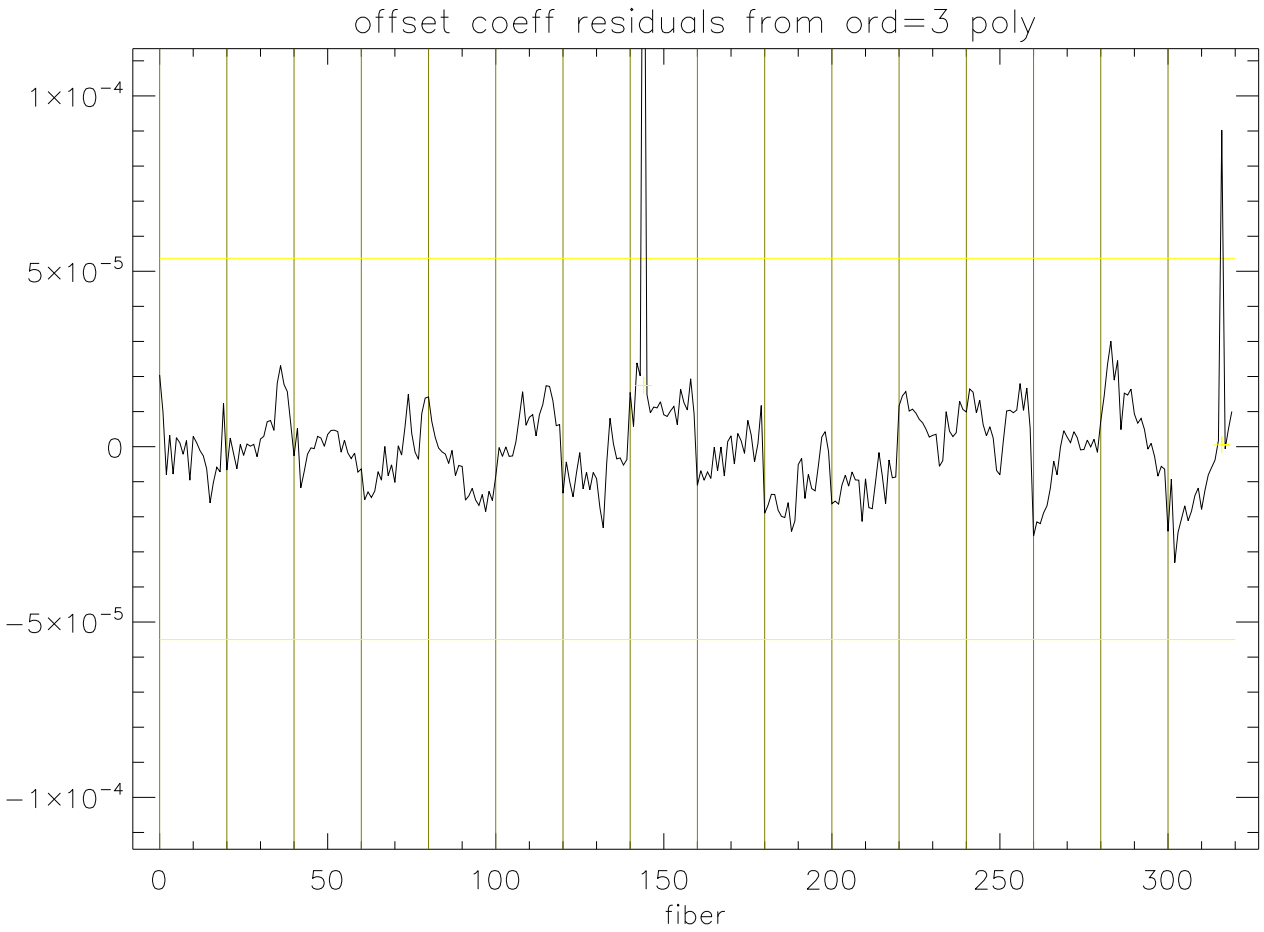
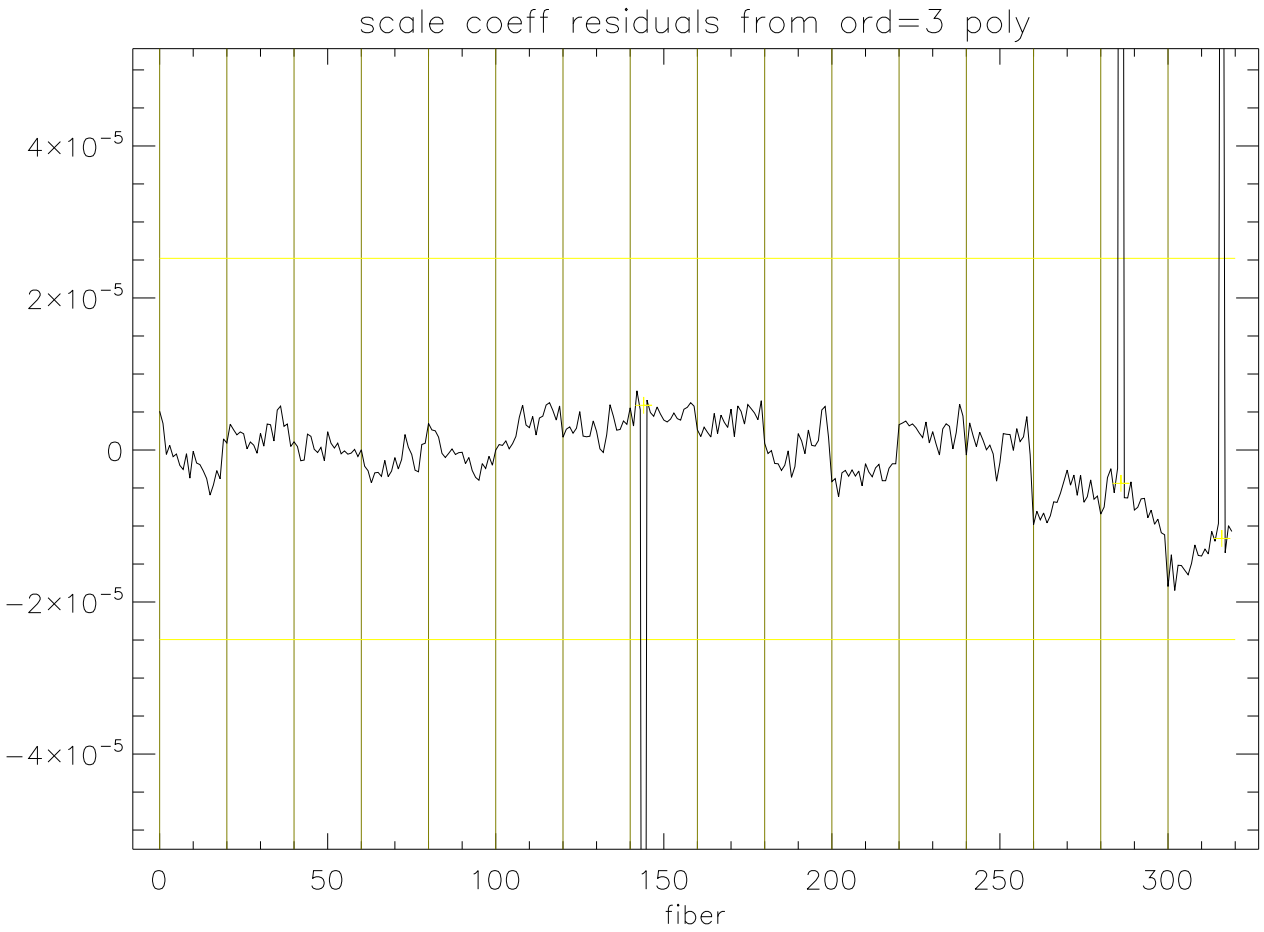
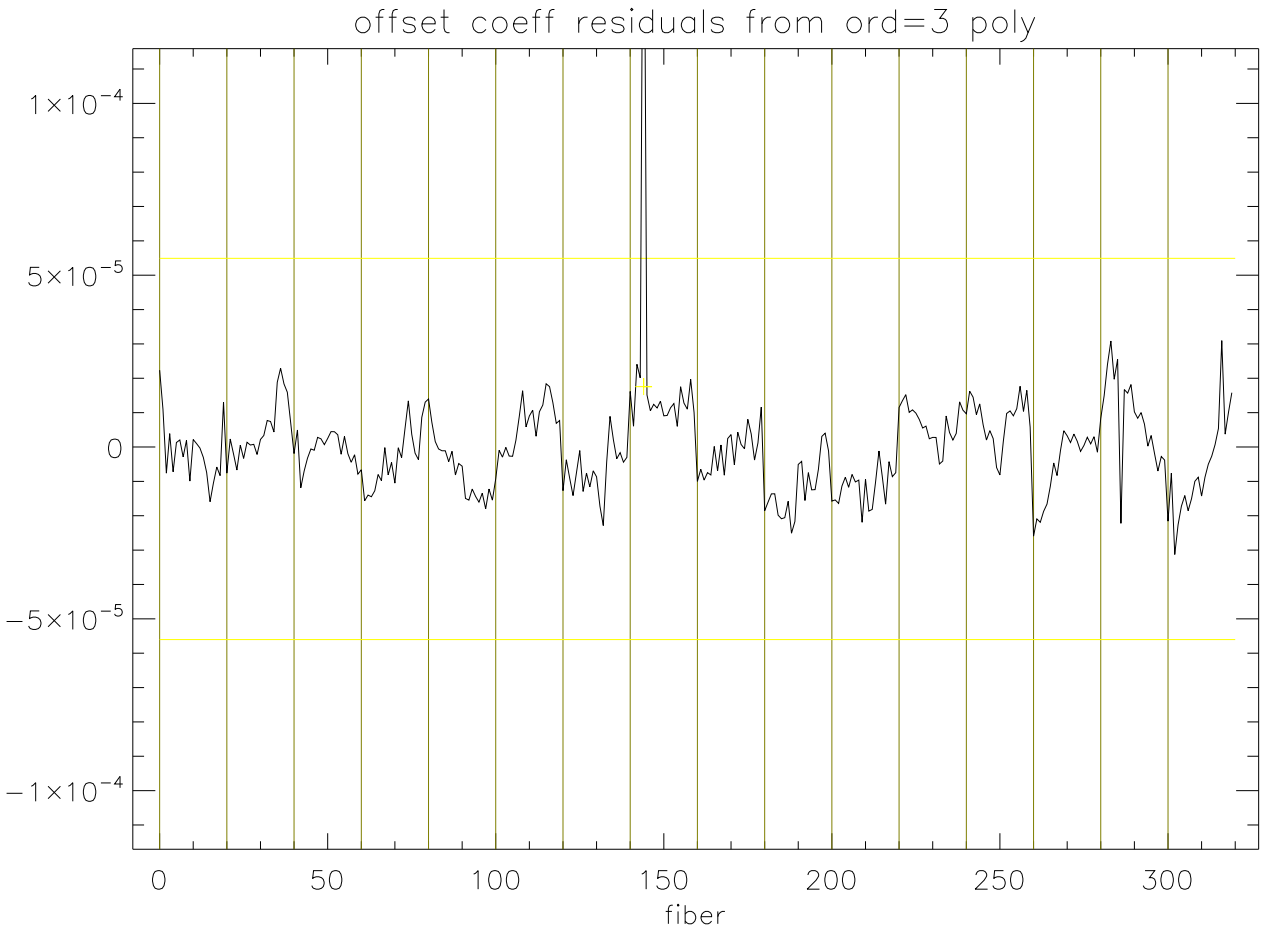
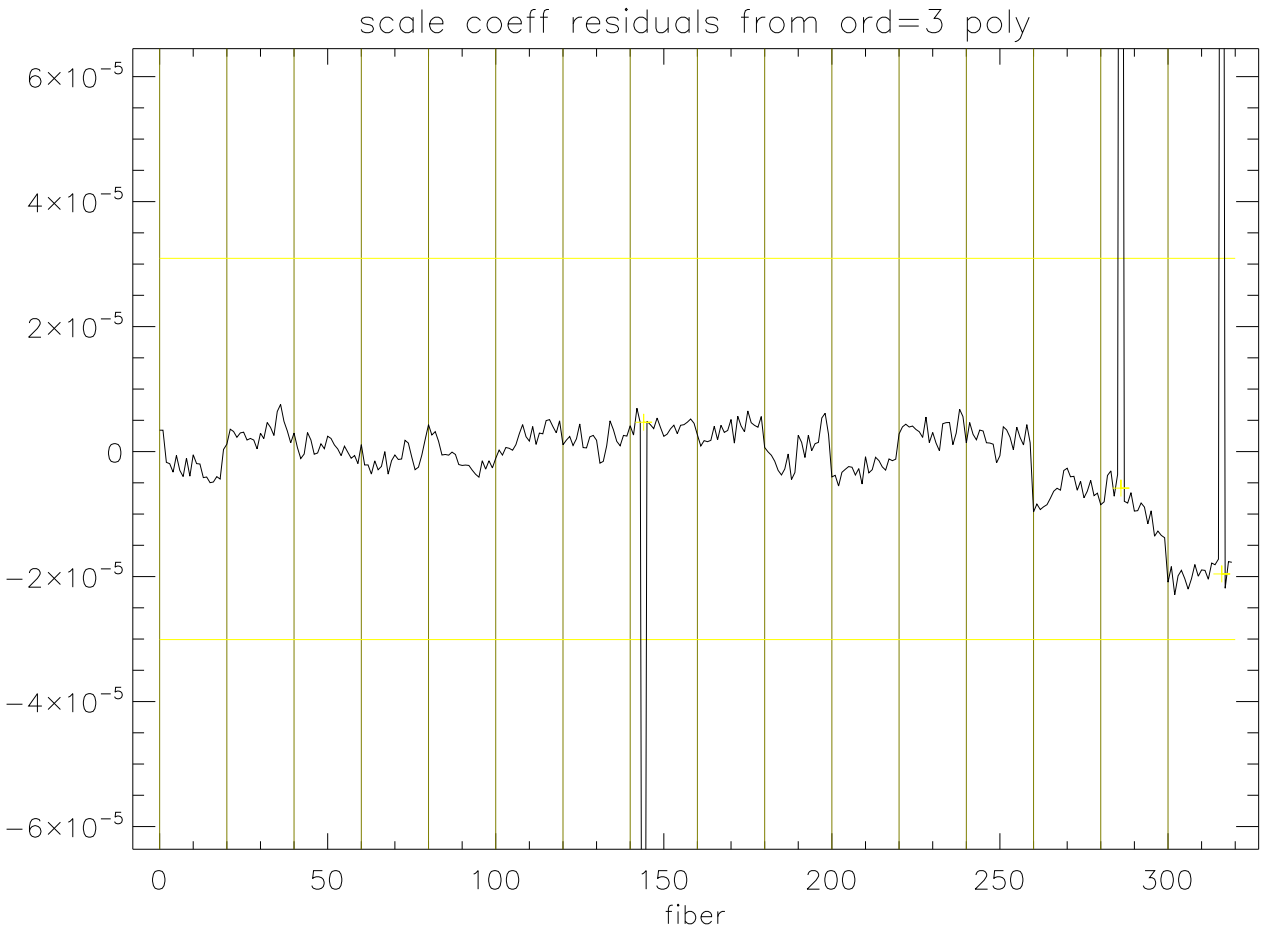
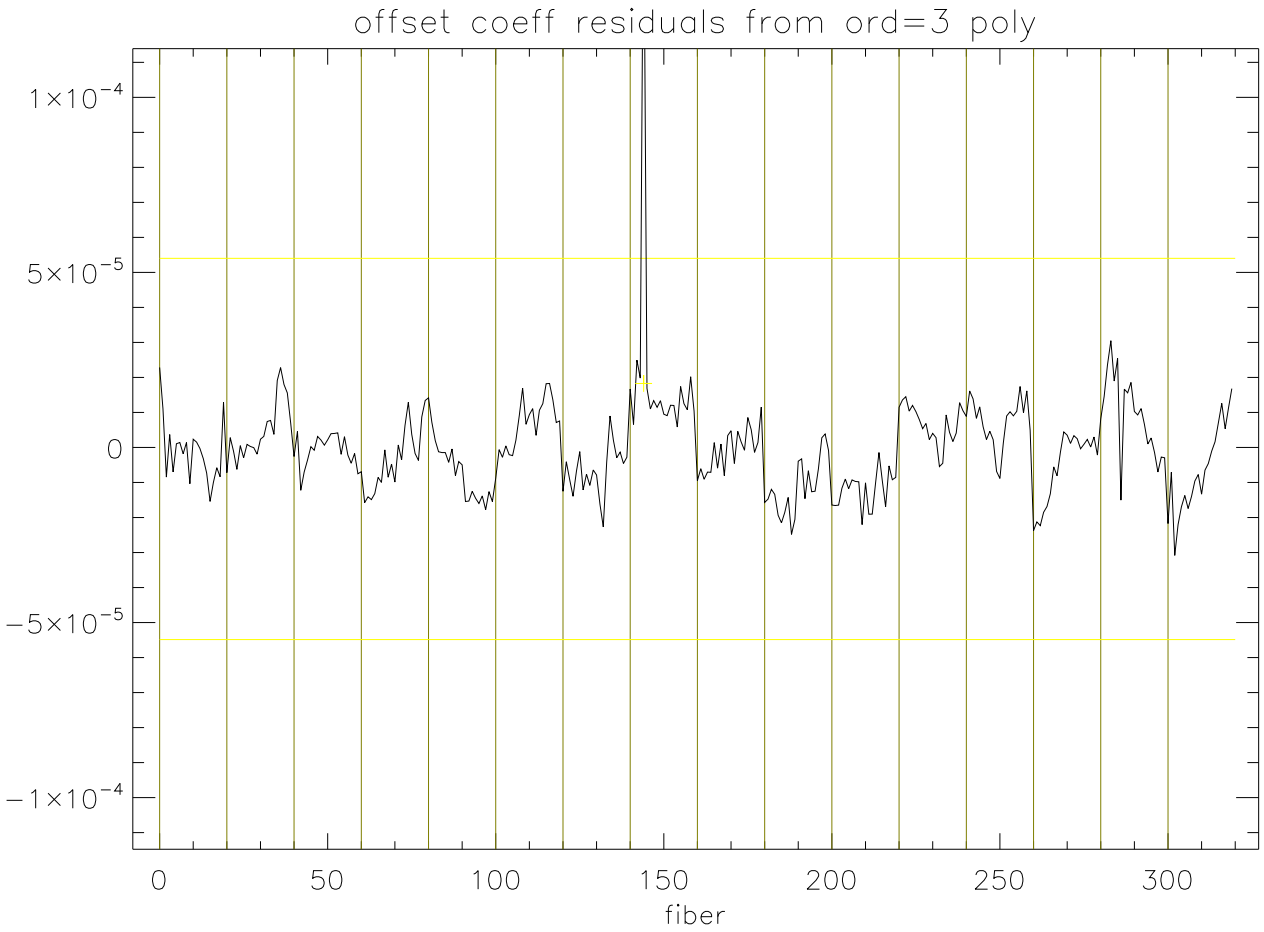
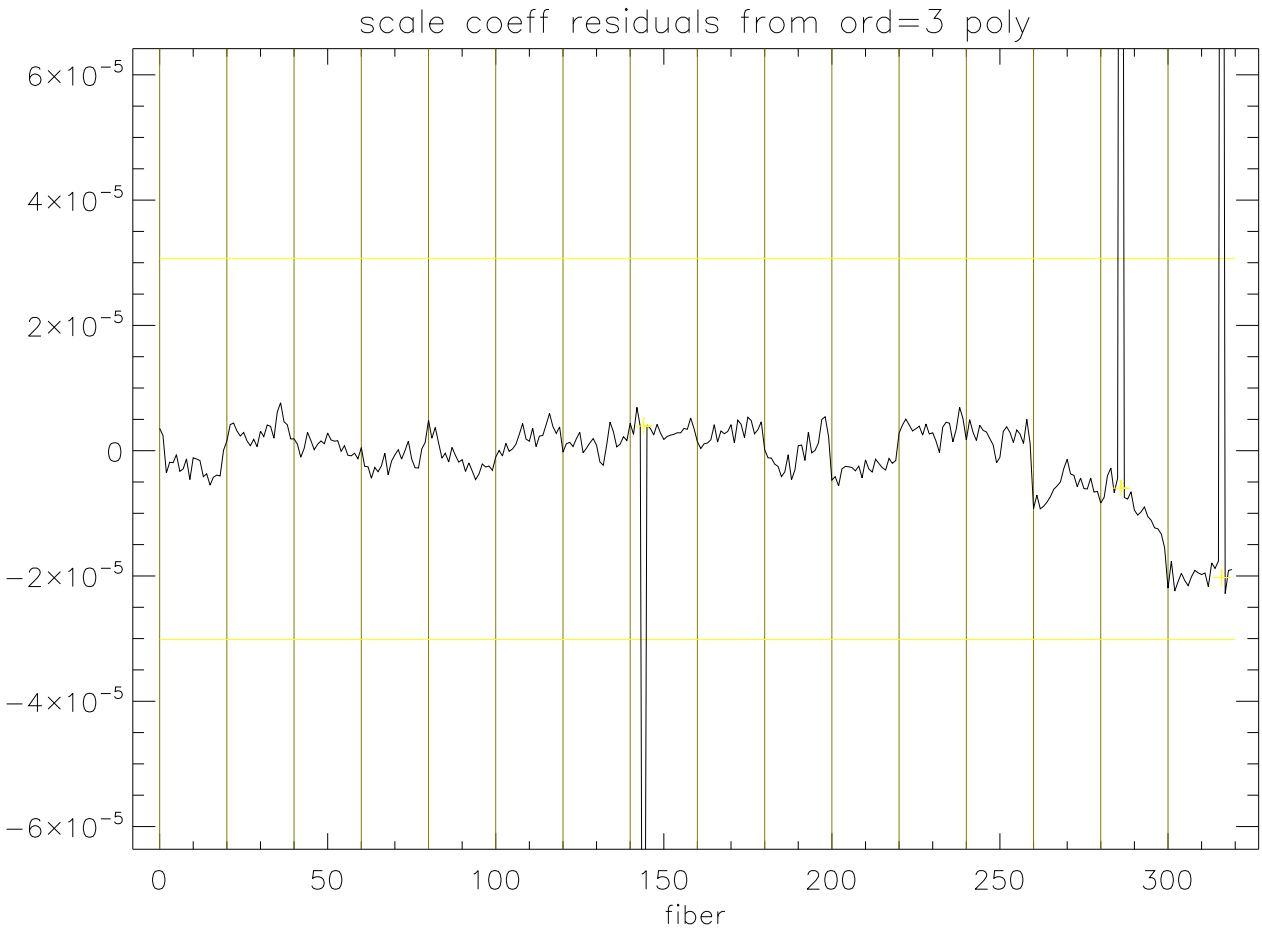

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

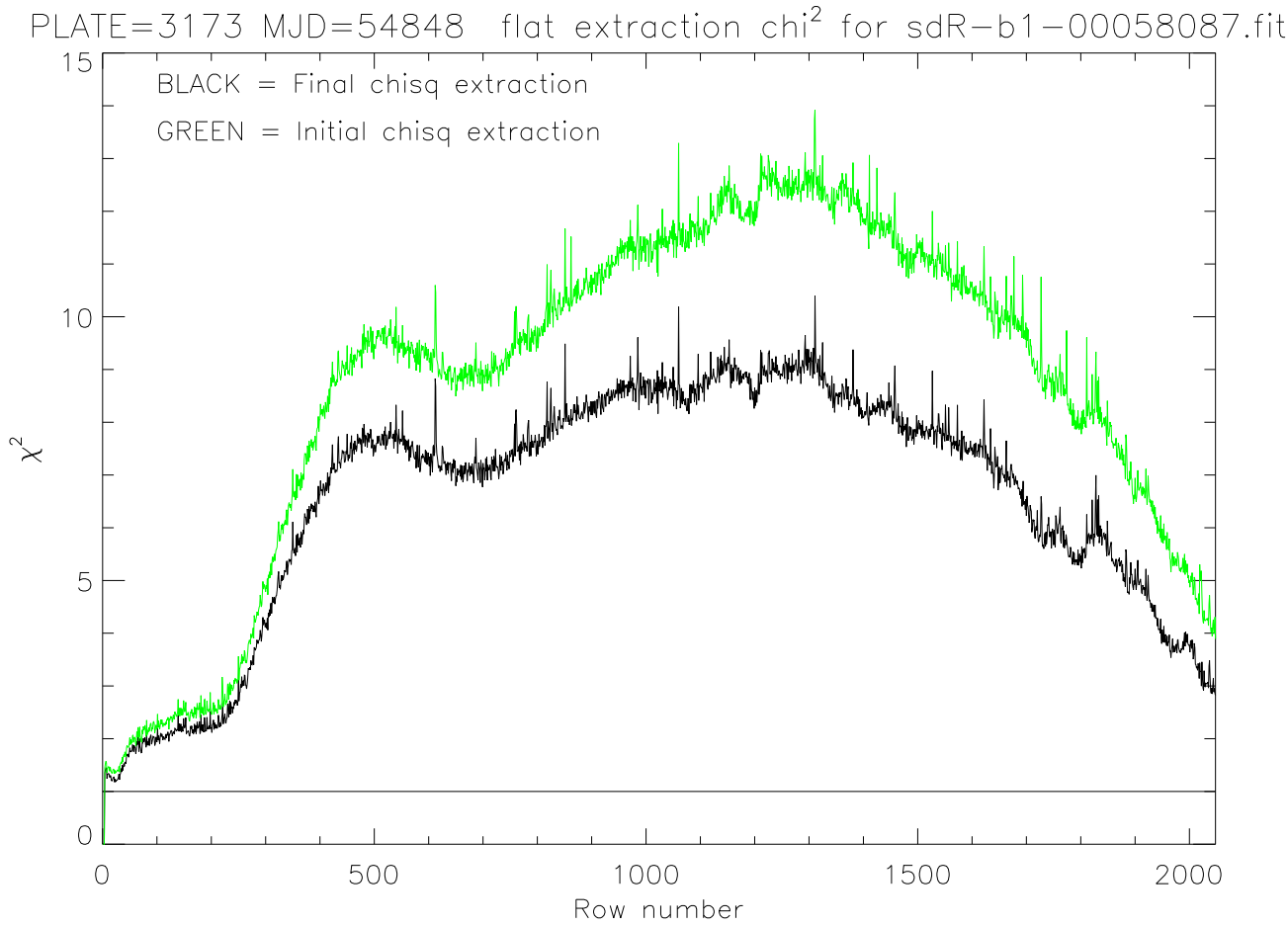

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

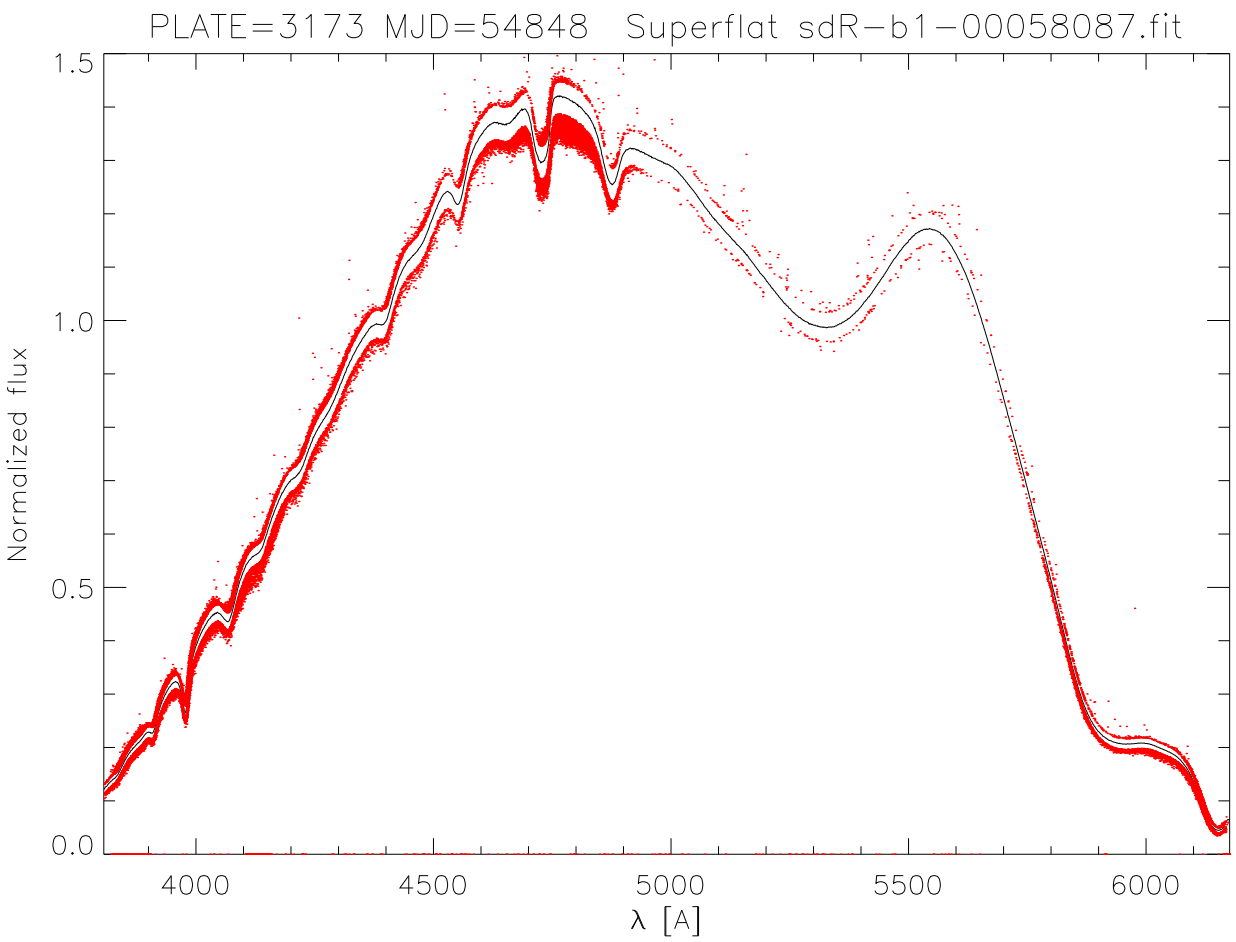

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

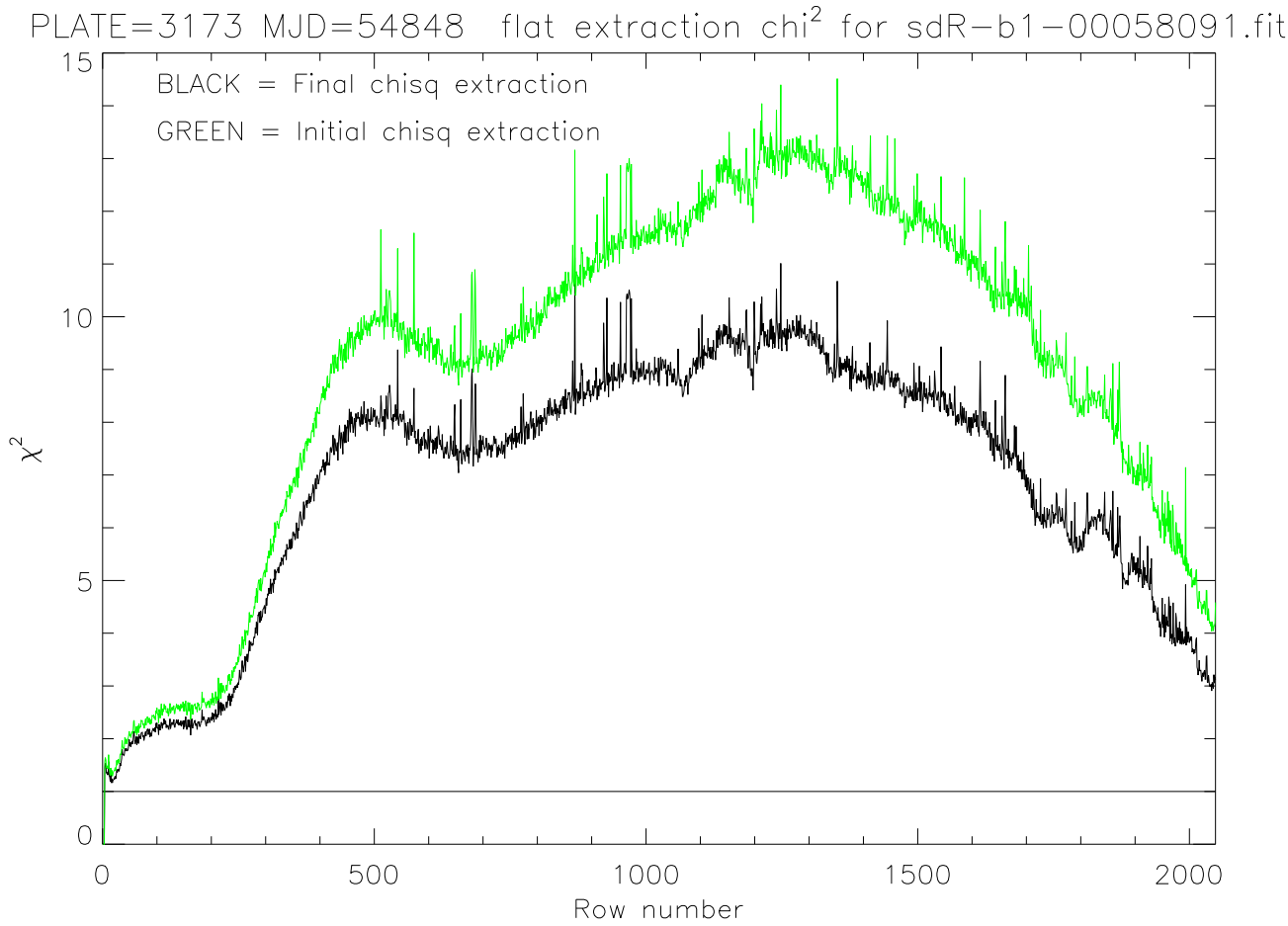

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

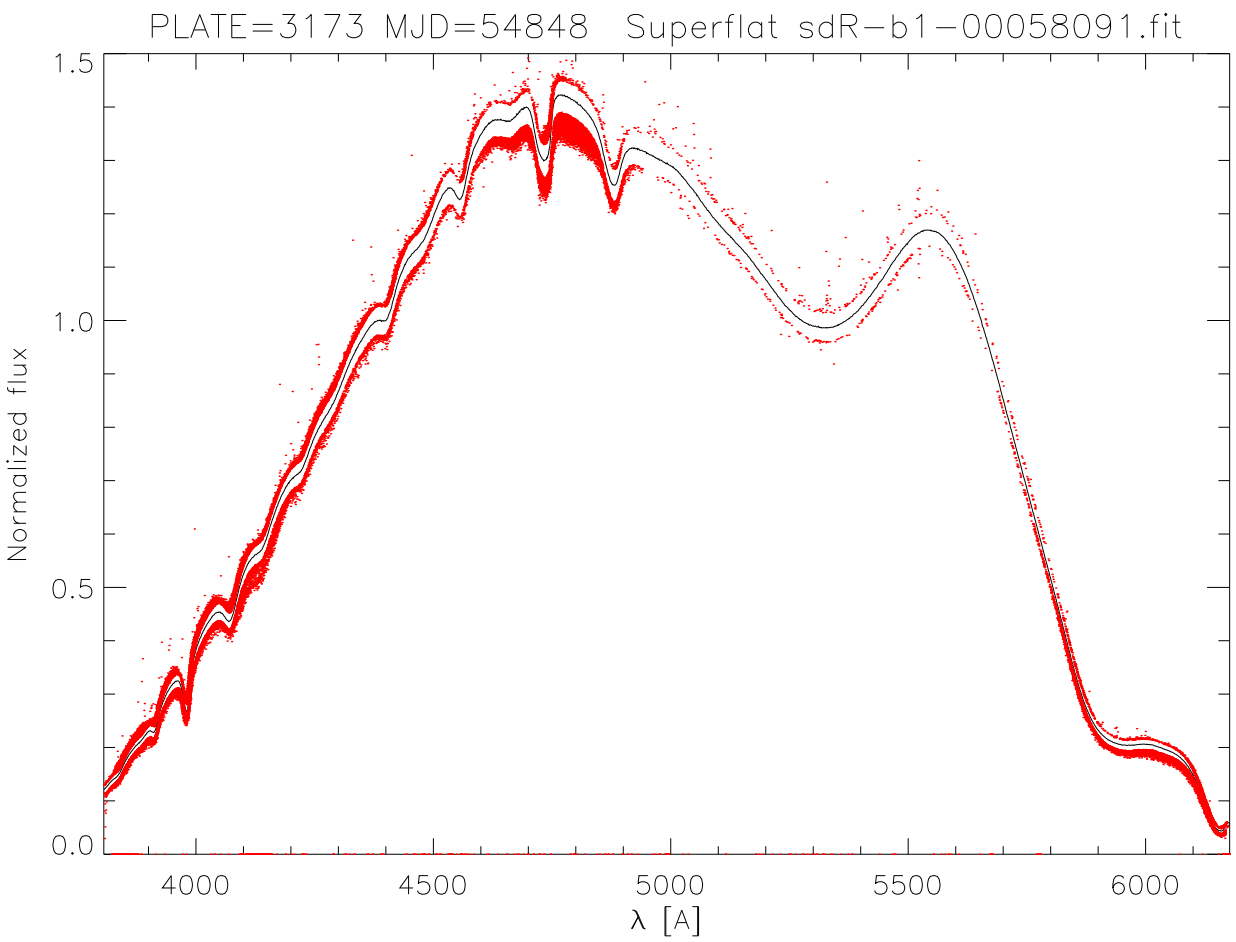

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

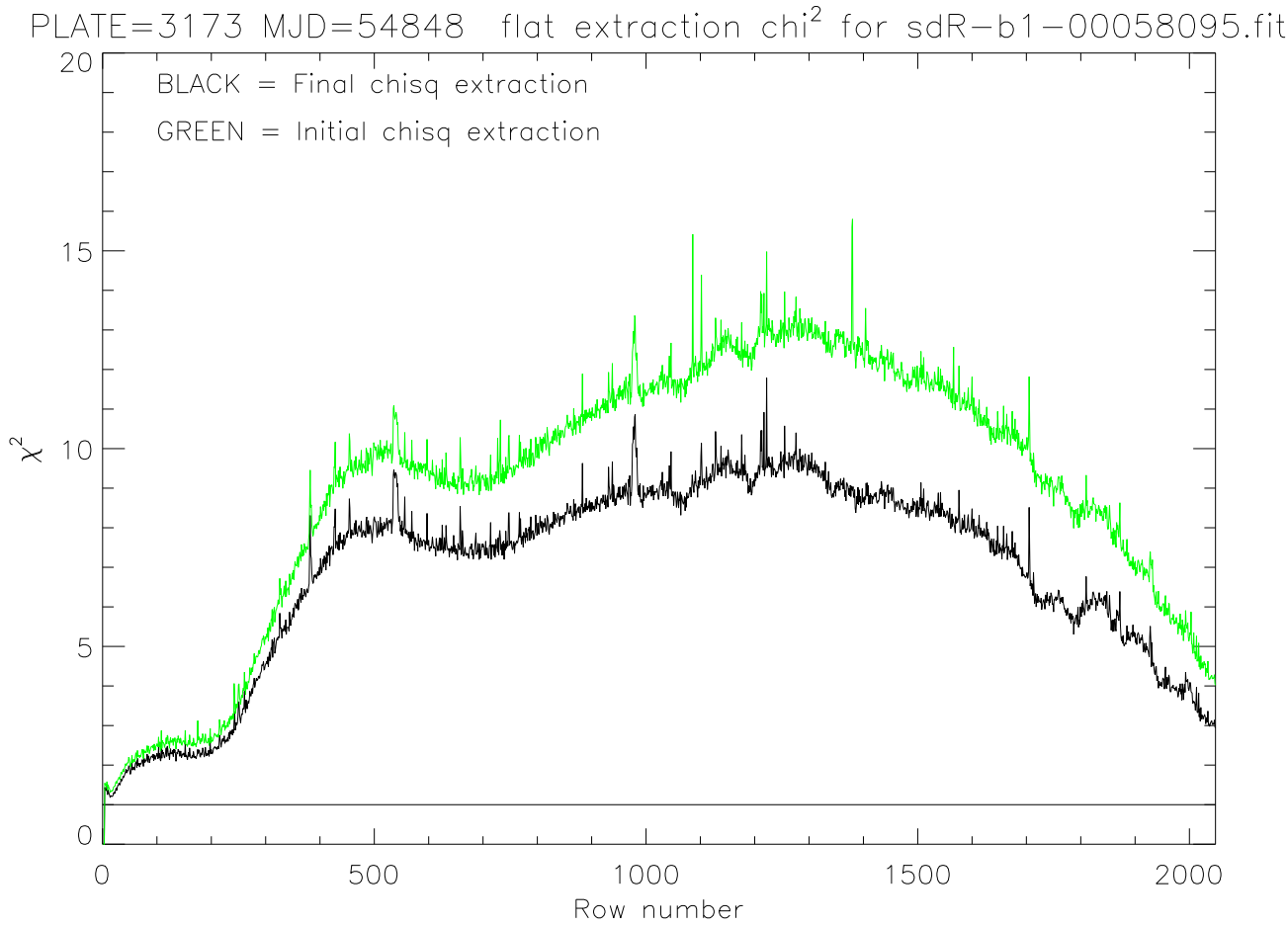

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

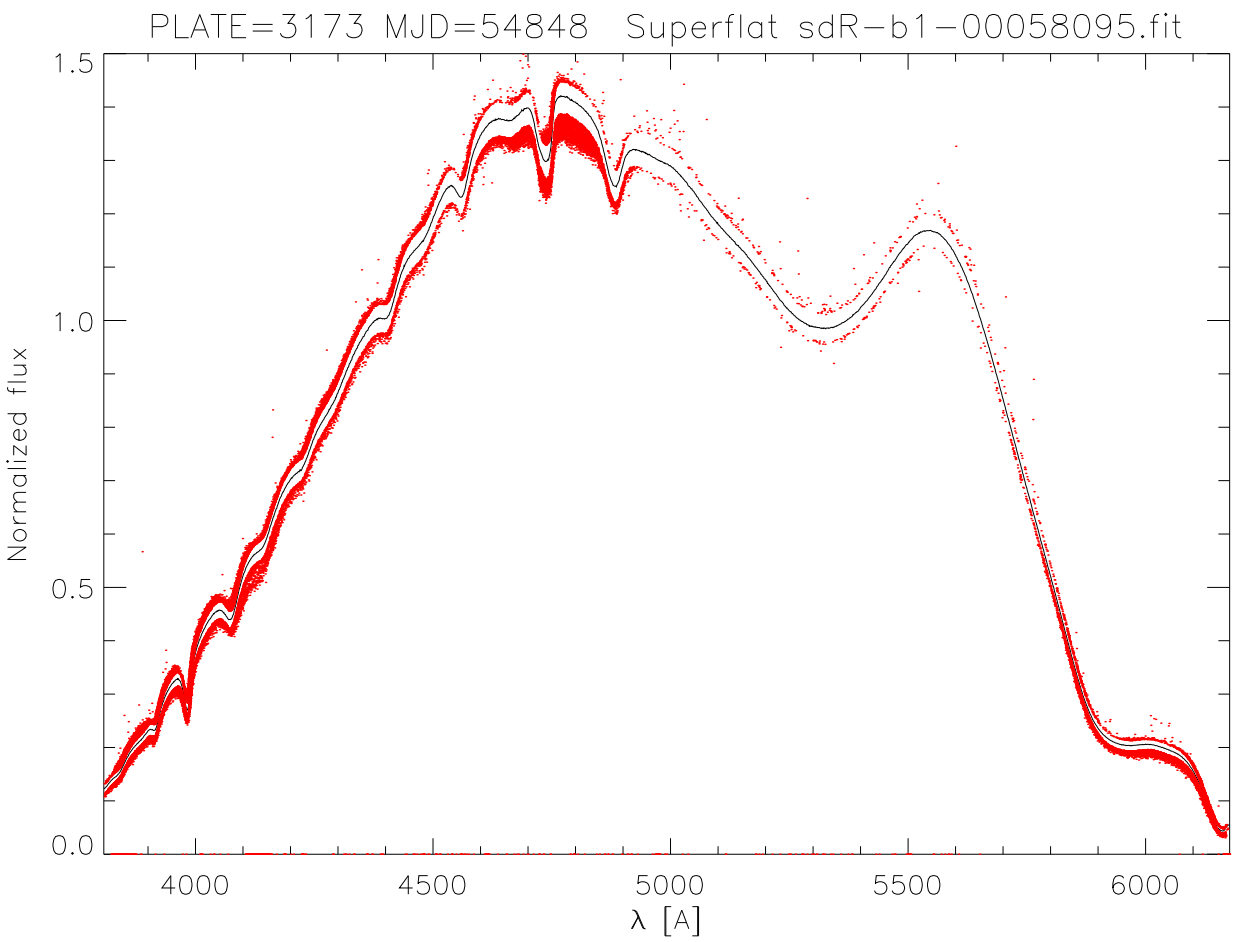

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−b1−00058087.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

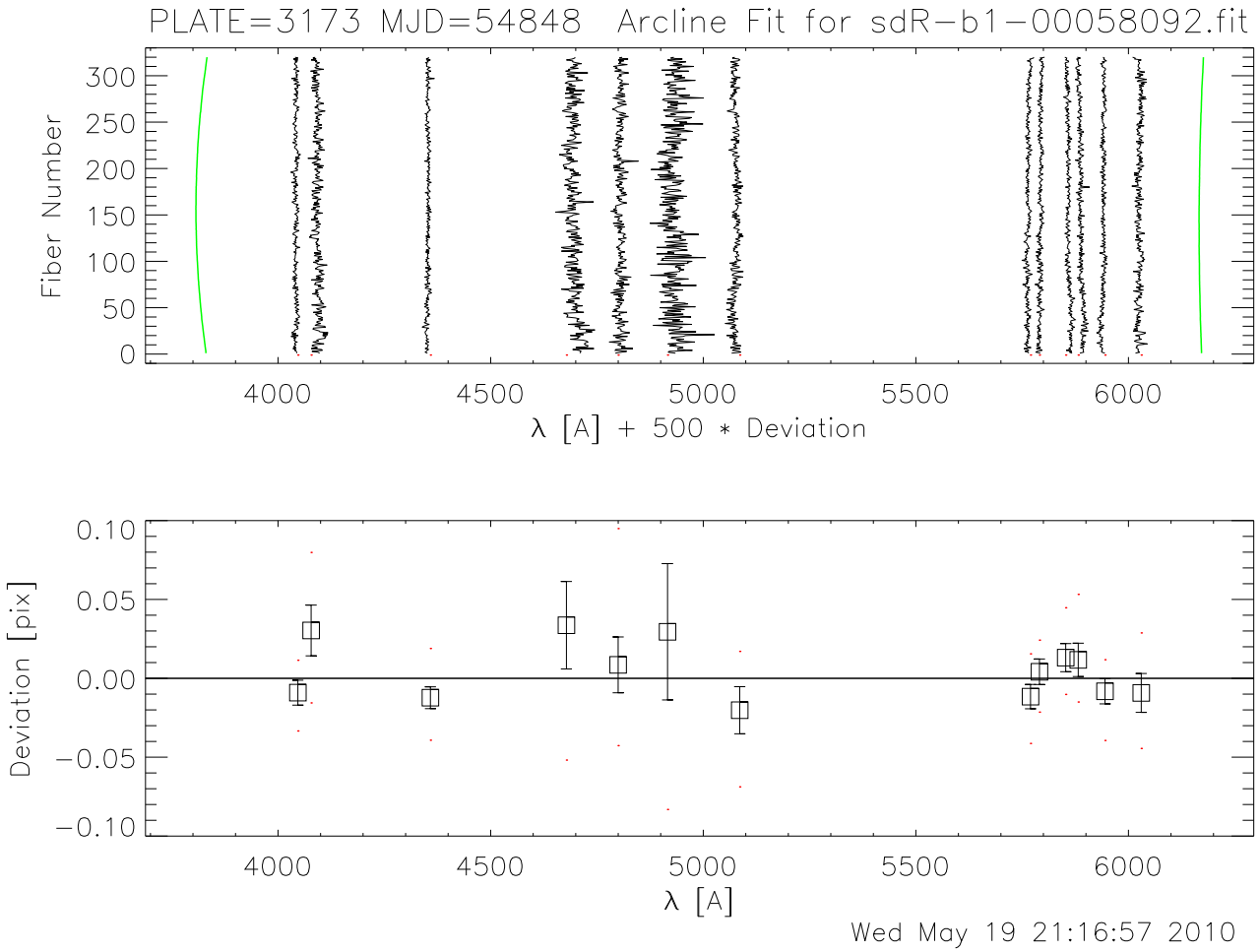

PLATE=3173 MJD=54848 Superflat sdR-b1-00058087.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

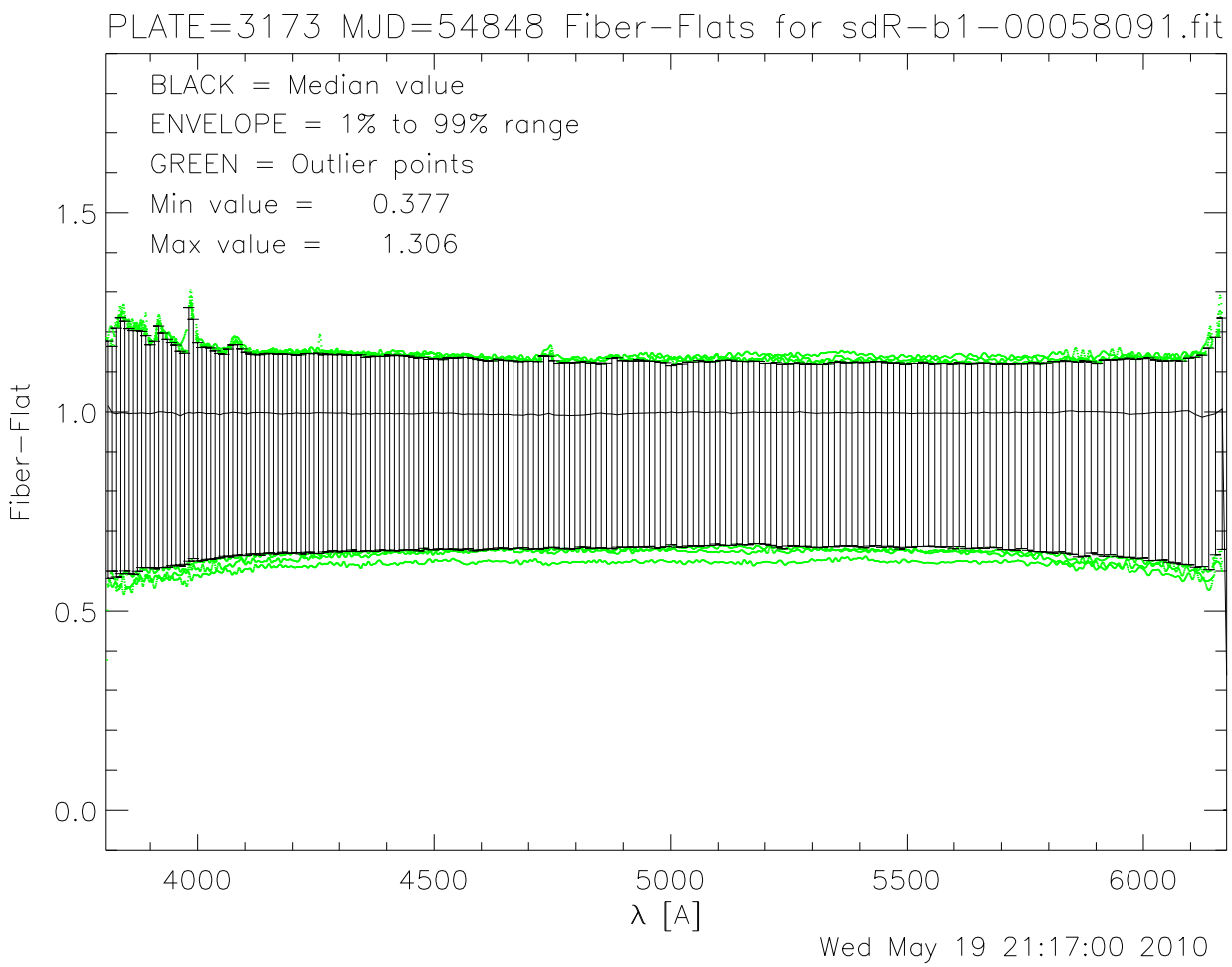

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−b1−00058091.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

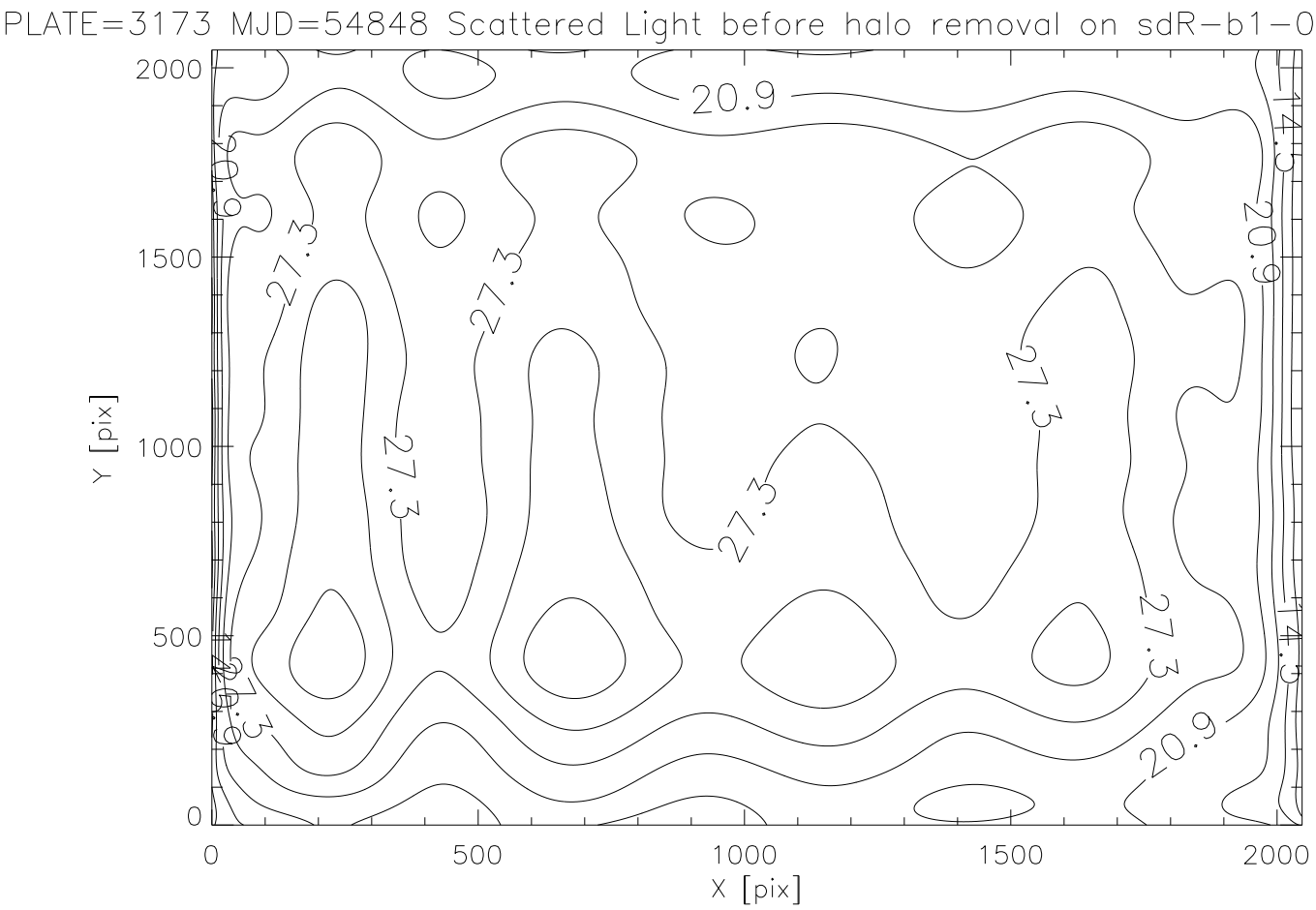

PLATE=3173 MJD=54848 Superflat sdR-b1-00058091.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

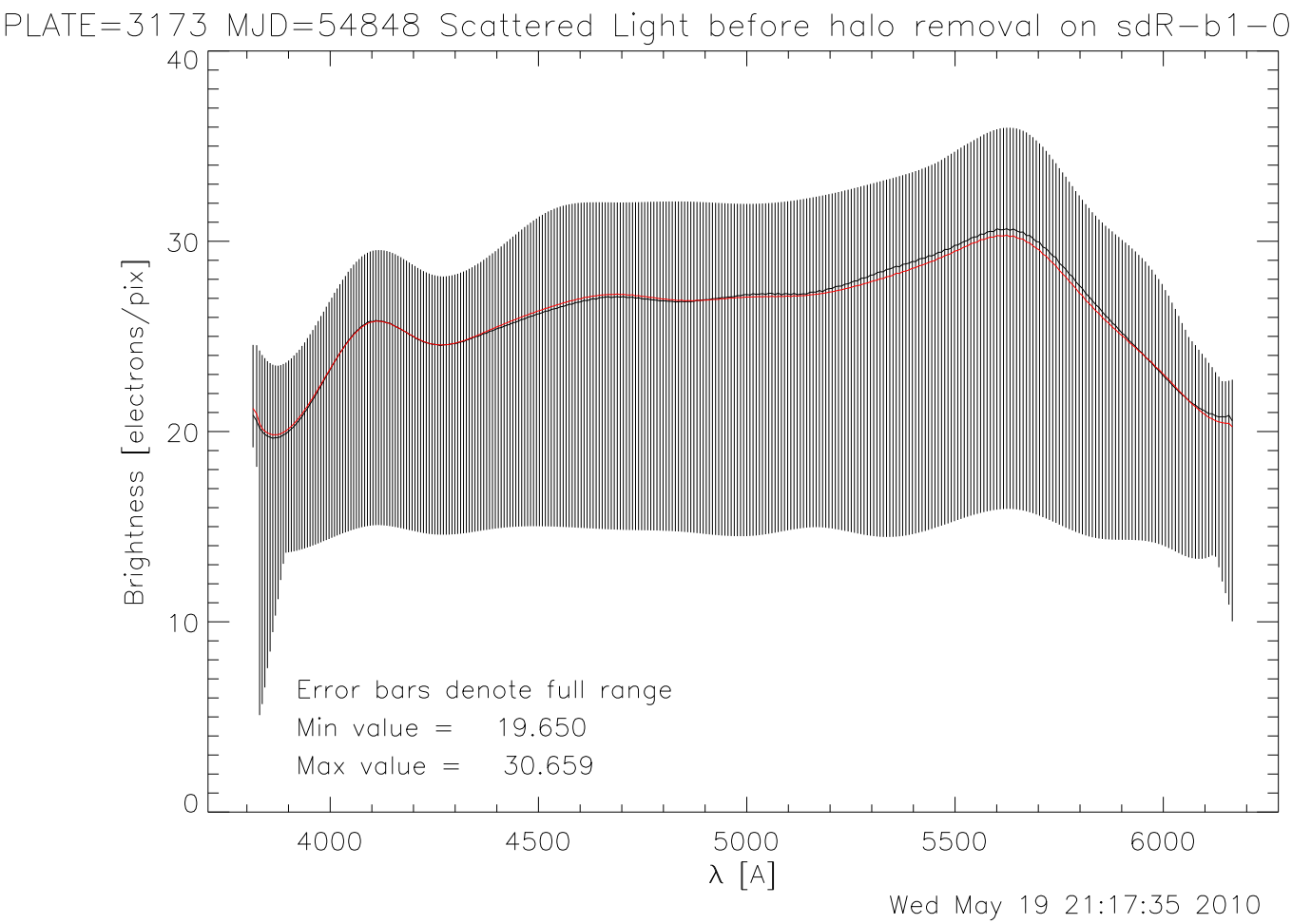

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−b1−00058095.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

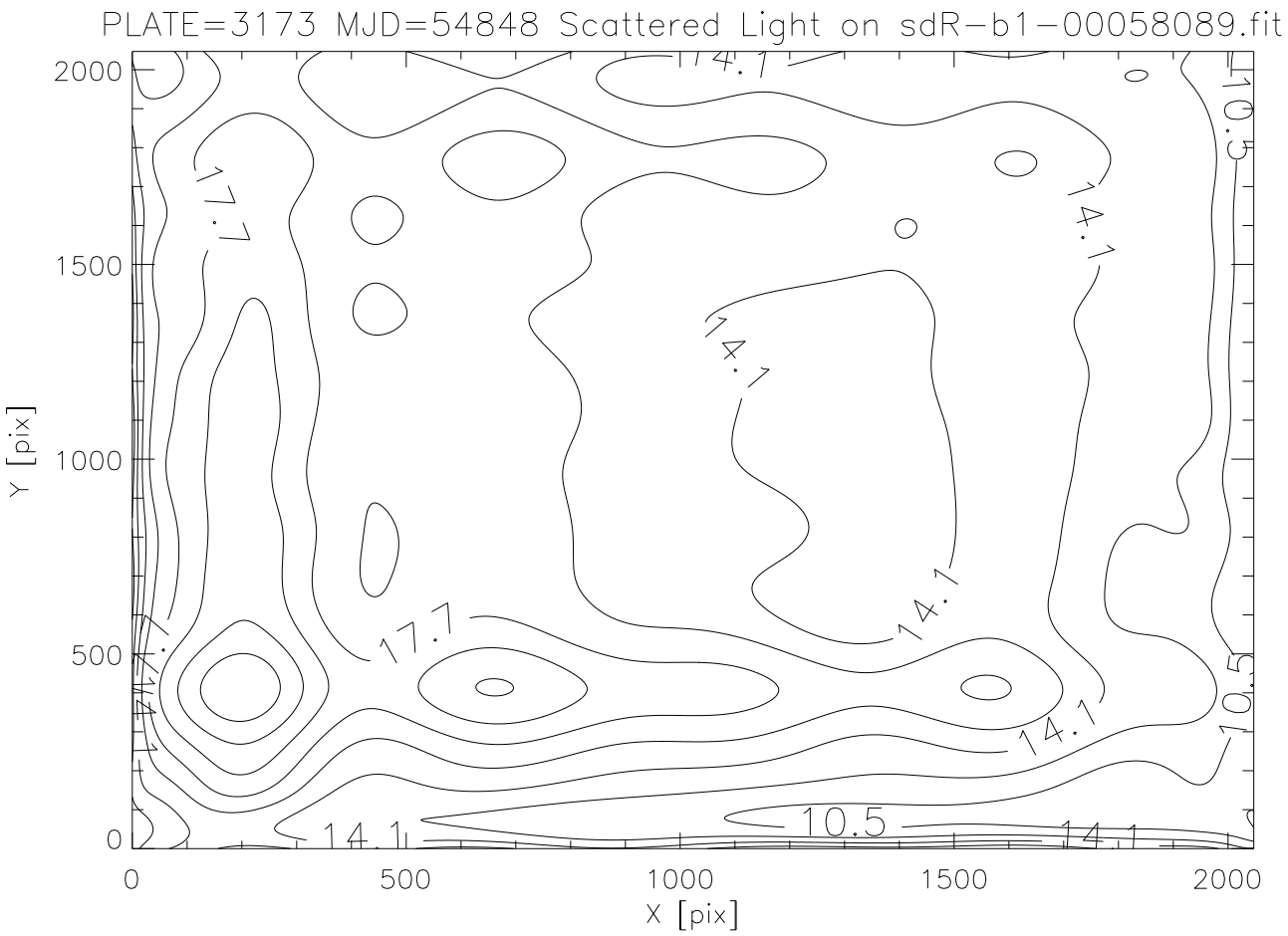

PLATE=3173 MJD=54848 Superflat sdR-b1-00058095.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

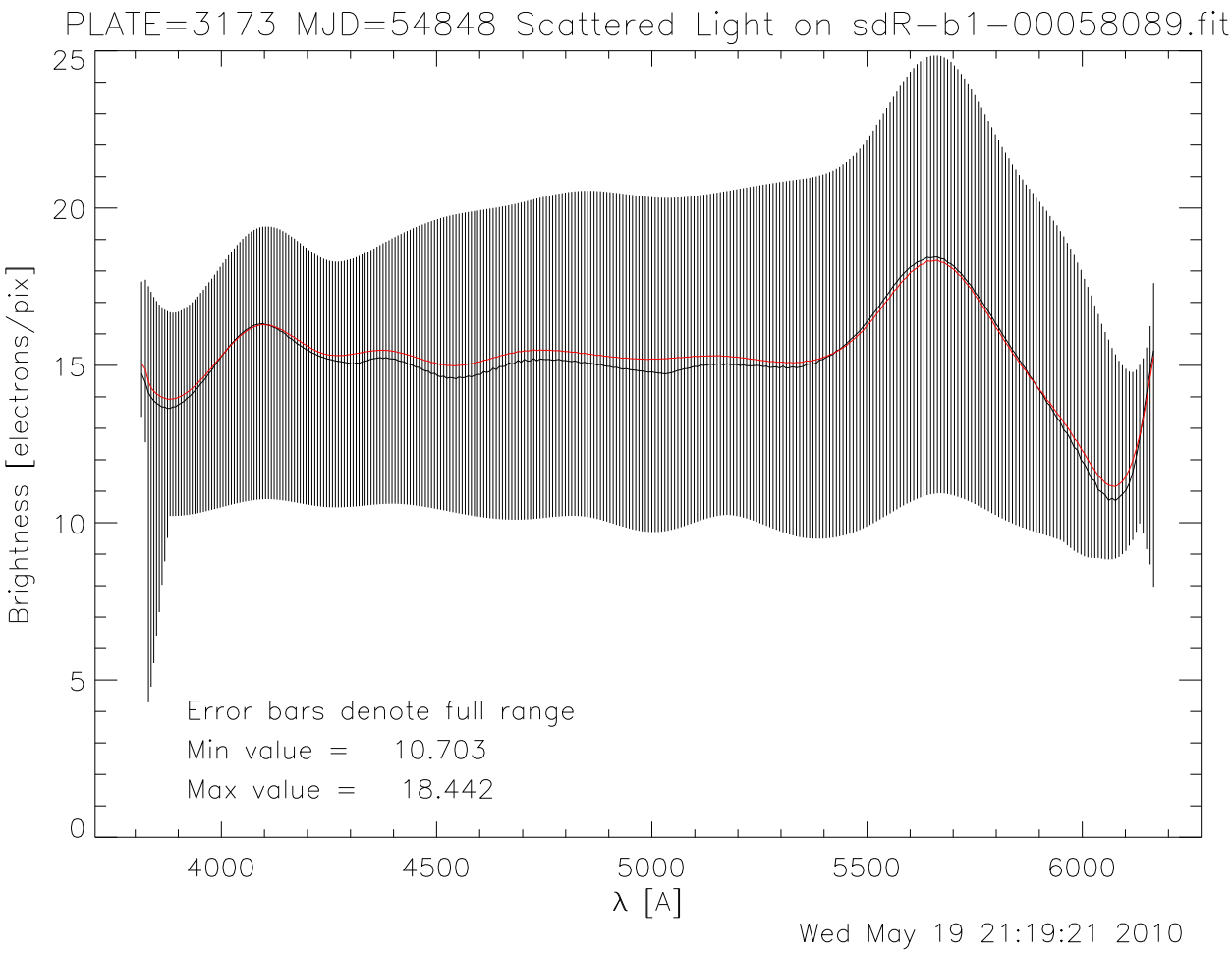

PLATE=3173 MJD=54848 Arcline Fit for sdR-b1-00058092.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:16:57 2010

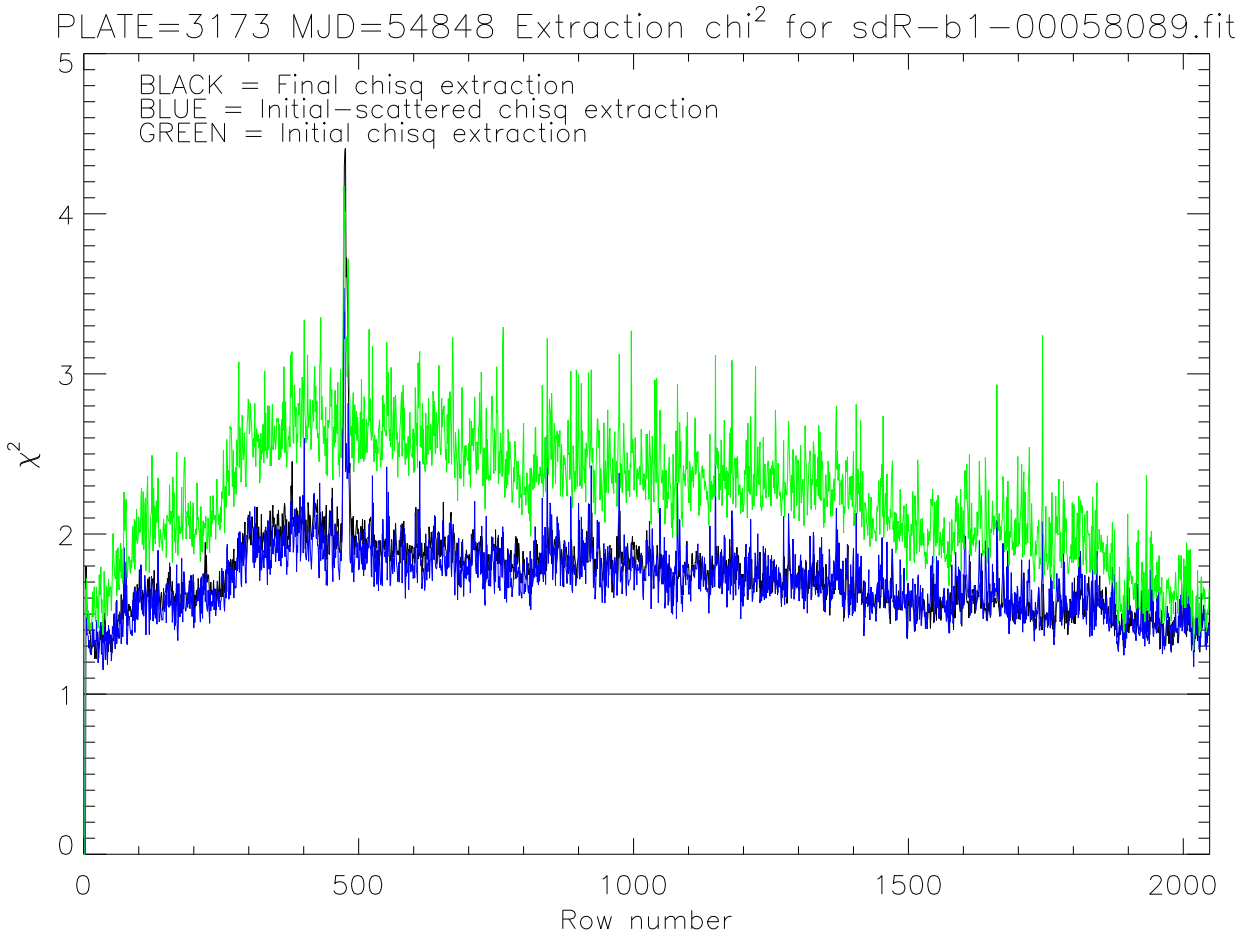

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.306
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:17:00 2010

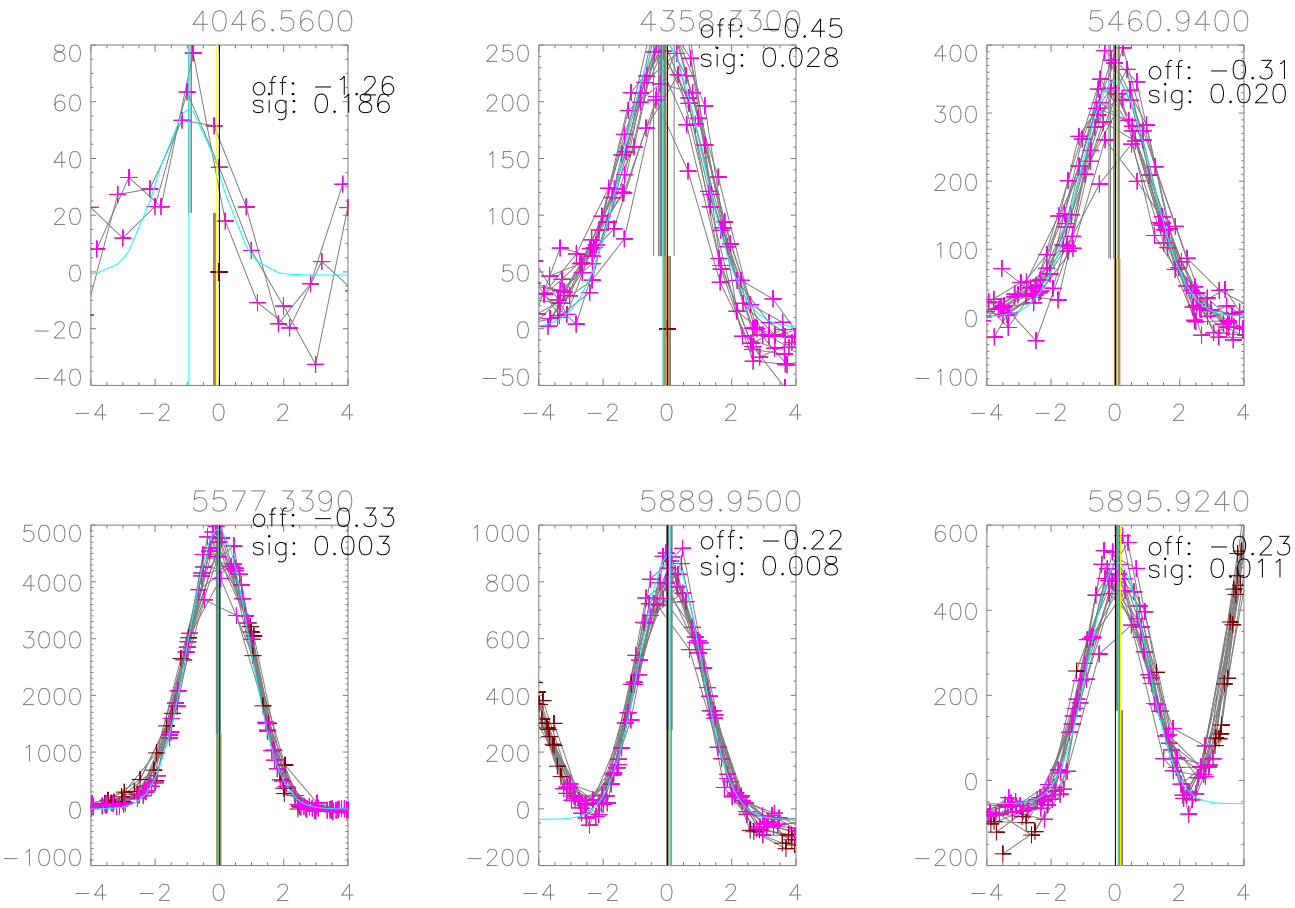

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058089.f
20.9
27.3
14.5
Y [pix]
X [pix]
0
500
1000
1500
2000

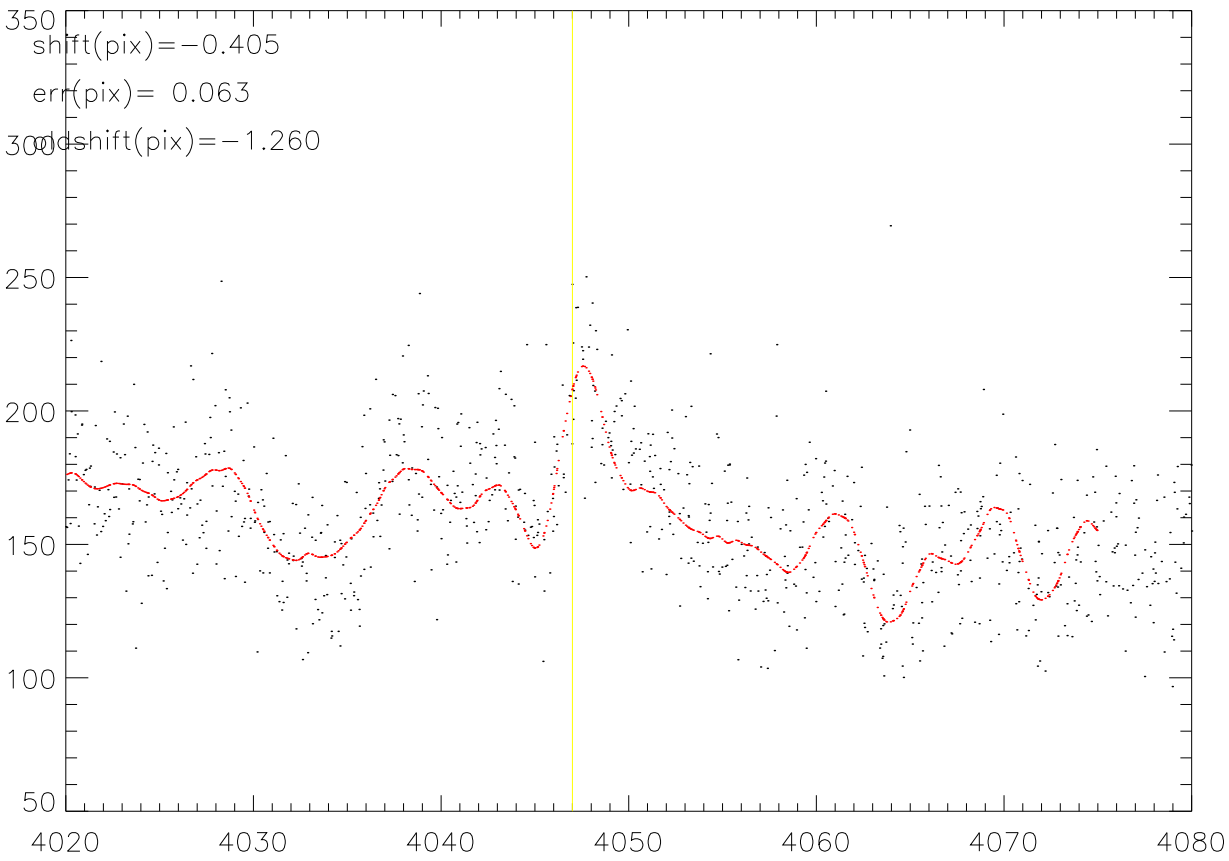

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058089.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 19.650
Max value = 30.659
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:17:35 2010

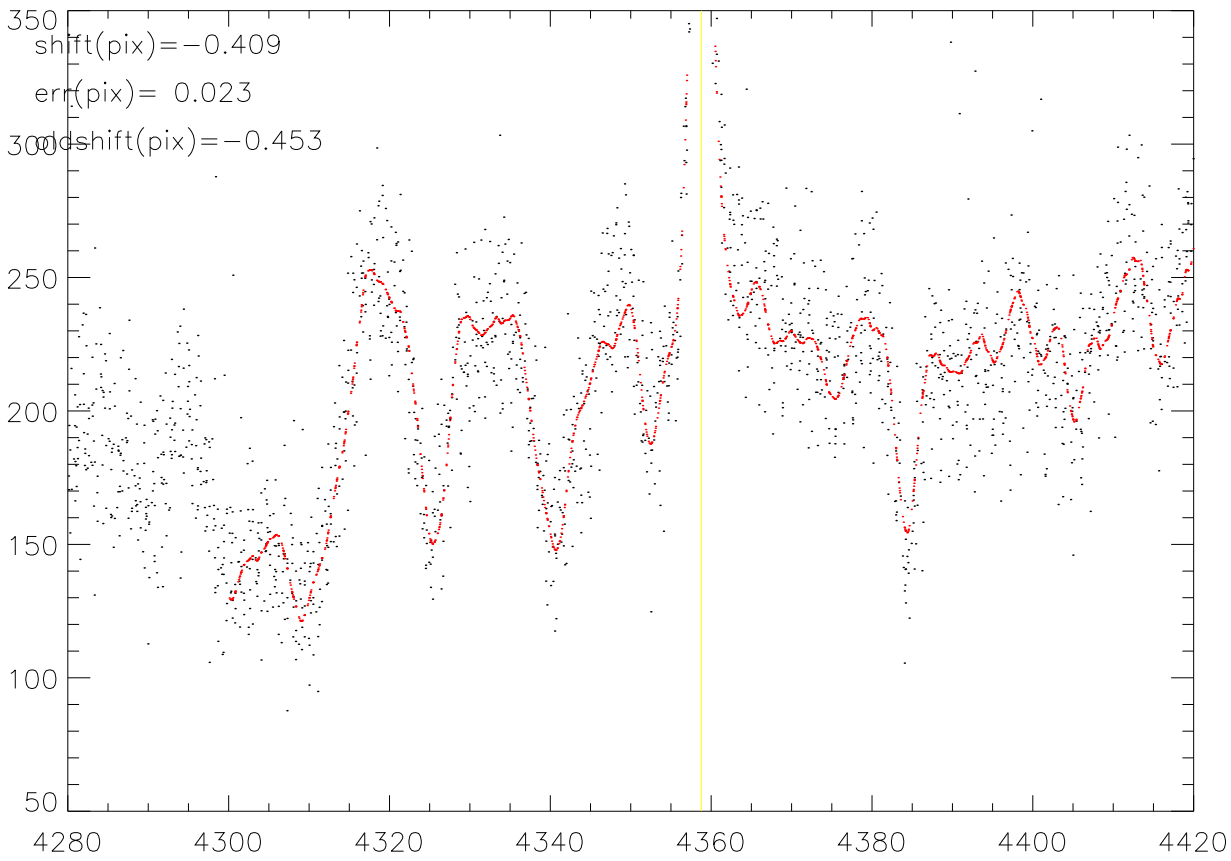

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058089.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
17.7
14.1
10.5

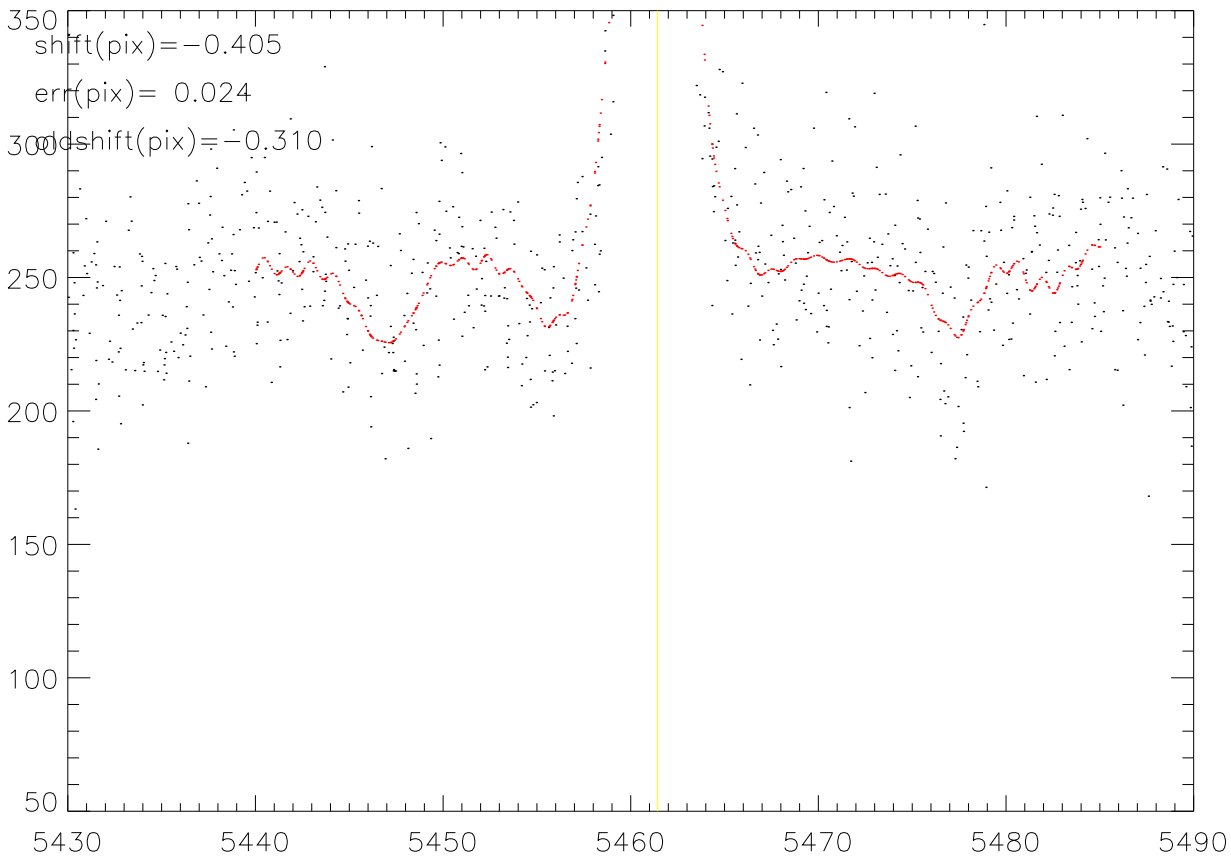

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058089.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.703
Max value = 18.442
Wed May 19 21:19:21 2010

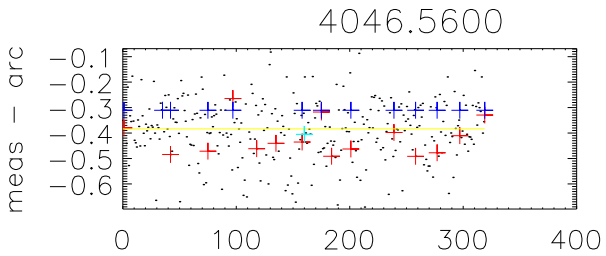

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b1-00058089.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

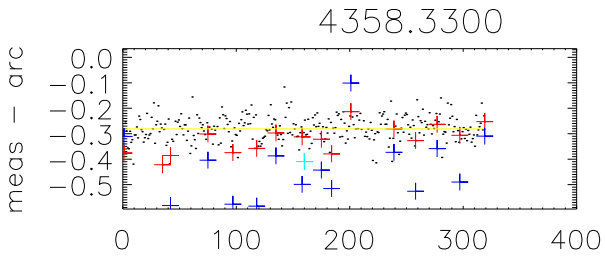

4046.5600
off: −1.26
sig: 0.186
4358.3300
off: −0.45
sig: 0.028
5460.9400
off: −0.31
sig: 0.020
5577.3390
off: −0.33
sig: 0.003
5889.9500
off: −0.22
sig: 0.008
5895.9240
off: −0.23
sig: 0.011

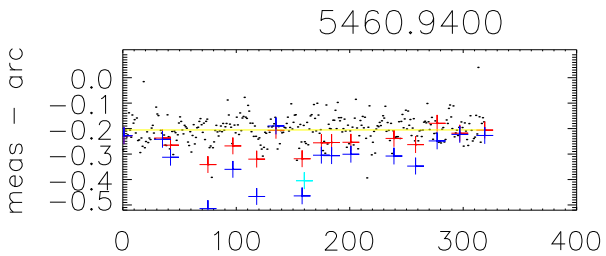

shift(pix)=−0.405
err(pix)= 0.063
oldshift(pix)=−1.260
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

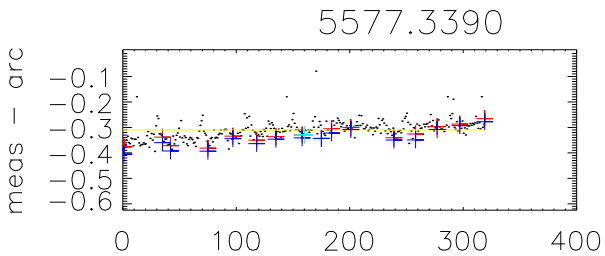

shift(pix)=−0.409
err(pix)= 0.023
oldshift(pix)=−0.453
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

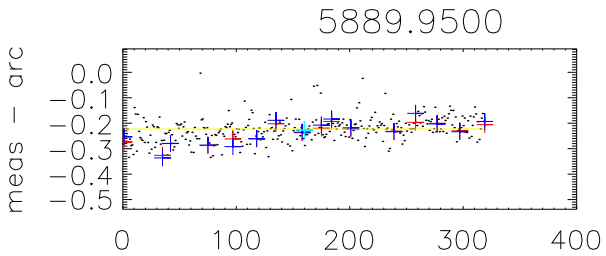

shift(pix)=−0.405
err(pix)= 0.024
oldshift(pix)=−0.310
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

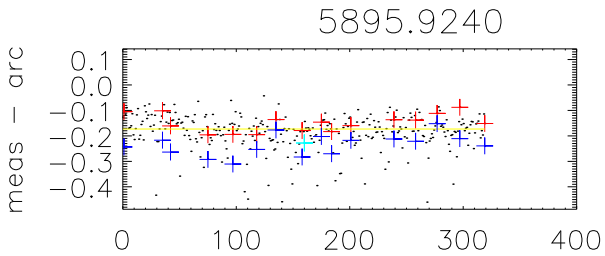

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

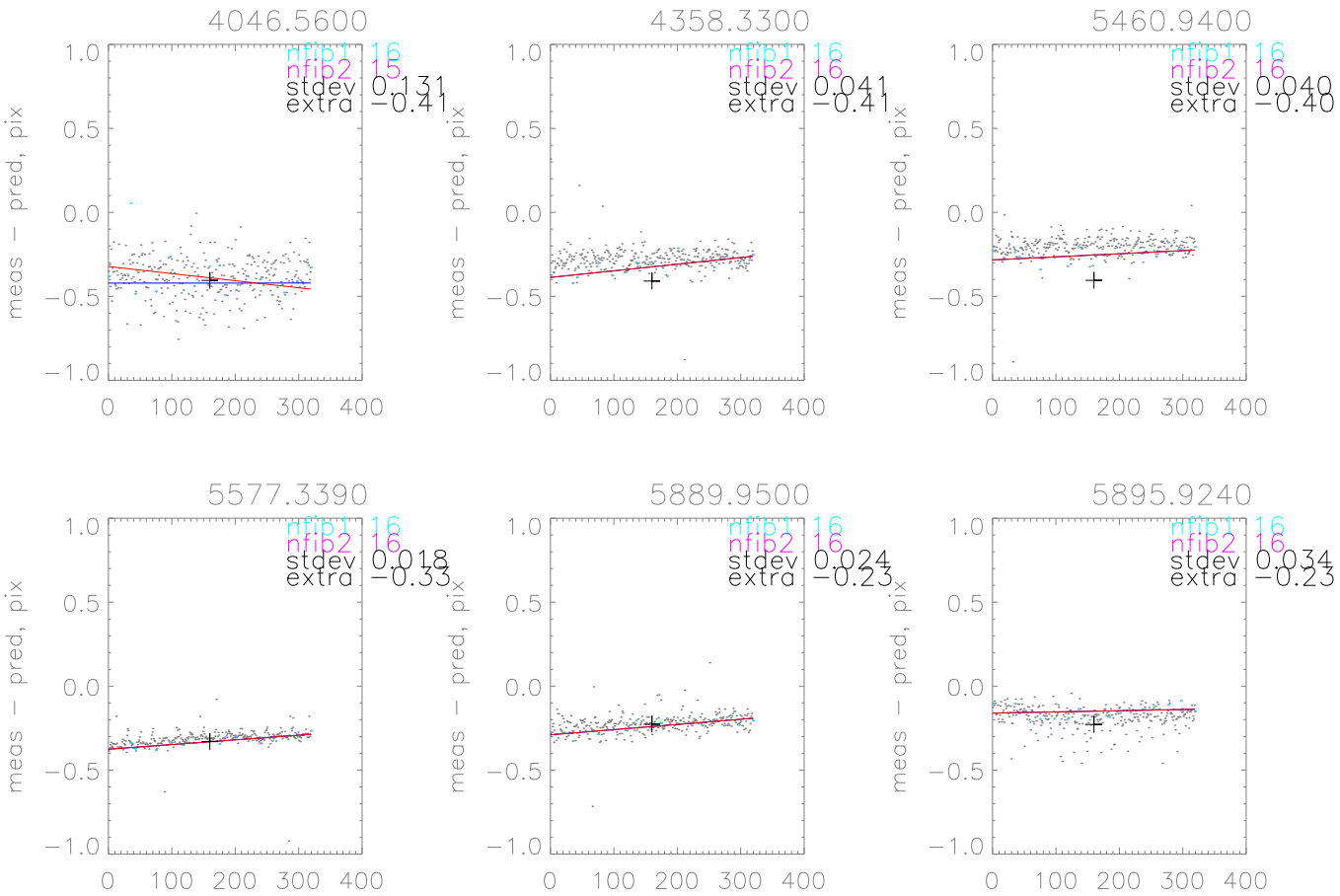

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

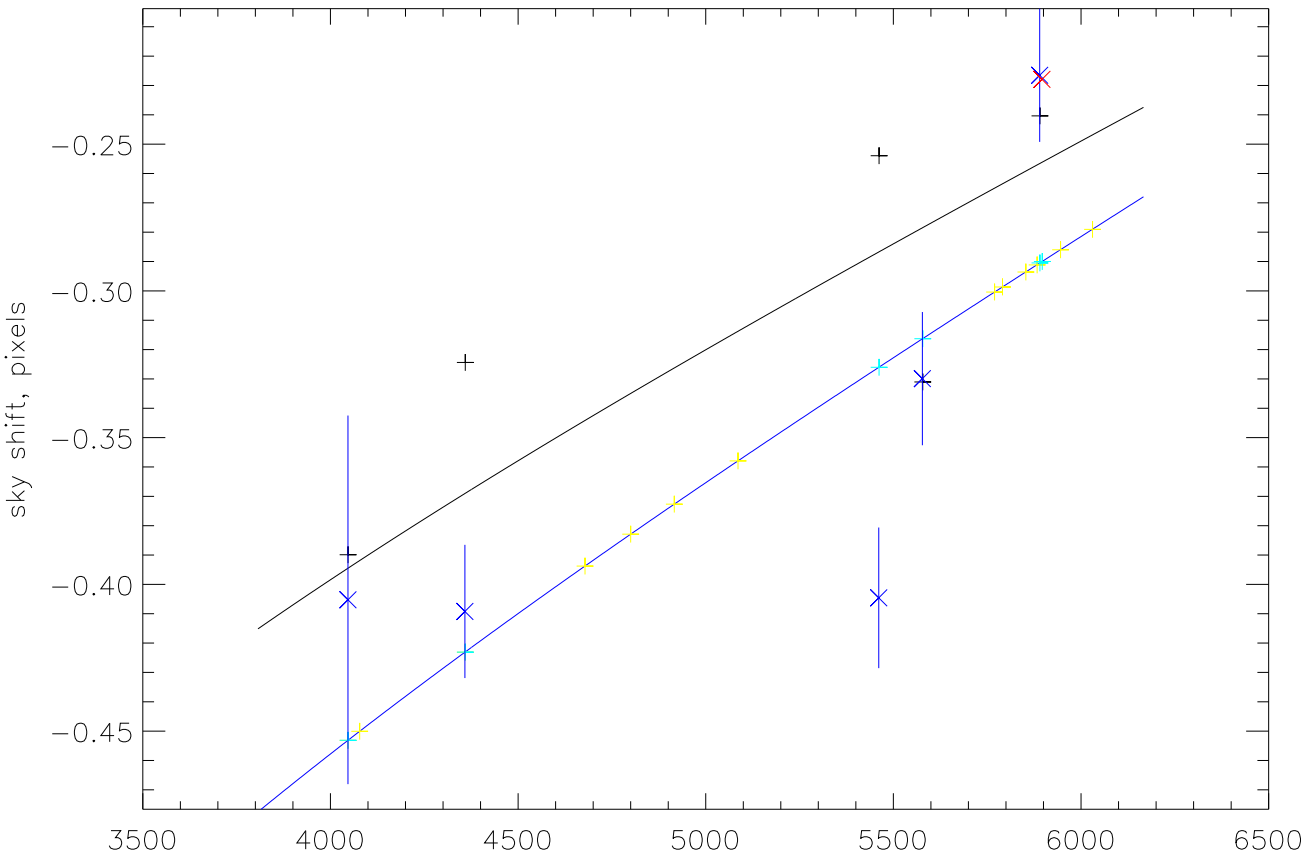

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

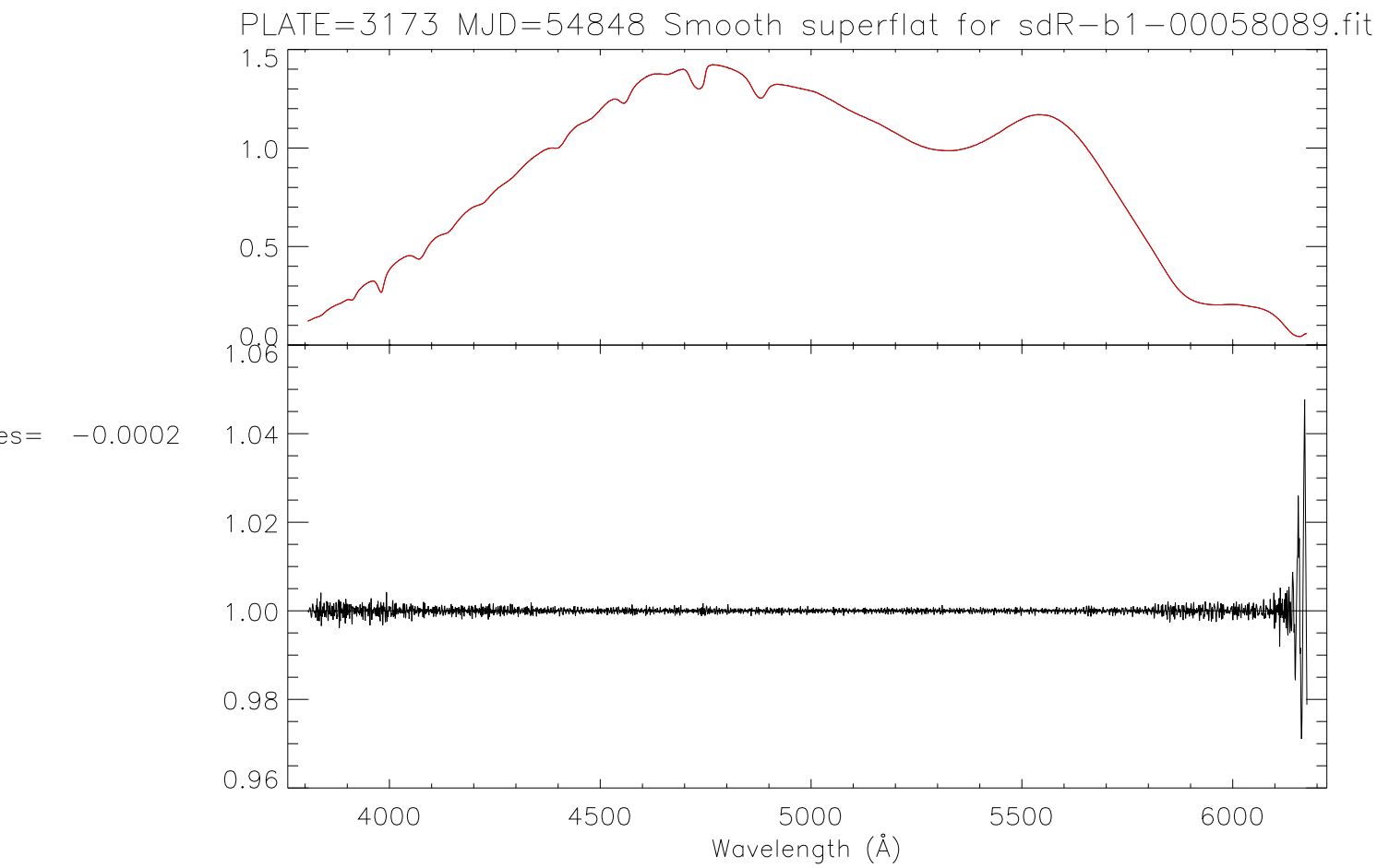

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

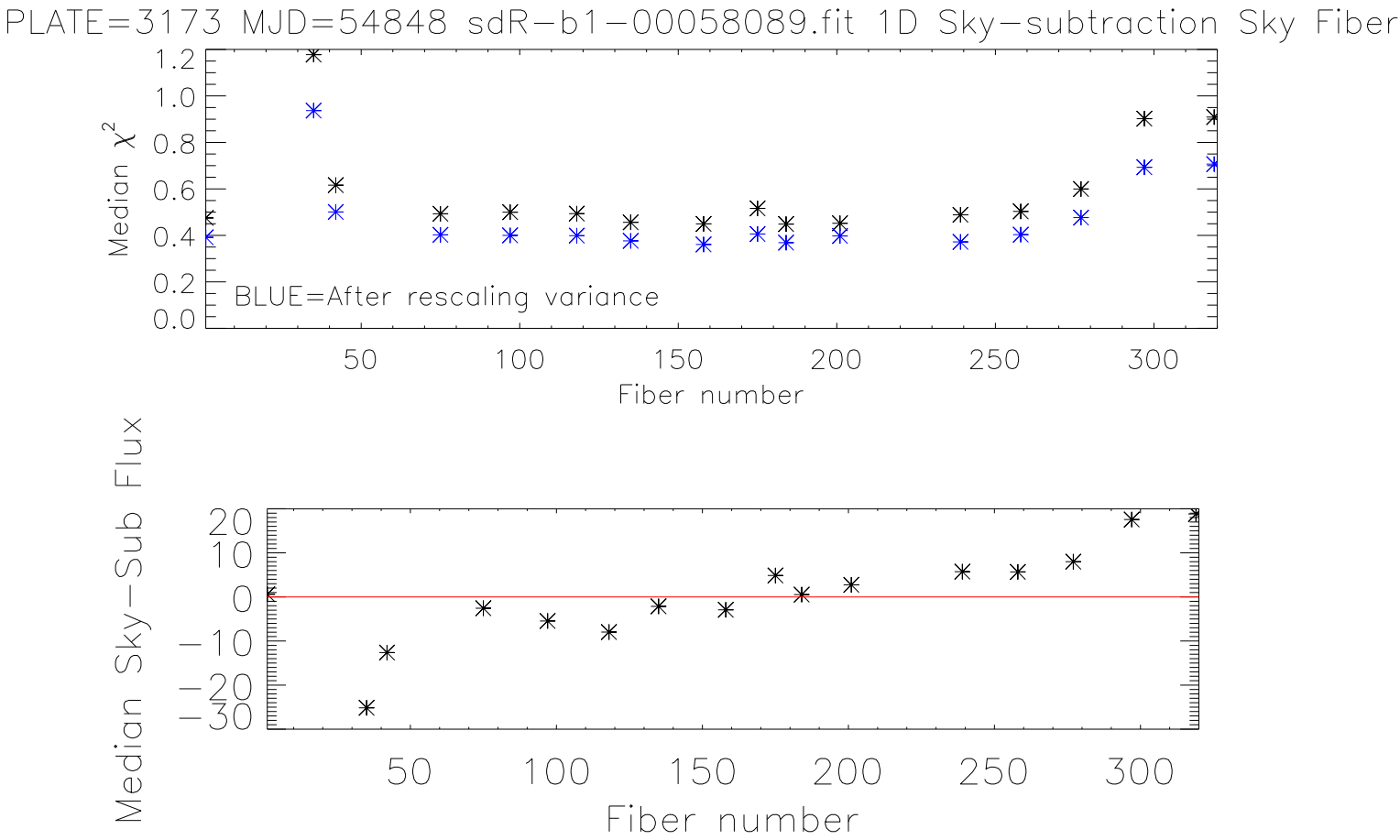

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

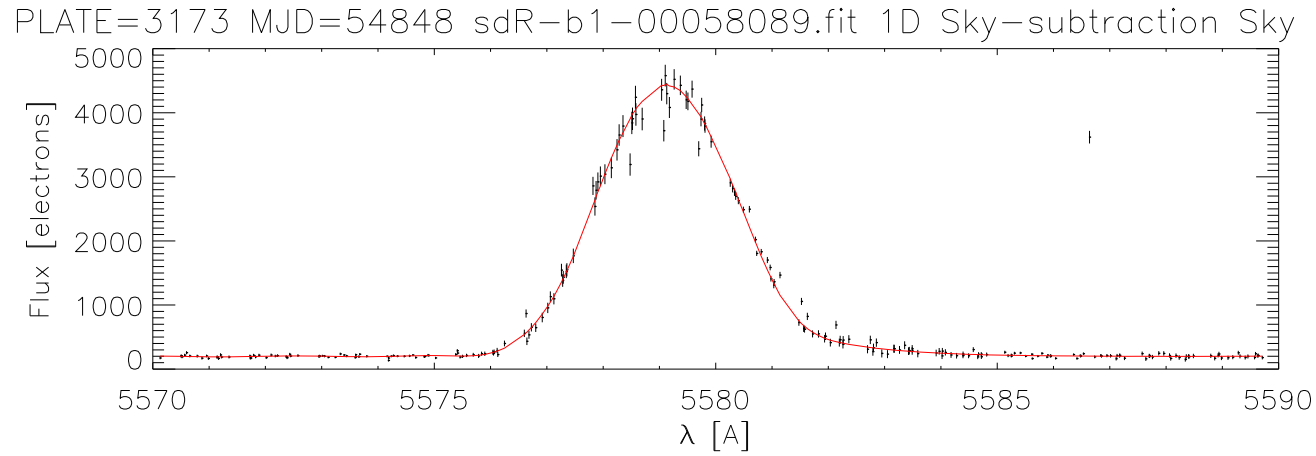

4046.5600
nfib1 16
nfib2 15
stdev 0.131
extra −0.41
4358.3300
nfib1 16
nfib2 16
stdev 0.041
extra −0.41
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra −0.40
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.33
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.23
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

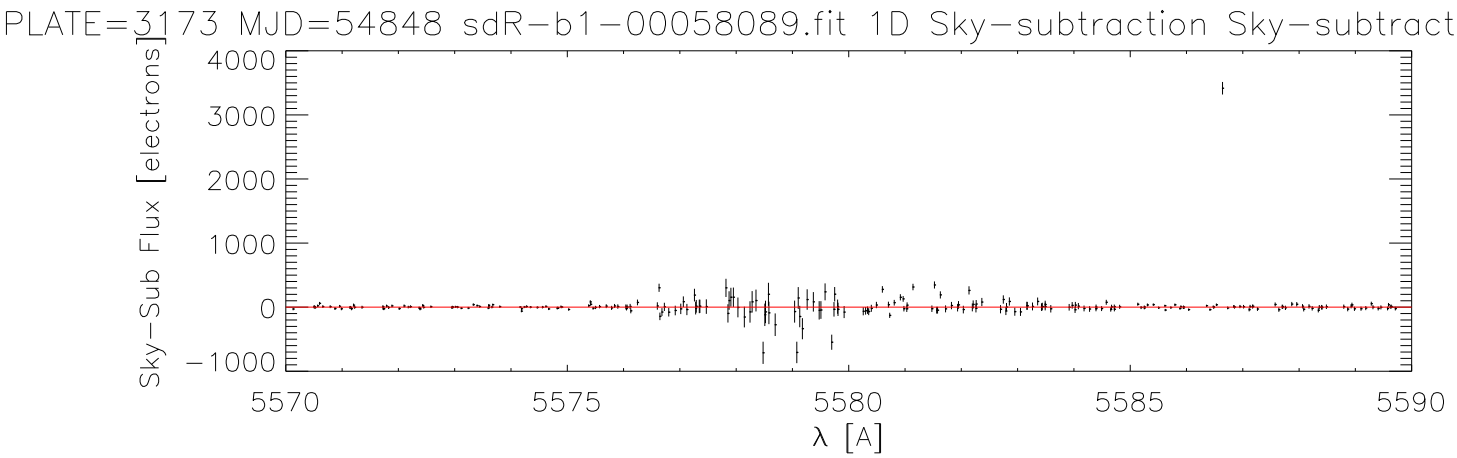

sky shift, pixels
−0.25
−0.30
−0.35
−0.40
−0.45
3500
4000
4500
5000
5500
6000
6500

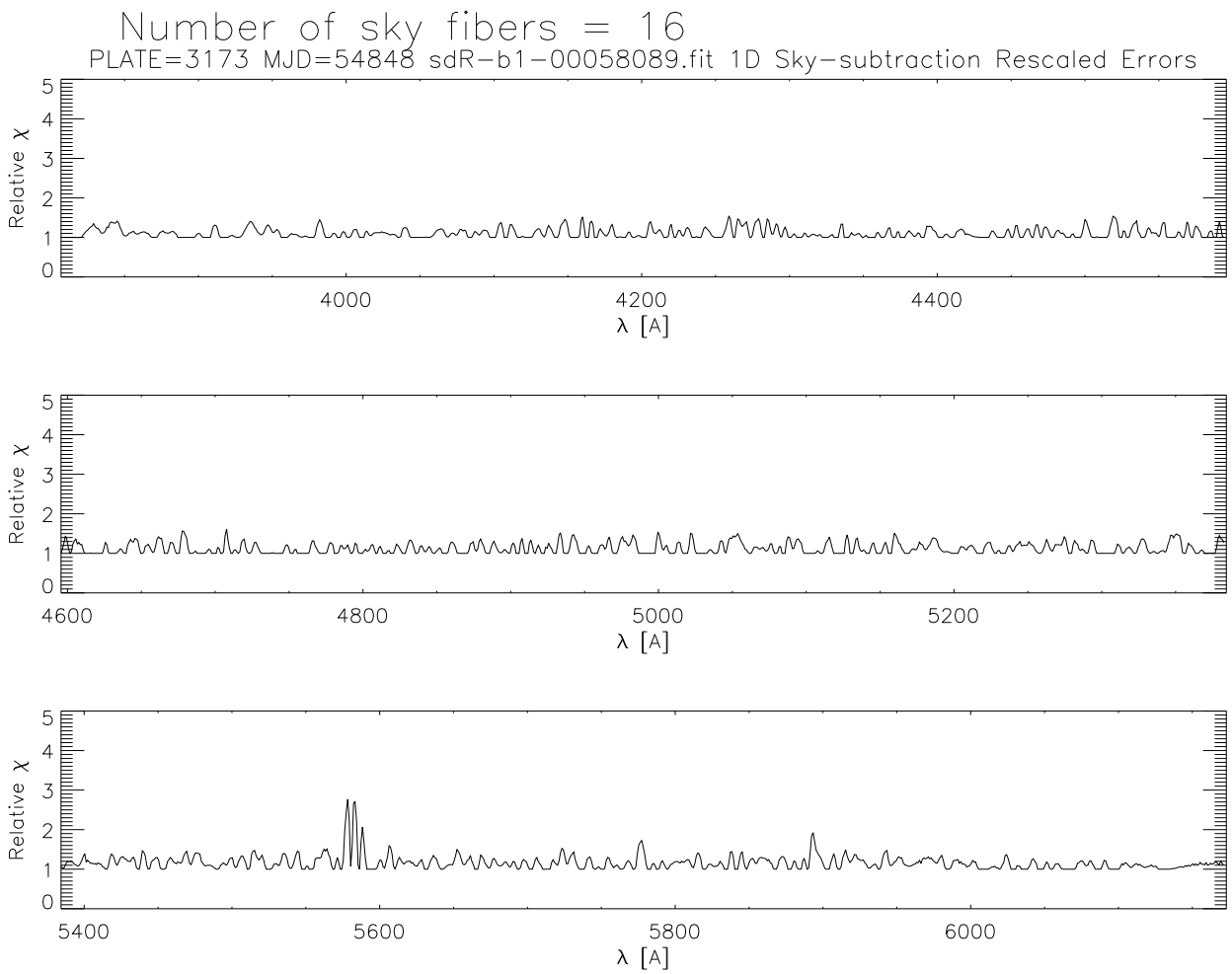

PLATE=3173 MJD=54848 Smooth superflat for sdR-b1-00058089.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

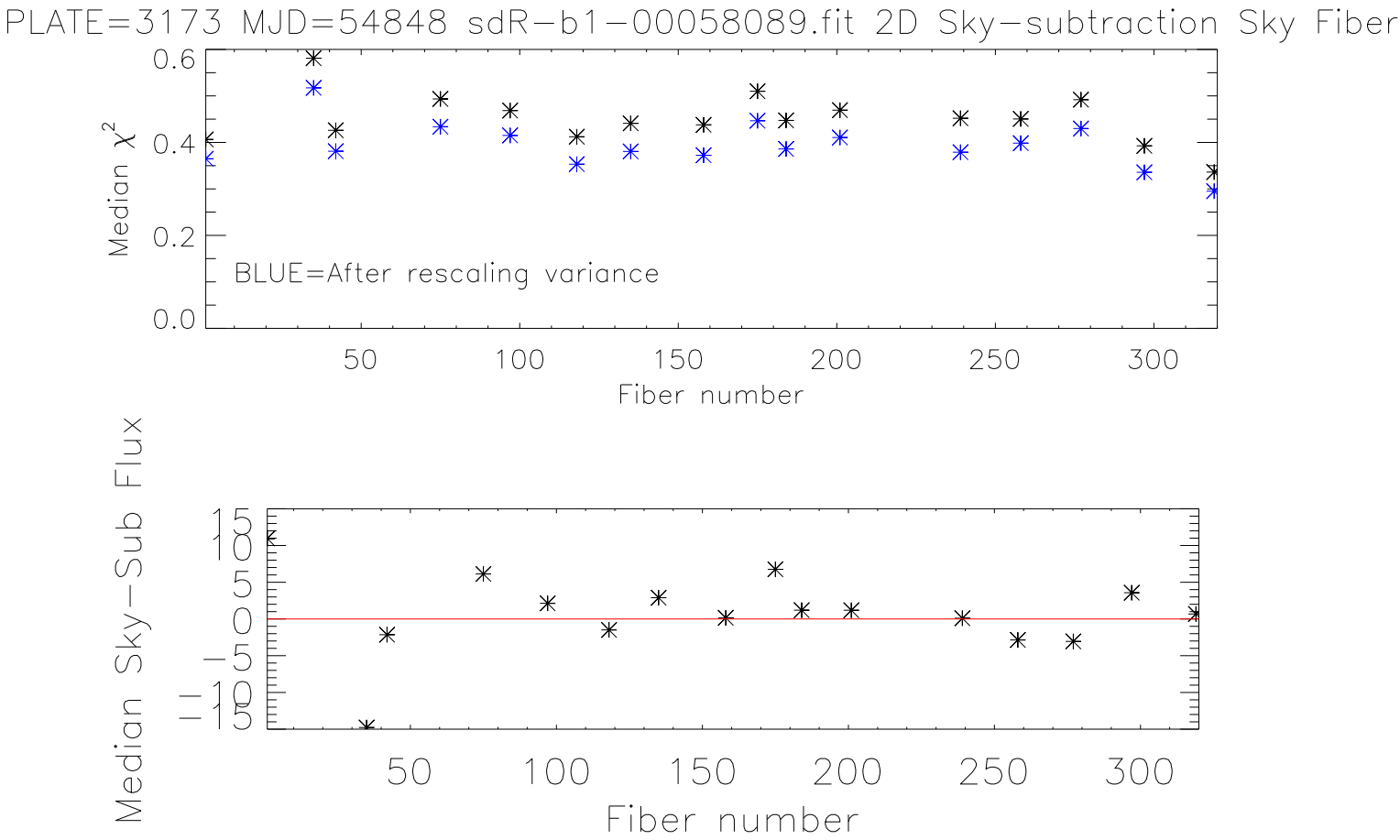
es= −0.0002

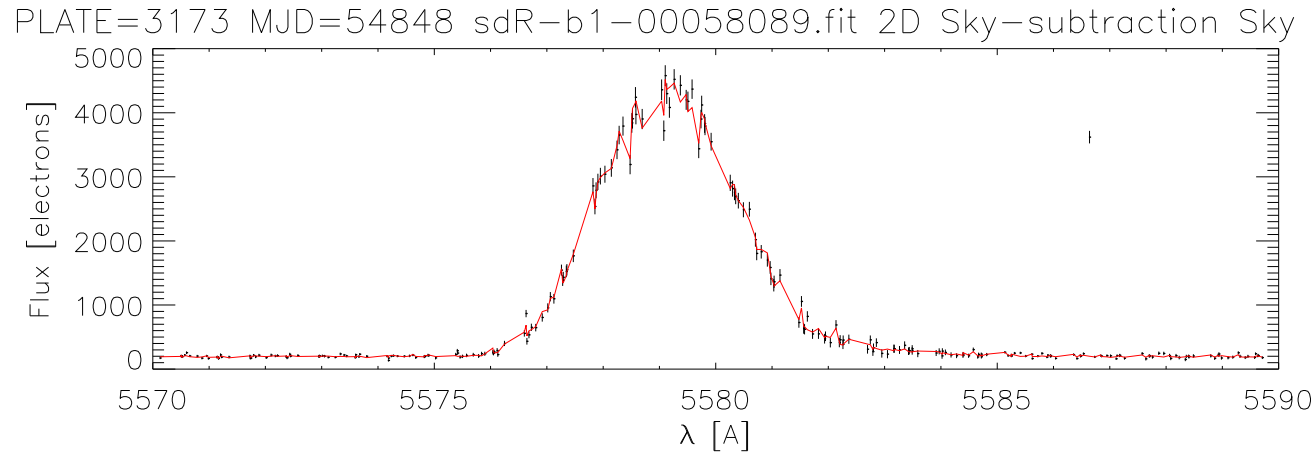

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

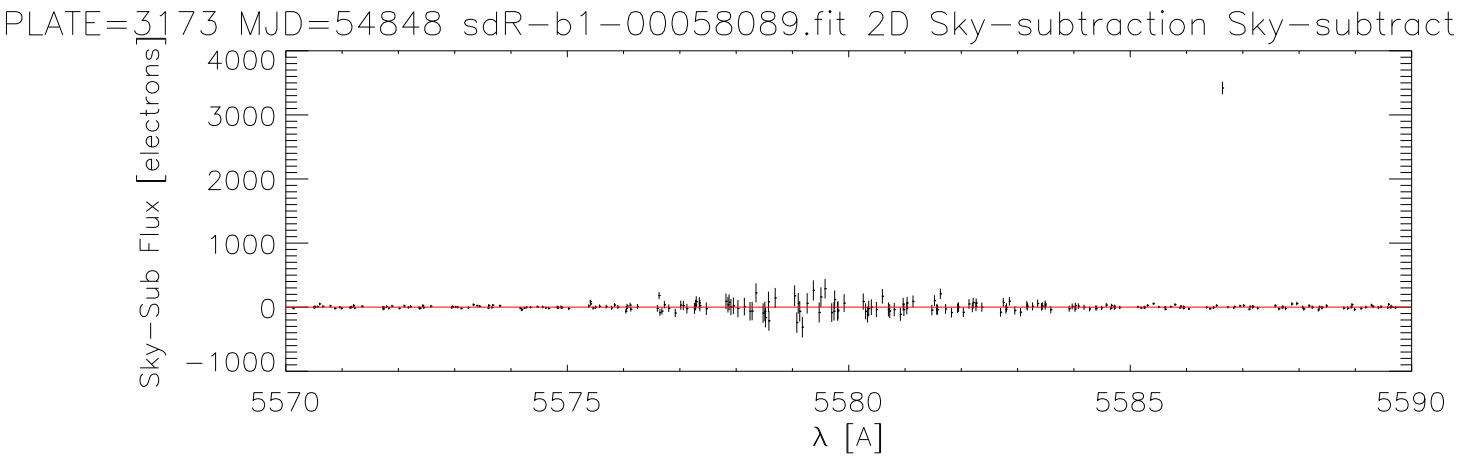

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

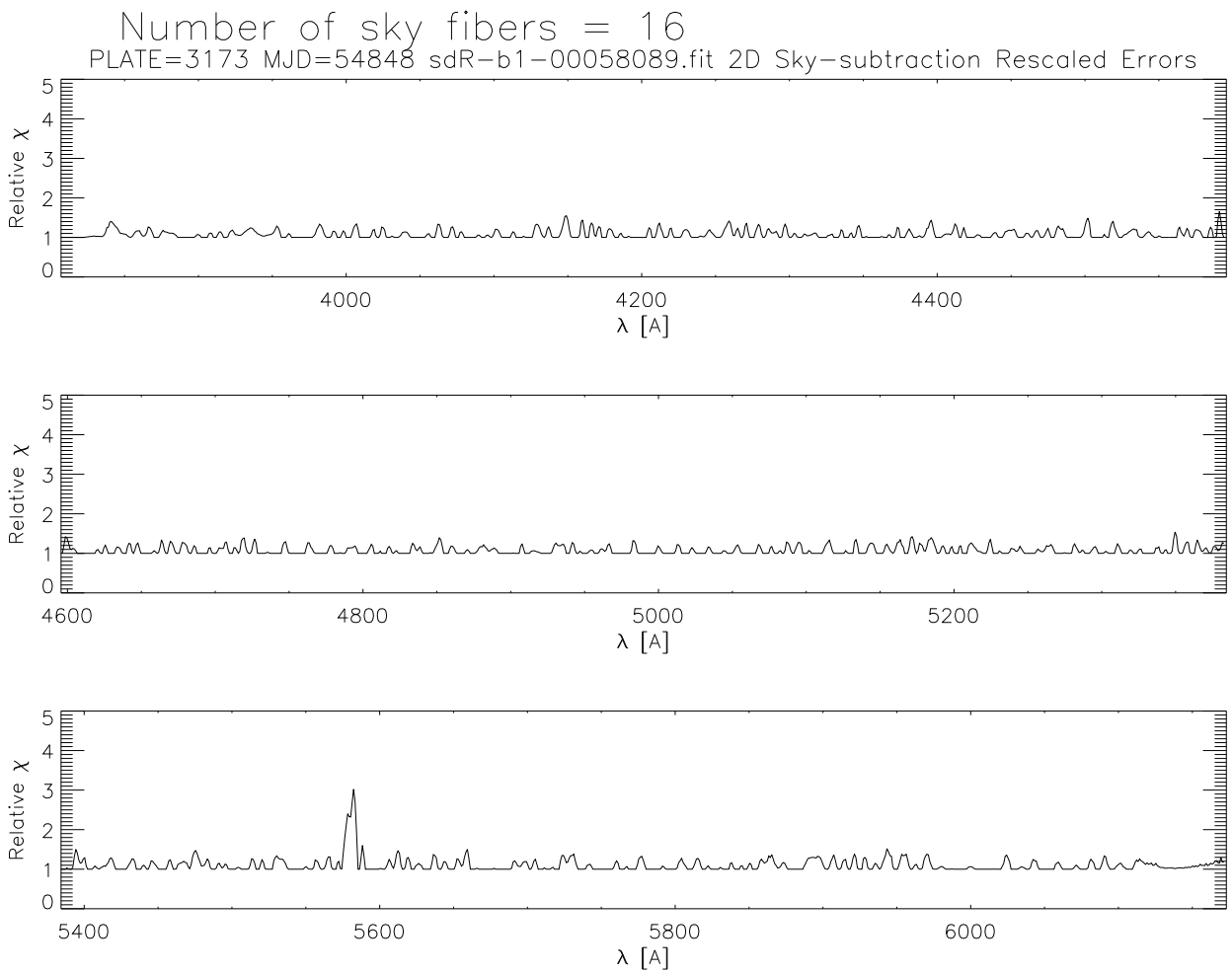

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

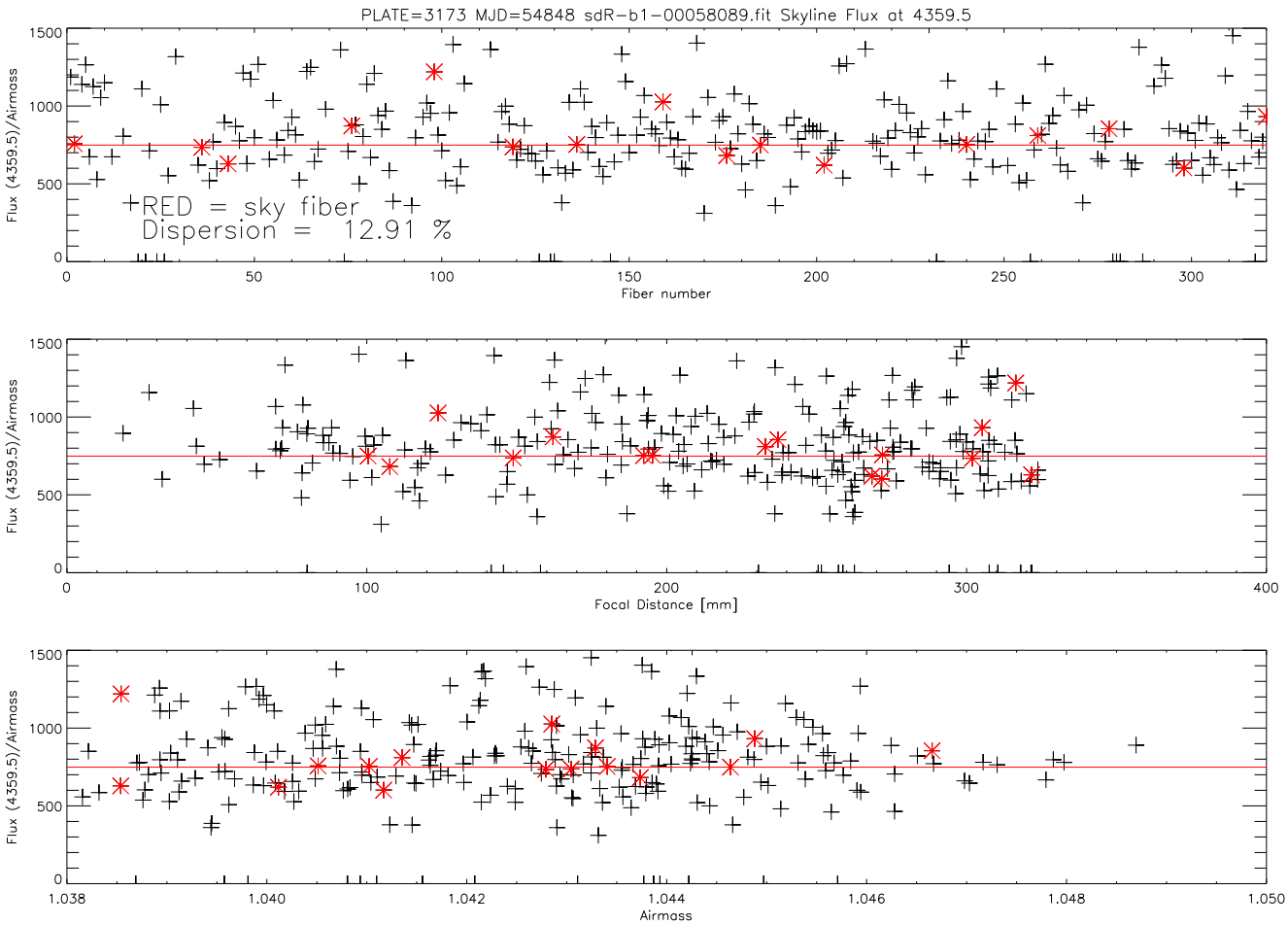

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058089.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

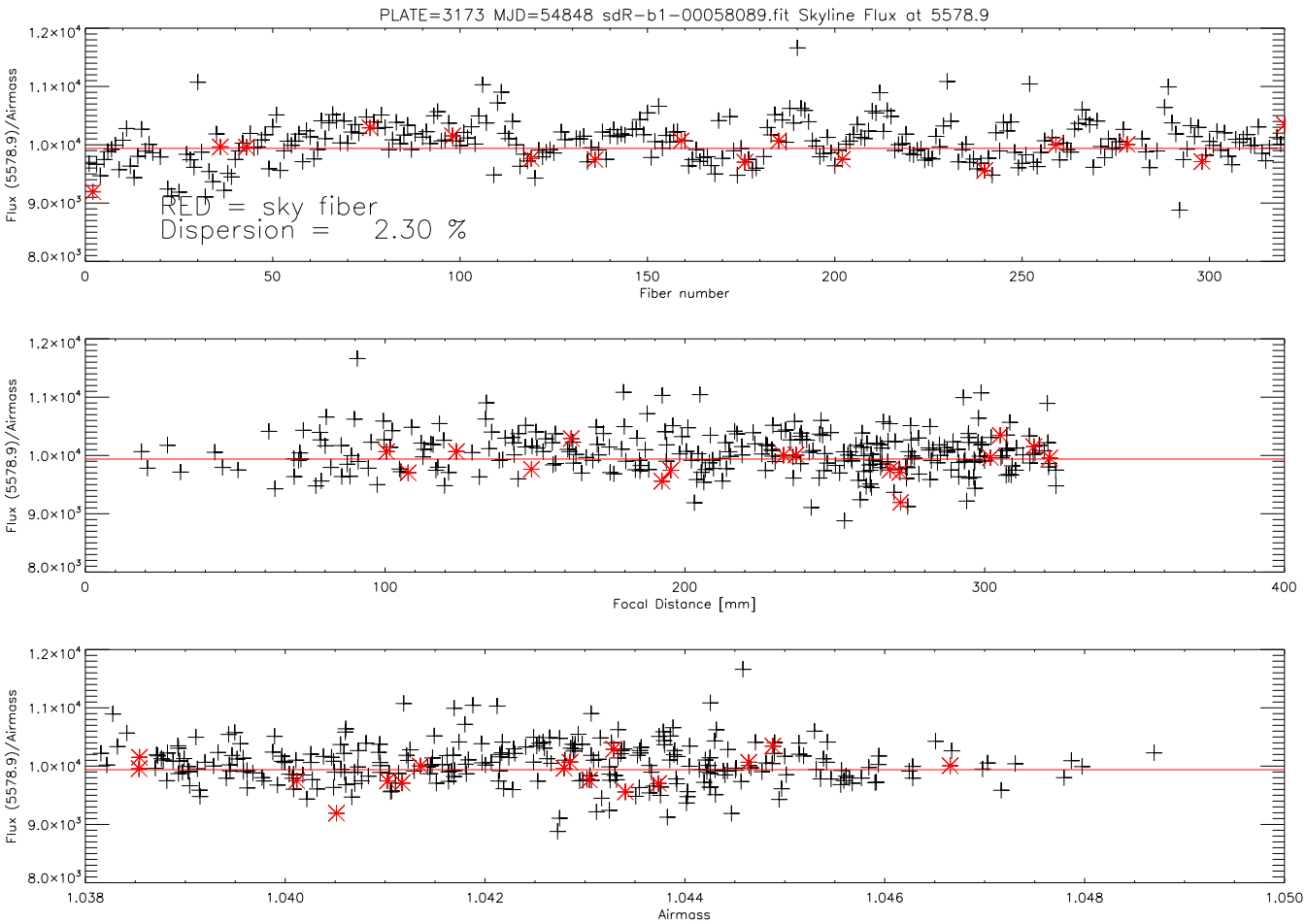

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

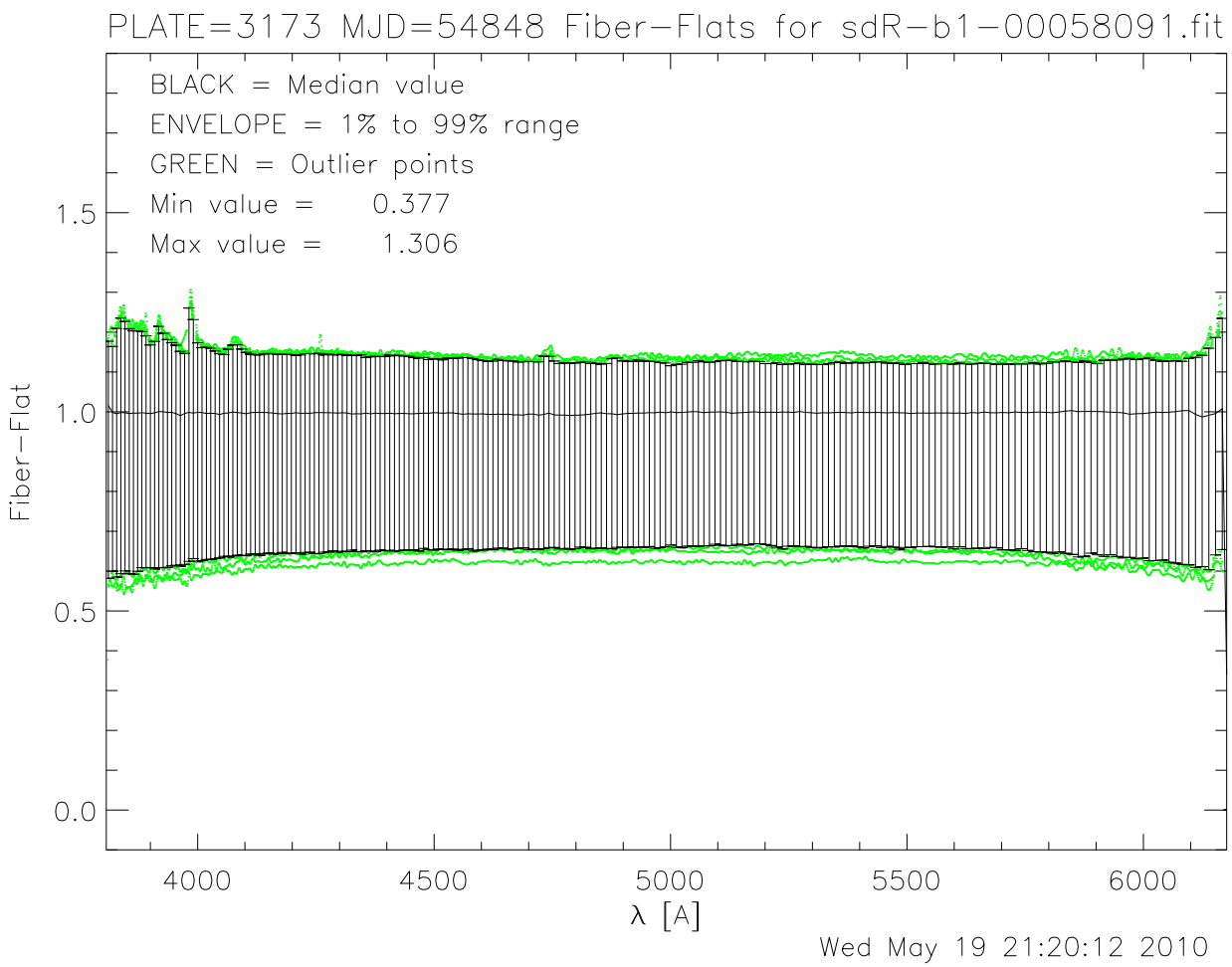

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

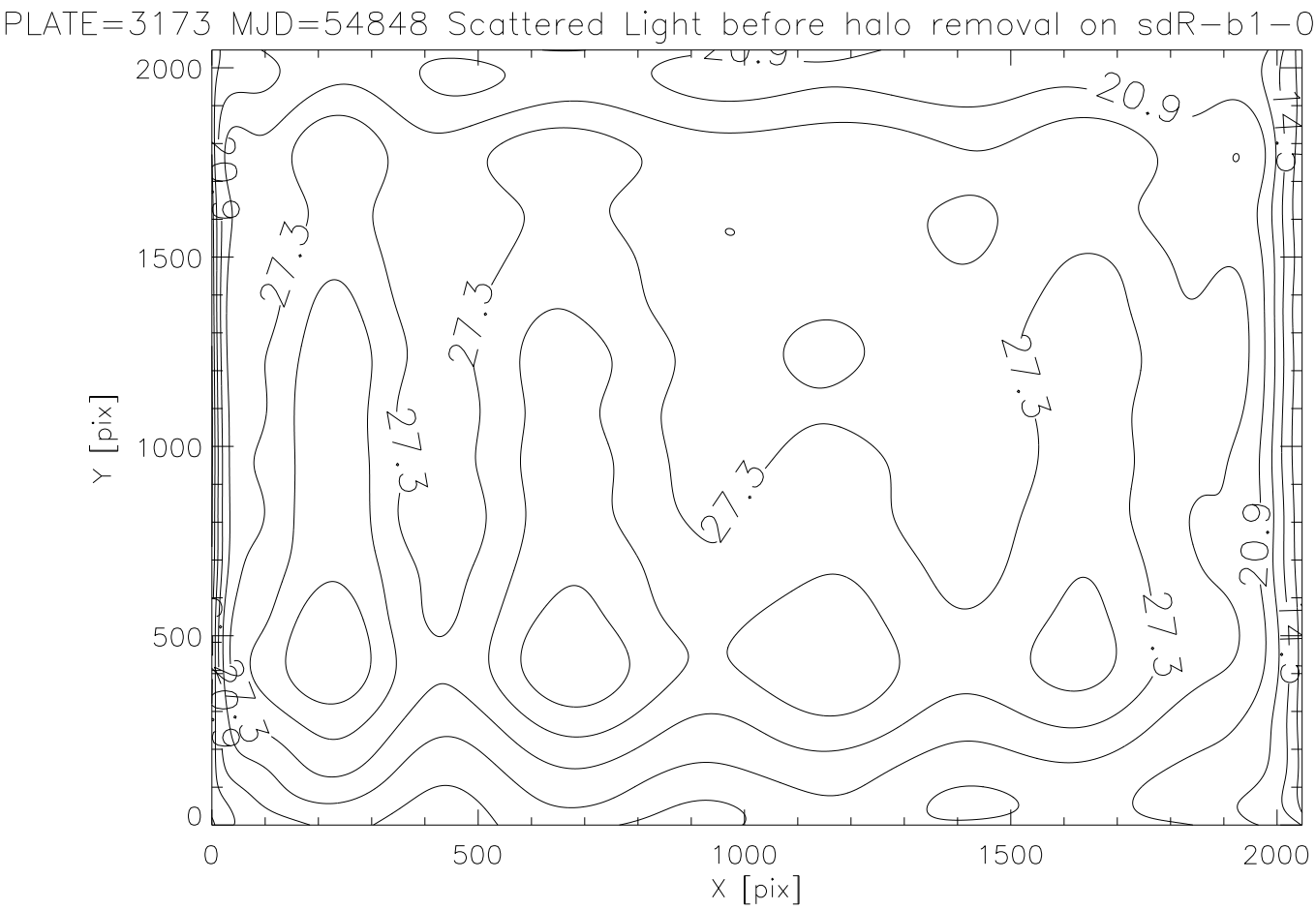

PLATE=3173 MJD=54848 sdR-b1-00058089.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

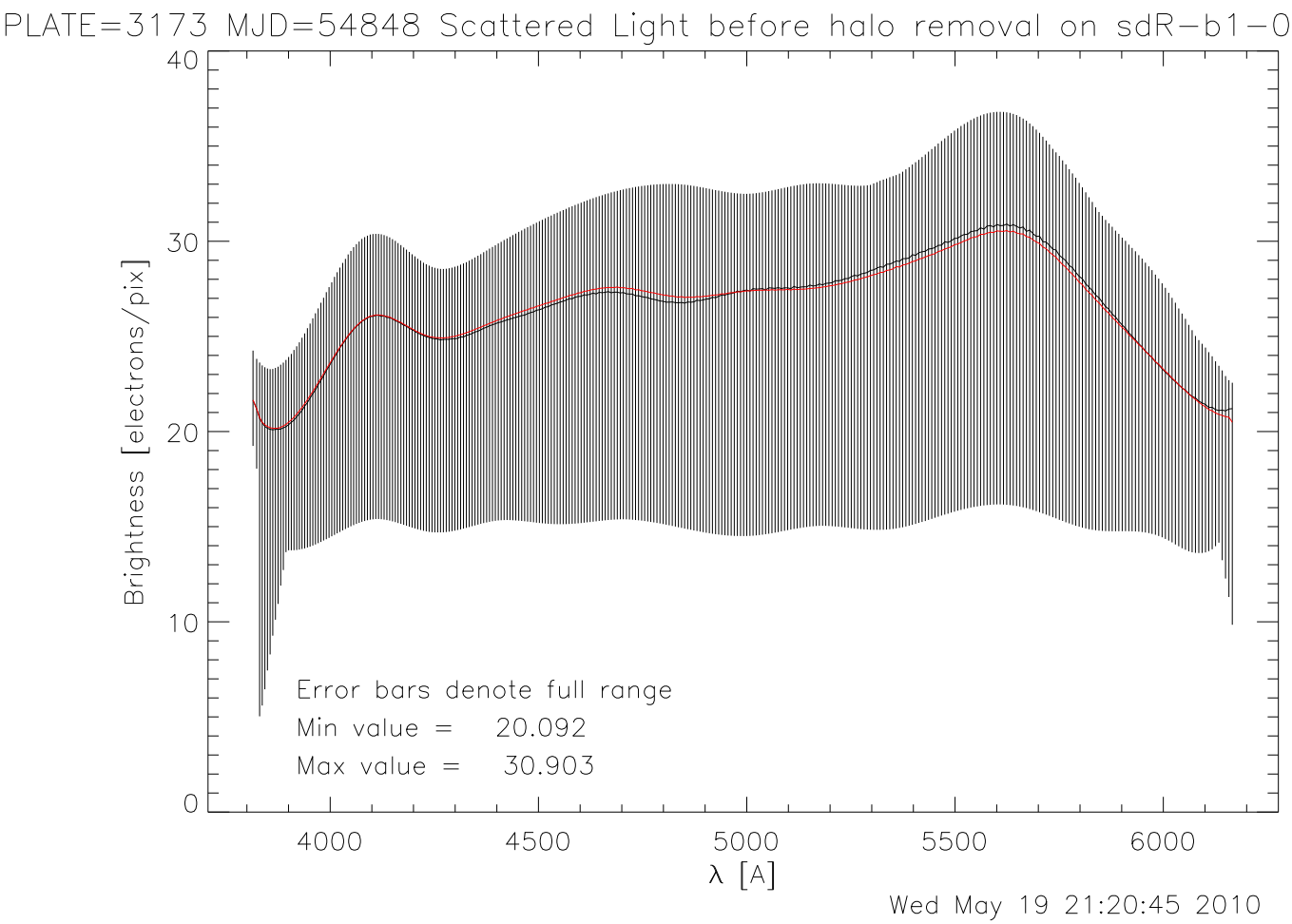

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058089.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

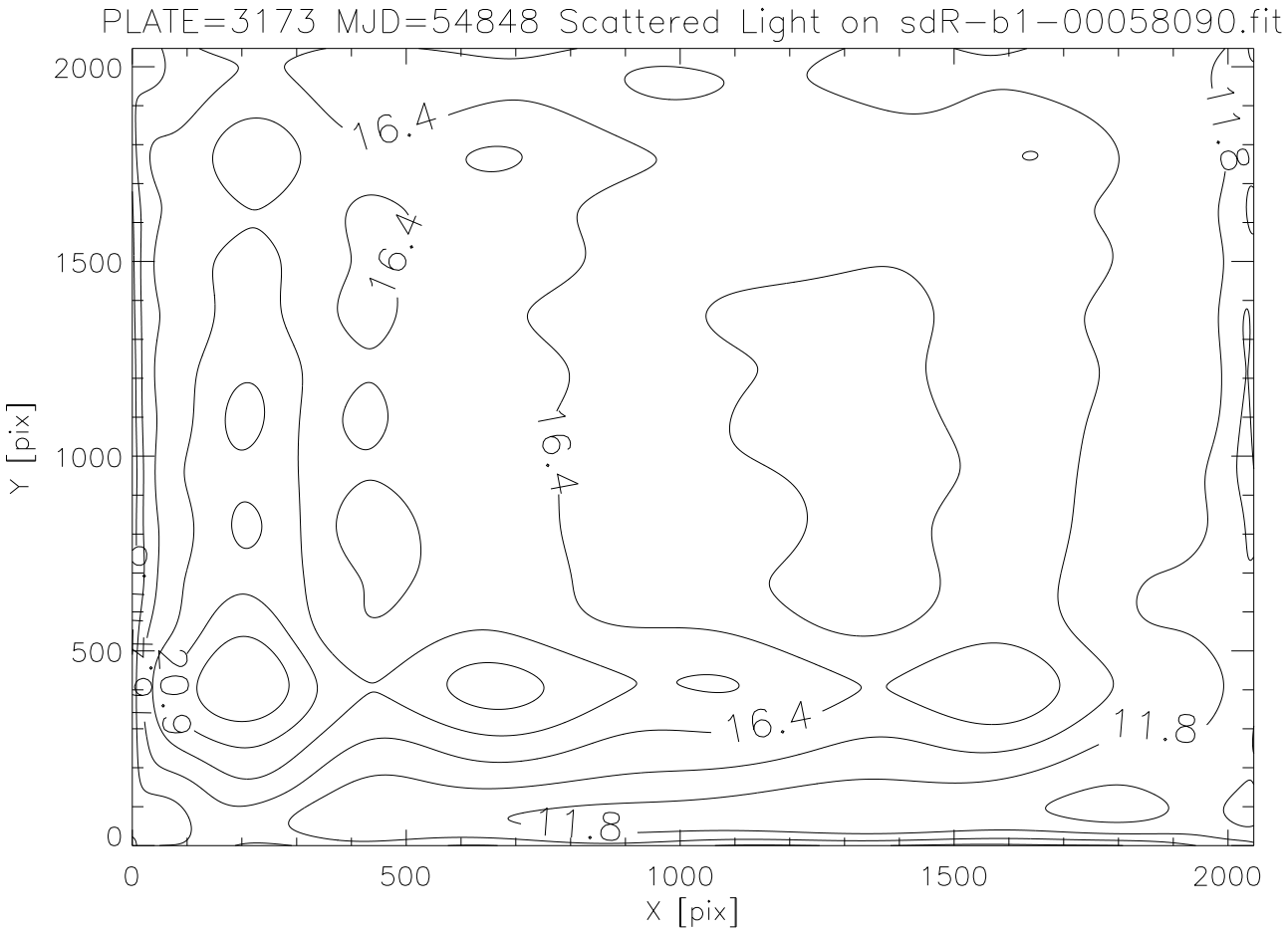

PLATE=3173 MJD=54848 sdR-b1-00058089.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.91 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

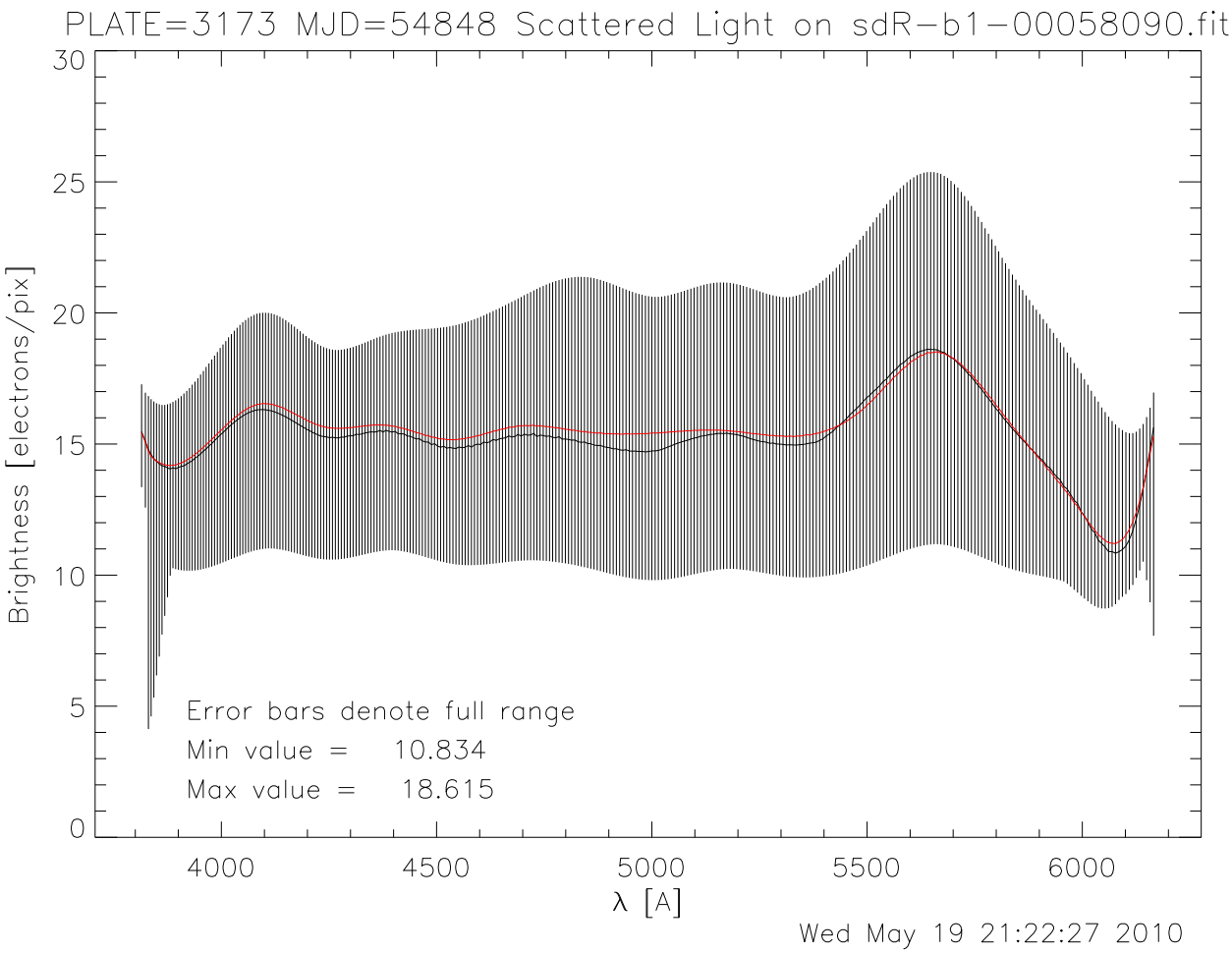

PLATE=3173 MJD=54848 sdR-b1-00058089.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Focal Distance [mm]
Airmass

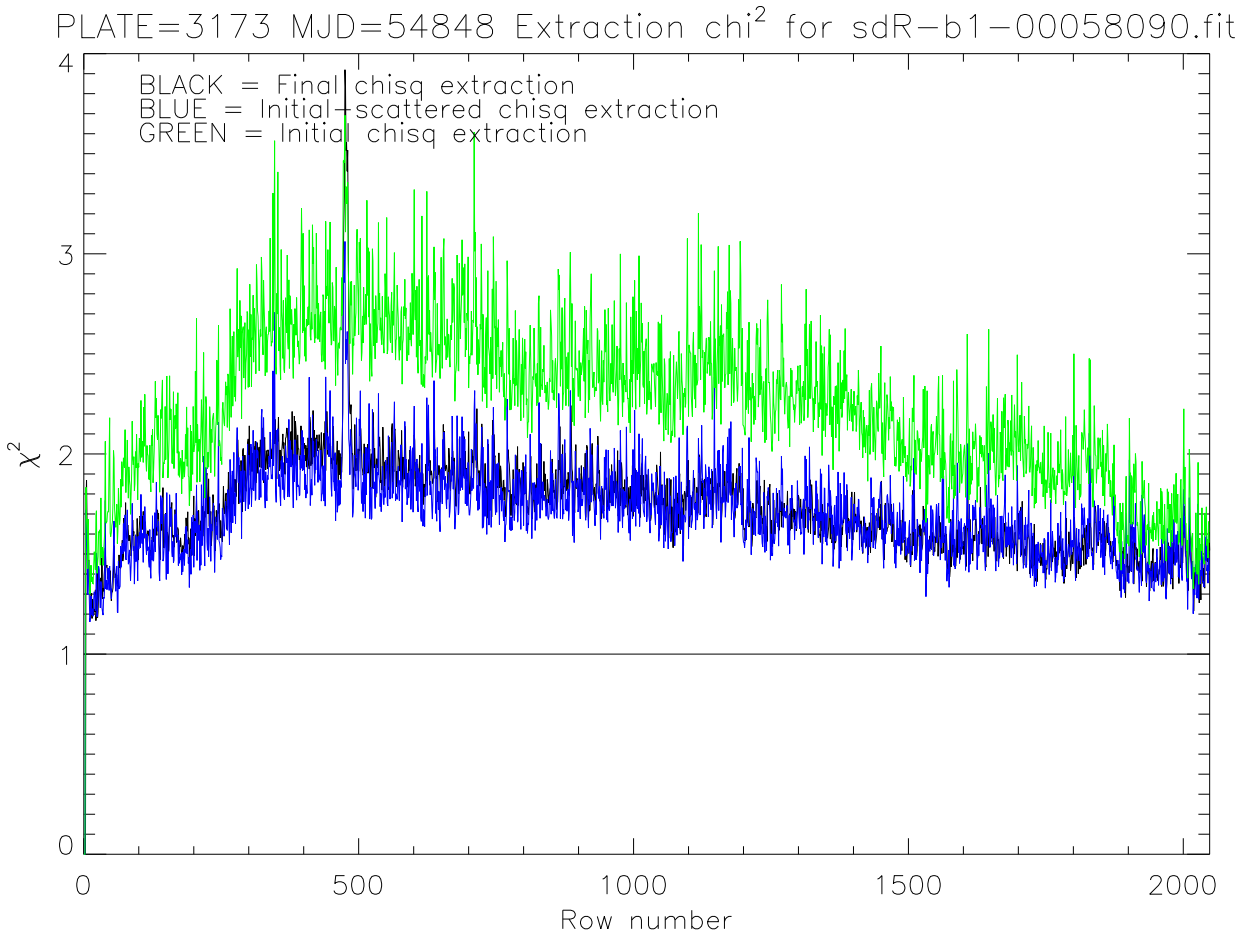

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.306
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:20:12 2010

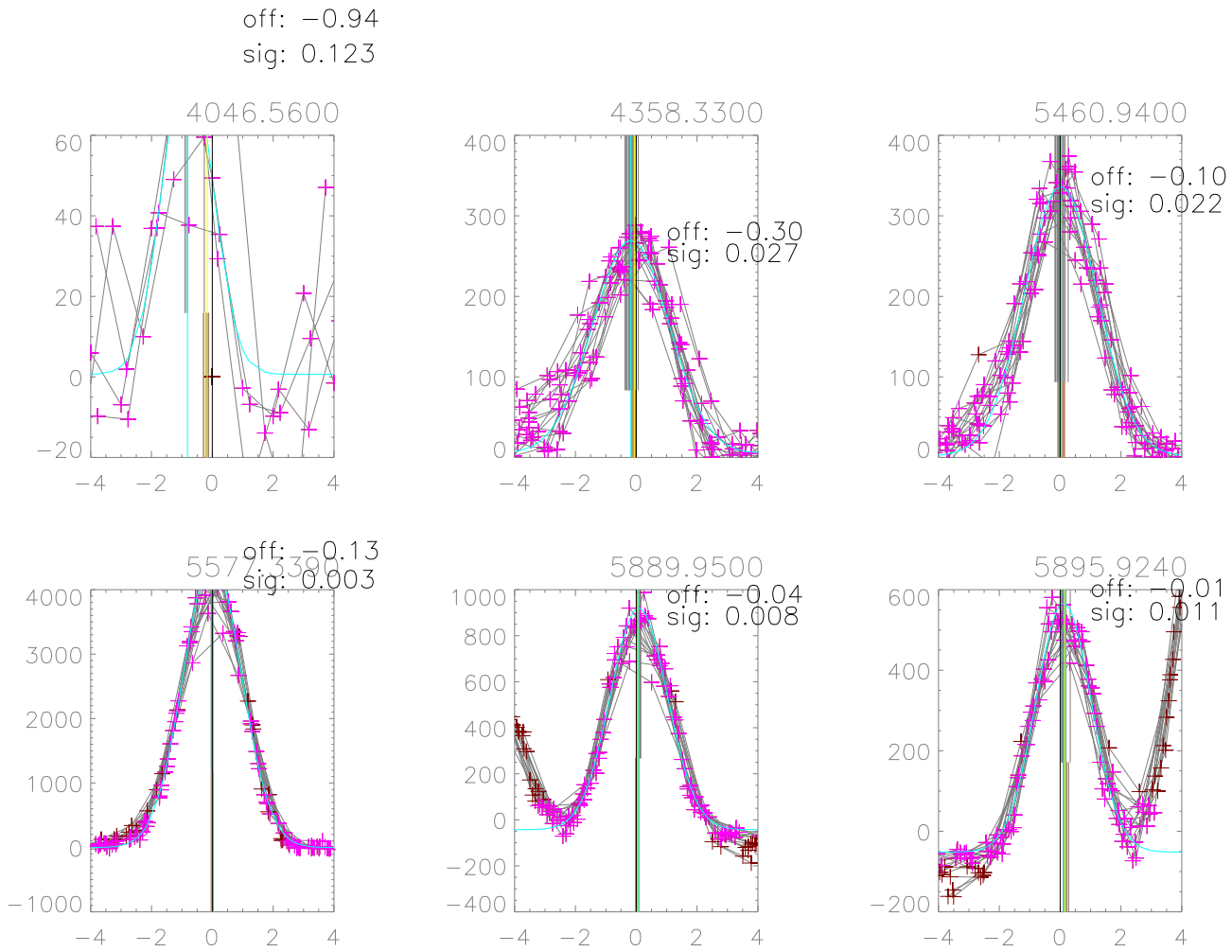

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058090.f
Y [pix]
X [pix]
0
500
1000
1500
2000
20.9
27.3
14.5
6.02

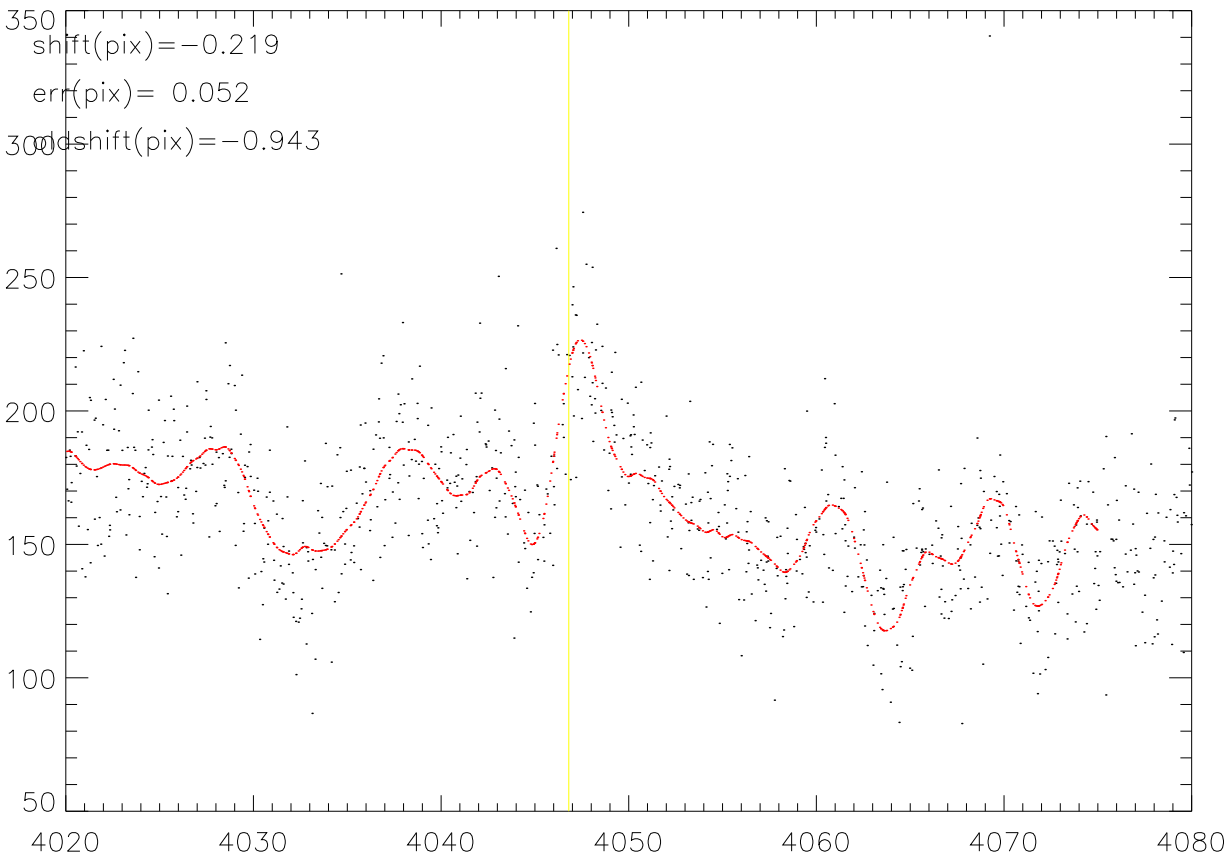

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058090.f
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 20.092
Max value = 30.903
Wed May 19 21:20:45 2010

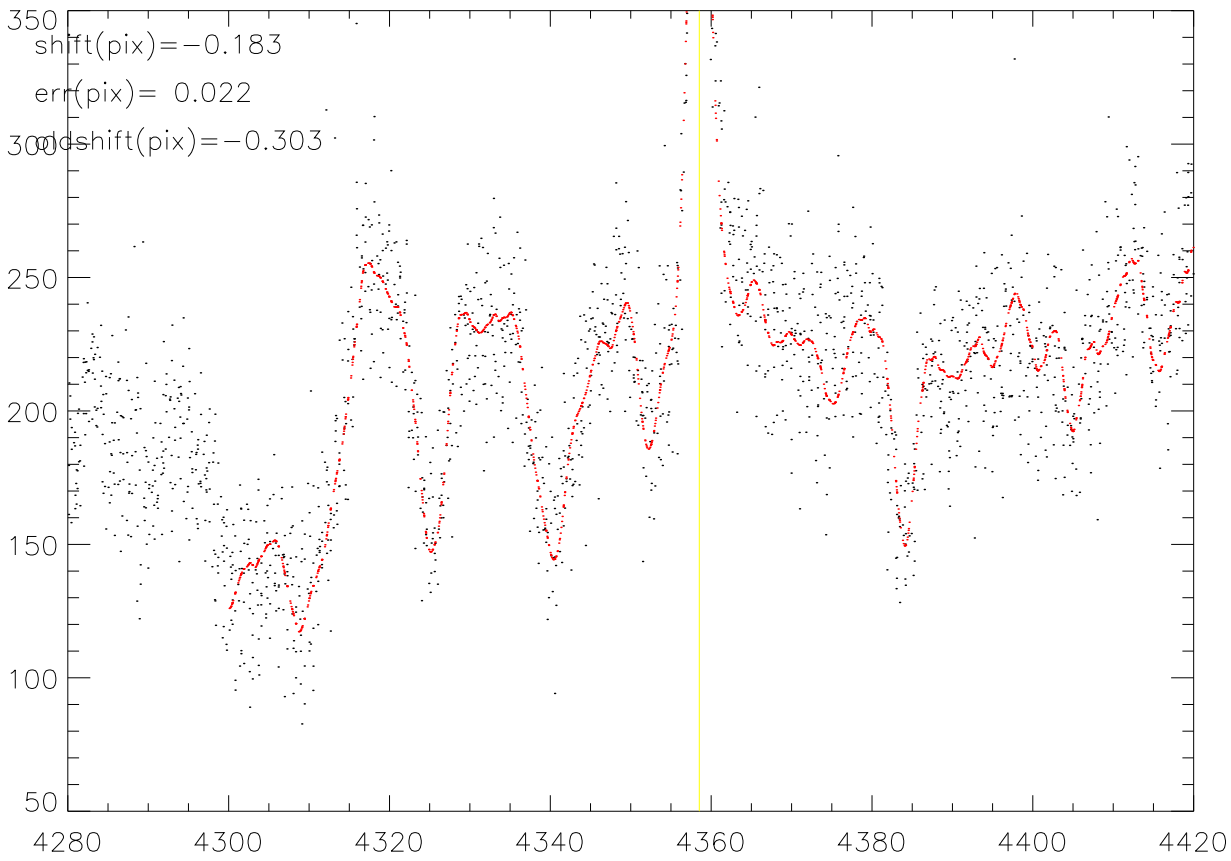

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058090.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
11.8

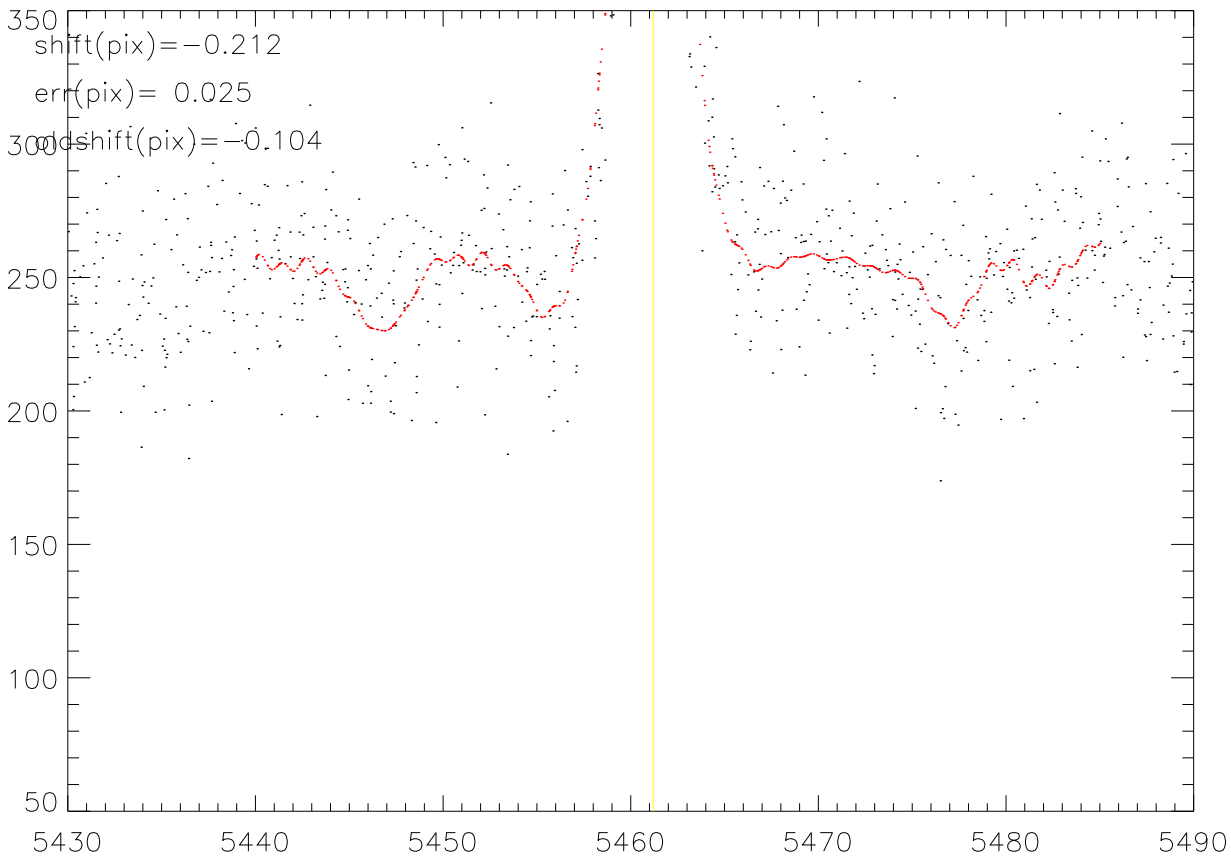

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058090.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.834
Max value = 18.615
Wed May 19 21:22:27 2010

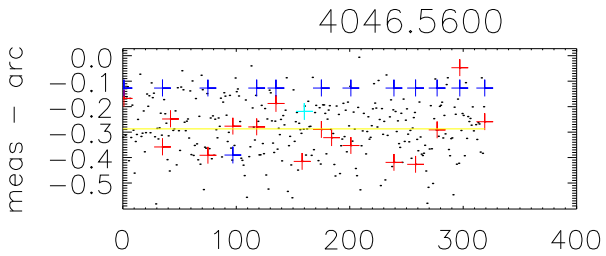

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b1-00058090.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
0
500
1000
1500
2000

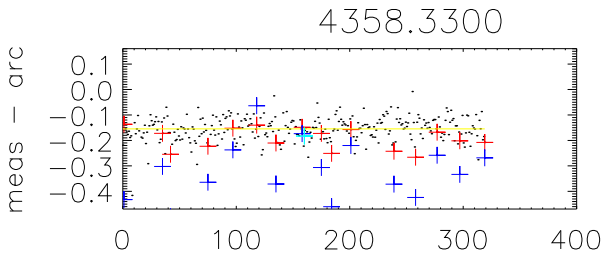

off: −0.94
sig: 0.123
4046.5600
4358.3300
off: −0.30
sig: 0.027
5460.9400
off: −0.10
sig: 0.022
off: −0.13
sig: 0.003
5889.9500
off: −0.04
sig: 0.008
5895.9240
off: −0.01
sig: 0.011

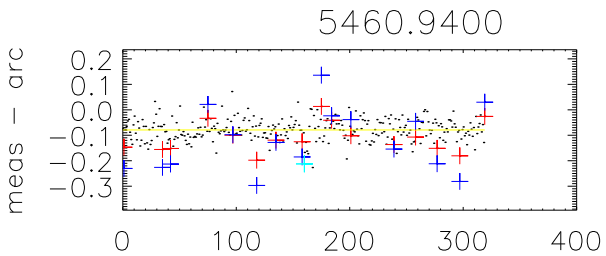

shift(pix)=−0.219
err(pix)= 0.052
oldshift(pix)=−0.943
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

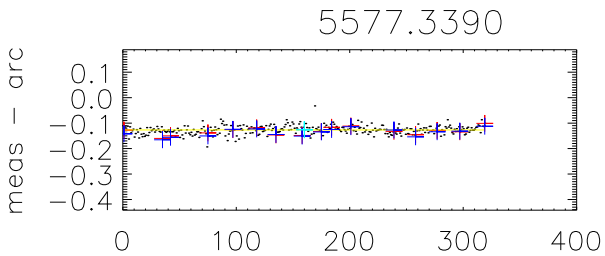

shift(pix)=−0.183
err(pix)= 0.022
oldshift(pix)=−0.303
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

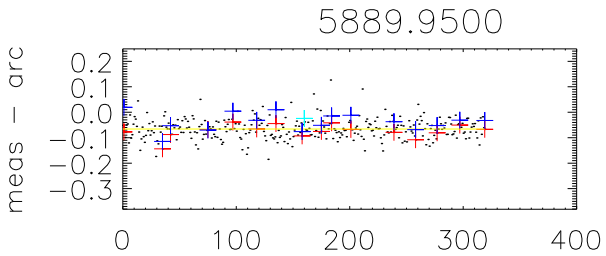

shift(pix)=−0.212
err(pix)= 0.025
oldshift(pix)=−0.104
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

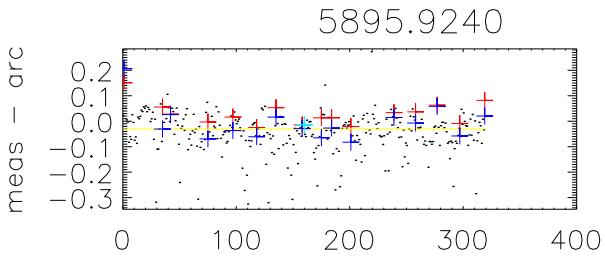

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

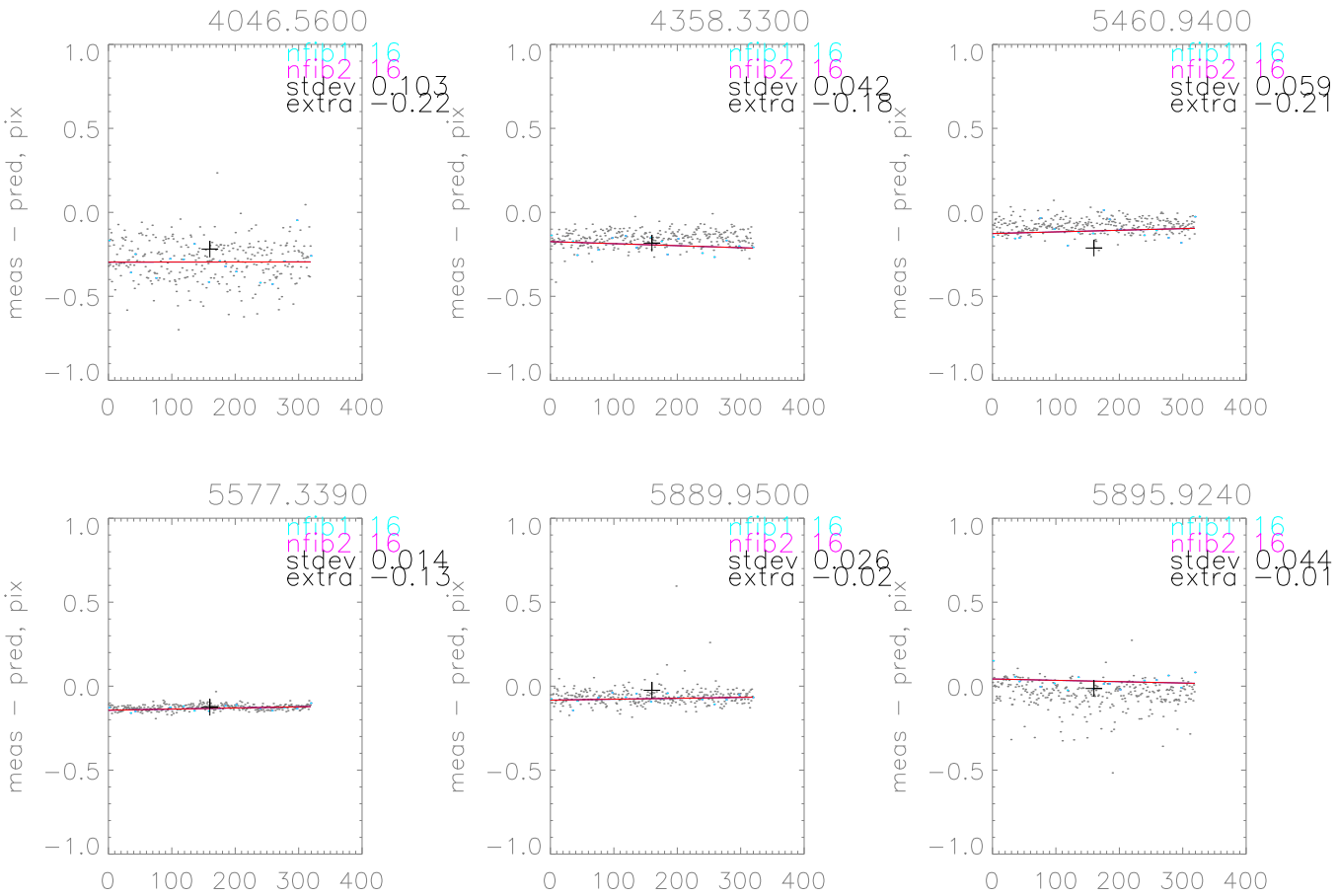

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

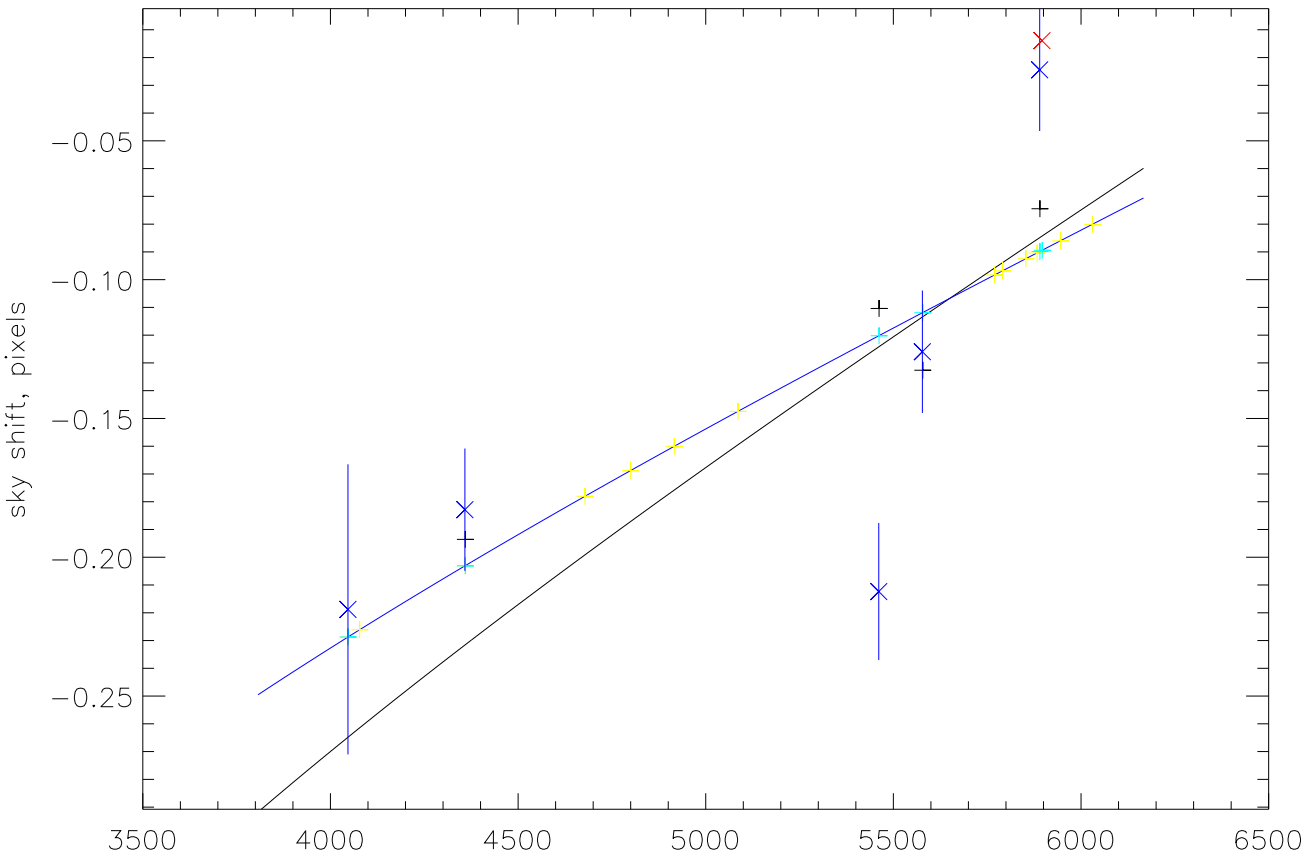

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

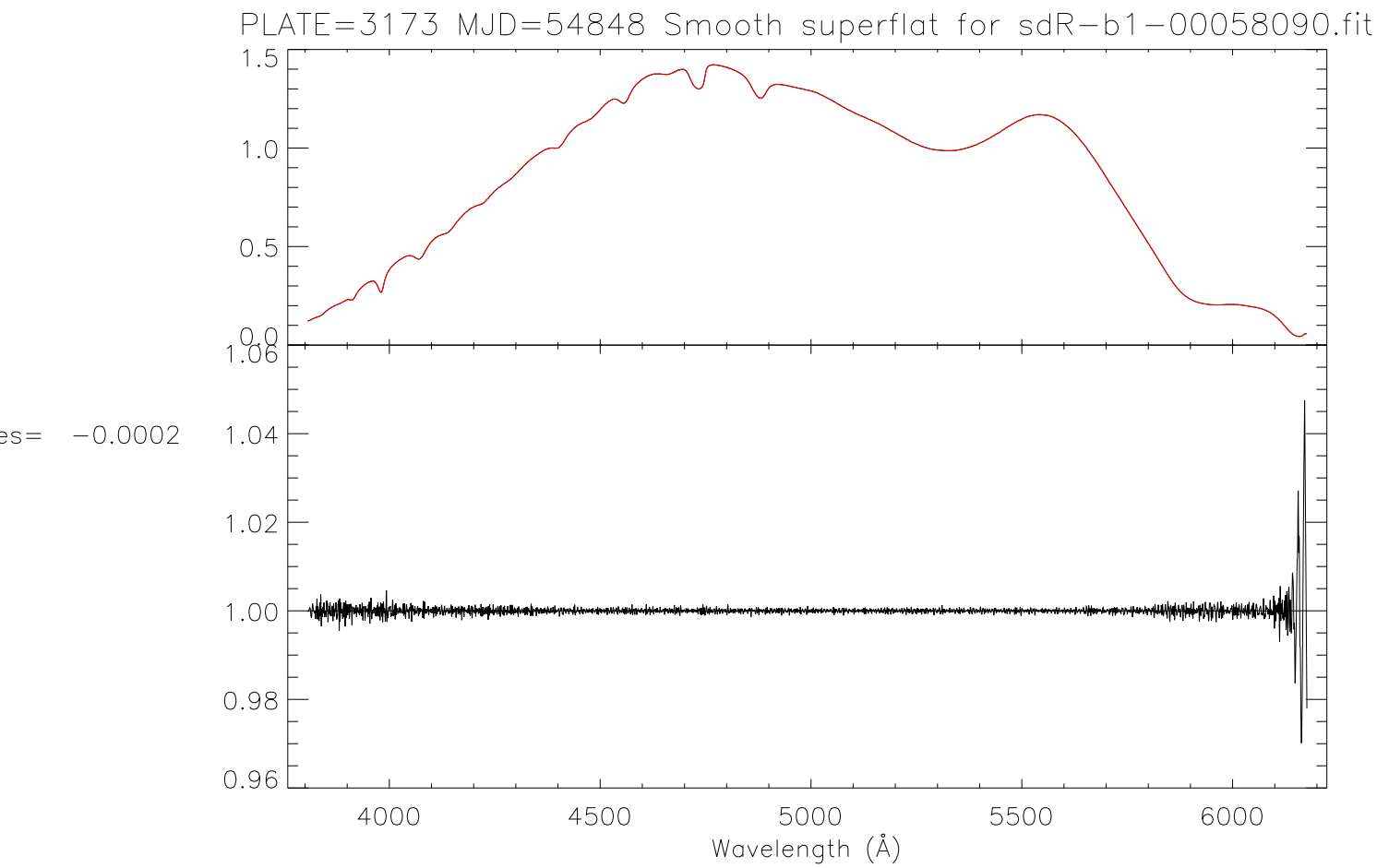

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

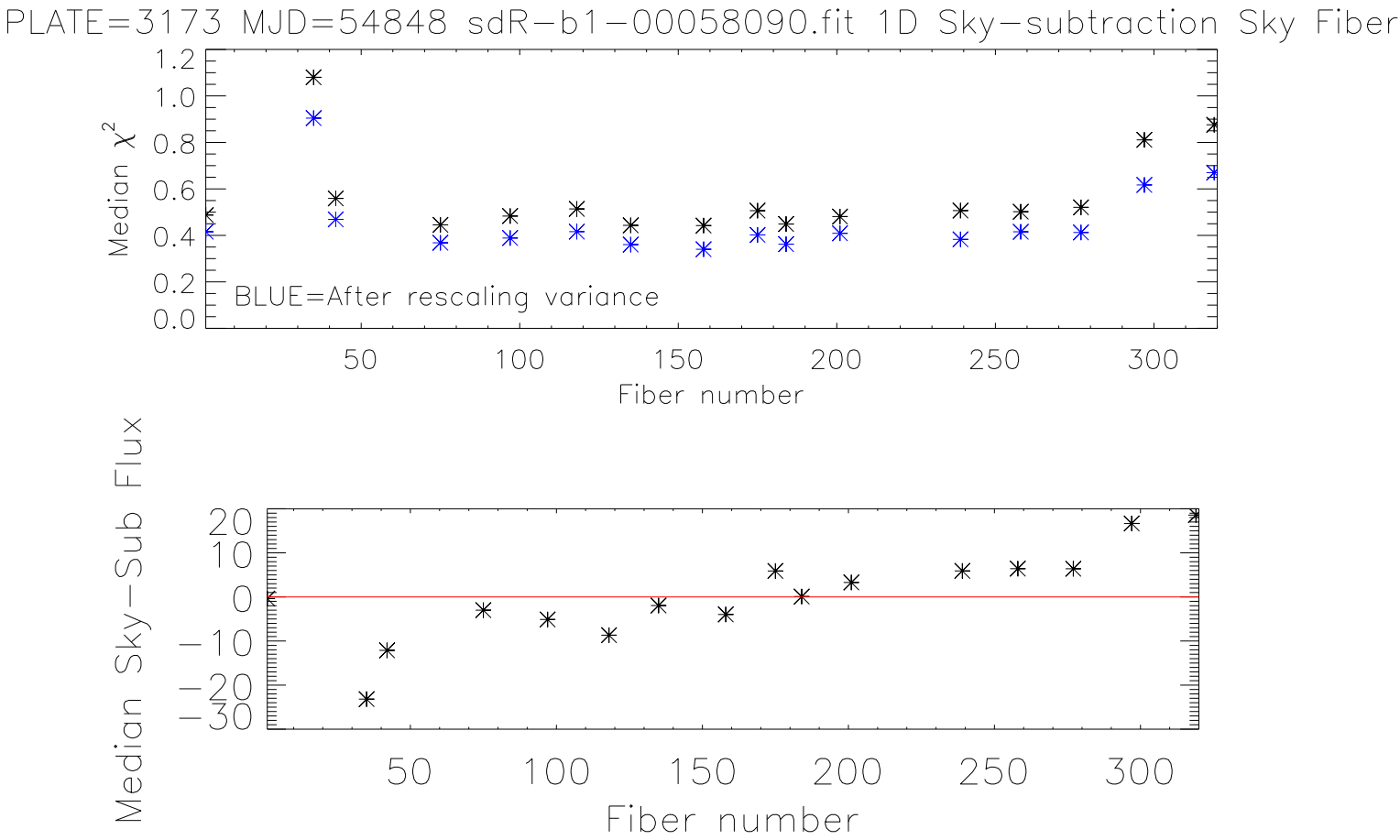

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

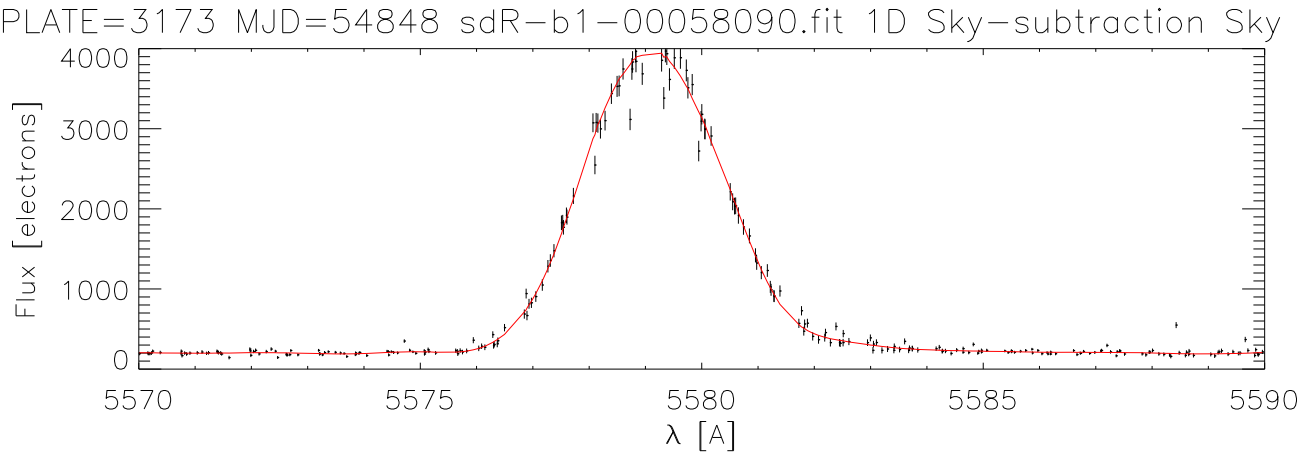

4046.5600
nfib1 16
nfib2 16
stdev 0.103
extra −0.22
4358.3300
nfib1 16
nfib2 16
stdev 0.042
extra −0.18
5460.9400
nfib1 16
nfib2 16
stdev 0.059
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra −0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

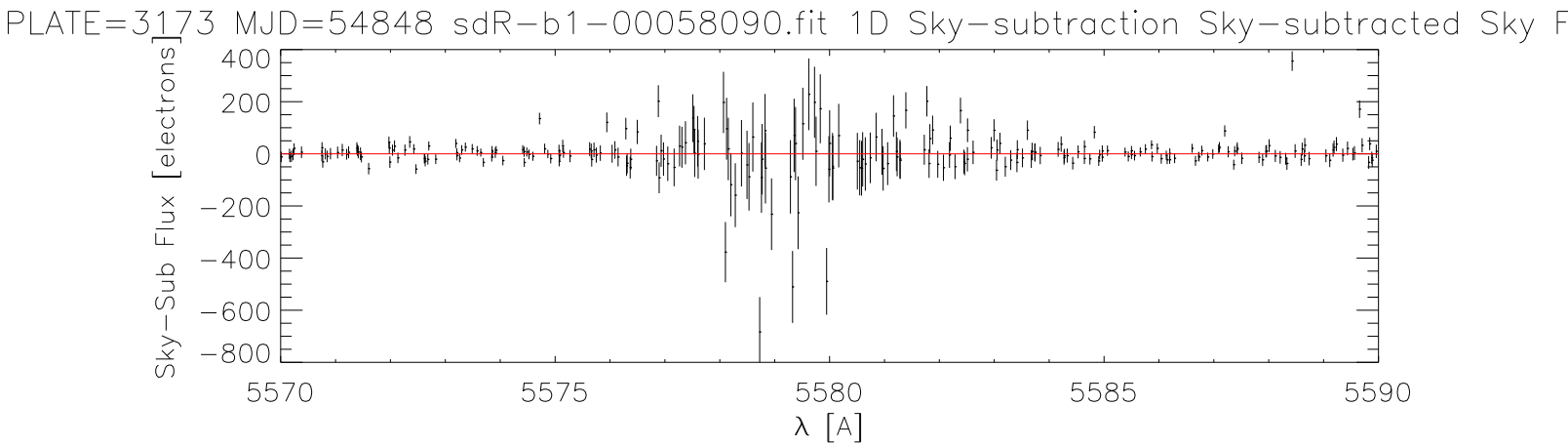

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500

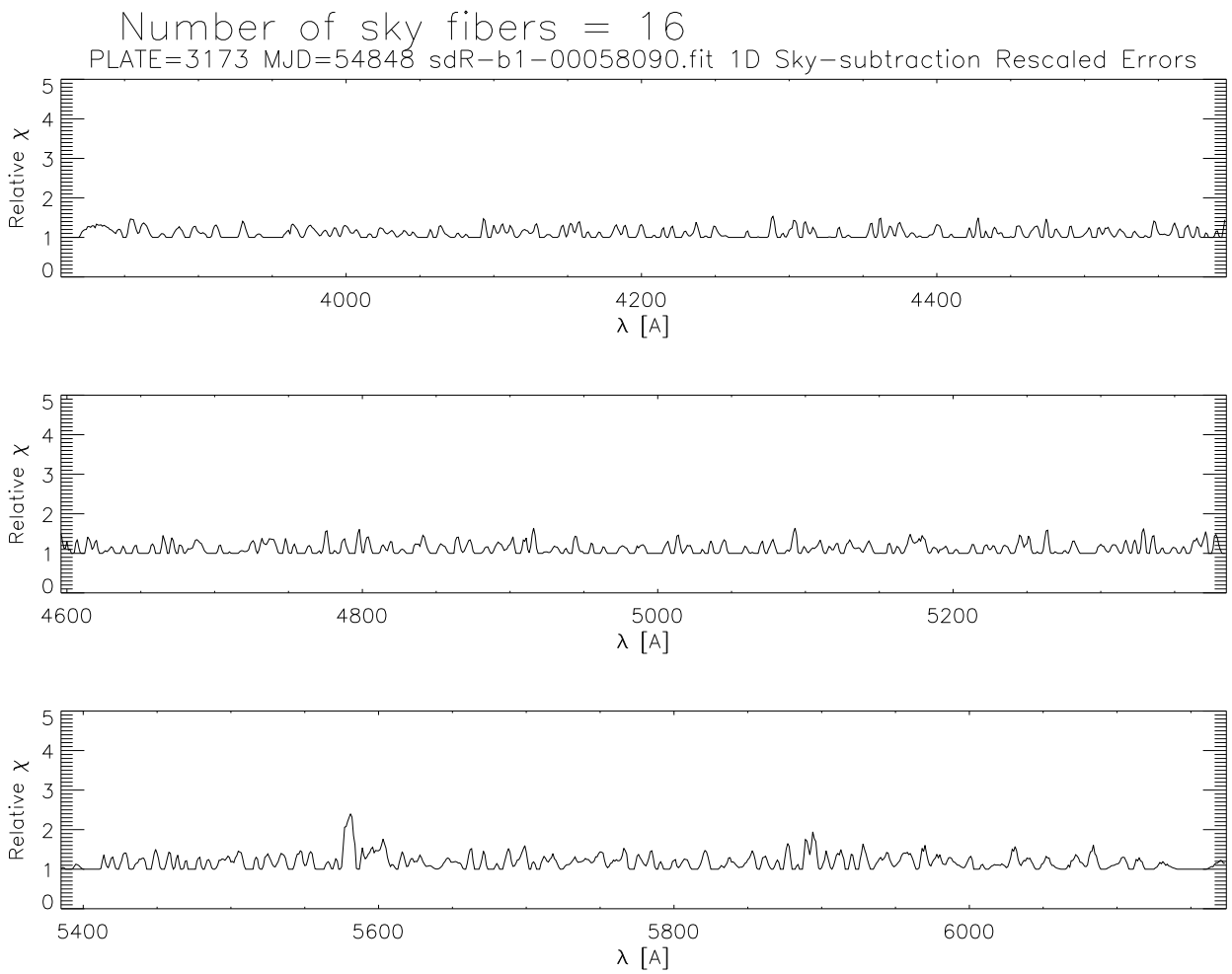

PLATE=3173 MJD=54848 Smooth superflat for sdR-b1-00058090.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

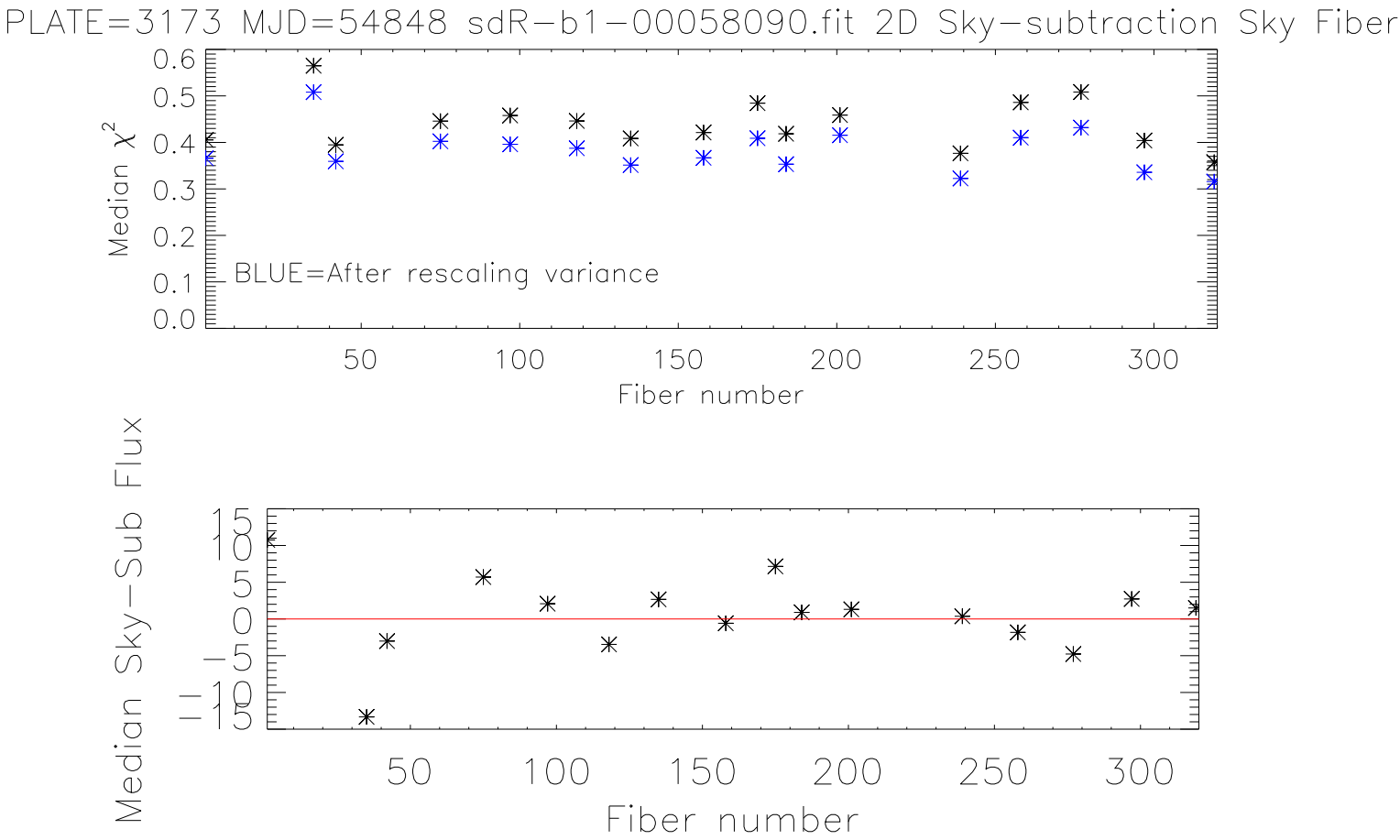
es= −0.0002

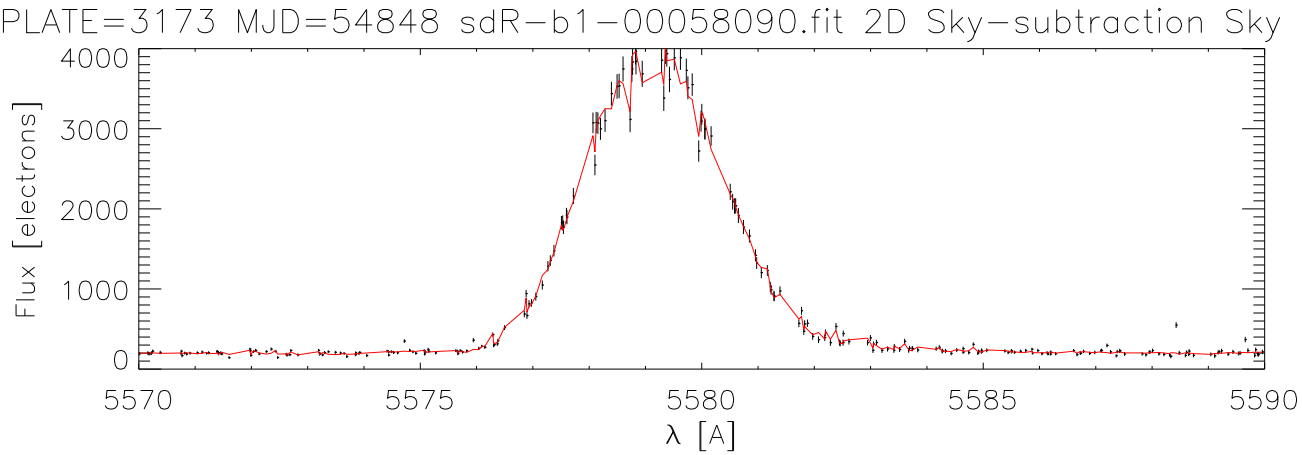

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

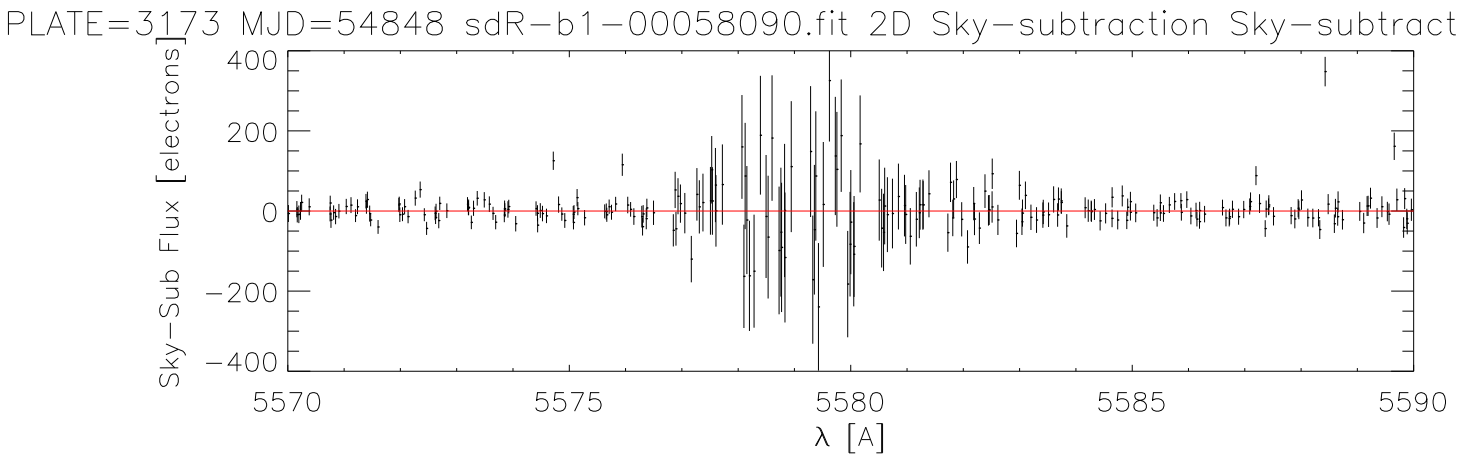

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

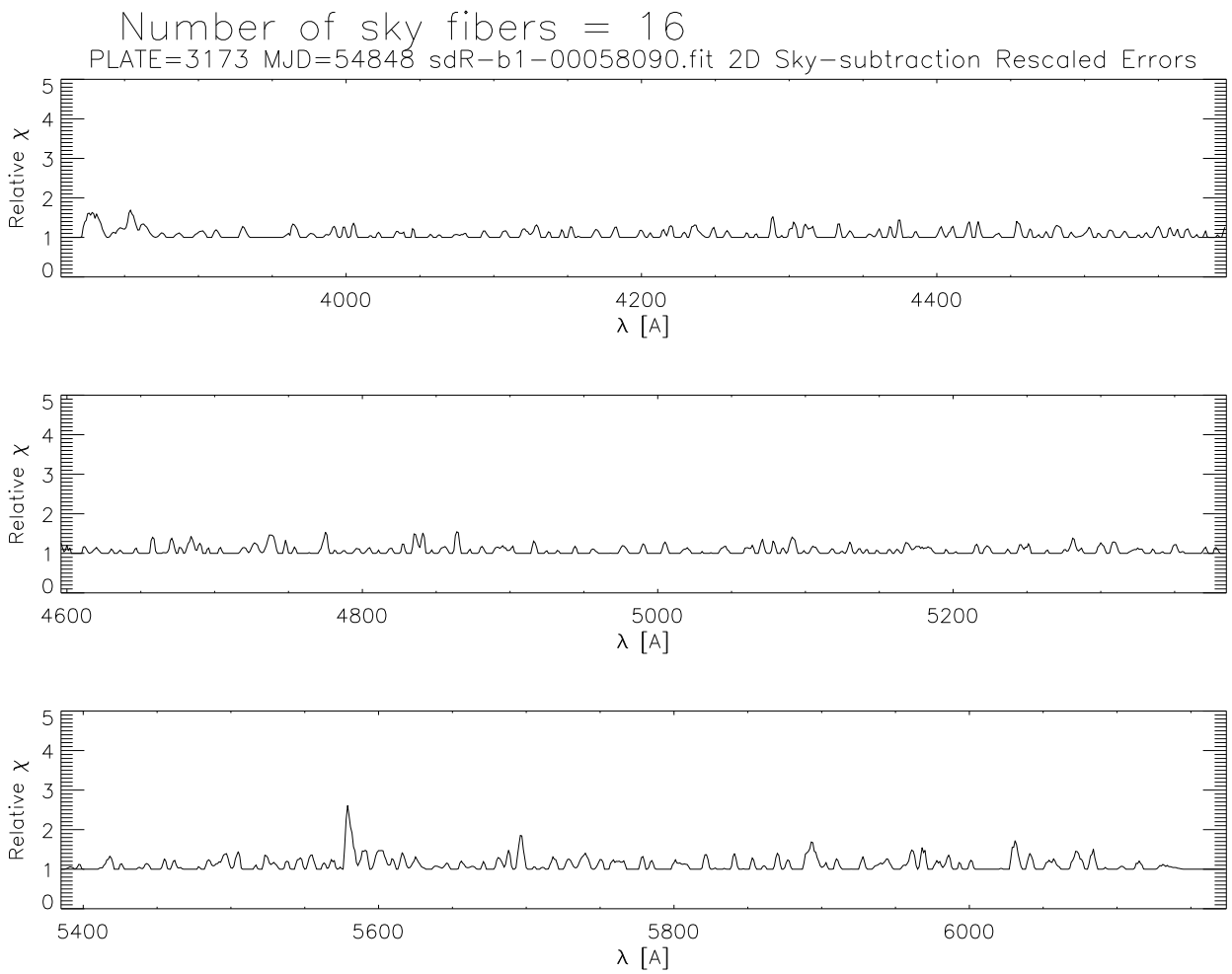

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

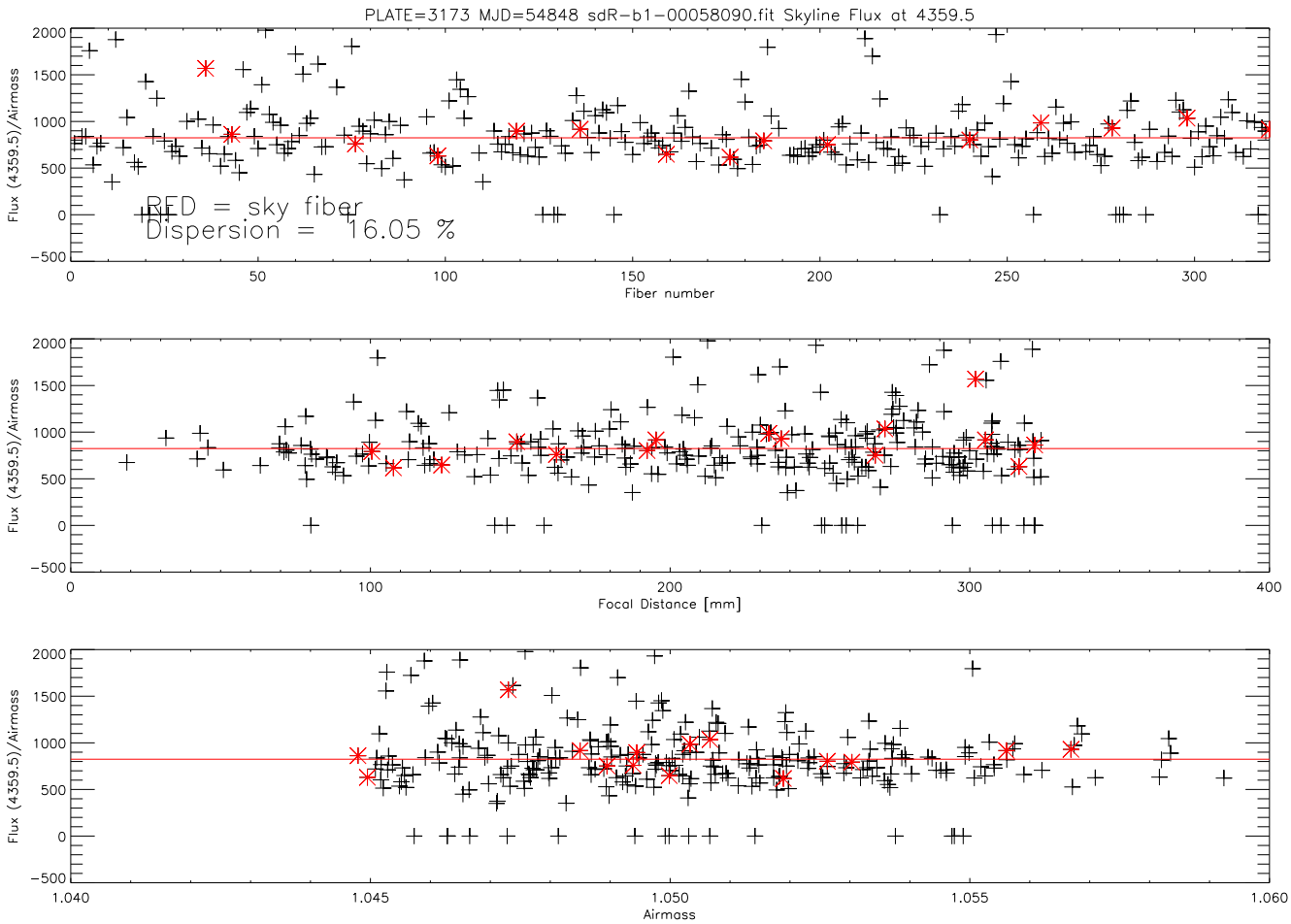

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058090.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

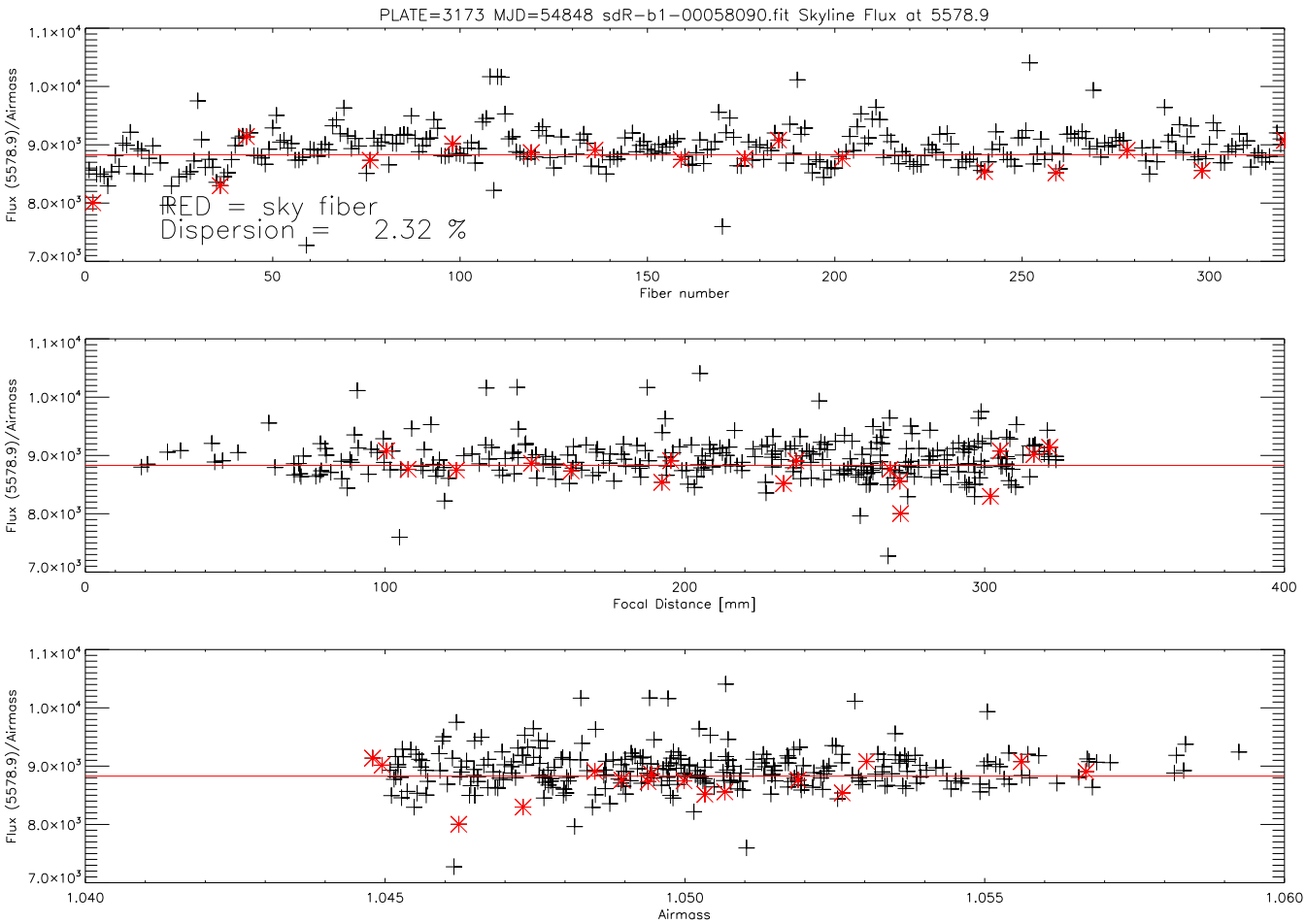

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

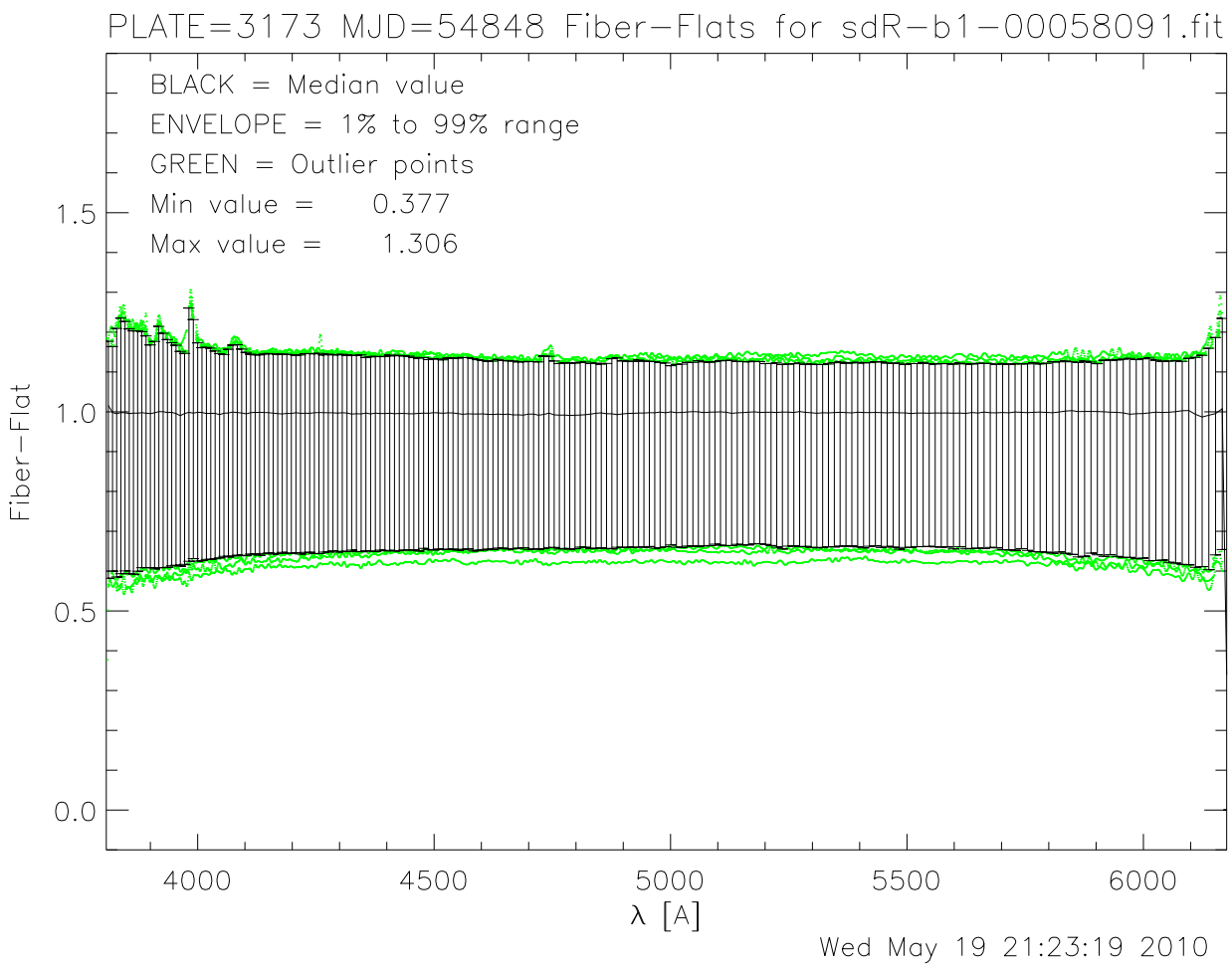

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

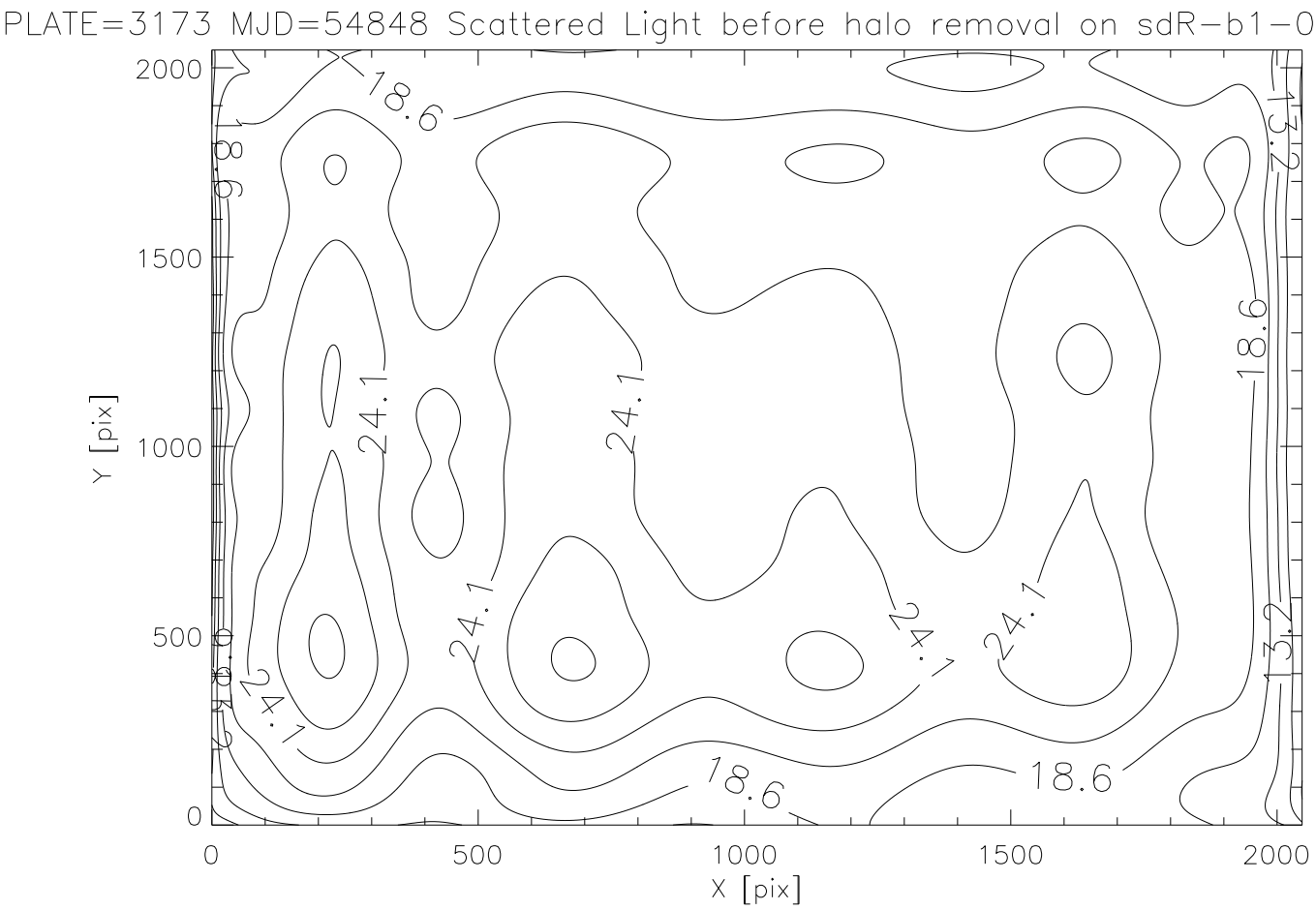

PLATE=3173 MJD=54848 sdR-b1-00058090.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

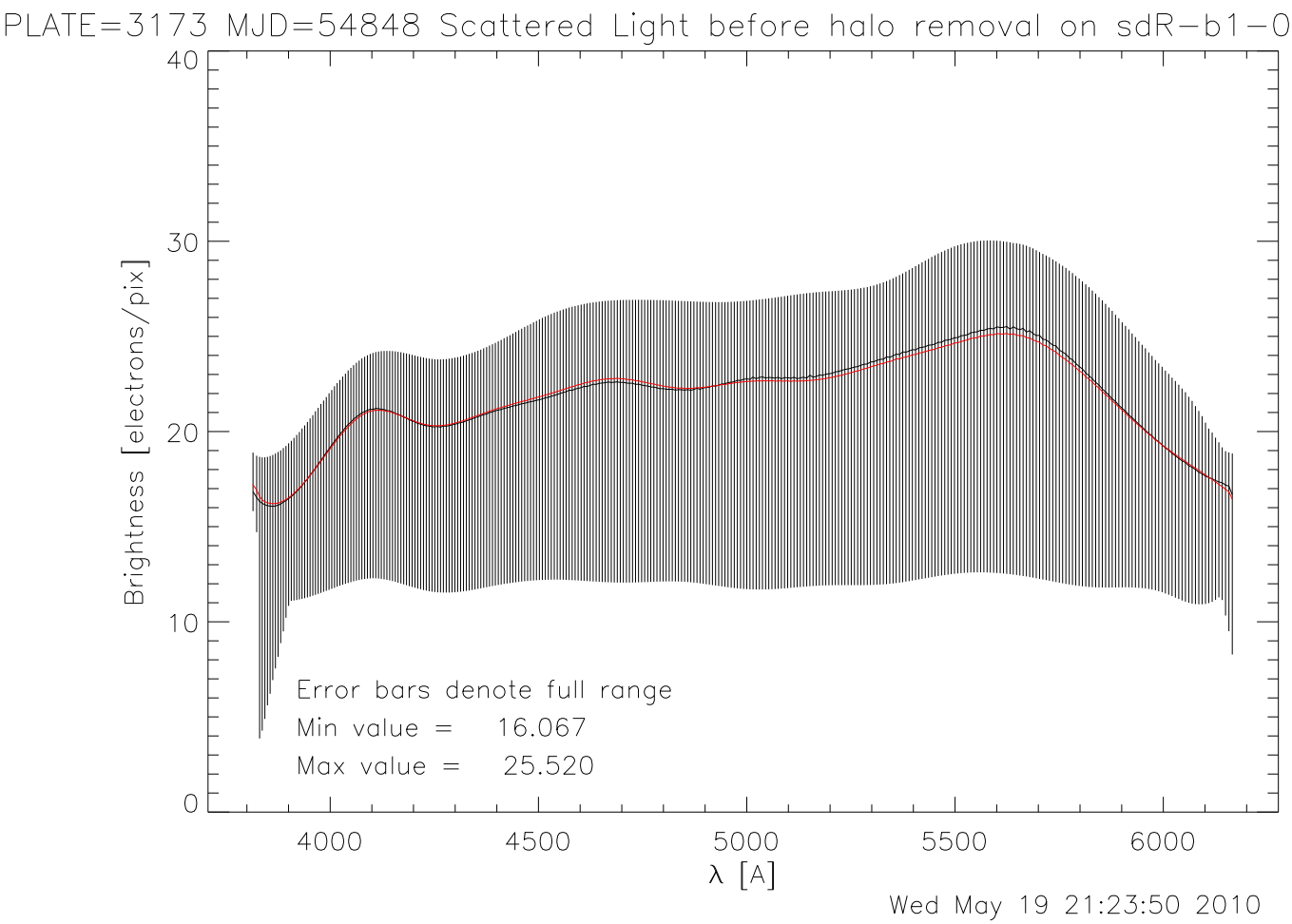

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058090.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

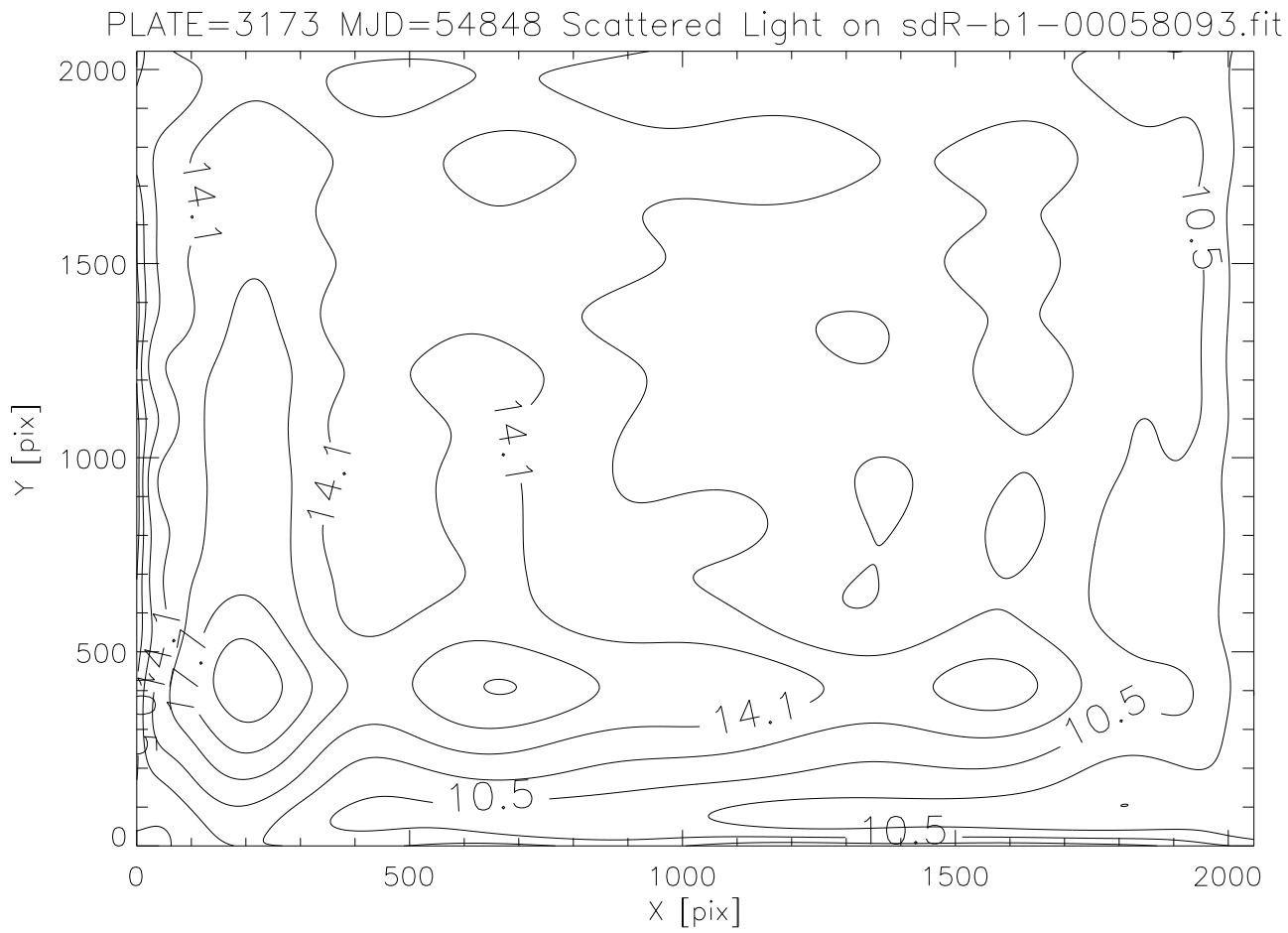

PLATE=3173 MJD=54848 sdR-b1-00058090.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 16.05 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

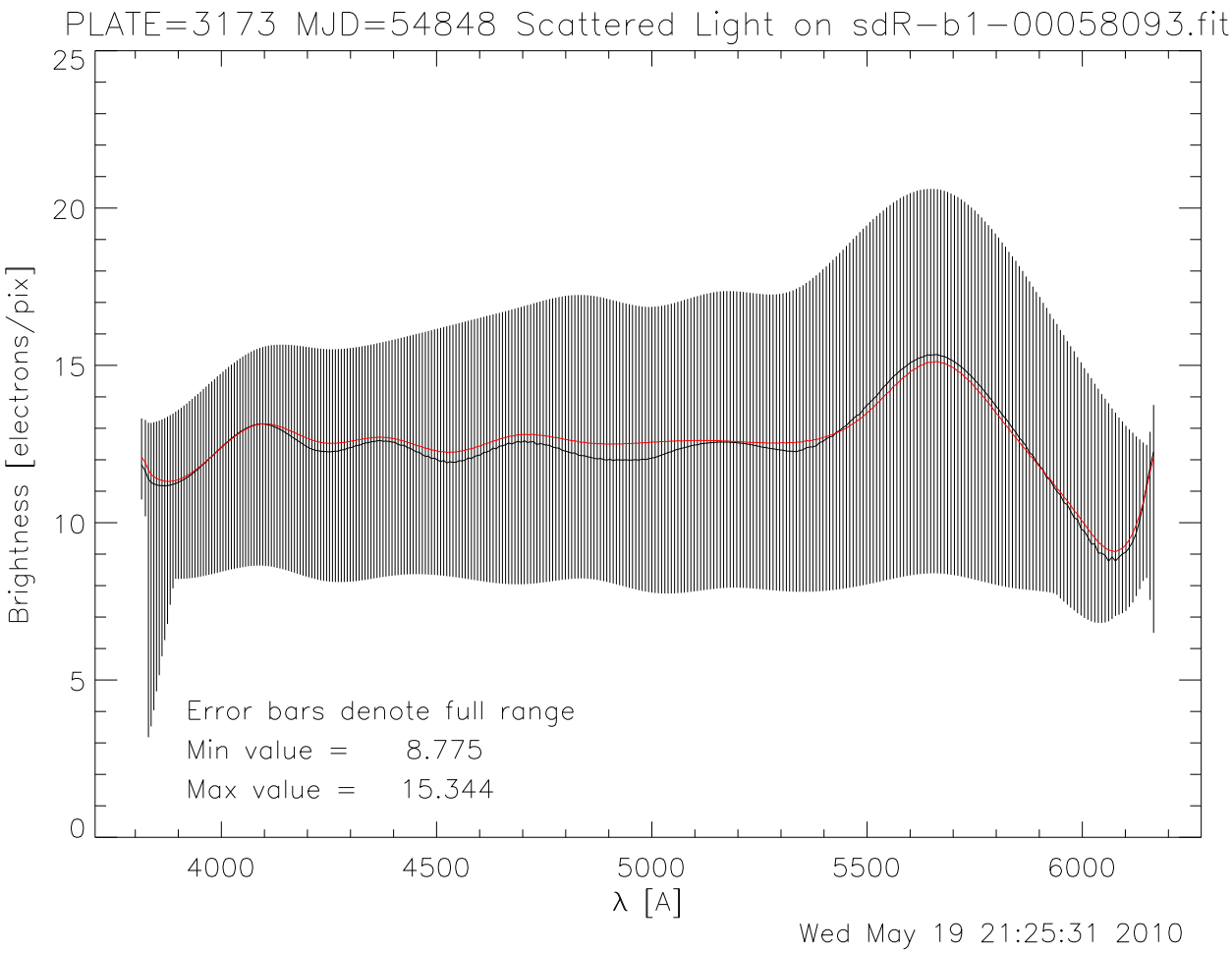

PLATE=3173 MJD=54848 sdR-b1-00058090.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.32 %
Focal Distance [mm]
Airmass

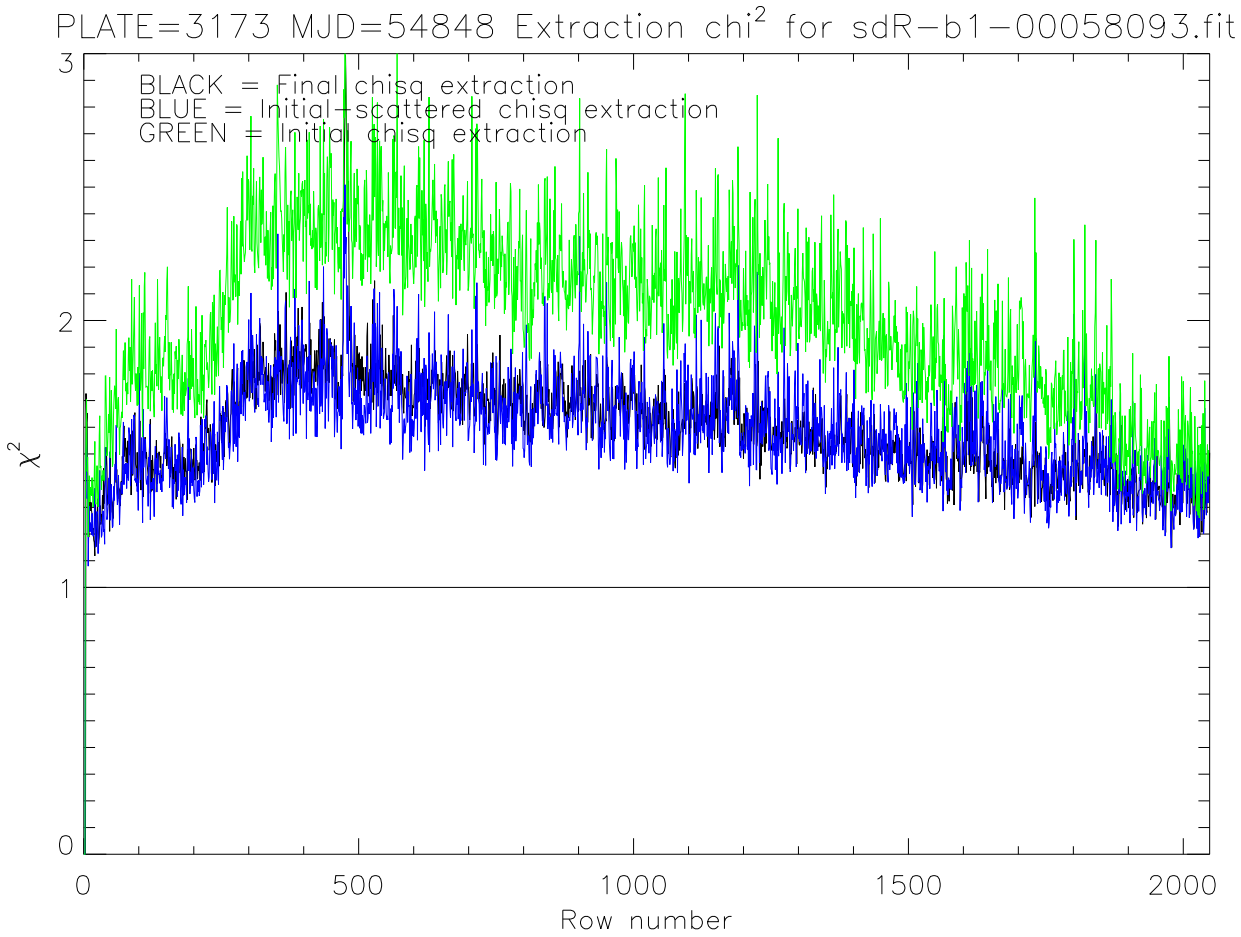

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.306
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:23:19 2010

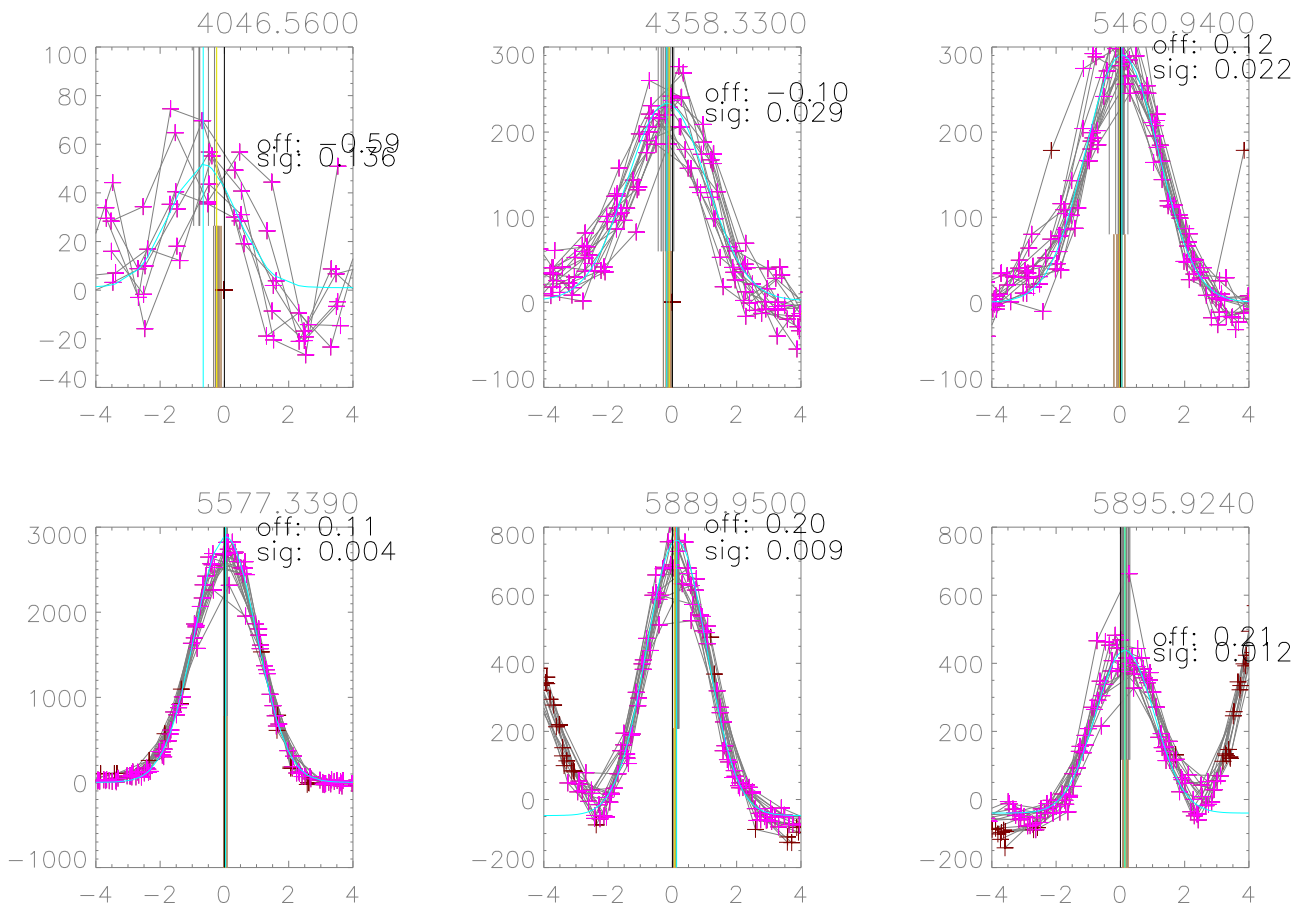

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR−b1−00058093.f
Y [pix]
X [pix]
0
500
1000
1500
2000
18.6
24.1
13.2

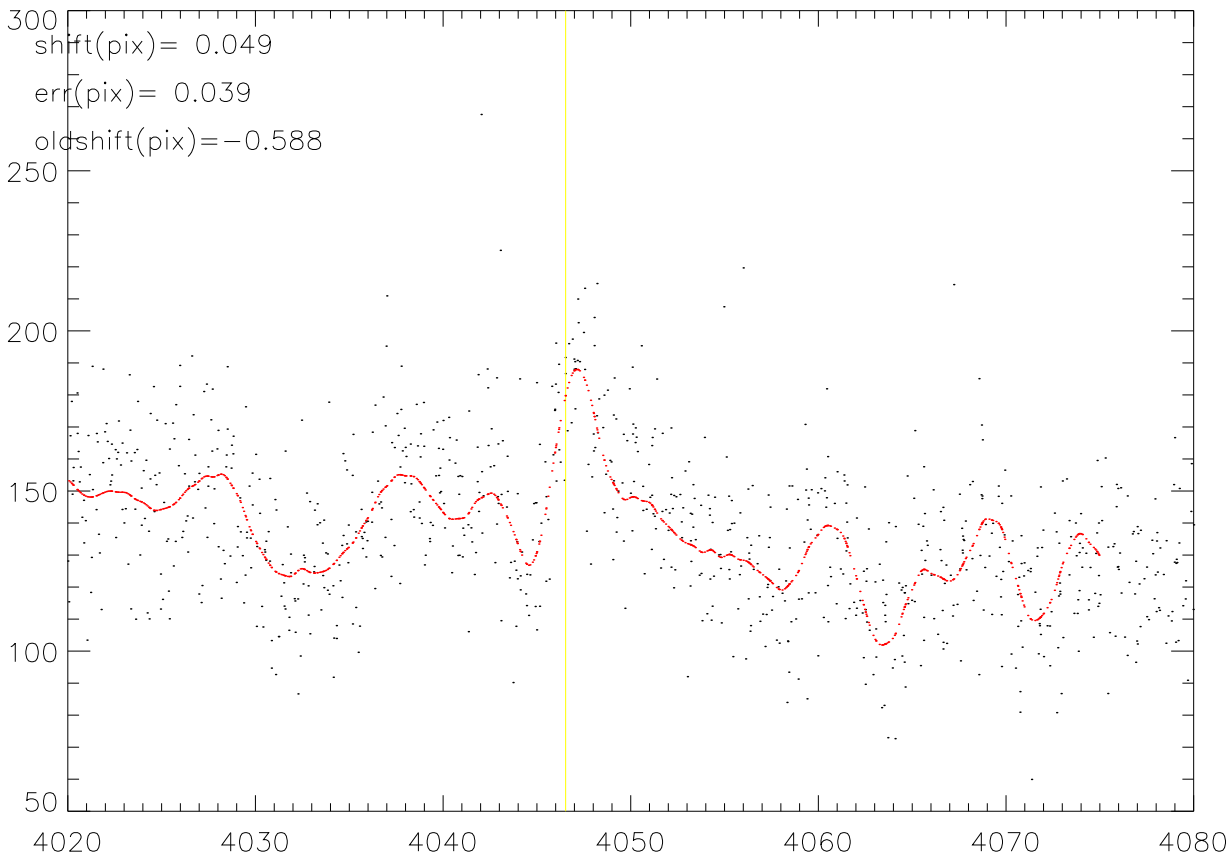

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058093.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 16.067
Max value = 25.520
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:23:50 2010

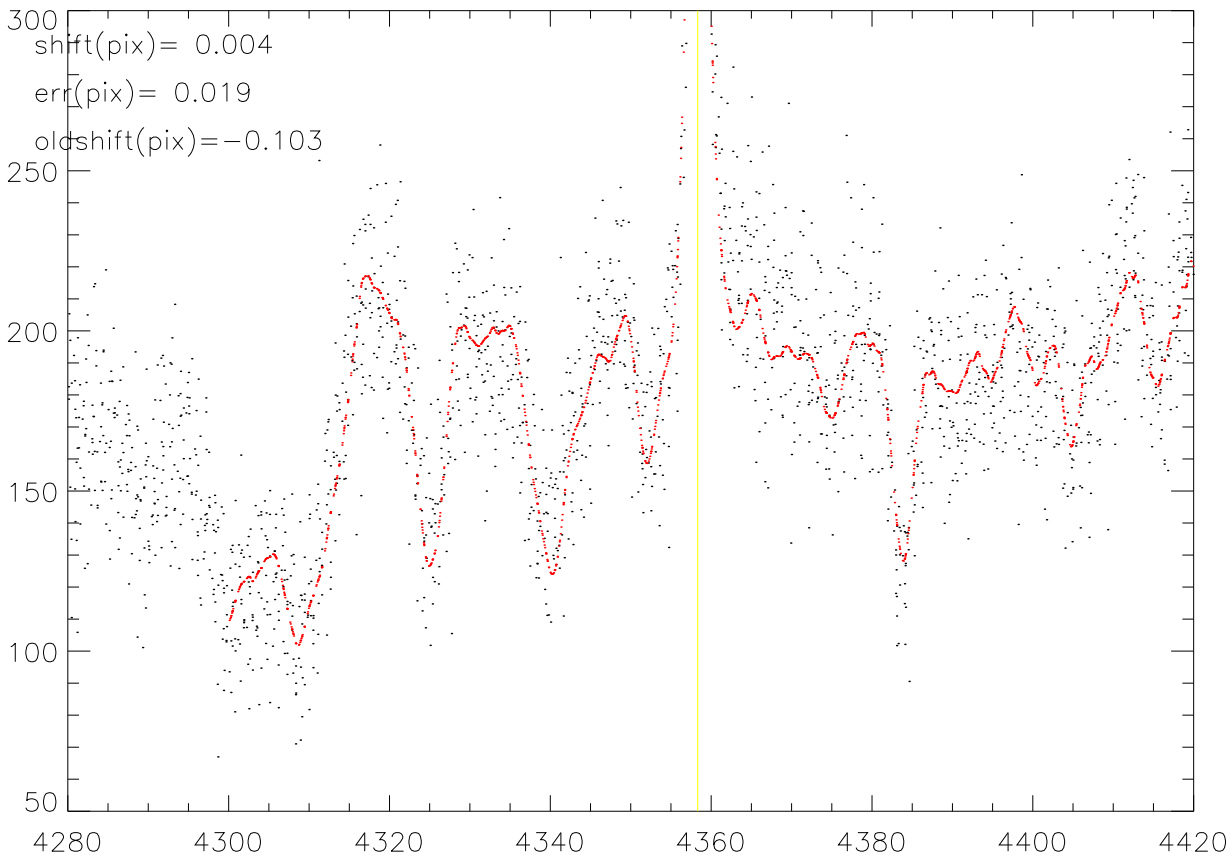

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058093.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
10.5

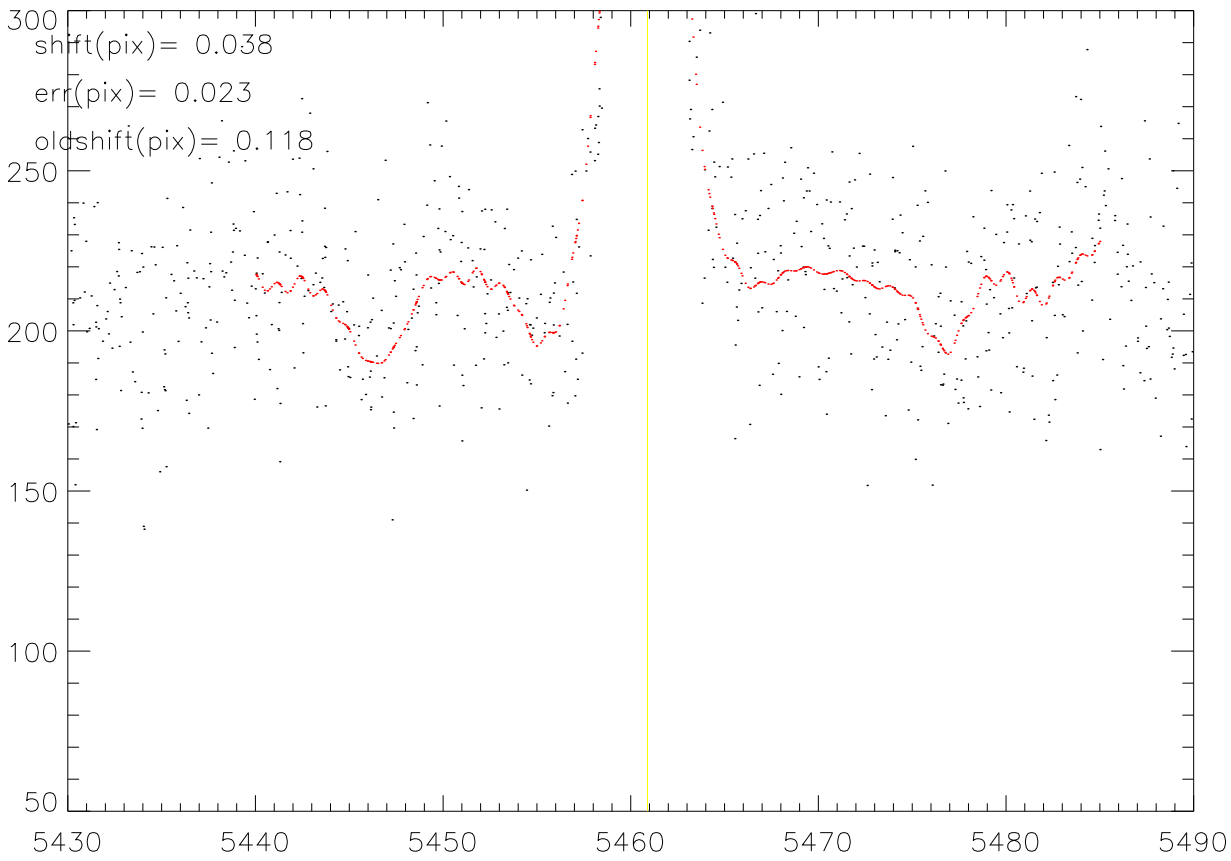

PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058093.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.775
Max value = 15.344
Wed May 19 21:25:31 2010

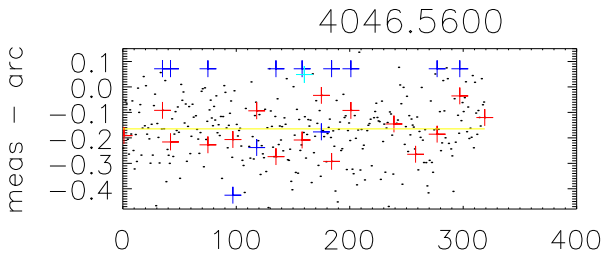

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b1-00058093.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

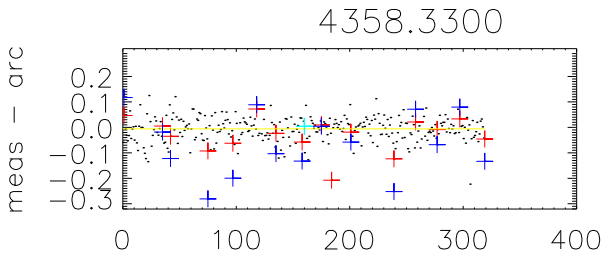

4046.5600
off: −0.59
sig: 0.36
4358.3300
off: −0.10
sig: 0.029
5460.9400
off: 0.12
sig: 0.022
5577.3390
off: 0.11
sig: 0.004
5889.9500
off: 0.20
sig: 0.009
5895.9240
off: 0.21
sig: 0.012

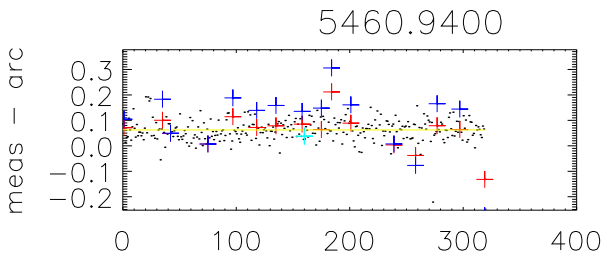

shift(pix)= 0.049
err(pix)= 0.039
oldshift(pix)=−0.588
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

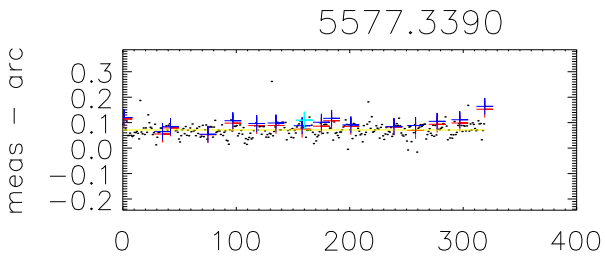

shift(pix)= 0.004
err(pix)= 0.019
oldshift(pix)=−0.103
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

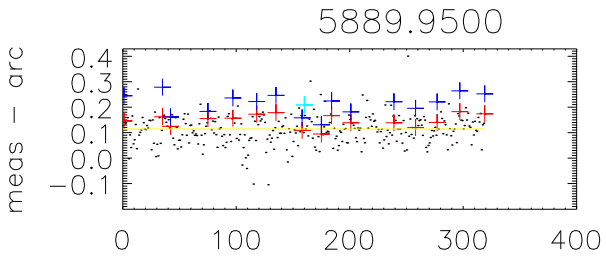

shift(pix)= 0.038
err(pix)= 0.023
oldshift(pix)= 0.118
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

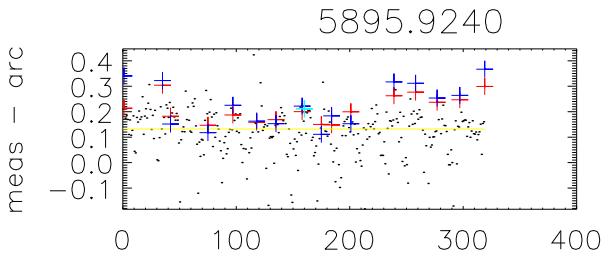

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

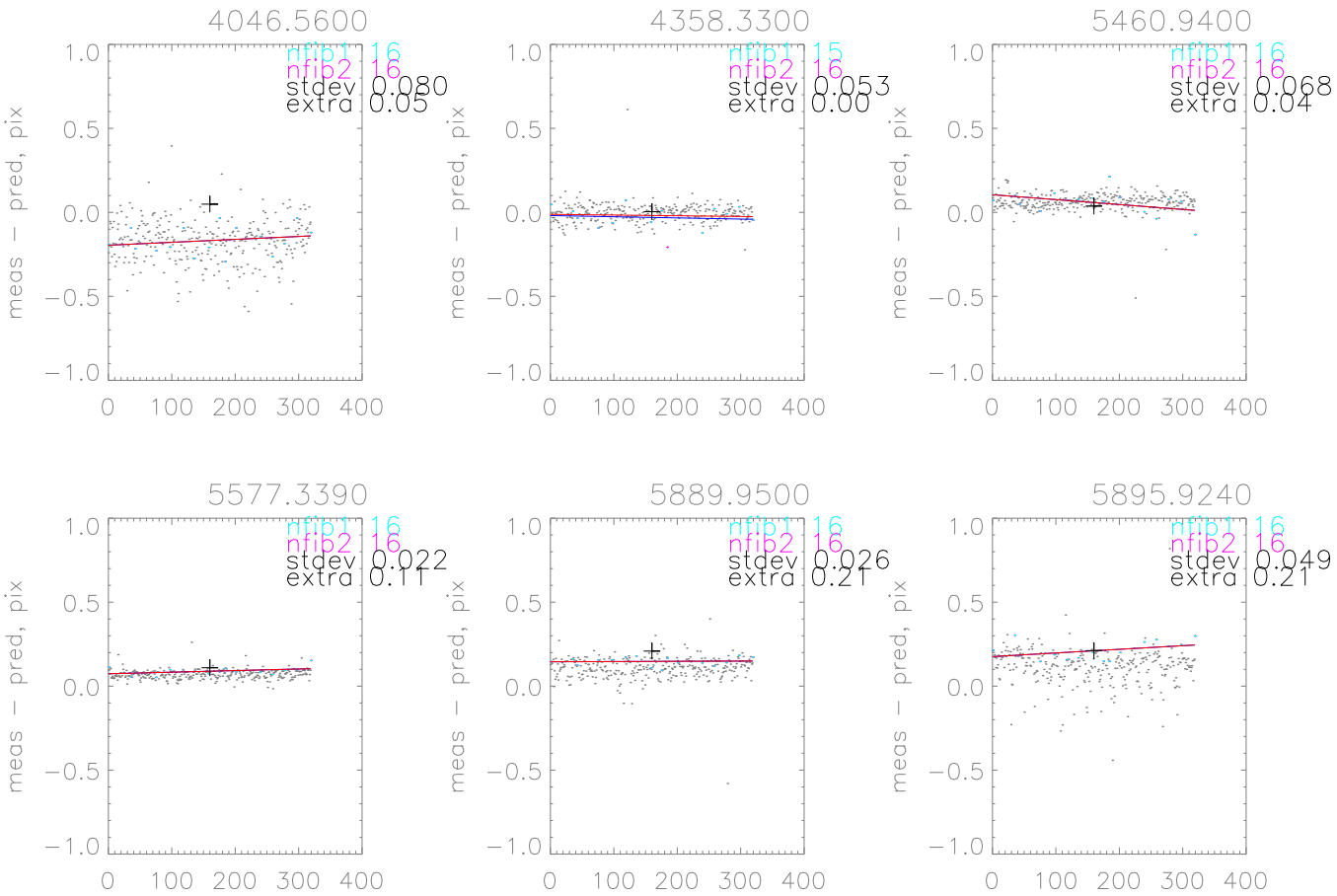

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

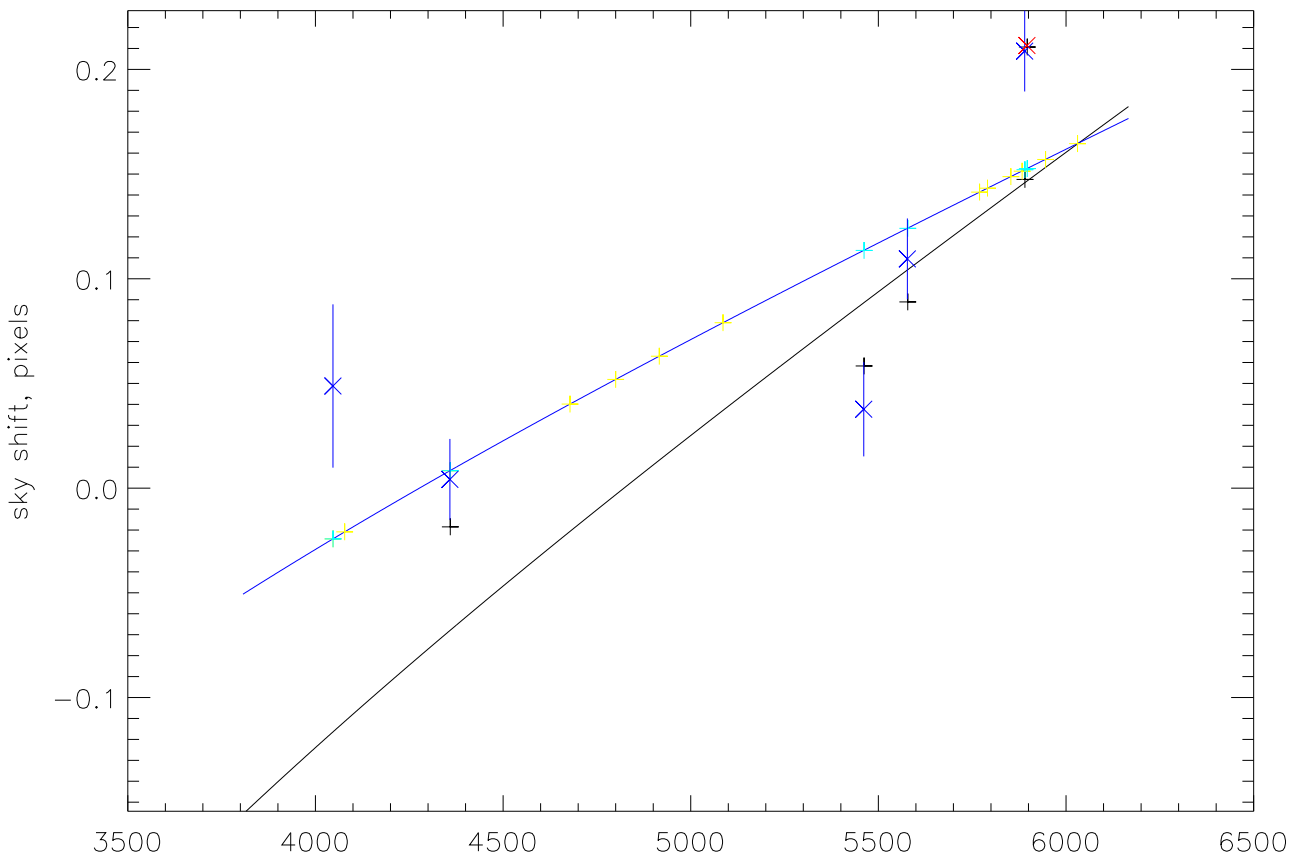

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

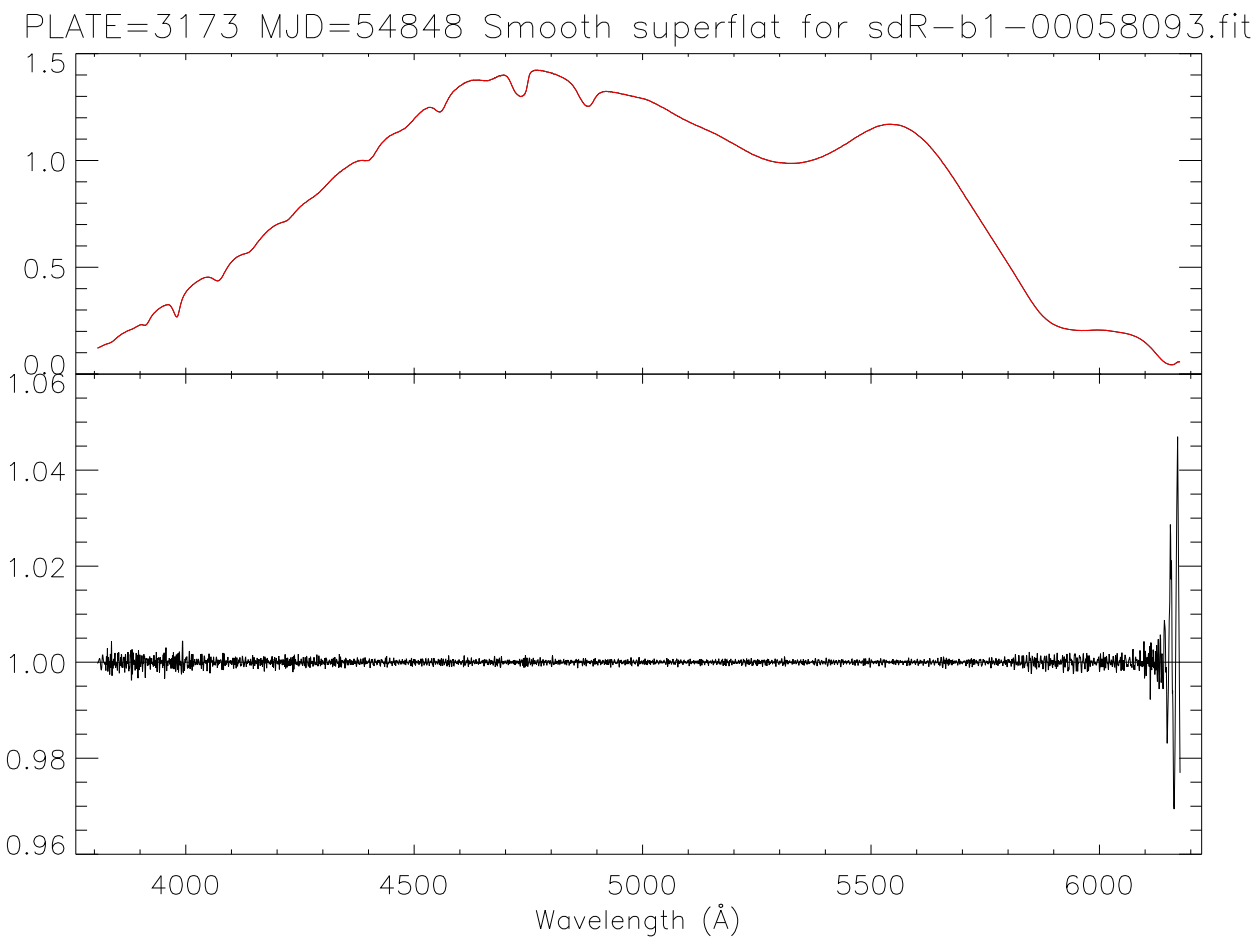

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

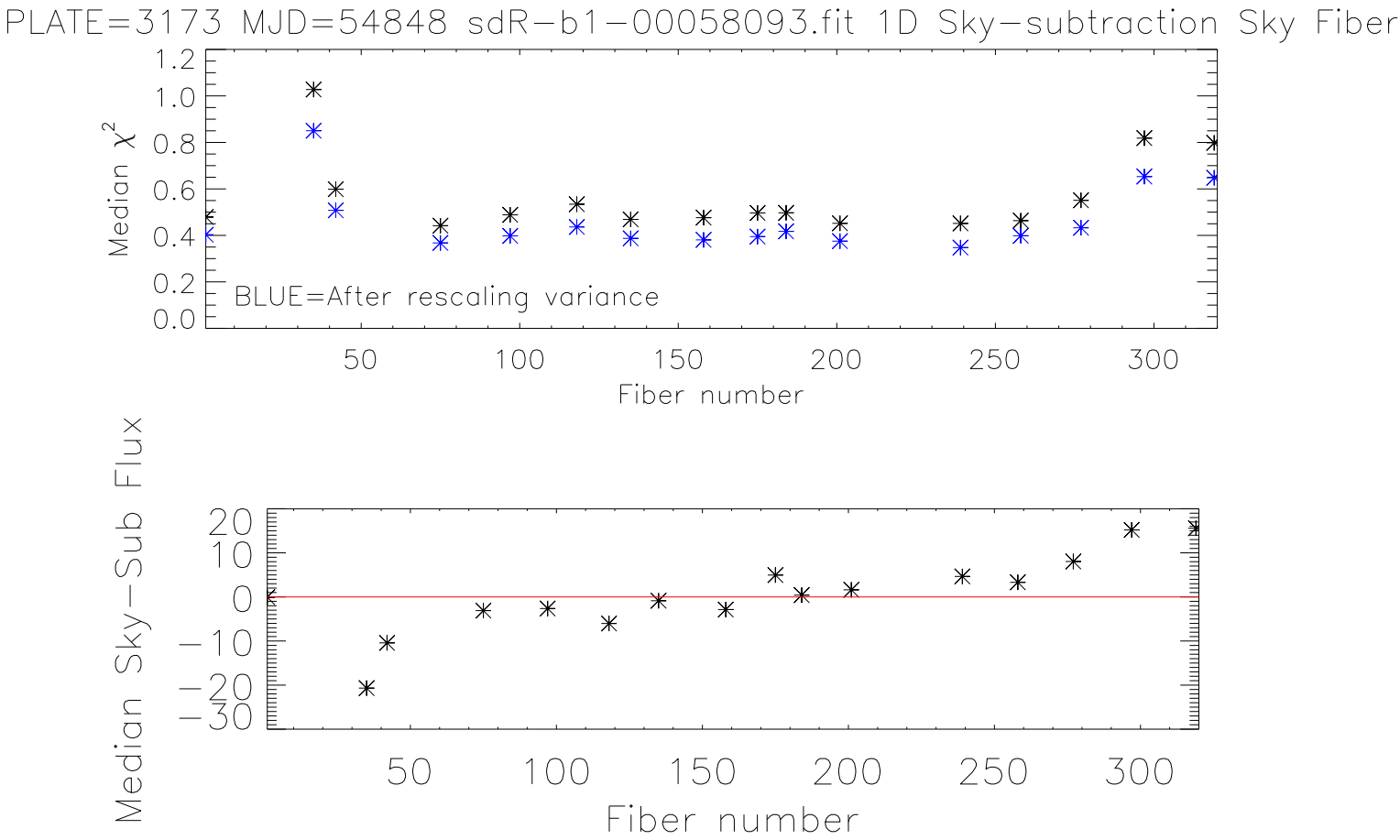

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

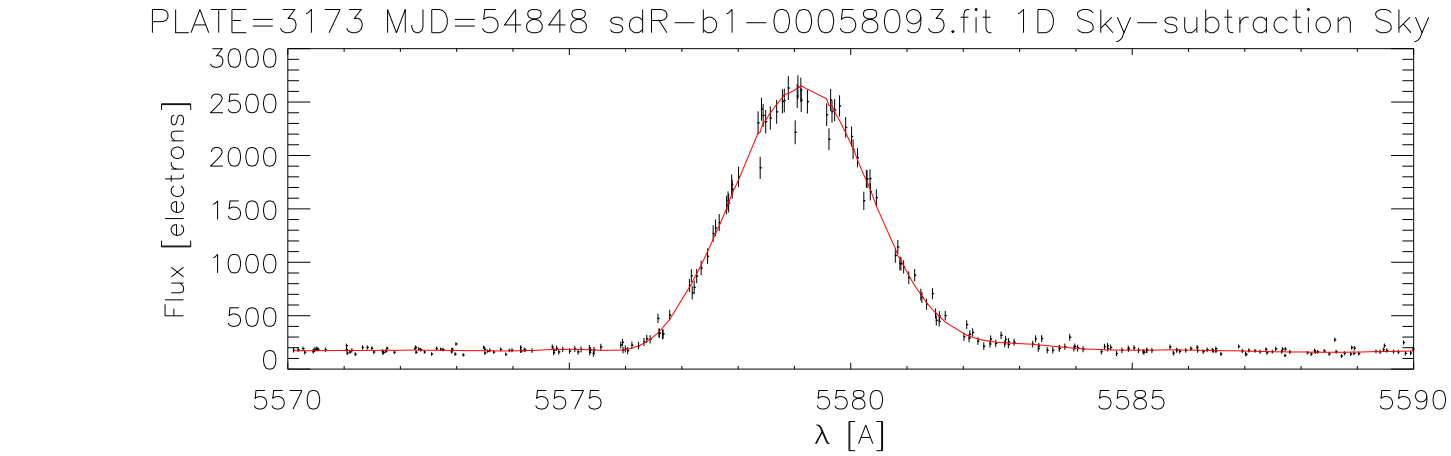

4046.5600
nfib1 16
nfib2 16
stdev 0.080
extra 0.05
4358.3300
nfib1 15
nfib2 16
stdev 0.053
extra 0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.068
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

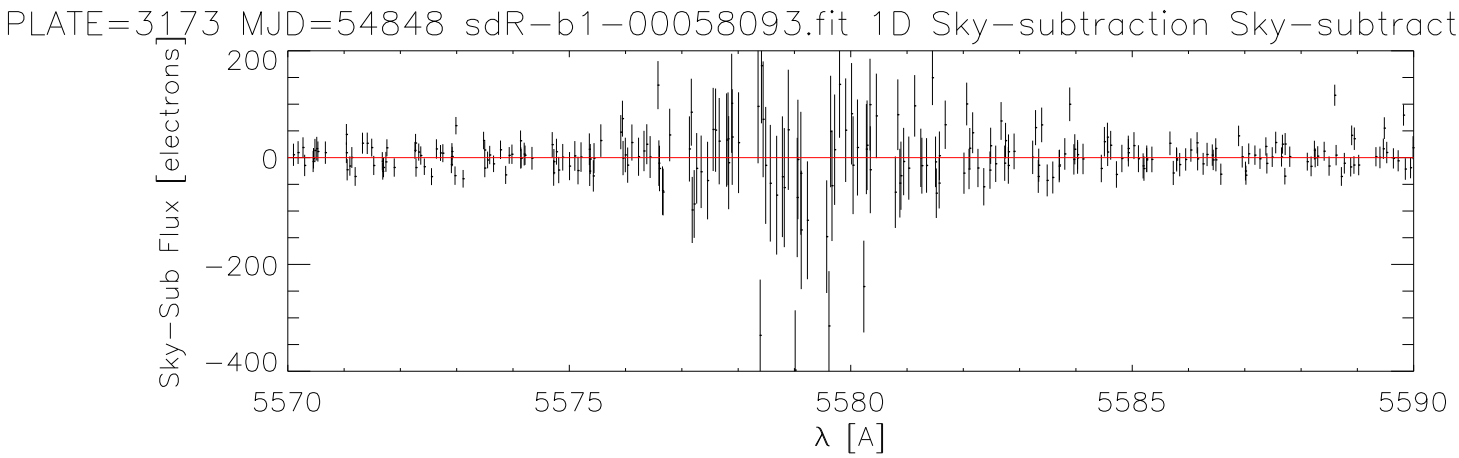

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

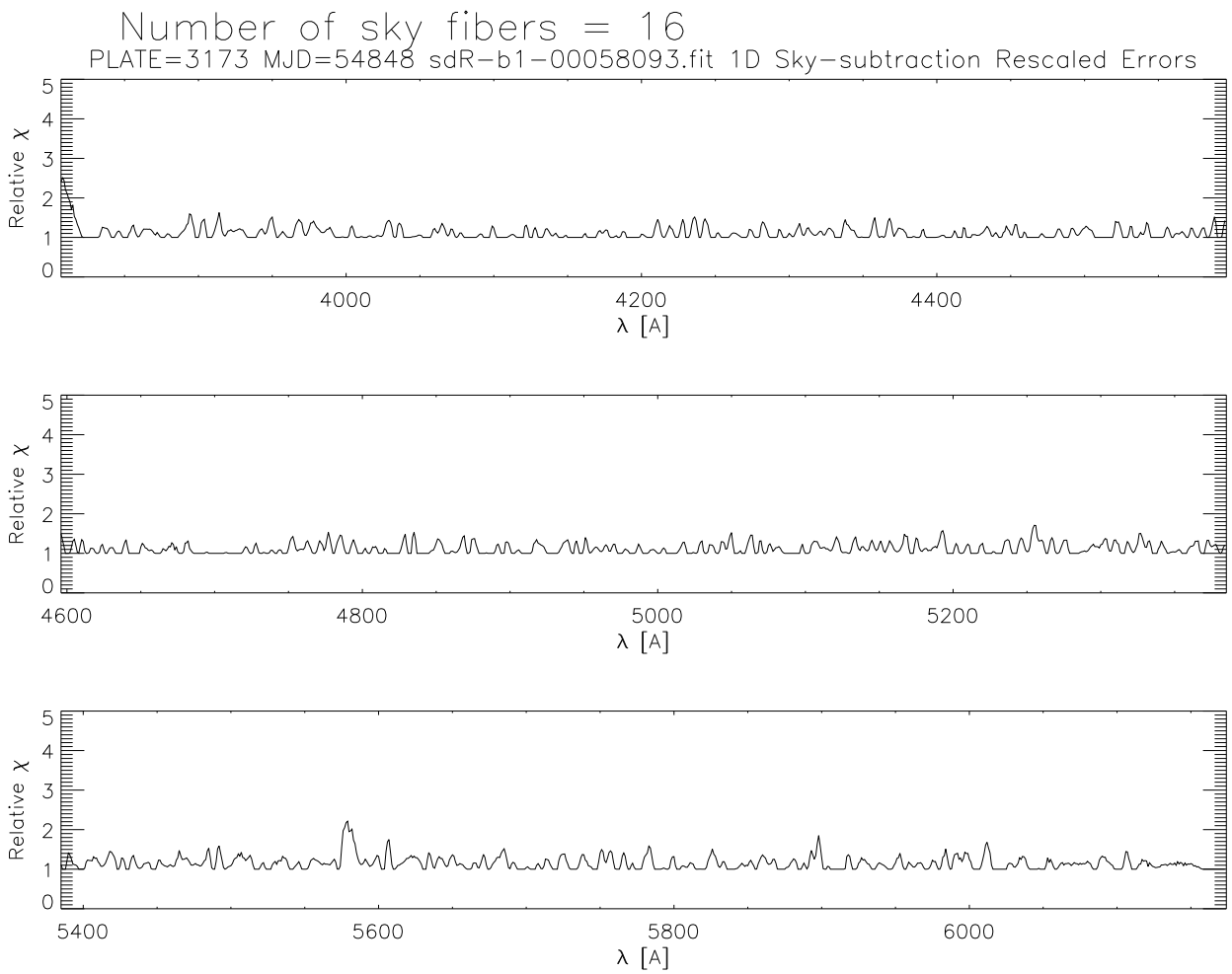
es= −0.0002

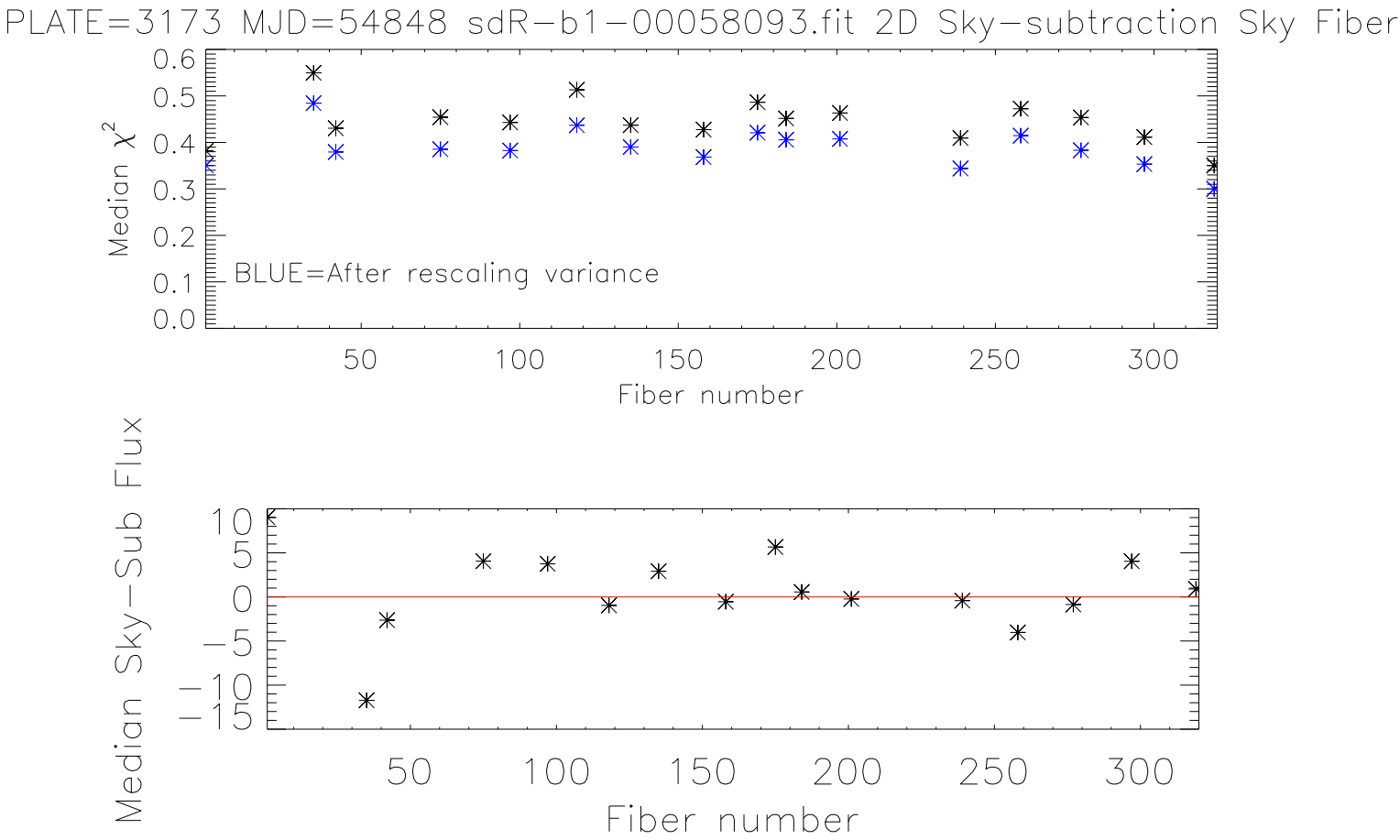

PLATE=3173 MJD=54848 Smooth superflat for sdR−b1−00058093.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

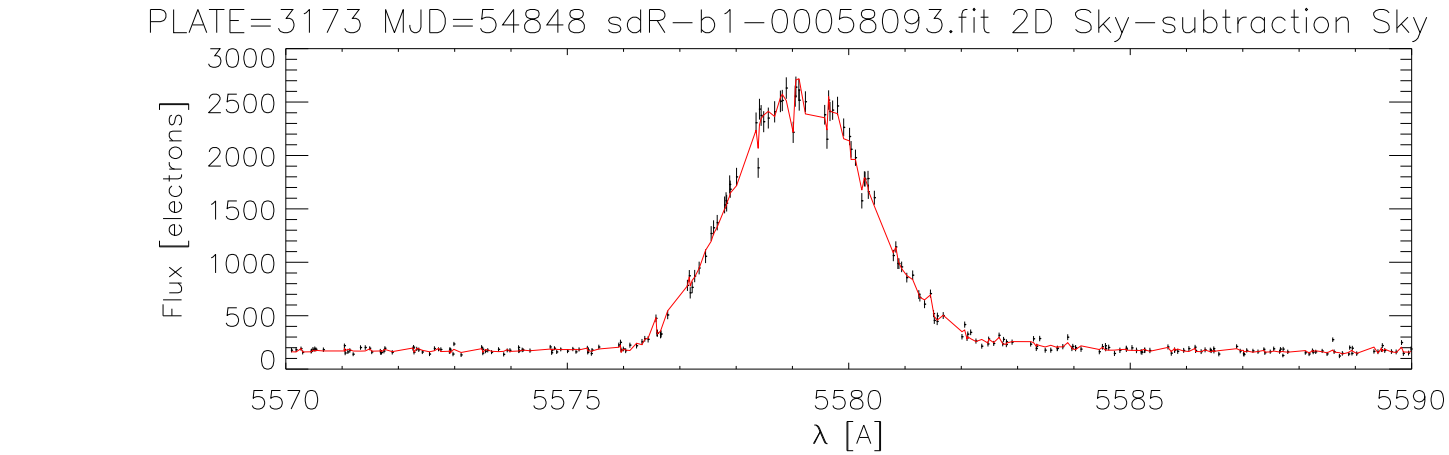

PLATE=3173 MJD=54848 sdR-b1-00058093.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

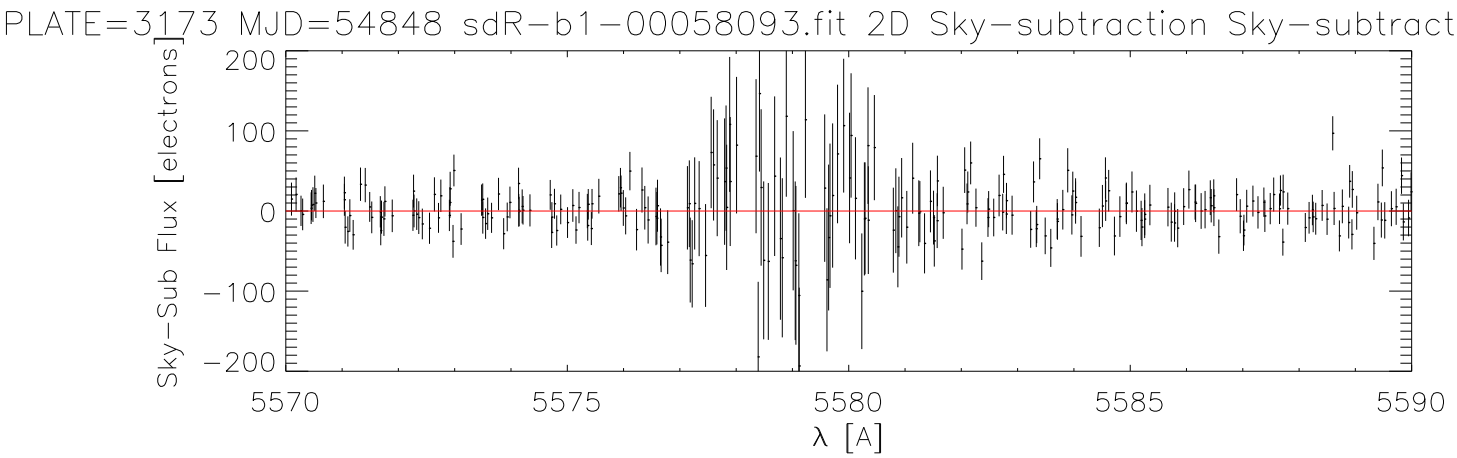

PLATE=3173 MJD=54848 sdR-b1-00058093.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

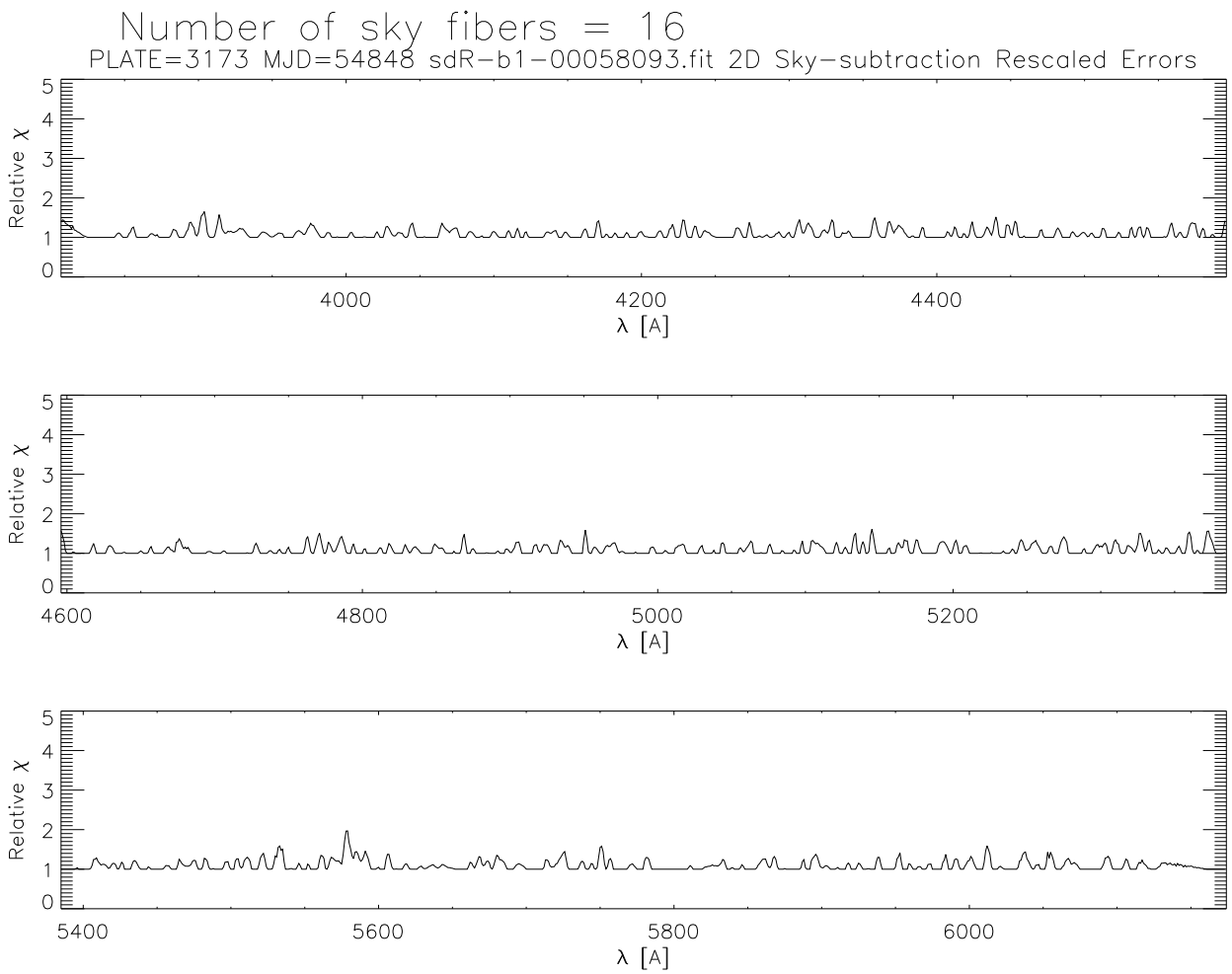

PLATE=3173 MJD=54848 sdR-b1-00058093.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

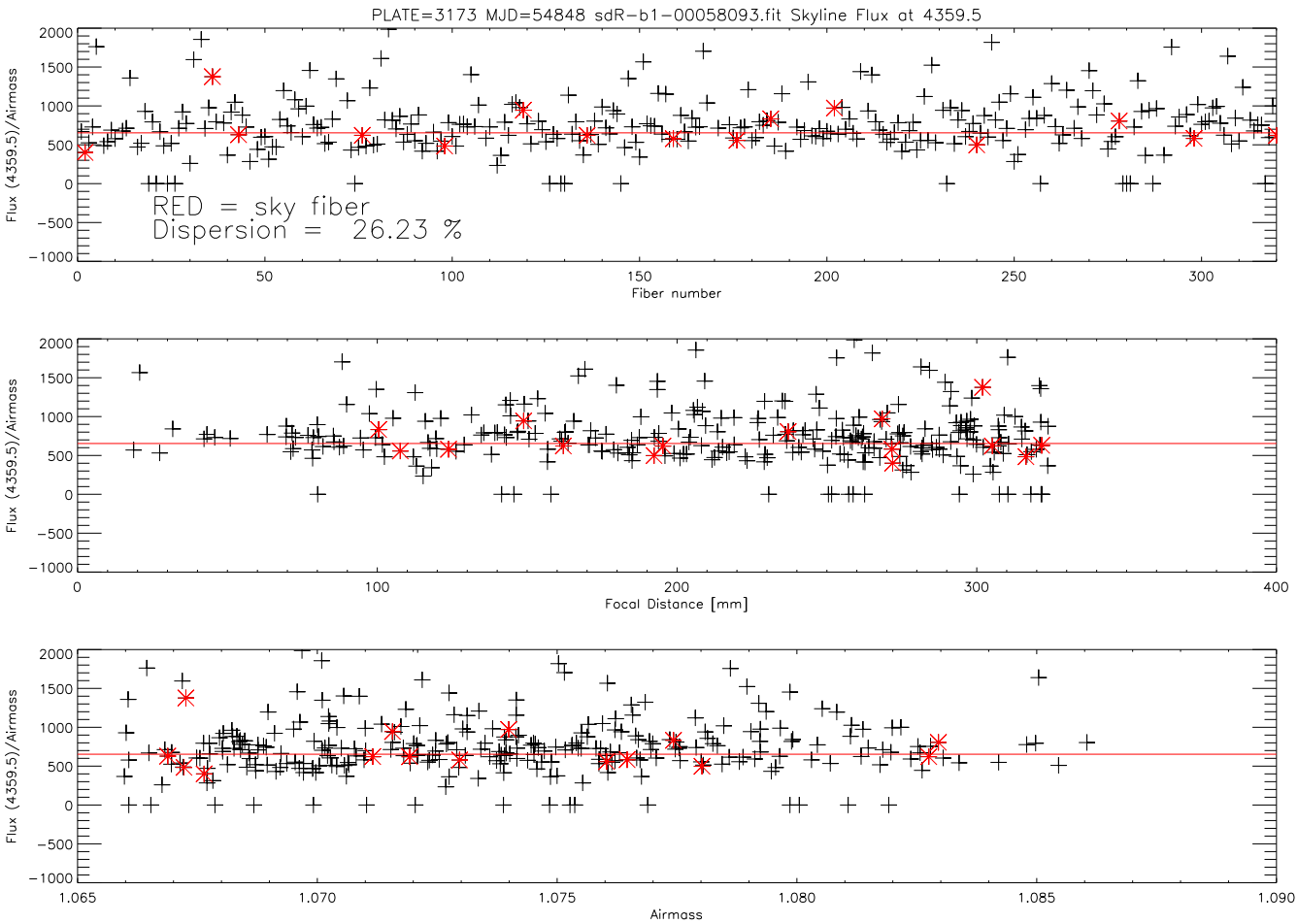

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058093.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

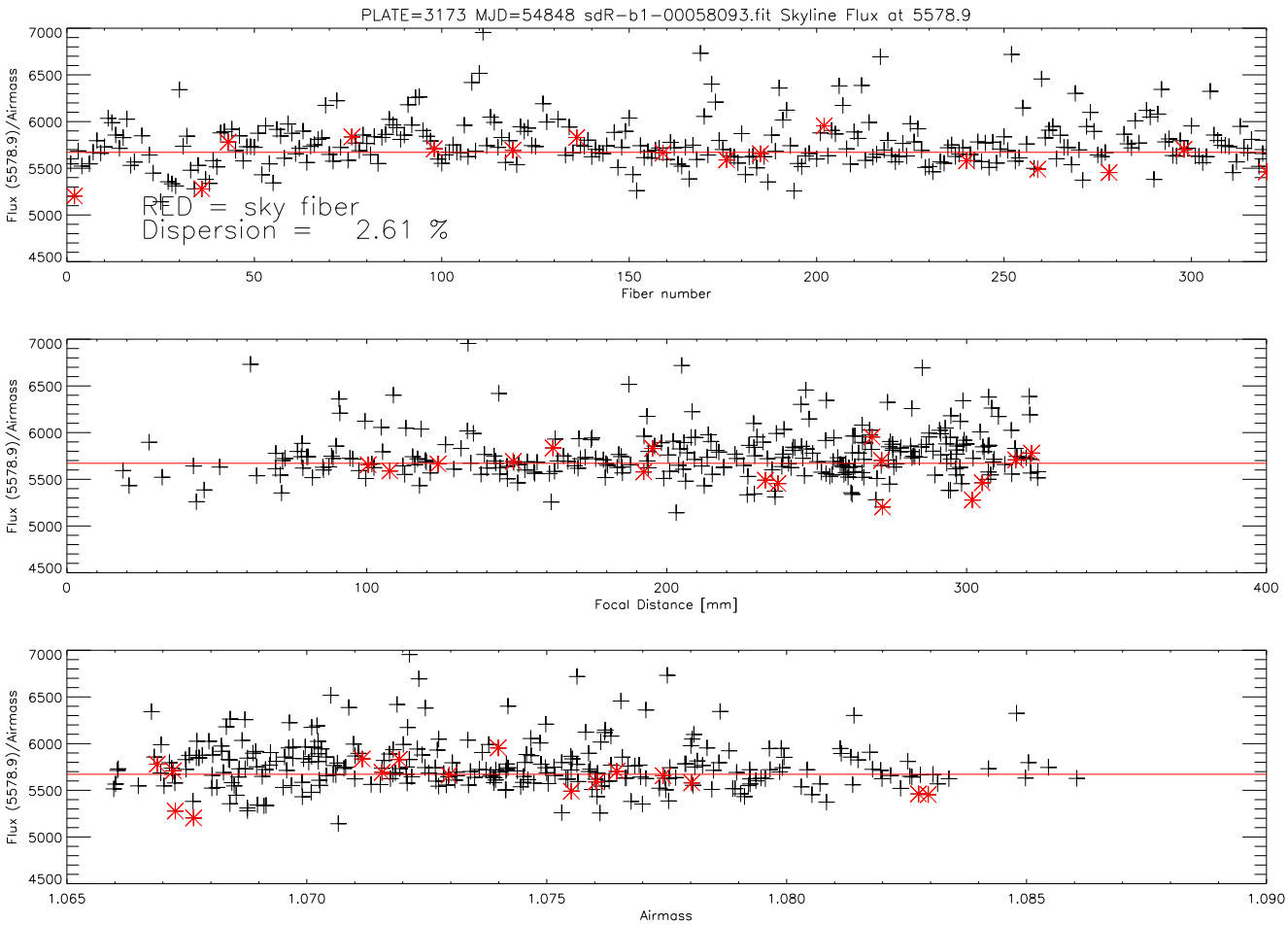

PLATE=3173 MJD=54848 sdR-b1-00058093.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

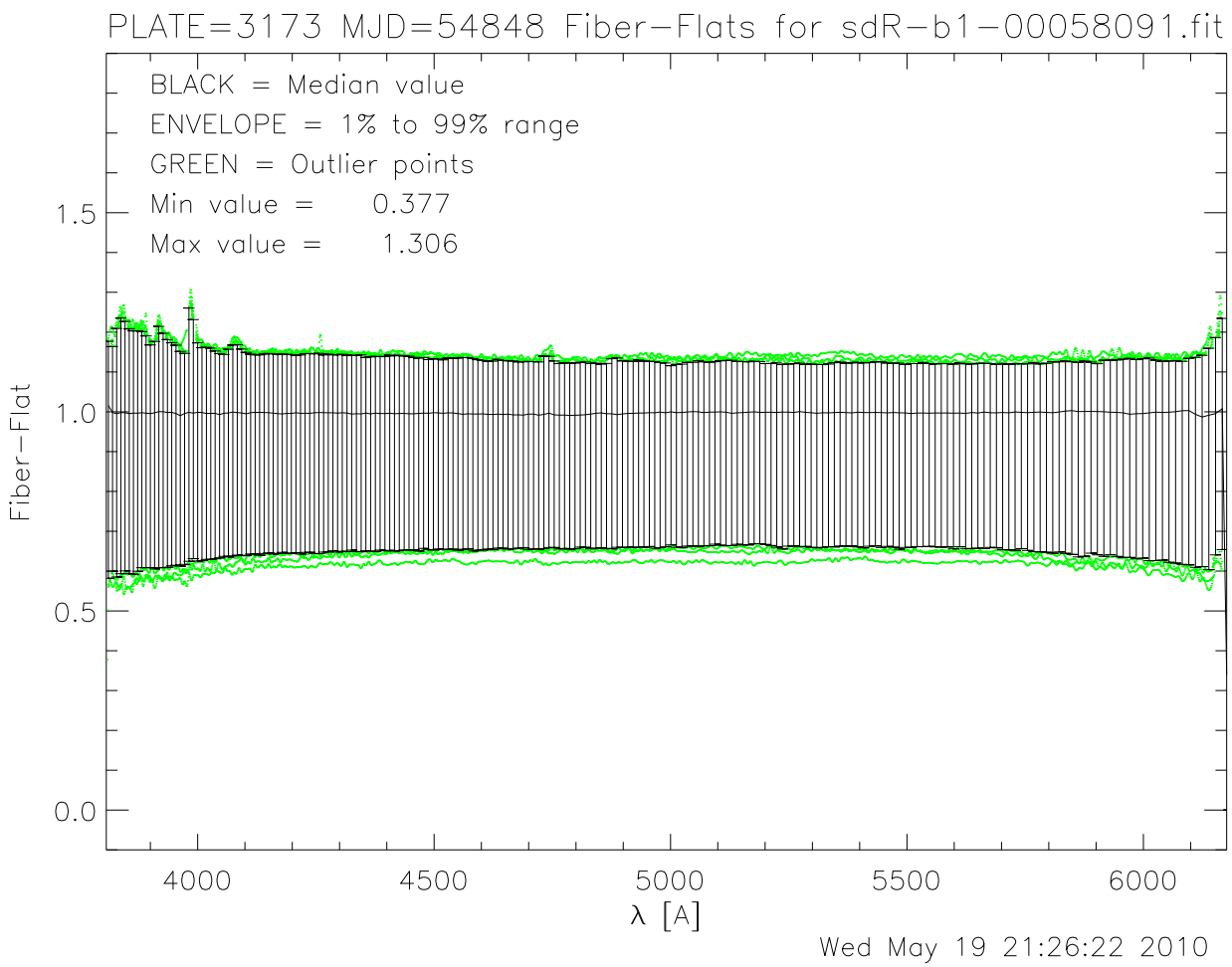

PLATE=3173 MJD=54848 sdR-b1-00058093.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=3173 MJD=54848 sdR-b1-00058093.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058093.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000


PLATE=3173 MJD=54848 sdR-b1-00058093.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 26.23 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=3173 MJD=54848 sdR-b1-00058093.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.61 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


PLATE=3173 MJD=54848 Fiber-Flats for sdR-b1-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.306
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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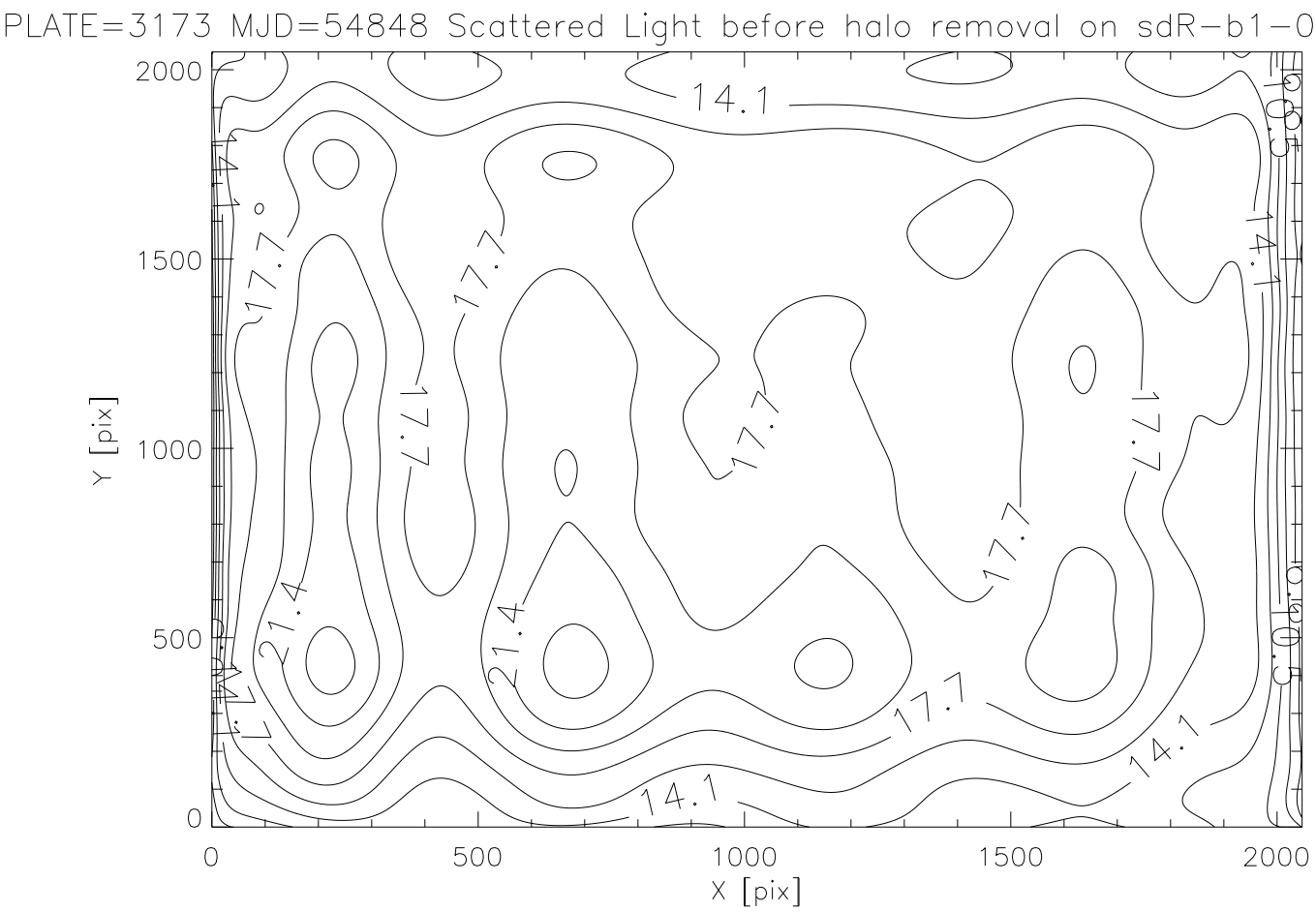
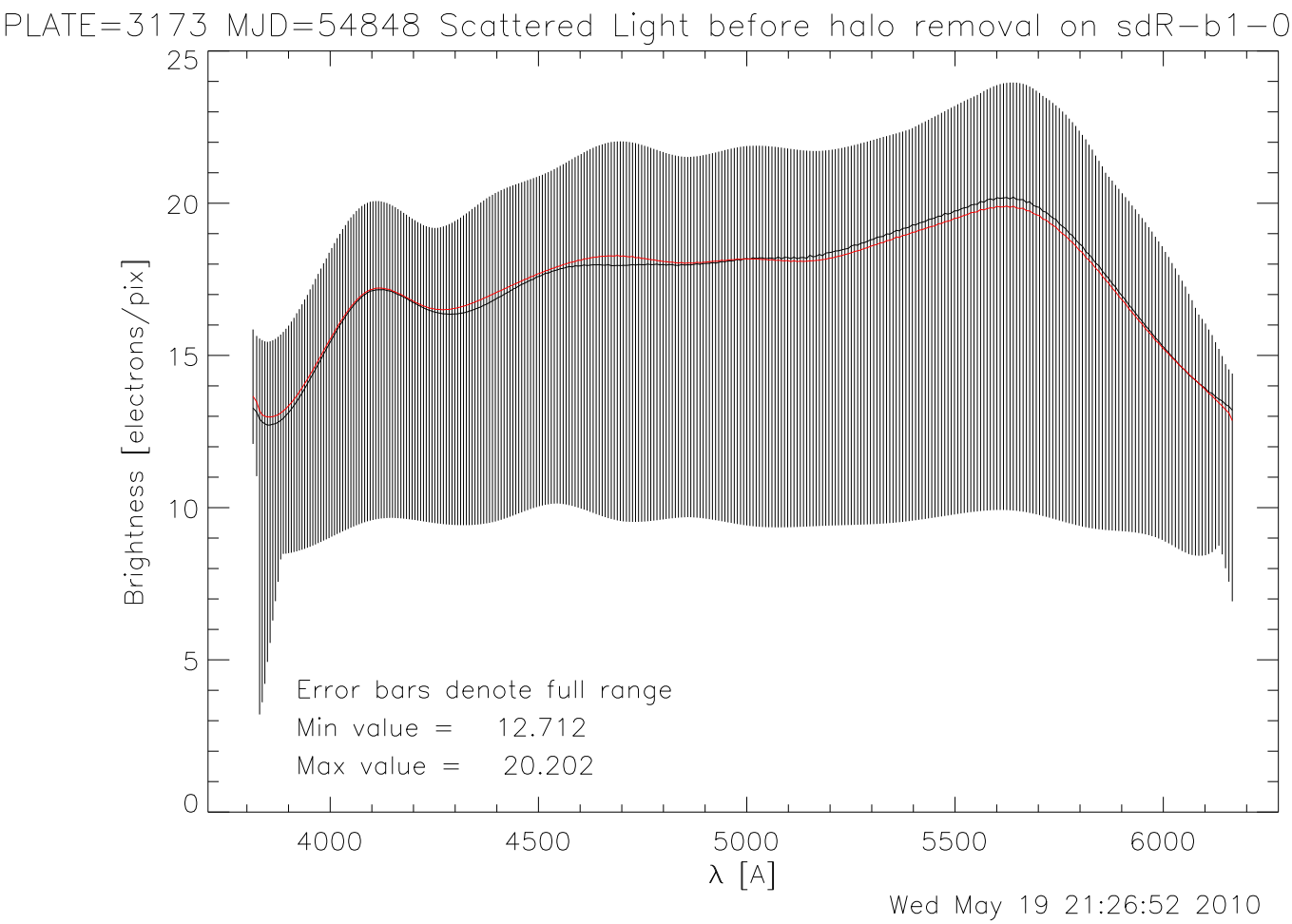
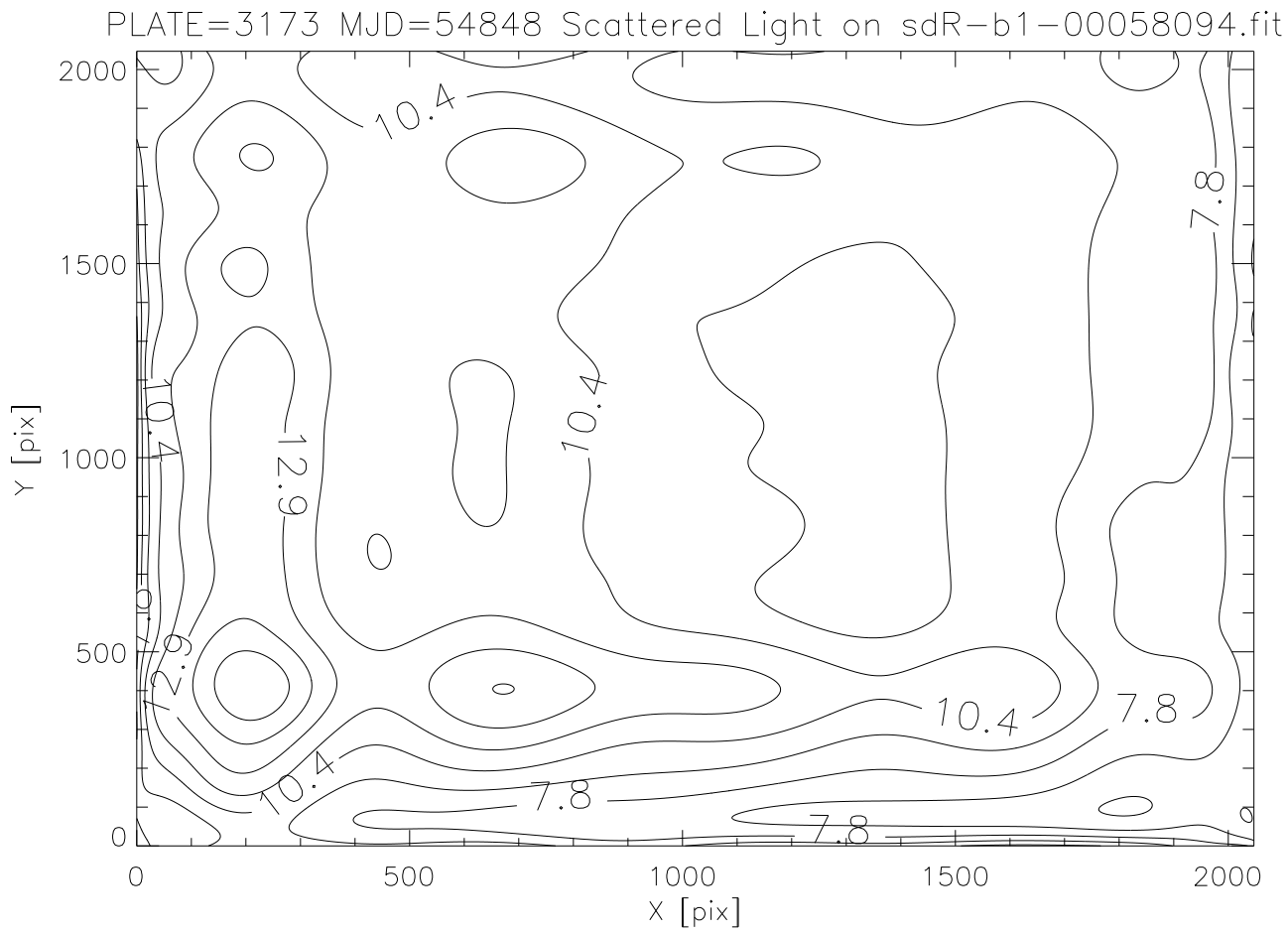
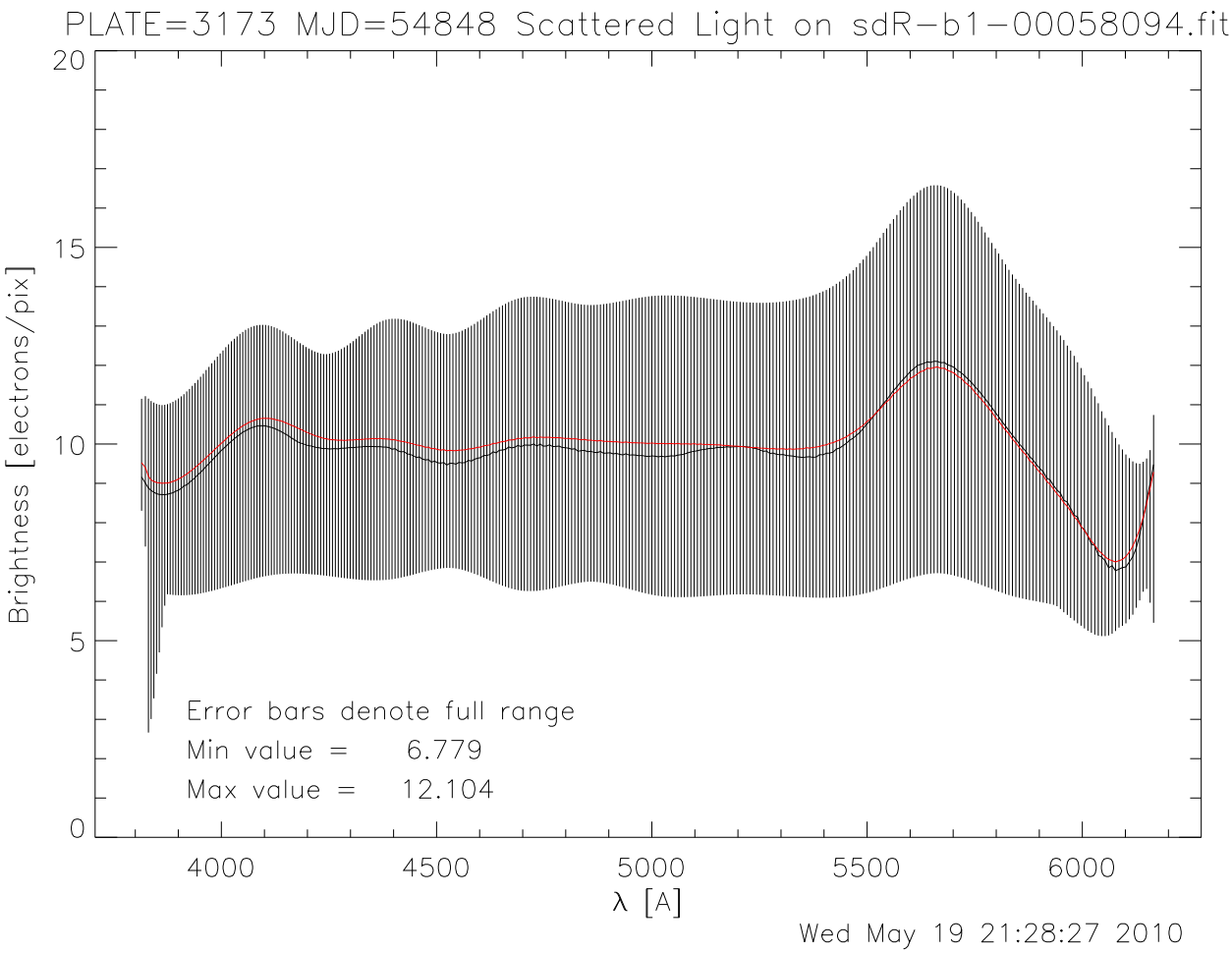

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058094.f
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
17.7
21.4
10.5


PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b1-00058094.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.712
Max value = 20.202
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:26:52 2010


PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058094.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.4
7.8
12.9
0


PLATE=3173 MJD=54848 Scattered Light on sdR-b1-00058094.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.779
Max value = 12.104
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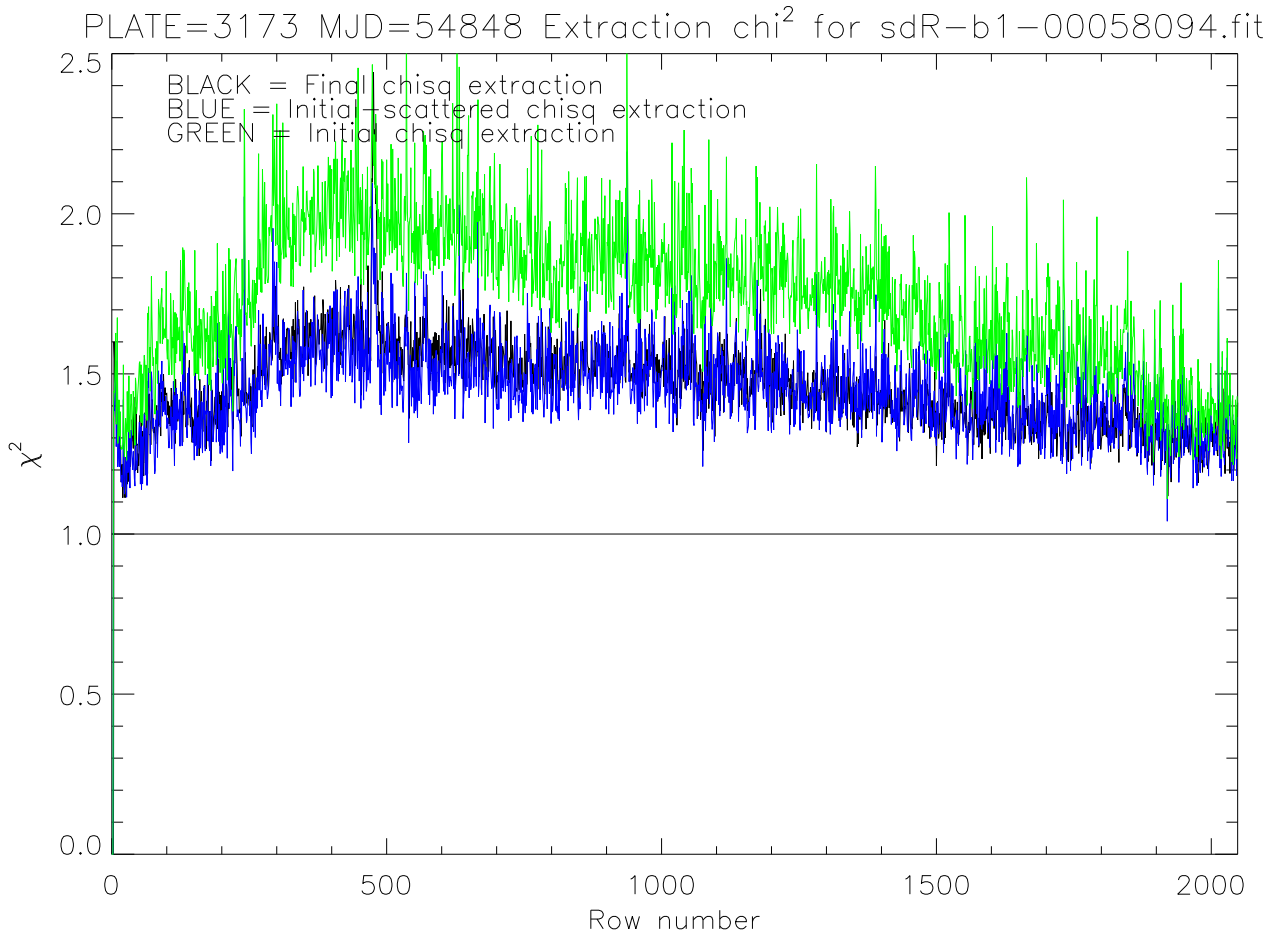
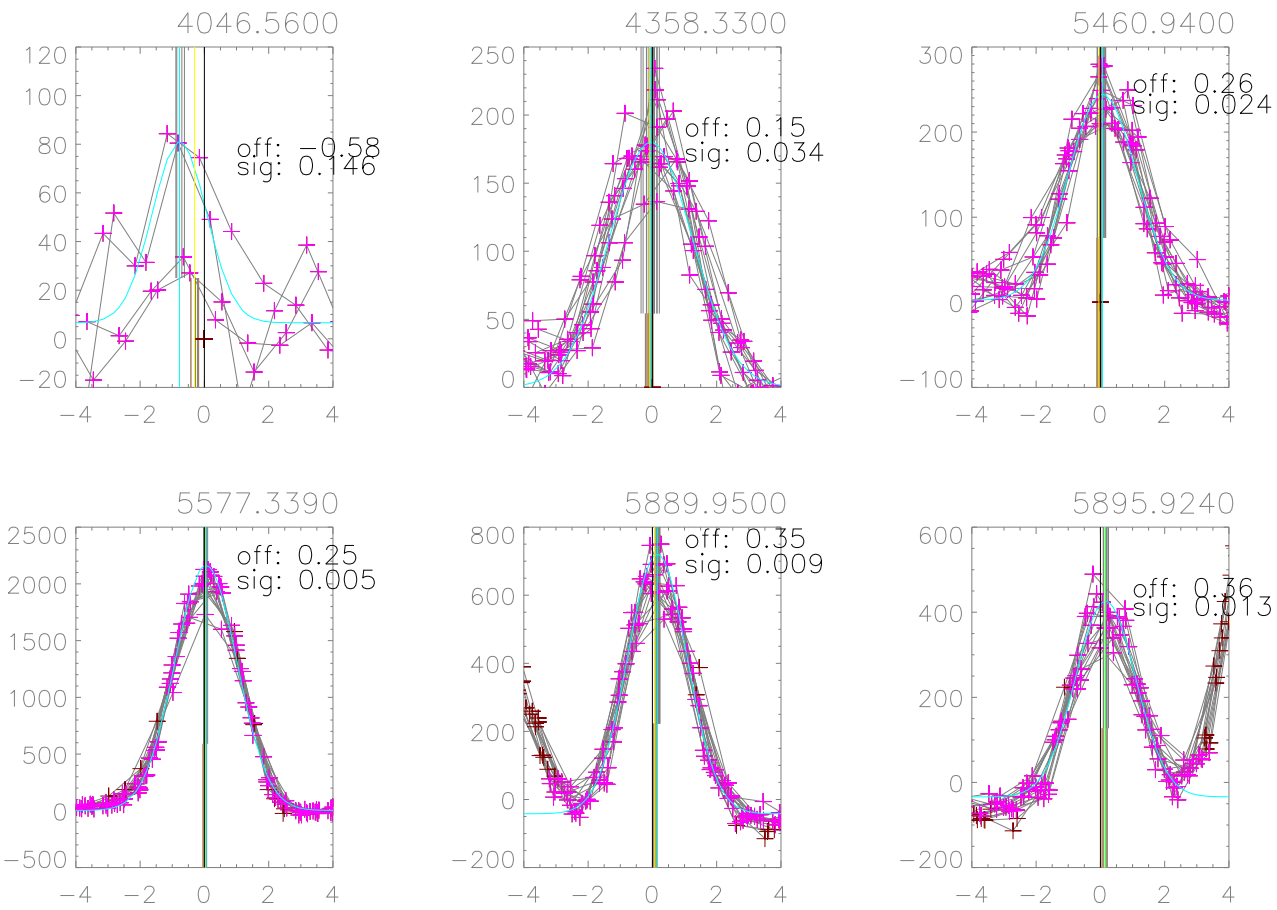
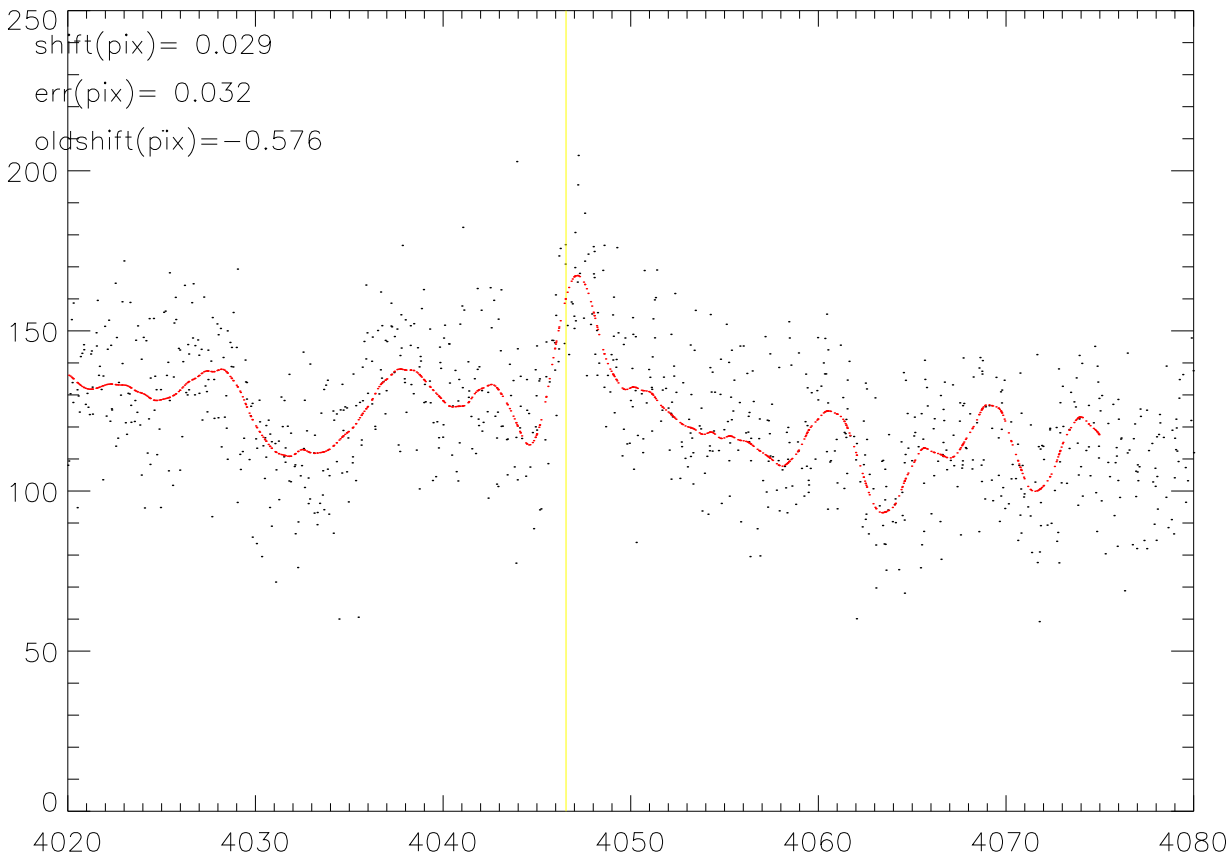
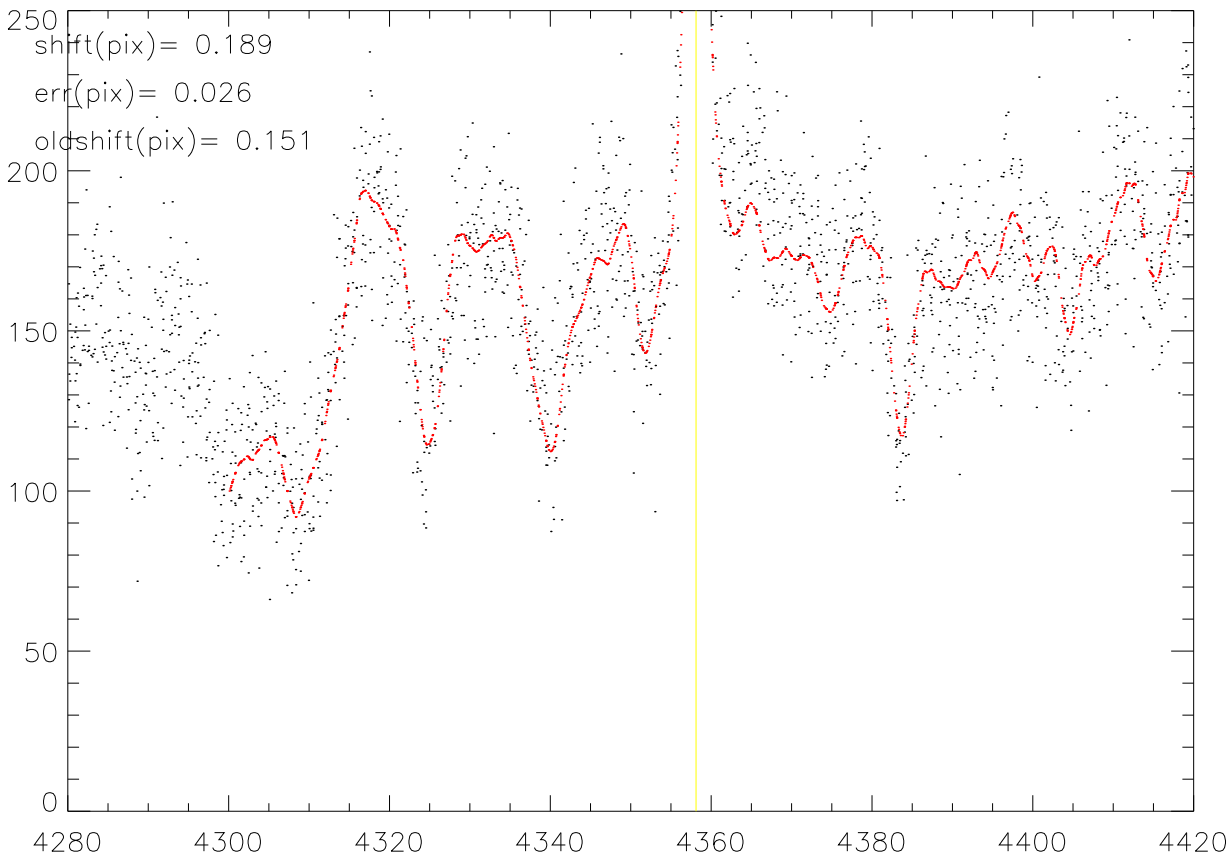
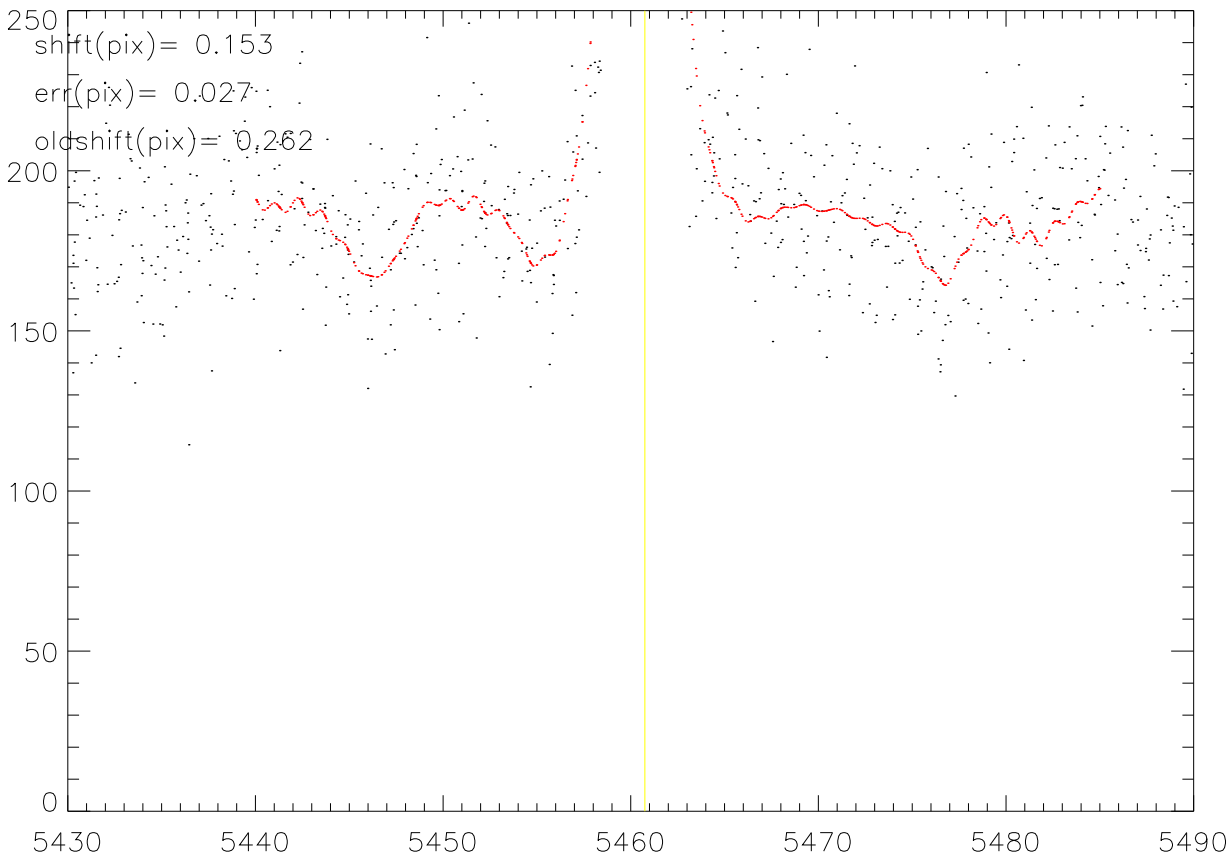
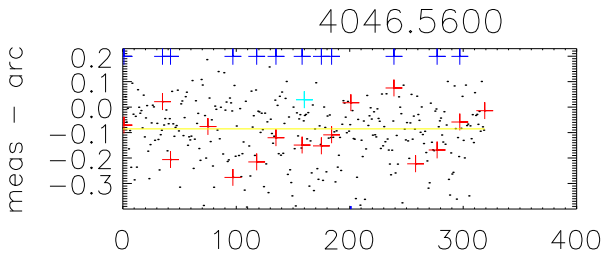

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b1-00058094.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

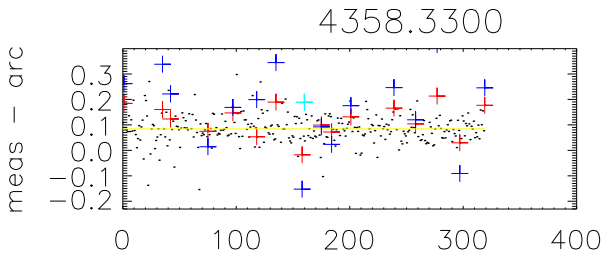

4046.5600
off: −0.58
sig: 0.146
4358.3300
off: 0.15
sig: 0.034
5460.9400
off: 0.26
sig: 0.024
5577.3390
off: 0.25
sig: 0.005
5889.9500
off: 0.35
sig: 0.009
5895.9240
off: 0.36
sig: 0.013

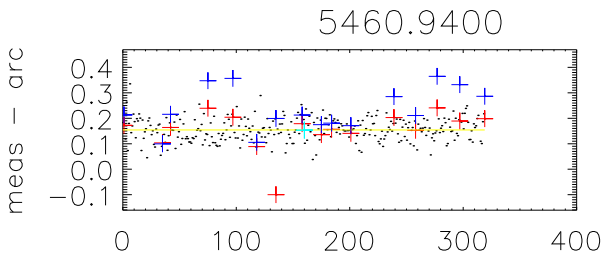

shift(pix)= 0.029
err(pix)= 0.032
oldshift(pix)=-0.576
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

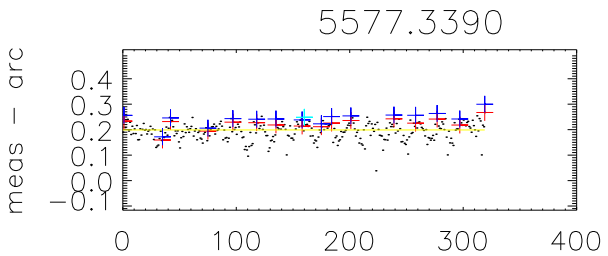

shift(pix)= 0.189
err(pix)= 0.026
oldshift(pix)= 0.151
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

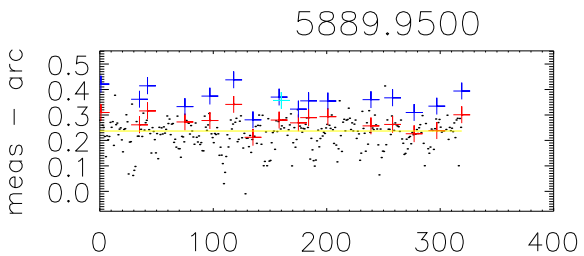

shift(pix)= 0.153
err(pix)= 0.027
oldshift(pix)= 0.262
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

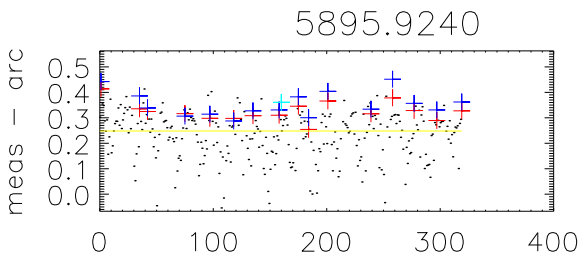

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

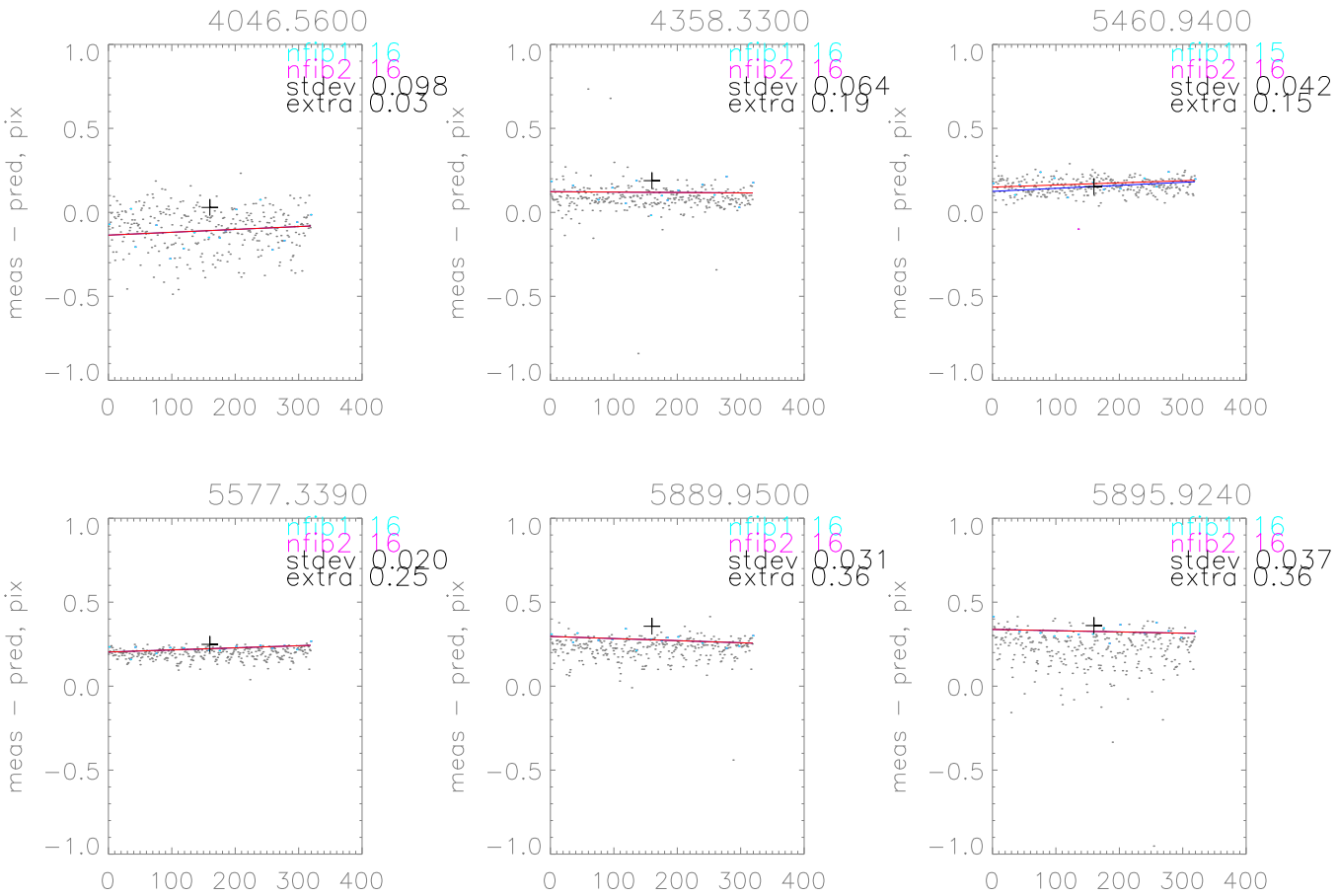

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

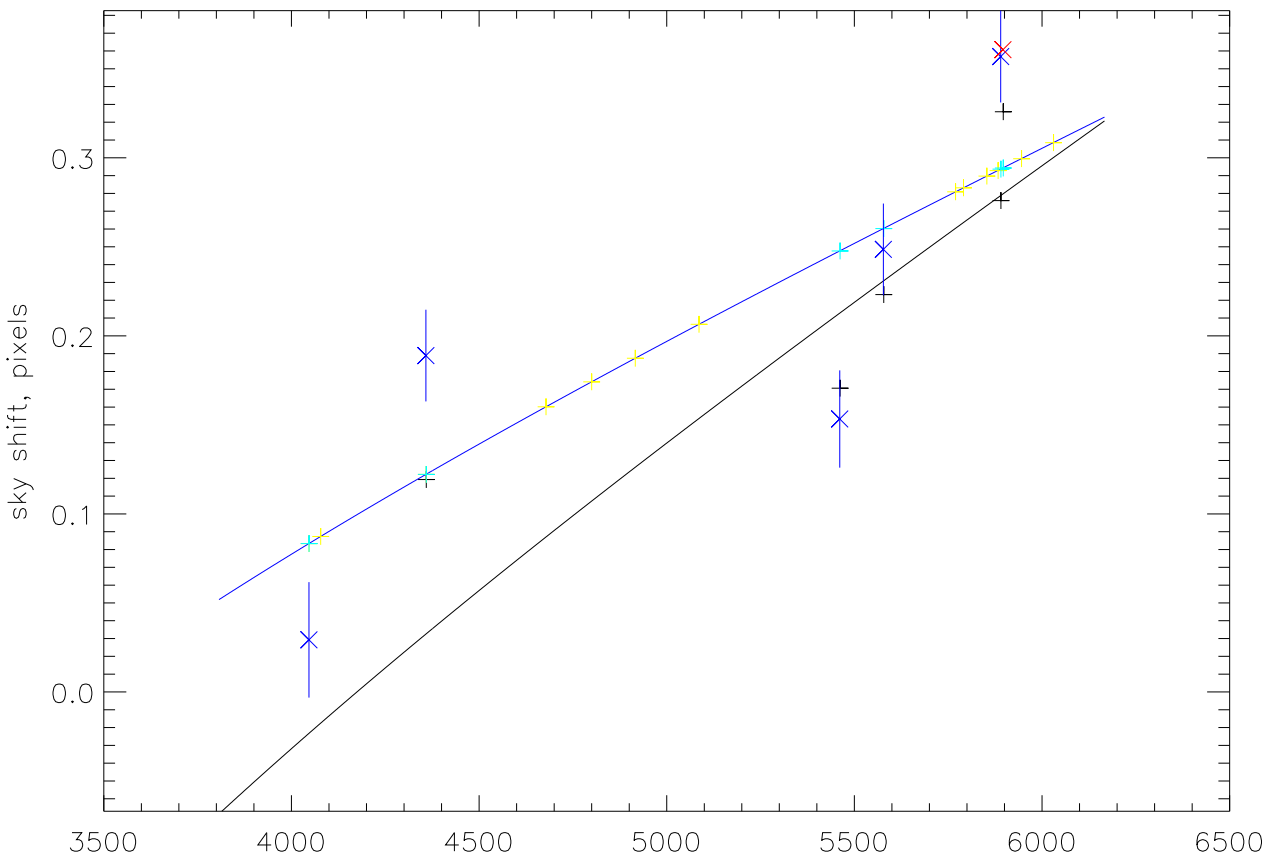

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

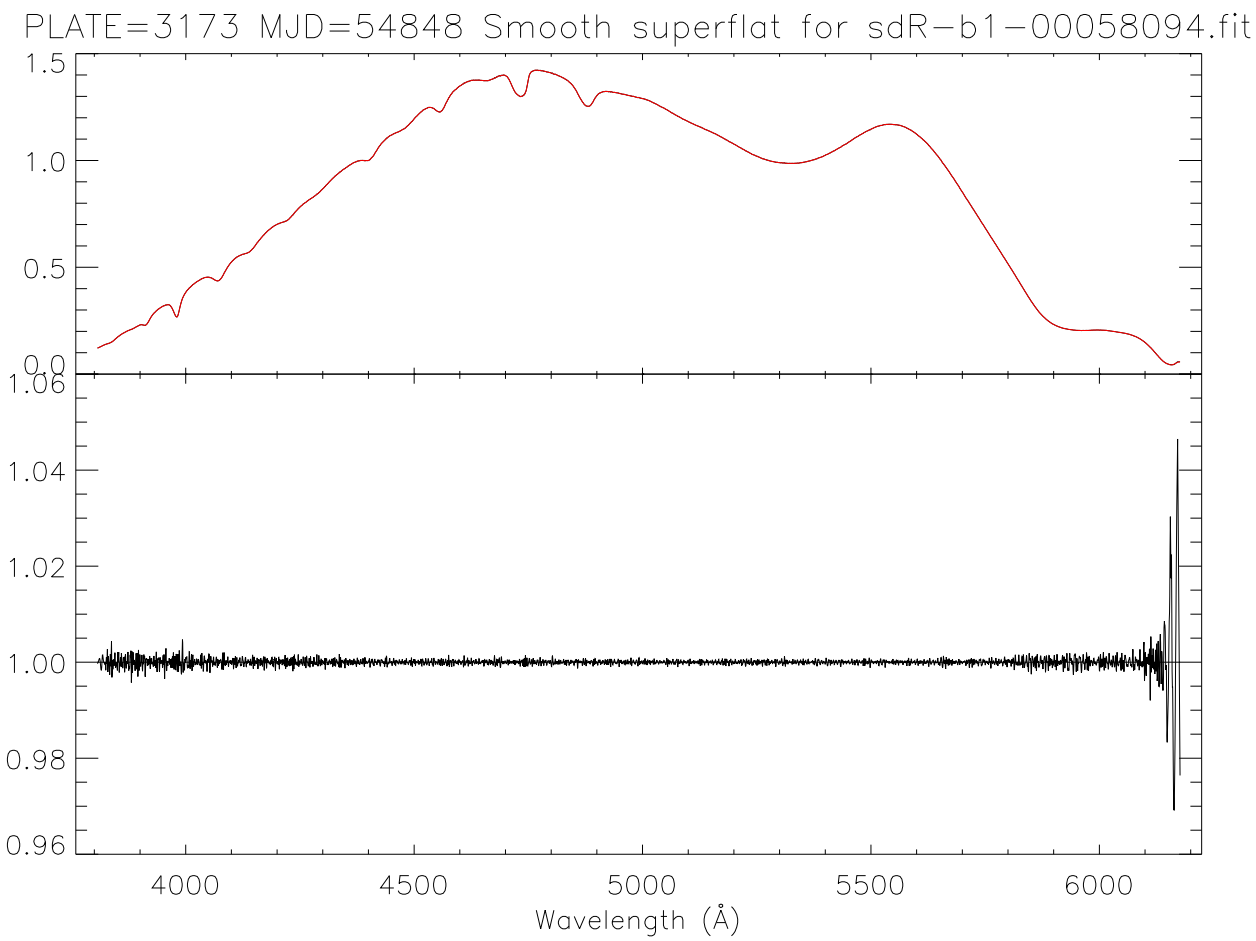

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

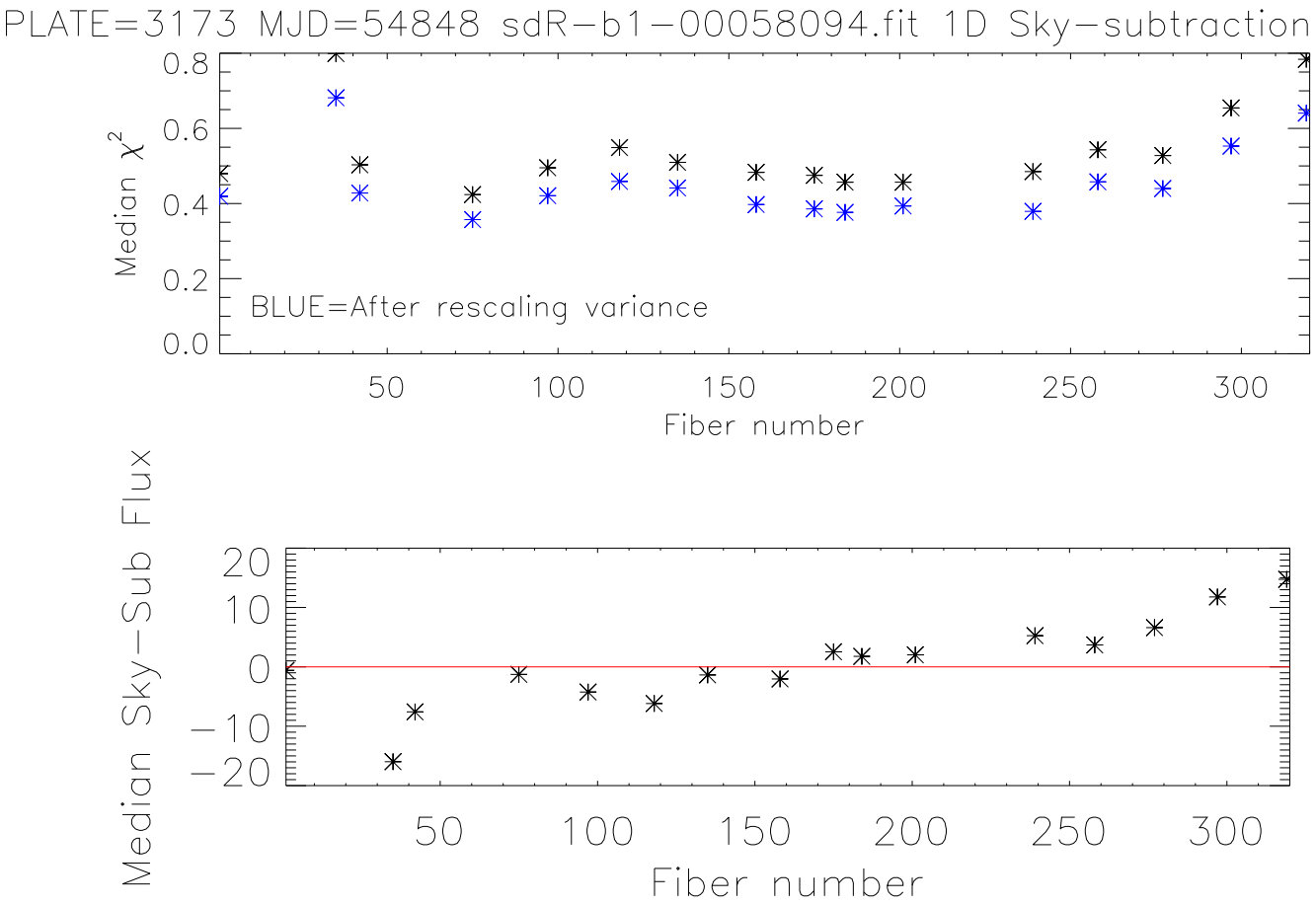

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

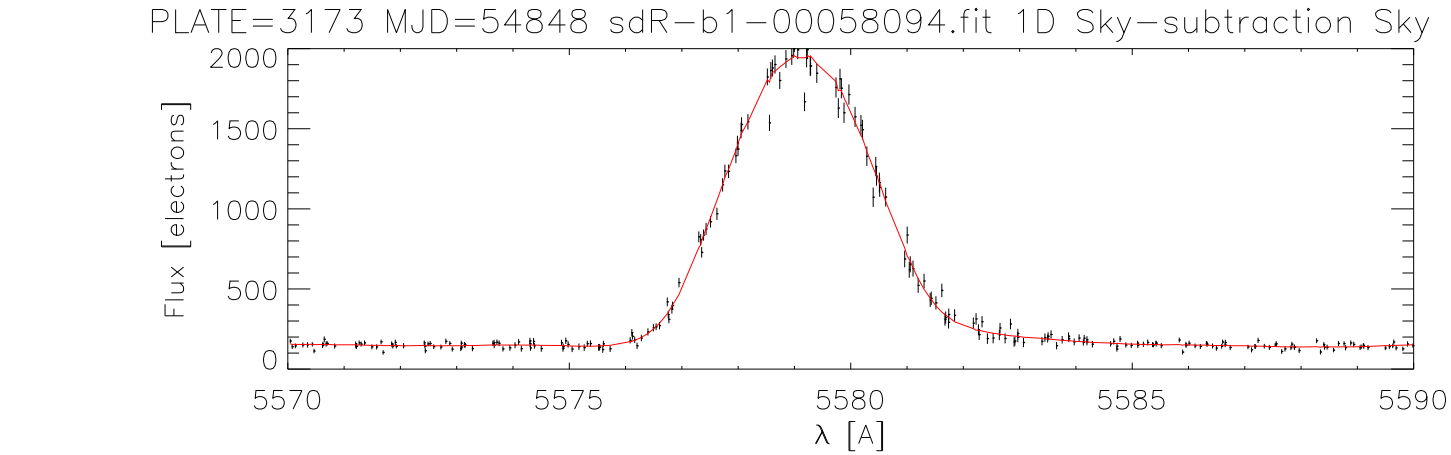

4046.5600
nfib1 16
nfib2 16
stdev 0.098
extra 0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.064
extra 0.19
5460.9400
nfib1 15
nfib2 16
stdev 0.042
extra 0.15
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra 0.25
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra 0.36
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

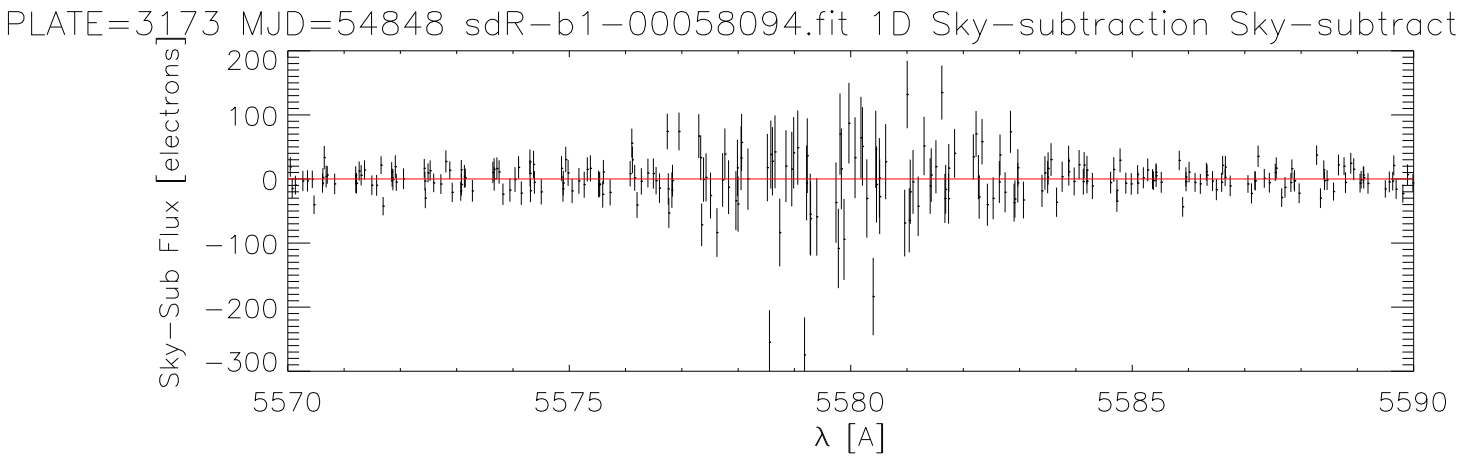

sky shift, pixels
0.0
0.1
0.2
0.3
3500
4000
4500
5000
5500
6000
6500

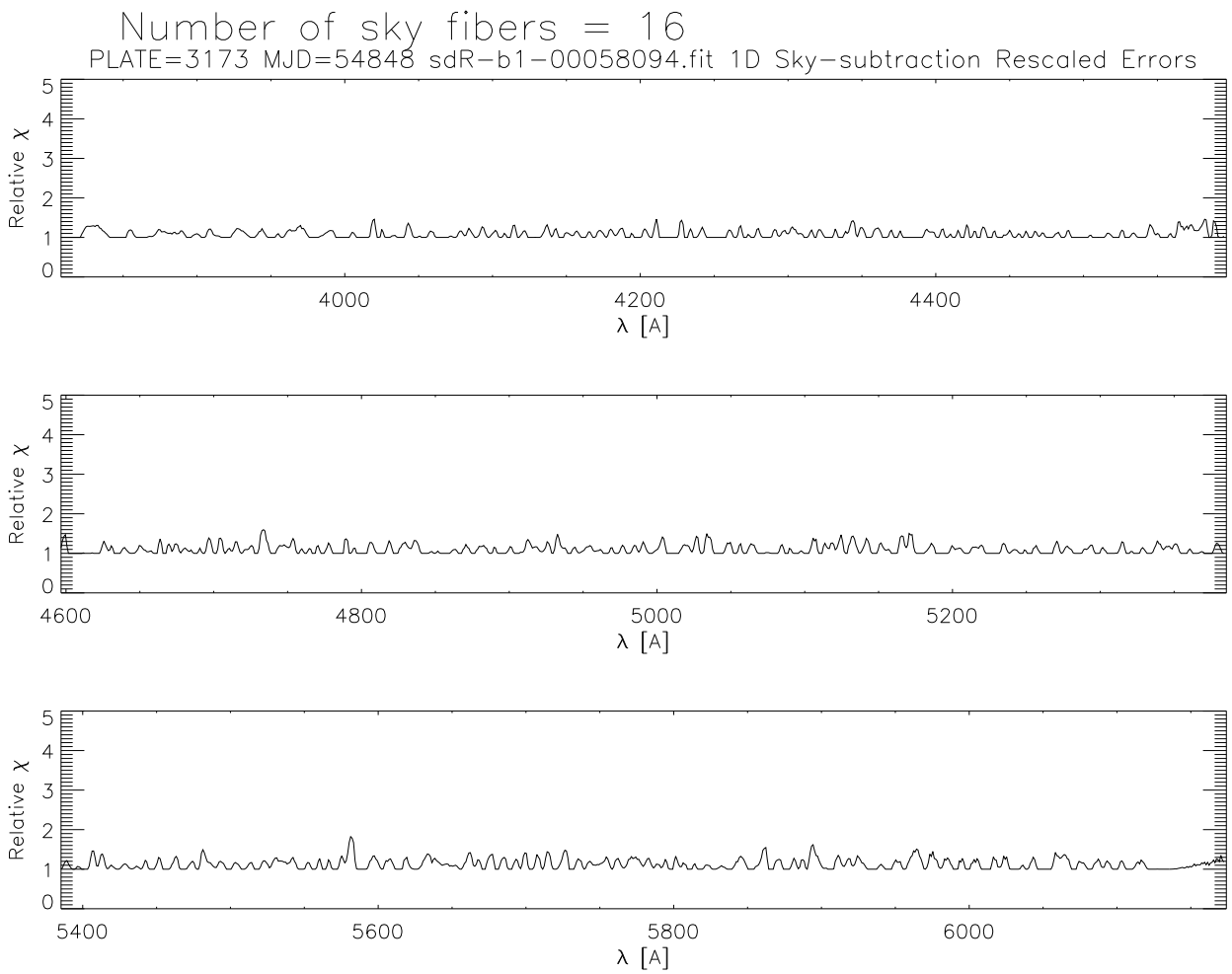
es= −0.0002

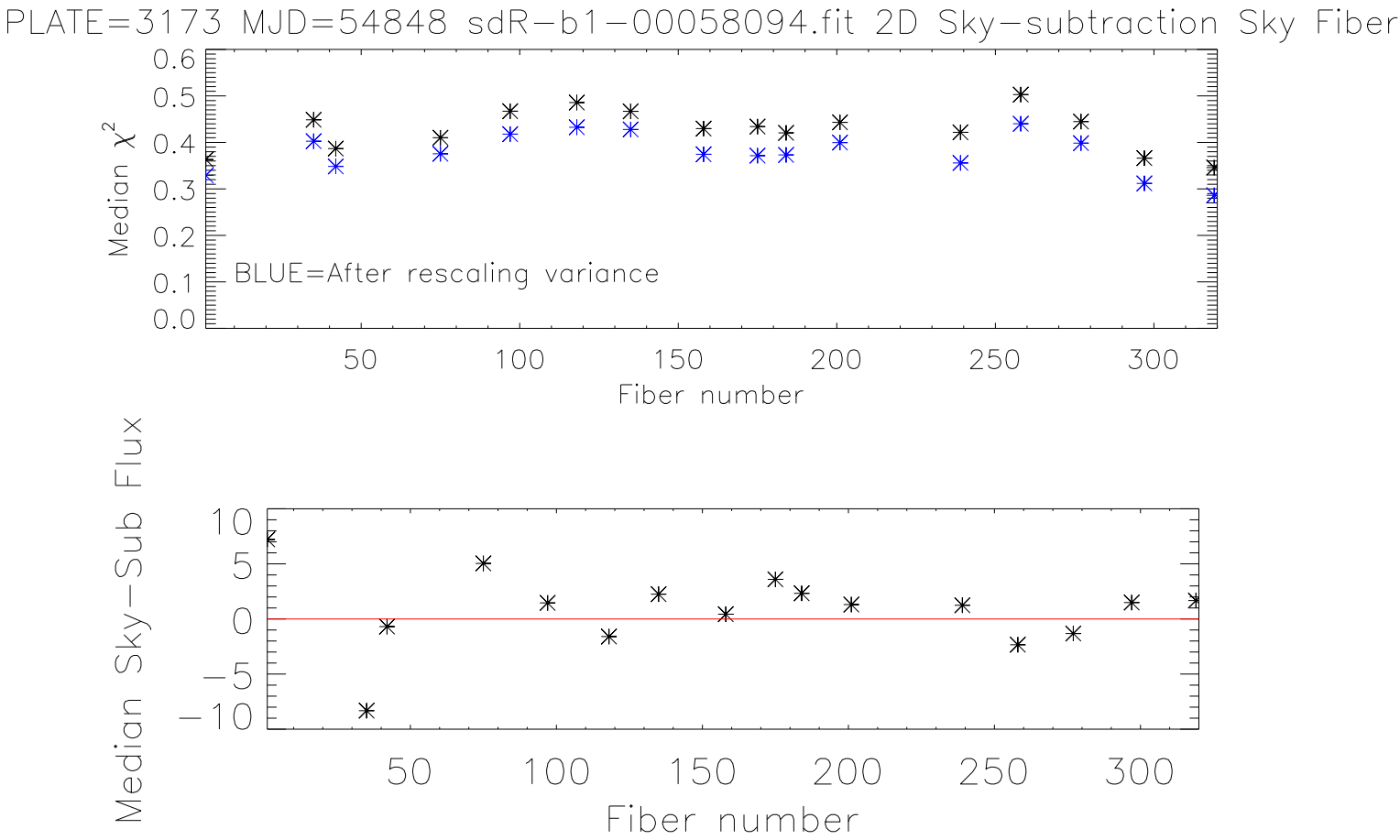

PLATE=3173 MJD=54848 Smooth superflat for sdR−b1−00058094.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

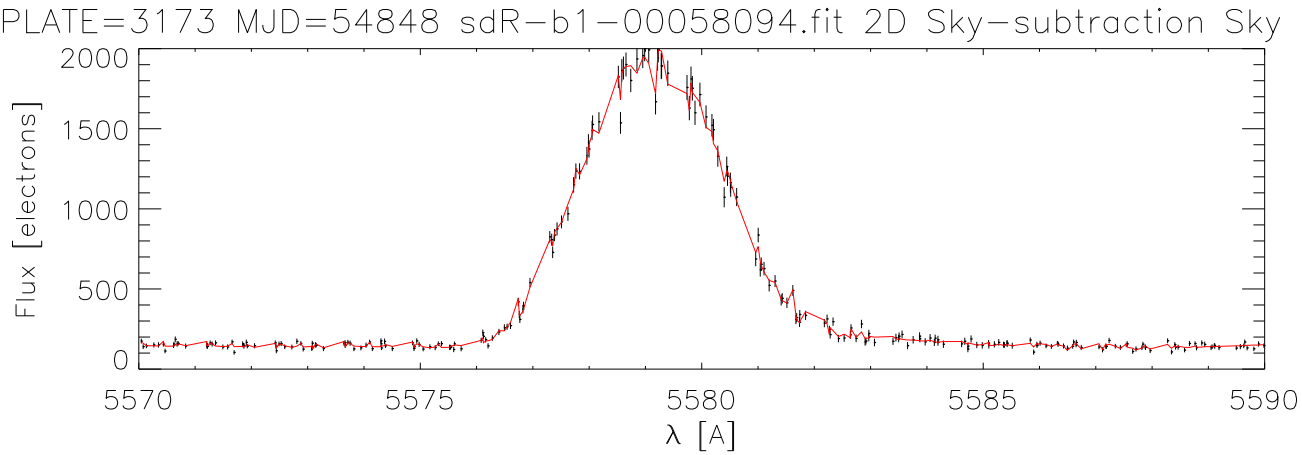

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

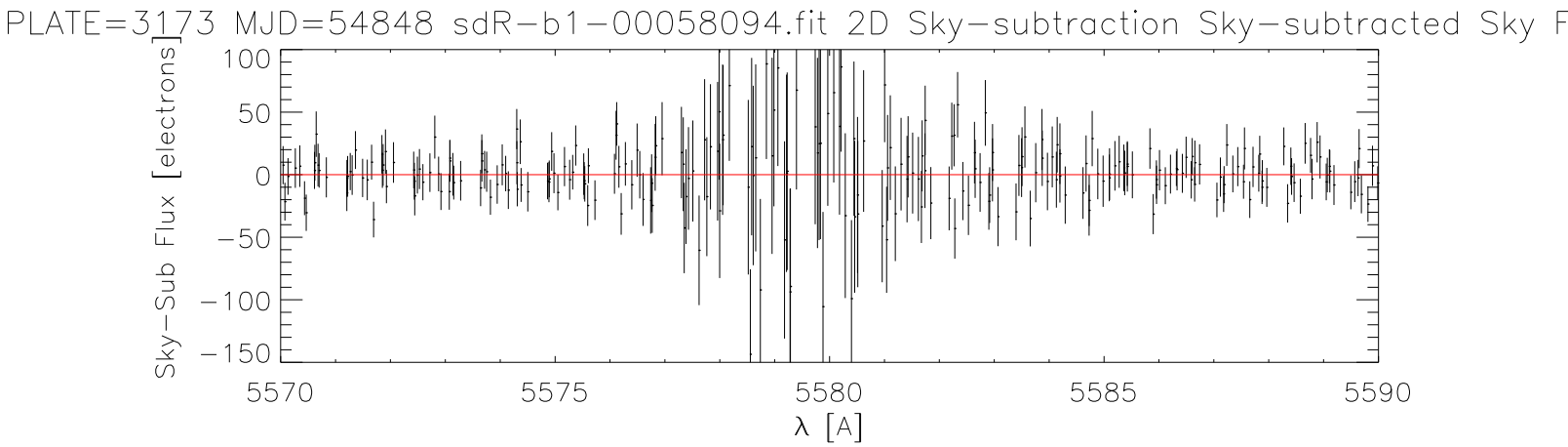

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

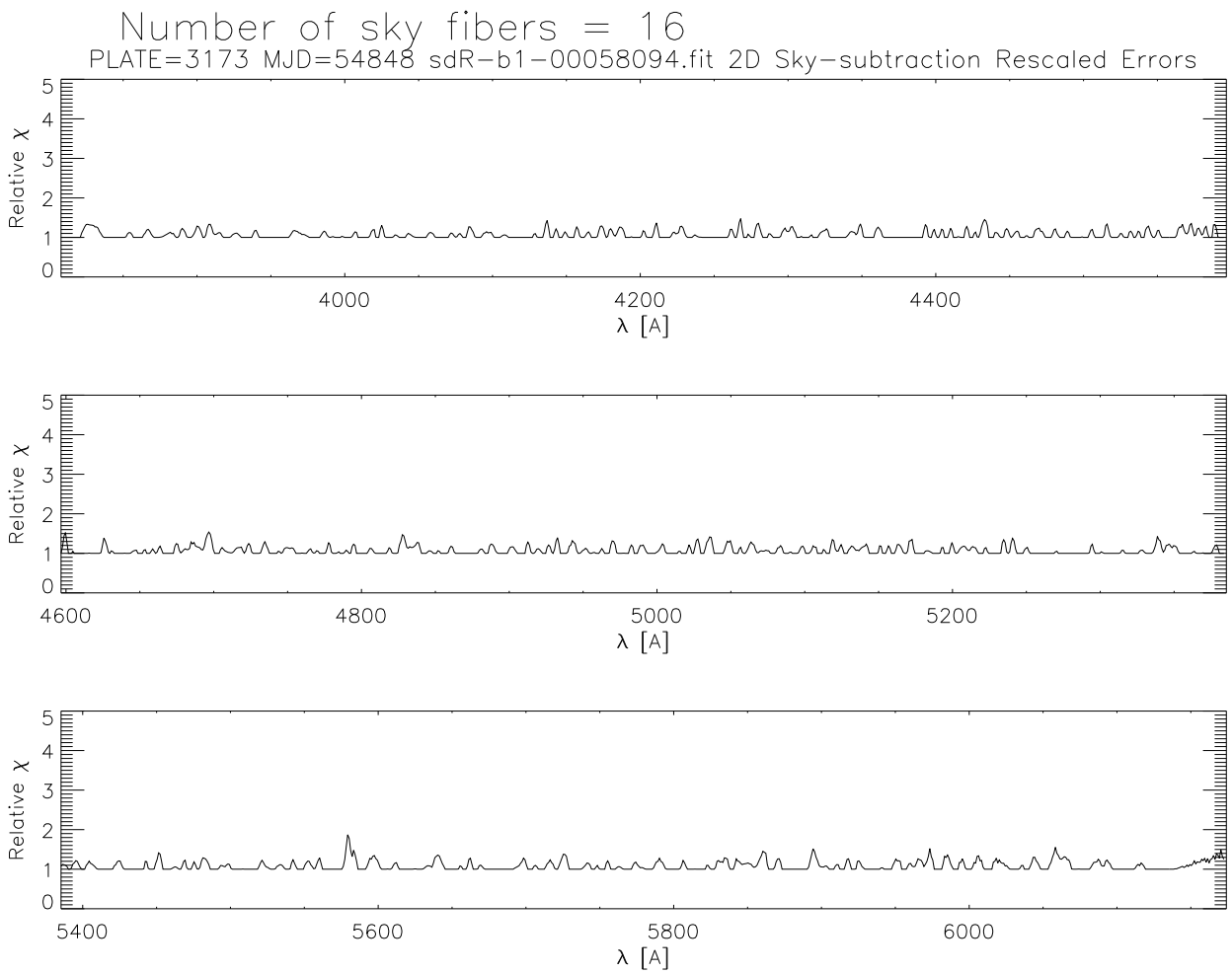

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

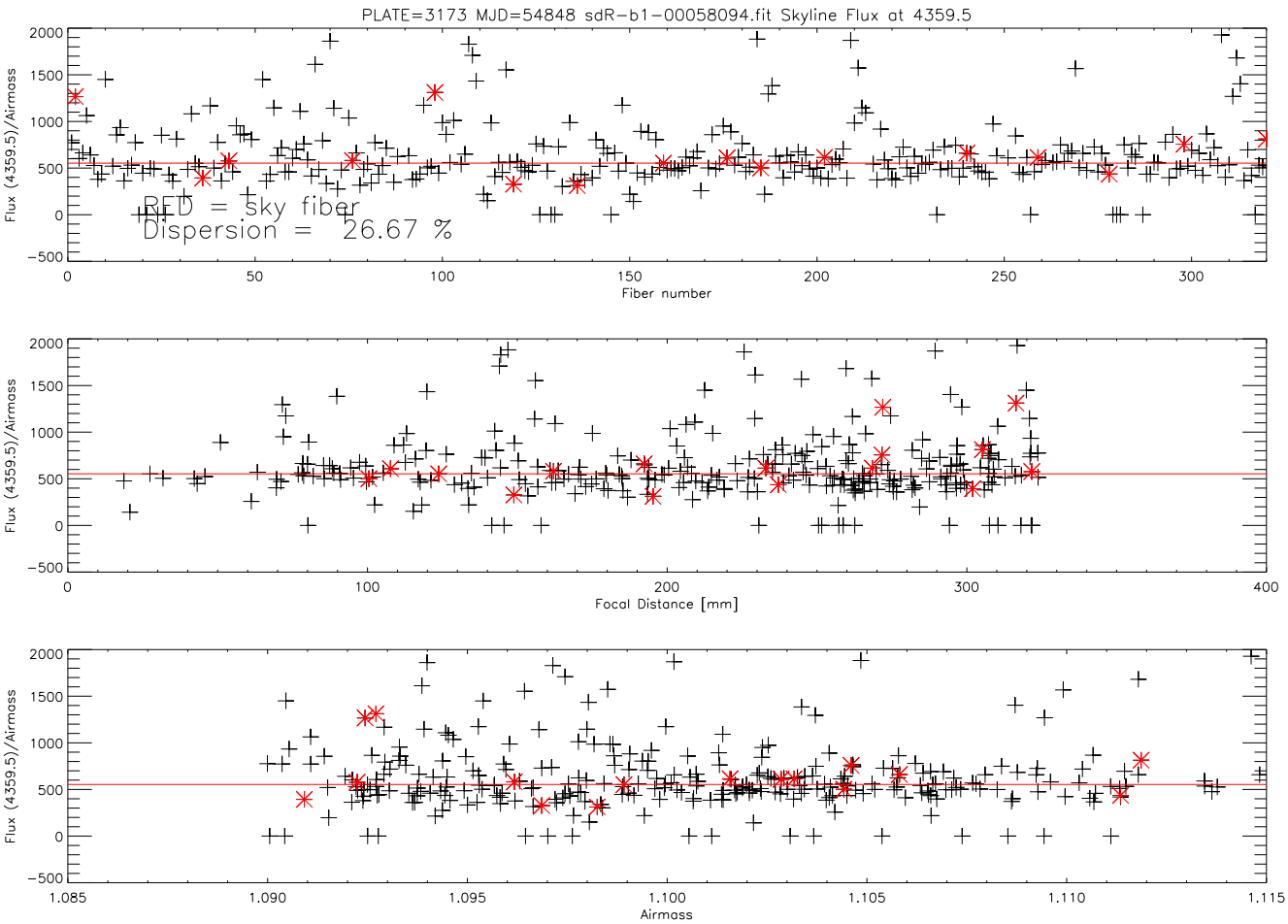

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058094.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

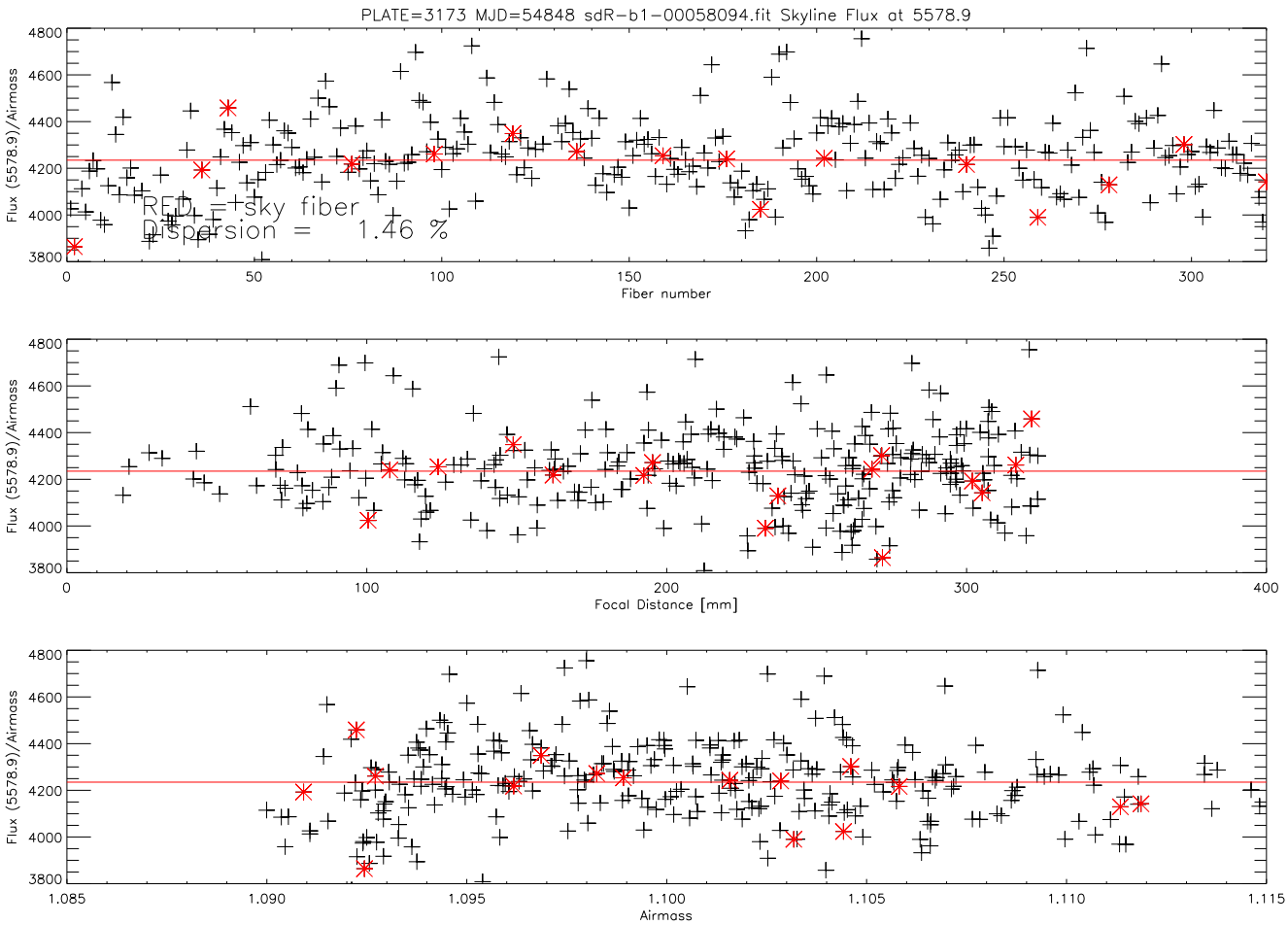

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

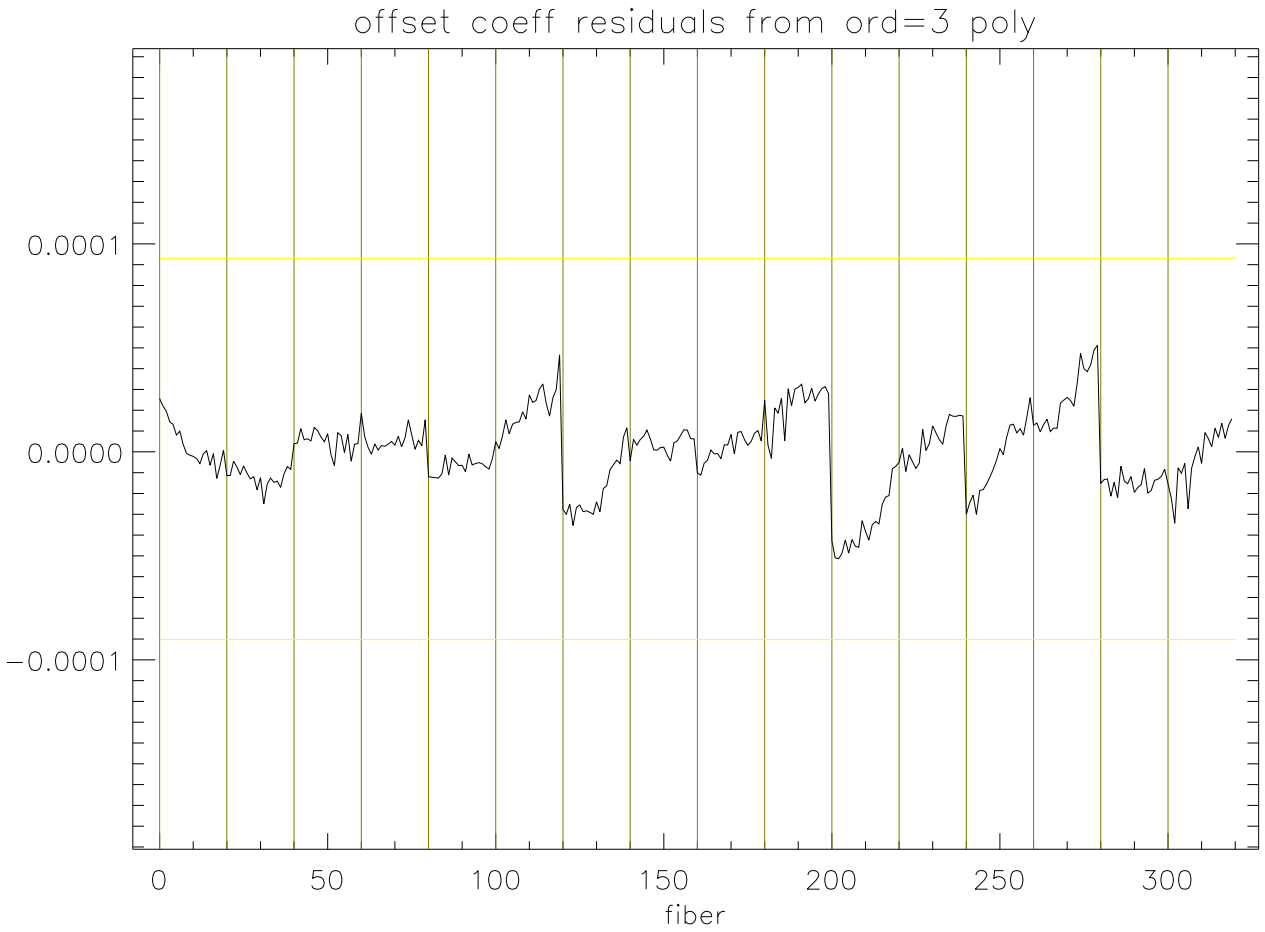

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

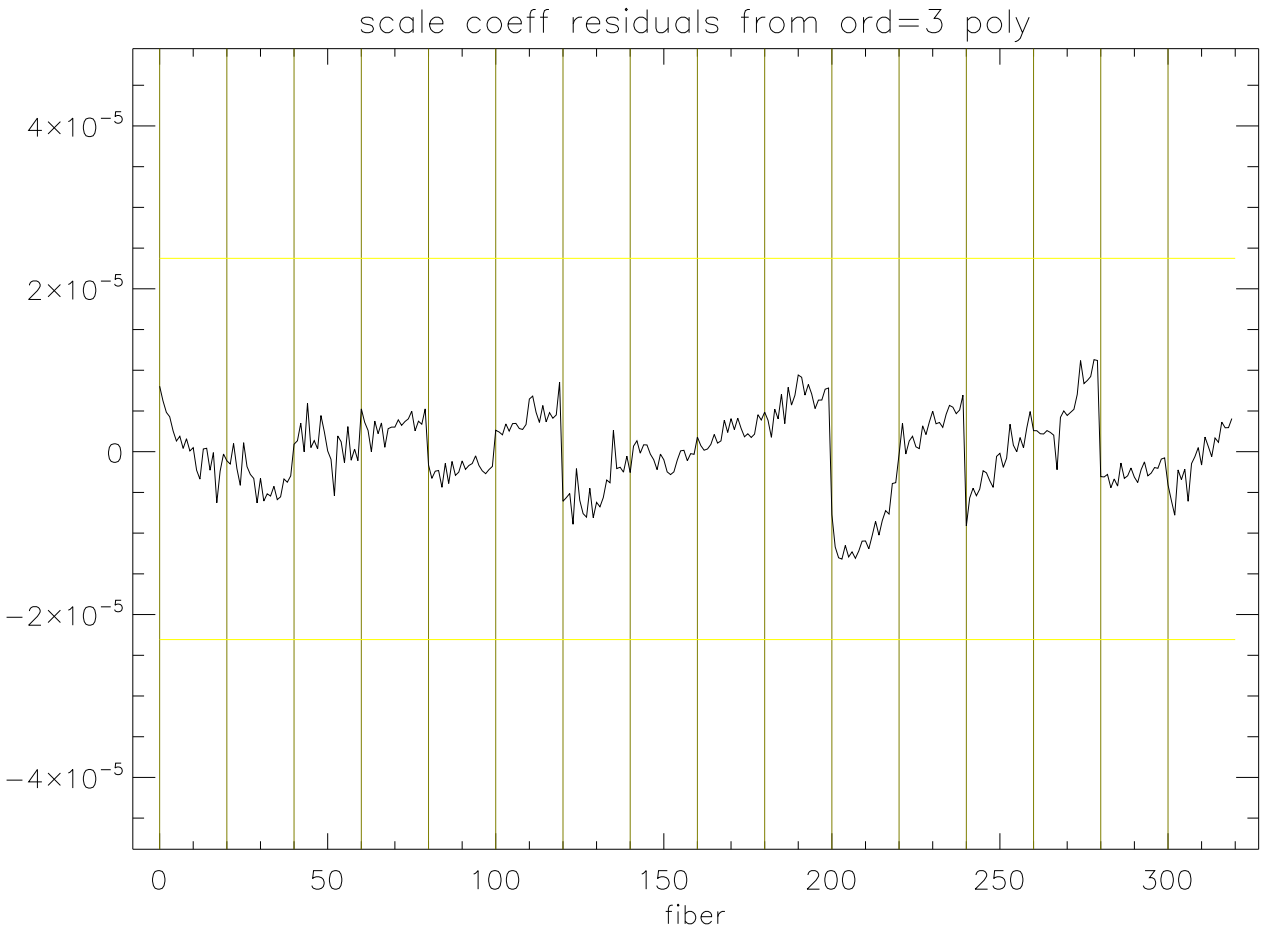

PLATE=3173 MJD=54848 sdR-b1-00058094.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

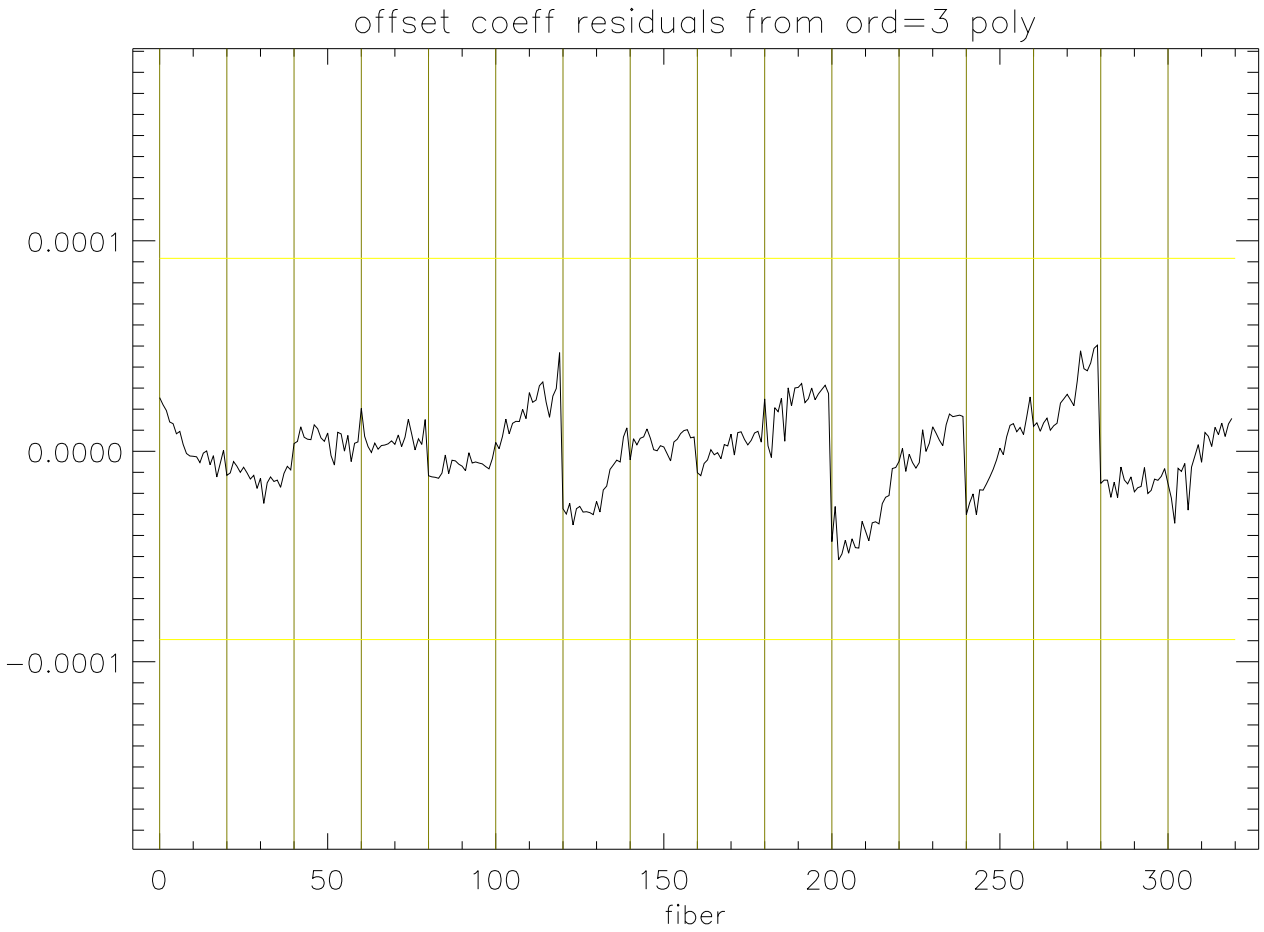

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b1-00058094.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

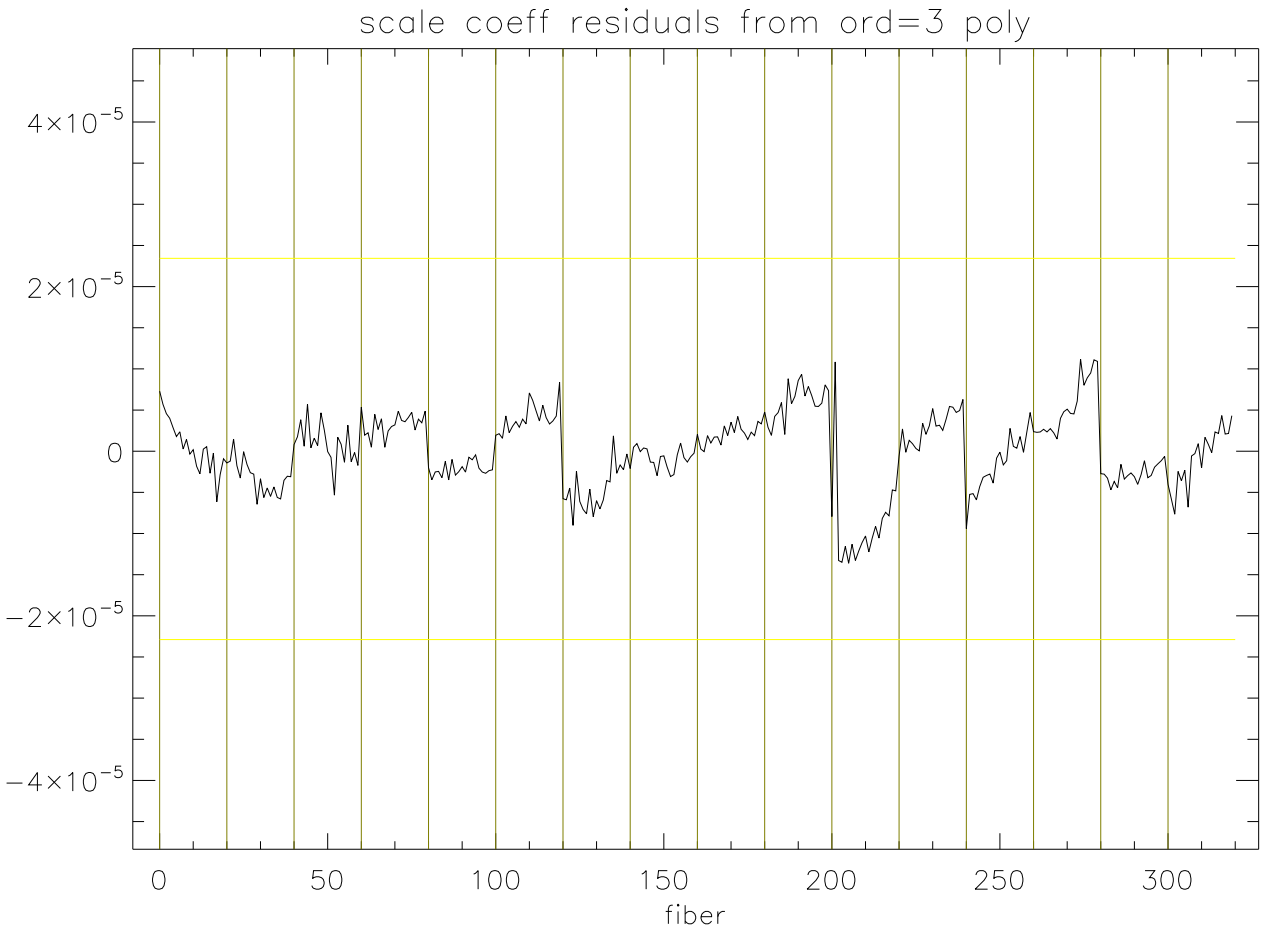

PLATE=3173 MJD=54848 sdR-b1-00058094.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 26.67 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

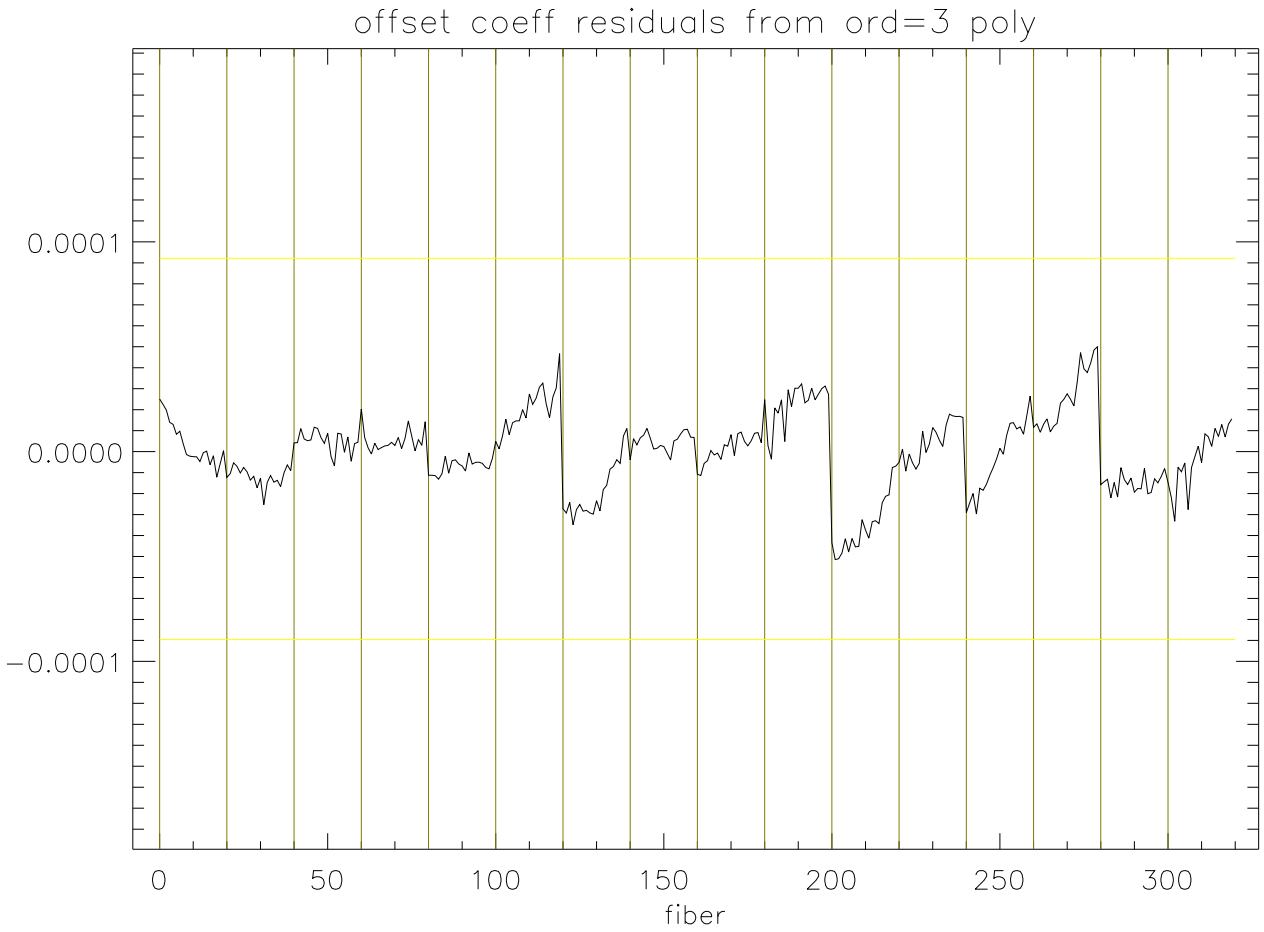

PLATE=3173 MJD=54848 sdR-b1-00058094.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.46 %
Focal Distance [mm]
Airmass

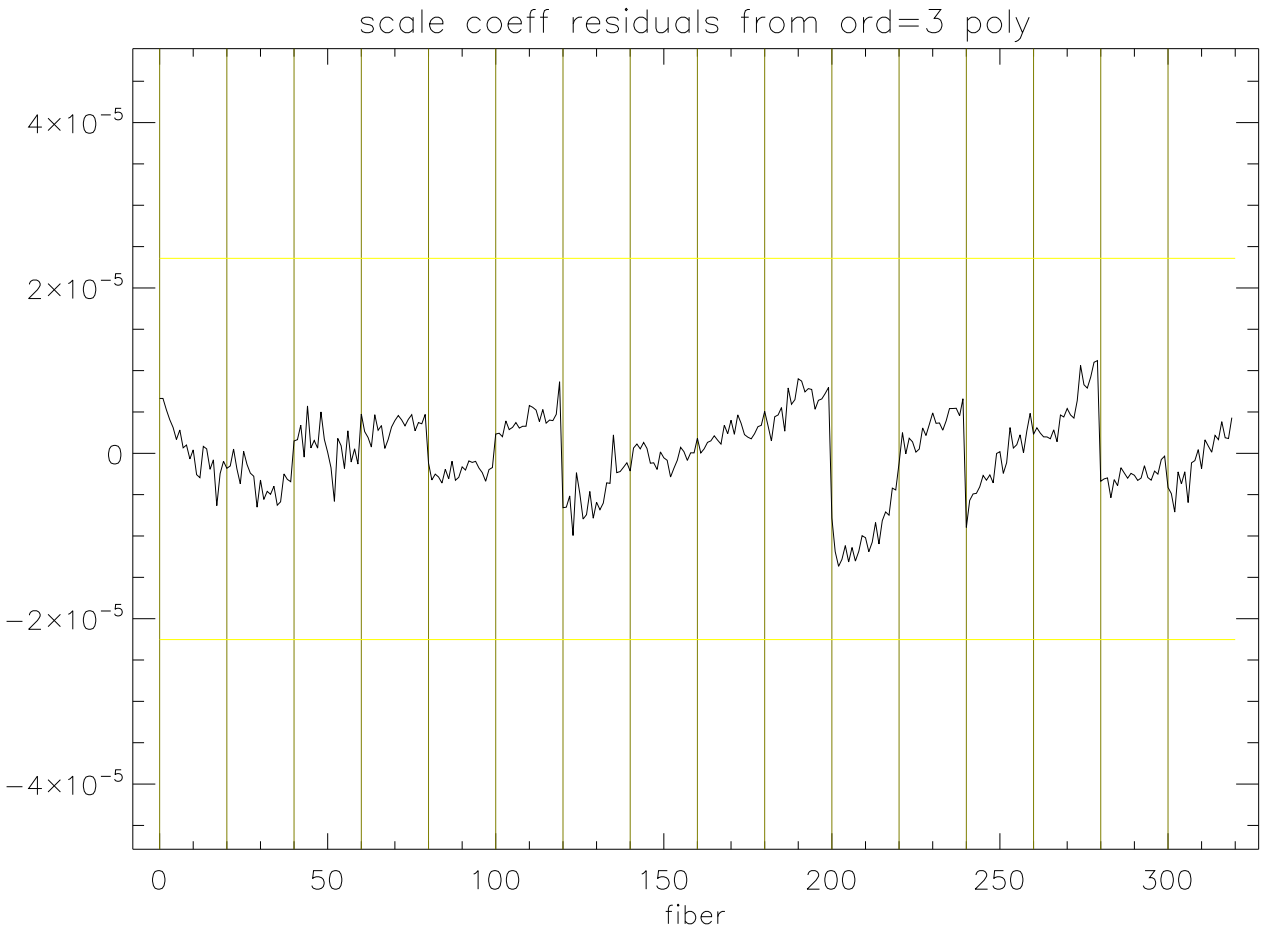

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

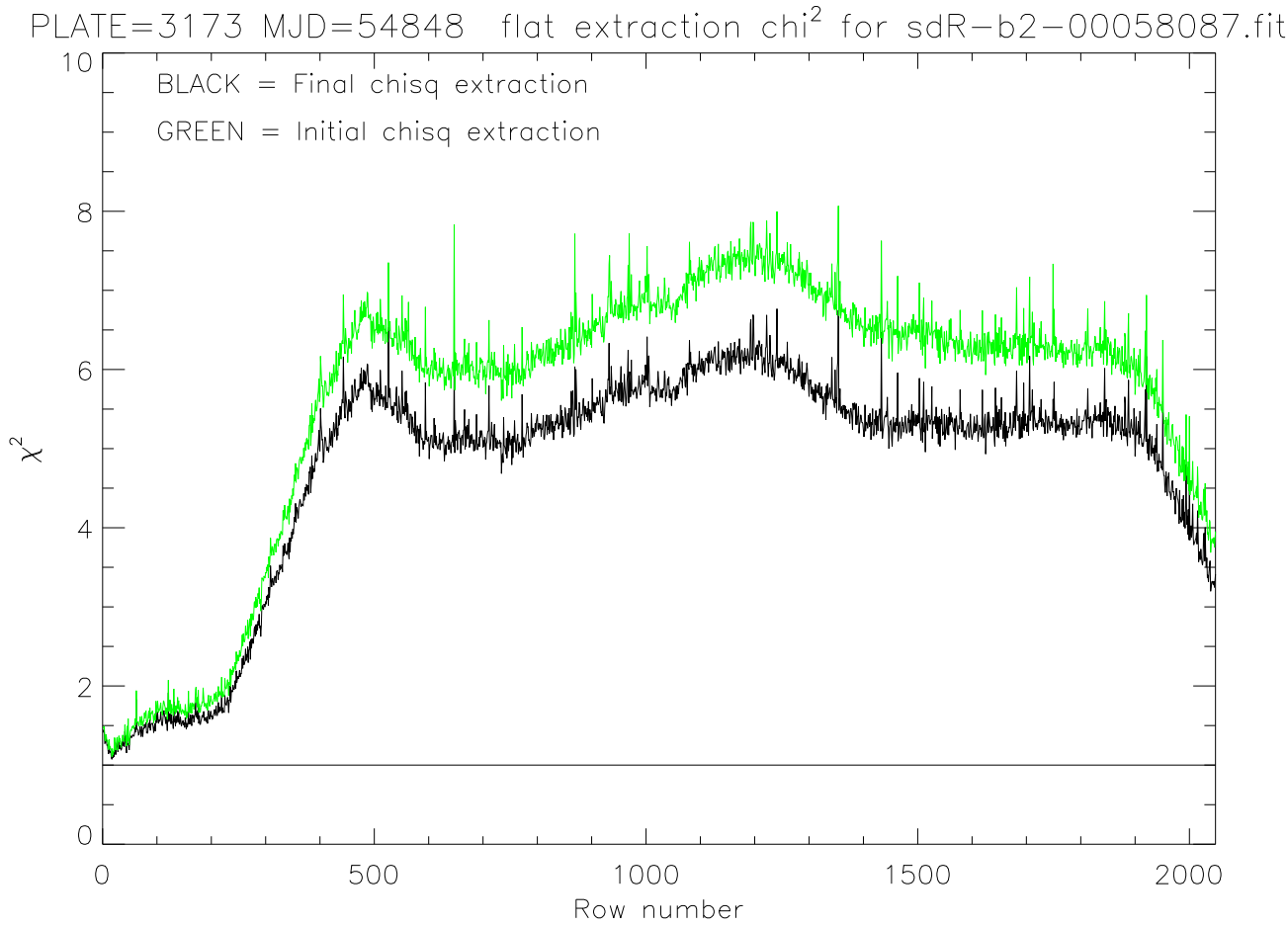

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

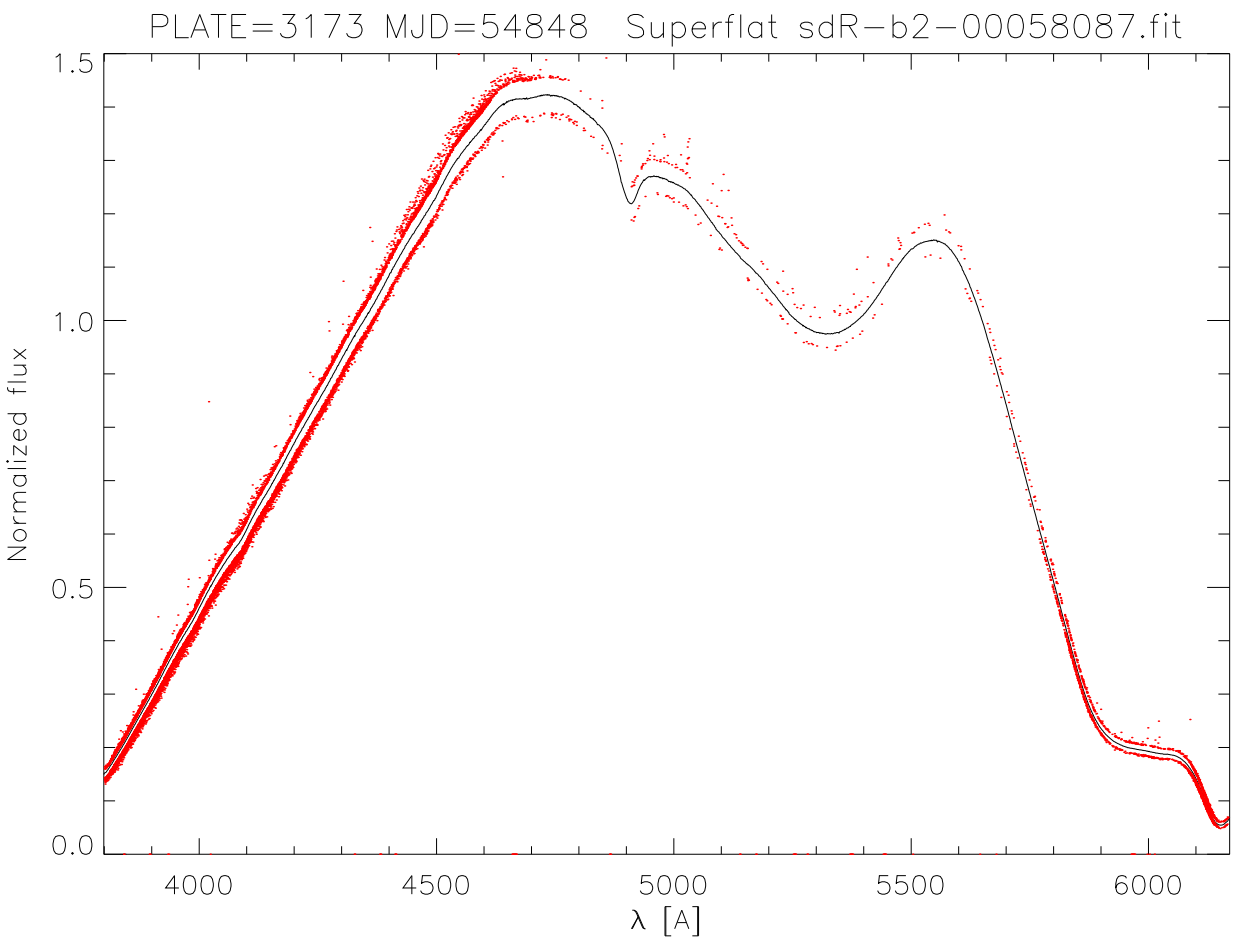

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

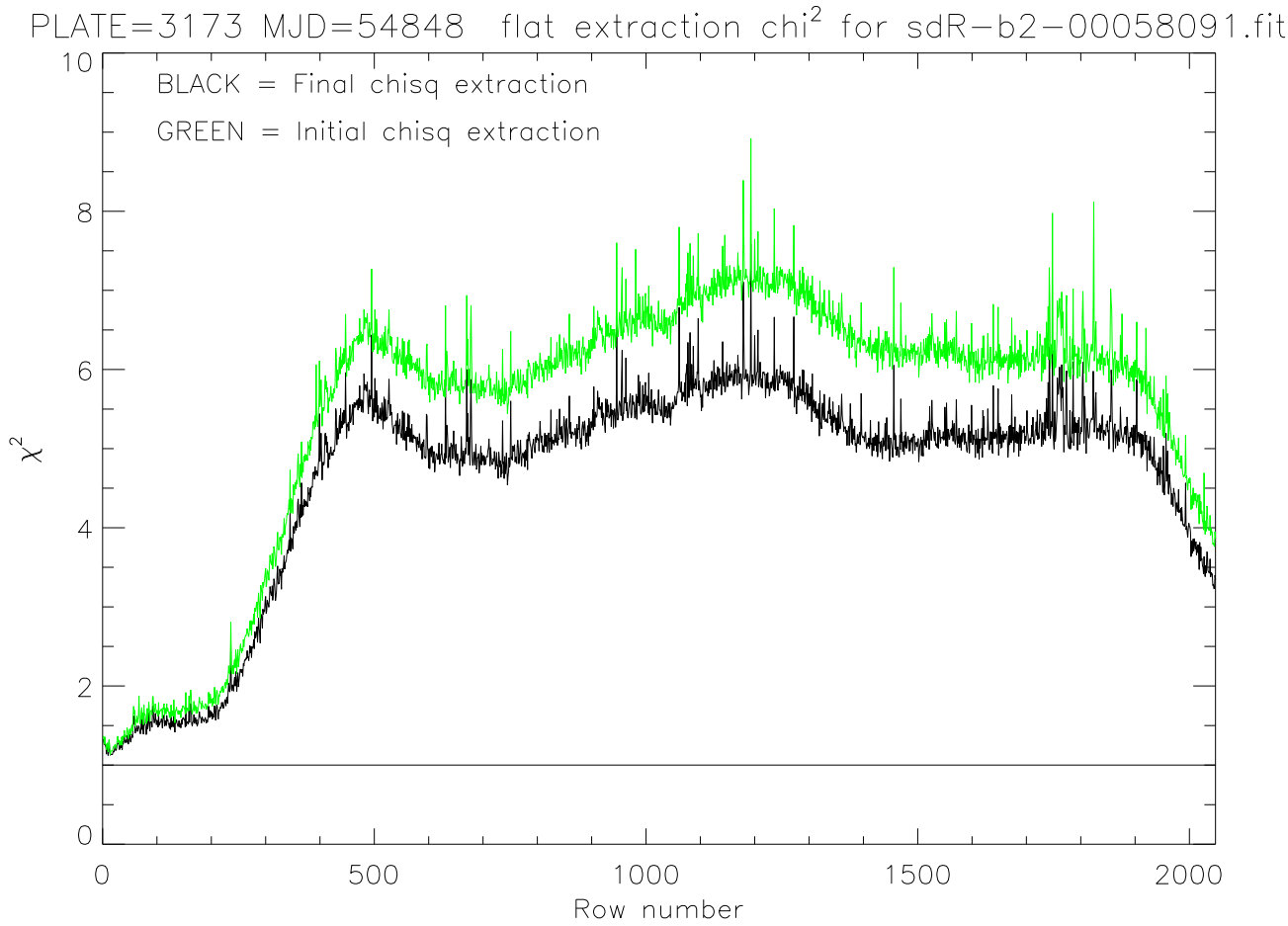

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

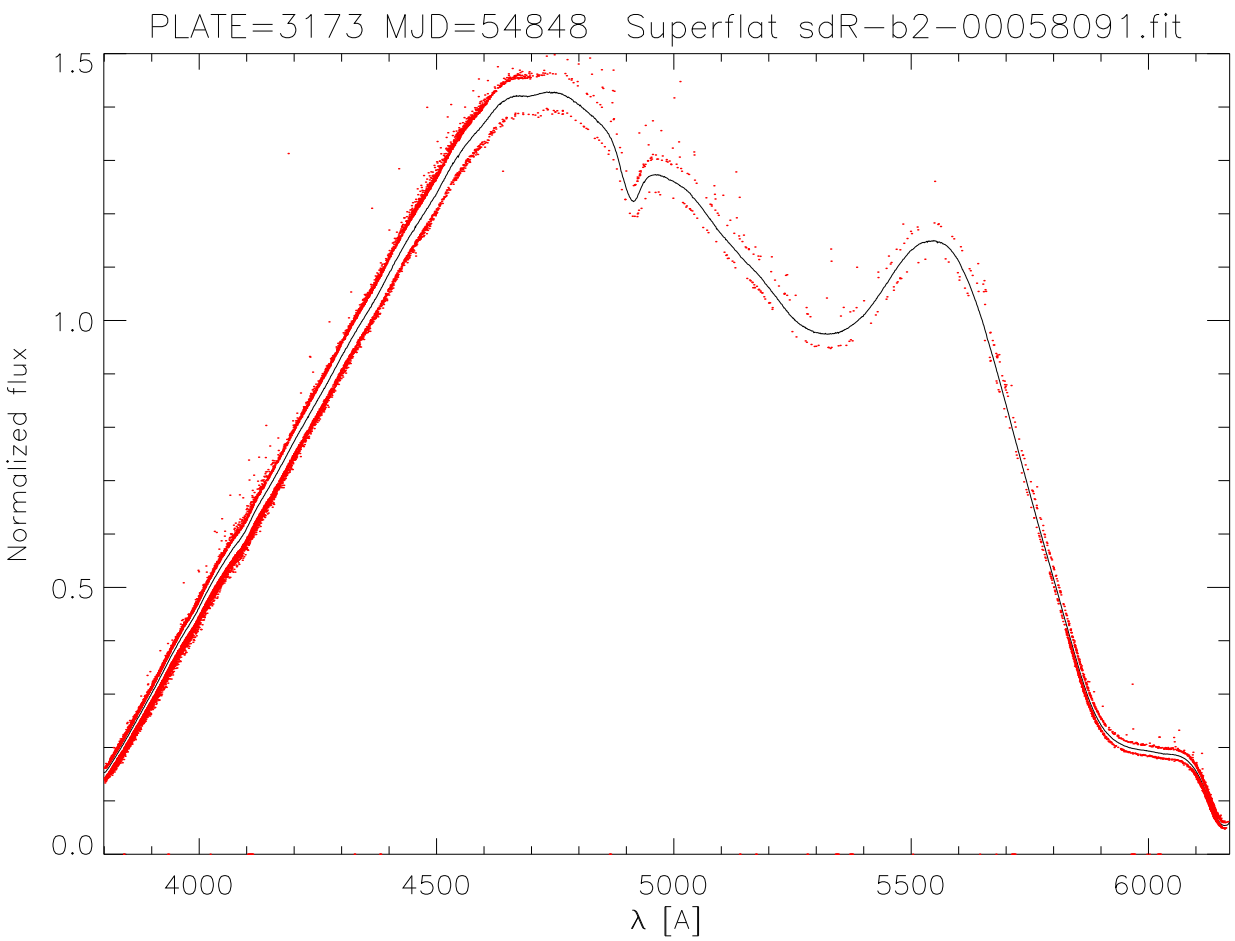

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

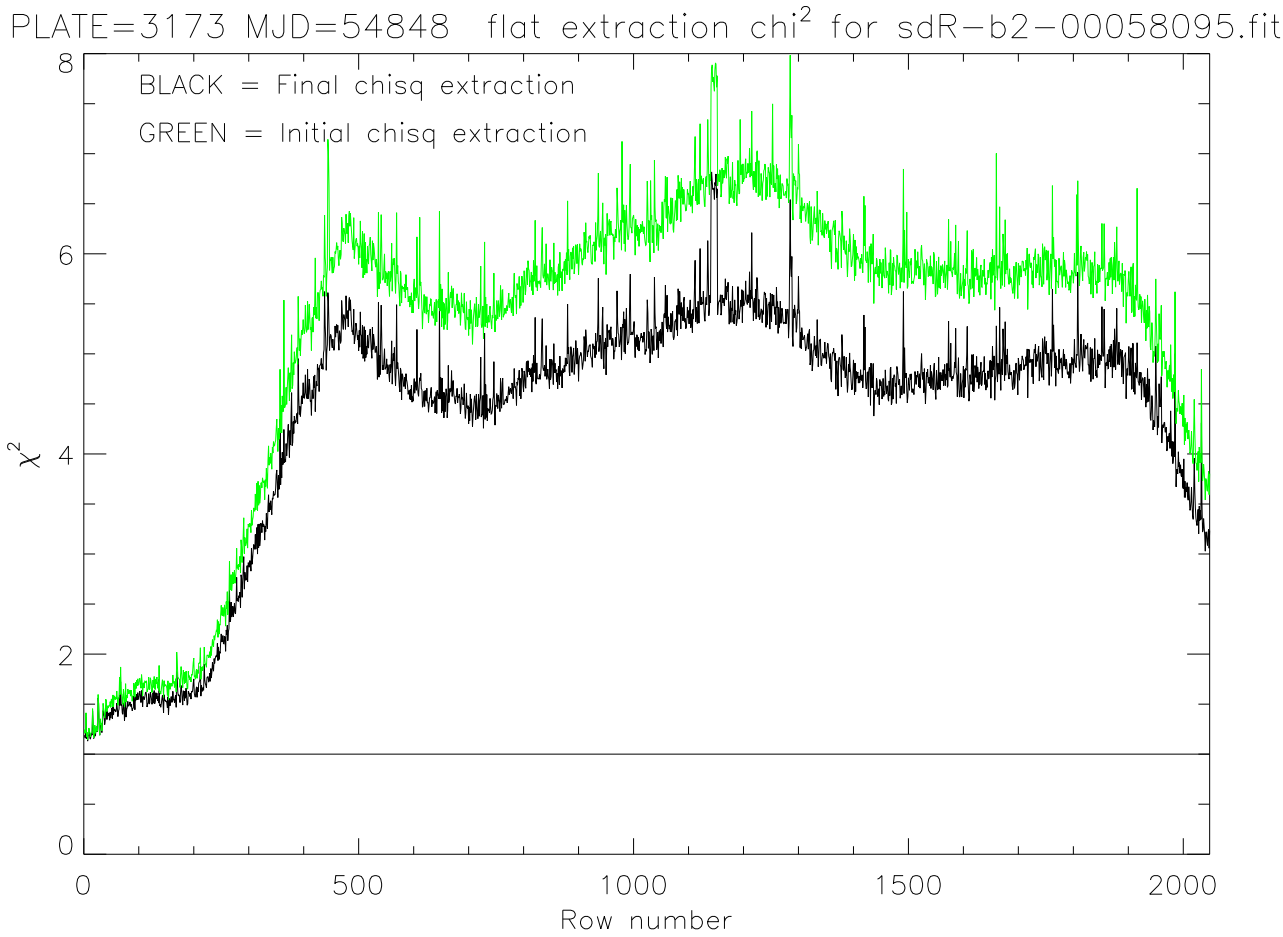

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

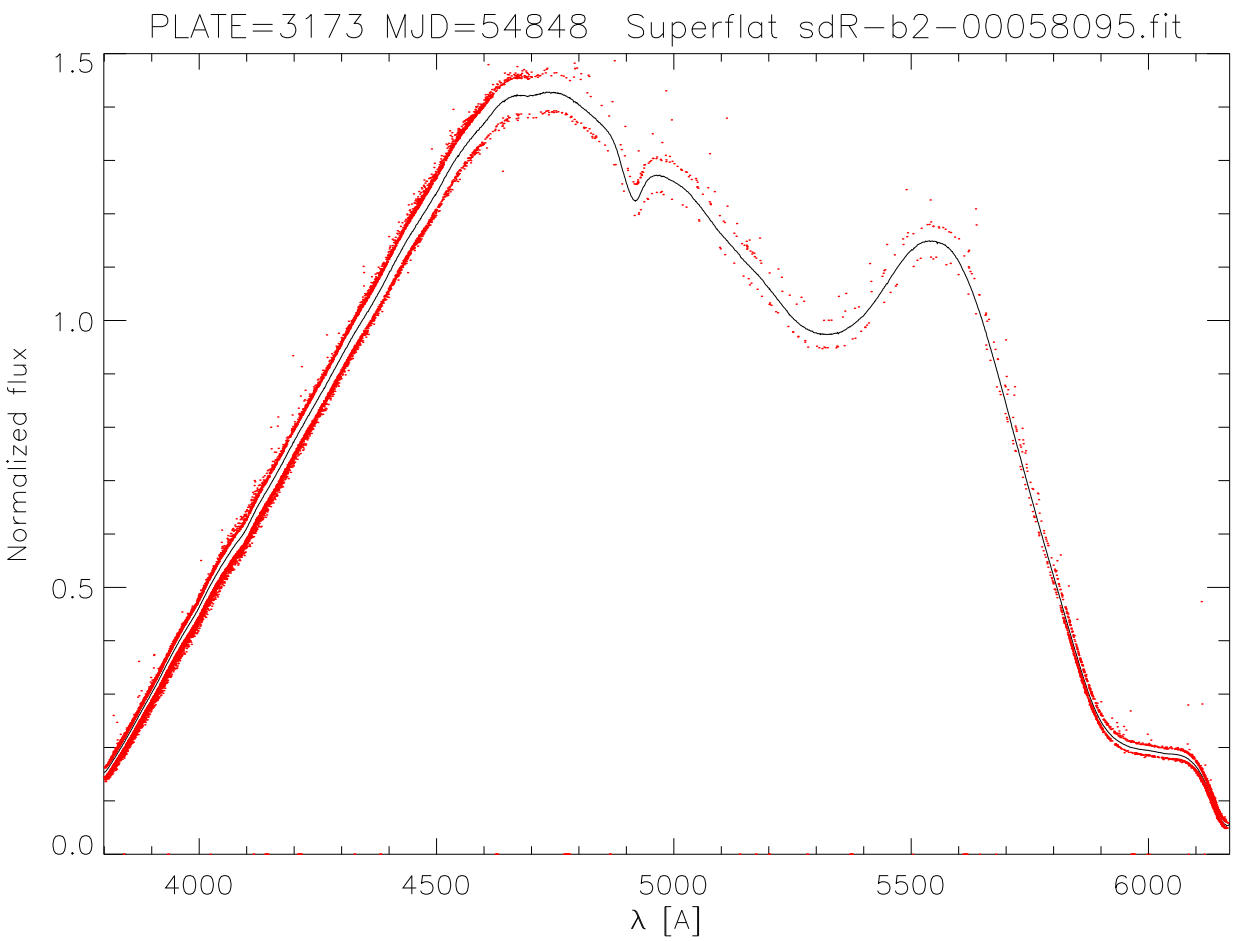

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−b2−00058087.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

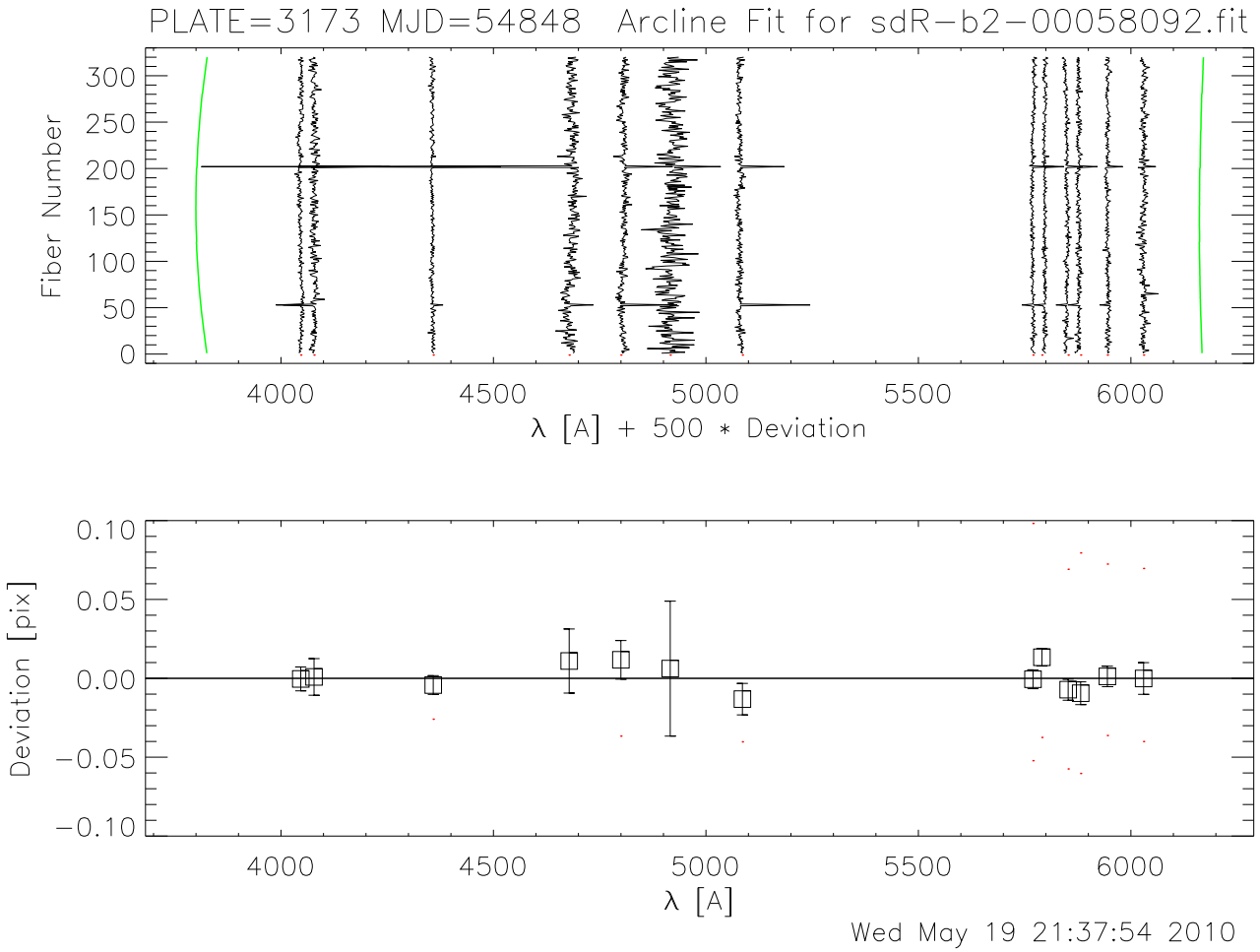

PLATE=3173 MJD=54848 Superflat sdR-b2-00058087.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

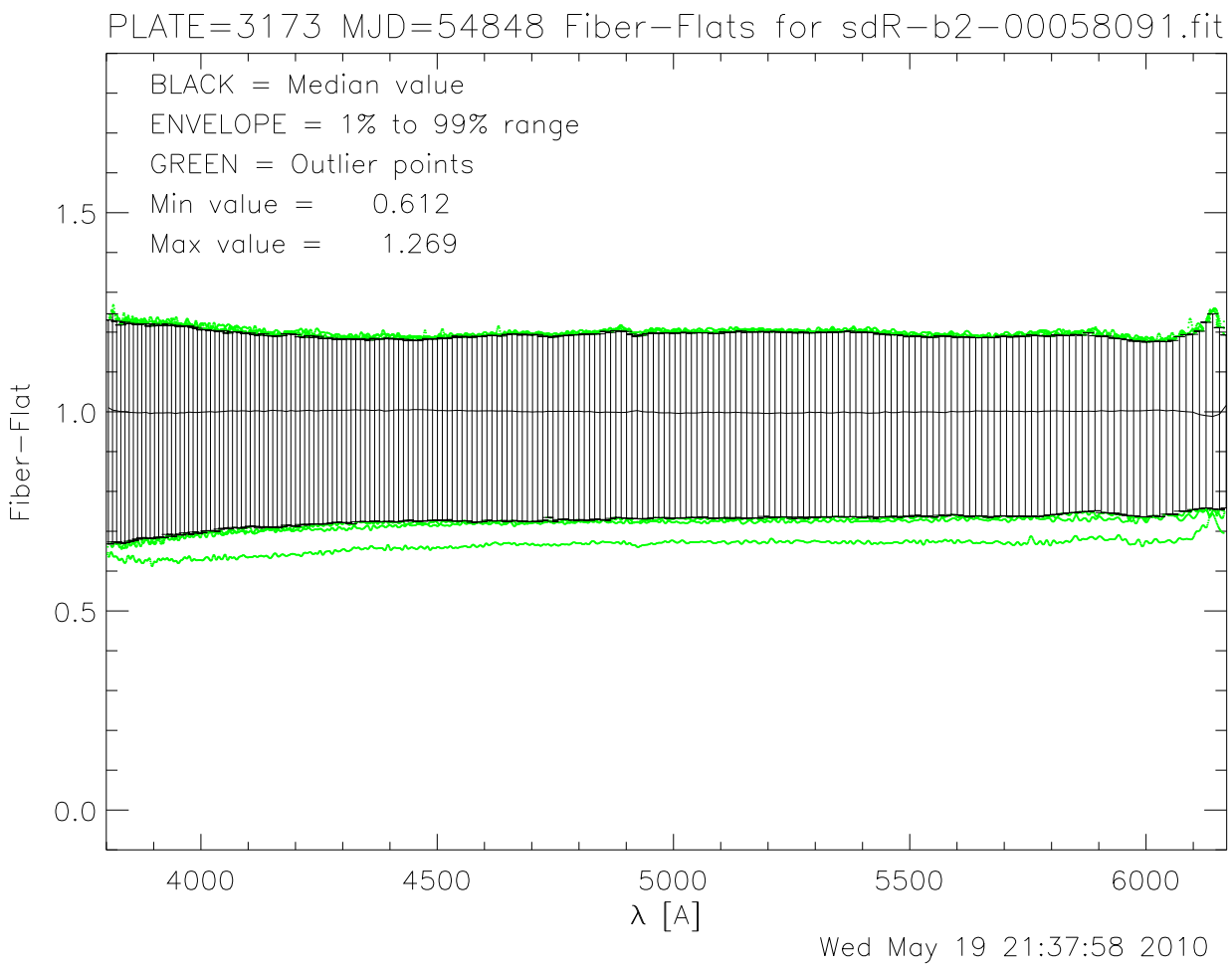

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR-b2-00058091.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

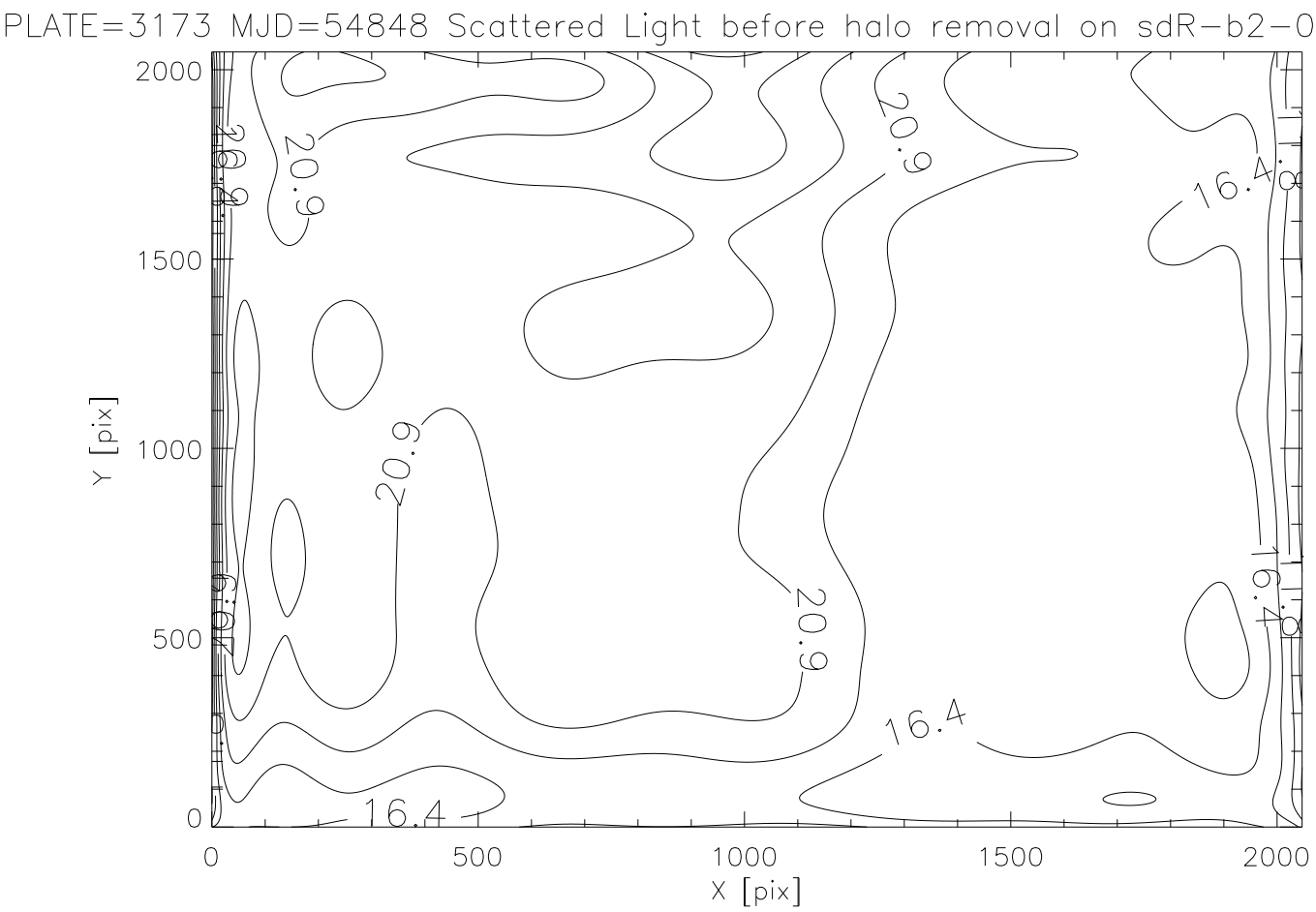

PLATE=3173 MJD=54848 Superflat sdR-b2-00058091.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

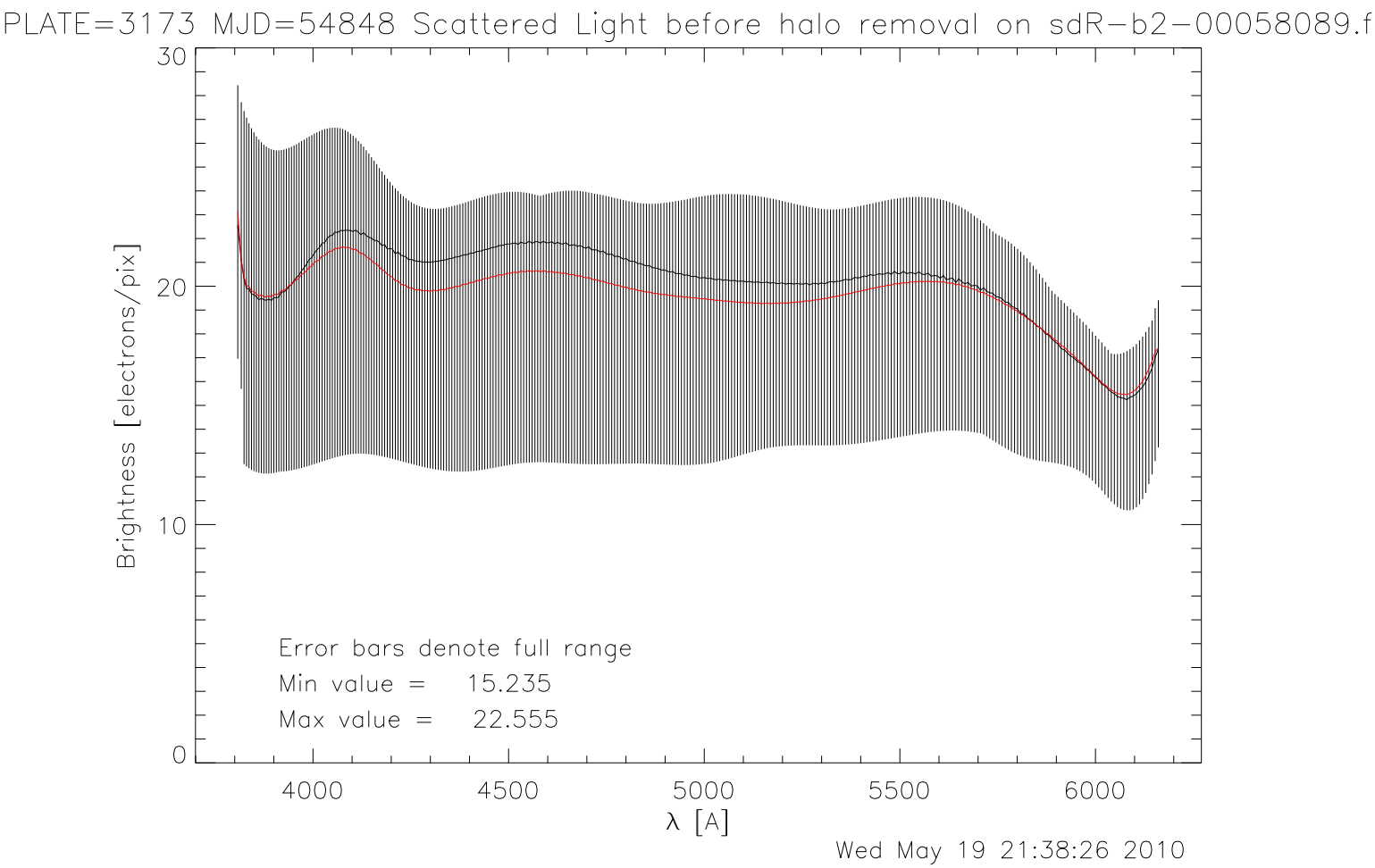

PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−b2−00058095.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

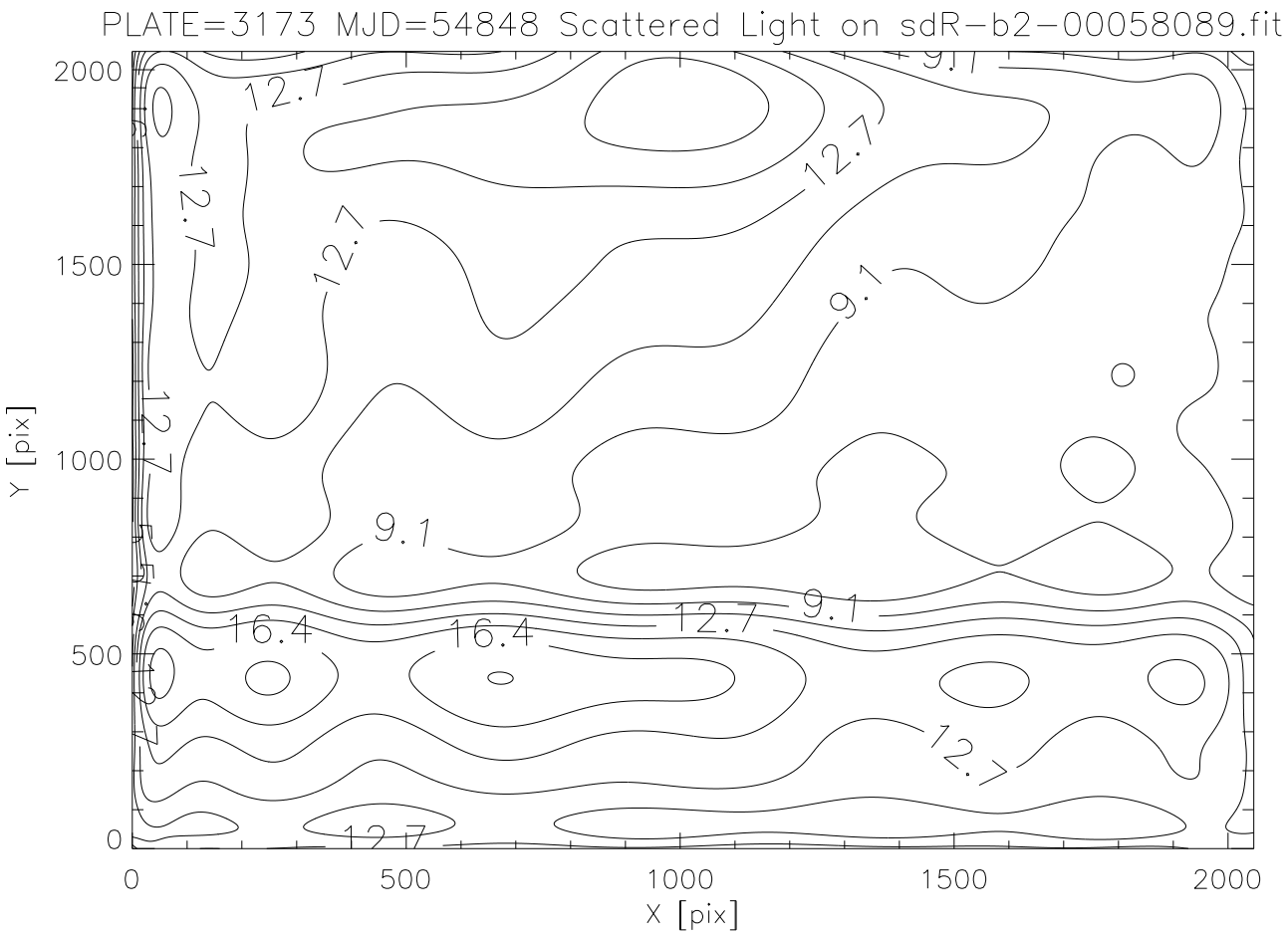

PLATE=3173 MJD=54848 Superflat sdR-b2-00058095.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

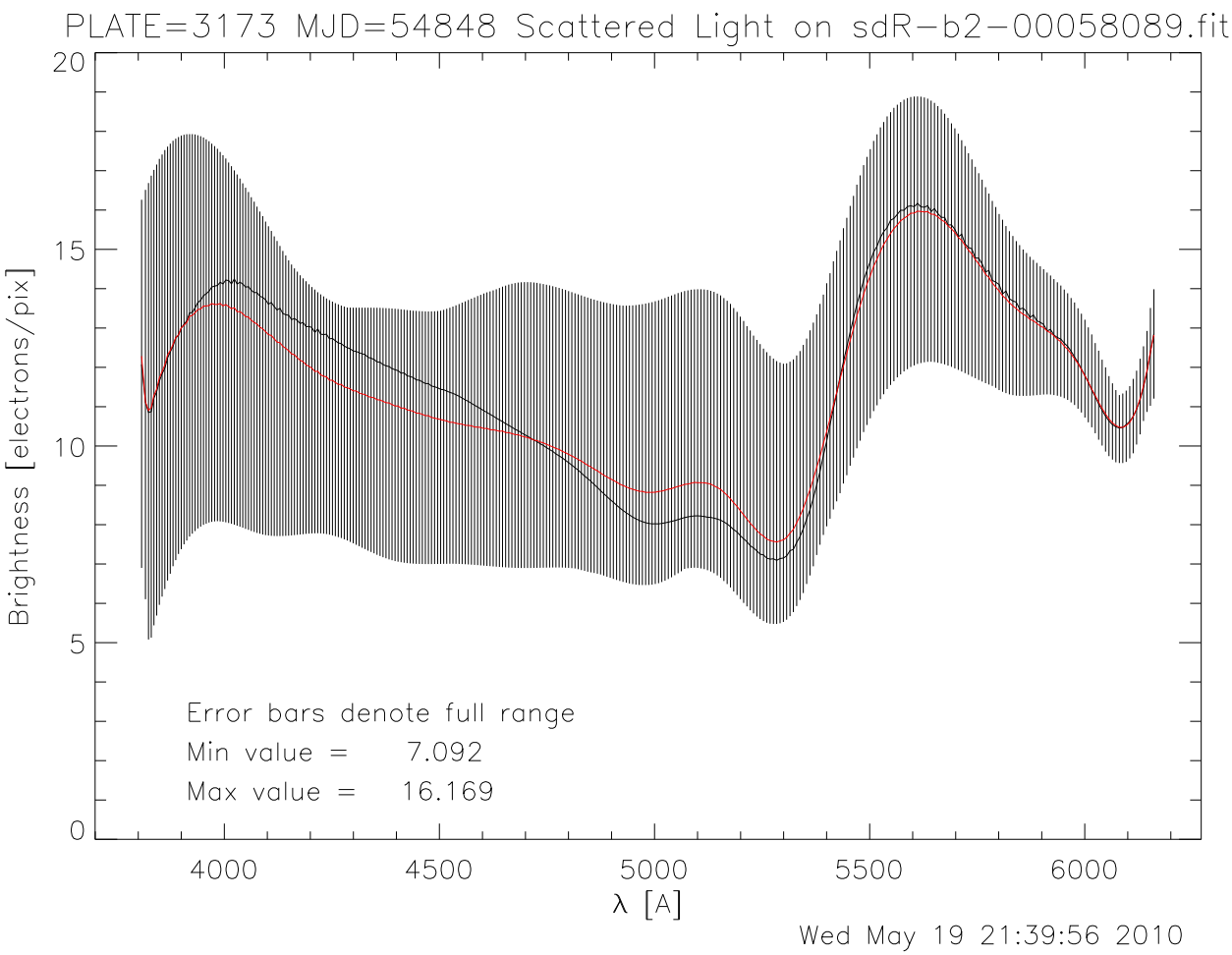

PLATE=3173 MJD=54848 Arcline Fit for sdR-b2-00058092.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:37:54 2010

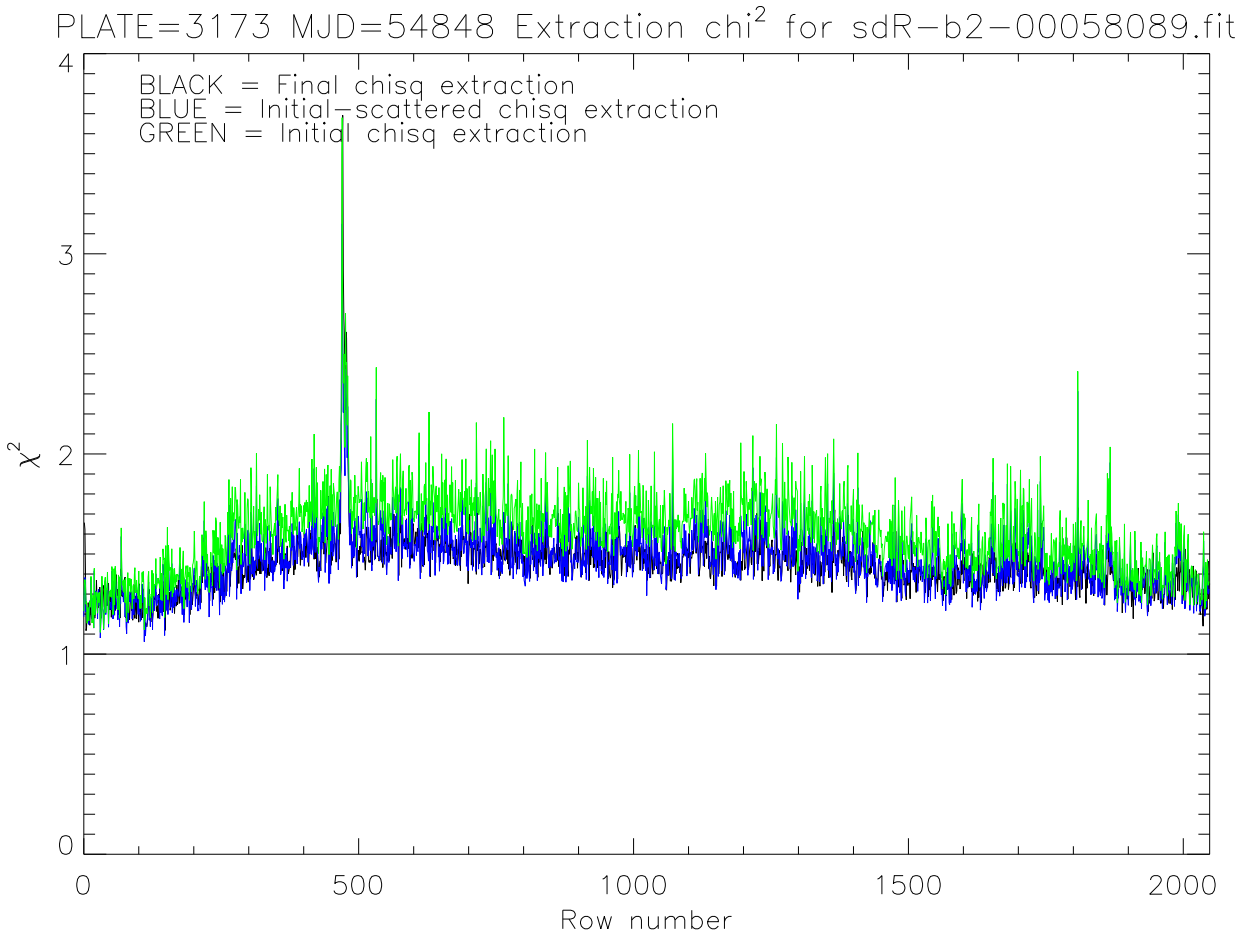

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b2-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.612
Max value = 1.269
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:37:58 2010

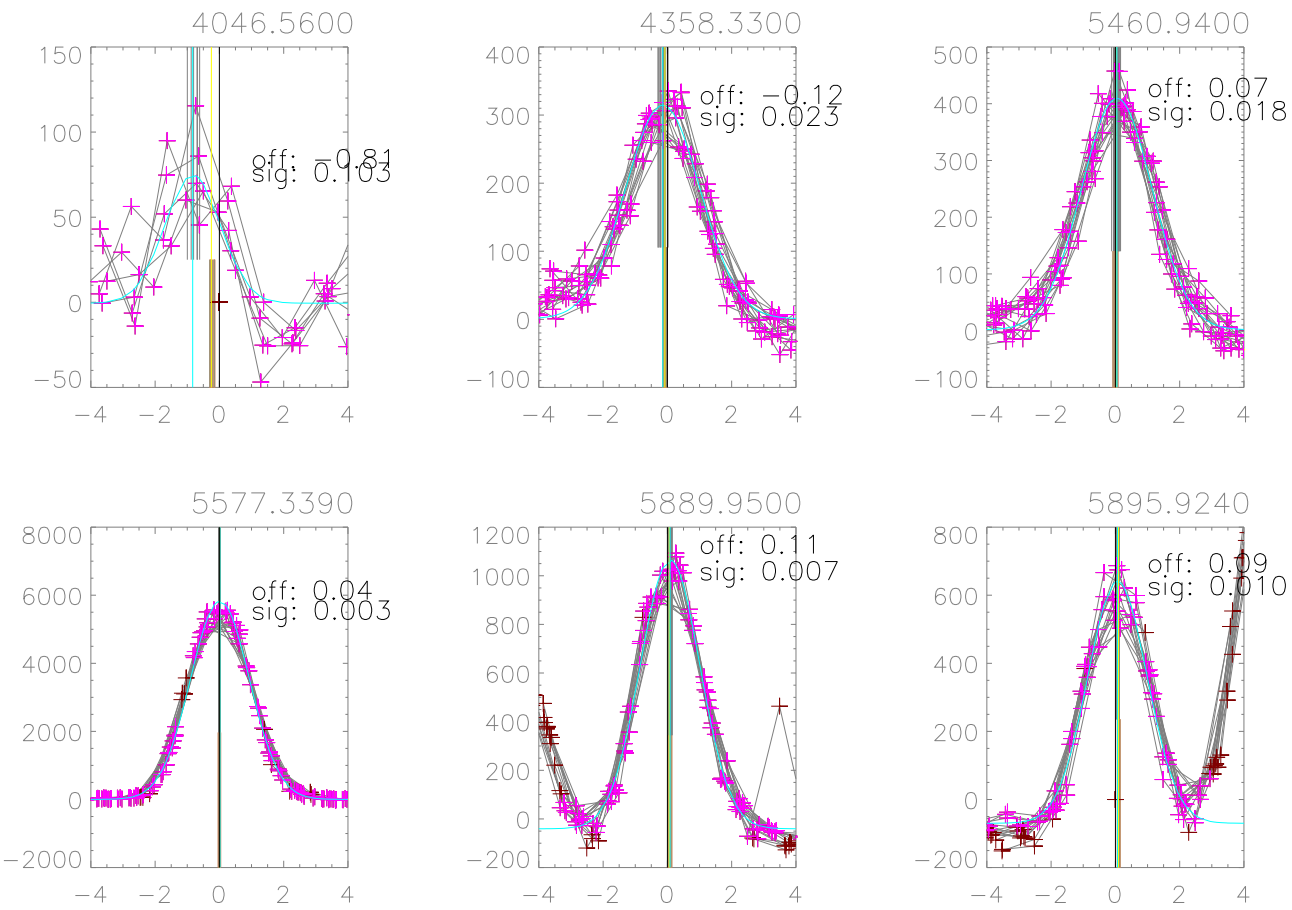

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR−b2−00058089.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
20.9
16.4

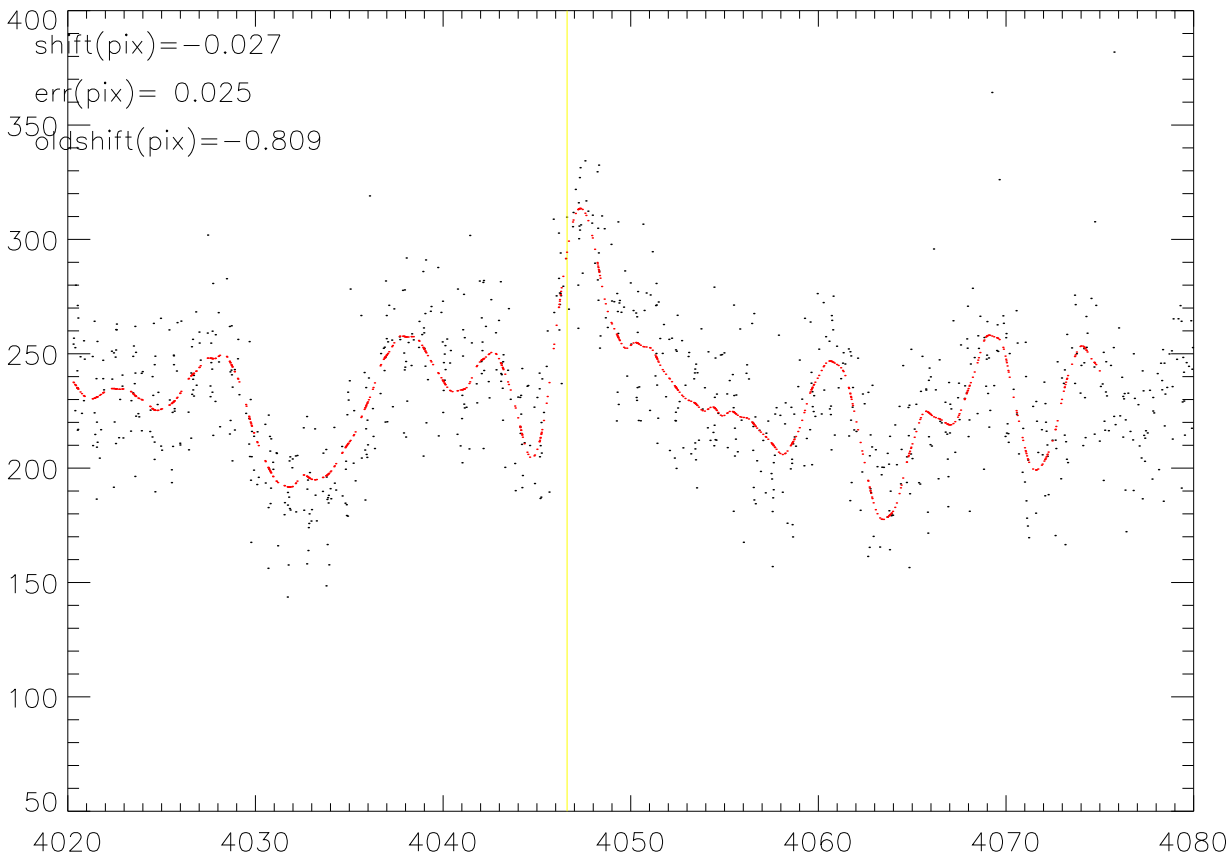

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058089.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 15.235
Max value = 22.555
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:38:26 2010

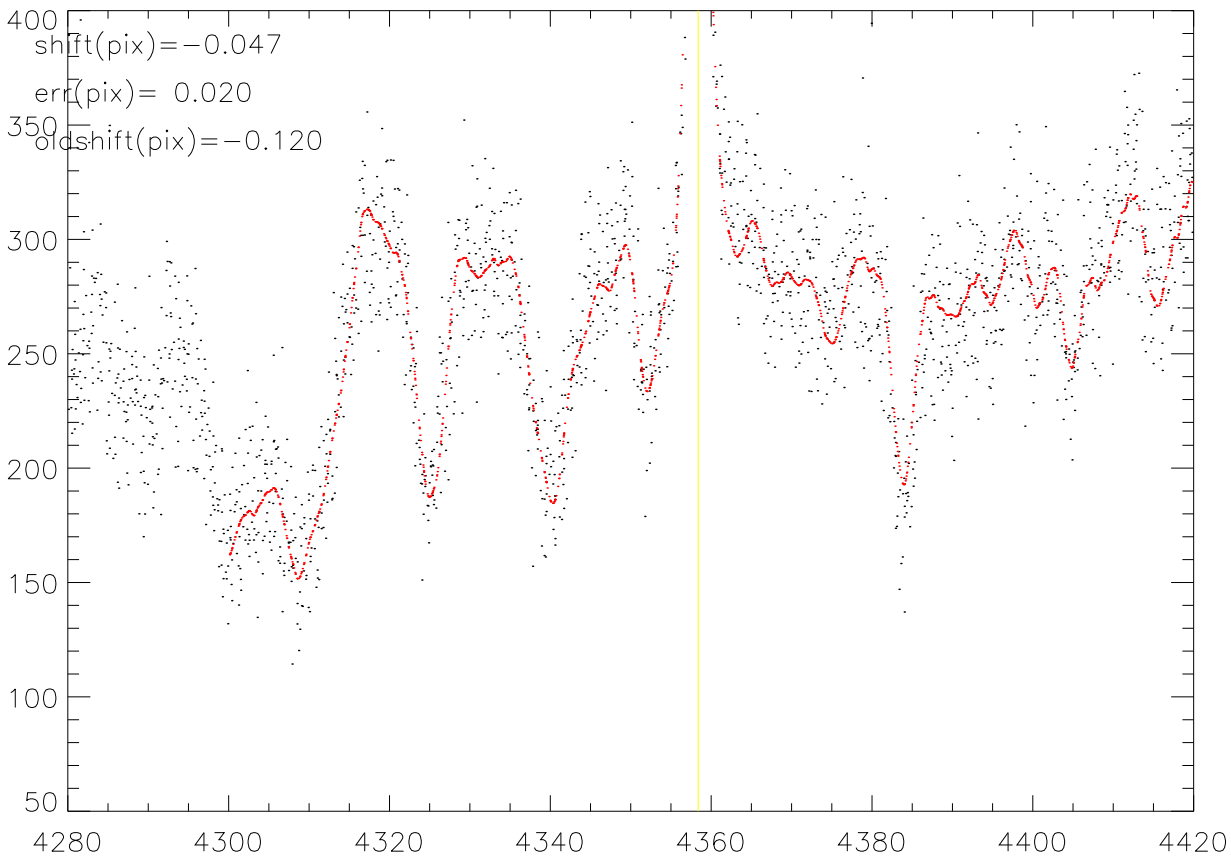

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058089.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1
16.4
0

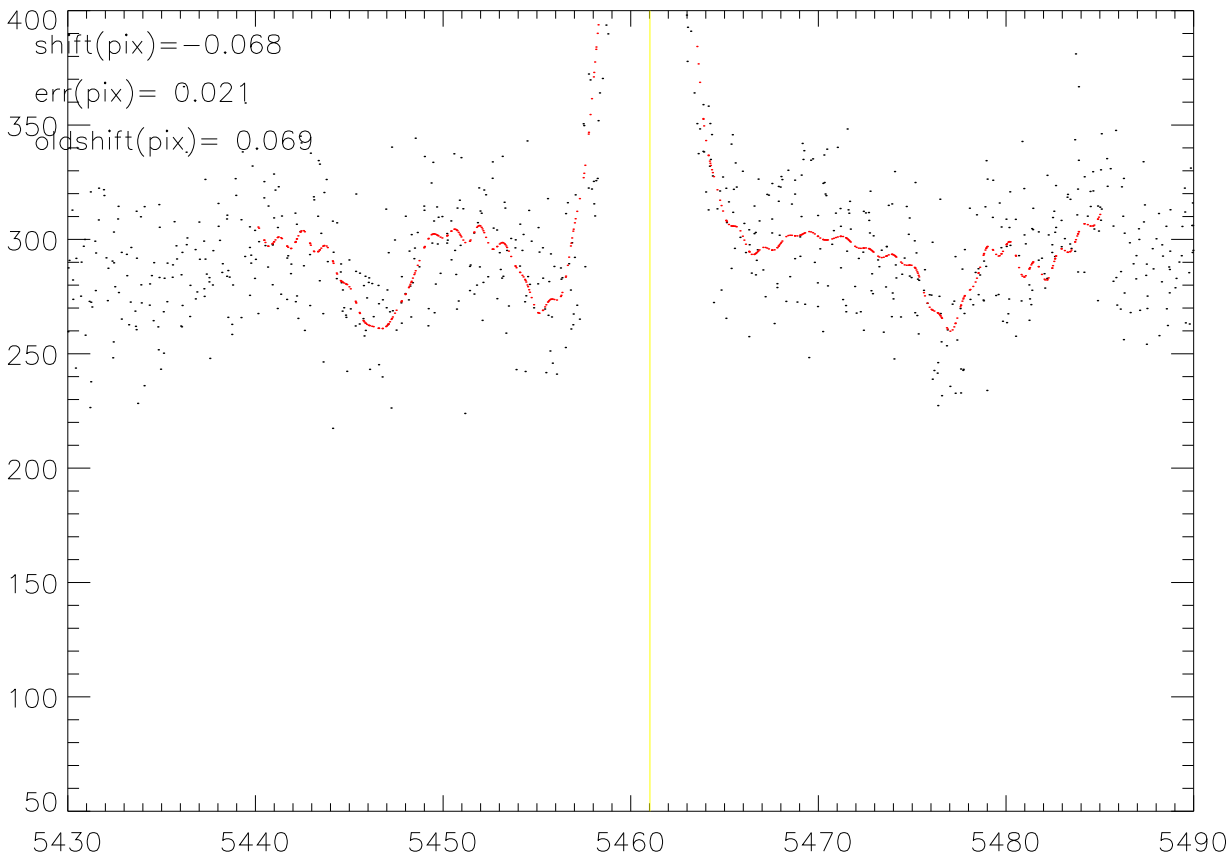

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058089.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.092
Max value = 16.169
Wed May 19 21:39:56 2010

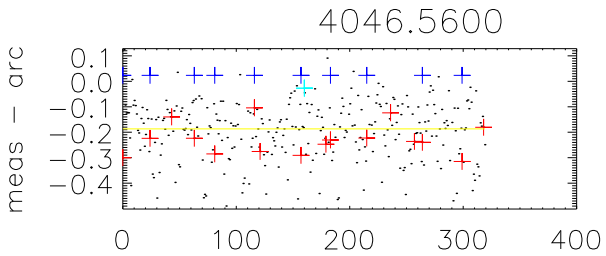

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b2-00058089.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

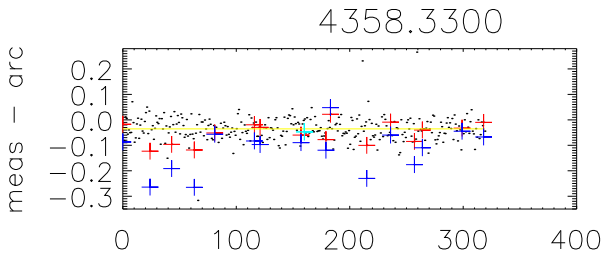

4046.5600
off: −0.81
sig: 0.103
4358.3300
off: −0.12
sig: 0.023
5460.9400
off: 0.07
sig: 0.018
5577.3390
off: 0.04
sig: 0.003
5889.9500
off: 0.11
sig: 0.007
5895.9240
off: 0.09
sig: 0.010

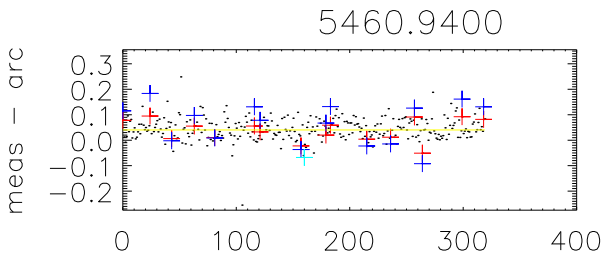

shift(pix)=−0.027
err(pix)= 0.025
oldshift(pix)=−0.809
400
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

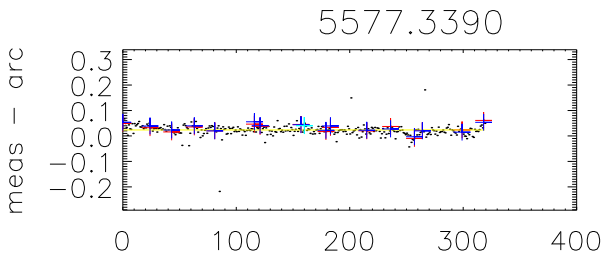

shift(pix)=−0.047
err(pix)= 0.020
oldshift(pix)=−0.120
400
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

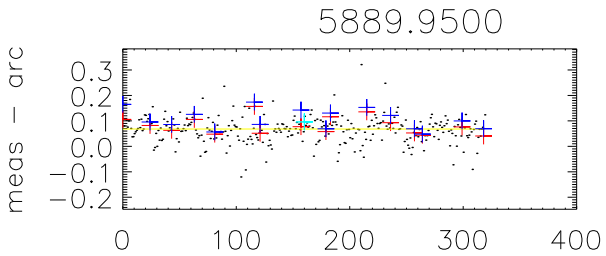

shift(pix)=−0.068
err(pix)= 0.021
oldshift(pix)= 0.069
400
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

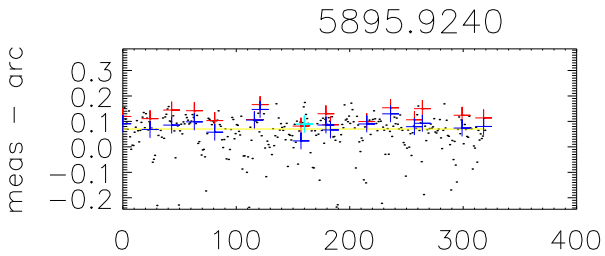

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

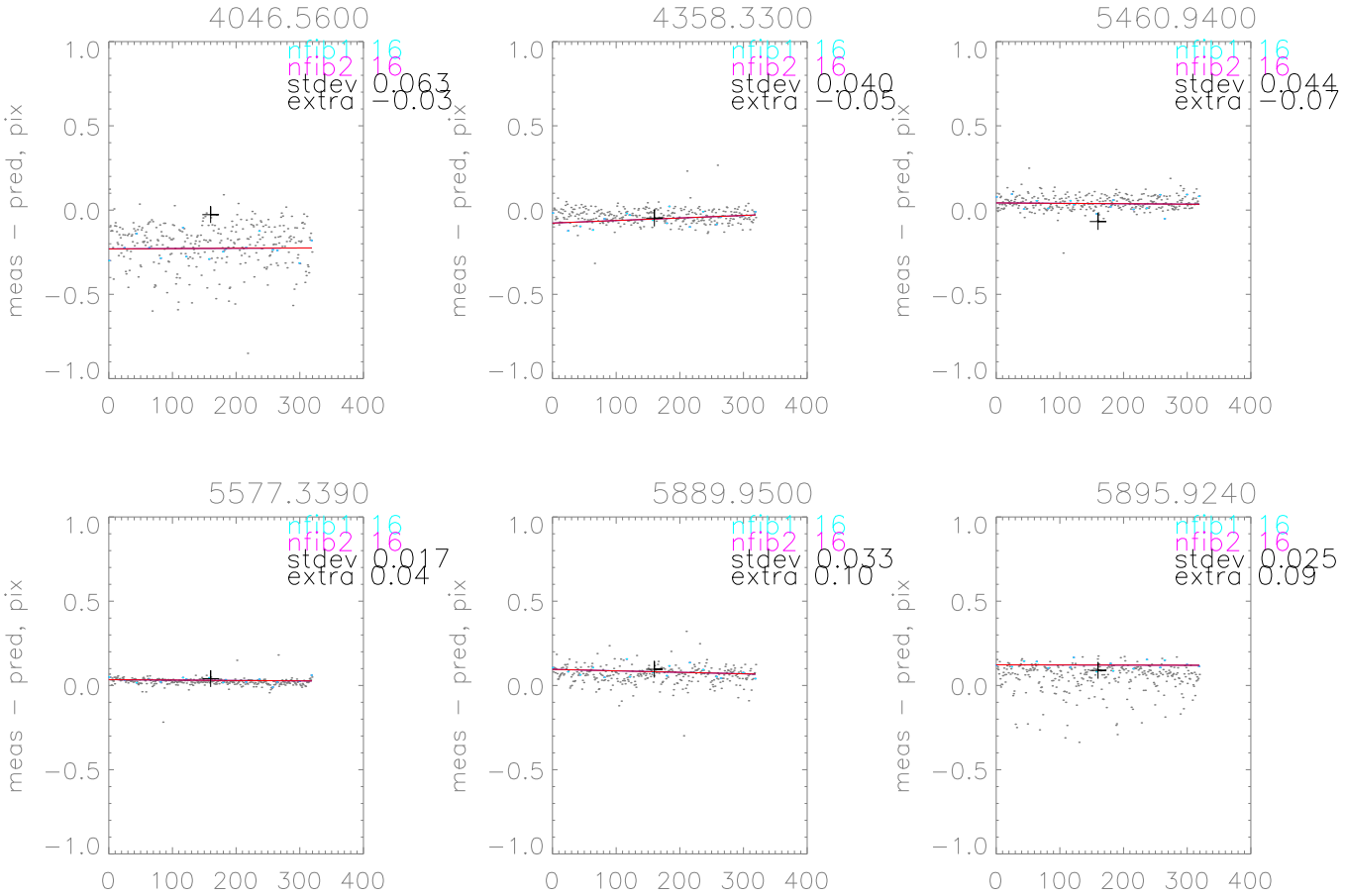

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

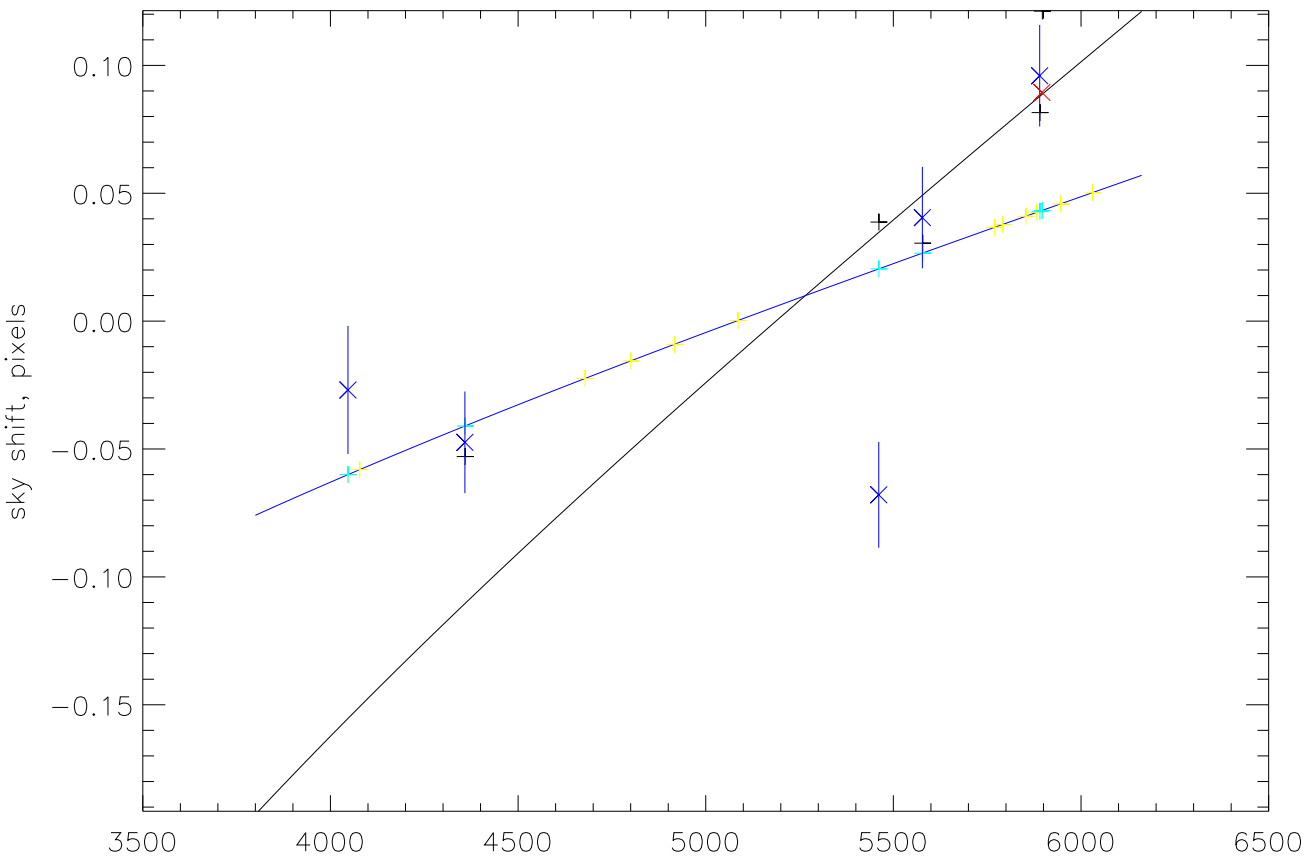

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

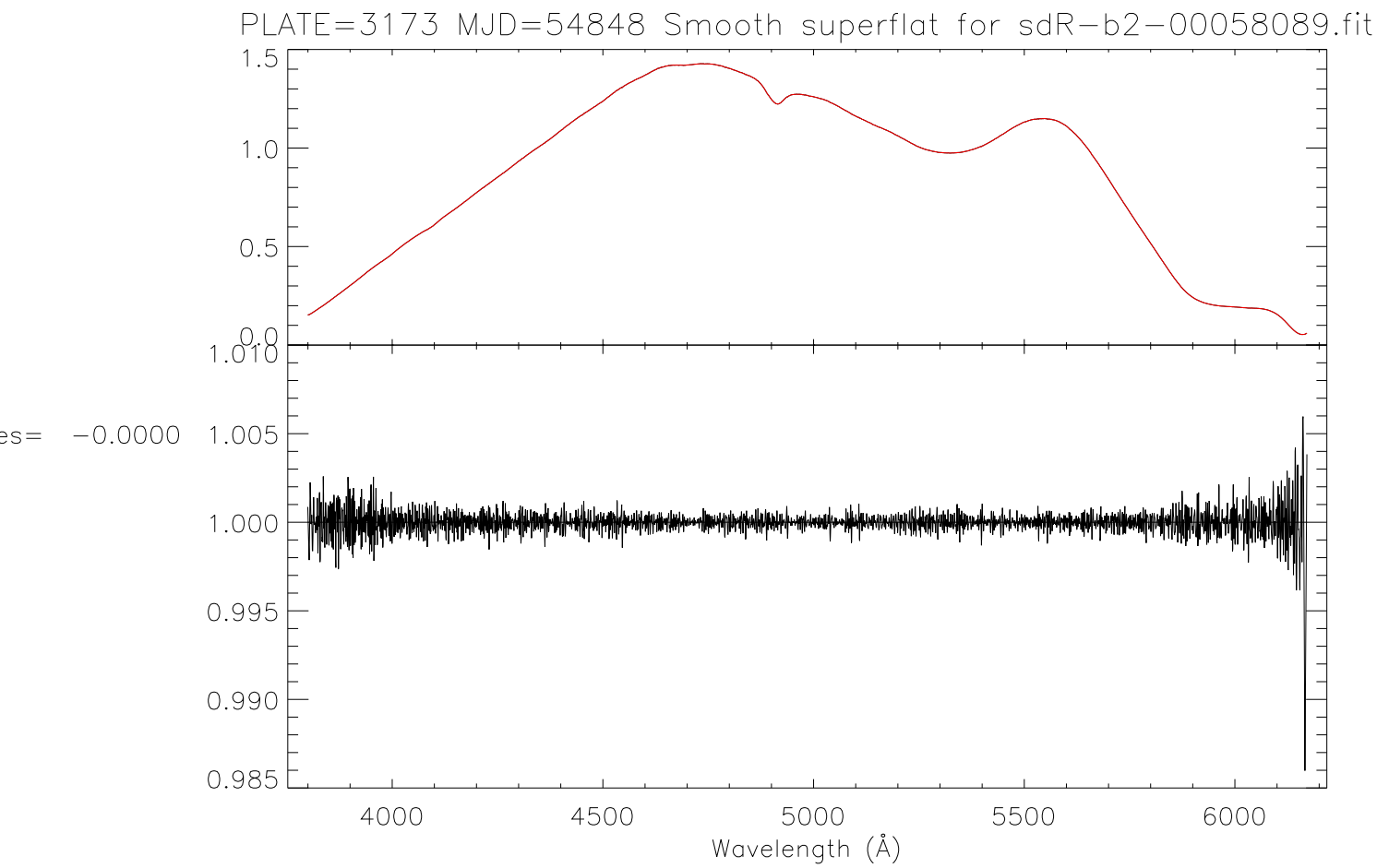

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

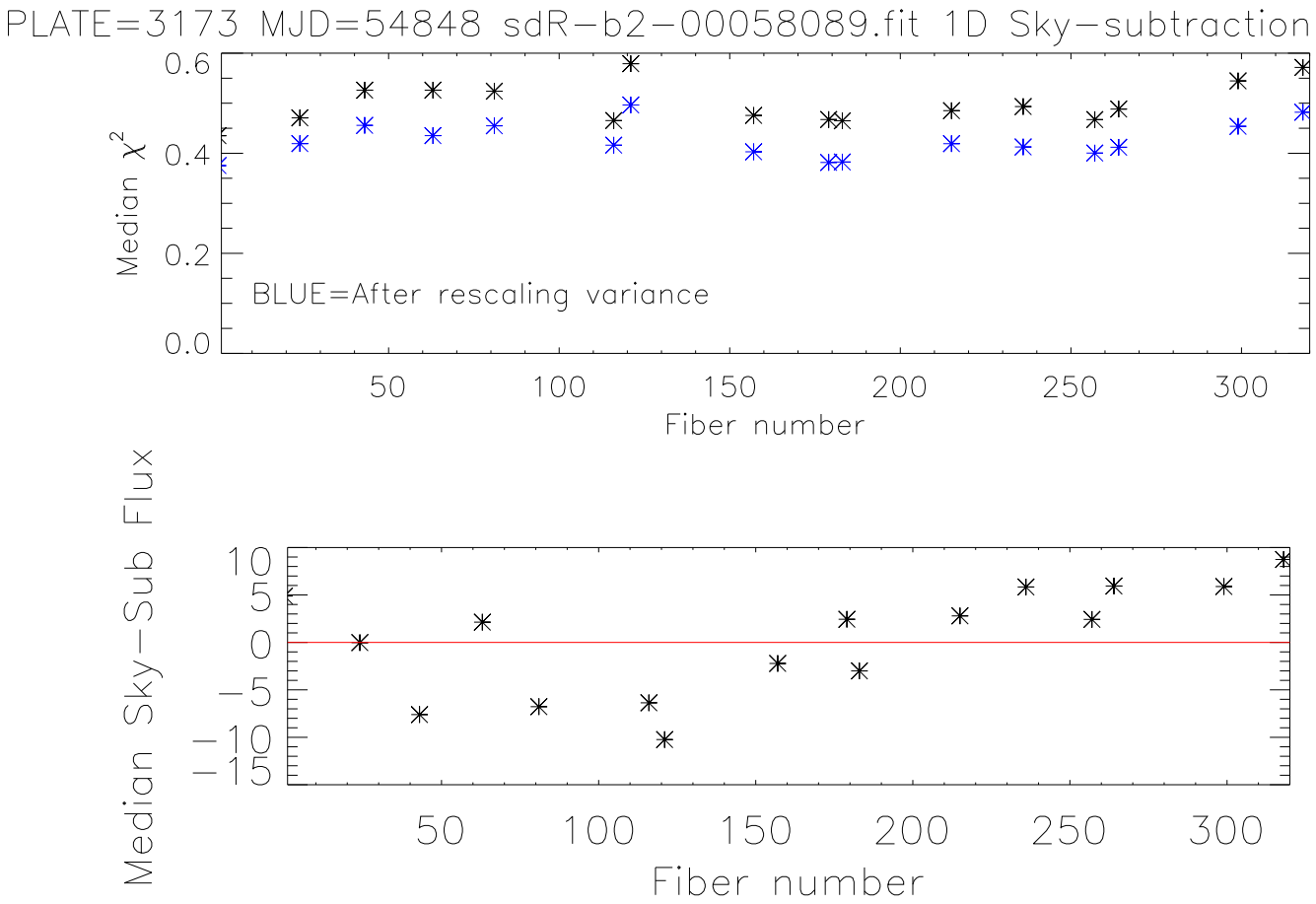

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

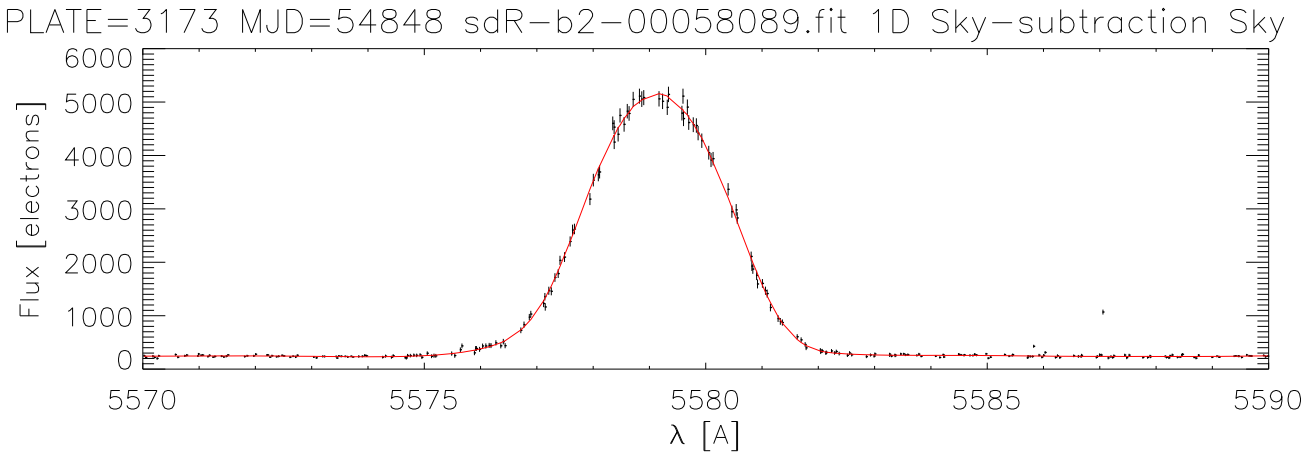

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

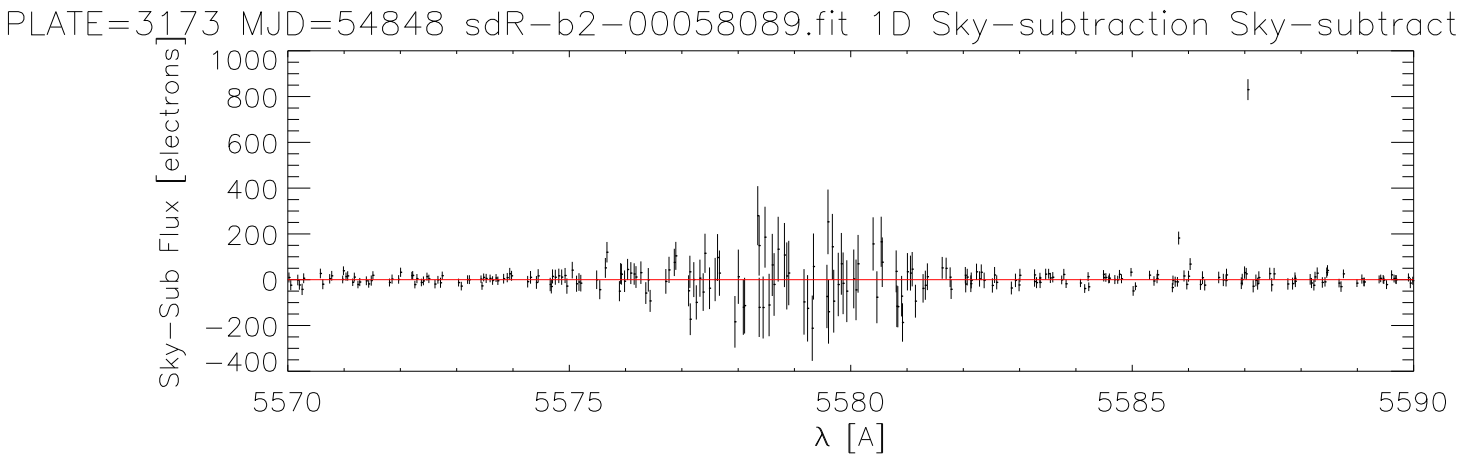

4046.5600
nfib1 16
nfib2 16
stdev 0.063
extra −0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.025
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

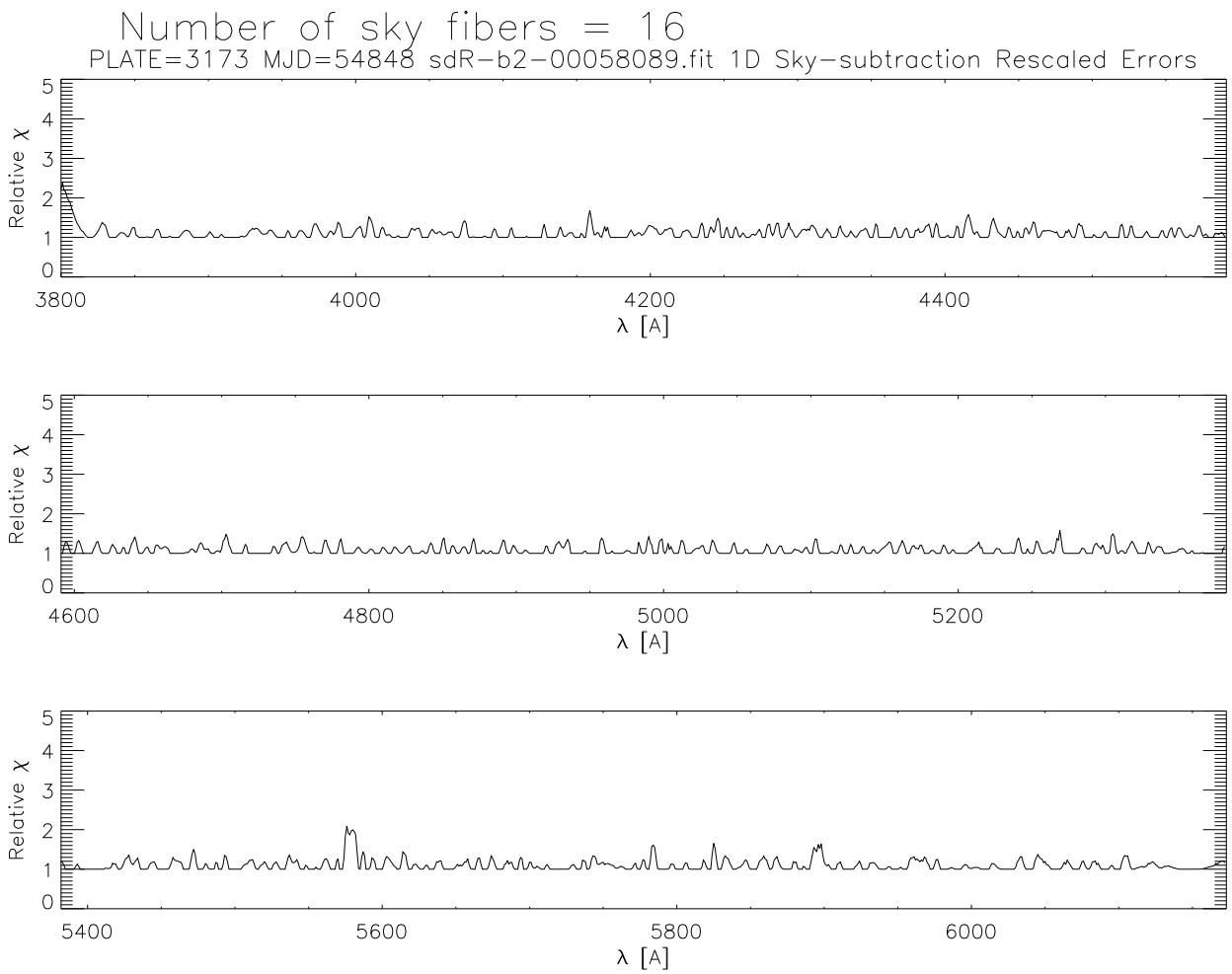

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

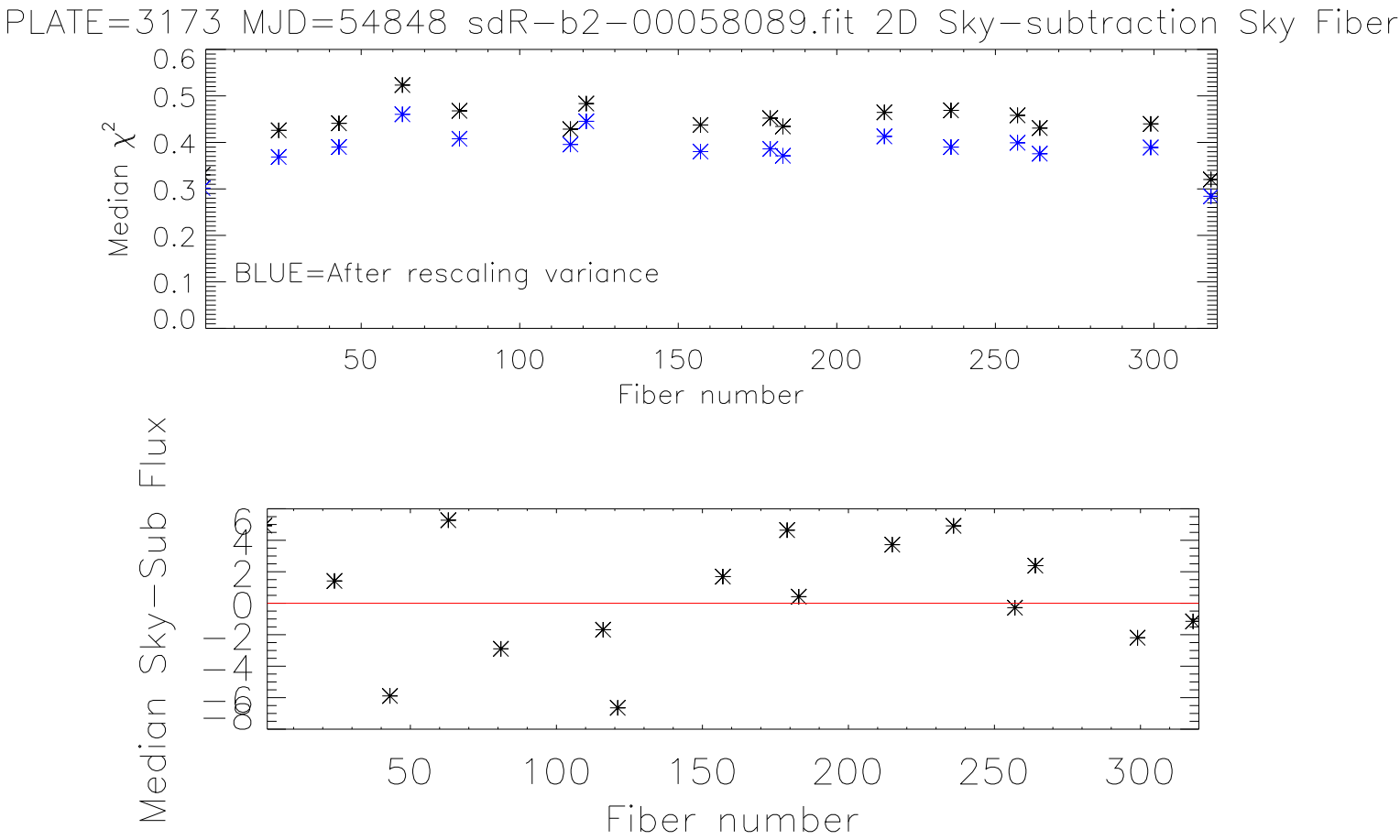

PLATE=3173 MJD=54848 Smooth superflat for sdR-b2-00058089.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

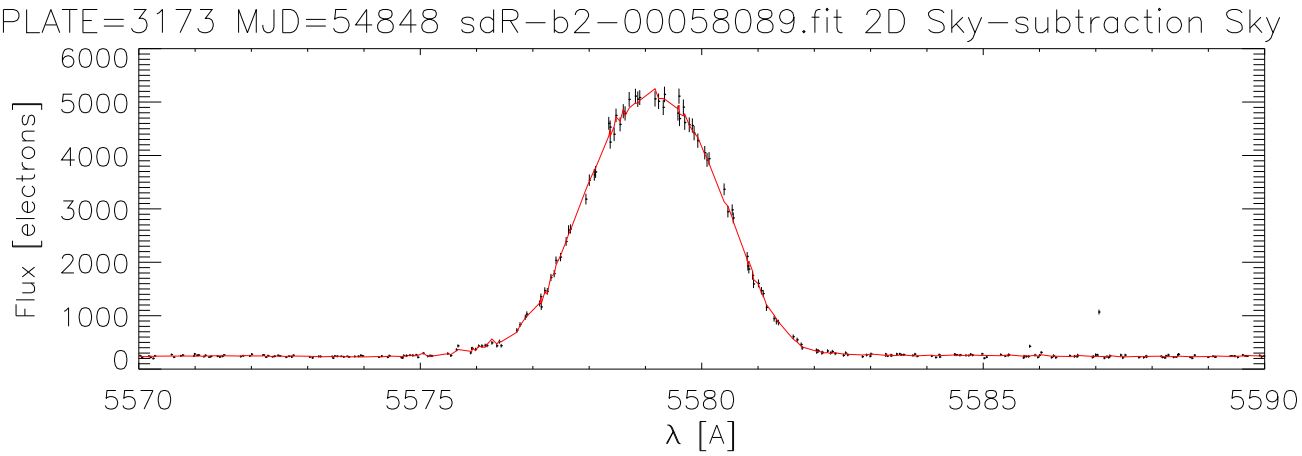

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

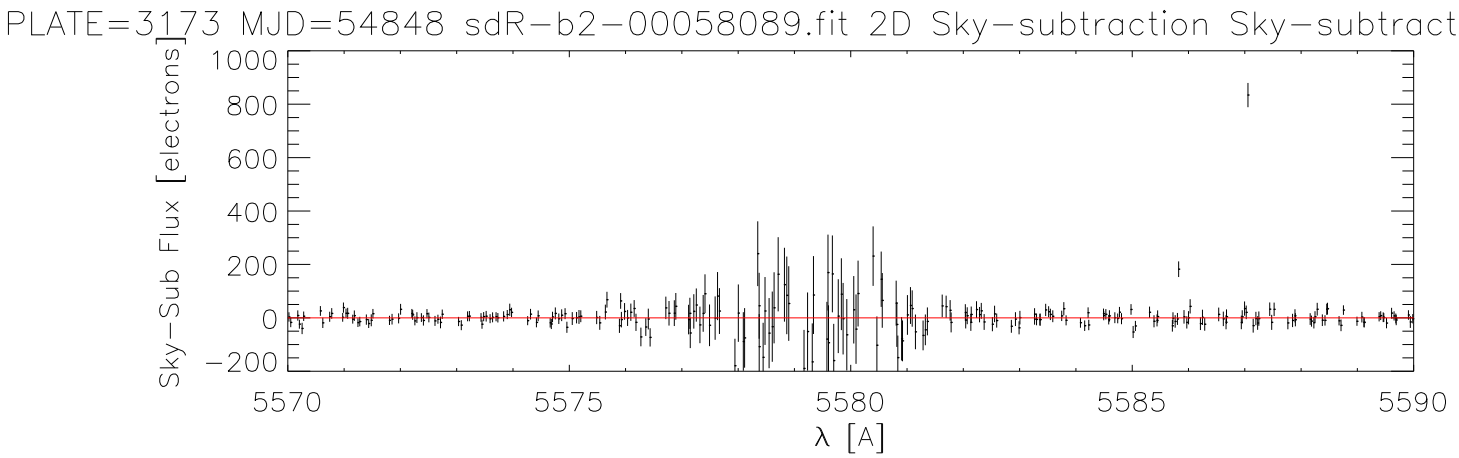

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

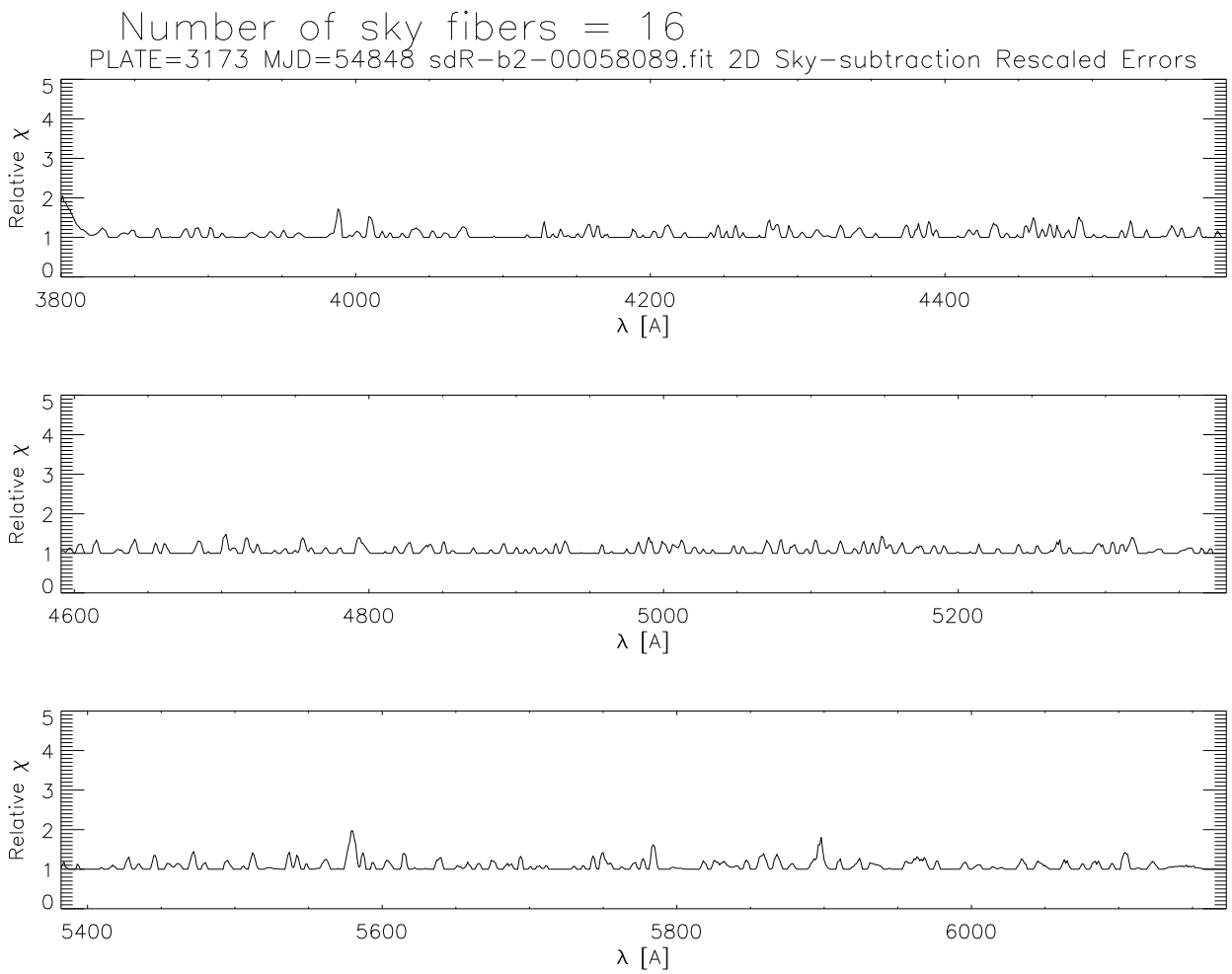

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

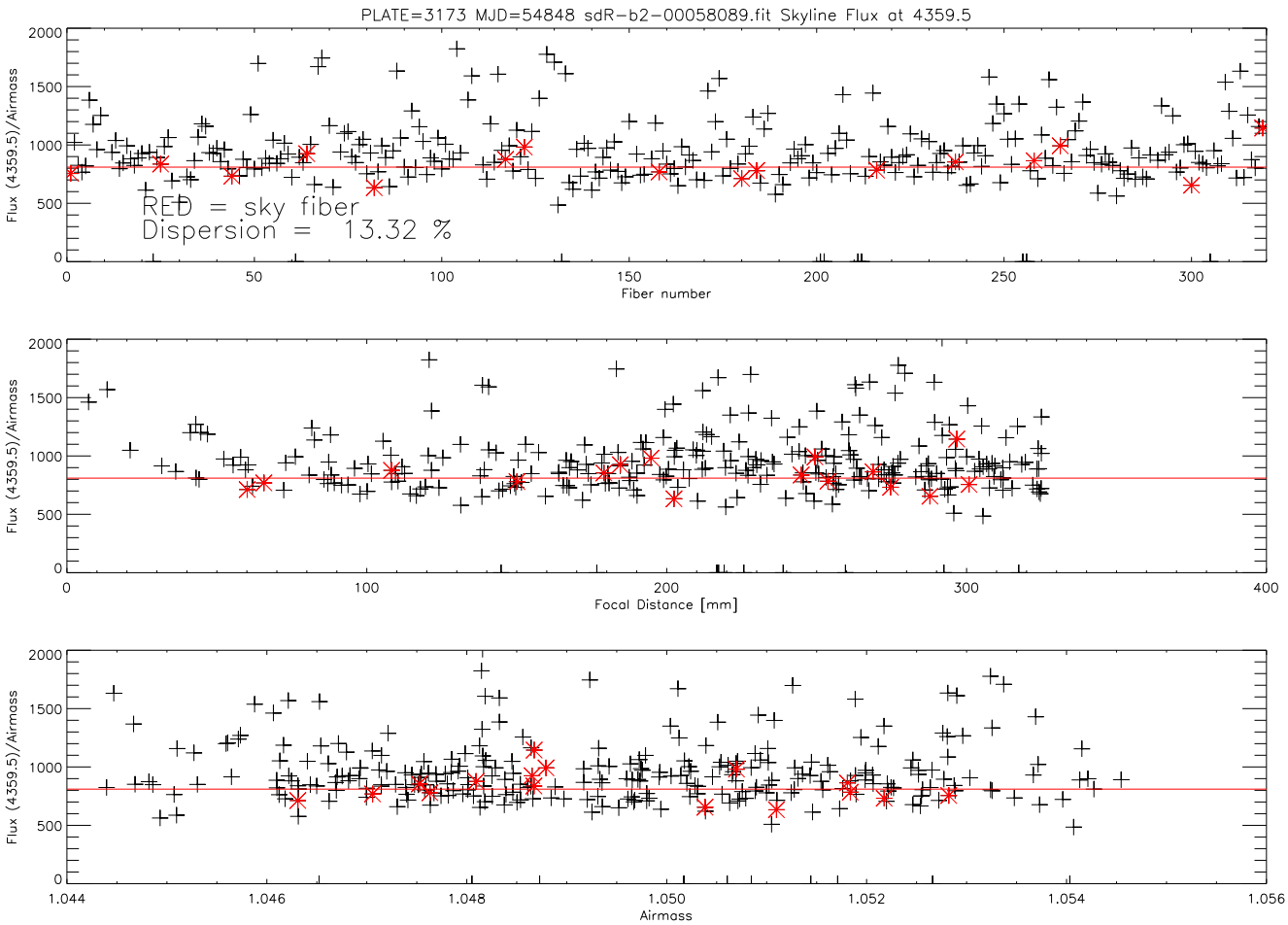

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058089.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

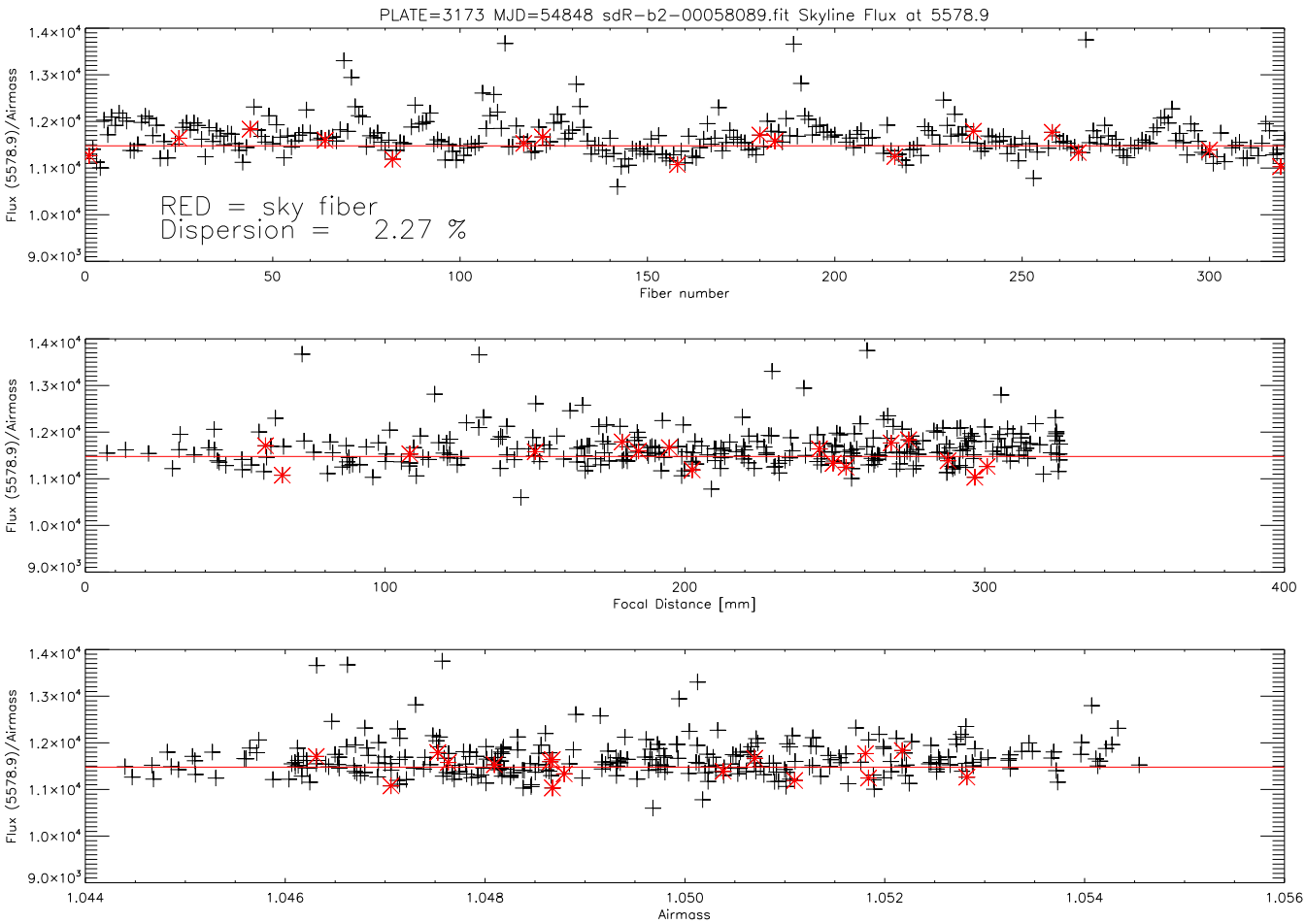

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

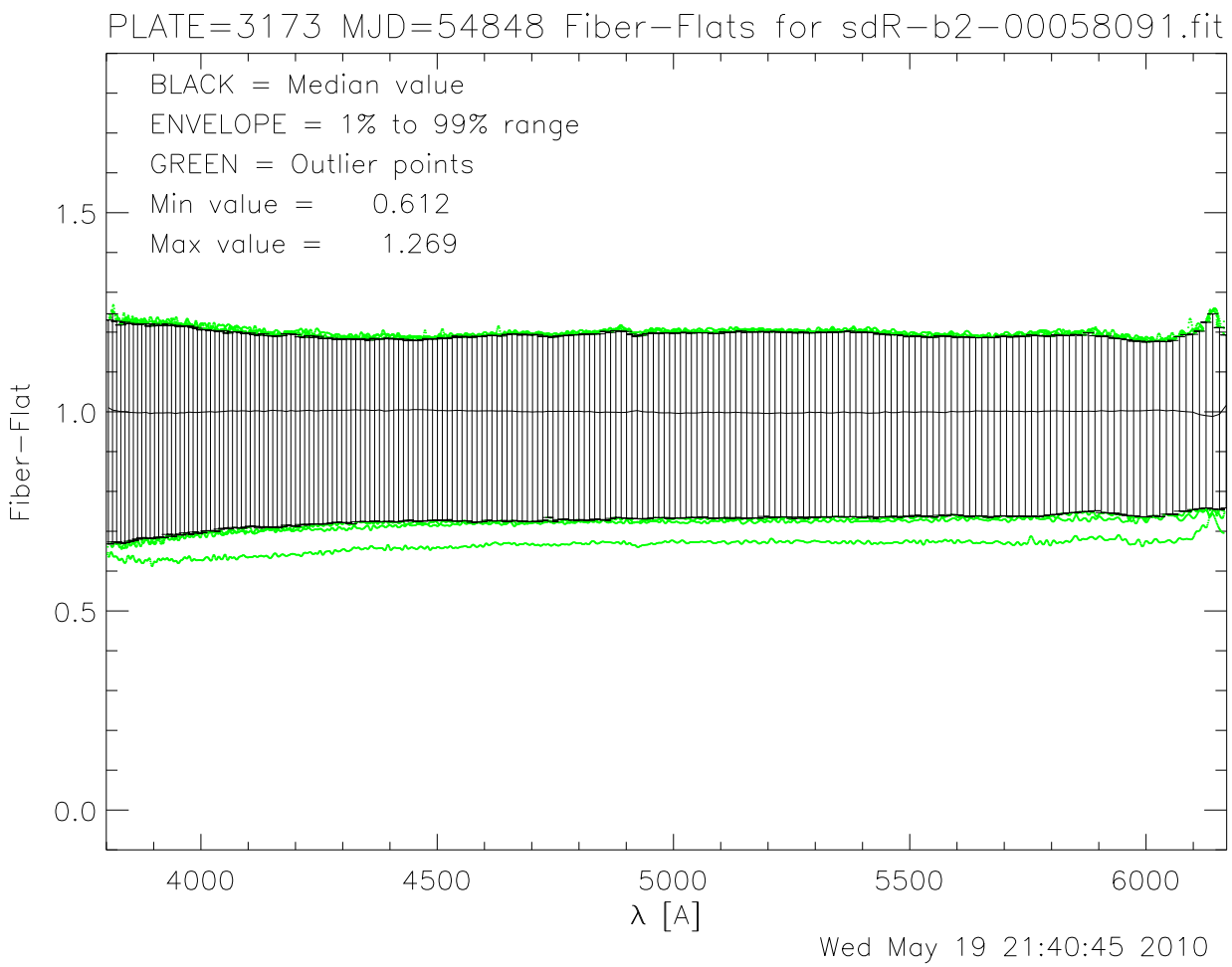

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

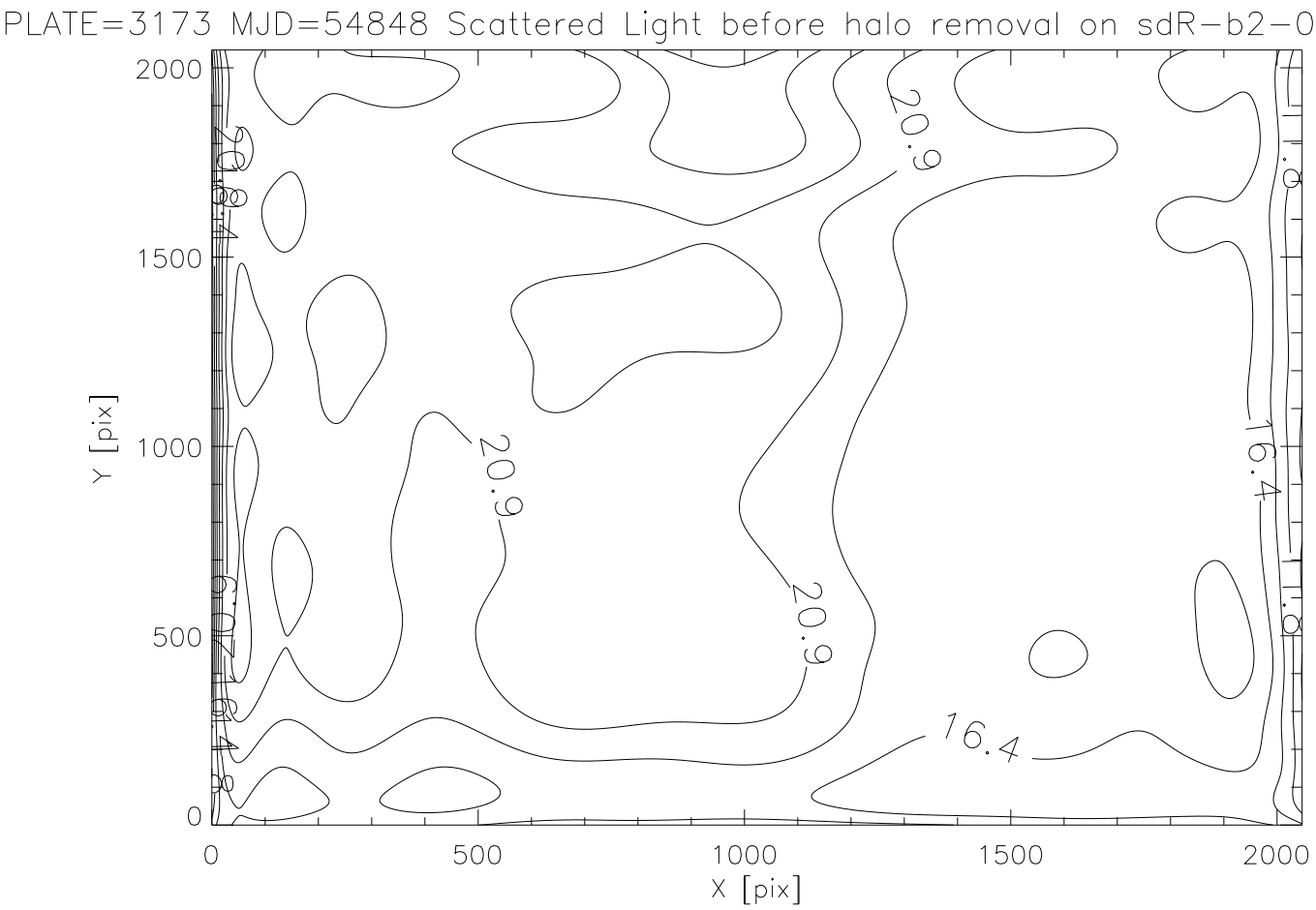

PLATE=3173 MJD=54848 sdR-b2-00058089.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

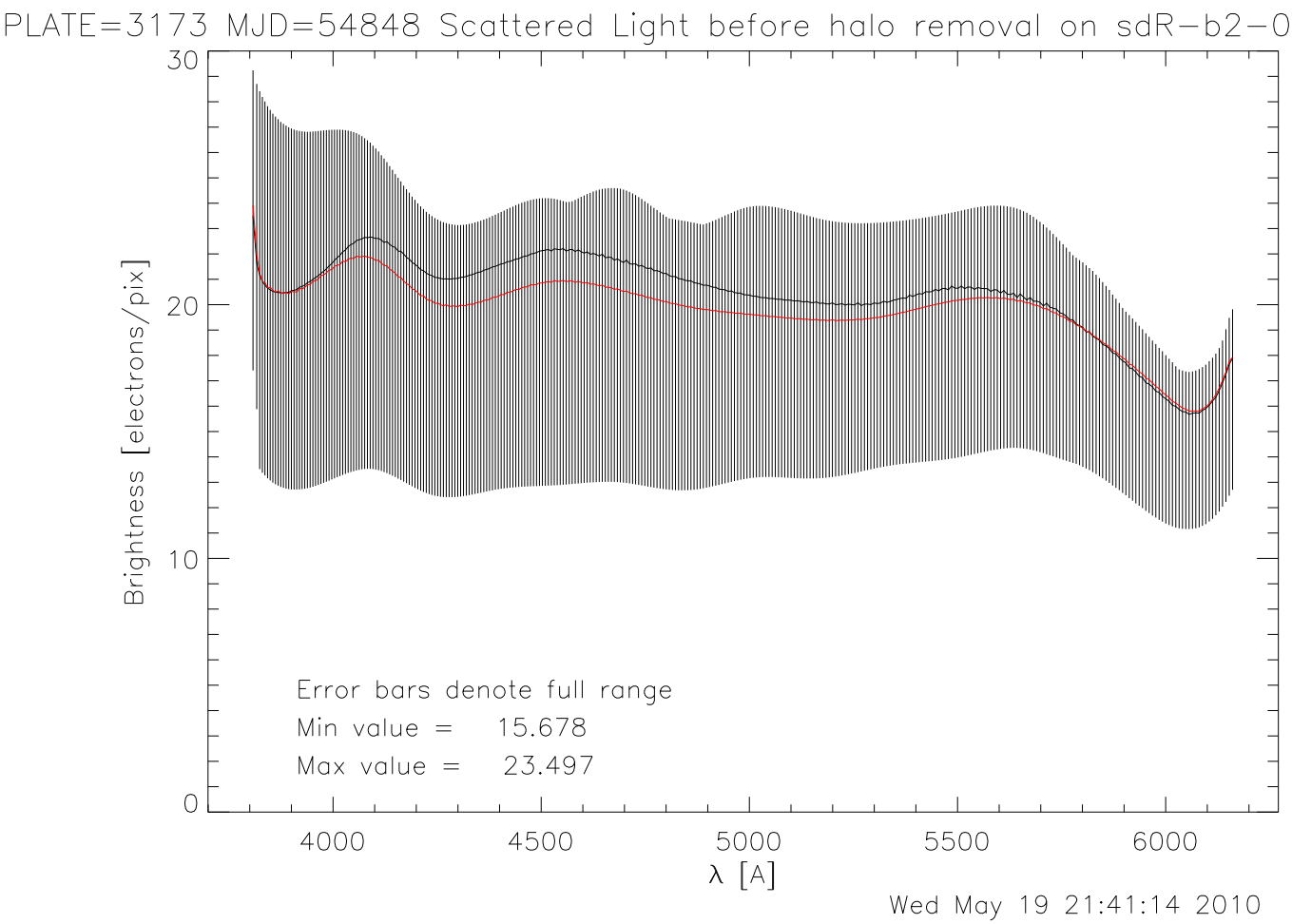

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058089.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

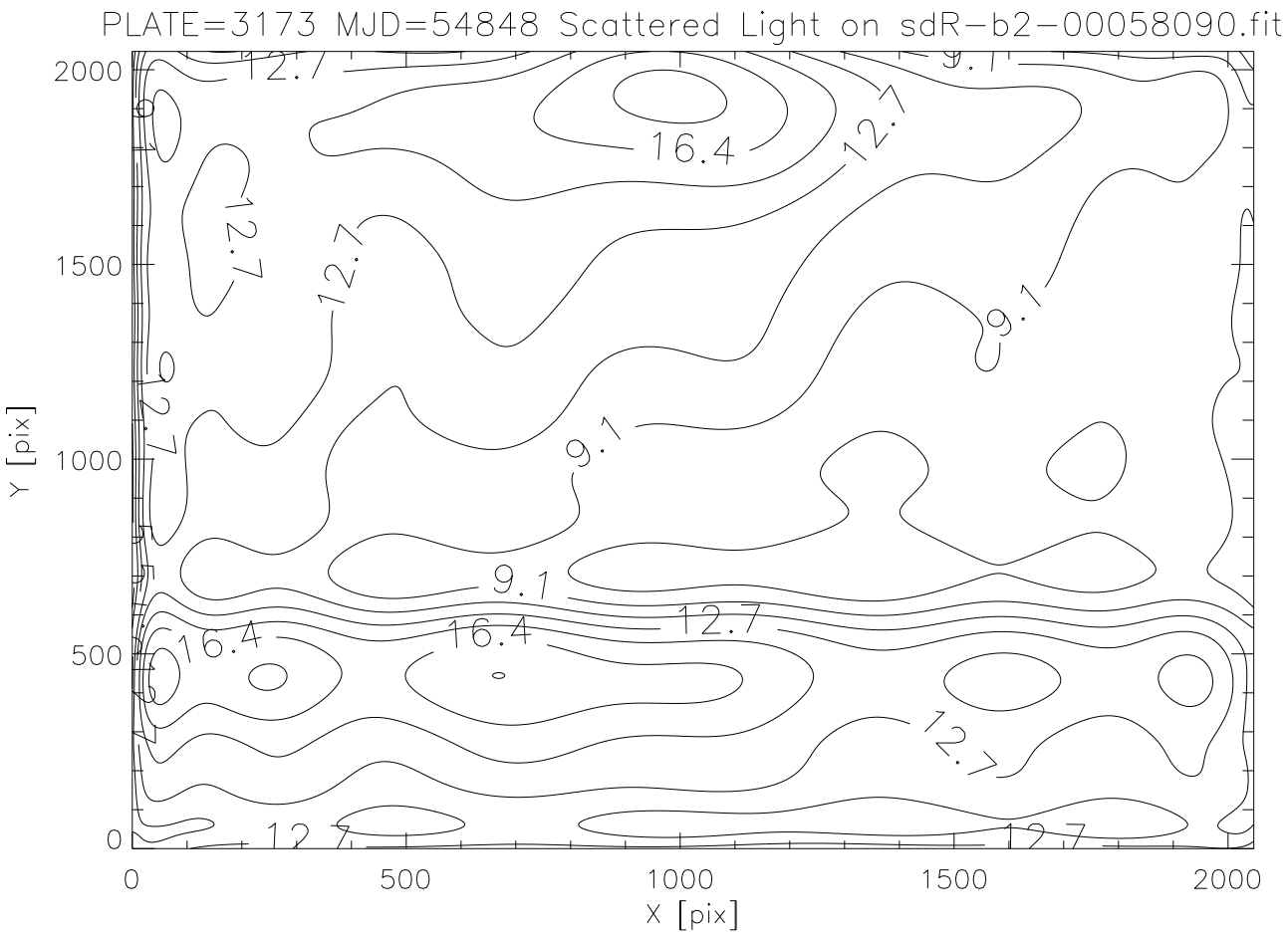

PLATE=3173 MJD=54848 sdR-b2-00058089.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 13.32 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

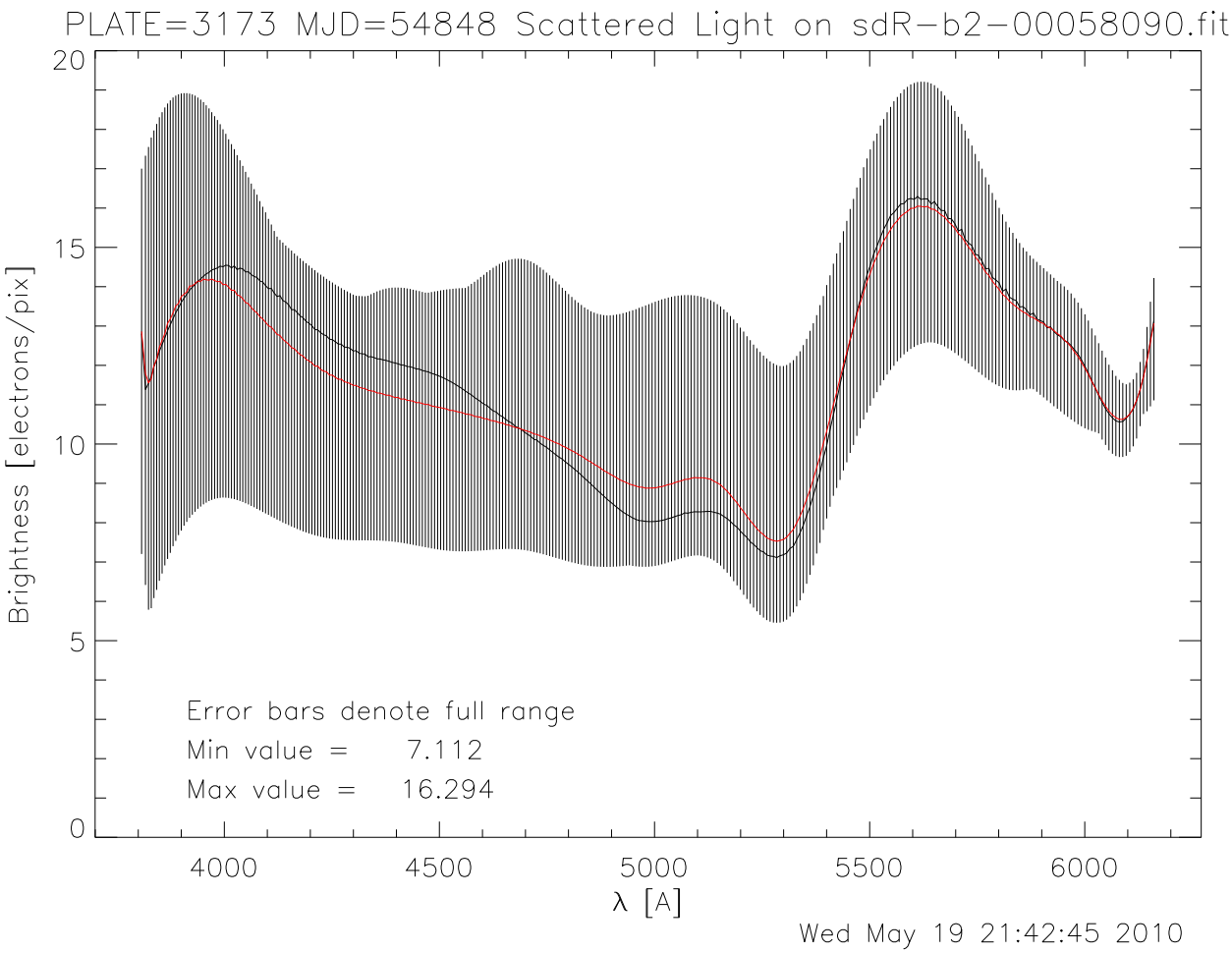

PLATE=3173 MJD=54848 sdR-b2-00058089.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.27 %
Fiber number
Focal Distance [mm]
Airmass

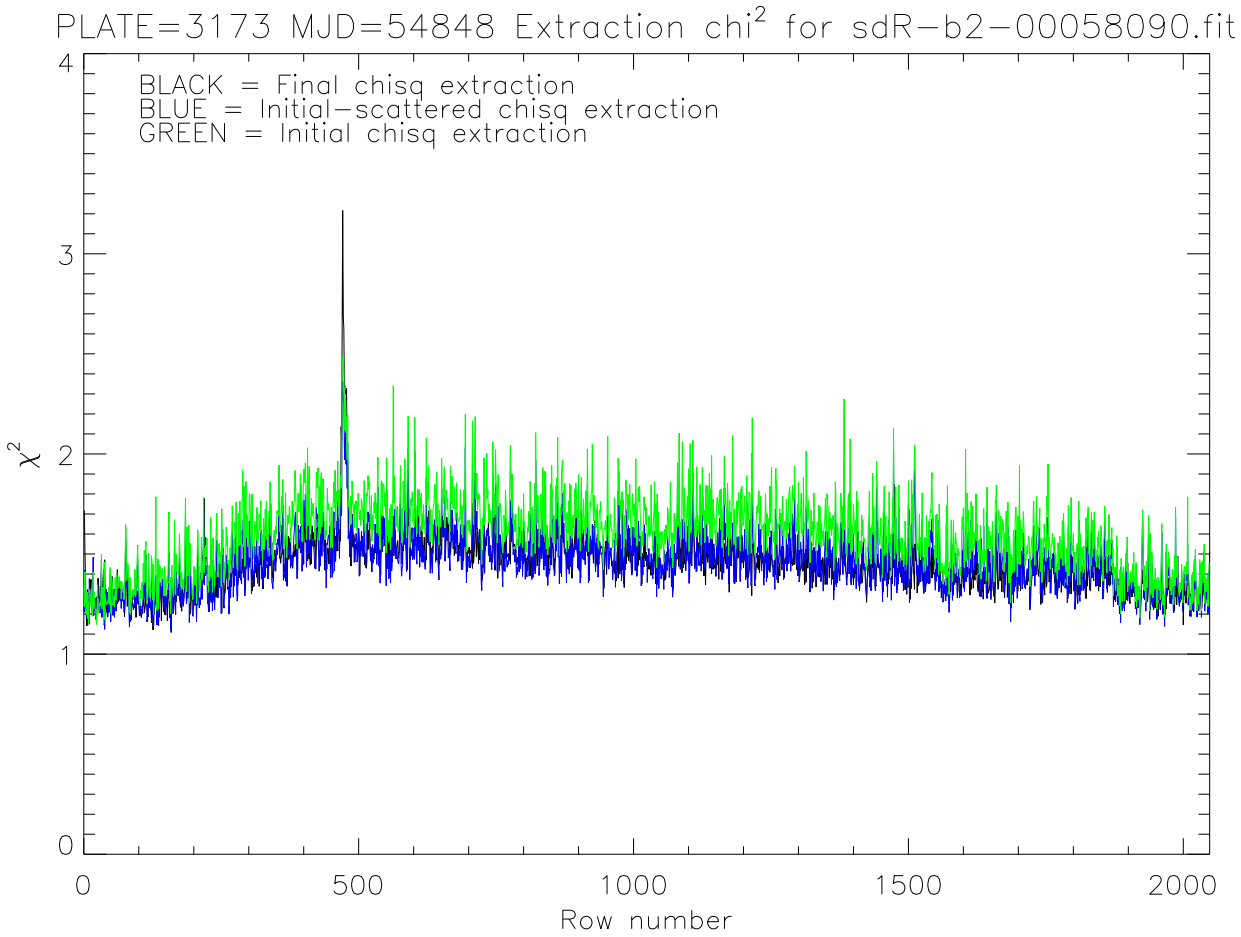

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b2-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.612
Max value = 1.269
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:40:45 2010

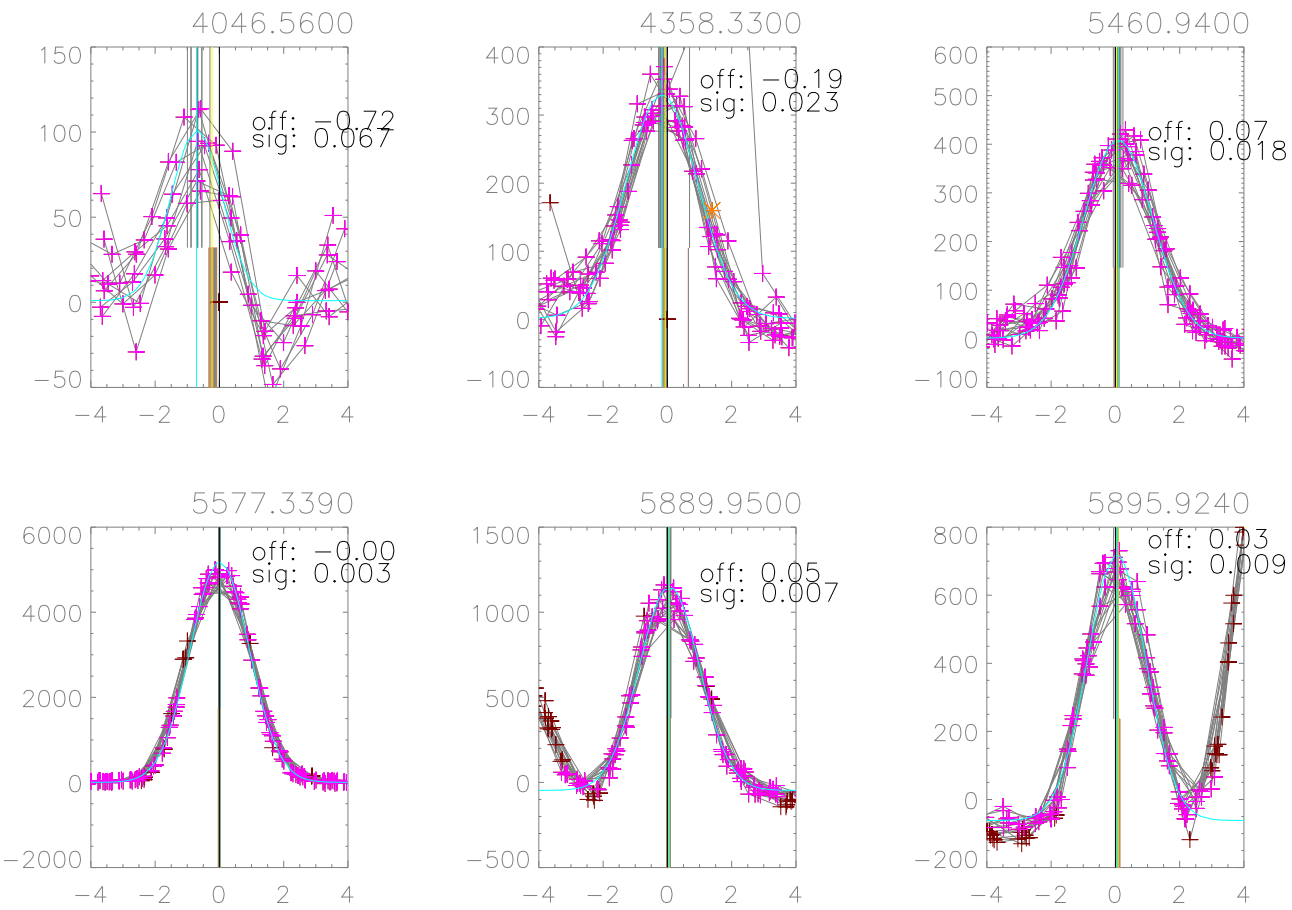

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR−b2−00058090.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
20.9
20.9
20.9
16.4
16.4
16.4

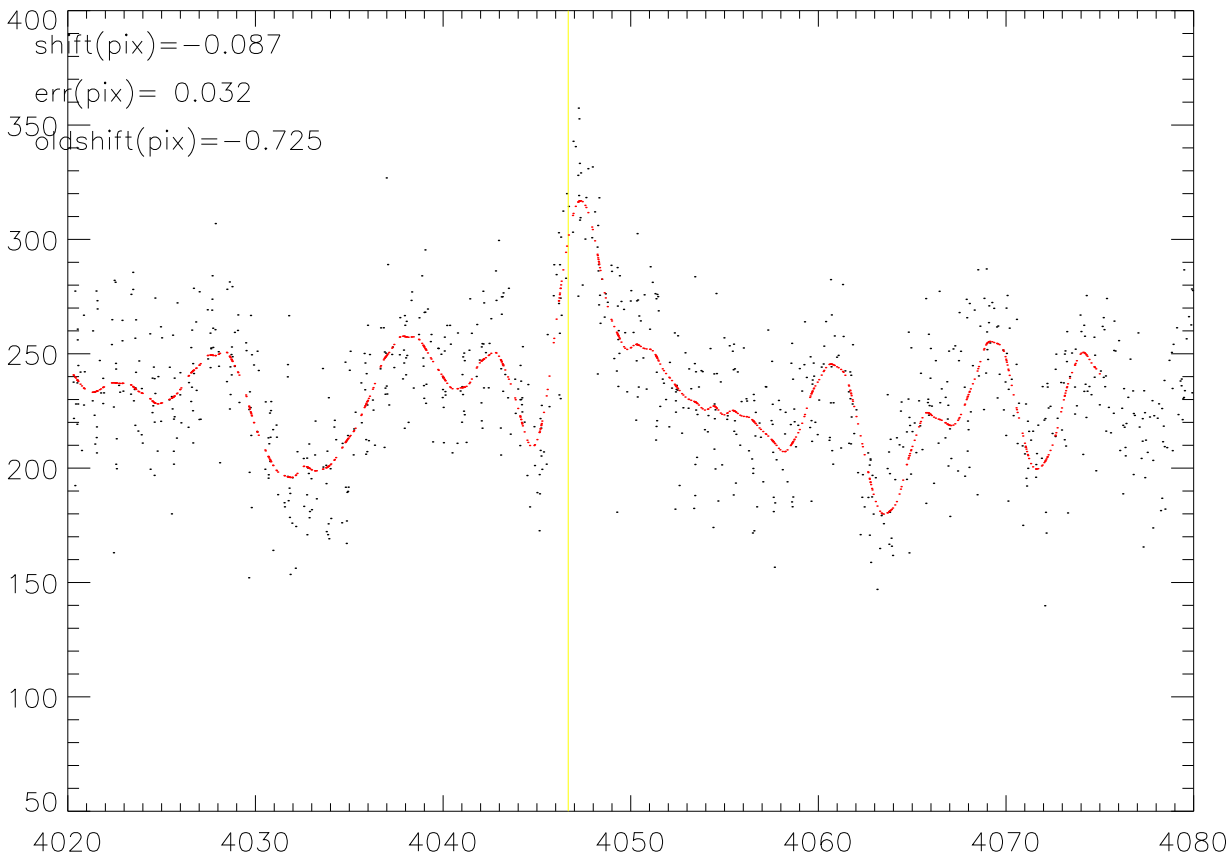

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058090.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 15.678
Max value = 23.497
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:41:14 2010

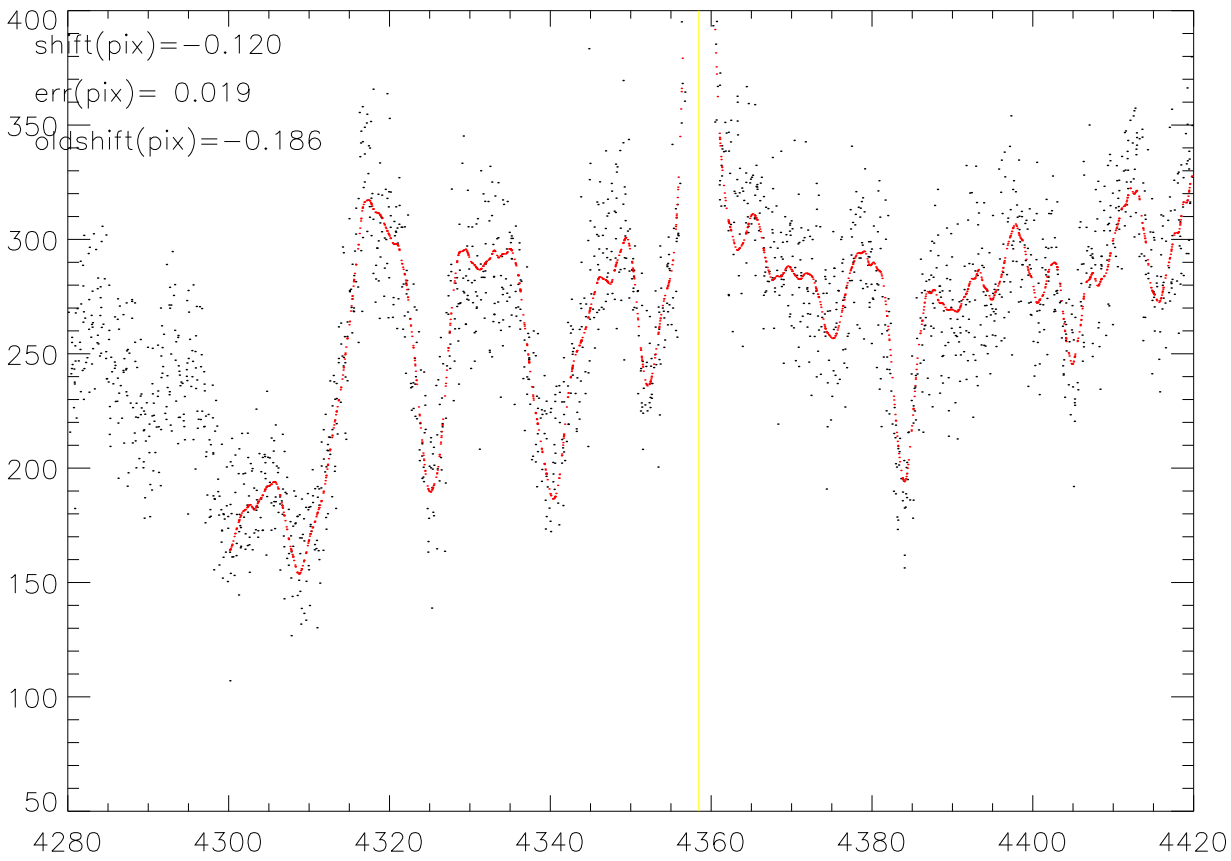

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058090.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
12.7
9.1

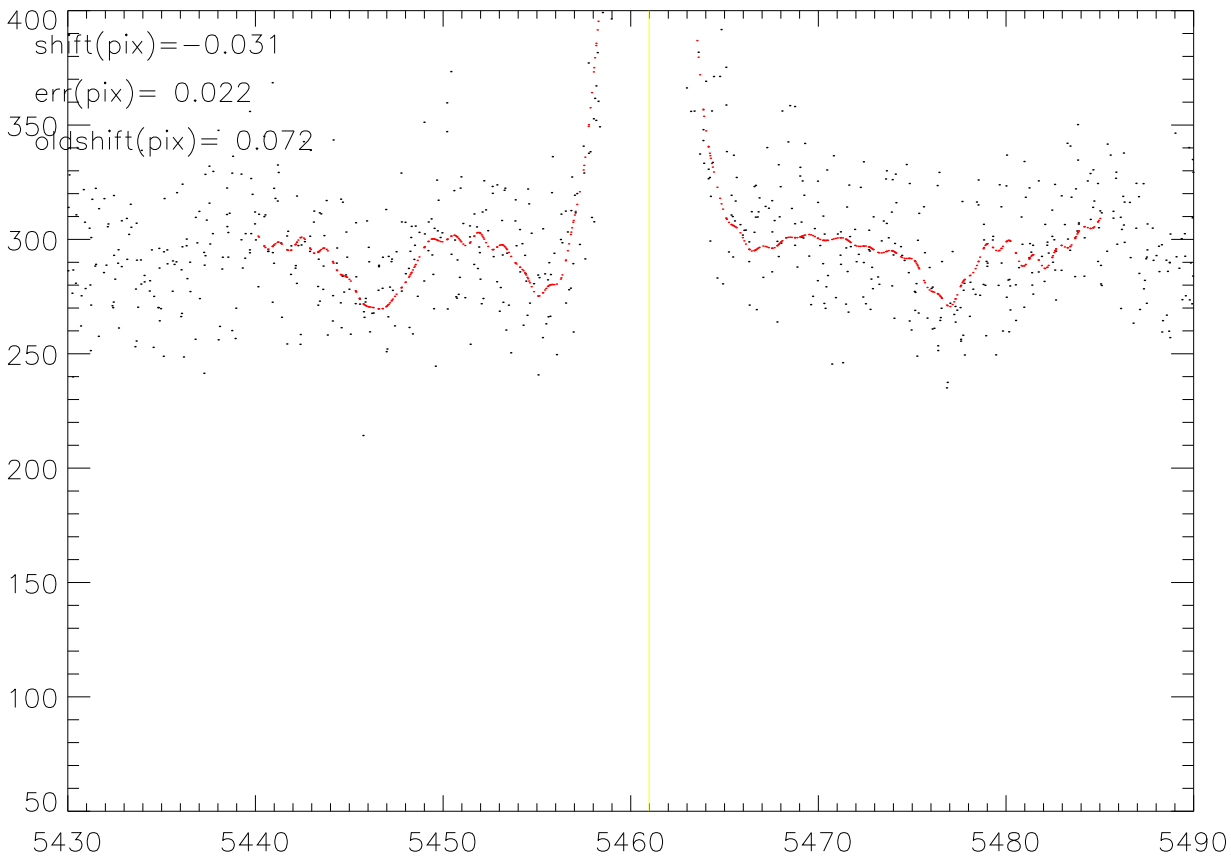

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058090.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.112
Max value = 16.294
Wed May 19 21:42:45 2010

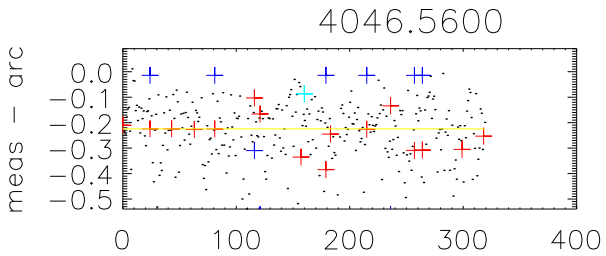

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b2-00058090.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

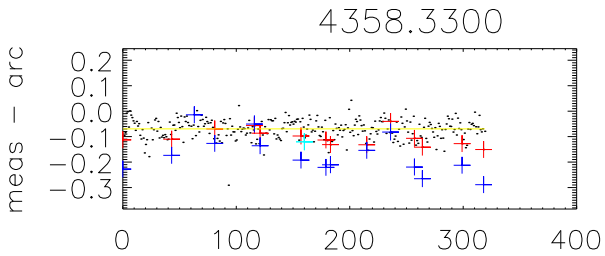

4046.5600
off: −0.72
sig: 0.067
4358.3300
off: −0.19
sig: 0.023
5460.9400
off: 0.07
sig: 0.018
5577.3390
off: −0.00
sig: 0.003
5889.9500
off: 0.05
sig: 0.007
5895.9240
off: 0.03
sig: 0.009

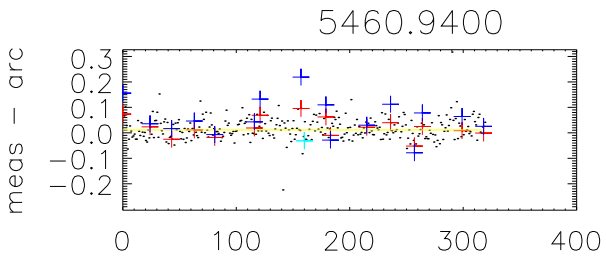

shift(pix)=−0.087
err(pix)= 0.032
oldshift(pix)=−0.725
400
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

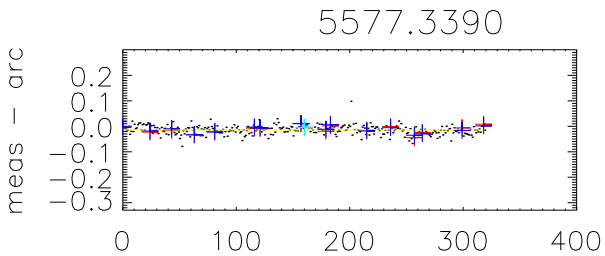

shift(pix)=−0.120
err(pix)= 0.019
oldshift(pix)=−0.186
400
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

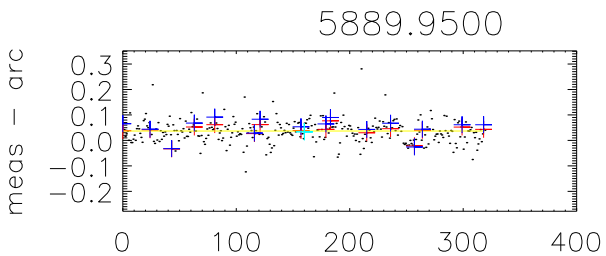

shift(pix)=−0.031
err(pix)= 0.022
oldshift(pix)= 0.072
400
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

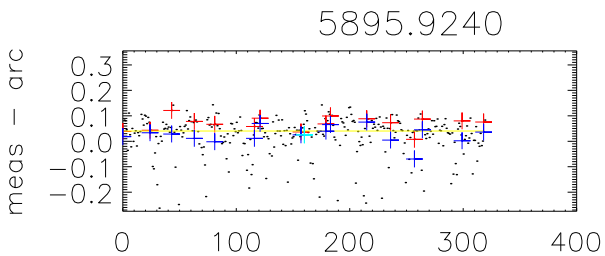

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

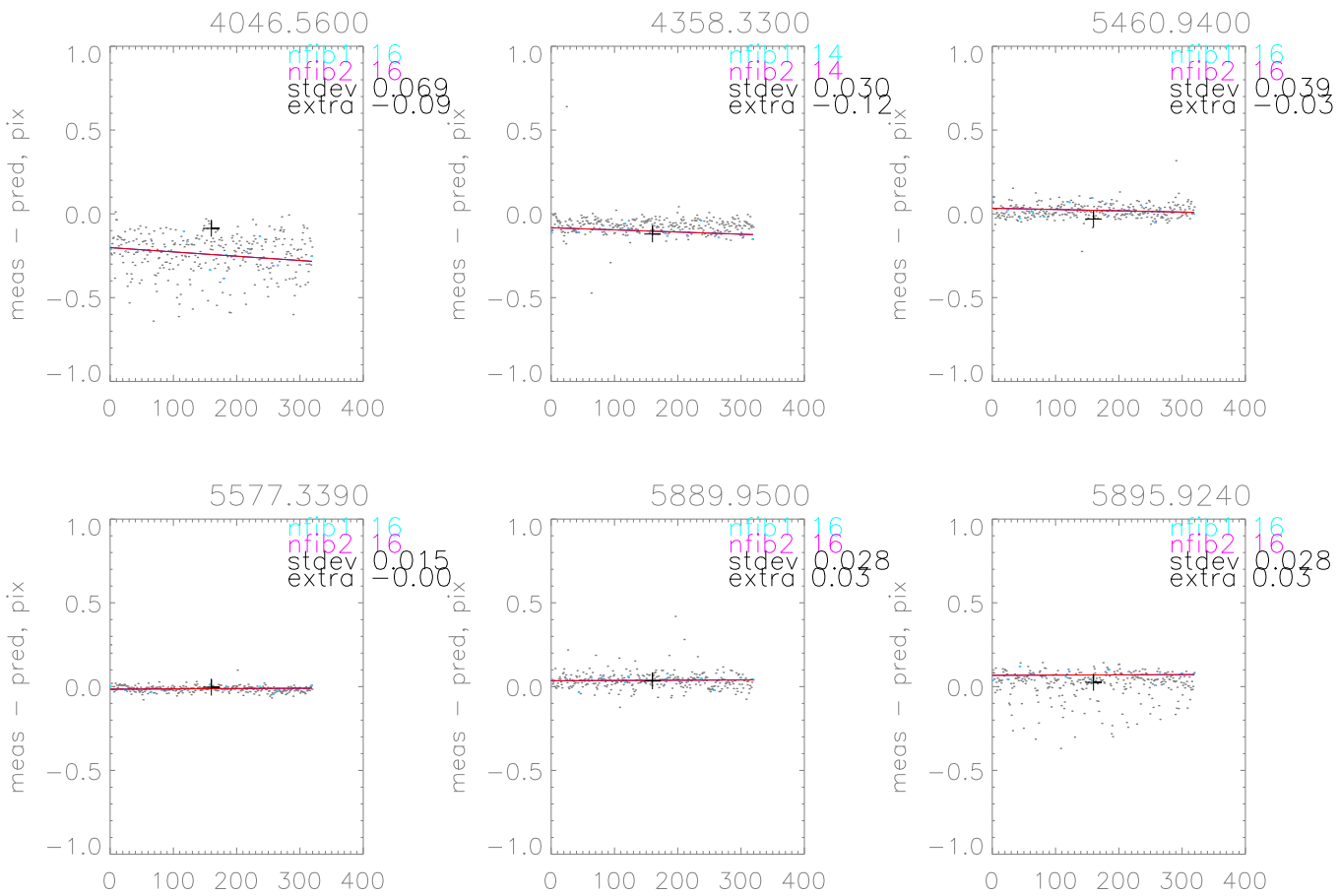

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

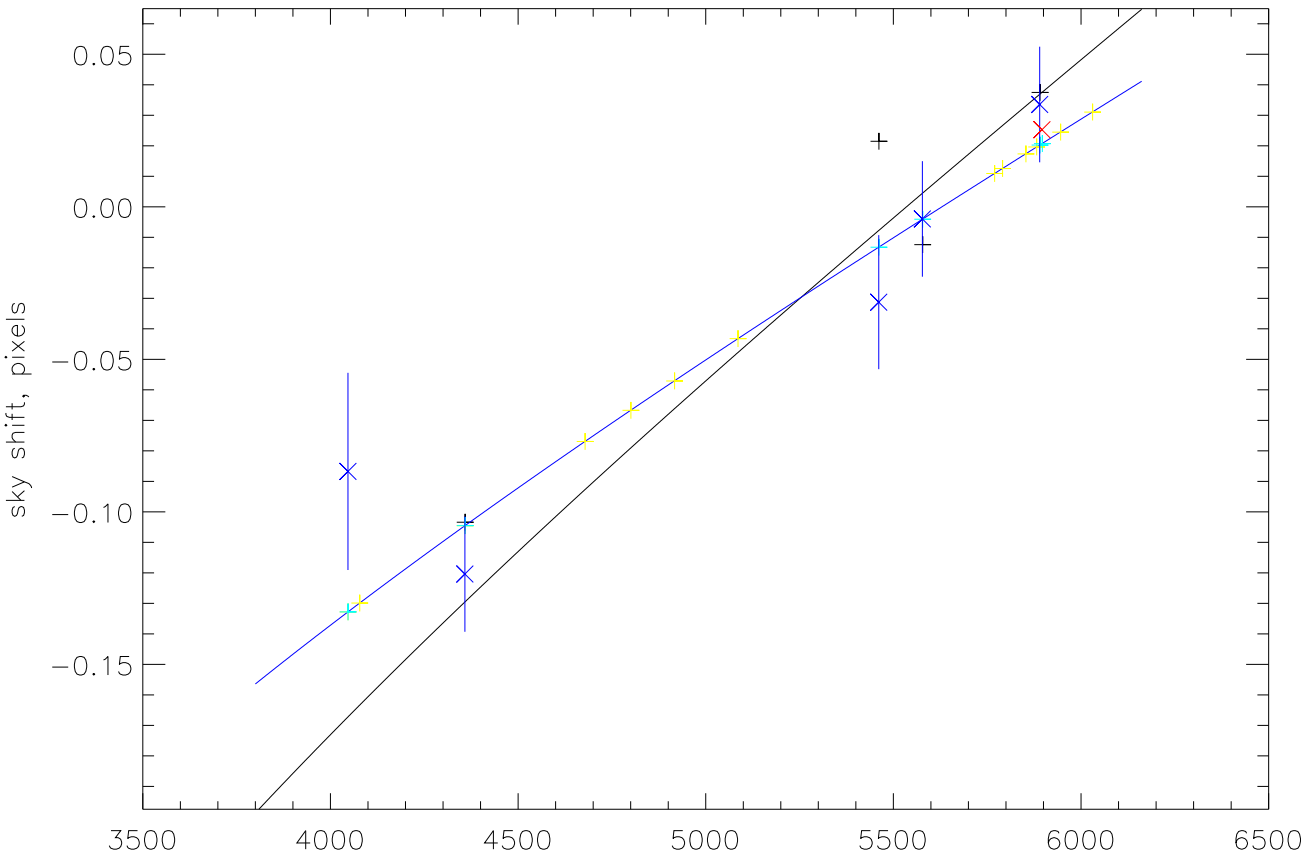

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

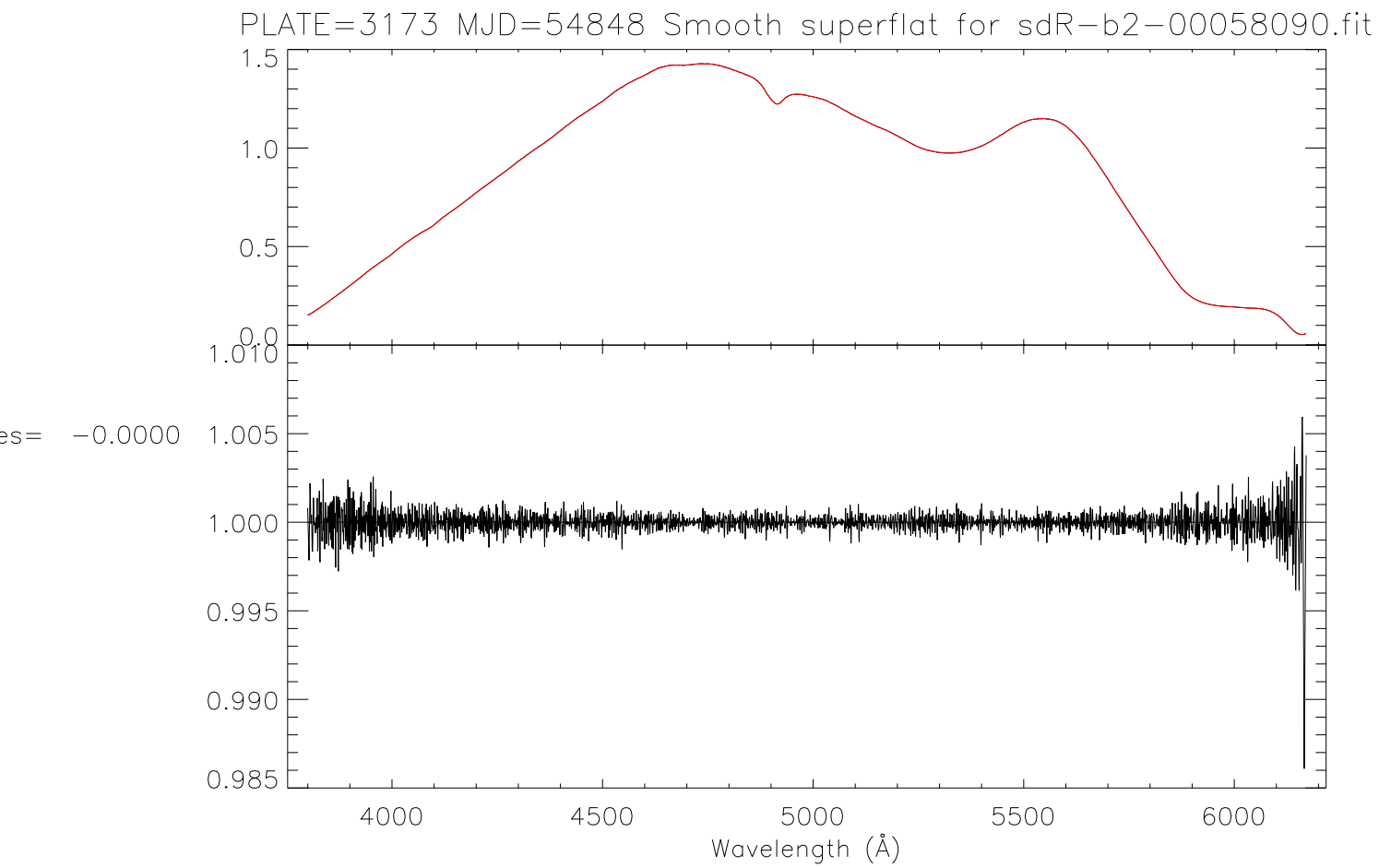

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

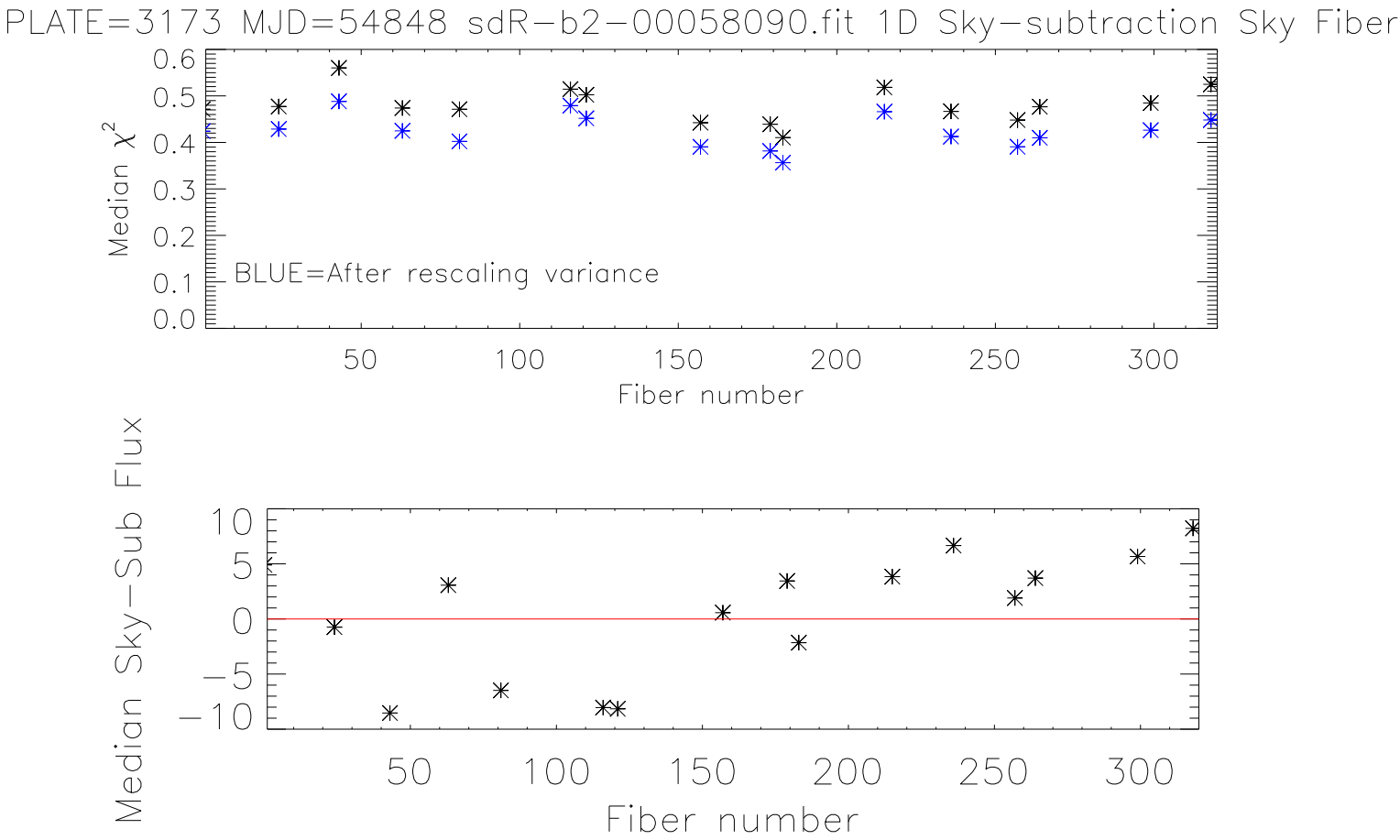

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

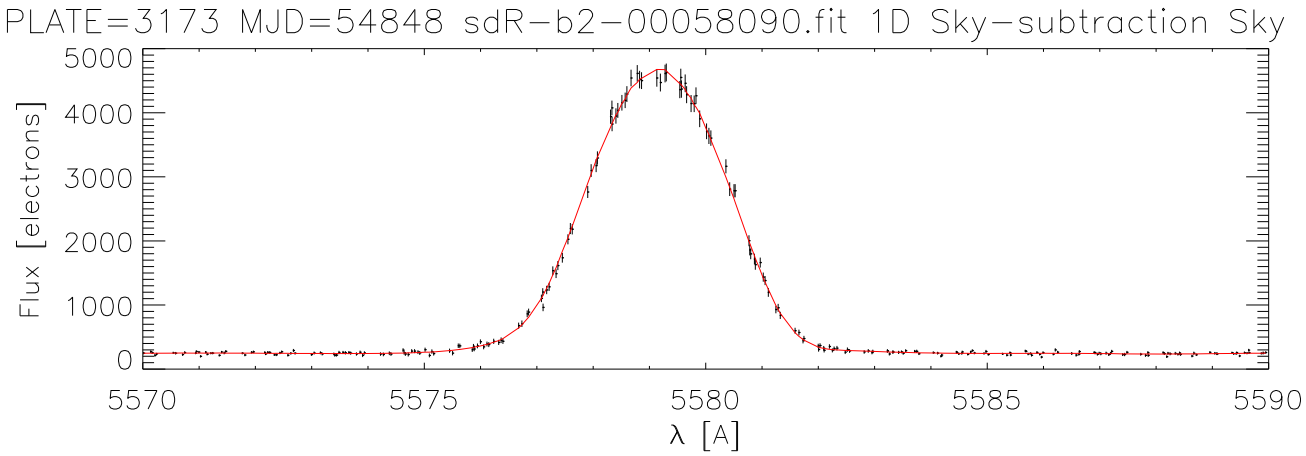

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

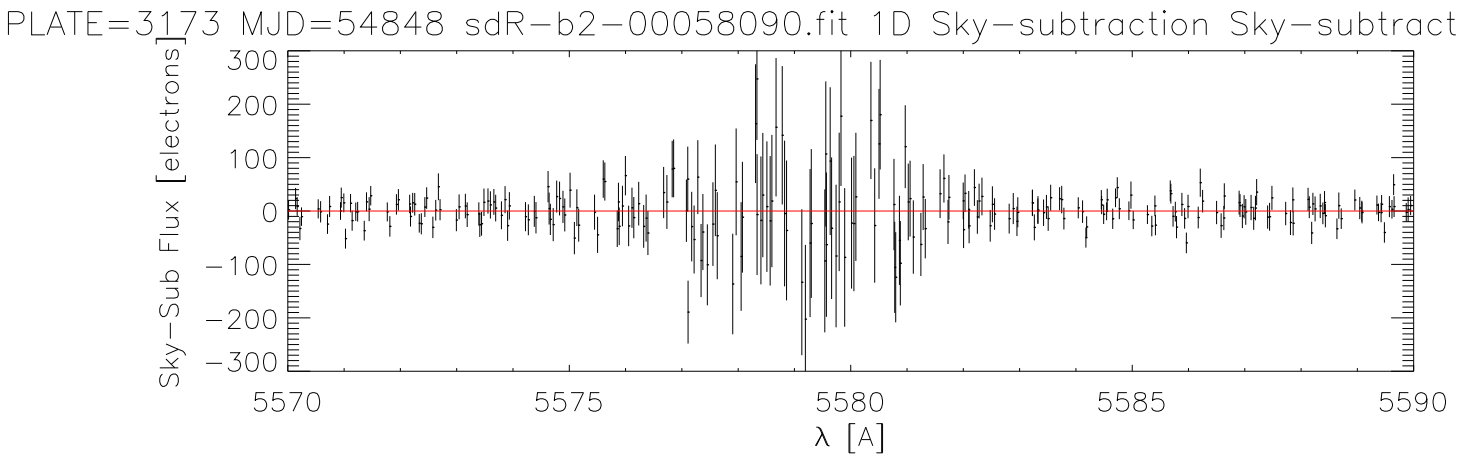

4046.5600
nfib1 16
nfib2 16
stdev 0.069
extra −0.09
4358.3300
nfib1 14
nfib2 14
stdev 0.030
extra −0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.00
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra 0.03
5895.9240
nfib1 16
nfib2 16
stdev 0.028
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

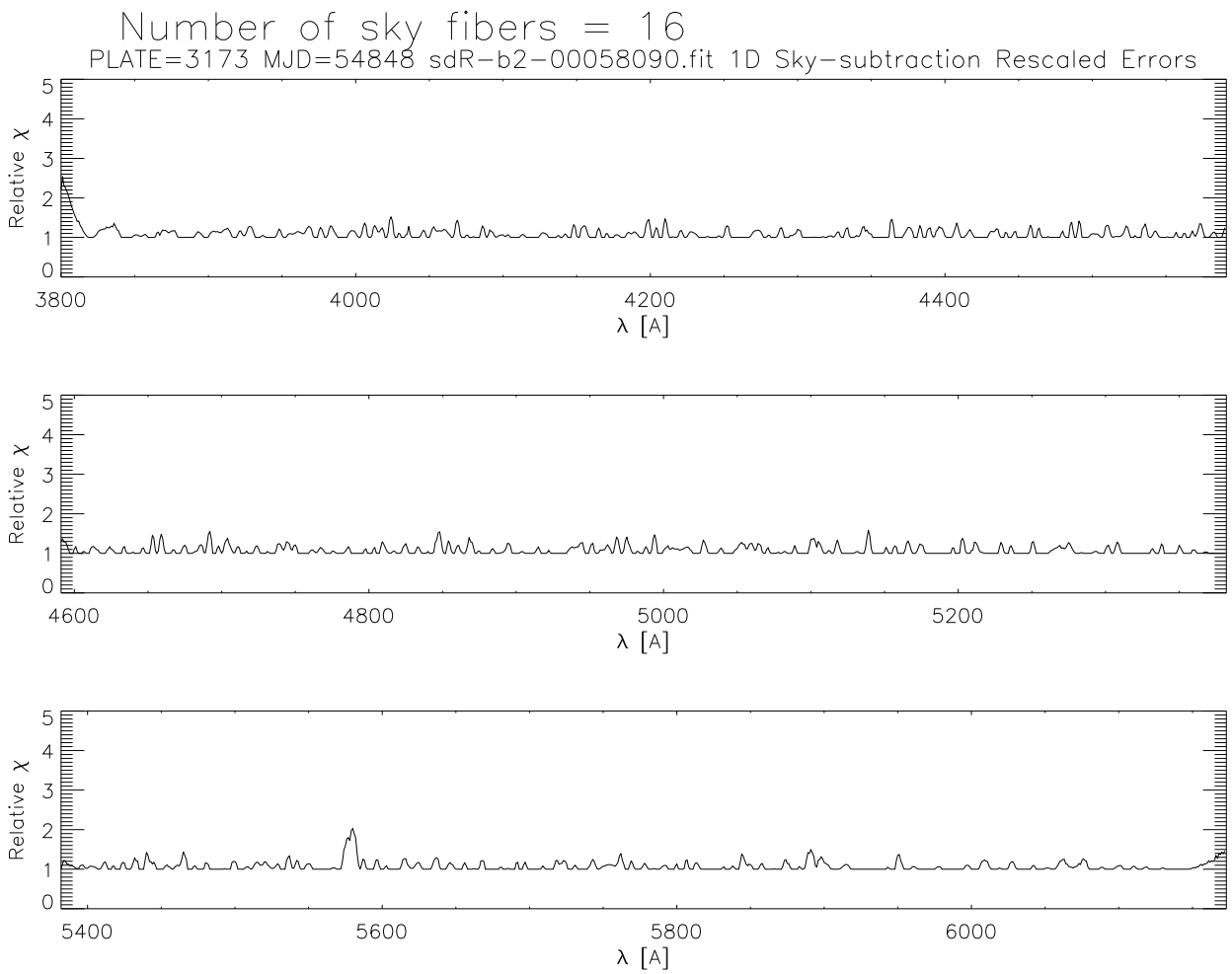

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

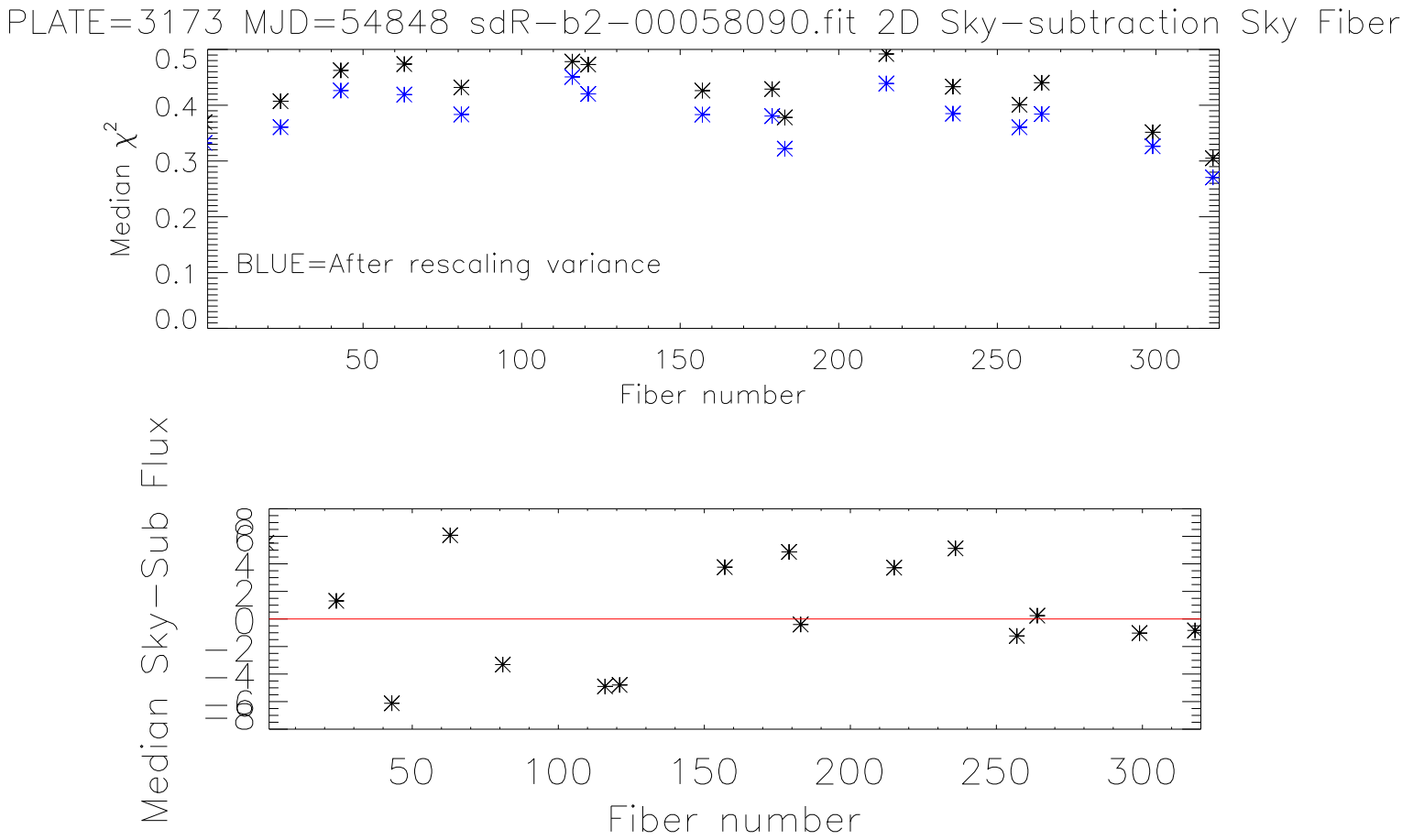

PLATE=3173 MJD=54848 Smooth superflat for sdR-b2-00058090.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

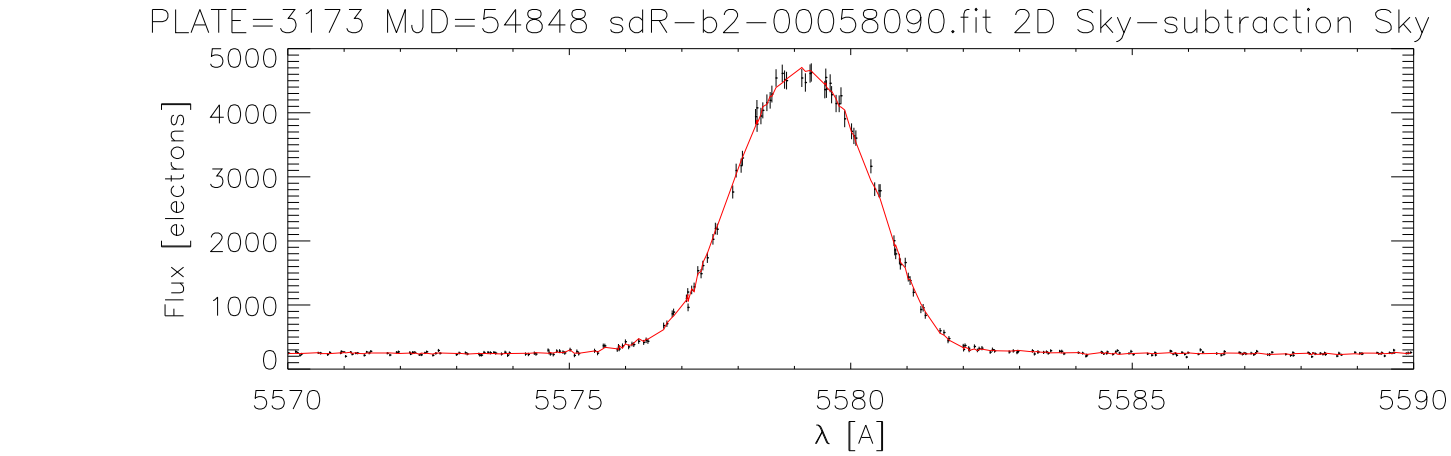

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

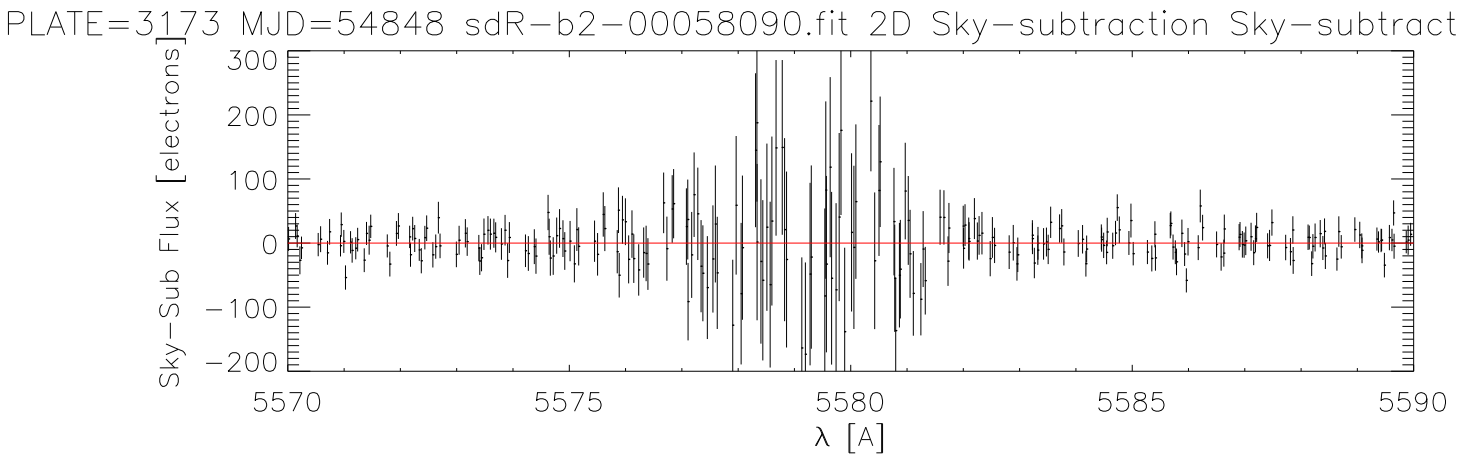

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

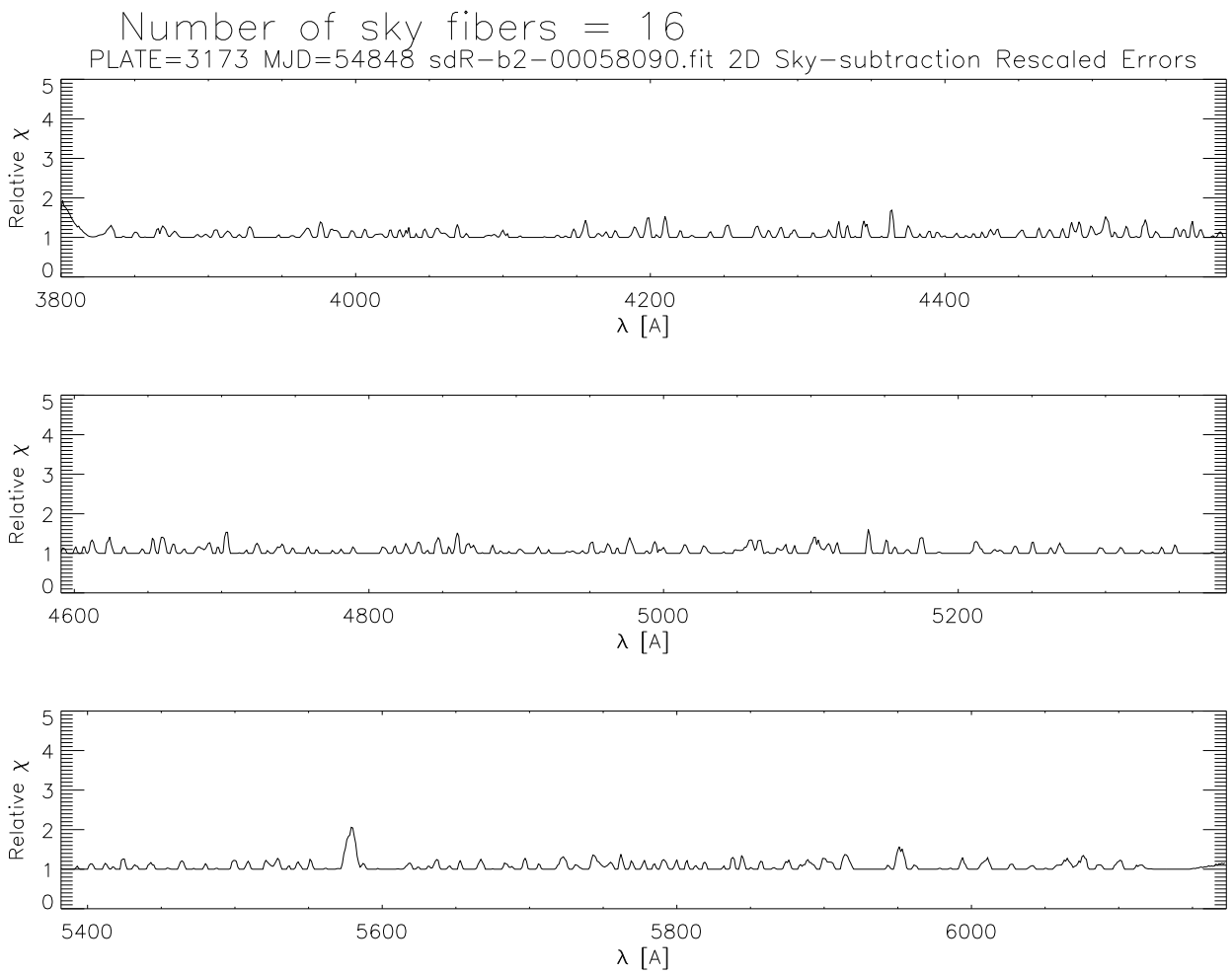

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

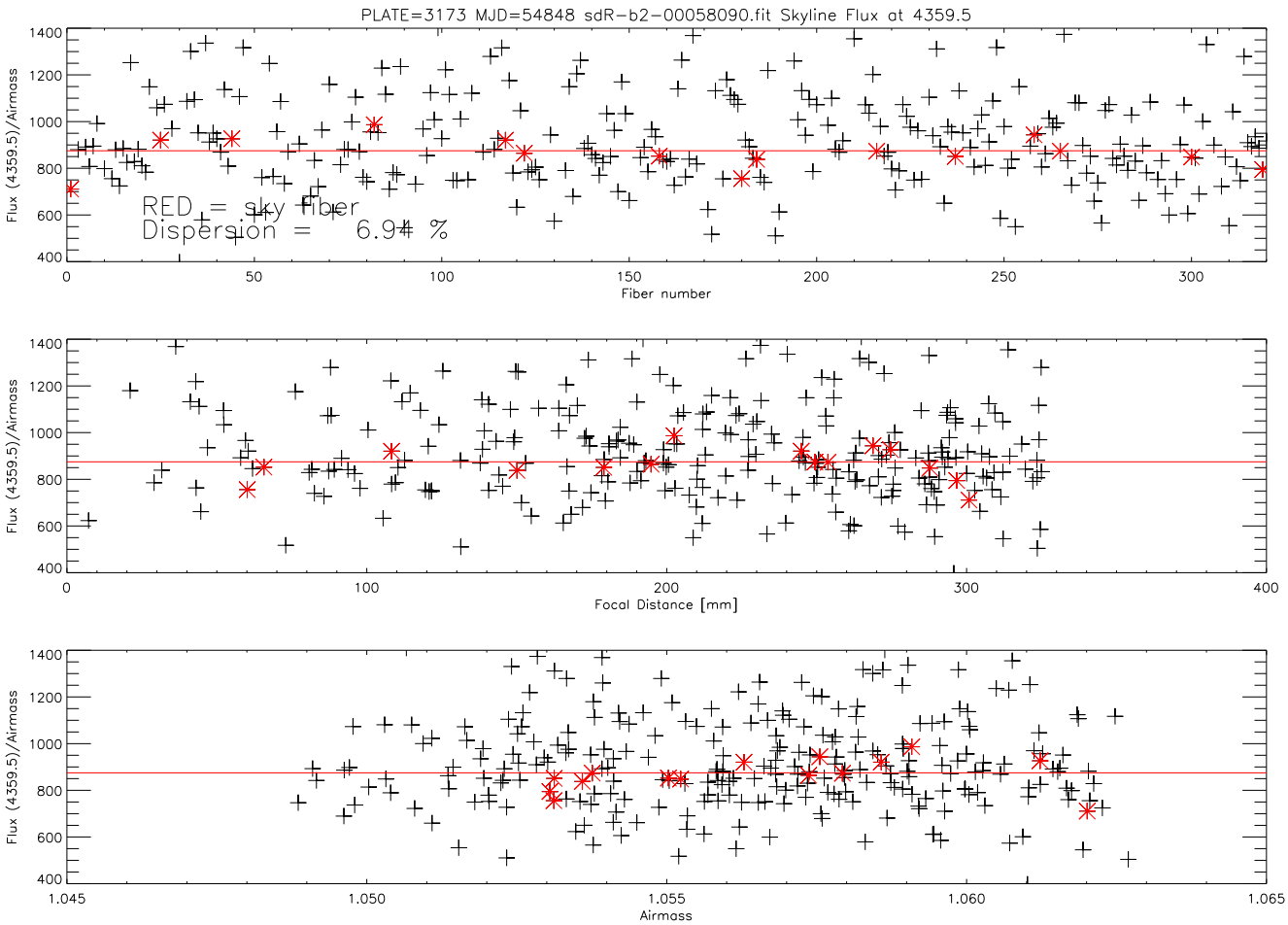

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058090.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

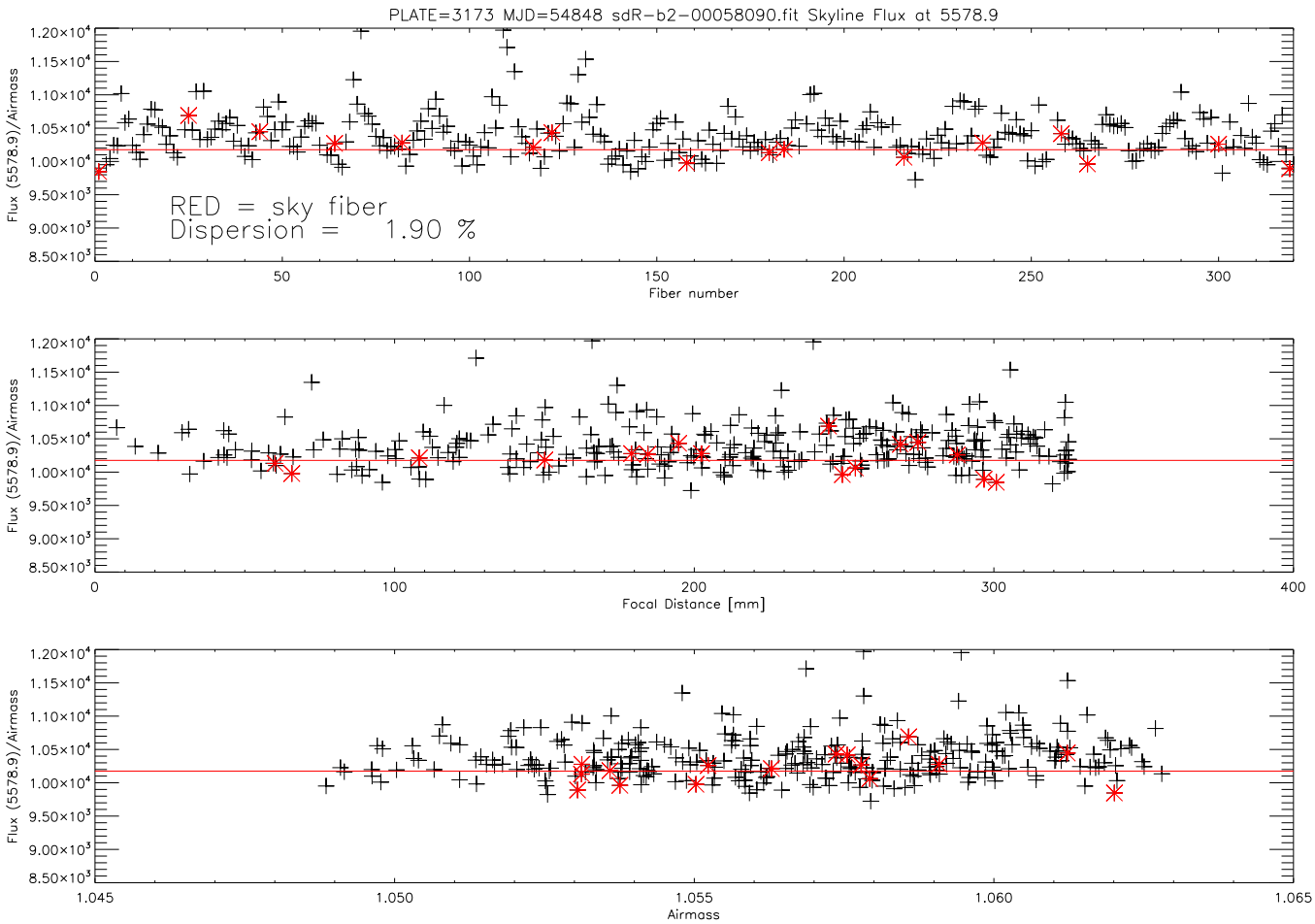

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

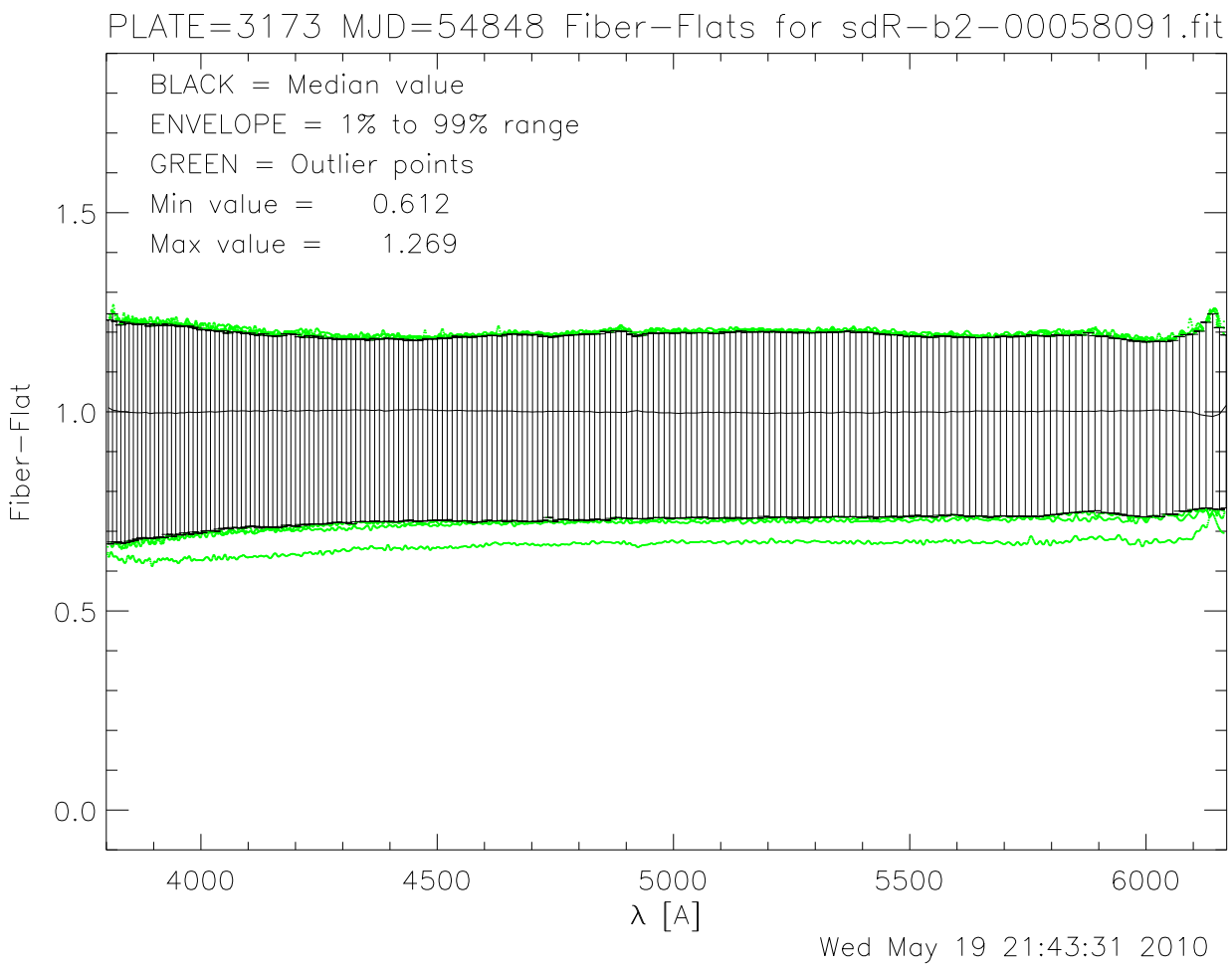

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

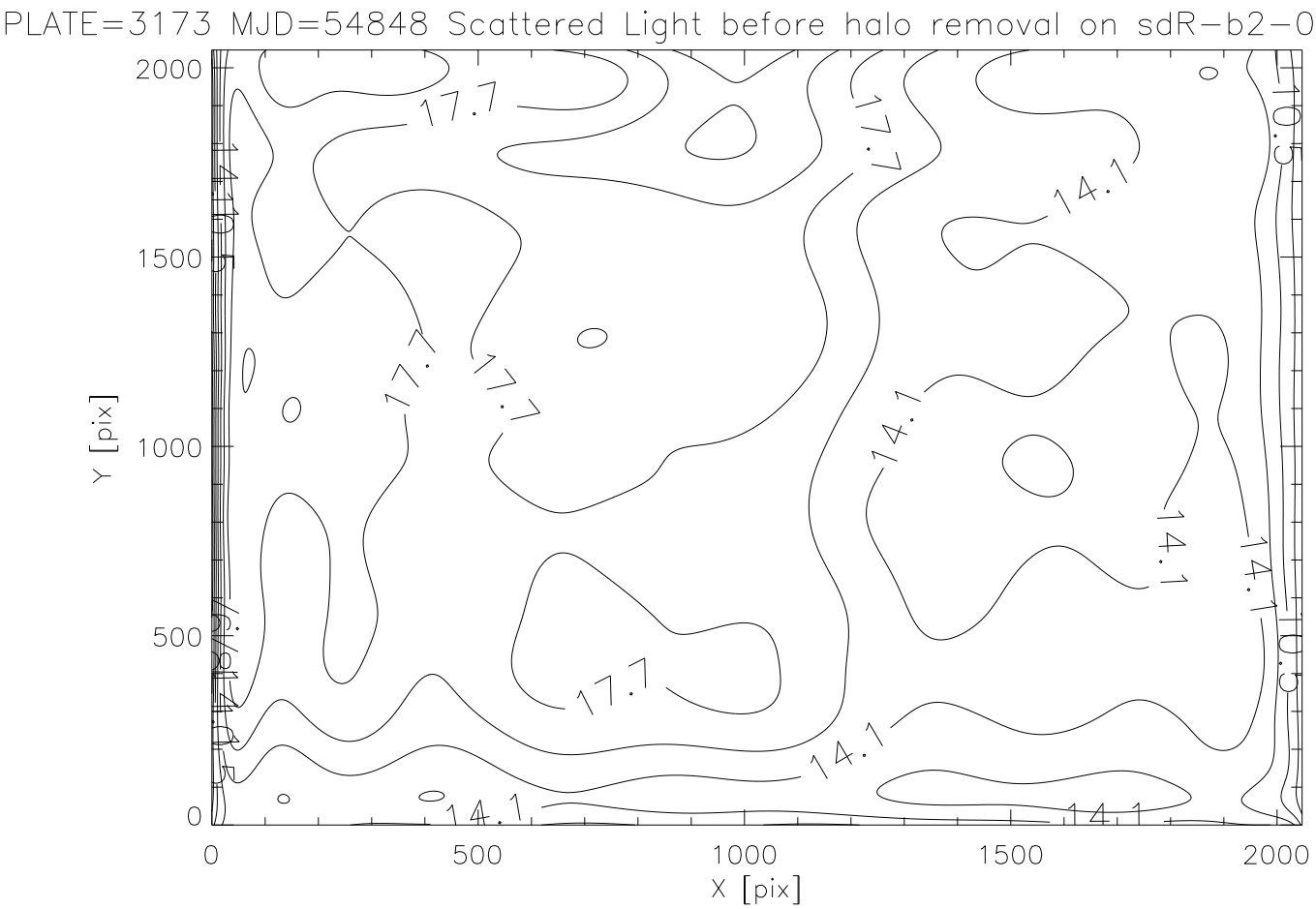

PLATE=3173 MJD=54848 sdR-b2-00058090.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

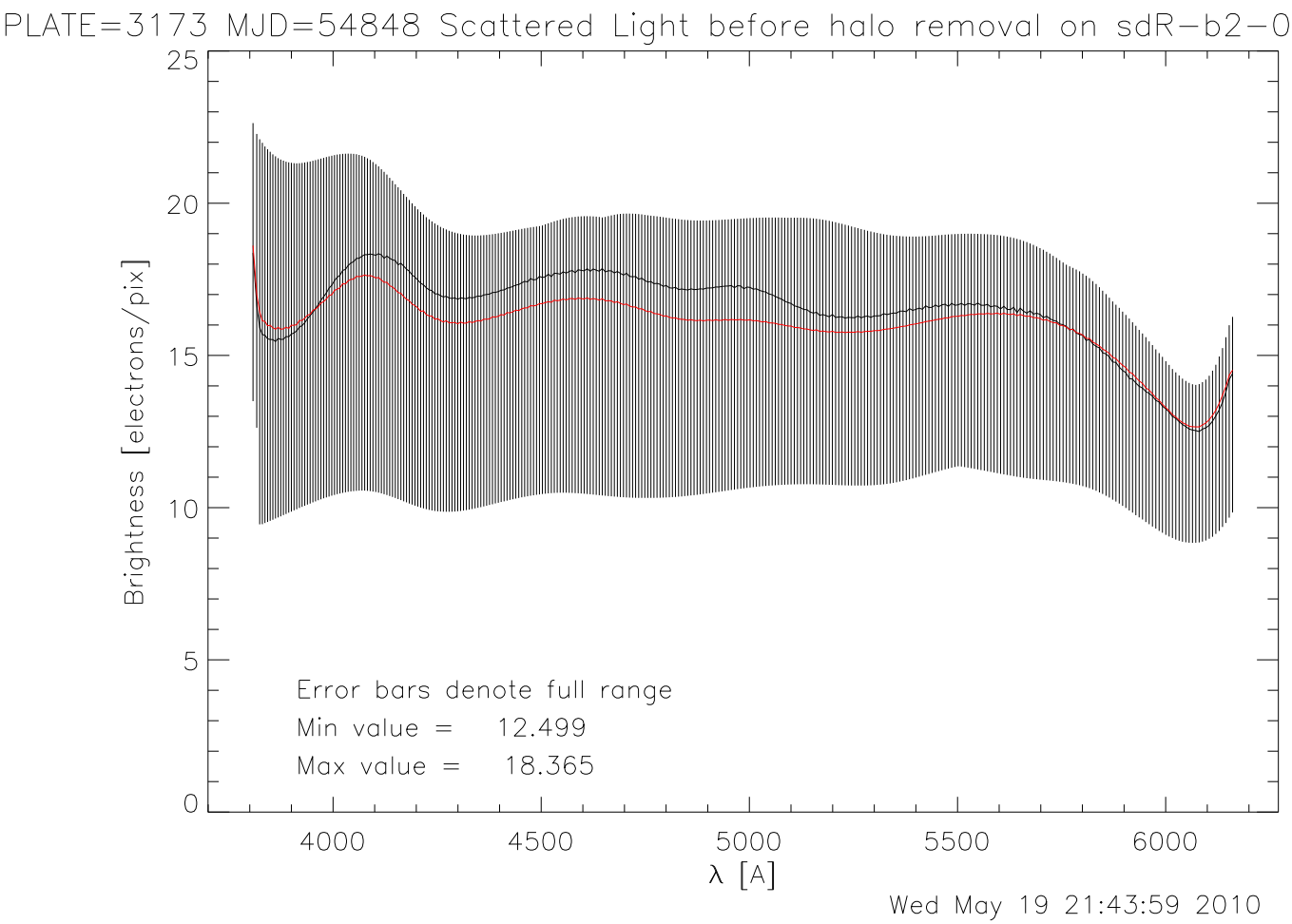

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058090.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

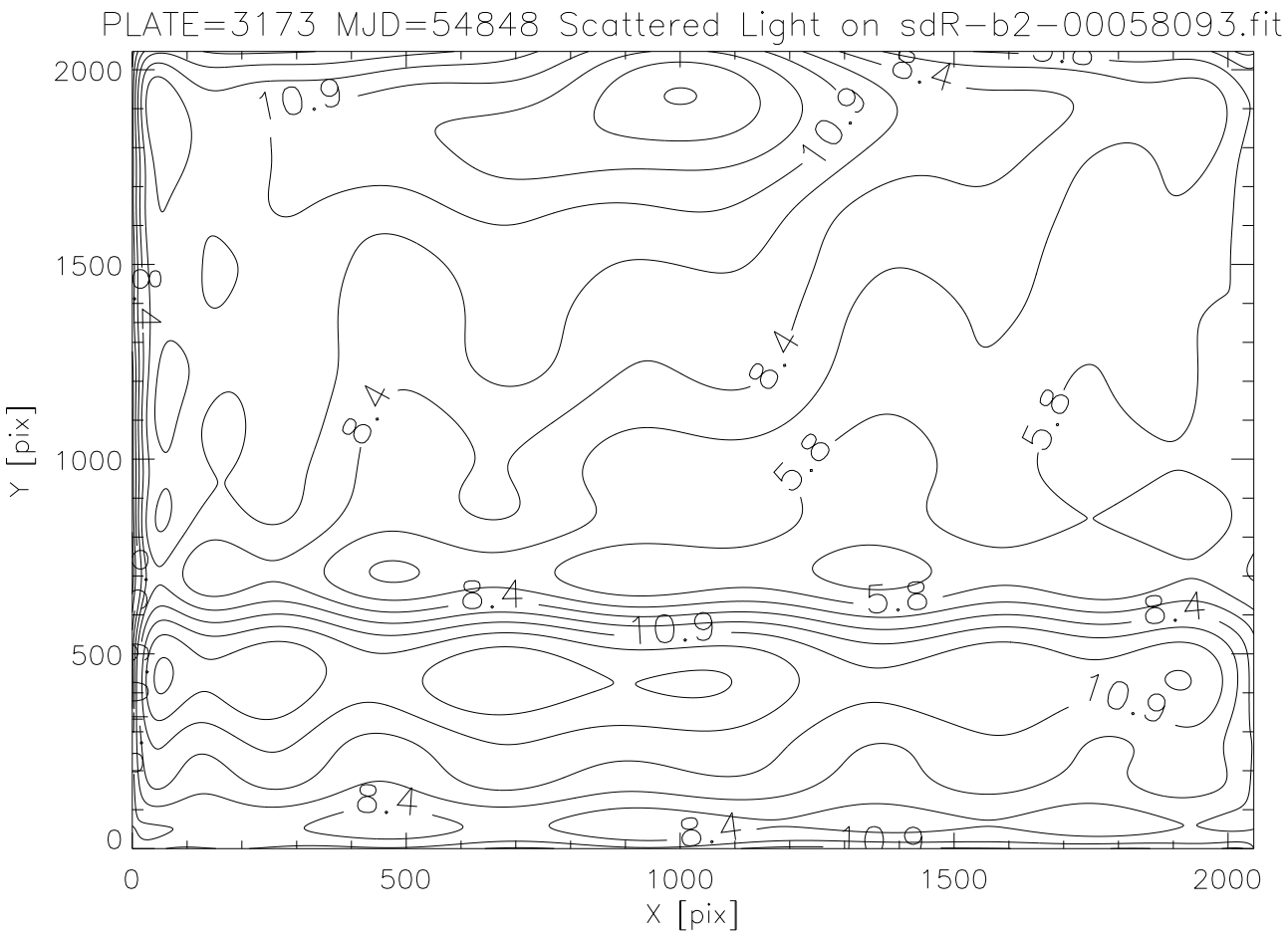

PLATE=3173 MJD=54848 sdR-b2-00058090.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.9# %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

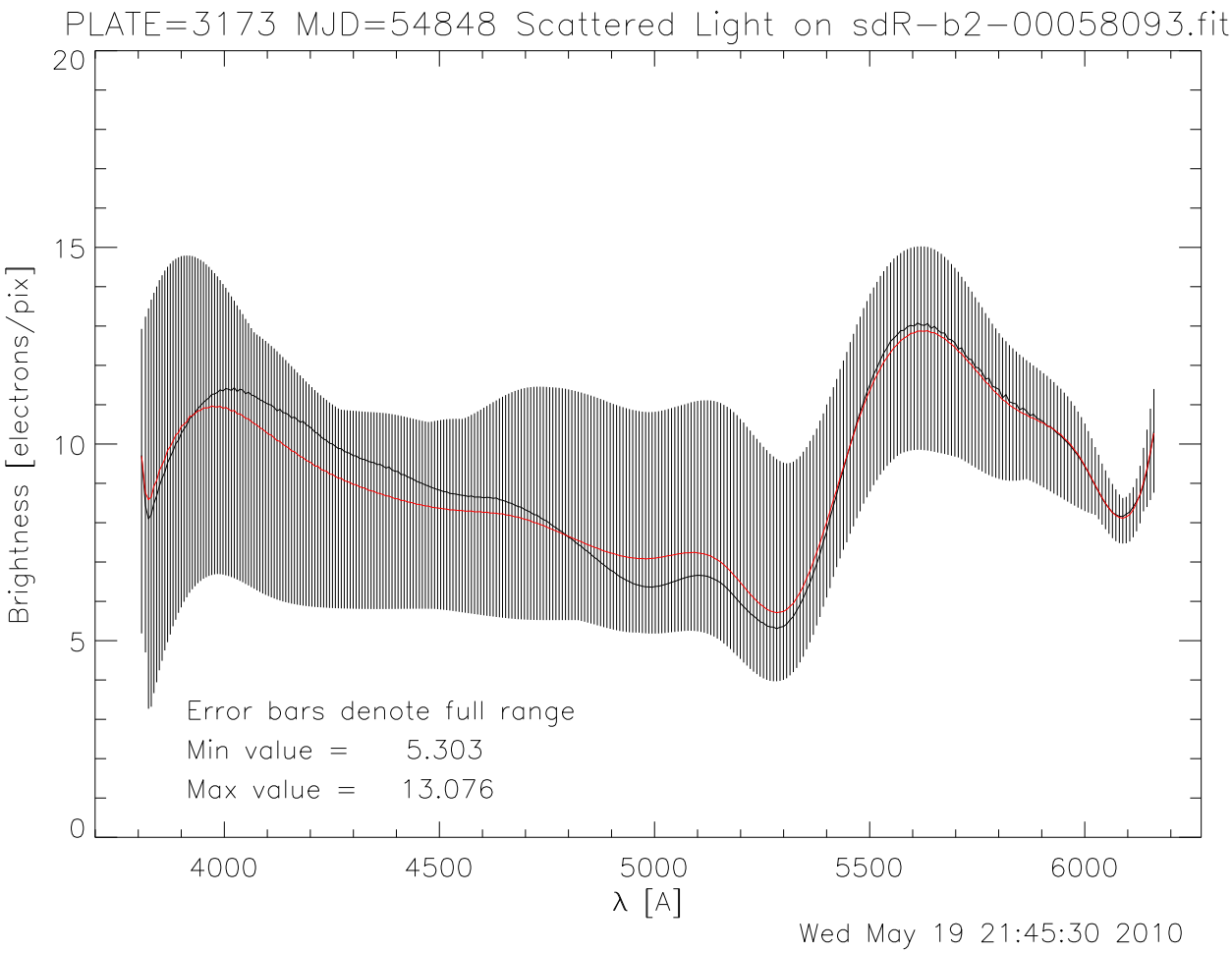

PLATE=3173 MJD=54848 sdR-b2-00058090.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.90 %
Fiber number
Focal Distance [mm]
Airmass

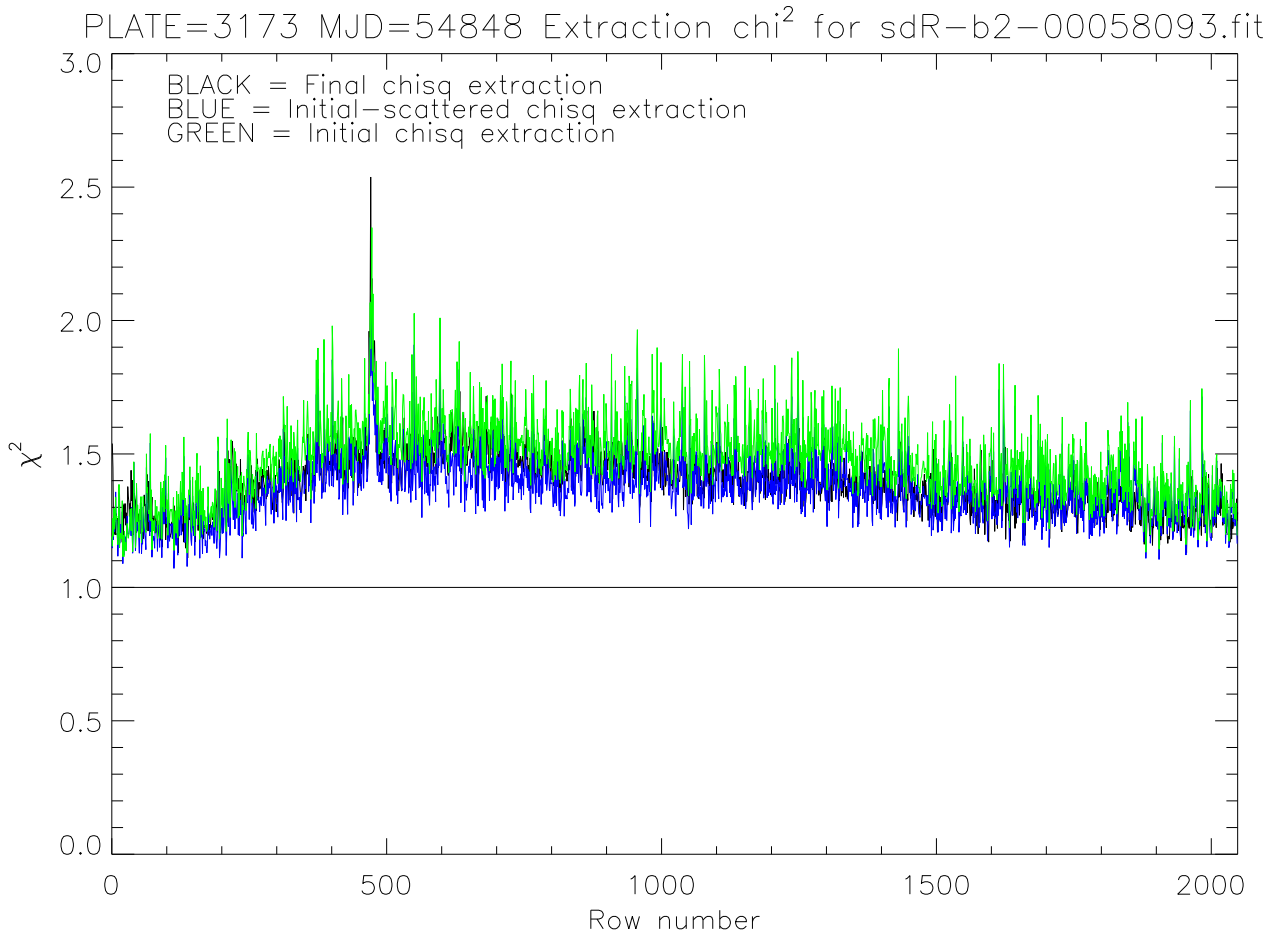

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b2-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.612
Max value = 1.269
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:43:31 2010

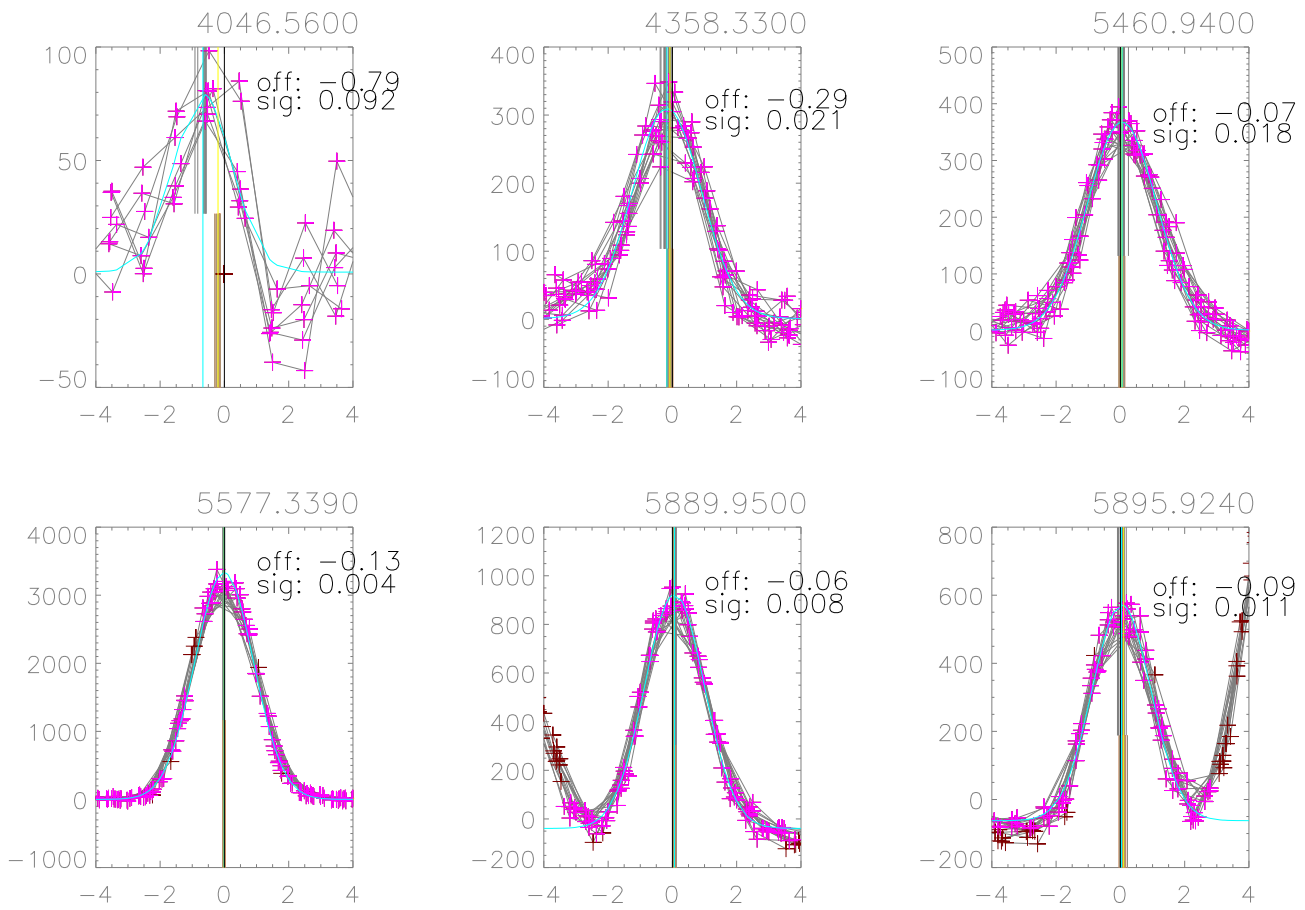

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058093.f
Y [pix]
X [pix]
0
500
1000
1500
2000
17.7
14.1
10.5
0

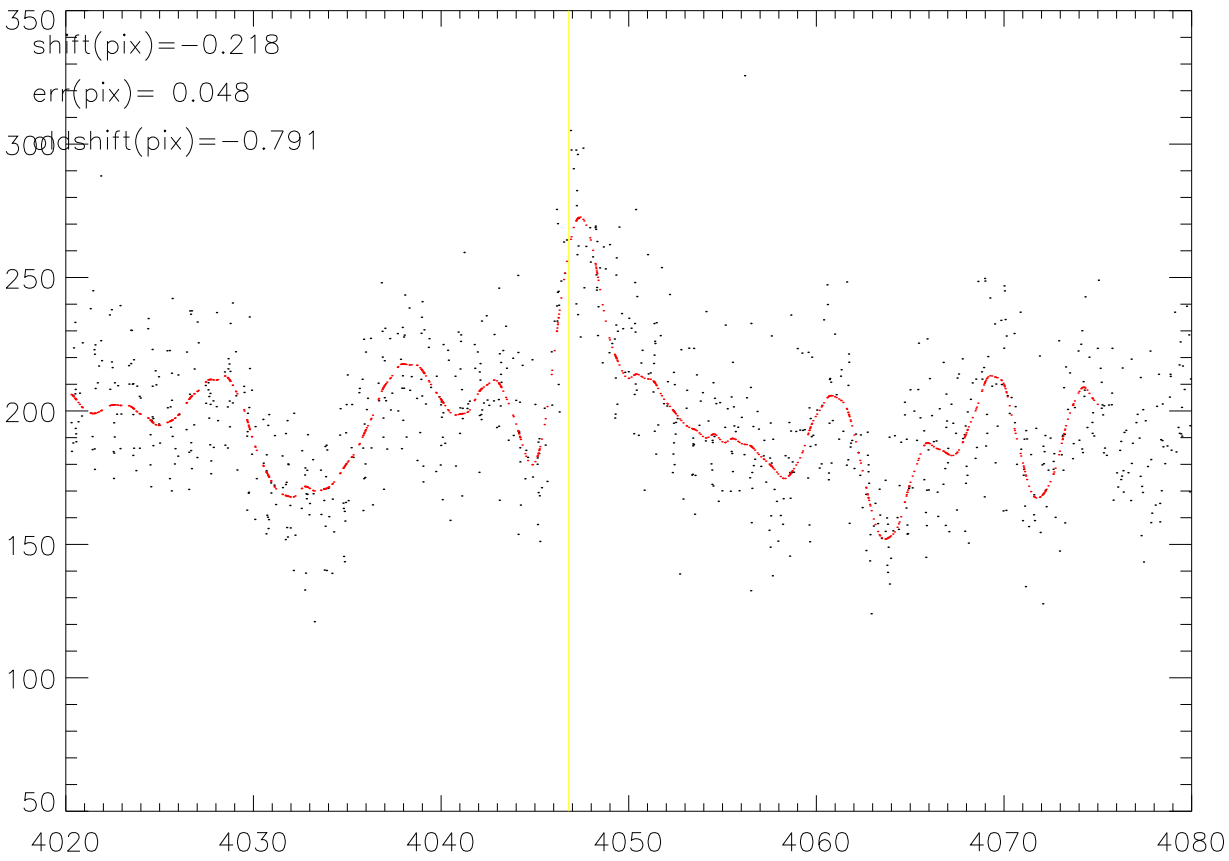

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058093.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.499
Max value = 18.365
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:43:59 2010

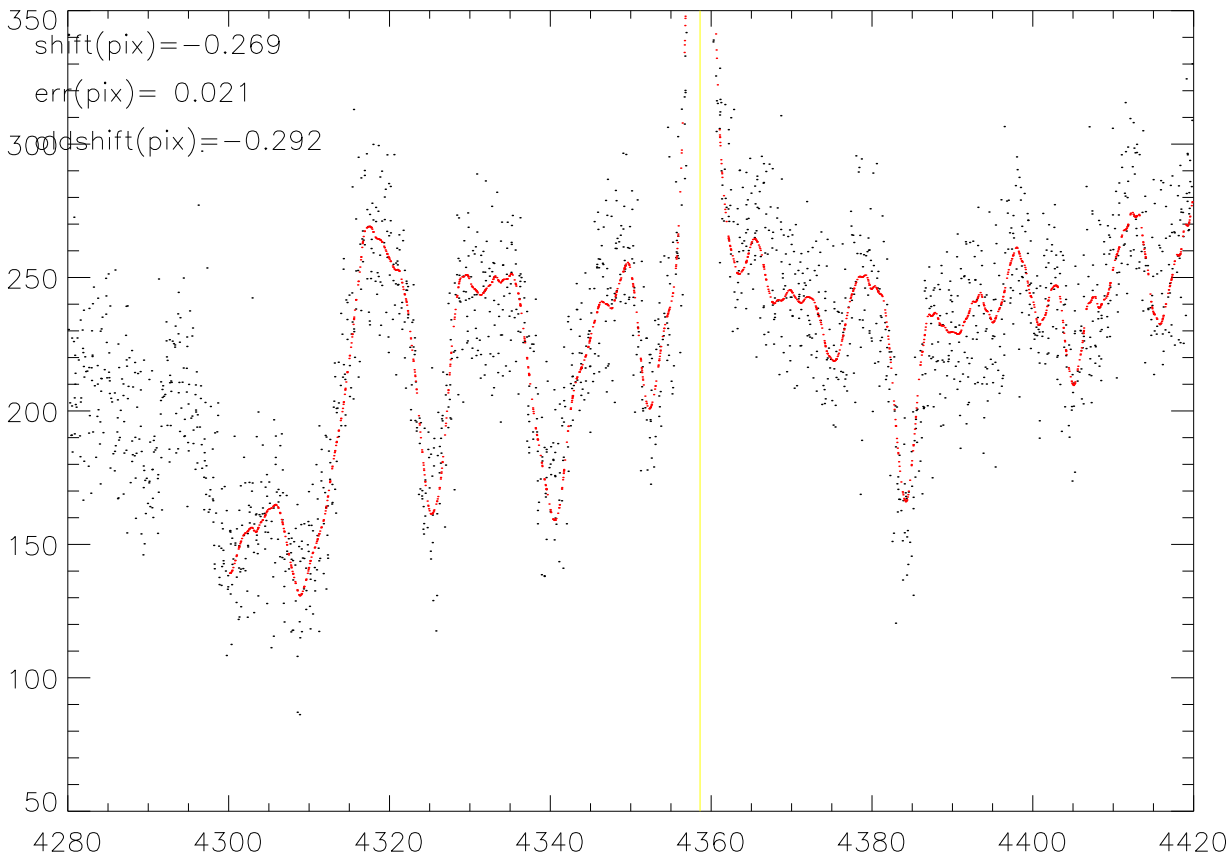

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058093.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
8.4
5.8

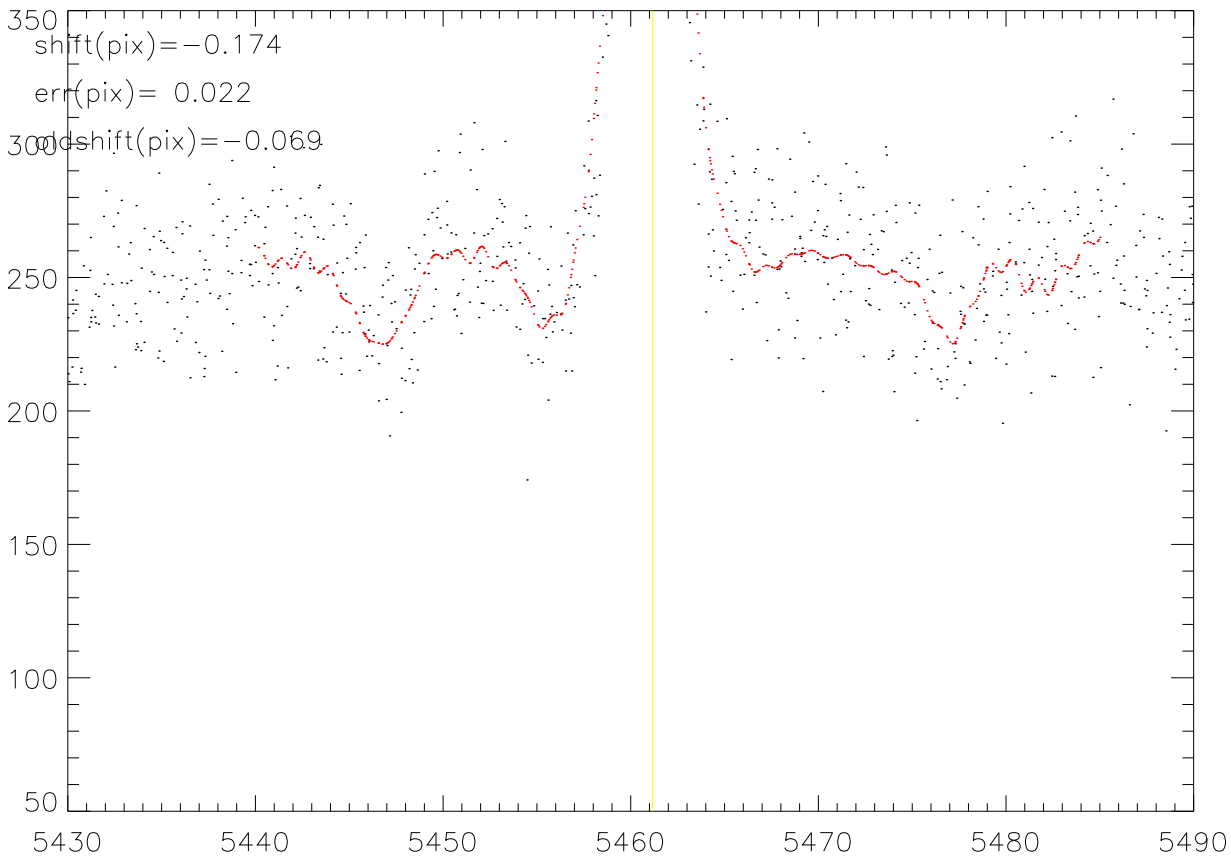

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058093.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.303
Max value = 13.076
Wed May 19 21:45:30 2010

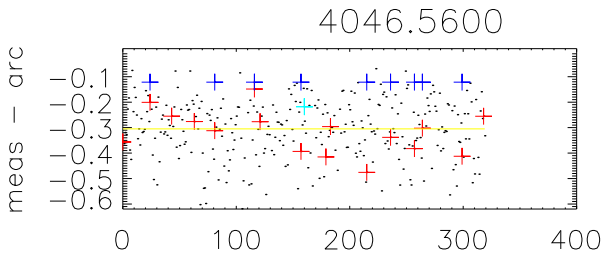

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b2-00058093.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

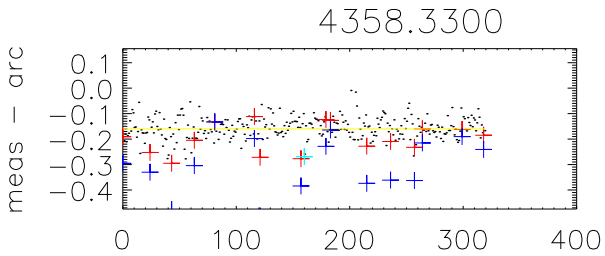

4046.5600
off: −0.79
sig: 0.092
4358.3300
off: −0.29
sig: 0.021
5460.9400
off: −0.07
sig: 0.018
5577.3390
off: −0.13
sig: 0.004
5889.9500
off: −0.06
sig: 0.008
5895.9240
off: −0.09
sig: 0.011

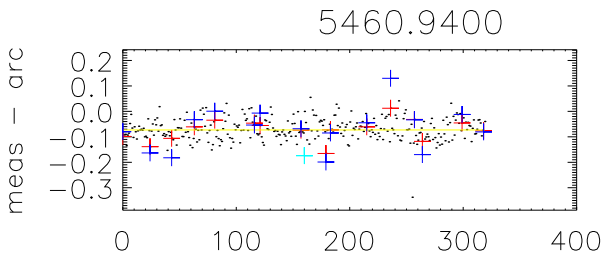

shift(pix)=−0.218
err(pix)= 0.048
oldshift(pix)=−0.791
350
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

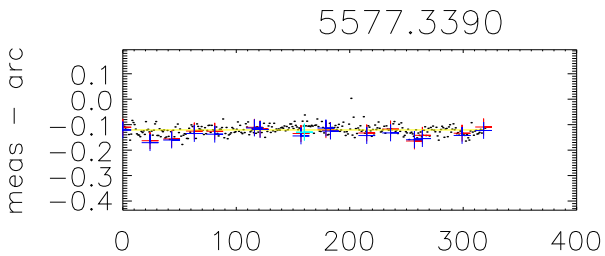

shift(pix)=−0.269
err(pix)= 0.021
oldshift(pix)=−0.292
350
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

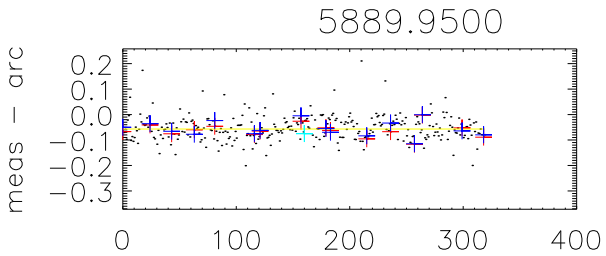

shift(pix)=−0.174
err(pix)= 0.022
oldshift(pix)=−0.069
350
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

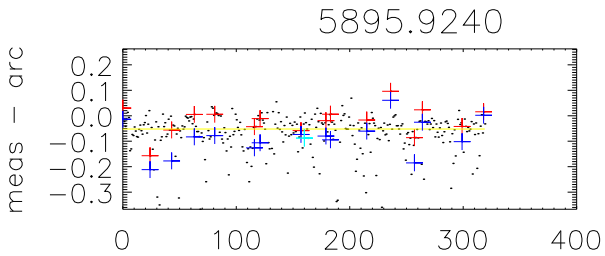

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

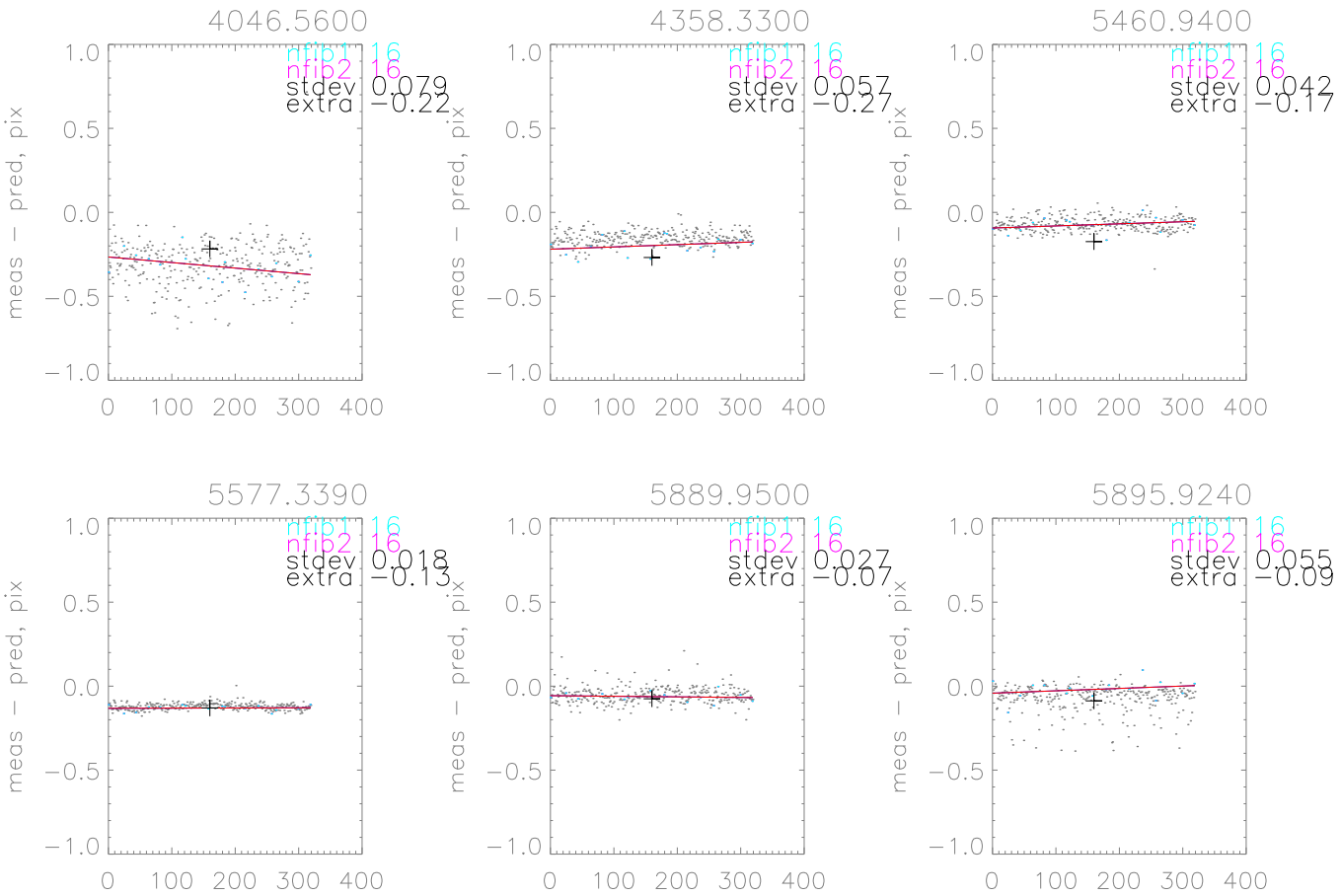

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

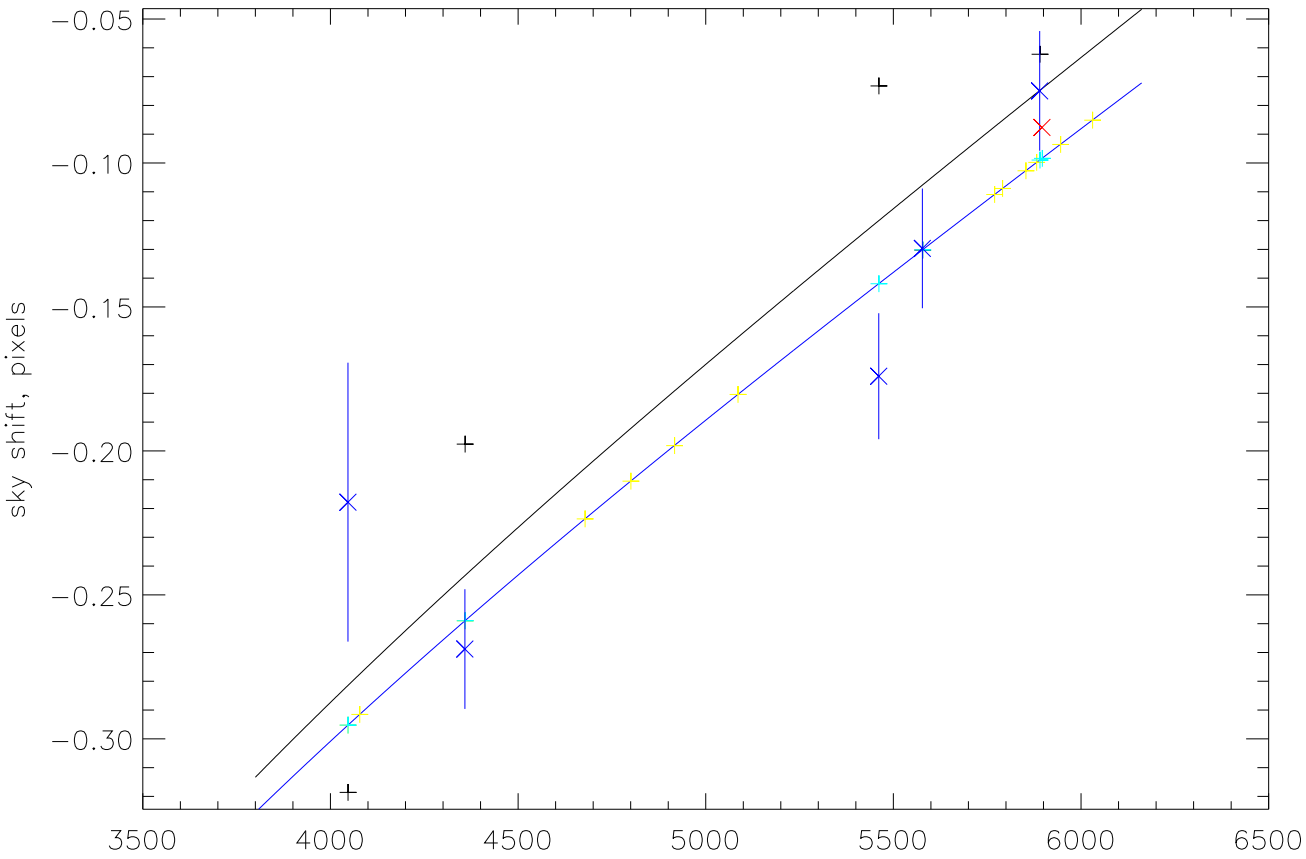

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

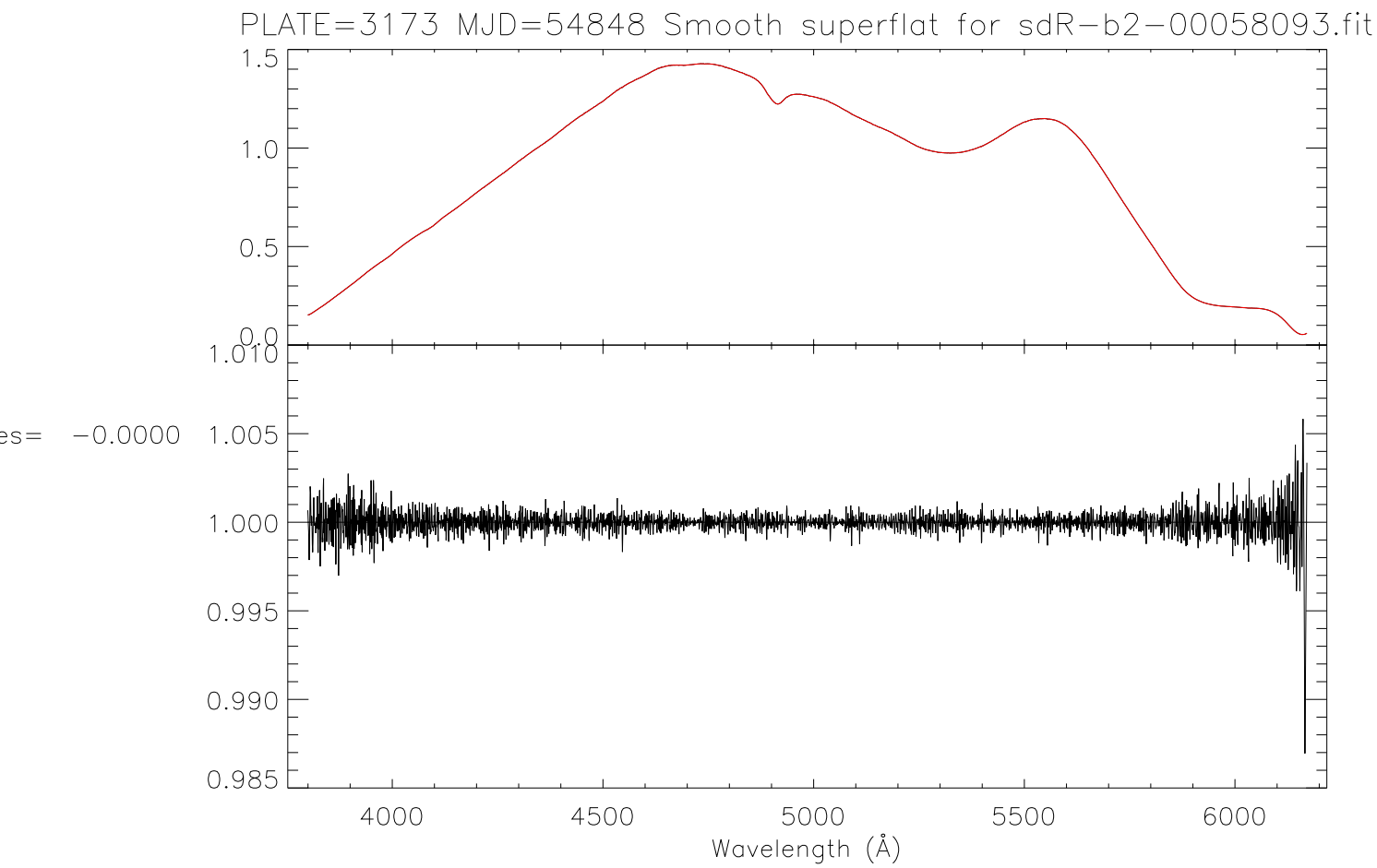

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

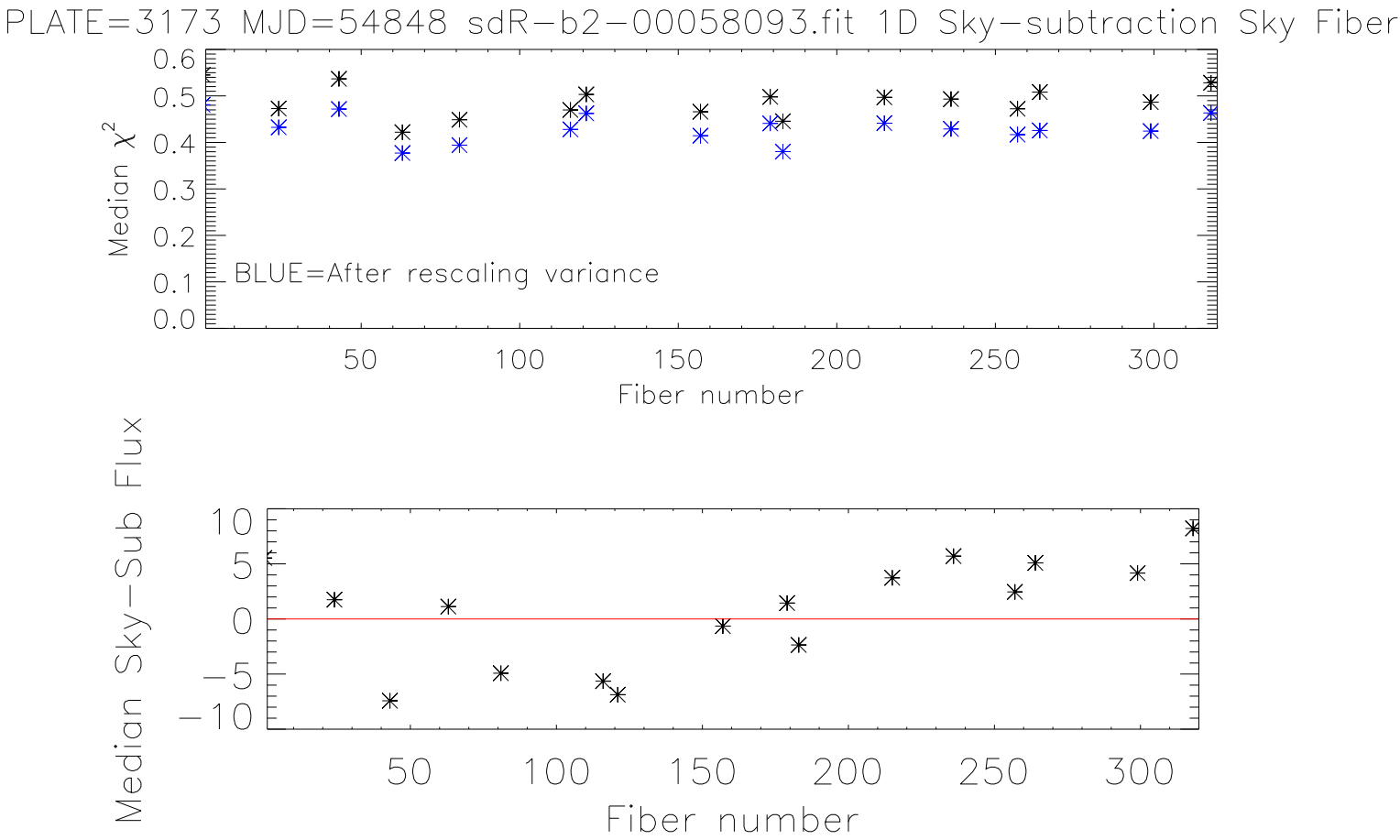

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

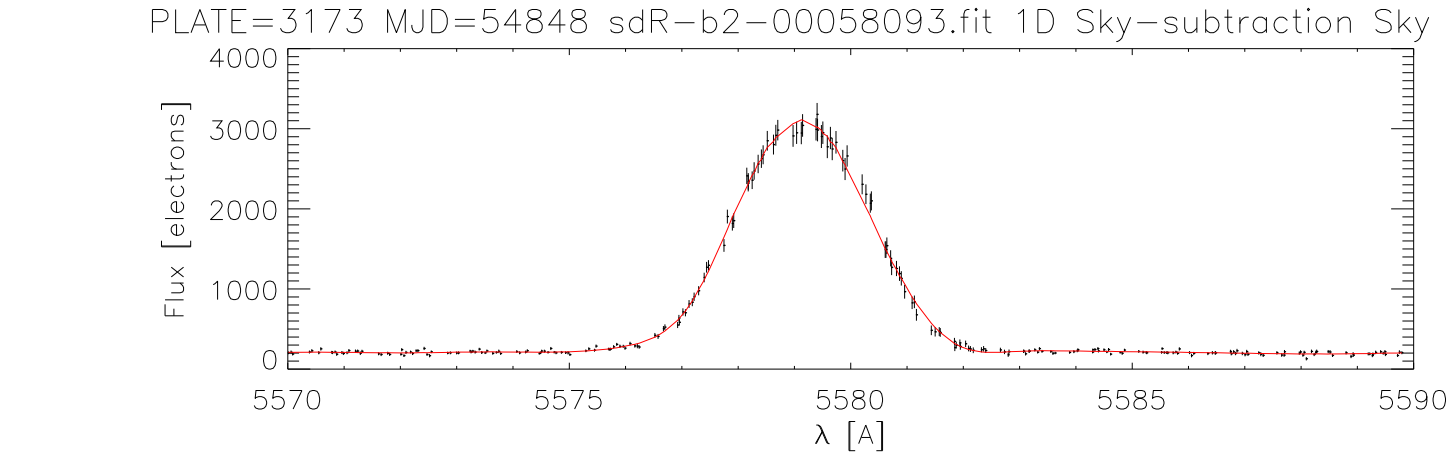

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

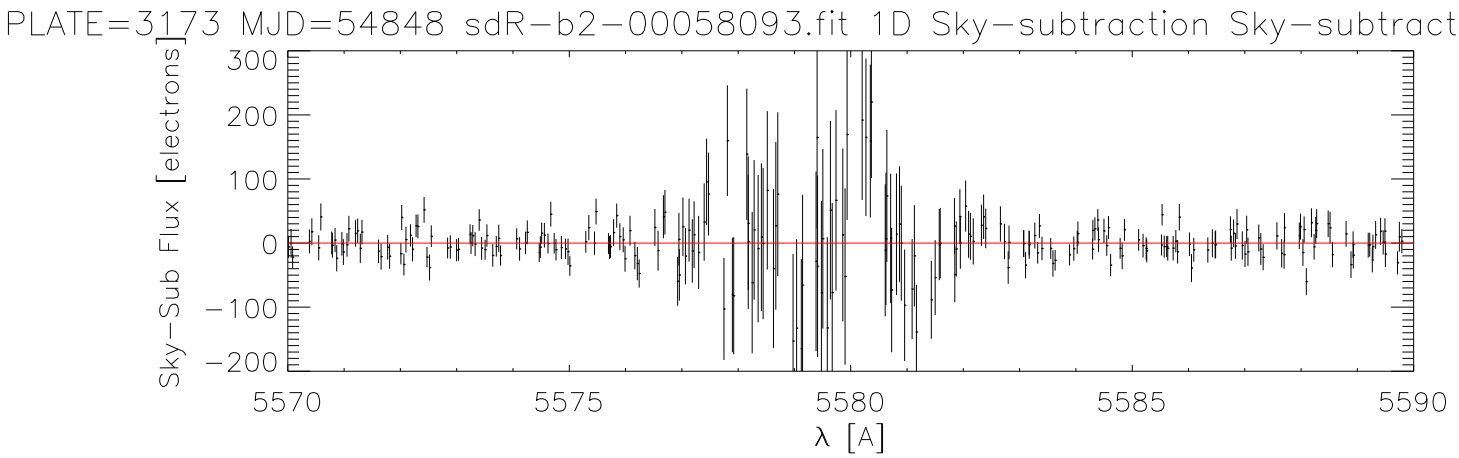

4046.5600
nfib1 16
nfib2 16
stdev 0.079
extra −0.22
4358.3300
nfib1 16
nfib2 16
stdev 0.057
extra −0.27
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra −0.17
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.027
extra −0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.055
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

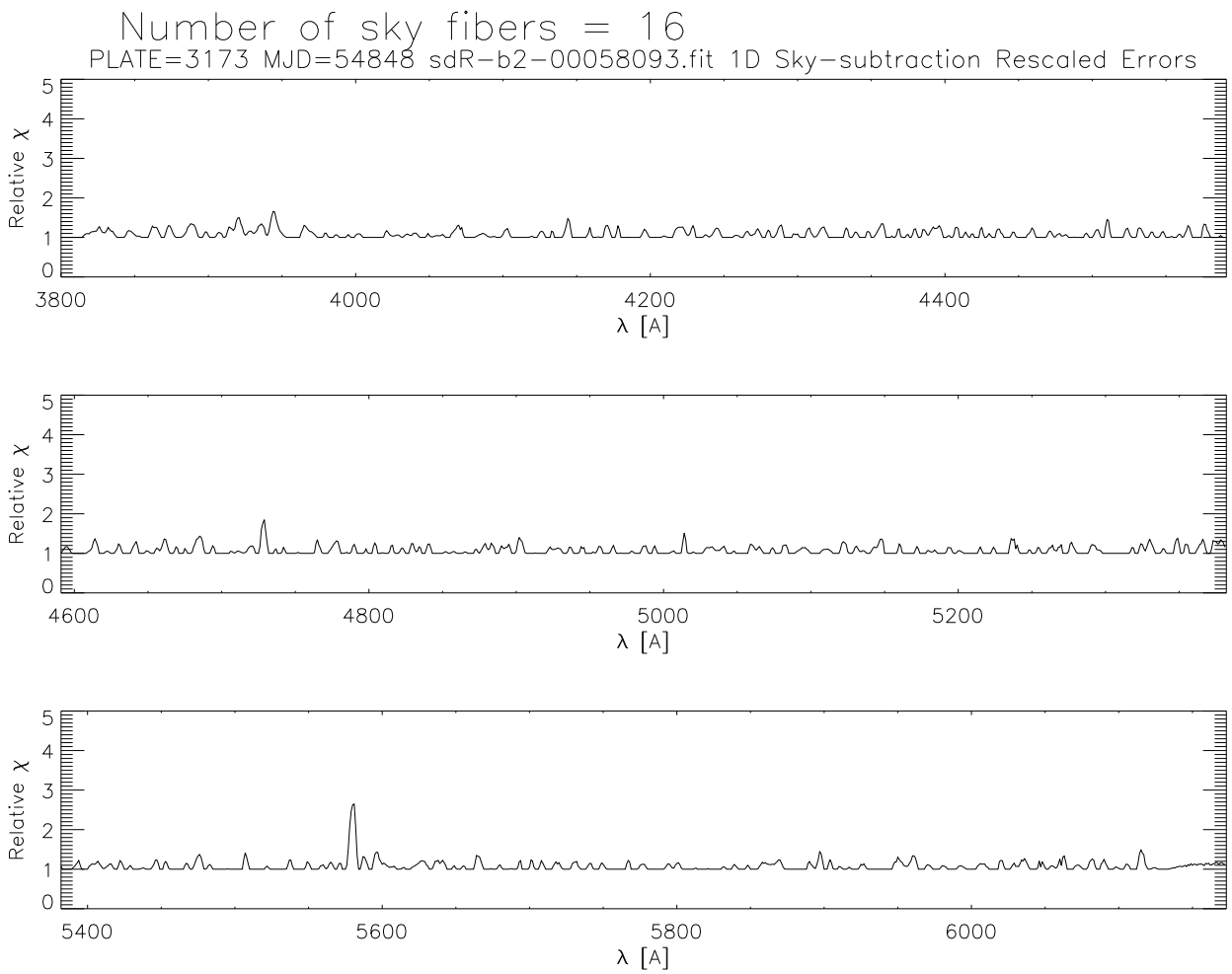

−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

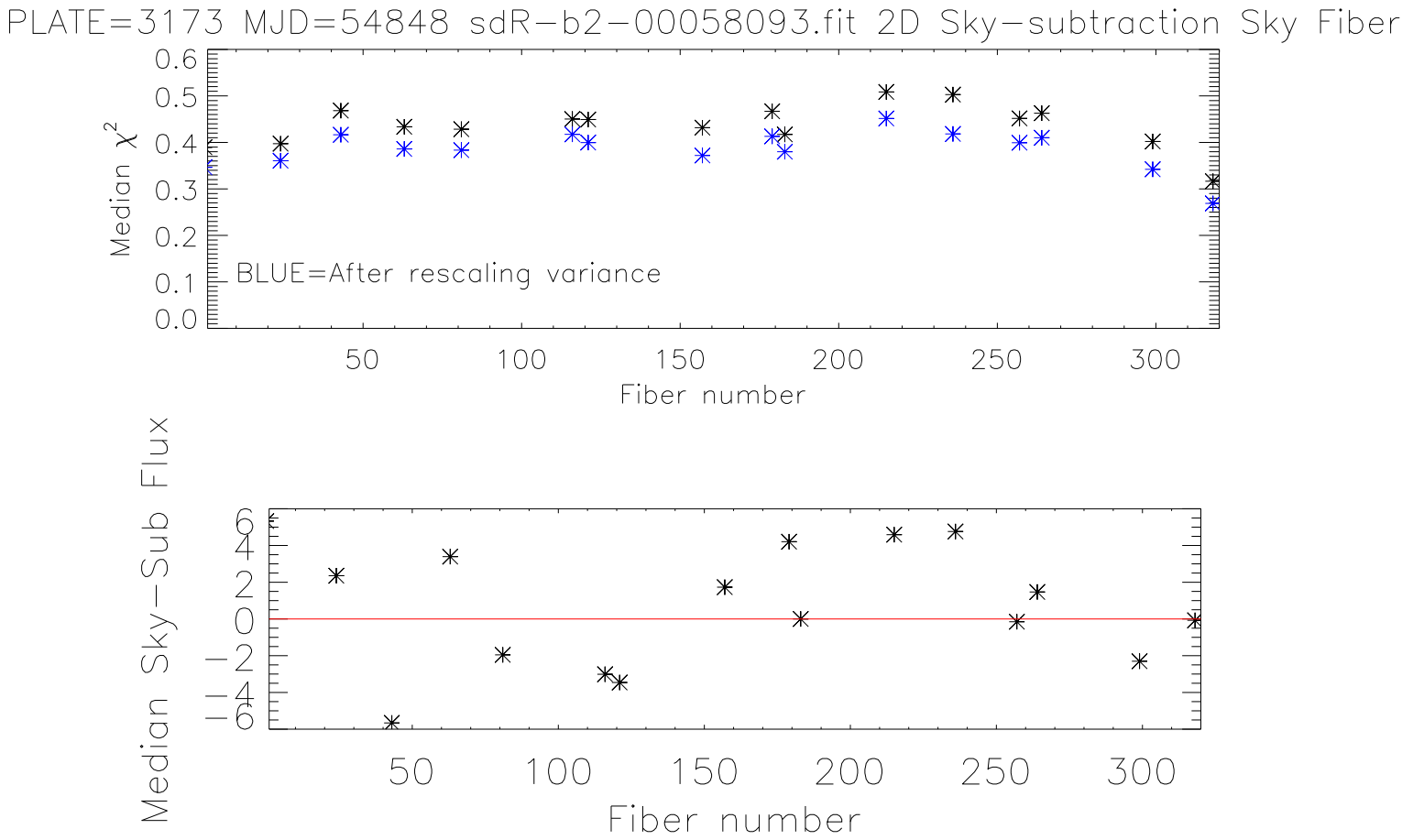

PLATE=3173 MJD=54848 Smooth superflat for sdR-b2-00058093.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

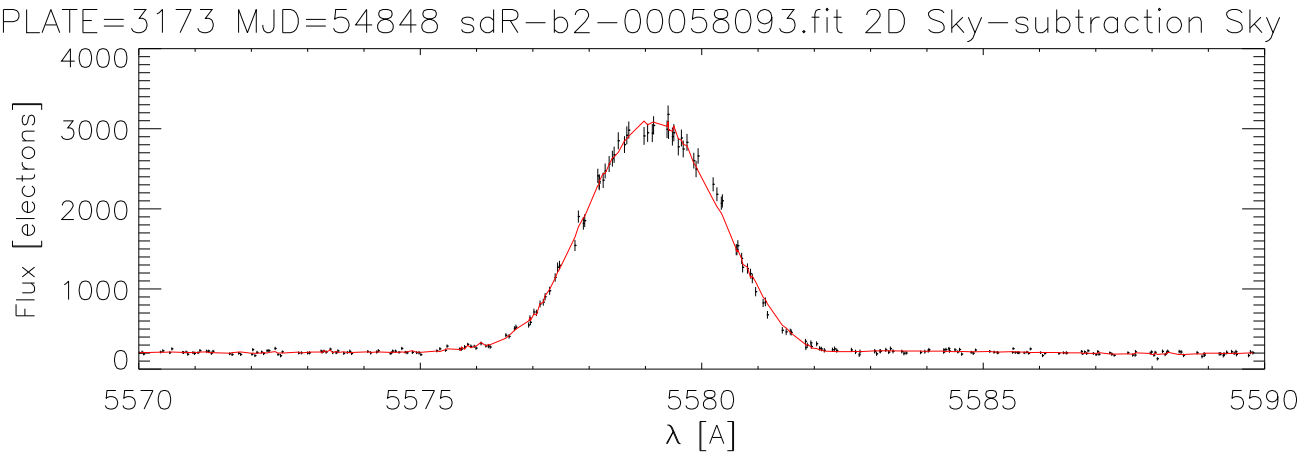

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

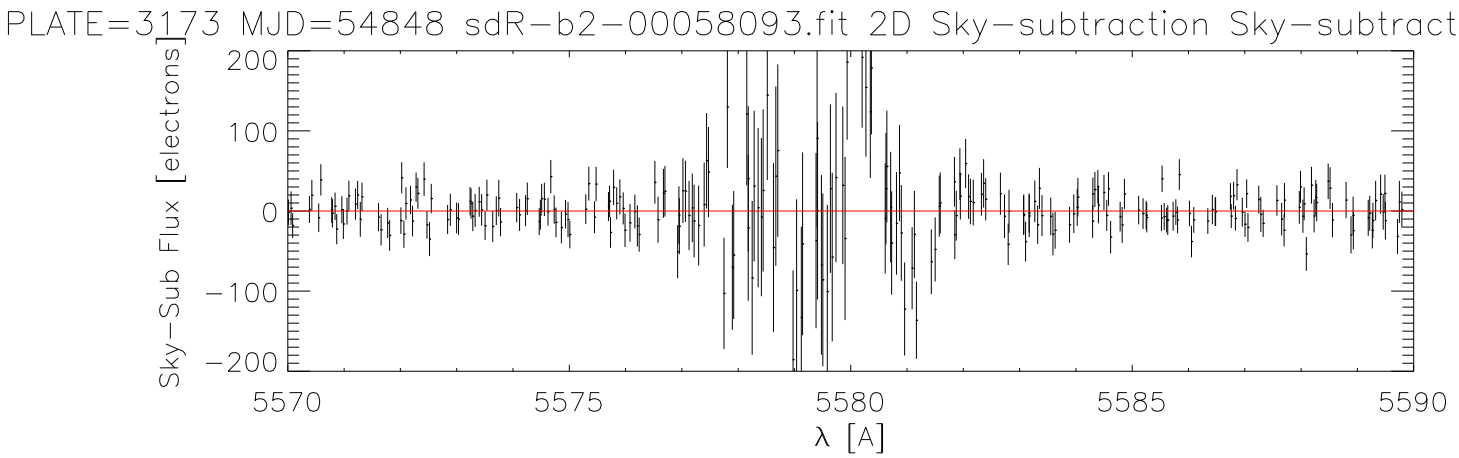

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

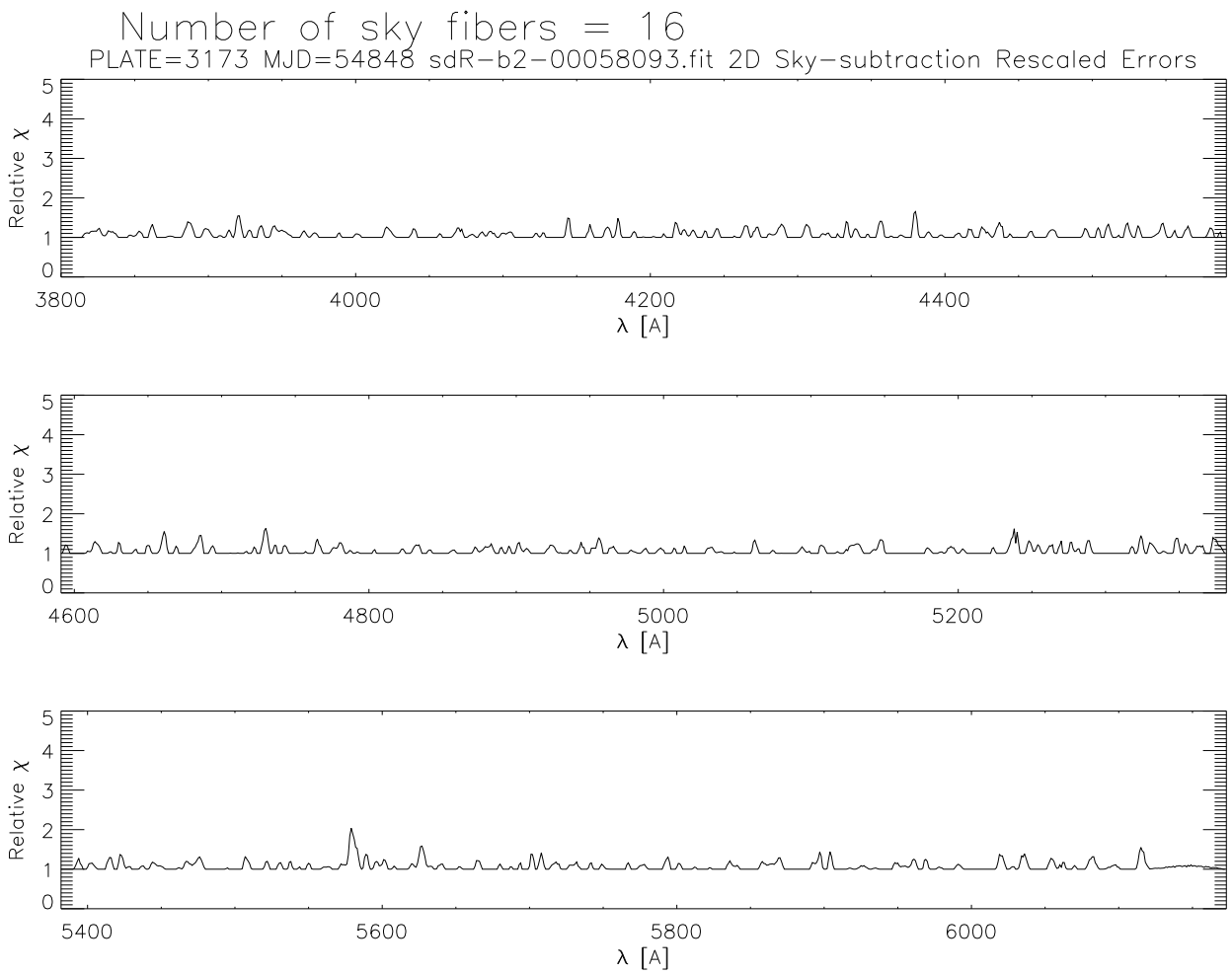

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

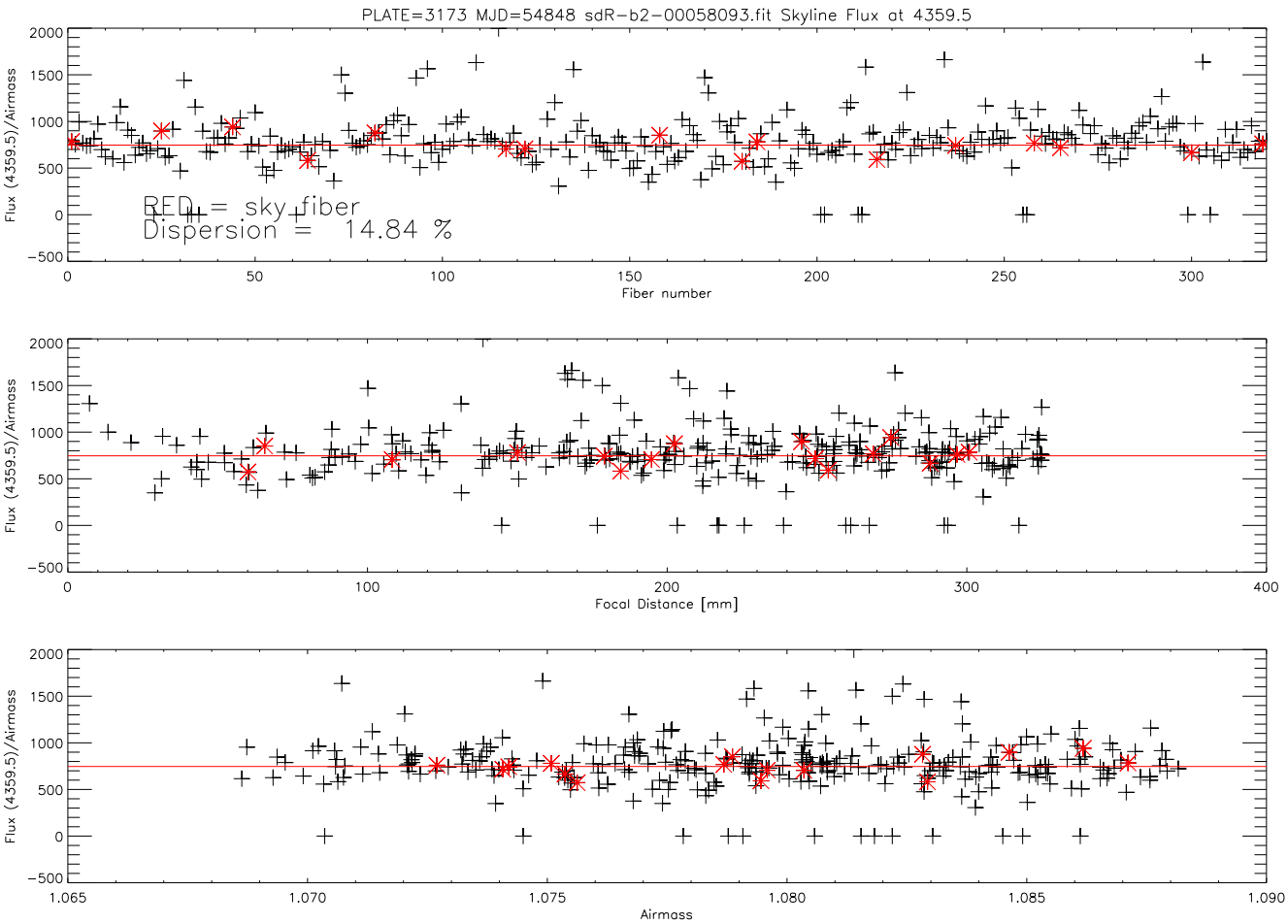

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058093.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

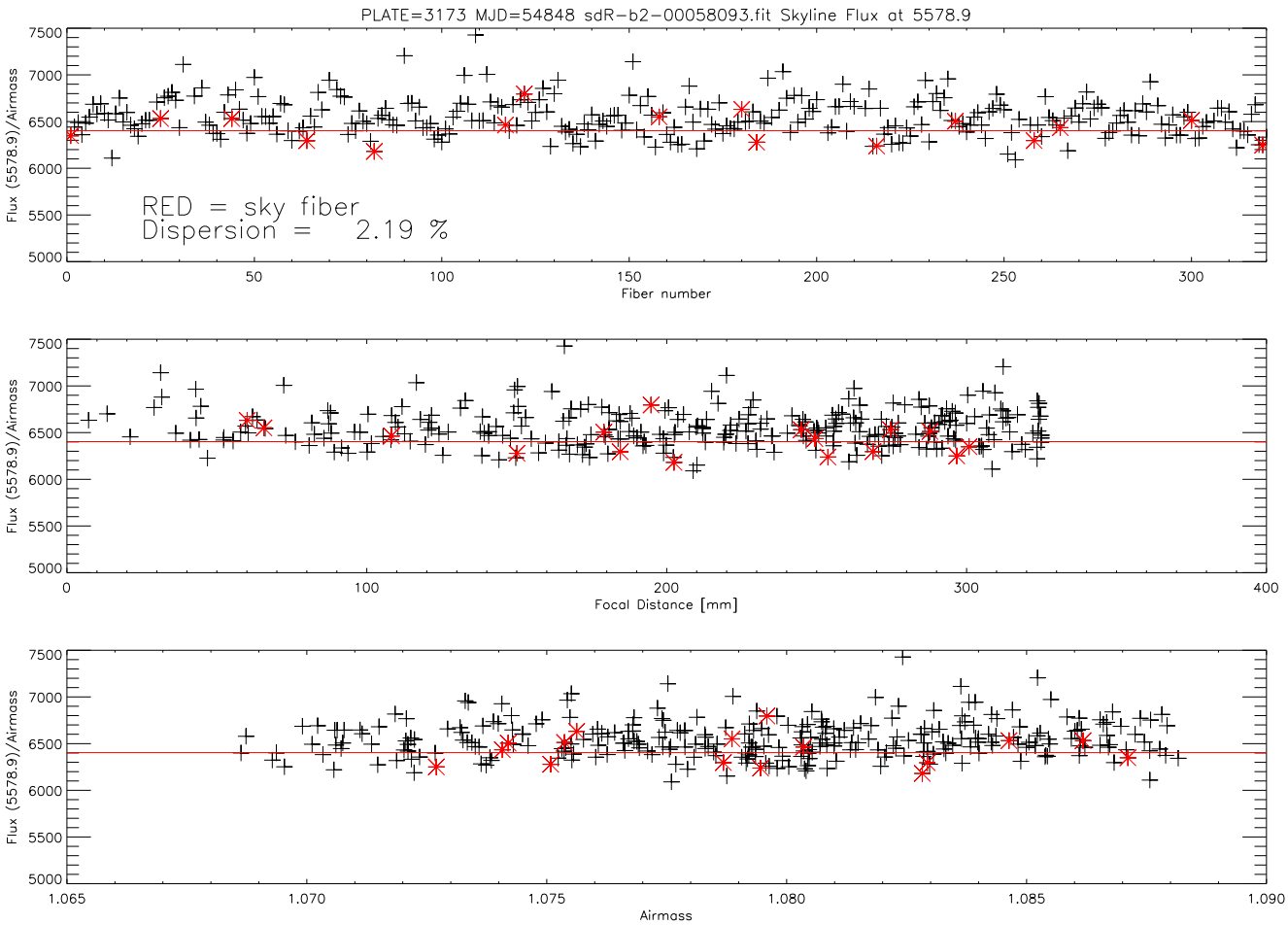

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

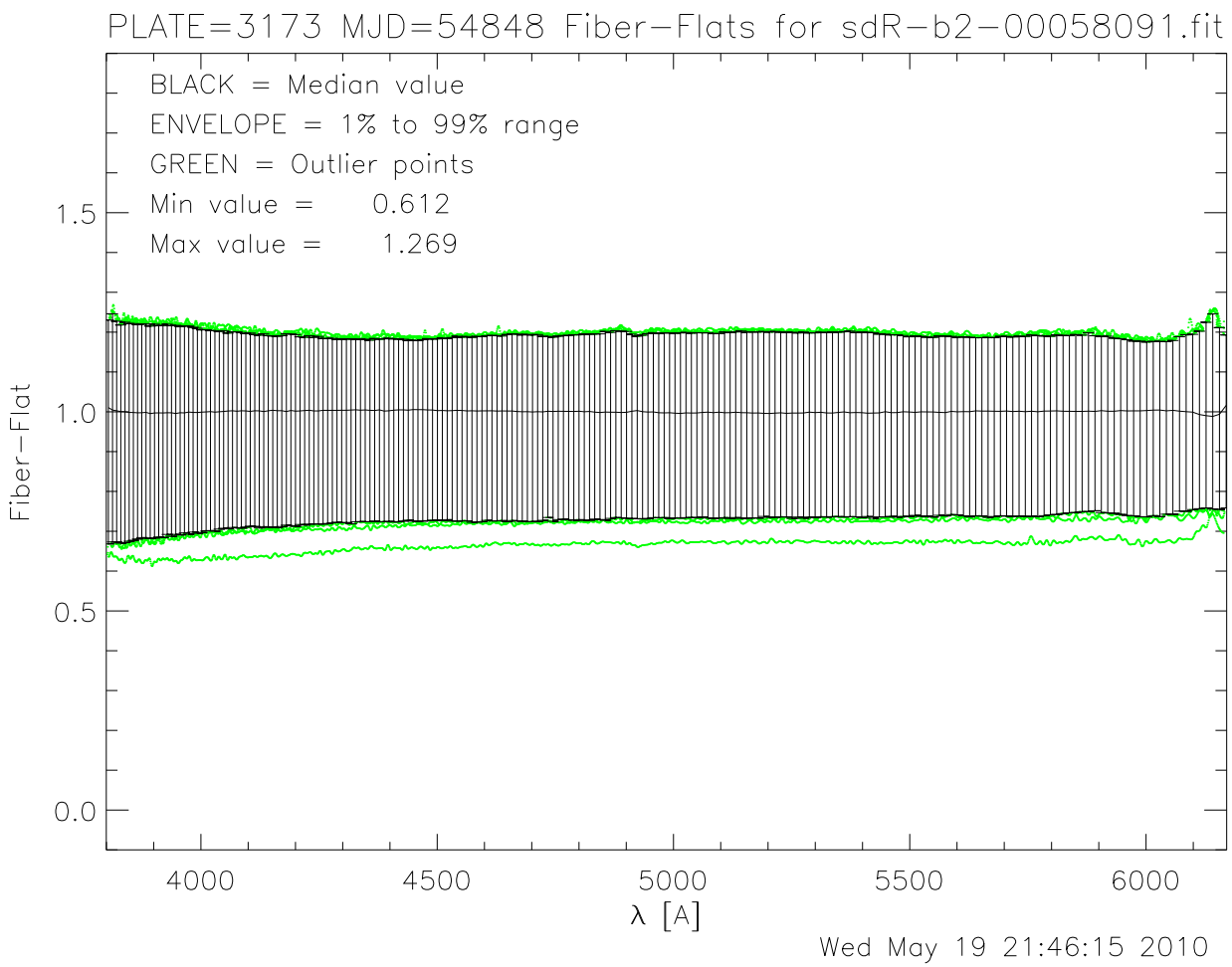

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

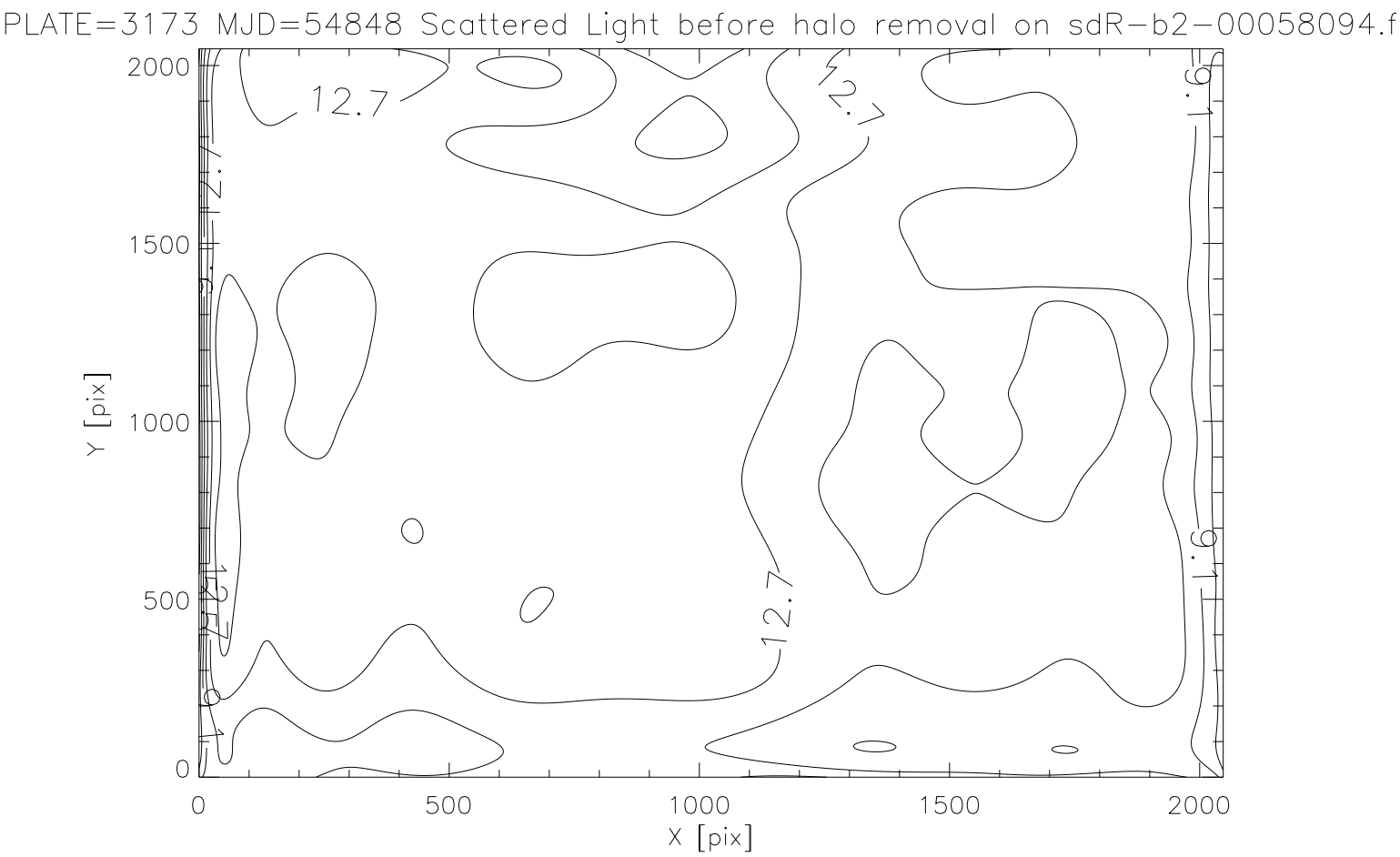

PLATE=3173 MJD=54848 sdR-b2-00058093.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

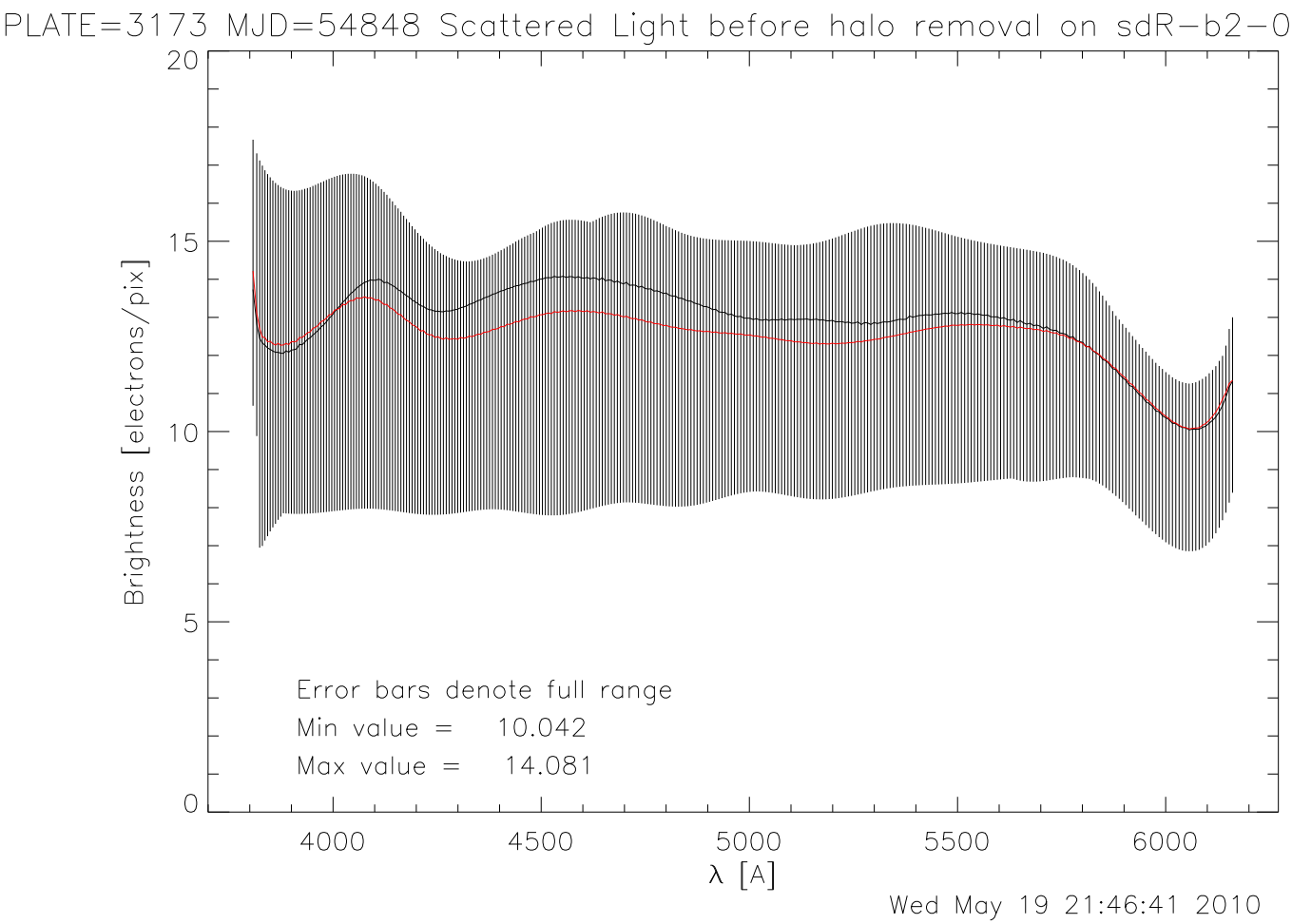

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058093.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

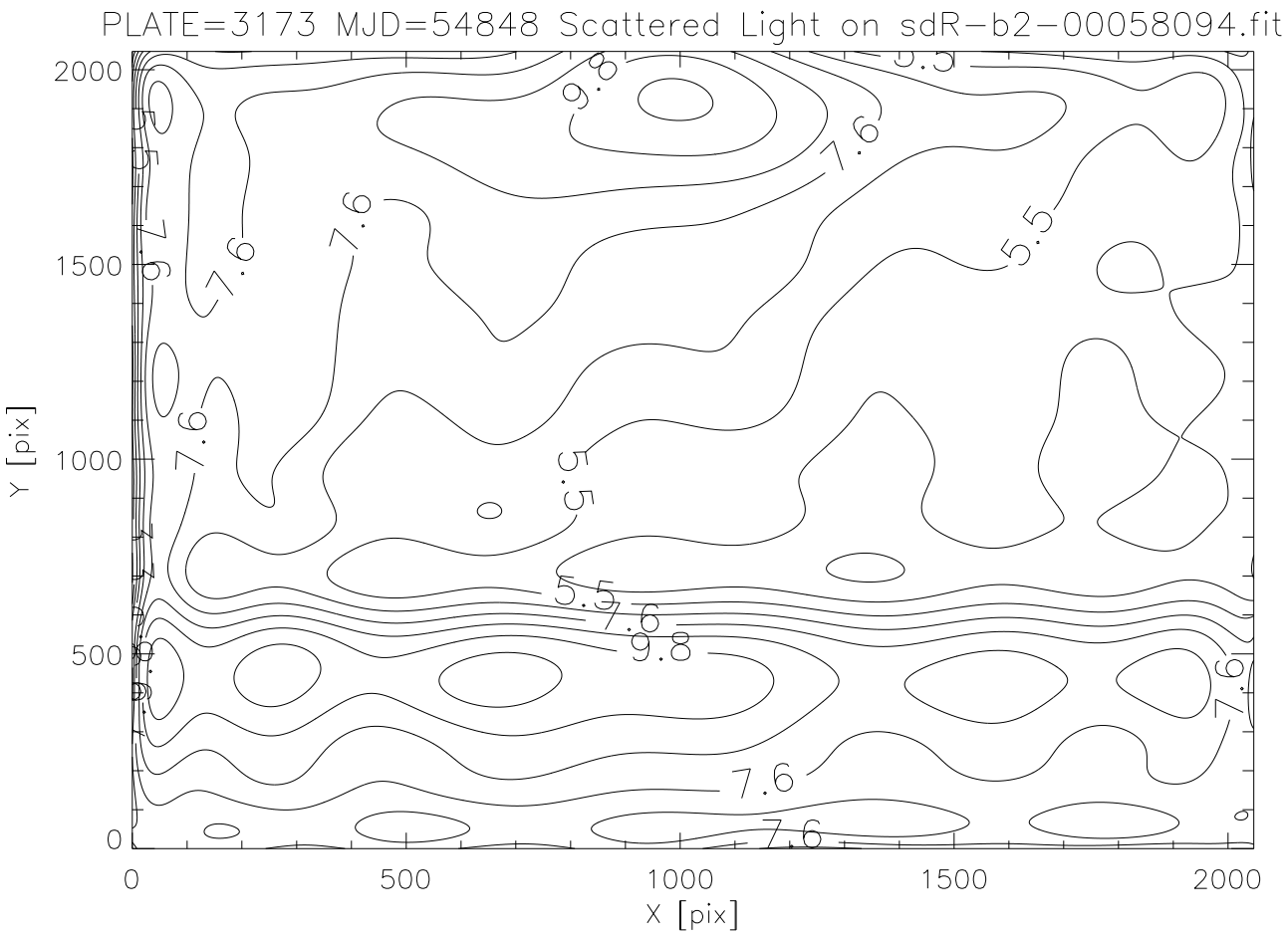

PLATE=3173 MJD=54848 sdR-b2-00058093.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.84 %
Fiber number
Focal Distance [mm]
Airmass

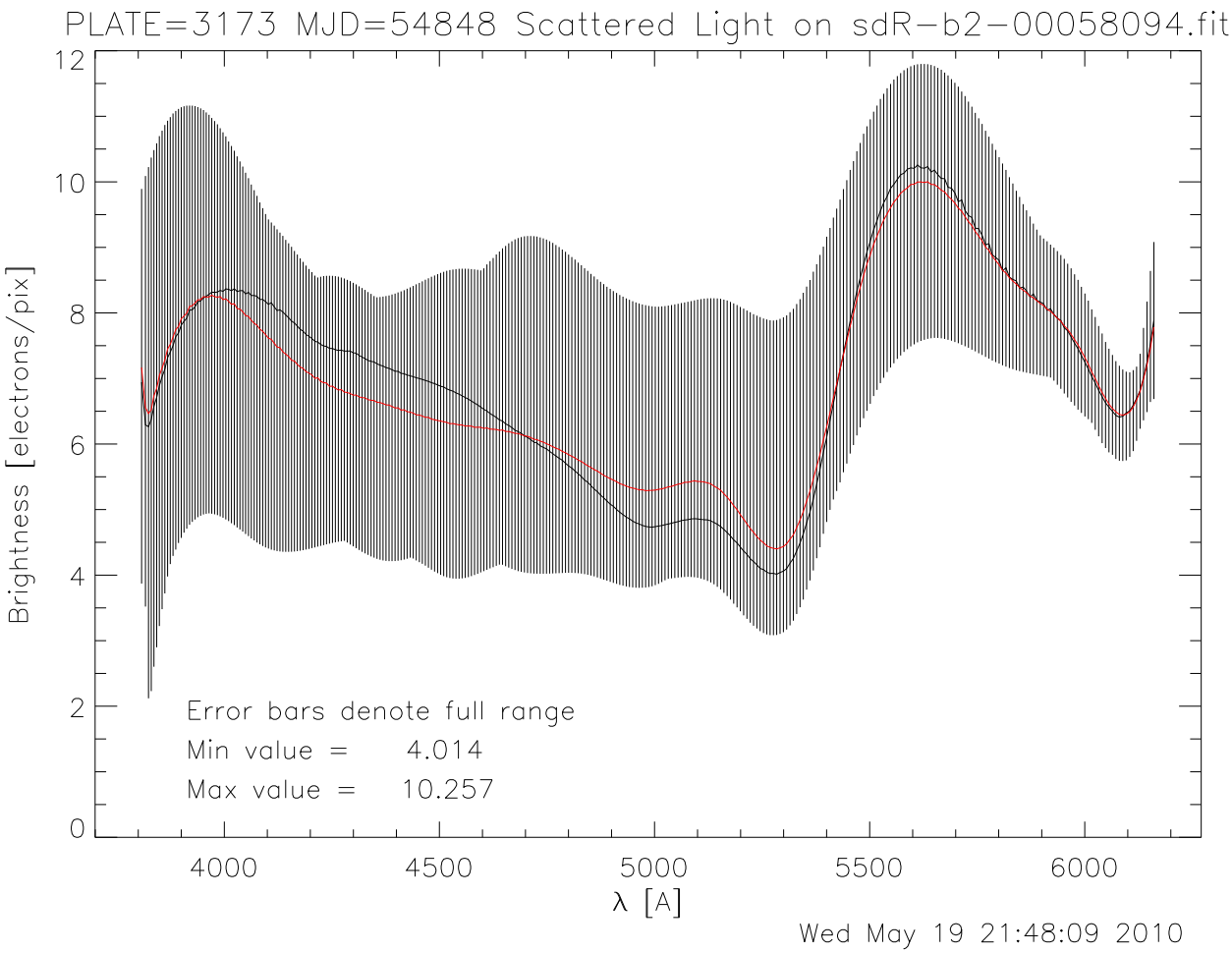

PLATE=3173 MJD=54848 sdR-b2-00058093.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.19 %
Fiber number
Focal Distance [mm]
Airmass

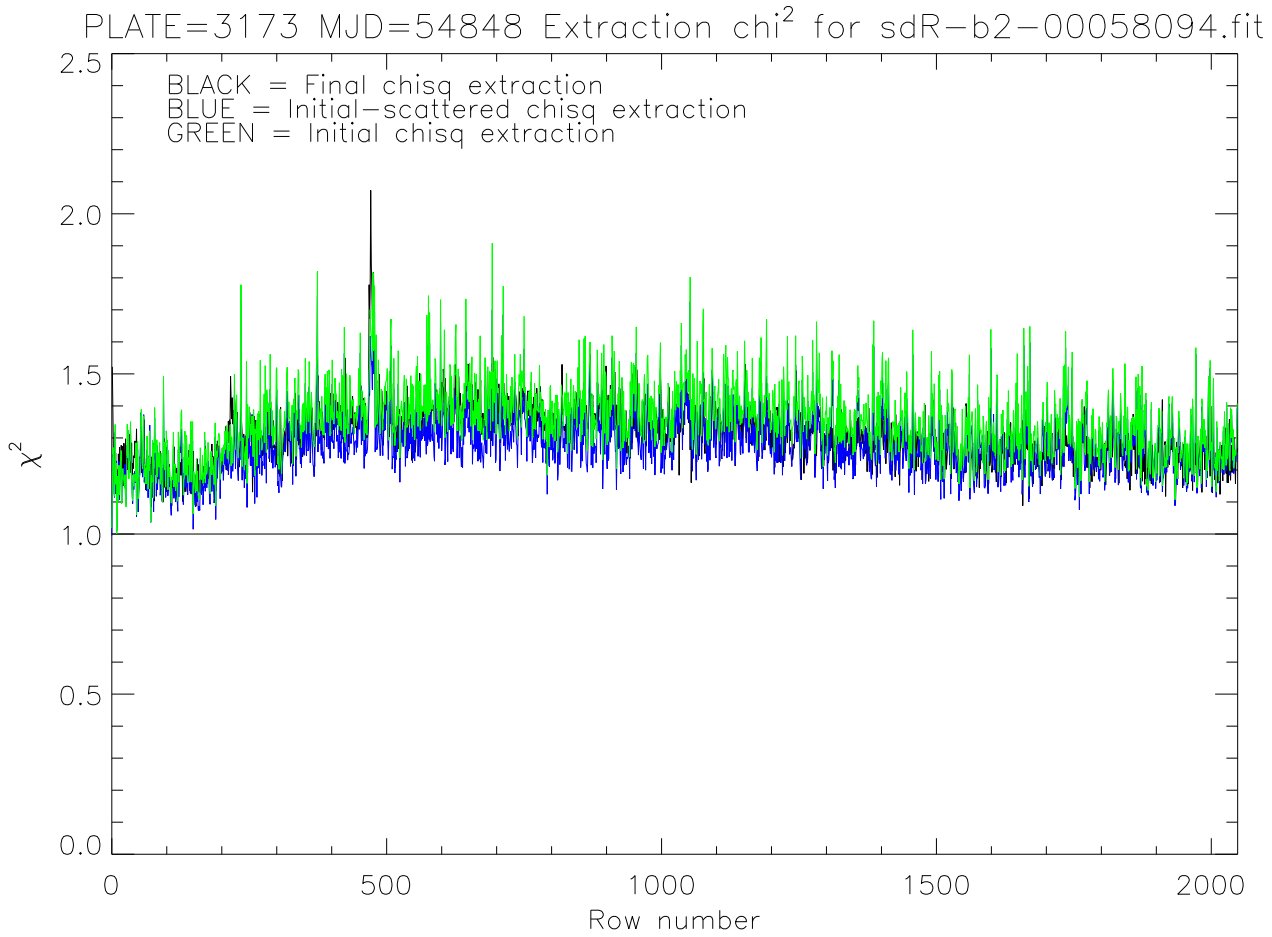

PLATE=3173 MJD=54848 Fiber-Flats for sdR-b2-00058091.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.612
Max value = 1.269
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed May 19 21:46:15 2010

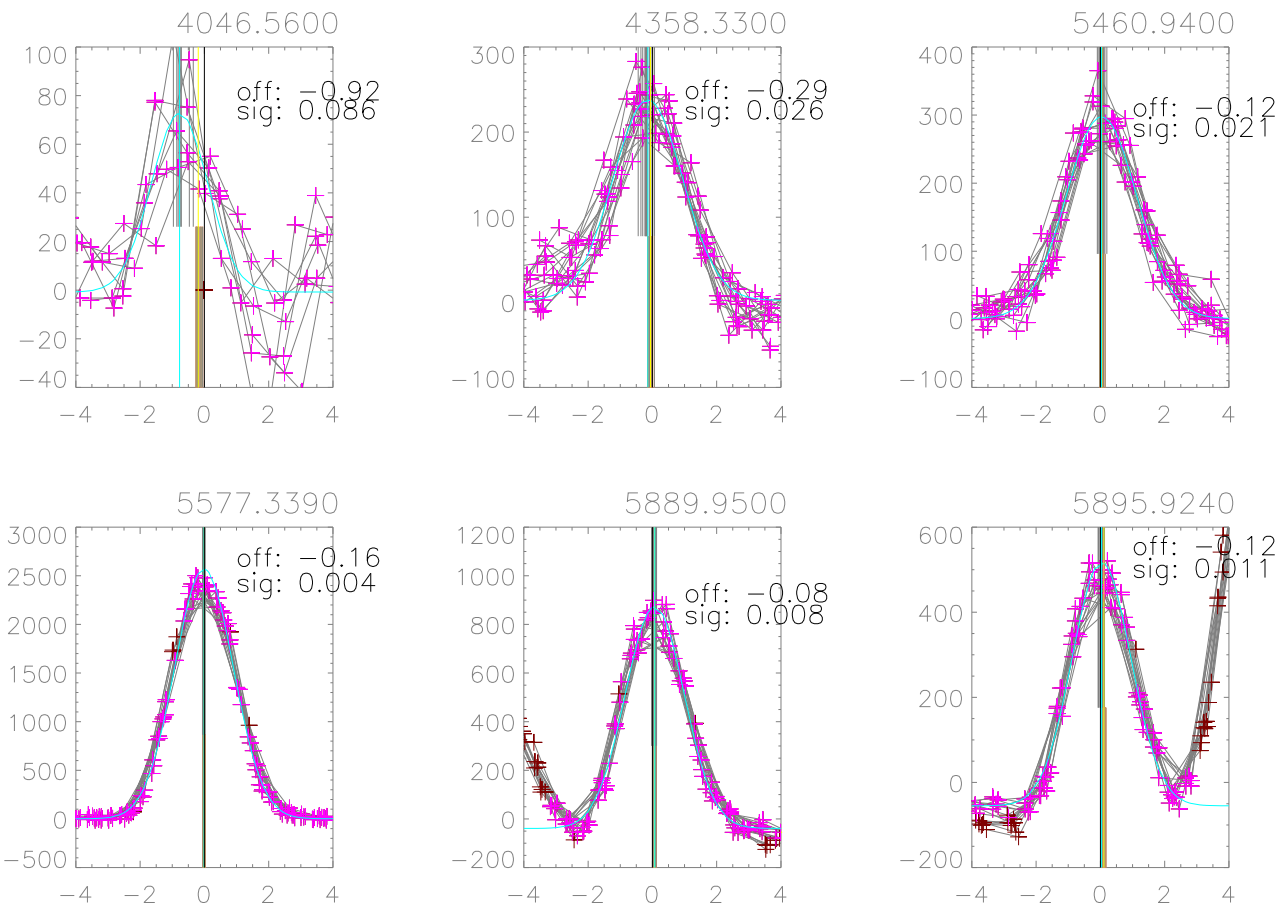

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058094.f
12.7
12.7
12.7

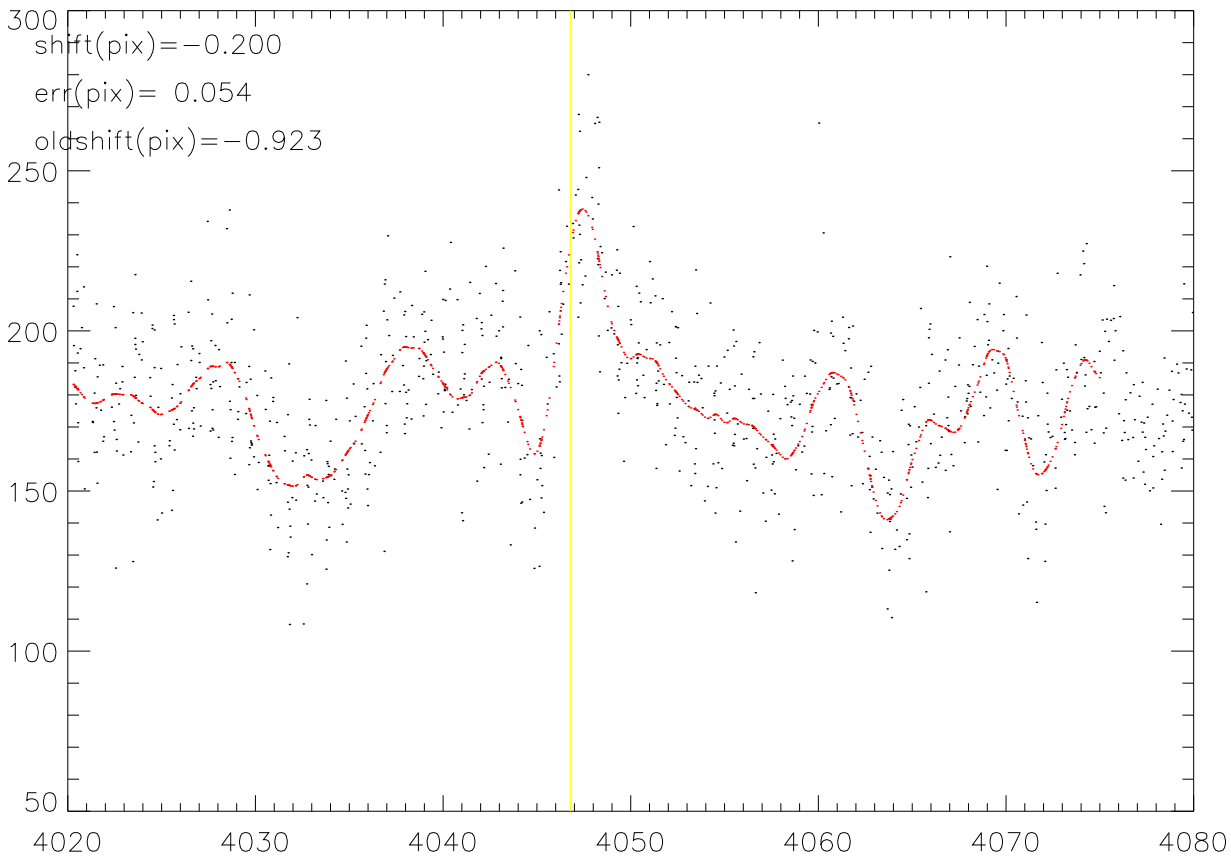

PLATE=3173 MJD=54848 Scattered Light before halo removal on sdR-b2-00058094.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.042
Max value = 14.081
Wed May 19 21:46:41 2010

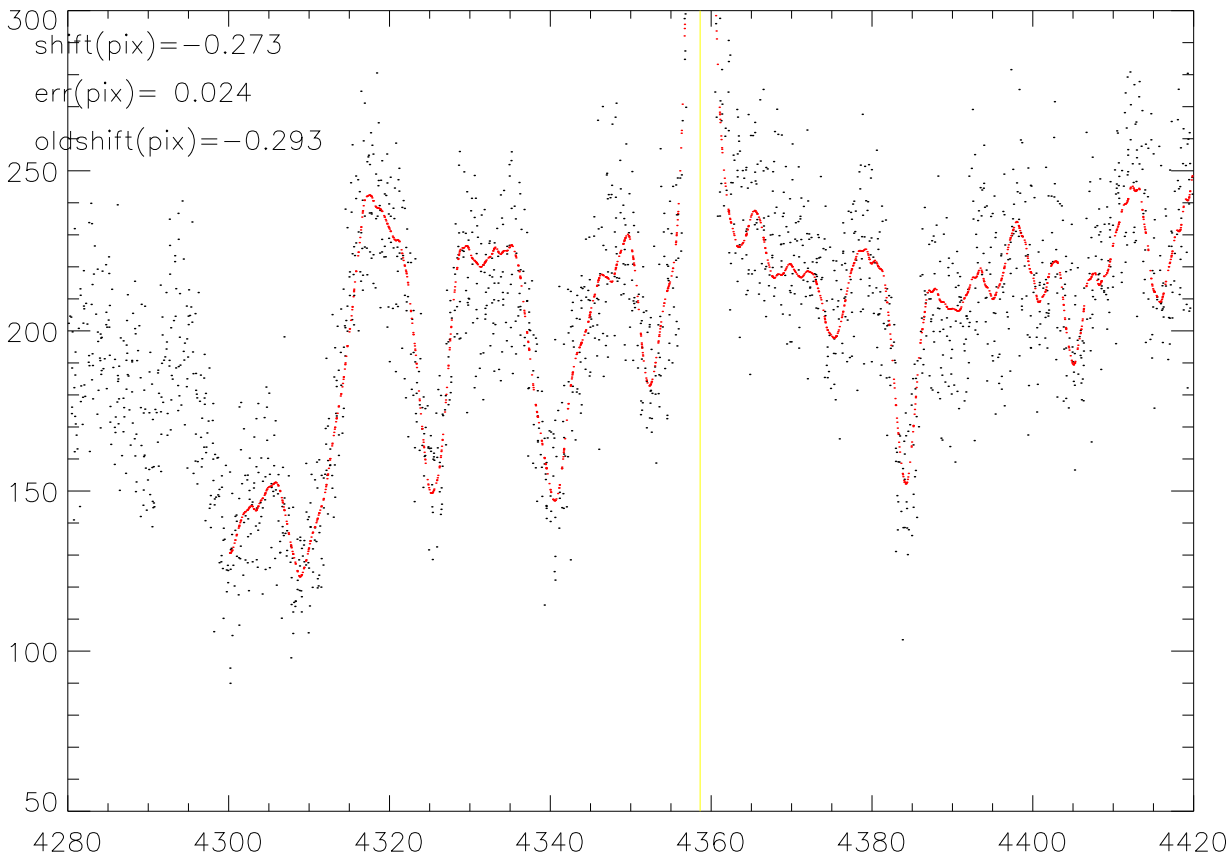

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058094.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
7.6
9.8

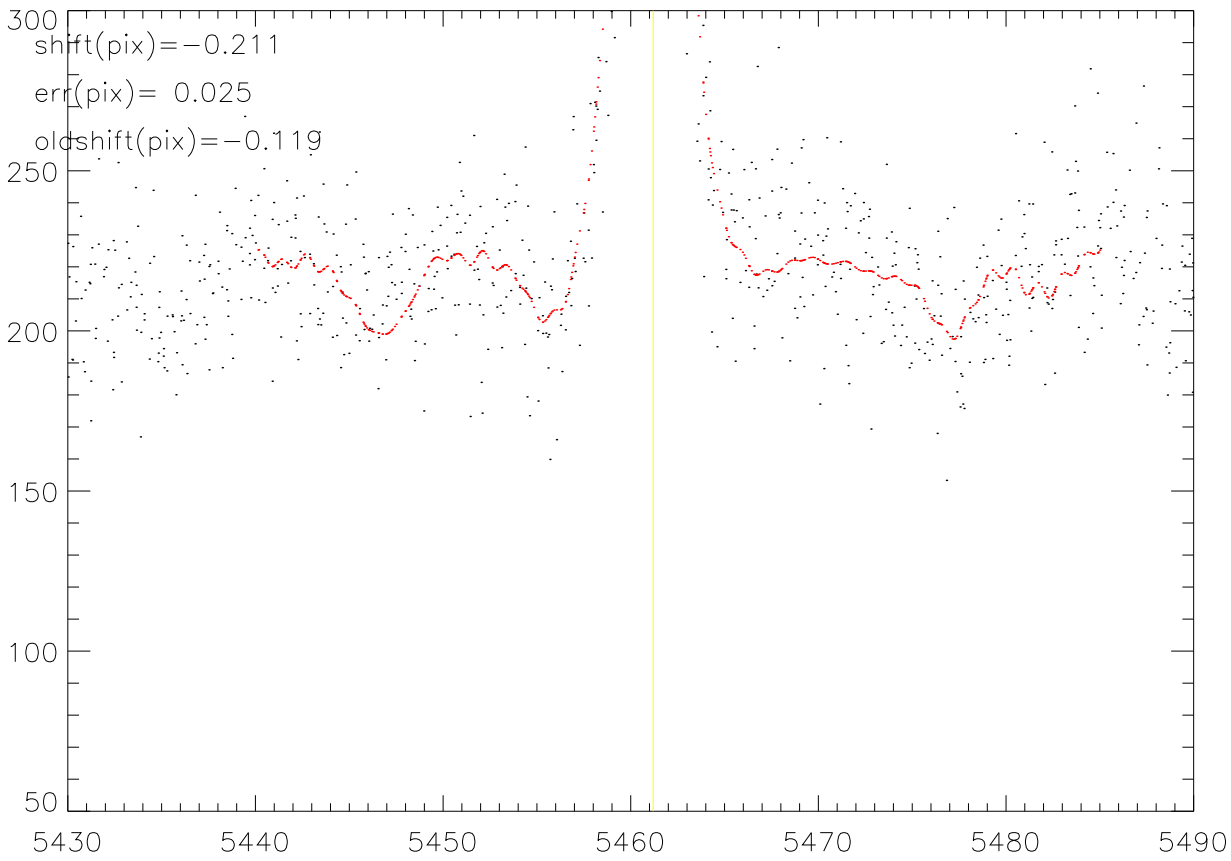

PLATE=3173 MJD=54848 Scattered Light on sdR-b2-00058094.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.014
Max value = 10.257
Wed May 19 21:48:09 2010

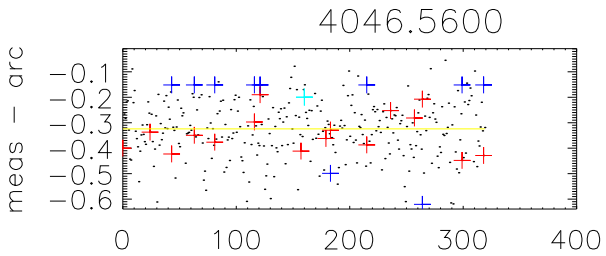

PLATE=3173 MJD=54848 Extraction chi^2 for sdR-b2-00058094.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

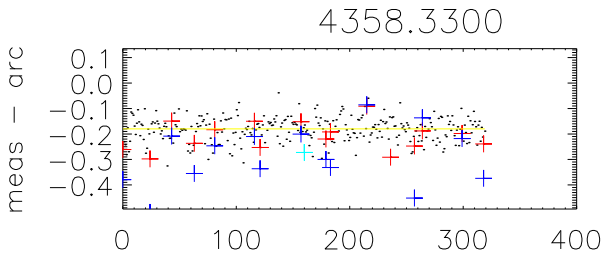

4046.5600
off: −0.92
sig: 0.086
4358.3300
off: −0.29
sig: 0.026
5460.9400
off: −0.12
sig: 0.021
5577.3390
off: −0.16
sig: 0.004
5889.9500
off: −0.08
sig: 0.008
5895.9240
off: −0.12
sig: 0.011

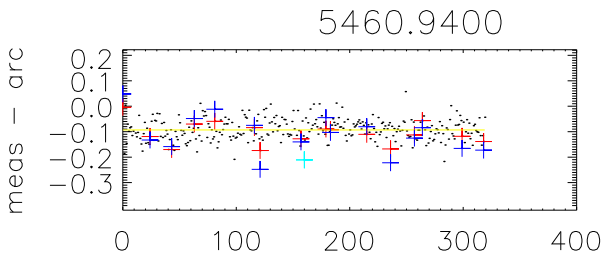

shift(pix)=−0.200
err(pix)= 0.054
oldshift(pix)=−0.923
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

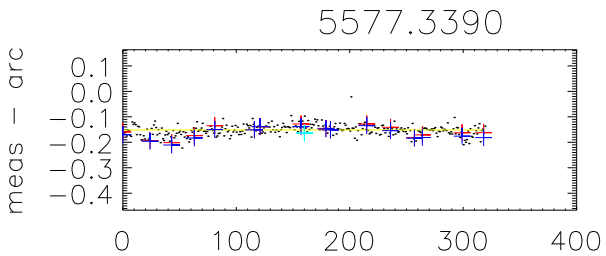

shift(pix)=−0.273
err(pix)= 0.024
oldshift(pix)=−0.293
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

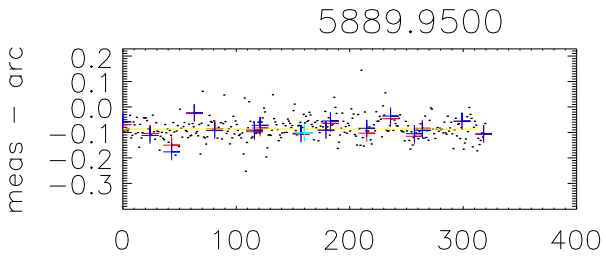

shift(pix)=−0.211
err(pix)= 0.025
oldshift(pix)=−0.119
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

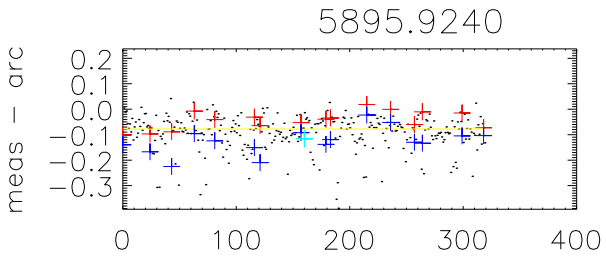

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

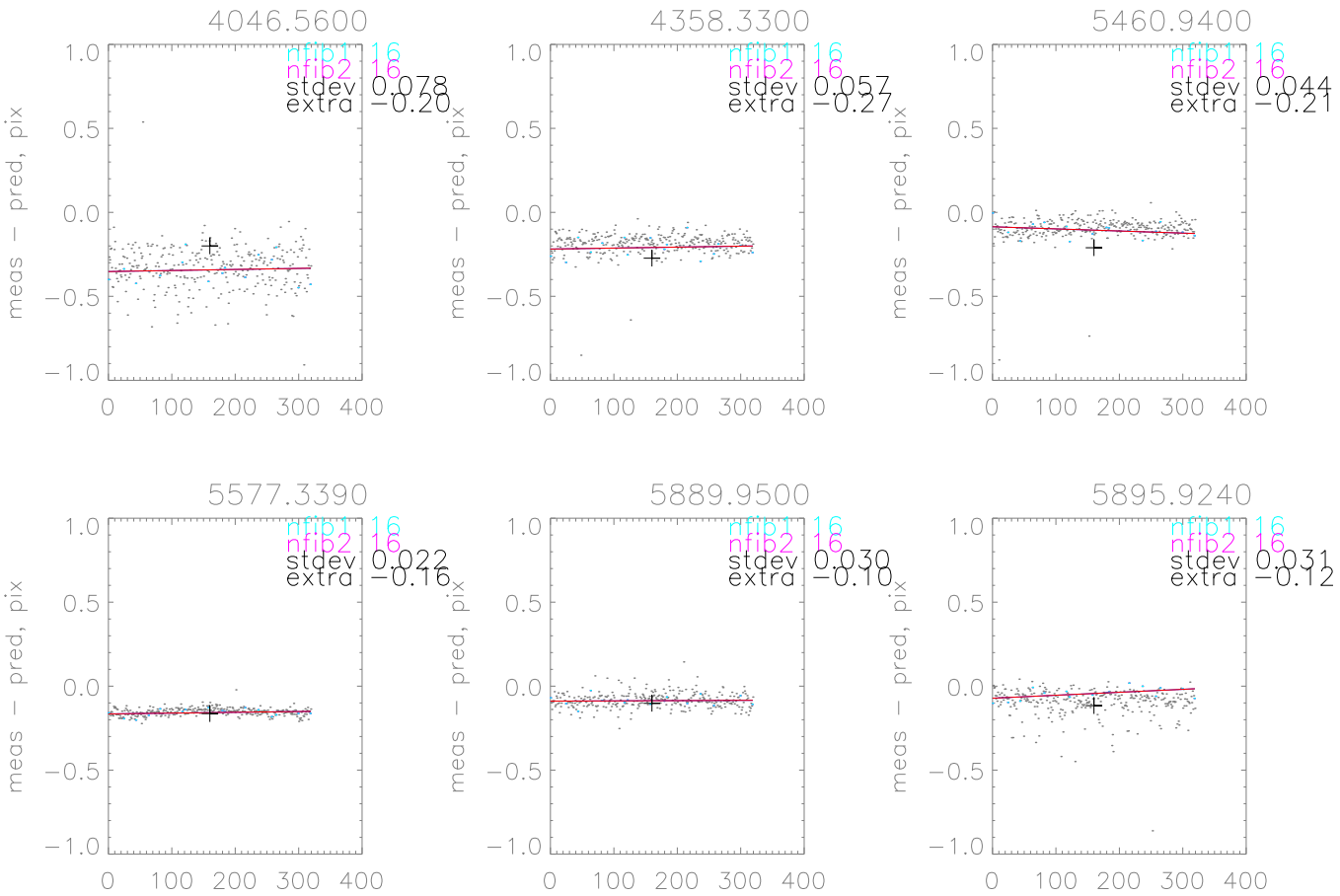

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

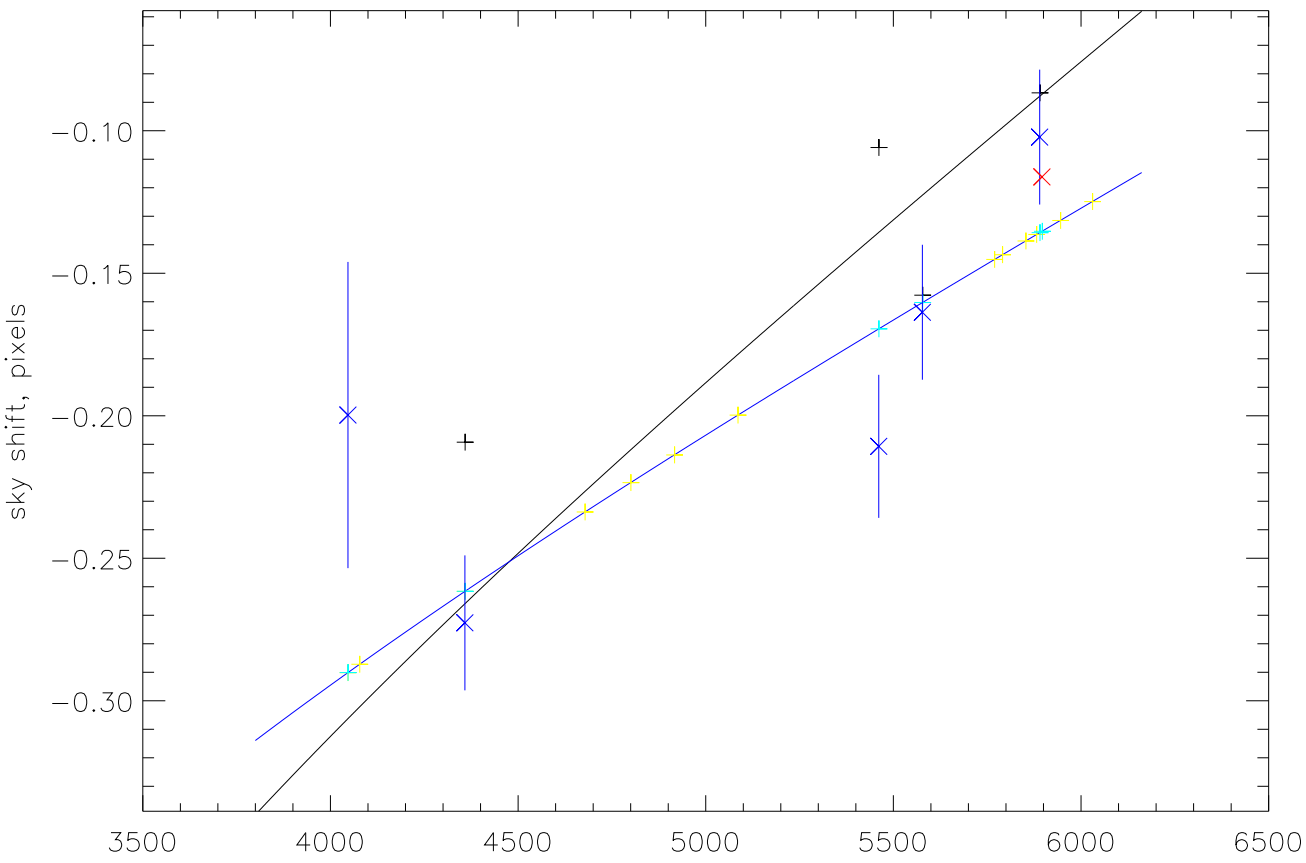

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

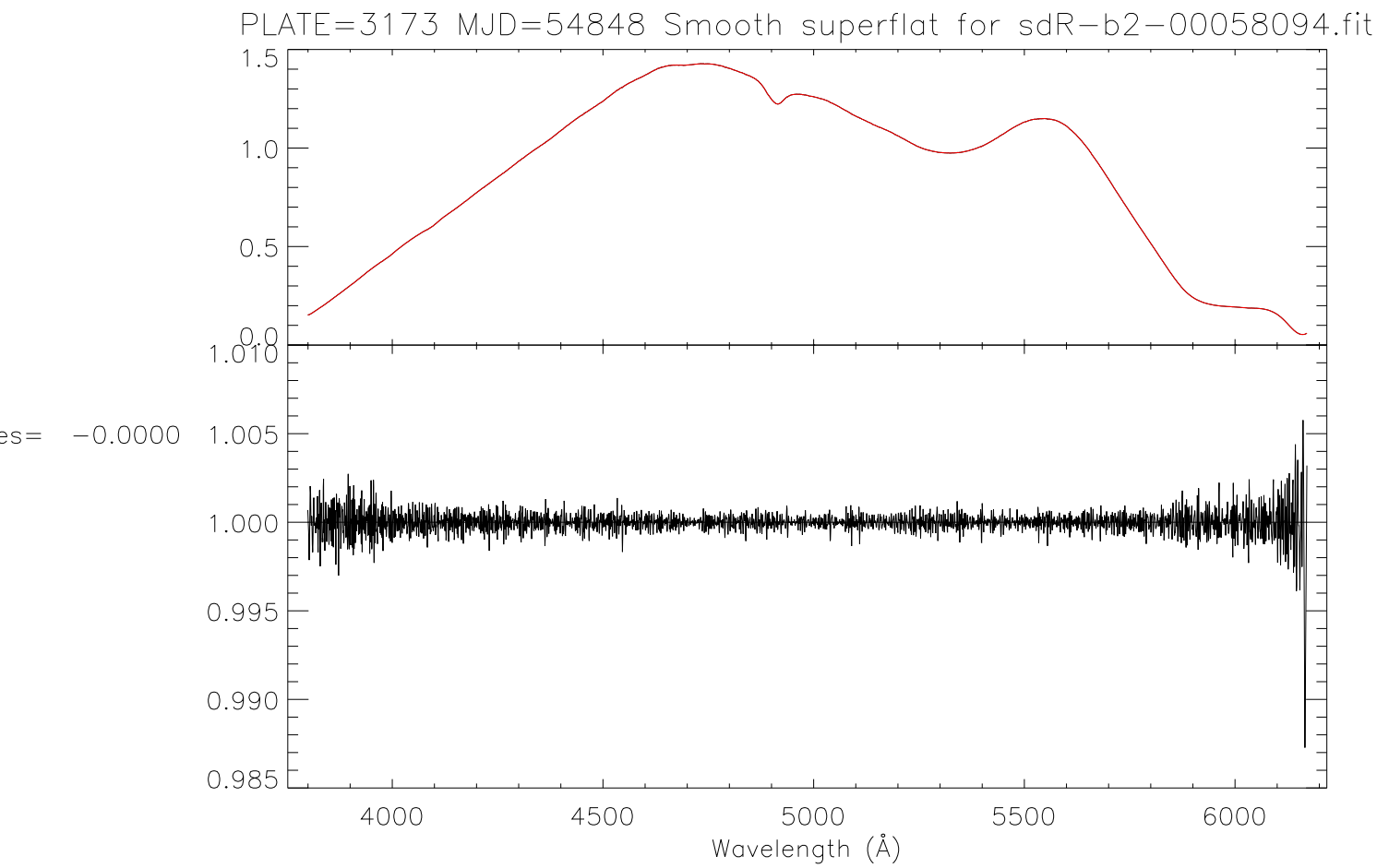

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

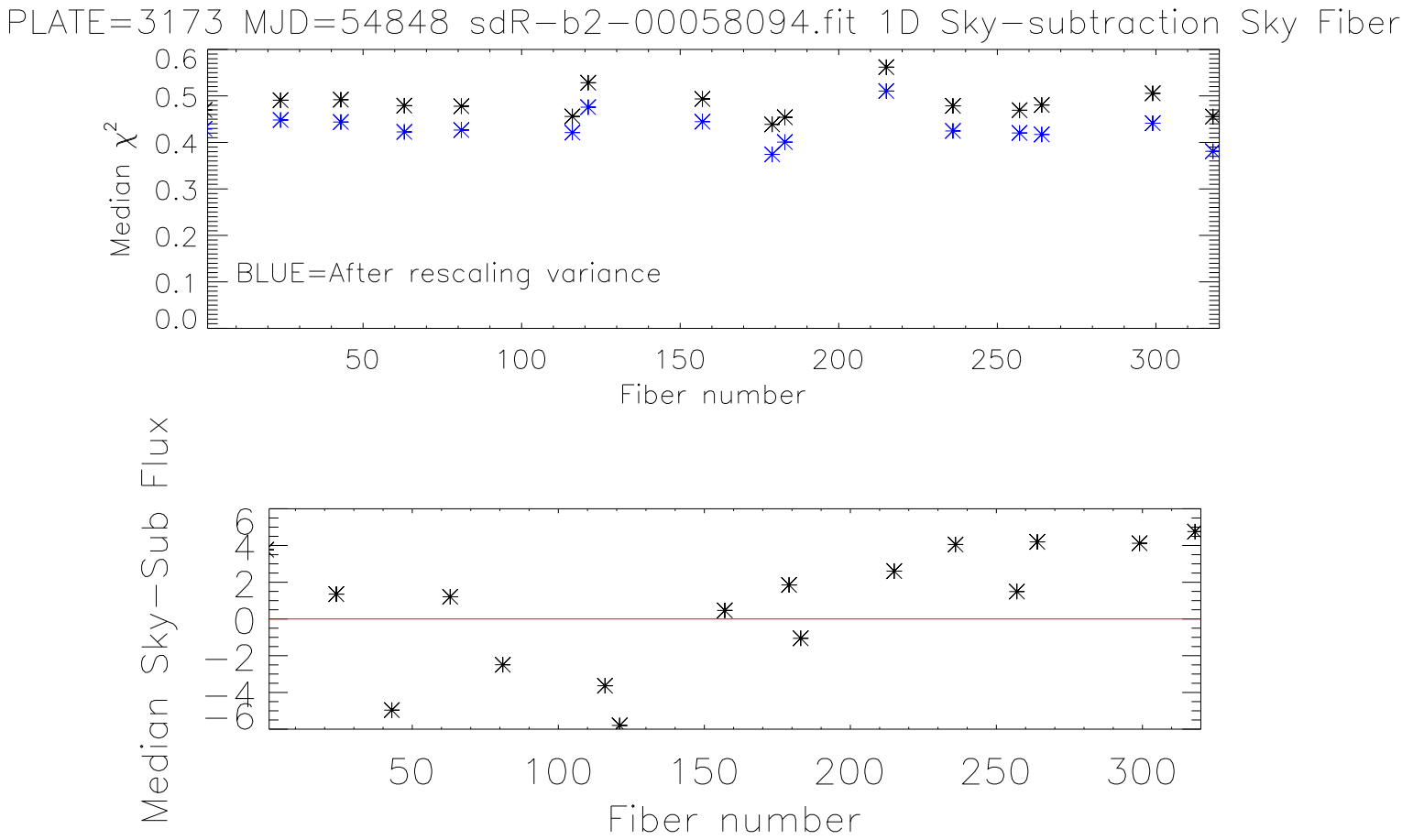

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

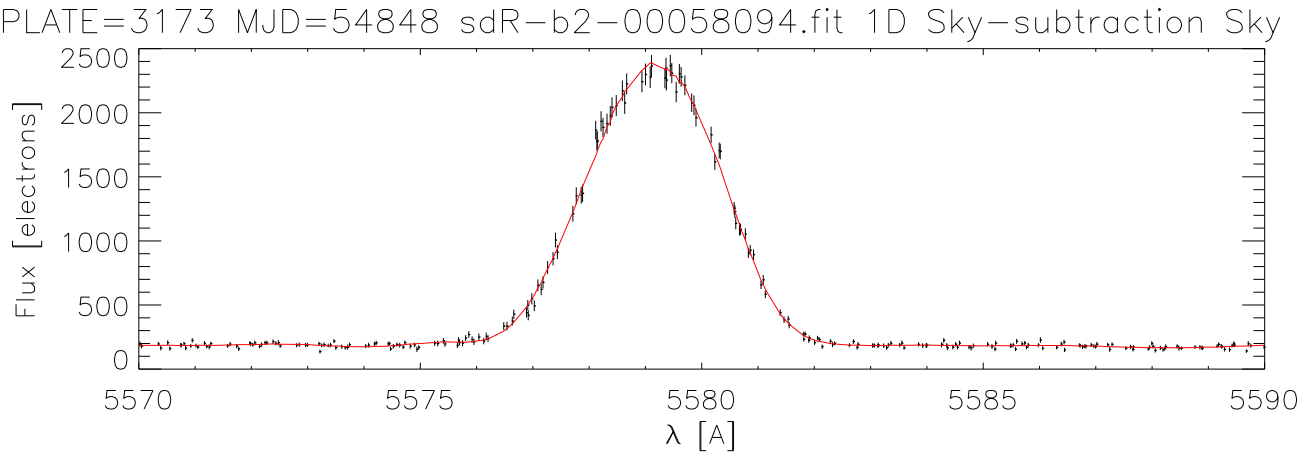

4046.5600
nfib1 16
nfib2 16
stdev 0.078
extra −0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.057
extra −0.27
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

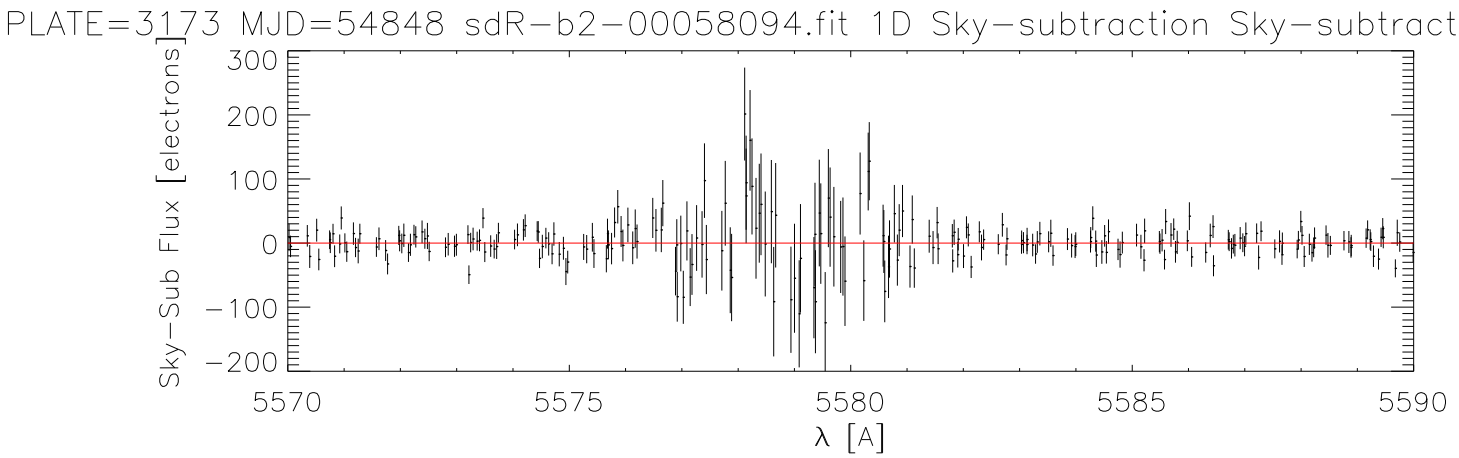

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

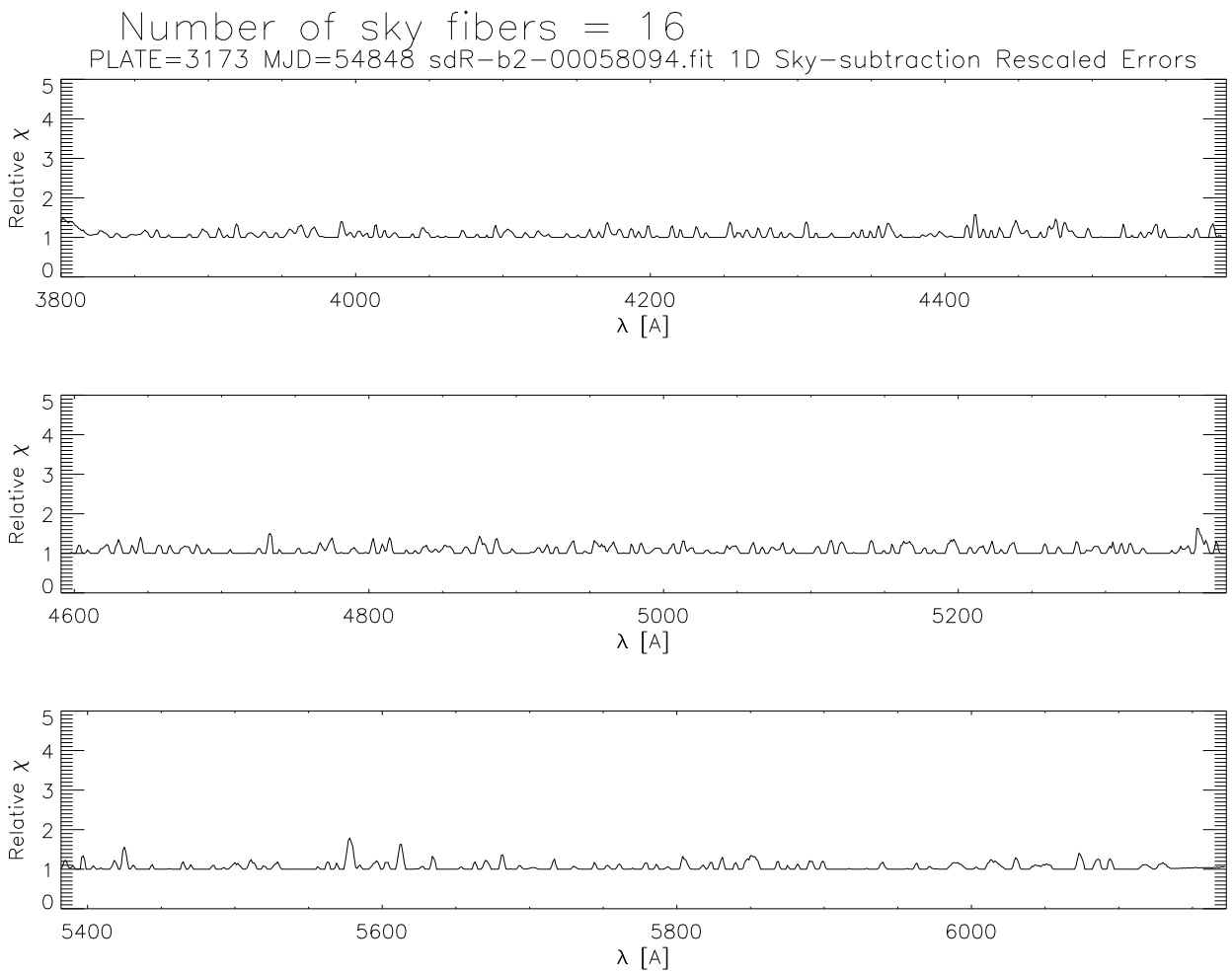

PLATE=3173 MJD=54848 Smooth superflat for sdR-b2-00058094.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

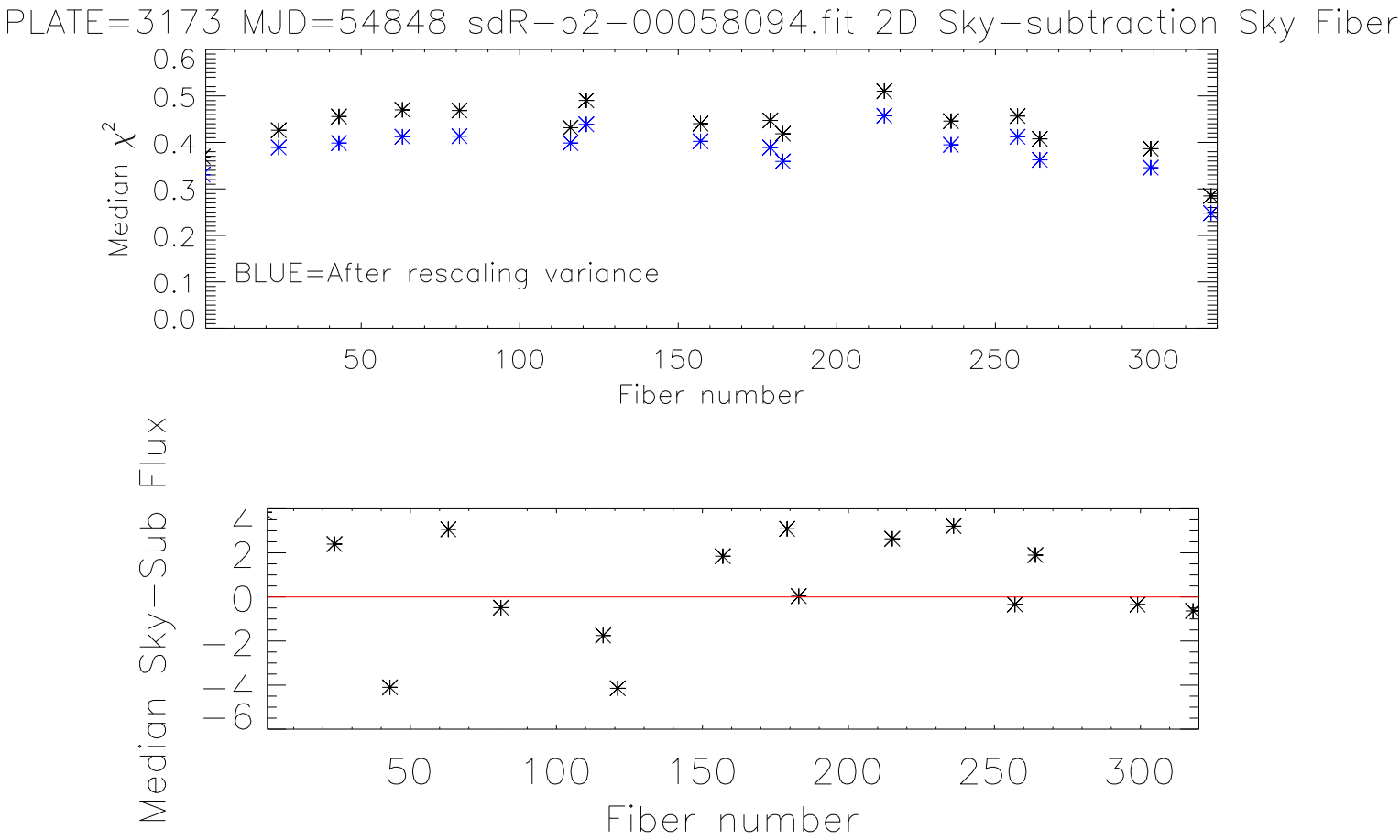
es= −0.0000

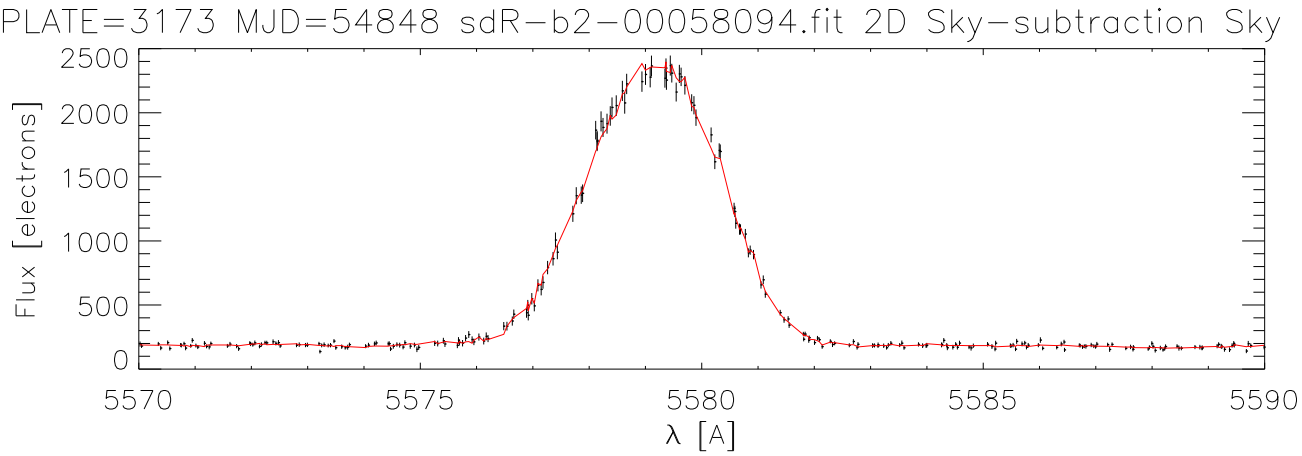

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

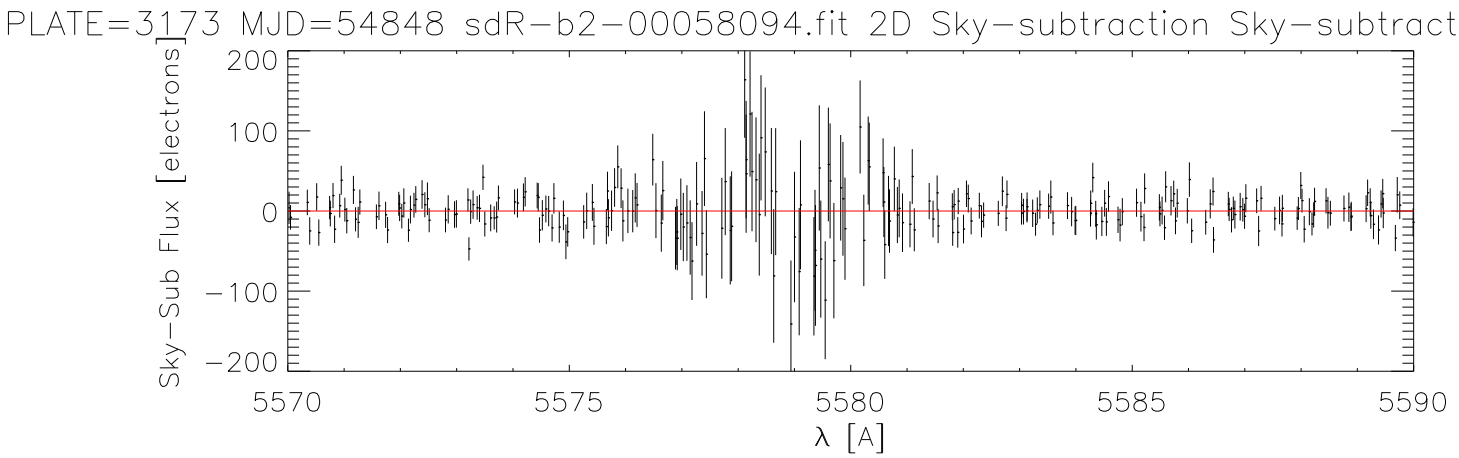

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

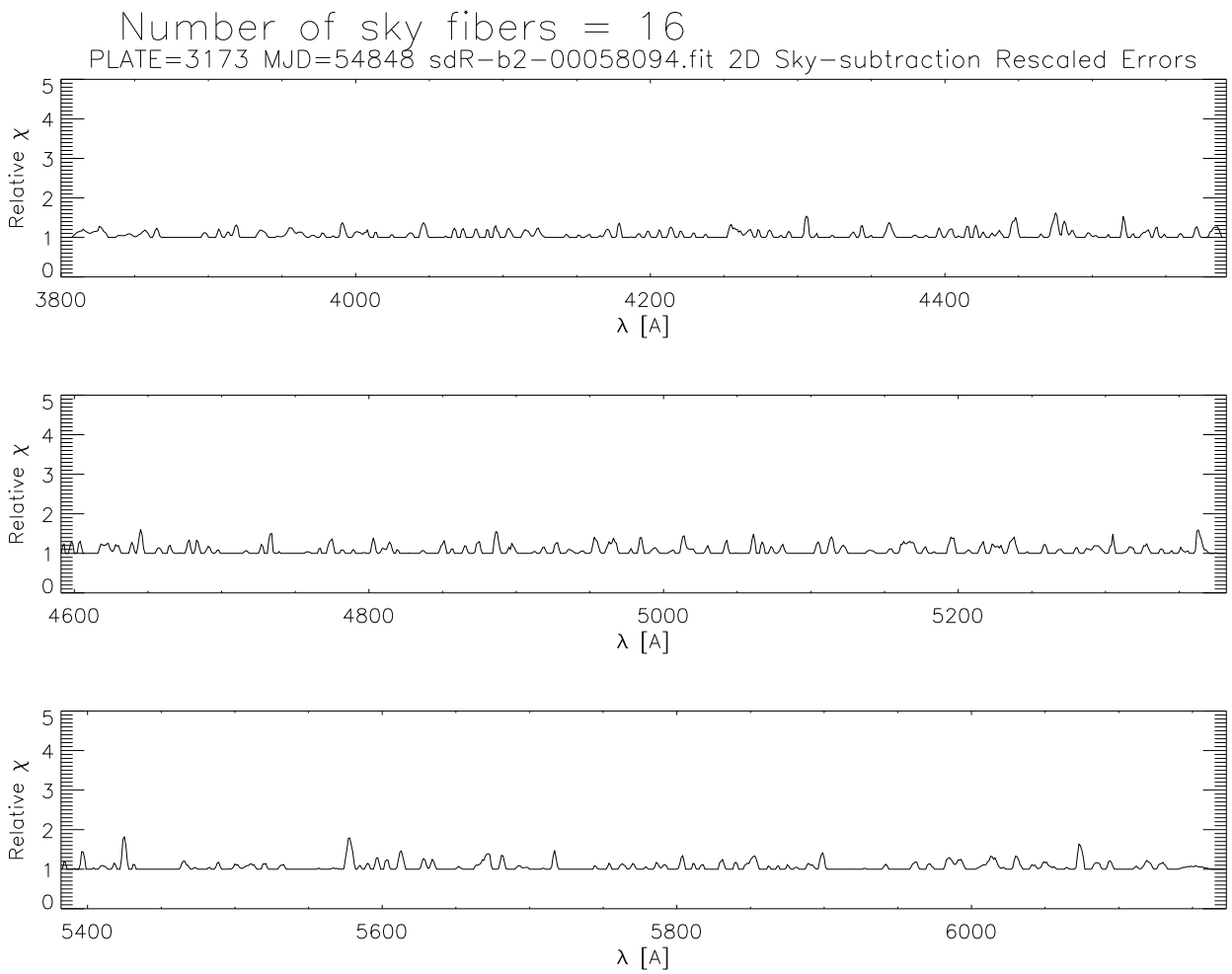

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

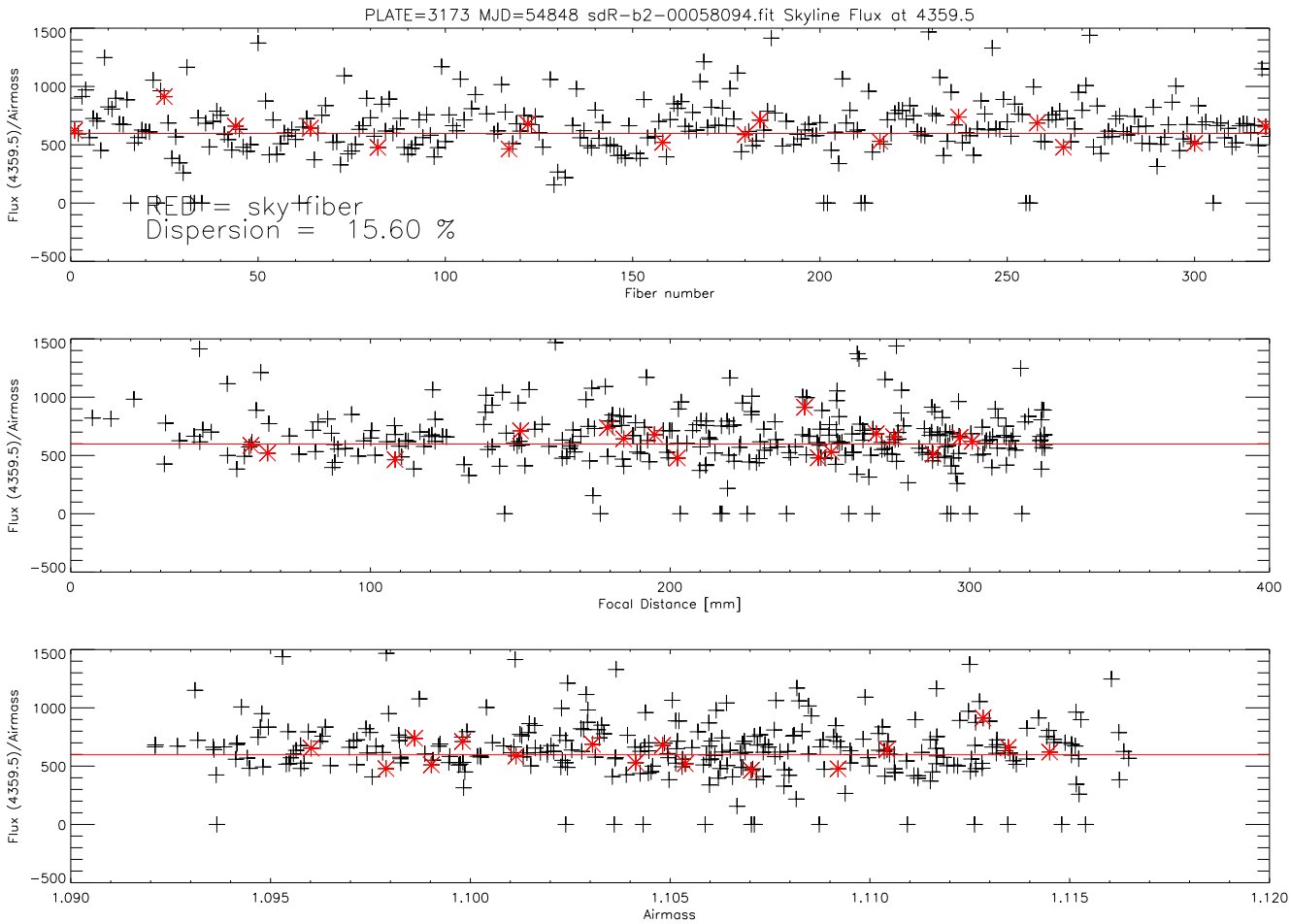

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058094.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

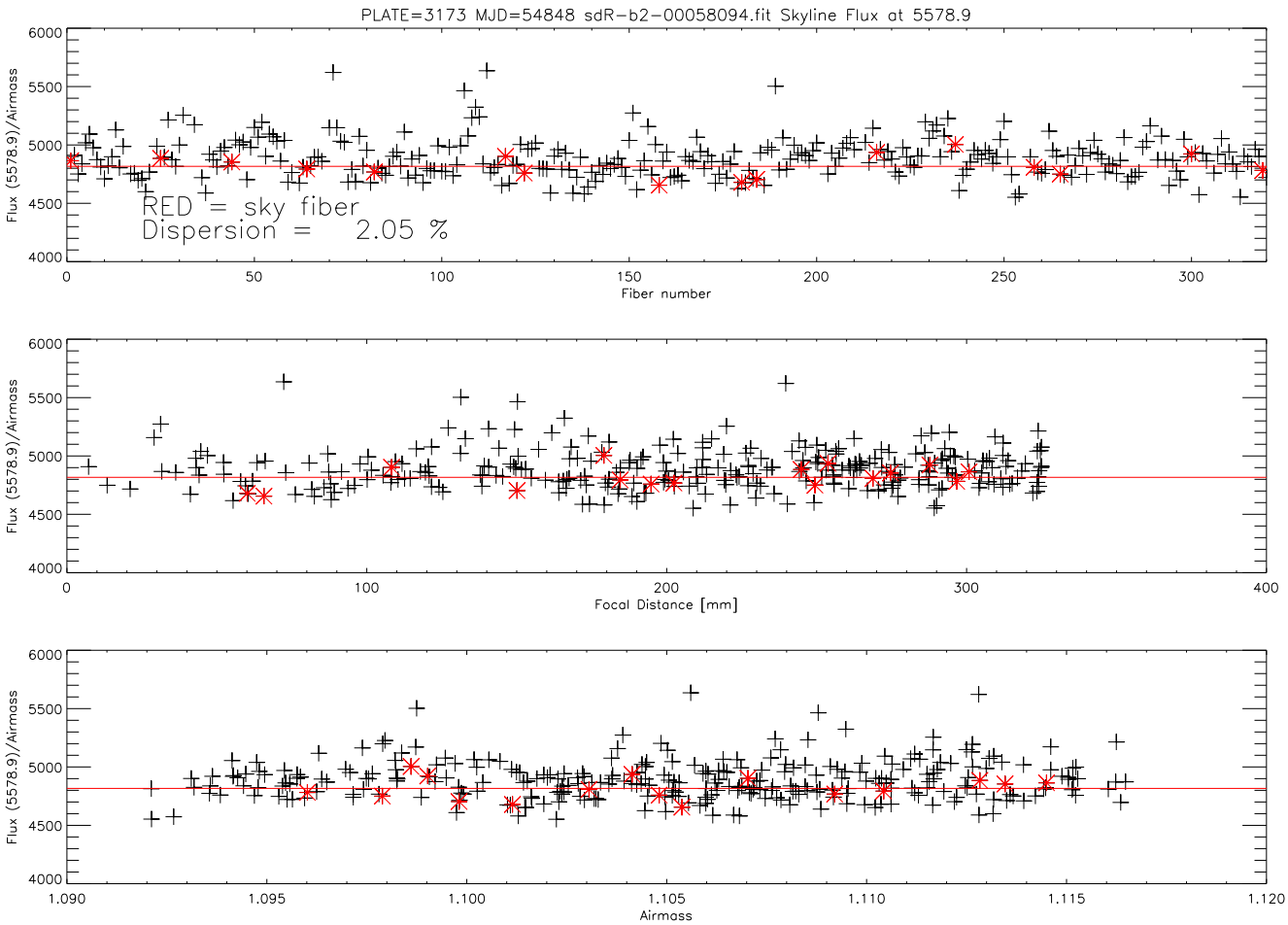

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

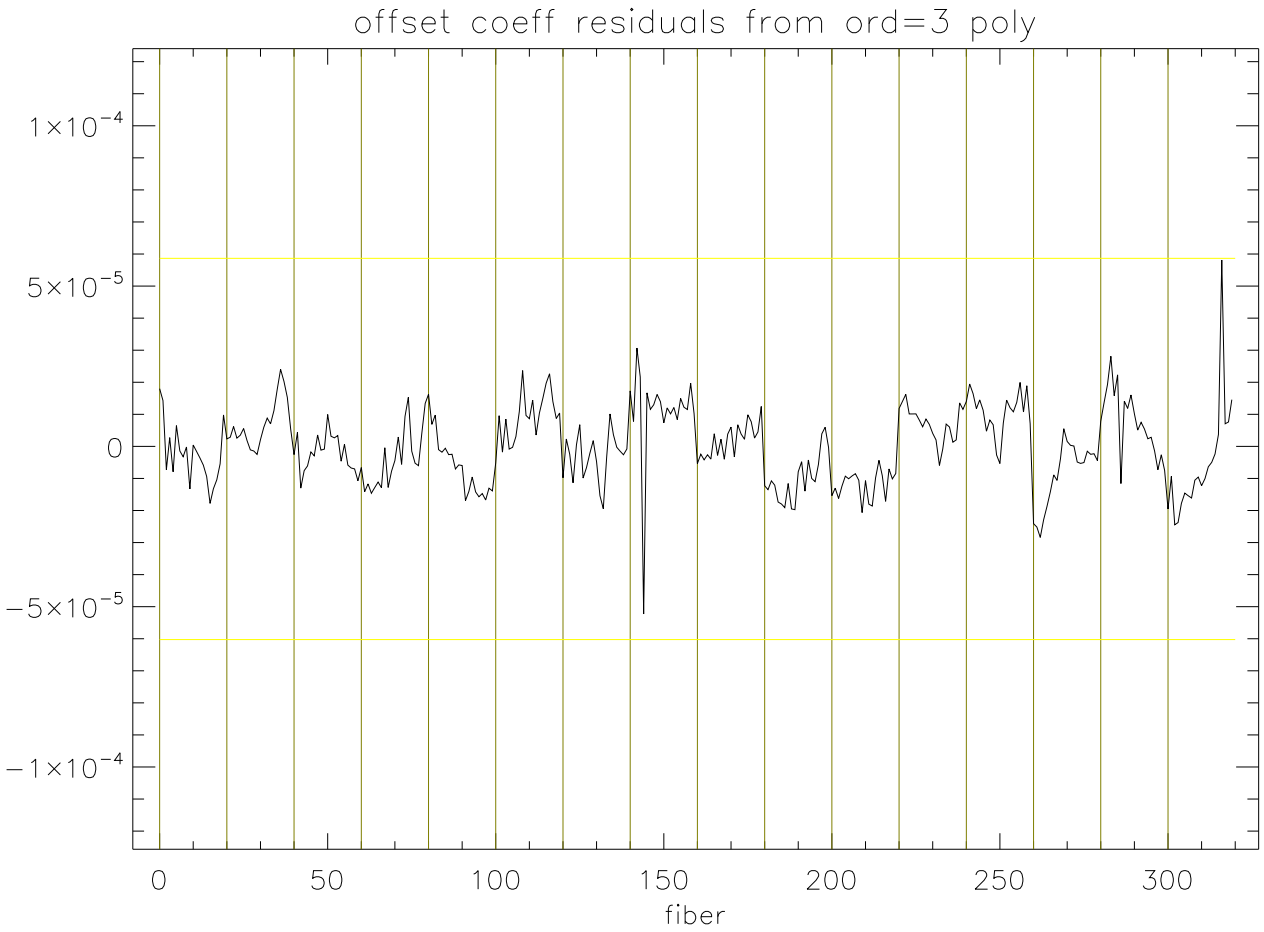

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

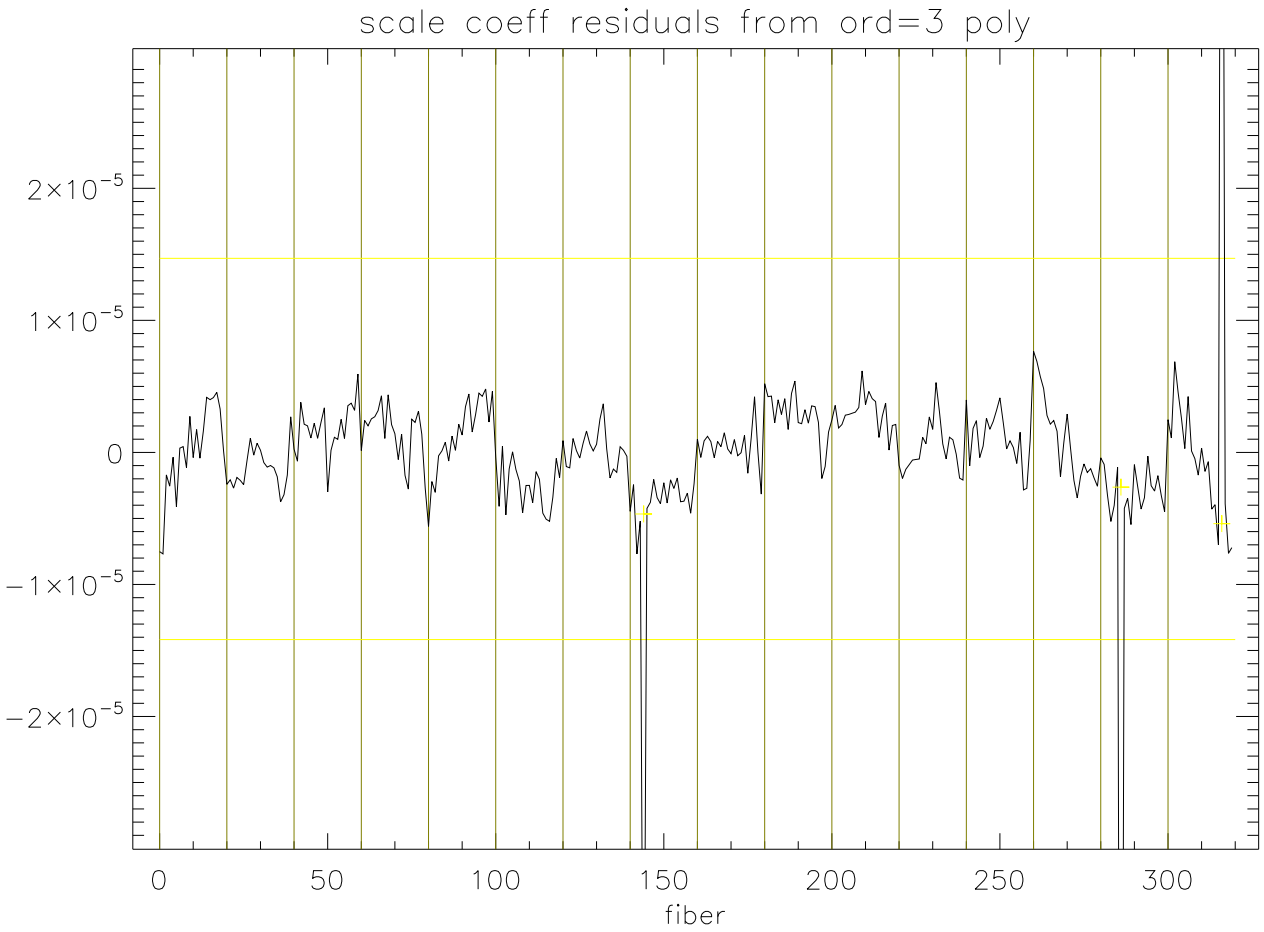

PLATE=3173 MJD=54848 sdR-b2-00058094.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

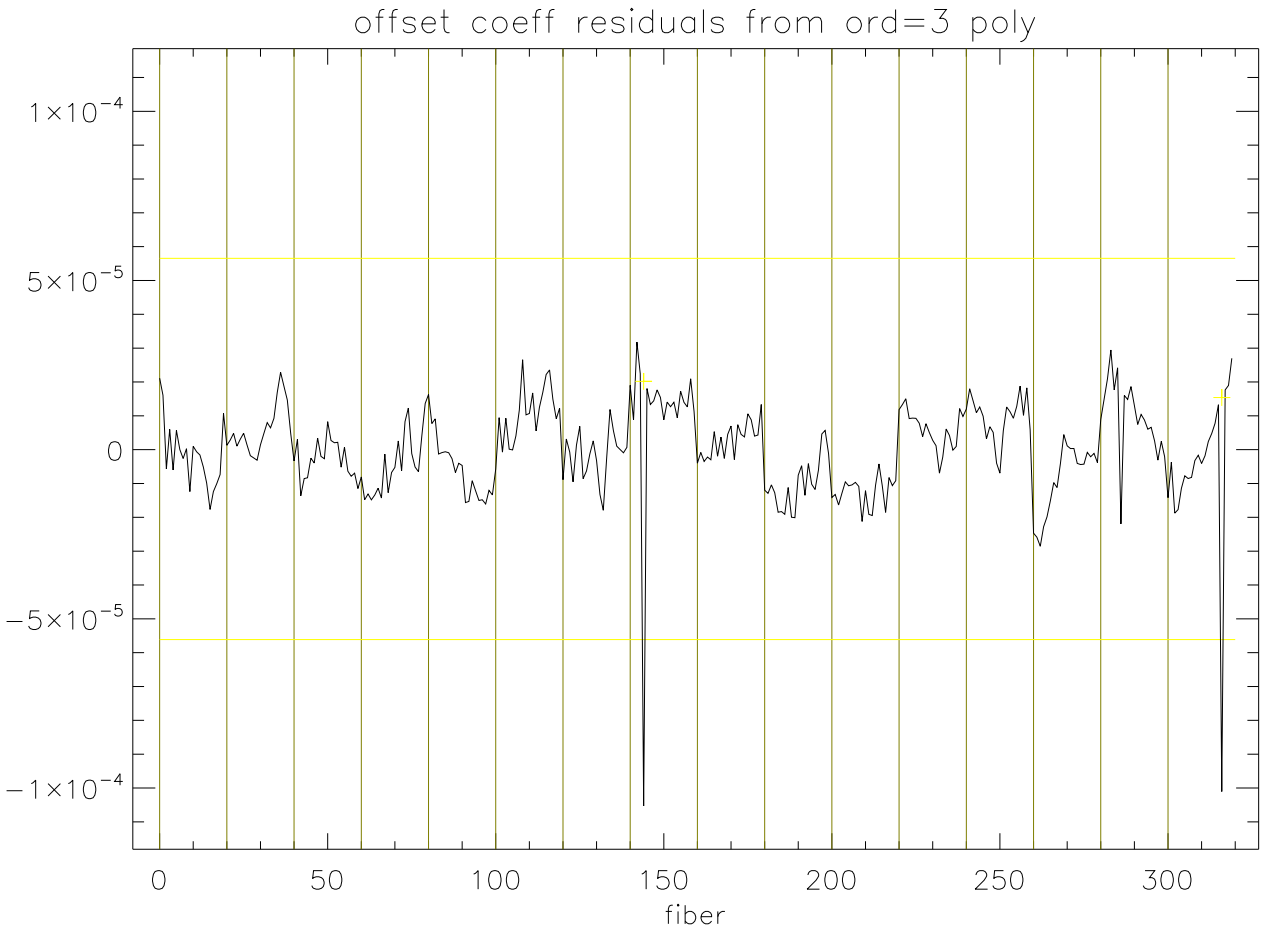

Number of sky fibers = 16
PLATE=3173 MJD=54848 sdR-b2-00058094.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

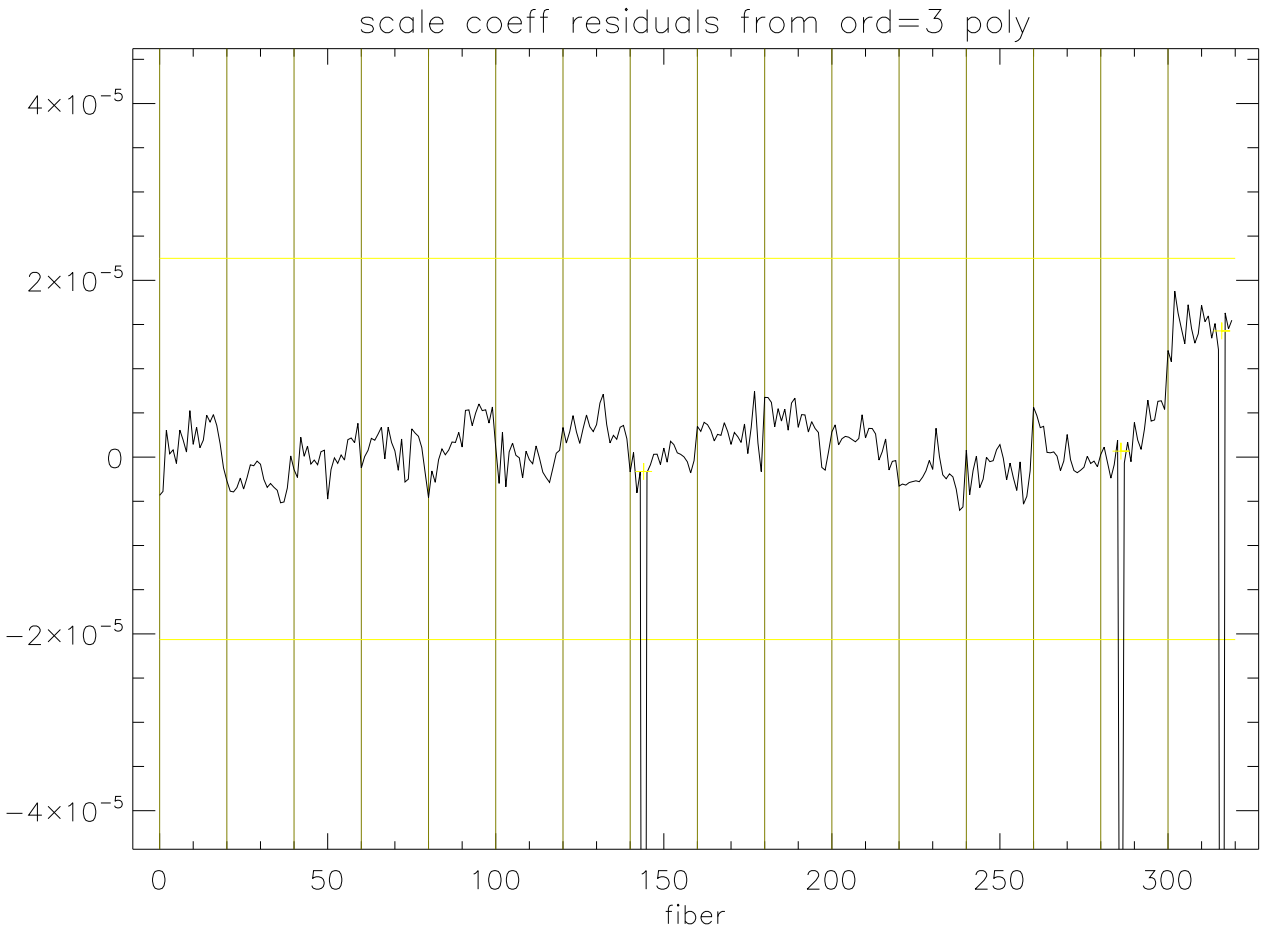

PLATE=3173 MJD=54848 sdR-b2-00058094.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED= sky fiber
Dispersion = 15.60 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

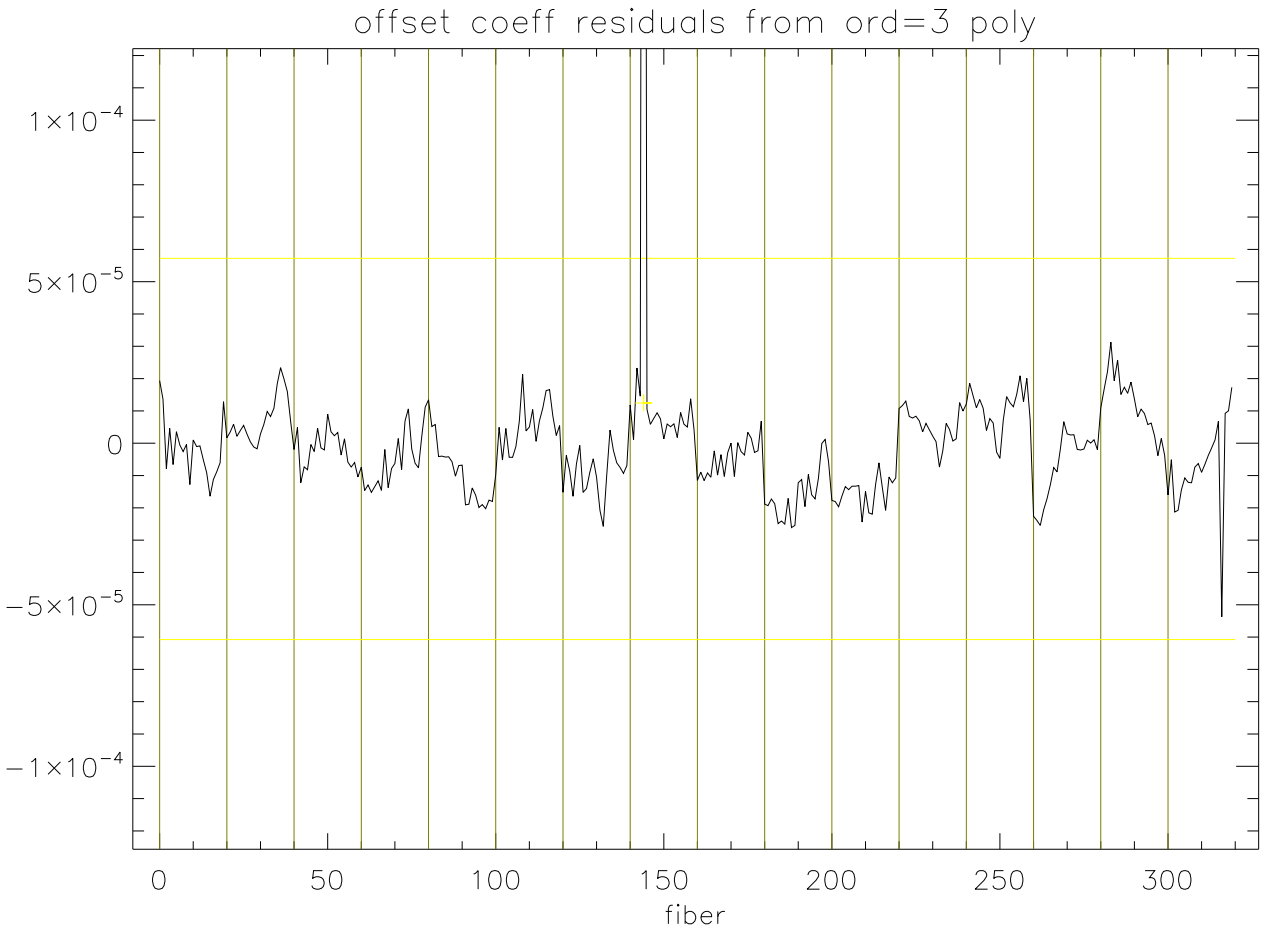

PLATE=3173 MJD=54848 sdR-b2-00058094.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.05 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

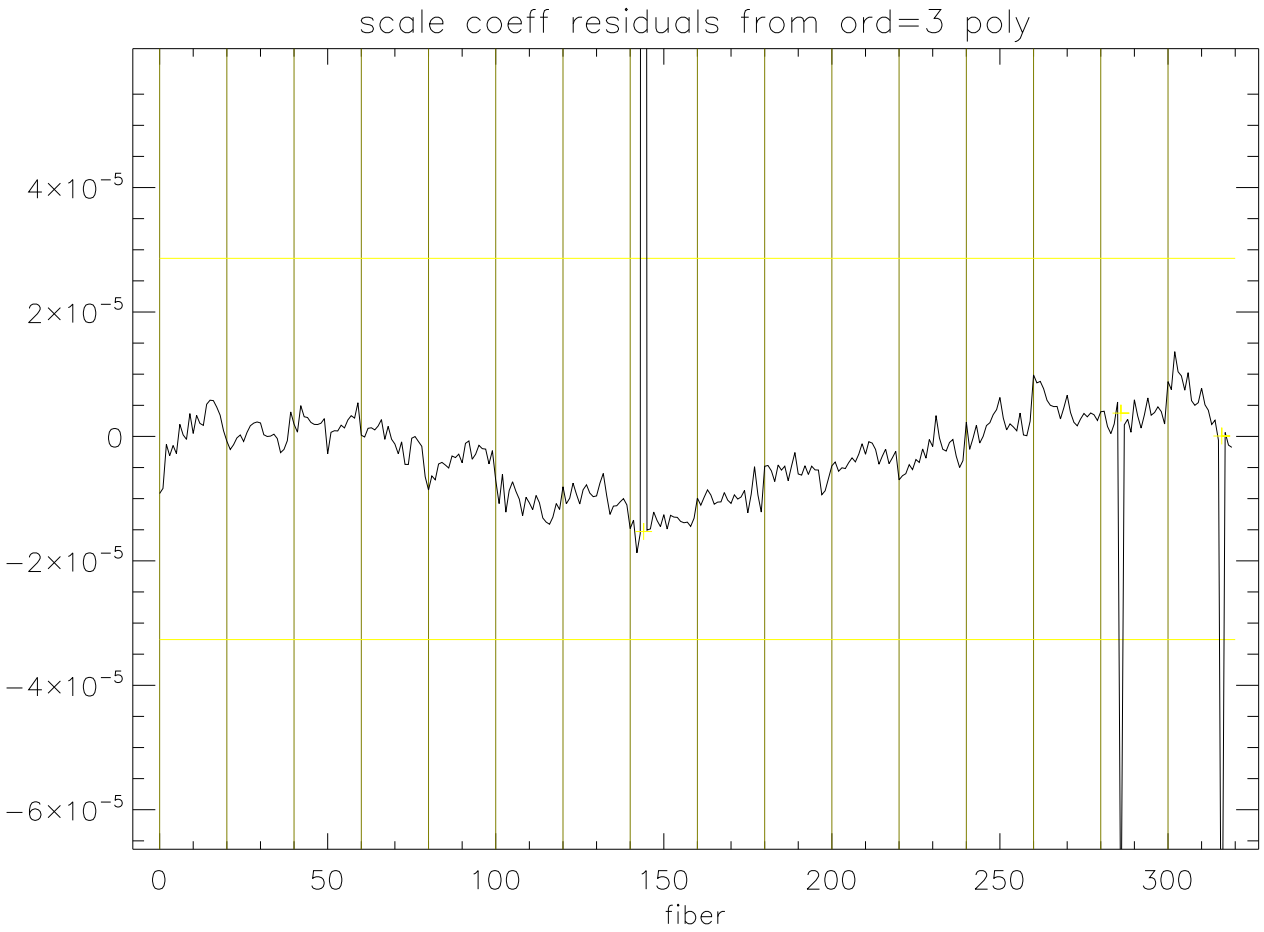

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

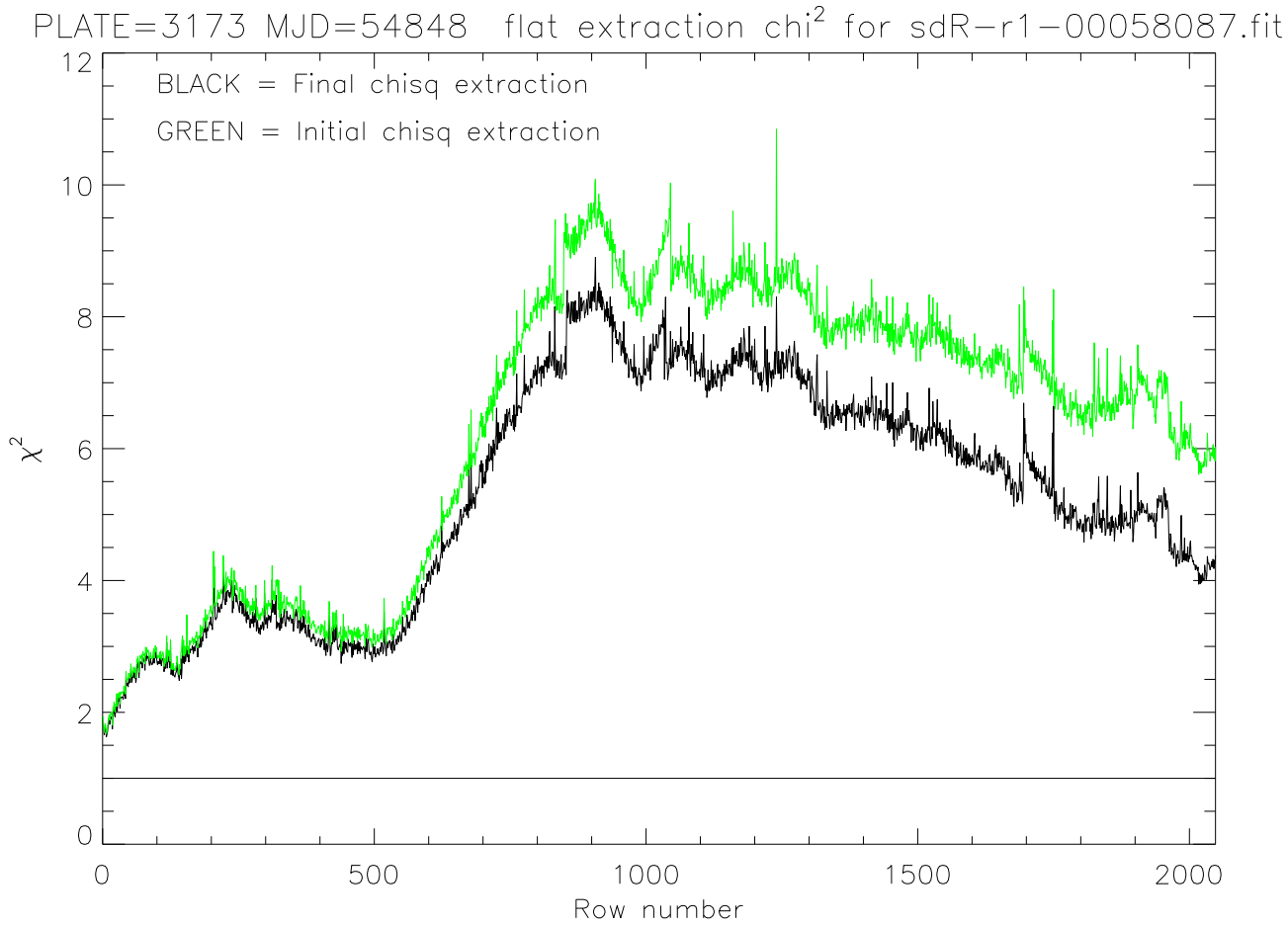

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

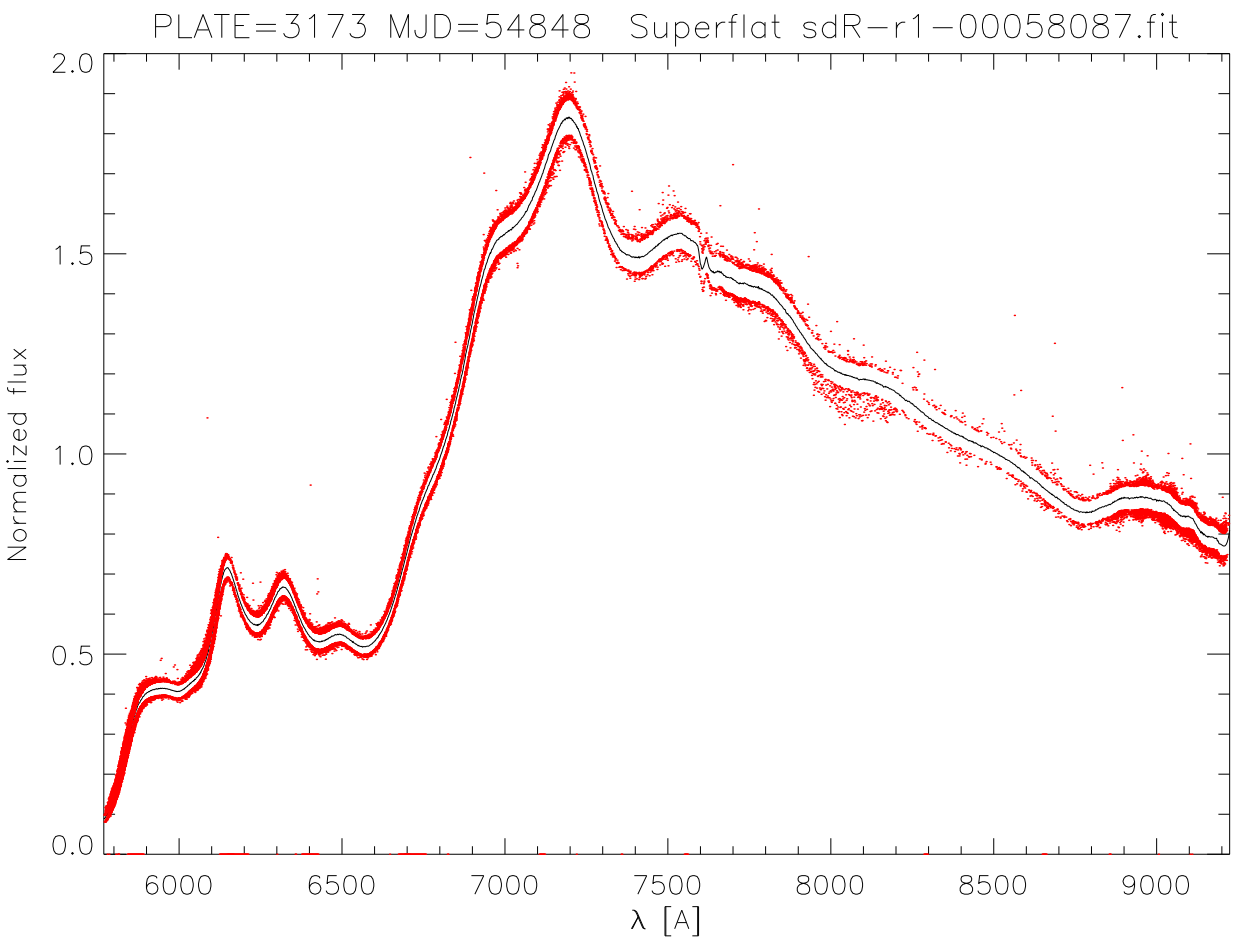

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

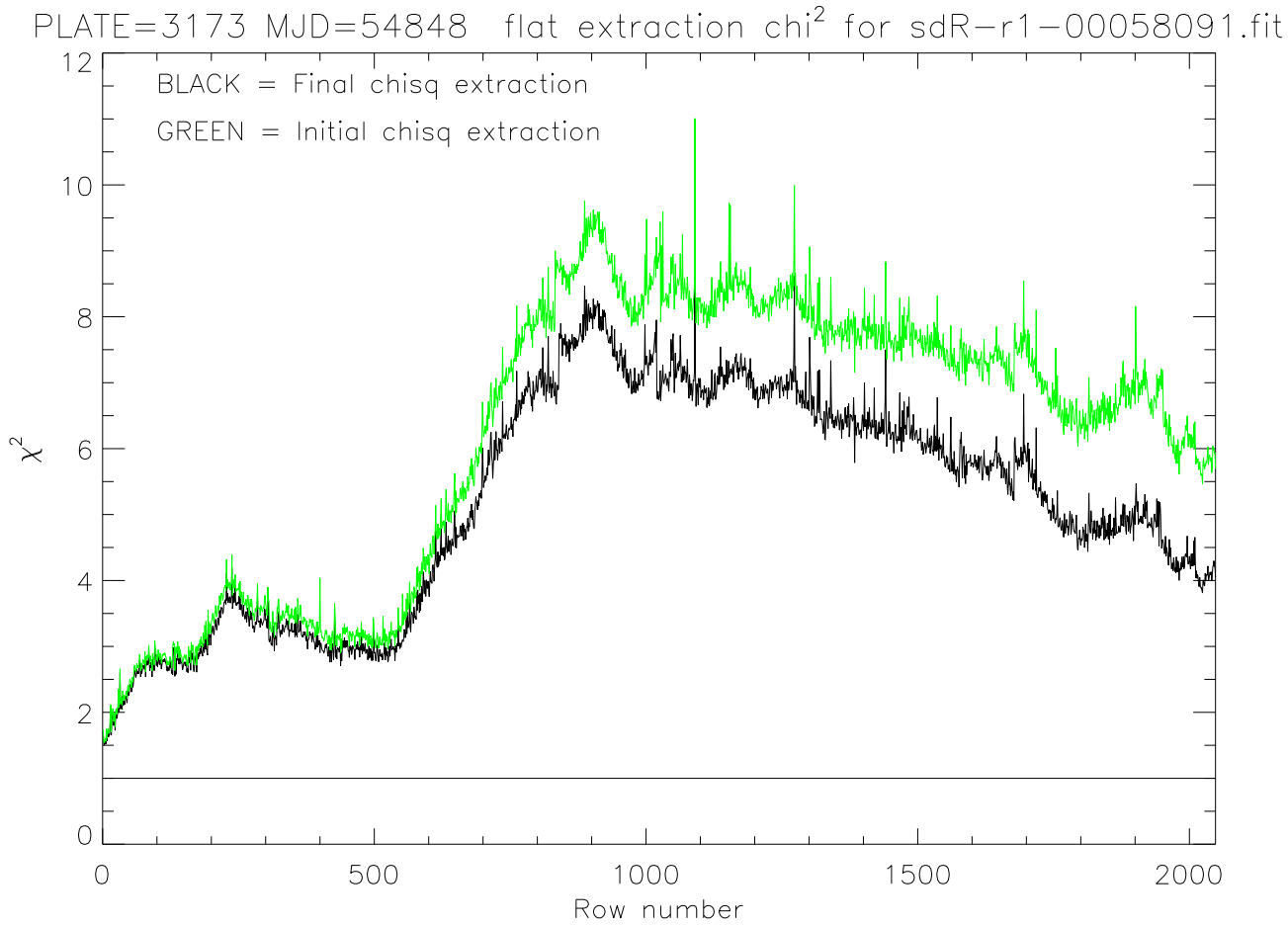

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

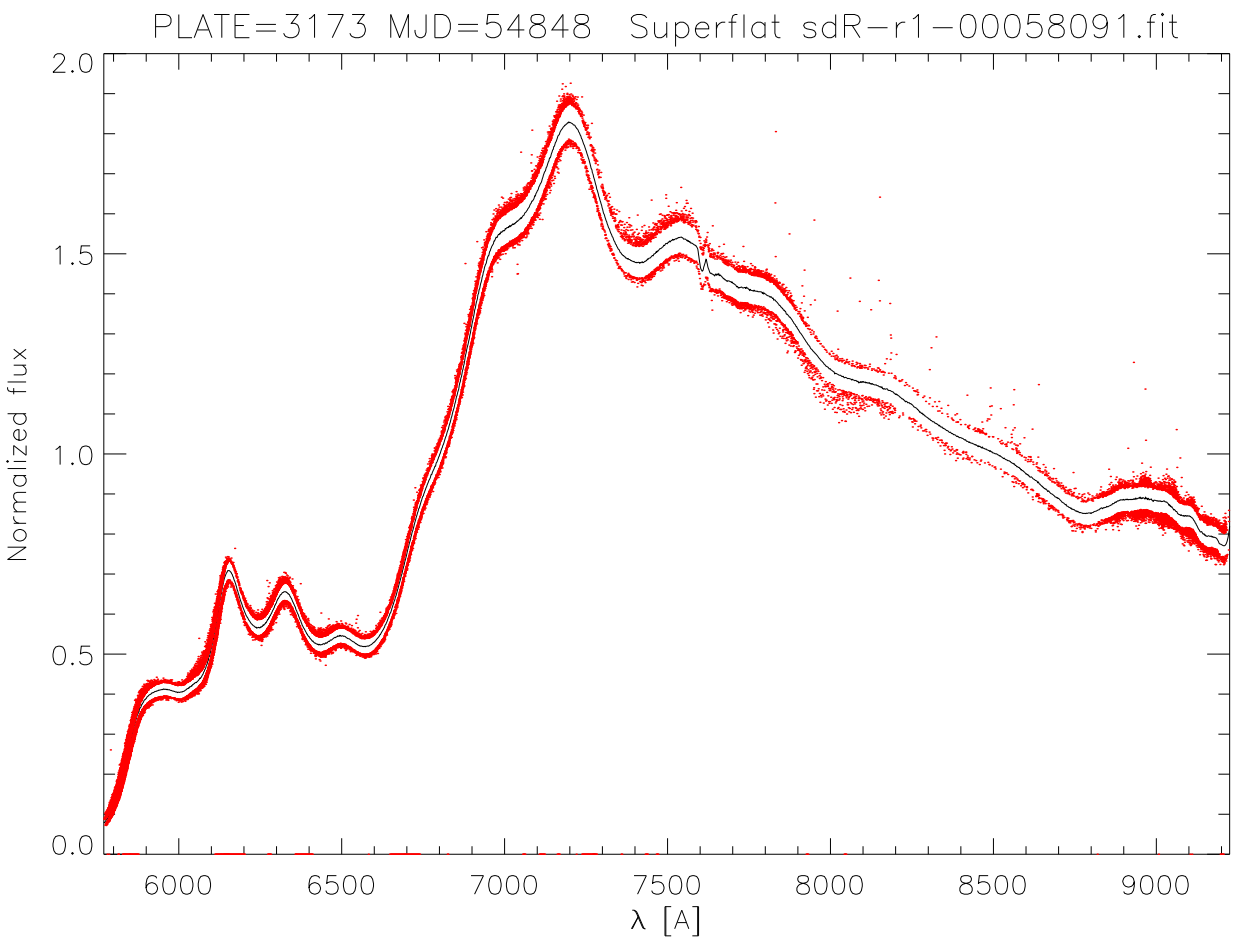

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

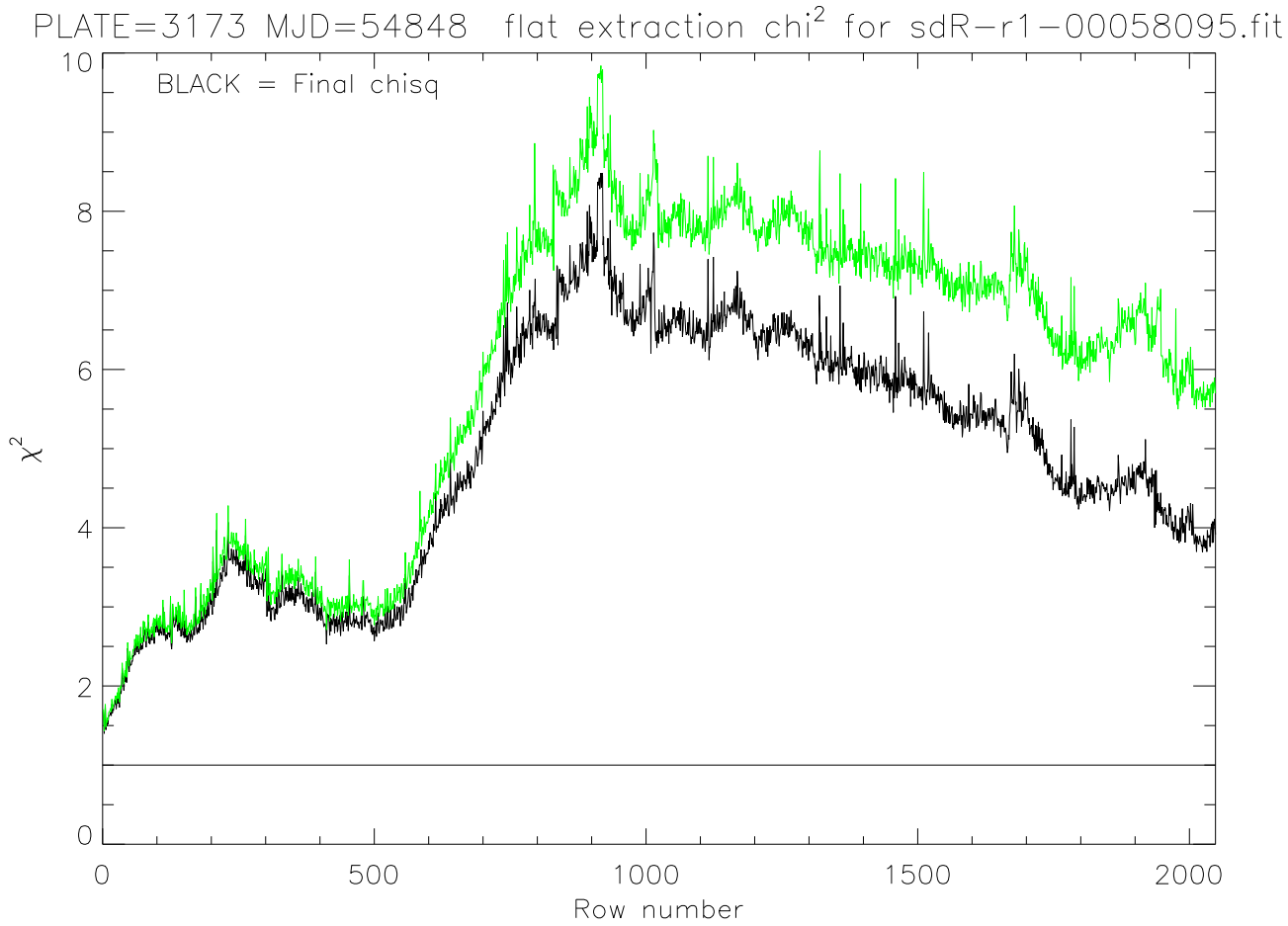

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−r1−00058087.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=3173 MJD=54848 Superflat sdR-r1-00058087.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−r1−00058091.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=3173 MJD=54848 Superflat sdR-r1-00058091.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000


PLATE=3173 MJD=54848 flat extraction chi^2 for sdR−r1−00058095.fit
BLACK = Final chisq
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000