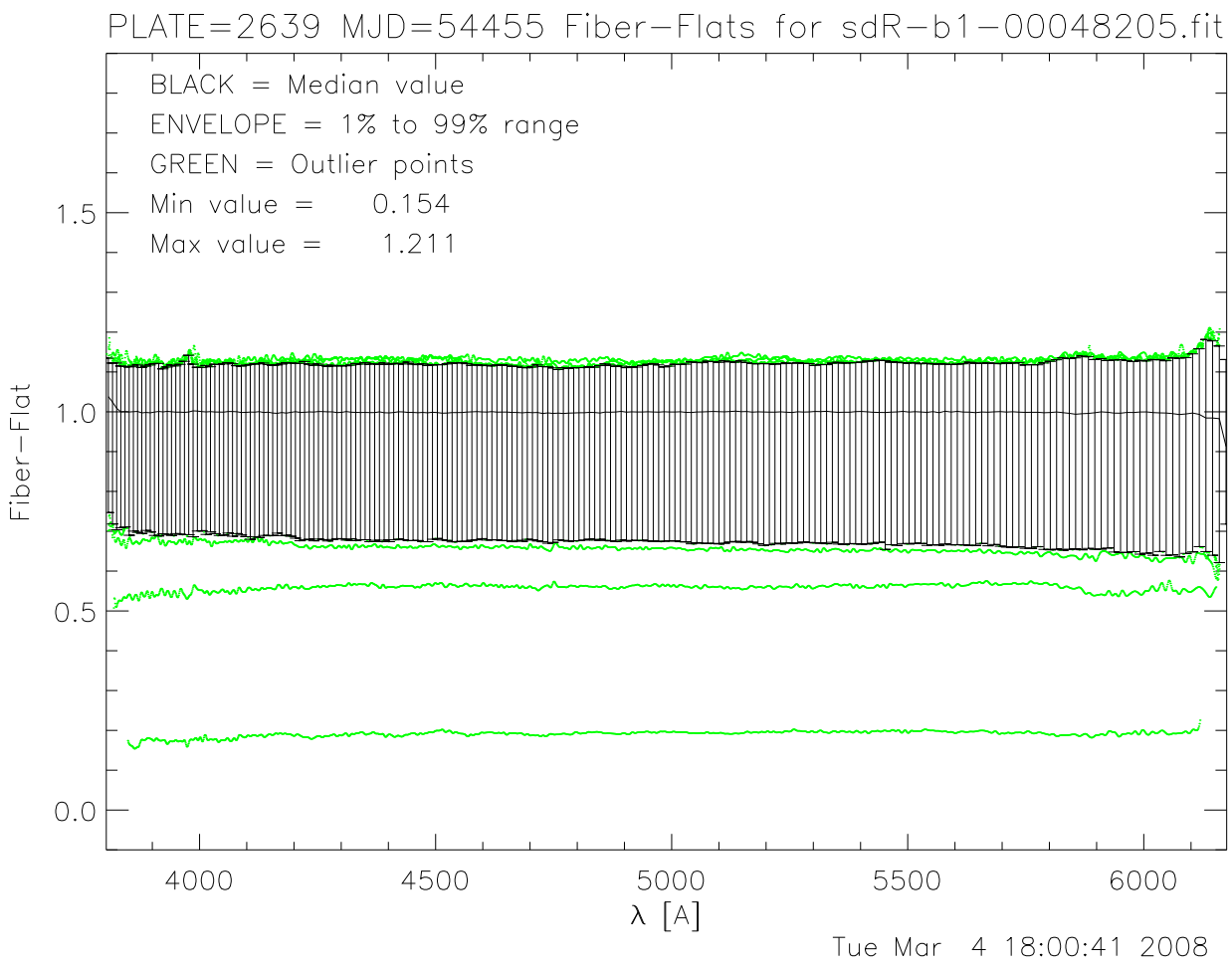

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−b1−00048200.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

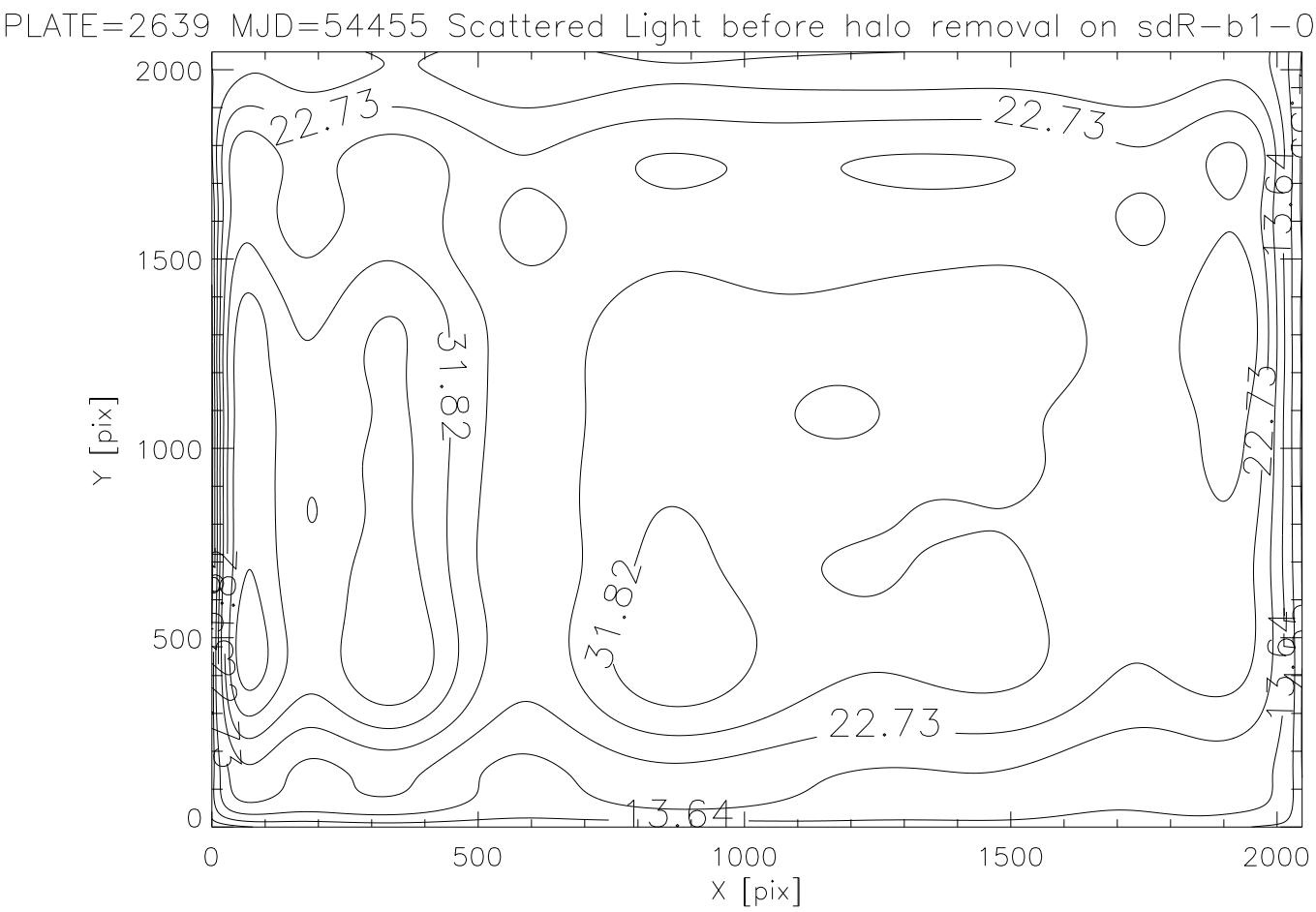

PLATE=2639 MJD=54455 Superflat sdR-b1-00048200.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

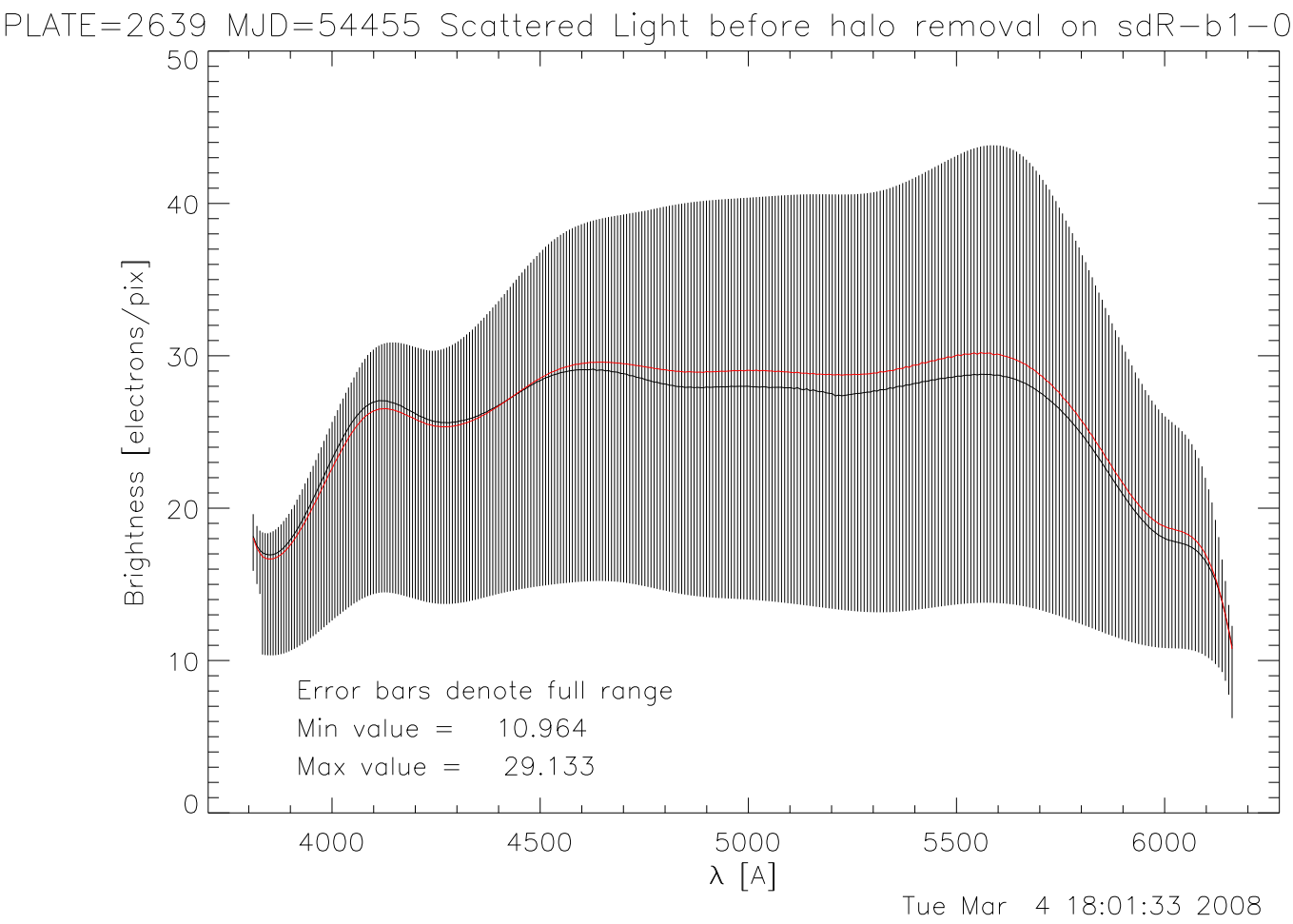

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−b1−00048205.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

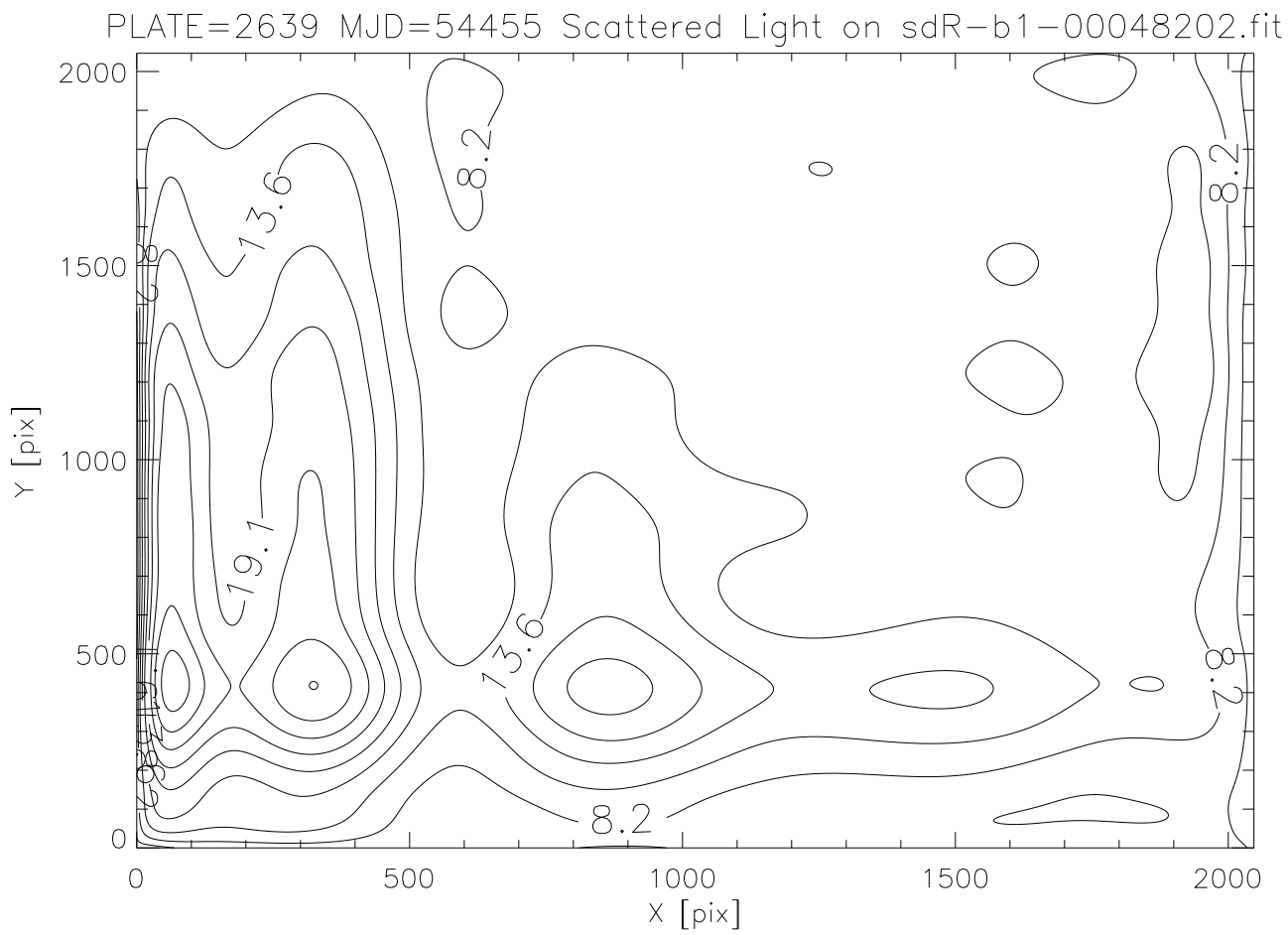

PLATE=2639 MJD=54455 Superflat sdR-b1-00048205.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

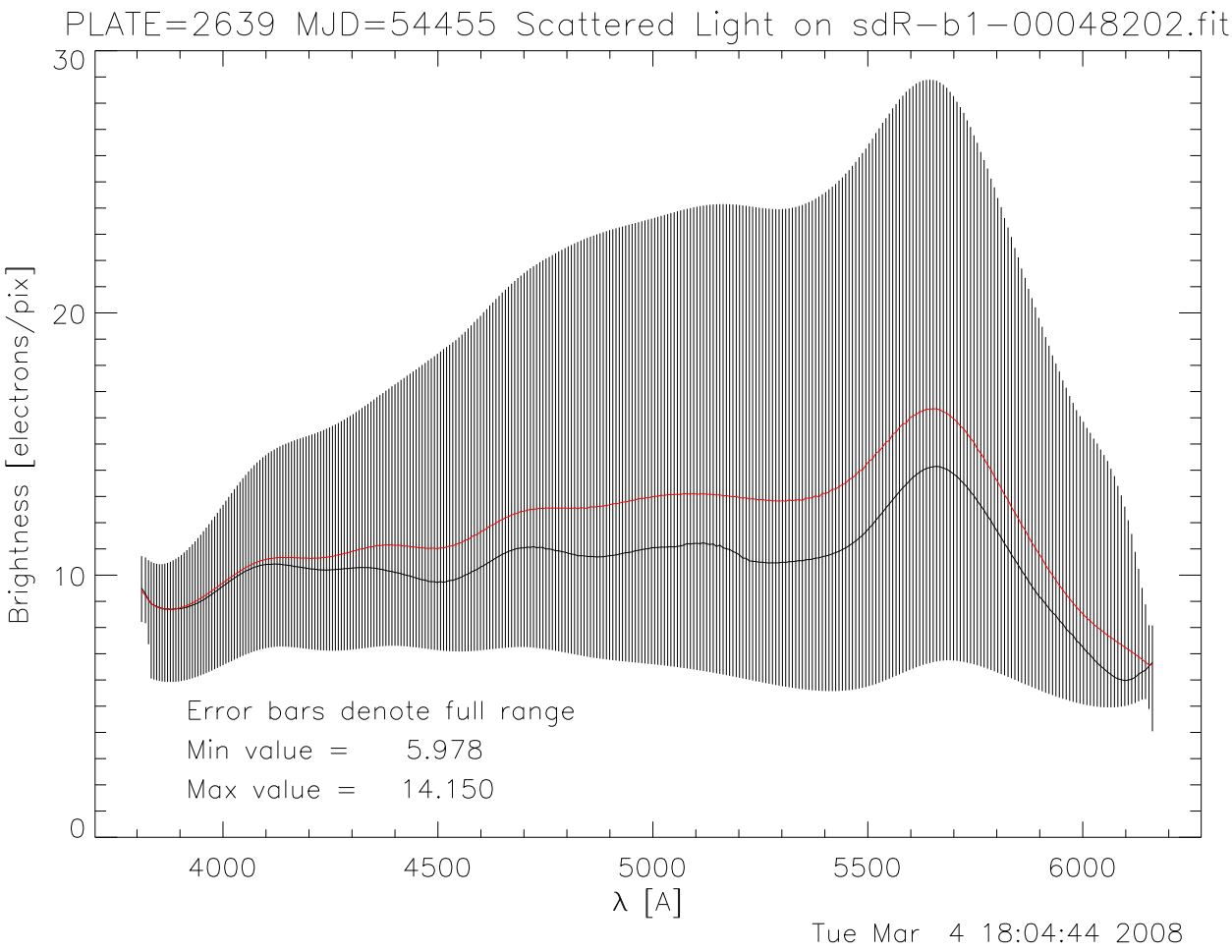

PLATE=2639 MJD=54455 Arcline Fit for sdR-b1-00048206.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:00:32 2008

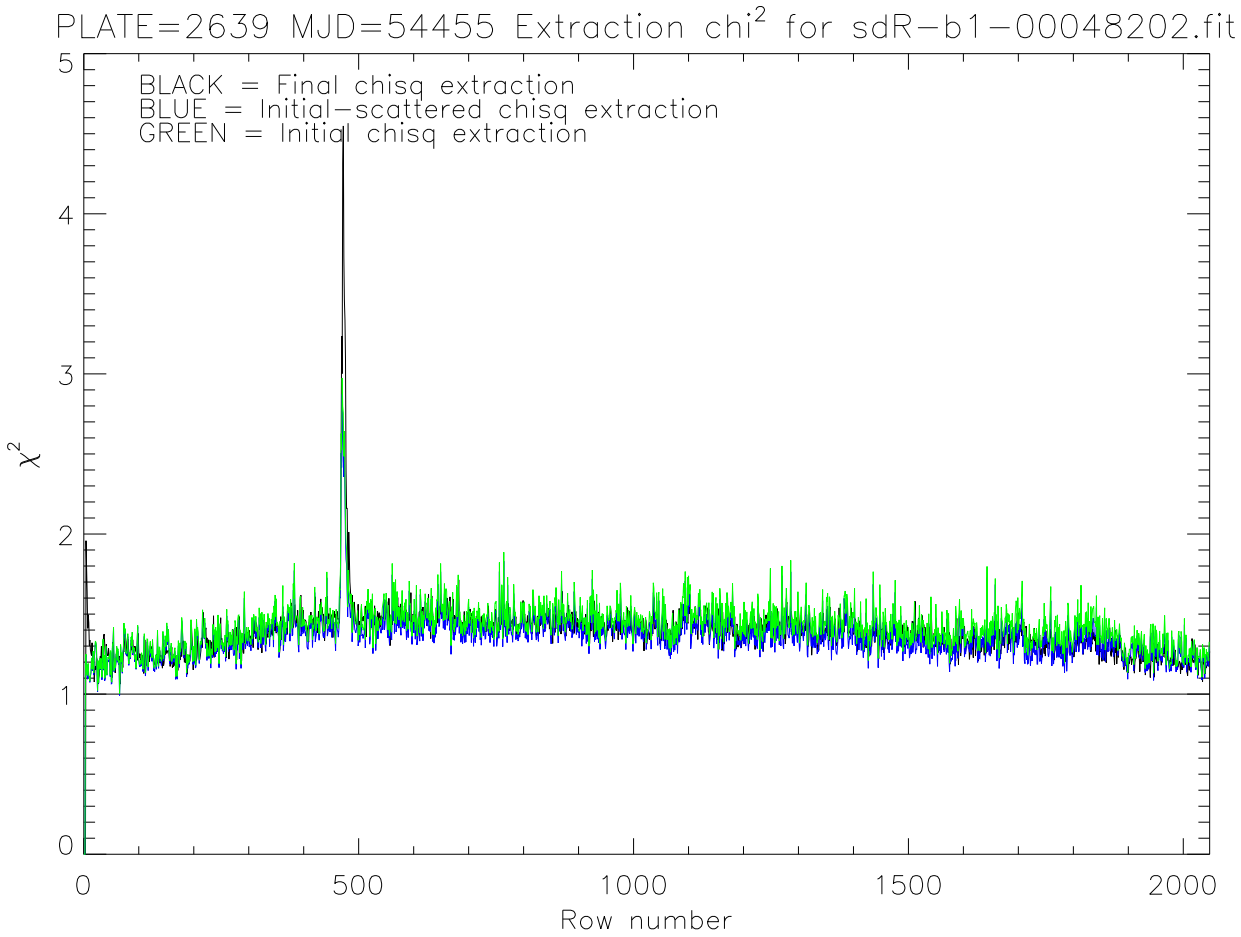

PLATE=2639 MJD=54455 Fiber-Flats for sdR-b1-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.154
Max value = 1.211
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:00:41 2008

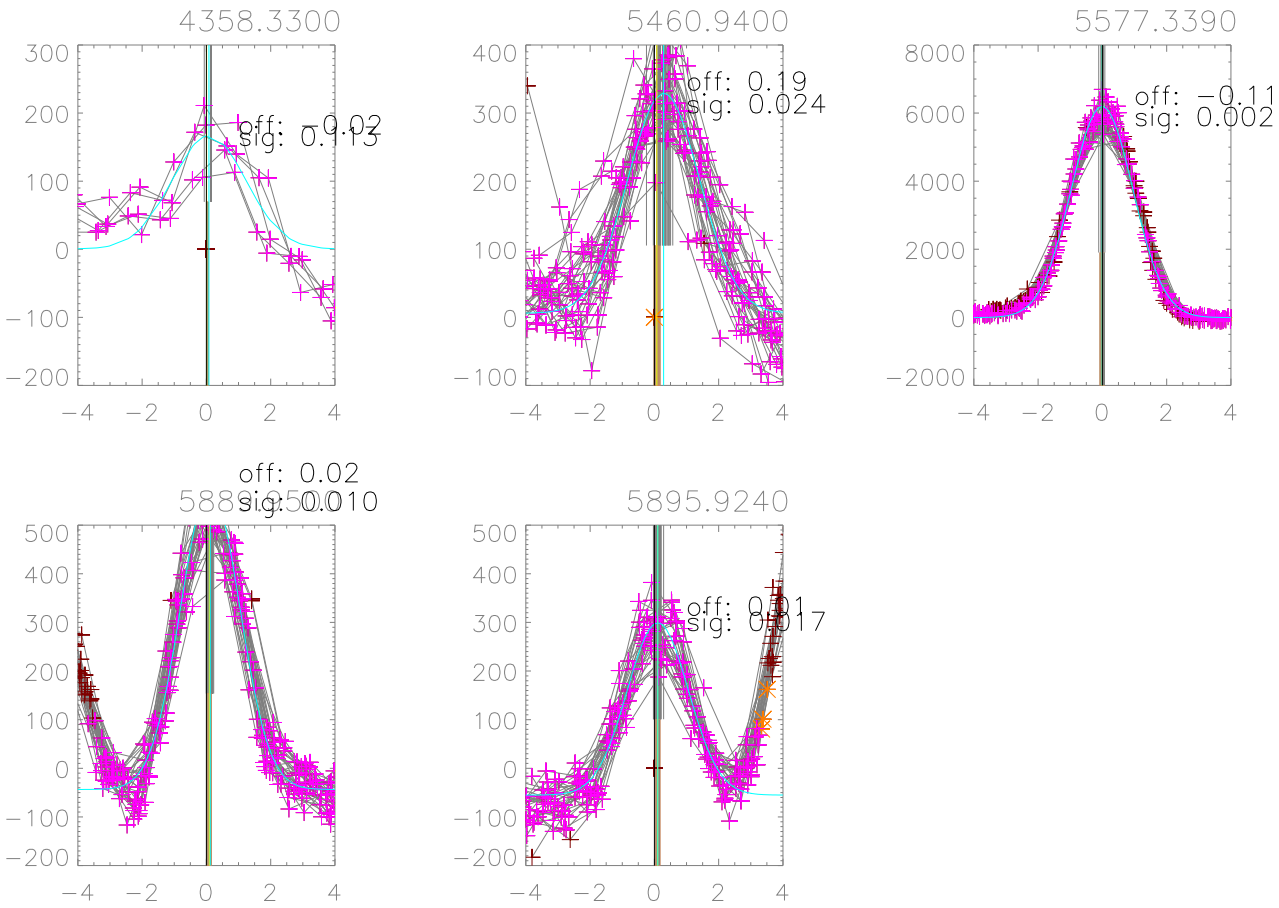

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b1−00048202.f
22.73
22.73
13.64
31.82
22.73
0
31.82
31.82
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

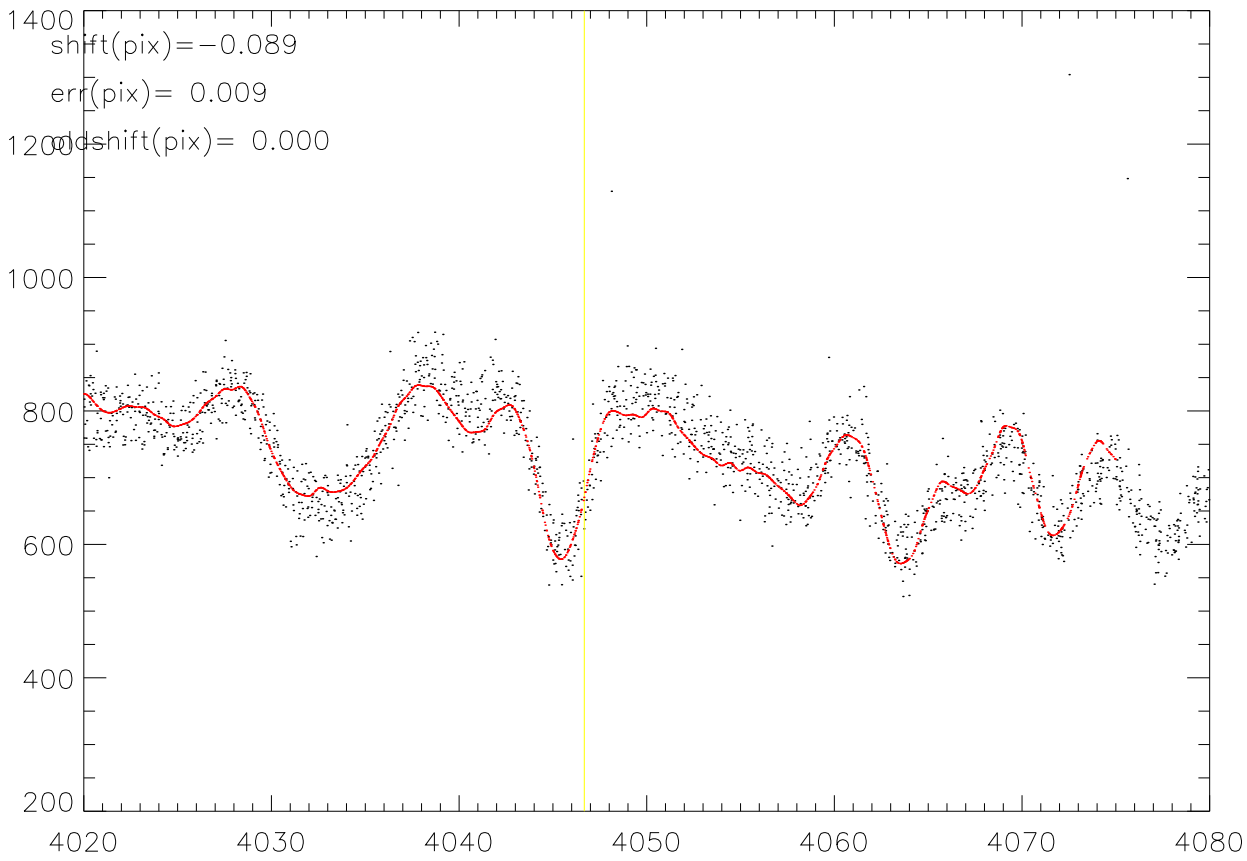

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b1−00048202.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.964
Max value = 29.133
Tue Mar 4 18:01:33 2008

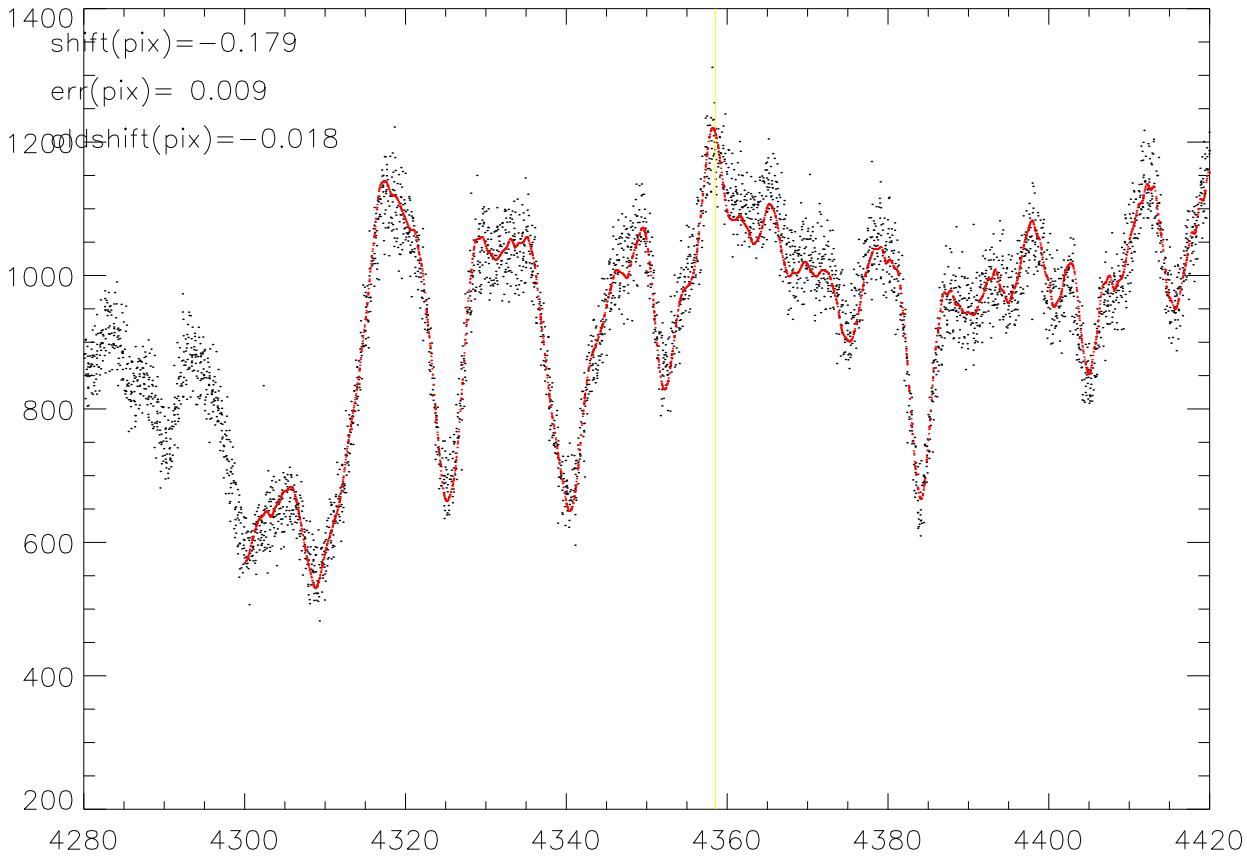

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048202.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
19.1
0

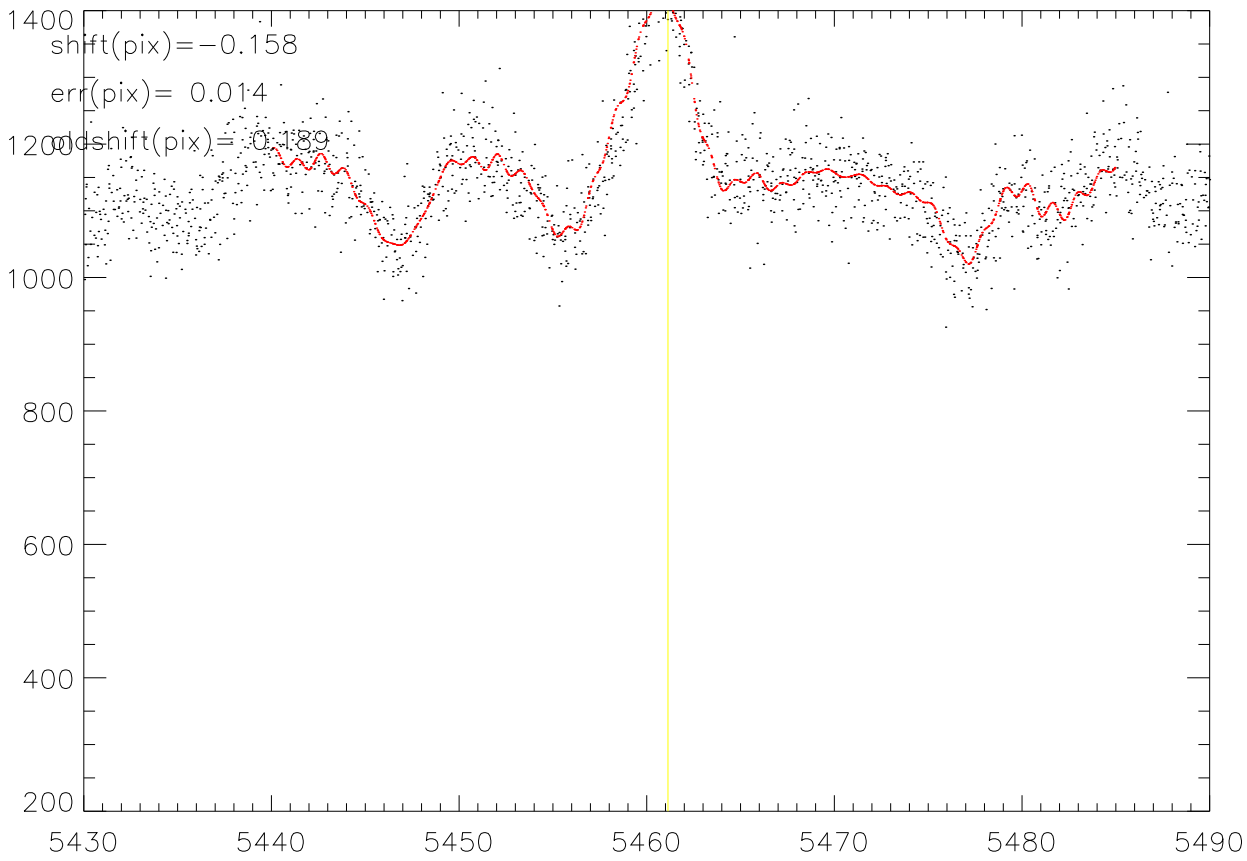

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048202.fit
Brightness [electrons/pix]
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.978
Max value = 14.150
Tue Mar 4 18:04:44 2008

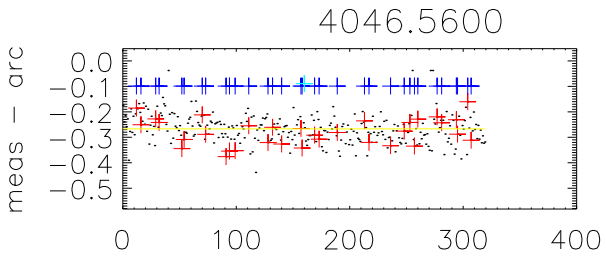

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b1-00048202.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

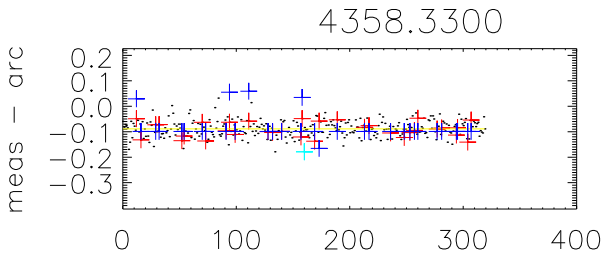

4358.3300
off: −0.02
sig: 0.113
5460.9400
off: 0.19
sig: 0.024
5577.3390
off: −0.11
sig: 0.002
off: 0.02
sig: 0.010
5895.9240

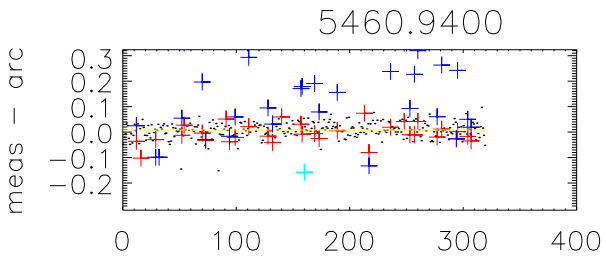

shift(pix)=−0.089
err(pix)= 0.009
oldshift(pix)= 0.000
1400
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

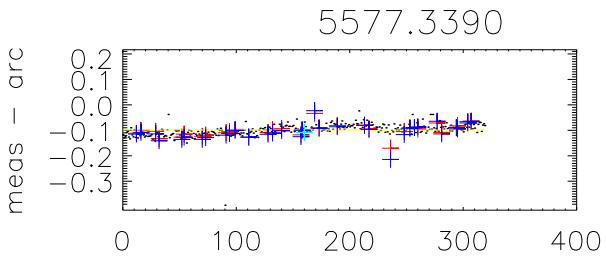

shift(pix)=−0.179
err(pix)= 0.009
oldshift(pix)=−0.018
1400
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

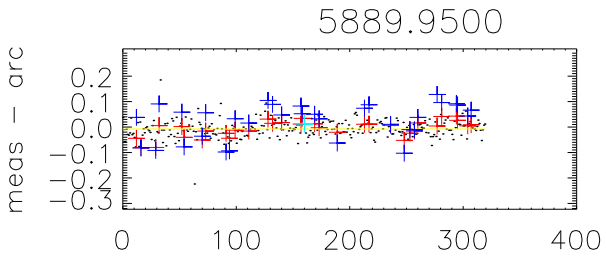

shift(pix)=−0.158
err(pix)= 0.014
oldshift(pix)= 0.189
1400
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

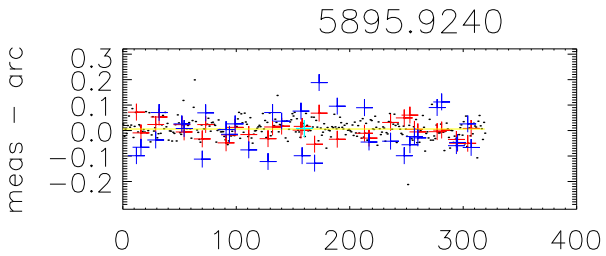

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

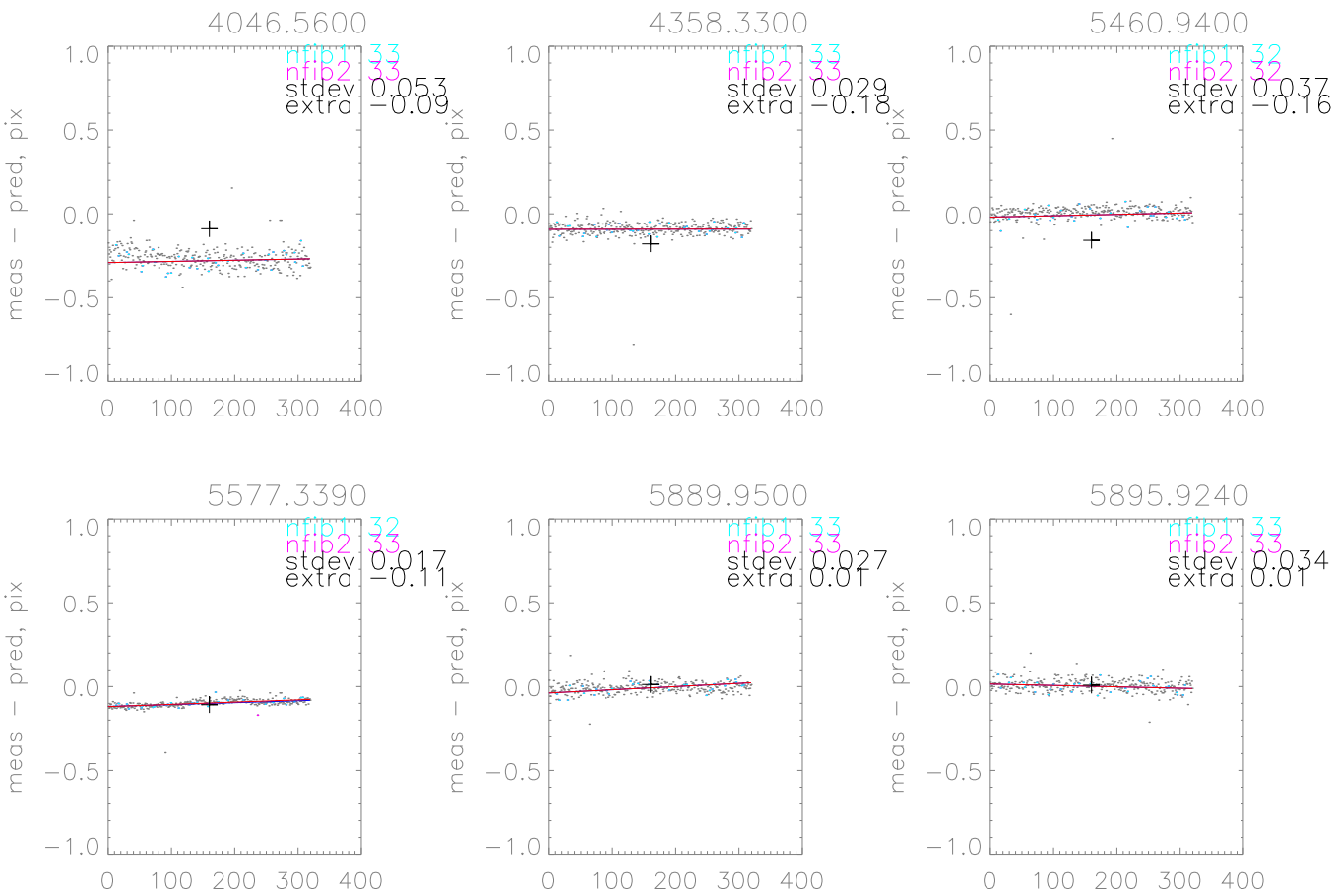

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

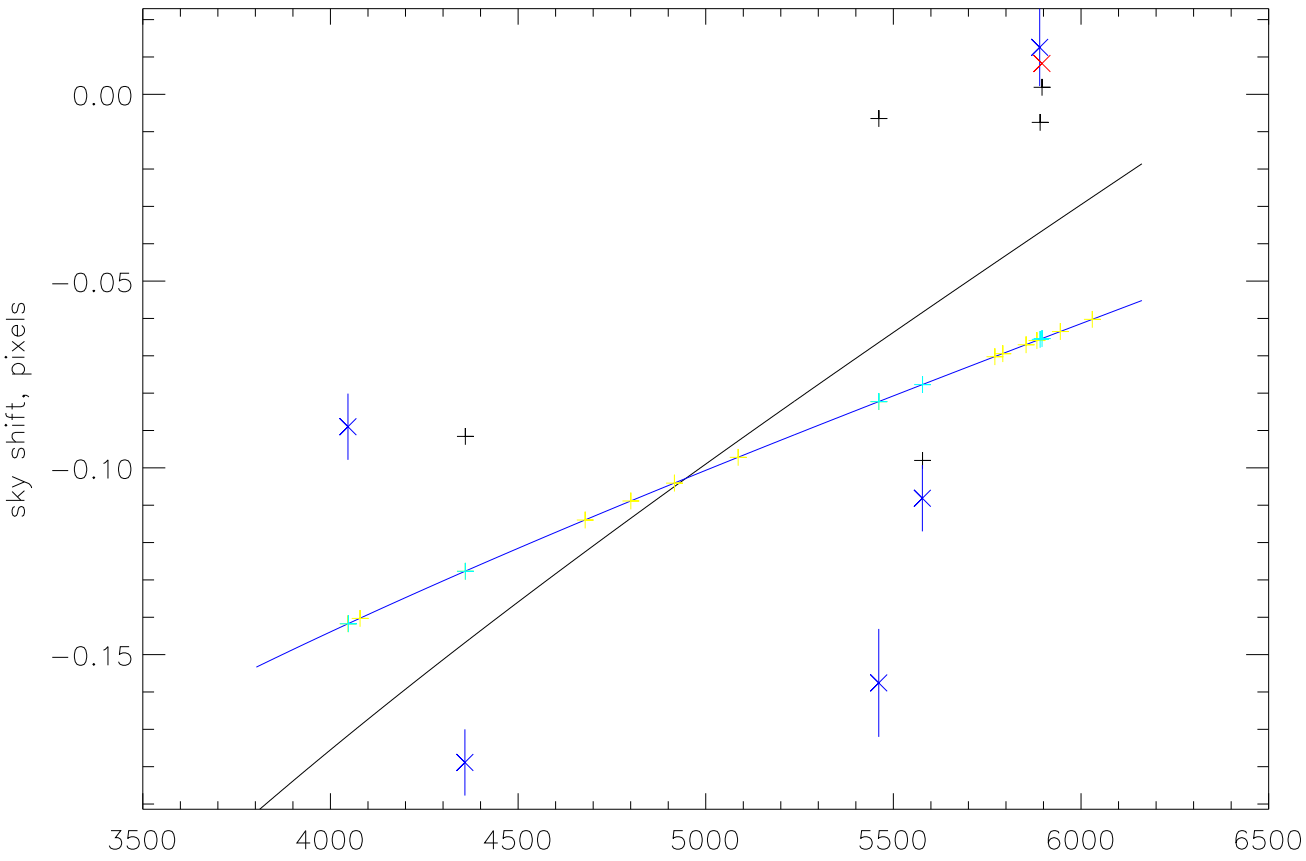

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

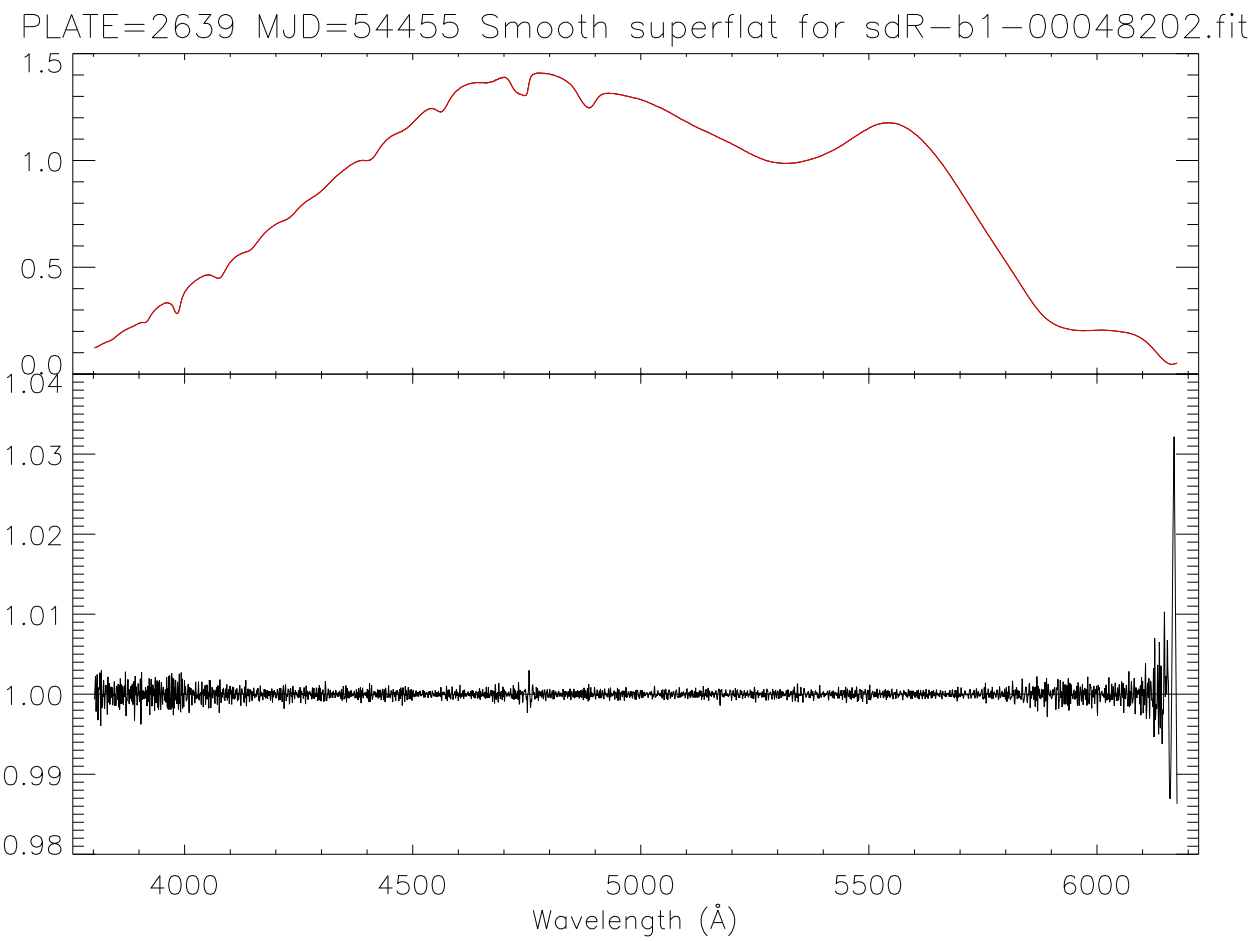

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

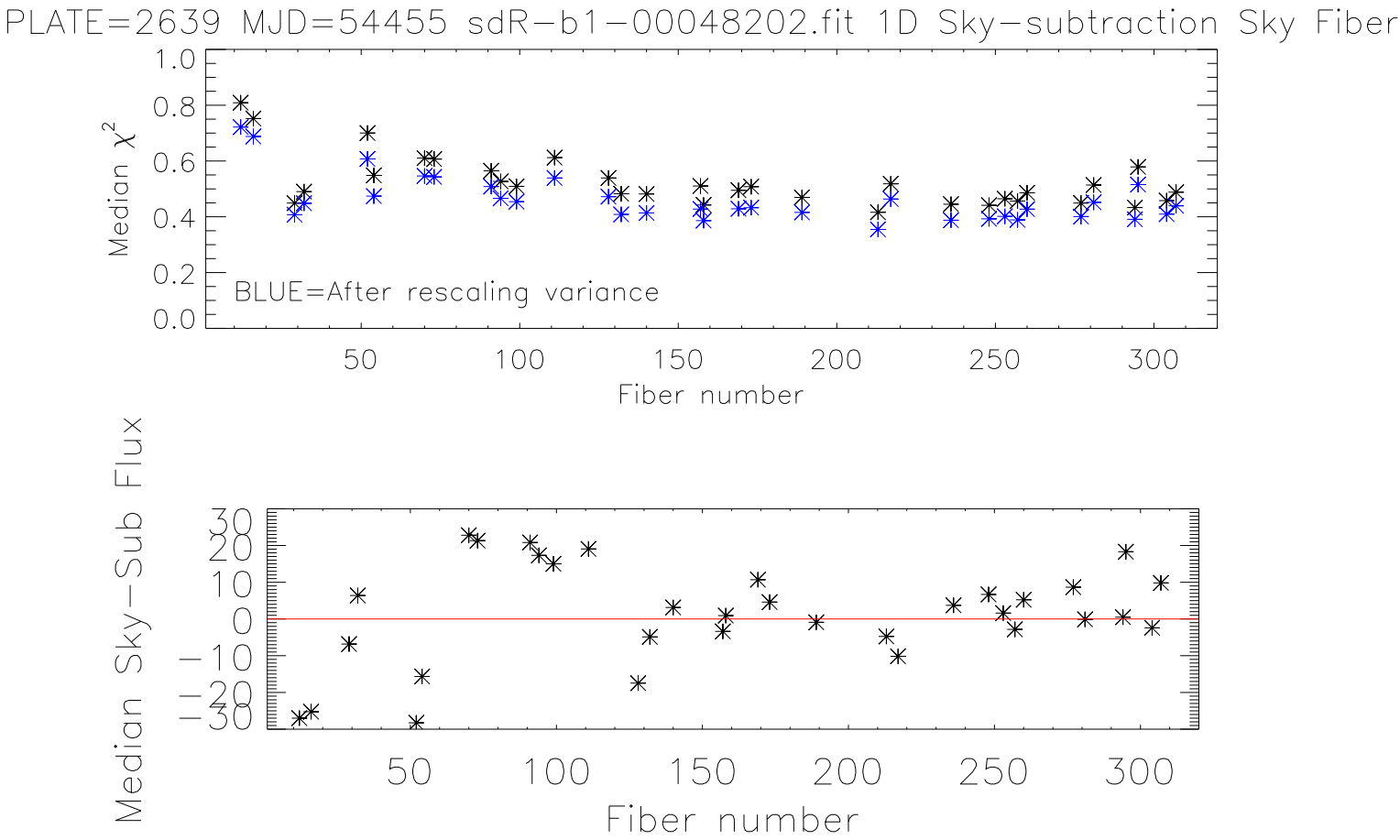

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

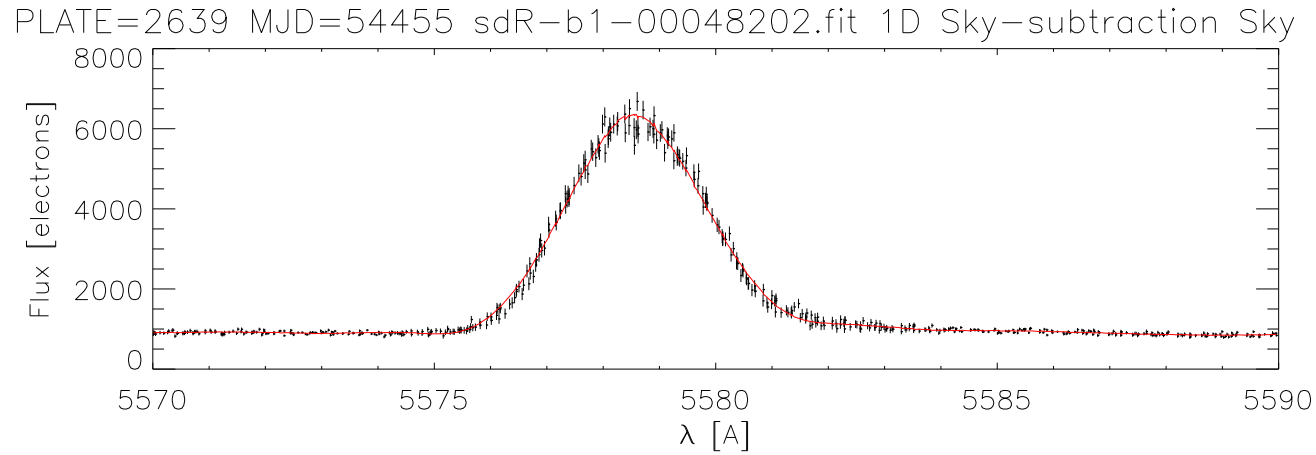

4046.5600
nfib1 33
nfib2 33
stdev 0.053
extra −0.09
4358.3300
nfib1 33
nfib2 33
stdev 0.029
extra −0.18
5460.9400
nfib1 32
nfib2 32
stdev 0.037
extra −0.16
5577.3390
nfib1 32
nfib2 33
stdev 0.017
extra −0.11
5889.9500
nfib1 33
nfib2 33
stdev 0.027
extra 0.01
5895.9240
nfib1 33
nfib2 33
stdev 0.034
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

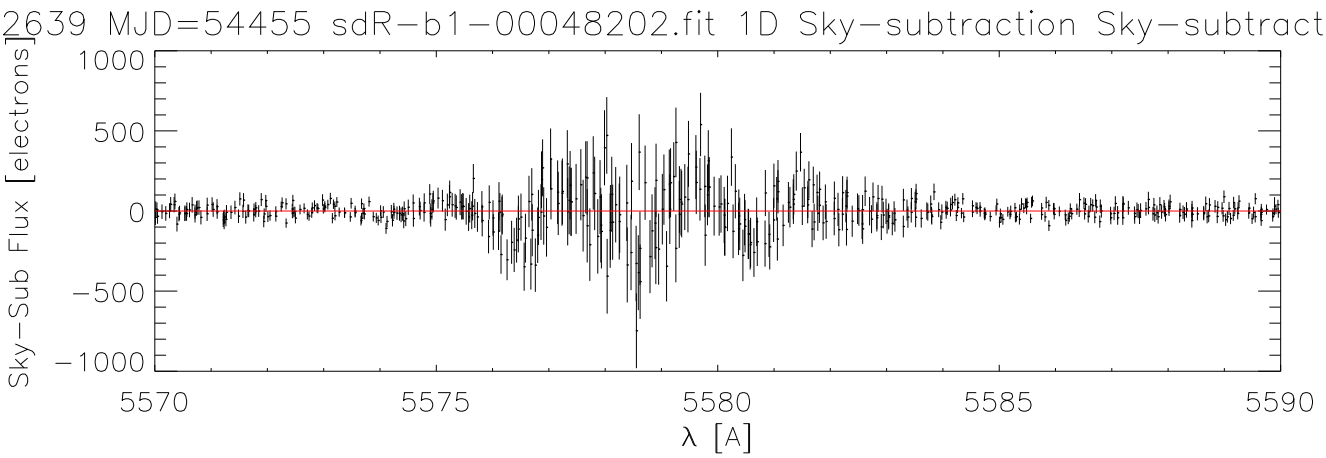

0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

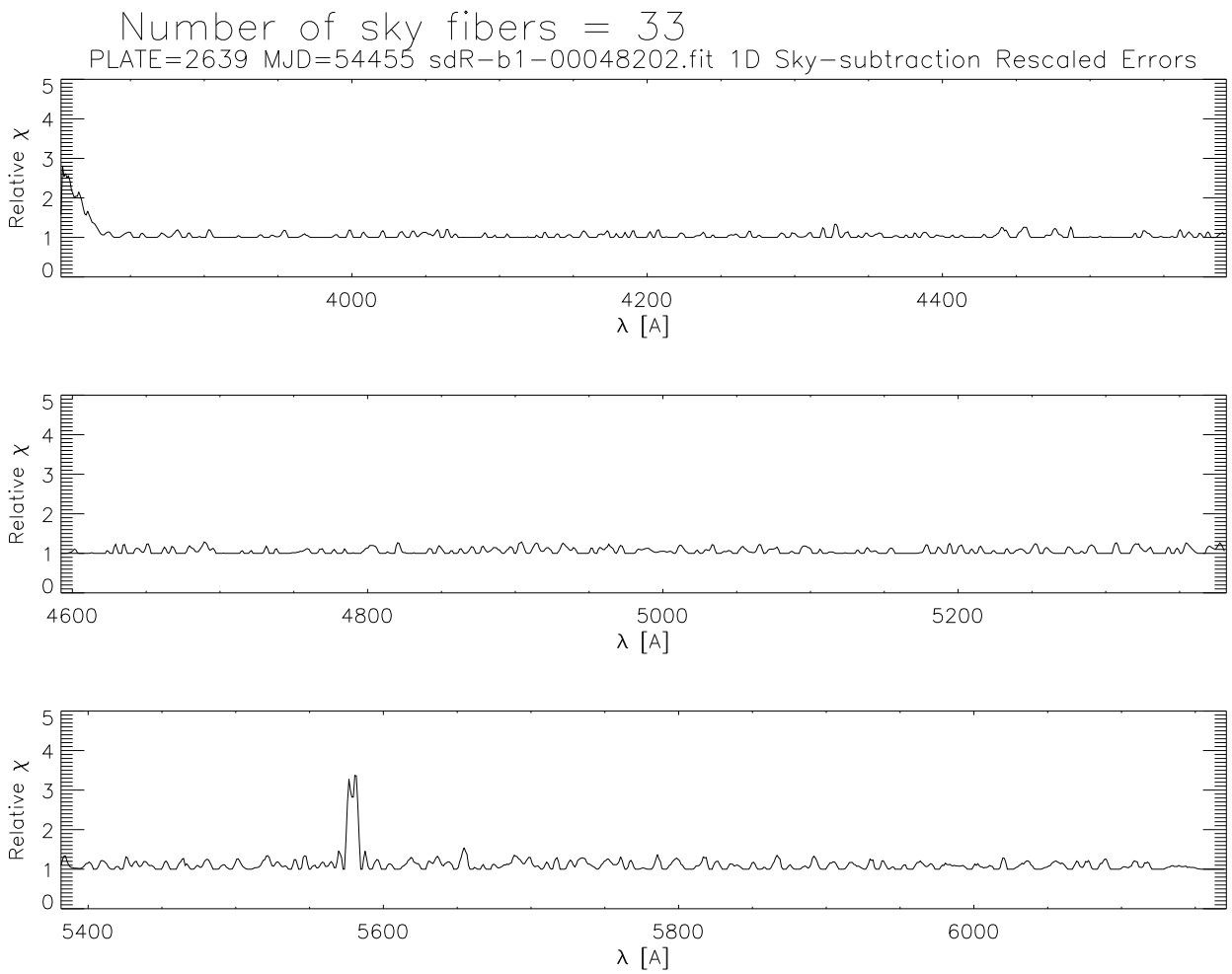
es= −0.0000

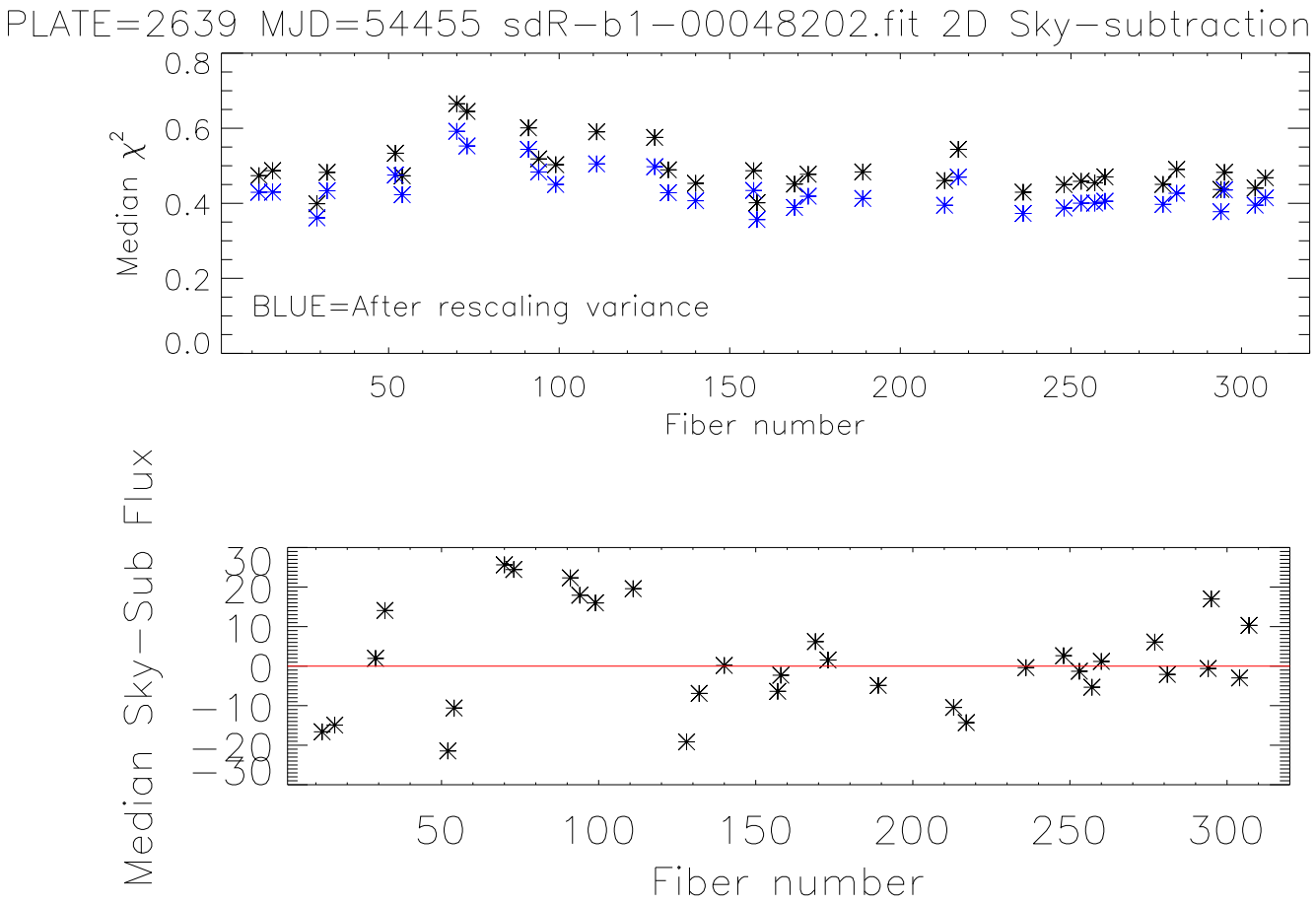

PLATE=2639 MJD=54455 Smooth superflat for sdR−b1−00048202.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

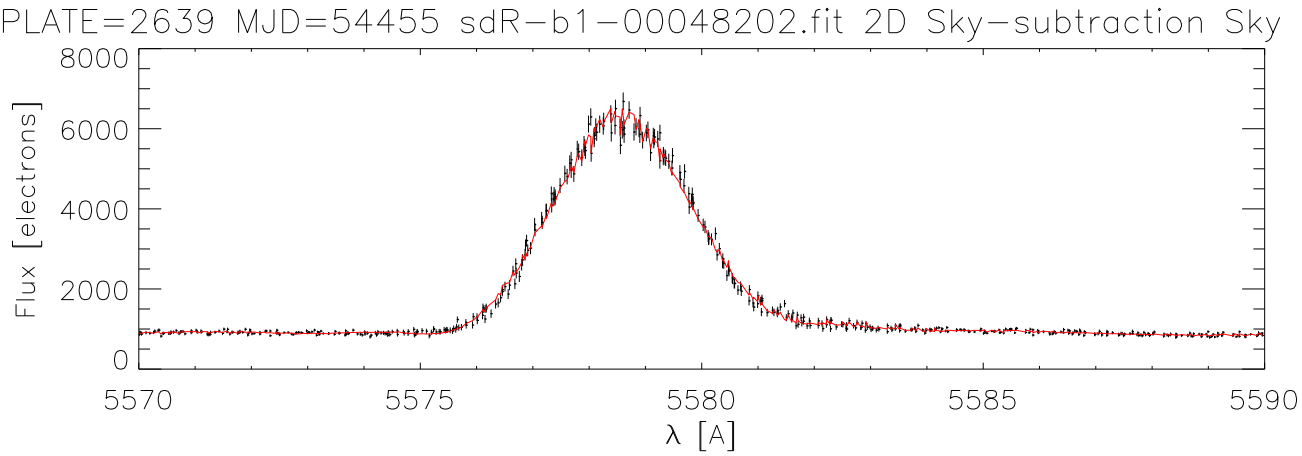

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

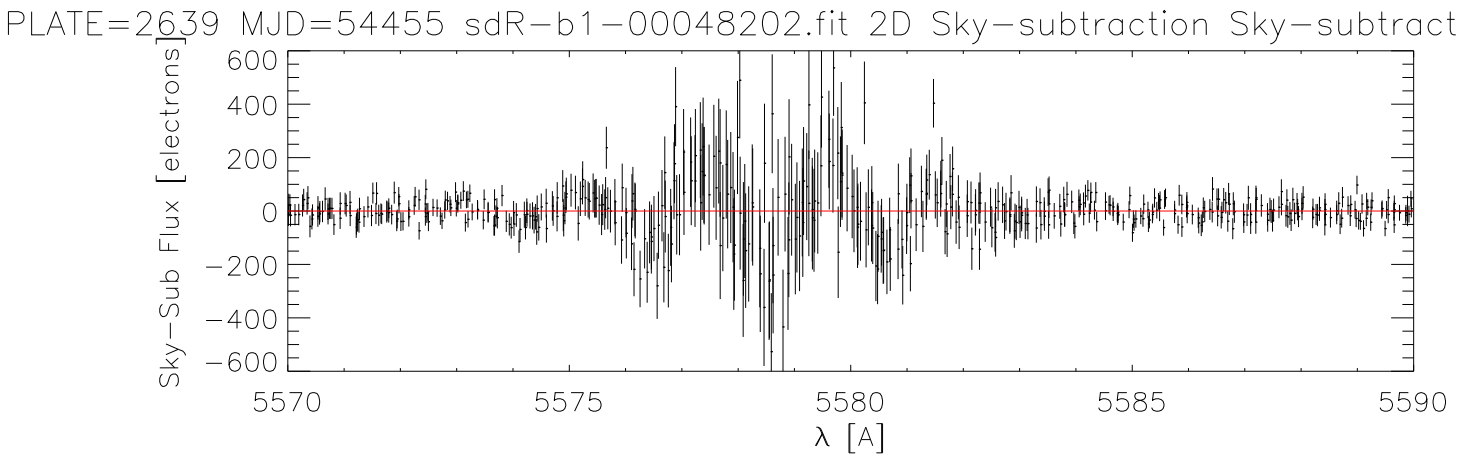

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

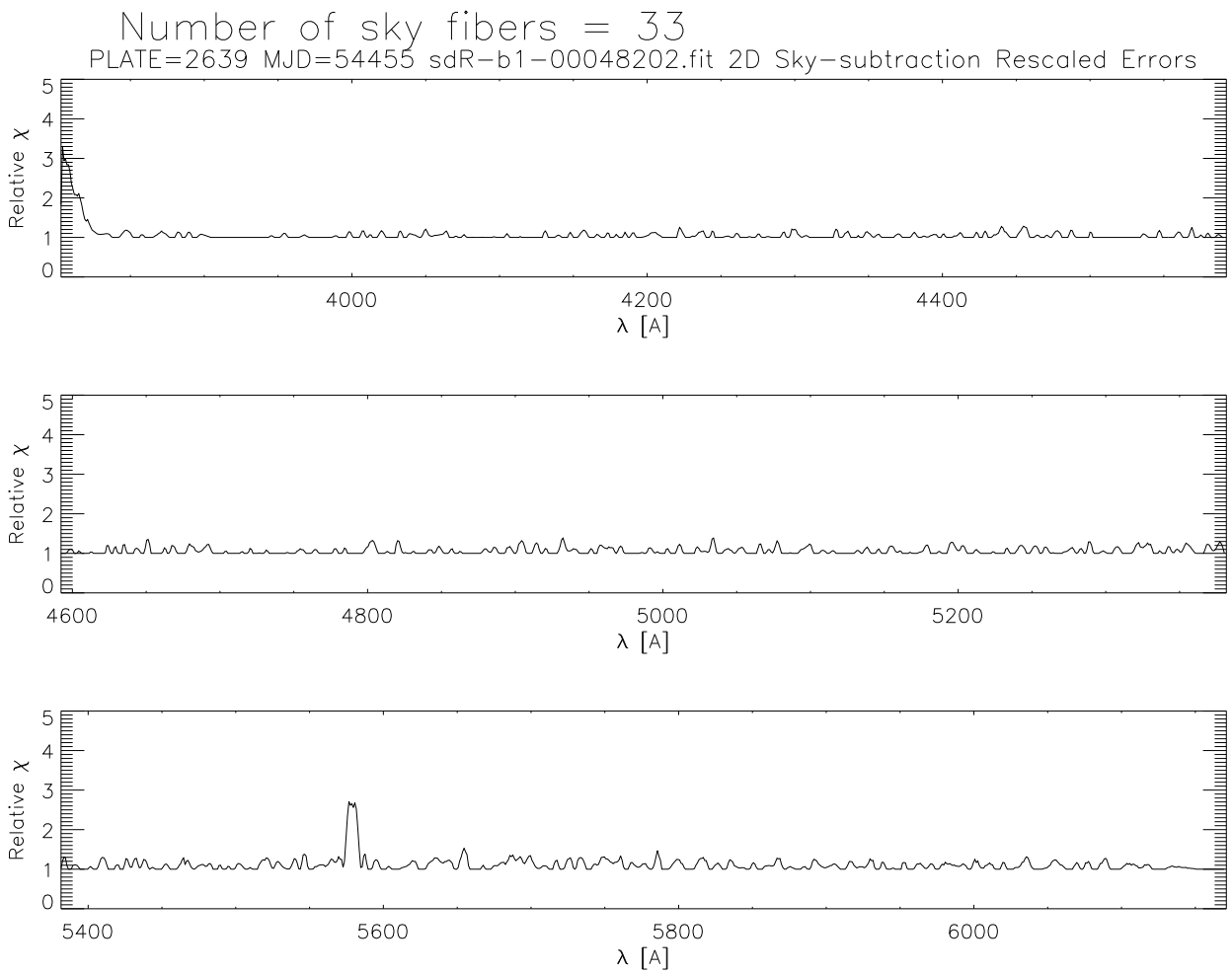

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

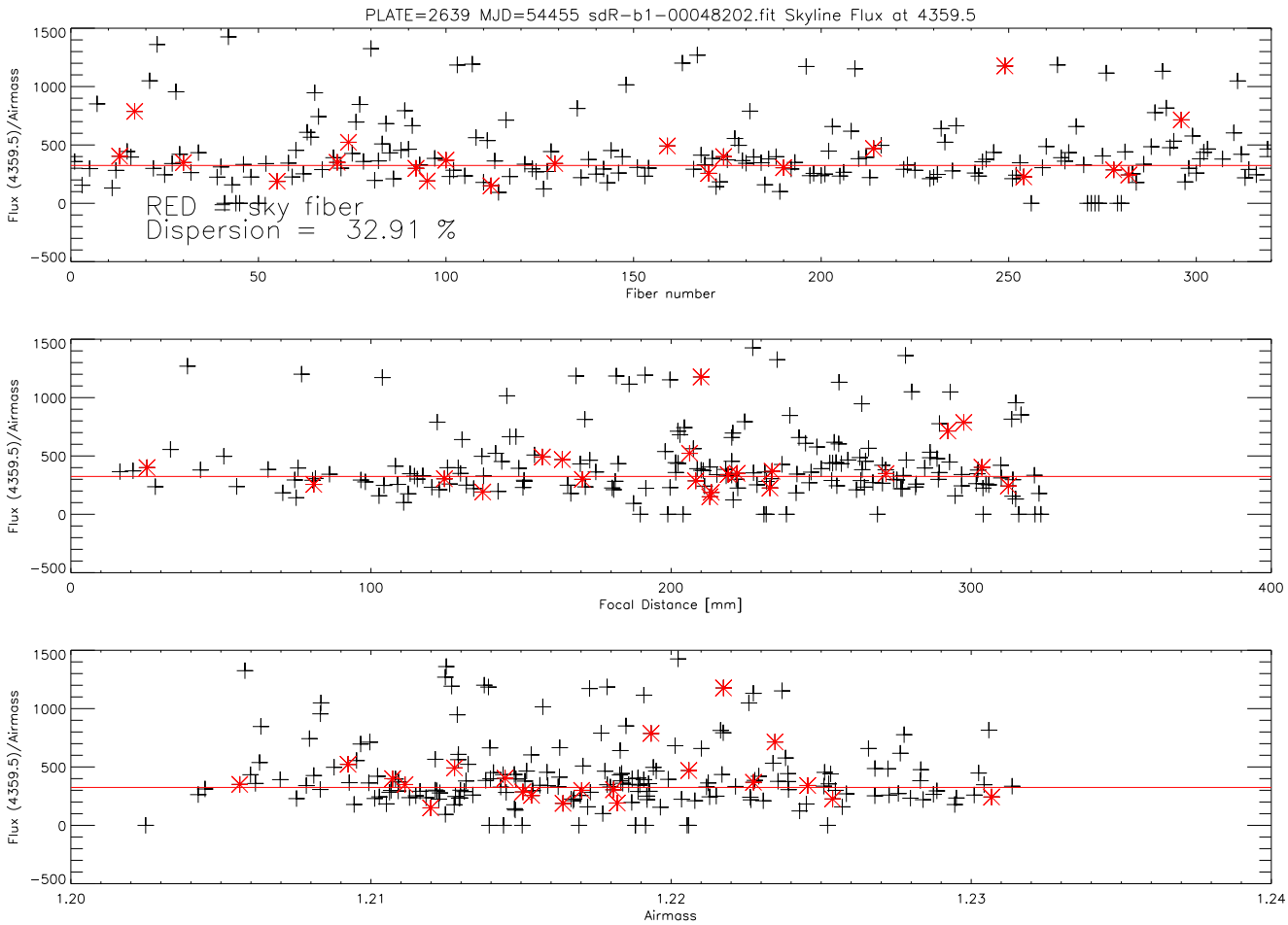

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048202.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

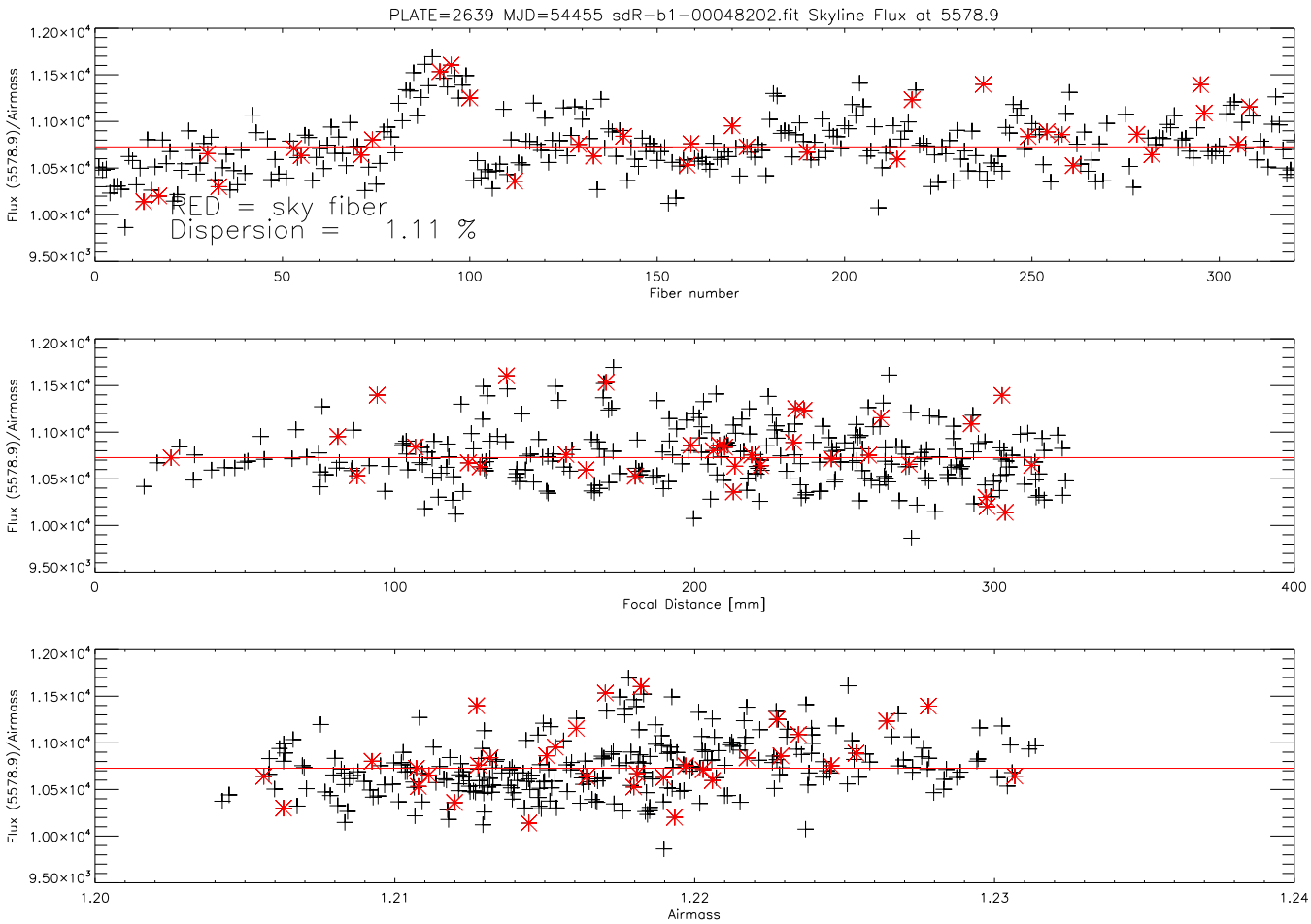

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

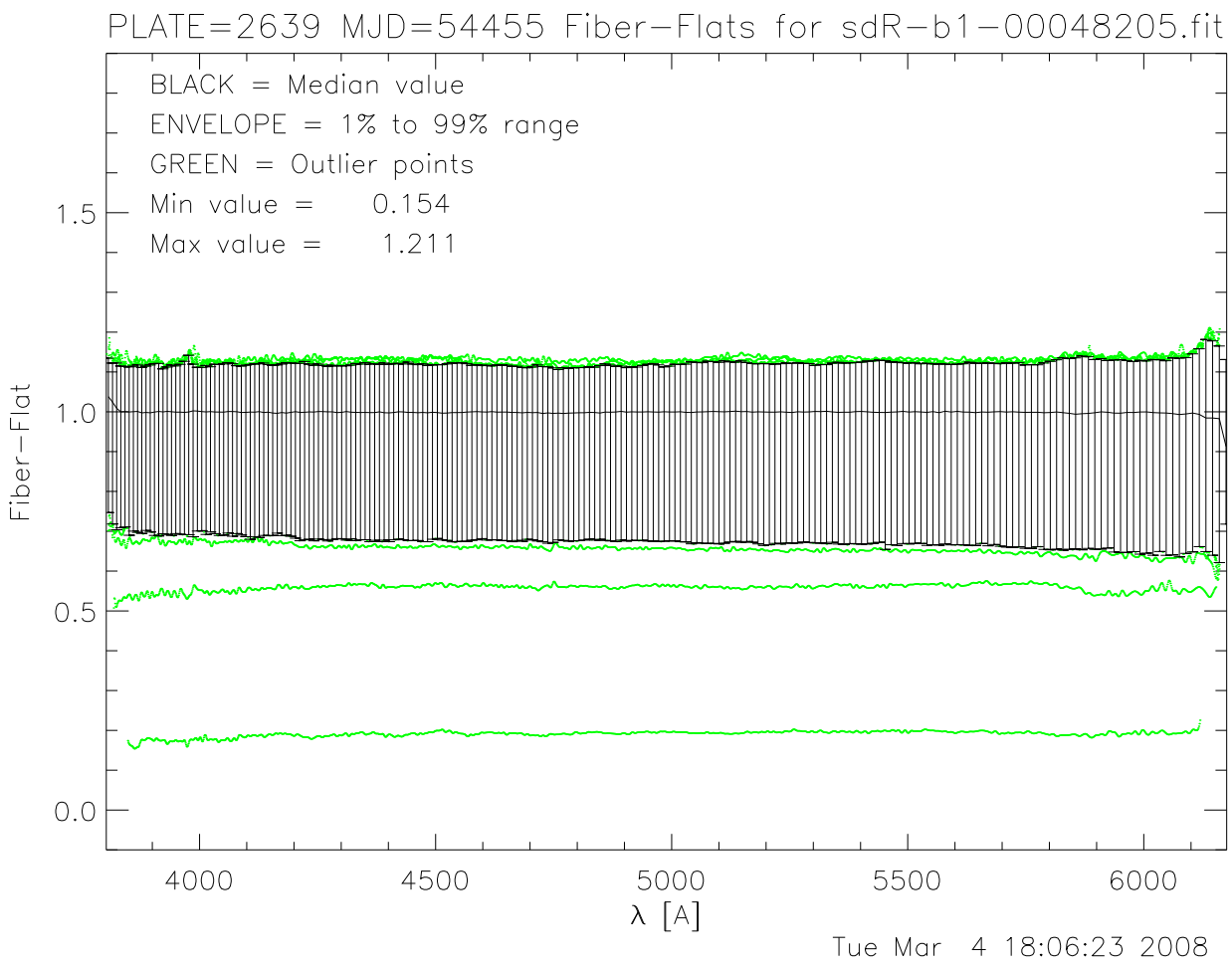

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

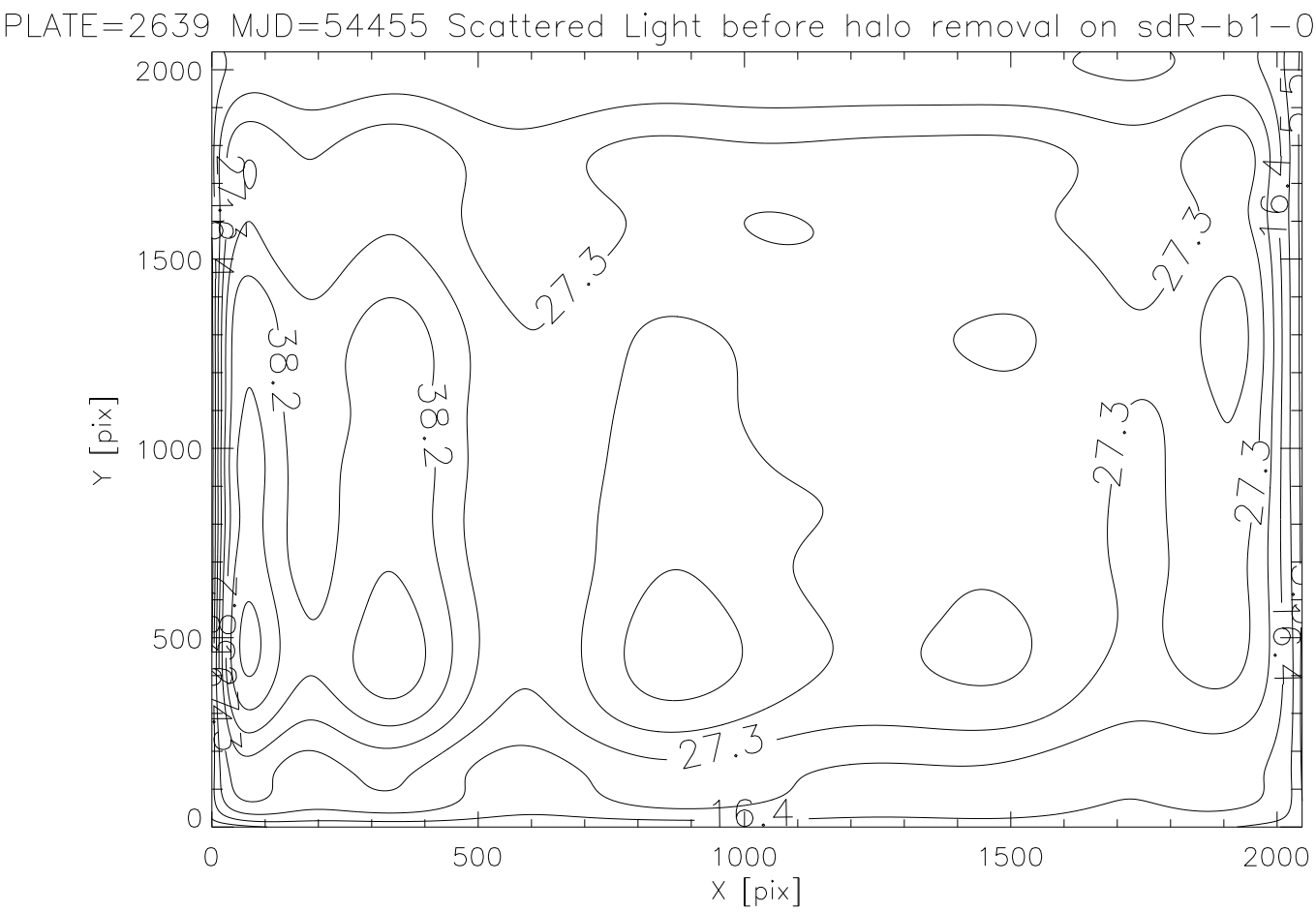

PLATE=2639 MJD=54455 sdR-b1-00048202.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

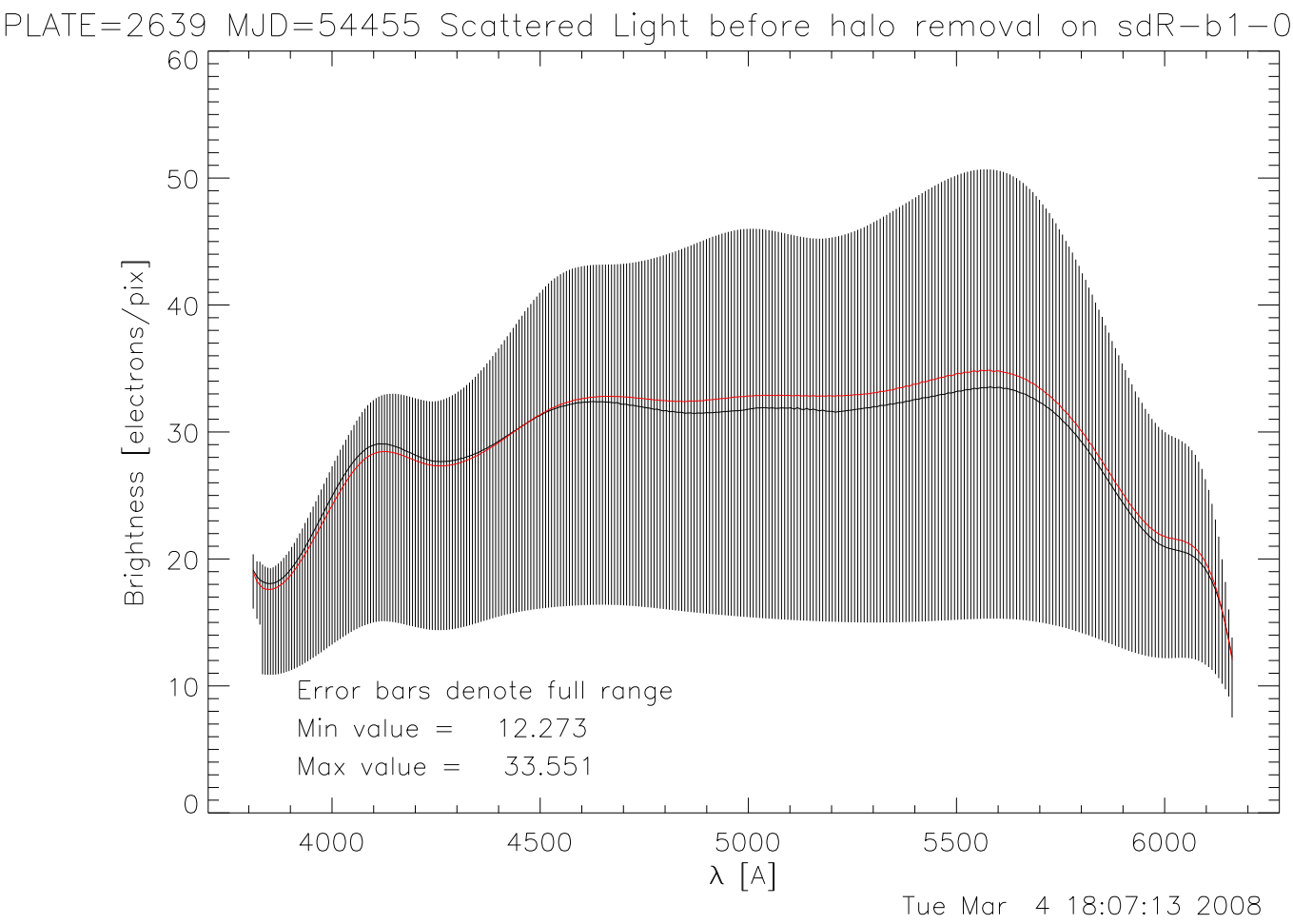

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048202.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

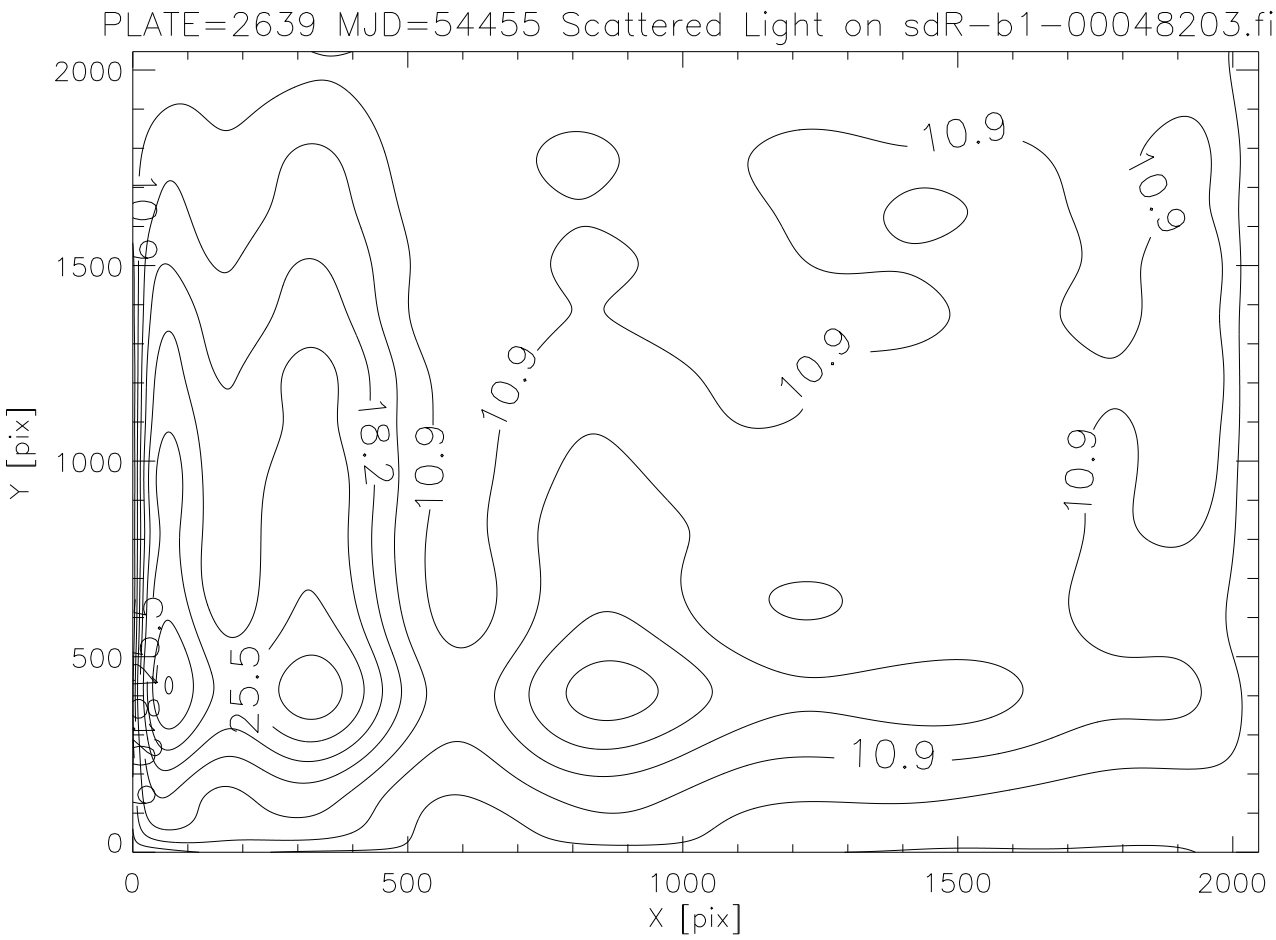

PLATE=2639 MJD=54455 sdR-b1-00048202.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 32.91 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

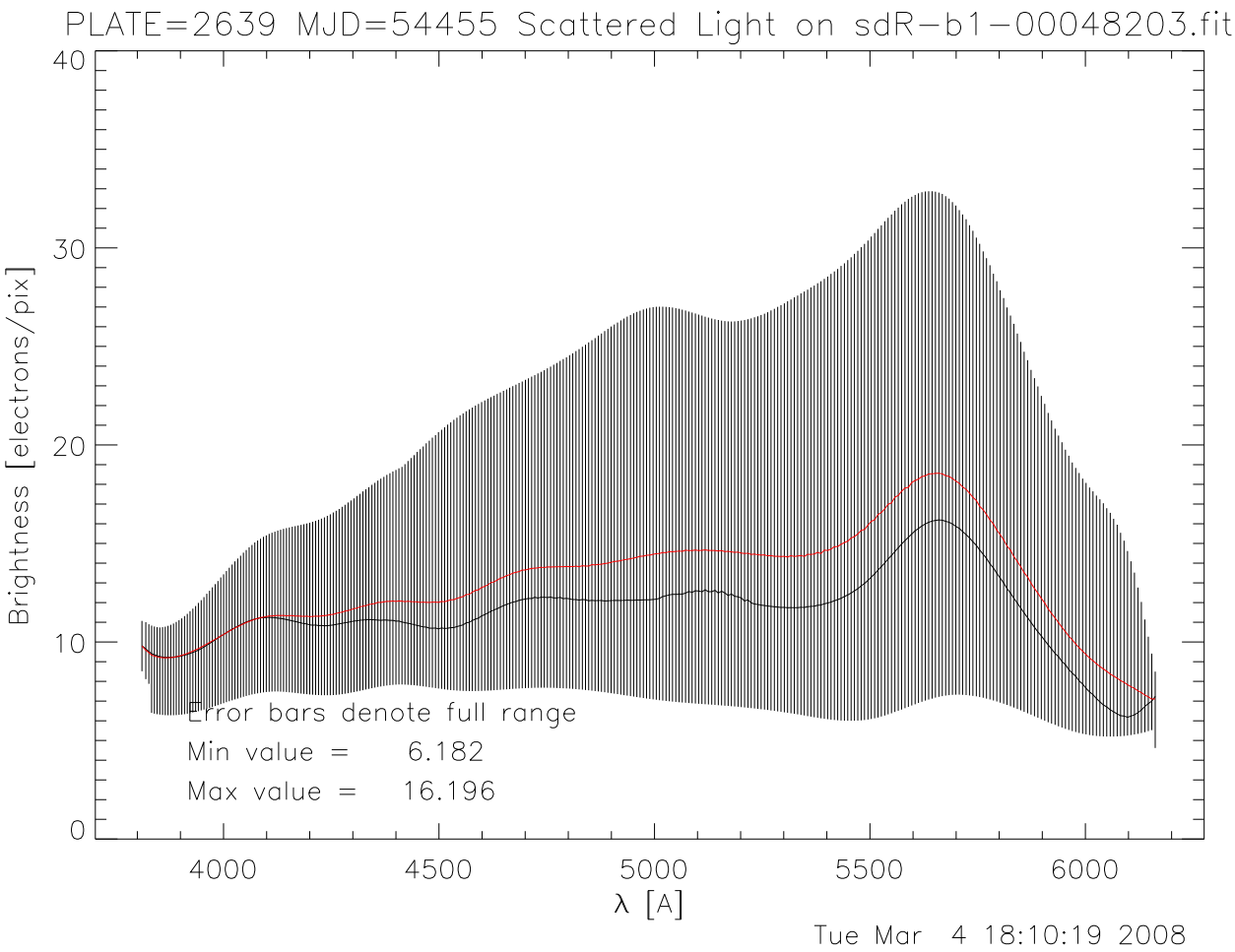

PLATE=2639 MJD=54455 sdR-b1-00048202.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.11 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

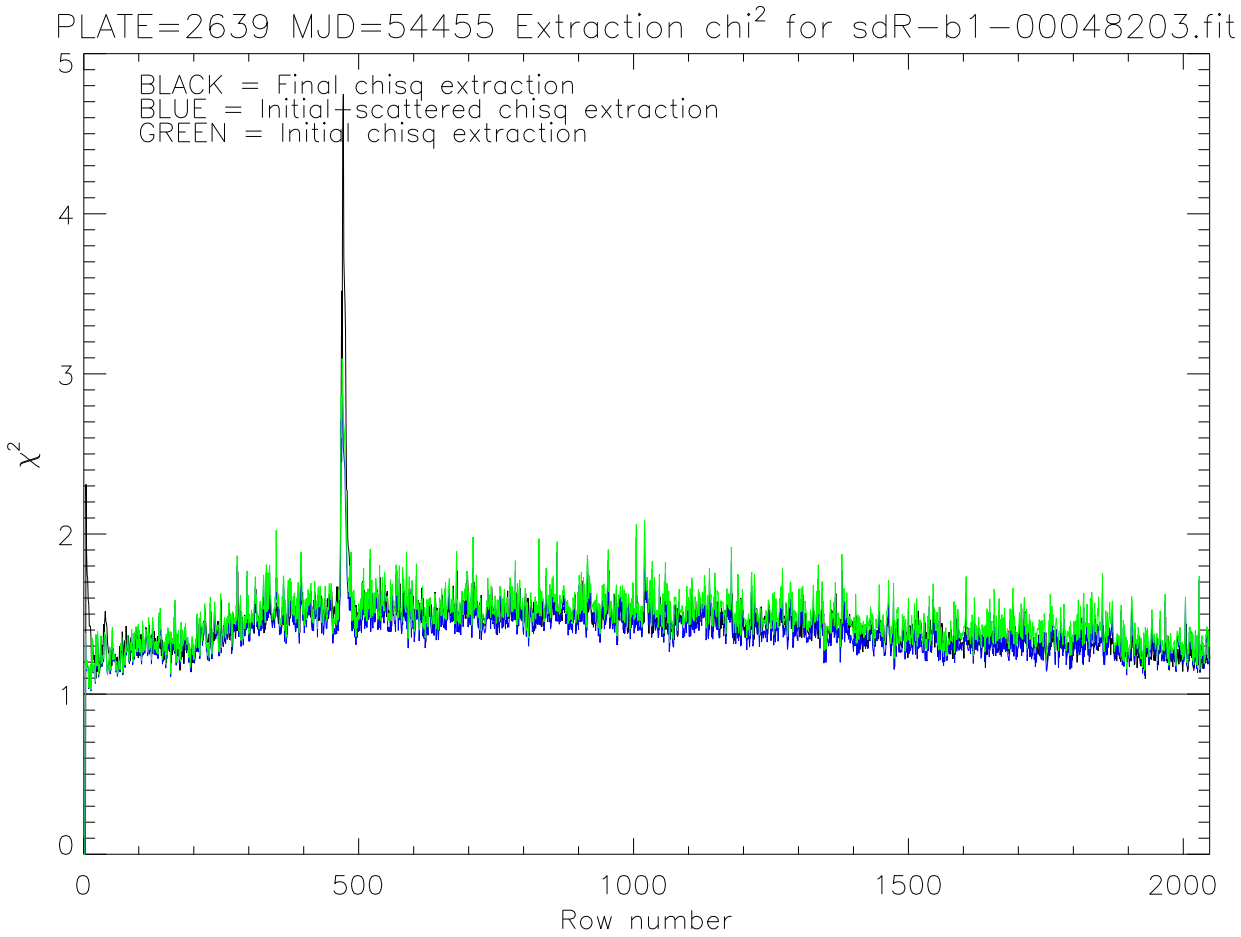

PLATE=2639 MJD=54455 Fiber-Flats for sdR-b1-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.154
Max value = 1.211
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:06:23 2008

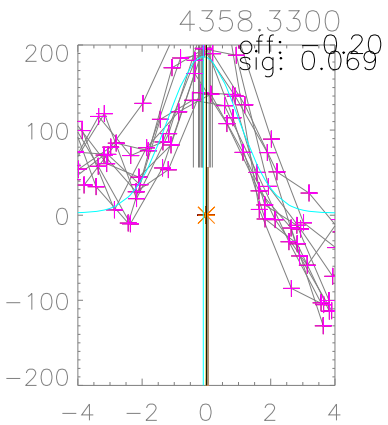

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b1−00048203.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
38.2
27.3
16.4

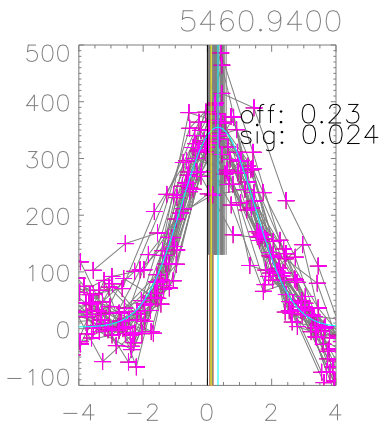

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b1−00048203.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 12.273
Max value = 33.551
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:07:13 2008

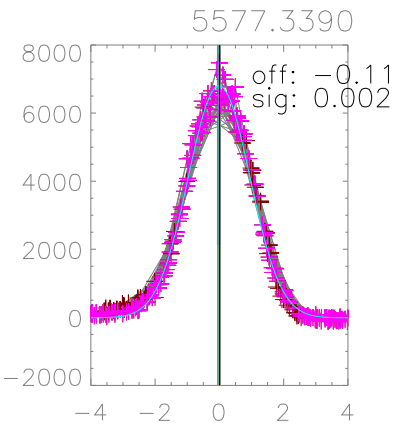

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048203.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
18.2
25.5

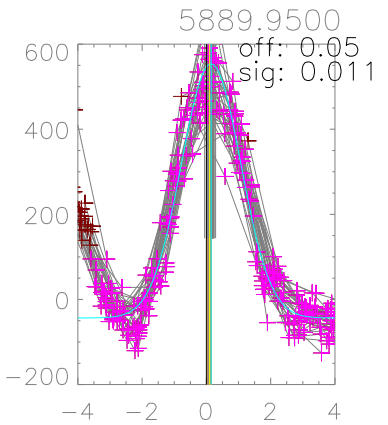

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048203.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.182
Max value = 16.196
Tue Mar 4 18:10:19 2008

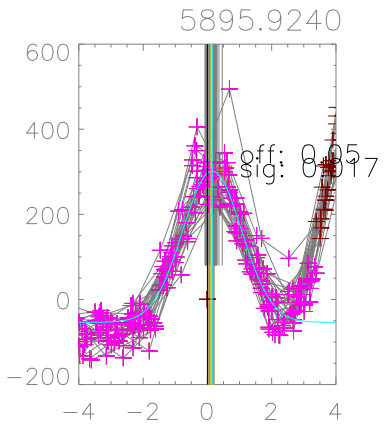

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b1-00048203.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

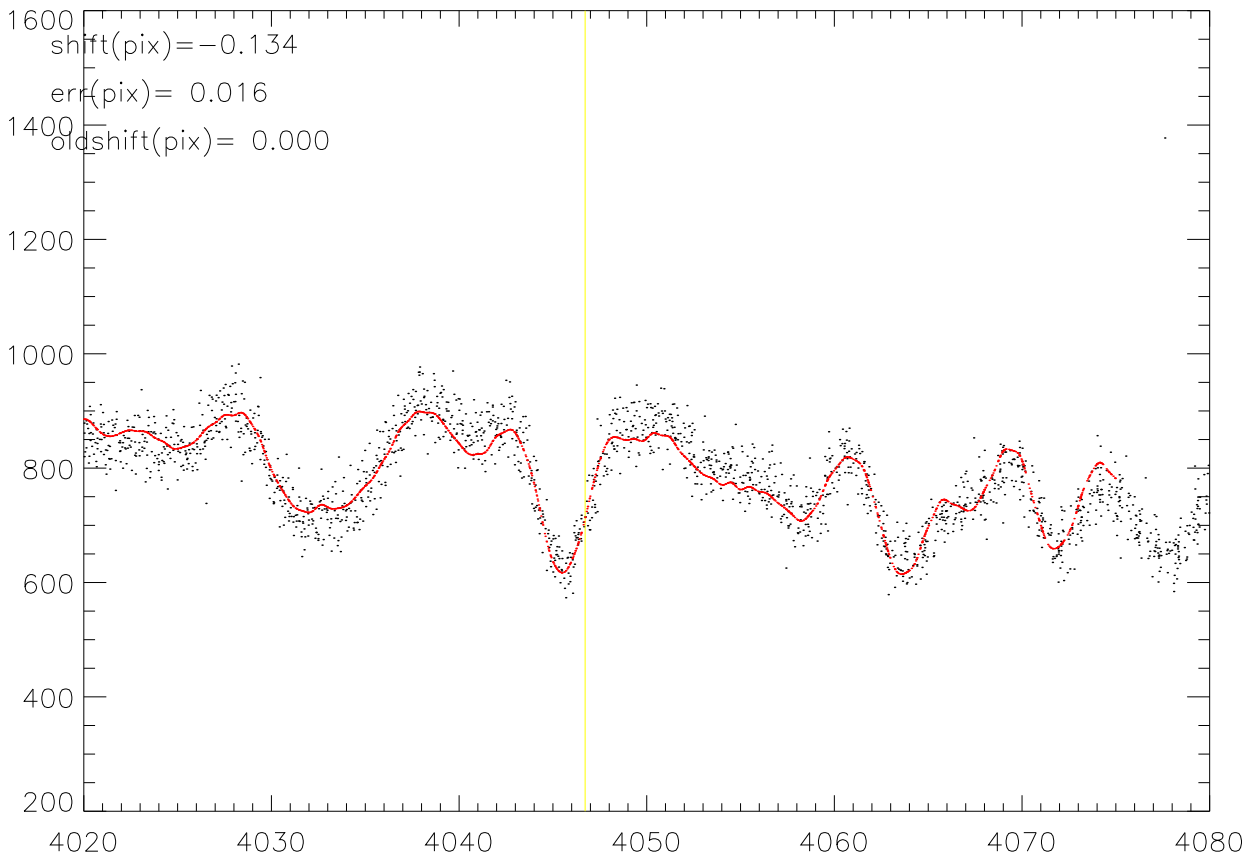

4358.3300
off: −0.20
sig: 0.069

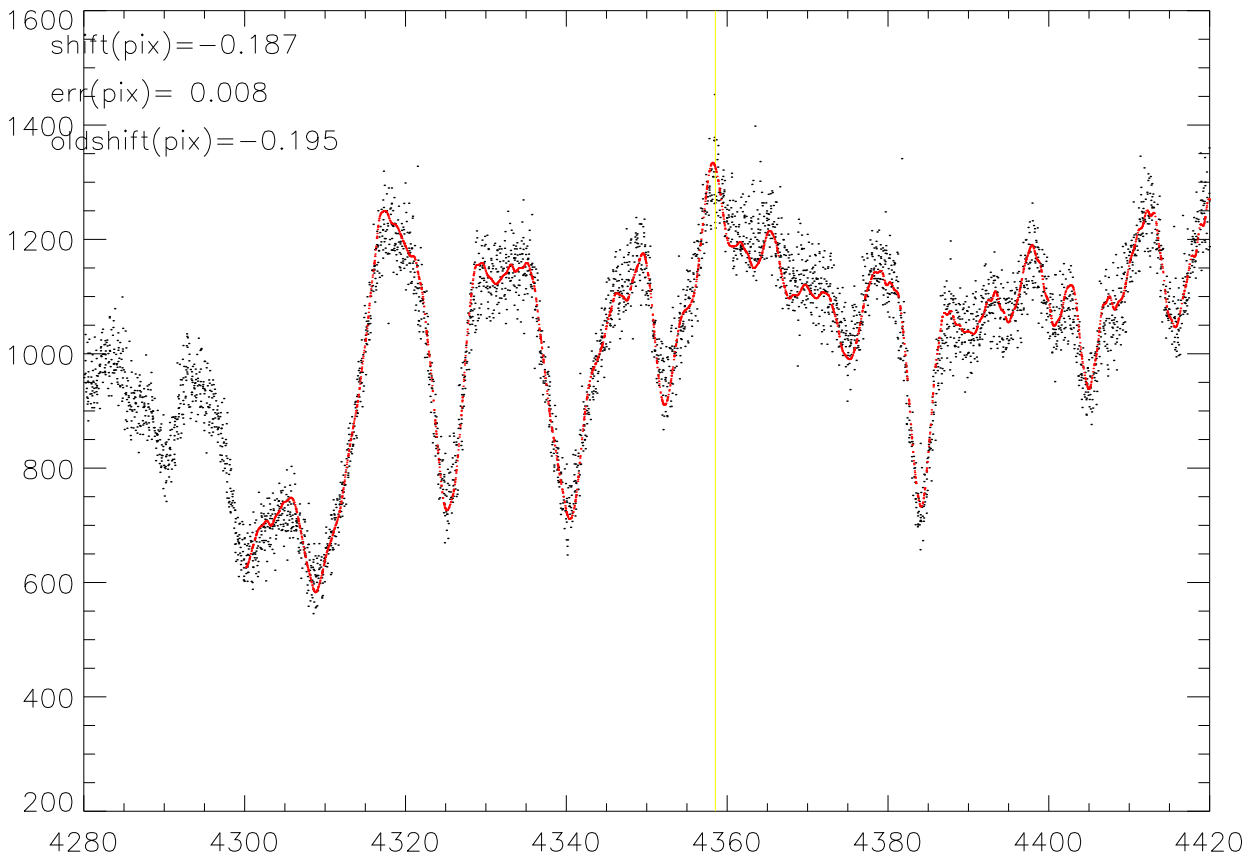

5460.9400
off: 0.23
sig: 0.024

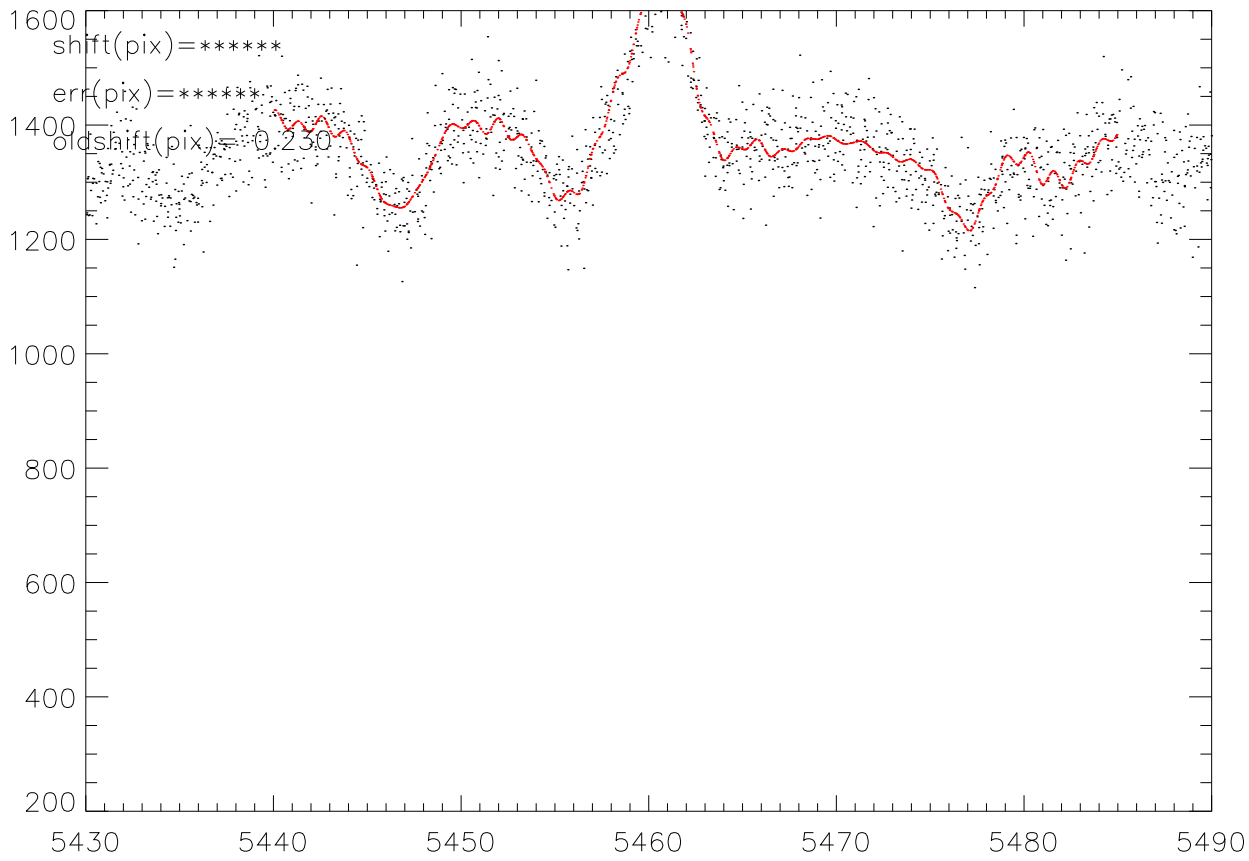

5577.3390
off: −0.11
sig: 0.002

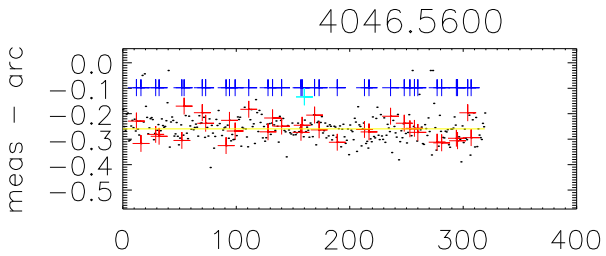

5889.9500
off: 0.05
sig: 0.011

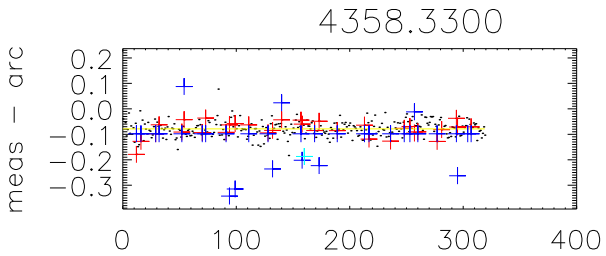

5895.9240
off: 0.05
sig: 0.017

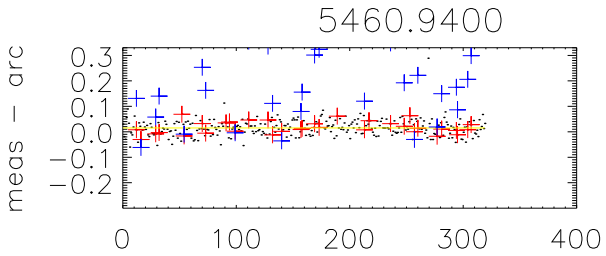

shift(pix)=−0.134
err(pix)= 0.016
oldshift(pix)= 0.000
1600
1400
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

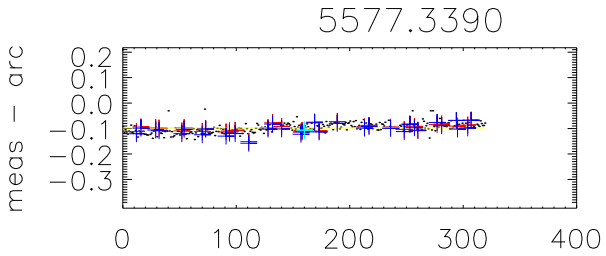

shift(pix)=−0.187
err(pix)= 0.008
oldshift(pix)=−0.195
1600
1400
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

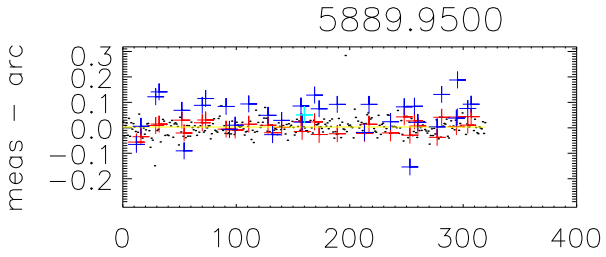

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.230
1600
1400
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

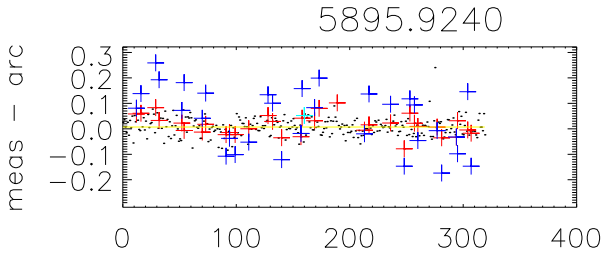

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

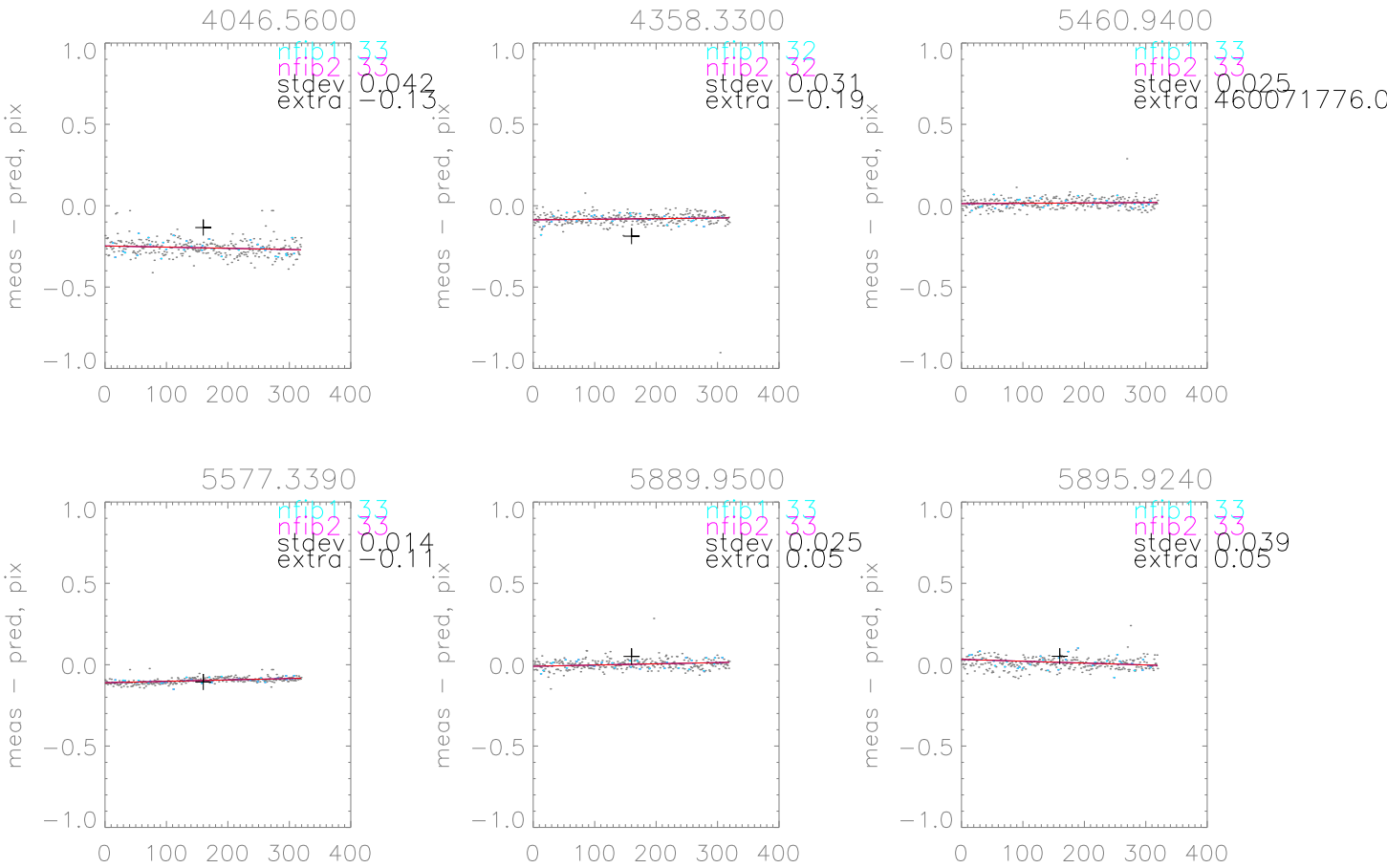

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

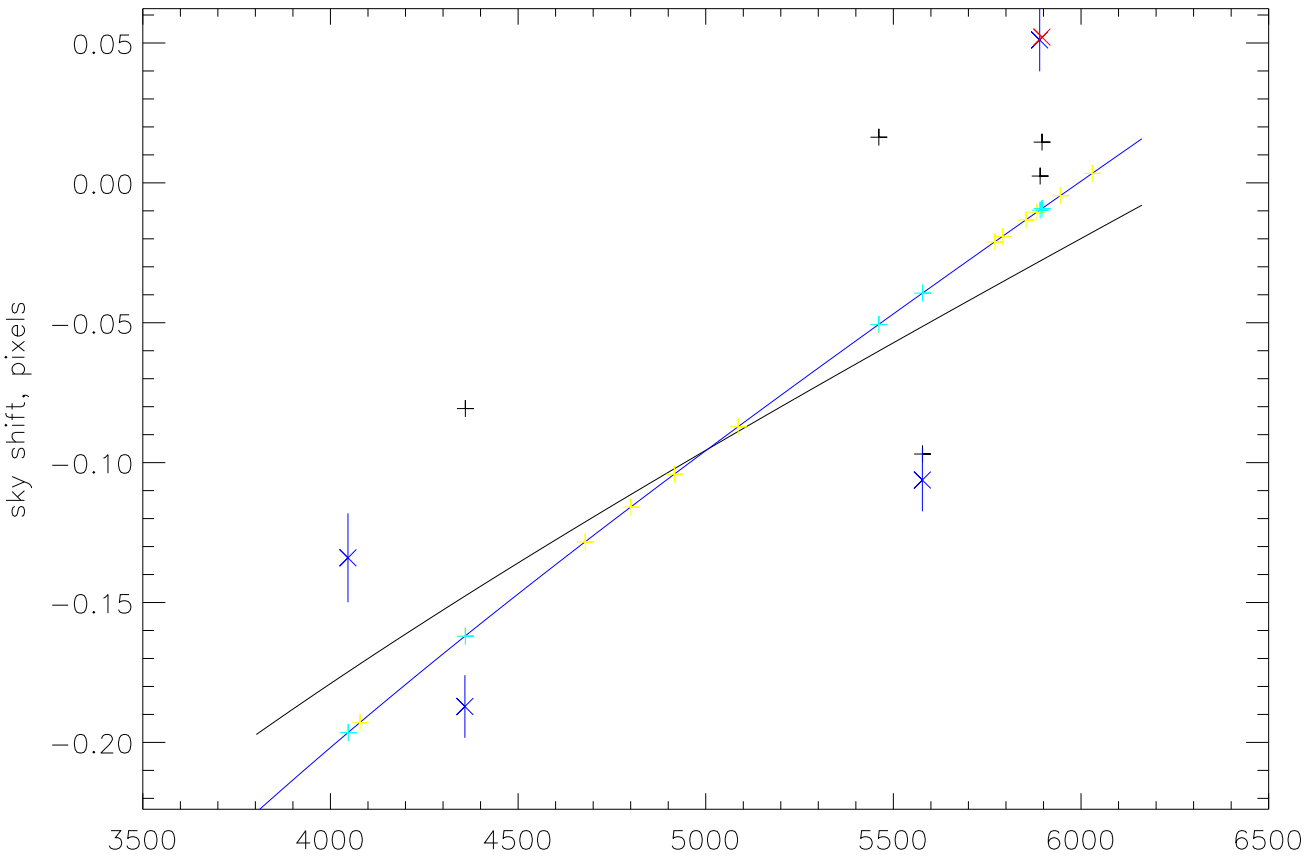

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

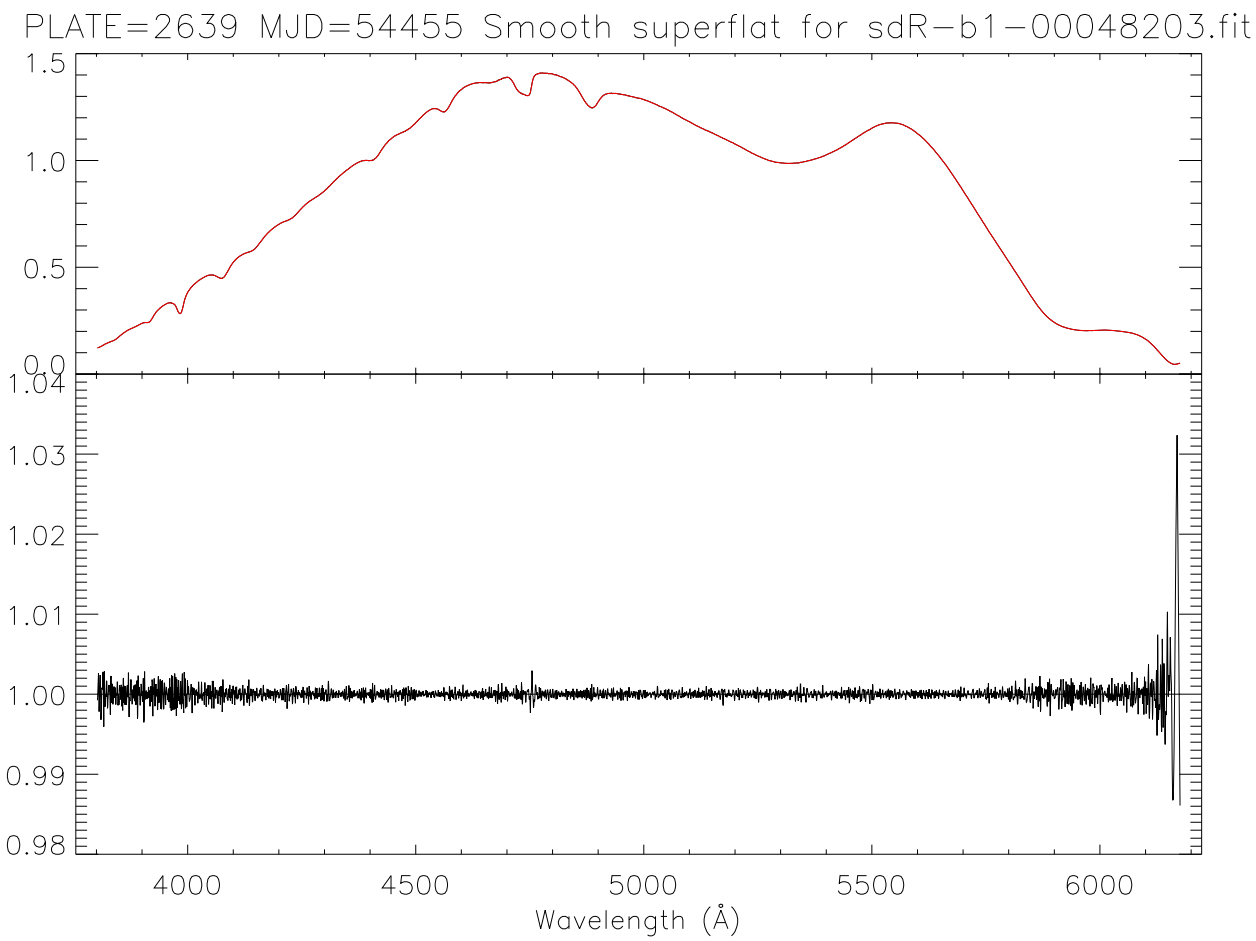

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

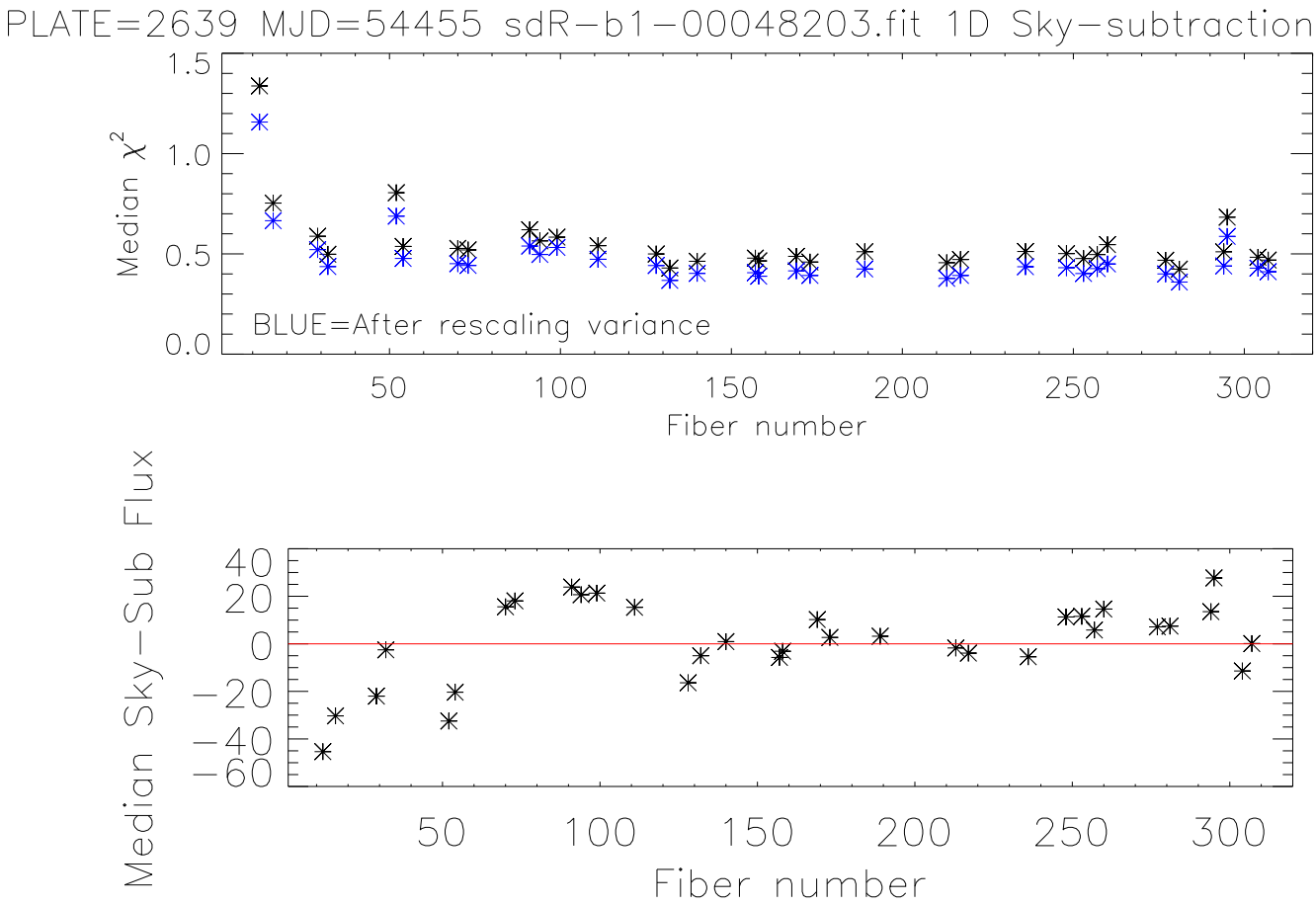

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

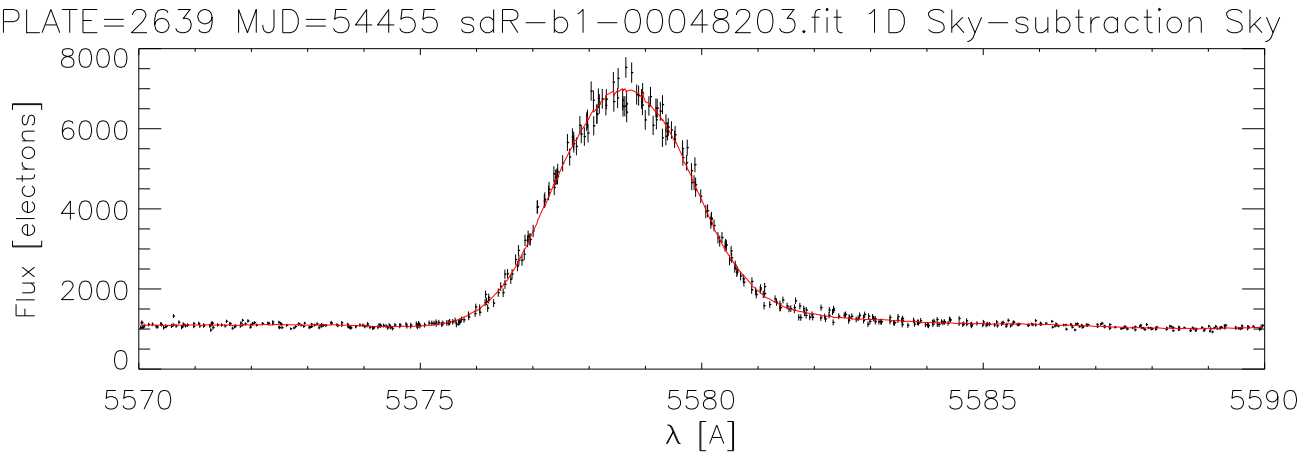

4046.5600
nfib1 33
nfib2 33
stdev 0.042
extra −0.13
4358.3300
nfib1 32
nfib2 32
stdev 0.031
extra −0.19
5460.9400
nfib1 33
nfib2 33
stdev 0.025
extra 460071776.0
5577.3390
nfib1 33
nfib2 33
stdev 0.014
extra −0.11
5889.9500
nfib1 33
nfib2 33
stdev 0.025
extra 0.05
5895.9240
nfib1 33
nfib2 33
stdev 0.039
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

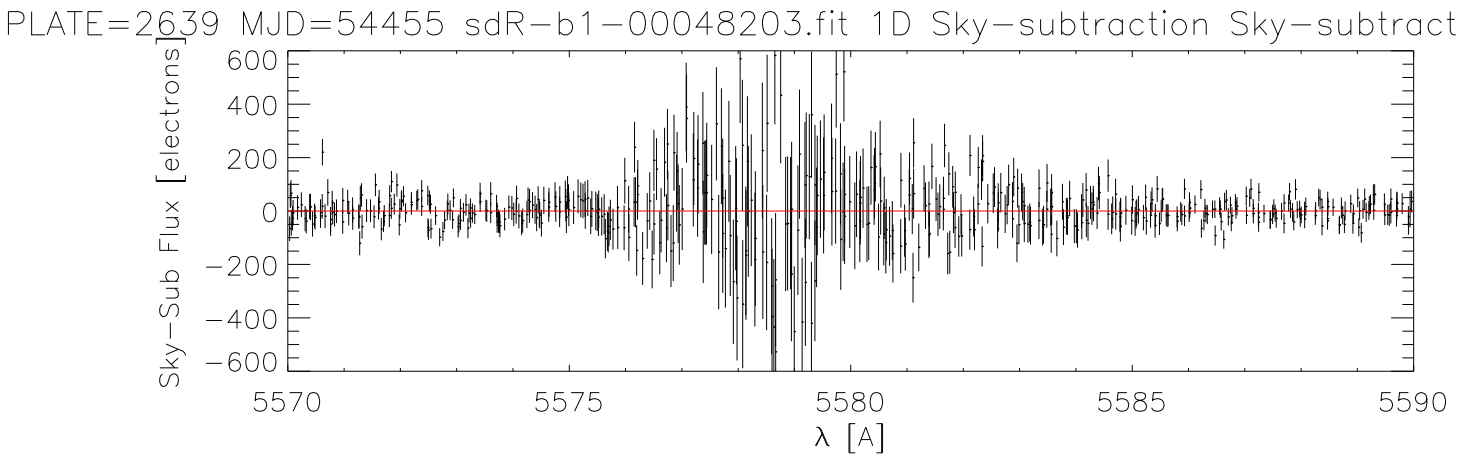

0.05
0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

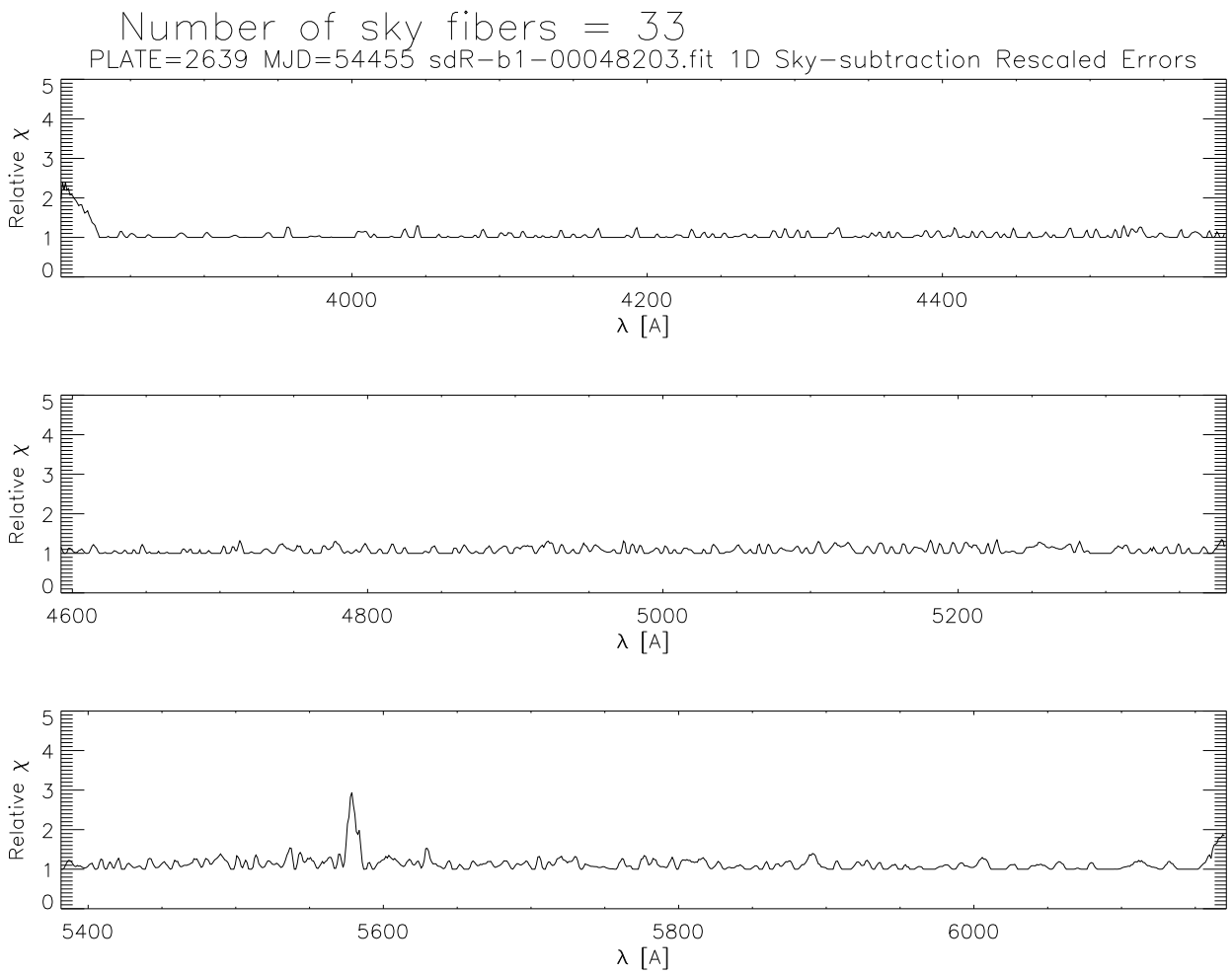
es= −0.0000

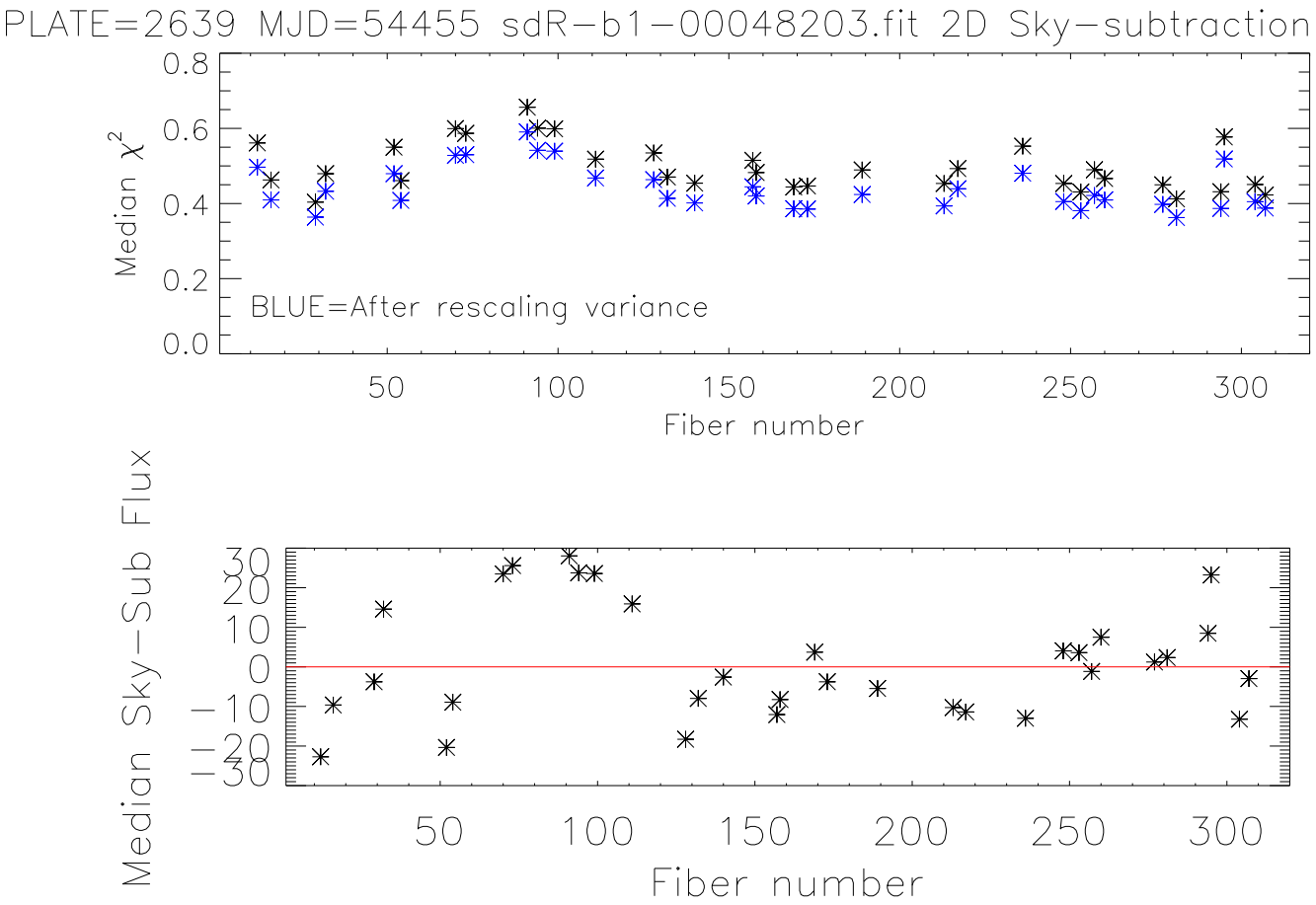

PLATE=2639 MJD=54455 Smooth superflat for sdR−b1−00048203.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

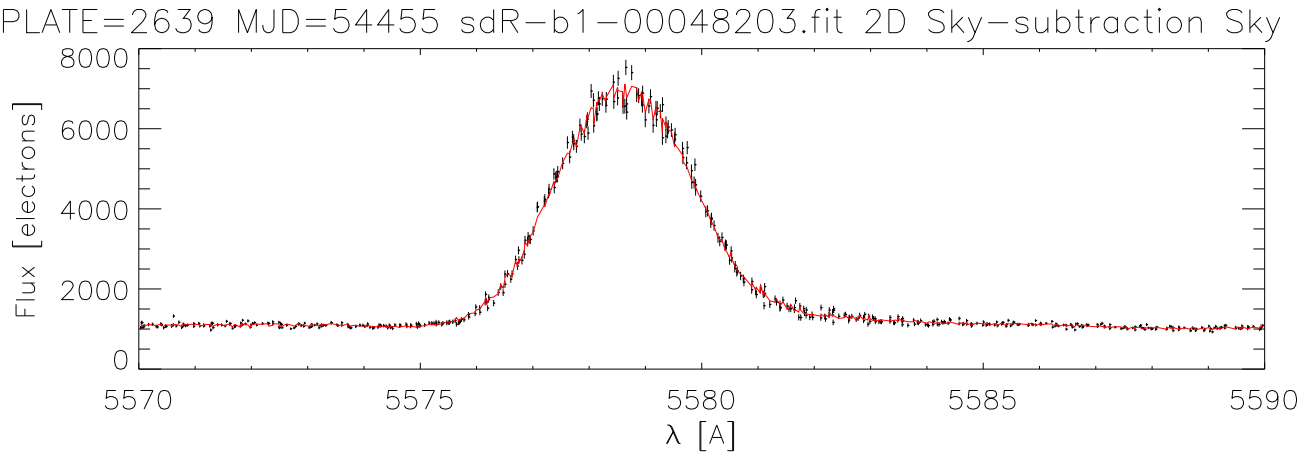

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number

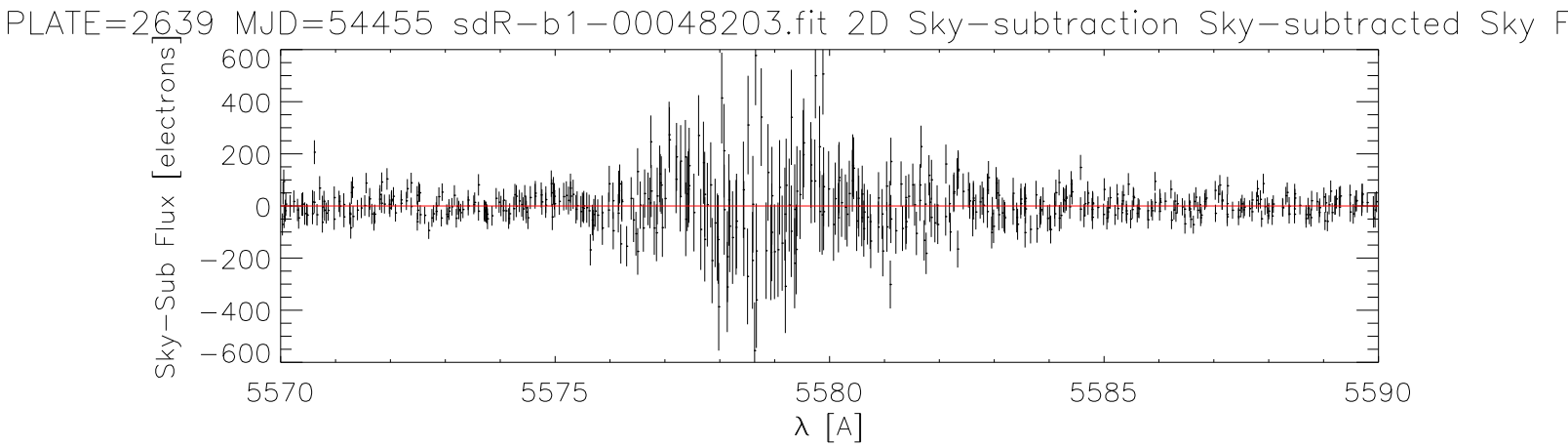

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

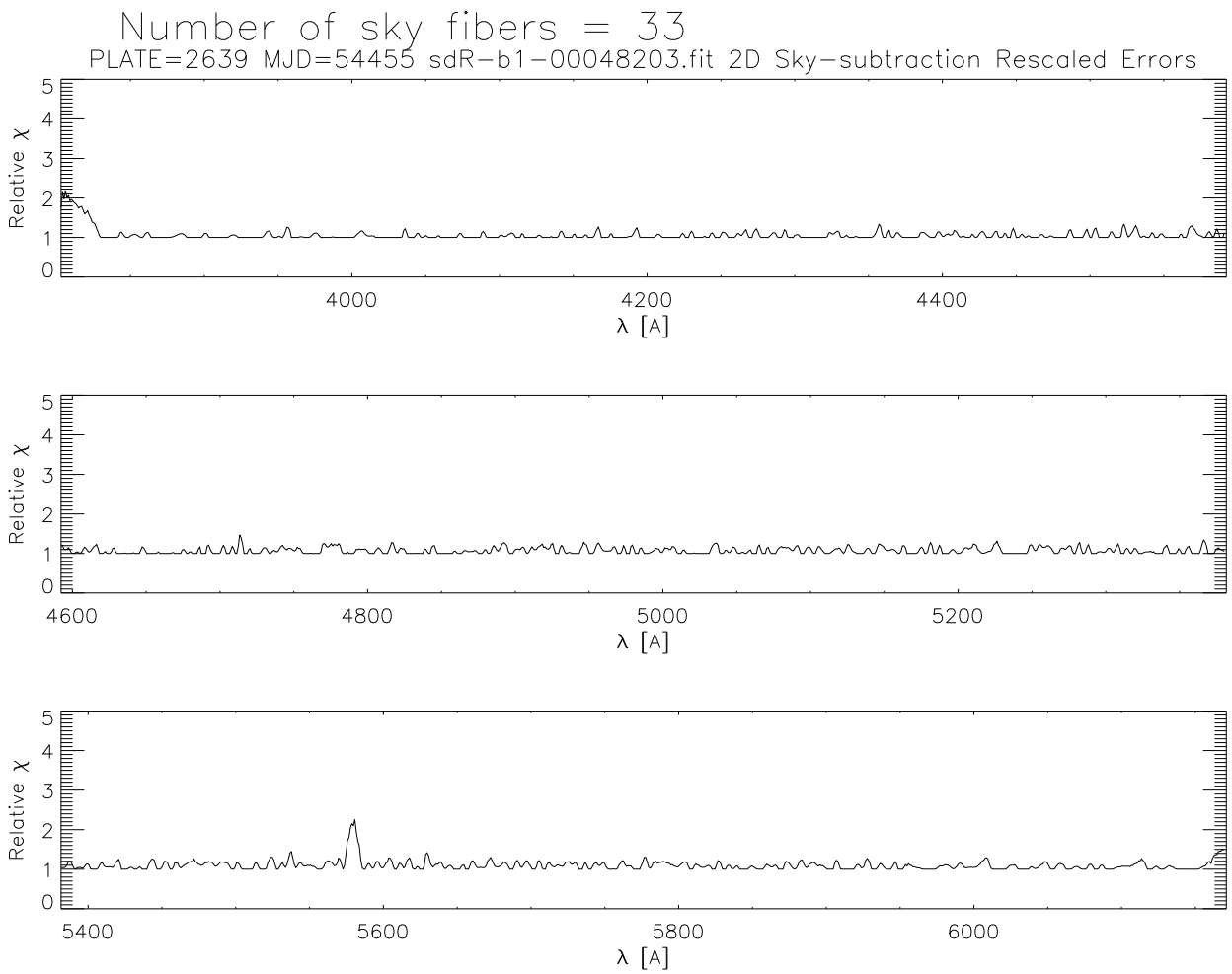

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

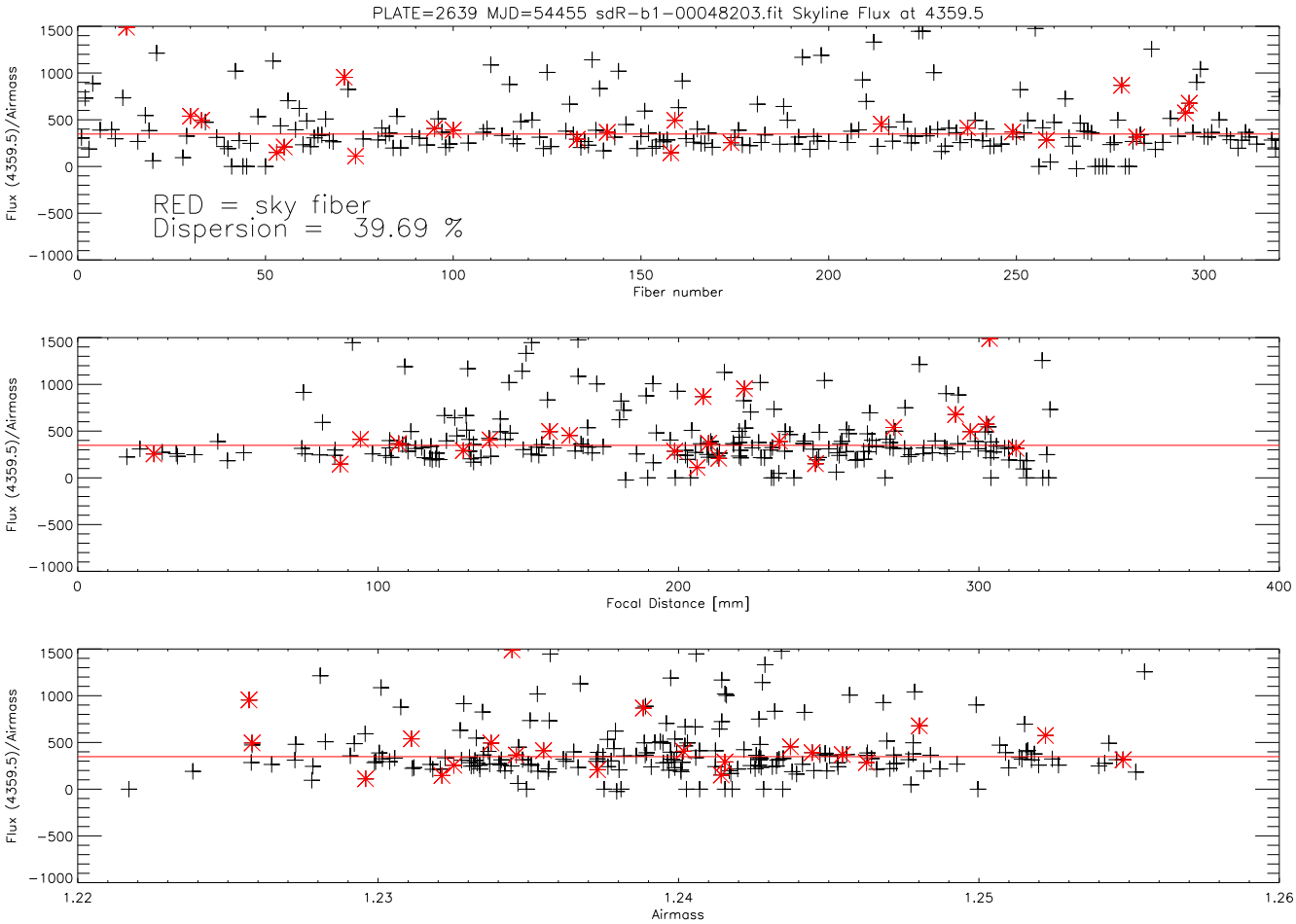

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048203.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

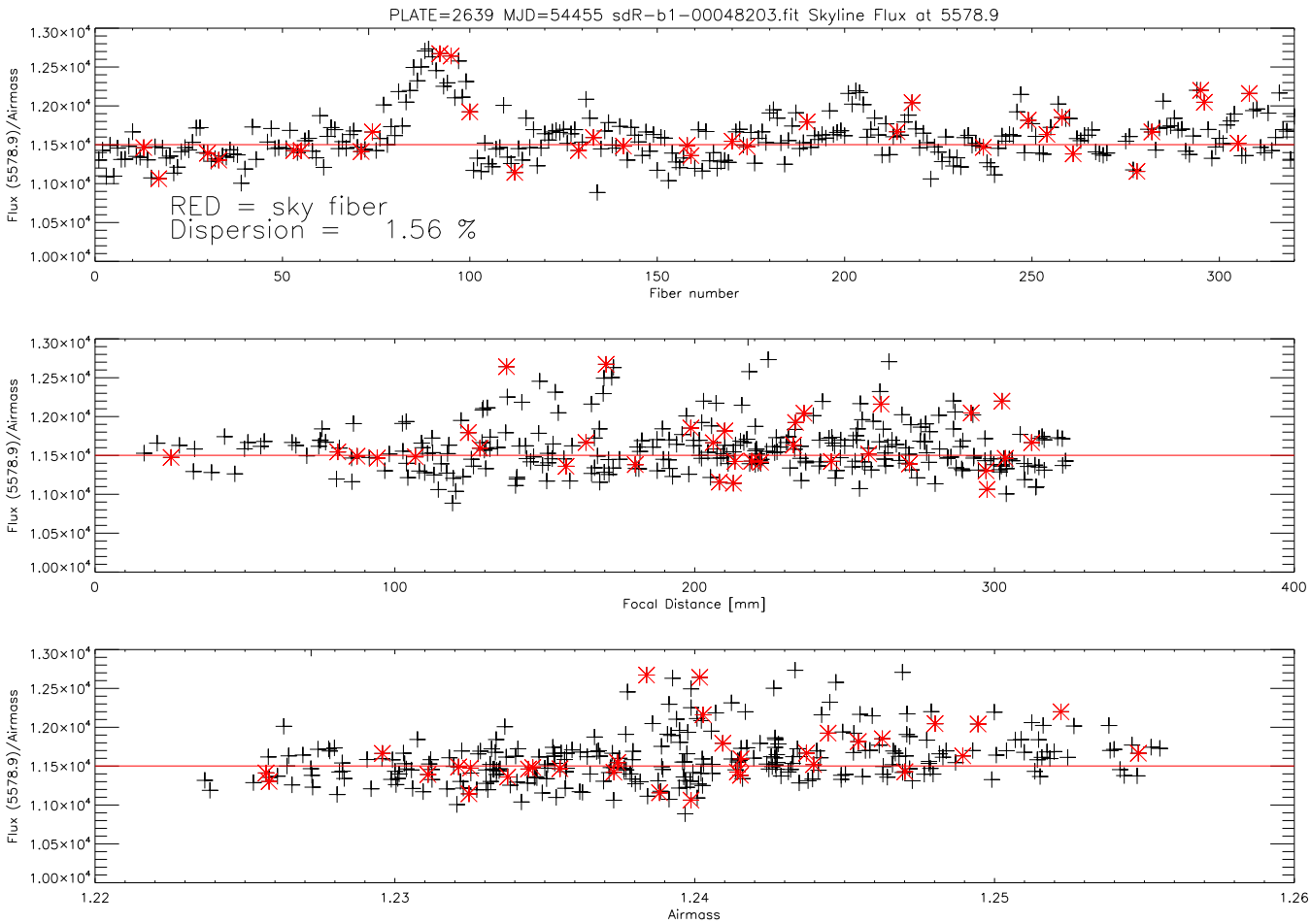

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

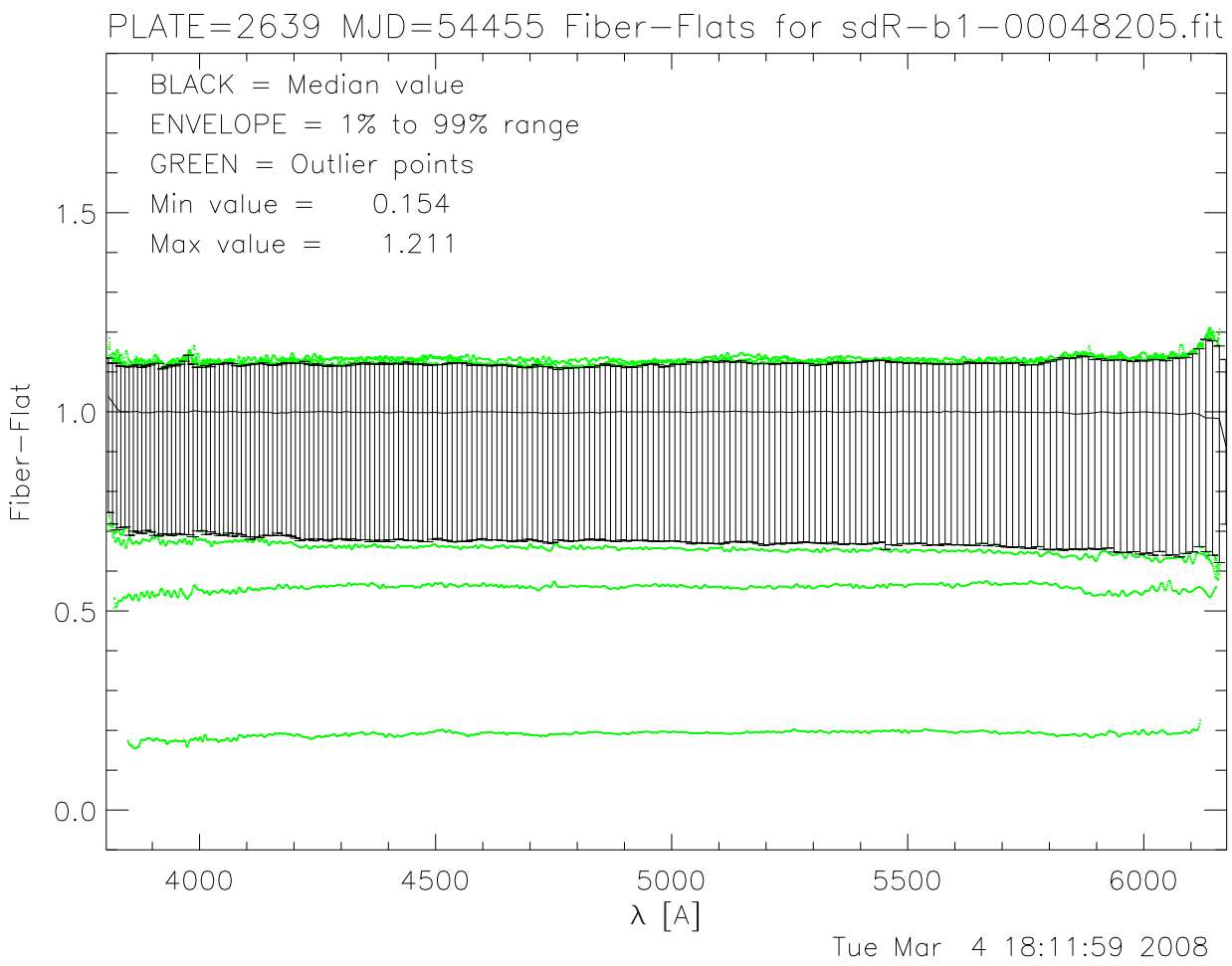

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

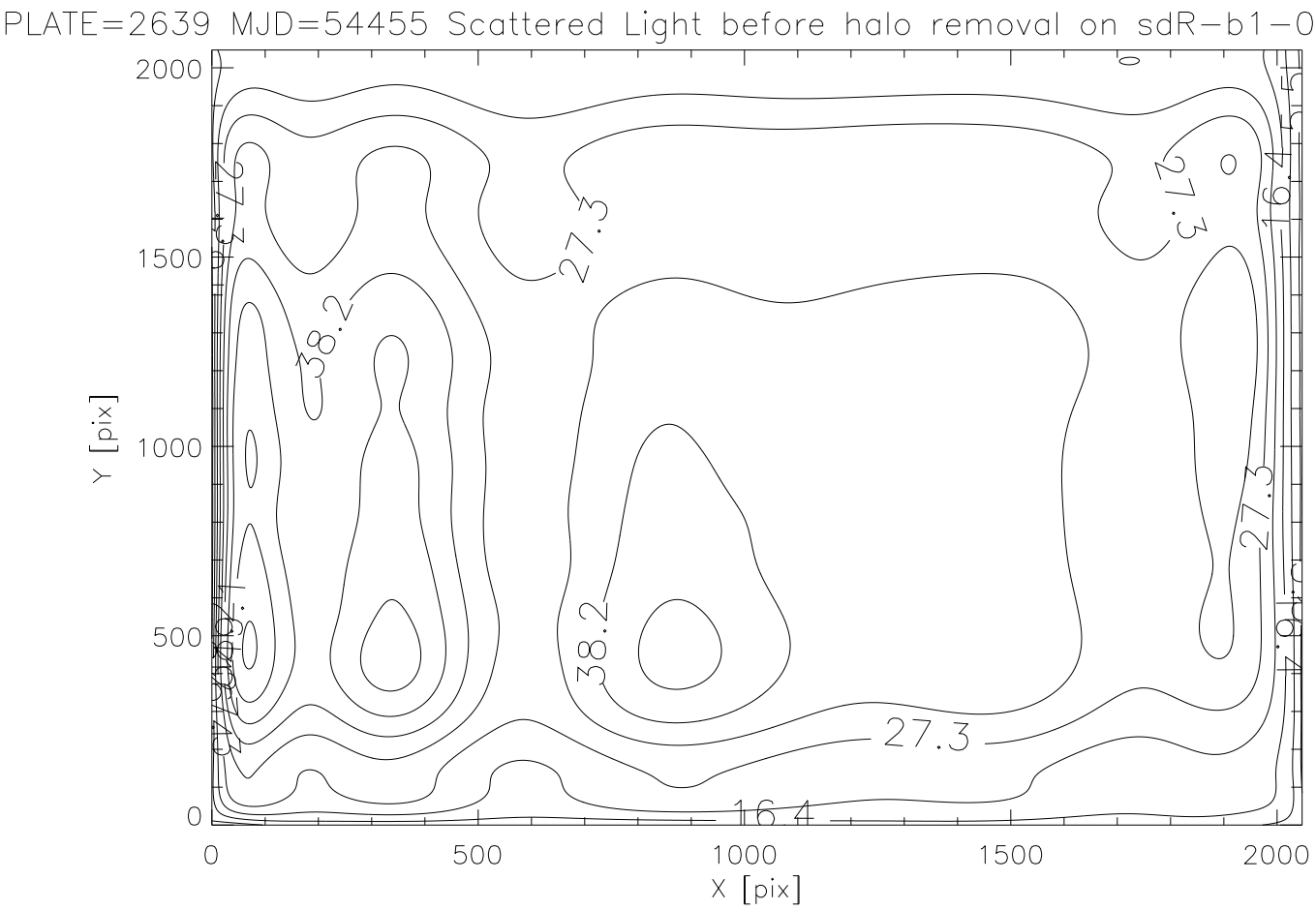

PLATE=2639 MJD=54455 sdR-b1-00048203.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

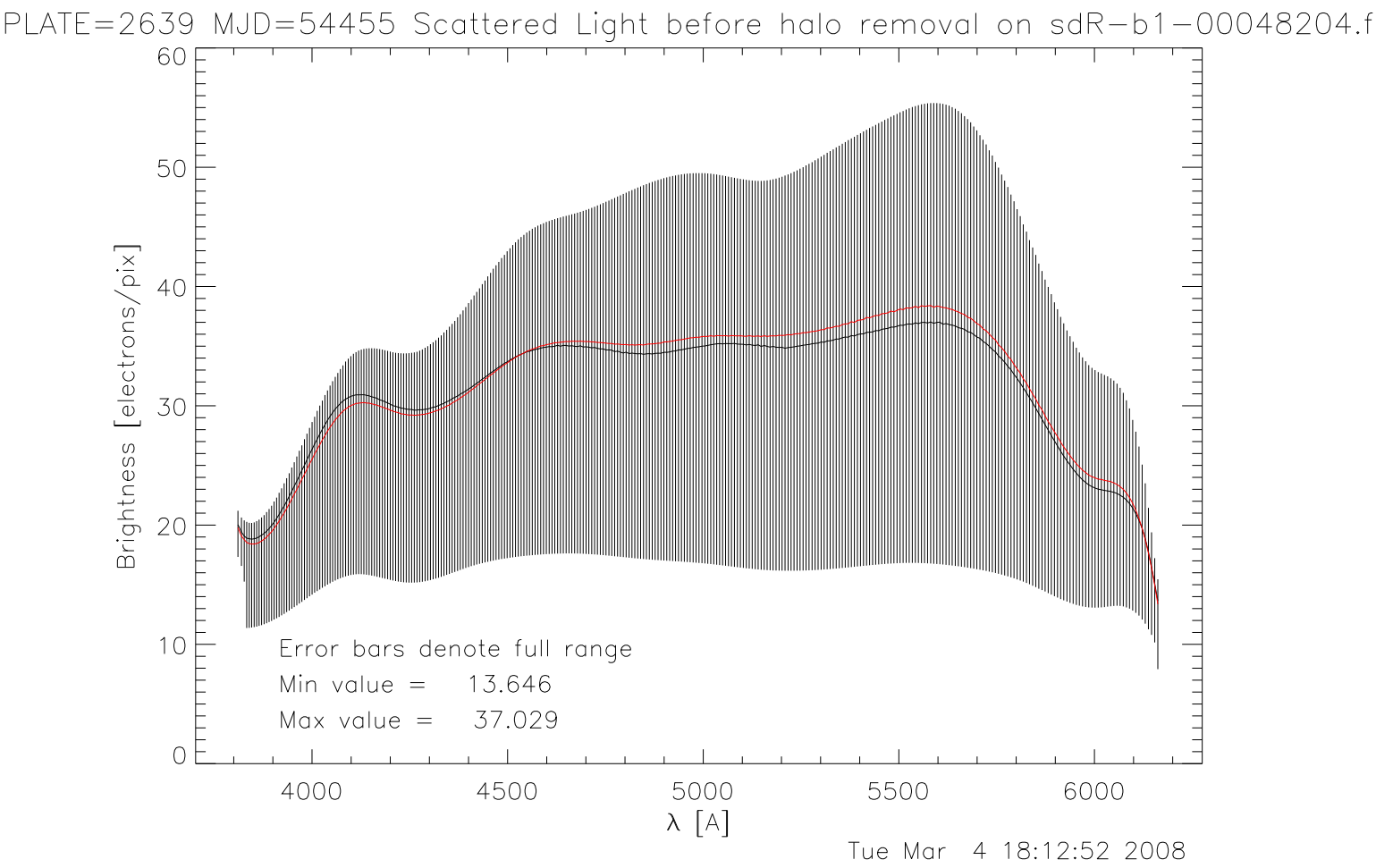

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048203.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

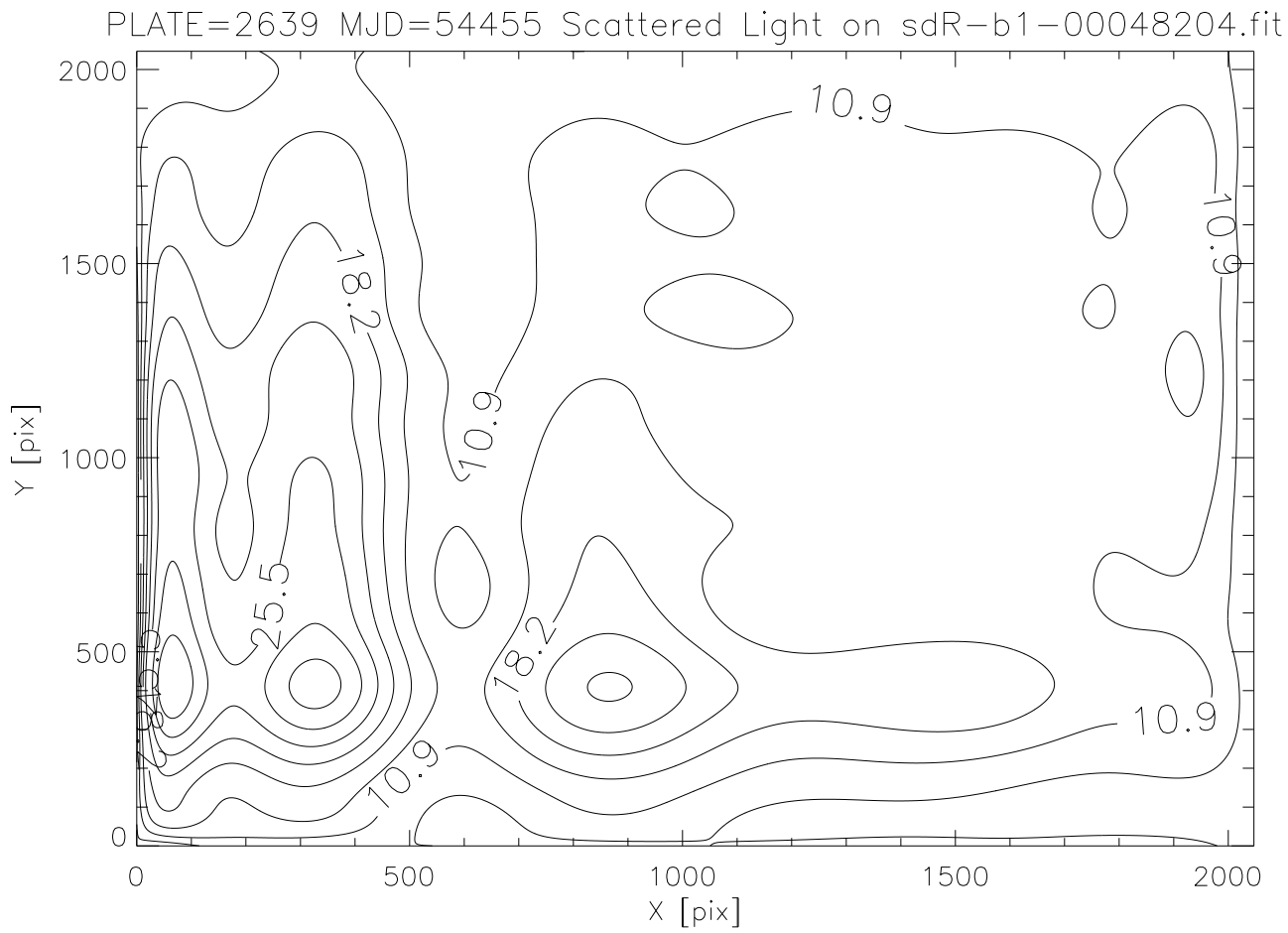

PLATE=2639 MJD=54455 sdR-b1-00048203.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 39.69 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

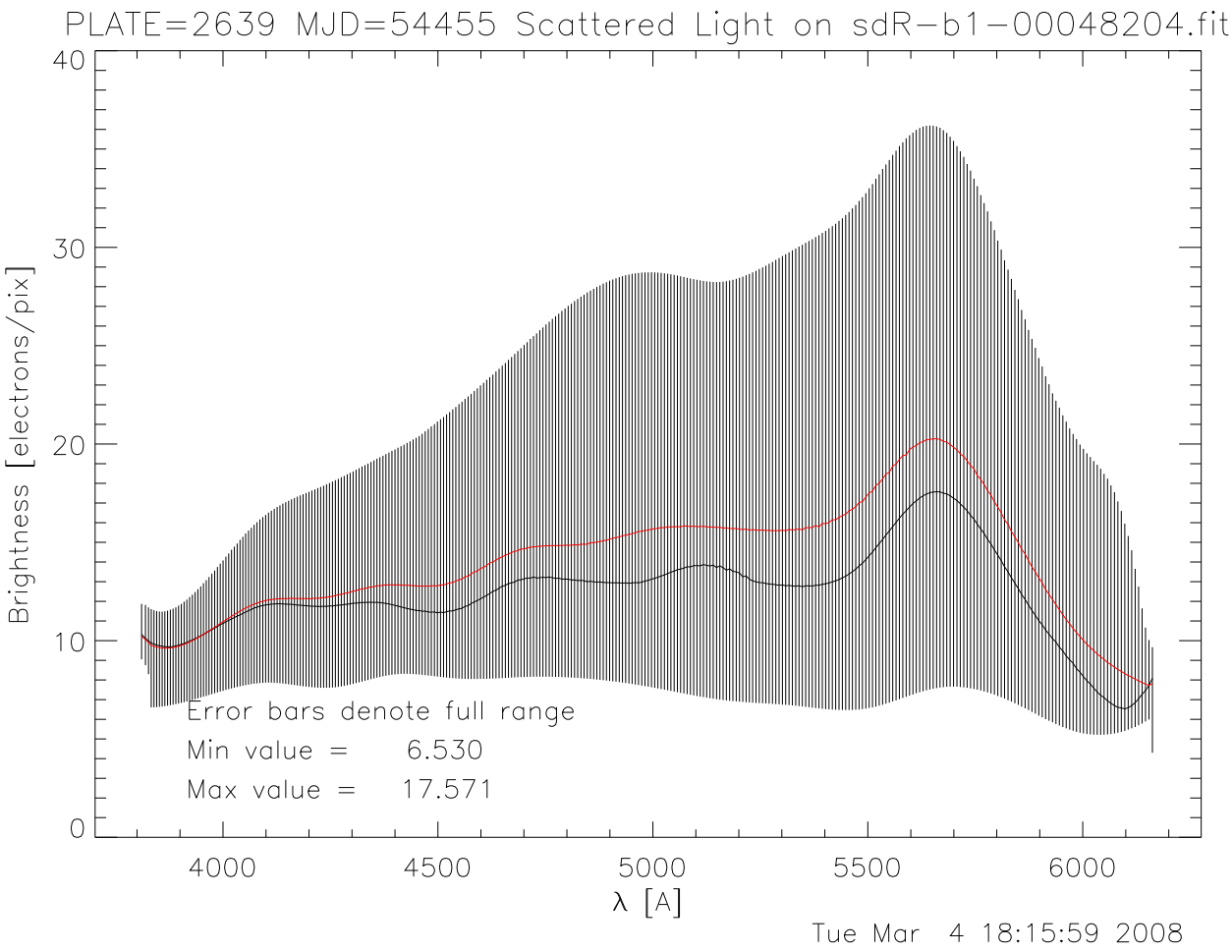

PLATE=2639 MJD=54455 sdR-b1-00048203.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.56 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

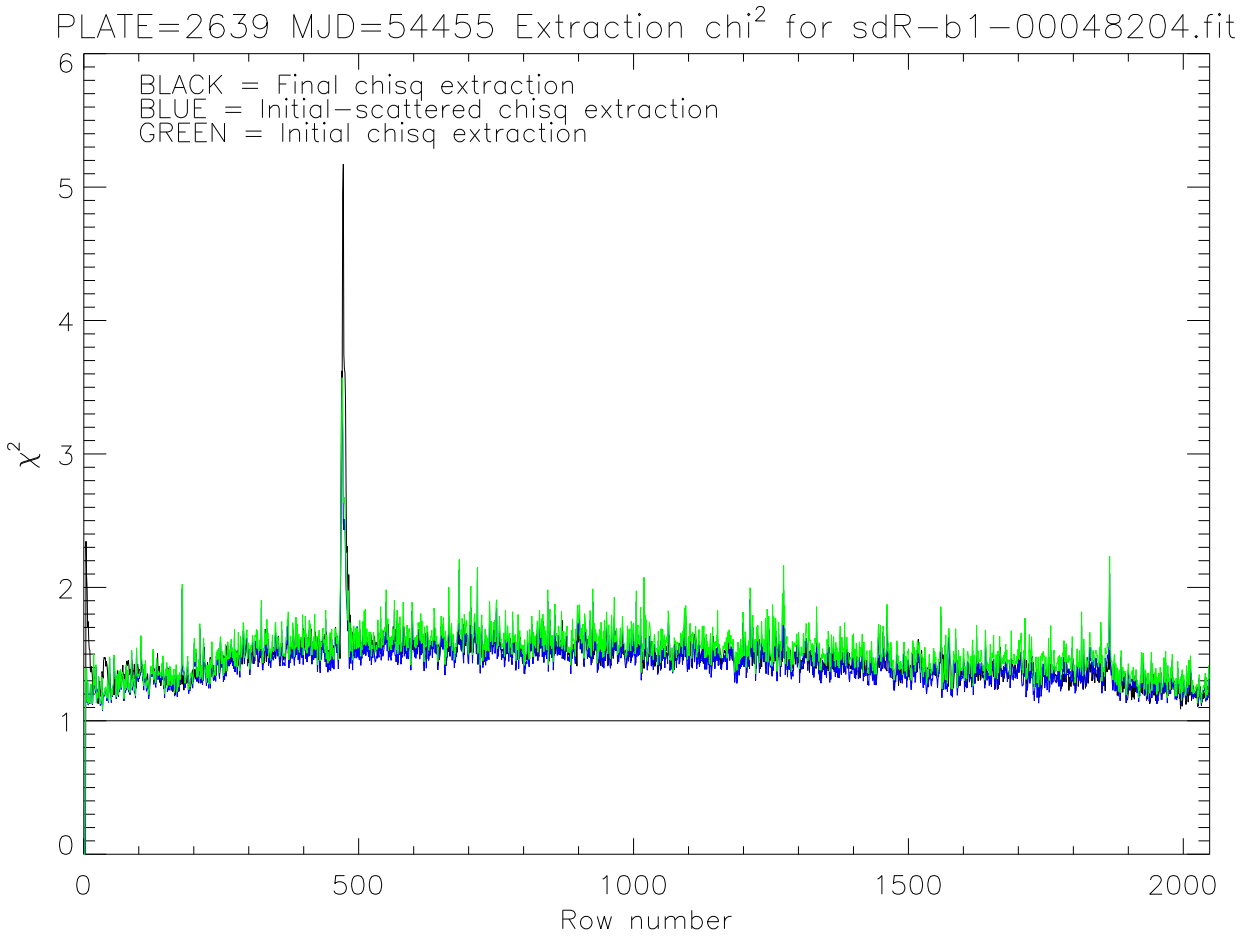

PLATE=2639 MJD=54455 Fiber-Flats for sdR-b1-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.154
Max value = 1.211
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:11:59 2008

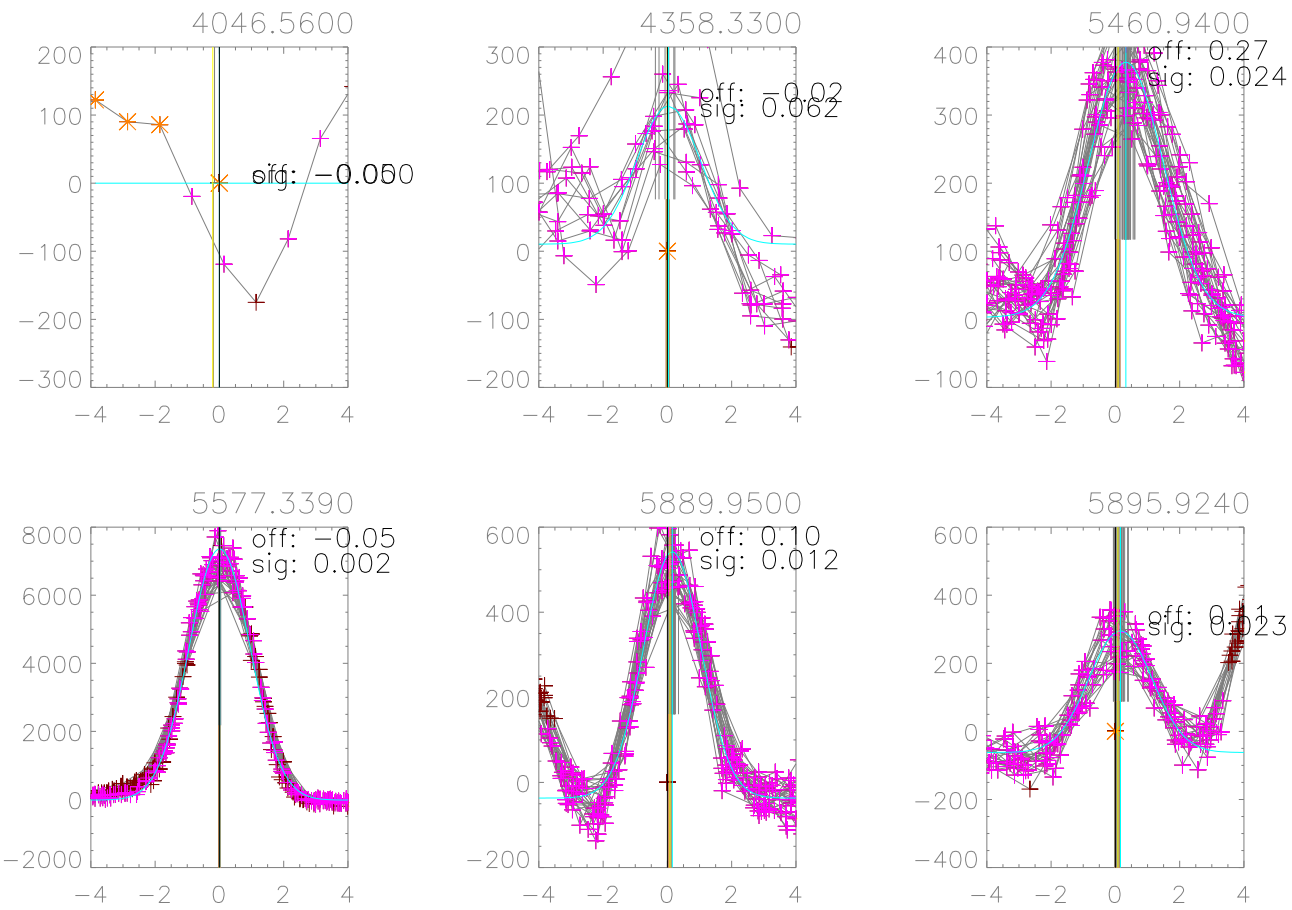

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b1−00048204.f
Y [pix]
X [pix]
0
500
1000
1500
2000
38.2
27.3
16.4

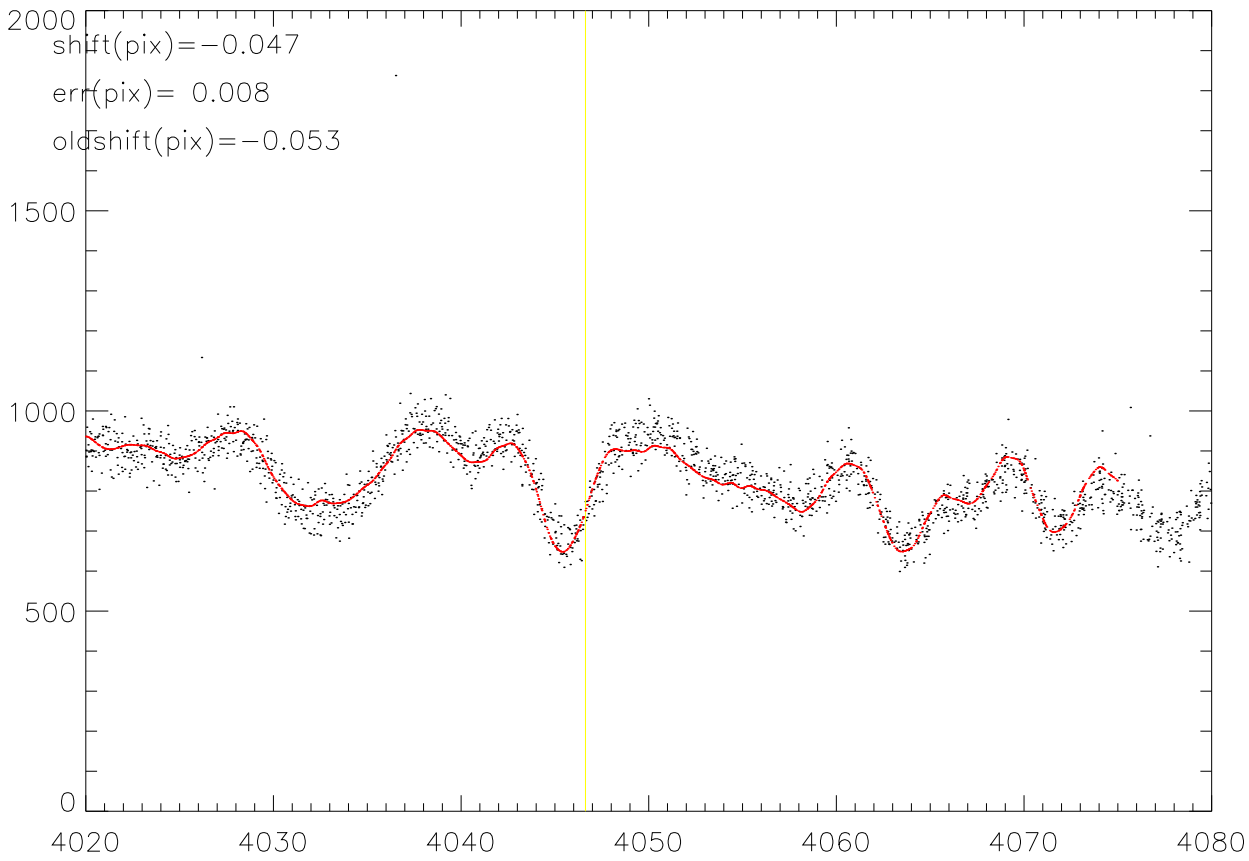

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-b1-00048204.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 13.646
Max value = 37.029
Tue Mar 4 18:12:52 2008

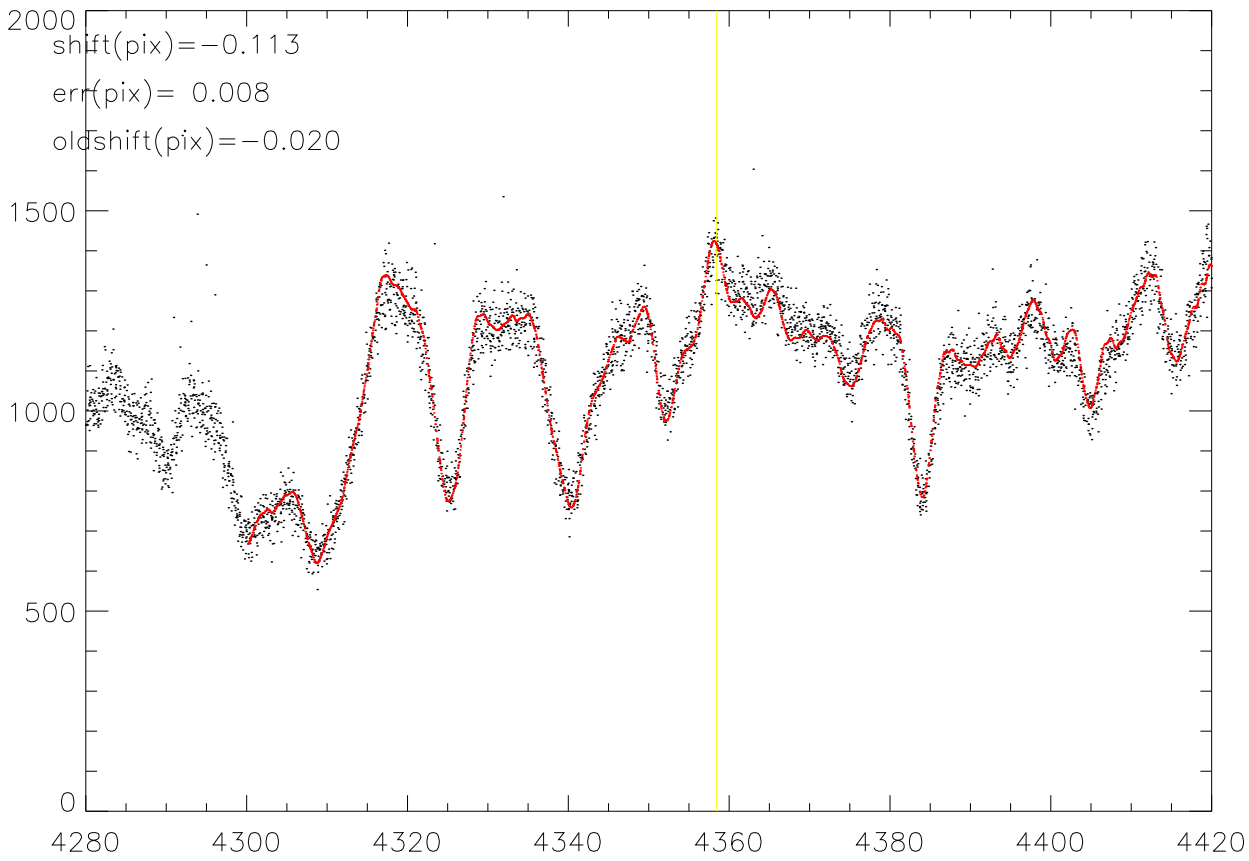

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048204.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
18.2
25.5

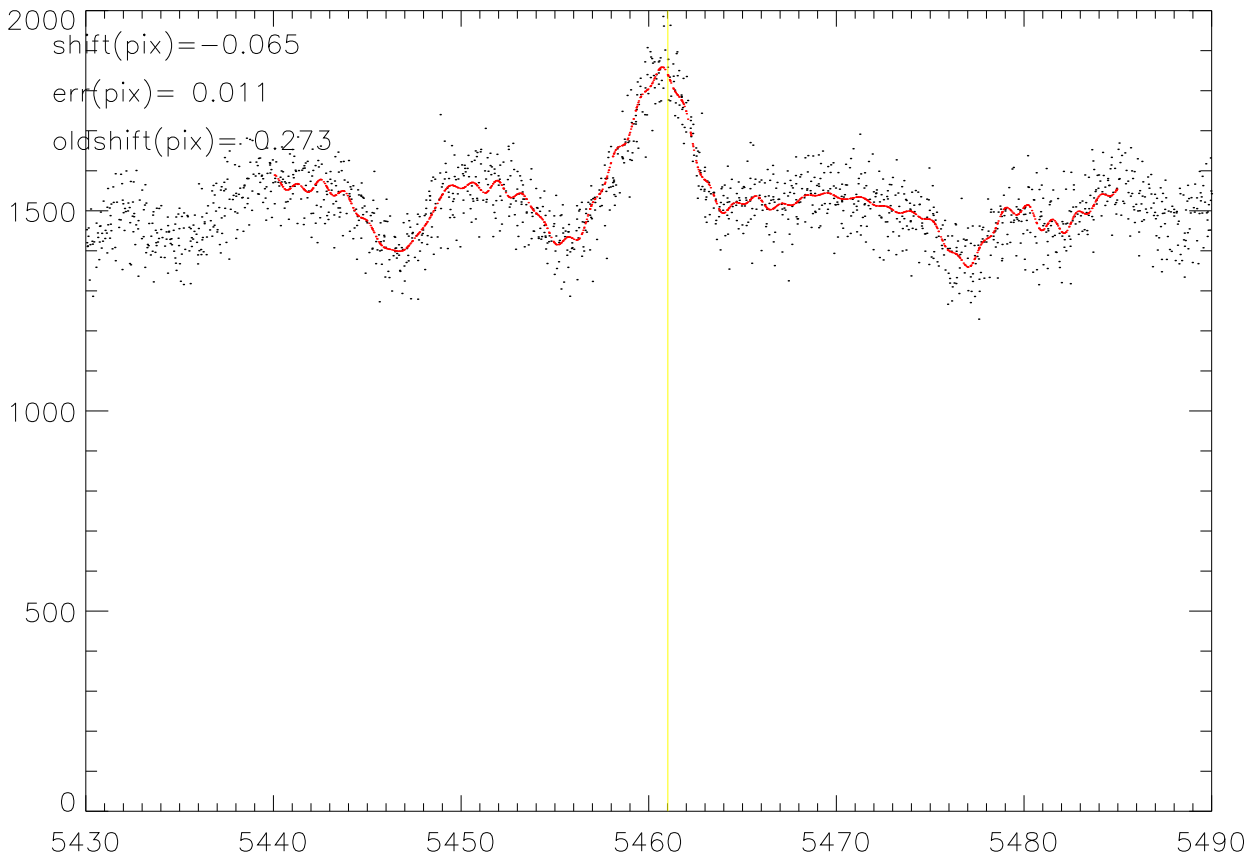

PLATE=2639 MJD=54455 Scattered Light on sdR-b1-00048204.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.530
Max value = 17.571
Tue Mar 4 18:15:59 2008

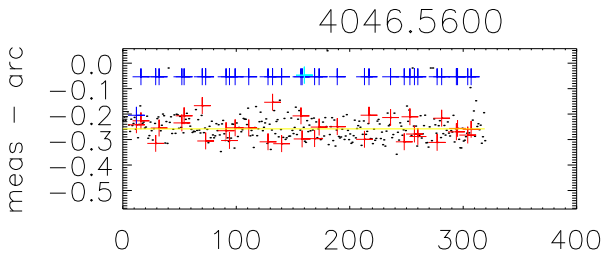

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b1-00048204.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

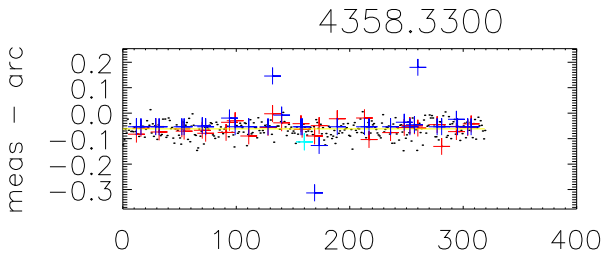

4046.5600
sig: −0.050
4358.3300
off: −0.02
sig: 0.062
5460.9400
off: 0.27
sig: 0.024
5577.3390
off: −0.05
sig: 0.002
5889.9500
off: 0.10
sig: 0.012
5895.9240
off: 0.11
sig: 0.023

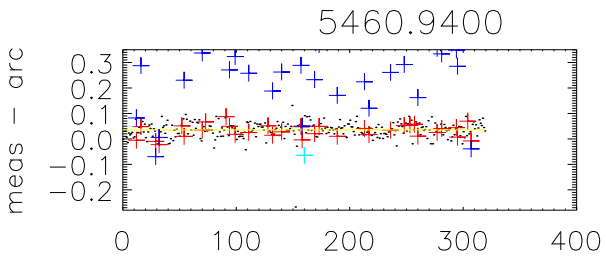

shift(pix)=−0.047
err(pix)= 0.008
oldshift(pix)=−0.053
2000
1500
1000
500
0
4020
4030
4040
4050
4060
4070
4080

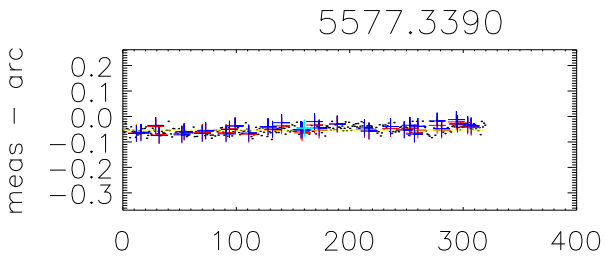

shift(pix)=−0.113
err(pix)= 0.008
oldshift(pix)=−0.020
2000
1500
1000
500
0
4280
4300
4320
4340
4360
4380
4400
4420

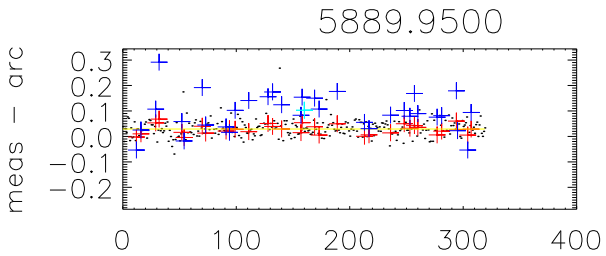

shift(pix)=−0.065
err(pix)= 0.011
oldshift(pix)= -0.273
2000
1500
1000
500
0
5430
5440
5450
5460
5470
5480
5490

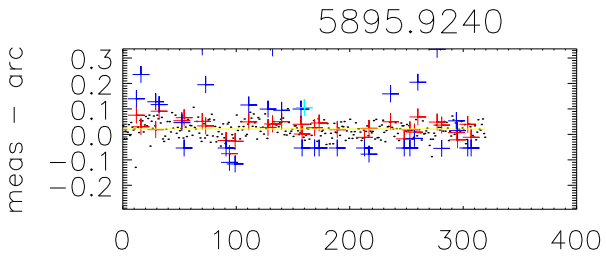

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

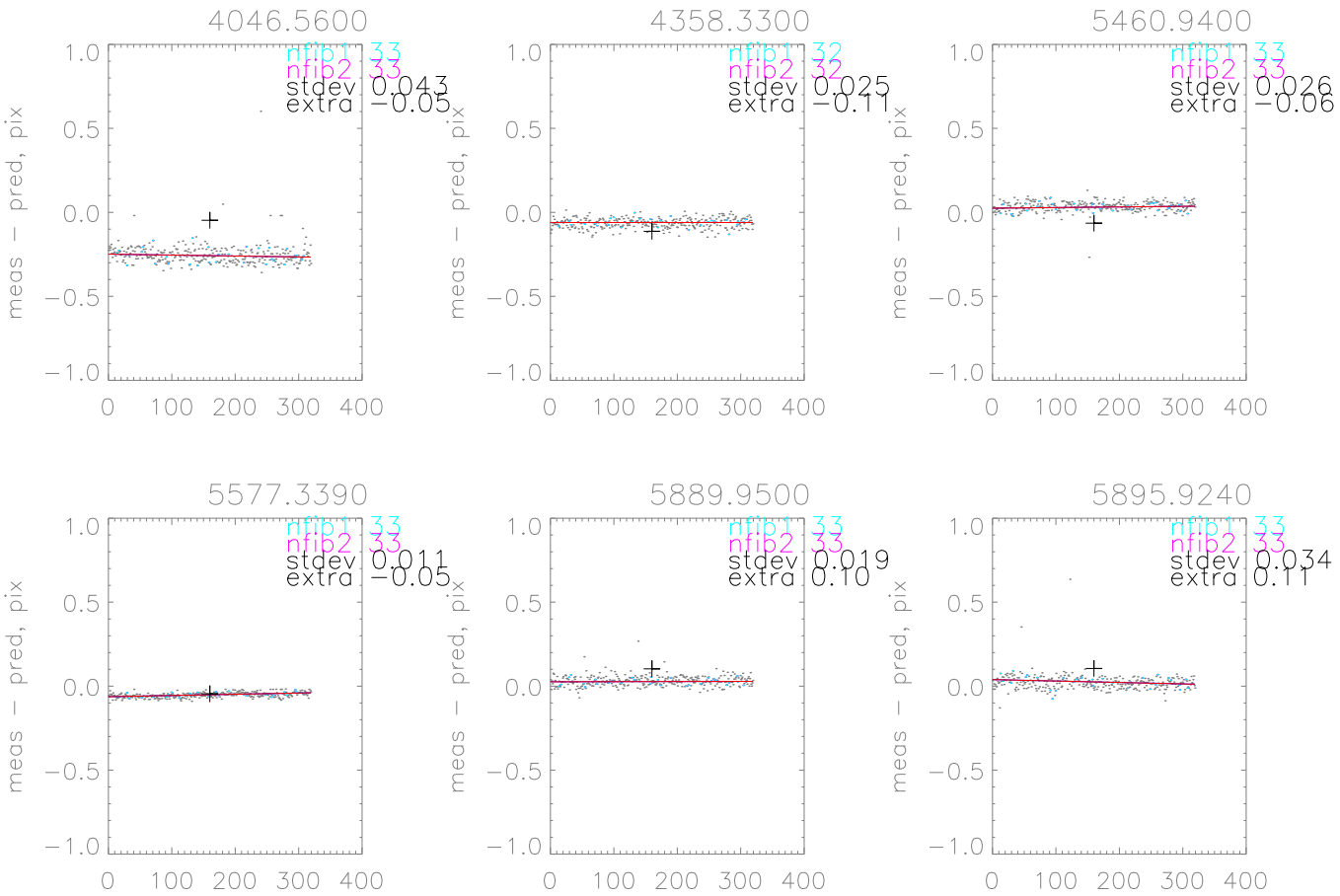

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

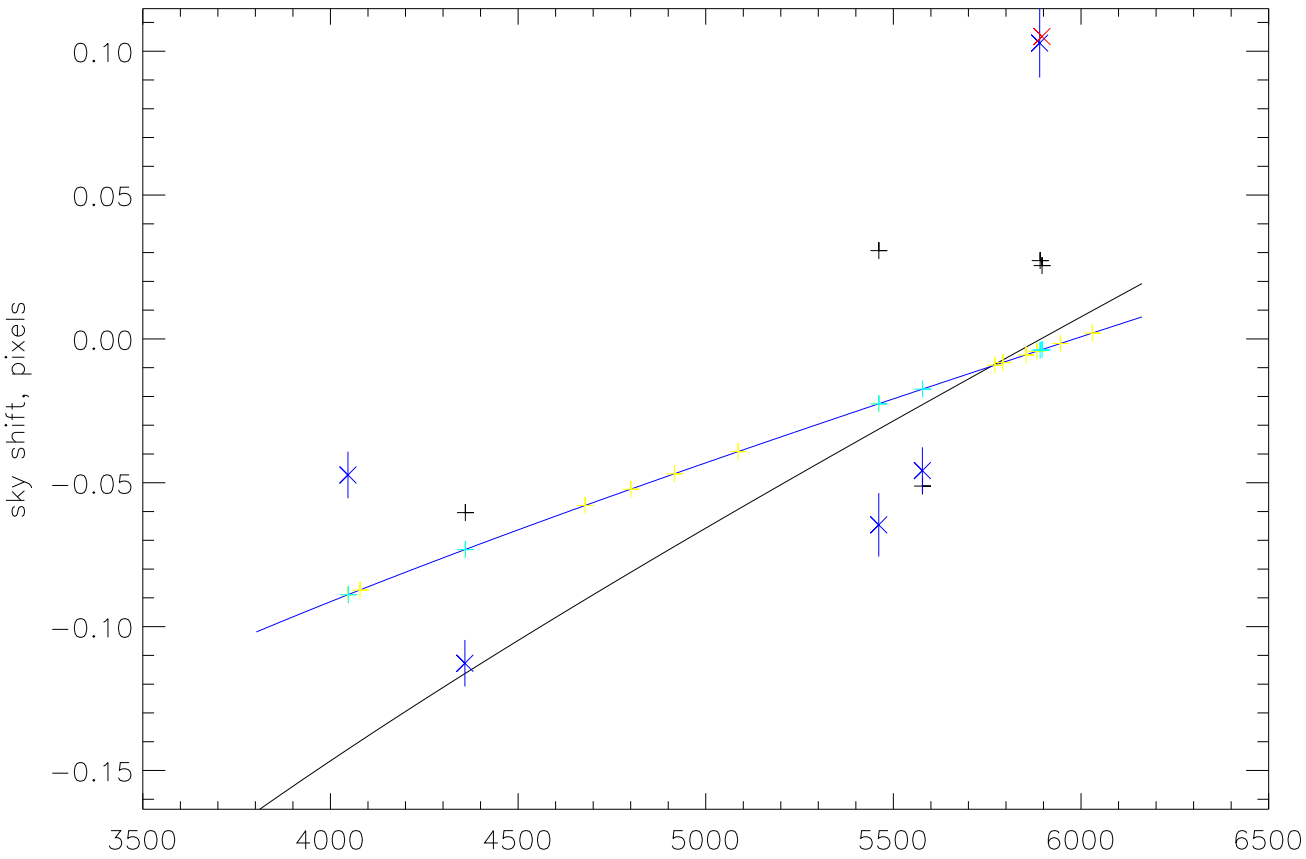

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

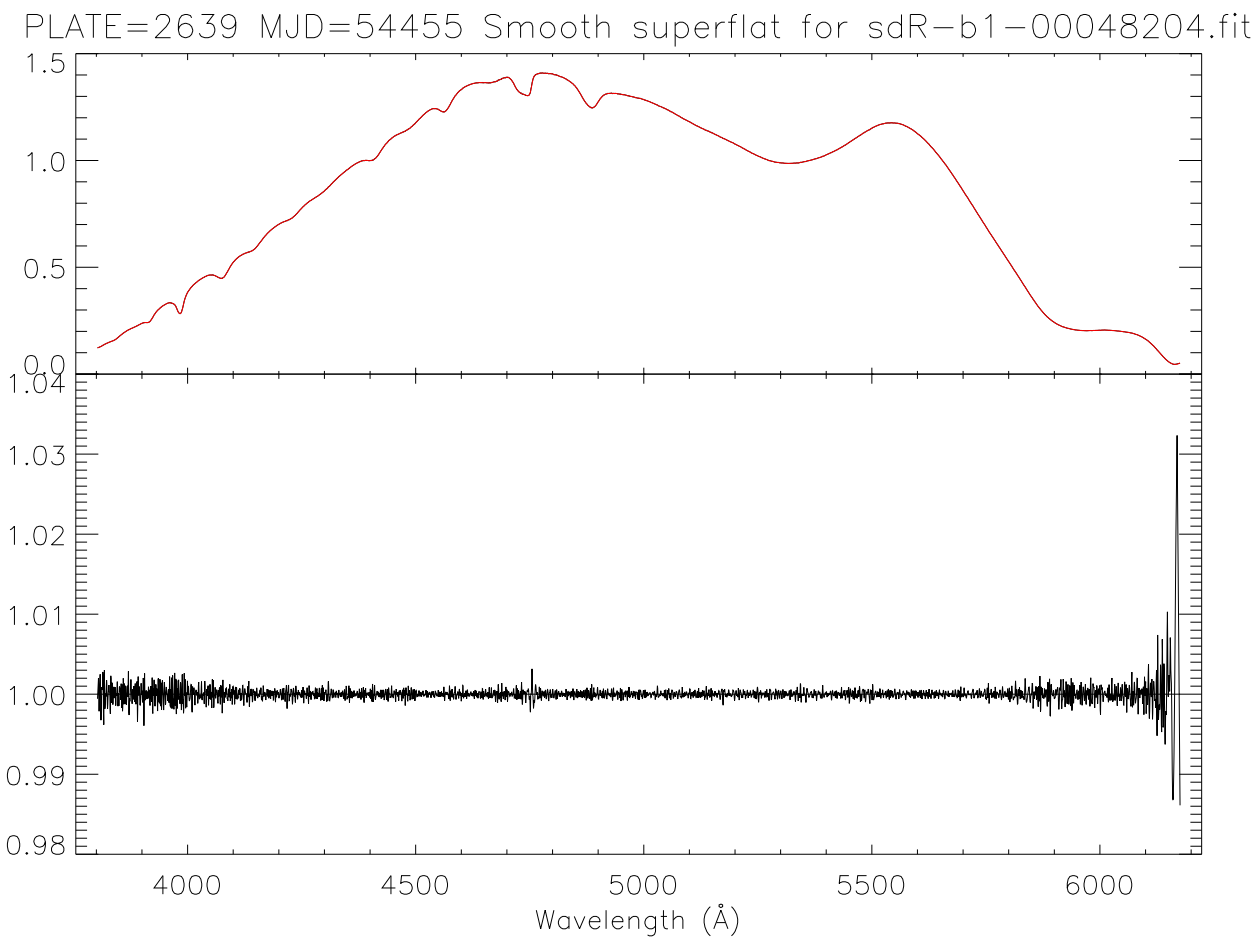

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

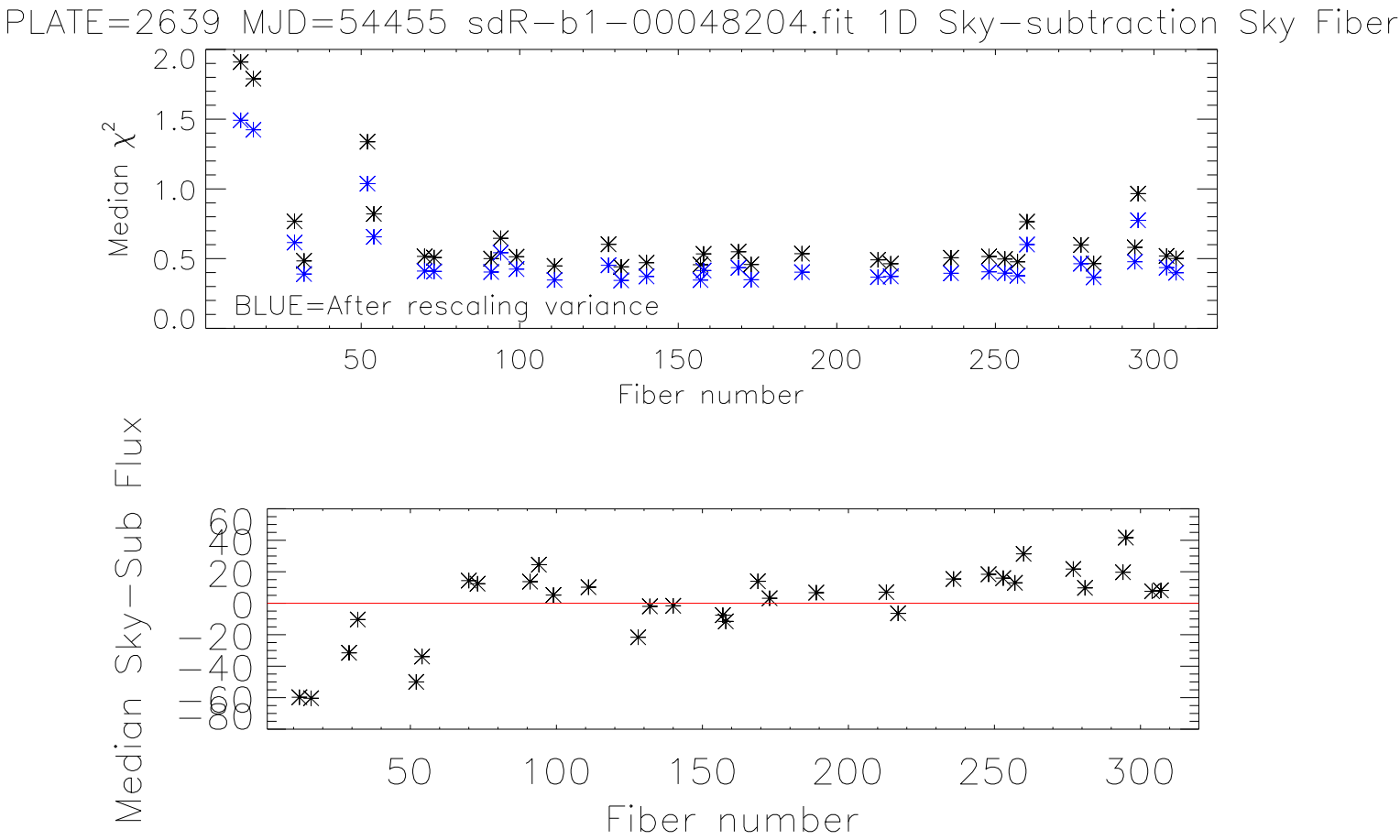

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

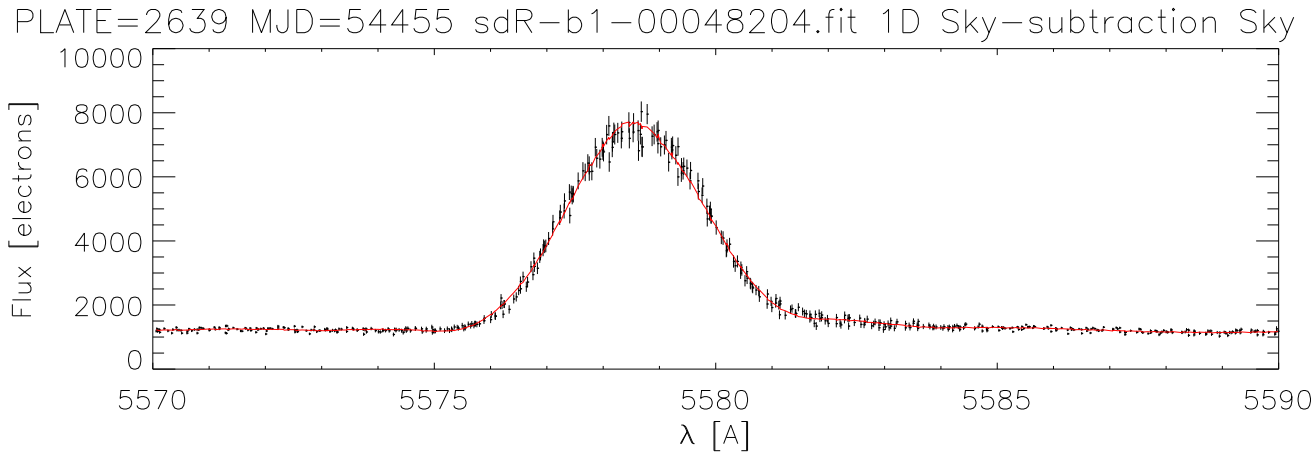

4046.5600
nfib1 33
nfib2 33
stdev 0.043
extra −0.05
4358.3300
nfib1 32
nfib2 32
stdev 0.025
extra −0.11
5460.9400
nfib1 33
nfib2 33
stdev 0.026
extra −0.06
5577.3390
nfib1 33
nfib2 33
stdev 0.011
extra −0.05
5889.9500
nfib1 33
nfib2 33
stdev 0.019
extra 0.10
5895.9240
nfib1 33
nfib2 33
stdev 0.034
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

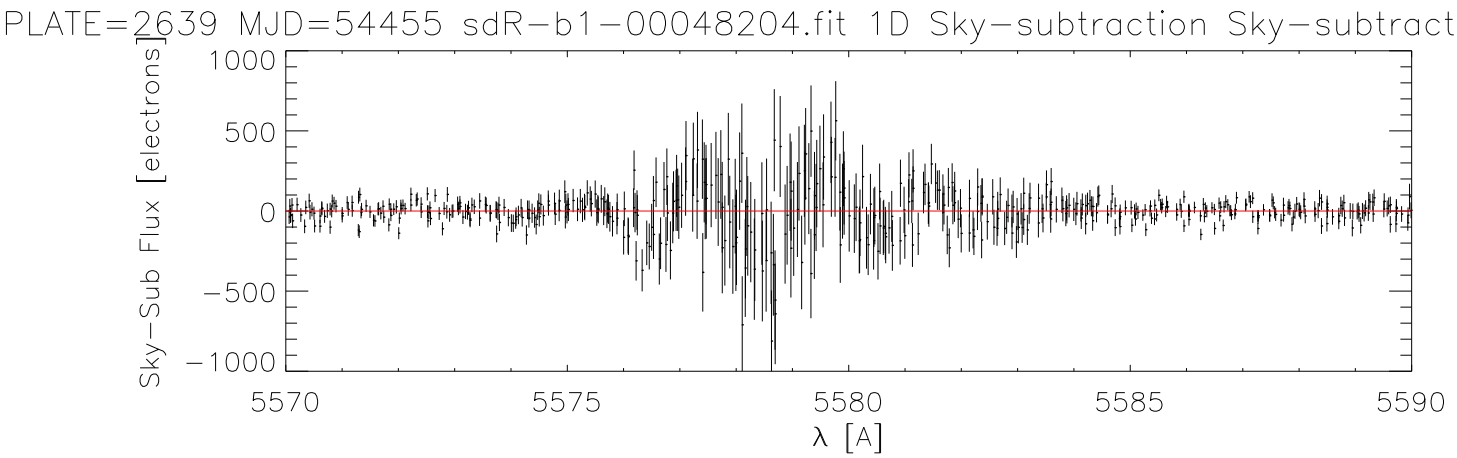

0.10
0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

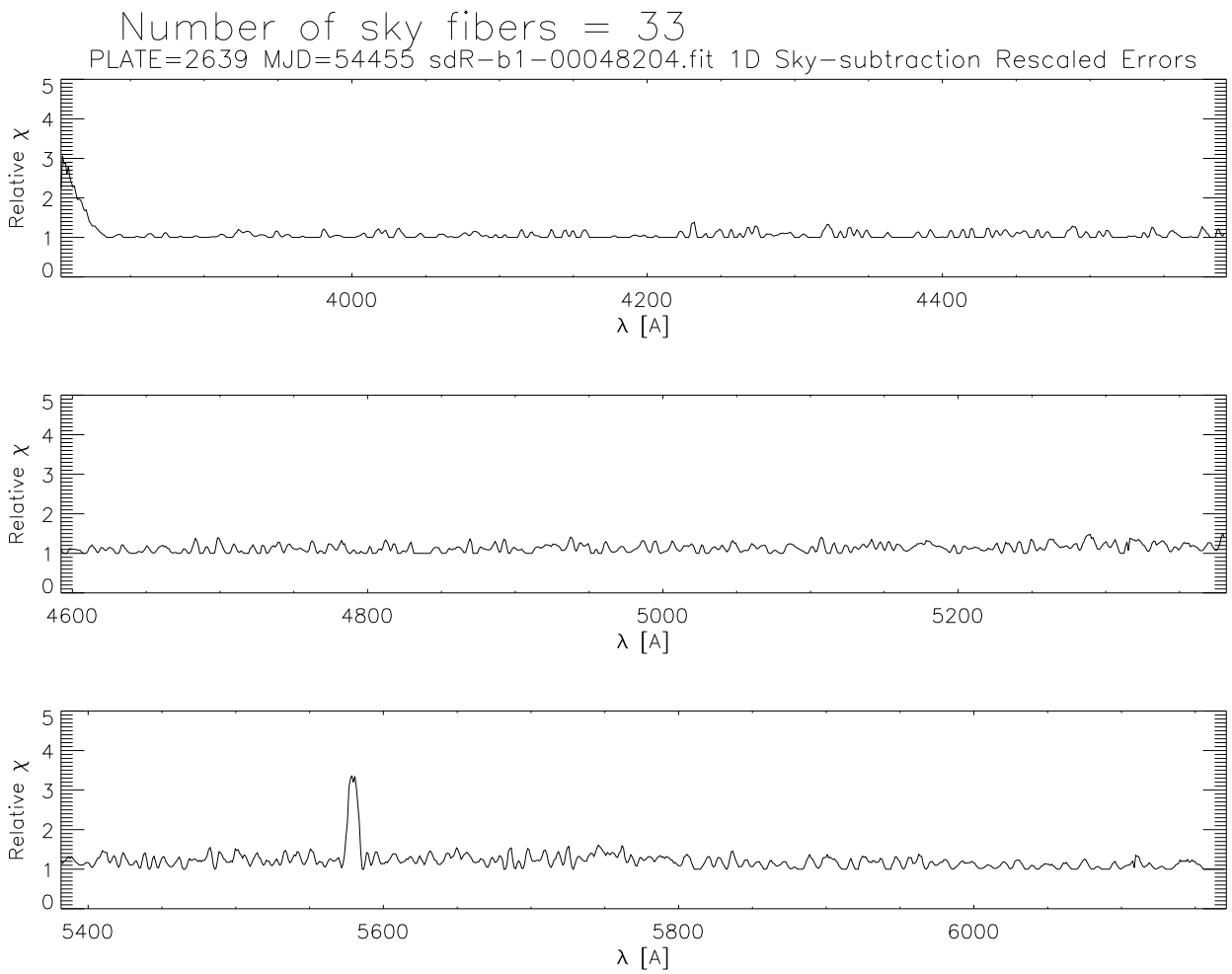
es= −0.0000

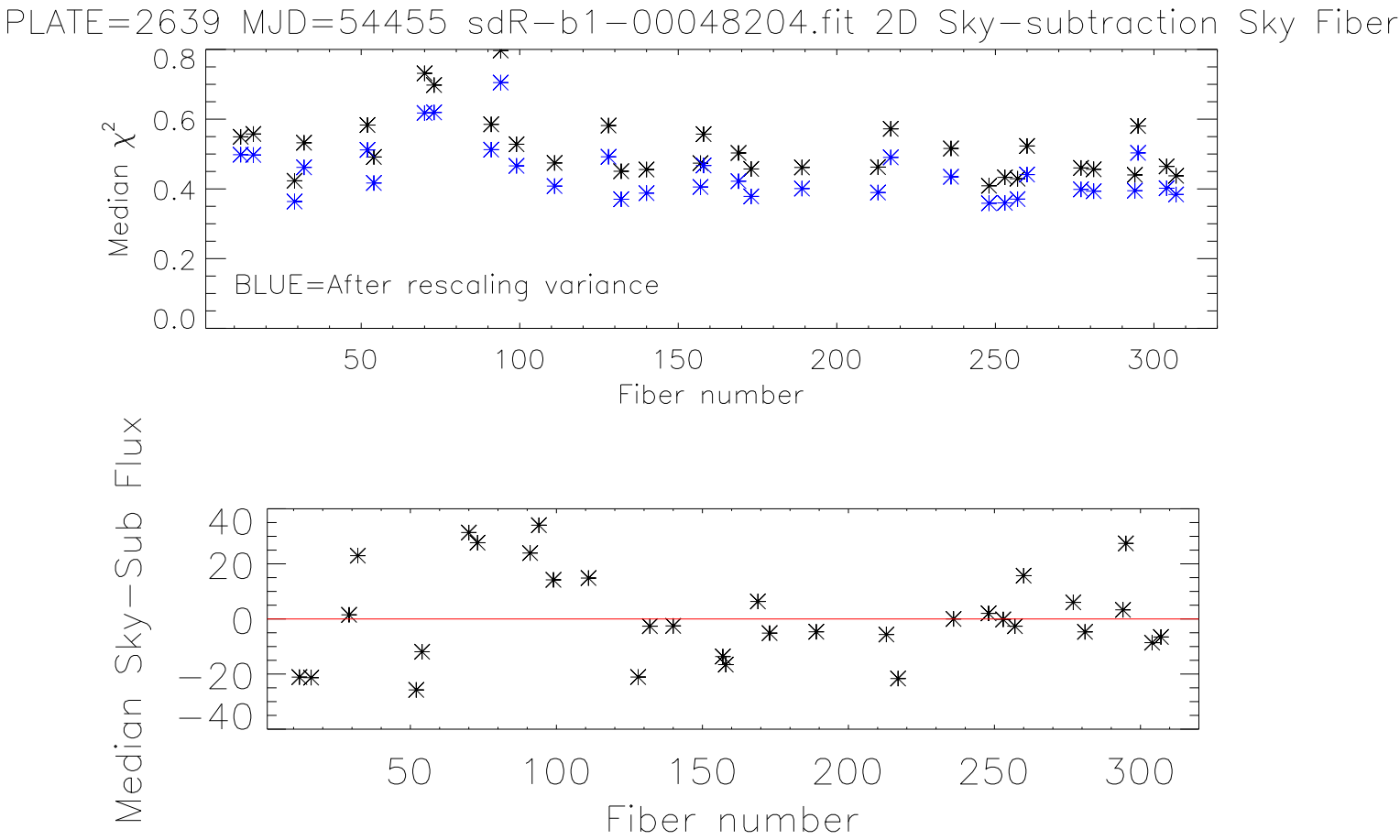

PLATE=2639 MJD=54455 Smooth superflat for sdR−b1−00048204.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

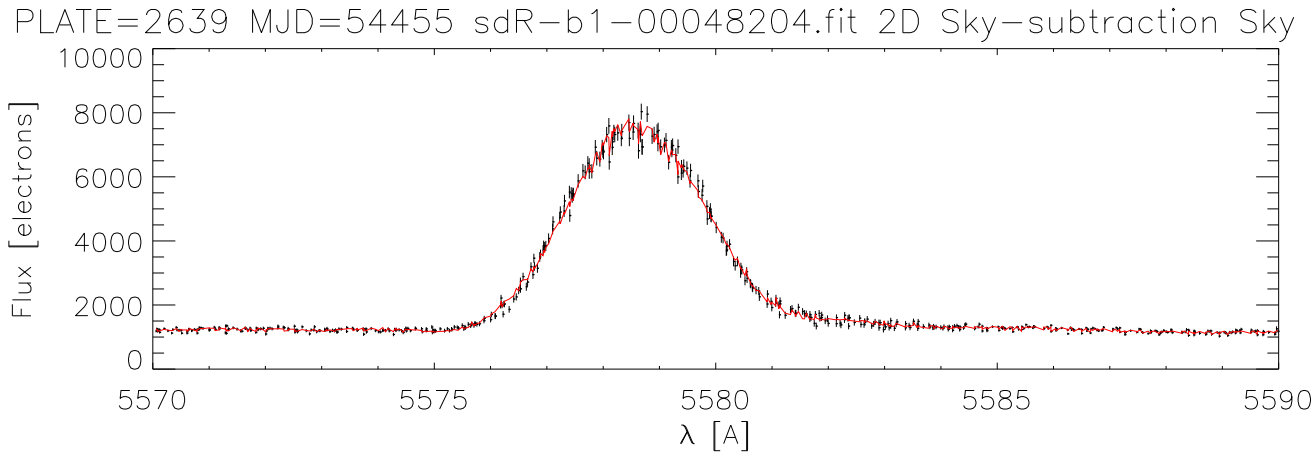

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

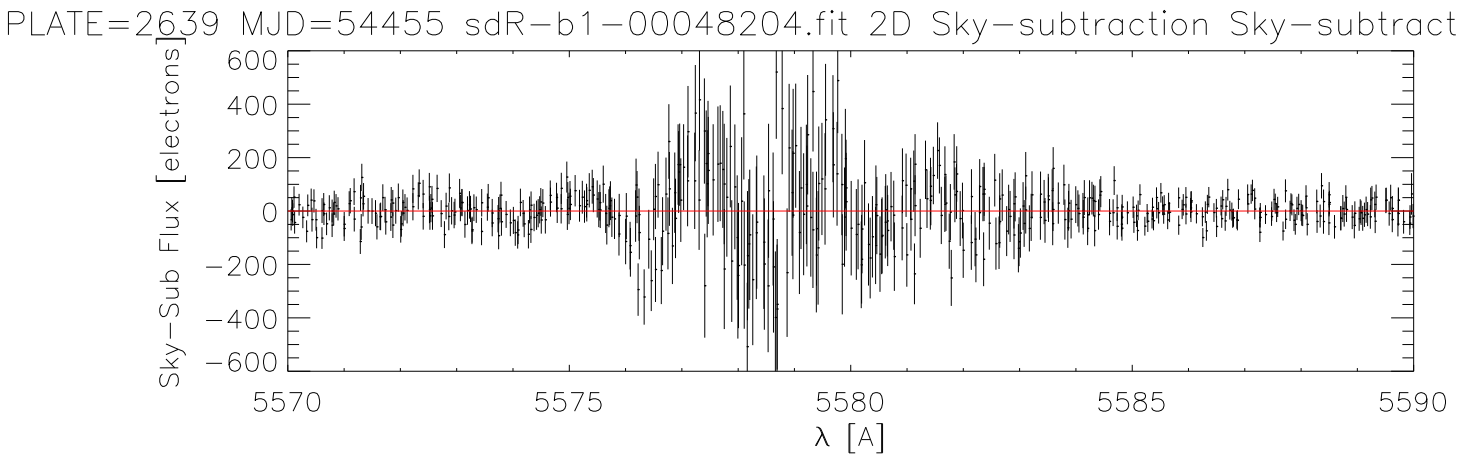

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

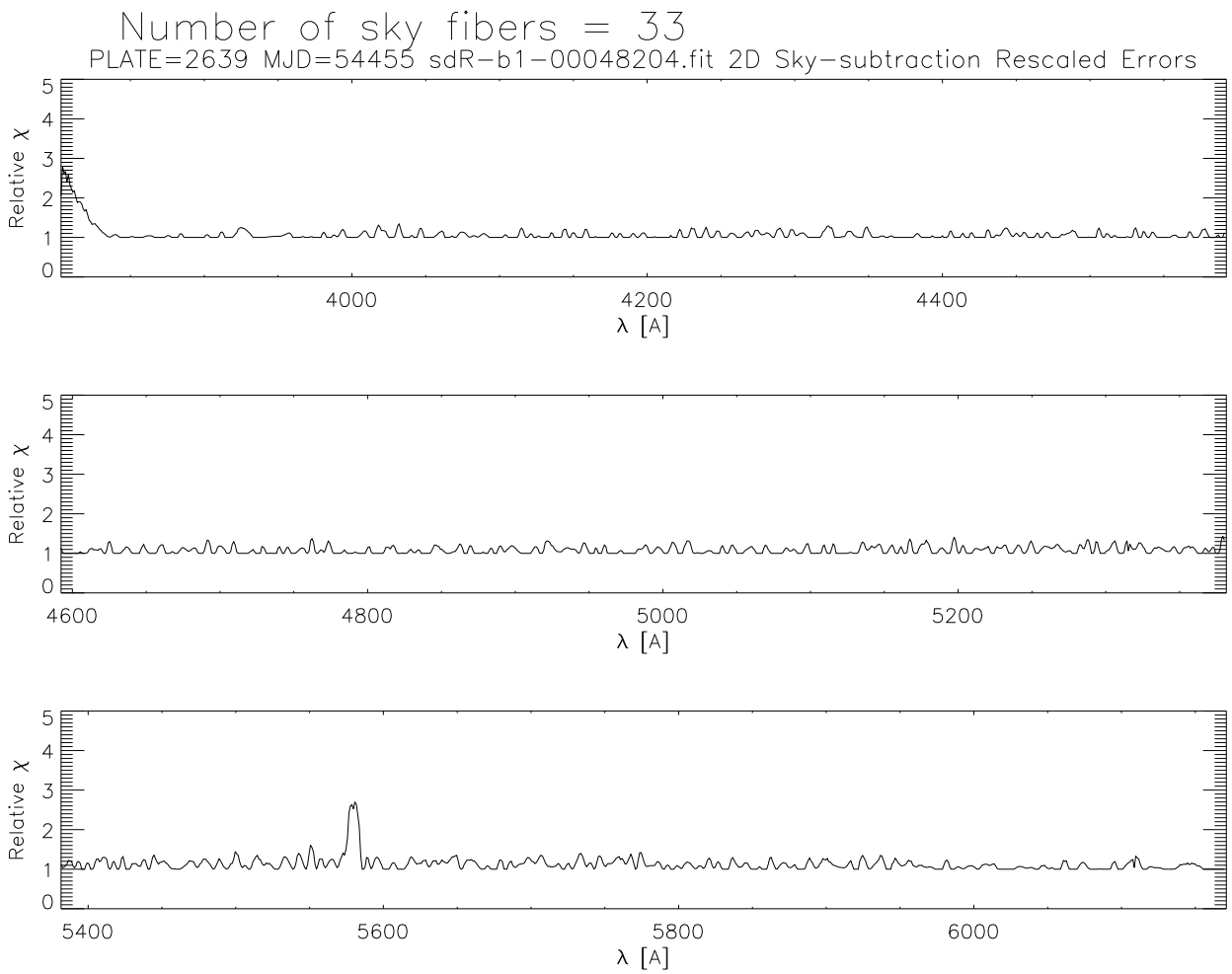

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

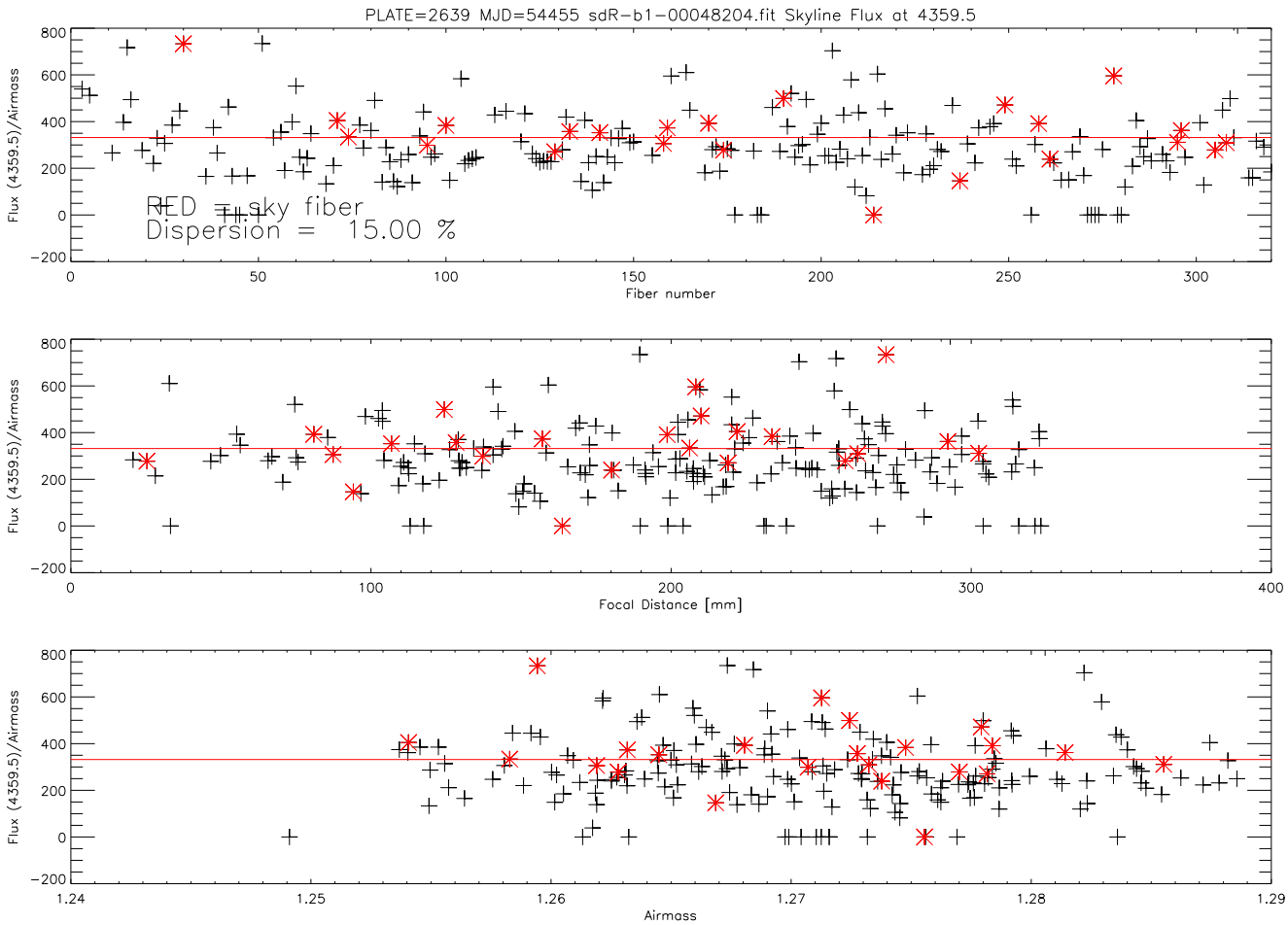

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048204.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

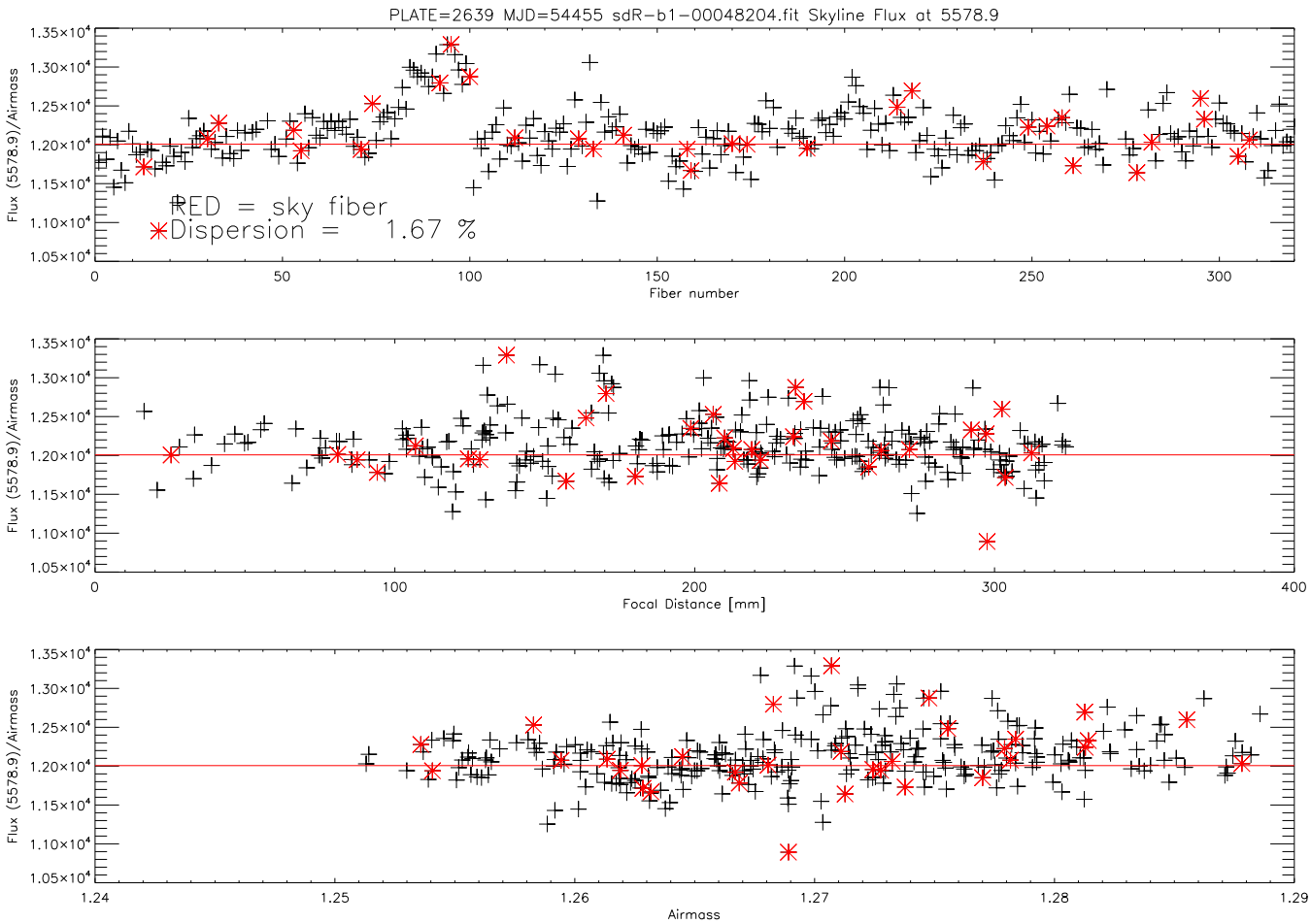

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

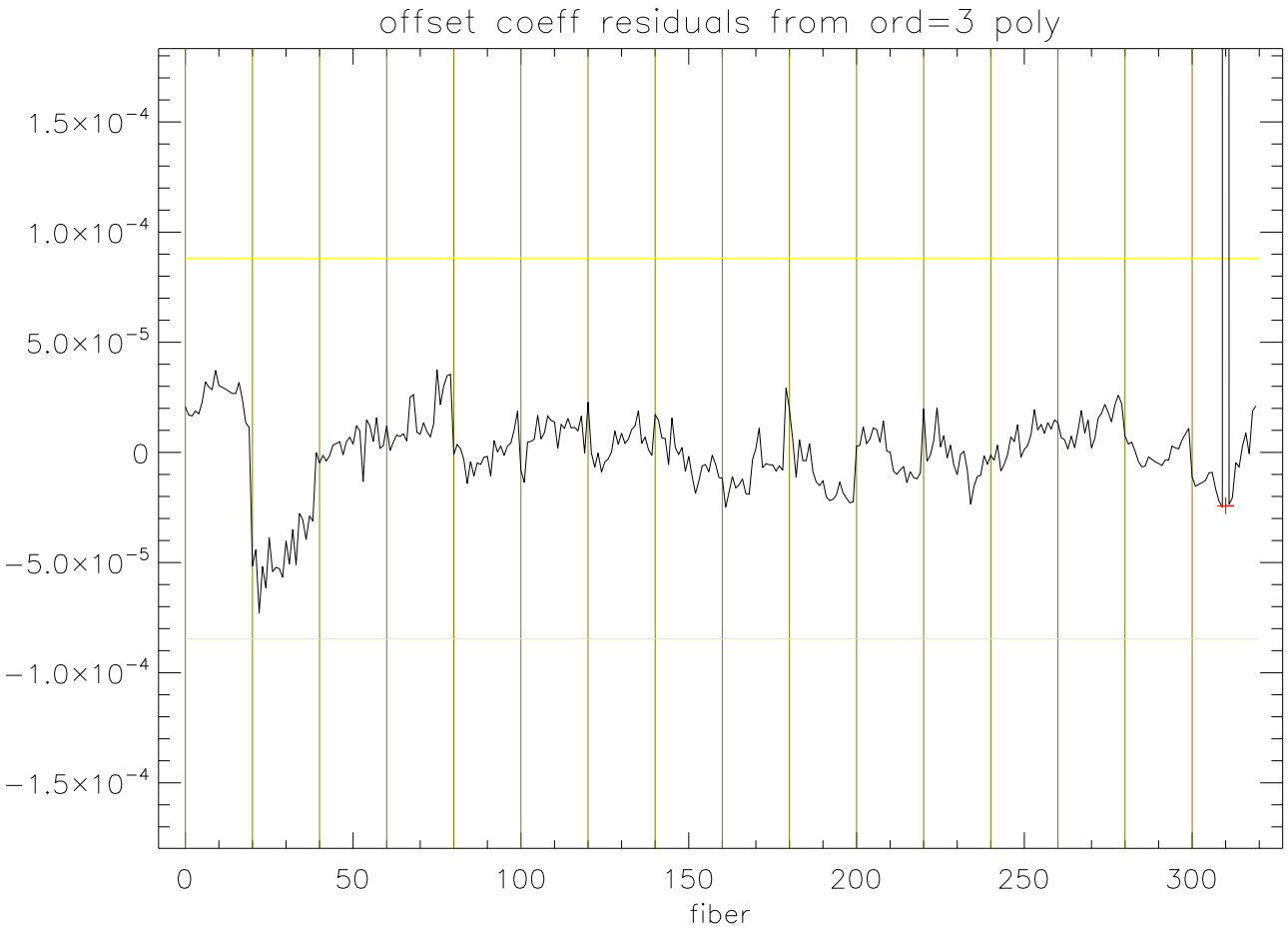

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

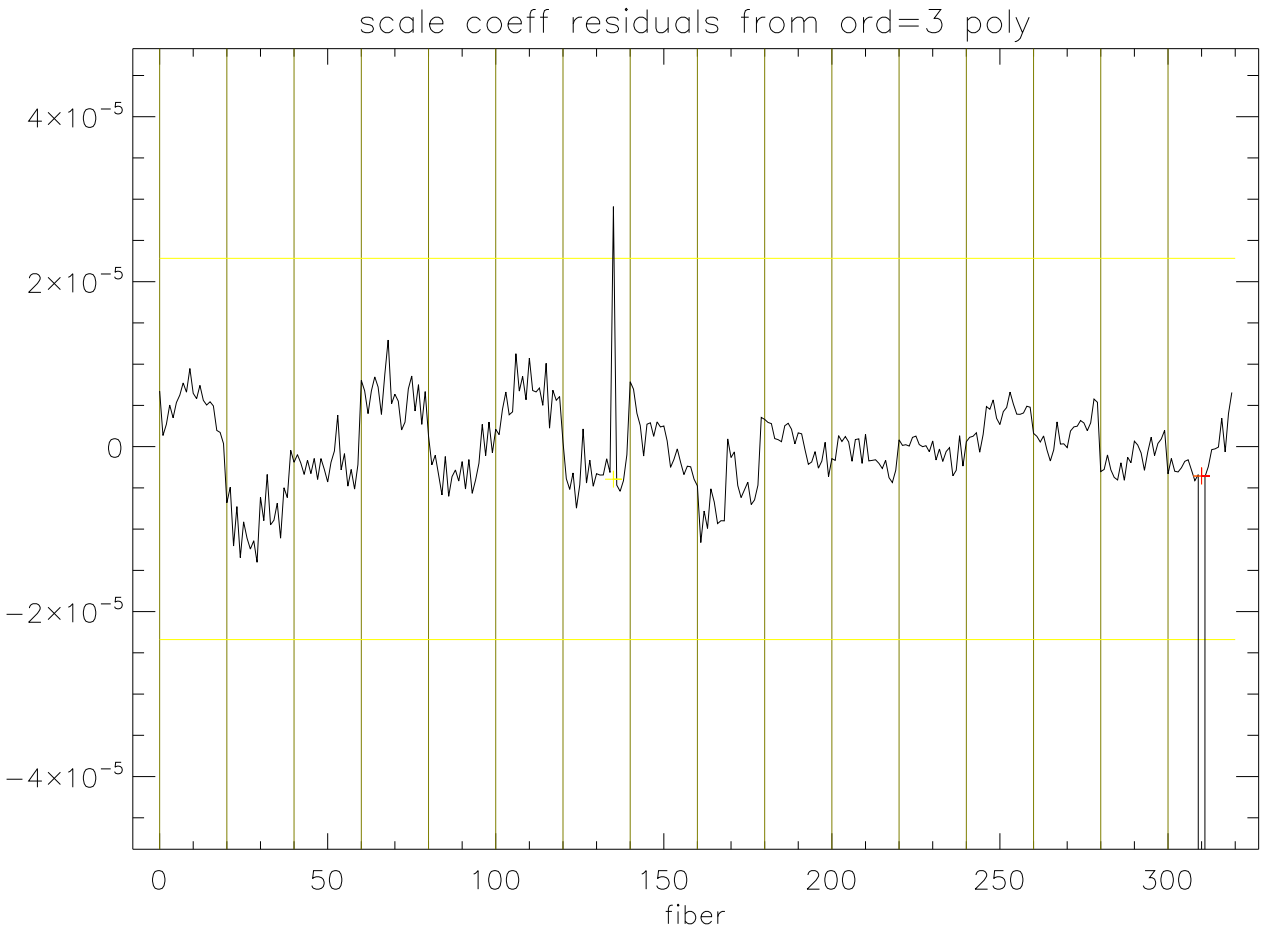

PLATE=2639 MJD=54455 sdR-b1-00048204.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

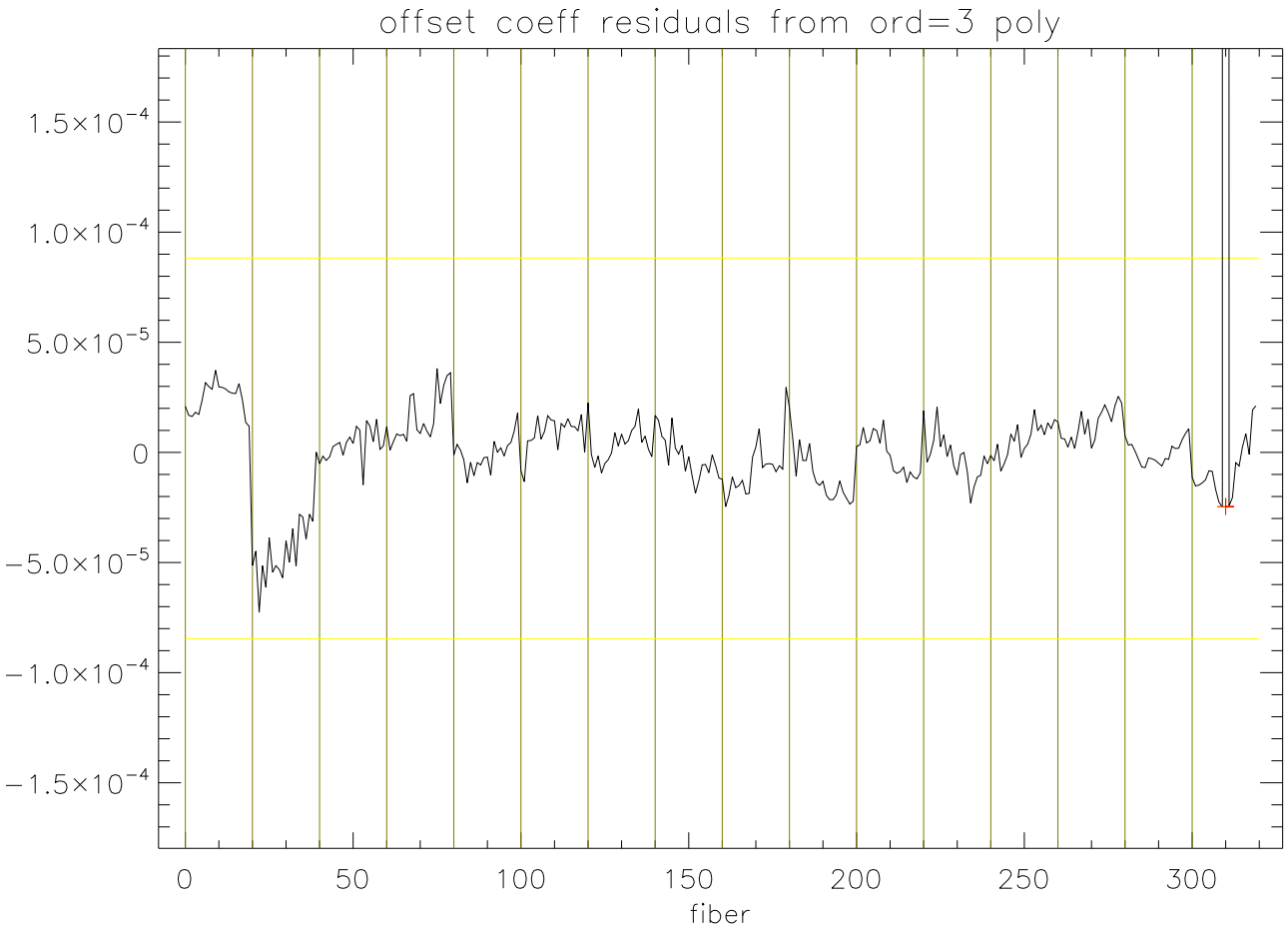

Number of sky fibers = 33
PLATE=2639 MJD=54455 sdR-b1-00048204.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

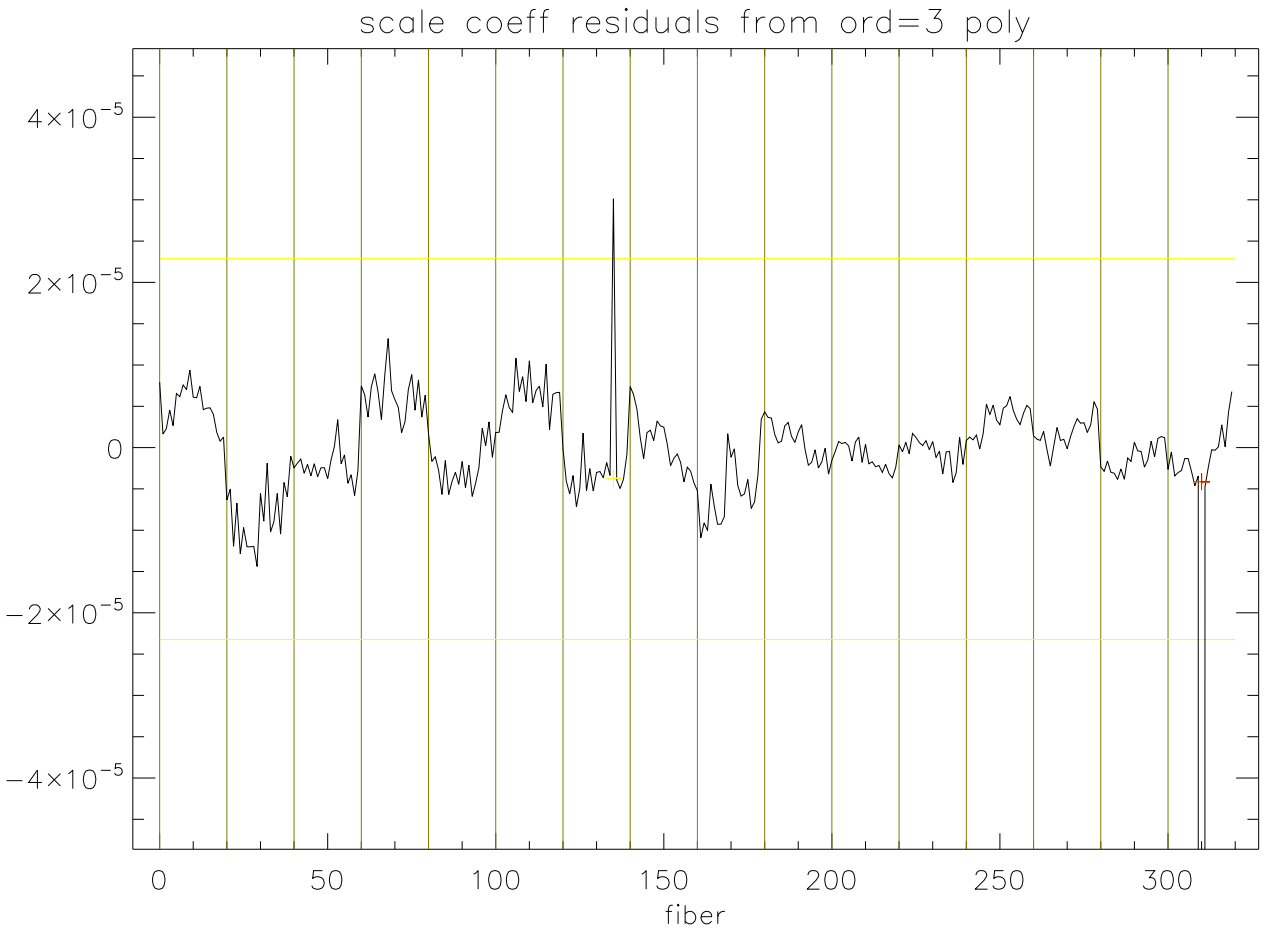

PLATE=2639 MJD=54455 sdR-b1-00048204.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.00 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

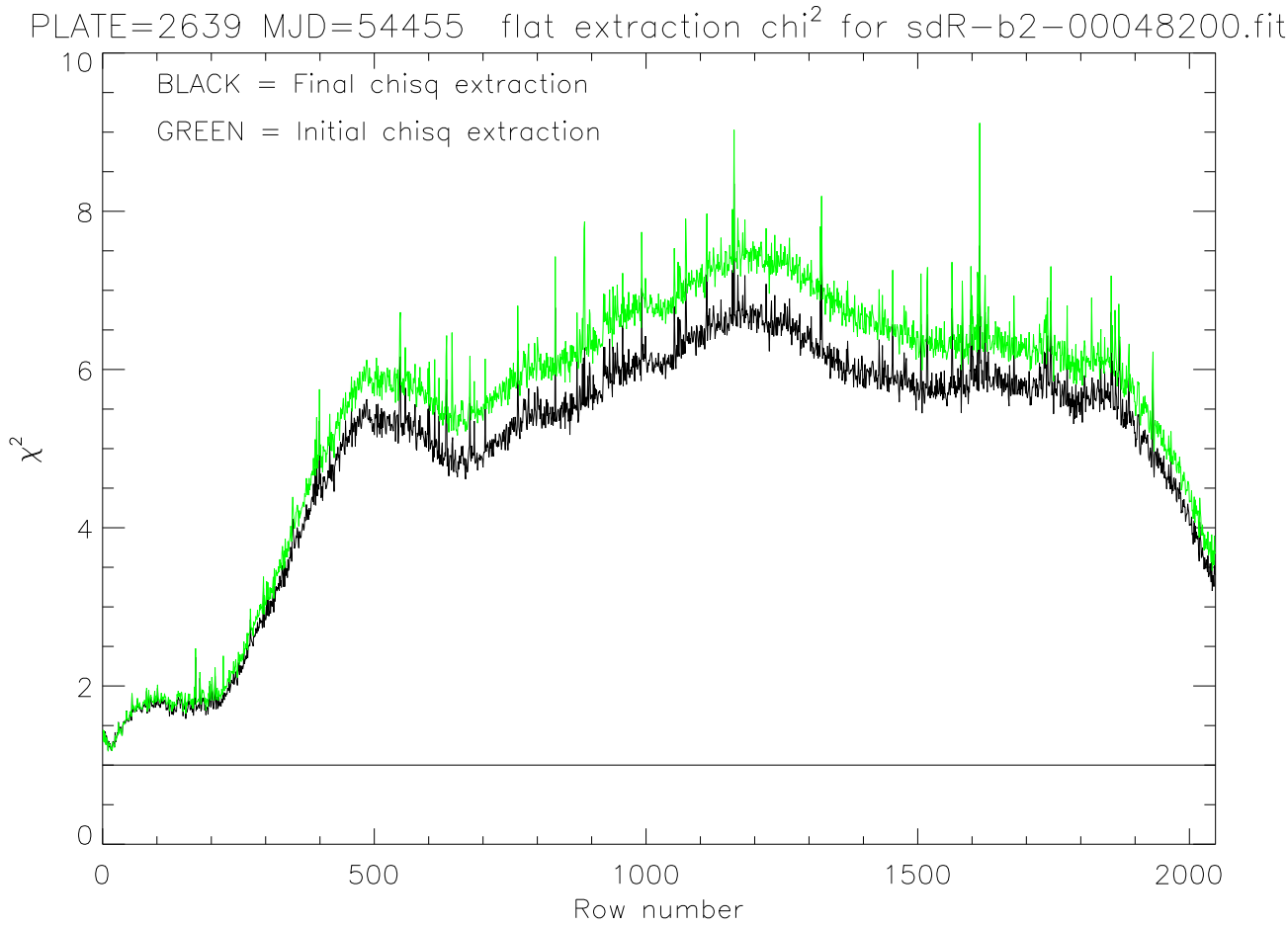

PLATE=2639 MJD=54455 sdR-b1-00048204.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.35×10^4
1.30×10^4
1.25×10^4
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
RED = sky fiber
Dispersion = 1.67 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.24
1.25
1.26
1.27
1.28
1.29
Airmass

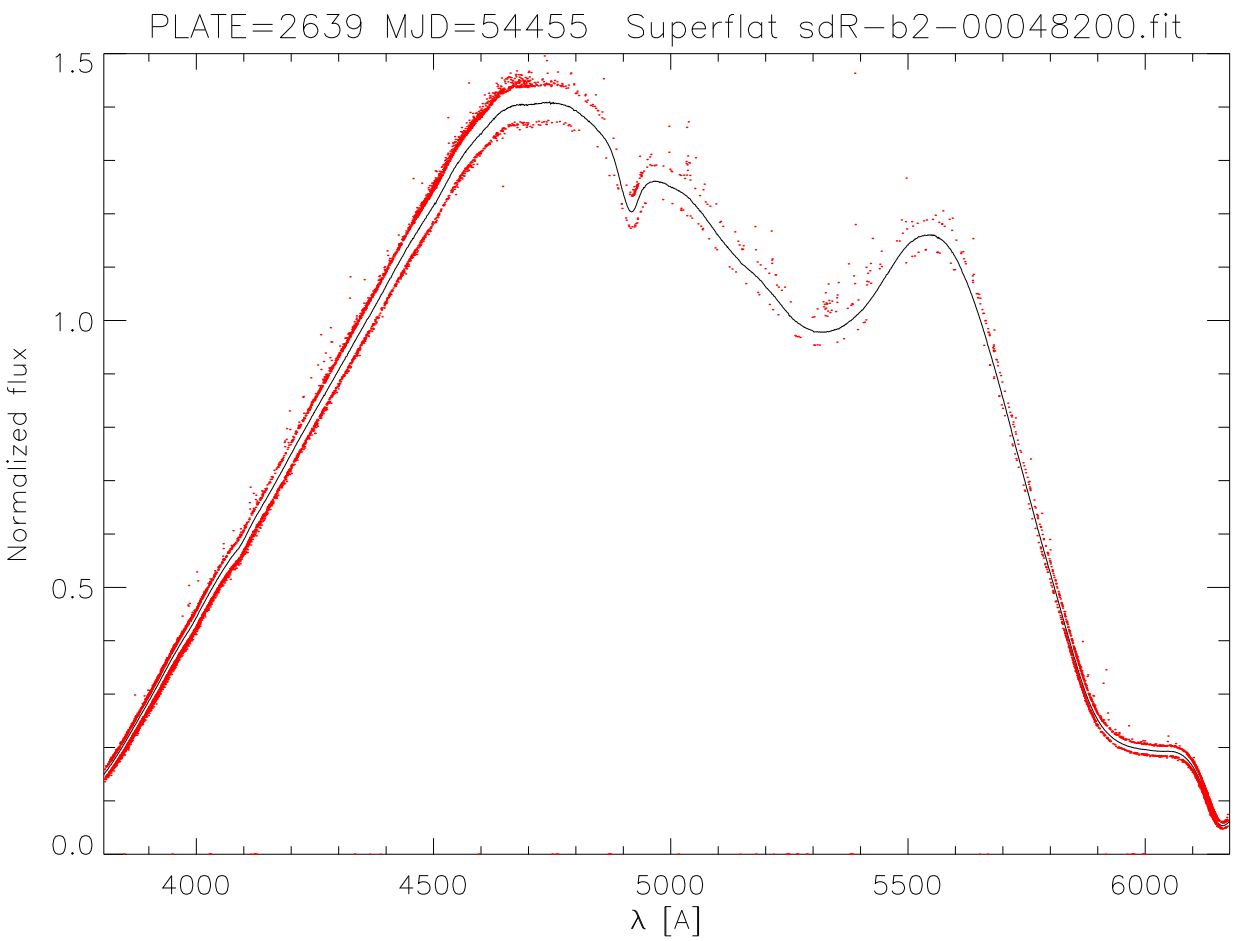

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

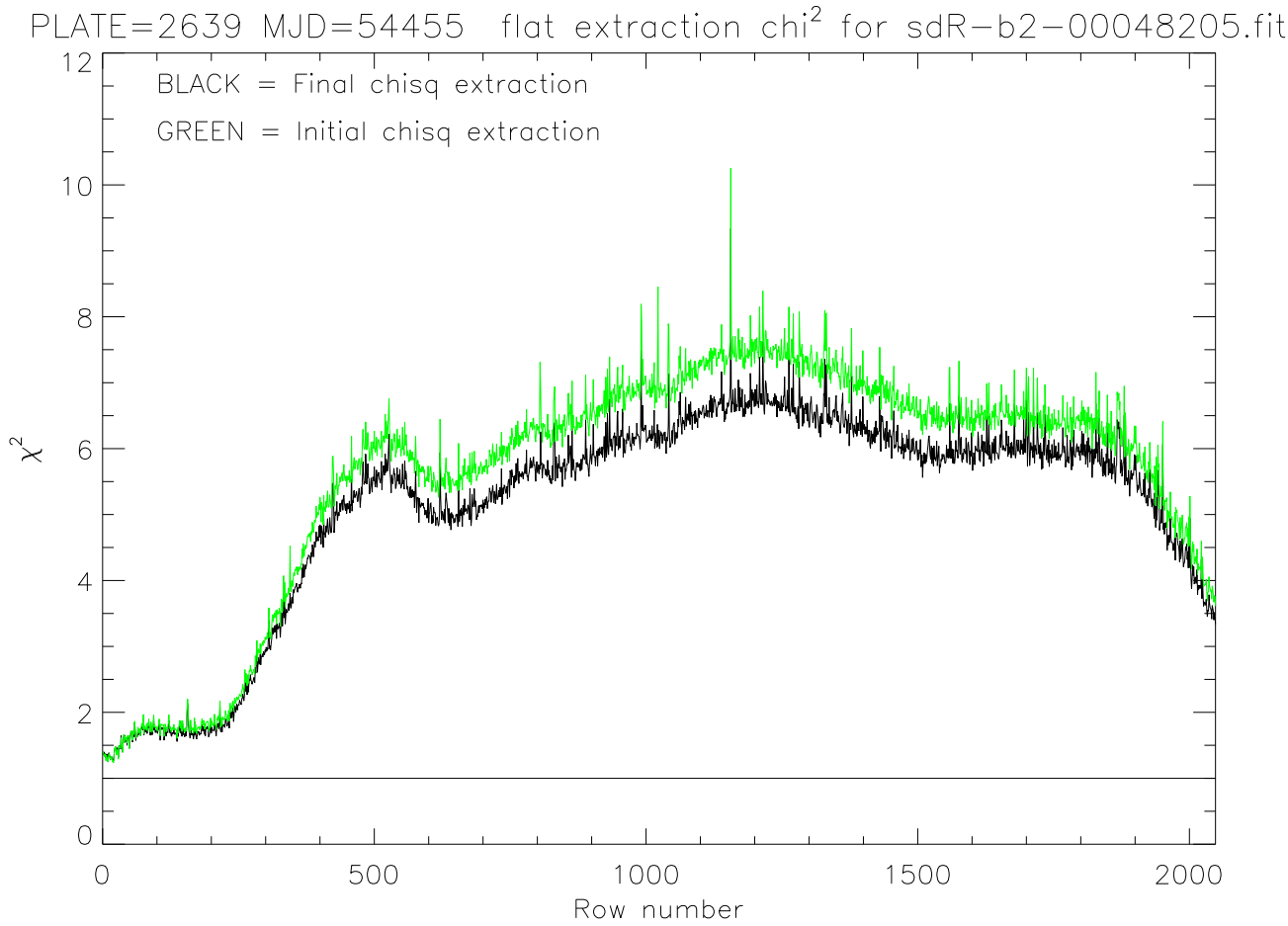

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

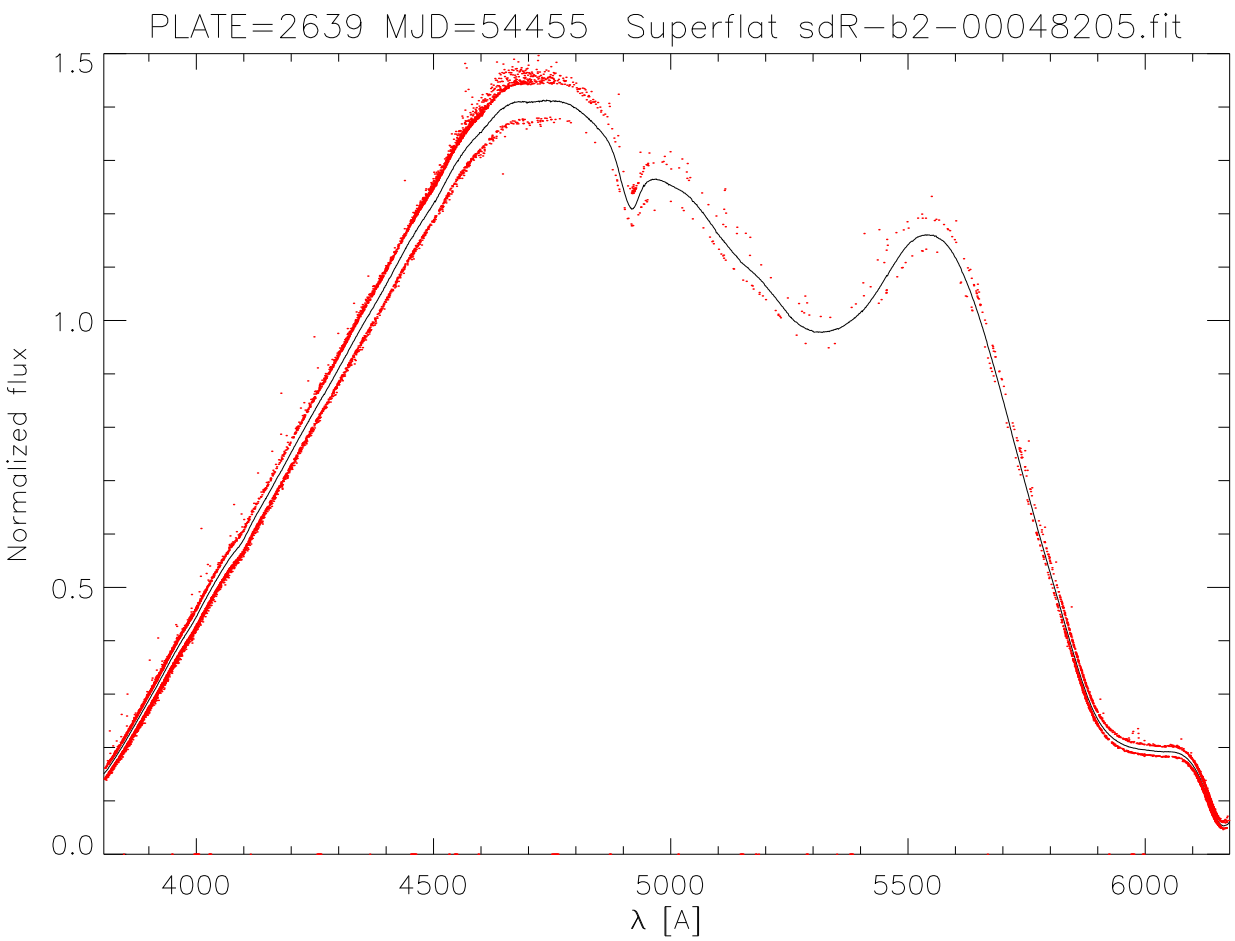

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

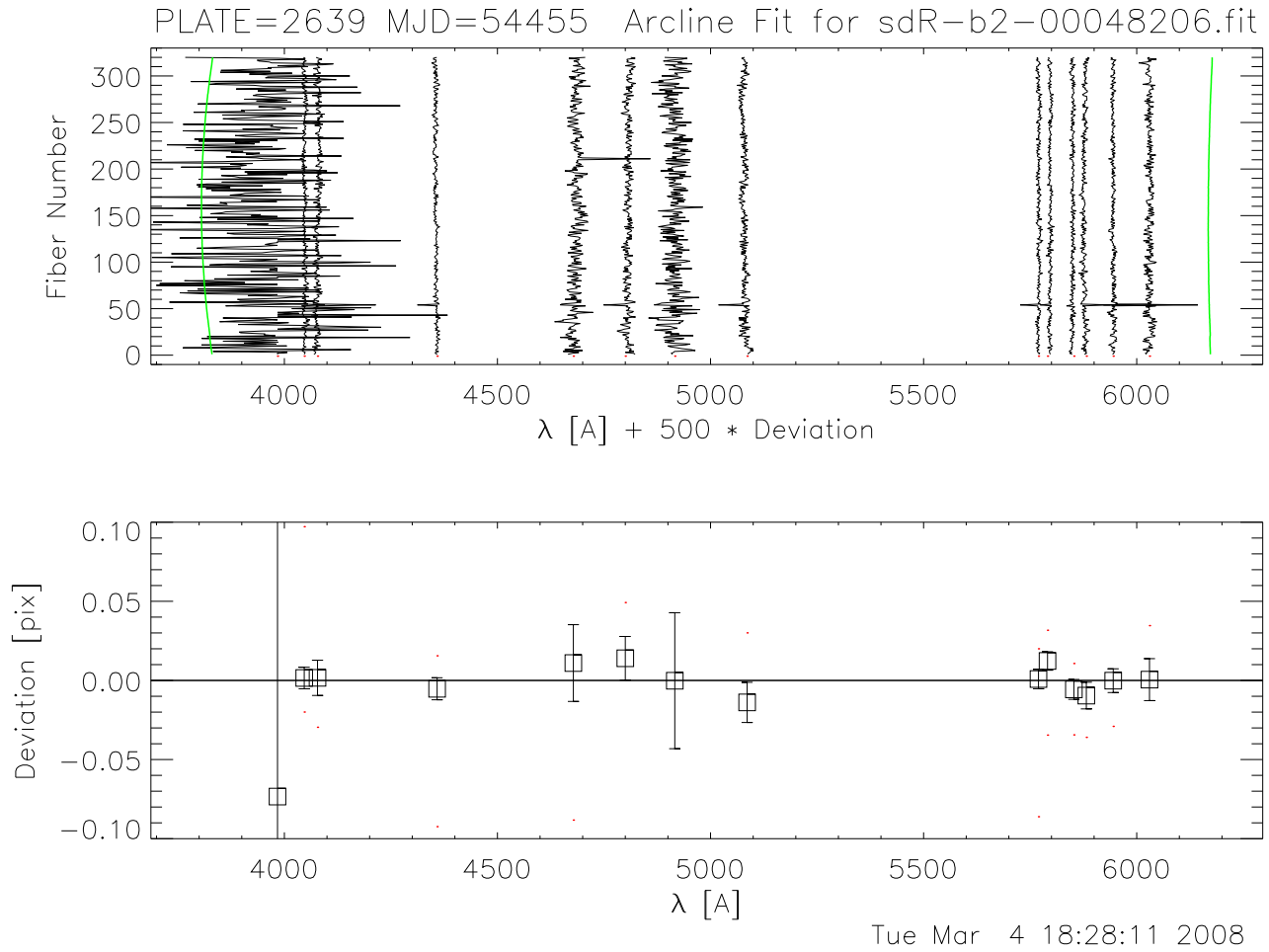

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

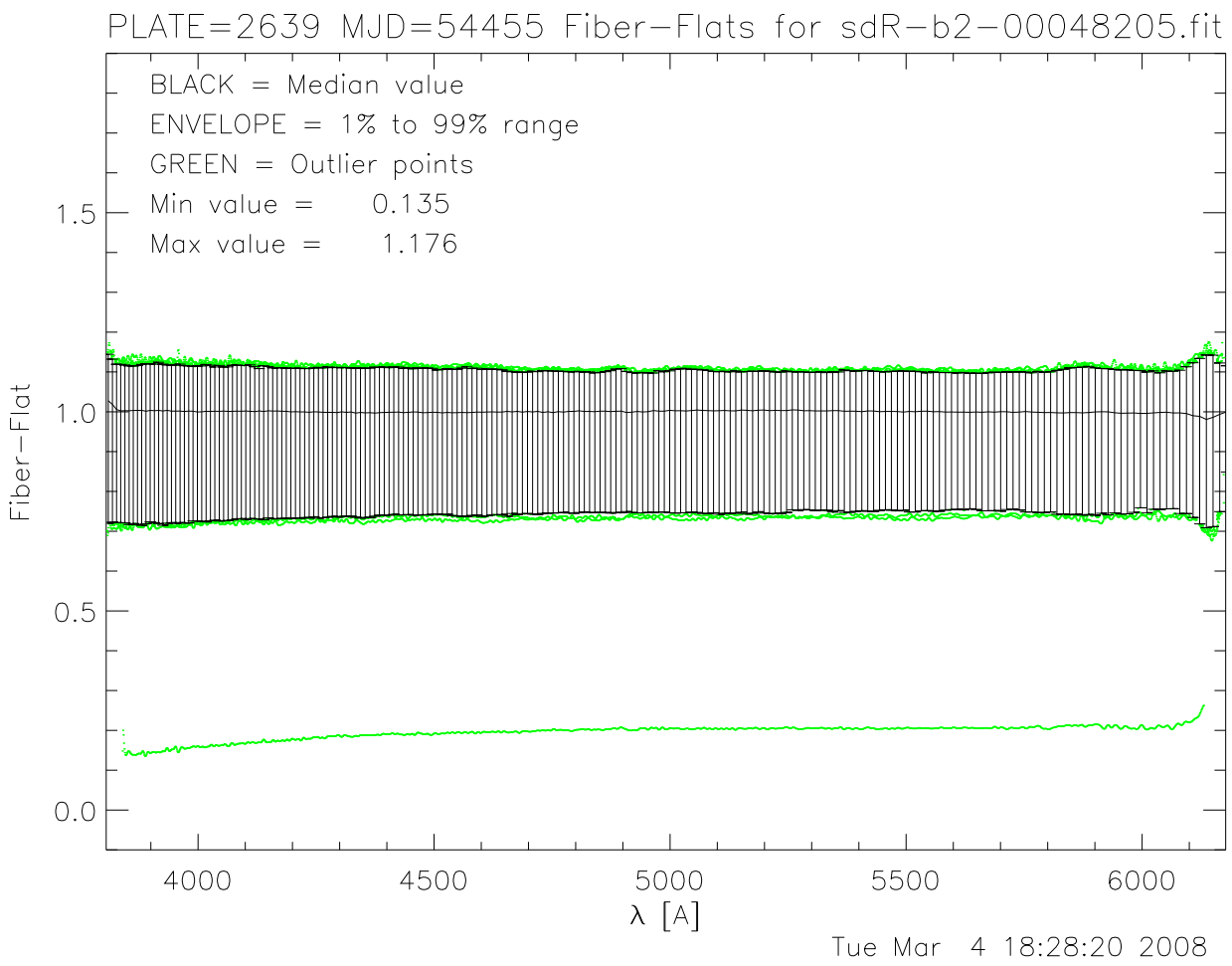

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−b2−00048200.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

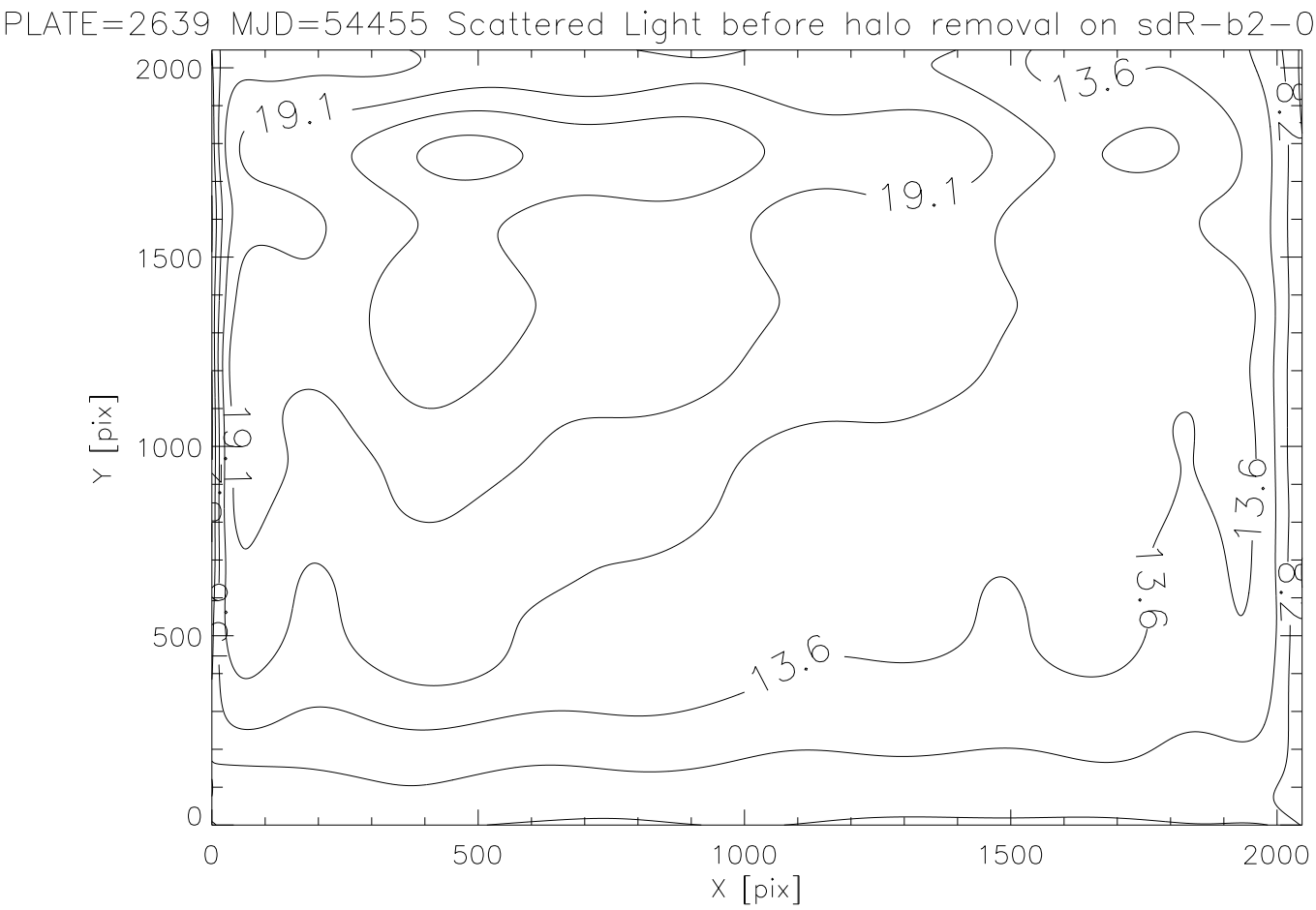

PLATE=2639 MJD=54455 Superflat sdR-b2-00048200.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

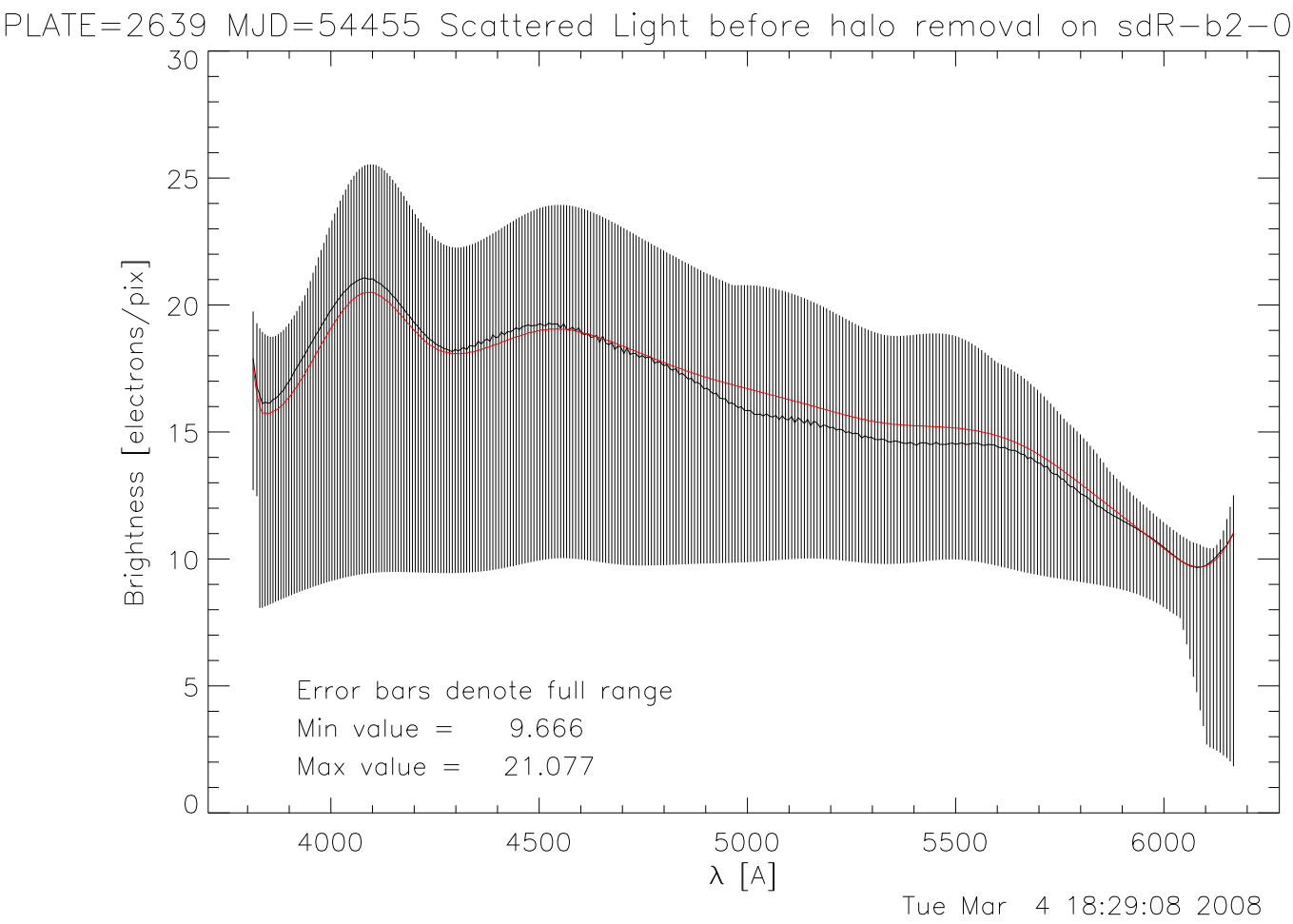

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−b2−00048205.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

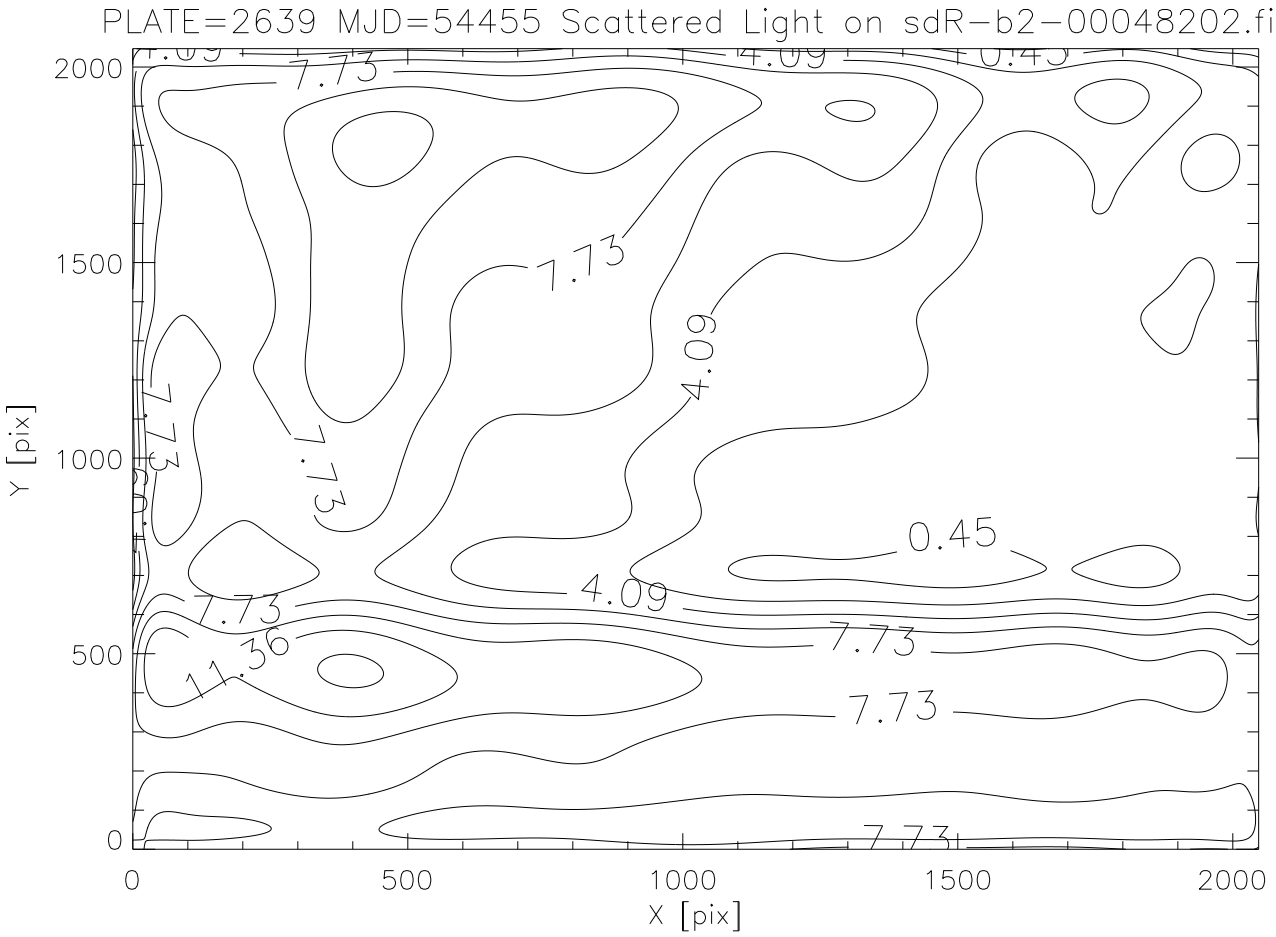

PLATE=2639 MJD=54455 Superflat sdR-b2-00048205.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

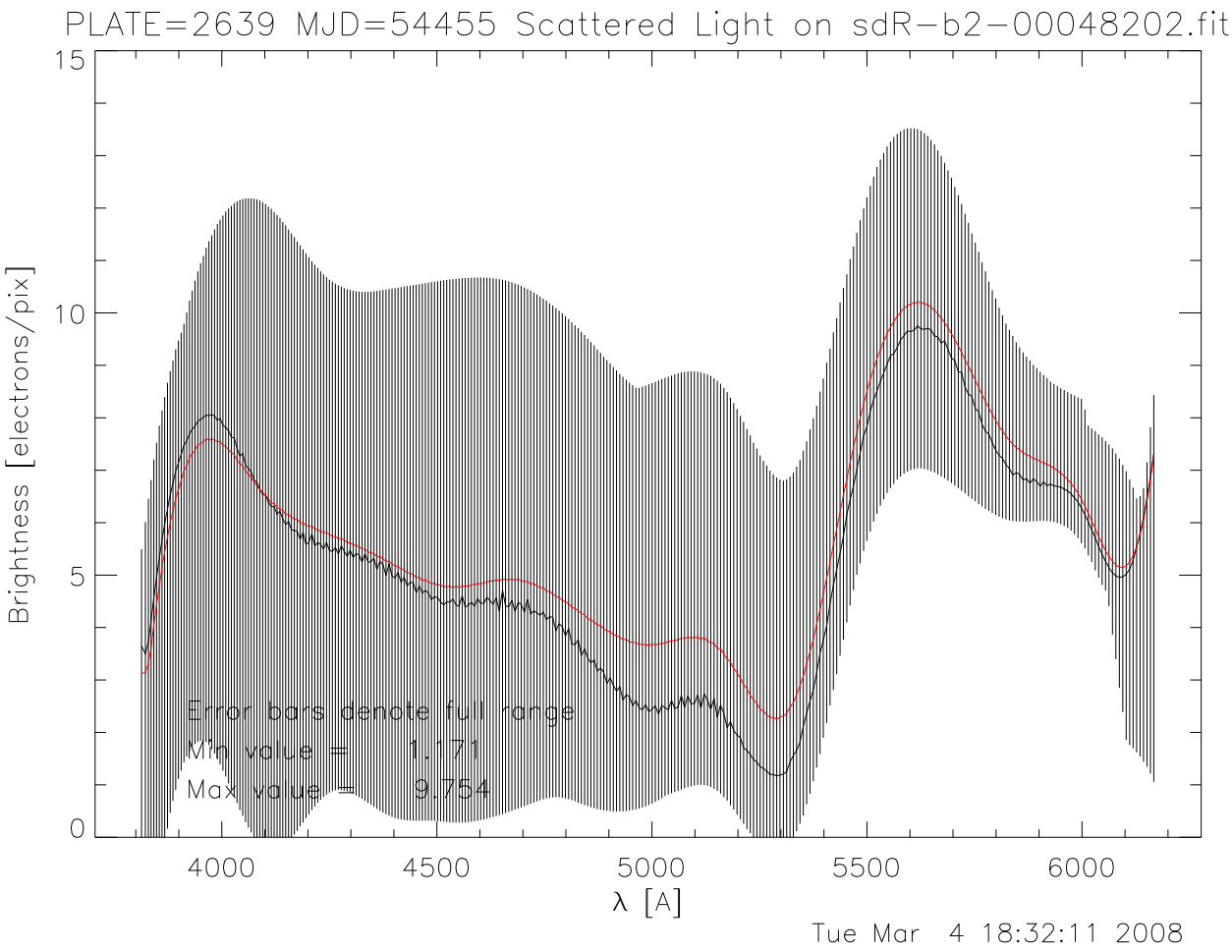

PLATE=2639 MJD=54455 Arcline Fit for sdR-b2-00048206.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:28:11 2008

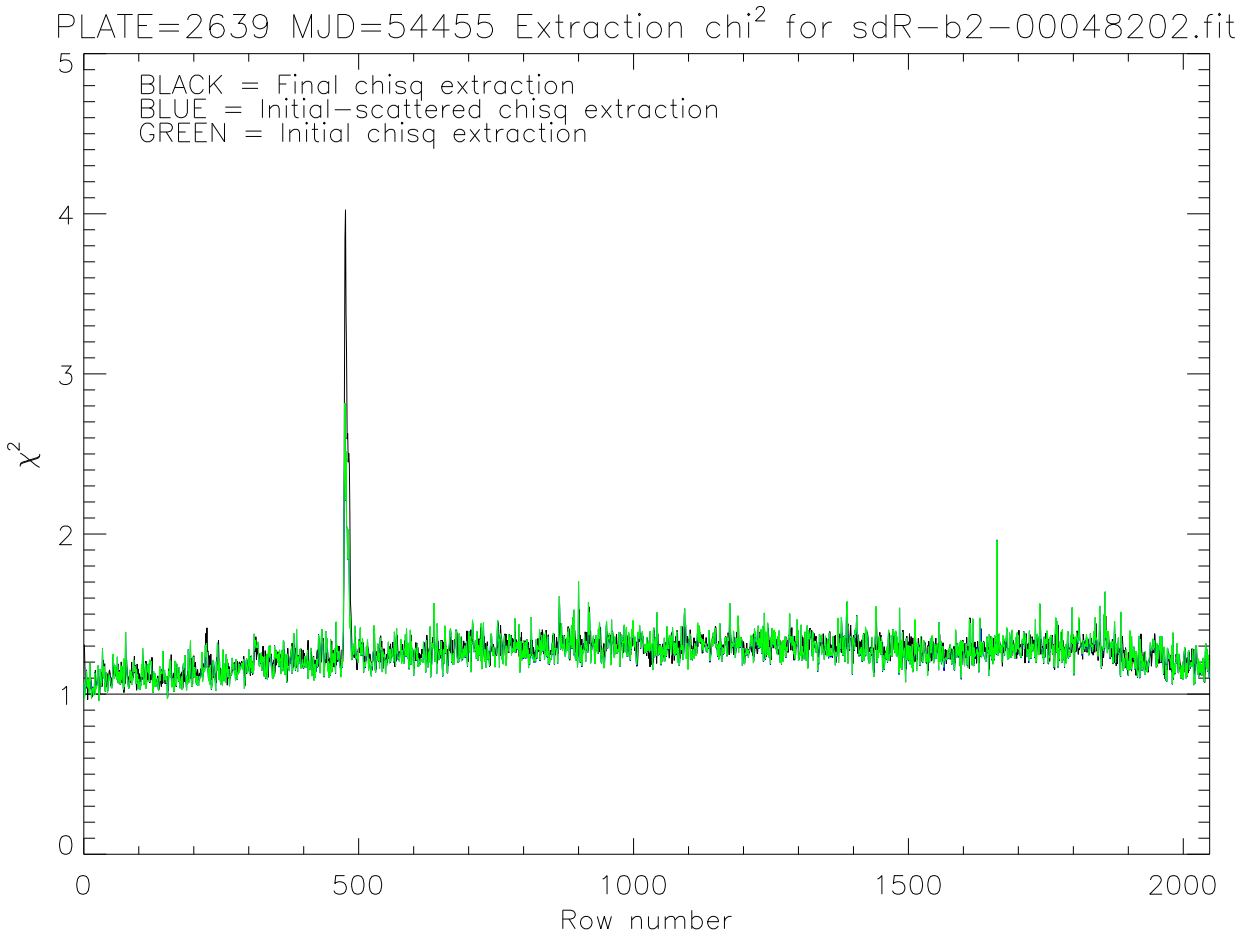

PLATE=2639 MJD=54455 Fiber-Flats for sdR-b2-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.135
Max value = 1.176
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:28:20 2008

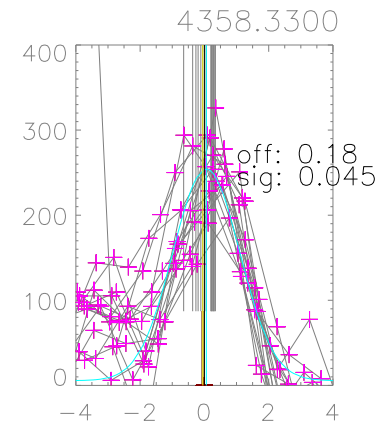

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b2−00048202.f
19.1
19.1
13.6
13.6
13.6
13.6
19.1
19.1
7.8
7.8
Y [pix]
X [pix]
0
500
1000
1500
2000

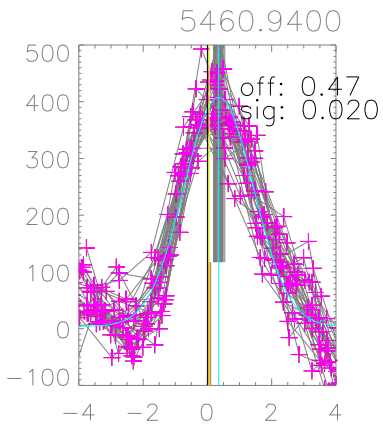

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-b2-00048202.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 9.666
Max value = 21.077
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:29:08 2008

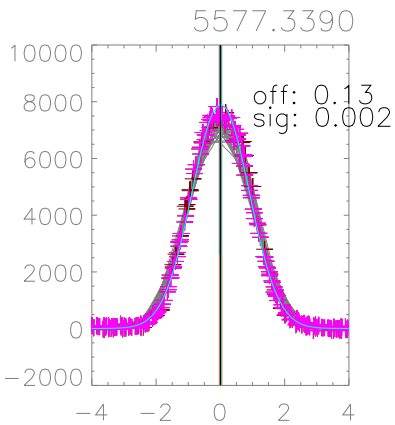

PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048202.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.73
4.09
0.45
11.36

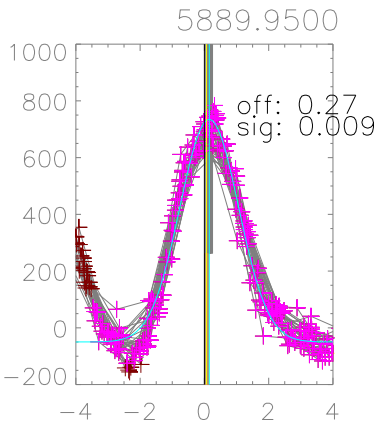

PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048202.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.171
Max value = 9.754
Tue Mar 4 18:32:11 2008

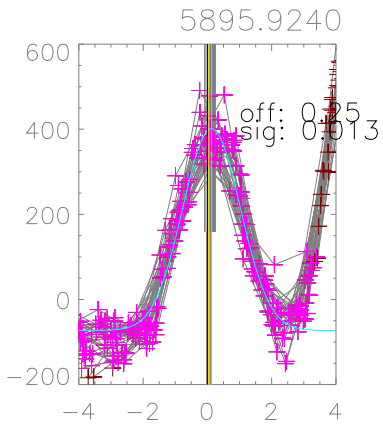

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b2-00048202.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

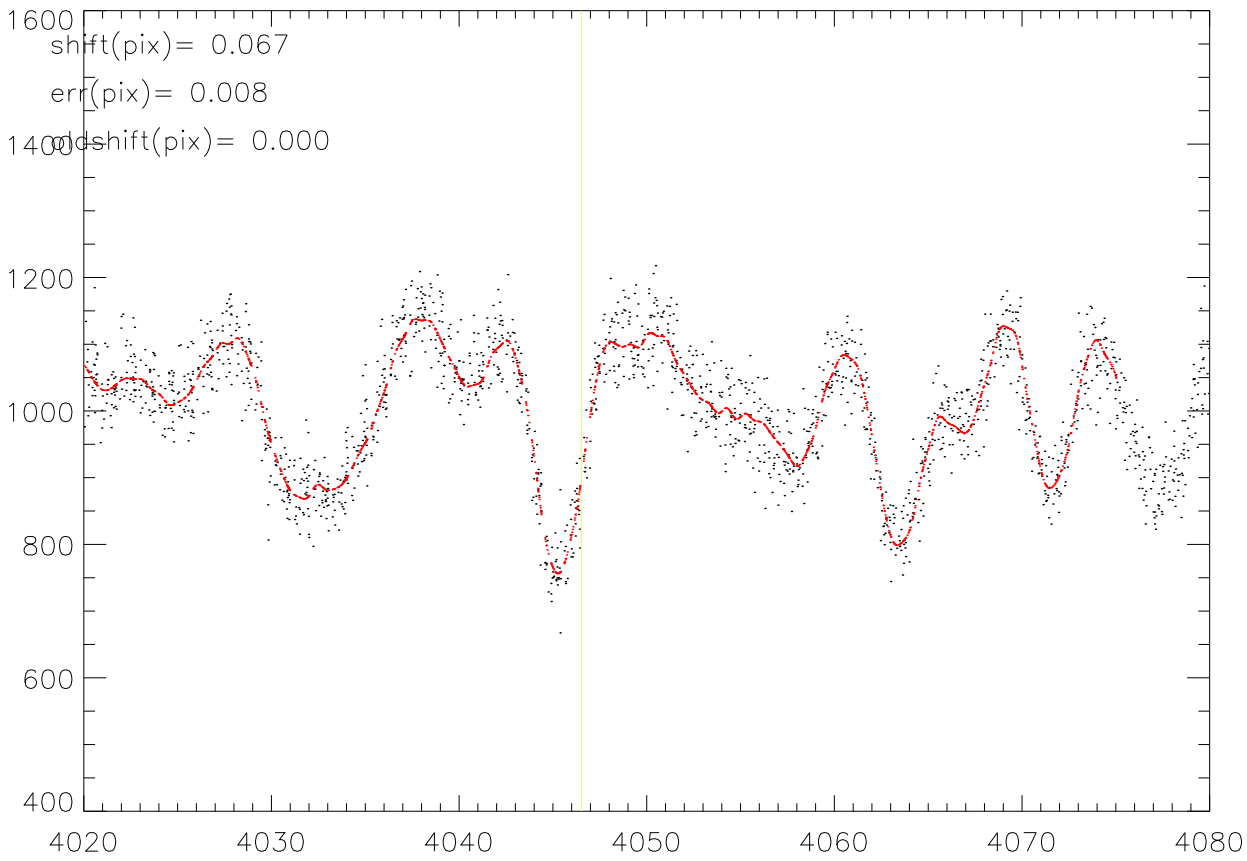

4358.3300
off: 0.18
sig: 0.045

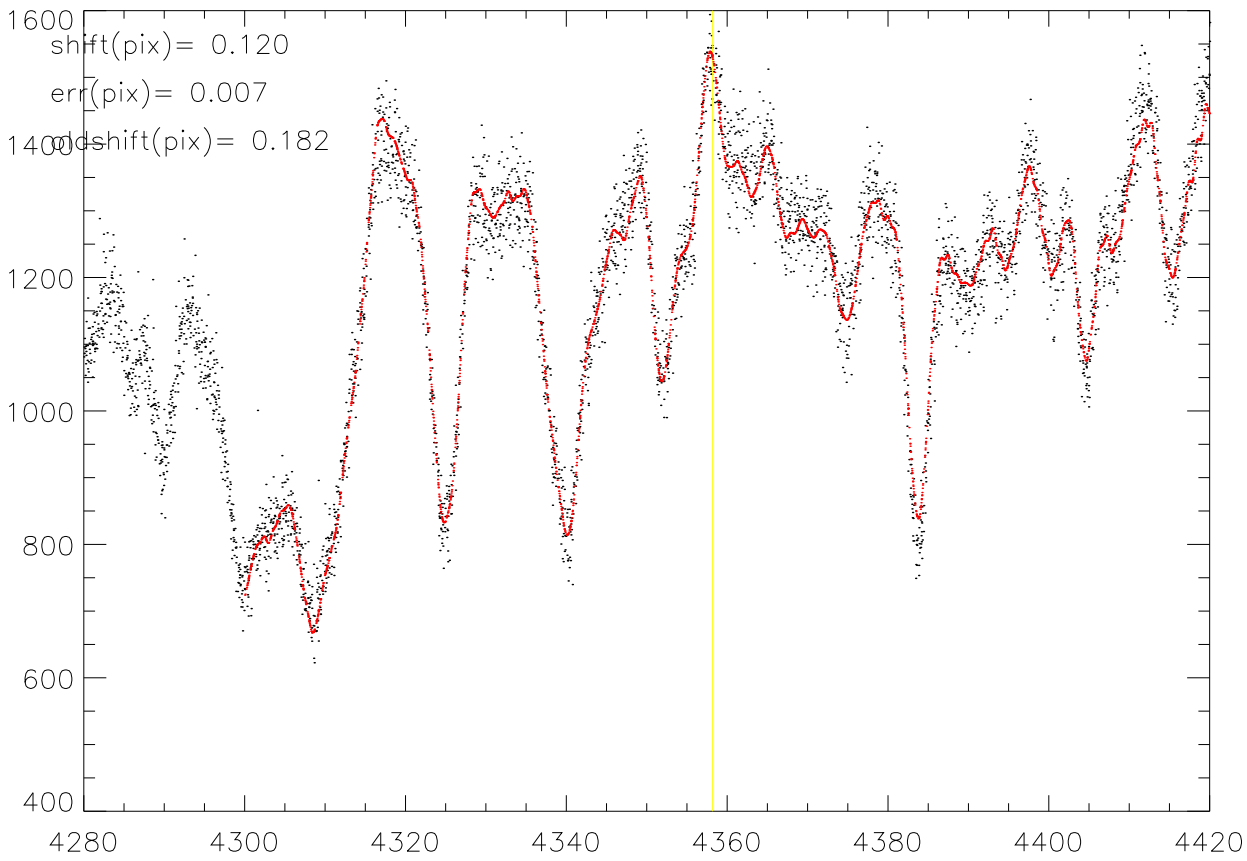

5460.9400
off: 0.47
sig: 0.020

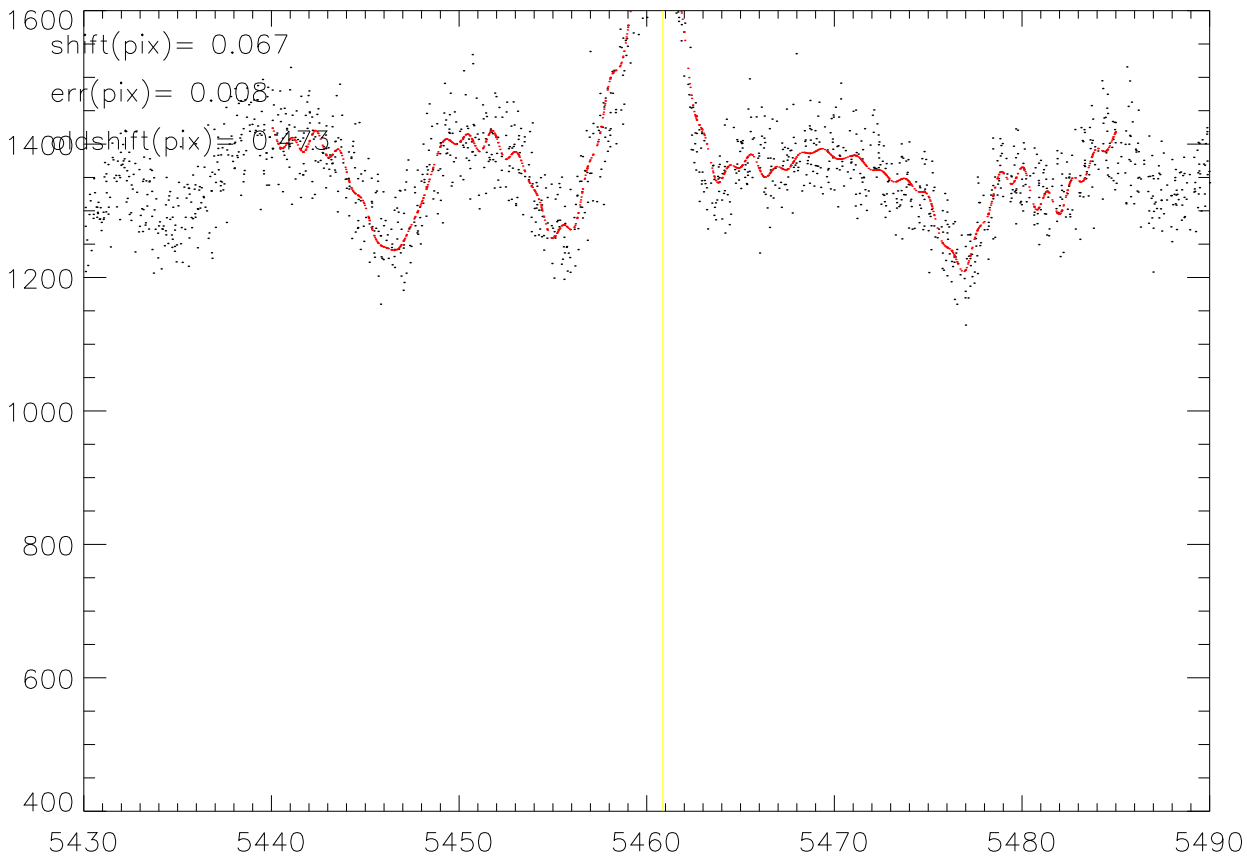

5577.3390
off: 0.13
sig: 0.002

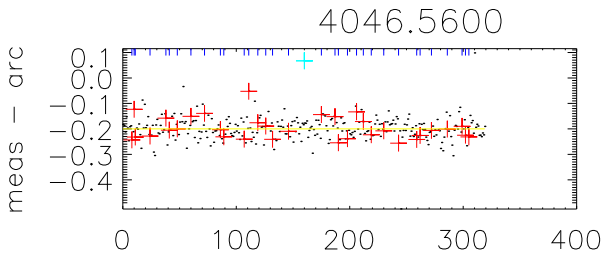

5889.9500
off: 0.27
sig: 0.009

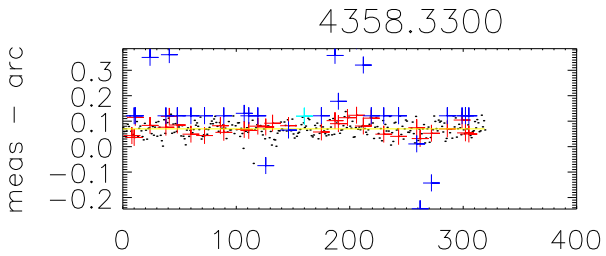

5895.9240
off: 0.25
sig: 0.013

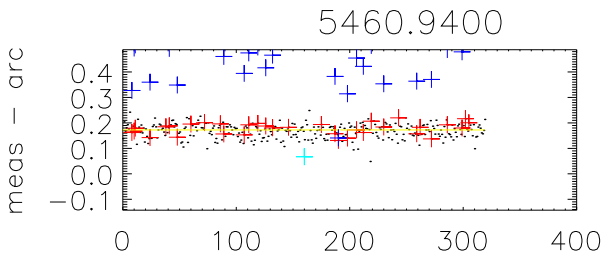

shift(pix)= 0.067
err(pix)= 0.008
oldshift(pix)= 0.000
1600
1400
1200
1000
800
600
400
4020
4030
4040
4050
4060
4070
4080

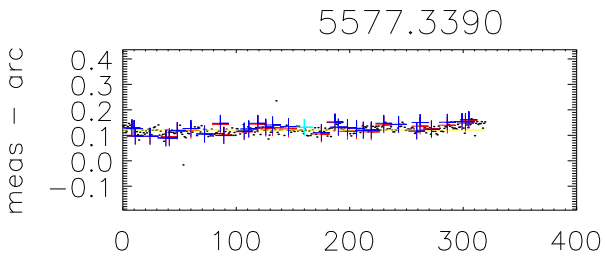

shift(pix)= 0.120
err(pix)= 0.007
oldshift(pix)= 0.182
1600
1400
1200
1000
800
600
400
4280
4300
4320
4340
4360
4380
4400
4420

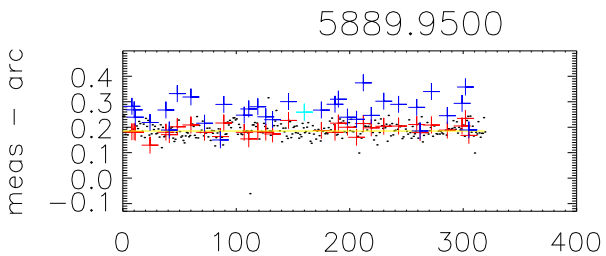

shift(pix)= 0.067
err(pix)= 0.008
oldshift(pix)= 0.473
1600
1400
1200
1000
800
600
400
5430
5440
5450
5460
5470
5480
5490

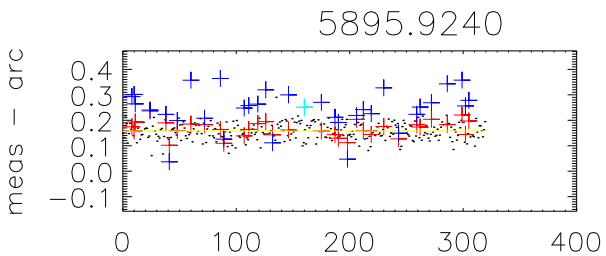

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

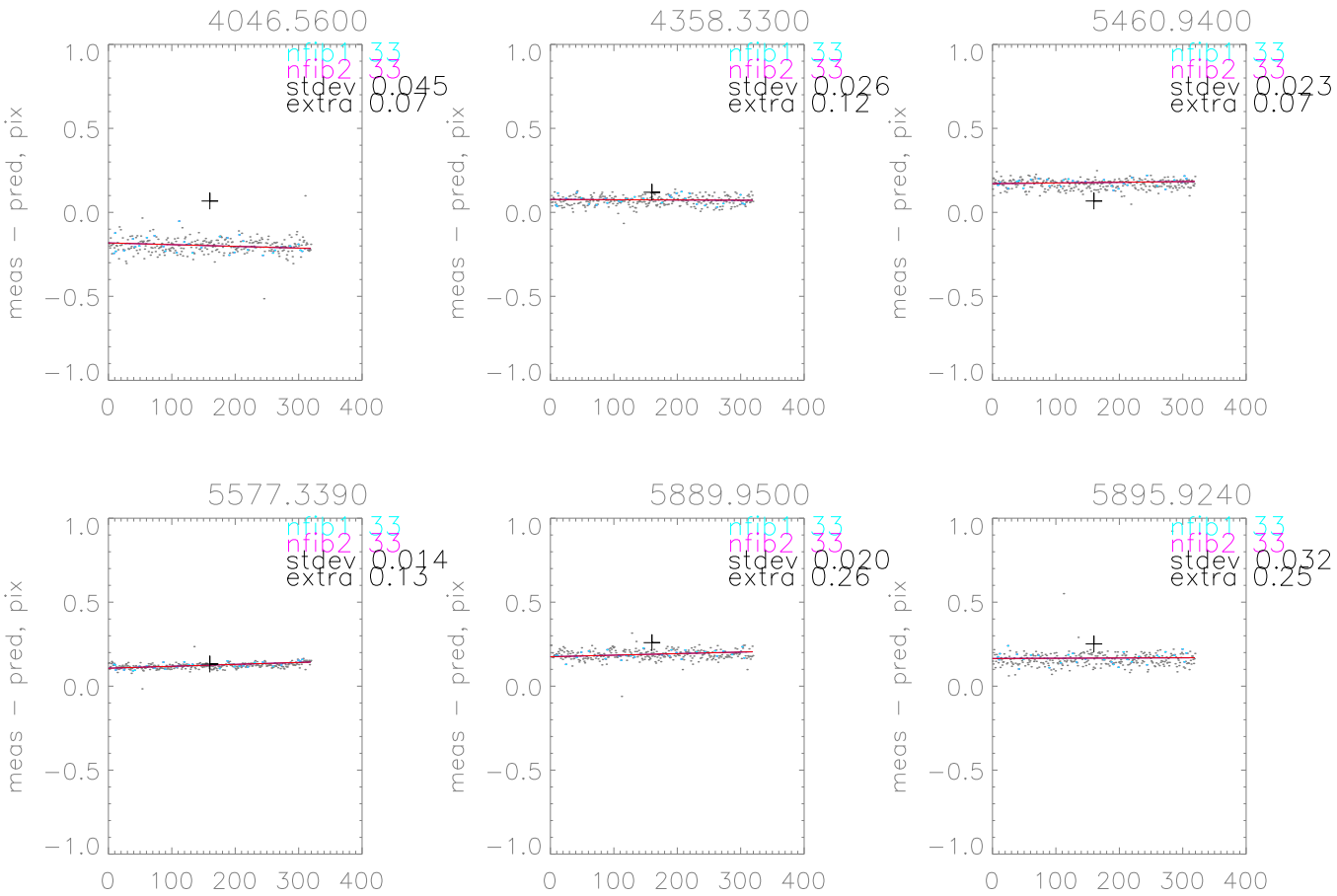

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

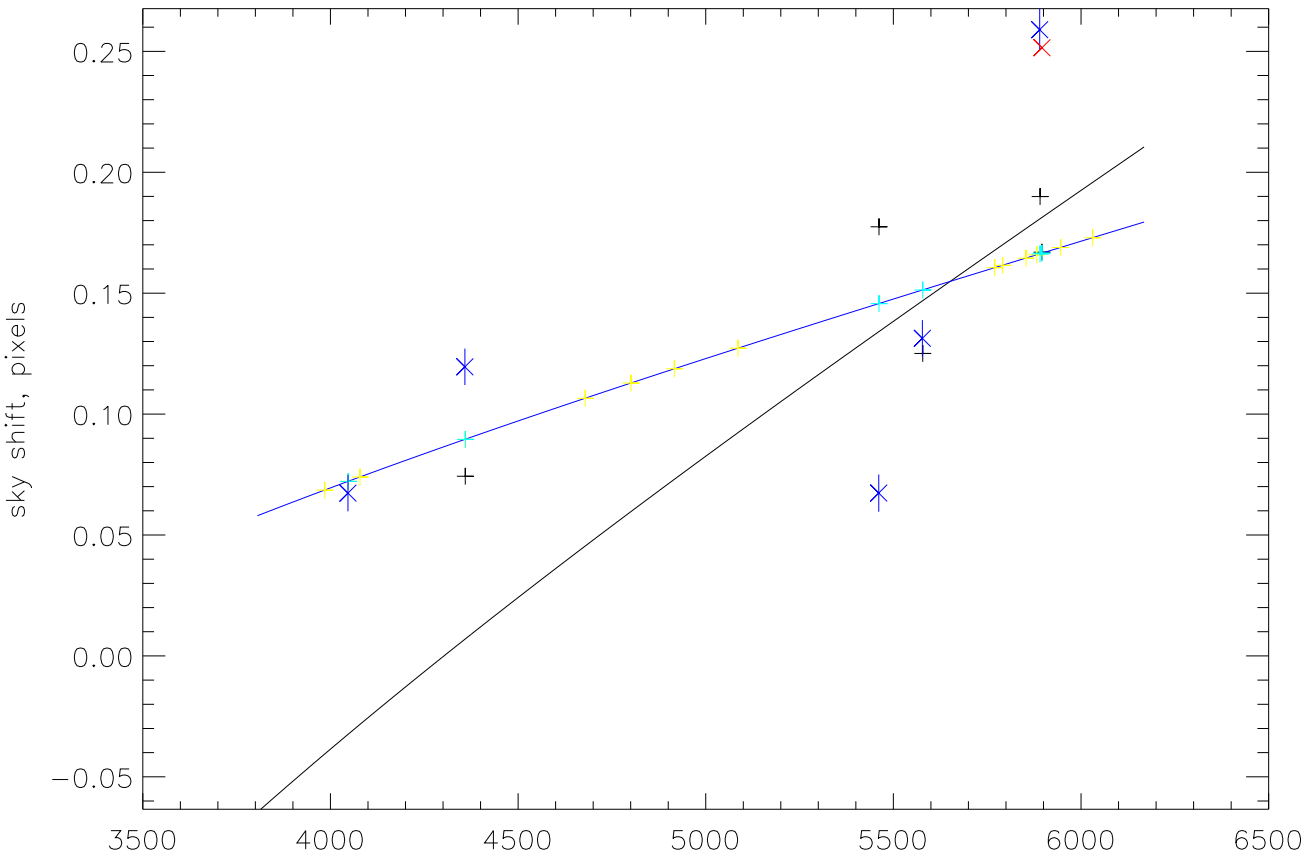

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

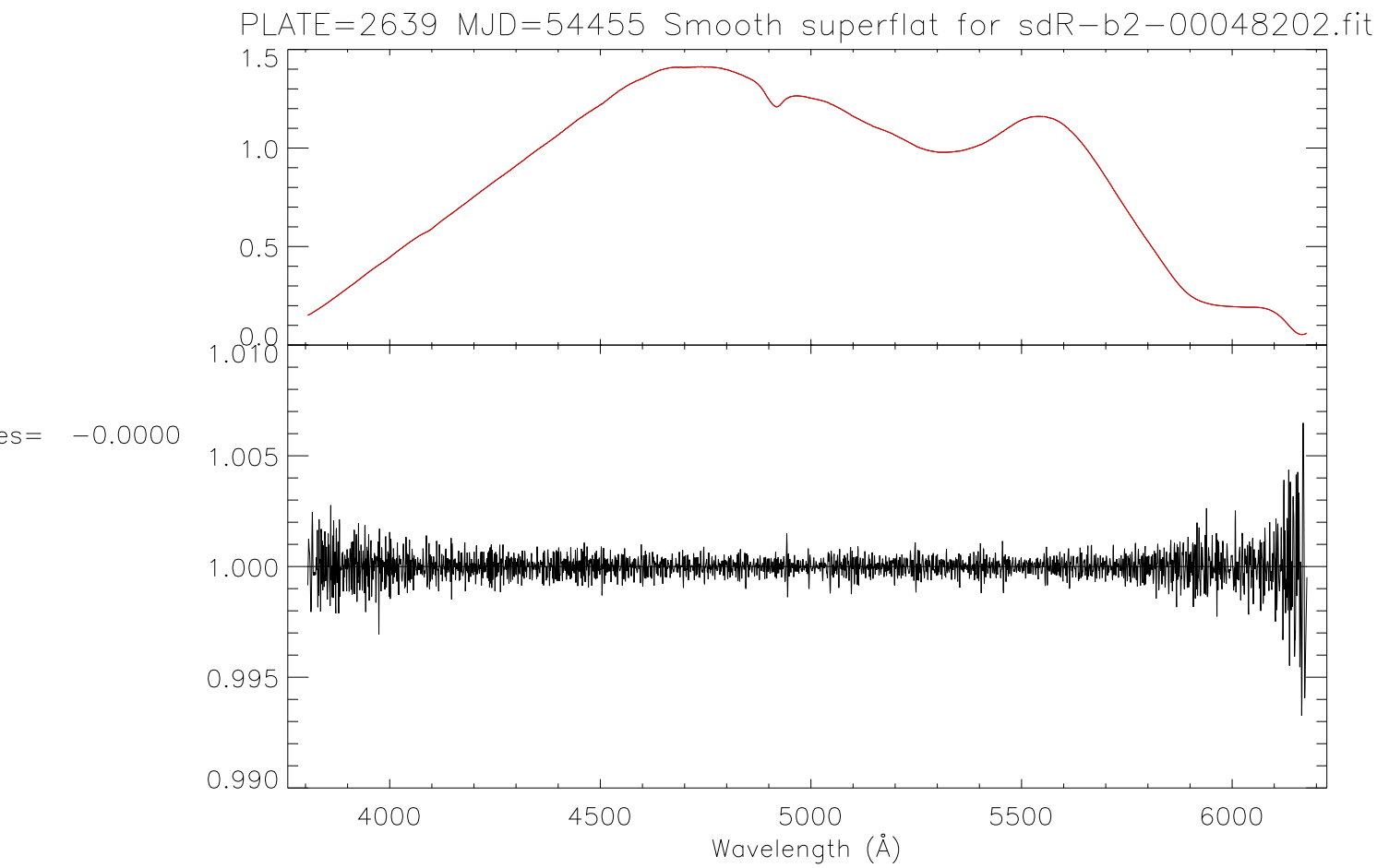

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

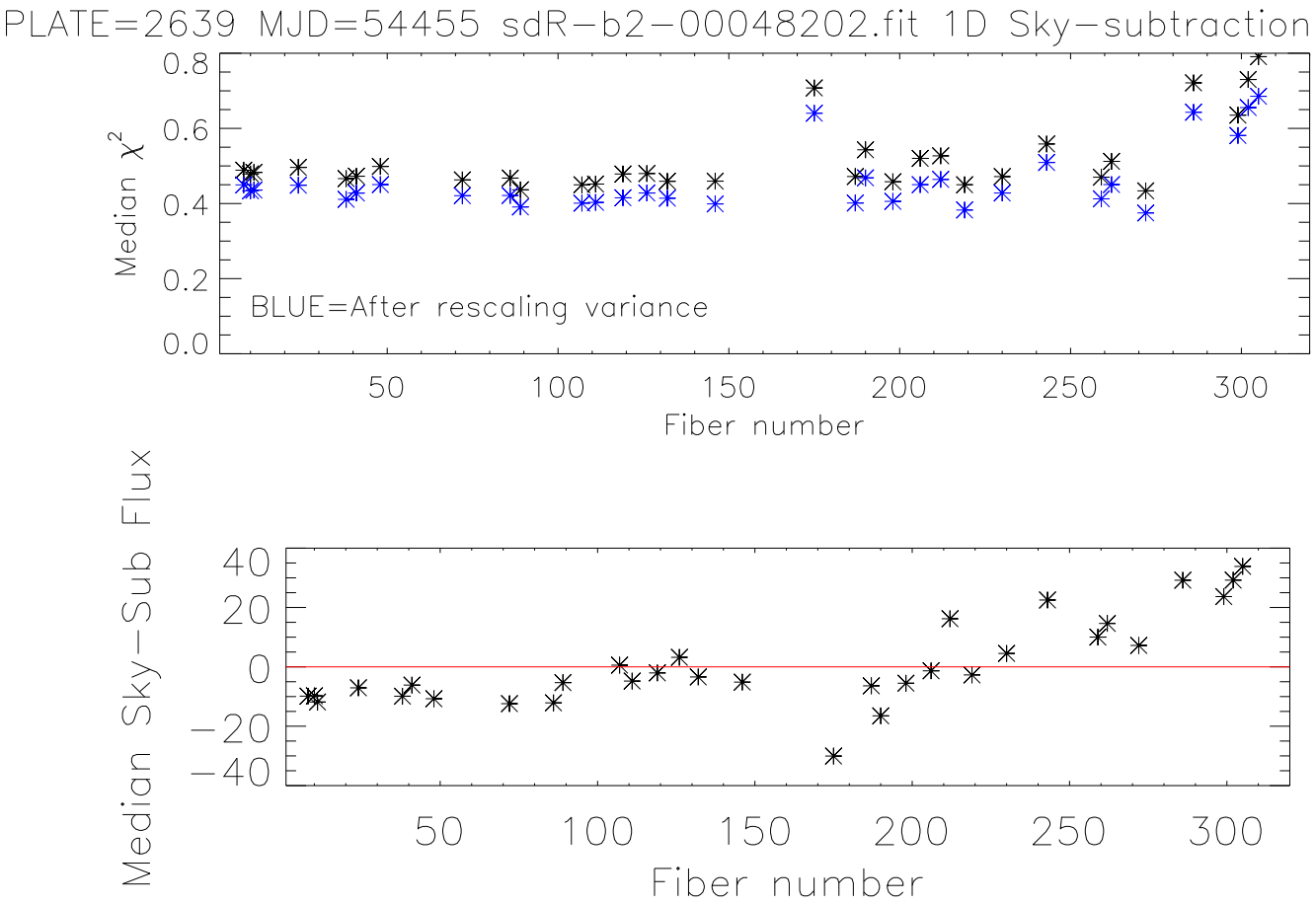

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

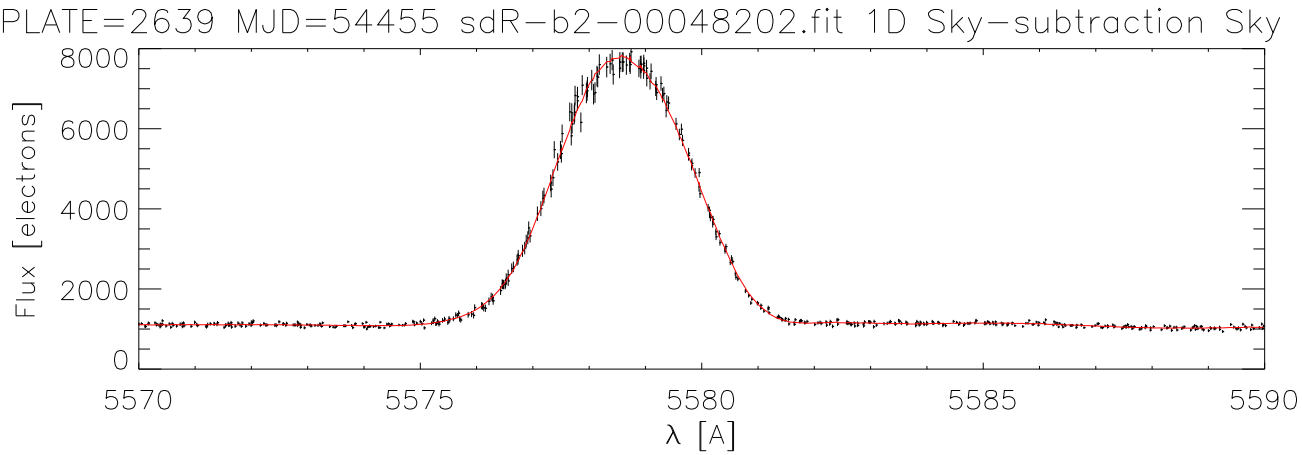

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

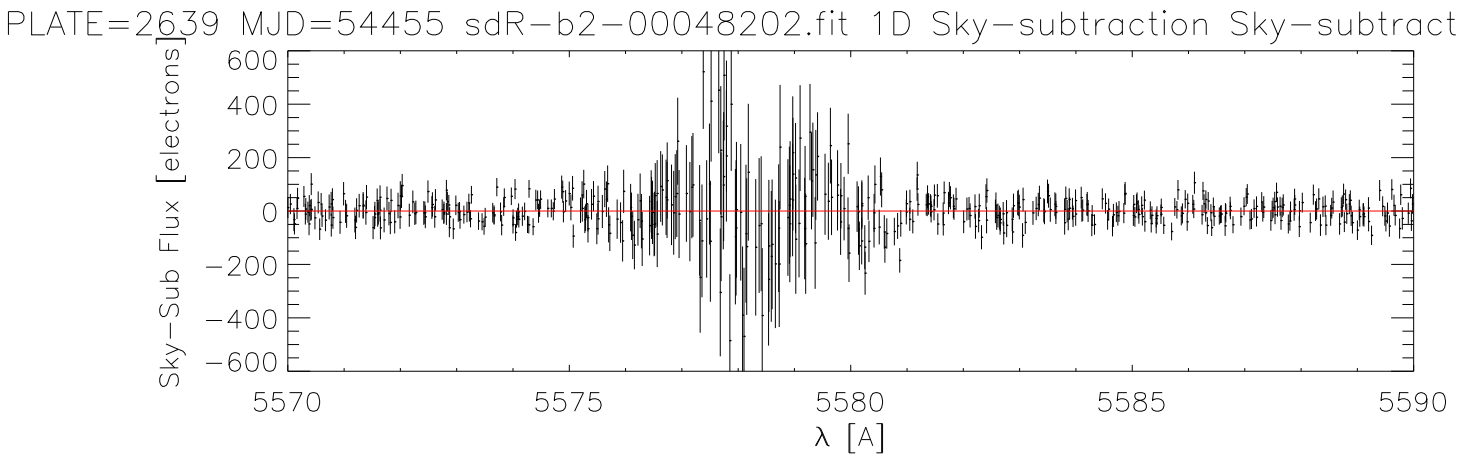

4046.5600
nfib1 33
nfib2 33
stdev 0.045
extra 0.07
4358.3300
nfib1 33
nfib2 33
stdev 0.026
extra 0.12
5460.9400
nfib1 33
nfib2 33
stdev 0.023
extra 0.07
5577.3390
nfib1 33
nfib2 33
stdev 0.014
extra 0.13
5889.9500
nfib1 33
nfib2 33
stdev 0.020
extra 0.26
5895.9240
nfib1 33
nfib2 33
stdev 0.032
extra 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

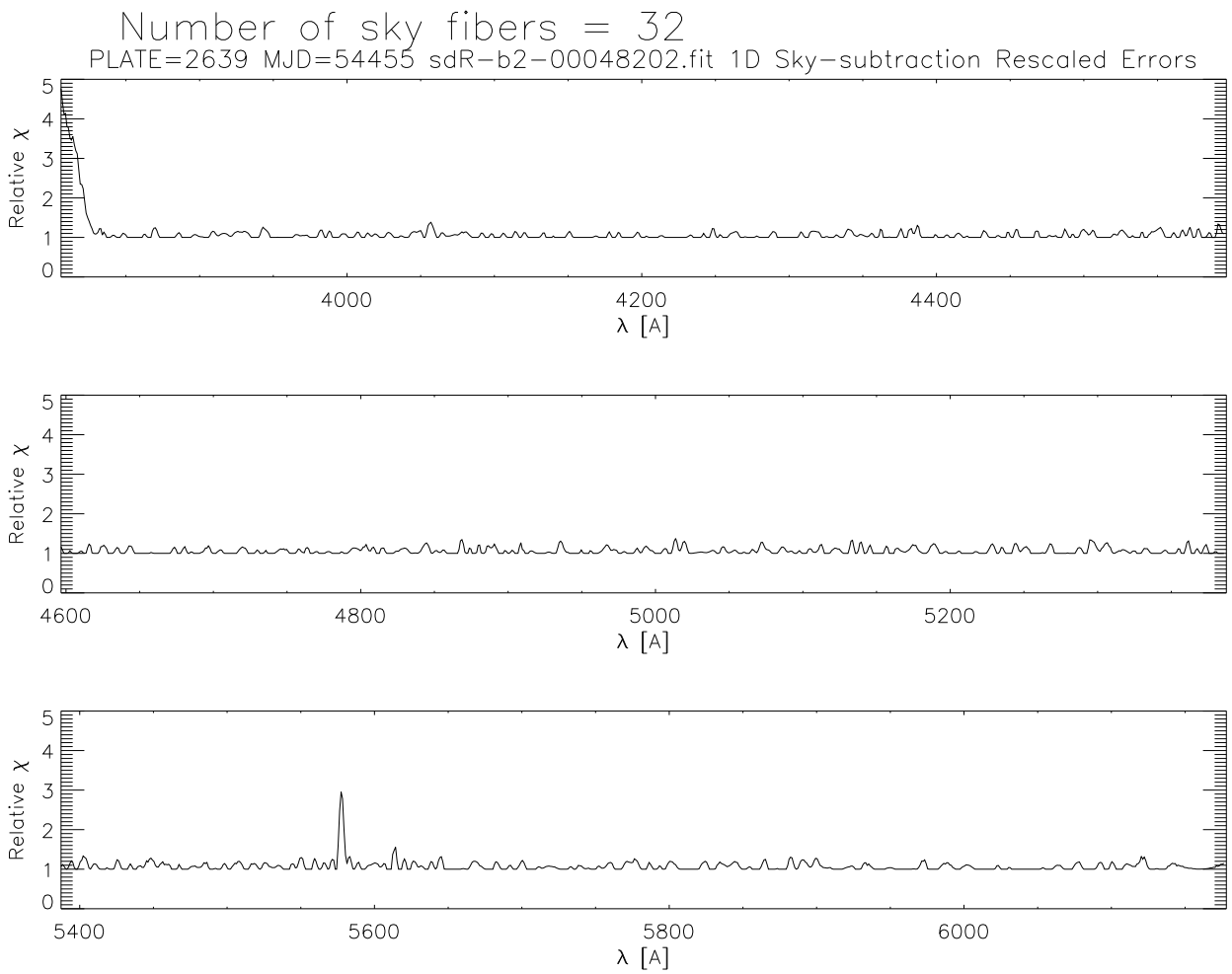

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

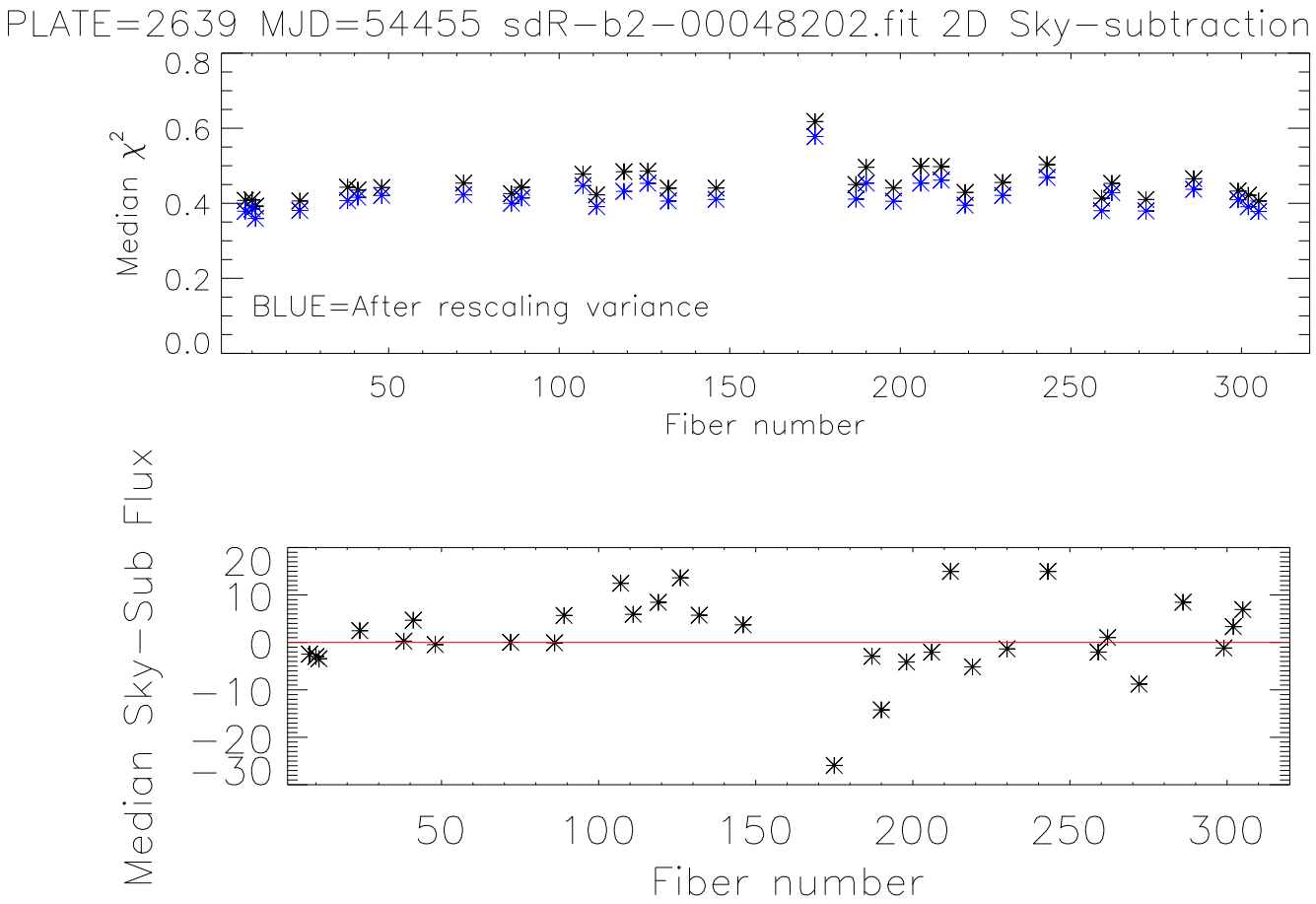

PLATE=2639 MJD=54455 Smooth superflat for sdR-b2-00048202.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

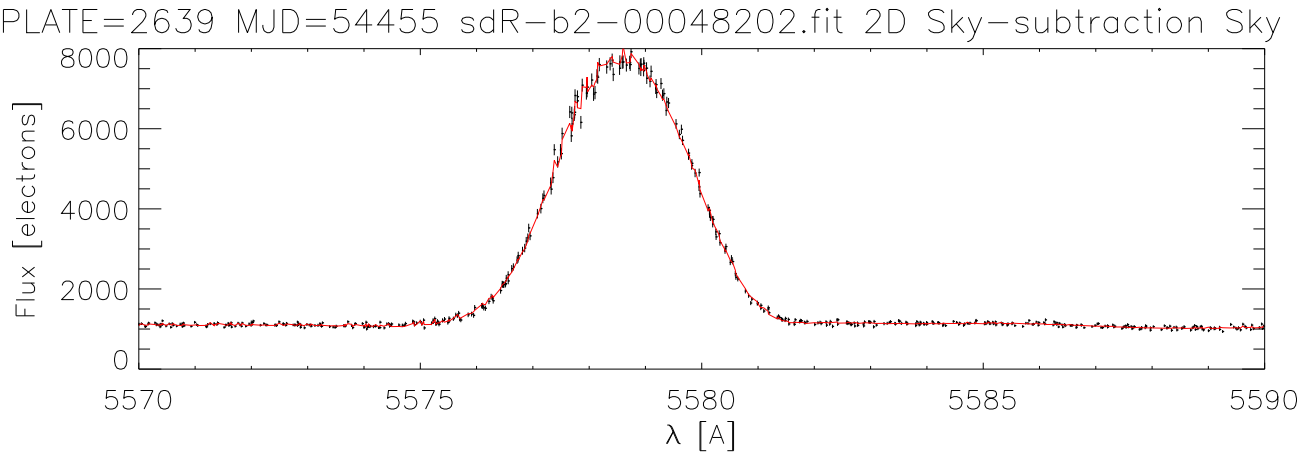

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

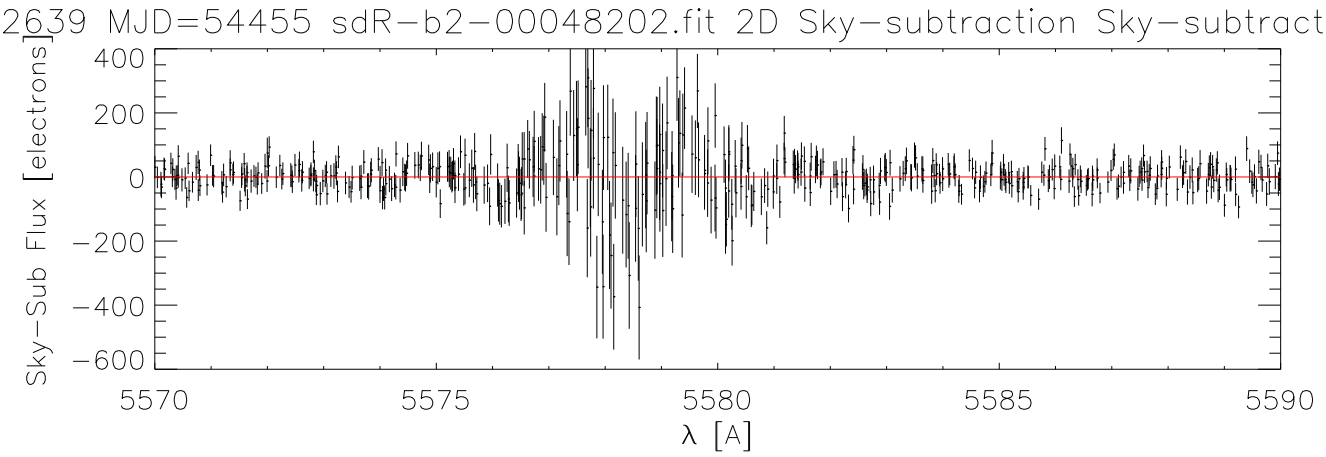

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

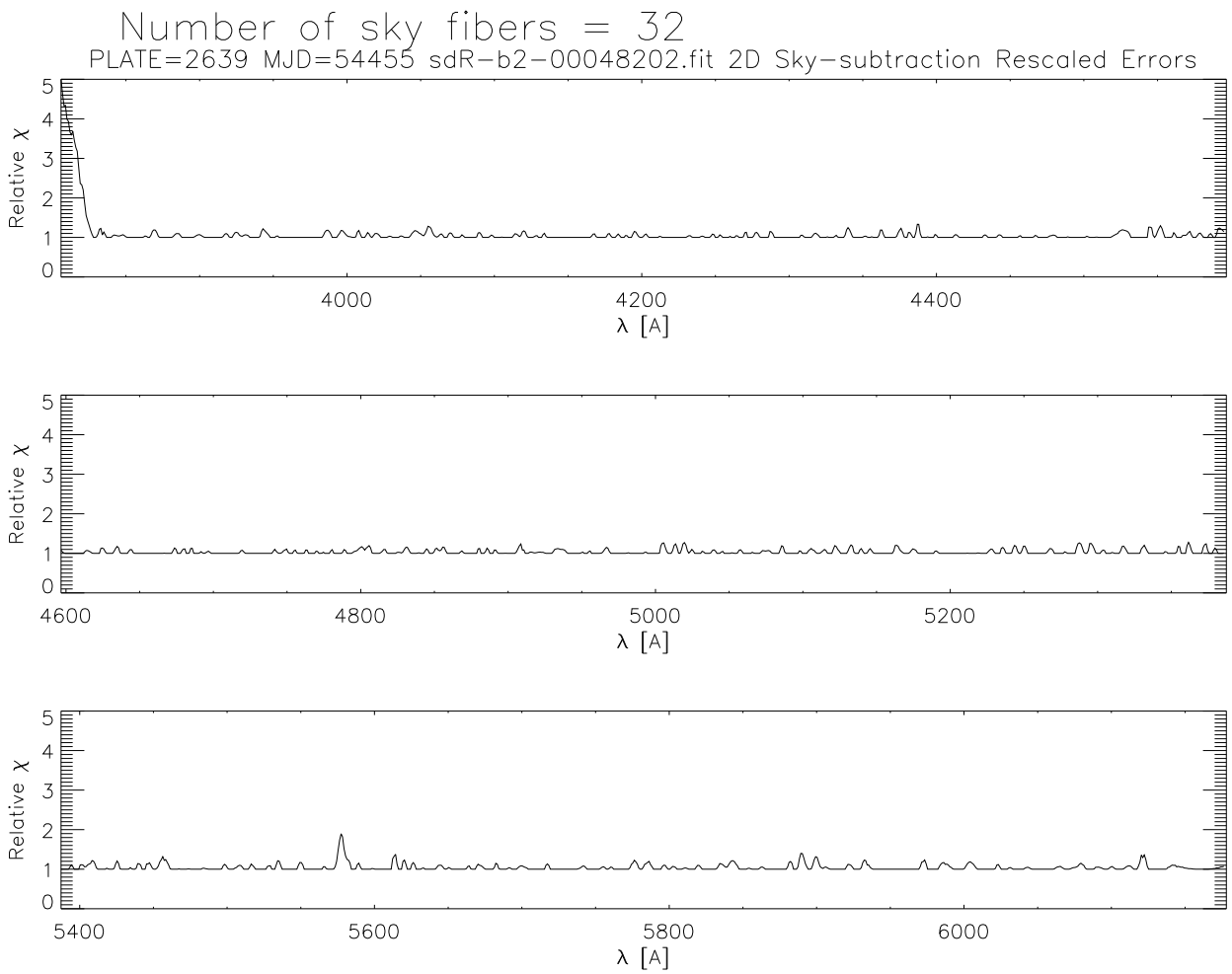

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

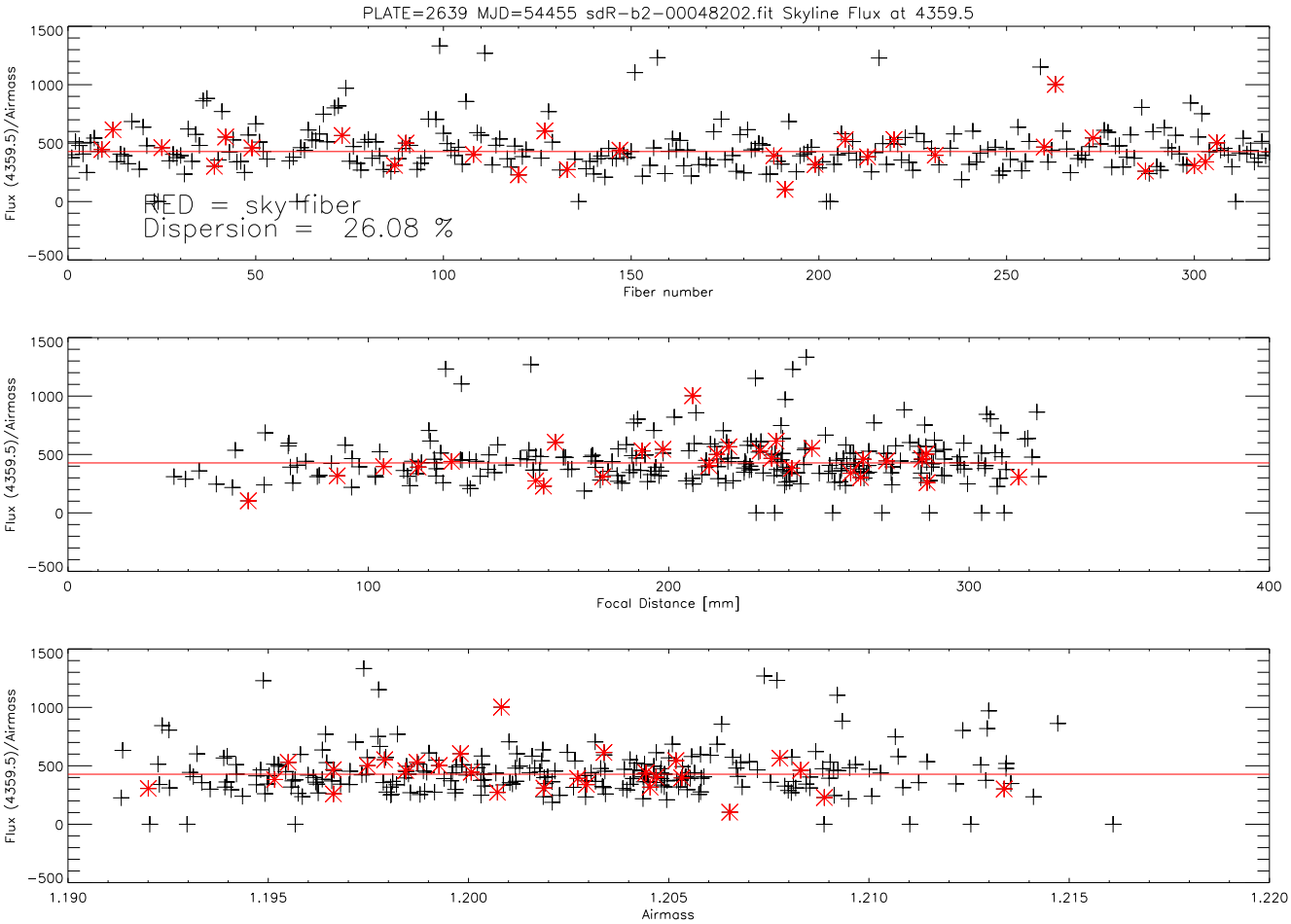

Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048202.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

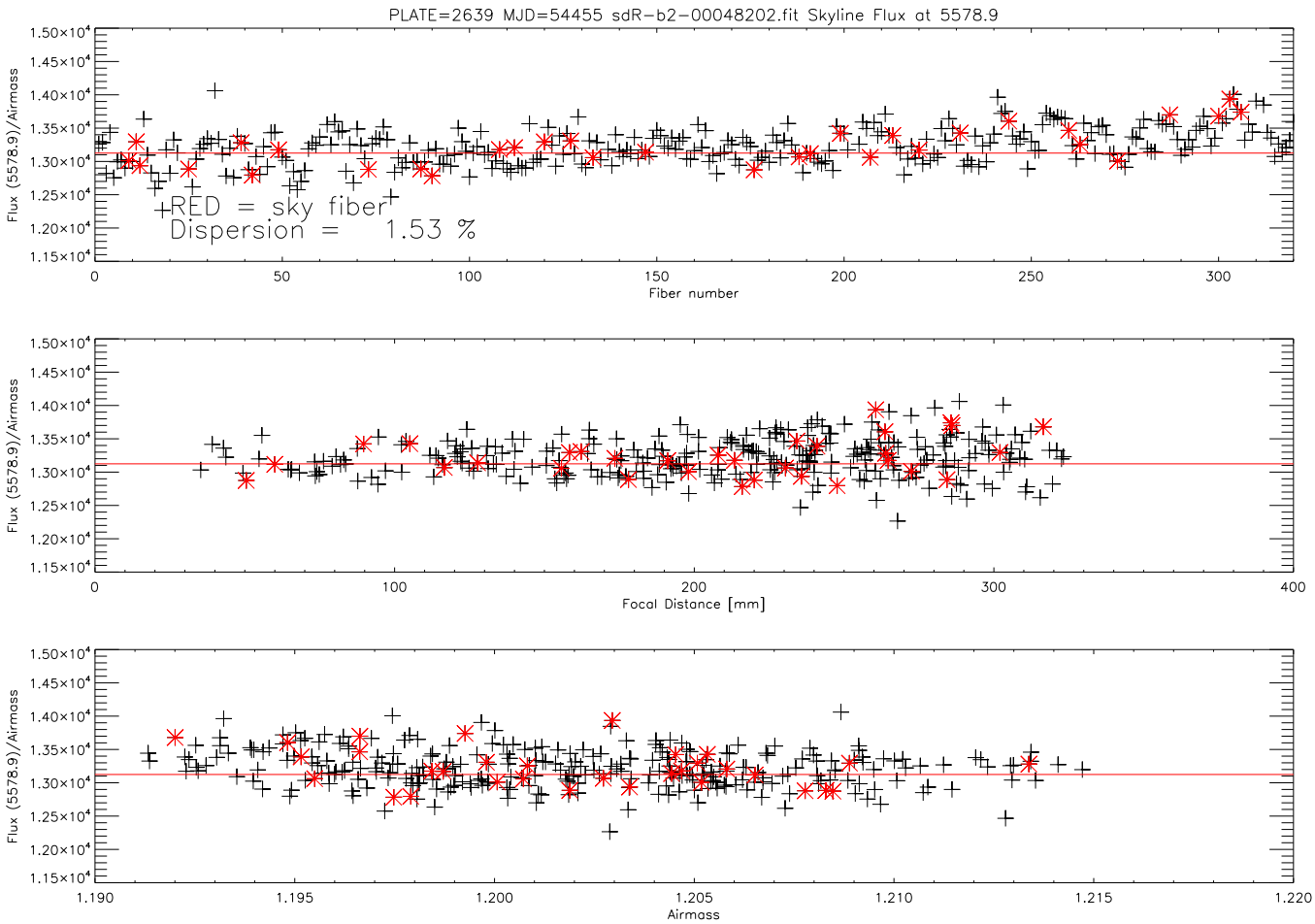

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

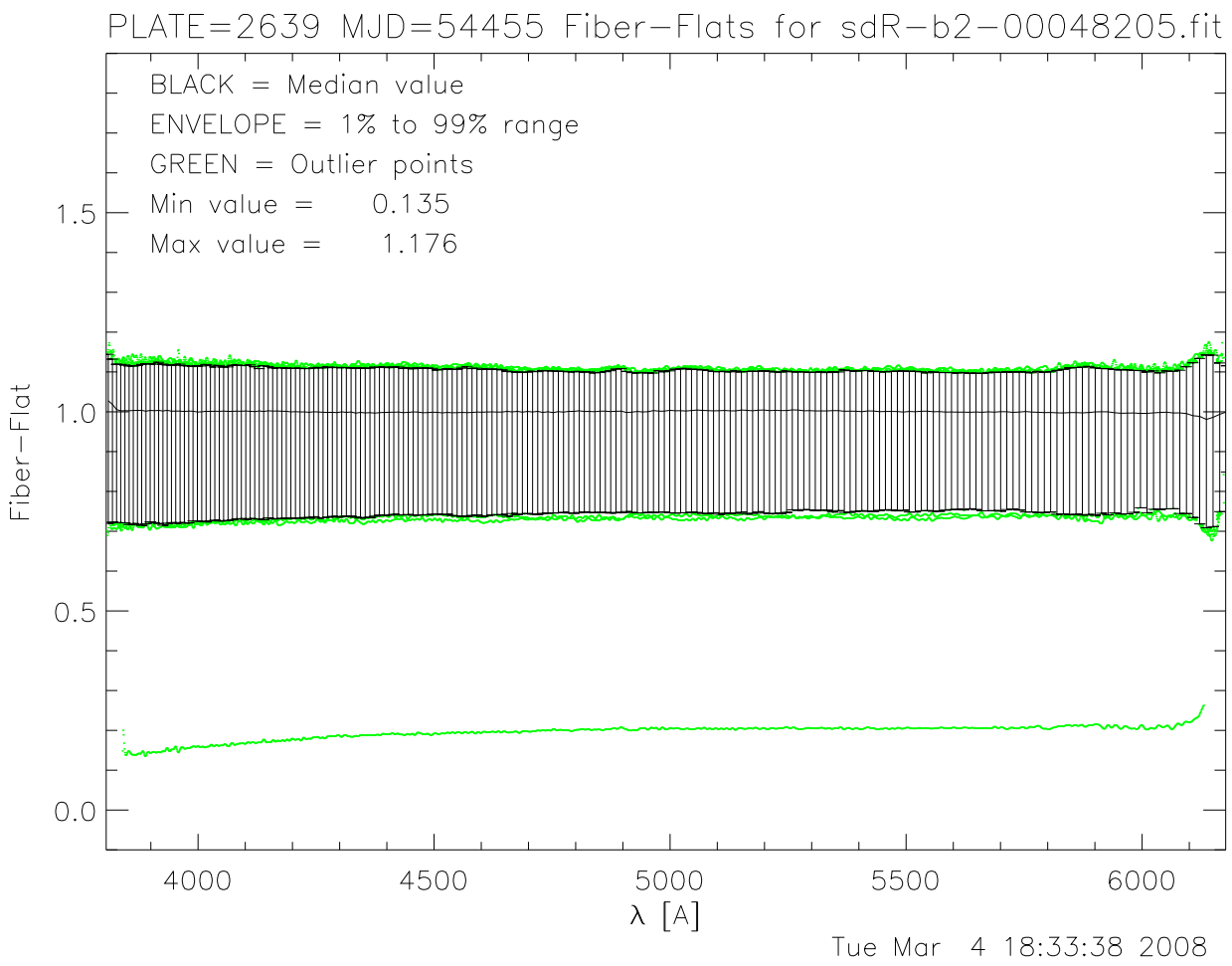

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

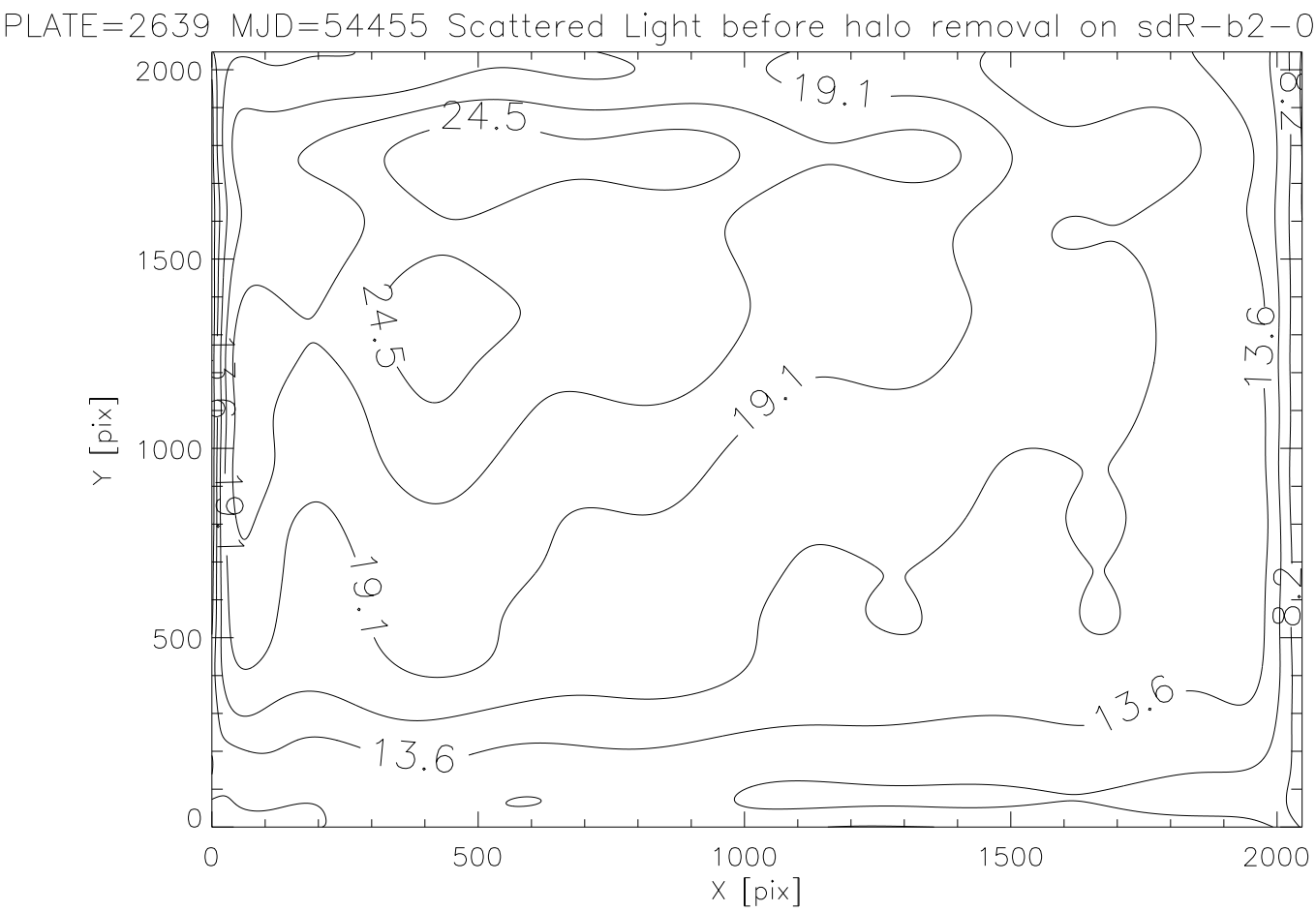

PLATE=2639 MJD=54455 sdR-b2-00048202.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

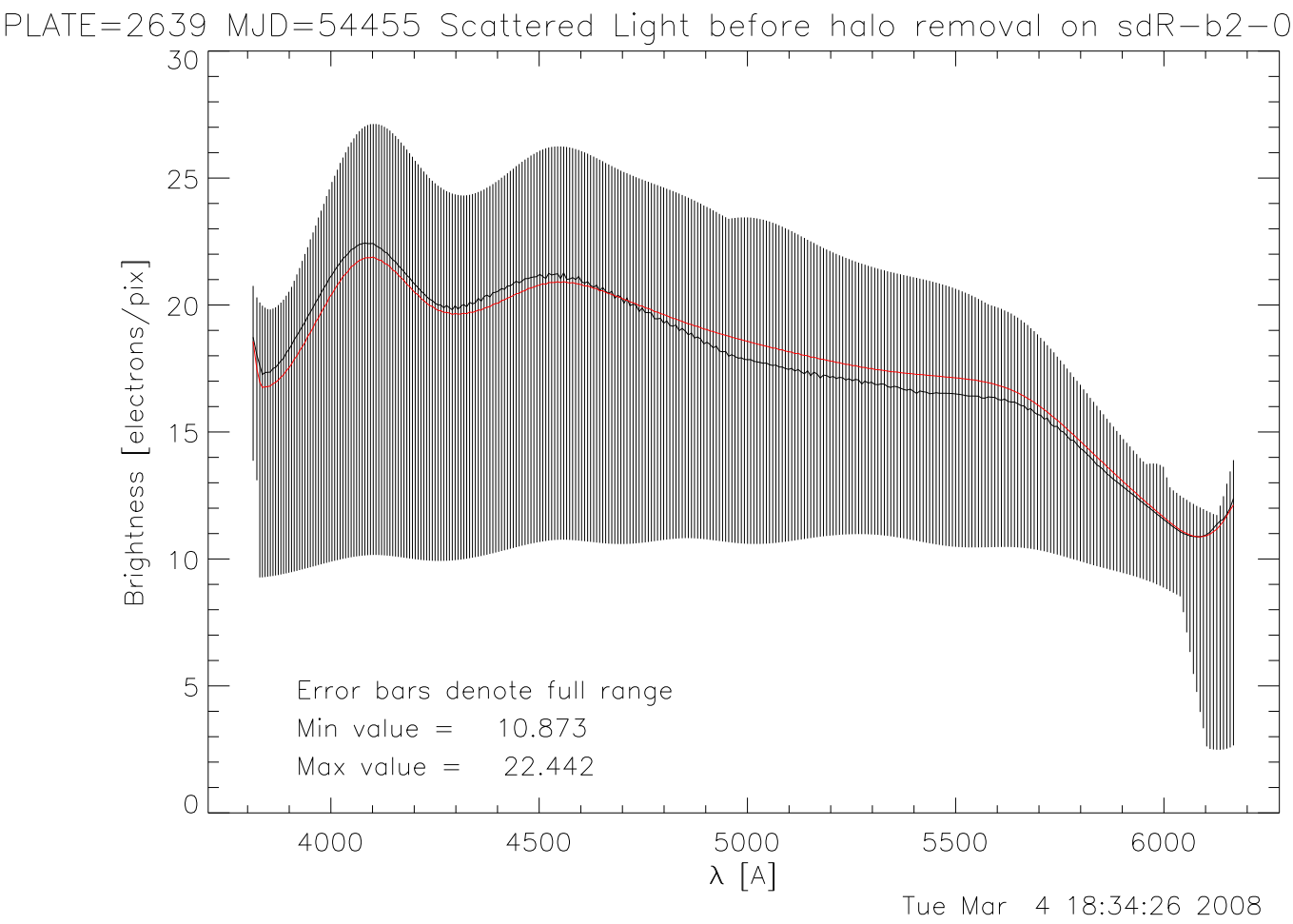

Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048202.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

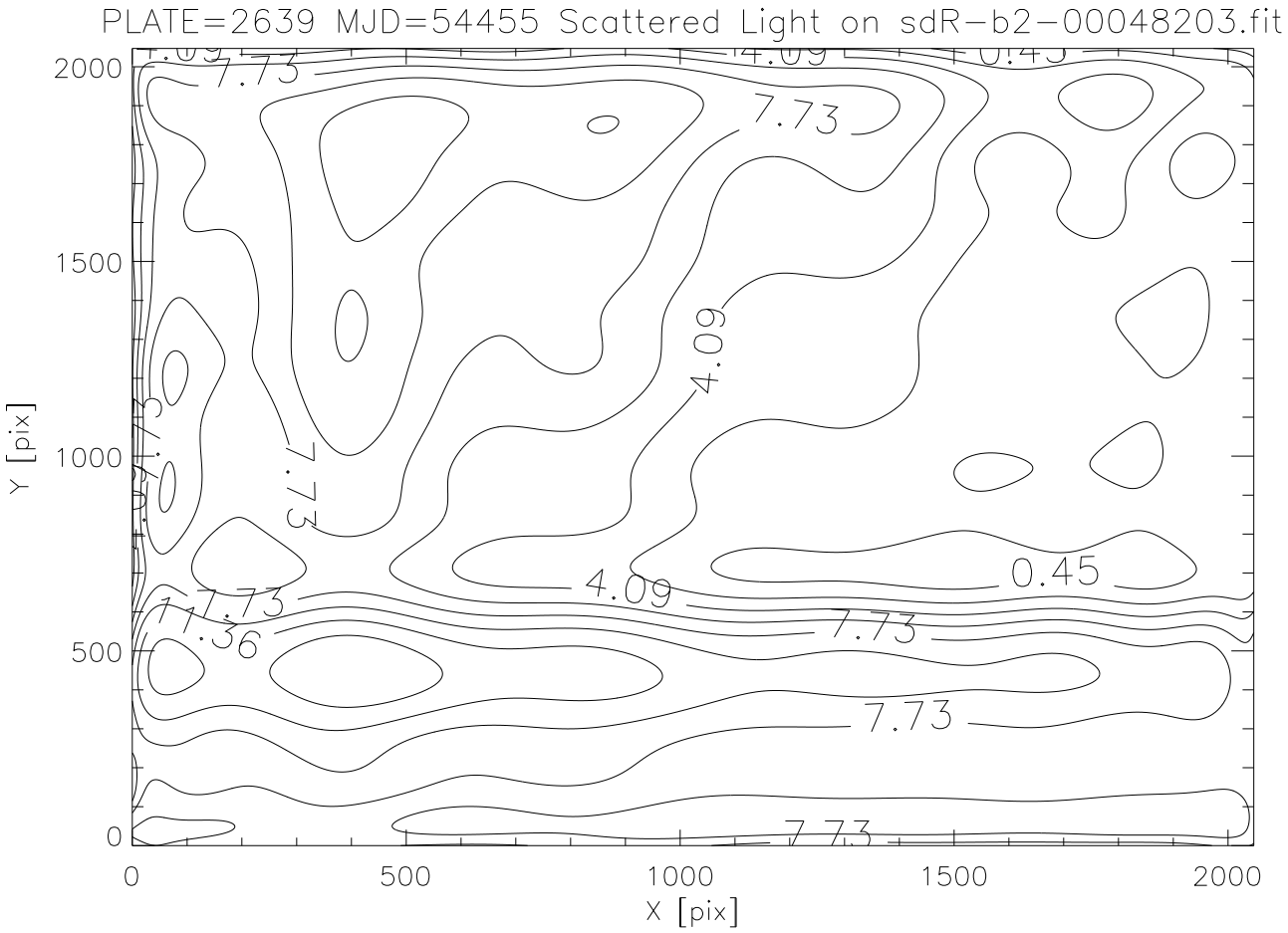

PLATE=2639 MJD=54455 sdR-b2-00048202.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 26.08 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

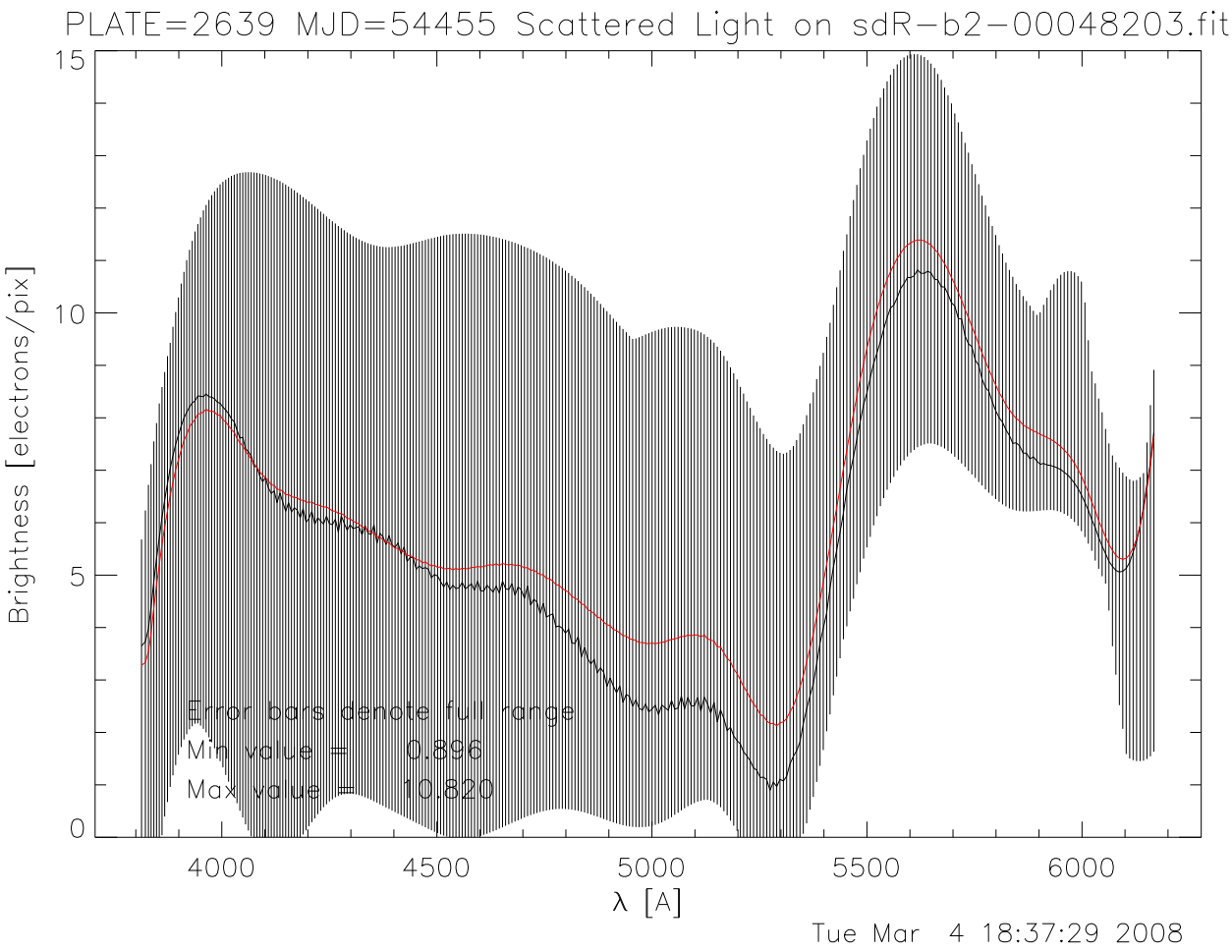

PLATE=2639 MJD=54455 sdR-b2-00048202.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.53 %
Focal Distance [mm]
Airmass


PLATE=2639 MJD=54455 Fiber-Flats for sdR-b2-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.135
Max value = 1.176
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:33:38 2008


PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b2−00048203.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
24.5
19.1
13.6
8.2
7.8
0


PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-b2-00048203.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.873
Max value = 22.442
Tue Mar 4 18:34:26 2008


PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048203.fit
7.73
4.09
0.45
1.36
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048203.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.896
Max value = 10.820
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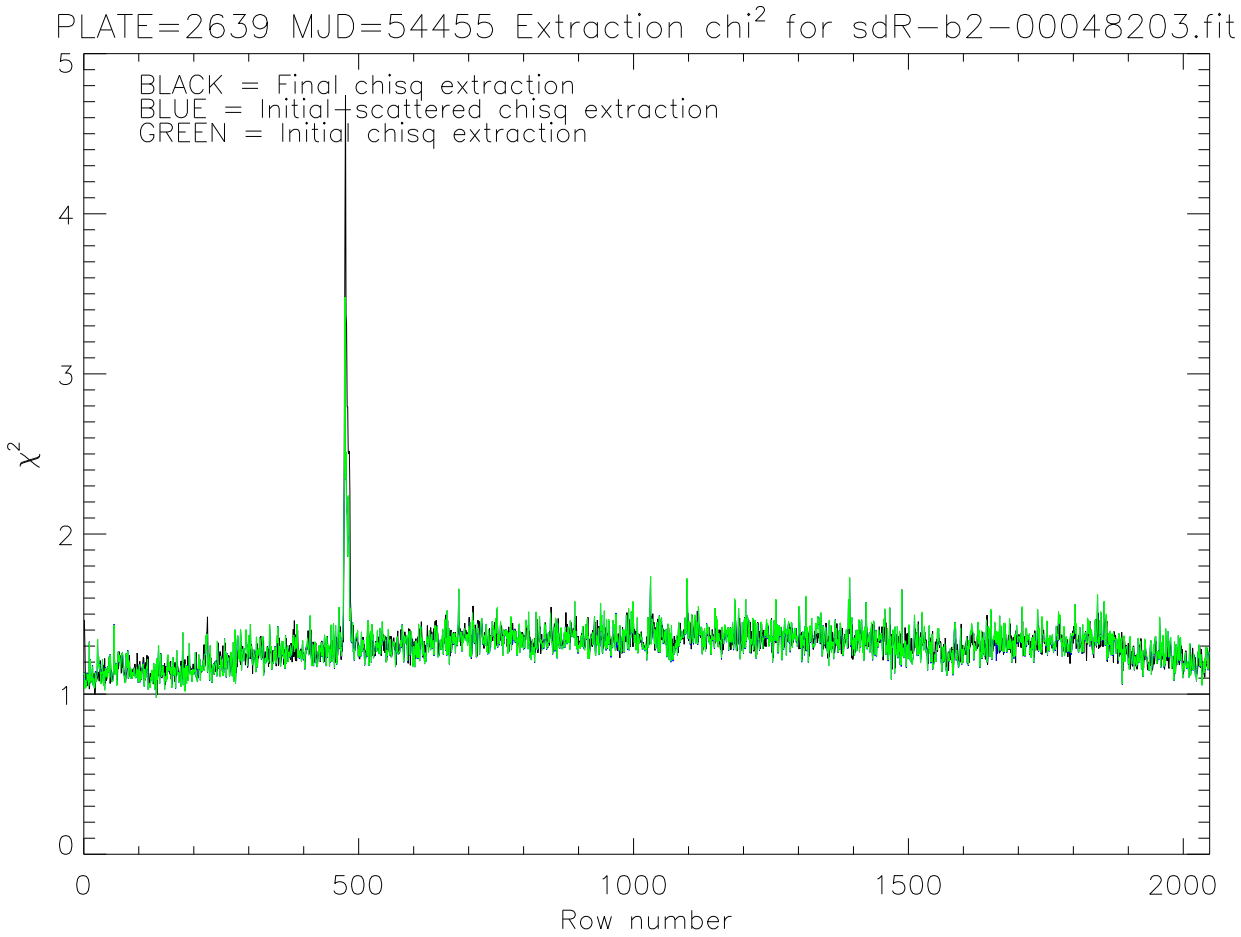
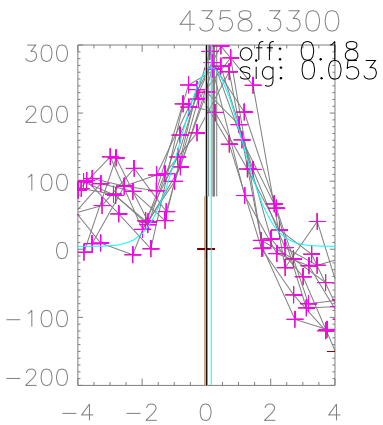
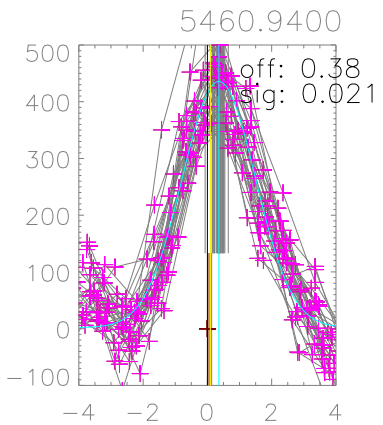
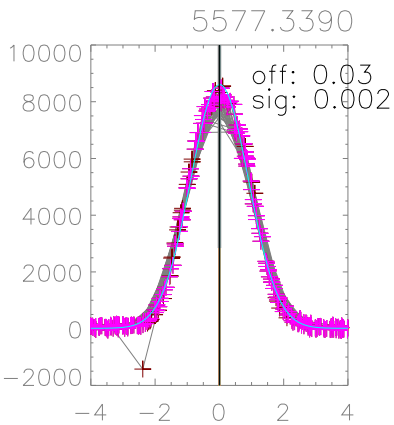
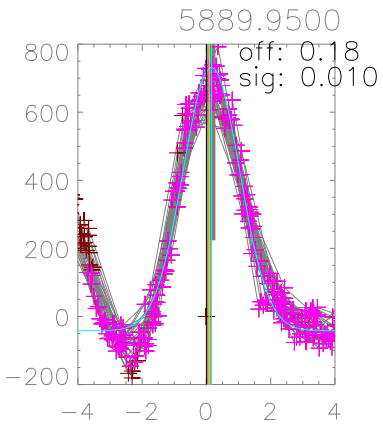
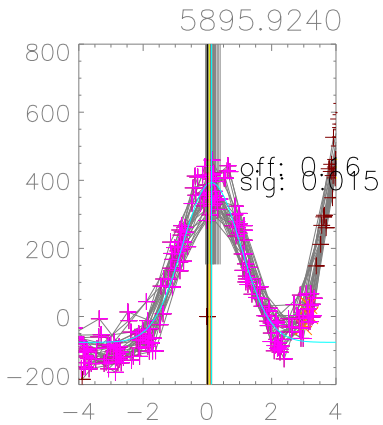

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b2-00048203.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

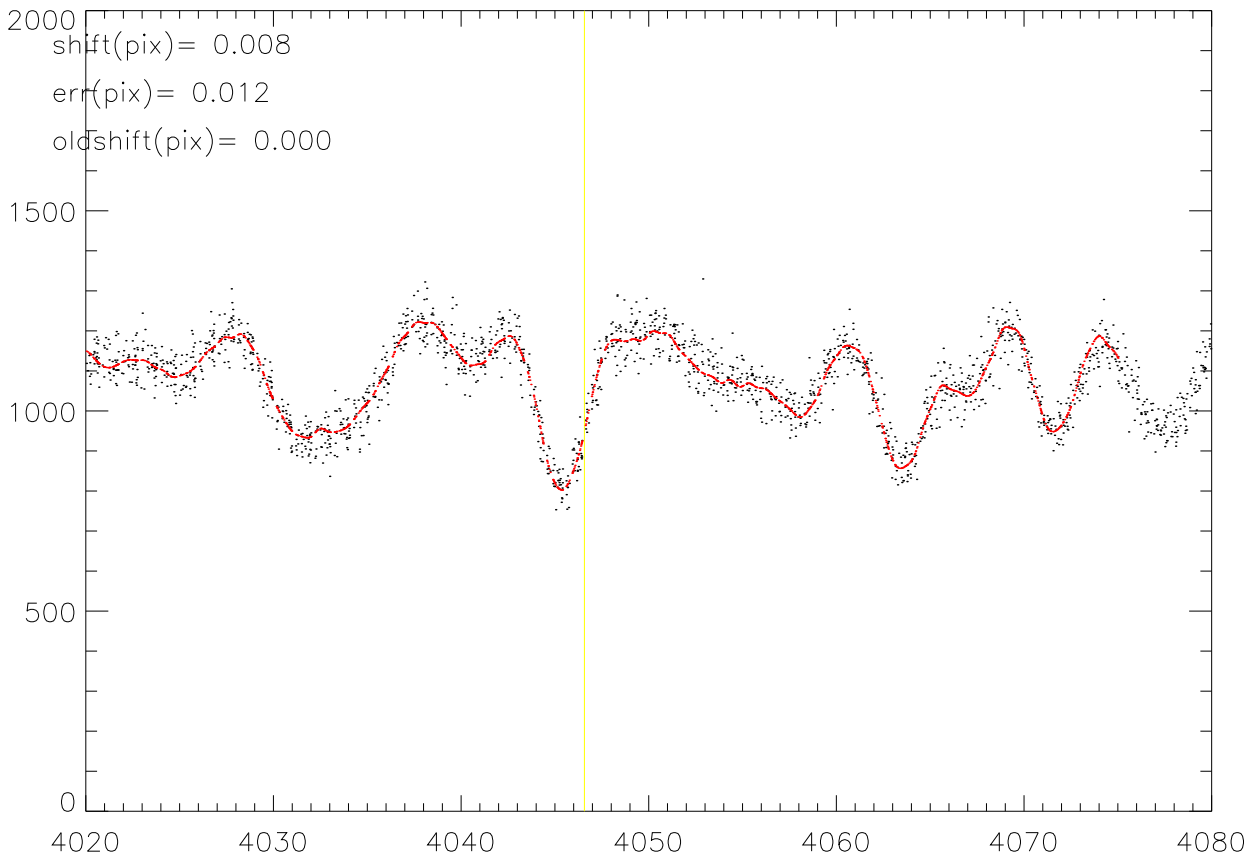

4358.3300
off: 0.18
sig: 0.053

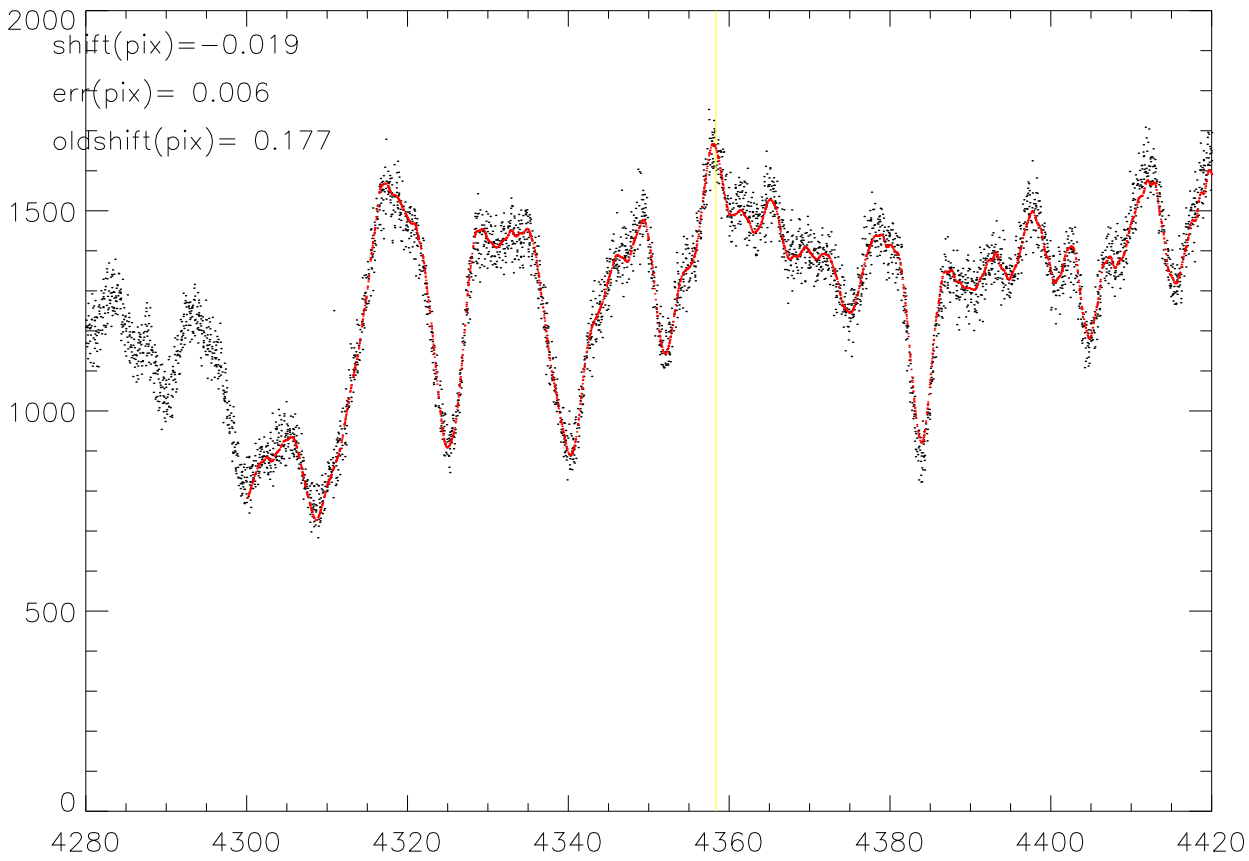

5460.9400
off: 0.38
sig: 0.021


5577.3390
off: 0.03
sig: 0.002

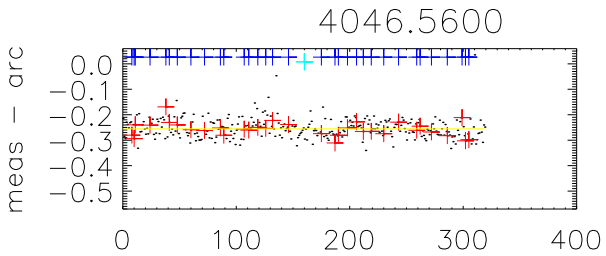

5889.9500
off: 0.18
sig: 0.010

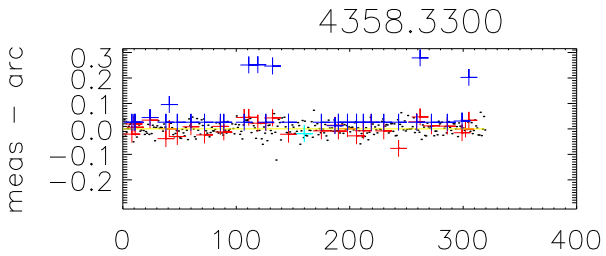

5895.9240
off: 0.16
sig: 0.015

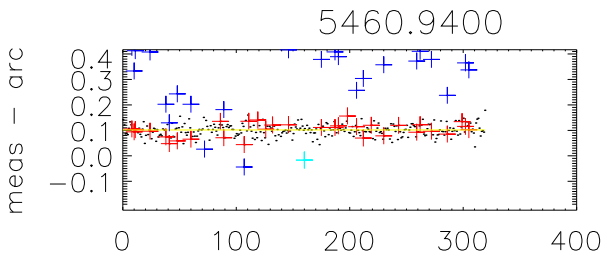

shift(pix)= 0.008
err(pix)= 0.012
oldshift(pix)= 0.000
2000
1500
1000
500
0
4020
4030
4040
4050
4060
4070
4080

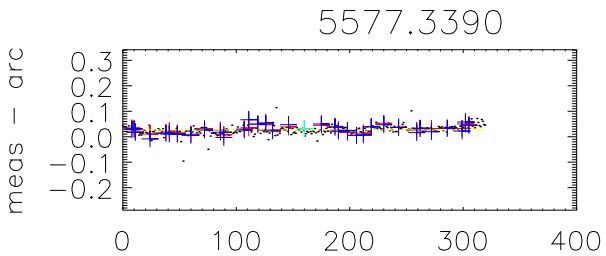

shift(pix)=−0.019
err(pix)= 0.006
oldshift(pix)= 0.177
2000
1500
1000
500
0
4280
4300
4320
4340
4360
4380
4400
4420

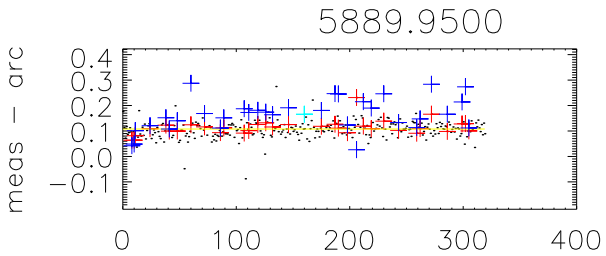
shift(pix)=−0.017
err(pix)= 0.013
oldshift(pix)=−0.383
2000
1500
1000
500
0
5430
5440
5450
5460
5470
5480
5490

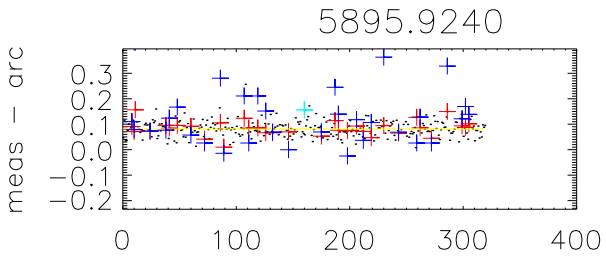

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

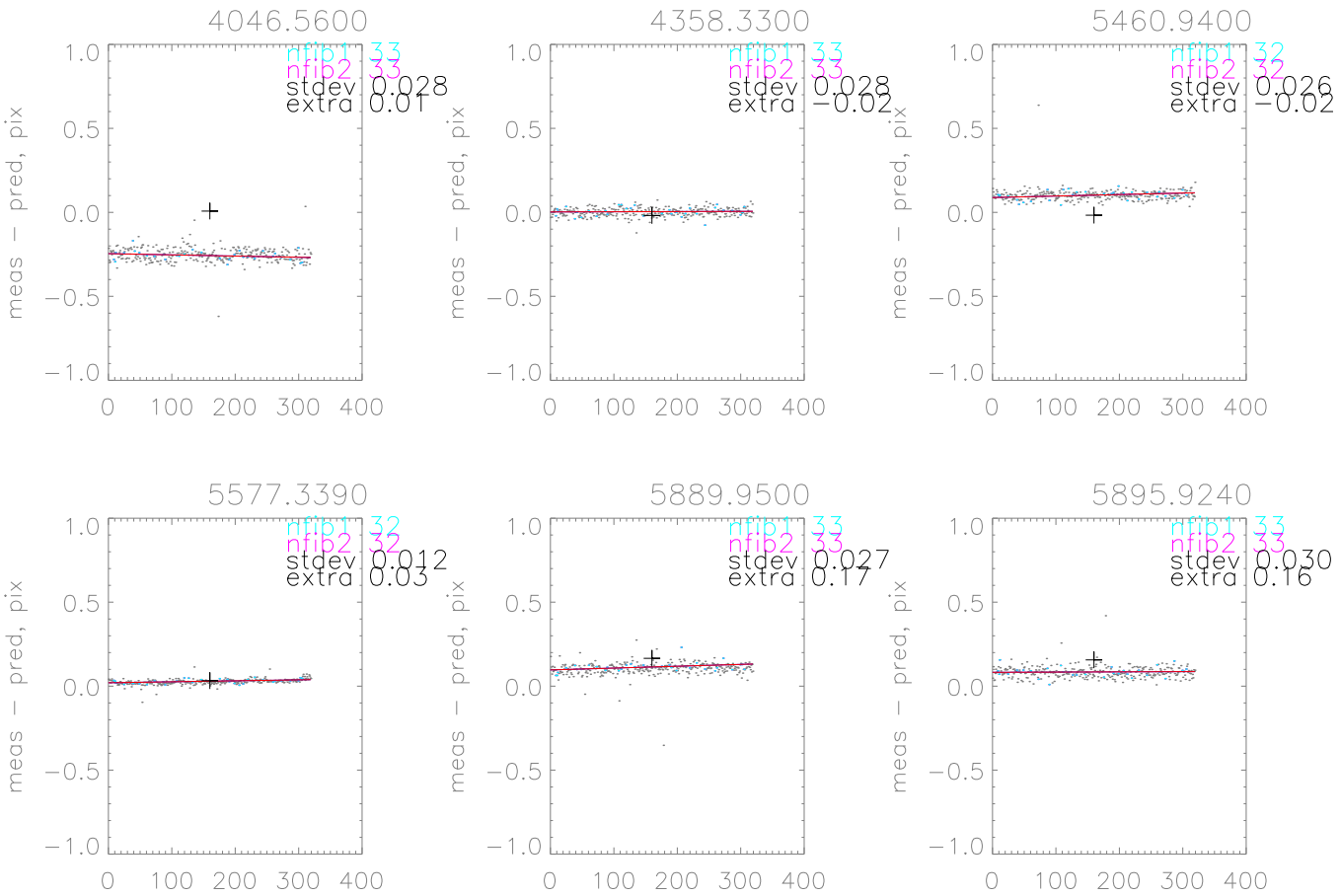

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

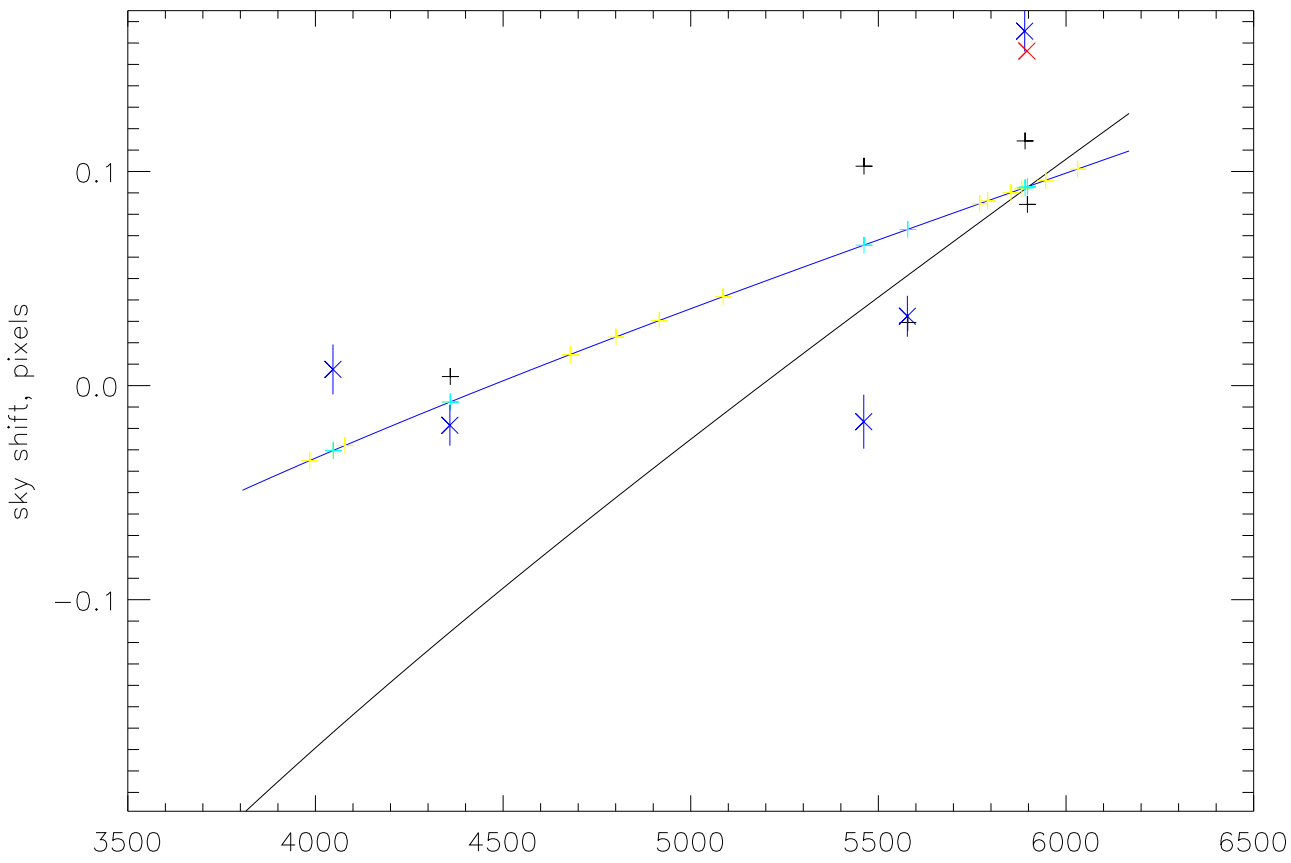

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

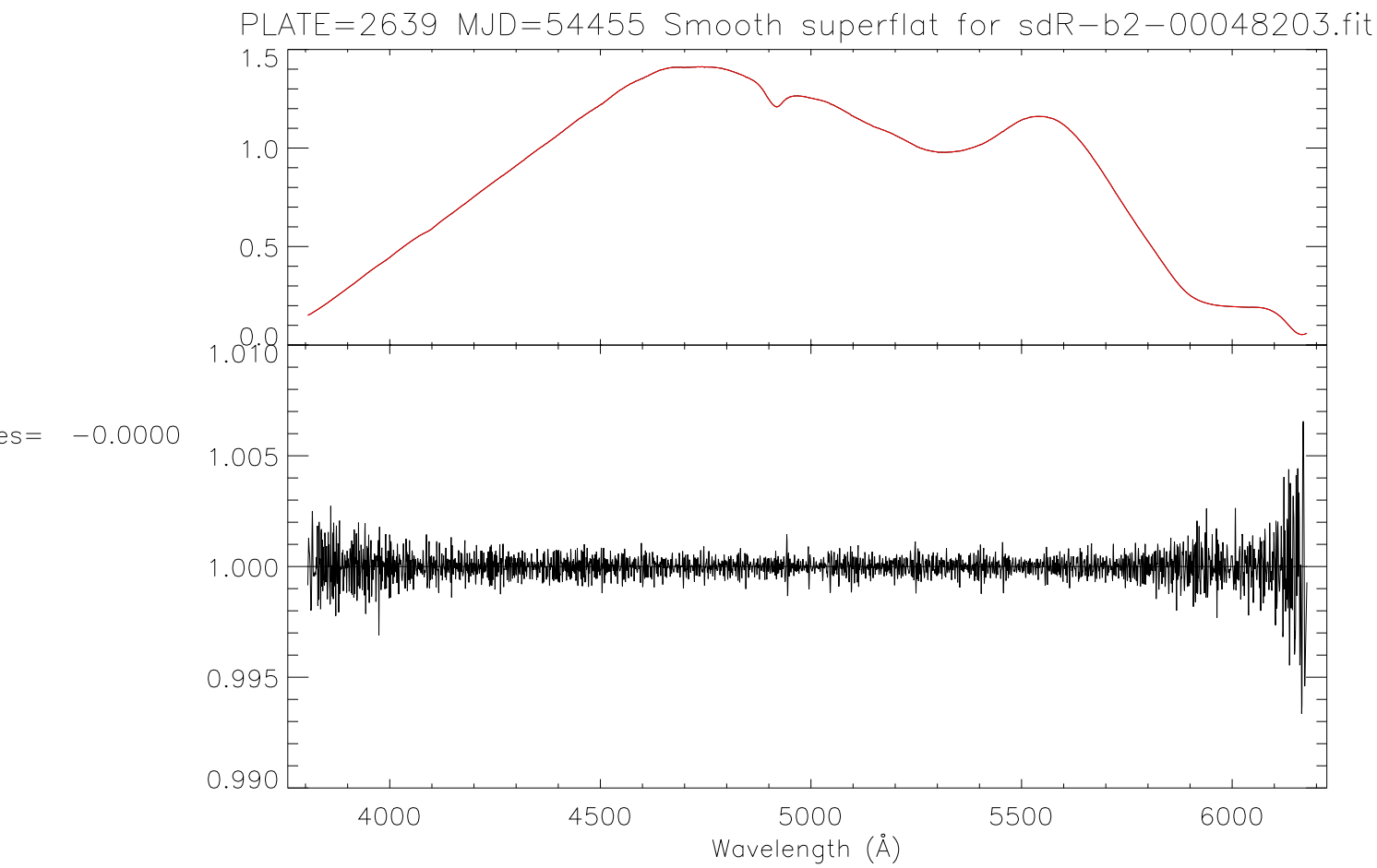

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

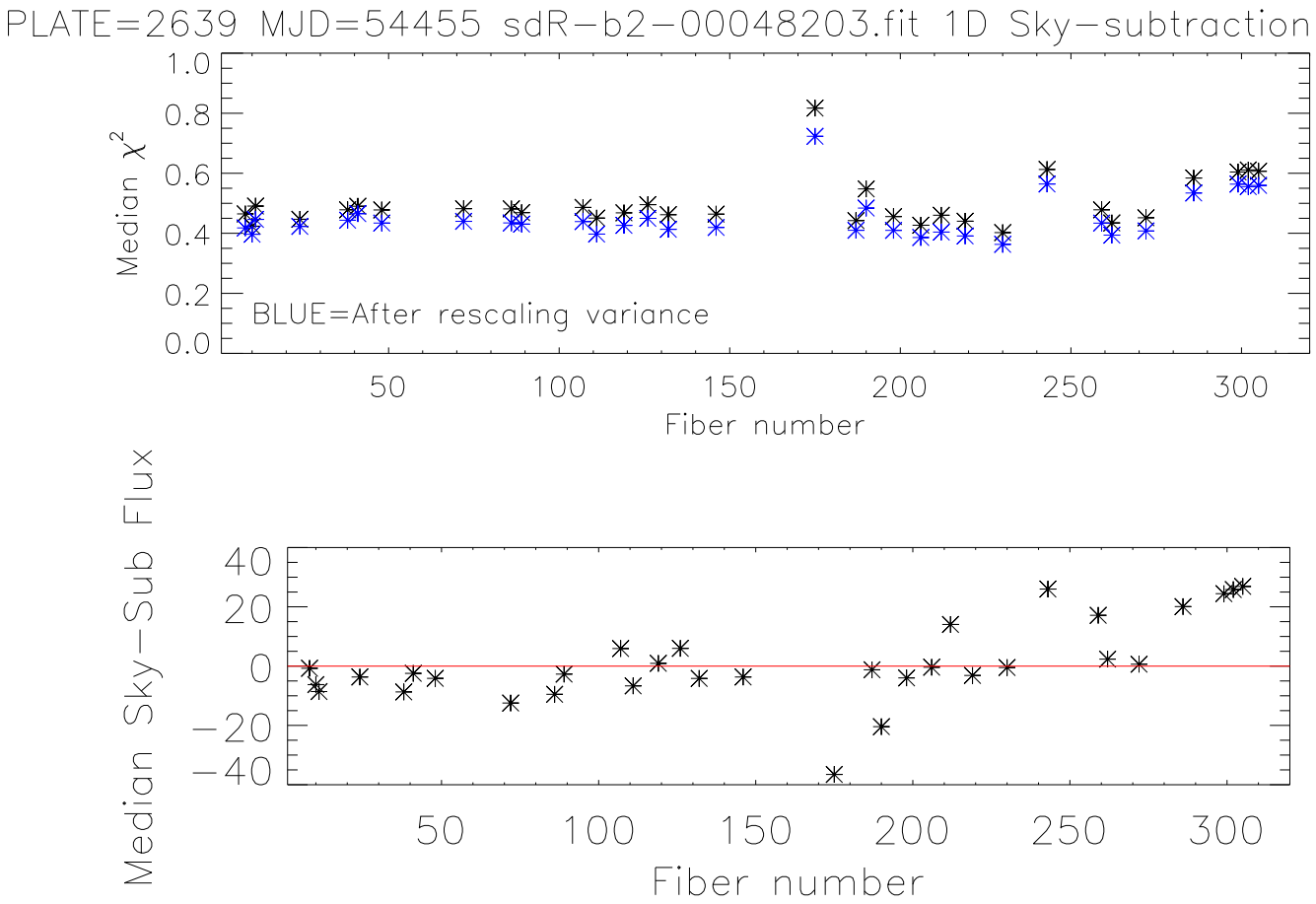

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

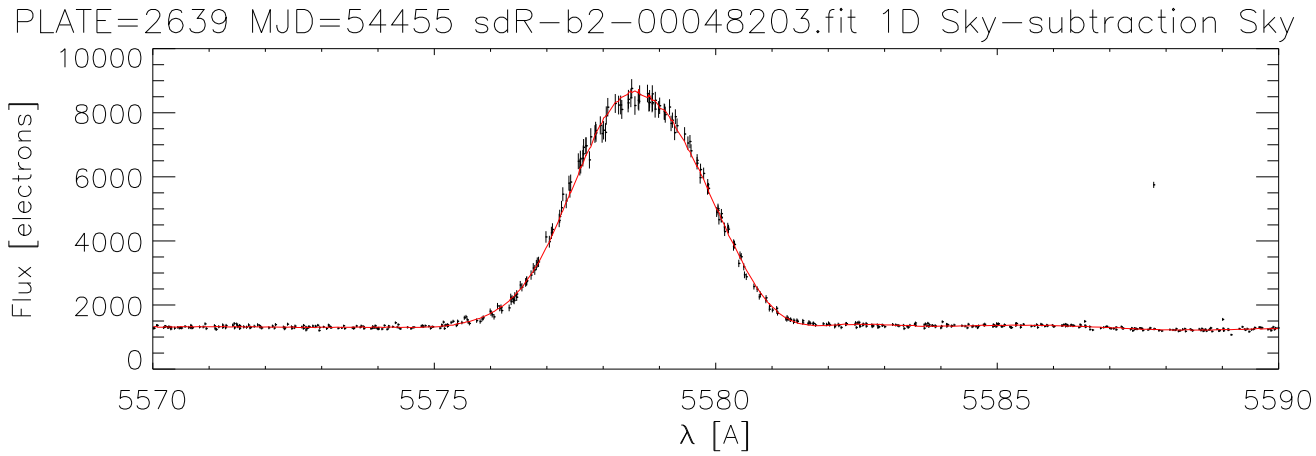

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

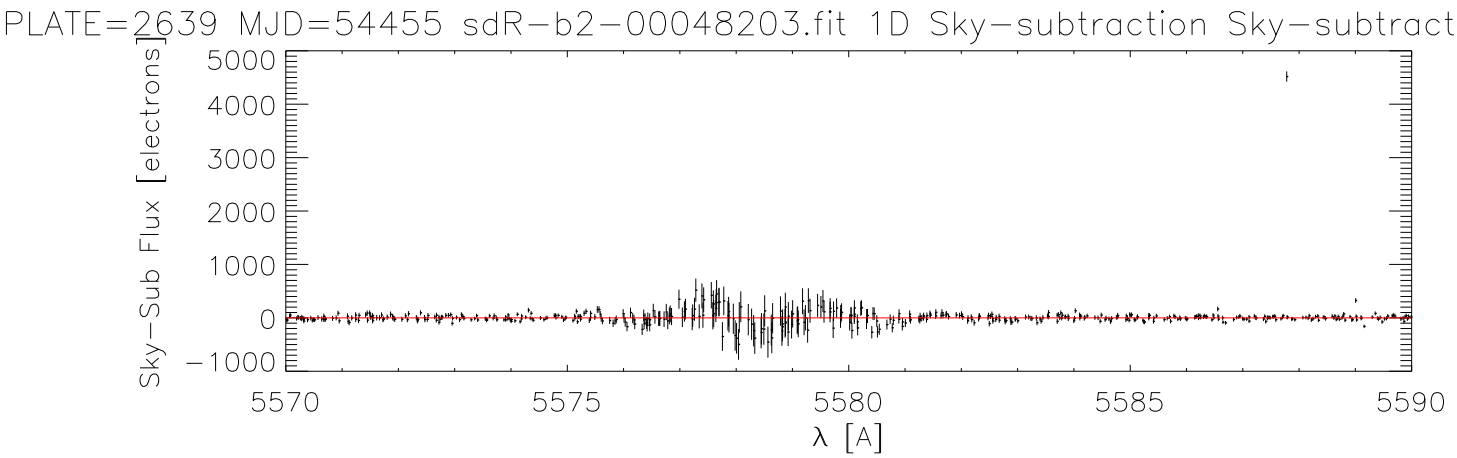

4046.5600
nfib1 33
nfib2 33
stdev 0.028
extra 0.01
4358.3300
nfib1 33
nfib2 33
stdev 0.028
extra −0.02
5460.9400
nfib1 32
nfib2 32
stdev 0.026
extra −0.02
5577.3390
nfib1 32
nfib2 32
stdev 0.012
extra 0.03
5889.9500
nfib1 33
nfib2 33
stdev 0.027
extra 0.17
5895.9240
nfib1 33
nfib2 33
stdev 0.030
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

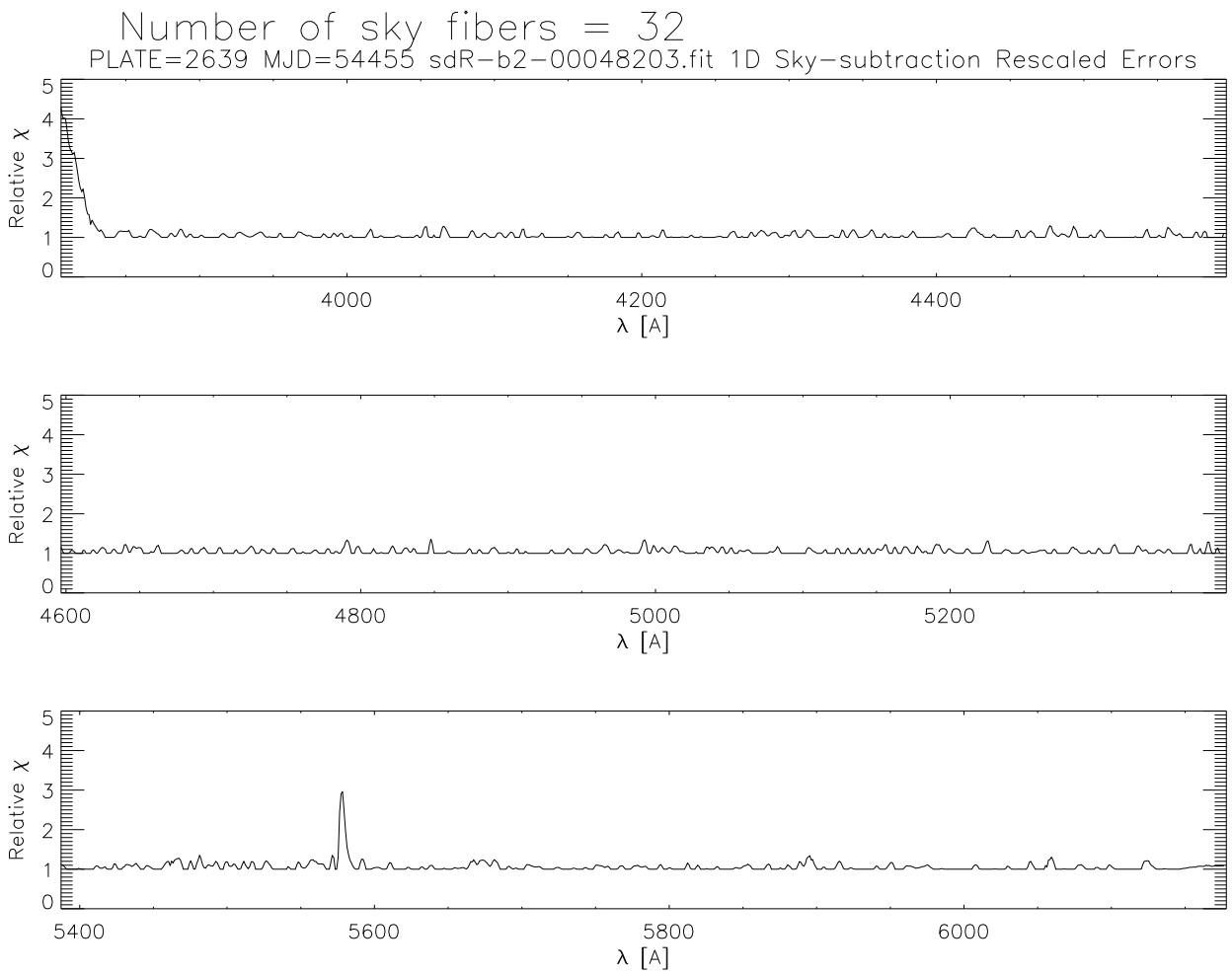

sky shift, pixels
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

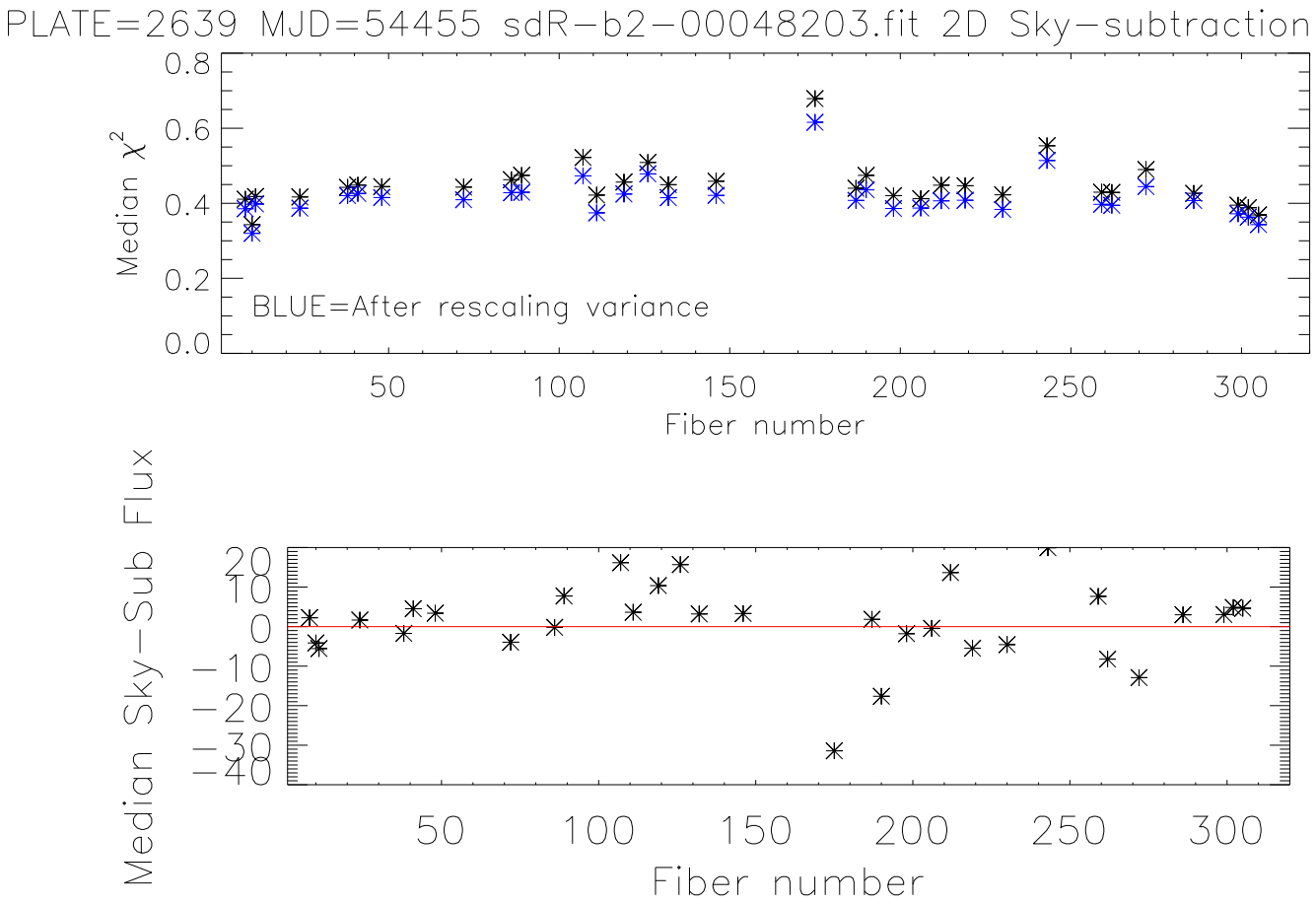

PLATE=2639 MJD=54455 Smooth superflat for sdR-b2-00048203.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

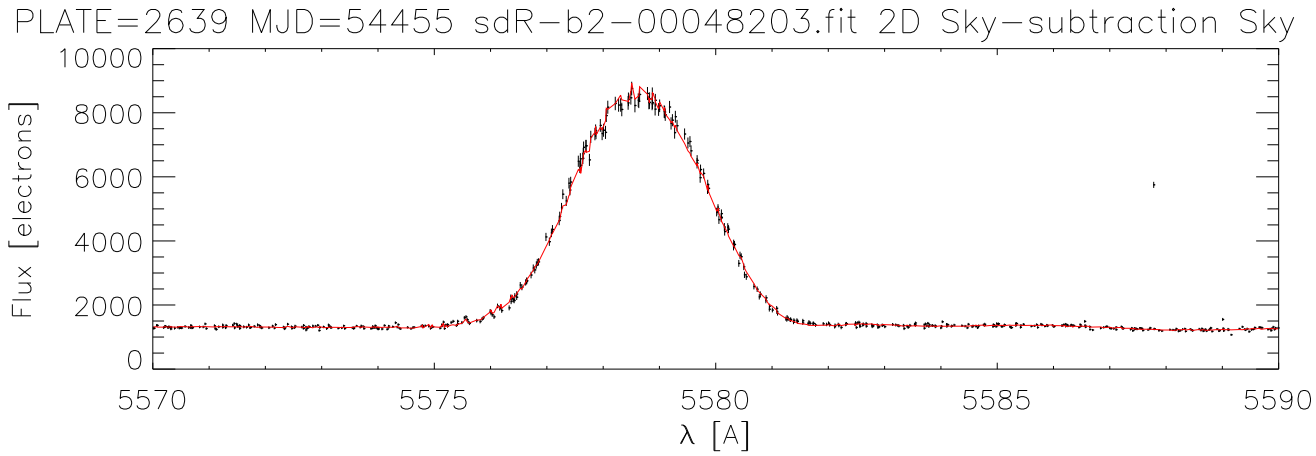

PLATE=2639 MJD=54455 sdR-b2-00048203.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

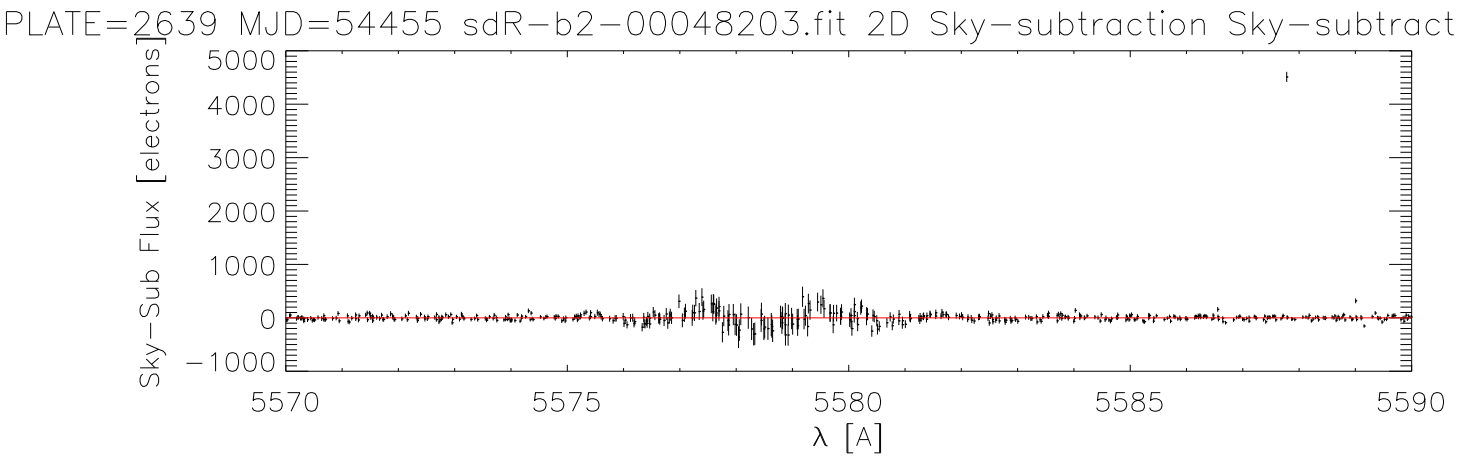

PLATE=2639 MJD=54455 sdR-b2-00048203.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

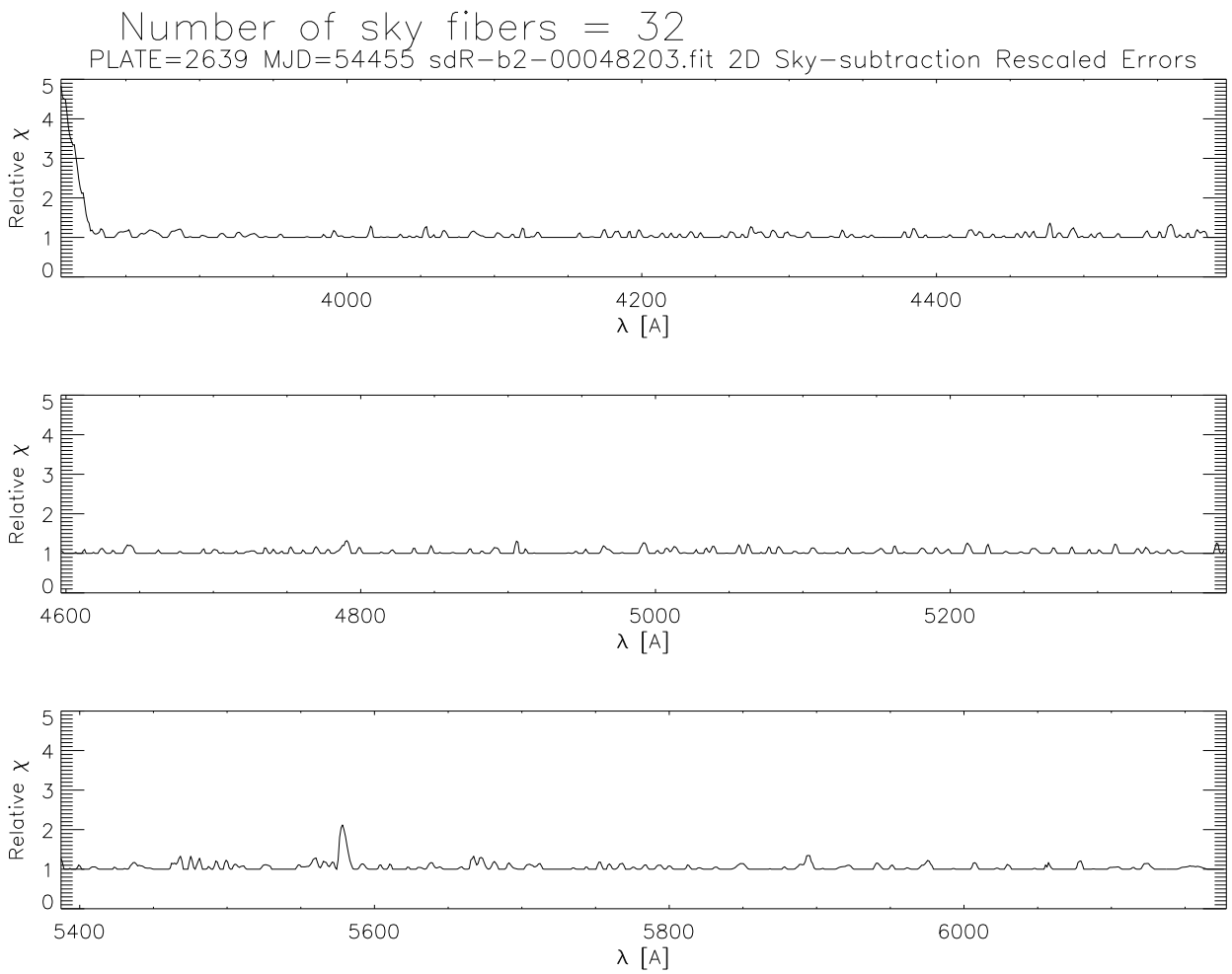

PLATE=2639 MJD=54455 sdR-b2-00048203.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

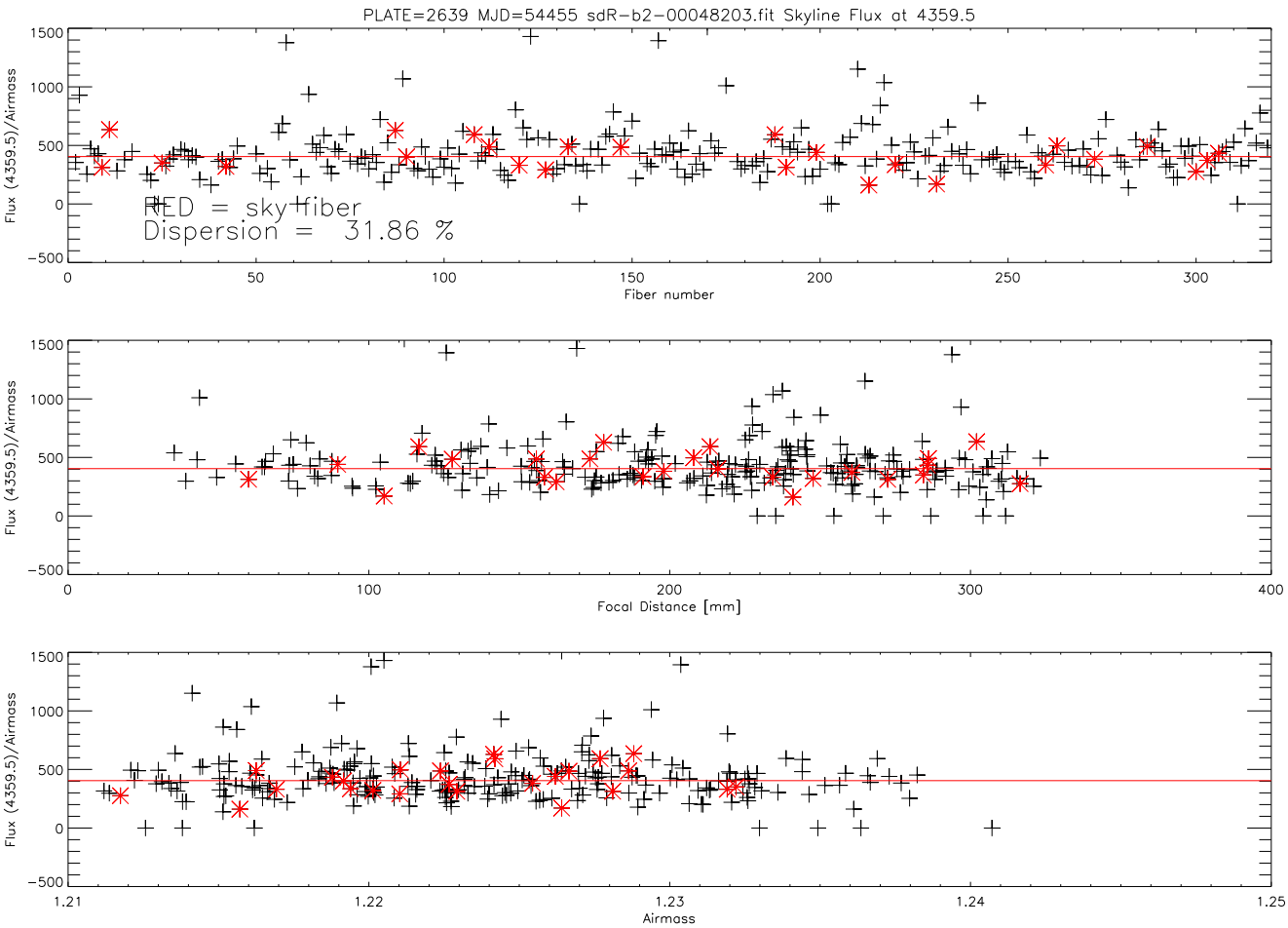

Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048203.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

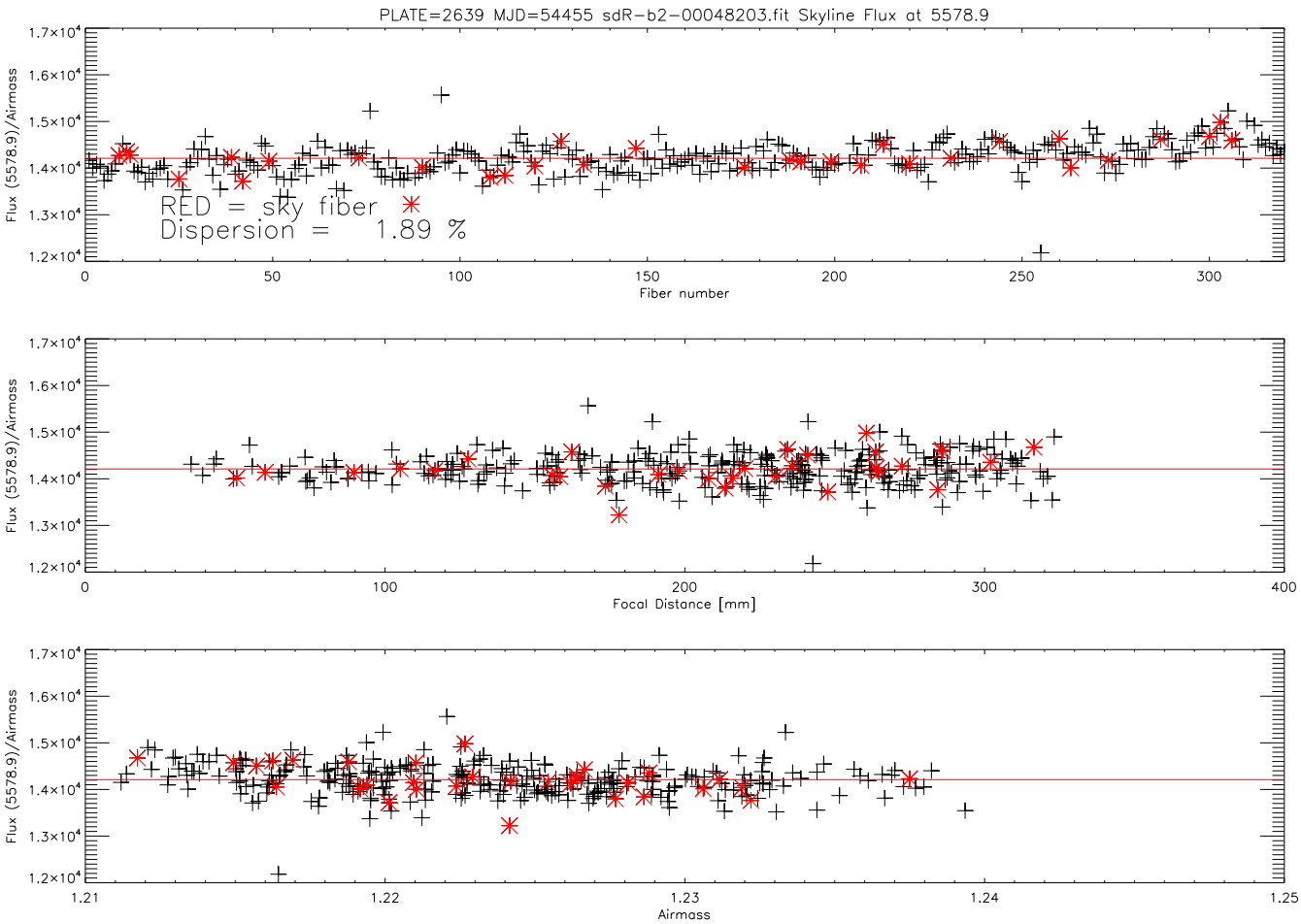

PLATE=2639 MJD=54455 sdR-b2-00048203.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

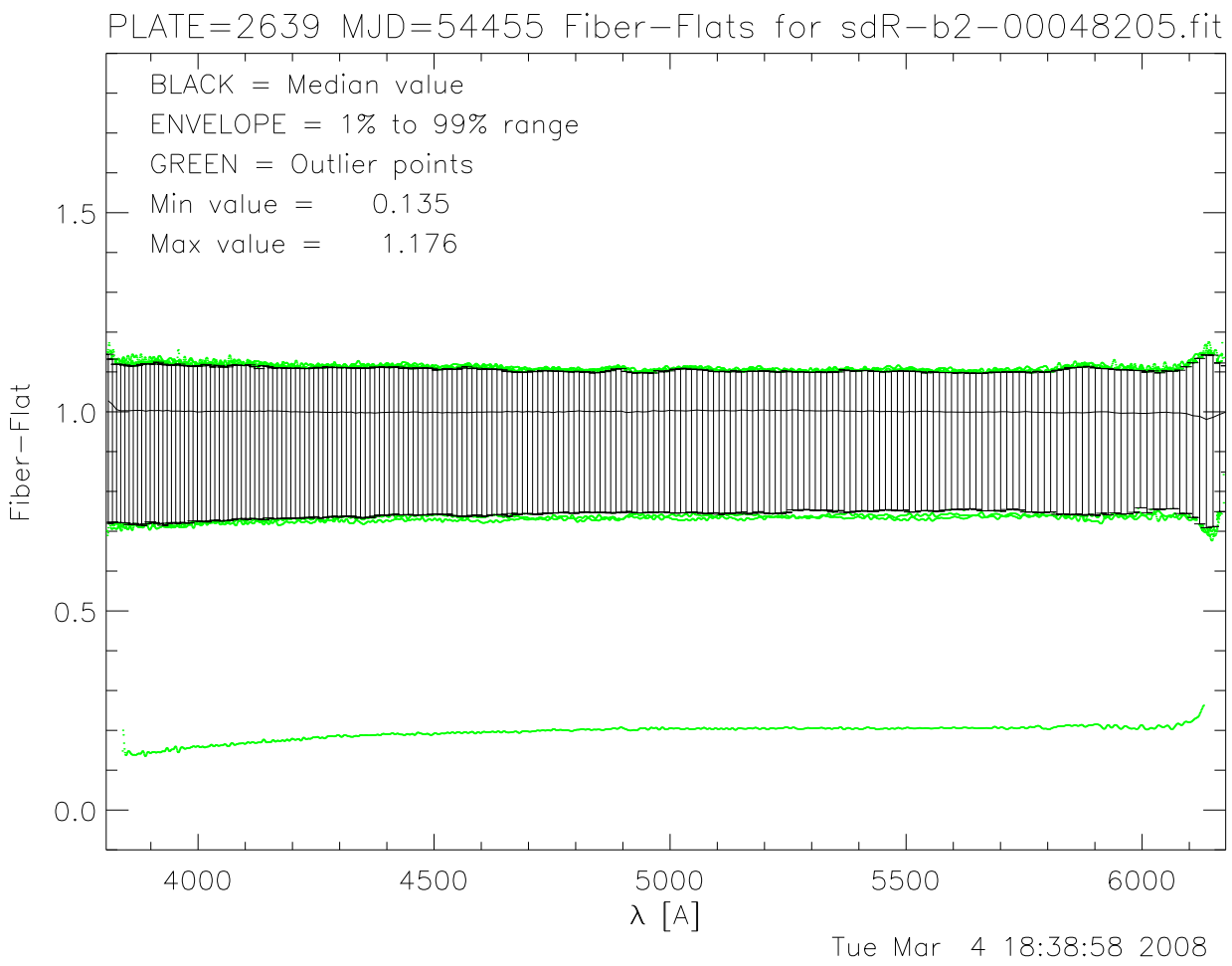

PLATE=2639 MJD=54455 sdR-b2-00048203.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2639 MJD=54455 sdR-b2-00048203.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048203.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=2639 MJD=54455 sdR-b2-00048203.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 31.86 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2639 MJD=54455 sdR-b2-00048203.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
RED = sky fiber
Dispersion = 1.89 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.21
1.22
1.23
1.24
1.25
Airmass


PLATE=2639 MJD=54455 Fiber-Flats for sdR-b2-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.135
Max value = 1.176
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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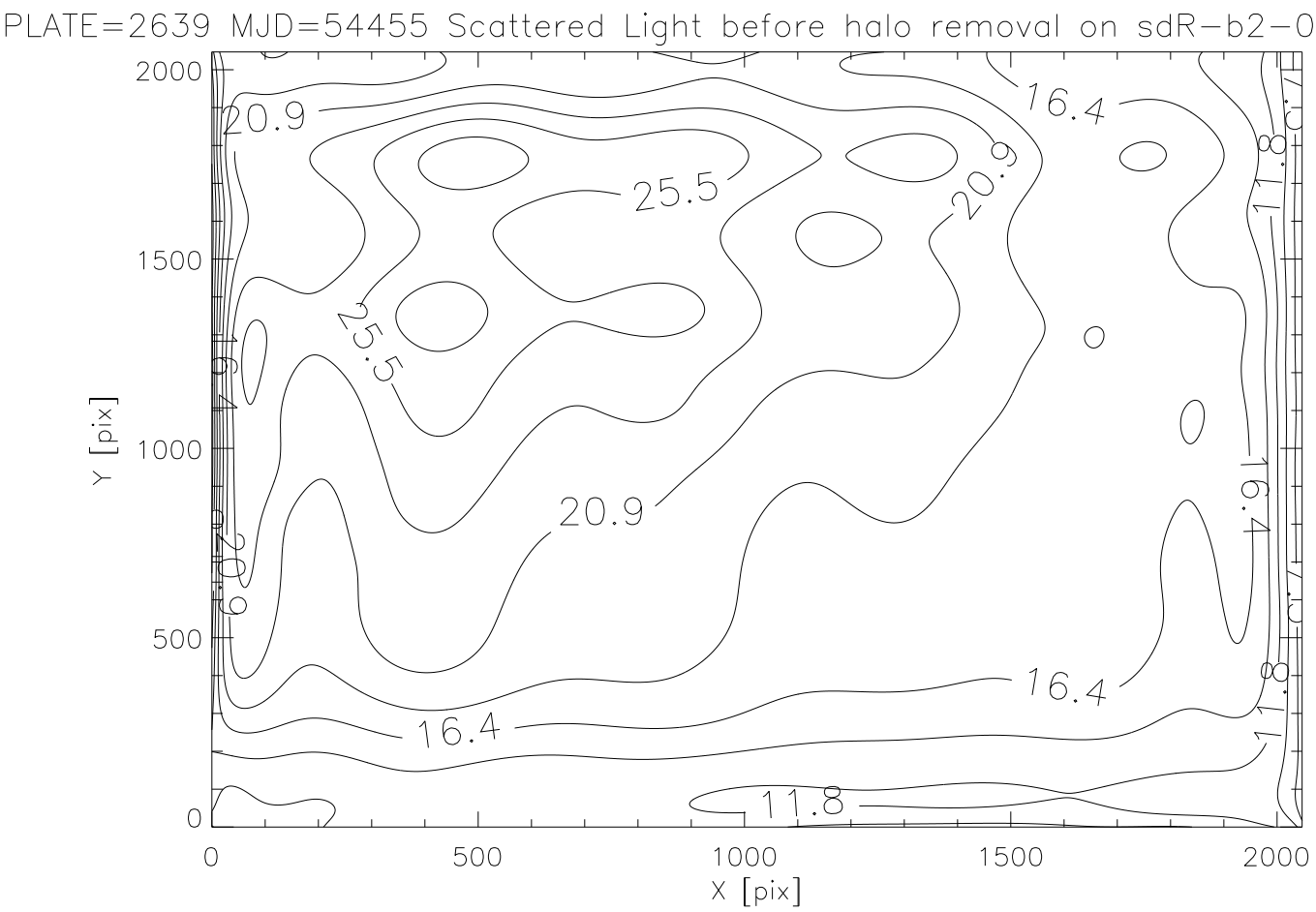
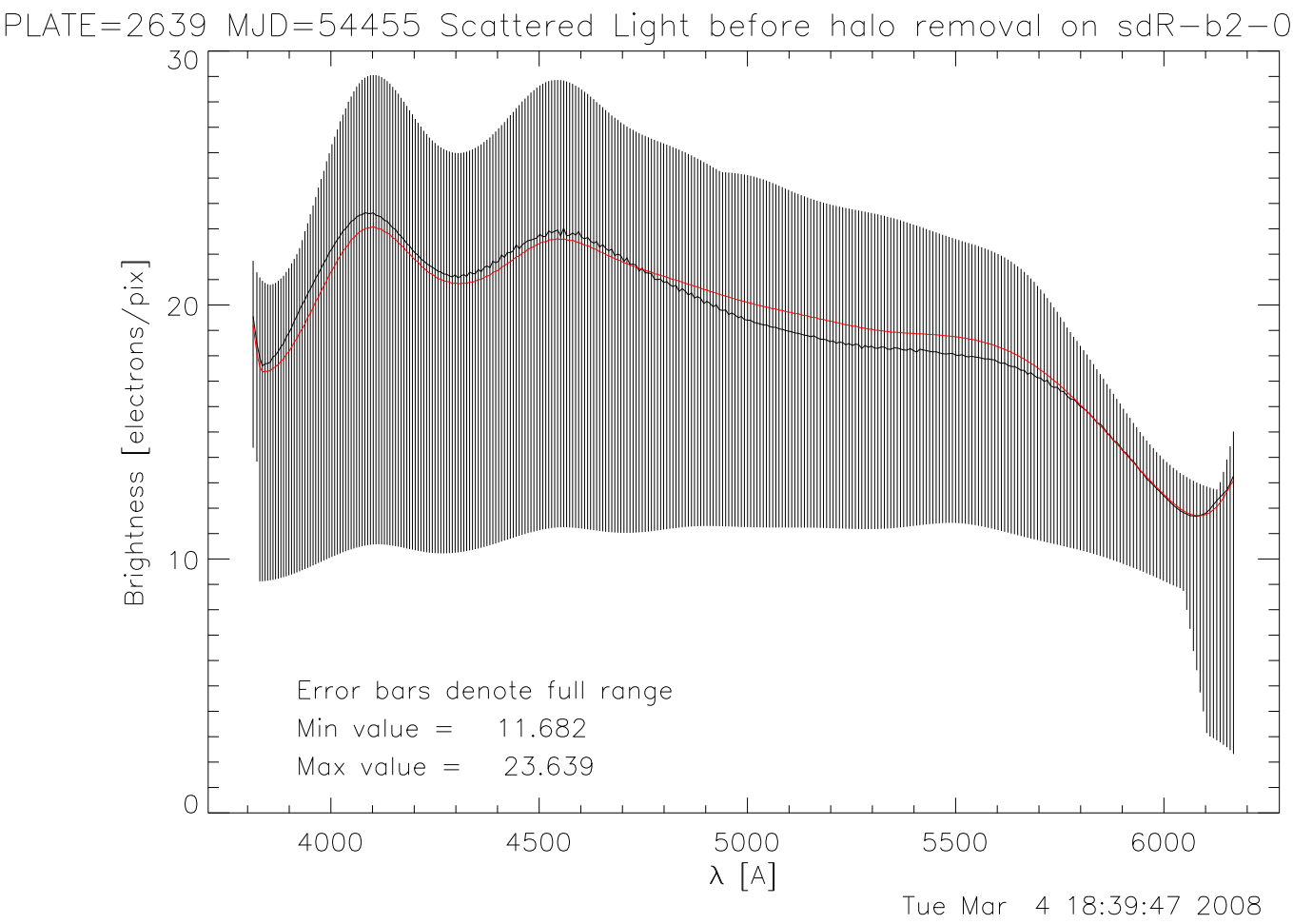
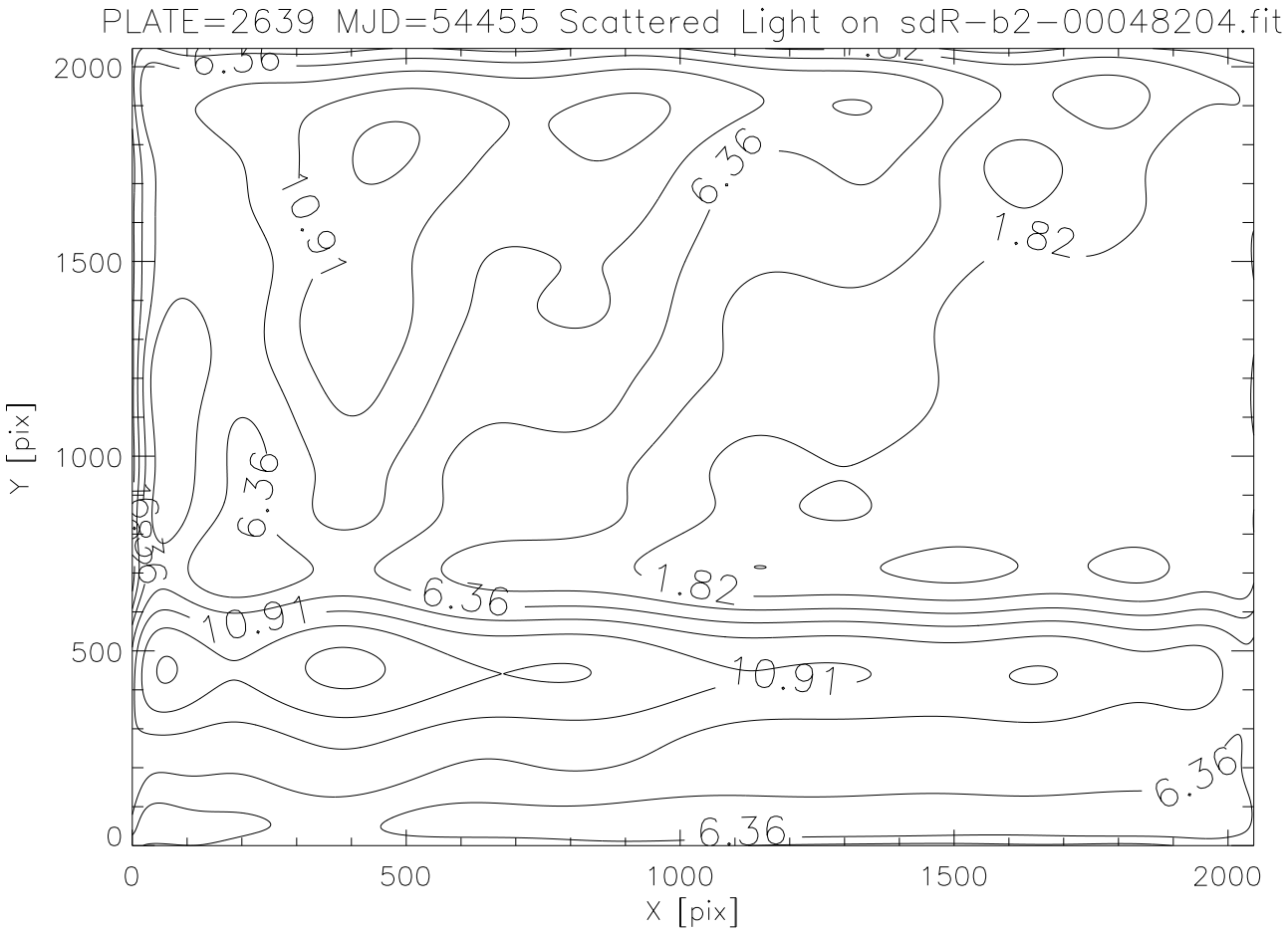
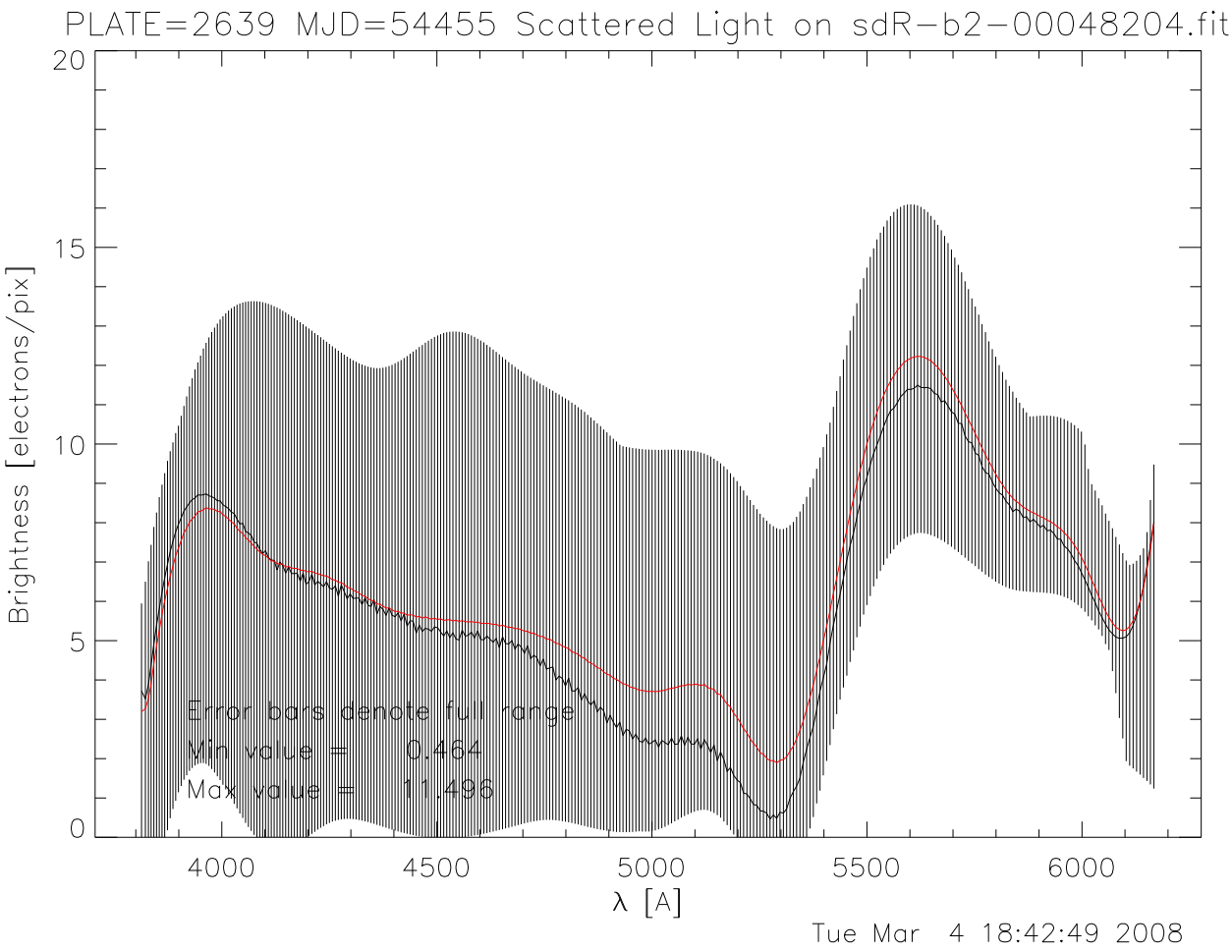
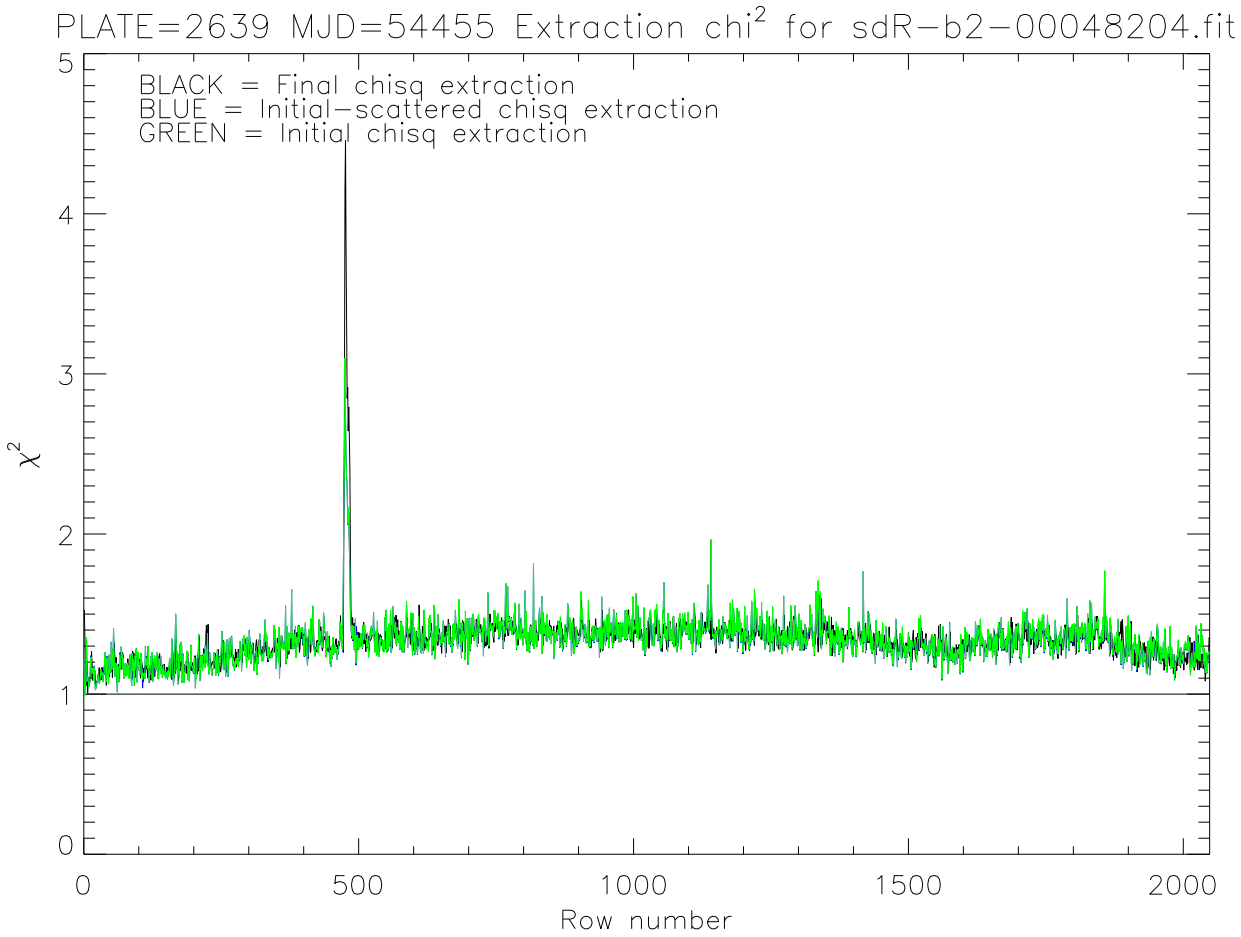
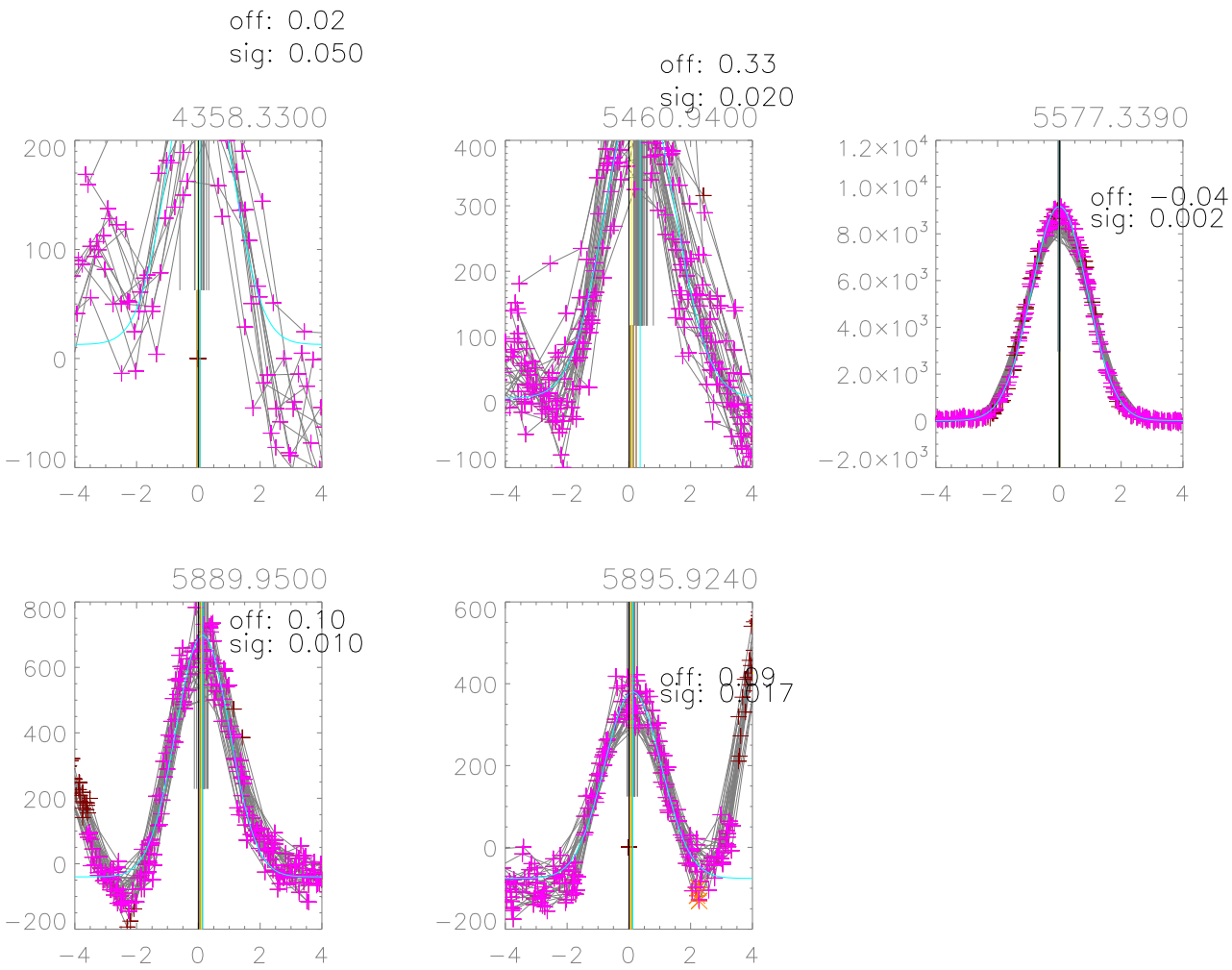

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR−b2−00048204.f
20.9
25.5
16.4
11.8
0
Y [pix]
X [pix]
0
500
1000
1500
2000

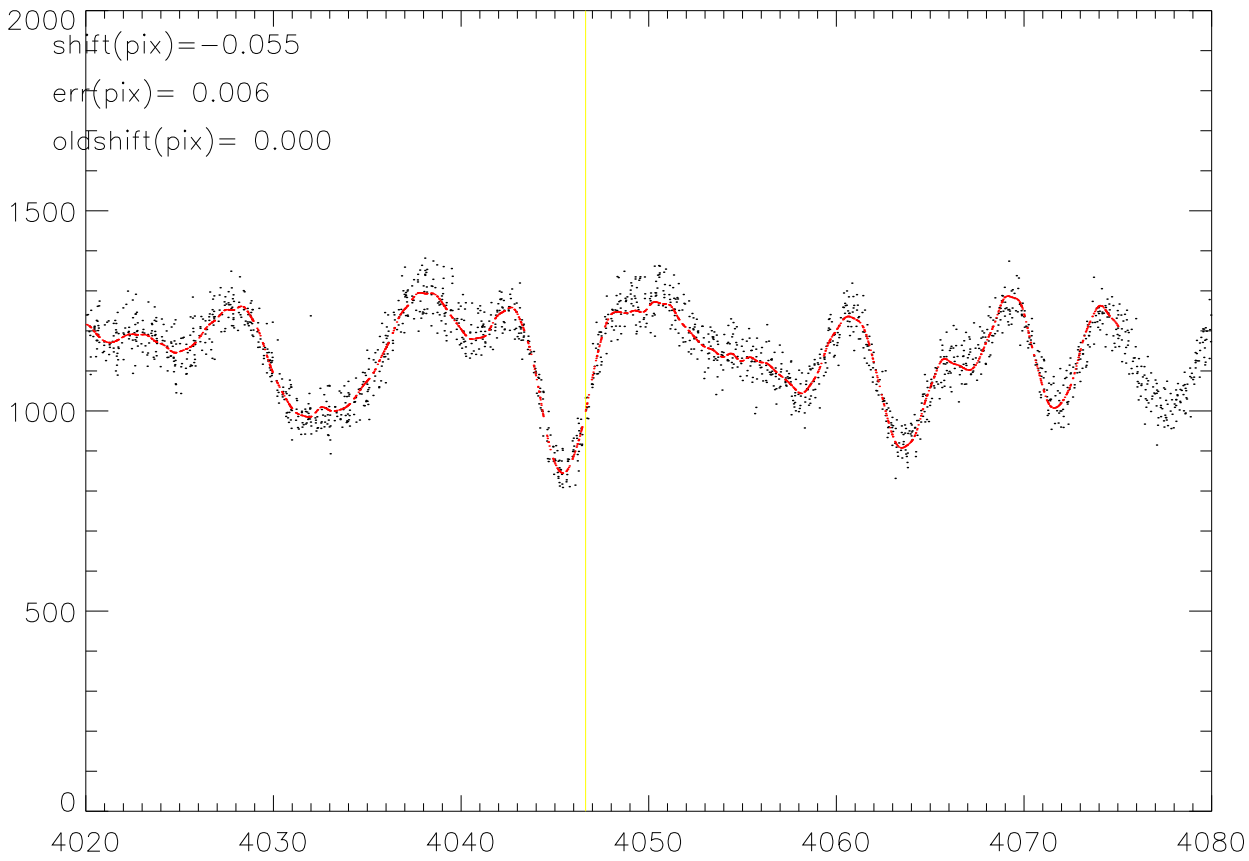

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-b2-00048204.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 11.682
Max value = 23.639
4000
4500
5000
5500
6000
λ [A]
Tue Mar 4 18:39:47 2008

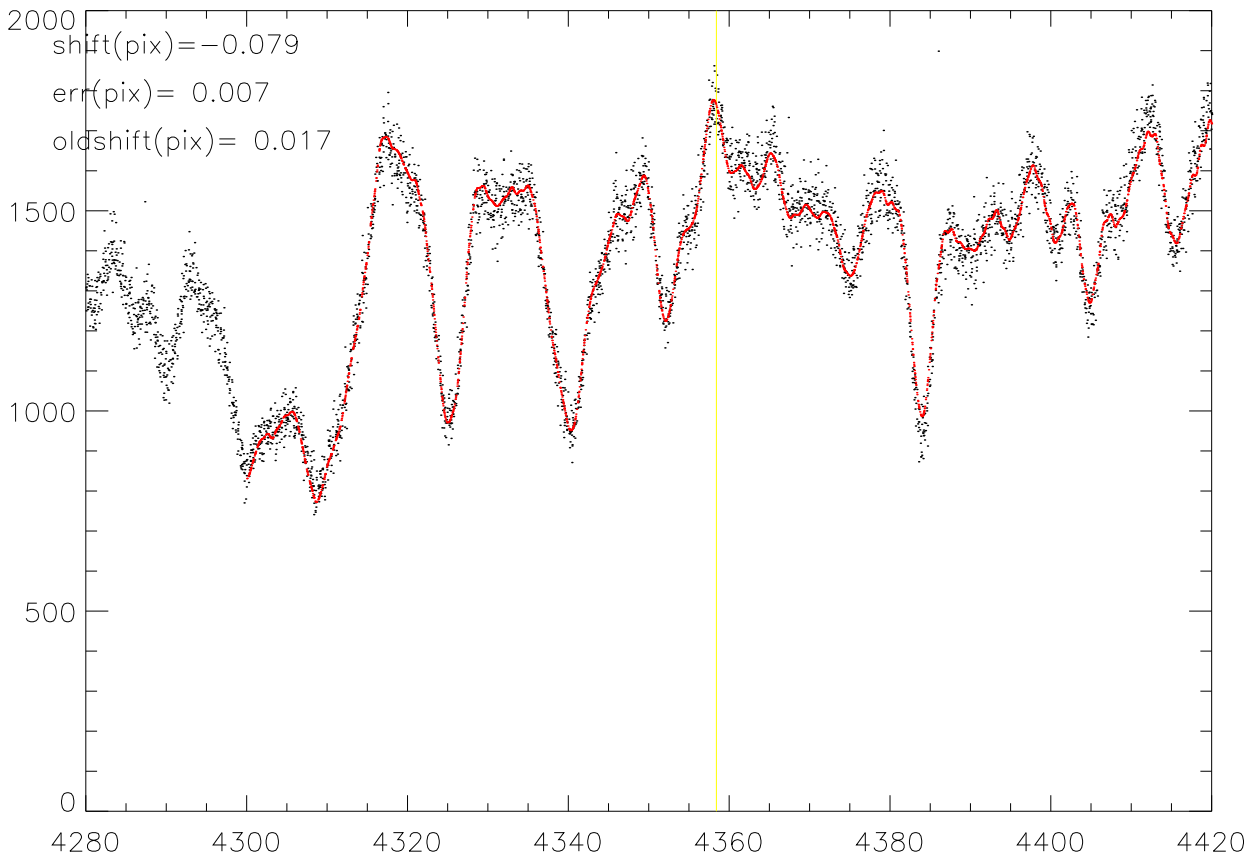

PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048204.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
10.91
1.82
6.36
10.91
1.82
6.36
10.91
6.36
6.36

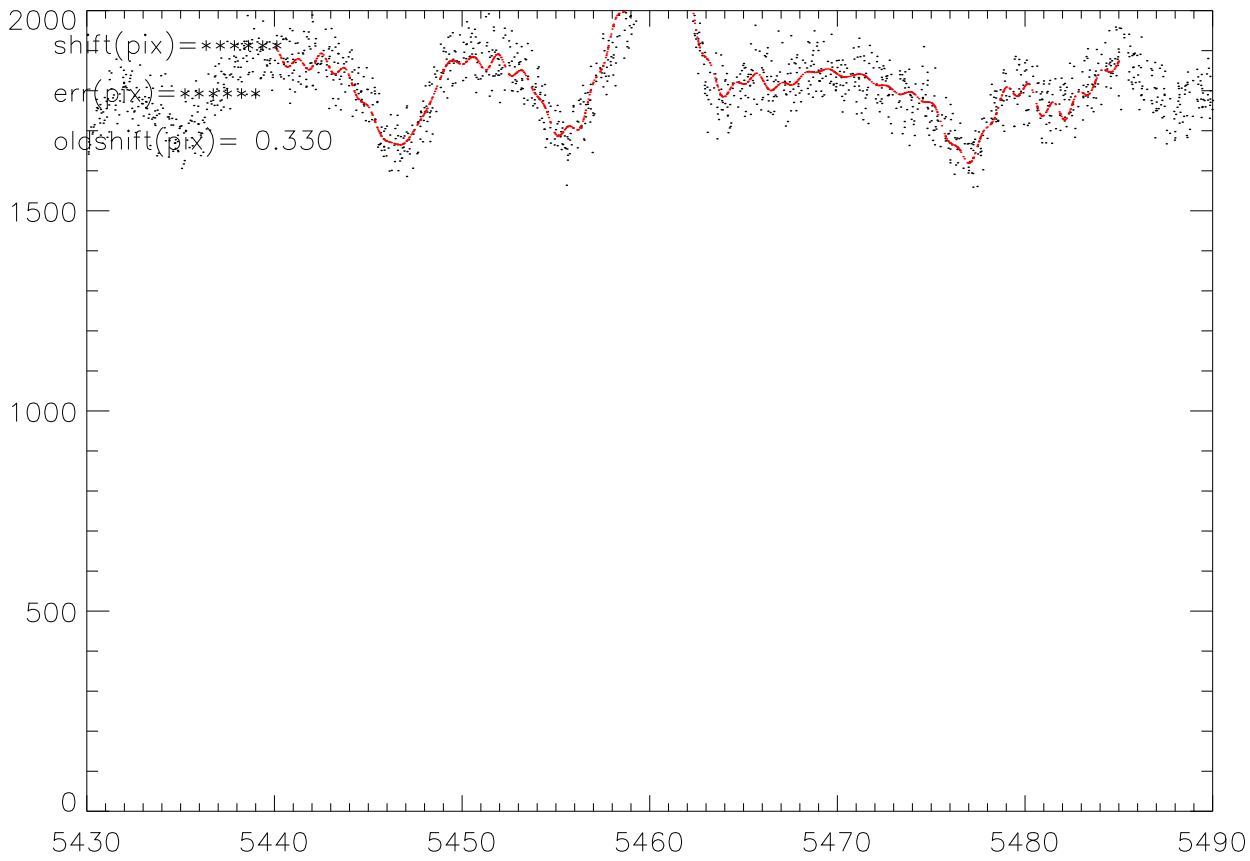

PLATE=2639 MJD=54455 Scattered Light on sdR-b2-00048204.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.464
Max value = 11.496
Tue Mar 4 18:42:49 2008

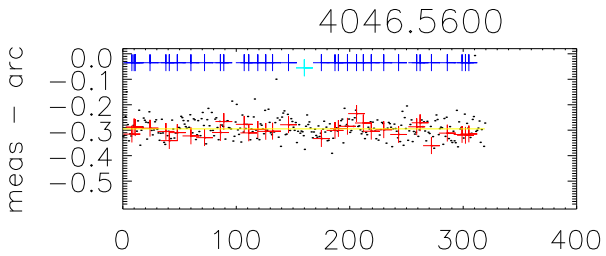

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-b2-00048204.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

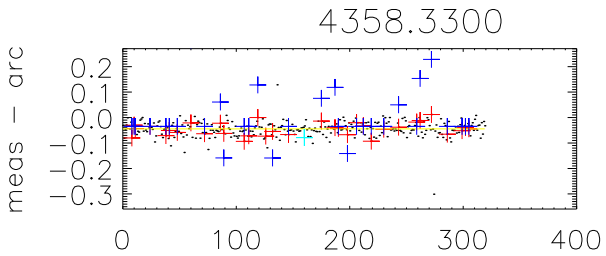

off: 0.02
sig: 0.050
4358.3300
off: 0.33
sig: 0.020
5460.9400
5577.3390
off: −0.04
sig: 0.002
5889.9500
off: 0.10
sig: 0.010
5895.9240
off: 0.09
sig: 0.017

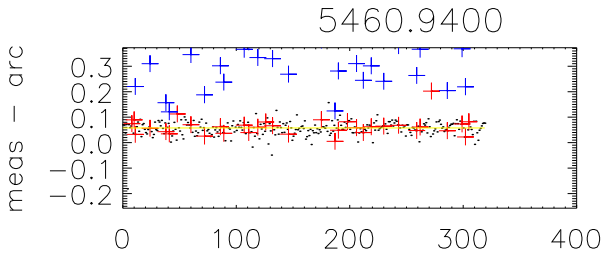

shift(pix)=−0.055
err(pix)= 0.006
oldshift(pix)= 0.000
2000
1500
1000
500
0
4020
4030
4040
4050
4060
4070
4080

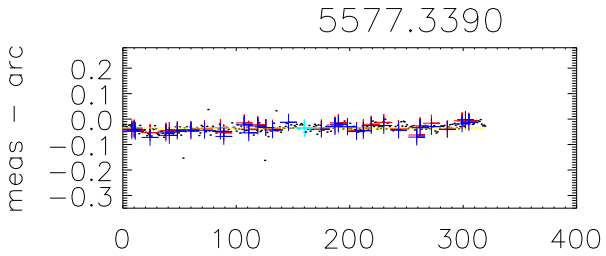

shift(pix)=−0.079
err(pix)= 0.007
oldshift(pix)= 0.017
2000
1500
1000
500
0
4280
4300
4320
4340
4360
4380
4400
4420

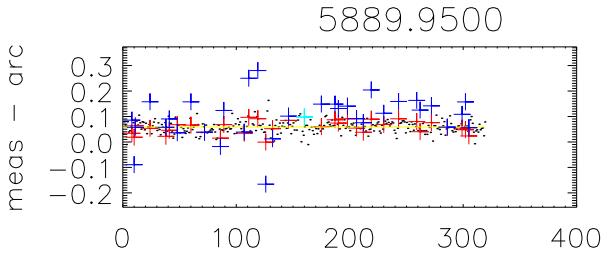

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.330
2000
1500
1000
500
0
5430
5440
5450
5460
5470
5480
5490

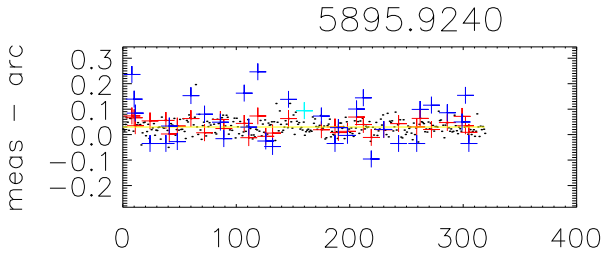

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

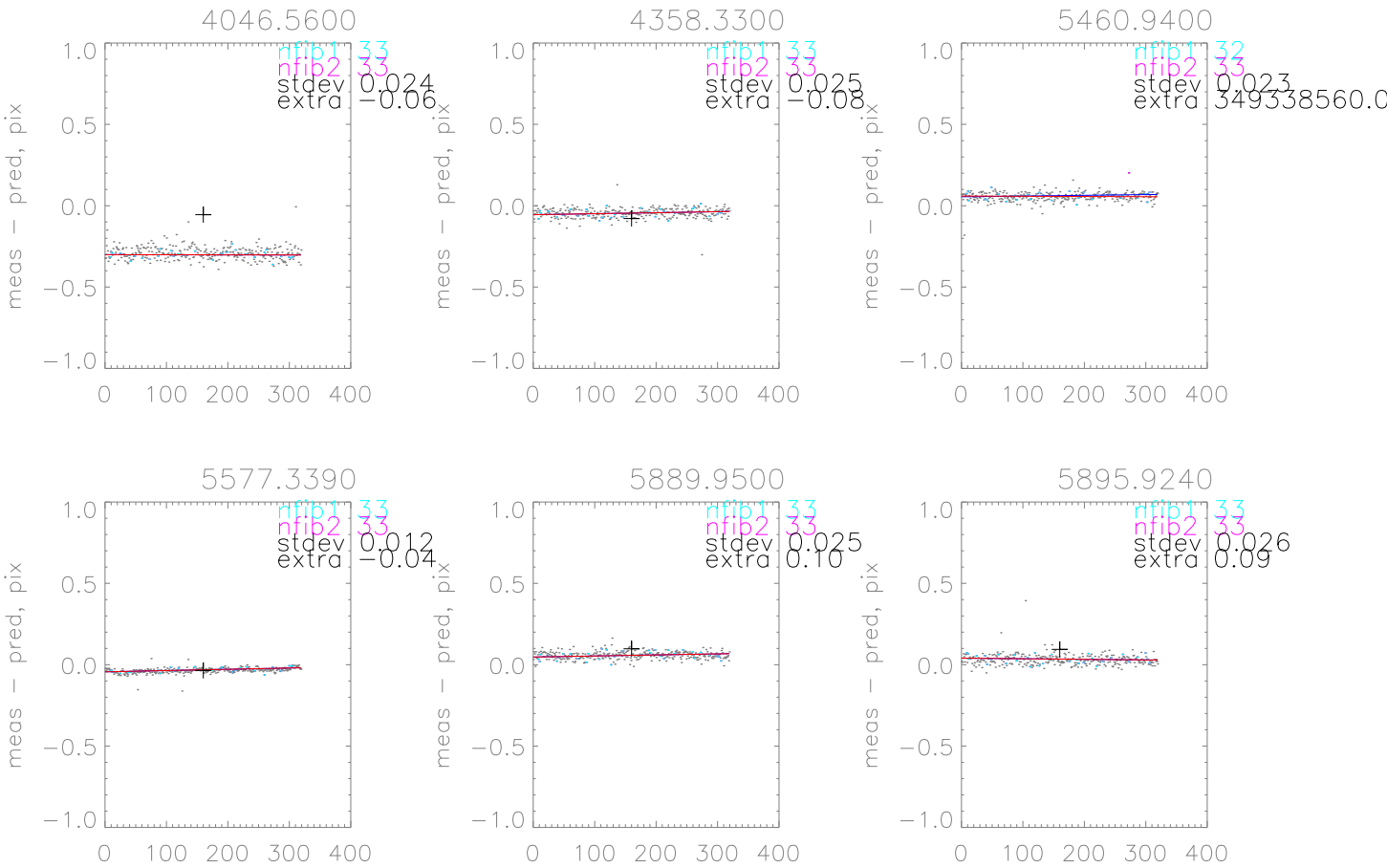

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

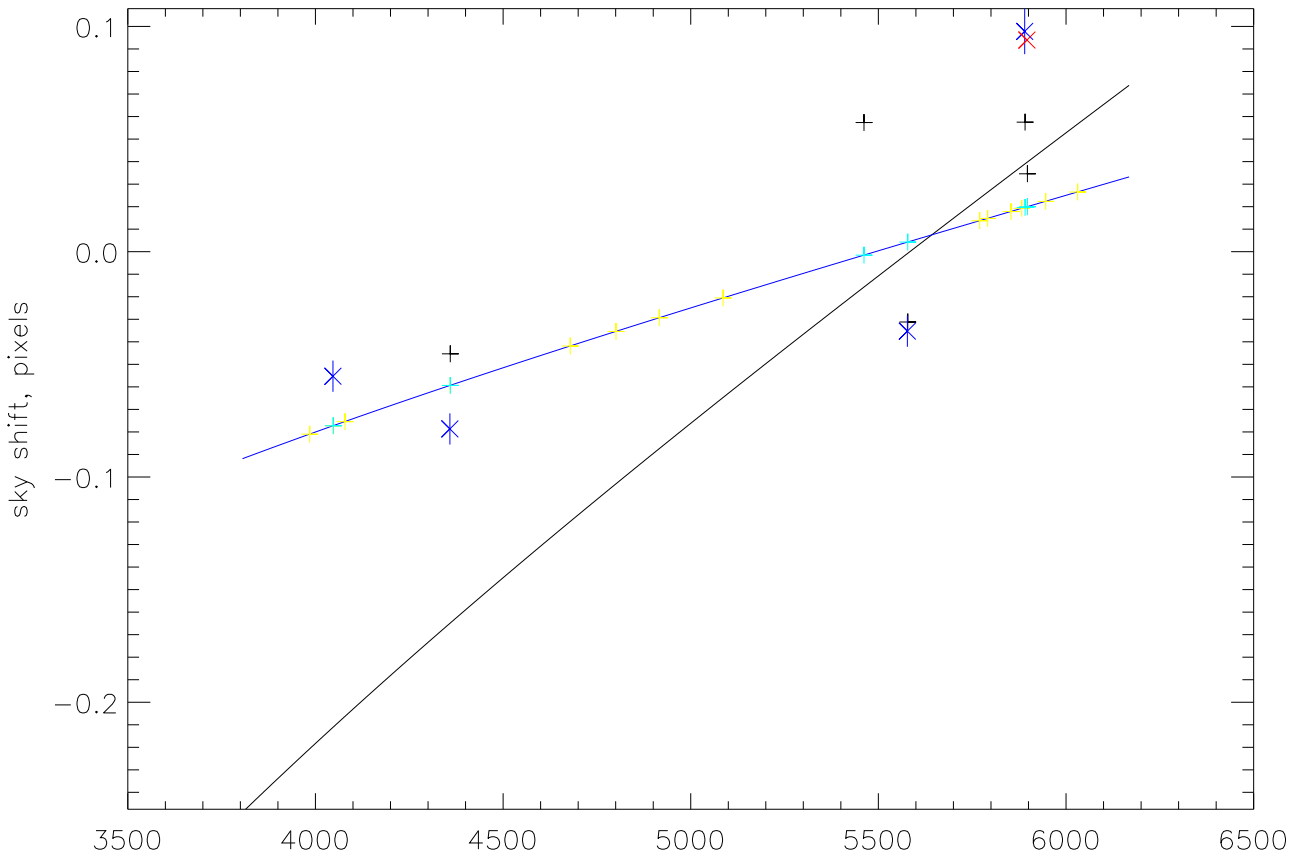

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

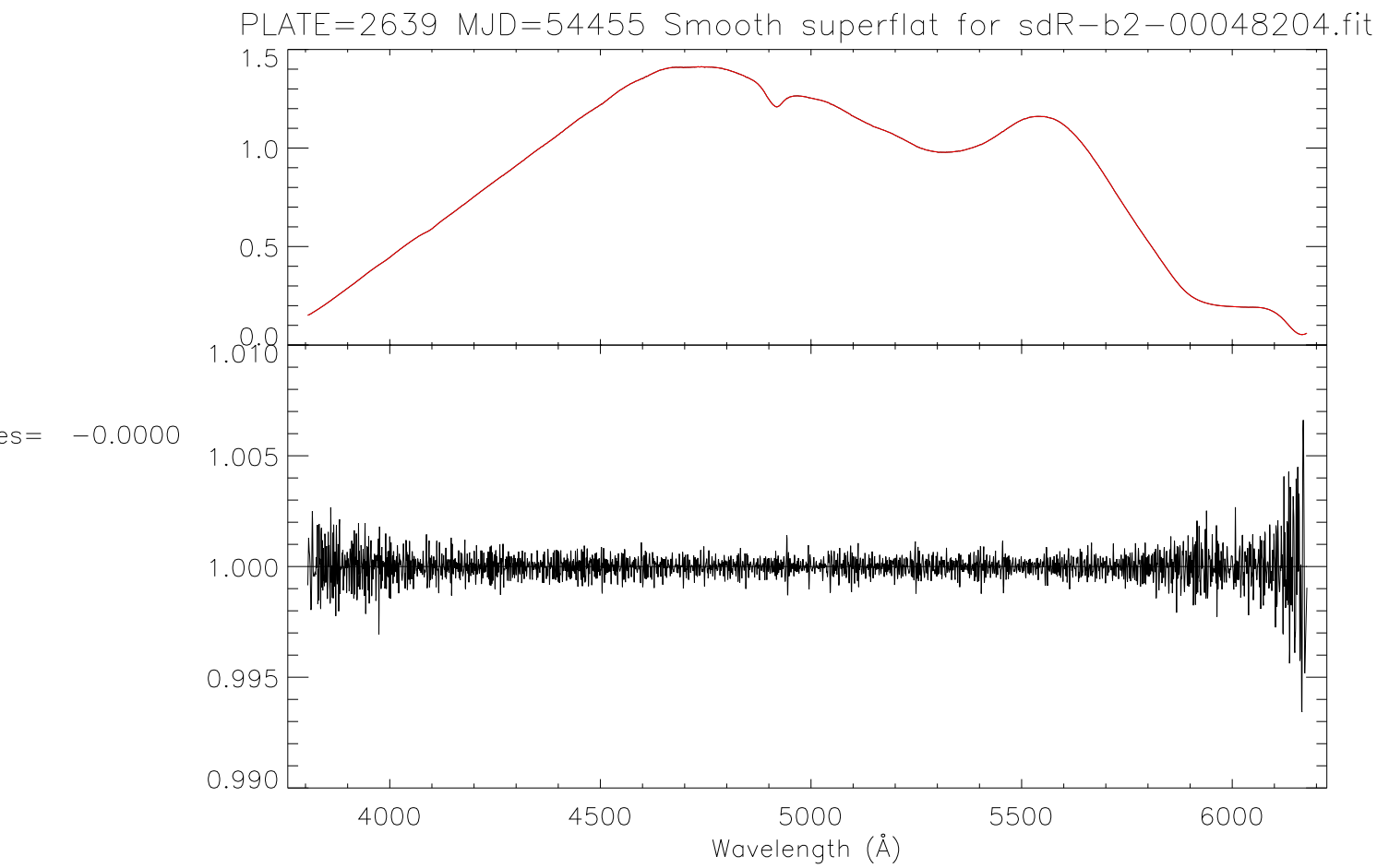

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

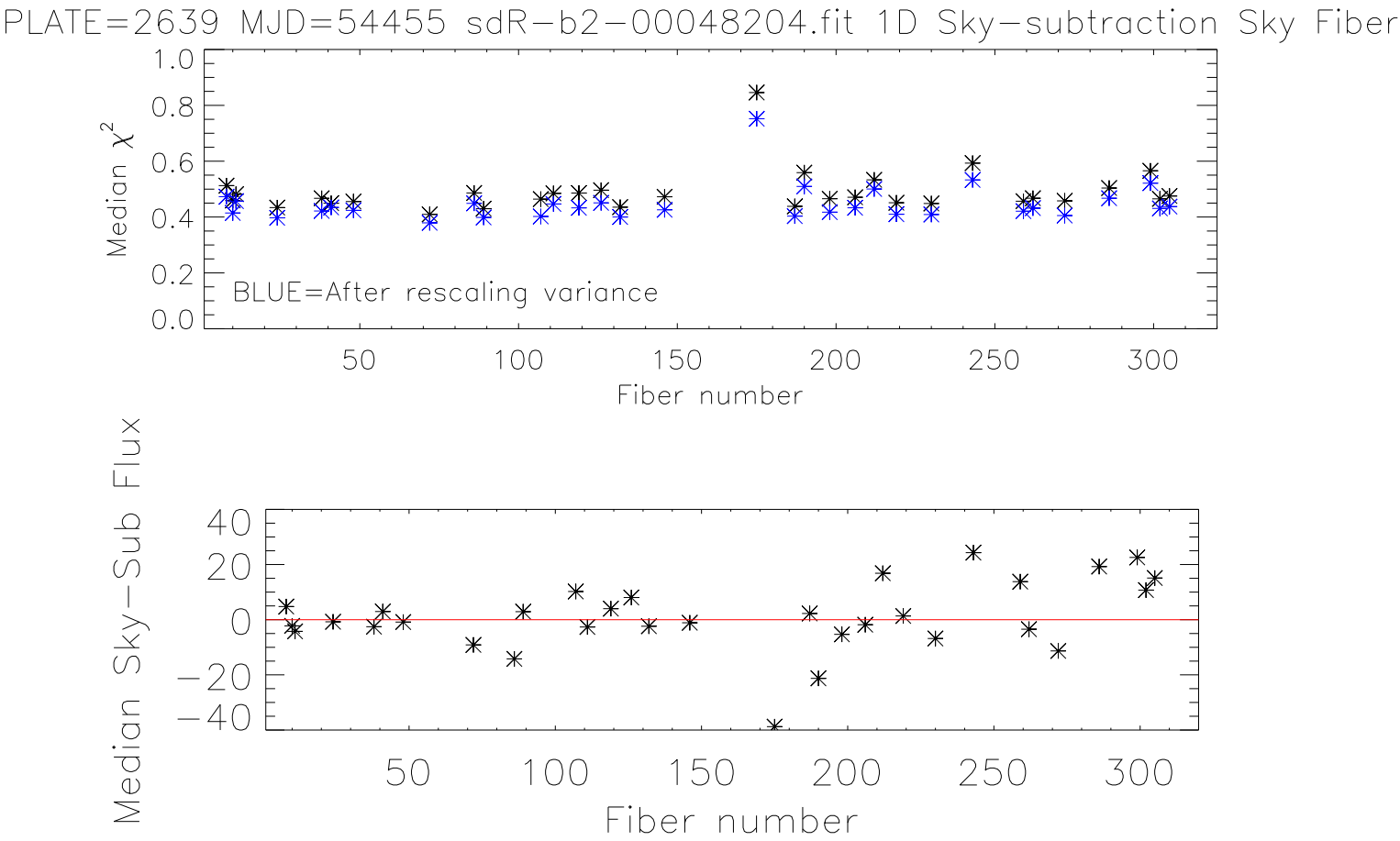

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

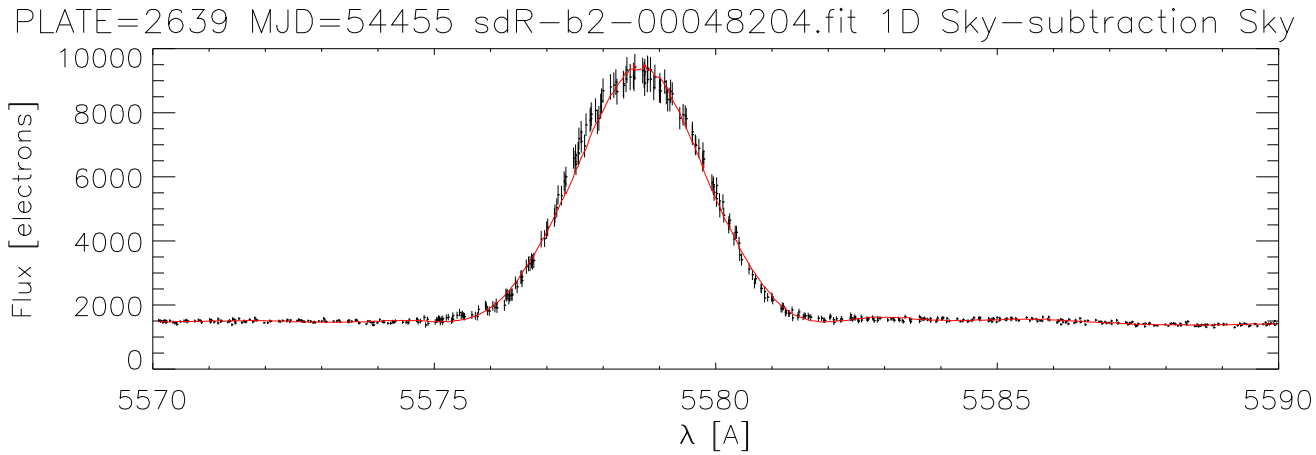

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

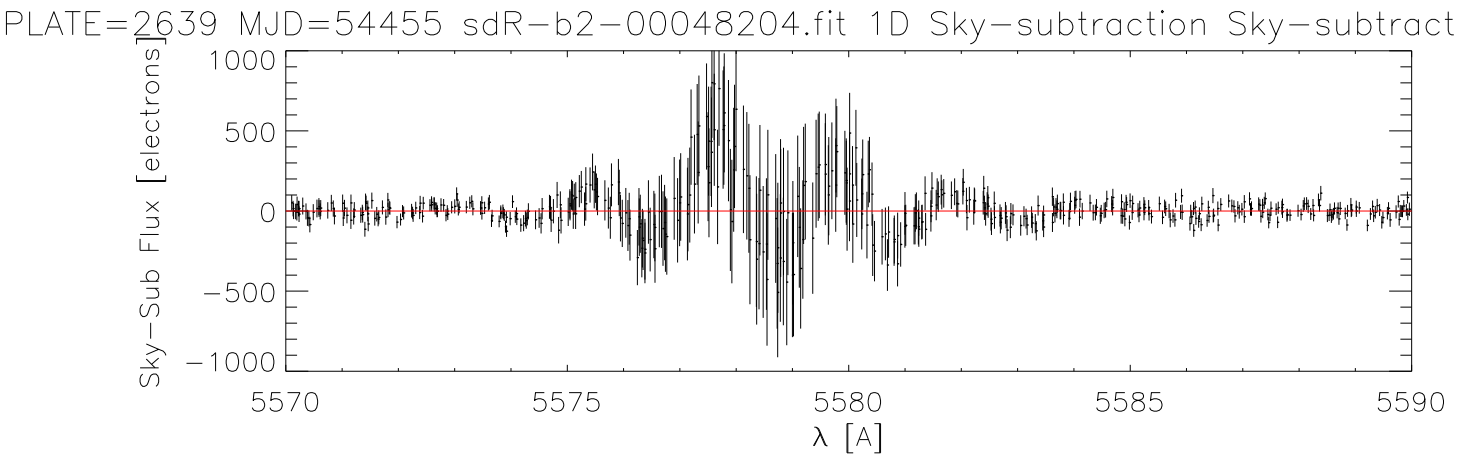

4046.5600
nfib1 33
nfib2 33
stdev 0.024
extra −0.06
4358.3300
nfib1 33
nfib2 33
stdev 0.025
extra −0.08
5460.9400
nfib1 32
nfib2 33
stdev 0.023
extra 349338560.0
5577.3390
nfib1 33
nfib2 33
stdev 0.012
extra −0.04
5889.9500
nfib1 33
nfib2 33
stdev 0.025
extra 0.10
5895.9240
nfib1 33
nfib2 33
stdev 0.026
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

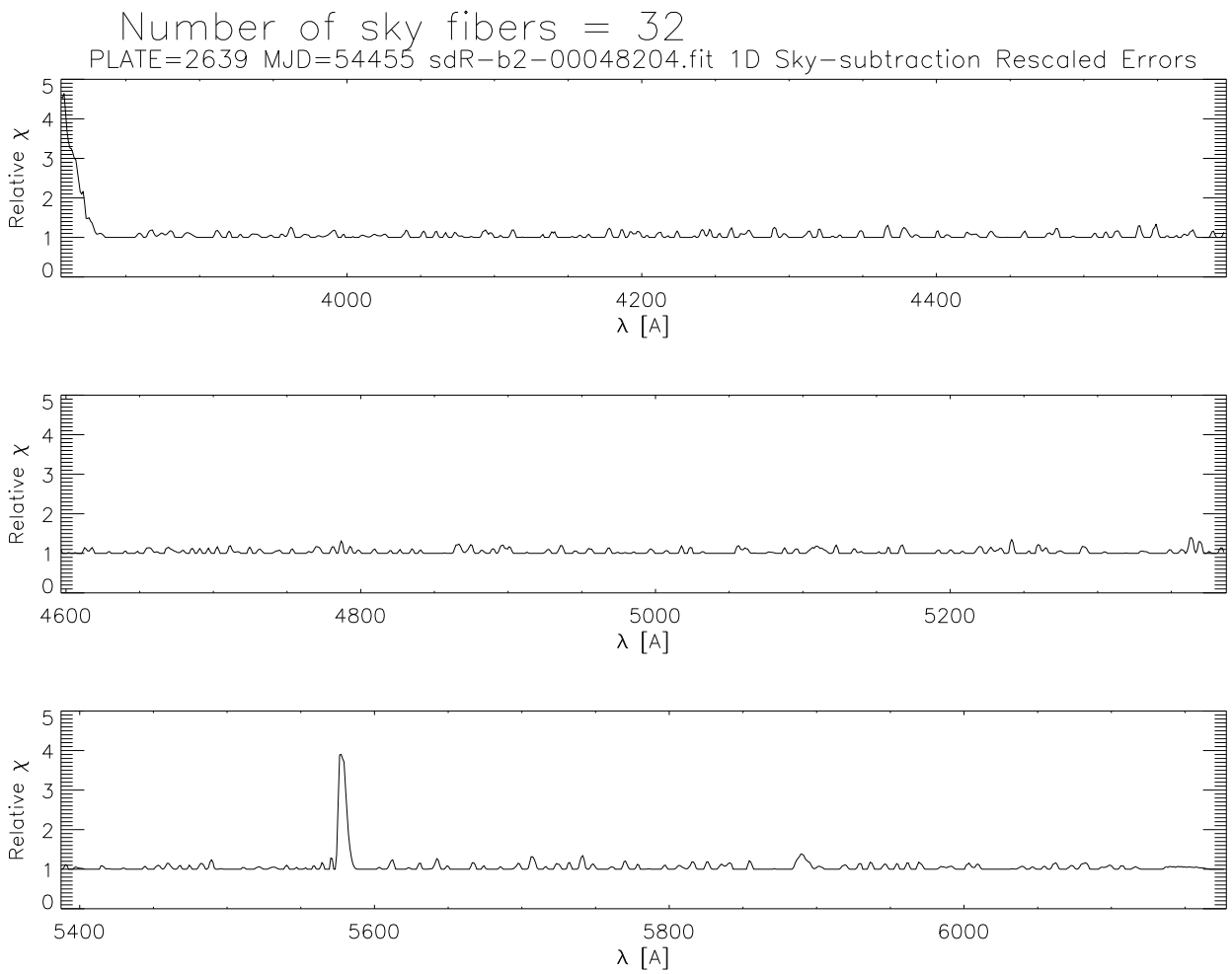

0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

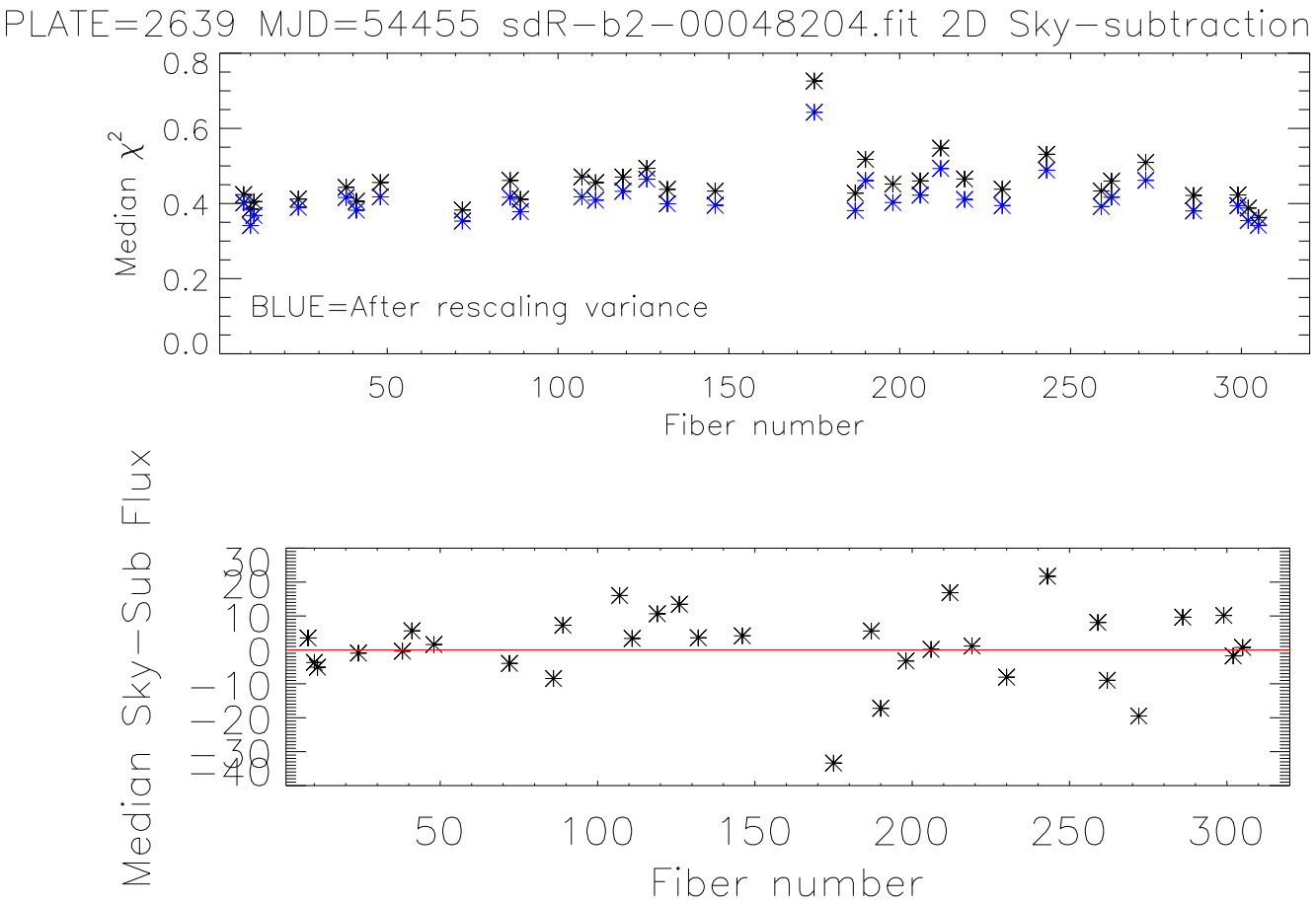

PLATE=2639 MJD=54455 Smooth superflat for sdR-b2-00048204.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

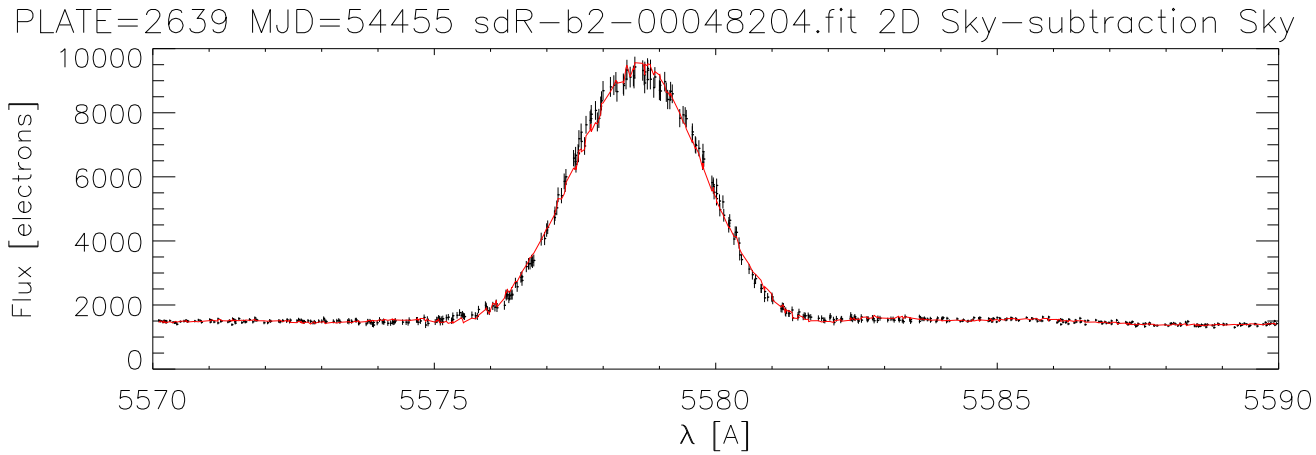

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

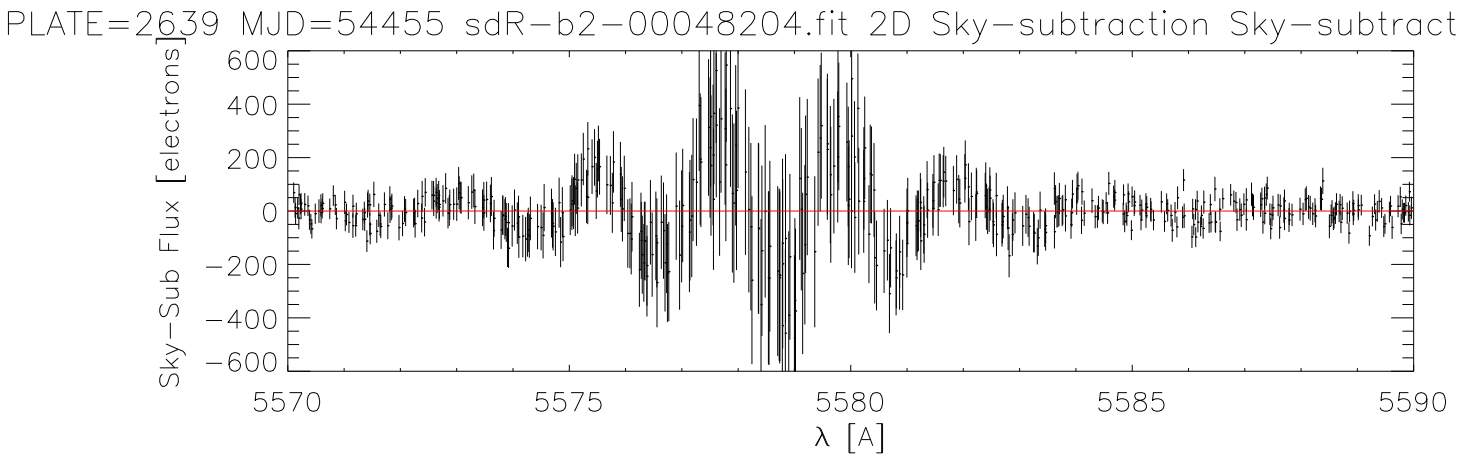

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

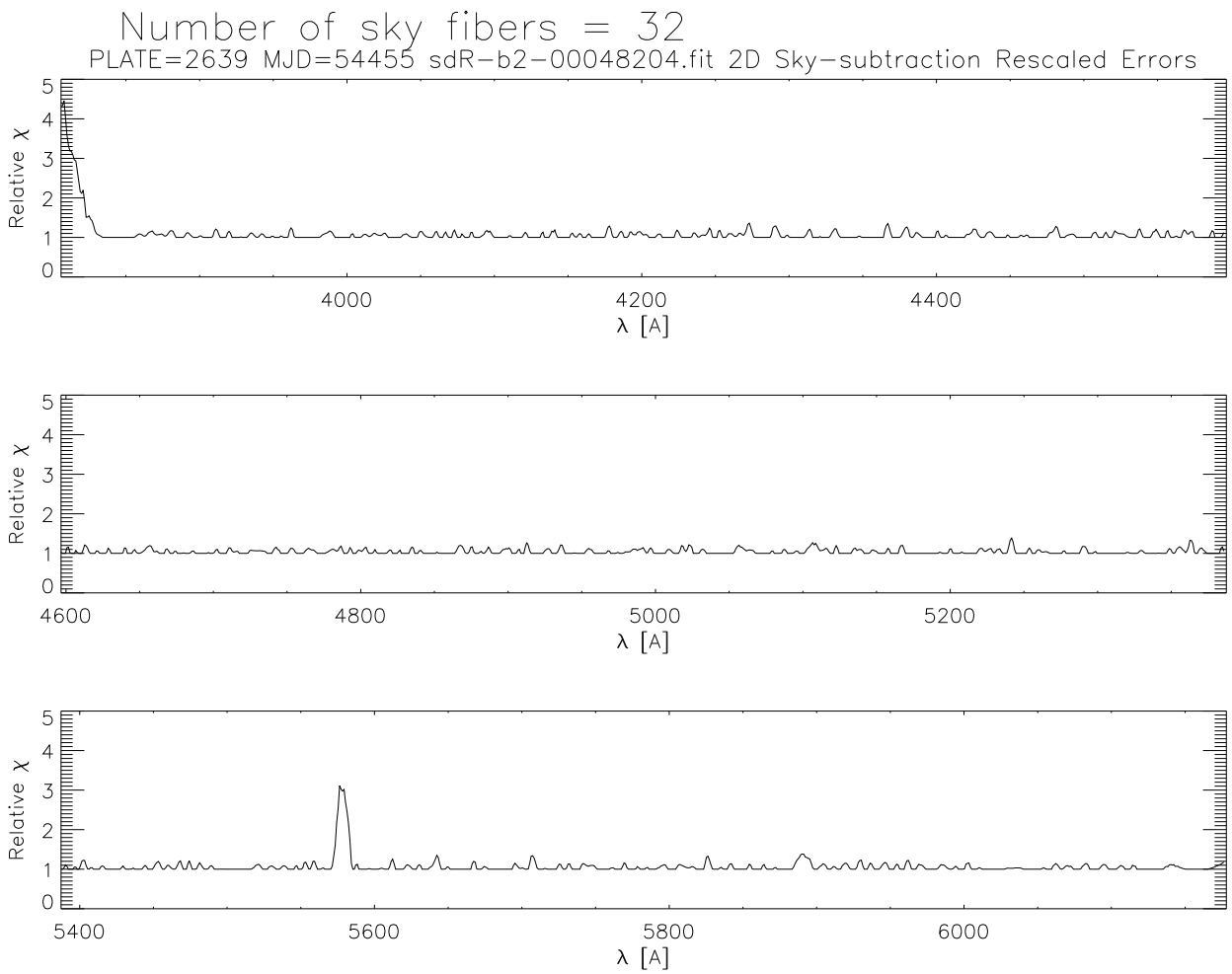

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

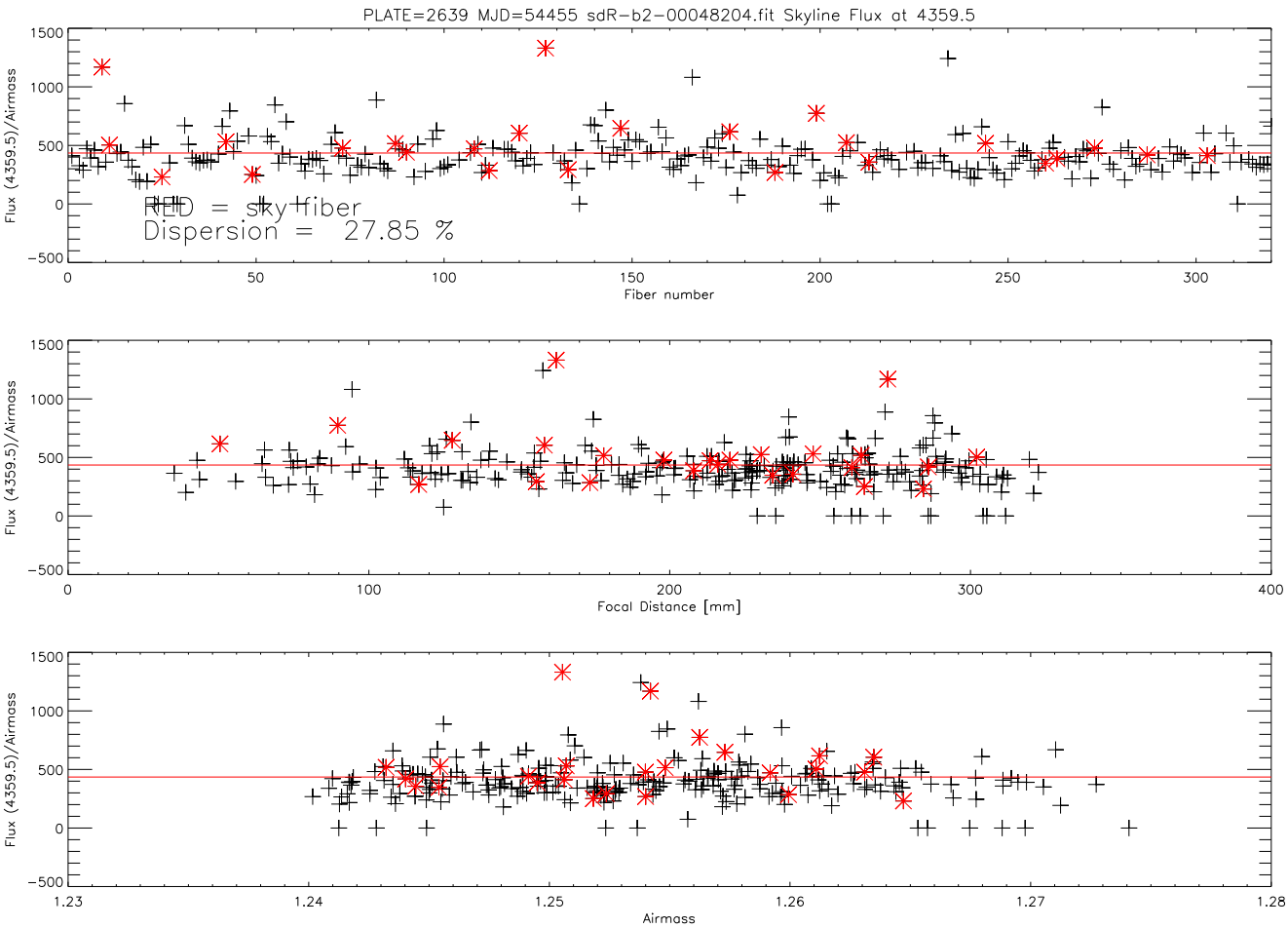

Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048204.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

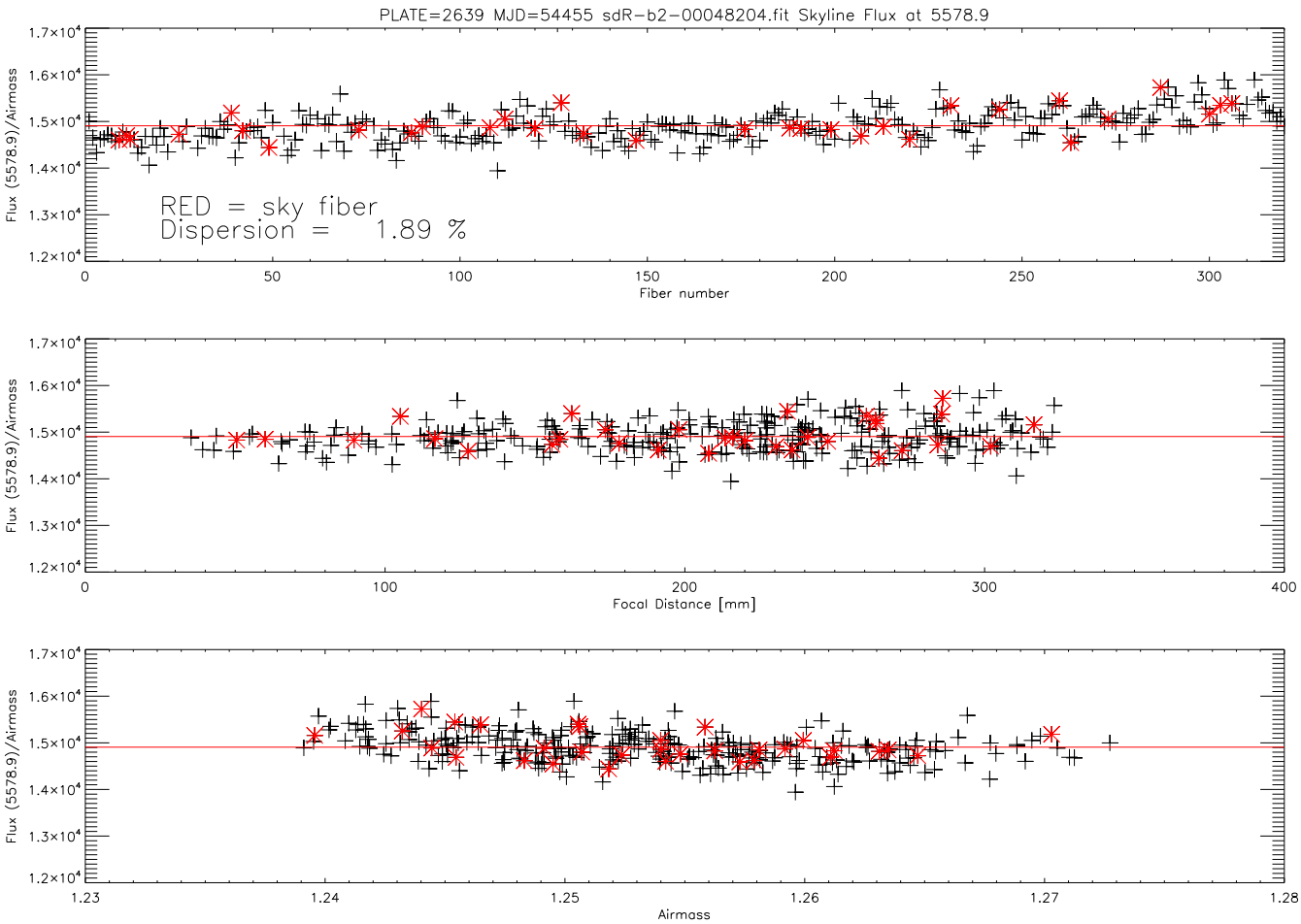

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

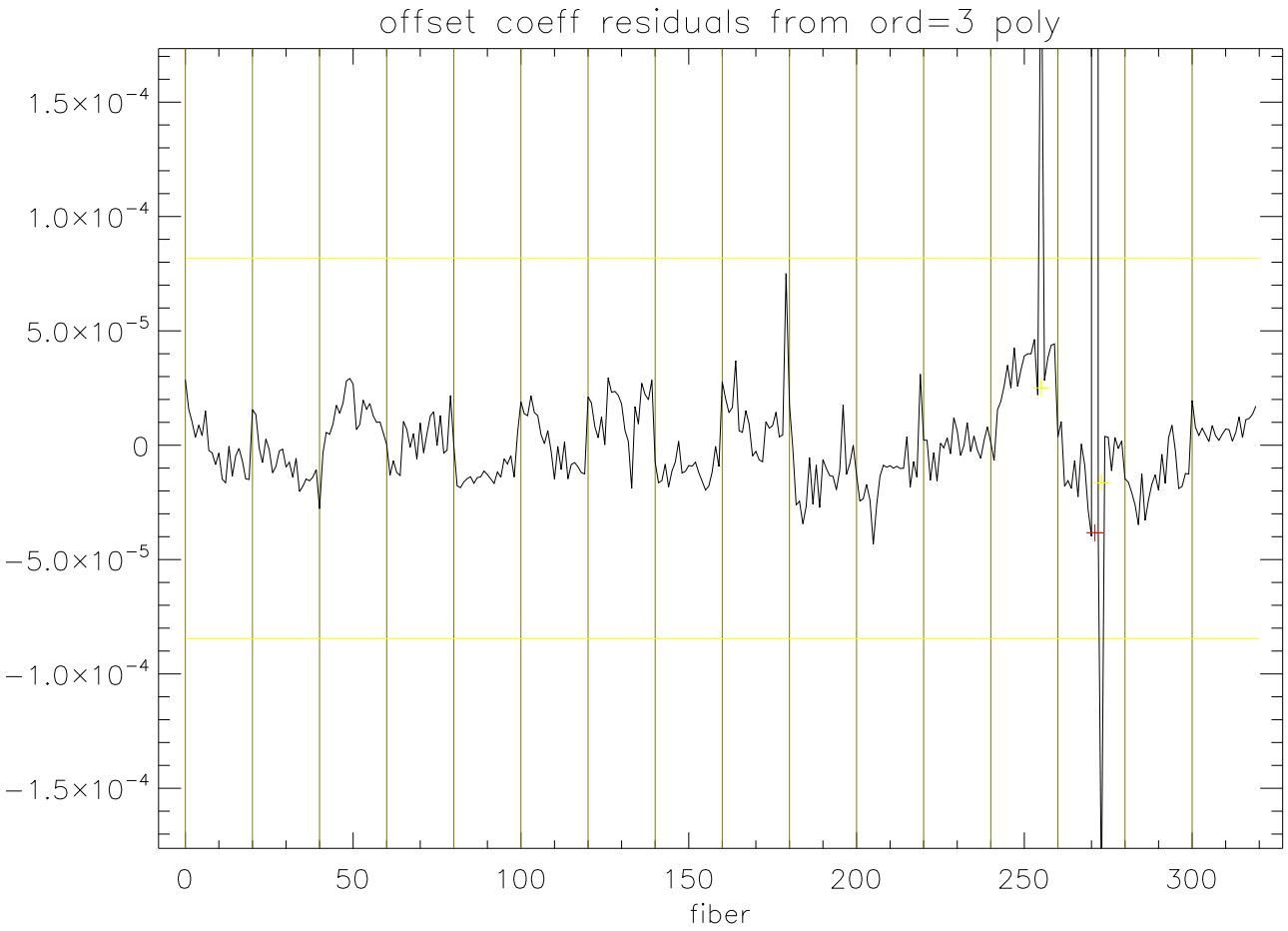

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

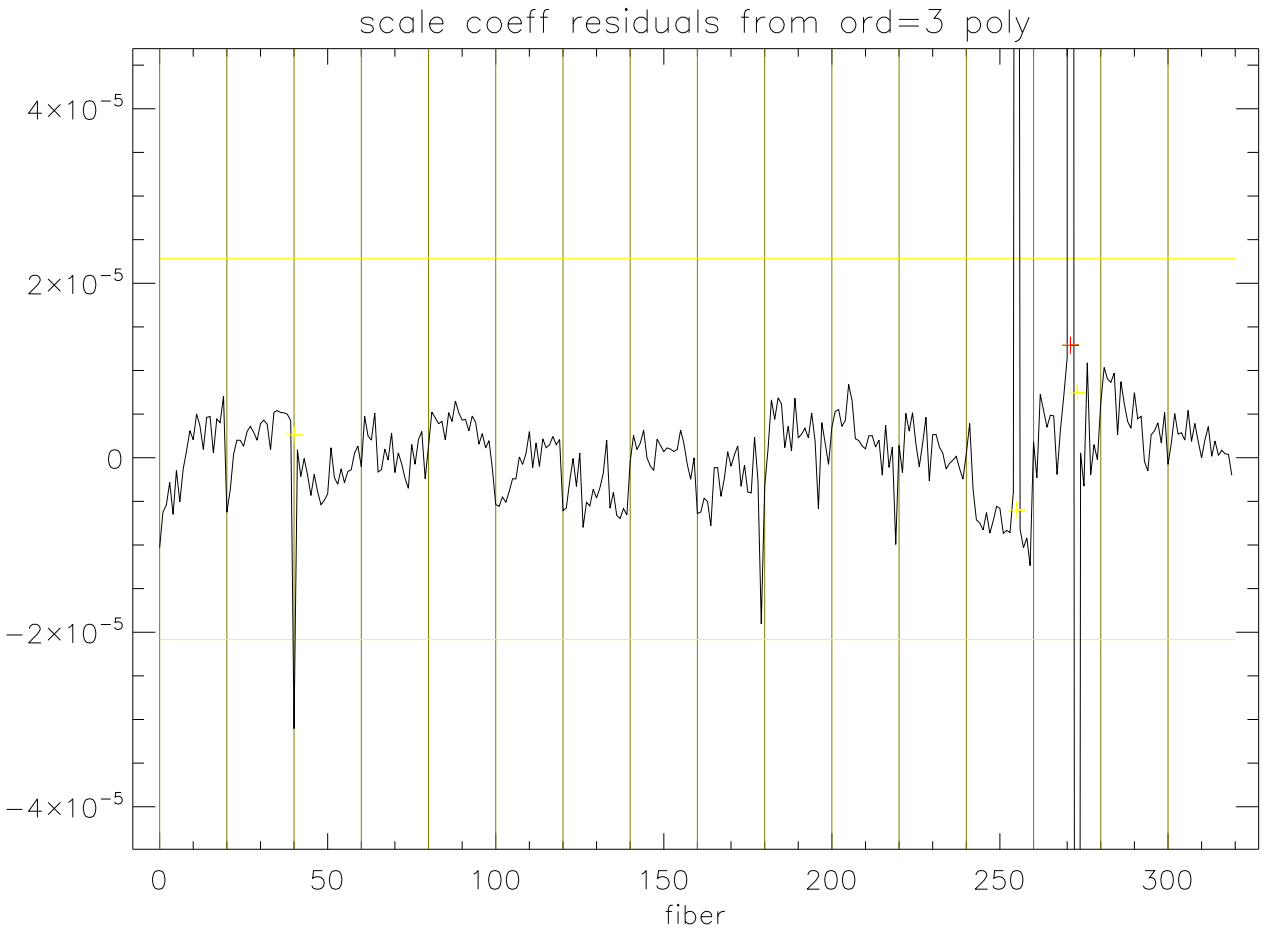

PLATE=2639 MJD=54455 sdR-b2-00048204.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

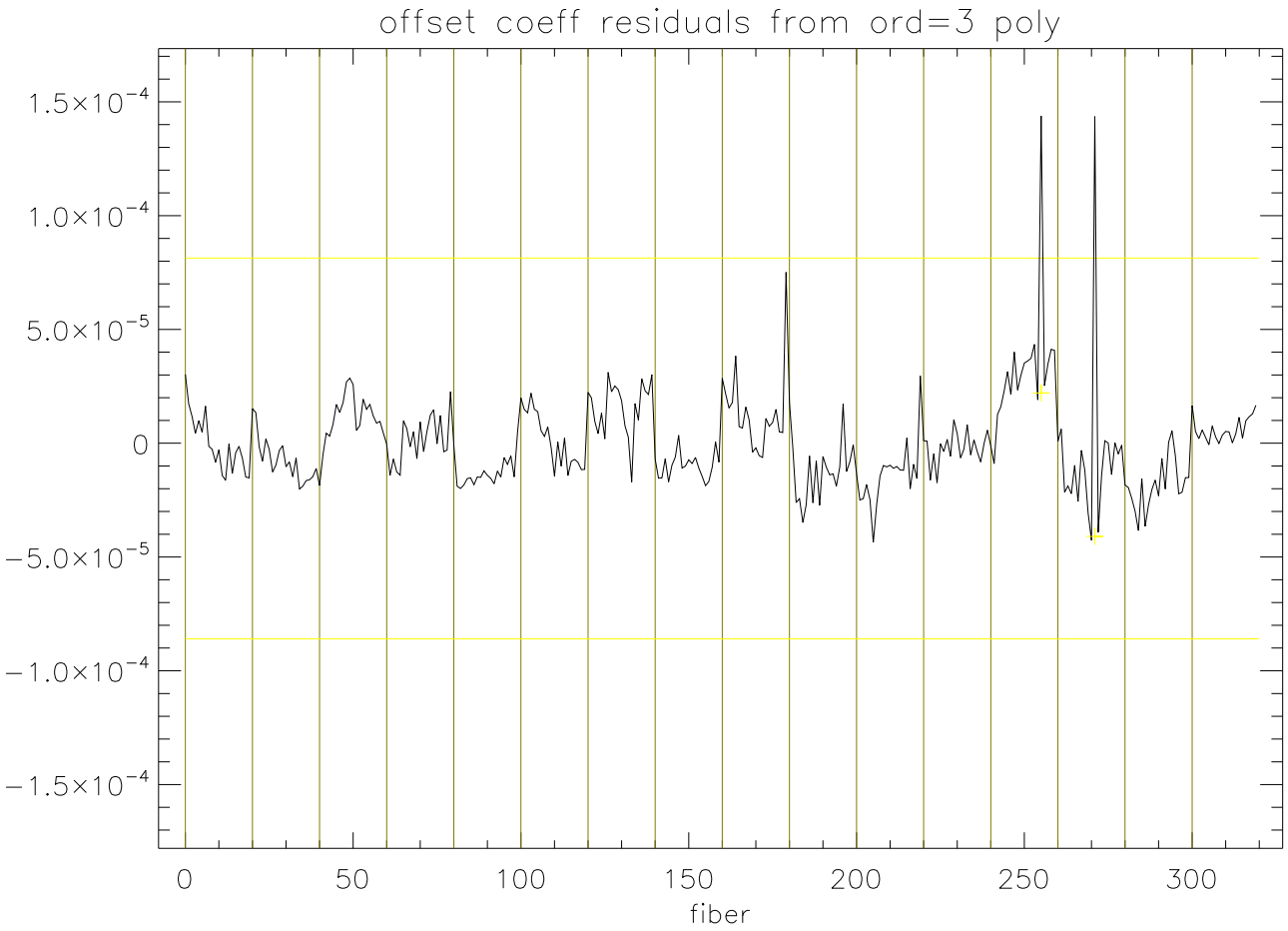

Number of sky fibers = 32
PLATE=2639 MJD=54455 sdR-b2-00048204.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

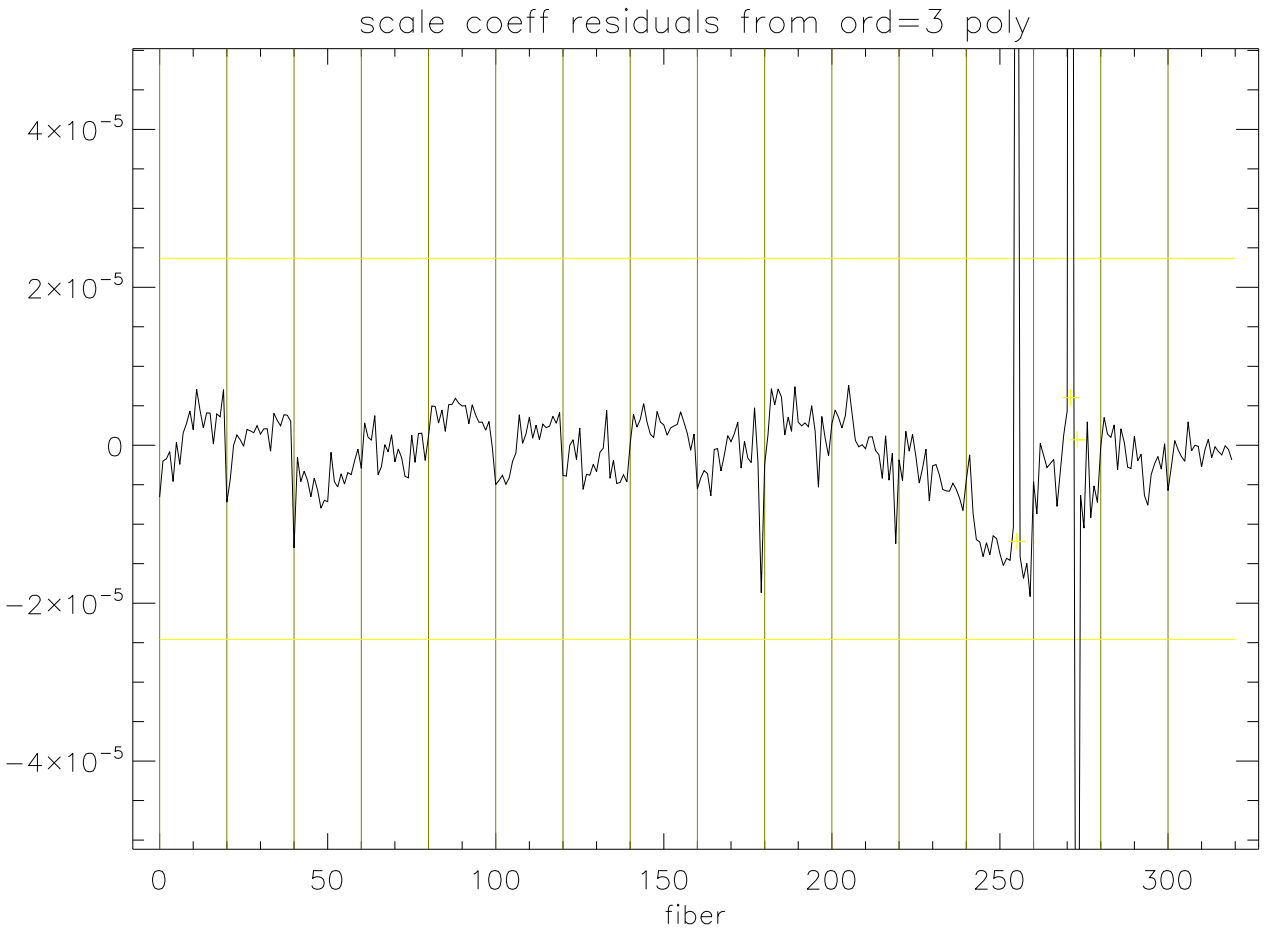

PLATE=2639 MJD=54455 sdR-b2-00048204.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 27.85 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

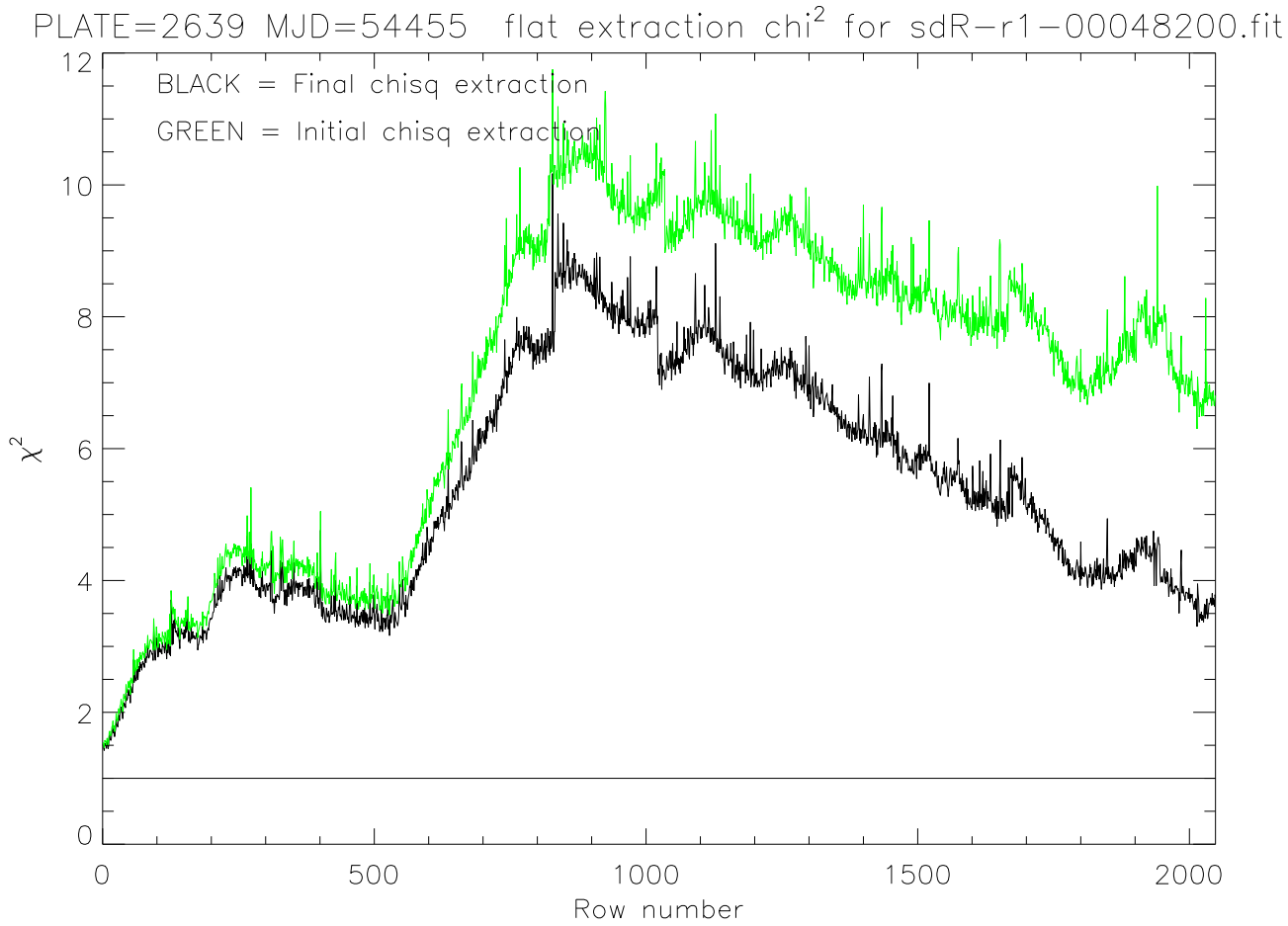

PLATE=2639 MJD=54455 sdR-b2-00048204.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.89 %
Fiber number
Focal Distance [mm]
Airmass

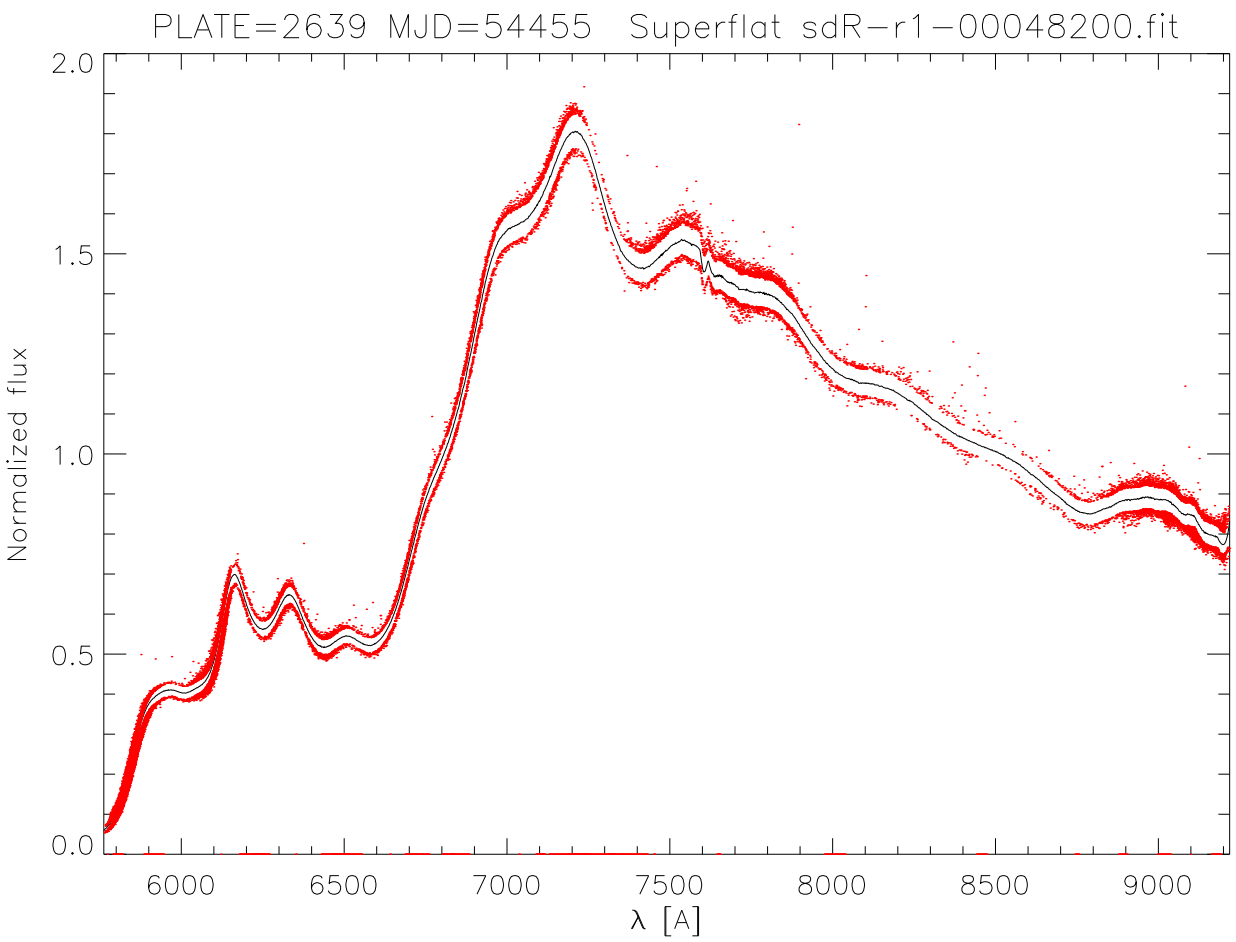

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

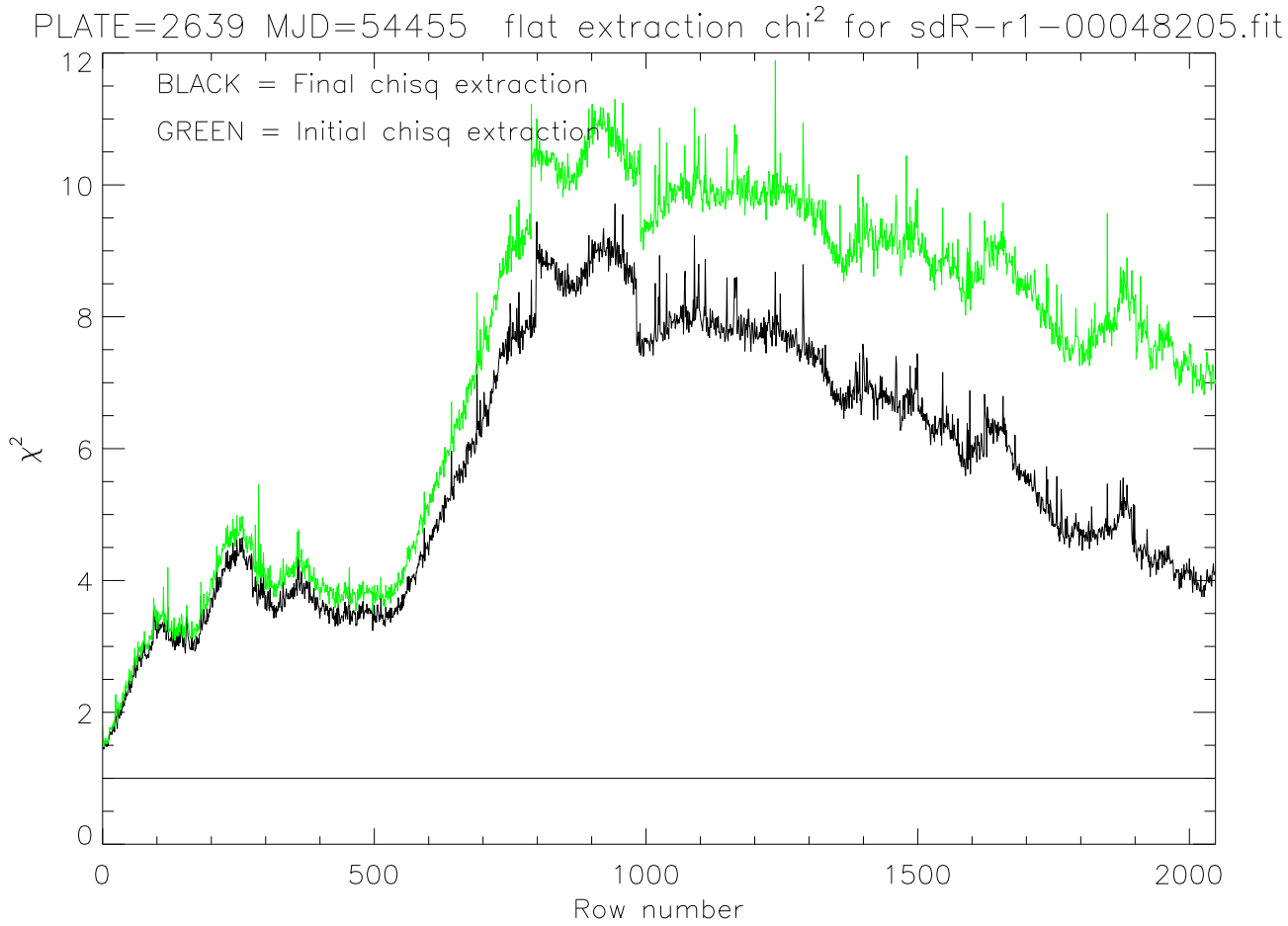

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

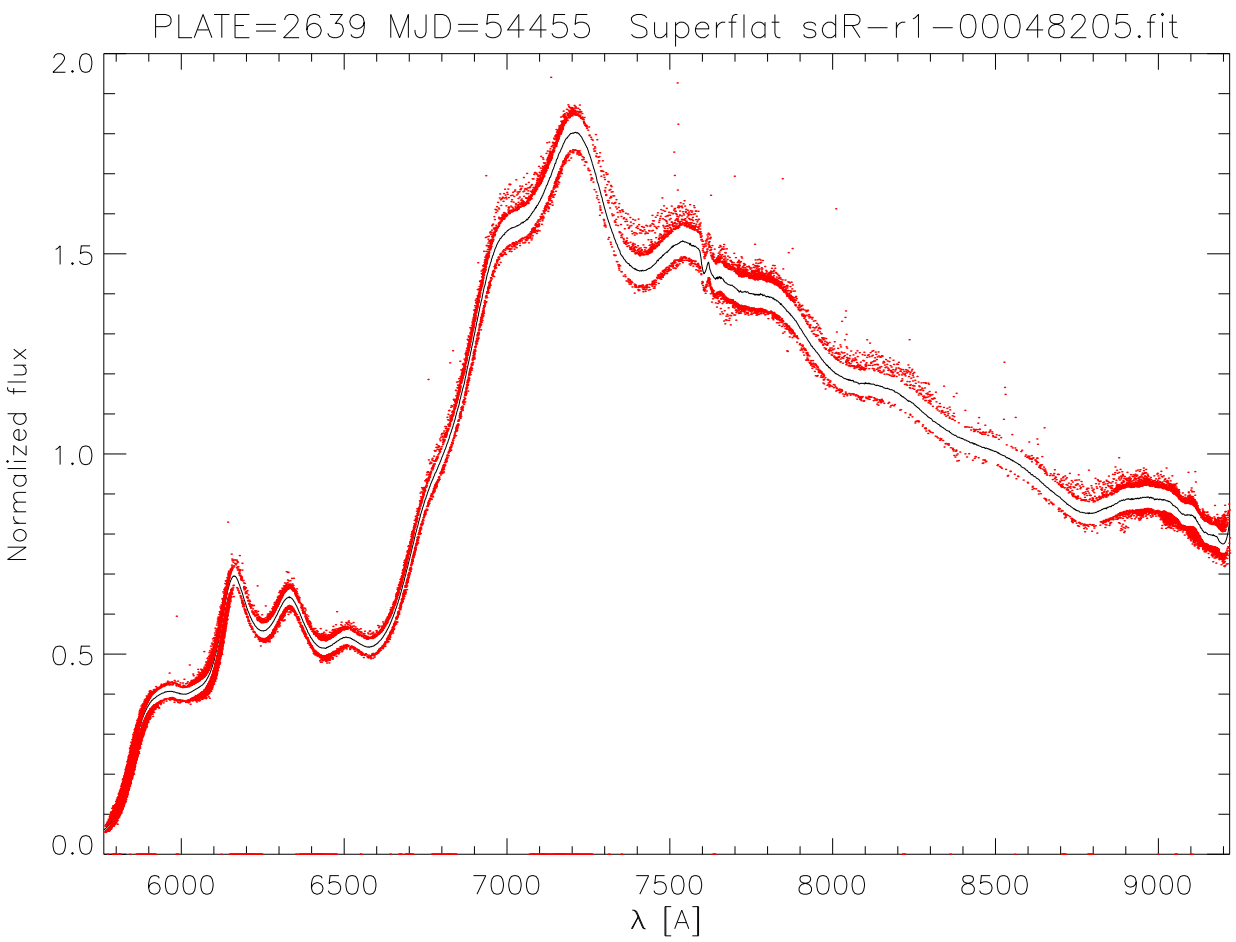

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

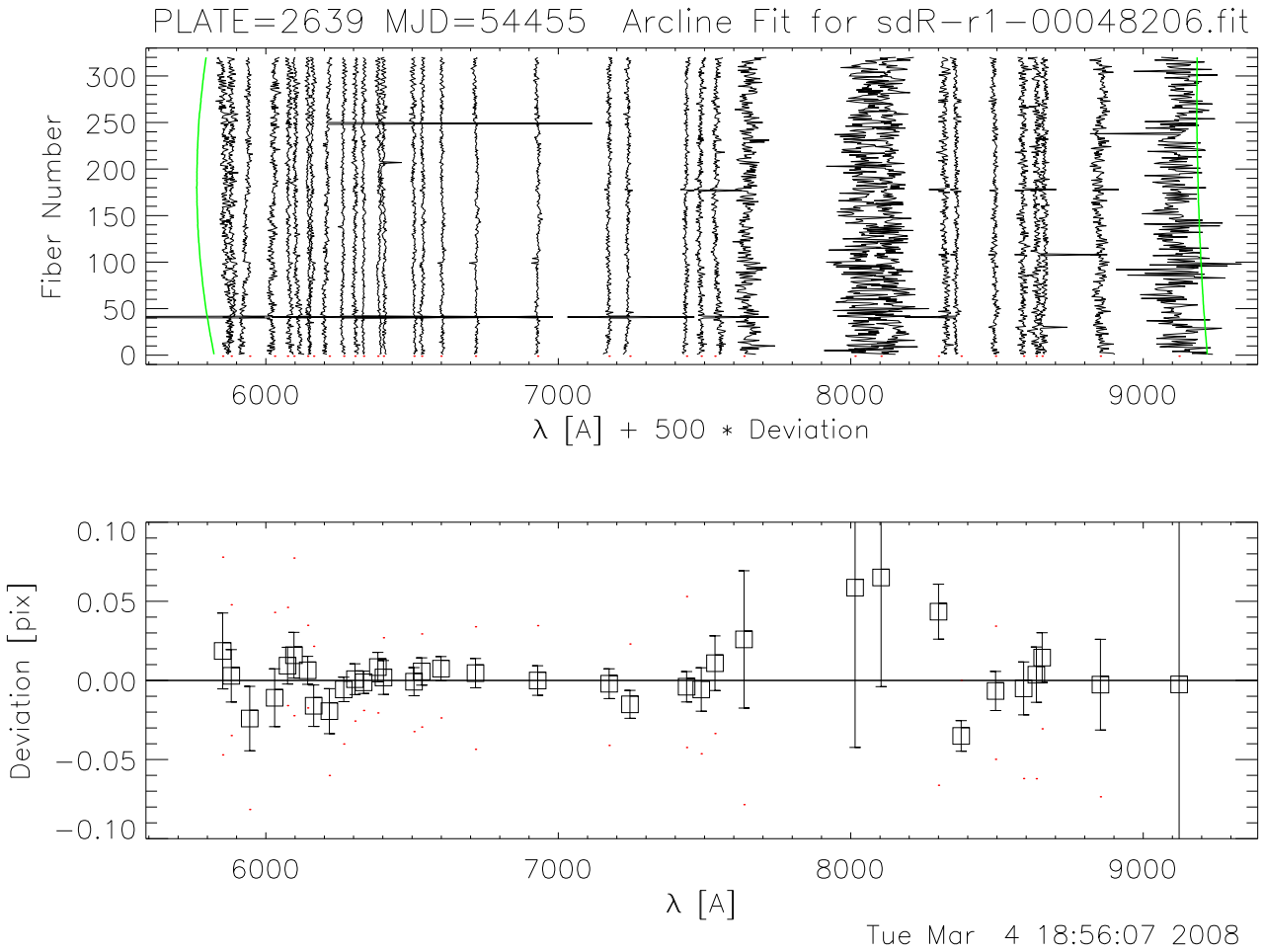

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

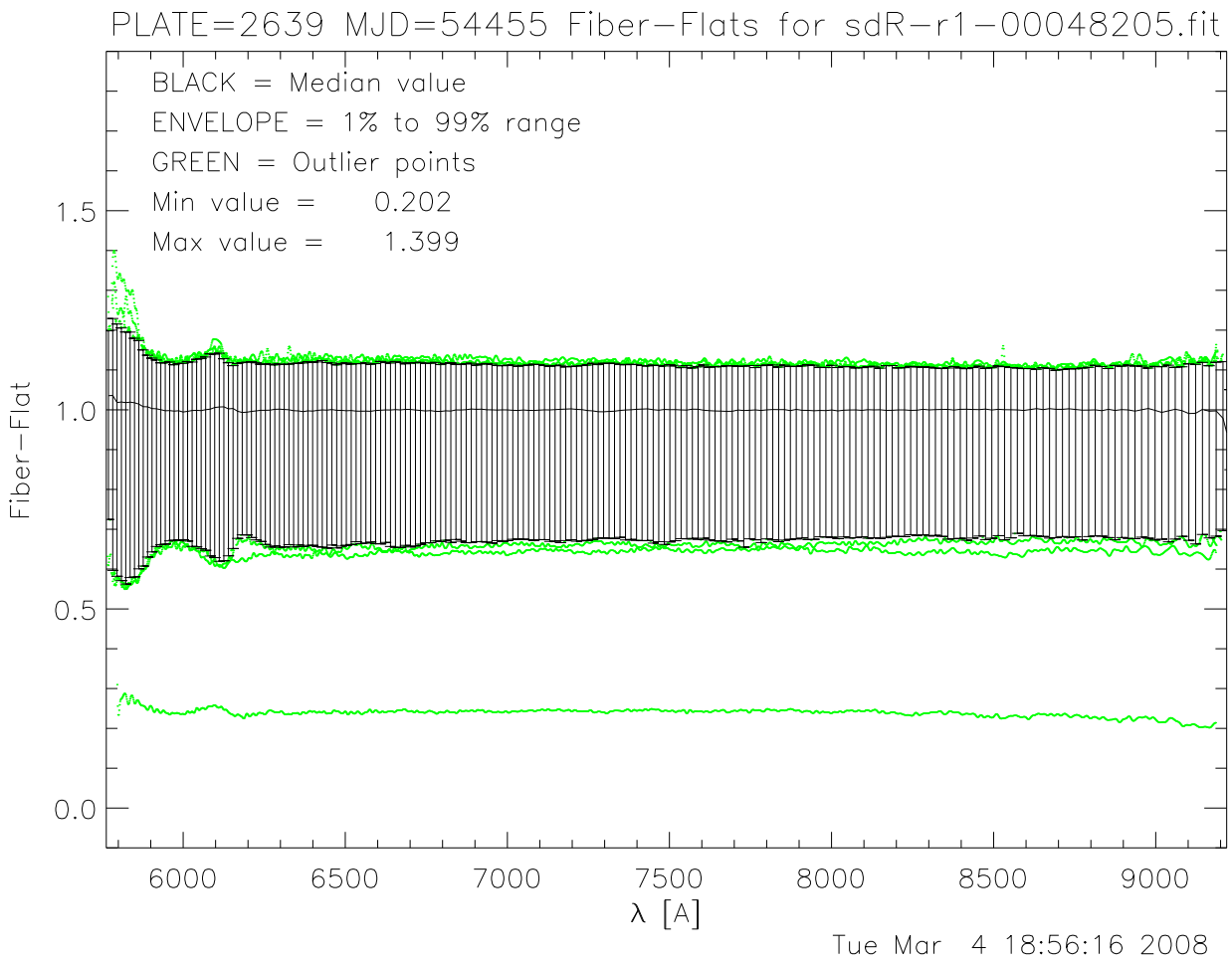

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−r1−00048200.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

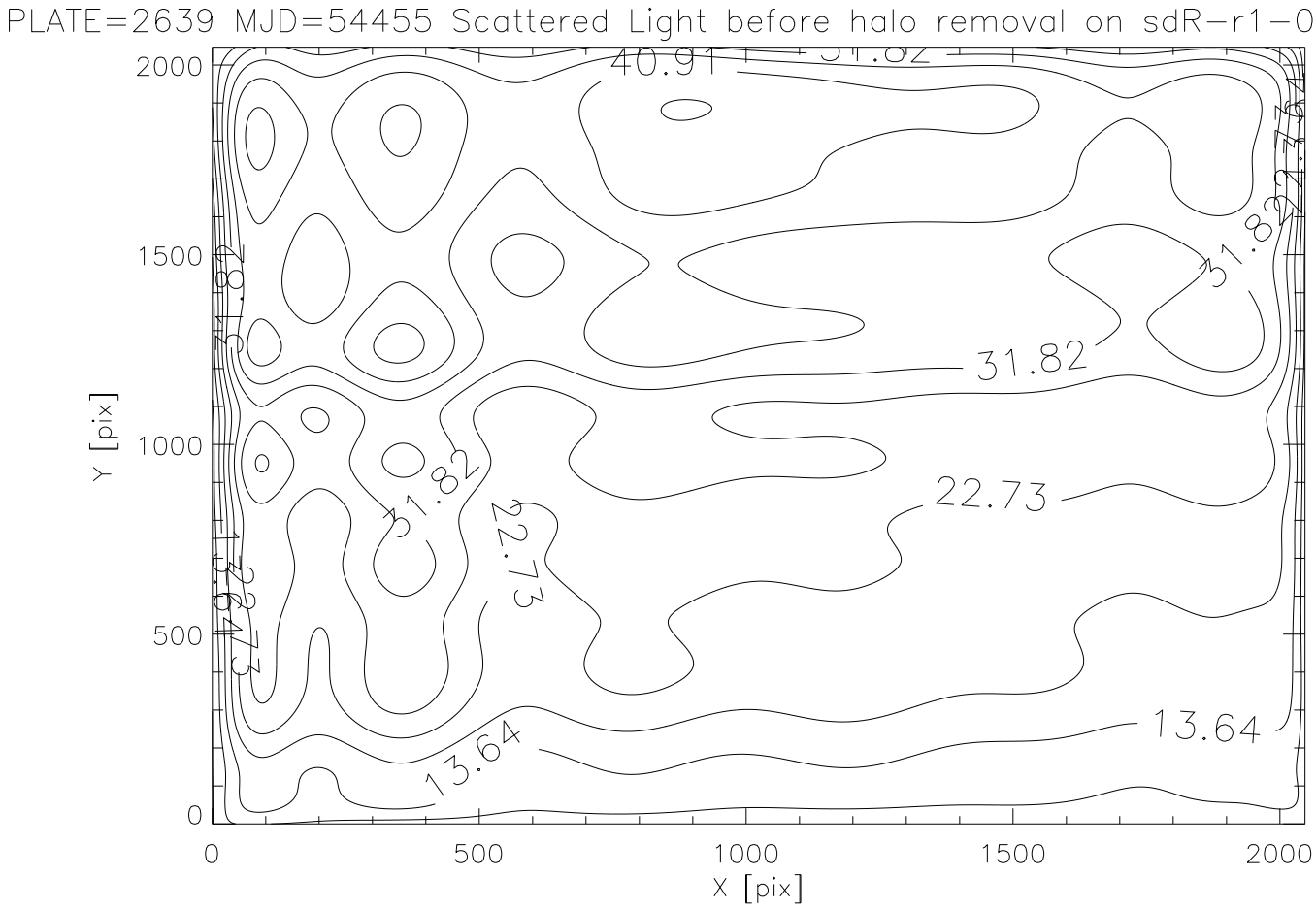

PLATE=2639 MJD=54455 Superflat sdR-r1-00048200.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

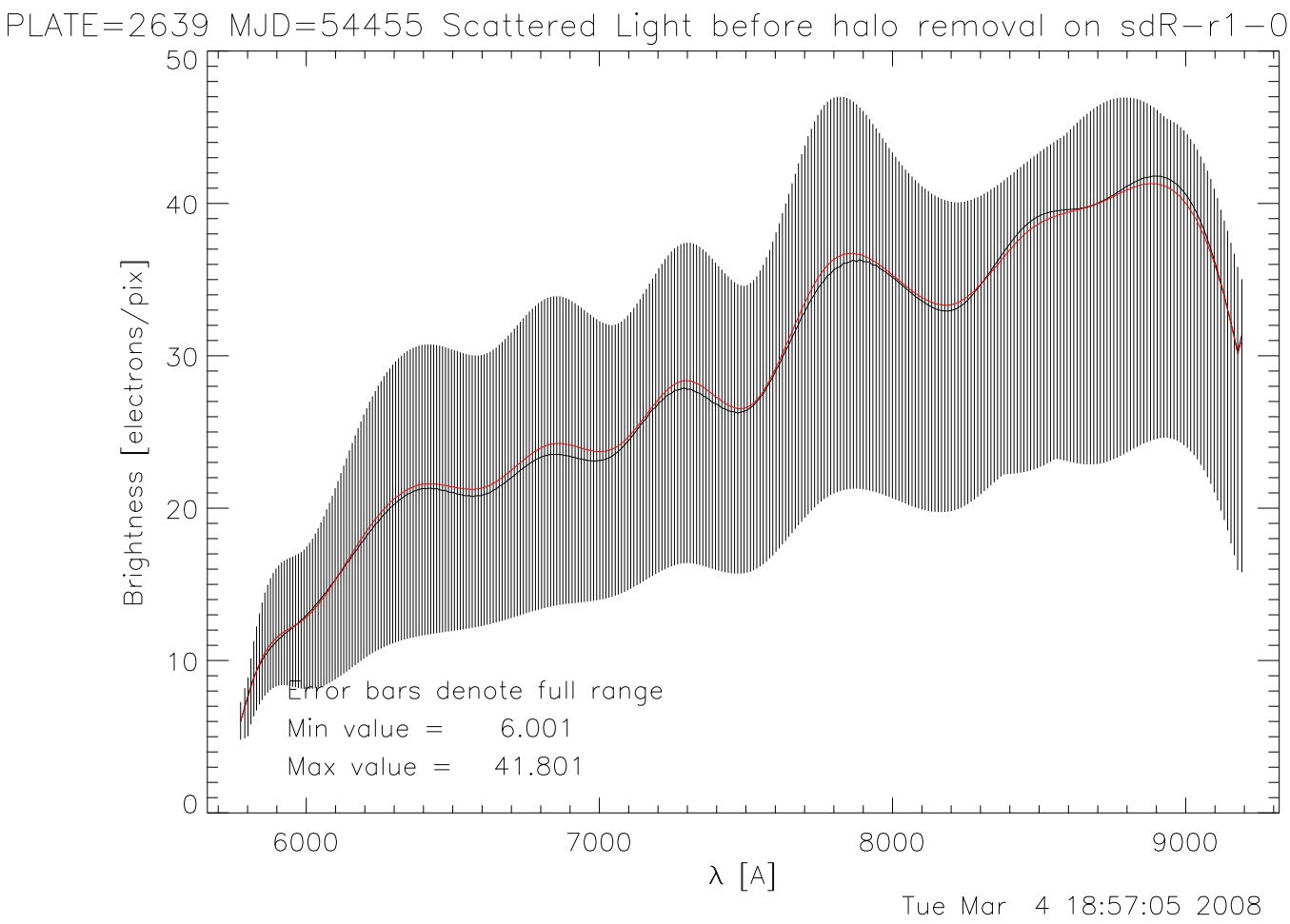

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−r1−00048205.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

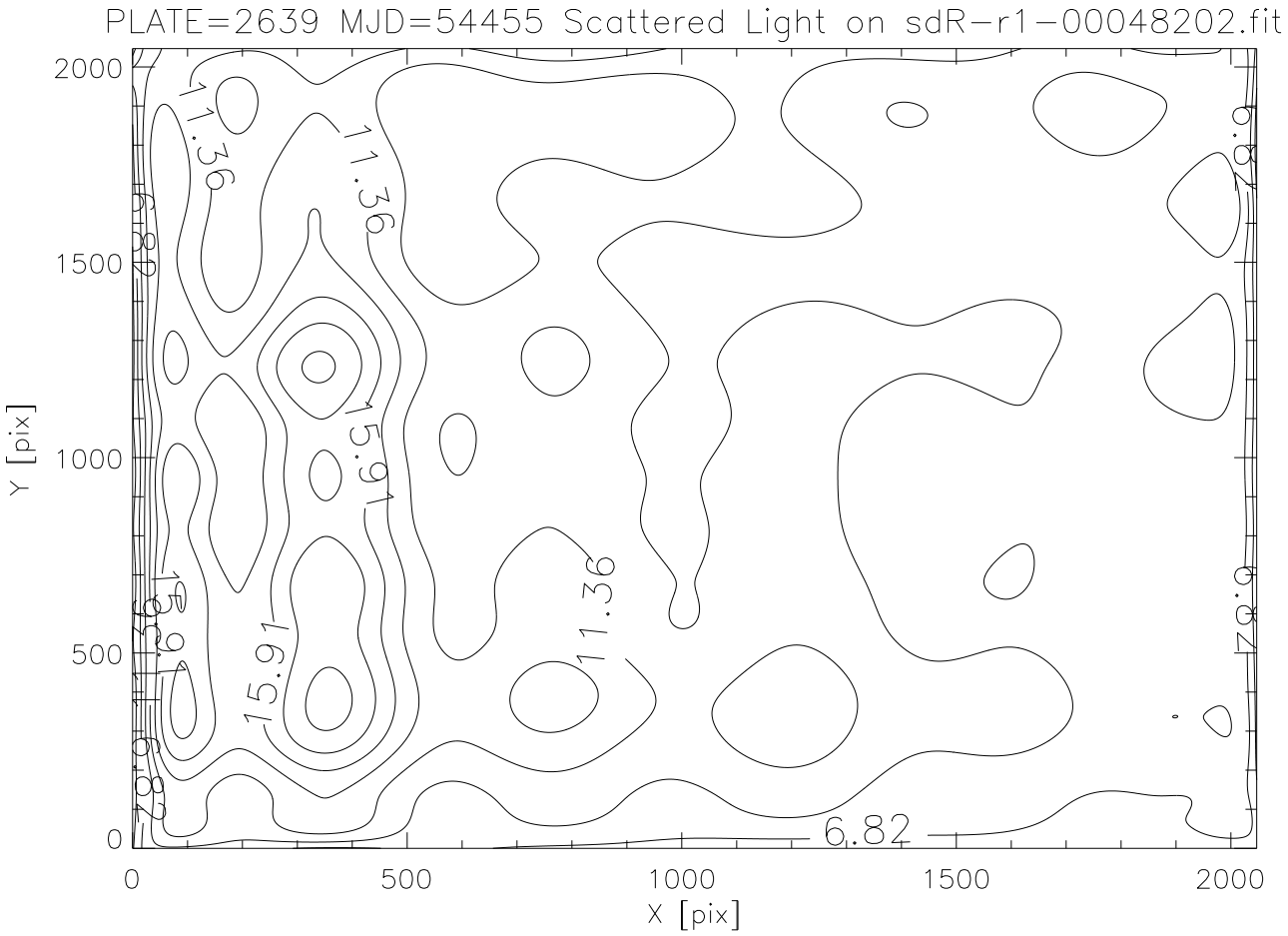

PLATE=2639 MJD=54455 Superflat sdR-r1-00048205.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

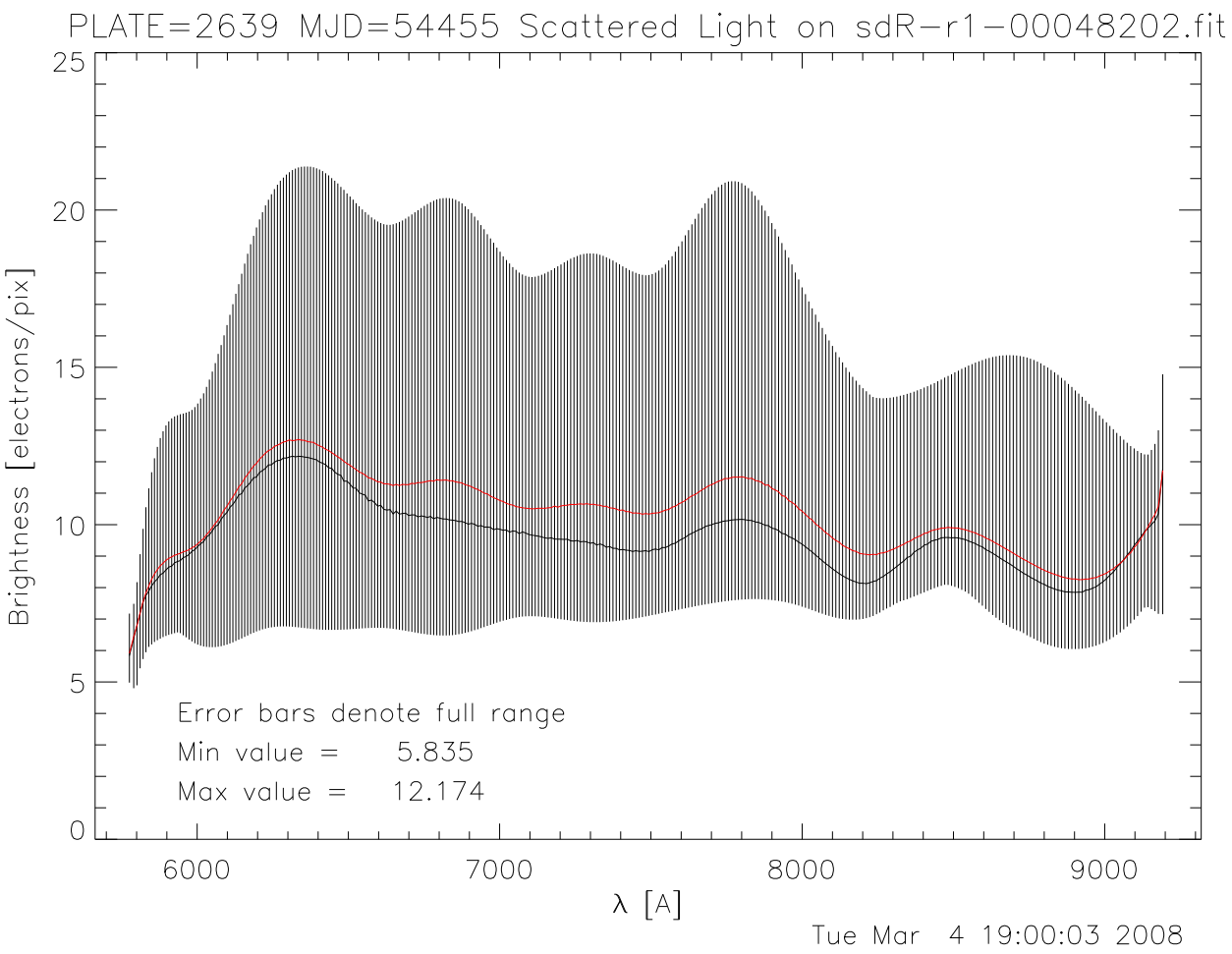

PLATE=2639 MJD=54455 Arcline Fit for sdR-r1-00048206.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Mar 4 18:56:07 2008

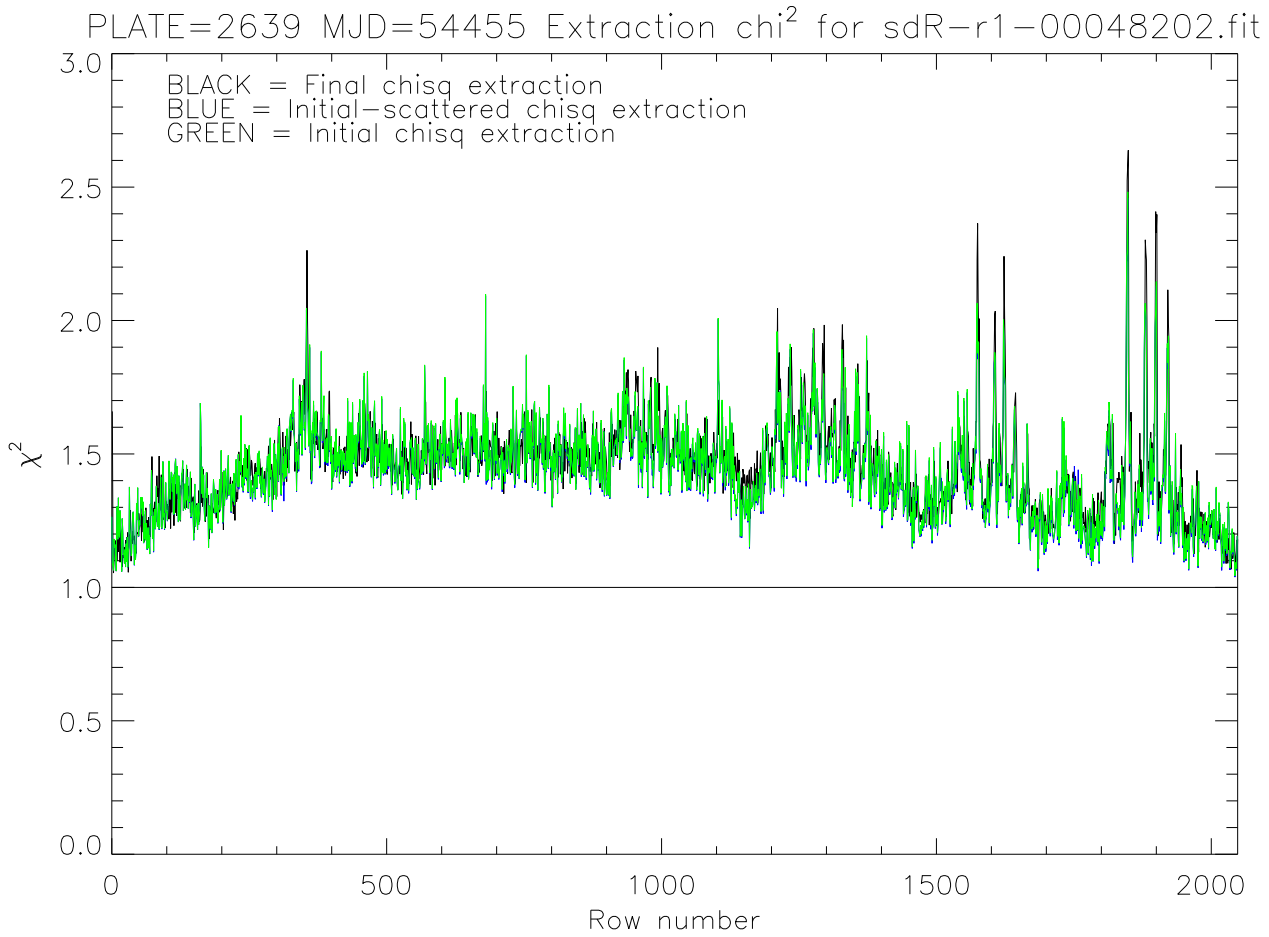

PLATE=2639 MJD=54455 Fiber−Flats for sdR−r1−00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.399
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 18:56:16 2008

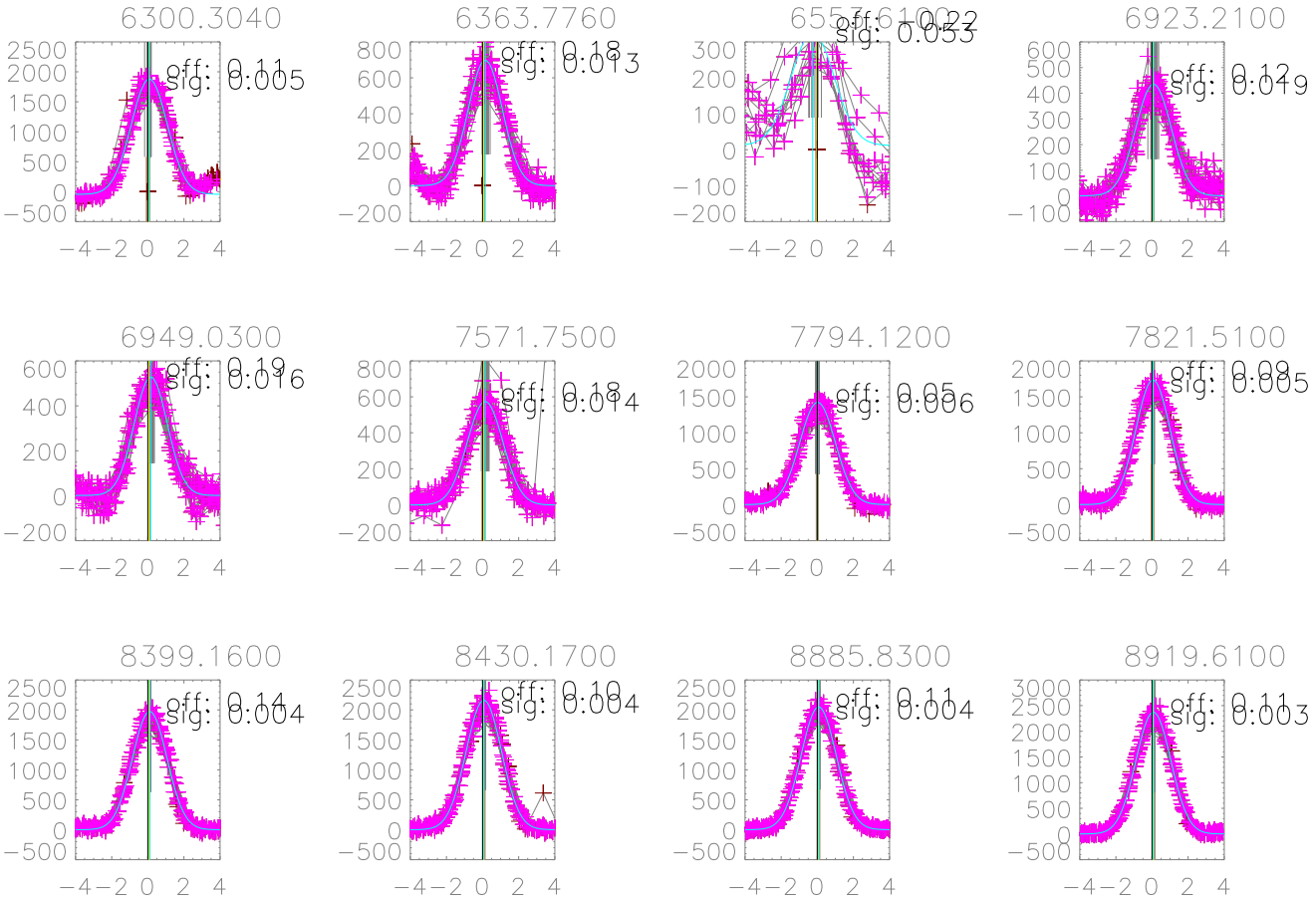

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048202.fi
40.91
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

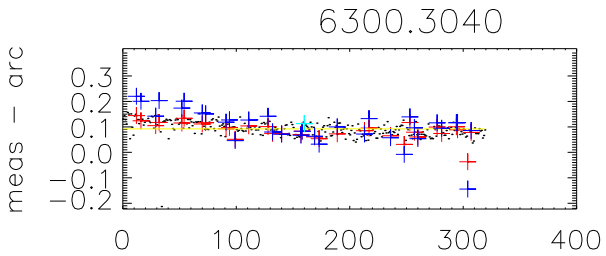

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048202.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.001
Max value = 41.801
Tue Mar 4 18:57:05 2008

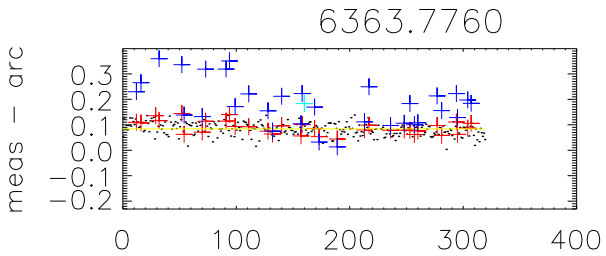

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048202.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
15.91
6.82

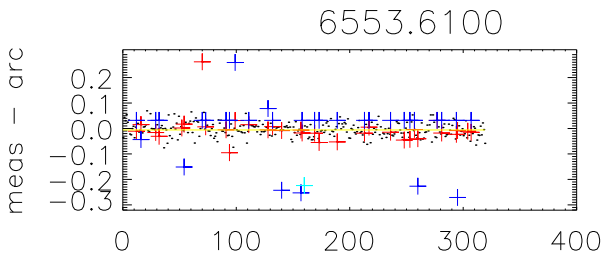

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048202.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.835
Max value = 12.174
Tue Mar 4 19:00:03 2008

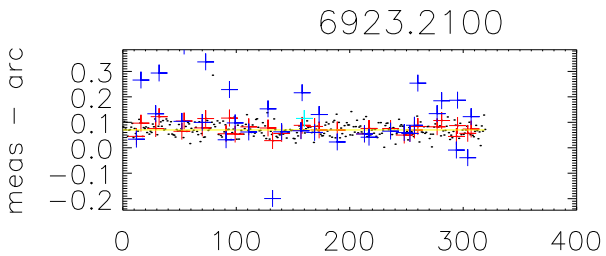

PLATE=2639 MJD=54455 Extraction chi^2 for sdR−r1−00048202.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

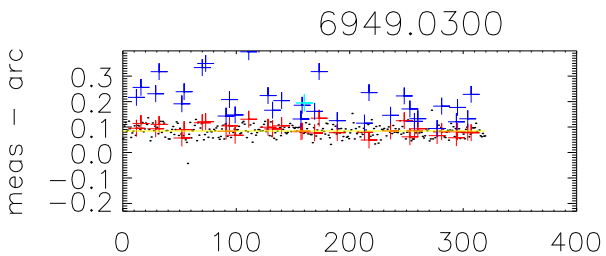

6300.3040
off: 0.11
sig: 0.005
6363.7760
off: 0.18
sig: 0.013
6557.6100
off: 0.22
sig: 0.033
6923.2100
off: 0.12
sig: 0.019
6949.0300
off: 0.19
sig: 0.016
7571.7500
off: 0.18
sig: 0.014
7794.1200
off: 0.05
sig: 0.006
7821.5100
off: 0.08
sig: 0.005
8399.1600
off: 0.14
sig: 0.004
8430.1700
off: 0.10
sig: 0.004
8885.8300
off: 0.11
sig: 0.004
8919.6100
off: 0.11
sig: 0.003

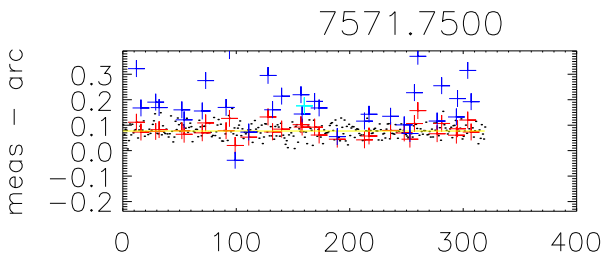

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

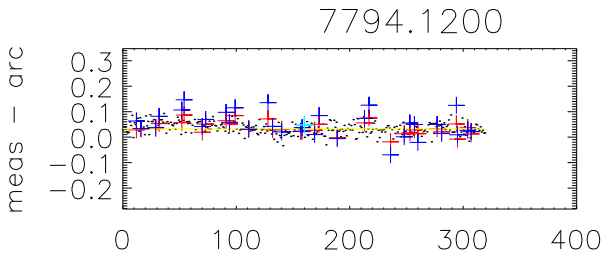

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

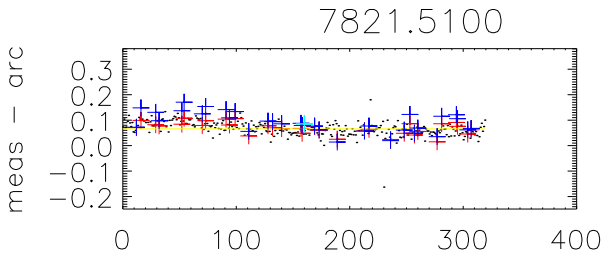

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

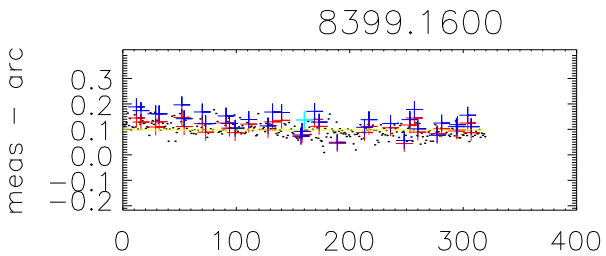

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

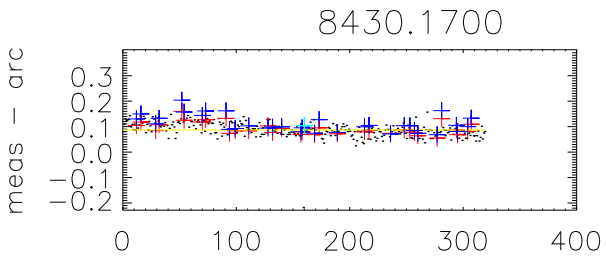

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

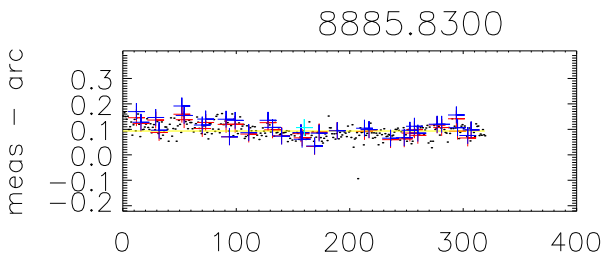

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

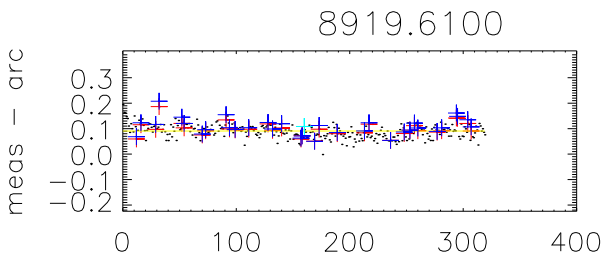

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

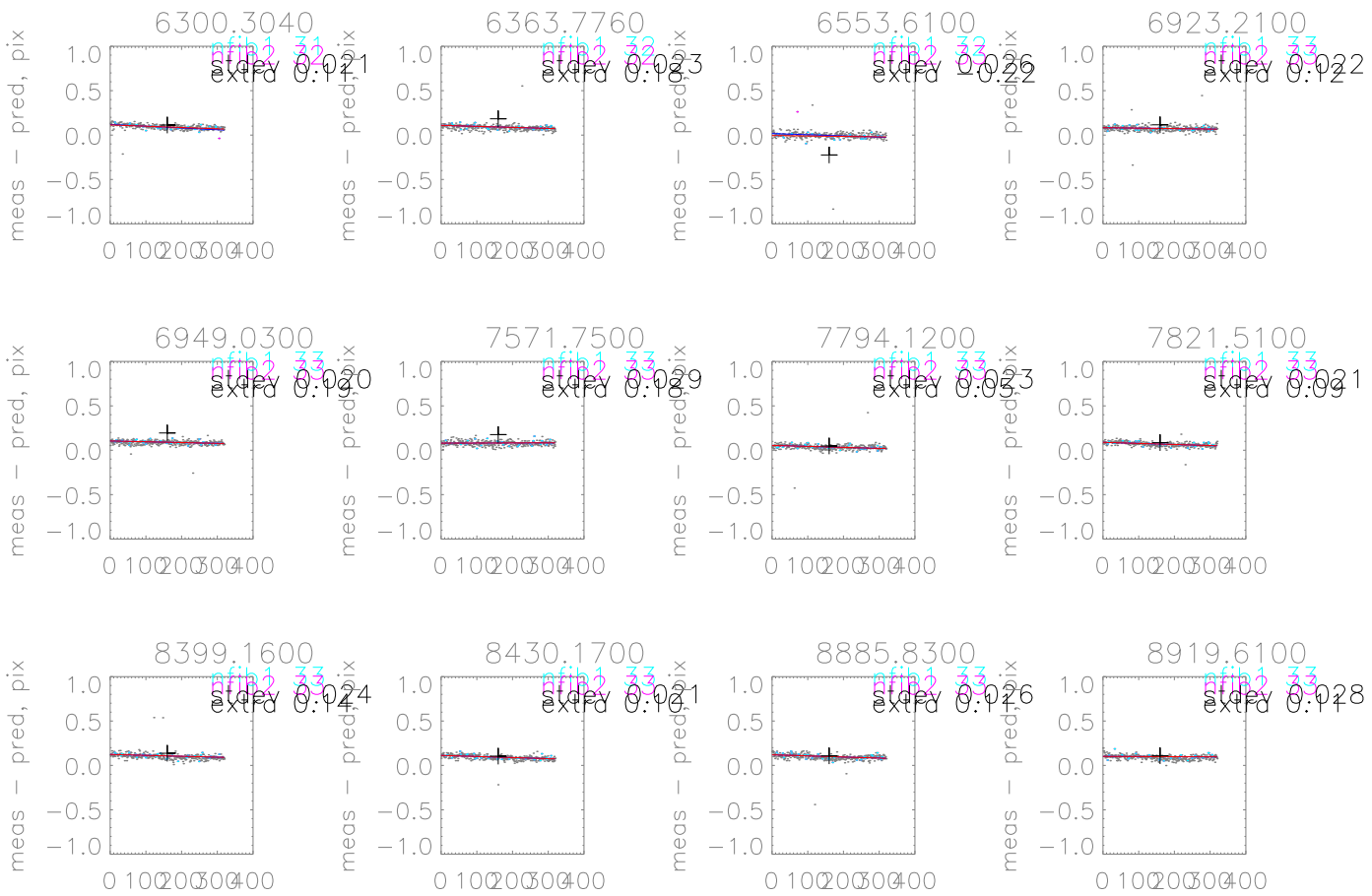

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

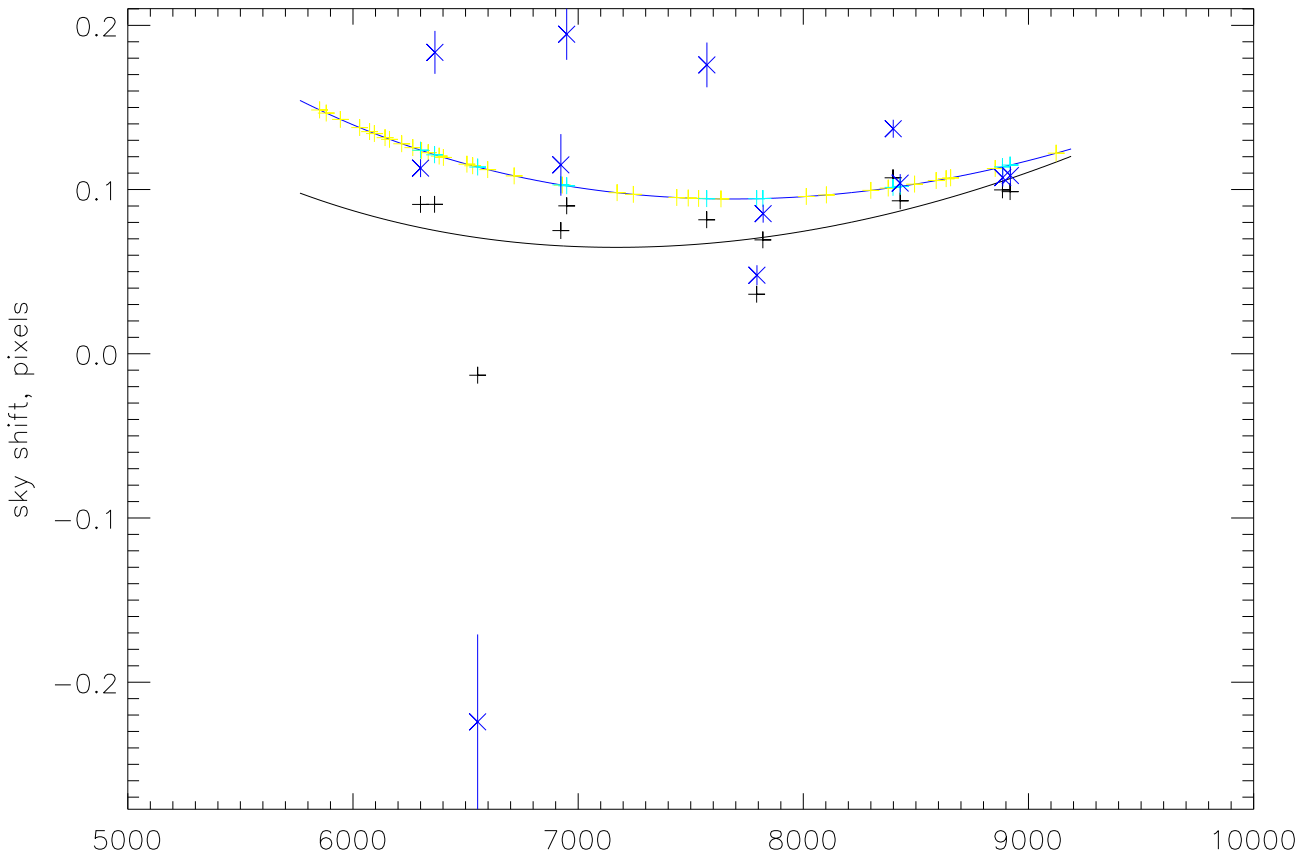

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

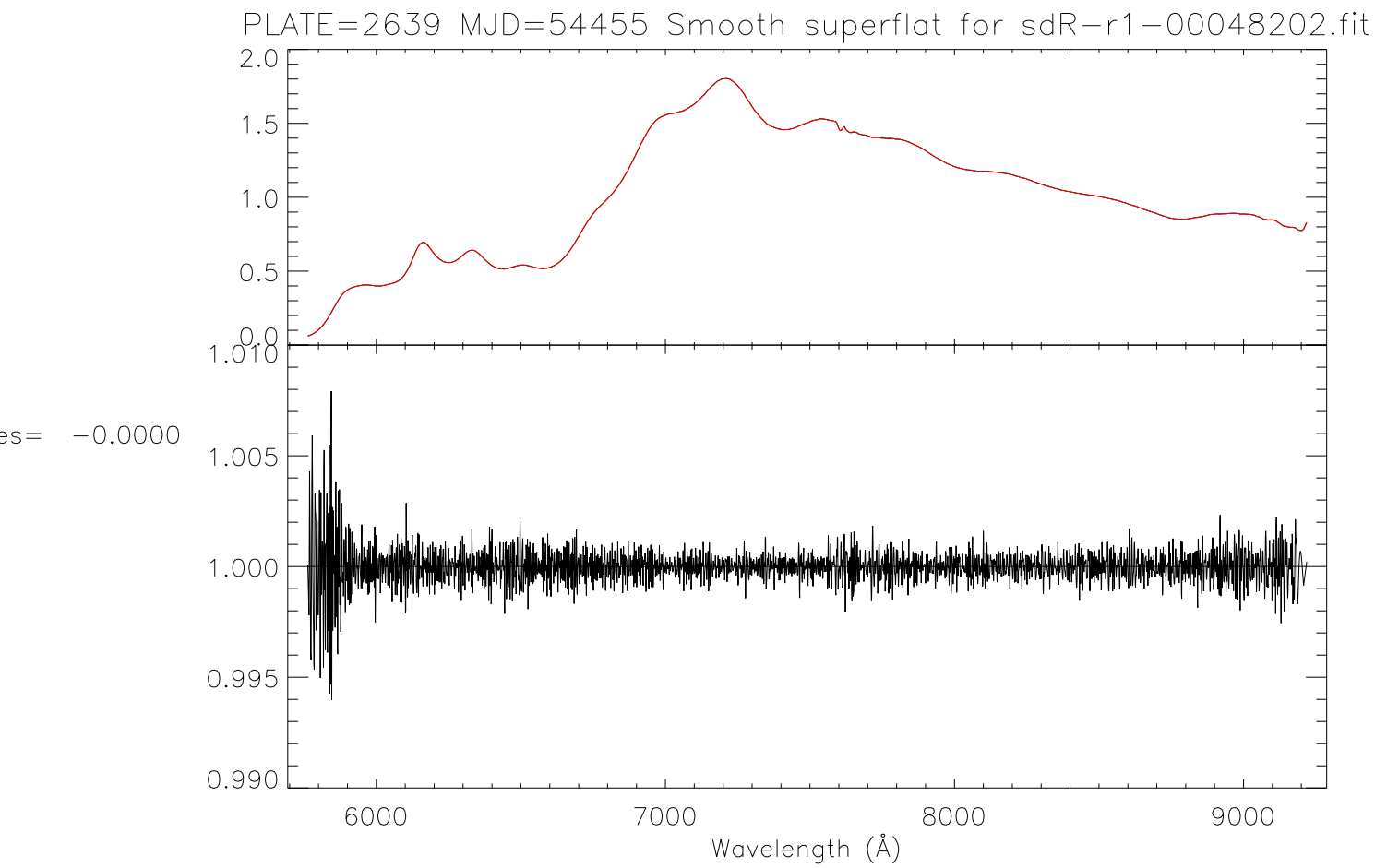

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

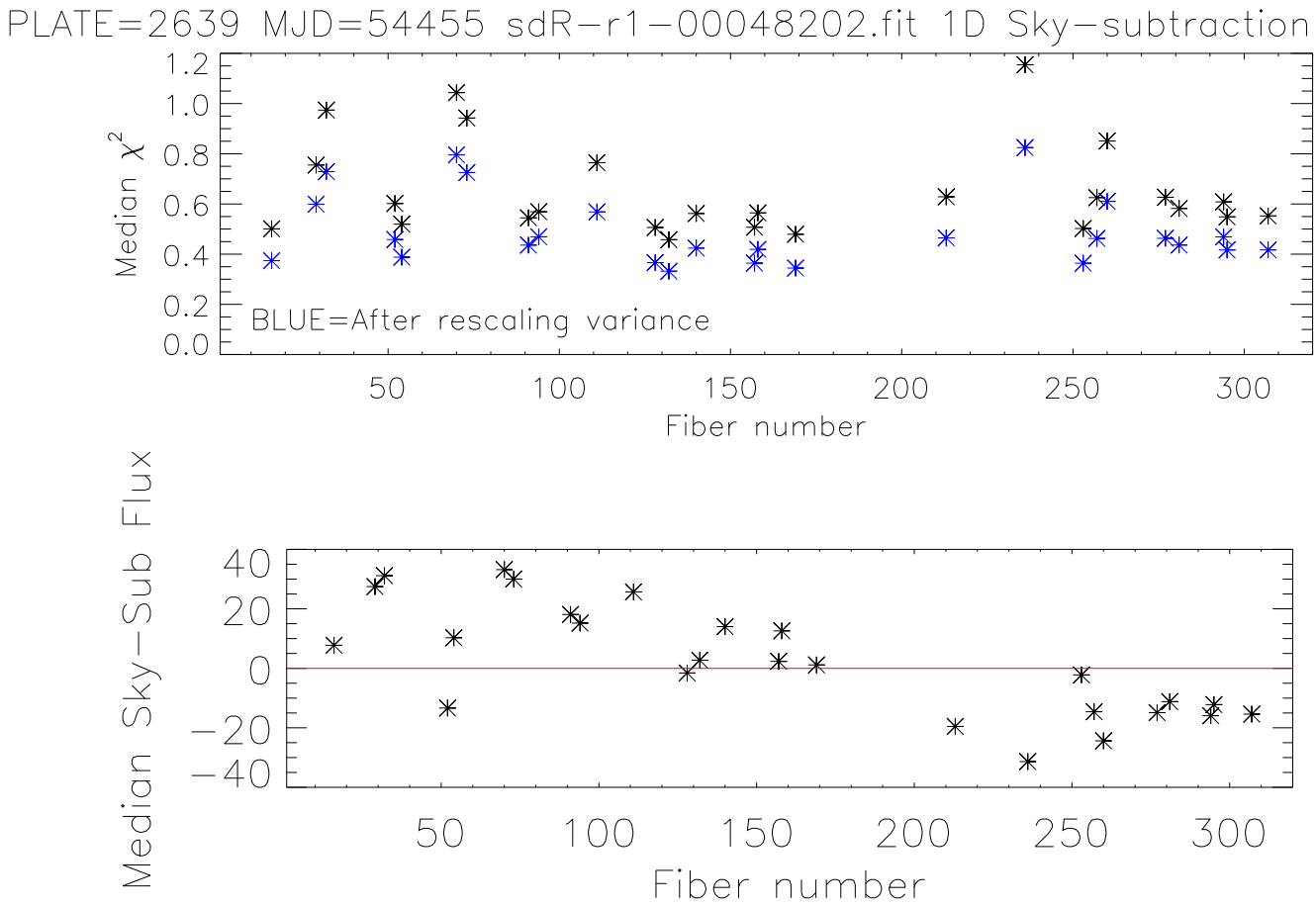

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

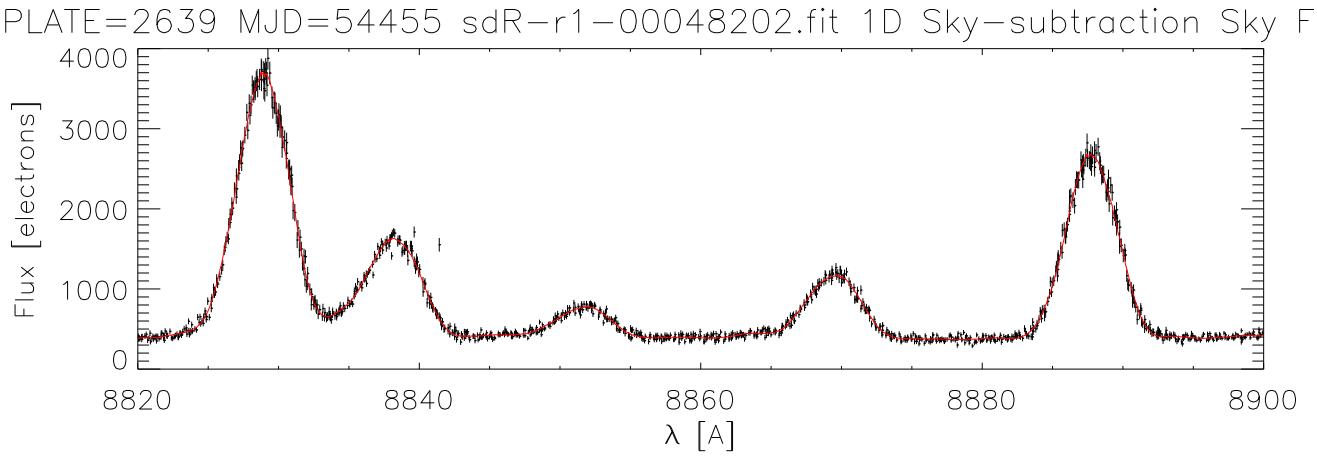

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

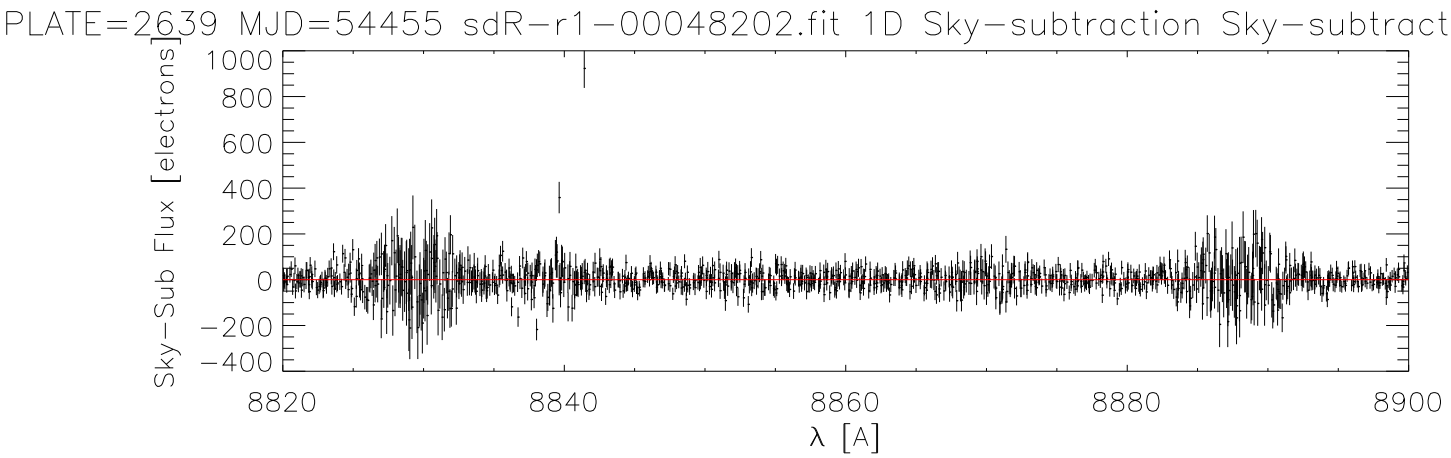

6300.3040
stdev 0.021
extra 0.11
6363.7760
stdev 0.023
extra 0.18
6553.6100
stdev 0.026
extra −0.22
6923.2100
stdev 0.022
extra 0.12
6949.0300
stdev 0.020
extra 0.14
7571.7500
stdev 0.029
extra 0.18
7794.1200
stdev 0.023
extra 0.05
7821.5100
stdev 0.021
extra 0.09
8399.1600
stdev 0.024
extra 0.14
8430.1700
stdev 0.021
extra 0.10
8885.8300
stdev 0.026
extra 0.11
8919.6100
stdev 0.028
extra 0.11
meas − pred, pix

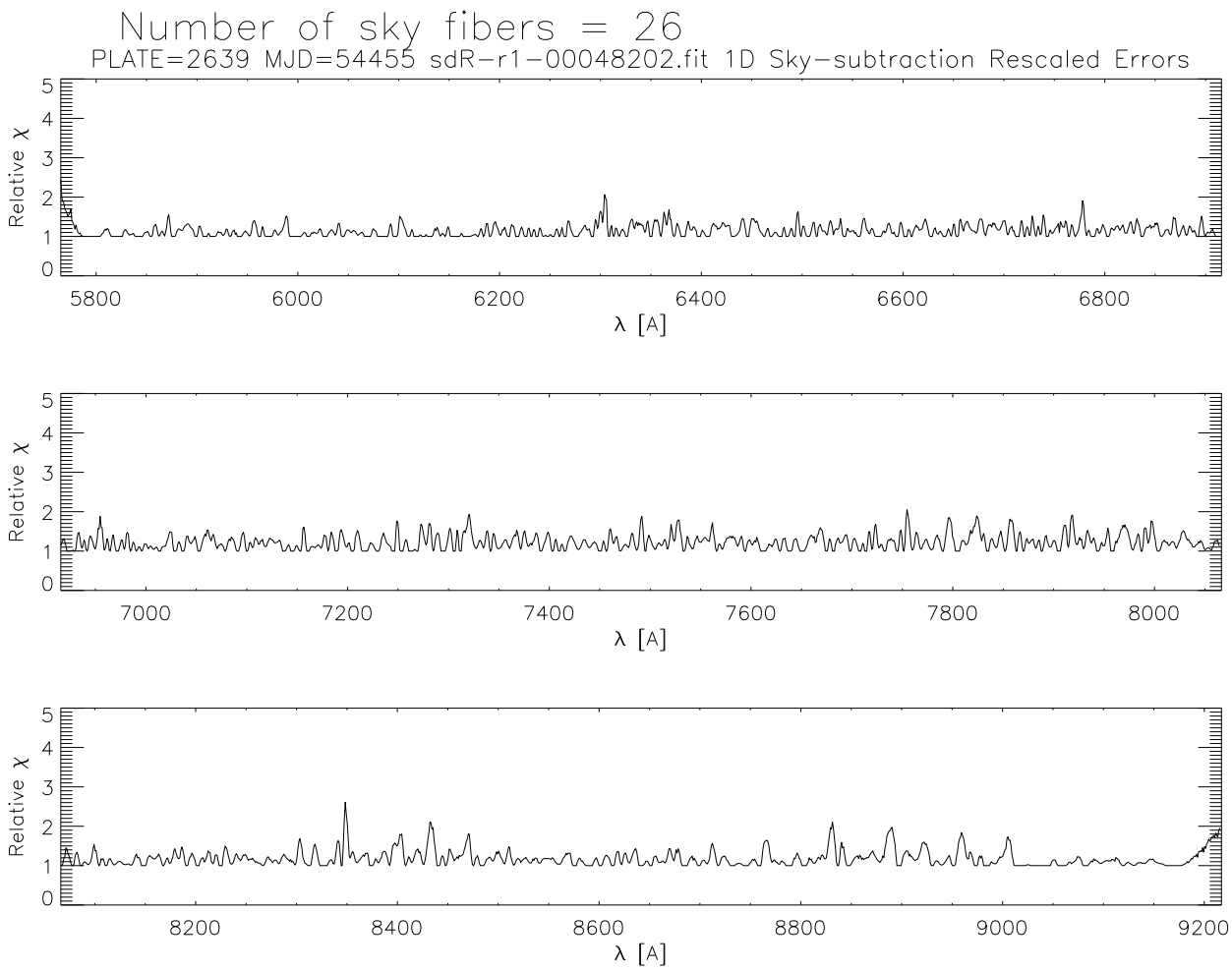

0.2
0.1
0.0
−0.1
−0.2
sky shift, pixels
5000
6000
7000
8000
9000
10000

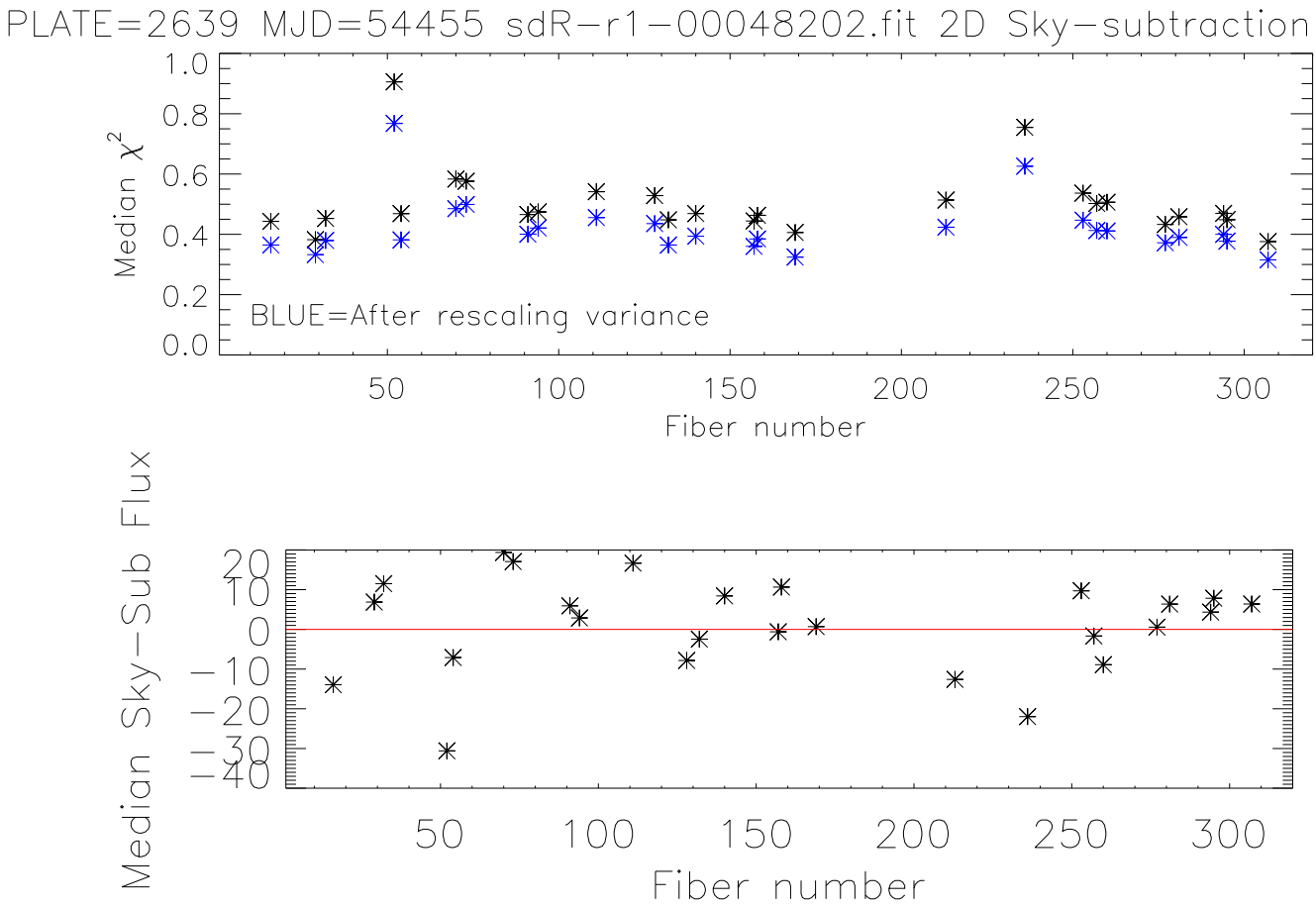

PLATE=2639 MJD=54455 Smooth superflat for sdR-r1-00048202.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=2639 MJD=54455 sdR-r1-00048202.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

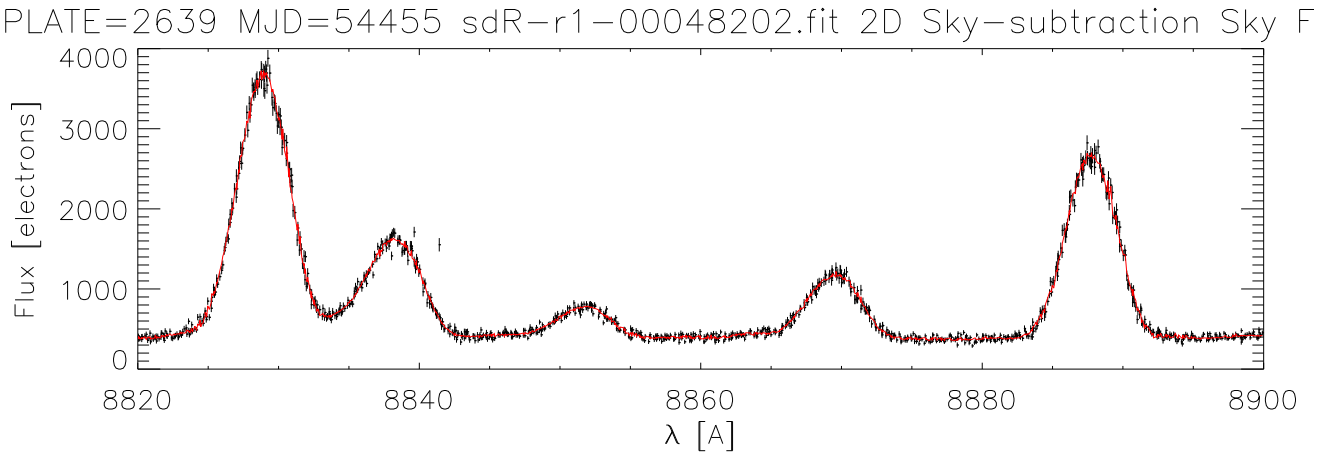

PLATE=2639 MJD=54455 sdR-r1-00048202.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

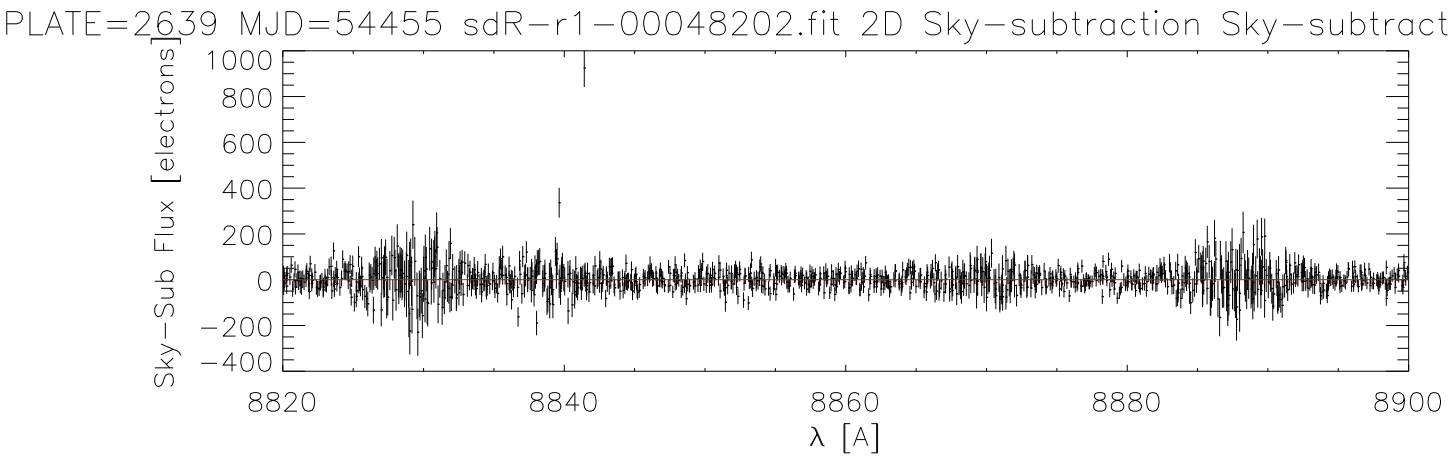

PLATE=2639 MJD=54455 sdR-r1-00048202.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

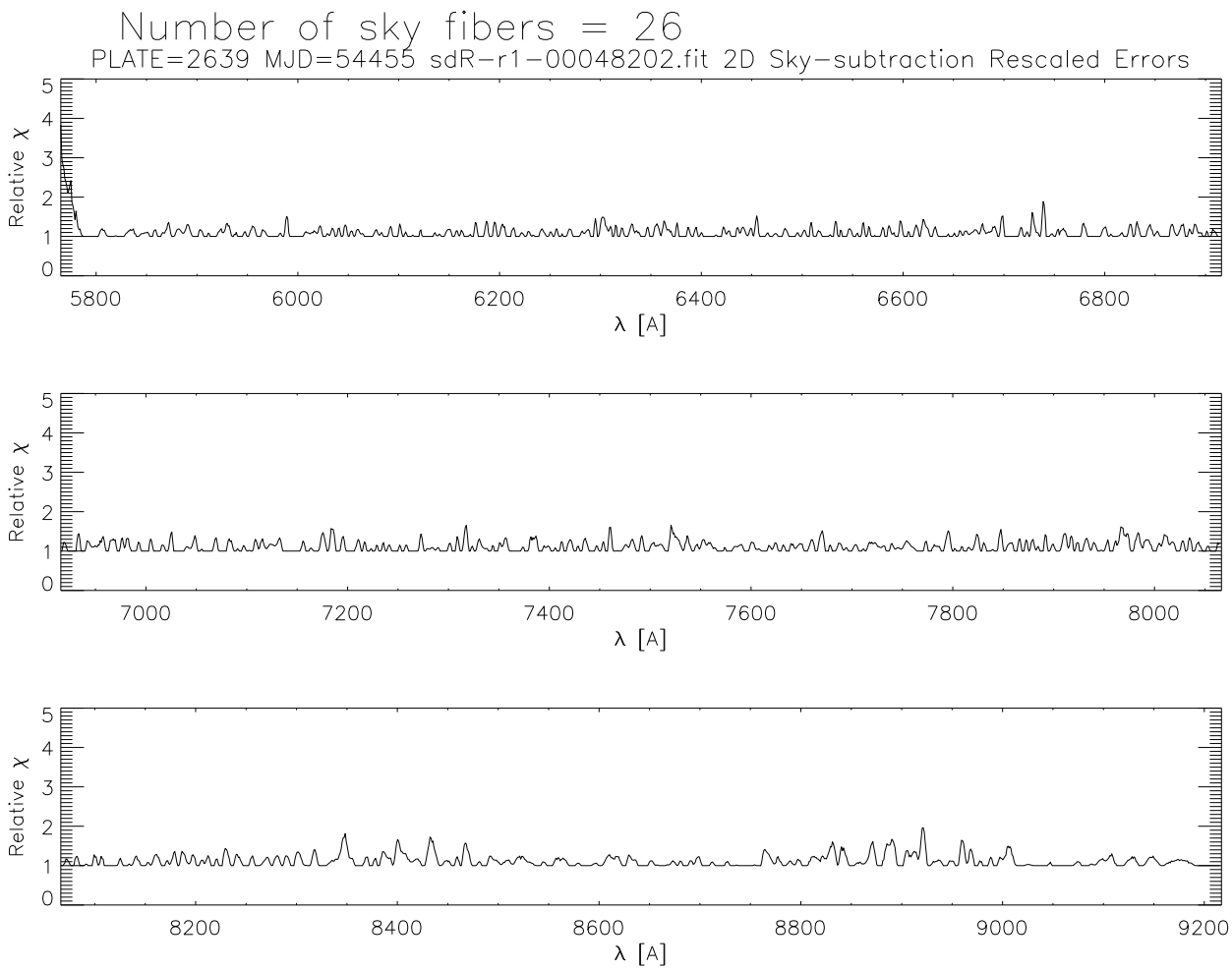

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048202.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

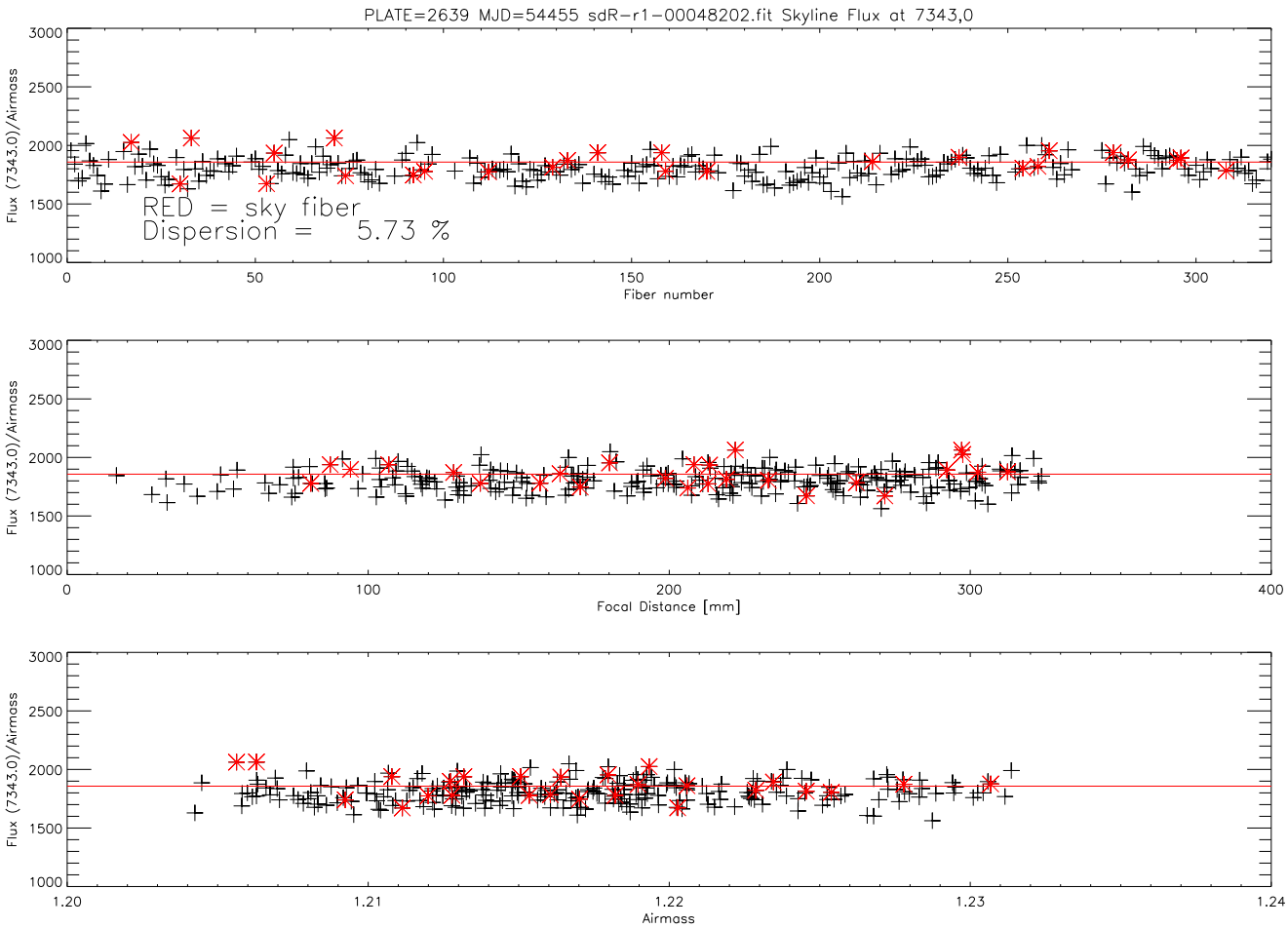

PLATE=2639 MJD=54455 sdR-r1-00048202.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

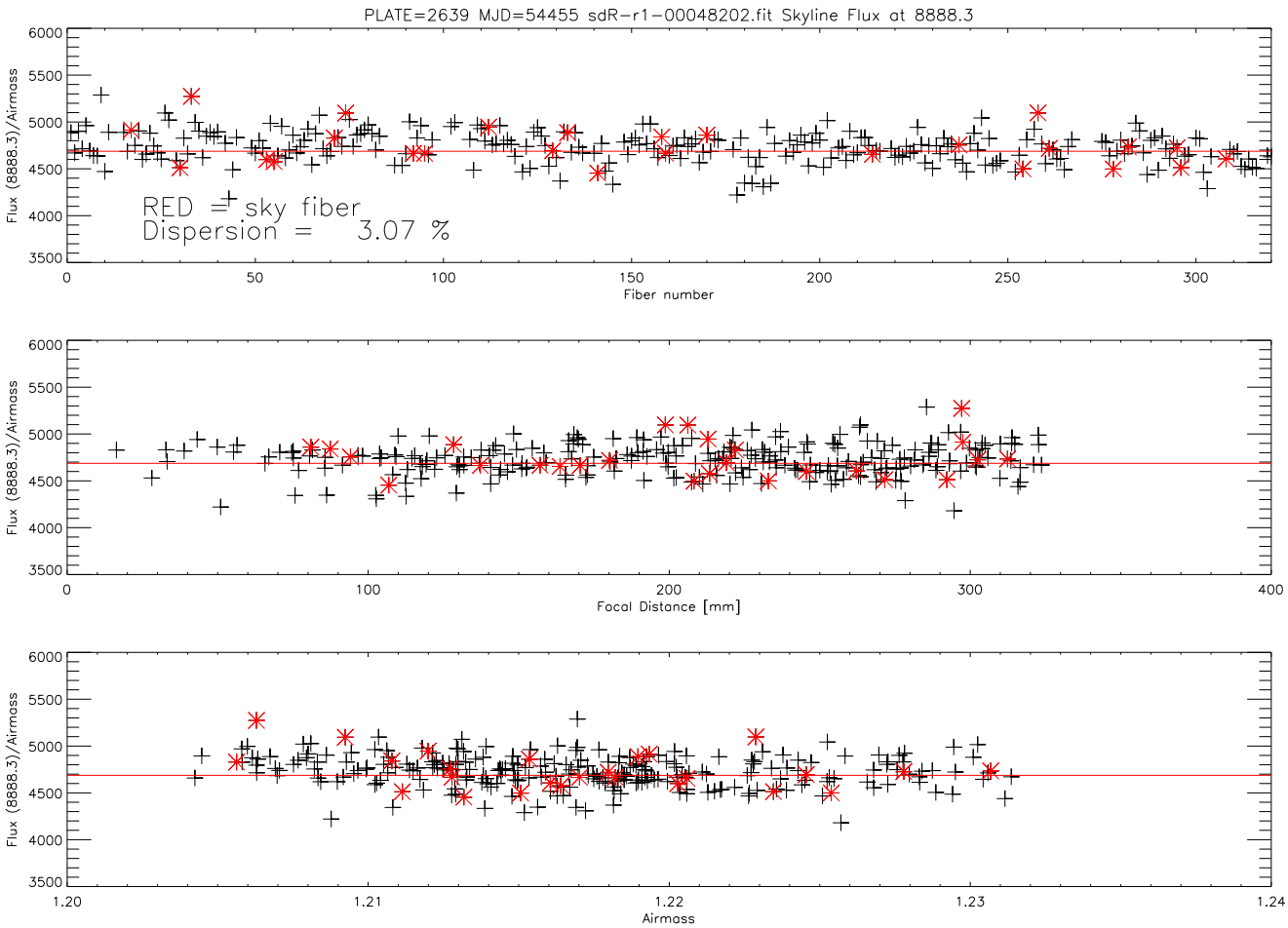
Median Sky-Sub Flux
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

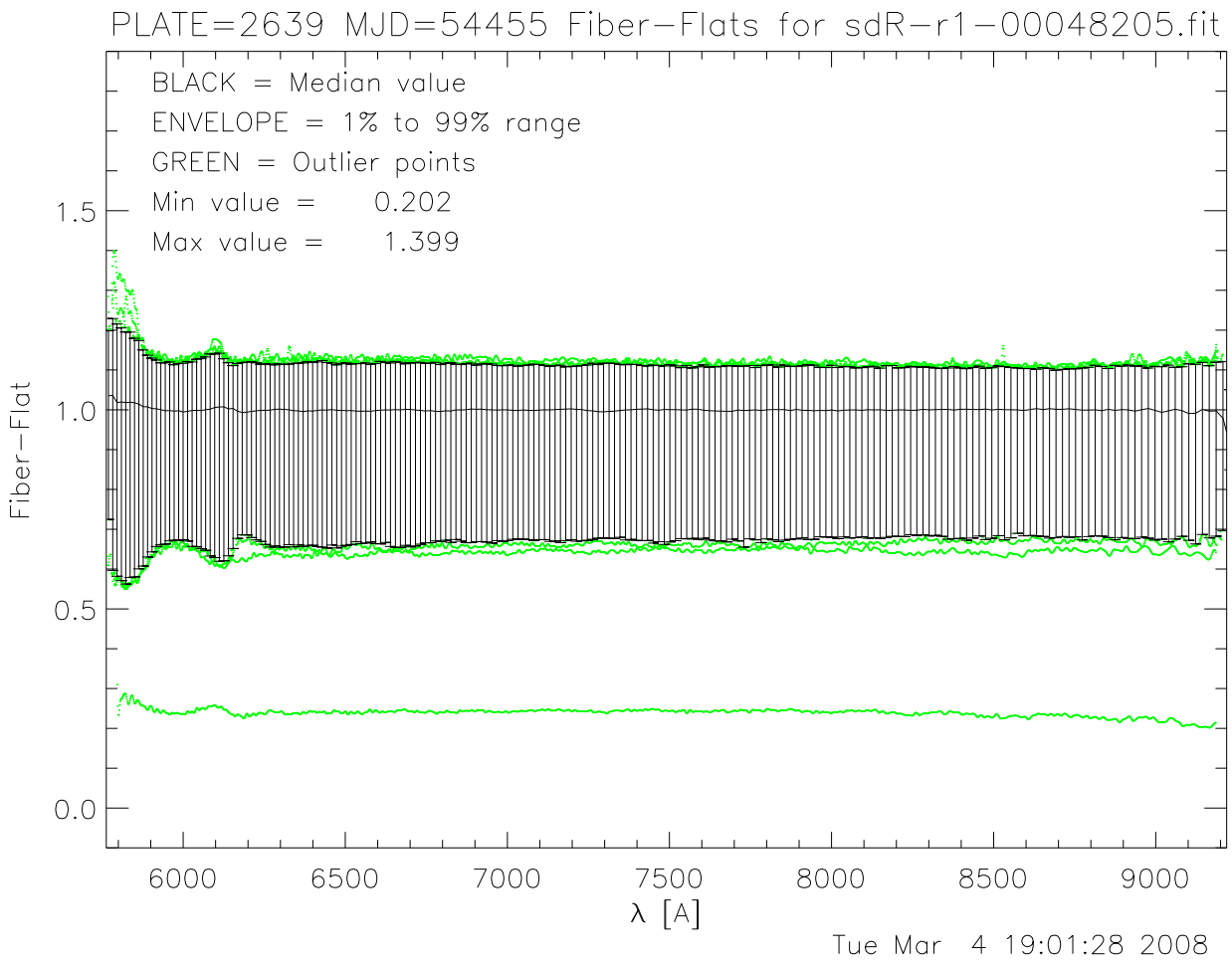

PLATE=2639 MJD=54455 sdR-r1-00048202.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

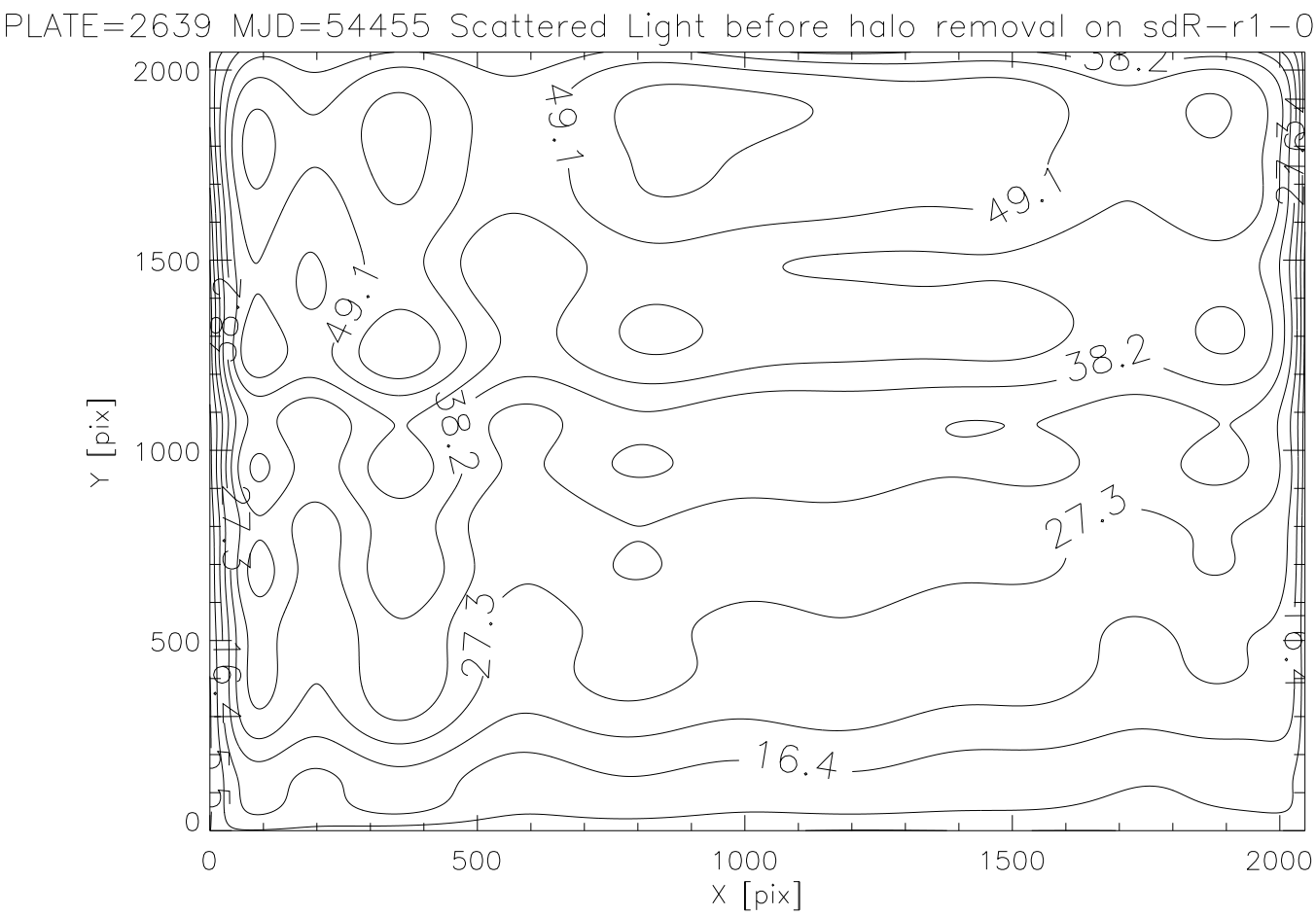

PLATE=2639 MJD=54455 sdR-r1-00048202.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

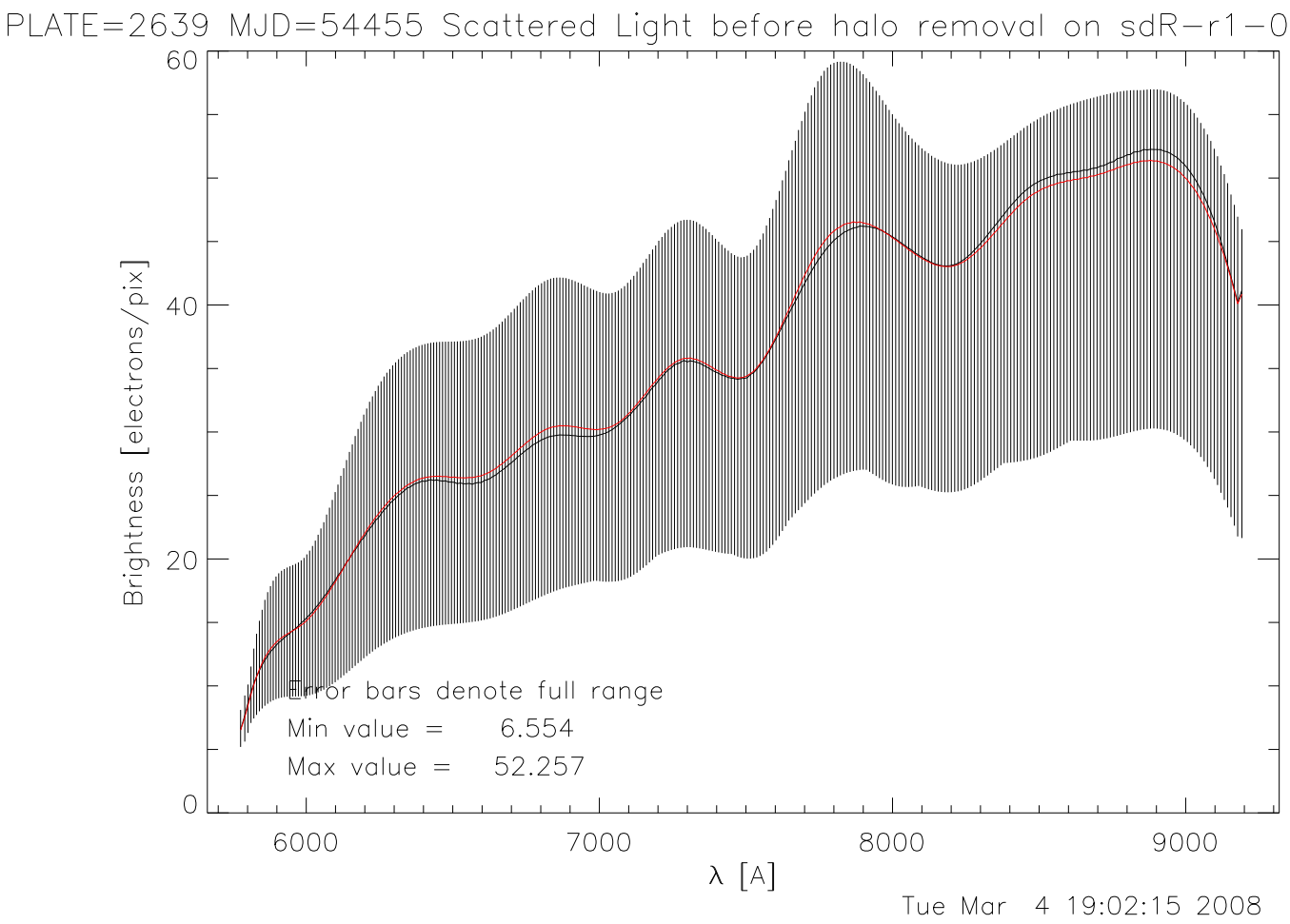

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048202.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

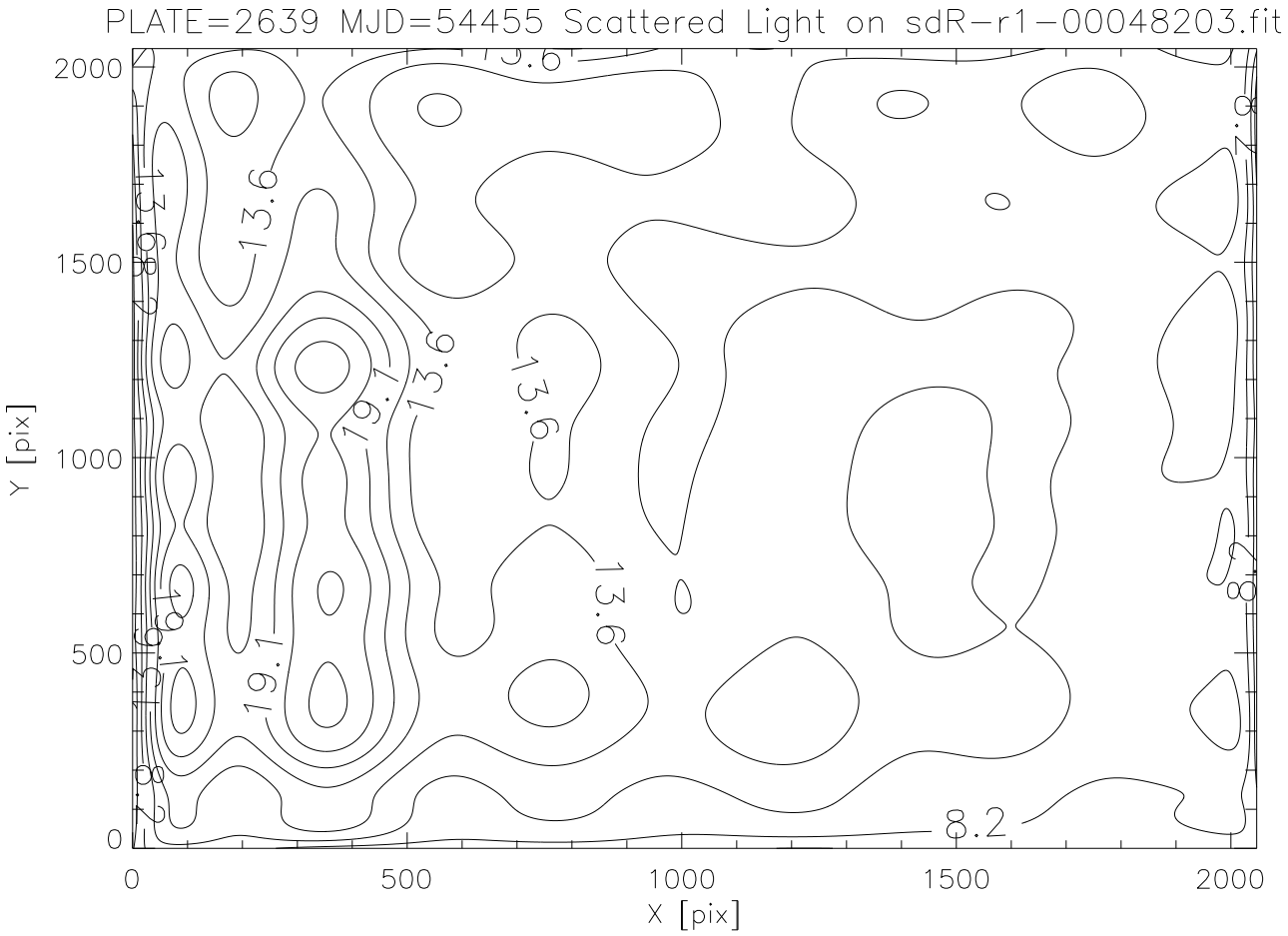

PLATE=2639 MJD=54455 sdR-r1-00048202.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.73 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

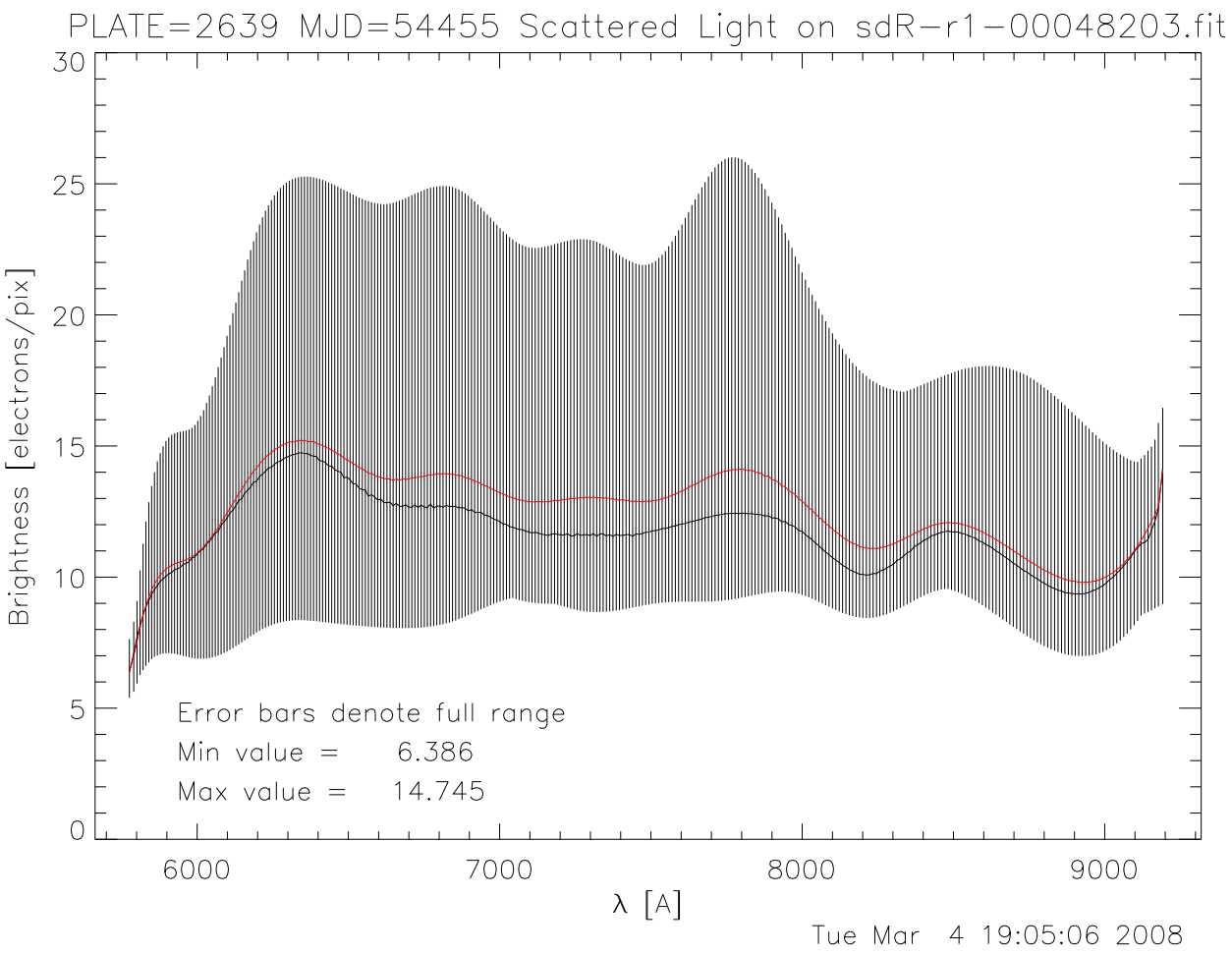

PLATE=2639 MJD=54455 sdR-r1-00048202.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.07 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

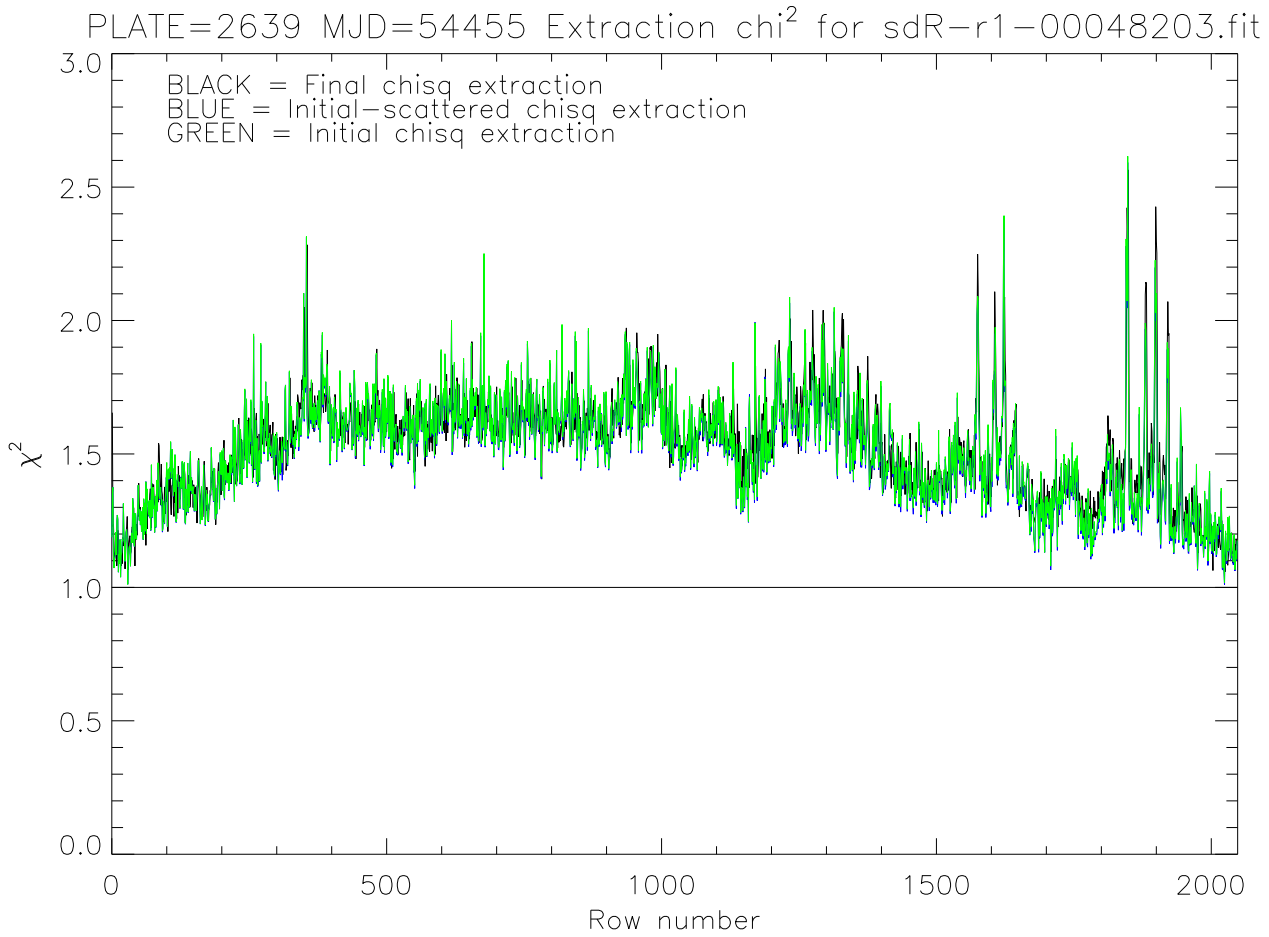

PLATE=2639 MJD=54455 Fiber−Flats for sdR−r1−00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.399
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 19:01:28 2008

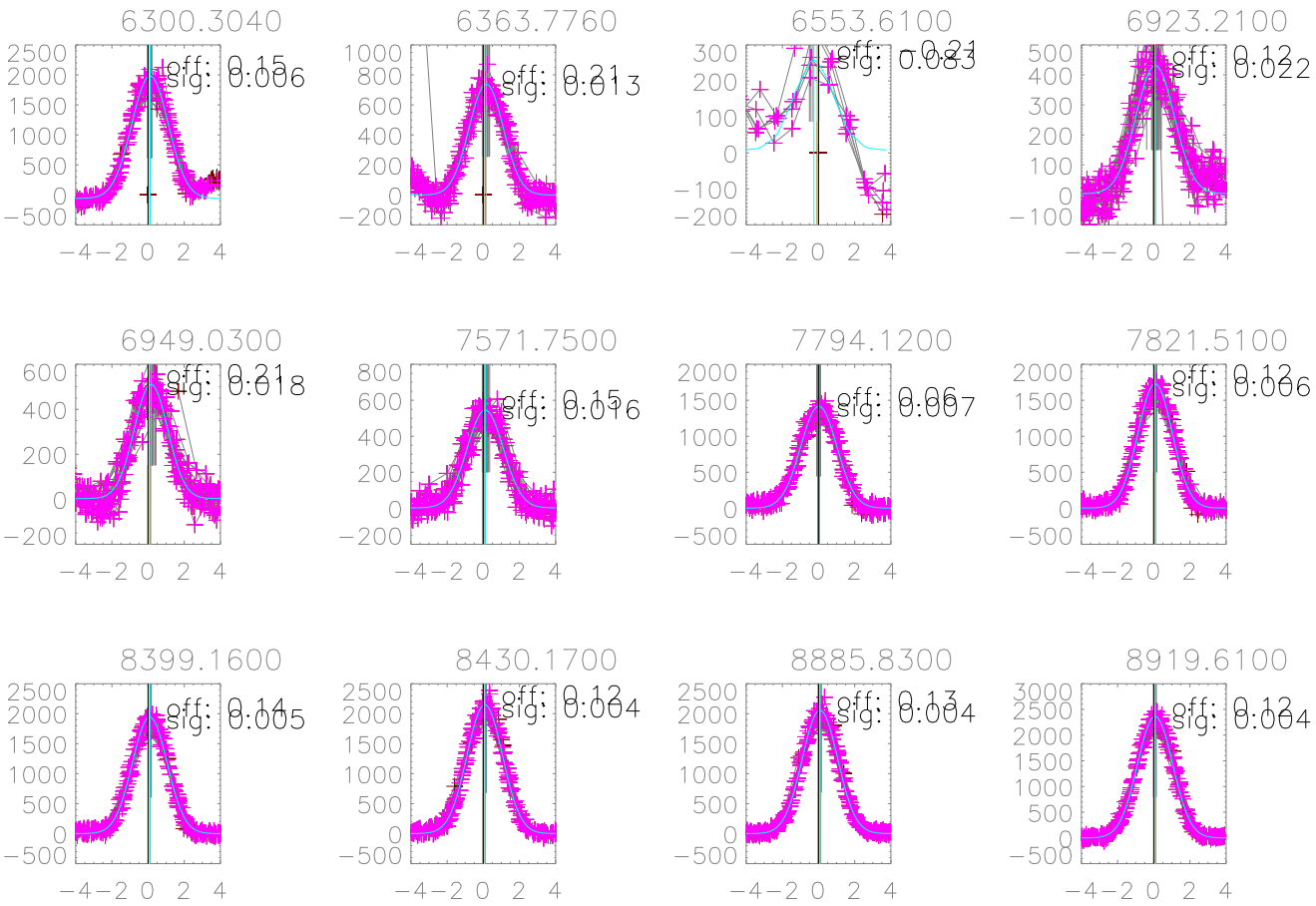

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048203.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
49.1
38.2
27.3
16.4

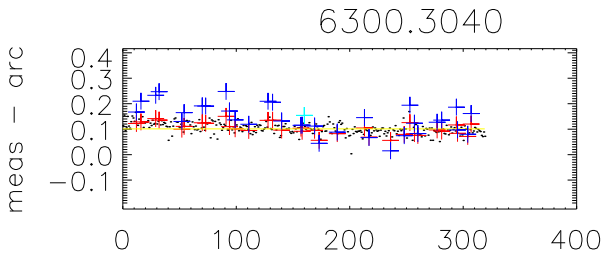

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048203.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.554
Max value = 52.257
Tue Mar 4 19:02:15 2008

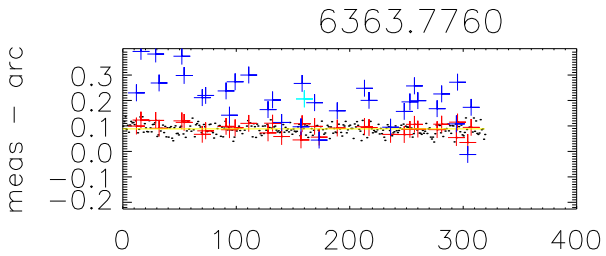

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048203.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

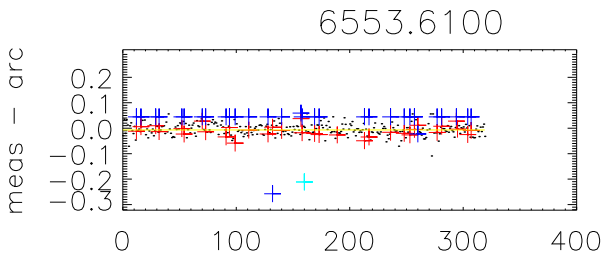

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048203.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.386
Max value = 14.745
Tue Mar 4 19:05:06 2008

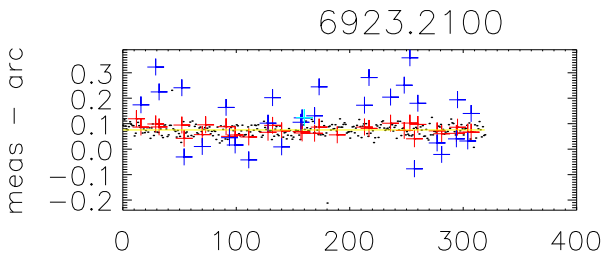

PLATE=2639 MJD=54455 Extraction chi^2 for sdR−r1−00048203.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

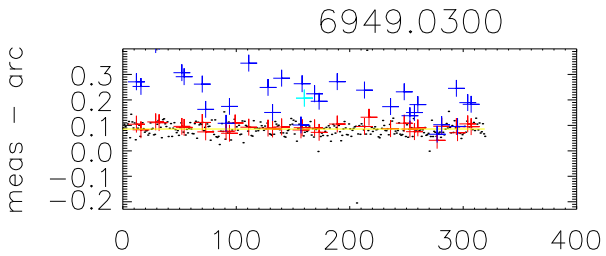

6300.3040
off: 0.15
sig: 0.006
6363.7760
off: 0.21
sig: 0.013
6553.6100
off: -0.21
sig: 0.083
6923.2100
off: 0.12
sig: 0.022
6949.0300
off: 0.21
sig: 0.018
7571.7500
off: 0.15
sig: 0.016
7794.1200
off: 0.06
sig: 0.007
7821.5100
off: 0.12
sig: 0.006
8399.1600
off: 0.14
sig: 0.005
8430.1700
off: 0.12
sig: 0.004
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.12
sig: 0.004

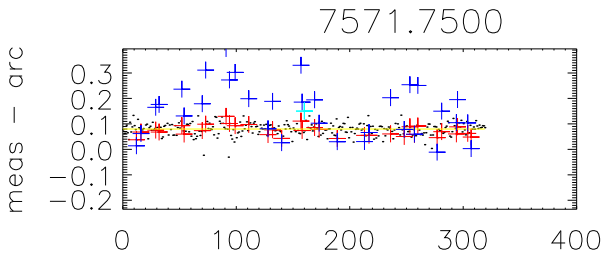

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

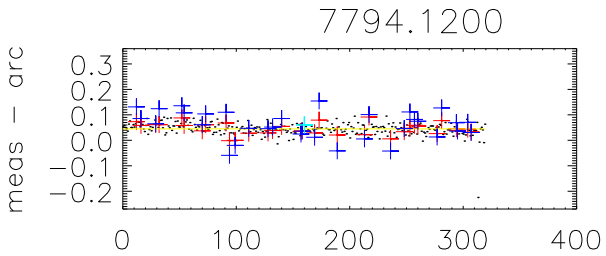

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

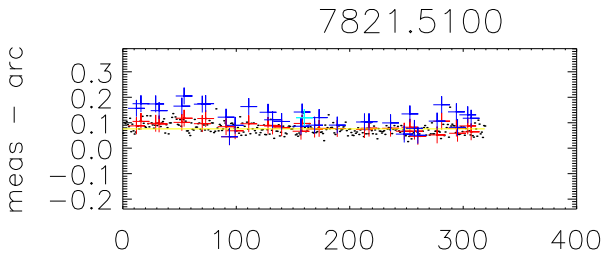

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

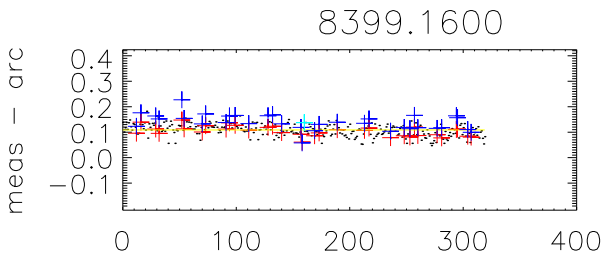

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

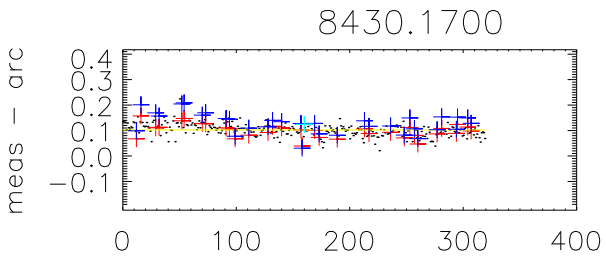

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

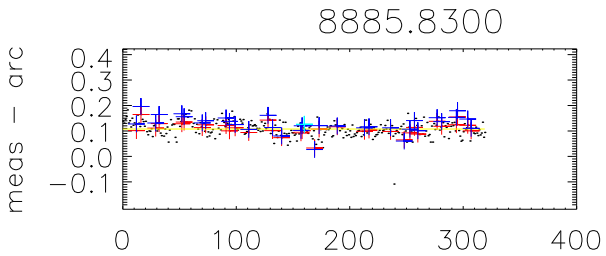

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

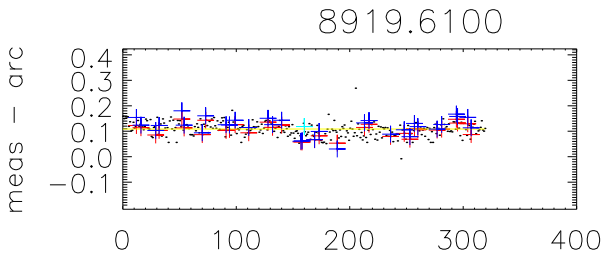

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

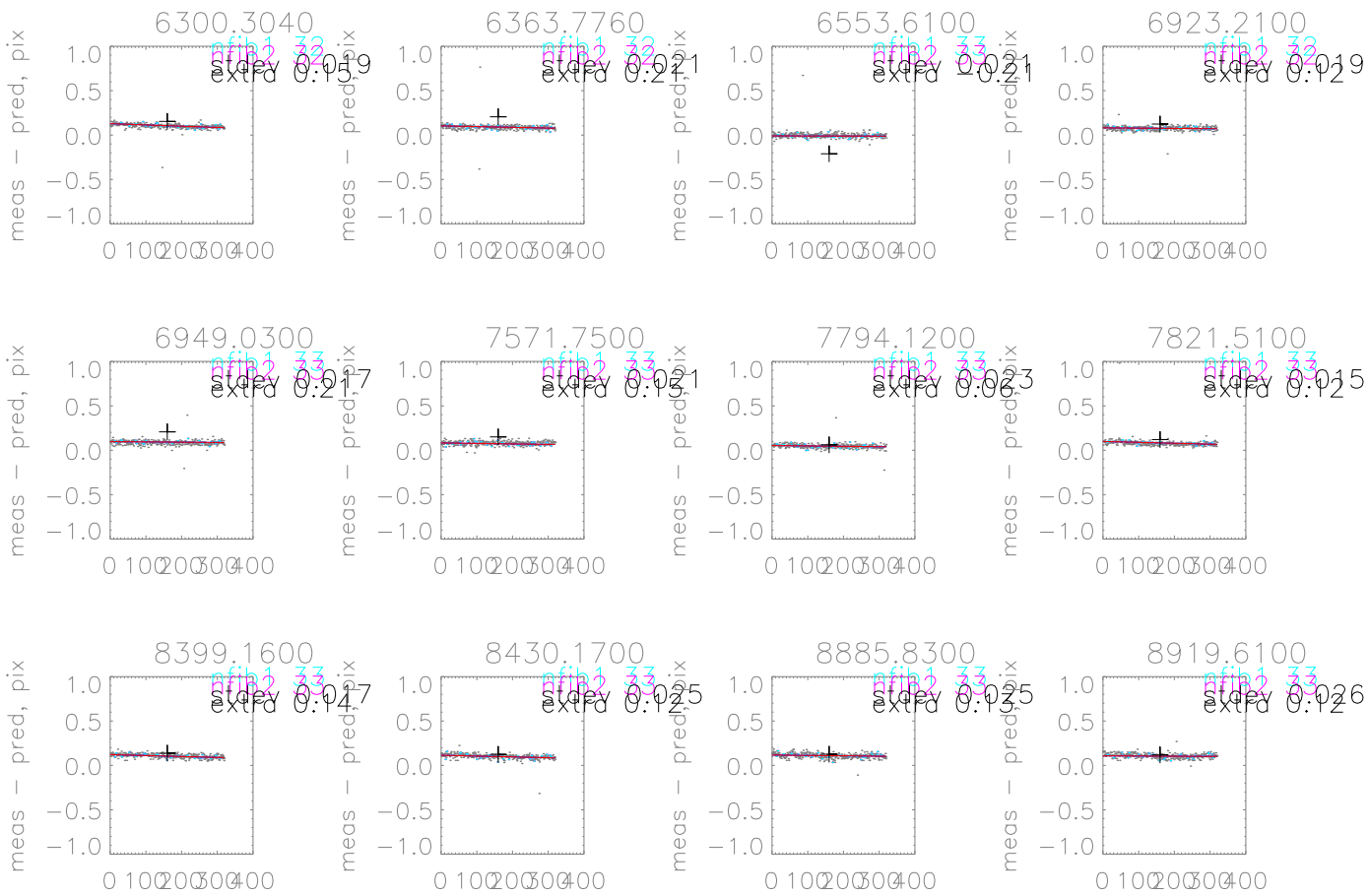

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

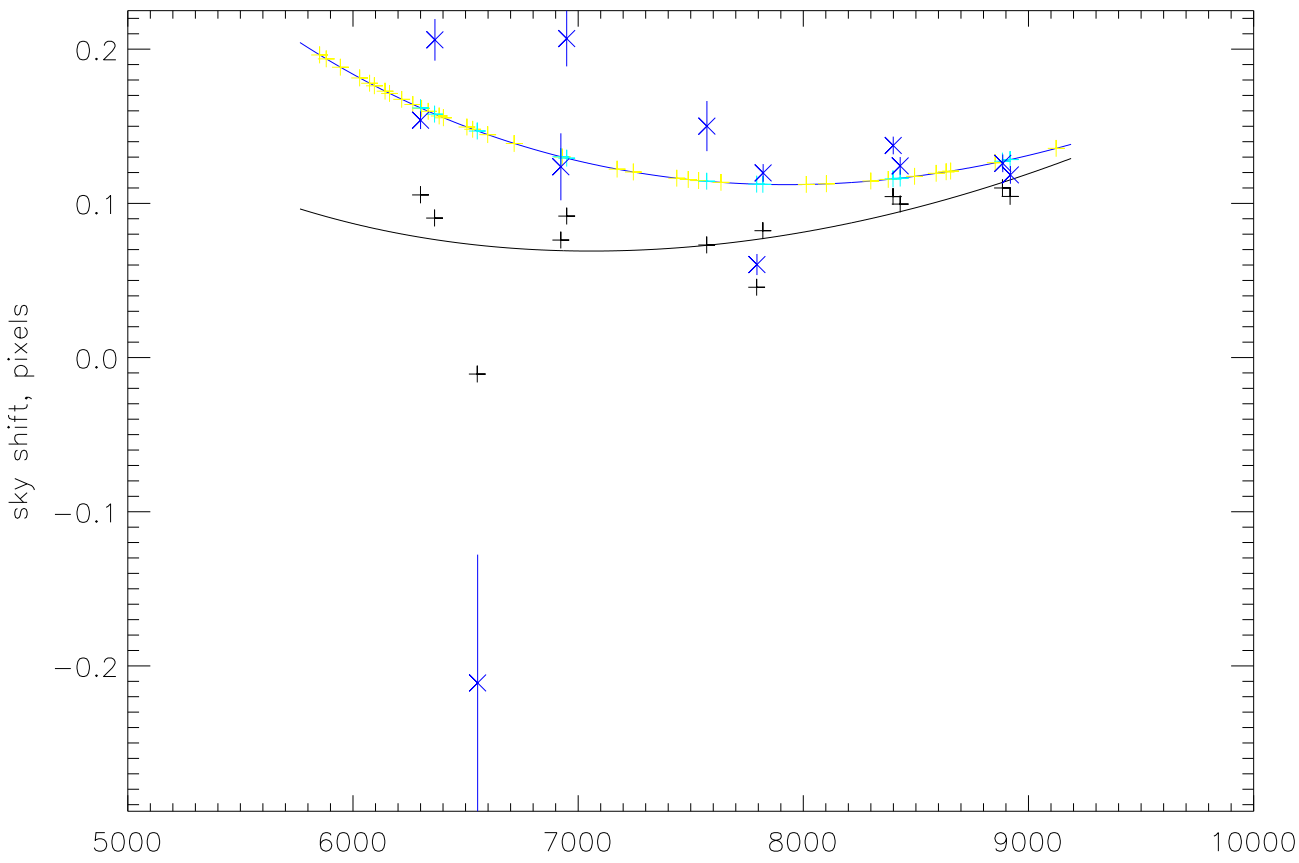

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

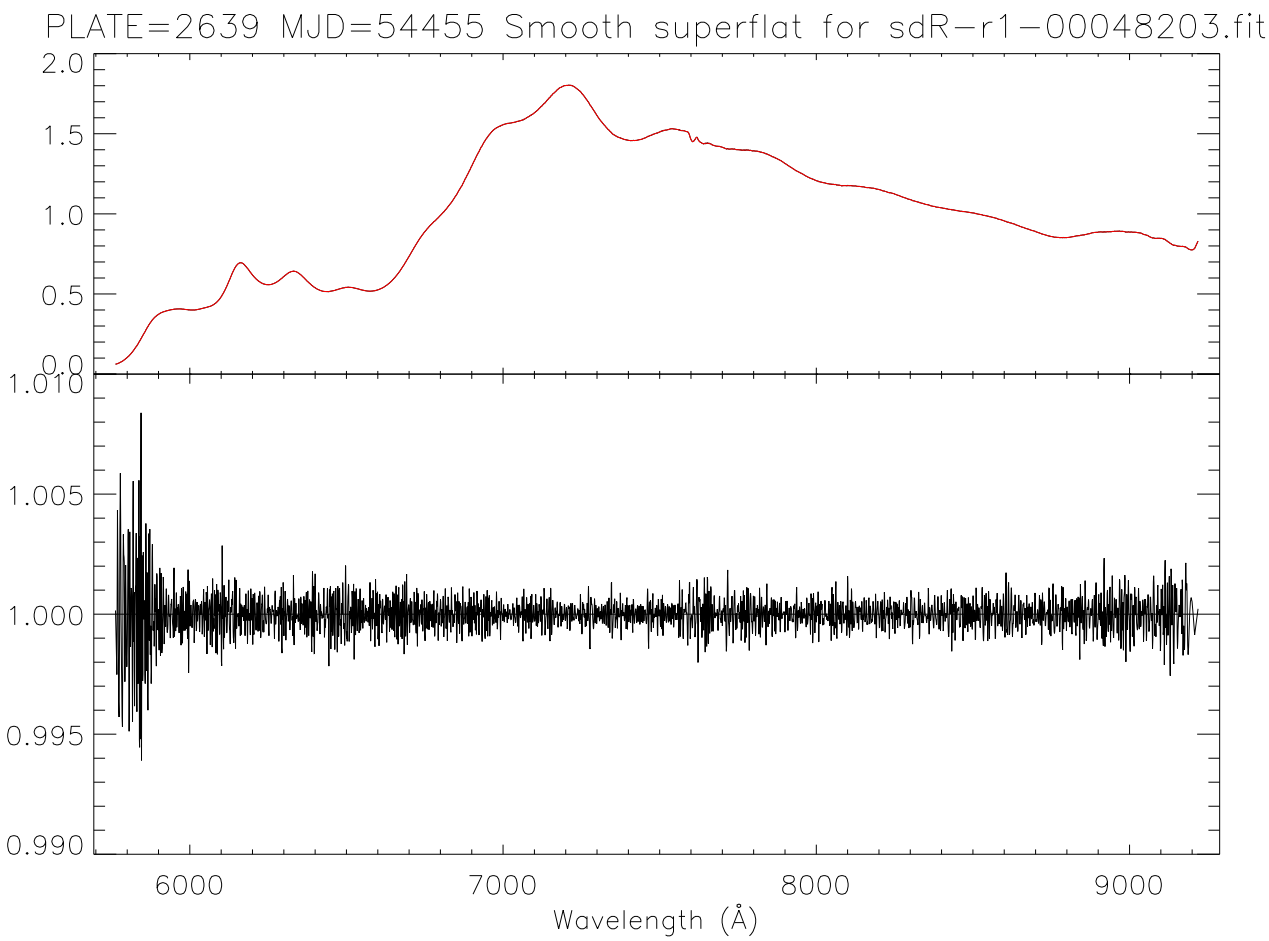

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

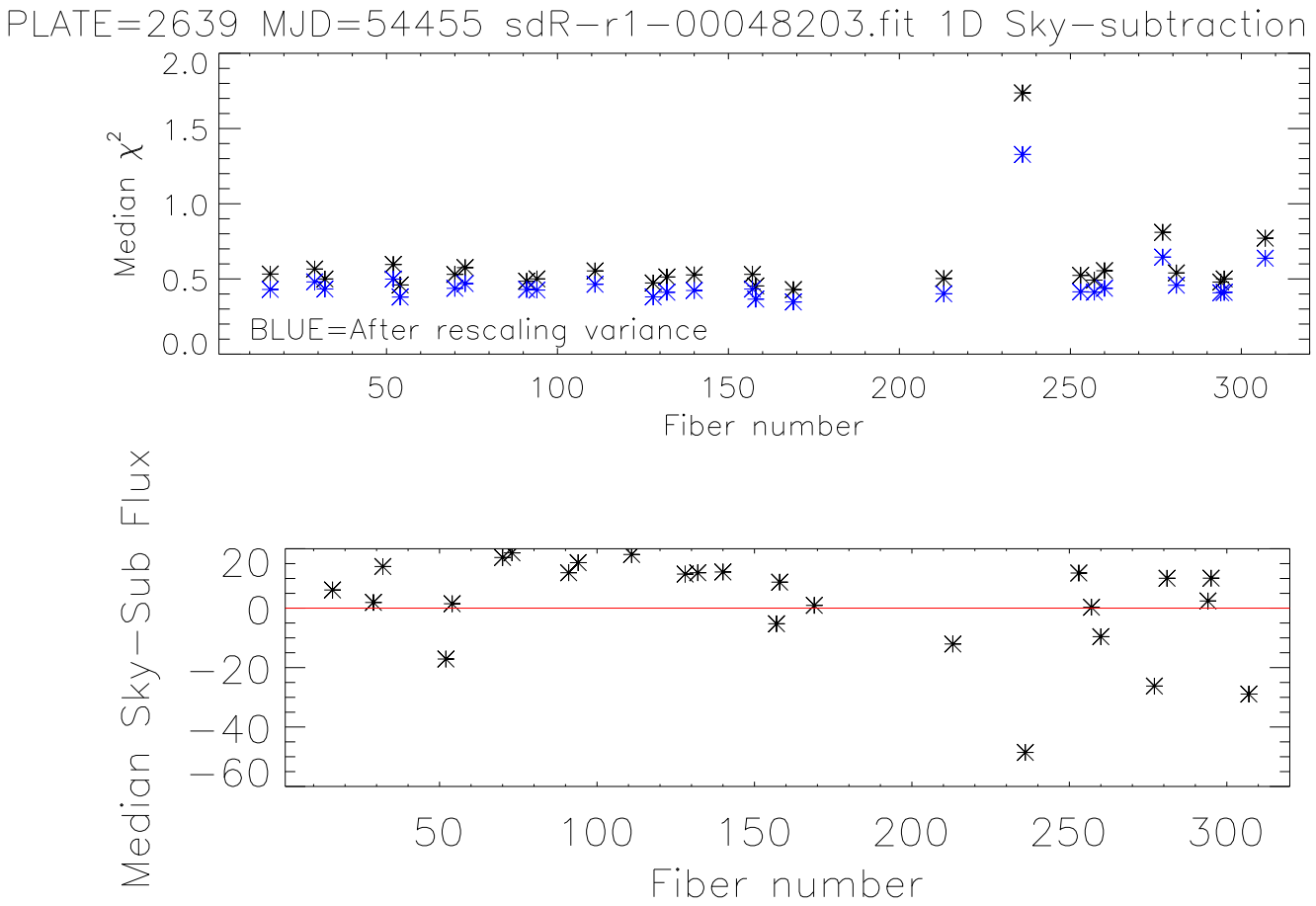

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

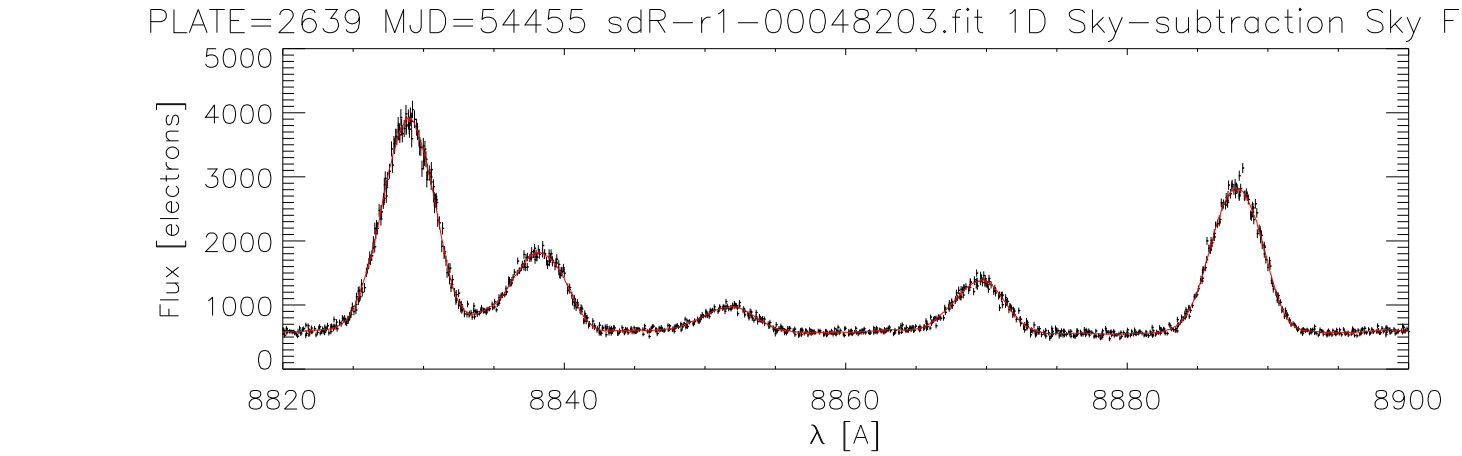

6300.3040
stdev 0.019
extra 0.15
6363.7760
stdev 0.021
extra 0.21
6553.6100
stdev 0.021
extra −0.21
6923.2100
stdev 0.019
extra 0.12
6949.0300
stdev 0.017
extra 0.21
7571.7500
stdev 0.021
extra 0.13
7794.1200
stdev 0.023
extra 0.06
7821.5100
stdev 0.015
extra 0.12
8399.1600
stdev 0.017
extra 0.14
8430.1700
stdev 0.025
extra 0.12
8885.8300
stdev 0.025
extra 0.13
8919.6100
stdev 0.026
extra 0.12
meas − pred, pix
mfib1 33
mfib2 33

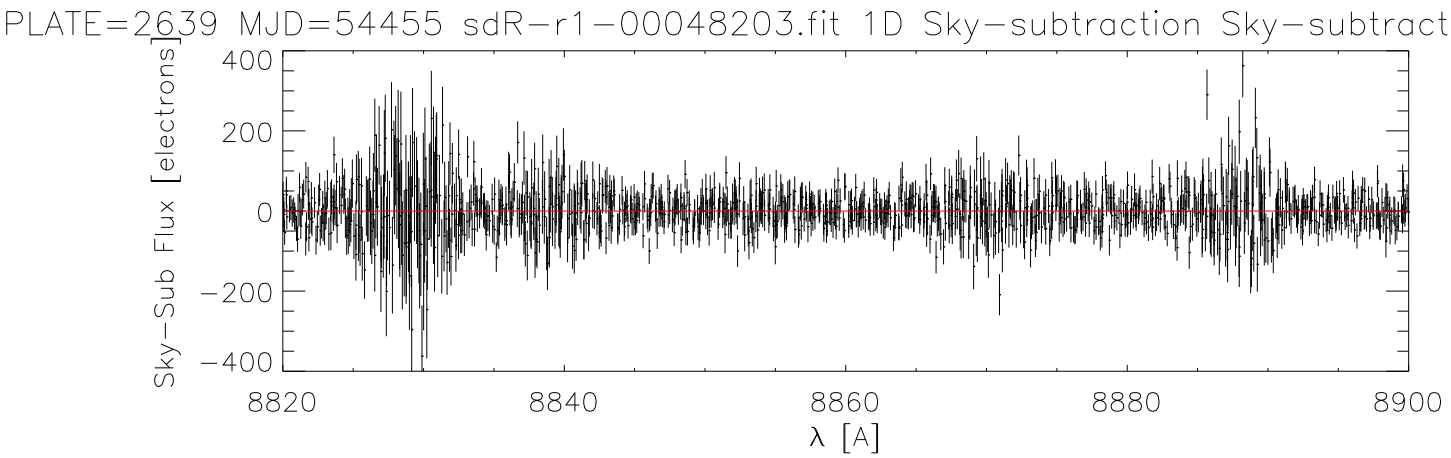

0.2
0.1
0.0
−0.1
−0.2
sky shift, pixels
5000
6000
7000
8000
9000
10000

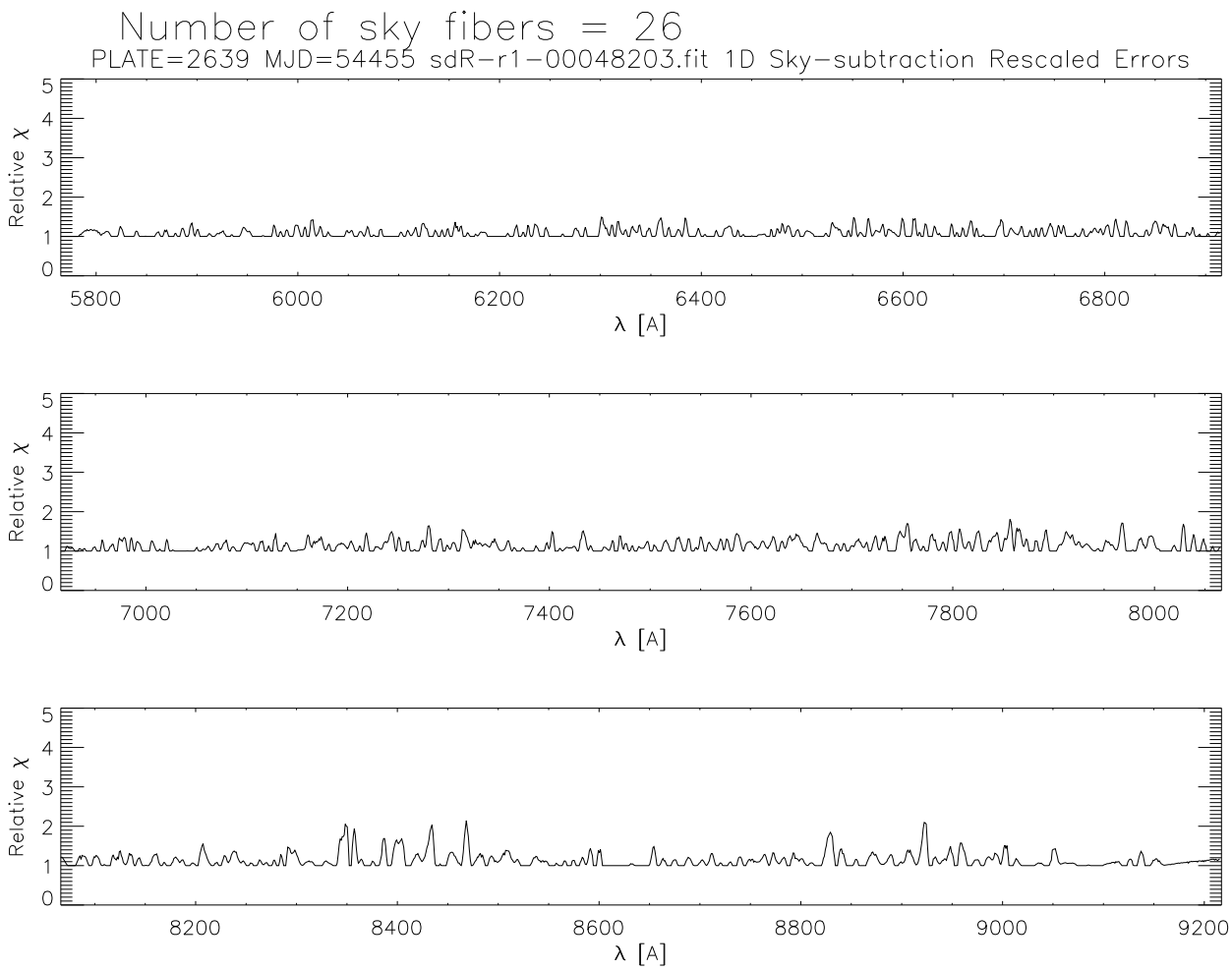
es= −0.0000

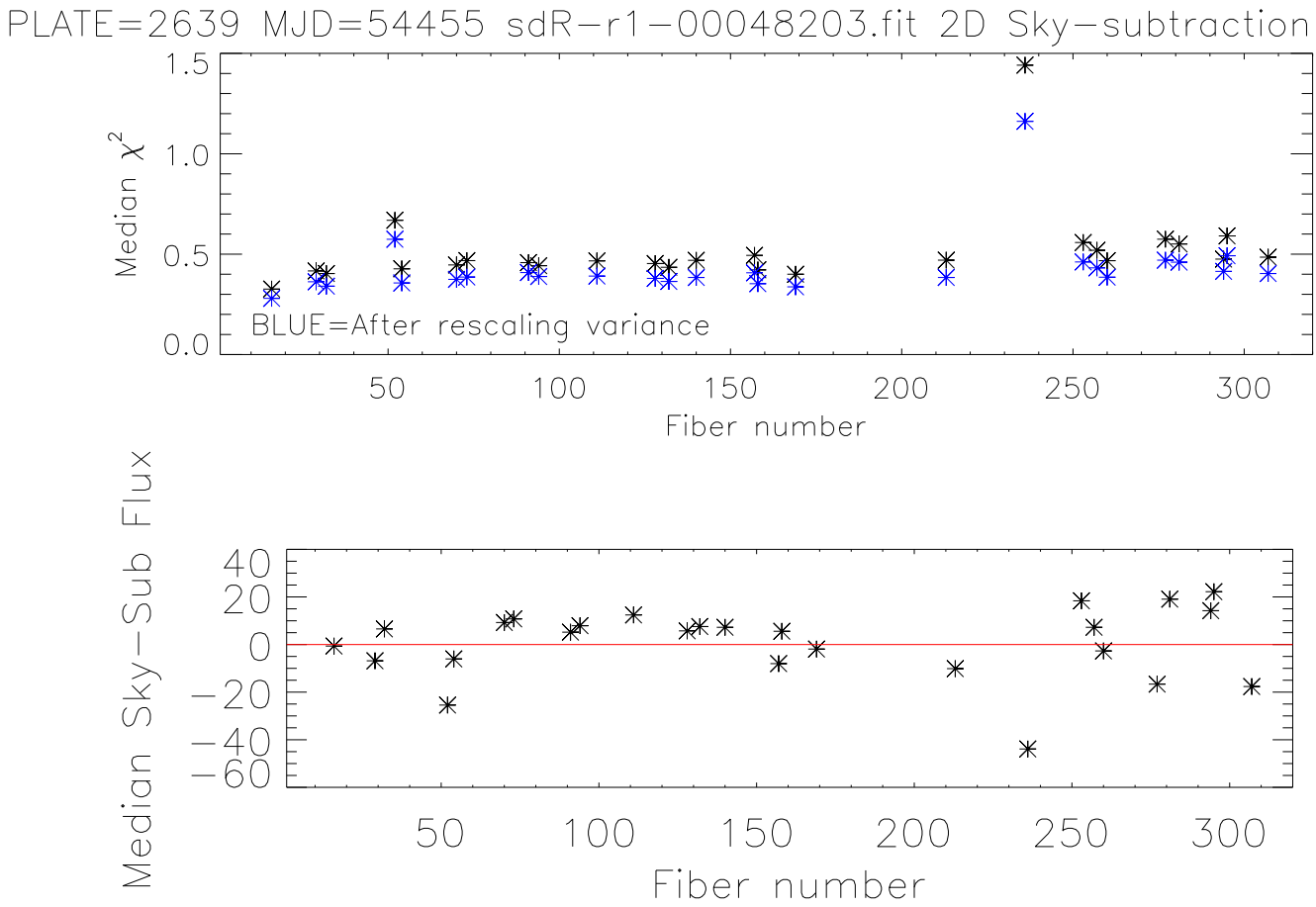

PLATE=2639 MJD=54455 Smooth superflat for sdR−r1−00048203.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

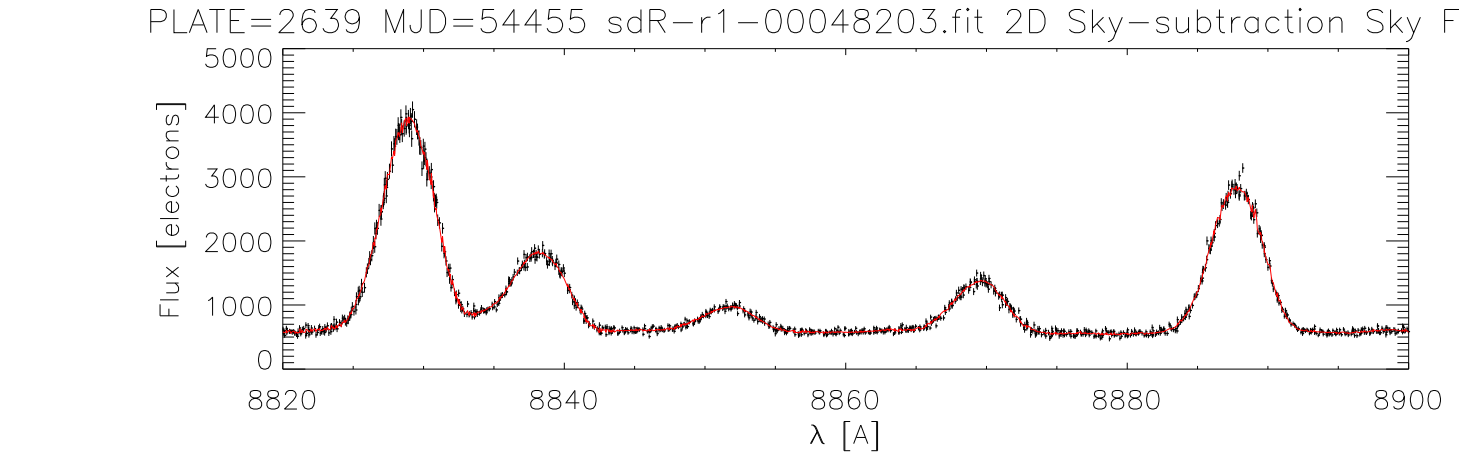

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number

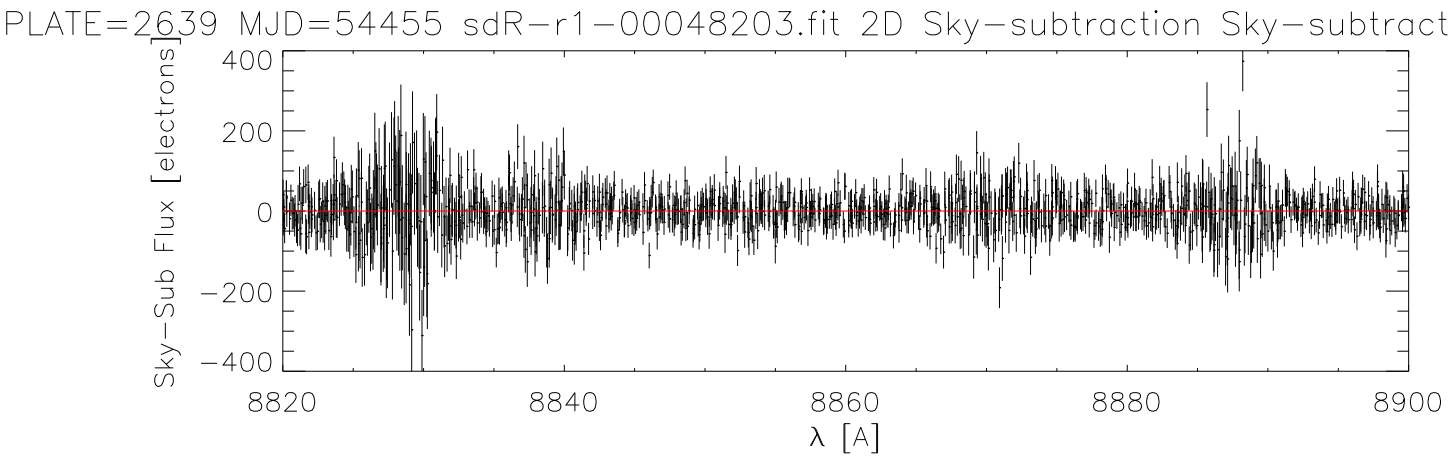

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

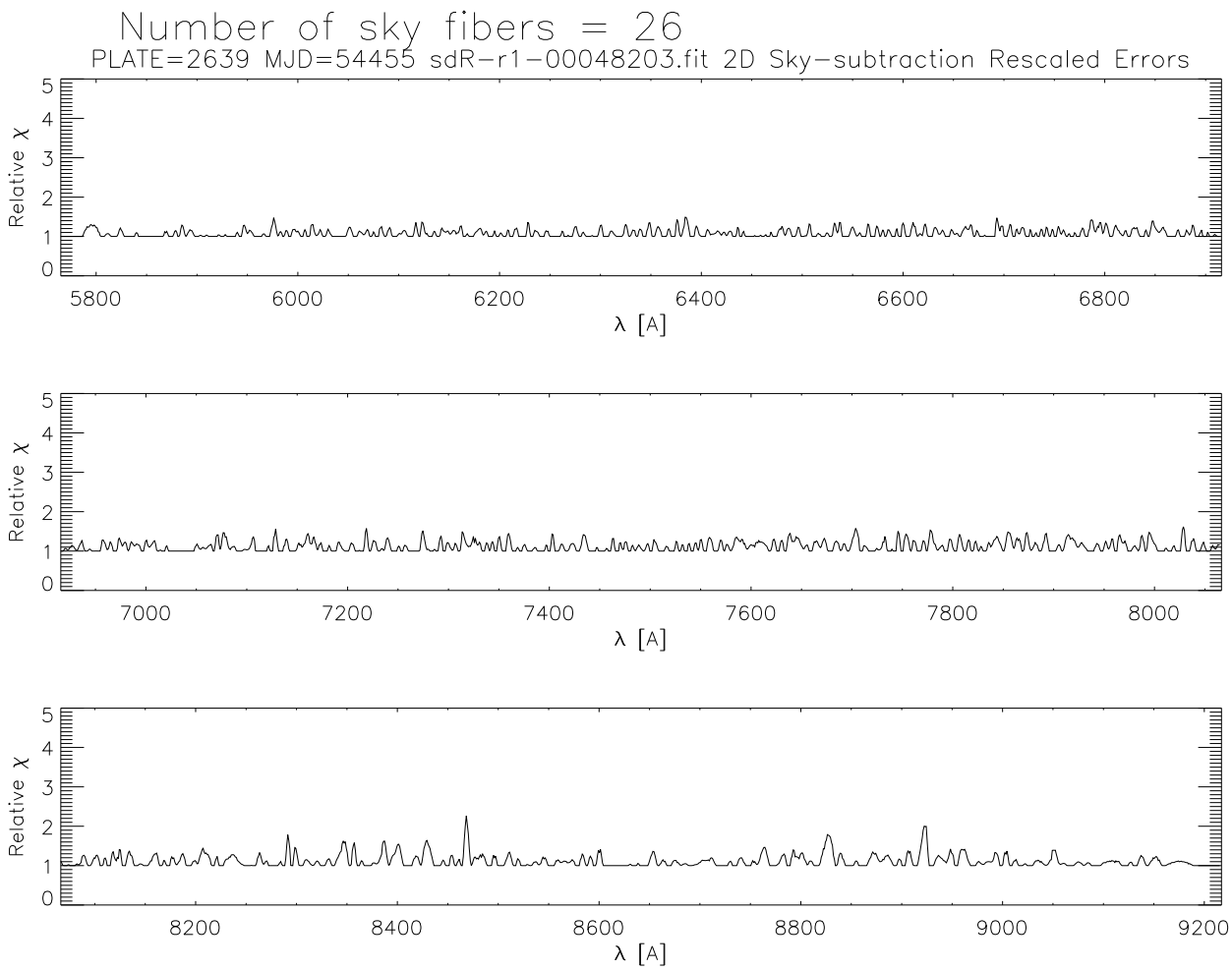

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

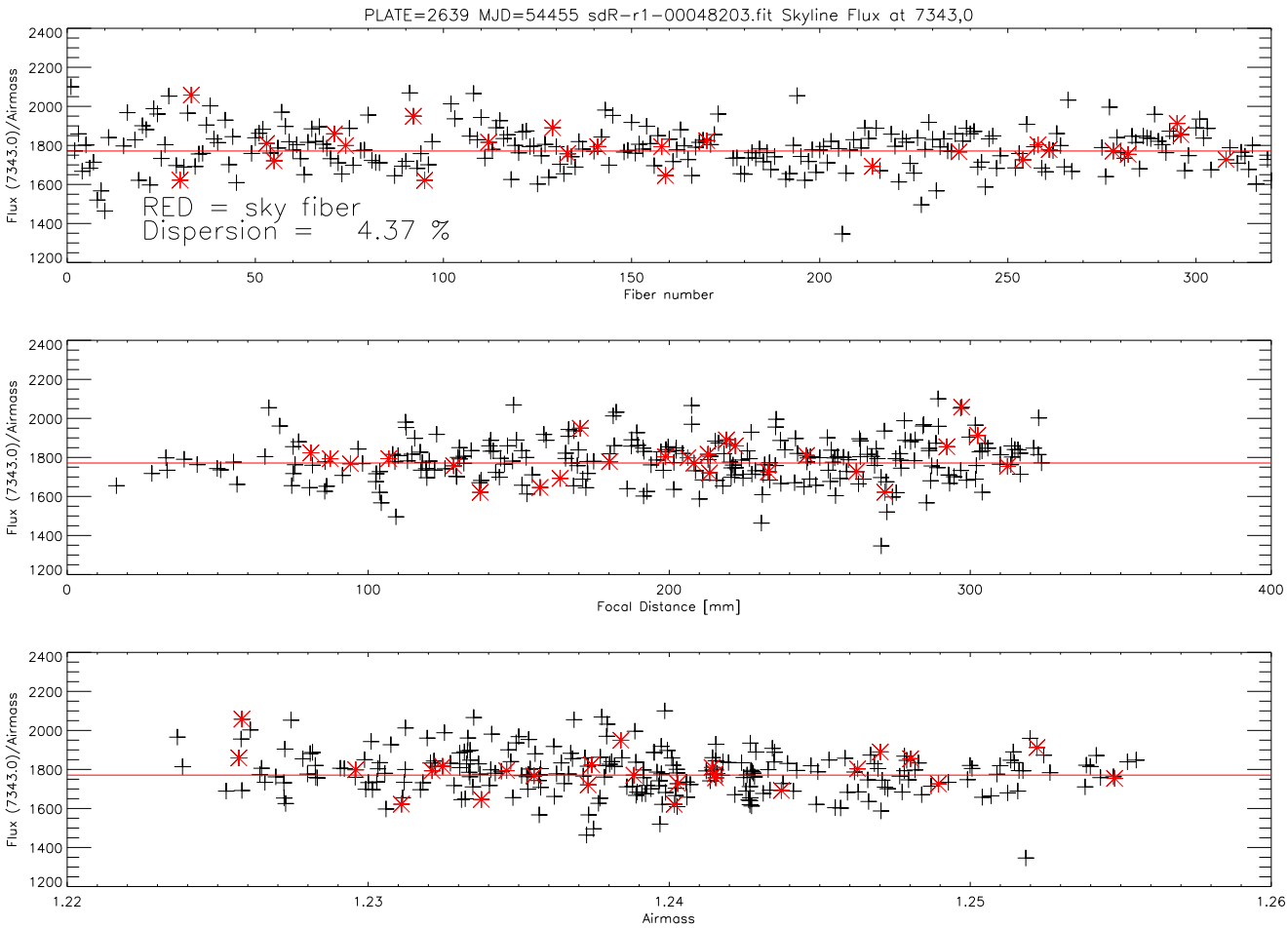

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048203.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

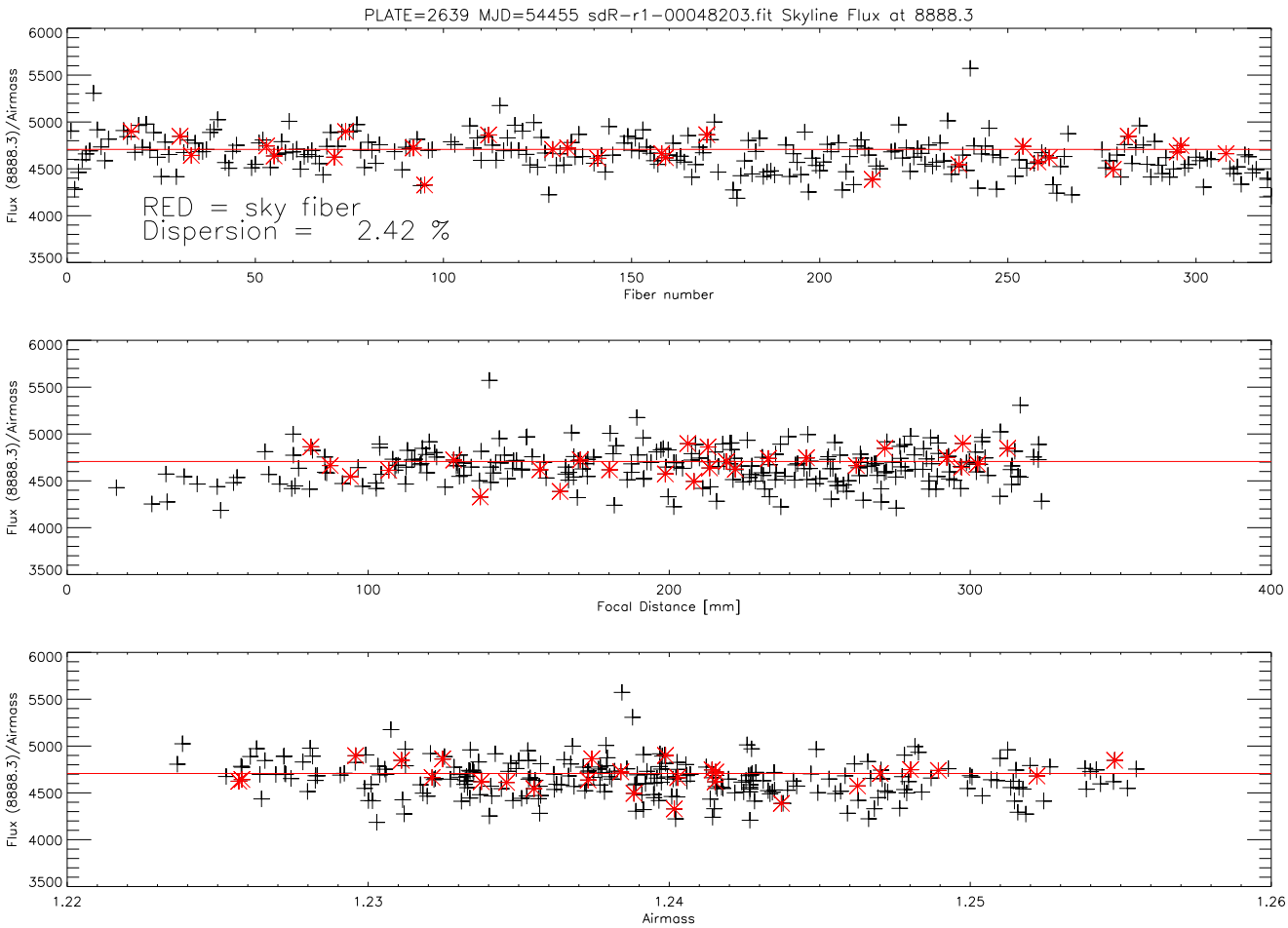

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number

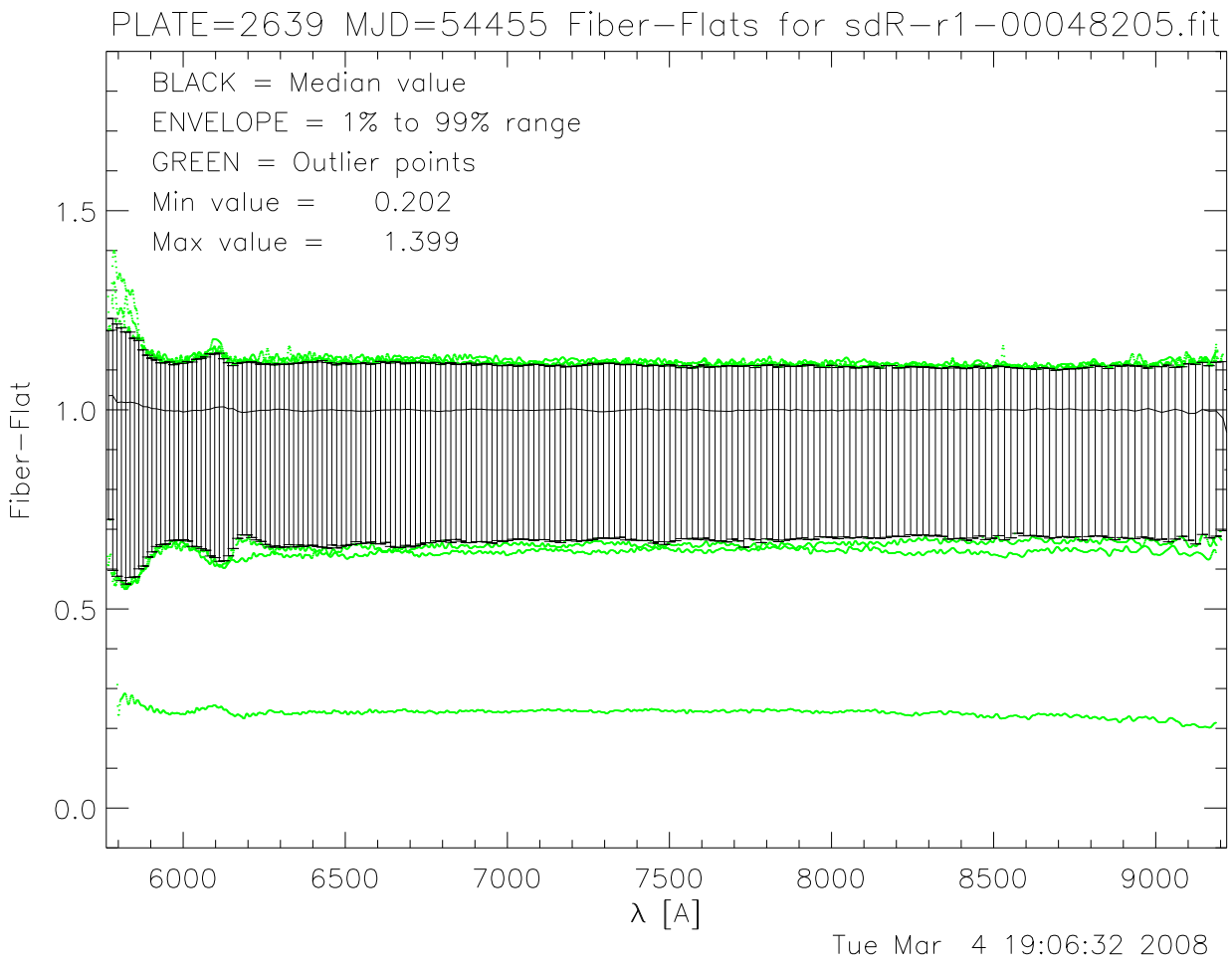

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

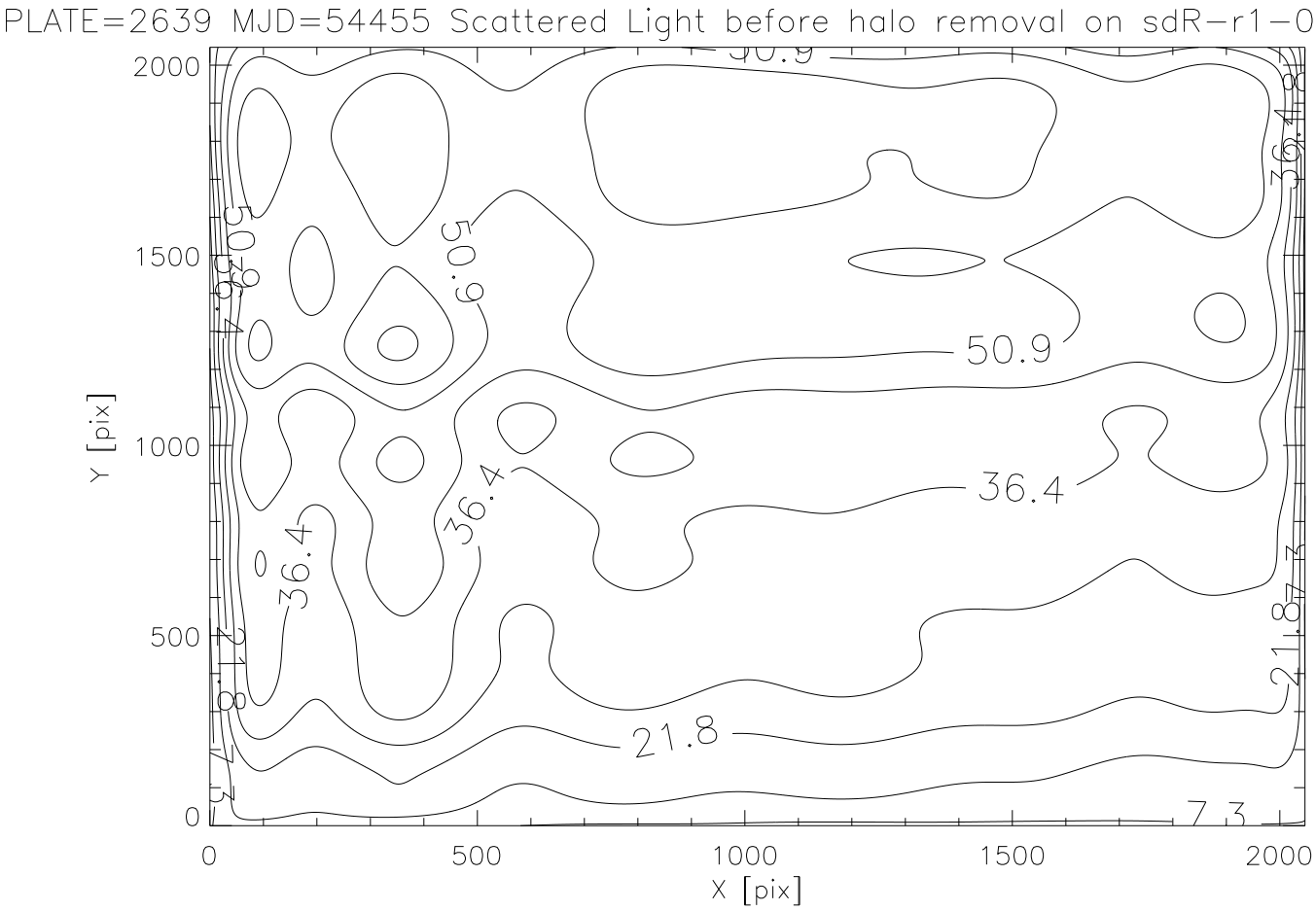

PLATE=2639 MJD=54455 sdR-r1-00048203.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

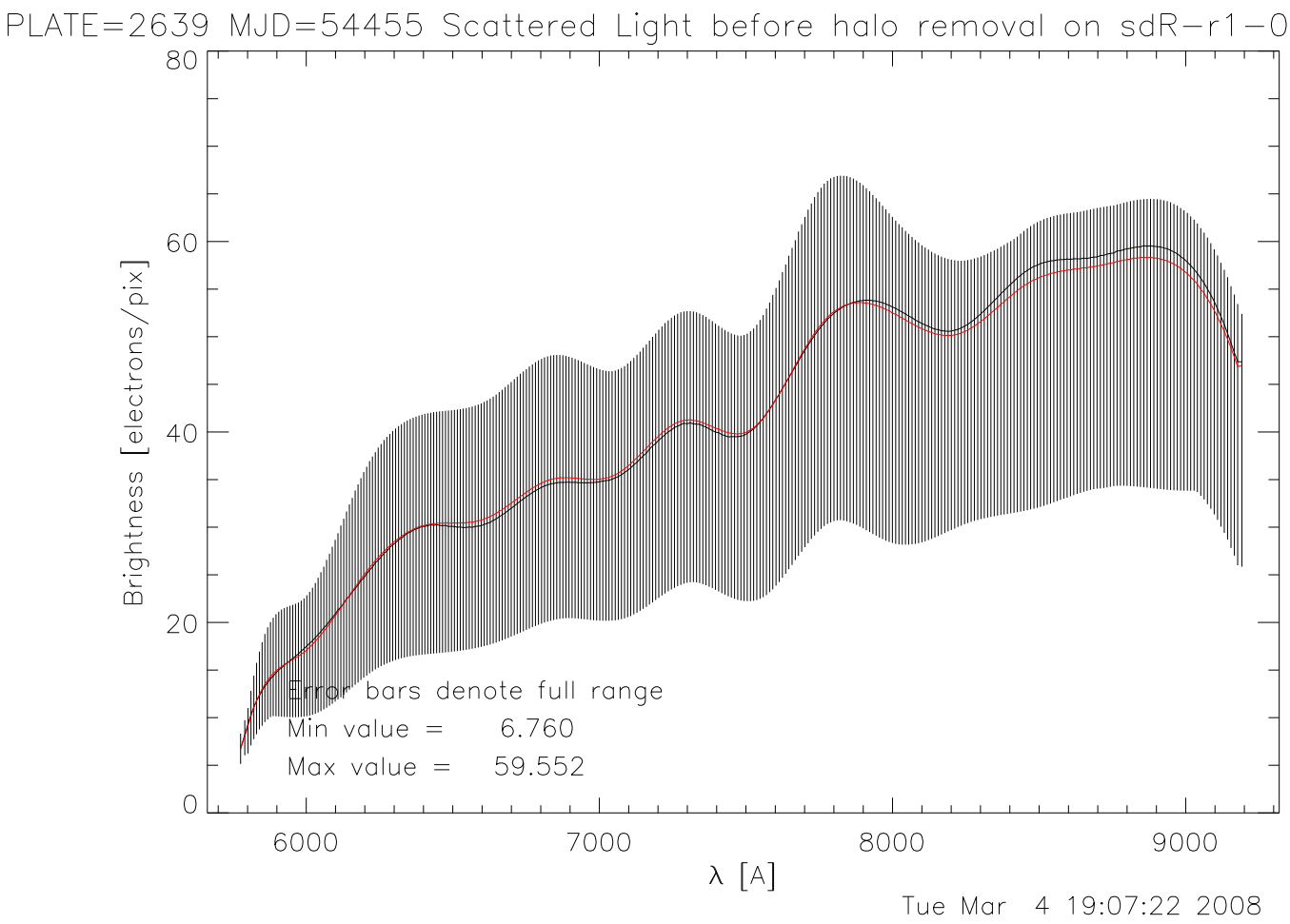

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048203.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

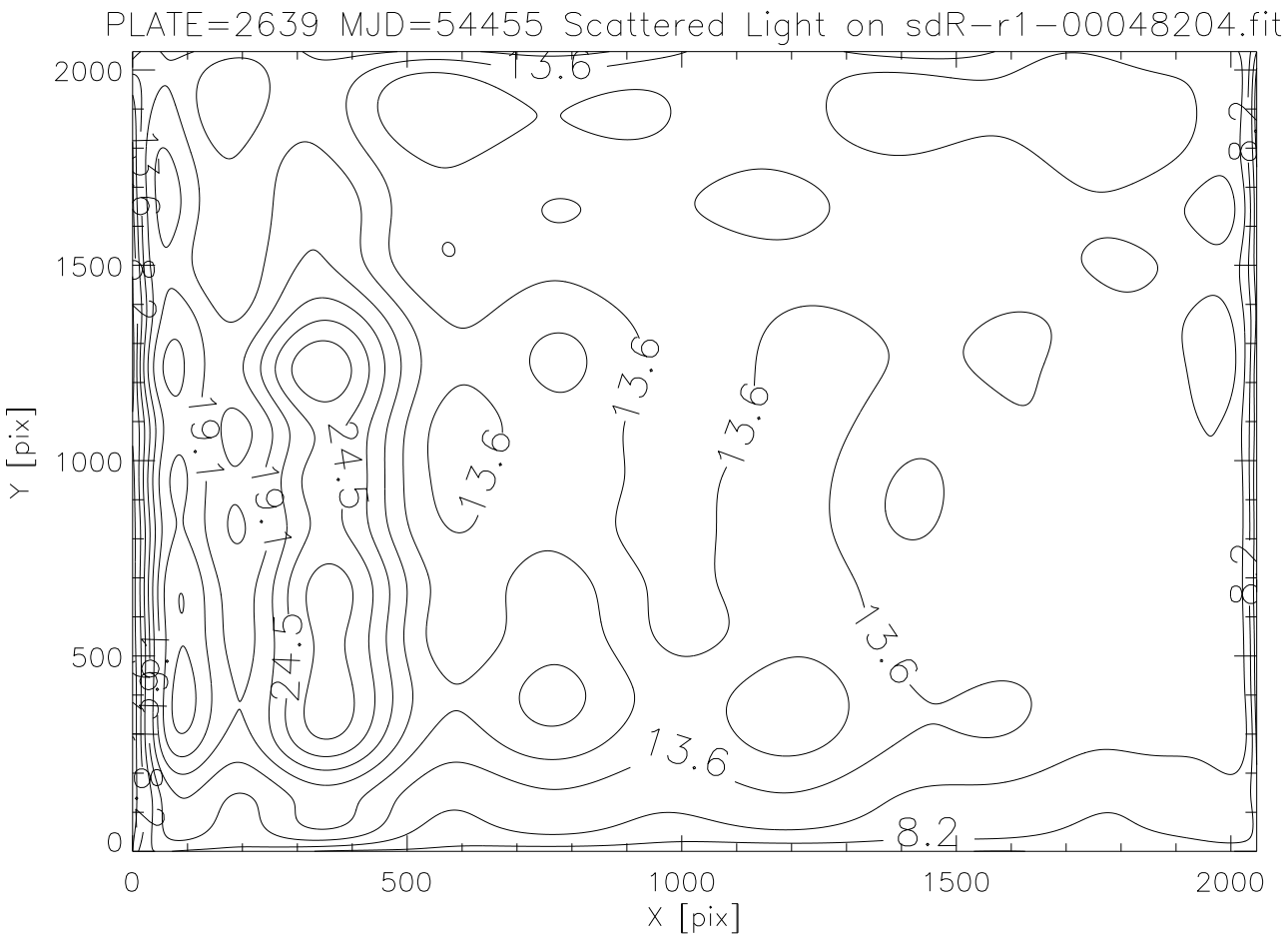

PLATE=2639 MJD=54455 sdR-r1-00048203.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.37 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

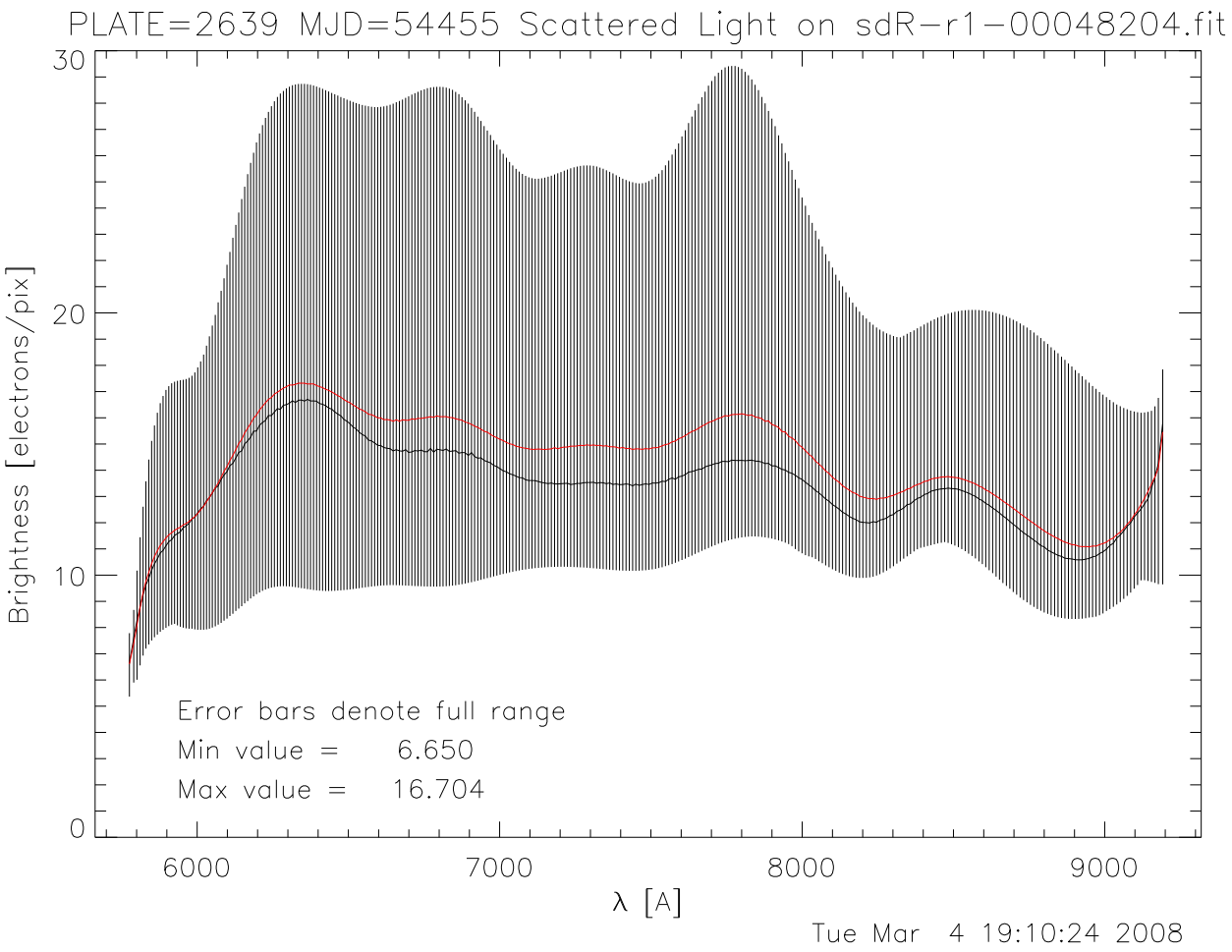

PLATE=2639 MJD=54455 sdR-r1-00048203.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.42 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

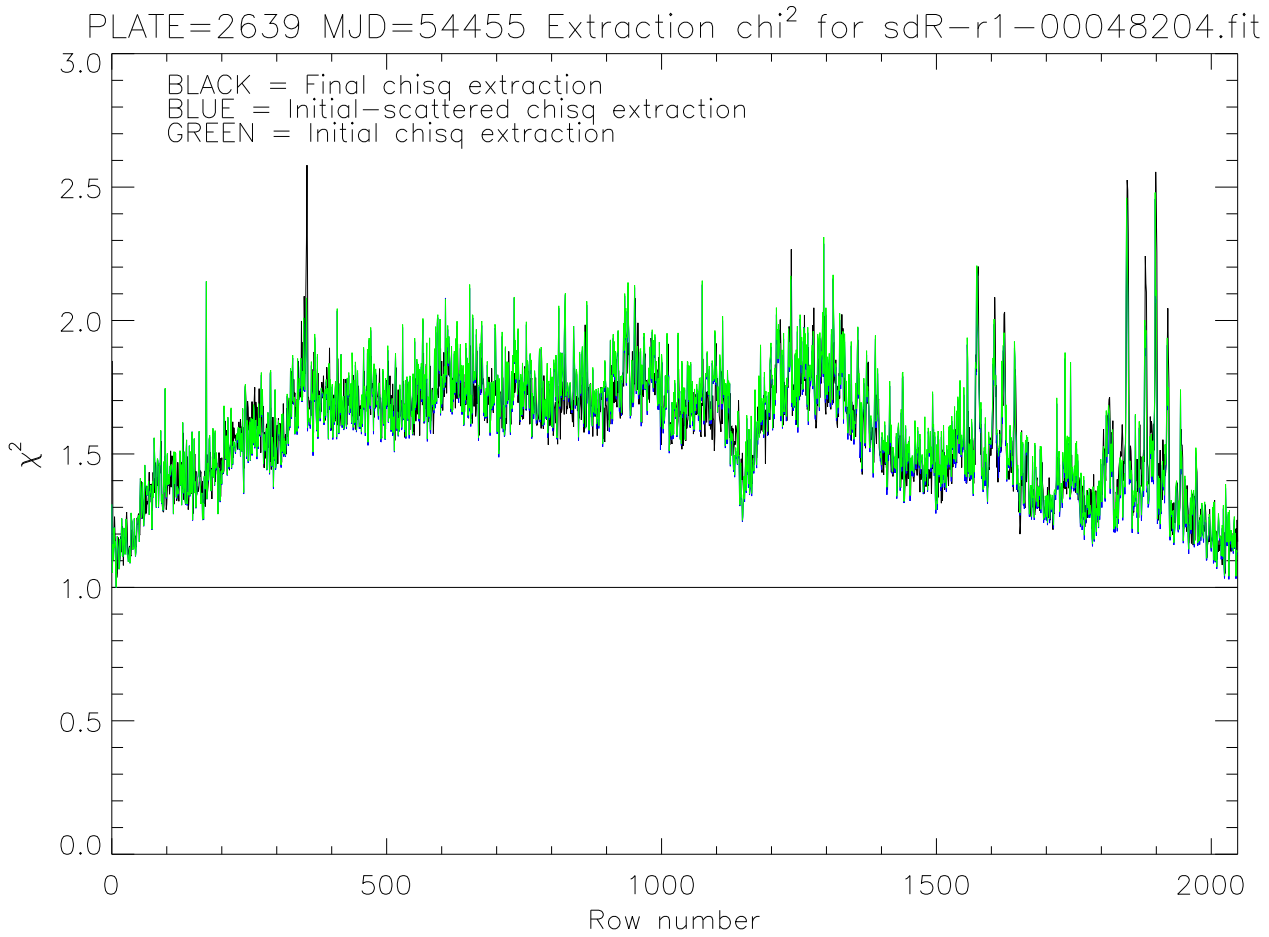

PLATE=2639 MJD=54455 Fiber−Flats for sdR−r1−00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.399
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 19:06:32 2008

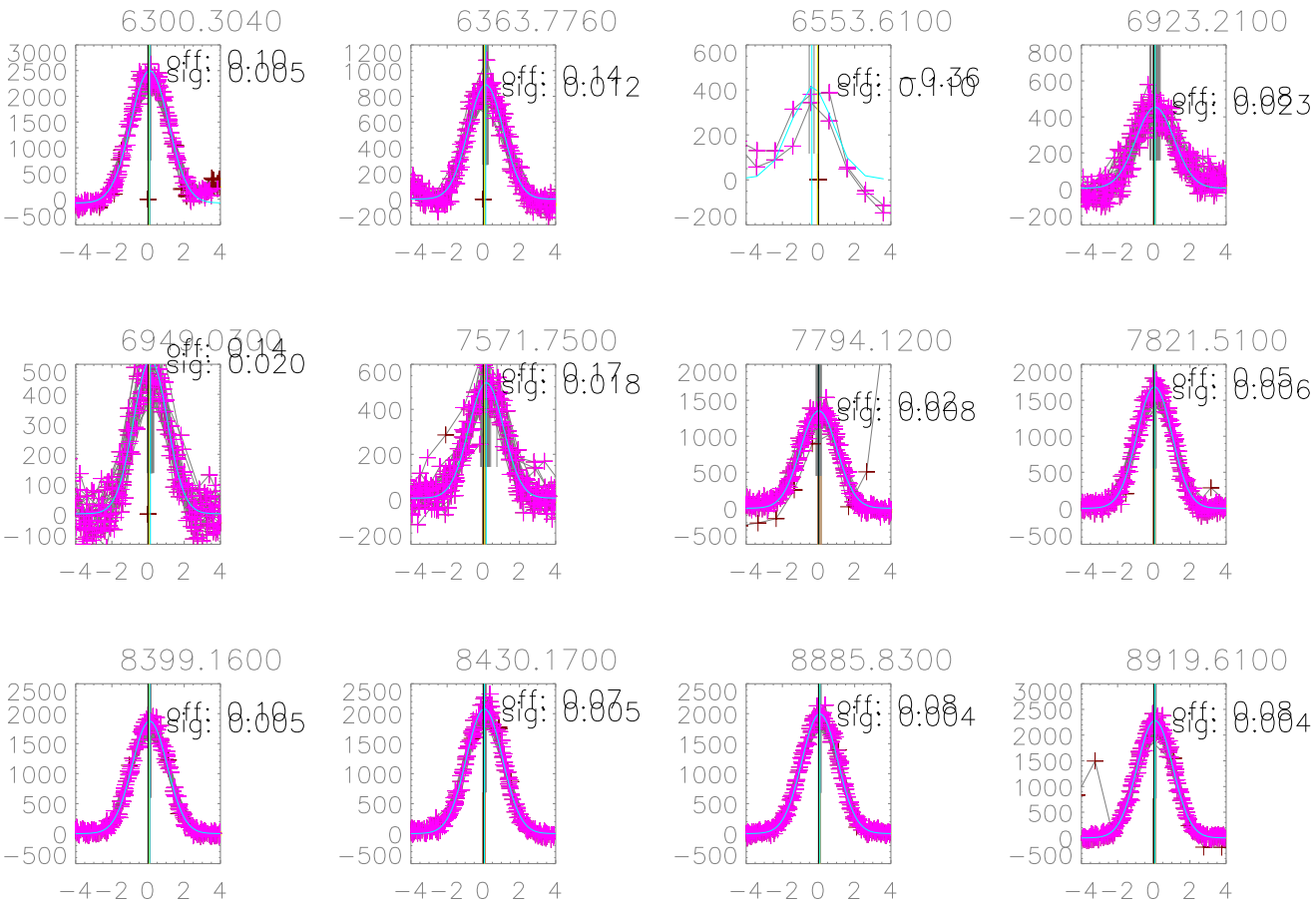

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048204.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
50.9
36.4
21.8
7.3

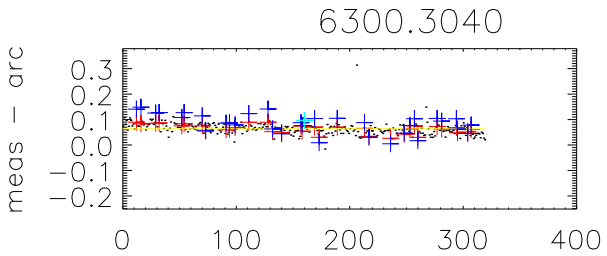

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r1-00048204.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.760
Max value = 59.552
Tue Mar 4 19:07:22 2008

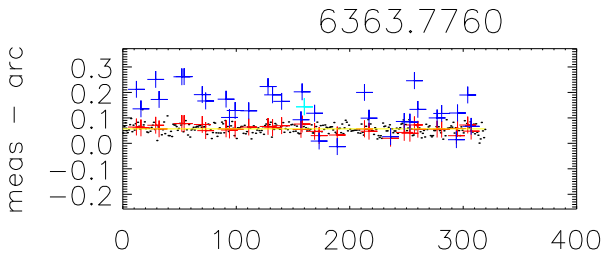

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048204.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
24.5
19.1
8.2

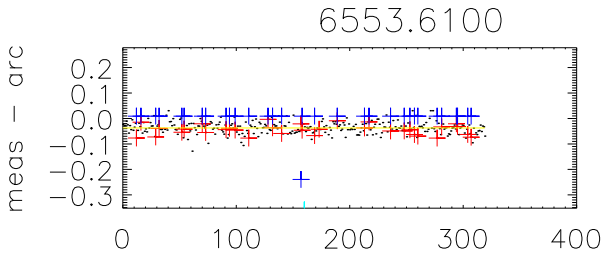

PLATE=2639 MJD=54455 Scattered Light on sdR-r1-00048204.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.650
Max value = 16.704
Tue Mar 4 19:10:24 2008

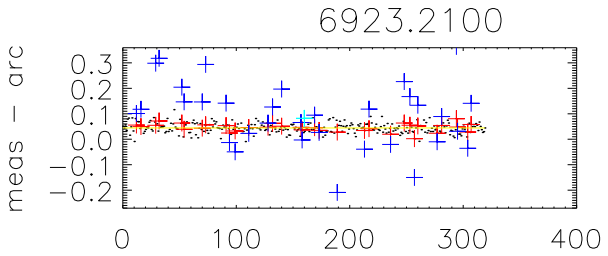

PLATE=2639 MJD=54455 Extraction chi^2 for sdR−r1−00048204.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

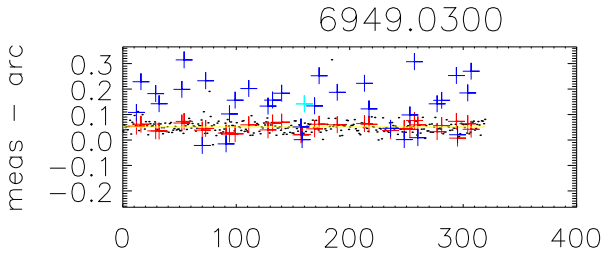

6300.3040
off: 0.10
sig: 0.005
6363.7760
off: 0.14
sig: 0.012
6553.6100
off: -0.36
sig: 0.110
6923.2100
off: 0.08
sig: 0.023
6949.0300
off: 0.14
sig: 0.020
7571.7500
off: 0.17
sig: 0.018
7794.1200
off: 0.02
sig: 0.008
7821.5100
off: 0.05
sig: 0.006
8399.1600
off: 0.10
sig: 0.005
8430.1700
off: 0.07
sig: 0.005
8885.8300
off: 0.08
sig: 0.004
8919.6100
off: 0.08
sig: 0.004

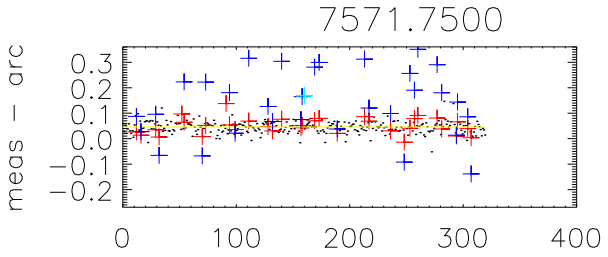

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

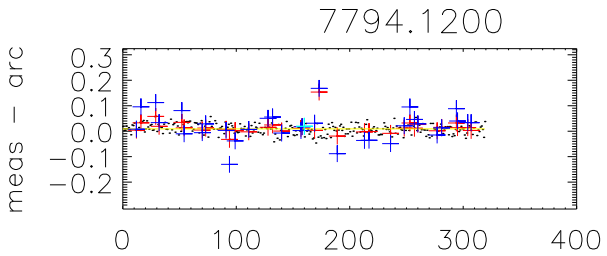

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

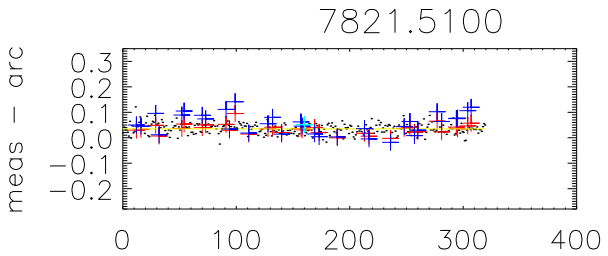

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

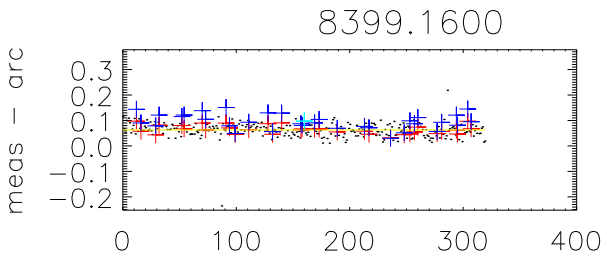

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

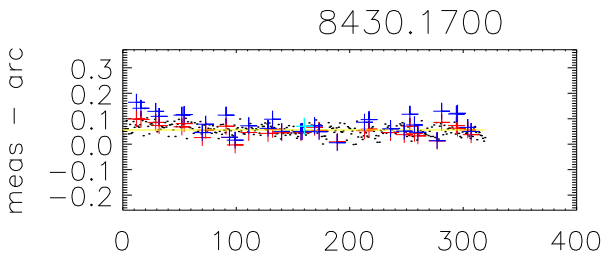

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

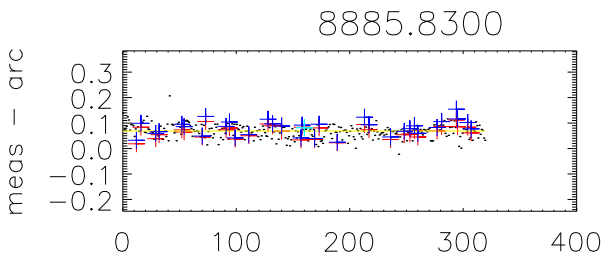

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

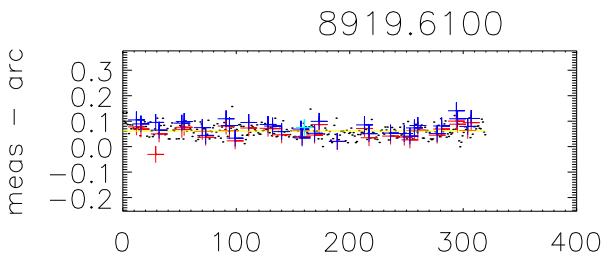

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

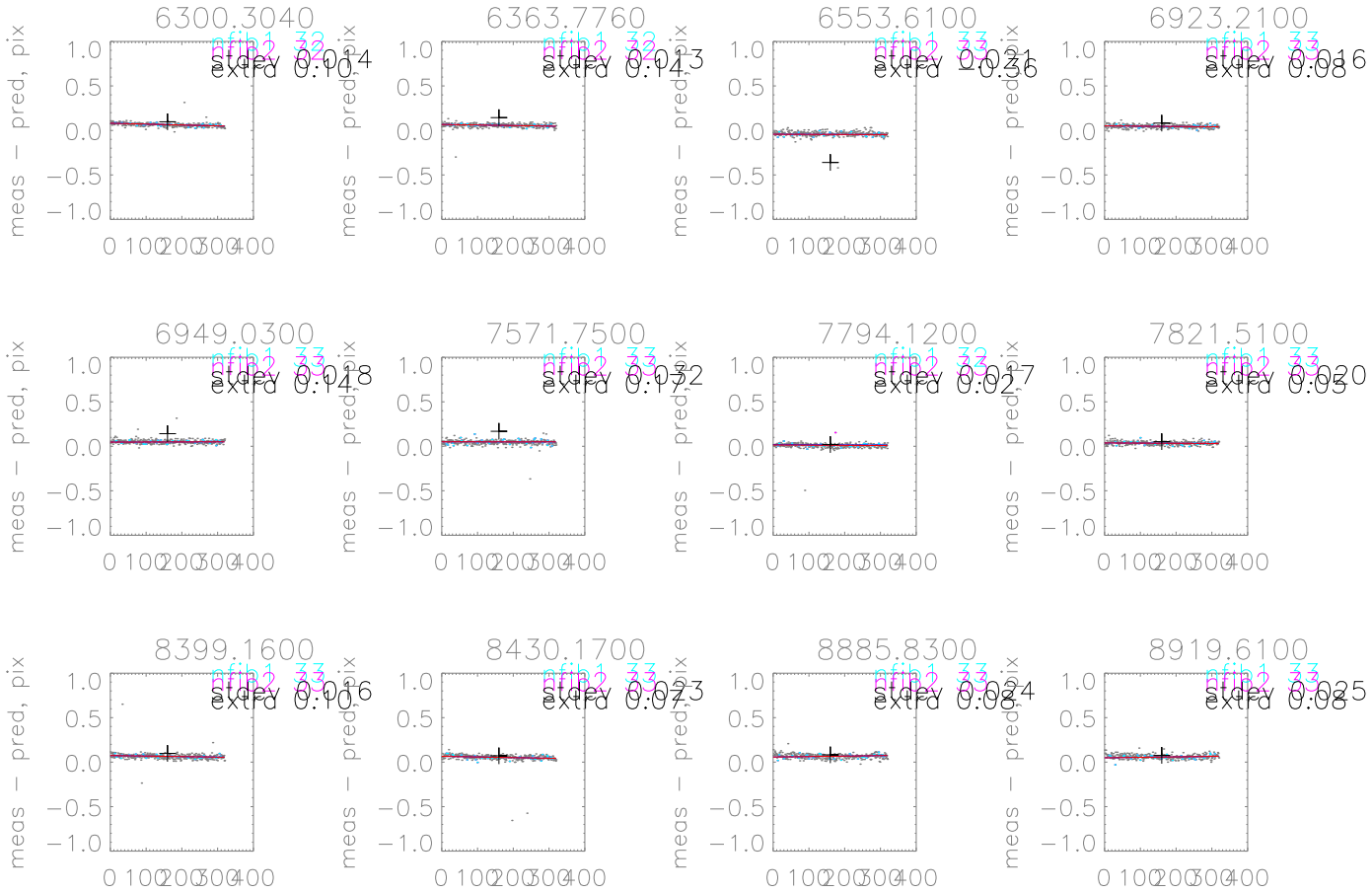

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

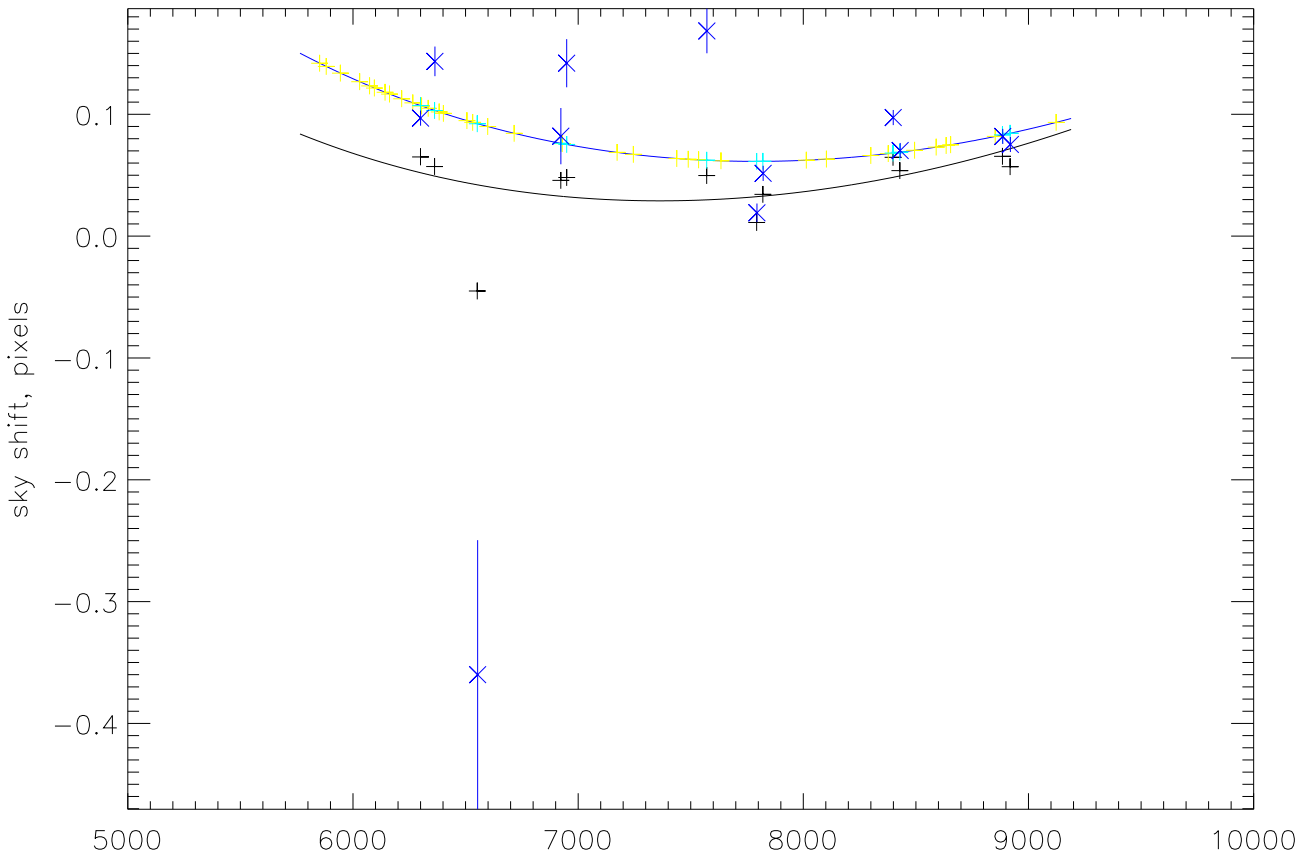

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

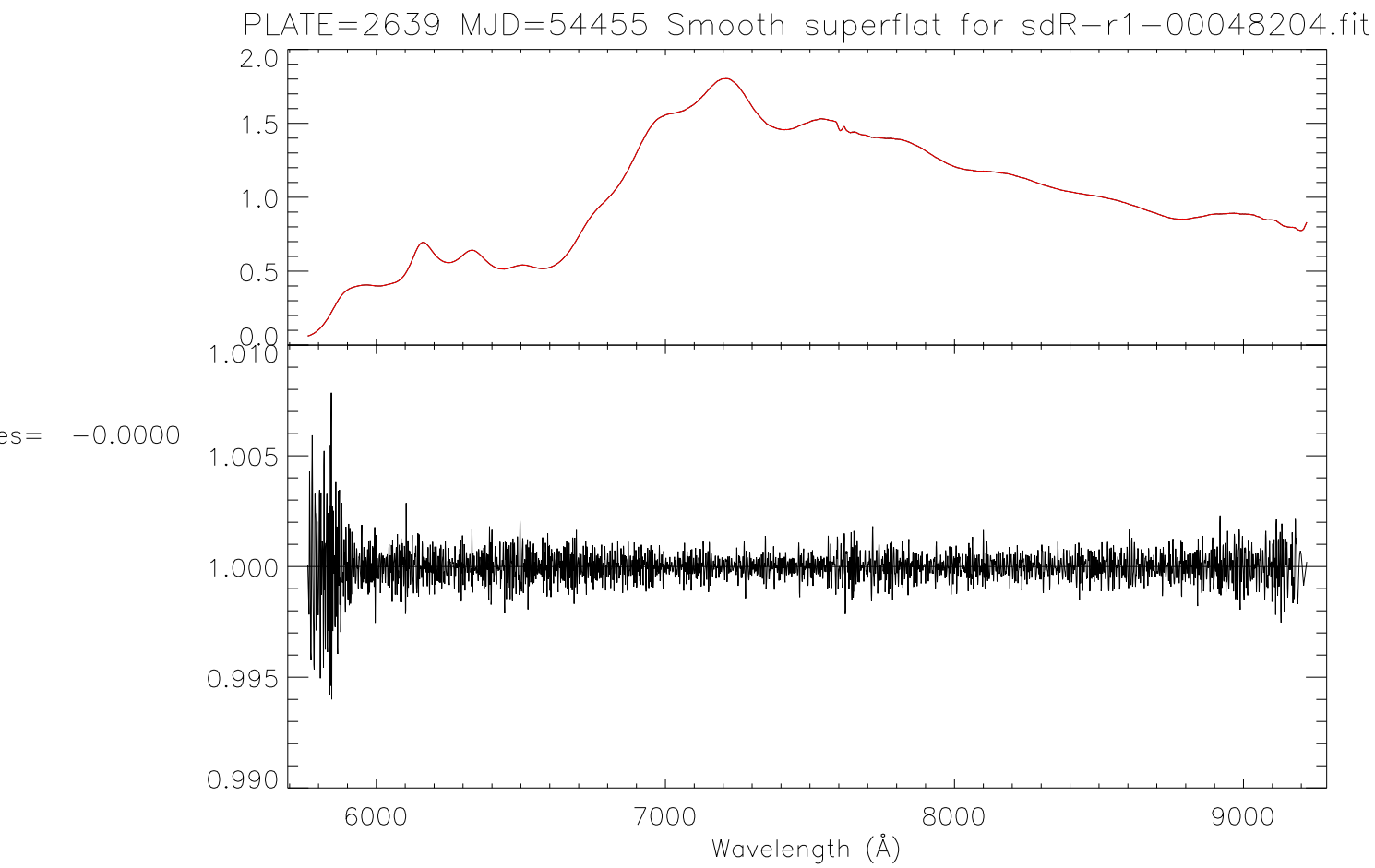

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

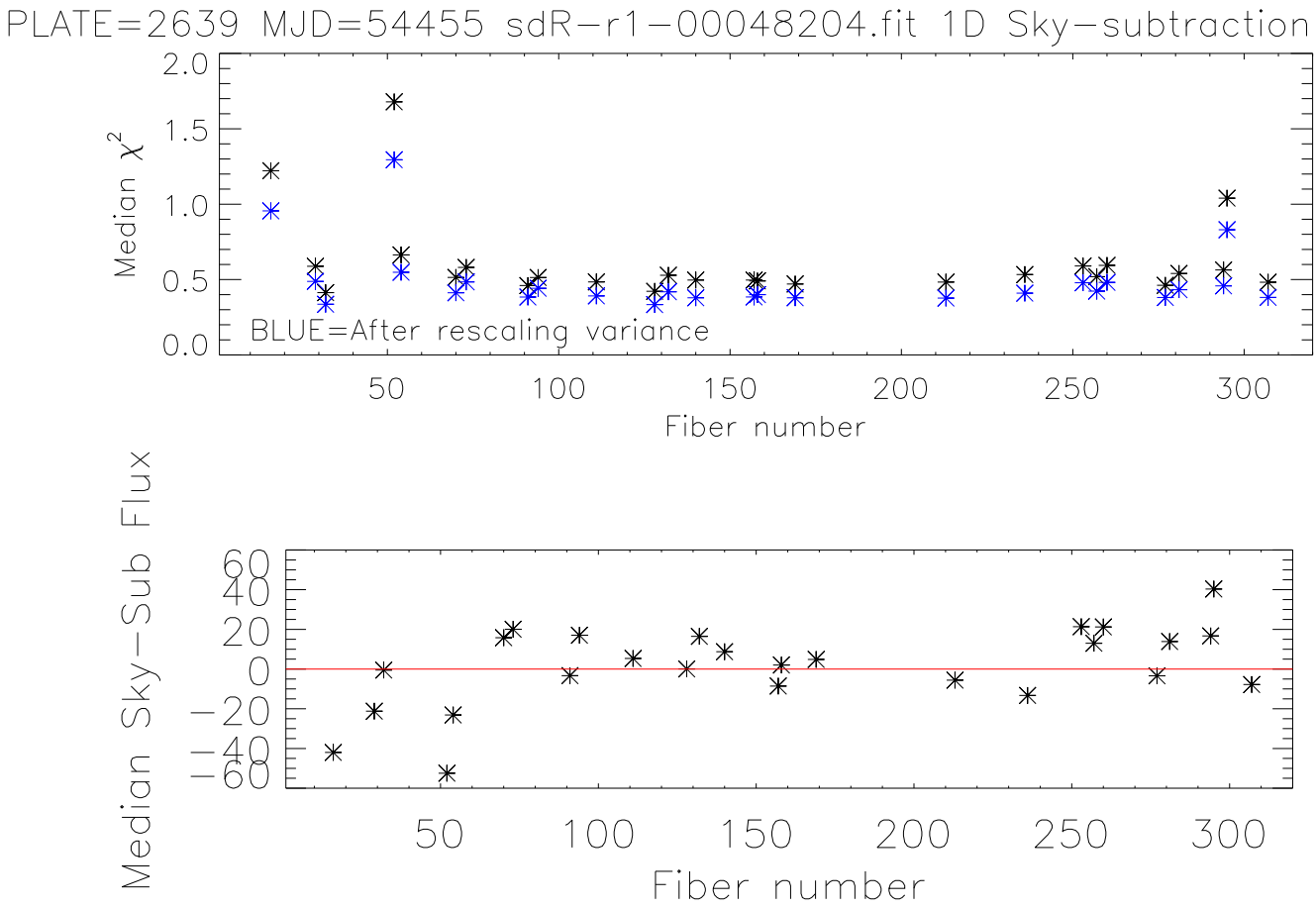

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

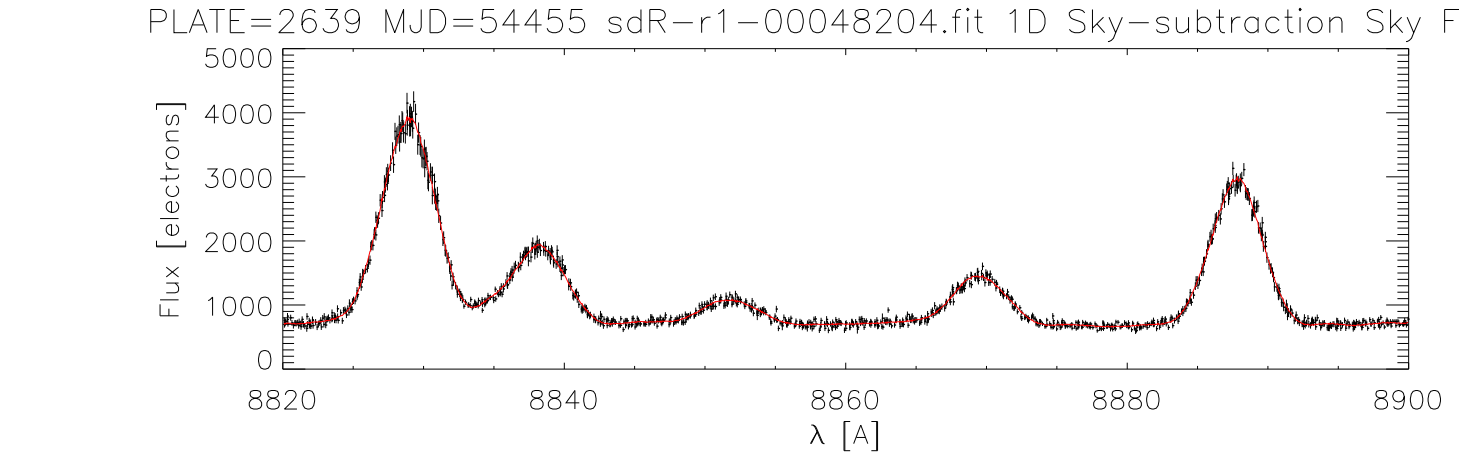

6300.3040
mfib1 32
mfib2 32
stdev 0.014
extra 0.10
6363.7760
mfib1 32
mfib2 32
stdev 0.013
extra 0.14
6553.6100
mfib1 33
mfib2 33
stdev 0.021
extra −0.36
6923.2100
mfib1 33
mfib2 33
stdev 0.016
extra 0.08
6949.0300
mfib1 33
mfib2 33
stdev 0.018
extra 0.14
7571.7500
mfib1 33
mfib2 33
stdev 0.032
extra 0.17
7794.1200
mfib1 32
mfib2 33
stdev 0.017
extra 0.02
7821.5100
mfib1 33
mfib2 33
stdev 0.020
extra 0.05
8399.1600
mfib1 33
mfib2 33
stdev 0.016
extra 0.10
8430.1700
mfib1 33
mfib2 33
stdev 0.023
extra 0.07
8885.8300
mfib1 33
mfib2 33
stdev 0.024
extra 0.08
8919.6100
mfib1 33
mfib2 33
stdev 0.025
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

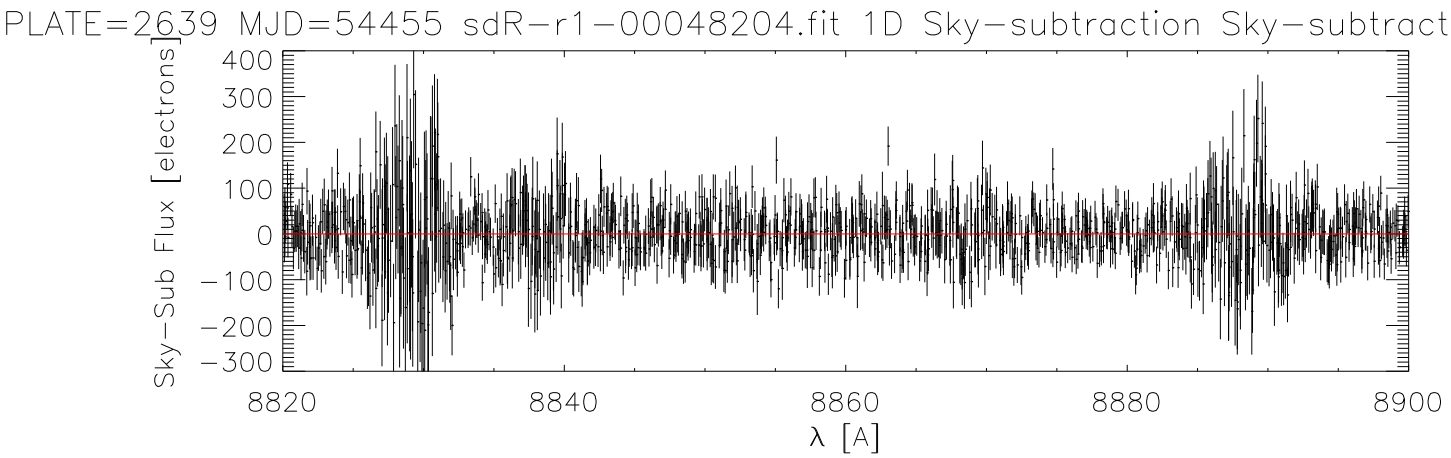

sky shift, pixels
0.1
0.0
−0.1
−0.2
−0.3
−0.4
5000
6000
7000
8000
9000
10000

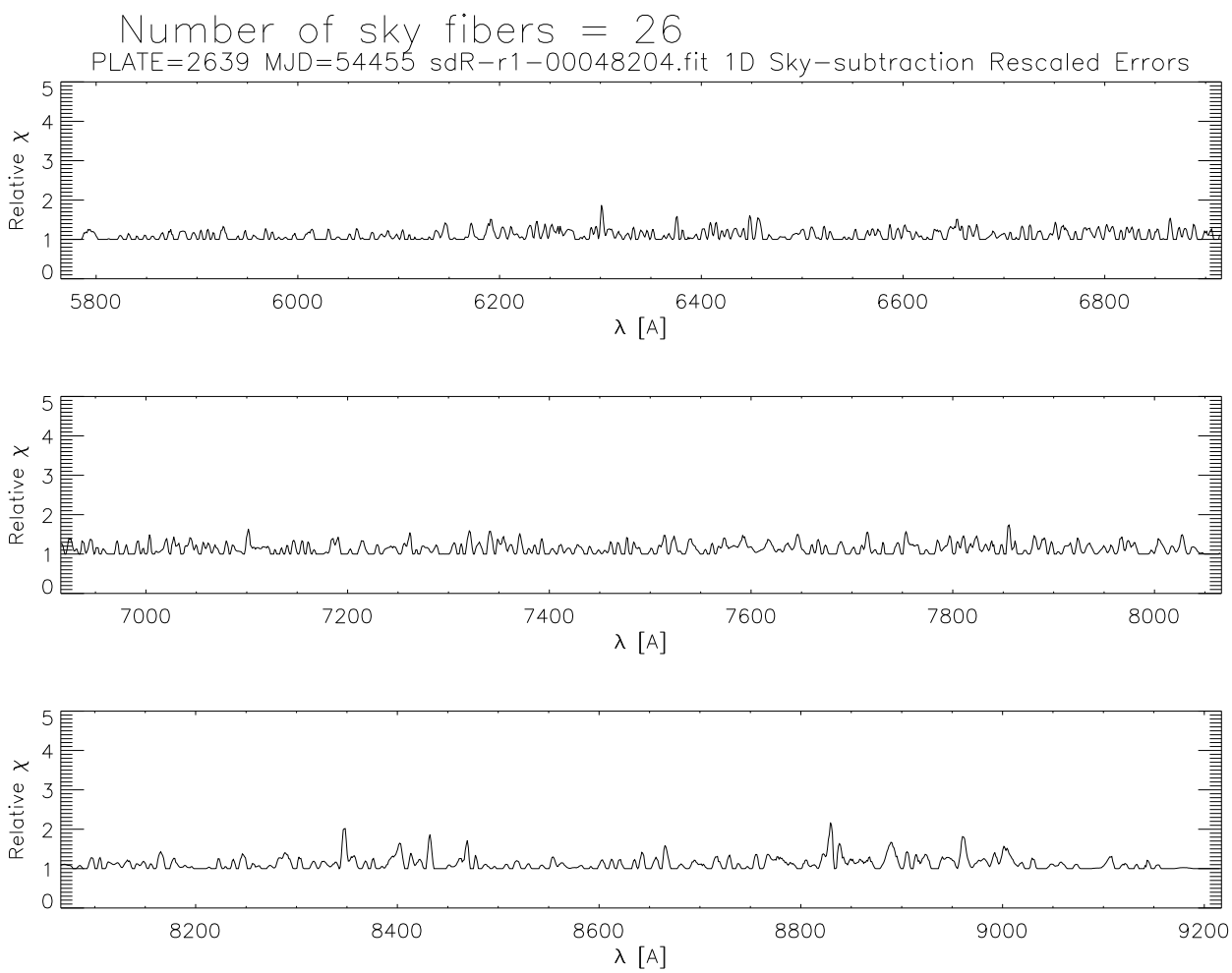

PLATE=2639 MJD=54455 Smooth superflat for sdR-r1-00048204.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

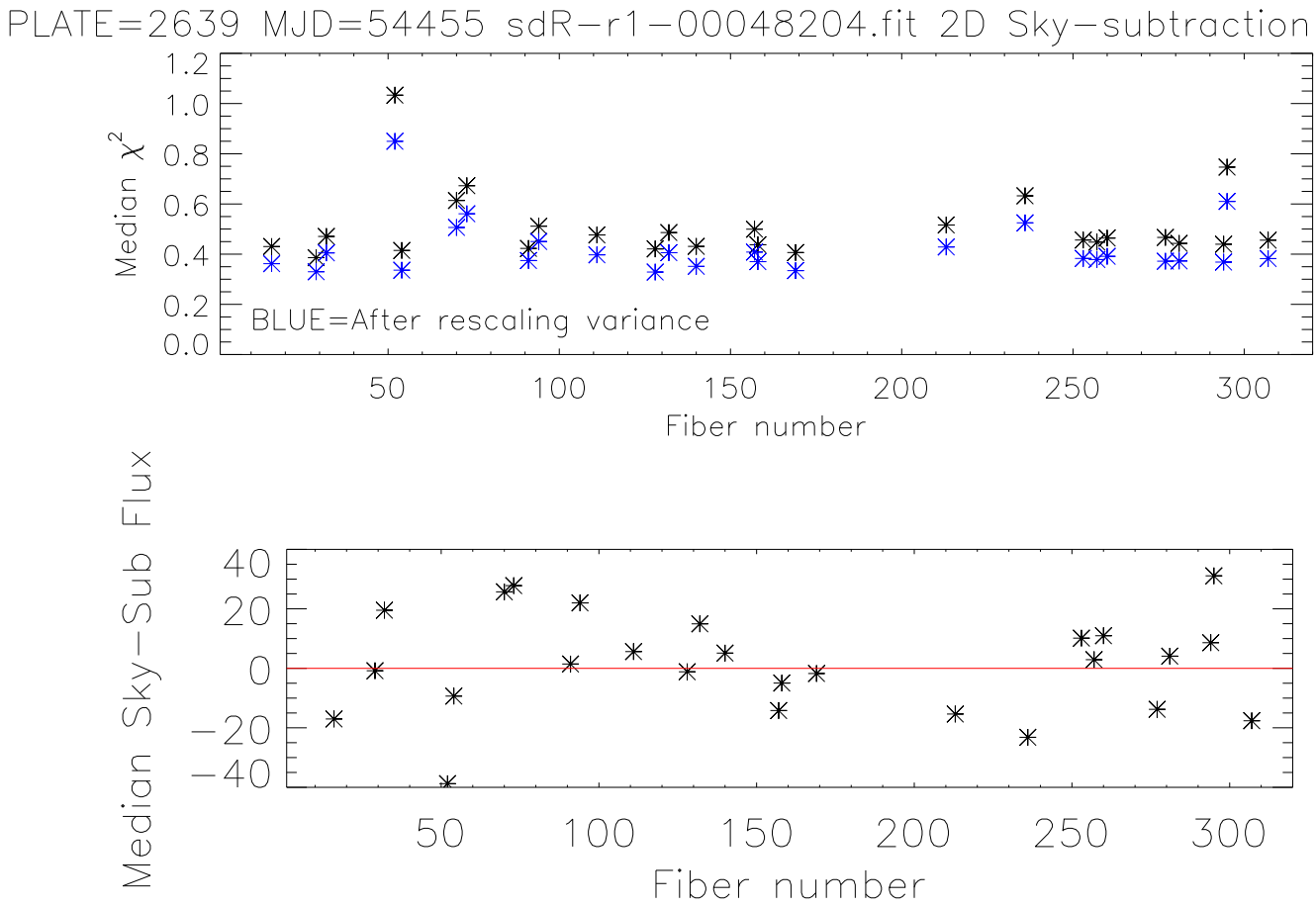
es= −0.0000

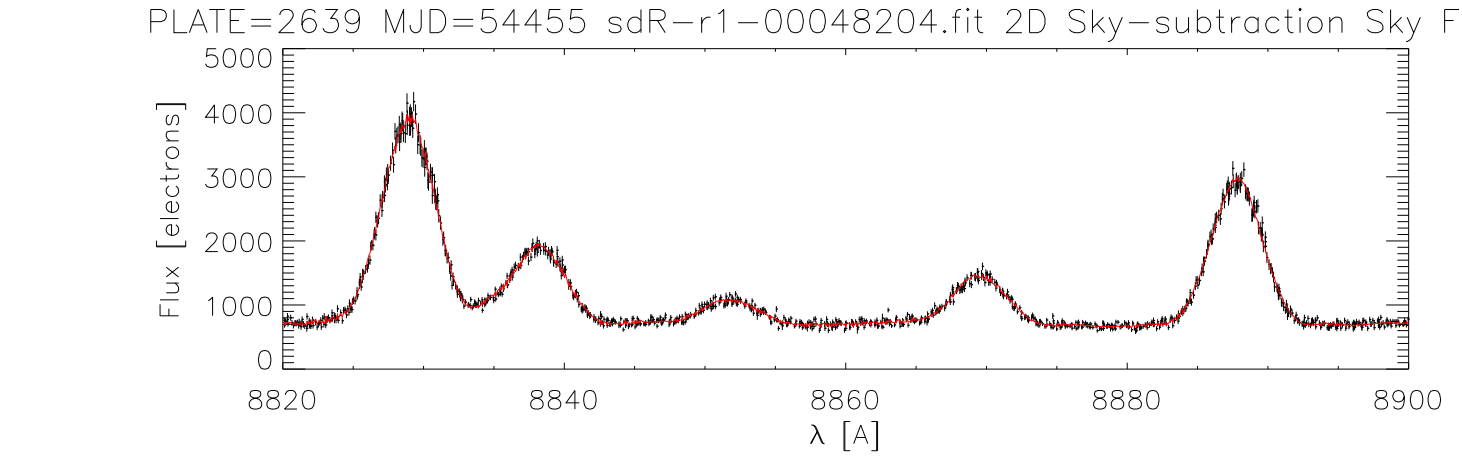

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

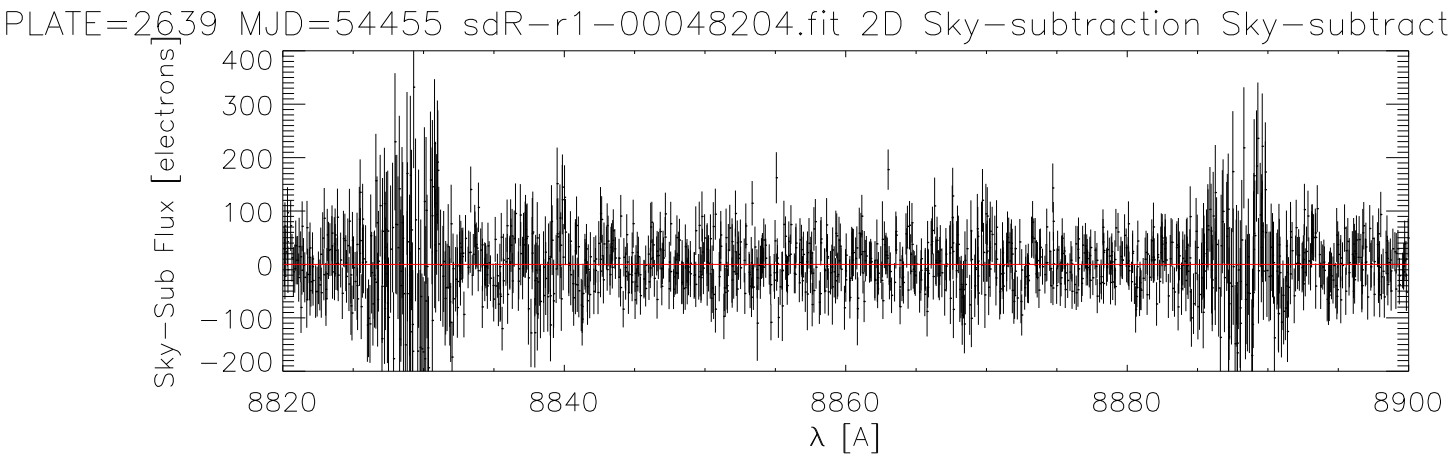

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

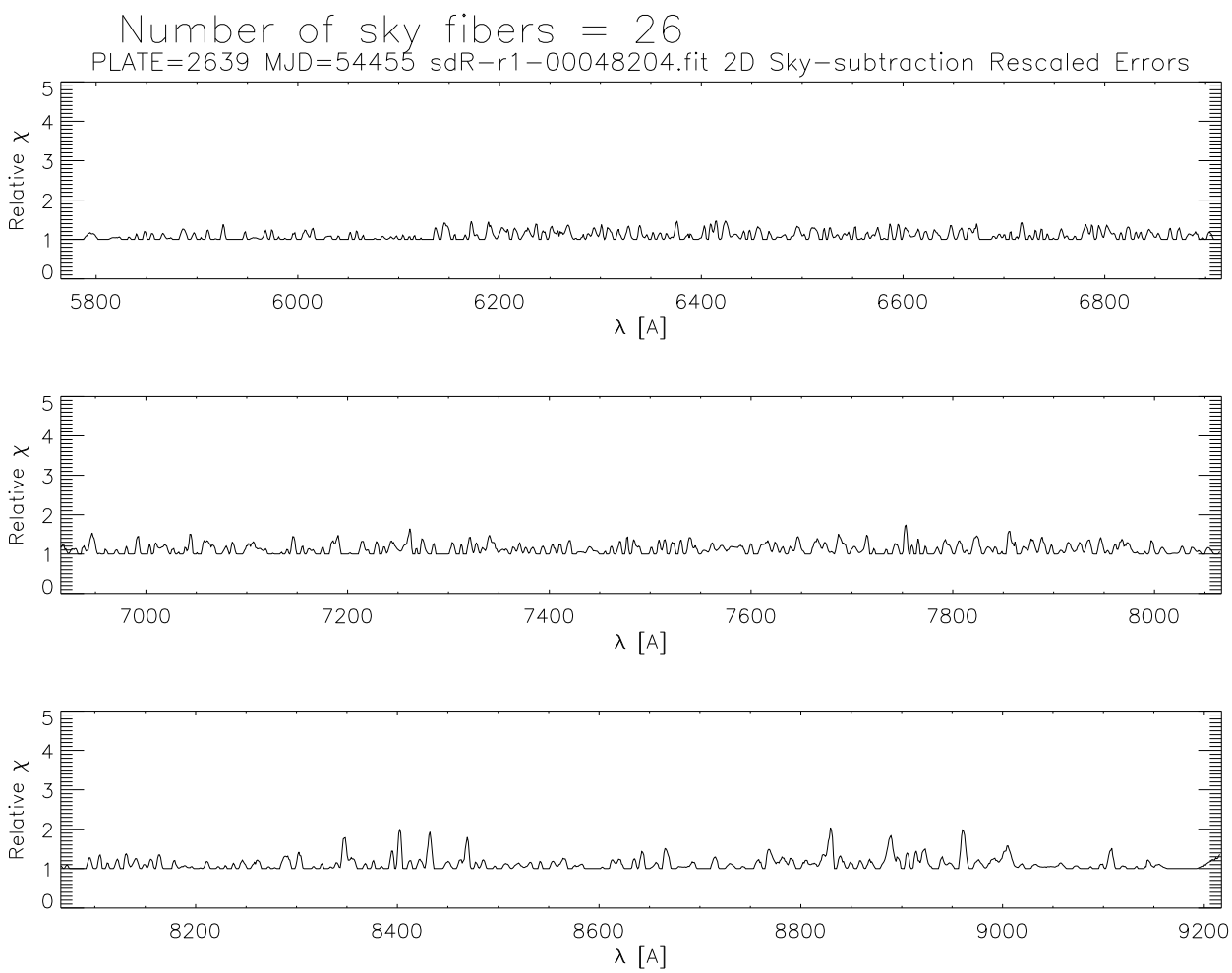

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

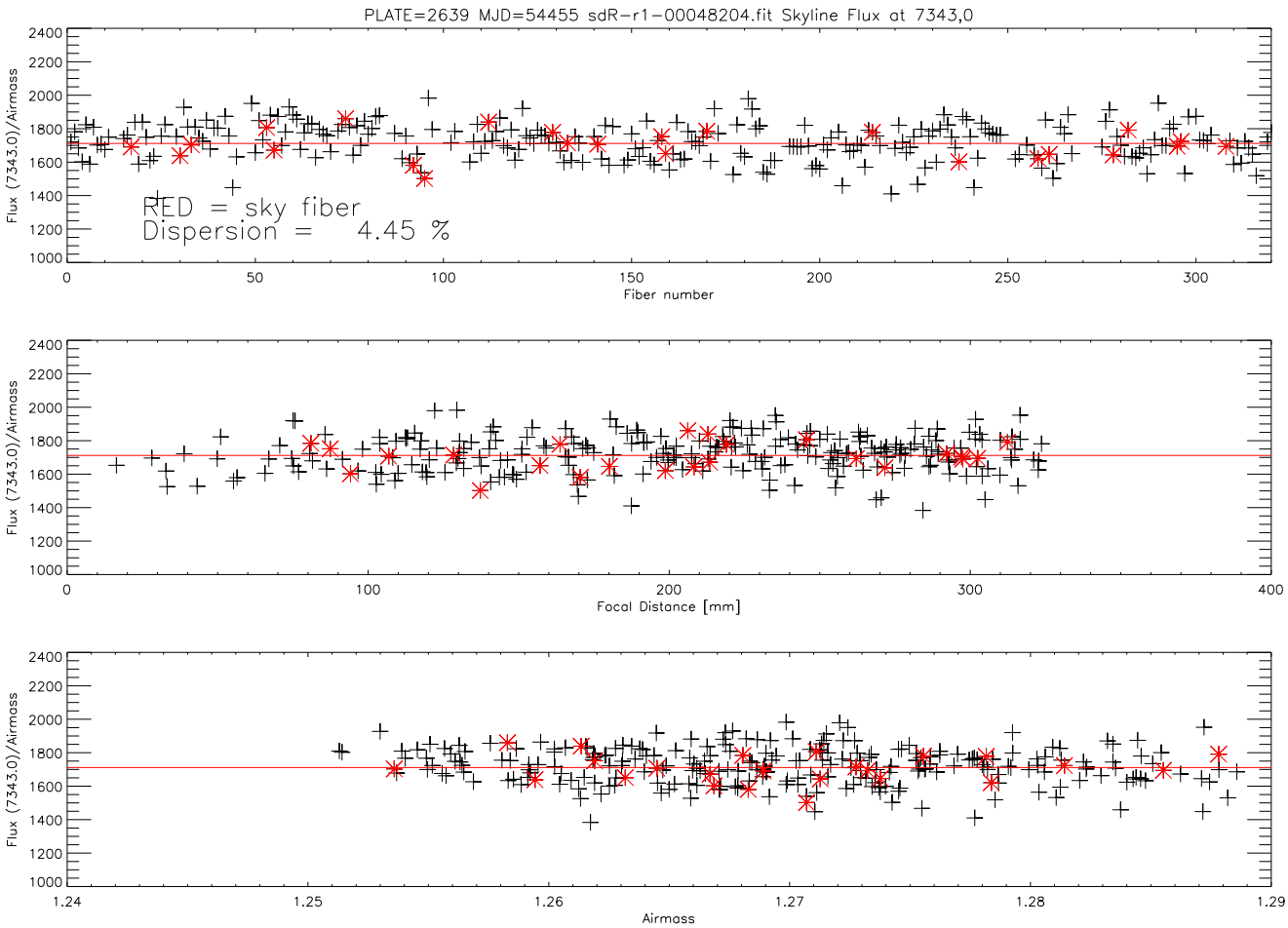

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048204.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

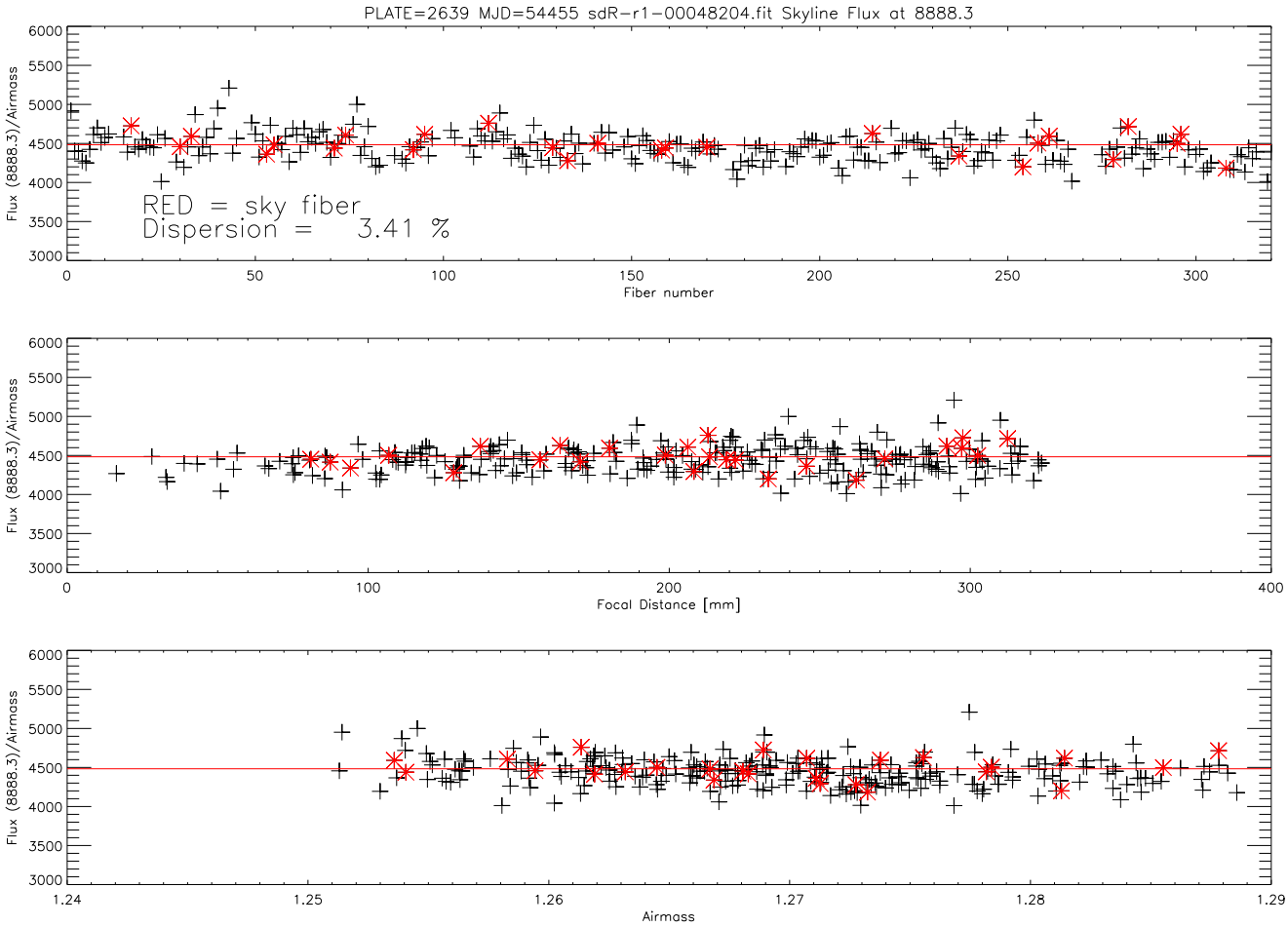

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

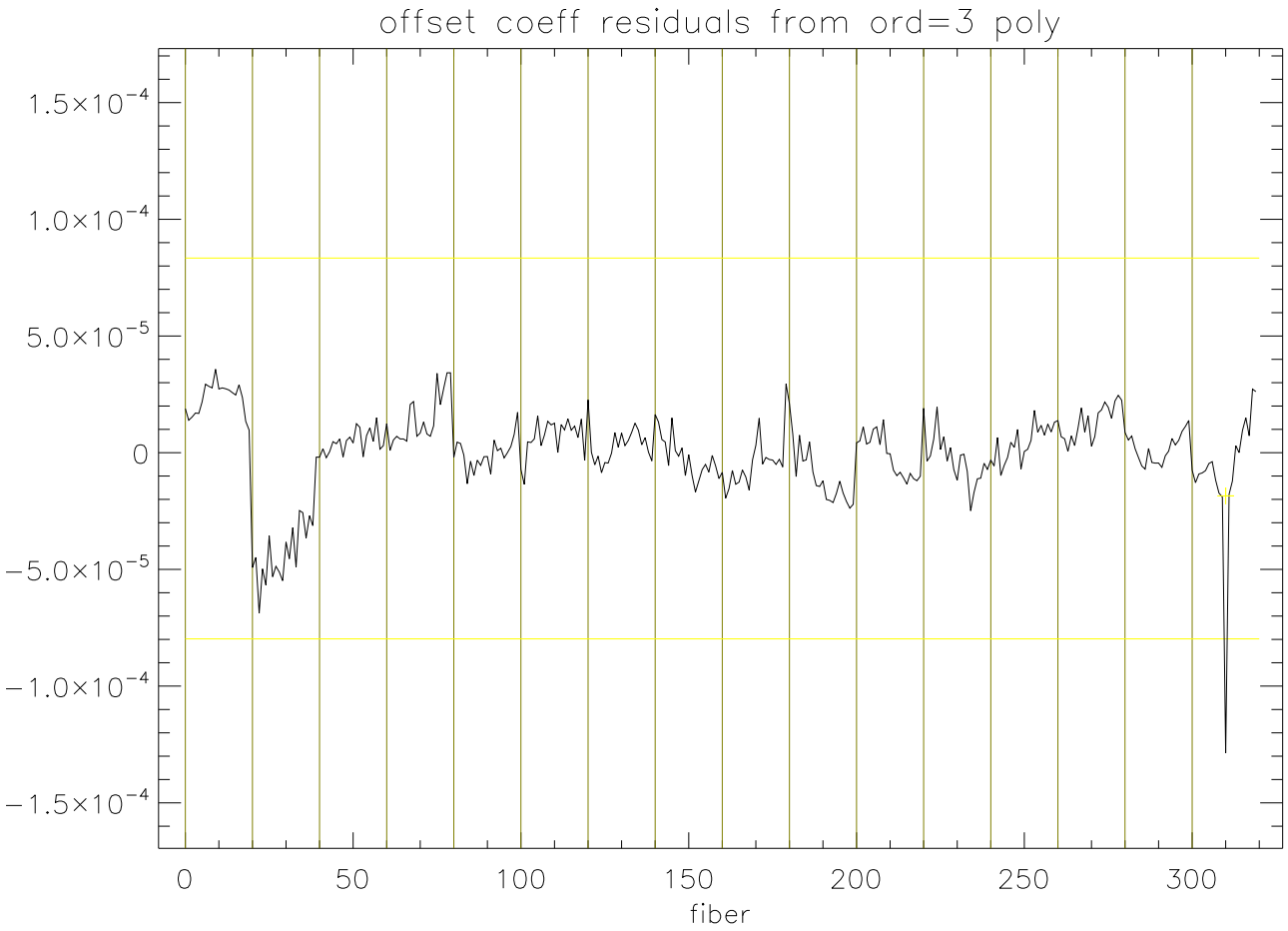

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

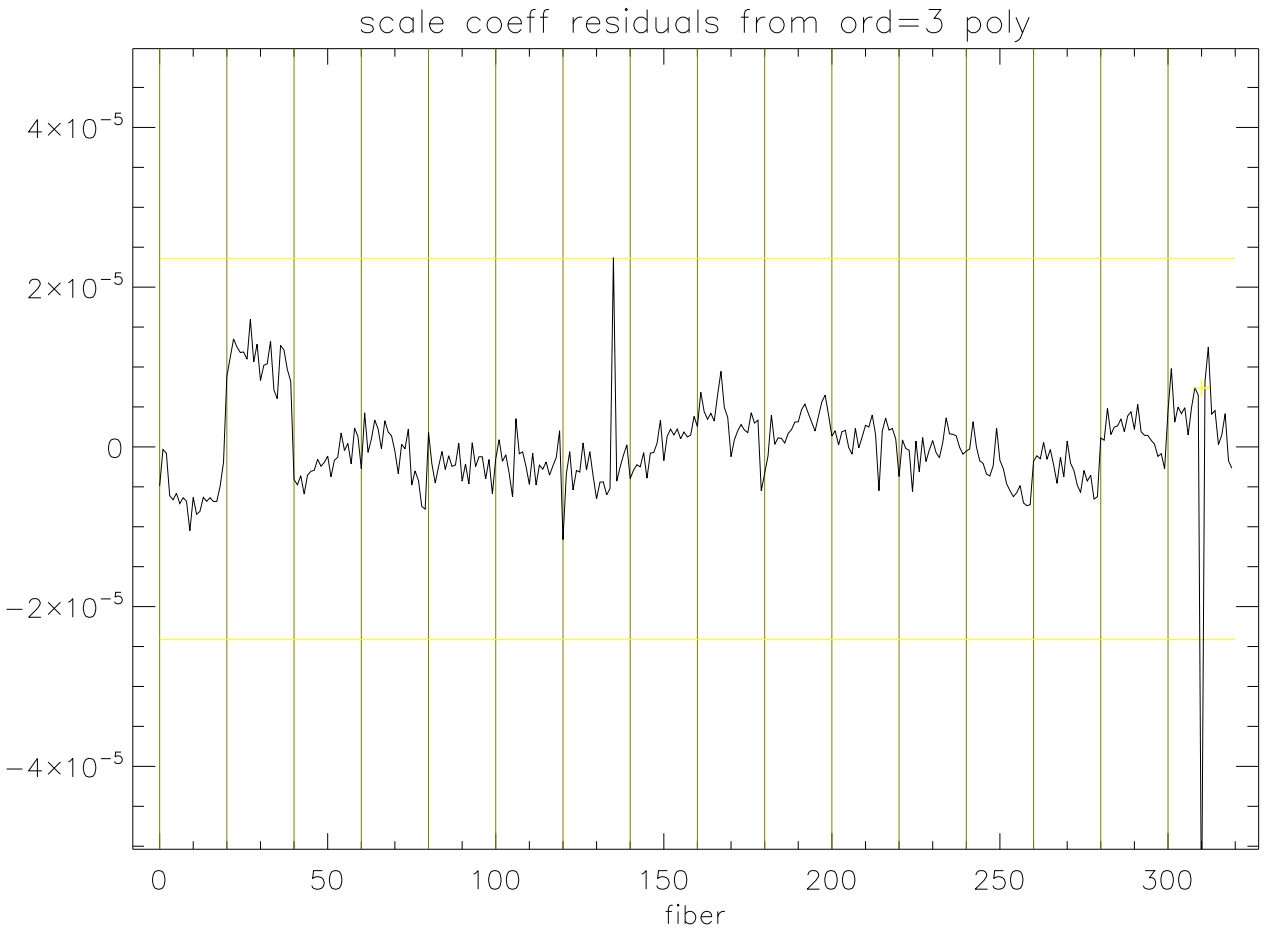

PLATE=2639 MJD=54455 sdR-r1-00048204.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

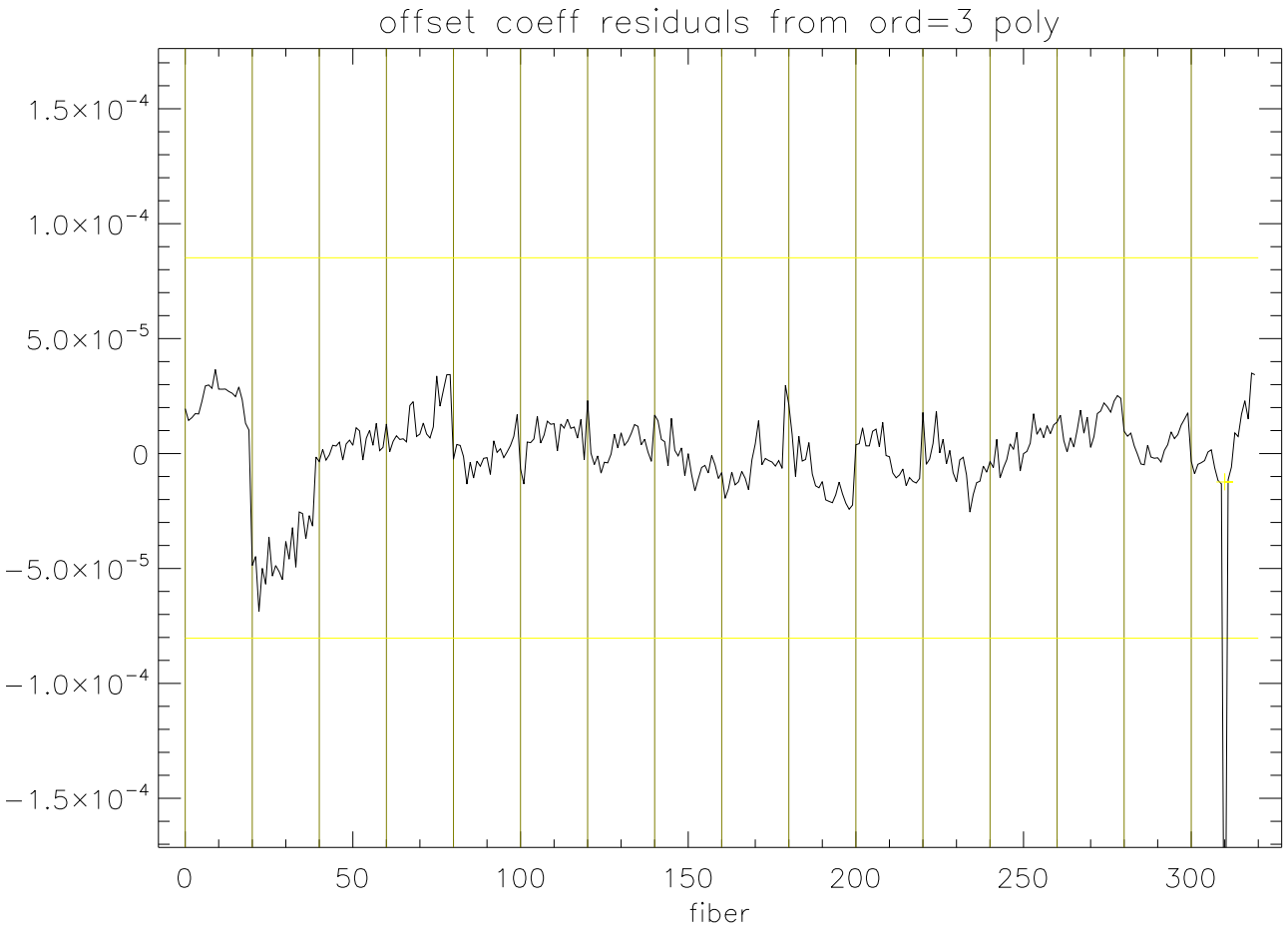

Number of sky fibers = 26
PLATE=2639 MJD=54455 sdR-r1-00048204.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

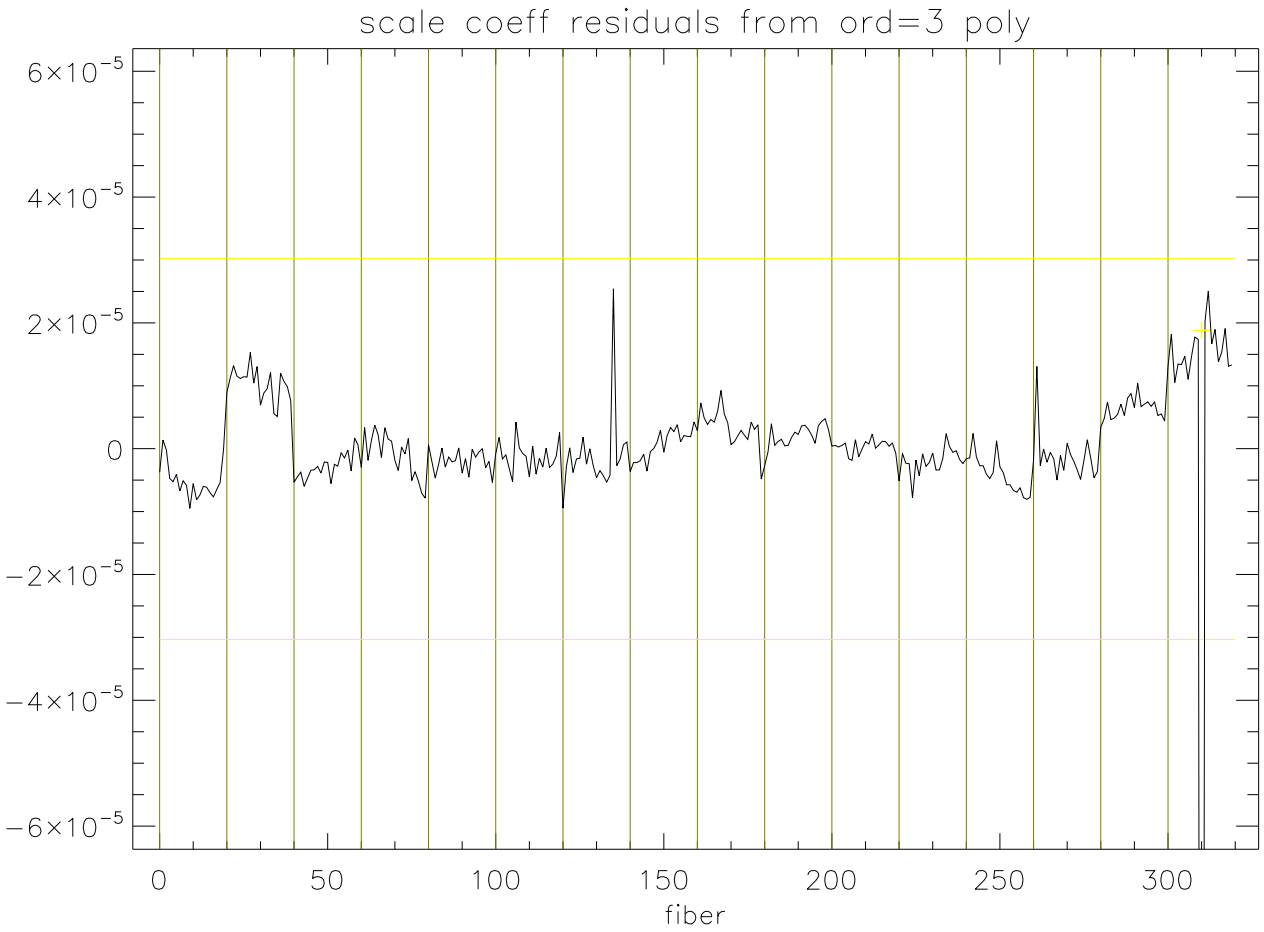

PLATE=2639 MJD=54455 sdR-r1-00048204.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.45 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

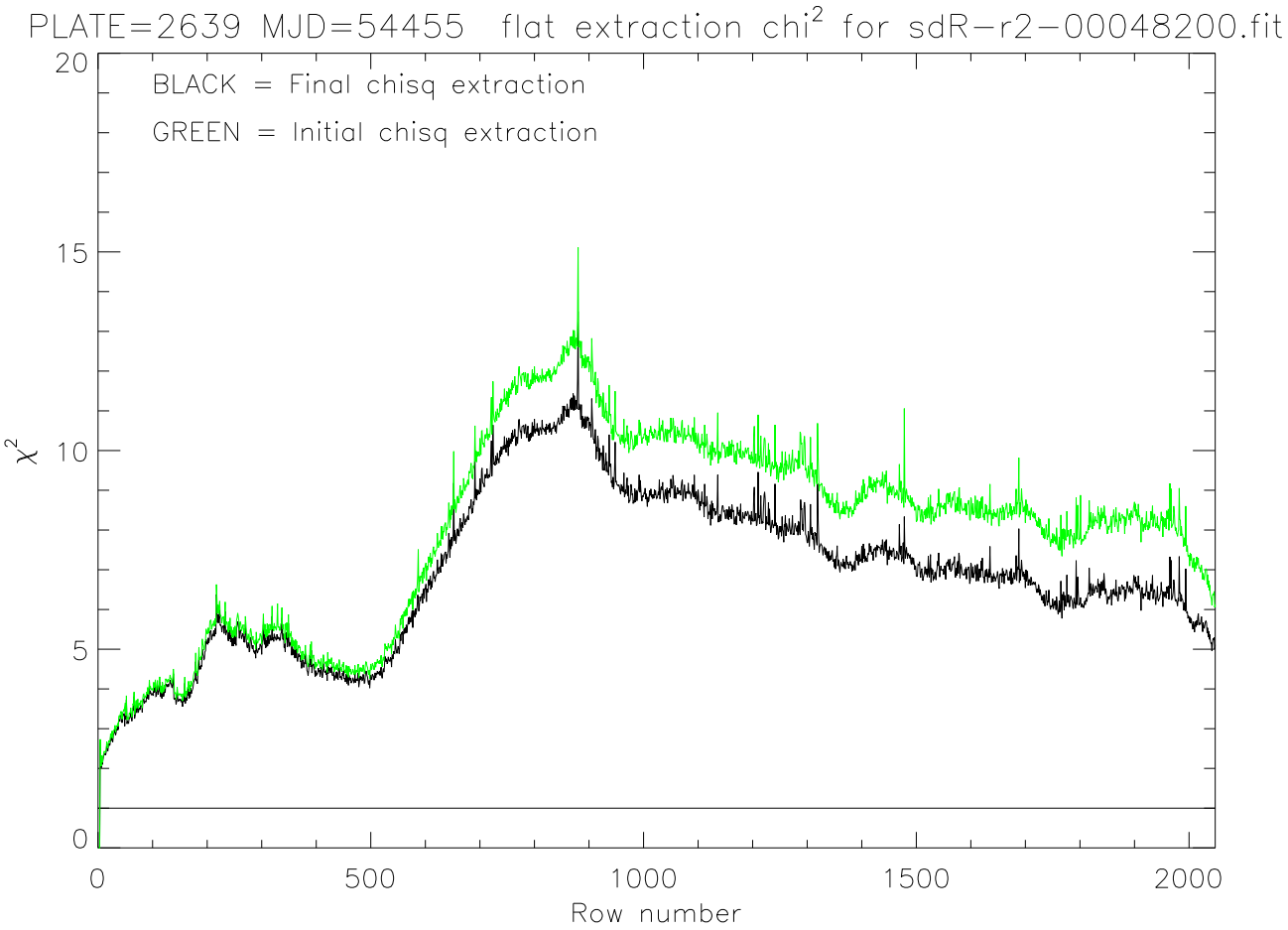

PLATE=2639 MJD=54455 sdR-r1-00048204.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.41 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

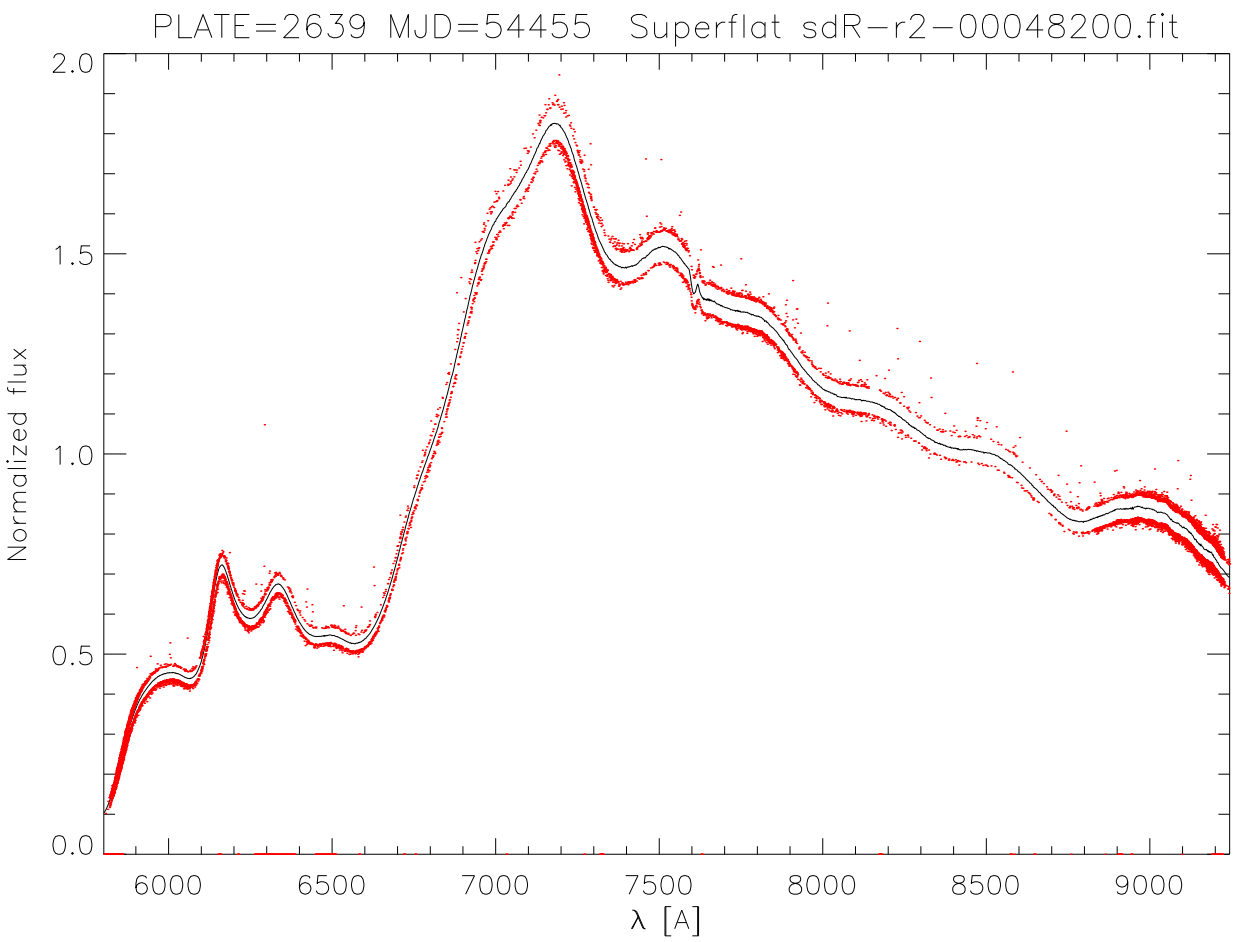

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

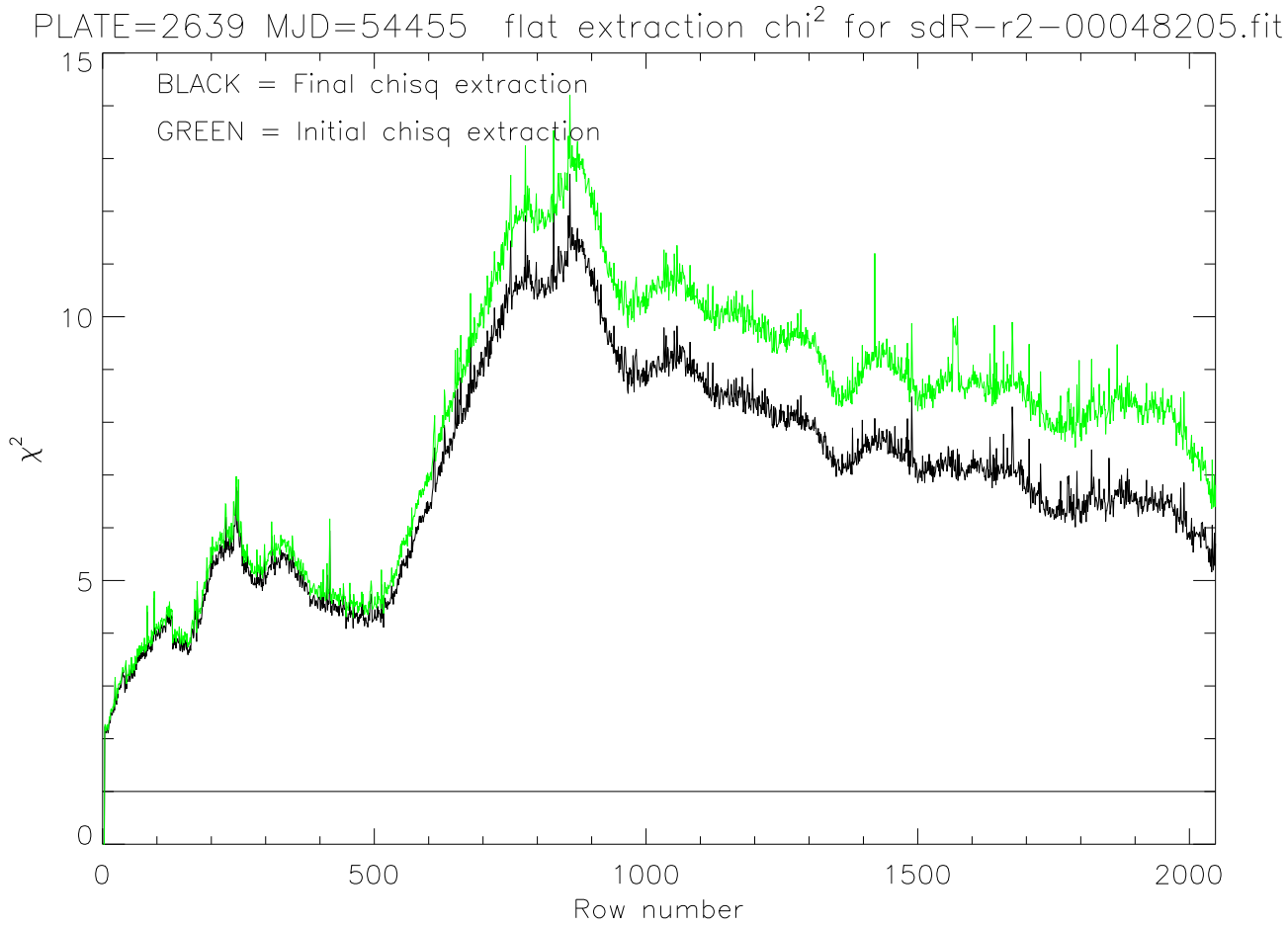

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

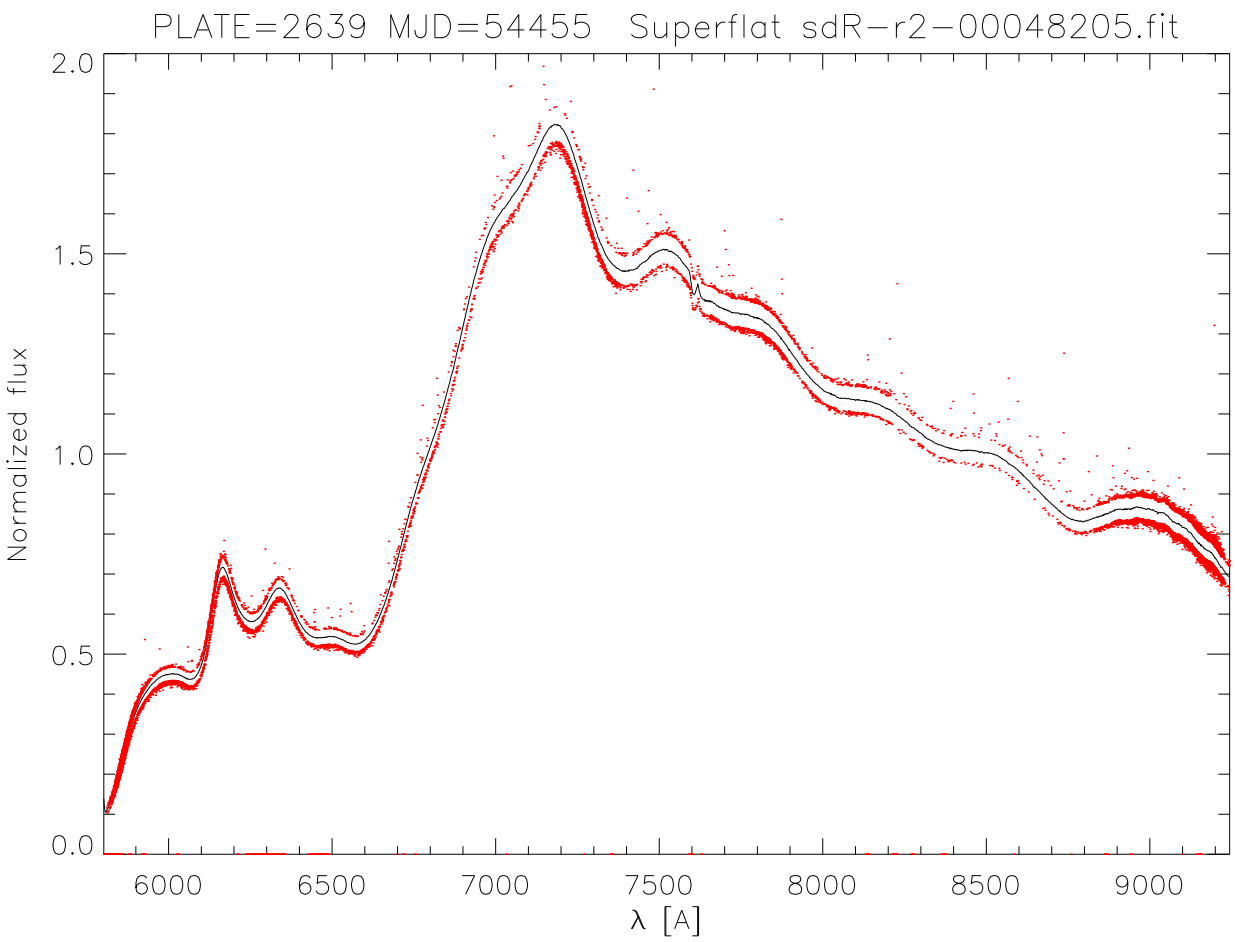

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

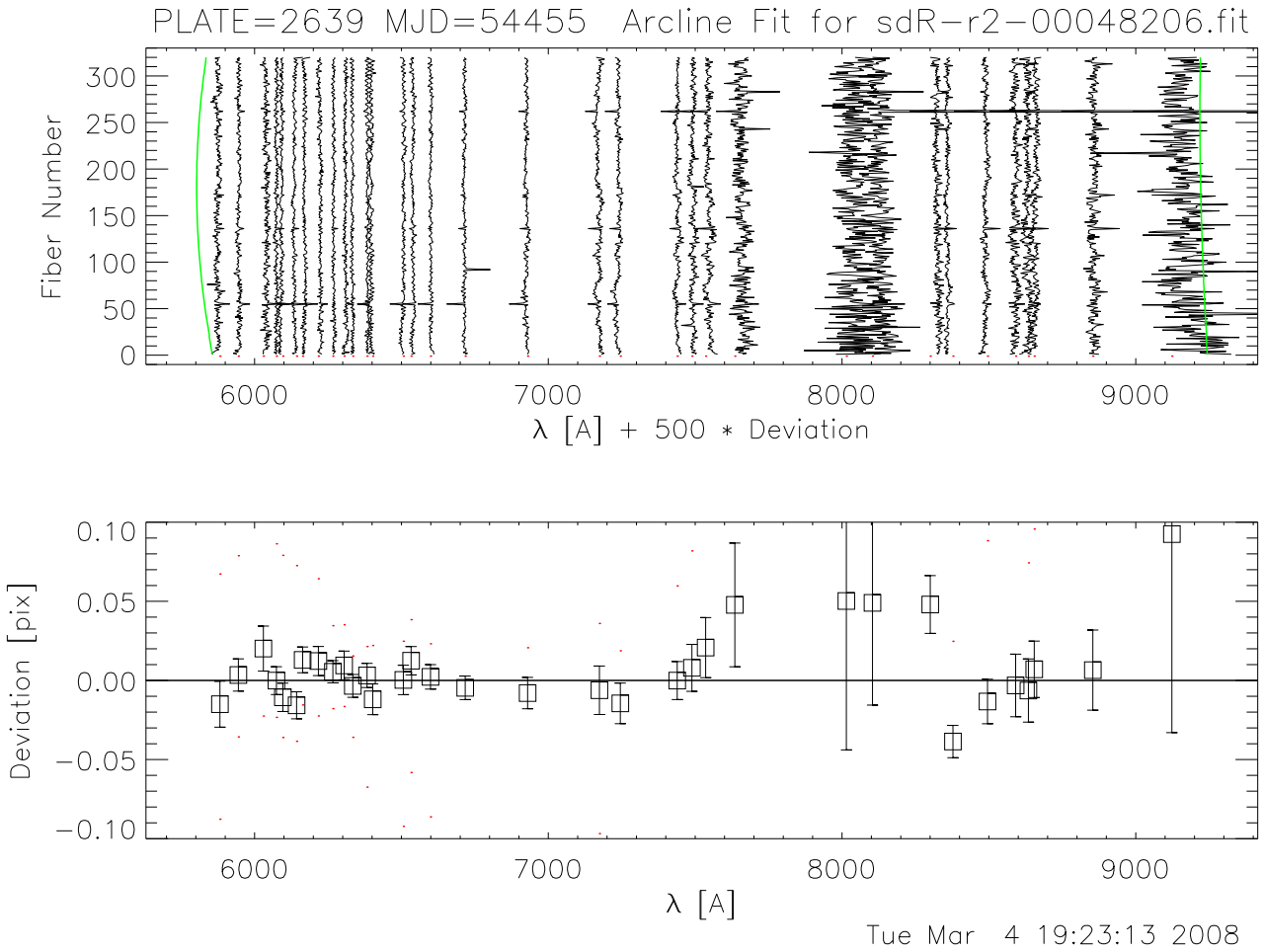

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

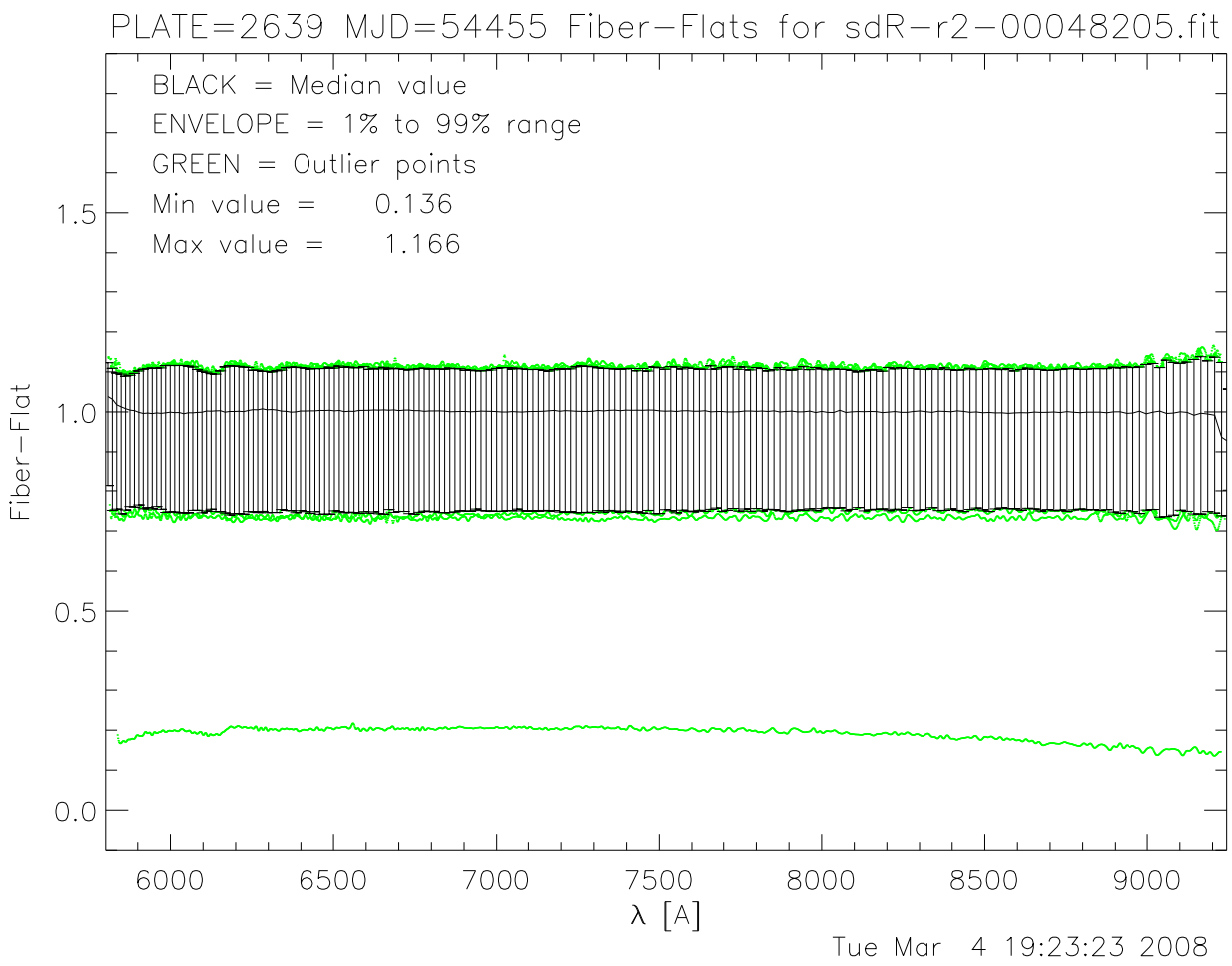

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−r2−00048200.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

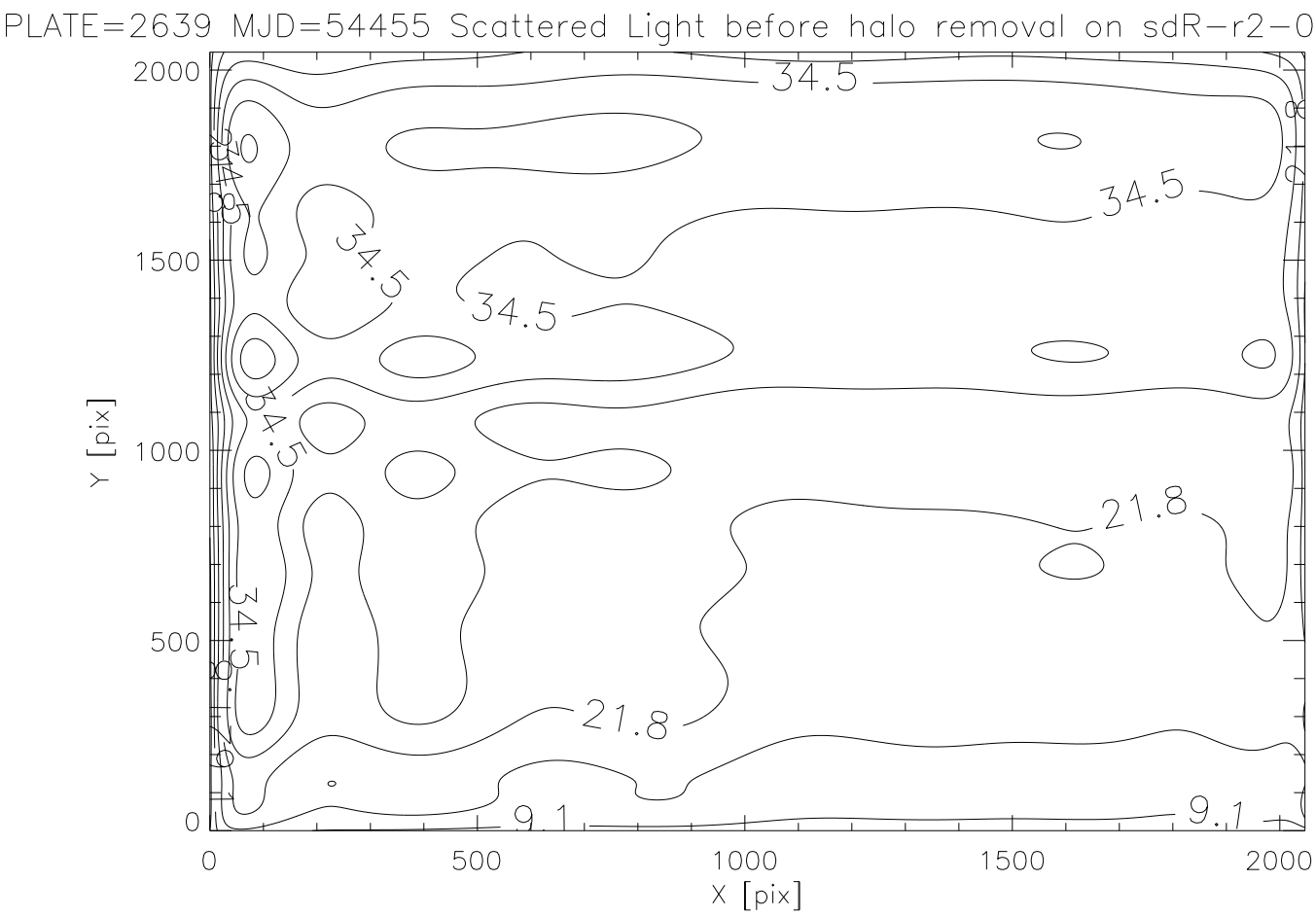

PLATE=2639 MJD=54455 Superflat sdR-r2-00048200.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

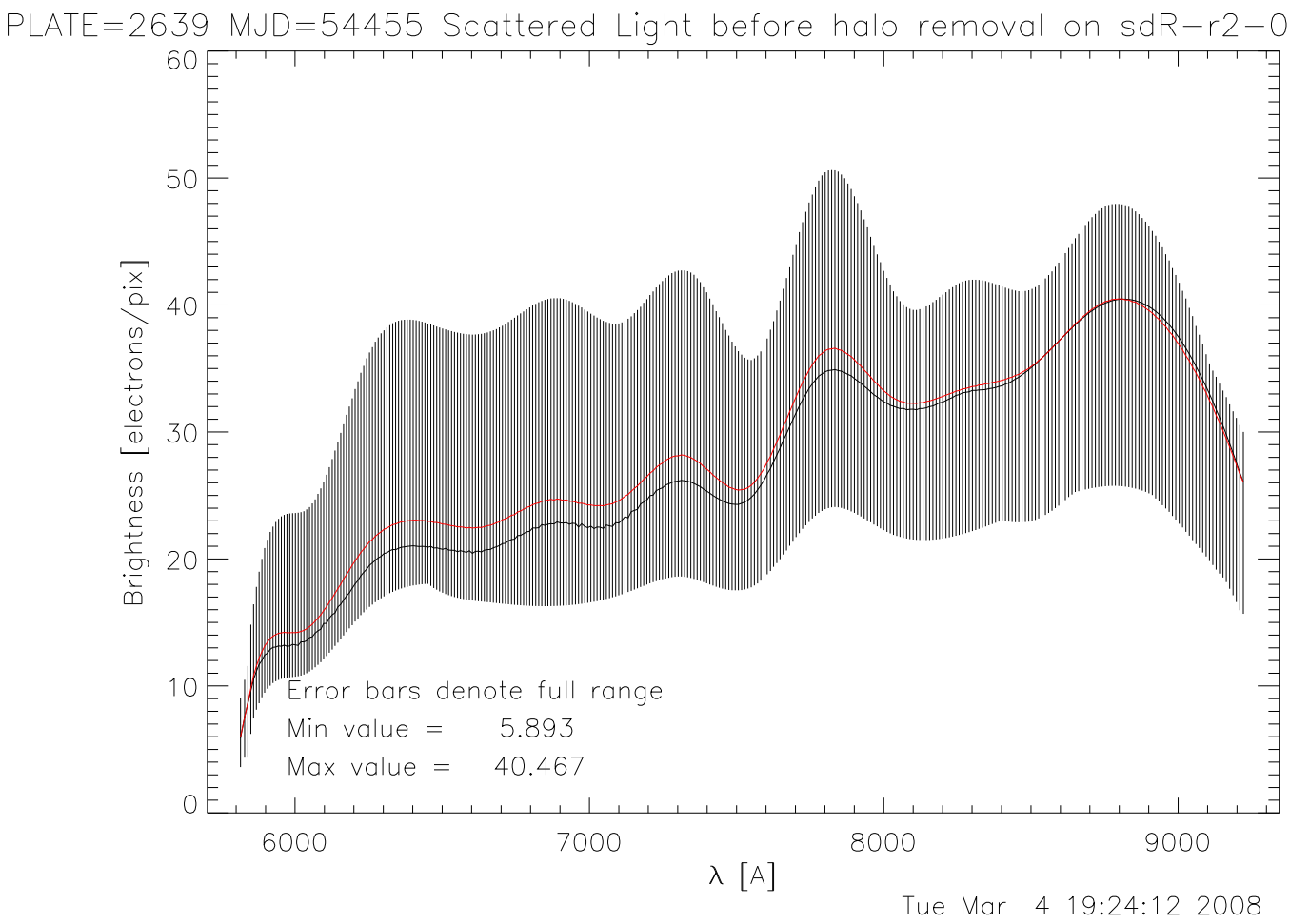

PLATE=2639 MJD=54455 flat extraction chi^2 for sdR−r2−00048205.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

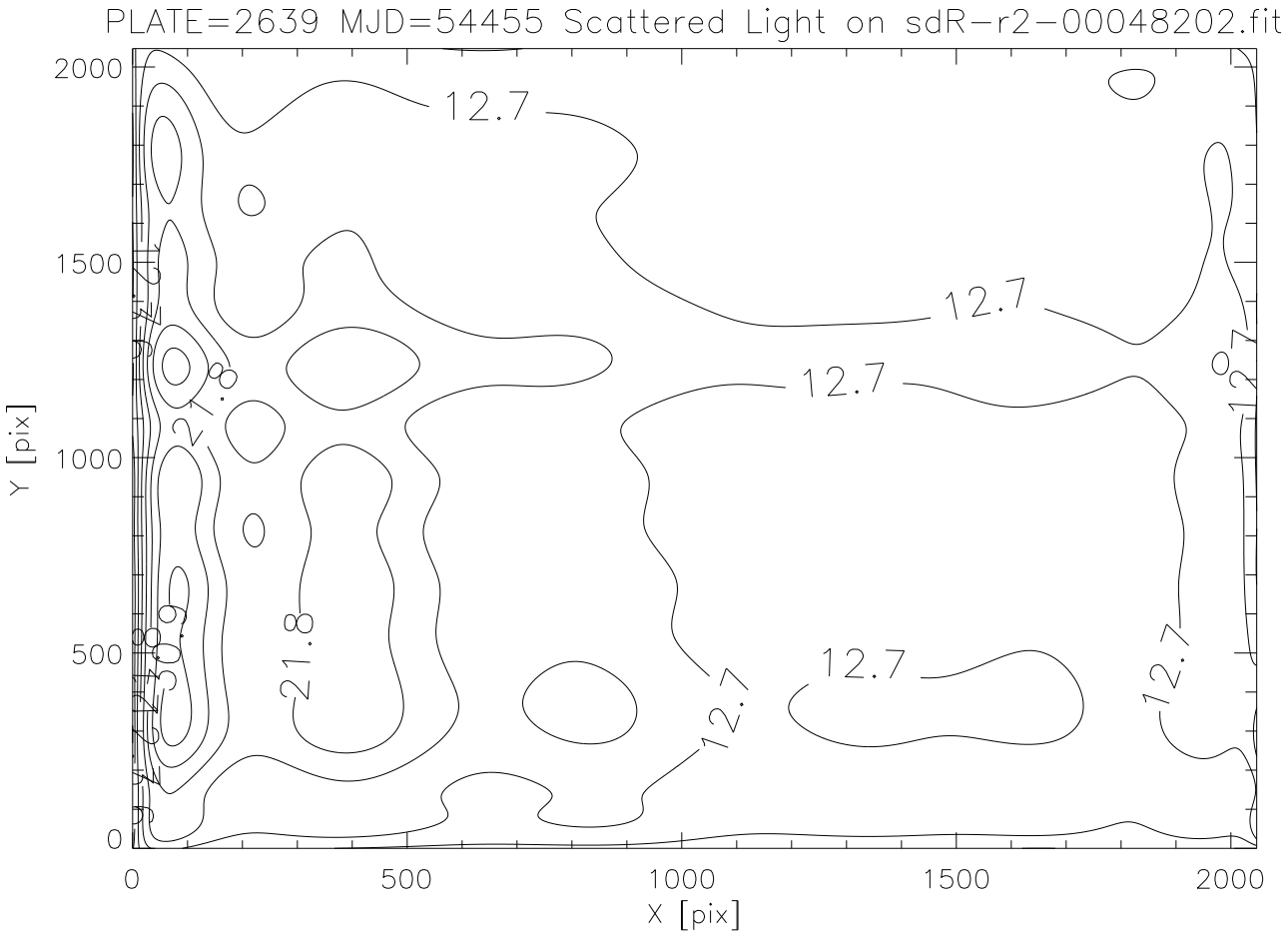

PLATE=2639 MJD=54455 Superflat sdR-r2-00048205.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

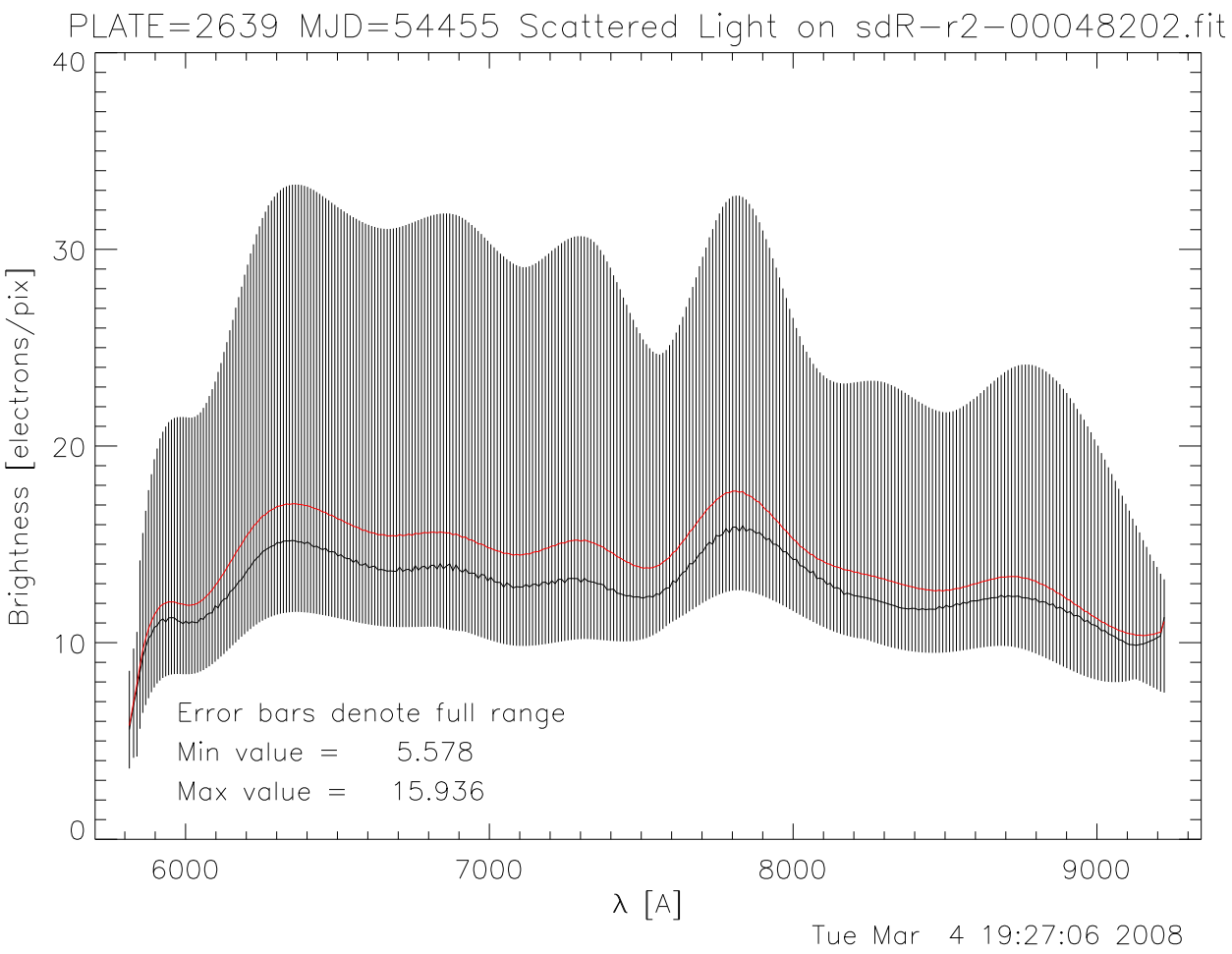

PLATE=2639 MJD=54455 Arcline Fit for sdR-r2-00048206.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Mar 4 19:23:13 2008

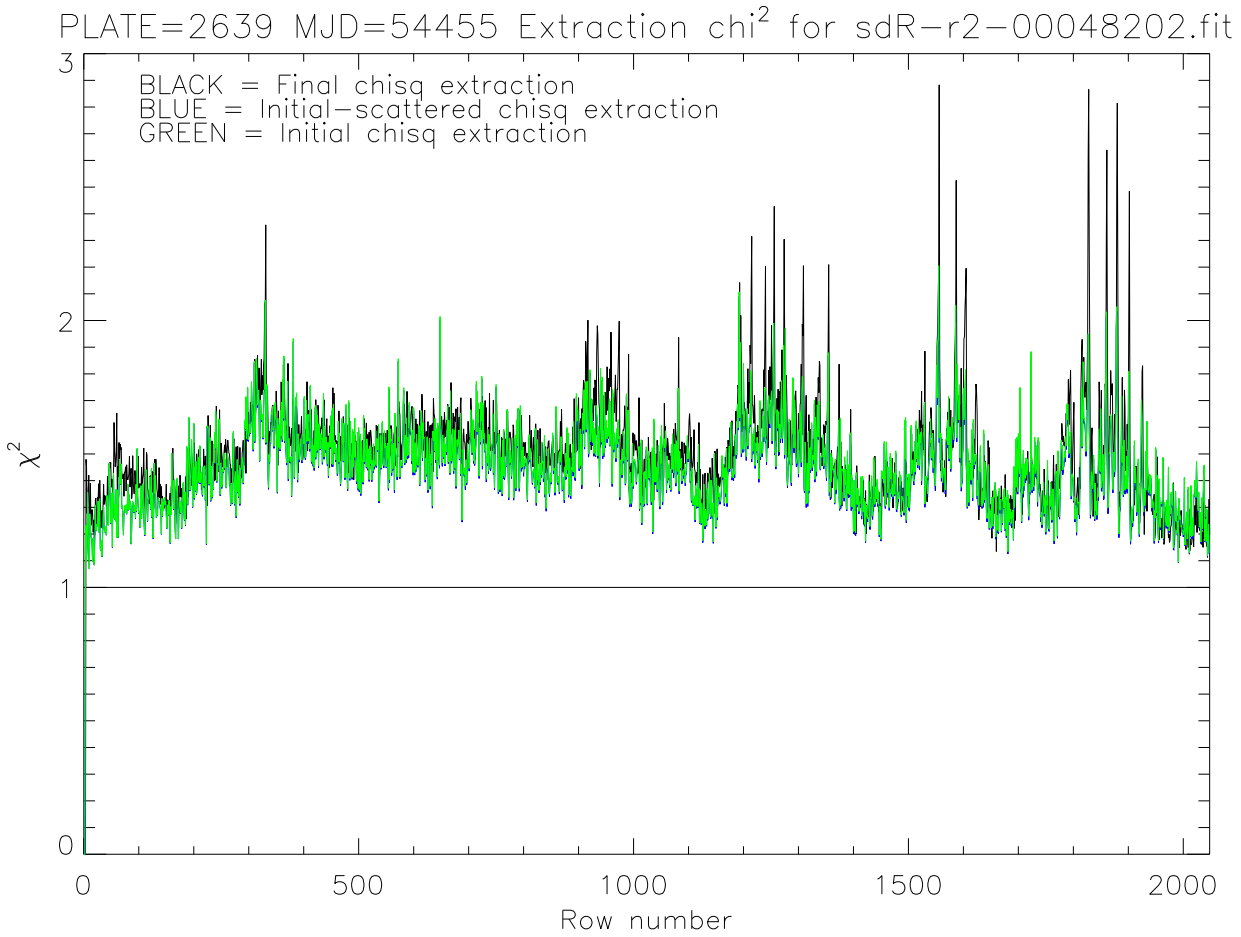

PLATE=2639 MJD=54455 Fiber−Flats for sdR−r2−00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.136
Max value = 1.166
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 19:23:23 2008

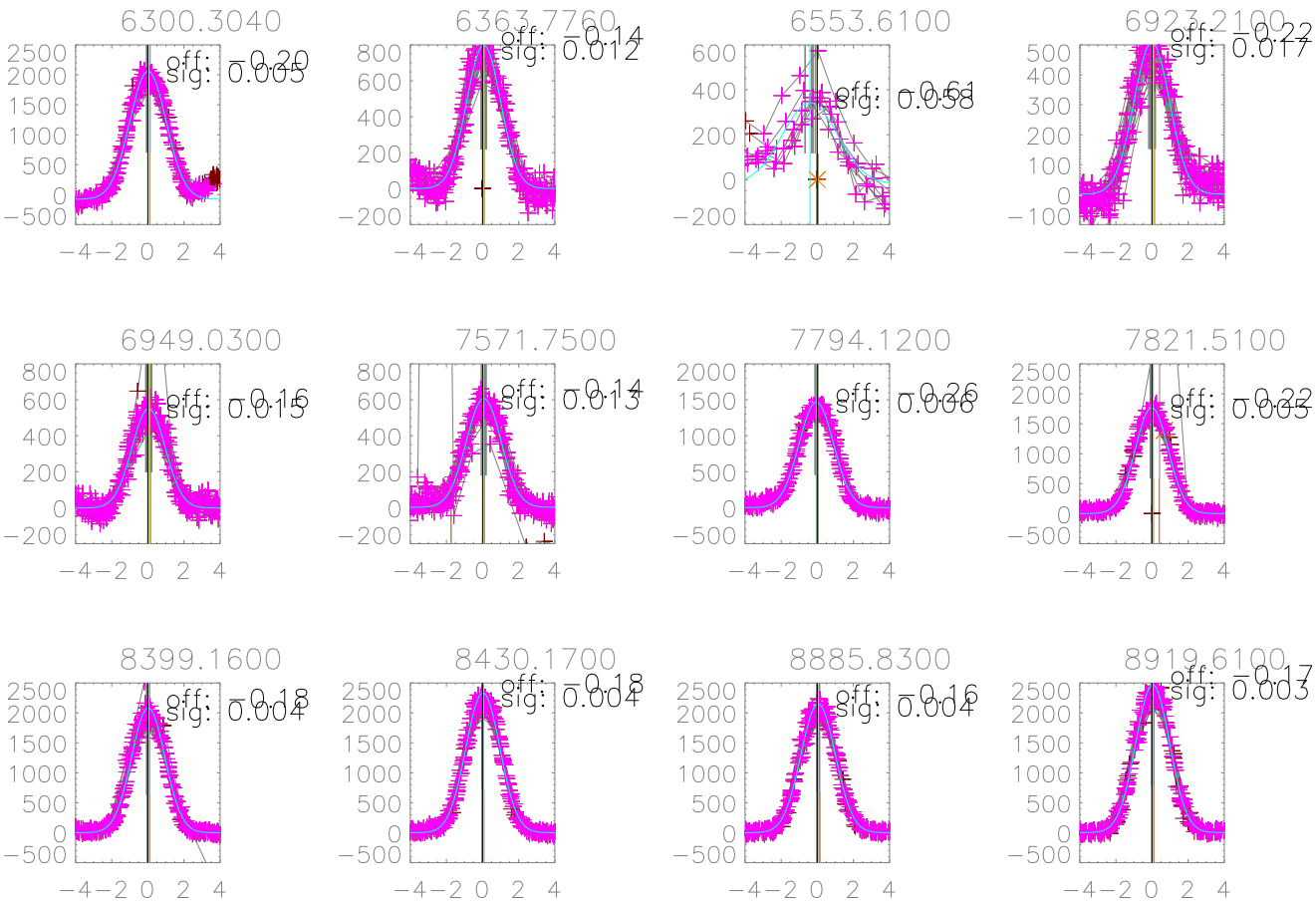

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048202.fi
34.5
34.5
34.5
34.5
34.5
34.5
21.8
21.8
9.1
9.1
0
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

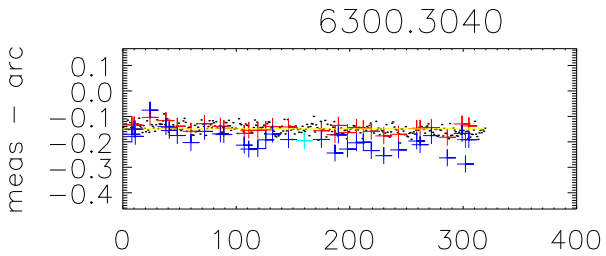

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048202.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.893
Max value = 40.467
Tue Mar 4 19:24:12 2008

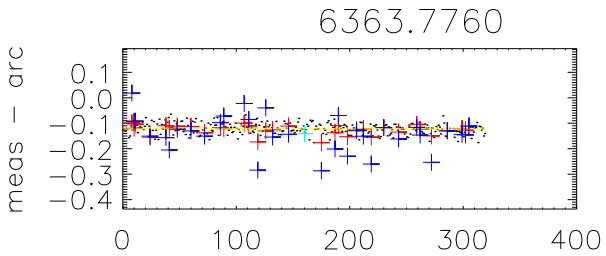

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048202.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8

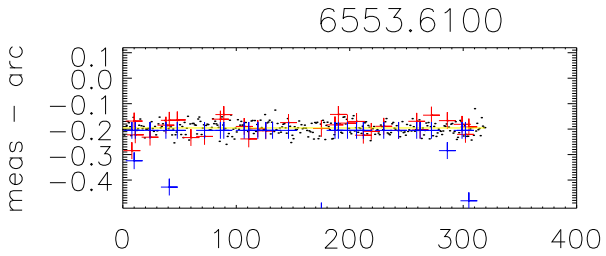

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048202.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.578
Max value = 15.936
Tue Mar 4 19:27:06 2008

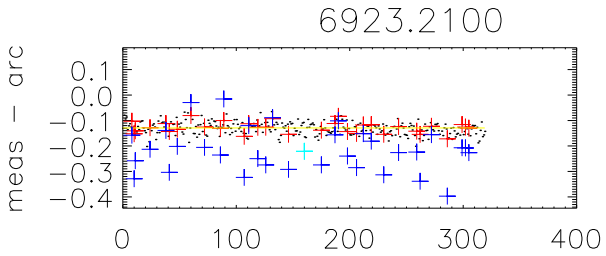

PLATE=2639 MJD=54455 Extraction chi^2 for sdR−r2−00048202.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

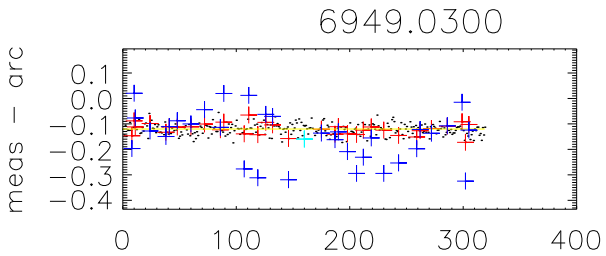

6300.3040
off: −0.20
sig: 0.005
6363.7760
off: −0.14
sig: 0.012
6553.6100
off: −0.61
sig: 0.058
6923.2100
off: −0.22
sig: 0.017
6949.0300
off: −0.16
sig: 0.015
7571.7500
off: −0.14
sig: 0.013
7794.1200
off: −0.26
sig: 0.006
7821.5100
off: −0.22
sig: 0.005
8399.1600
off: −0.18
sig: 0.004
8430.1700
off: −0.18
sig: 0.004
8885.8300
off: −0.16
sig: 0.004
8919.6100
off: −0.17
sig: 0.003

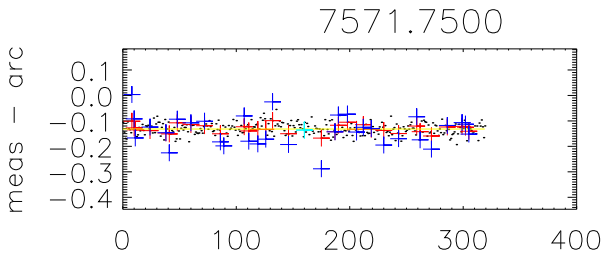

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

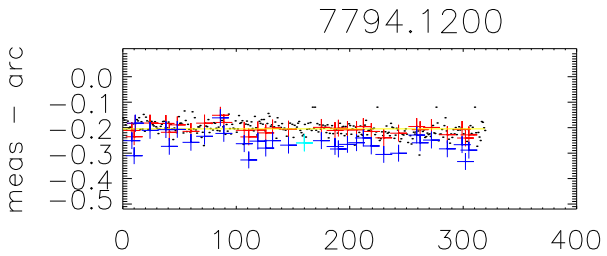

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

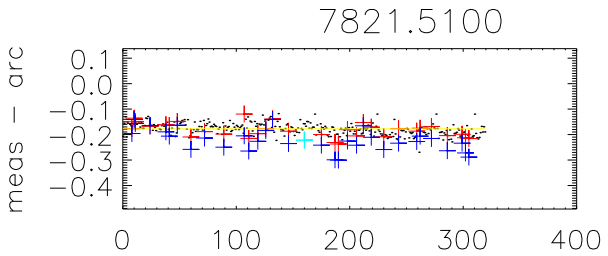

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

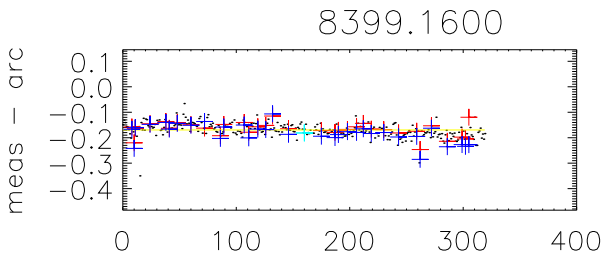

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

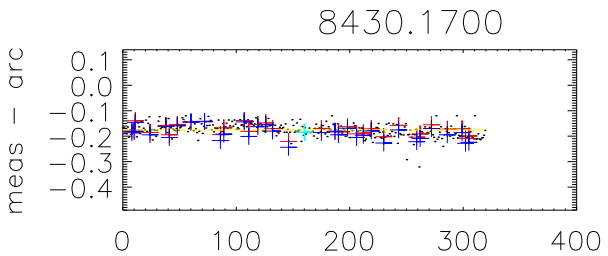

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

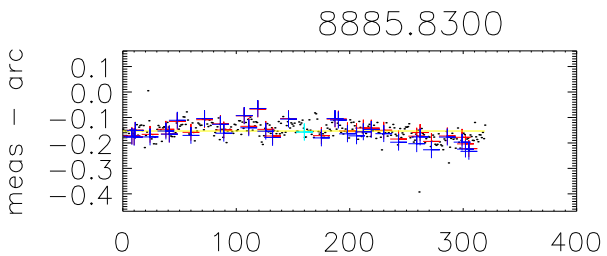

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

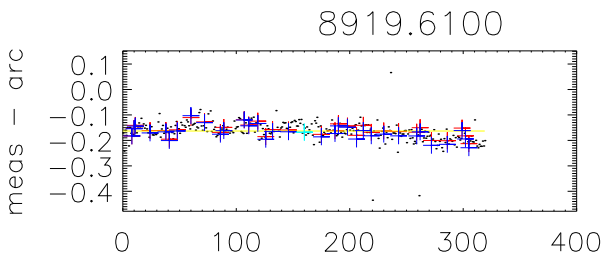

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

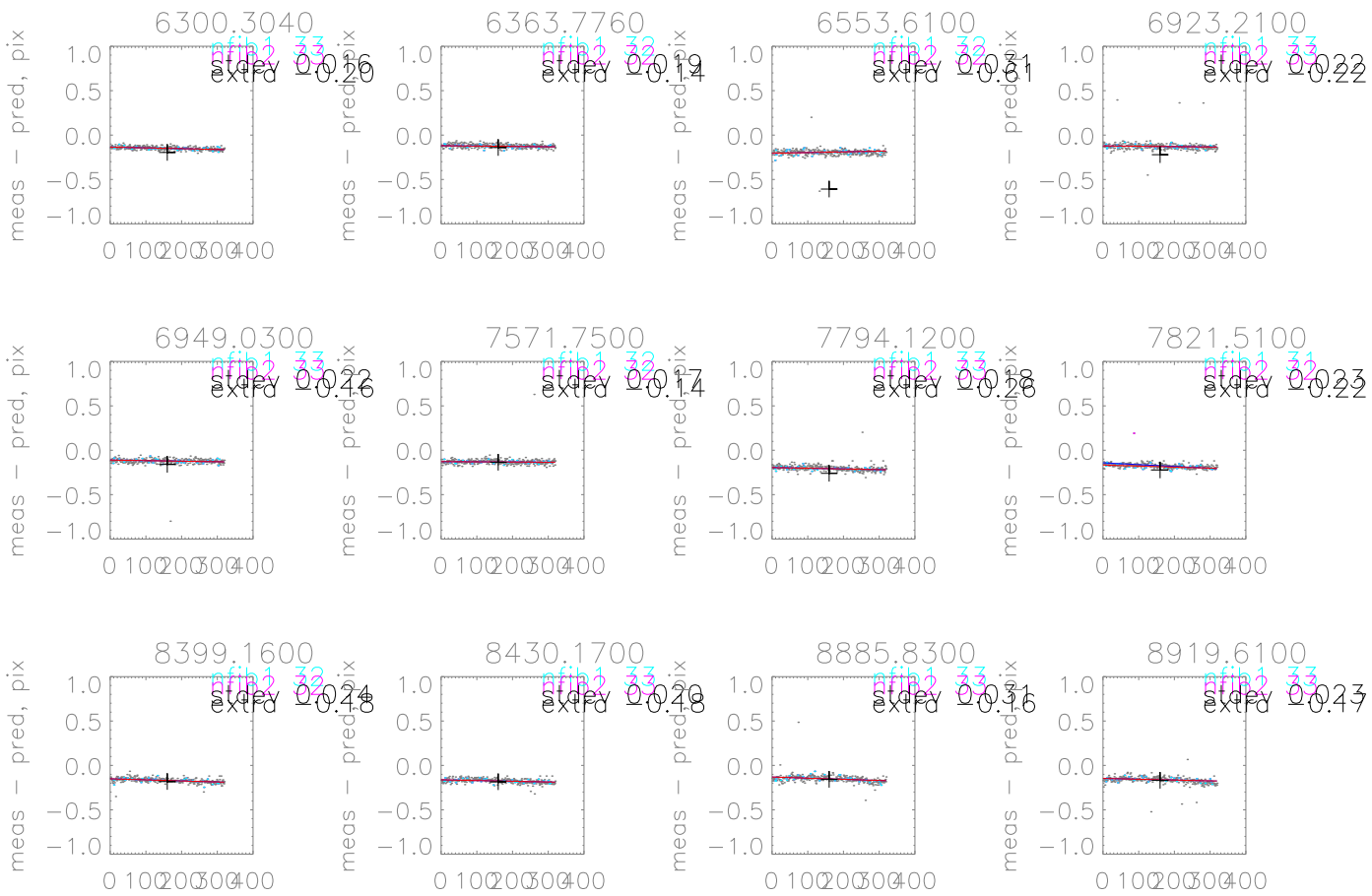

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

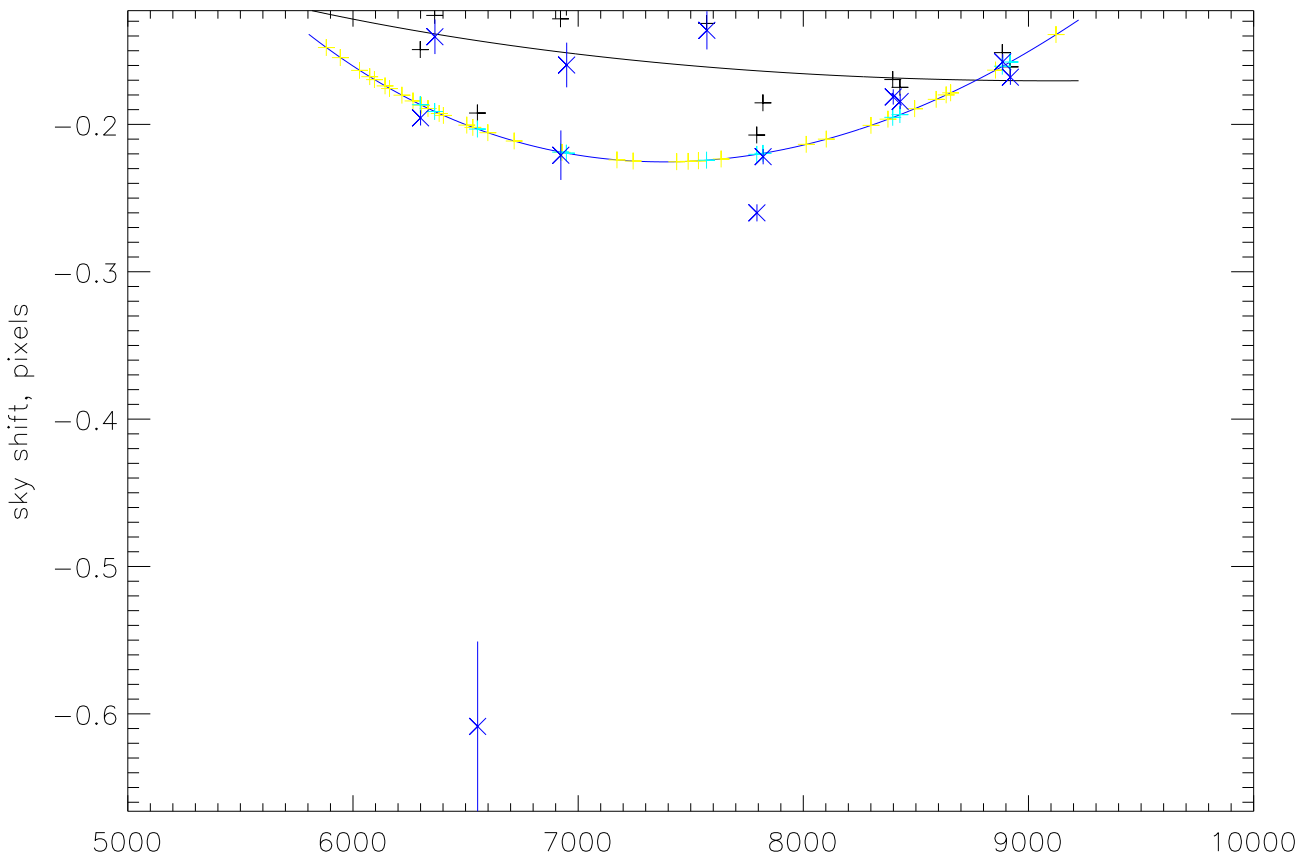

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

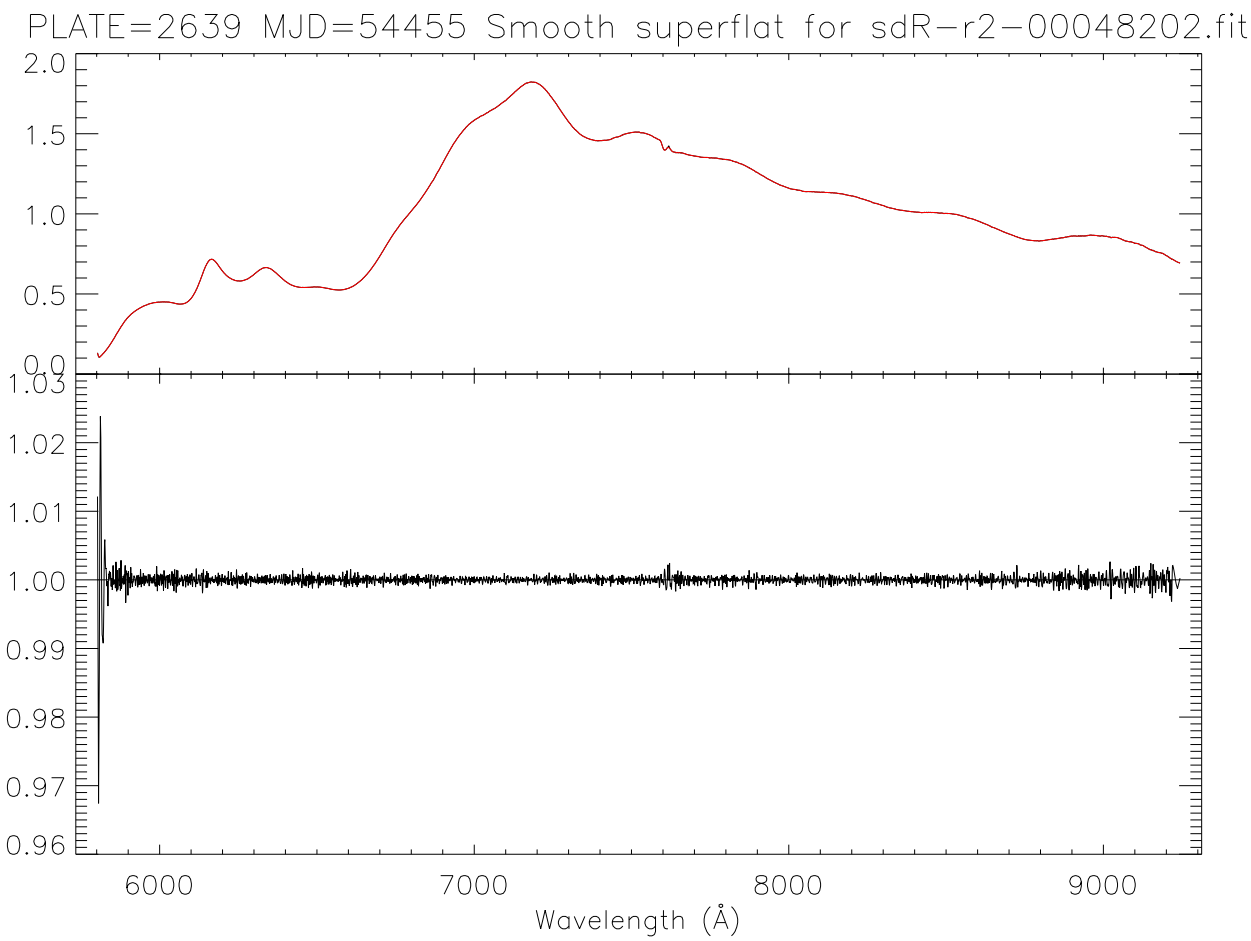

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

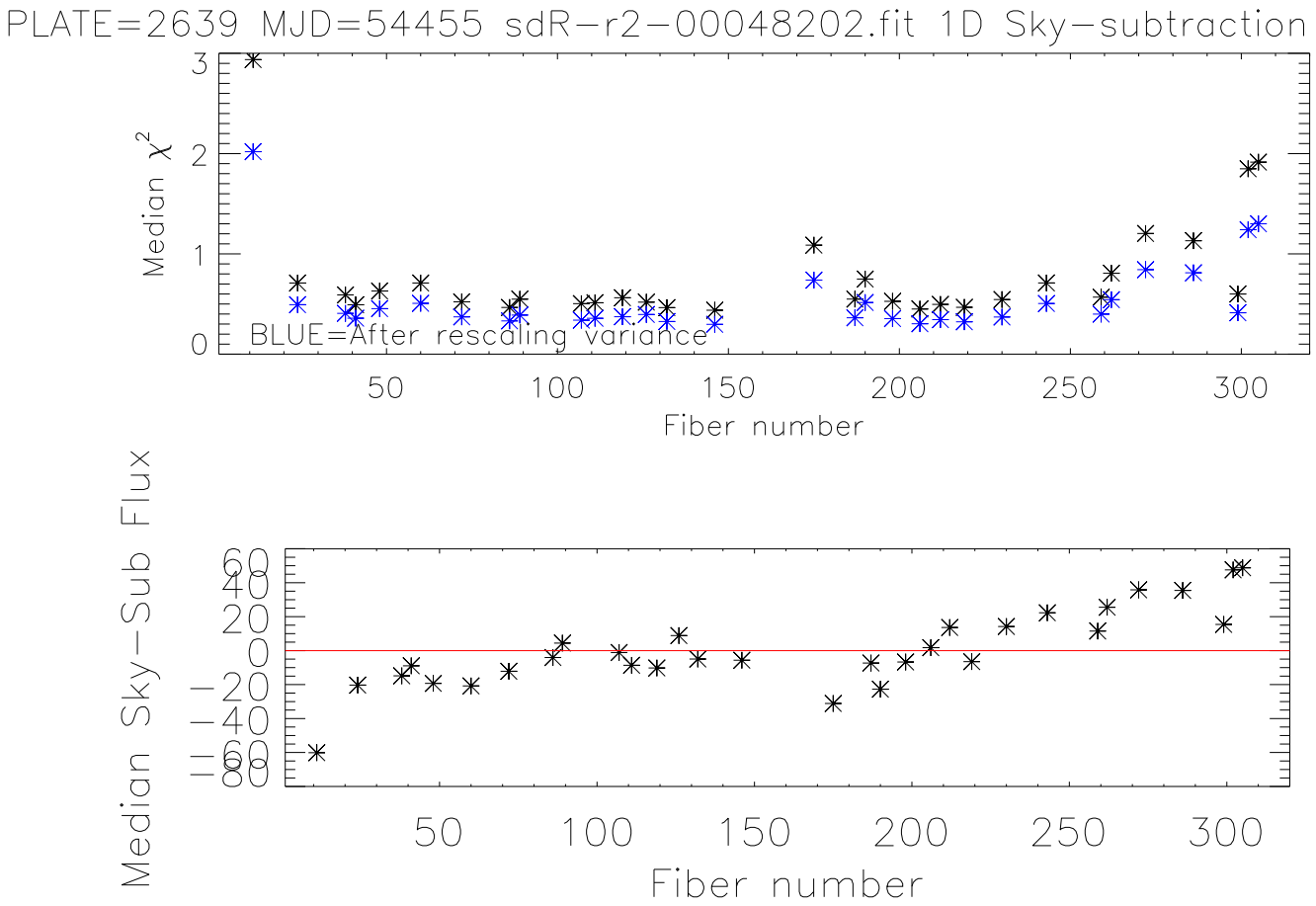

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

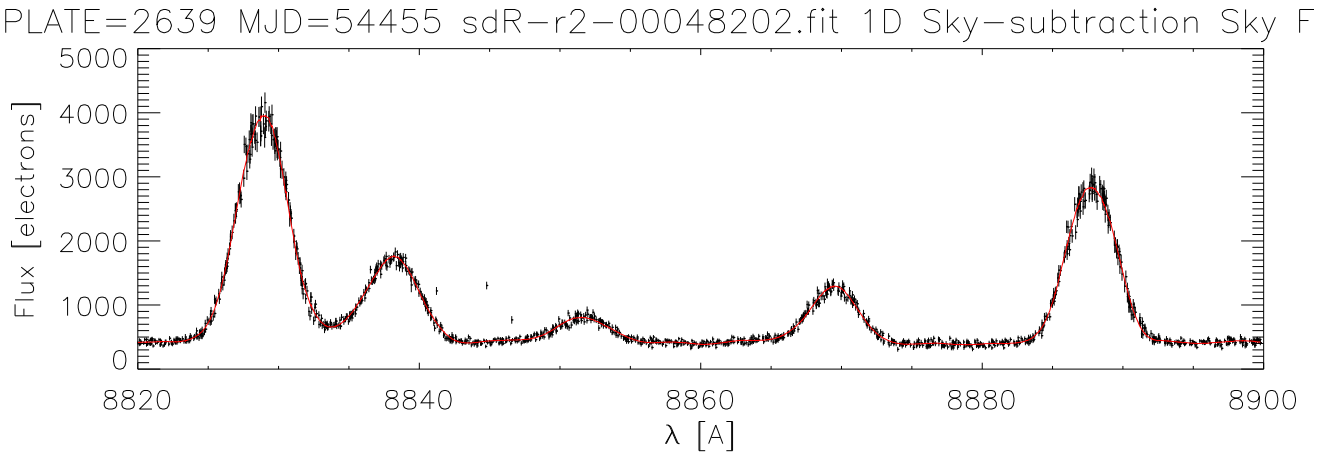

6300.3040
mfib1 33
mfib2 33
stdev 0.026
extra −0.20
6363.7760
mfib1 32
mfib2 32
stdev 0.019
extra −0.14
6553.6100
mfib1 32
mfib2 32
stdev 0.031
extra −0.81
6923.2100
mfib1 33
mfib2 33
stdev 0.022
extra −0.22
6949.0300
mfib1 33
mfib2 33
stdev 0.022
extra −0.46
7571.7500
mfib1 32
mfib2 32
stdev 0.017
extra −0.14
7794.1200
mfib1 33
mfib2 33
stdev 0.028
extra −0.28
7821.5100
mfib1 31
mfib2 32
stdev 0.023
extra −0.22
8399.1600
mfib1 32
mfib2 32
stdev 0.024
extra −0.48
8430.1700
mfib1 33
mfib2 33
stdev 0.020
extra −0.48
8885.8300
mfib1 33
mfib2 33
stdev 0.031
extra −0.16
8919.6100
mfib1 33
mfib2 33
stdev 0.023
extra −0.47
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

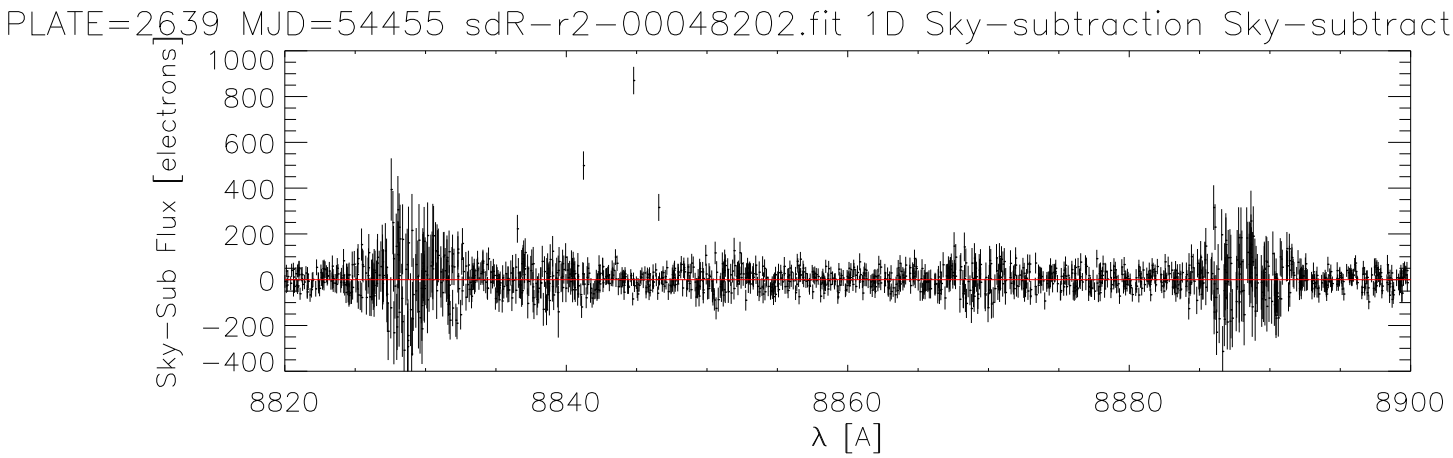

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
−0.6
5000
6000
7000
8000
9000
10000

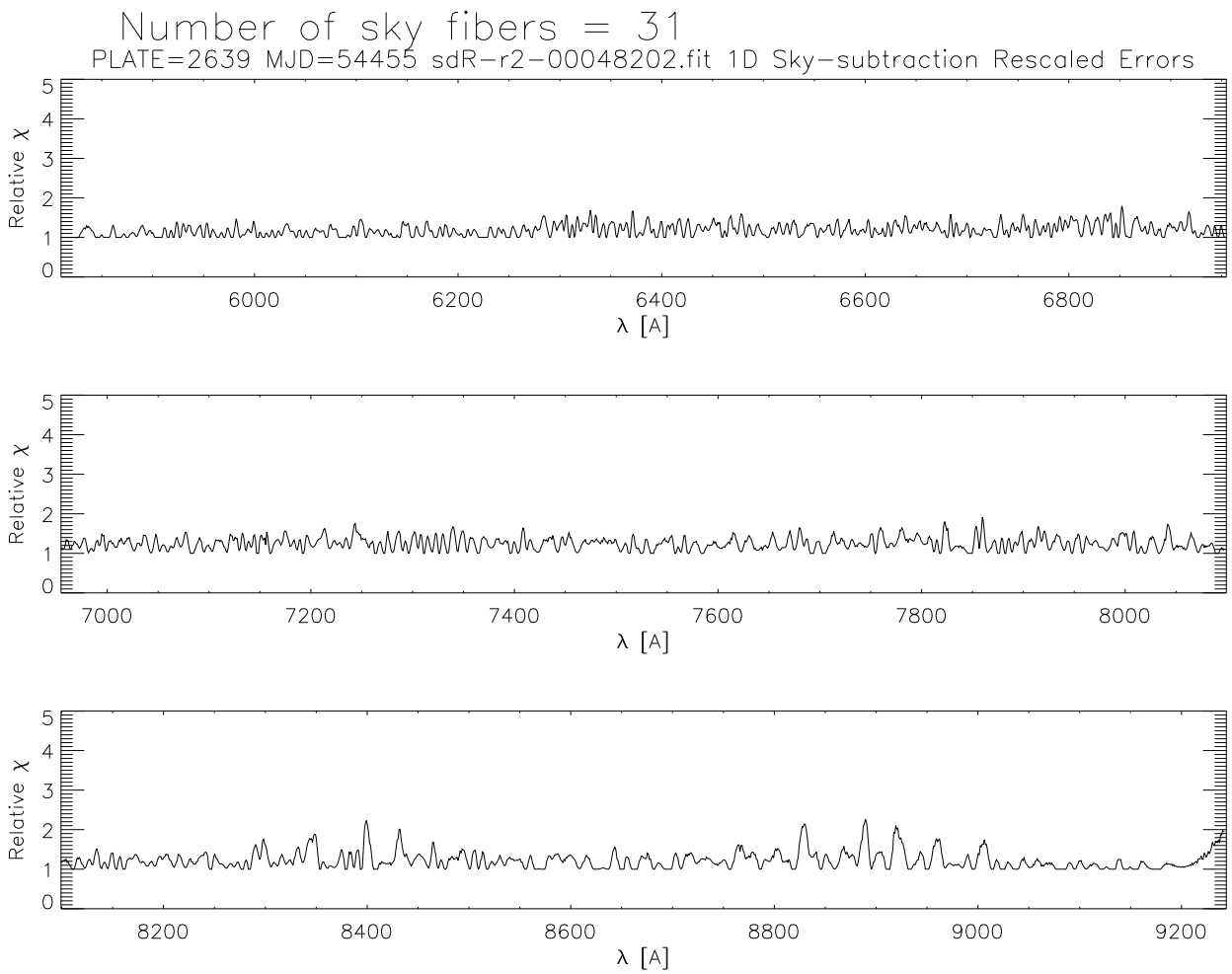
es= 0.0000

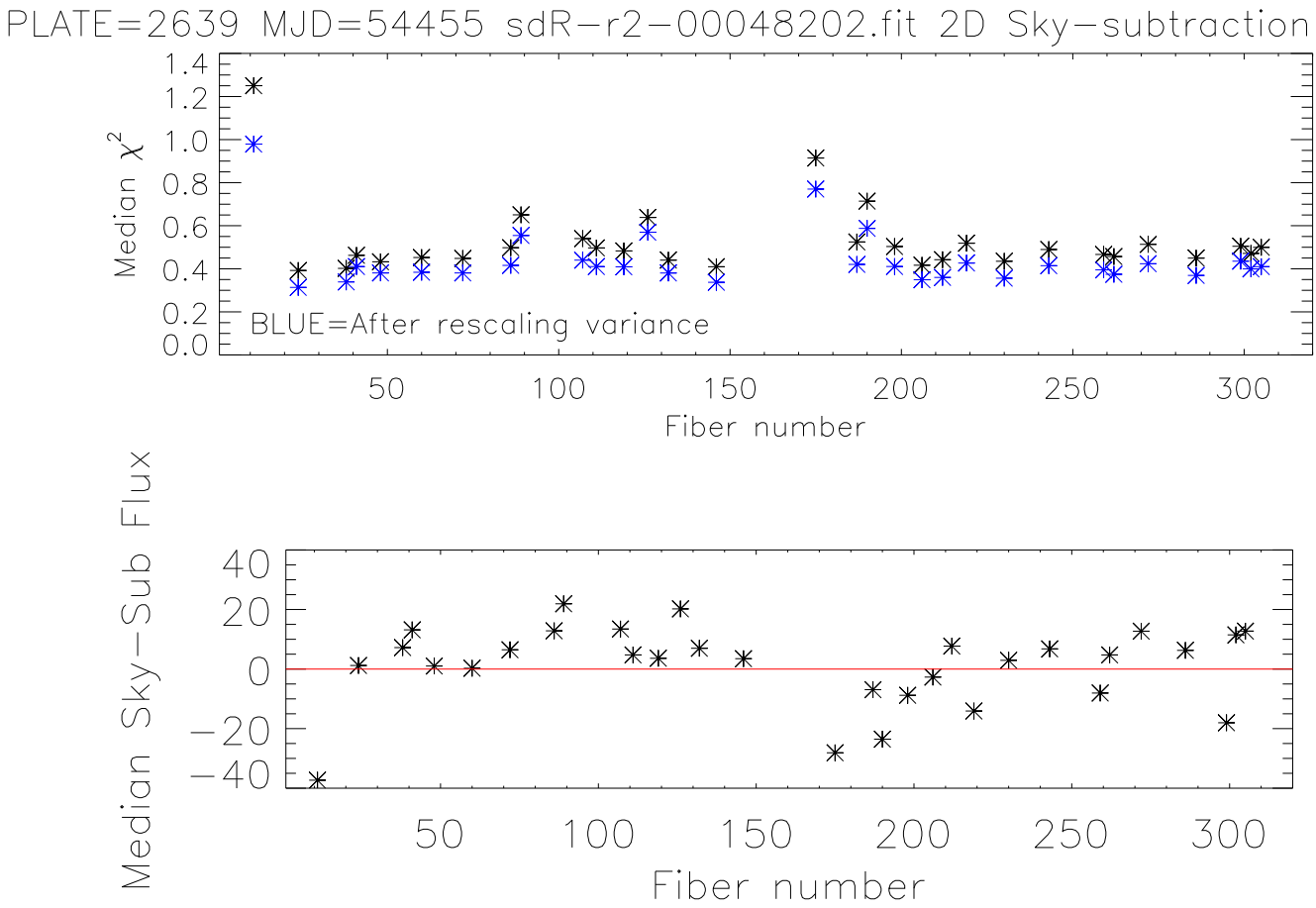

PLATE=2639 MJD=54455 Smooth superflat for sdR-r2-00048202.fit
2.0
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
0.96
6000
7000
8000
9000
Wavelength (Å)

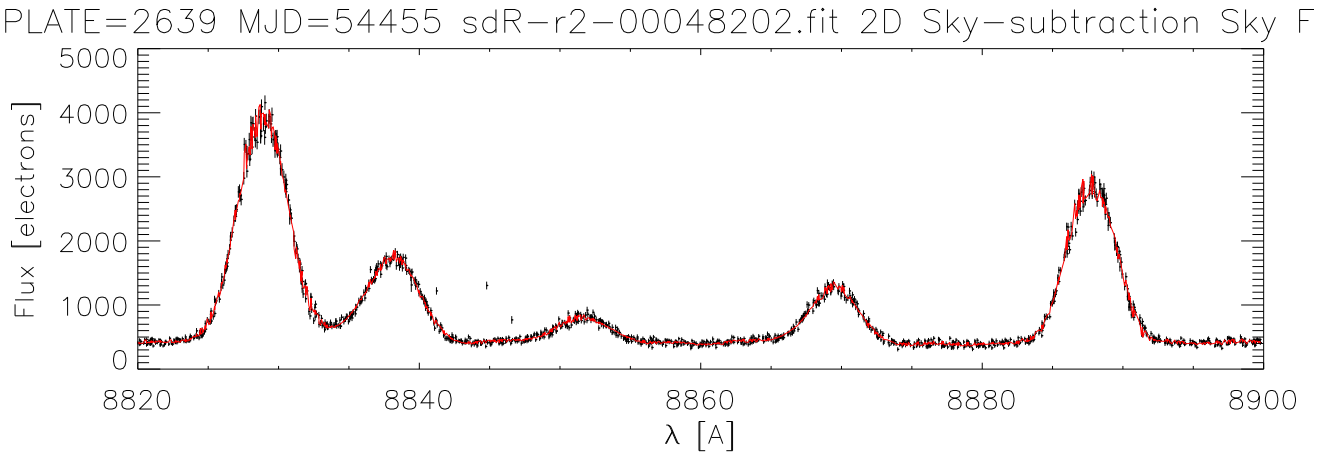

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

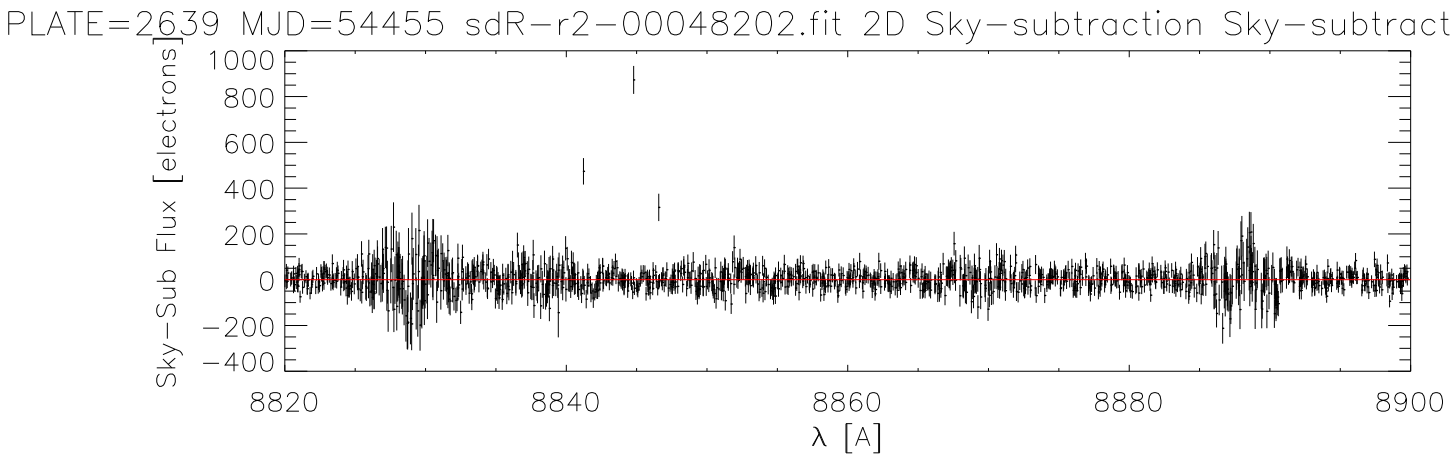

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

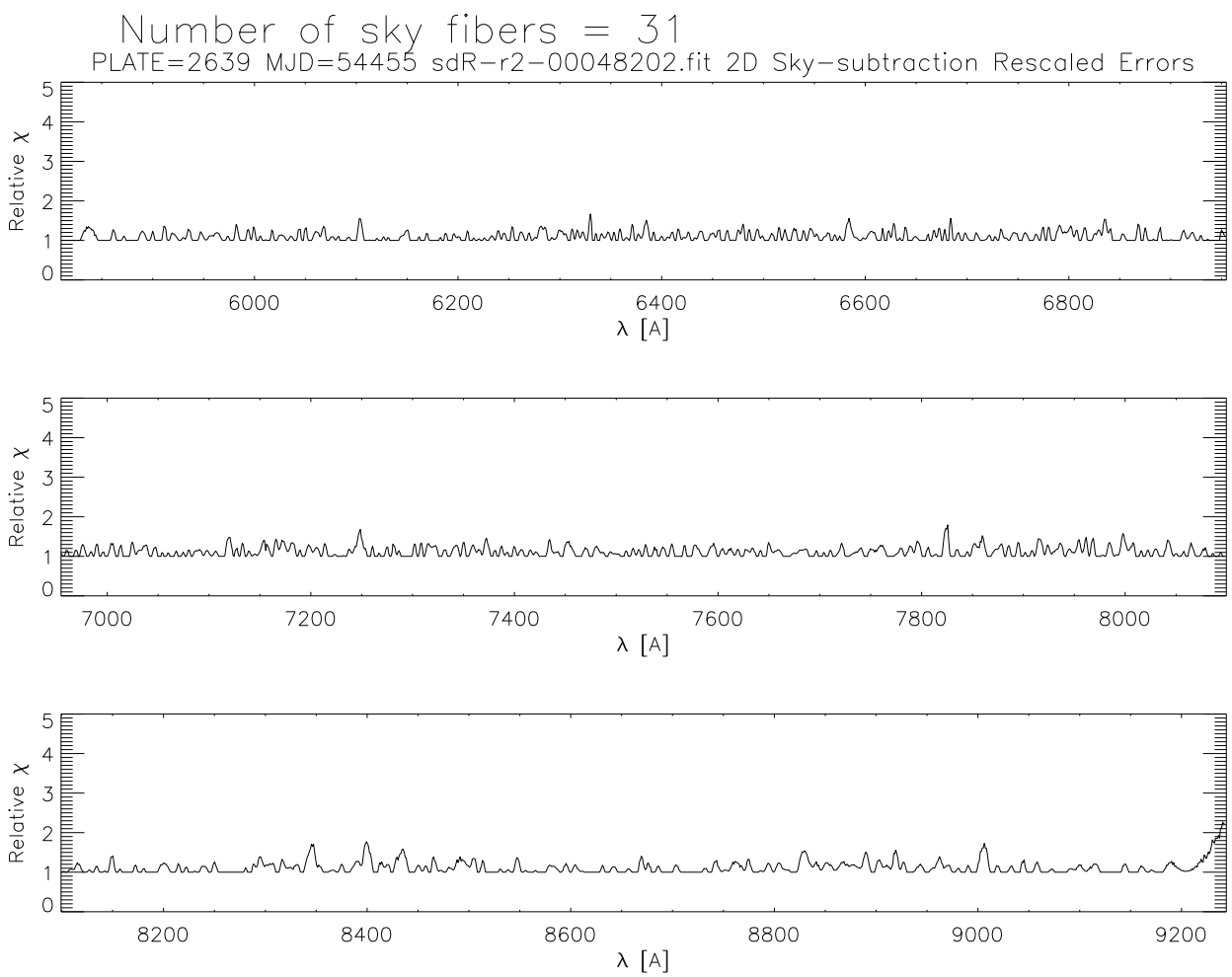

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

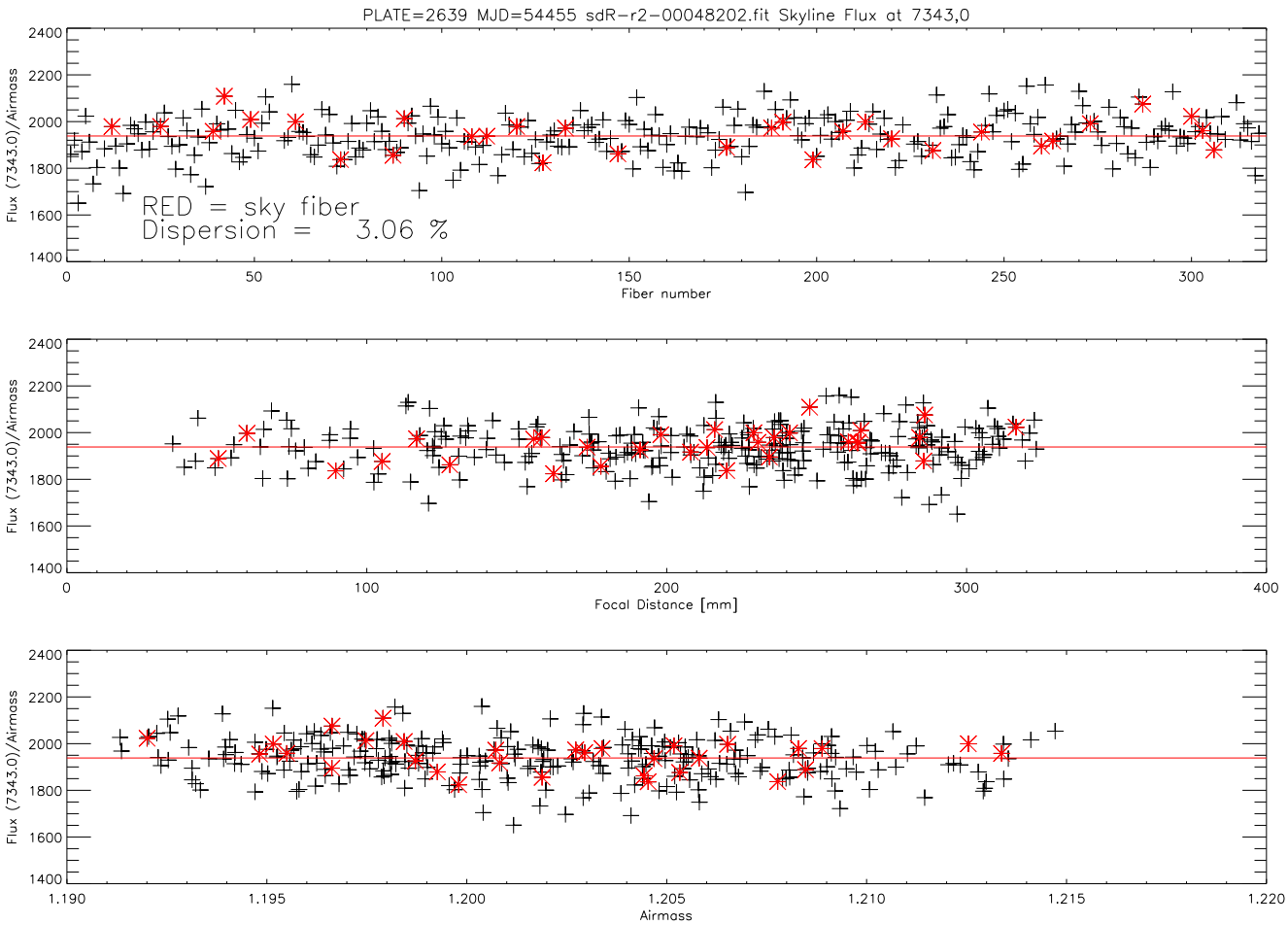

Number of sky fibers = 31
PLATE=2639 MJD=54455 sdR-r2-00048202.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

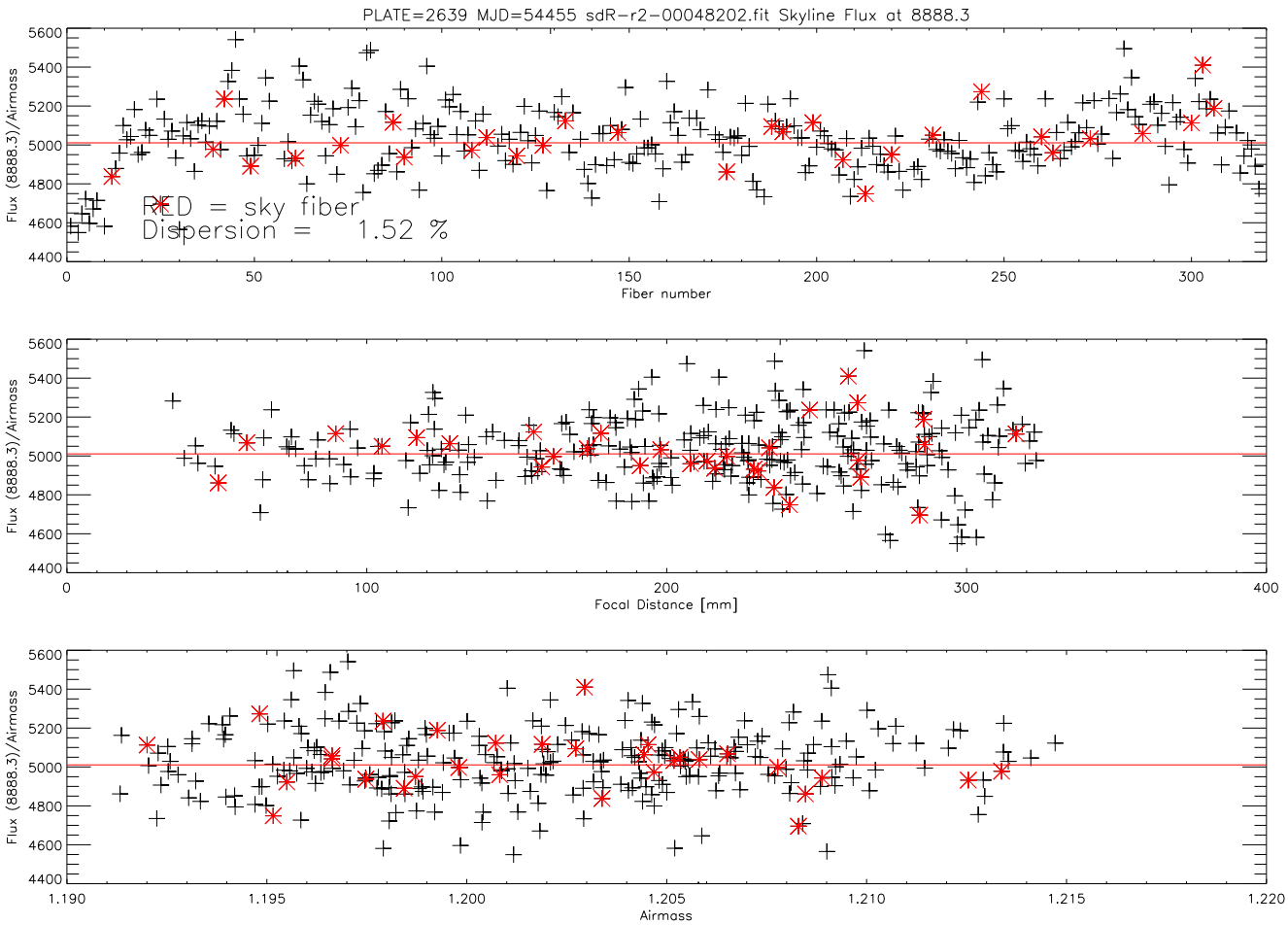

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

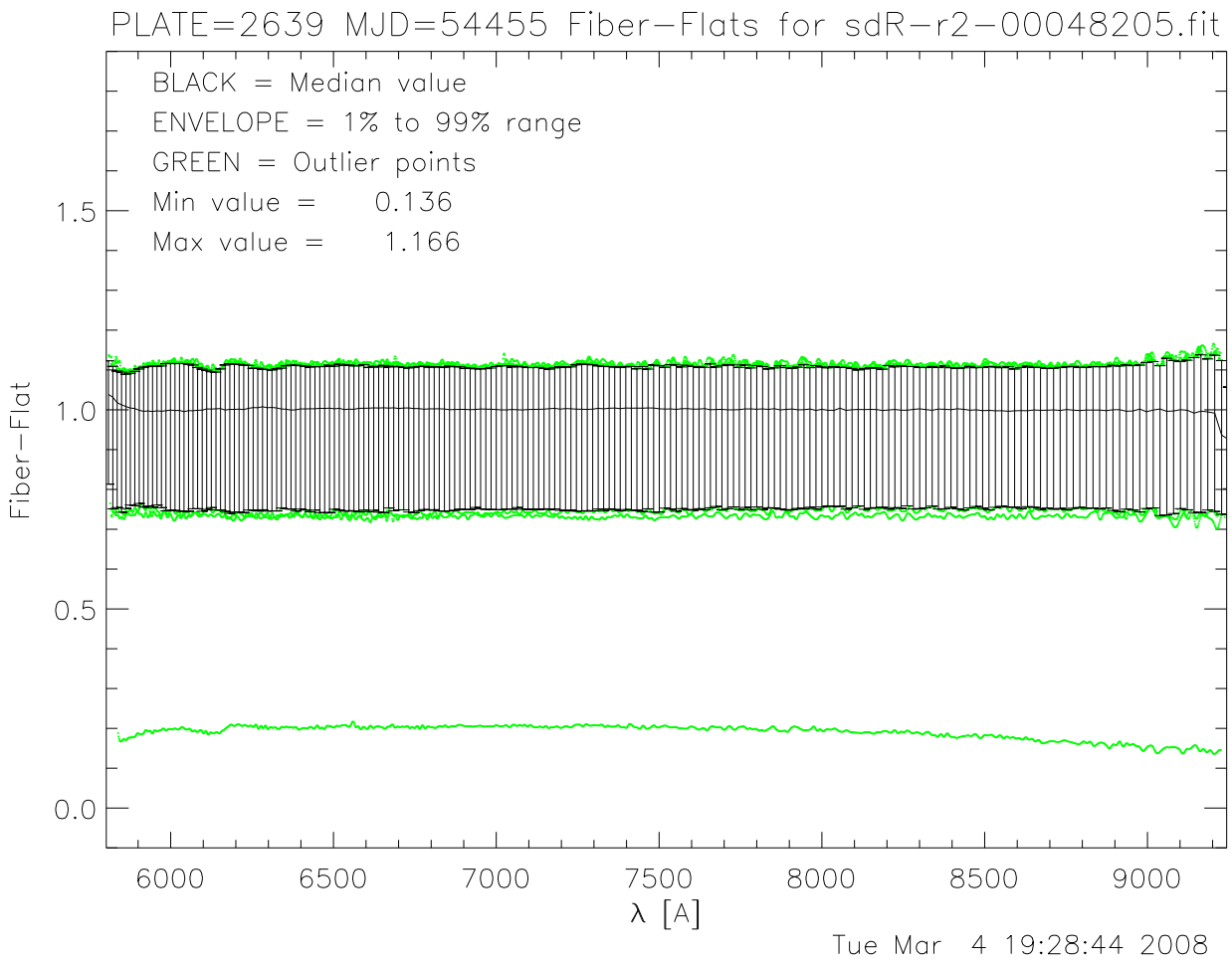

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

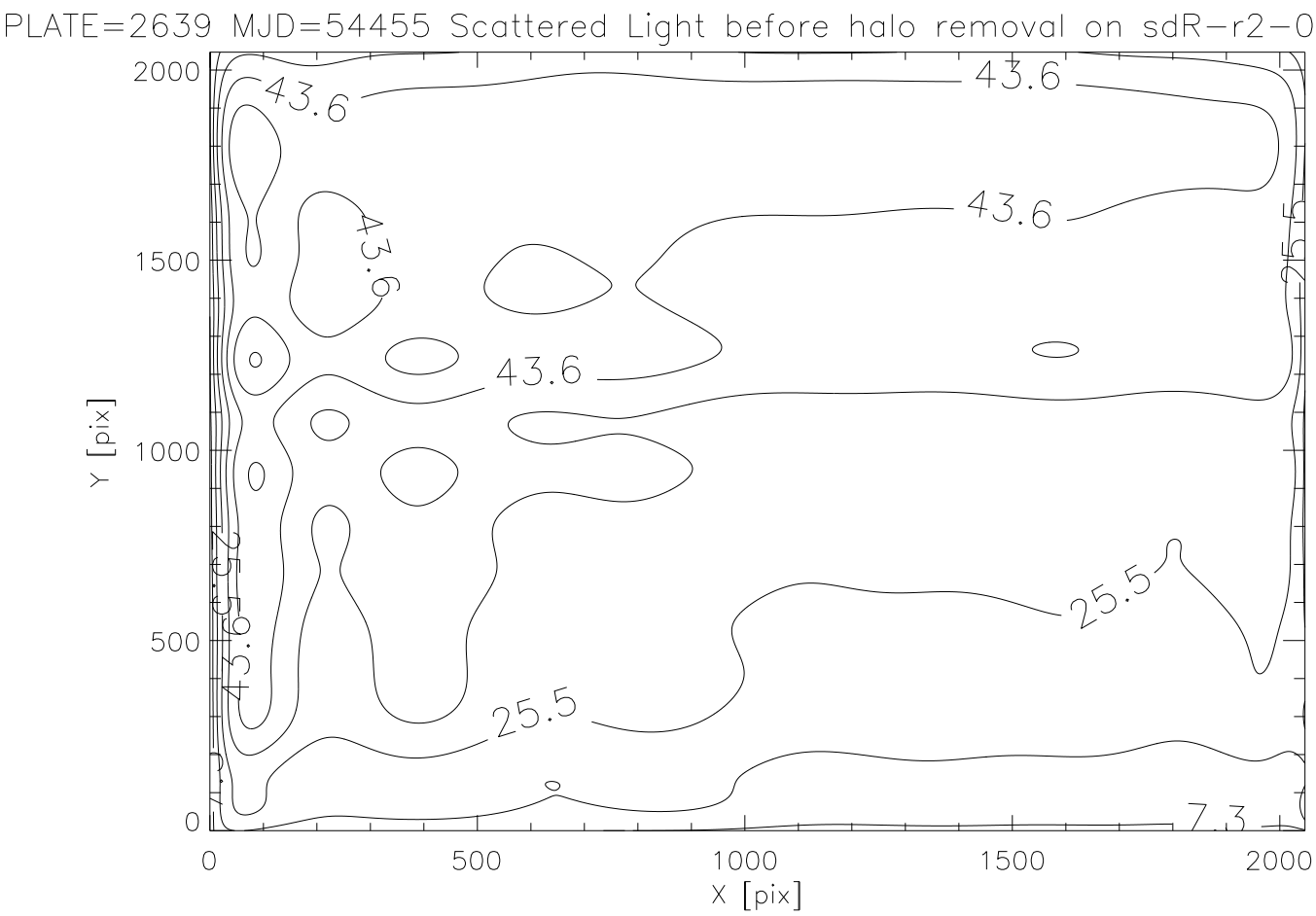

PLATE=2639 MJD=54455 sdR-r2-00048202.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

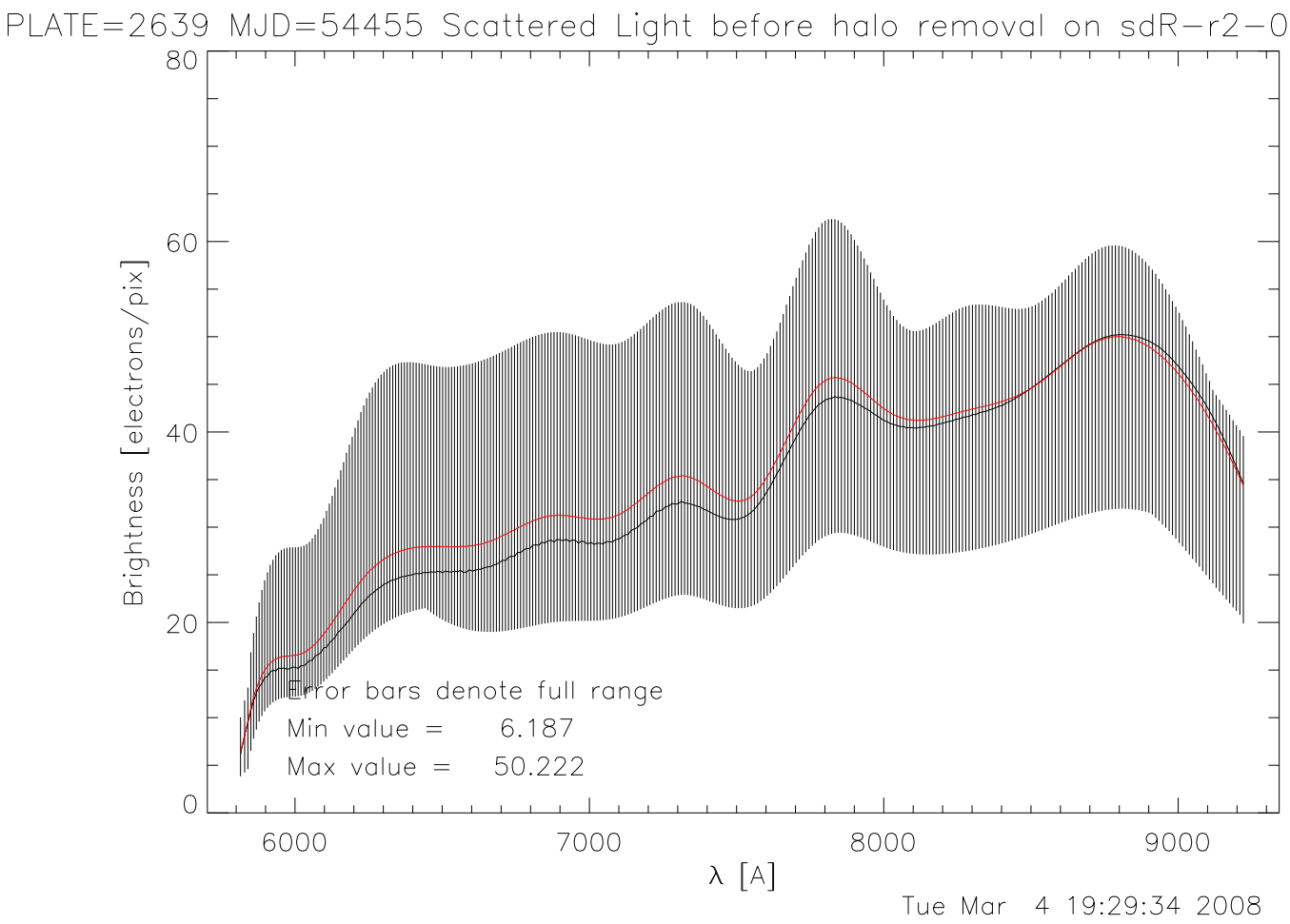

Number of sky fibers = 31
PLATE=2639 MJD=54455 sdR-r2-00048202.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

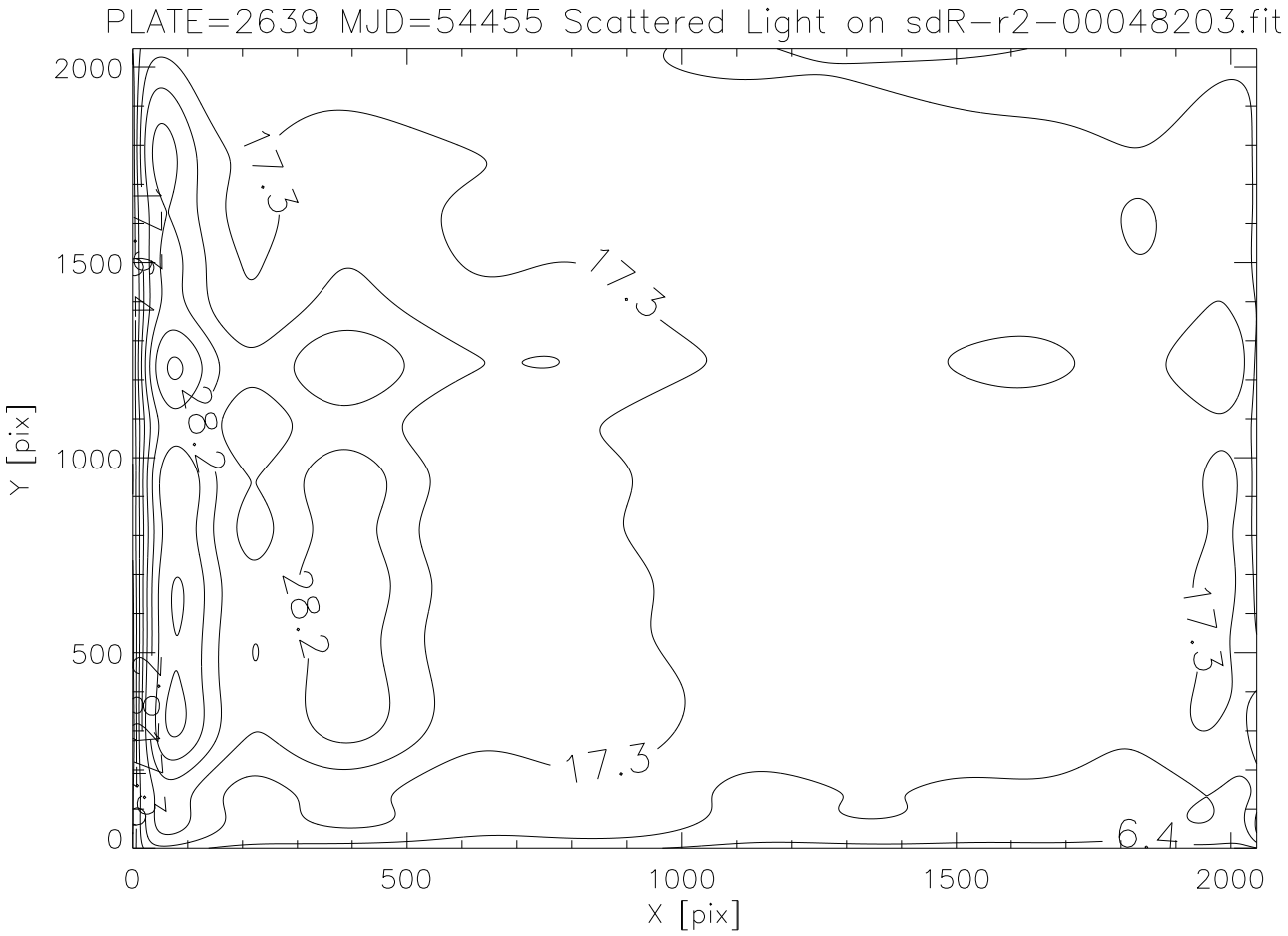

PLATE=2639 MJD=54455 sdR-r2-00048202.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.06 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

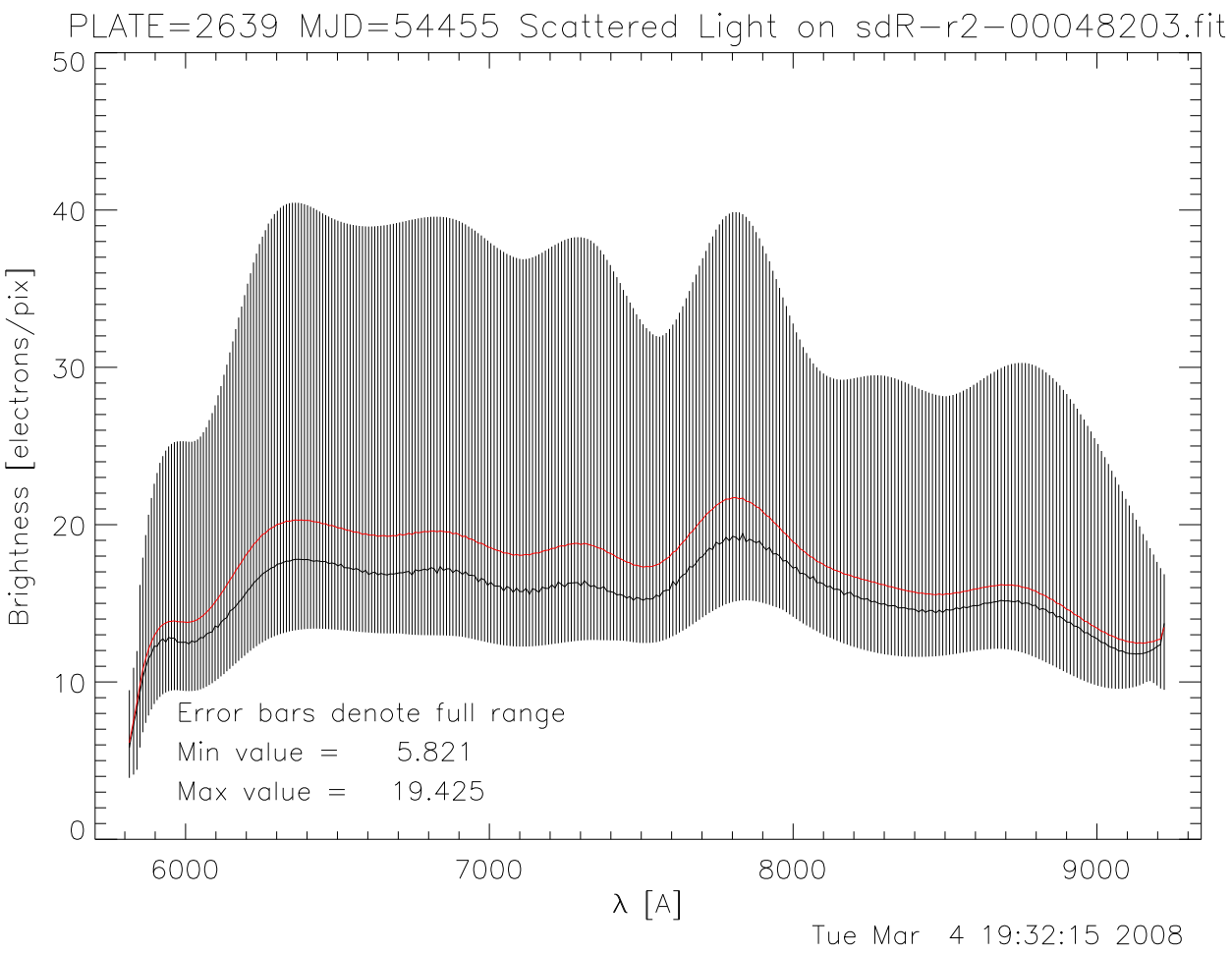

PLATE=2639 MJD=54455 sdR-r2-00048202.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.52 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

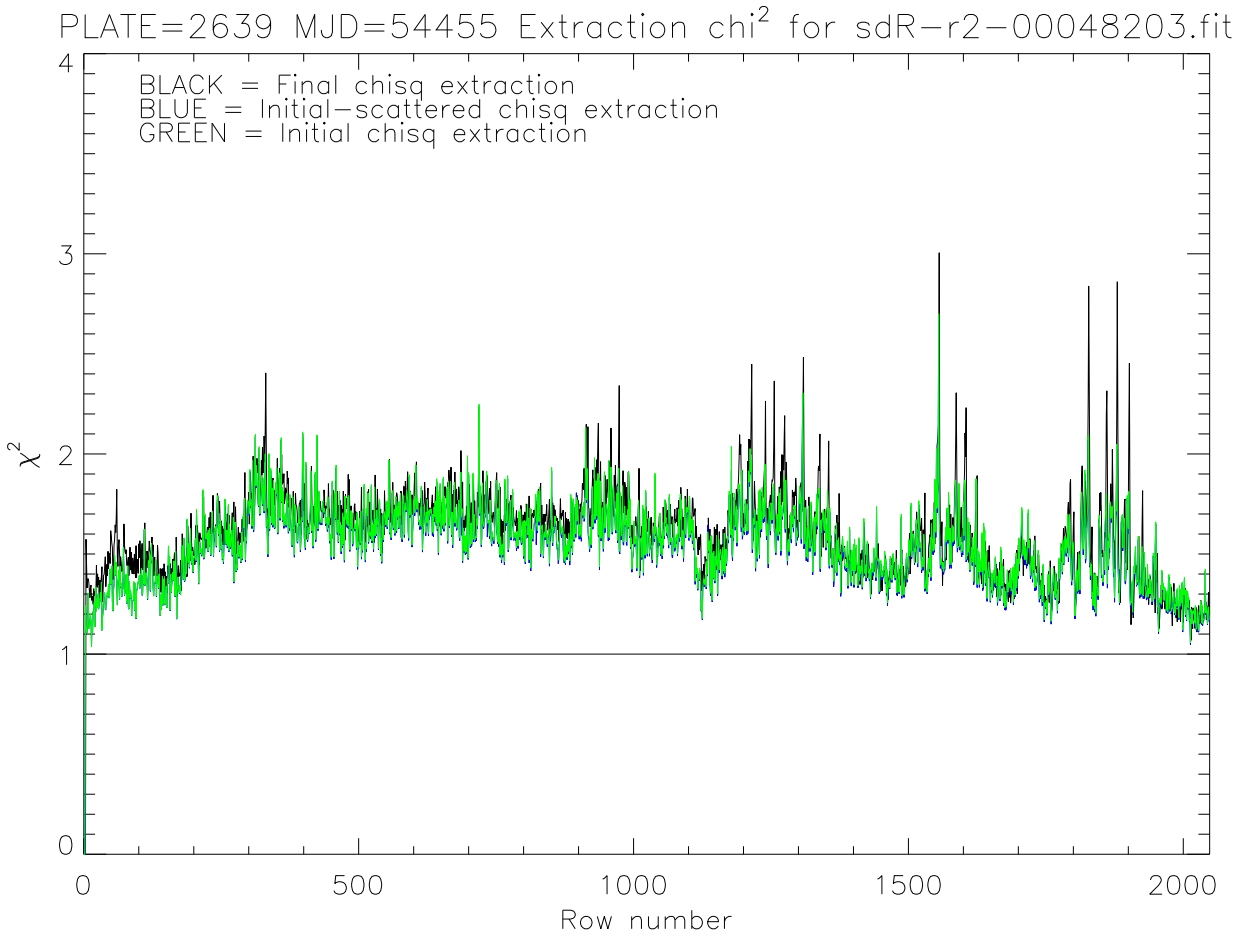

PLATE=2639 MJD=54455 Fiber-Flats for sdR-r2-00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.136
Max value = 1.166
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 19:28:44 2008

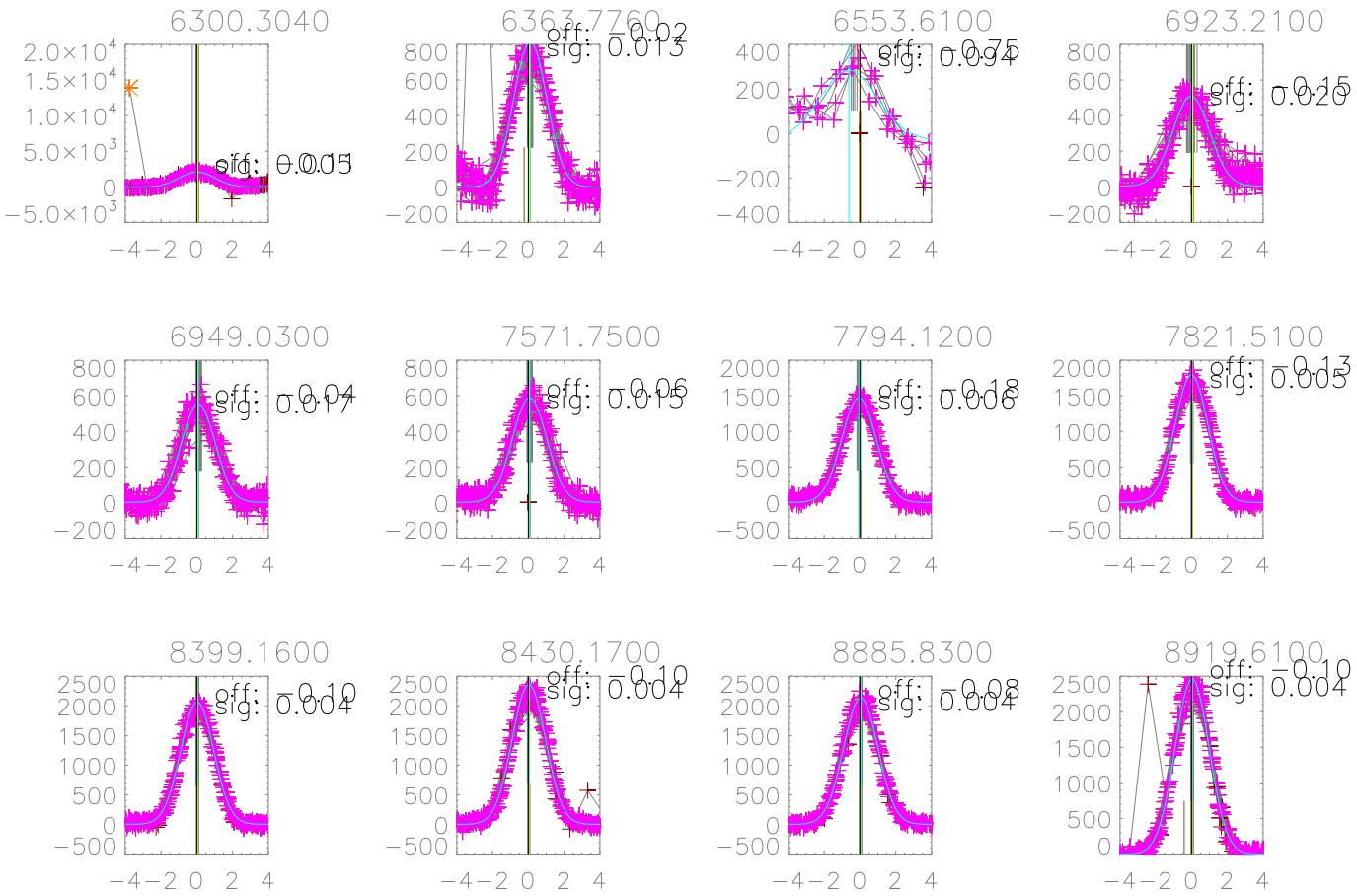

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048203.fi
43.6
43.6
43.6
43.6
43.6
25.5
25.5
25.5
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

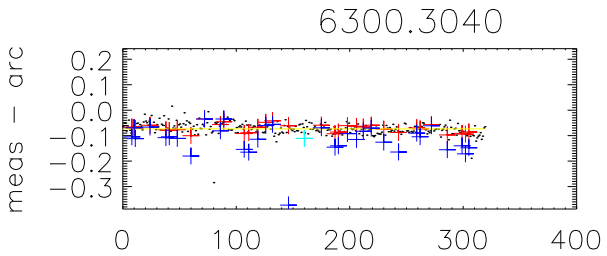

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048203.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.187
Max value = 50.222
Tue Mar 4 19:29:34 2008

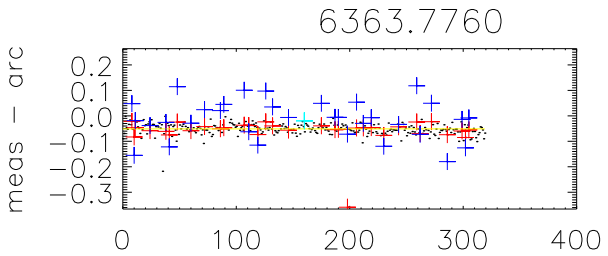

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048203.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
17.3
28.2
6.4

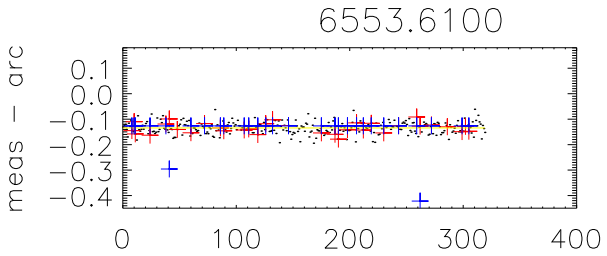

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048203.fit
Brightness [electrons/pix]
50
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.821
Max value = 19.425
Tue Mar 4 19:32:15 2008

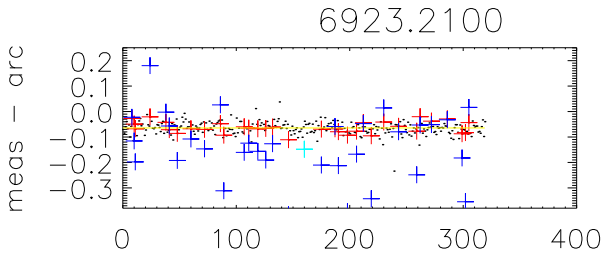

PLATE=2639 MJD=54455 Extraction chi^2 for sdR-r2-00048203.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

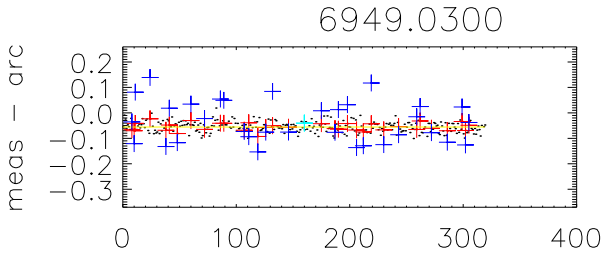

6300.3040
off: 0.005
sig: 0.005
6363.7760
off: −0.02
sig: 0.013
6553.6100
off: −0.75
sig: 0.094
6923.2100
off: −0.15
sig: 0.020
6949.0300
off: −0.04
sig: 0.017
7571.7500
off: −0.06
sig: 0.015
7794.1200
off: −0.18
sig: 0.006
7821.5100
off: −0.13
sig: 0.005
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.10
sig: 0.004
8885.8300
off: −0.08
sig: 0.004
8919.6100
off: −0.10
sig: 0.004

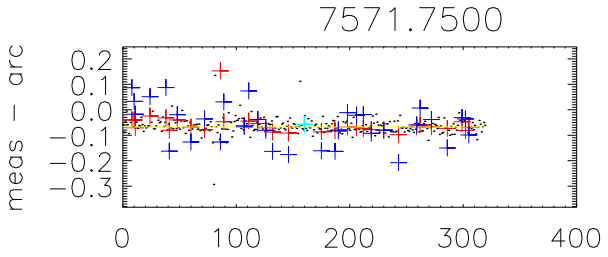

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

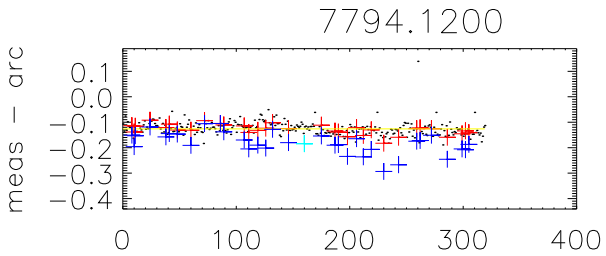

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

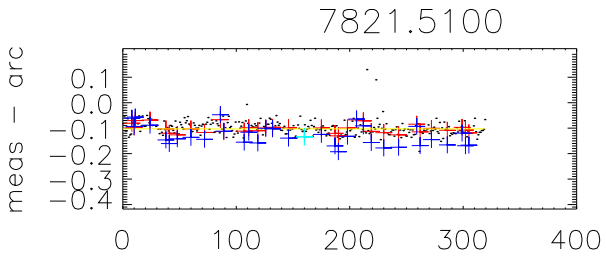

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

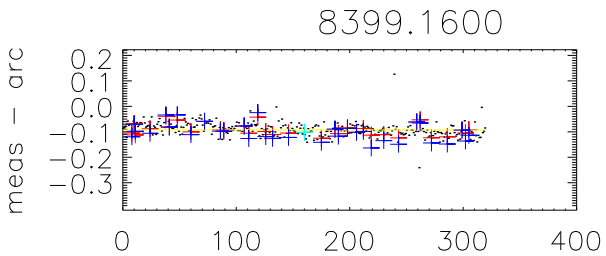

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

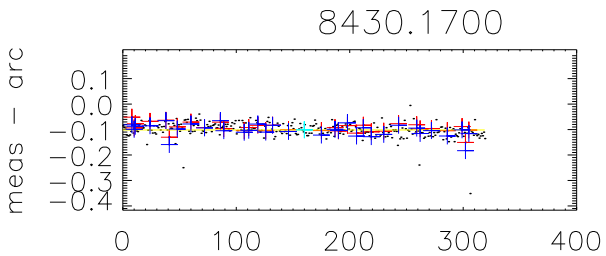

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

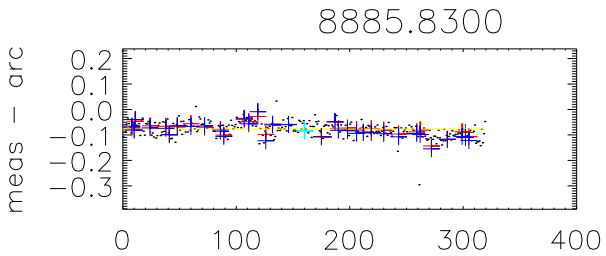

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

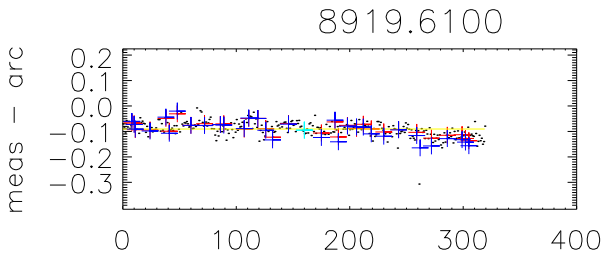

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

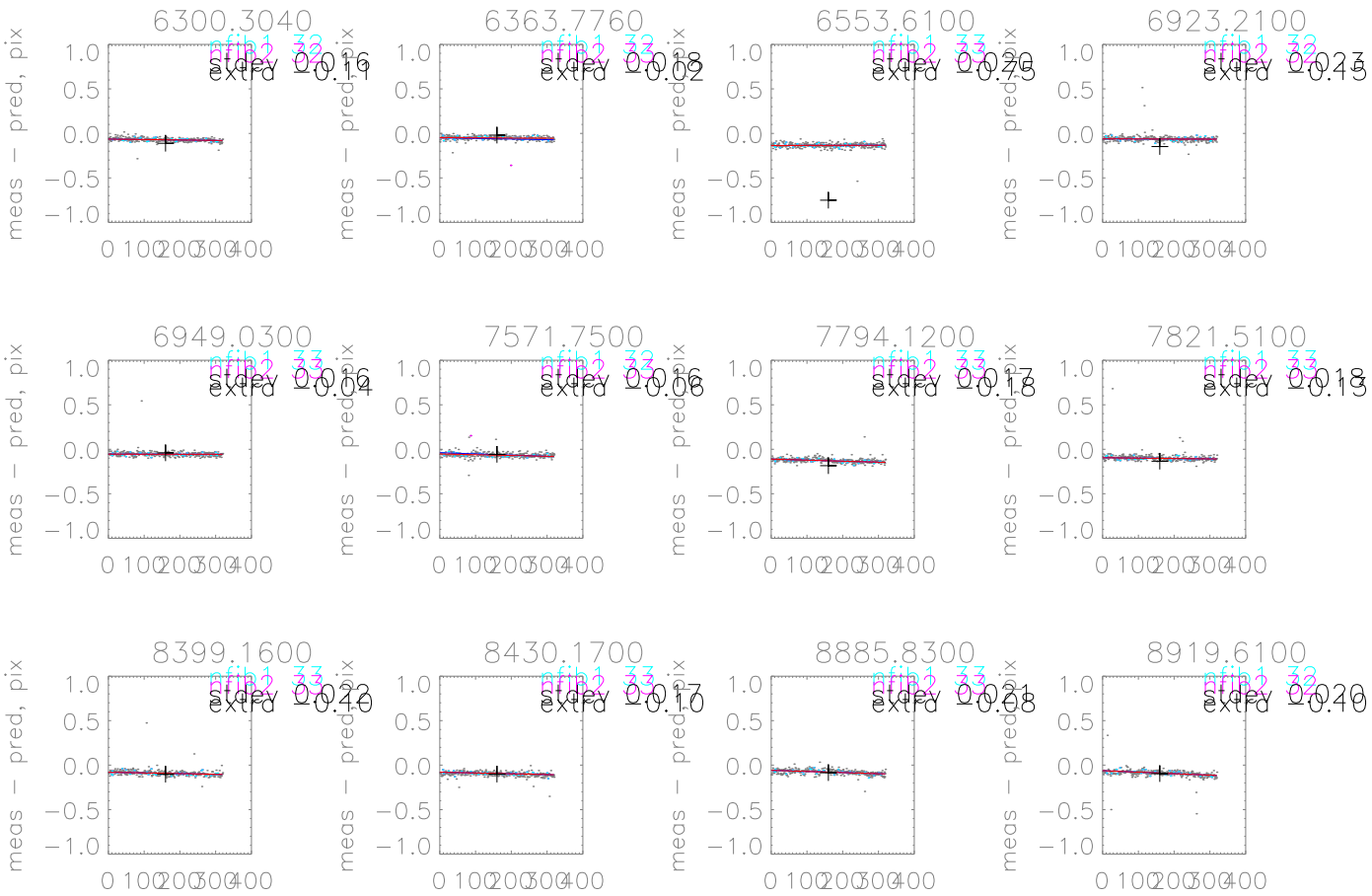

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

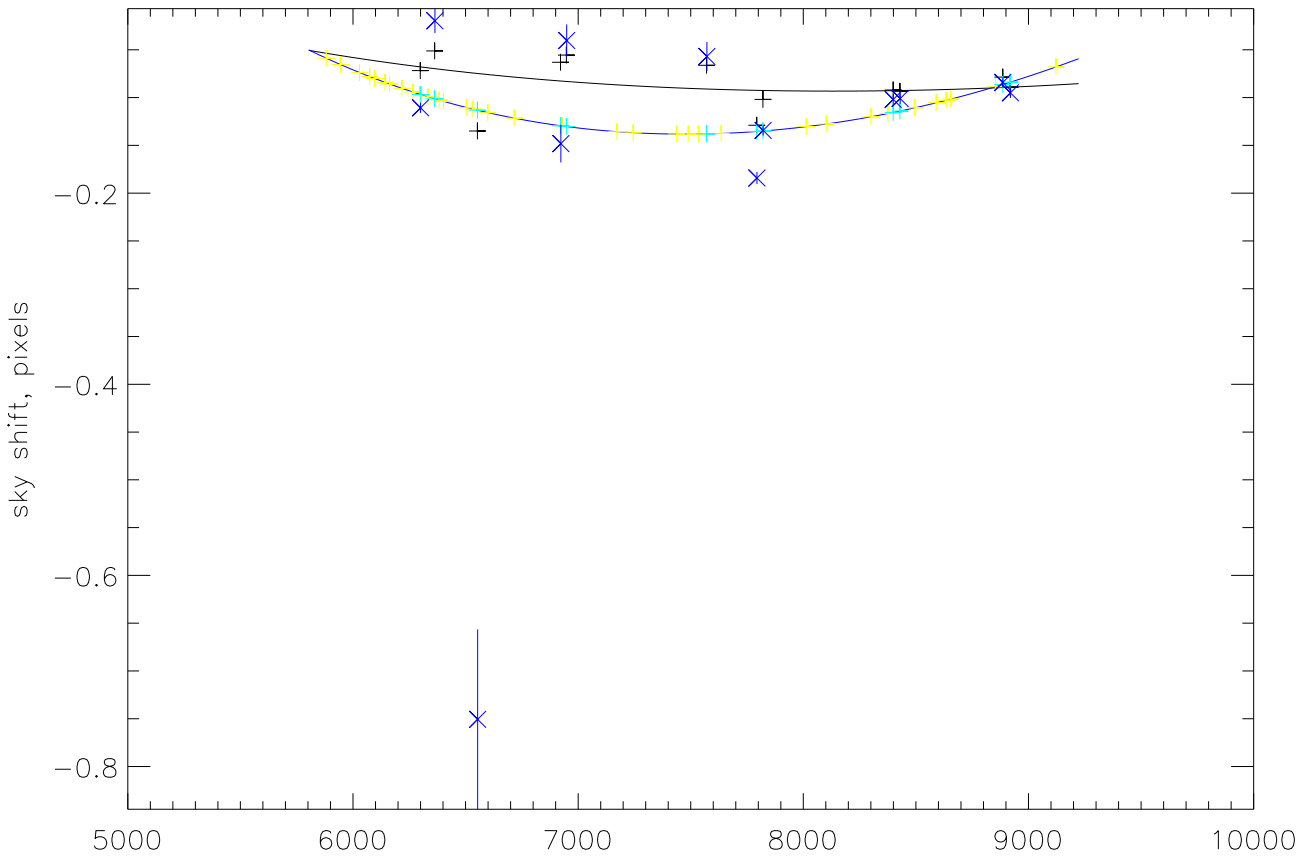

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

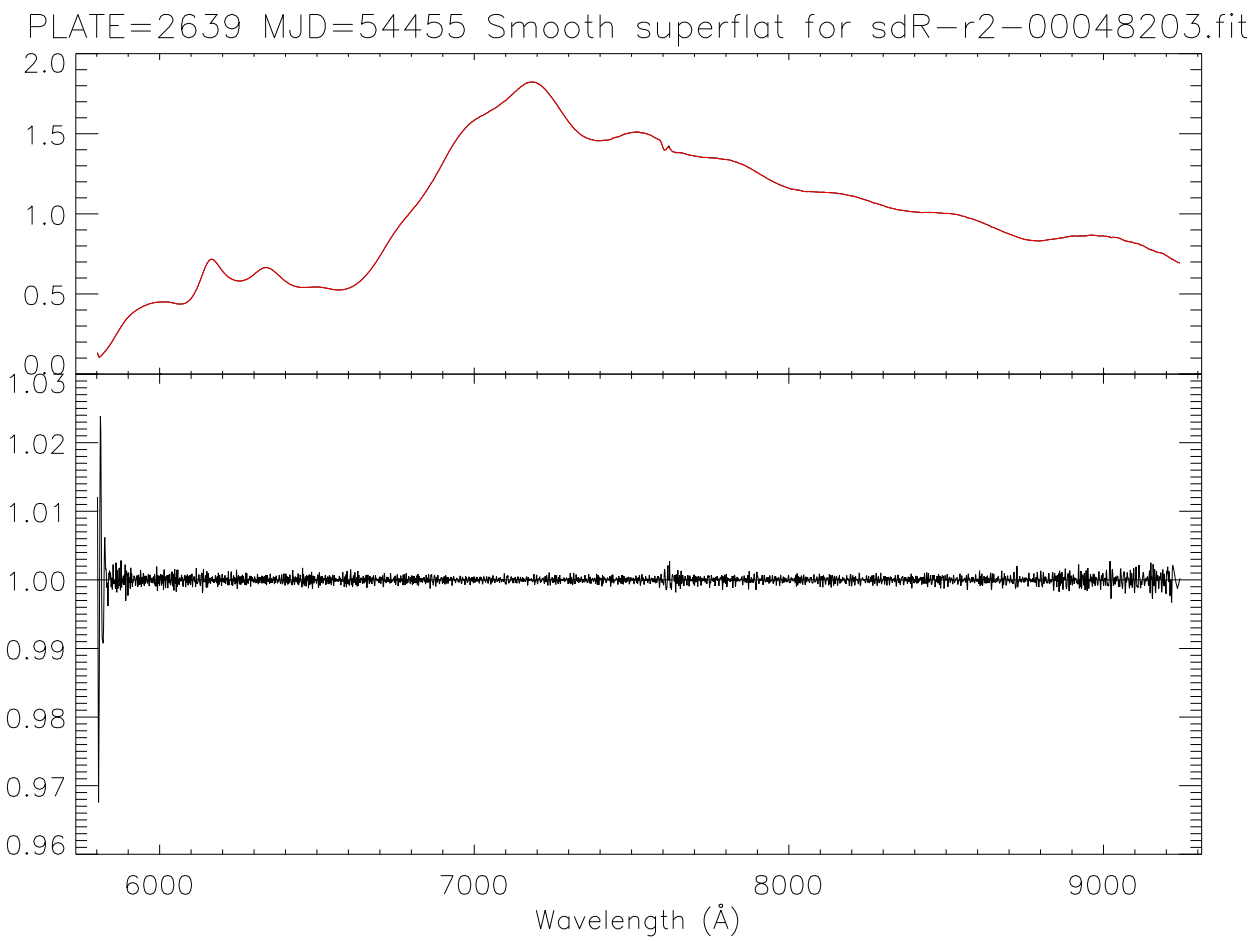

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

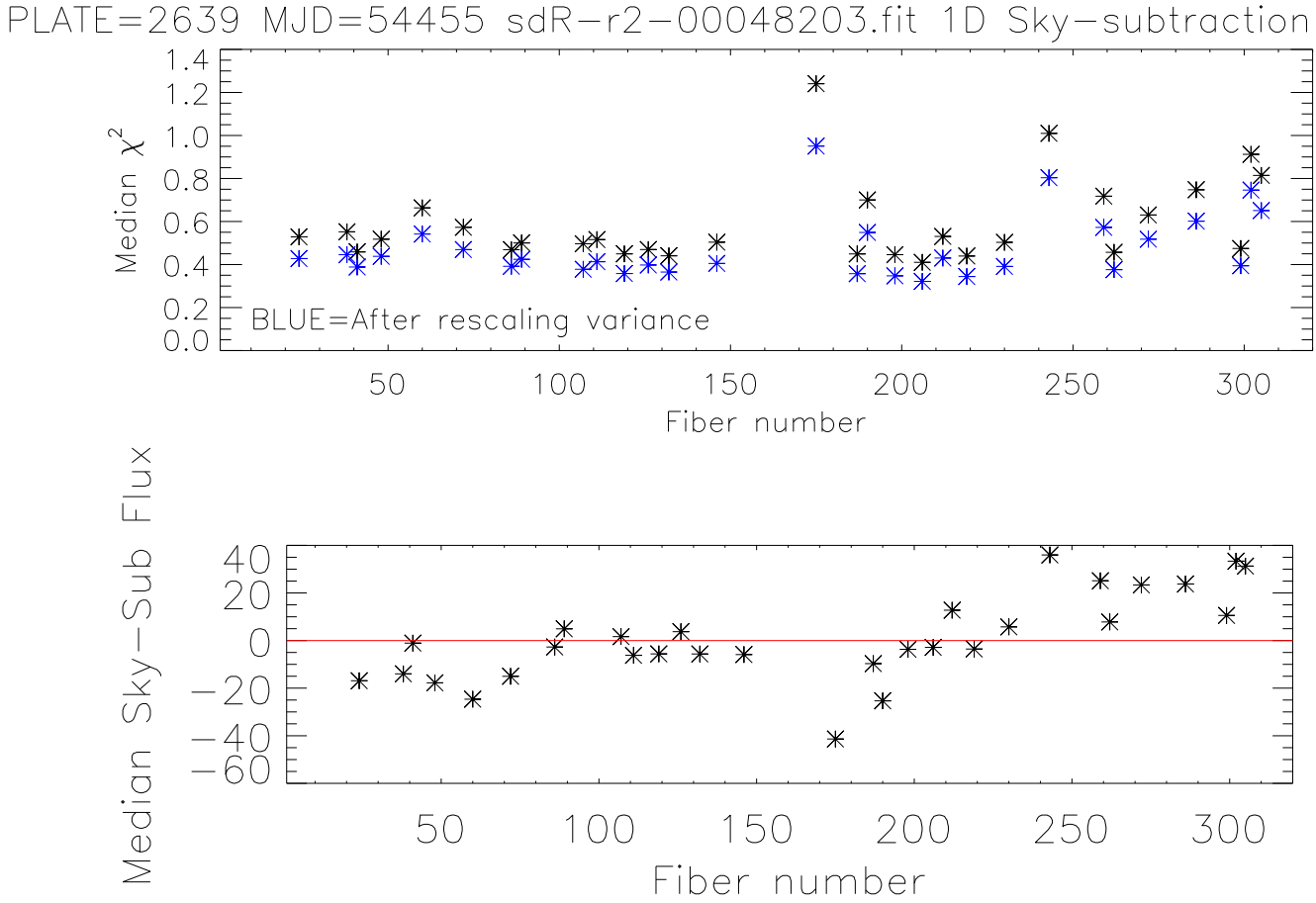

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

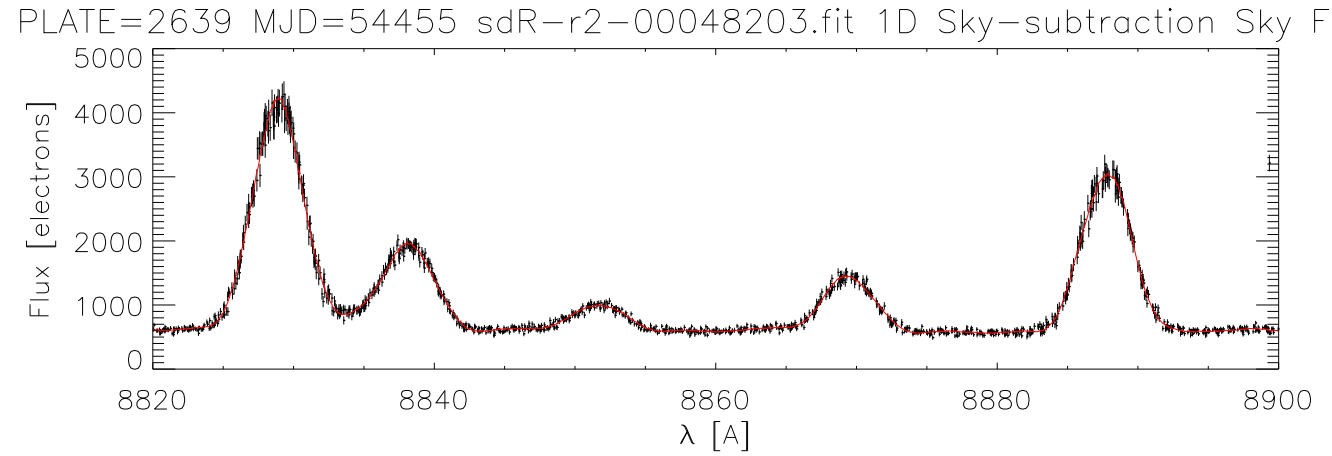

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 33
mfib2 32
stdev 0.016
extra −0.11
stdev 0.018
extra −0.02
stdev 0.020
extra −0.75
stdev 0.023
extra −0.43
stdev 0.016
extra −0.04
stdev 0.016
extra −0.06
stdev 0.017
extra −0.18
stdev 0.018
extra −0.13
stdev 0.022
extra −0.46
stdev 0.017
extra −0.10
stdev 0.021
extra −0.08
stdev 0.020
extra −0.40

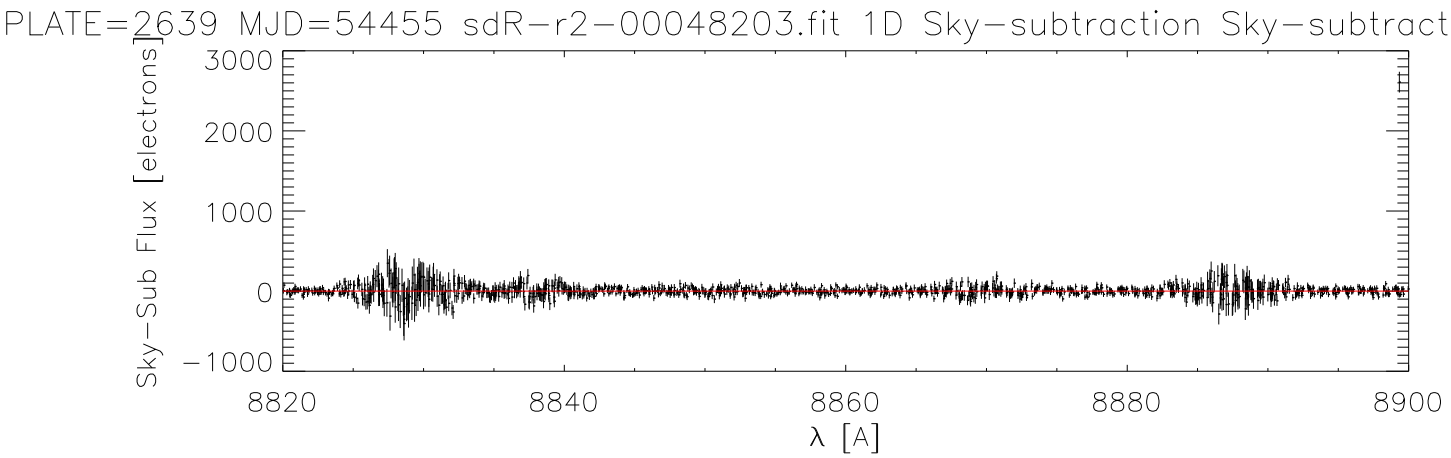

sky shift, pixels
−0.2
−0.4
−0.6
−0.8
5000
6000
7000
8000
9000
10000

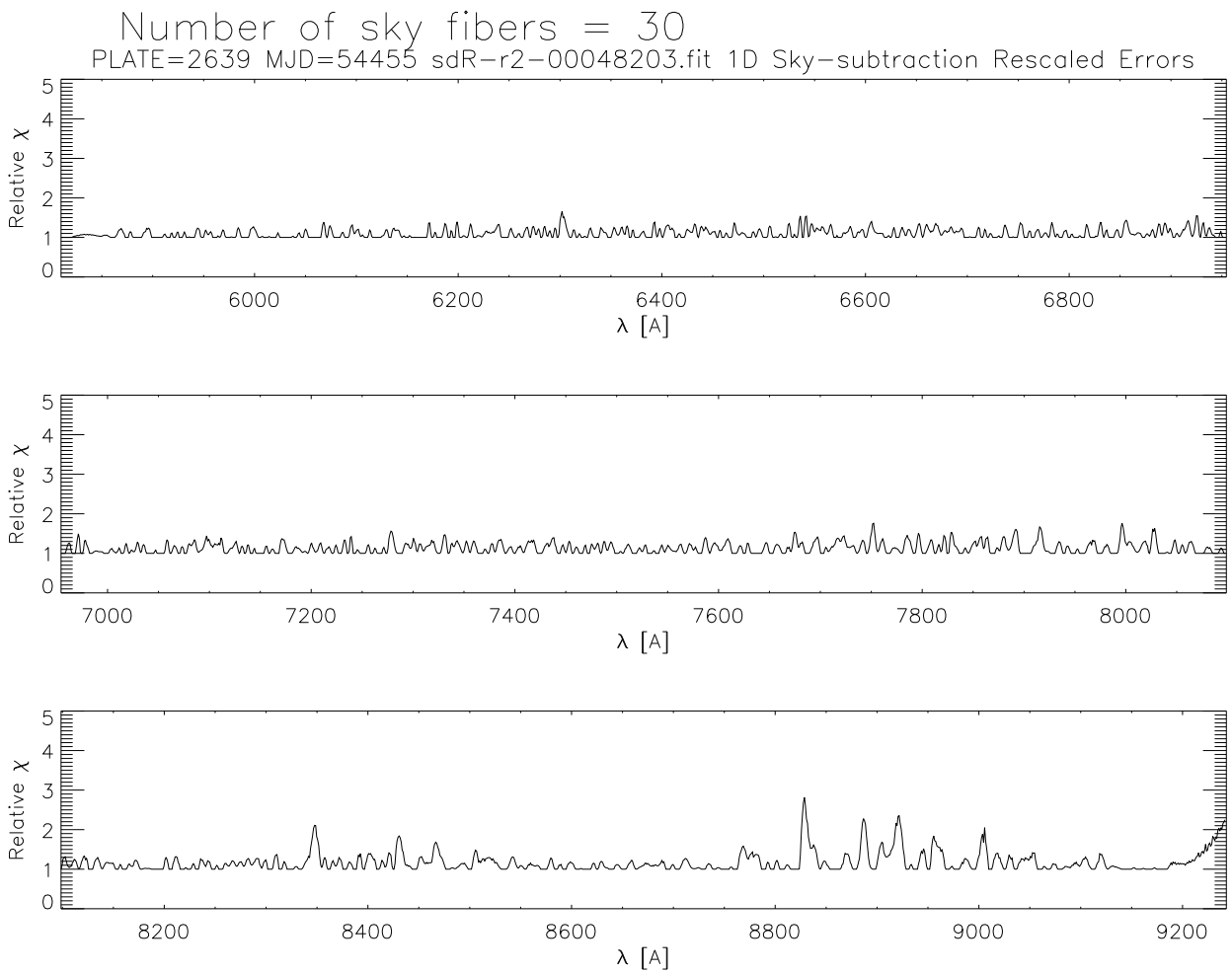
es= 0.0000

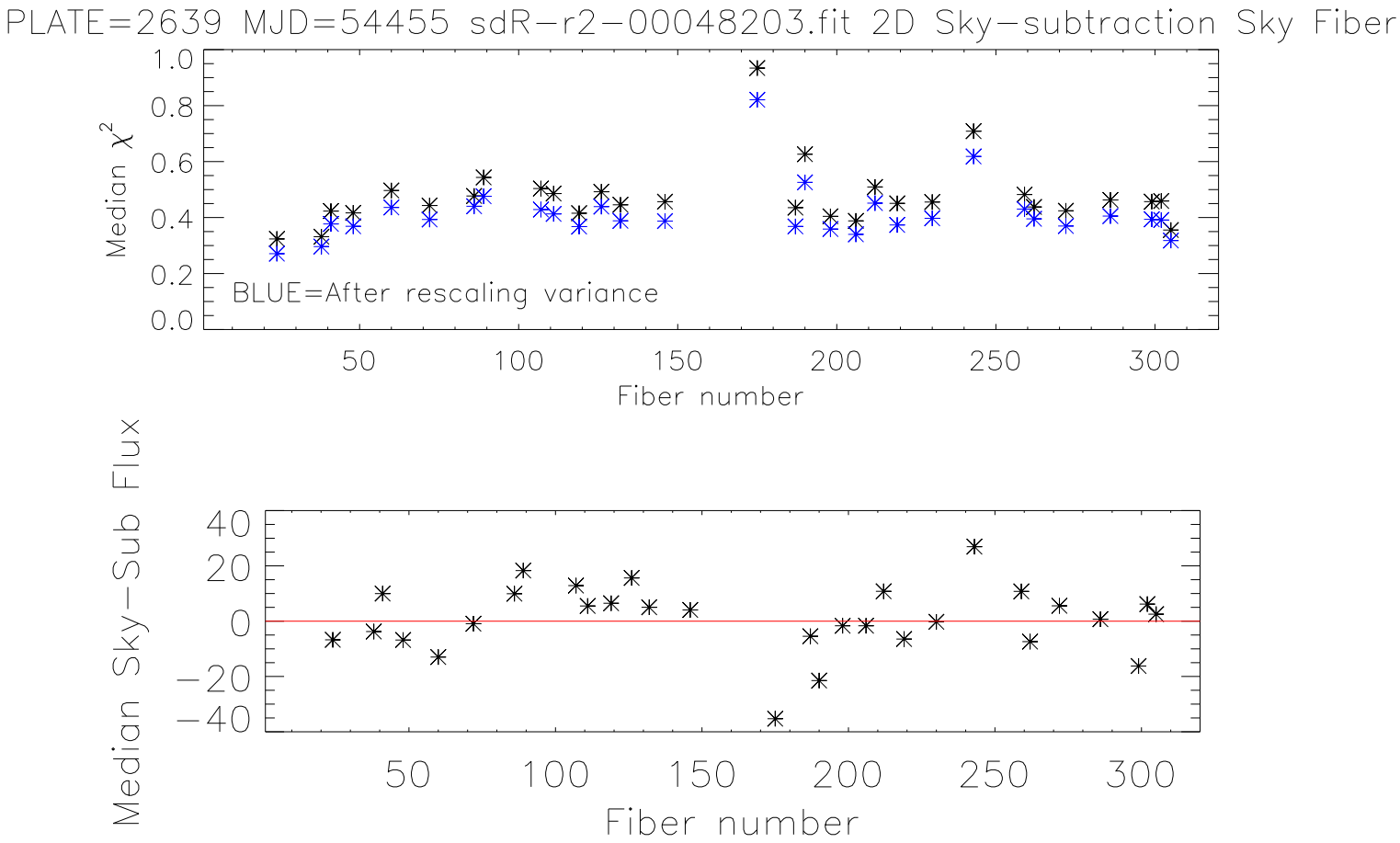

PLATE=2639 MJD=54455 Smooth superflat for sdR-r2-00048203.fit
2.0
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
0.96
6000
7000
8000
9000
Wavelength (Å)

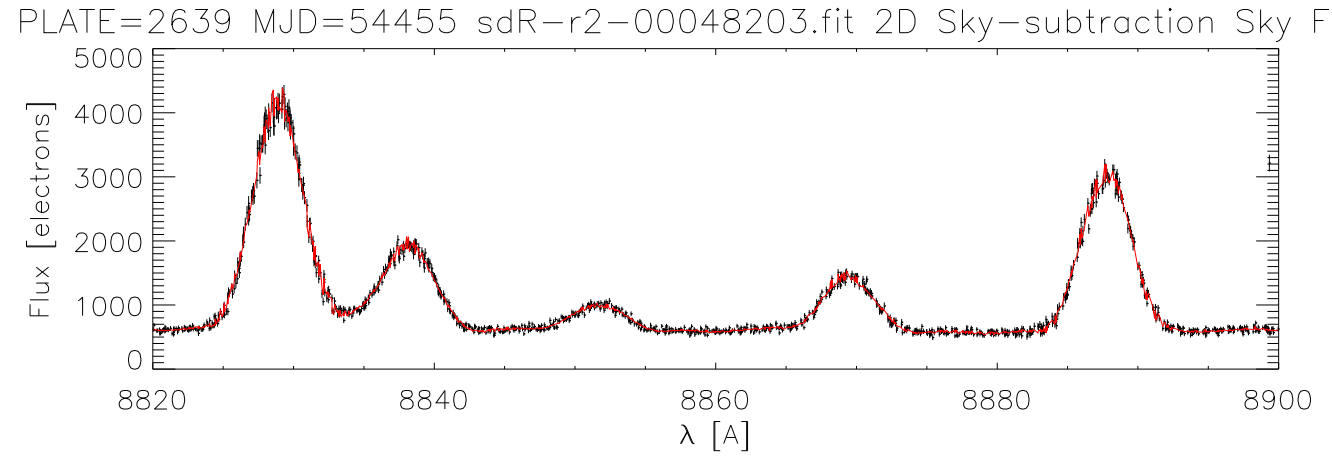

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

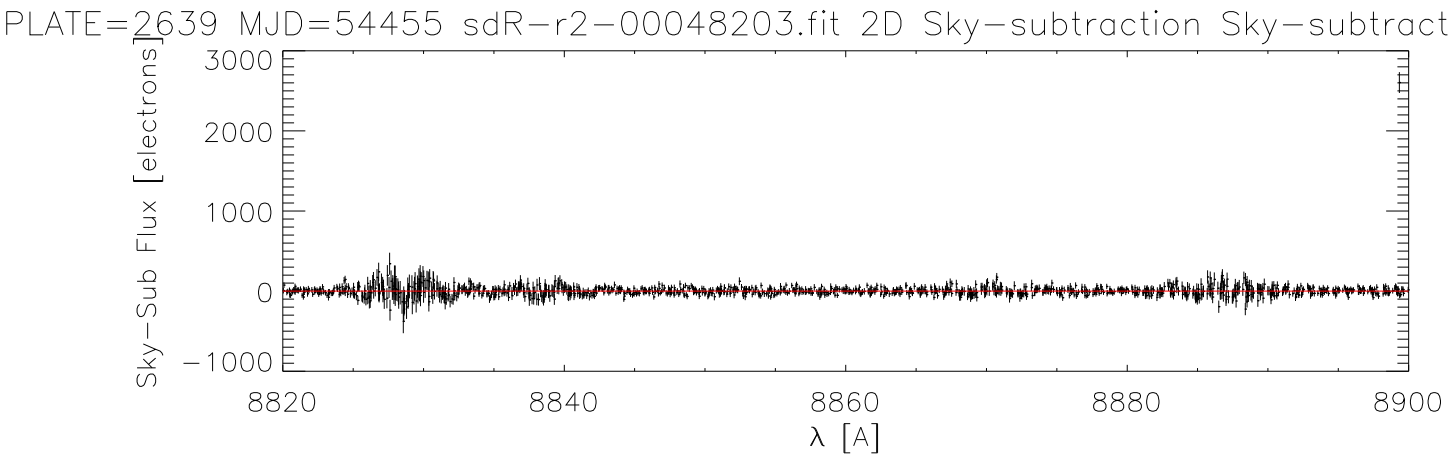

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

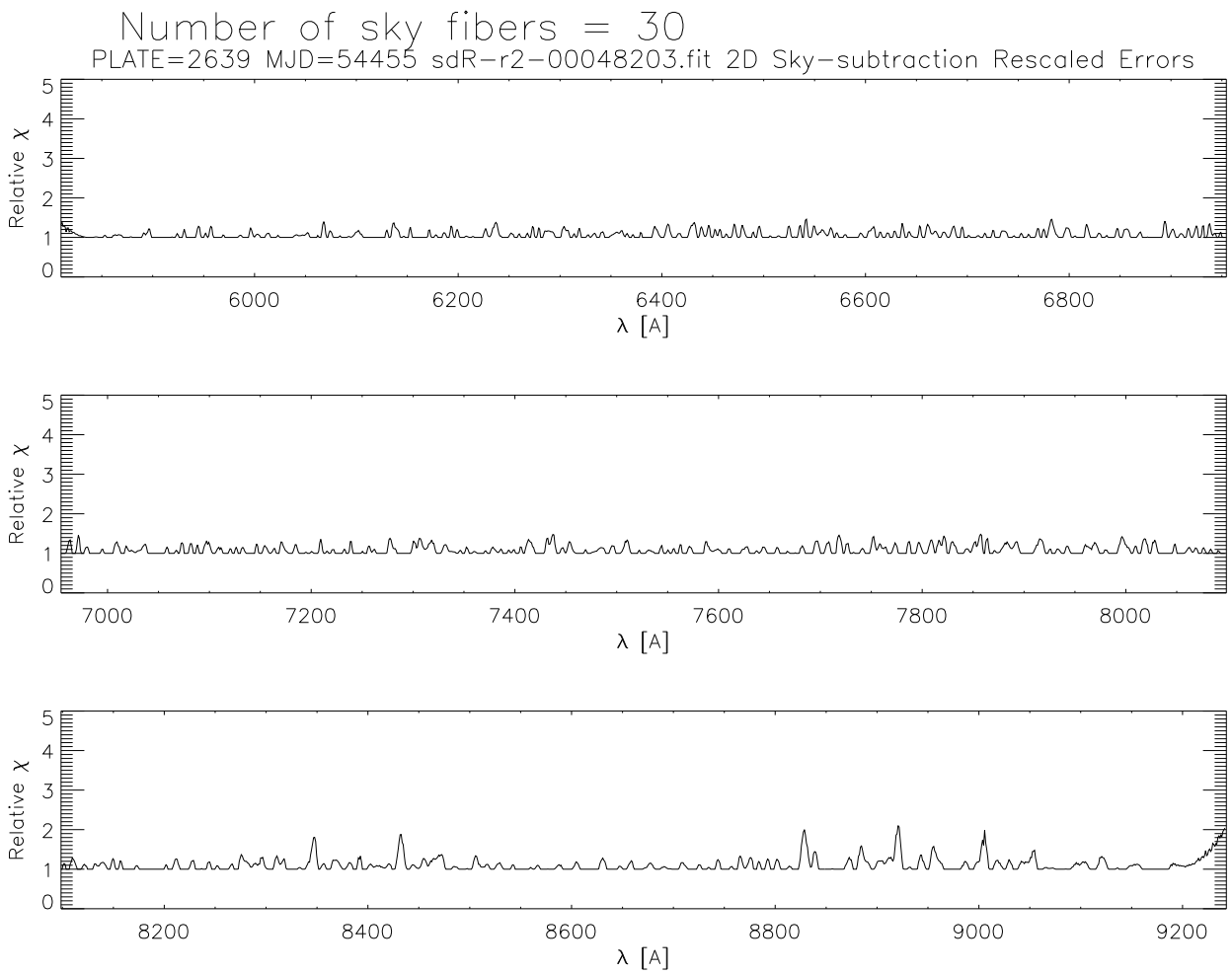

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

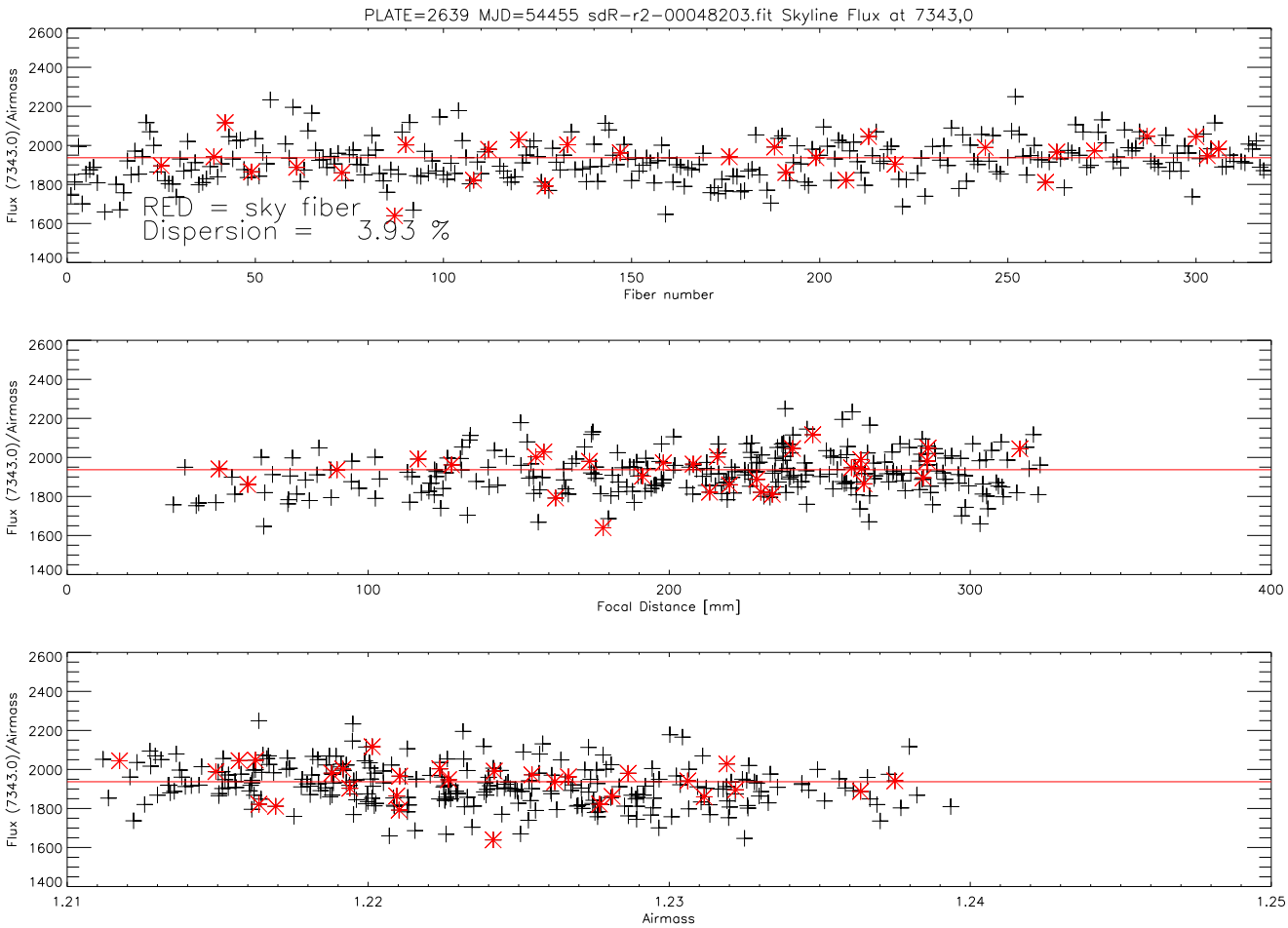

Number of sky fibers = 30
PLATE=2639 MJD=54455 sdR-r2-00048203.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

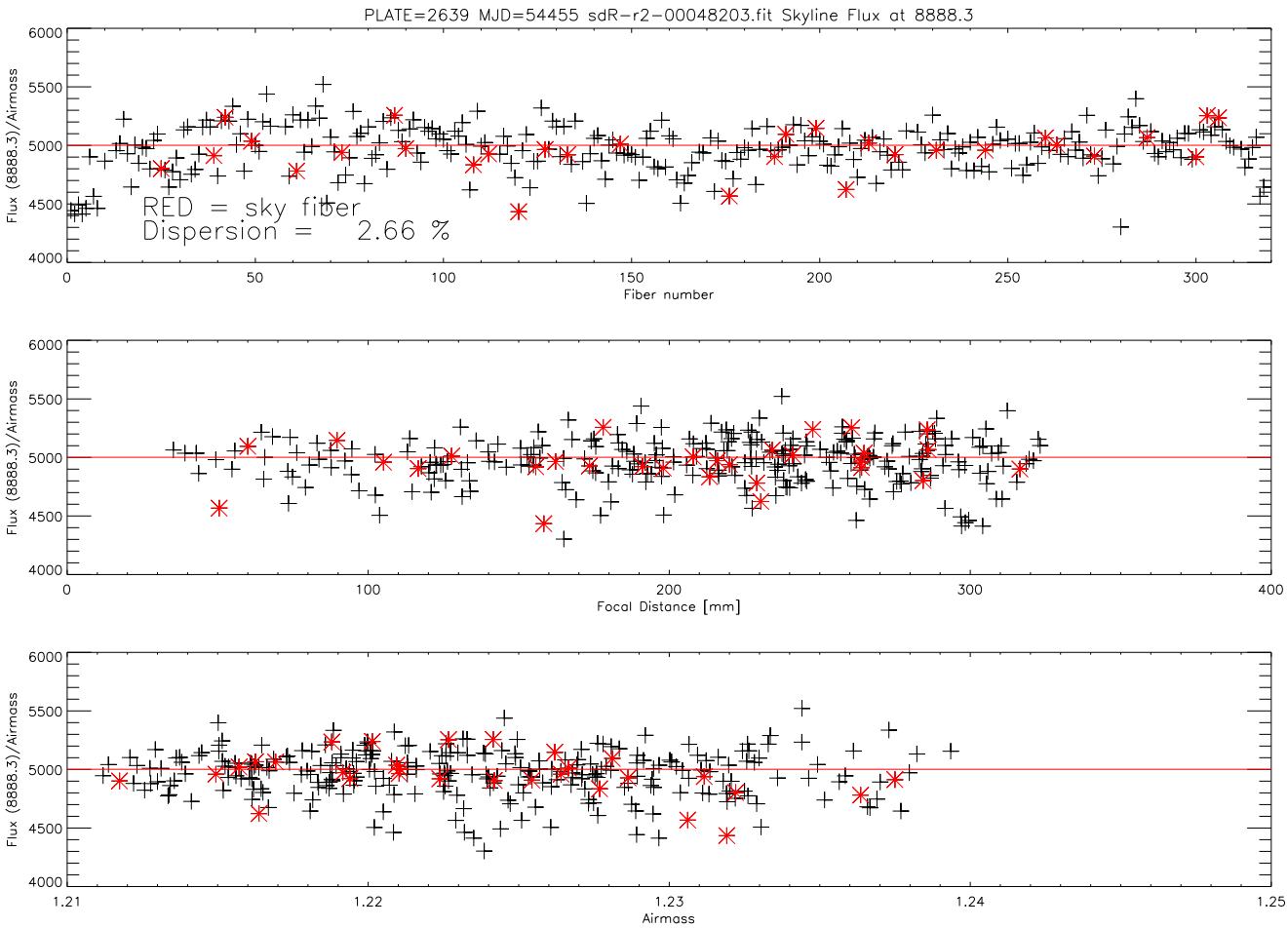

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

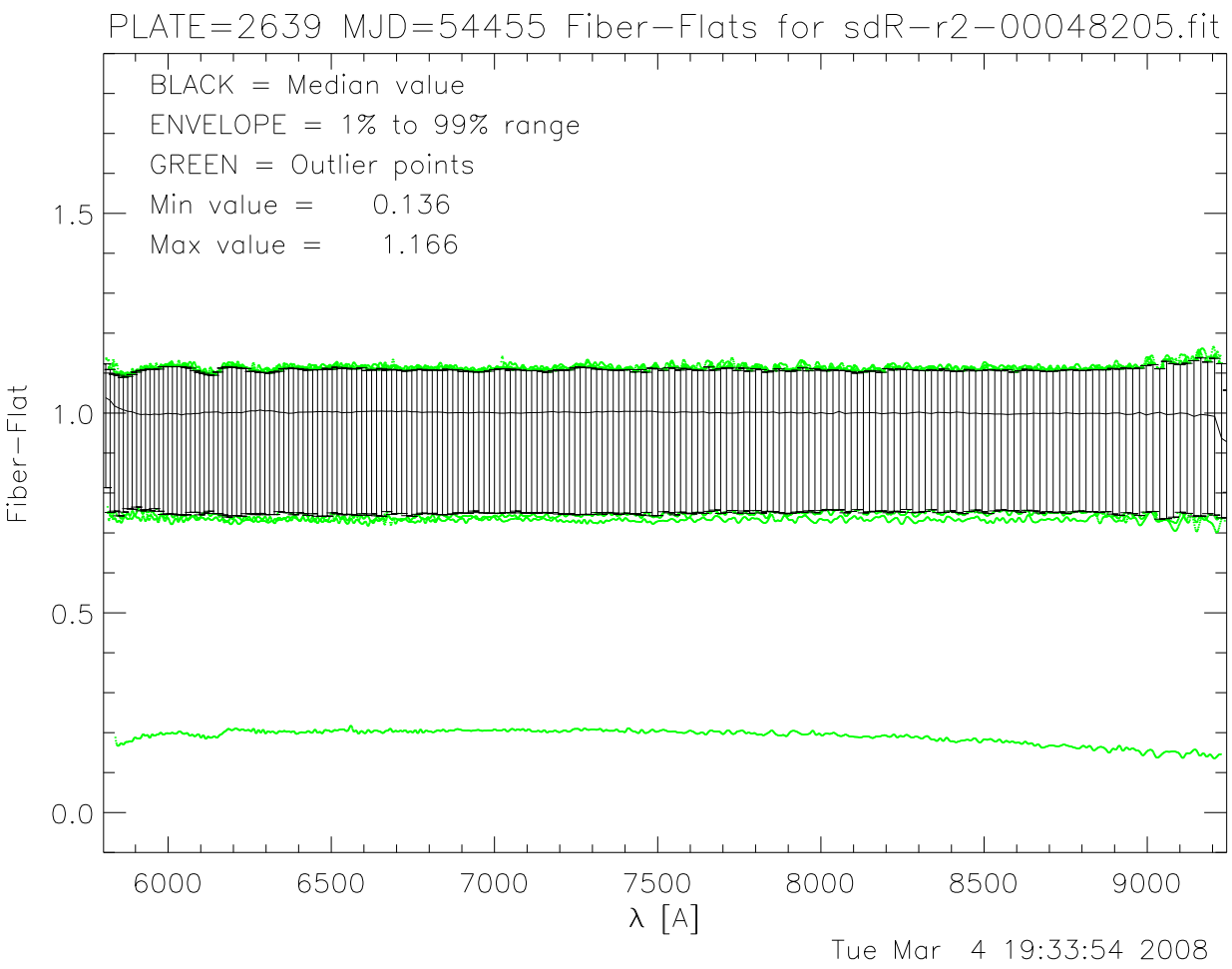

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

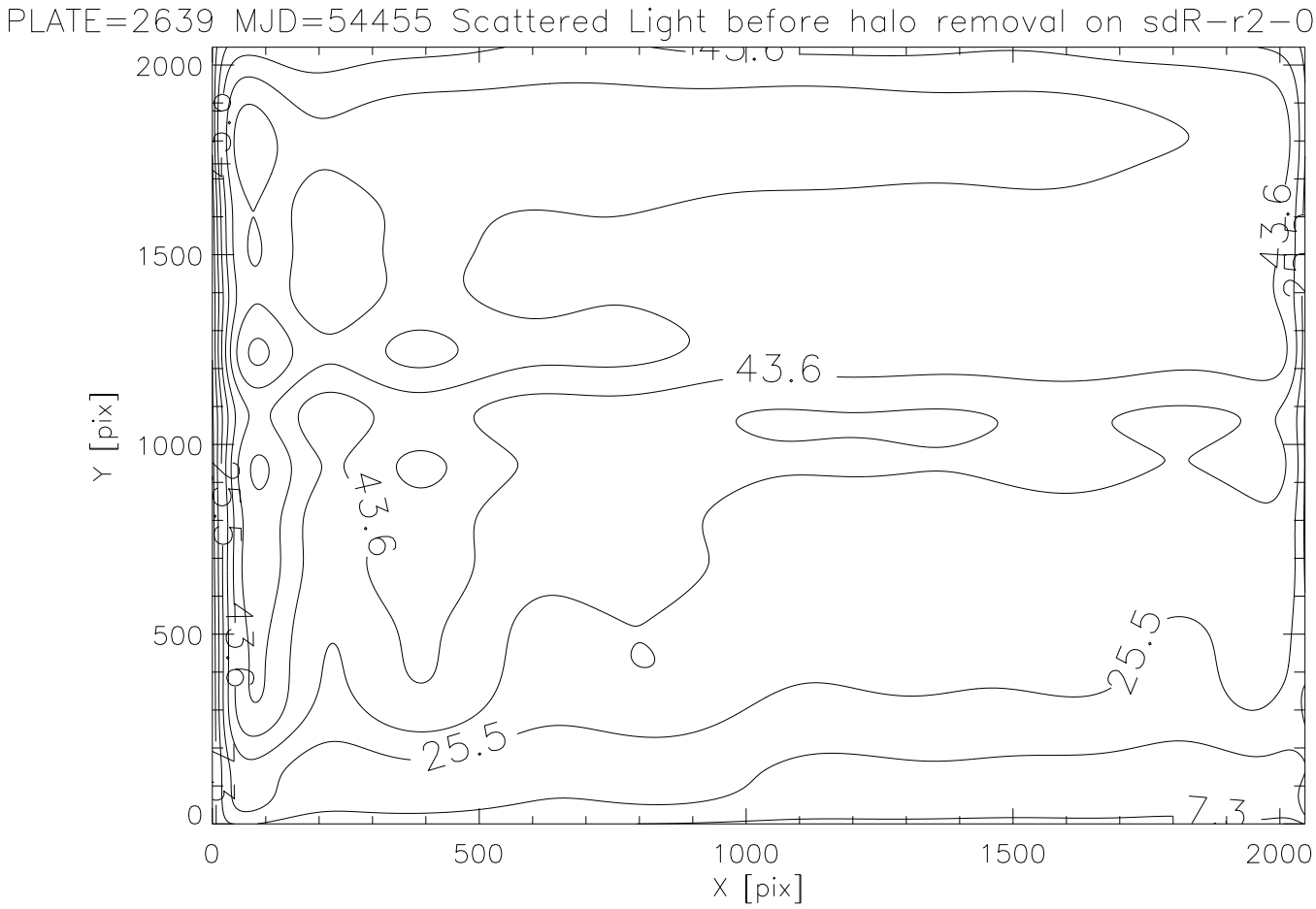

PLATE=2639 MJD=54455 sdR-r2-00048203.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

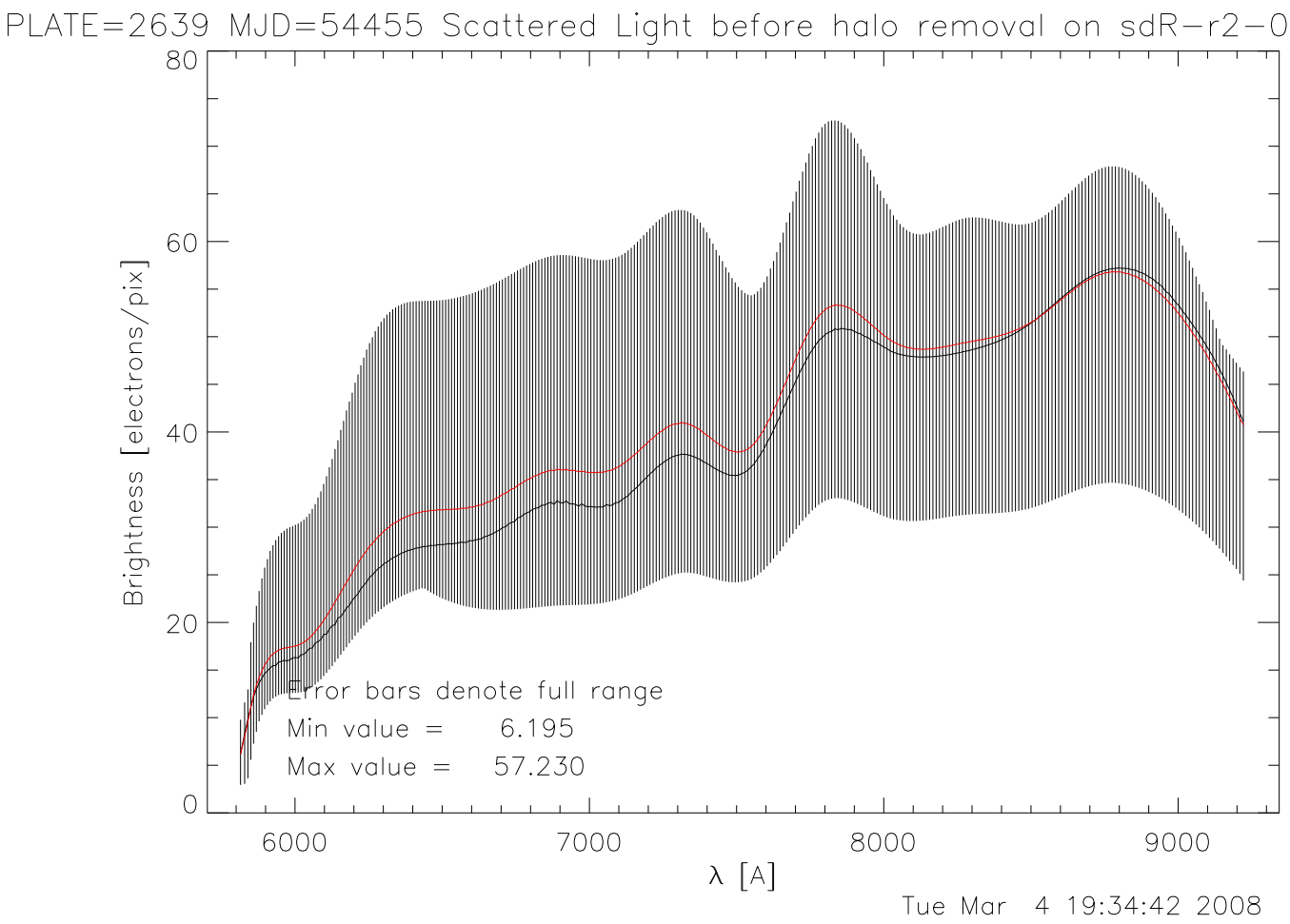

Number of sky fibers = 30
PLATE=2639 MJD=54455 sdR-r2-00048203.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

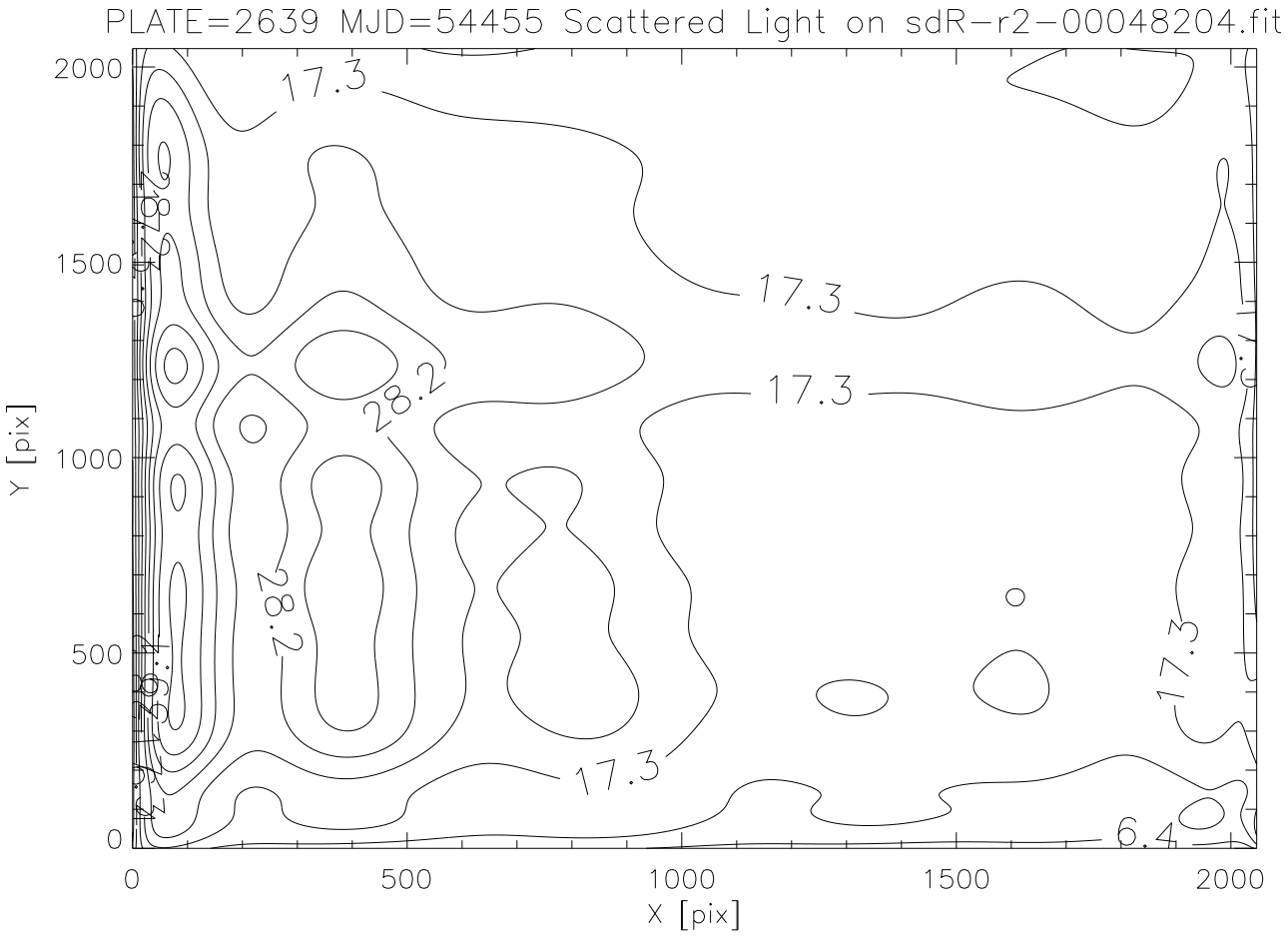

PLATE=2639 MJD=54455 sdR-r2-00048203.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.93 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

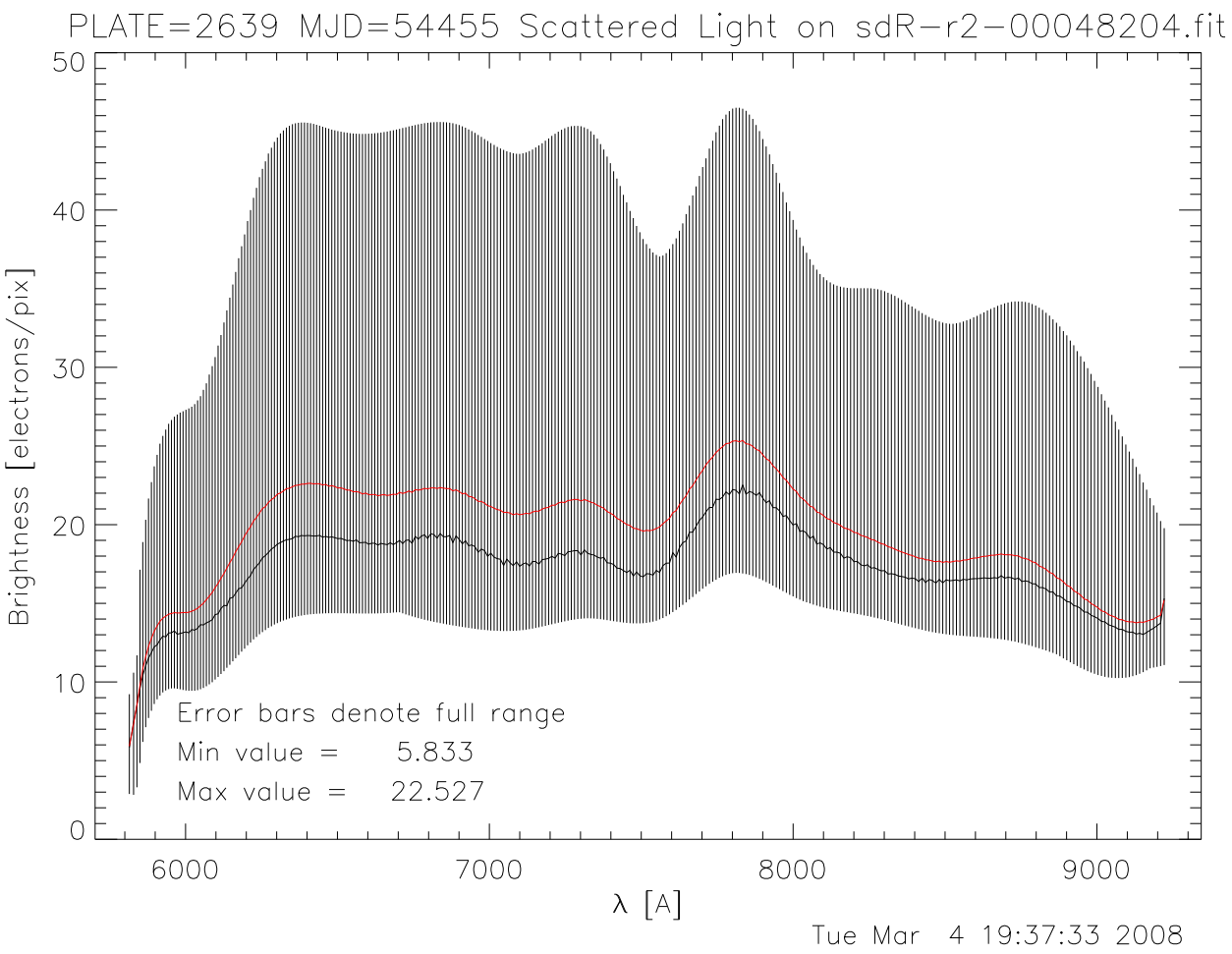

PLATE=2639 MJD=54455 sdR-r2-00048203.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.66 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

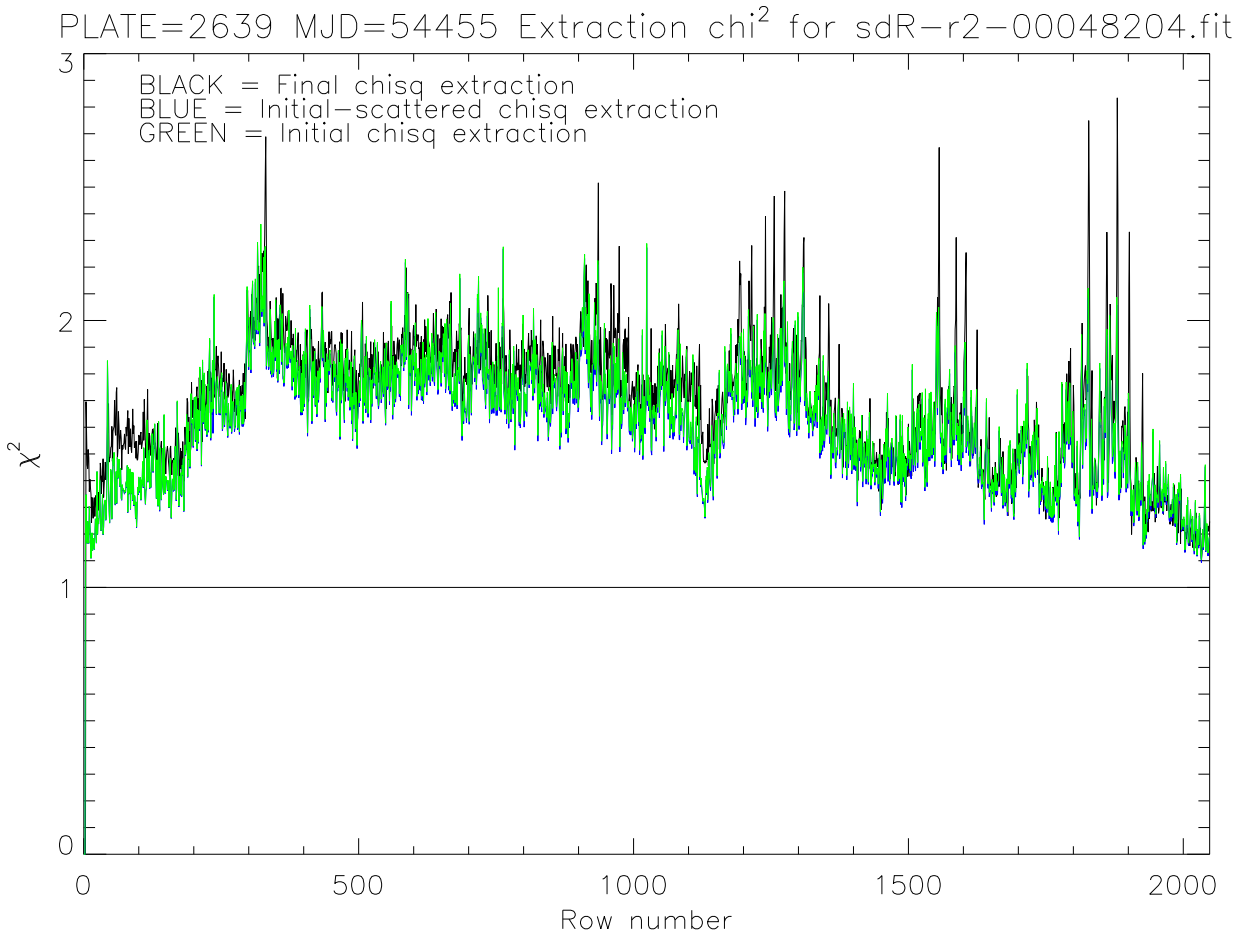

PLATE=2639 MJD=54455 Fiber−Flats for sdR−r2−00048205.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.136
Max value = 1.166
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 4 19:33:54 2008

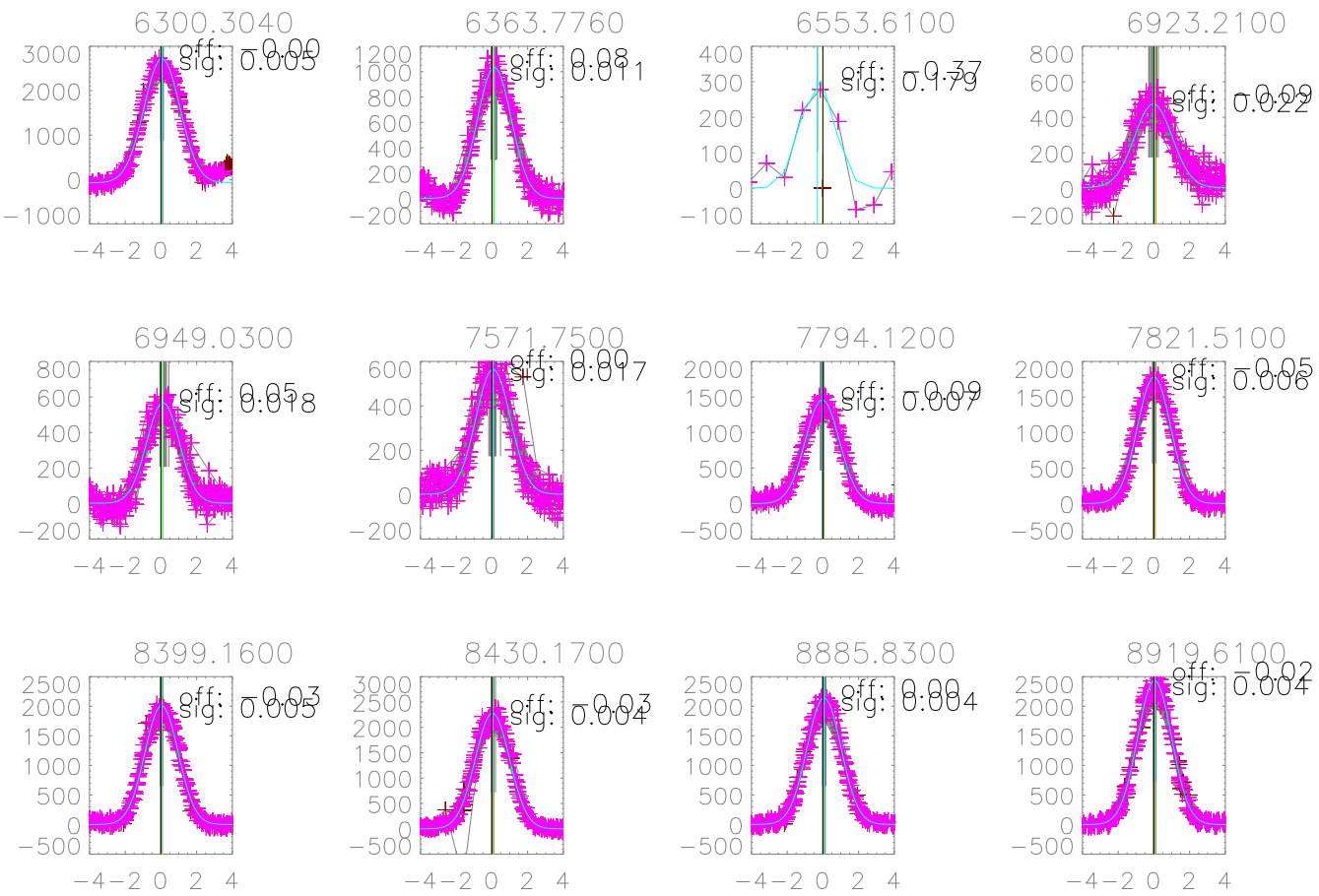

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048204.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
43.6
25.5
7.3
0

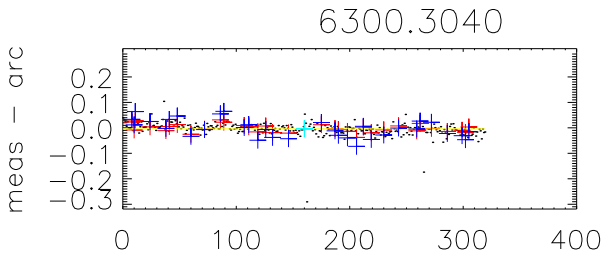

PLATE=2639 MJD=54455 Scattered Light before halo removal on sdR-r2-00048204.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.195
Max value = 57.230
Tue Mar 4 19:34:42 2008

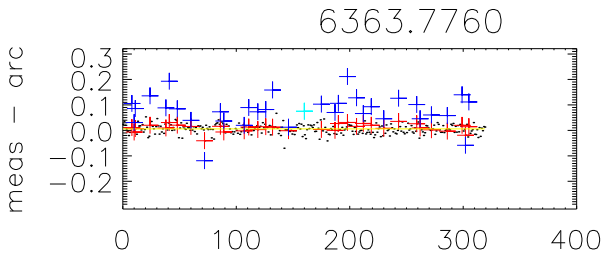

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048204.fit
17.3
28.2
17.3
17.3
28.2
17.3
17.3
6.4
Y [pix]
X [pix]
0
500
1000
1500
2000

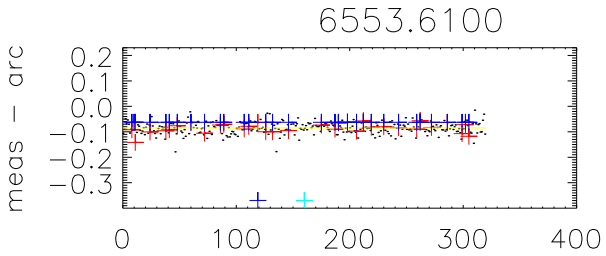

PLATE=2639 MJD=54455 Scattered Light on sdR-r2-00048204.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.833
Max value = 22.527
Tue Mar 4 19:37:33 2008

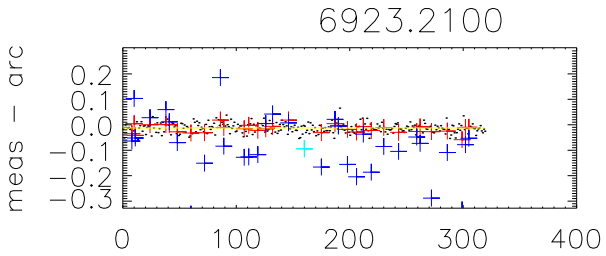

PLATE=2639 MJD=54455 Extraction chi^2 for sdR−r2−00048204.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

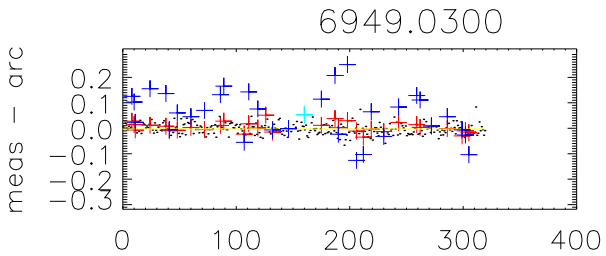

6300.3040
off: −0.00
sig: 0.005
6363.7760
off: 0.08
sig: 0.011
6553.6100
off: −0.37
sig: 0.179
6923.2100
off: −0.09
sig: 0.022
6949.0300
off: 0.05
sig: 0.018
7571.7500
off: 0.00
sig: 0.017
7794.1200
off: −0.09
sig: 0.007
7821.5100
off: −0.05
sig: 0.006
8399.1600
off: −0.03
sig: 0.005
8430.1700
off: −0.03
sig: 0.004
8885.8300
off: 0.00
sig: 0.004
8919.6100
off: −0.02
sig: 0.004

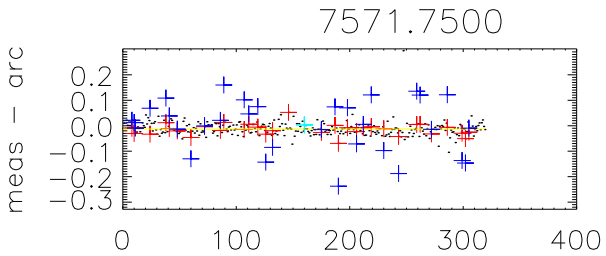

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

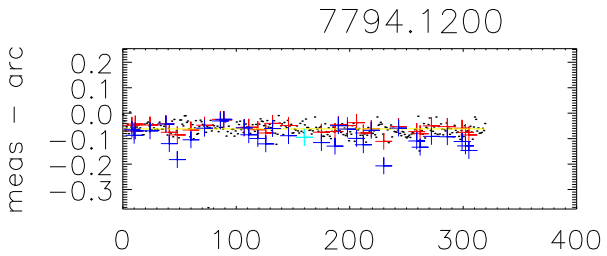

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

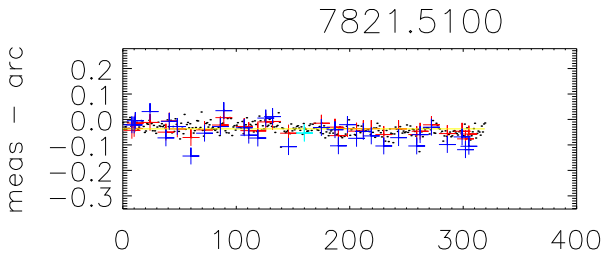

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

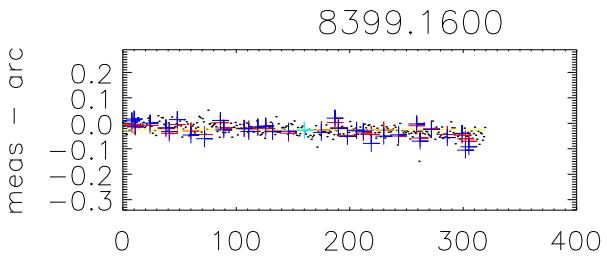

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

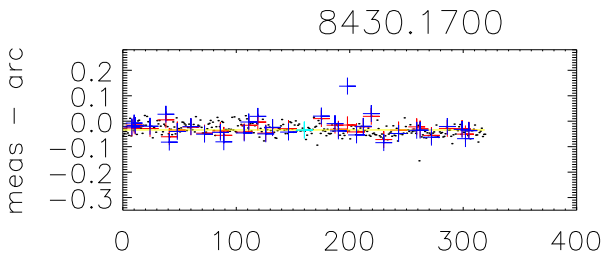

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

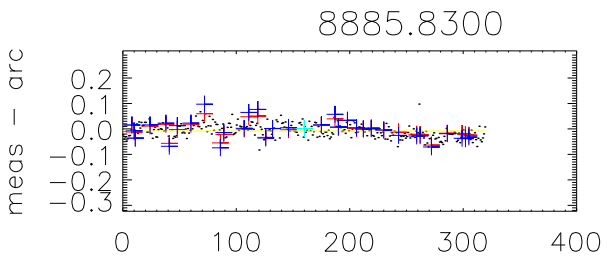

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

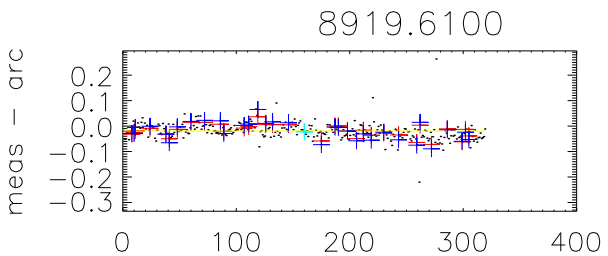

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

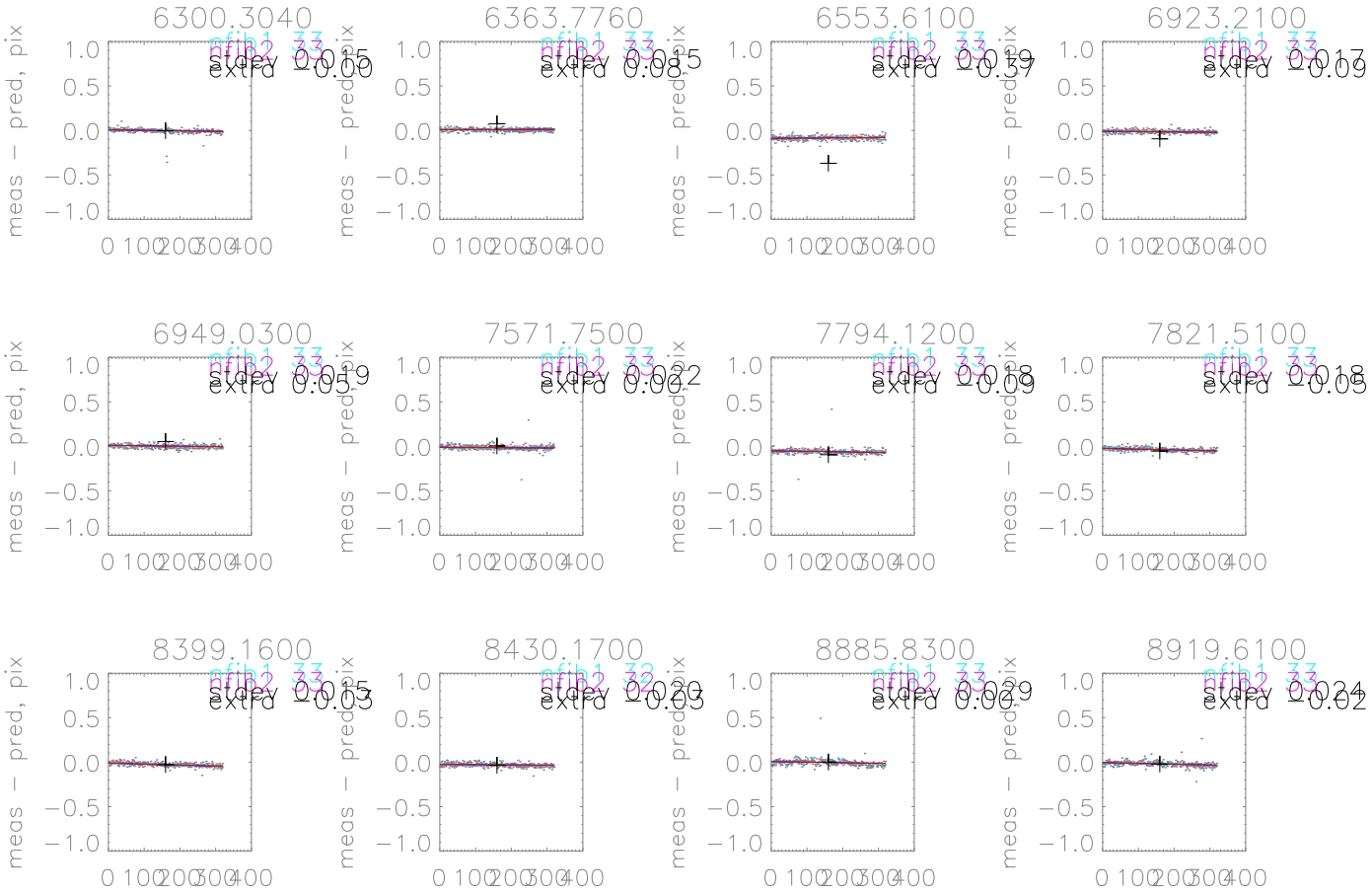

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

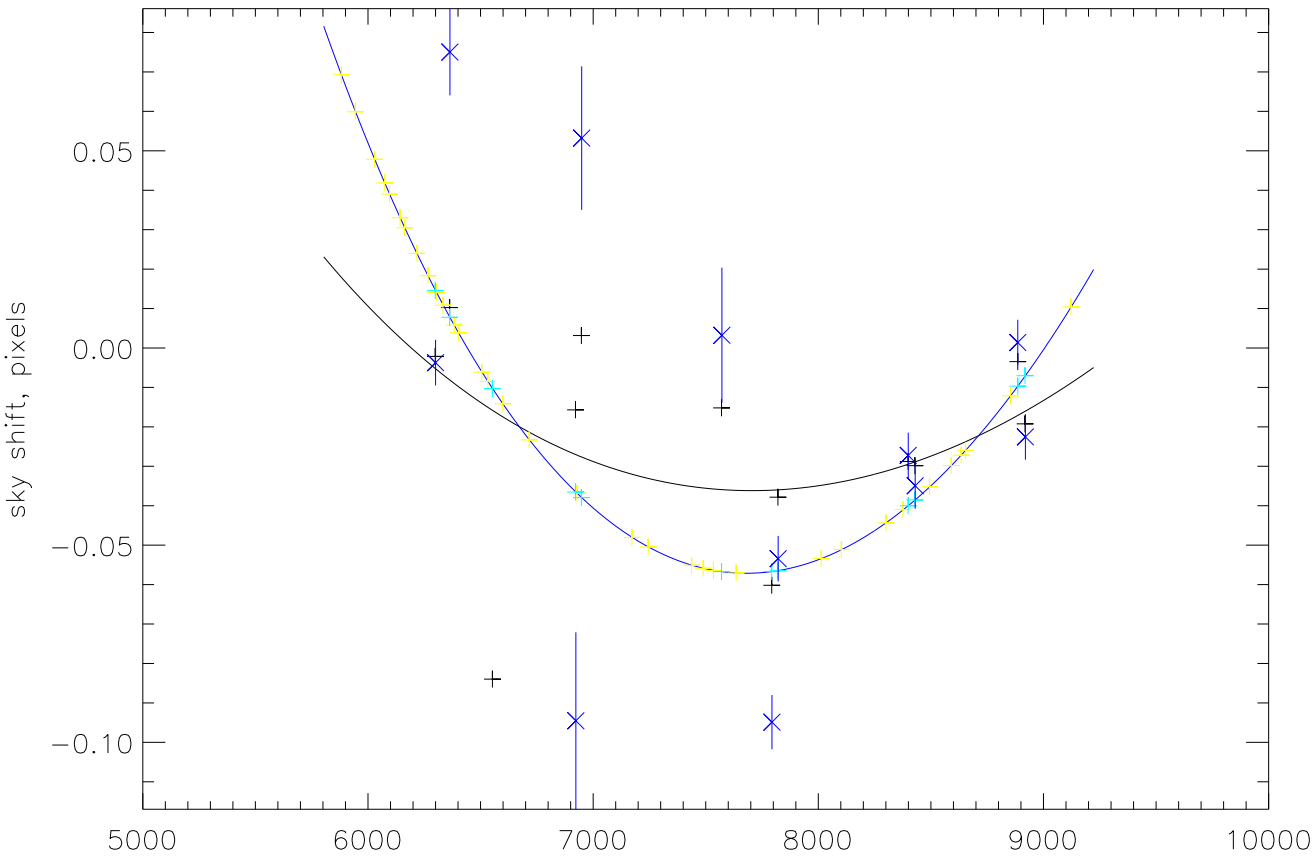

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

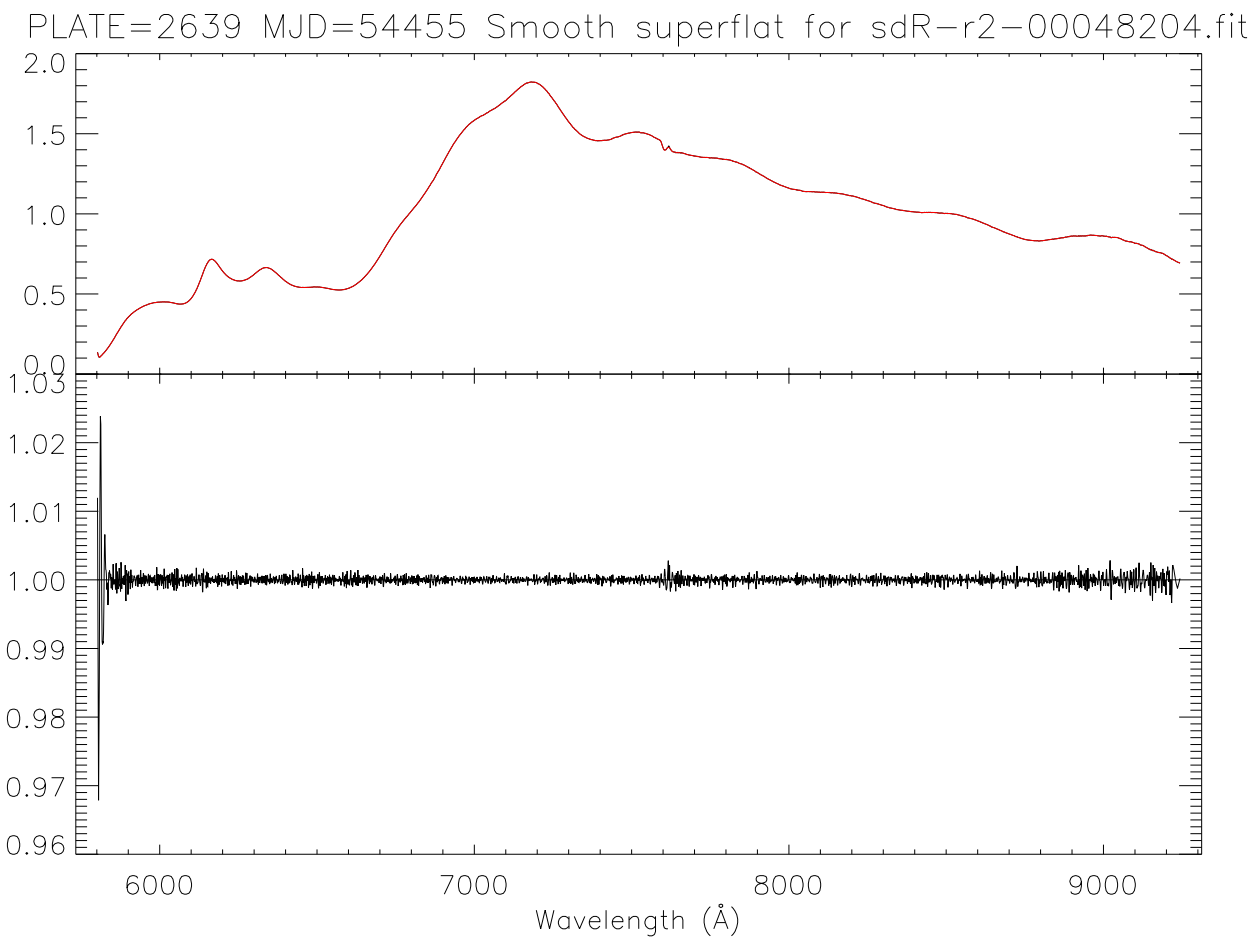

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

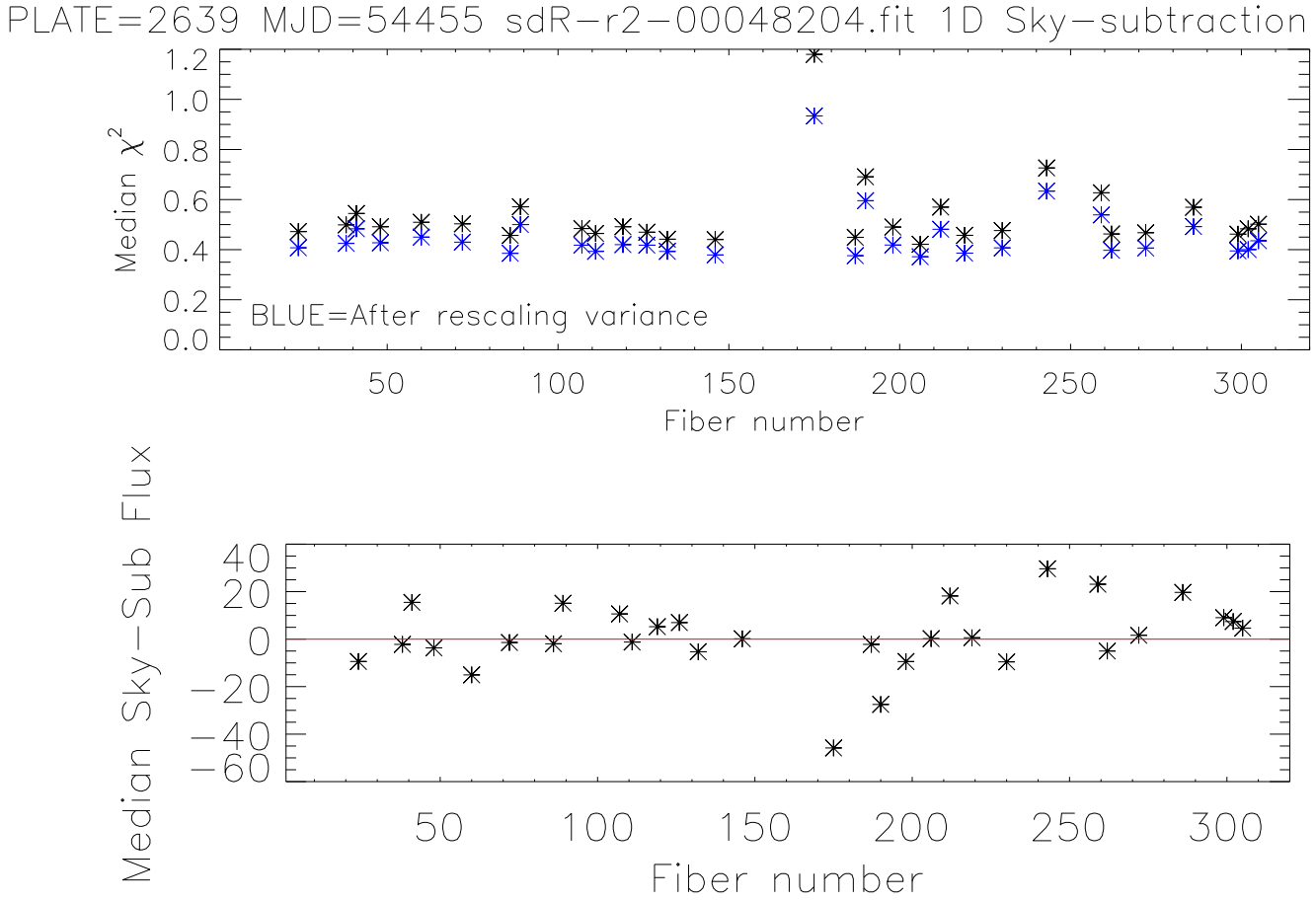

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

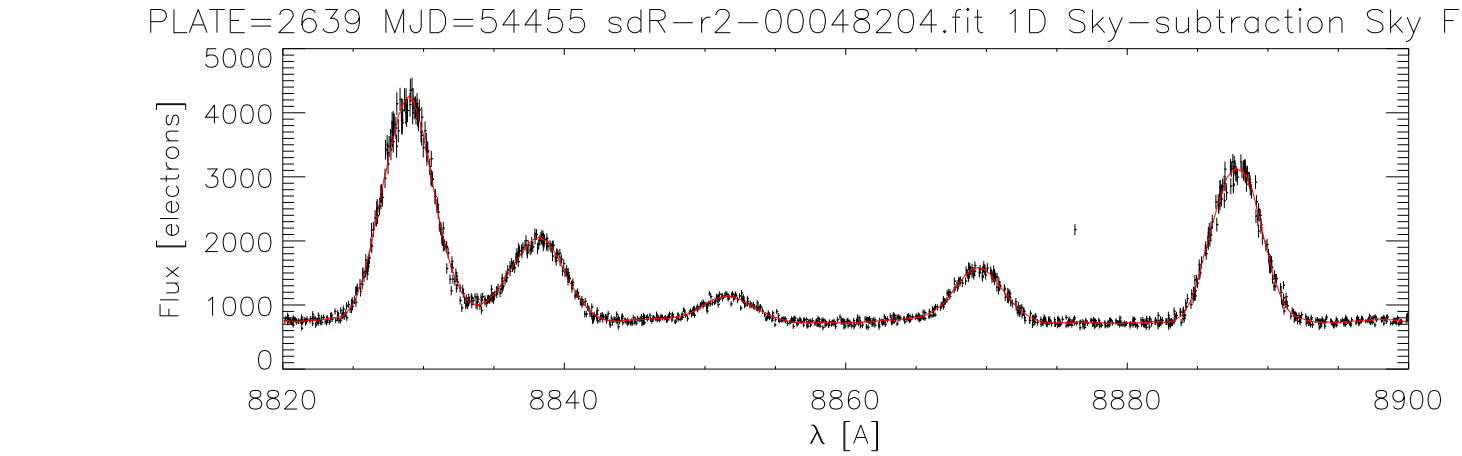

6300.3040
stdev 0.015
extrd 0.00
6363.7760
stdev 0.015
extrd 0.08
6553.6100
stdev 0.019
extrd 0.37
6923.2100
stdev 0.017
extrd 0.09
6949.0300
stdev 0.019
extrd 0.05
7571.7500
stdev 0.022
extrd 0.06
7794.1200
stdev 0.018
extrd 0.09
7821.5100
stdev 0.018
extrd 0.05
8399.1600
stdev 0.015
extrd 0.03
8430.1700
stdev 0.020
extrd 0.03
8885.8300
stdev 0.029
extrd 0.04
8919.6100
stdev 0.024
extrd 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

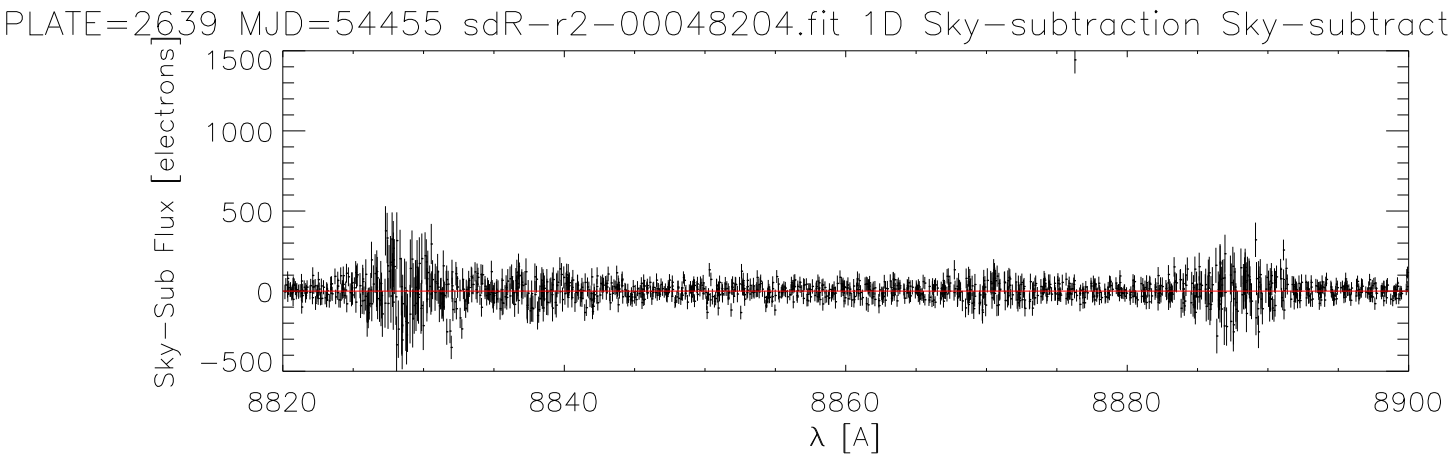

sky shift, pixels
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

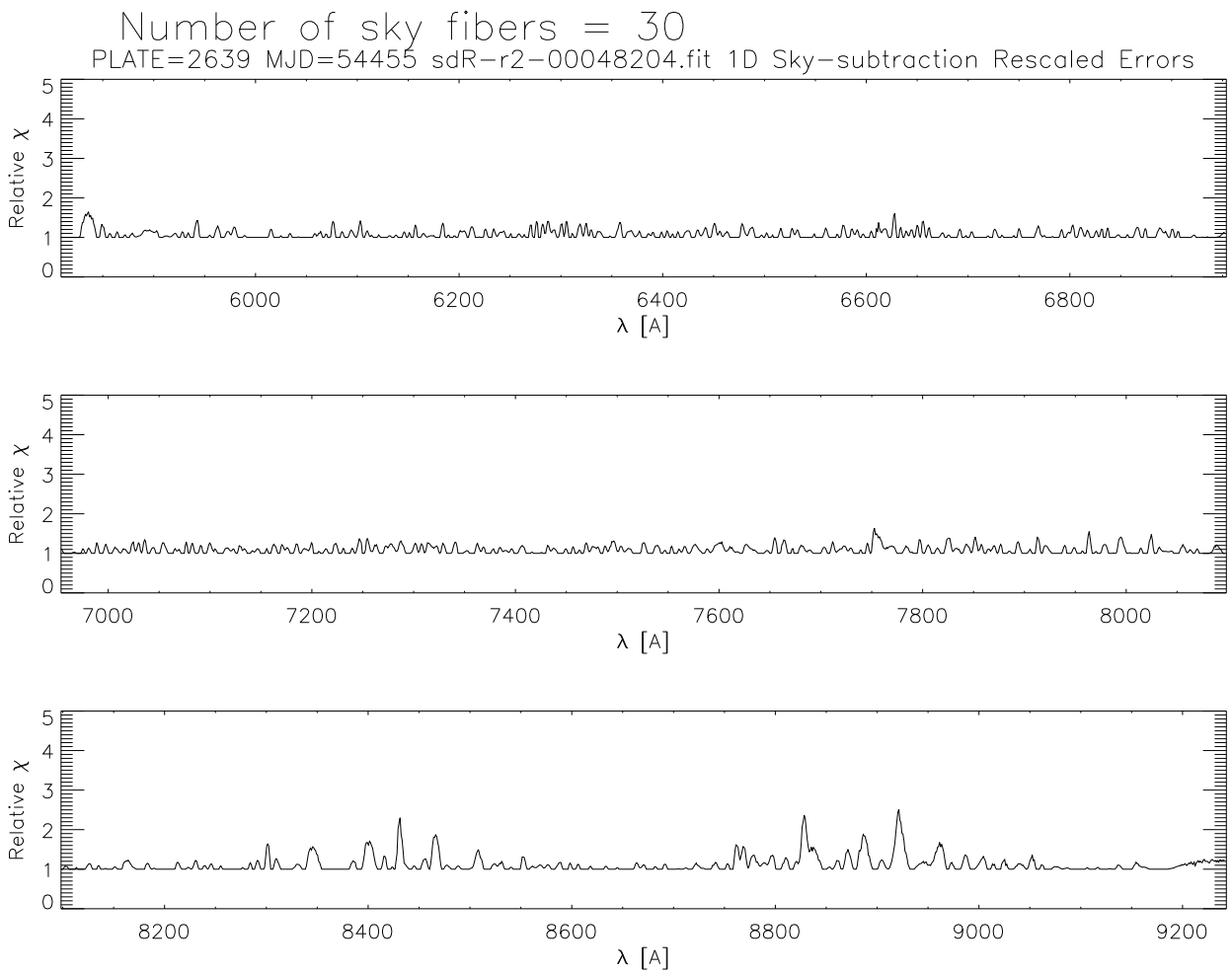
es= 0.0000

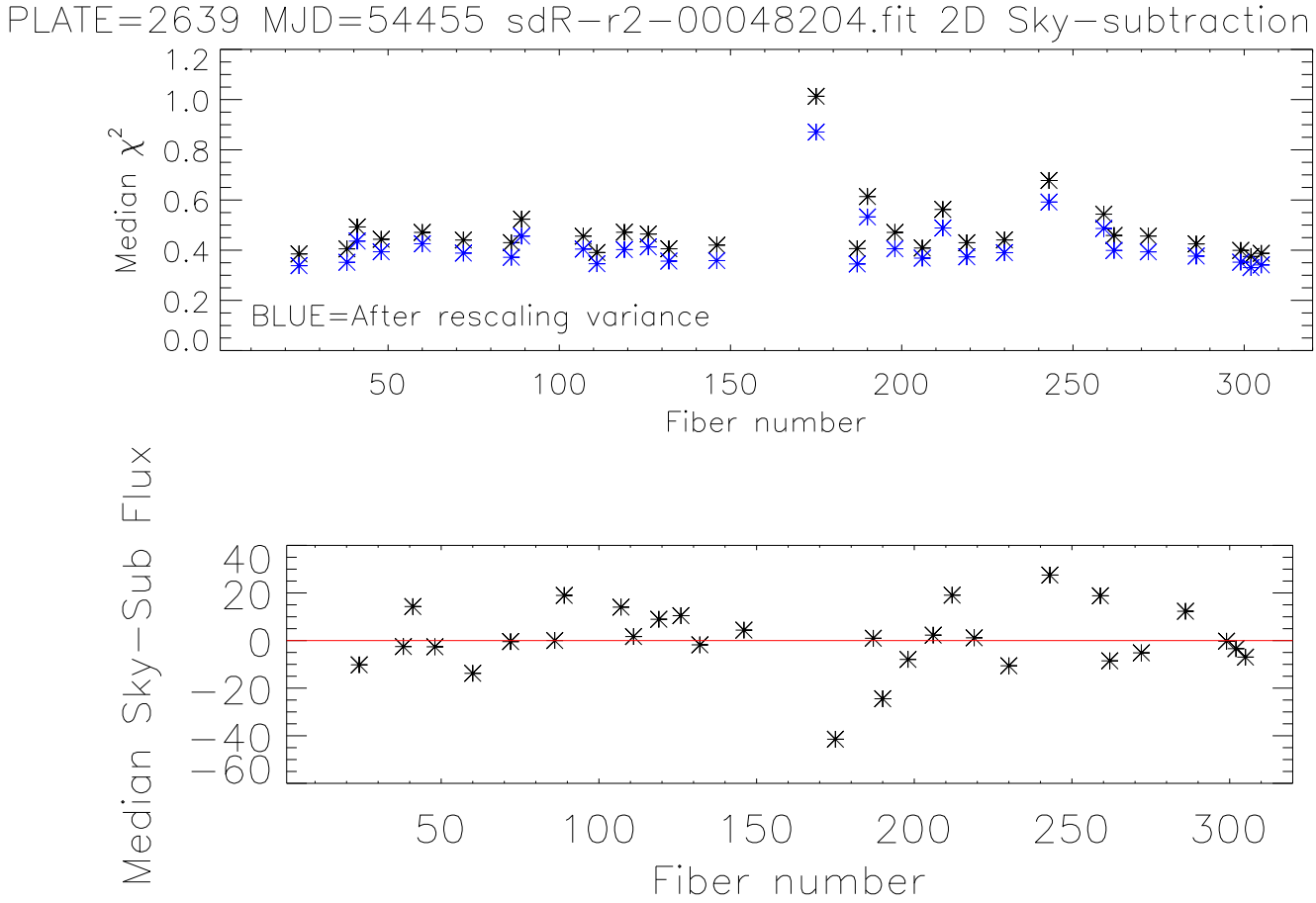

PLATE=2639 MJD=54455 Smooth superflat for sdR-r2-00048204.fit
2.0
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
0.96
6000
7000
8000
9000
Wavelength (Å)

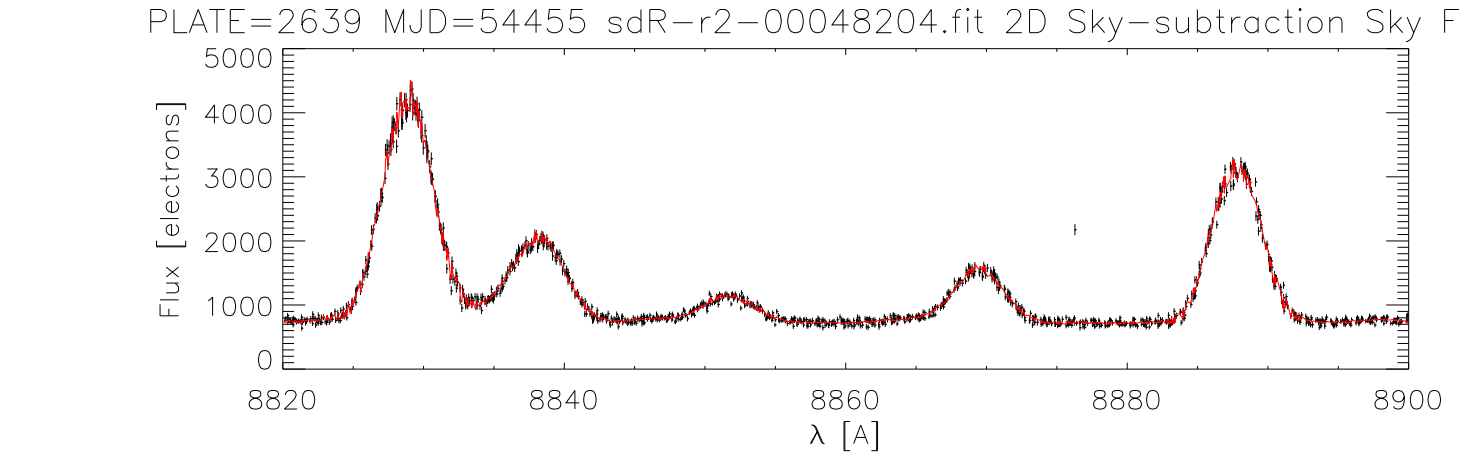

PLATE=2639 MJD=54455 sdR-r2-00048204.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

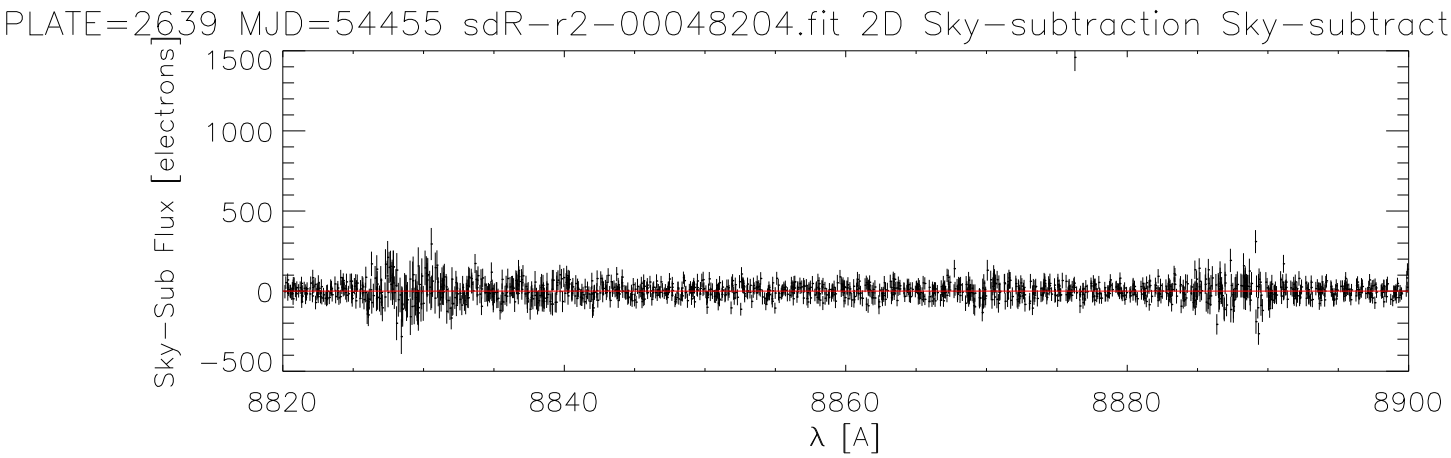

PLATE=2639 MJD=54455 sdR-r2-00048204.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

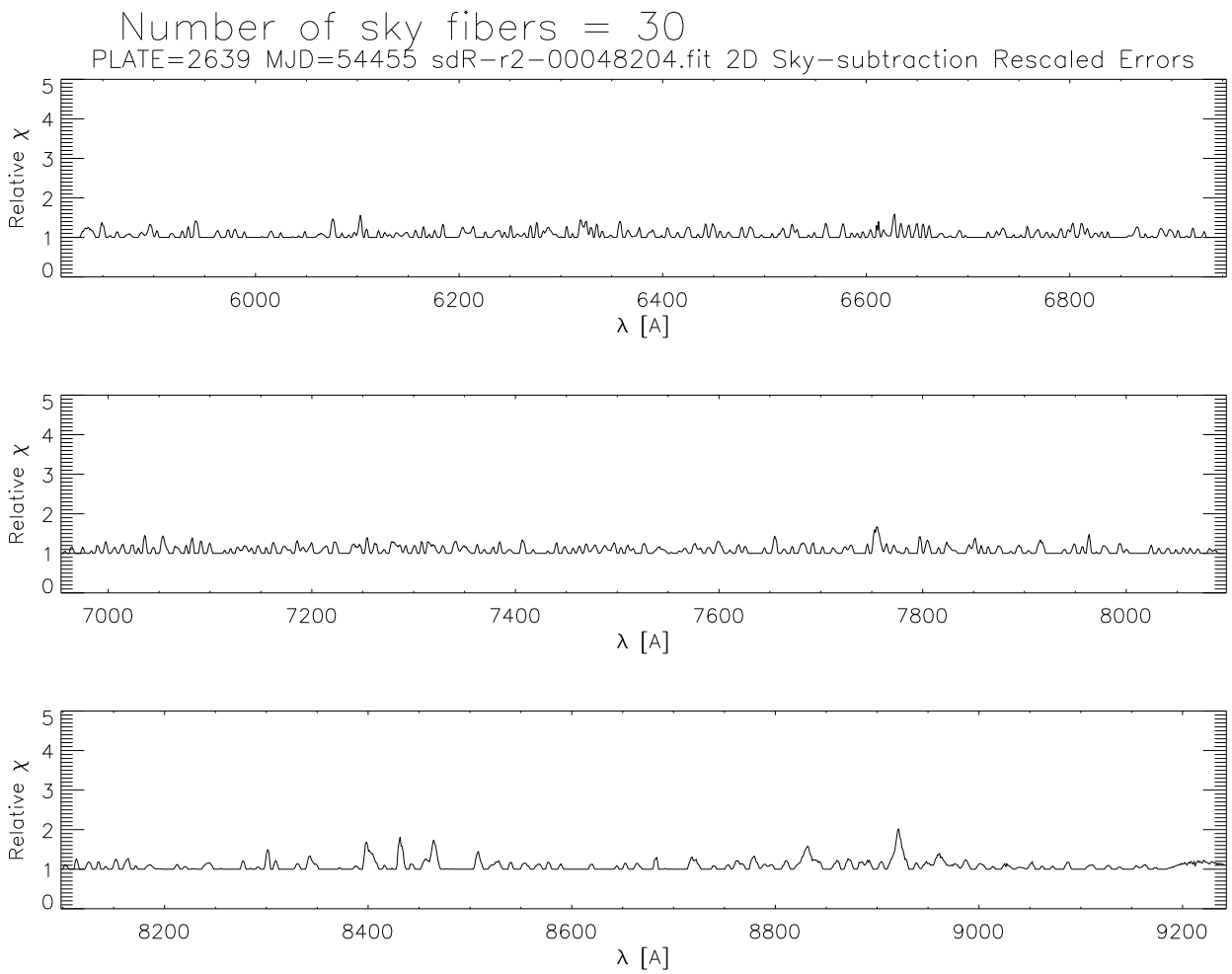

PLATE=2639 MJD=54455 sdR-r2-00048204.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

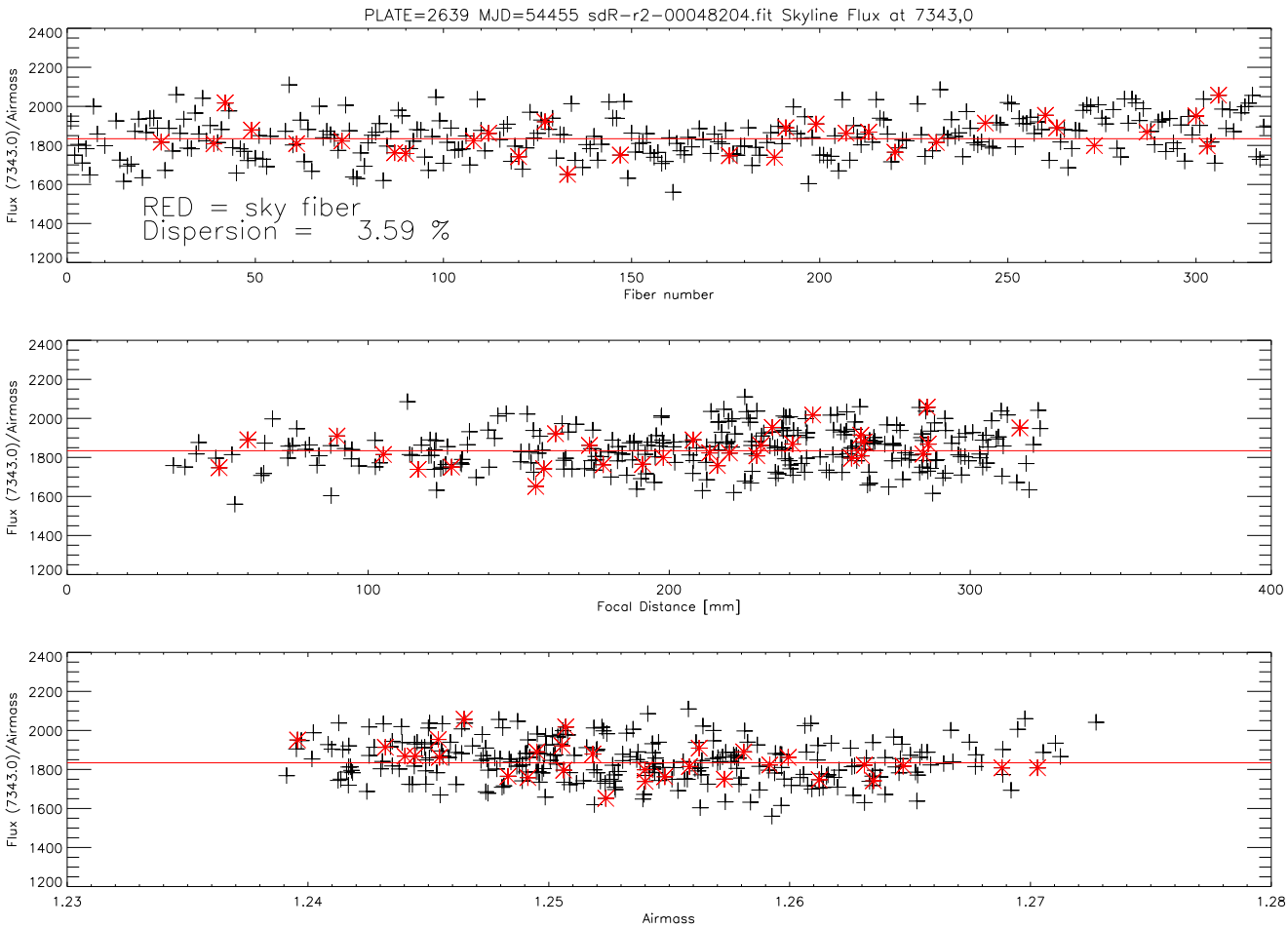

Number of sky fibers = 30
PLATE=2639 MJD=54455 sdR-r2-00048204.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

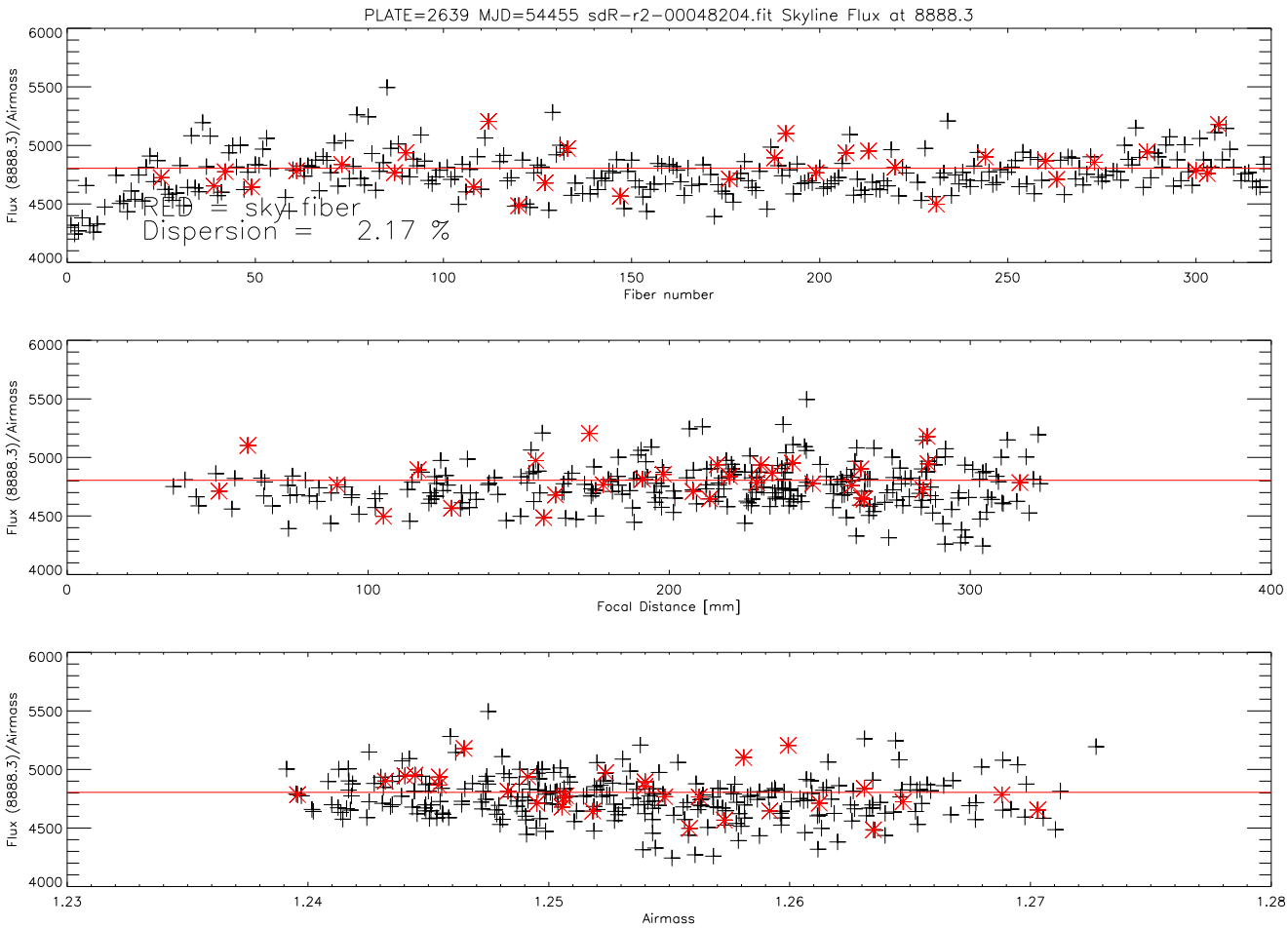

PLATE=2639 MJD=54455 sdR-r2-00048204.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
-20
-40
-60
50
100
150
200
250
300
Fiber number


PLATE=2639 MJD=54455 sdR-r2-00048204.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2639 MJD=54455 sdR-r2-00048204.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 30
PLATE=2639 MJD=54455 sdR-r2-00048204.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=2639 MJD=54455 sdR-r2-00048204.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.59 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2639 MJD=54455 sdR-r2-00048204.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.17 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass