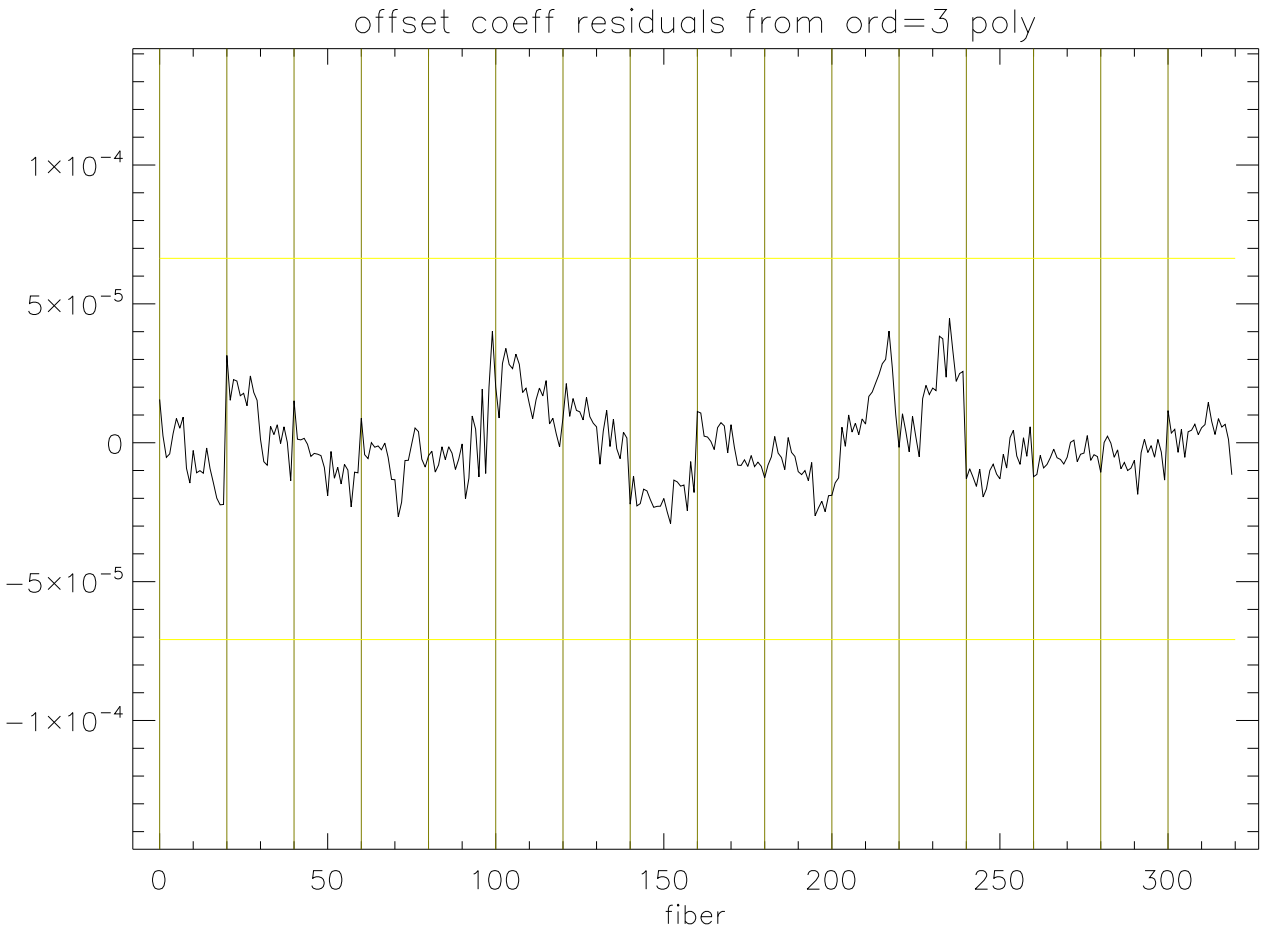
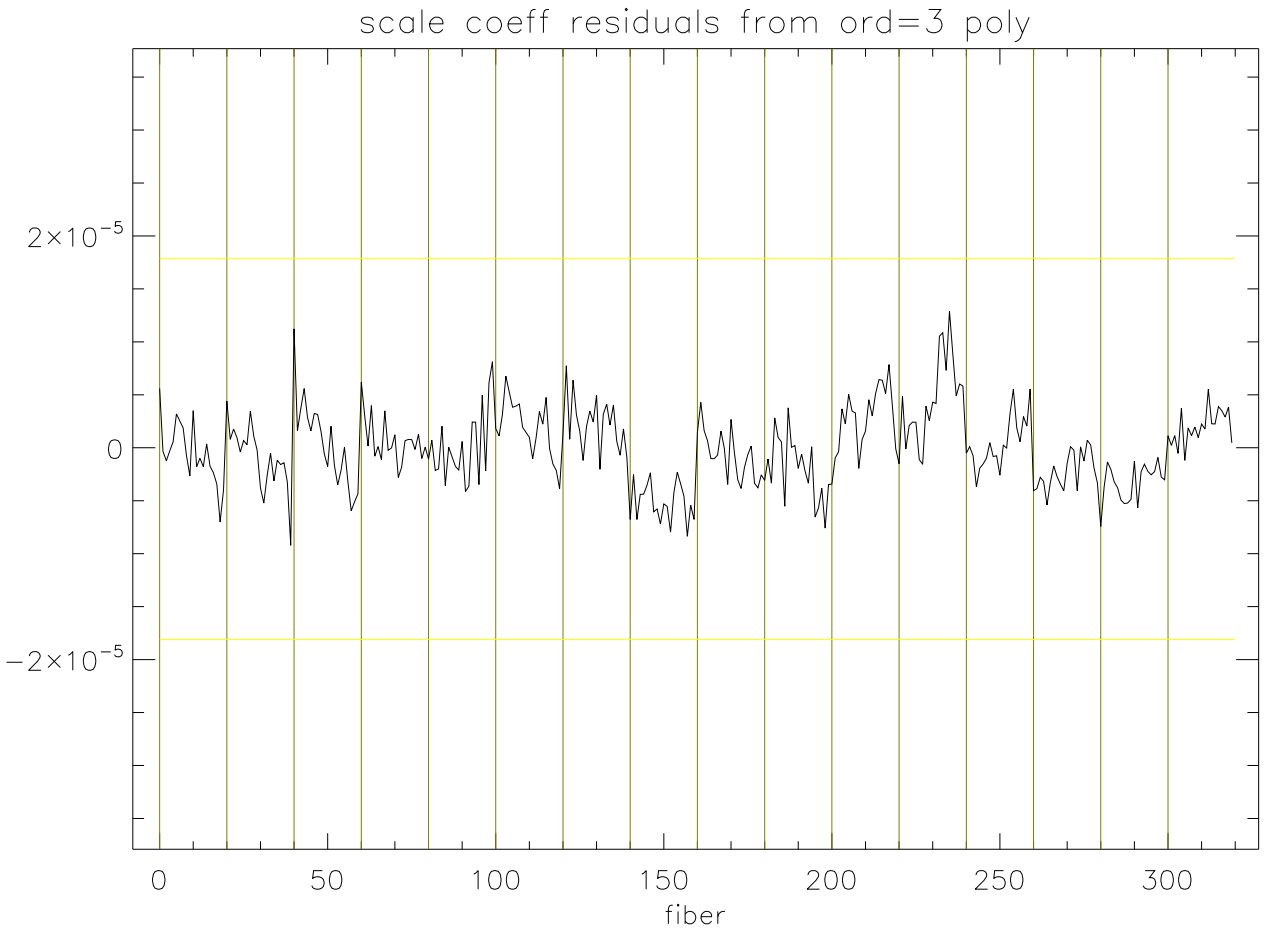
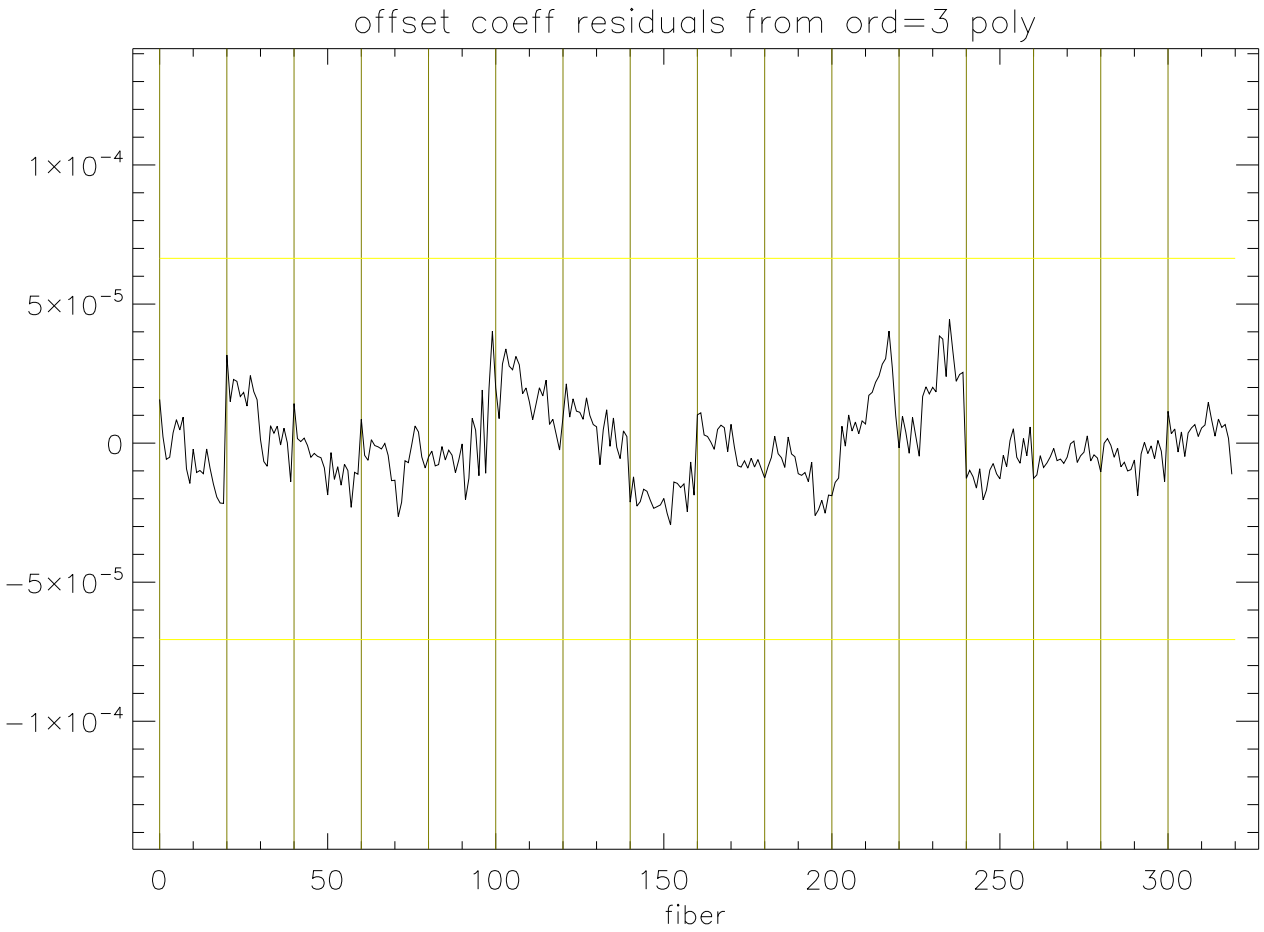
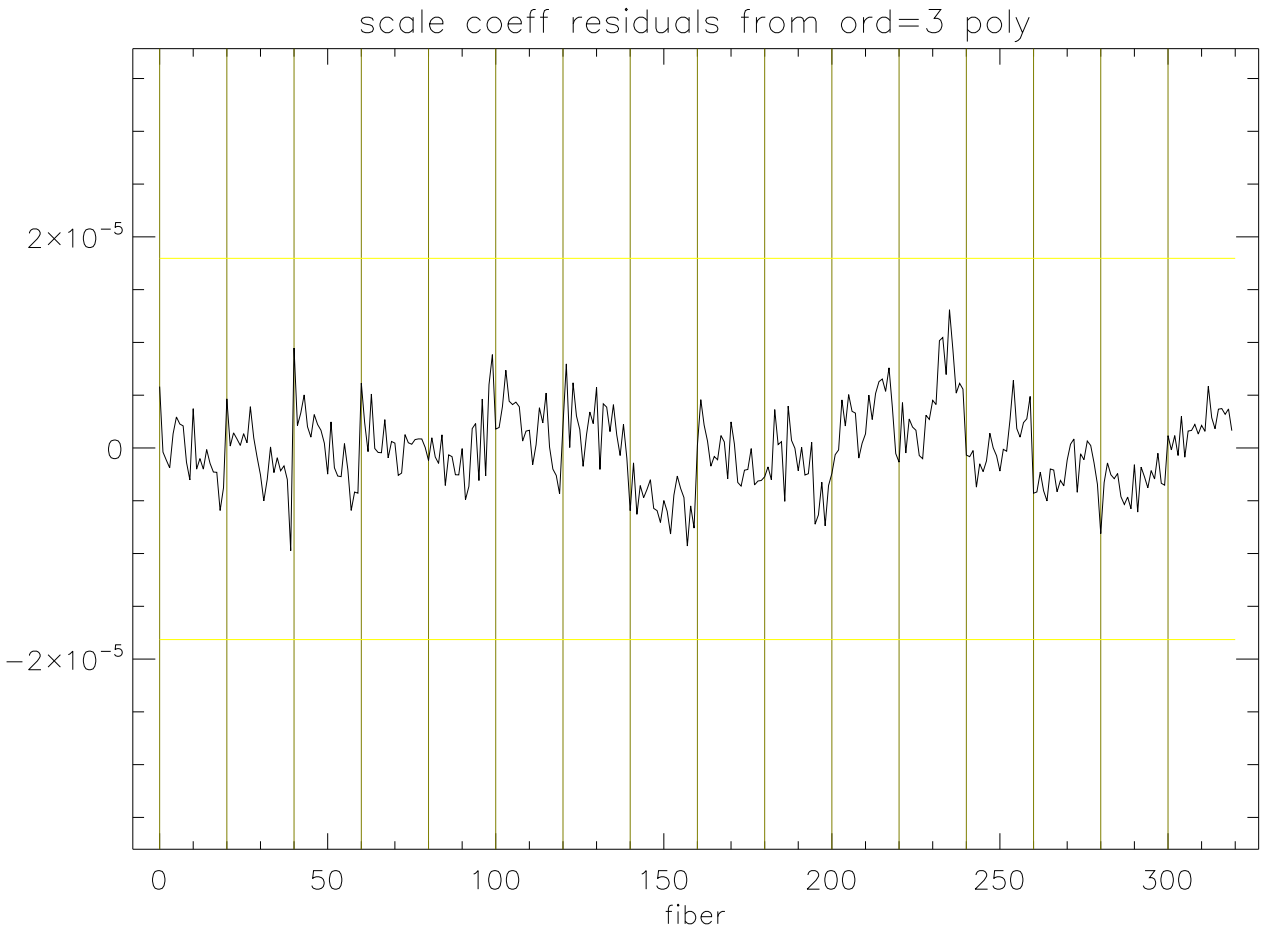
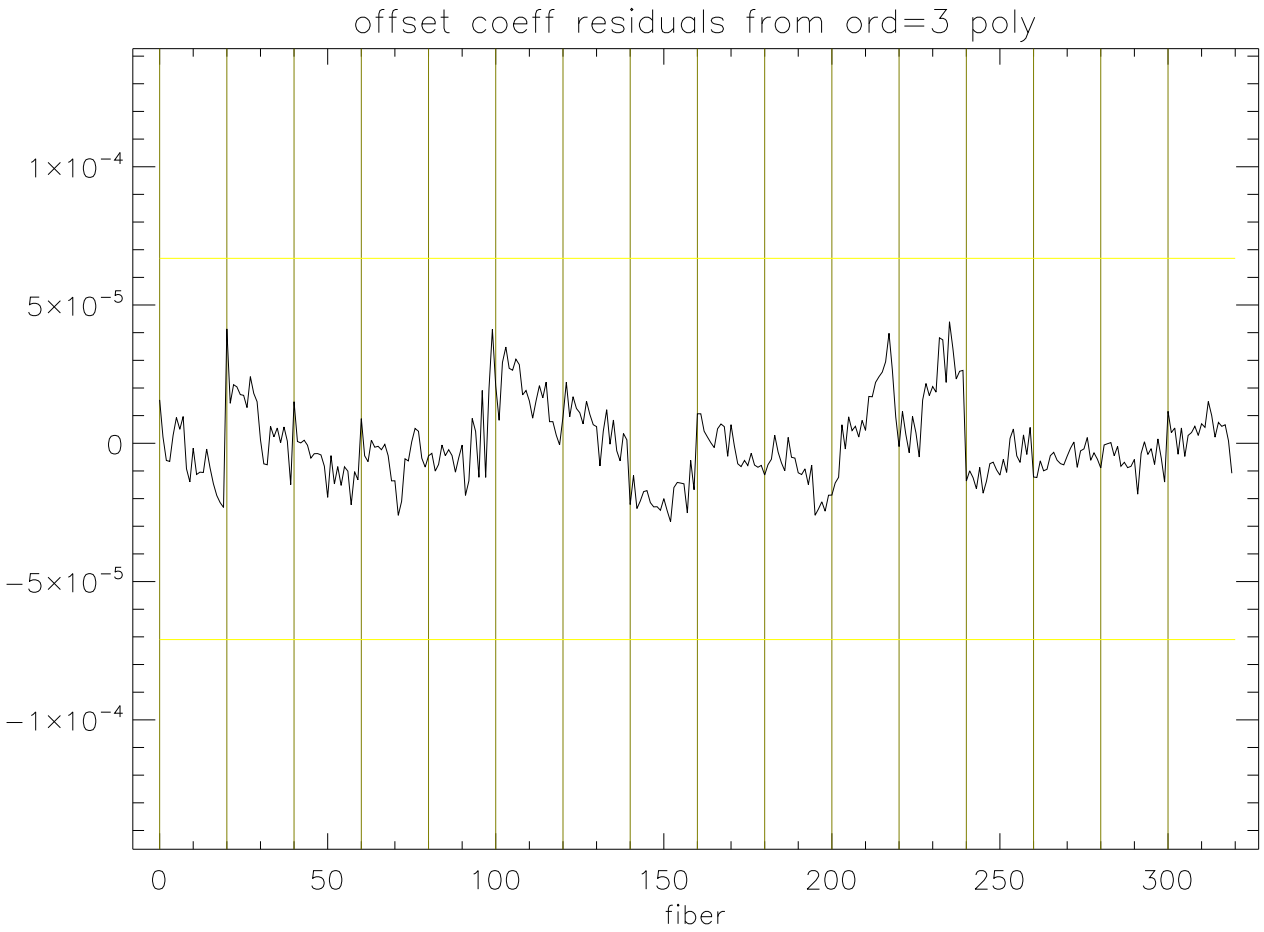
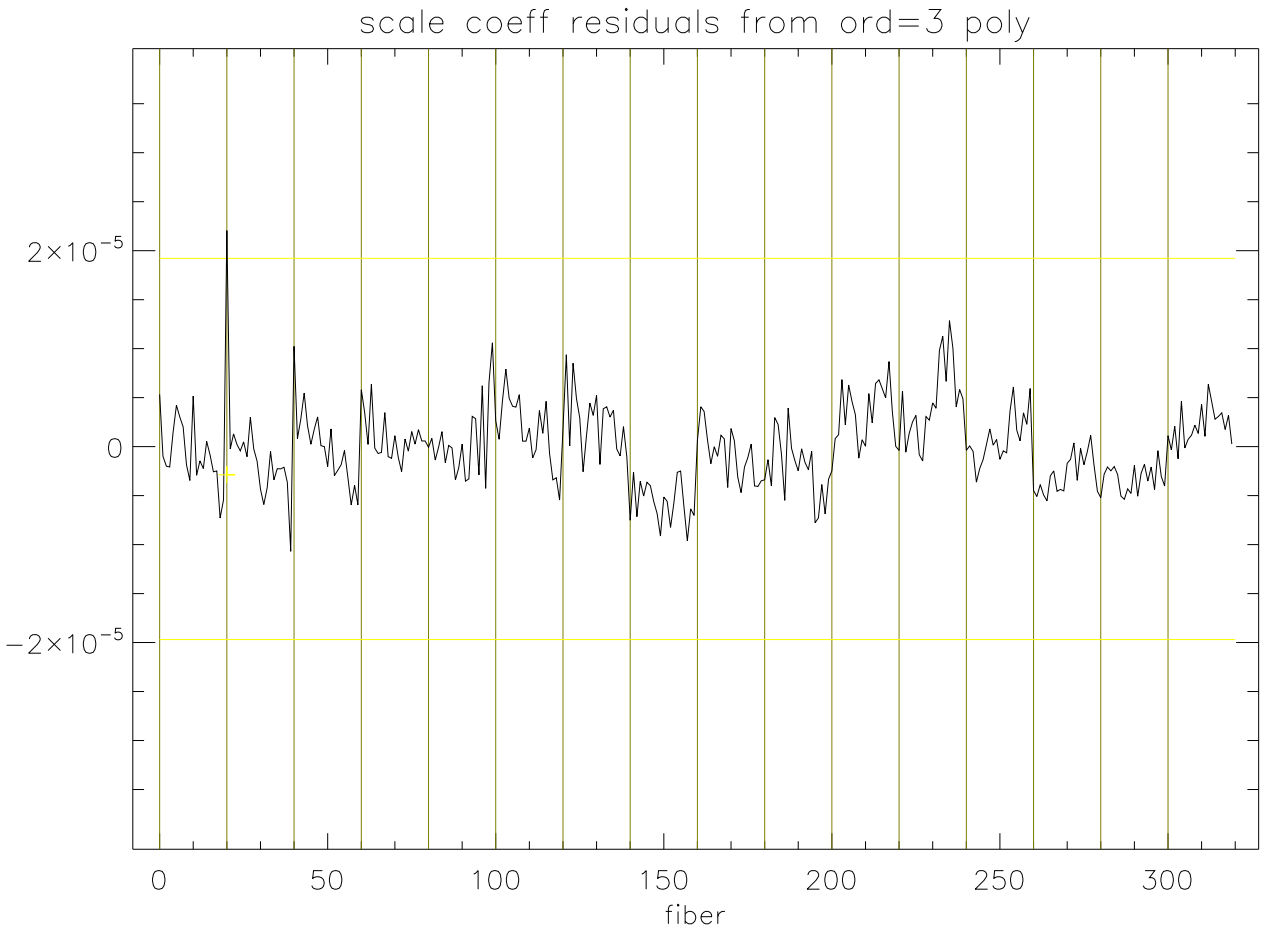

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

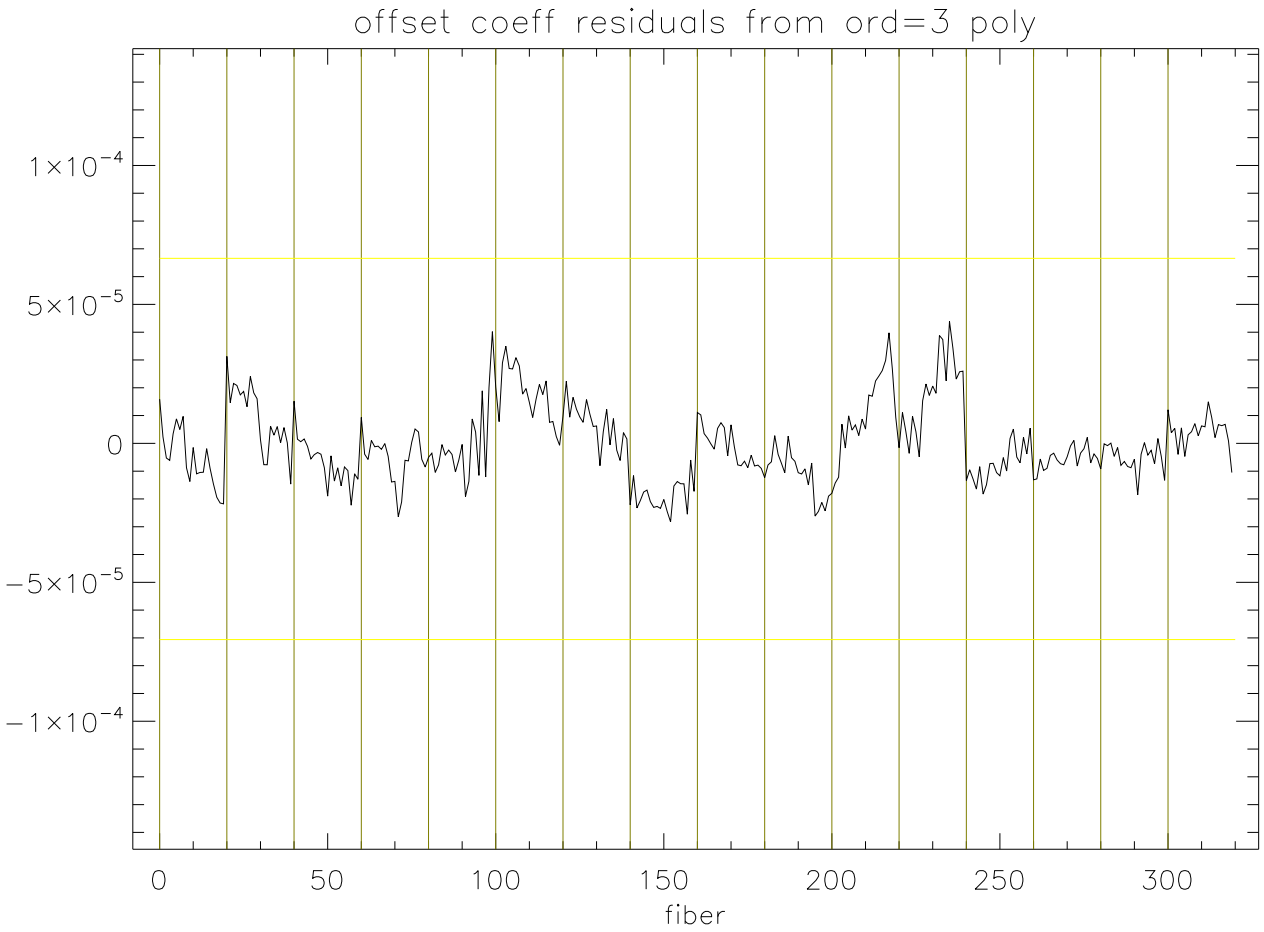

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

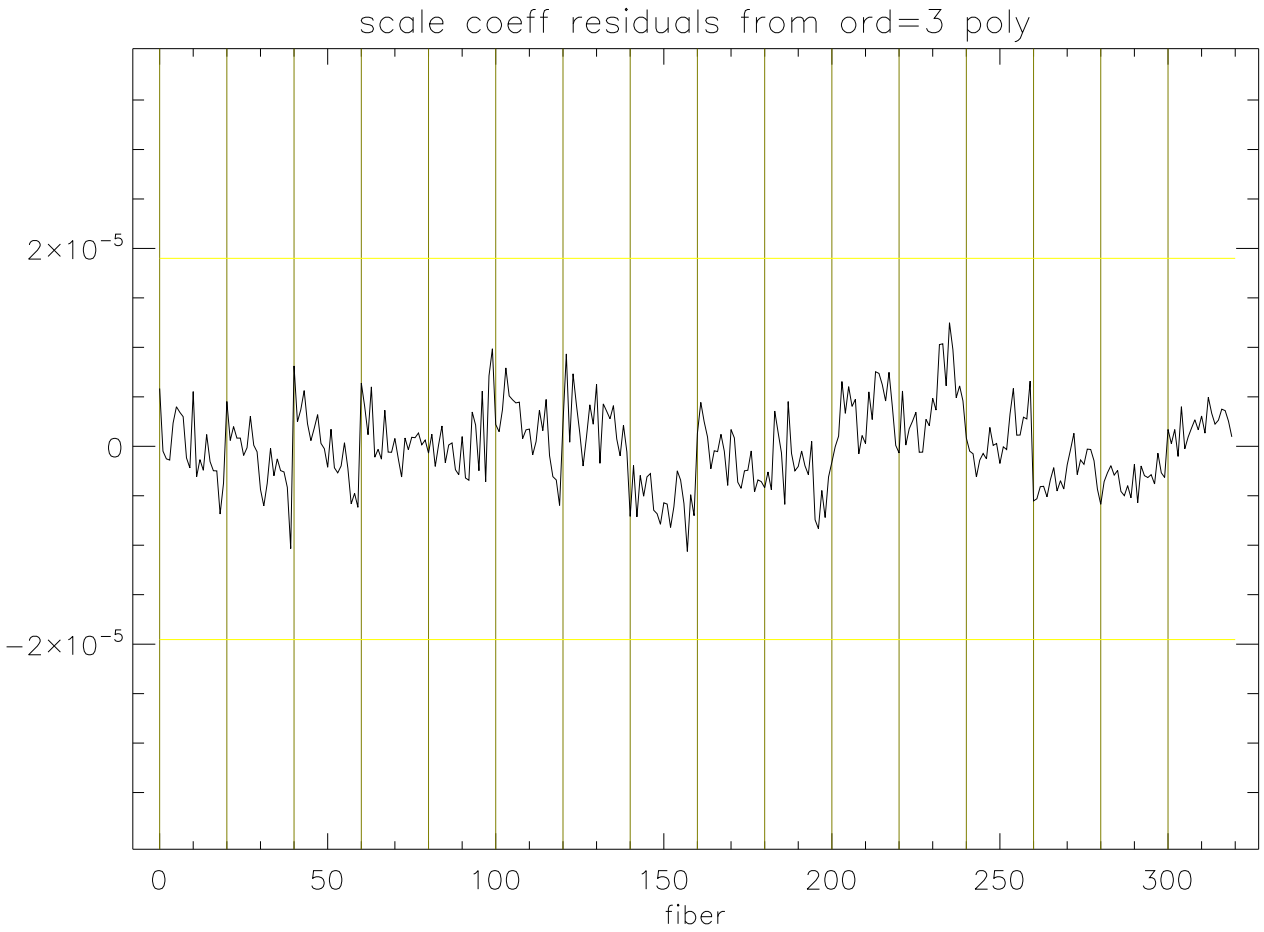

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

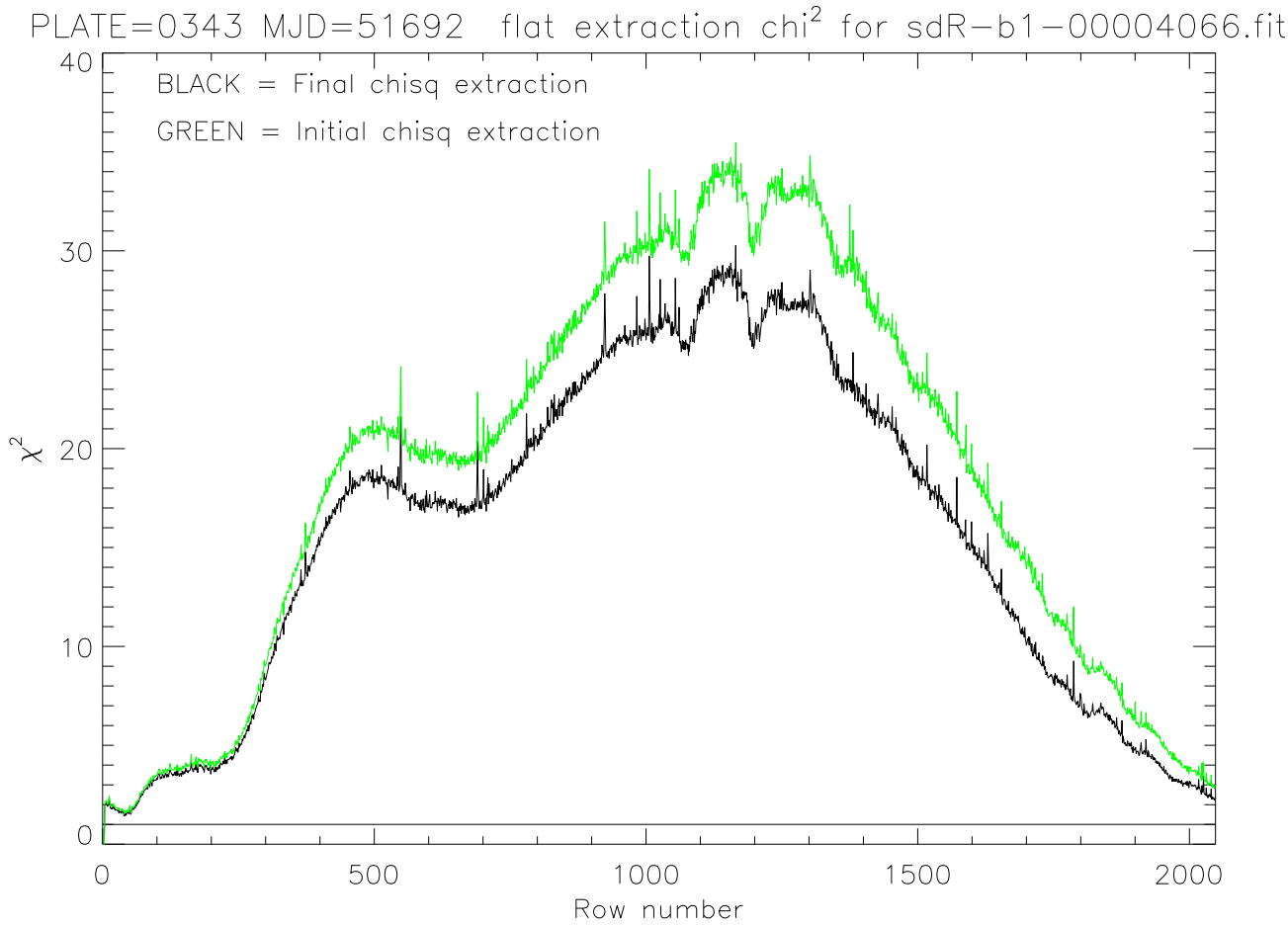

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

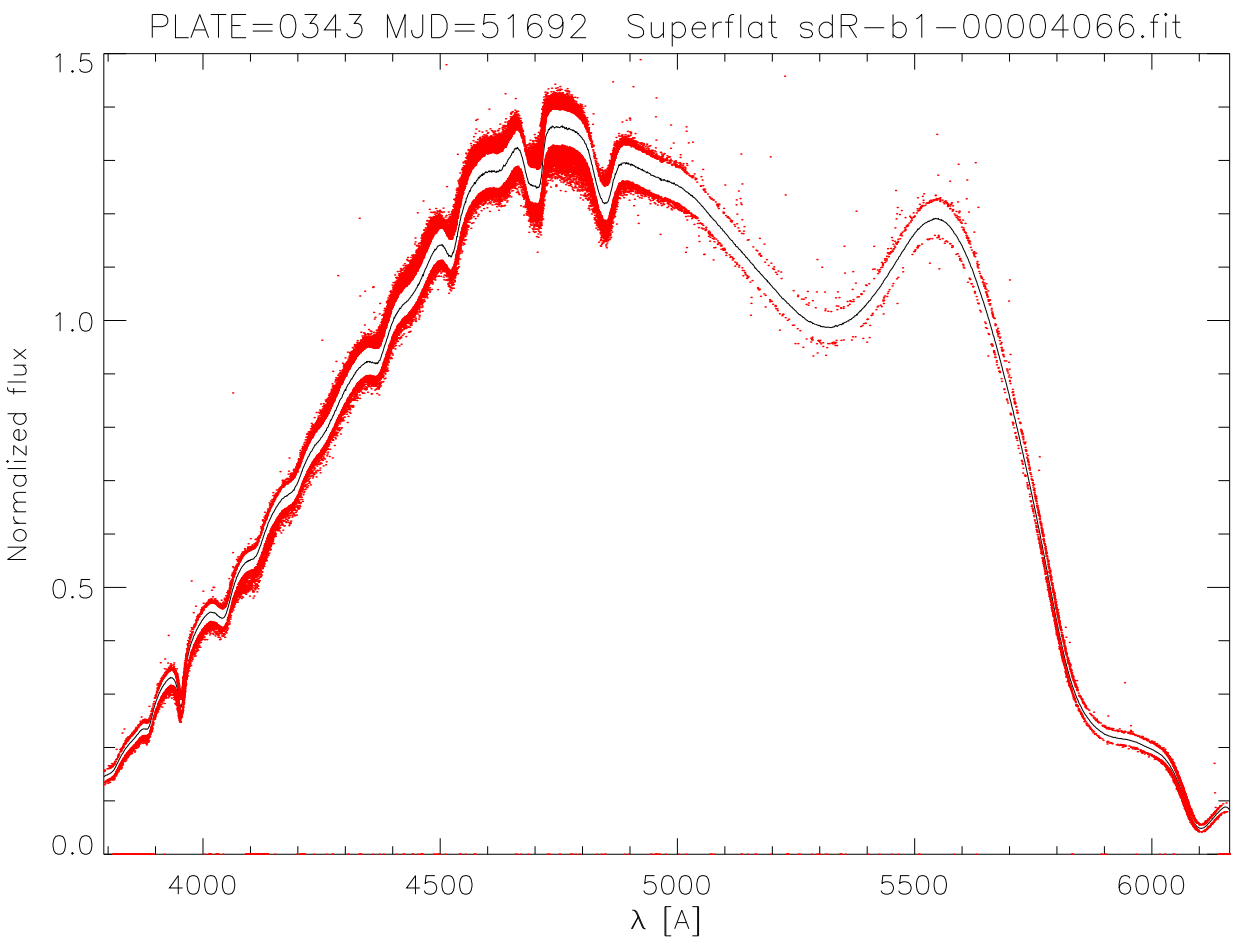

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

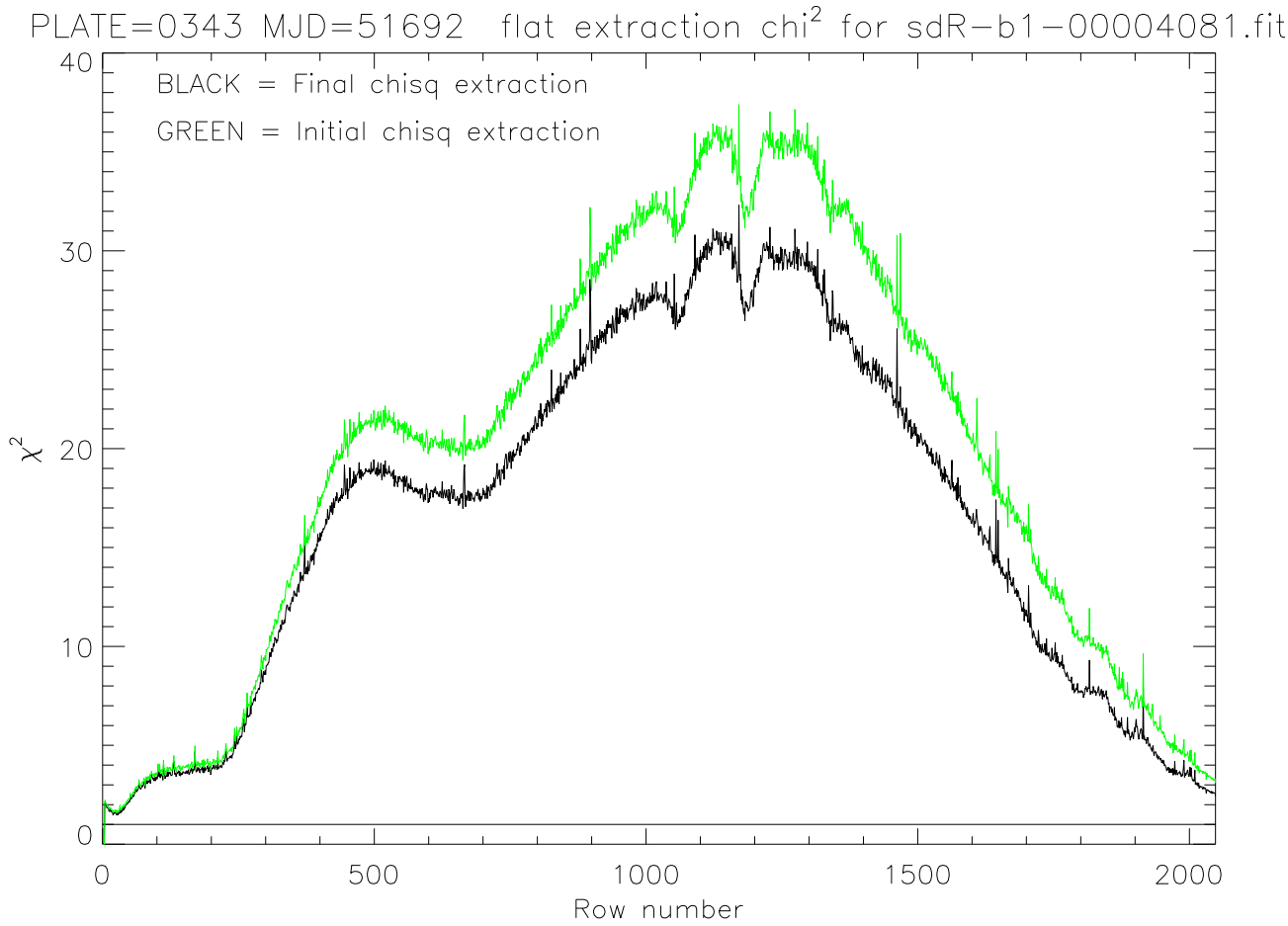

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

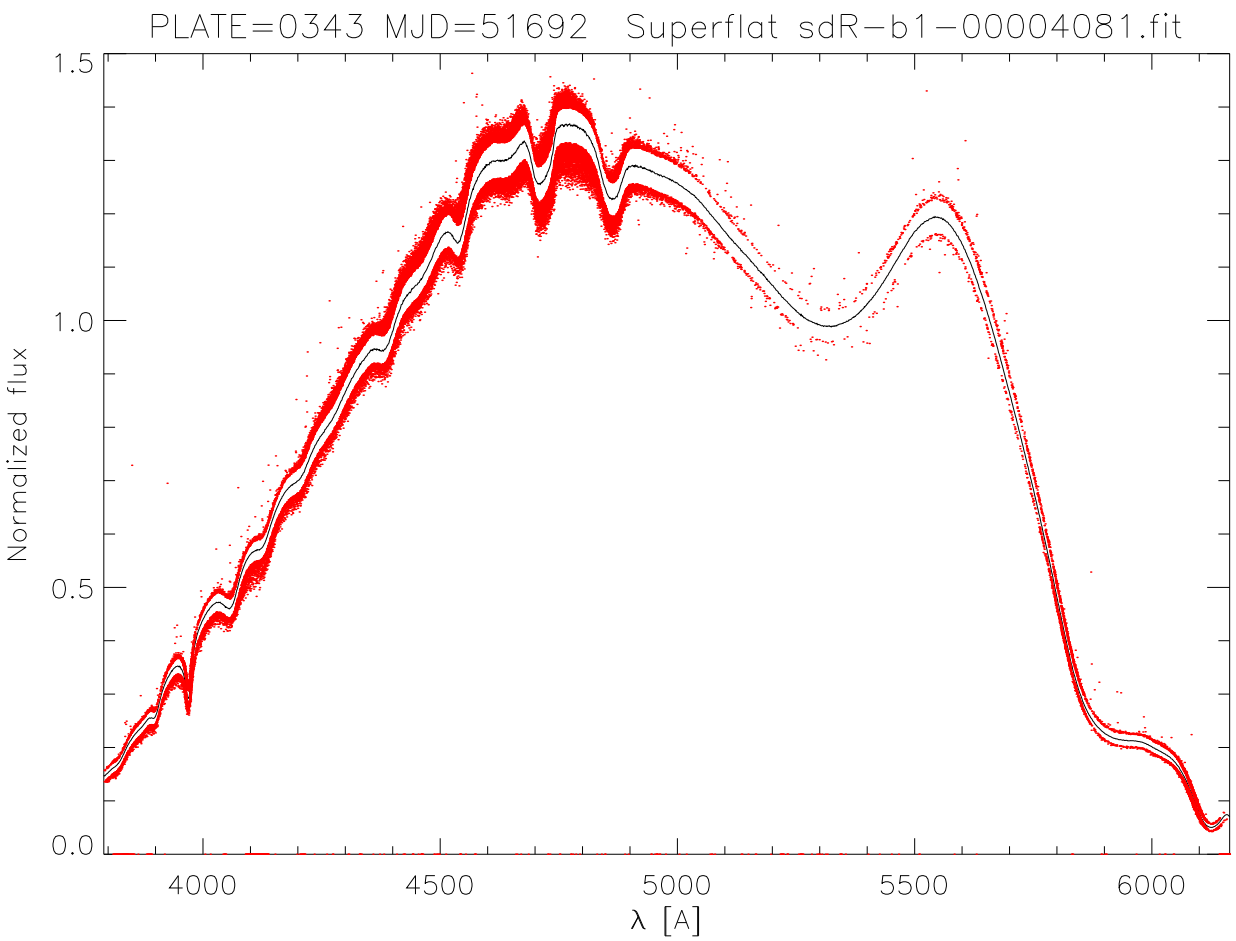

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

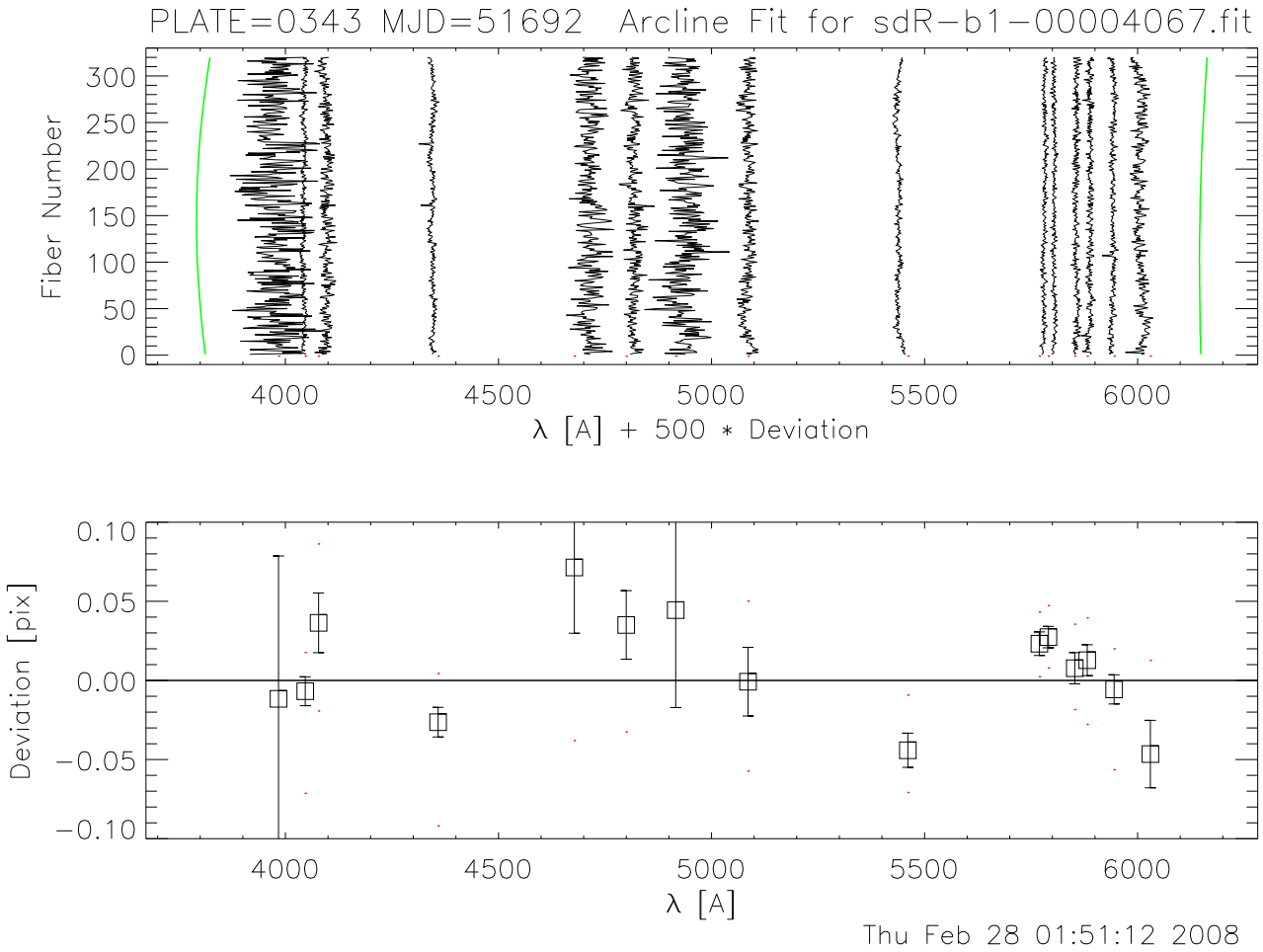

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

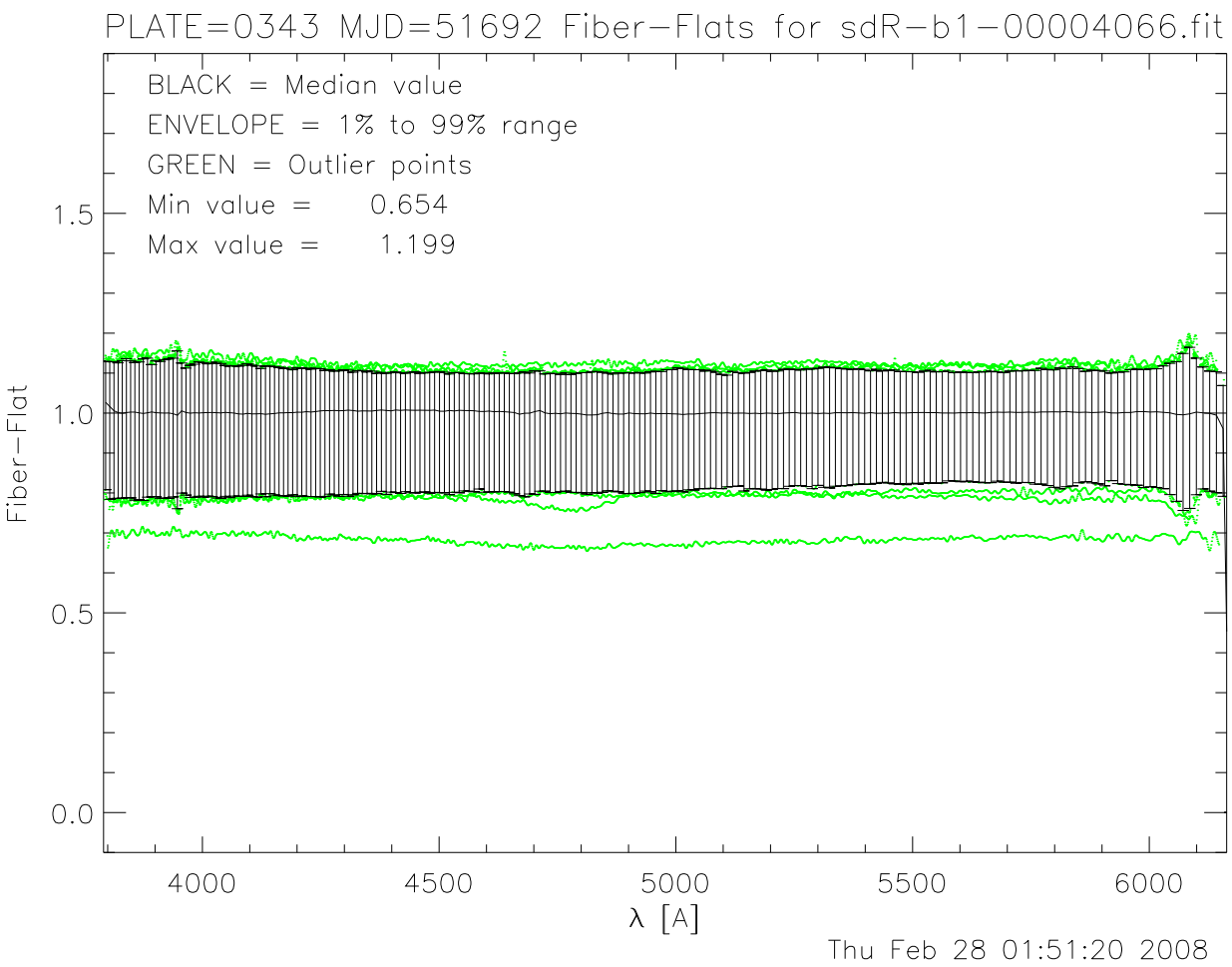

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−b1−00004066.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
10
20
30
40
0
500
1000
1500
2000

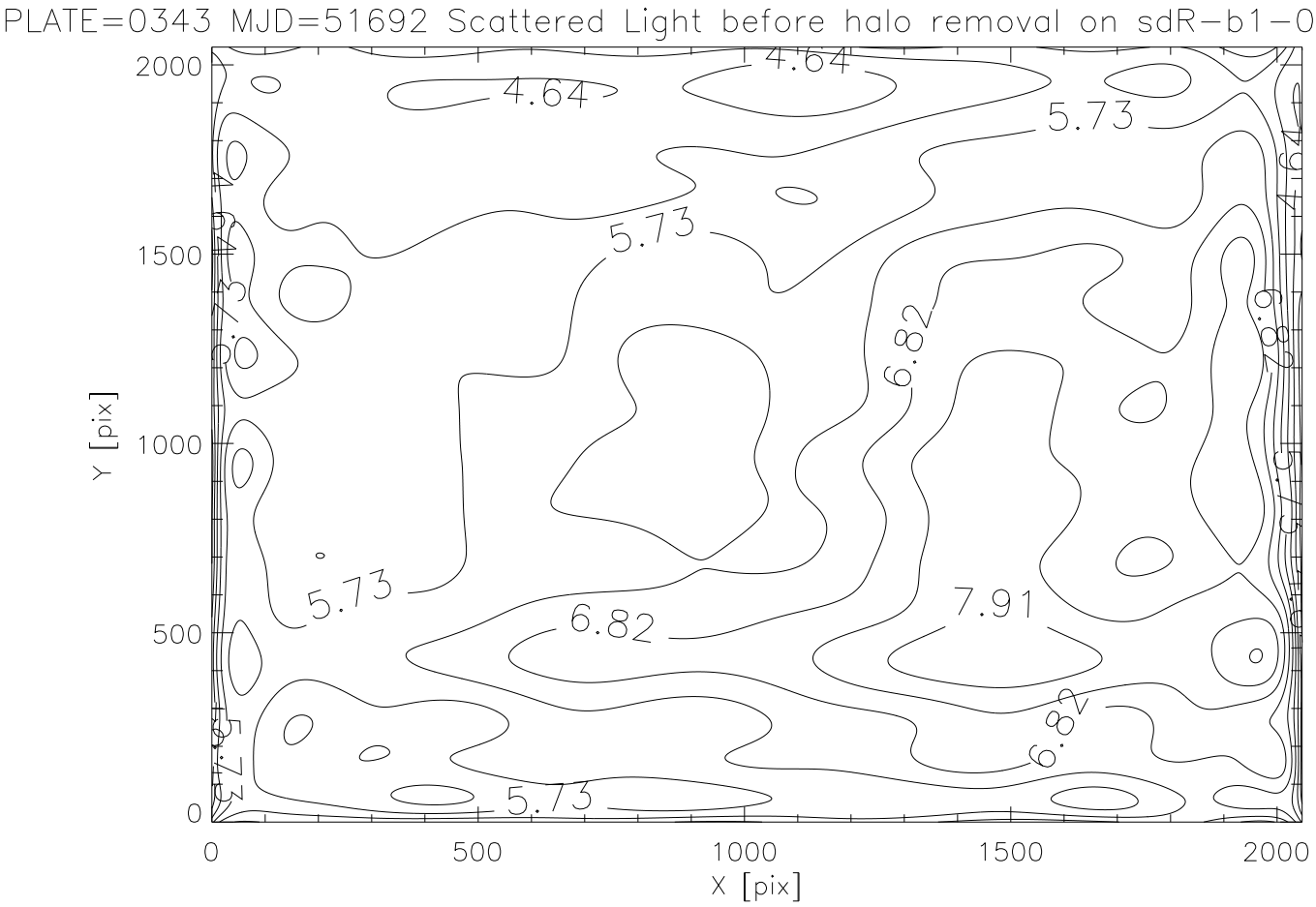

PLATE=0343 MJD=51692 Superflat sdR-b1-00004066.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

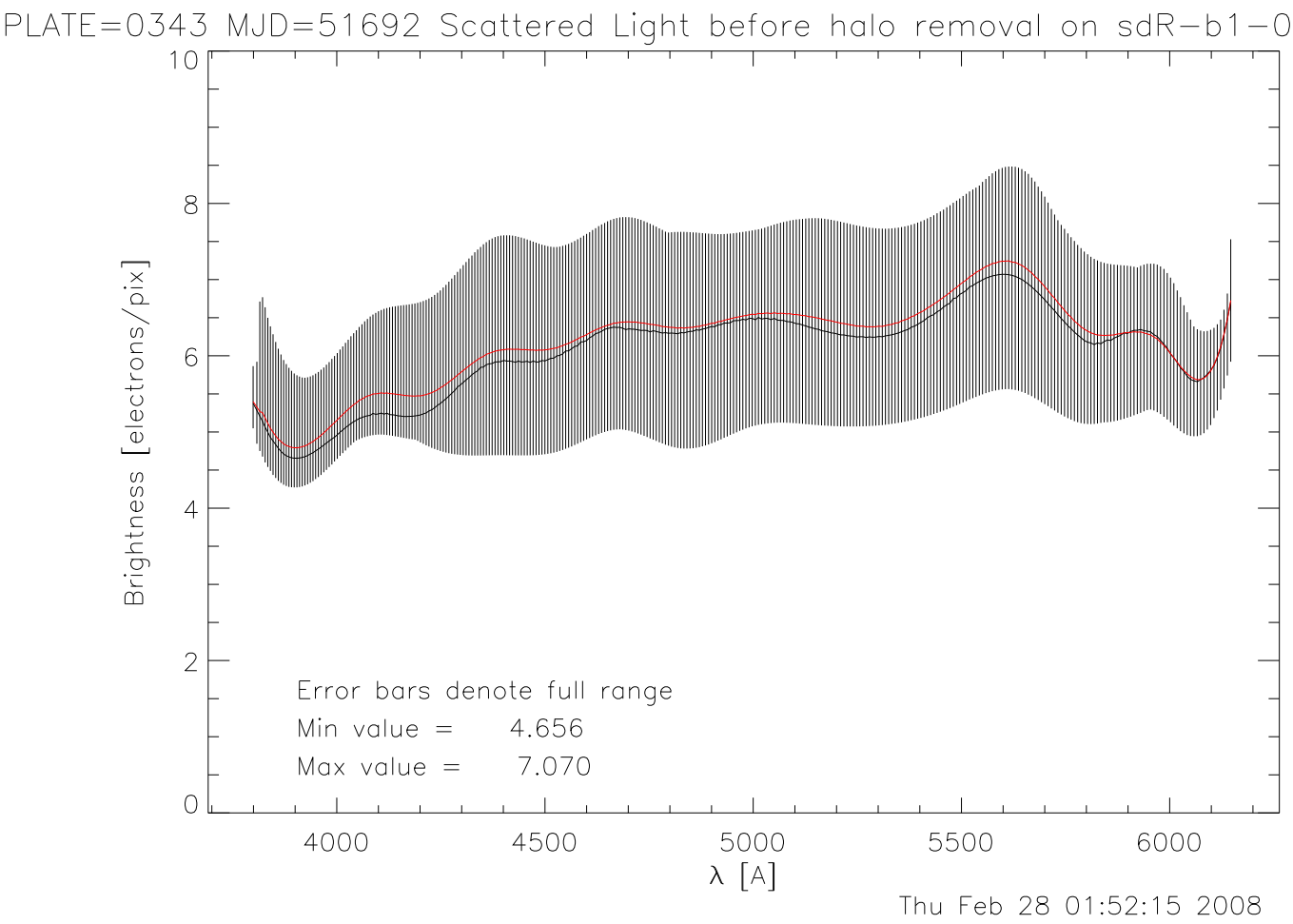

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−b1−00004081.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

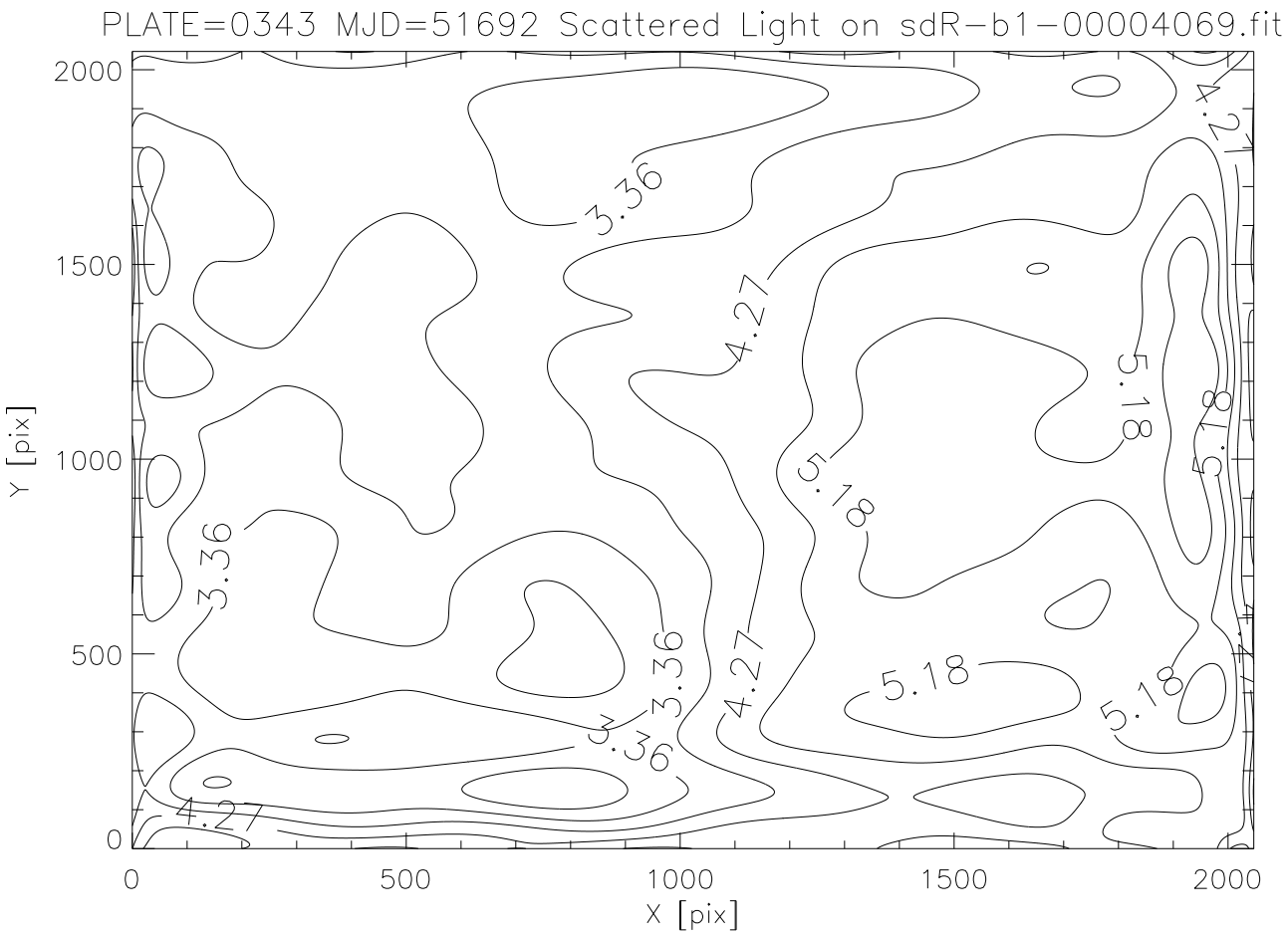

PLATE=0343 MJD=51692 Superflat sdR-b1-00004081.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

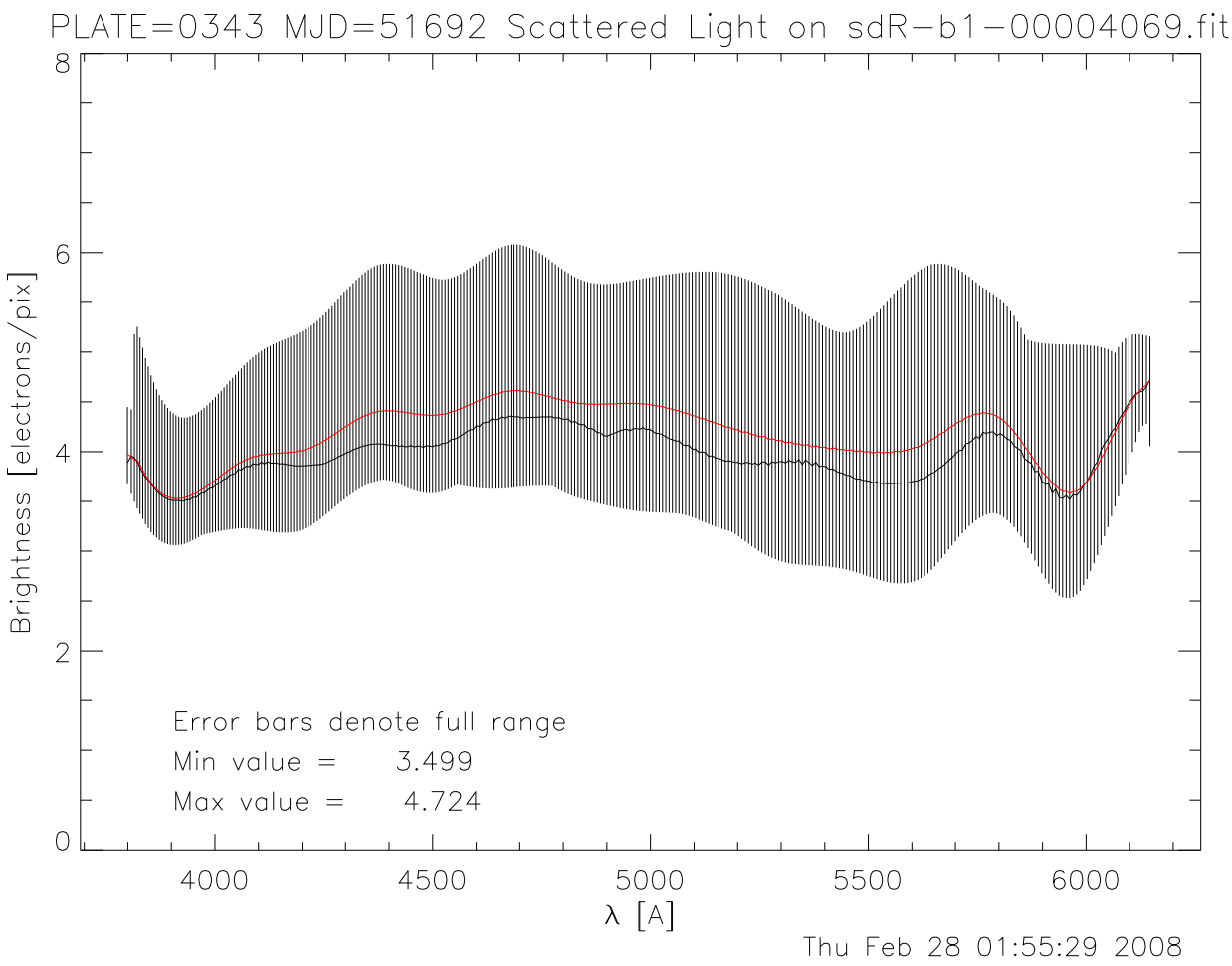

PLATE=0343 MJD=51692 Arcline Fit for sdR-b1-00004067.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 01:51:12 2008

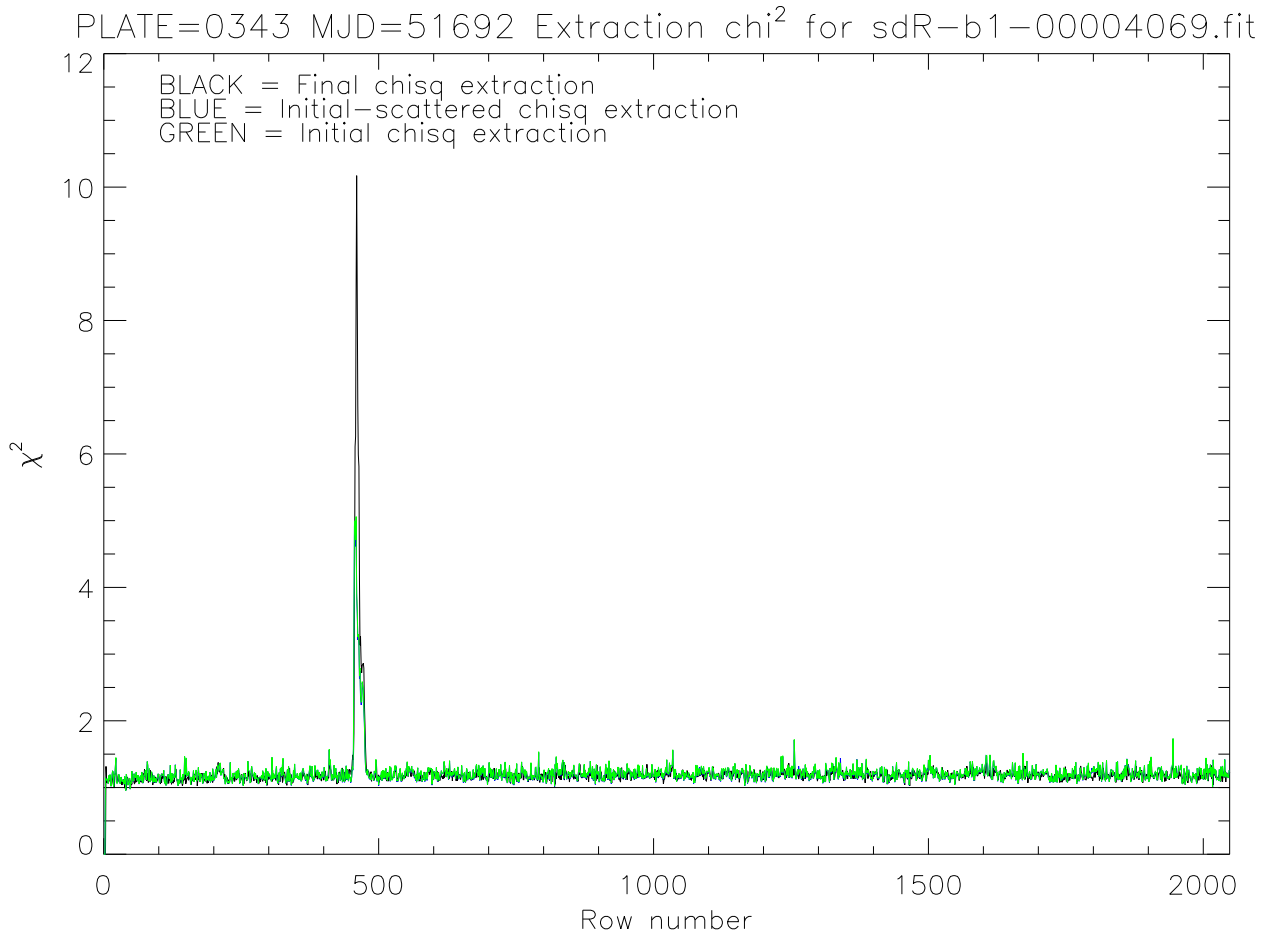

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 01:51:20 2008

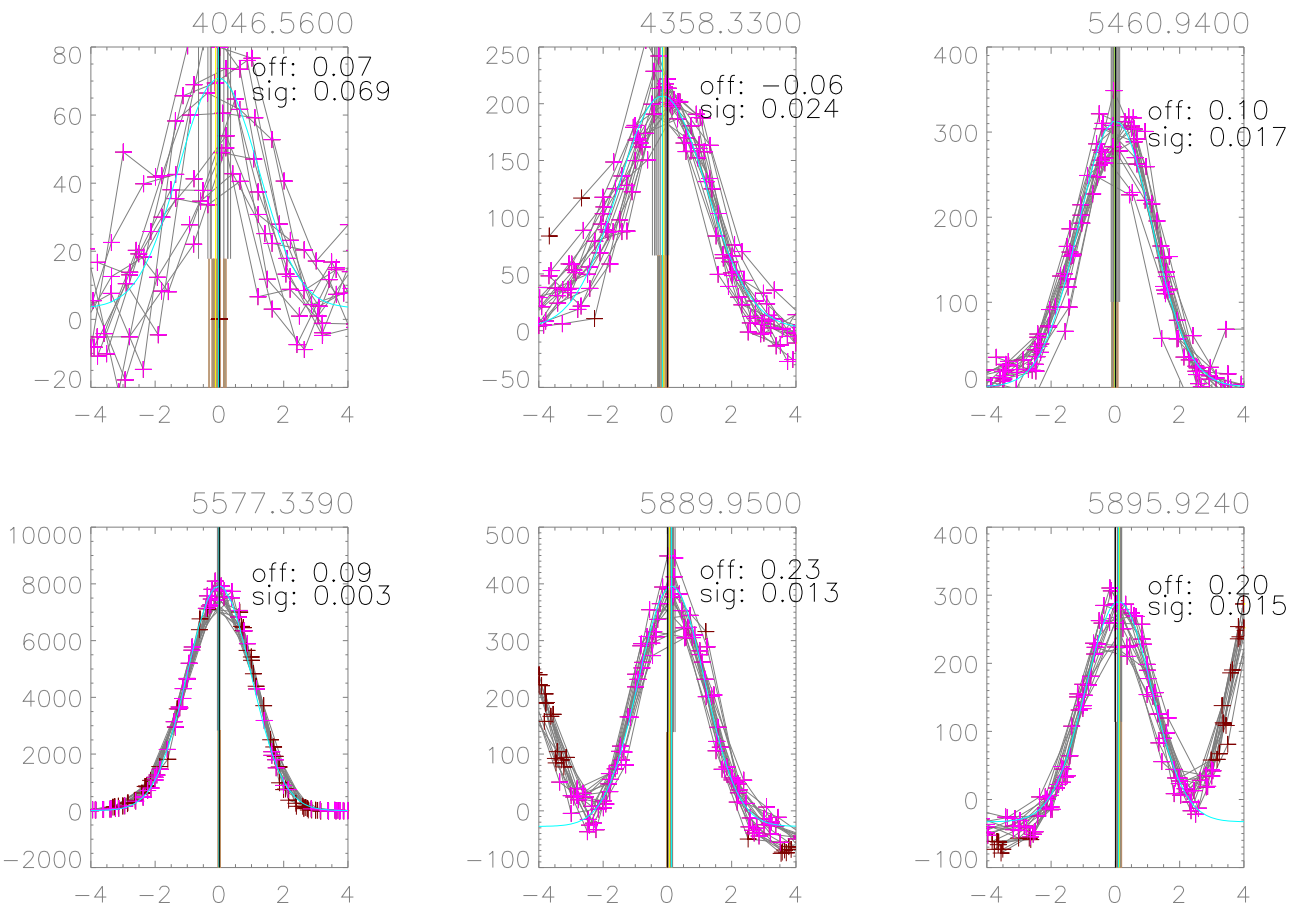

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004069.f
4.64
5.73
6.82
7.91
Y [pix]
X [pix]
0
500
1000
1500
2000

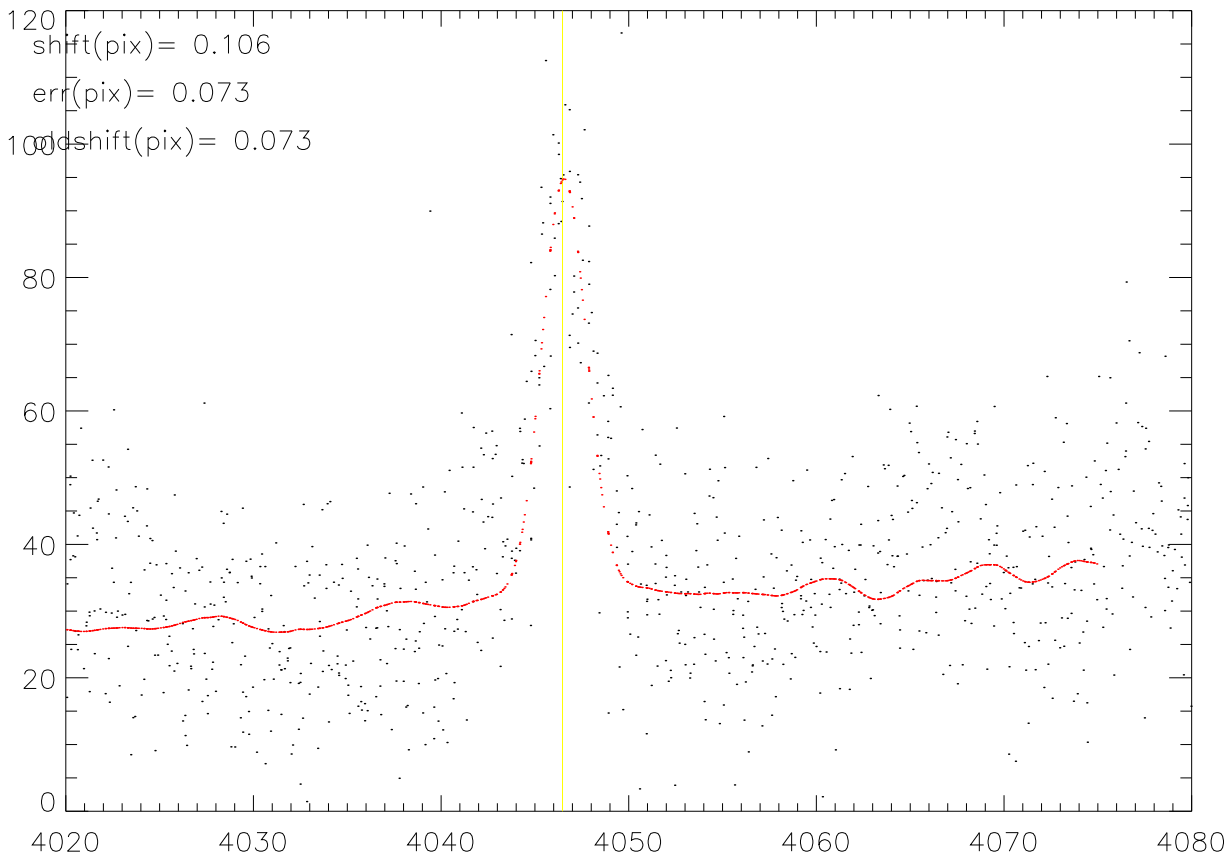

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004069.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.656
Max value = 7.070
Thu Feb 28 01:52:15 2008

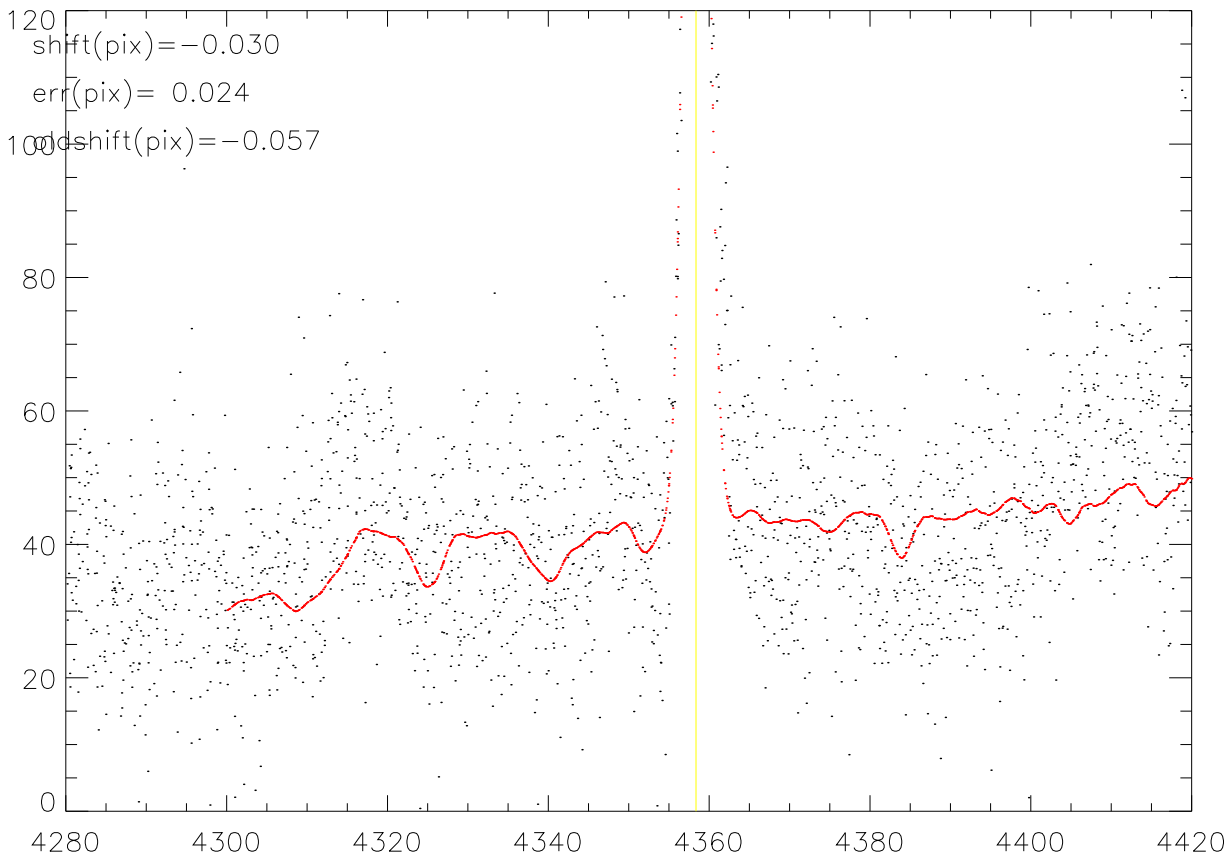

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004069.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18
0

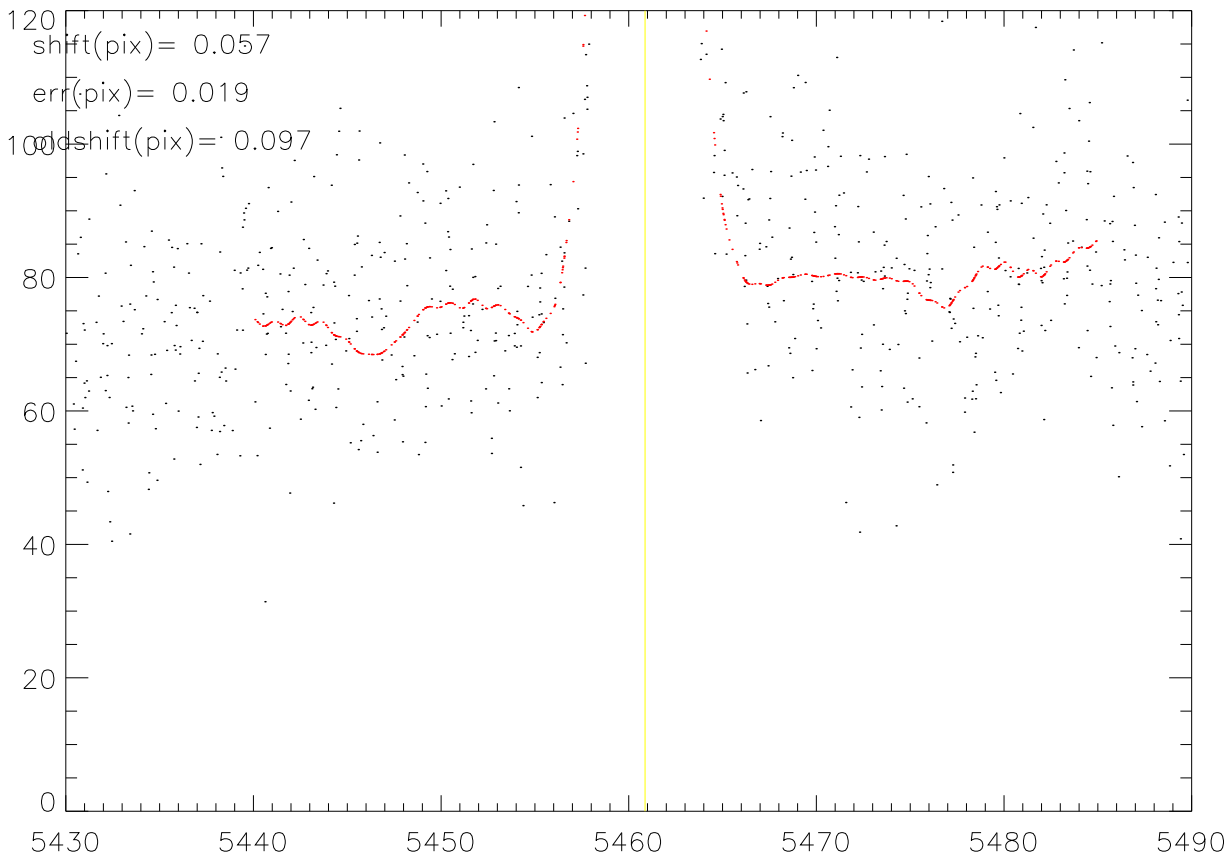

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004069.fit
Brightness [electrons/pix]
8
6
4
2
0
Error bars denote full range
Min value = 3.499
Max value = 4.724
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 01:55:29 2008

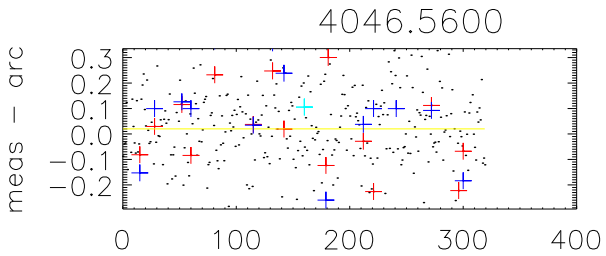

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004069.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

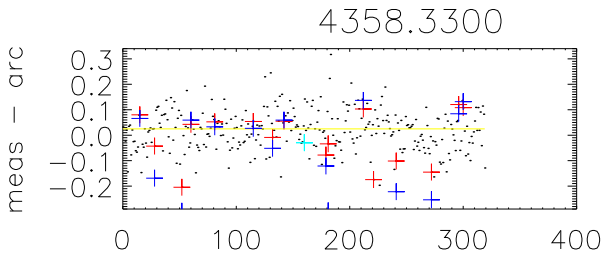

4046.5600
off: 0.07
sig: 0.069
4358.3300
off: −0.06
sig: 0.024
5460.9400
off: 0.10
sig: 0.017
5577.3390
off: 0.09
sig: 0.003
5889.9500
off: 0.23
sig: 0.013
5895.9240
off: 0.20
sig: 0.015

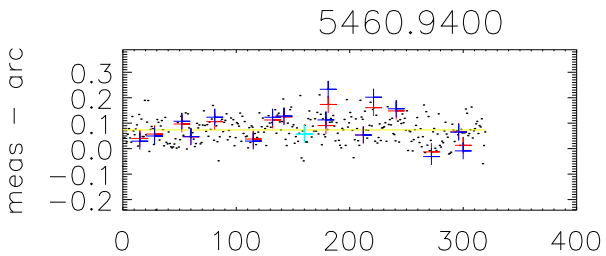

shift(pix)= 0.106
err(pix)= 0.073
oldshift(pix)= 0.073
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

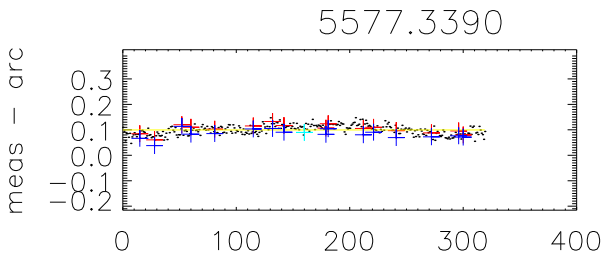

shift(pix)=−0.030
err(pix)= 0.024
oldshift(pix)=−0.057
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

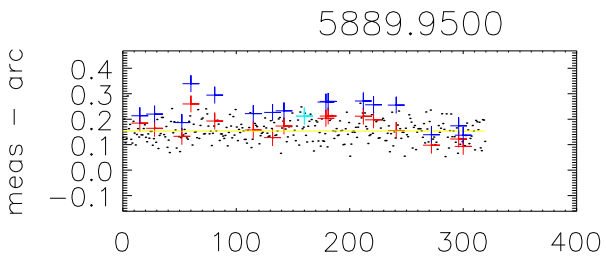

shift(pix)= 0.057
err(pix)= 0.019
oldshift(pix)= 0.097
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

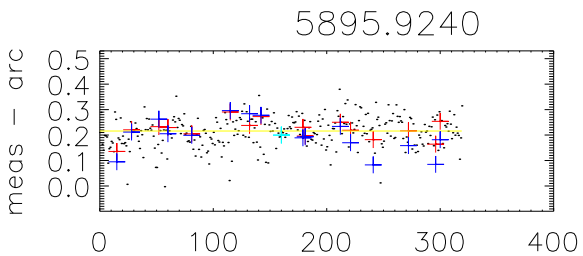

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

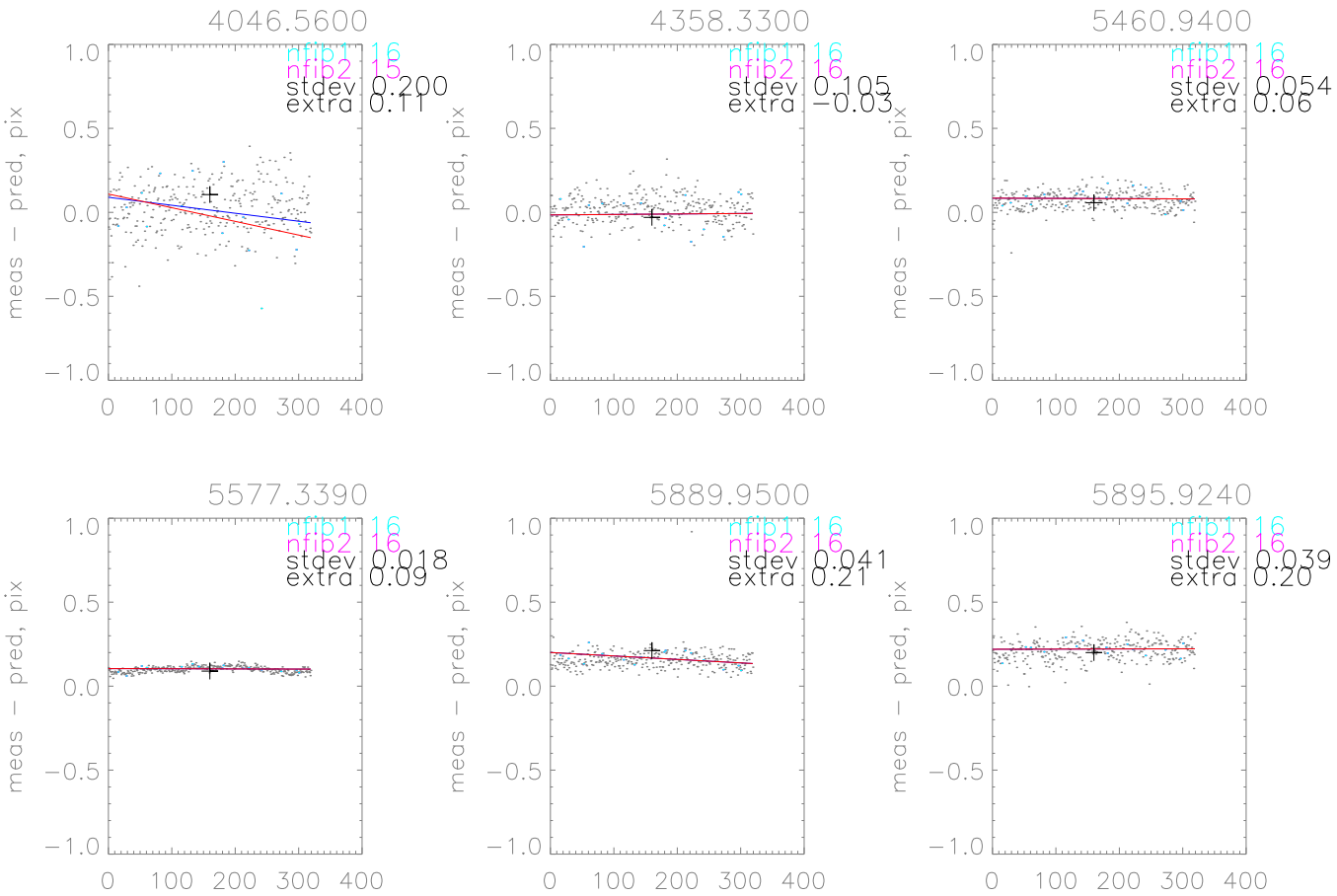

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

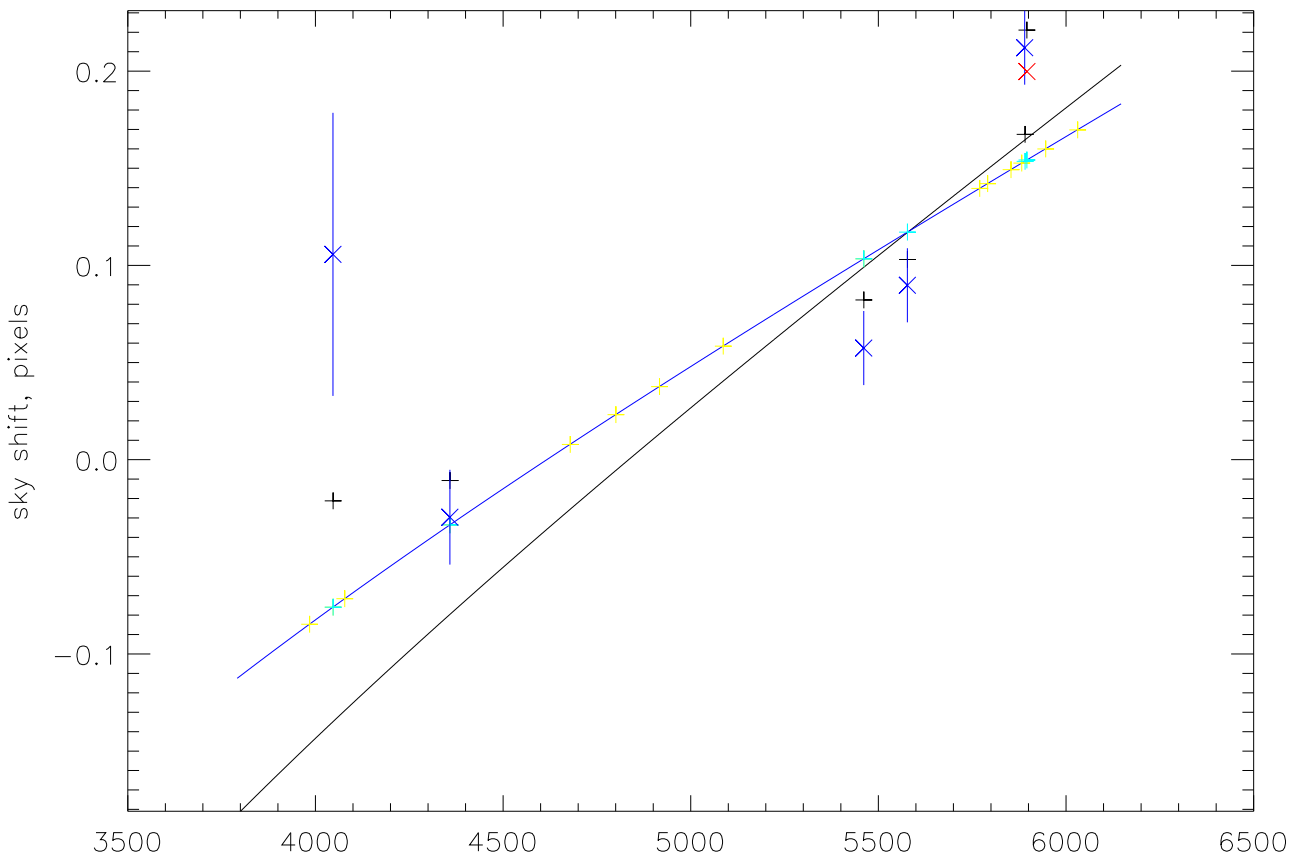

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

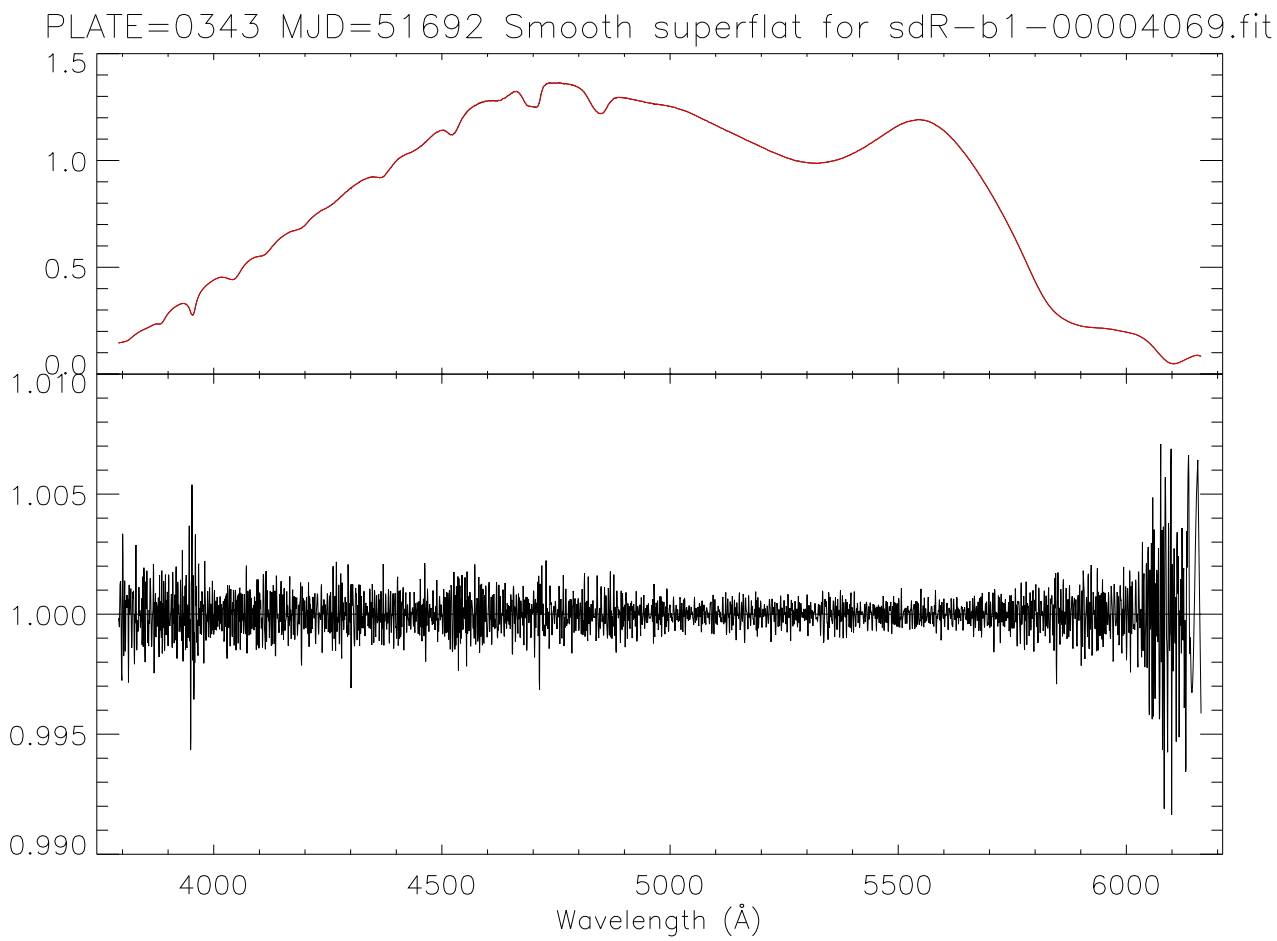

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

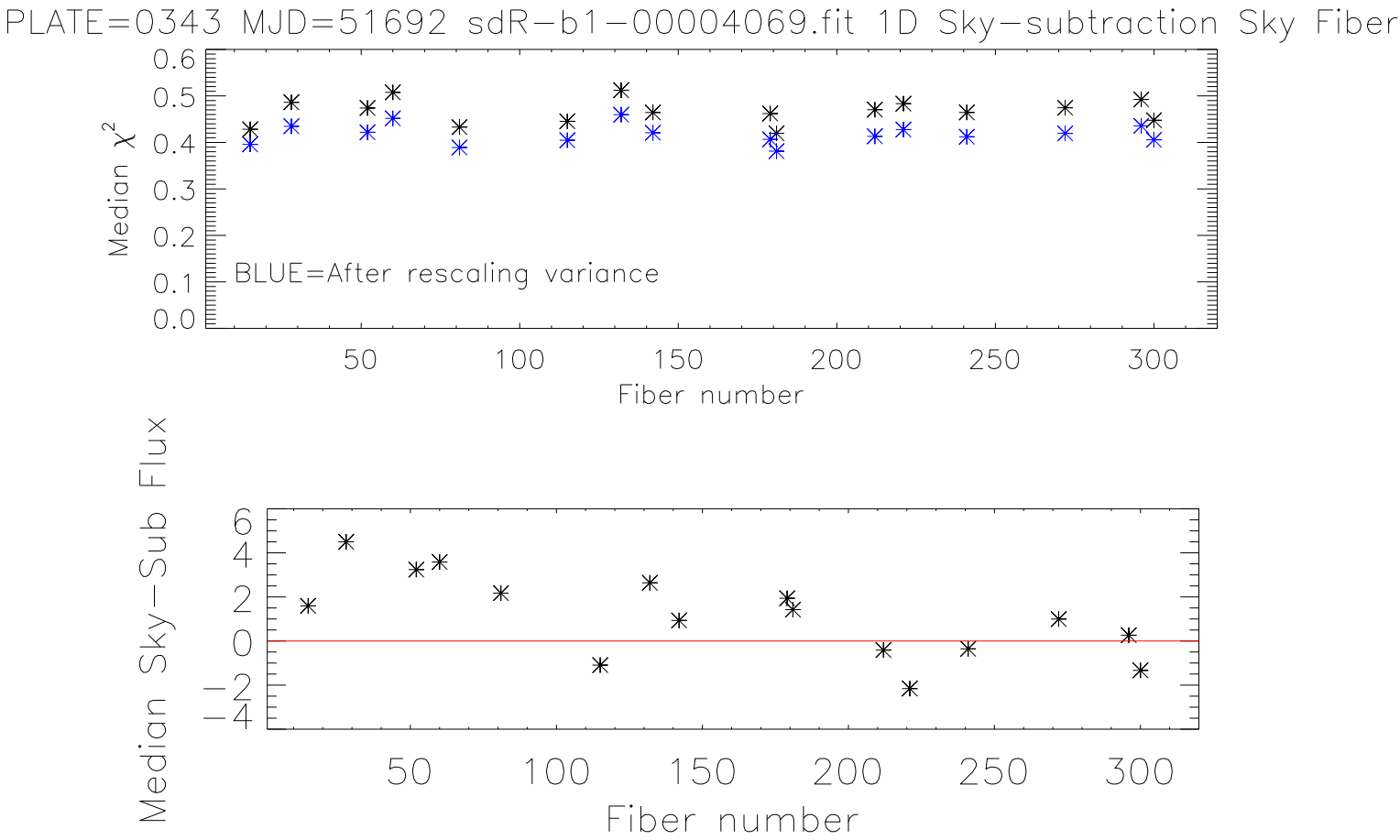

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

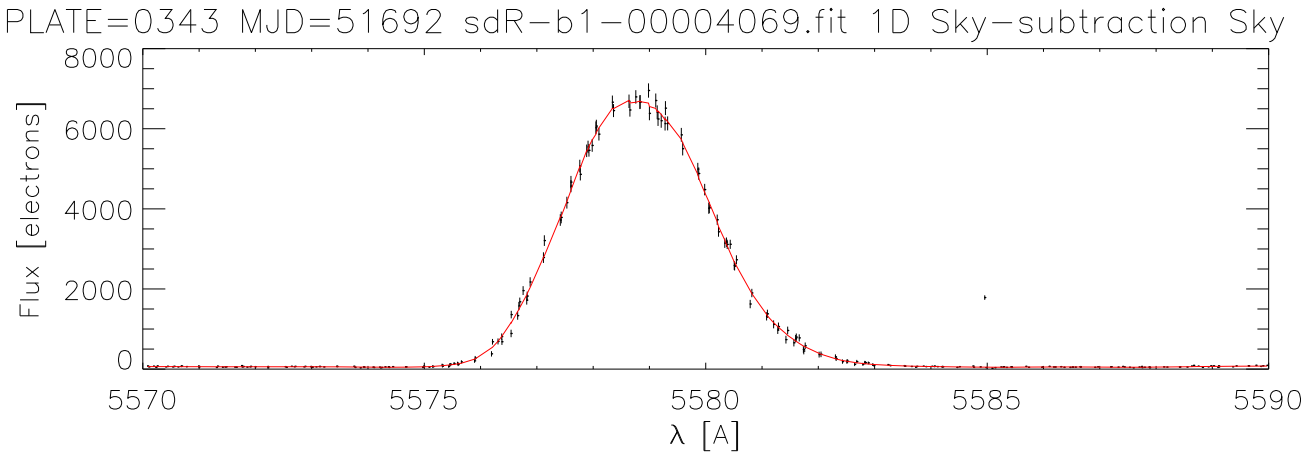

4046.5600
nfib1 16
nfib2 15
stdev 0.200
extra 0.11
4358.3300
nfib1 16
nfib2 16
stdev 0.105
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.041
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

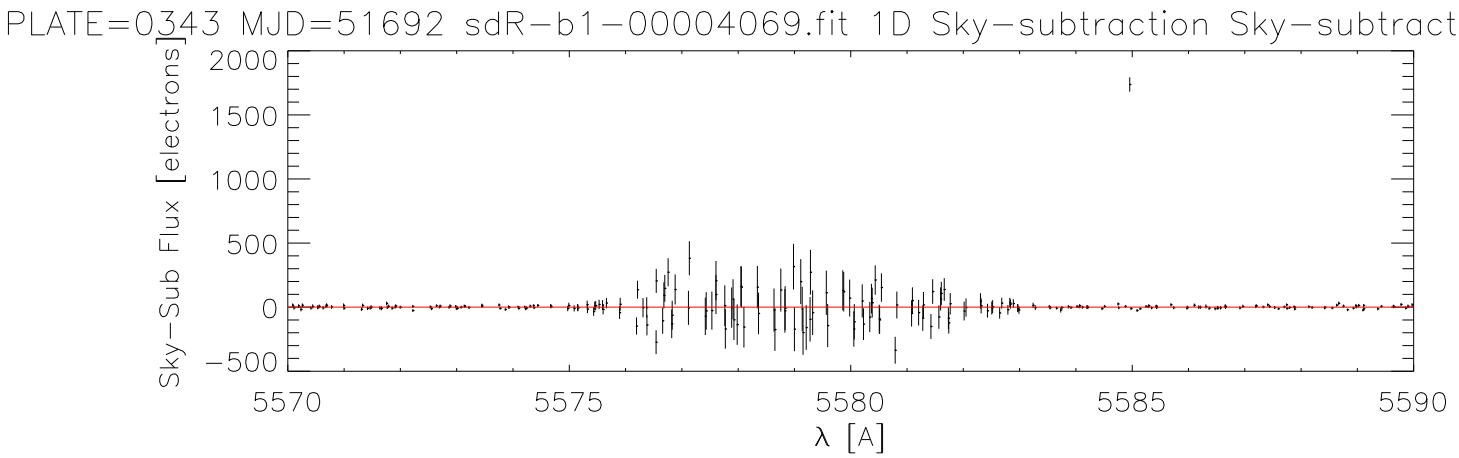

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

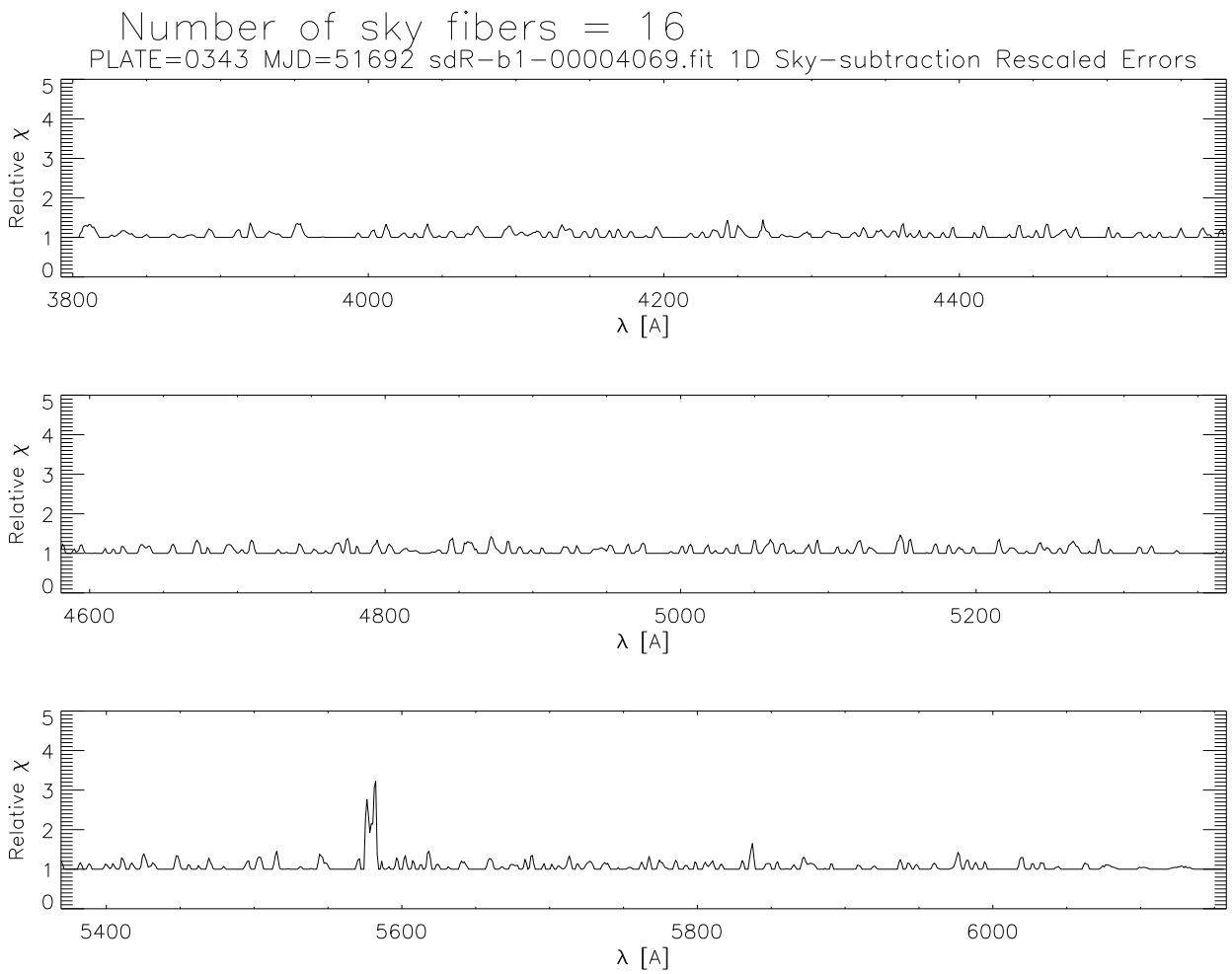
es= 0.0000

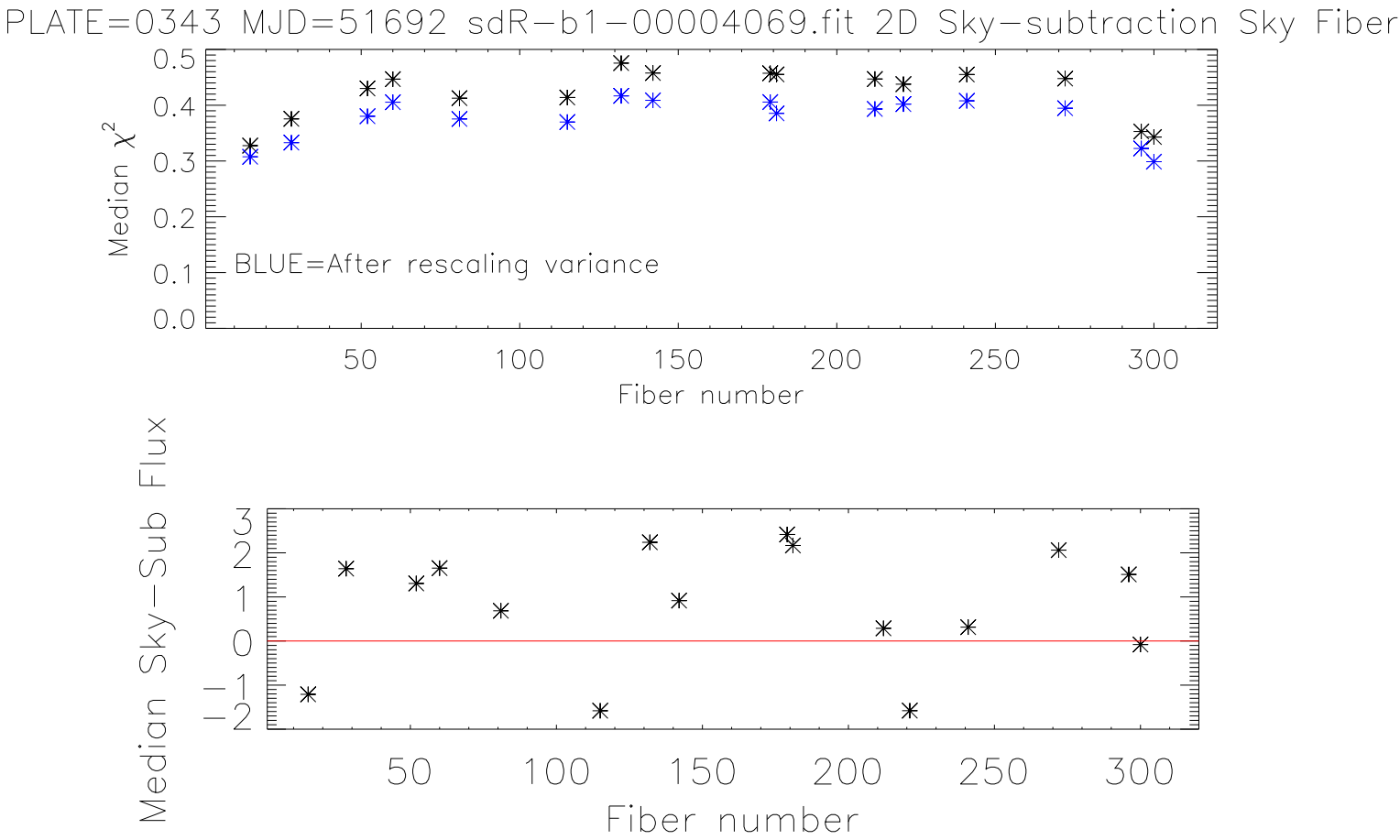

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004069.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

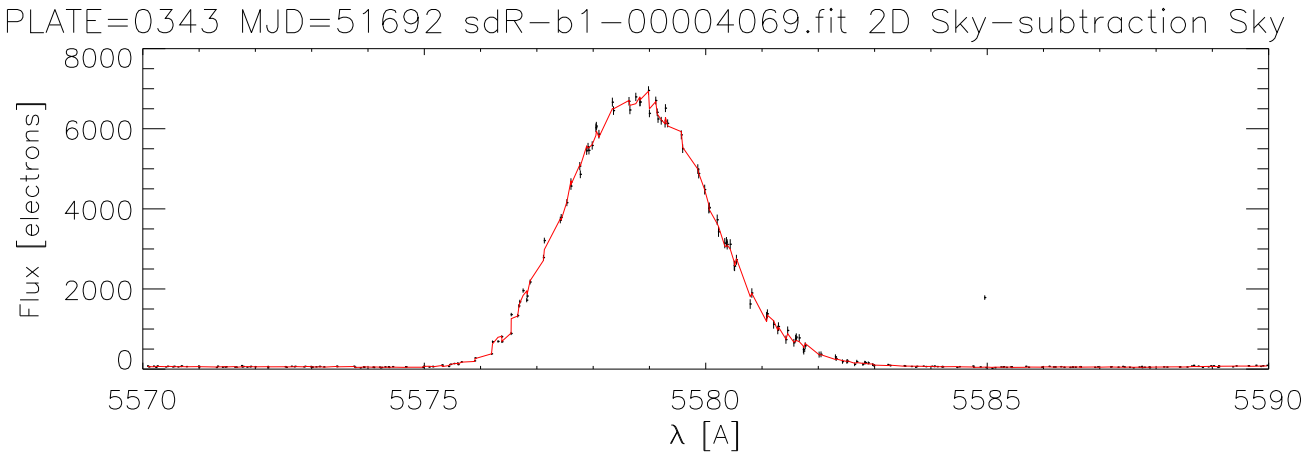

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

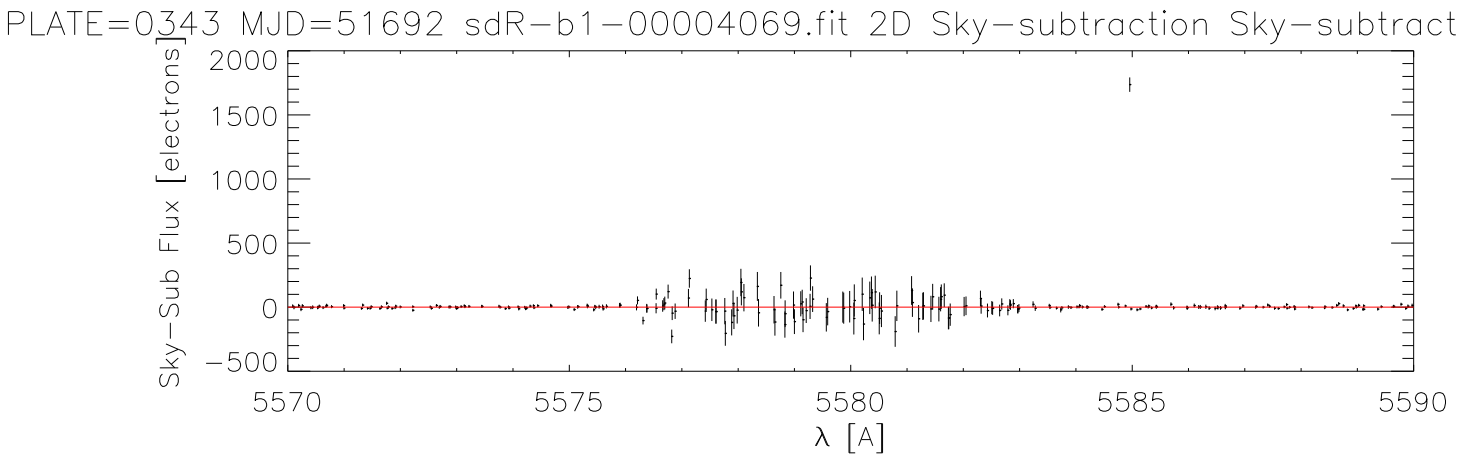

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

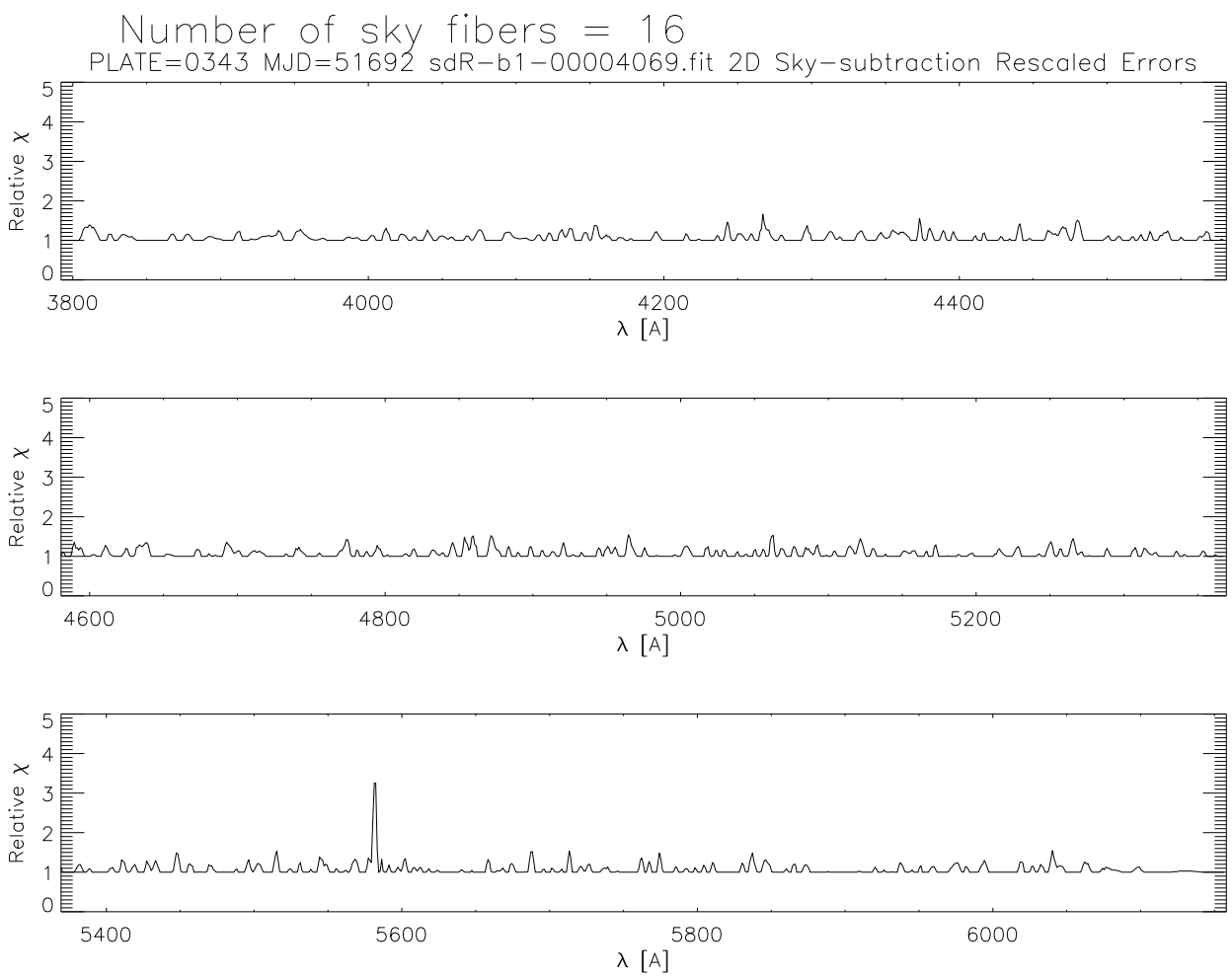

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

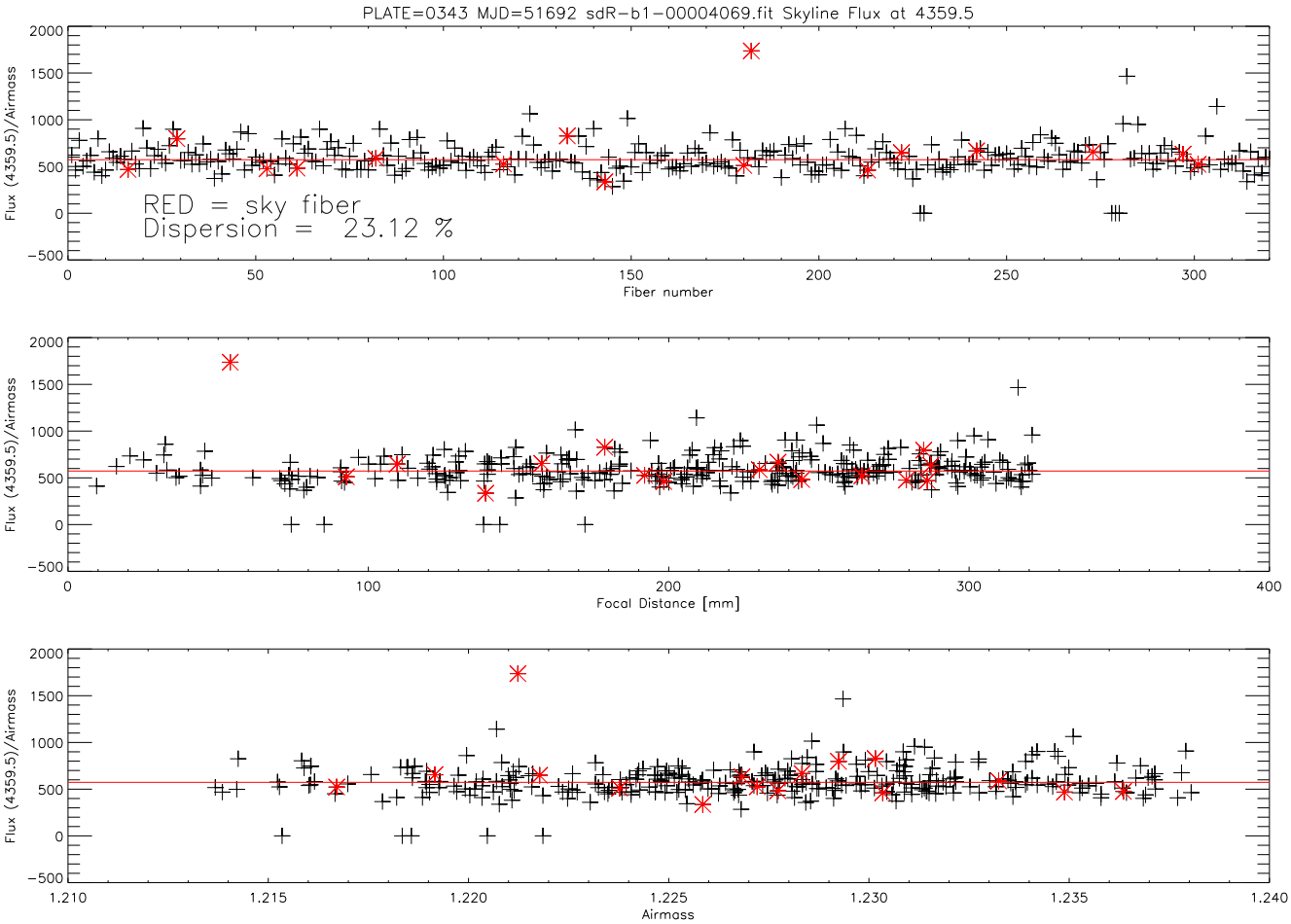

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004069.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

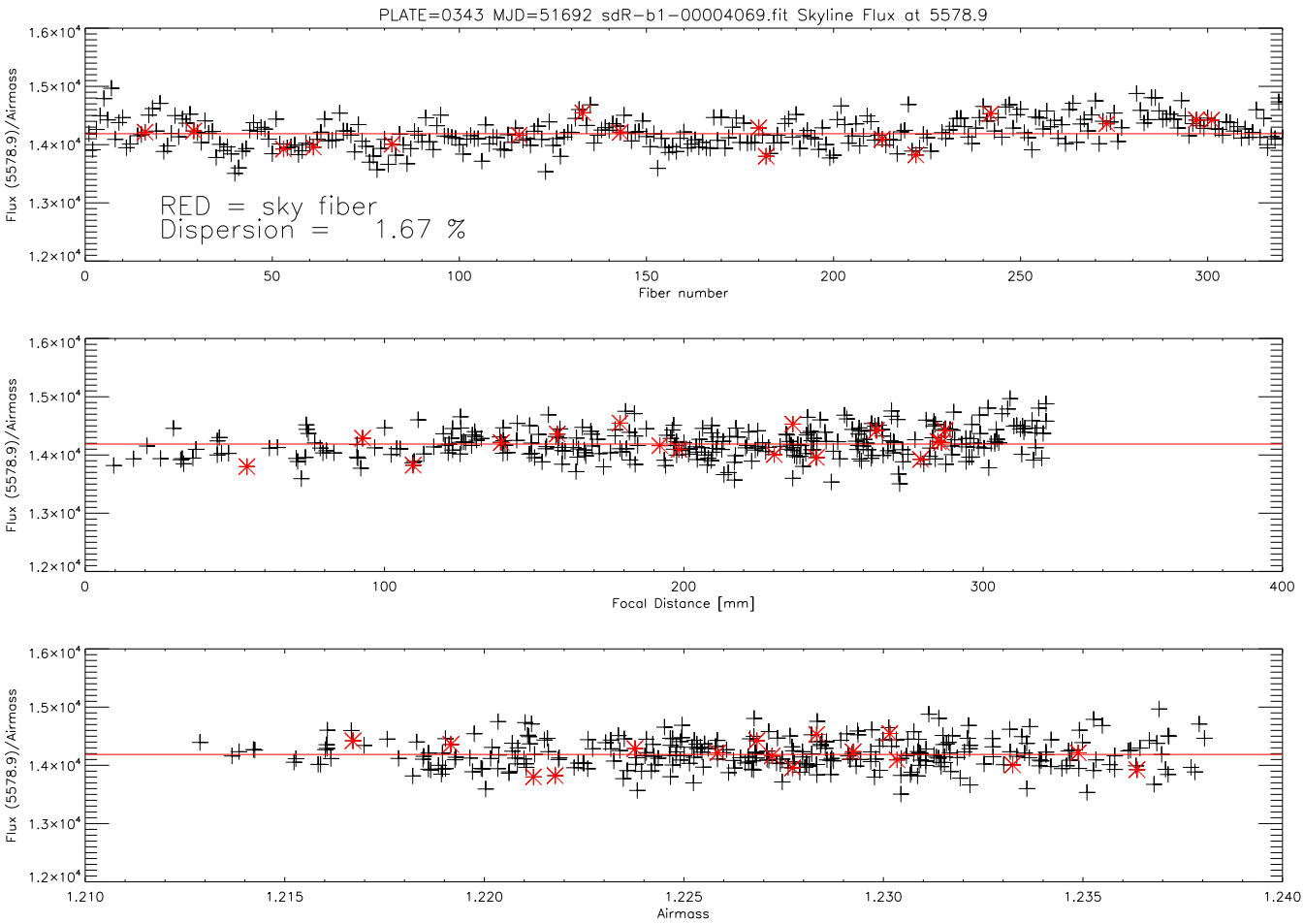

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

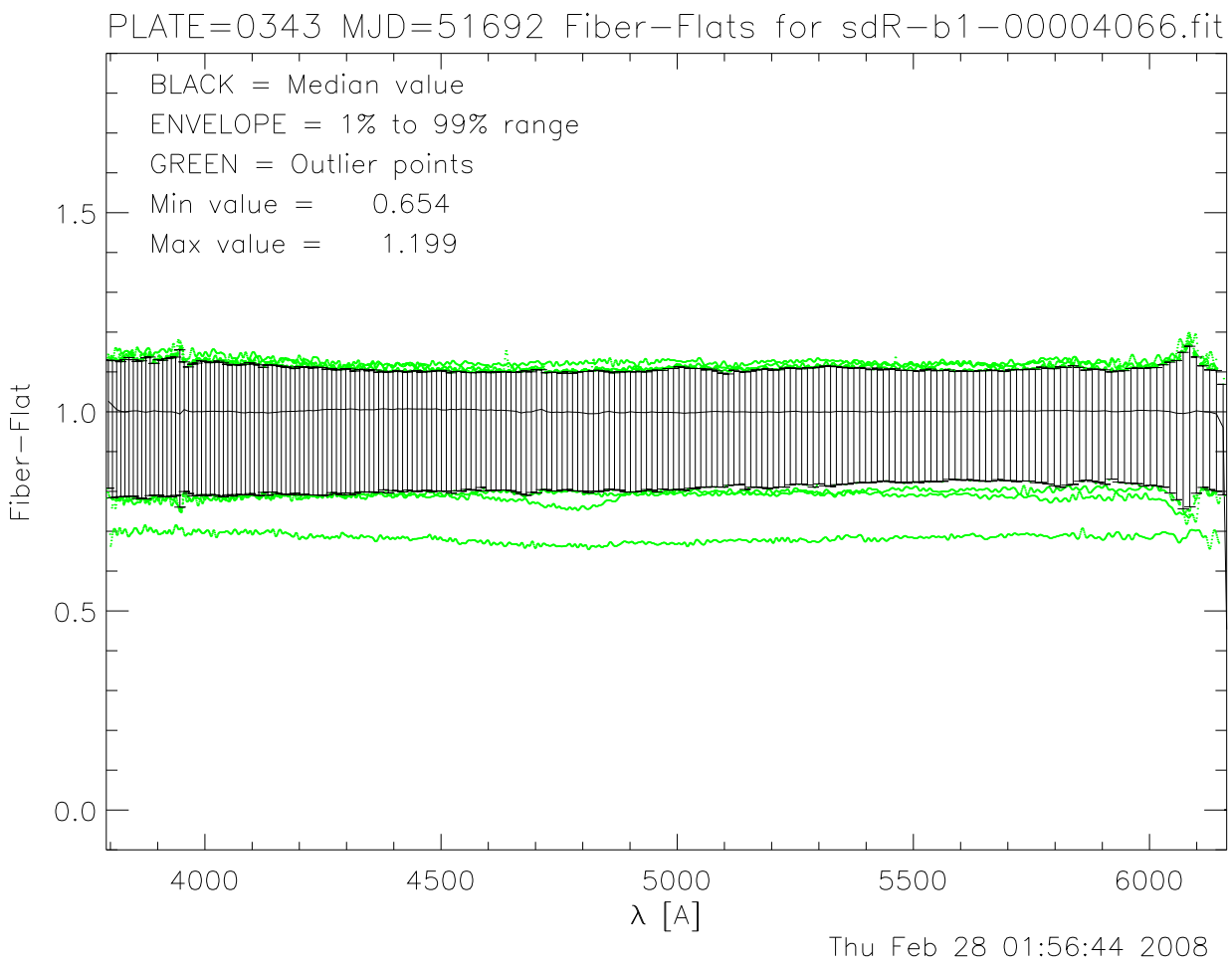

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

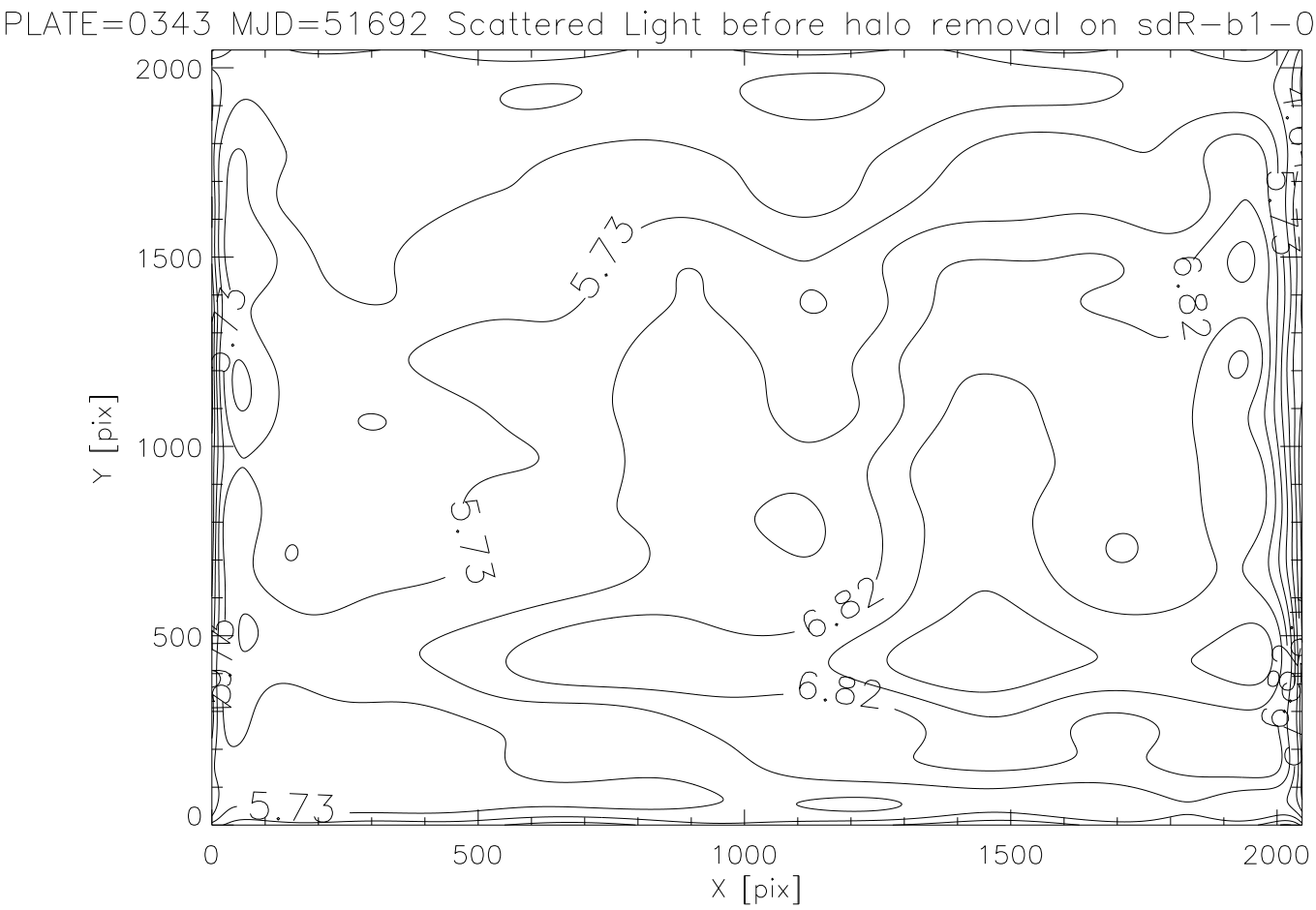

PLATE=0343 MJD=51692 sdR-b1-00004069.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

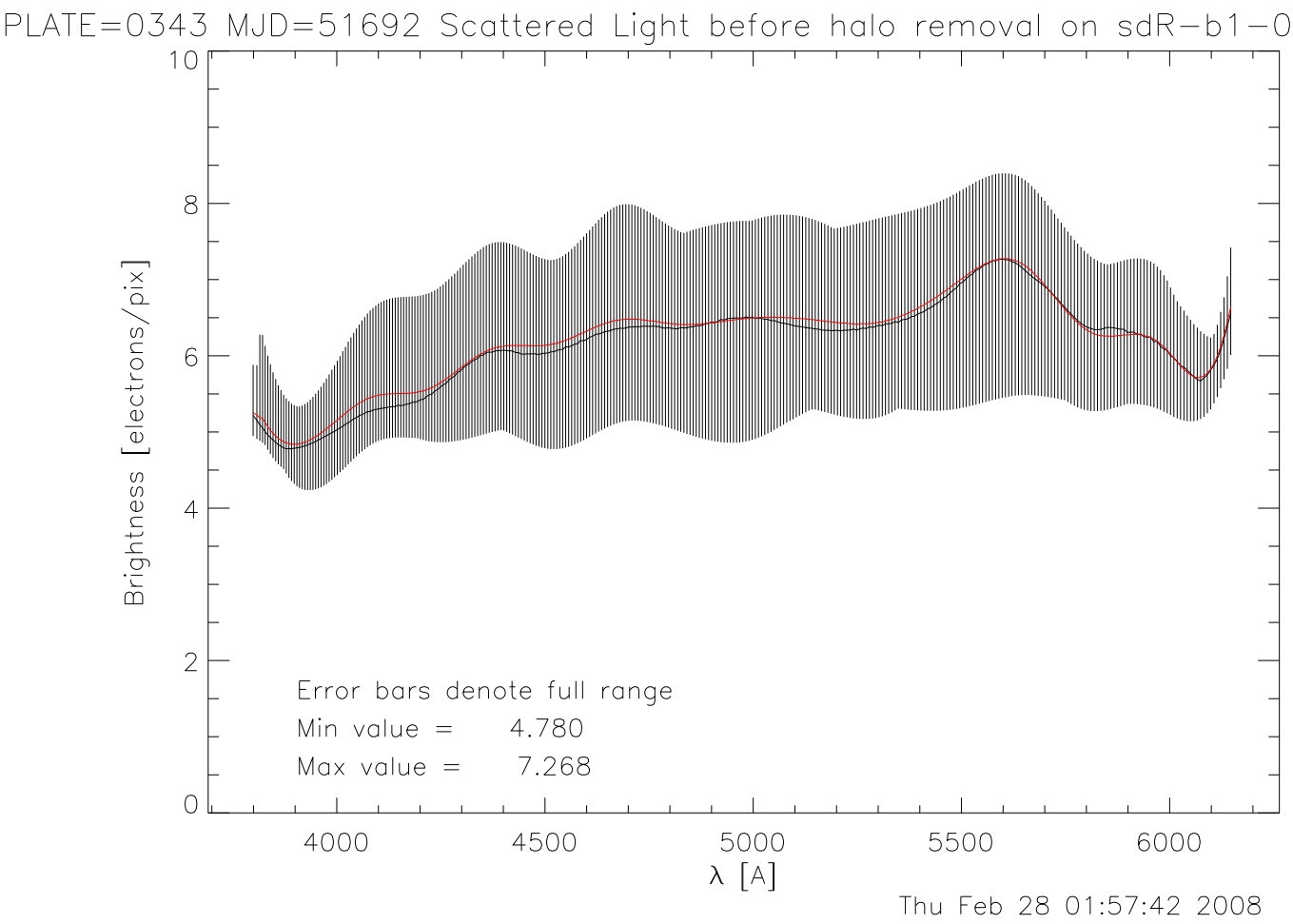

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004069.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

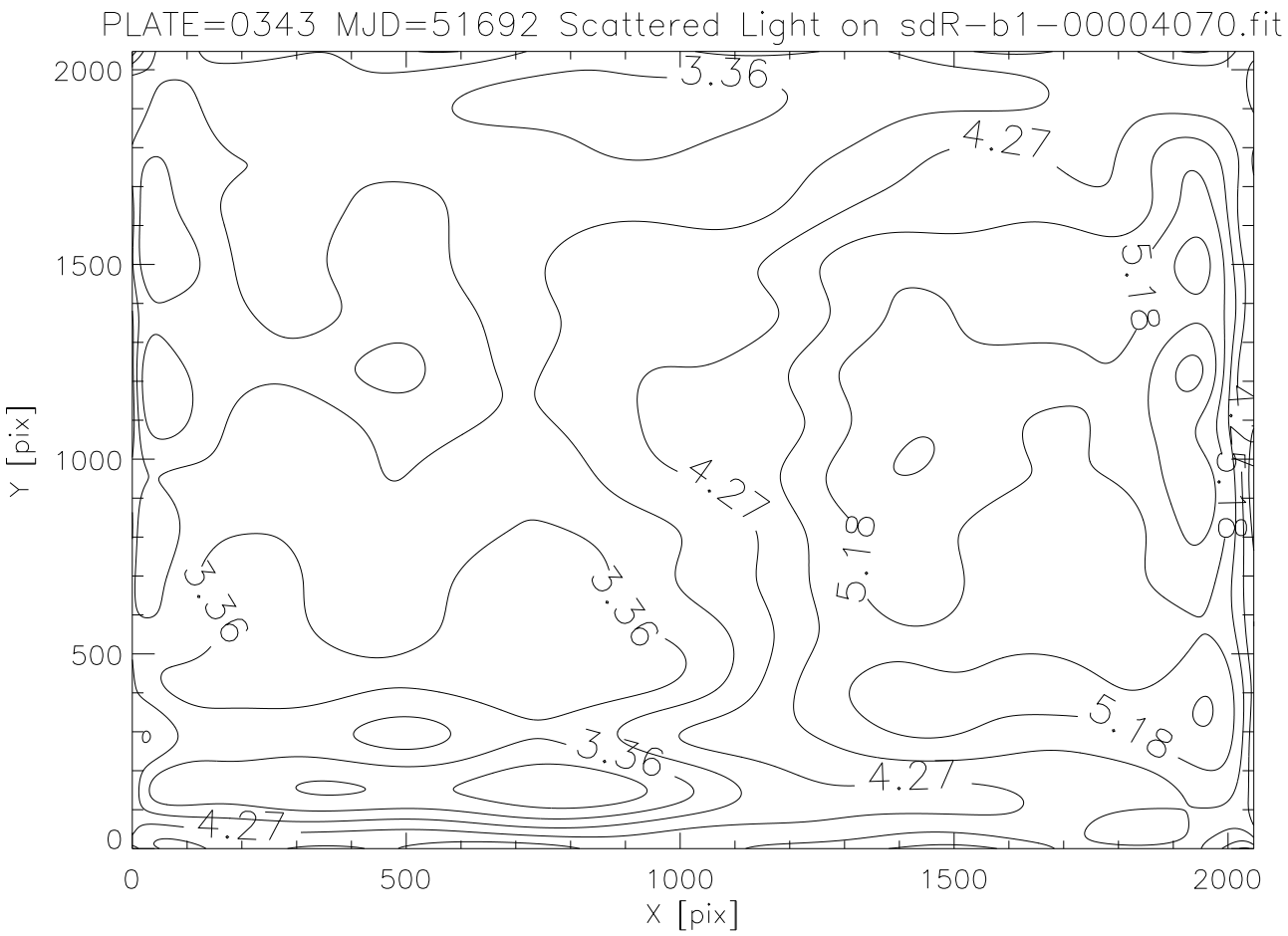

PLATE=0343 MJD=51692 sdR-b1-00004069.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 23.12 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

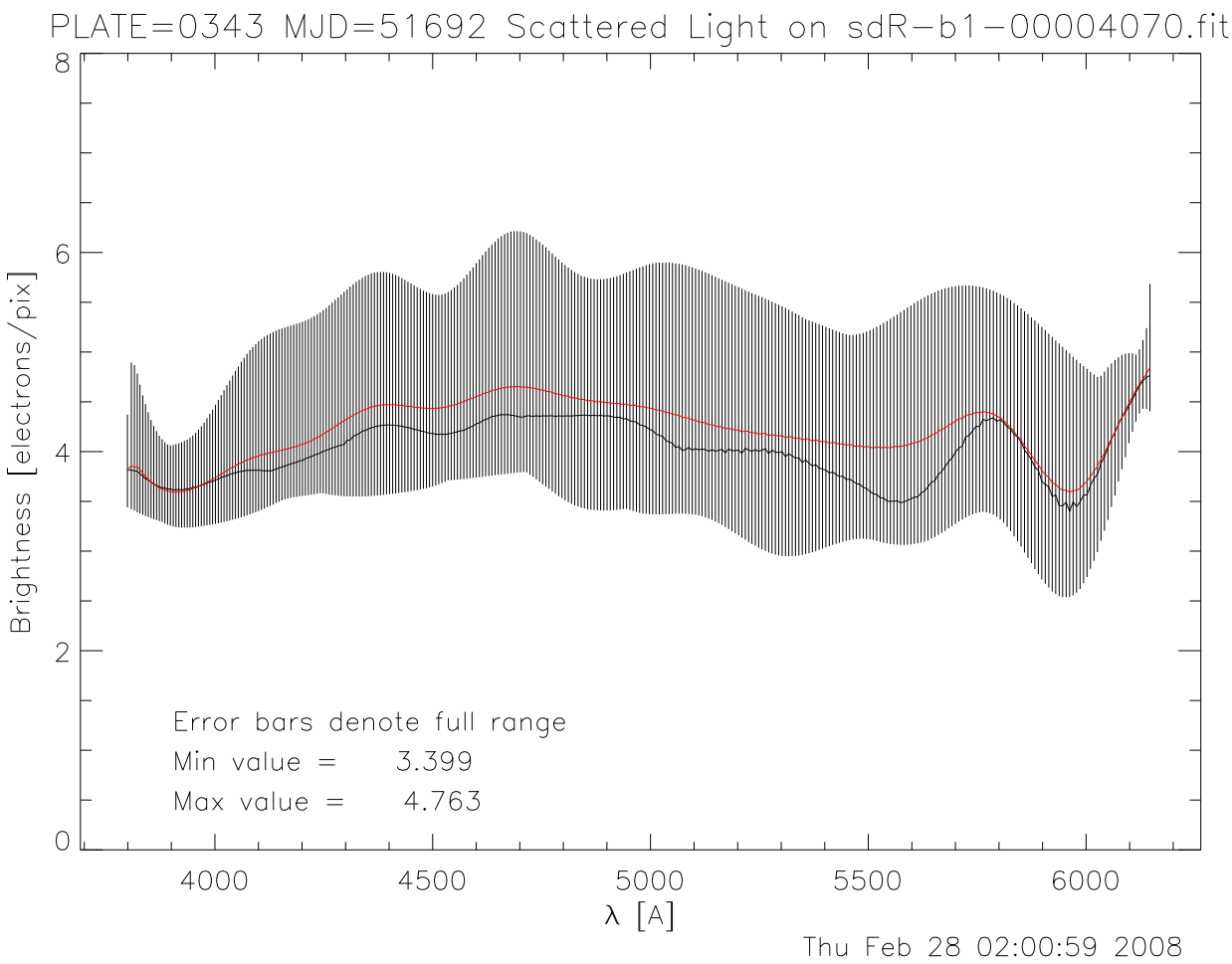

PLATE=0343 MJD=51692 sdR-b1-00004069.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.67 %
Fiber number
Focal Distance [mm]
Airmass

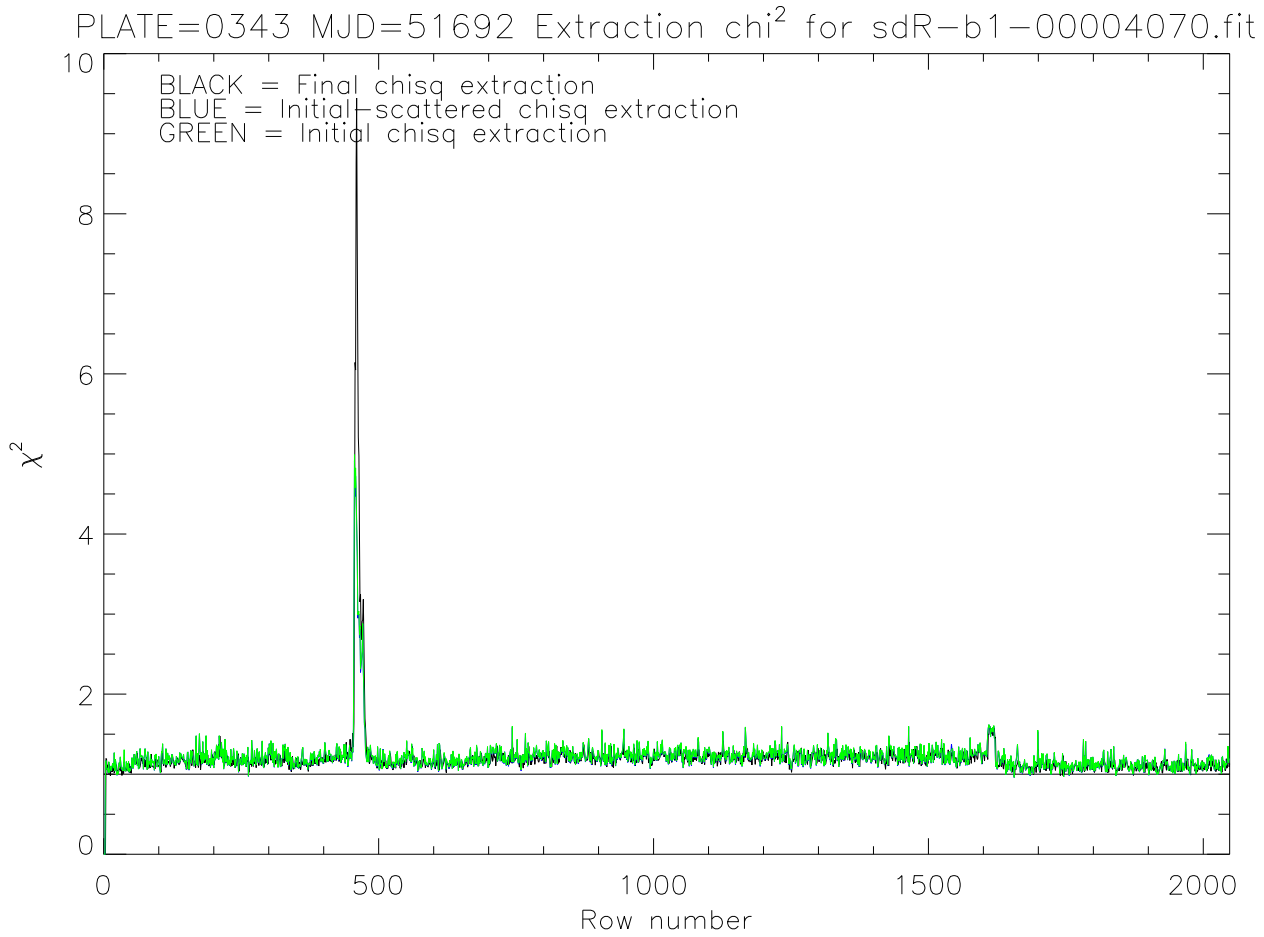

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 01:56:44 2008

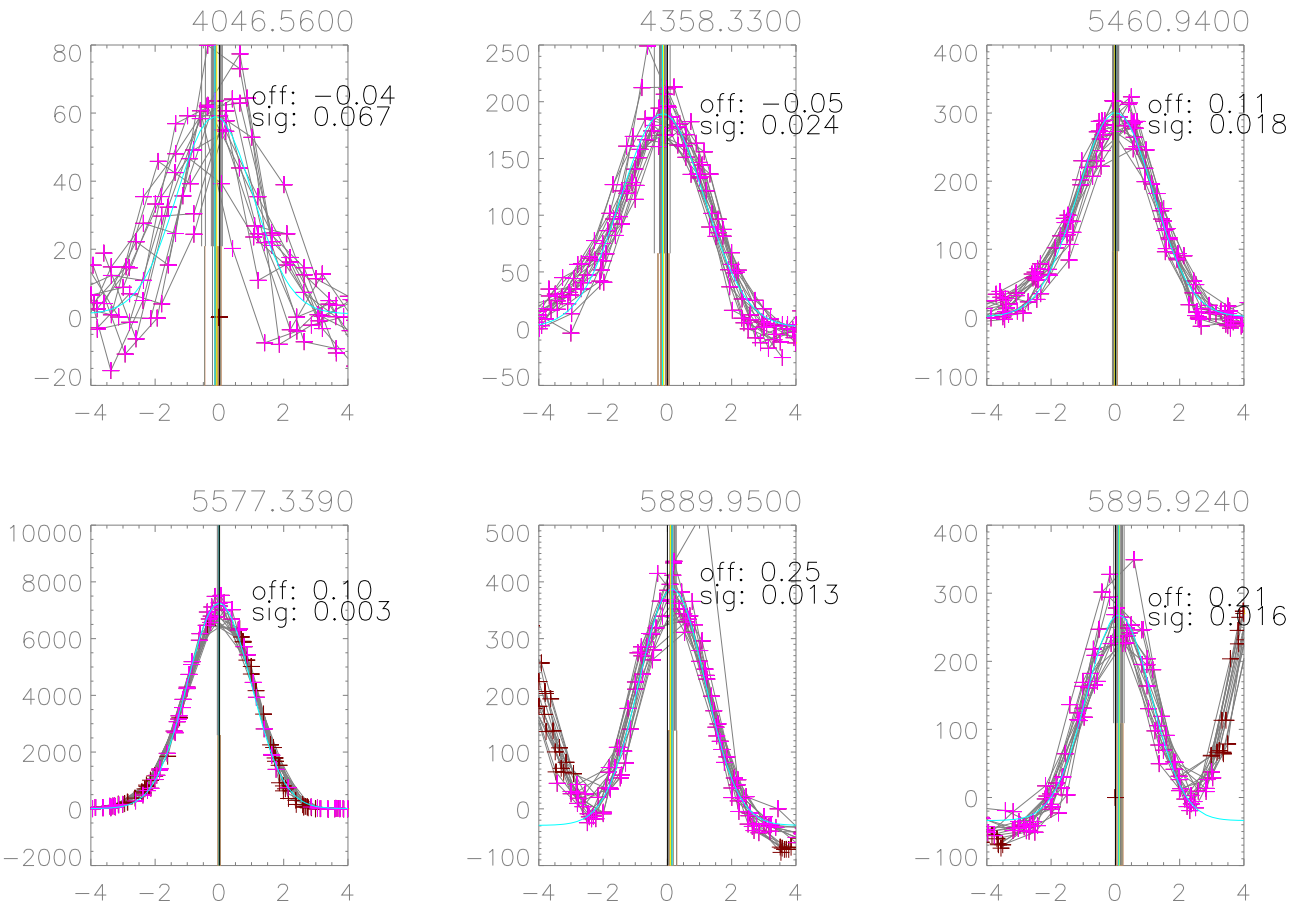

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004070.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.73
6.82
0

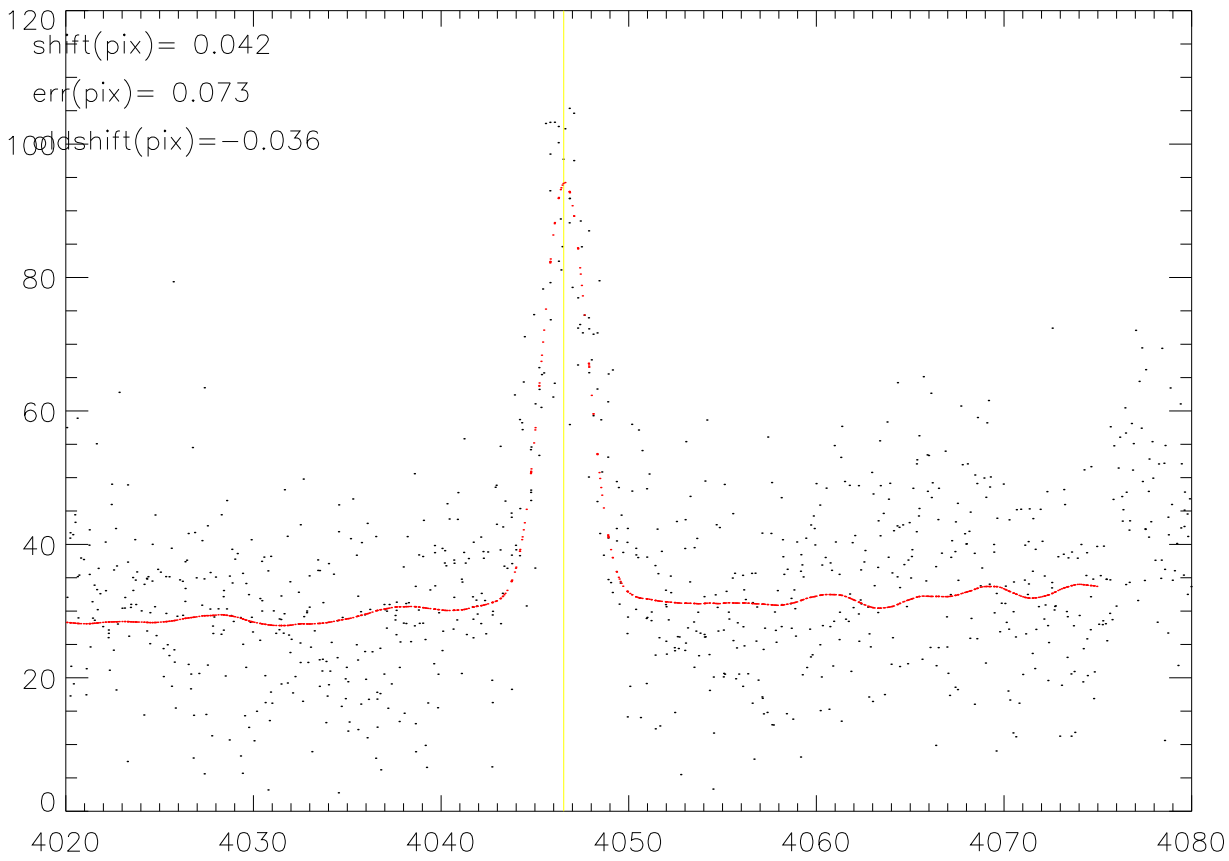

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004070.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.780
Max value = 7.268
Thu Feb 28 01:57:42 2008

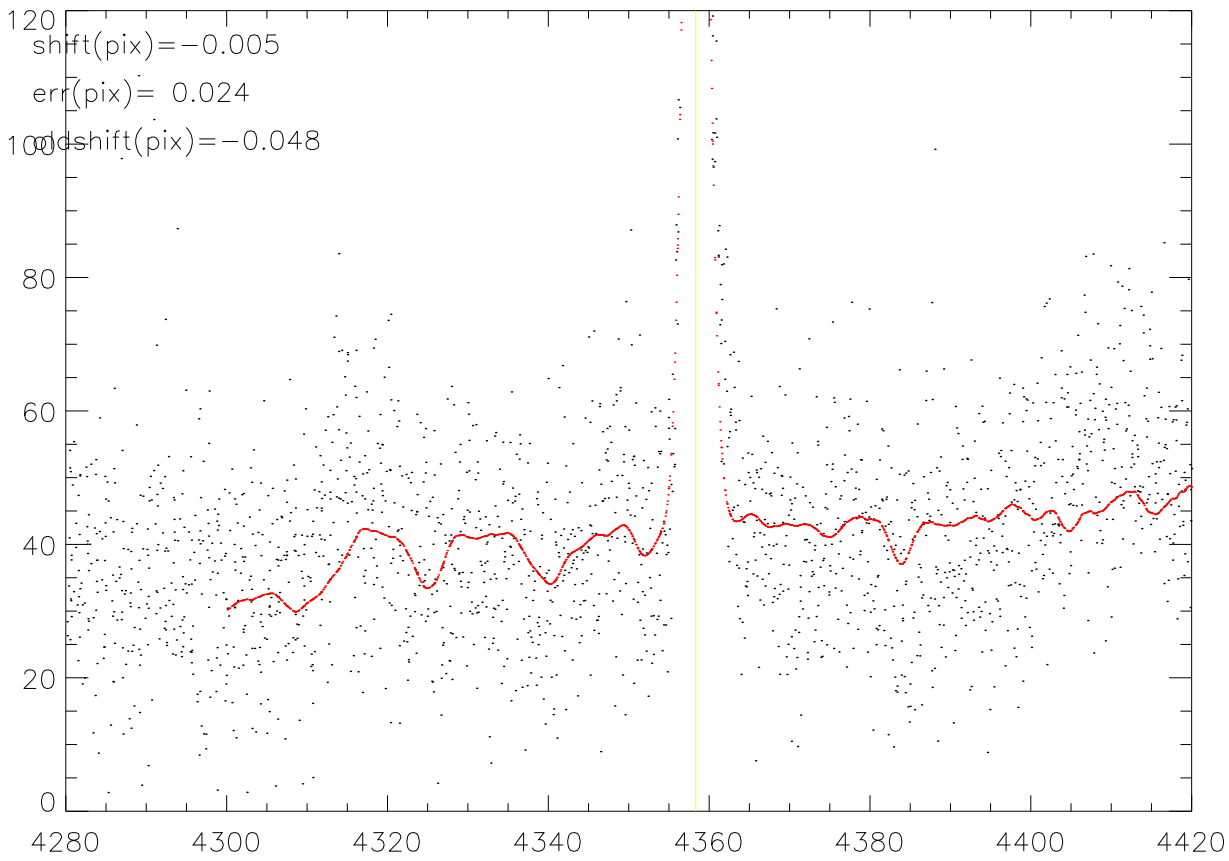

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004070.fit
3.36
4.27
5.18
4.27
5.18
3.36
3.36
5.18
3.36
4.27
4.27
5.18
Y [pix]
X [pix]
0
500
1000
1500
2000

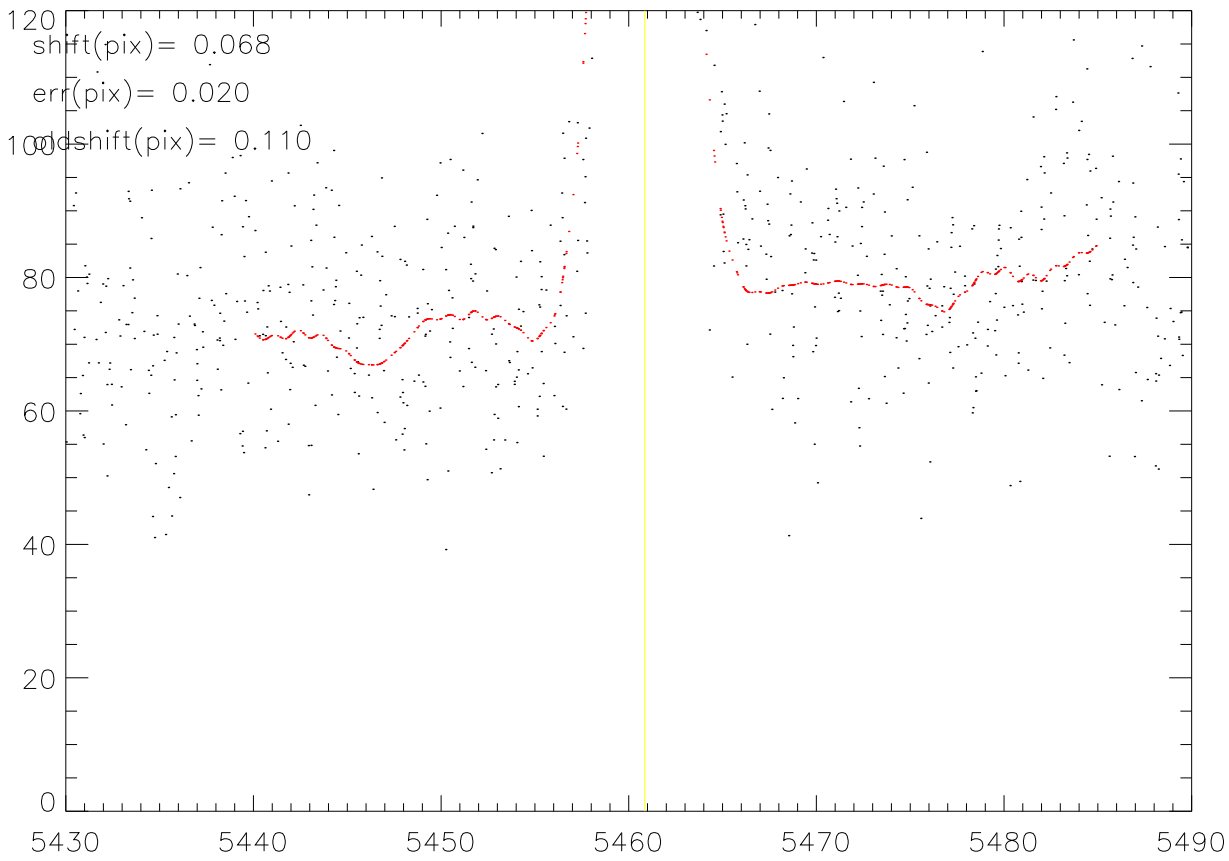

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004070.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.399
Max value = 4.763
Thu Feb 28 02:00:59 2008

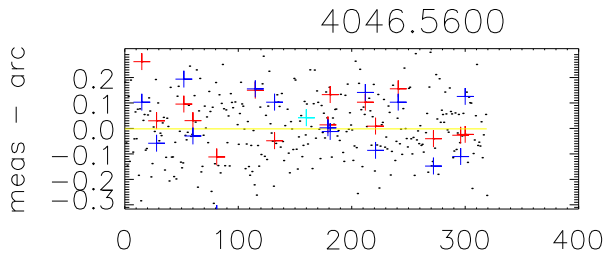

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004070.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

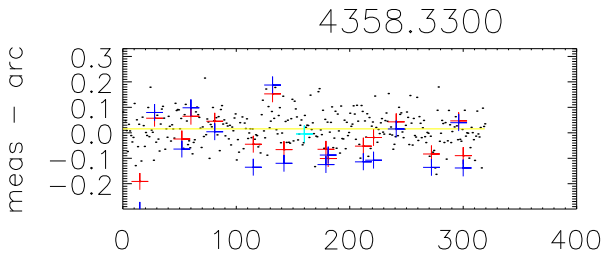

4046.5600
off: −0.04
sig: 0.067
4358.3300
off: −0.05
sig: 0.024
5460.9400
off: 0.11
sig: 0.018
5577.3390
off: 0.10
sig: 0.003
5889.9500
off: 0.25
sig: 0.013
5895.9240
off: 0.21
sig: 0.016

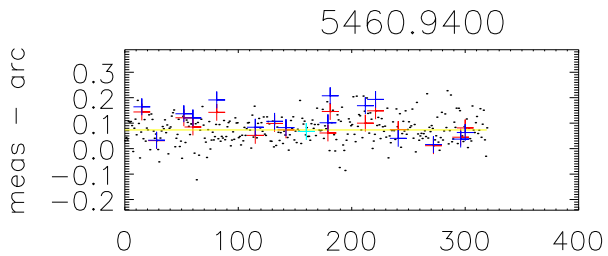

shift(pix)= 0.042
err(pix)= 0.073
oldshift(pix)=−0.036
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

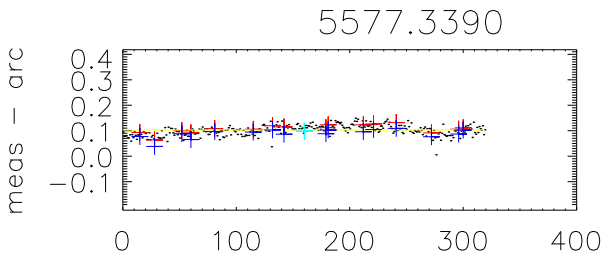

shift(pix)=−0.005
err(pix)= 0.024
oldshift(pix)=−0.048
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

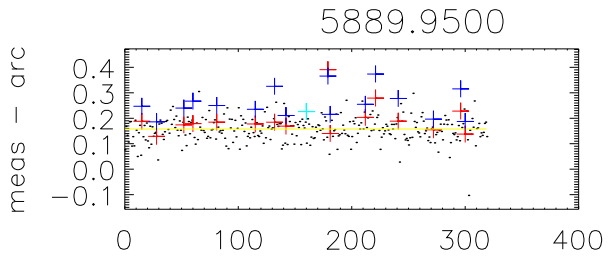

shift(pix)= 0.068
err(pix)= 0.020
oldshift(pix)= 0.110
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

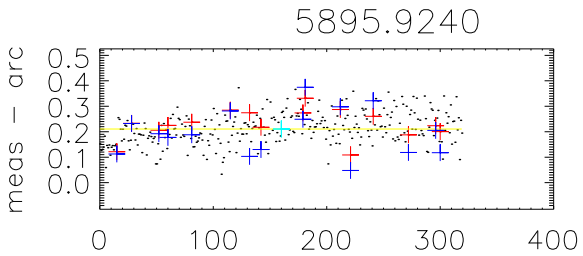

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

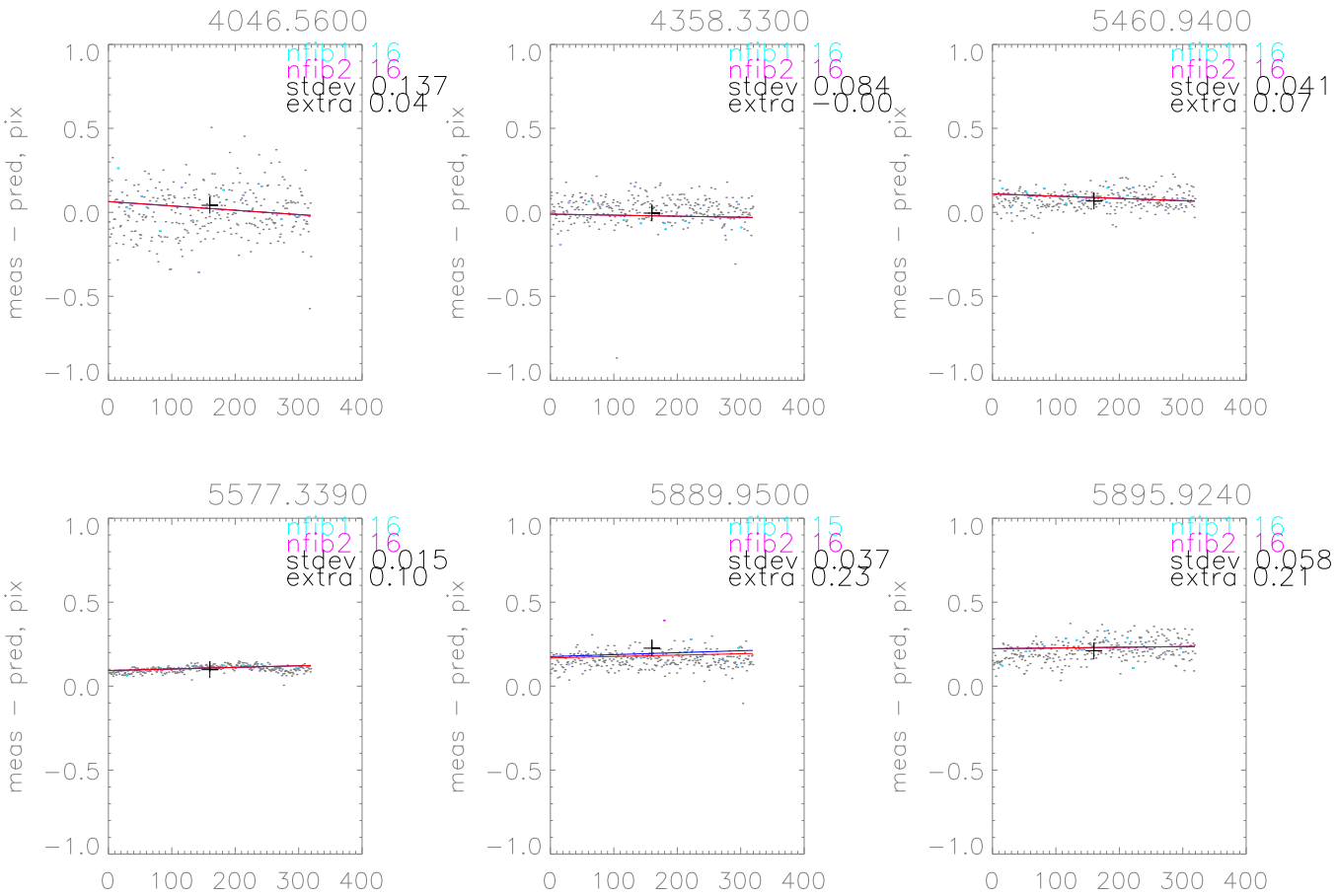

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

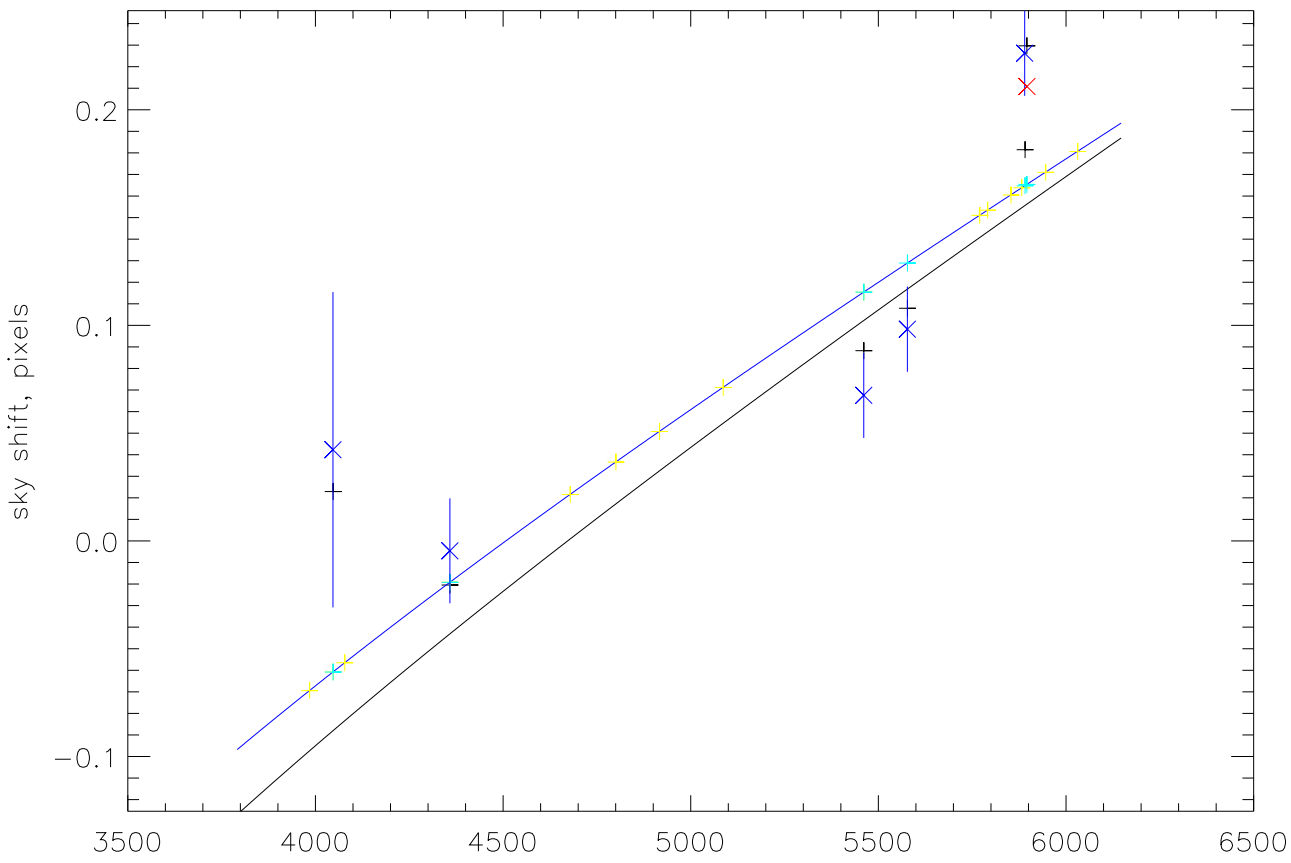

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

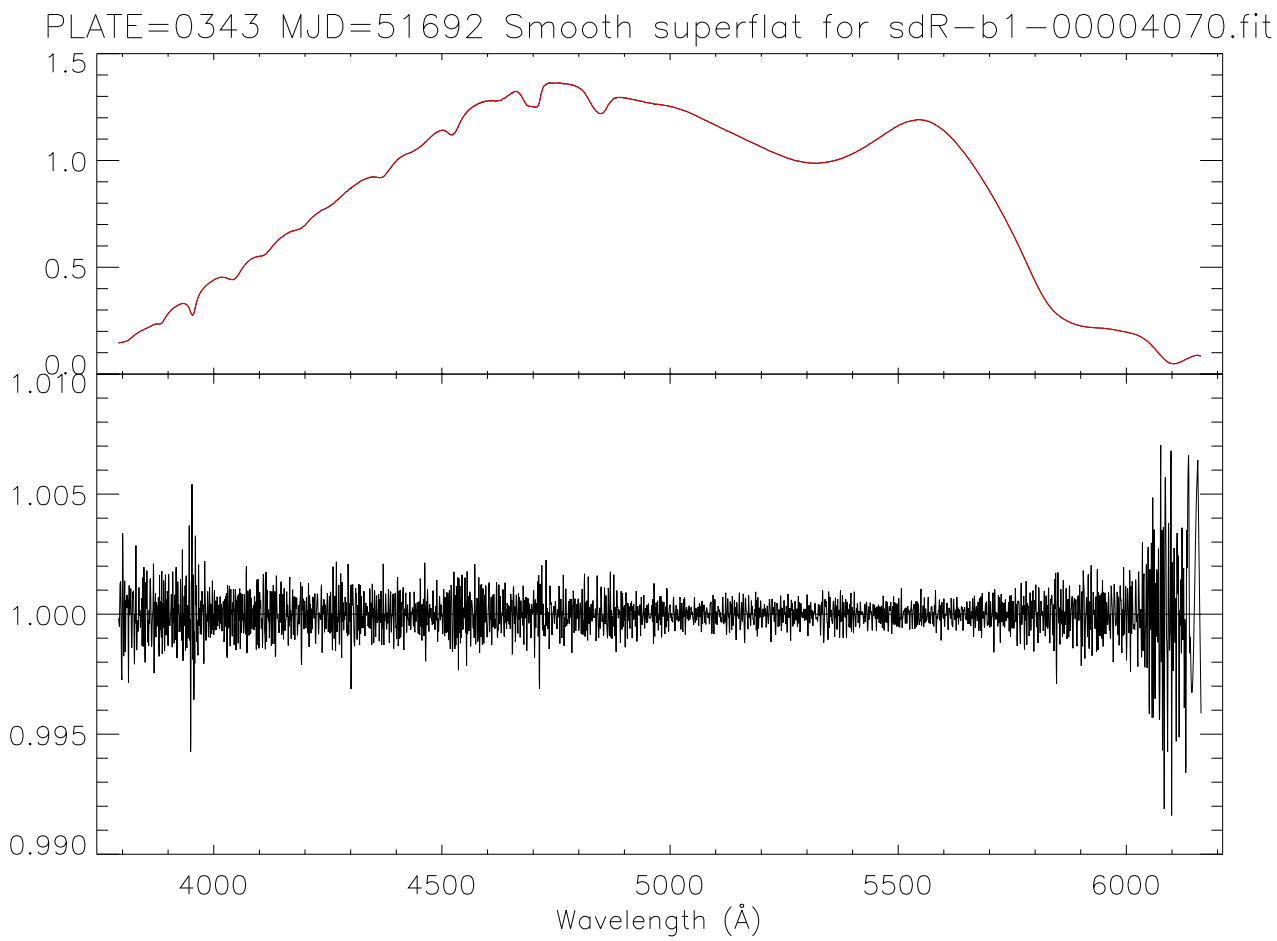

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

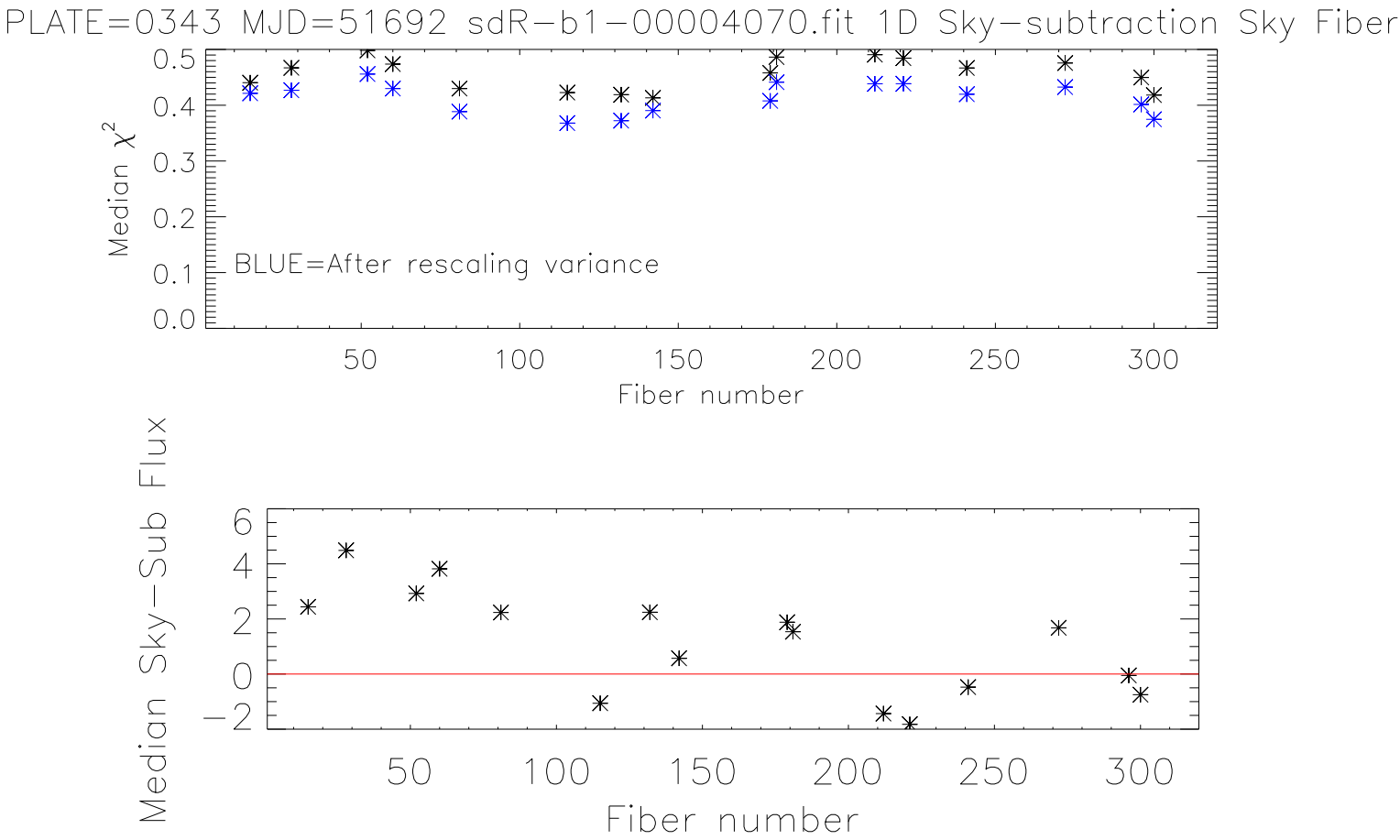

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

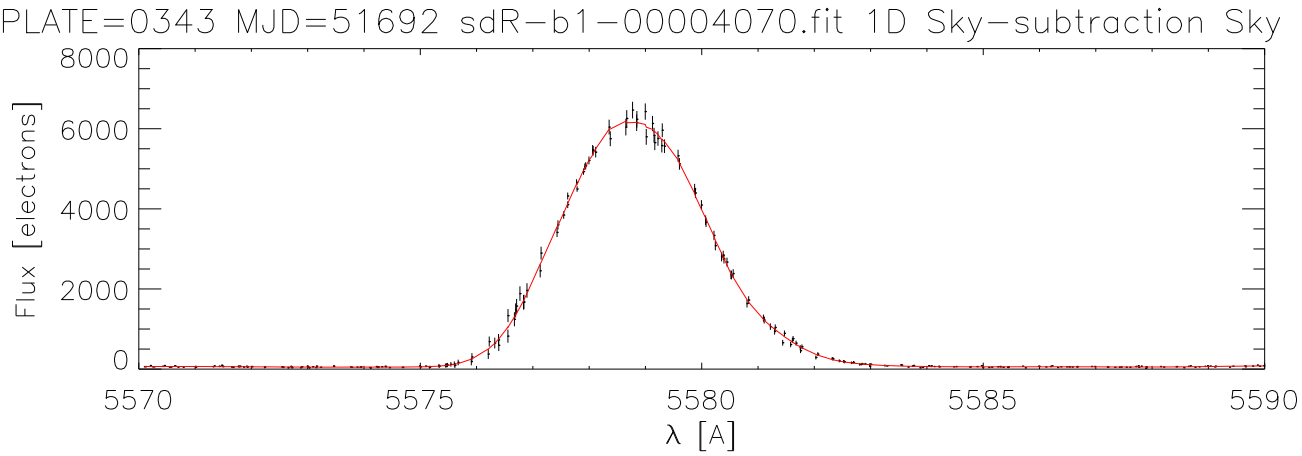

4046.5600
nfib1 16
nfib2 16
stdev 0.137
extra 0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.084
extra −0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.041
extra 0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.10
5889.9500
nfib1 15
nfib2 16
stdev 0.037
extra 0.23
5895.9240
nfib1 16
nfib2 16
stdev 0.058
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

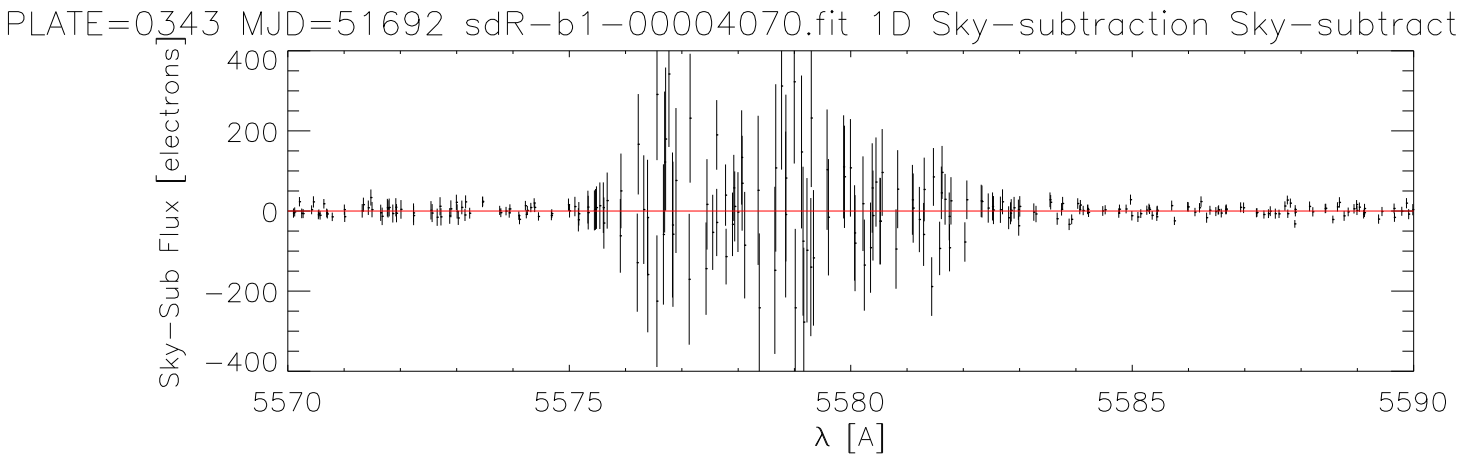

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

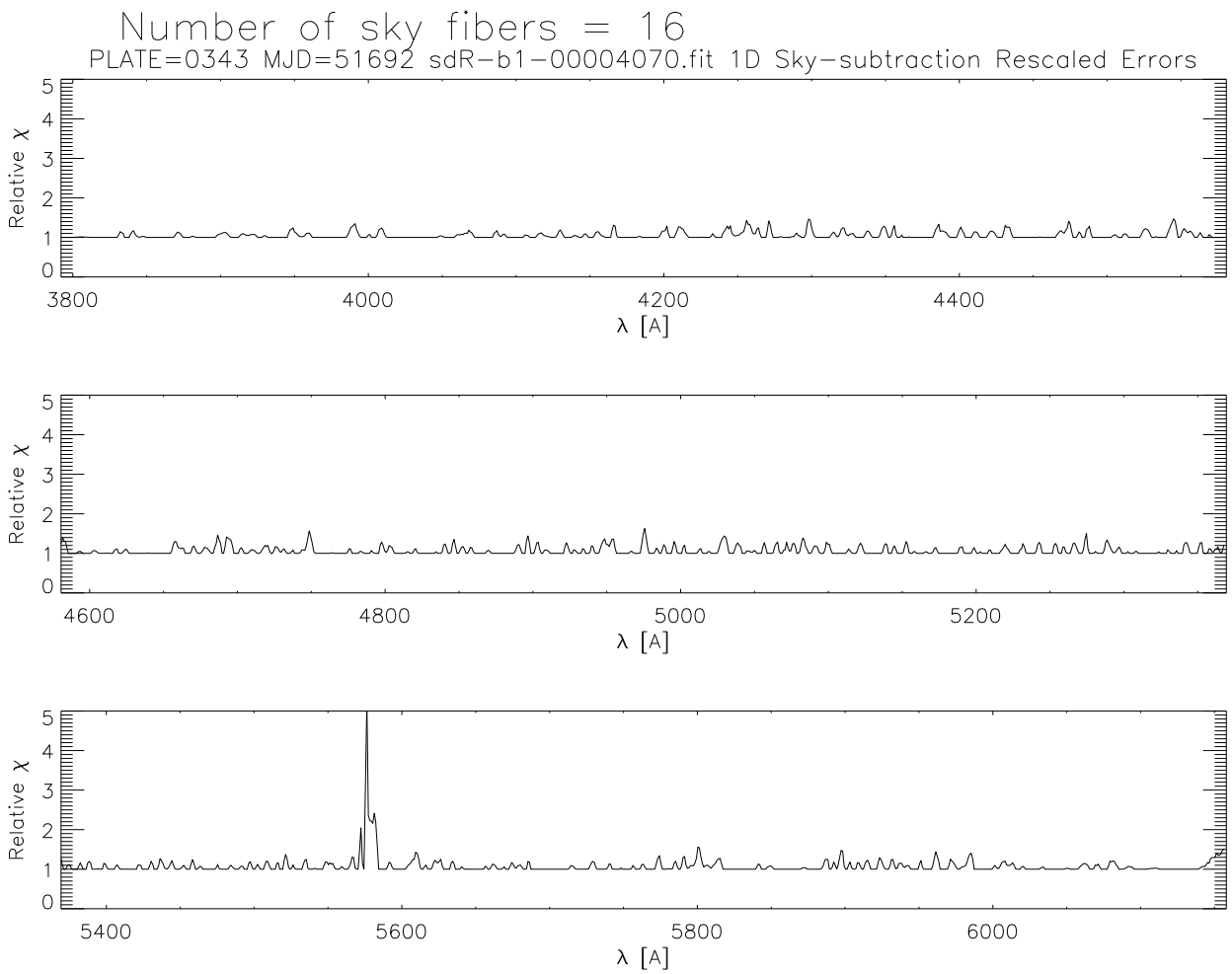
es= 0.0000

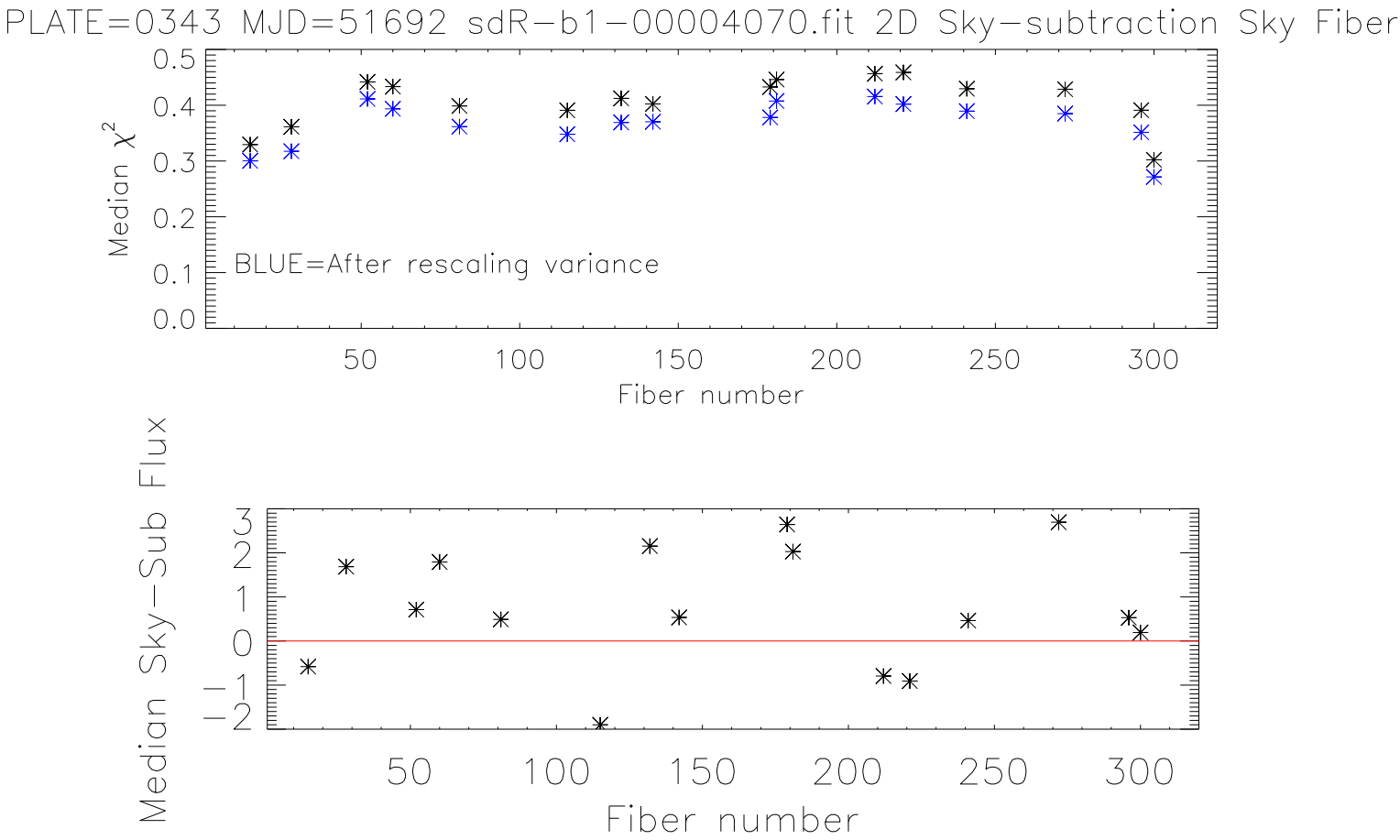

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004070.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

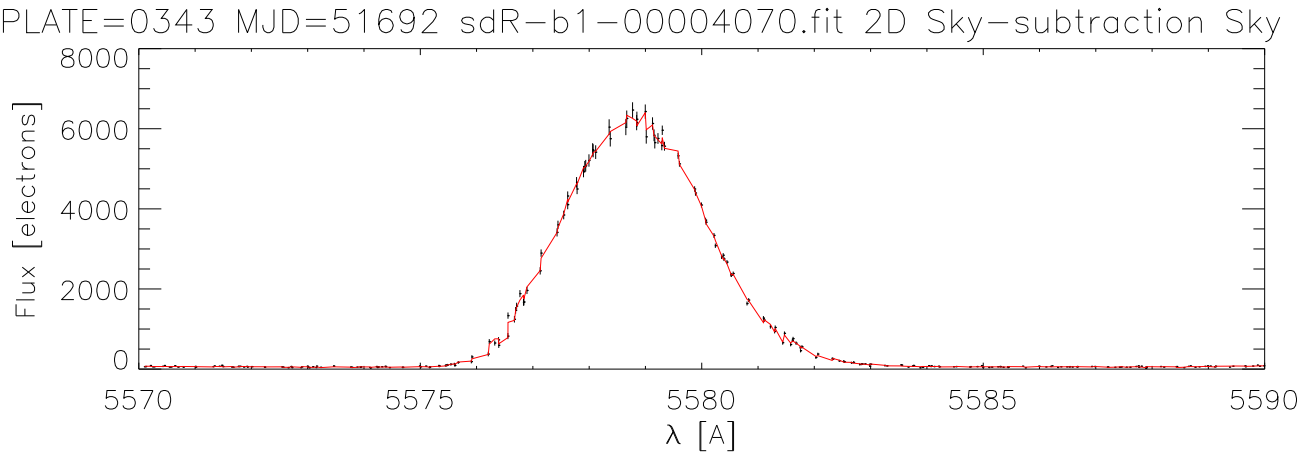

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

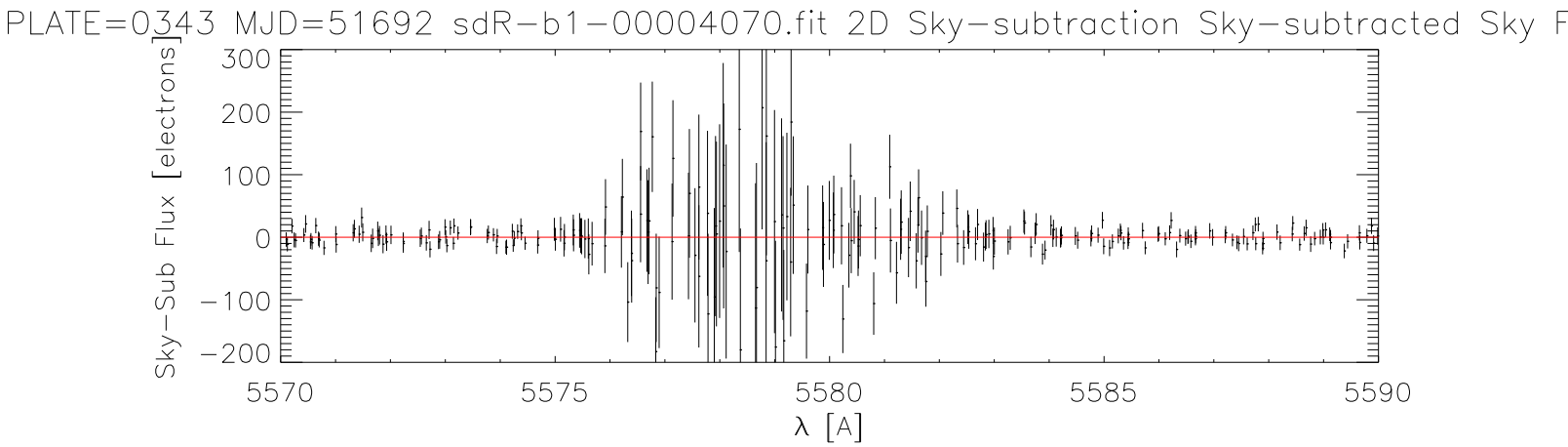

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

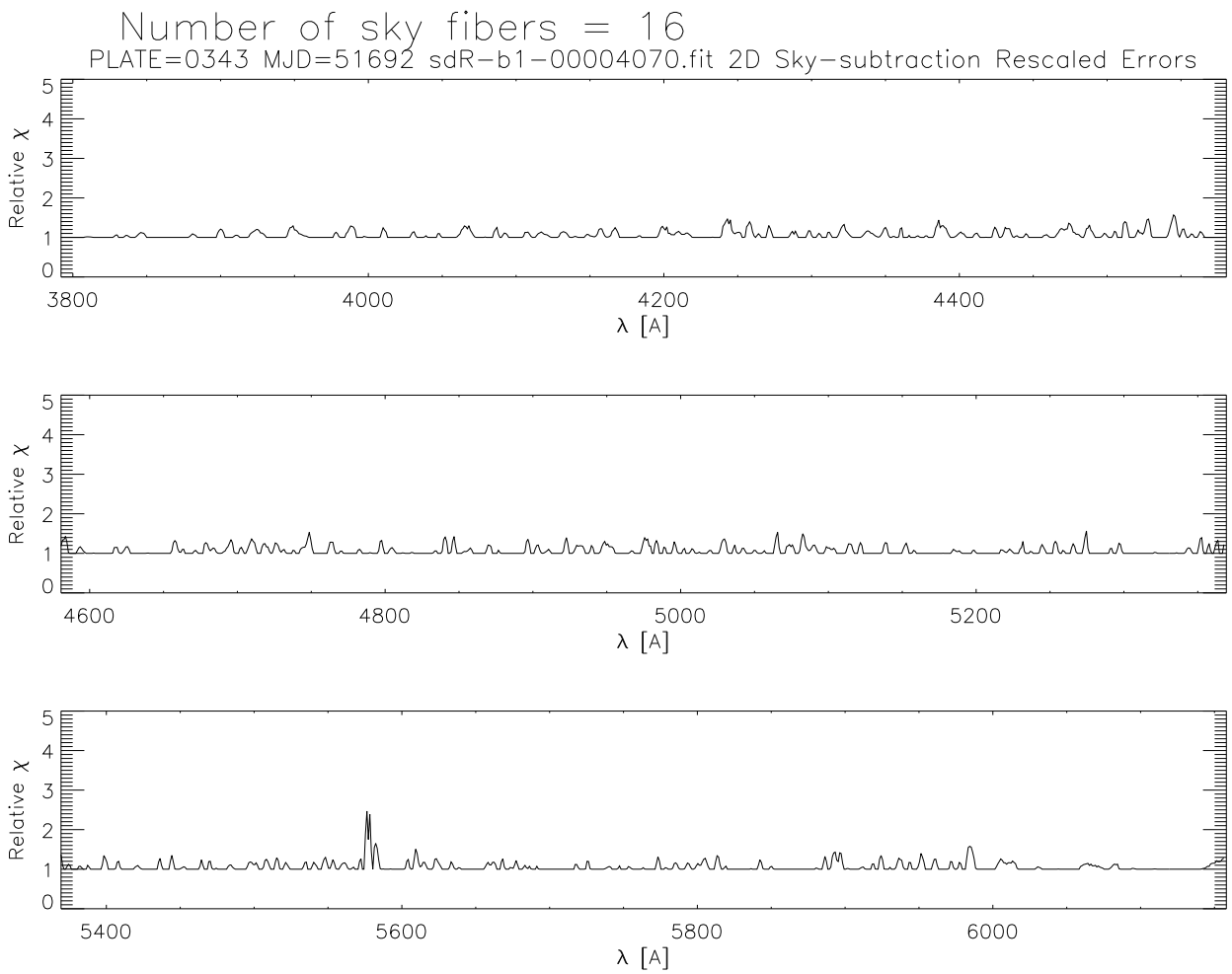

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

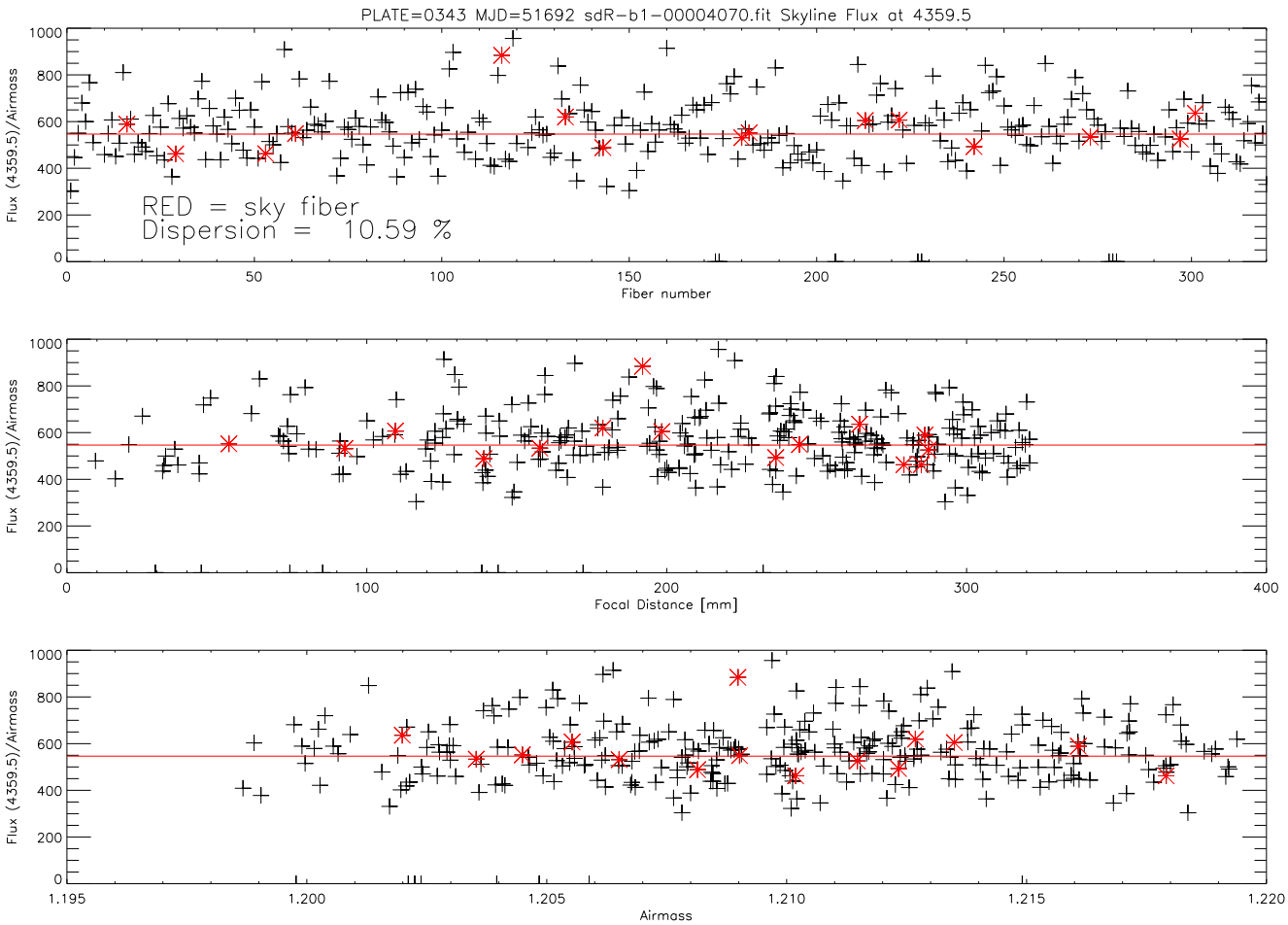

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004070.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

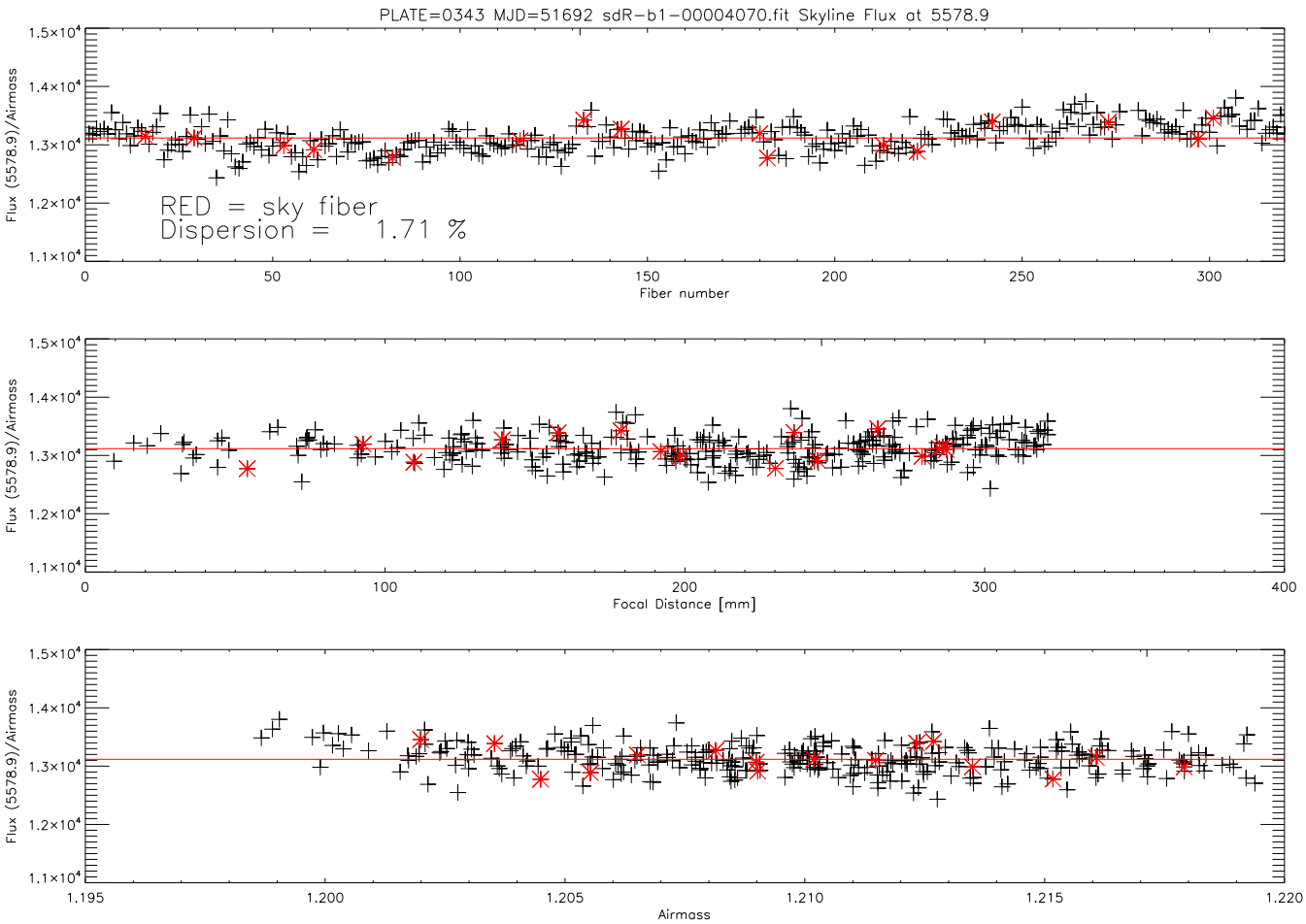

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

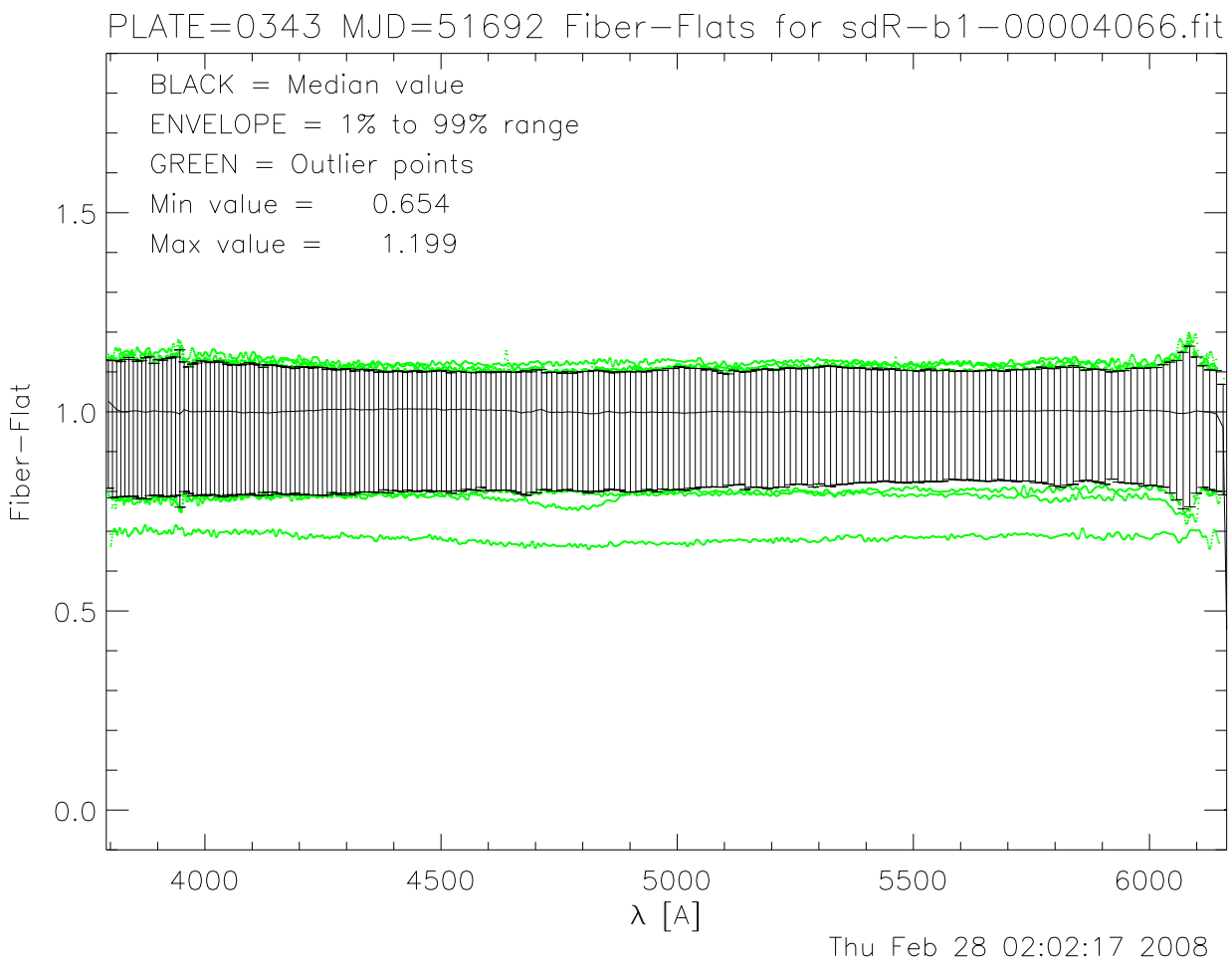

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

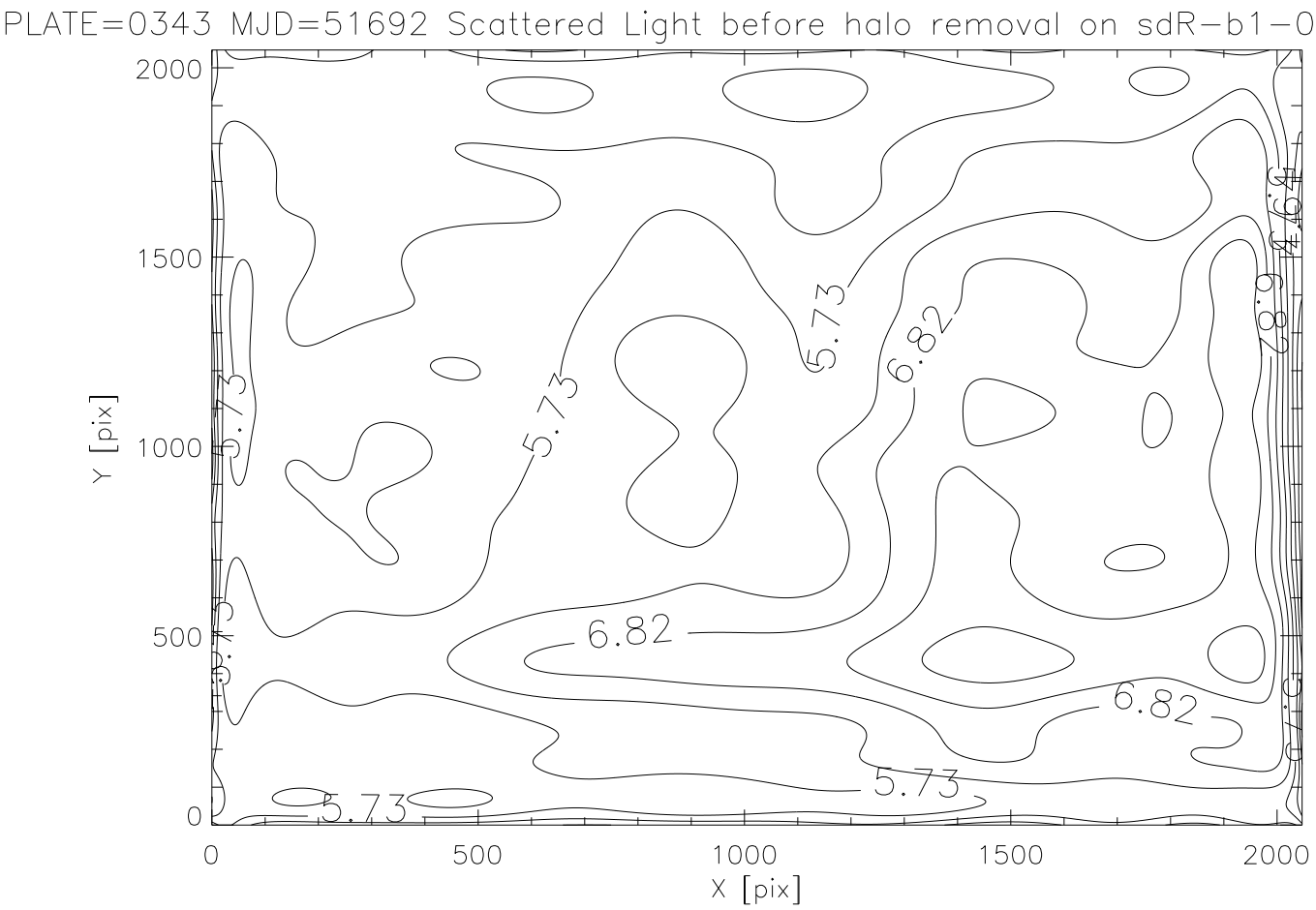

PLATE=0343 MJD=51692 sdR-b1-00004070.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

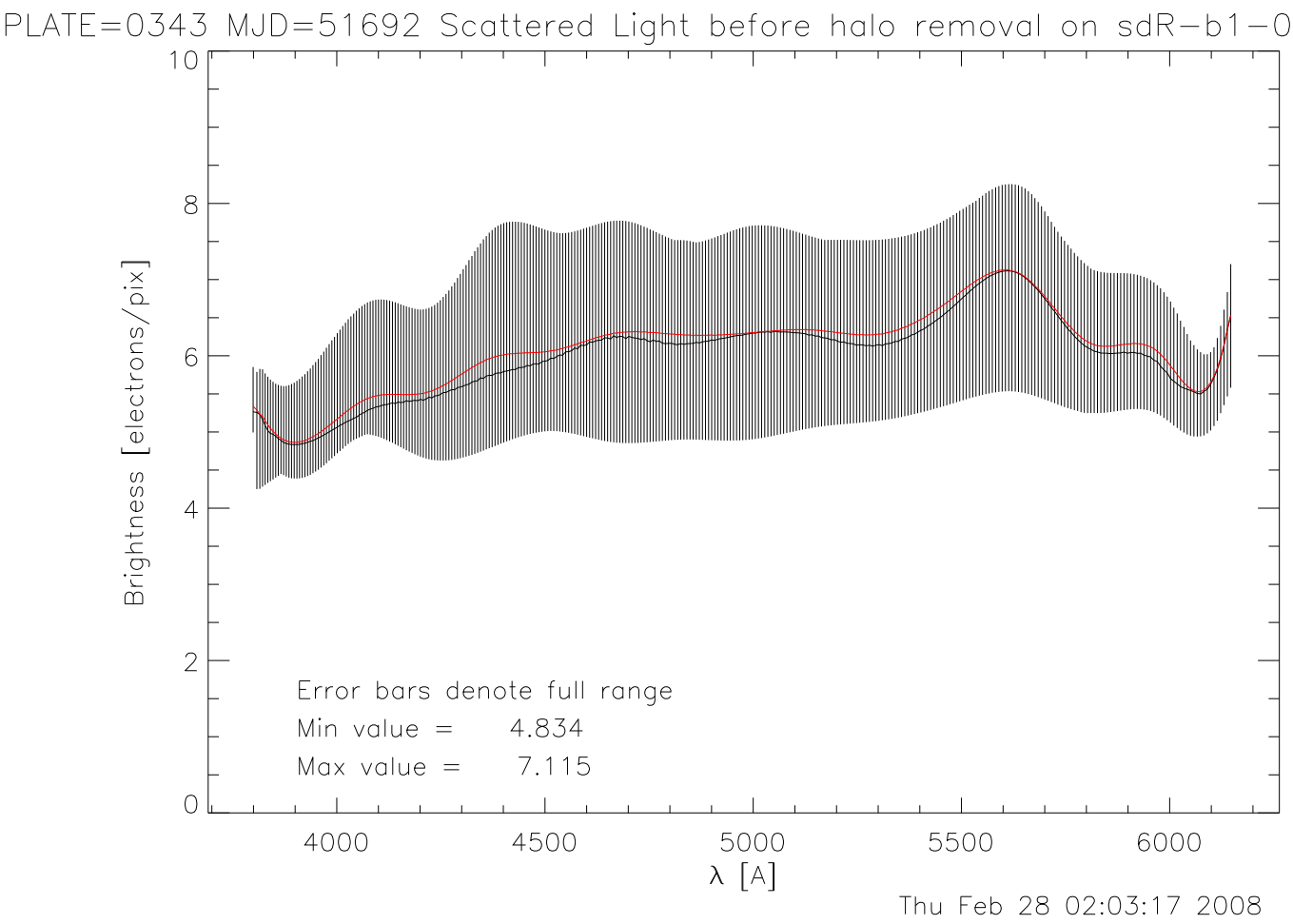

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004070.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

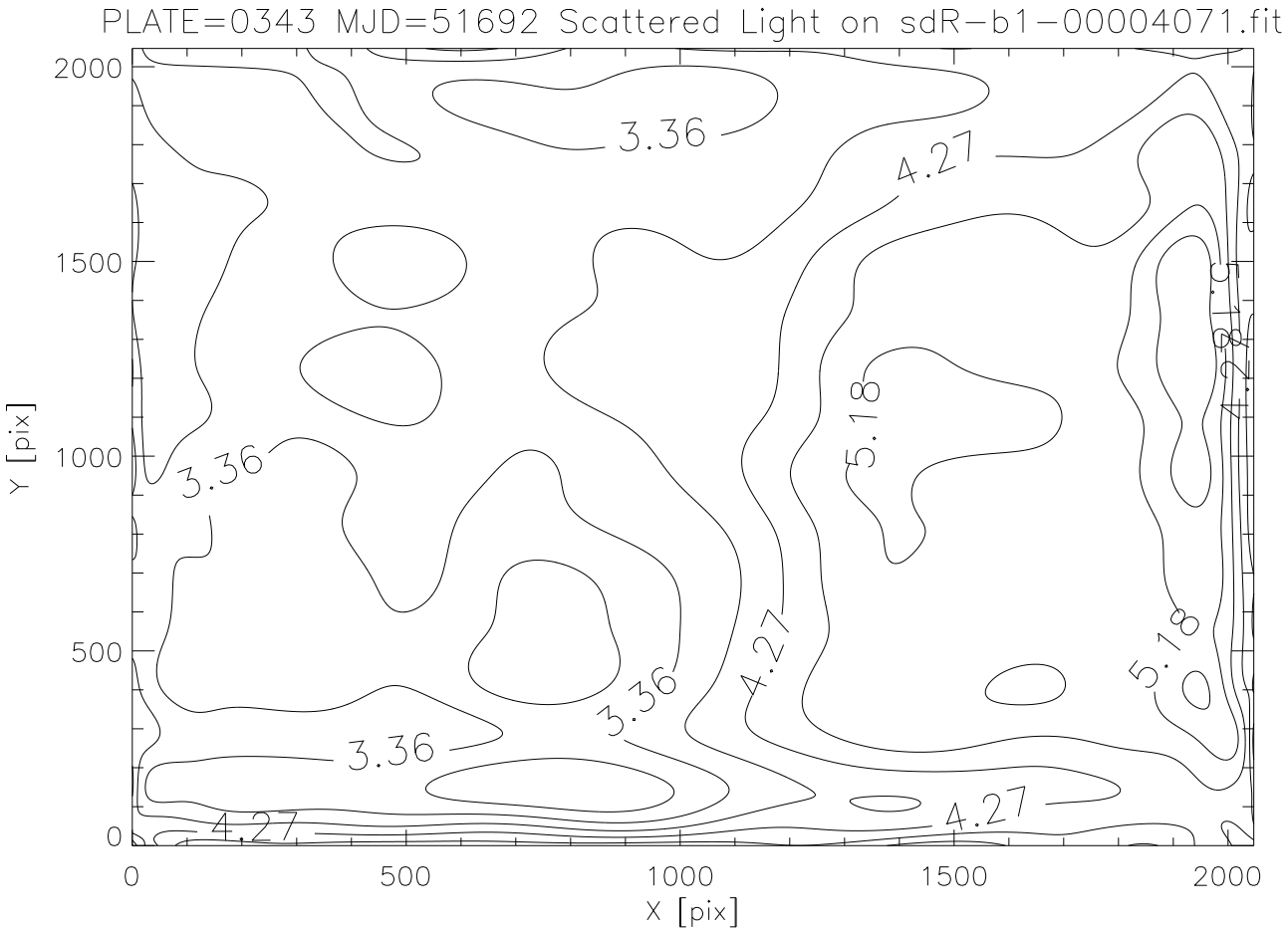

PLATE=0343 MJD=51692 sdR-b1-00004070.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.59 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

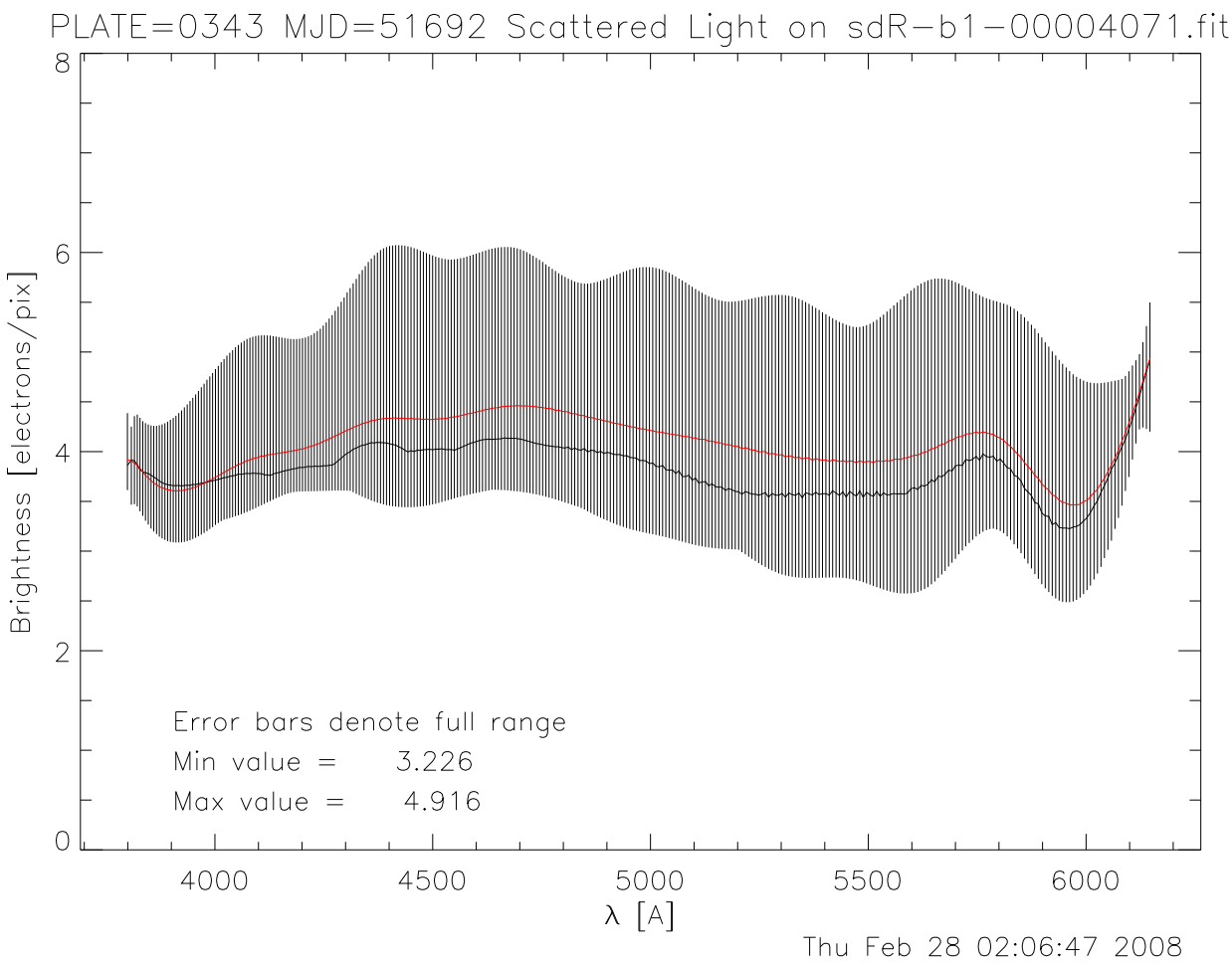

PLATE=0343 MJD=51692 sdR-b1-00004070.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Focal Distance [mm]
Airmass

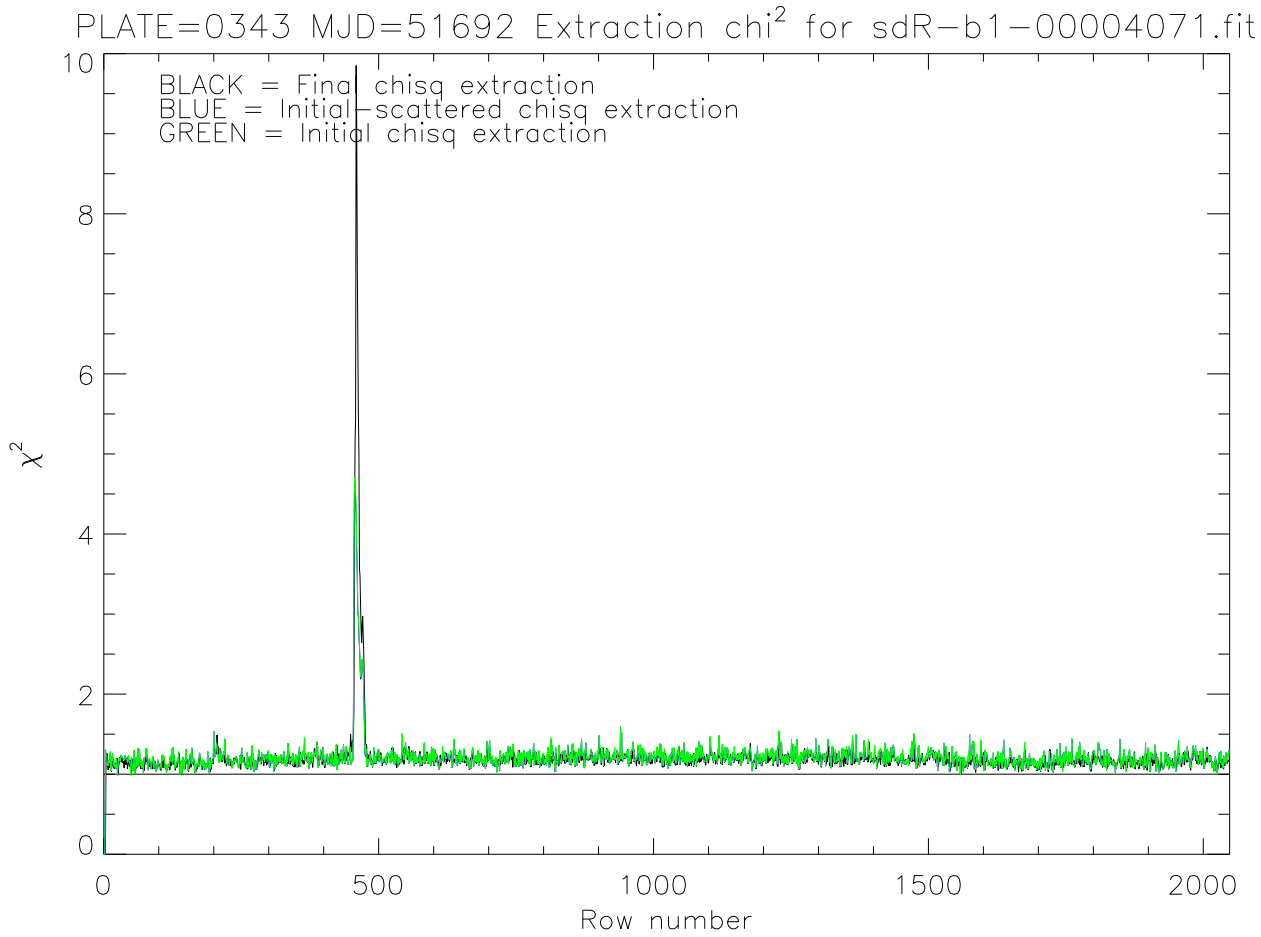

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:02:17 2008

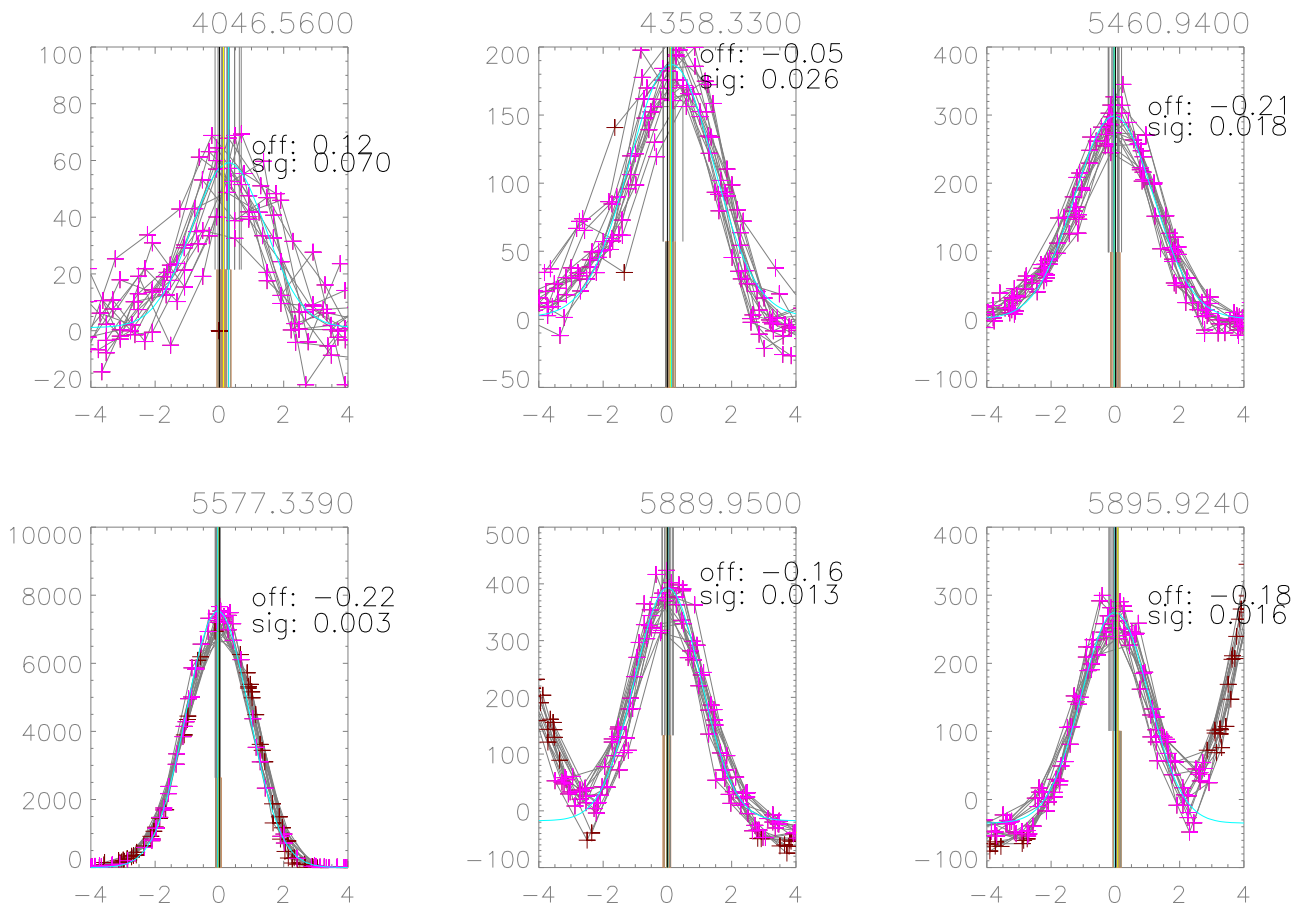

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004071.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.73
6.82

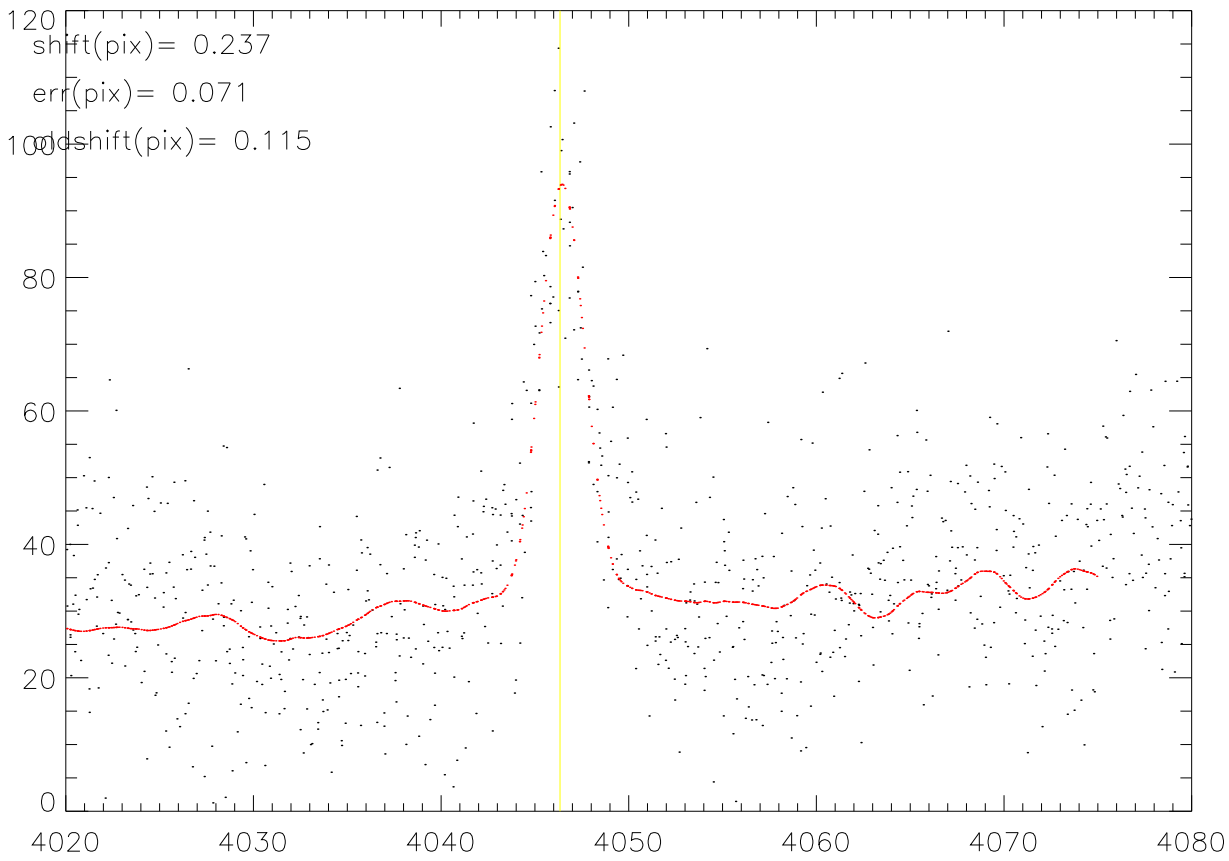

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004071.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.834
Max value = 7.115
Thu Feb 28 02:03:17 2008

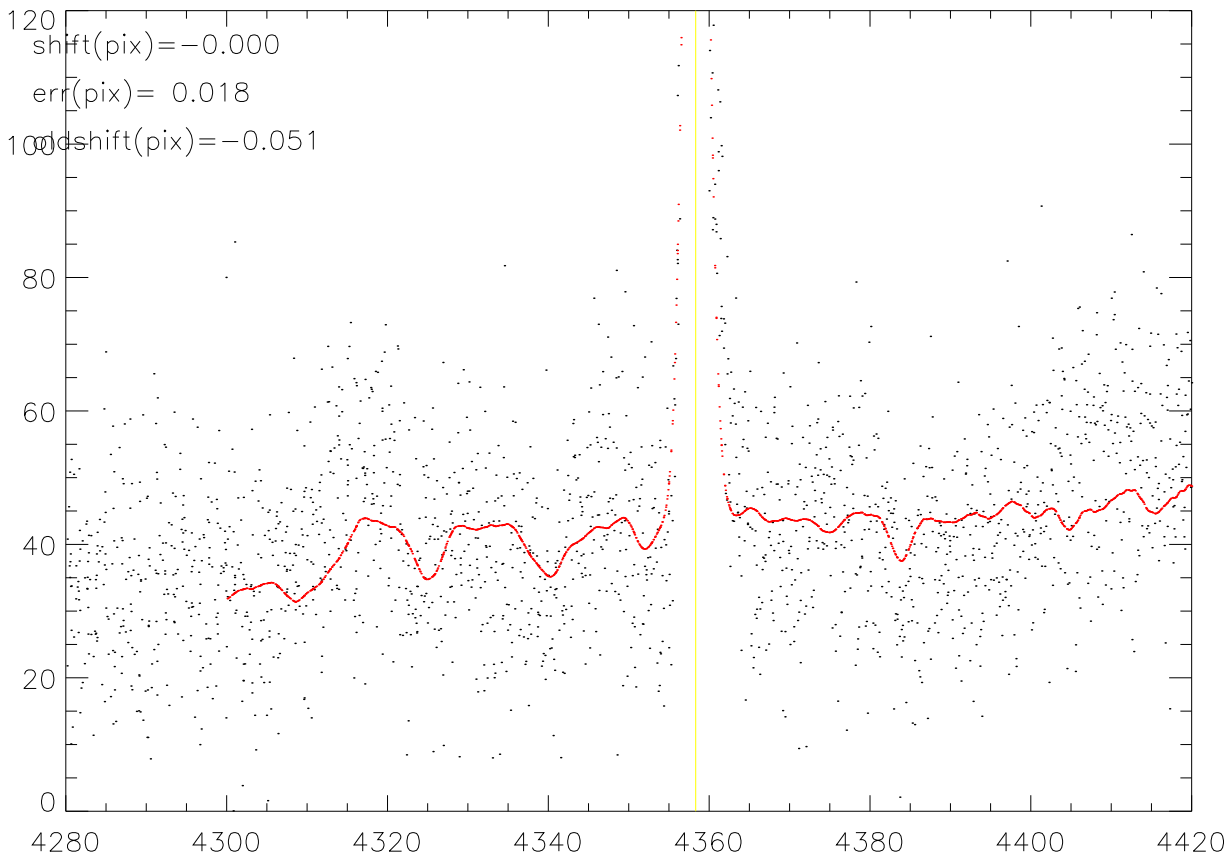

PLATE=0343 MJD=51692 Scattered Light on sdR−b1−00004071.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
3.36
4.27
5.18
3.36
4.27
5.18
3.36
3.36
4.27
4.27

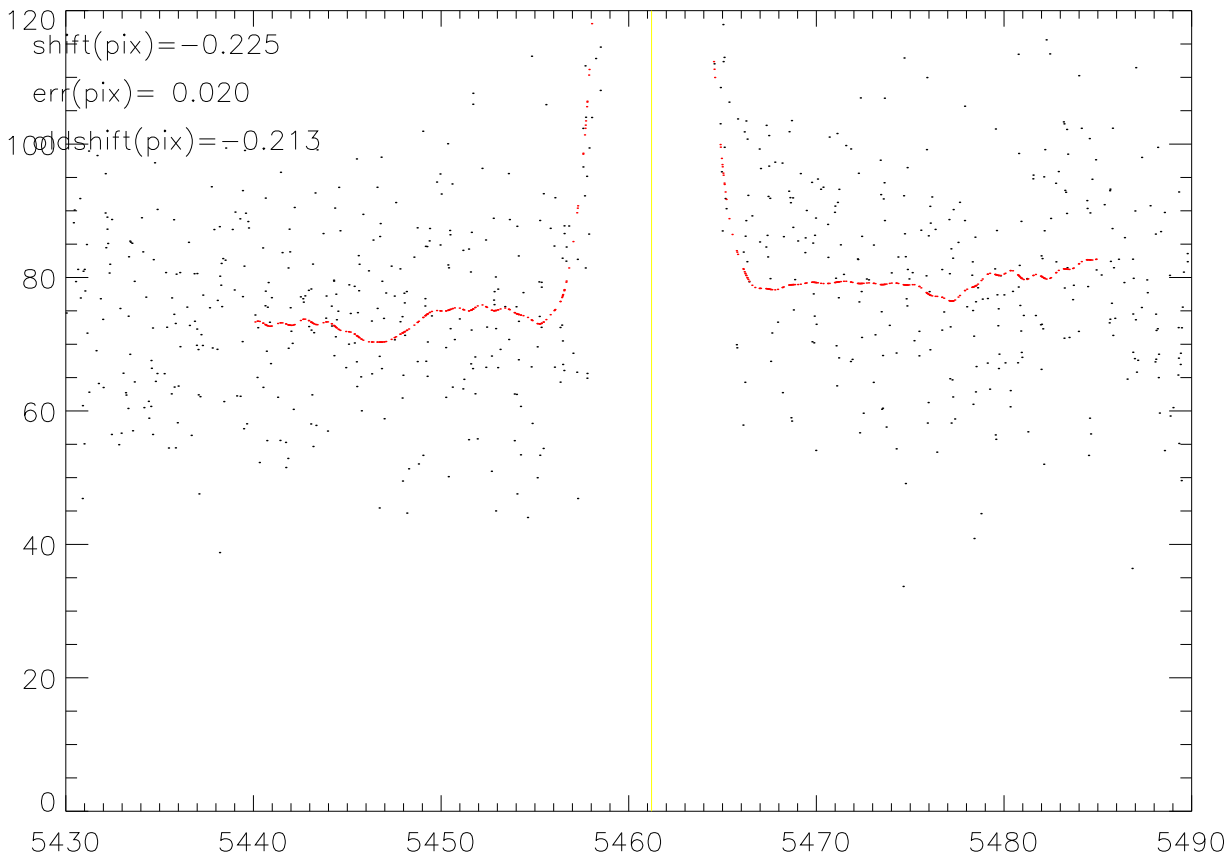

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004071.fit
Brightness [electrons/pix]
8
6
4
2
0
Error bars denote full range
Min value = 3.226
Max value = 4.916
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:06:47 2008

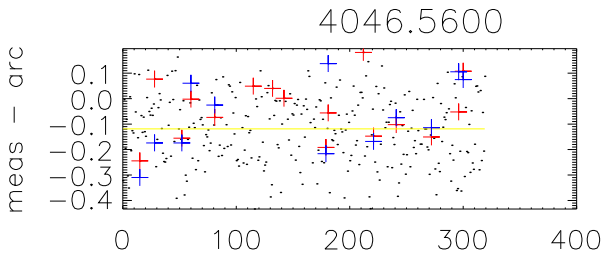

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004071.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

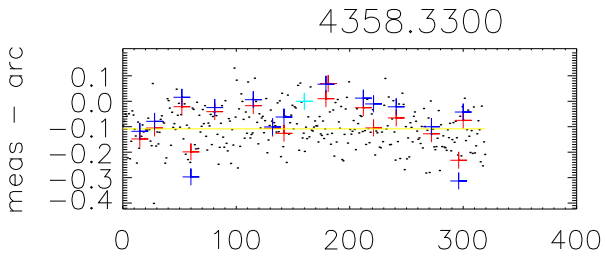

4046.5600
off: 0.12
sig: 0.070
4358.3300
off: −0.05
sig: 0.026
5460.9400
off: −0.21
sig: 0.018
5577.3390
off: −0.22
sig: 0.003
5889.9500
off: −0.16
sig: 0.013
5895.9240
off: −0.18
sig: 0.016

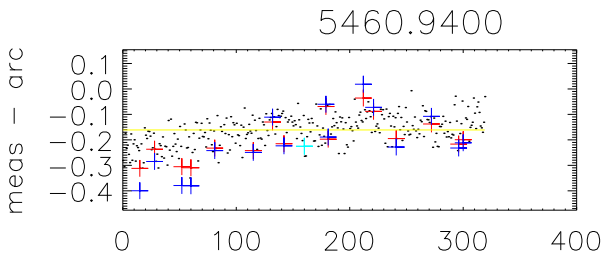

shift(pix)= 0.237
err(pix)= 0.071
oldshift(pix)= 0.115
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

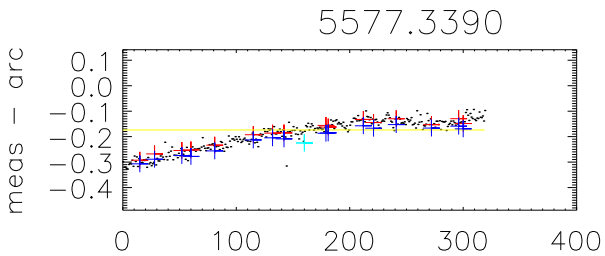

shift(pix)=−0.000
err(pix)= 0.018
oldshift(pix)=−0.051
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

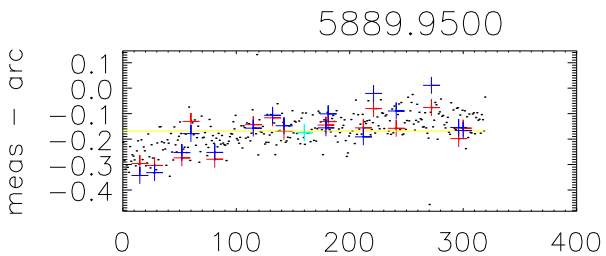

shift(pix)=−0.225
err(pix)= 0.020
oldshift(pix)=−0.213
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

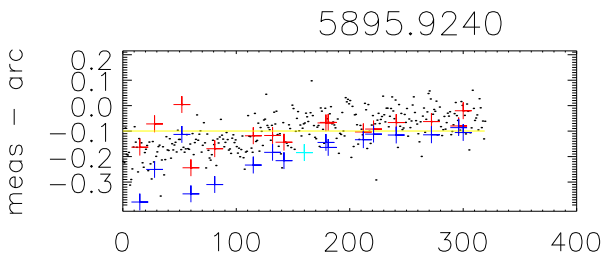

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

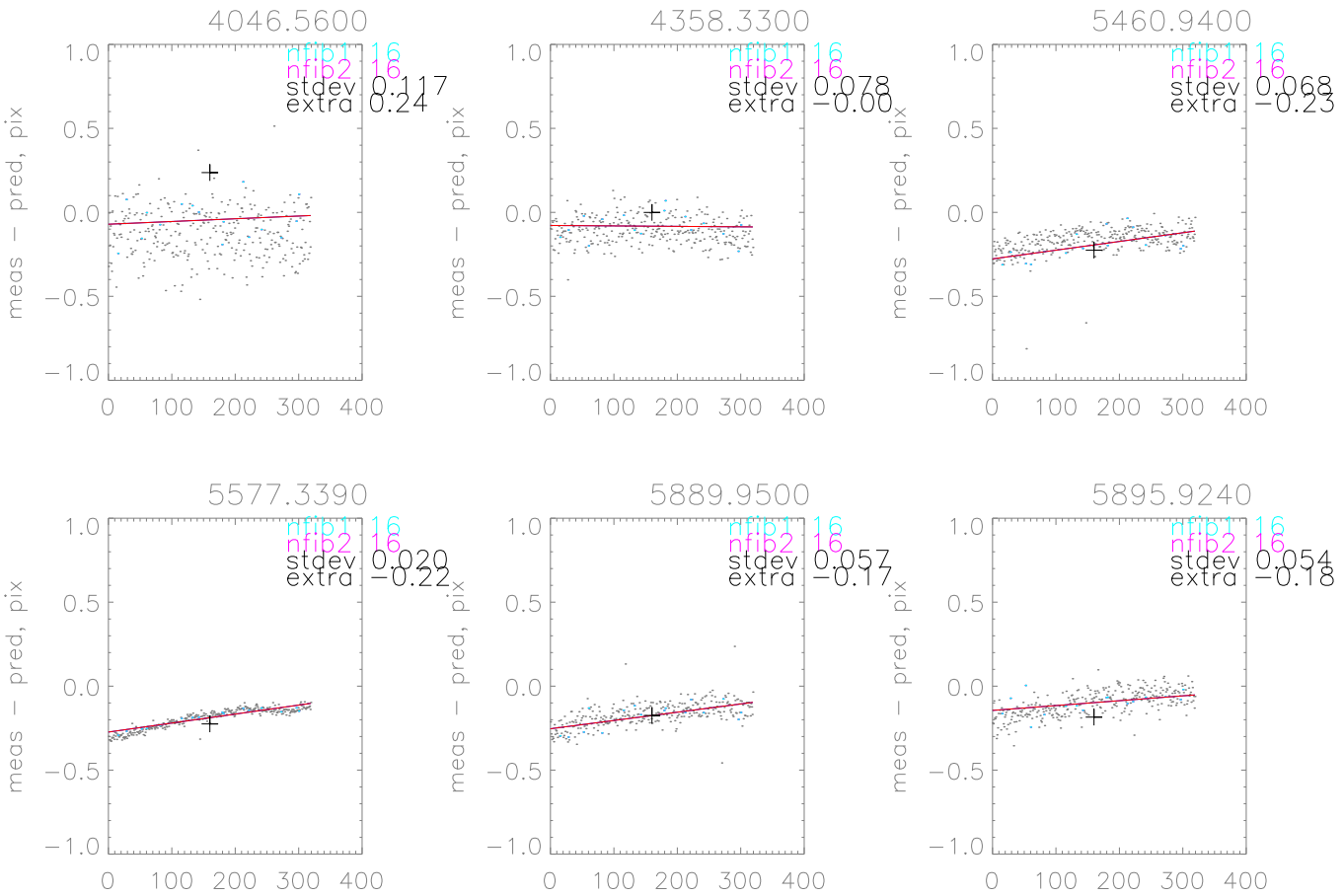

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

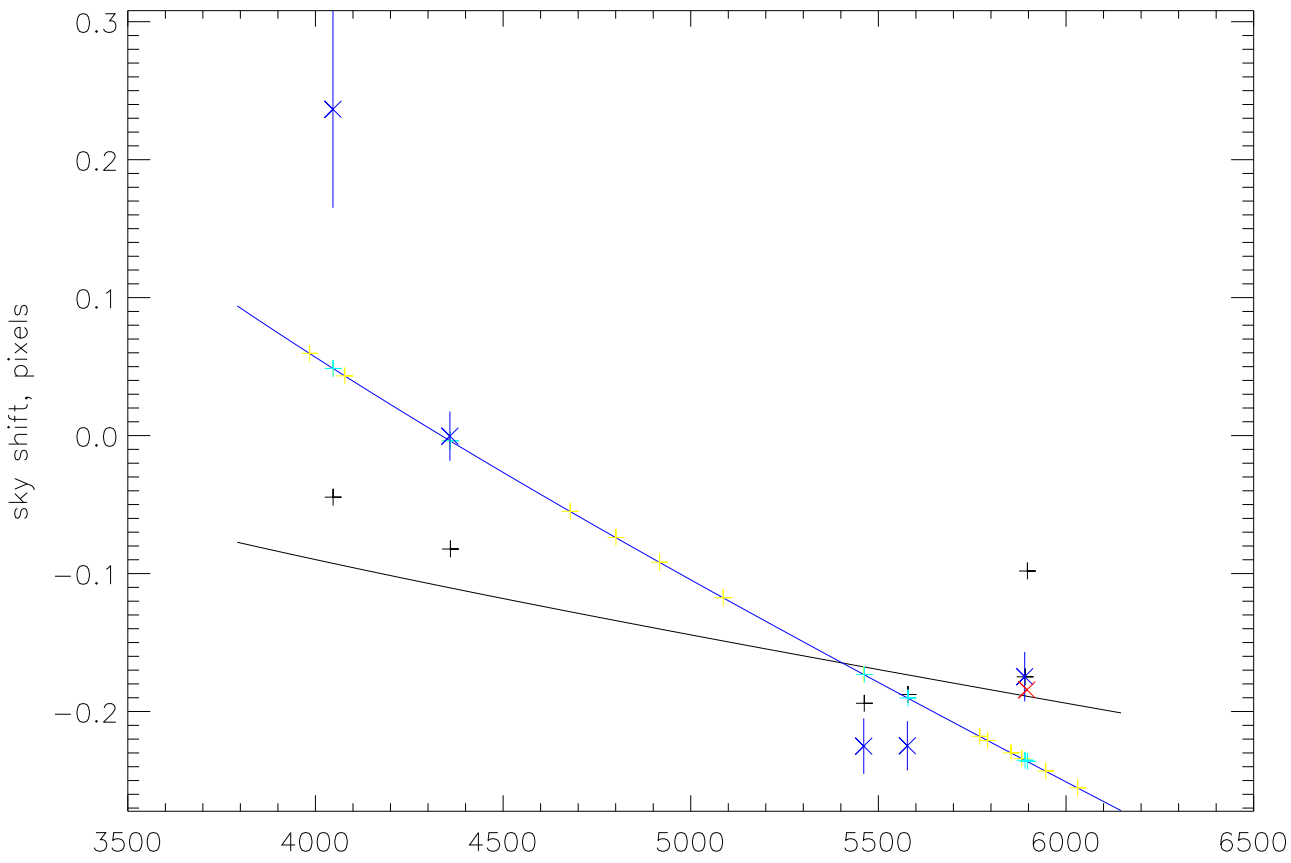

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

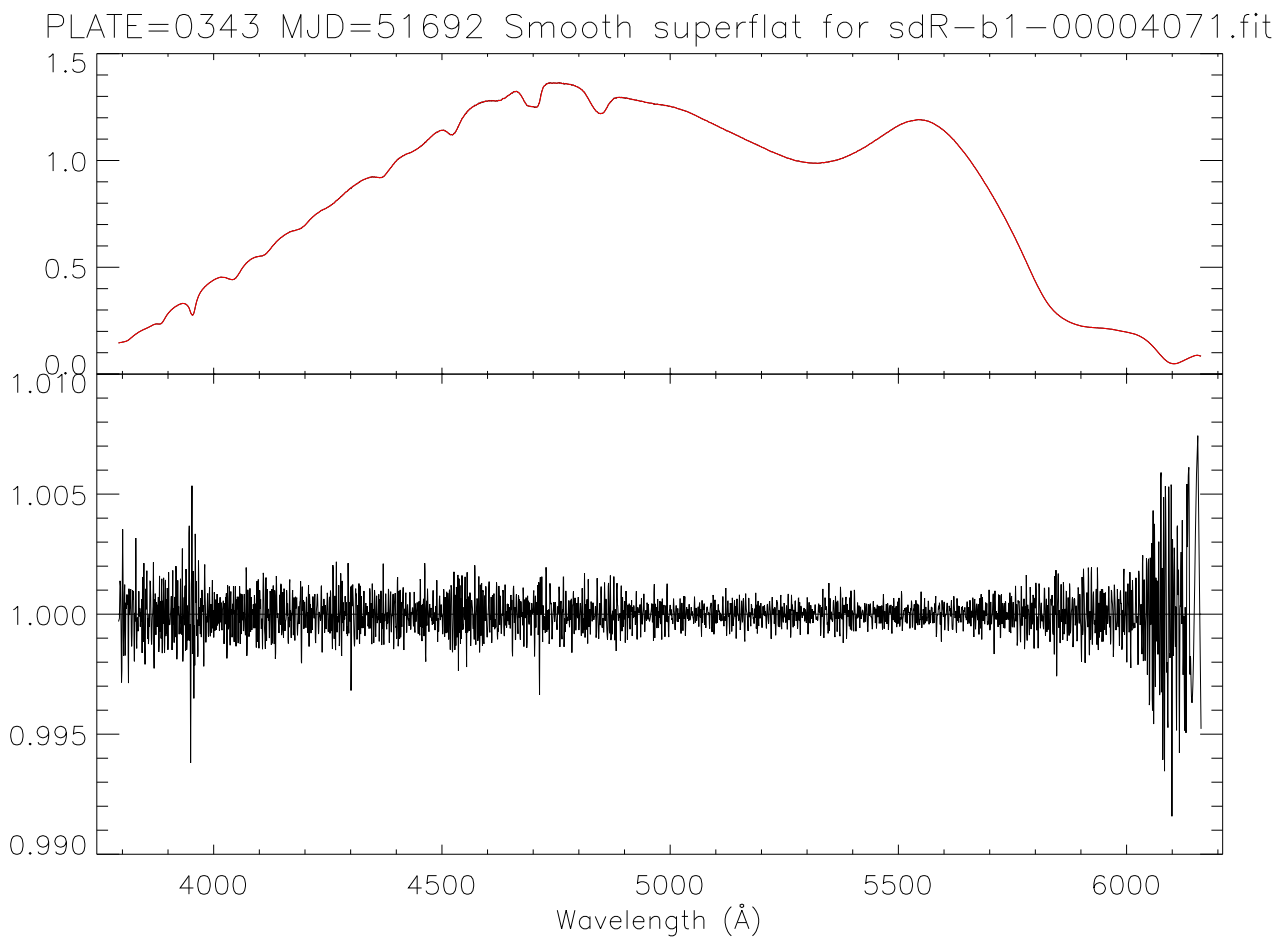

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

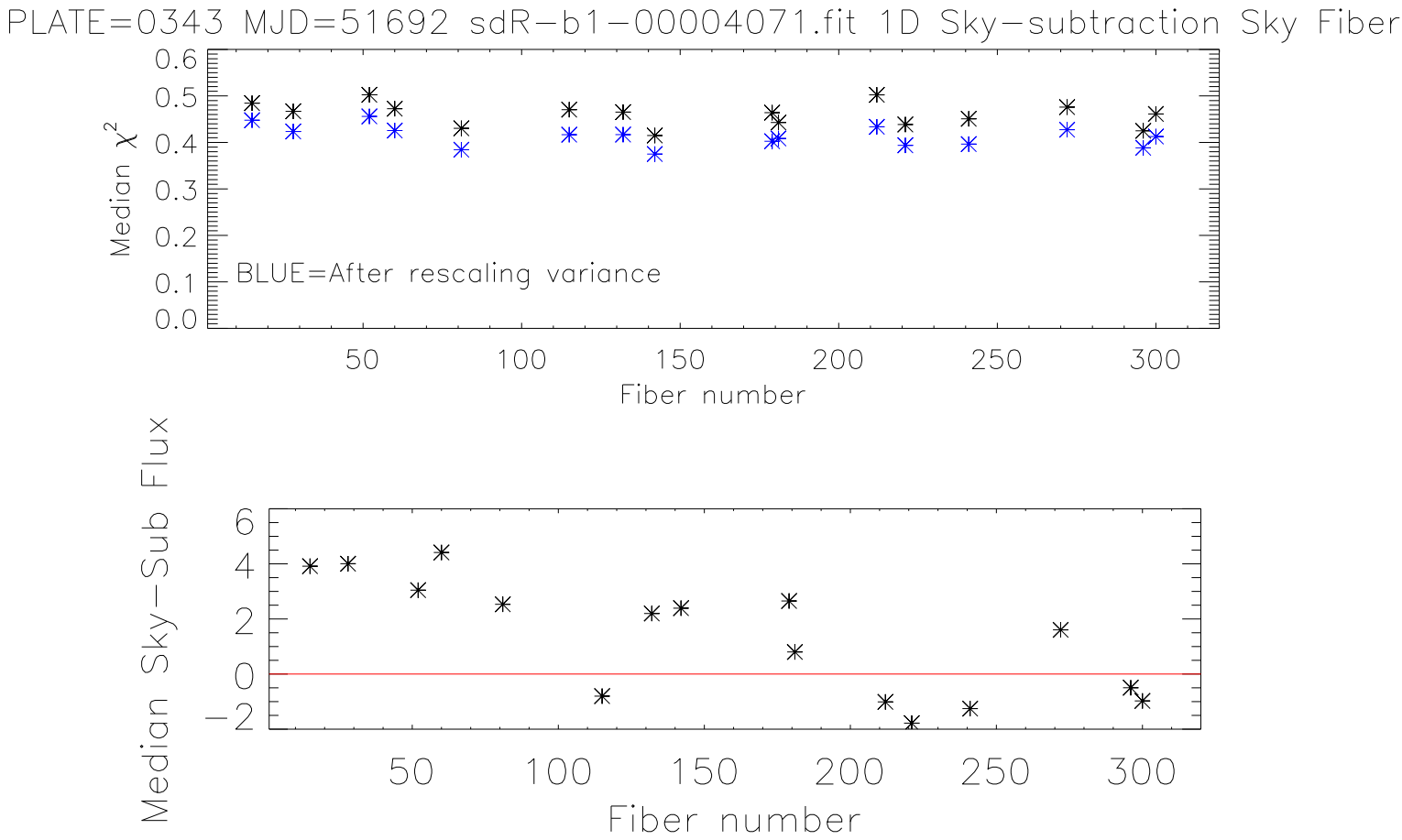

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

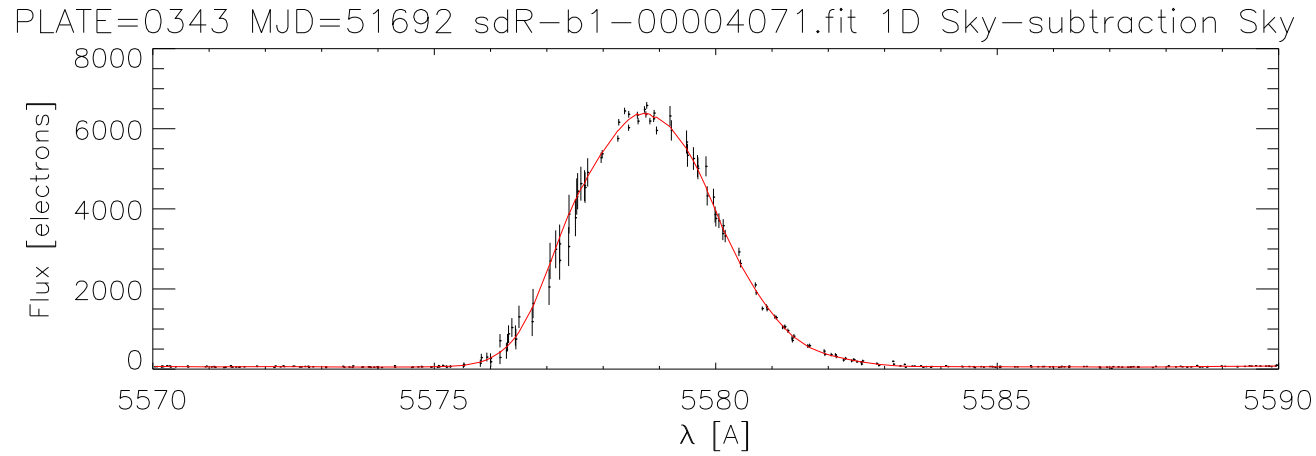

4046.5600
nfib1 16
nfib2 16
stdev 0.117
extra 0.24
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra −0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.068
extra −0.23
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.22
5889.9500
nfib1 16
nfib2 16
stdev 0.057
extra −0.17
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra −0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

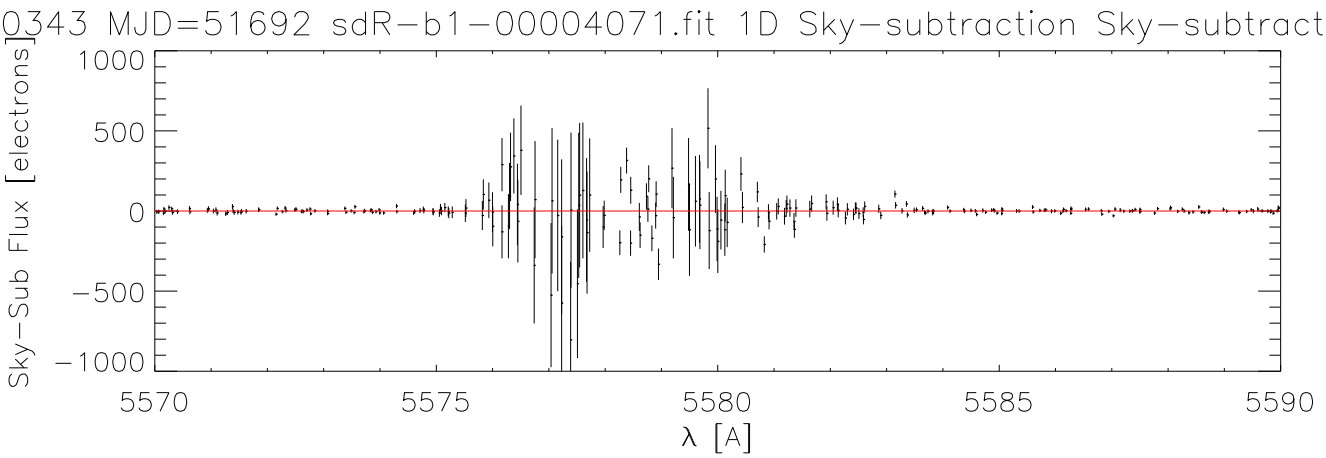

0.3
0.2
0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

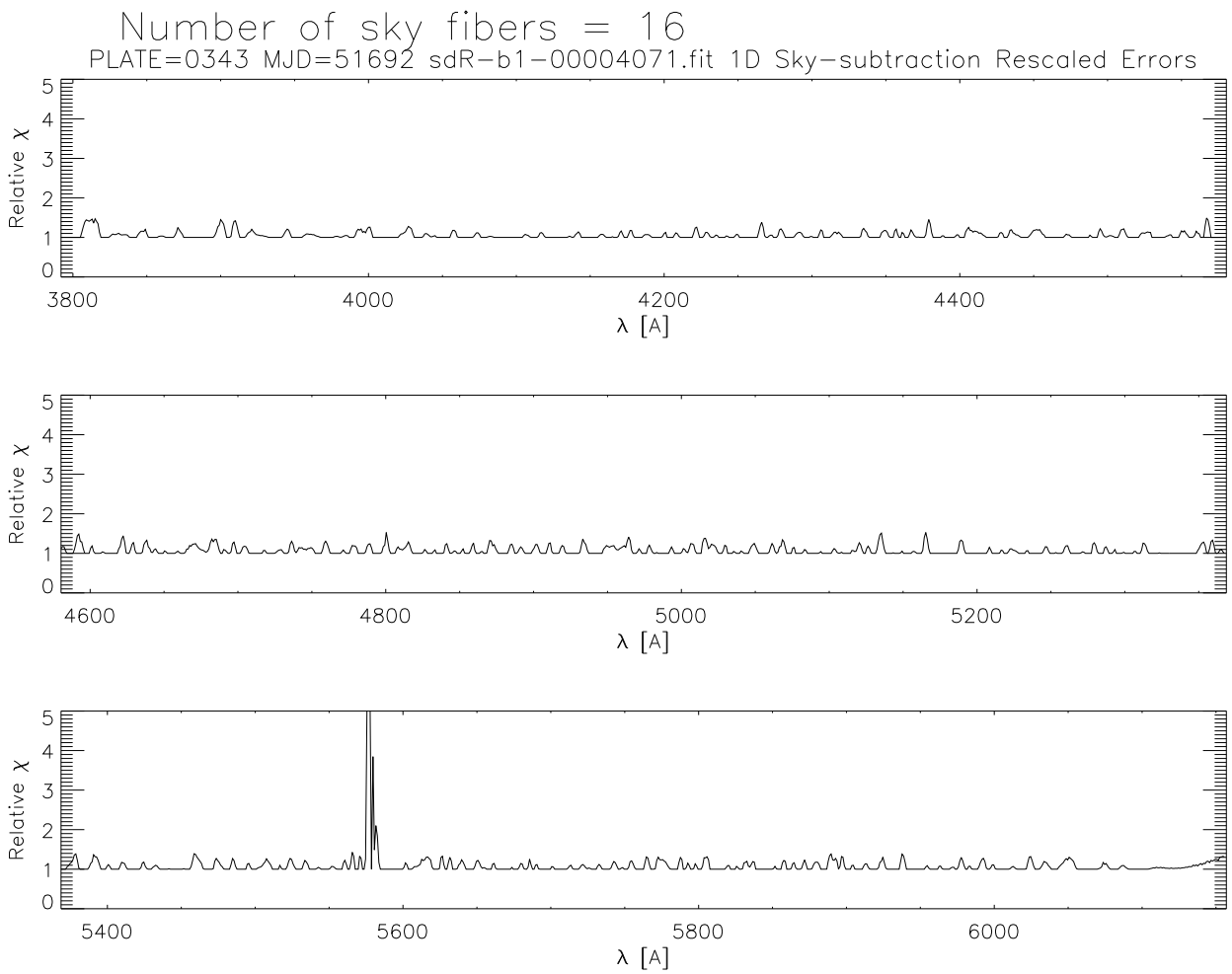
es= 0.0000

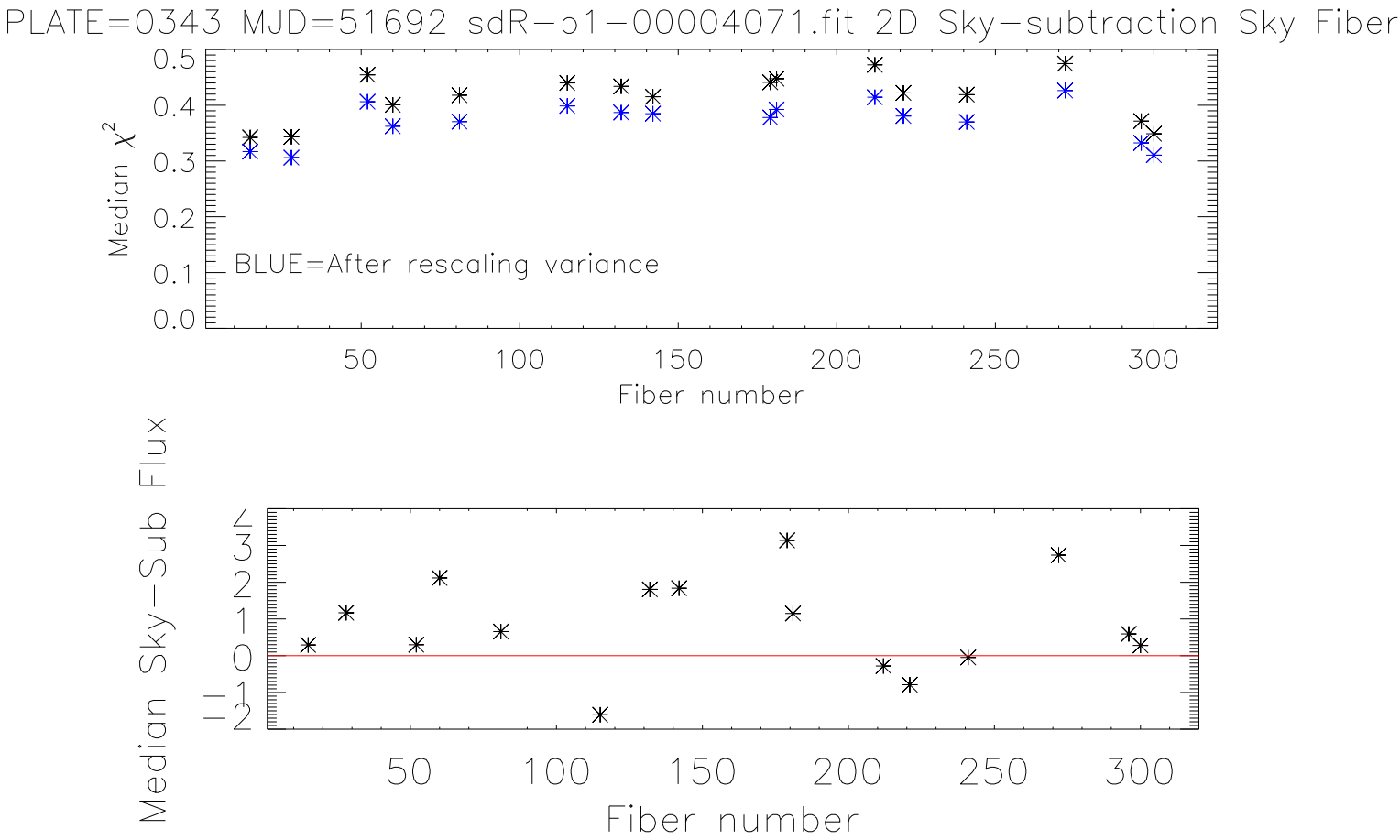

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004071.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

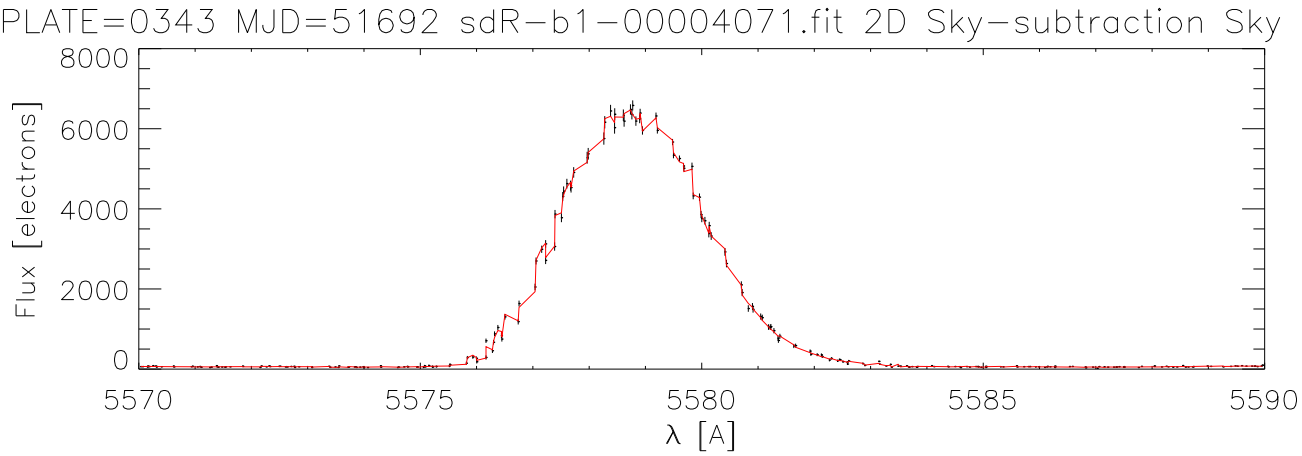

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

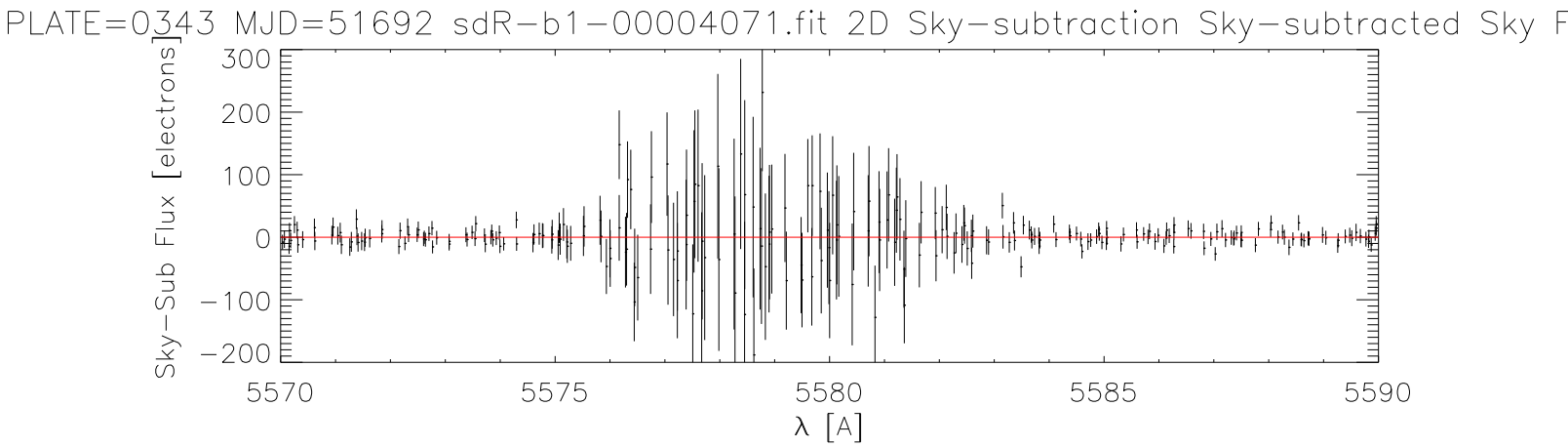

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

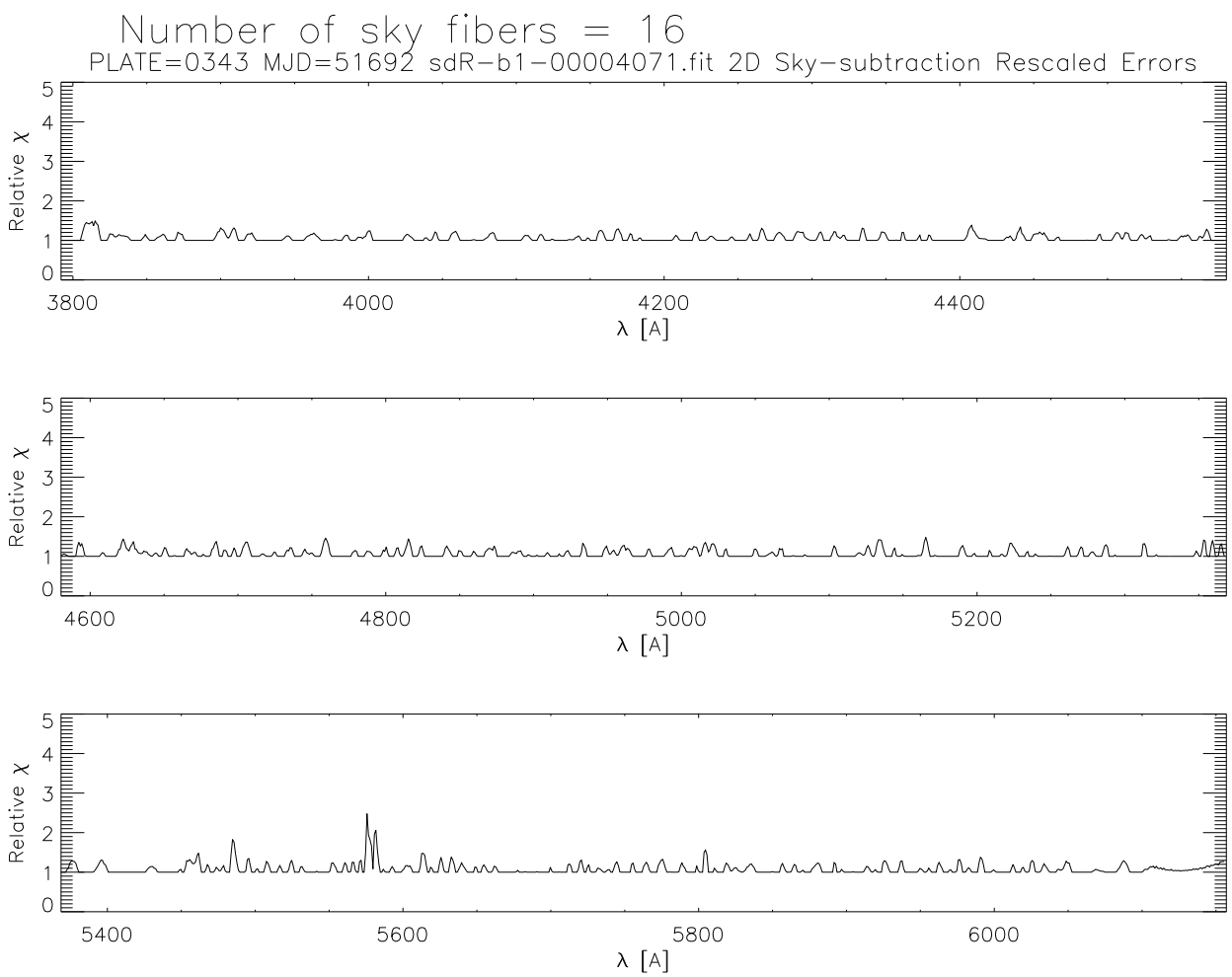

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

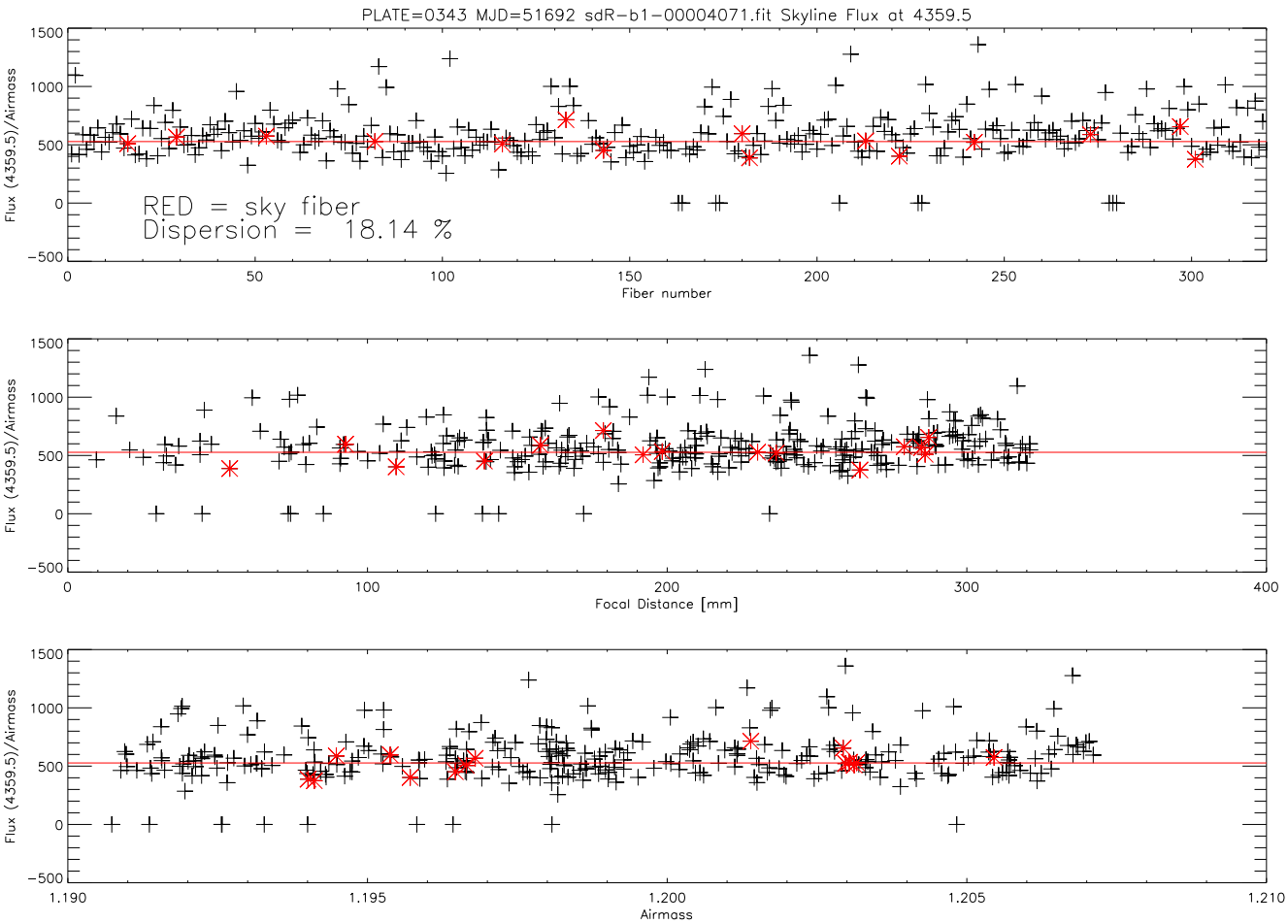

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004071.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

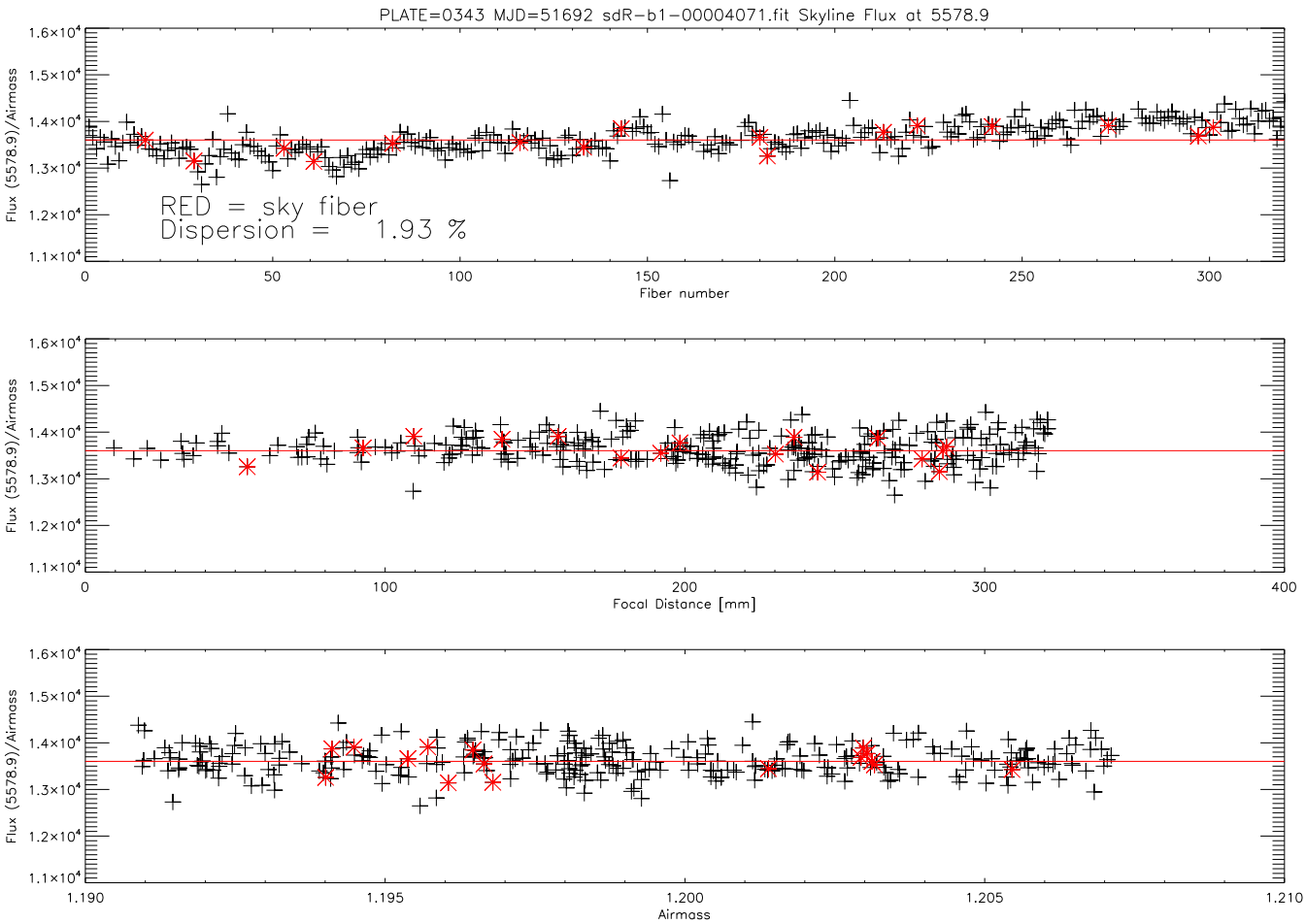

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

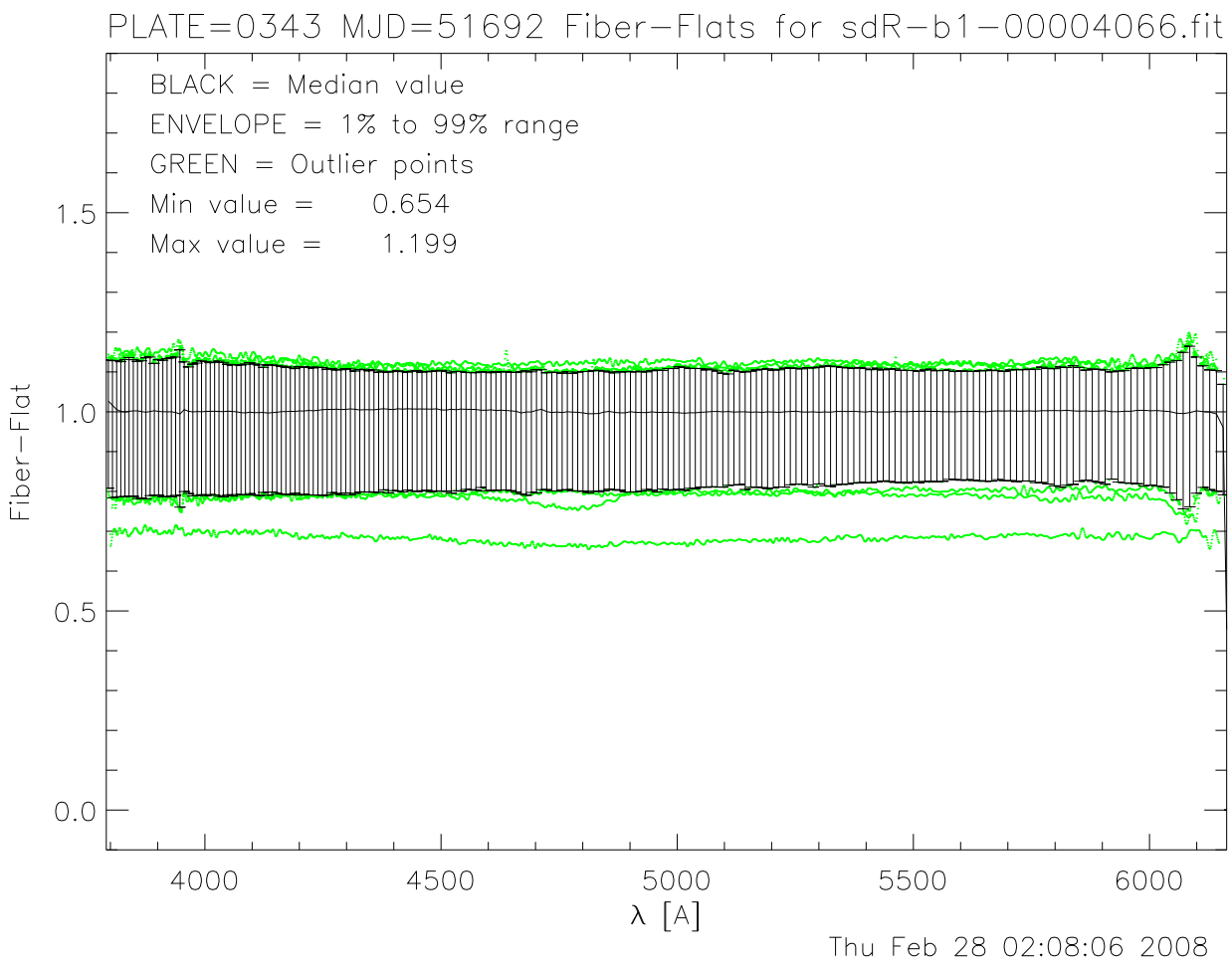

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

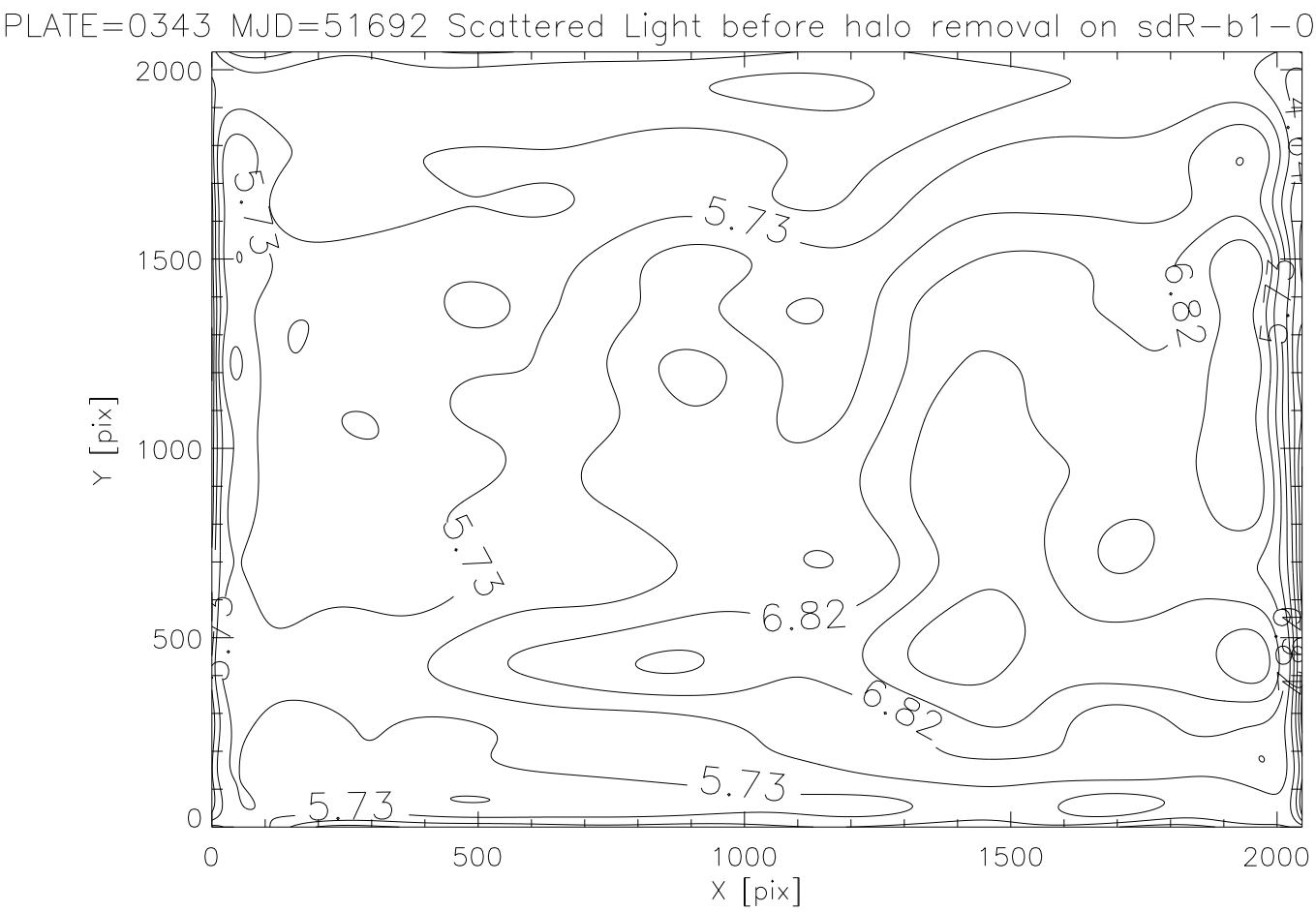

PLATE=0343 MJD=51692 sdR-b1-00004071.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

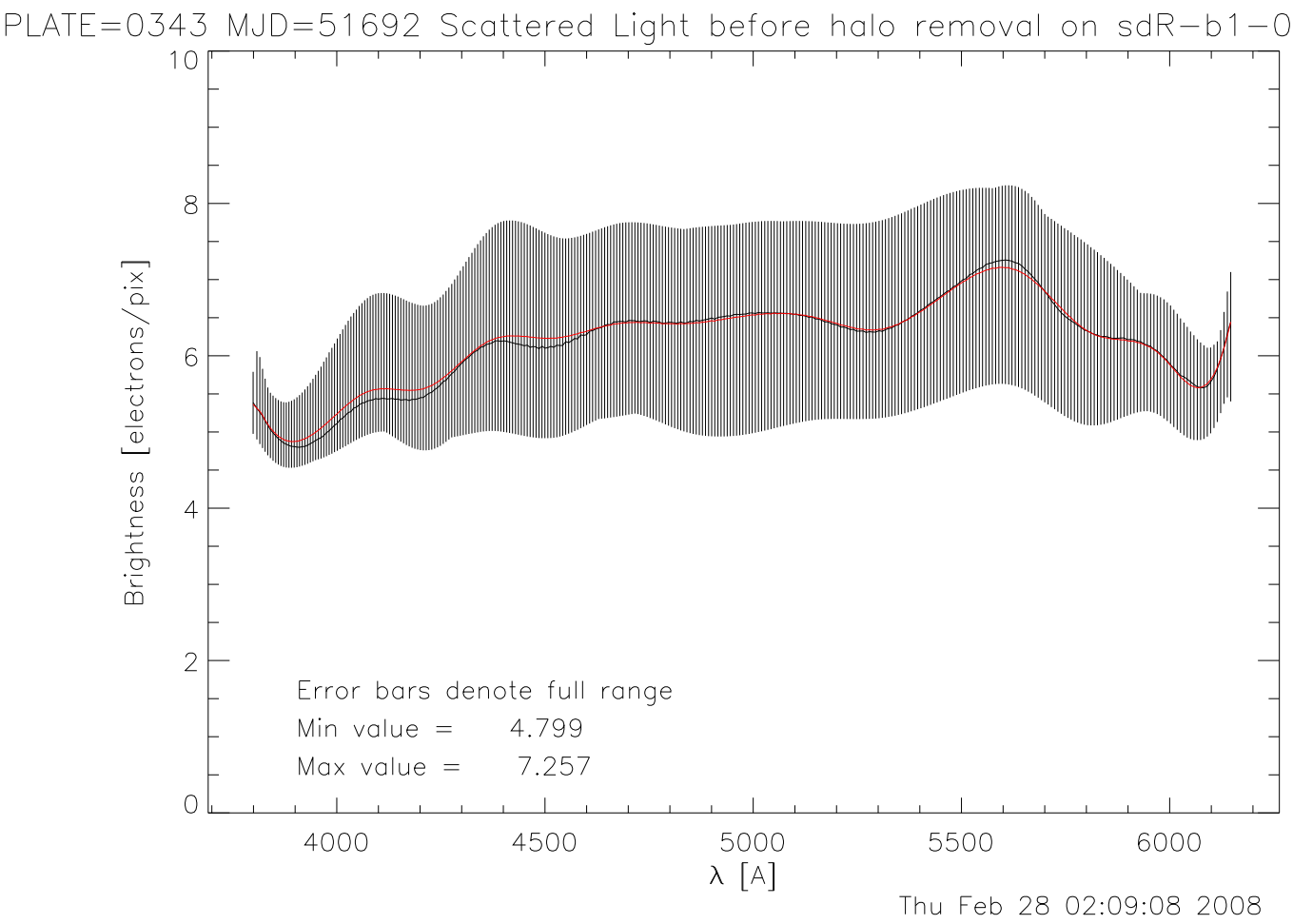

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004071.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

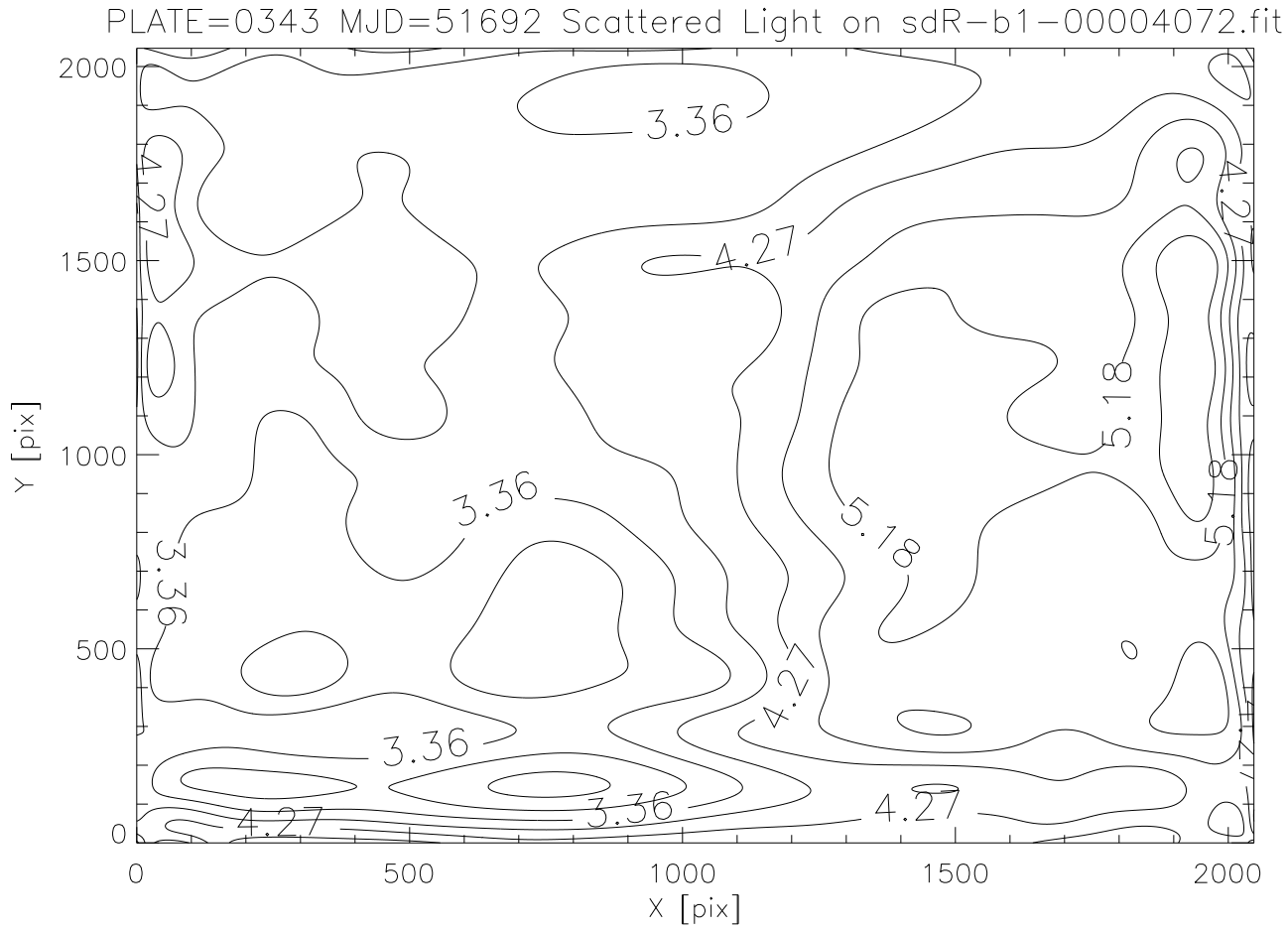

PLATE=0343 MJD=51692 sdR-b1-00004071.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.14 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

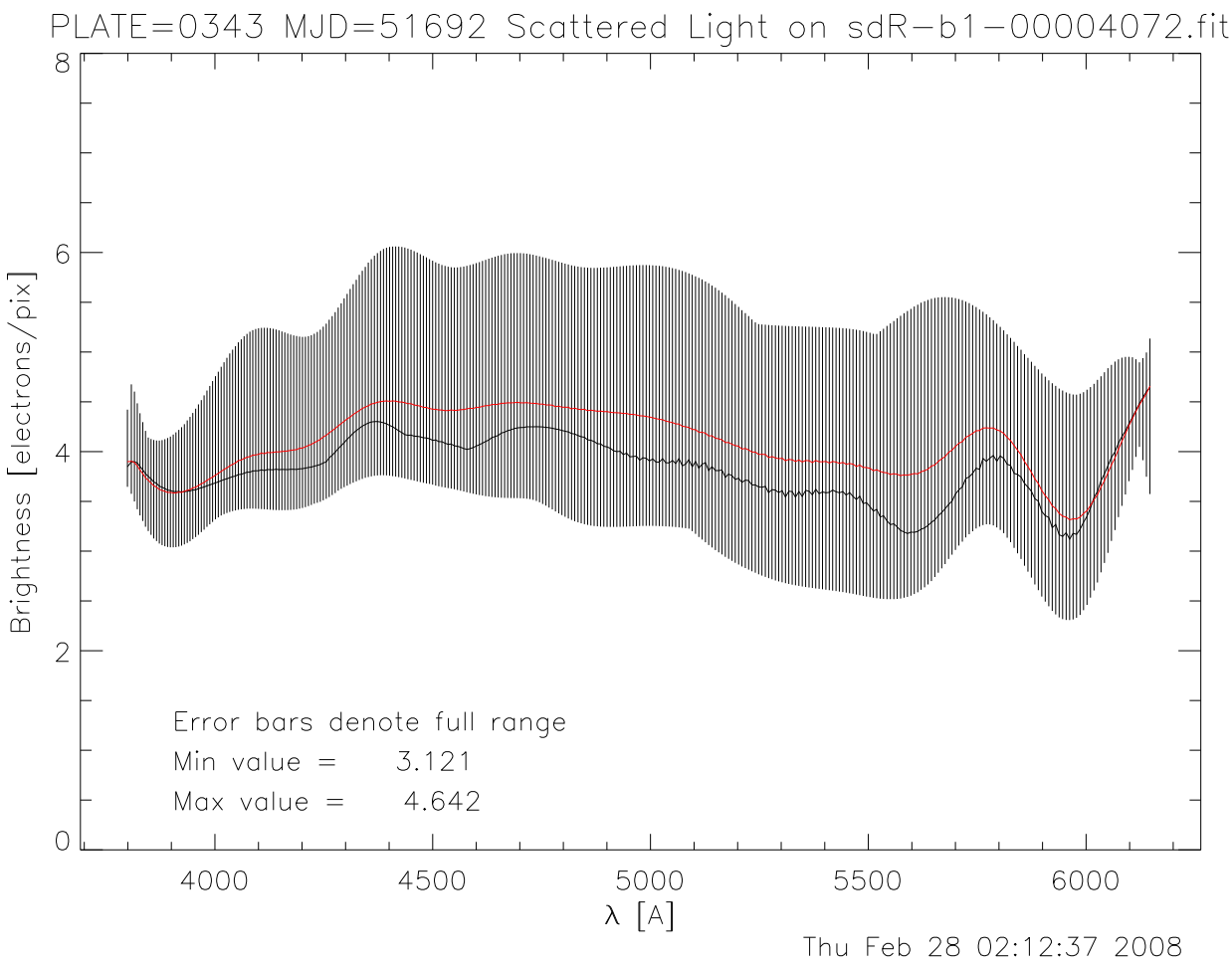

PLATE=0343 MJD=51692 sdR-b1-00004071.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Focal Distance [mm]
Airmass

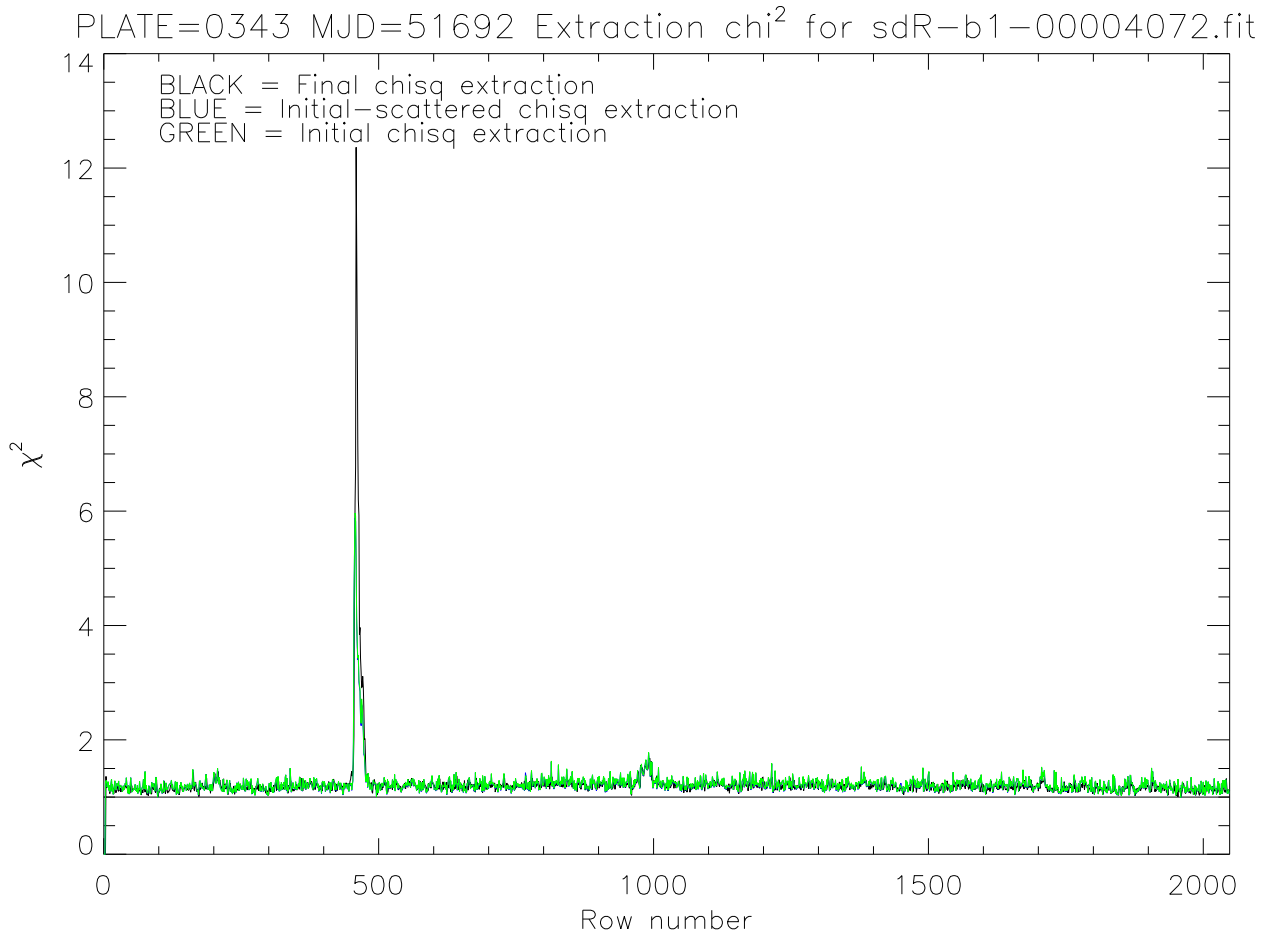

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:08:06 2008

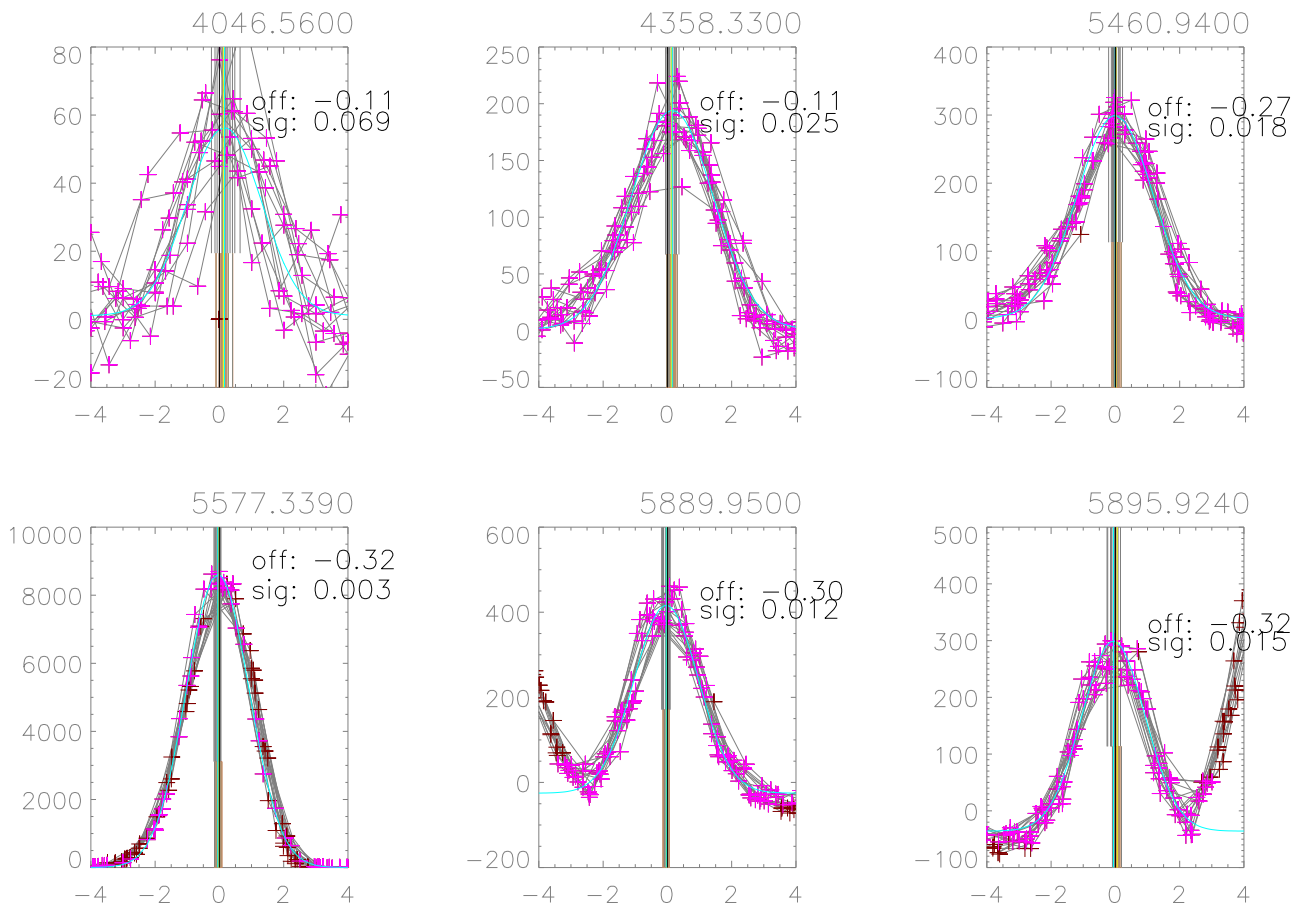

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004072.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.73
6.82
0

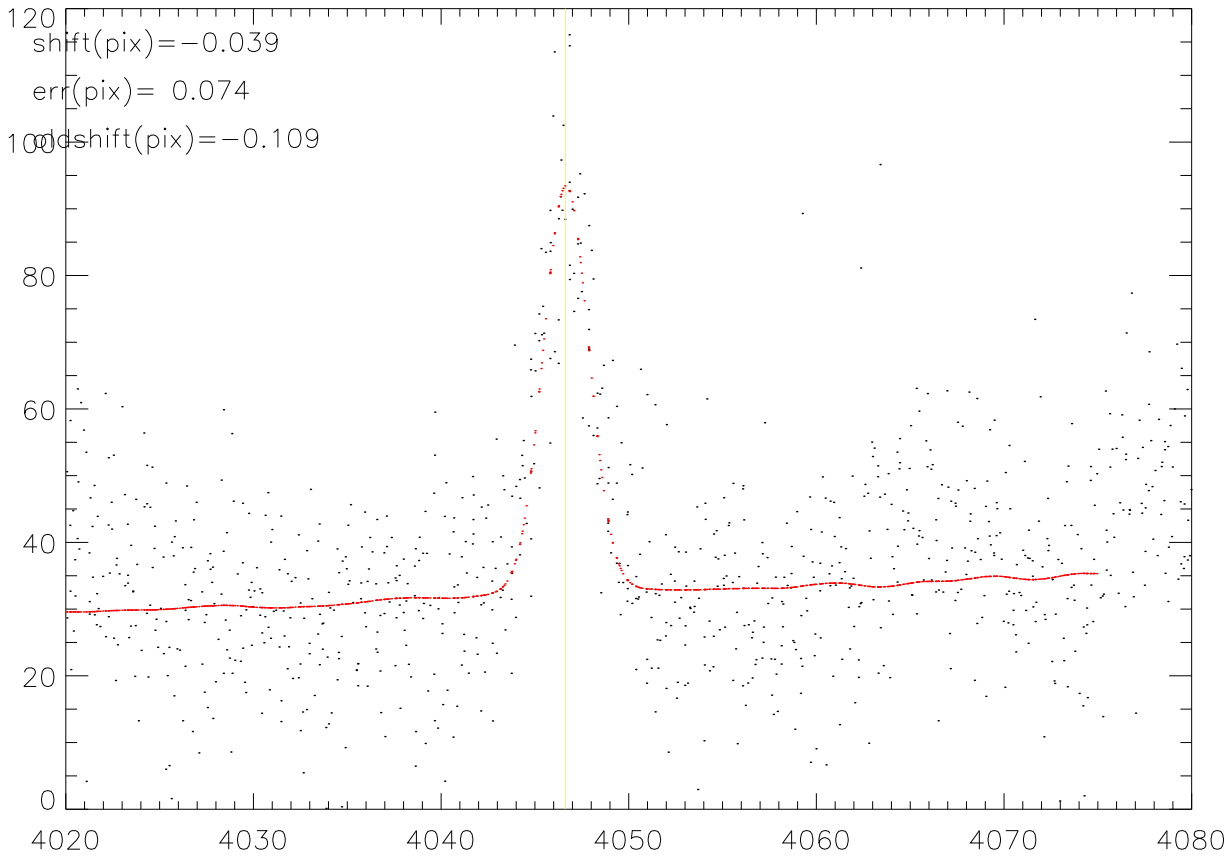

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004072.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.799
Max value = 7.257
Thu Feb 28 02:09:08 2008

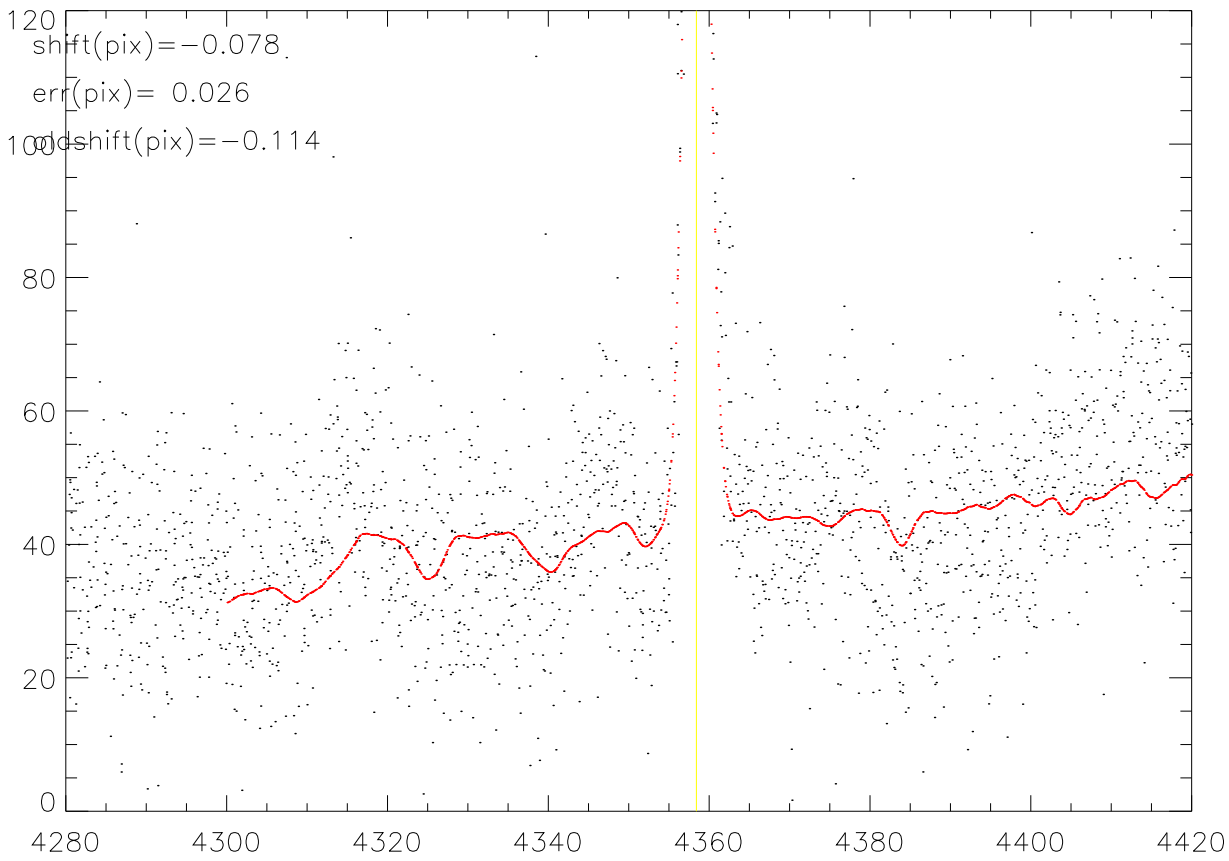

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004072.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18

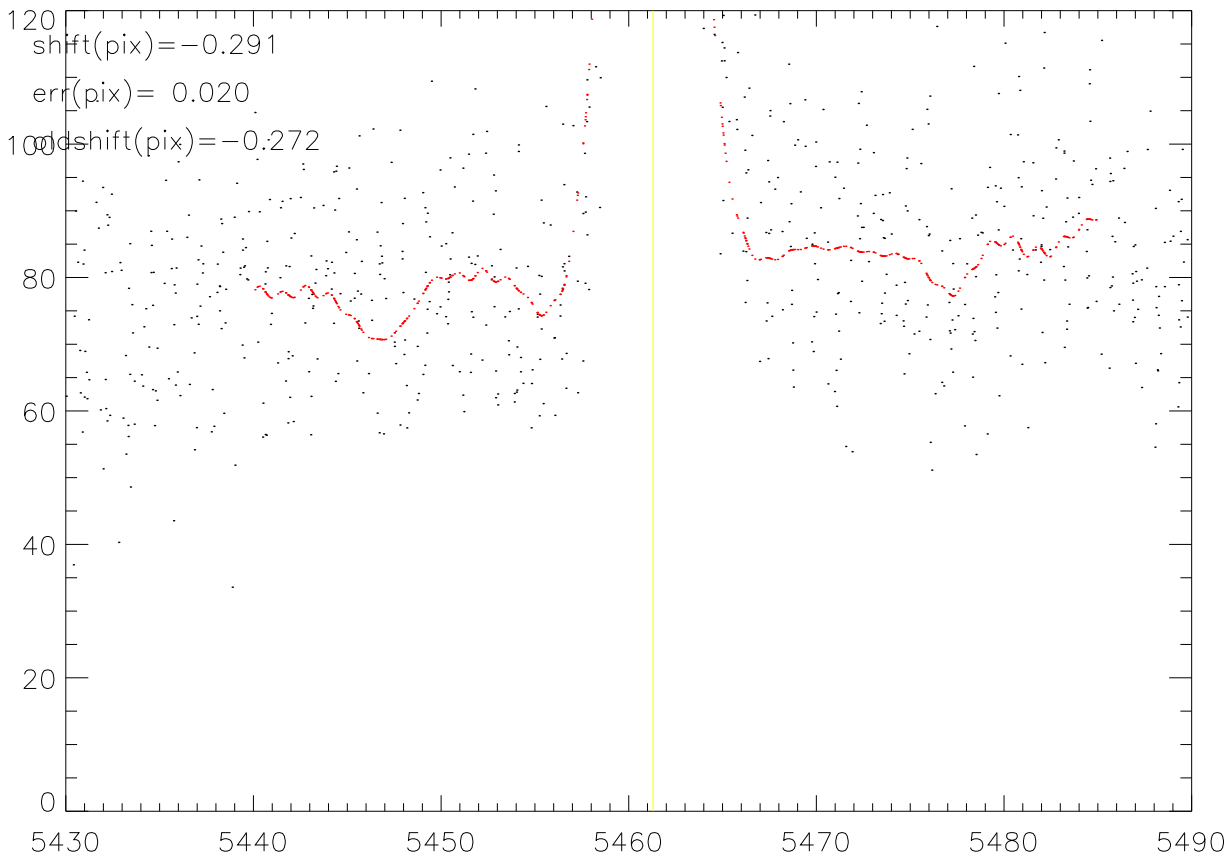

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004072.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.121
Max value = 4.642
Thu Feb 28 02:12:37 2008

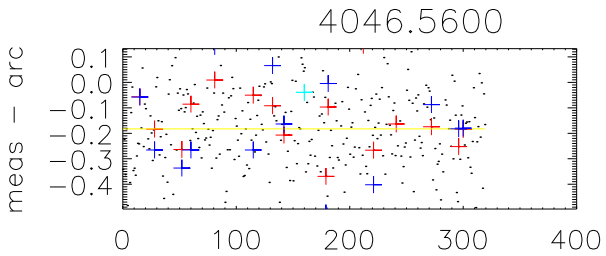

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−b1−00004072.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

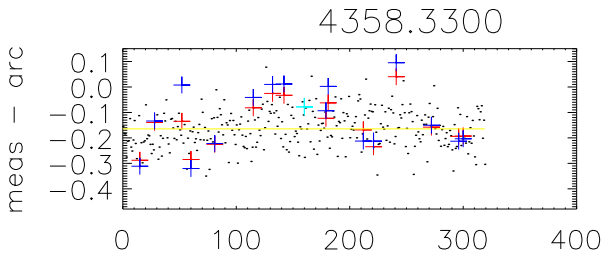

4046.5600
off: −0.11
sig: 0.069
4358.3300
off: −0.11
sig: 0.025
5460.9400
off: −0.27
sig: 0.018
5577.3390
off: −0.32
sig: 0.003
5889.9500
off: −0.30
sig: 0.012
5895.9240
off: −0.32
sig: 0.015

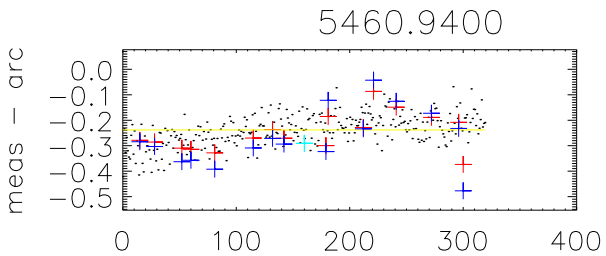

shift(pix)=−0.039
err(pix)= 0.074
oldshift(pix)=−0.109
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

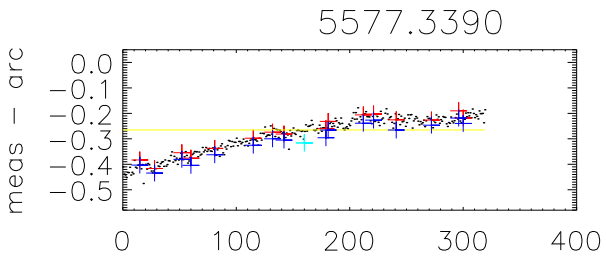

shift(pix)=−0.078
err(pix)= 0.026
oldshift(pix)=−0.114
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

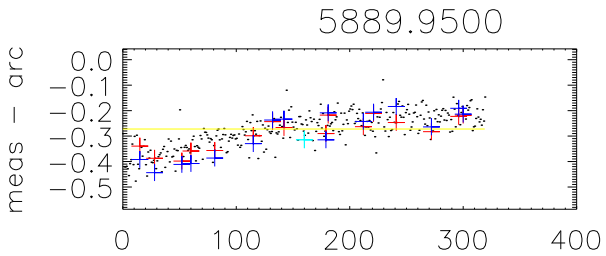

shift(pix)=−0.291
err(pix)= 0.020
oldshift(pix)=−0.272
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

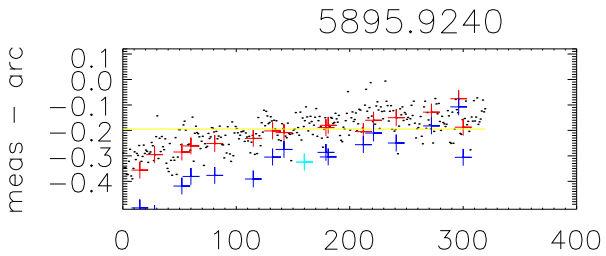

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

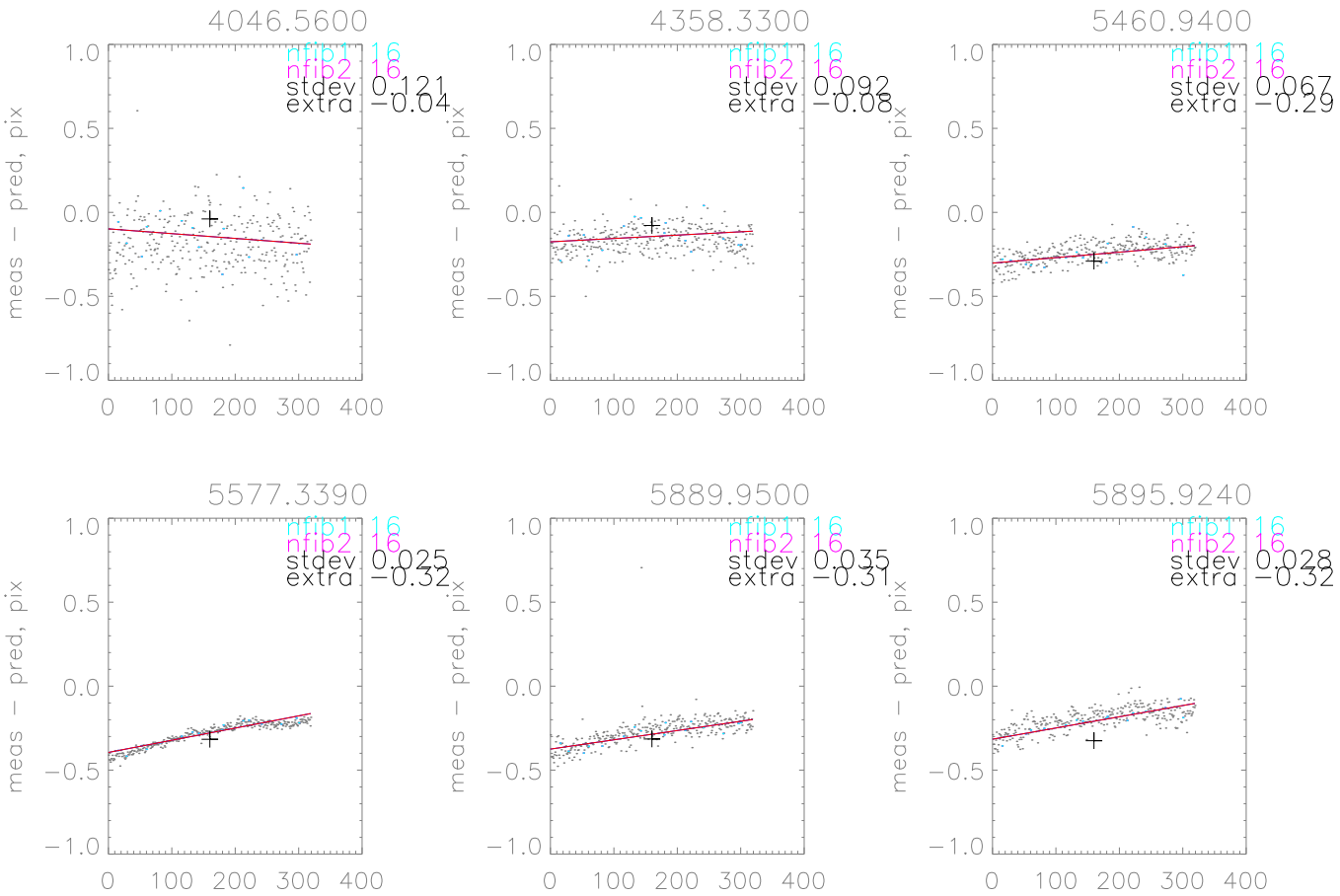

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

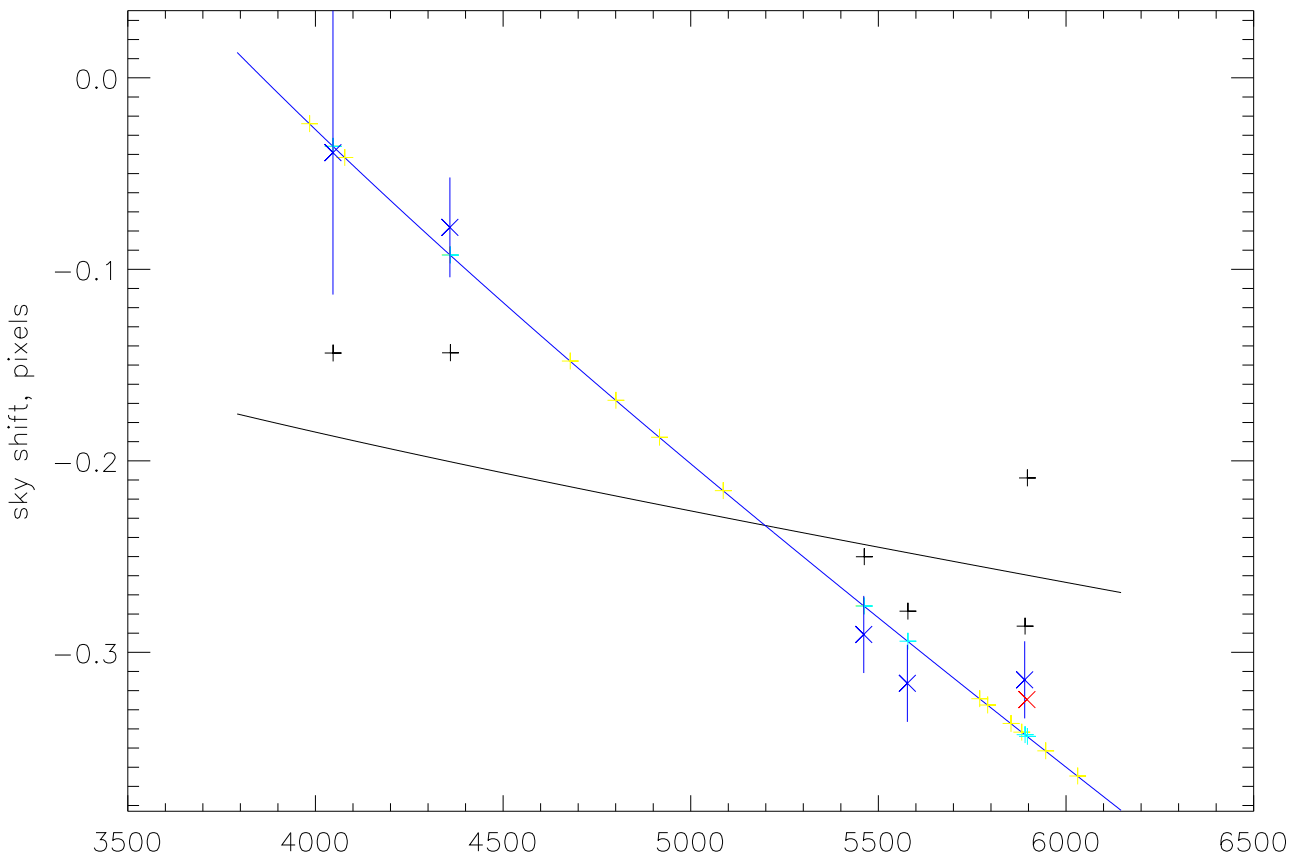

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

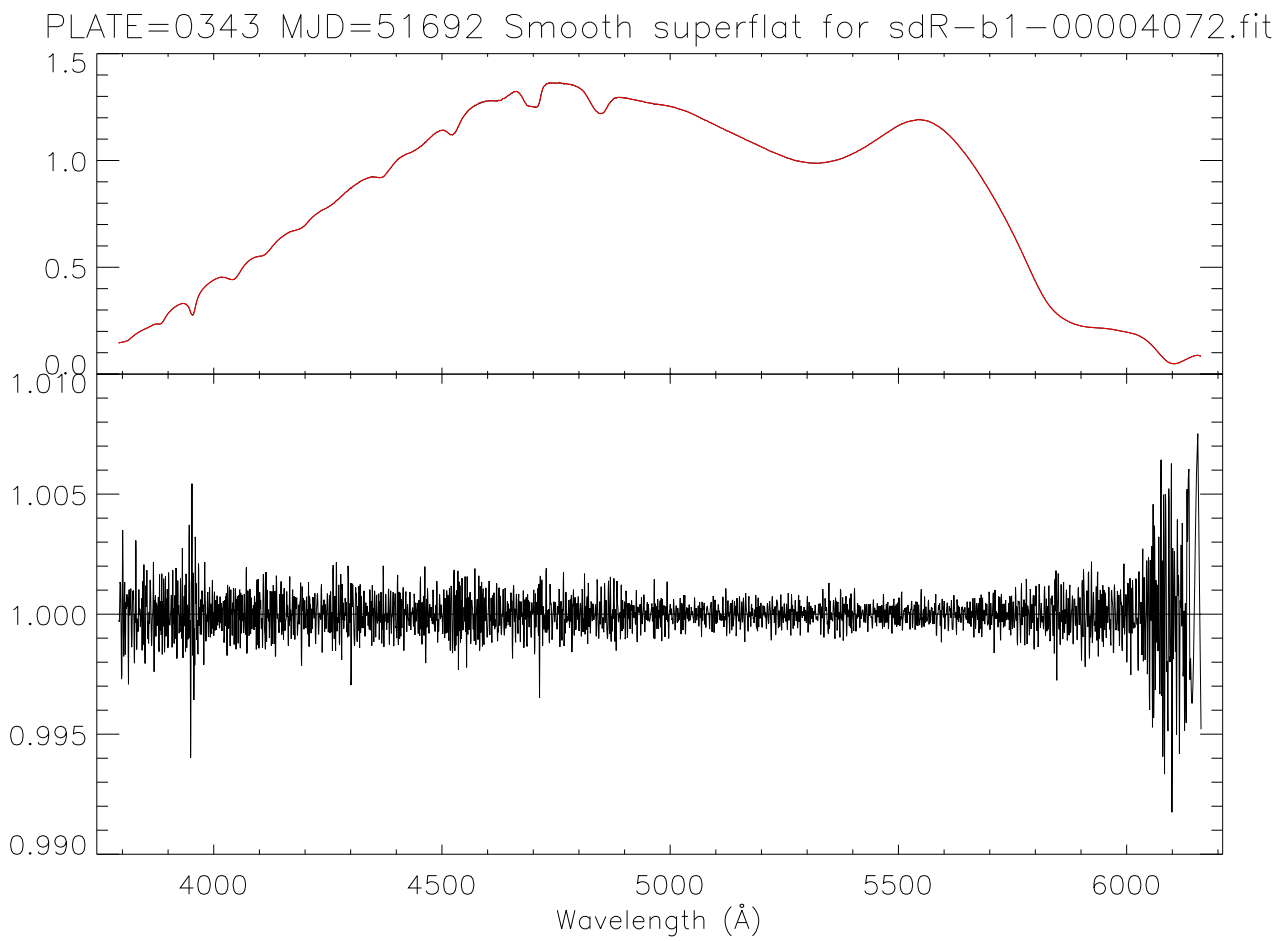

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

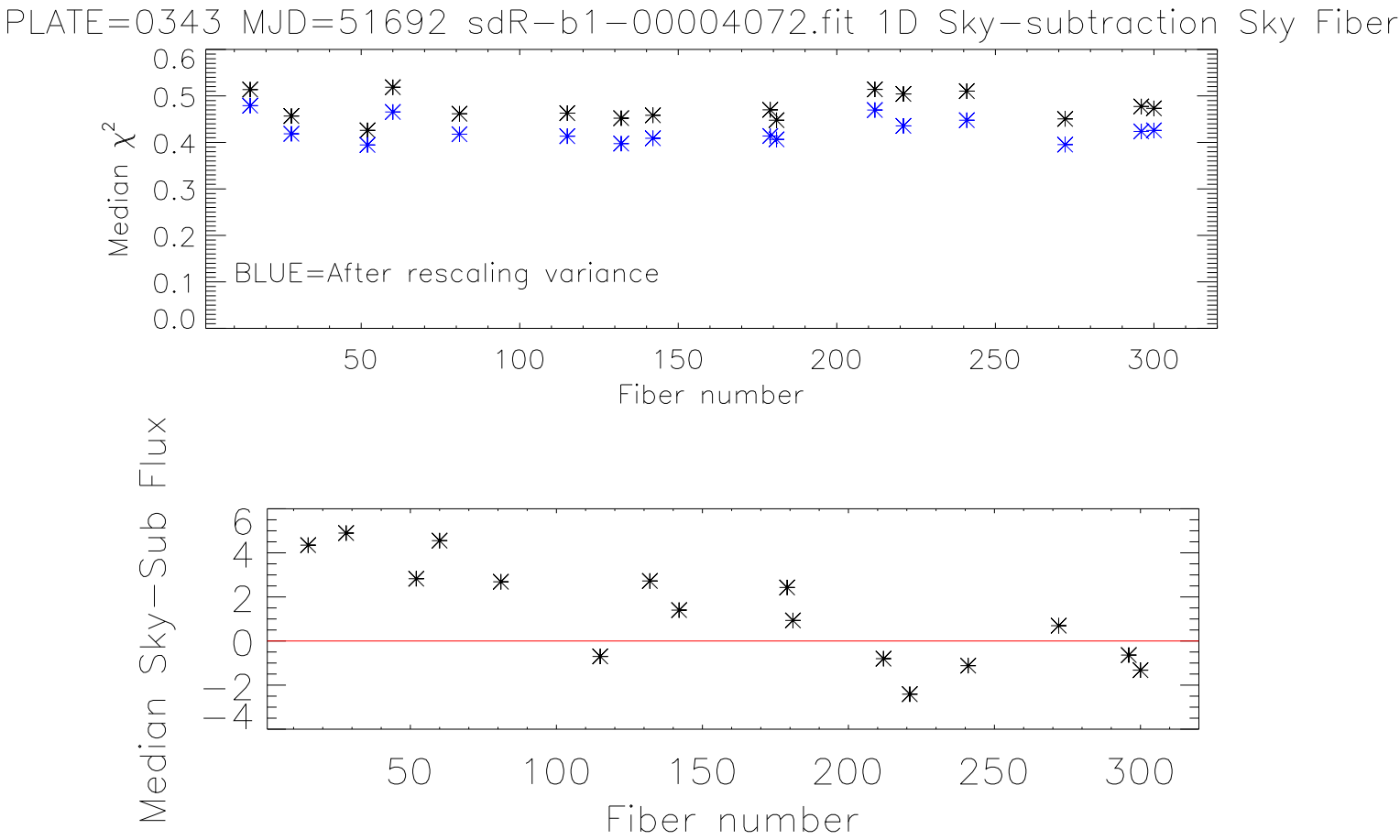

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

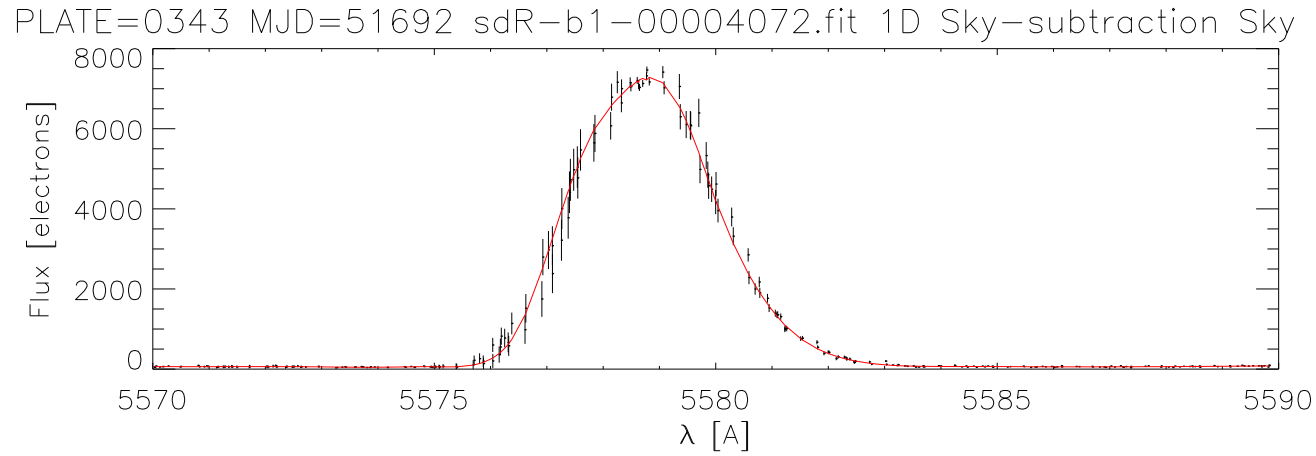

4046.5600
nfib1 16
nfib2 16
stdev 0.121
extra −0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.092
extra −0.08
5460.9400
nfib1 16
nfib2 16
stdev 0.067
extra −0.29
5577.3390
nfib1 16
nfib2 16
stdev 0.025
extra −0.32
5889.9500
nfib1 16
nfib2 16
stdev 0.035
extra −0.31
5895.9240
nfib1 16
nfib2 16
stdev 0.028
extra −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

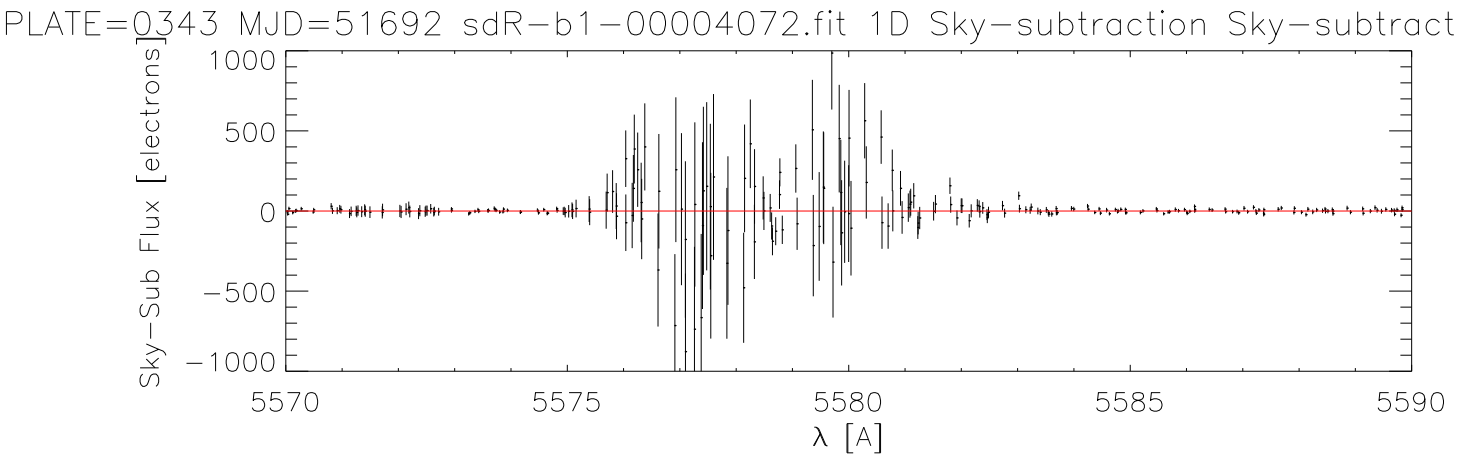

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

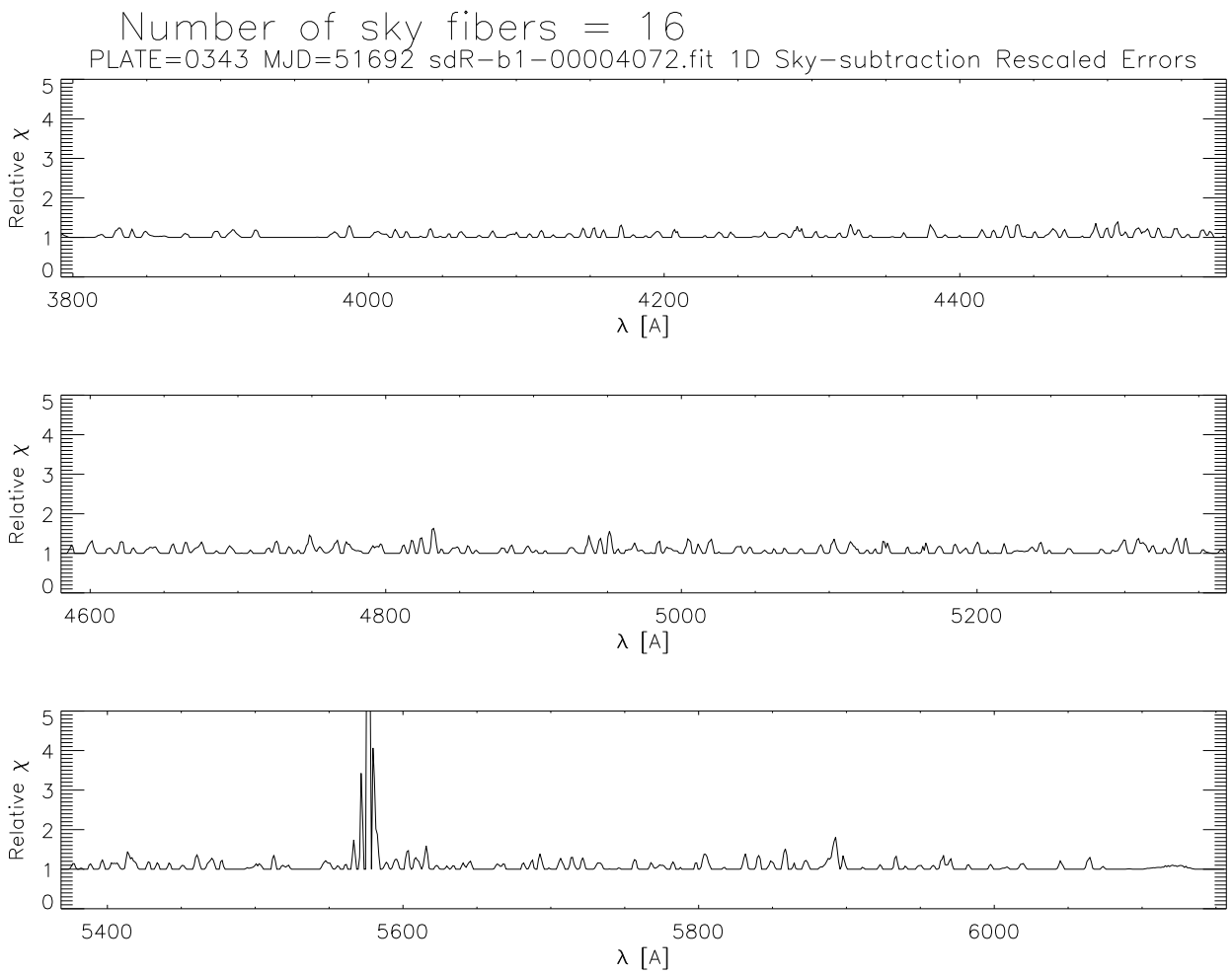
es= 0.0000

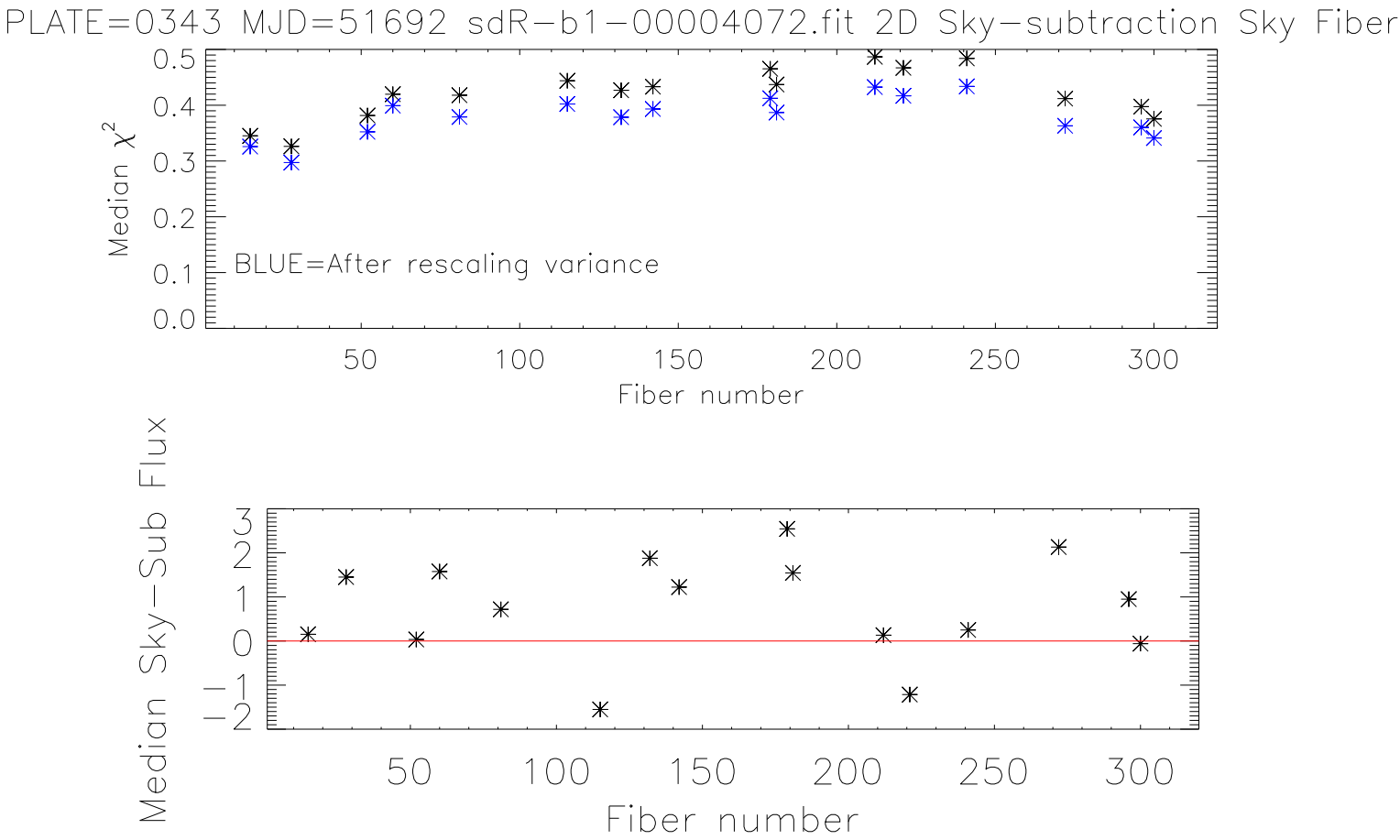

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004072.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

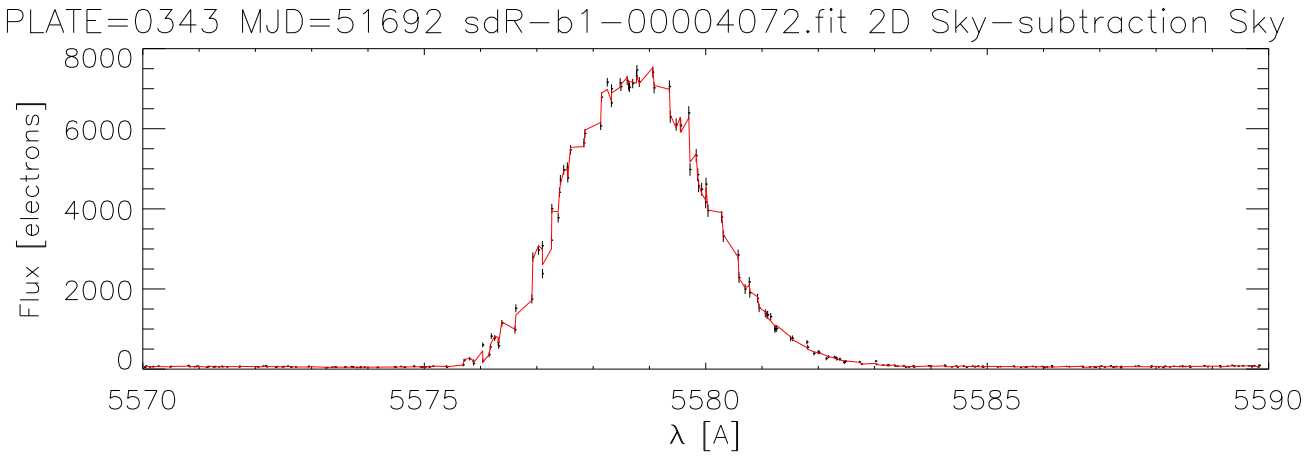

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

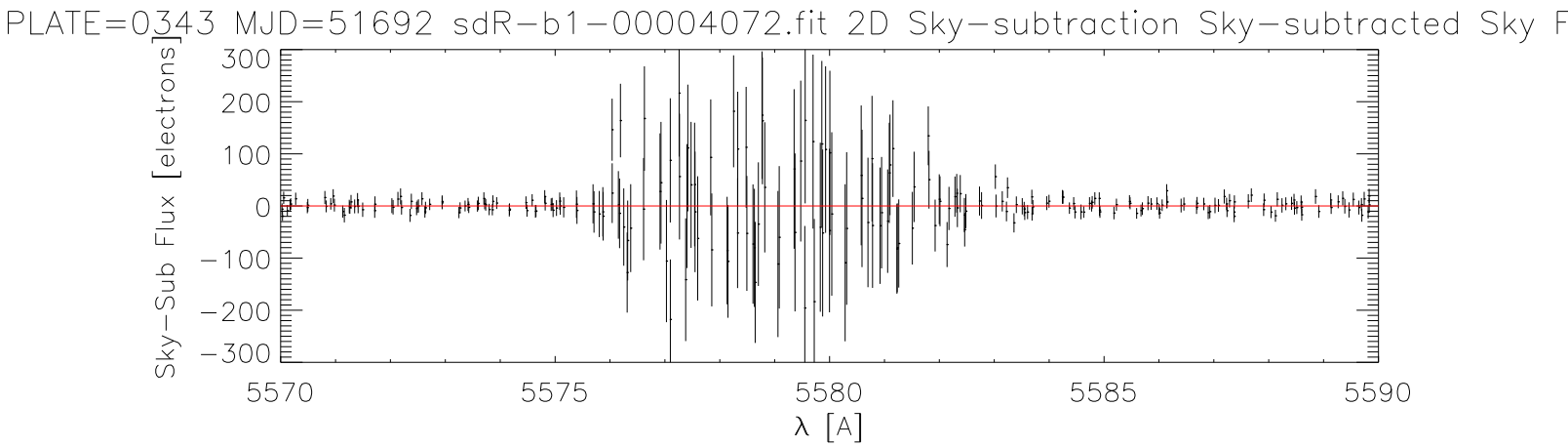

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

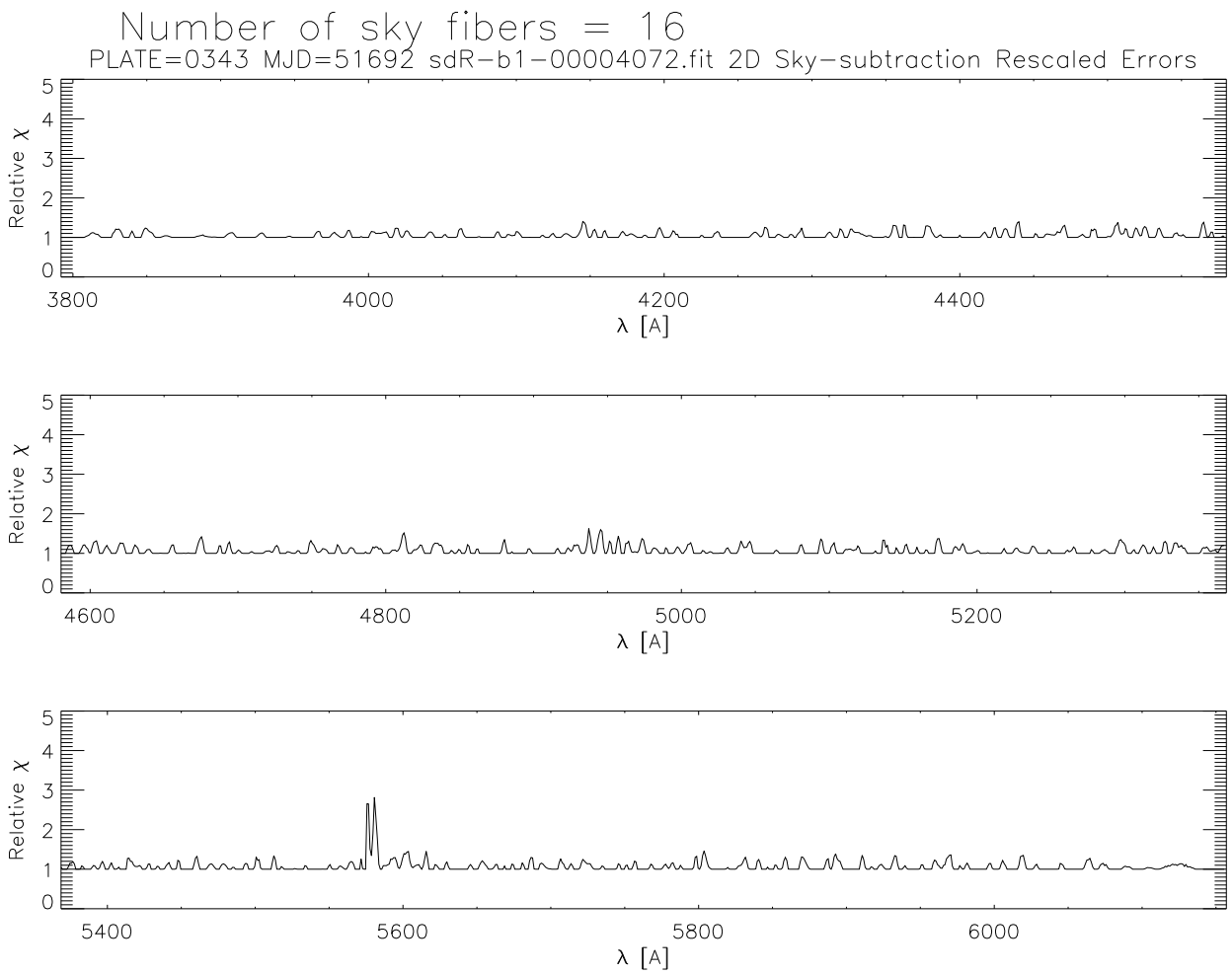

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

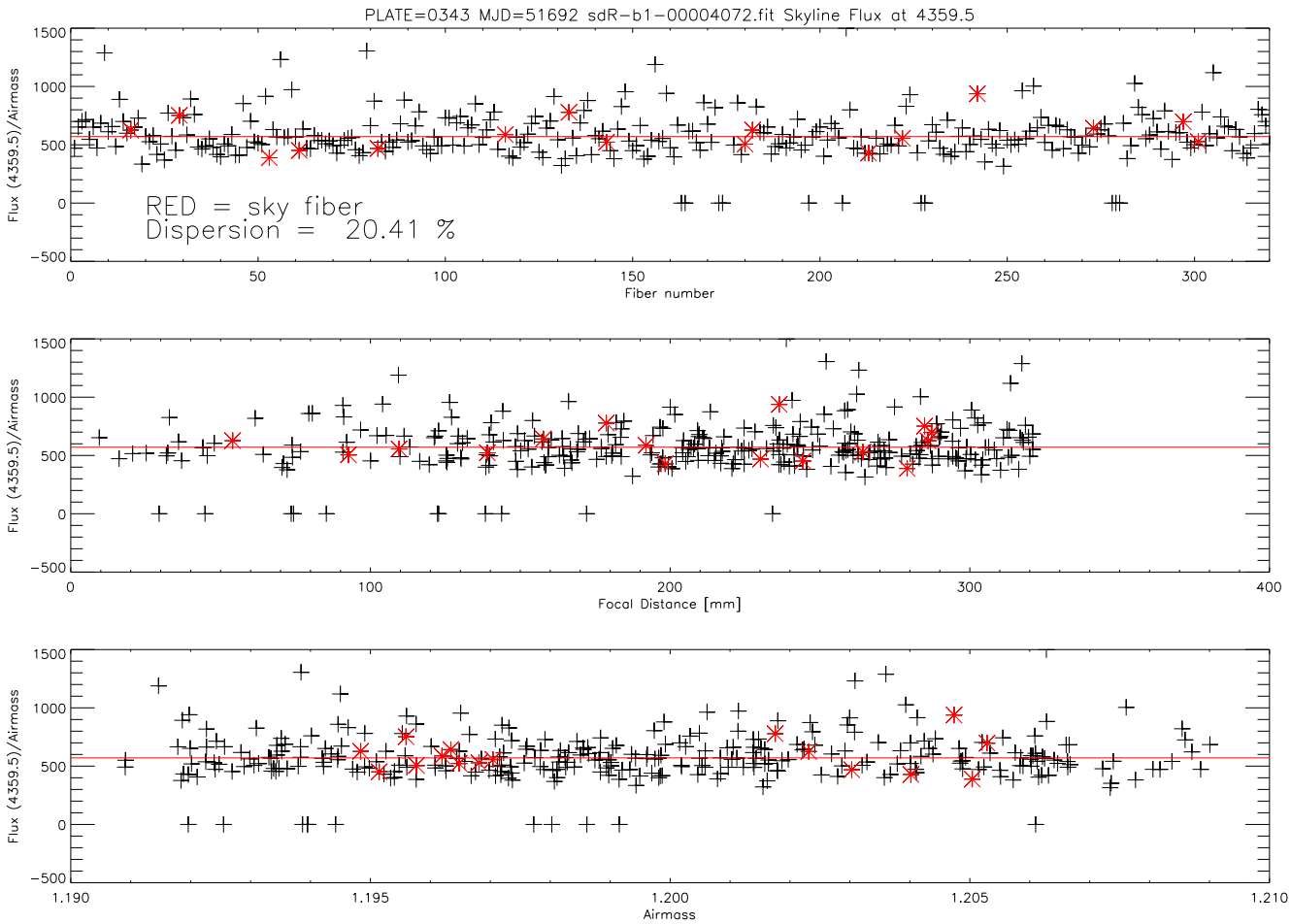

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004072.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

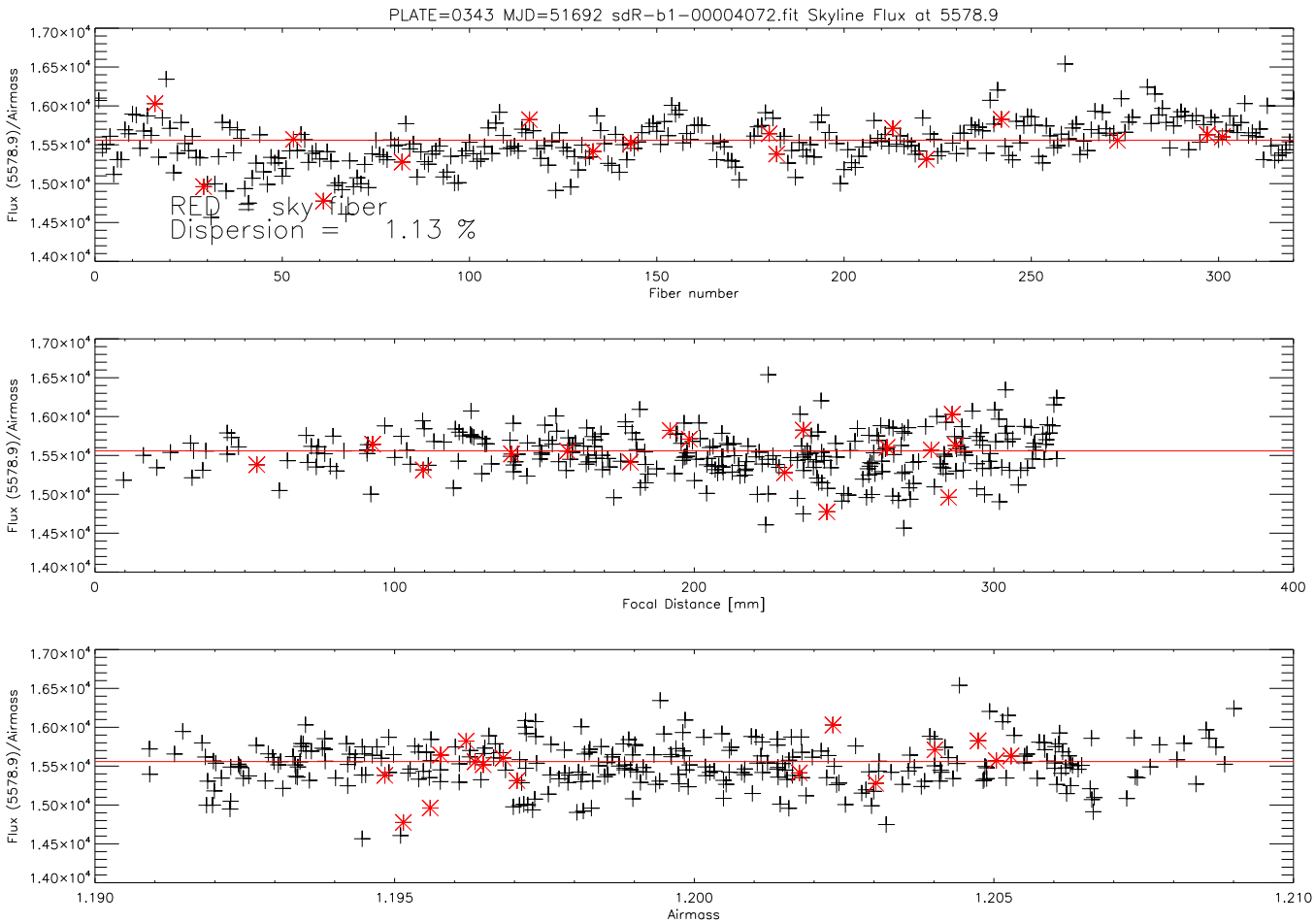

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

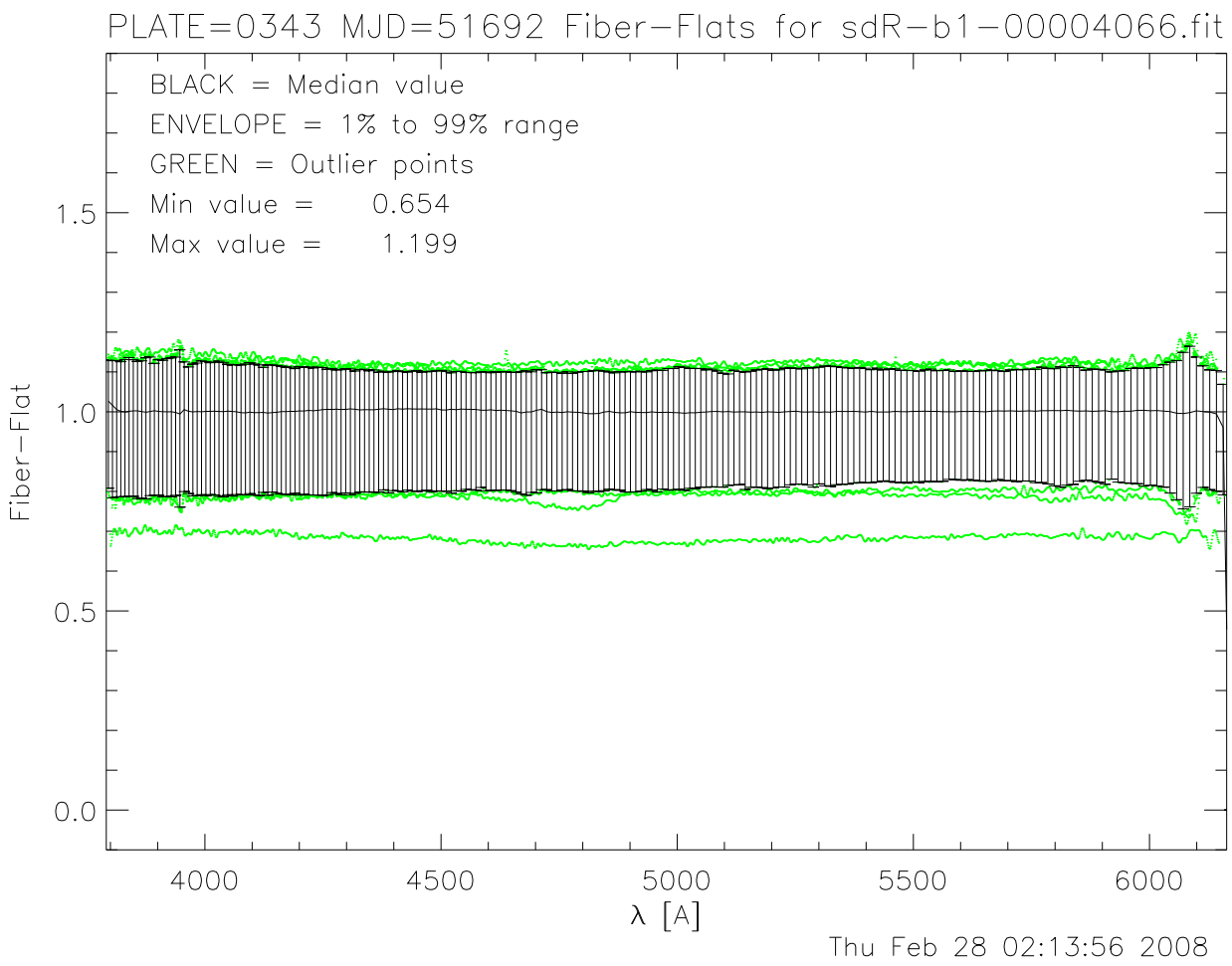

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

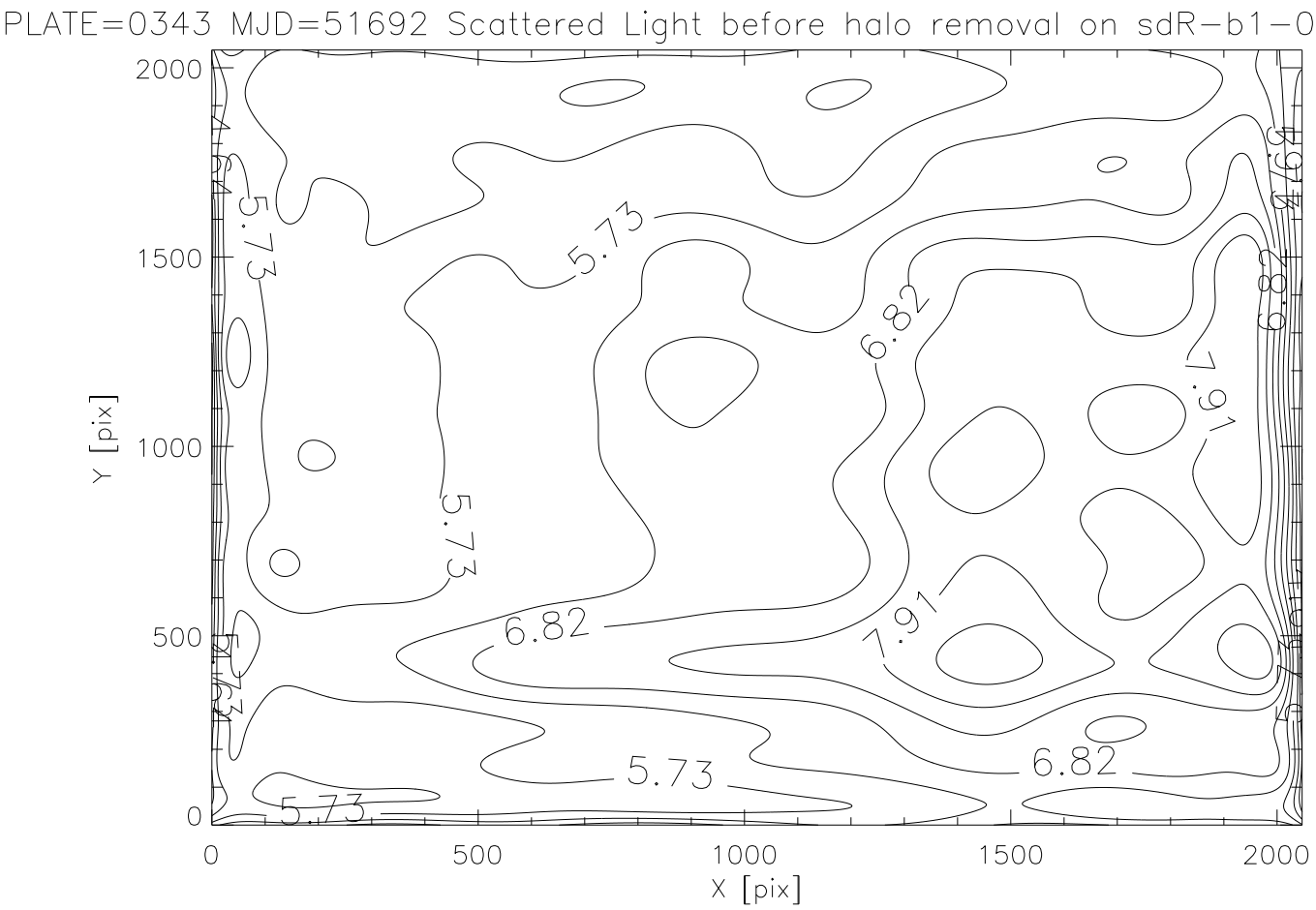

PLATE=0343 MJD=51692 sdR-b1-00004072.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

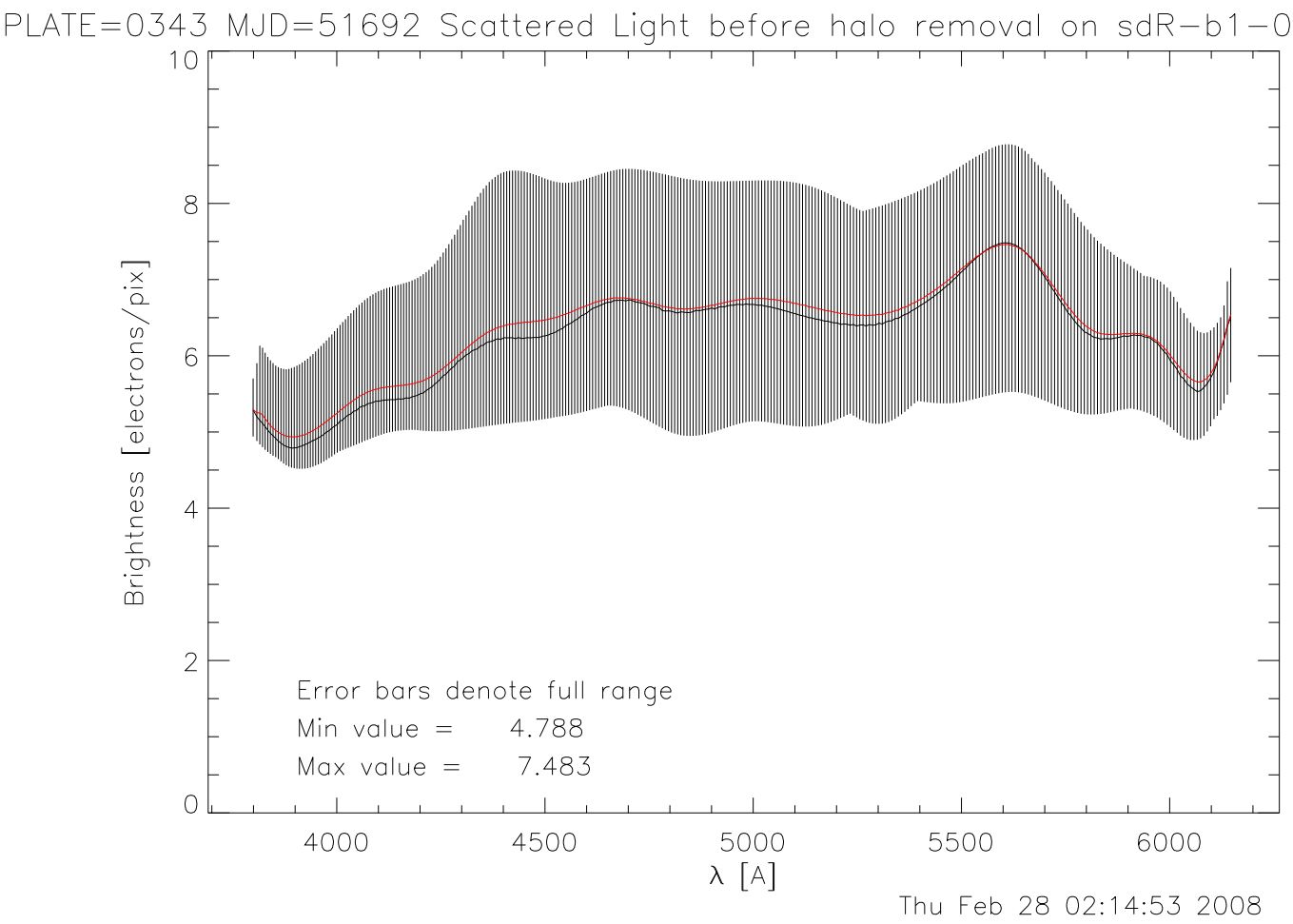

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004072.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

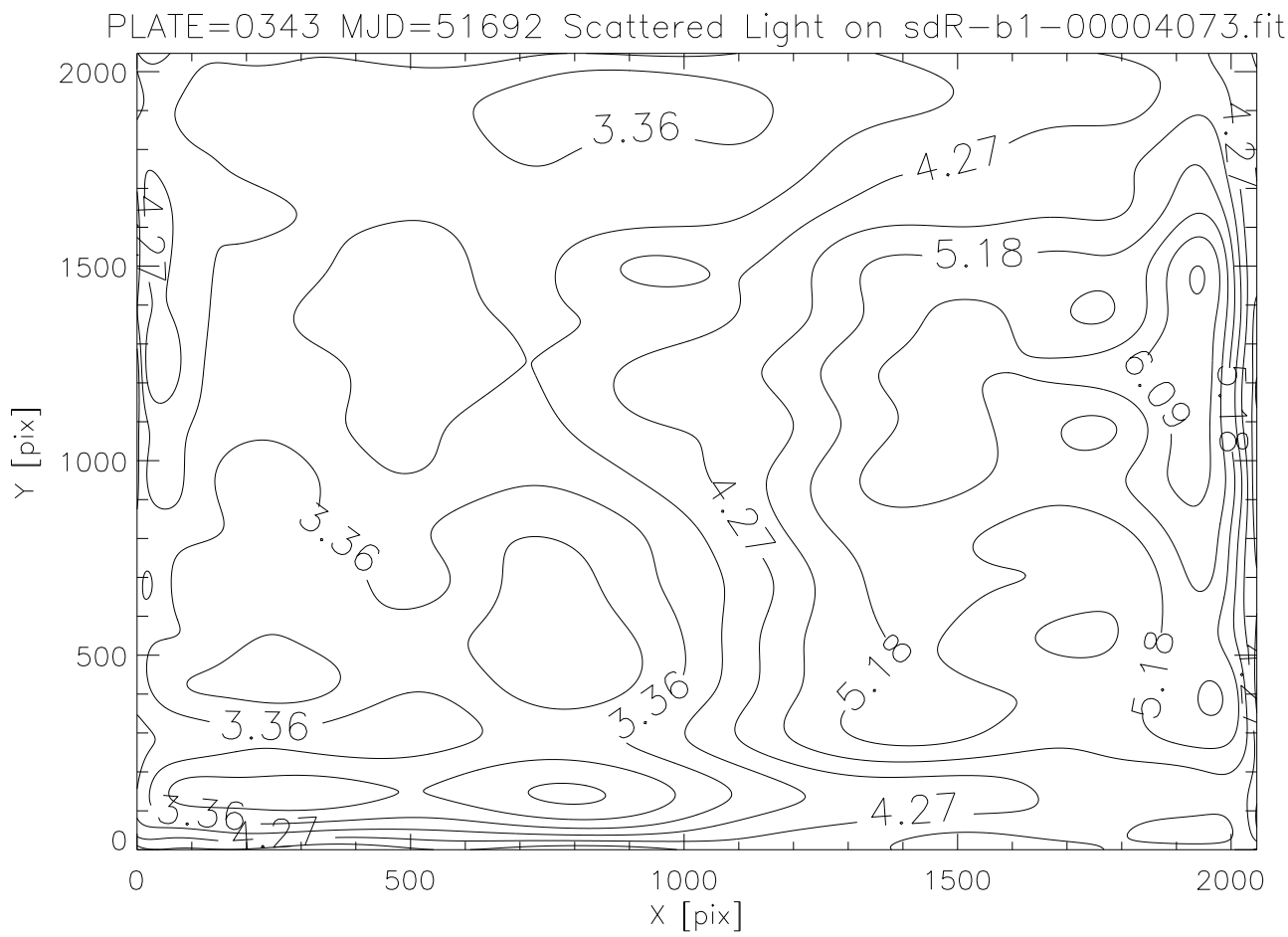

PLATE=0343 MJD=51692 sdR-b1-00004072.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 20.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

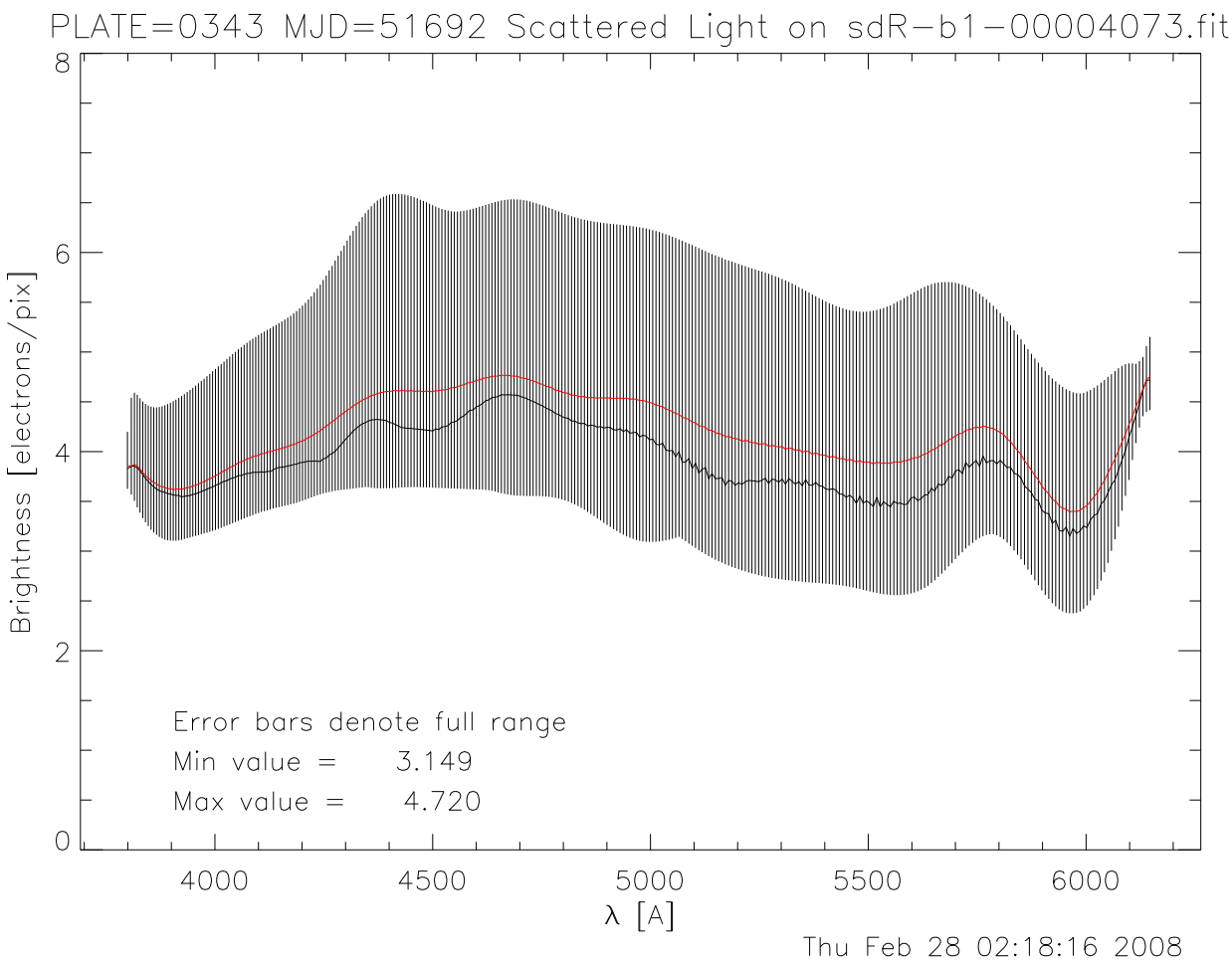

PLATE=0343 MJD=51692 sdR-b1-00004072.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.13 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

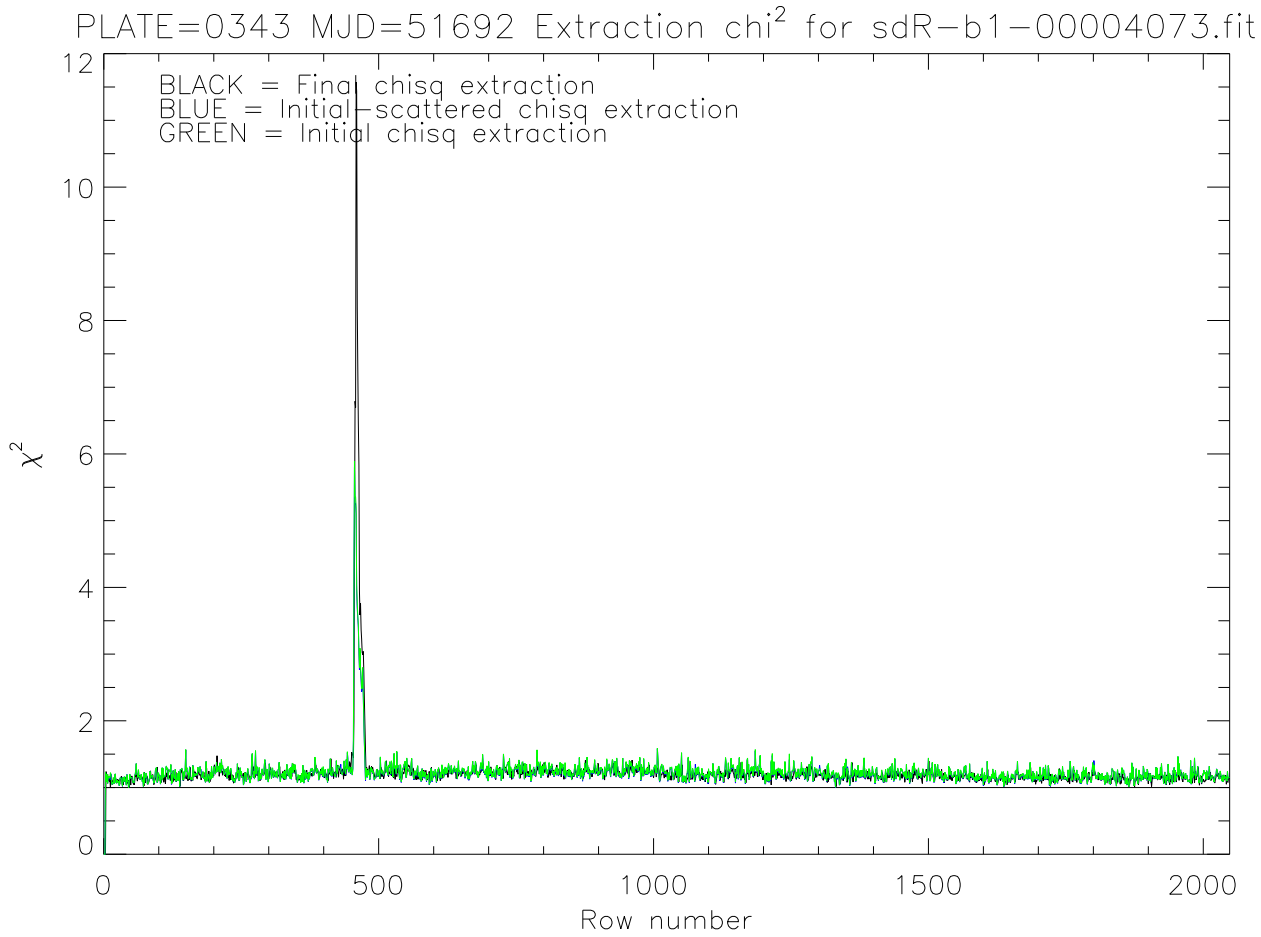

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:13:56 2008

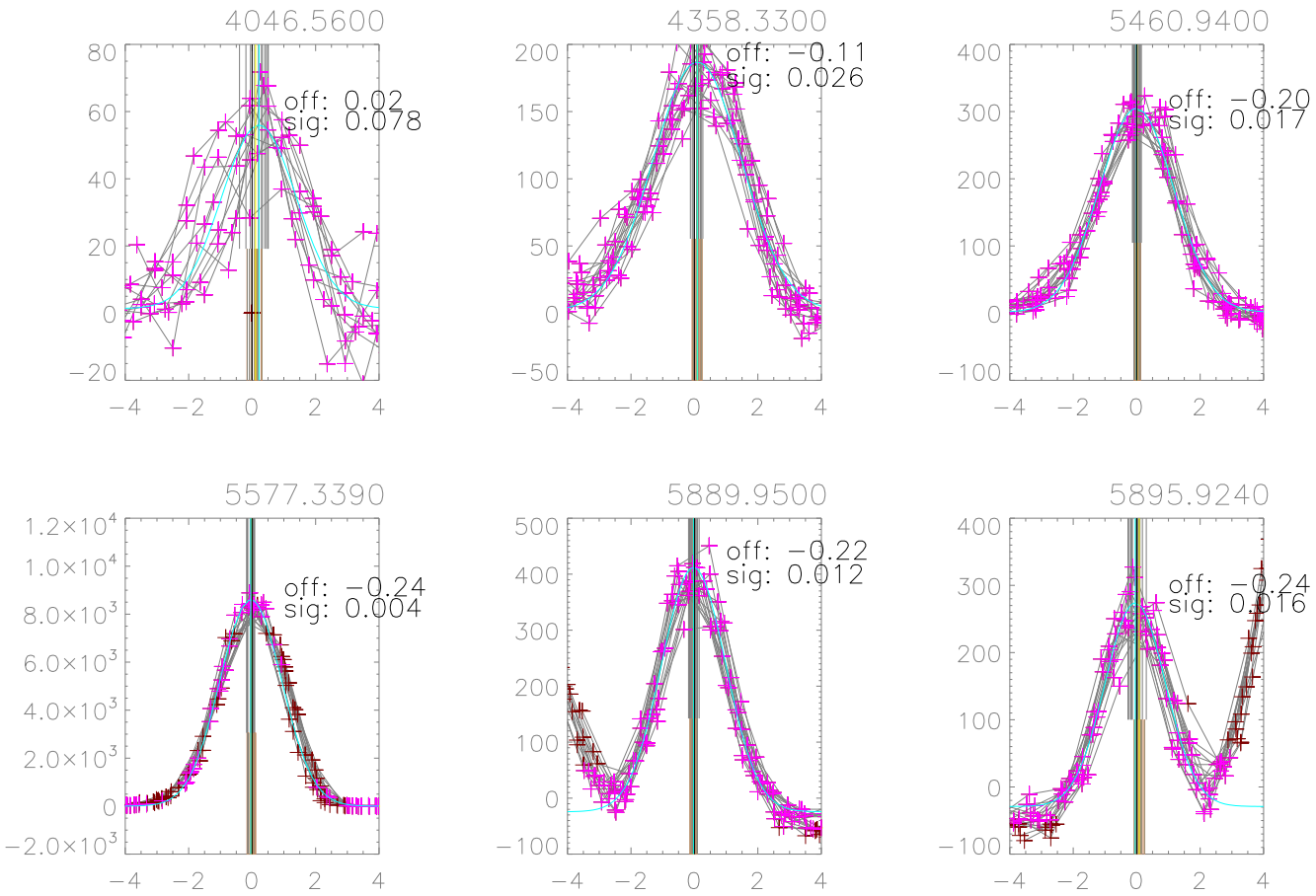

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004073.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.73
5.73
6.82
7.91
5.73
6.82
7.91
5.73
5.73
6.82

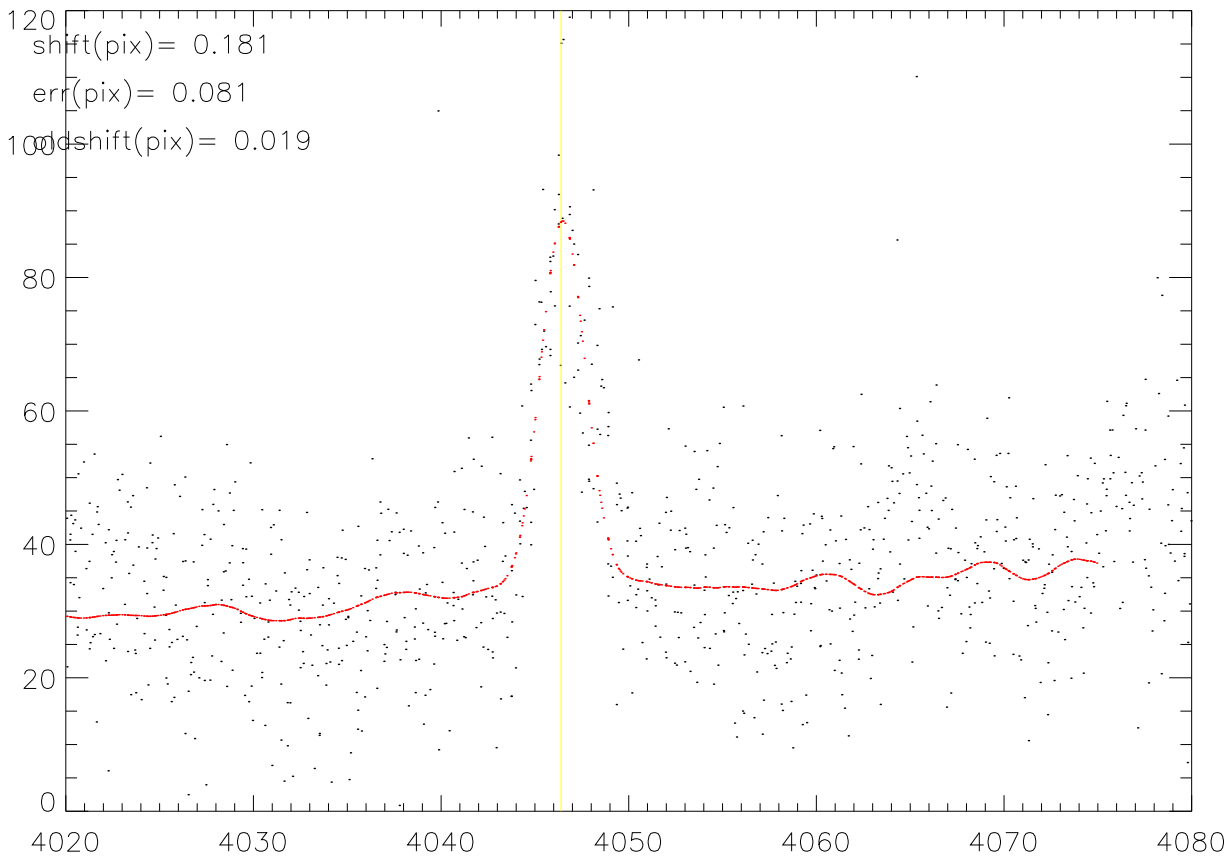

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004073.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.788
Max value = 7.483
Thu Feb 28 02:14:53 2008

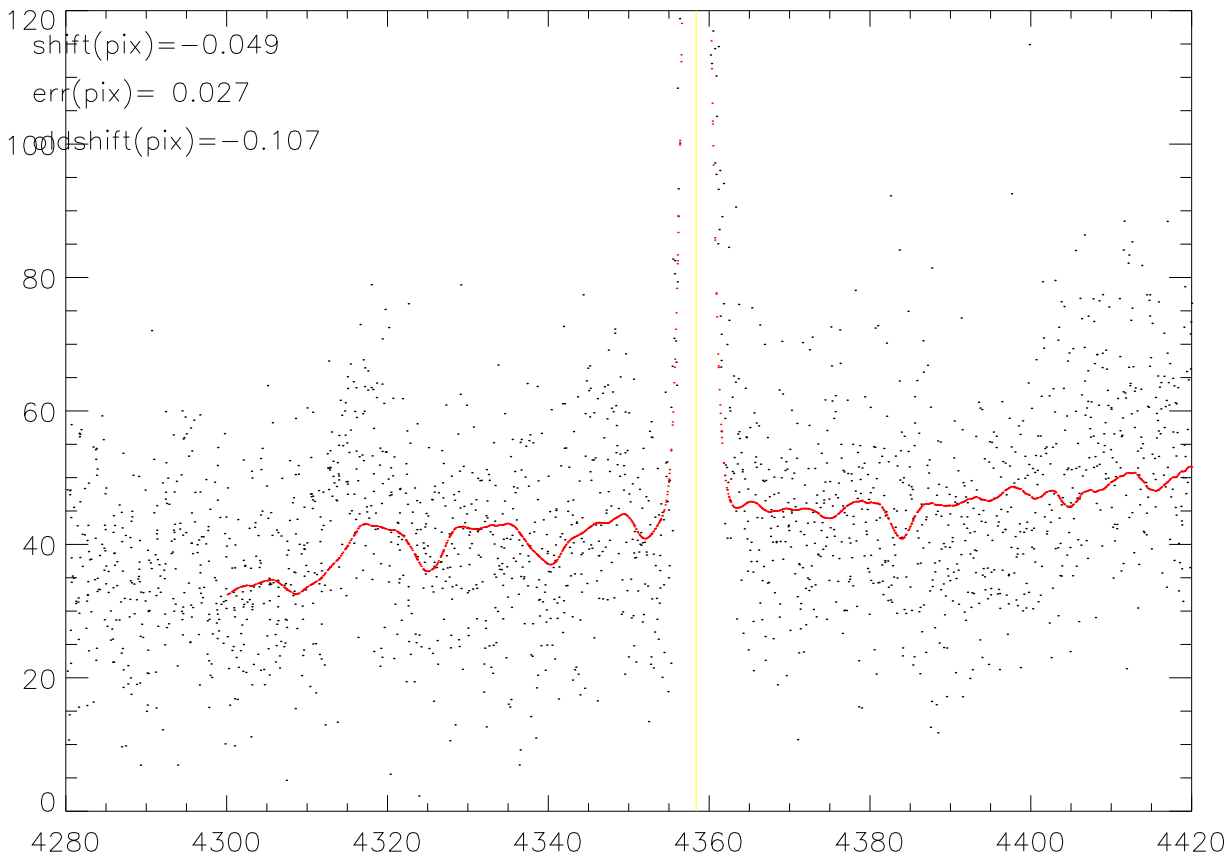

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004073.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18
6.09

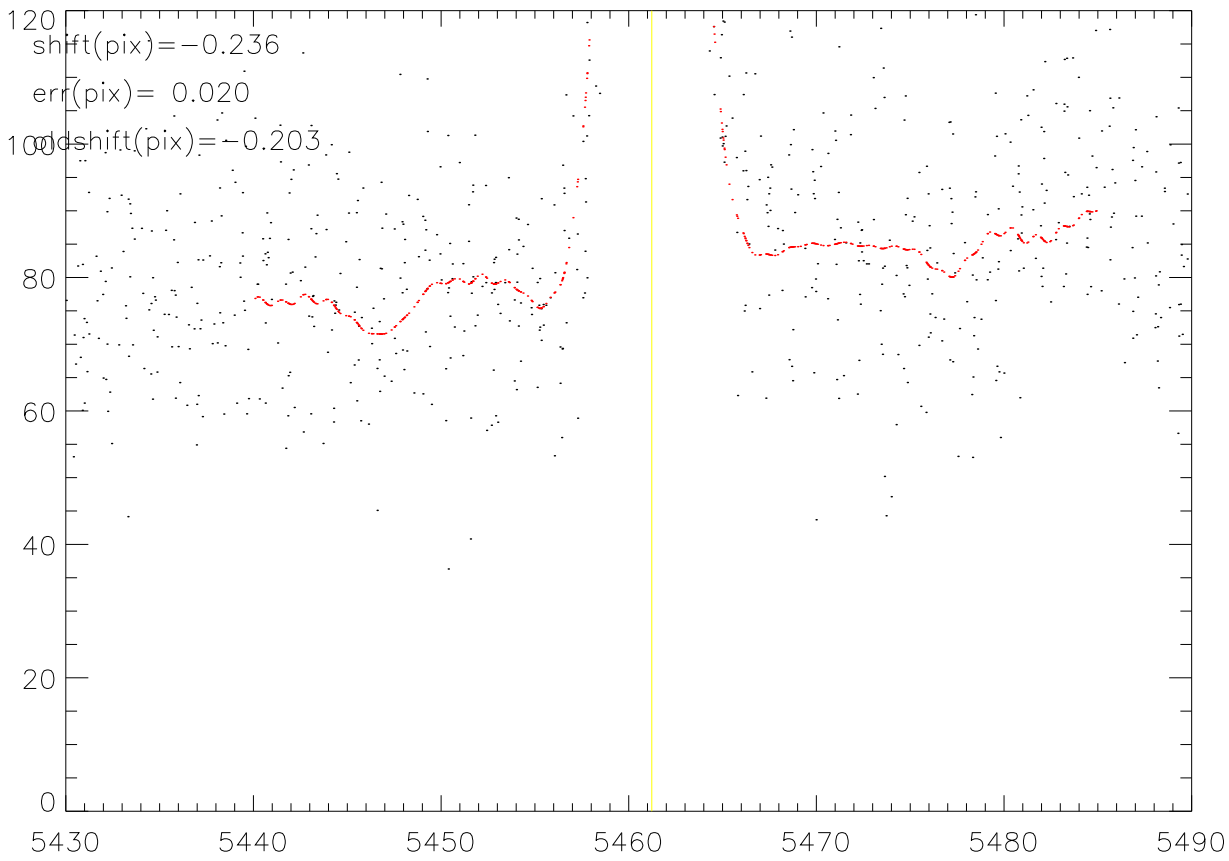

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004073.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.149
Max value = 4.720
Thu Feb 28 02:18:16 2008

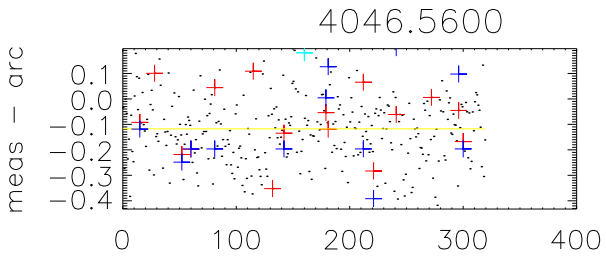

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004073.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

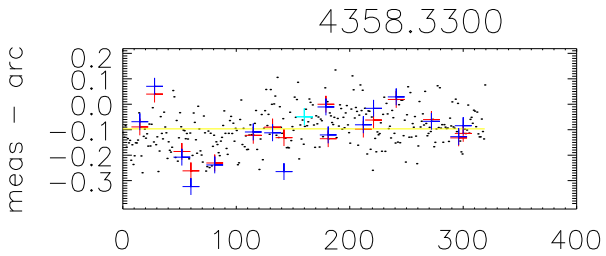

4046.5600
off: 0.02
sig: 0.078
4358.3300
off: −0.11
sig: 0.026
5460.9400
off: −0.20
sig: 0.017
5577.3390
off: −0.24
sig: 0.004
5889.9500
off: −0.22
sig: 0.012
5895.9240
off: −0.24
sig: 0.016

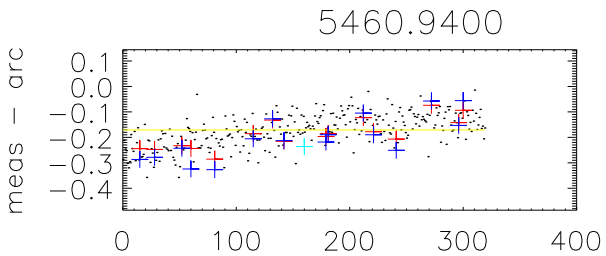

shift(pix)= 0.181
err(pix)= 0.081
oldshift(pix)= 0.019
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

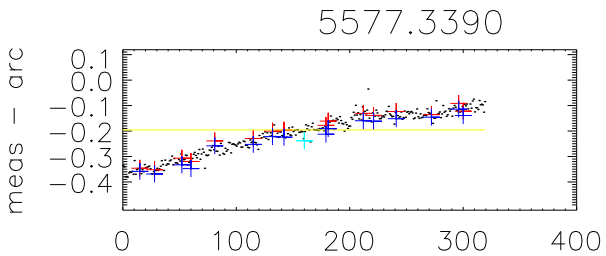

shift(pix)=−0.049
err(pix)= 0.027
oldshift(pix)=−0.107
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

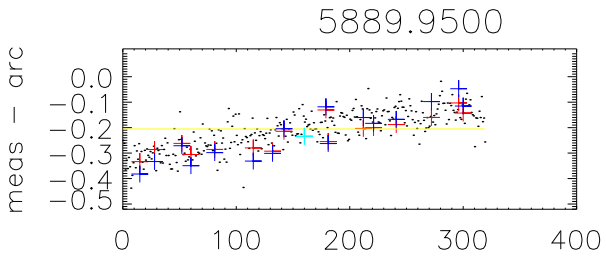

shift(pix)=−0.236
err(pix)= 0.020
oldshift(pix)=−0.203
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

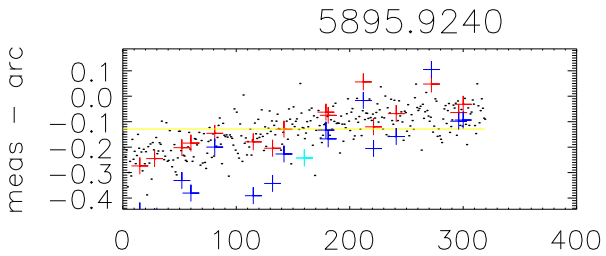

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

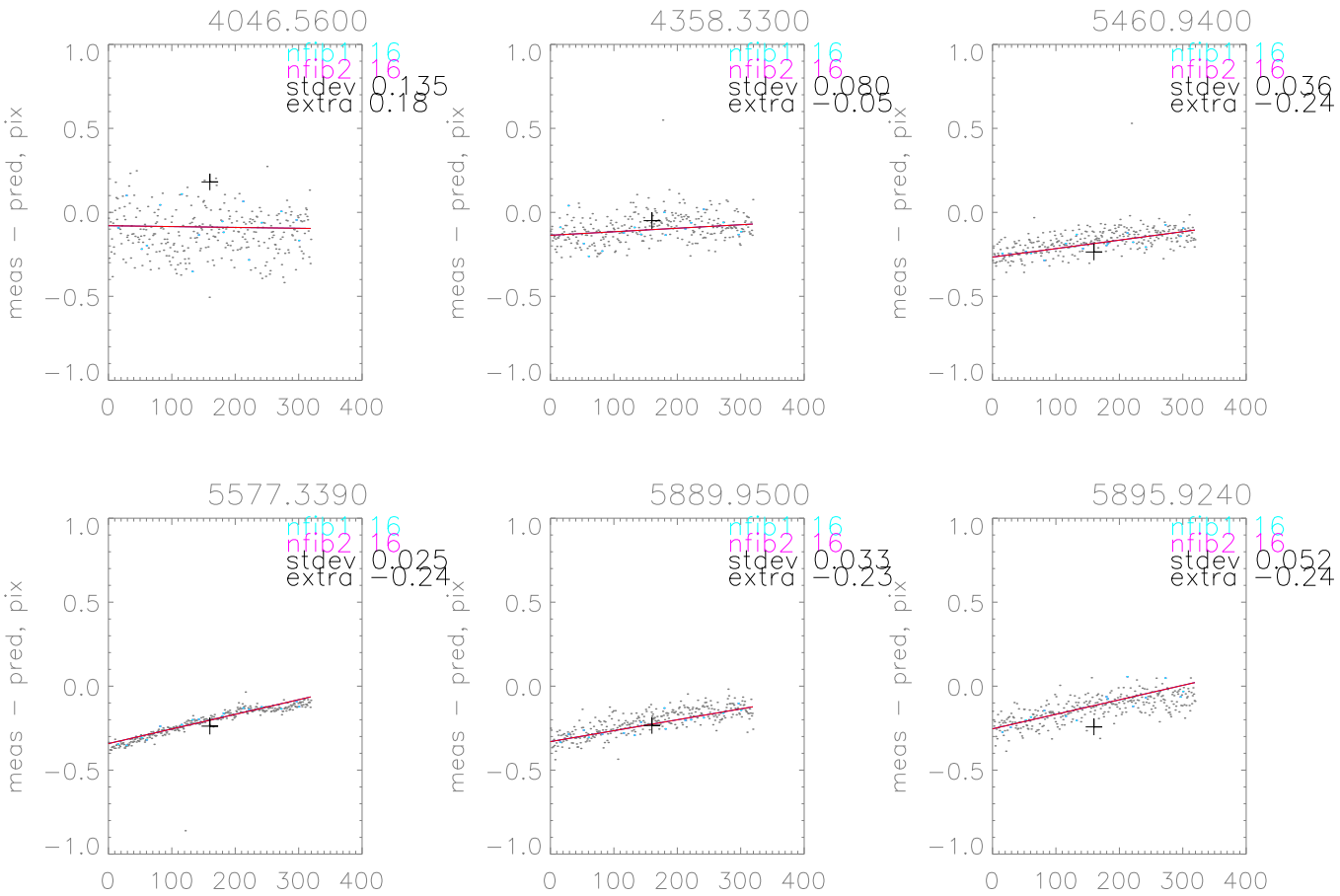

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

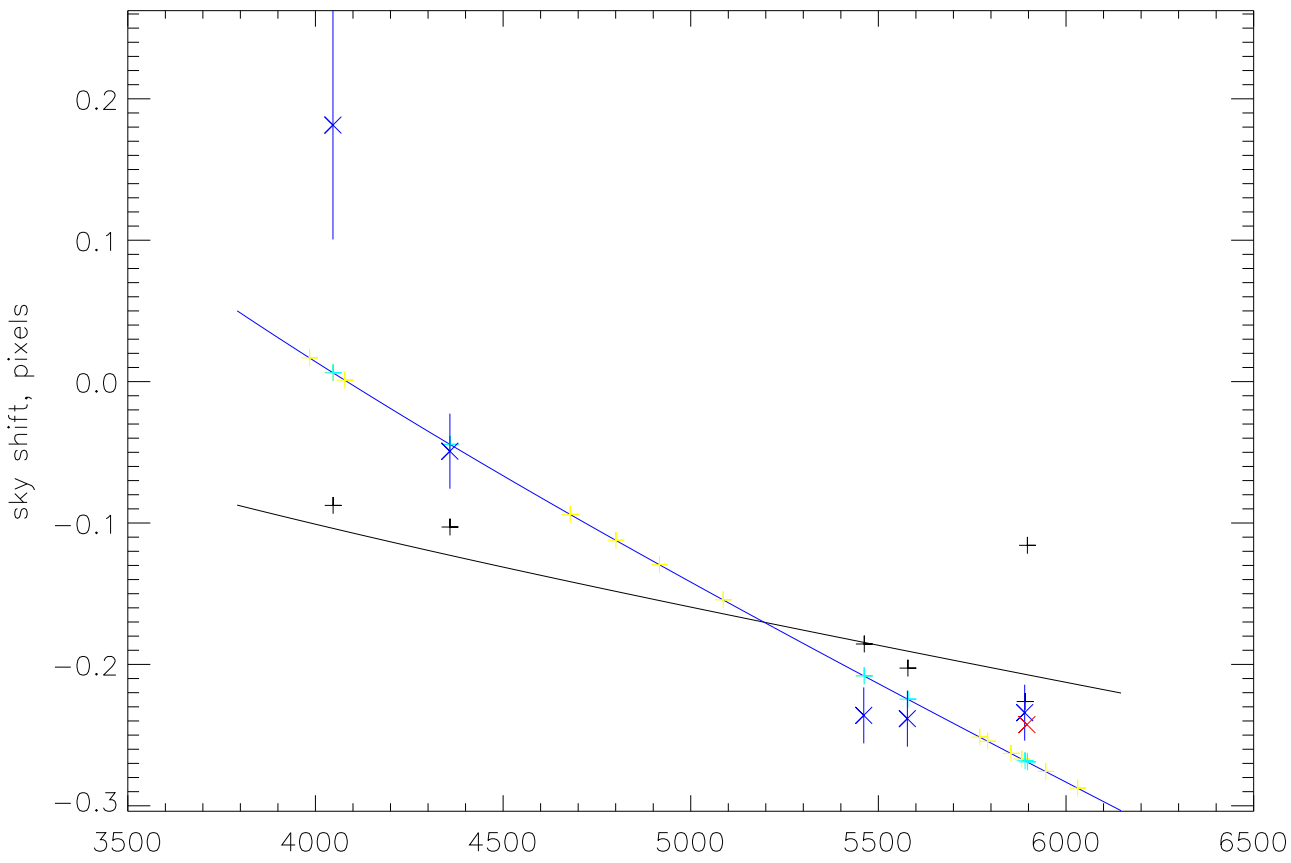

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

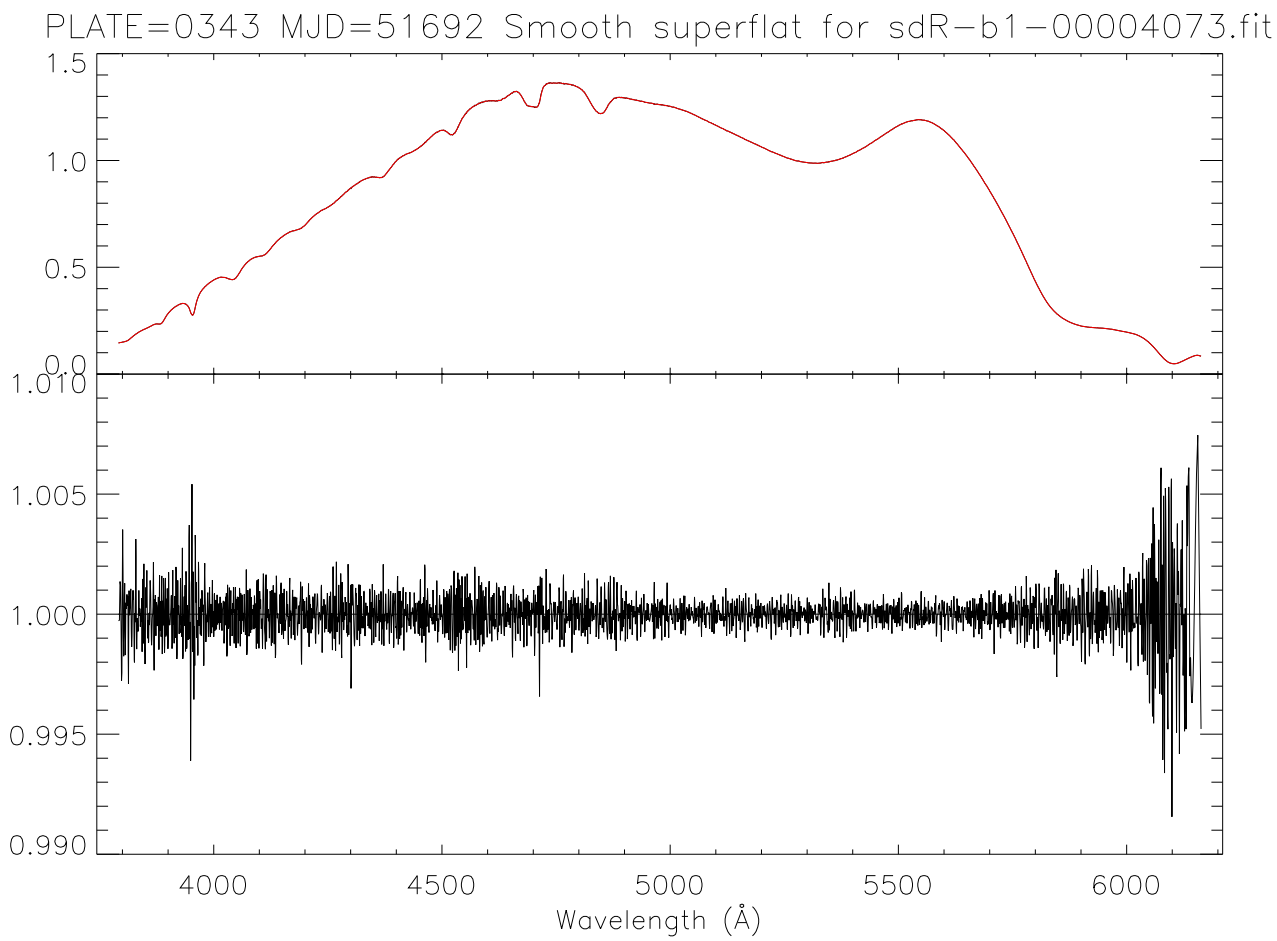

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

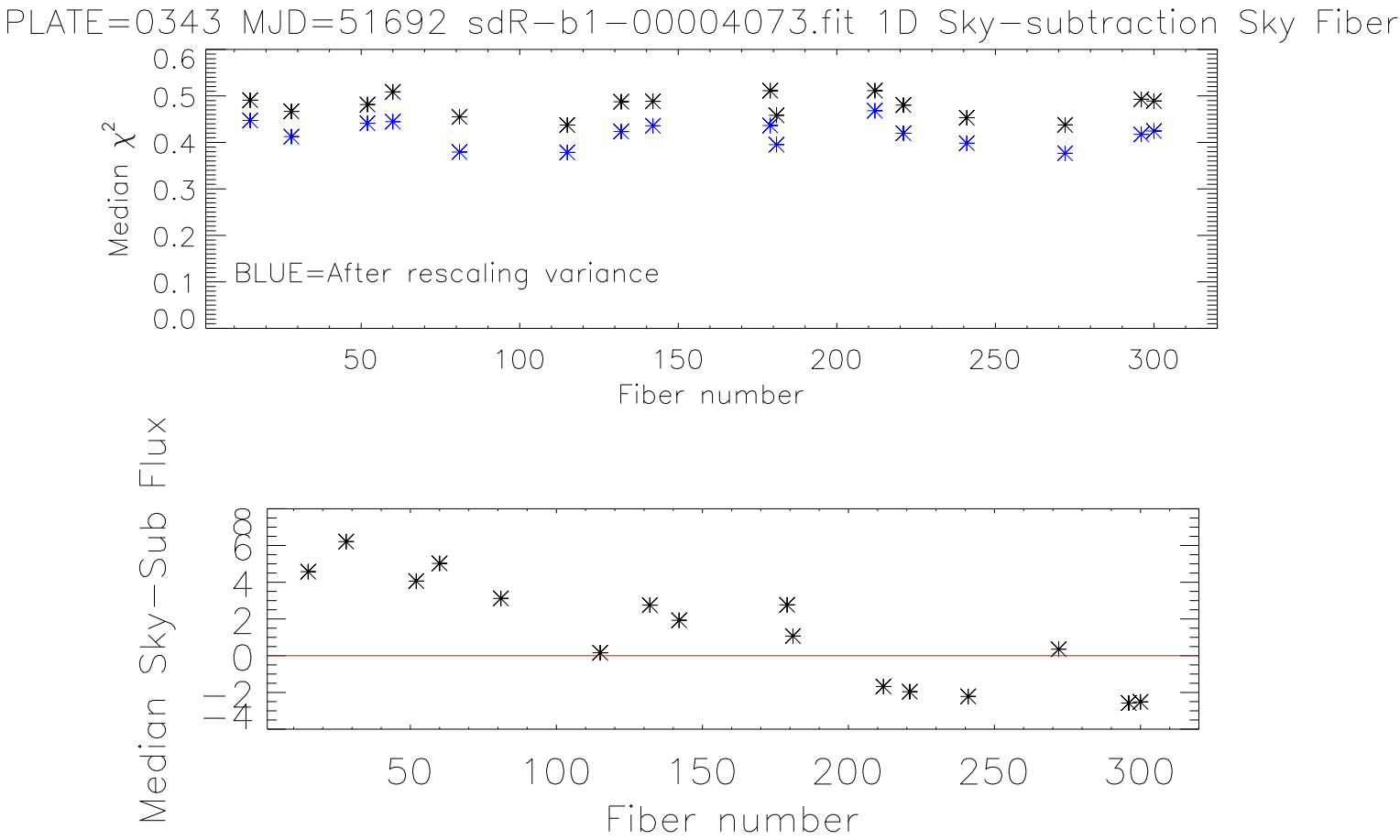

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

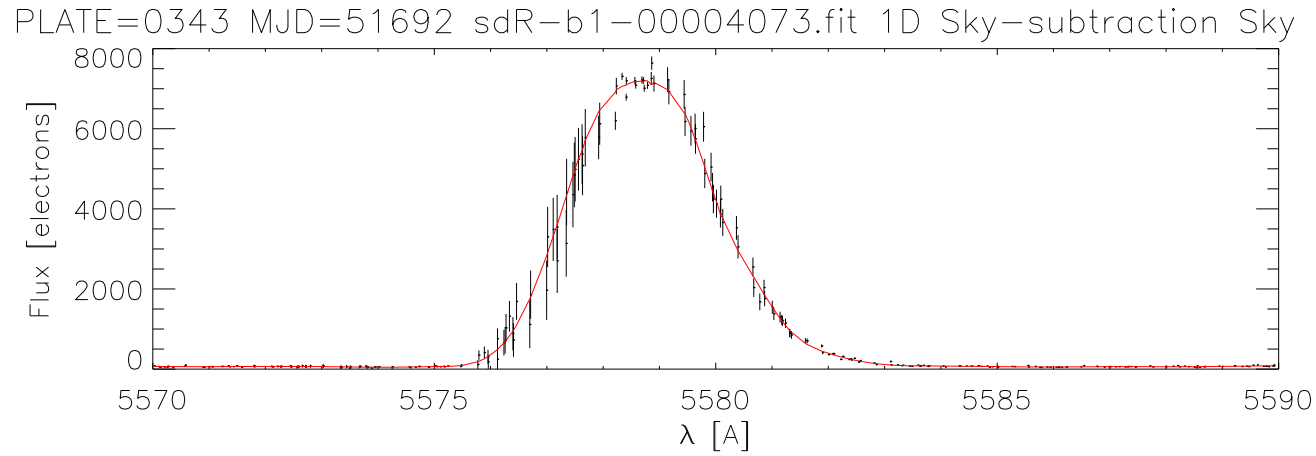

4046.5600
nfib1 16
nfib2 16
stdev 0.135
extra 0.18
4358.3300
nfib1 16
nfib2 16
stdev 0.080
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra −0.24
5577.3390
nfib1 16
nfib2 16
stdev 0.025
extra −0.24
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra −0.23
5895.9240
nfib1 16
nfib2 16
stdev 0.052
extra −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

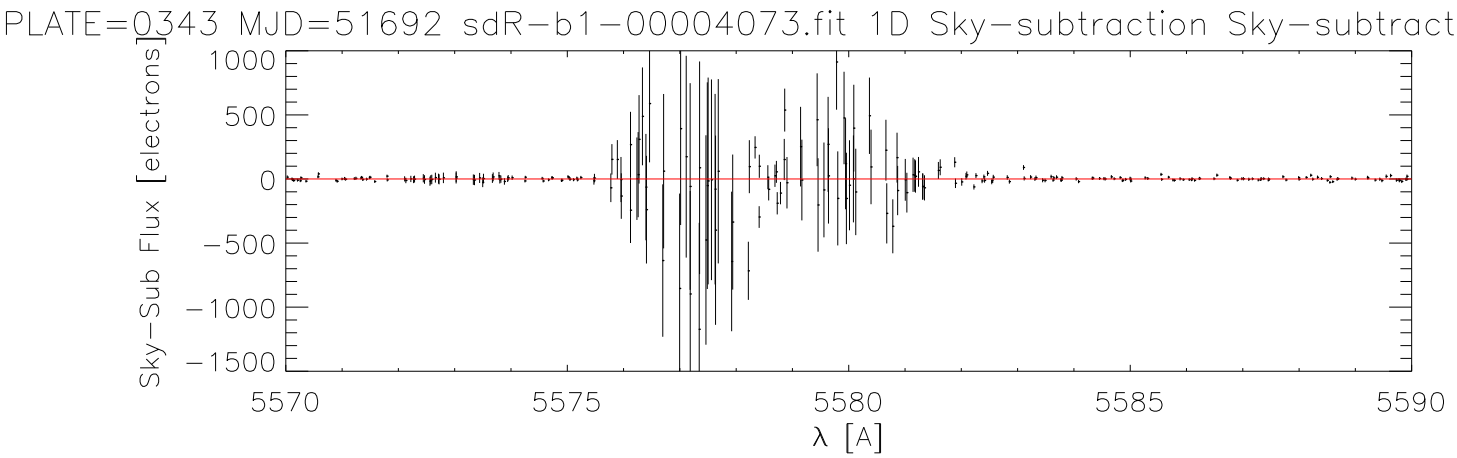

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

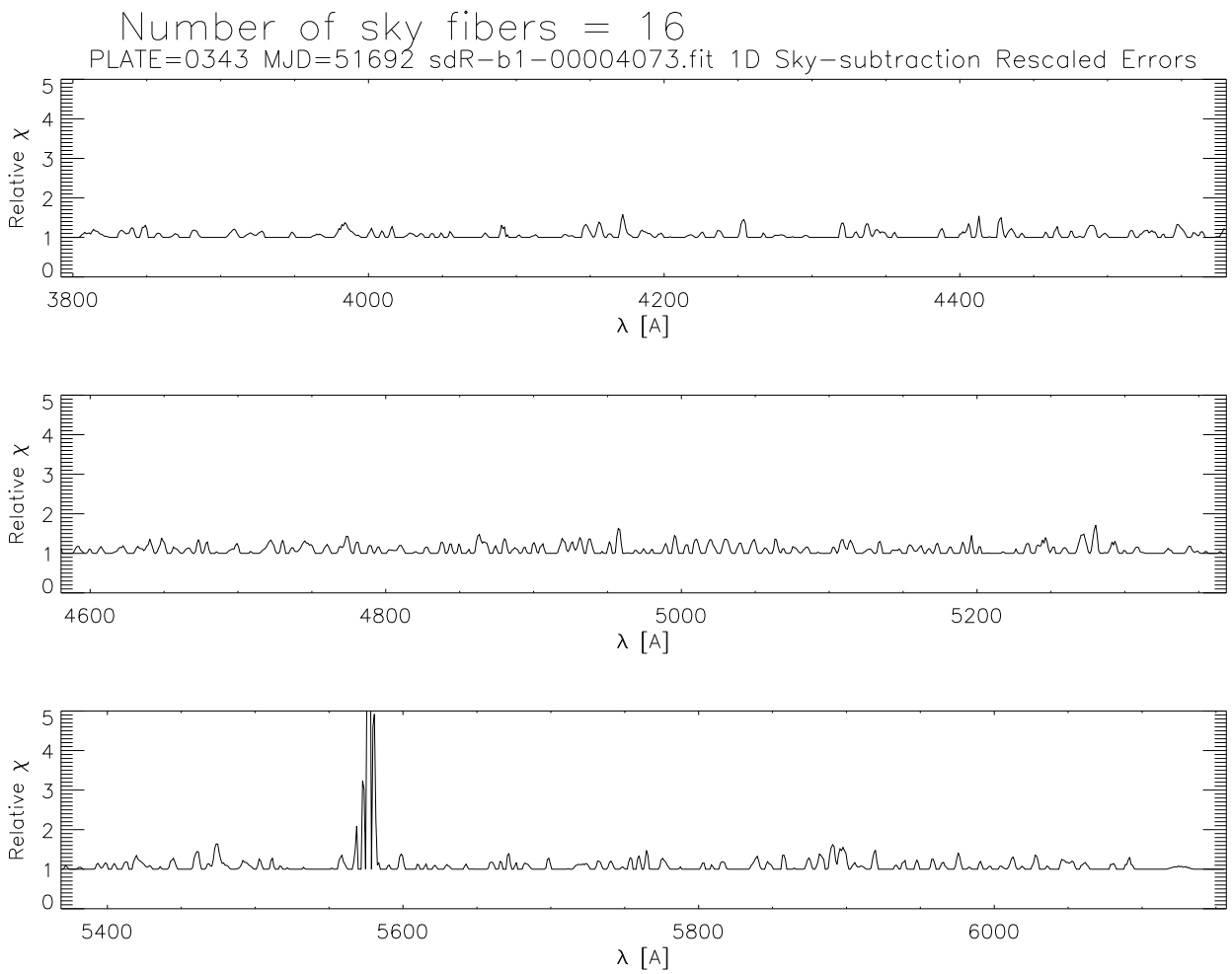
es= 0.0000

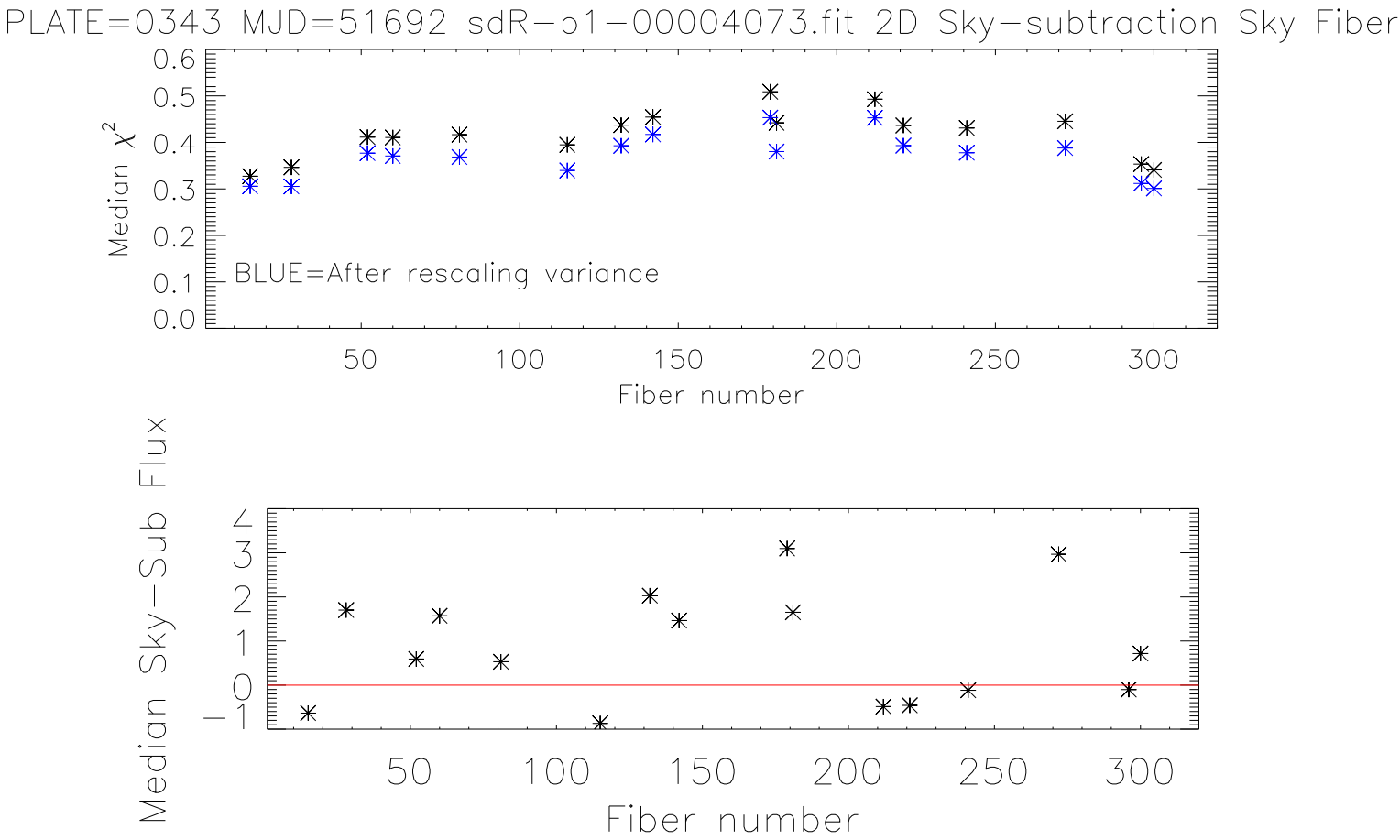

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004073.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

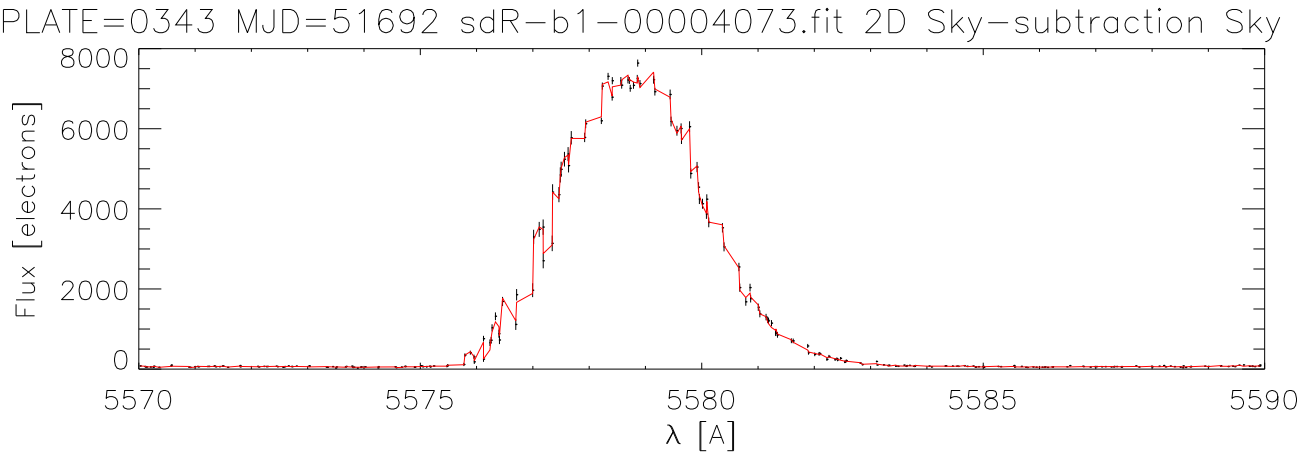

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

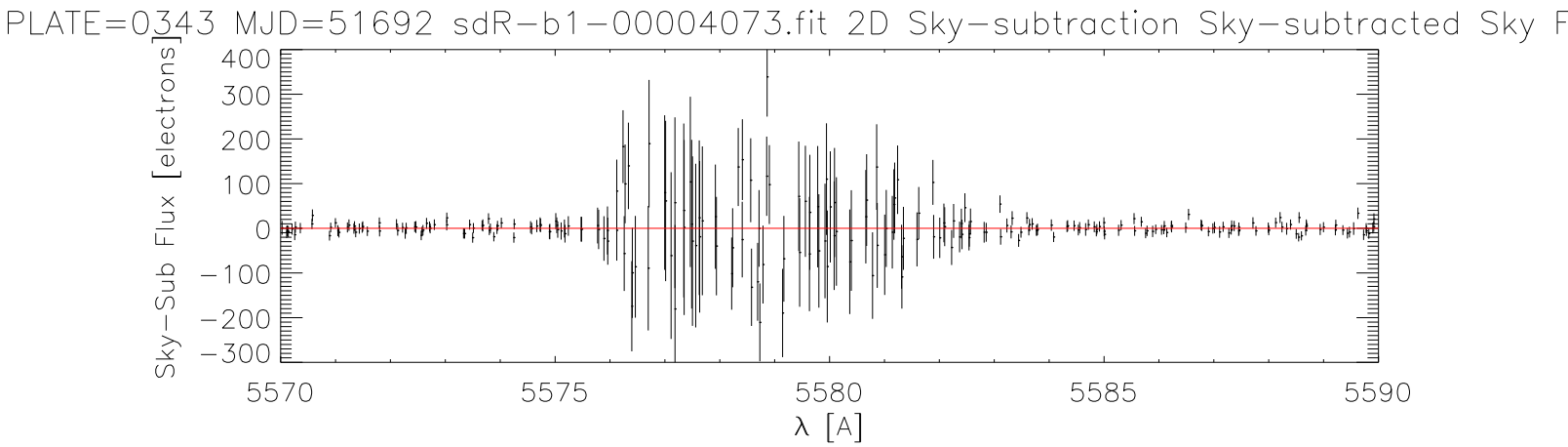

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

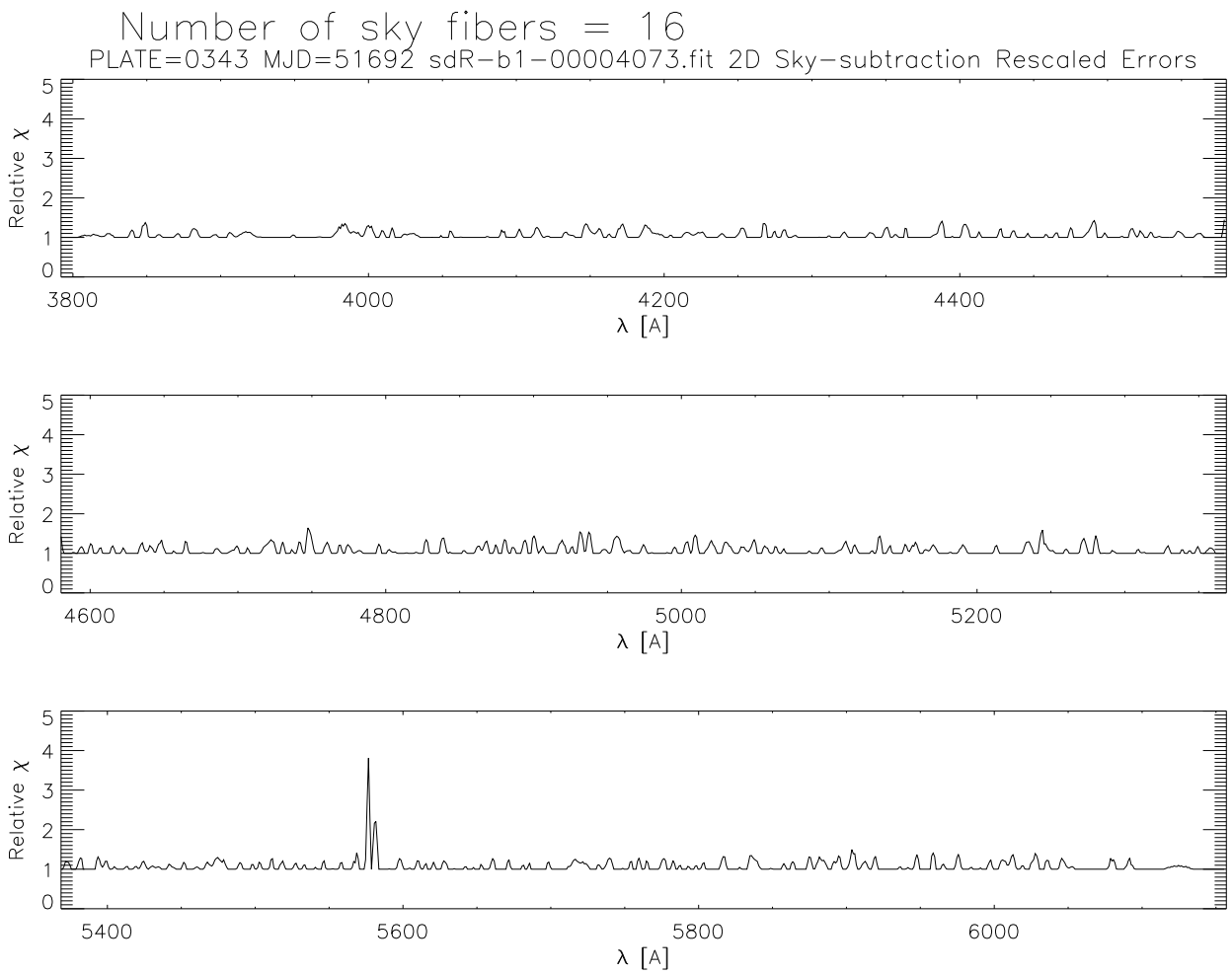

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
-1500
5570
5575
5580
5585
5590
λ [A]

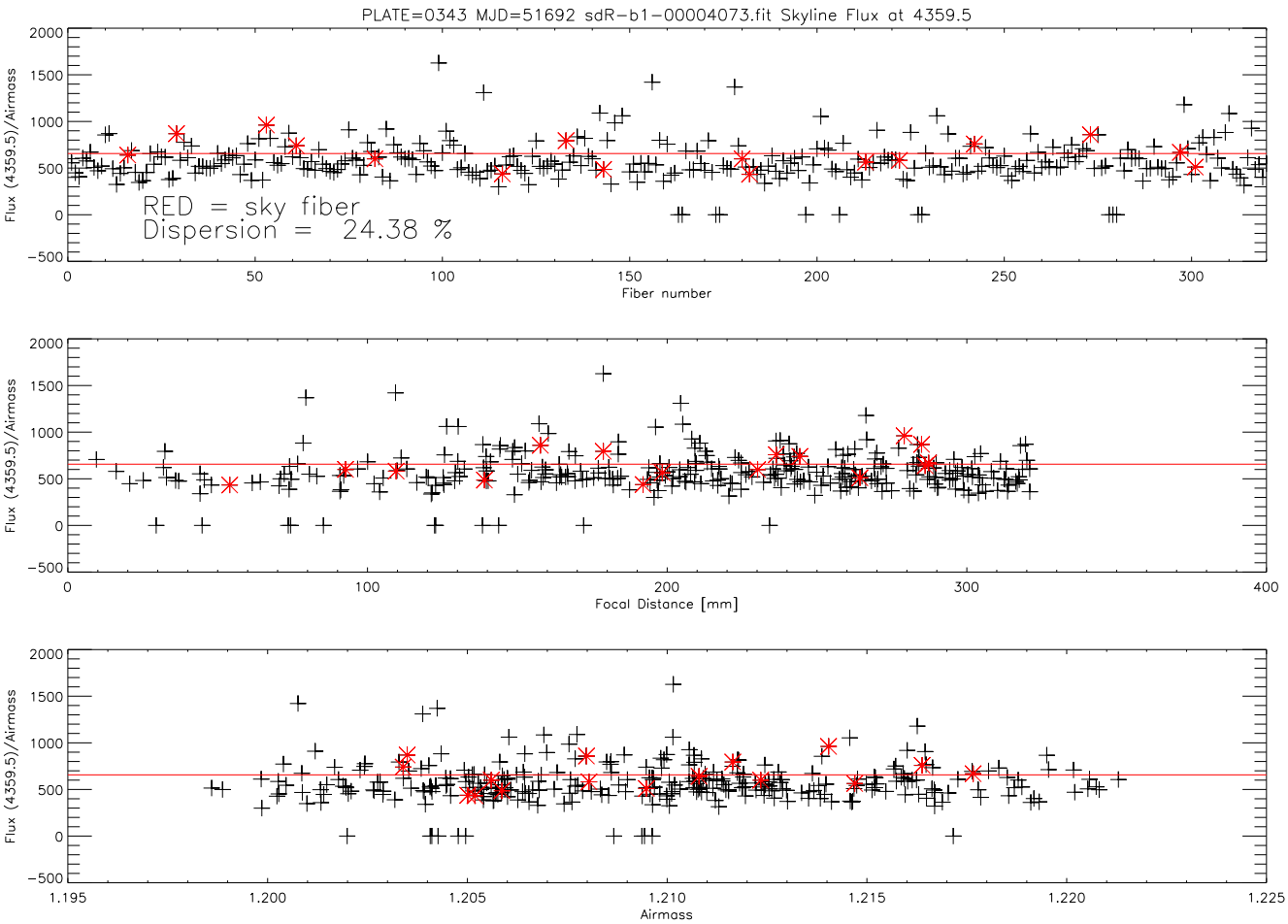

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004073.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

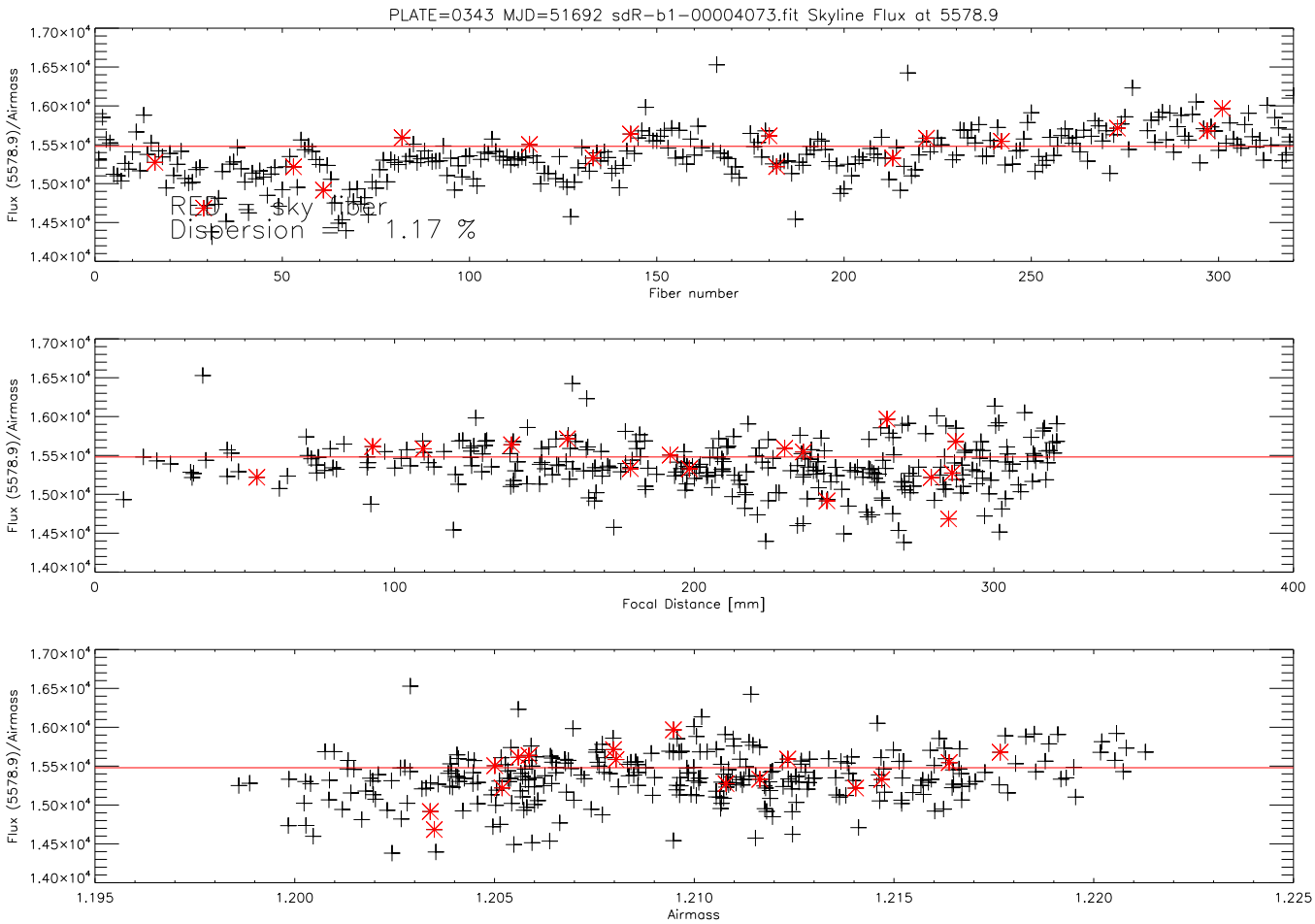

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

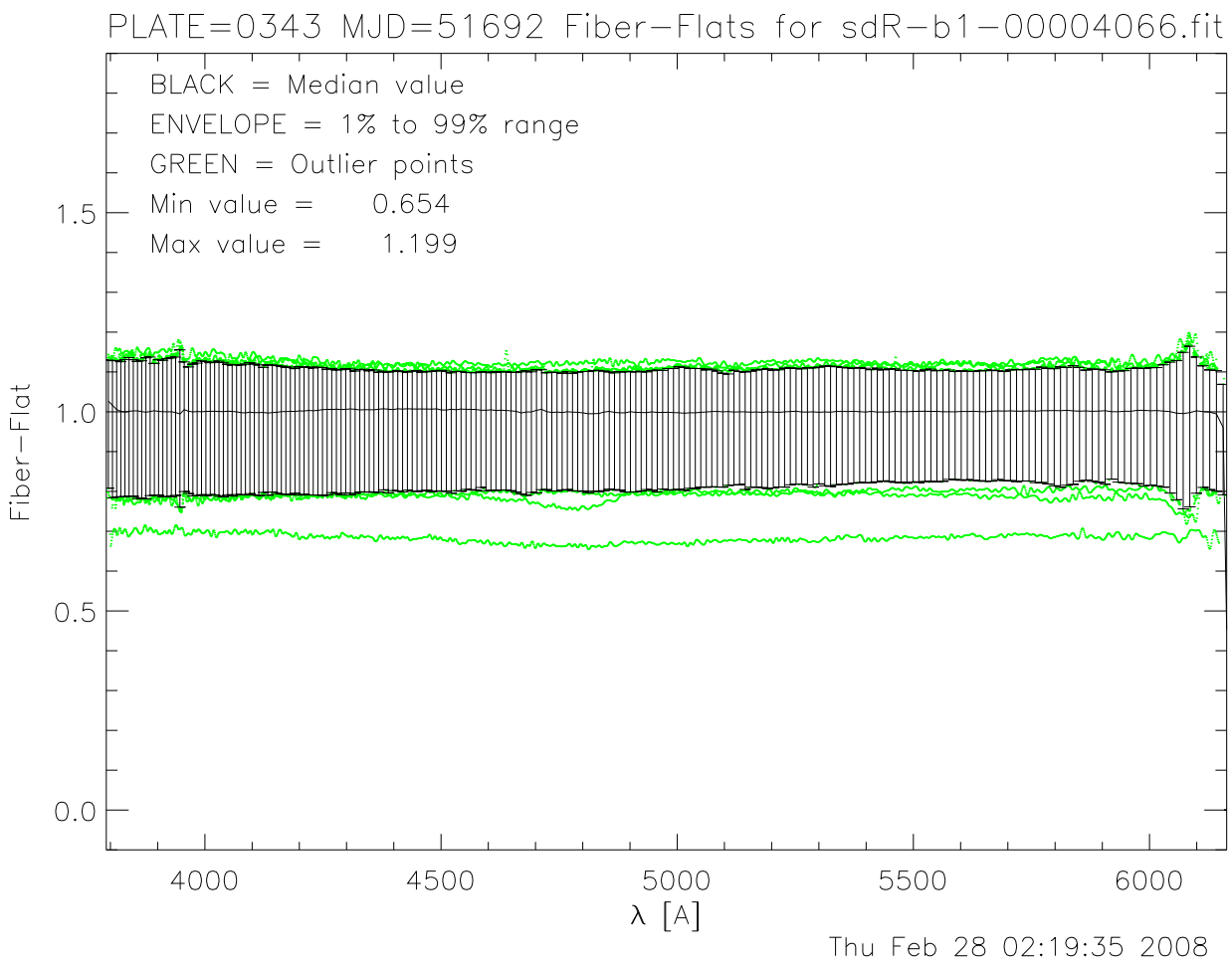

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

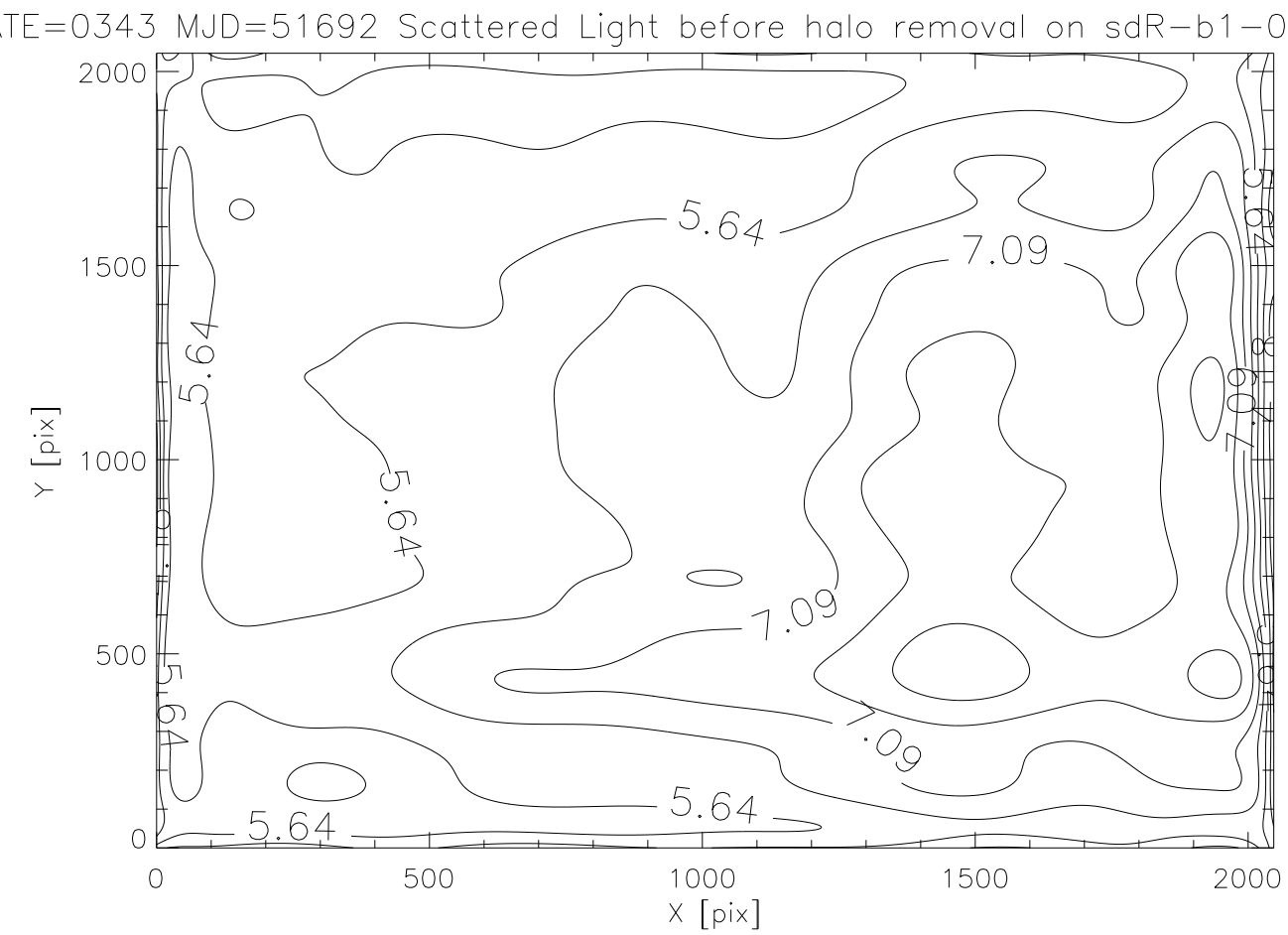

PLATE=0343 MJD=51692 sdR-b1-00004073.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

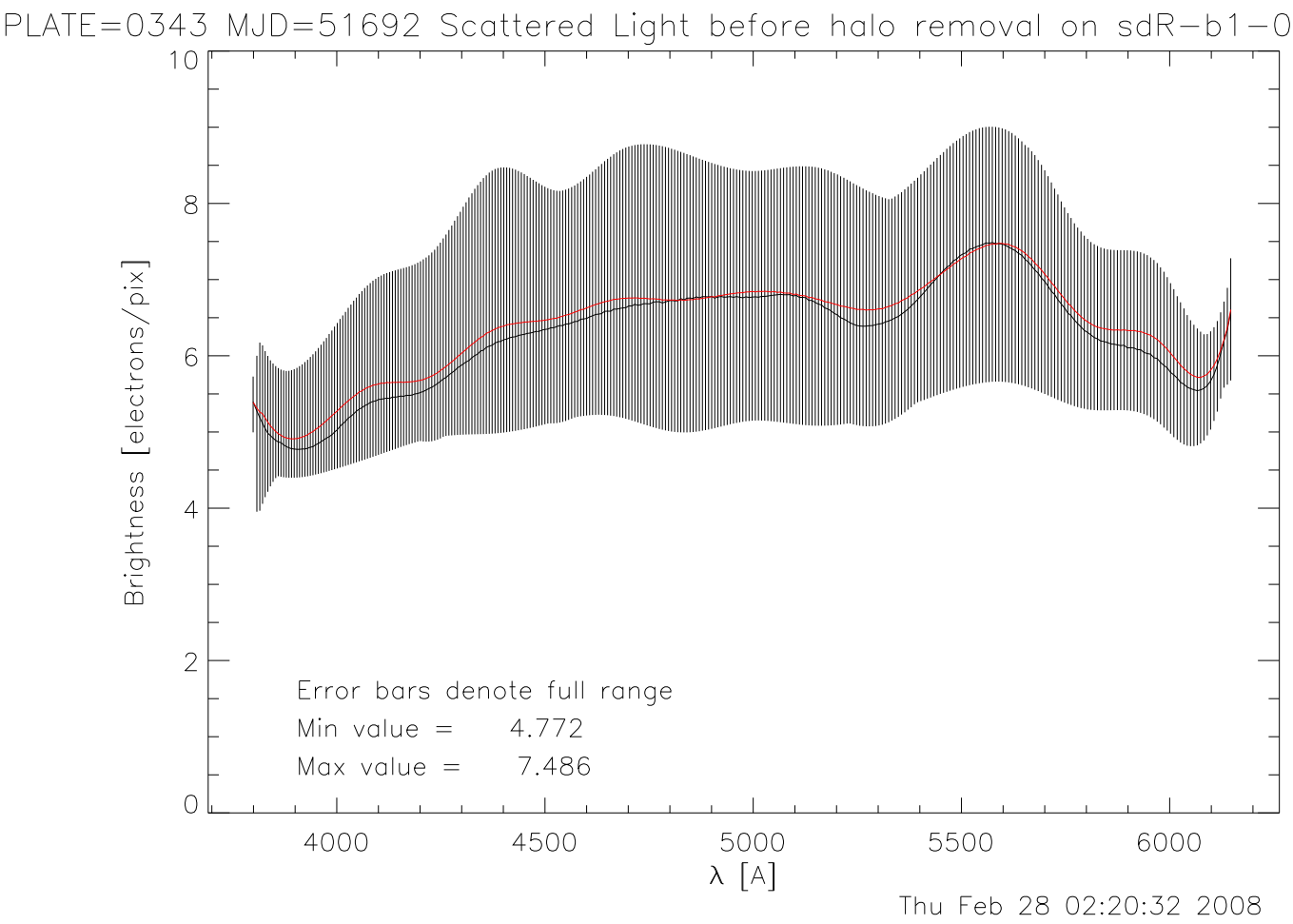

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004073.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

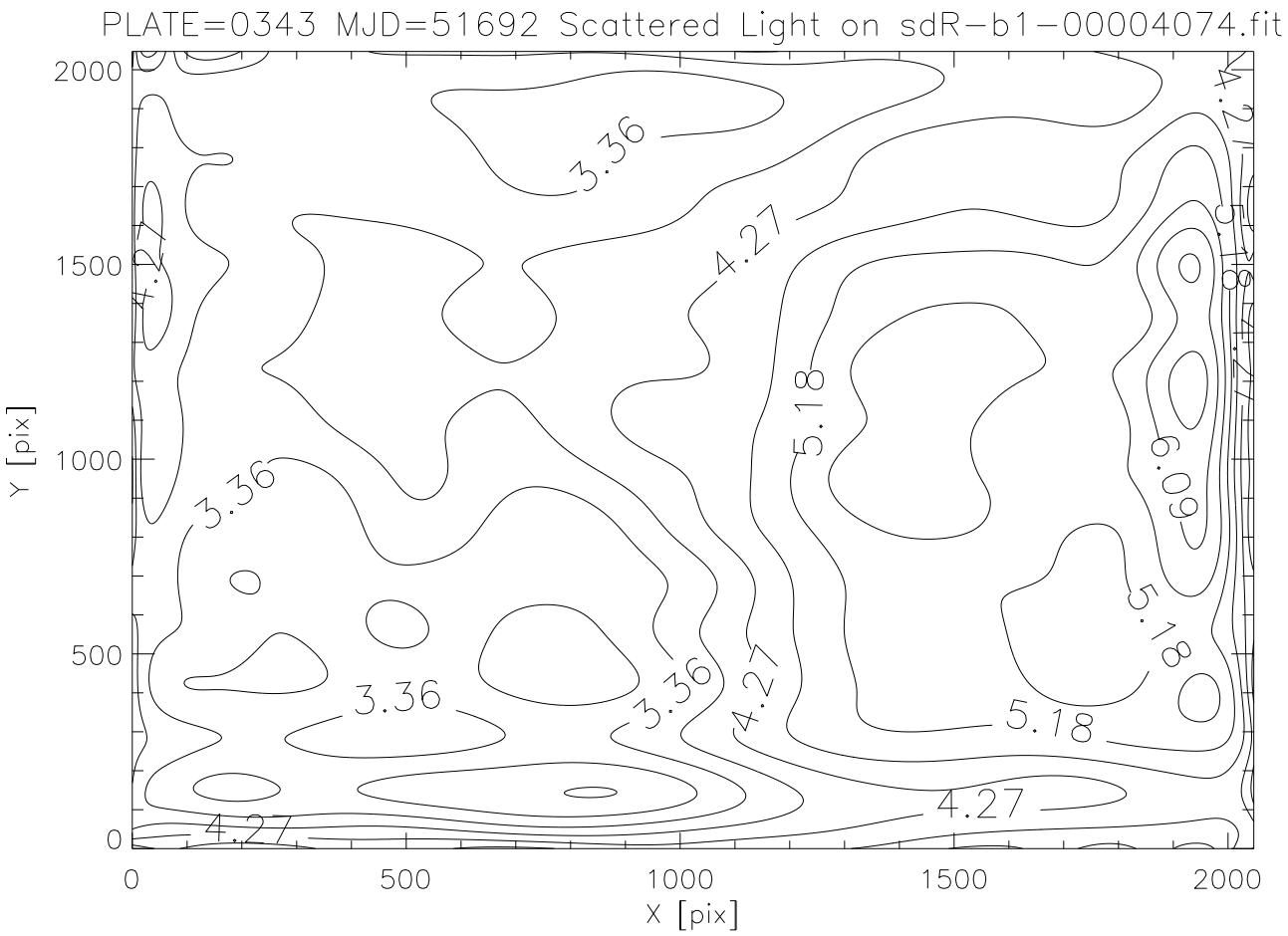

PLATE=0343 MJD=51692 sdR-b1-00004073.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 24.38 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

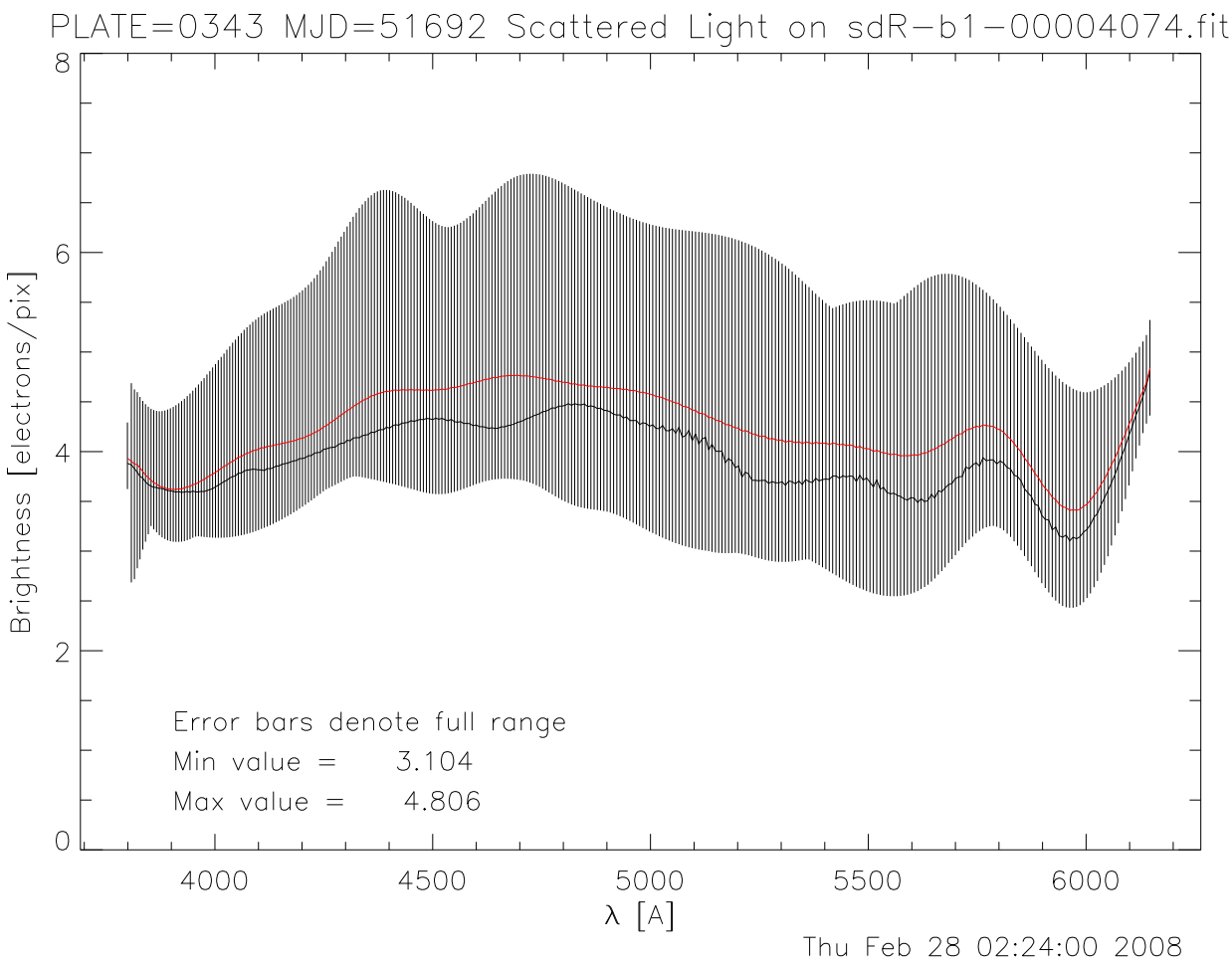

PLATE=0343 MJD=51692 sdR-b1-00004073.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
Focal Distance [mm]
Airmass
Dispersion = 1.17 %

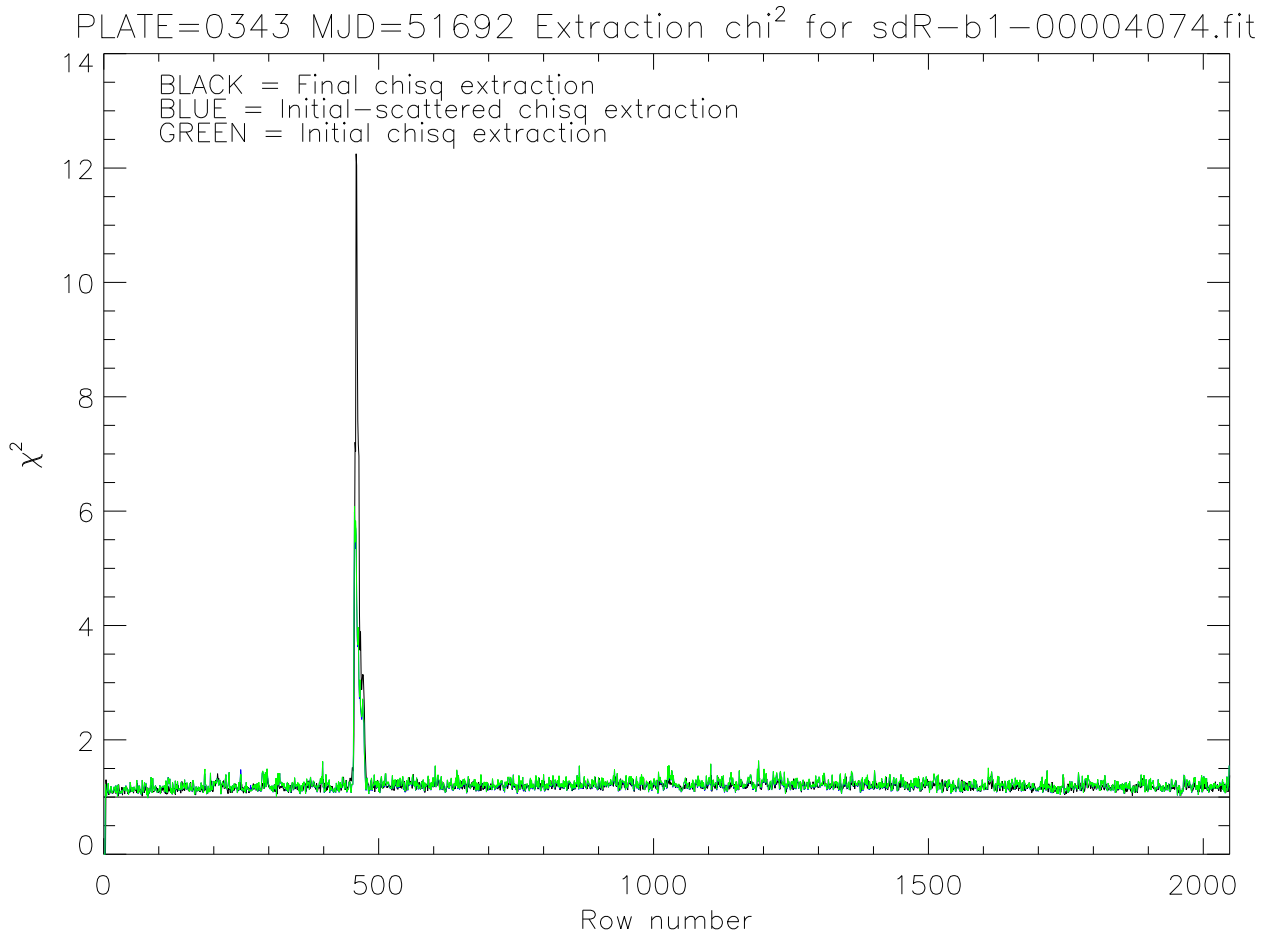

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:19:35 2008

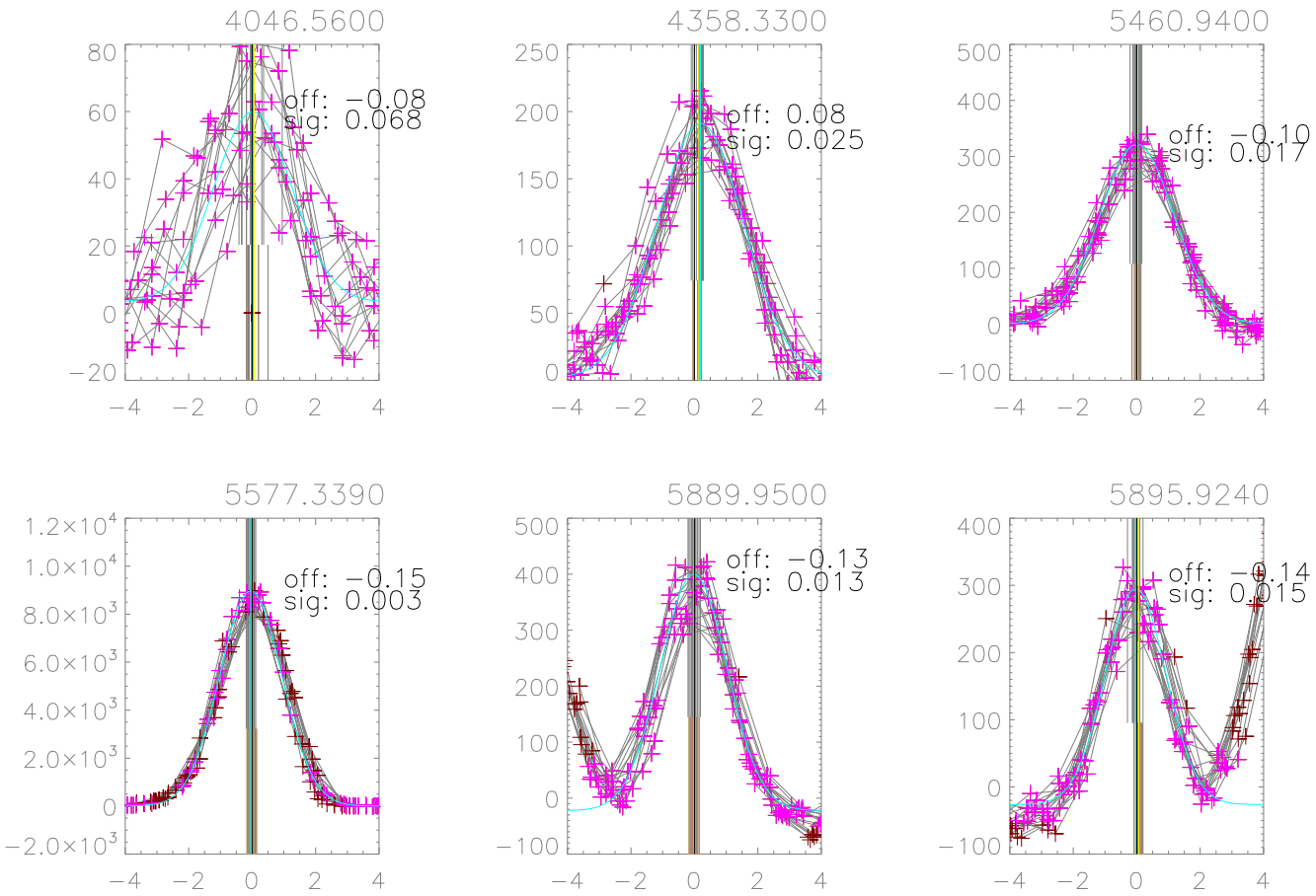

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004074.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.64
7.09
5.64
7.09
5.64
5.64
5.64
5.64
5.64
7.09
7.09
5.64
5.64
5.64

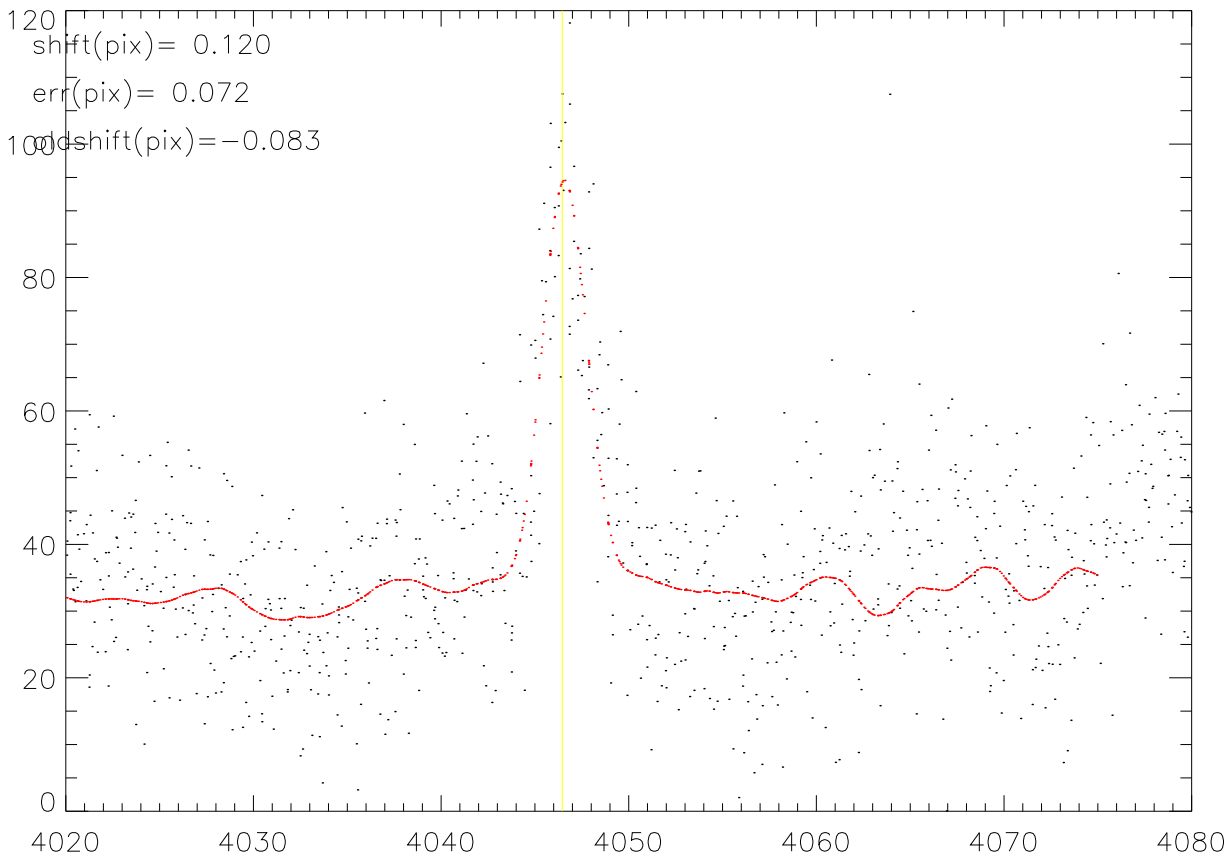

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b1-00004074.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.772
Max value = 7.486
Thu Feb 28 02:20:32 2008

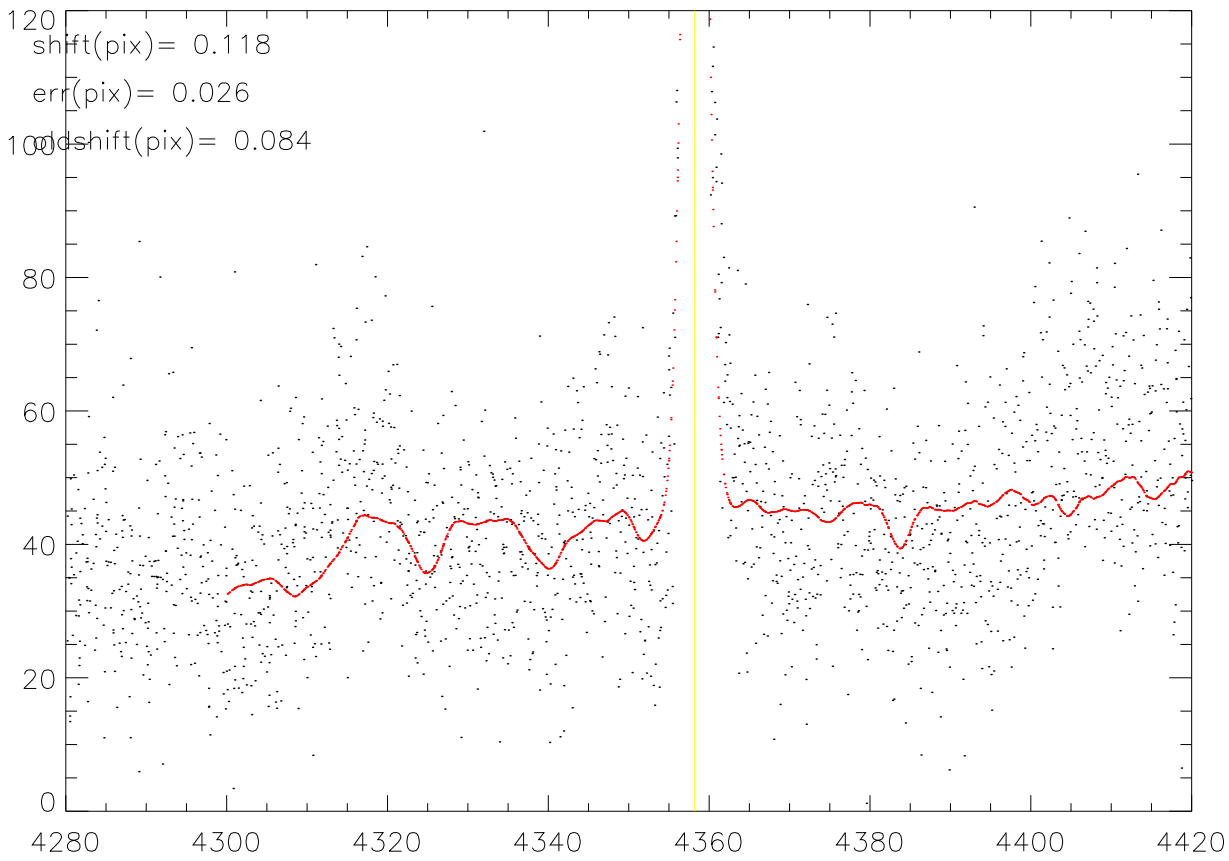

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004074.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18
6.09

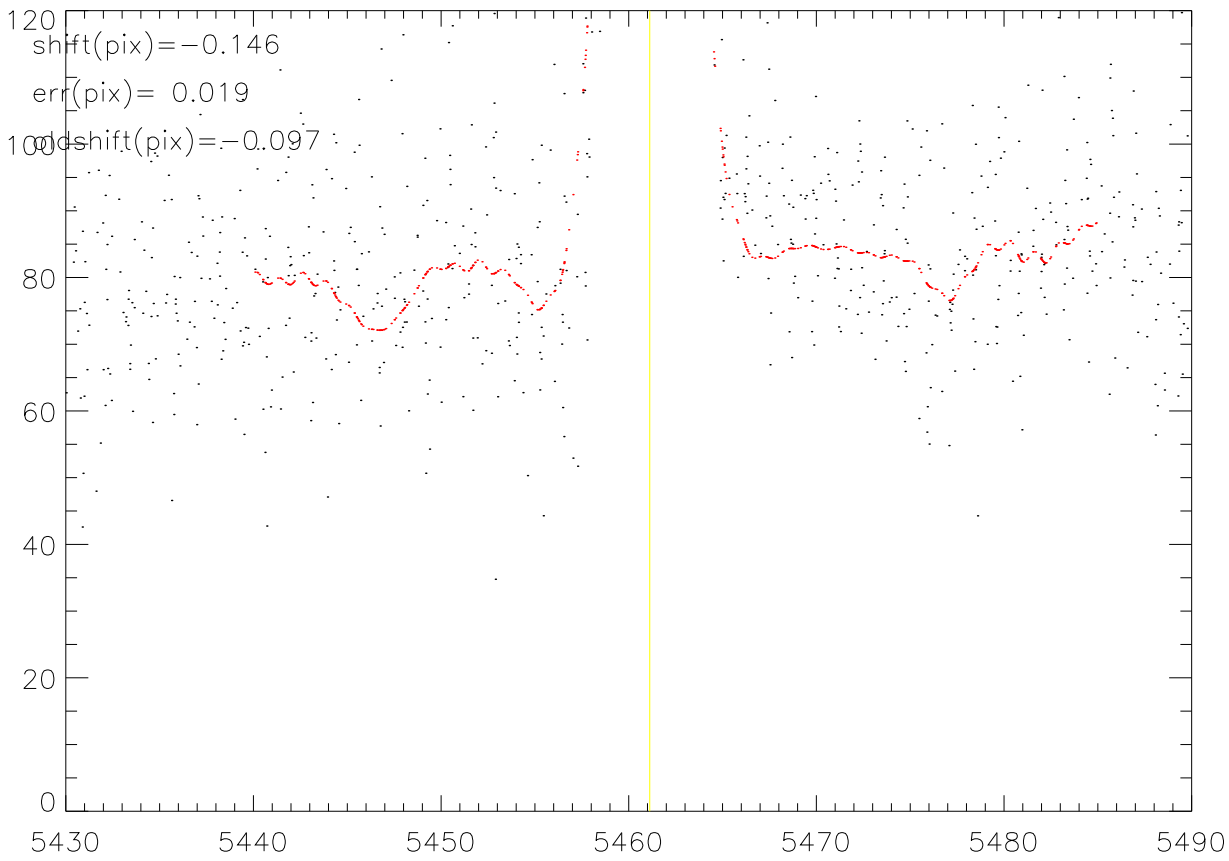

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004074.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.104
Max value = 4.806
Thu Feb 28 02:24:00 2008

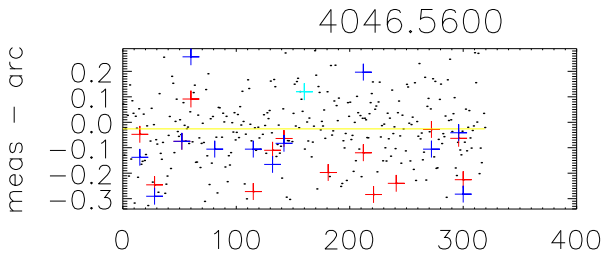

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004074.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

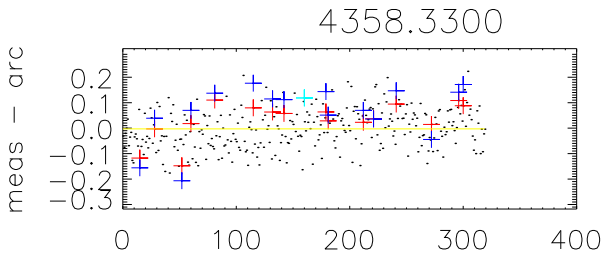

4046.5600
off: −0.08
sig: 0.068
4358.3300
off: 0.08
sig: 0.025
5460.9400
off: −0.10
sig: 0.017
5577.3390
off: −0.15
sig: 0.003
5889.9500
off: −0.13
sig: 0.013
5895.9240
off: −0.14
sig: 0.015

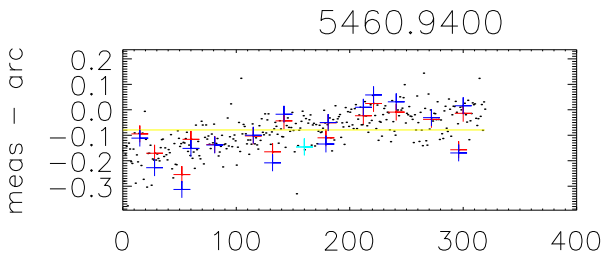

shift(pix)= 0.120
err(pix)= 0.072
oldshift(pix)=−0.083
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

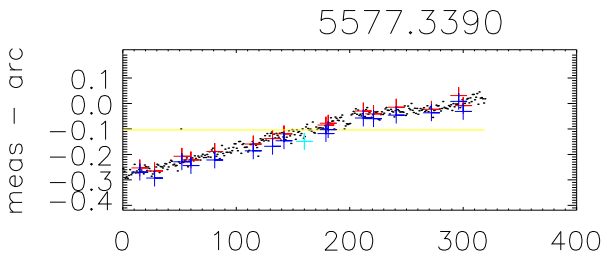

shift(pix)= 0.118
err(pix)= 0.026
oldshift(pix)= 0.084
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

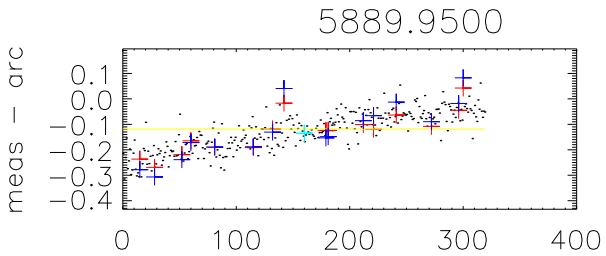

shift(pix)=−0.146
err(pix)= 0.019
oldshift(pix)=−0.097
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

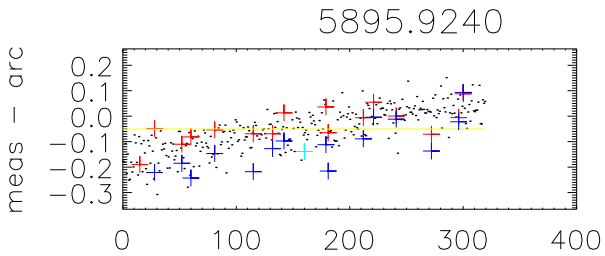

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

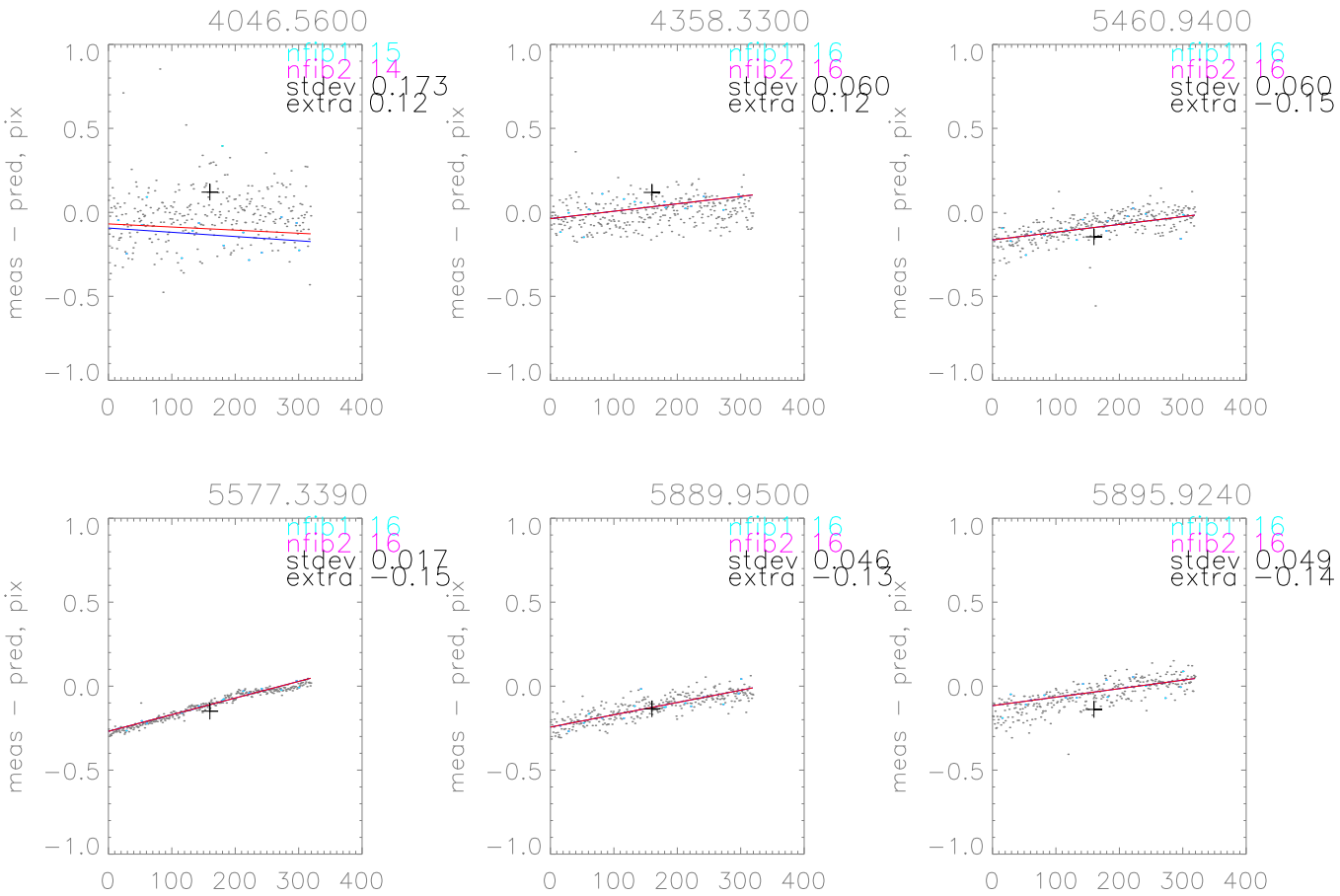

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

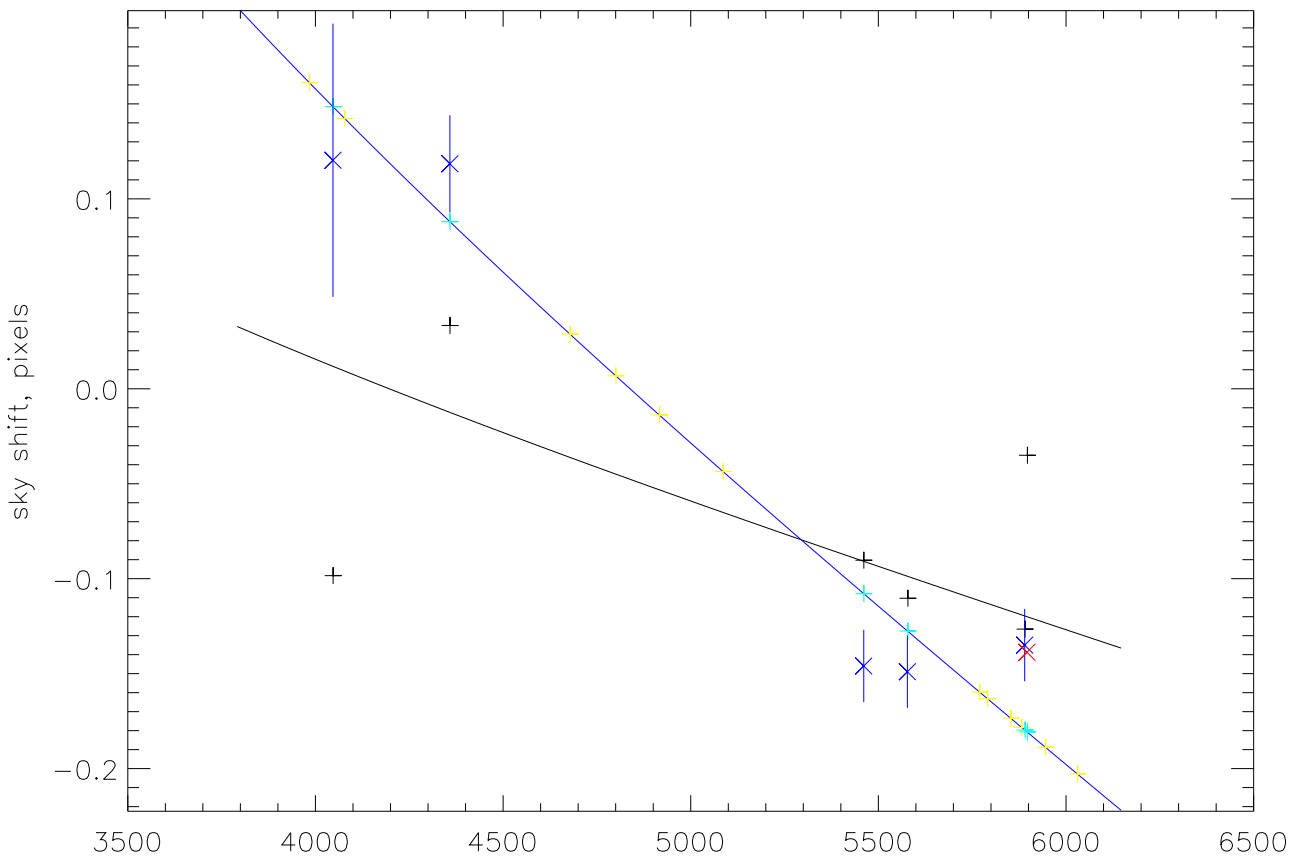

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

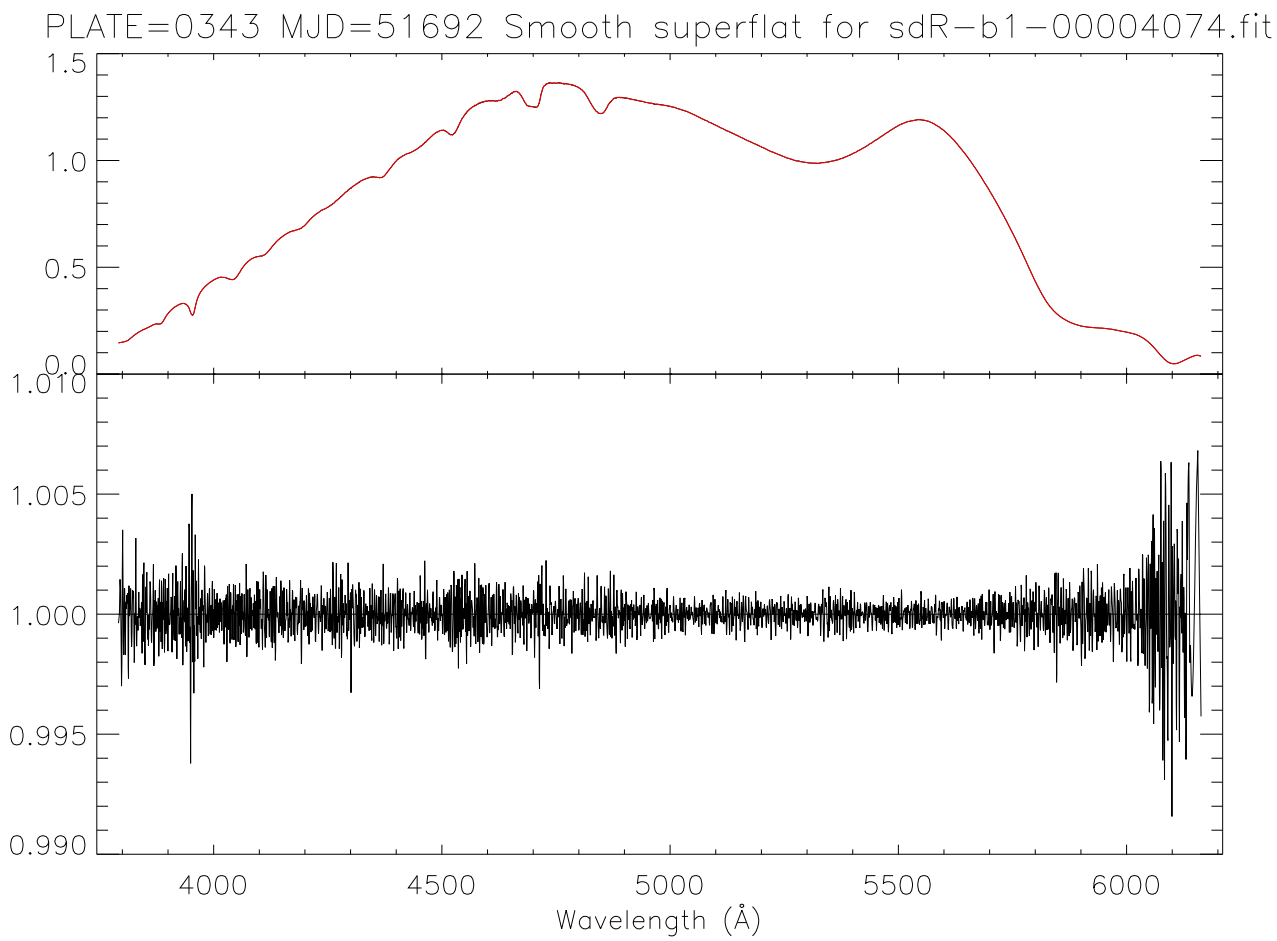

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

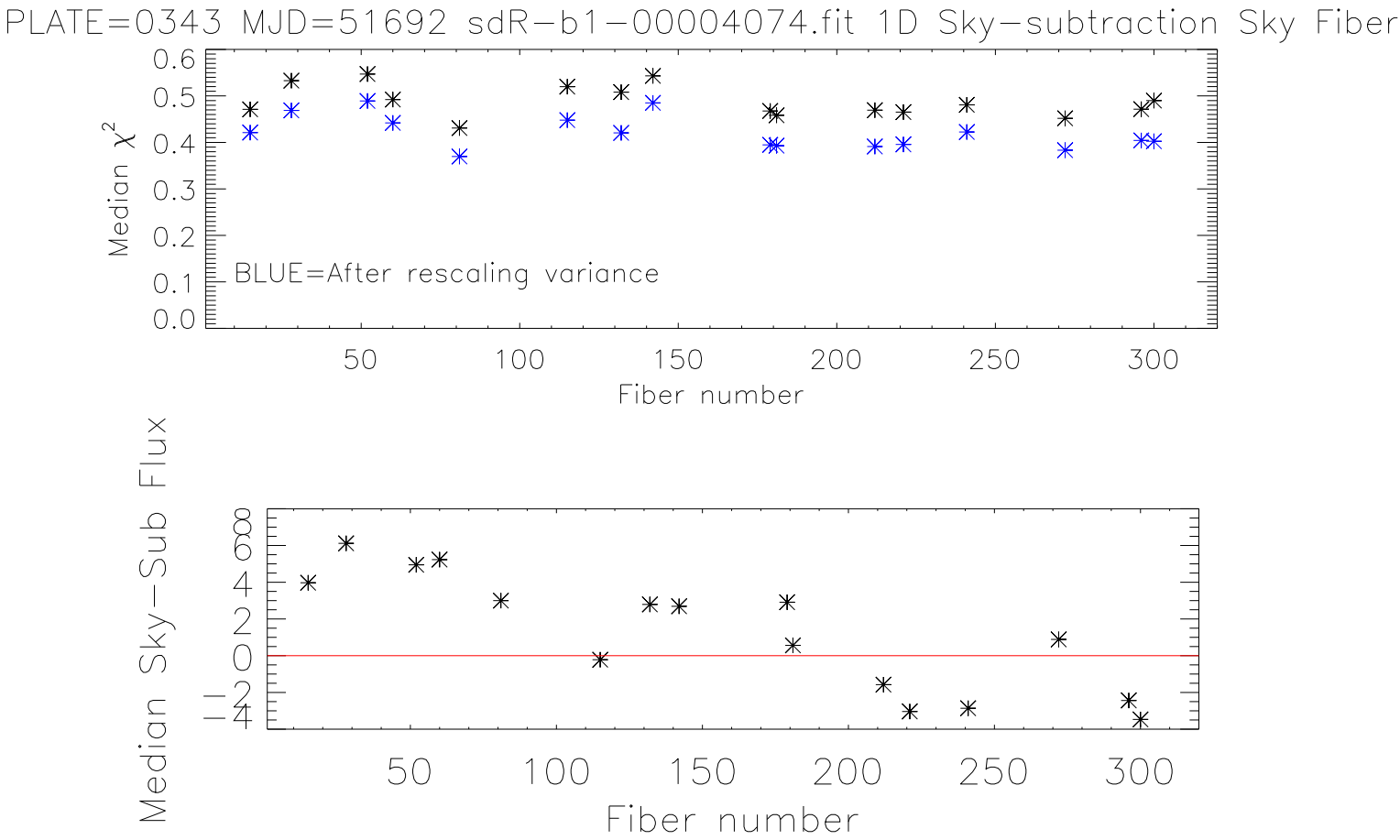

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

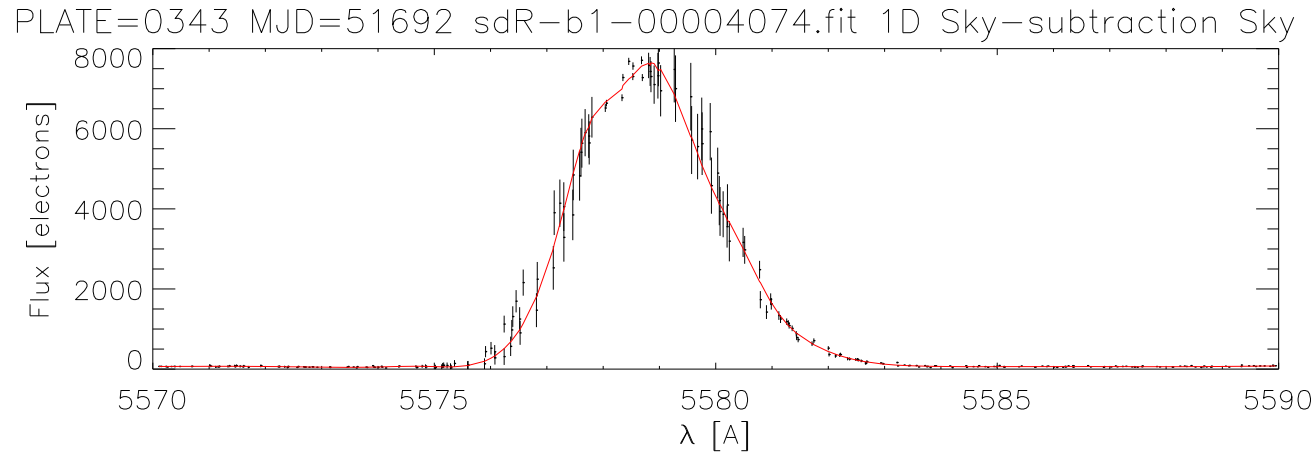

4046.5600
nfib1 15
nfib2 14
stdev 0.173
extra 0.12
4358.3300
nfib1 16
nfib2 16
stdev 0.060
extra 0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.060
extra −0.15
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra −0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.046
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

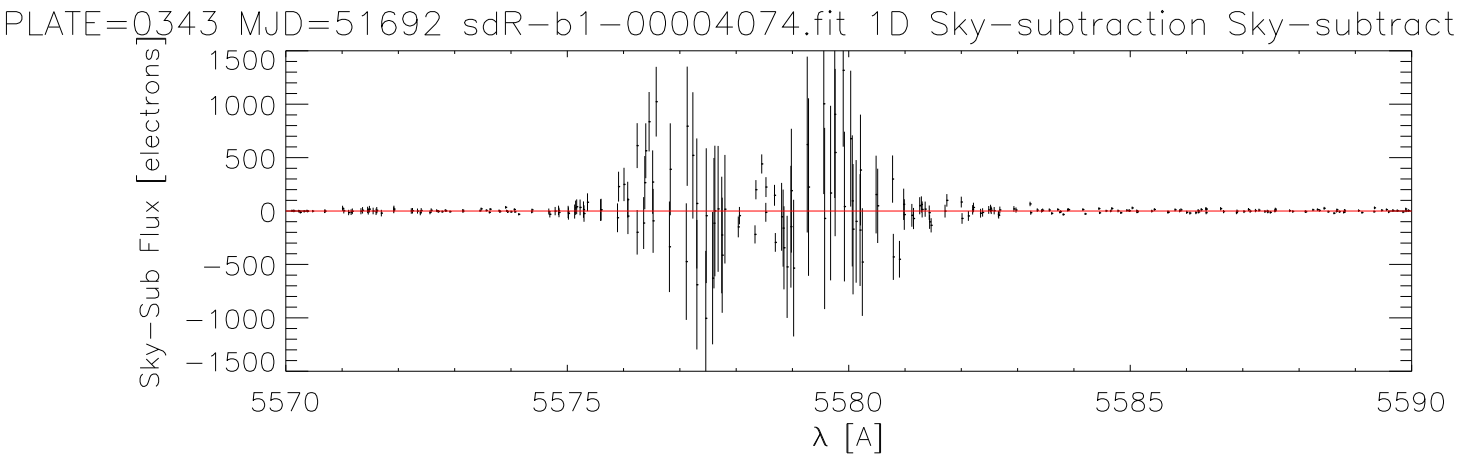

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

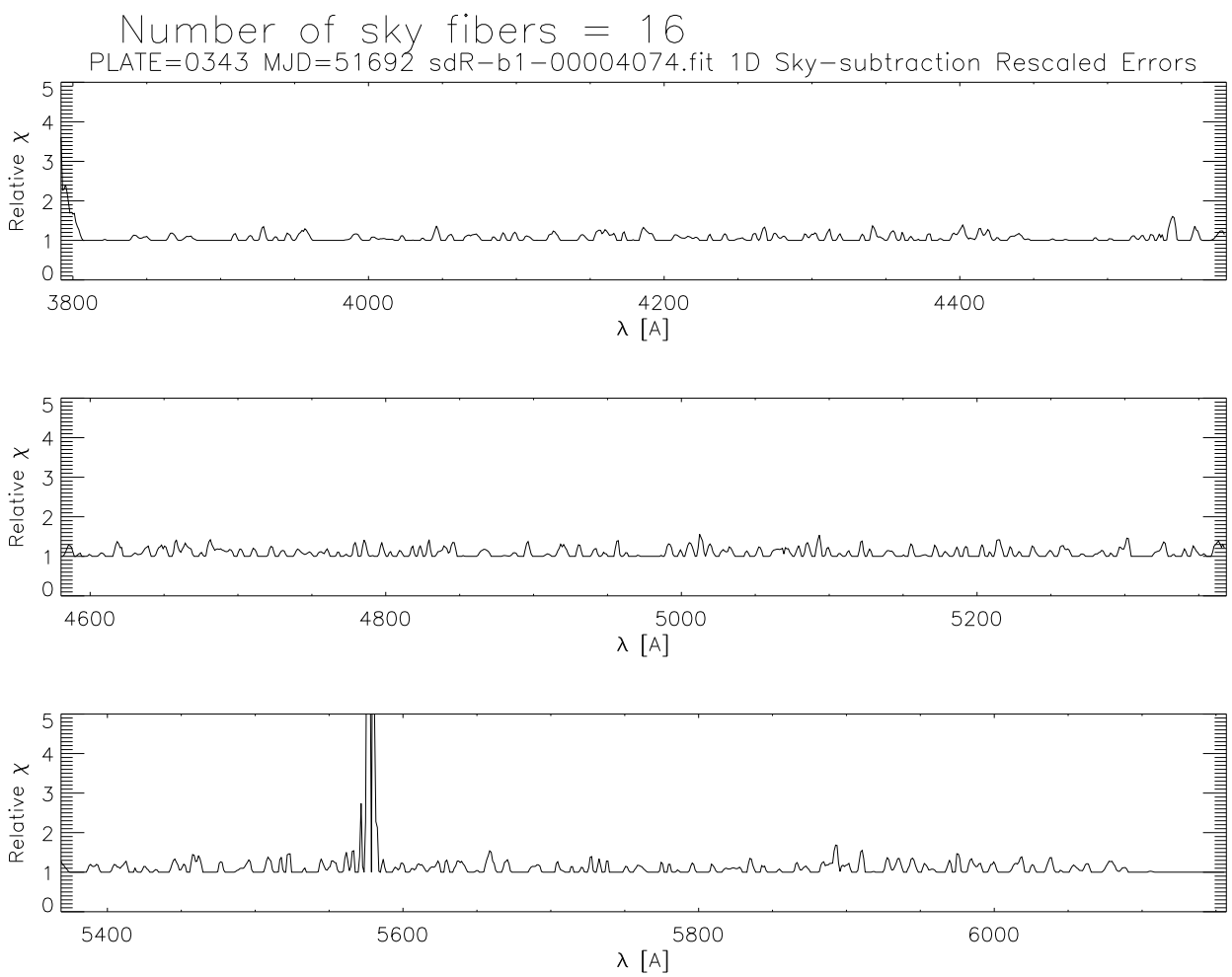
es= 0.0000

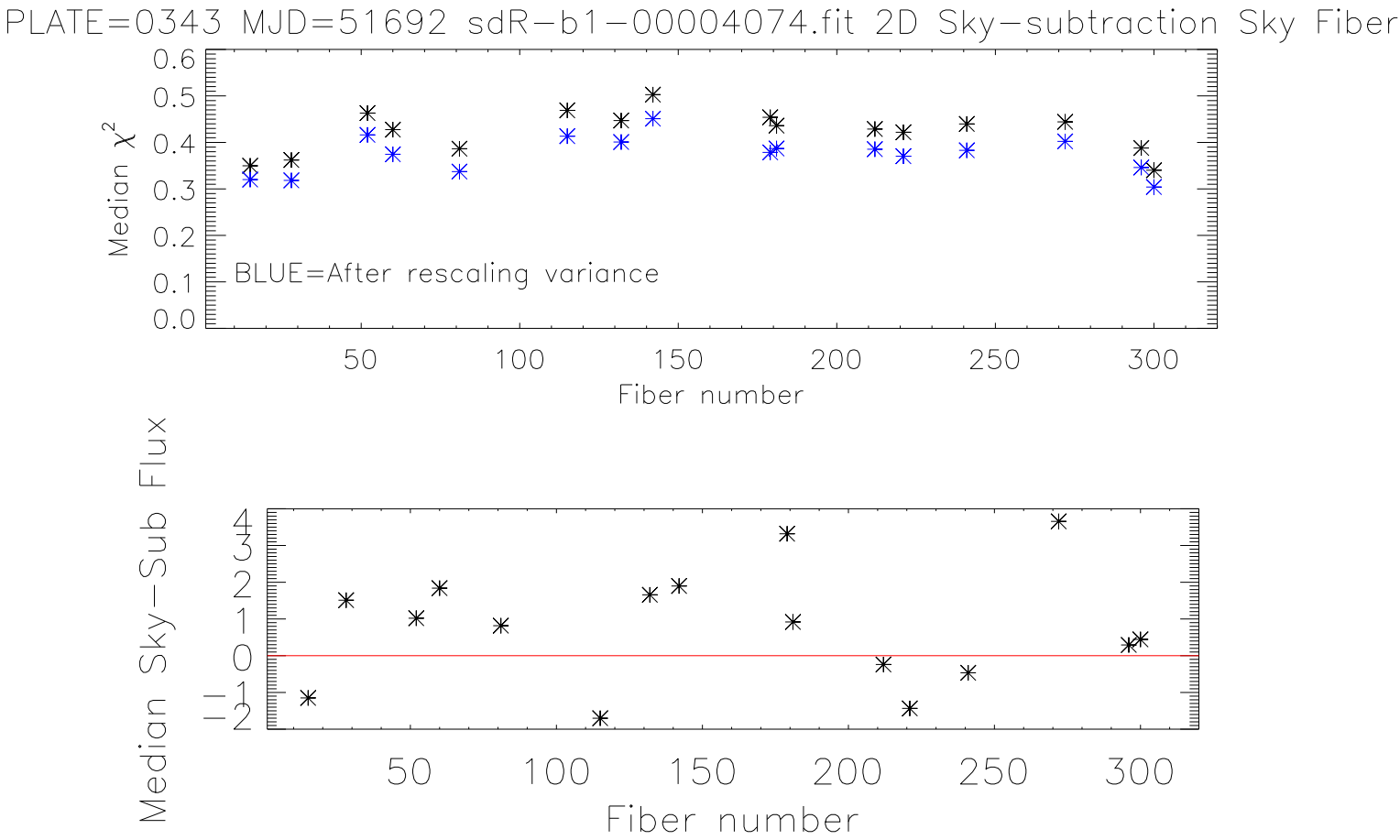

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004074.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

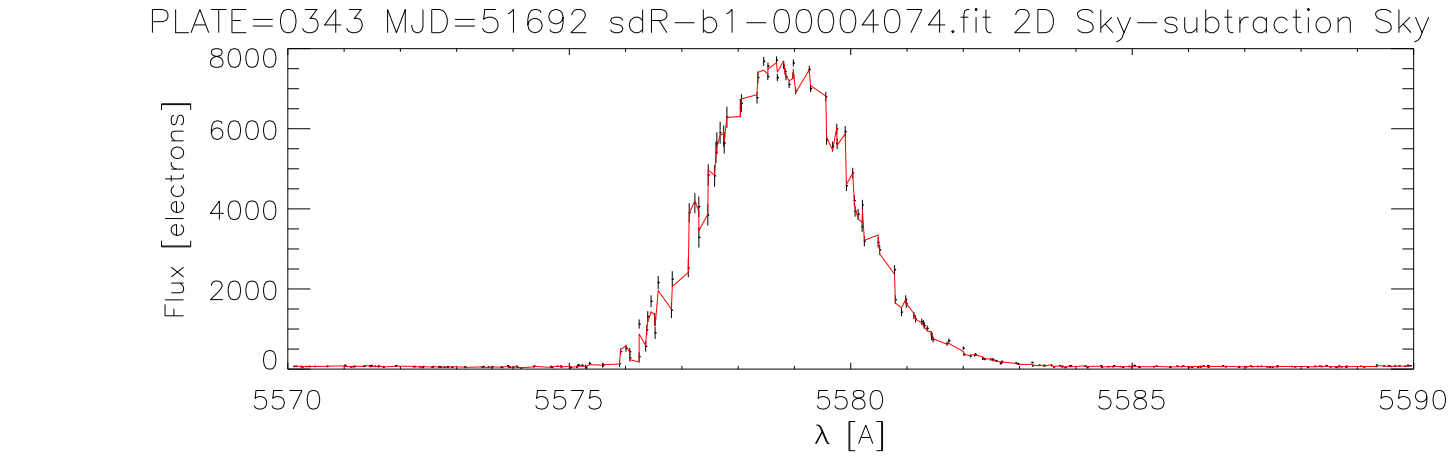

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

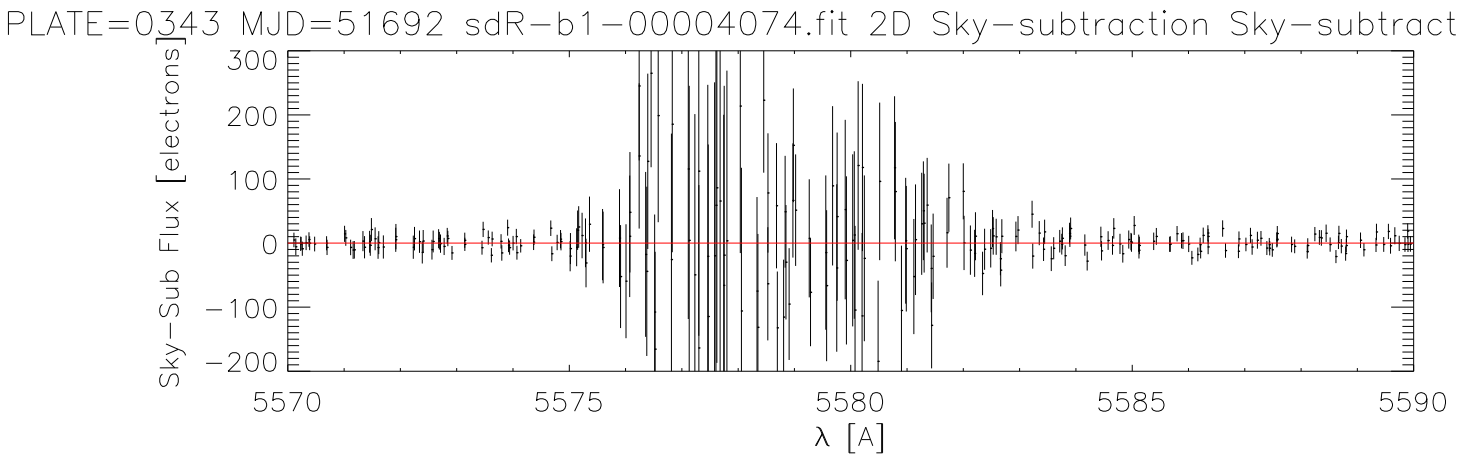

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

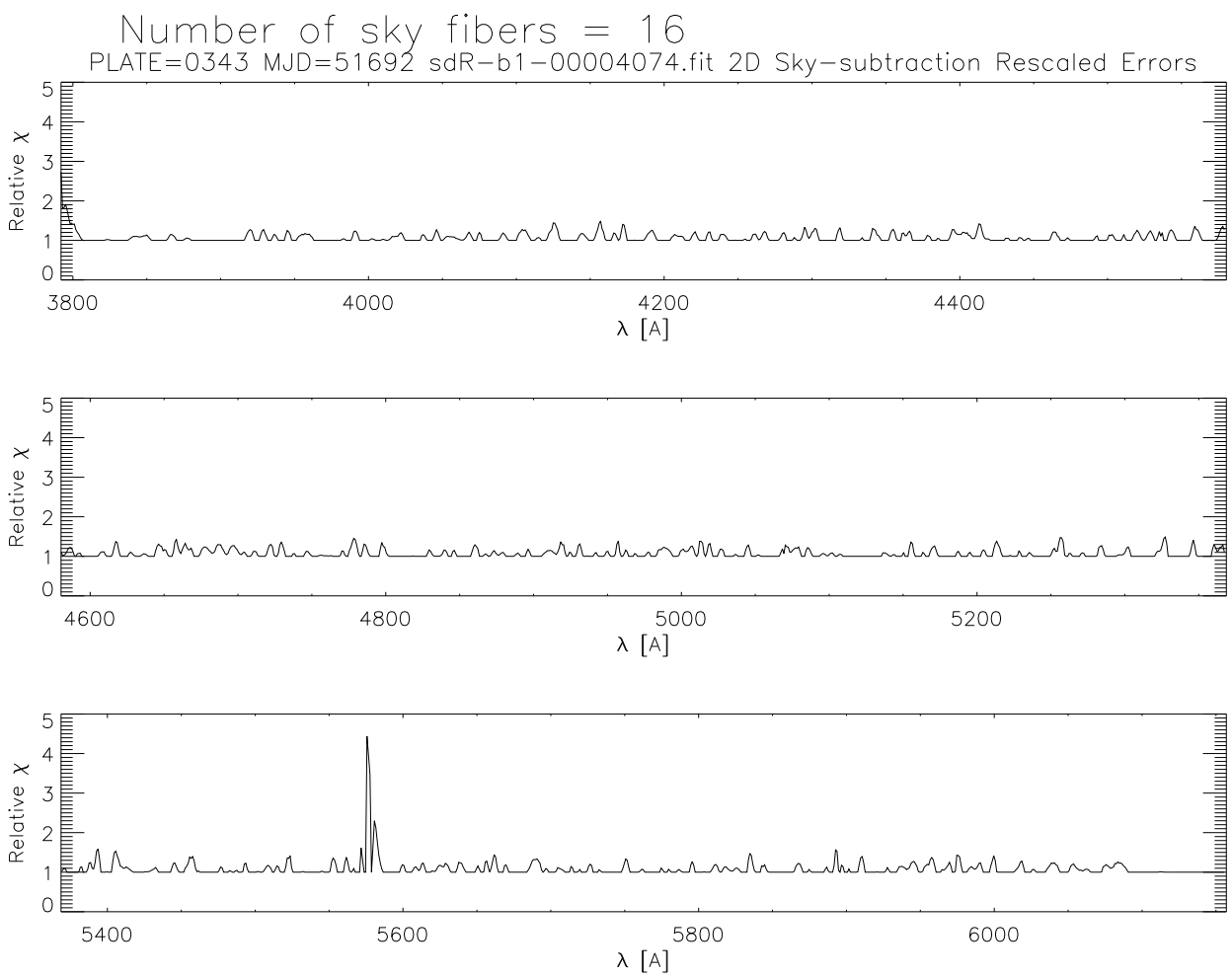

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
-1500
5570
5575
5580
5585
5590
λ [A]

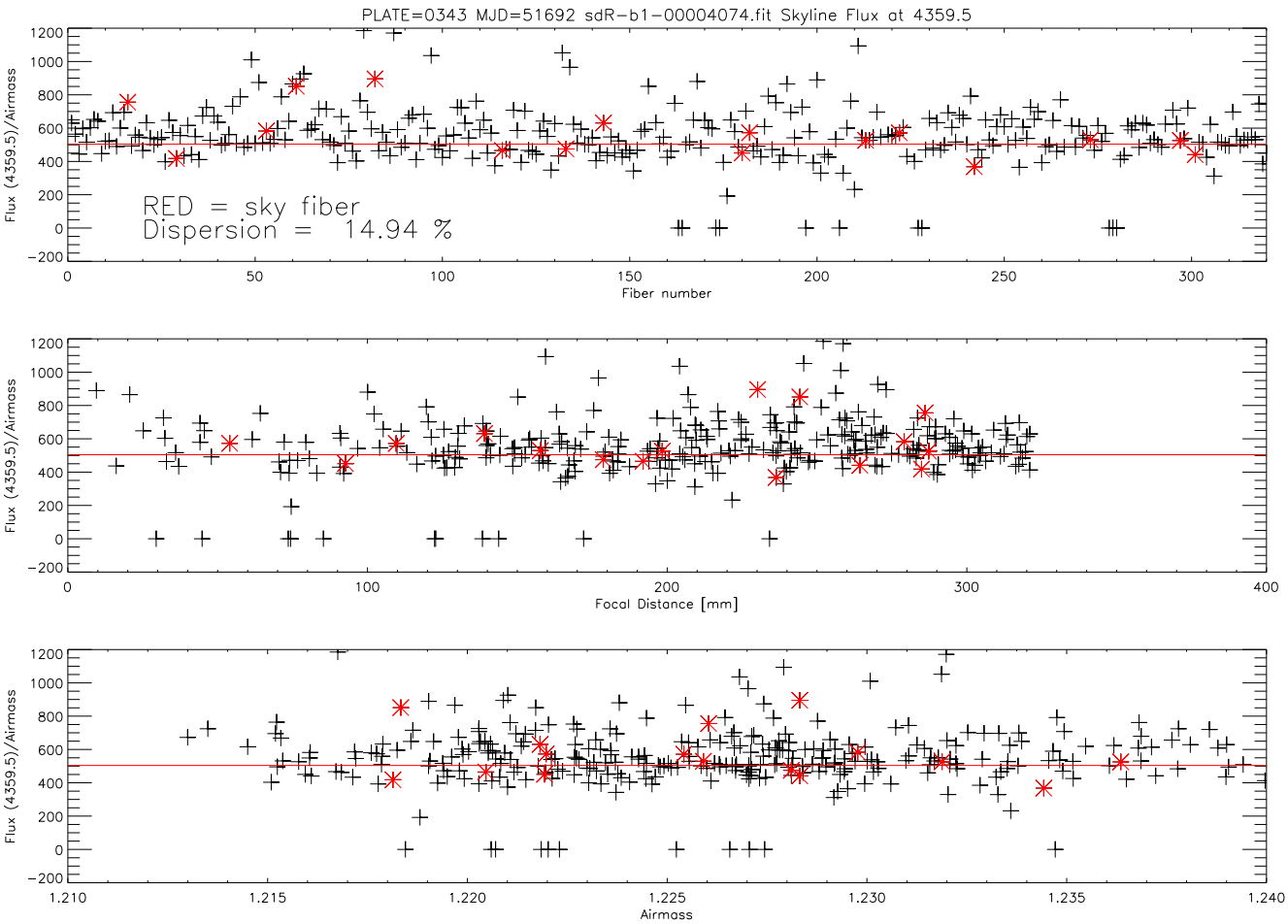

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004074.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

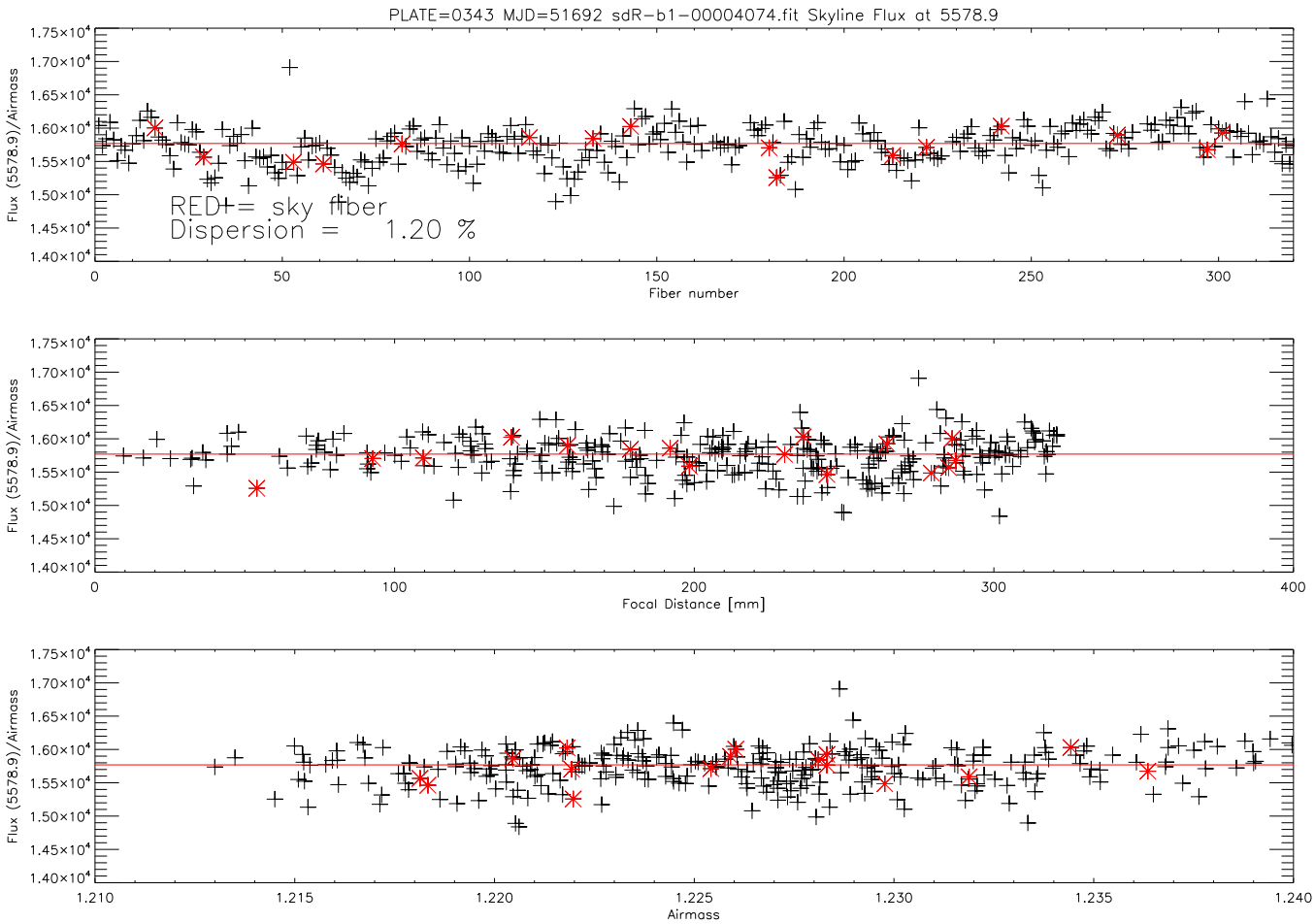

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

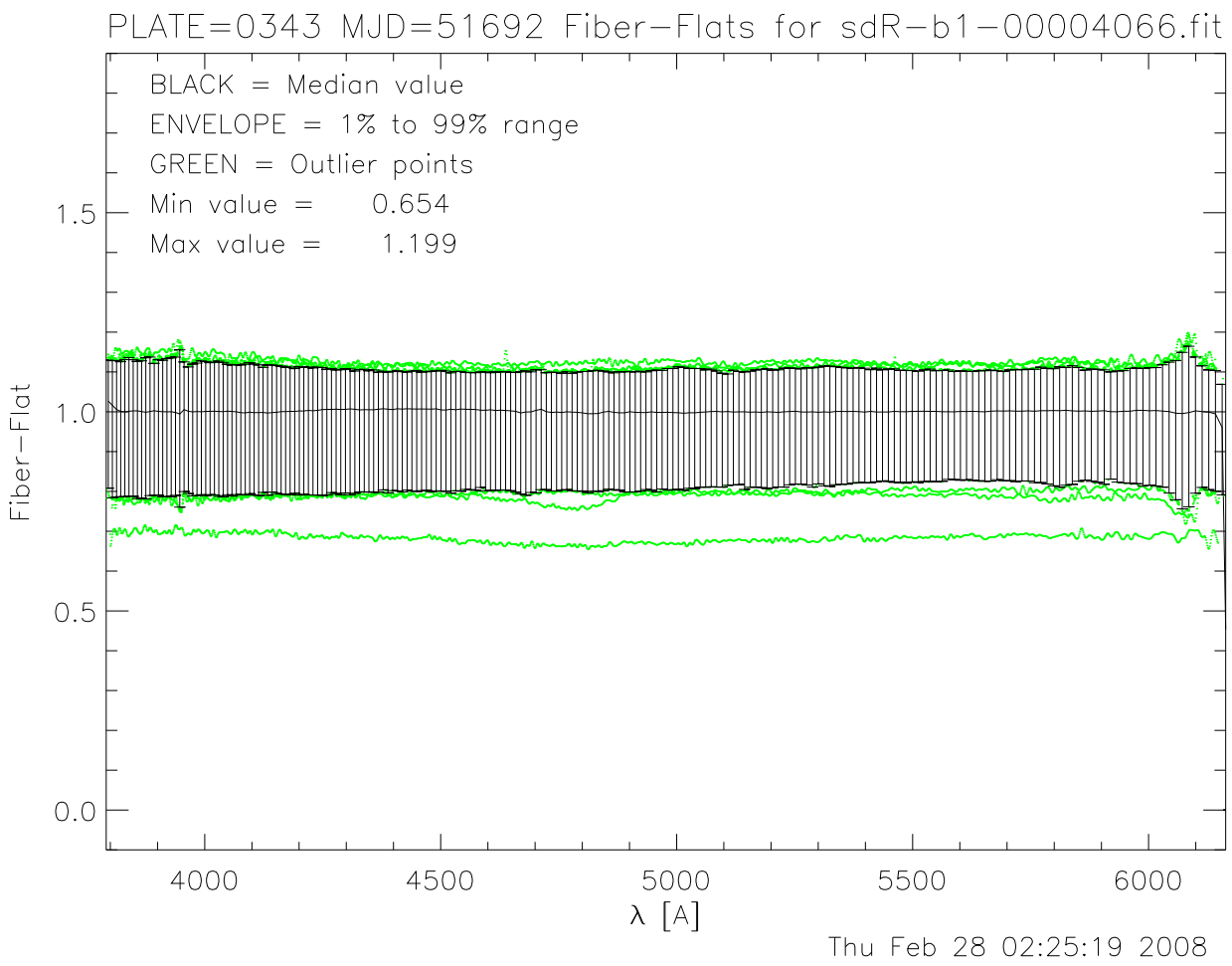

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

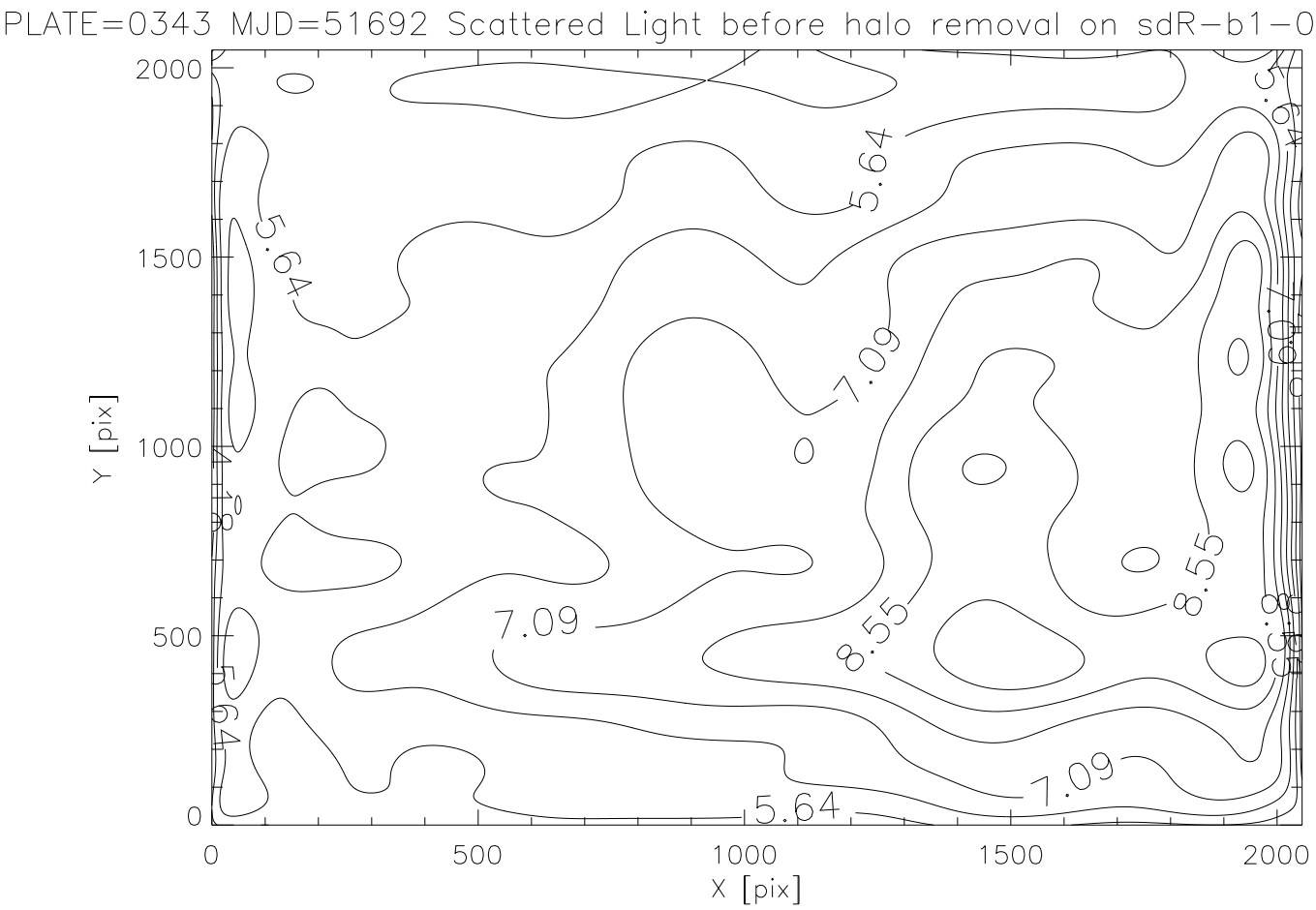

PLATE=0343 MJD=51692 sdR-b1-00004074.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

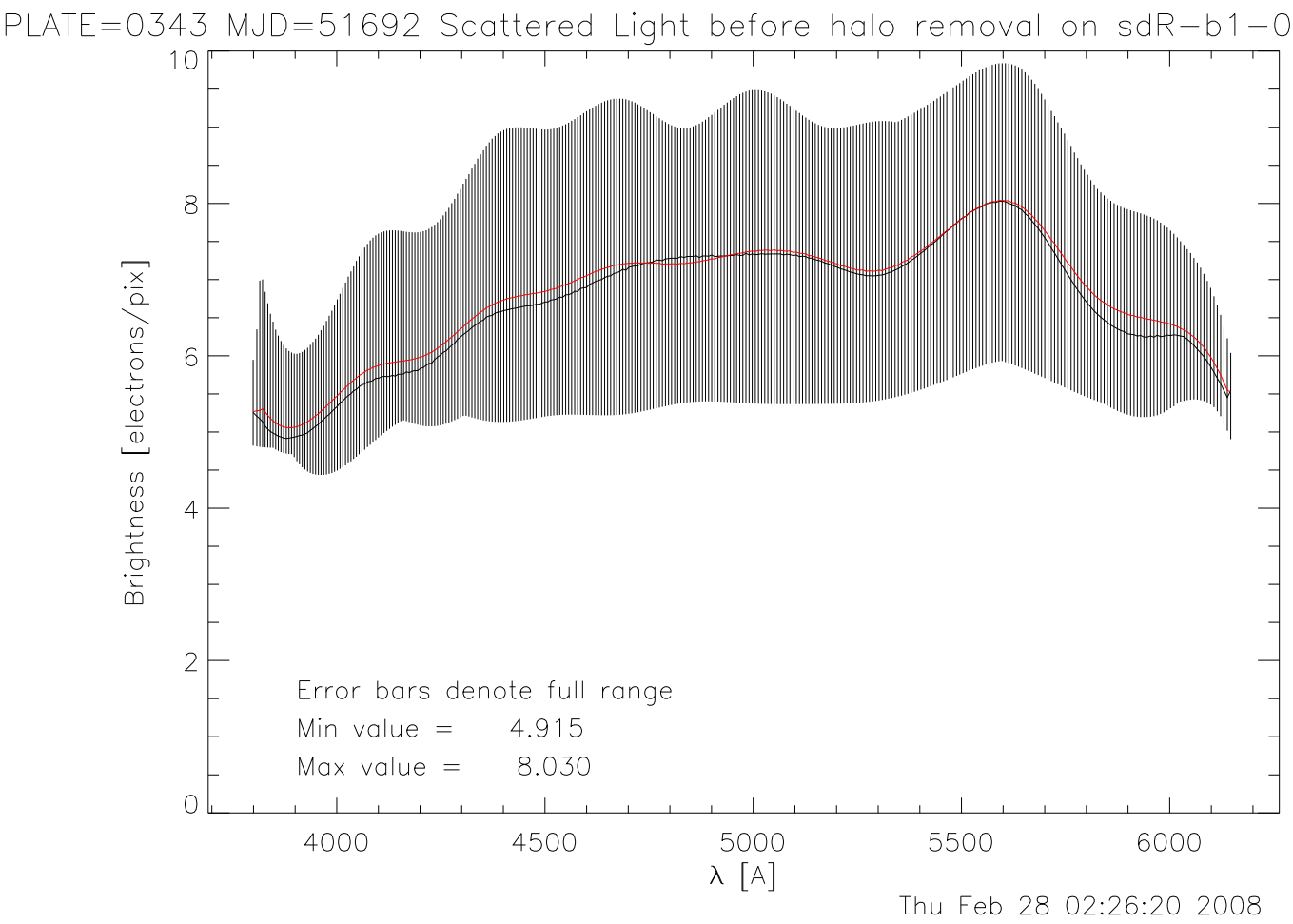

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004074.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

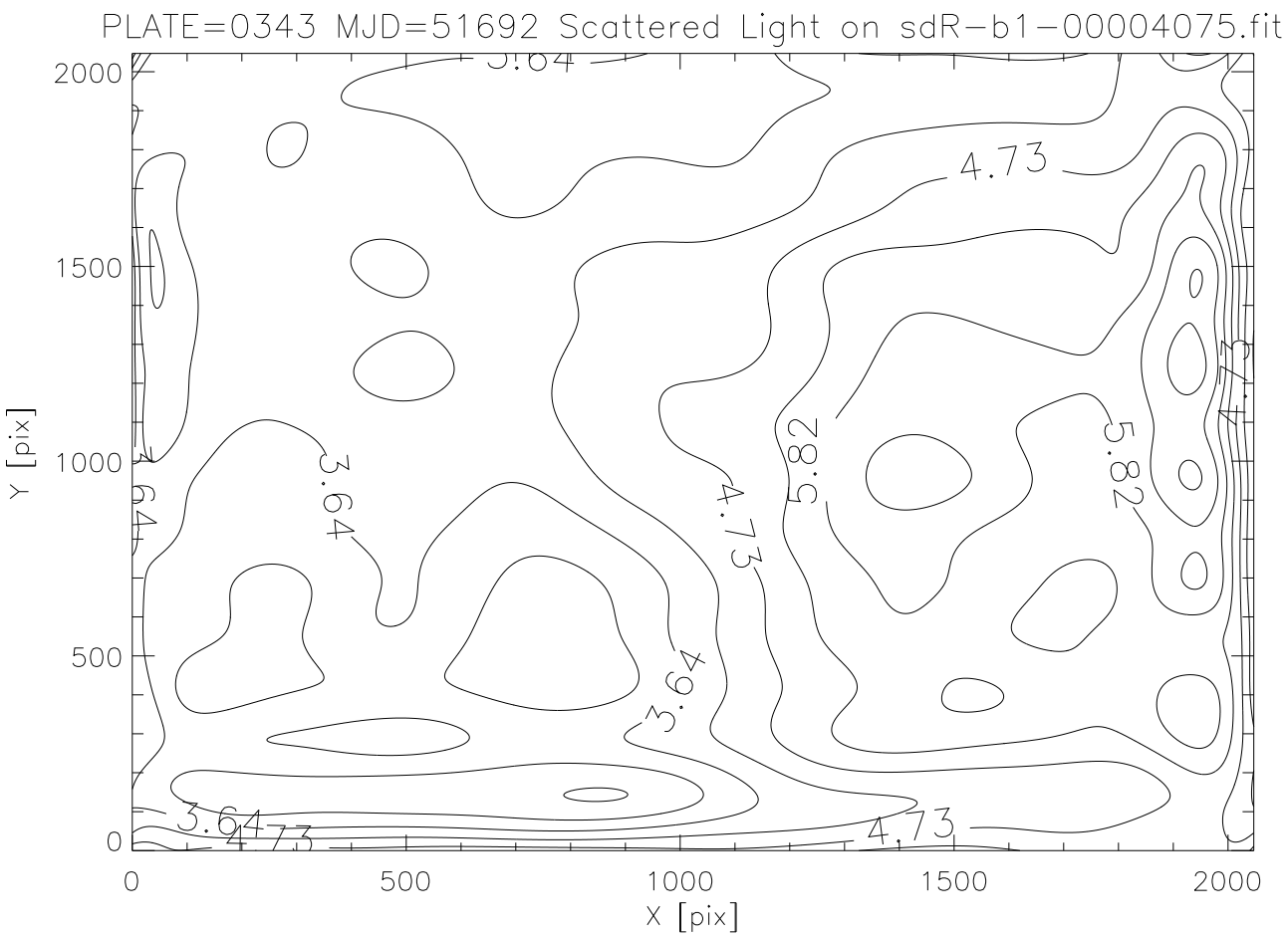

PLATE=0343 MJD=51692 sdR-b1-00004074.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.94 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

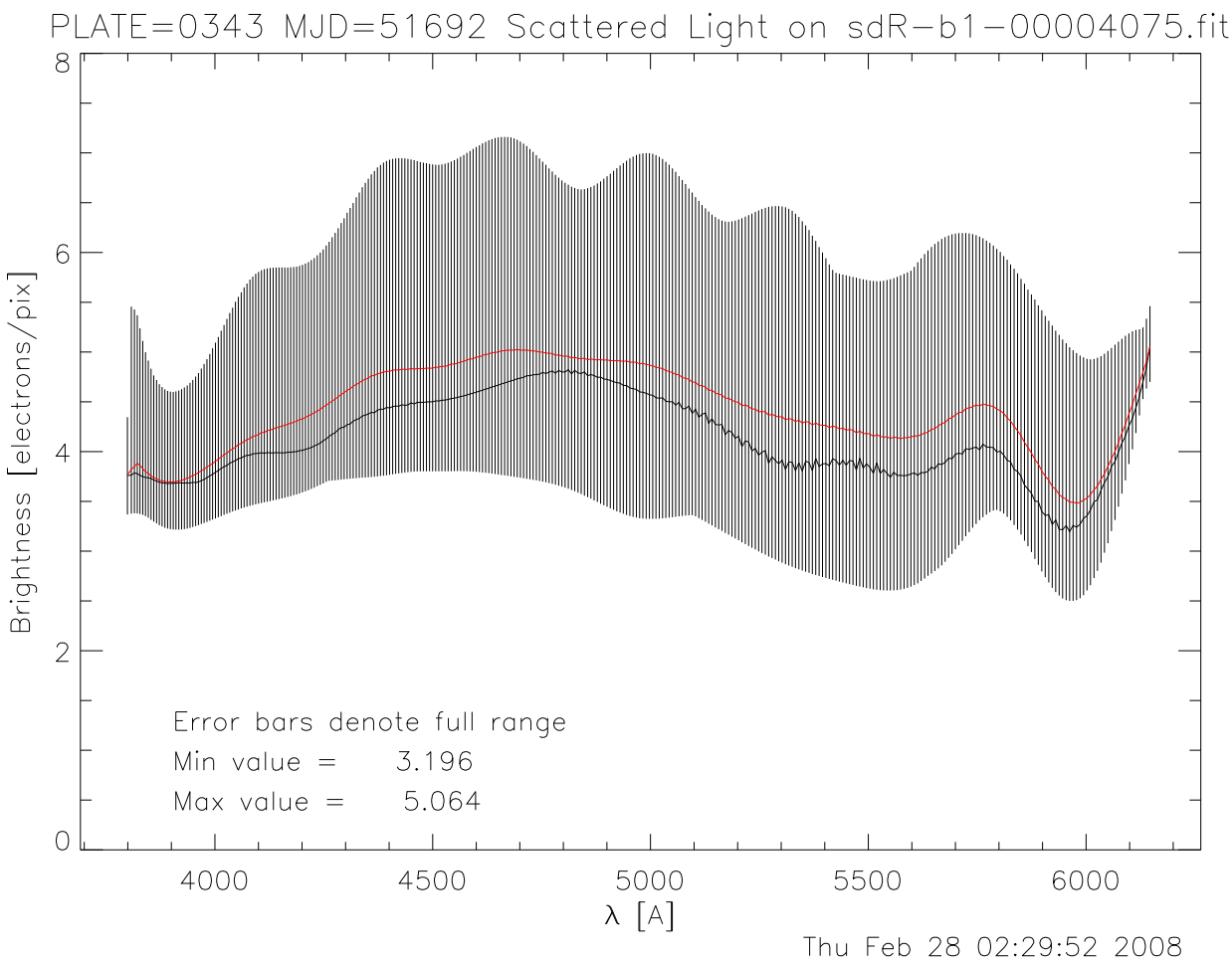

PLATE=0343 MJD=51692 sdR-b1-00004074.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 1.20 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

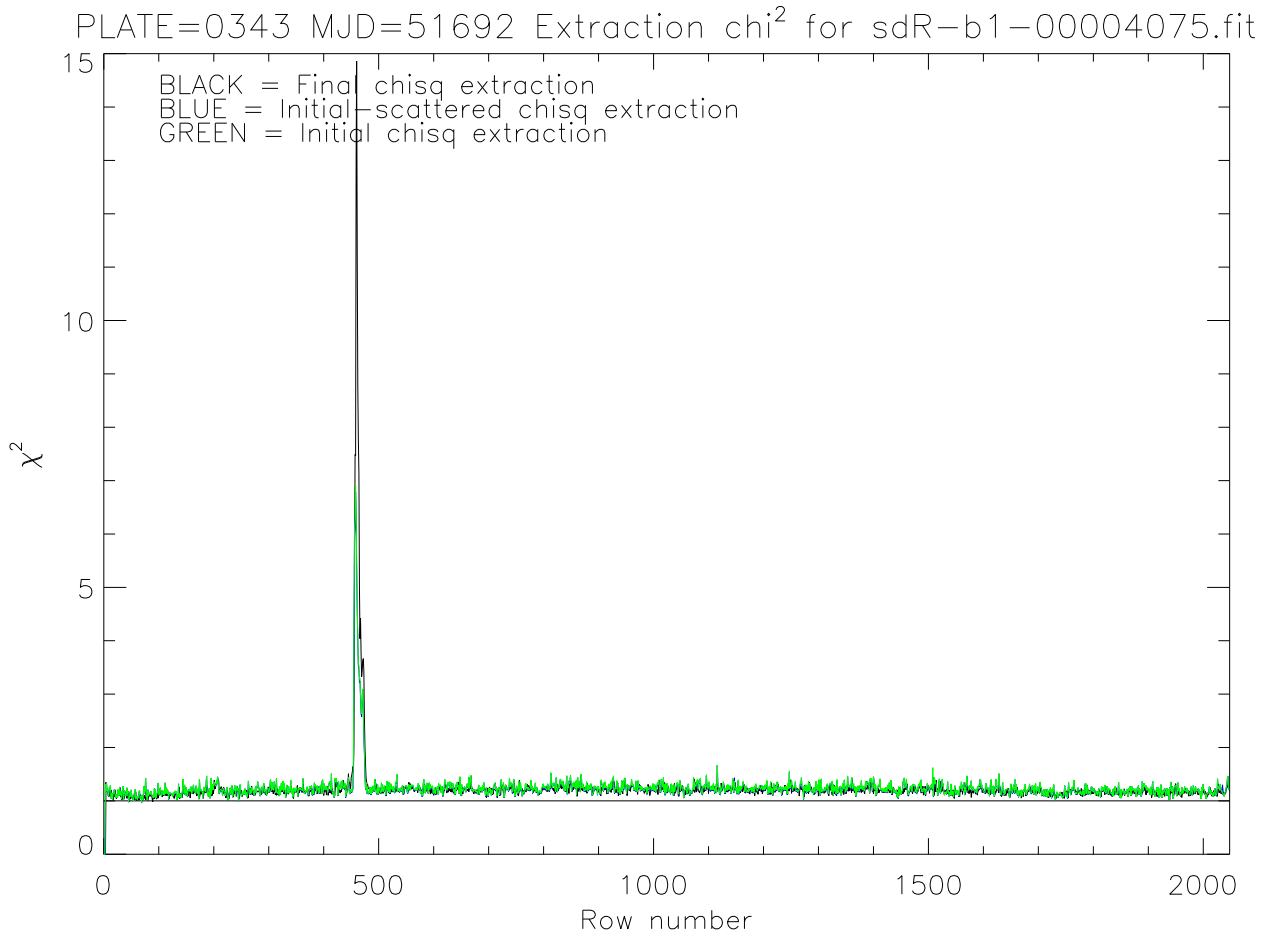

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:25:19 2008

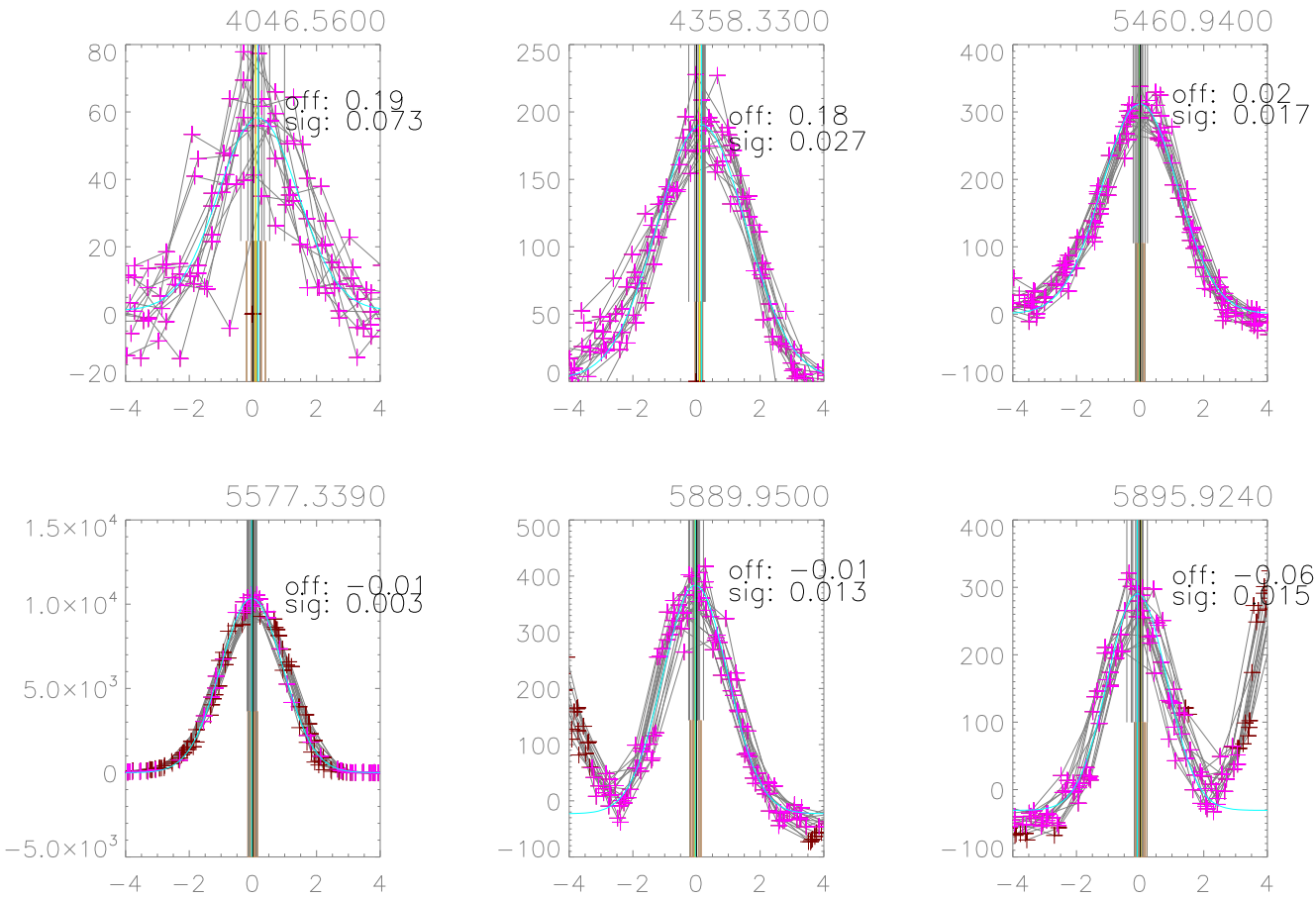

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004075.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
5.64
7.09
8.55

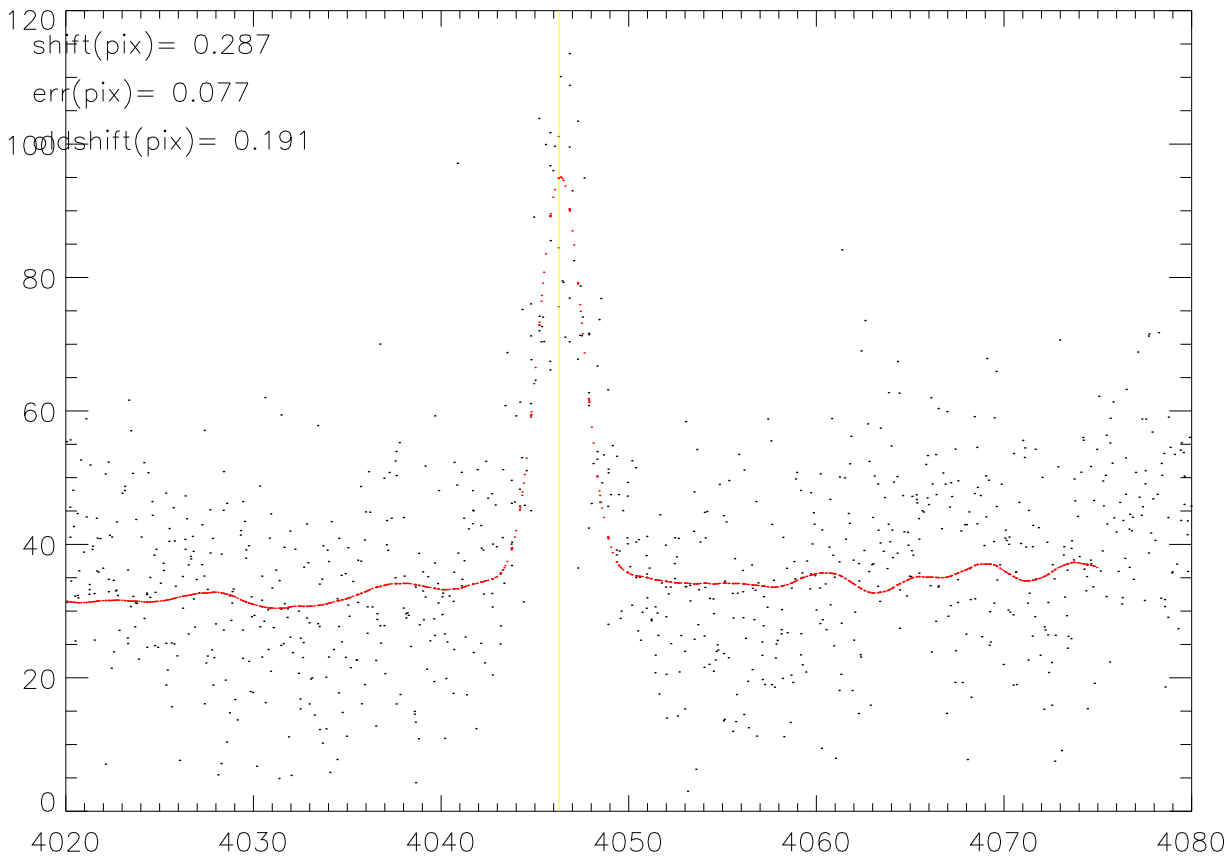

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004075.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.915
Max value = 8.030
Thu Feb 28 02:26:20 2008

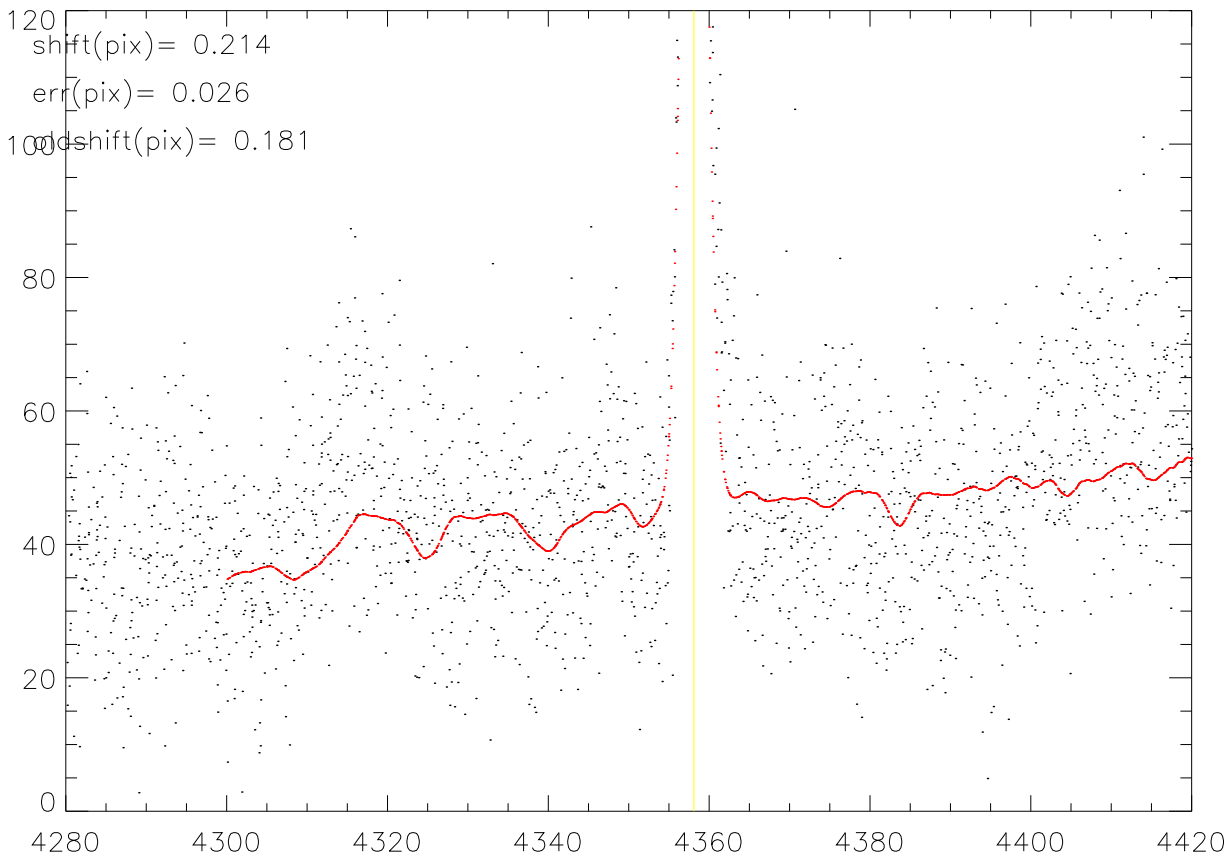

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004075.fit
3.64
4.73
5.82
4.73
3.64
3.64
4.73
4.73
Y [pix]
X [pix]
0
500
1000
1500
2000

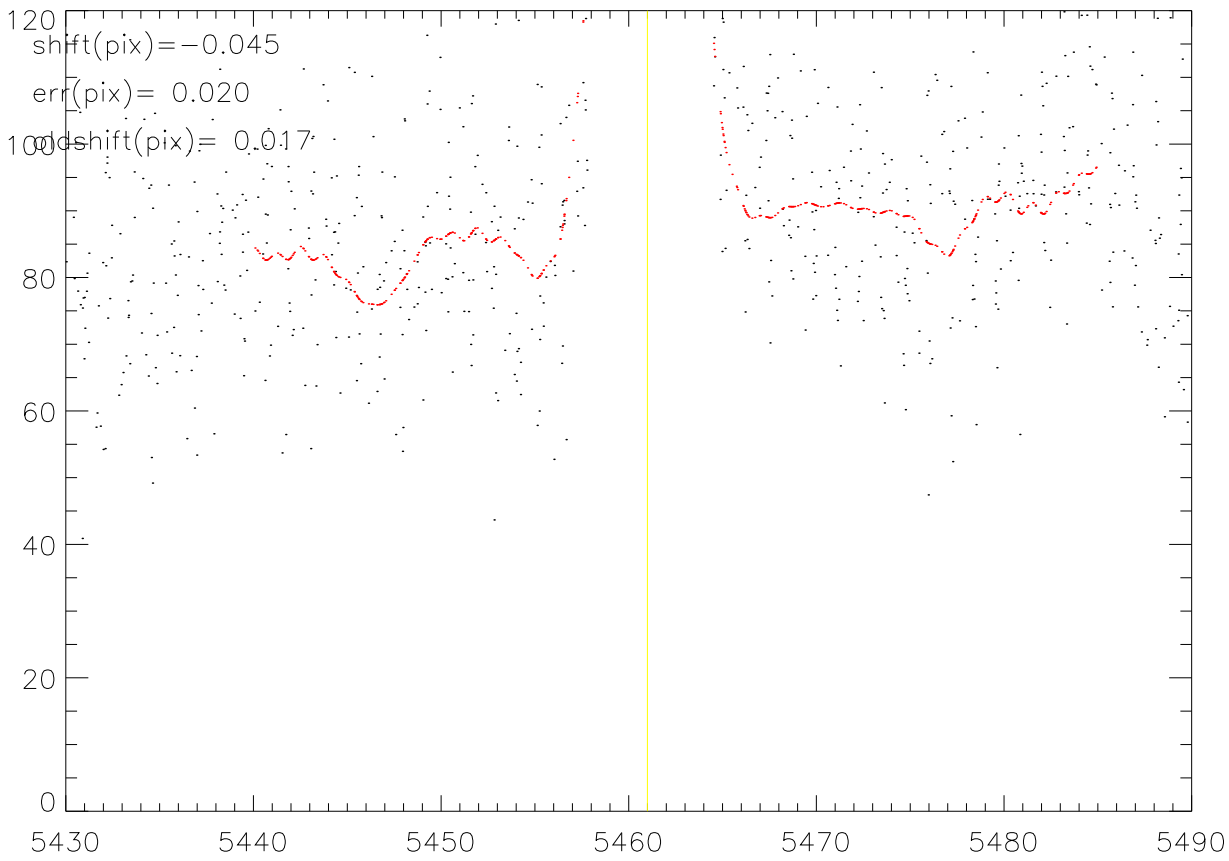

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004075.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.196
Max value = 5.064
Thu Feb 28 02:29:52 2008

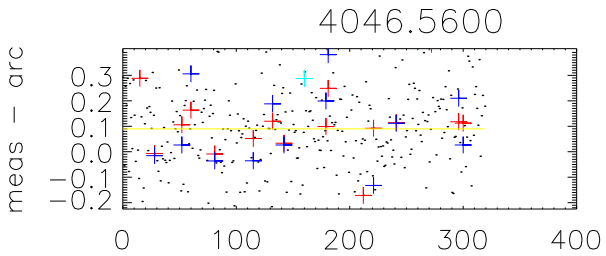

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b1-00004075.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

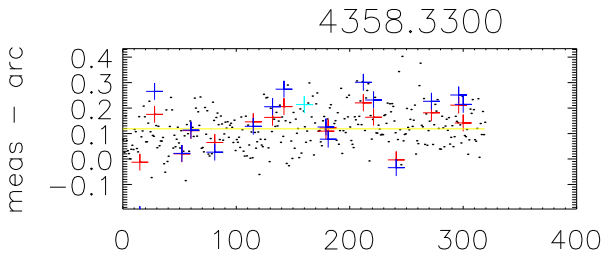

4046.5600
off: 0.19
sig: 0.073
4358.3300
off: 0.18
sig: 0.027
5460.9400
off: 0.02
sig: 0.017
5577.3390
off: −0.01
sig: 0.003
5889.9500
off: −0.01
sig: 0.013
5895.9240
off: −0.06
sig: 0.015

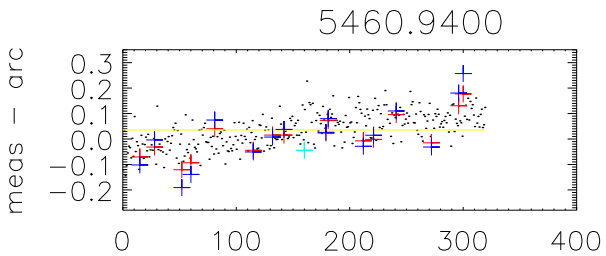

shift(pix)= 0.287
err(pix)= 0.077
oldshift(pix)= 0.191
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

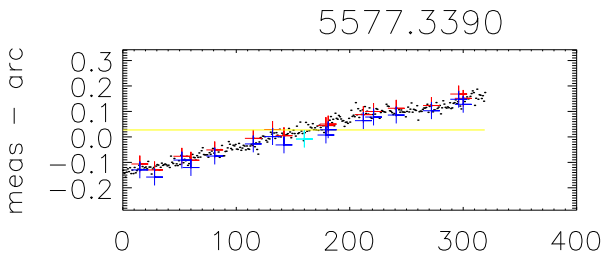

shift(pix)= 0.214
err(pix)= 0.026
oldshift(pix)= 0.181
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

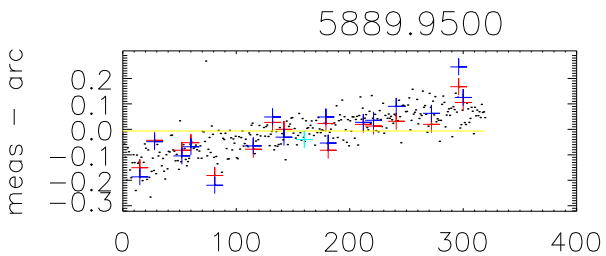

shift(pix)=−0.045
err(pix)= 0.020
oldshift(pix)= 0.017
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

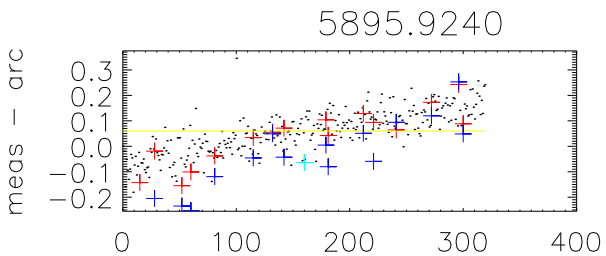

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

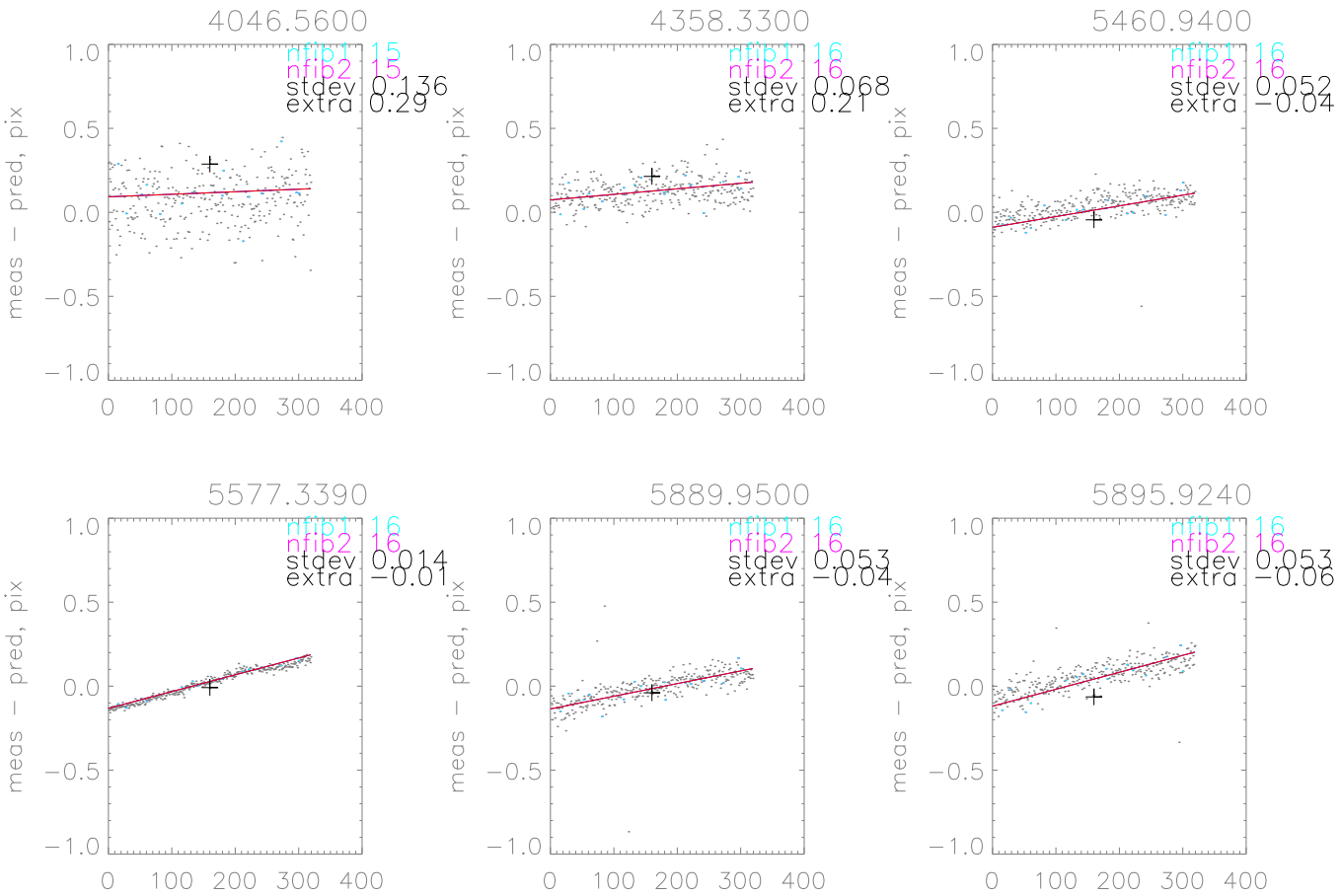

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

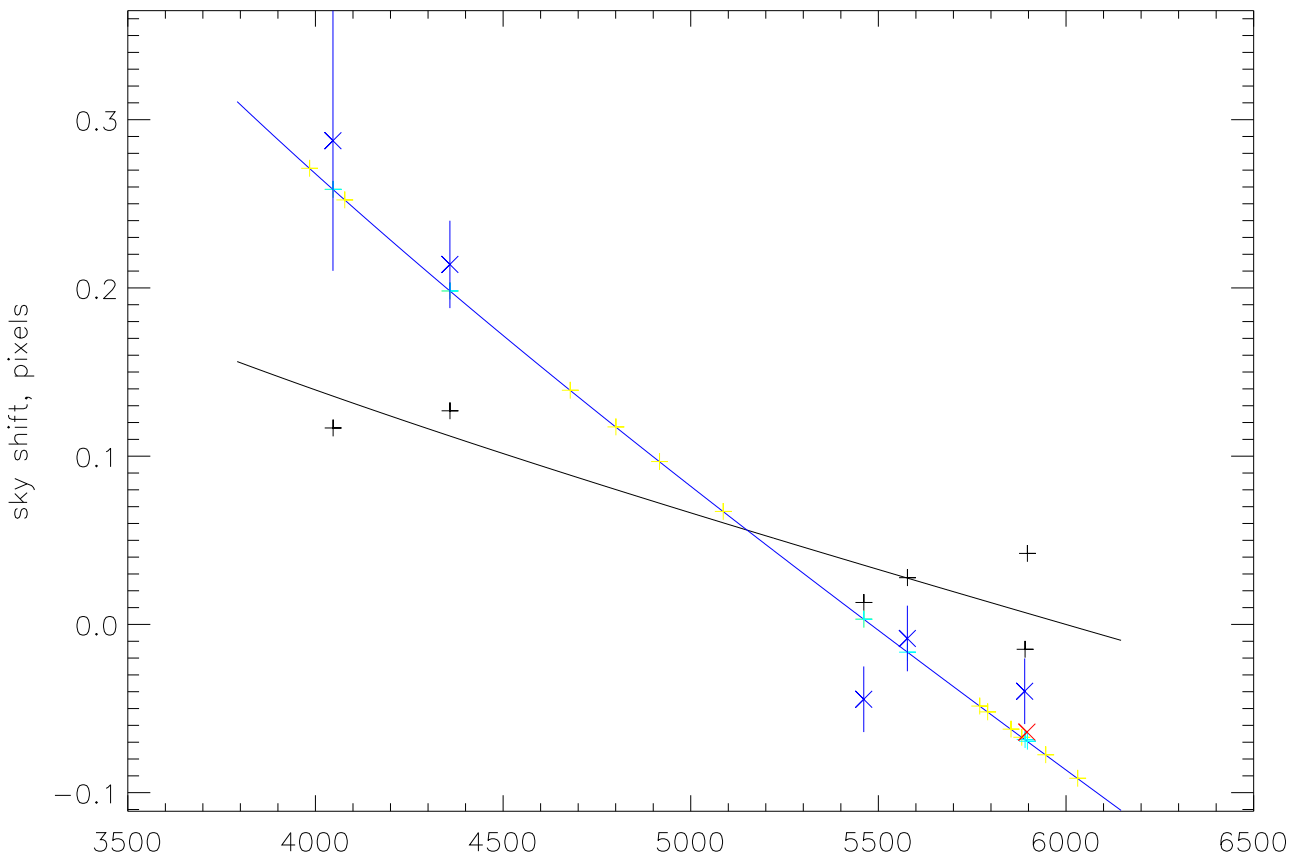

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

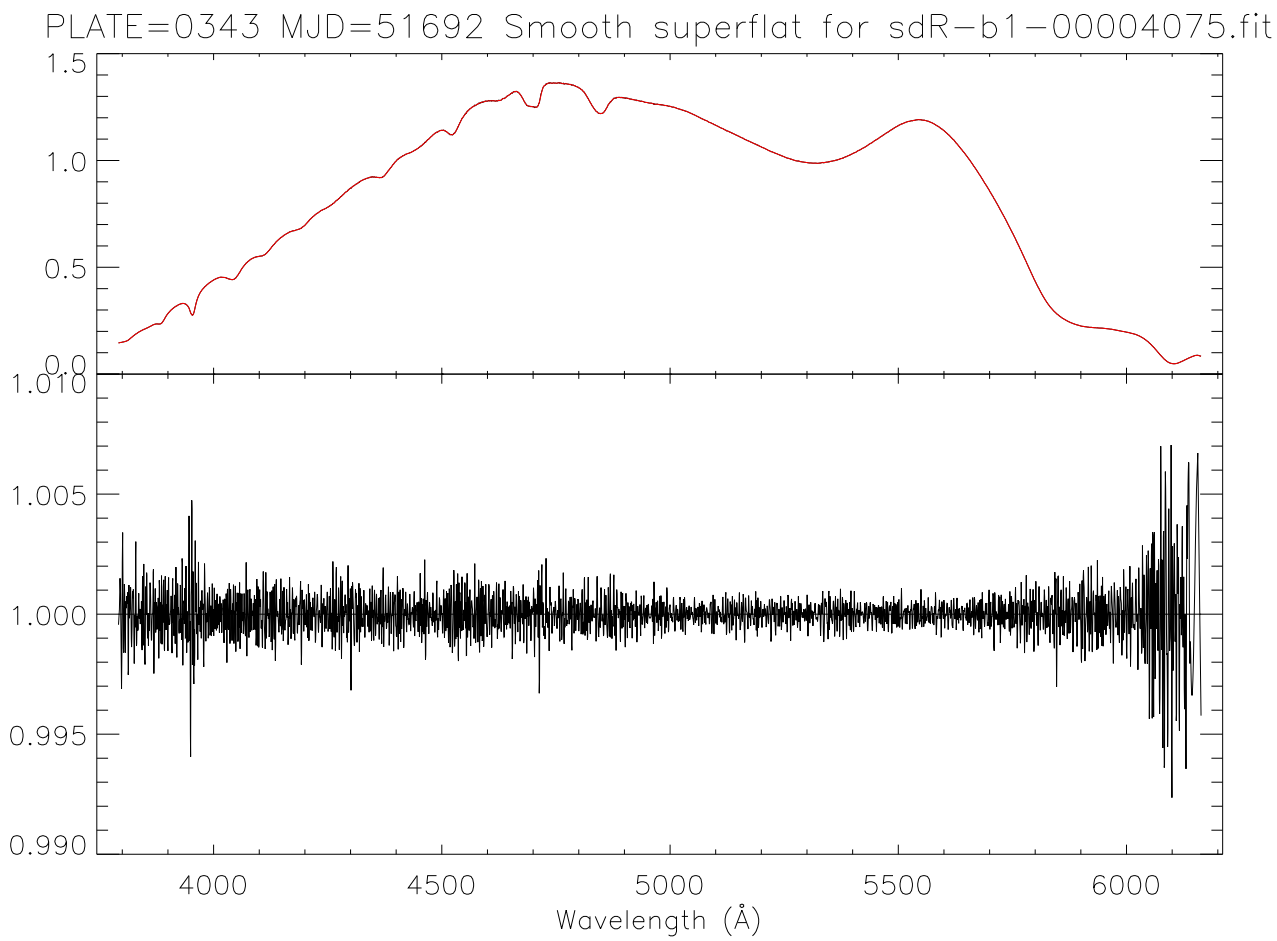

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

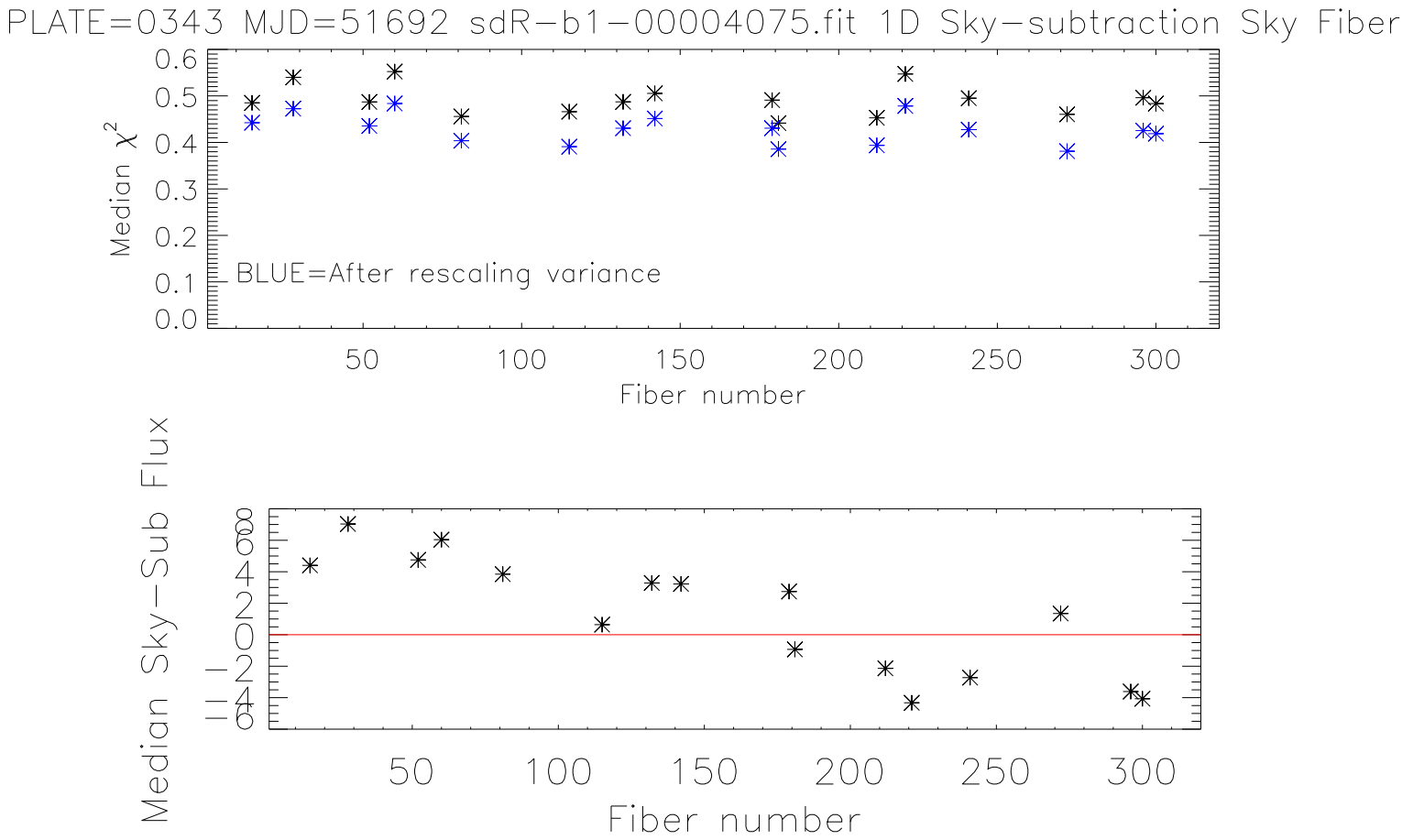

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

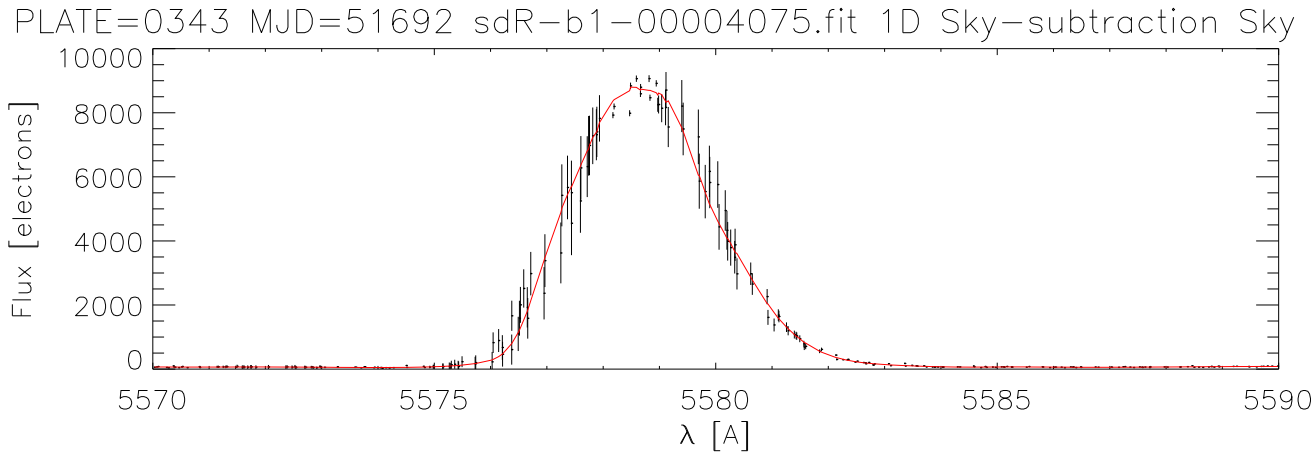

4046.5600
nfib1 15
nfib2 15
stdev 0.136
extra 0.29
4358.3300
nfib1 16
nfib2 16
stdev 0.068
extra 0.21
5460.9400
nfib1 16
nfib2 16
stdev 0.052
extra −0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.053
extra −0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.053
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

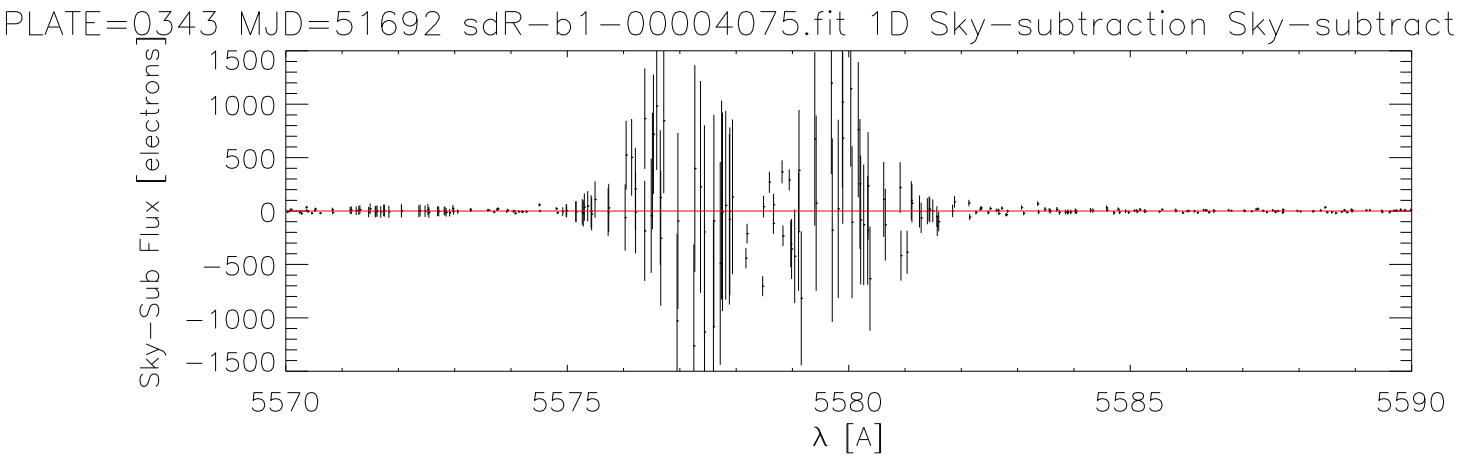

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

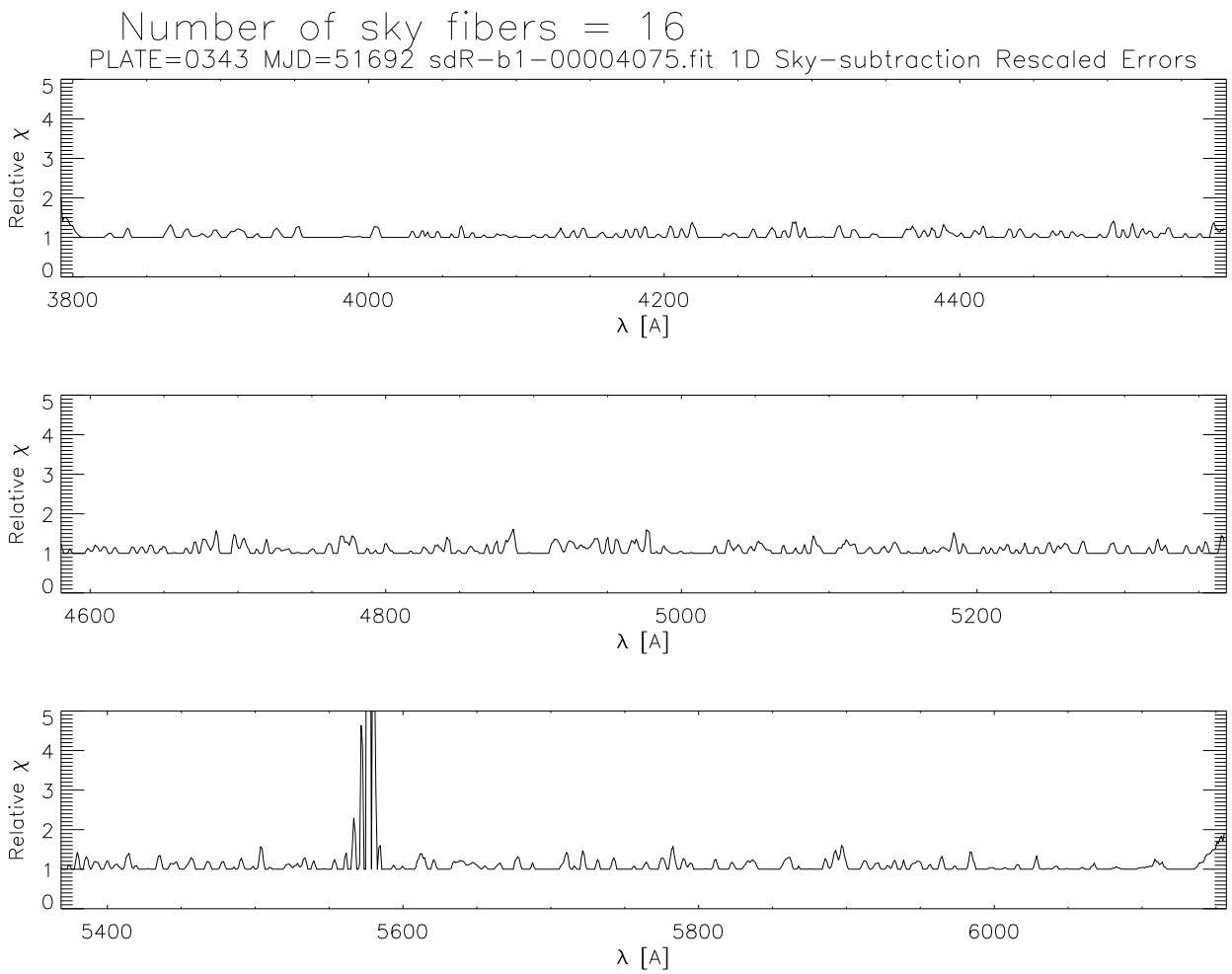
es= 0.0000

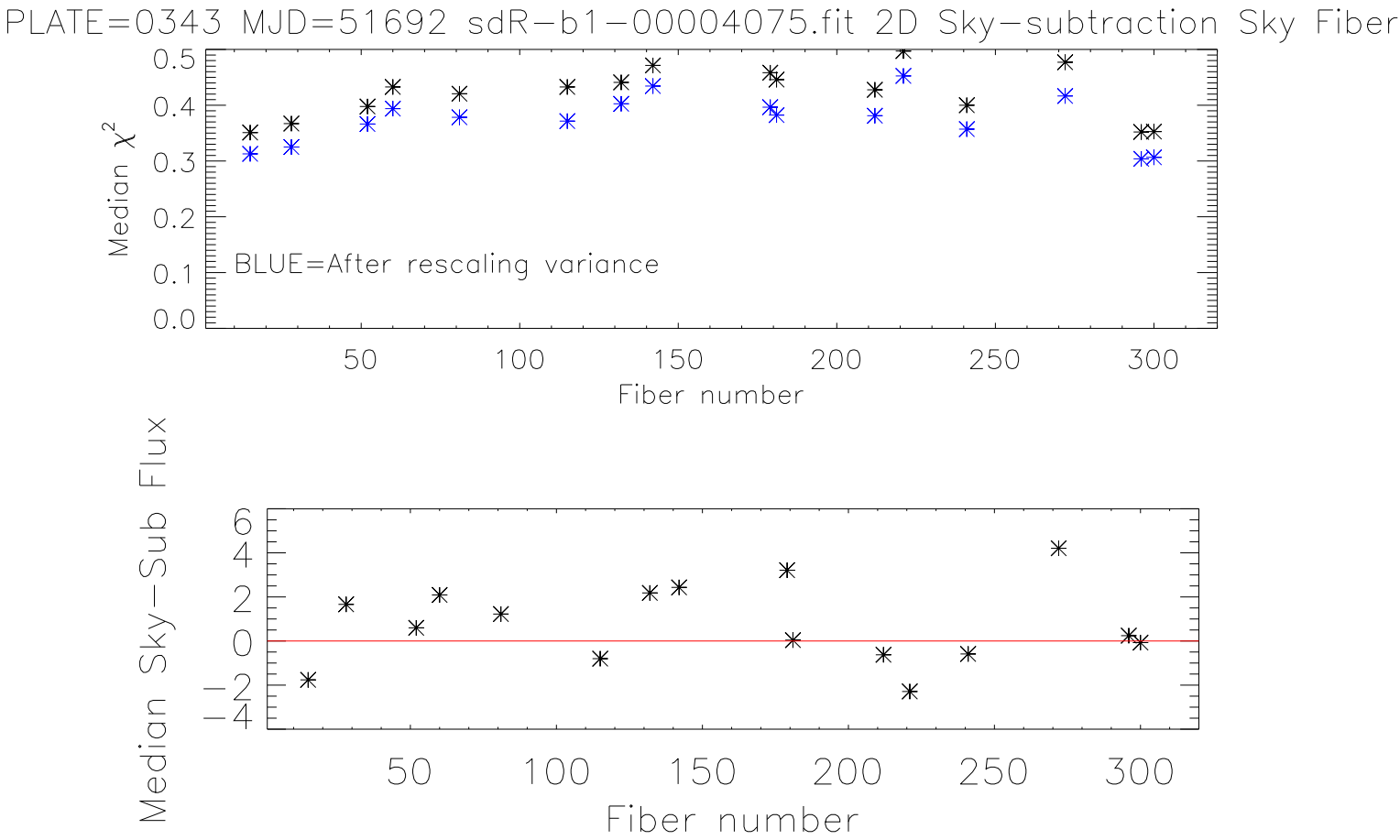

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004075.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

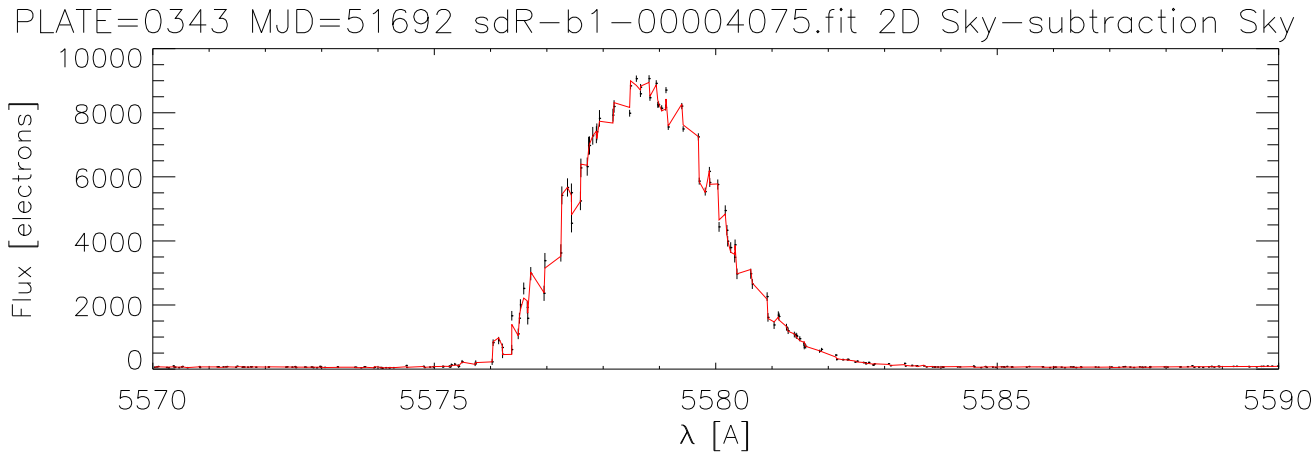

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

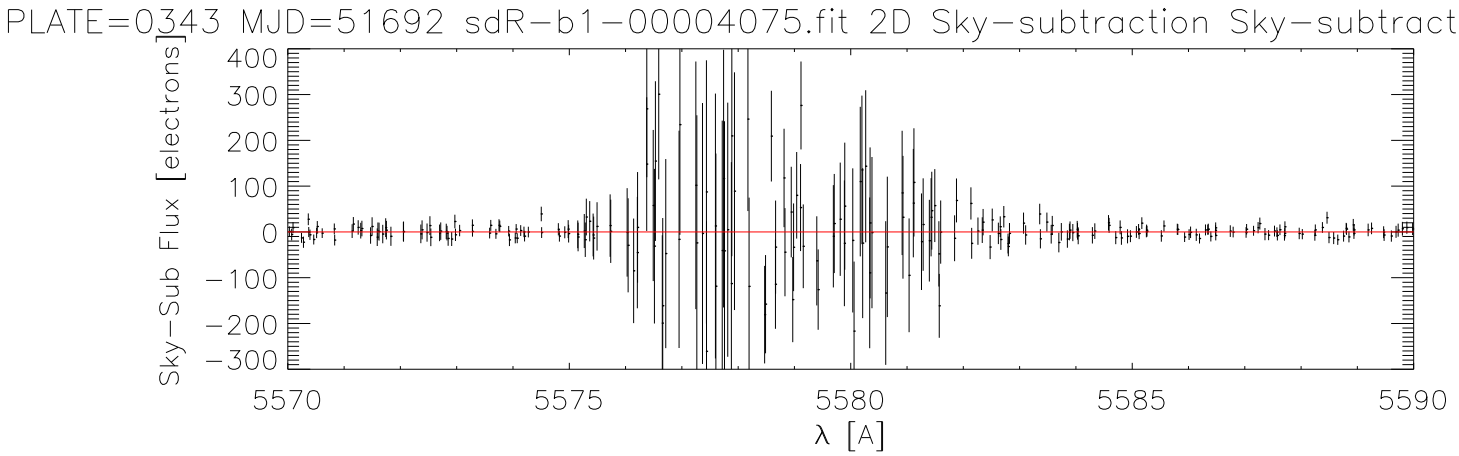

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

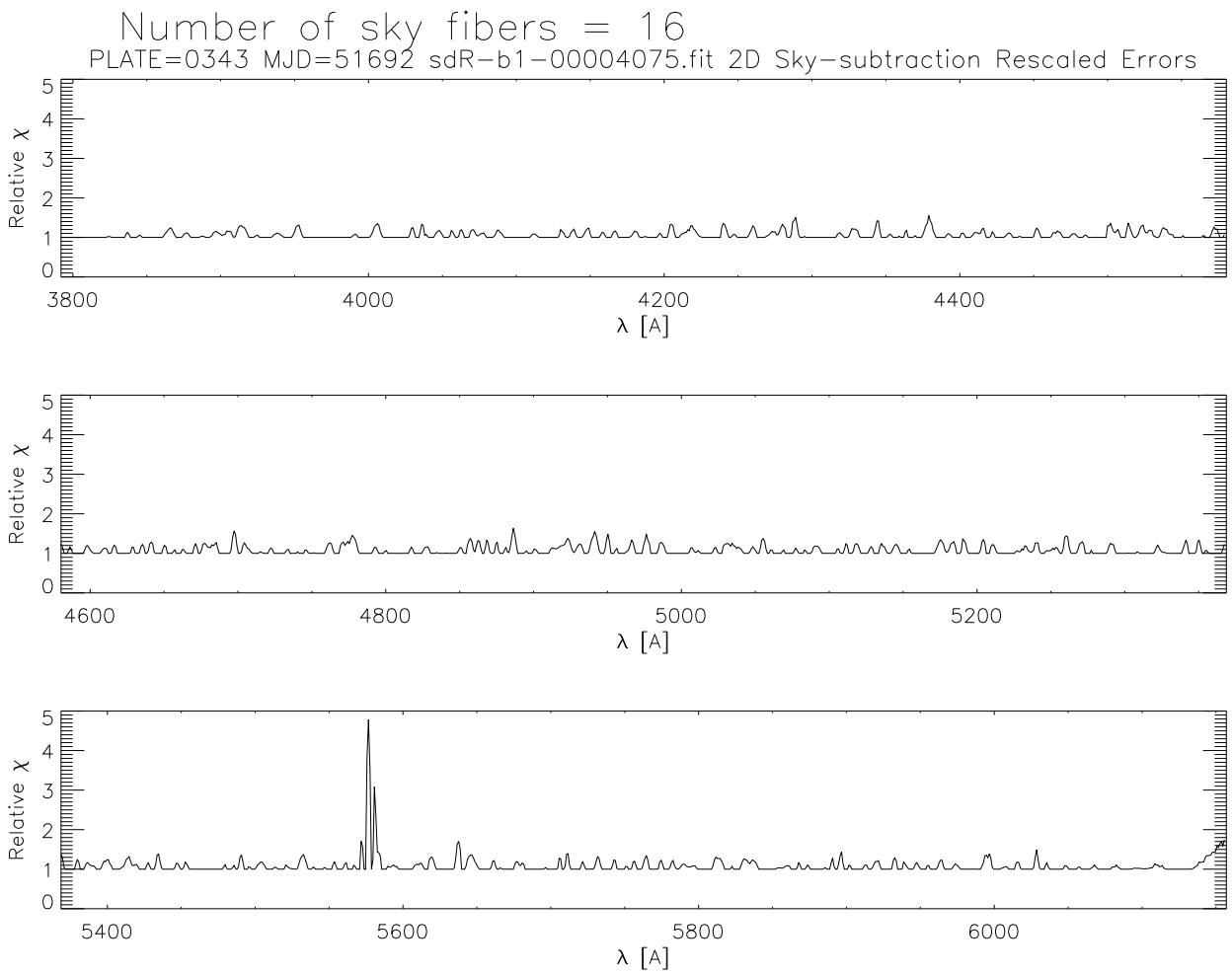

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

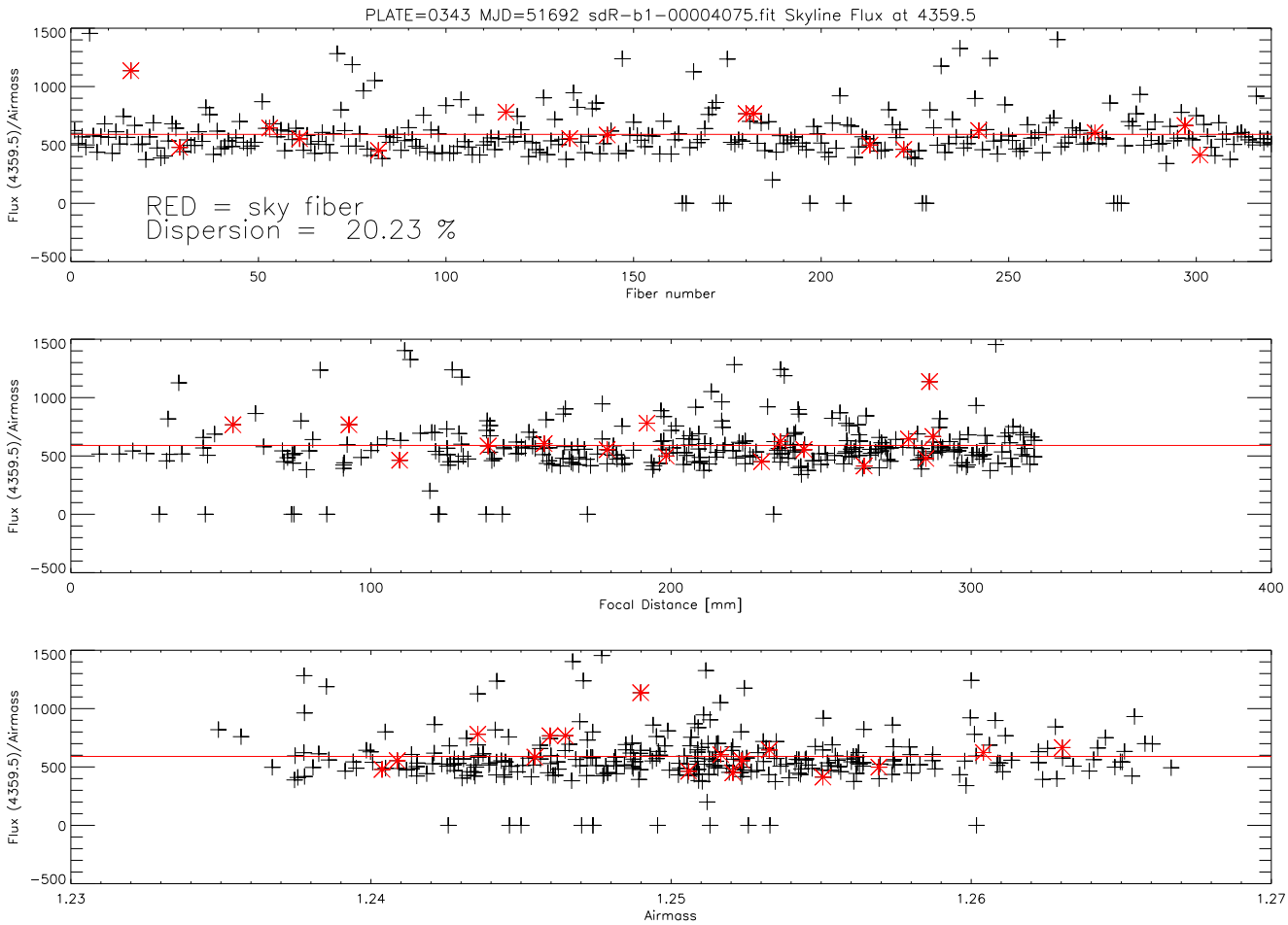

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004075.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

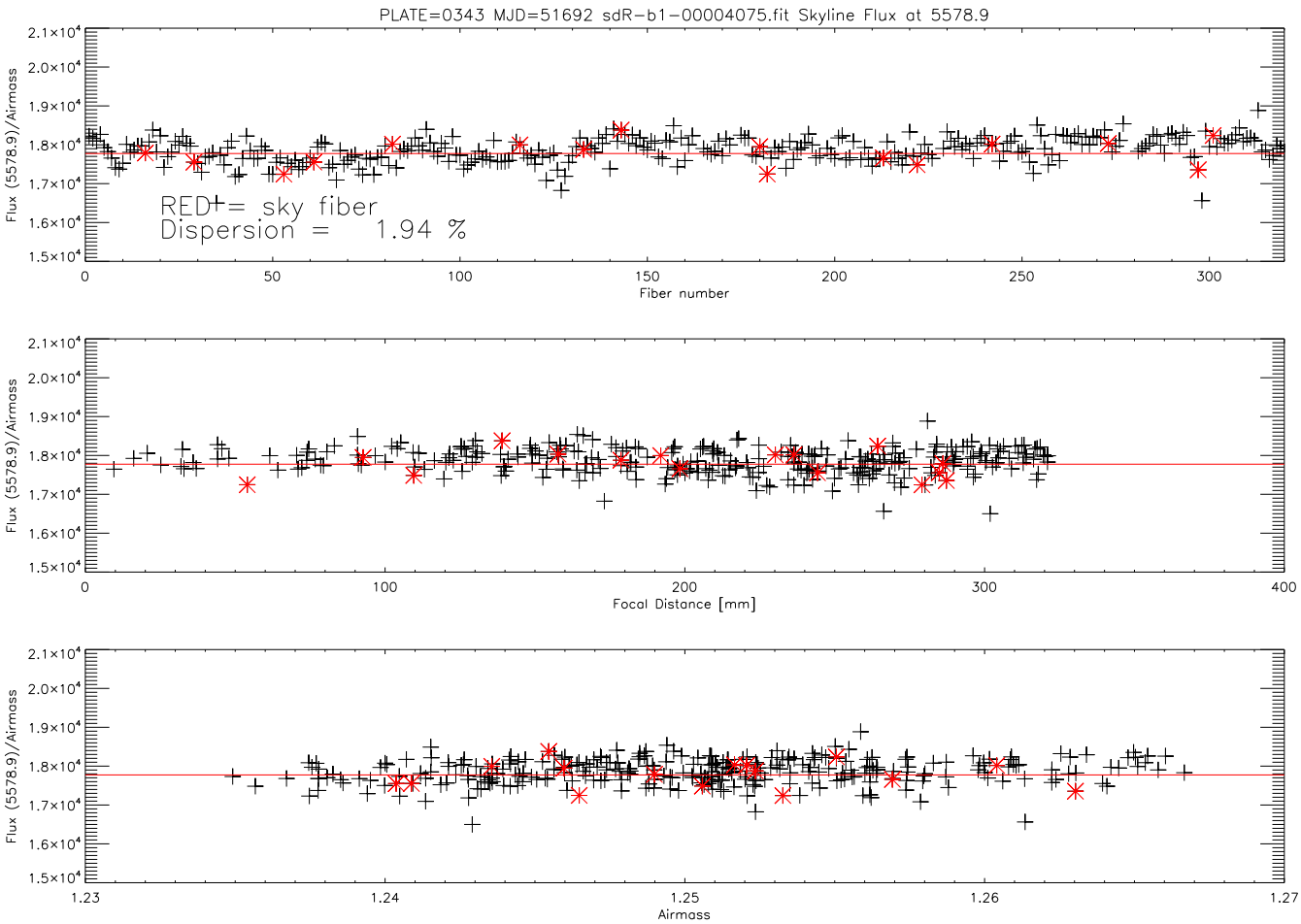

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

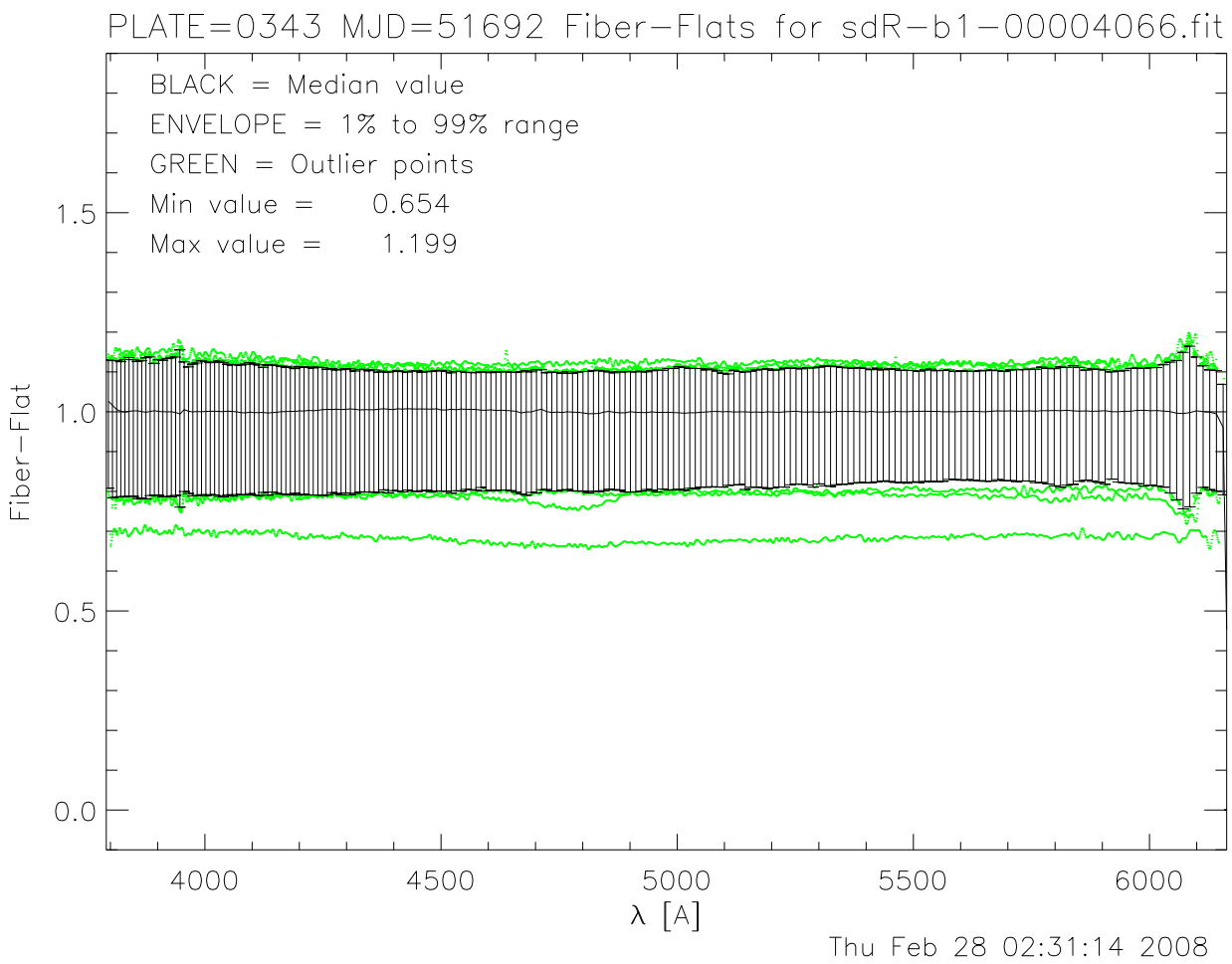

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

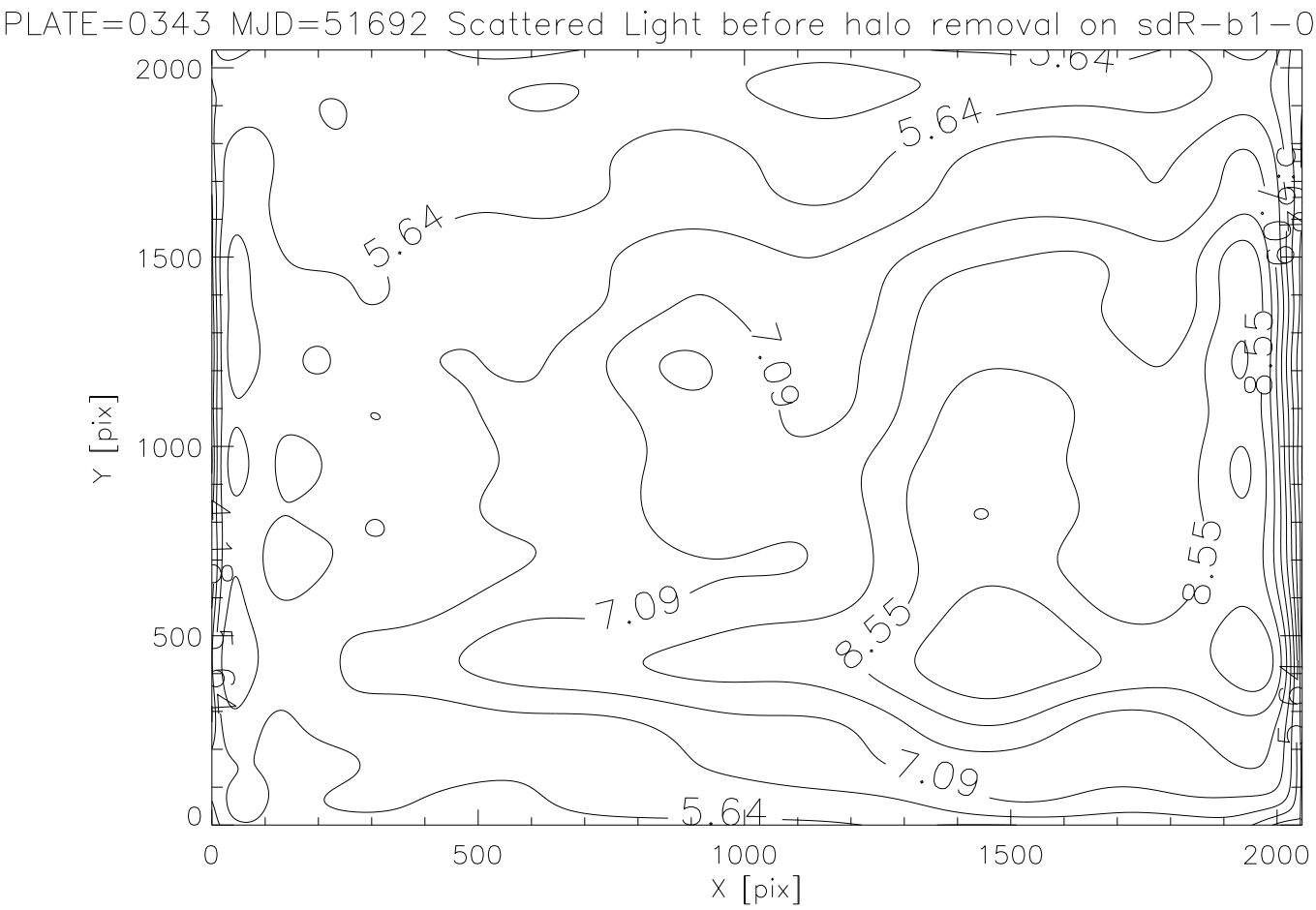

PLATE=0343 MJD=51692 sdR-b1-00004075.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

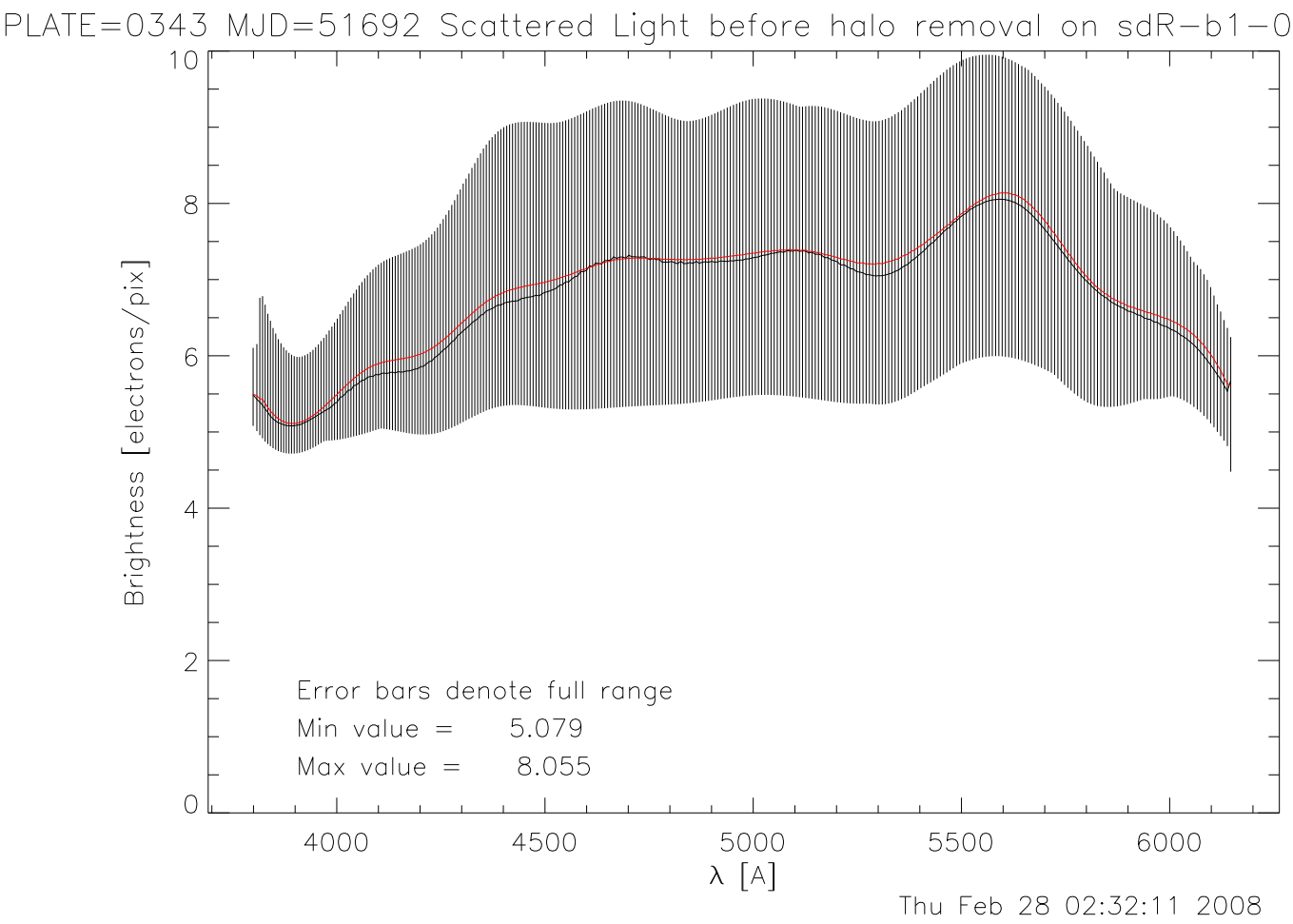

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004075.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

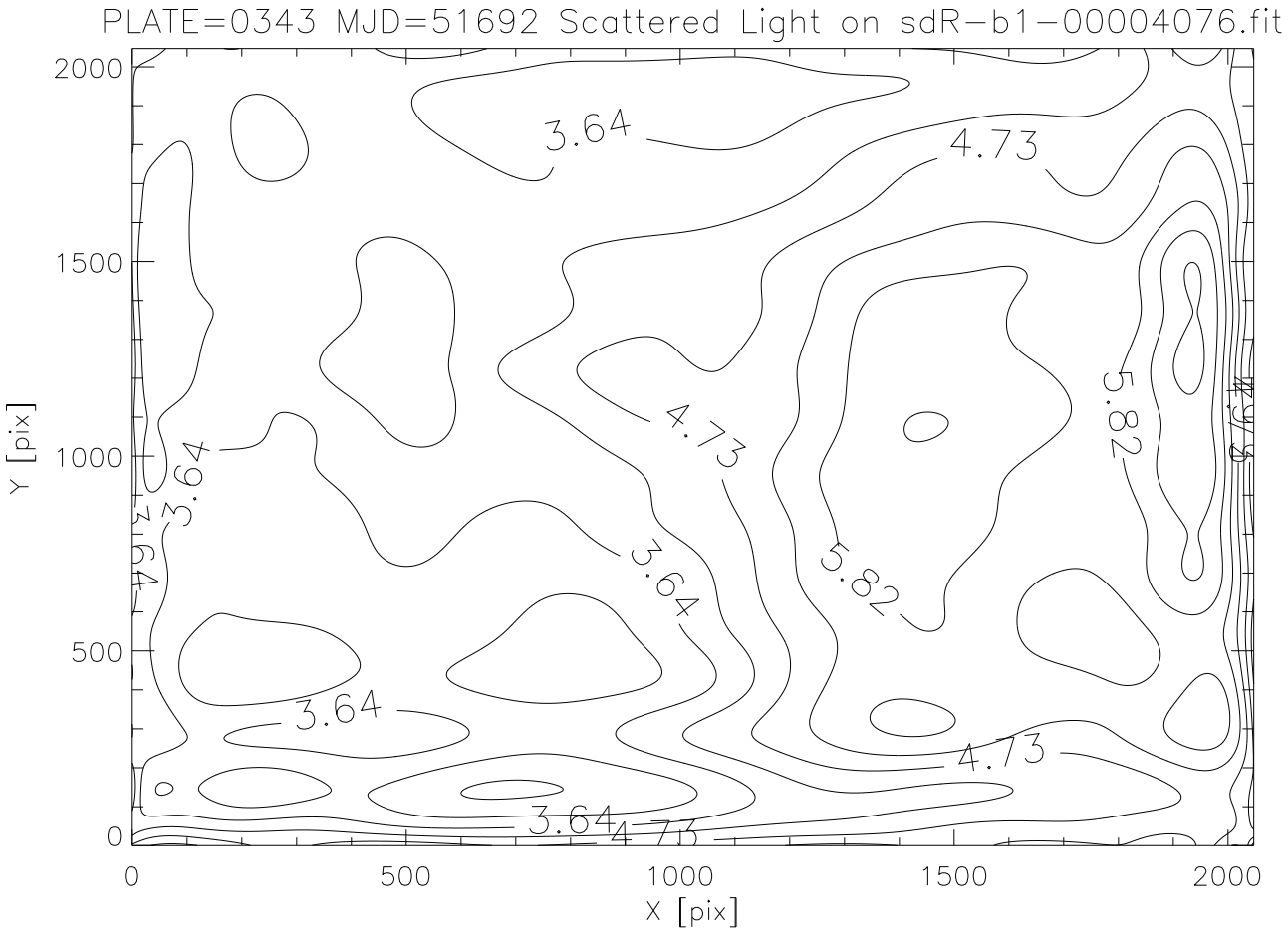

PLATE=0343 MJD=51692 sdR-b1-00004075.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 20.23 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

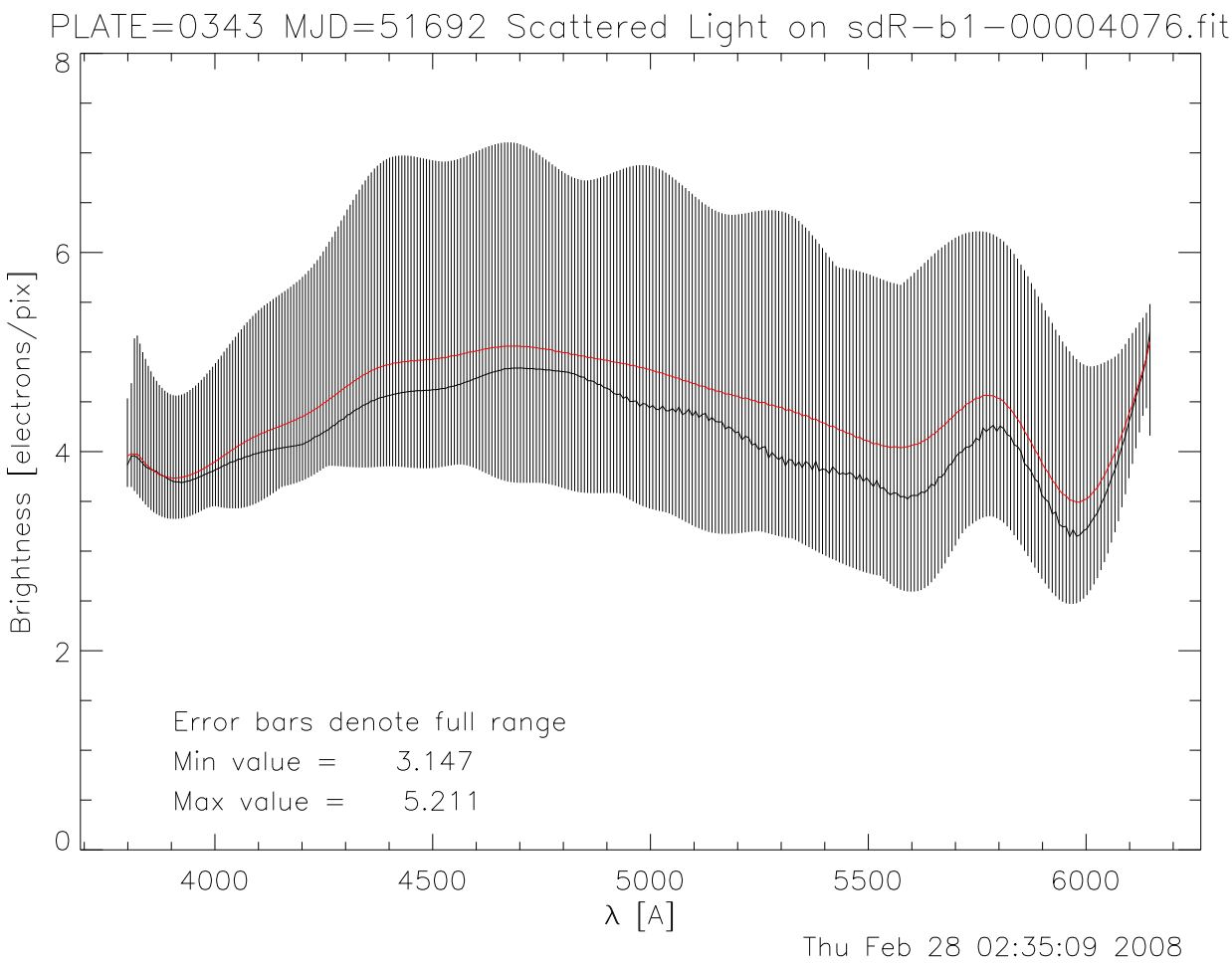

PLATE=0343 MJD=51692 sdR-b1-00004075.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 1.94 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

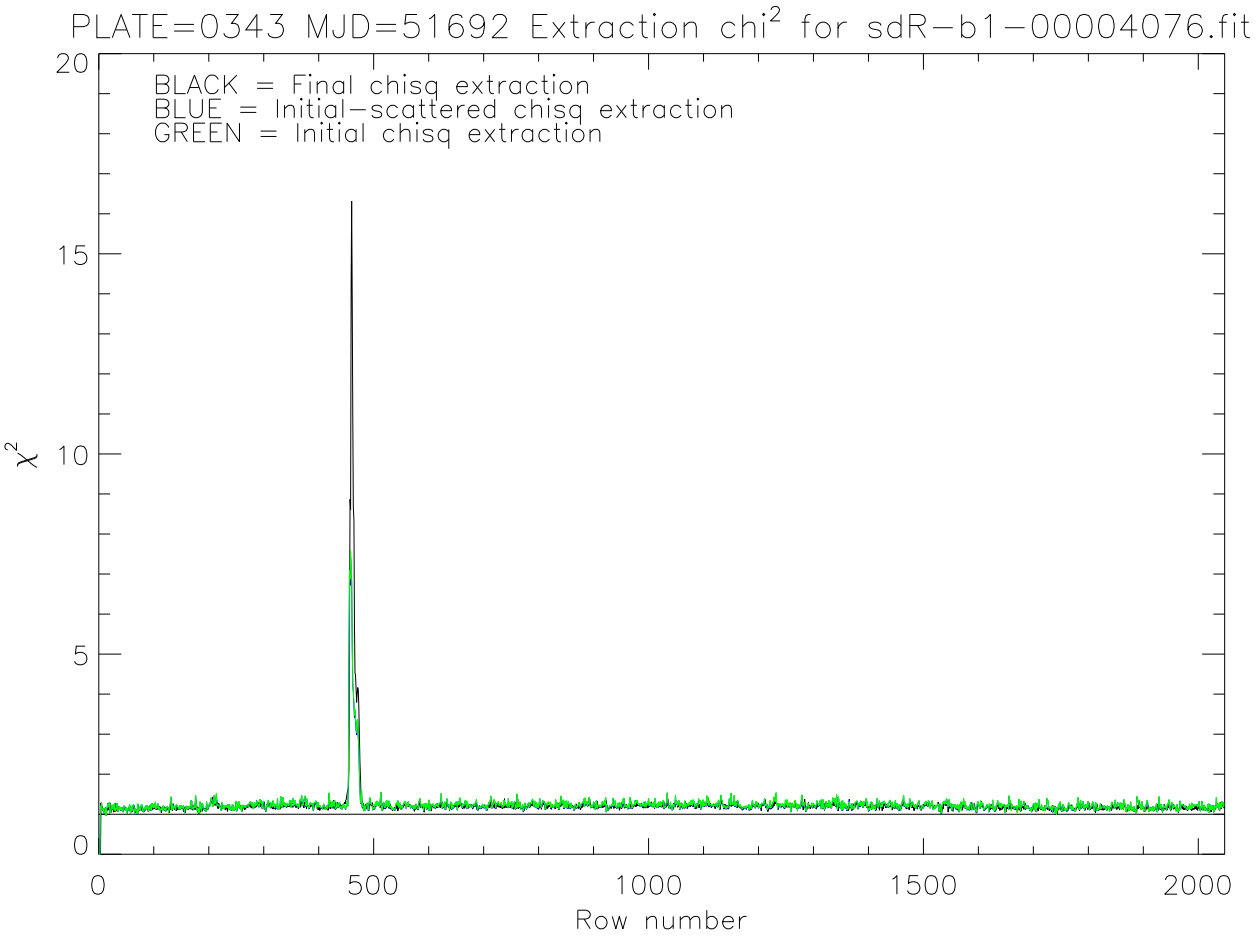

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.654
Max value = 1.199
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:31:14 2008

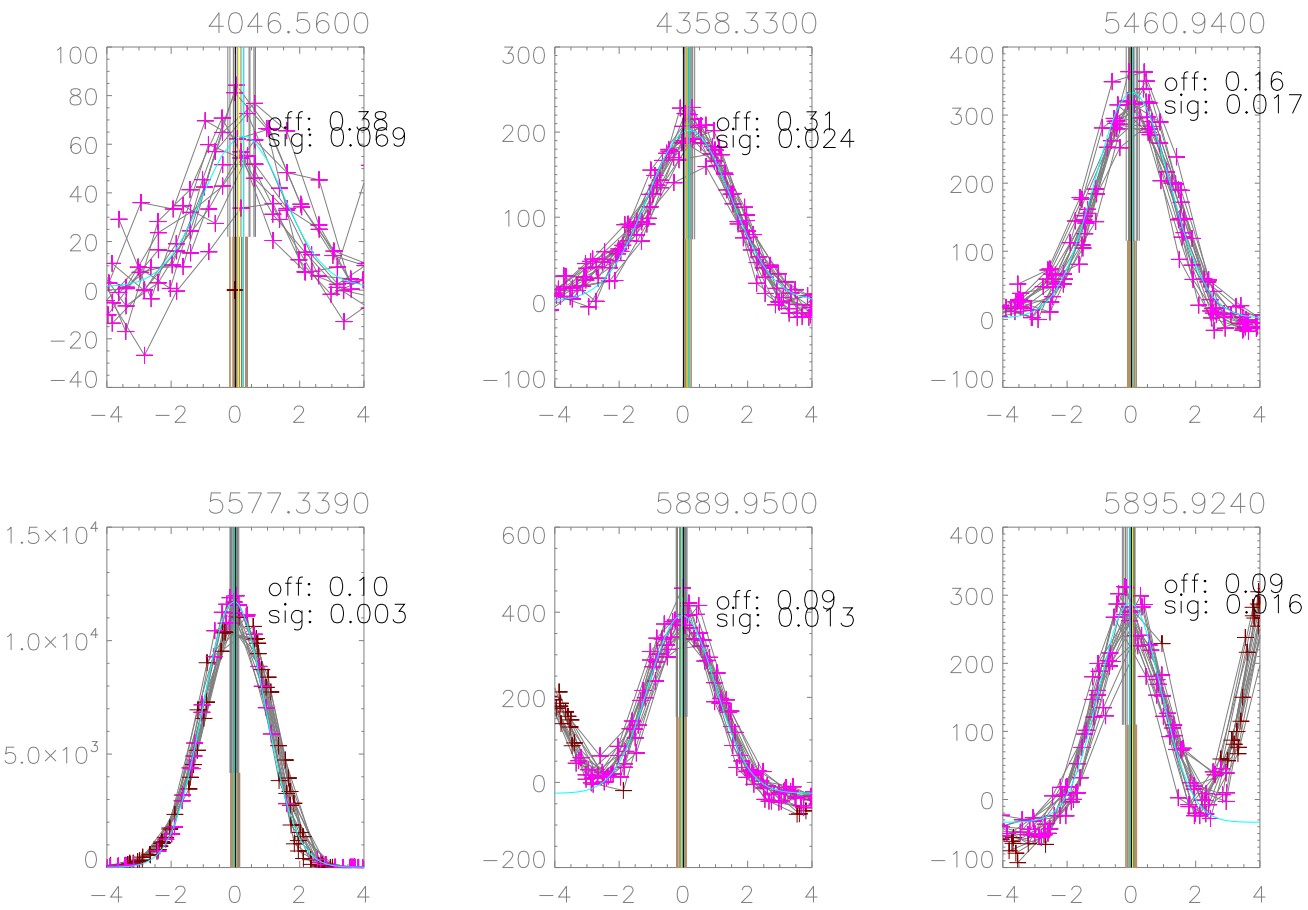

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004076.f
5.64
7.09
8.55
Y [pix]
X [pix]
0
500
1000
1500
2000

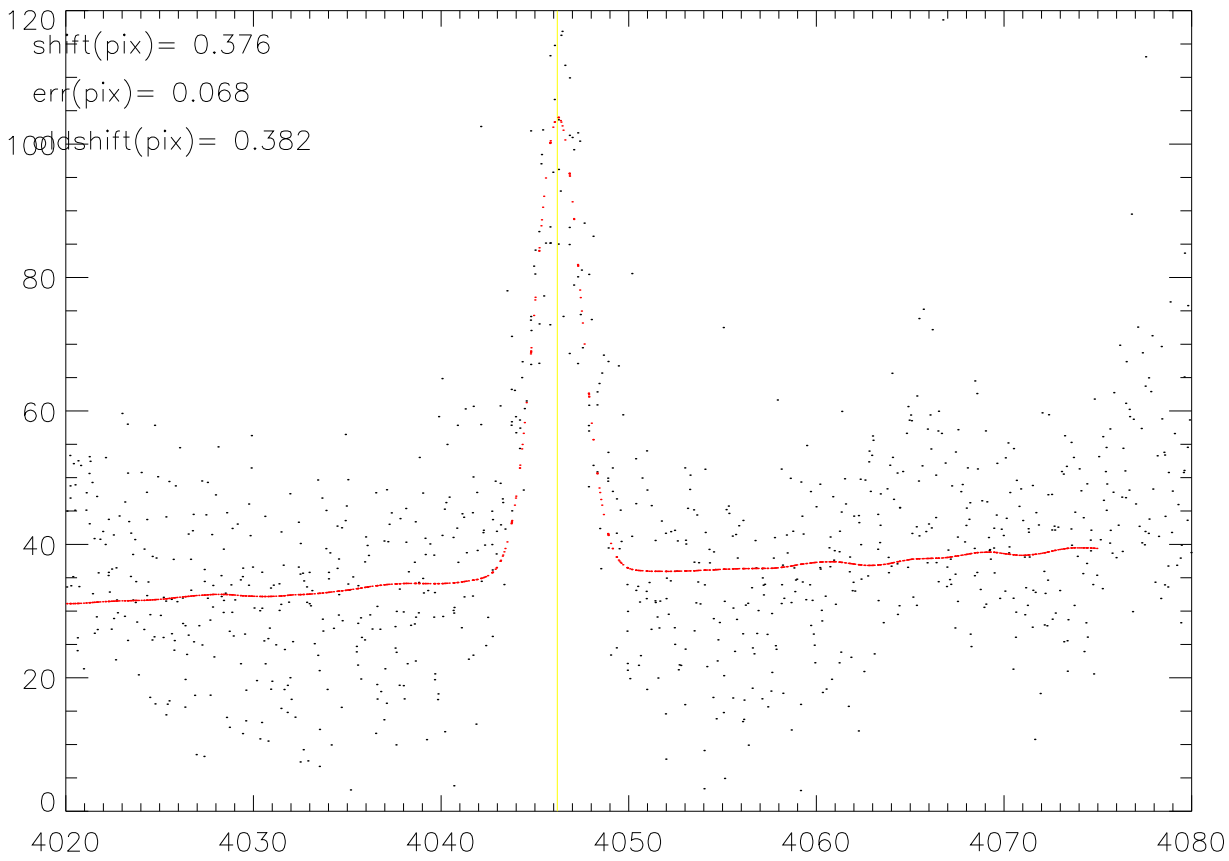

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b1−00004076.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.079
Max value = 8.055
Thu Feb 28 02:32:11 2008

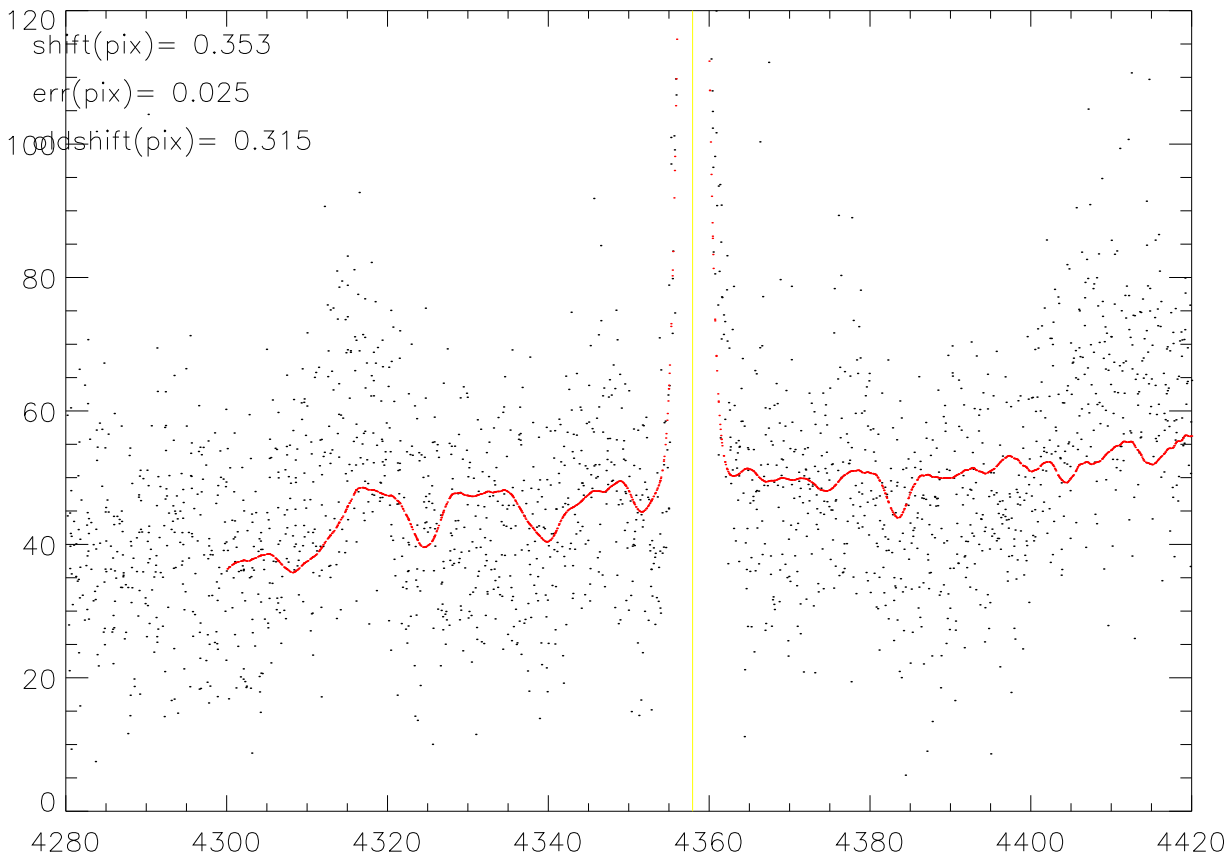

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004076.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73
5.82
4.73
3.64
5.82
3.64
3.64
4.73
3.64
4.73

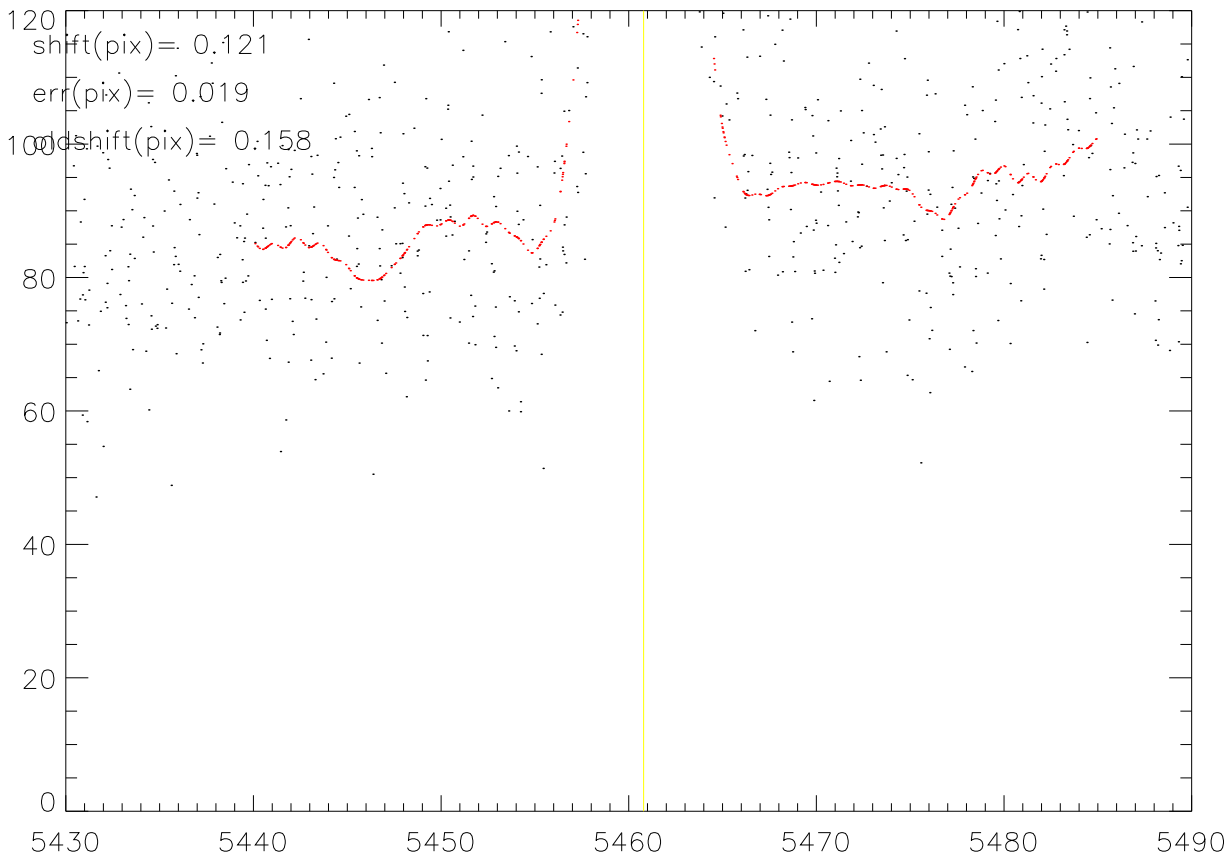

PLATE=0343 MJD=51692 Scattered Light on sdR-b1-00004076.fit
Brightness [electrons/pix]
8
6
4
2
0
Error bars denote full range
Min value = 3.147
Max value = 5.211
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:35:09 2008

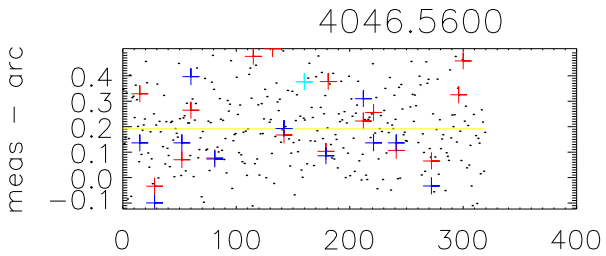

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−b1−00004076.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

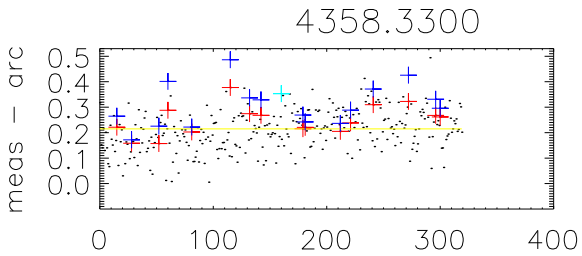

4046.5600
off: 0.38
sig: 0.069
4358.3300
off: 0.31
sig: 0.024
5460.9400
off: 0.16
sig: 0.017
5577.3390
off: 0.10
sig: 0.003
5889.9500
off: 0.09
sig: 0.013
5895.9240
off: 0.09
sig: 0.016

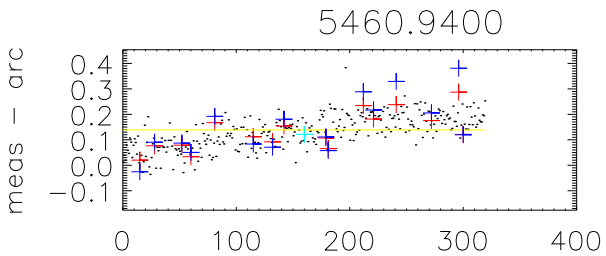

shift(pix)= 0.376
err(pix)= 0.068
oldshift(pix)= 0.382
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

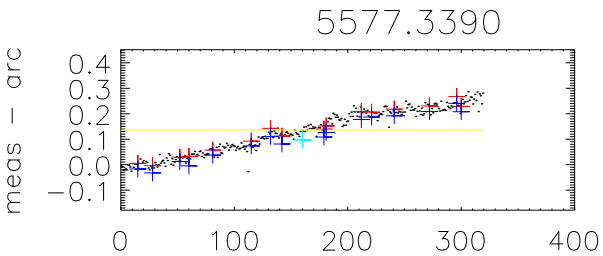

shift(pix)= 0.353
err(pix)= 0.025
oldshift(pix)= 0.315
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

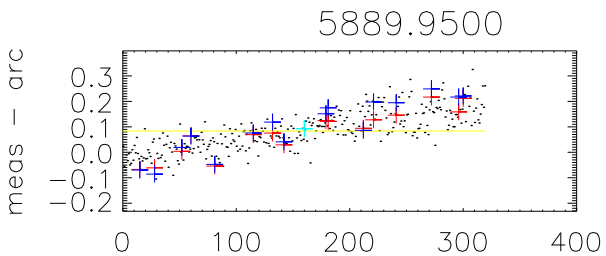

shift(pix)= 0.121
err(pix)= 0.019
oldshift(pix)= 0.158
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

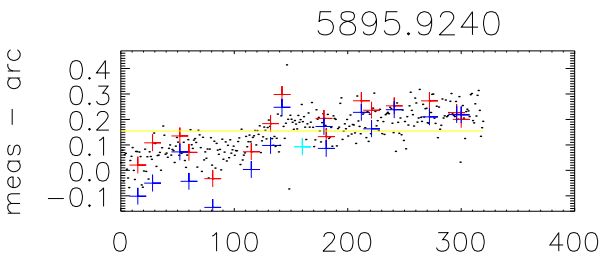

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

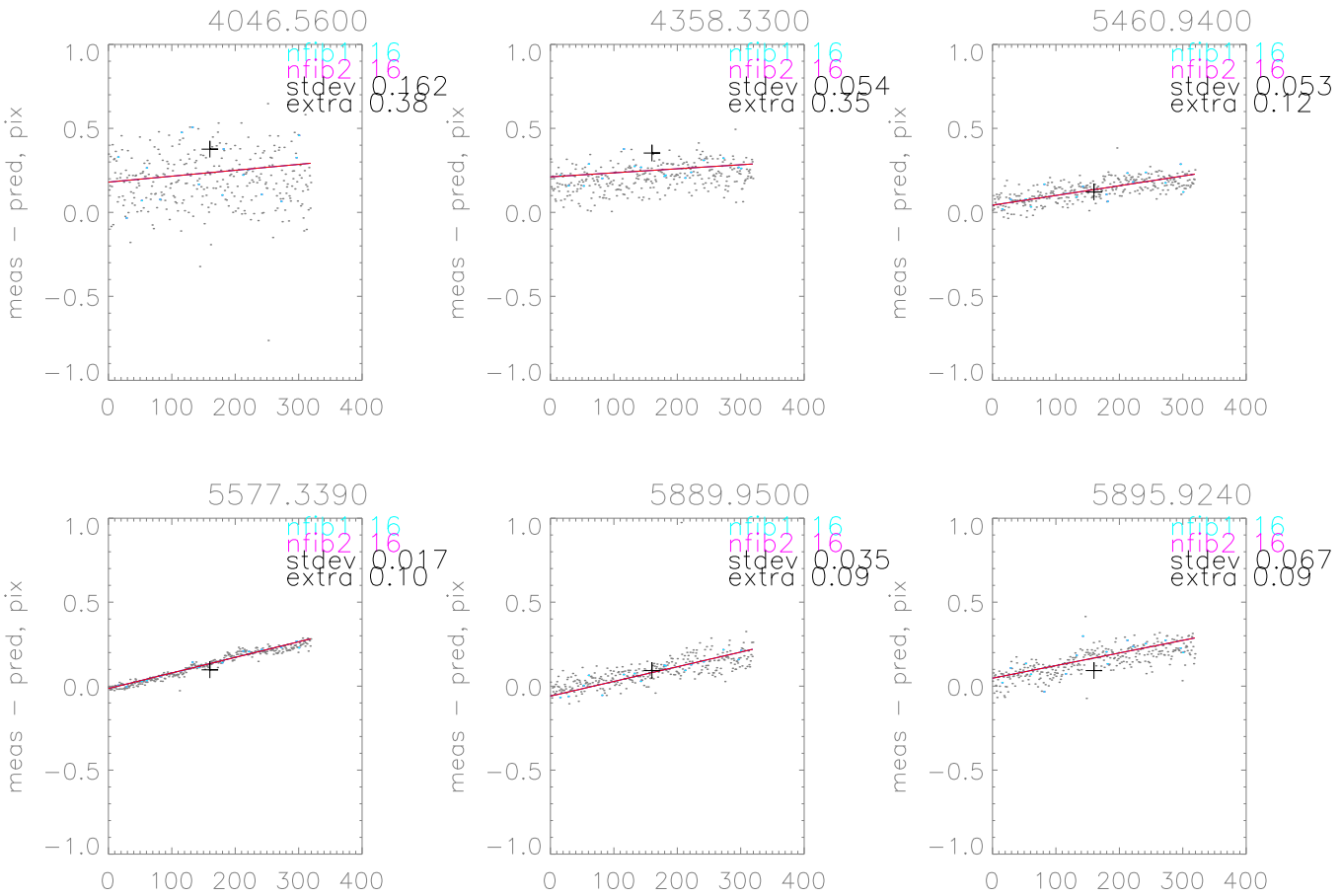

4358.3300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

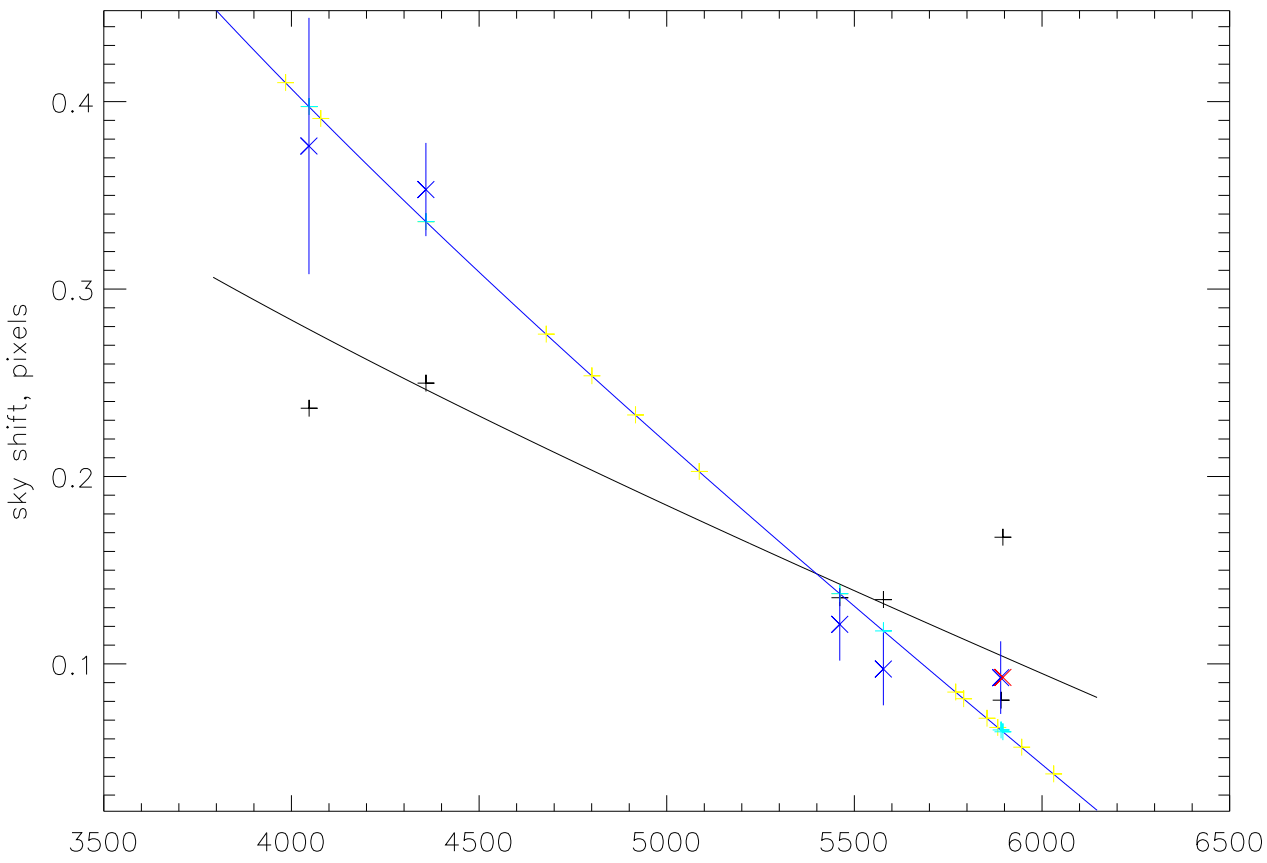

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

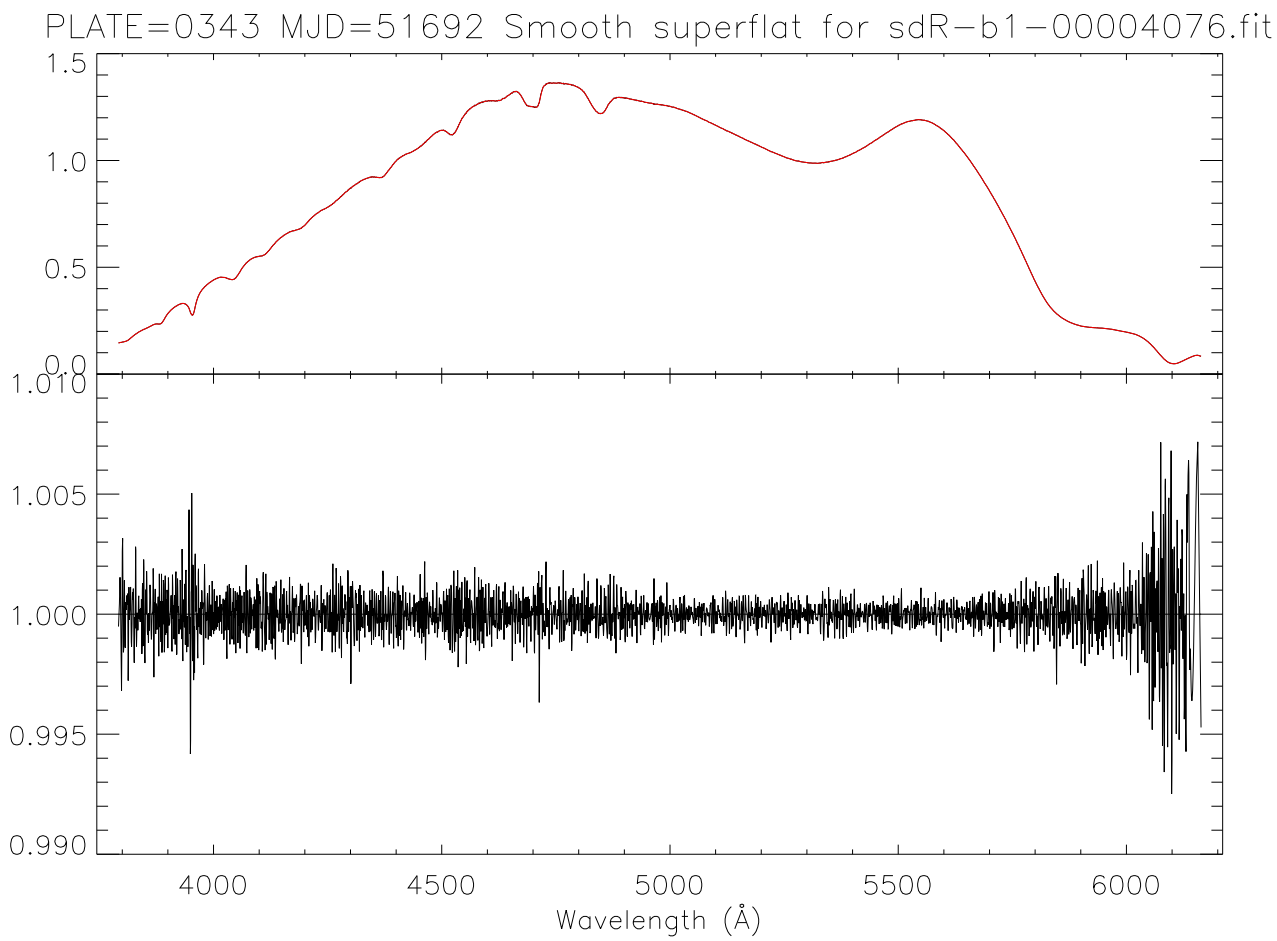

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

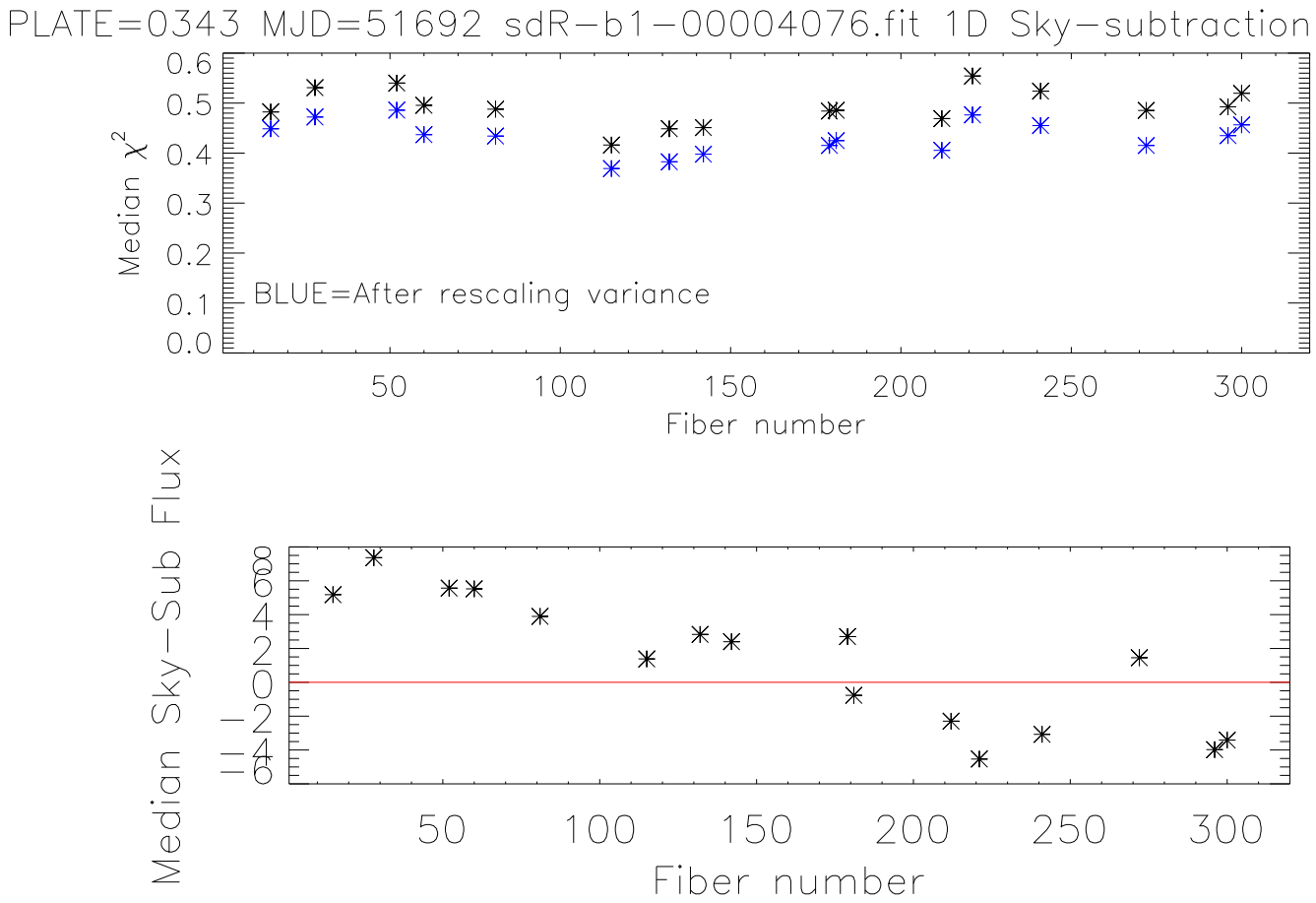

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

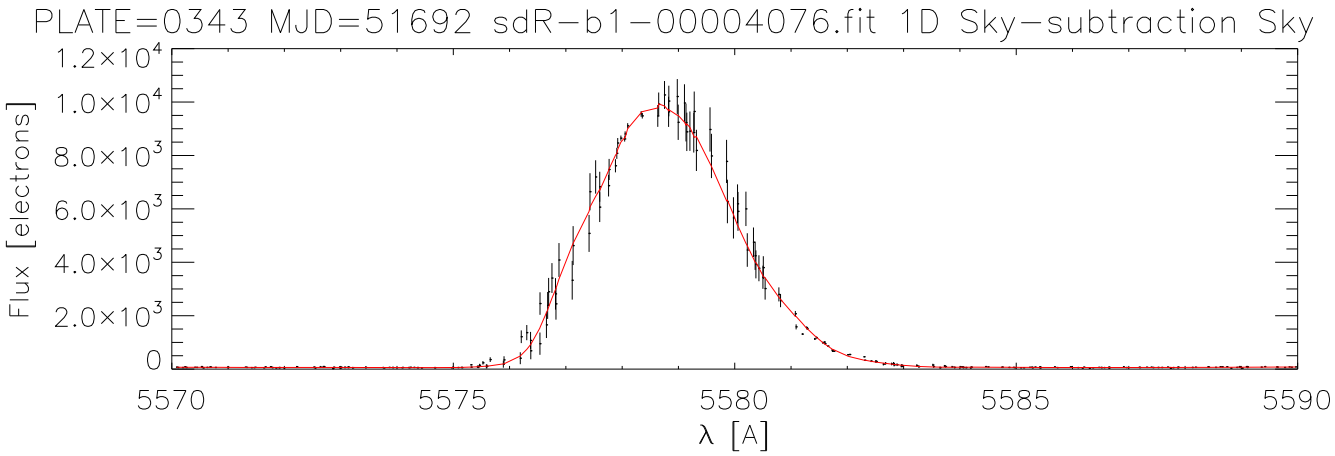

4046.5600
nfib1 16
nfib2 16
stdev 0.162
extra 0.38
4358.3300
nfib1 16
nfib2 16
stdev 0.054
extra 0.35
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra 0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.035
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.067
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

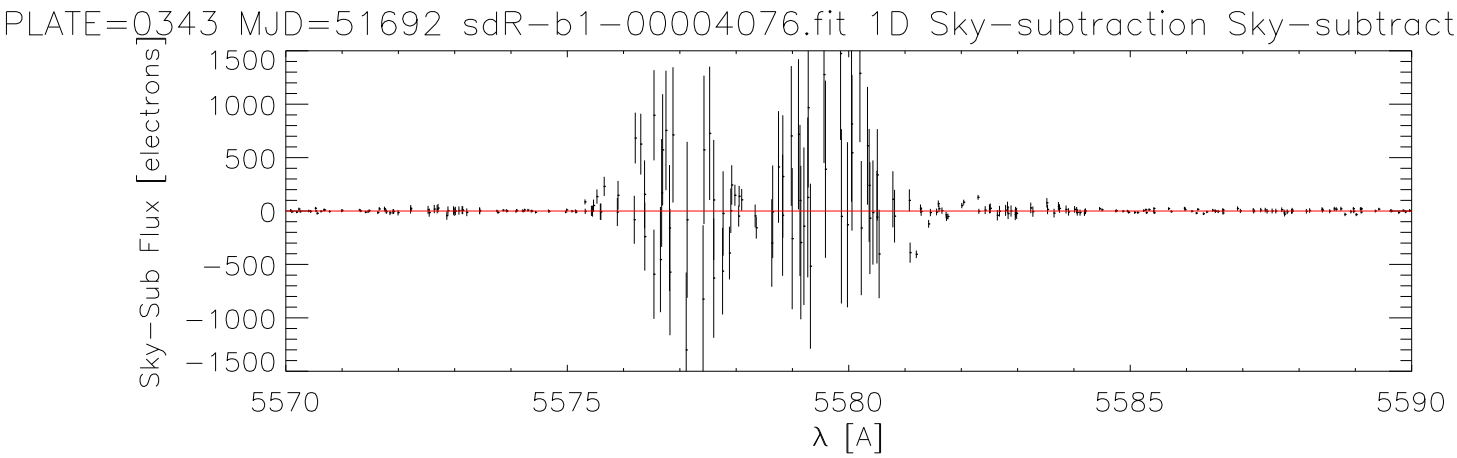

sky shift, pixels
0.4
0.3
0.2
0.1
3500
4000
4500
5000
5500
6000
6500

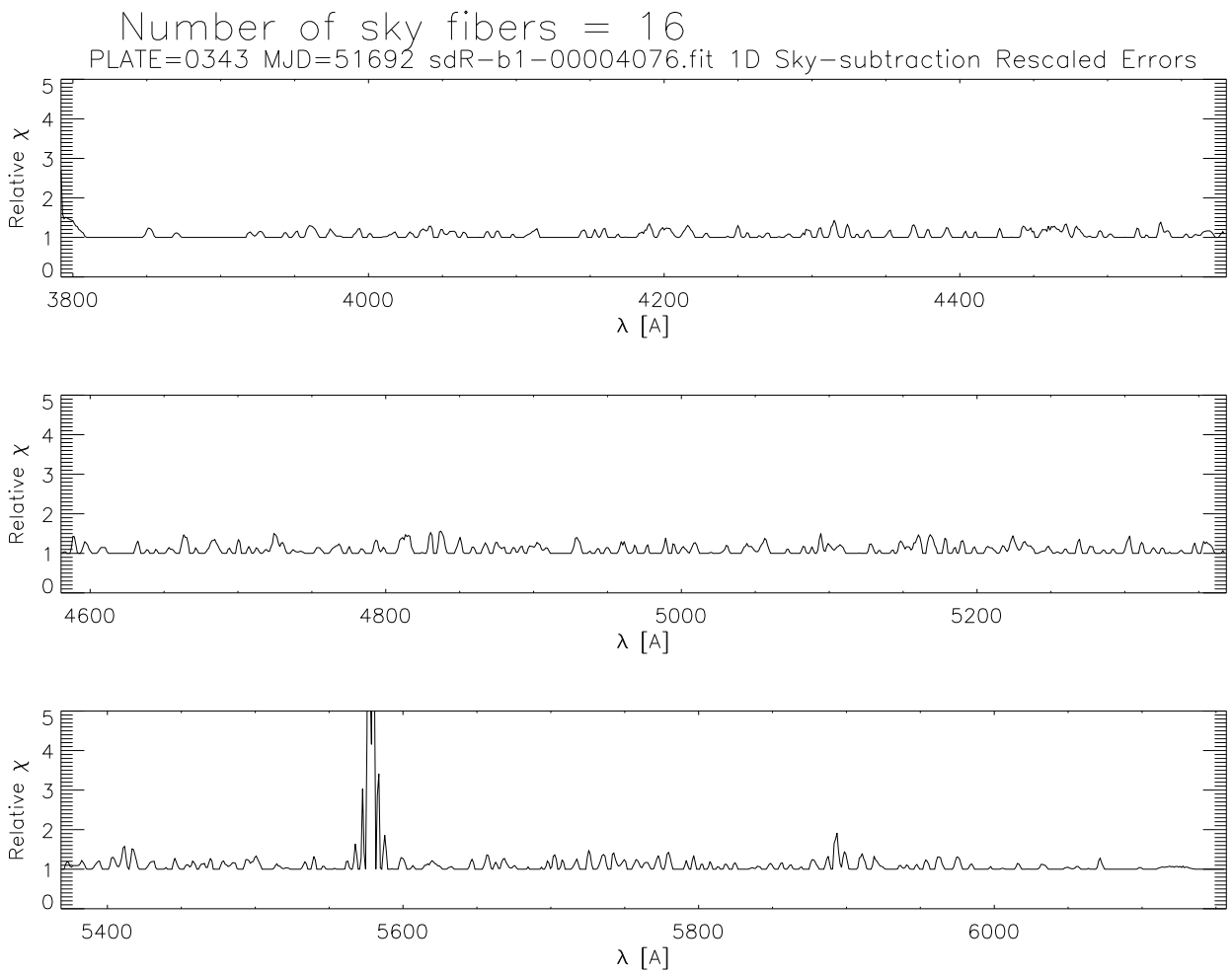
es= 0.0000

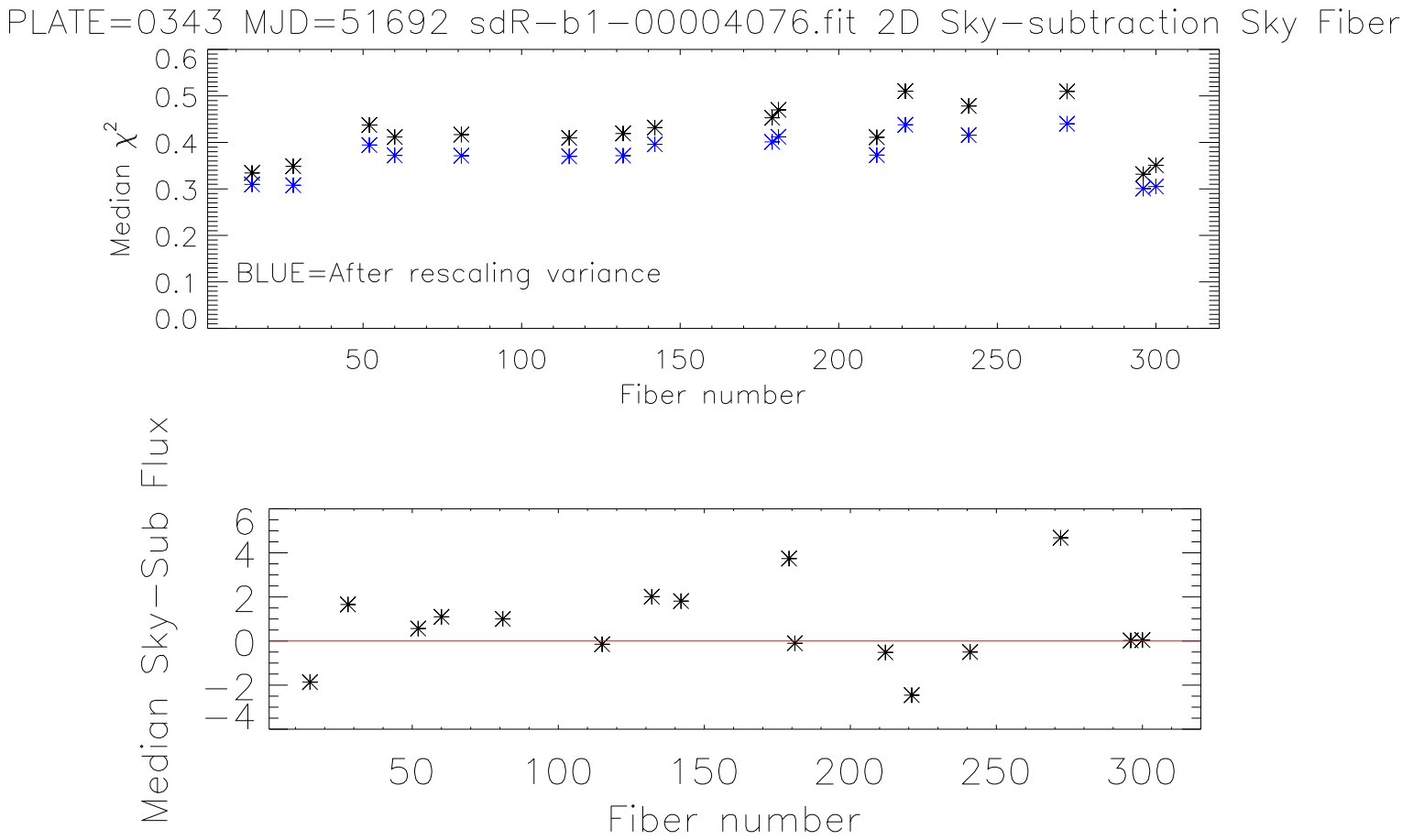

PLATE=0343 MJD=51692 Smooth superflat for sdR-b1-00004076.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

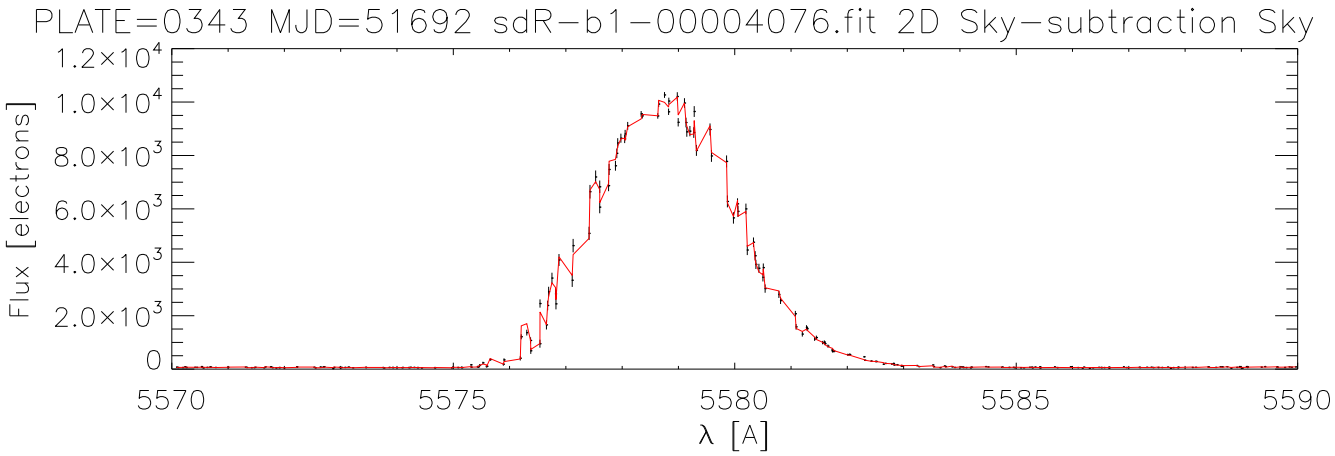

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

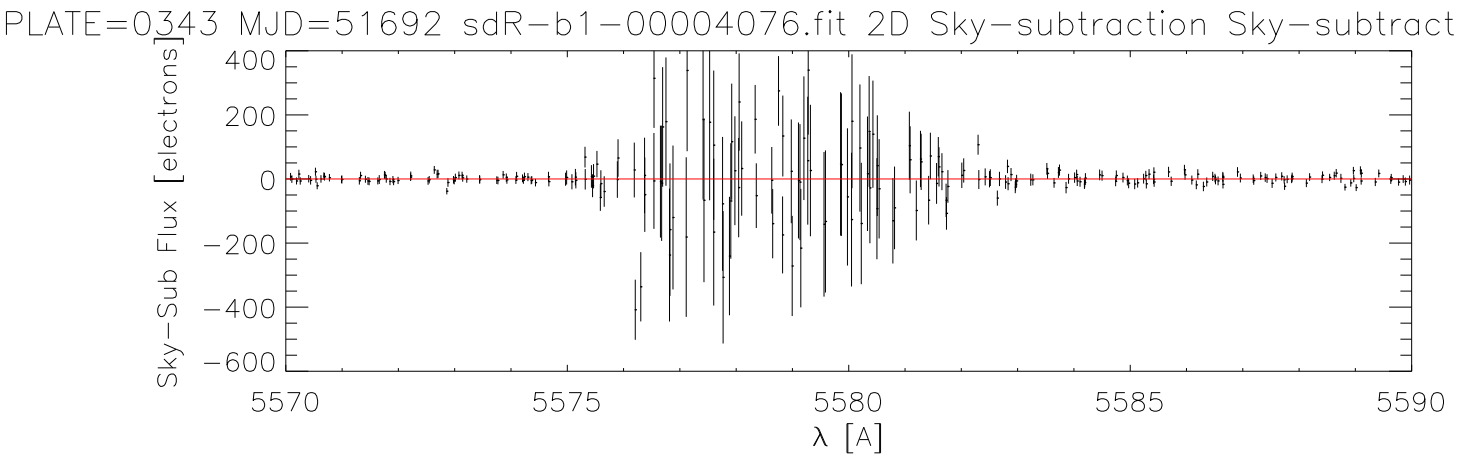

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

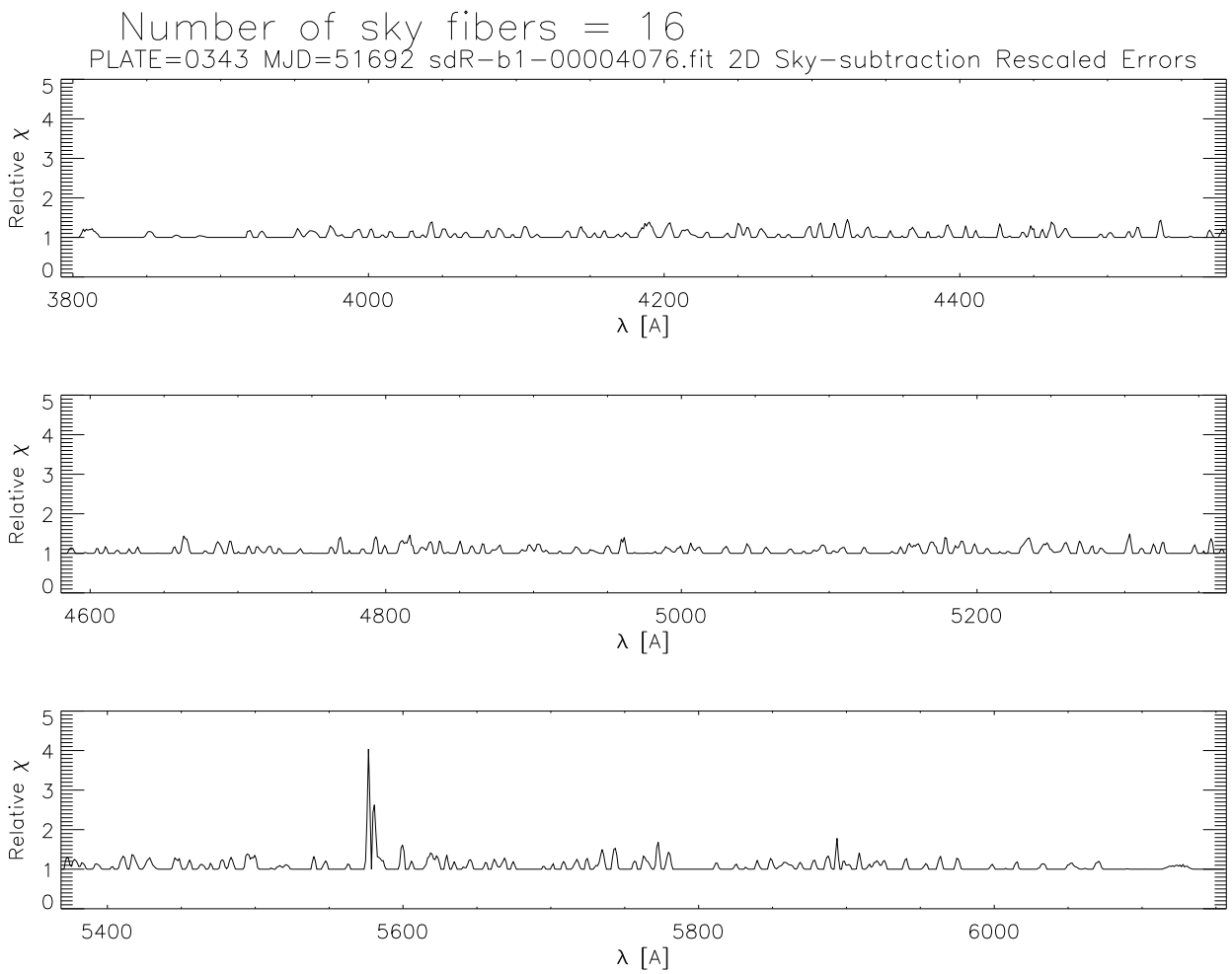

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

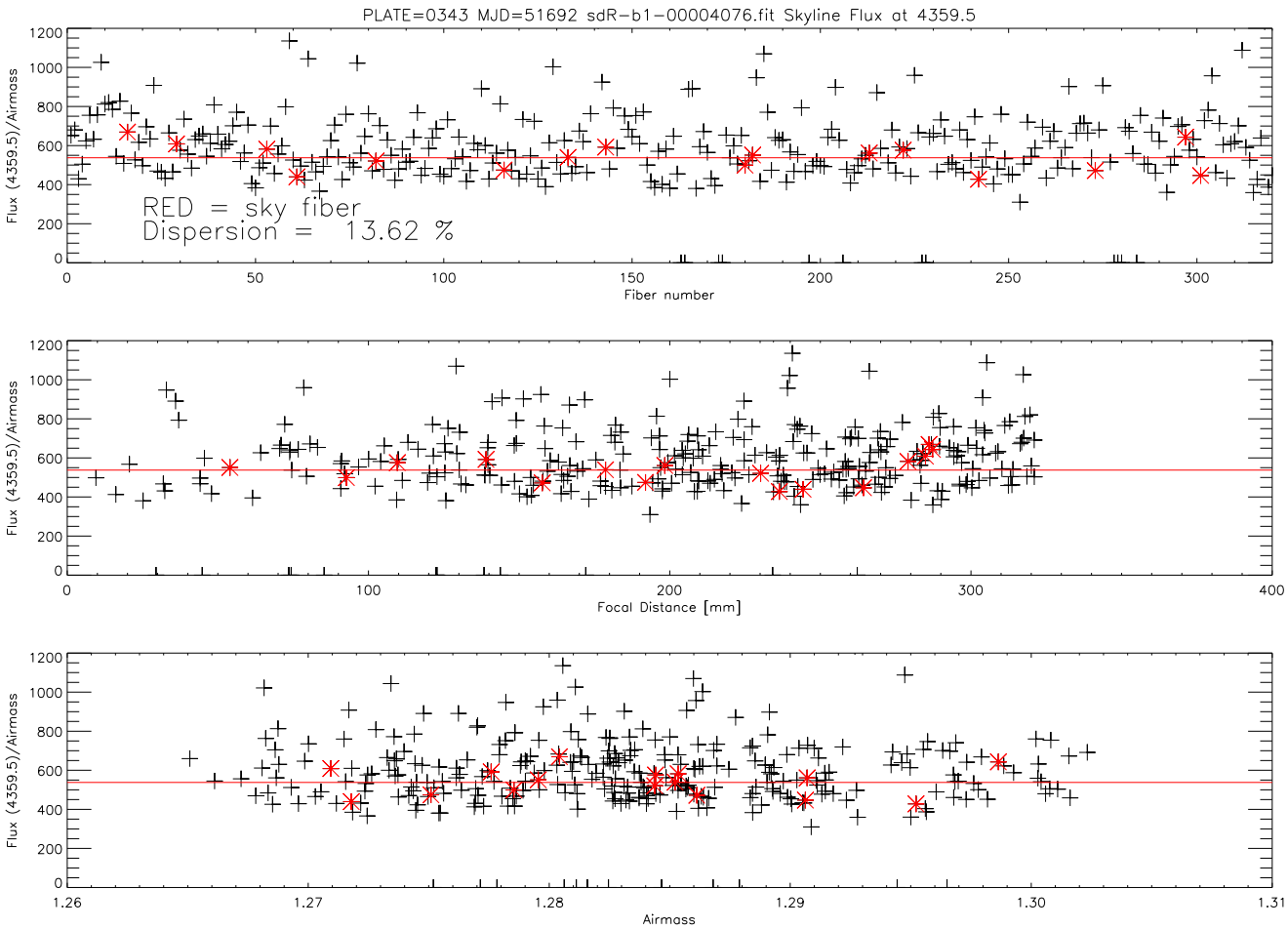

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004076.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

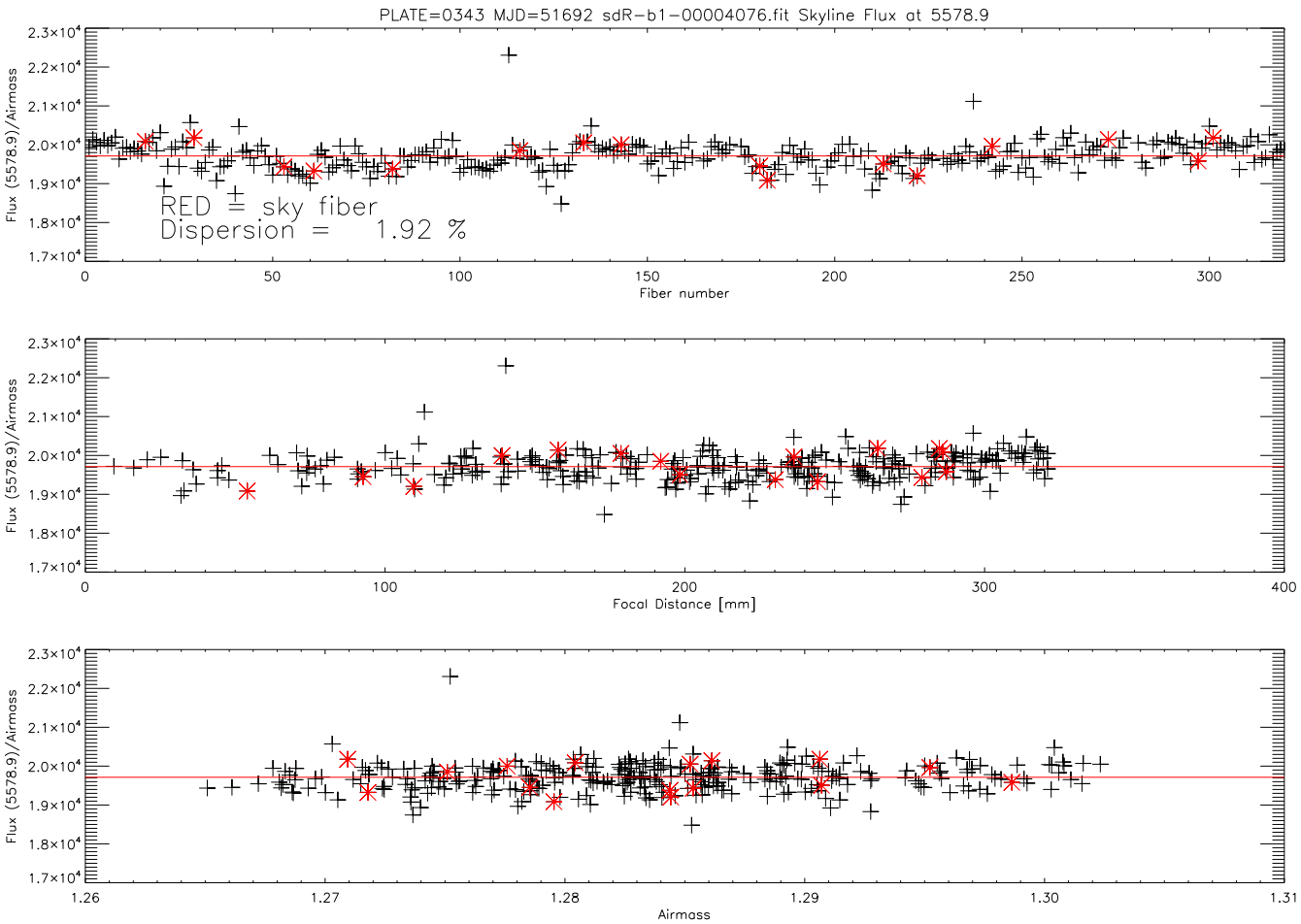

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

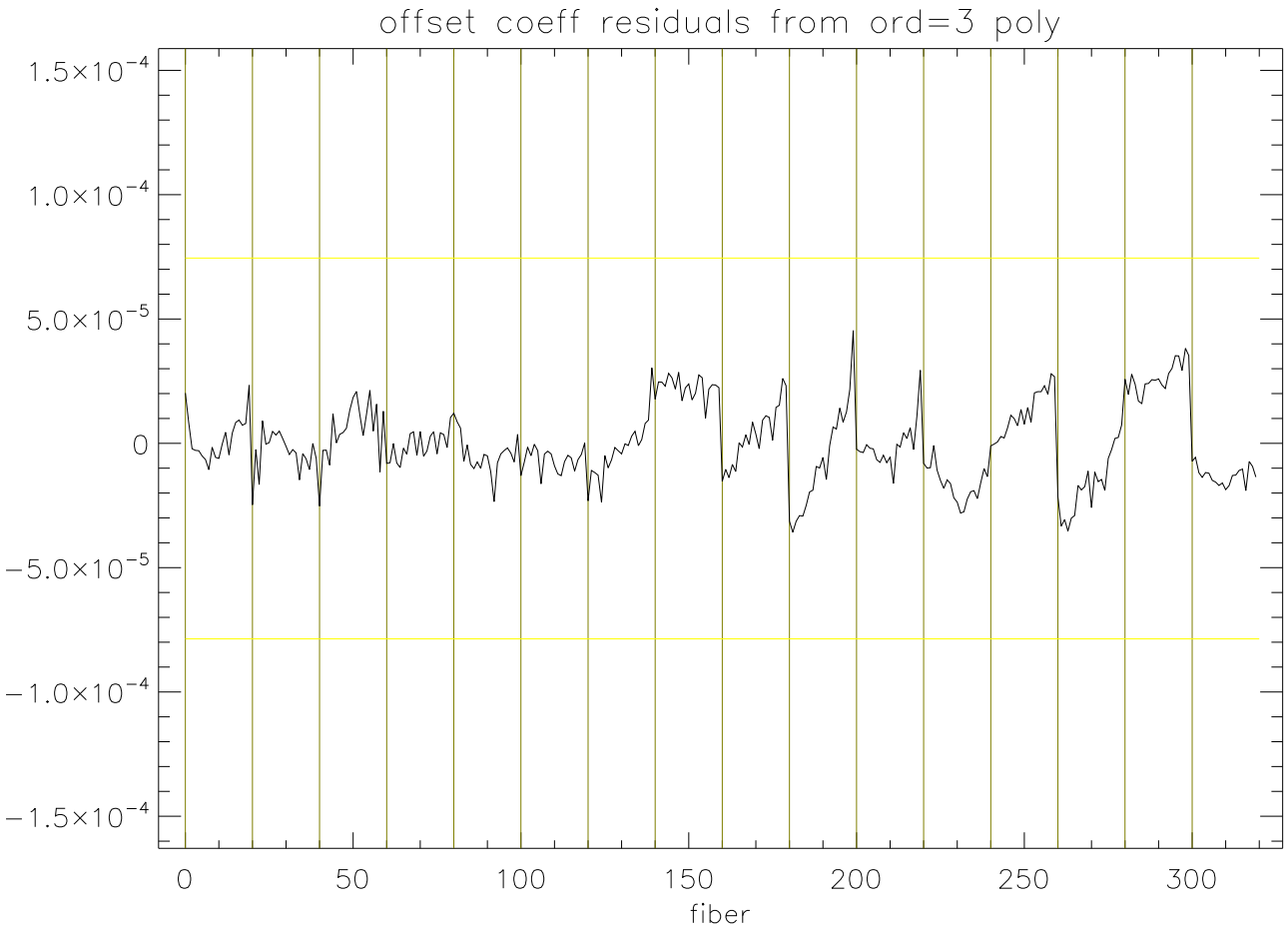

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

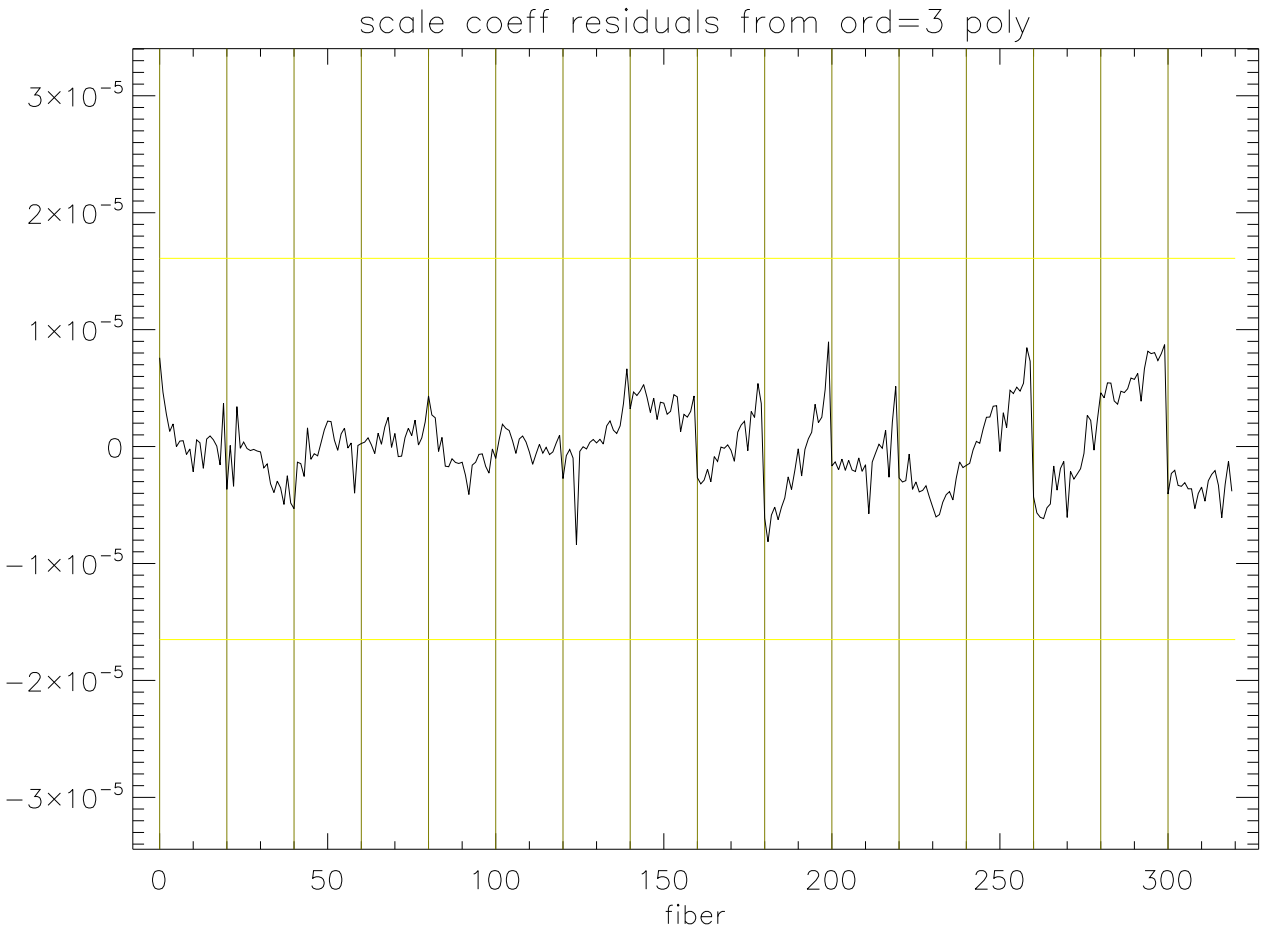

PLATE=0343 MJD=51692 sdR-b1-00004076.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

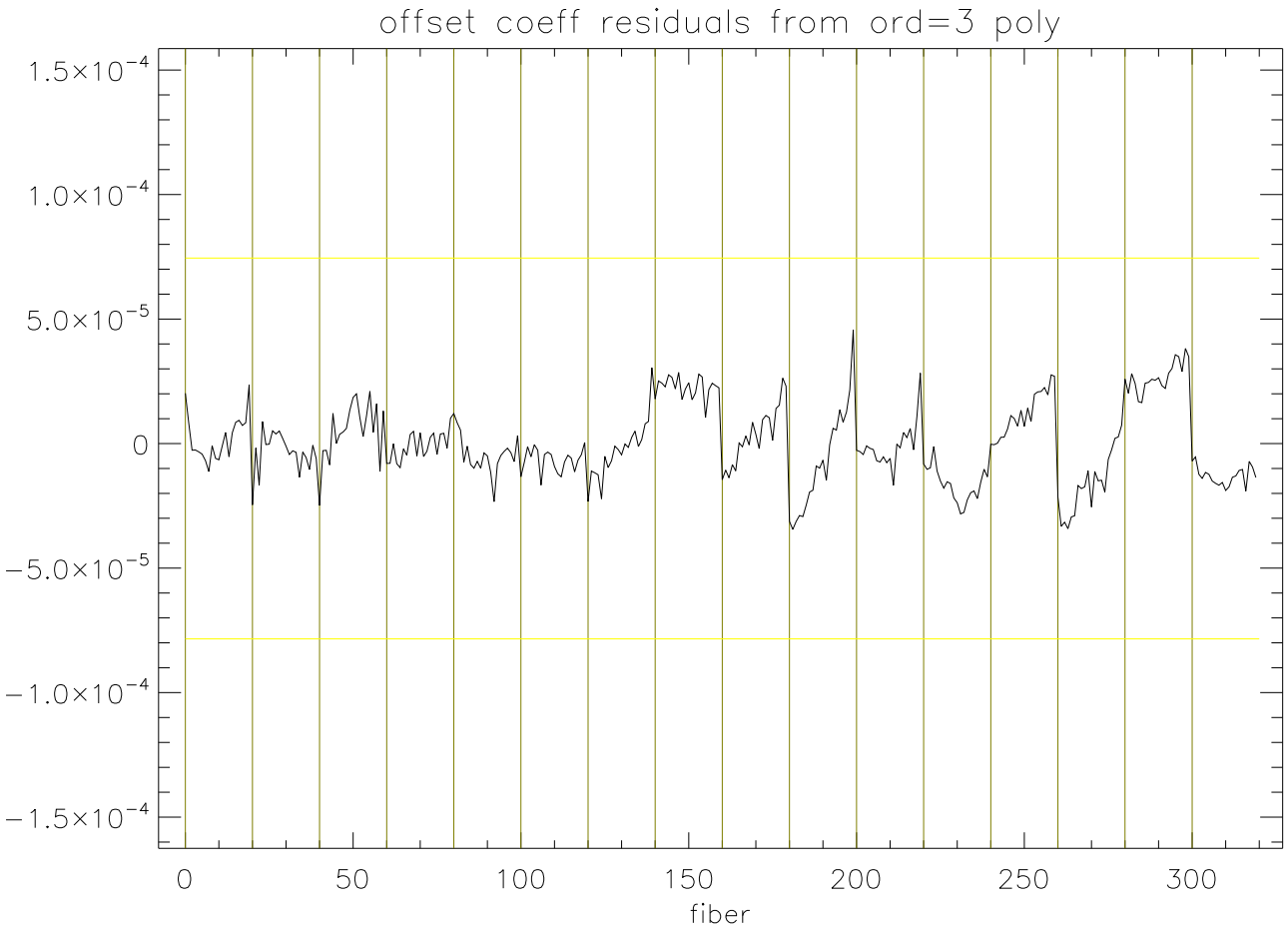

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b1-00004076.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

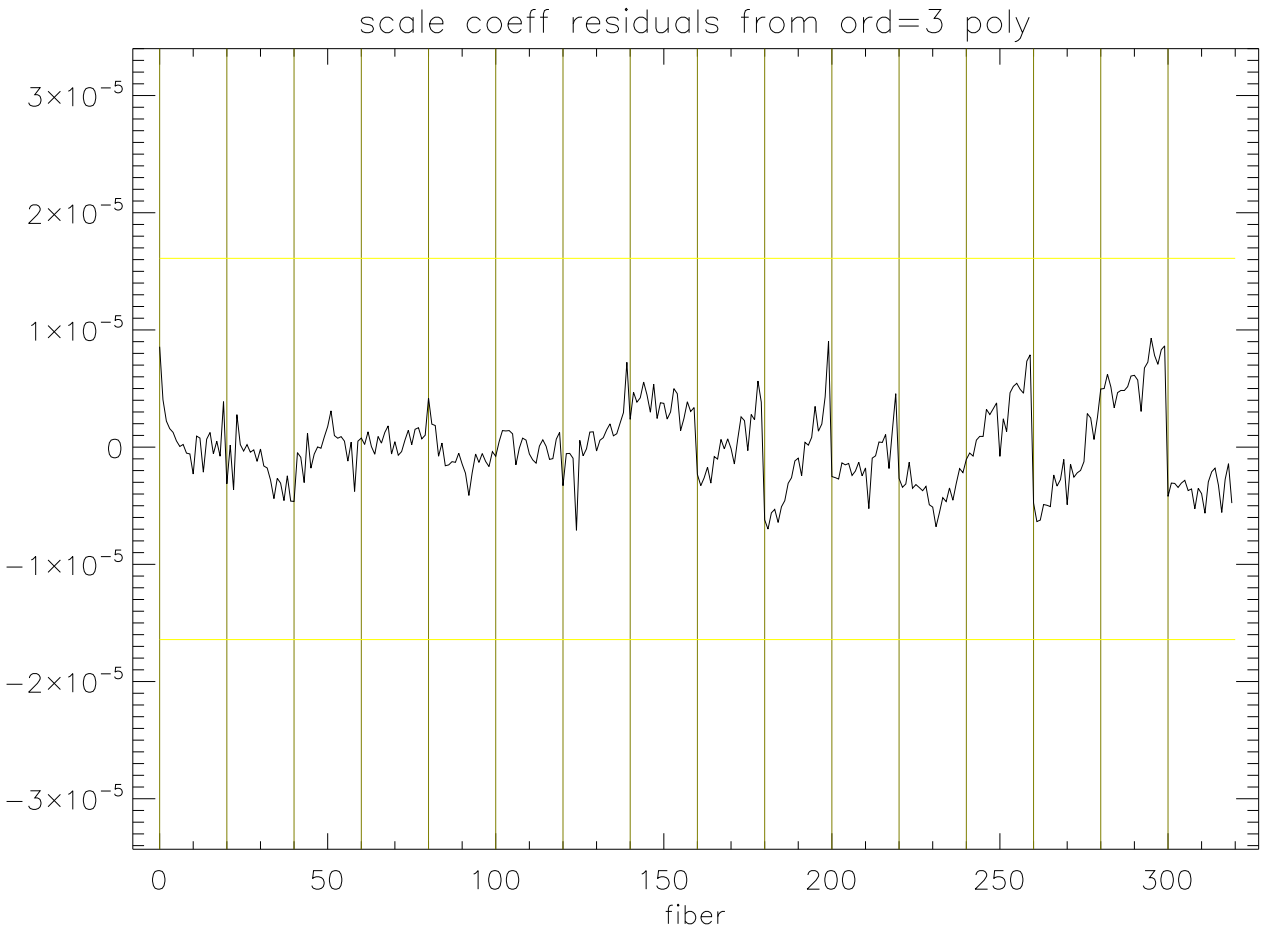

PLATE=0343 MJD=51692 sdR-b1-00004076.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

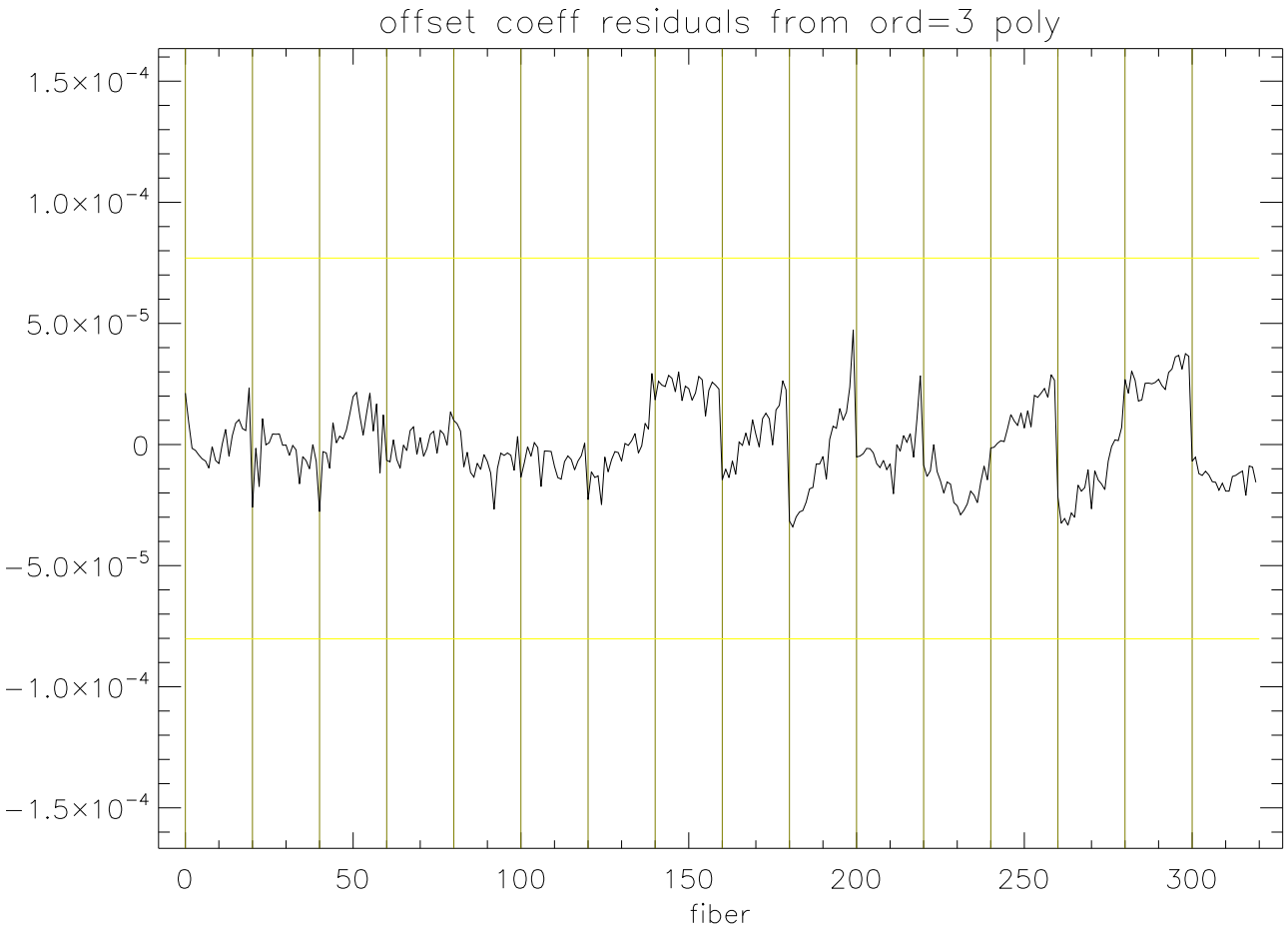

PLATE=0343 MJD=51692 sdR-b1-00004076.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

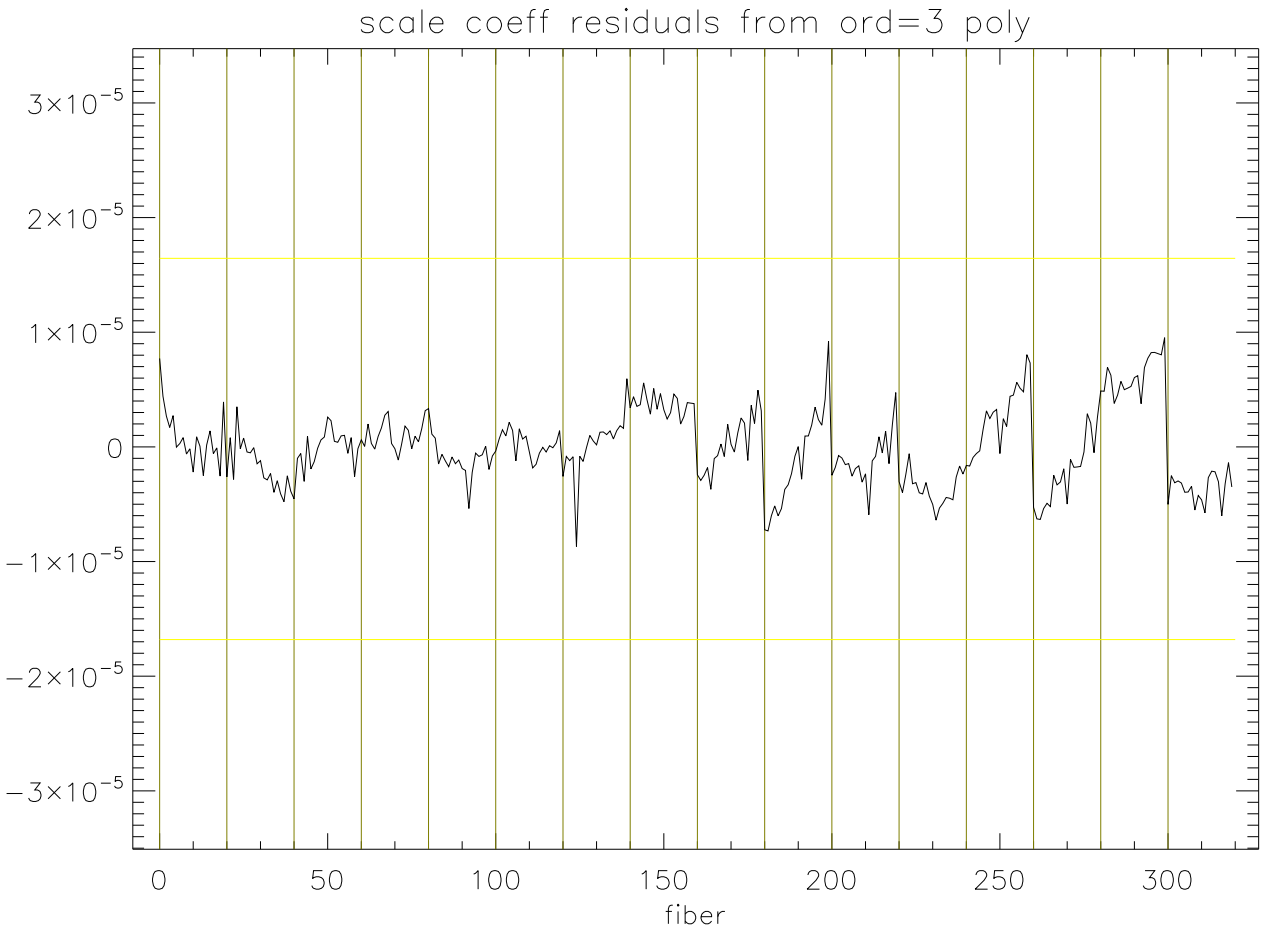

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

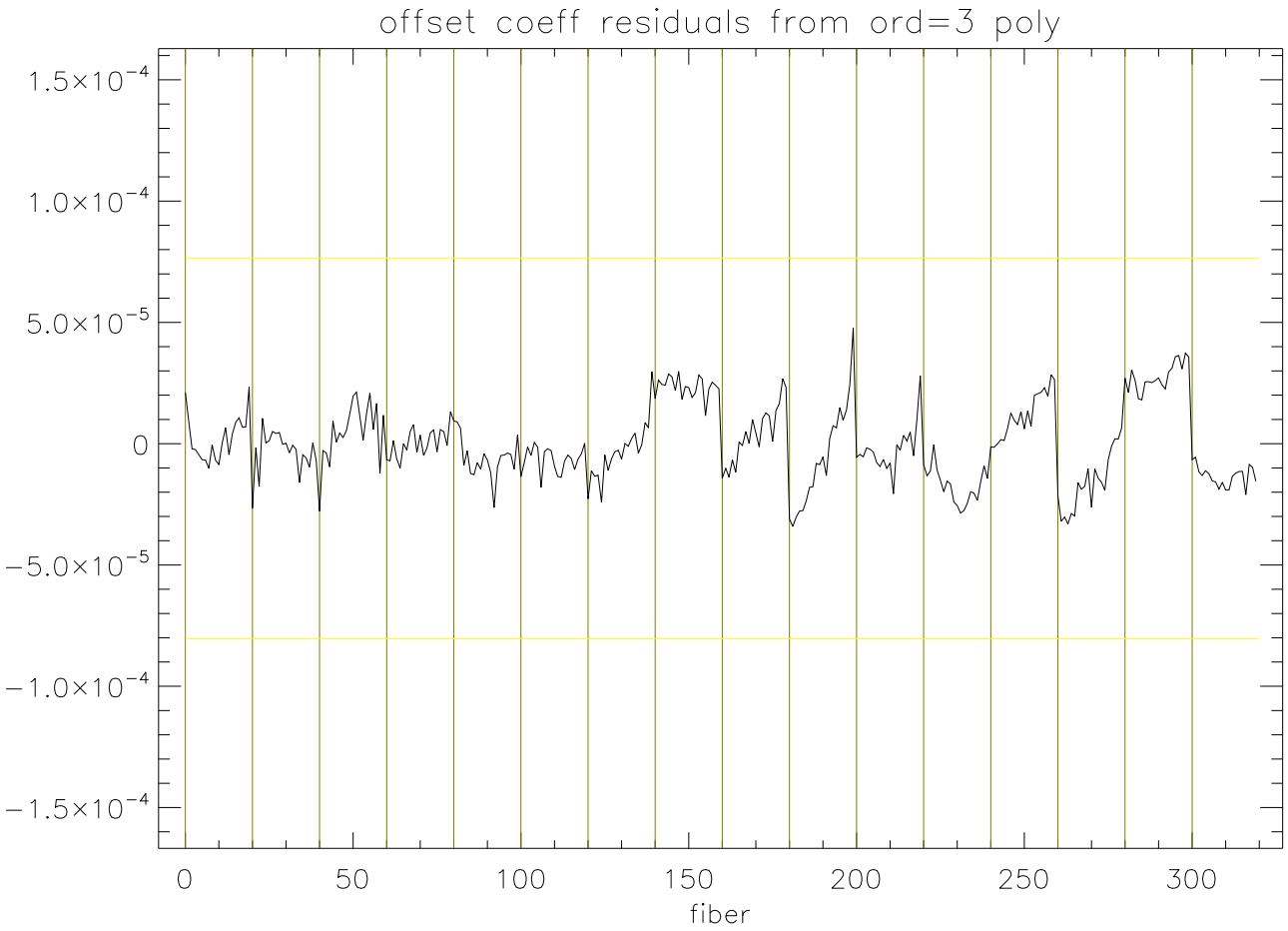

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

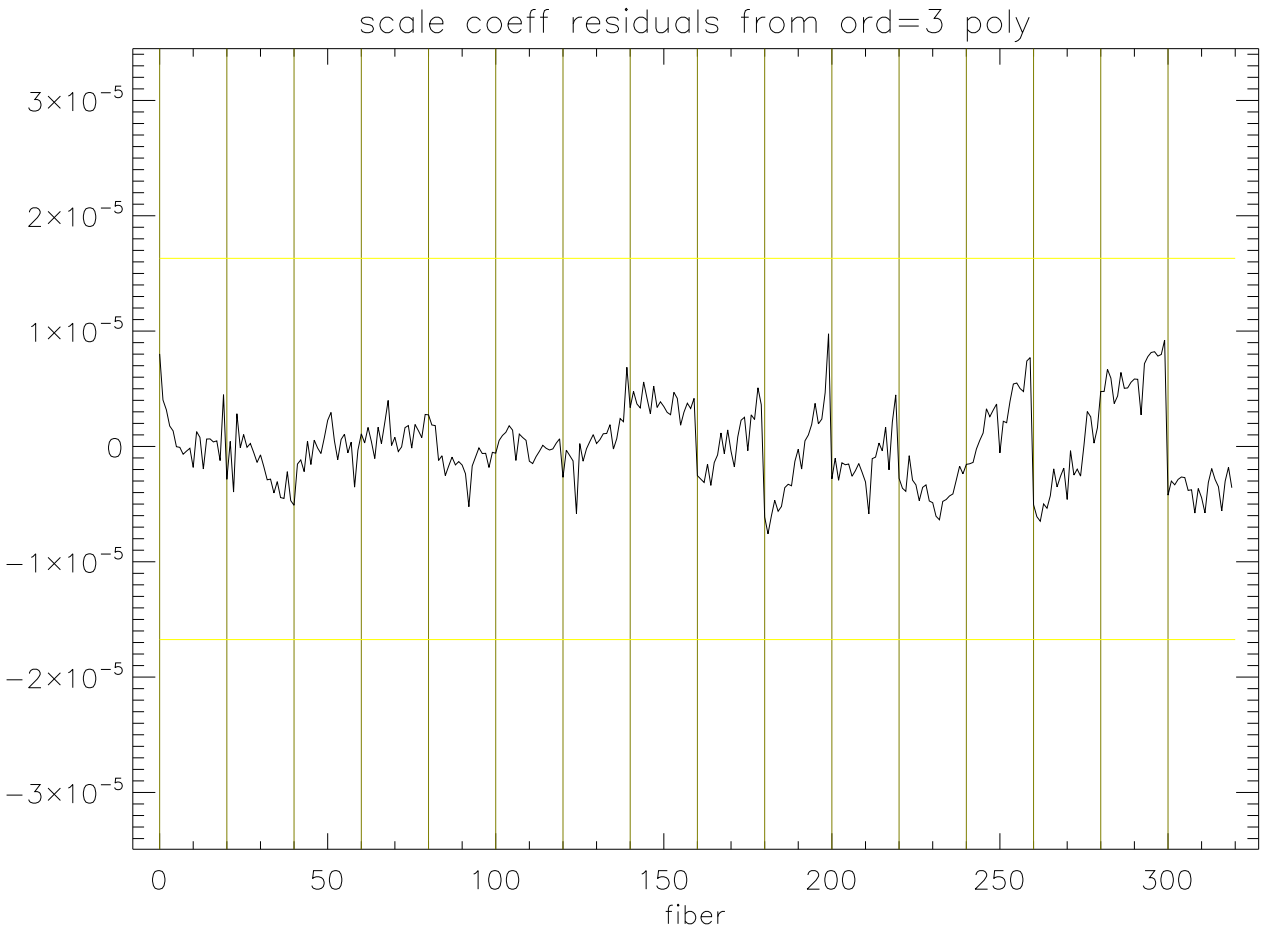

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

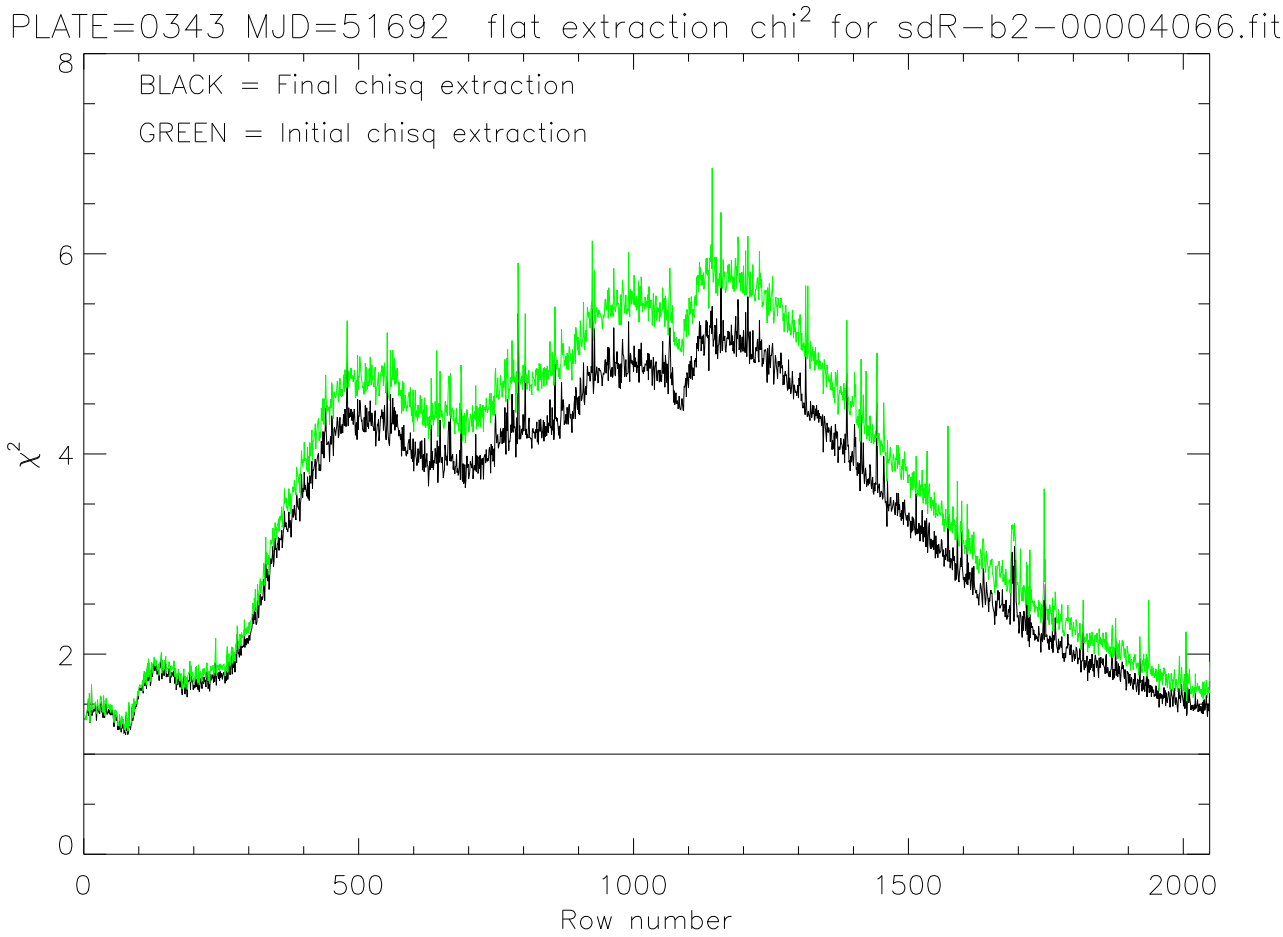

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

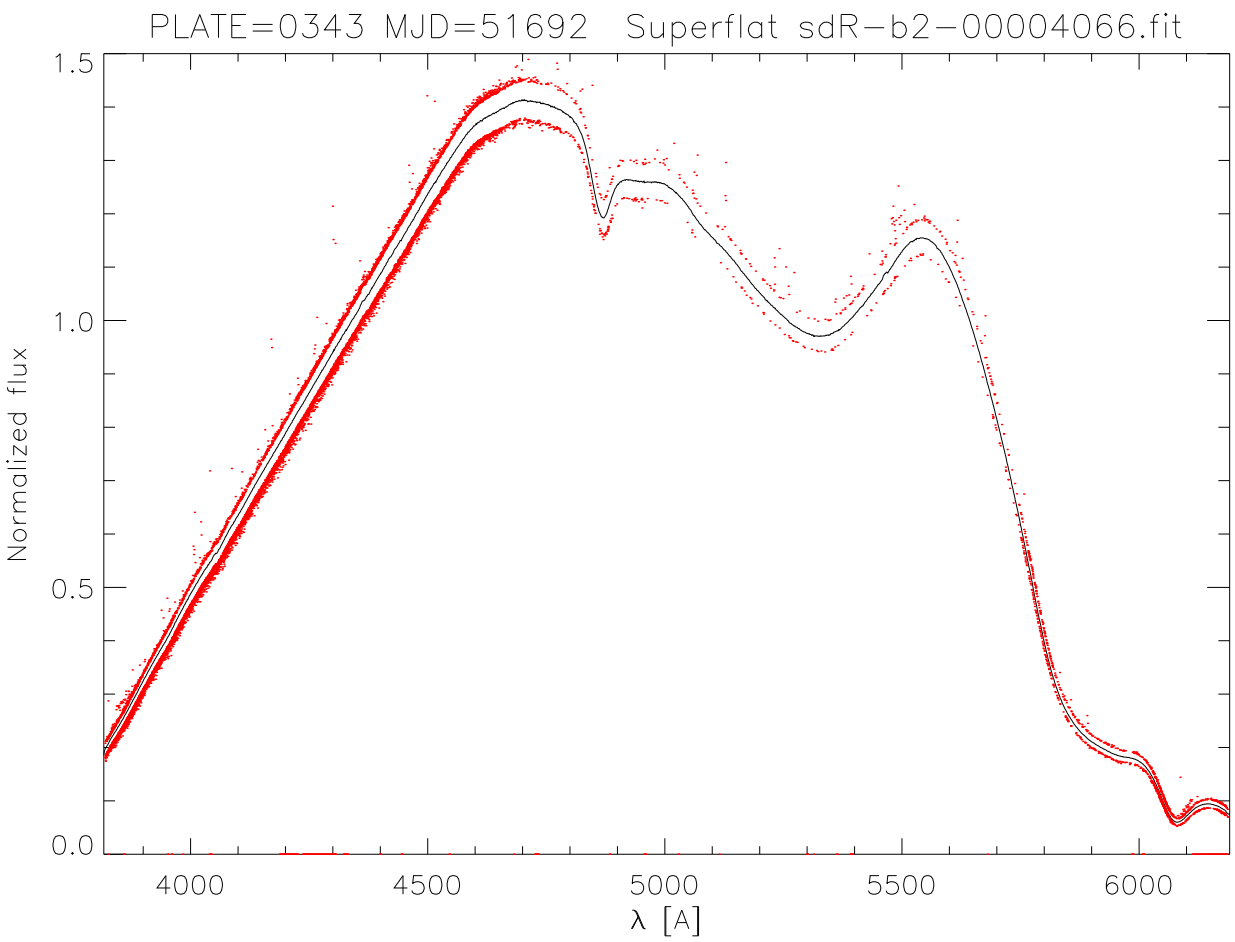

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

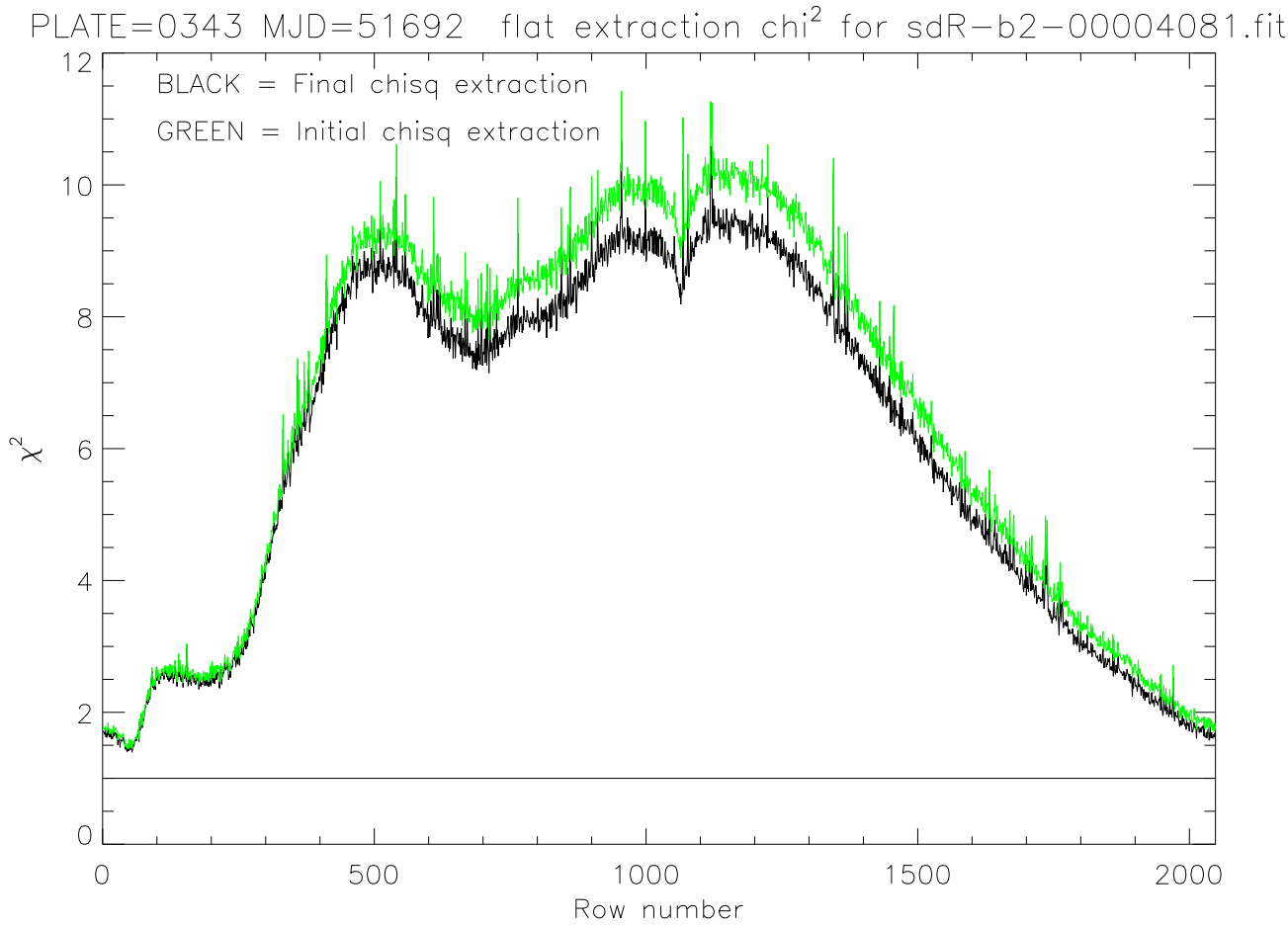

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

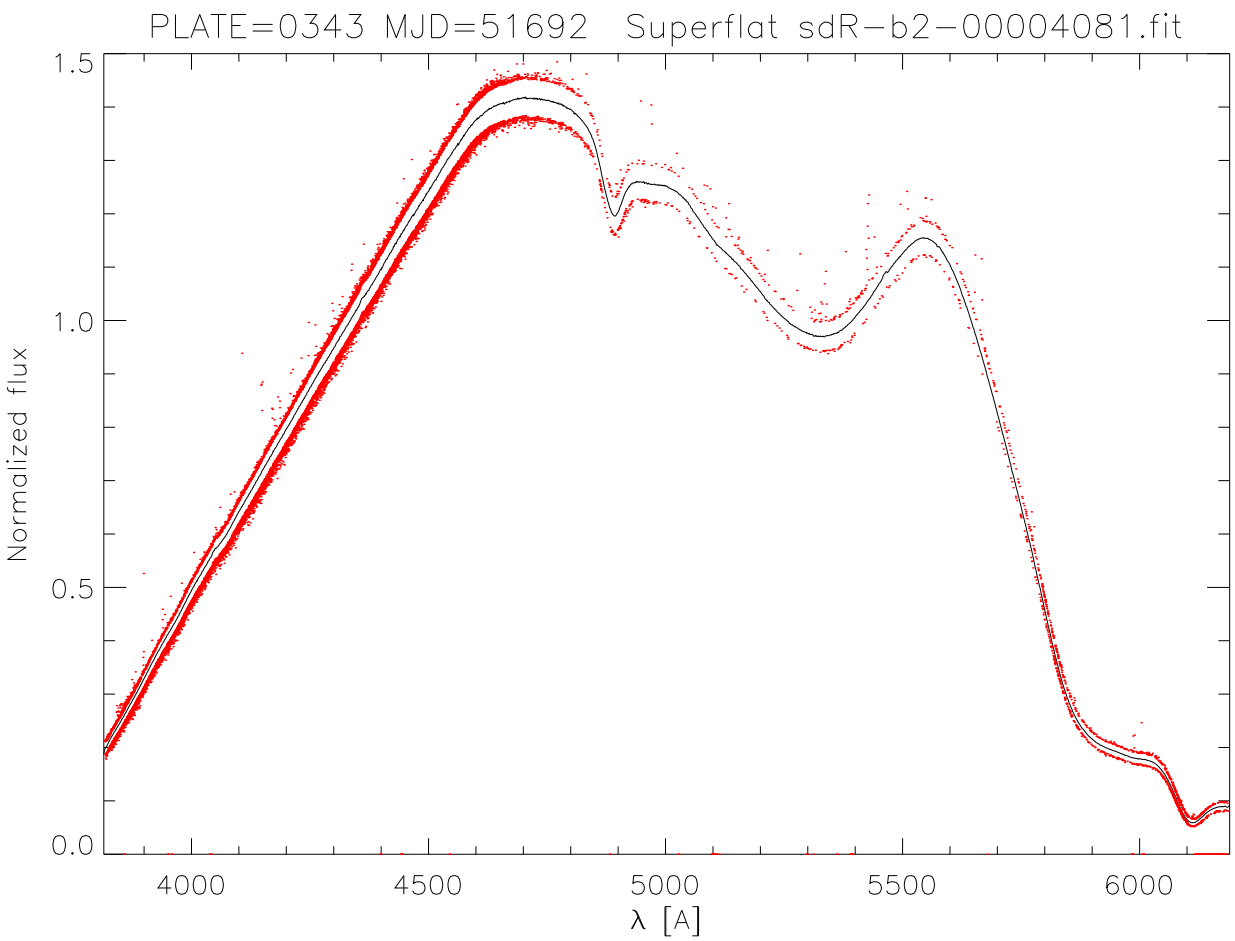

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

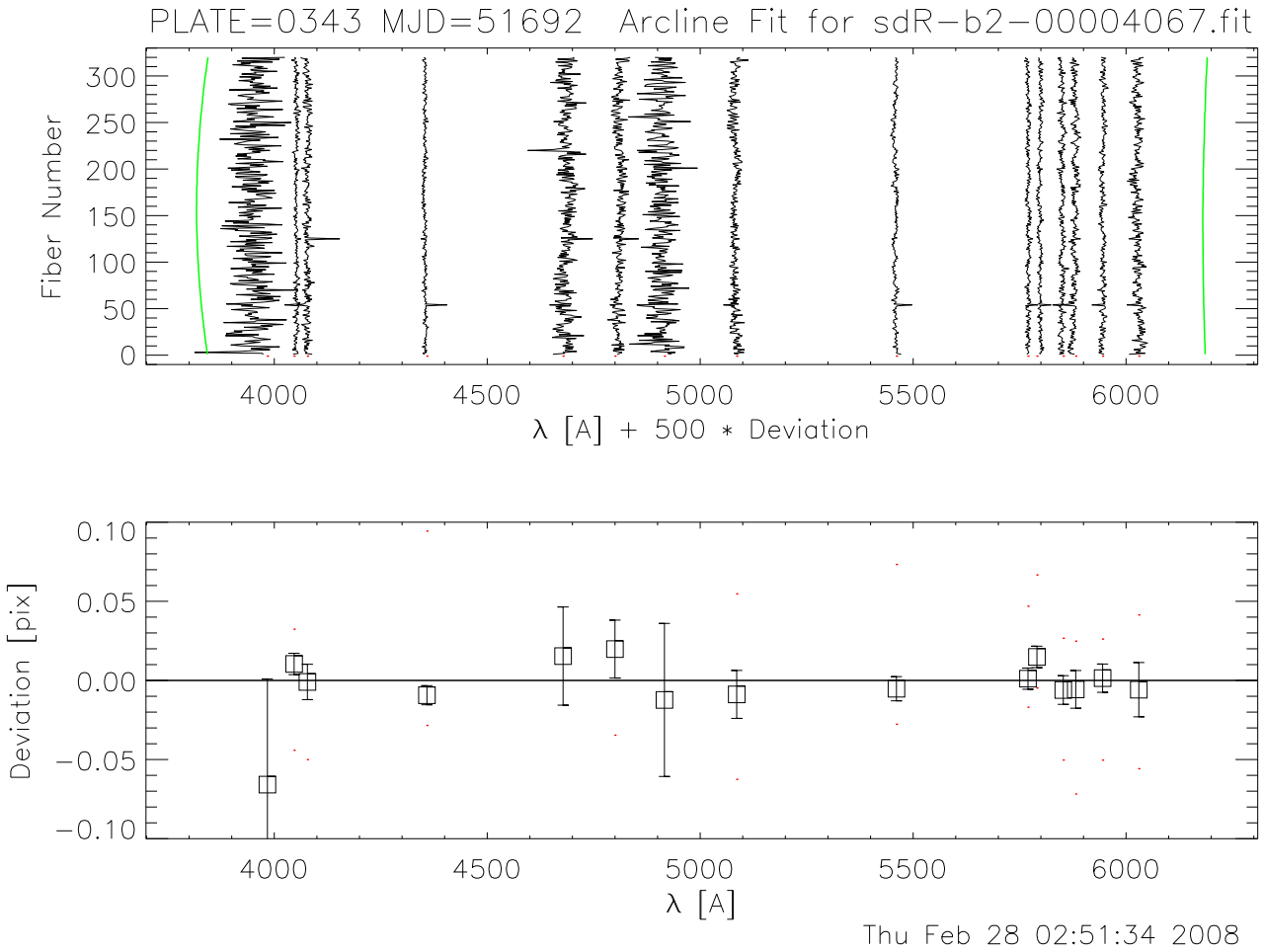

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

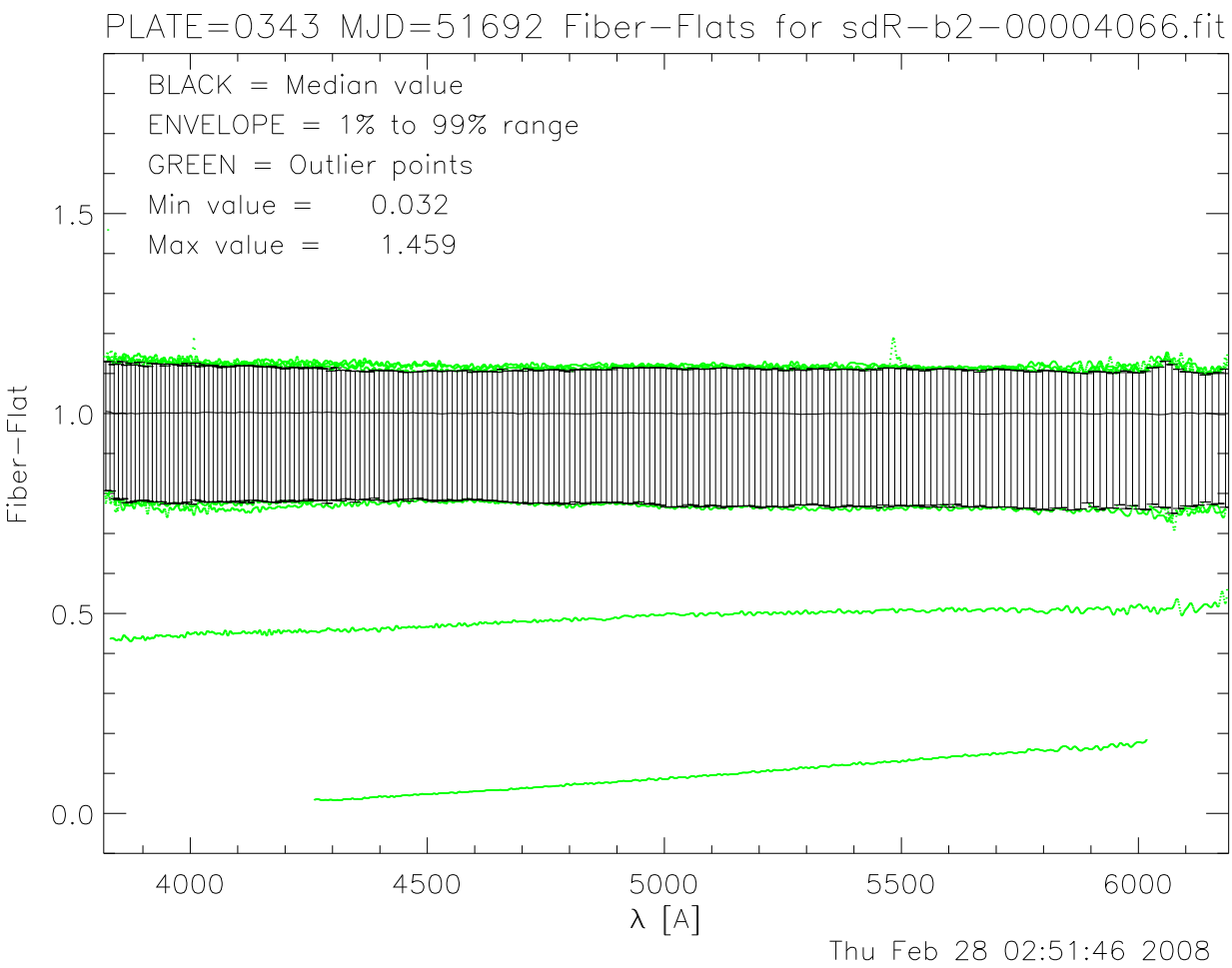

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−b2−00004066.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

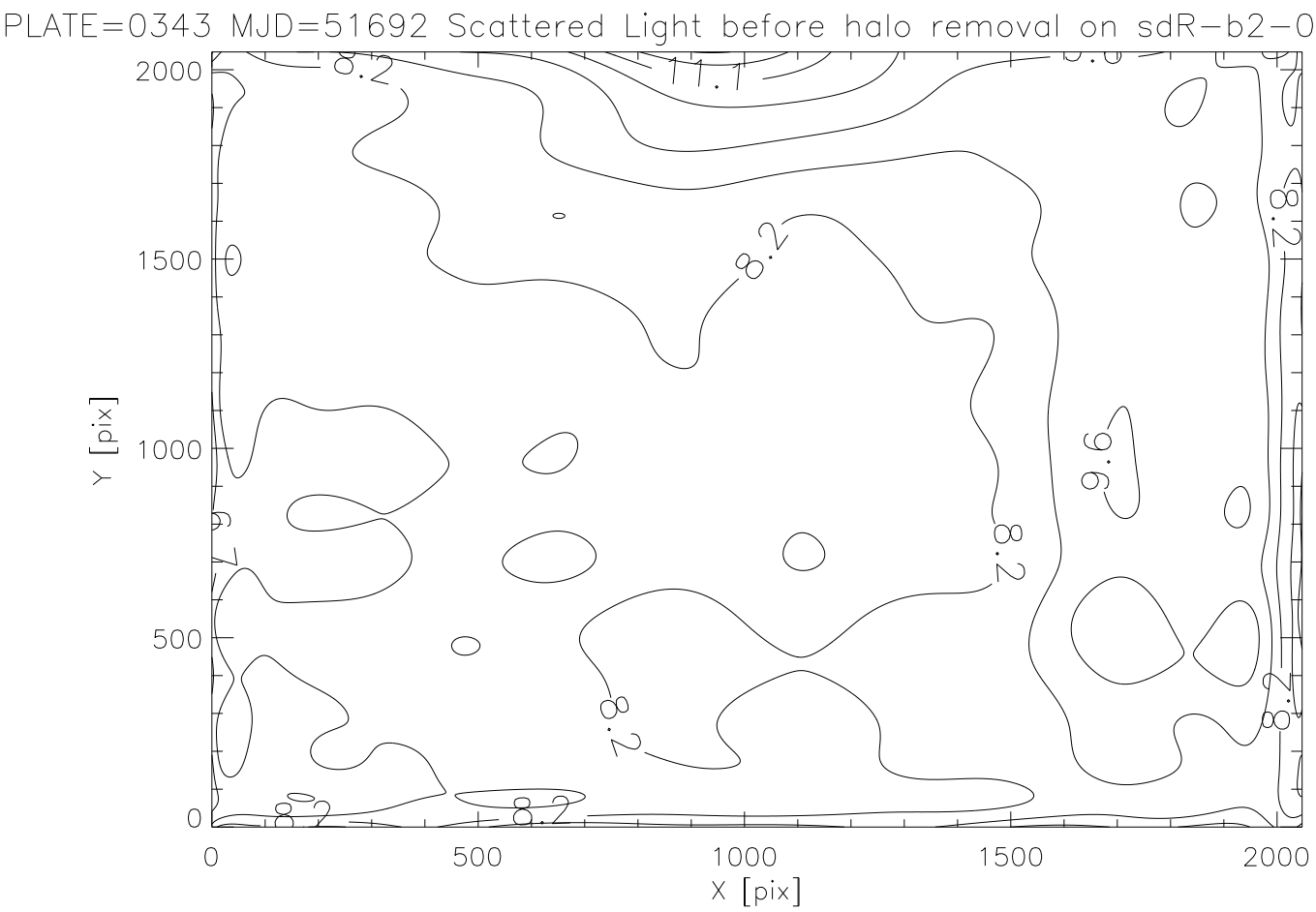

PLATE=0343 MJD=51692 Superflat sdR-b2-00004066.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

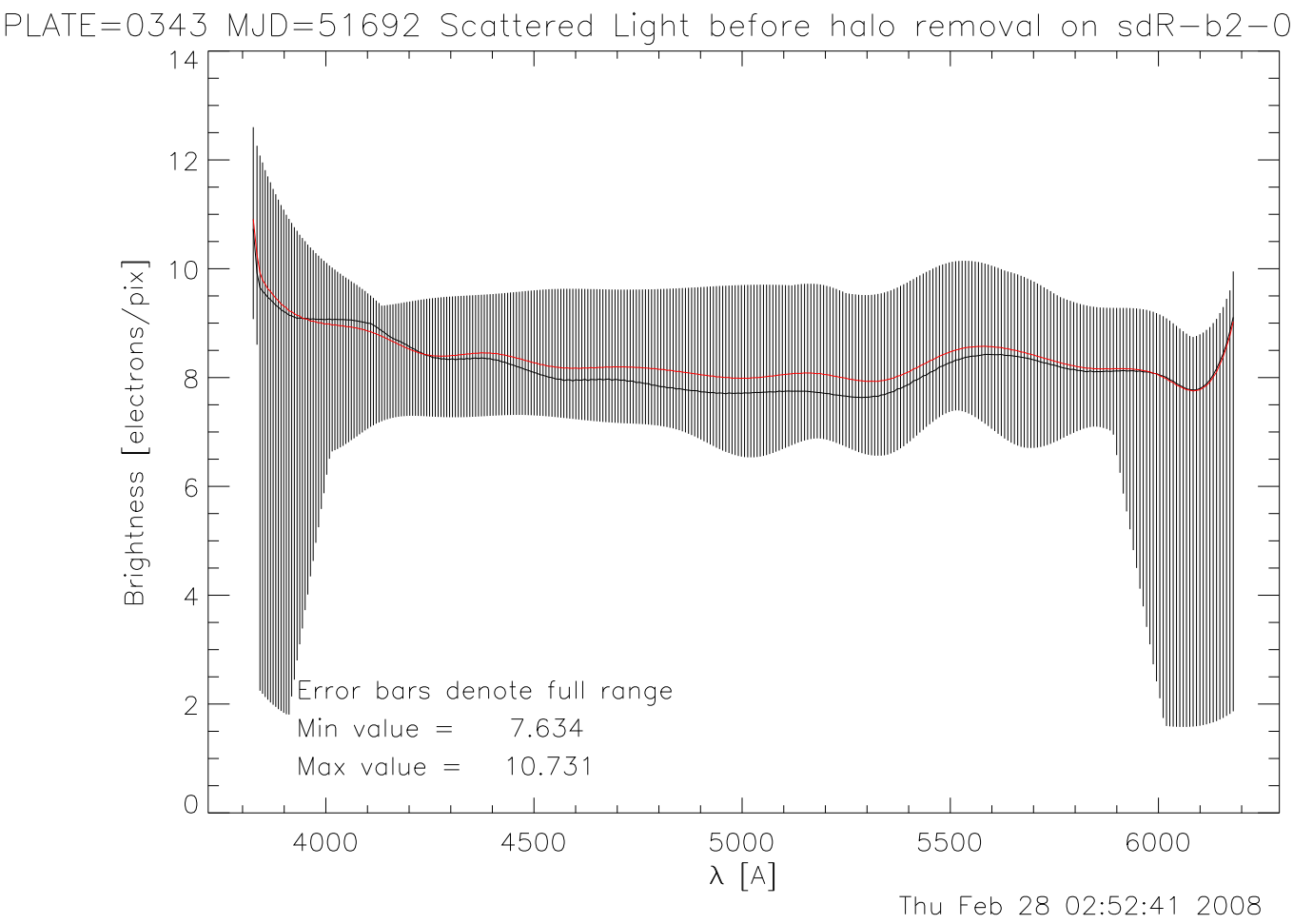

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−b2−00004081.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

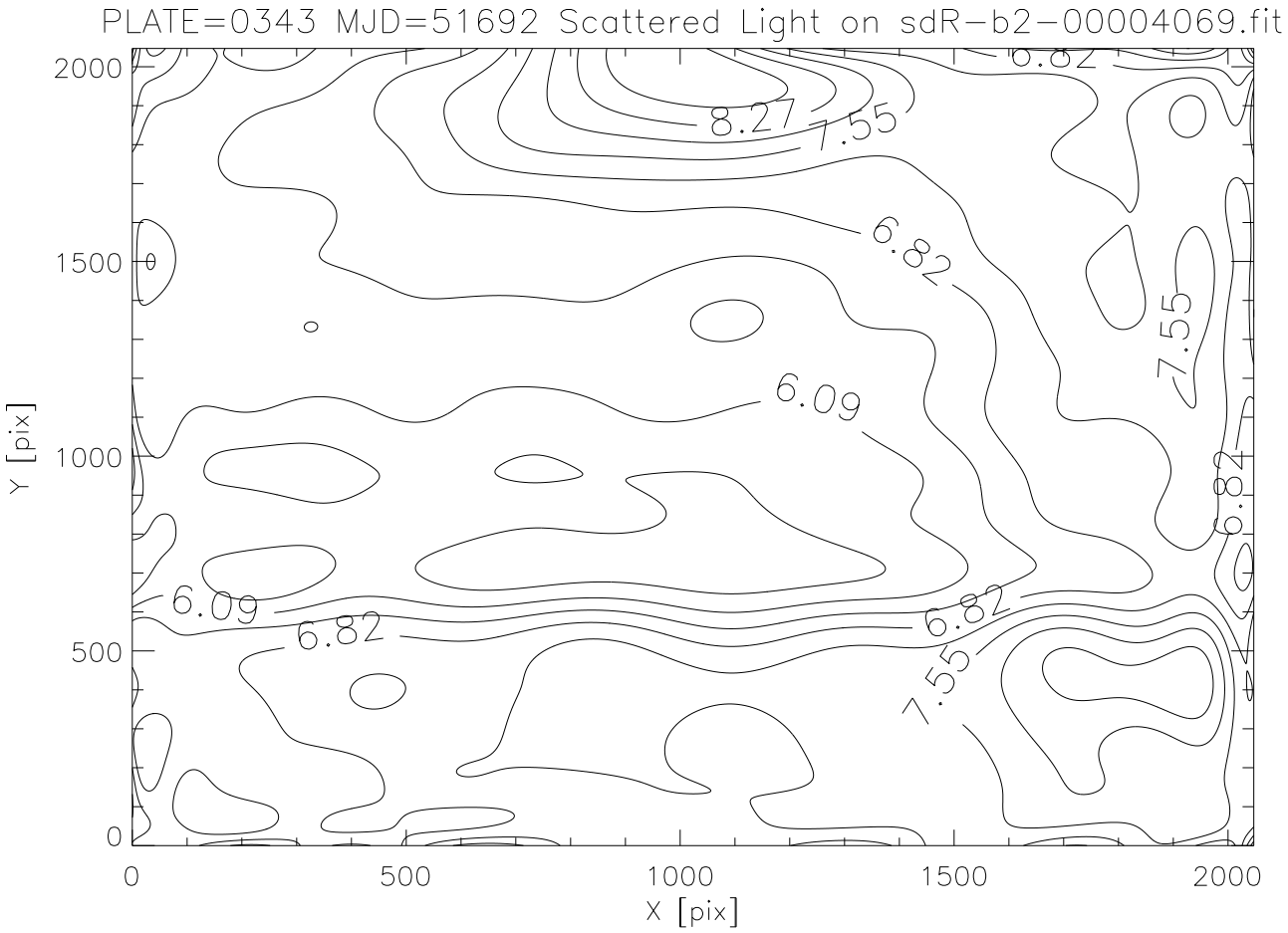

PLATE=0343 MJD=51692 Superflat sdR-b2-00004081.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

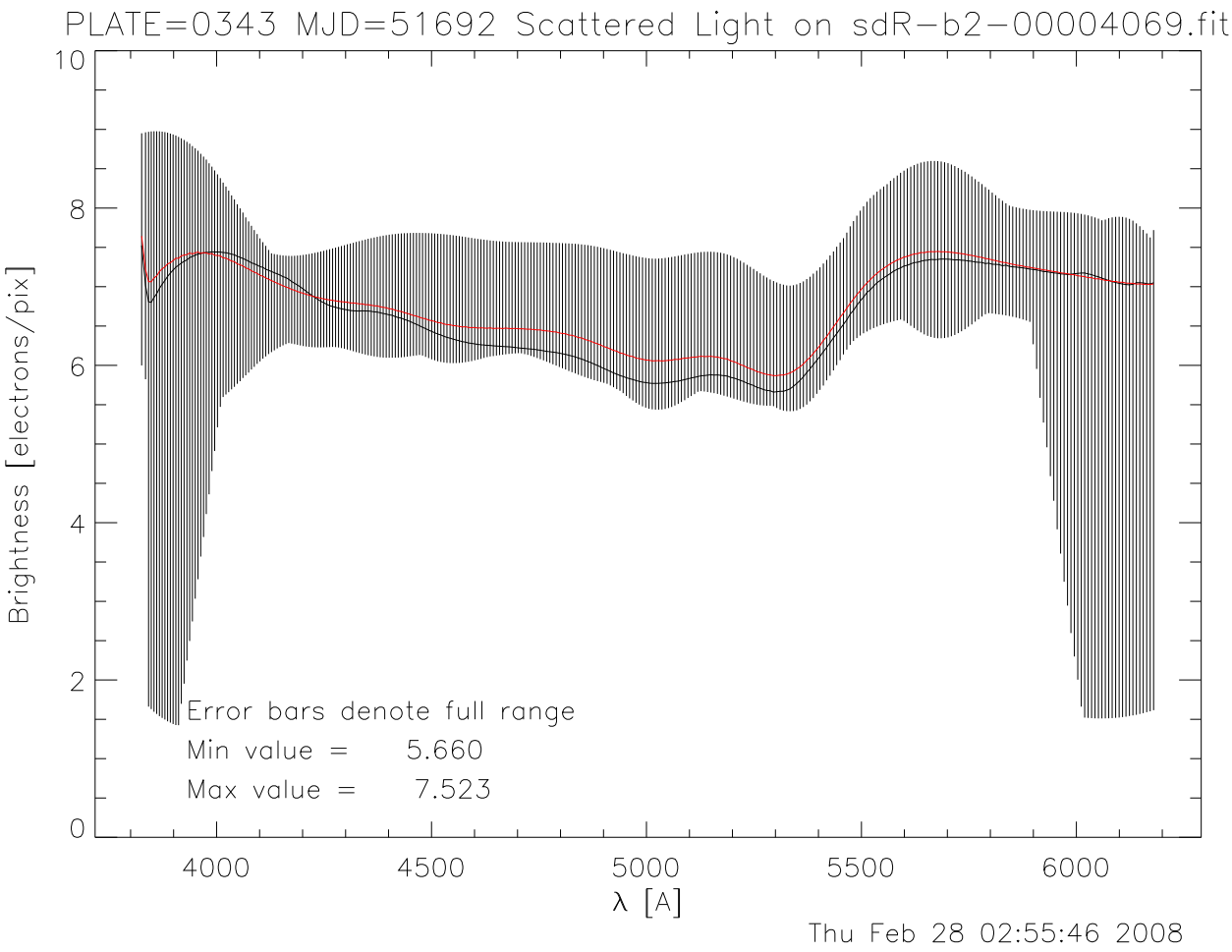

PLATE=0343 MJD=51692 Arcline Fit for sdR-b2-00004067.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:51:34 2008

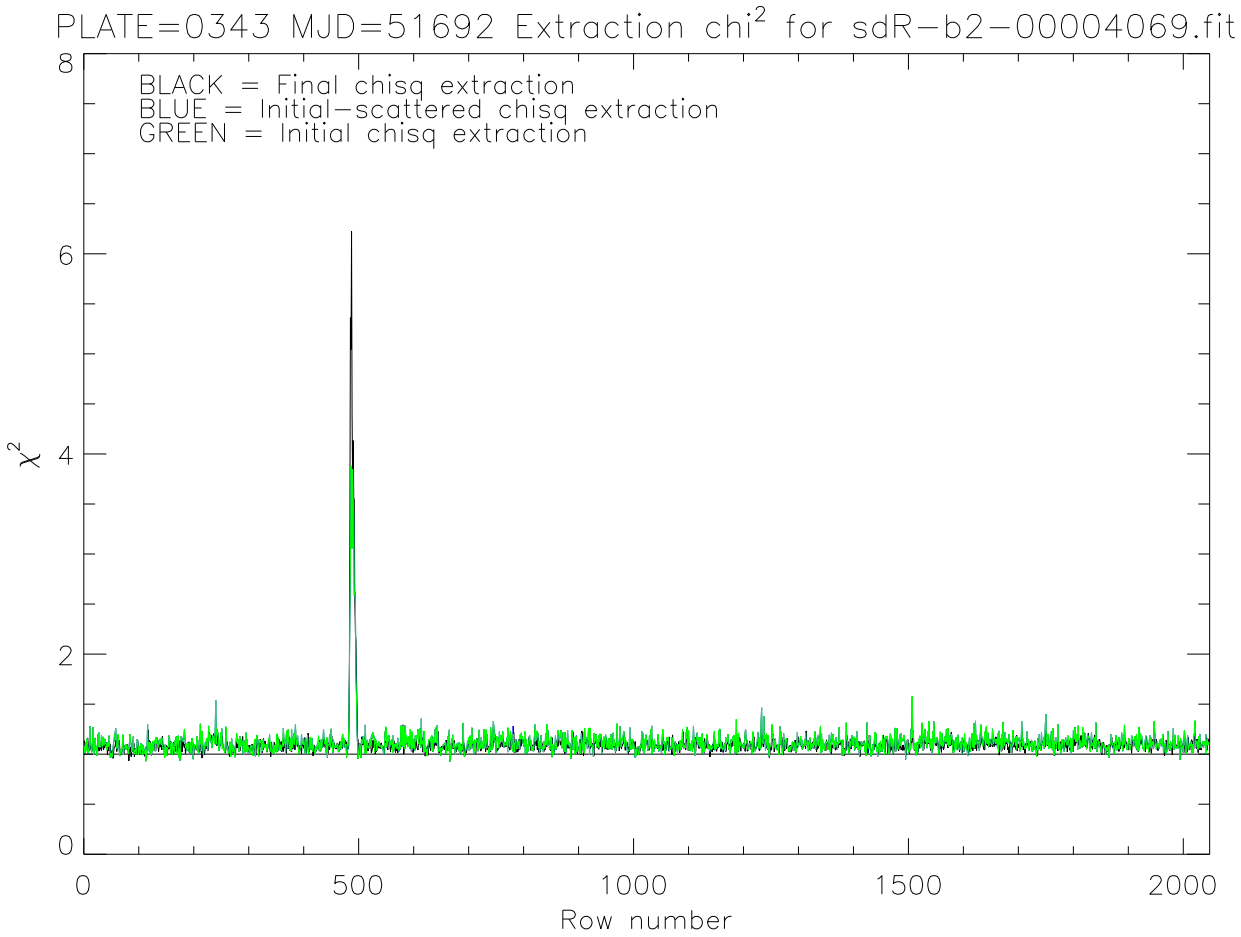

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:51:46 2008

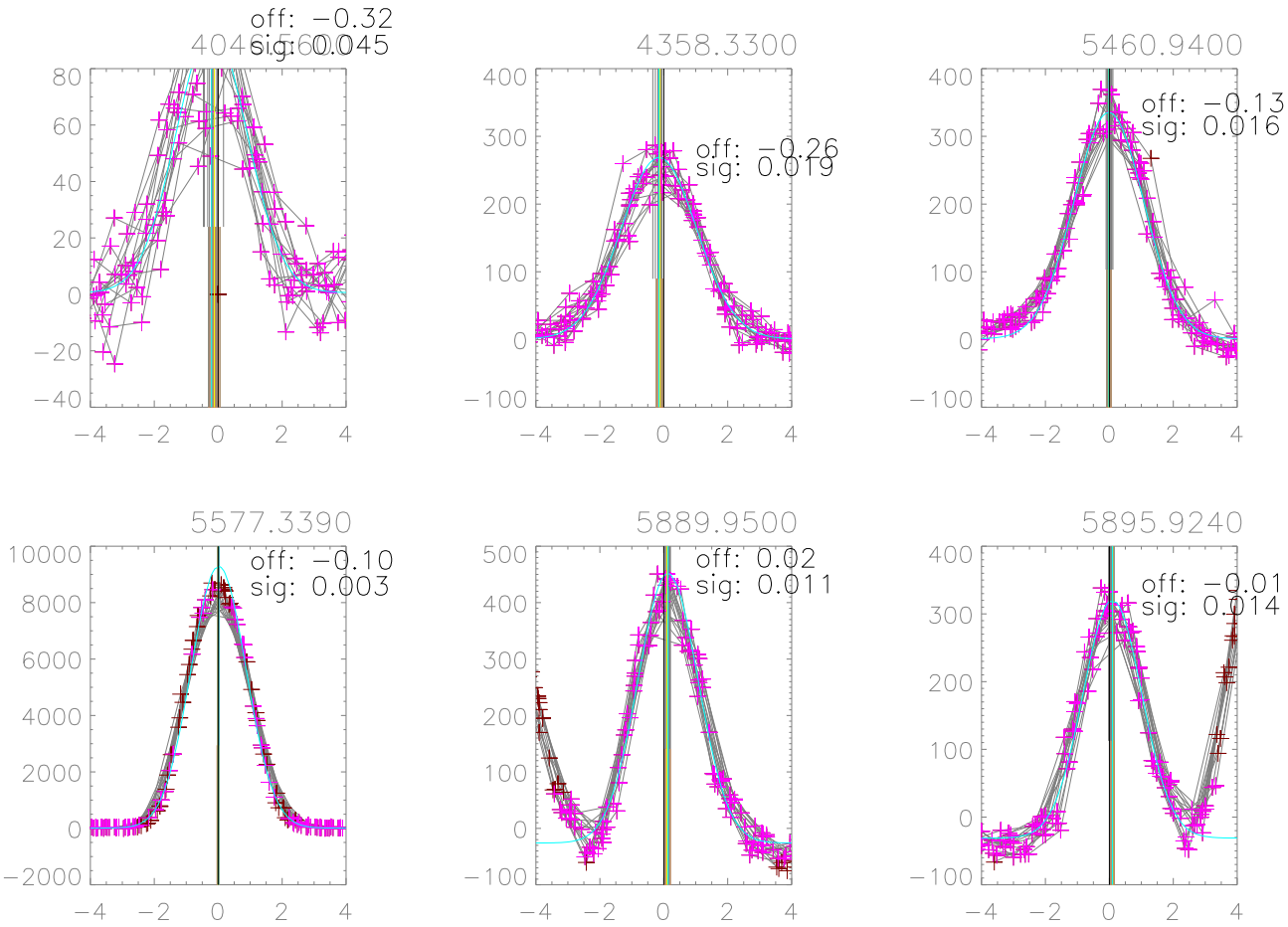

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004069.f
8.2
11.1
9.6
8.2
8.2
9.6
8.2
8.2
8.2
8.2
8.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

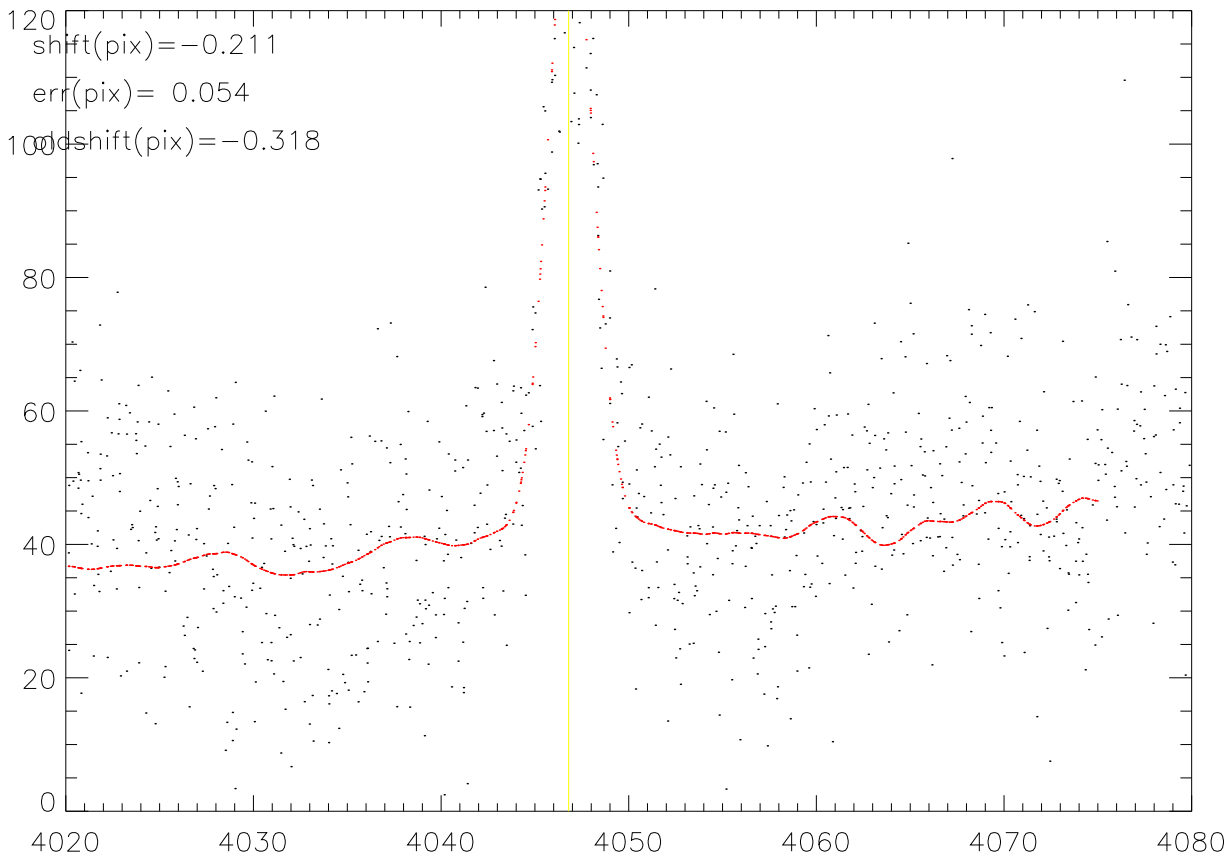

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004069.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.634
Max value = 10.731
Thu Feb 28 02:52:41 2008

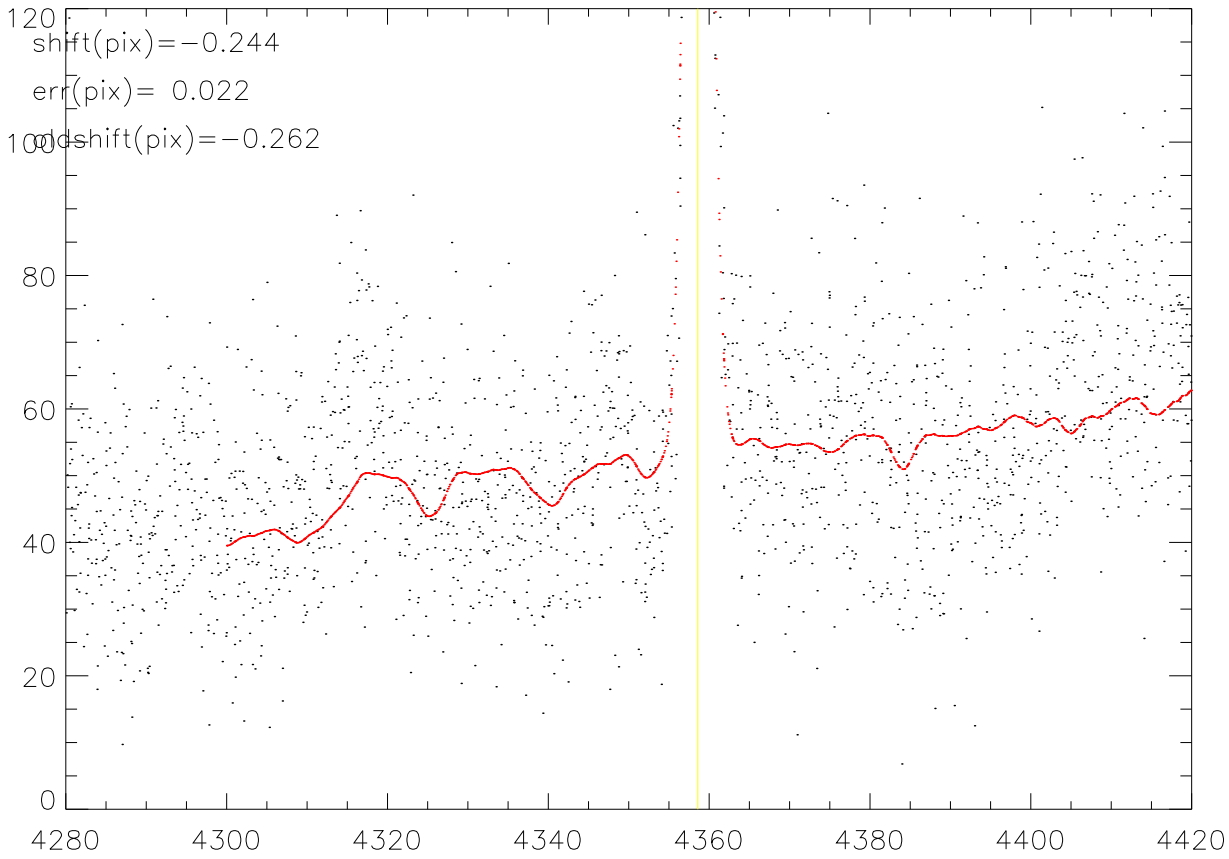

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004069.fit
8.27
7.55
6.82
6.09
Y [pix]
X [pix]
0
500
1000
1500
2000

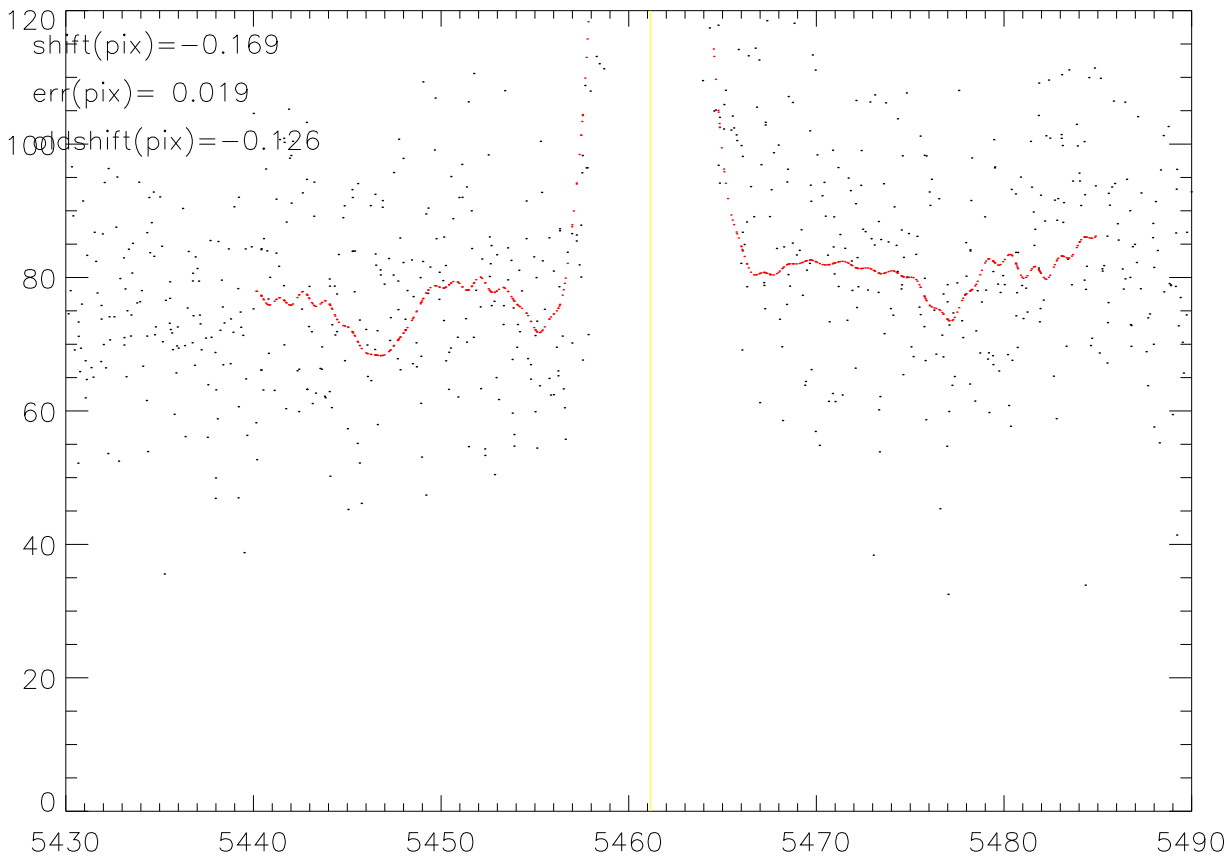

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004069.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.660
Max value = 7.523
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:55:46 2008

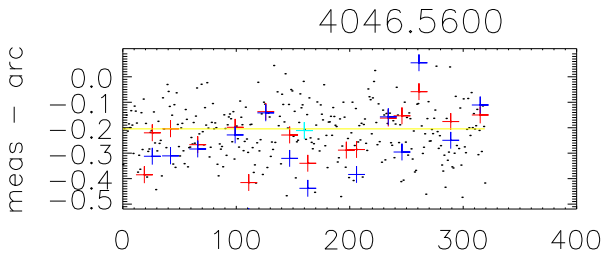

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004069.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

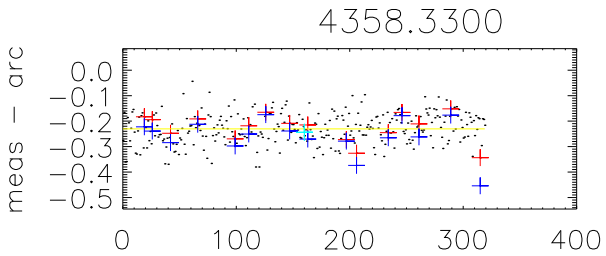

off: −0.32
sig: 0.045
4358.3300
off: −0.26
sig: 0.019
5460.9400
off: −0.13
sig: 0.016
5577.3390
off: −0.10
sig: 0.003
5889.9500
off: 0.02
sig: 0.011
5895.9240
off: −0.01
sig: 0.014

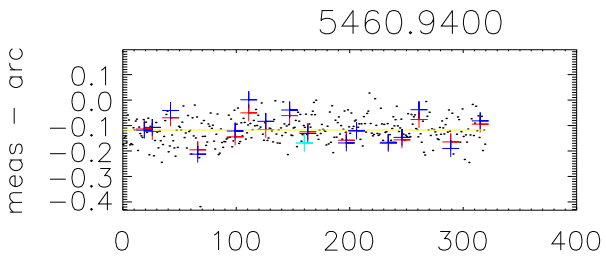

shift(pix)=−0.211
err(pix)= 0.054
oldshift(pix)=−0.318
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

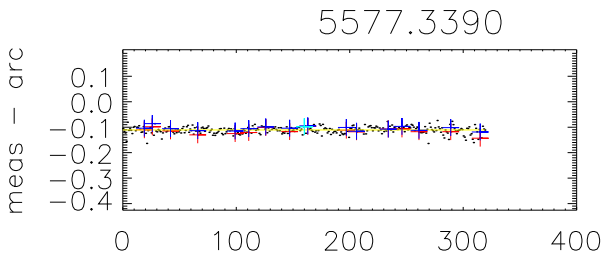

shift(pix)=−0.244
err(pix)= 0.022
oldshift(pix)=−0.262
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

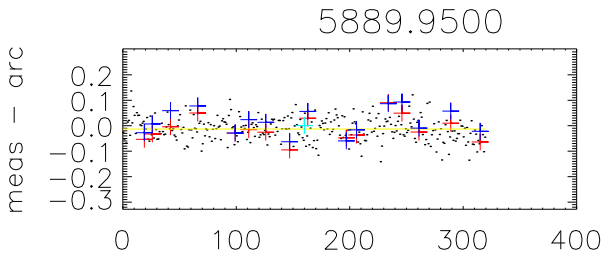

shift(pix)=−0.169
err(pix)= 0.019
oldshift(pix)=−0.126
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

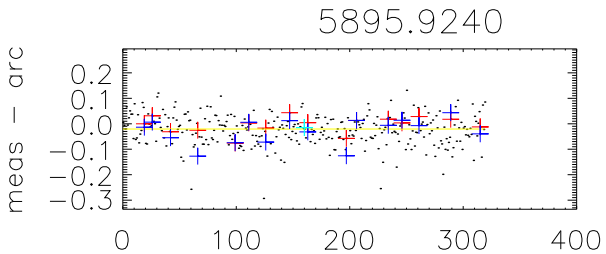

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

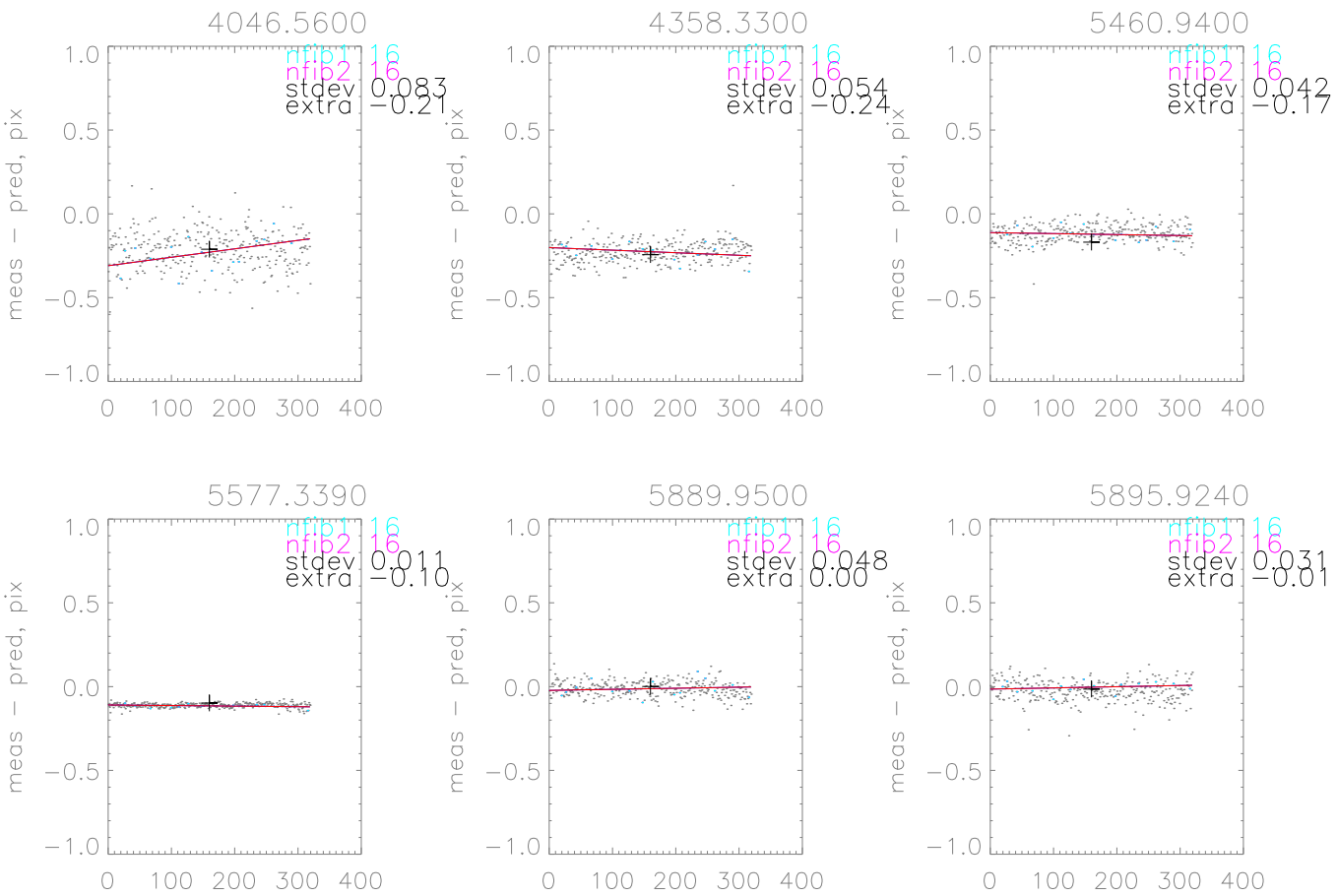

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

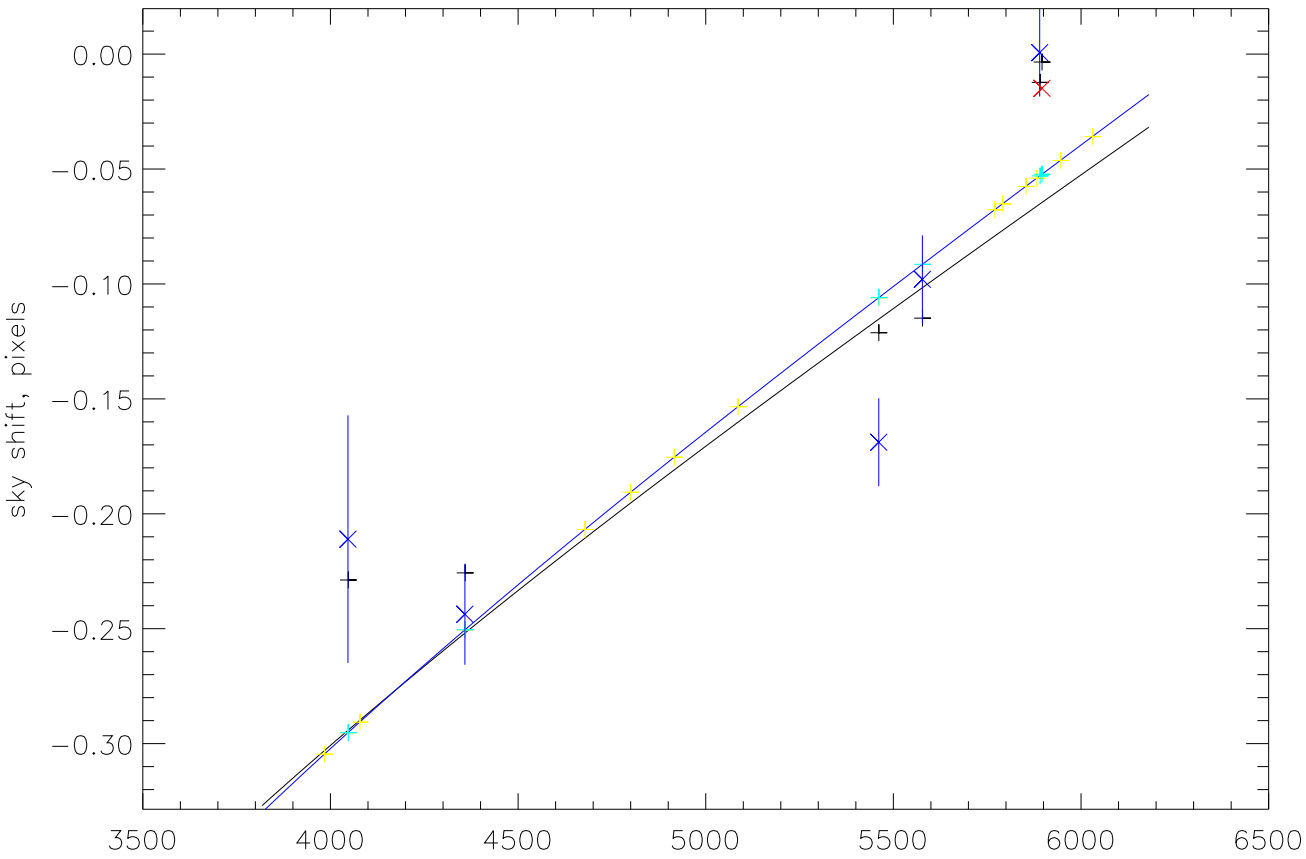

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

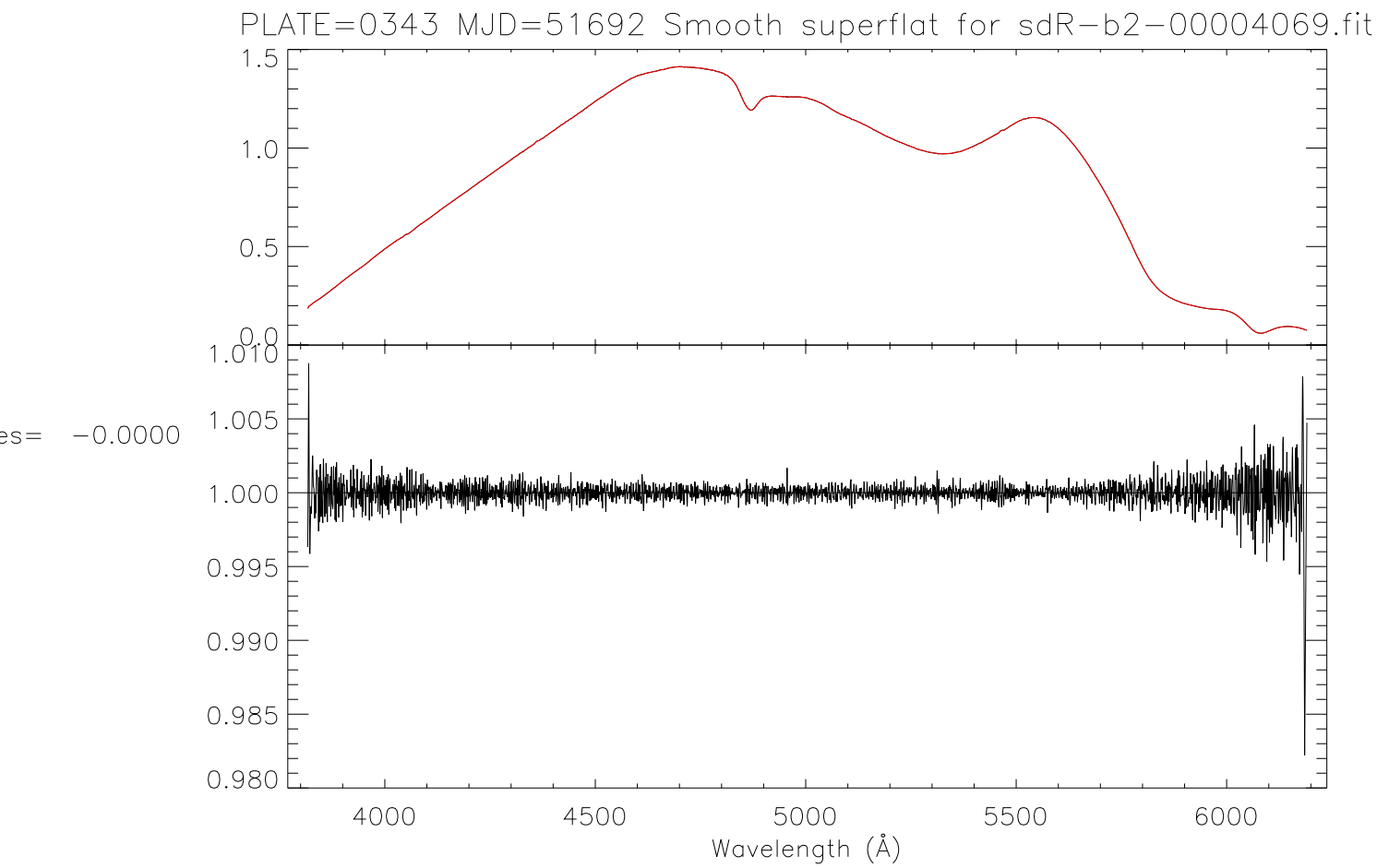

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

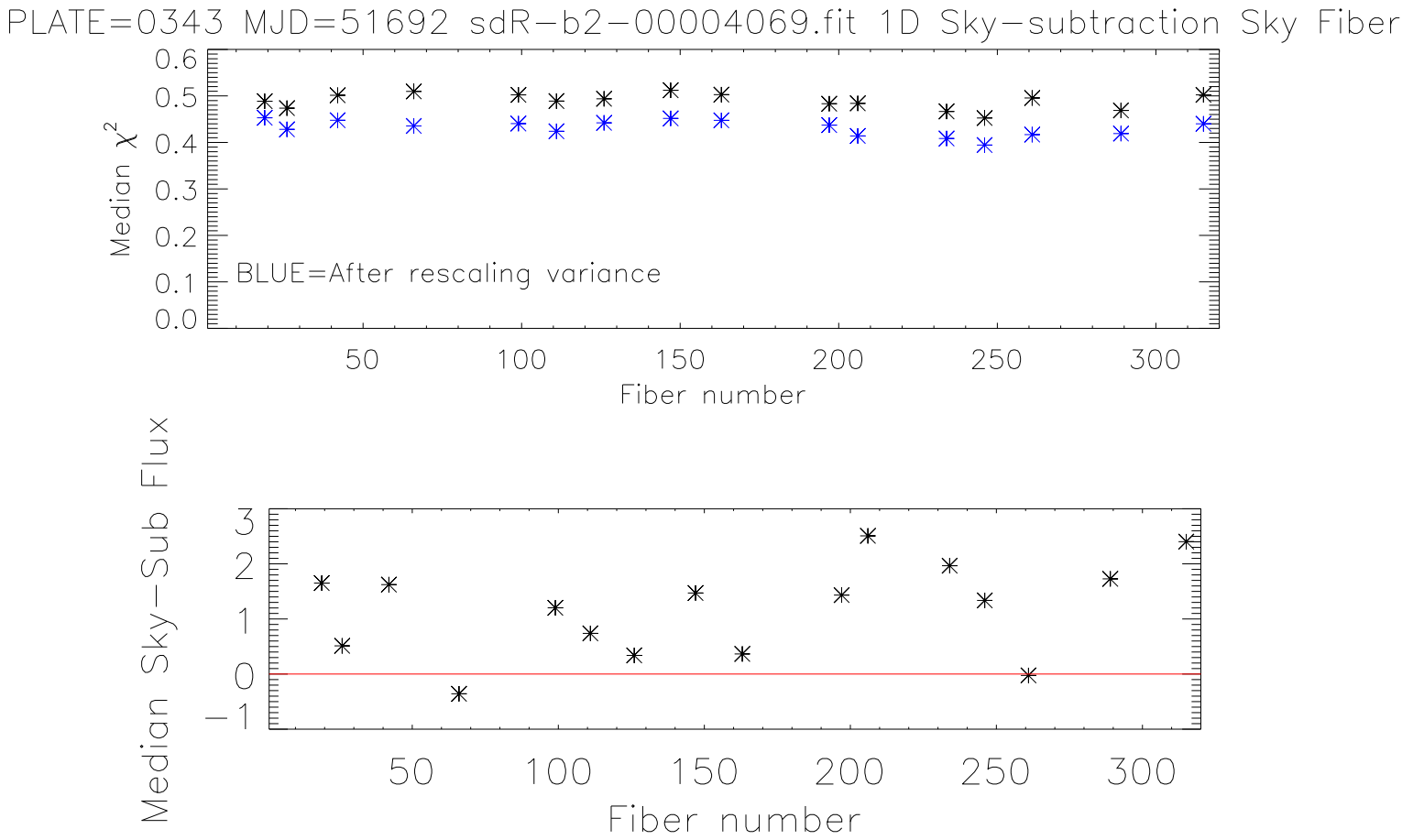

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

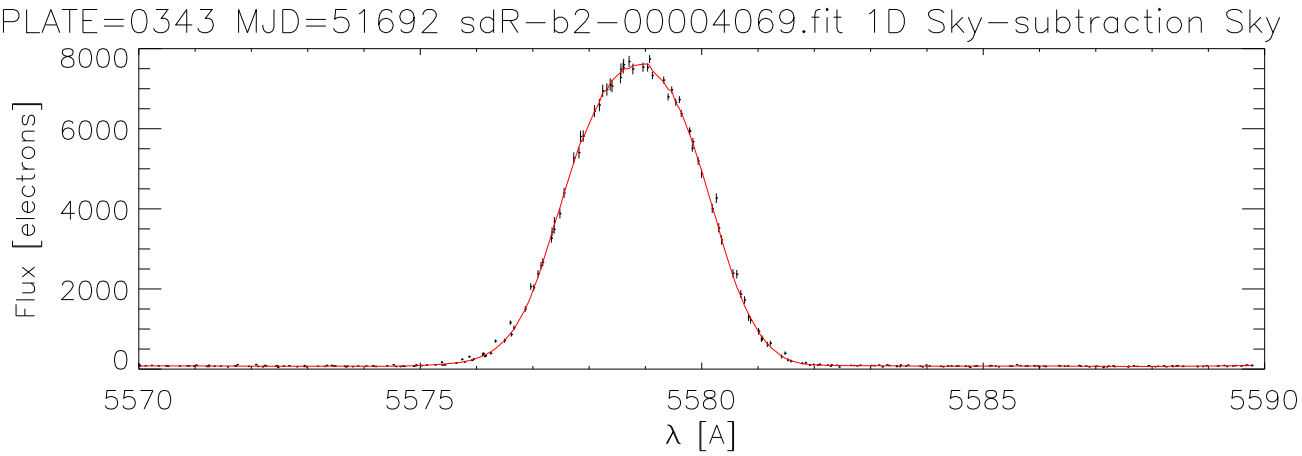

4046.5600
nfib1 16
nfib2 16
stdev 0.083
extra −0.21
4358.3300
nfib1 16
nfib2 16
stdev 0.054
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra −0.17
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra −0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.048
extra 0.00
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

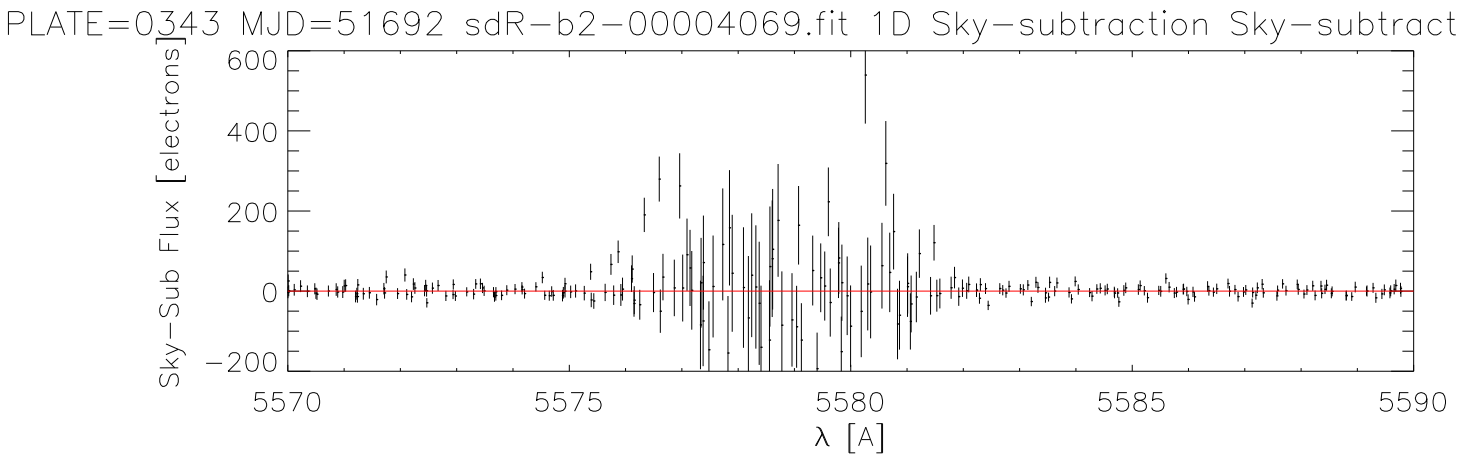

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

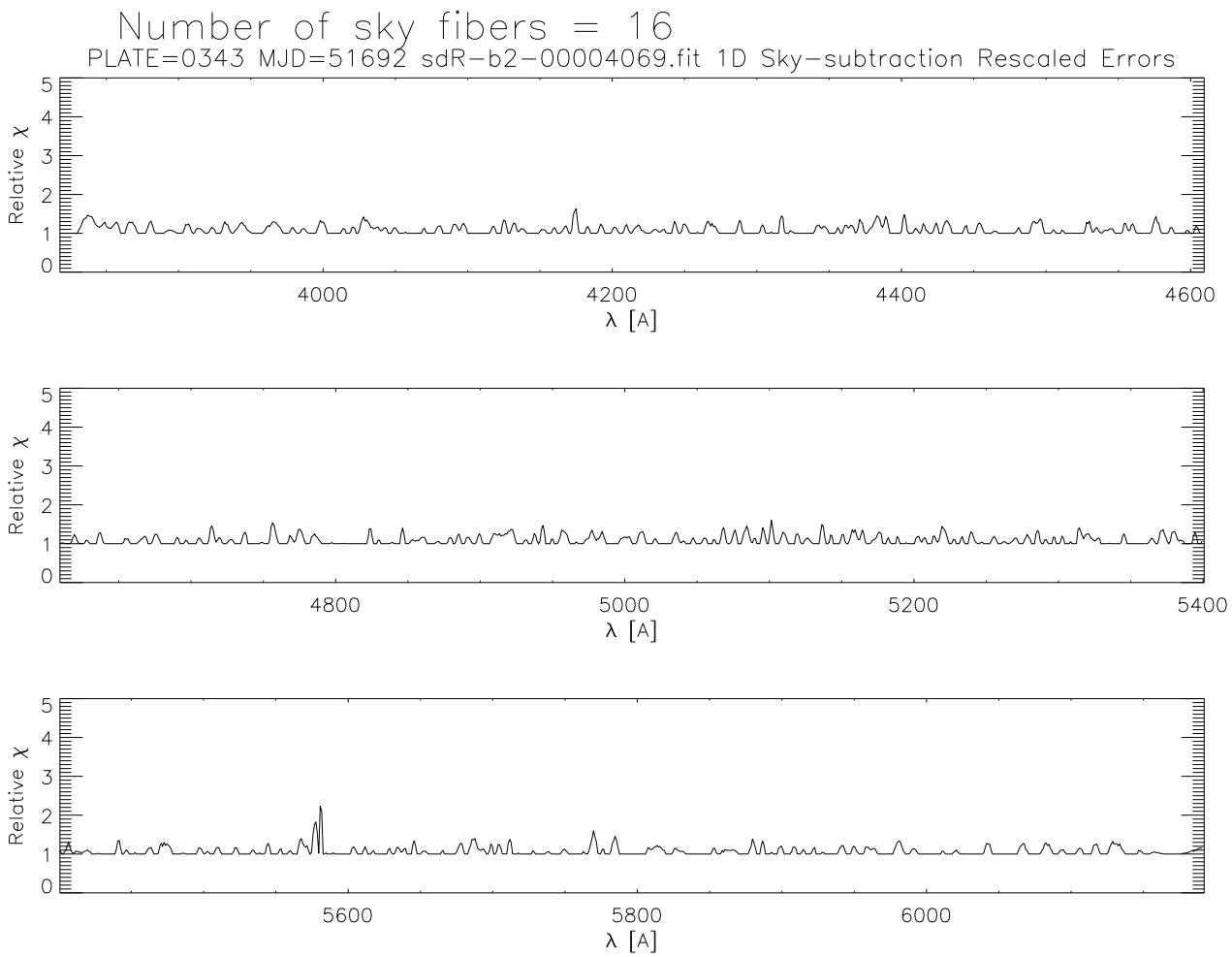

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004069.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

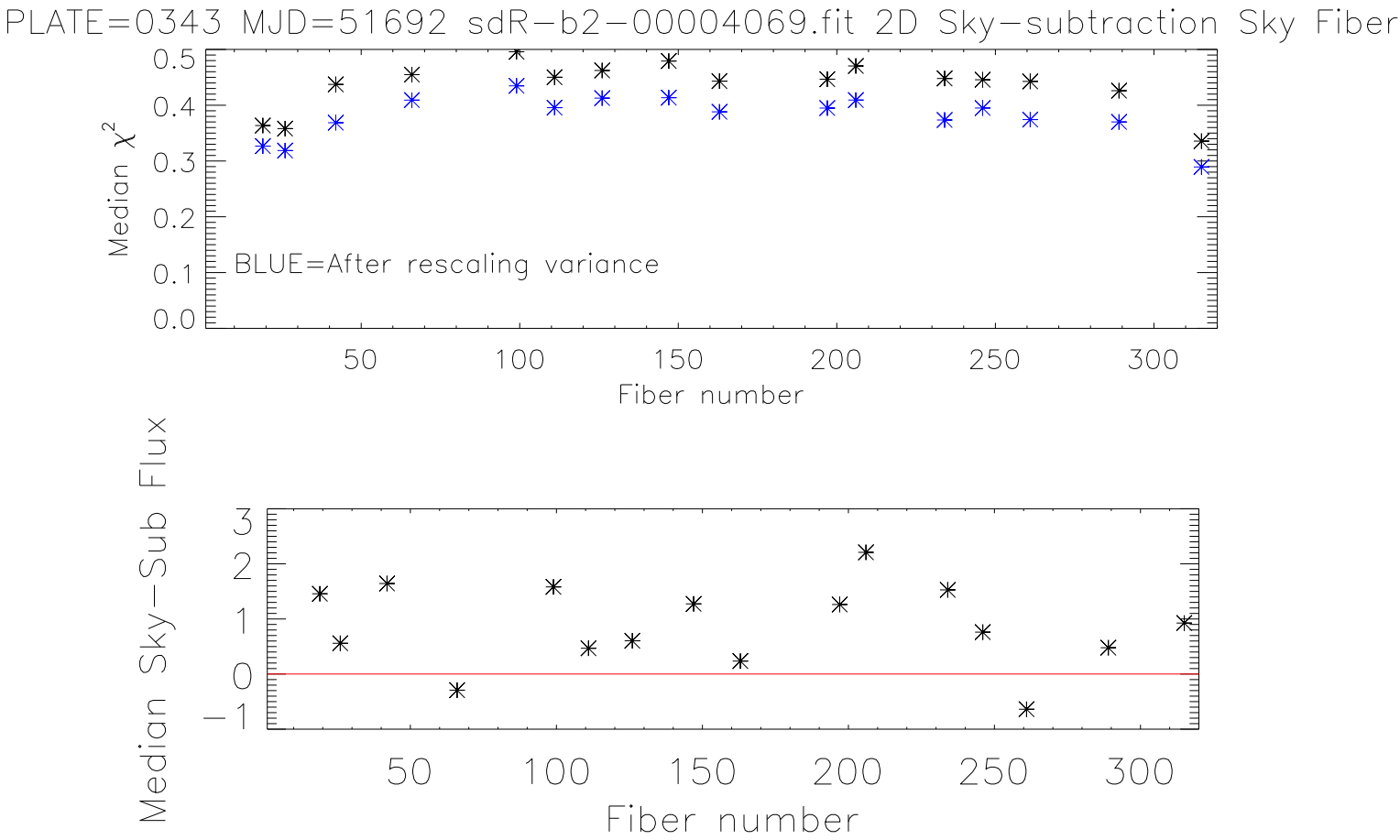
es= −0.0000

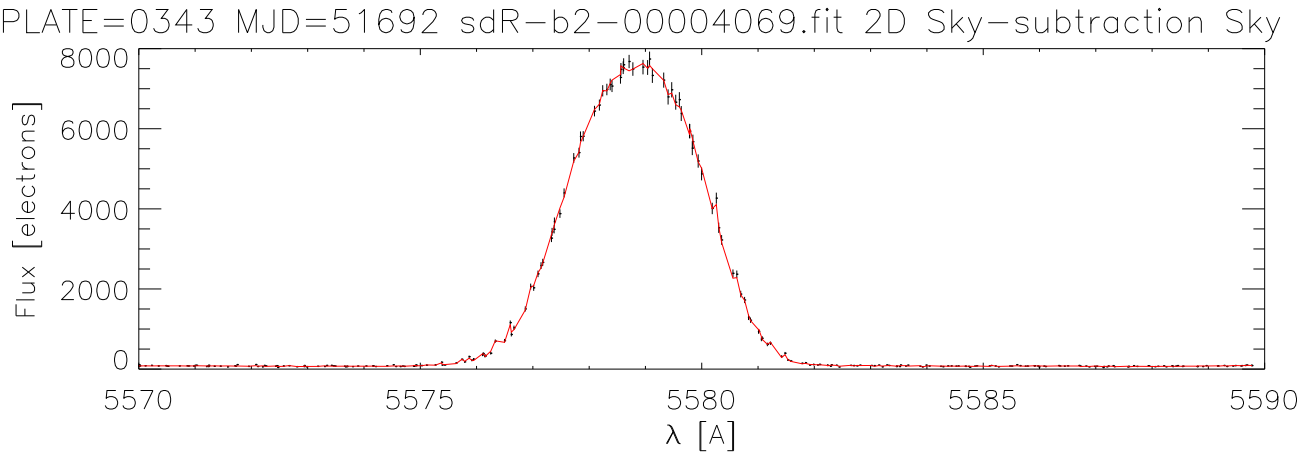

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

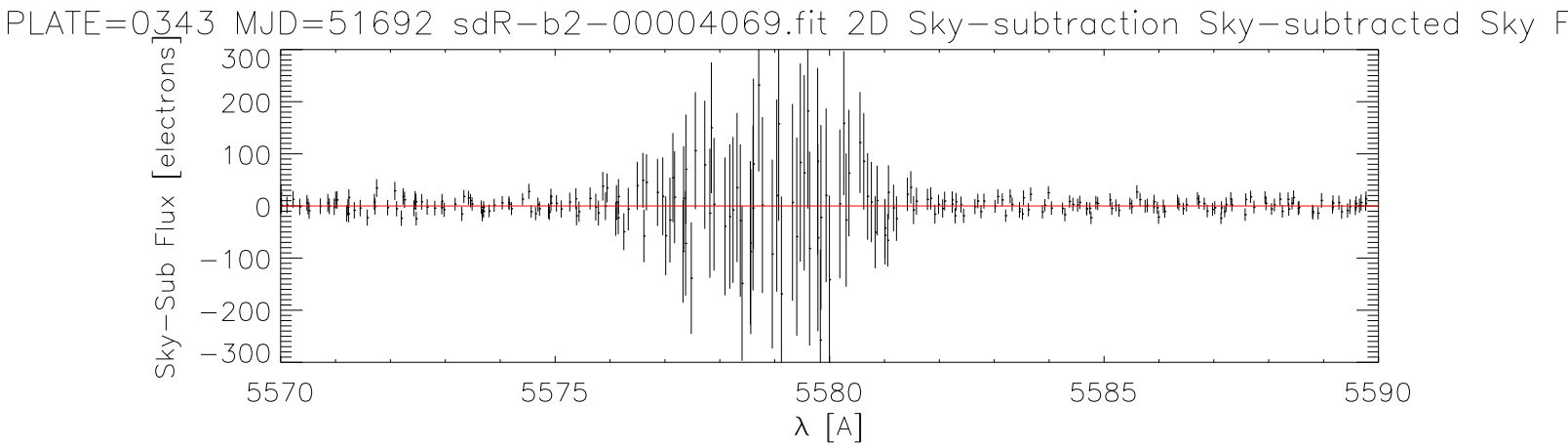

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

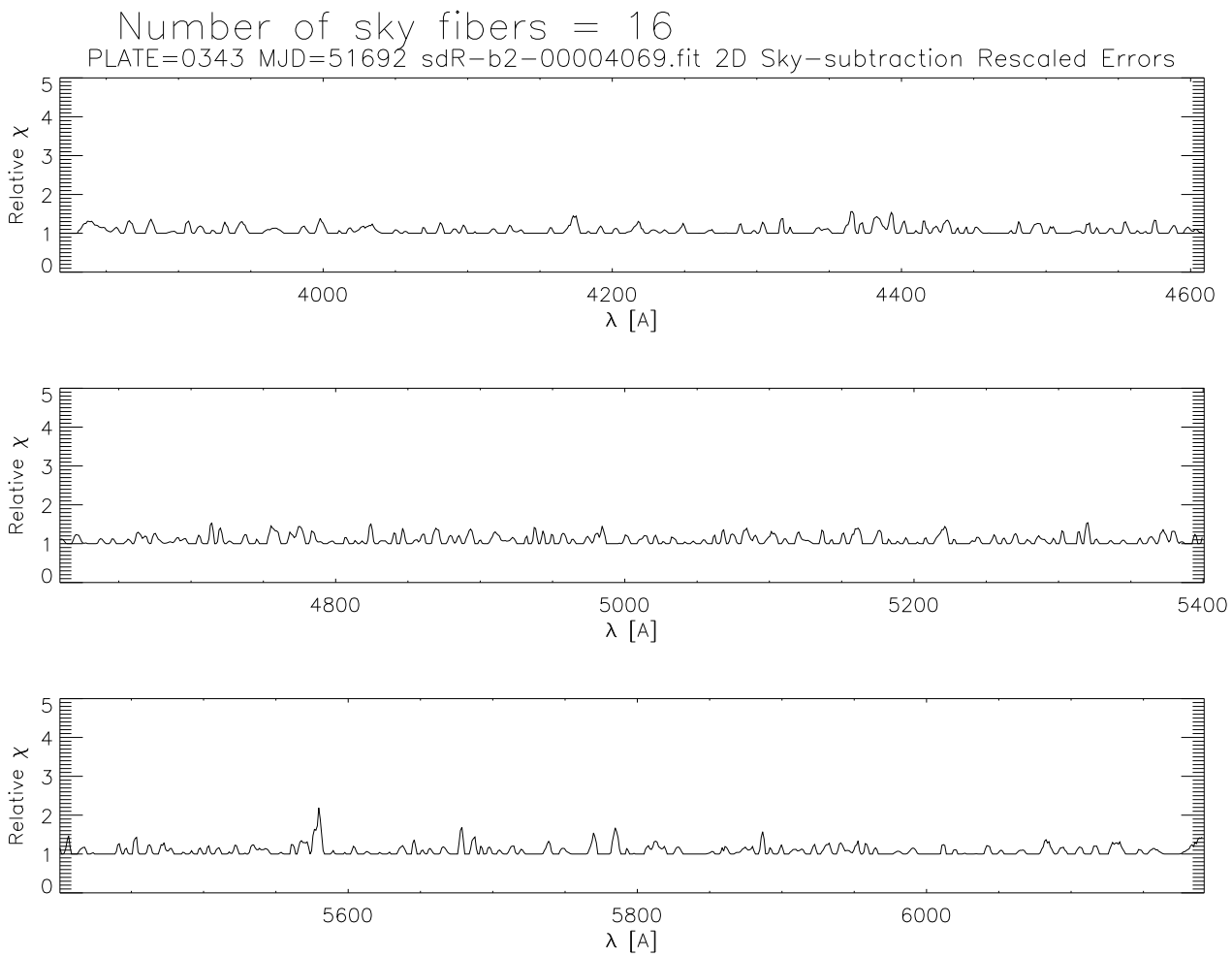

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

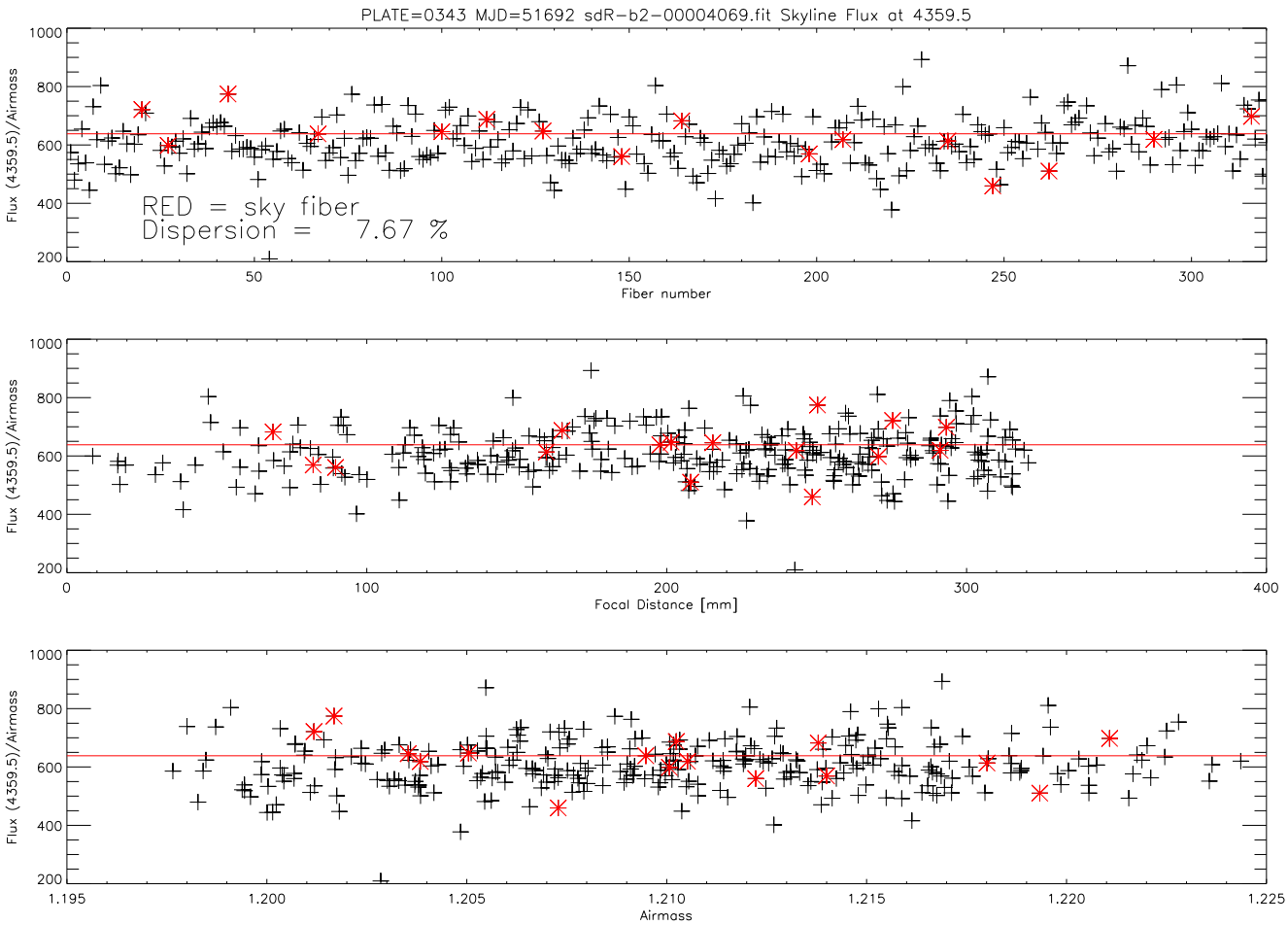

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004069.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

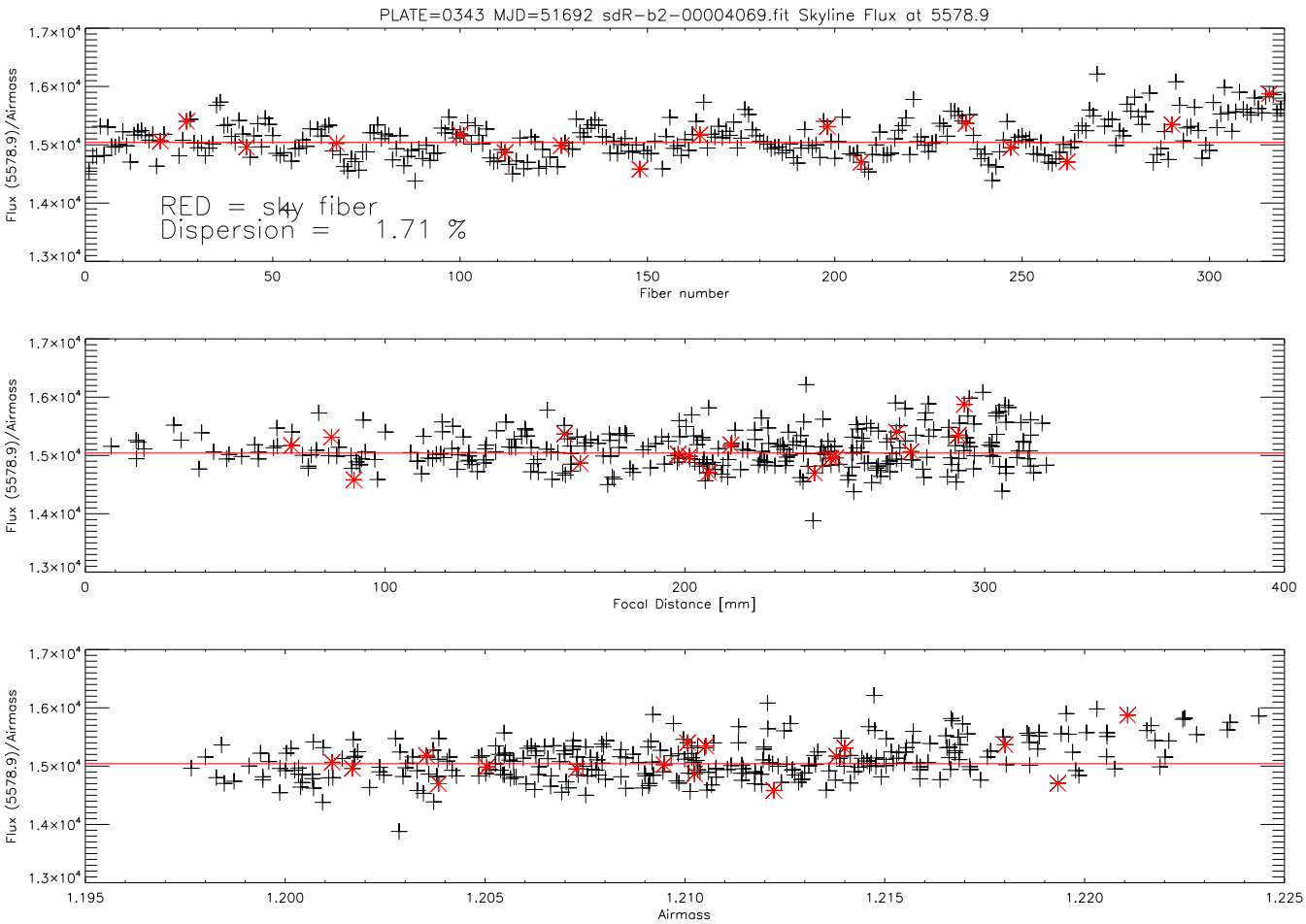

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

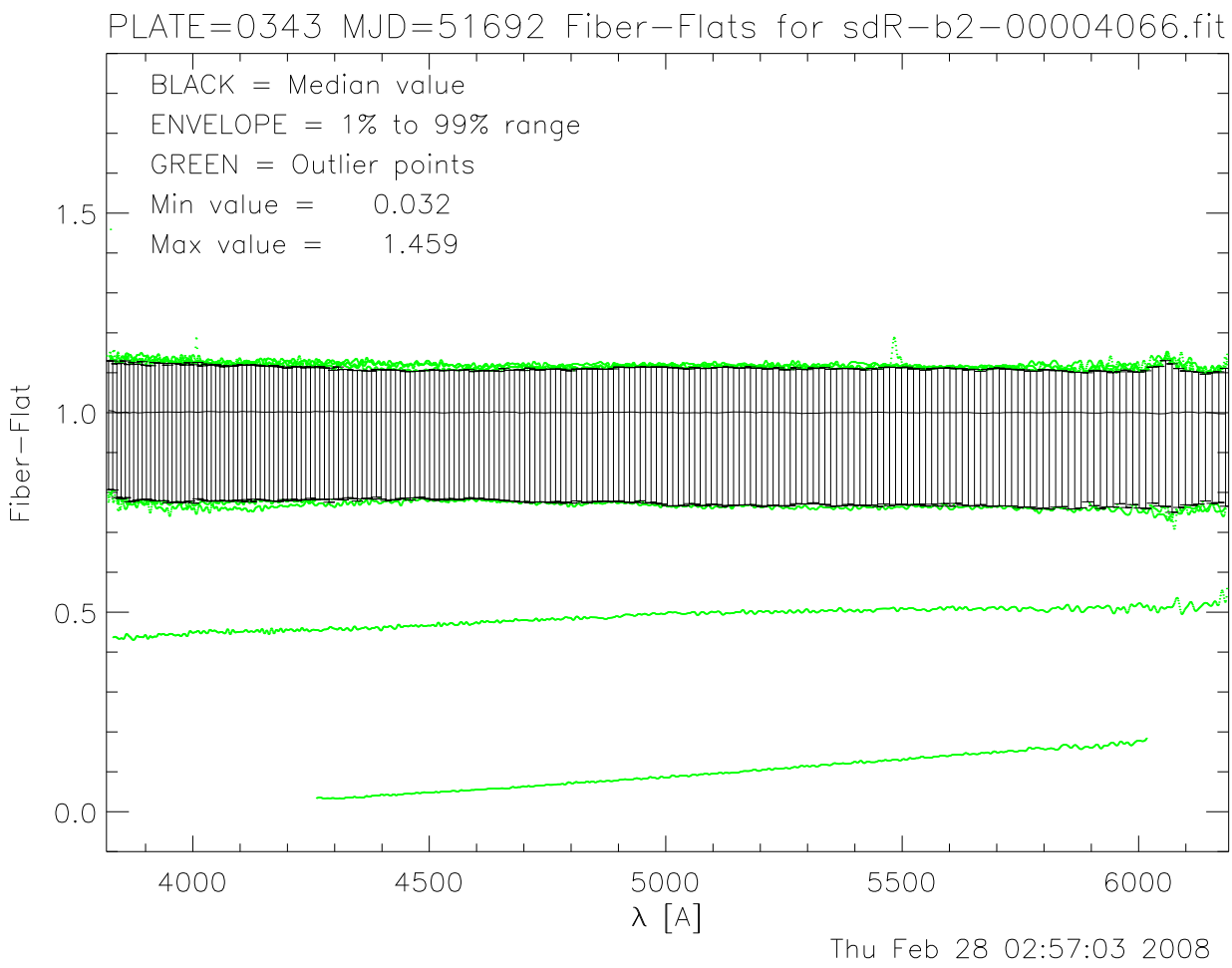

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

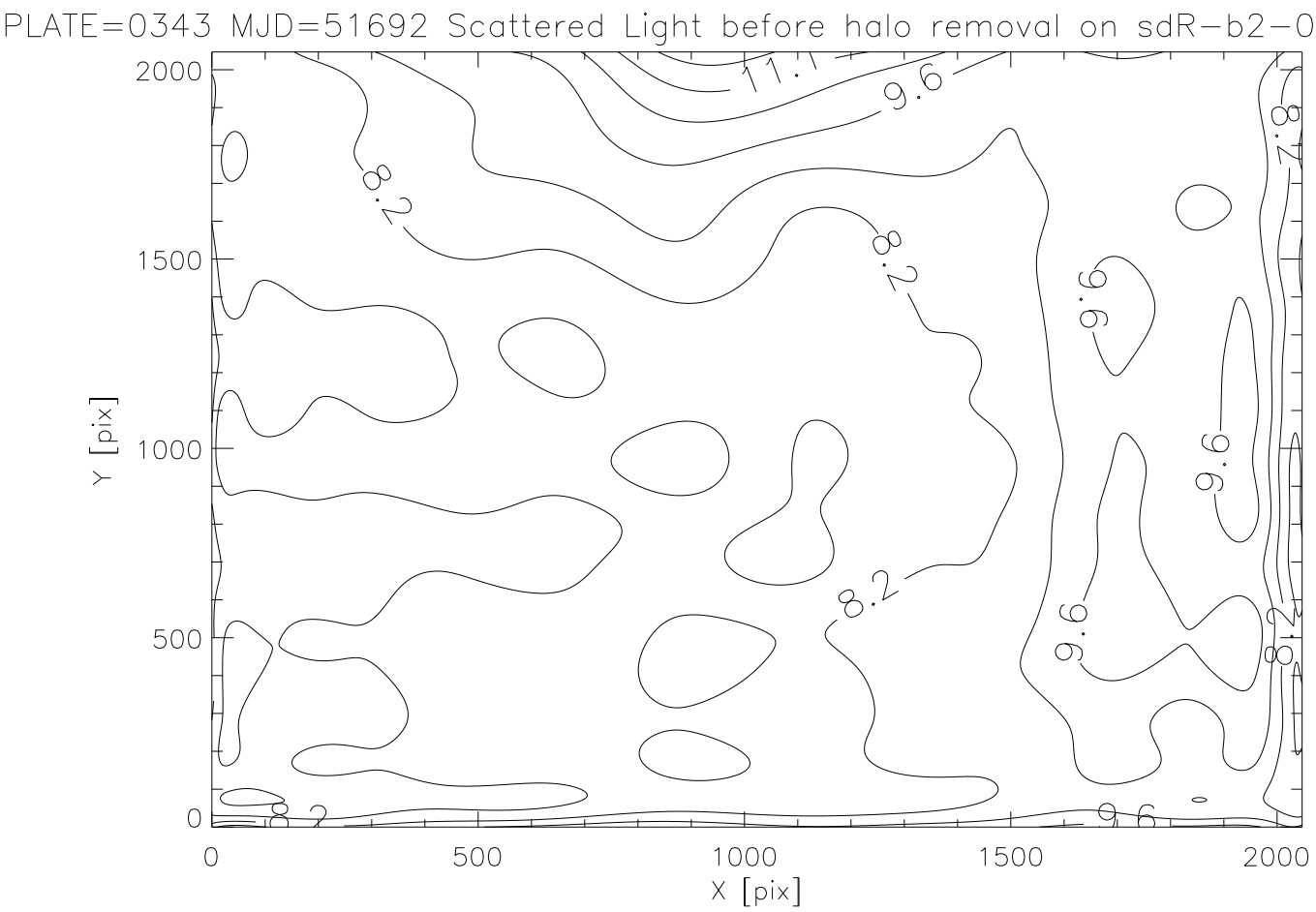

PLATE=0343 MJD=51692 sdR-b2-00004069.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

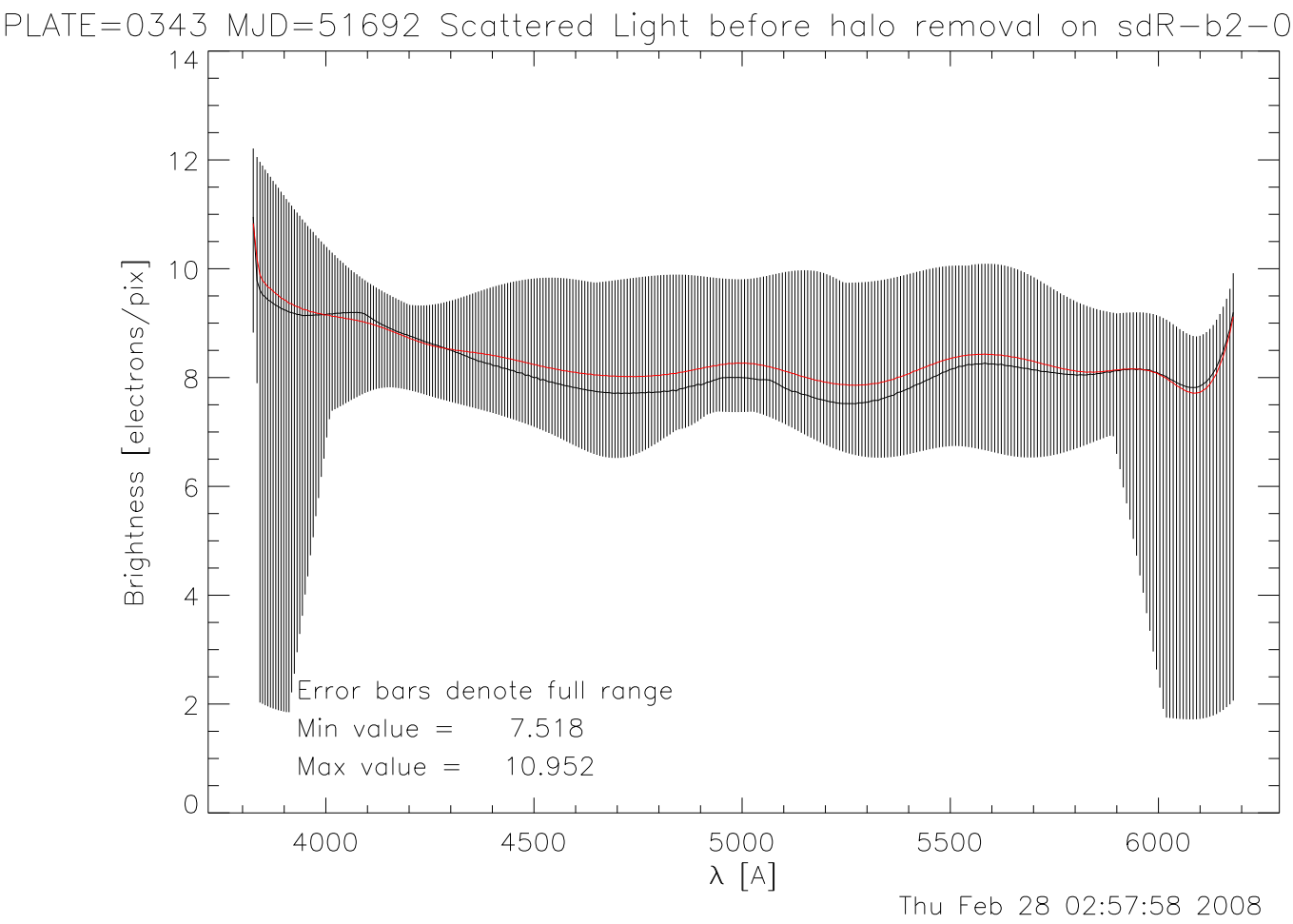

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004069.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

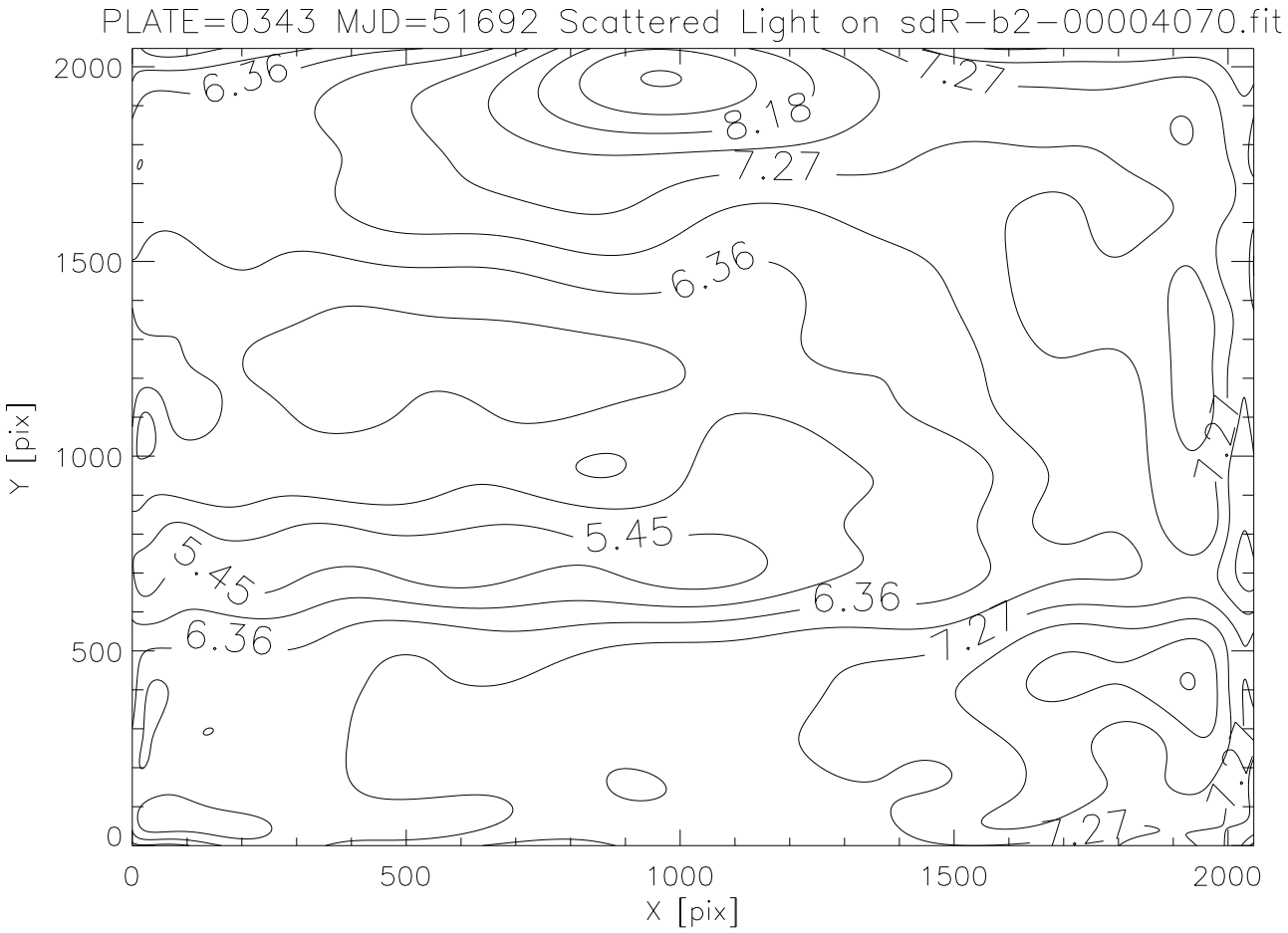

PLATE=0343 MJD=51692 sdR-b2-00004069.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.67 %
Fiber number
Focal Distance [mm]
Airmass

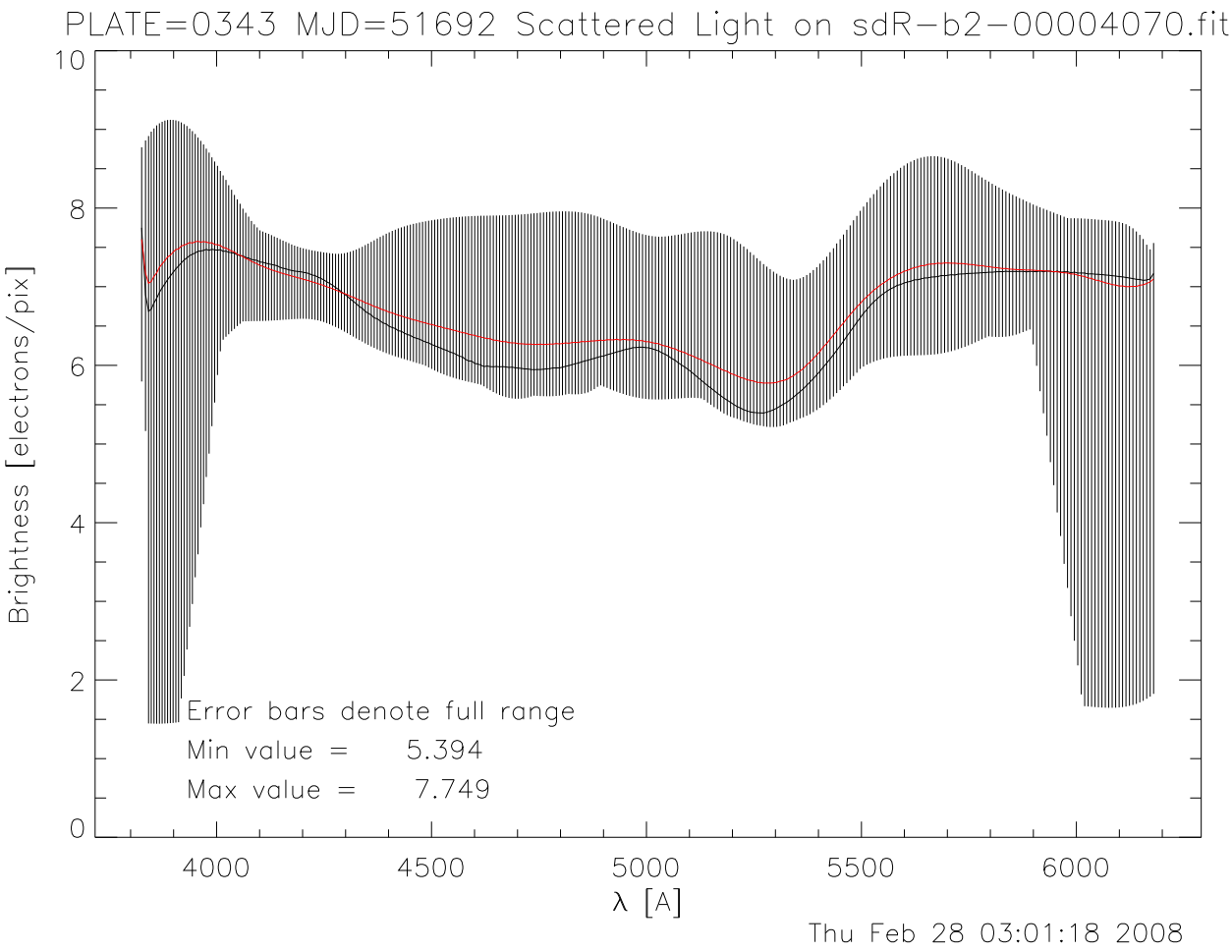

PLATE=0343 MJD=51692 sdR-b2-00004069.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.71 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.195
1.200
1.205
1.210
1.215
1.220
1.225
Airmass

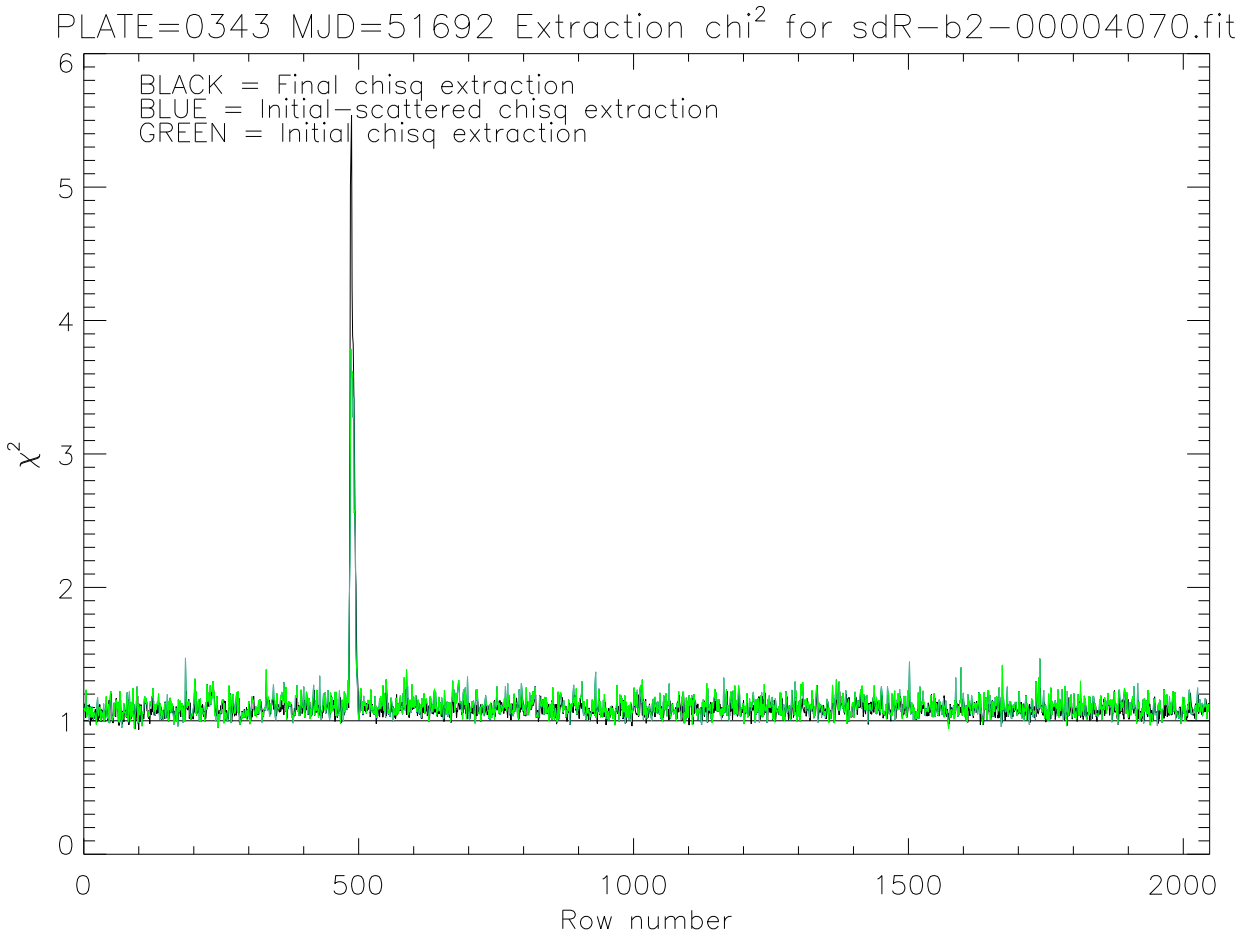

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 02:57:03 2008

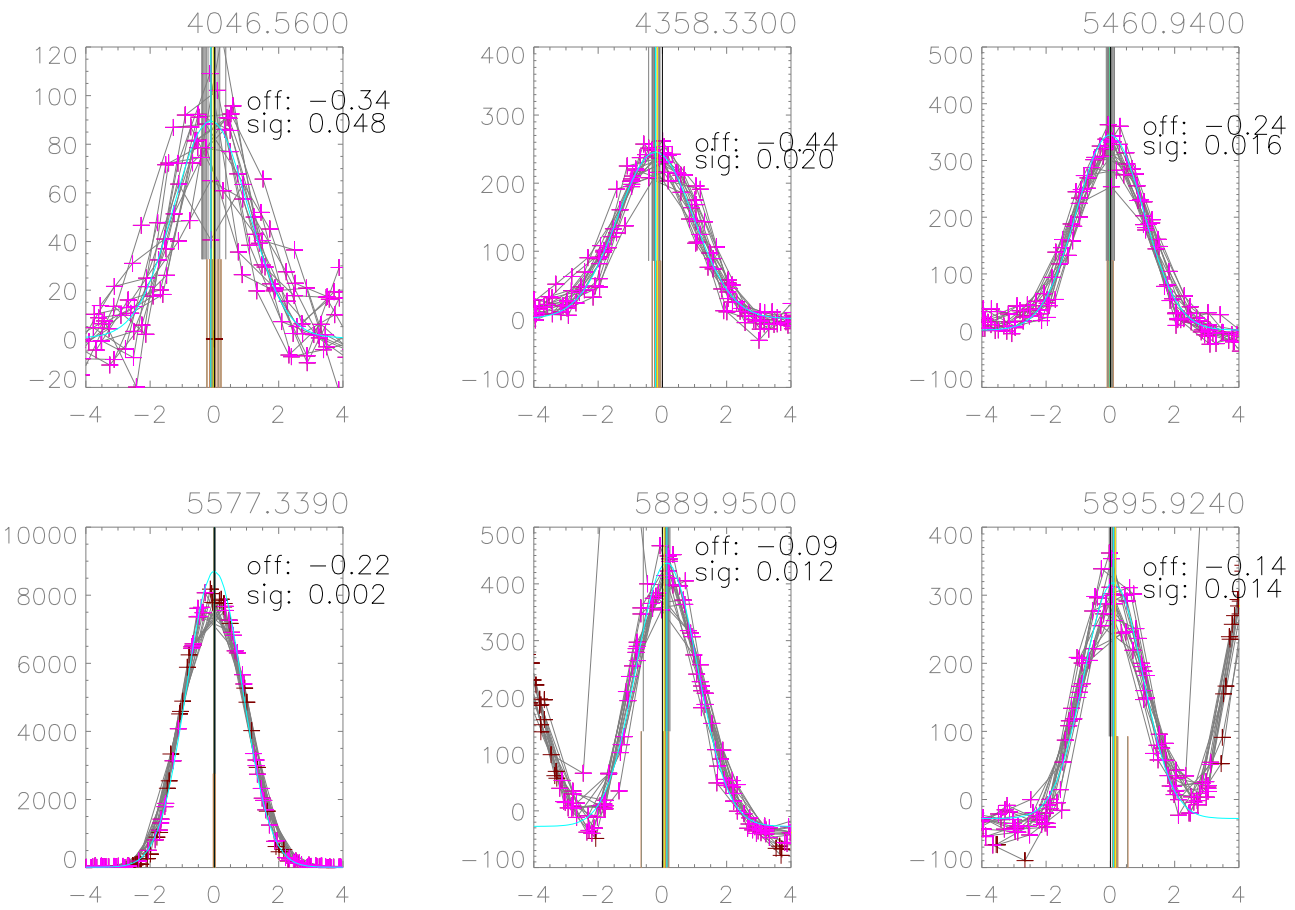

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004070.f
11.1
9.6
8.2
7.8
9.6
8.2
9.6
9.6
8.2
9.6
8.2
9.6
Y [pix]
X [pix]
0
500
1000
1500
2000

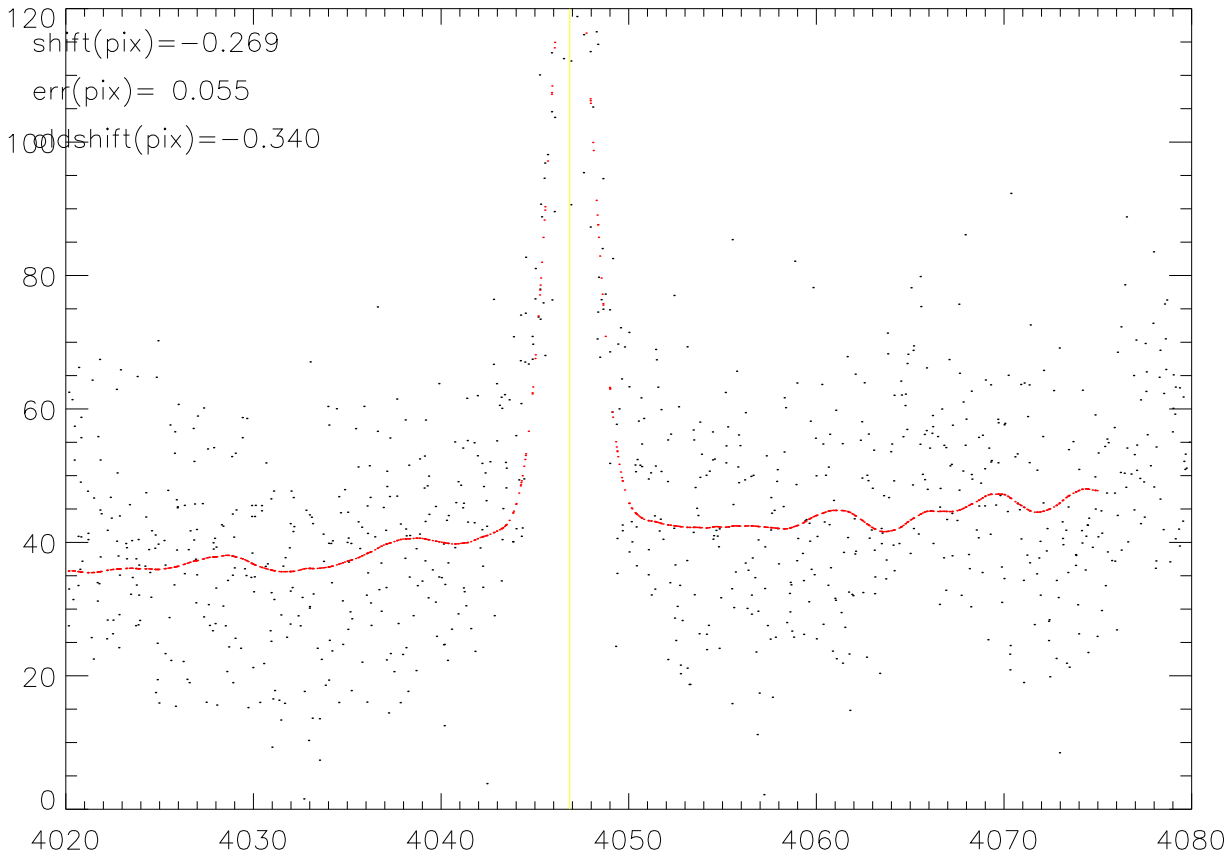

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004070.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.518
Max value = 10.952
Thu Feb 28 02:57:58 2008

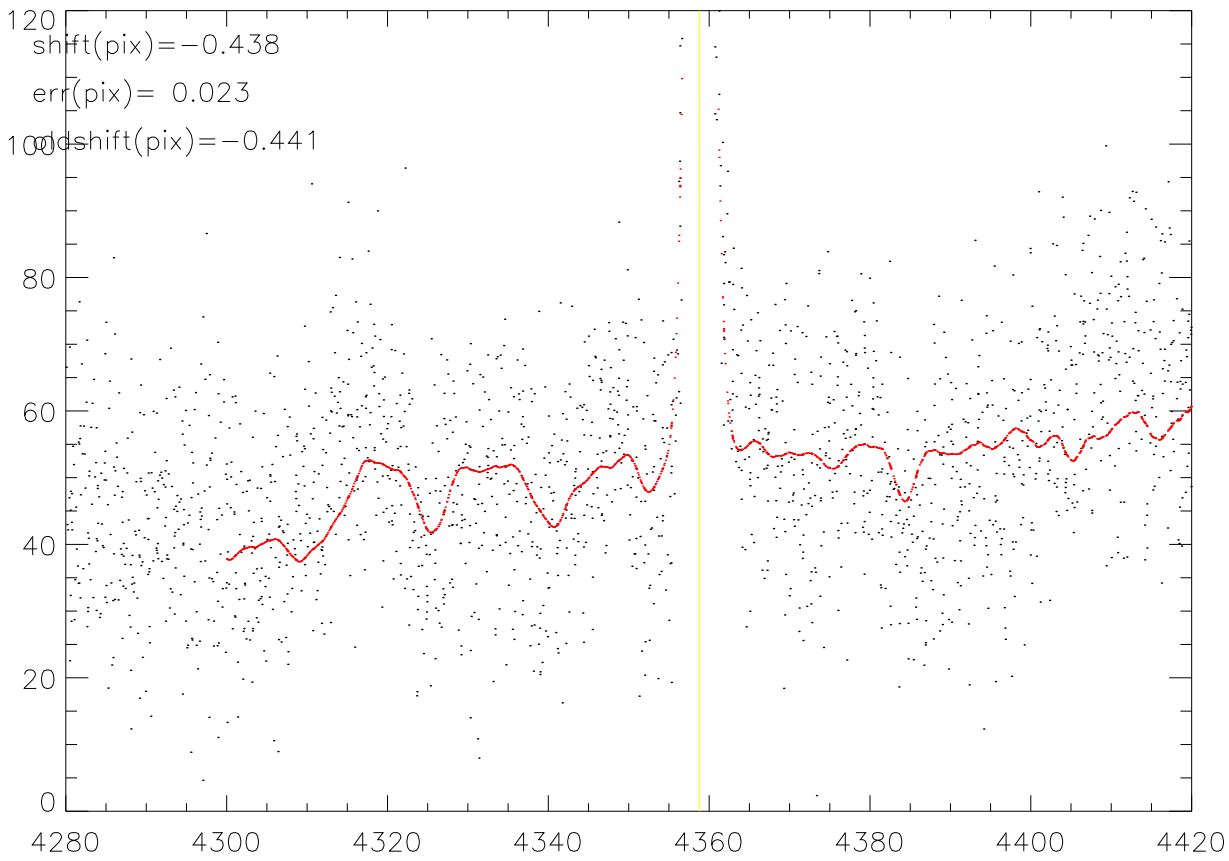

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004070.fit
6.36
8.18
7.27
0
6.36
5.45
5.45
6.36
6.36
7.27
7.27
Y [pix]
X [pix]
0
500
1000
1500
2000

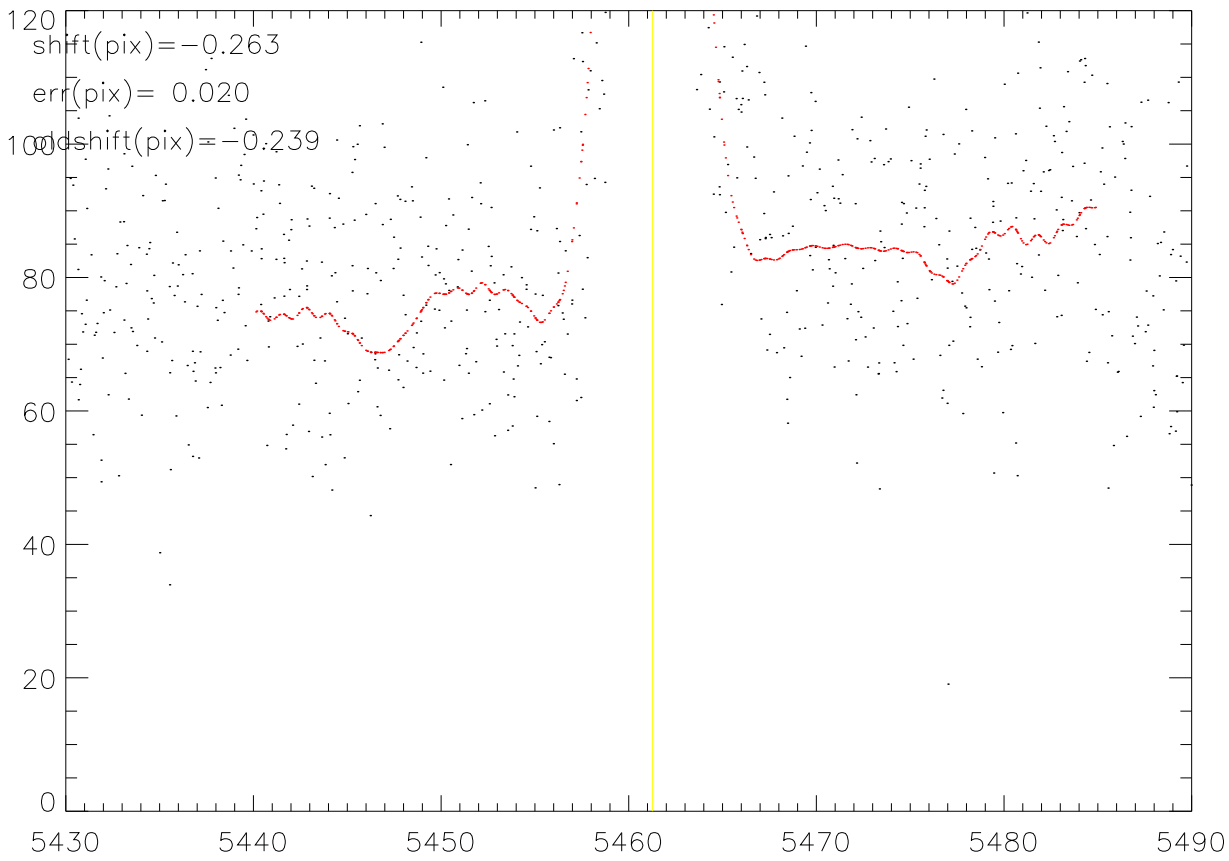

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004070.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.394
Max value = 7.749
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:01:18 2008

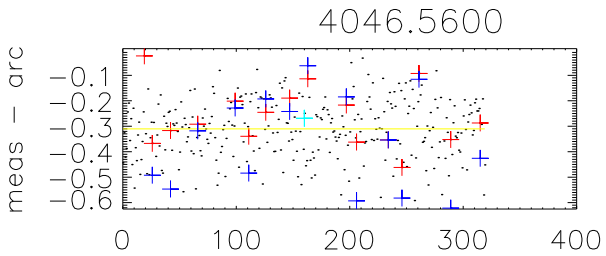

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004070.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

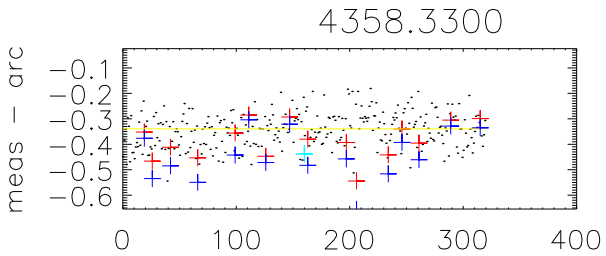

4046.5600
off: −0.34
sig: 0.048
4358.3300
off: −0.44
sig: 0.020
5460.9400
off: −0.24
sig: 0.016
5577.3390
off: −0.22
sig: 0.002
5889.9500
off: −0.09
sig: 0.012
5895.9240
off: −0.14
sig: 0.014

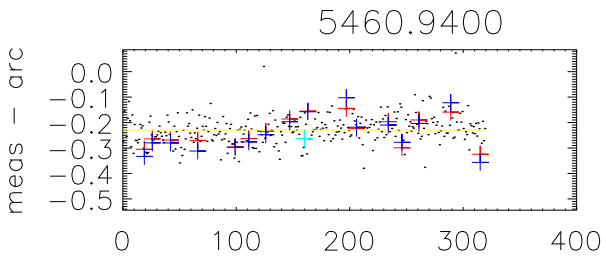

shift(pix)=−0.269
err(pix)= 0.055
oldshift(pix)=−0.340
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

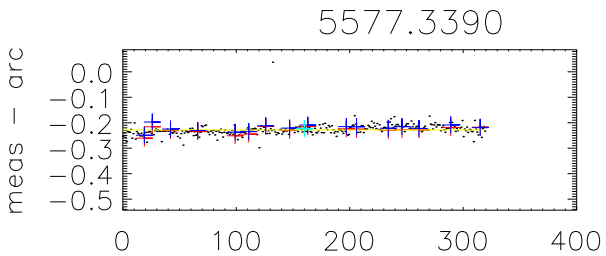

shift(pix)=−0.438
err(pix)= 0.023
oldshift(pix)=−0.441
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

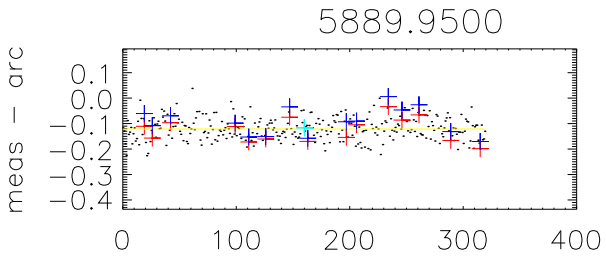

shift(pix)=−0.263
err(pix)= 0.020
oldshift(pix)=−0.239
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

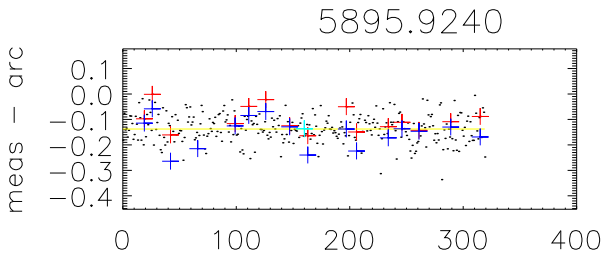

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

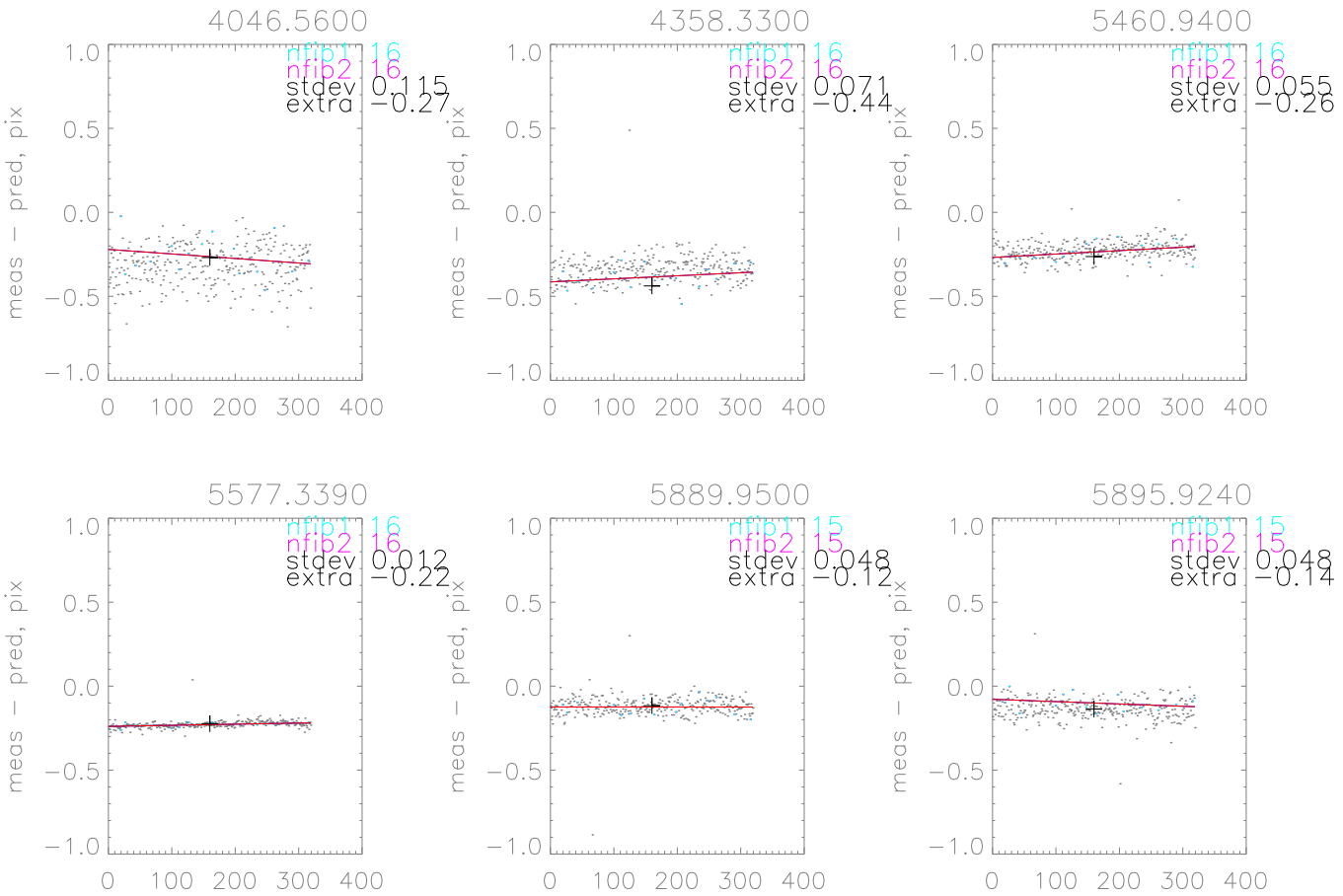

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

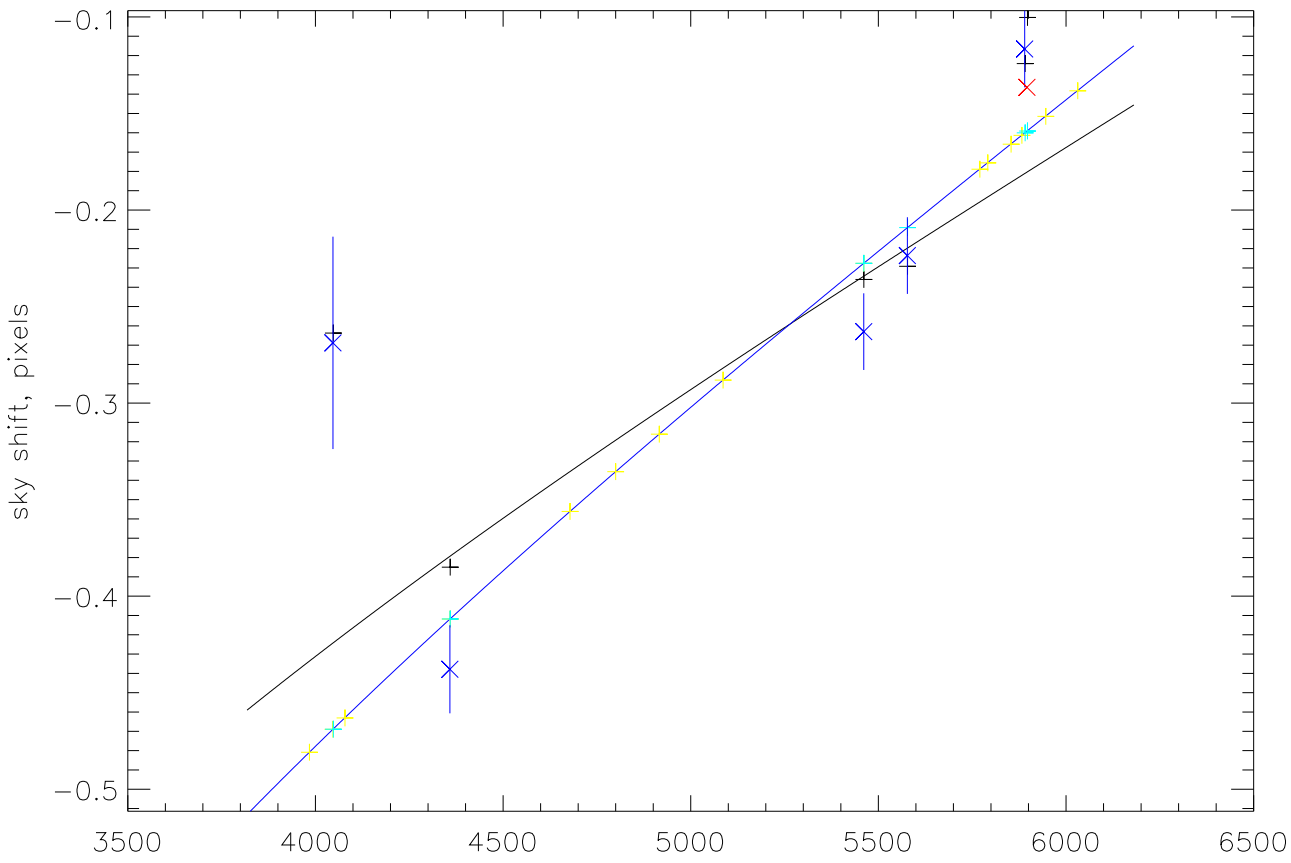

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

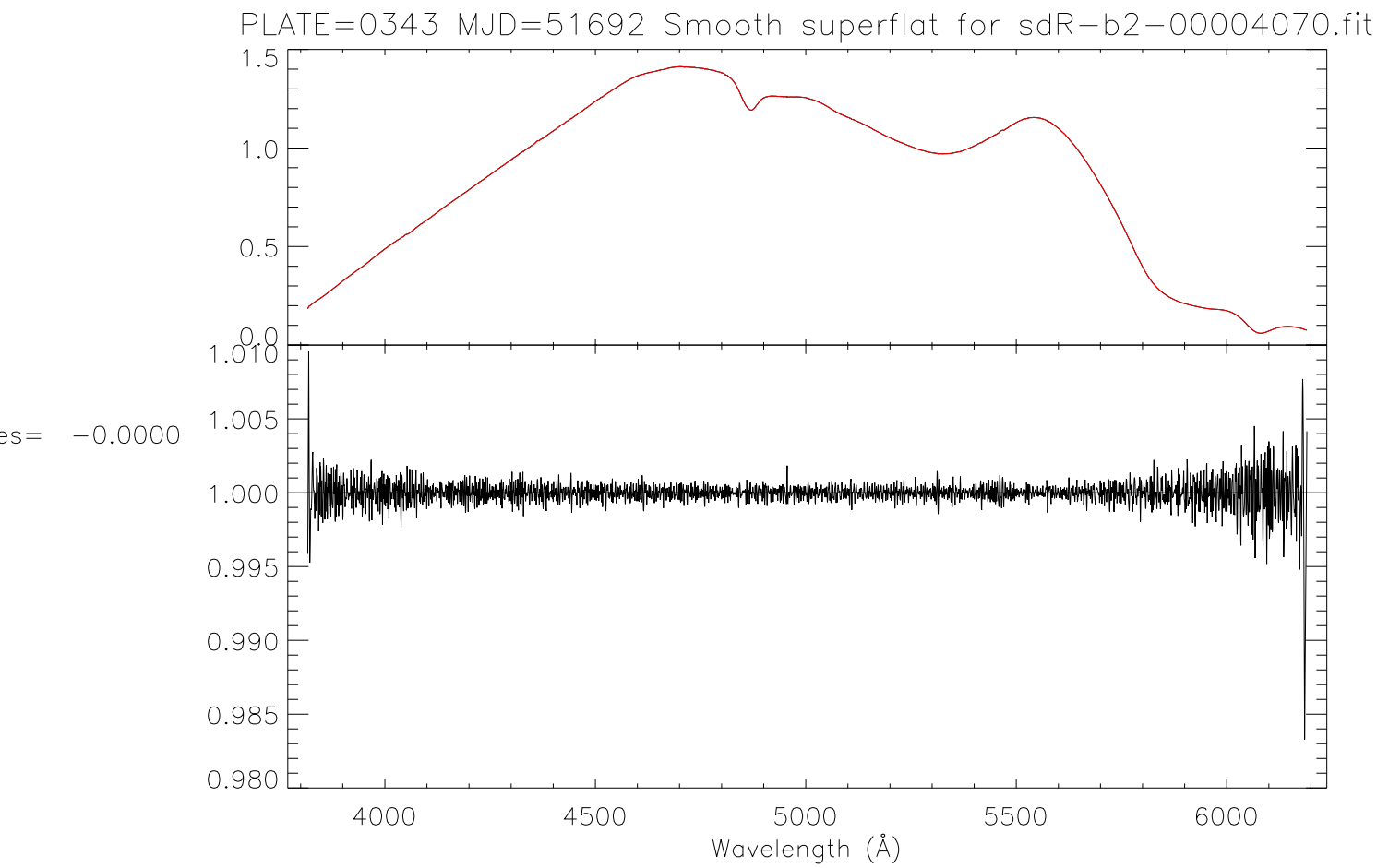

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

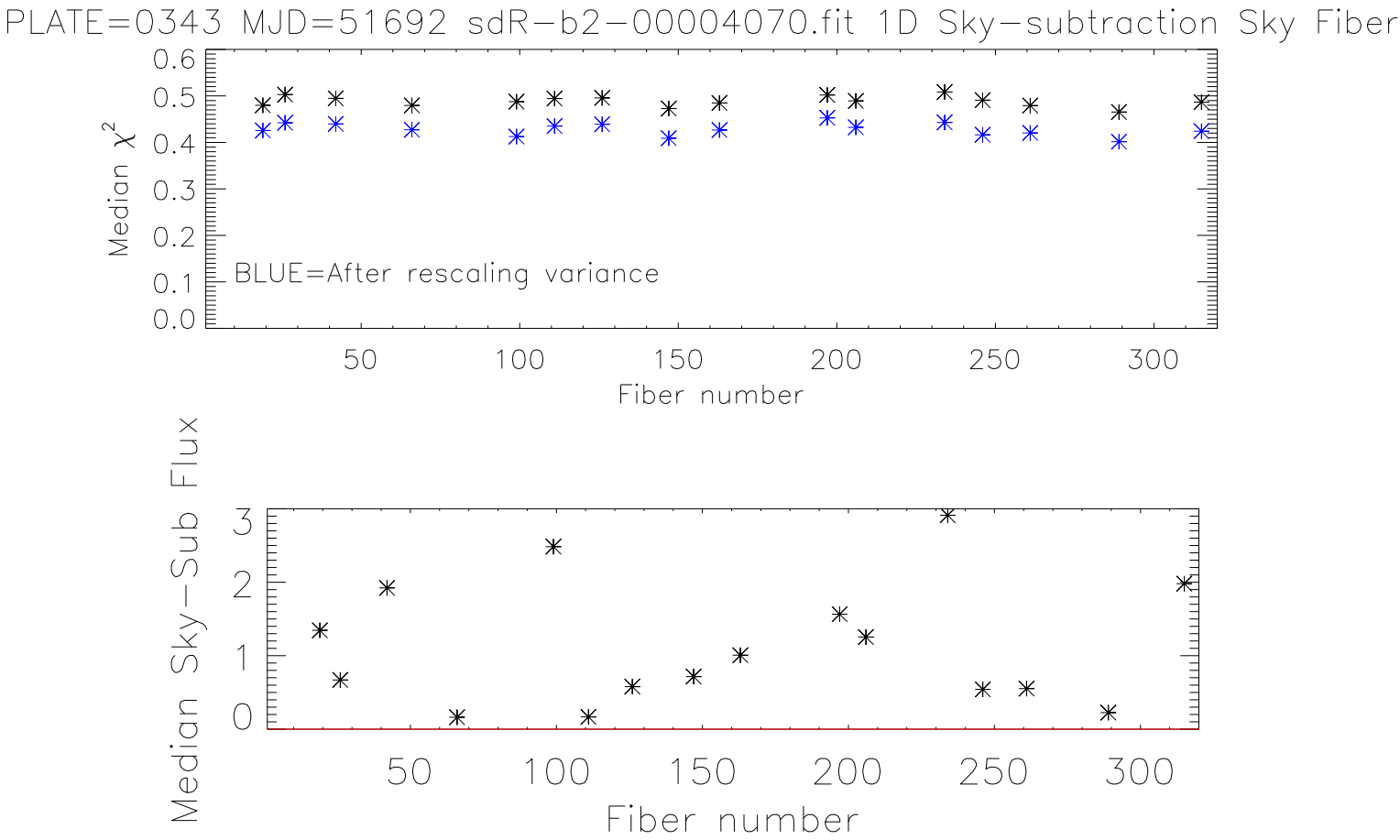

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

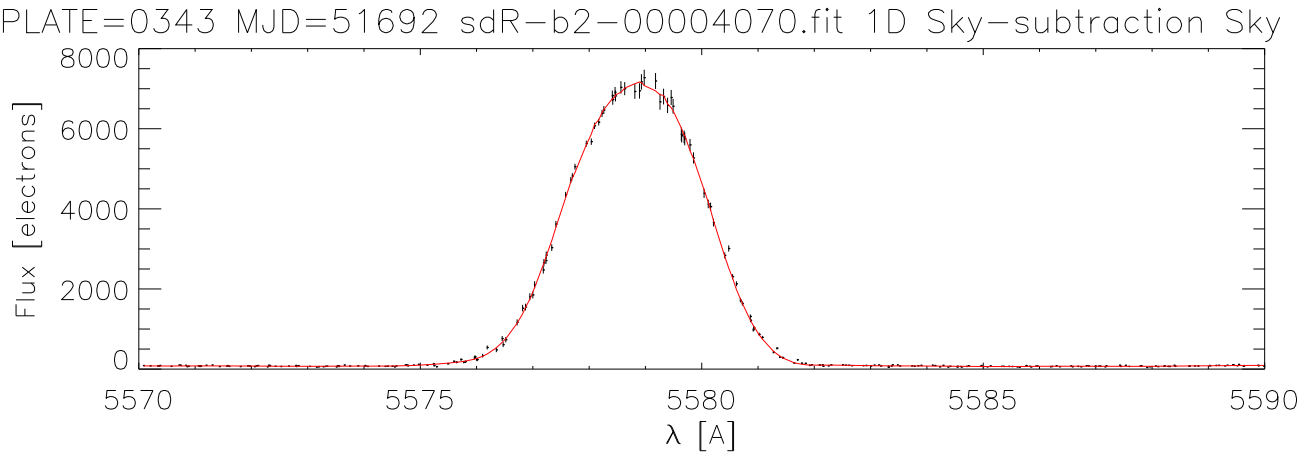

4046.5600
nfib1 16
nfib2 16
stdev 0.115
extra −0.27
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra −0.44
5460.9400
nfib1 16
nfib2 16
stdev 0.055
extra −0.26
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.22
5889.9500
nfib1 15
nfib2 15
stdev 0.048
extra −0.12
5895.9240
nfib1 15
nfib2 15
stdev 0.048
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

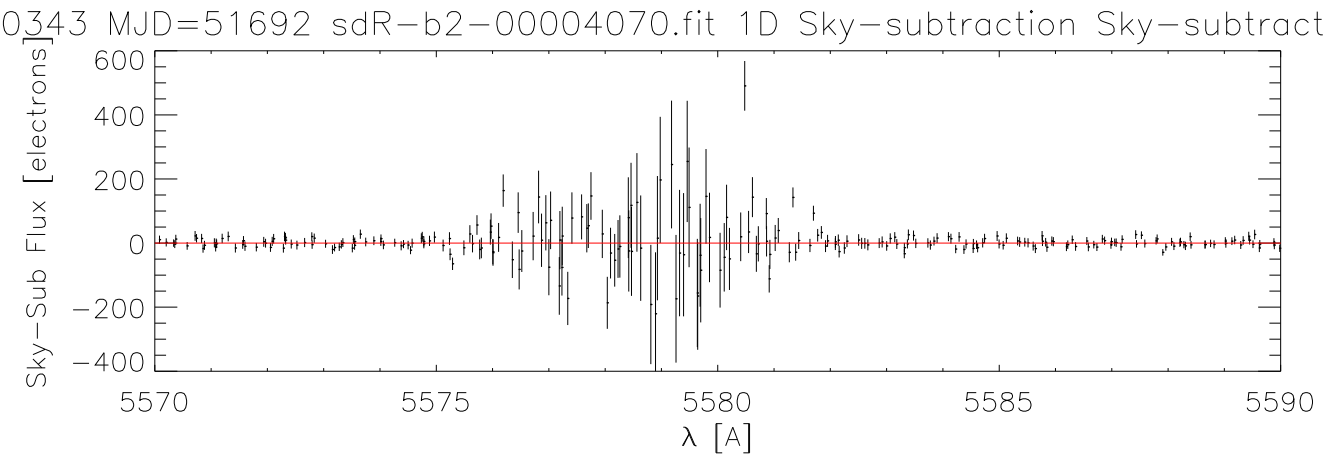

−0.1
−0.2
−0.3
−0.4
−0.5
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

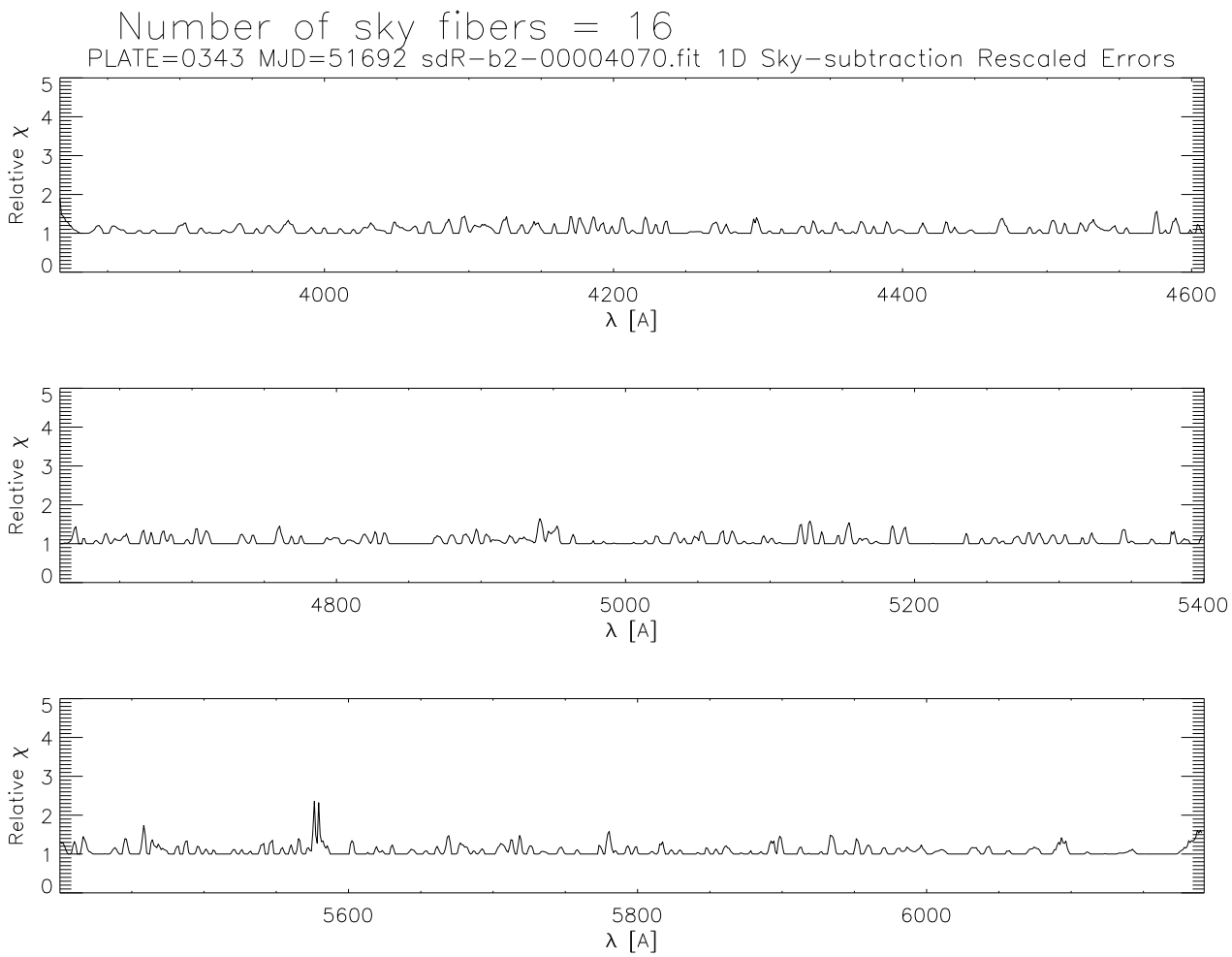

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004070.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

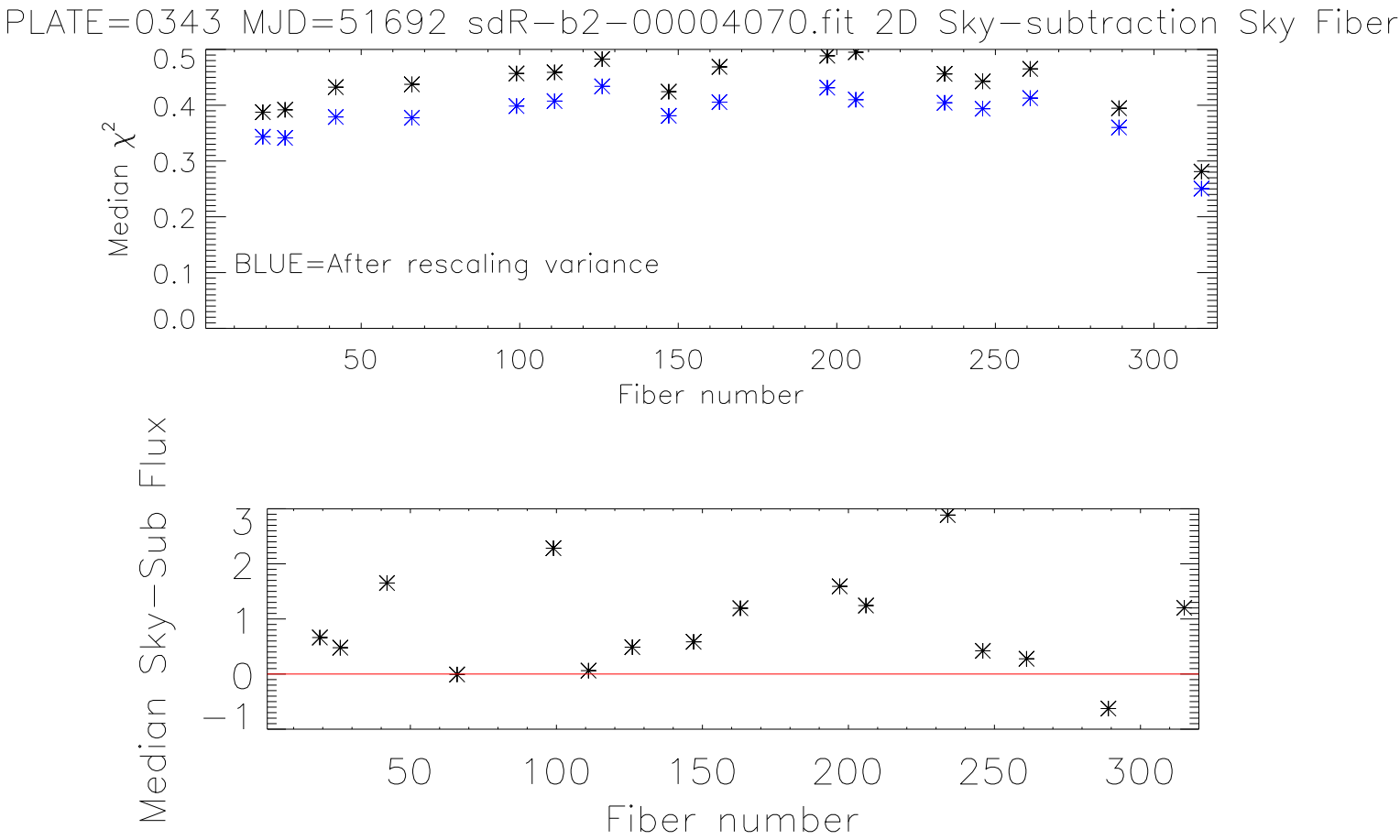
es= −0.0000

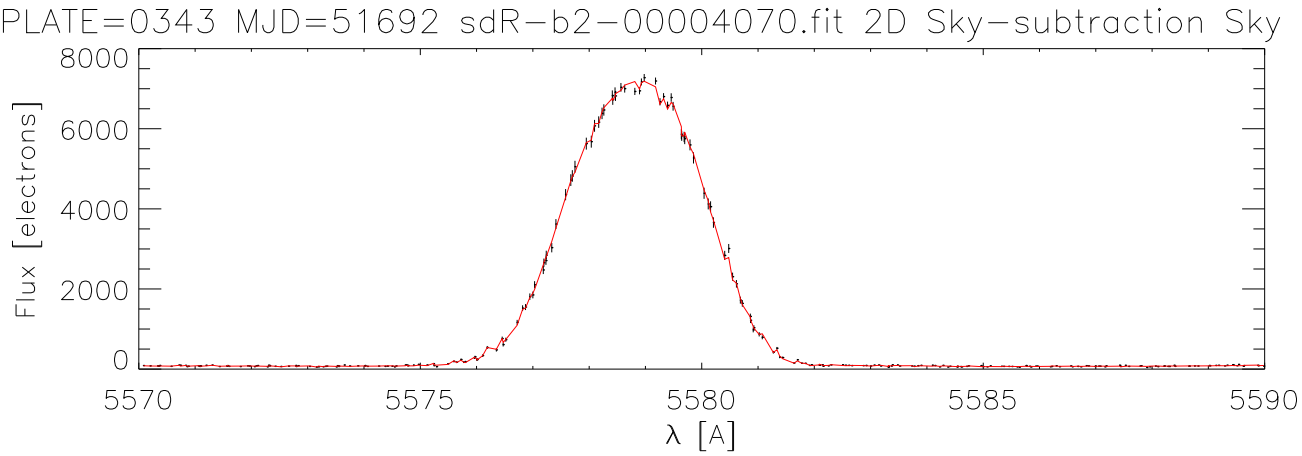

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0
1
2
3
50
100
150
200
250
300
Fiber number

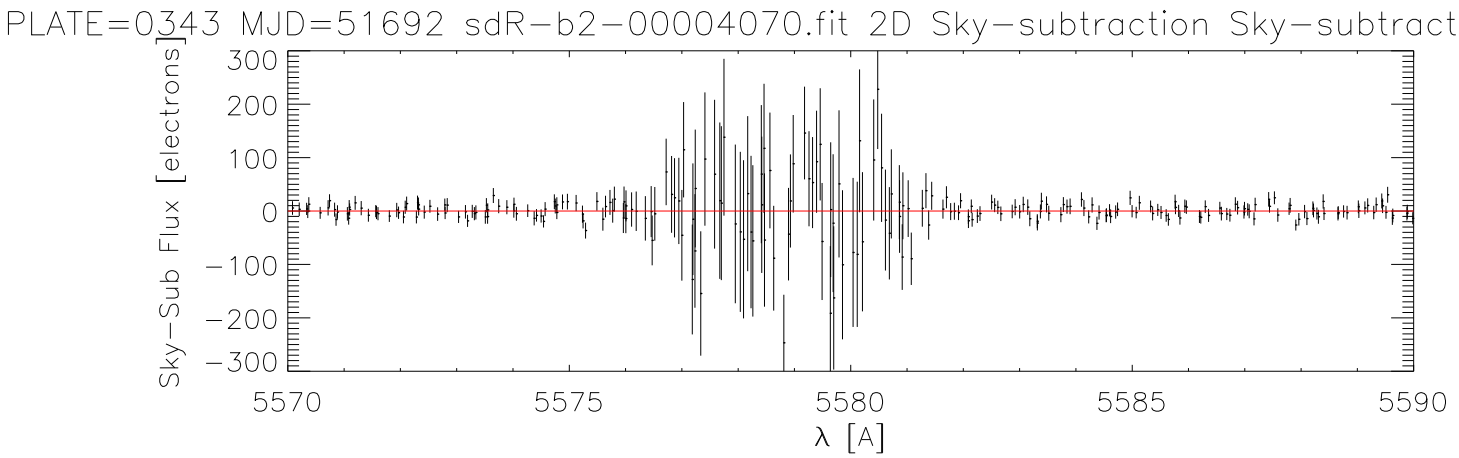

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

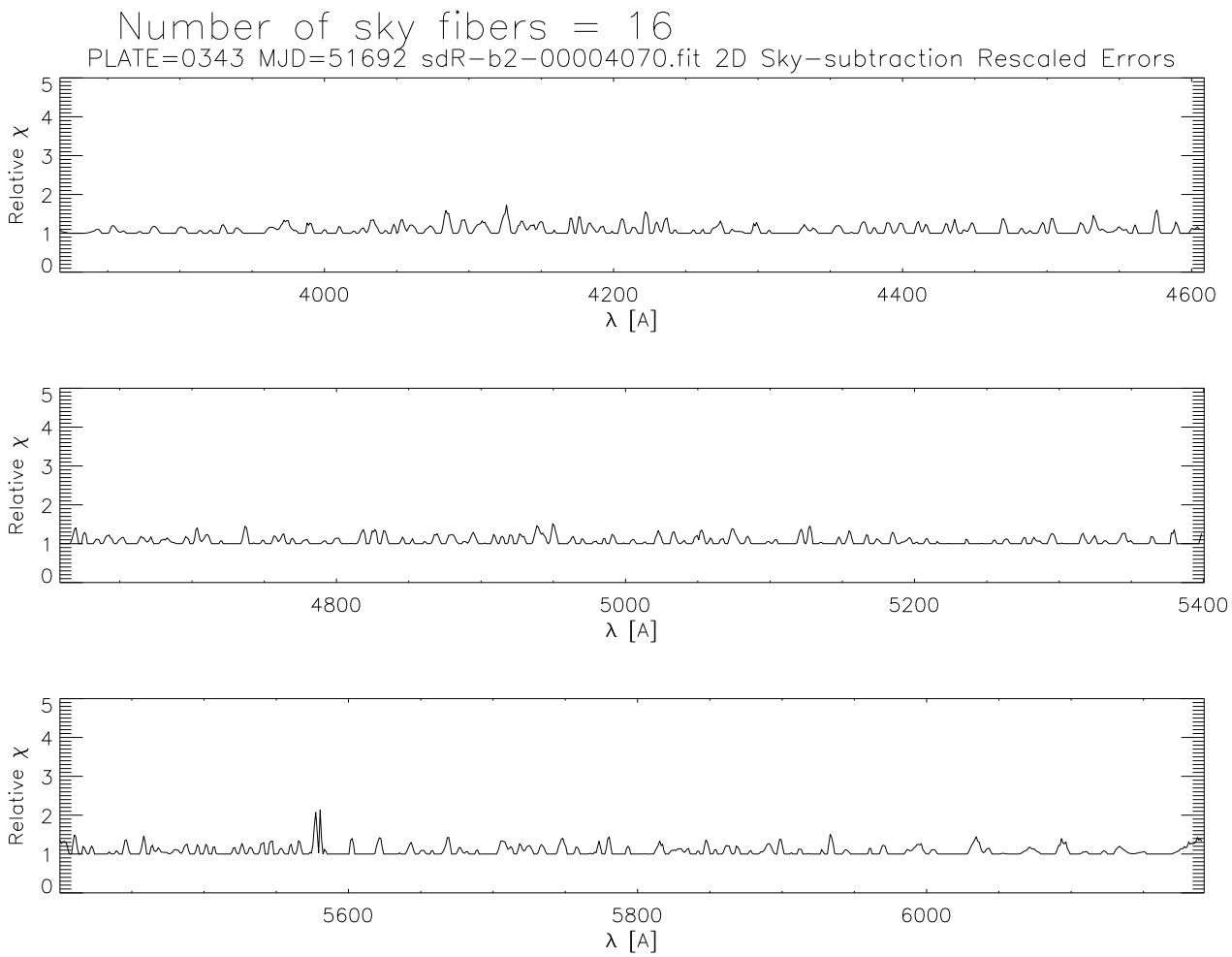

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

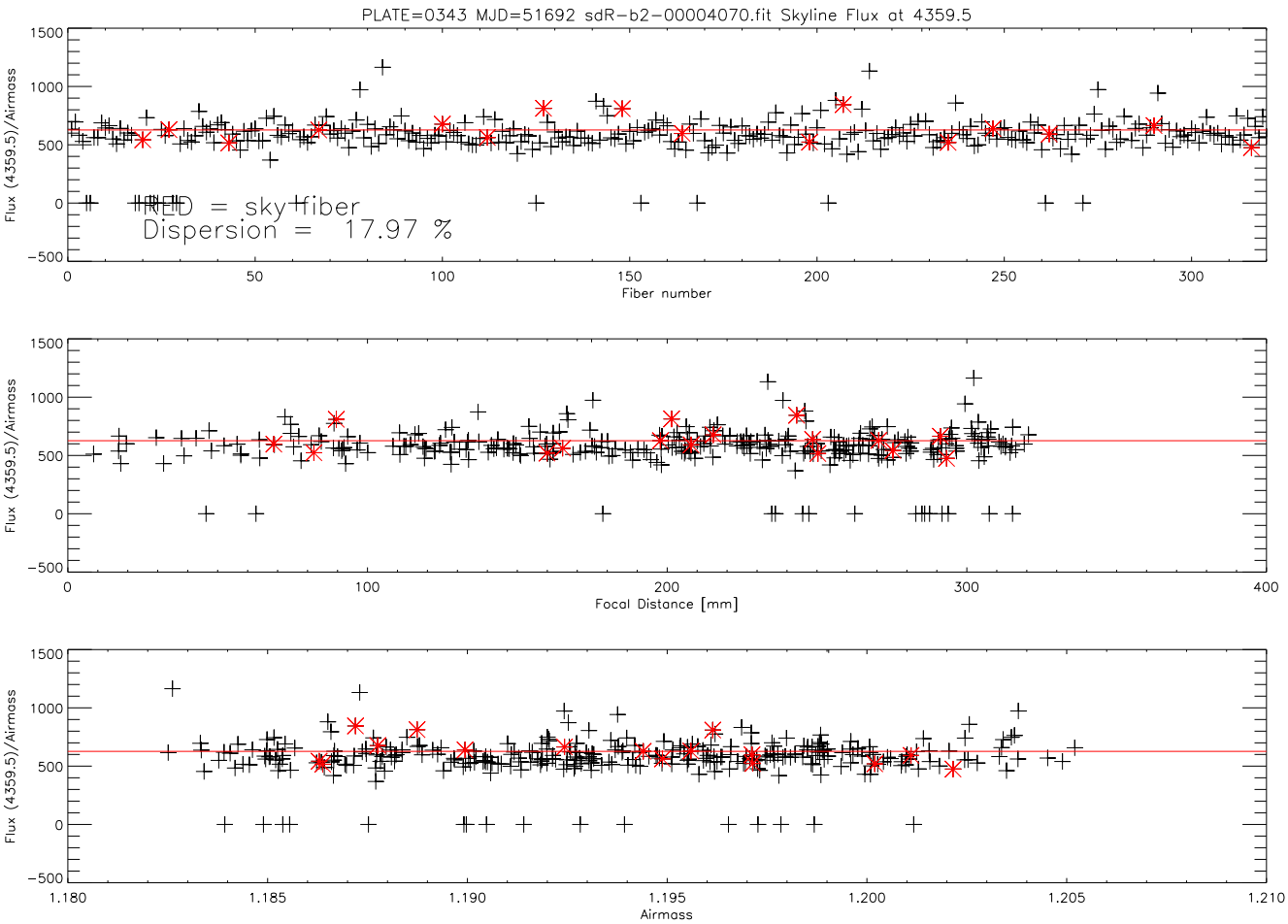

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004070.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

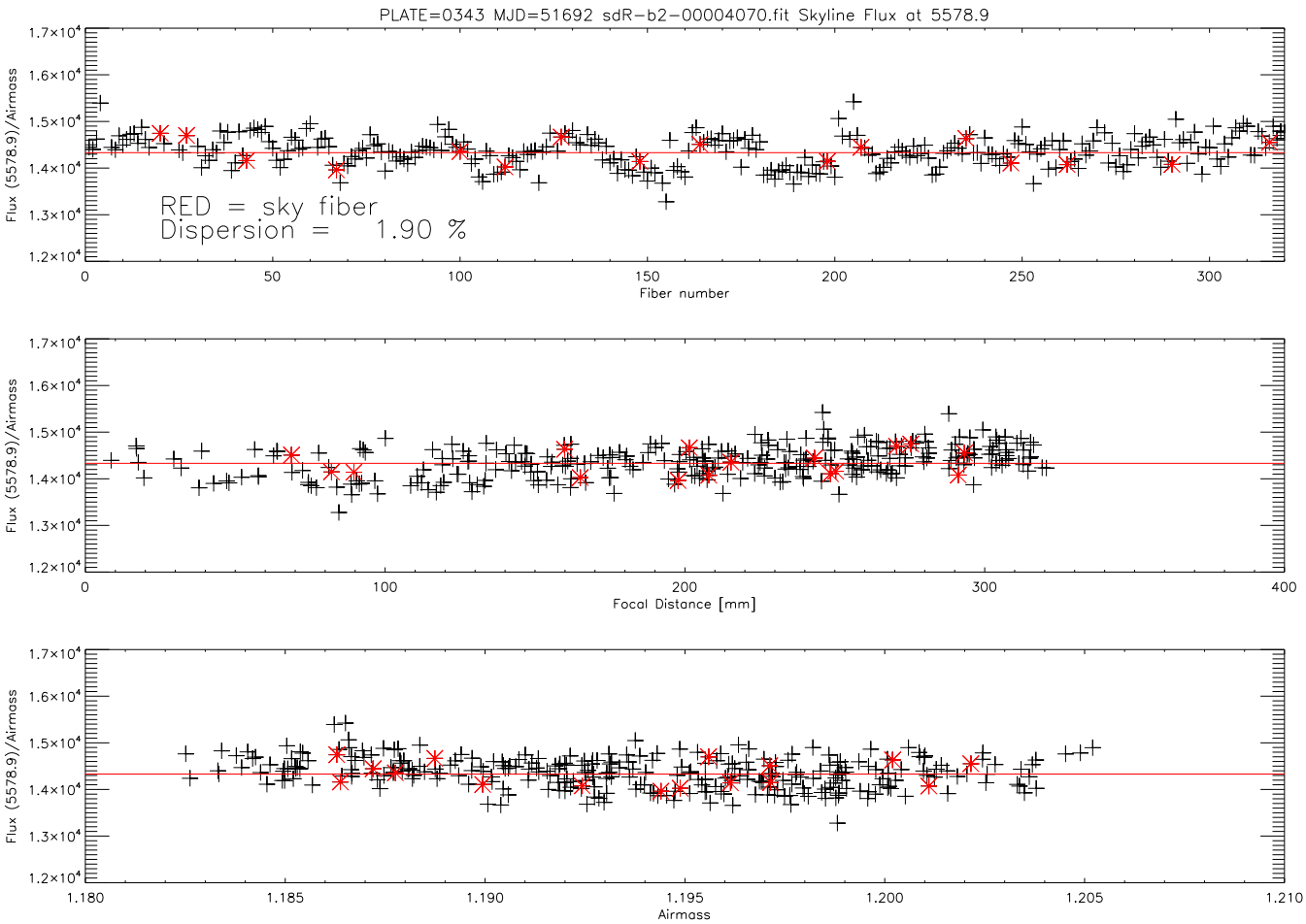

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

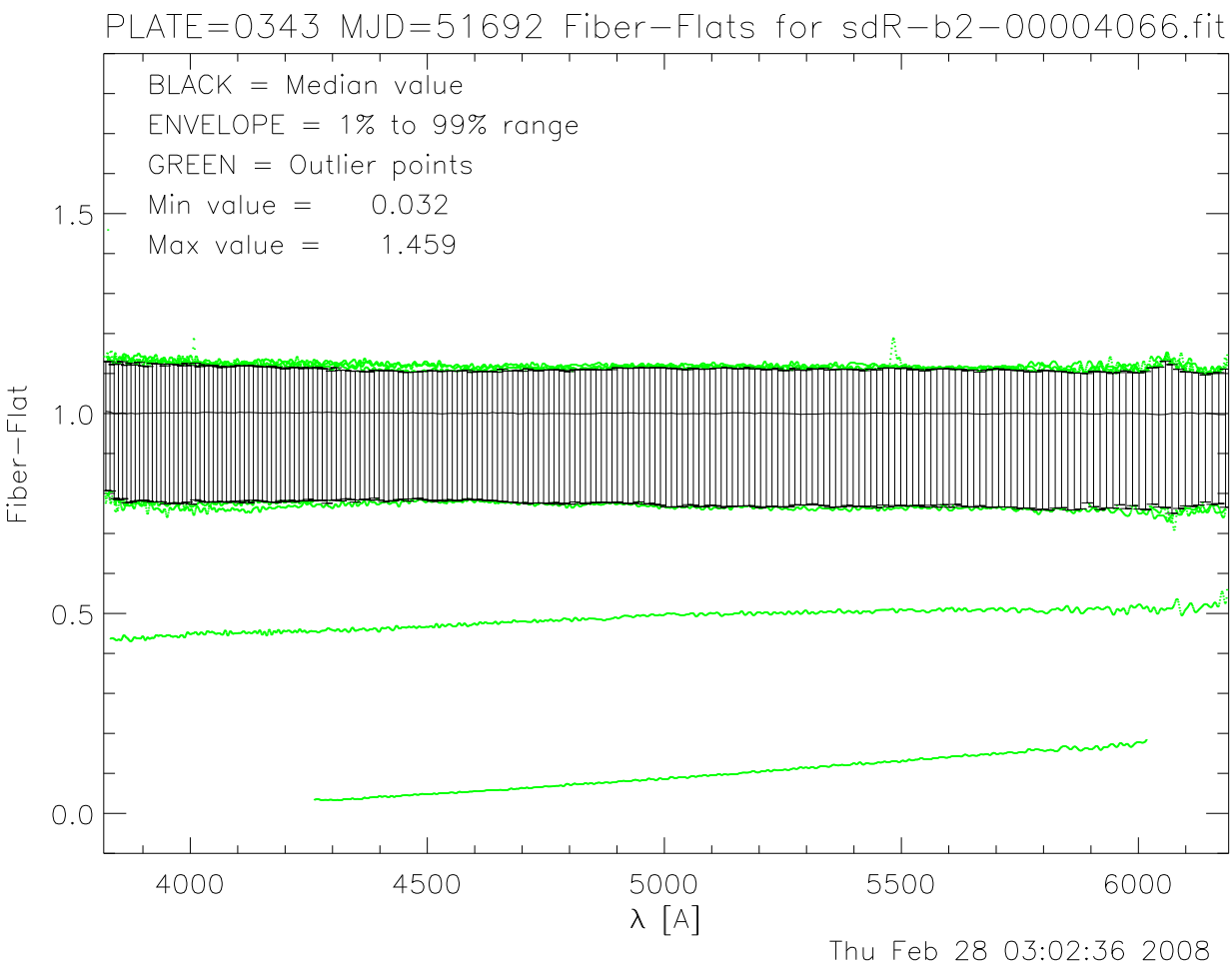

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

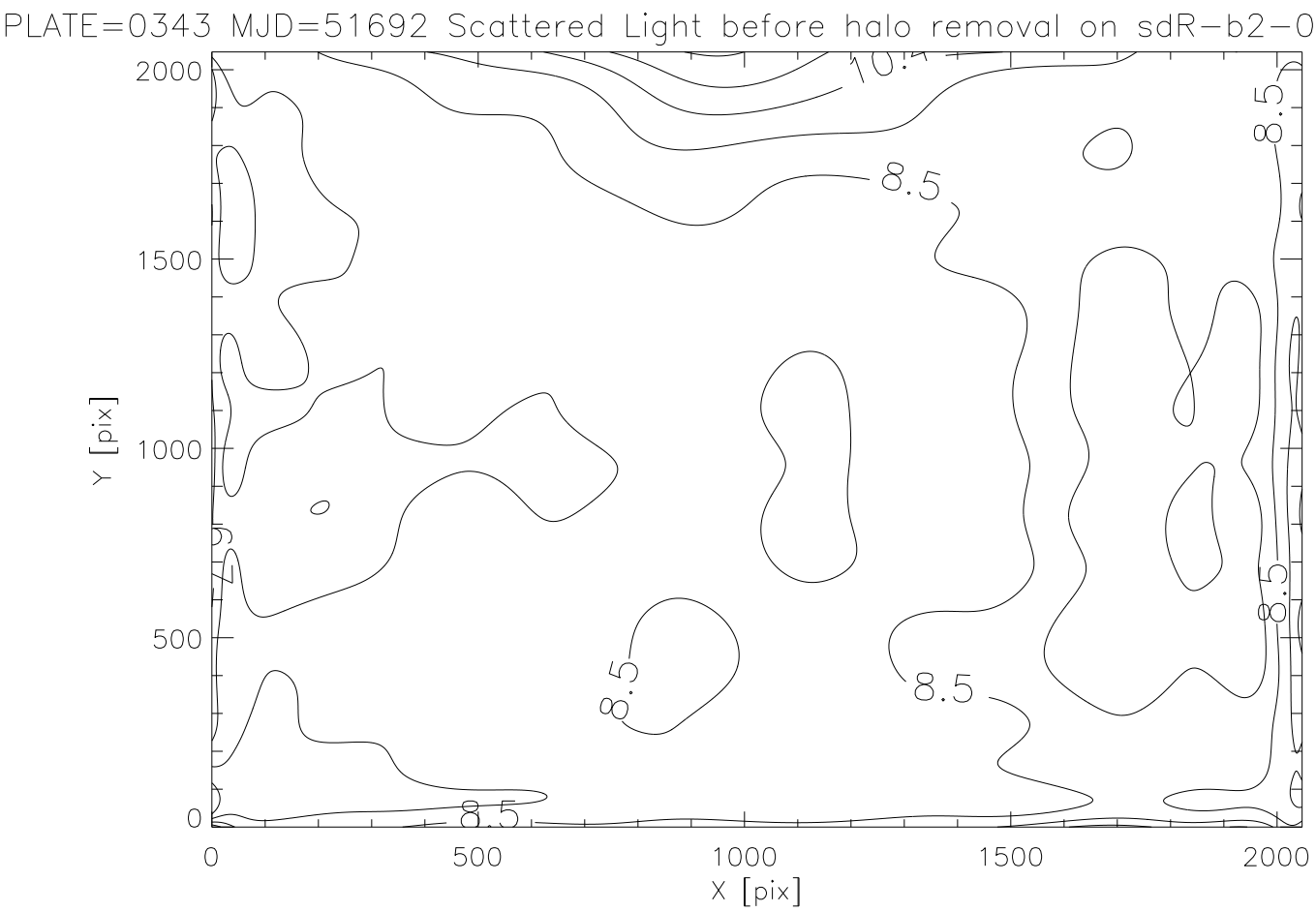

PLATE=0343 MJD=51692 sdR-b2-00004070.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

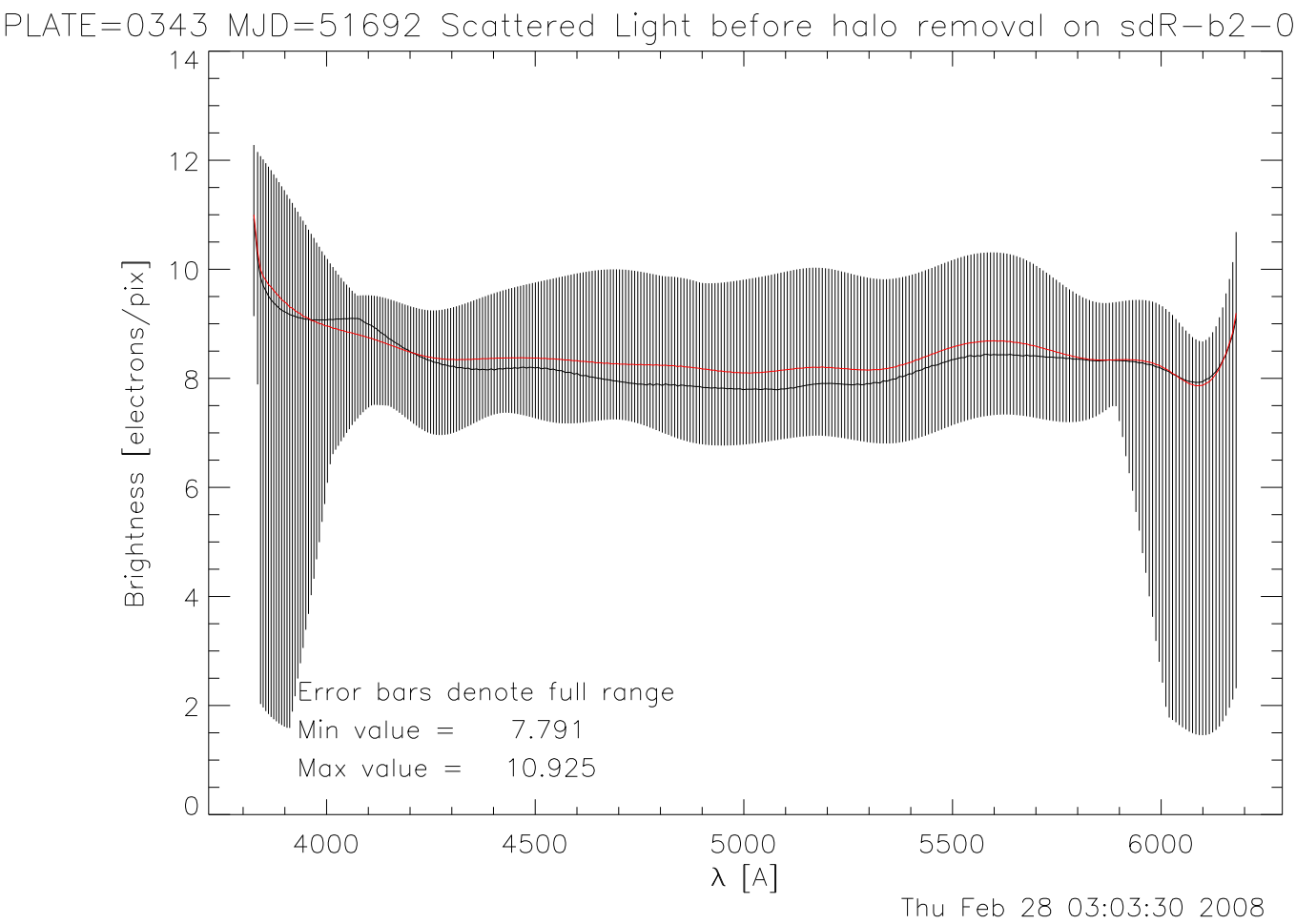

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004070.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

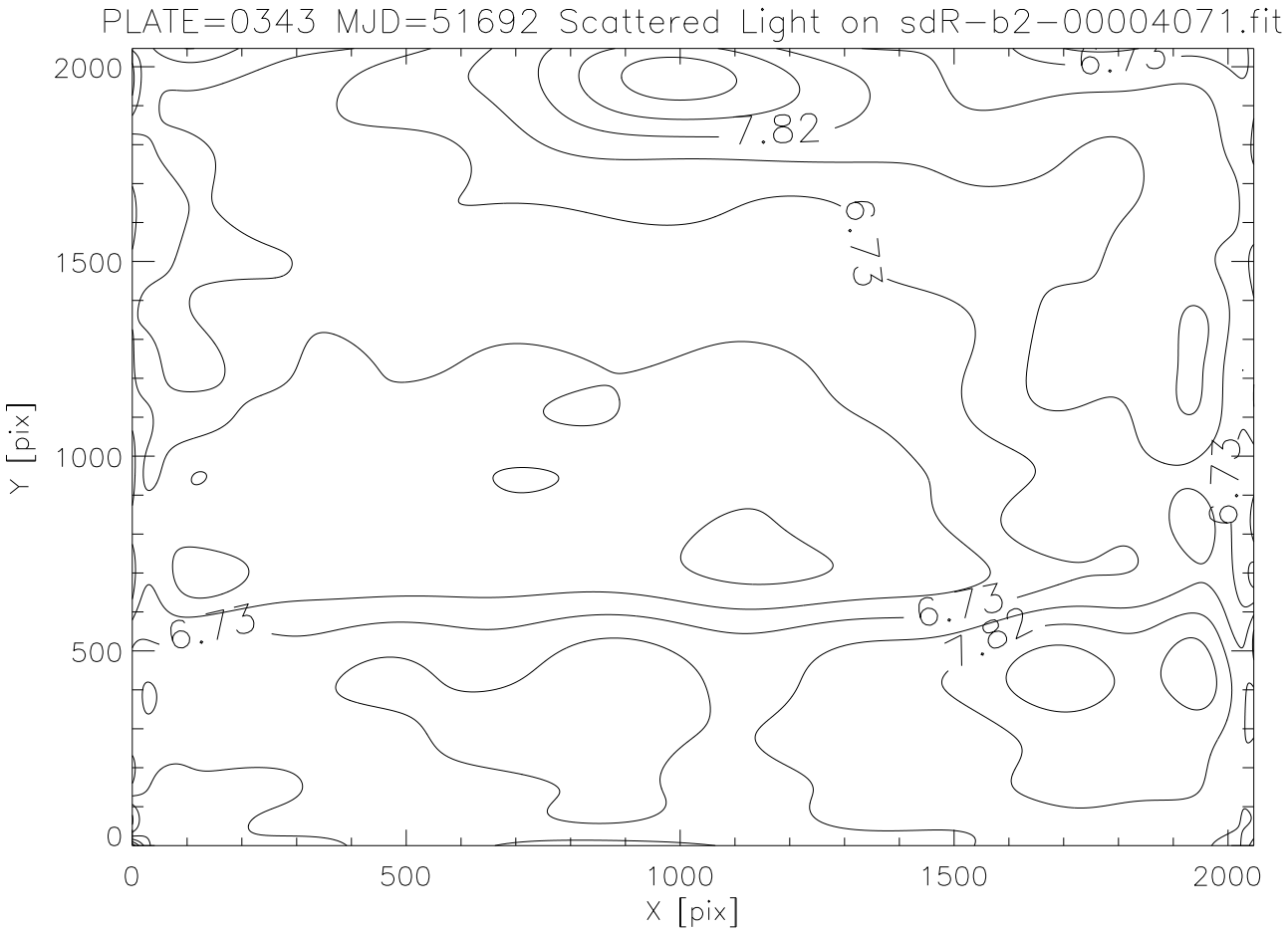

PLATE=0343 MJD=51692 sdR-b2-00004070.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 17.97 %
Fiber number
Focal Distance [mm]
Airmass

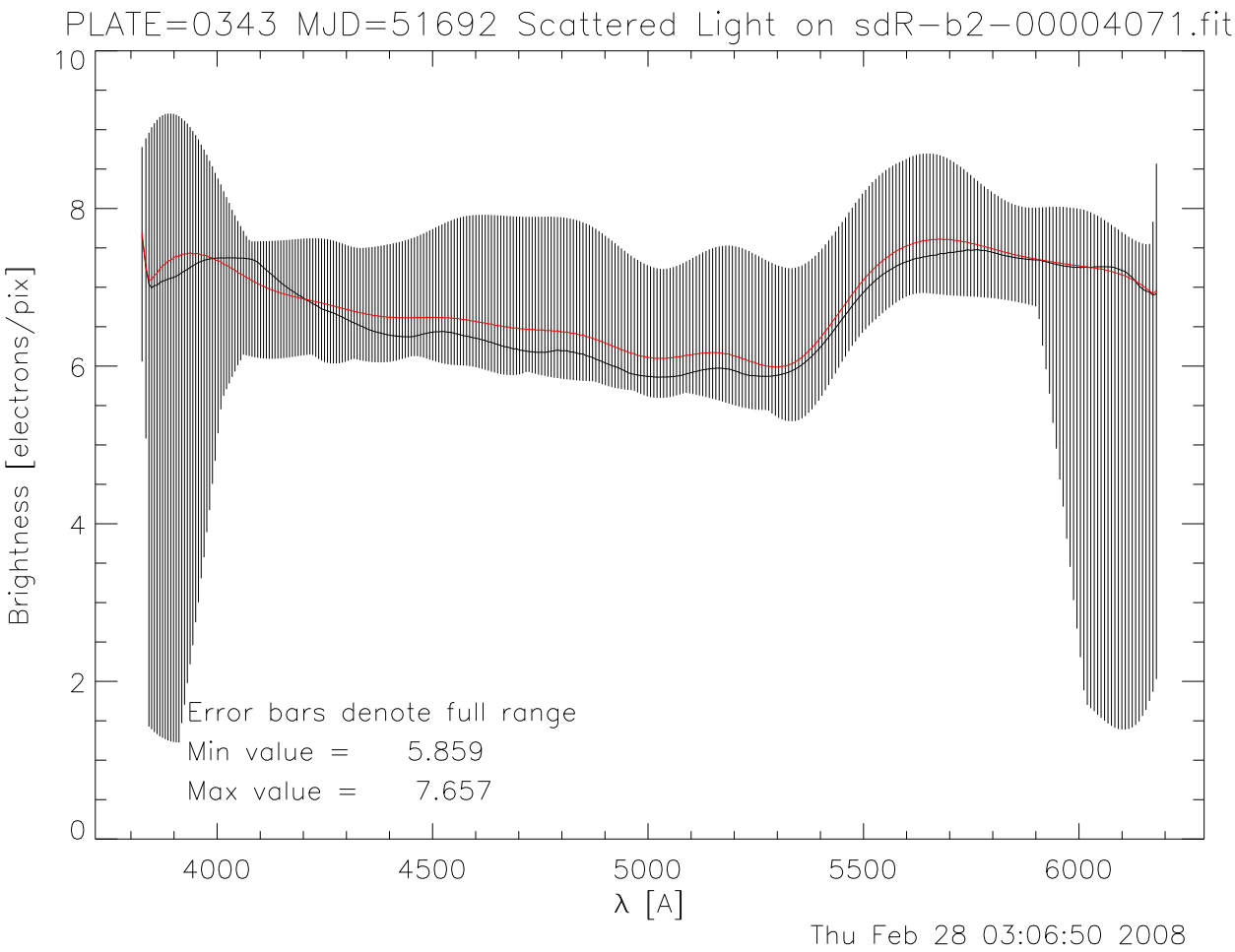

PLATE=0343 MJD=51692 sdR-b2-00004070.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.90 %
Fiber number
Focal Distance [mm]
Airmass

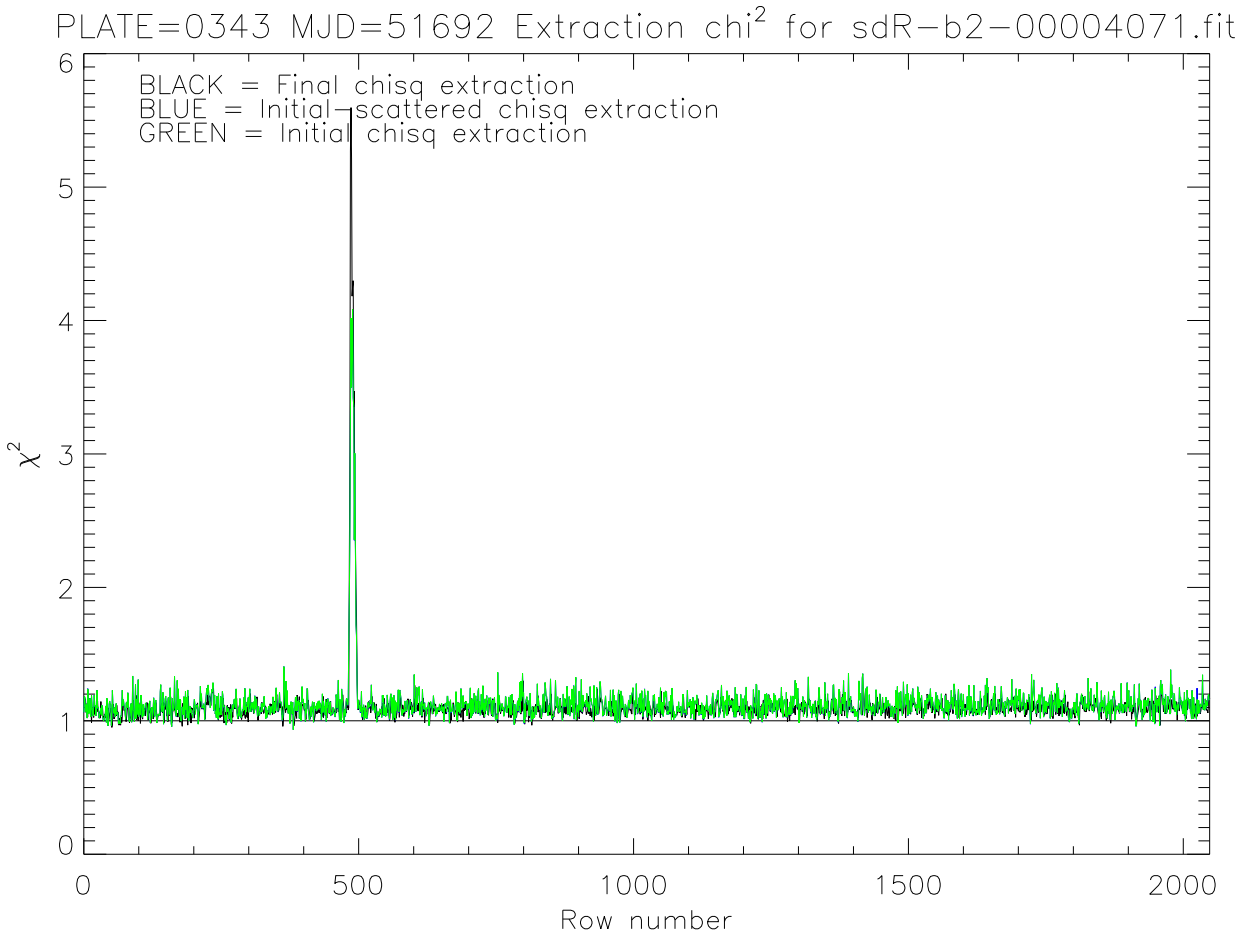

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:02:36 2008

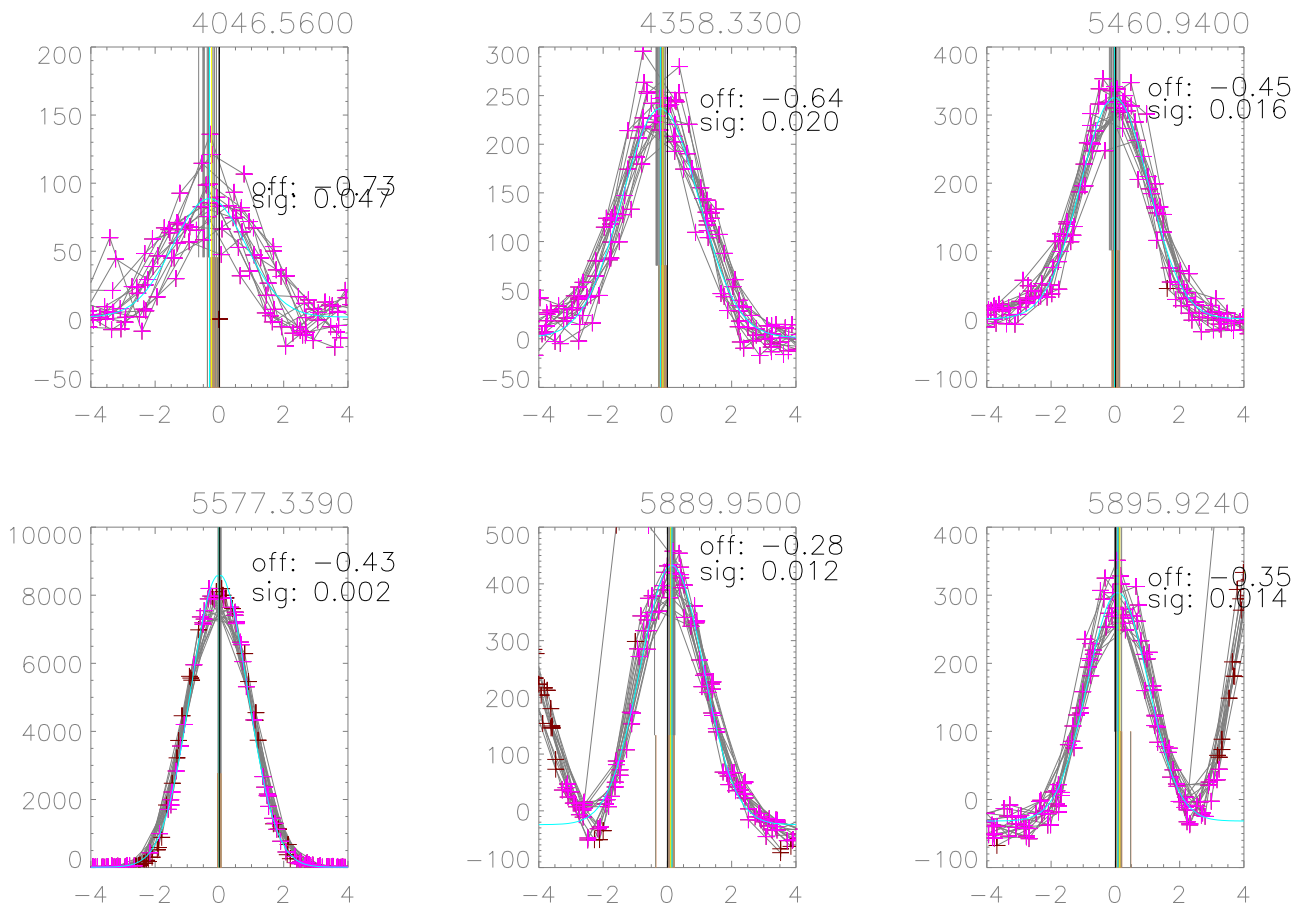

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004071.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
8.5
8.5
8.5
8.5
8.5
8.5

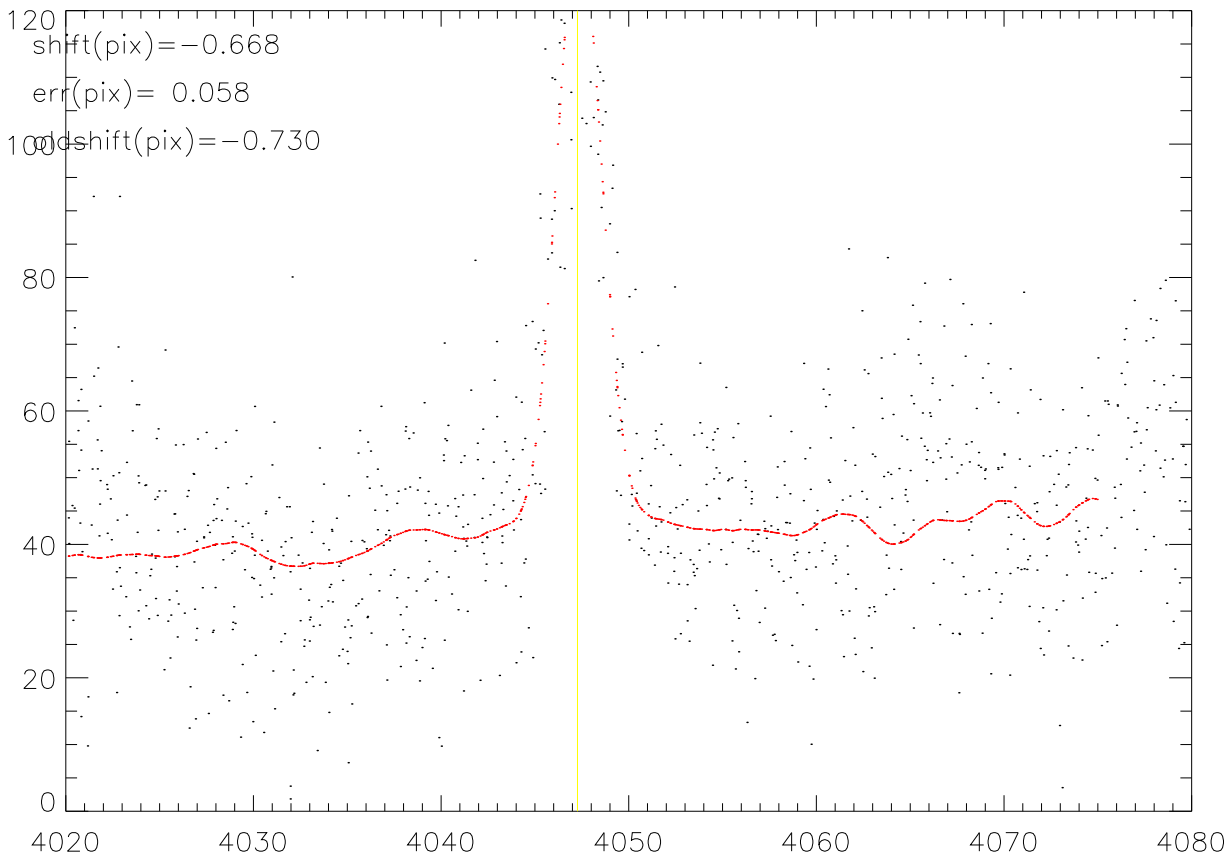

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004071.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.791
Max value = 10.925
Thu Feb 28 03:03:30 2008

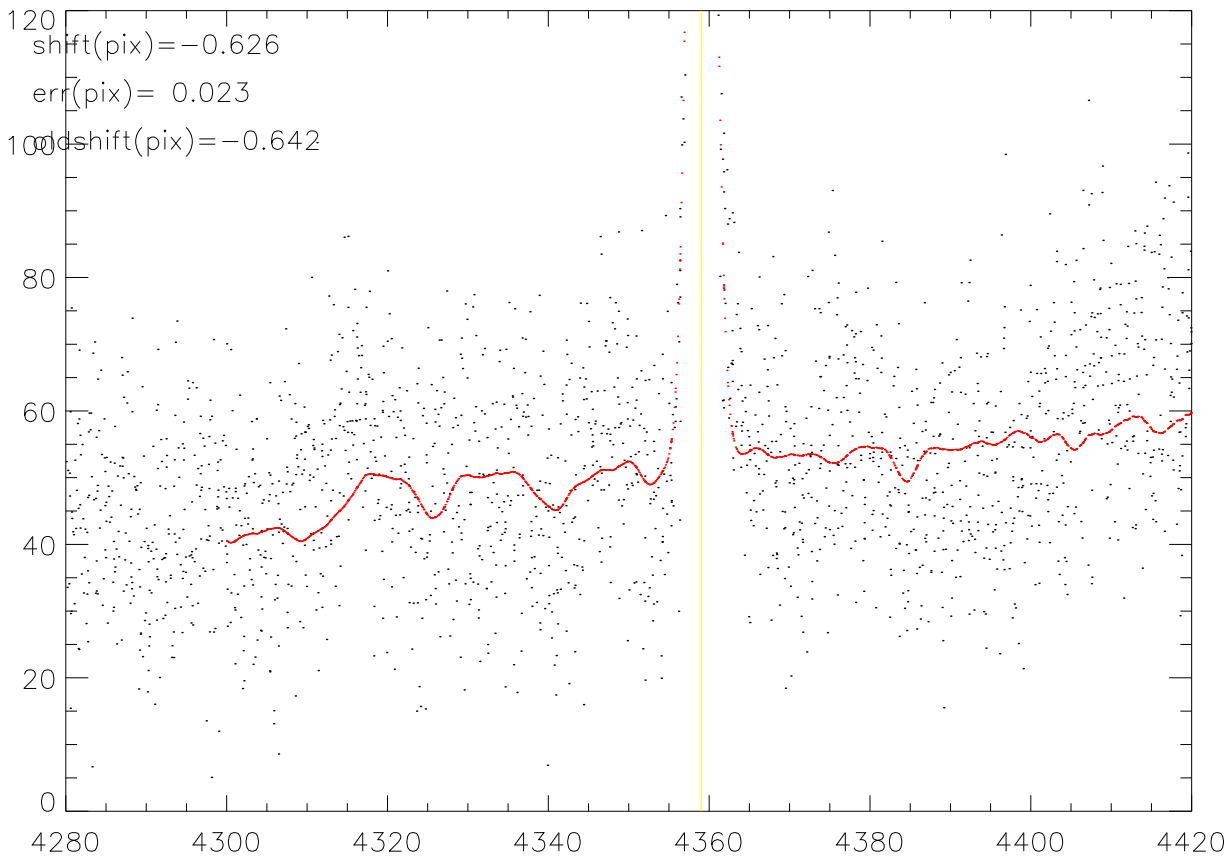

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004071.fit
6.73
7.82
6.73
6.73
6.73
6.73
7.82
Y [pix]
X [pix]
0
500
1000
1500
2000

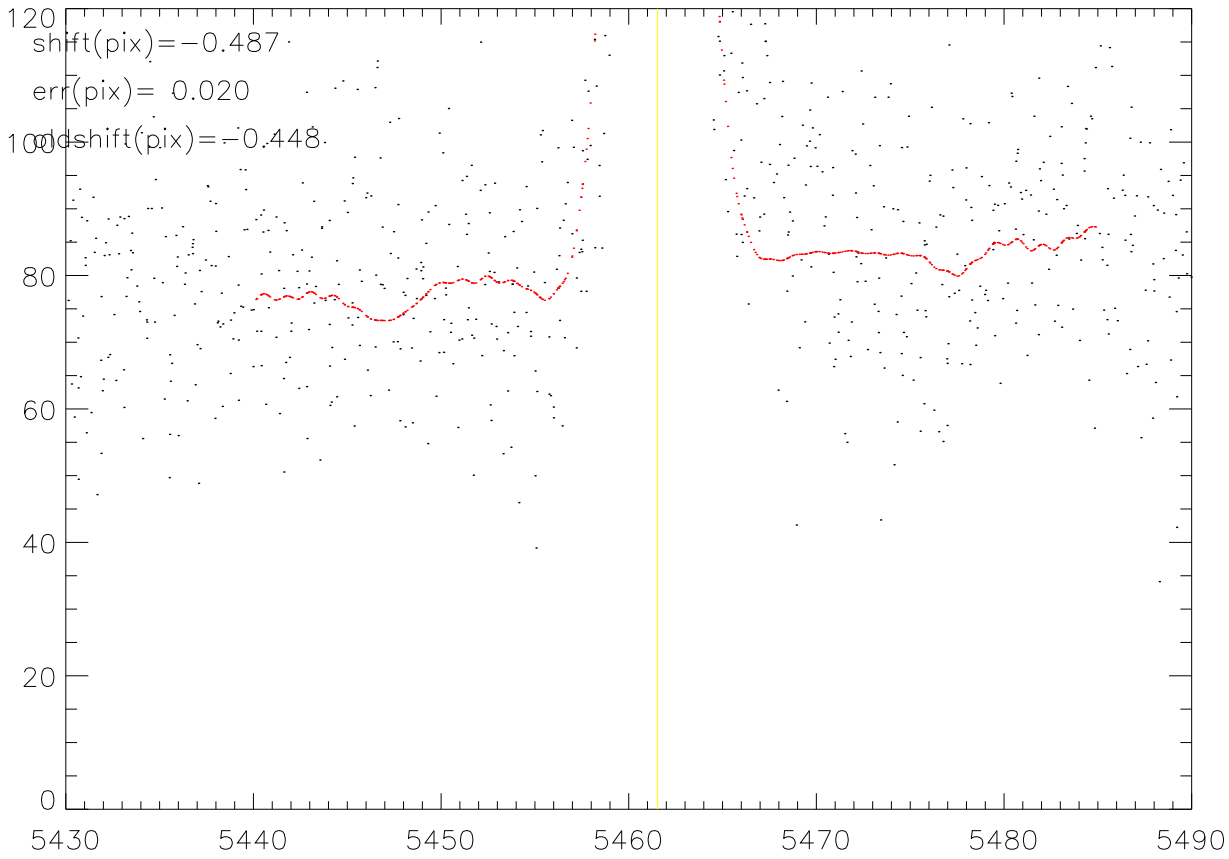

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004071.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.859
Max value = 7.657
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:06:50 2008

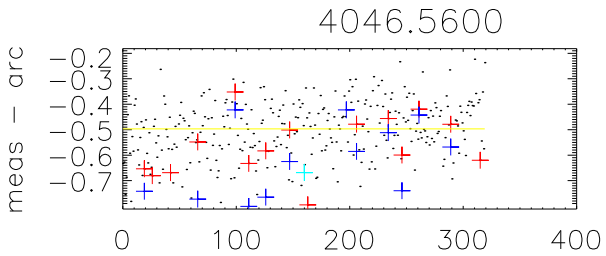

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004071.fit
BLACK = Final chisq extraction
BLUE = Initial scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

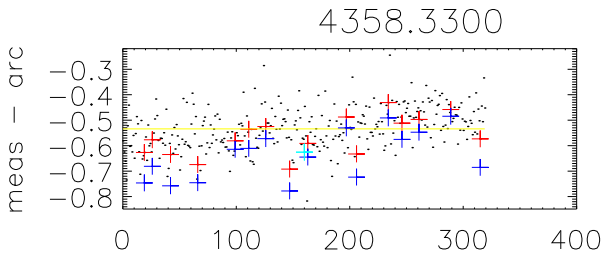

4046.5600
off: −0.73
sig: 0.047
4358.3300
off: −0.64
sig: 0.020
5460.9400
off: −0.45
sig: 0.016
5577.3390
off: −0.43
sig: 0.002
5889.9500
off: −0.28
sig: 0.012
5895.9240
off: −0.35
sig: 0.014

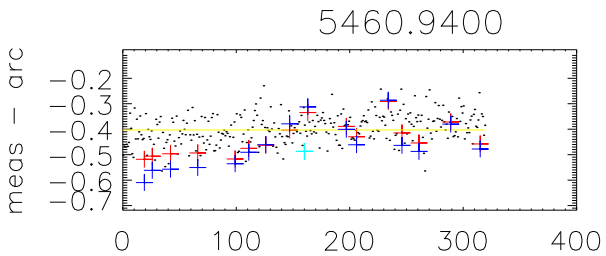

shift(pix)=−0.668
err(pix)= 0.058
oldshift(pix)=−0.730
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

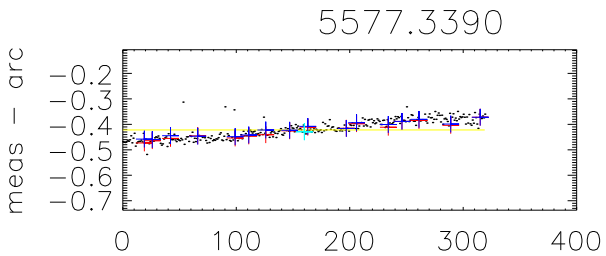

shift(pix)=−0.626
err(pix)= 0.023
oldshift(pix)=−0.642
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

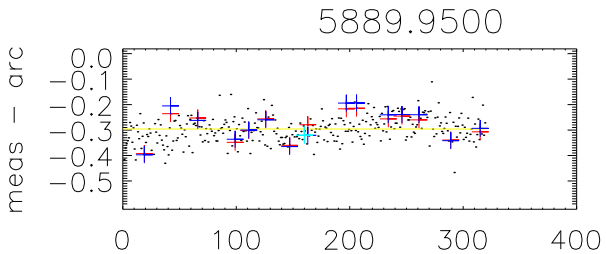

shift(pix)=−0.487
err(pix)= 0.020
oldshift(pix)=−0.448
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

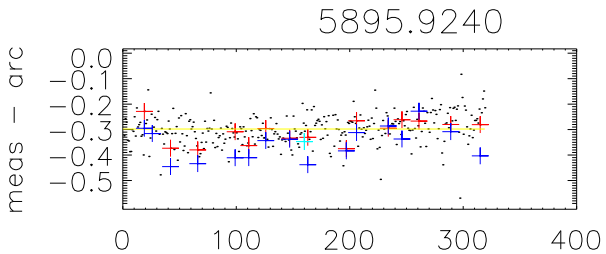

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

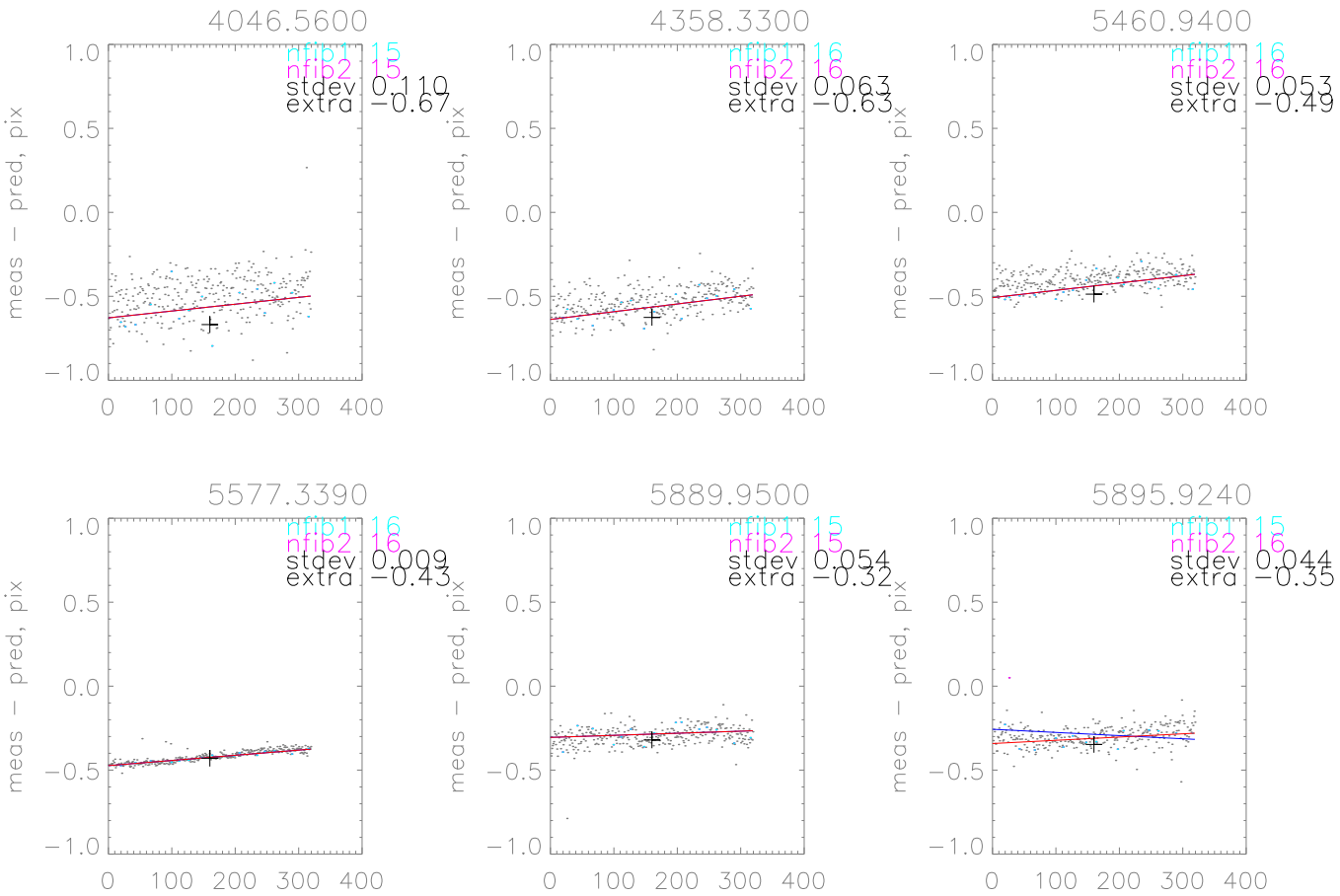

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

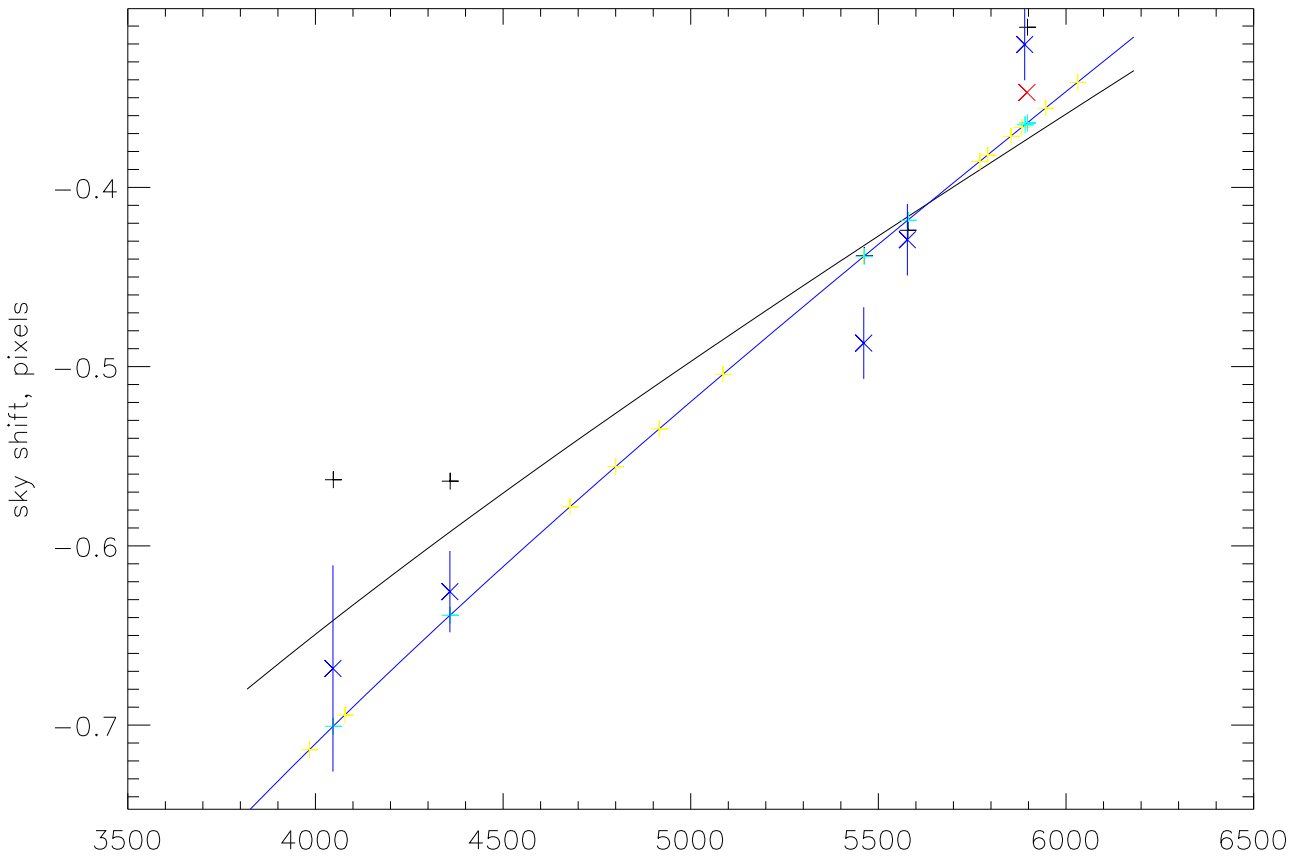

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

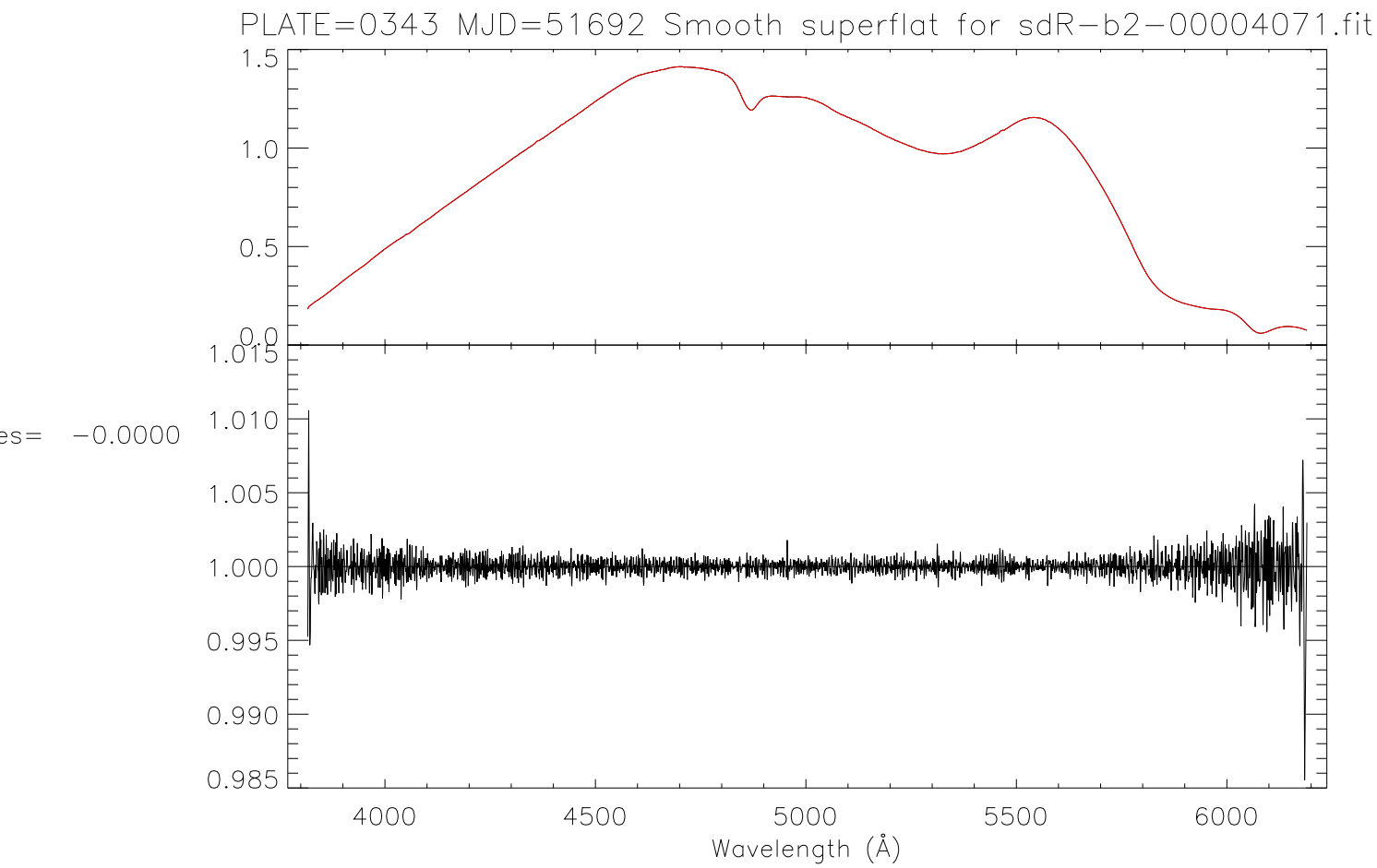

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

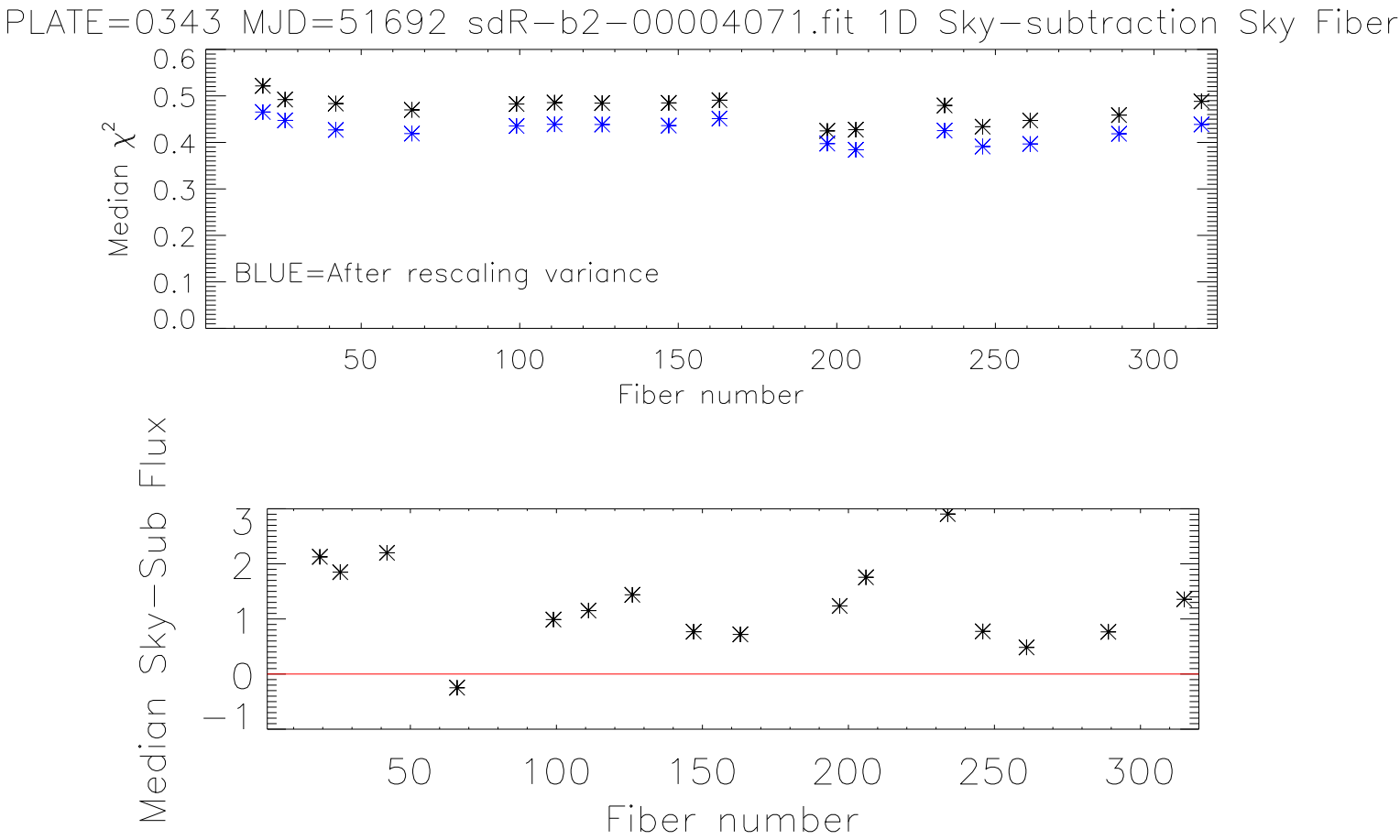

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

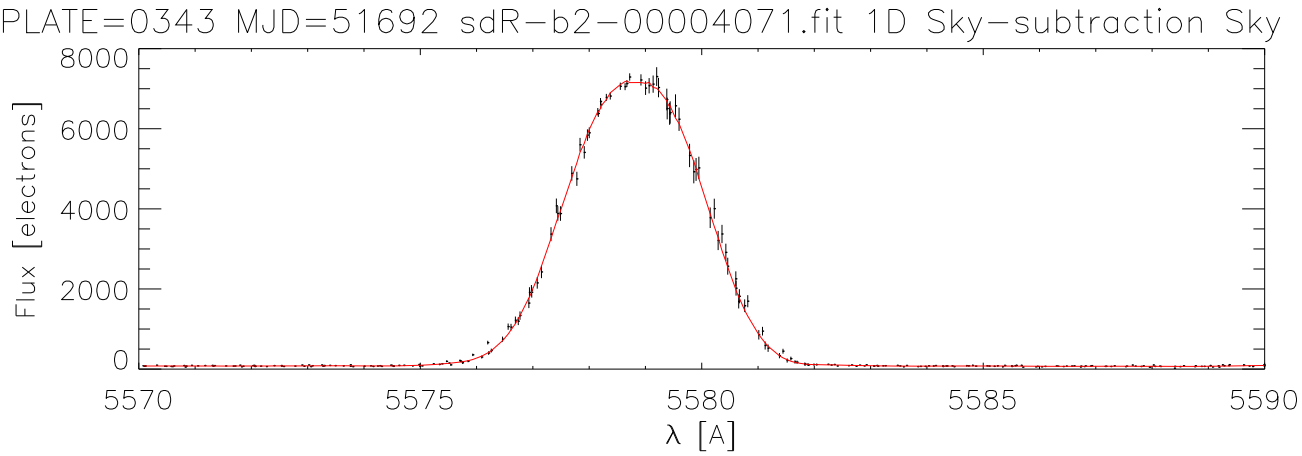

4046.5600
nfib1 15
nfib2 15
stdev 0.110
extra −0.67
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.63
5460.9400
nfib1 16
nfib2 16
stdev 0.053
extra −0.49
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.43
5889.9500
nfib1 15
nfib2 15
stdev 0.054
extra −0.32
5895.9240
nfib1 15
nfib2 16
stdev 0.044
extra −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

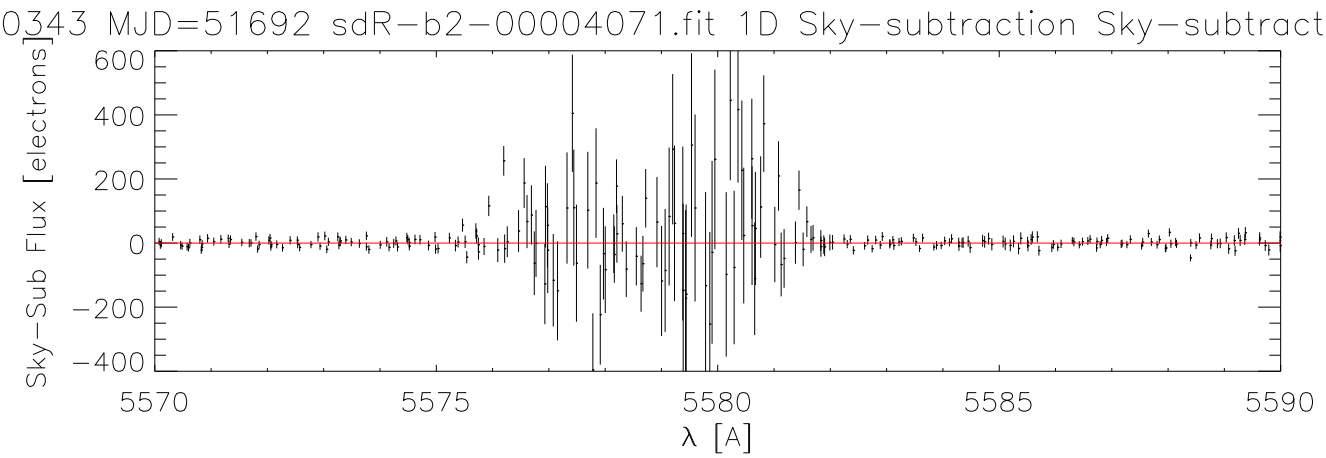

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

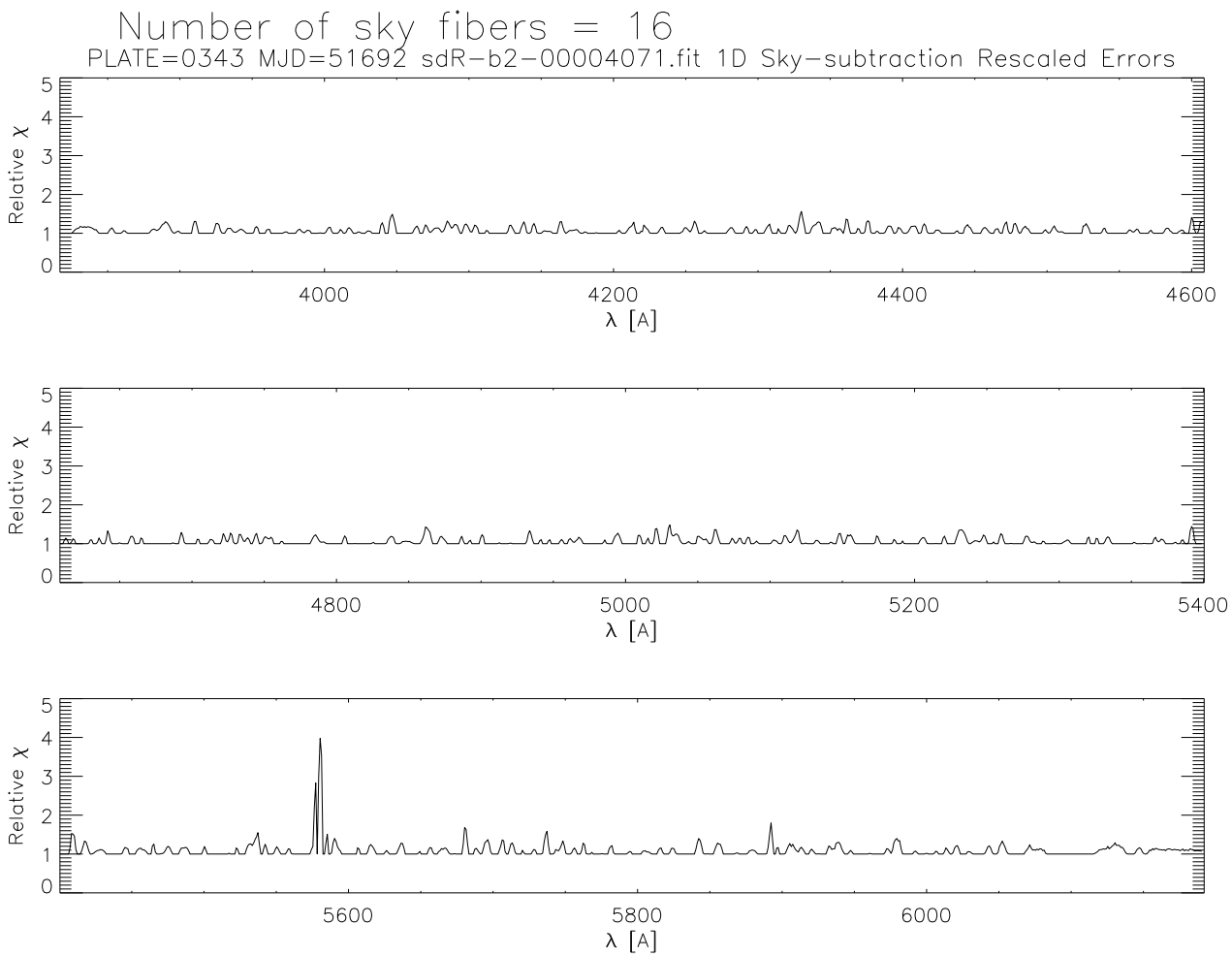

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004071.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

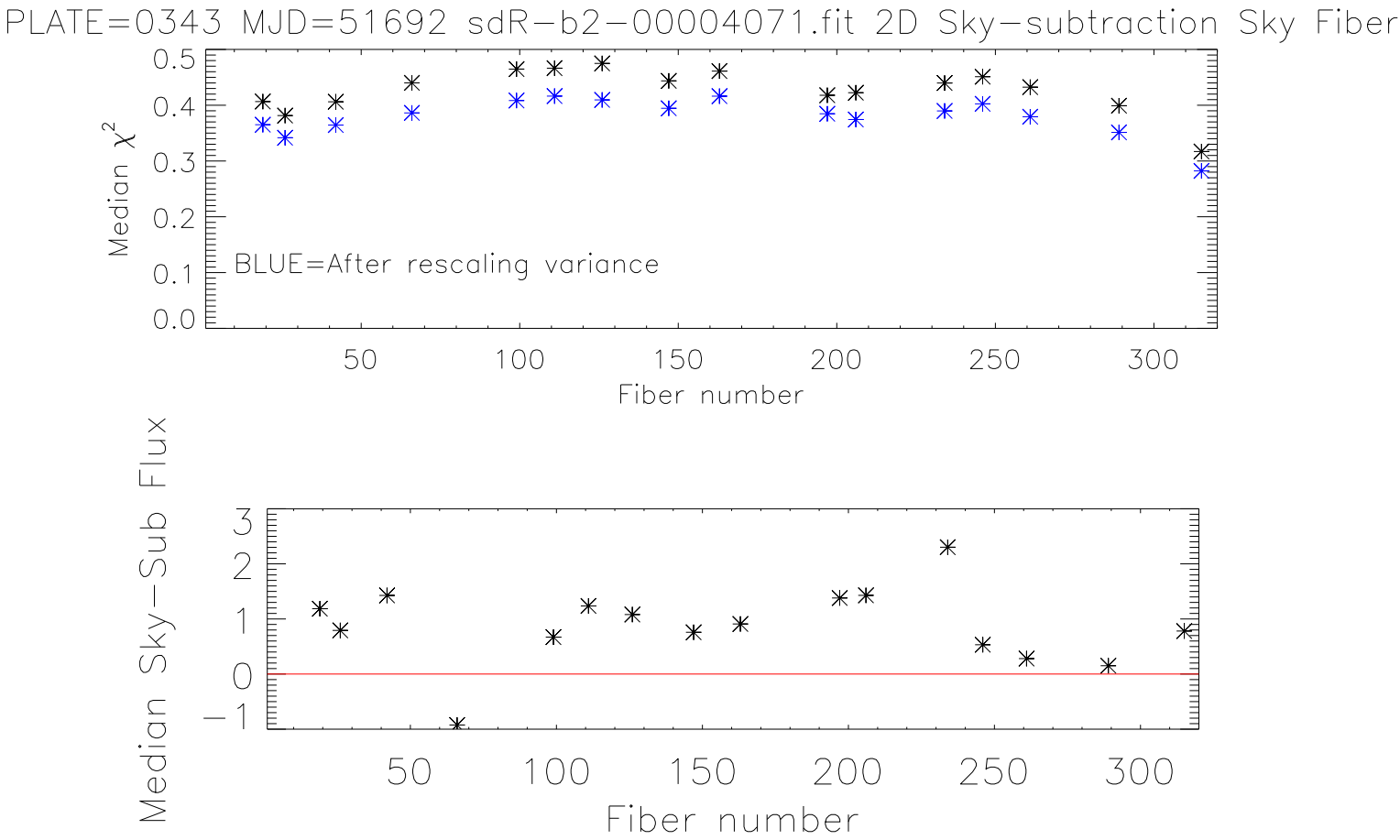
es= −0.0000

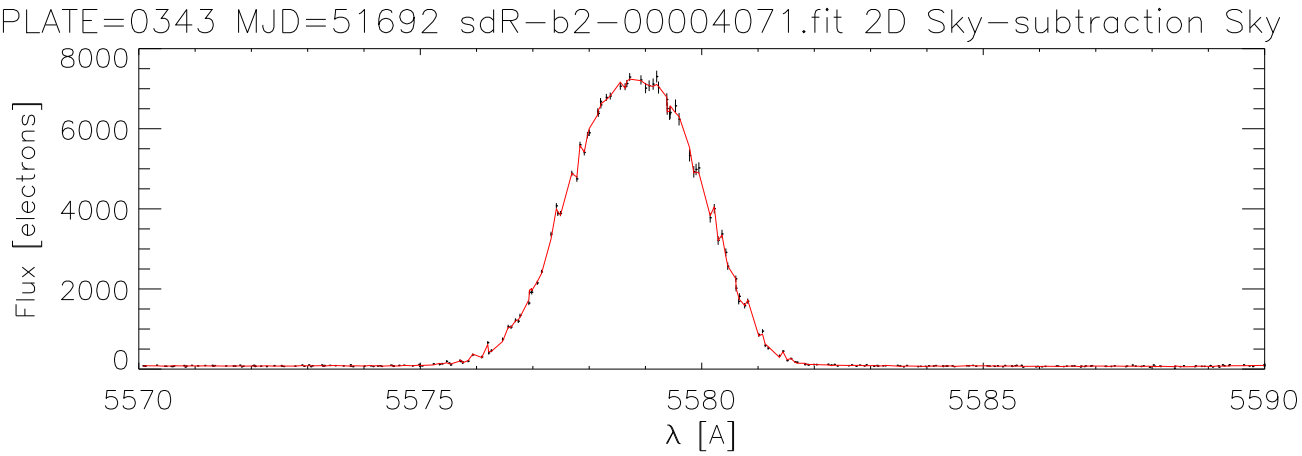

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

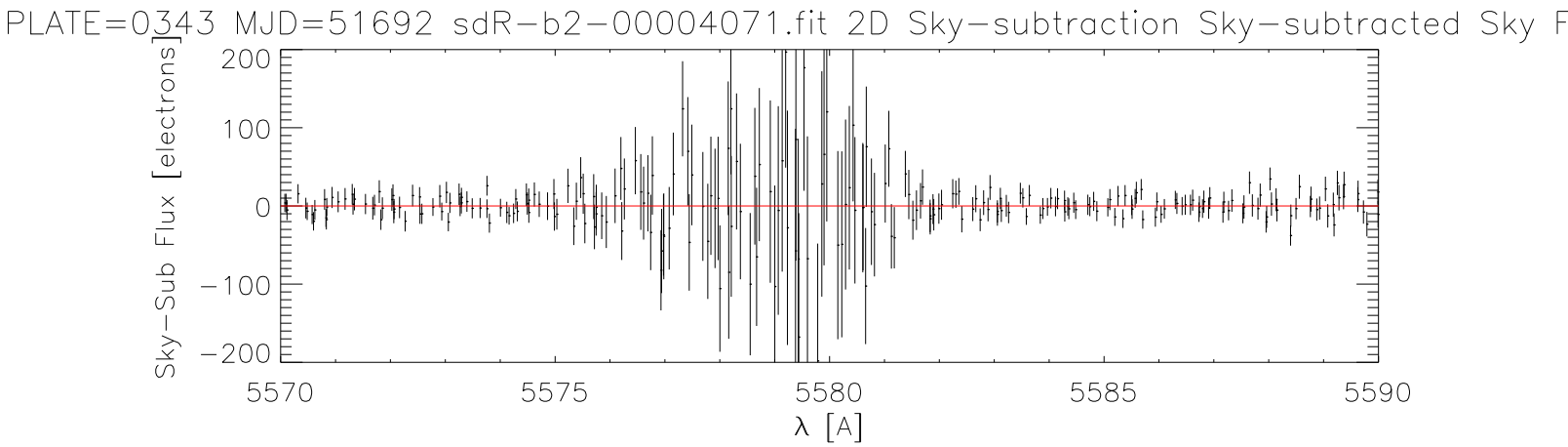

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

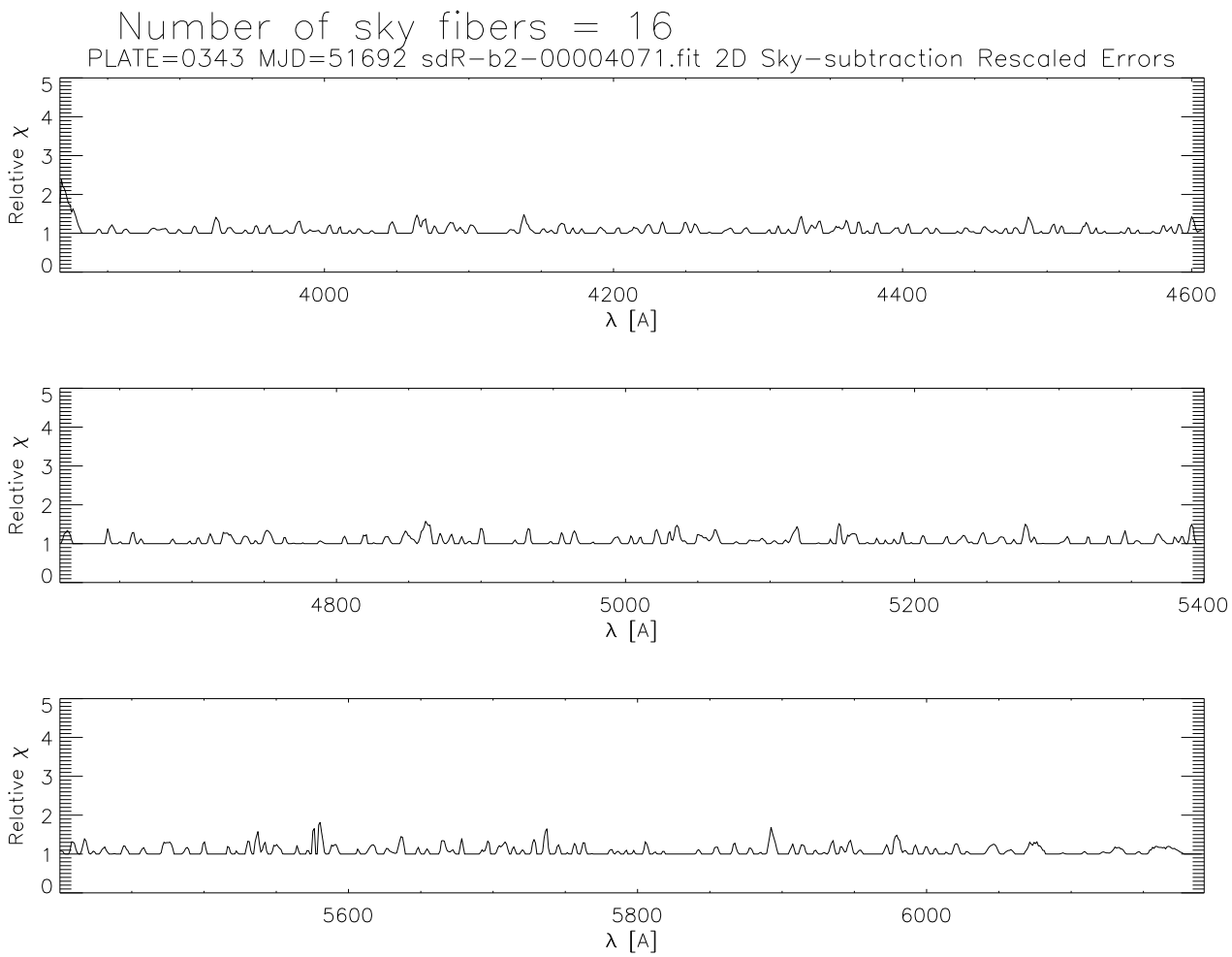

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

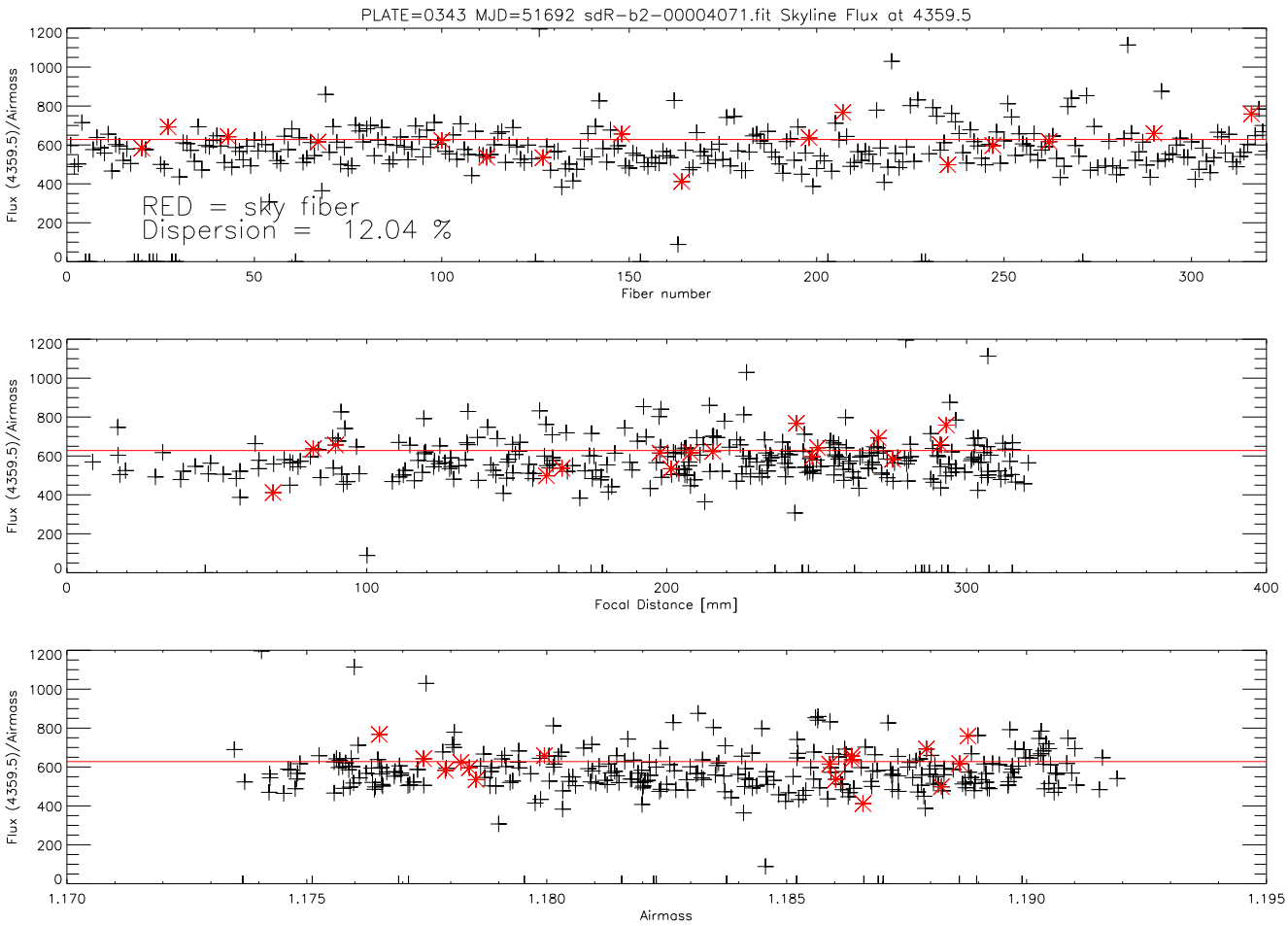

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004071.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

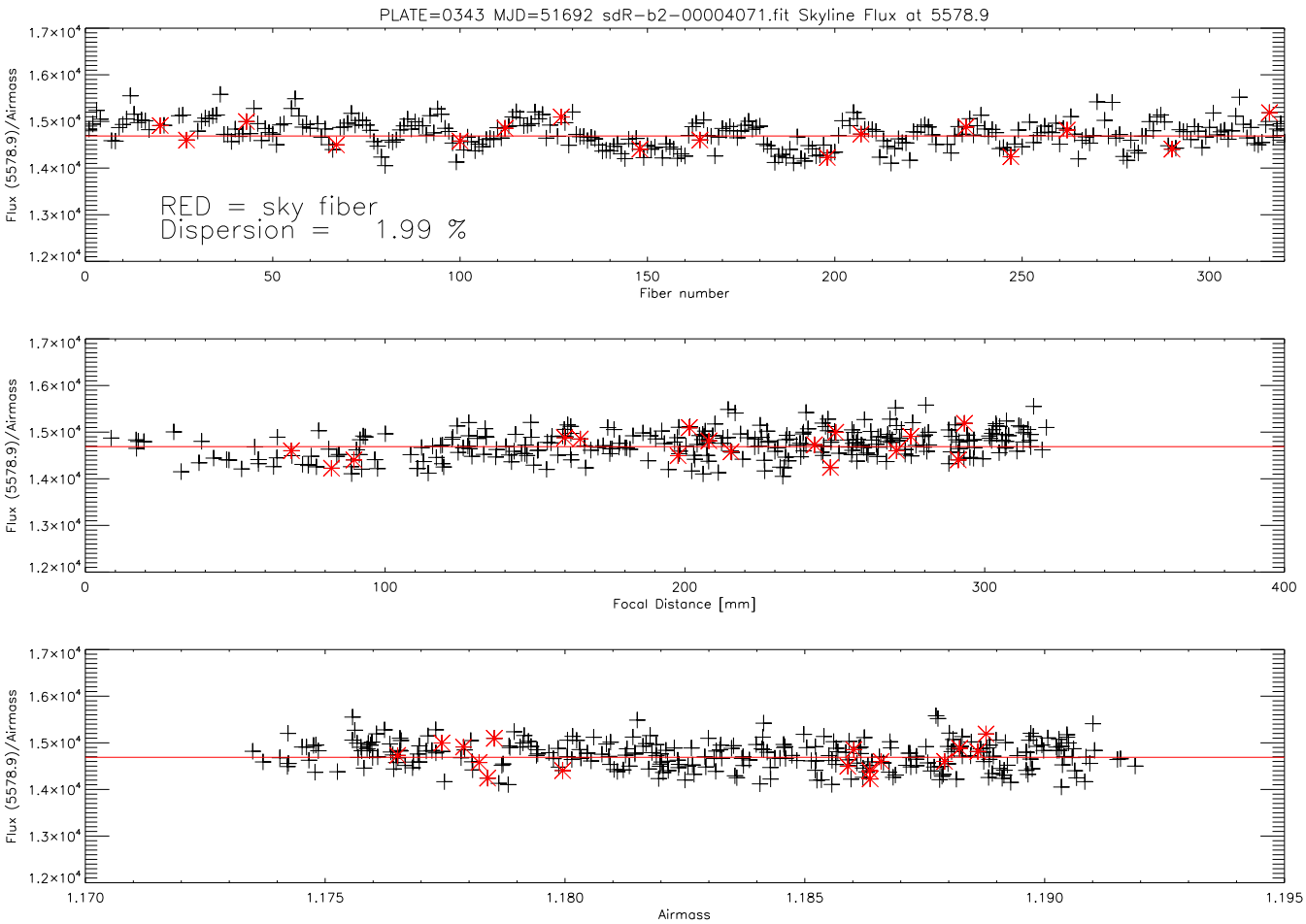

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

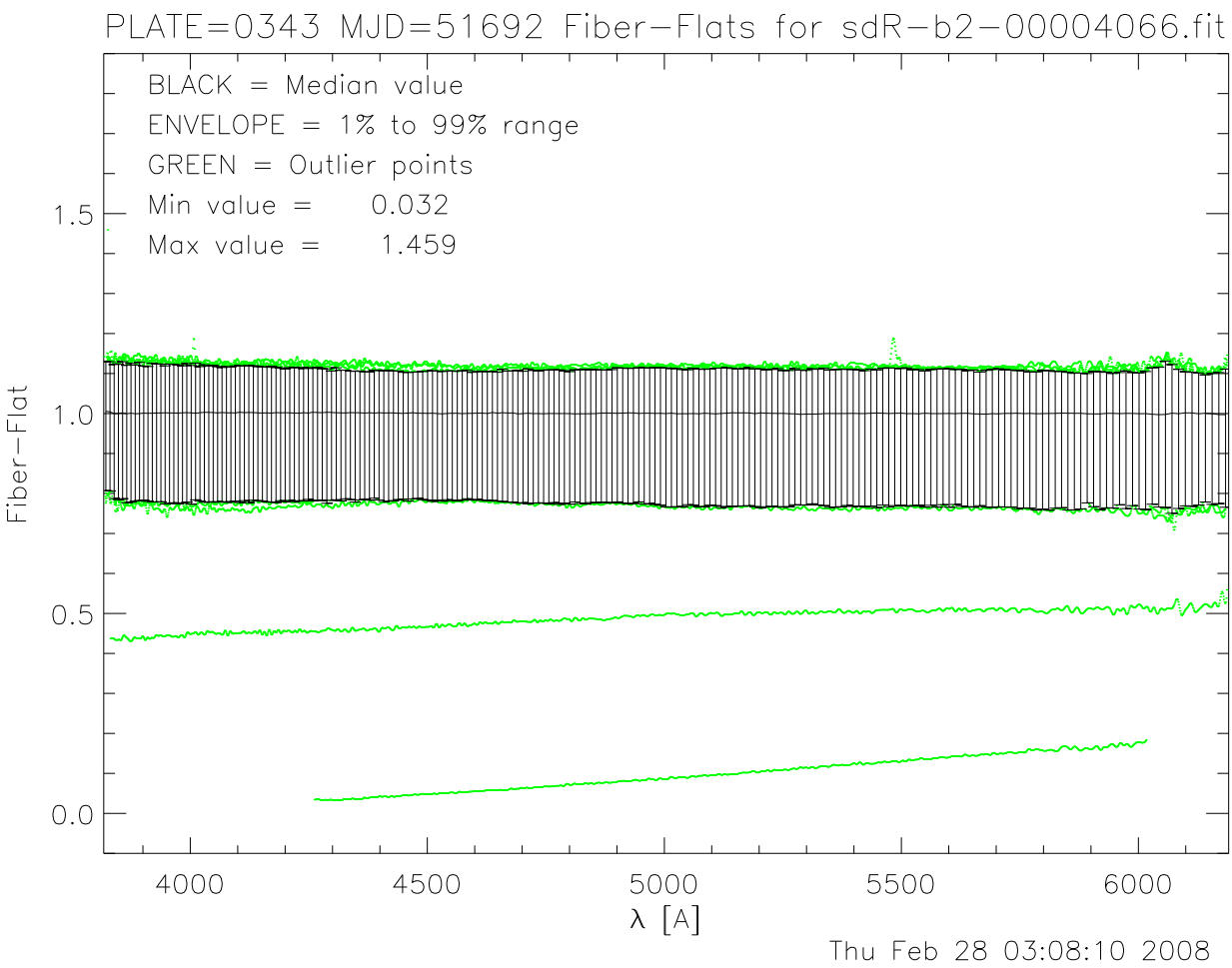

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

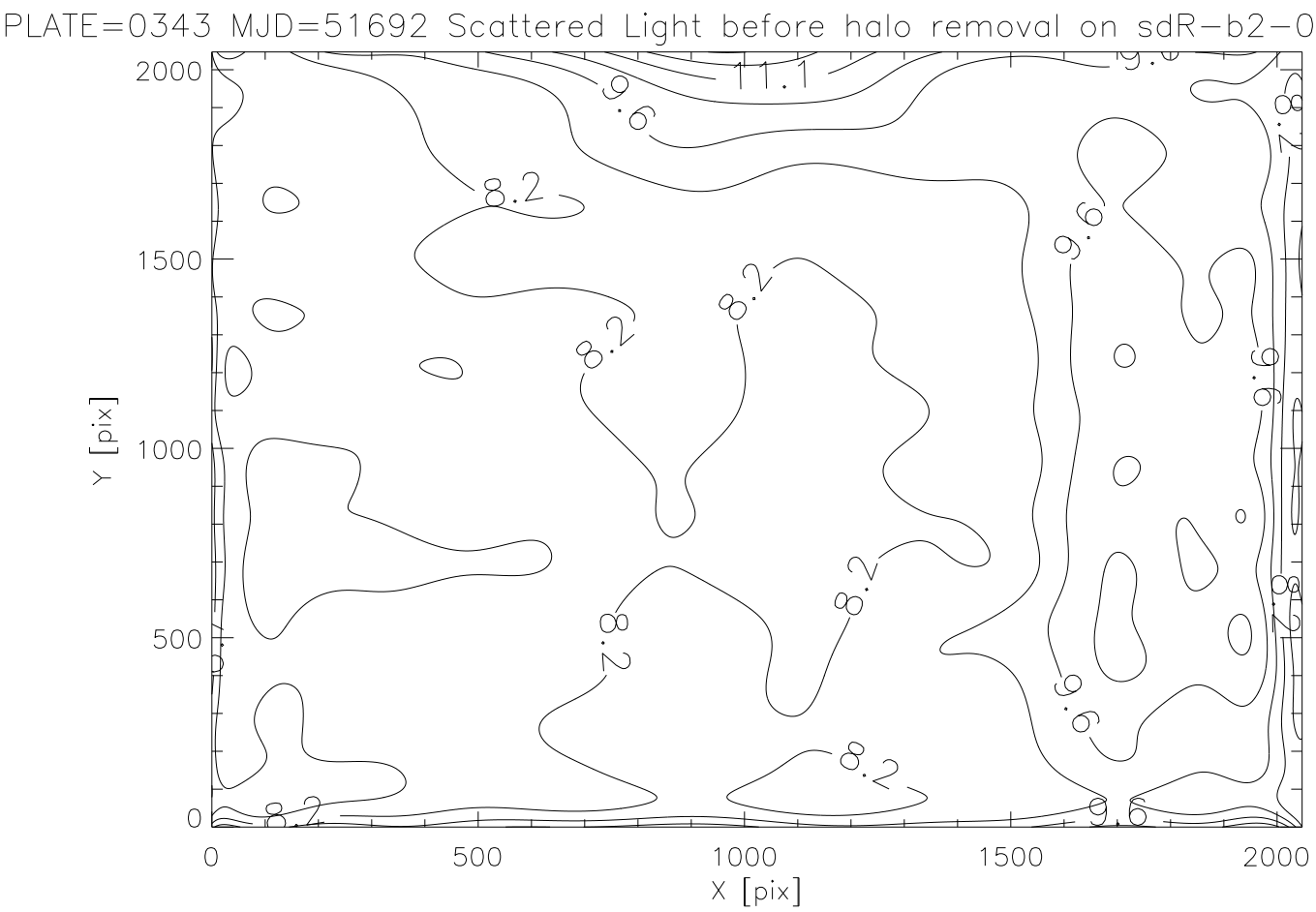

PLATE=0343 MJD=51692 sdR-b2-00004071.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

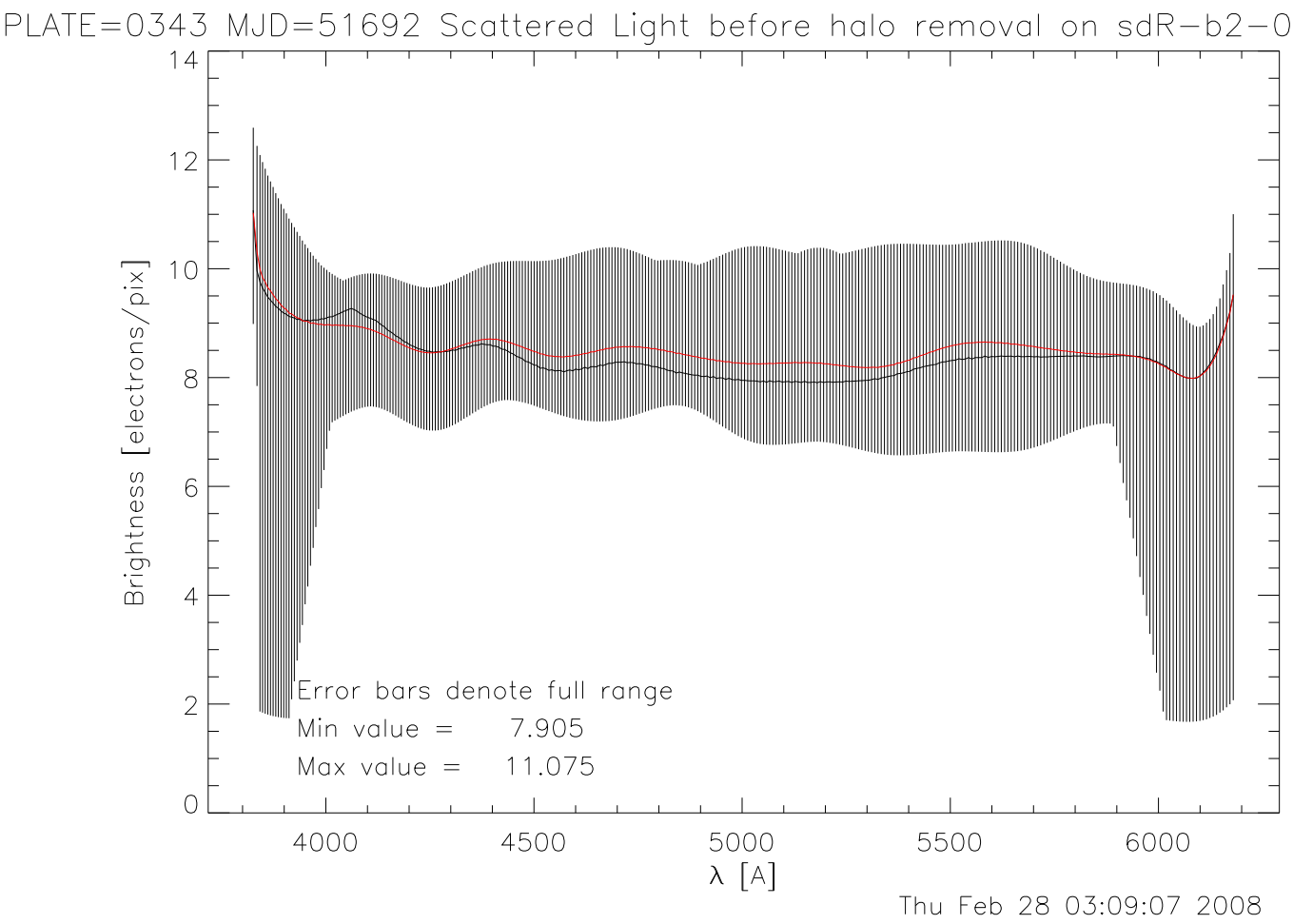

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004071.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

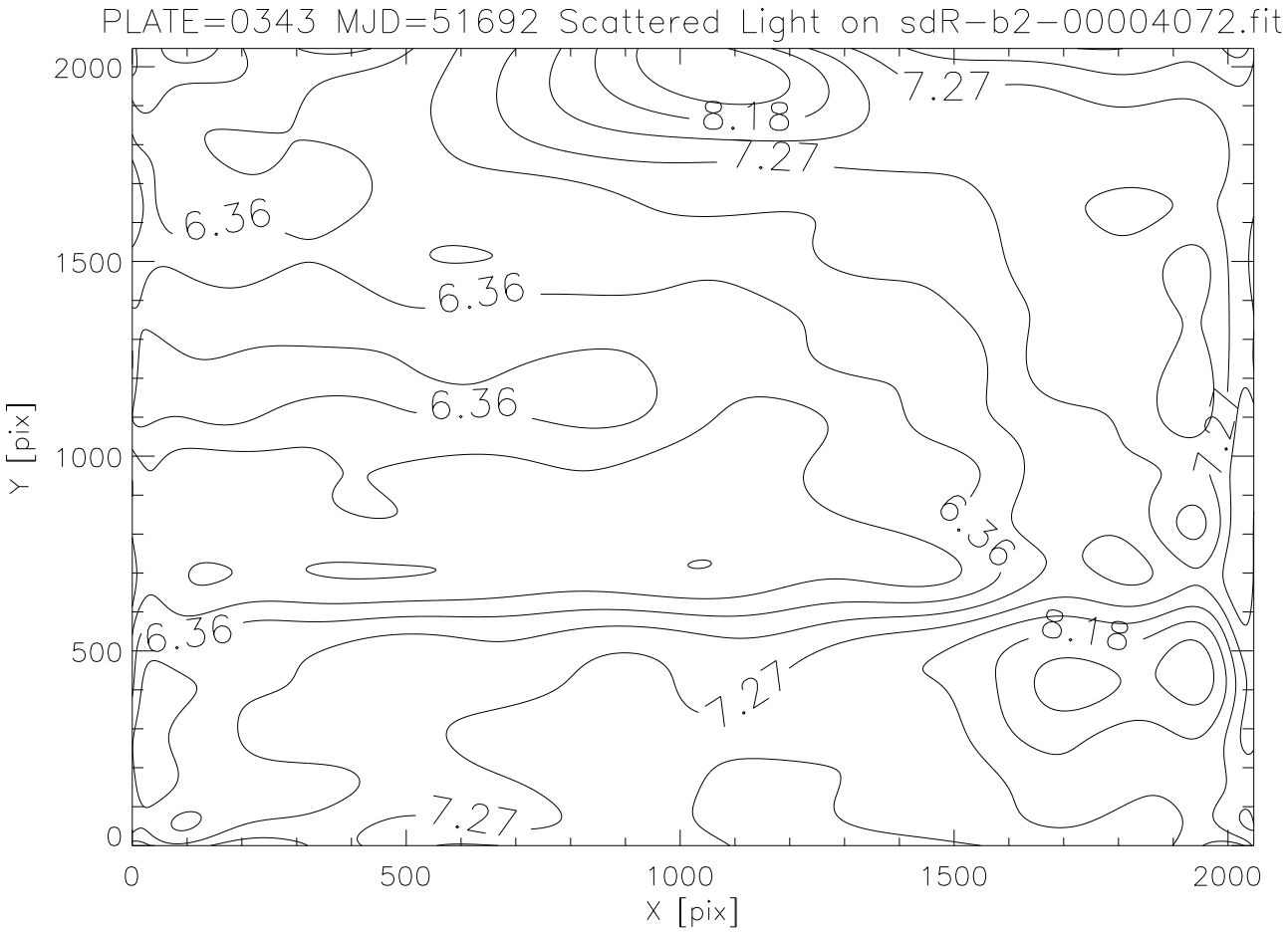

PLATE=0343 MJD=51692 sdR-b2-00004071.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.04 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

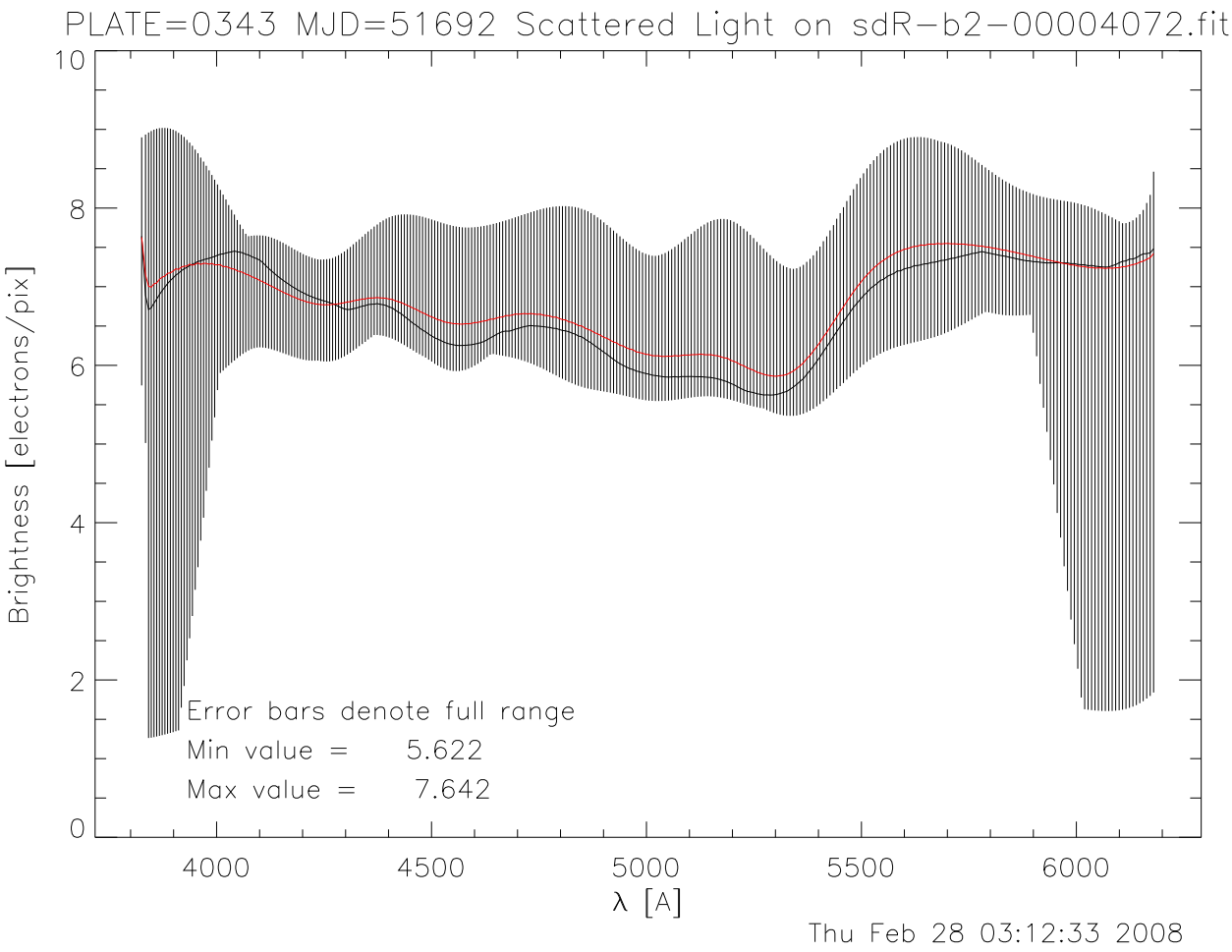

PLATE=0343 MJD=51692 sdR-b2-00004071.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Focal Distance [mm]
Airmass

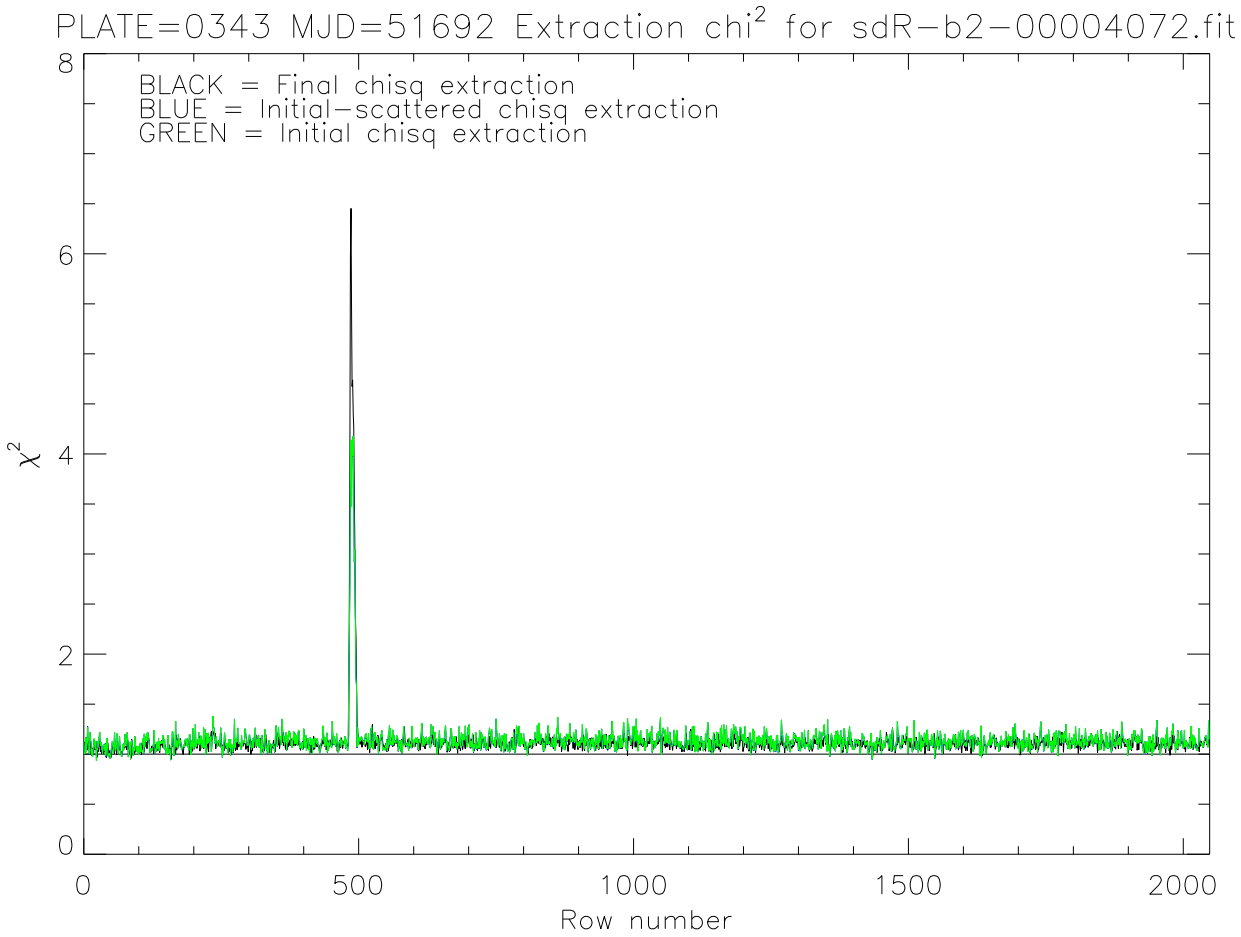

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:08:10 2008

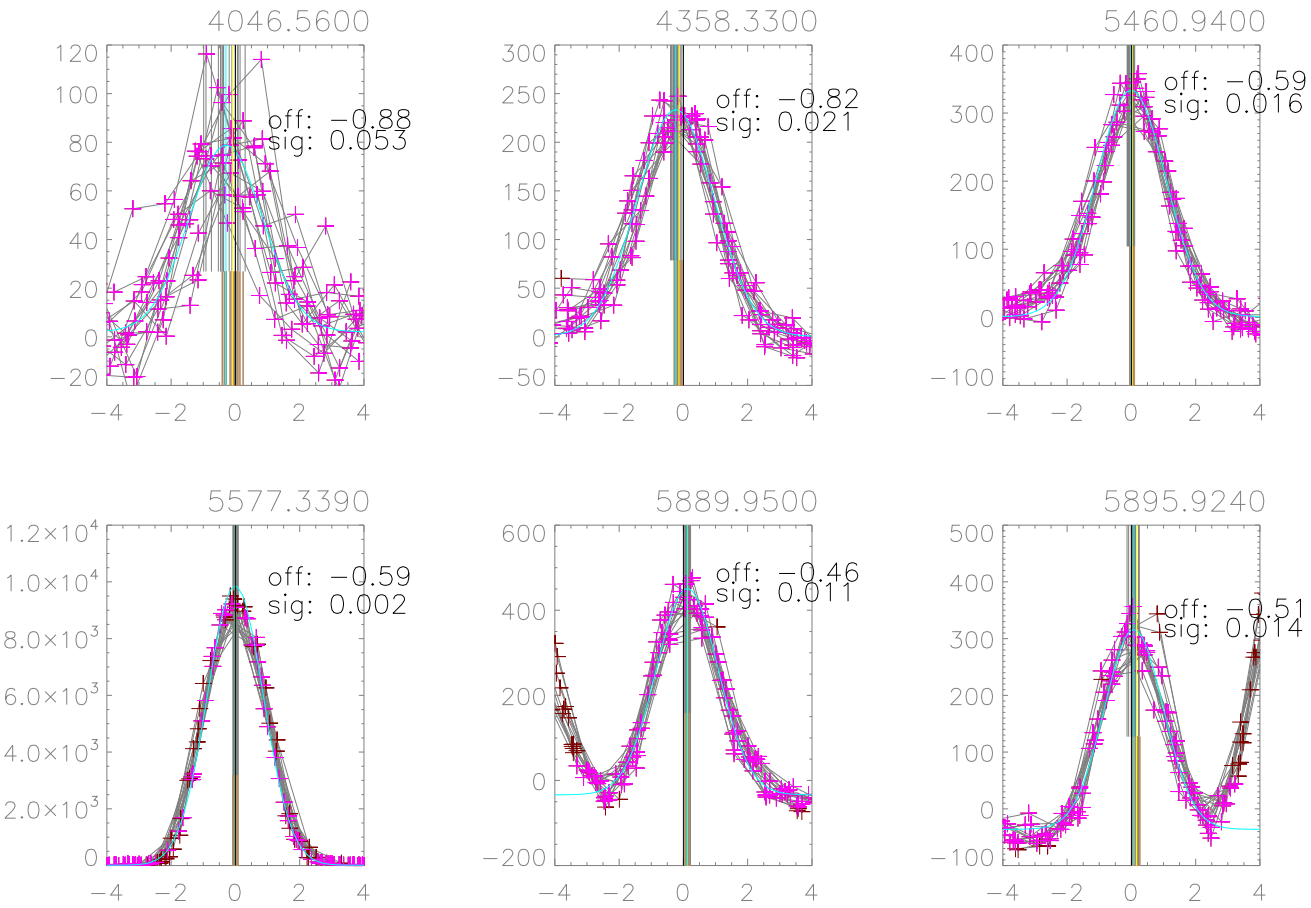

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004072.f
11.1
9.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

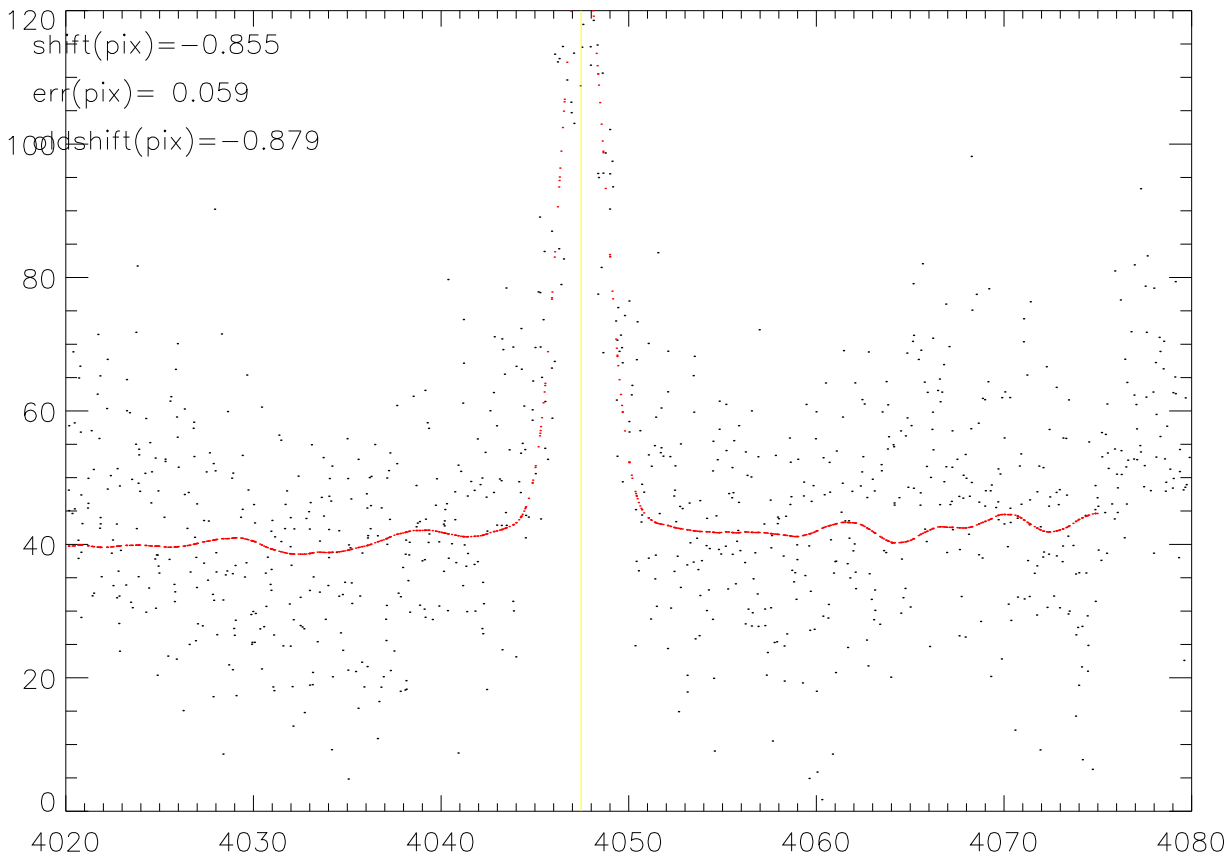

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004072.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.905
Max value = 11.075
Thu Feb 28 03:09:07 2008

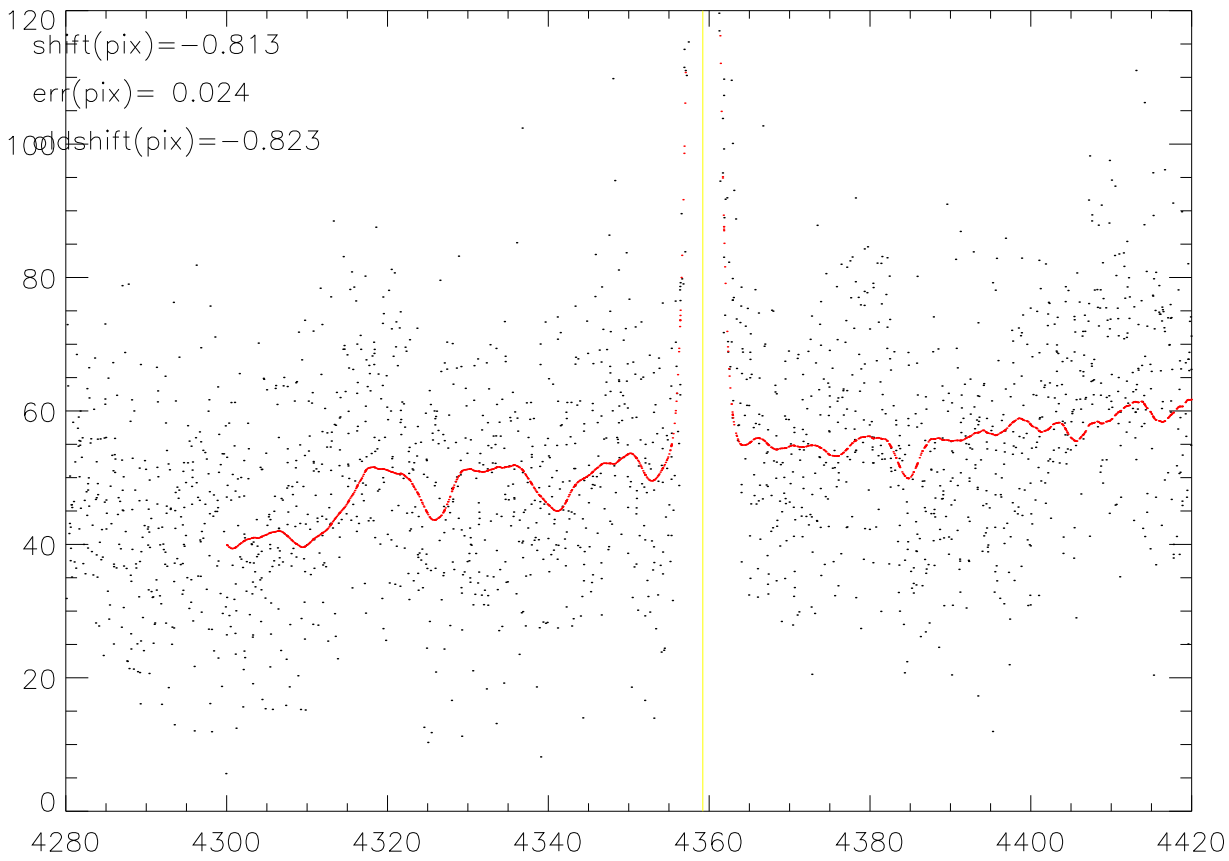

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004072.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.18
7.27
6.36

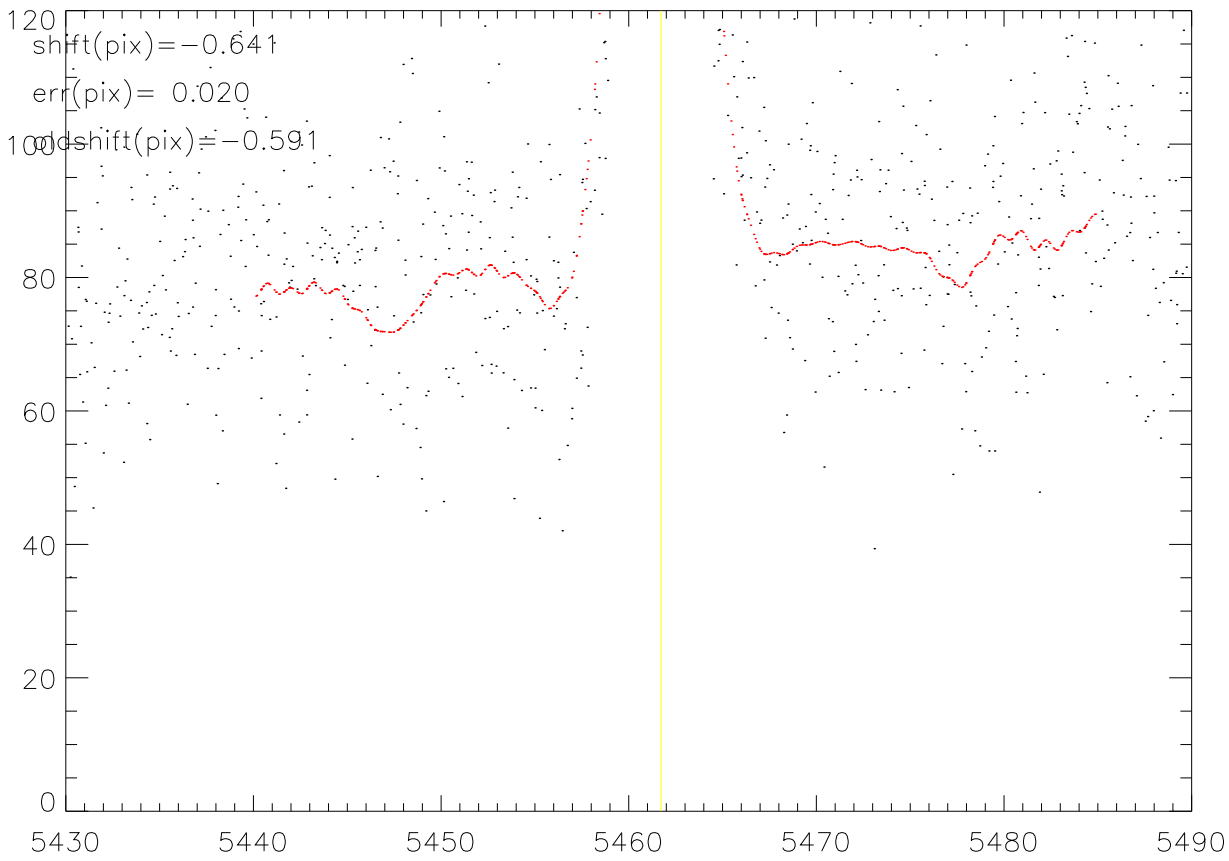

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004072.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.622
Max value = 7.642
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:12:33 2008

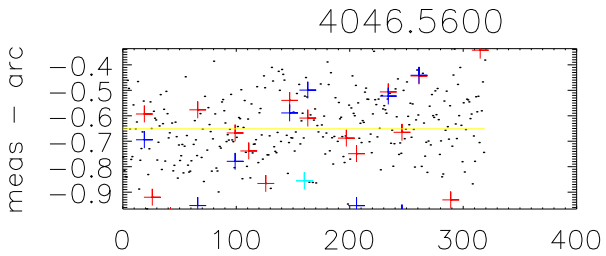

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004072.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

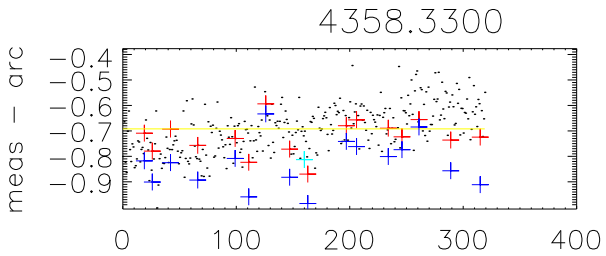

4046.5600
off: −0.88
sig: 0.053
4358.3300
off: −0.82
sig: 0.021
5460.9400
off: −0.59
sig: 0.016
5577.3390
off: −0.59
sig: 0.002
5889.9500
off: −0.46
sig: 0.011
5895.9240
off: −0.51
sig: 0.014

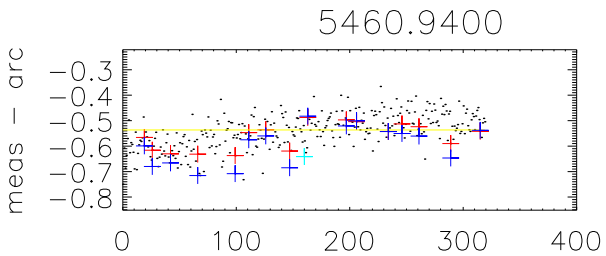

shift(pix)=−0.855
err(pix)= 0.059
oldshift(pix)=−0.879
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

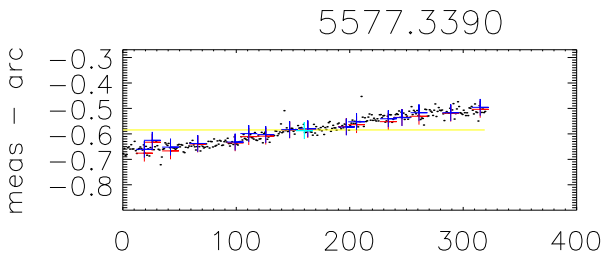

shift(pix)=−0.813
err(pix)= 0.024
oldshift(pix)=−0.823
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

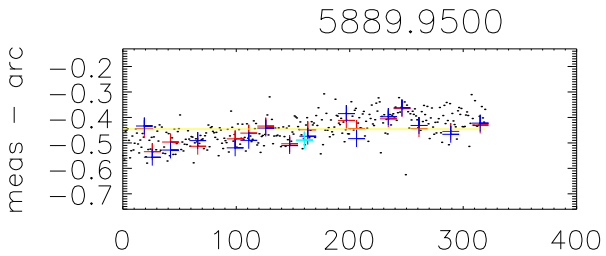

shift(pix)=−0.641
err(pix)= 0.020
oldshift(pix)=−0.591
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

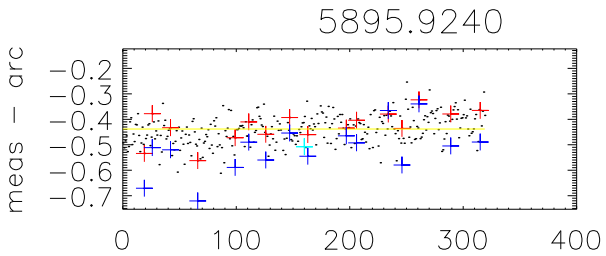

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

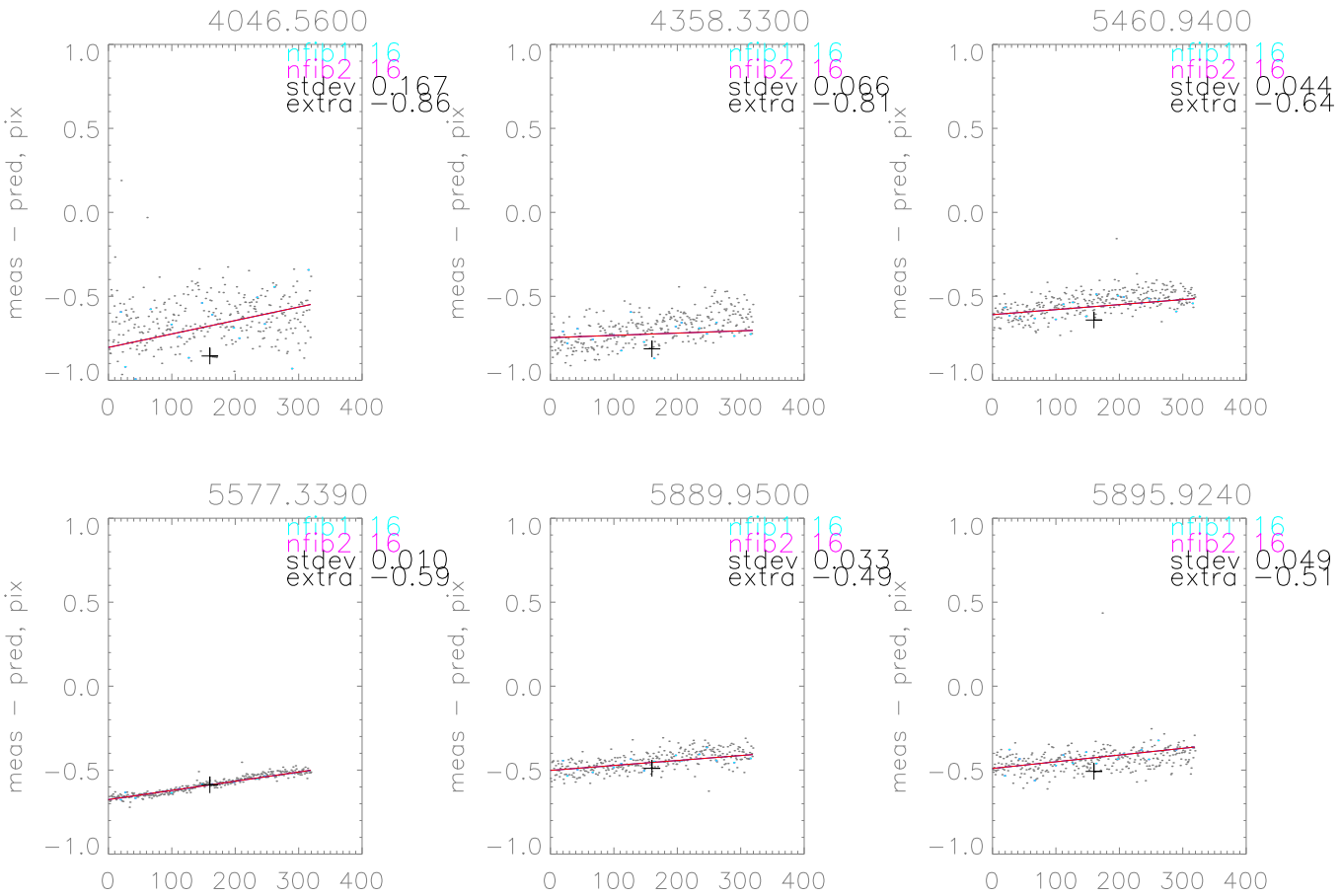

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

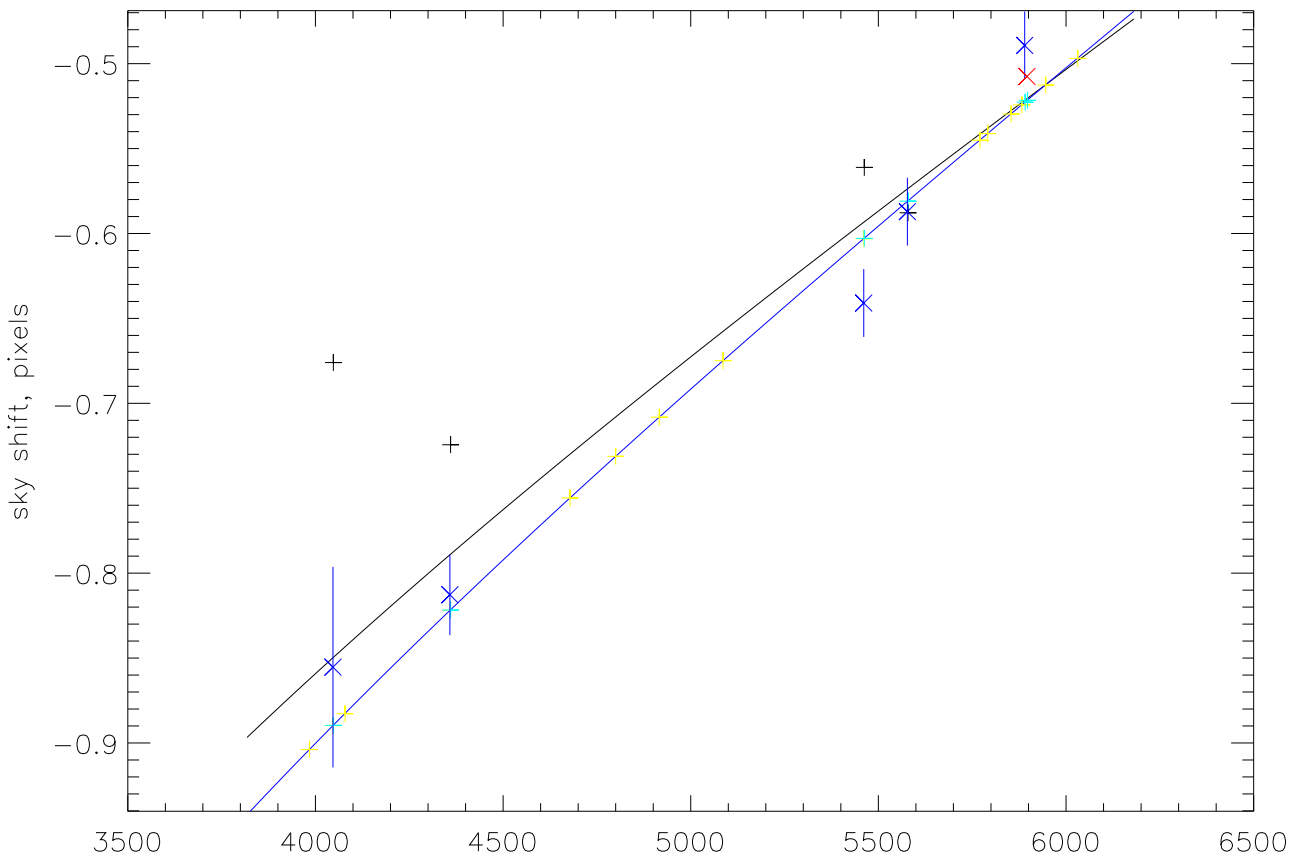

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

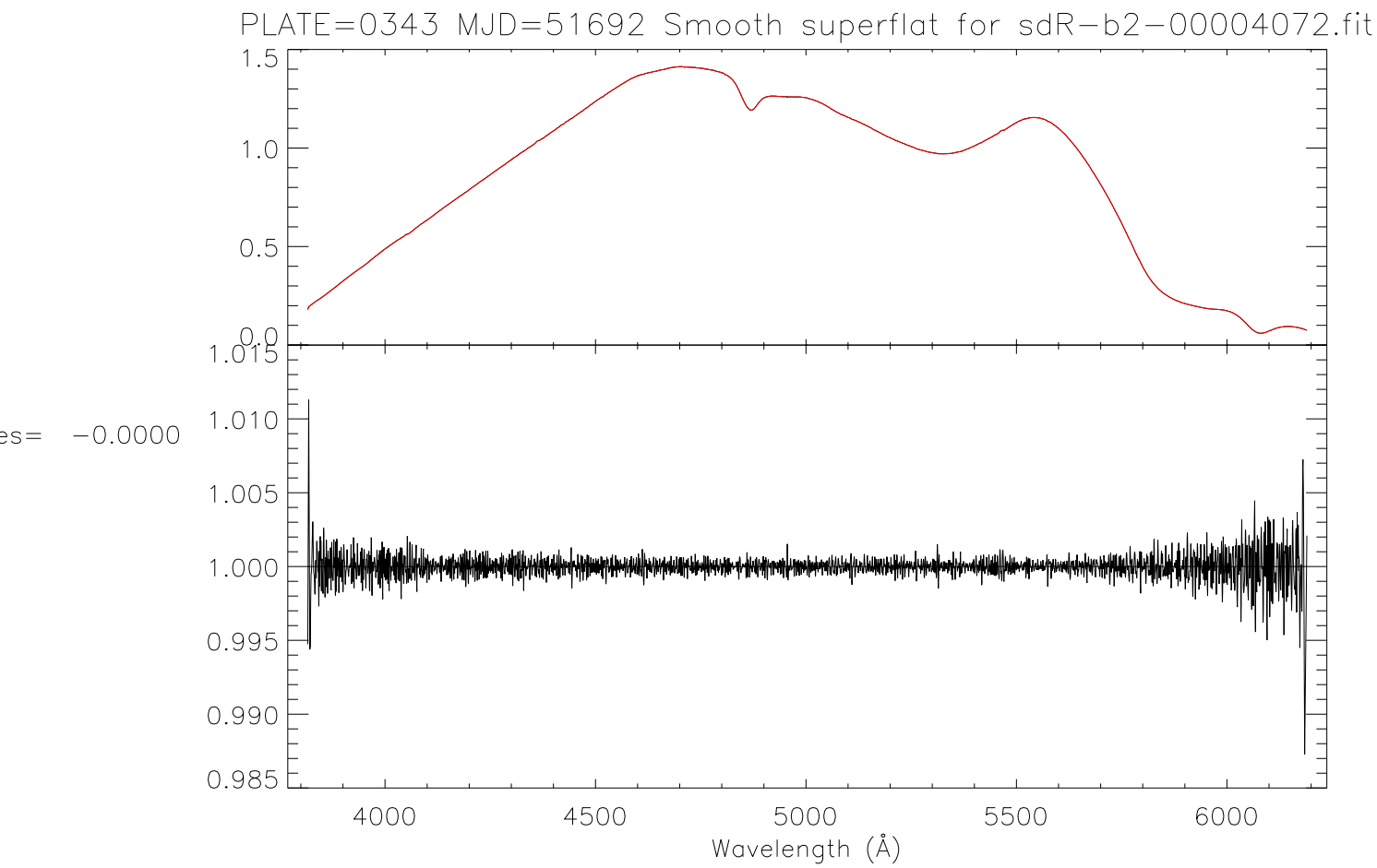

5577.3390
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


5889.9500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

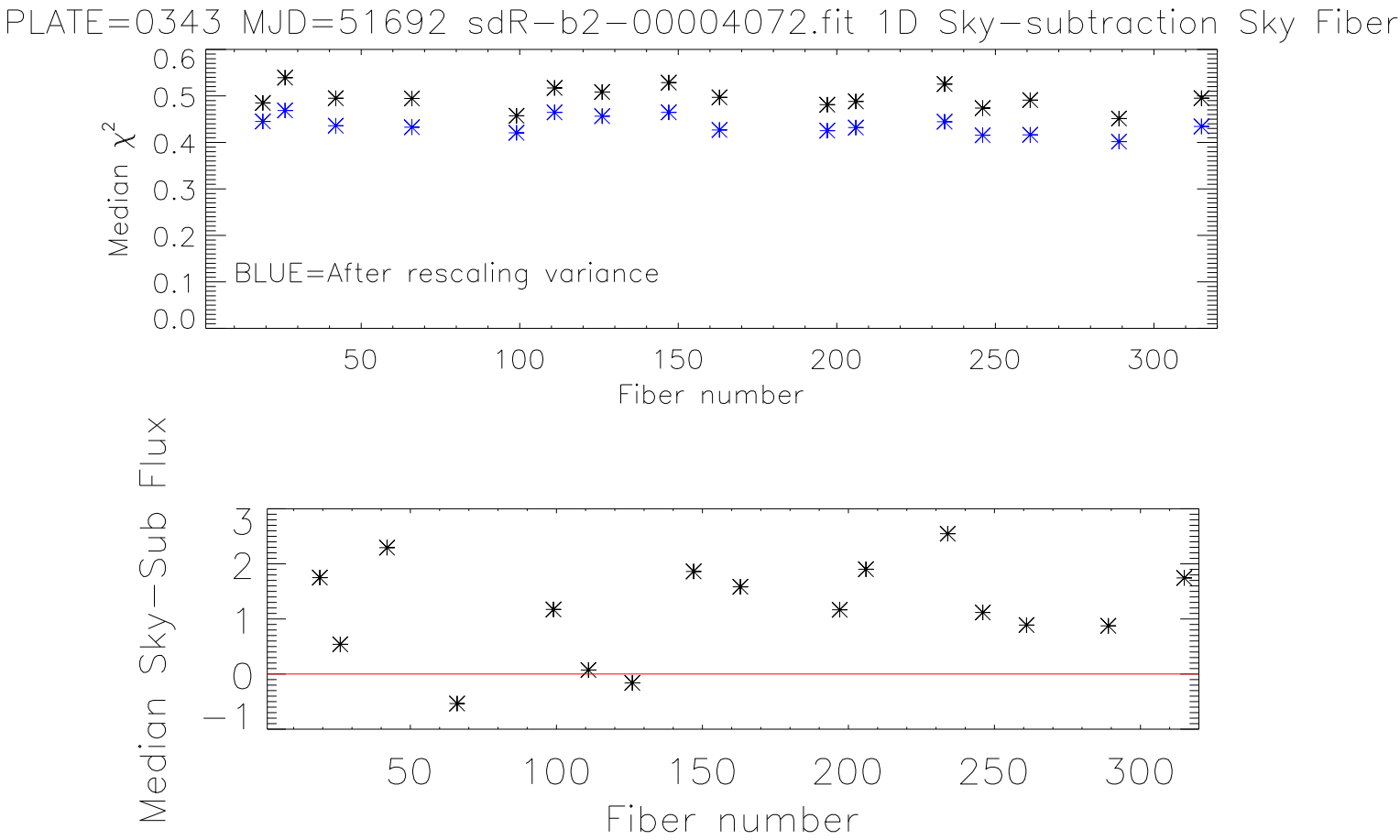

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

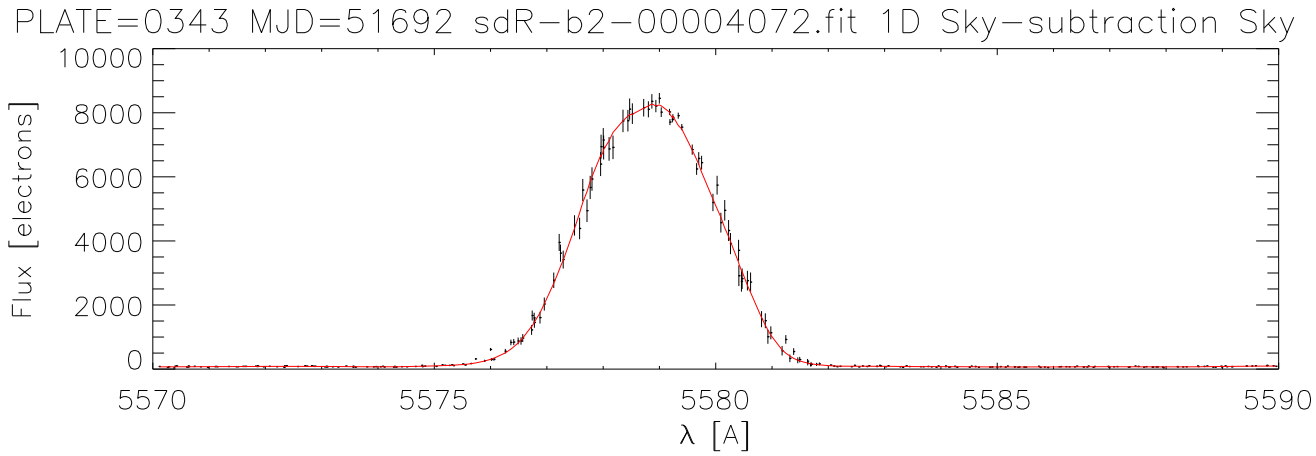

4046.5600
nfib1 16
nfib2 16
stdev 0.167
extra −0.86
4358.3300
nfib1 16
nfib2 16
stdev 0.066
extra −0.81
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra −0.64
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra −0.59
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra −0.49
5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra −0.51
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

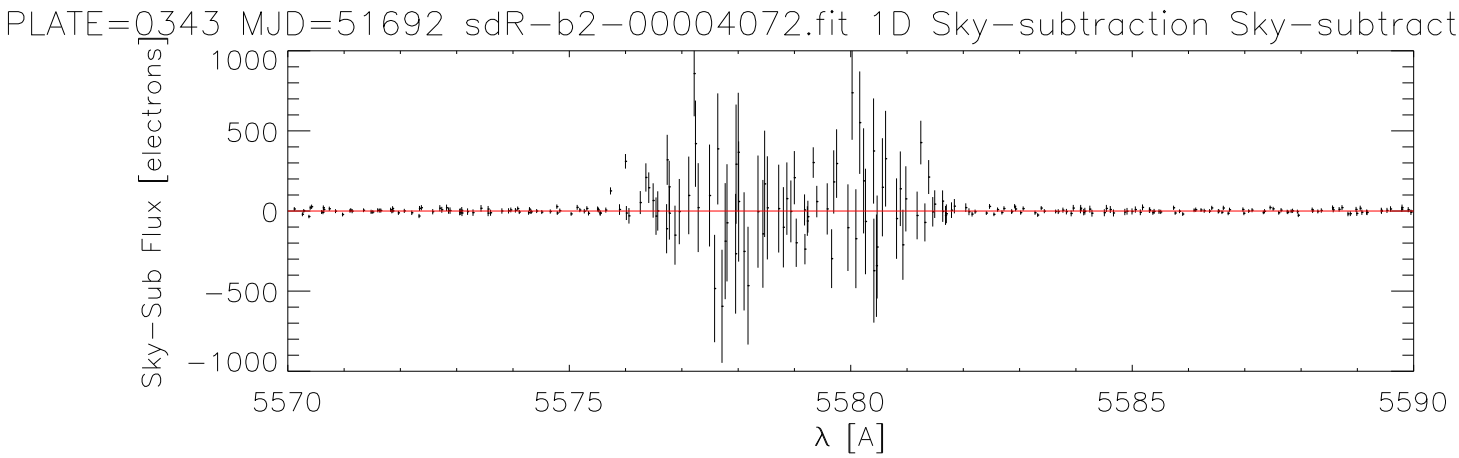

sky shift, pixels
−0.5
−0.6
−0.7
−0.8
−0.9
3500
4000
4500
5000
5500
6000
6500

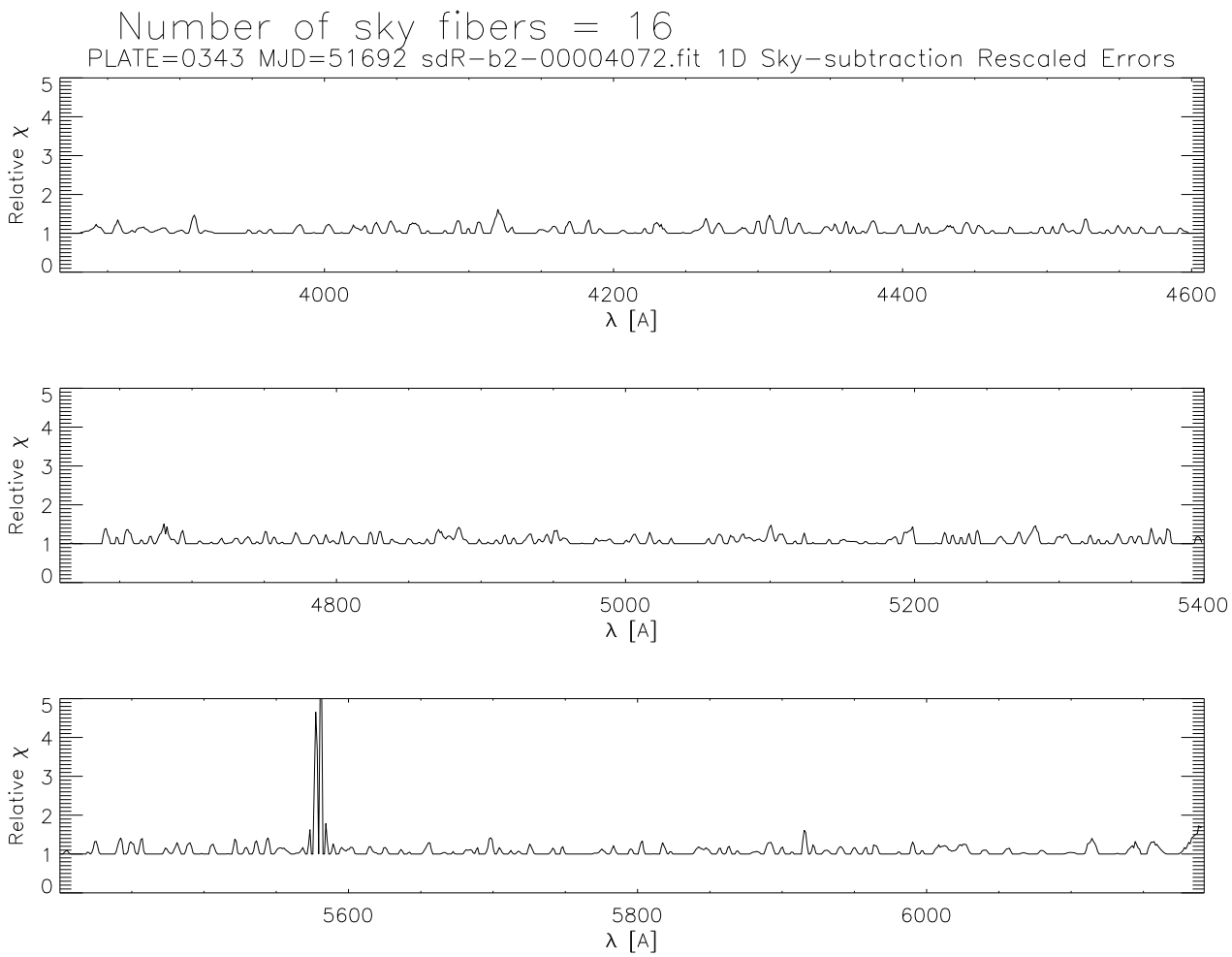

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004072.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

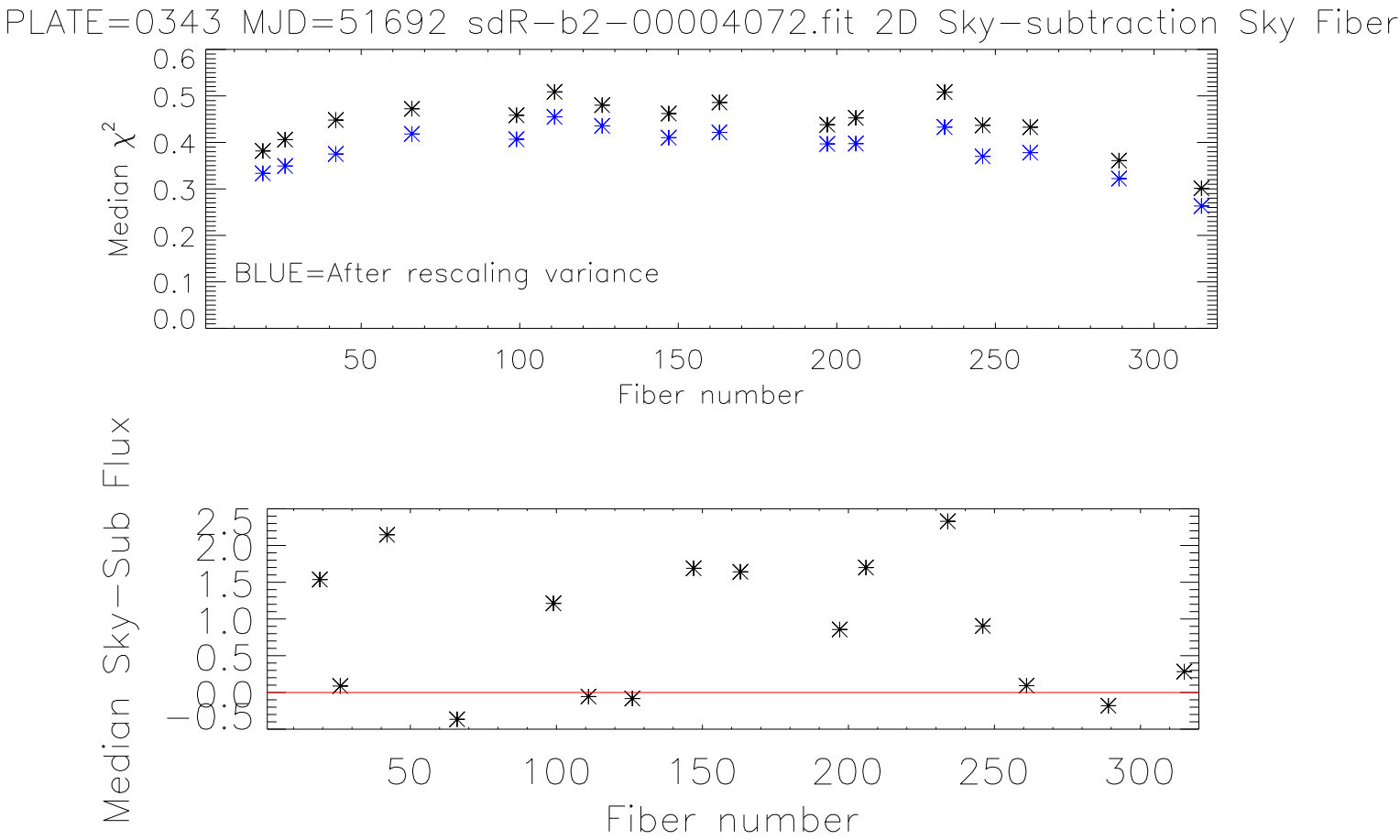
es= −0.0000

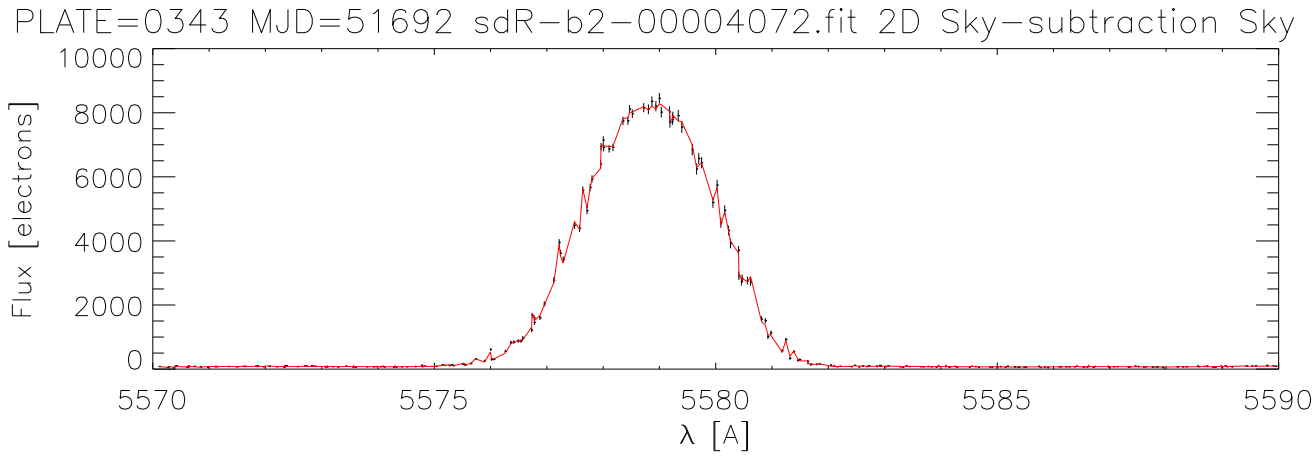

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

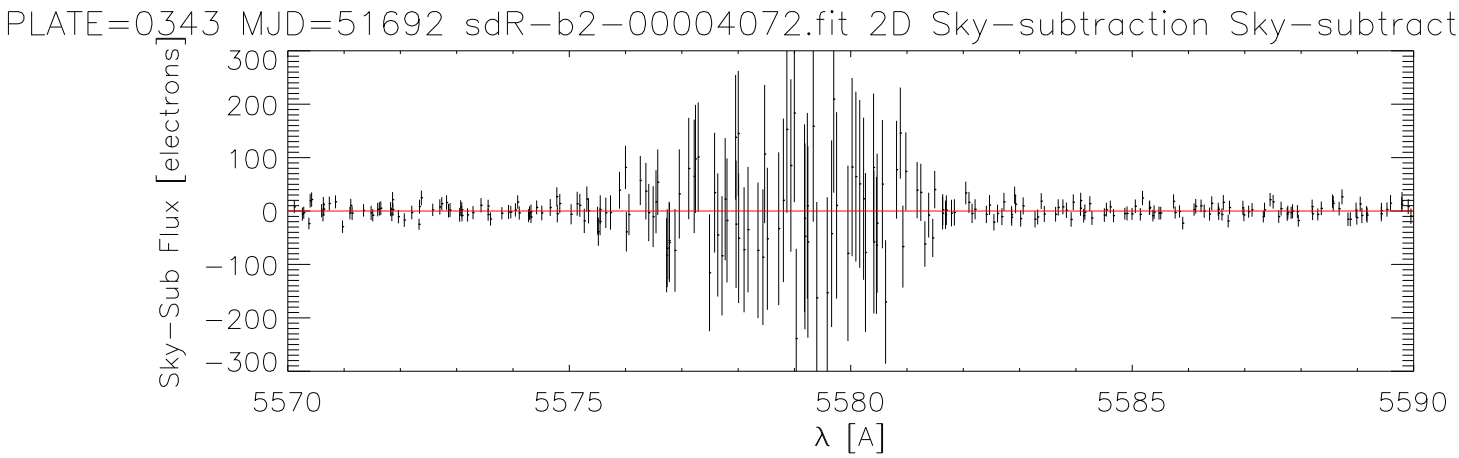

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

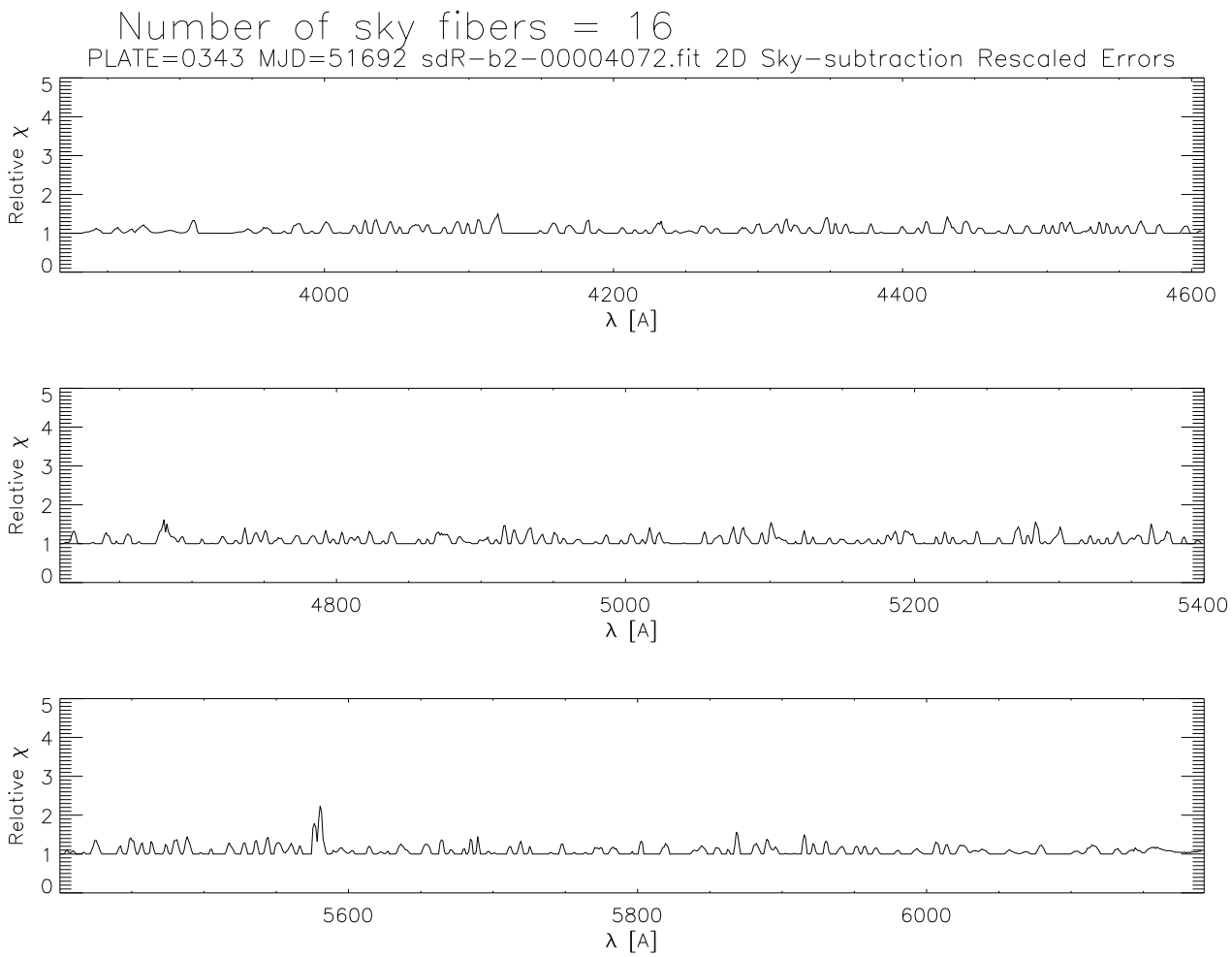

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

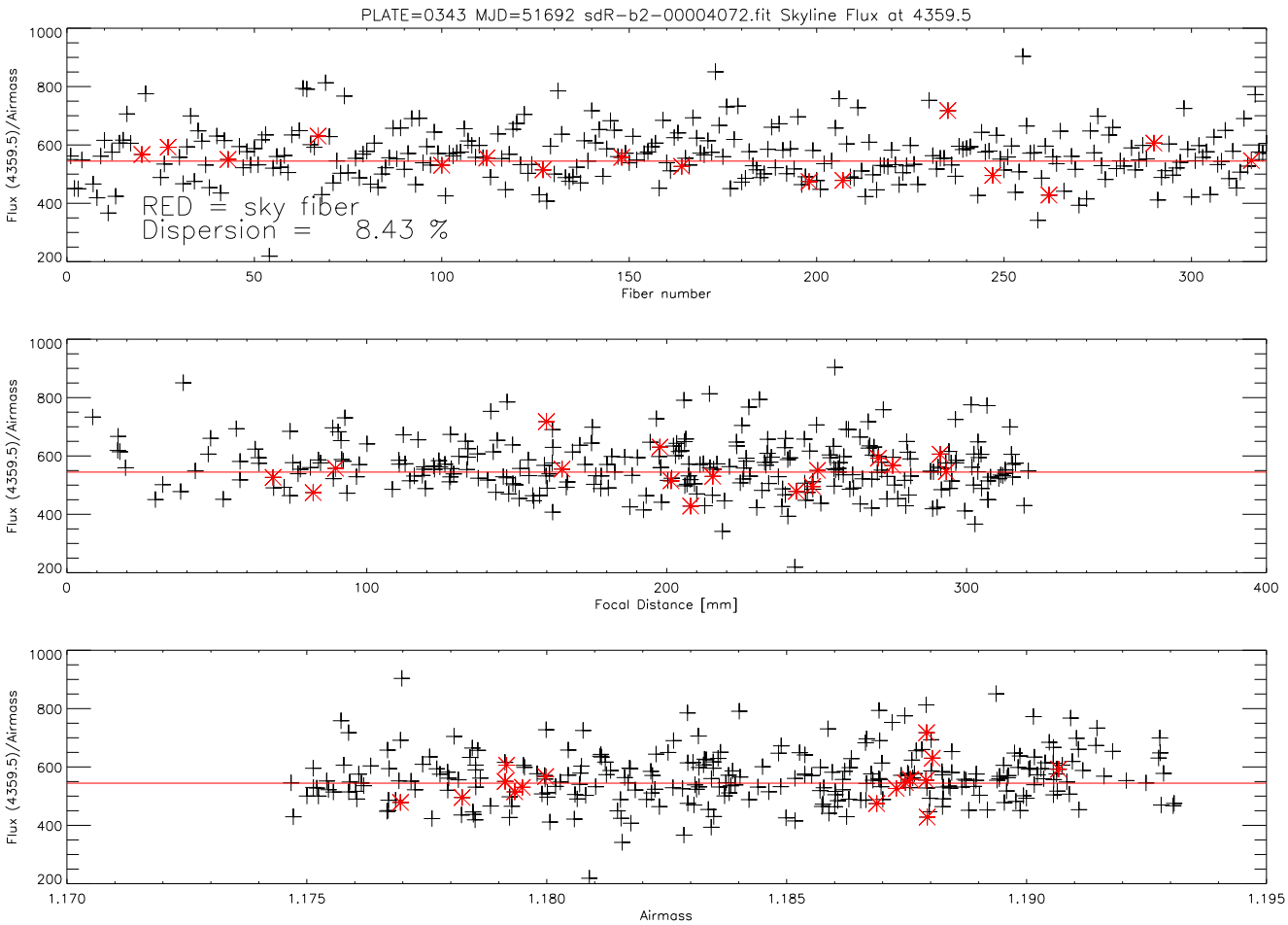

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004072.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

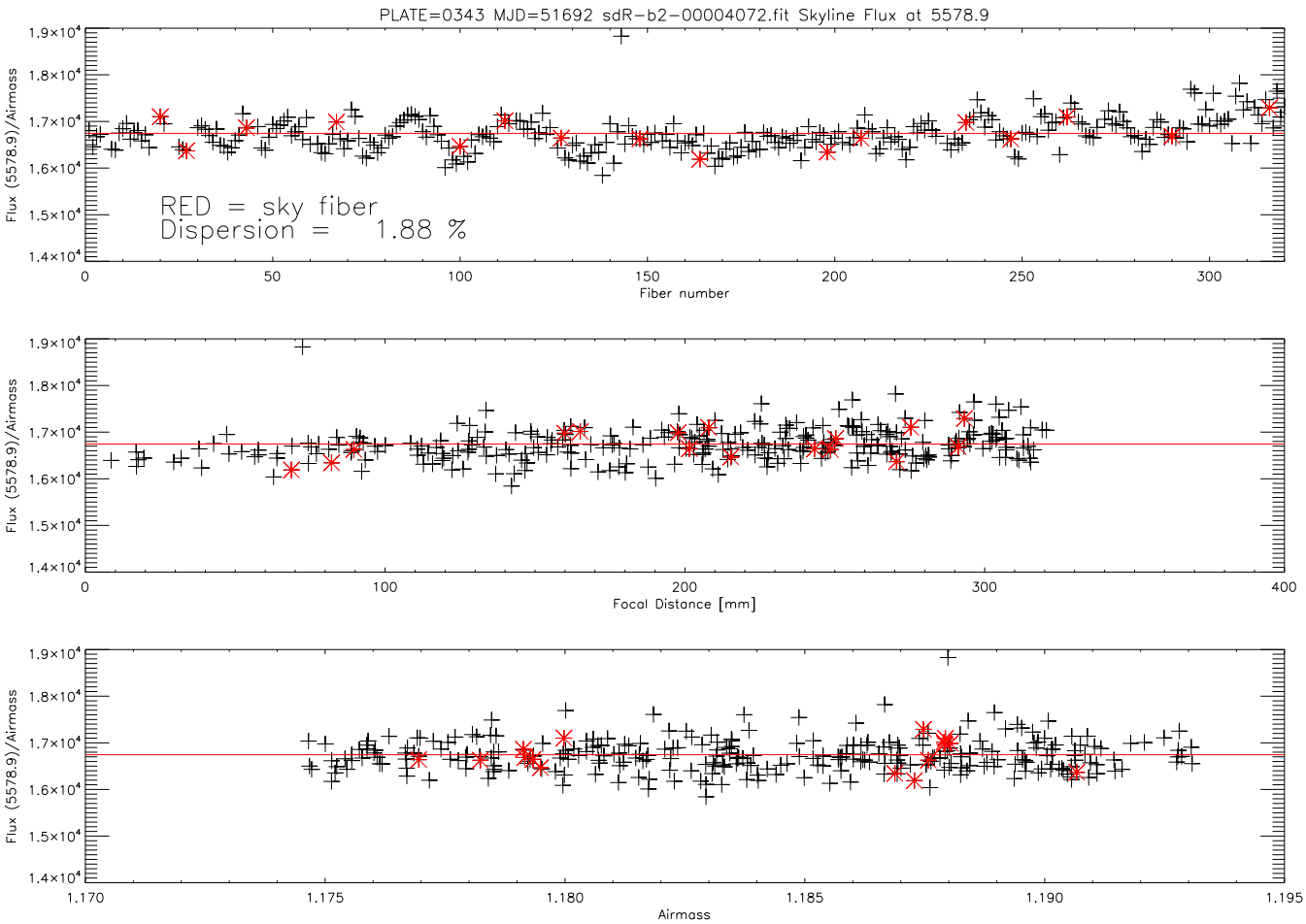

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

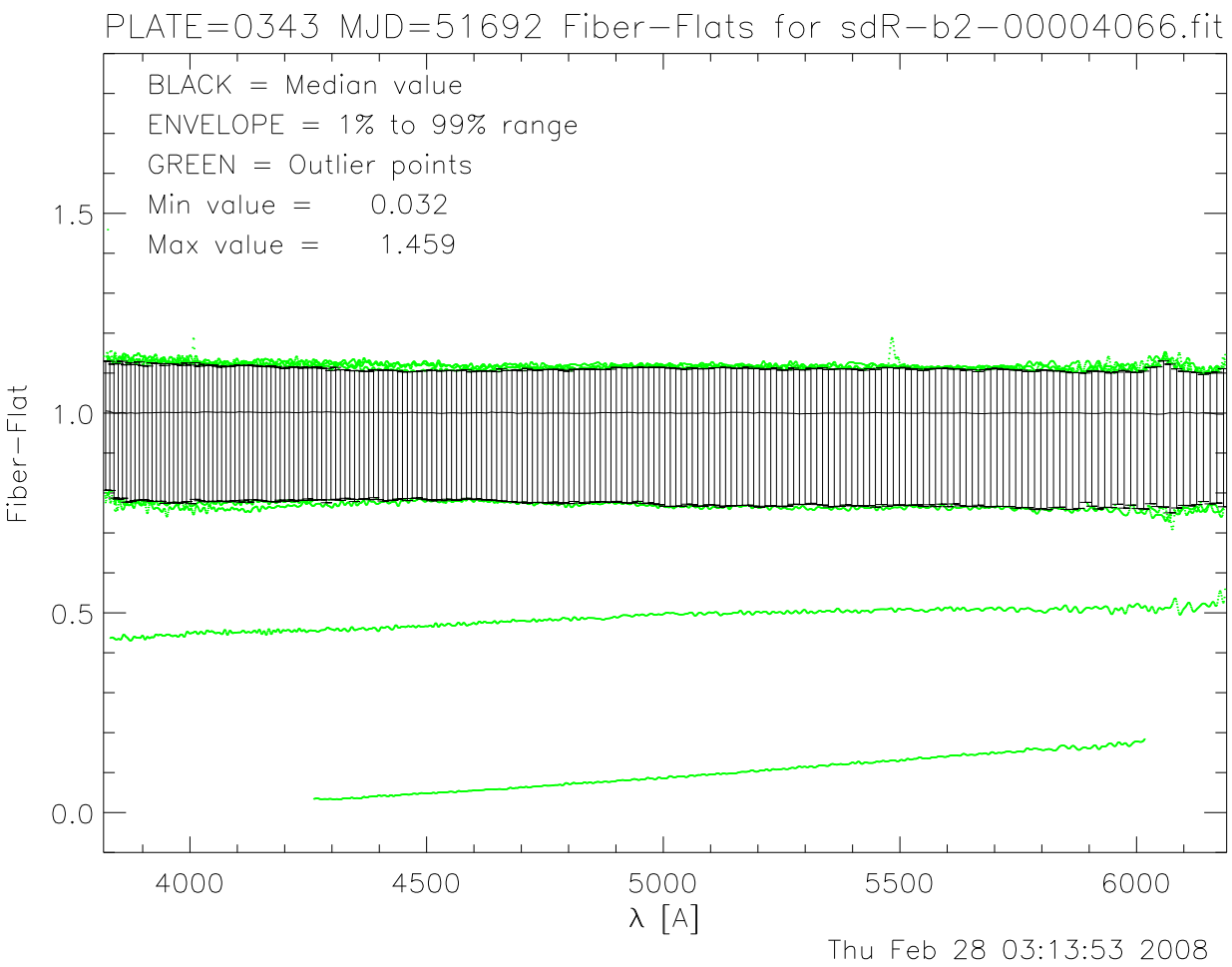

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

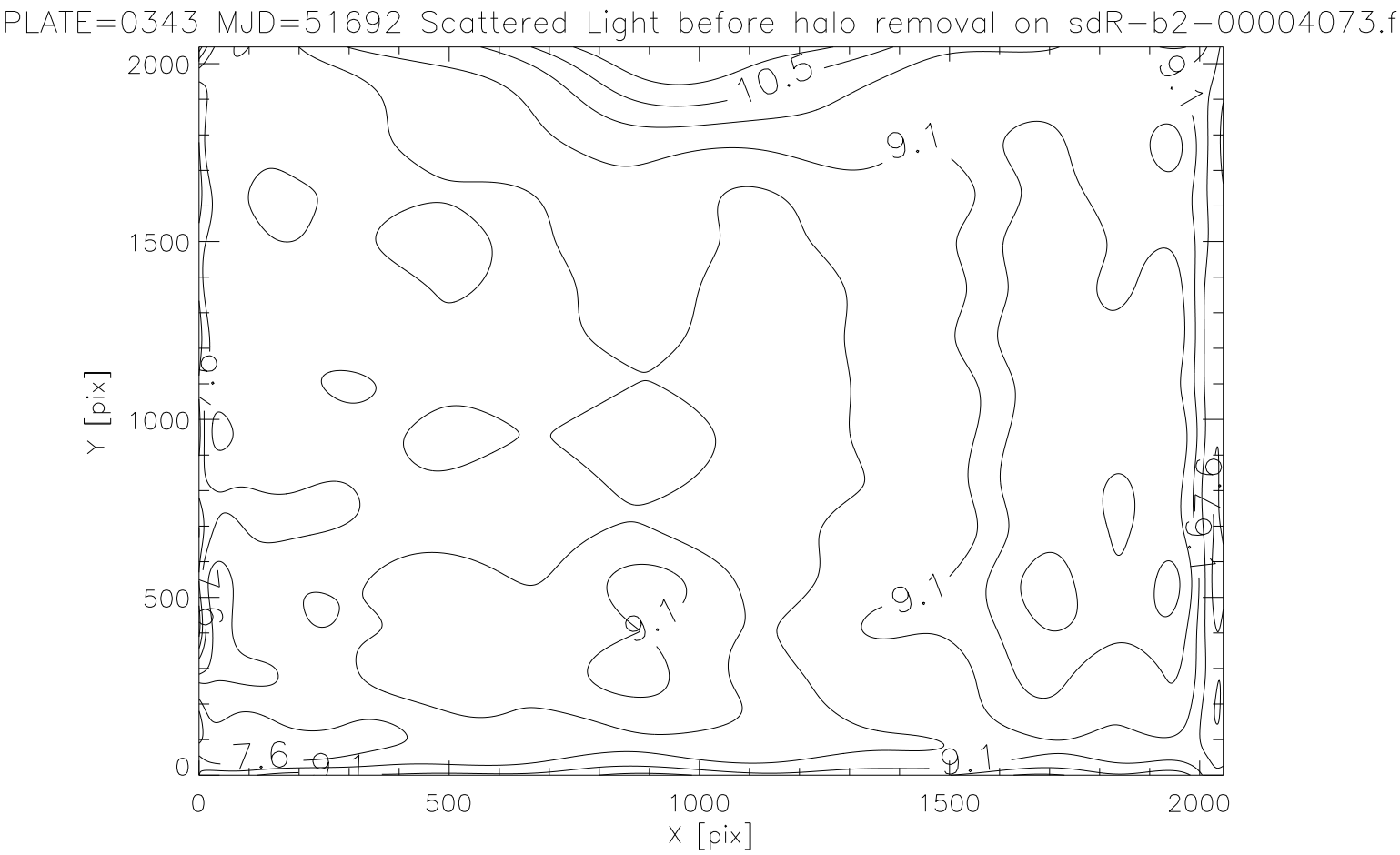

PLATE=0343 MJD=51692 sdR-b2-00004072.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

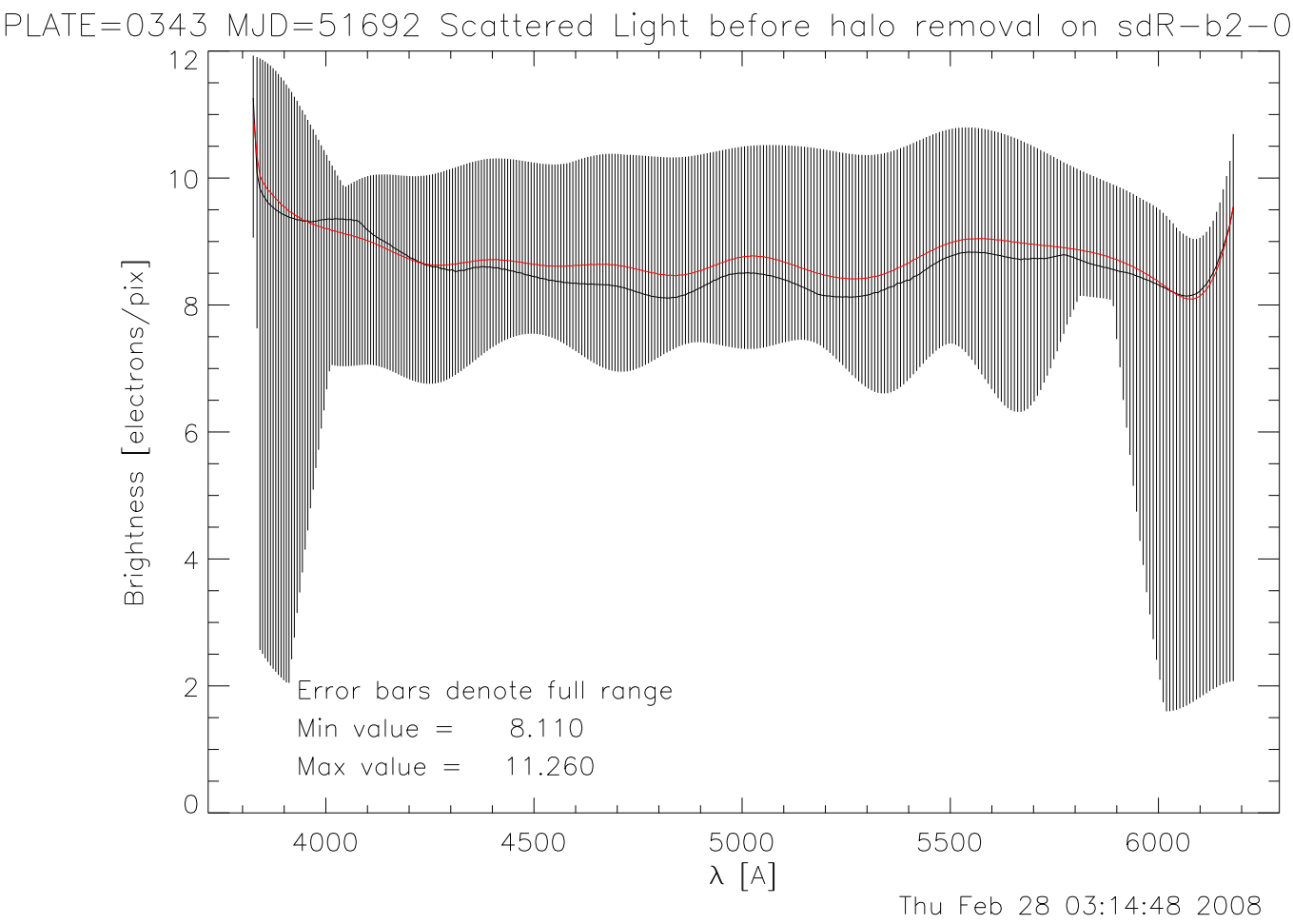

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004072.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

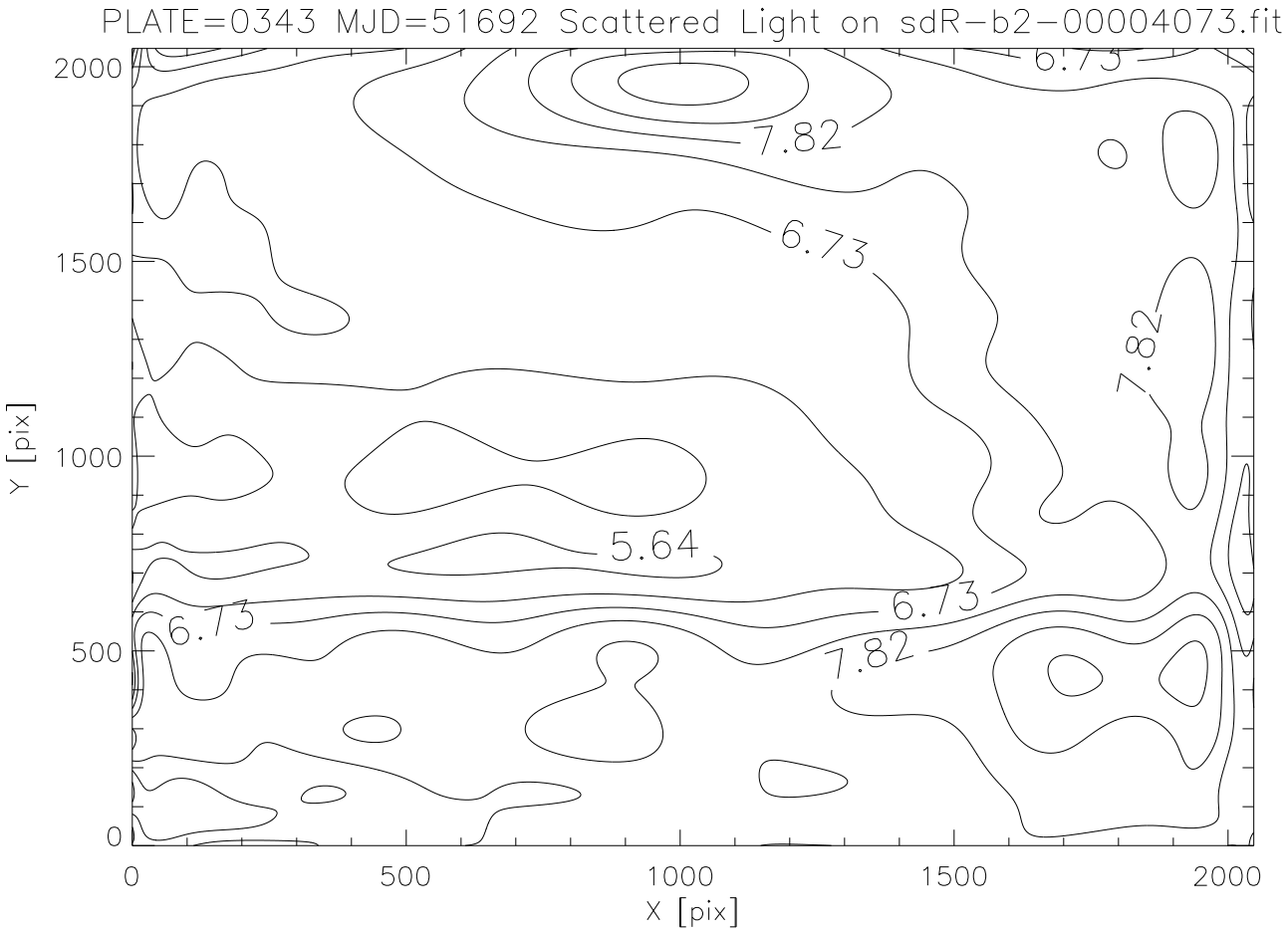

PLATE=0343 MJD=51692 sdR-b2-00004072.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.43 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

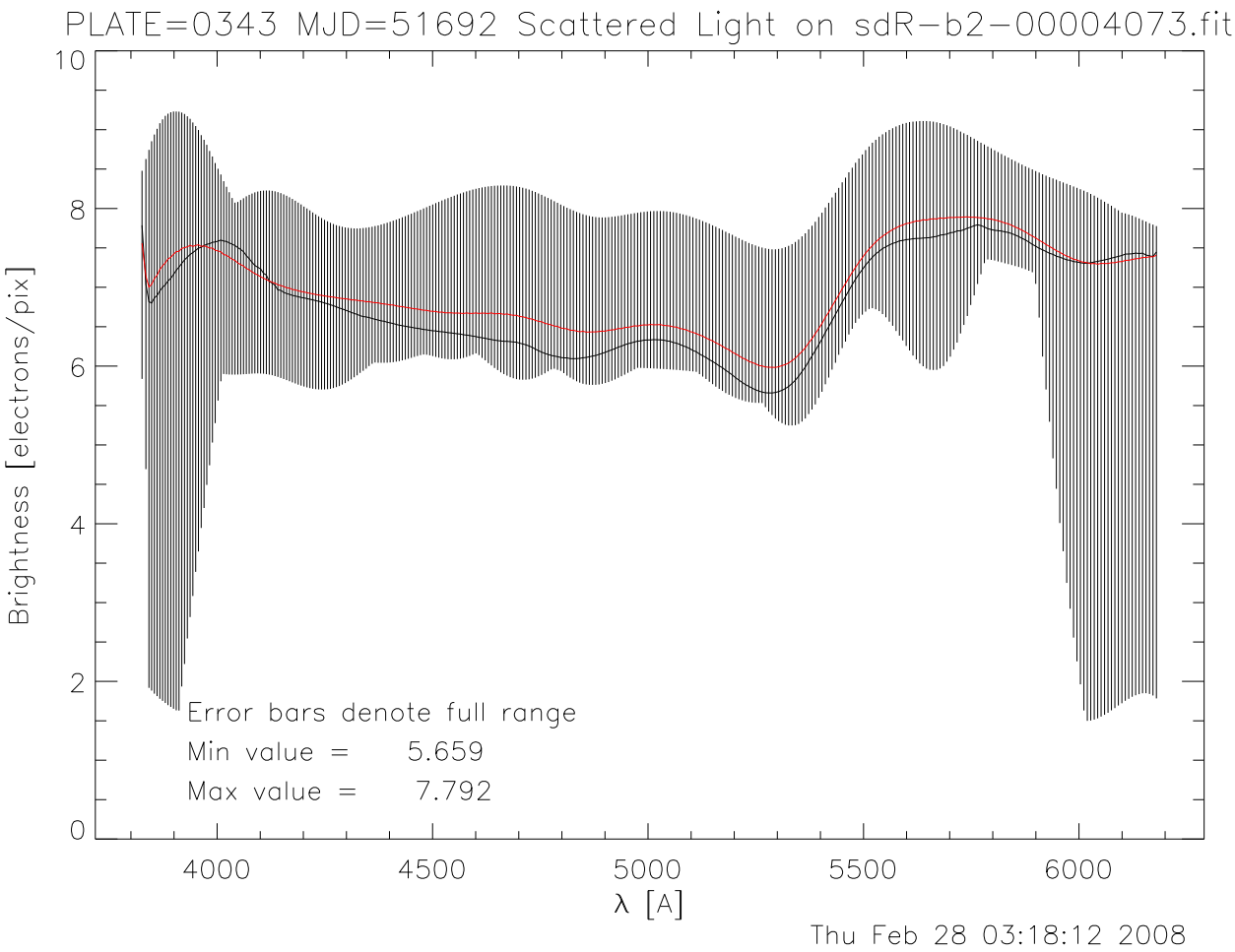

PLATE=0343 MJD=51692 sdR-b2-00004072.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.88 %
Fiber number
Focal Distance [mm]
Airmass

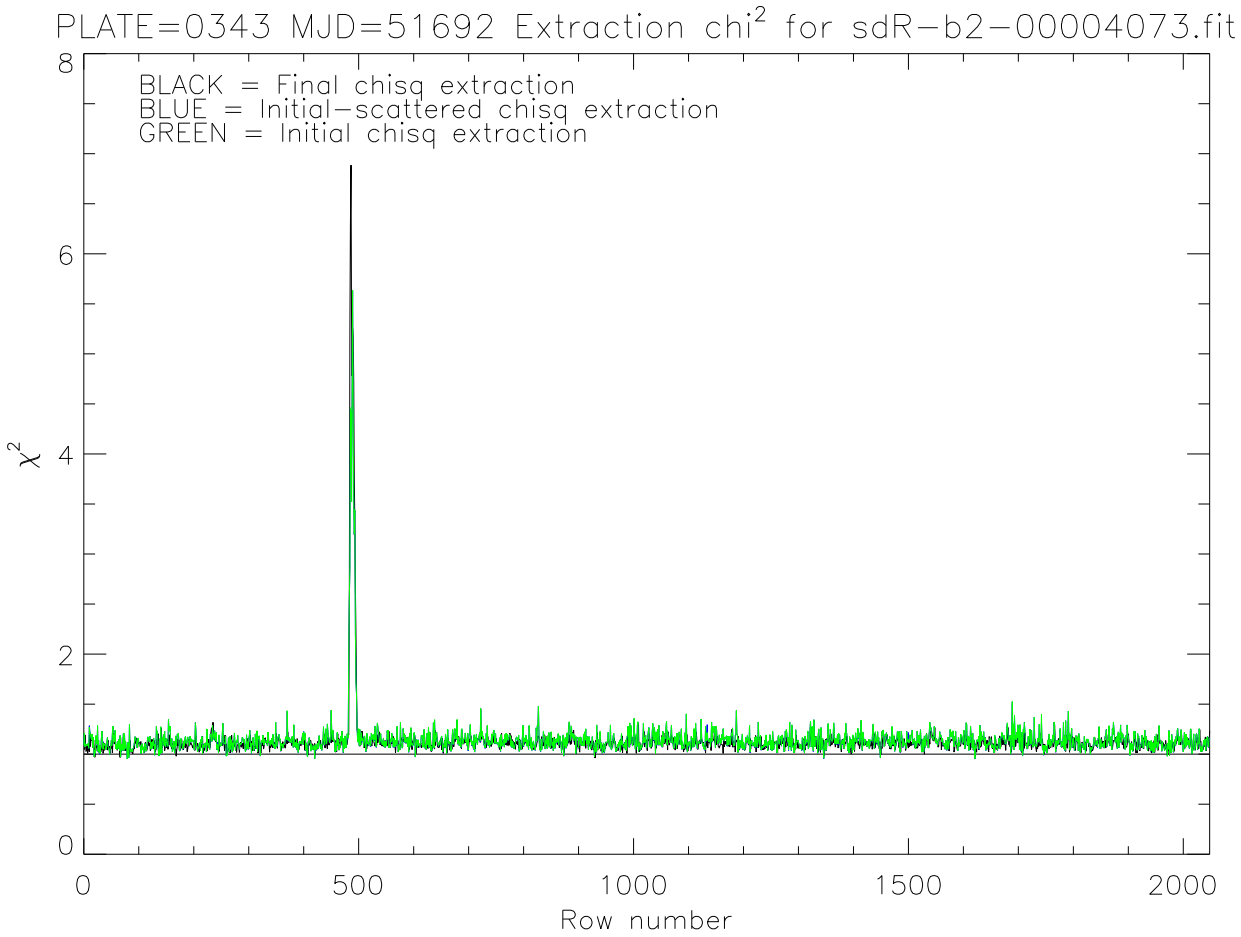

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:13:53 2008

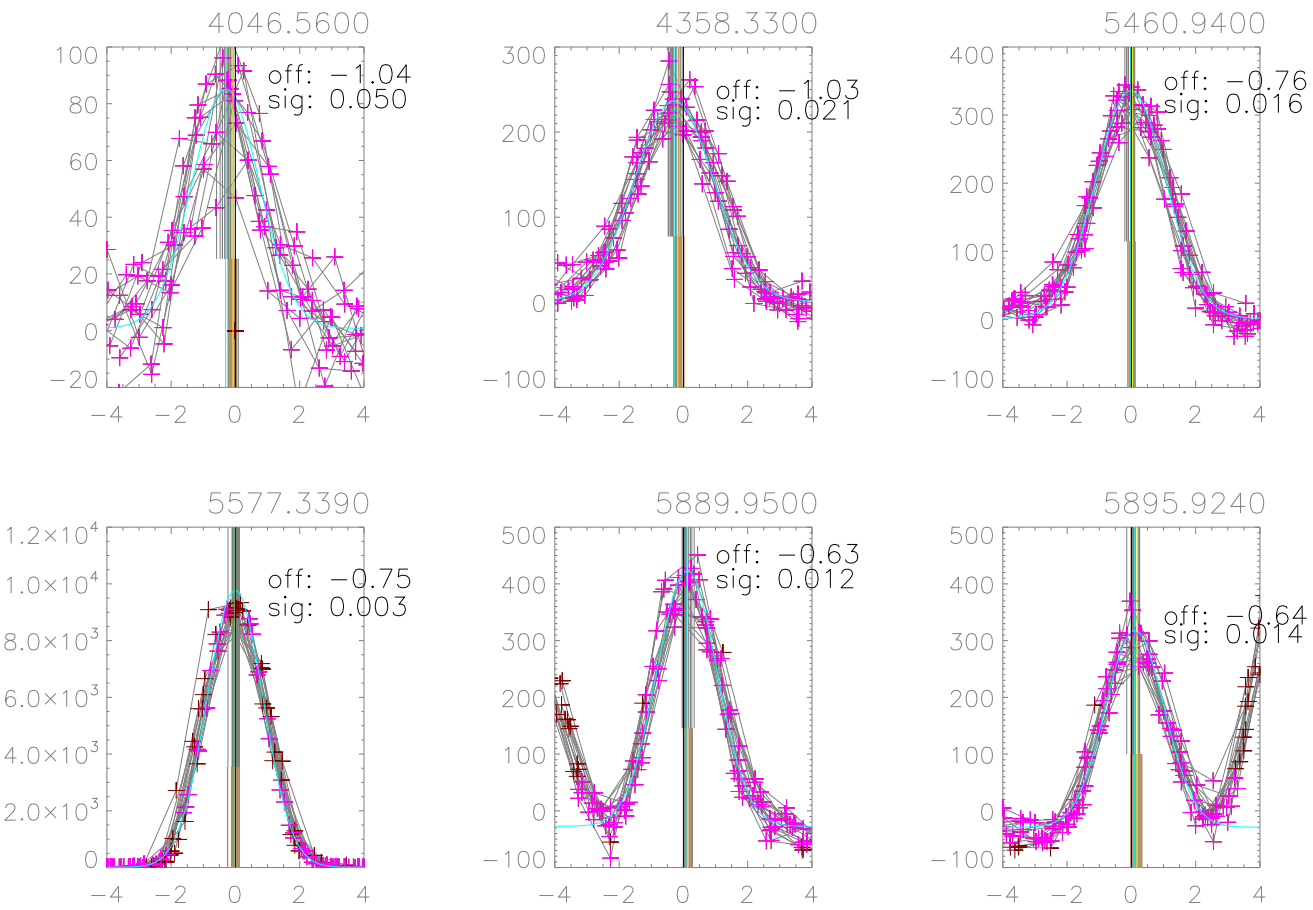

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004073.f
10.5
9.1
7.6
Y [pix]
X [pix]
0
500
1000
1500
2000

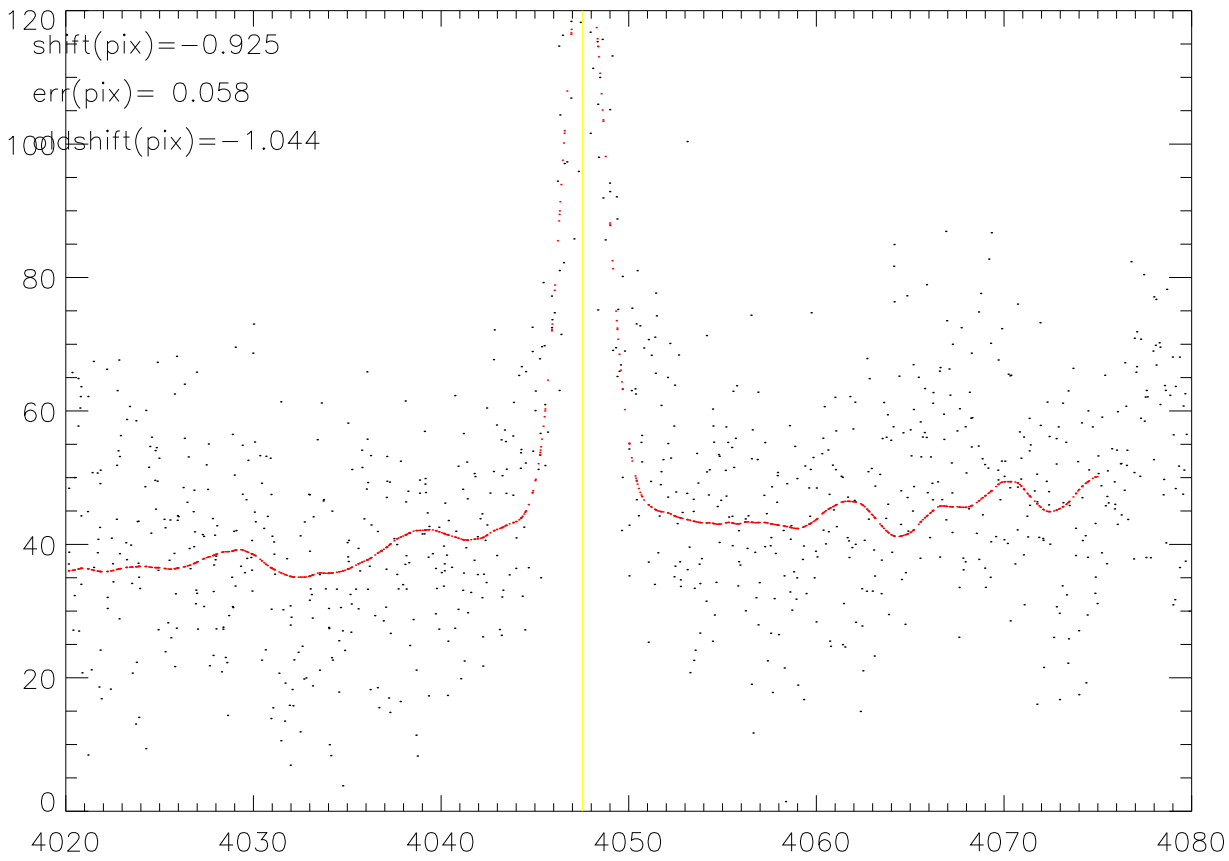

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004073.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.110
Max value = 11.260
Thu Feb 28 03:14:48 2008

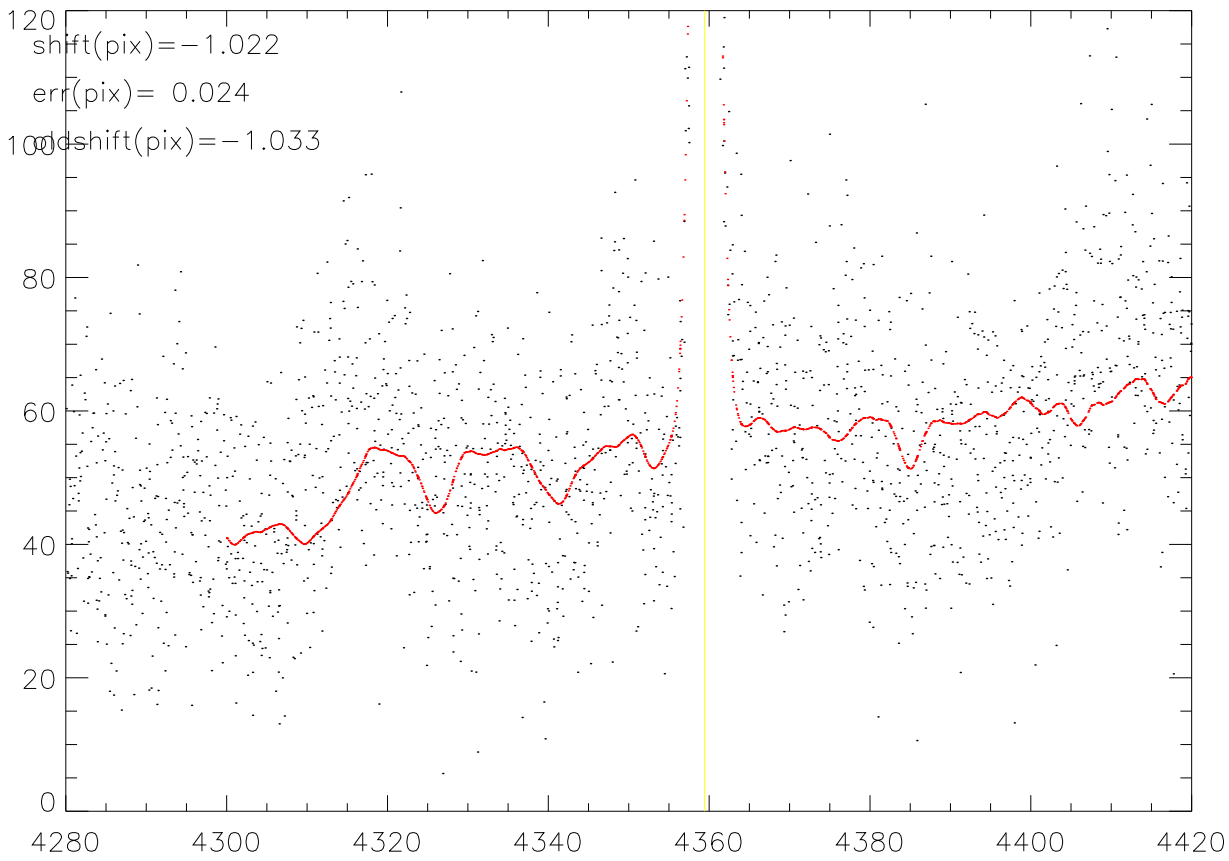

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004073.fit
6.73
7.82
6.73
7.82
5.64
6.73
6.73
7.82
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

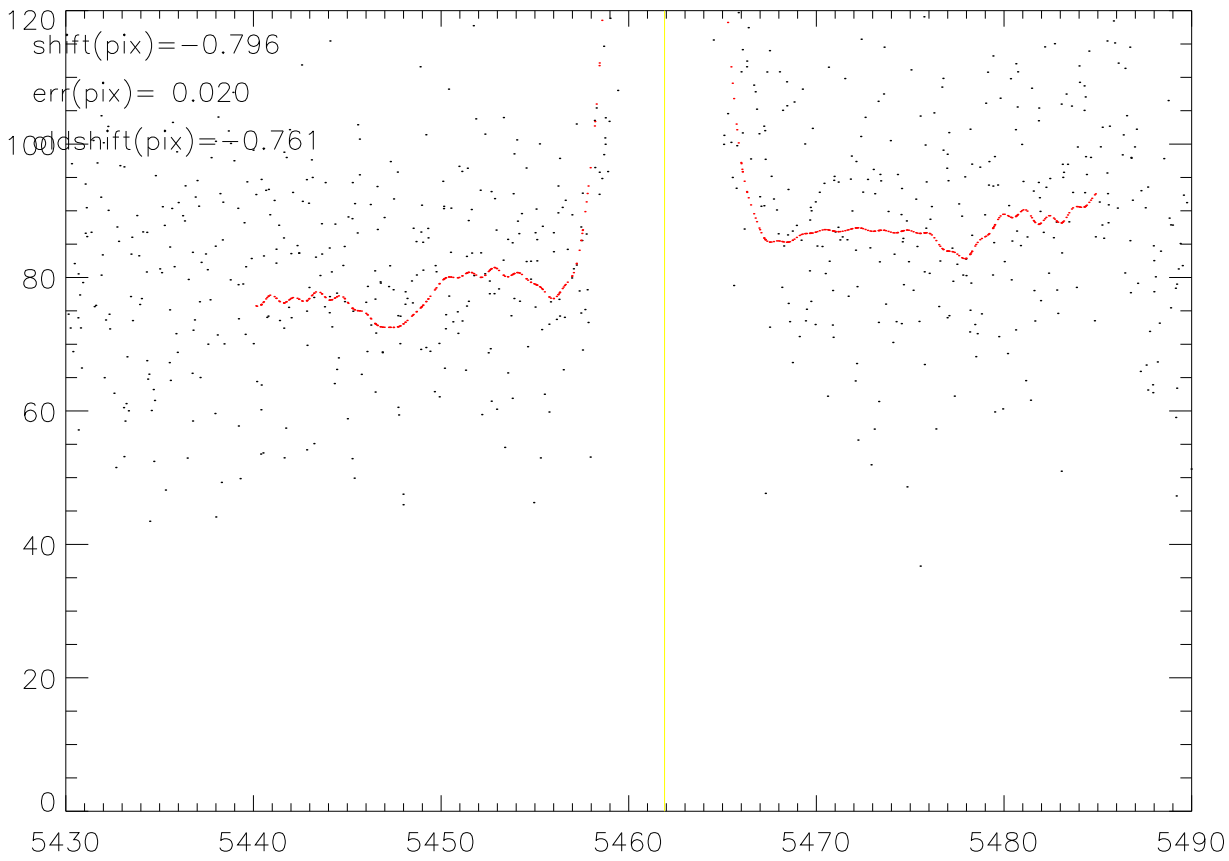

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004073.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.659
Max value = 7.792
Thu Feb 28 03:18:12 2008

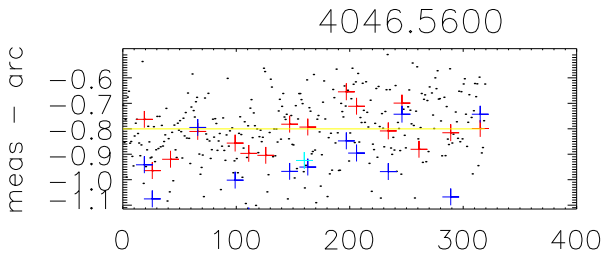

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004073.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

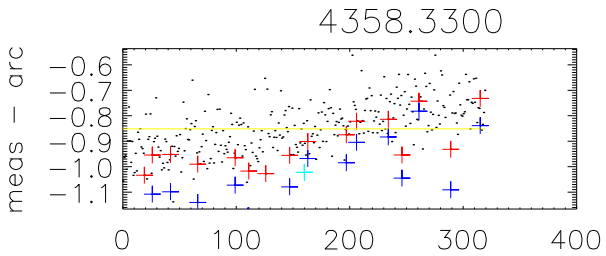

4046.5600
off: −1.04
sig: 0.050
4358.3300
off: −1.03
sig: 0.021
5460.9400
off: −0.76
sig: 0.016
5577.3390
off: −0.75
sig: 0.003
5889.9500
off: −0.63
sig: 0.012
5895.9240
off: −0.64
sig: 0.014

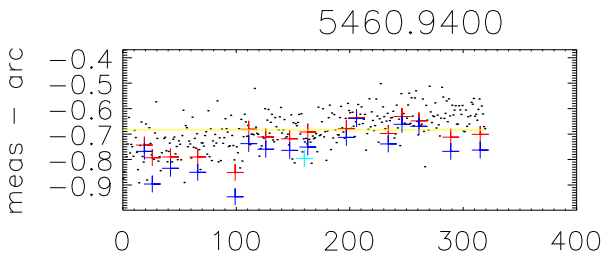

shift(pix)=−0.925
err(pix)= 0.058
oldshift(pix)=−1.044
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

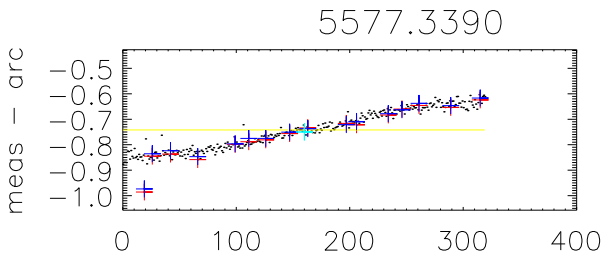

shift(pix)=−1.022
err(pix)= 0.024
oldshift(pix)=−1.033
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

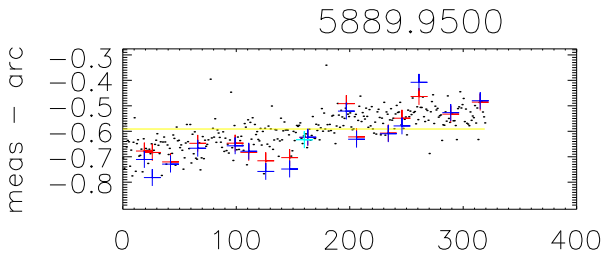

shift(pix)=−0.796
err(pix)= 0.020
oldshift(pix)=−0.761
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

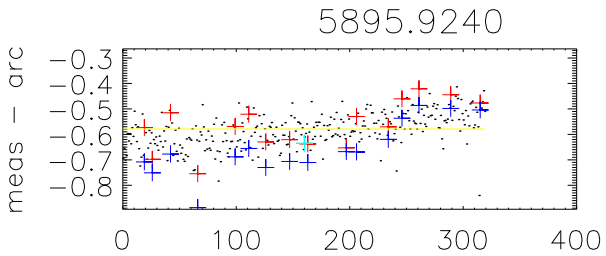

4046.5600
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

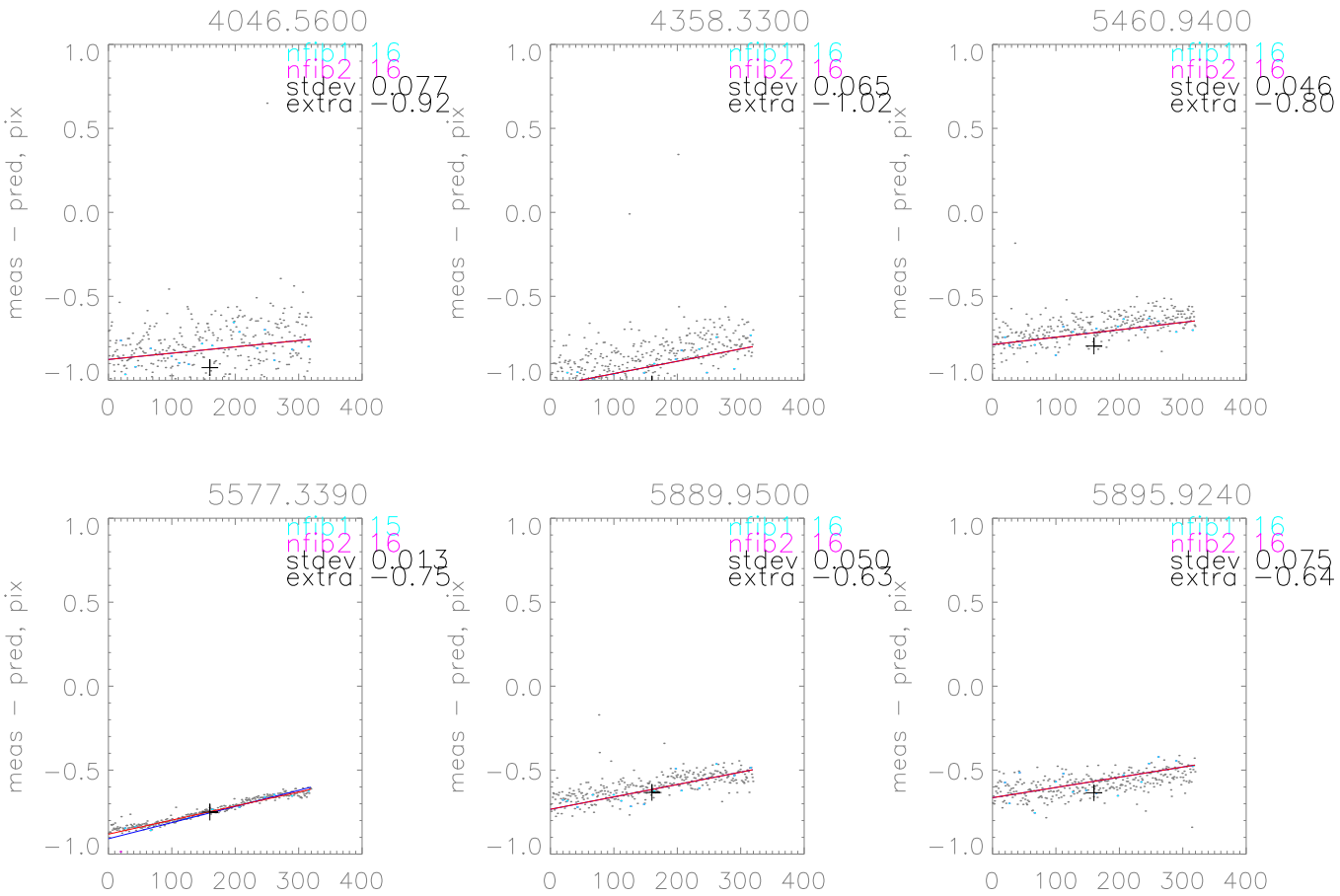

4358.3300
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

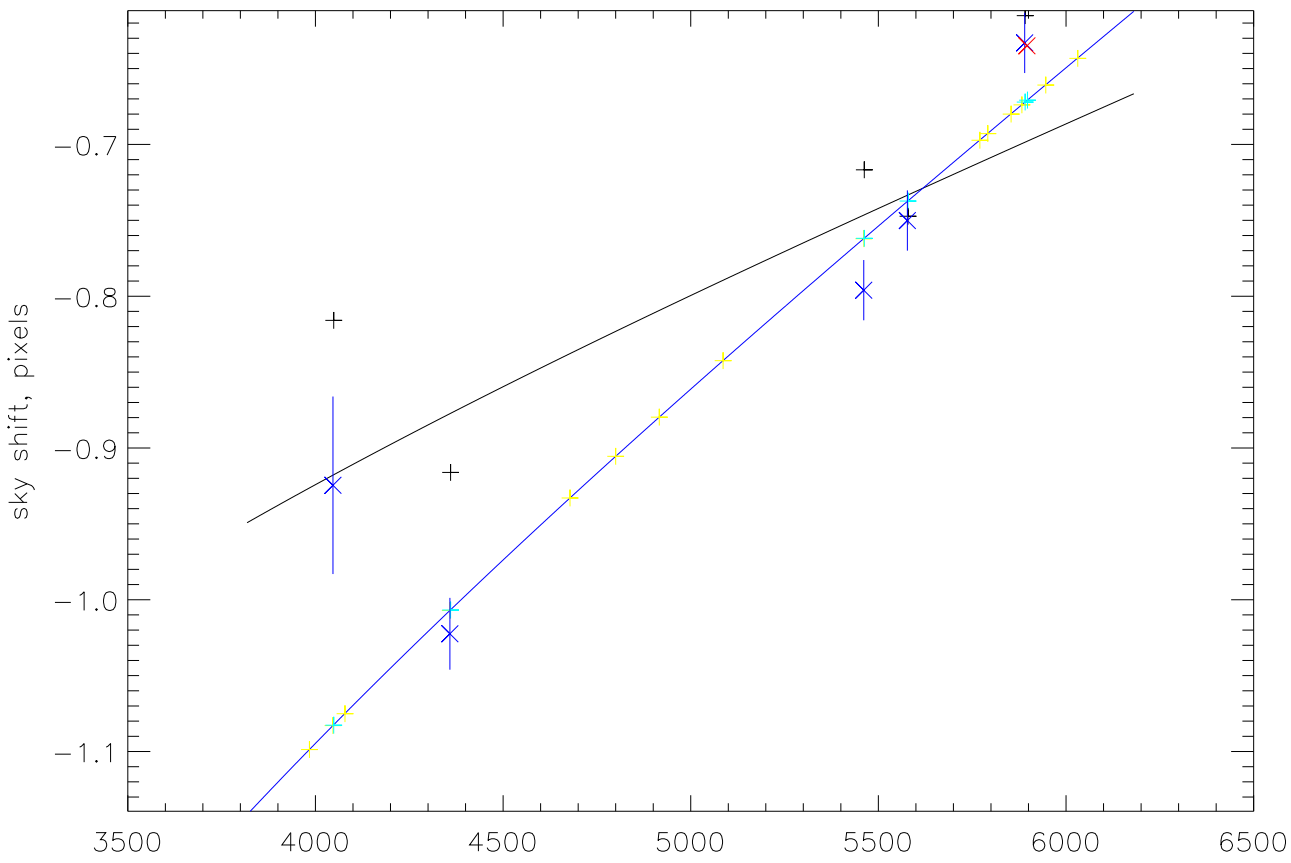

5460.9400
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400


5577.3390
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

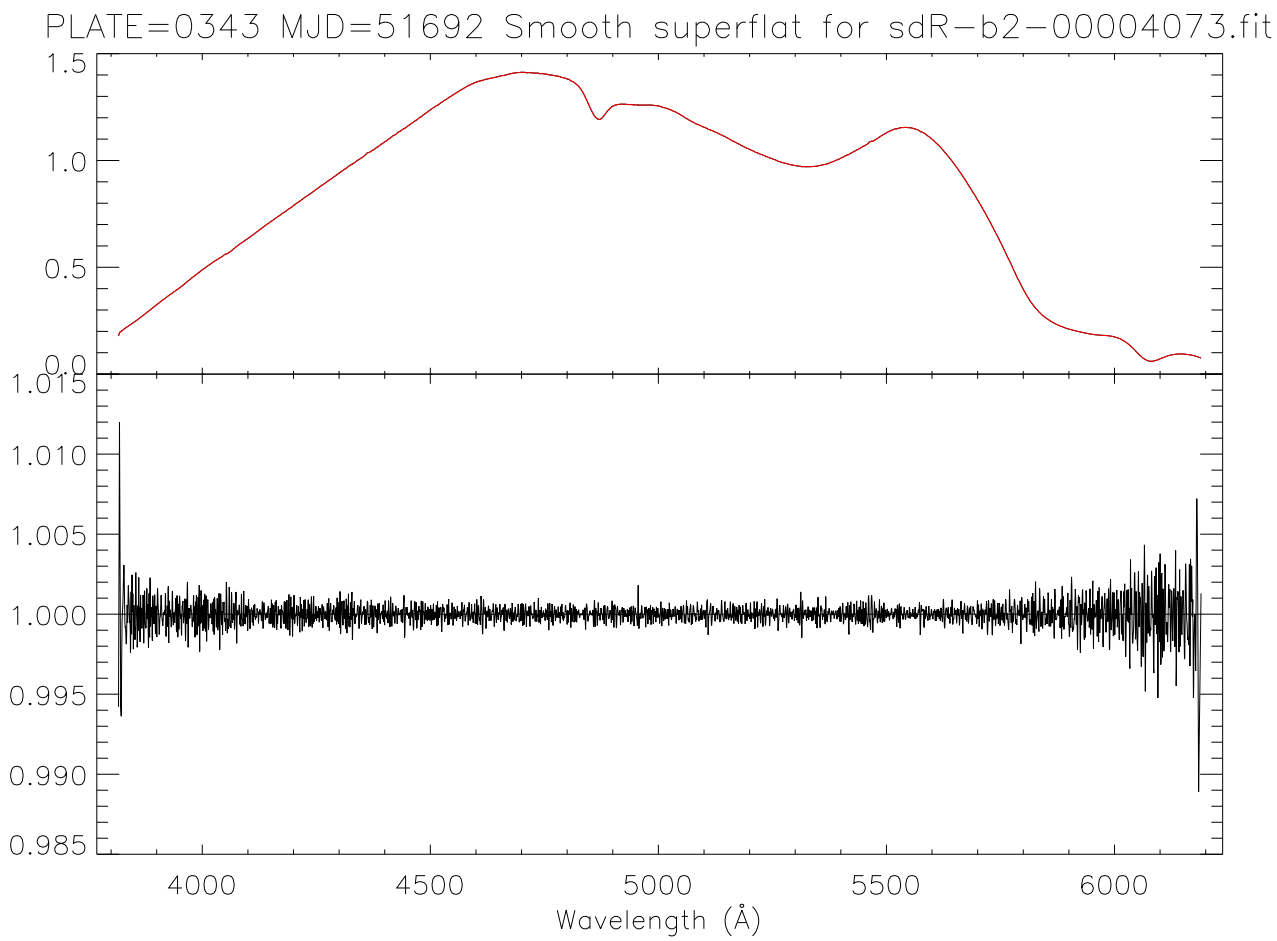

5889.9500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

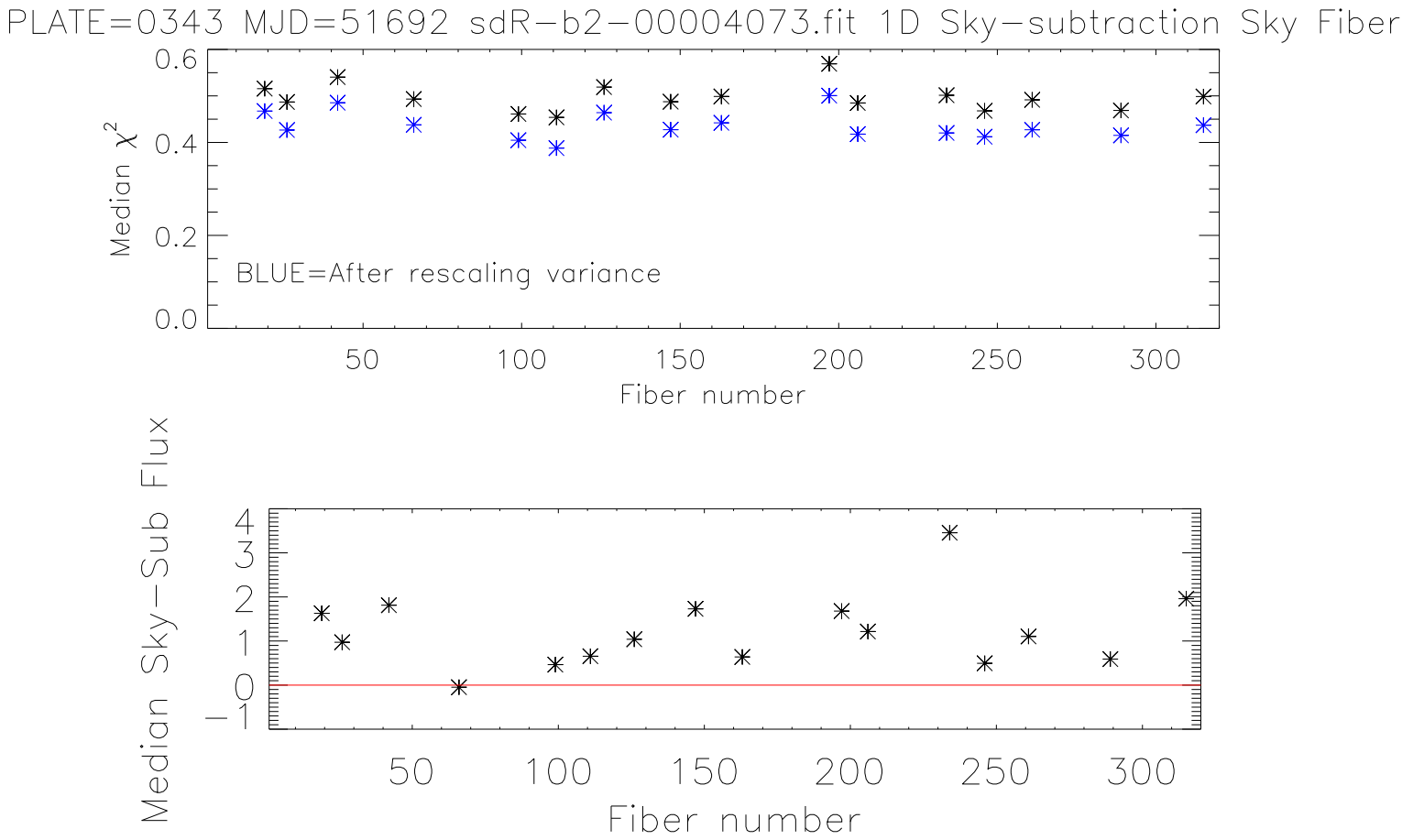

5895.9240
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

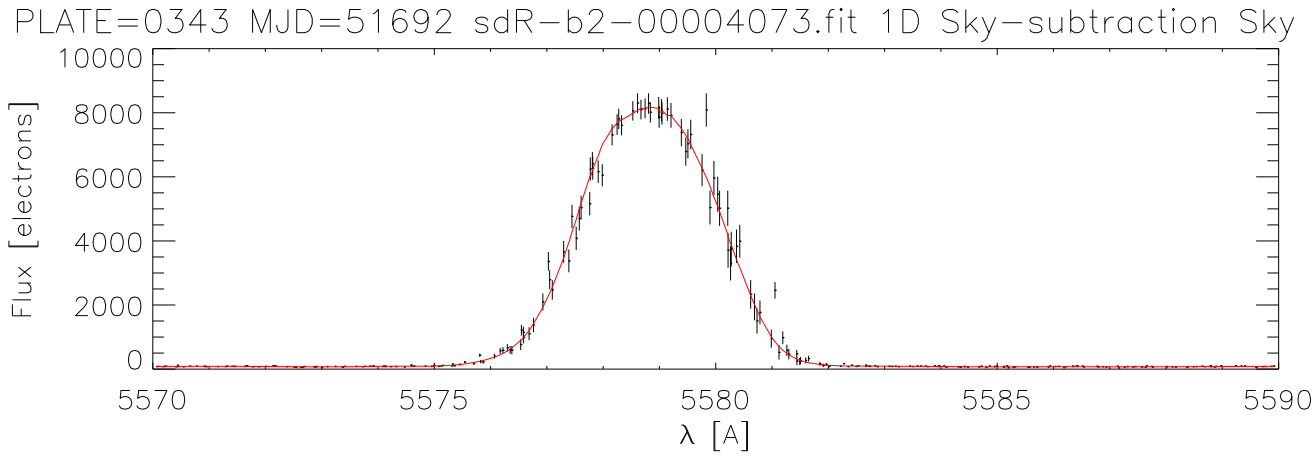

4046.5600
nfib1 16
nfib2 16
stdev 0.077
extra −0.92
4358.3300
nfib1 16
nfib2 16
stdev 0.065
extra −1.02
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.80
5577.3390
nfib1 15
nfib2 16
stdev 0.013
extra −0.75
5889.9500
nfib1 16
nfib2 16
stdev 0.050
extra −0.63
5895.9240
nfib1 16
nfib2 16
stdev 0.075
extra −0.64
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

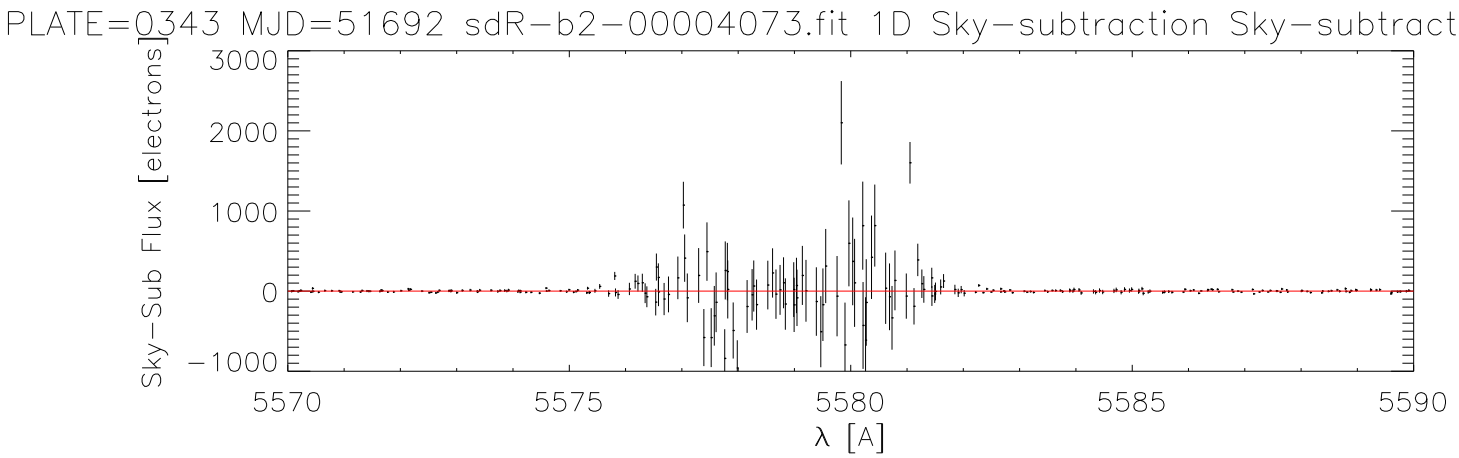

sky shift, pixels
−0.7
−0.8
−0.9
−1.0
−1.1
3500
4000
4500
5000
5500
6000
6500

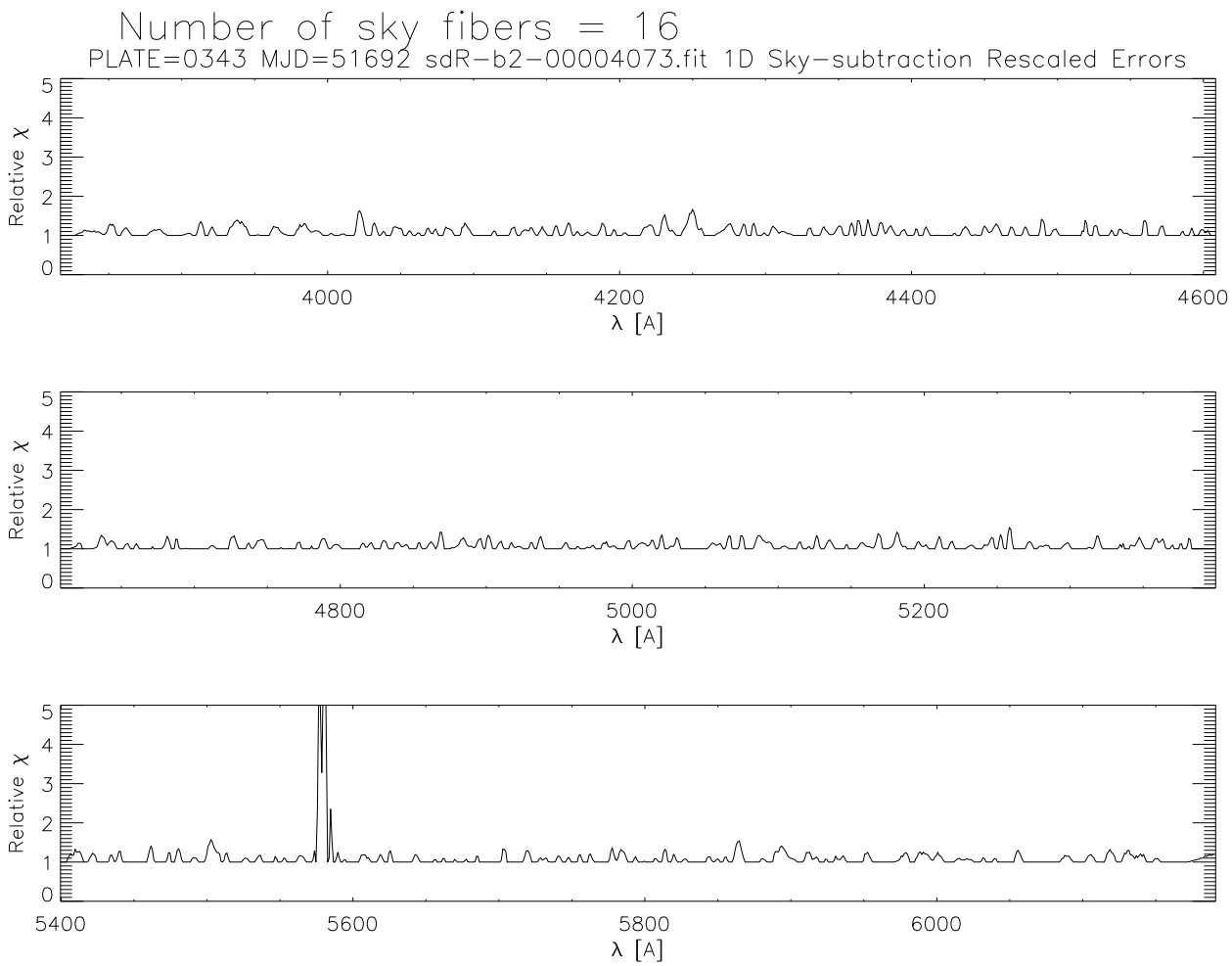
es= −0.0000

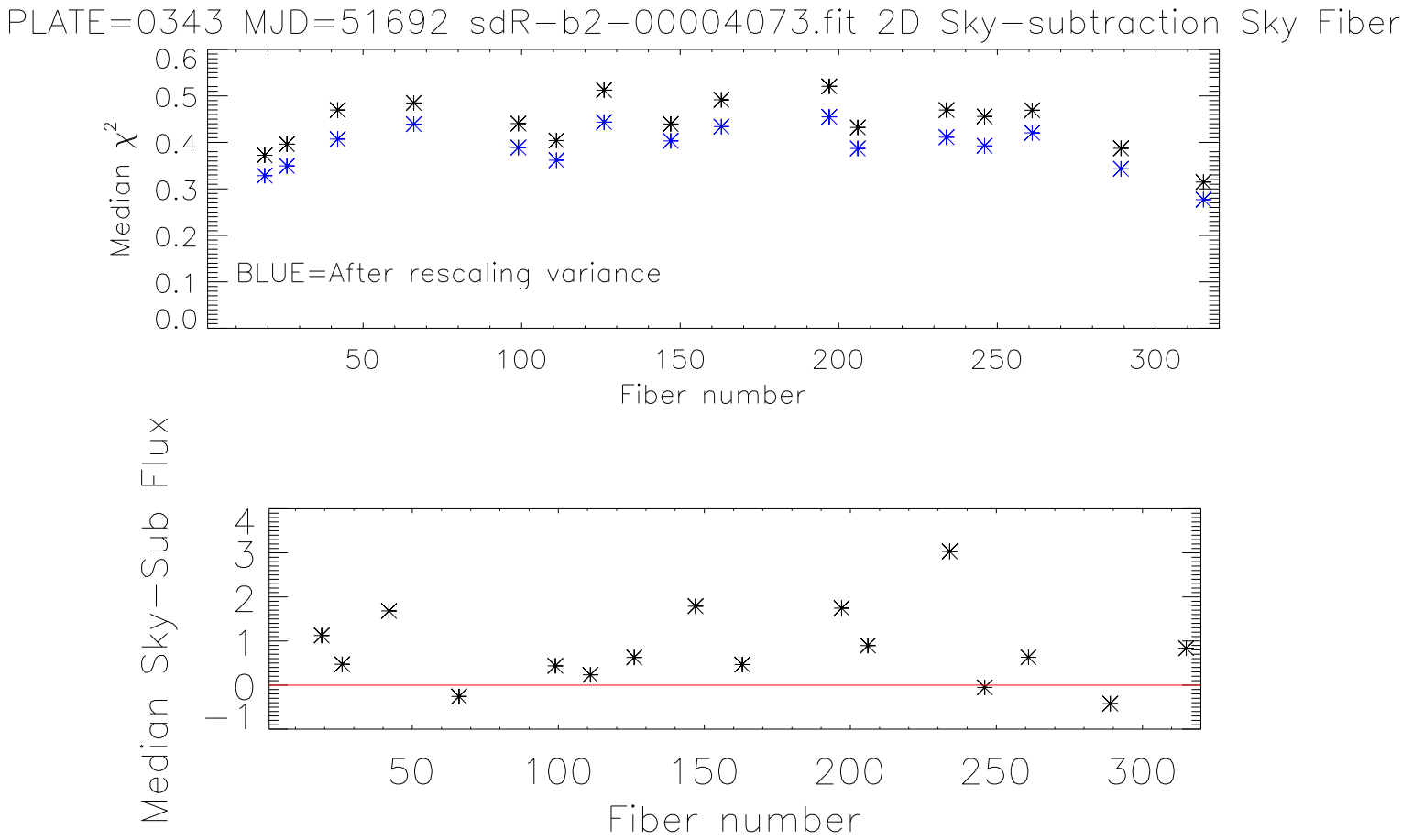

PLATE=0343 MJD=51692 Smooth superflat for sdR−b2−00004073.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

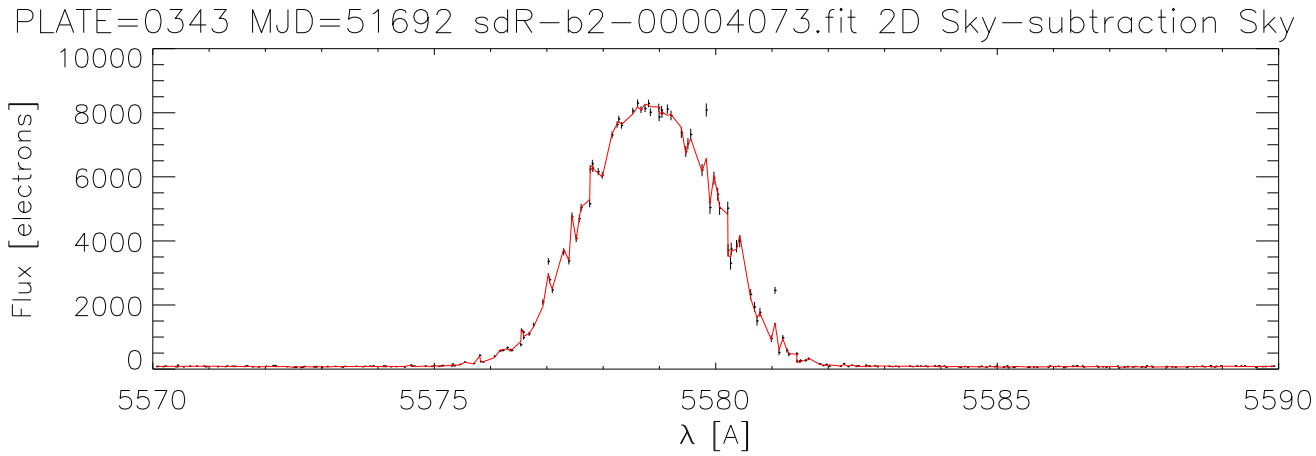

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

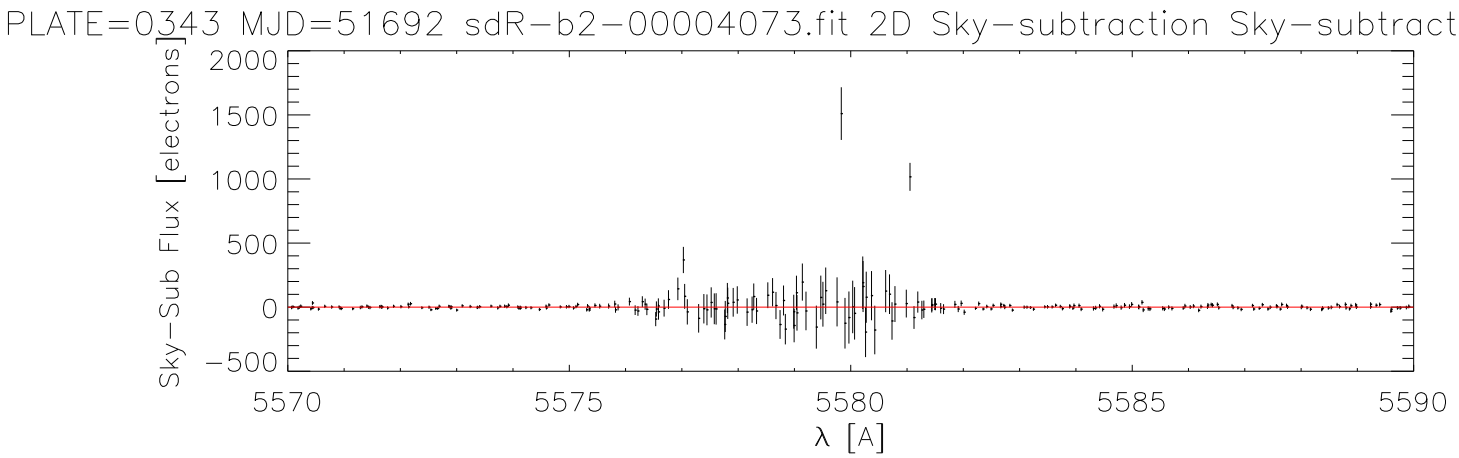

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

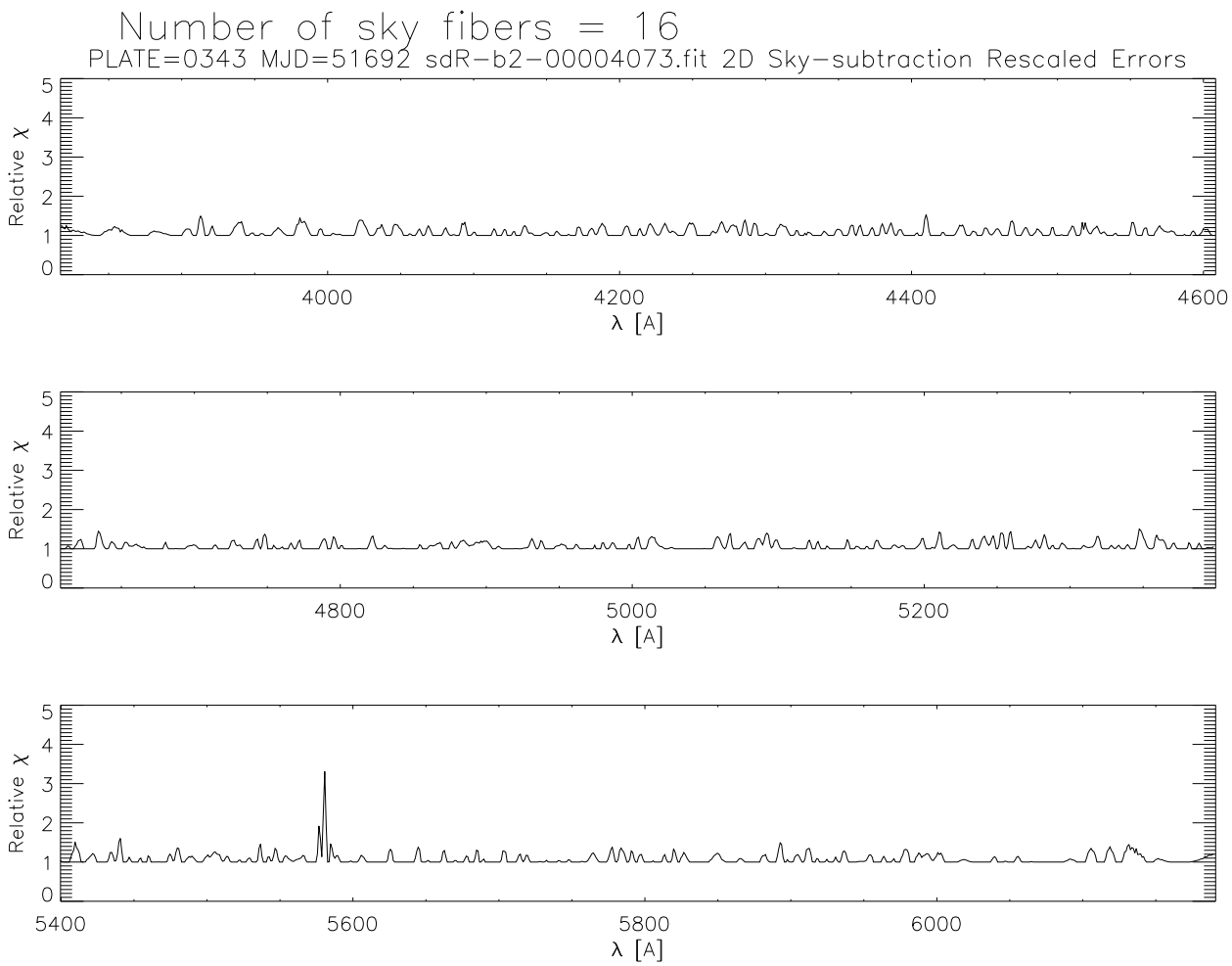

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

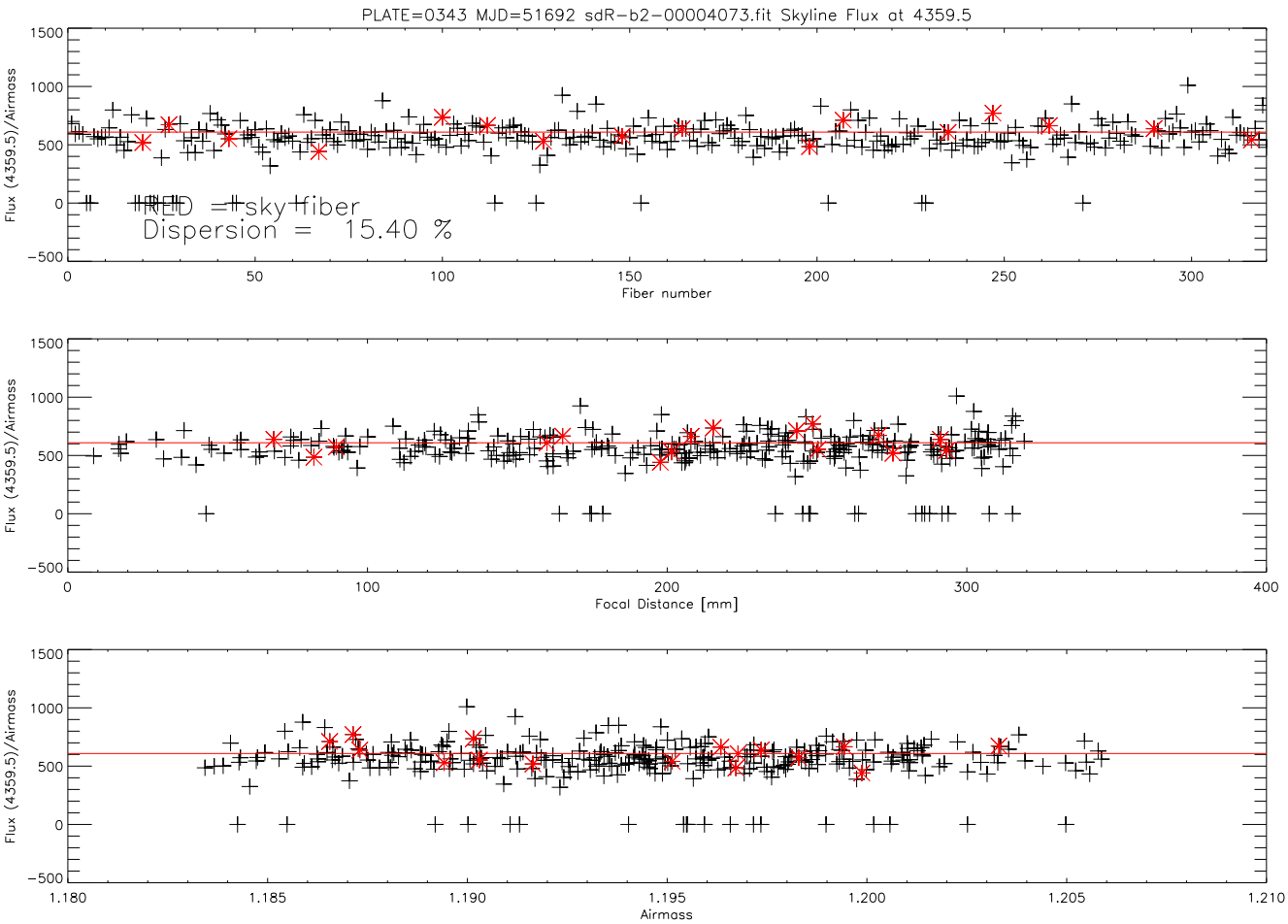

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004073.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

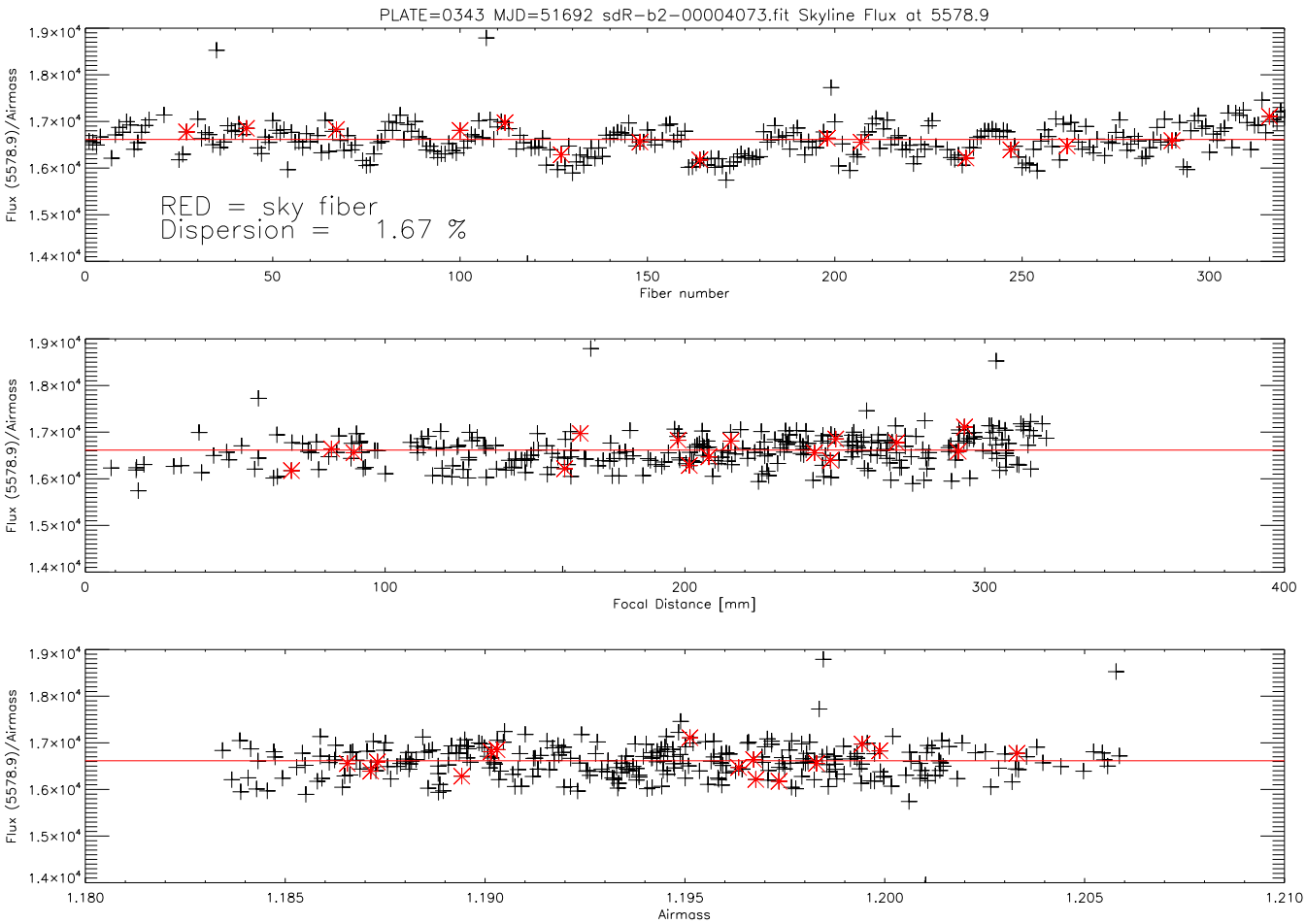

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

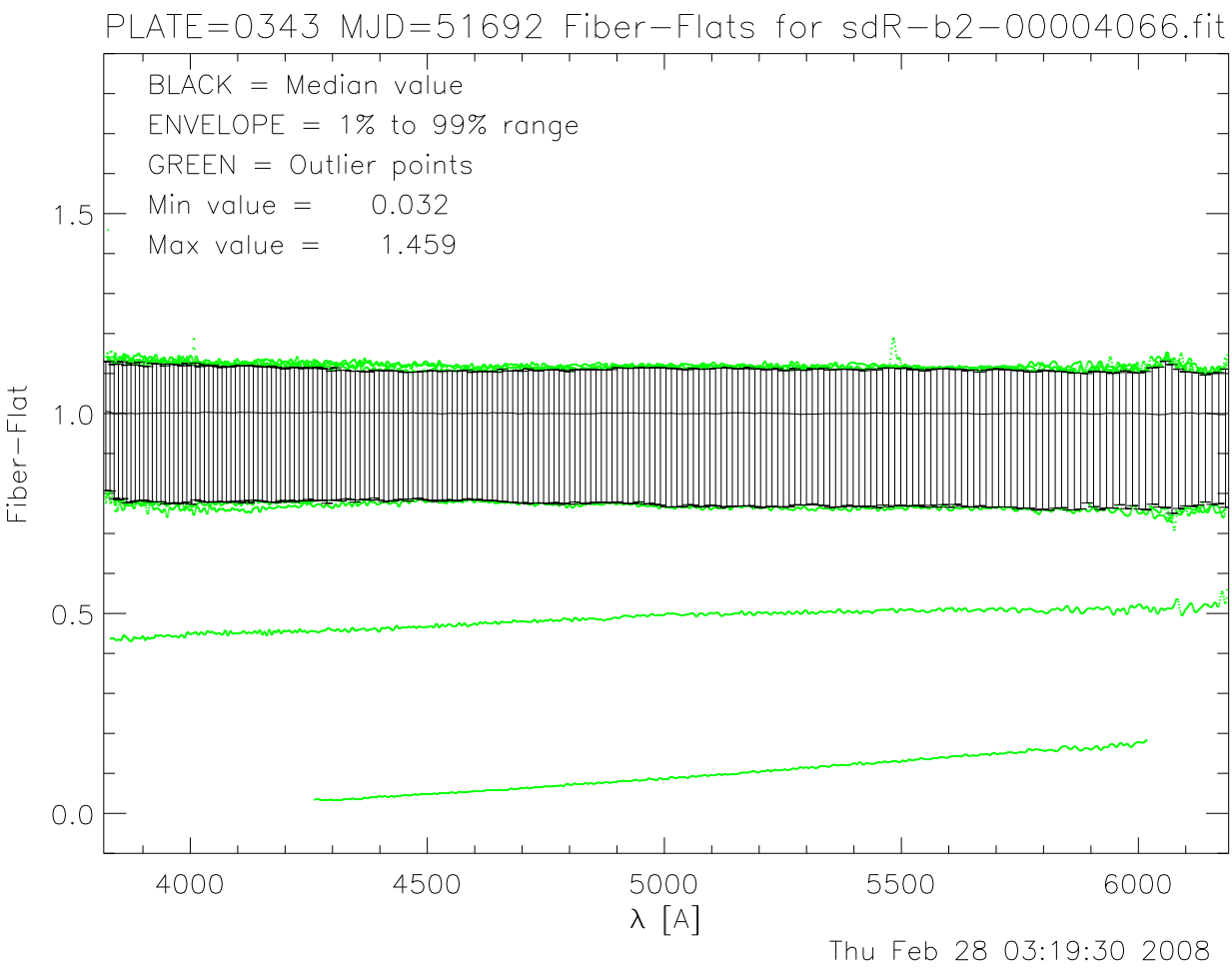

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

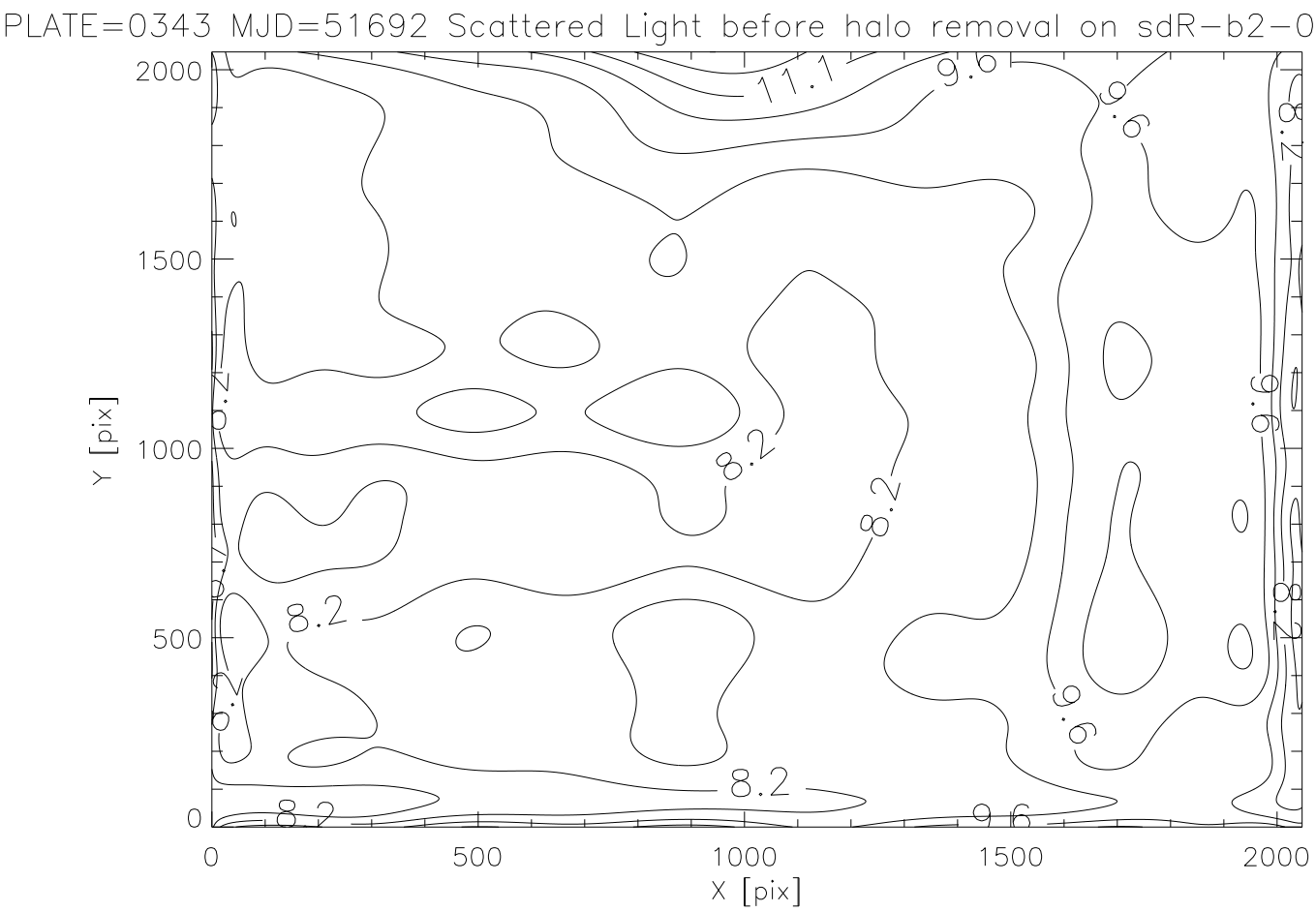

PLATE=0343 MJD=51692 sdR-b2-00004073.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

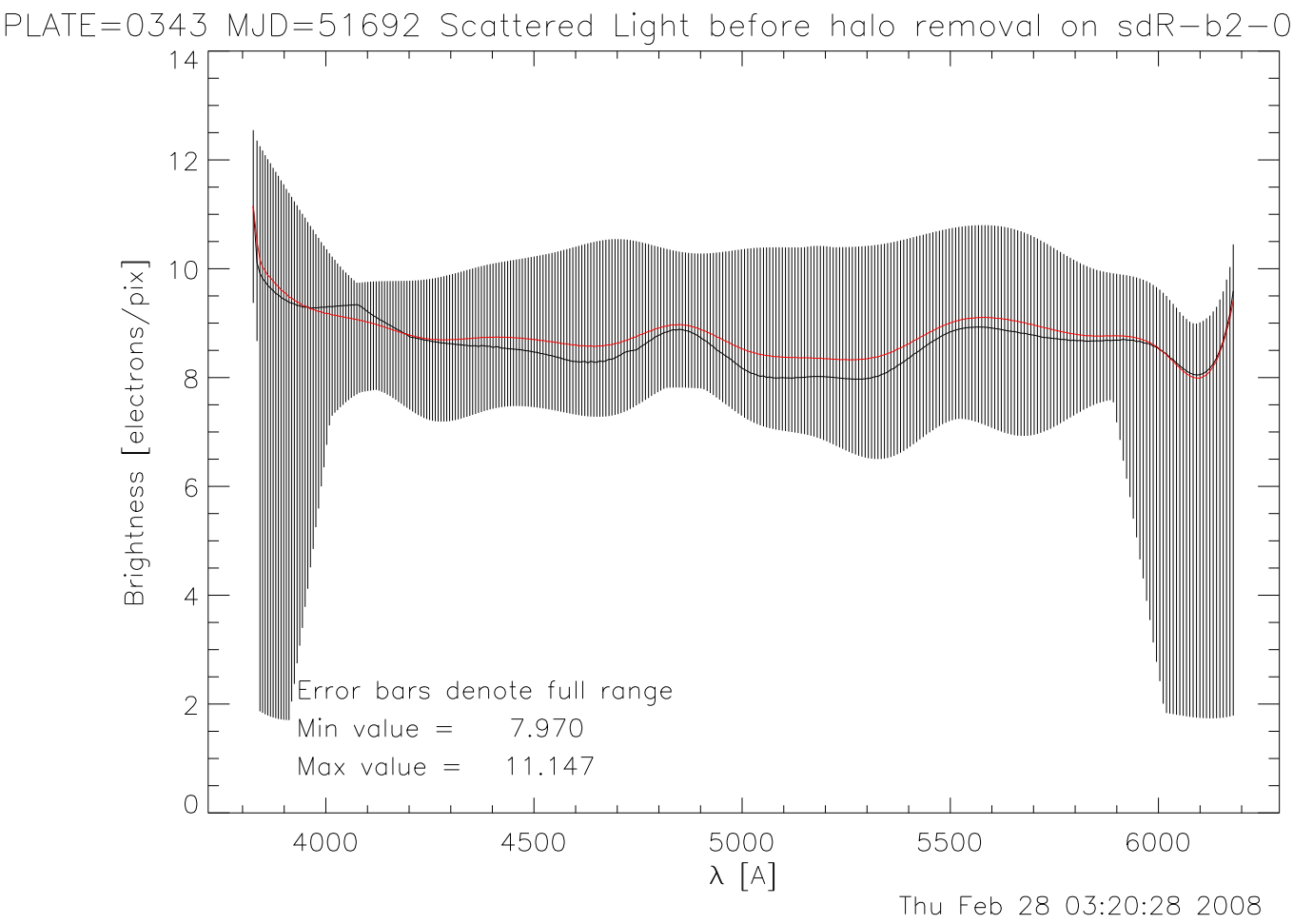

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004073.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

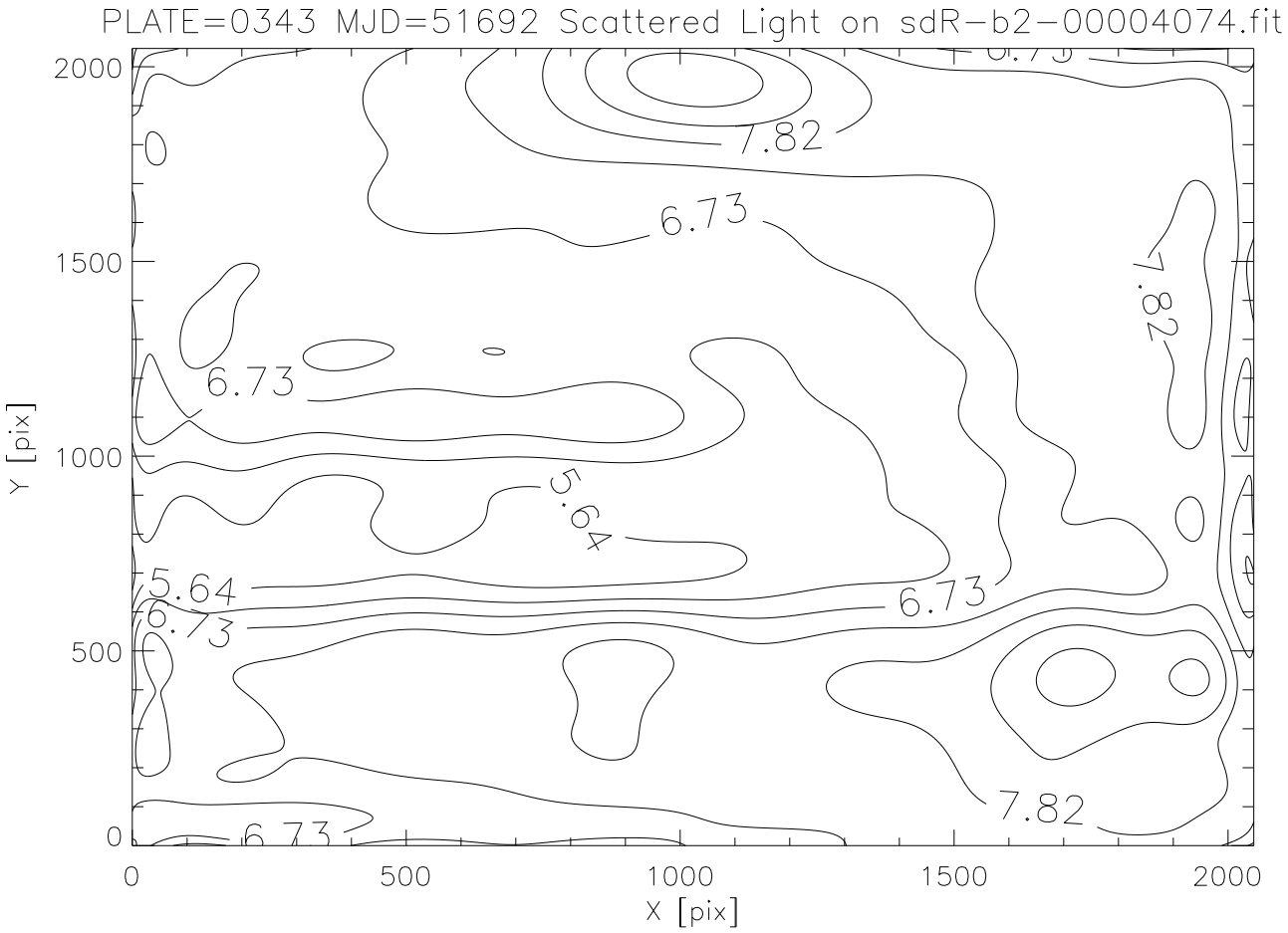

PLATE=0343 MJD=51692 sdR-b2-00004073.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.40 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

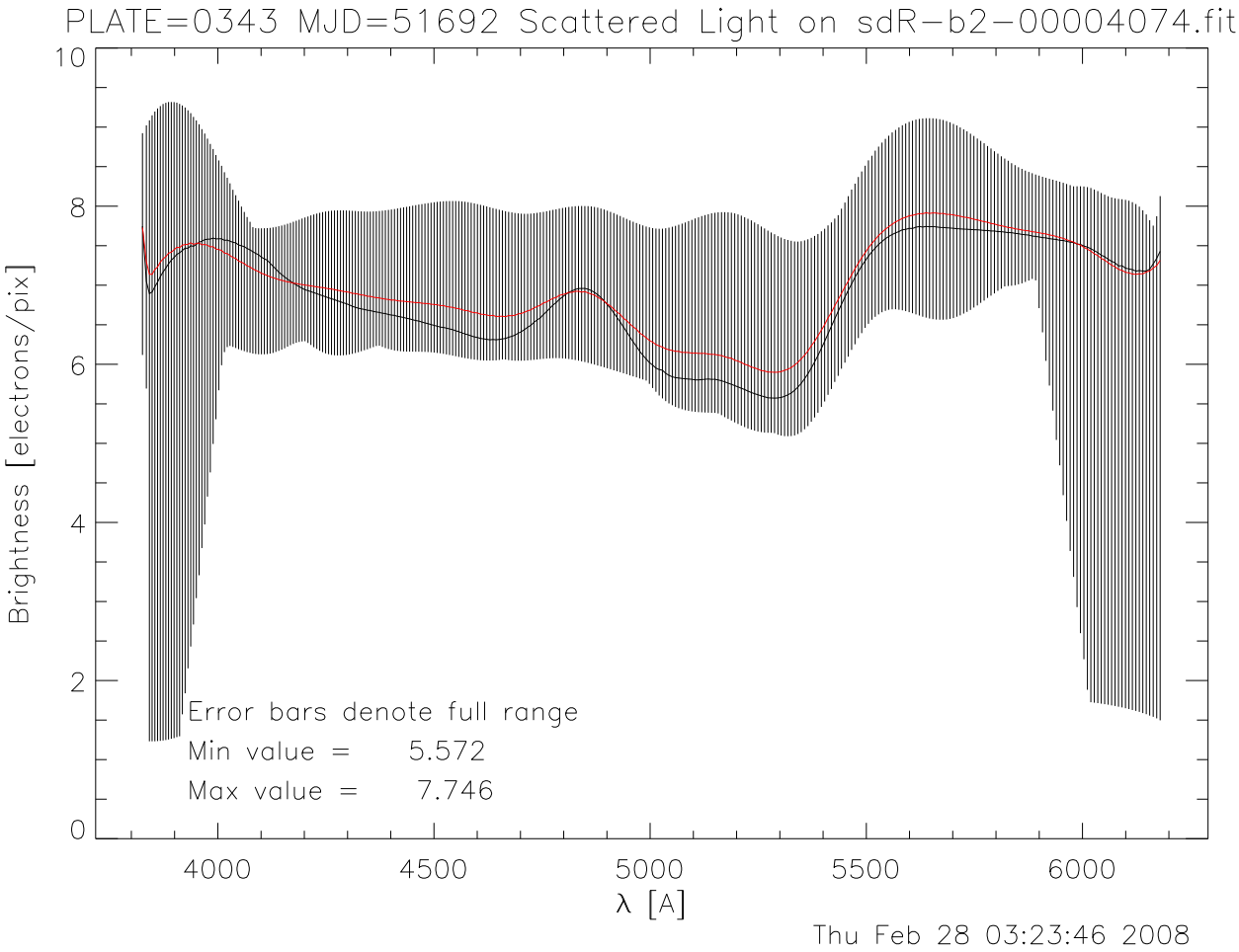

PLATE=0343 MJD=51692 sdR-b2-00004073.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.67 %
Fiber number
Focal Distance [mm]
Airmass

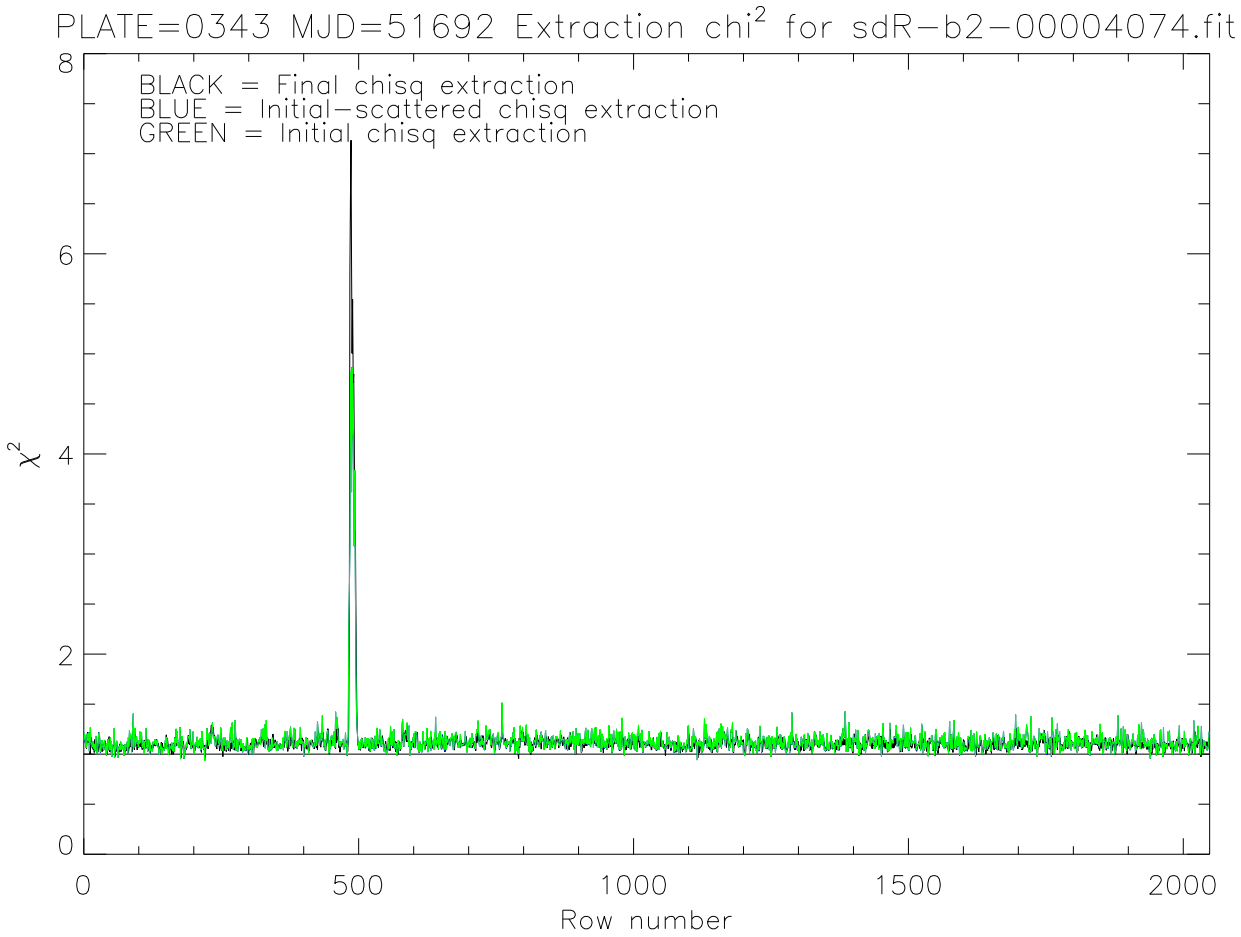

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:19:30 2008

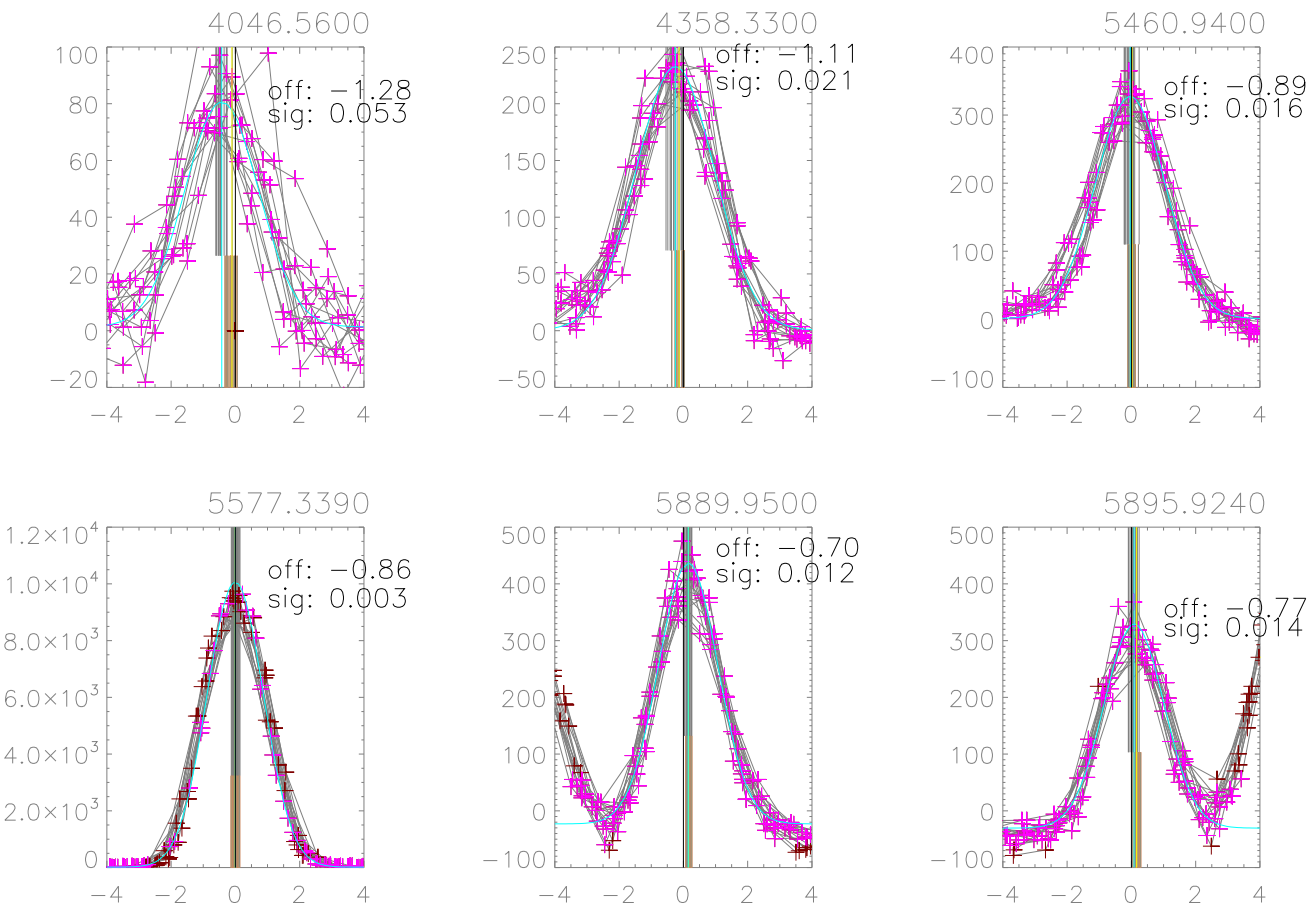

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004074.f
11.1
9.6
9.6
9.6
9.6
8.2
8.2
8.2
8.2
8.2
9.6
9.6
9.6
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

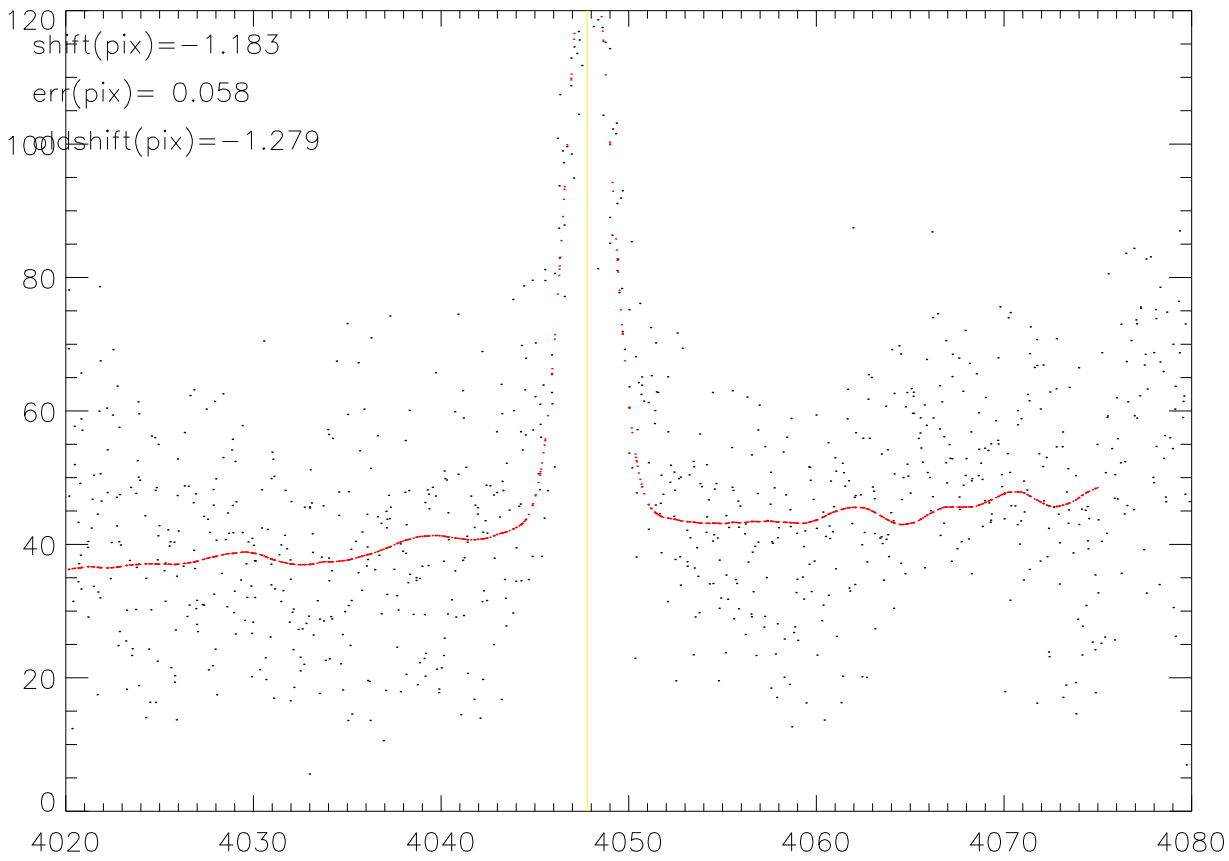

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004074.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.970
Max value = 11.147
Thu Feb 28 03:20:28 2008

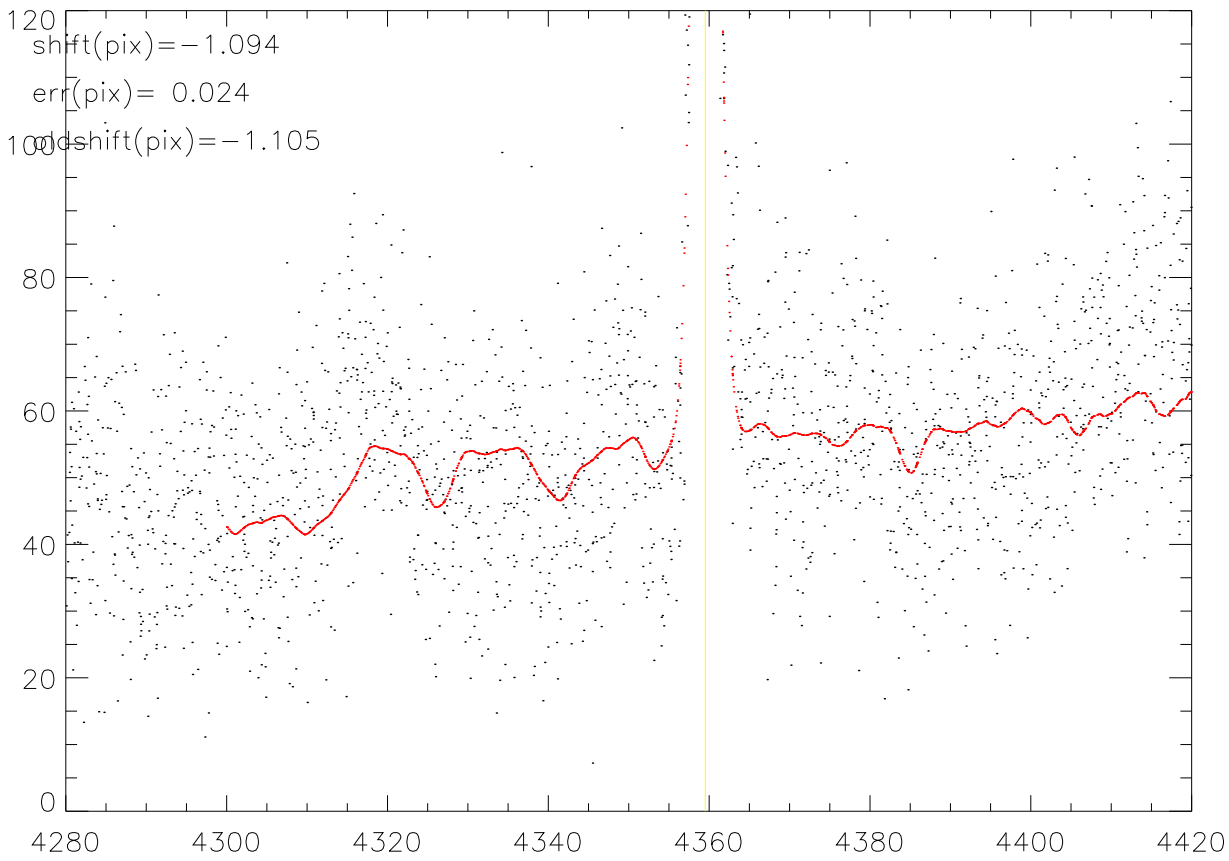

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004074.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.82
6.73
5.64

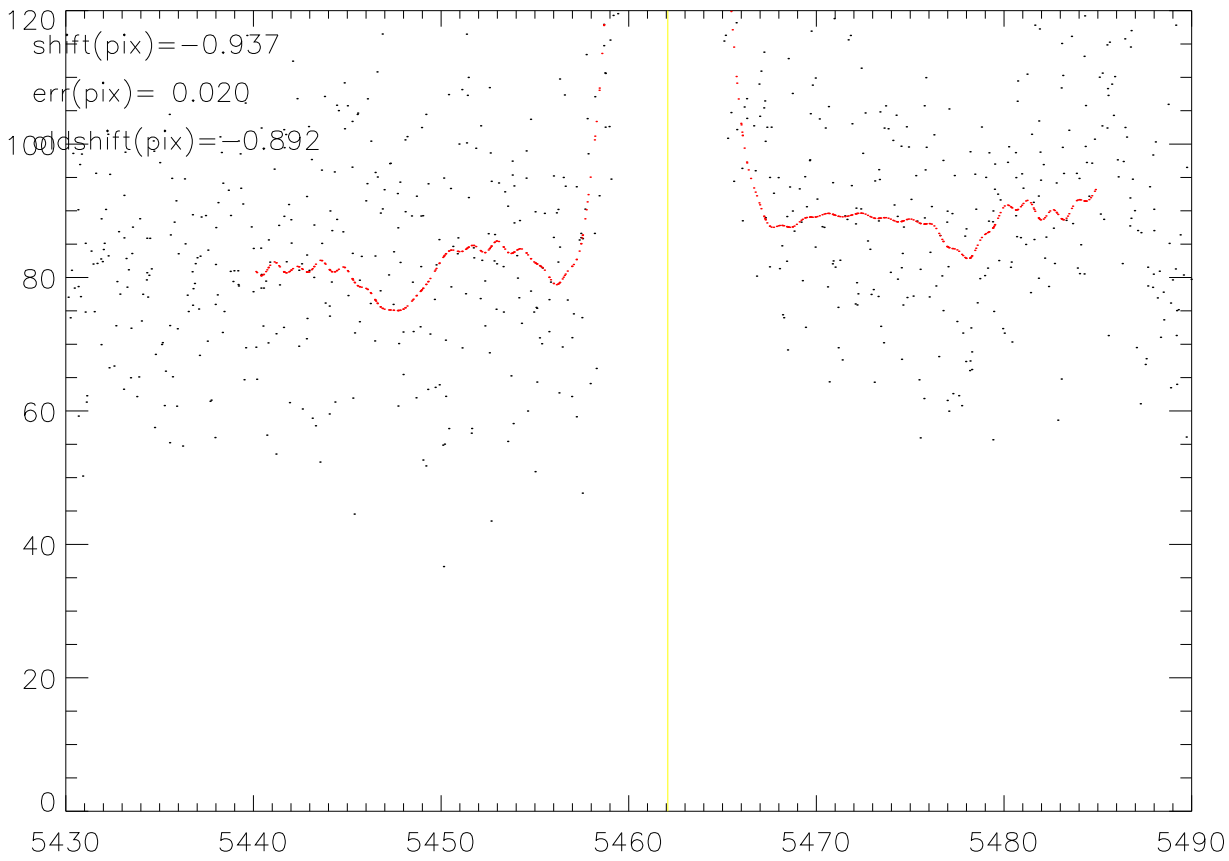

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004074.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.572
Max value = 7.746
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:23:46 2008

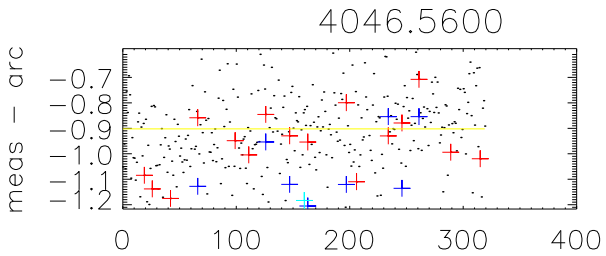

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004074.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

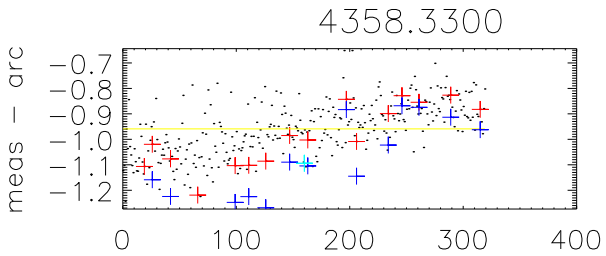

4046.5600
off: −1.28
sig: 0.053
4358.3300
off: −1.11
sig: 0.021
5460.9400
off: −0.89
sig: 0.016
5577.3390
off: −0.86
sig: 0.003
5889.9500
off: −0.70
sig: 0.012
5895.9240
off: −0.77
sig: 0.014

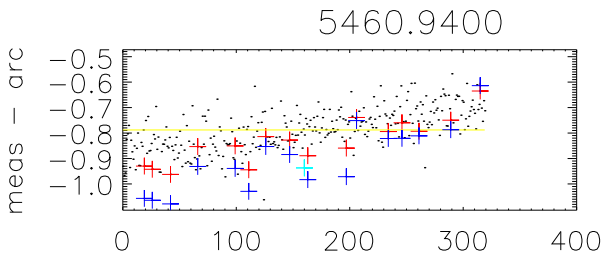

shift(pix)=−1.183
err(pix)= 0.058
oldshift(pix)=−1.279
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

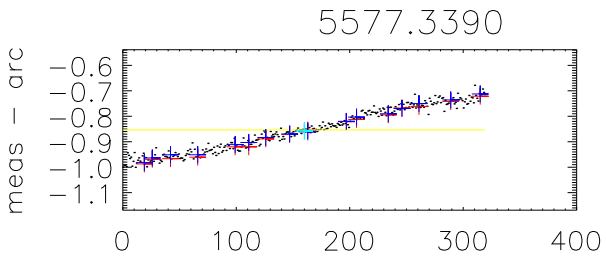

shift(pix)=−1.094
err(pix)= 0.024
oldshift(pix)=−1.105
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

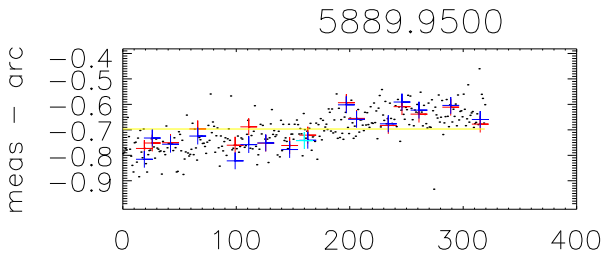

shift(pix)=−0.937
err(pix)= 0.020
oldshift(pix)=−0.892
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

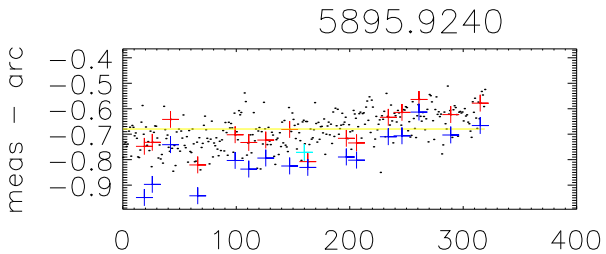

4046.5600
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

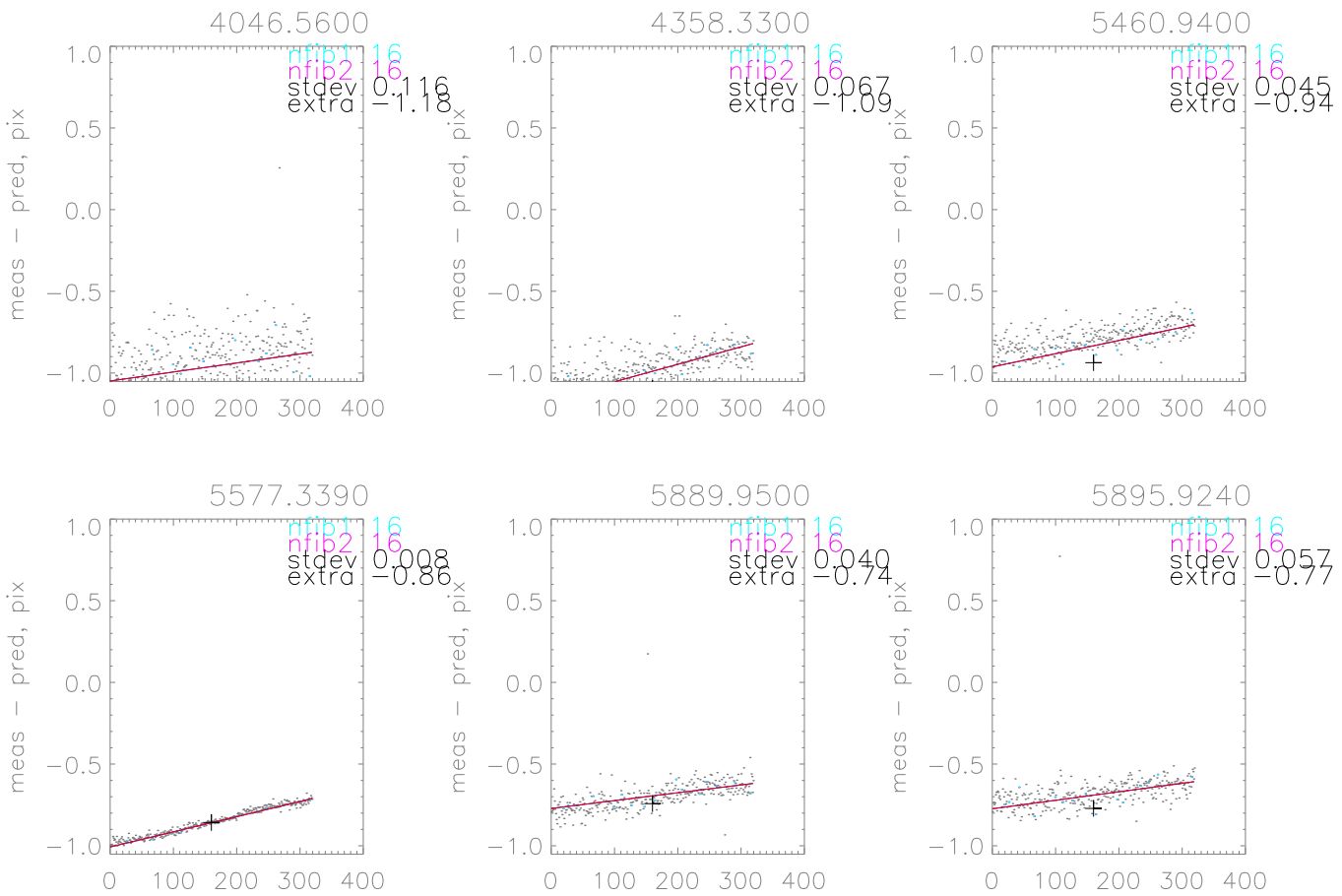

4358.3300
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

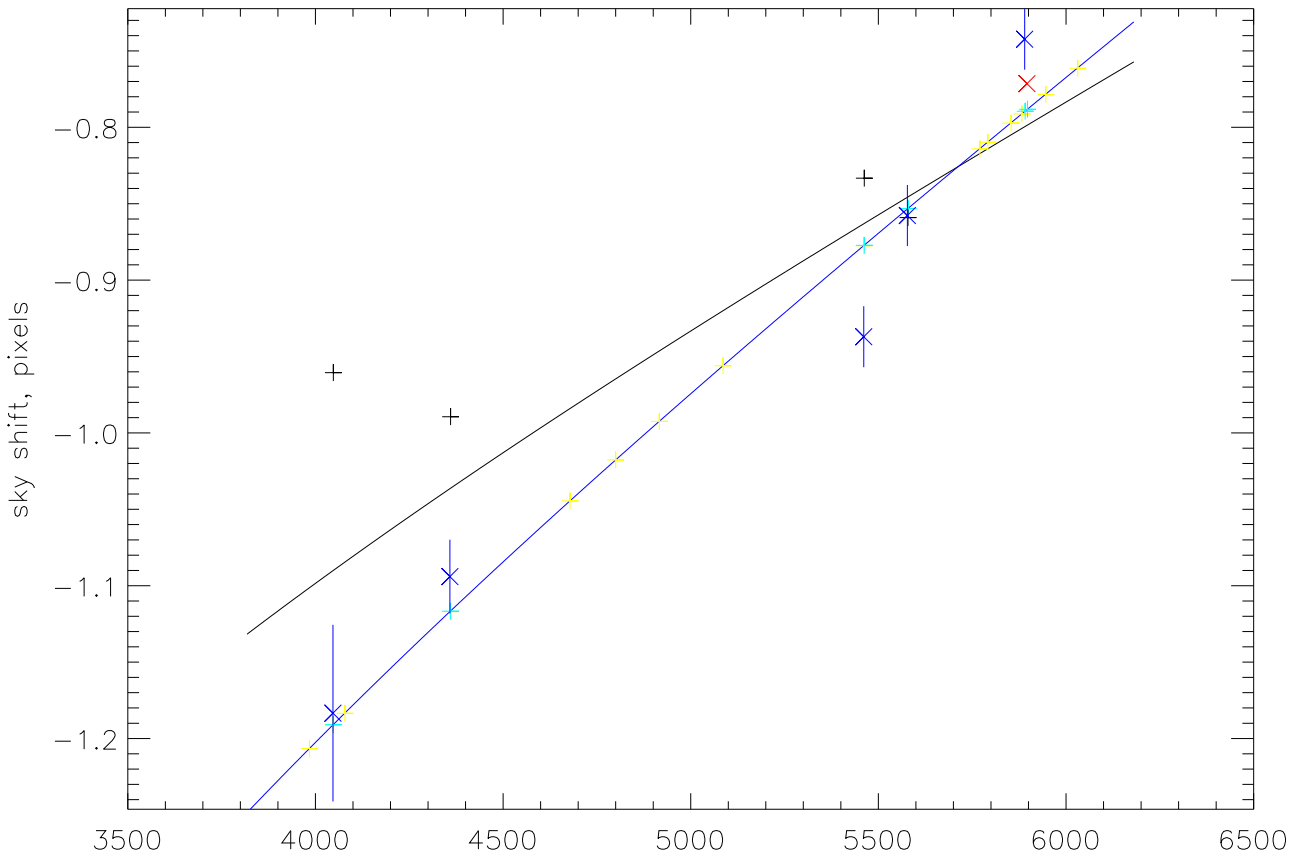

5460.9400
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

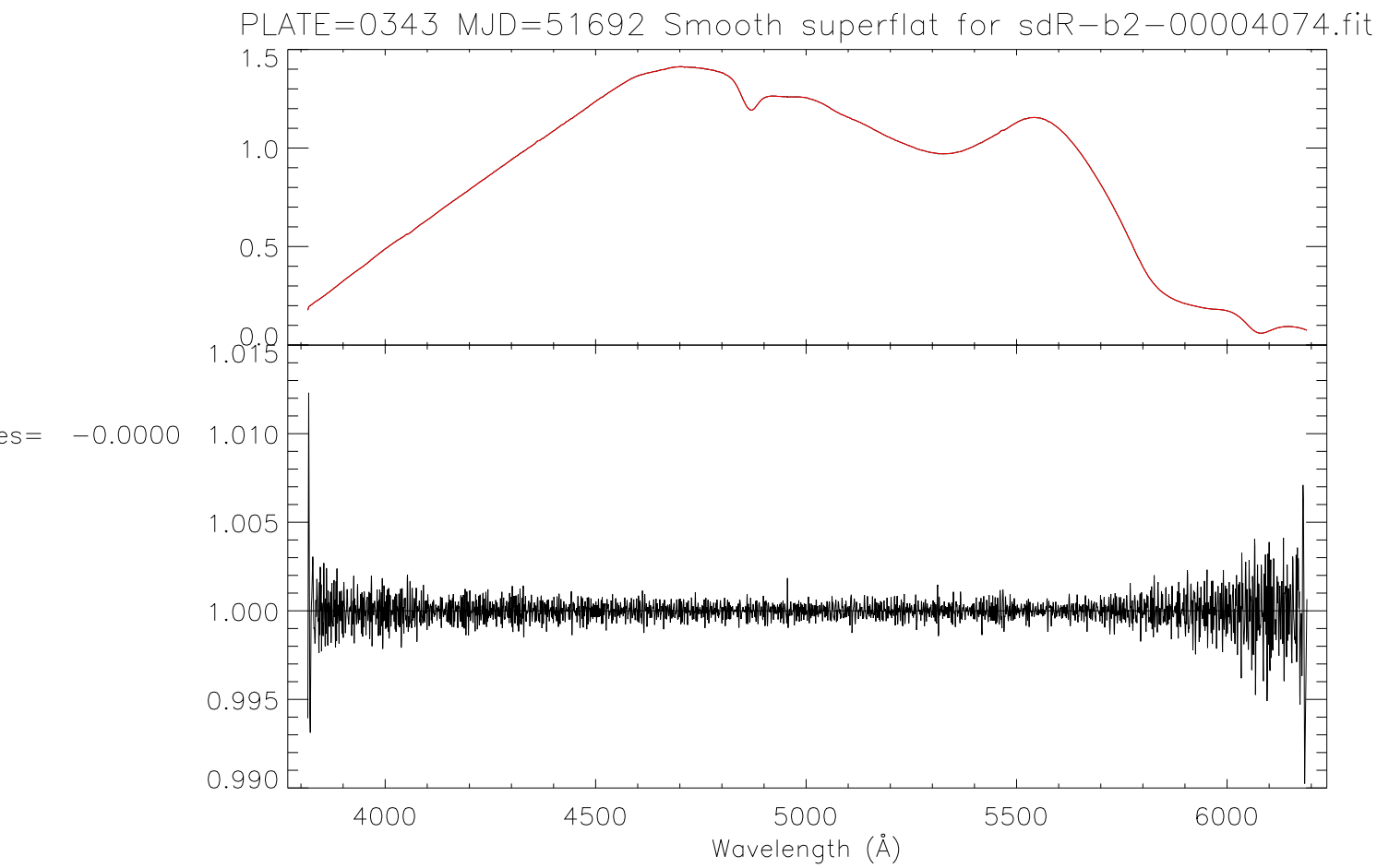

5577.3390
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

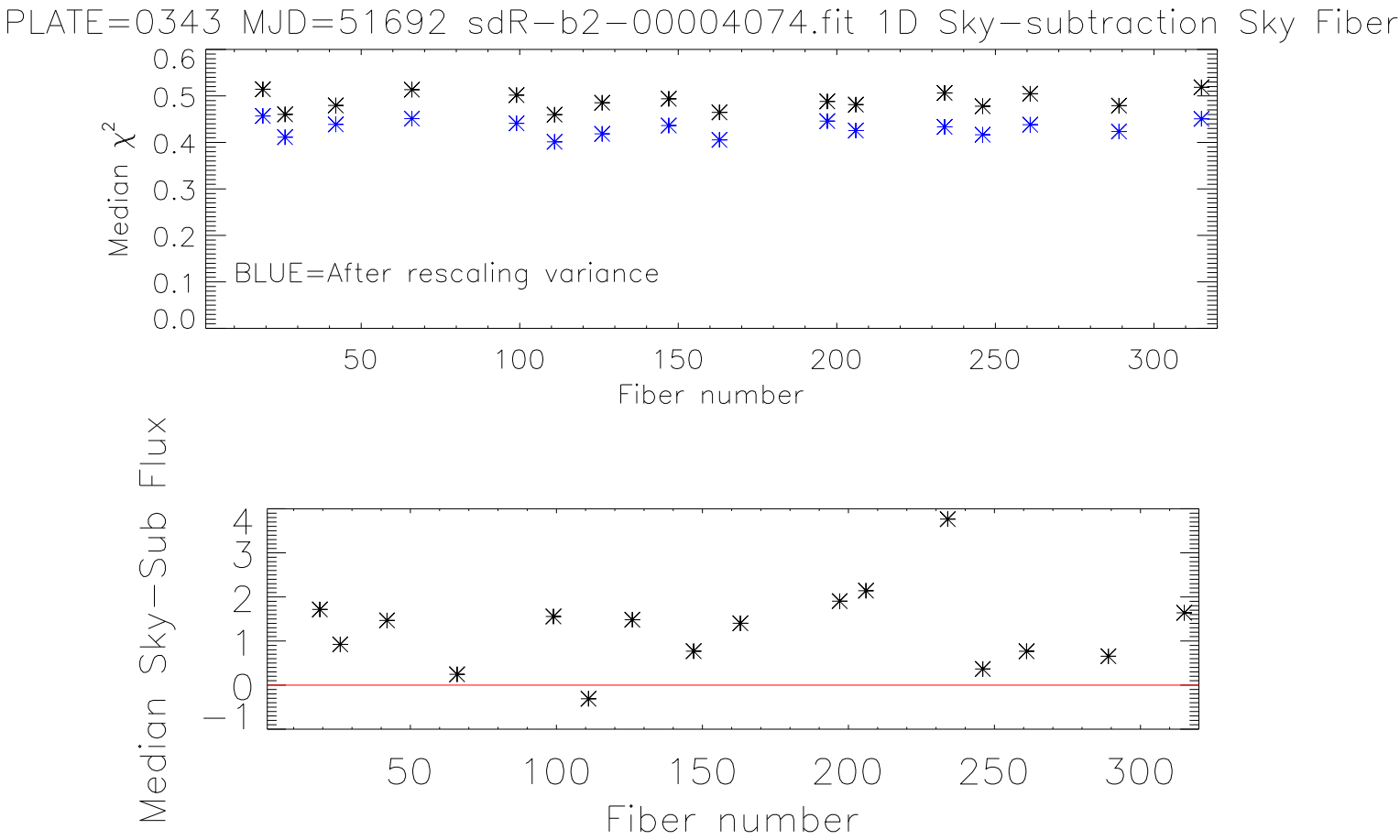

5889.9500
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

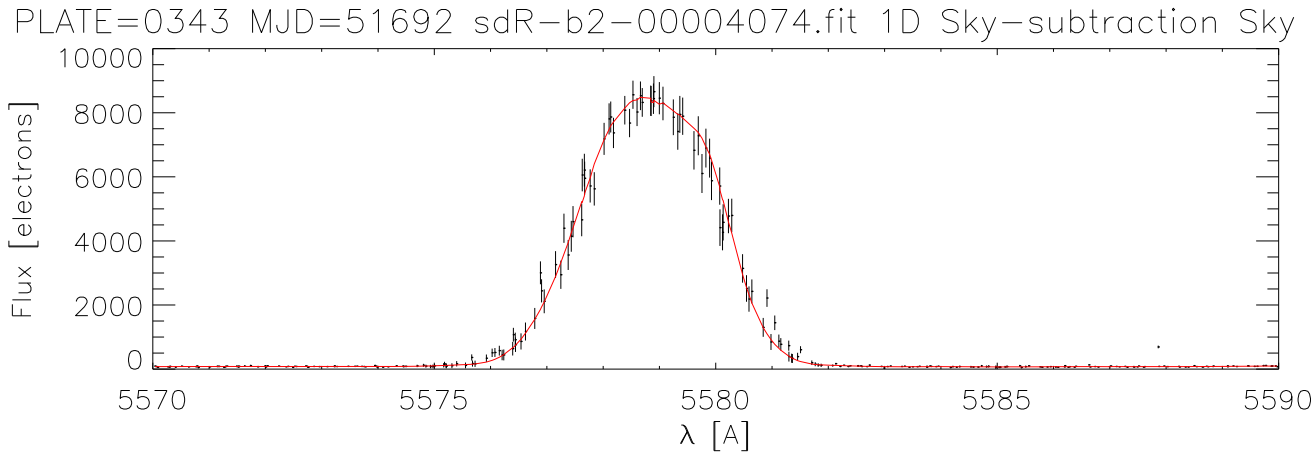

5895.9240
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

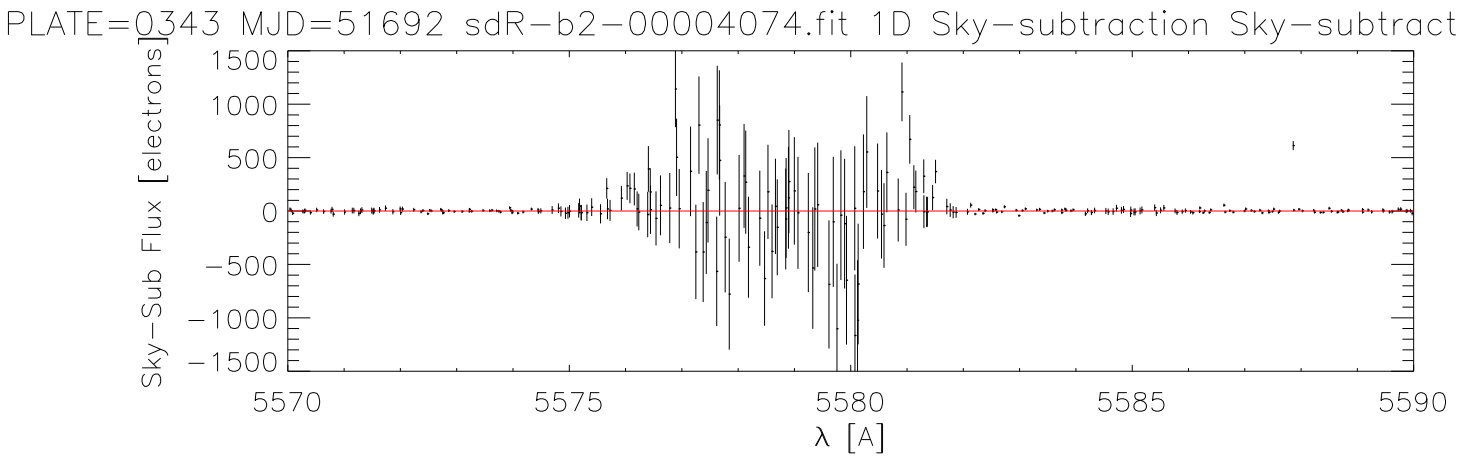

4046.5600
nfib1 16
nfib2 16
stdev 0.116
extra −1.18
4358.3300
nfib1 16
nfib2 16
stdev 0.067
extra −1.09
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra −0.94
5577.3390
nfib1 16
nfib2 16
stdev 0.008
extra −0.86
5889.9500
nfib1 16
nfib2 16
stdev 0.040
extra −0.74
5895.9240
nfib1 16
nfib2 16
stdev 0.057
extra −0.77
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

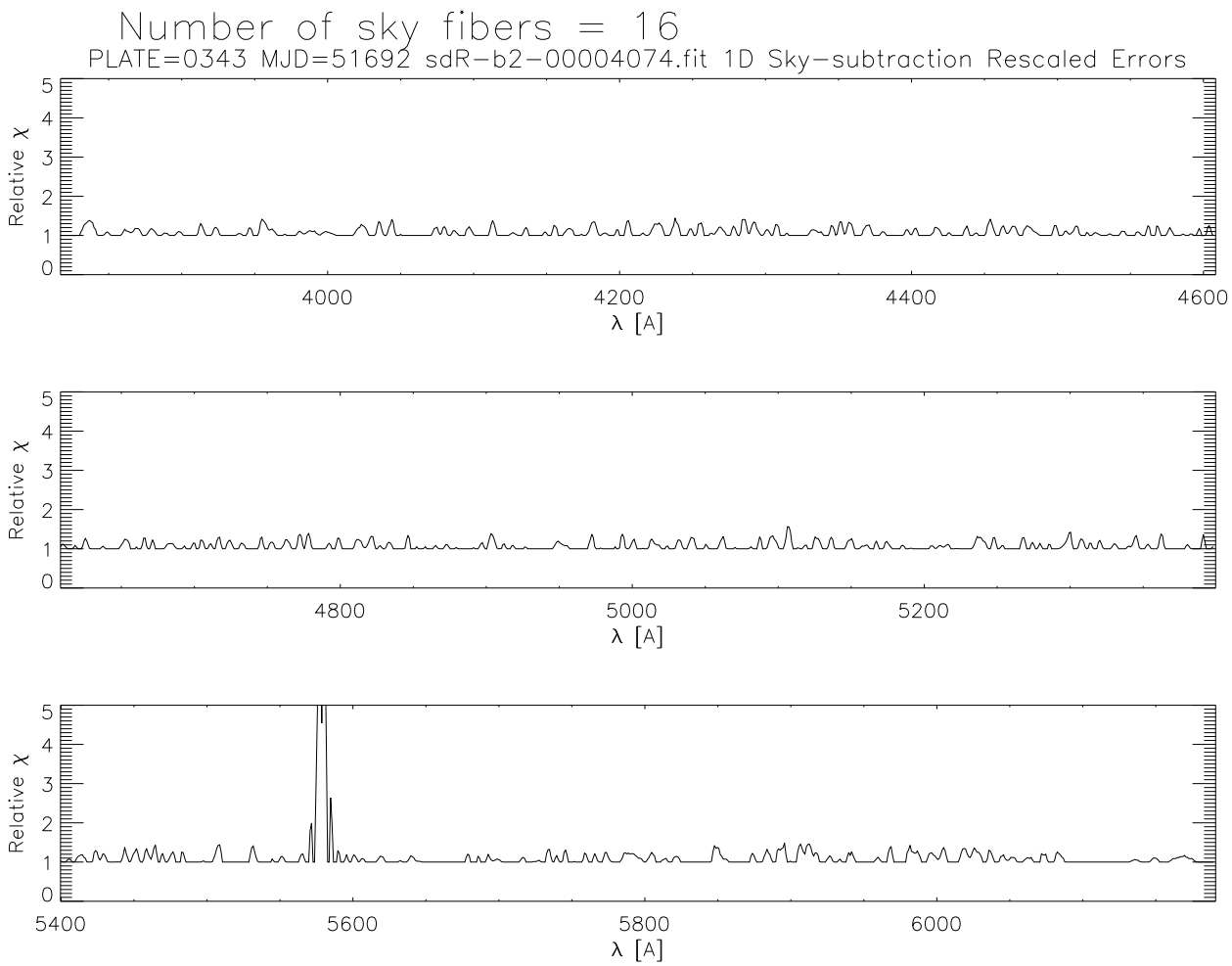

sky shift, pixels
−0.8
−0.9
−1.0
−1.1
−1.2
3500
4000
4500
5000
5500
6000
6500

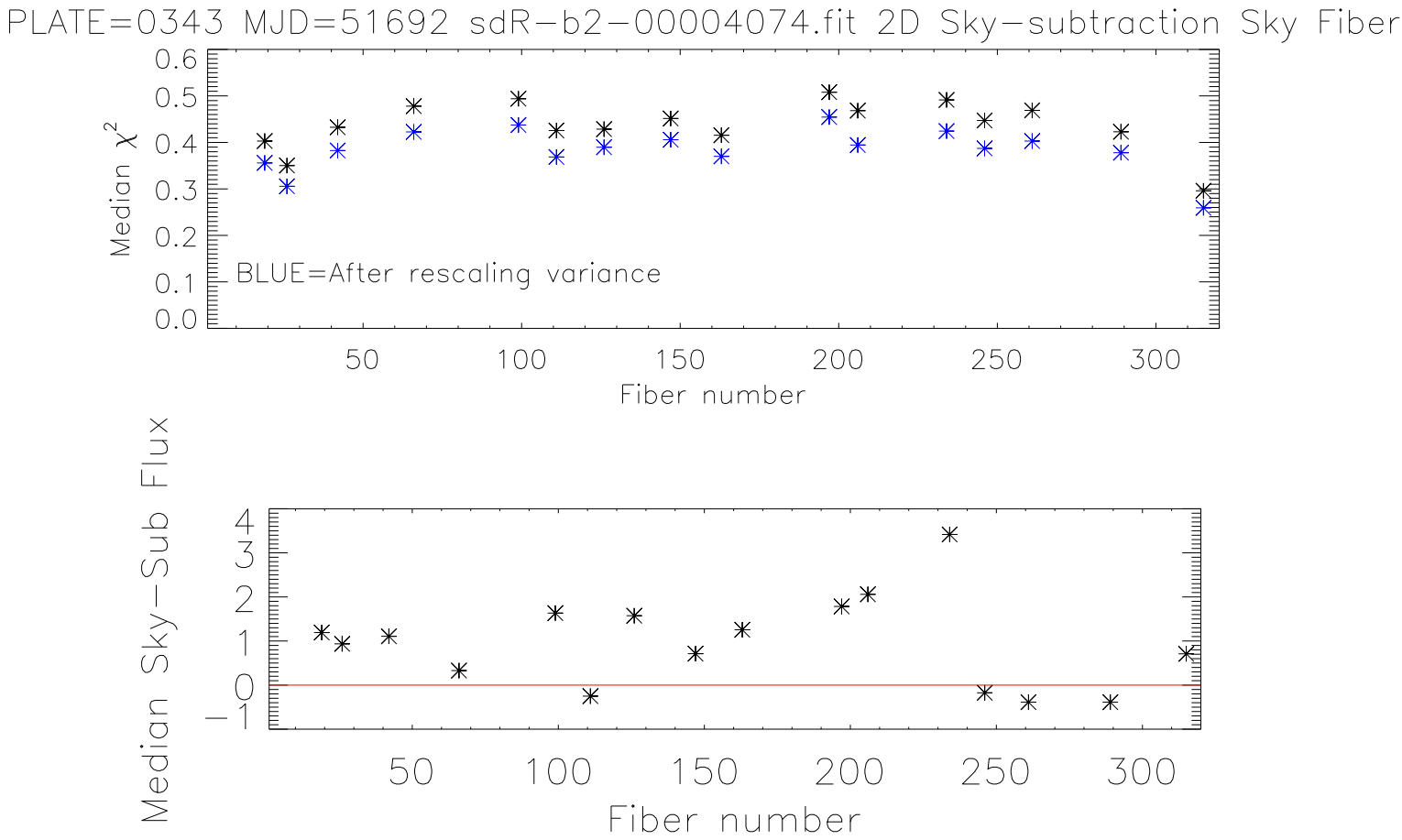

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004074.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

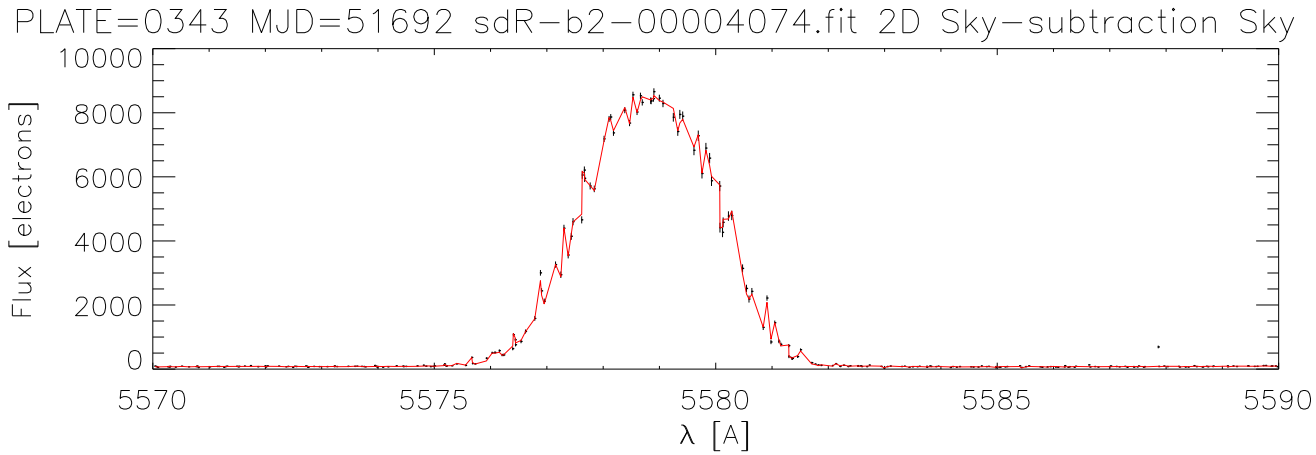

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

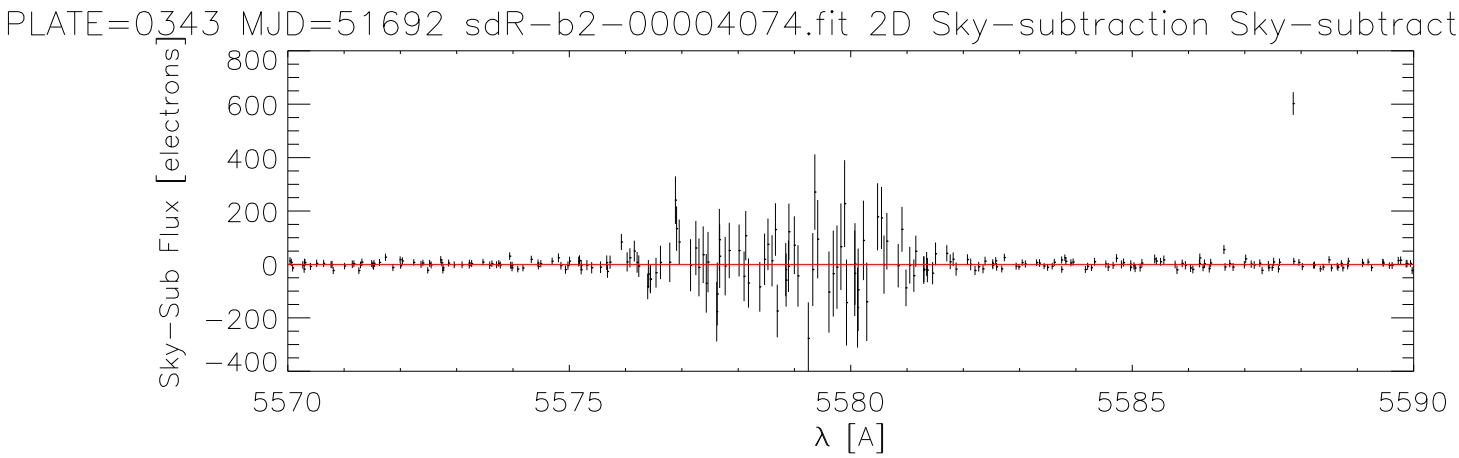

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

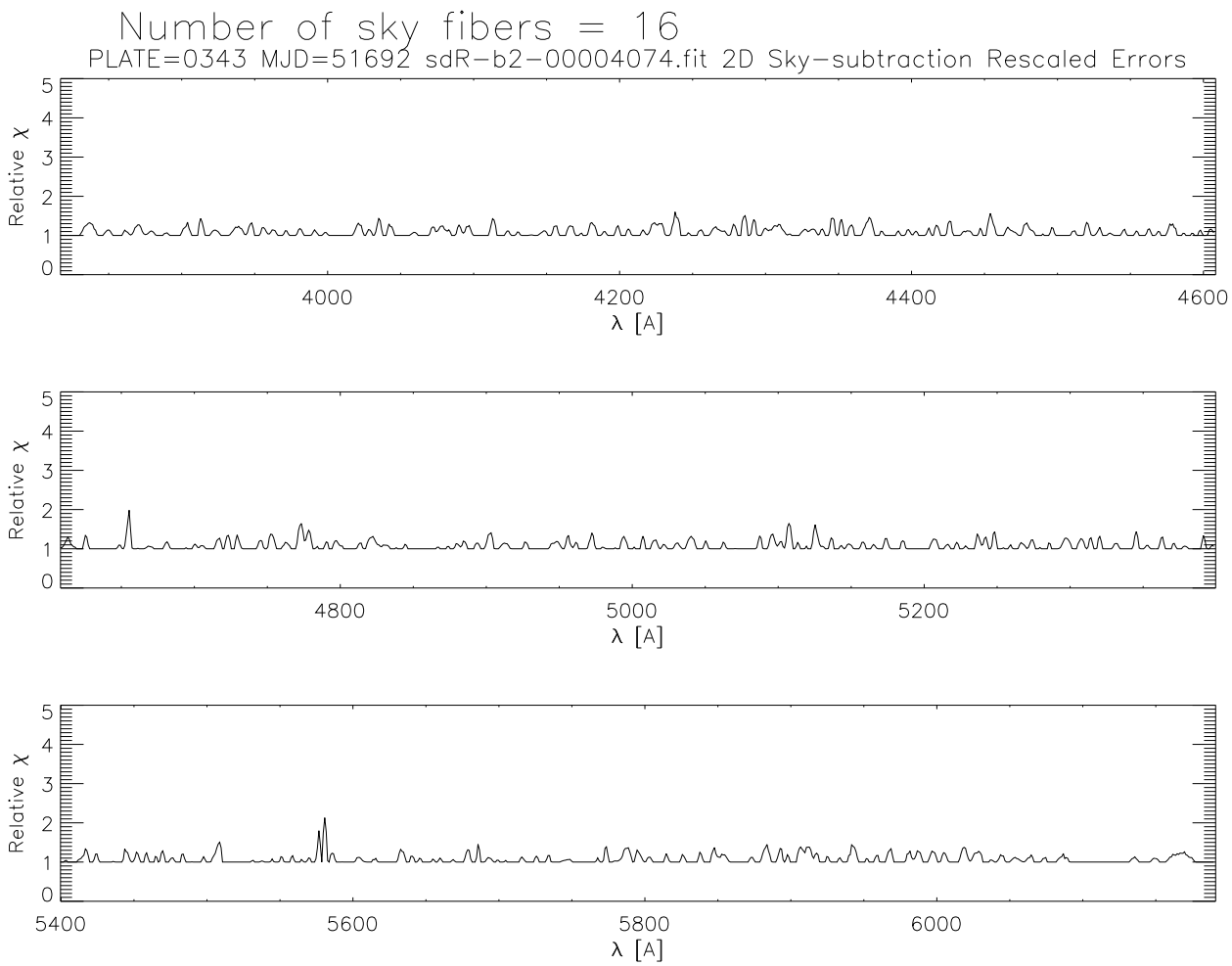

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
-1500
5570
5575
5580
5585
5590
λ [A]

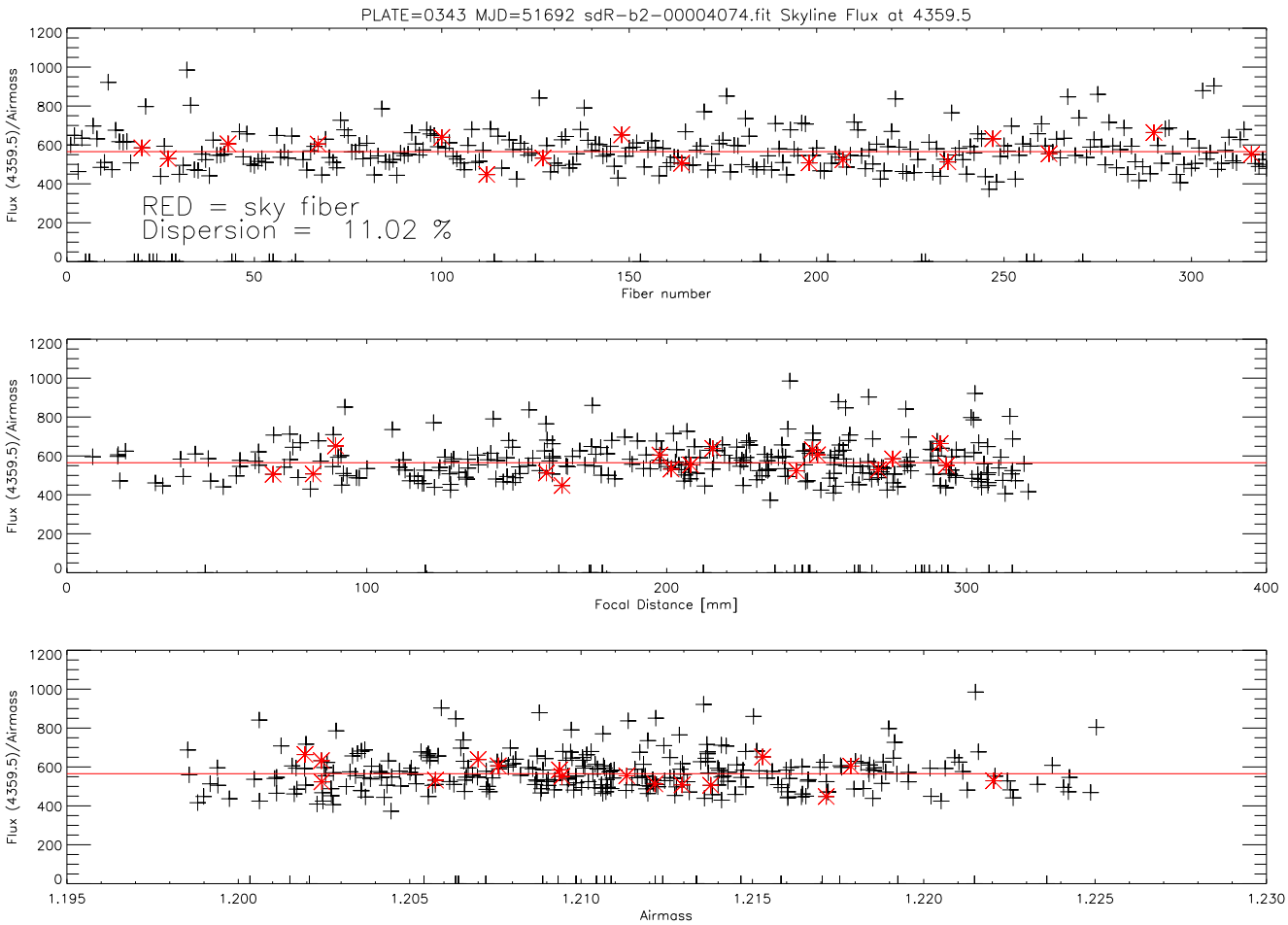

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004074.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

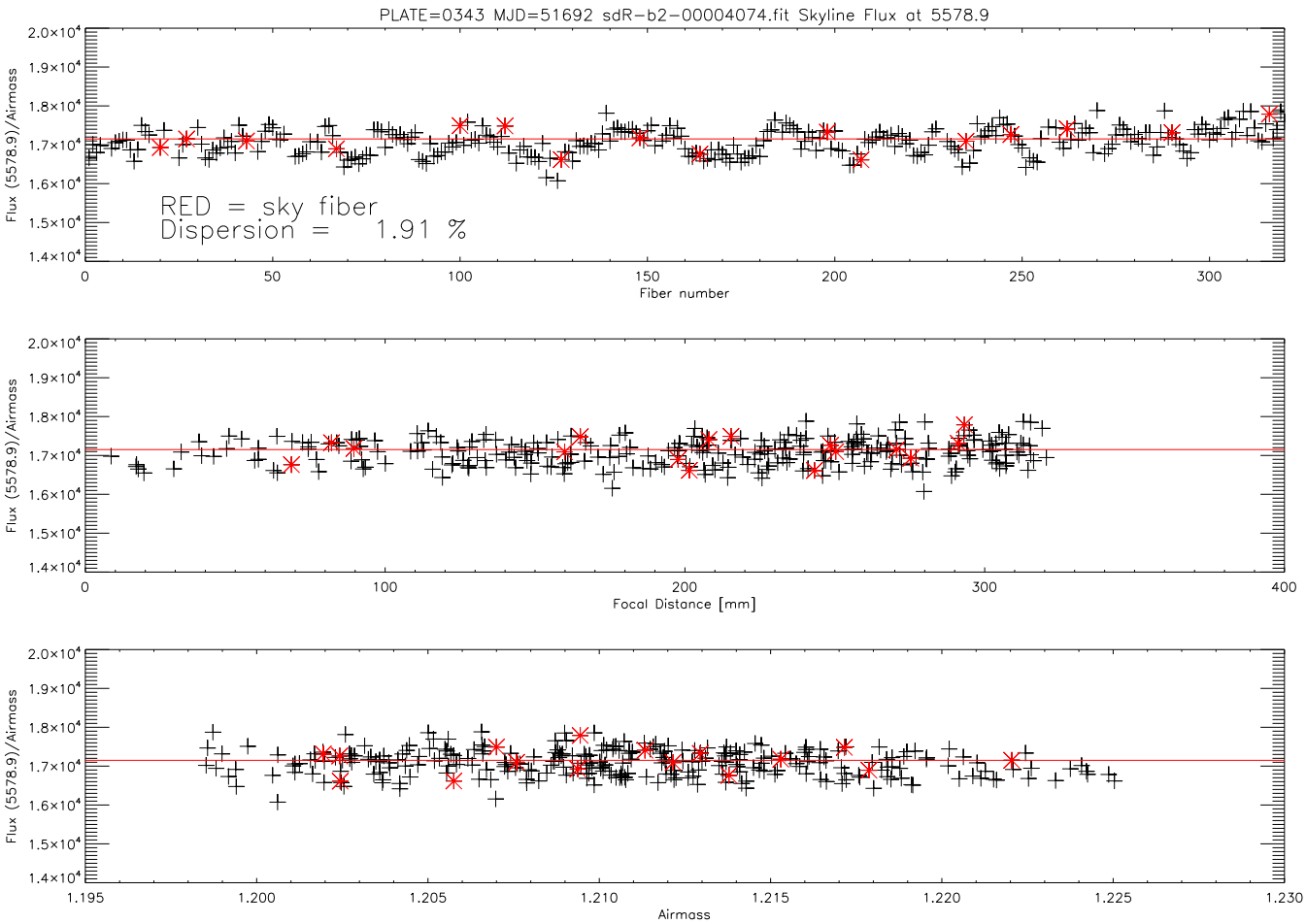

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

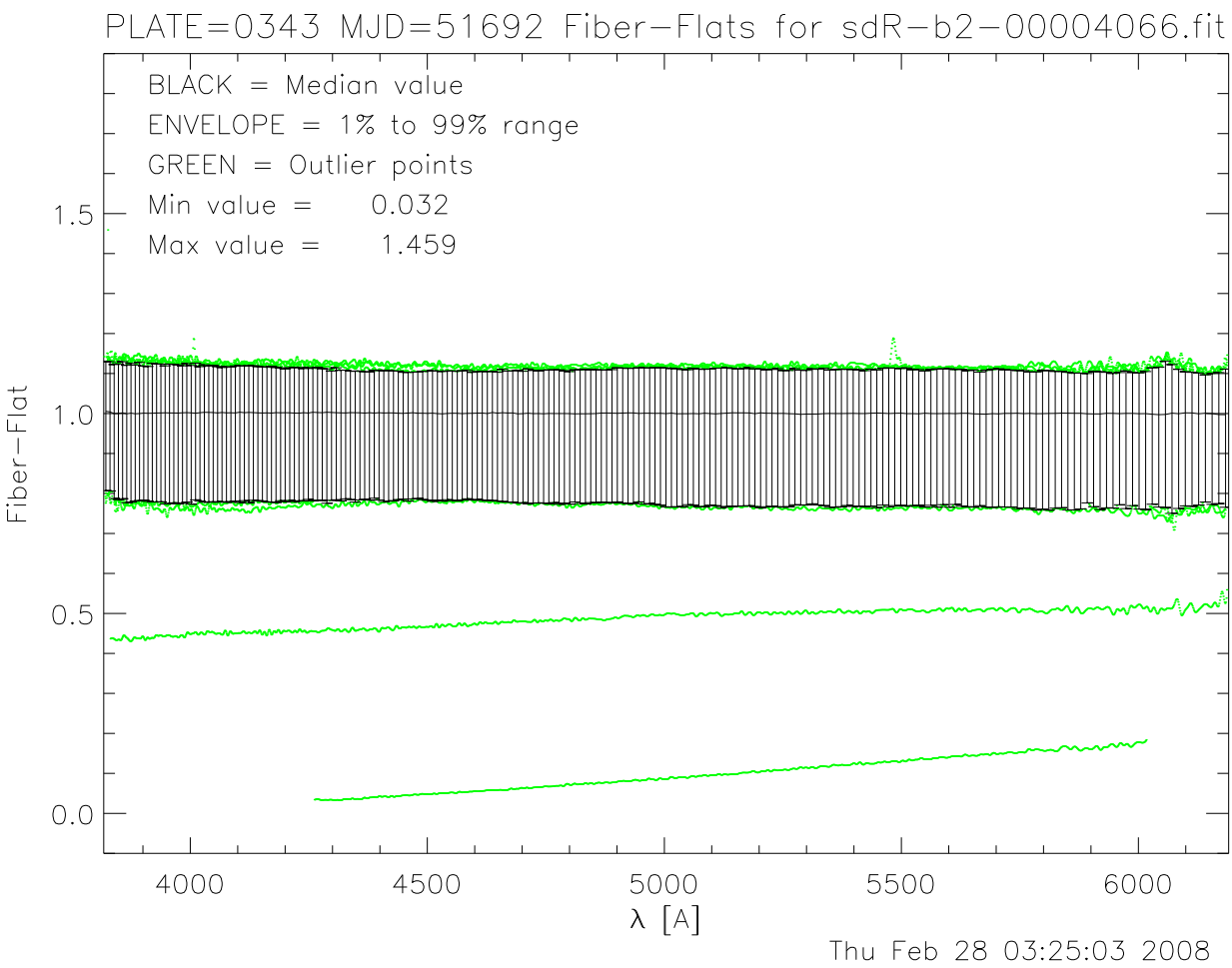

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

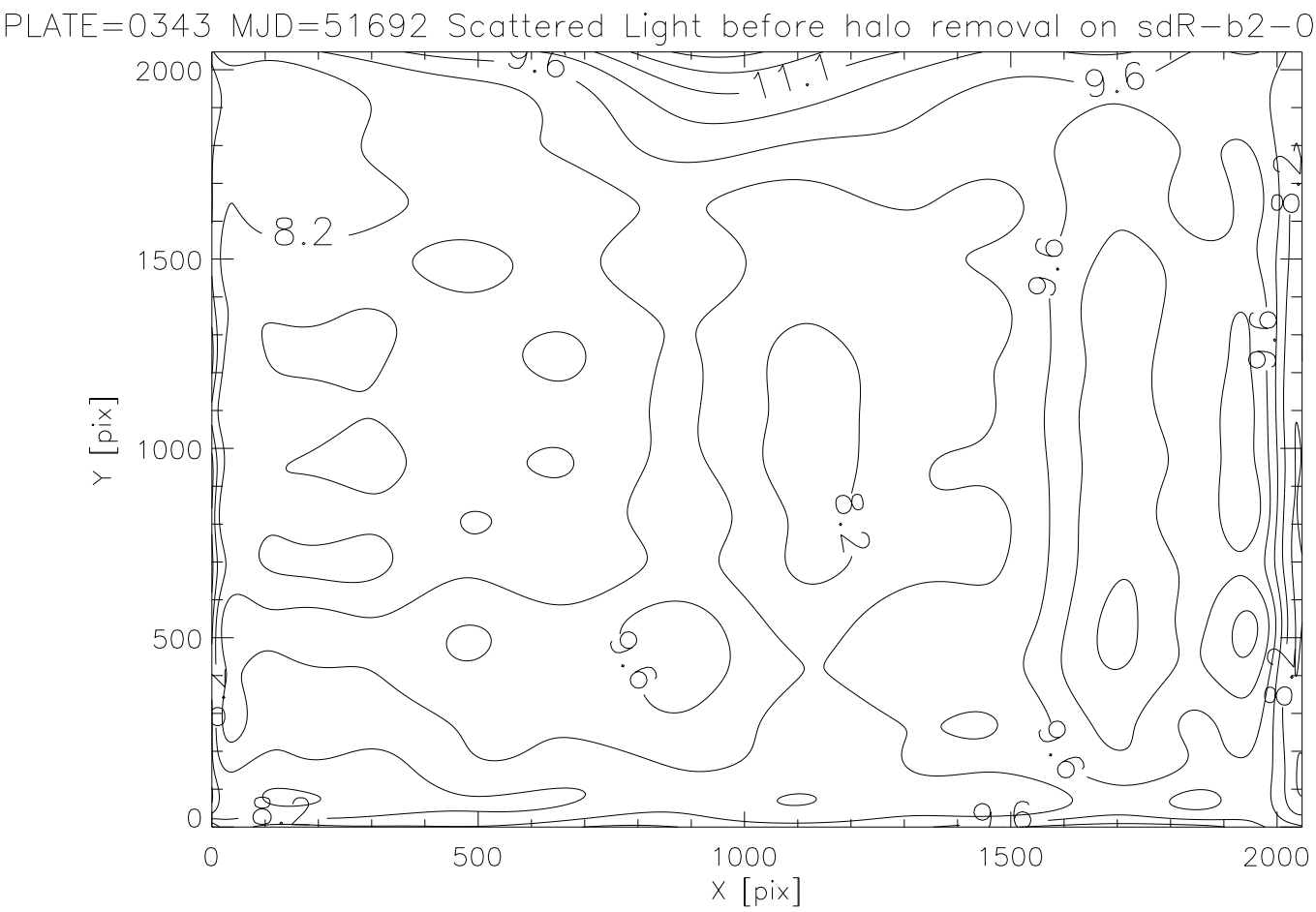

PLATE=0343 MJD=51692 sdR-b2-00004074.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

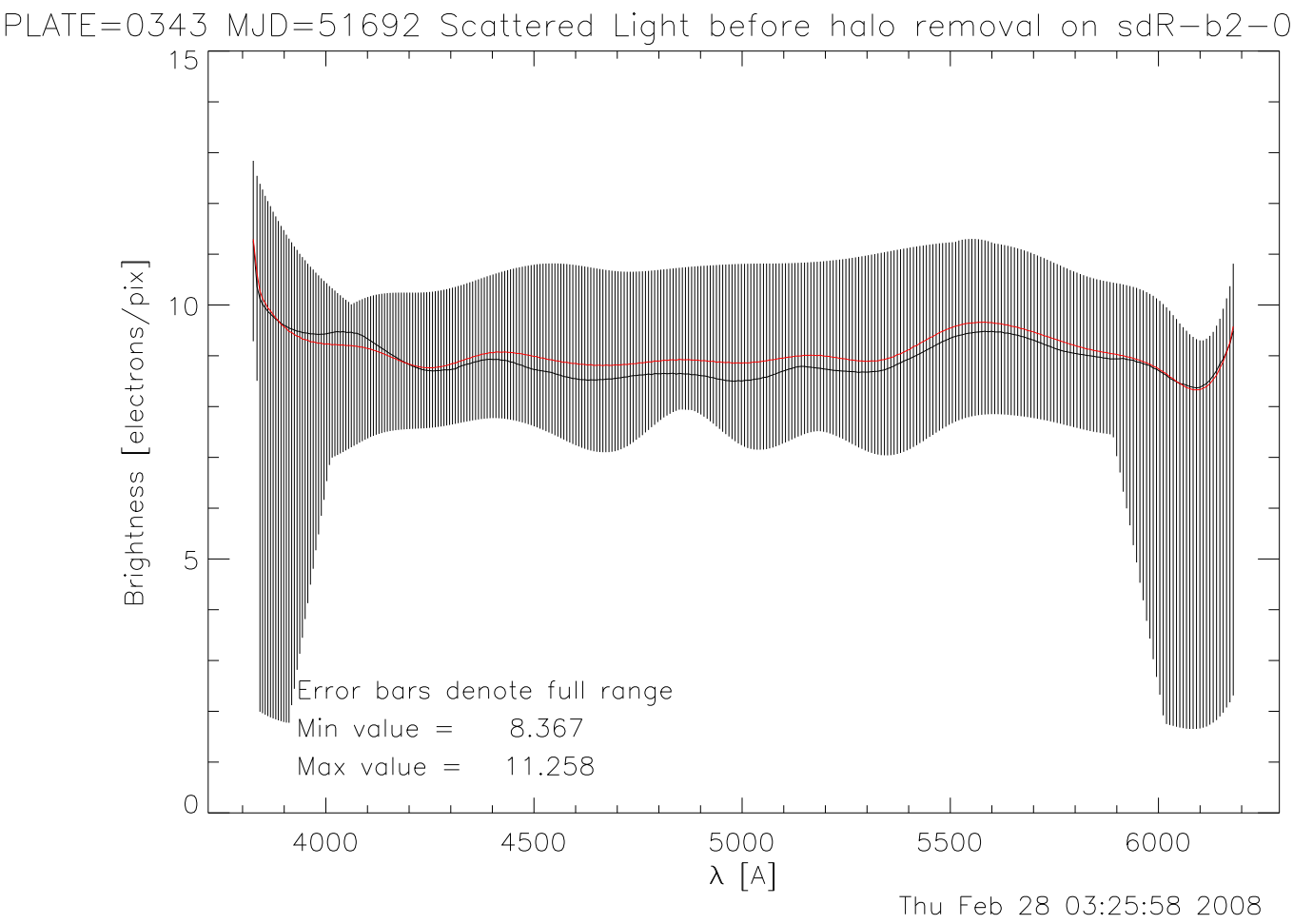

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004074.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

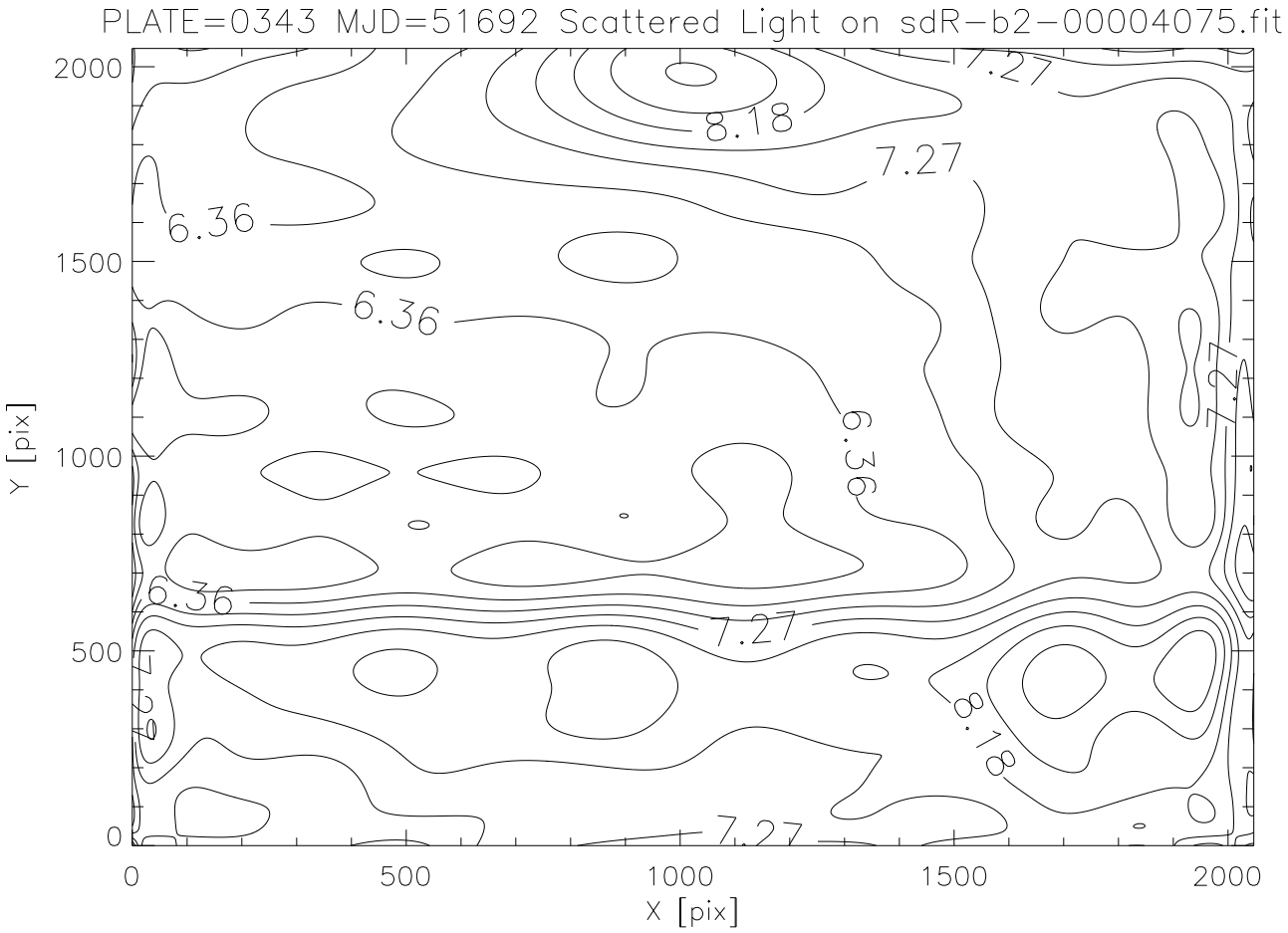

PLATE=0343 MJD=51692 sdR-b2-00004074.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.02 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

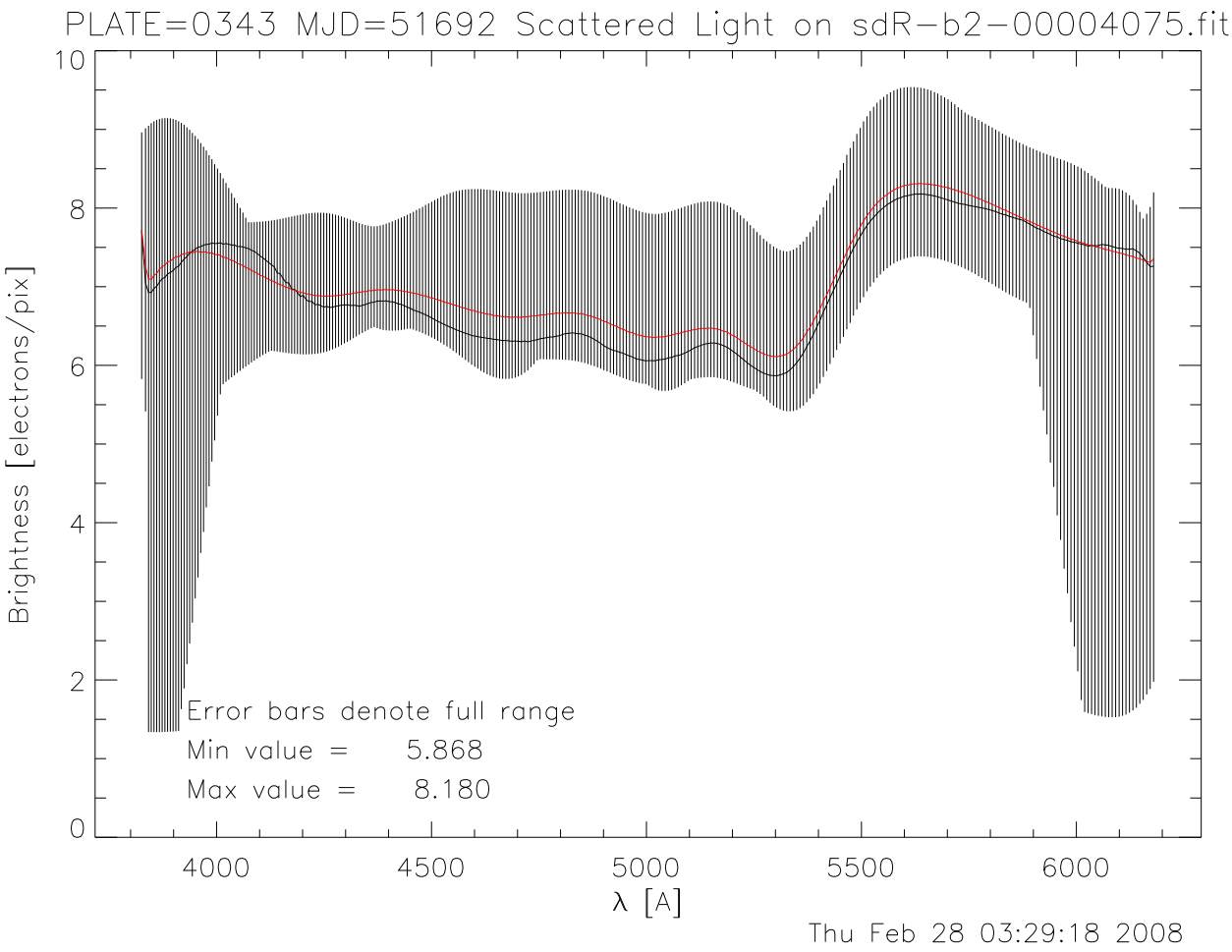

PLATE=0343 MJD=51692 sdR-b2-00004074.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.91 %
Fiber number
Focal Distance [mm]
Airmass

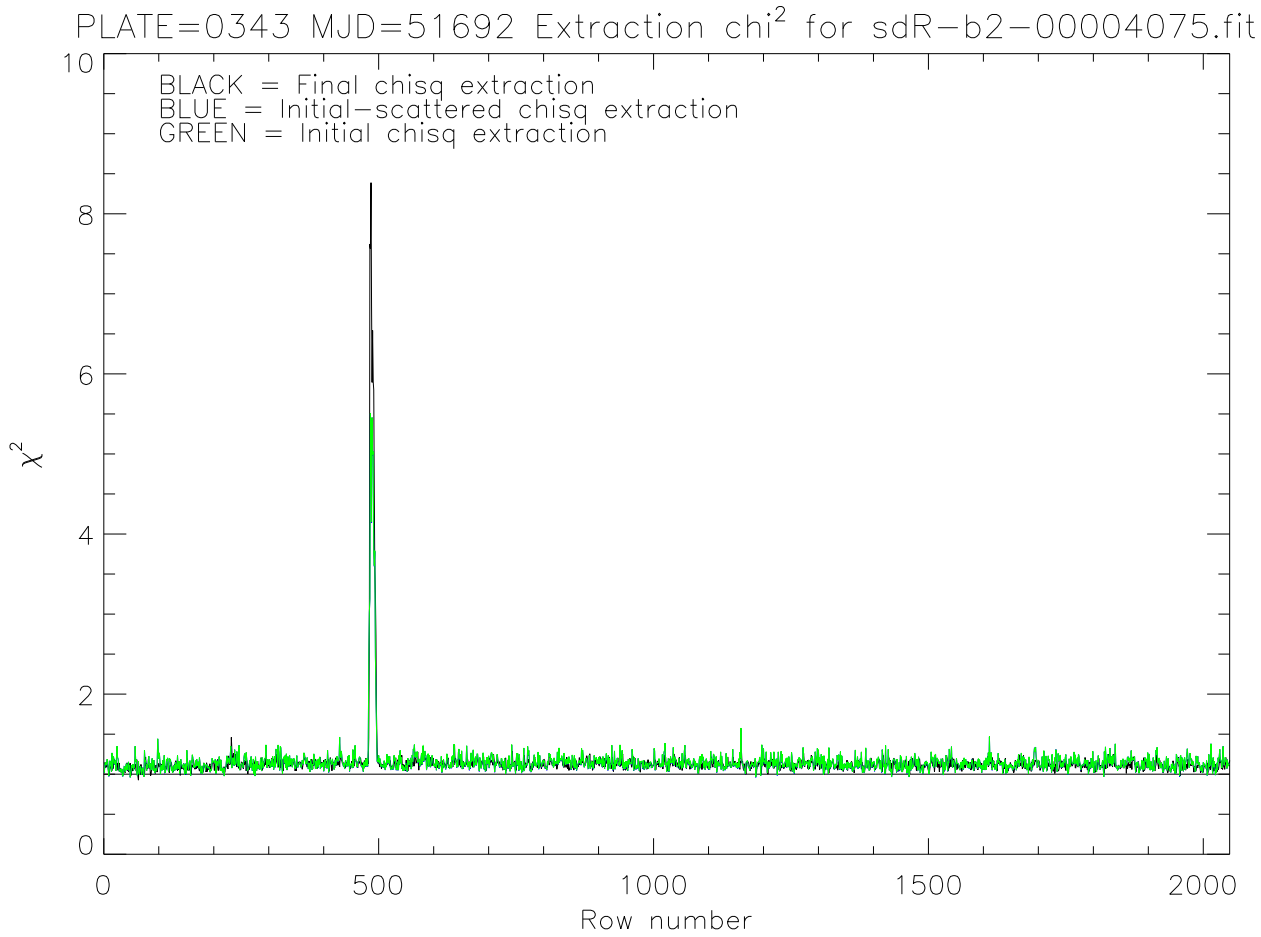

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:25:03 2008

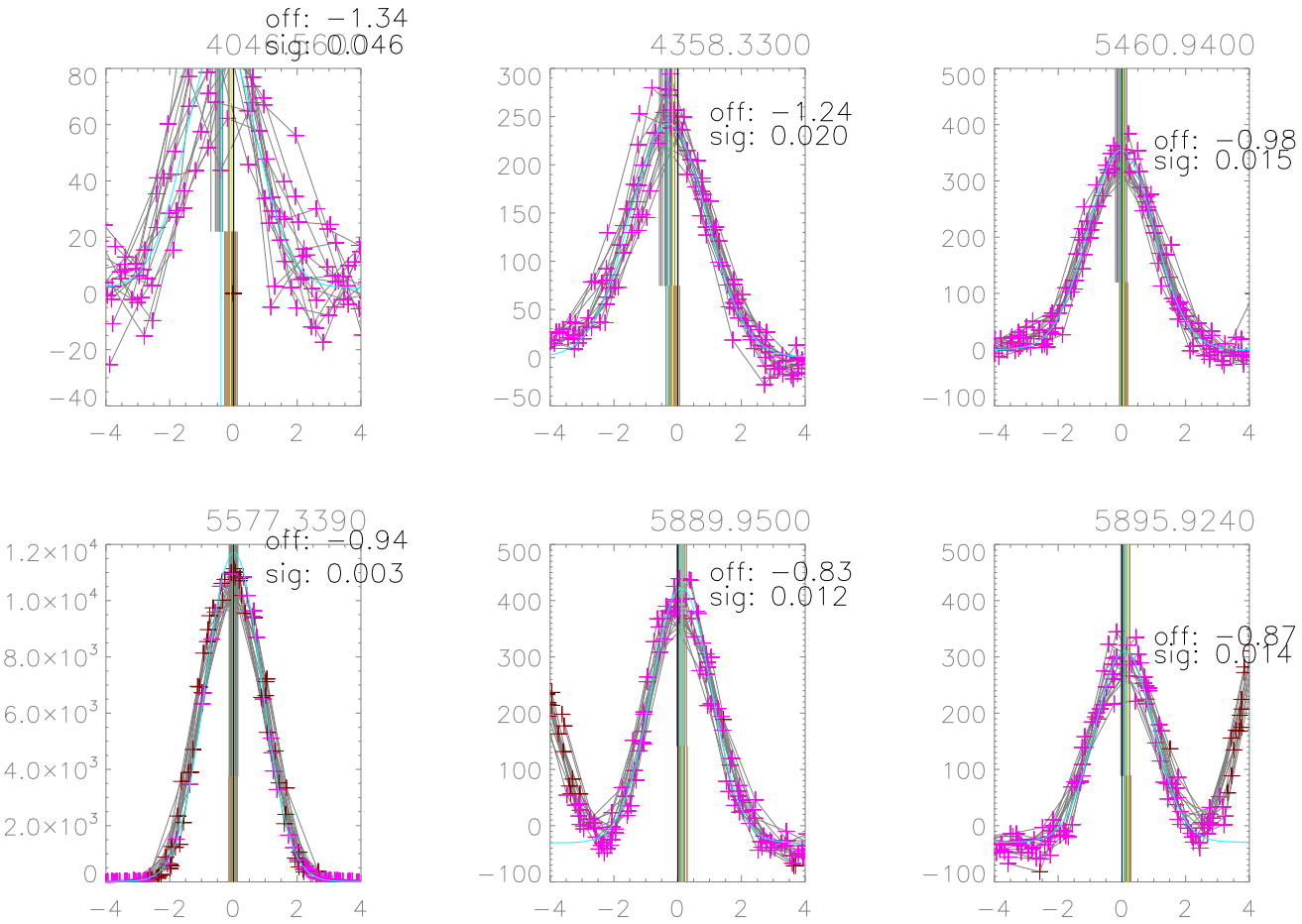

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004075.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
8.2
9.6
11.1

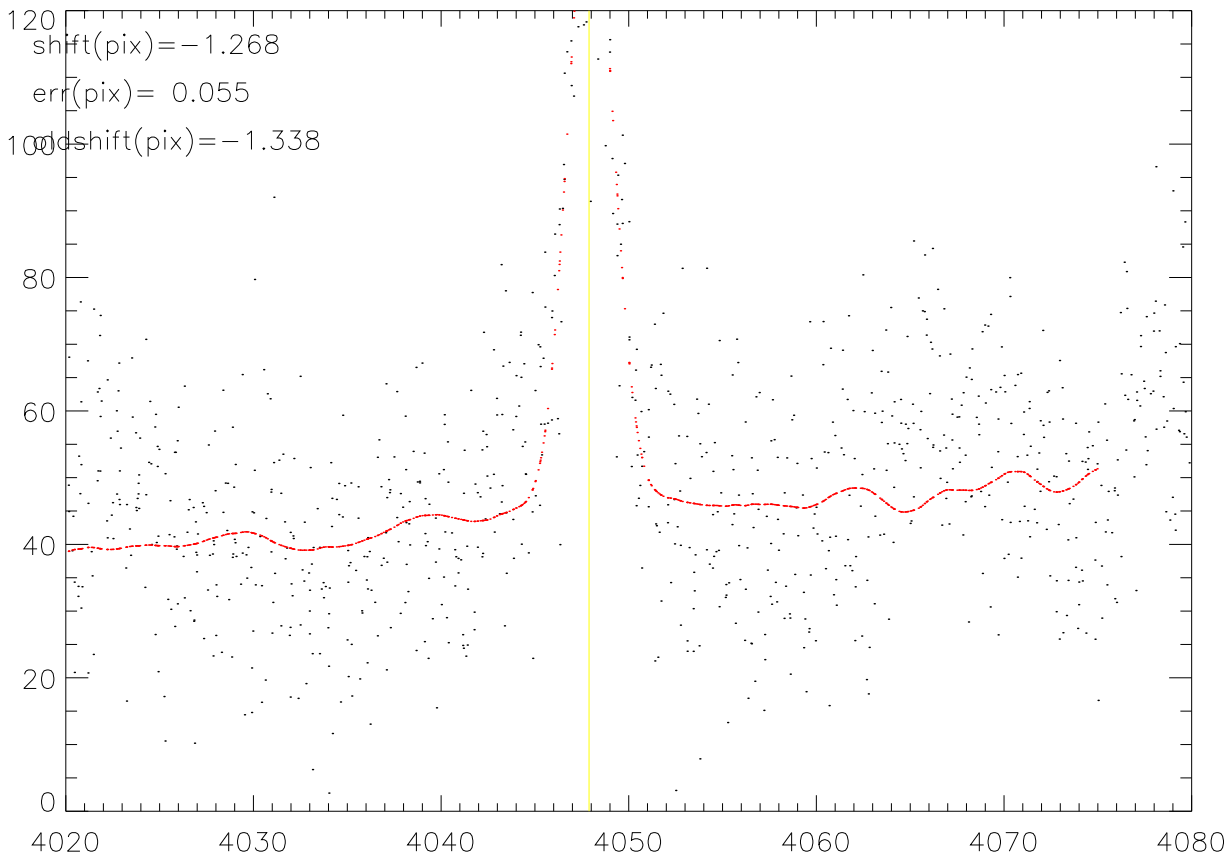

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004075.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.367
Max value = 11.258
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:25:58 2008

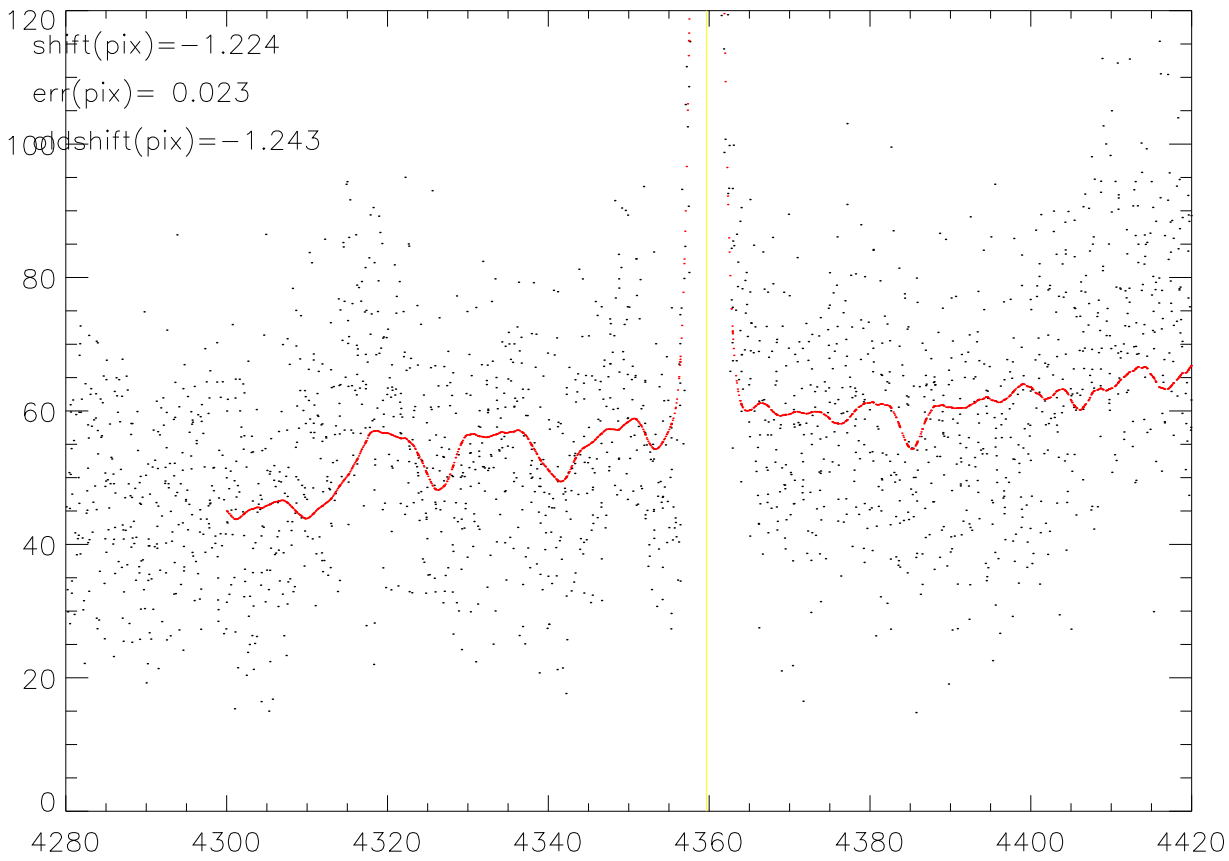

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004075.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
7.27
8.18

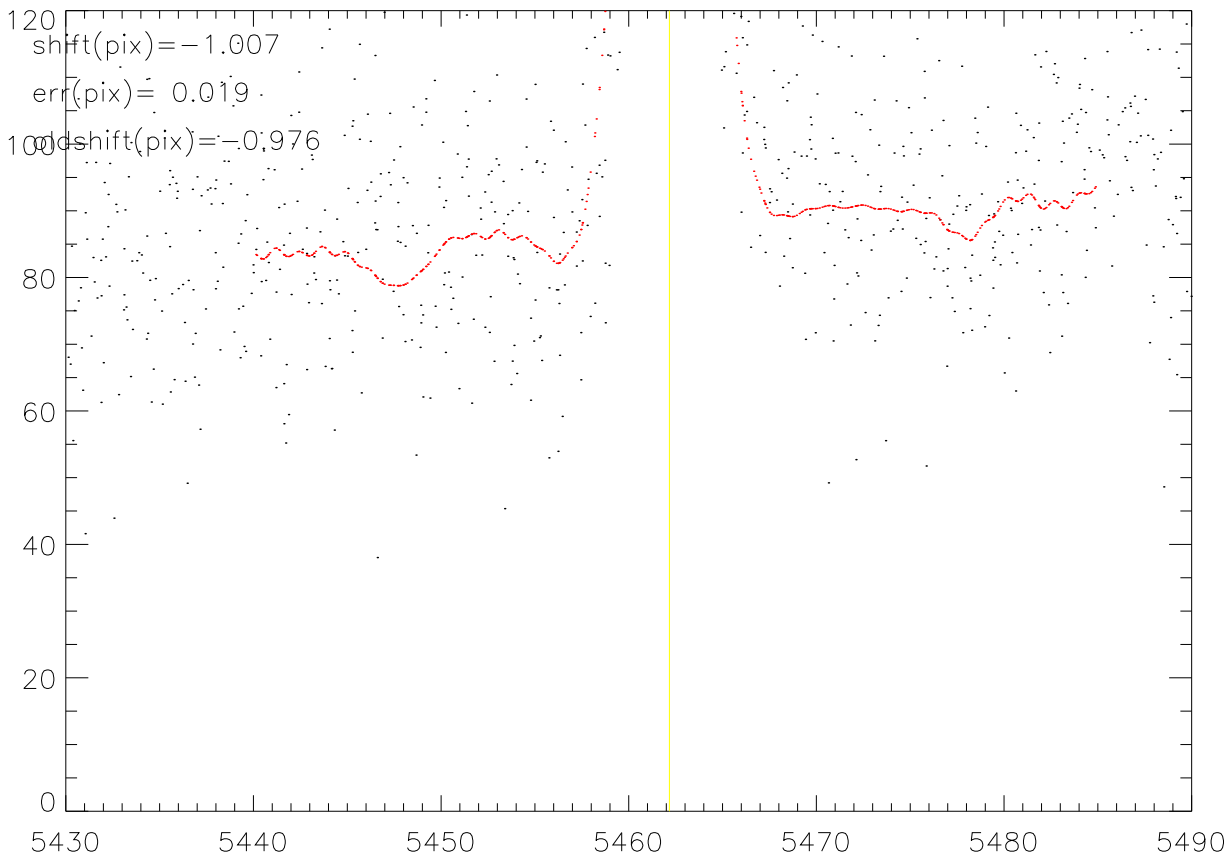

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004075.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.868
Max value = 8.180
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:29:18 2008

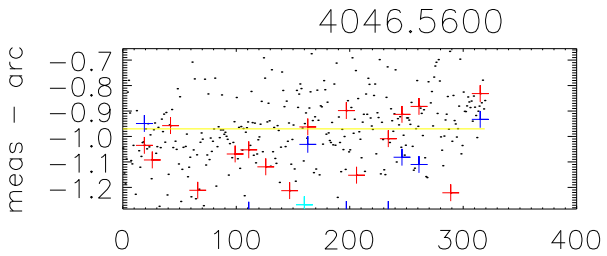

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004075.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

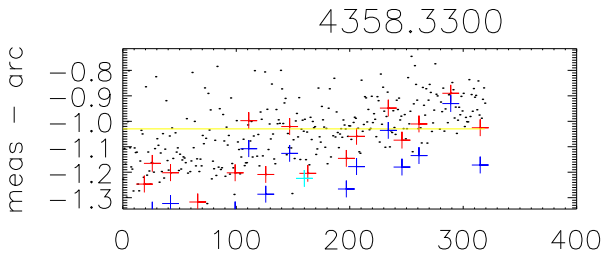

4046.5600
off: −1.34
sig: 0.046
4358.3300
off: −1.24
sig: 0.020
5460.9400
off: −0.98
sig: 0.015
5577.3390
off: −0.94
sig: 0.003
5889.9500
off: −0.83
sig: 0.012
5895.9240
off: −0.87
sig: 0.014

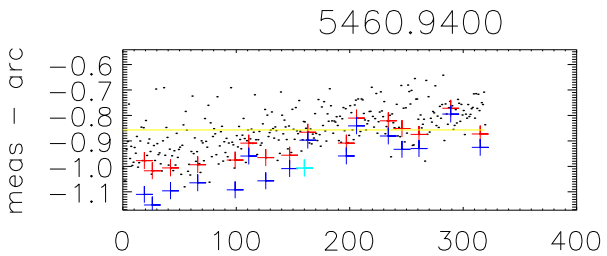

shift(pix)=−1.268
err(pix)= 0.055
oldshift(pix)=−1.338
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

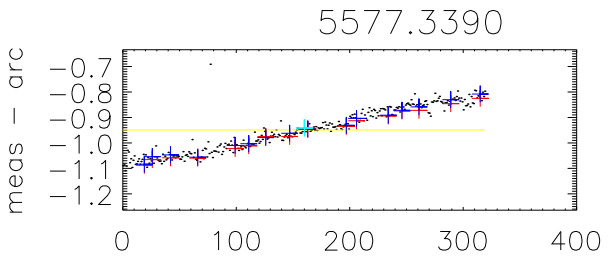

shift(pix)=−1.224
err(pix)= 0.023
oldshift(pix)=−1.243
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

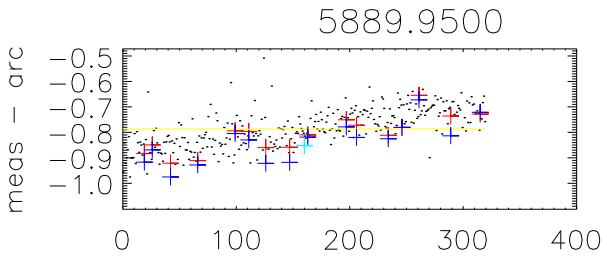

shift(pix)=−1.007
err(pix)= 0.019
oldshift(pix)=−0.976
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

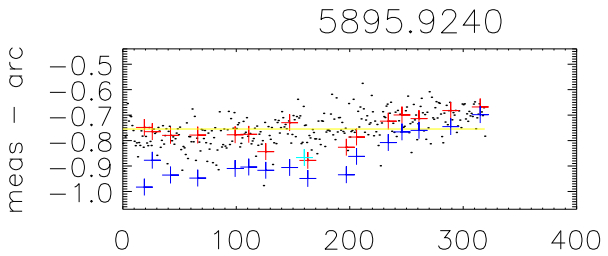

4046.5600
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

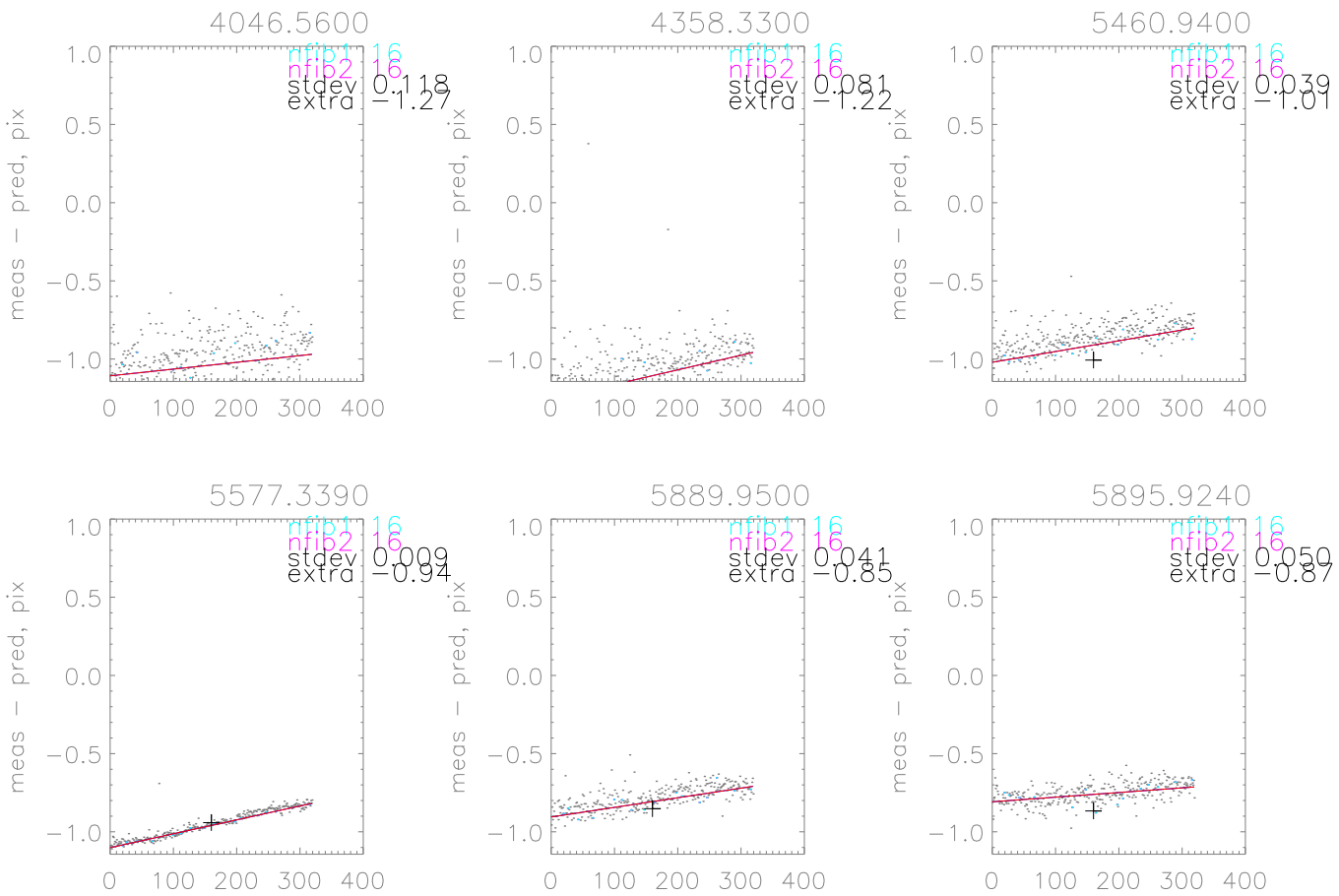

4358.3300
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

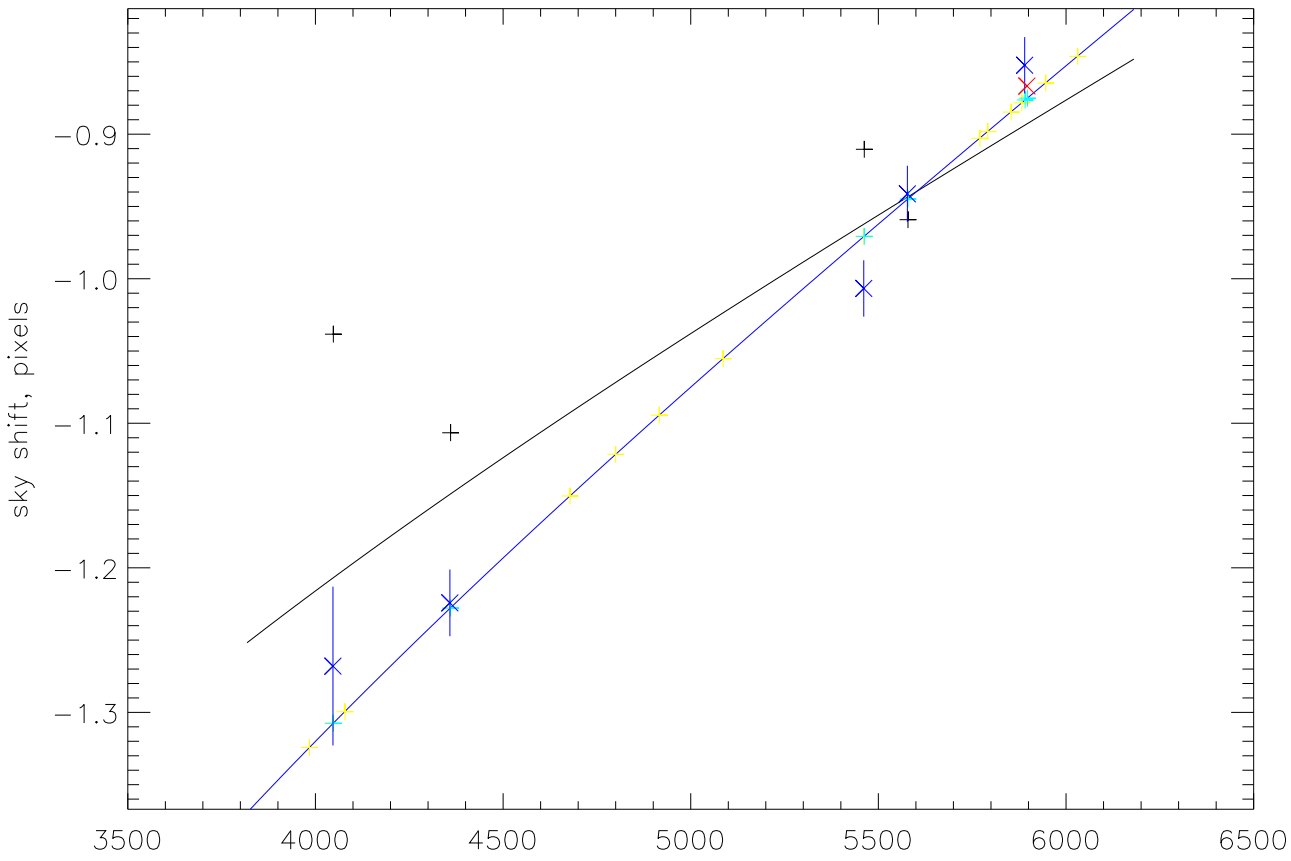

5460.9400
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

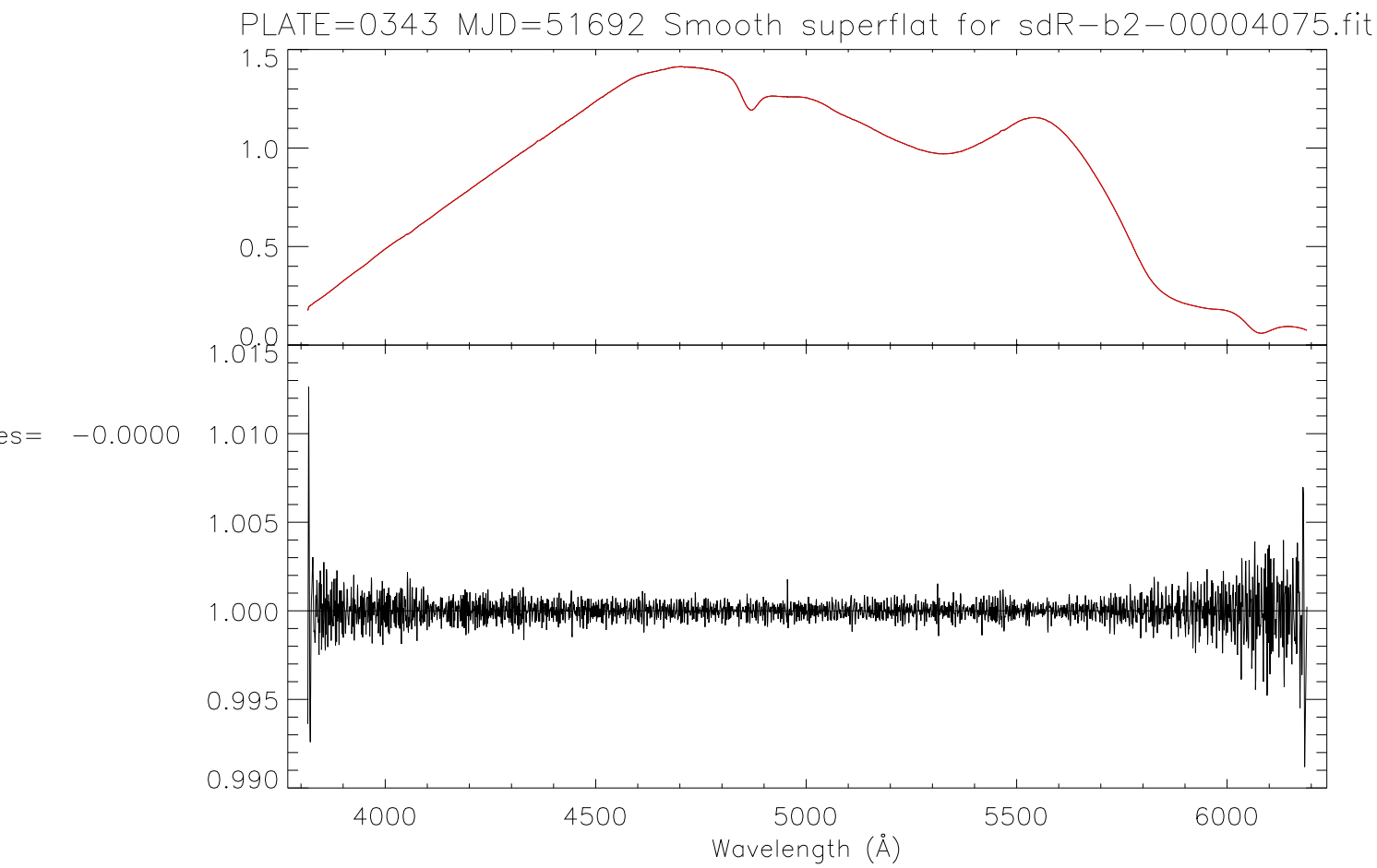

5577.3390
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400


5889.9500
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

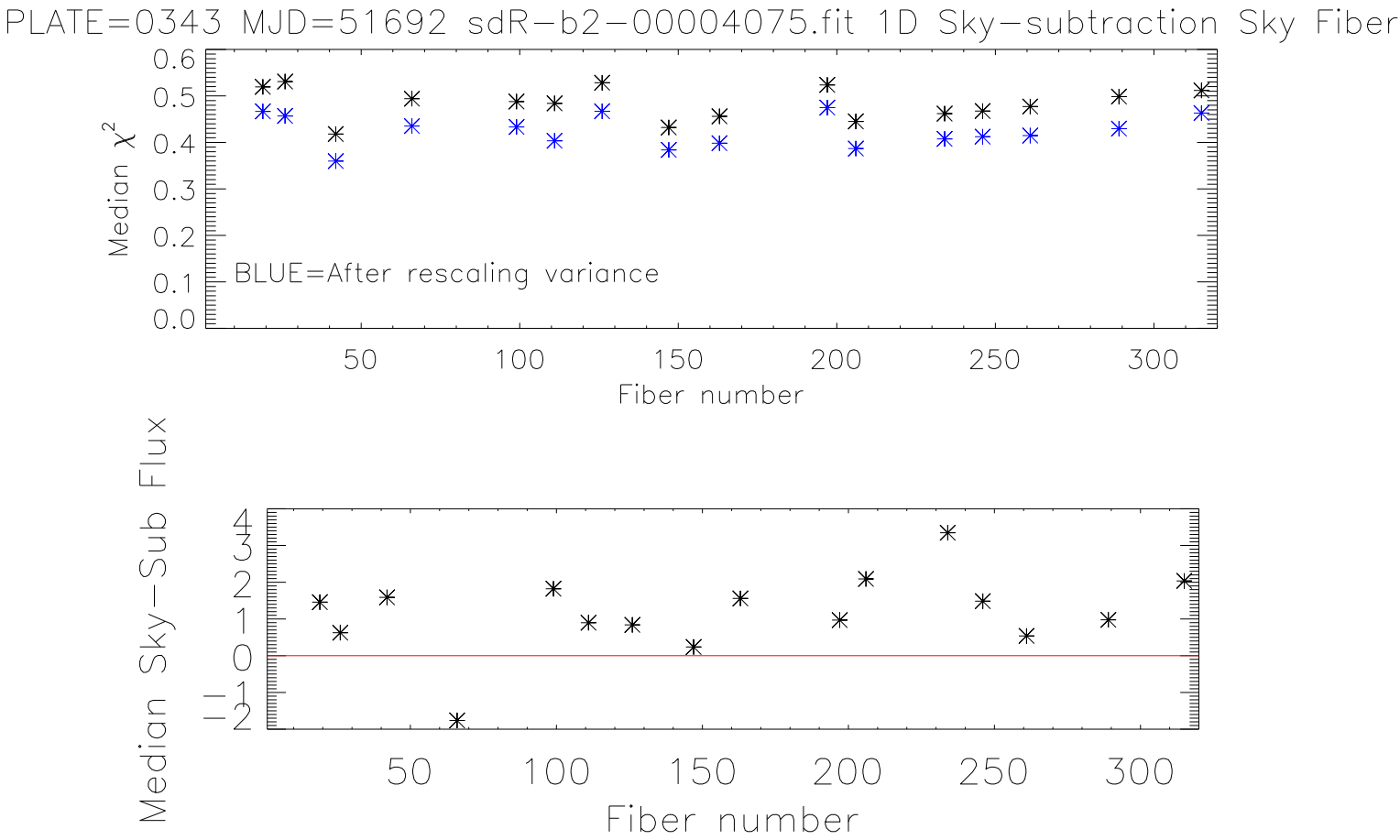

5895.9240
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

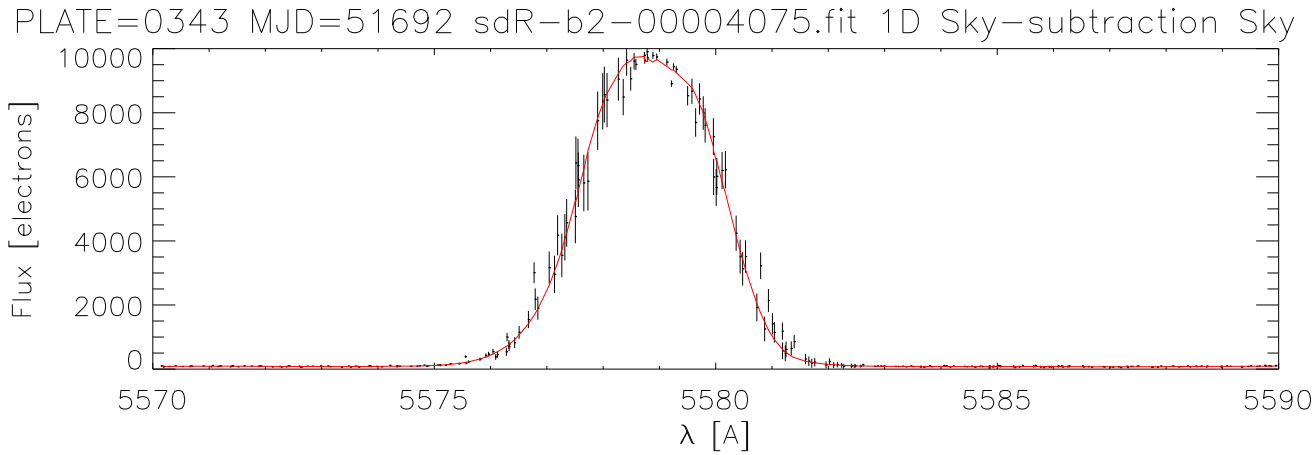

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
nfib1 16
nfib2 16
stdev 0.118
extra −1.27
stdev 0.081
extra −1.22
stdev 0.039
extra −1.01
stdev 0.009
extra −0.94
stdev 0.041
extra −0.85
stdev 0.050
extra −0.87
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

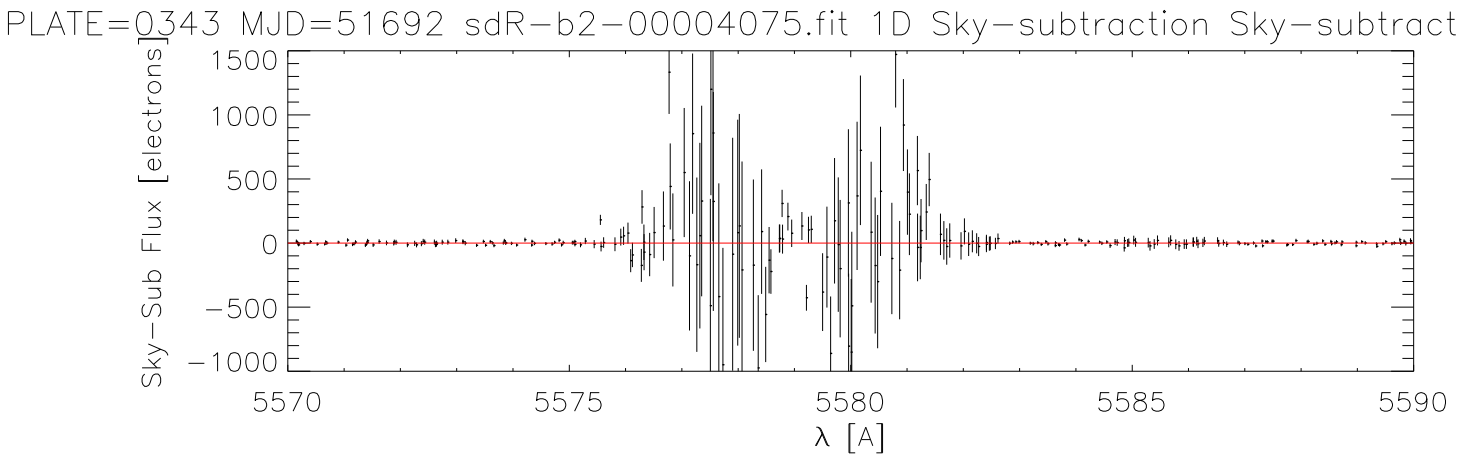

sky shift, pixels
−0.9
−1.0
−1.1
−1.2
−1.3
3500
4000
4500
5000
5500
6000
6500

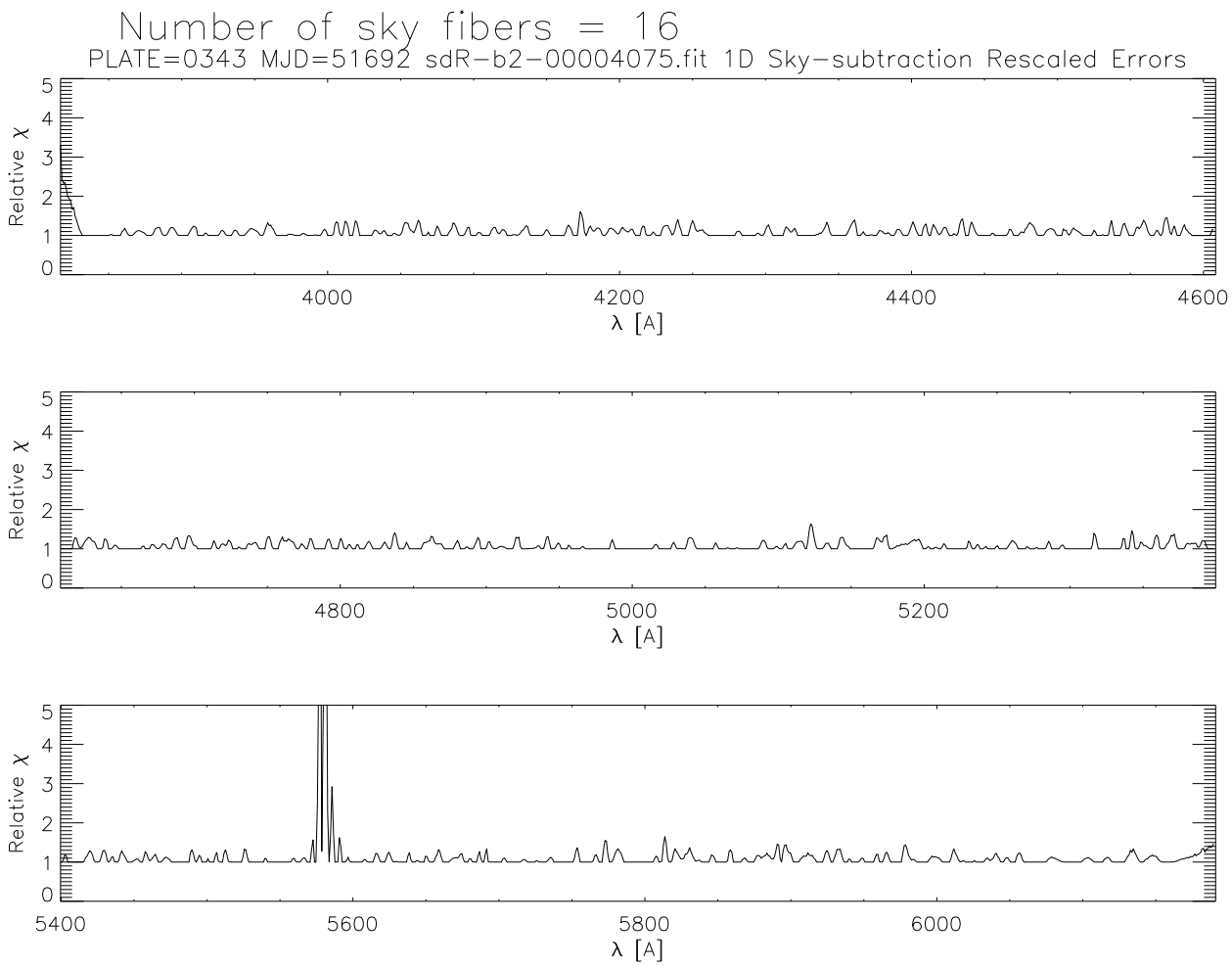

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004075.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

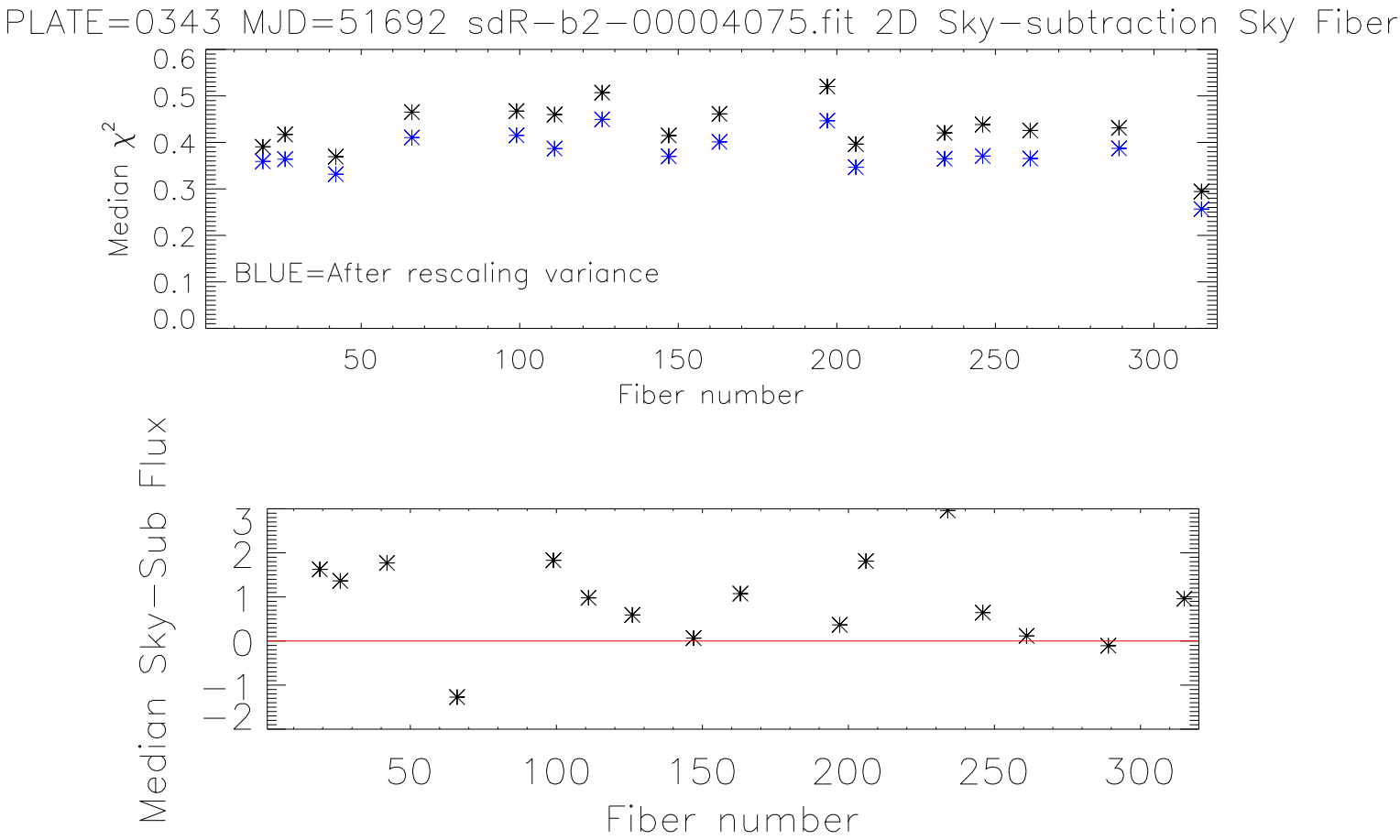
es= −0.0000

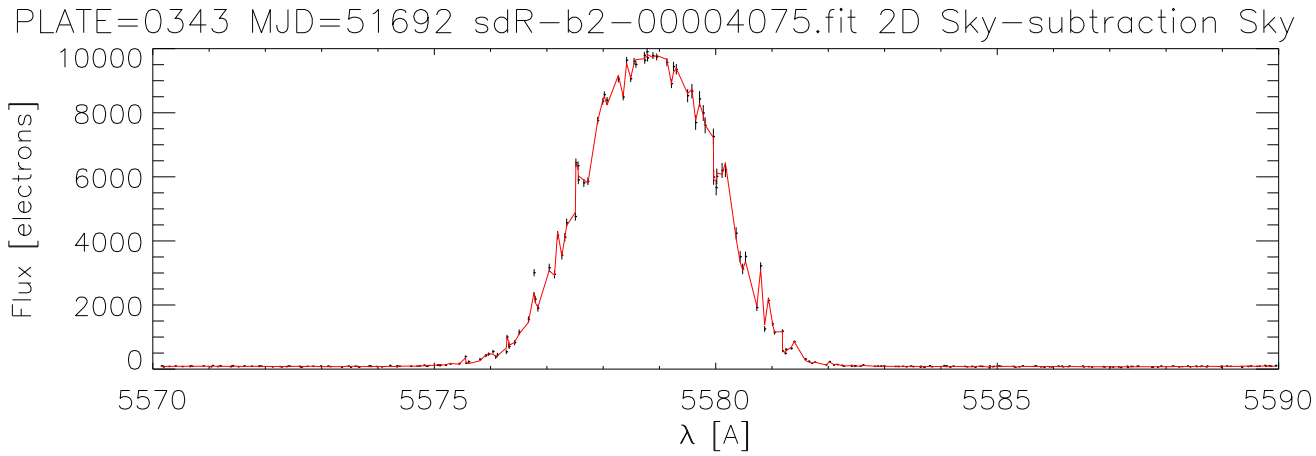

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

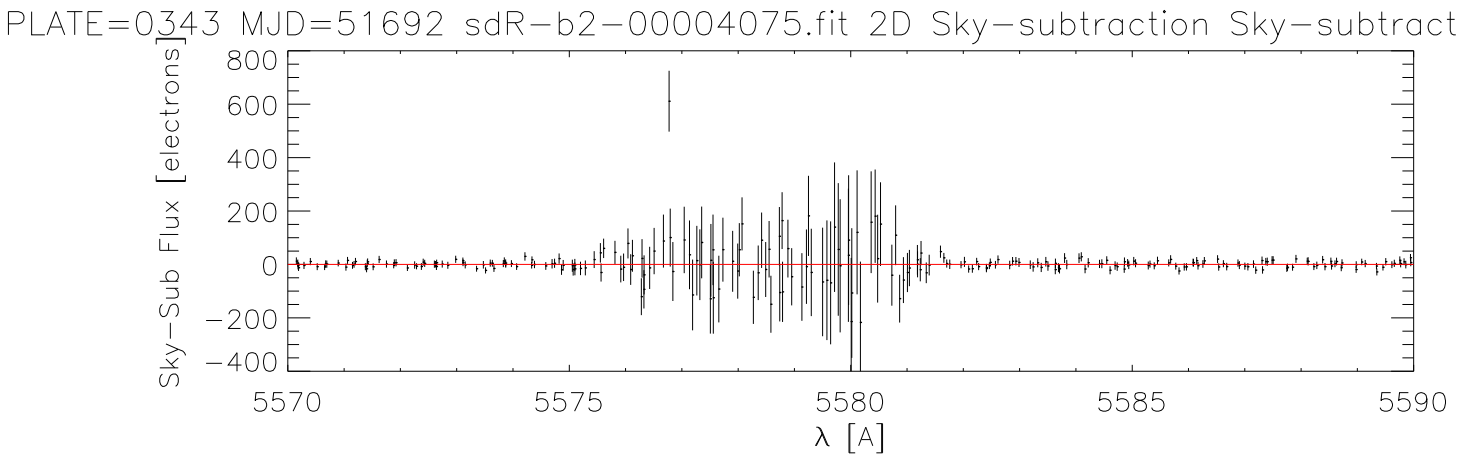

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

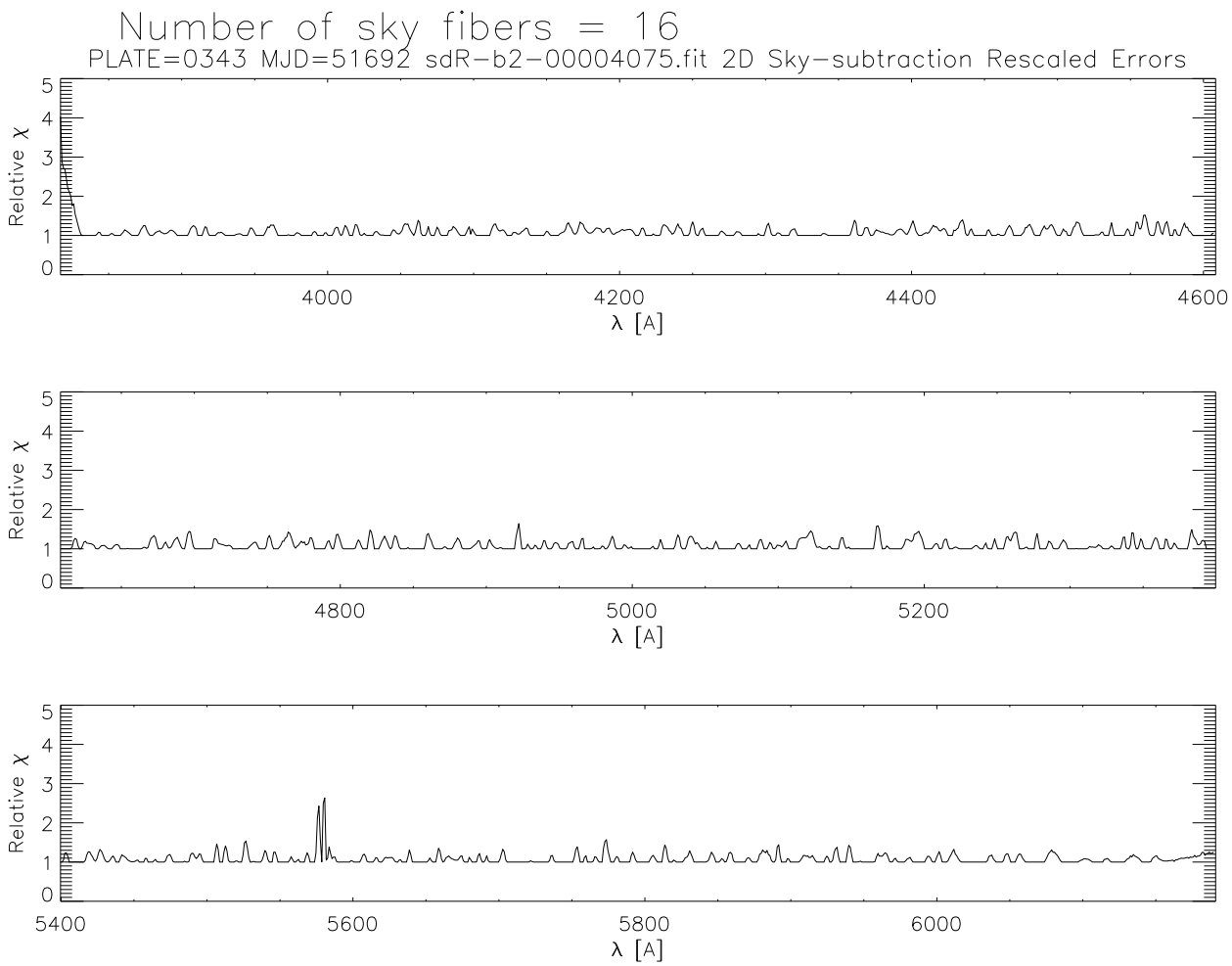

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

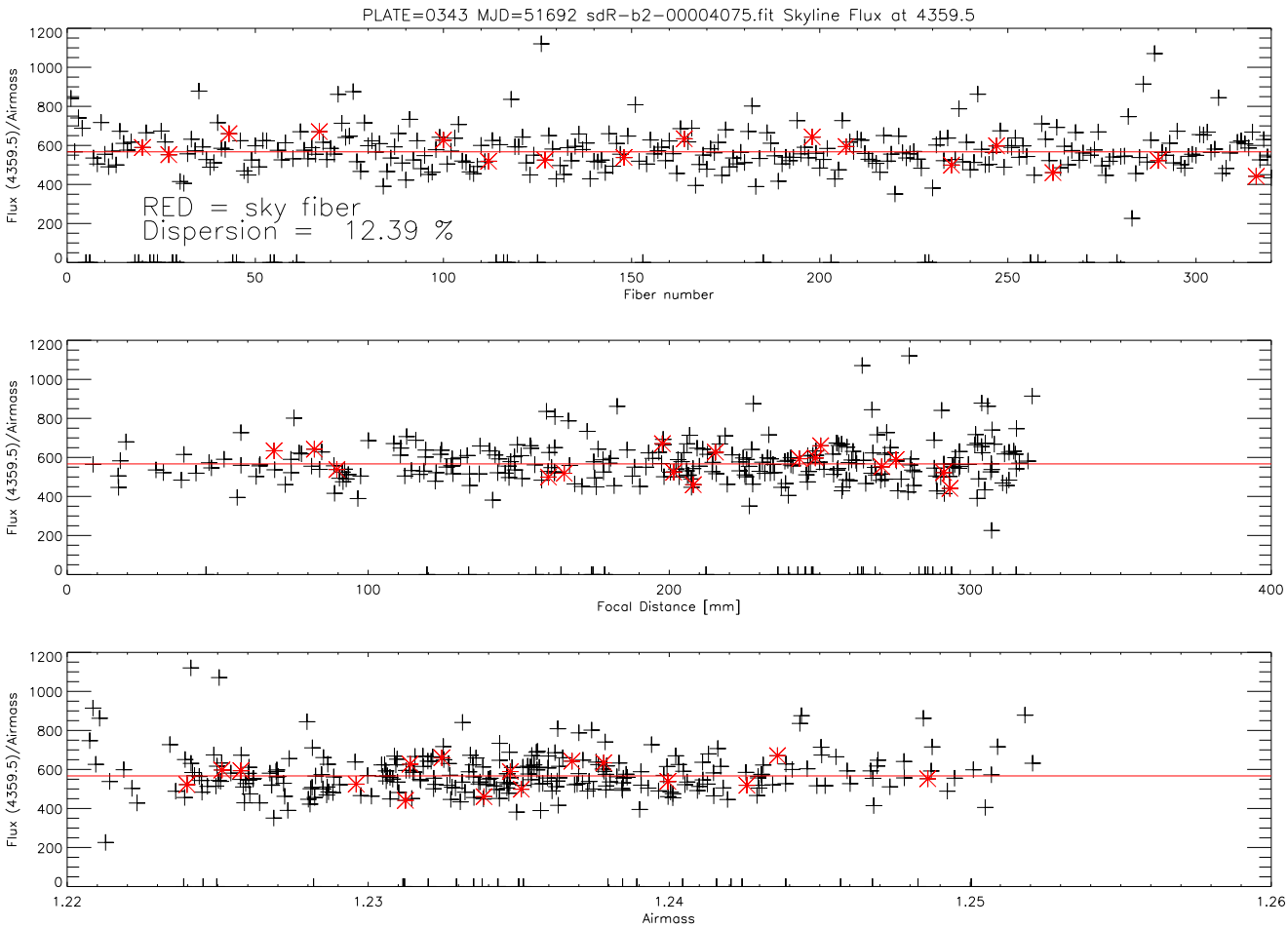

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004075.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

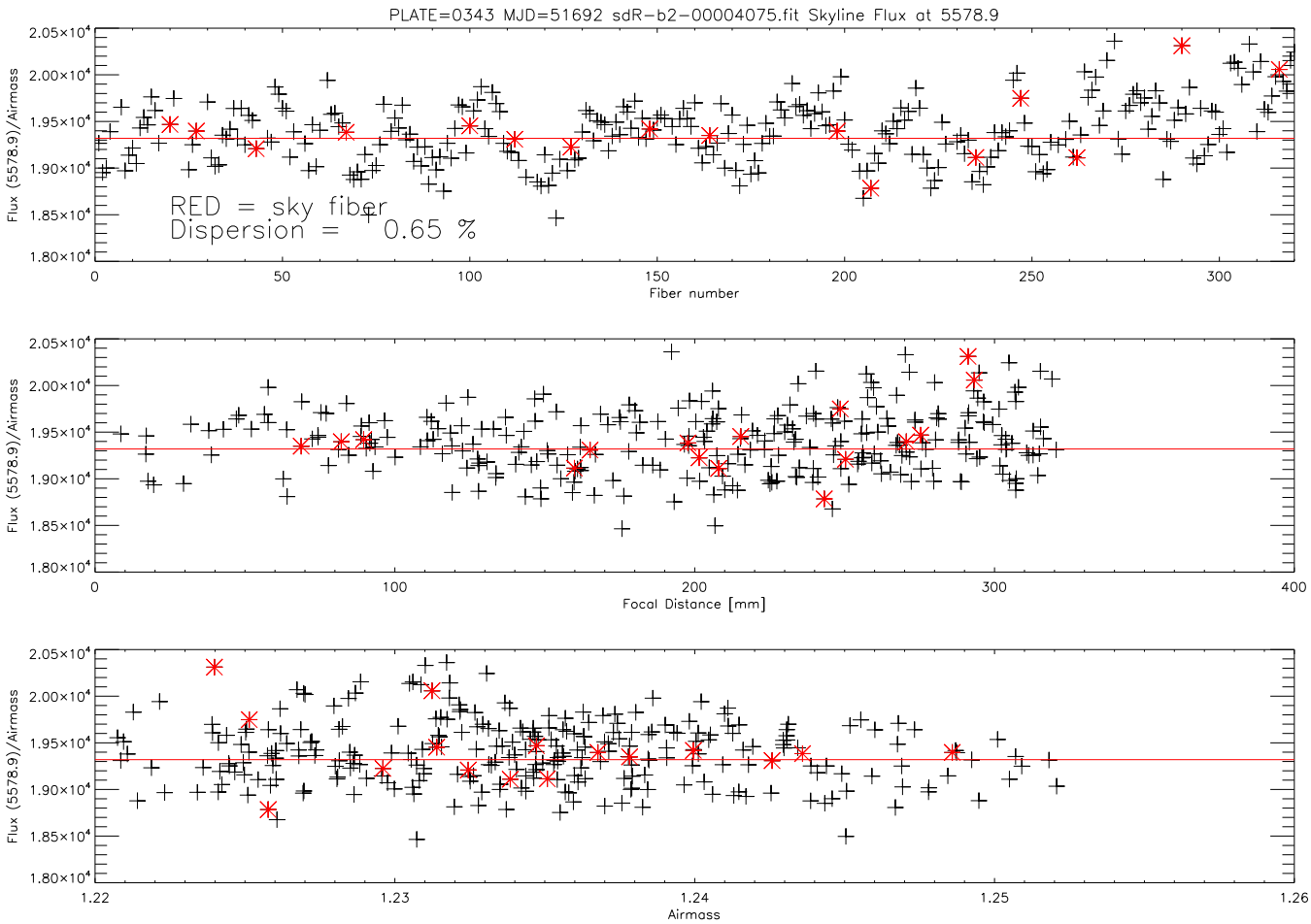

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

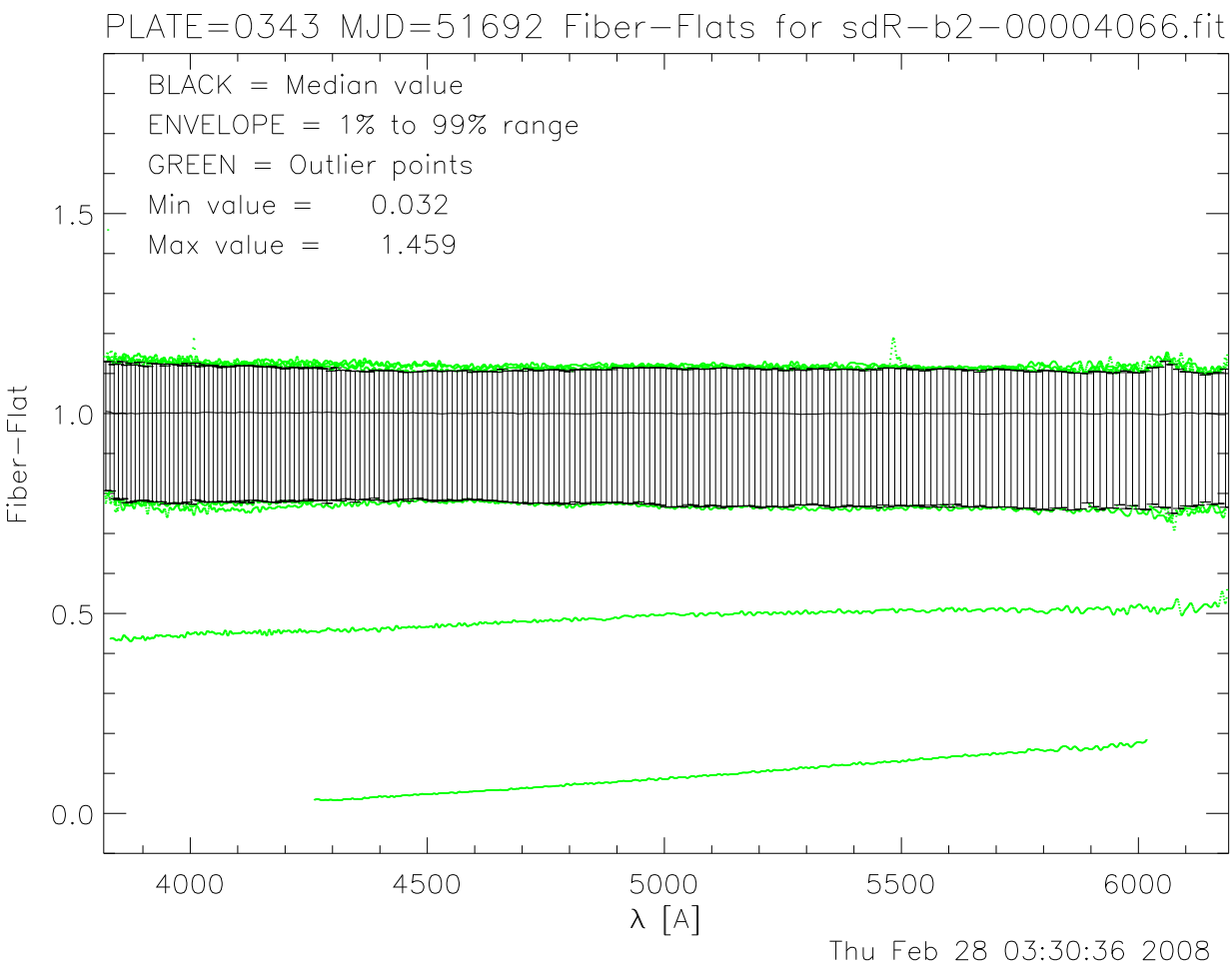

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

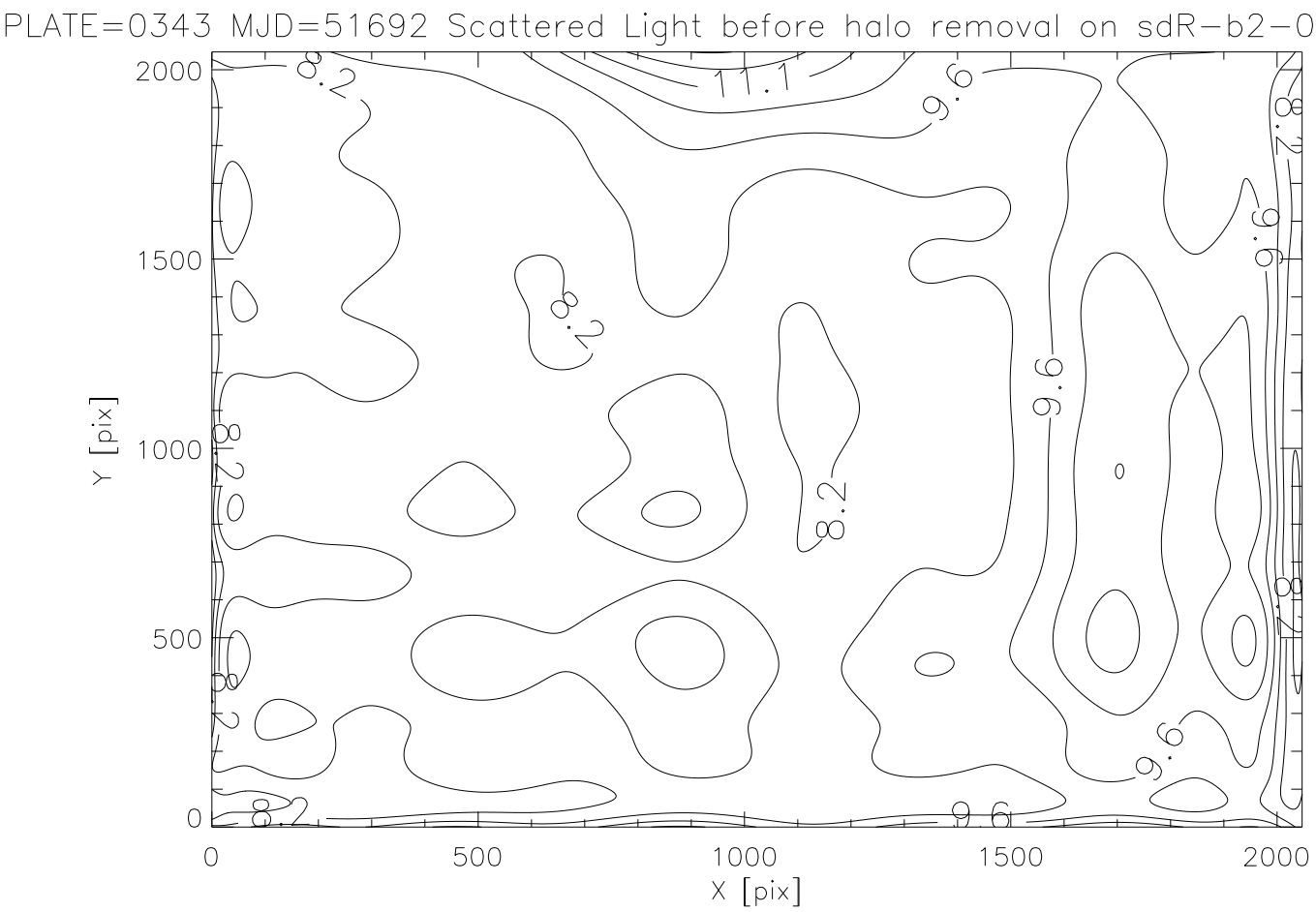

PLATE=0343 MJD=51692 sdR-b2-00004075.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

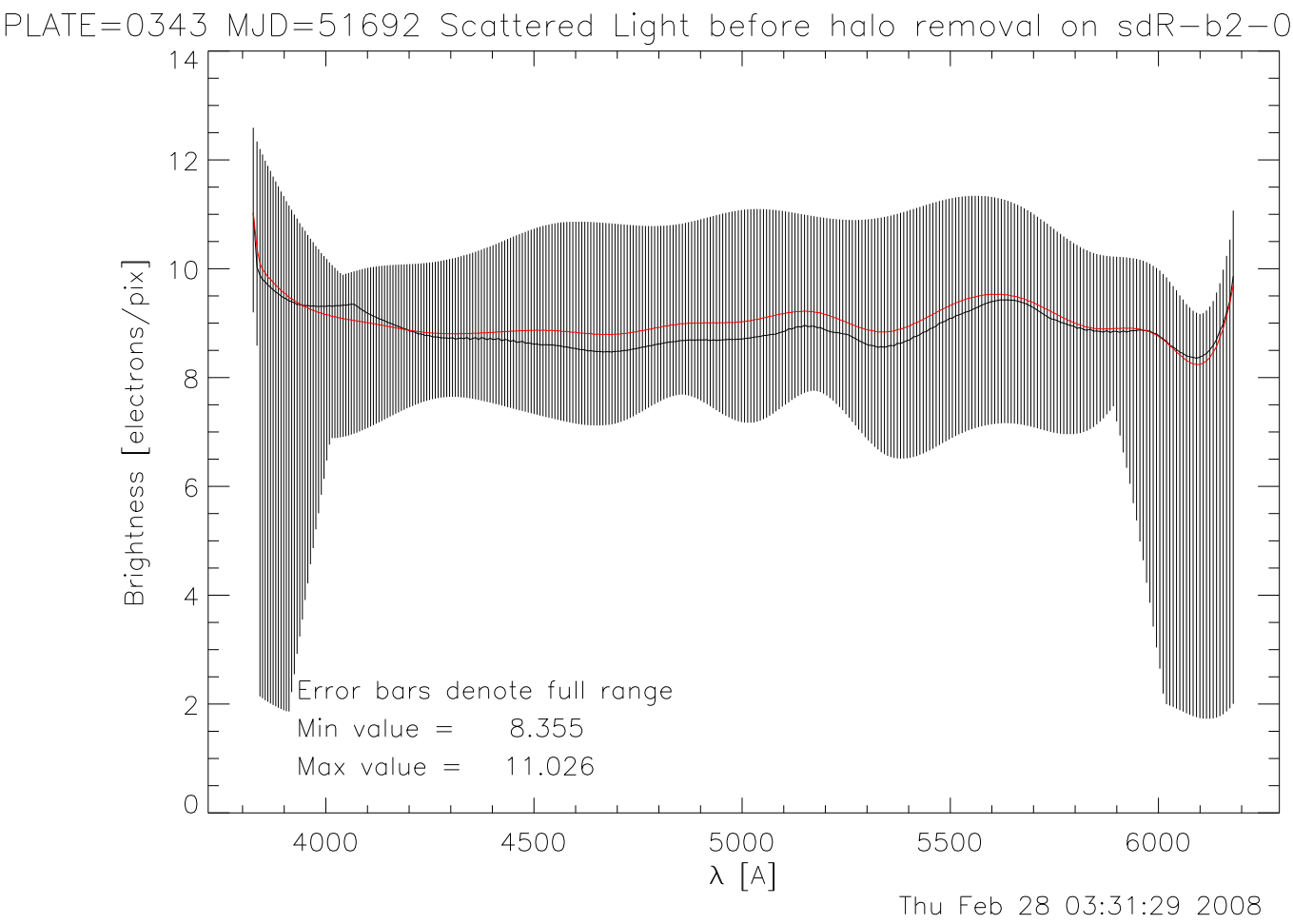

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004075.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

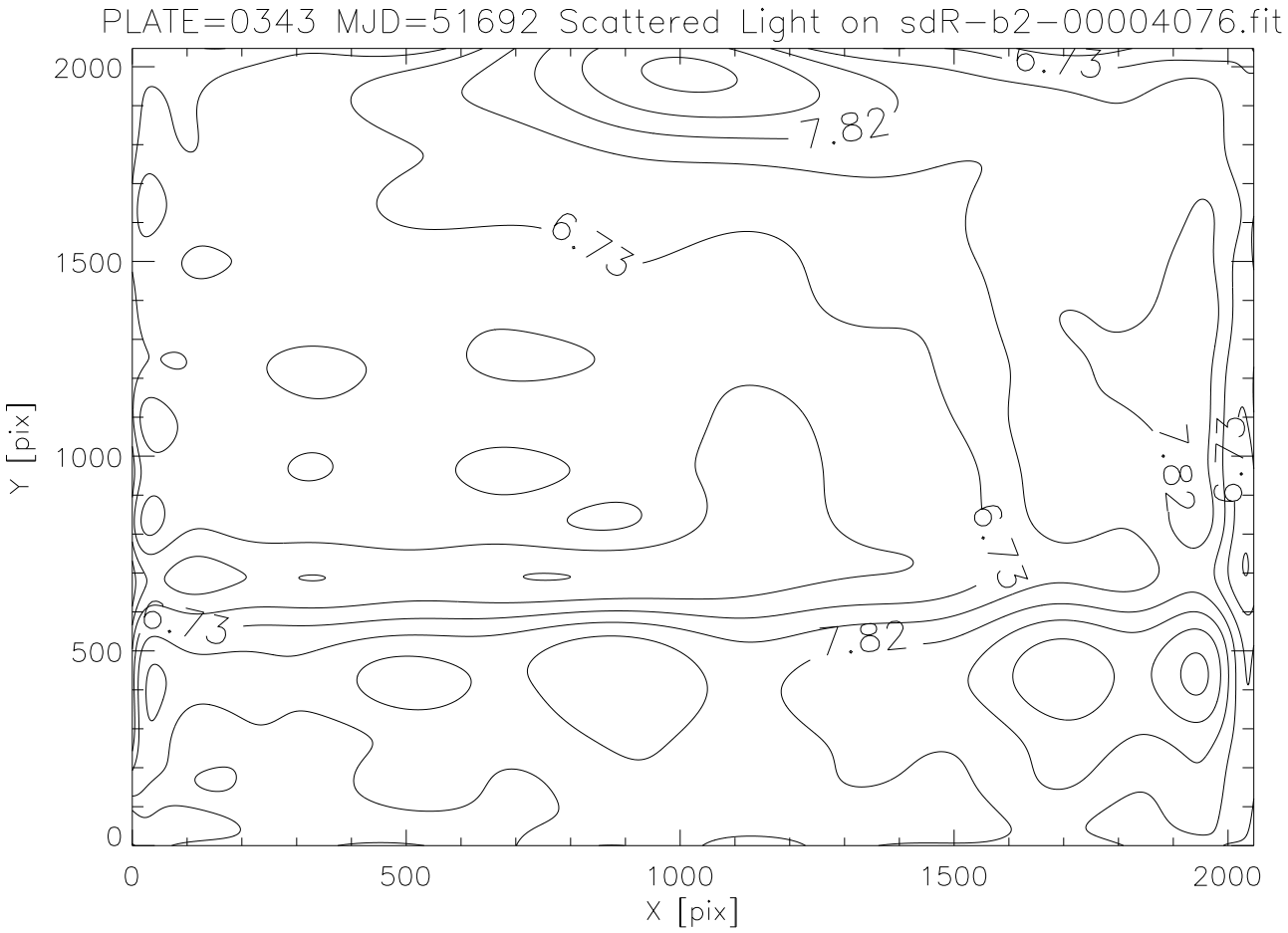

PLATE=0343 MJD=51692 sdR-b2-00004075.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.39 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

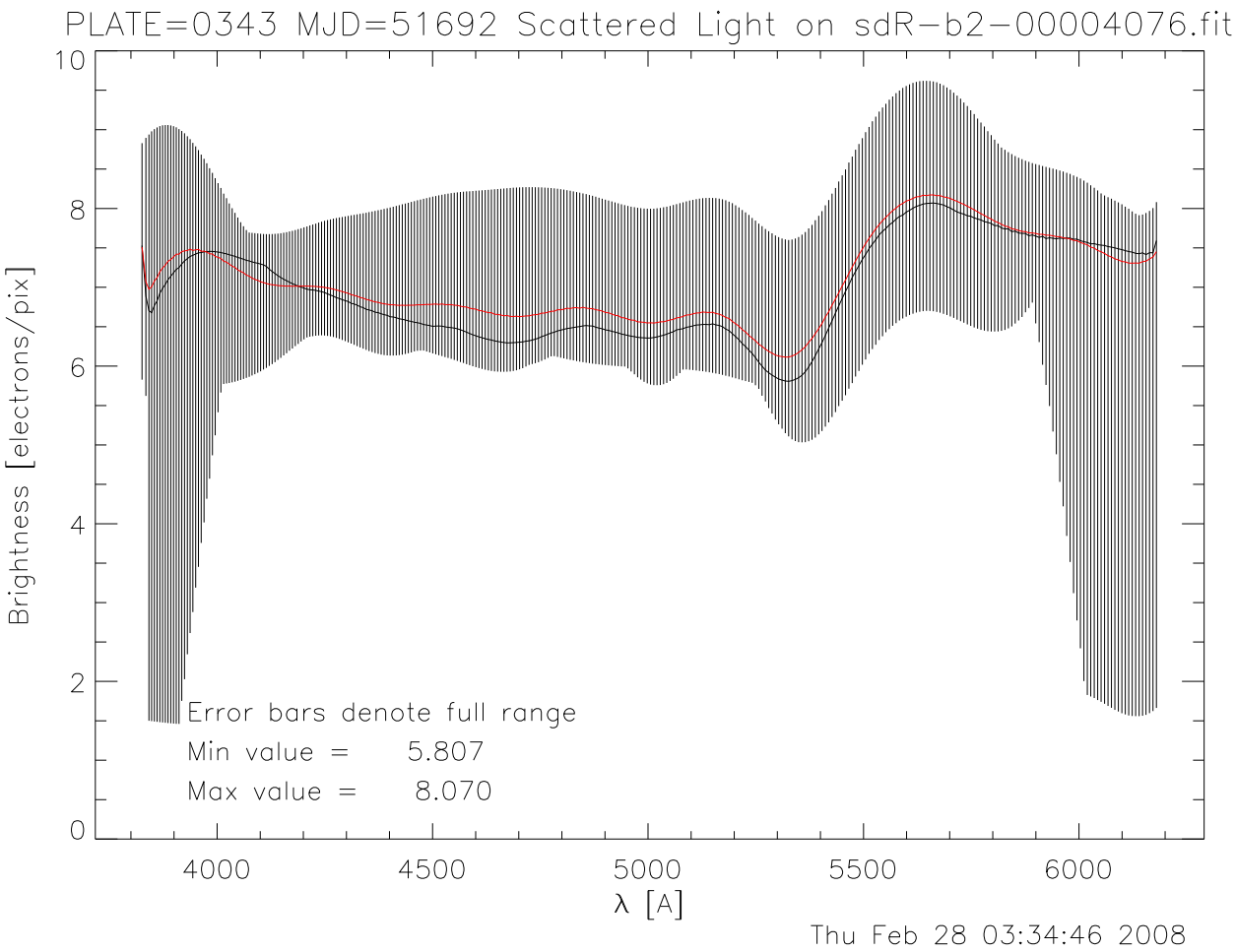

PLATE=0343 MJD=51692 sdR-b2-00004075.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.05×10^4
2.00×10^4
1.95×10^4
1.90×10^4
1.85×10^4
1.80×10^4
RED = sky fiber
Dispersion = 0.65 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.05×10^4
2.00×10^4
1.95×10^4
1.90×10^4
1.85×10^4
1.80×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.05×10^4
2.00×10^4
1.95×10^4
1.90×10^4
1.85×10^4
1.80×10^4
1.22
1.23
1.24
1.25
1.26
Airmass

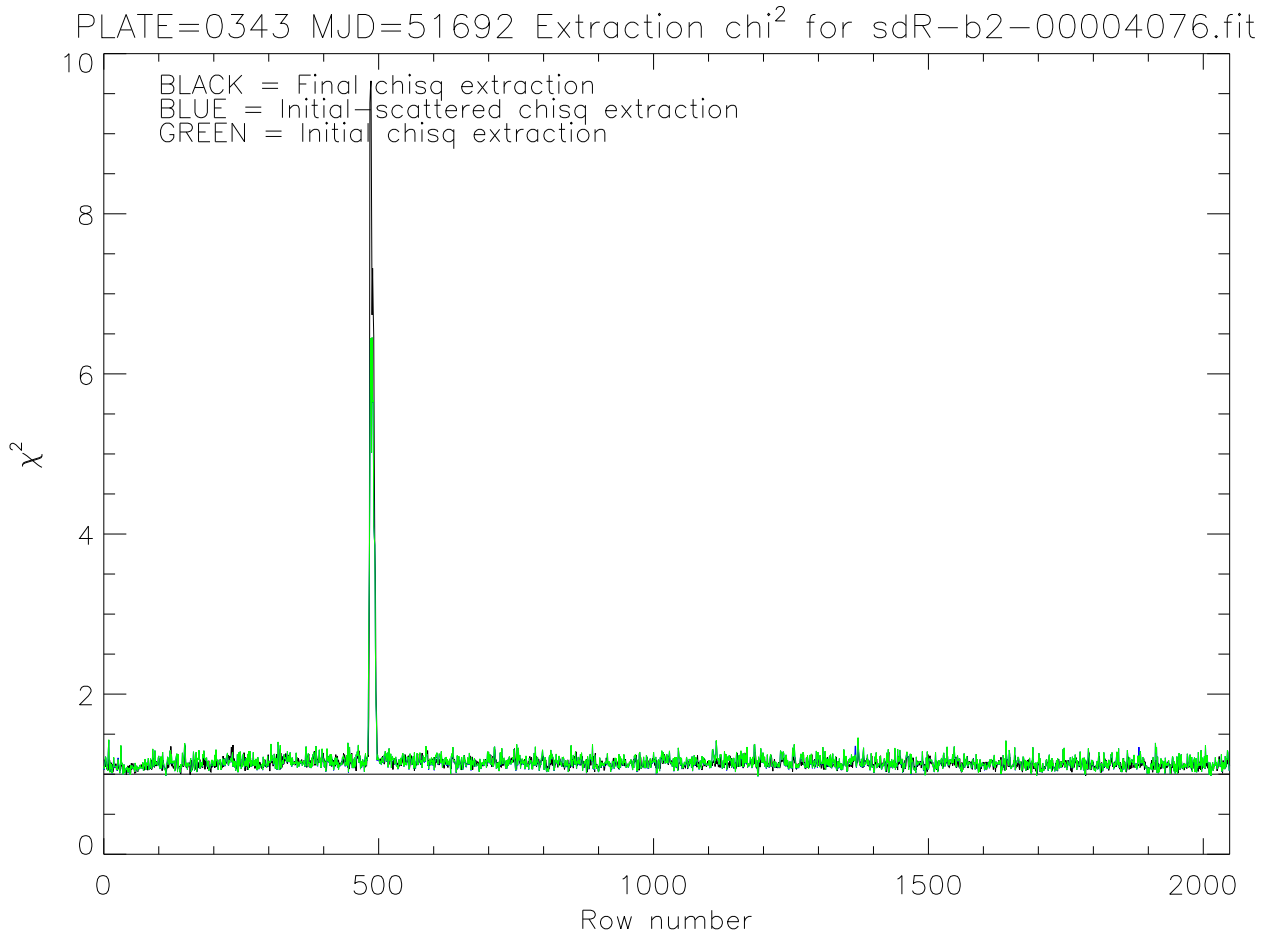

PLATE=0343 MJD=51692 Fiber-Flats for sdR-b2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.032
Max value = 1.459
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Feb 28 03:30:36 2008

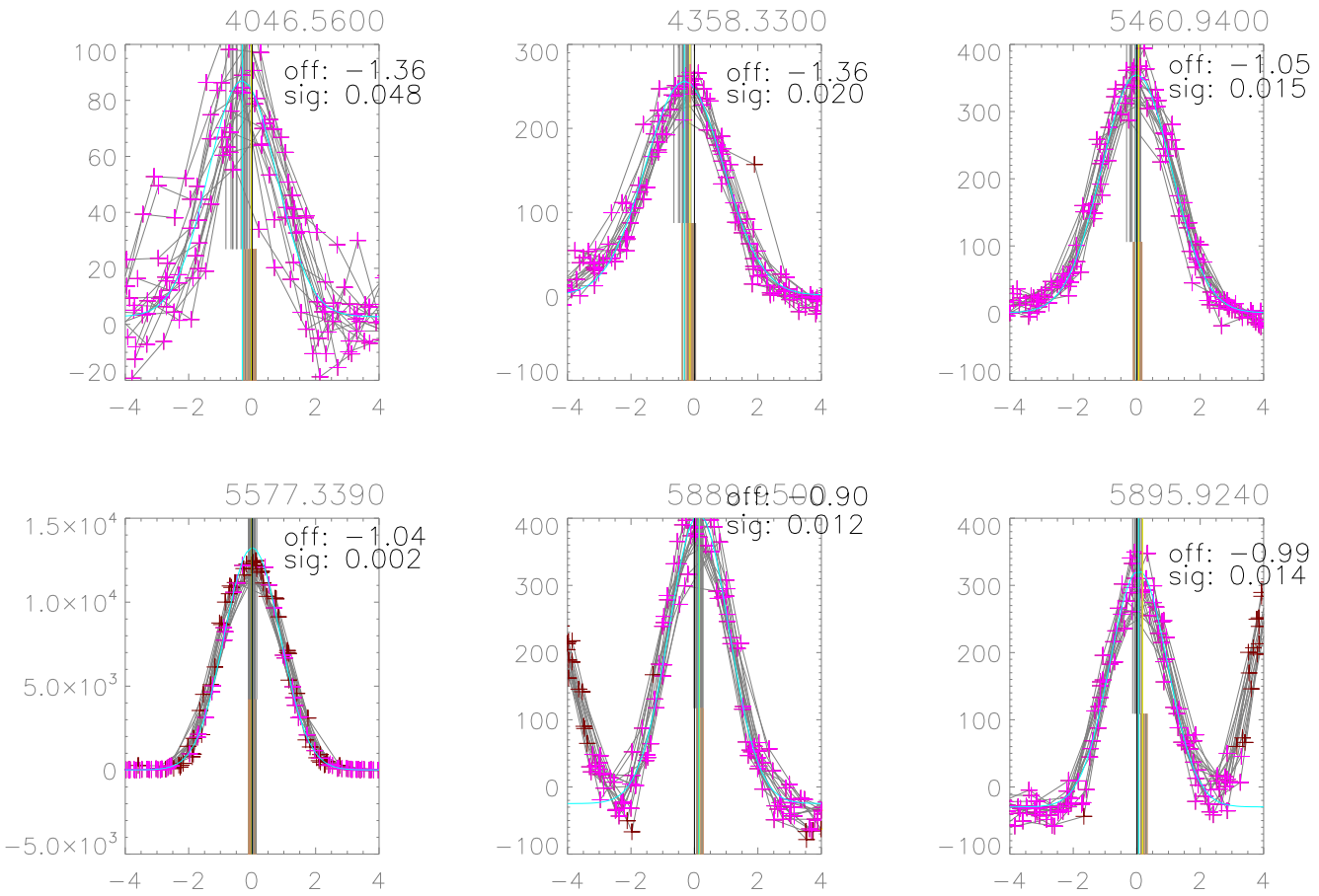

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−b2−00004076.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
9.6
11.1

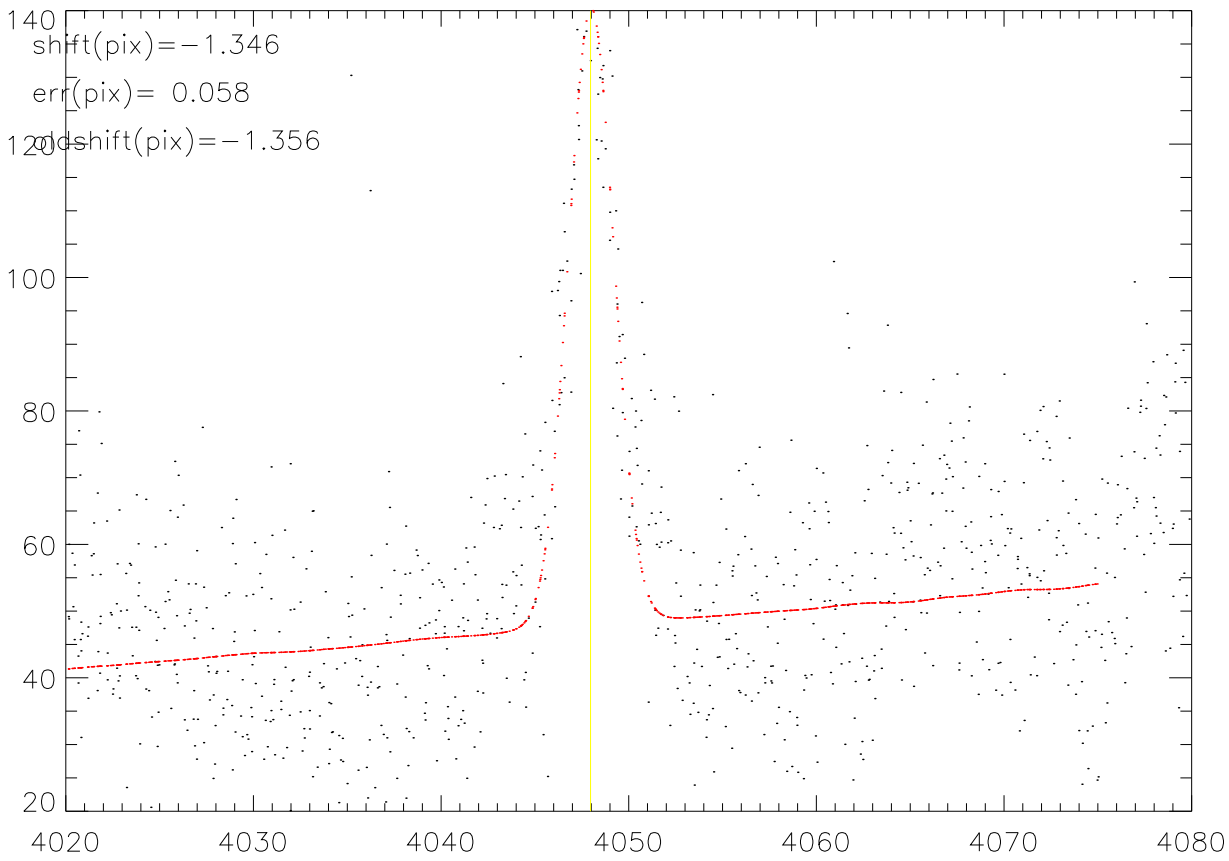

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-b2-00004076.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.355
Max value = 11.026
Thu Feb 28 03:31:29 2008

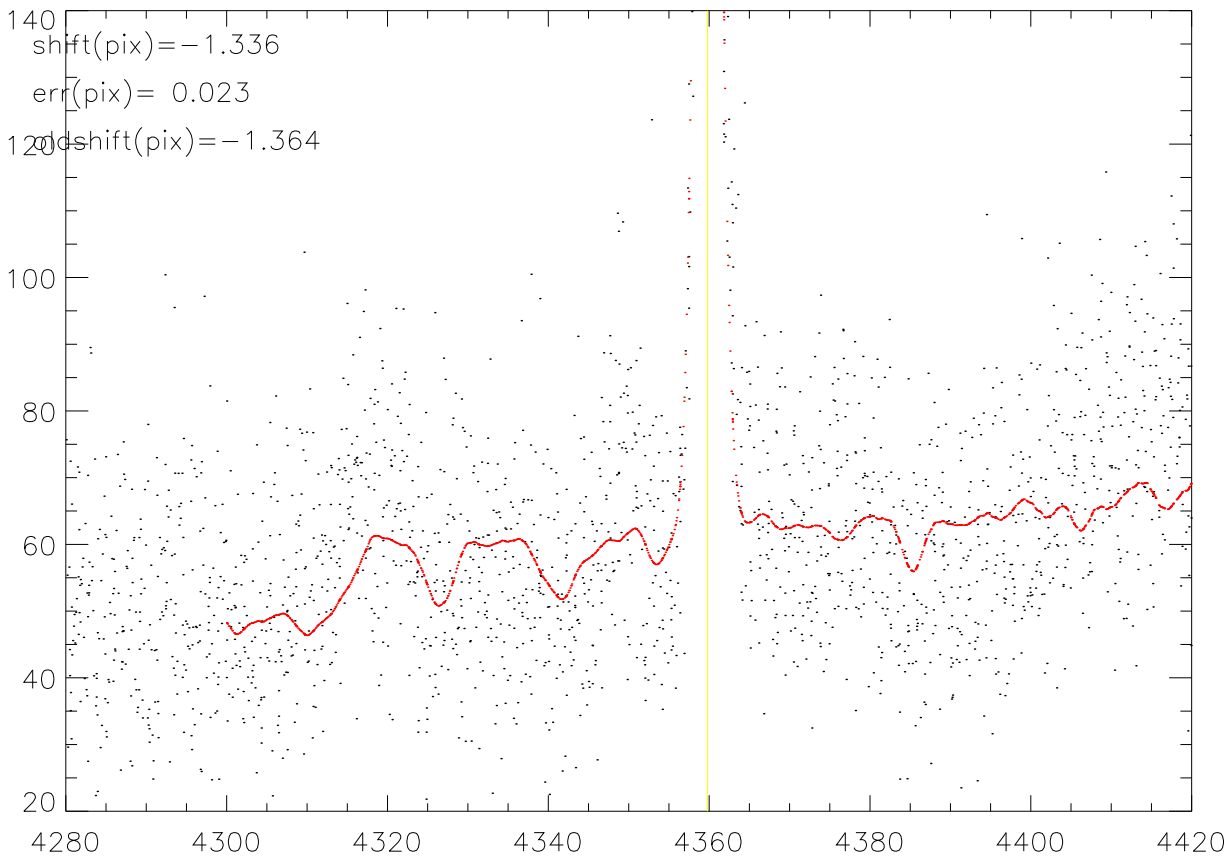

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004076.fit
6.73
7.82
6.73
0
7.82
6.73
6.73
7.82
6.73
Y [pix]
X [pix]
0
500
1000
1500
2000

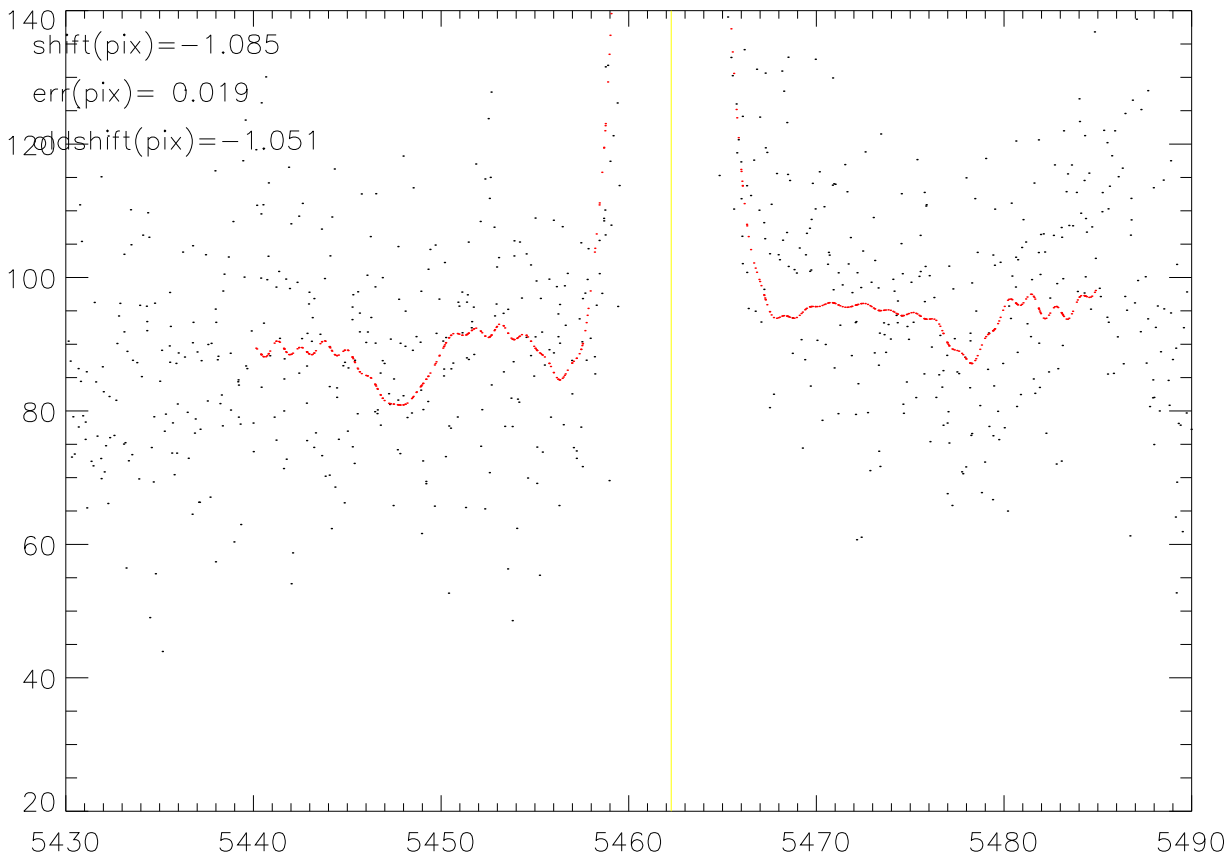

PLATE=0343 MJD=51692 Scattered Light on sdR-b2-00004076.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.807
Max value = 8.070
Thu Feb 28 03:34:46 2008

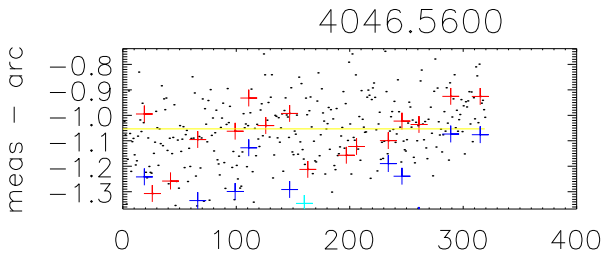

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-b2-00004076.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

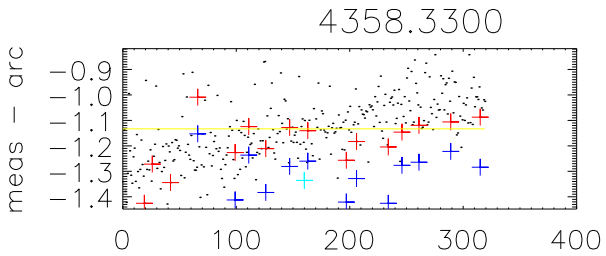

4046.5600
off: −1.36
sig: 0.048
4358.3300
off: −1.36
sig: 0.020
5460.9400
off: −1.05
sig: 0.015
5577.3390
off: −1.04
sig: 0.002
off: −0.90
sig: 0.012
5895.9240
off: −0.99
sig: 0.014

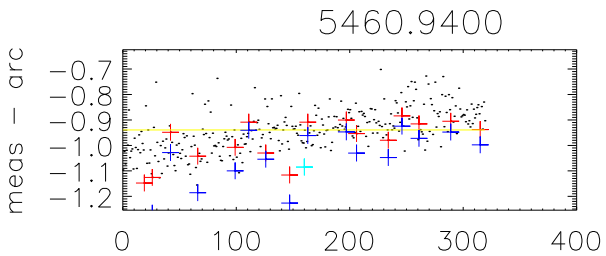

shift(pix)=−1.346
err(pix)= 0.058
oldshift(pix)=−1.356
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

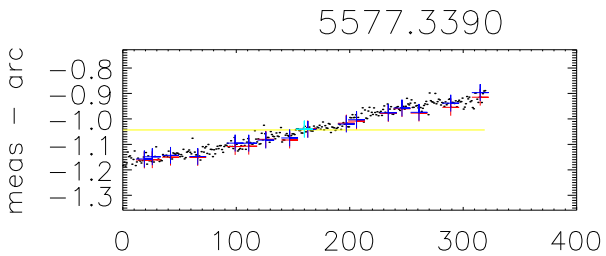

shift(pix)=−1.336
err(pix)= 0.023
oldshift(pix)=−1.364
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

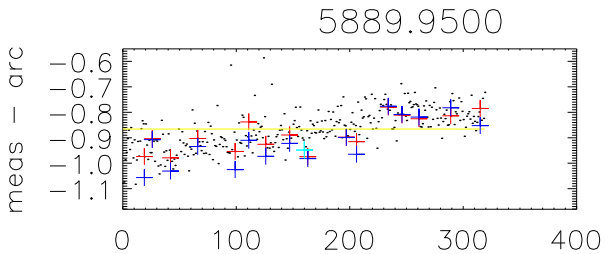

shift(pix)=−1.085
err(pix)= 0.019
oldshift(pix)=−1.051
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

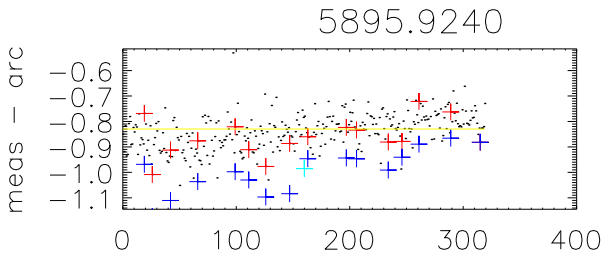

4046.5600
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

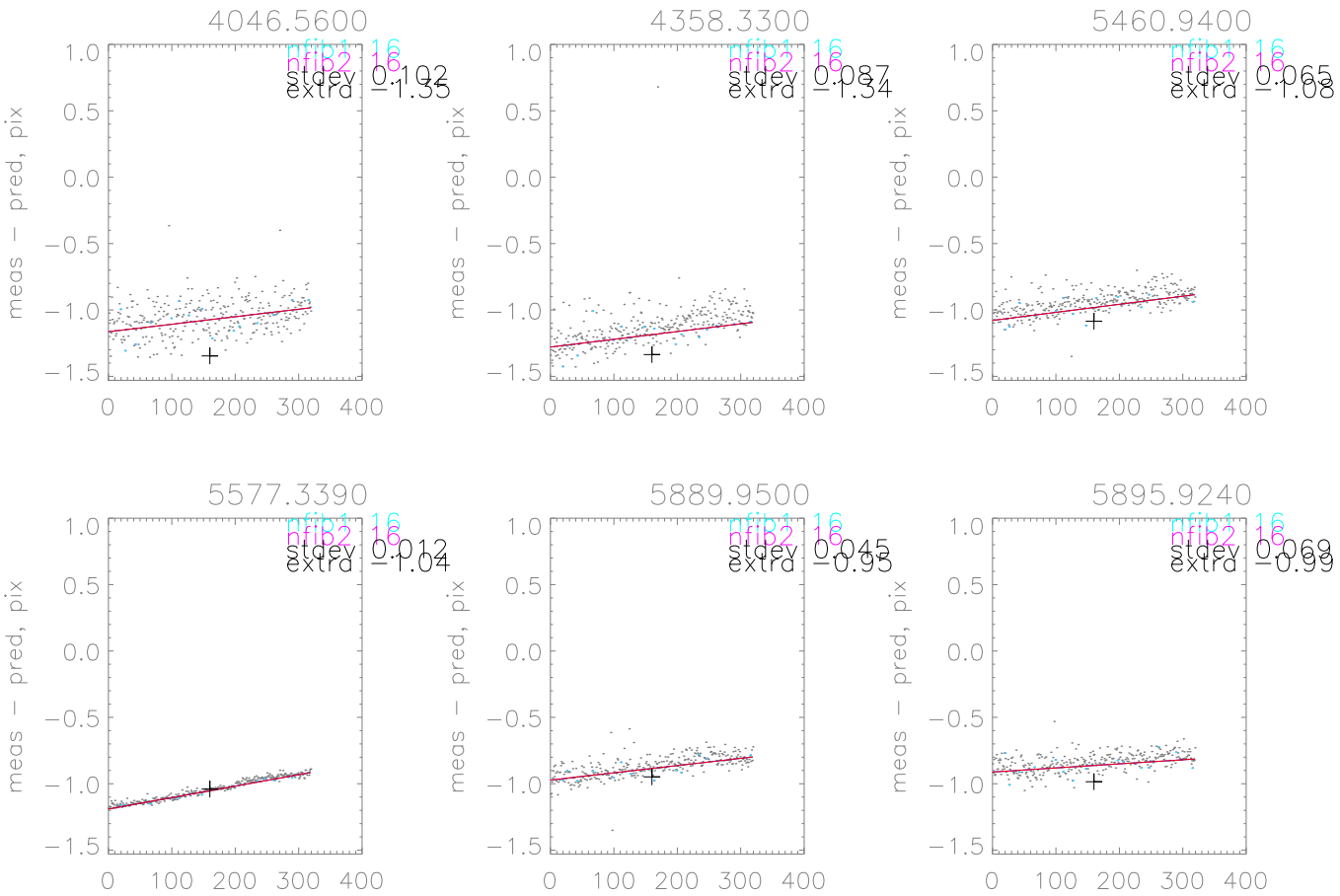

4358.3300
meas − arc
−0.9
−1.0
−1.1
−1.2
−1.3
−1.4
0
100
200
300
400

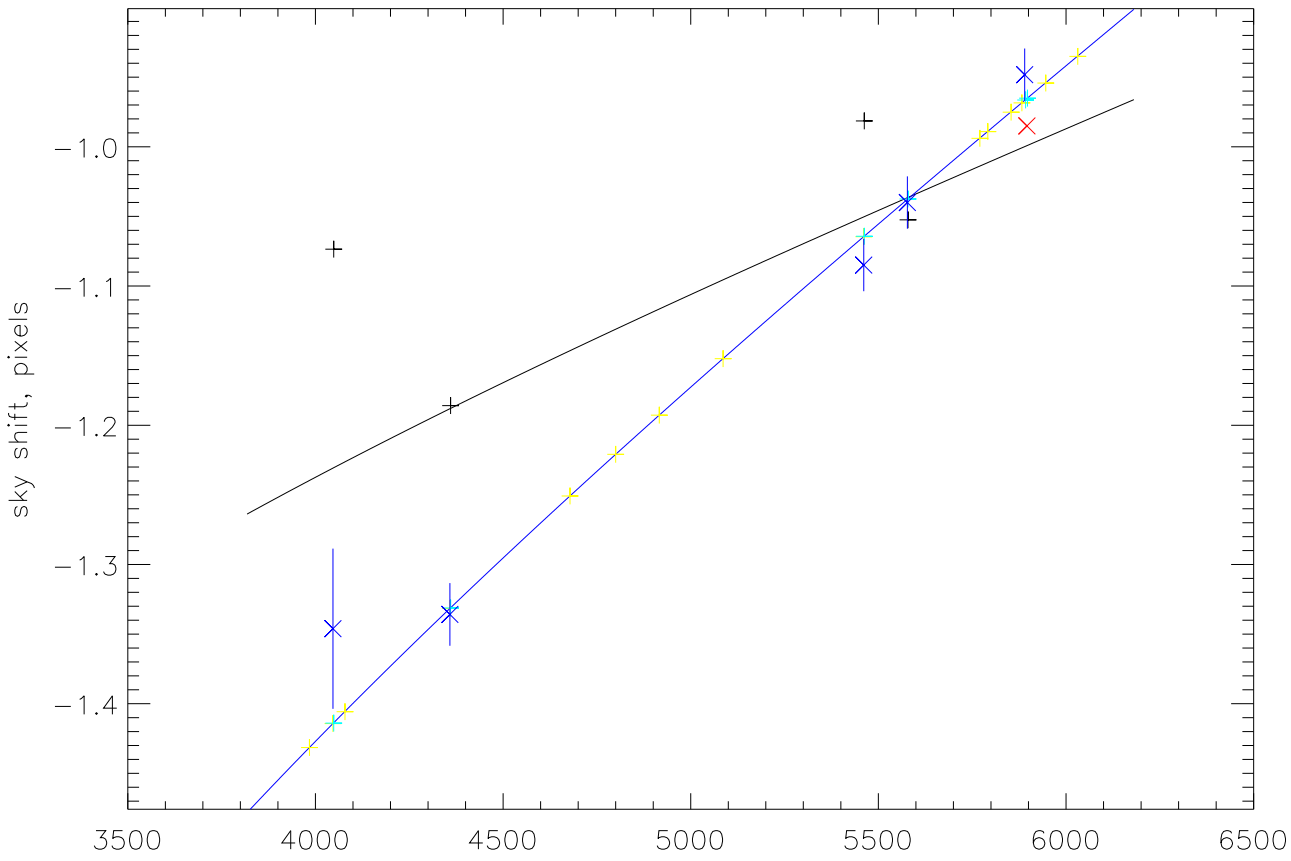

5460.9400
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

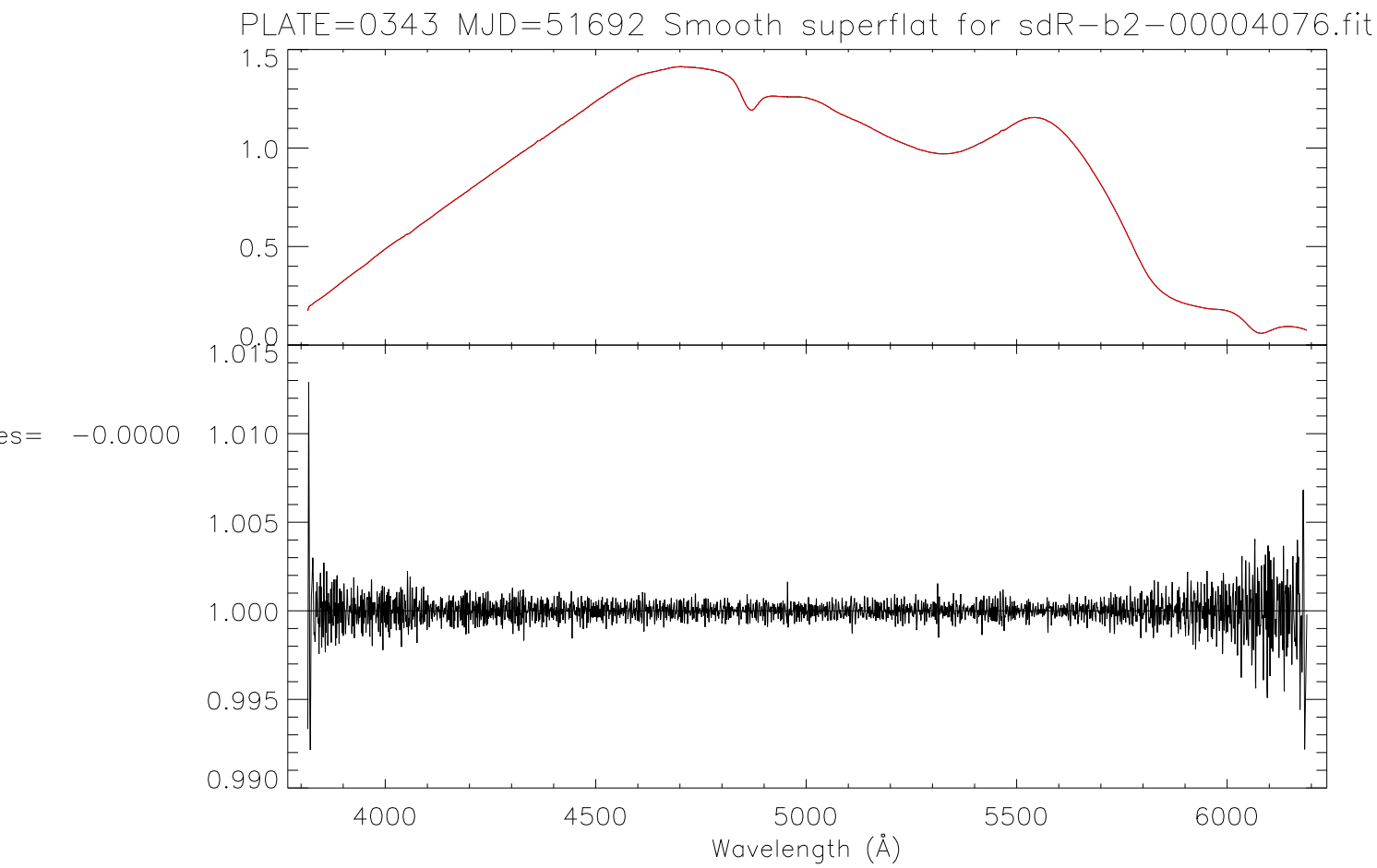

5577.3390
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

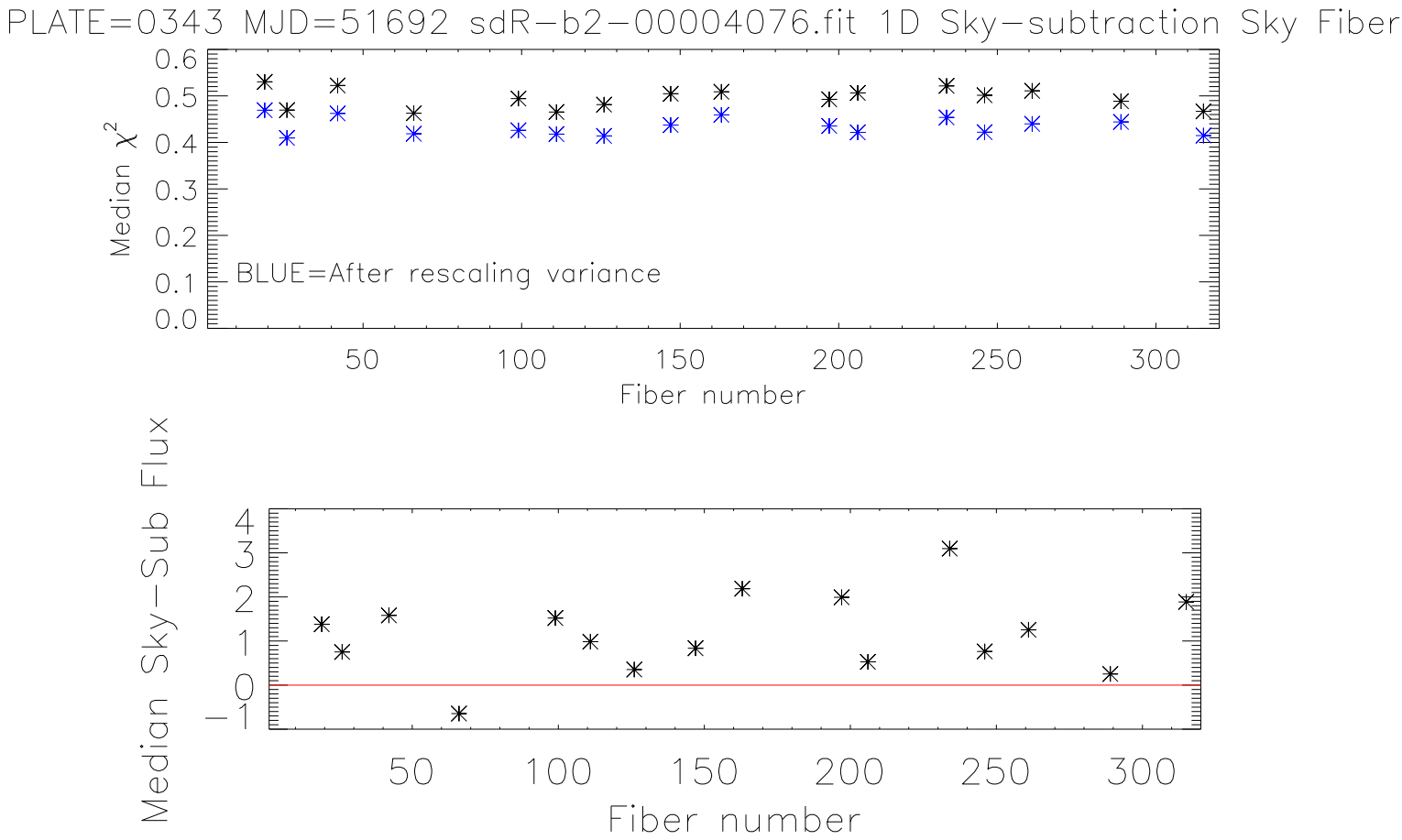

5889.9500
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

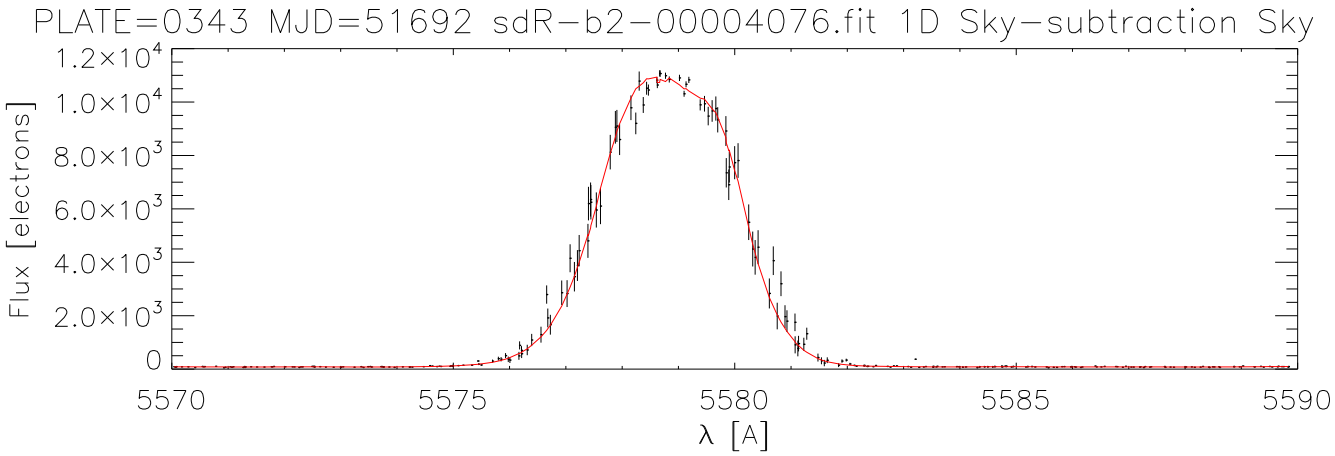

5895.9240
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

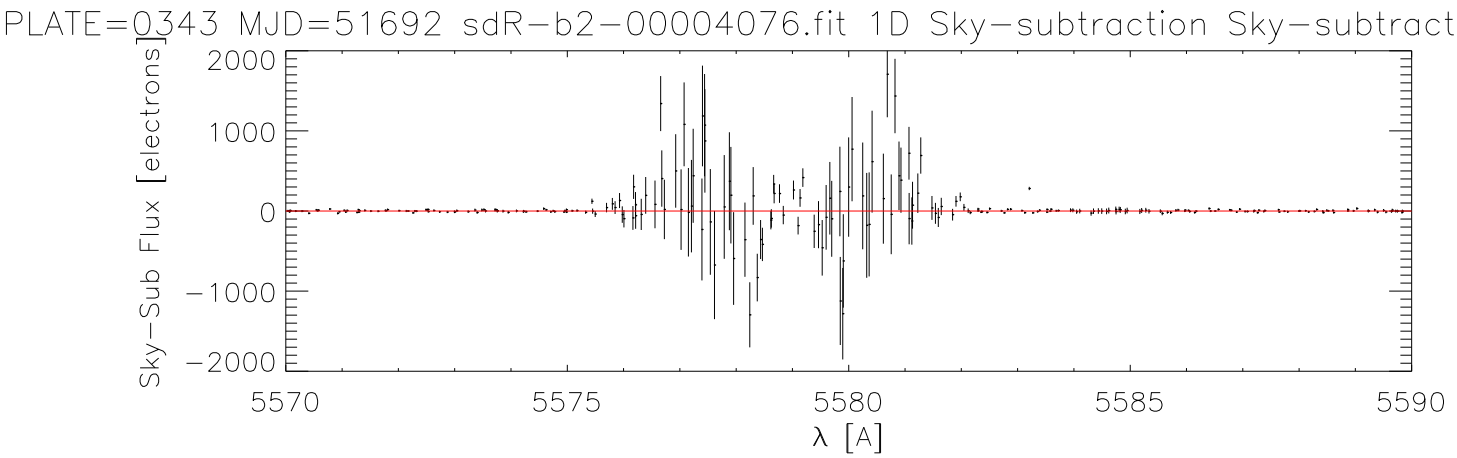

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
nfib1 16
nfib2 16
stdev 0.102
extrd −1.35
stdev 0.087
extrd −1.34
stdev 0.065
extrd −1.08
stdev 0.012
extrd −1.04
stdev 0.045
extrd −0.95
stdev 0.069
extrd −0.99
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
−1.5
0
100
200
300
400

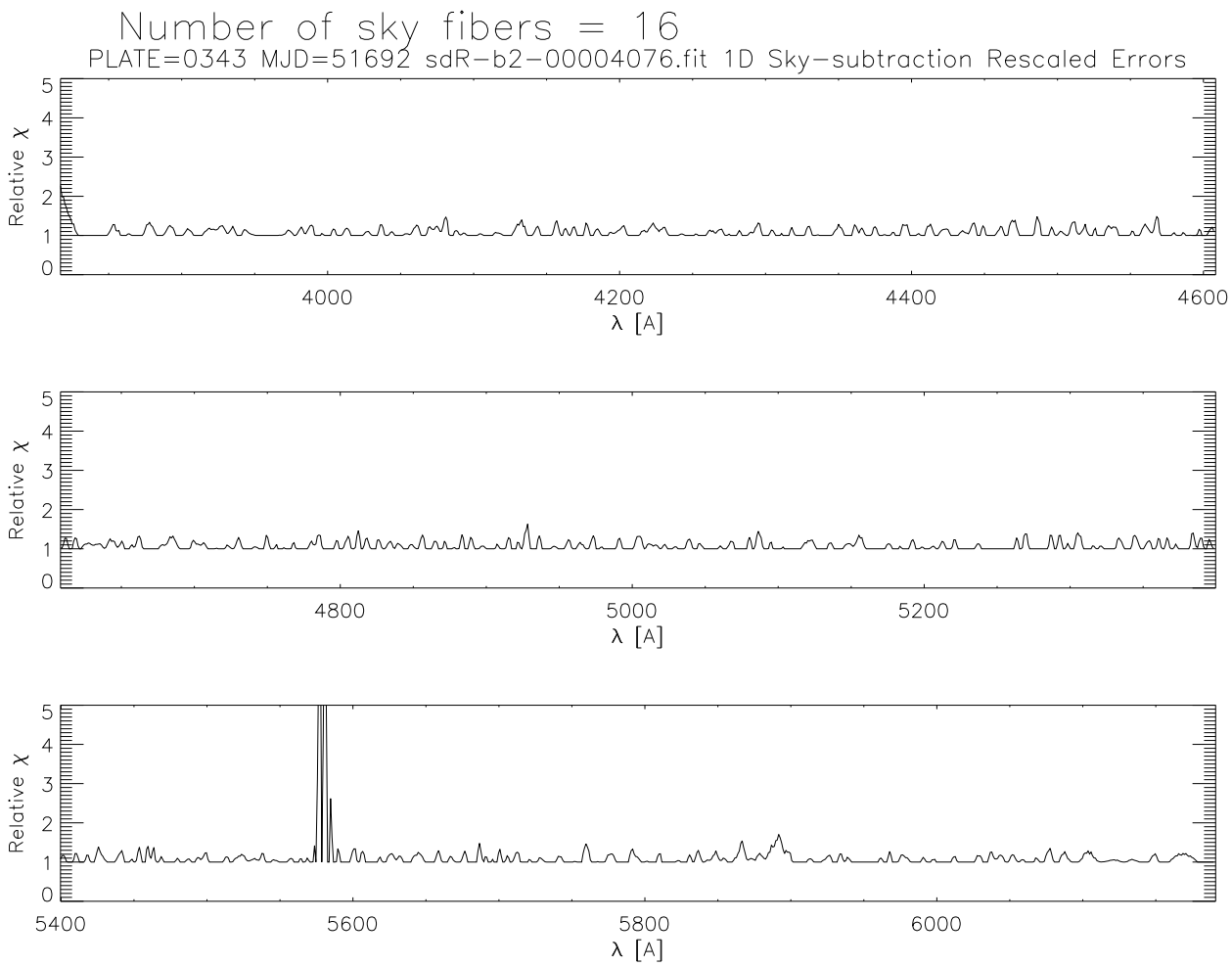

sky shift, pixels
−1.0
−1.1
−1.2
−1.3
−1.4
3500
4000
4500
5000
5500
6000
6500

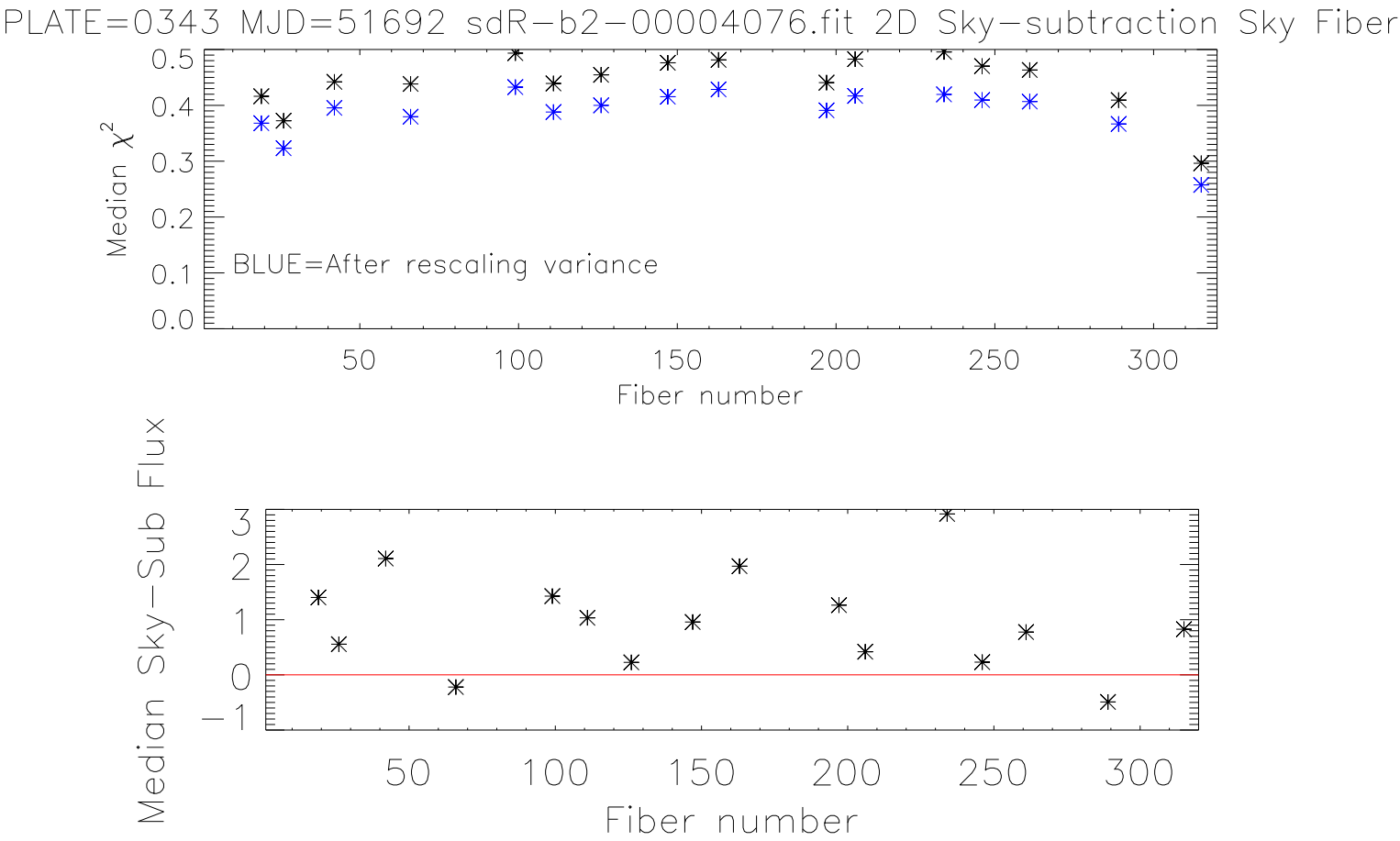

PLATE=0343 MJD=51692 Smooth superflat for sdR-b2-00004076.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

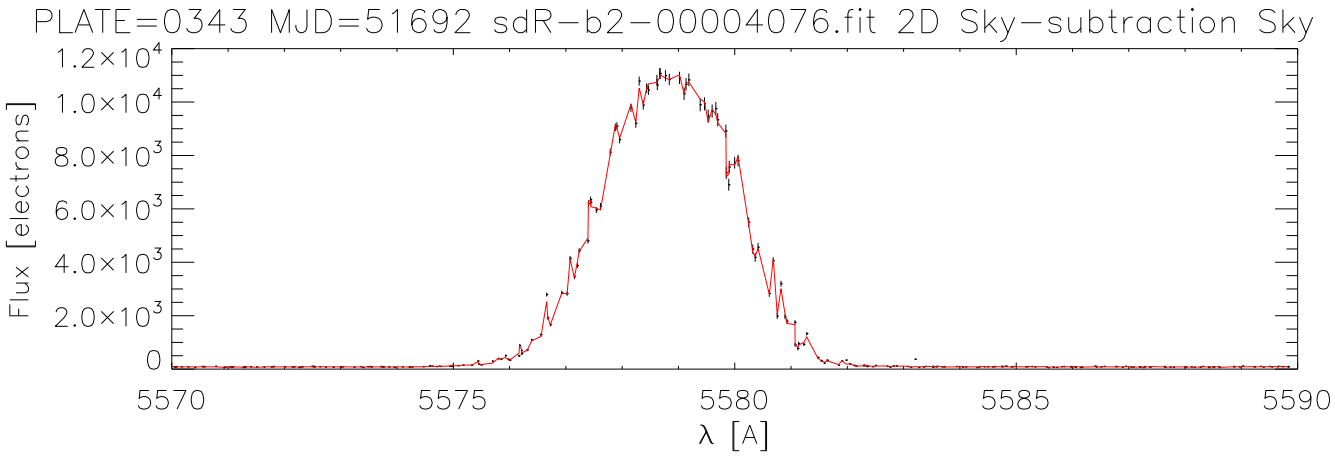

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

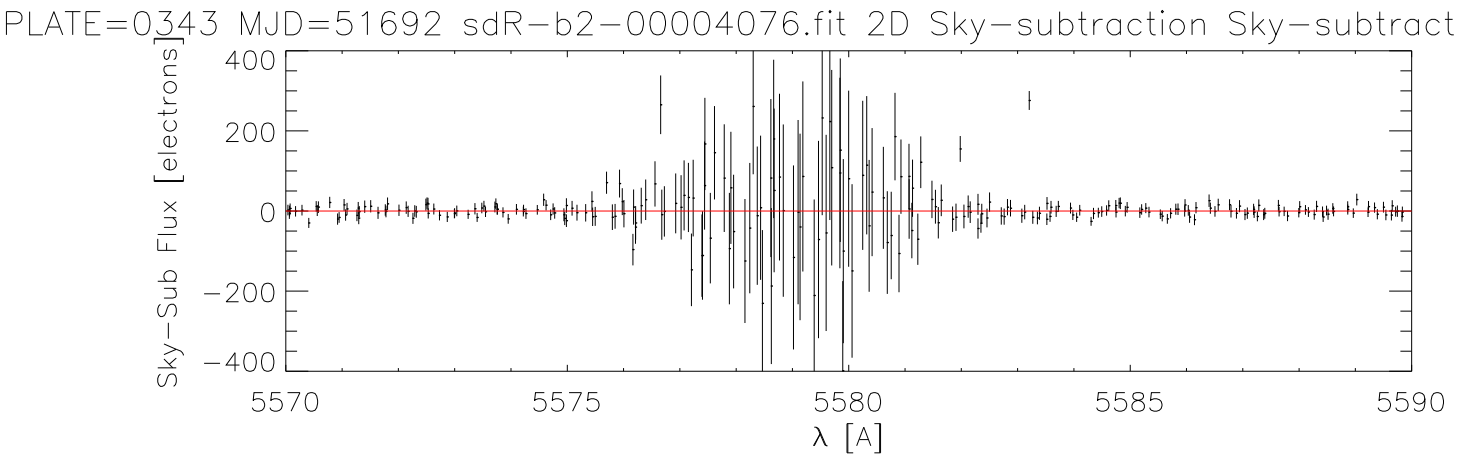

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

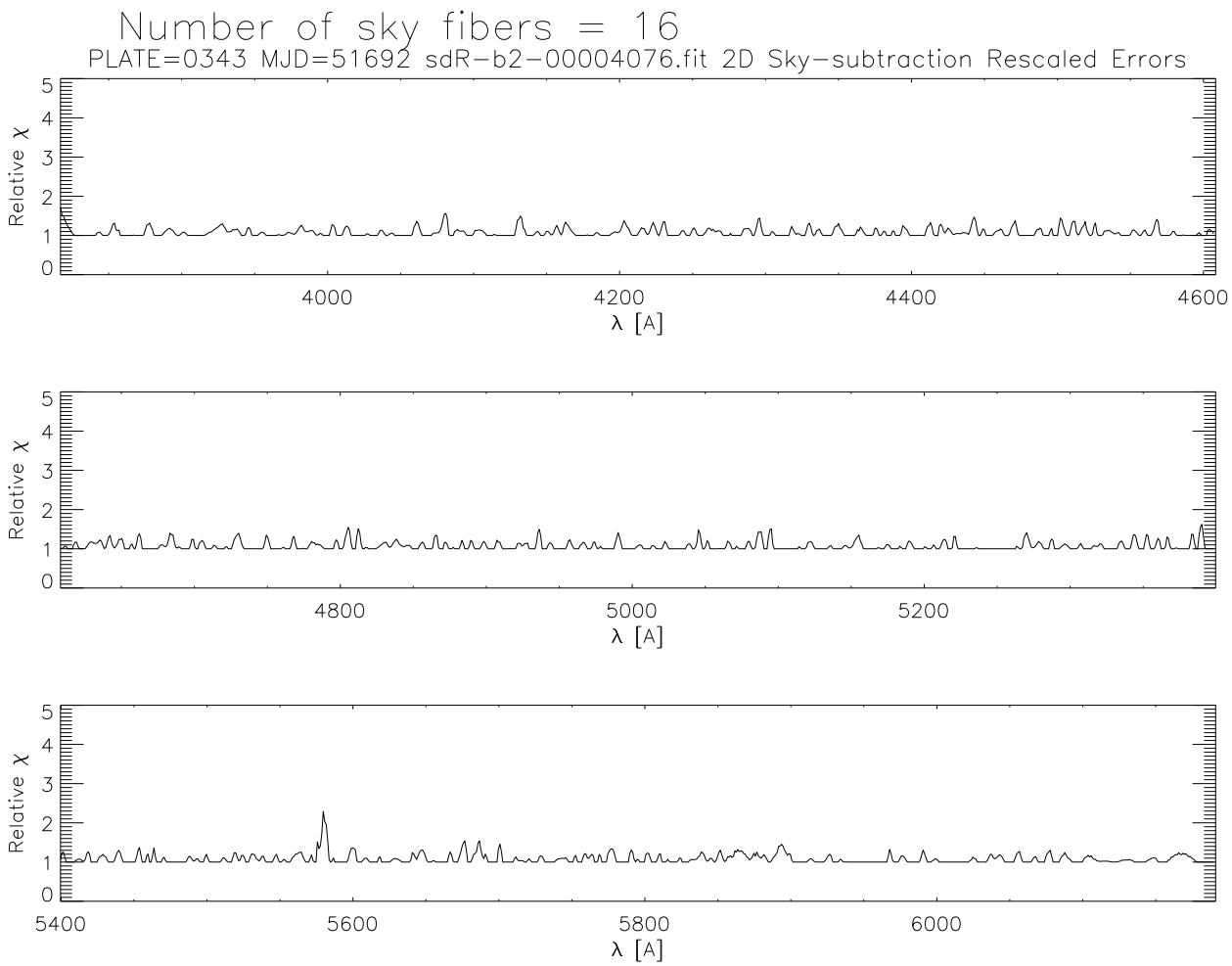

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

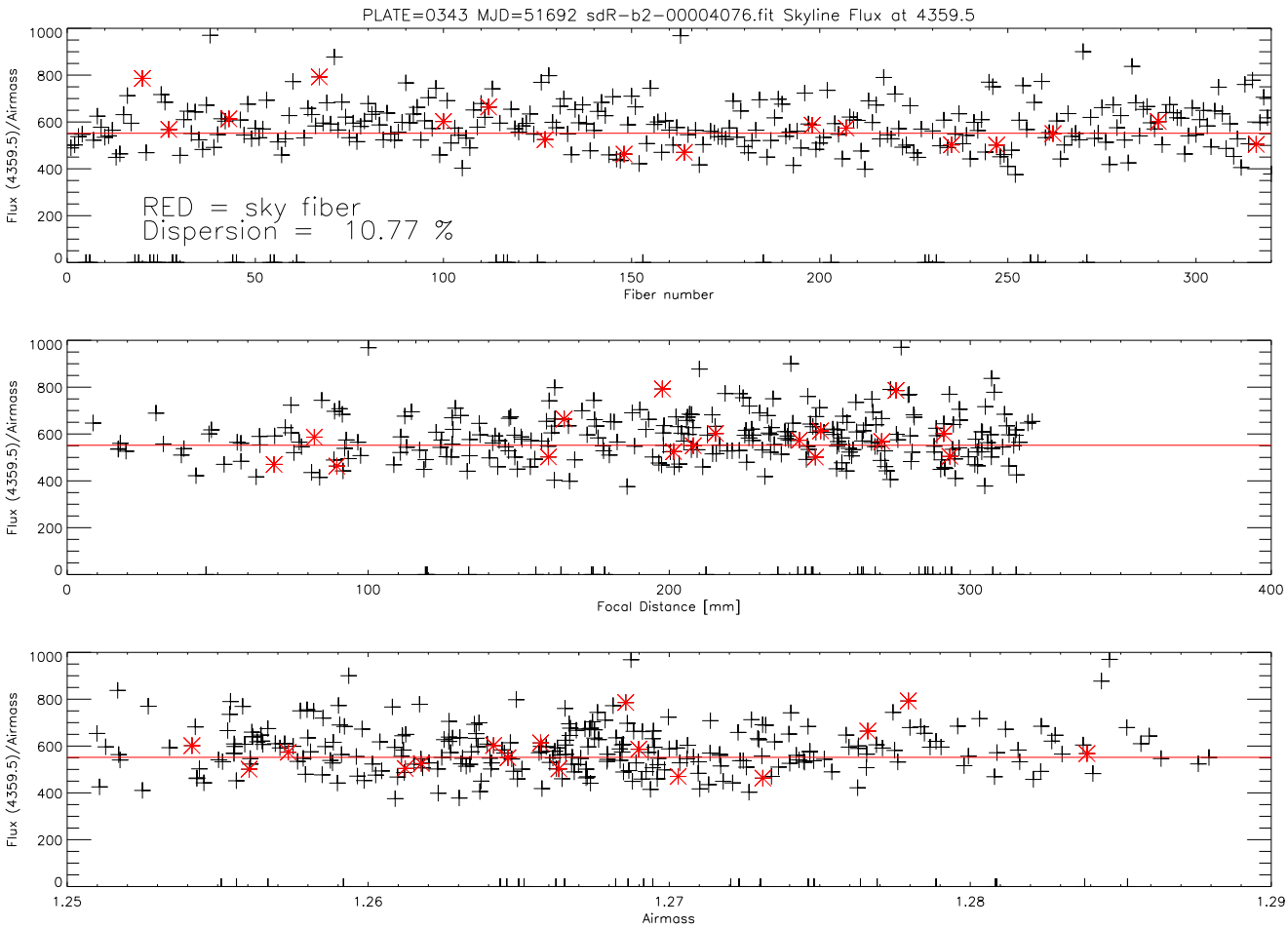

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004076.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

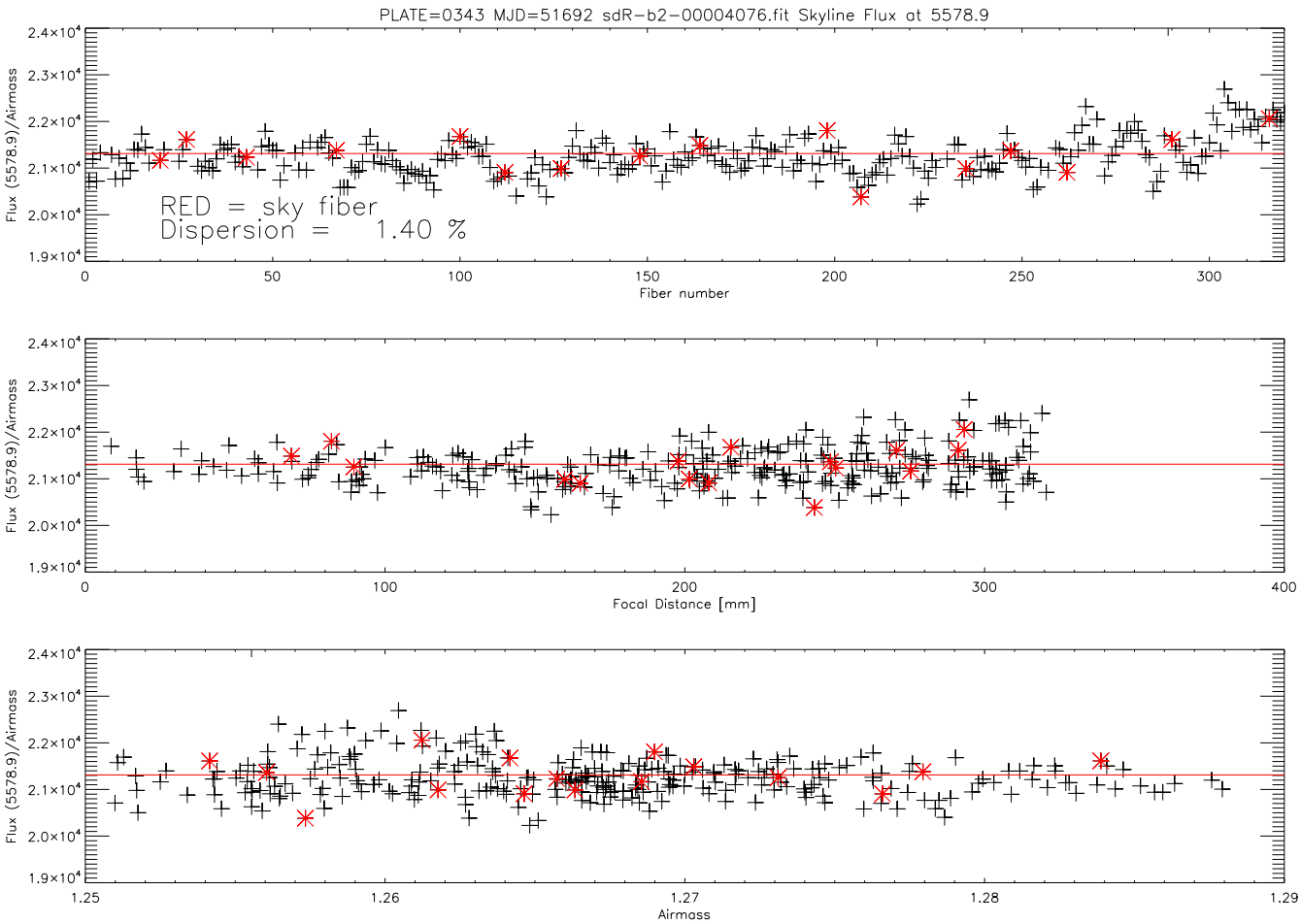

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

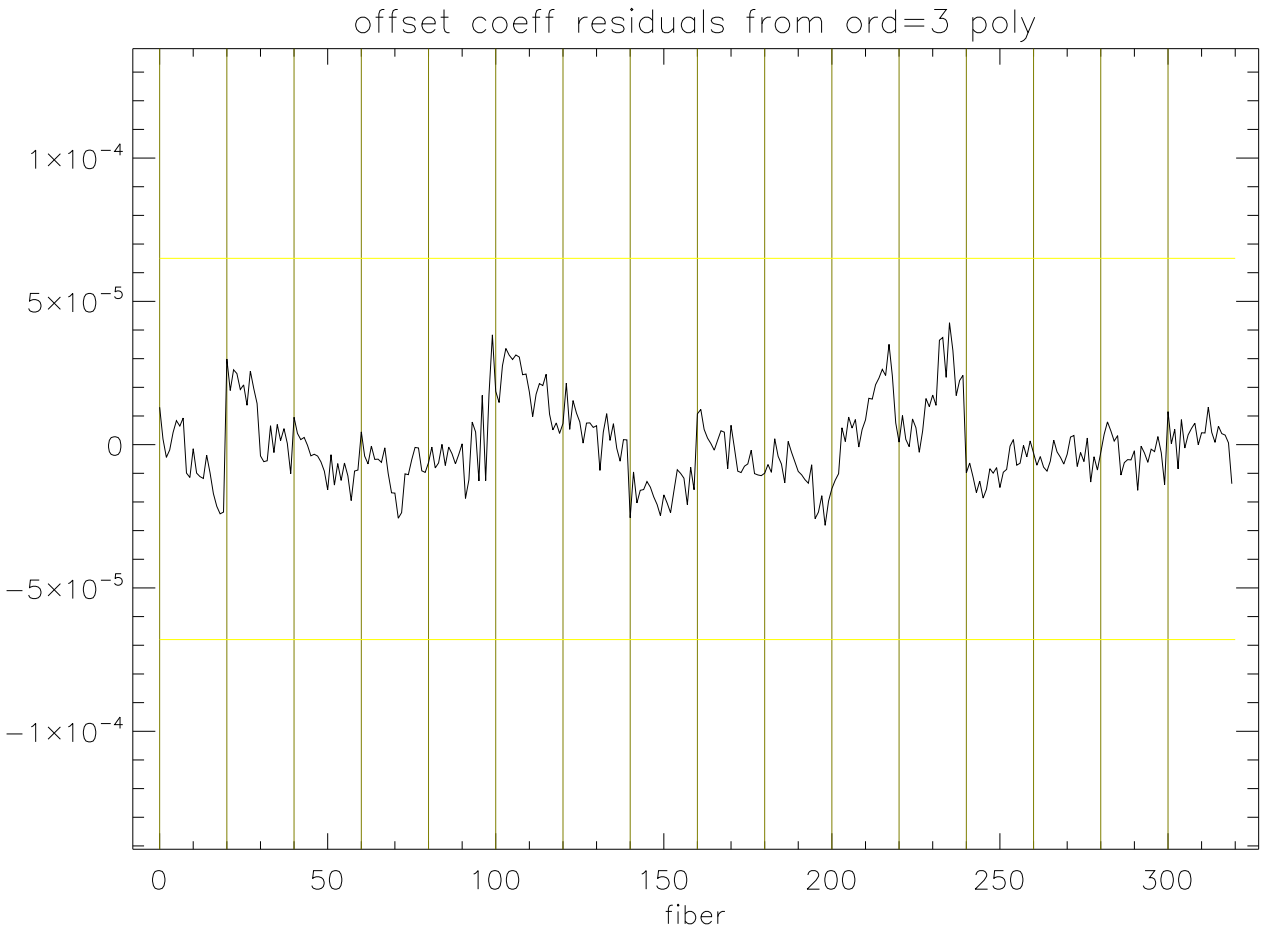

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

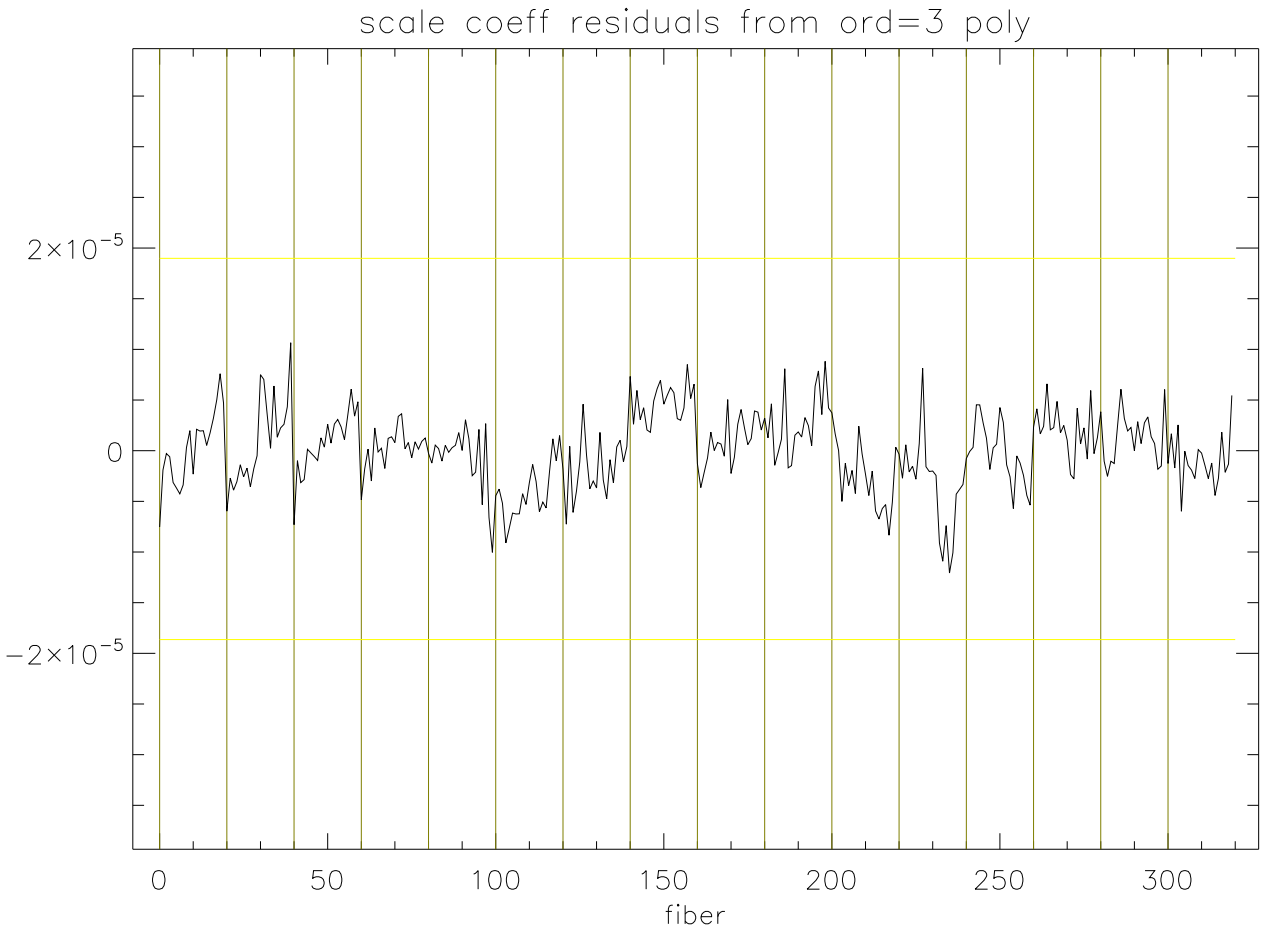

PLATE=0343 MJD=51692 sdR-b2-00004076.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

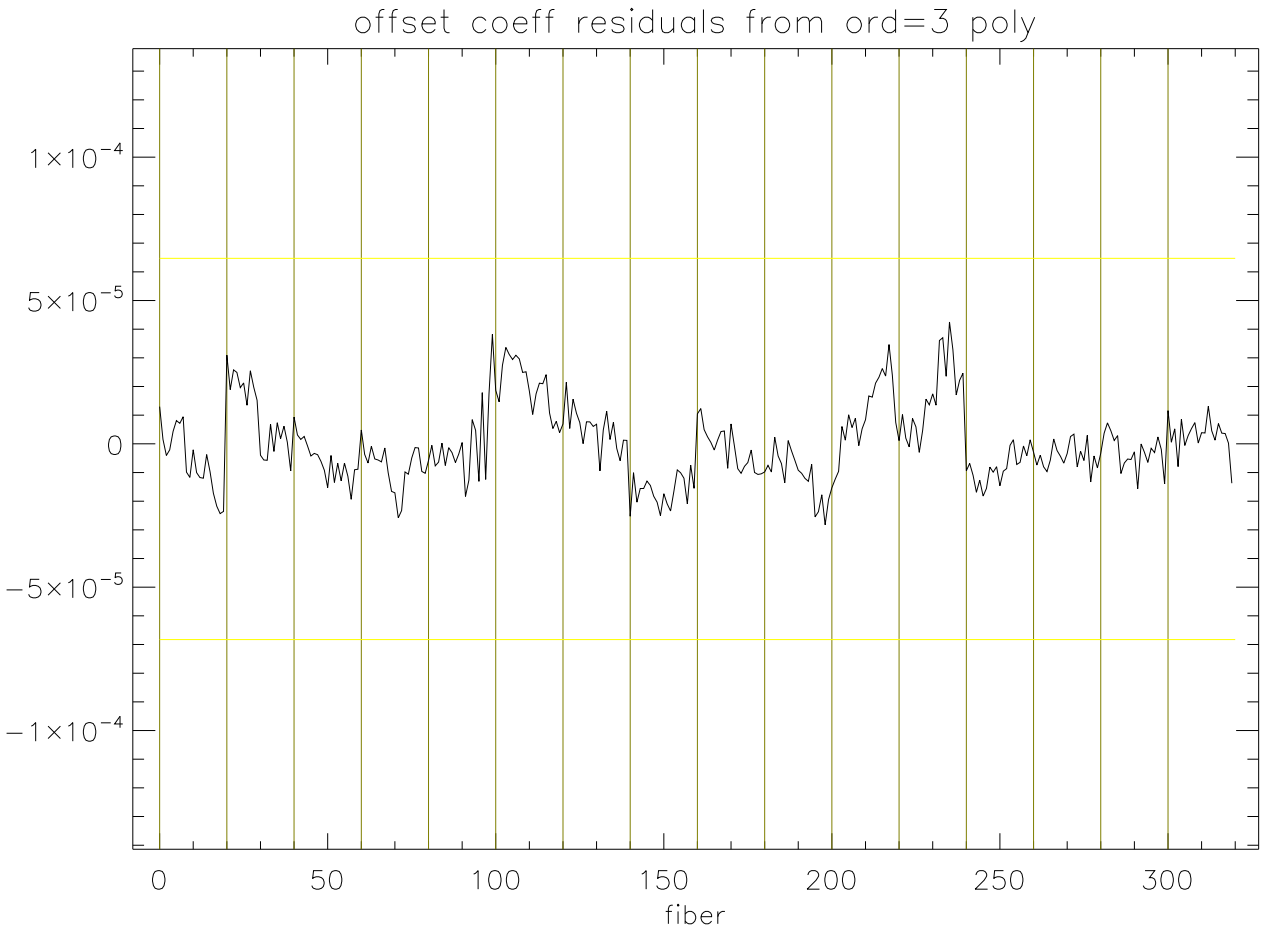

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-b2-00004076.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

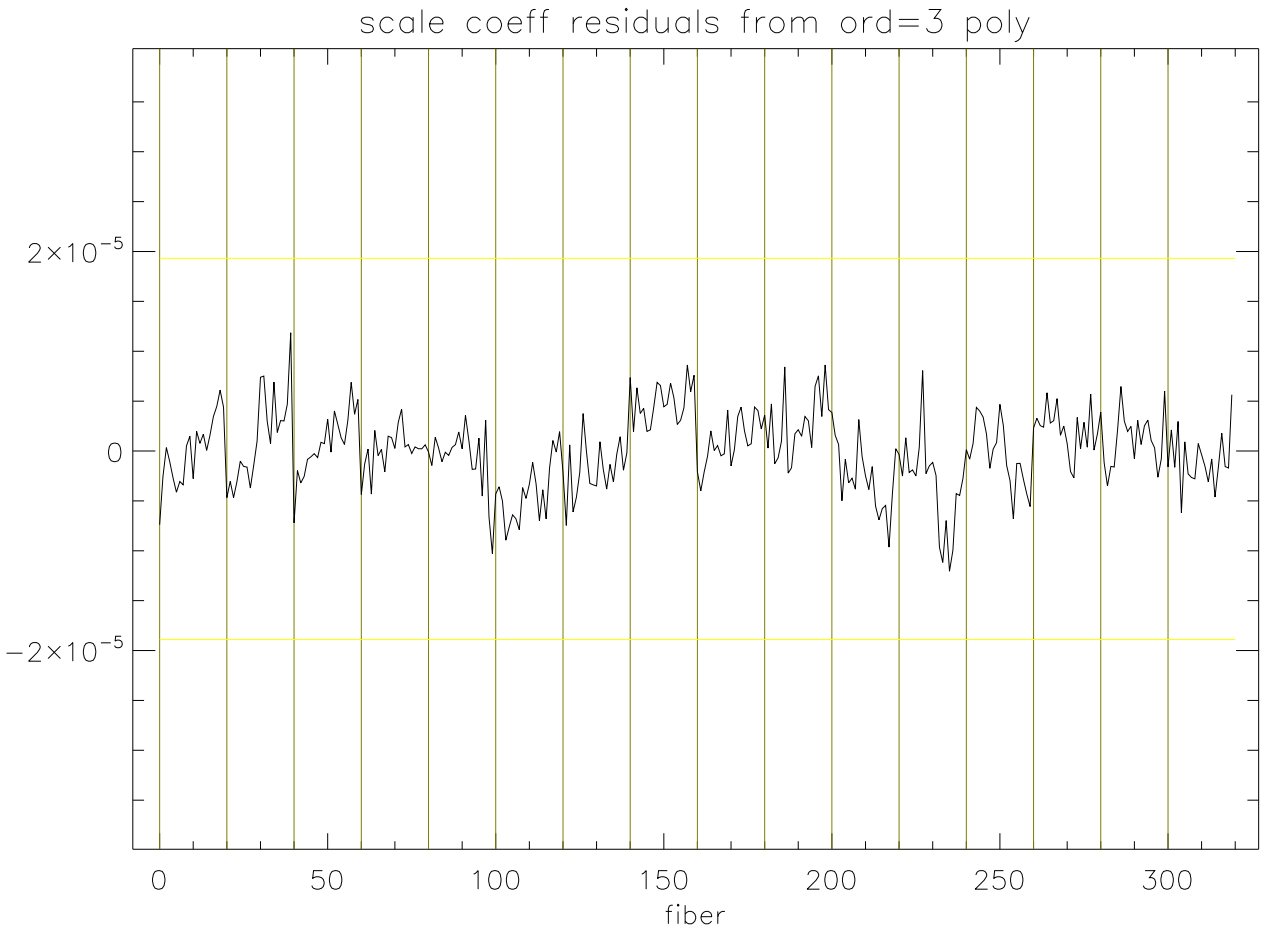

PLATE=0343 MJD=51692 sdR-b2-00004076.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.77 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

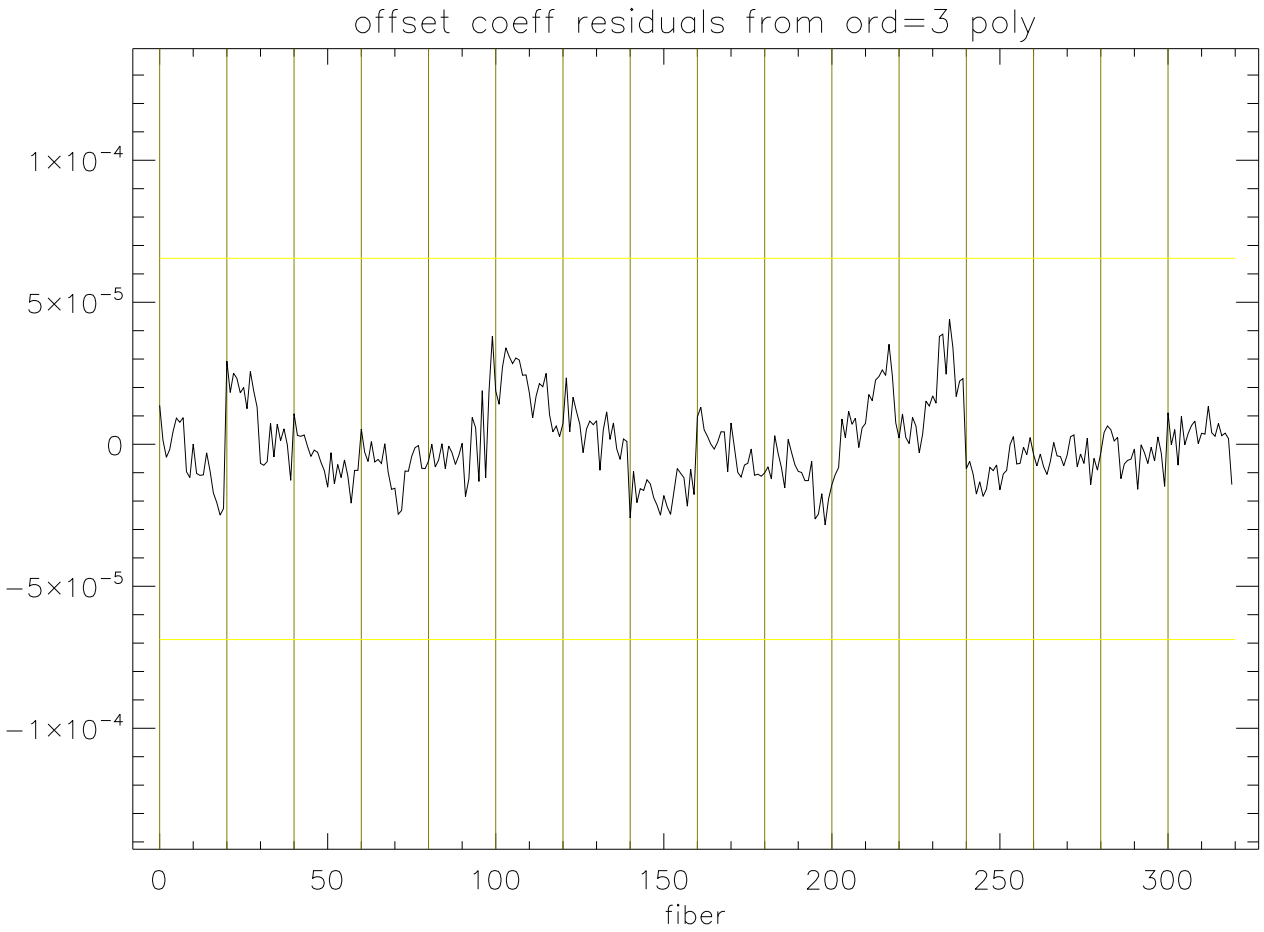

PLATE=0343 MJD=51692 sdR-b2-00004076.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.40 %
Fiber number
Focal Distance [mm]
Airmass

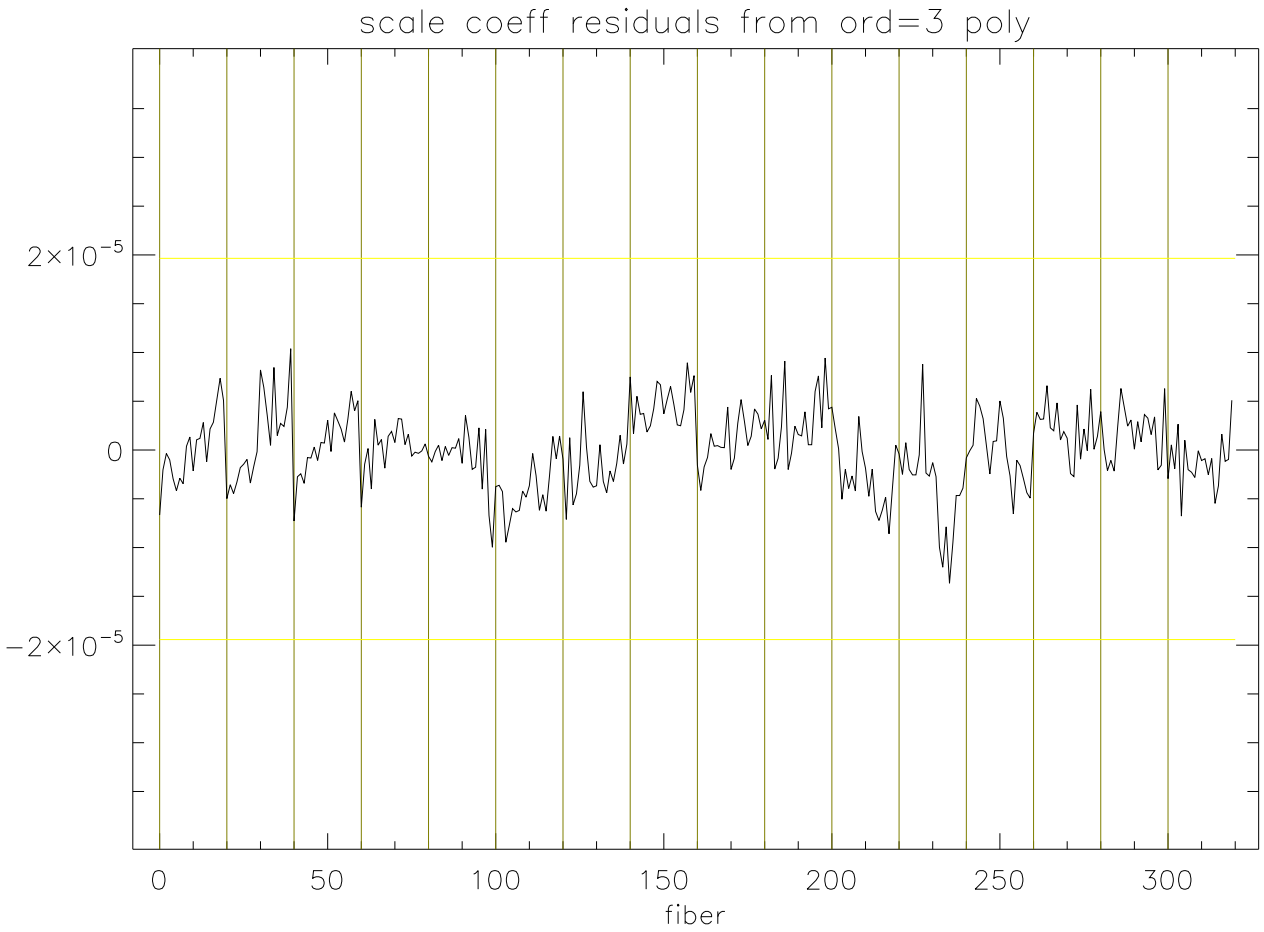

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

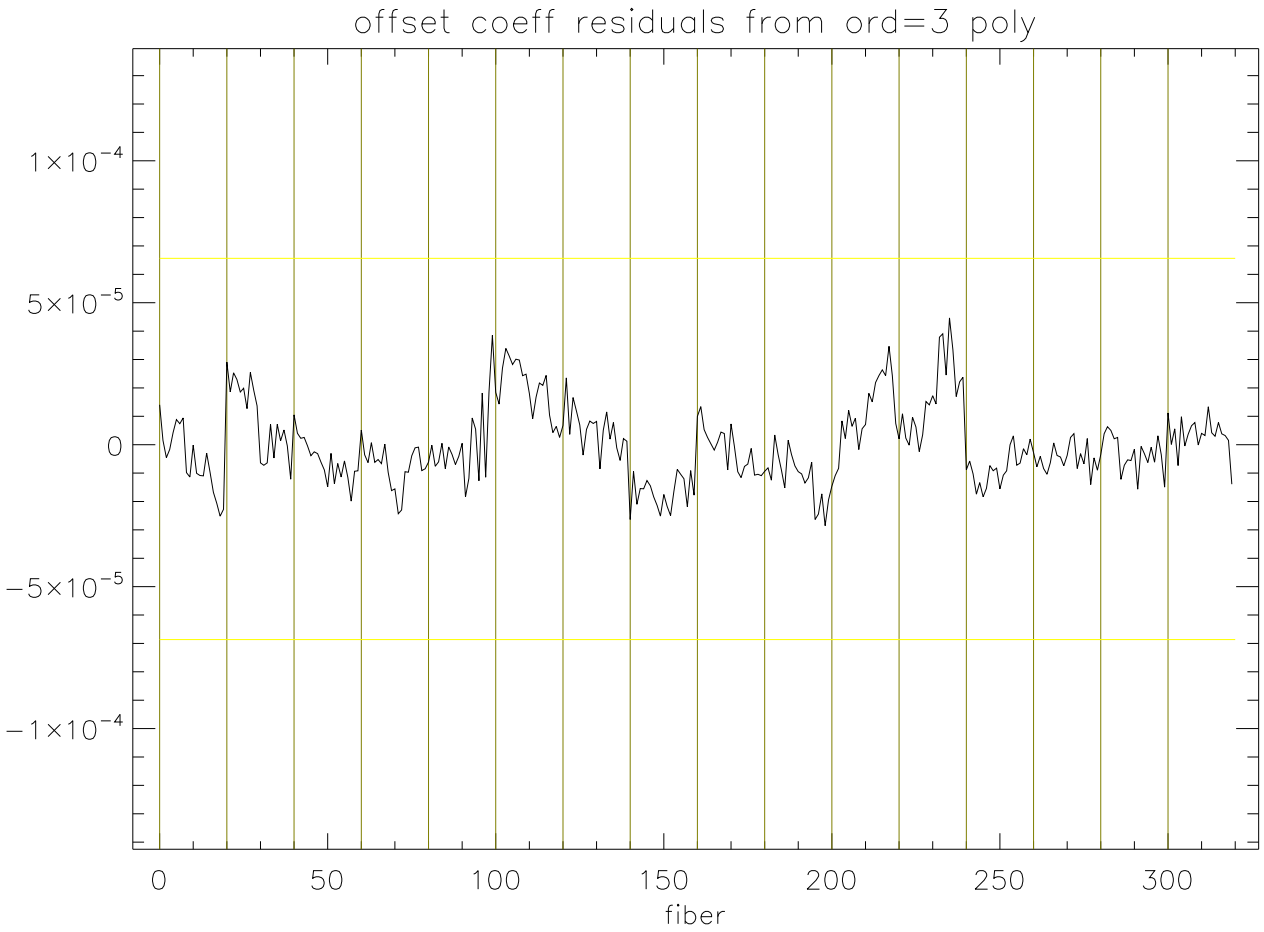

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

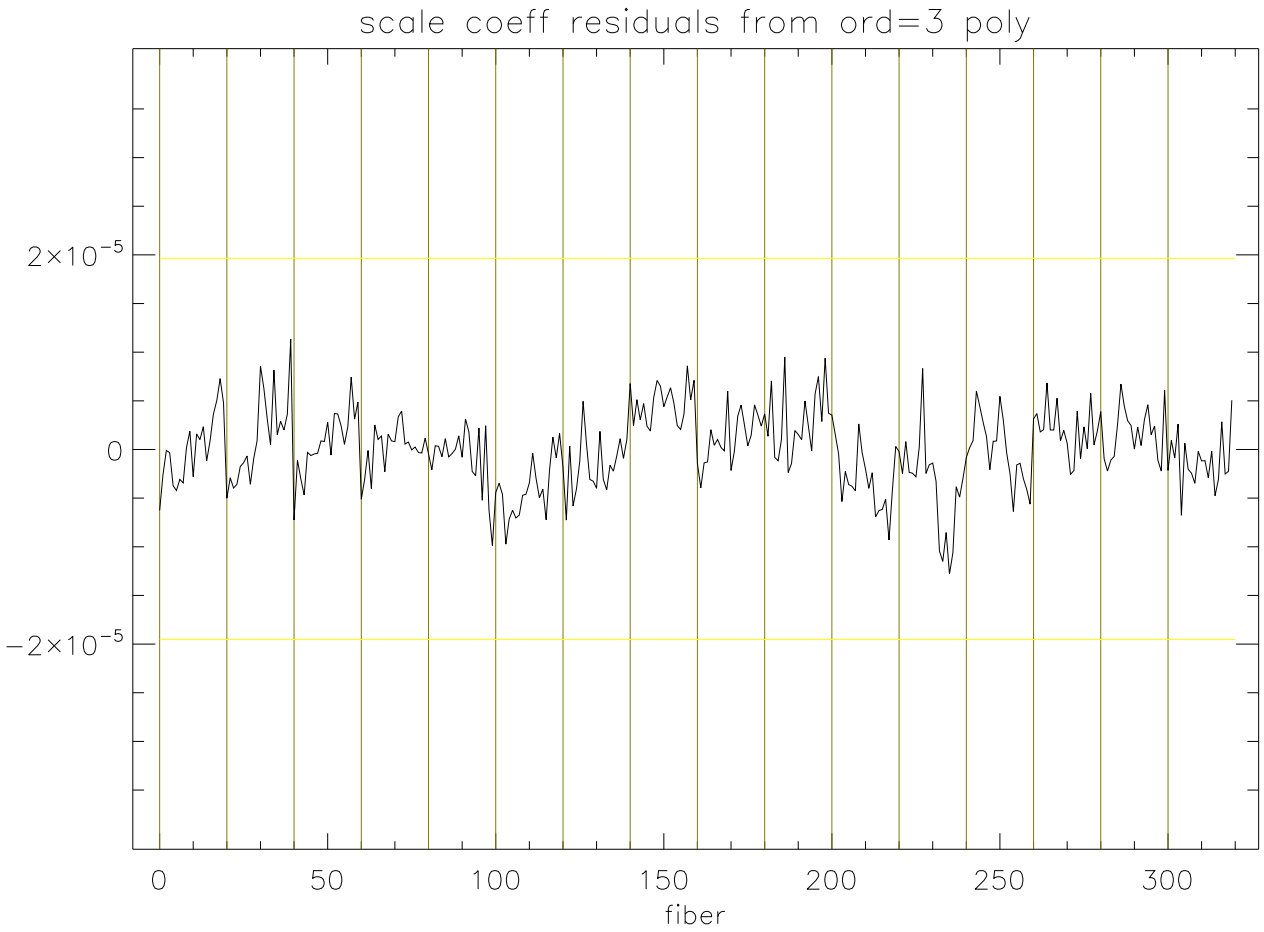

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

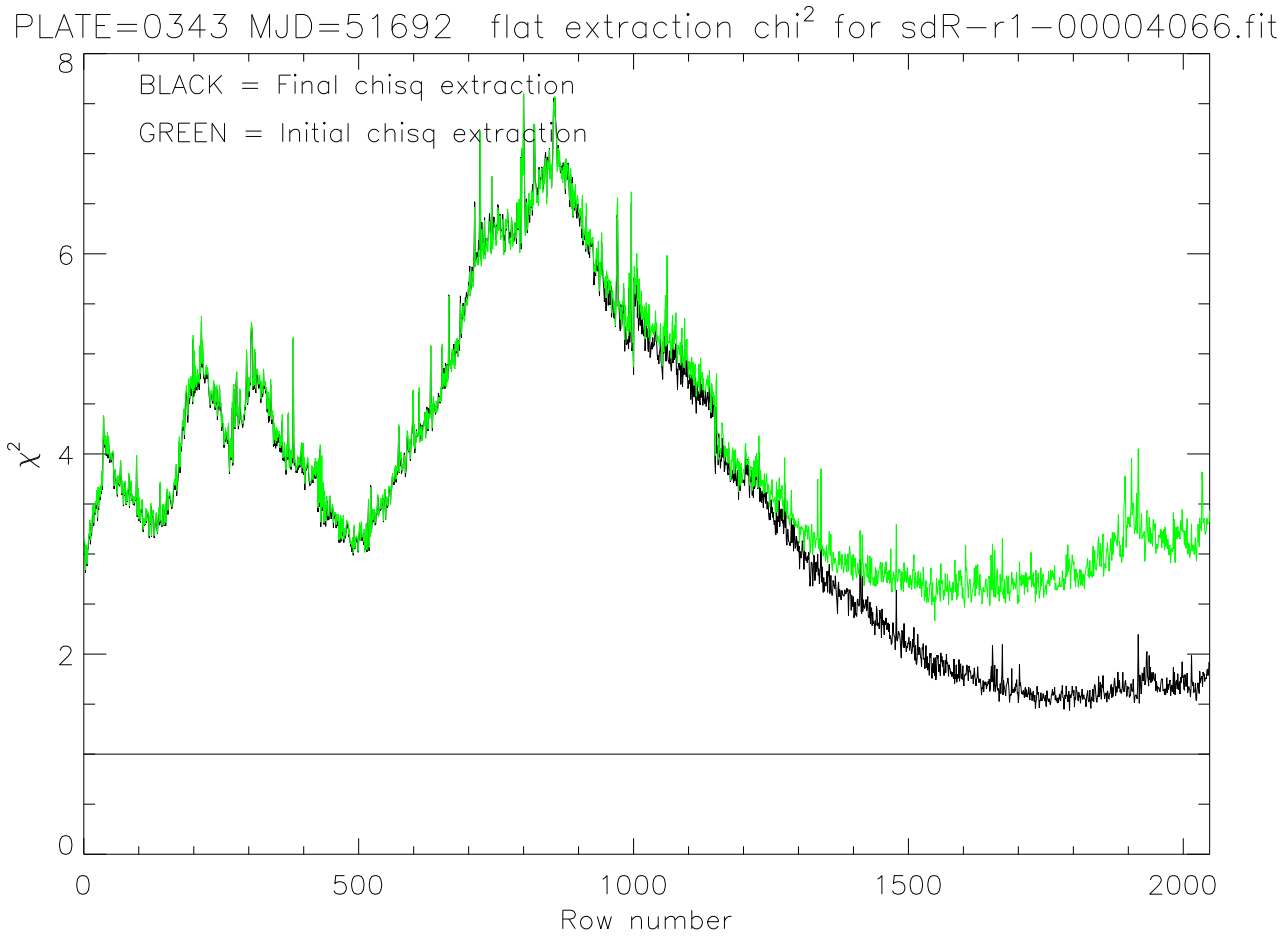

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

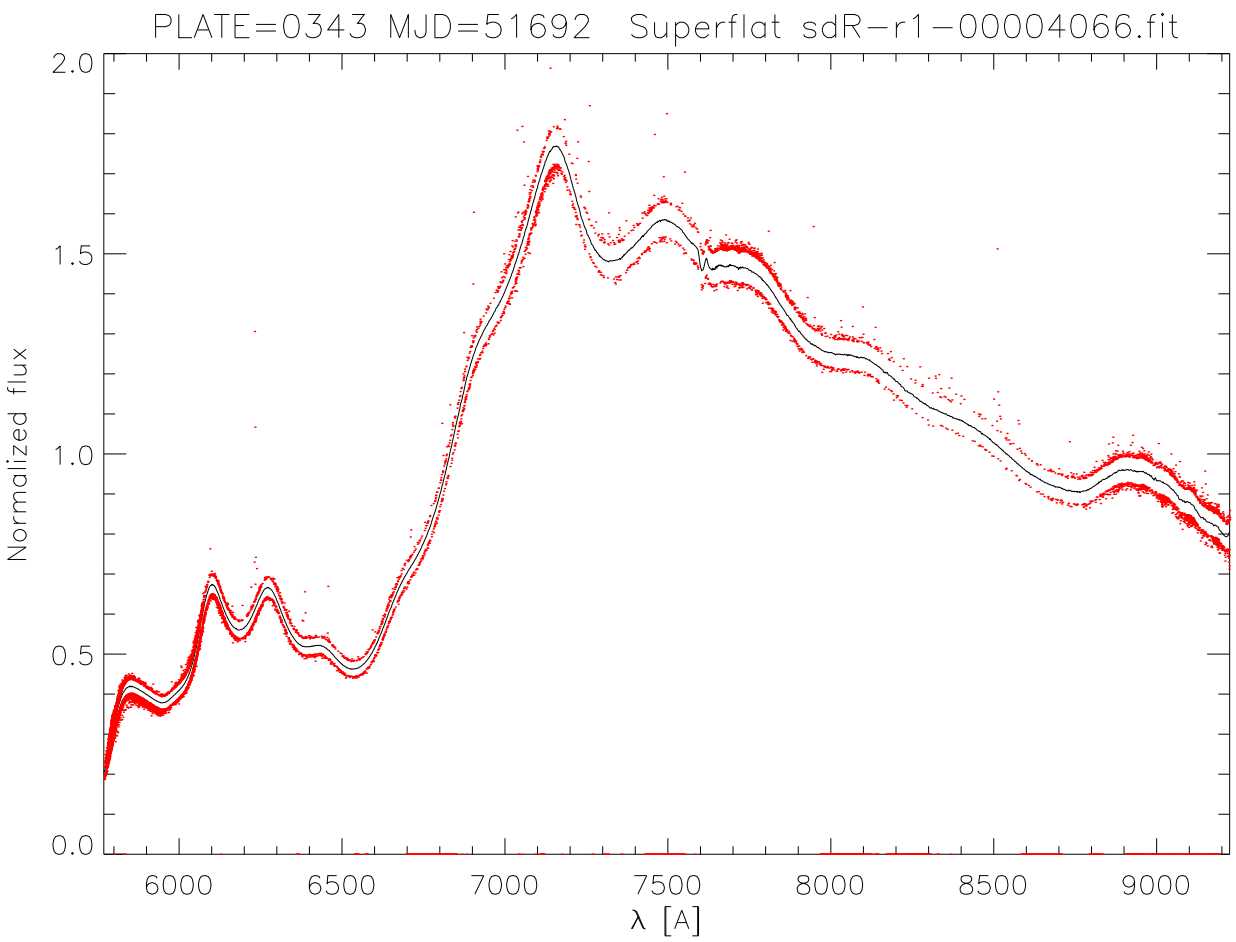

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

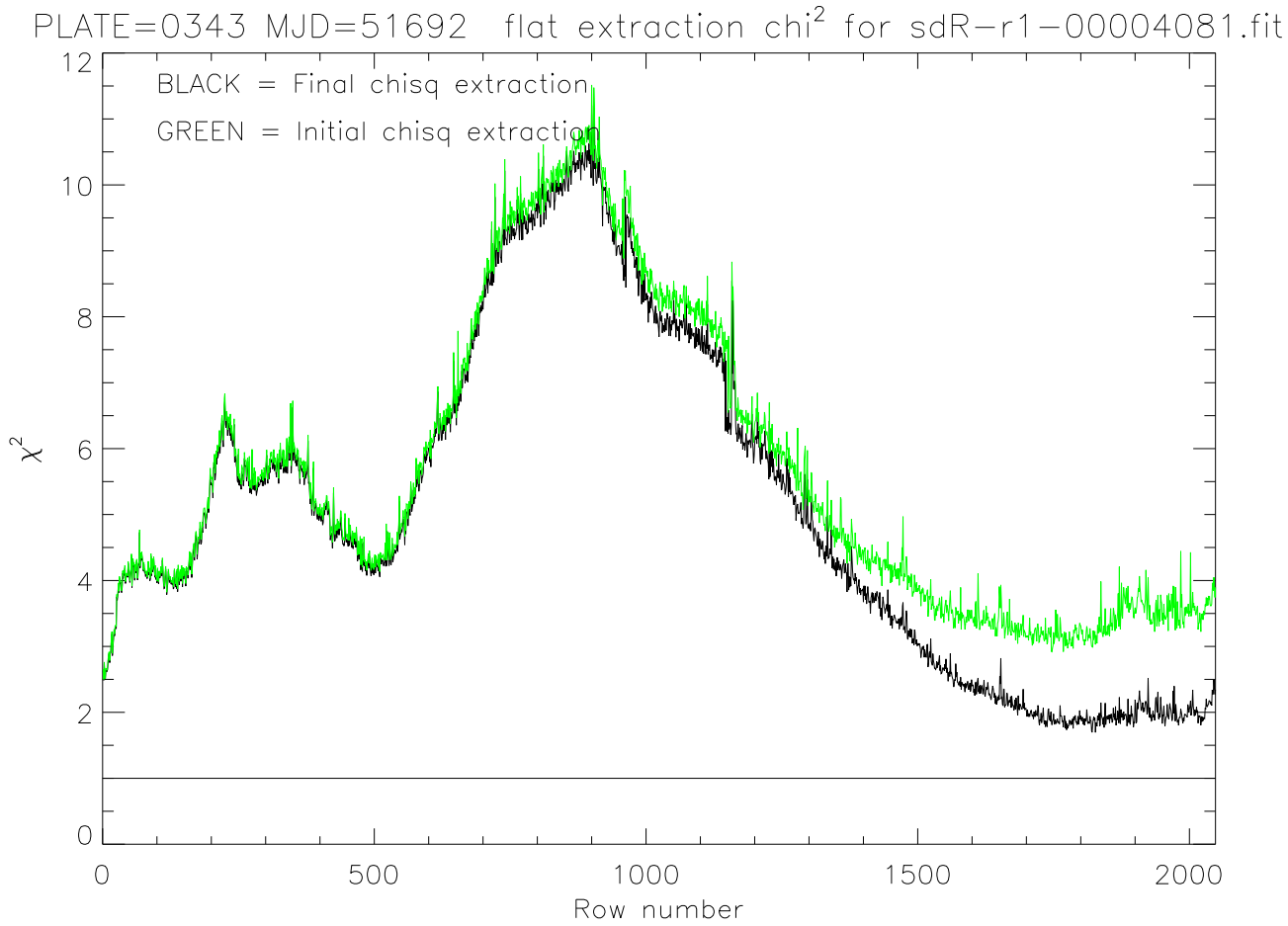

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

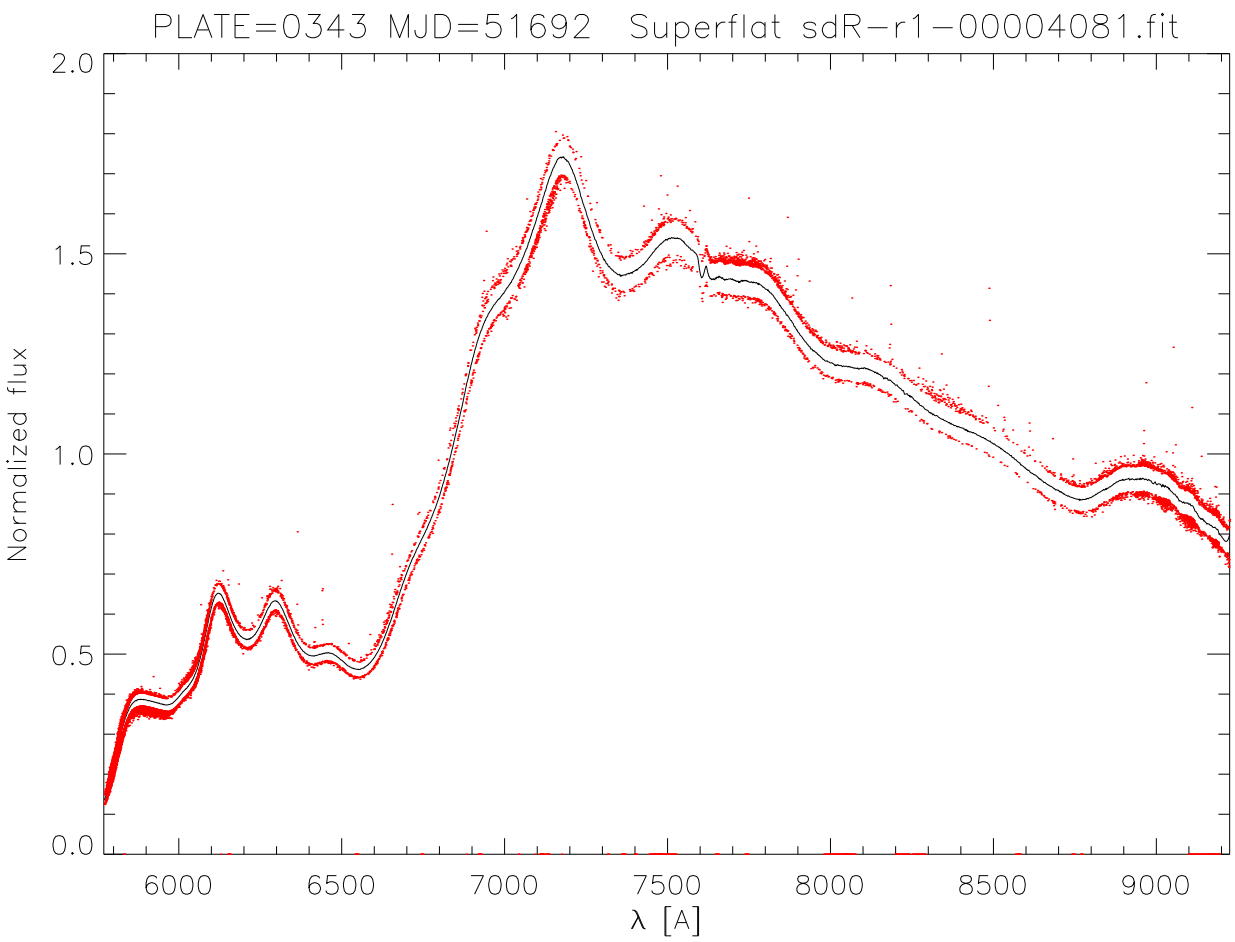

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

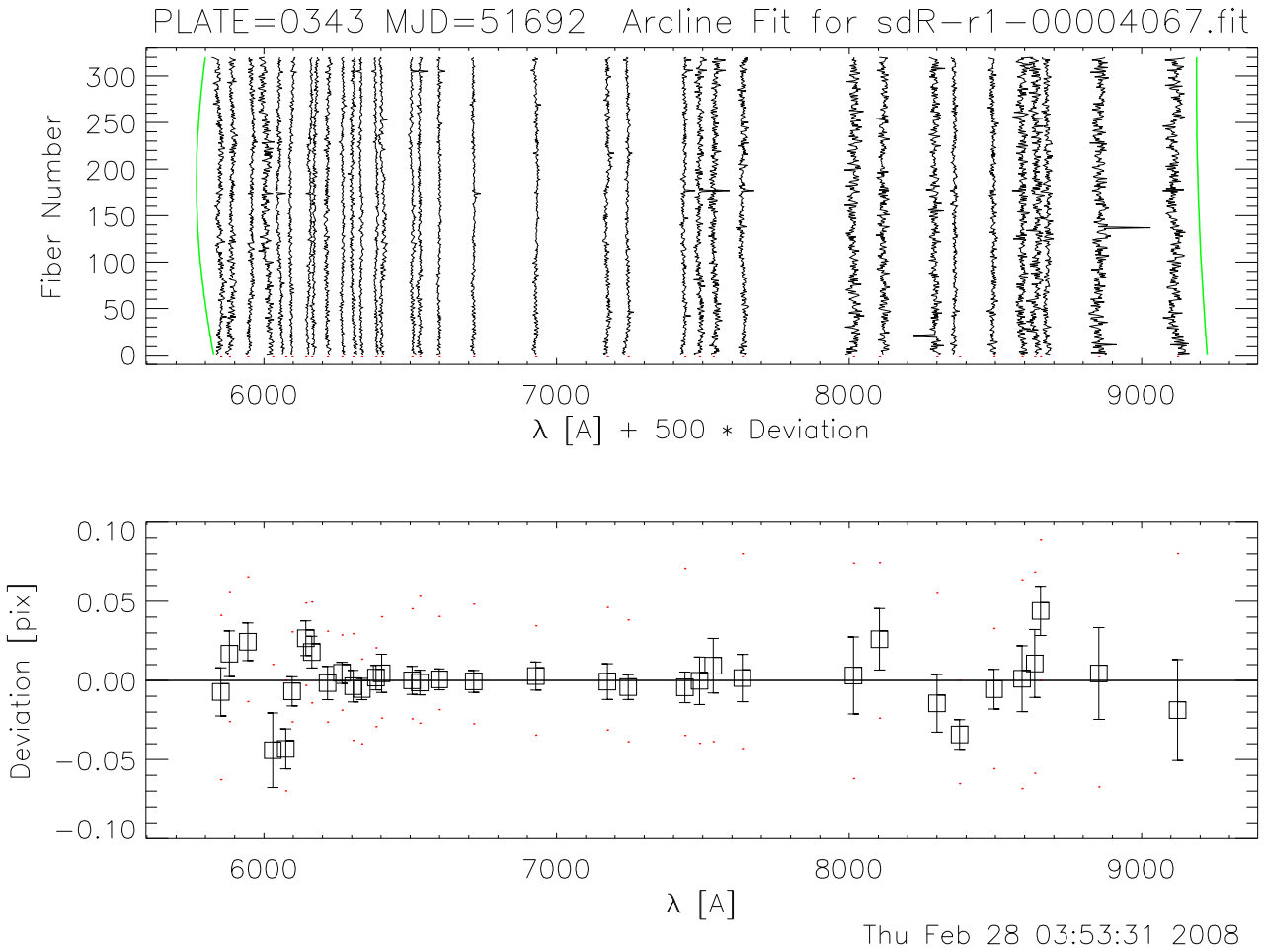

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

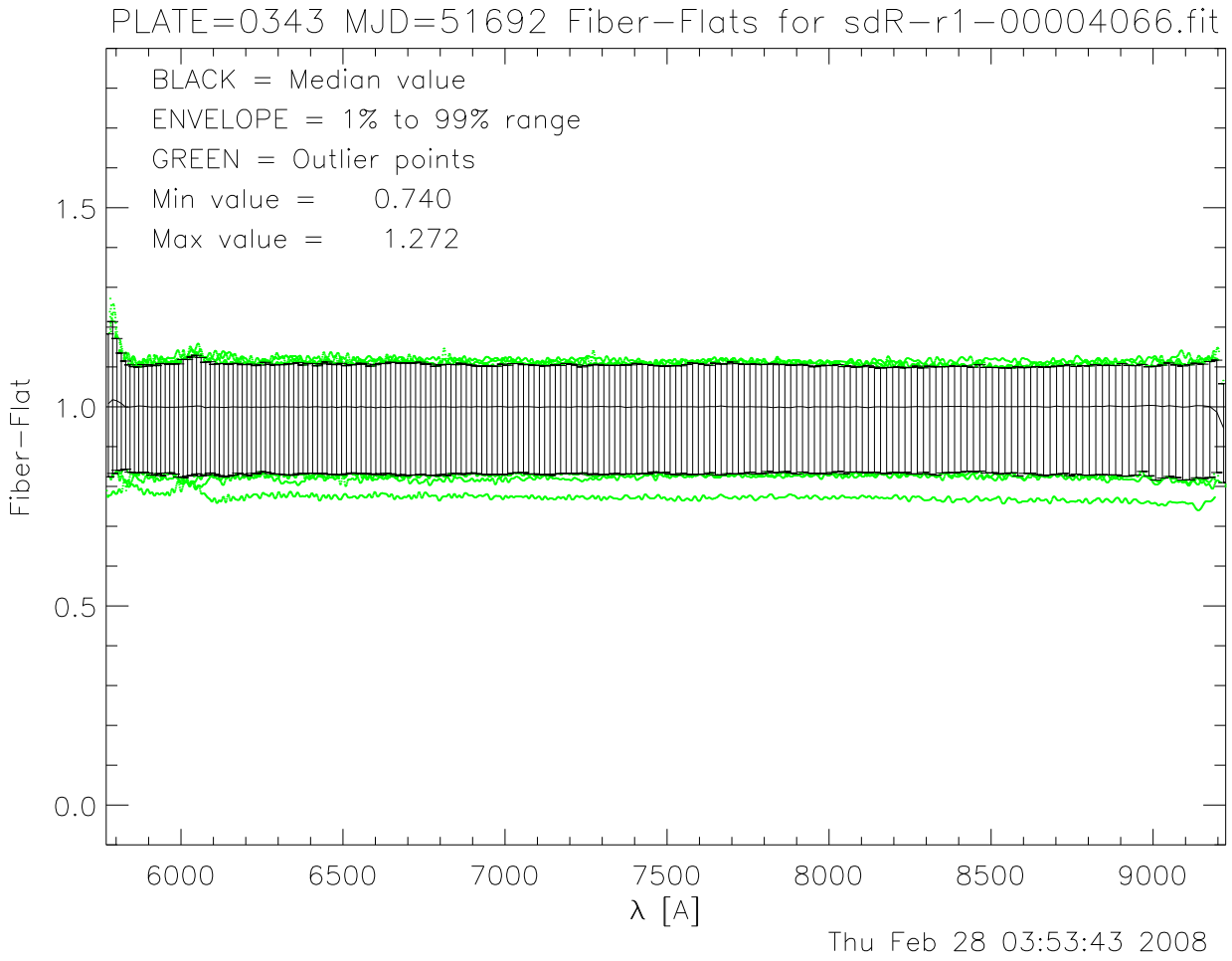

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−r1−00004066.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

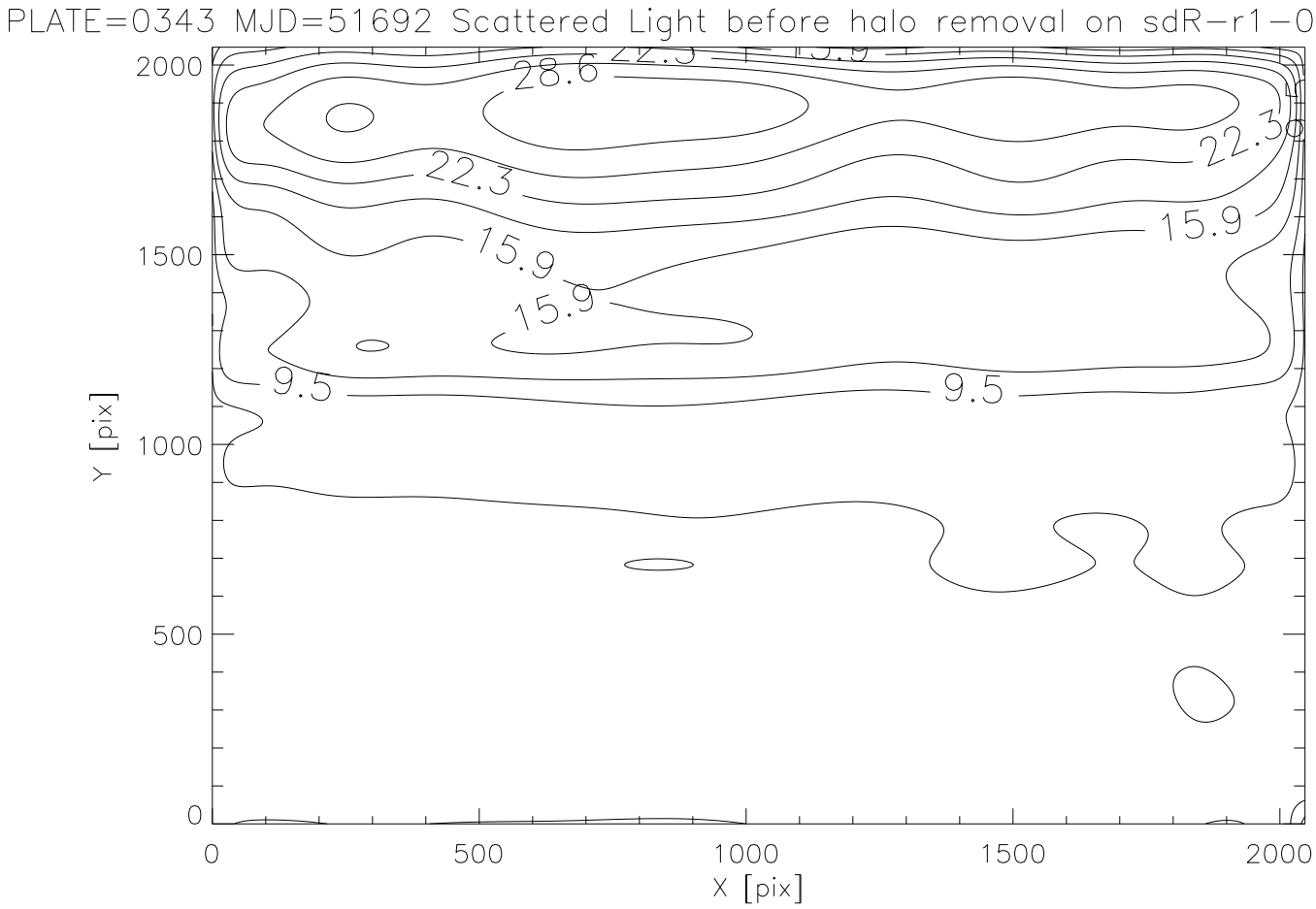

PLATE=0343 MJD=51692 Superflat sdR-r1-00004066.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

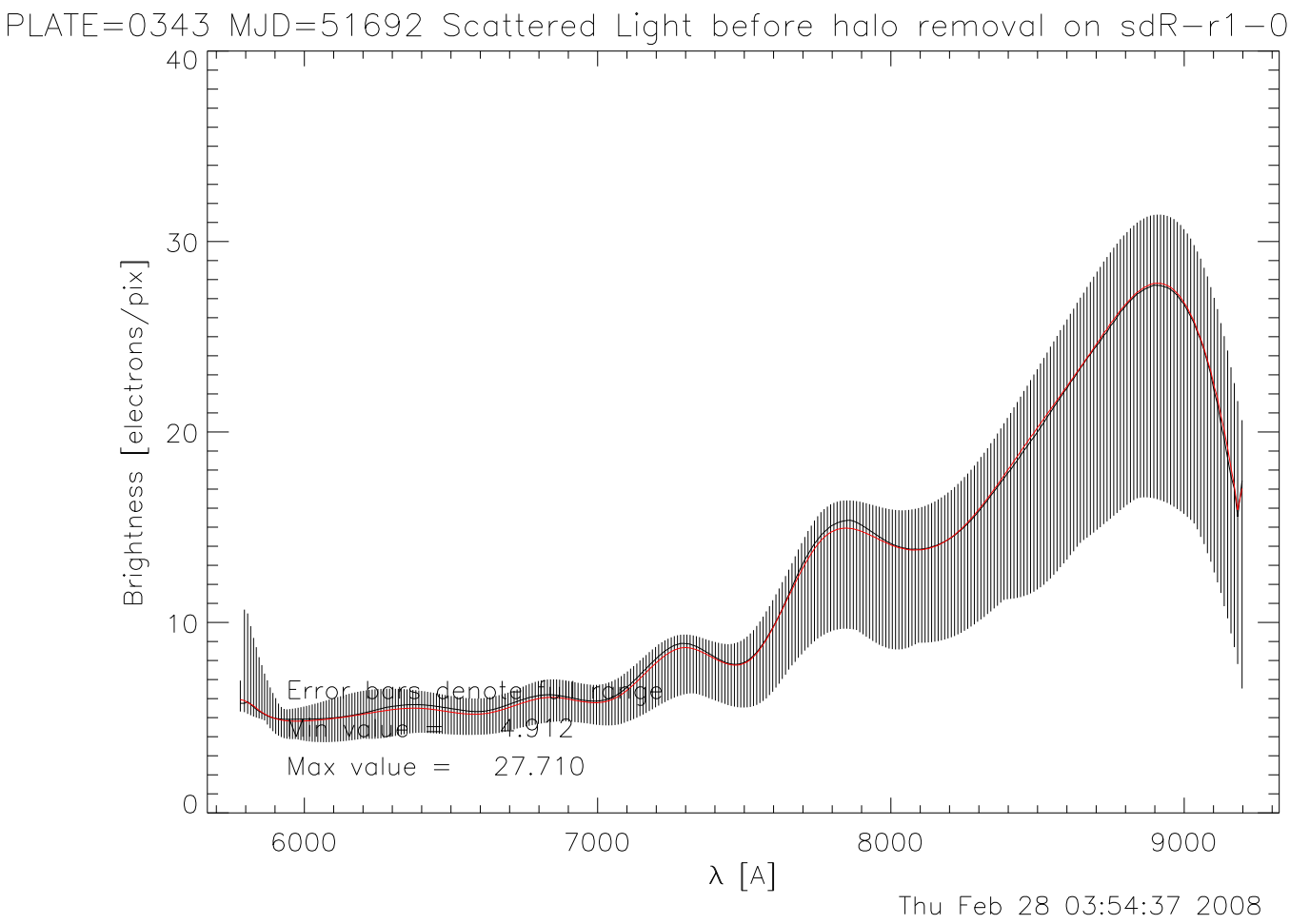

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−r1−00004081.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

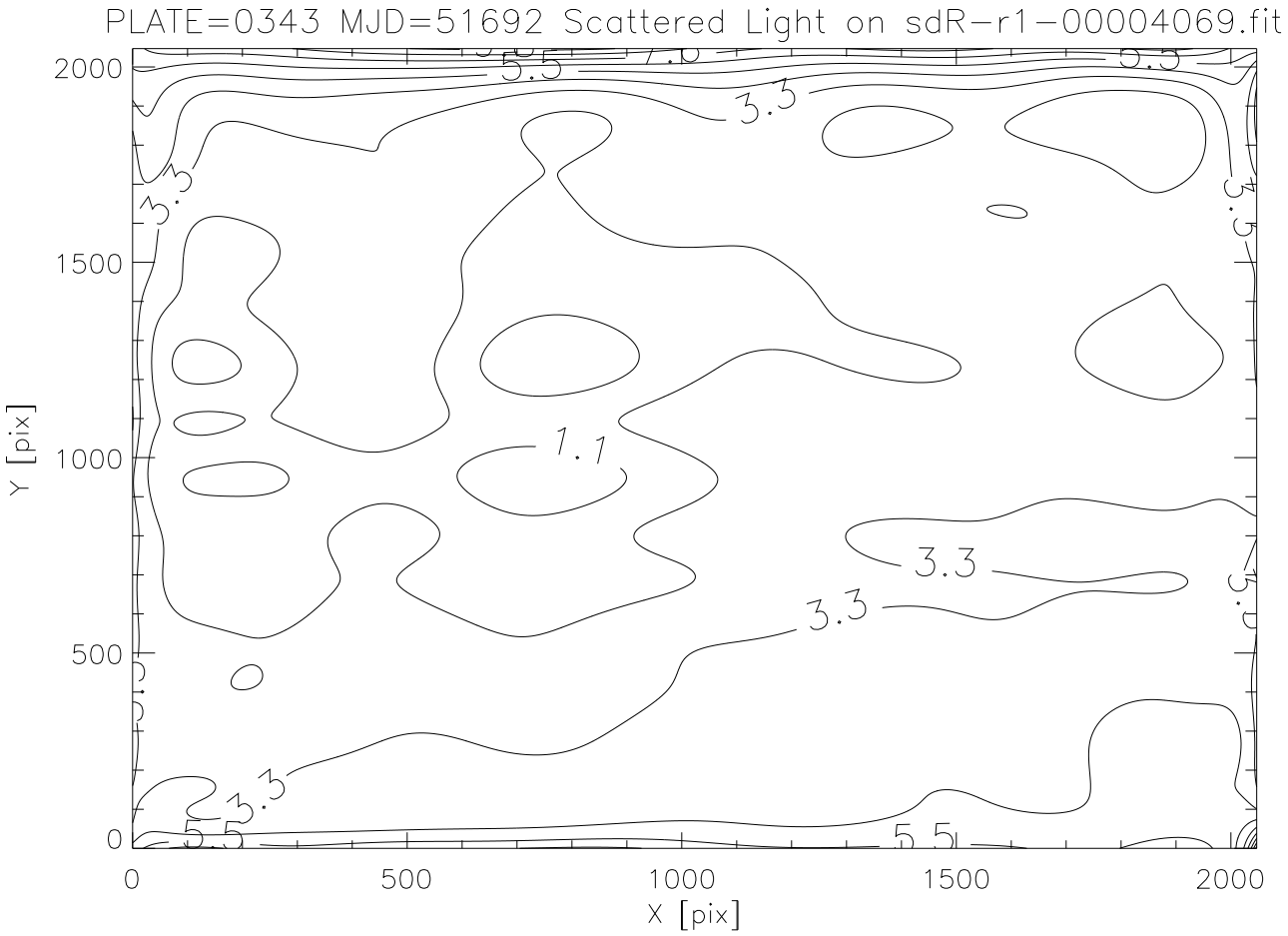

PLATE=0343 MJD=51692 Superflat sdR-r1-00004081.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

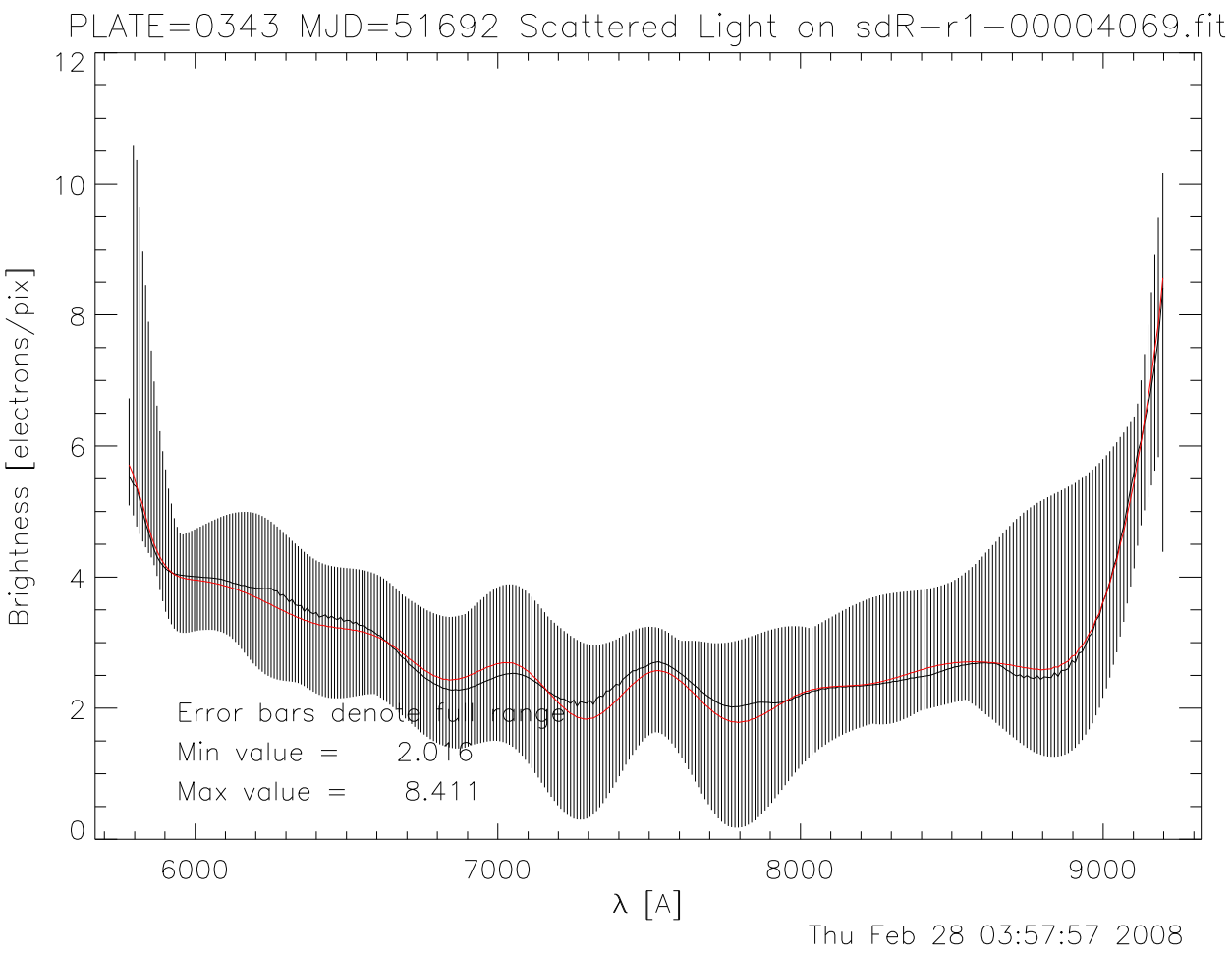

PLATE=0343 MJD=51692 Arcline Fit for sdR-r1-00004067.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 28 03:53:31 2008

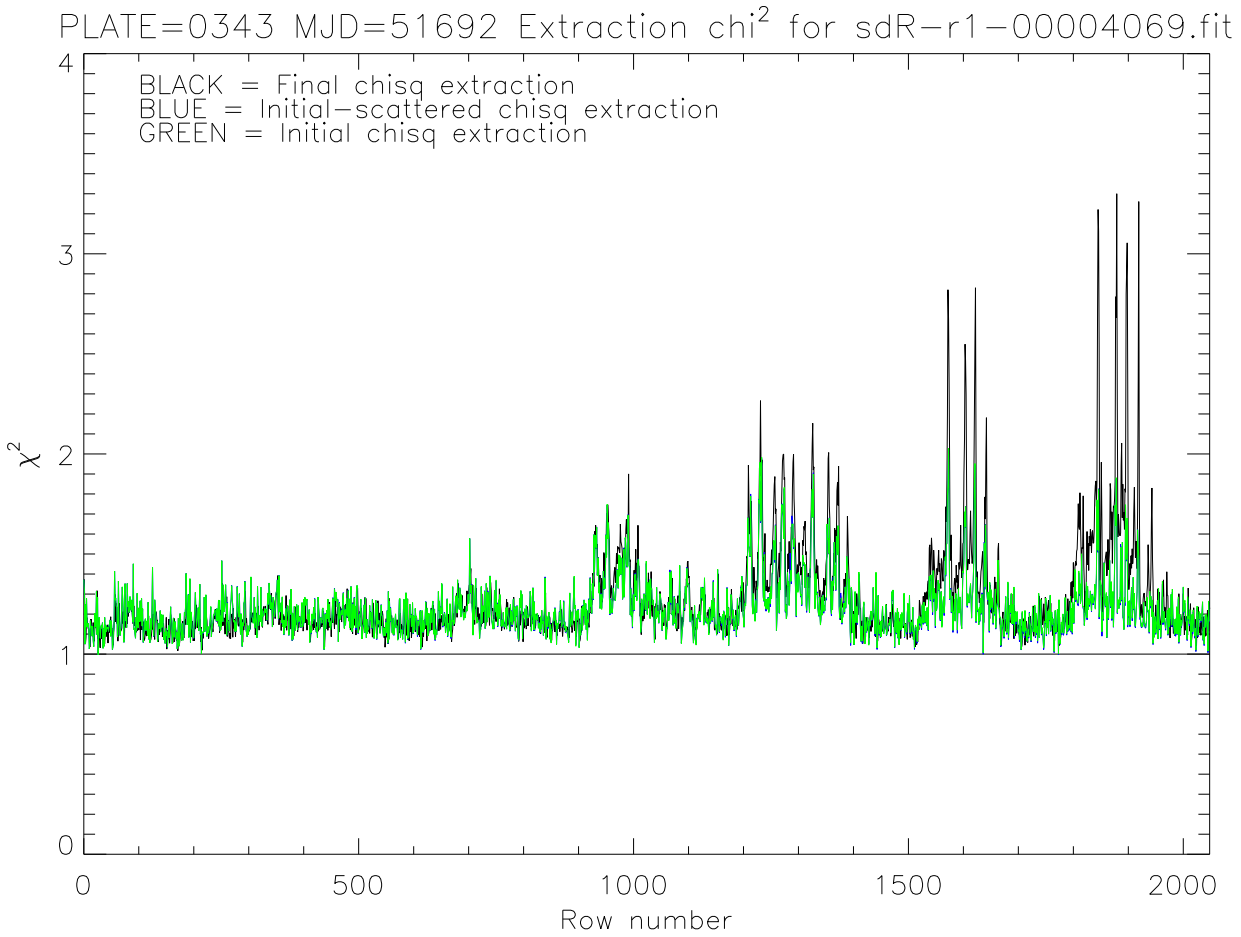

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 03:53:43 2008

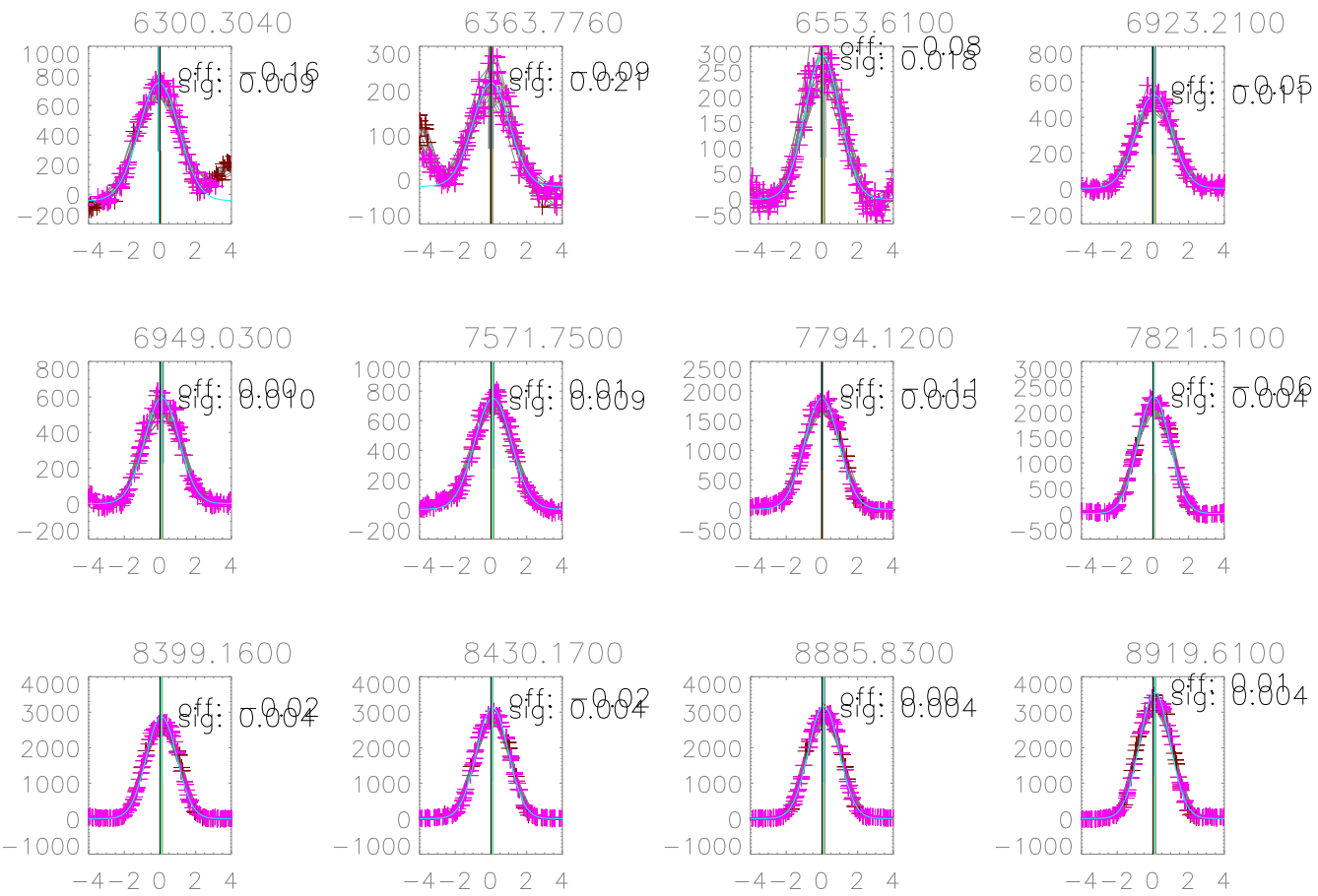

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004069.fi
28.6
22.3
22.3
15.9
15.9
15.9
9.5
9.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

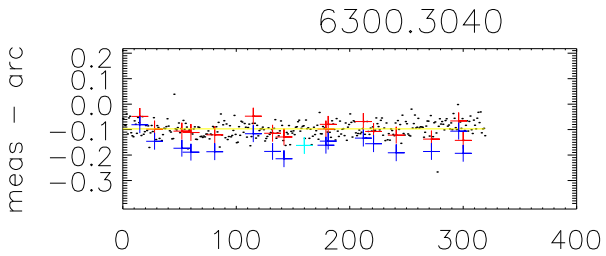

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004069.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.912
Max value = 27.710
Thu Feb 28 03:54:37 2008

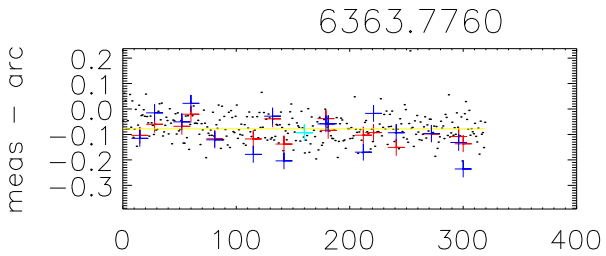

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004069.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3
1.1

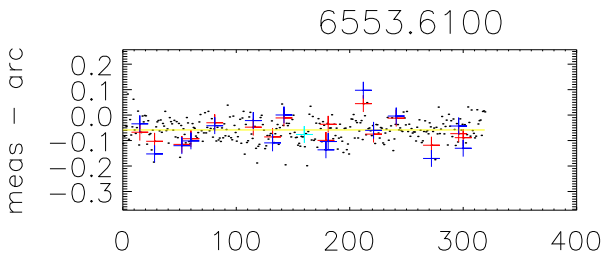

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004069.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.016
Max value = 8.411
Thu Feb 28 03:57:57 2008

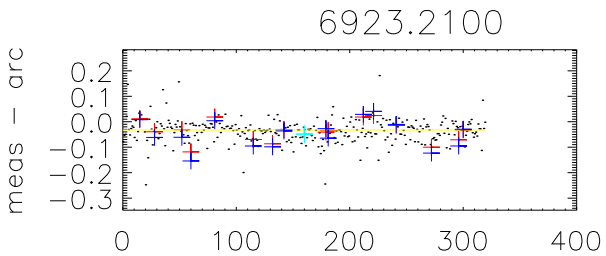

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004069.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

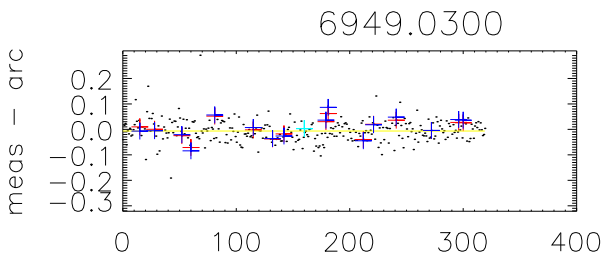

6300.3040
off: −0.16
sig: 0.009
6363.7760
off: −0.09
sig: 0.021
6553.6100
off: −0.08
sig: 0.018
6923.2100
off: −0.05
sig: 0.011
6949.0300
off: 0.00
sig: 0.010
7571.7500
off: 0.01
sig: 0.009
7794.1200
off: −0.11
sig: 0.005
7821.5100
off: −0.06
sig: 0.004
8399.1600
off: −0.02
sig: 0.004
8430.1700
off: −0.02
sig: 0.004
8885.8300
off: 0.00
sig: 0.004
8919.6100
off: 0.01
sig: 0.004

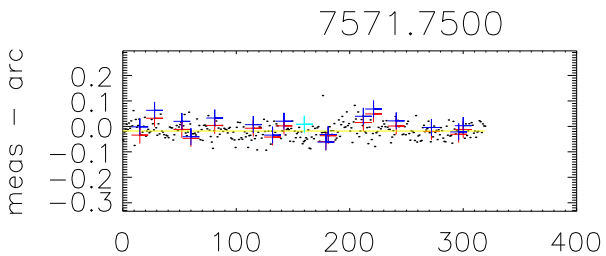

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

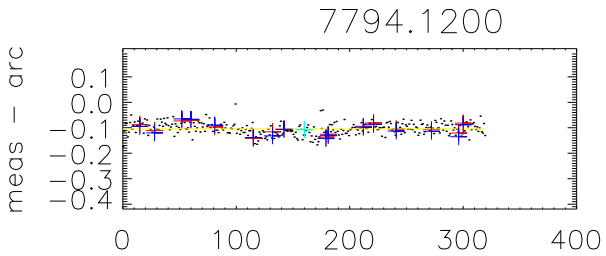

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

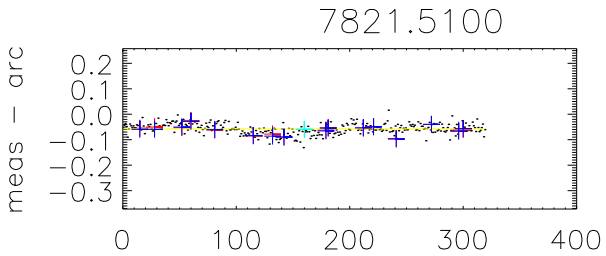

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

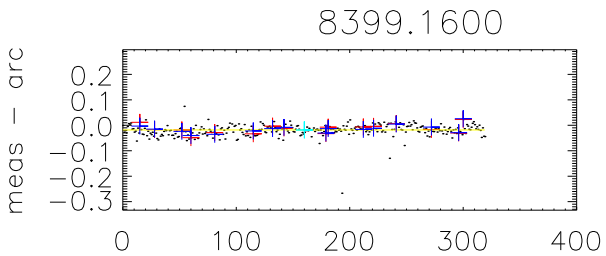

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

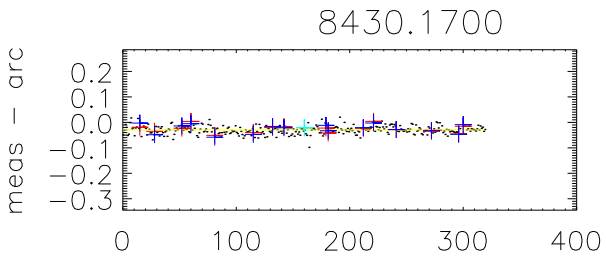

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

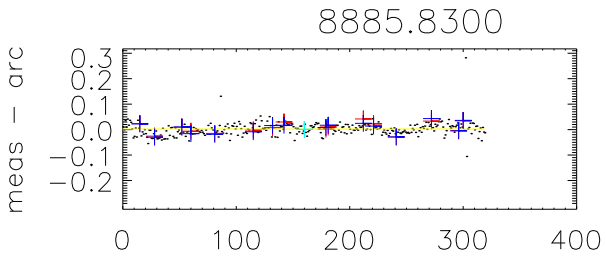

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

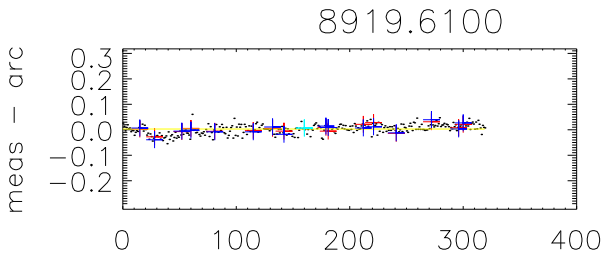

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

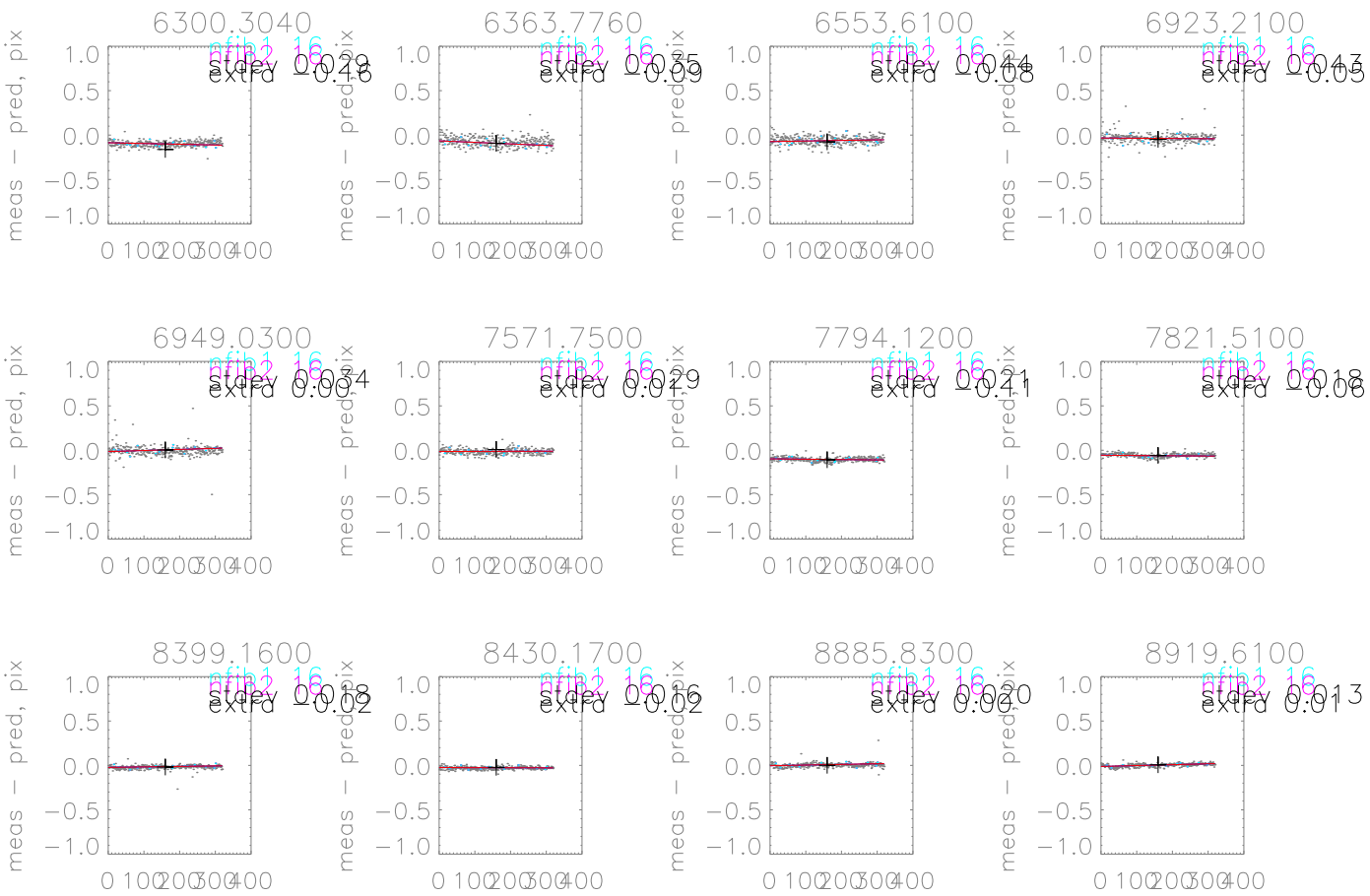

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

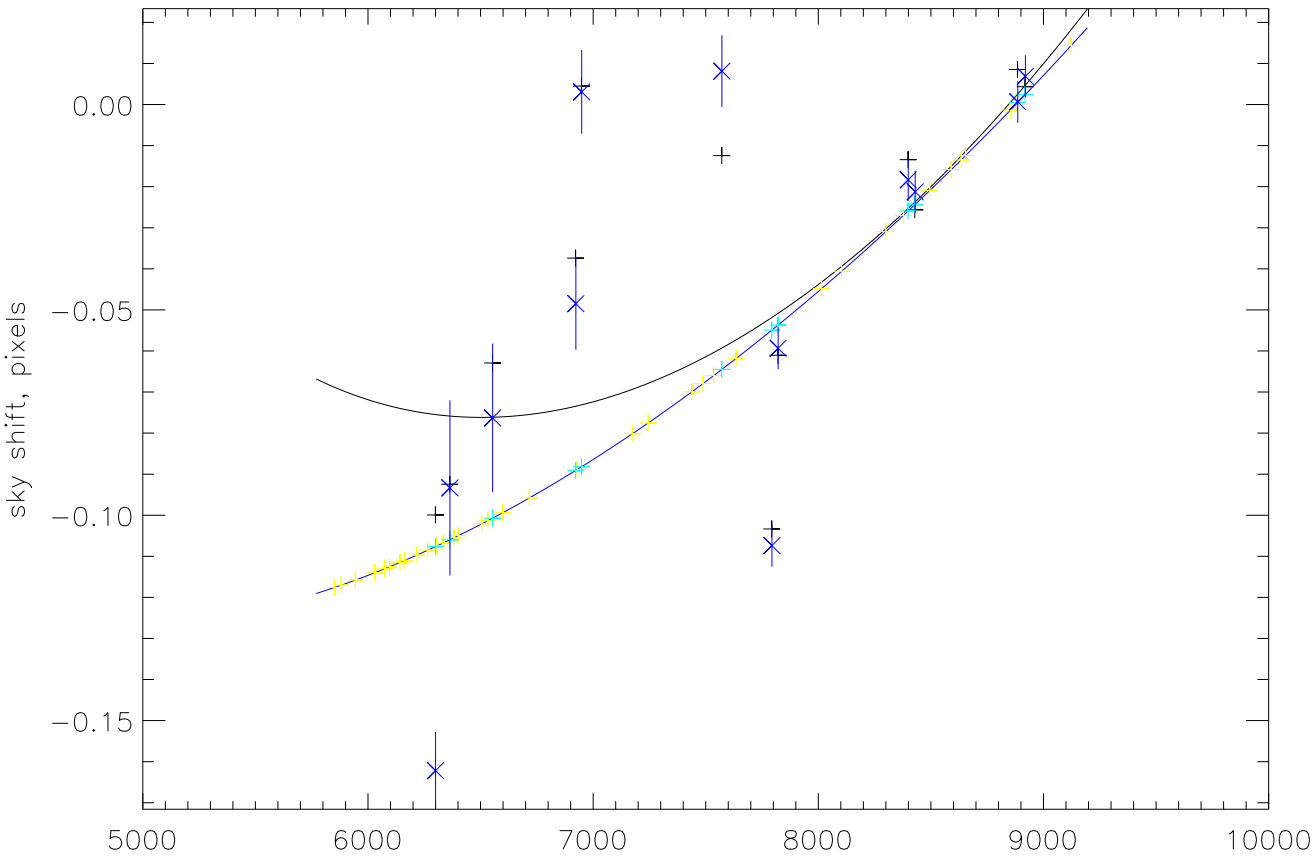

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

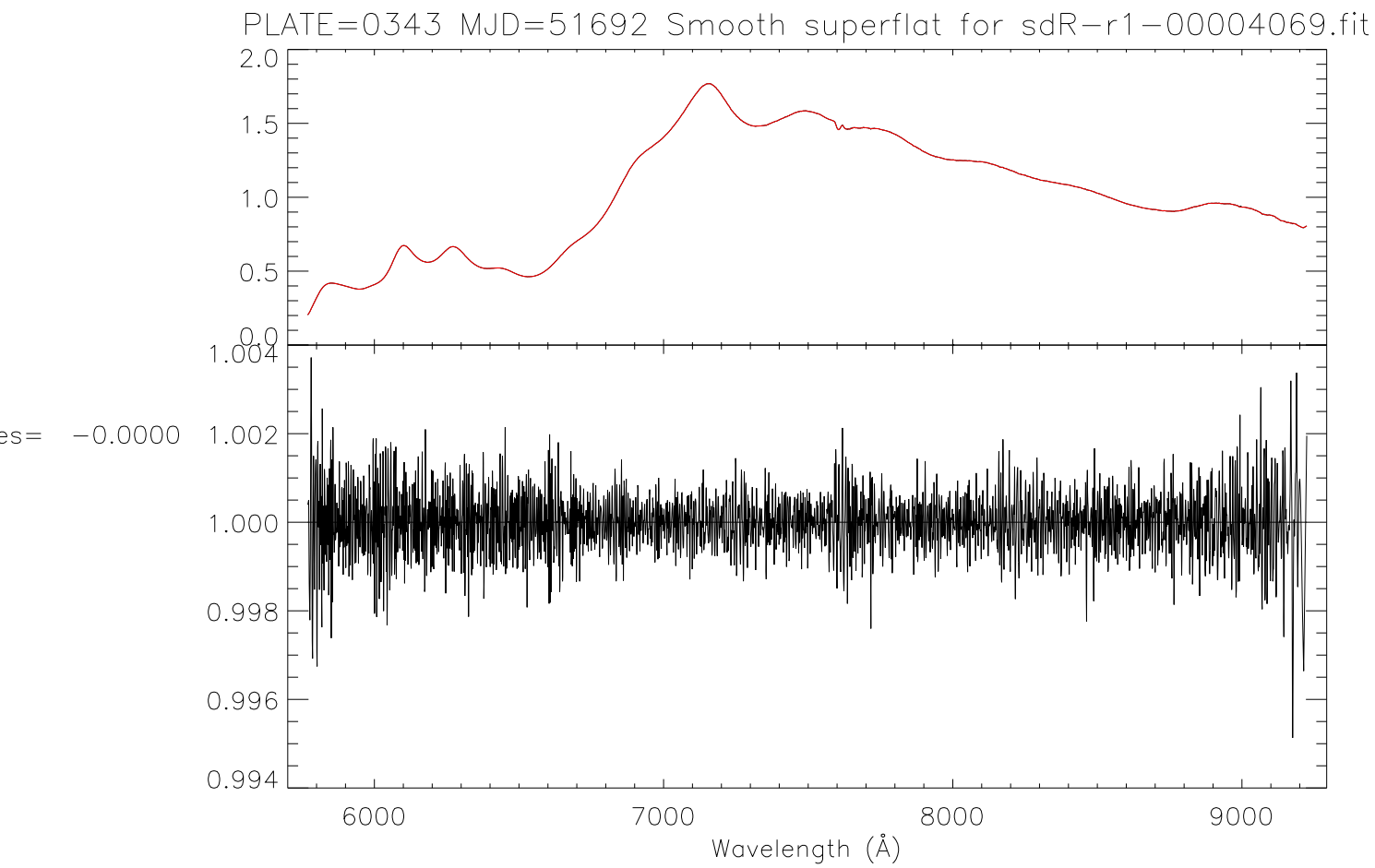

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

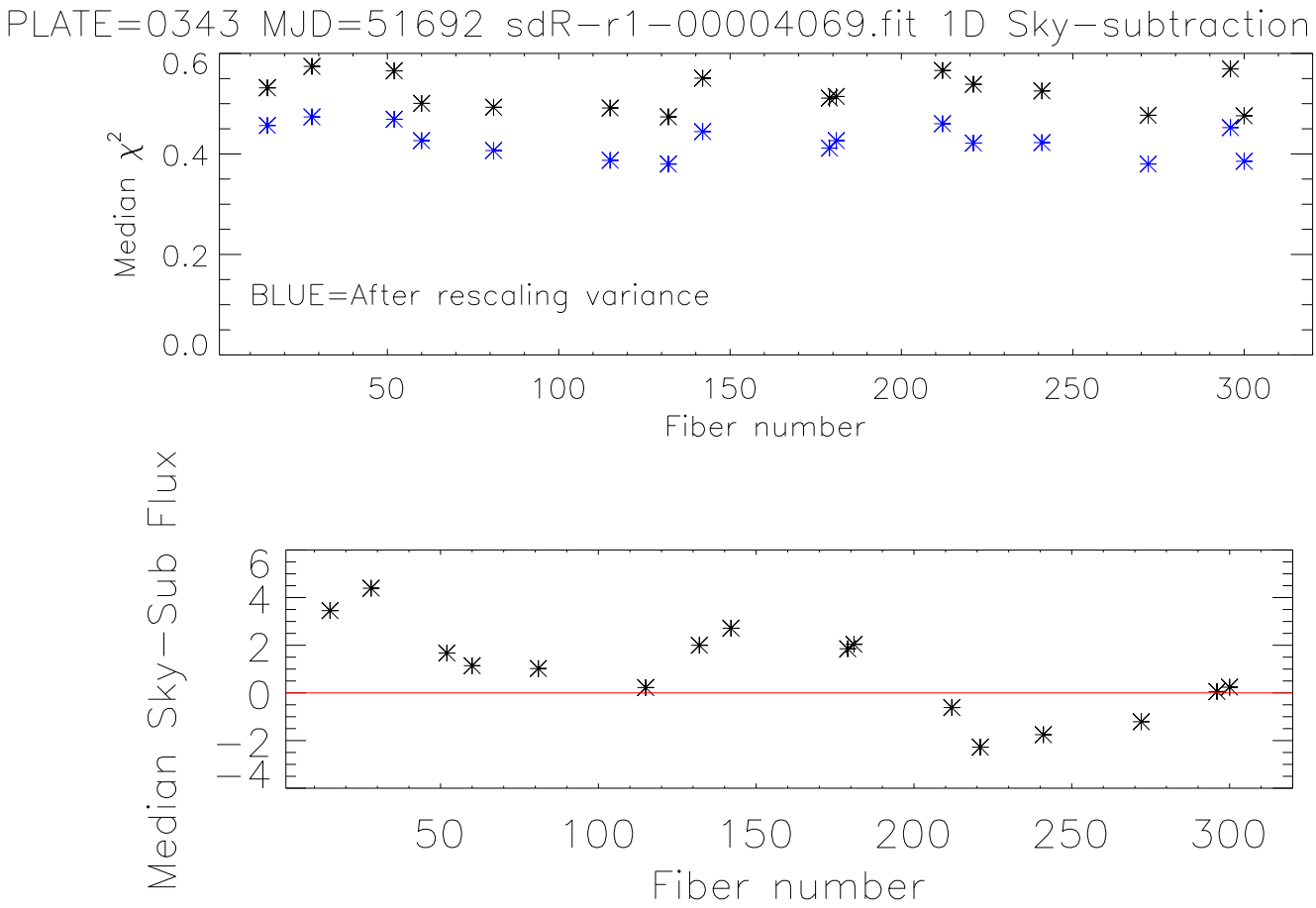

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

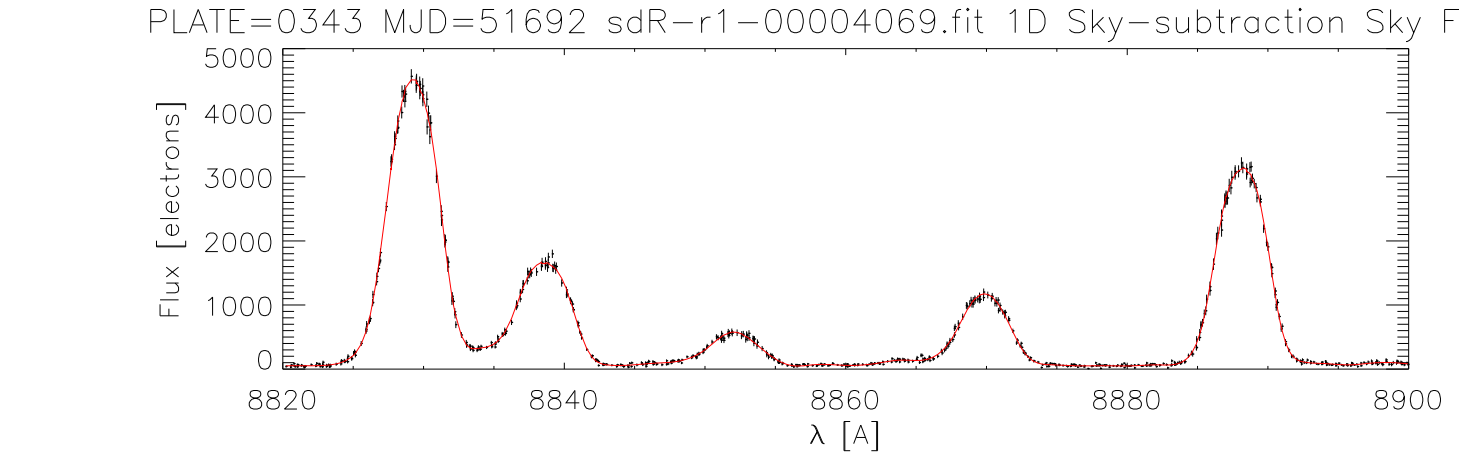

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

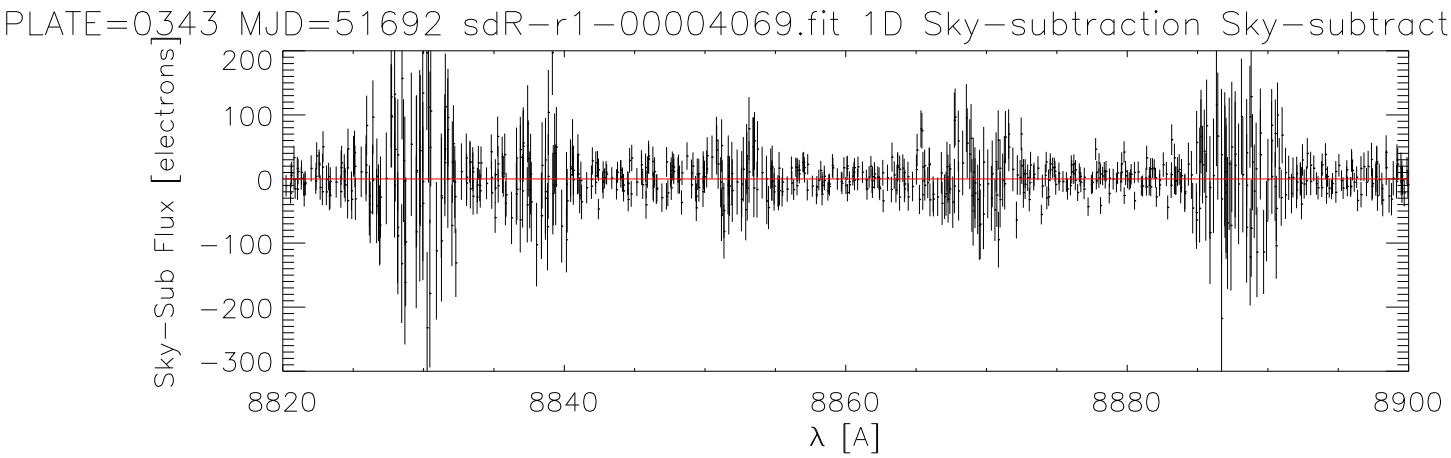

6300.3040
stdev 0.029
extra −0.48
6363.7760
stdev 0.035
extra −0.09
6553.6100
stdev 0.044
extra −0.08
6923.2100
stdev 0.043
extra −0.05
6949.0300
stdev 0.034
extra 0.00
7571.7500
stdev 0.029
extra 0.01
7794.1200
stdev 0.041
extra −0.41
7821.5100
stdev 0.018
extra −0.06
8399.1600
stdev 0.018
extra −0.02
8430.1700
stdev 0.016
extra −0.02
8885.8300
stdev 0.020
extra 0.04
8919.6100
stdev 0.013
extra 0.01
meas − pred, pix
mfhd2 16

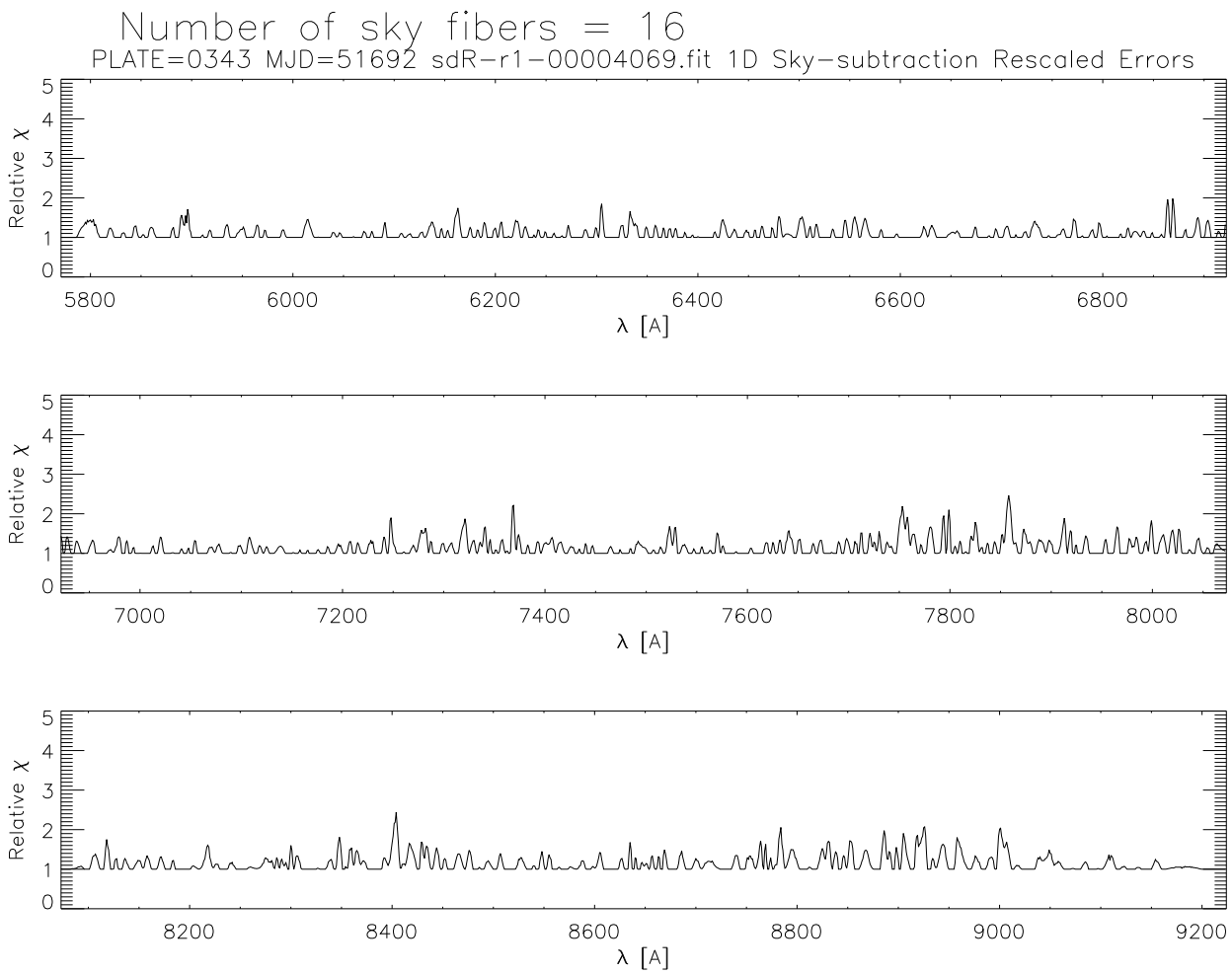

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

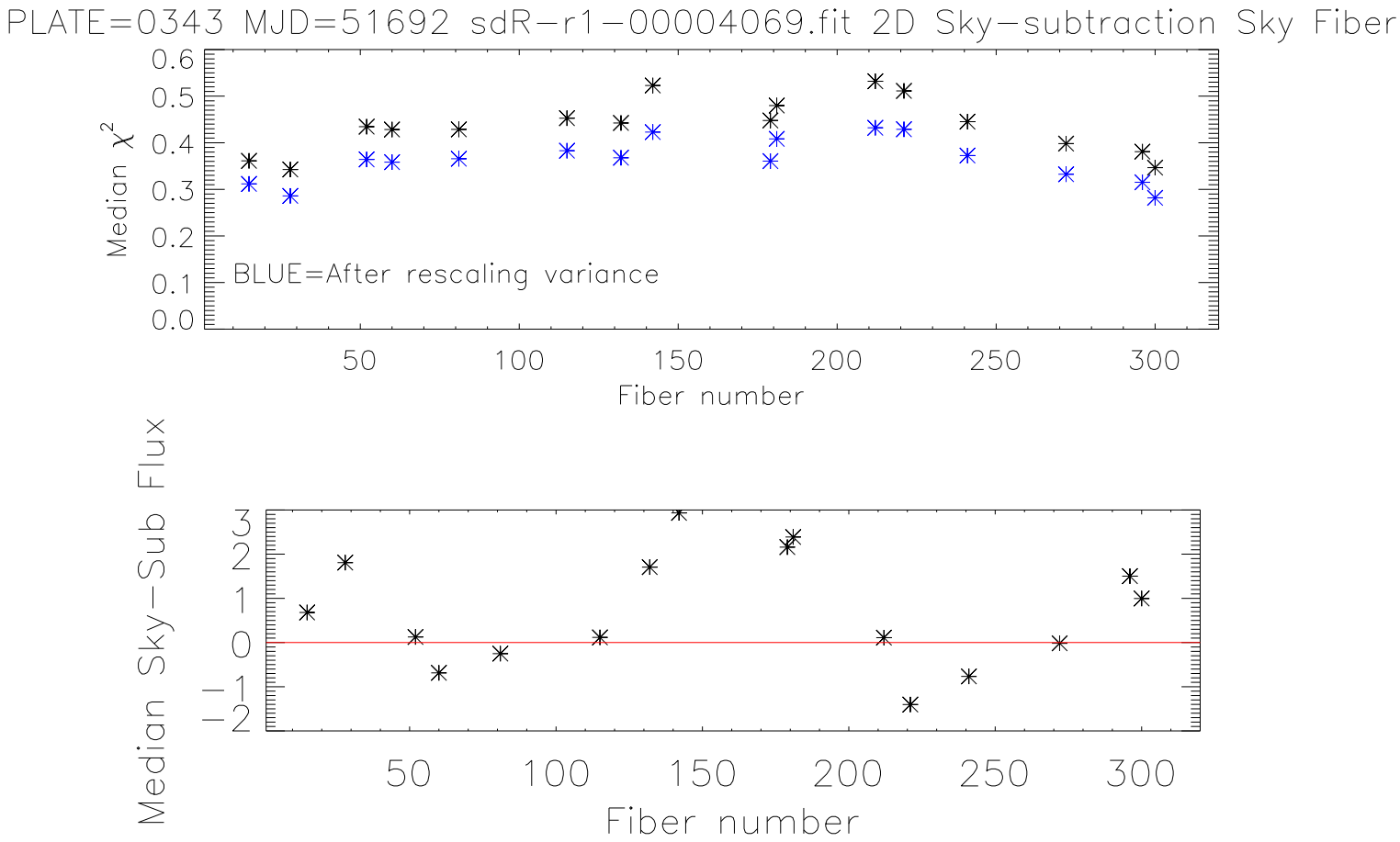

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004069.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

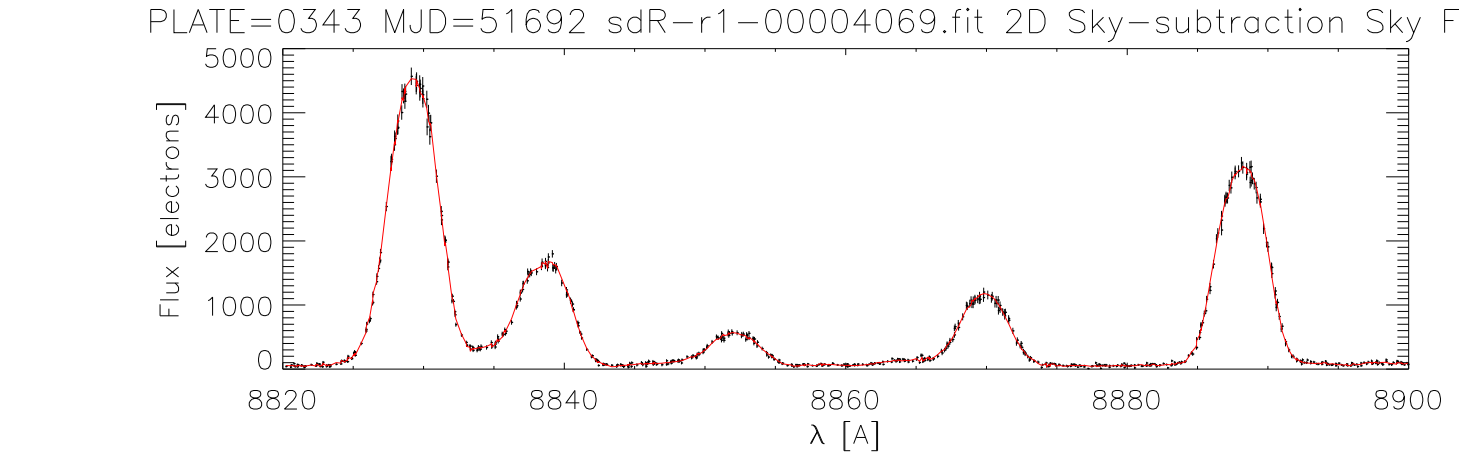

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

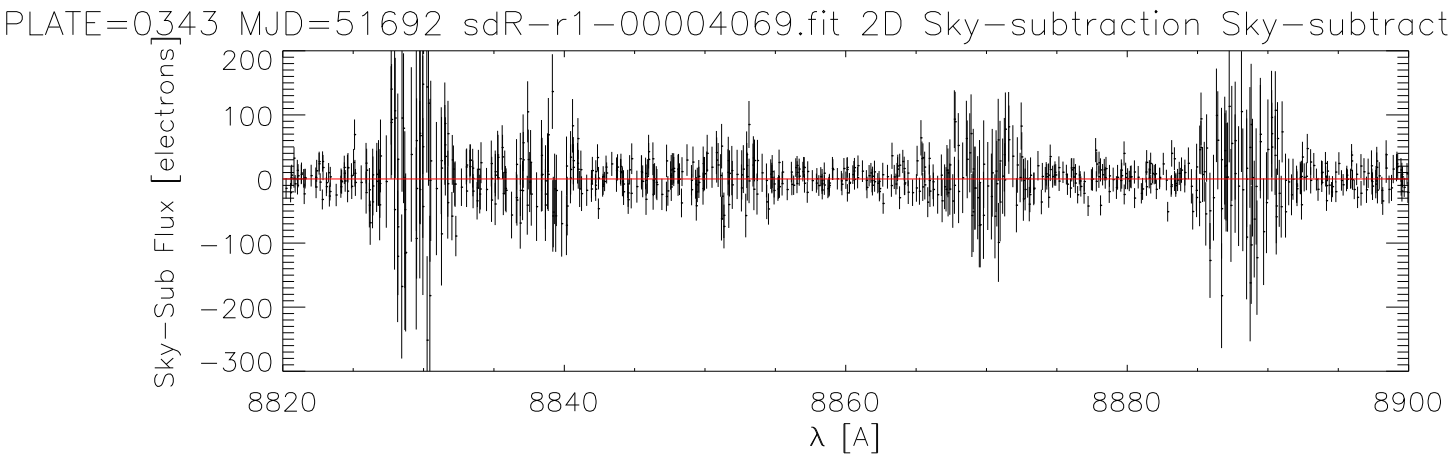

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

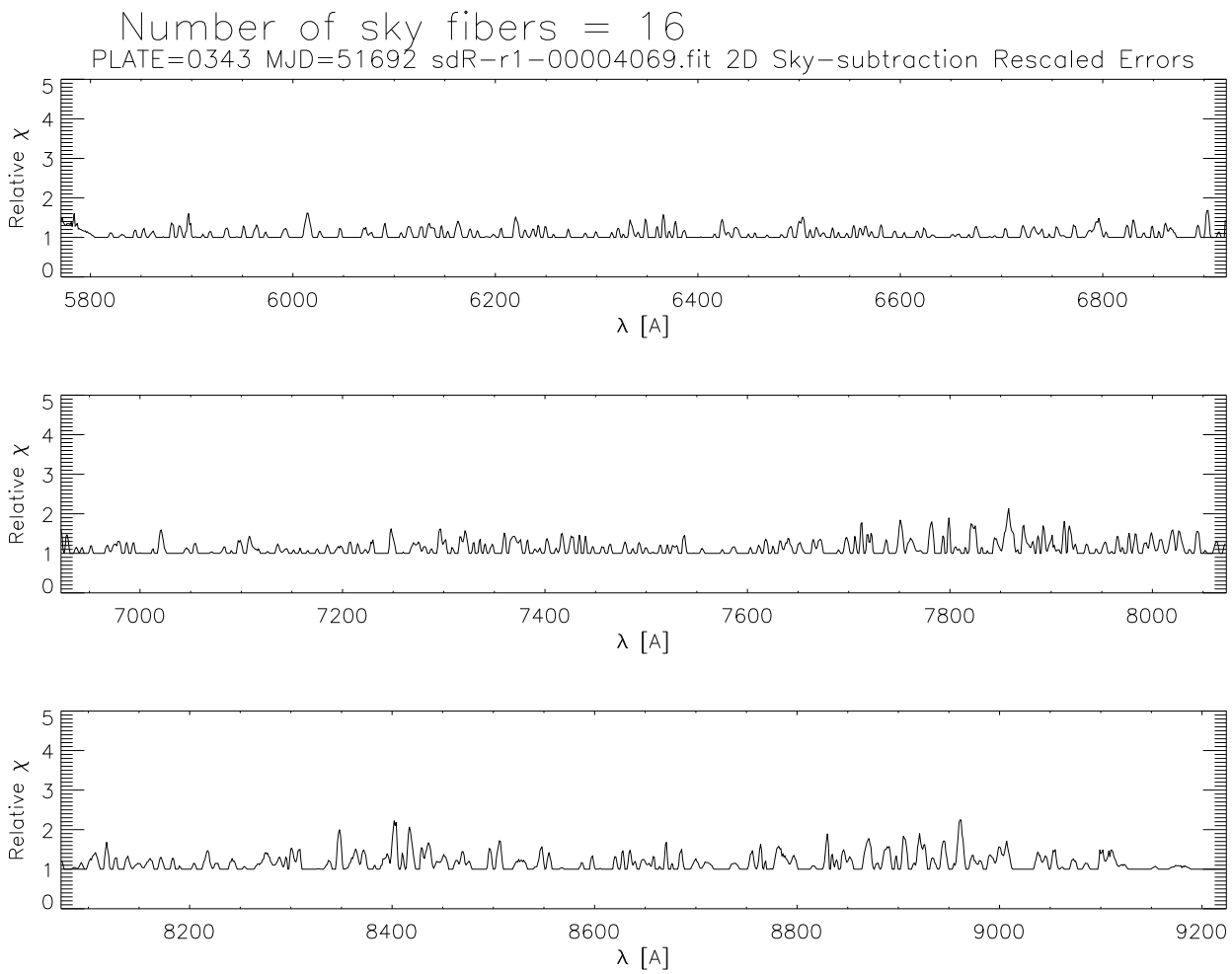

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

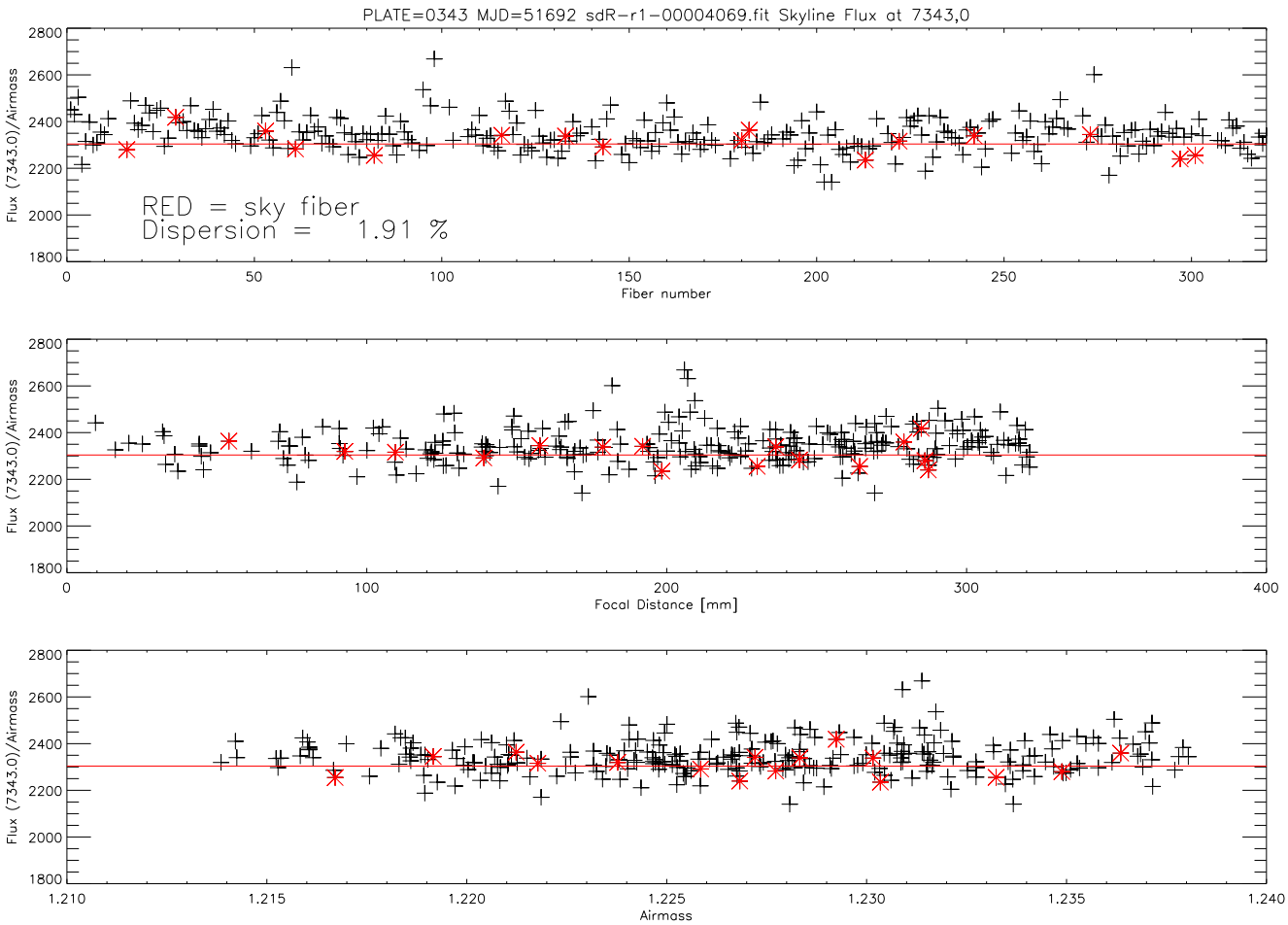

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004069.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

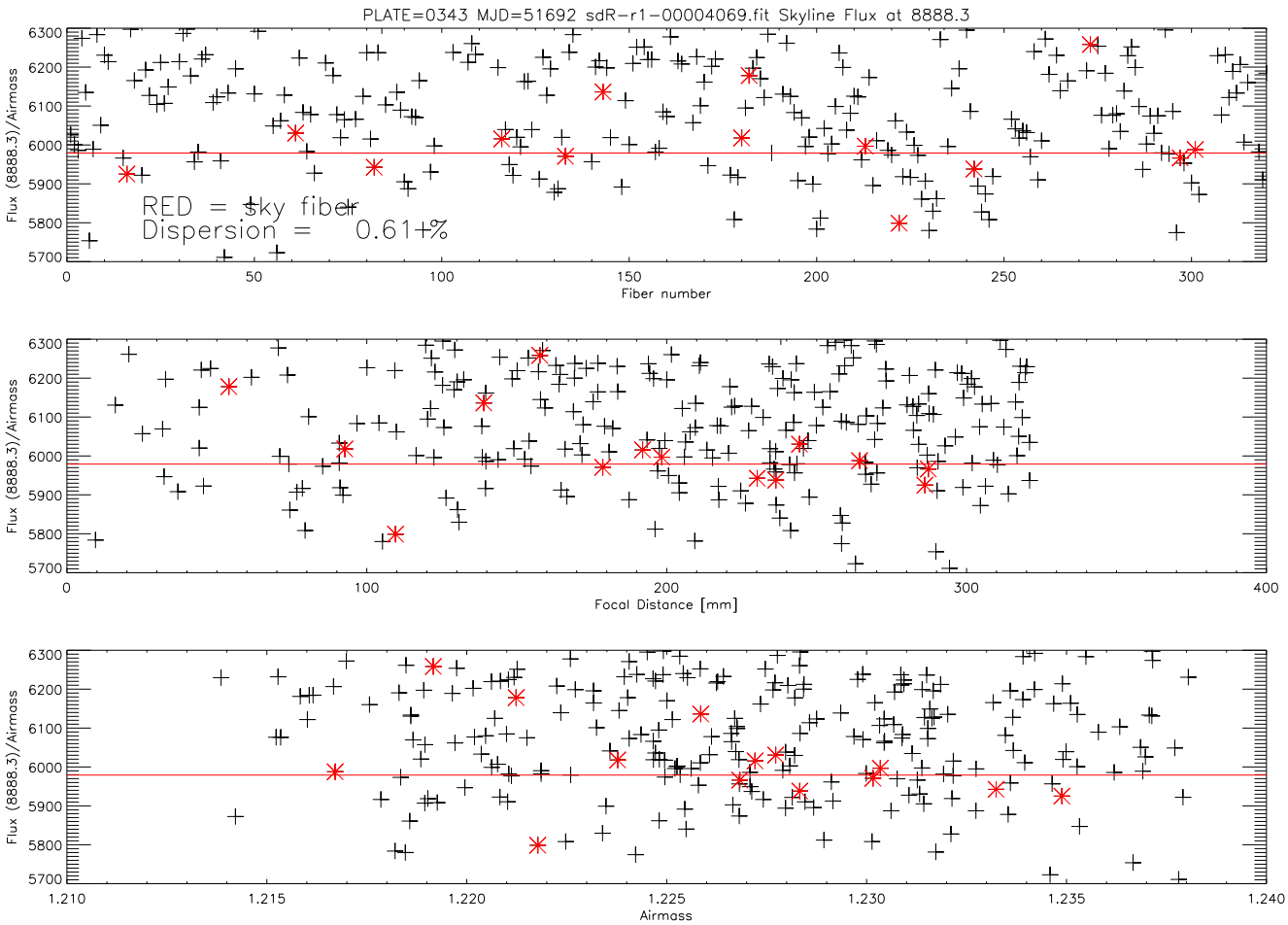

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

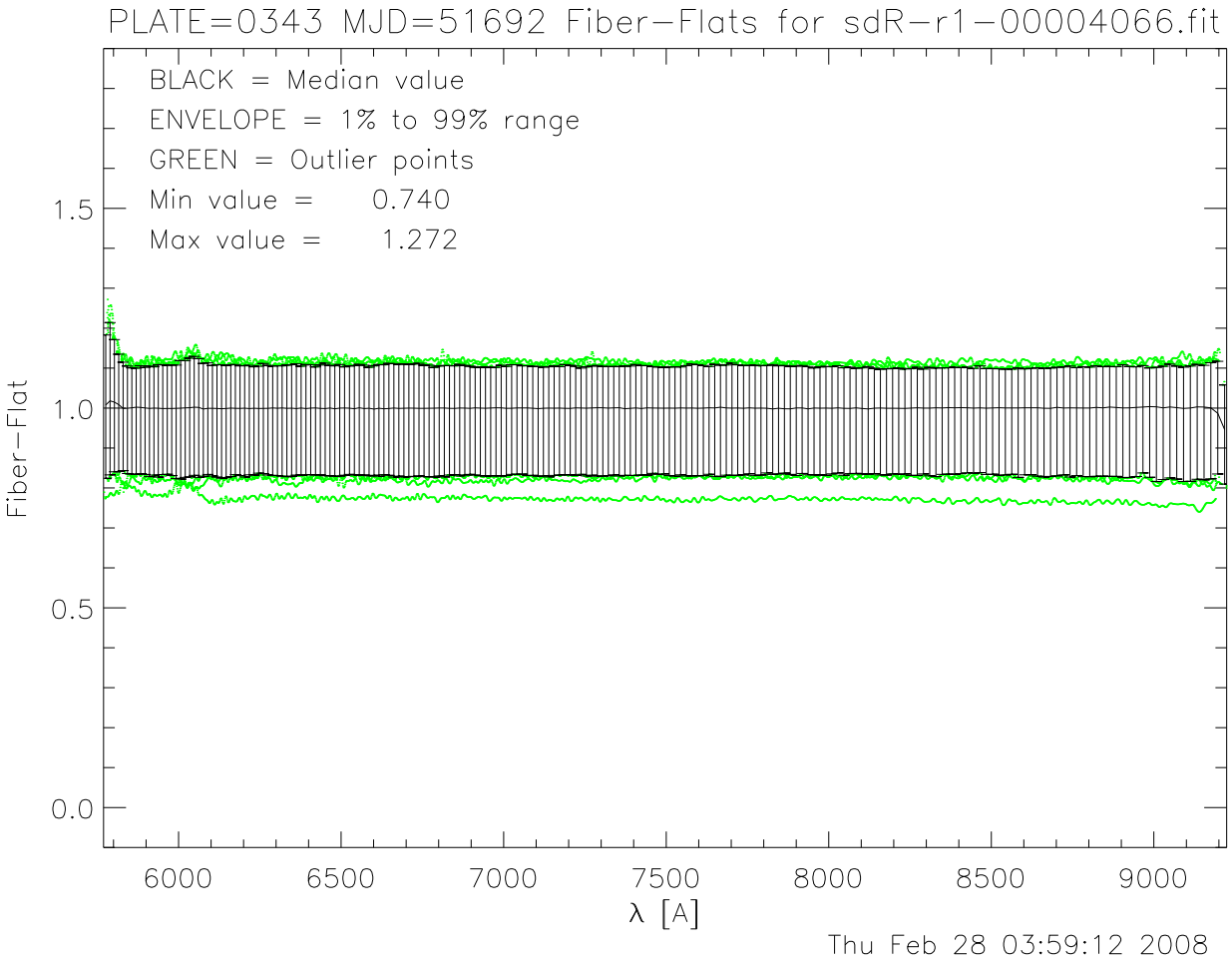

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

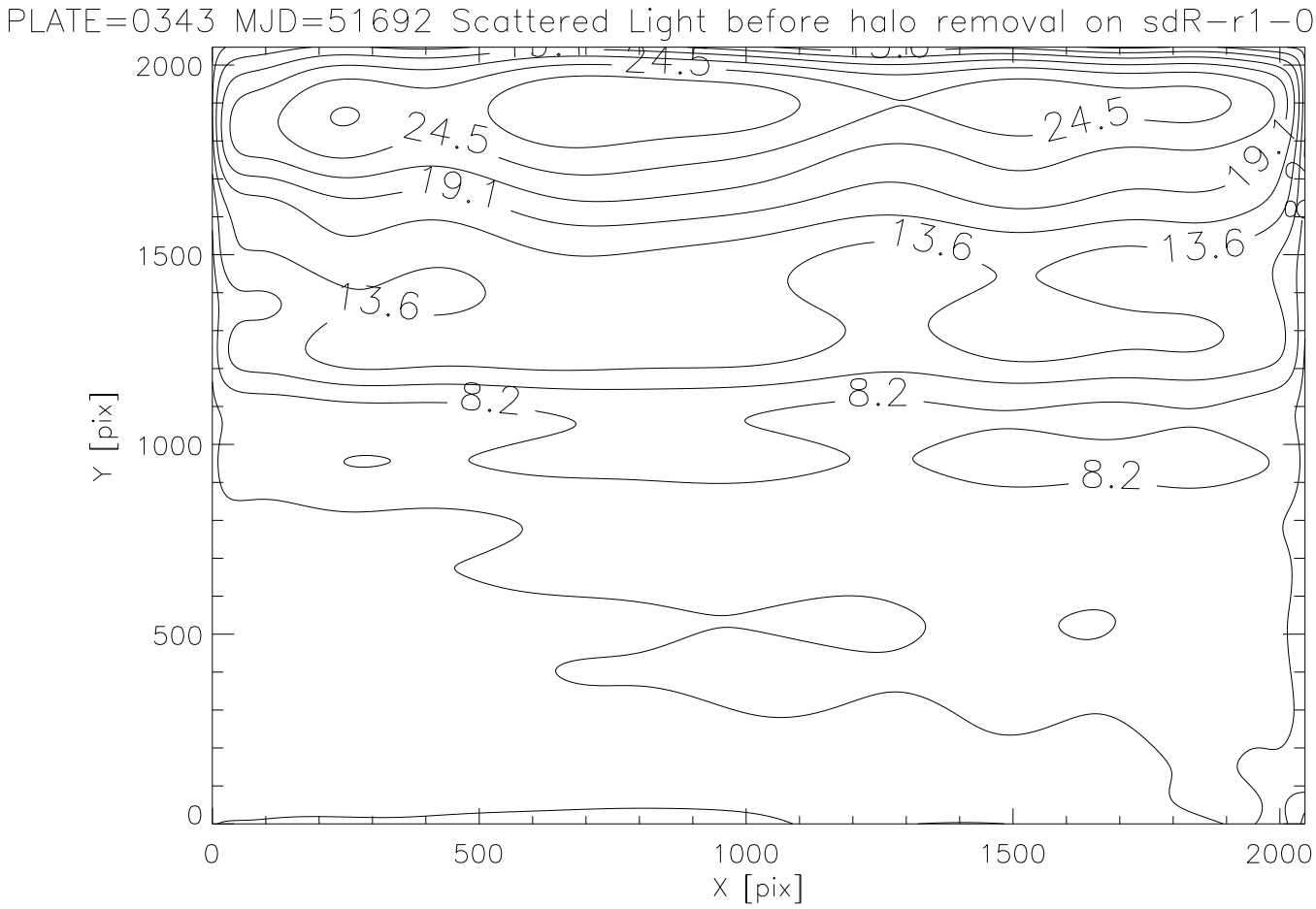

PLATE=0343 MJD=51692 sdR-r1-00004069.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

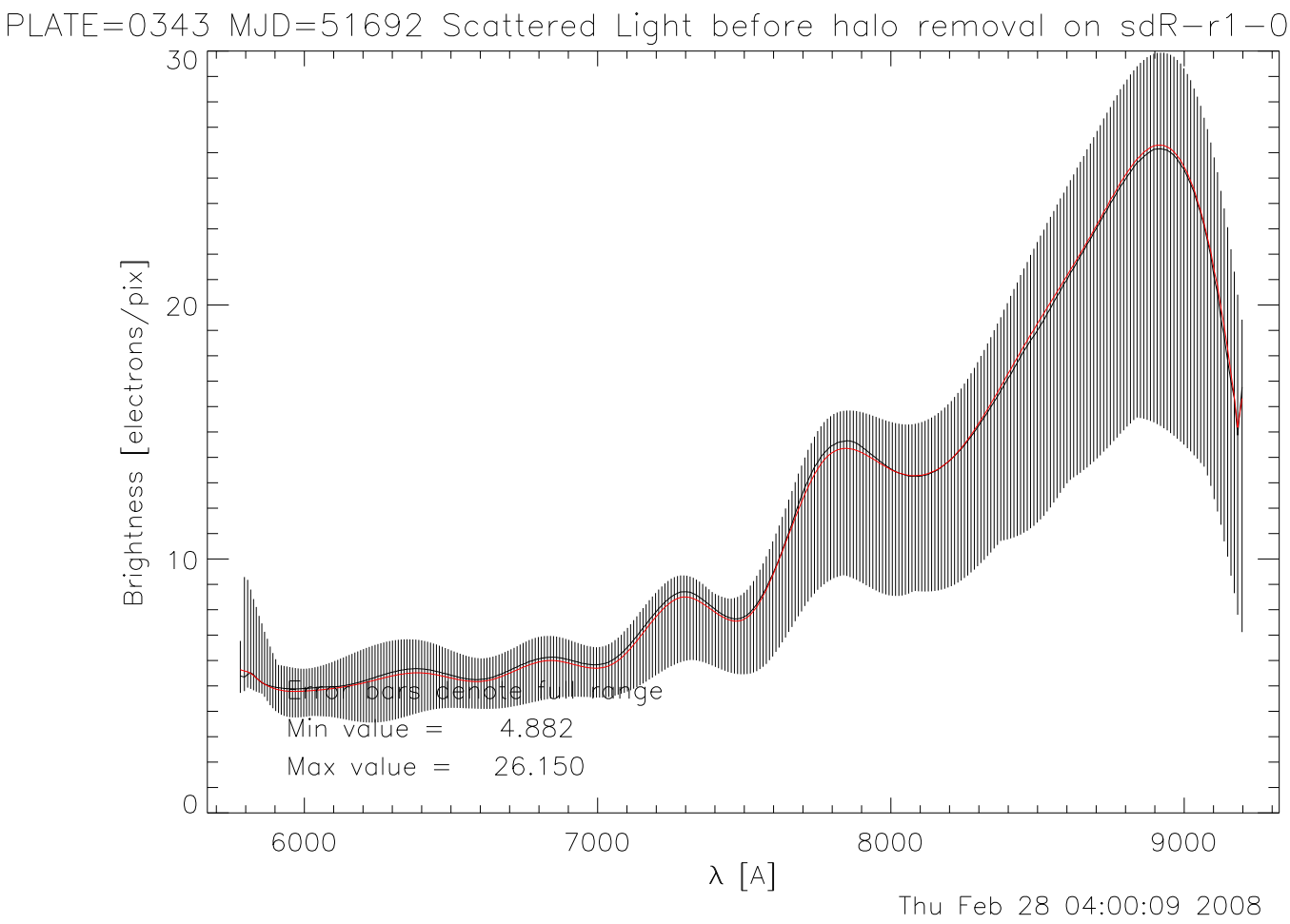

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004069.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

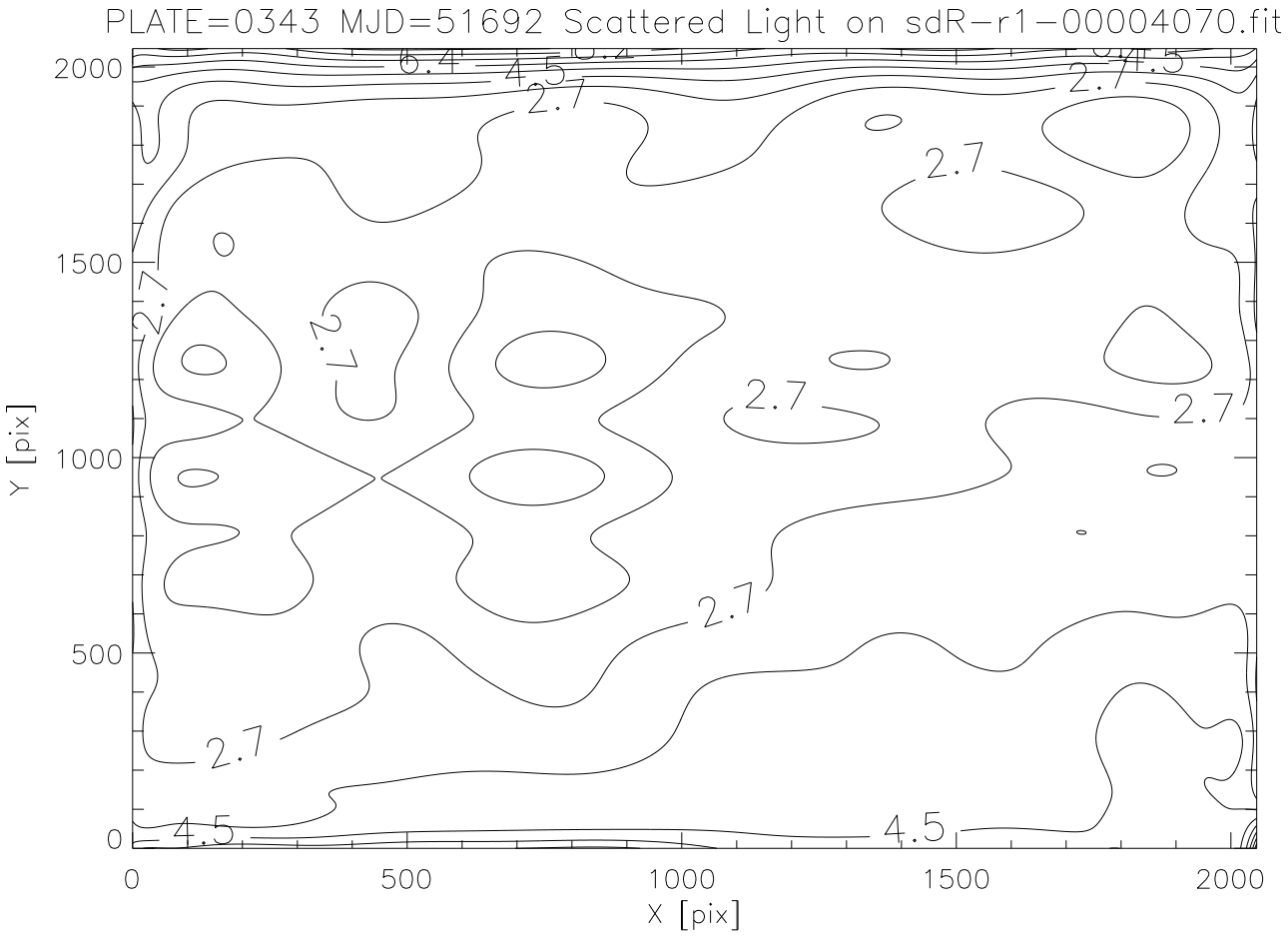

PLATE=0343 MJD=51692 sdR-r1-00004069.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.91 %
Fiber number
Focal Distance [mm]
Airmass

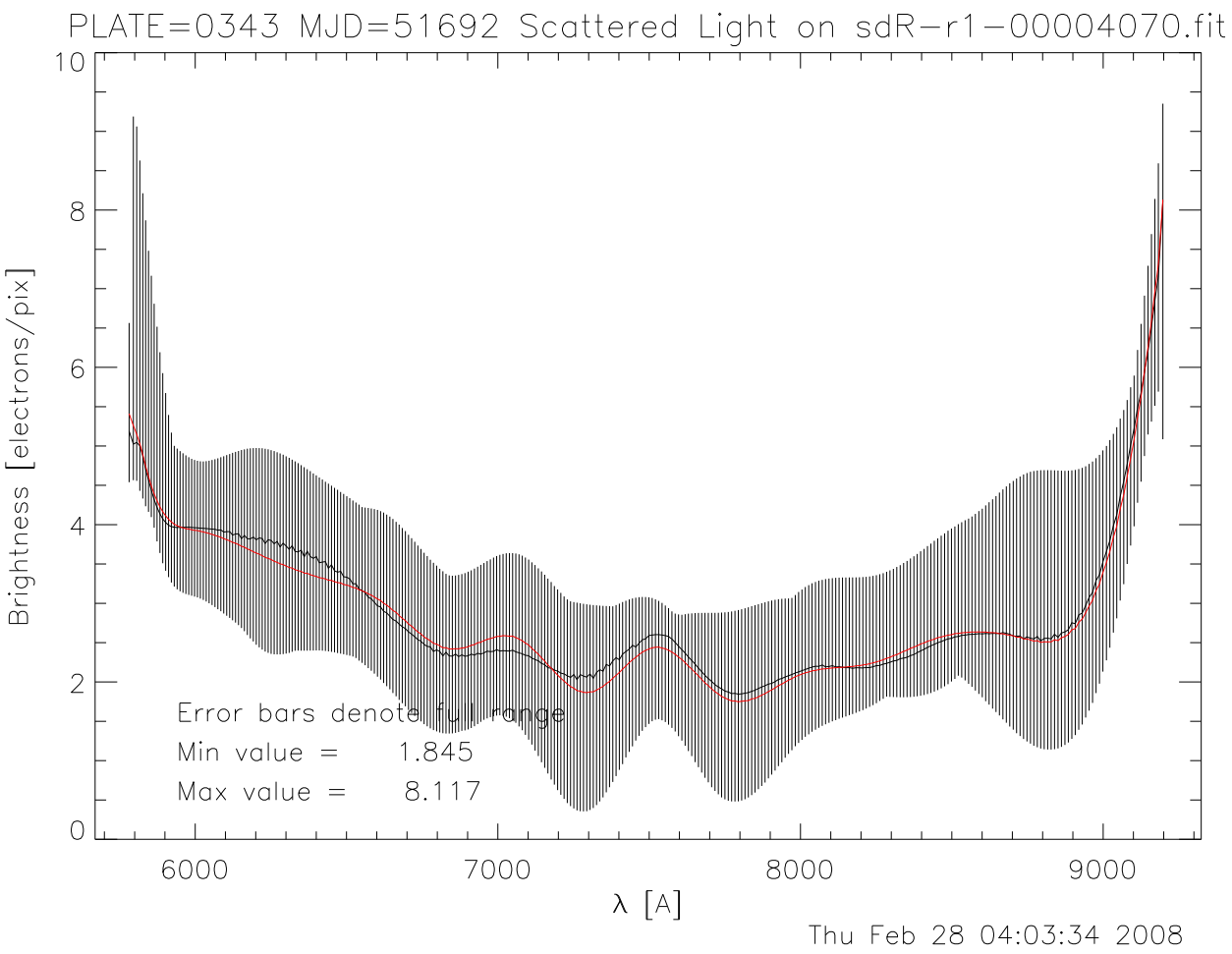

PLATE=0343 MJD=51692 sdR-r1-00004069.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 0.61+%
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

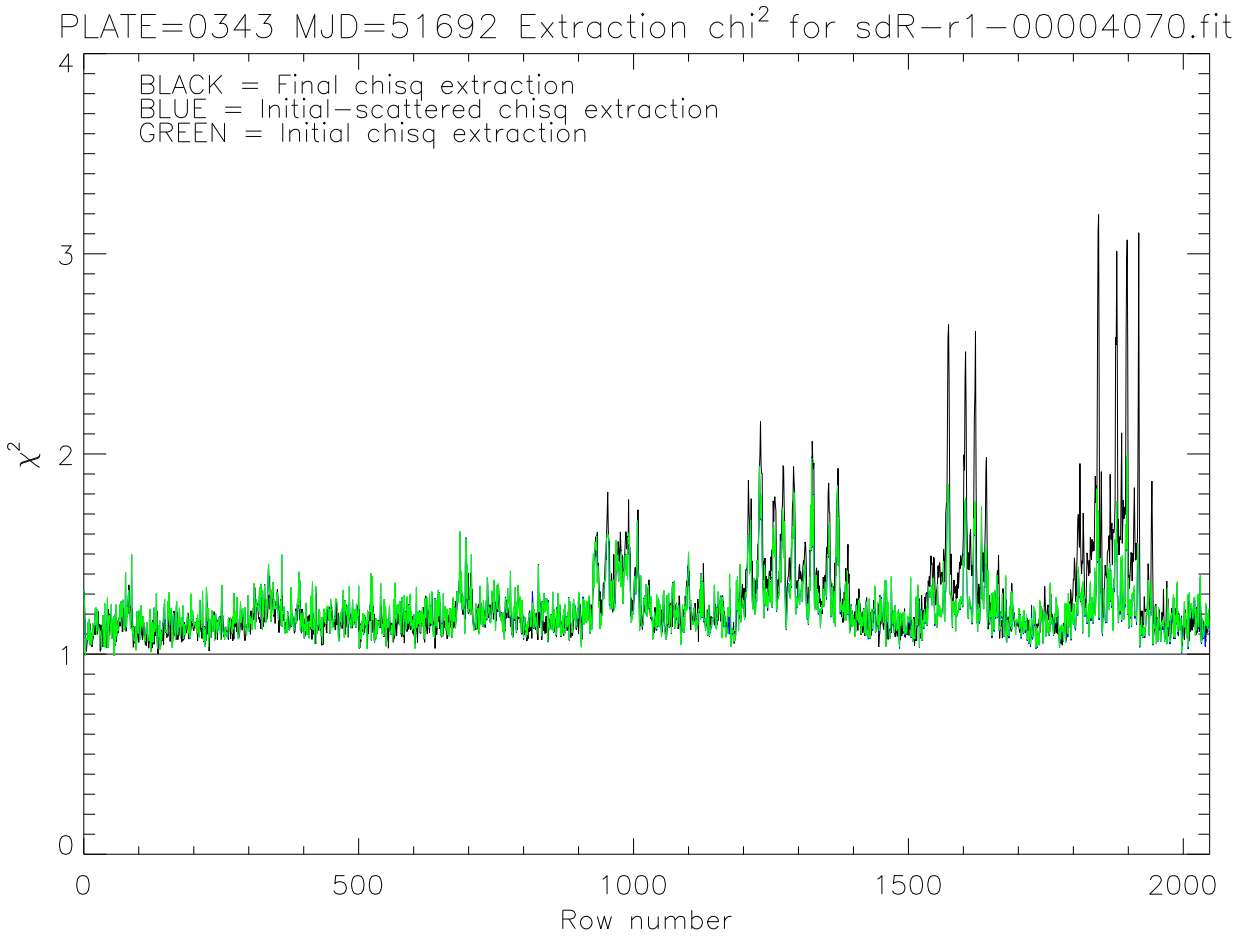

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 03:59:12 2008

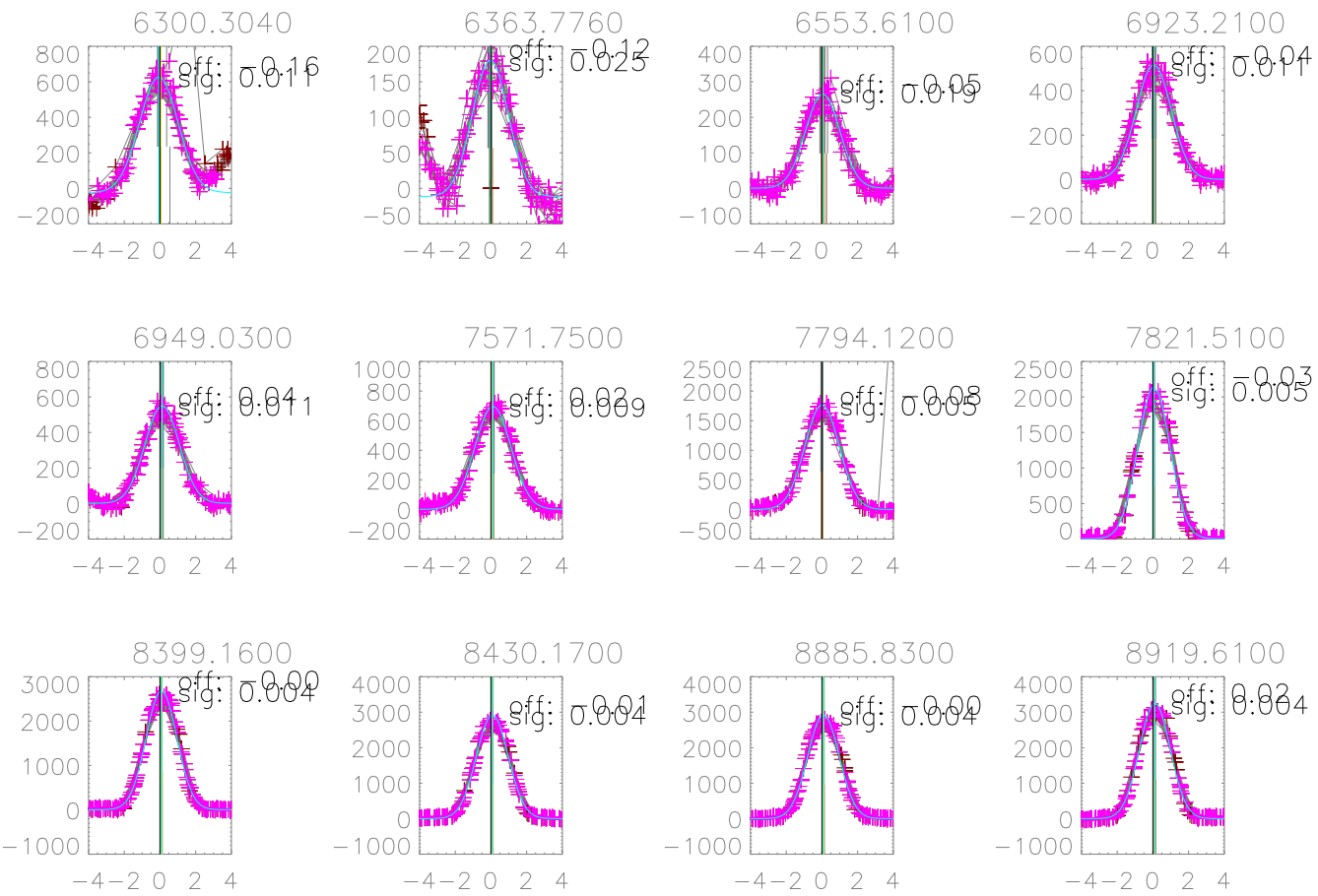

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004070.fi
24.5
24.5
24.5
19.1
19.1
13.6
13.6
13.6
8.2
8.2
8.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

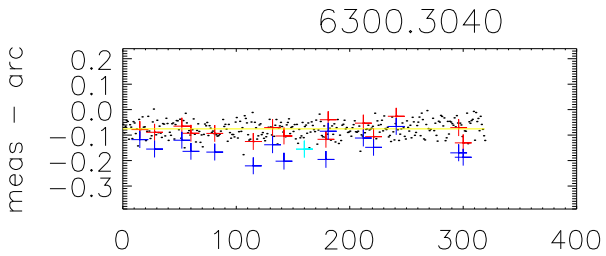

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004070.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.882
Max value = 26.150
Thu Feb 28 04:00:09 2008

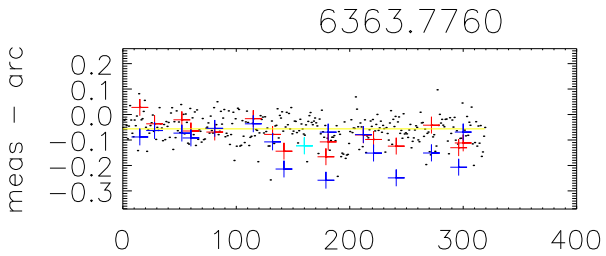

PLATE=0343 MJD=51692 Scattered Light on sdR−r1−00004070.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.4
4.5
2.7
0

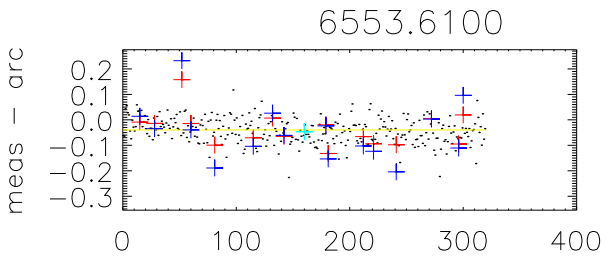

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004070.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.845
Max value = 8.117
Thu Feb 28 04:03:34 2008

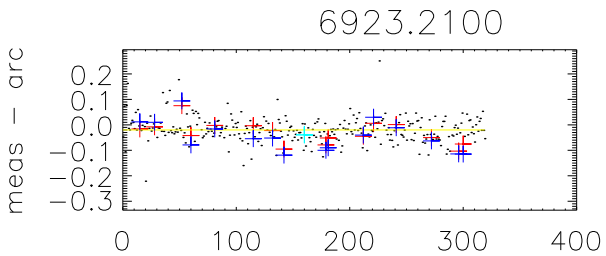

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004070.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

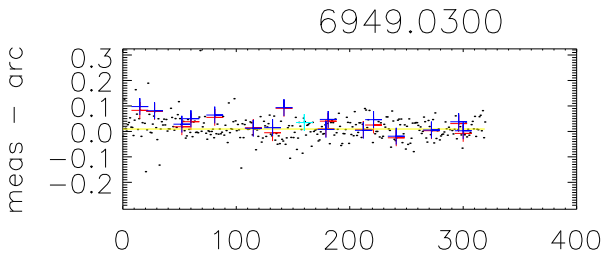

6300.3040
off: −0.16
sig: 0.011
6363.7760
off: −0.12
sig: 0.025
6553.6100
off: −0.05
sig: 0.019
6923.2100
off: −0.04
sig: 0.011
6949.0300
off: 0.04
sig: 0.011
7571.7500
off: 0.02
sig: 0.009
7794.1200
off: −0.08
sig: 0.005
7821.5100
off: −0.03
sig: 0.005
8399.1600
off: −0.00
sig: 0.004
8430.1700
off: −0.01
sig: 0.004
8885.8300
off: −0.00
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

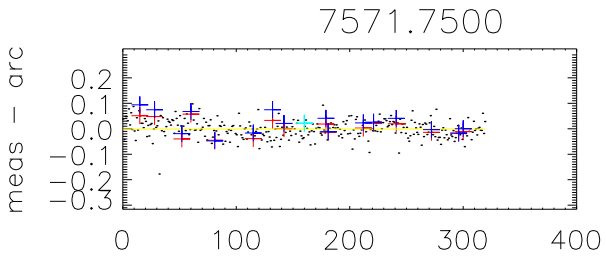

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

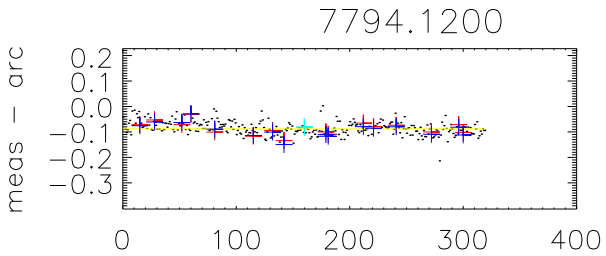

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

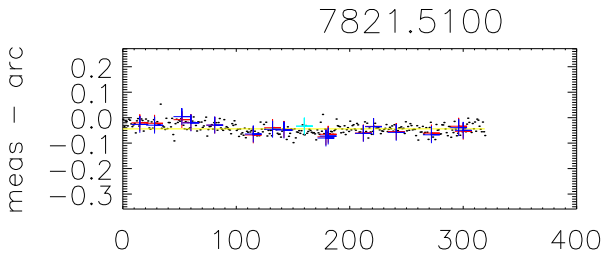

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

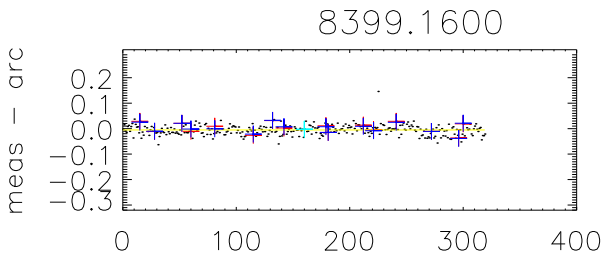

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

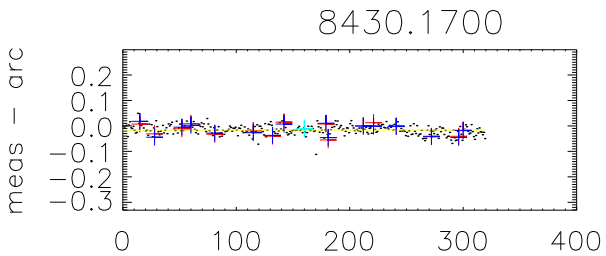

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

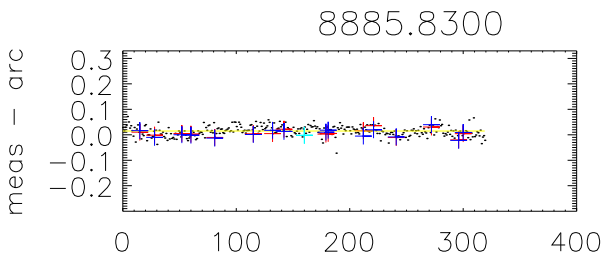

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

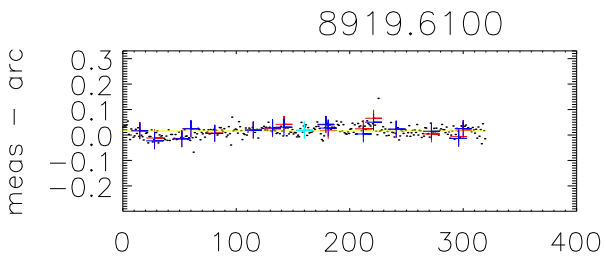

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

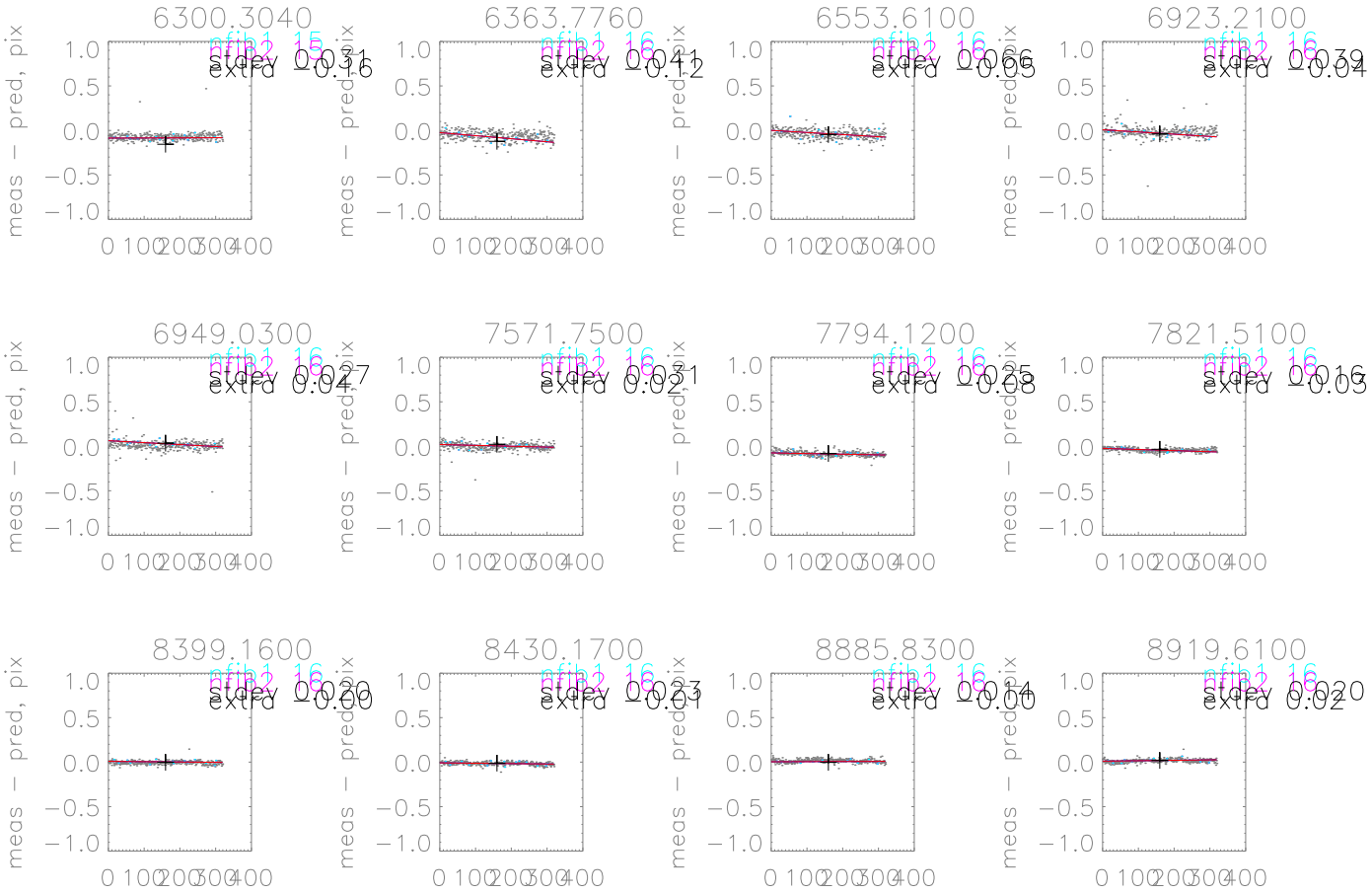

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

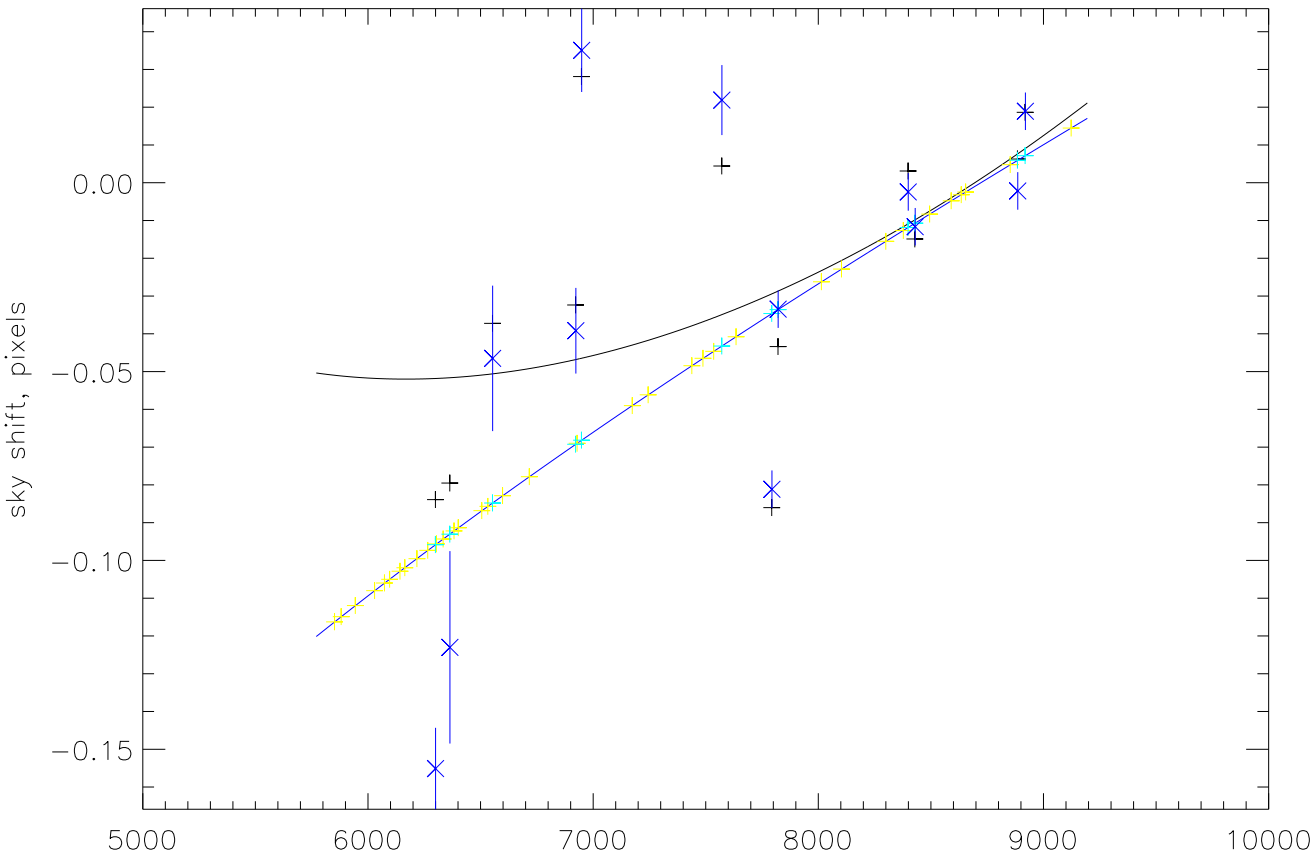

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

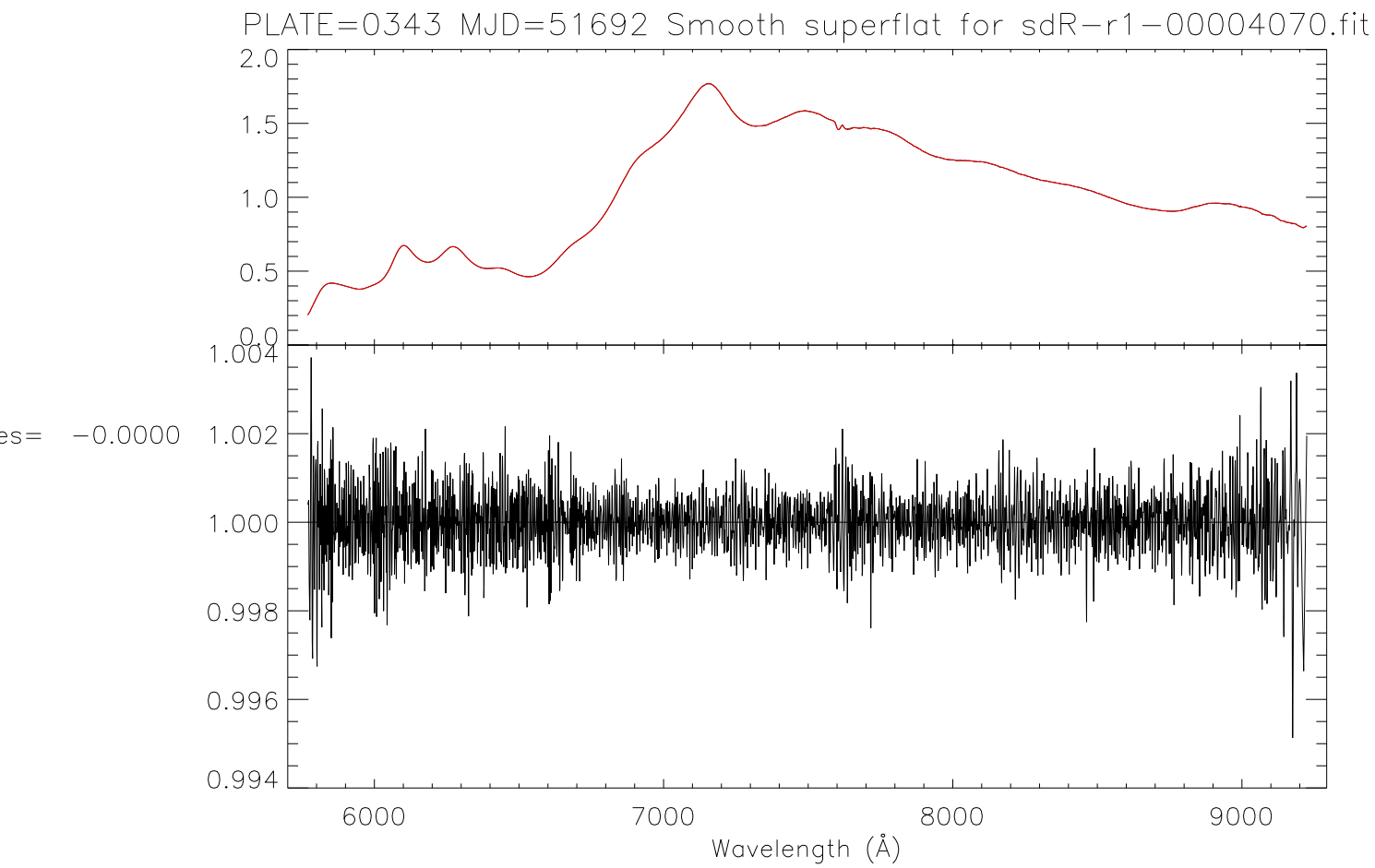

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

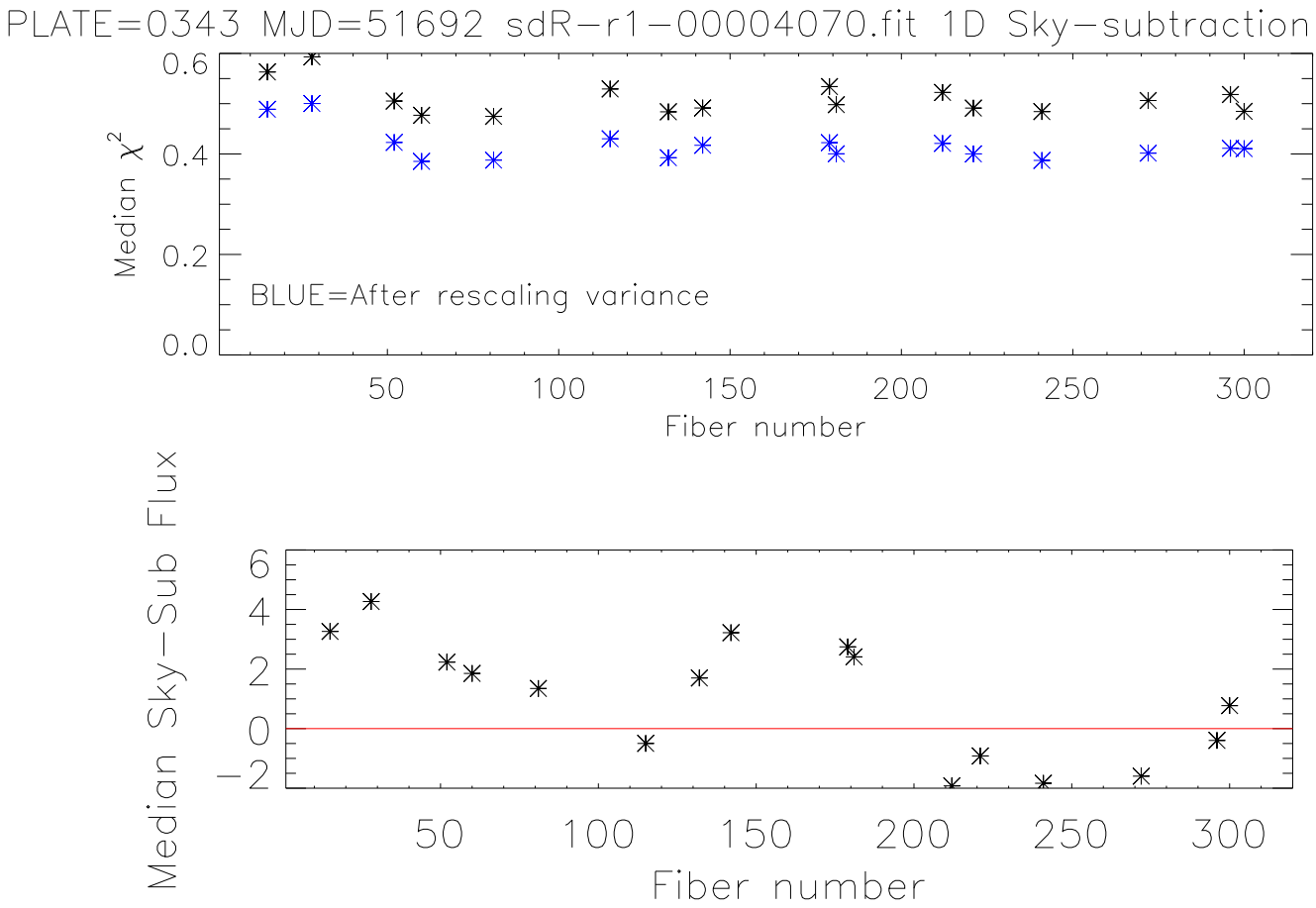

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

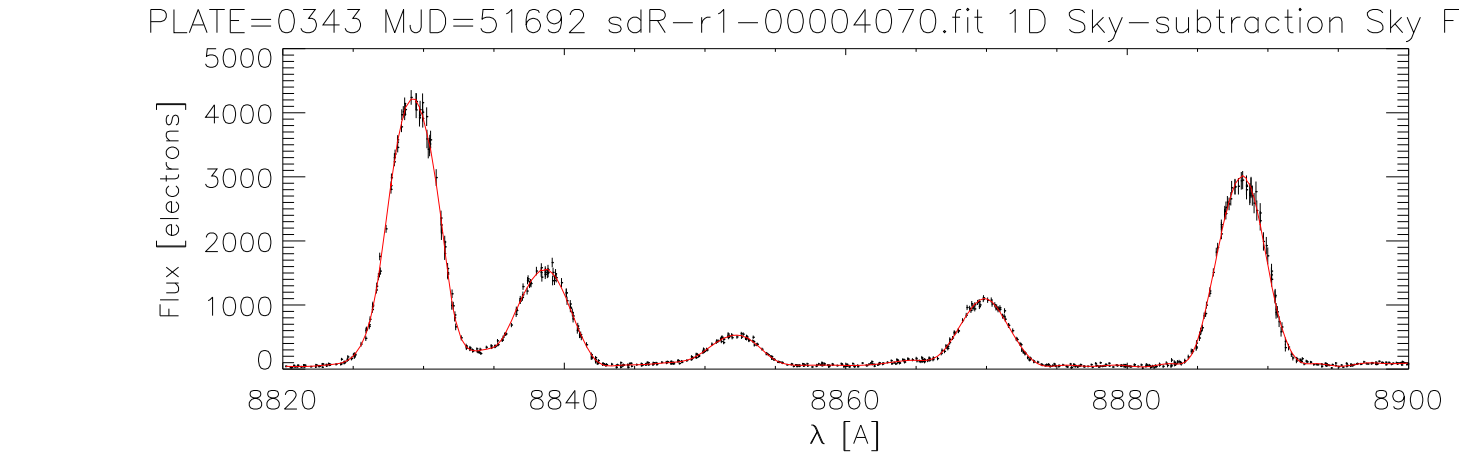

6300.3040
stdev 0.31
extra −0.16
6363.7760
stdev 0.41
extra −0.12
6553.6100
stdev 0.06
extra −0.05
6923.2100
stdev 0.39
extra −0.04
6949.0300
stdev 0.27
extra 0.04
7571.7500
stdev 0.31
extra 0.02
7794.1200
stdev 0.25
extra −0.08
7821.5100
stdev 0.16
extra −0.03
8399.1600
stdev 0.20
extra −0.00
8430.1700
stdev 0.23
extra −0.01
8885.8300
stdev 0.14
extra −0.00
8919.6100
stdev 0.20
extra 0.02
meas − pred, pix

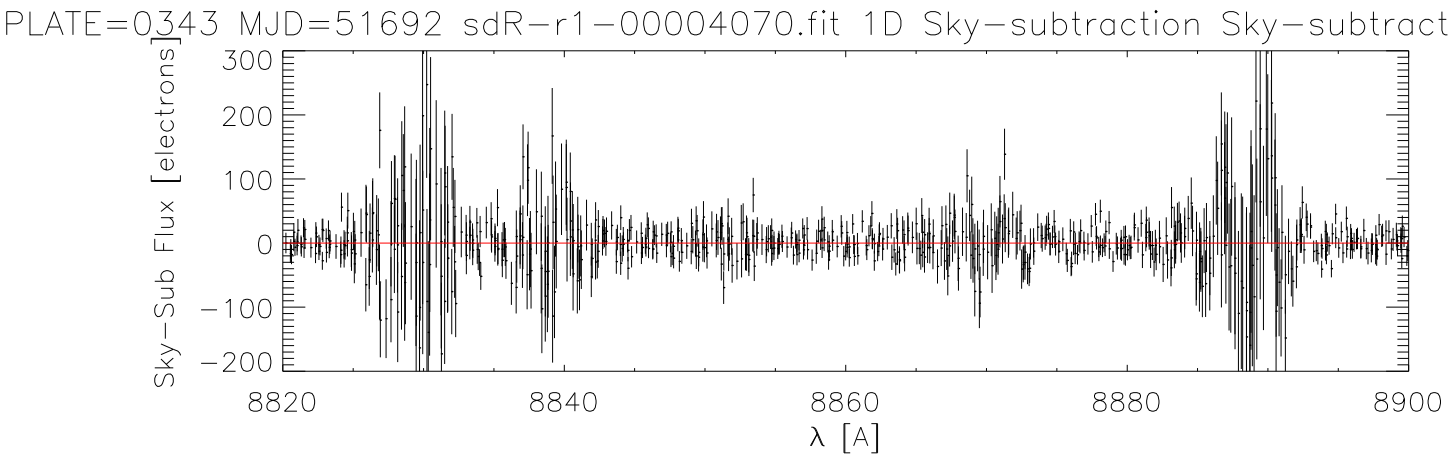

sky shift, pixels
0.00
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000

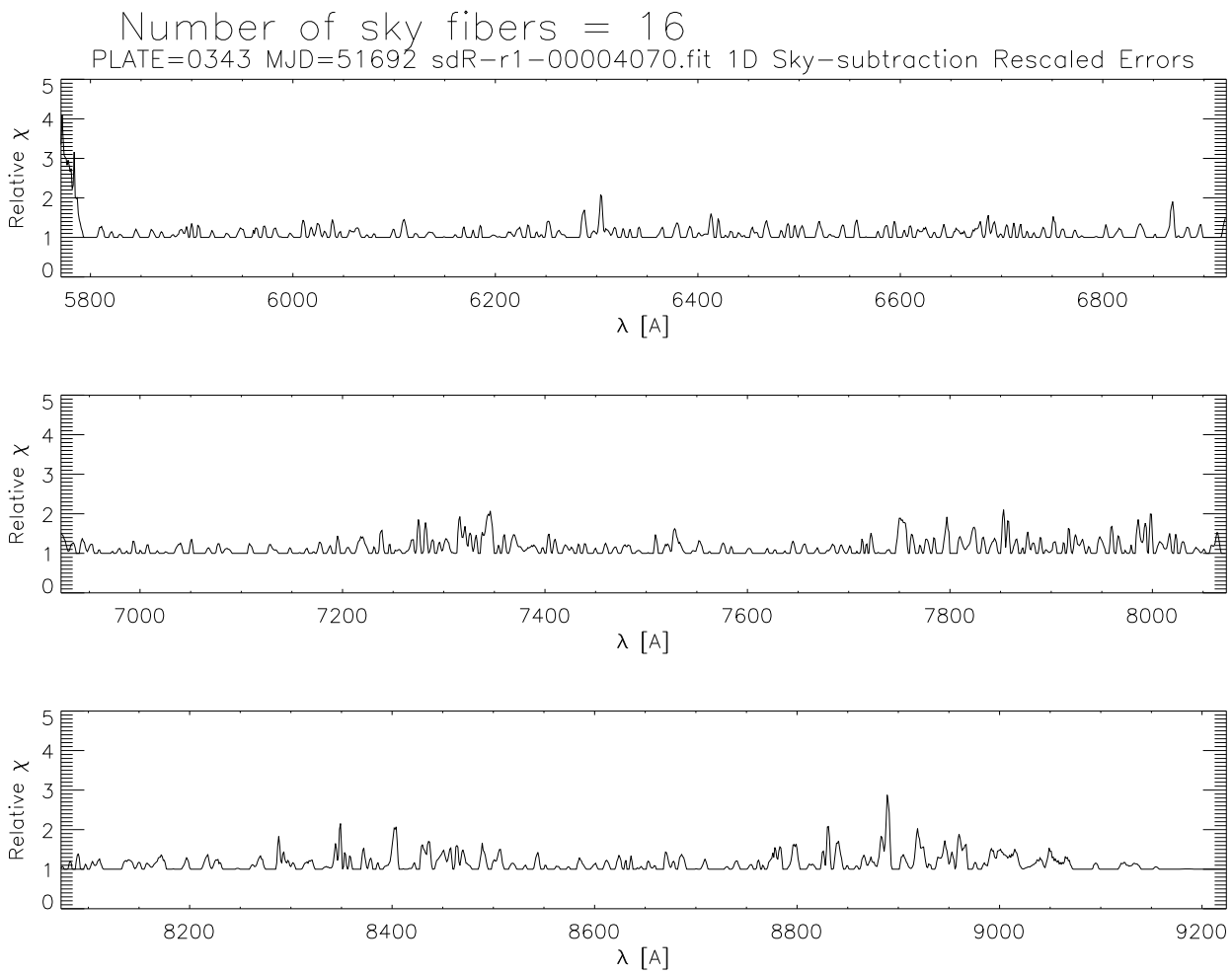

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004070.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

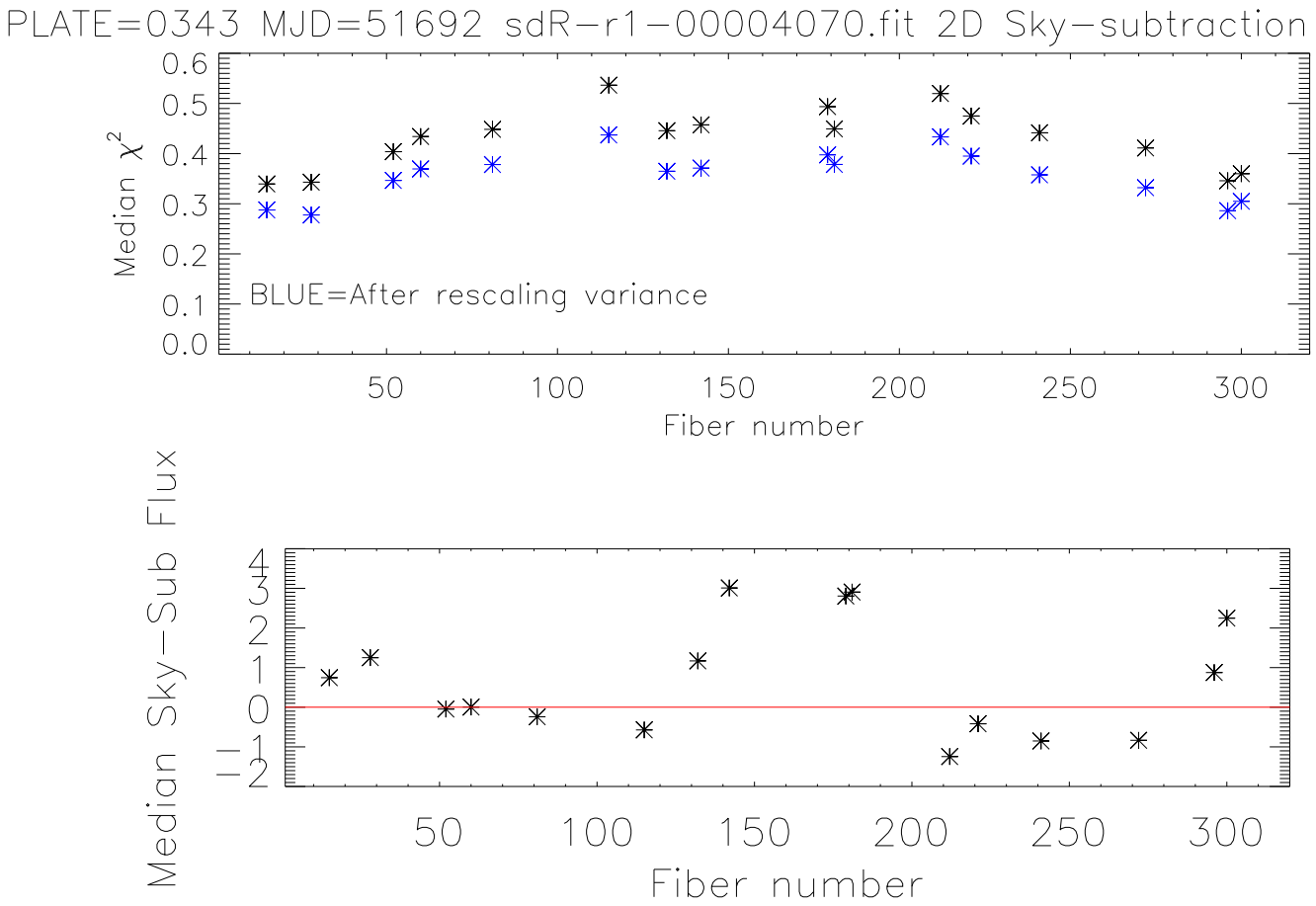

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

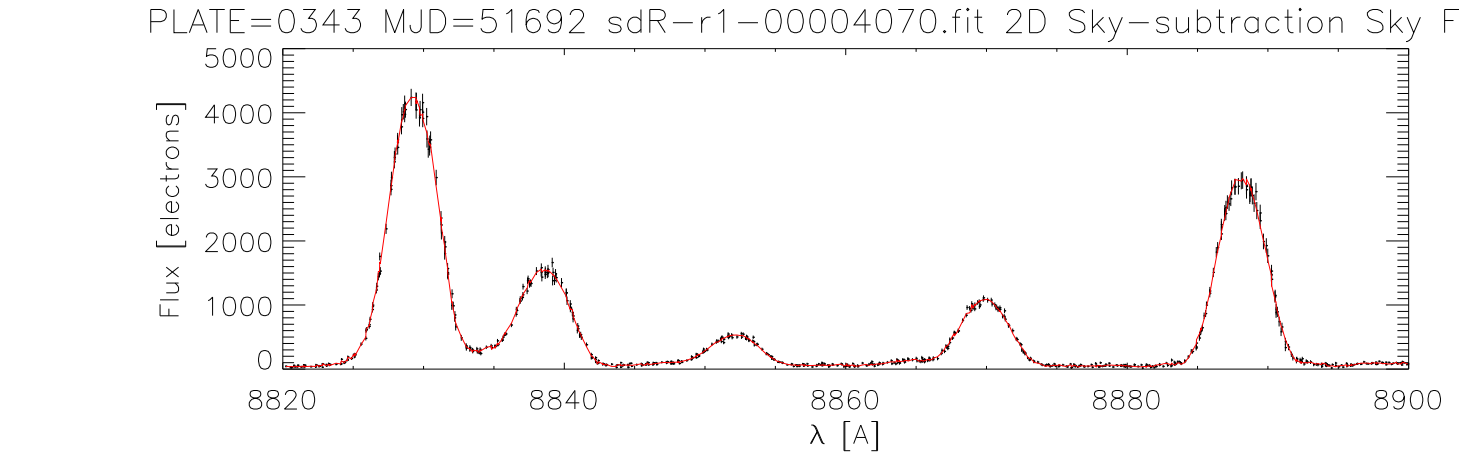
Median Sky-Sub Flux
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

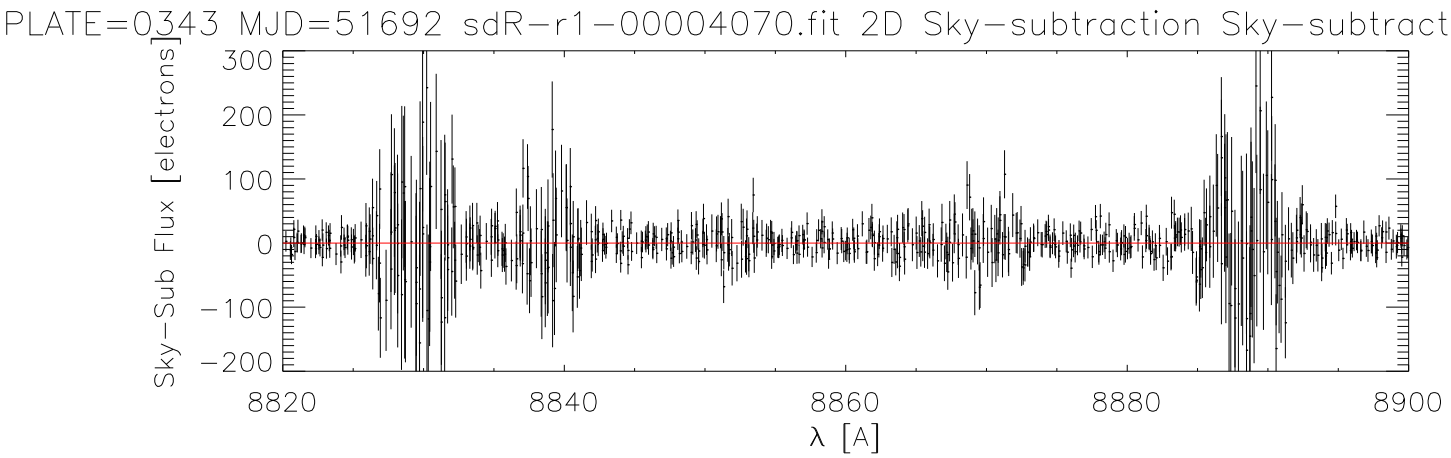

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

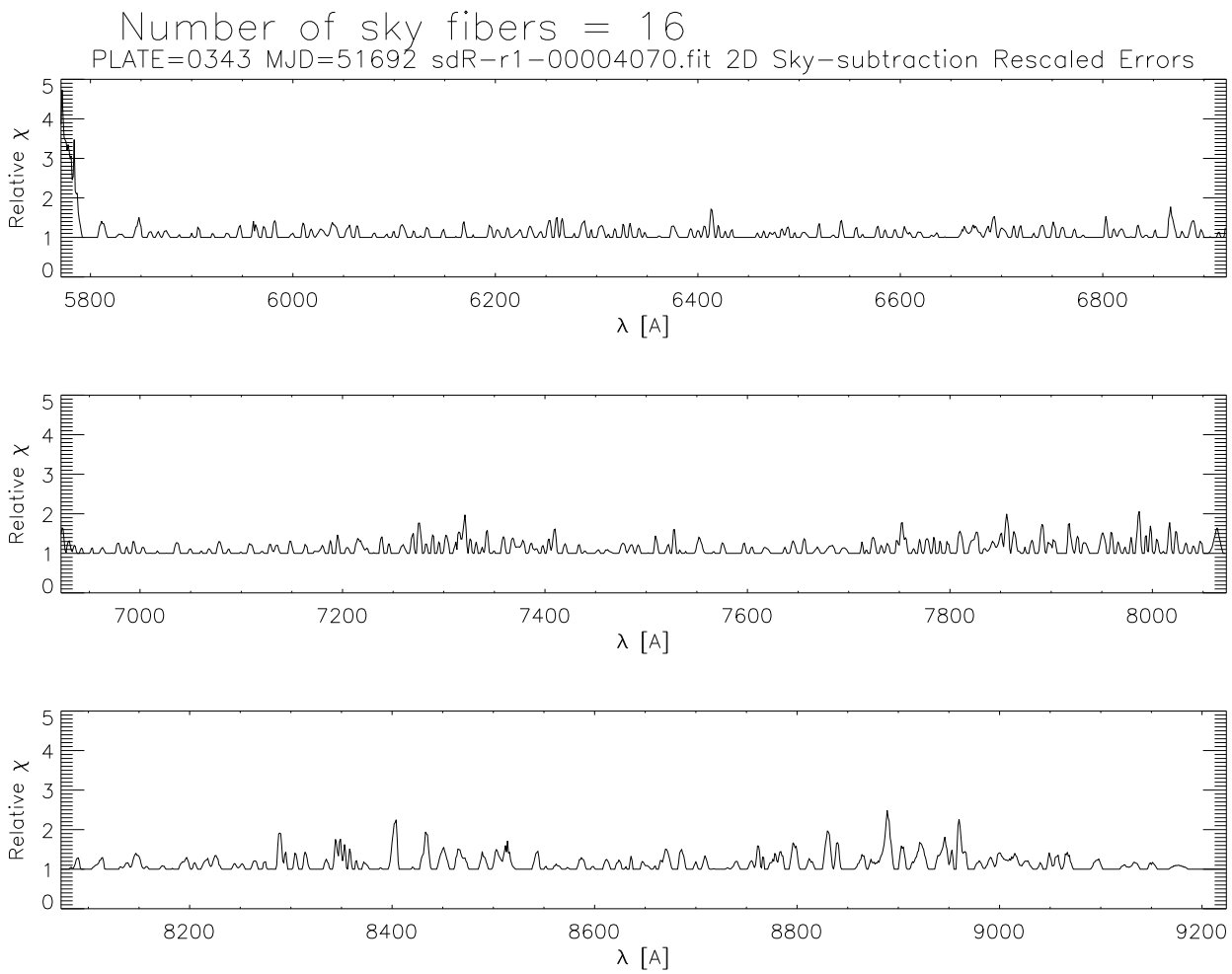

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

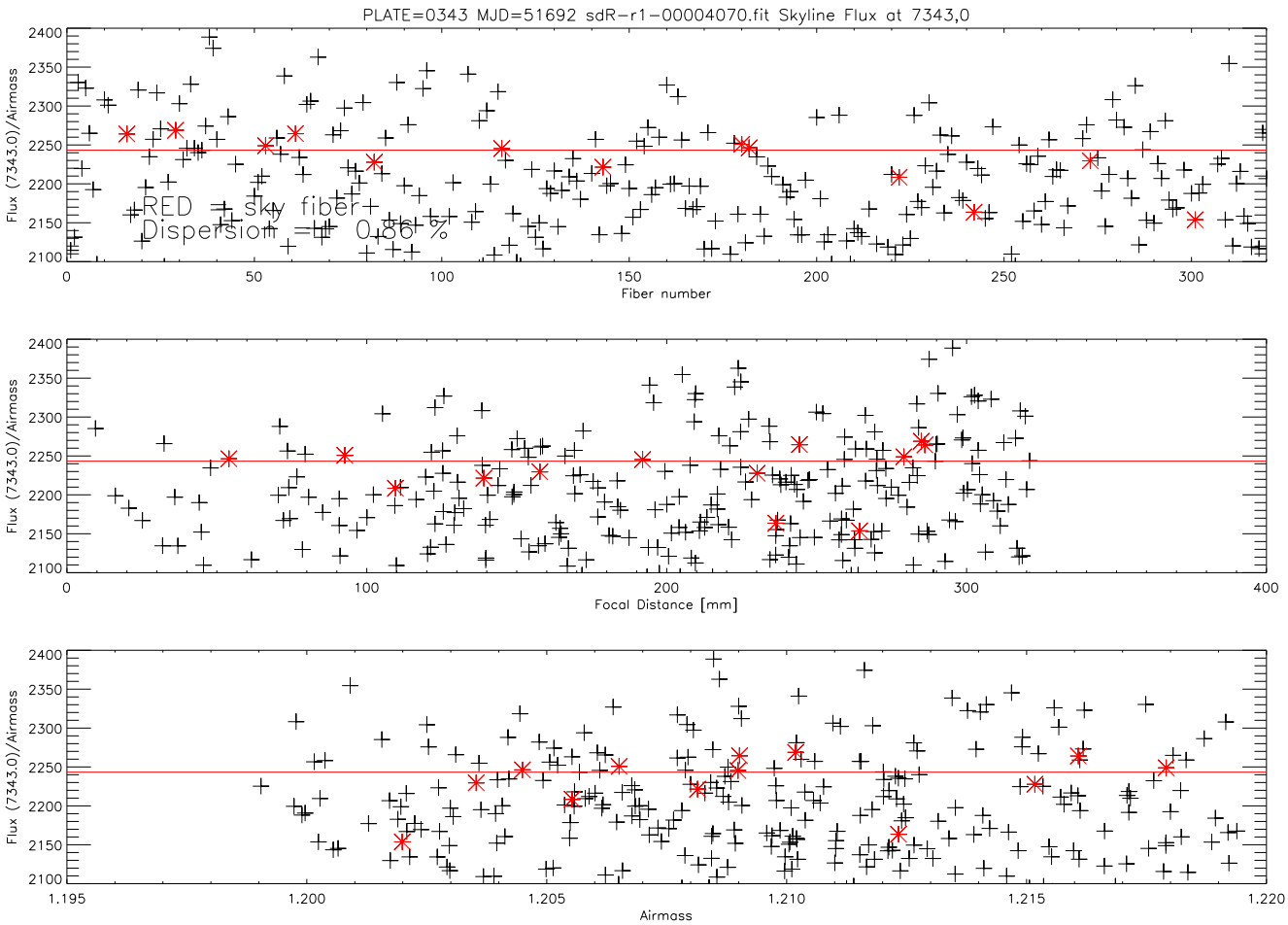

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004070.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

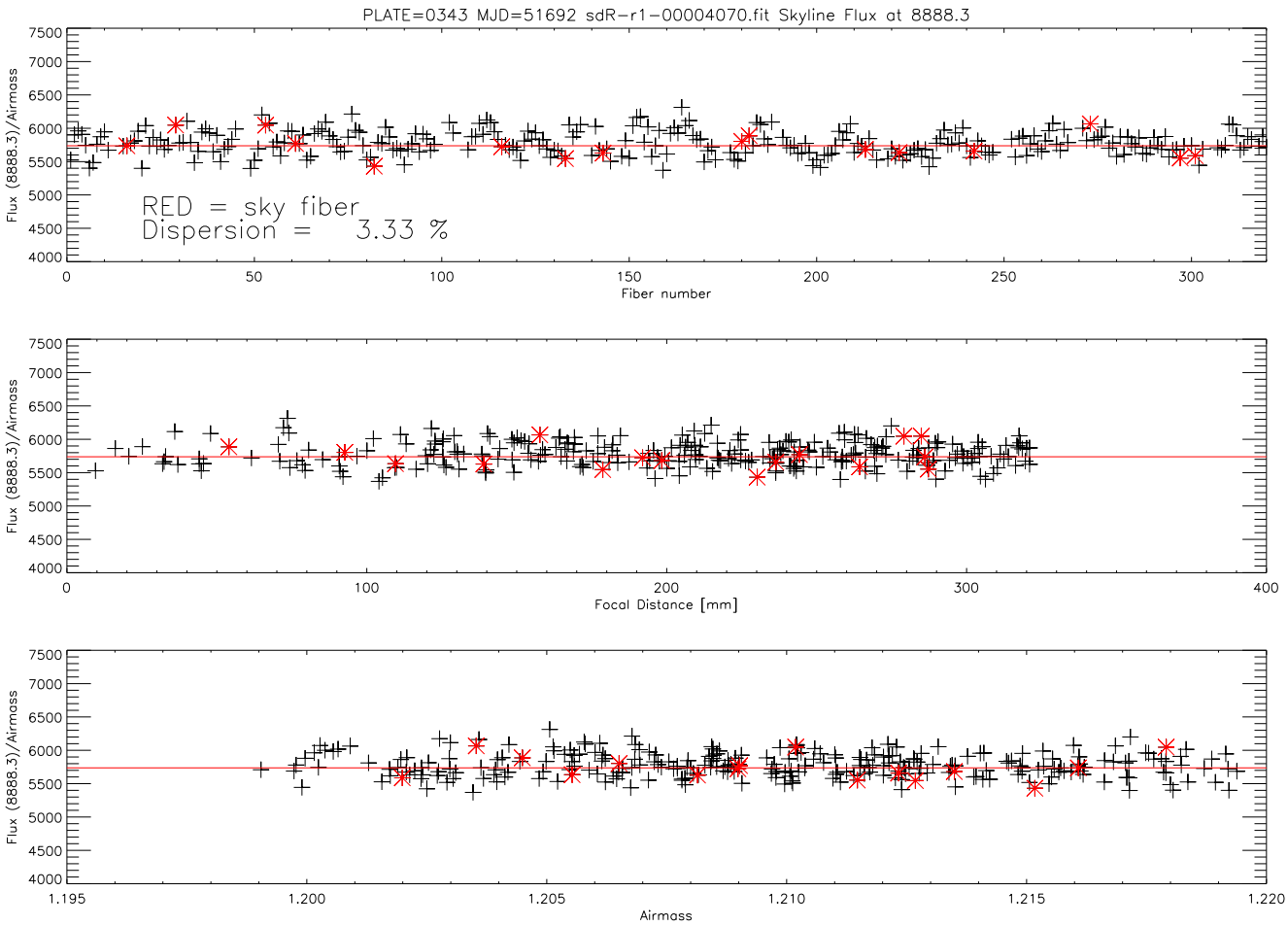

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

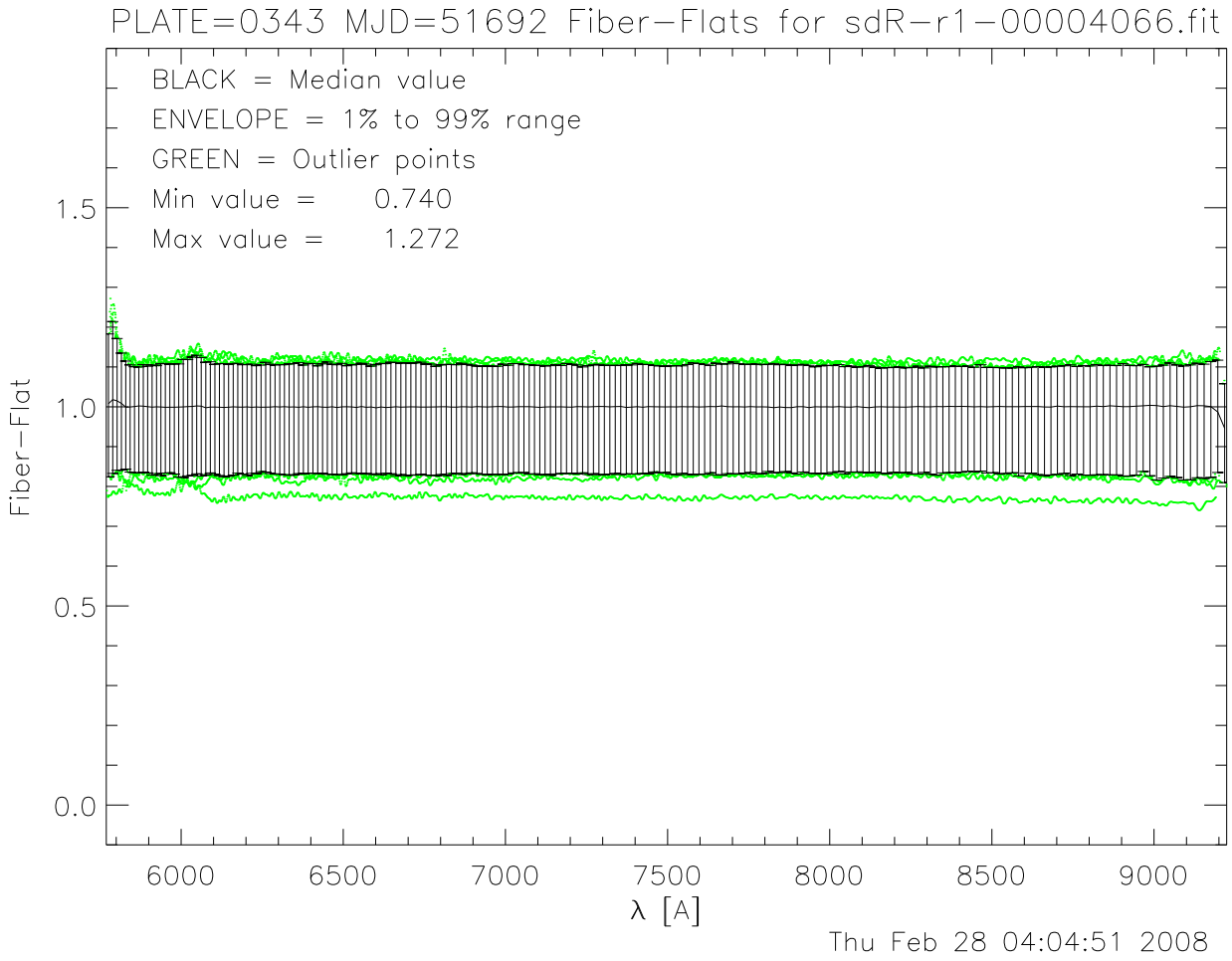

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

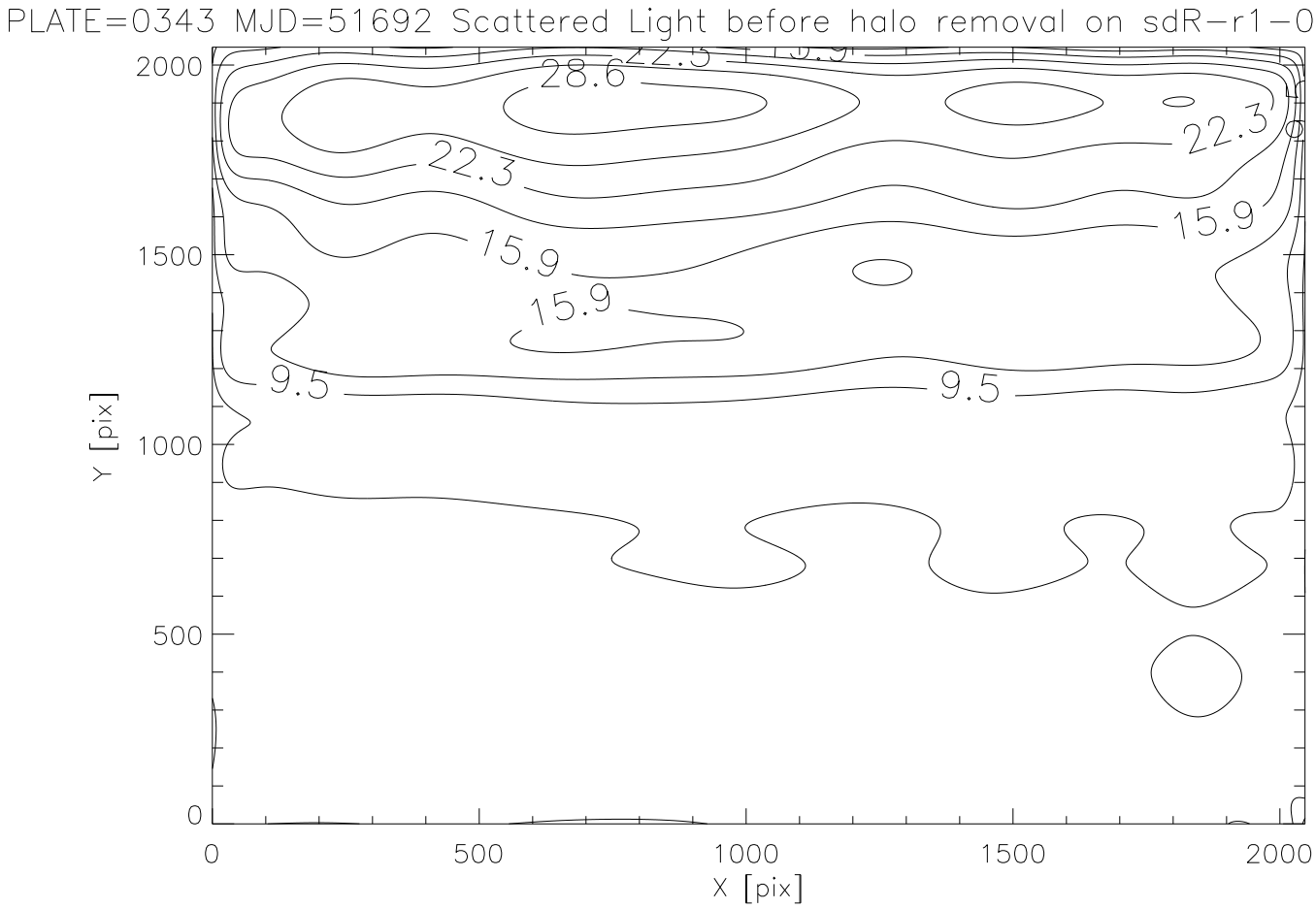

PLATE=0343 MJD=51692 sdR-r1-00004070.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

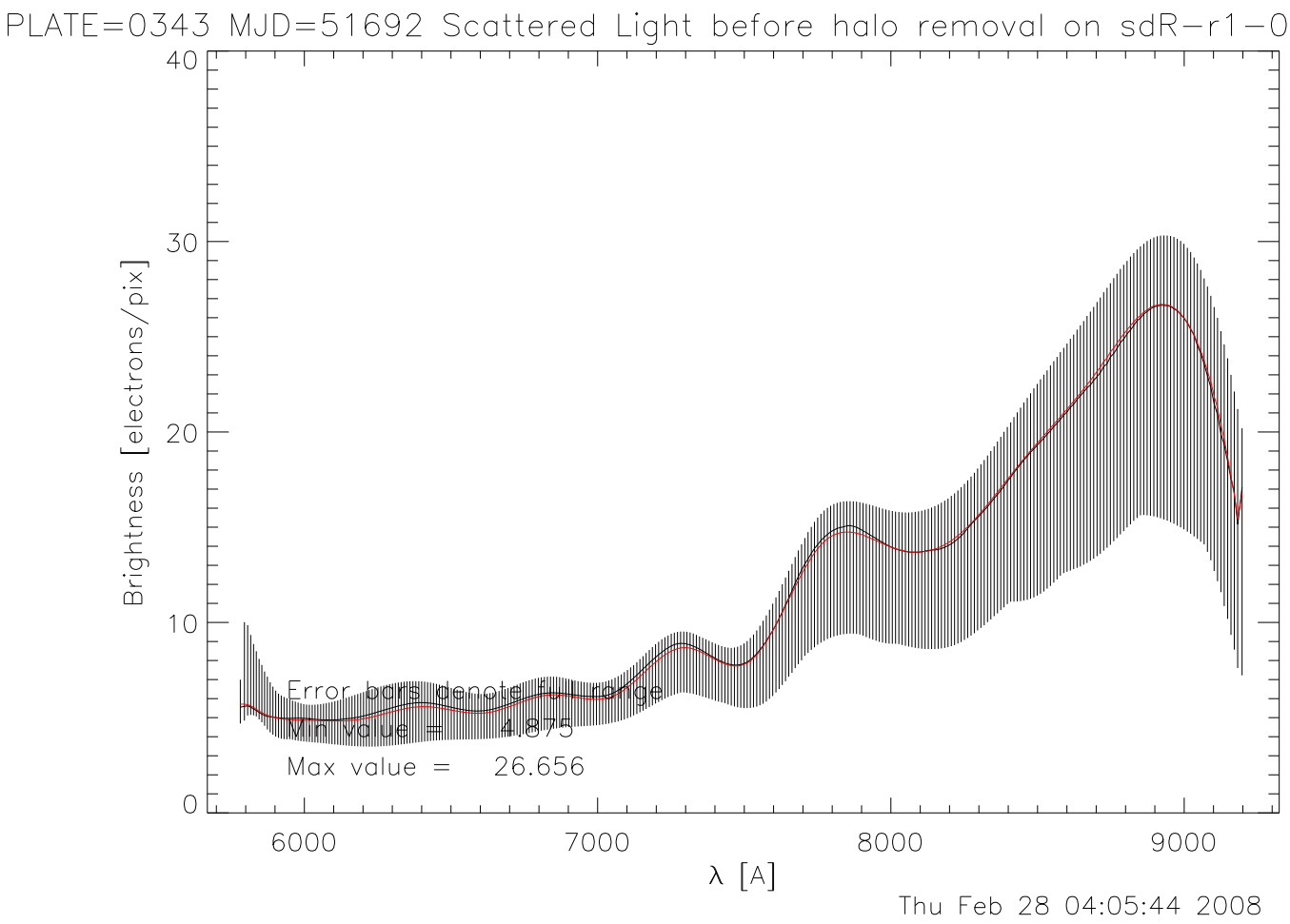

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004070.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

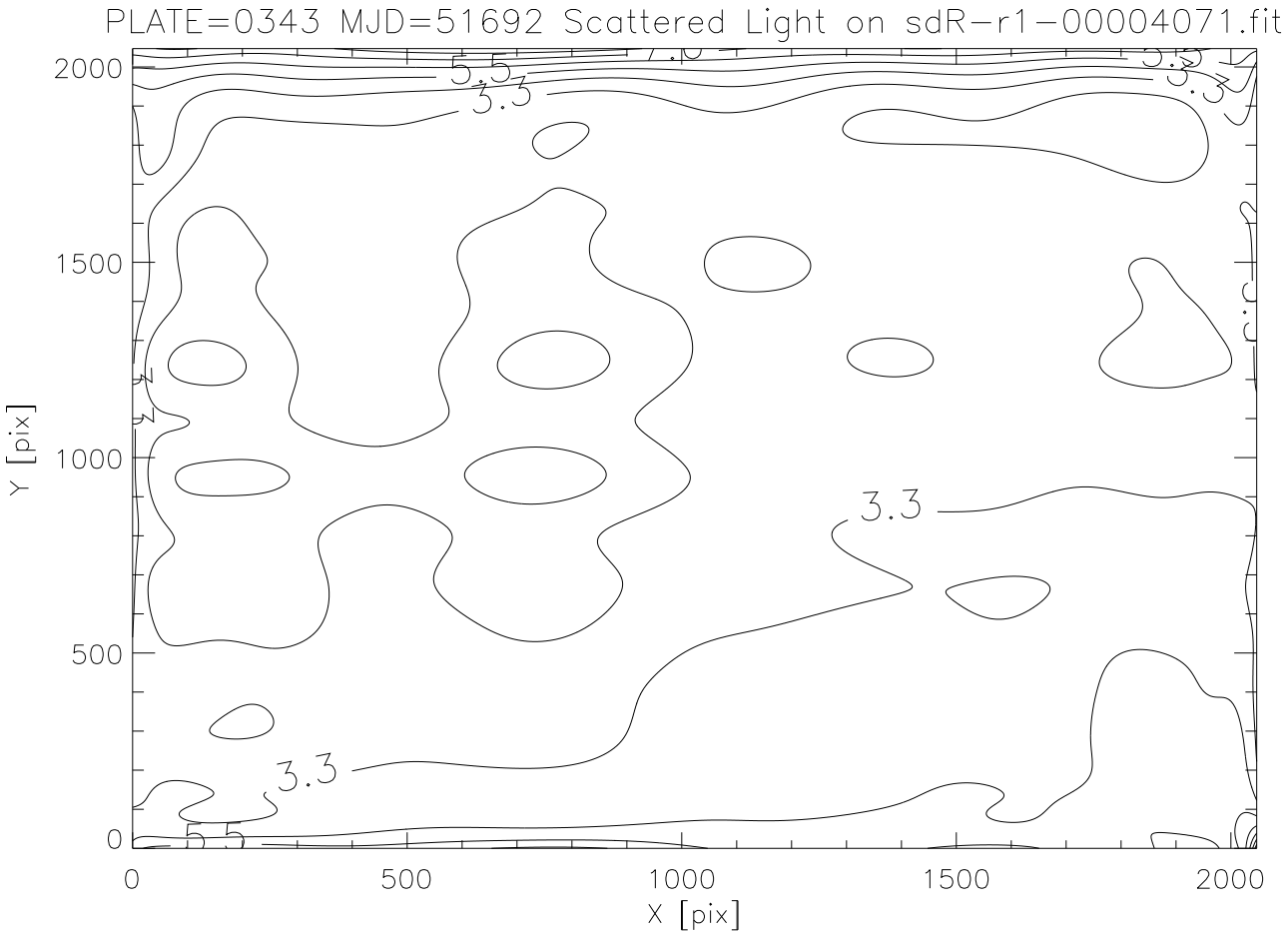

PLATE=0343 MJD=51692 sdR-r1-00004070.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.866 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

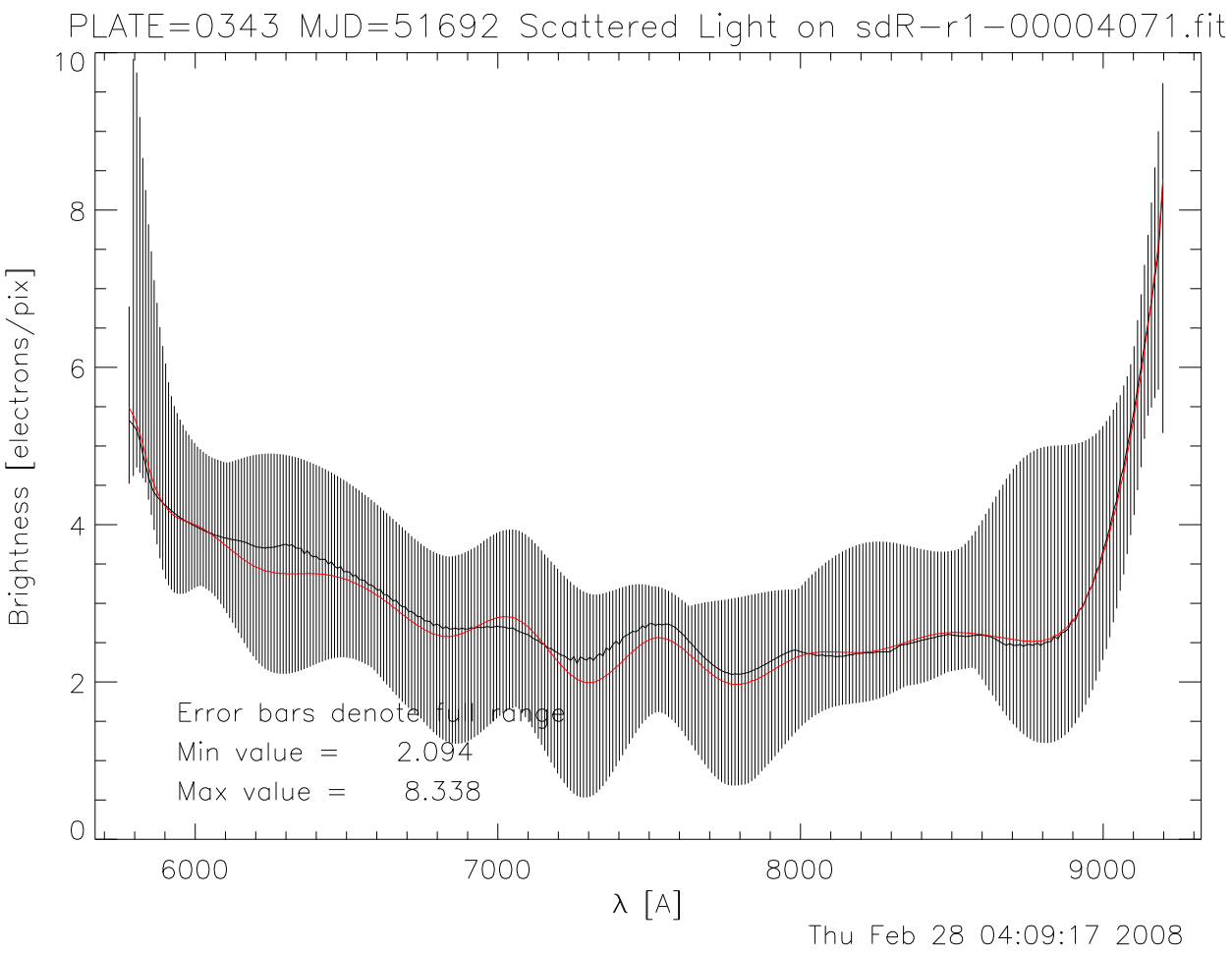

PLATE=0343 MJD=51692 sdR-r1-00004070.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.33 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

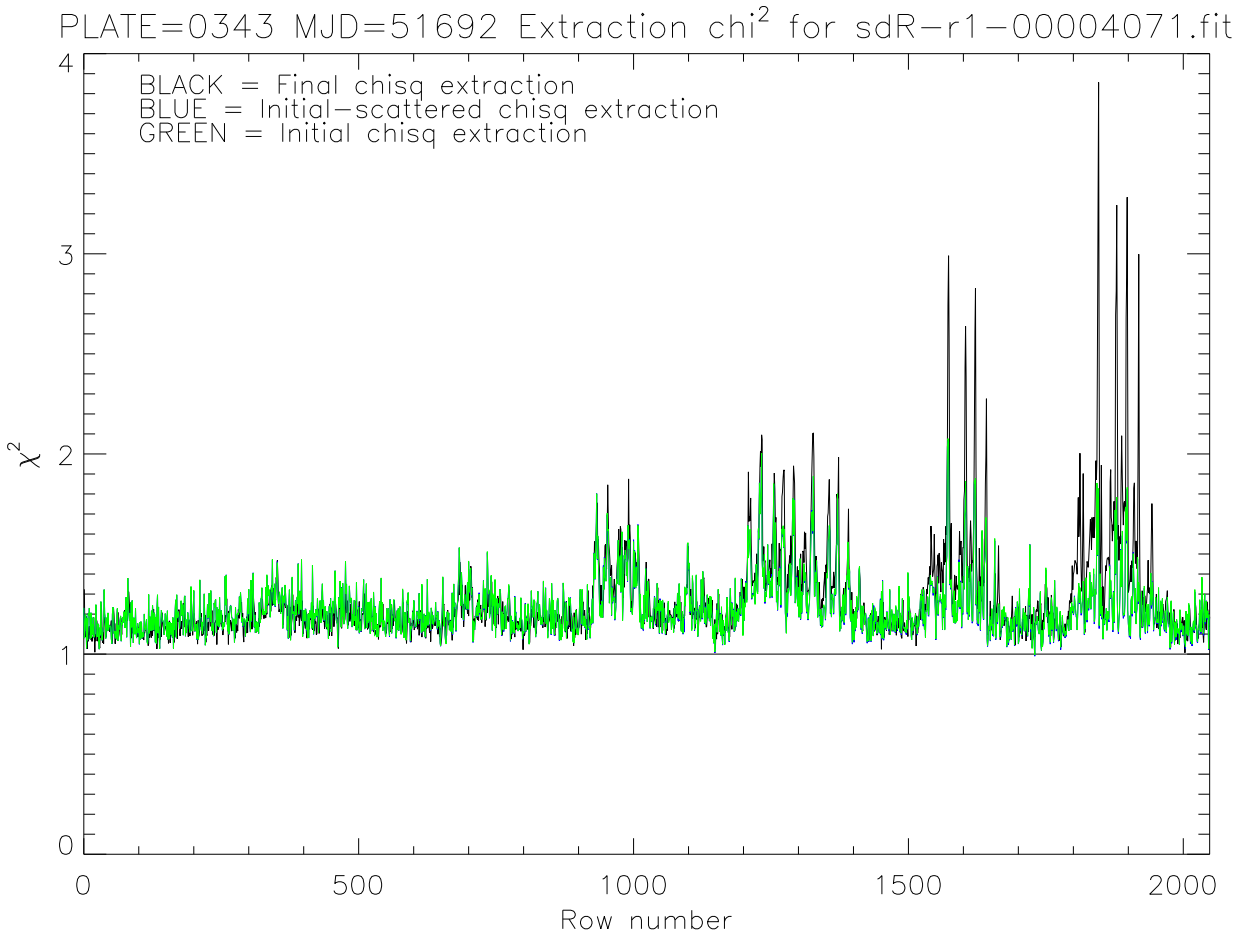

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:04:51 2008

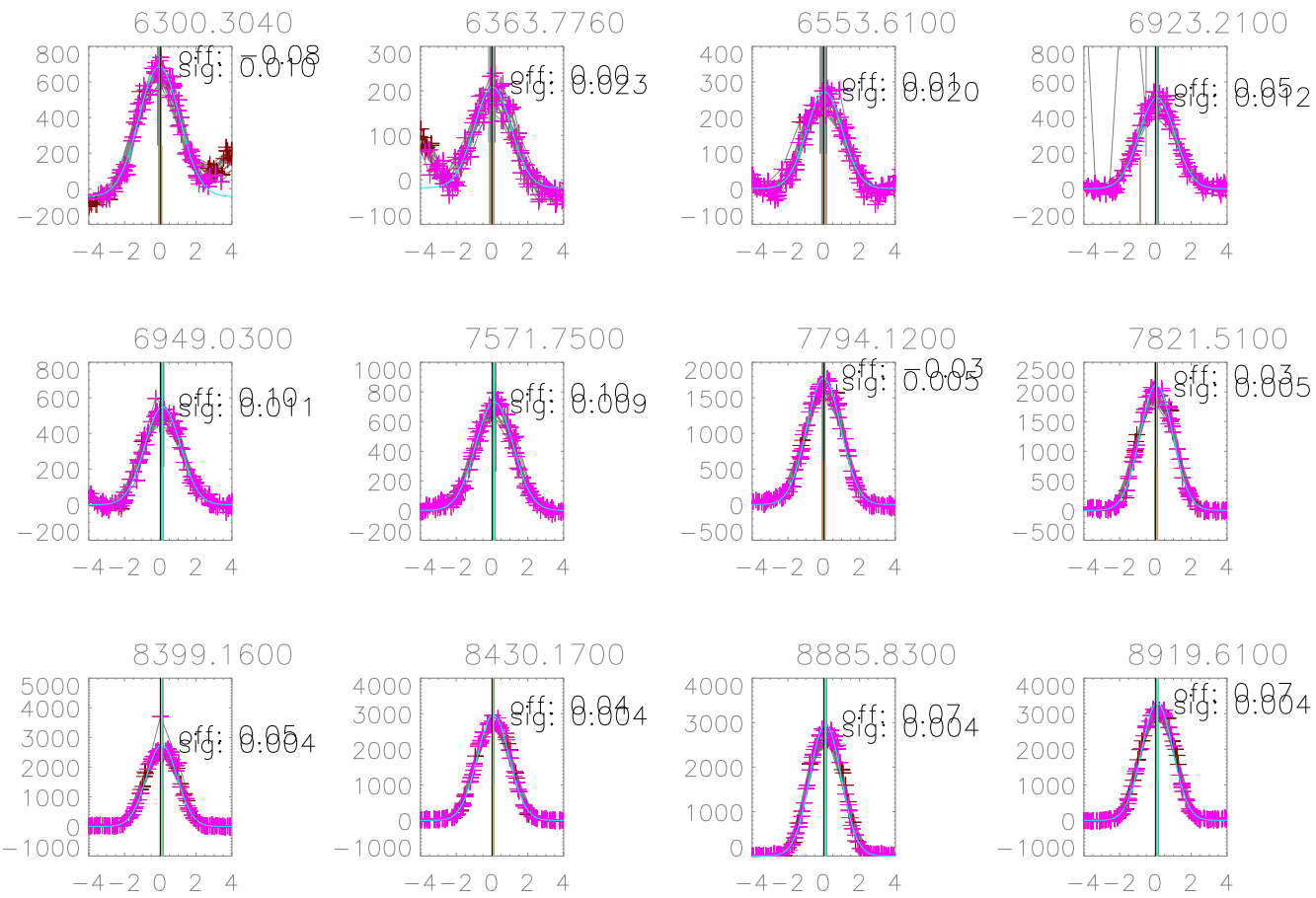

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004071.fi
28.6
22.3
22.3
15.9
15.9
15.9
9.5
9.5
Y [pix]
X [pix]
0
500
1000
1500
2000

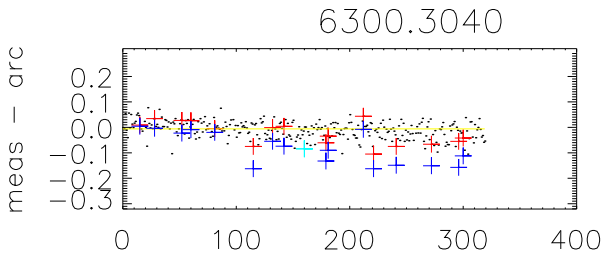

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004071.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.875
Max value = 26.656
Thu Feb 28 04:05:44 2008

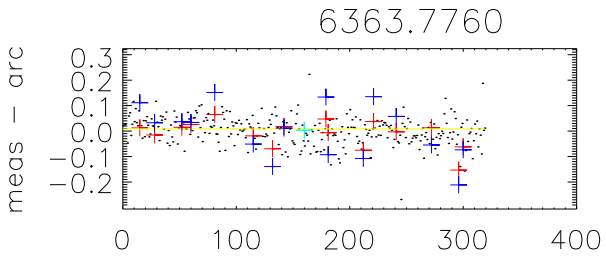

PLATE=0343 MJD=51692 Scattered Light on sdR−r1−00004071.fit
5.5
3.3
3.3
3.3
3.3
5.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

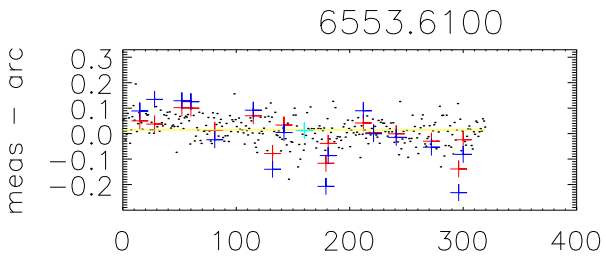

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004071.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.094
Max value = 8.338
Thu Feb 28 04:09:17 2008

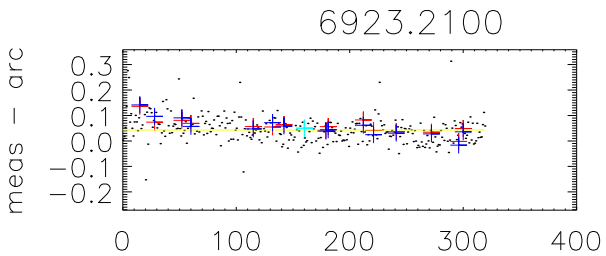

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004071.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

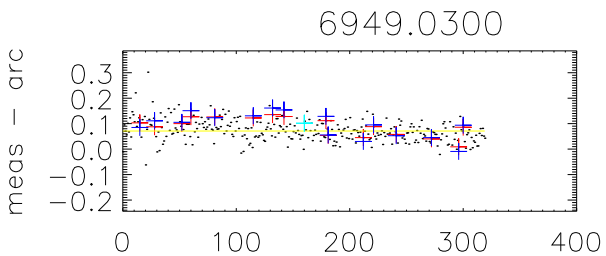

6300.3040
off: −0.08
sig: 0.010
6363.7760
off: 0.00
sig: 0.023
6553.6100
off: 0.01
sig: 0.020
6923.2100
off: 0.05
sig: 0.012
6949.0300
off: 0.10
sig: 0.011
7571.7500
off: 0.10
sig: 0.009
7794.1200
off: −0.03
sig: 0.005
7821.5100
off: 0.03
sig: 0.005
8399.1600
off: 0.05
sig: 0.004
8430.1700
off: 0.04
sig: 0.004
8885.8300
off: 0.07
sig: 0.004
8919.6100
off: 0.07
sig: 0.004

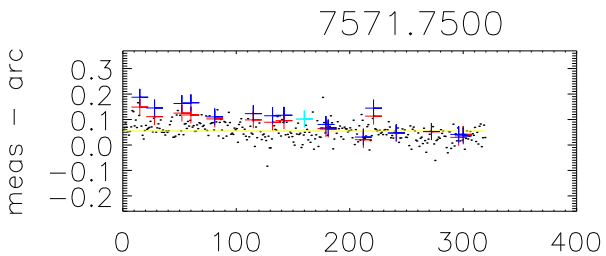

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

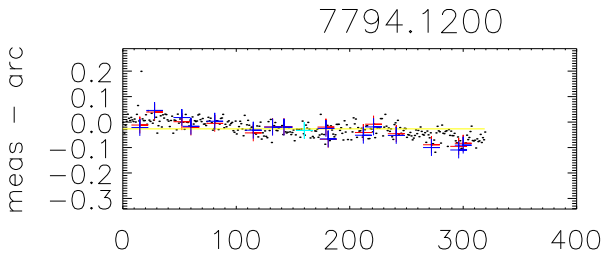

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

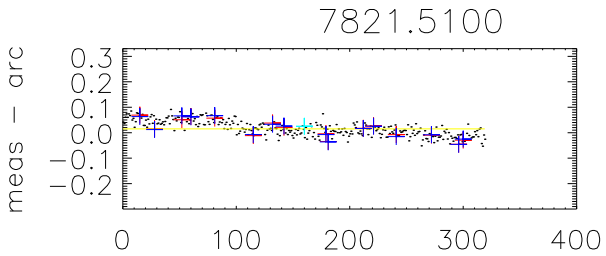

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

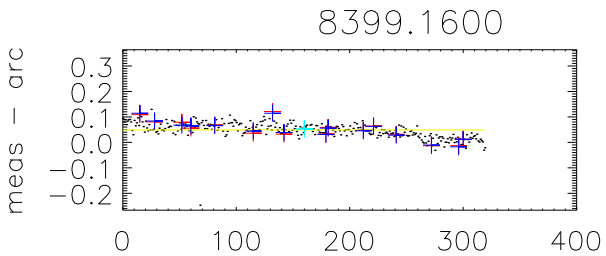

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

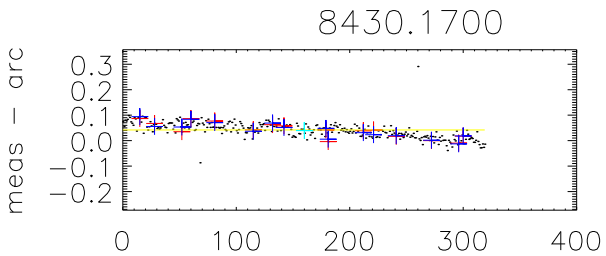

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

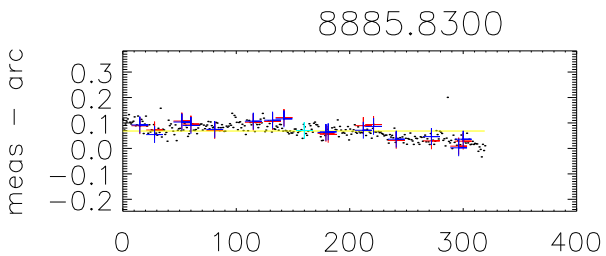

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

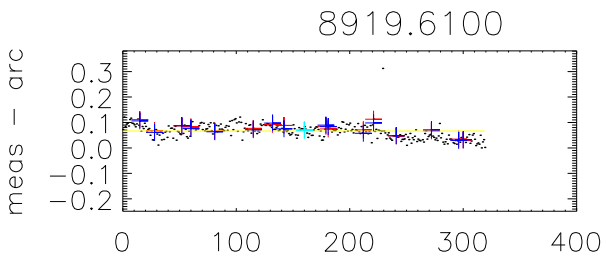

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

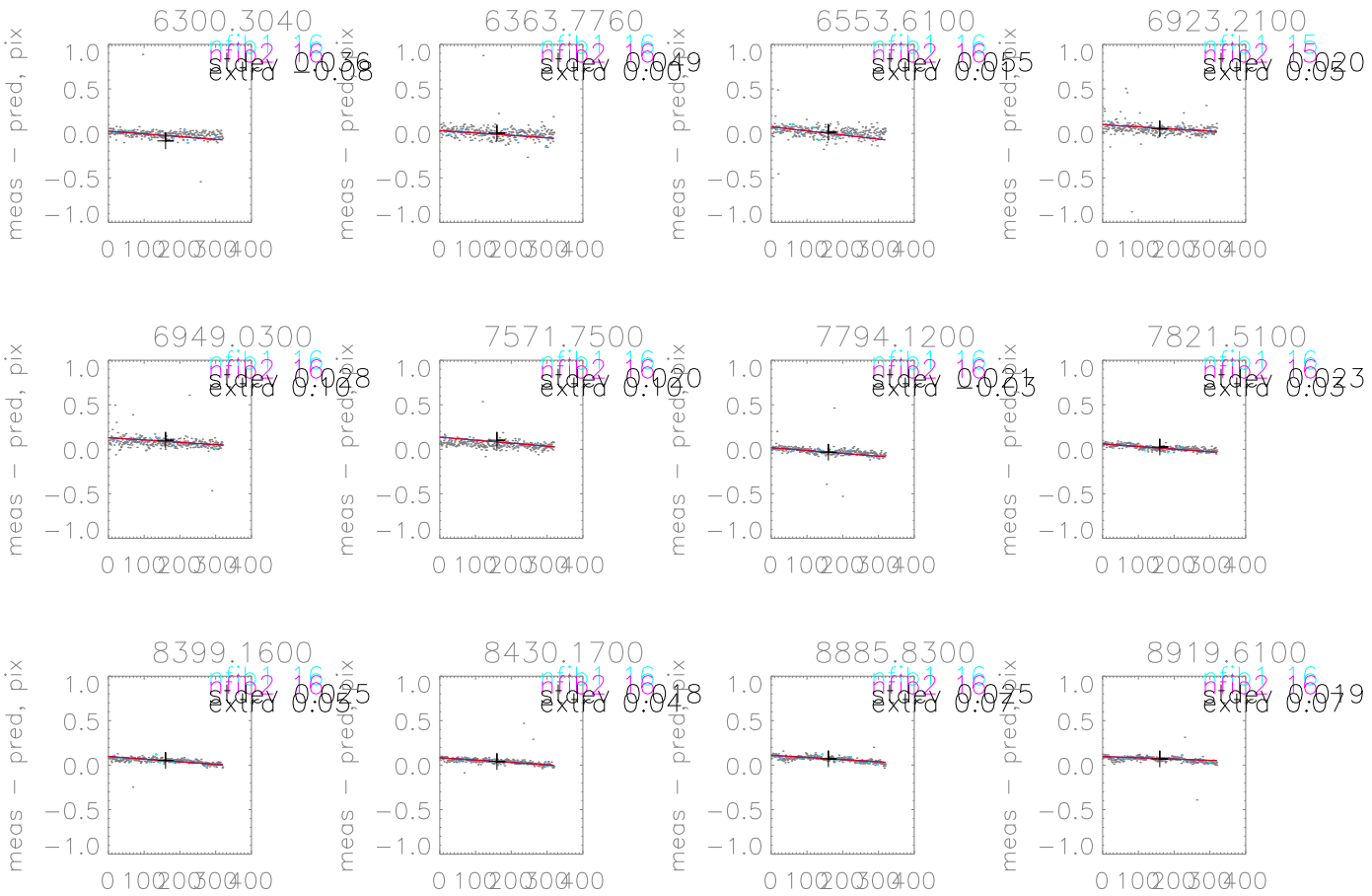

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

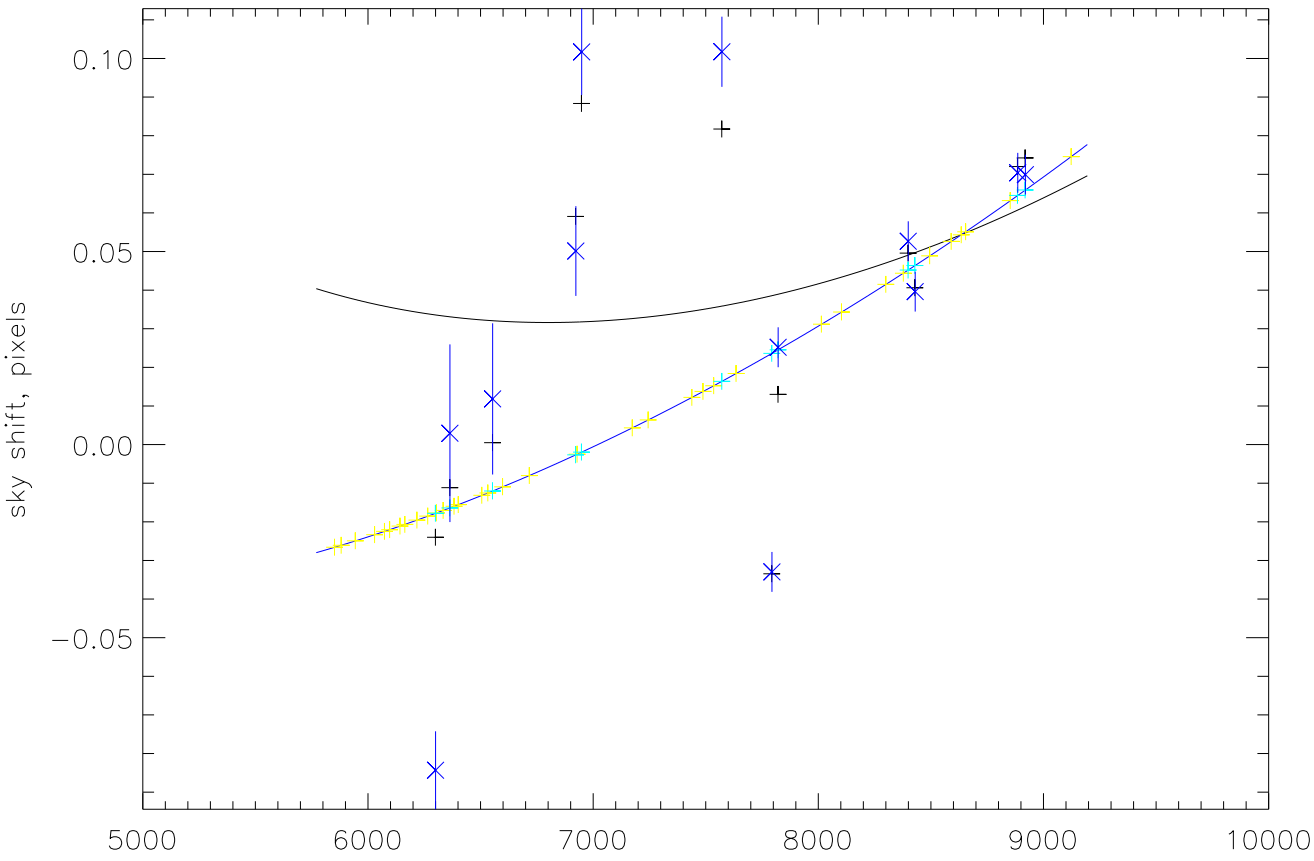

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

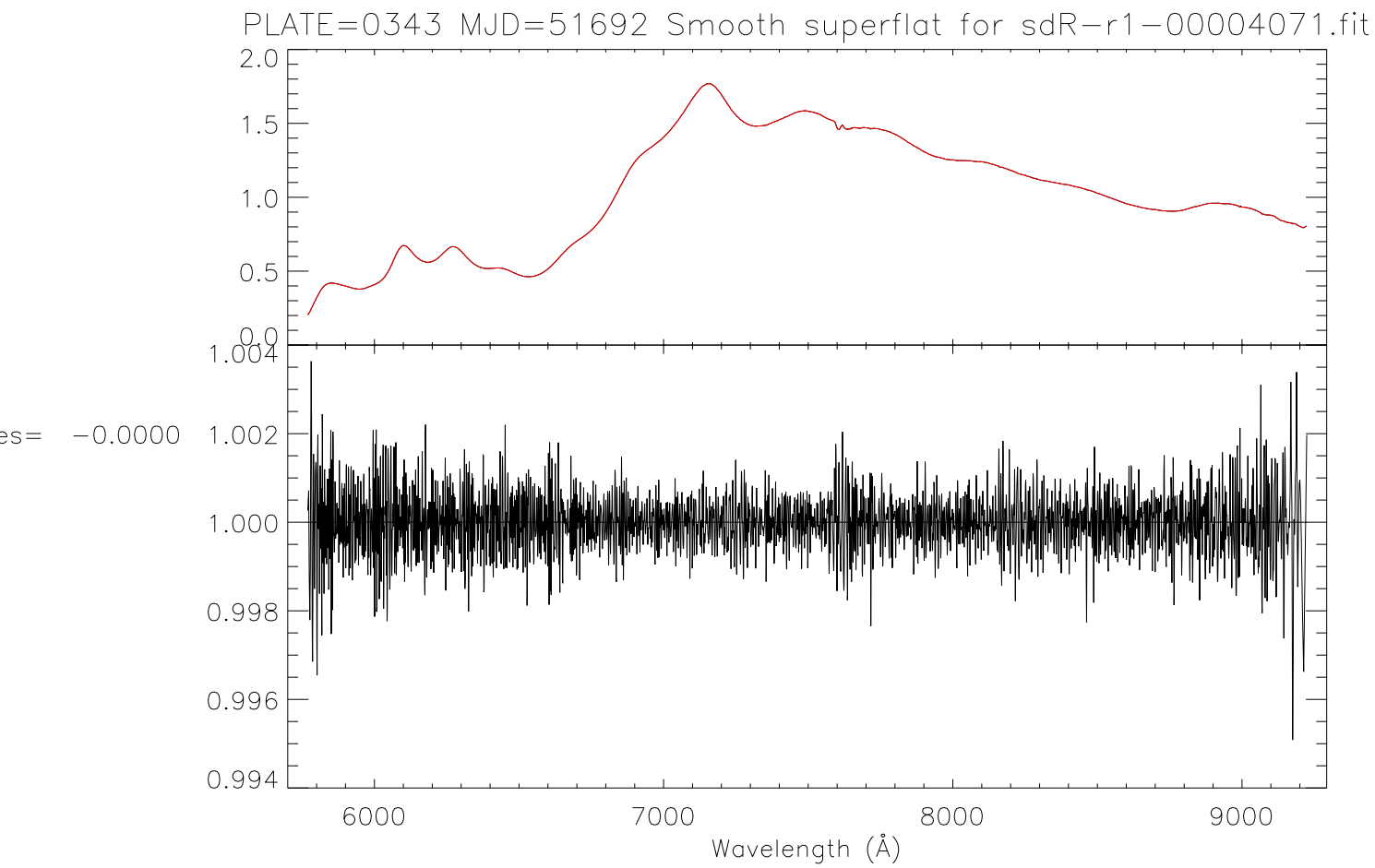

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

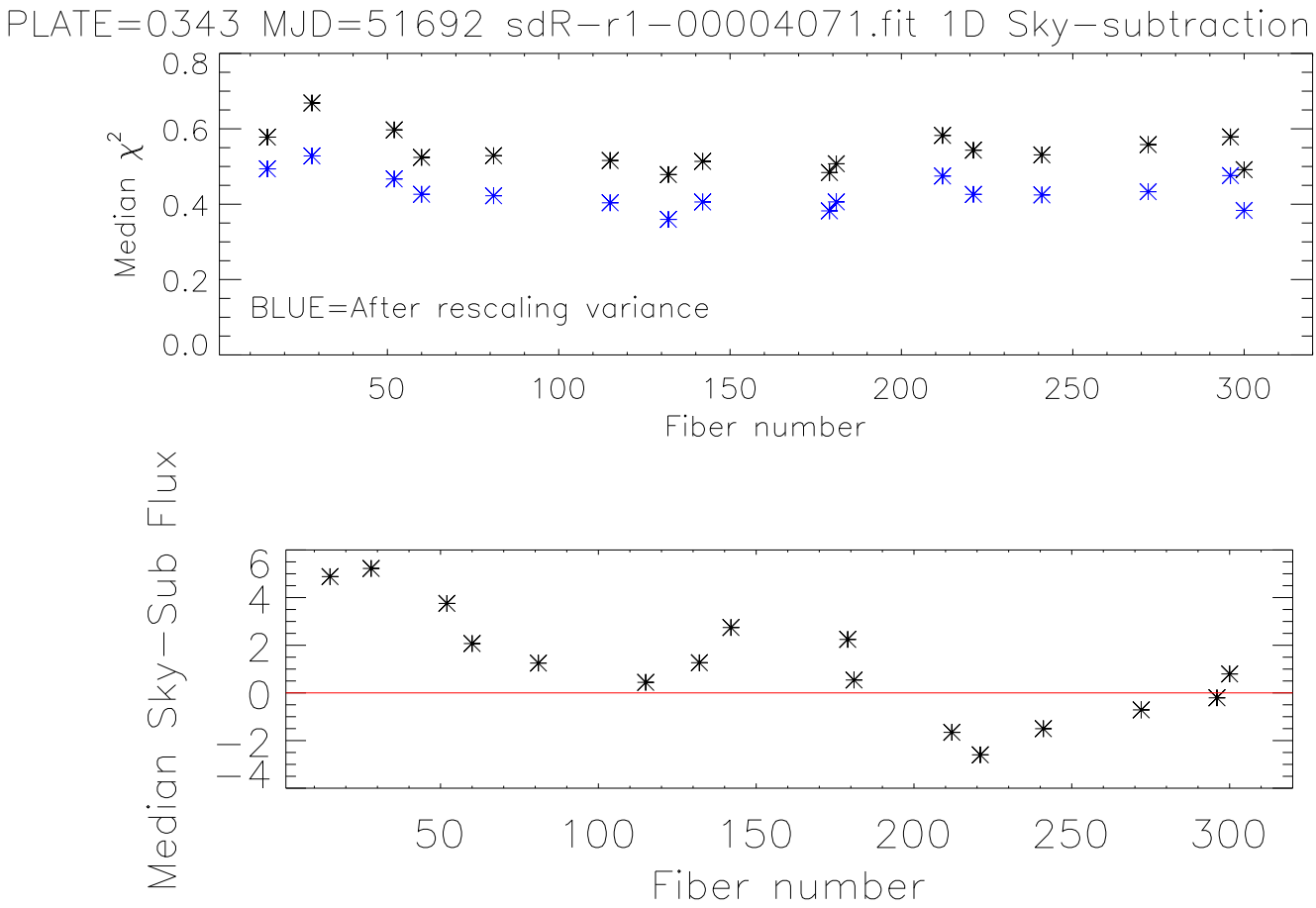

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

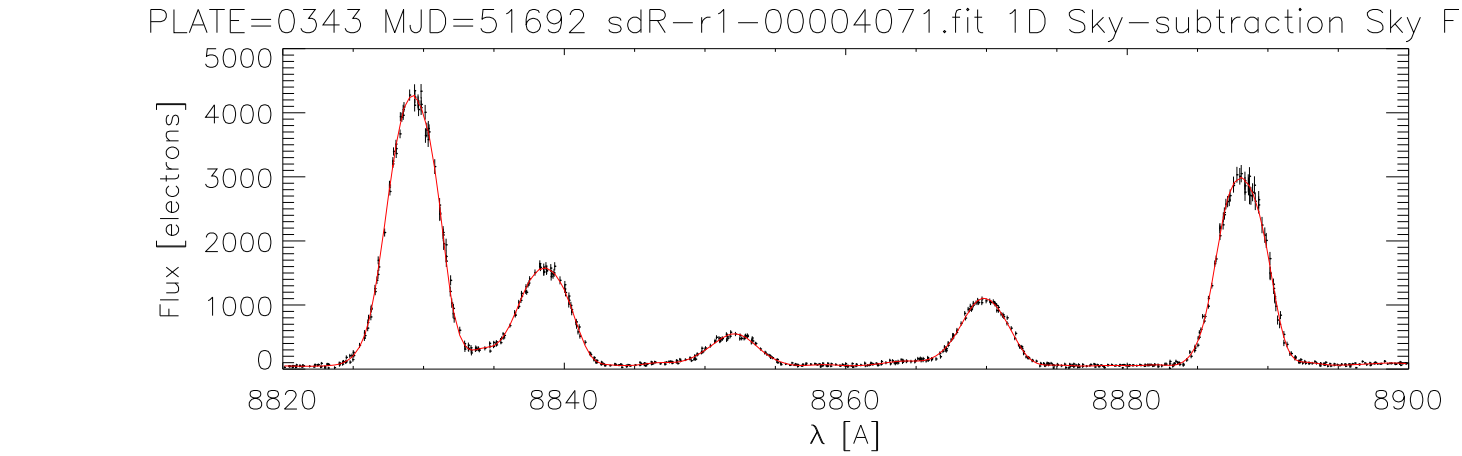

6300.3040
stdev 0.036
extra −0.008
6363.7760
stdev 0.049
extra 0.000
6553.6100
stdev 0.055
extra 0.015
6923.2100
stdev 0.020
extra 0.005
6949.0300
stdev 0.028
extra 0.016
7571.7500
stdev 0.020
extra 0.016
7794.1200
stdev 0.021
extra −0.003
7821.5100
stdev 0.023
extra 0.005
8399.1600
stdev 0.025
extra 0.005
8430.1700
stdev 0.018
extra 0.048
8885.8300
stdev 0.025
extra 0.007
8919.6100
stdev 0.019
extra 0.007
meas − pred, pix
mfib2 16
mfib2 15

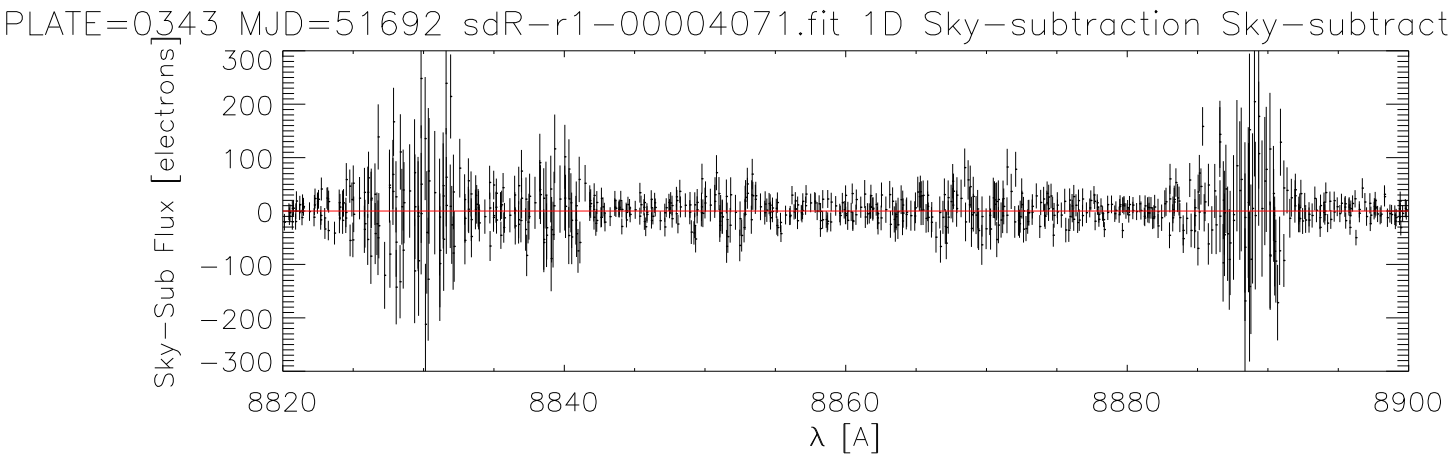

0.10
0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

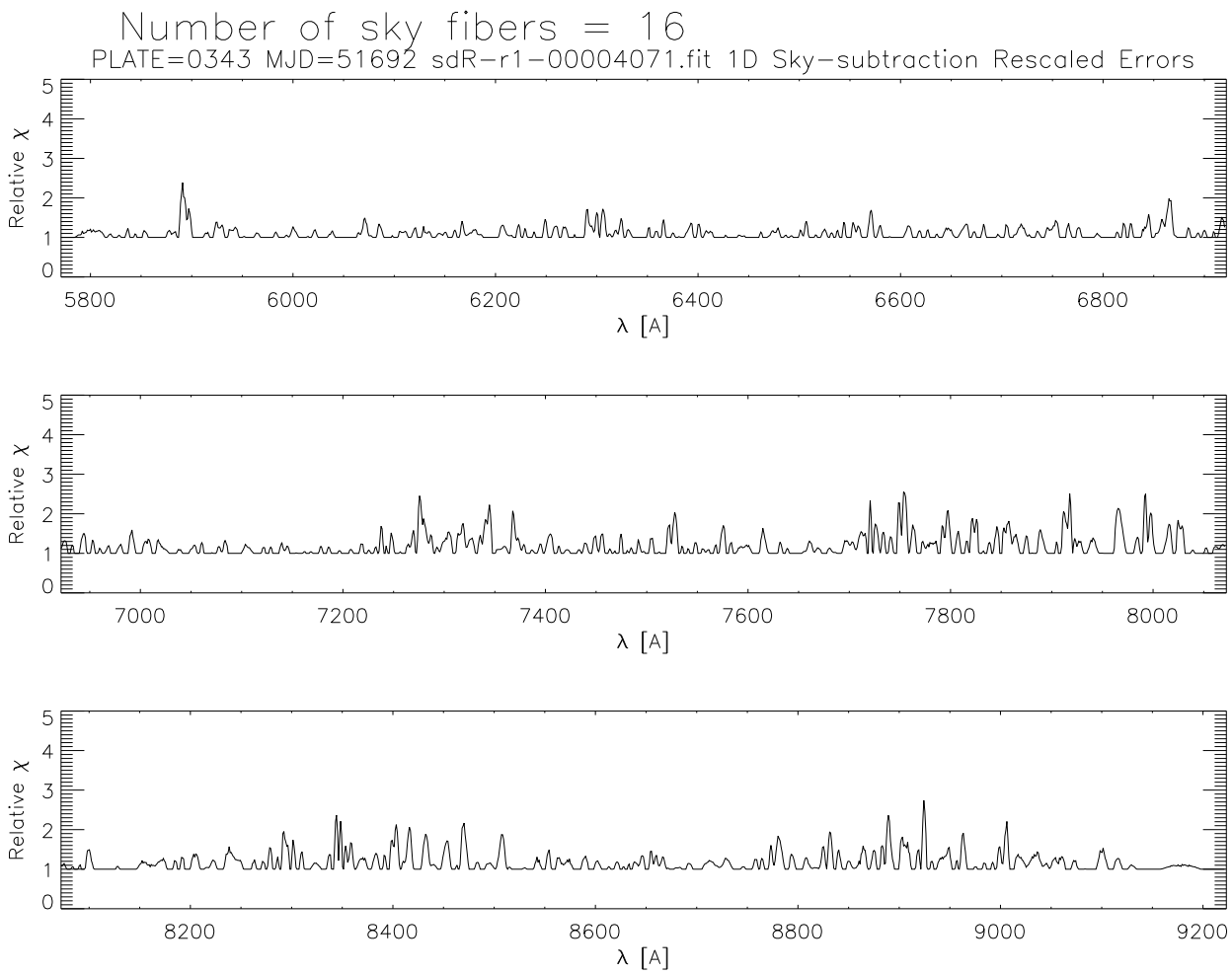

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004071.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

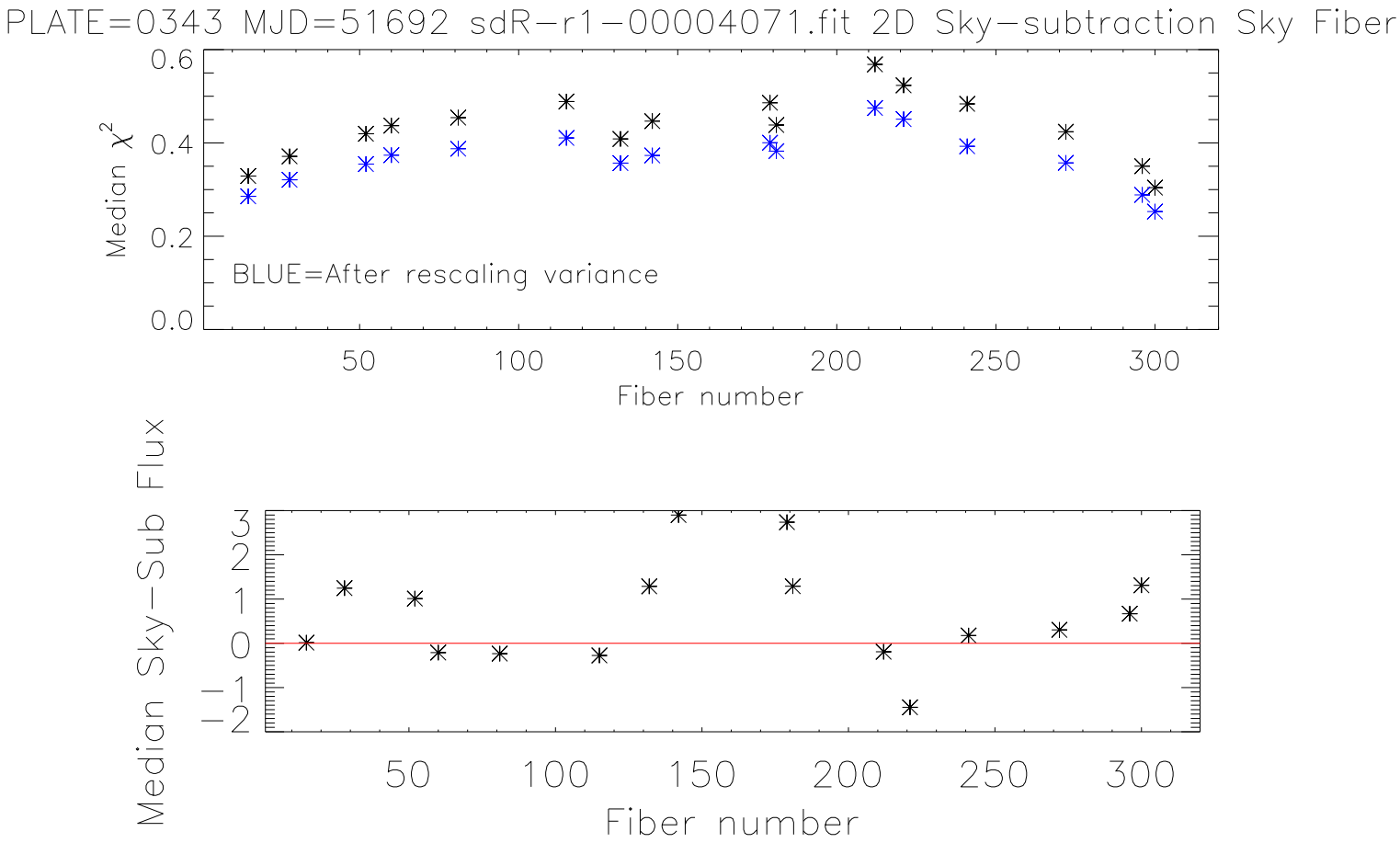

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

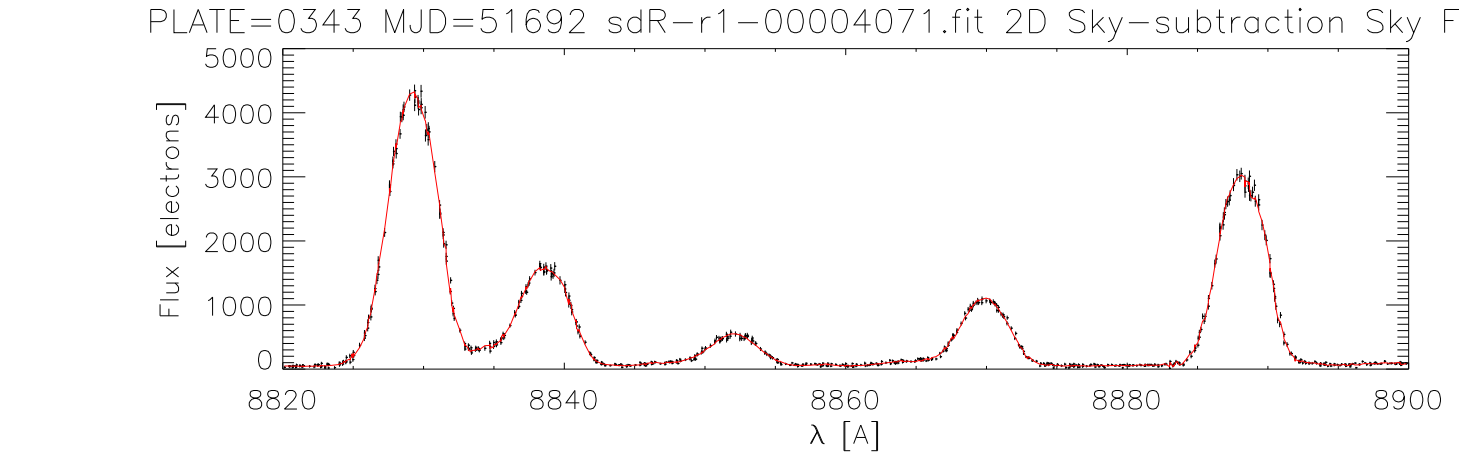
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

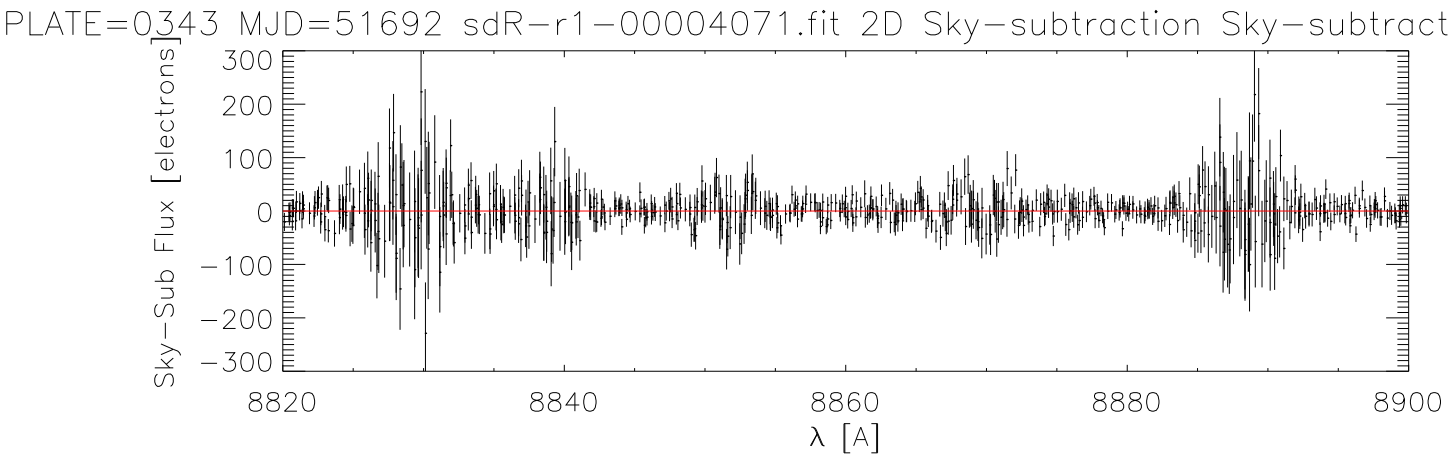

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

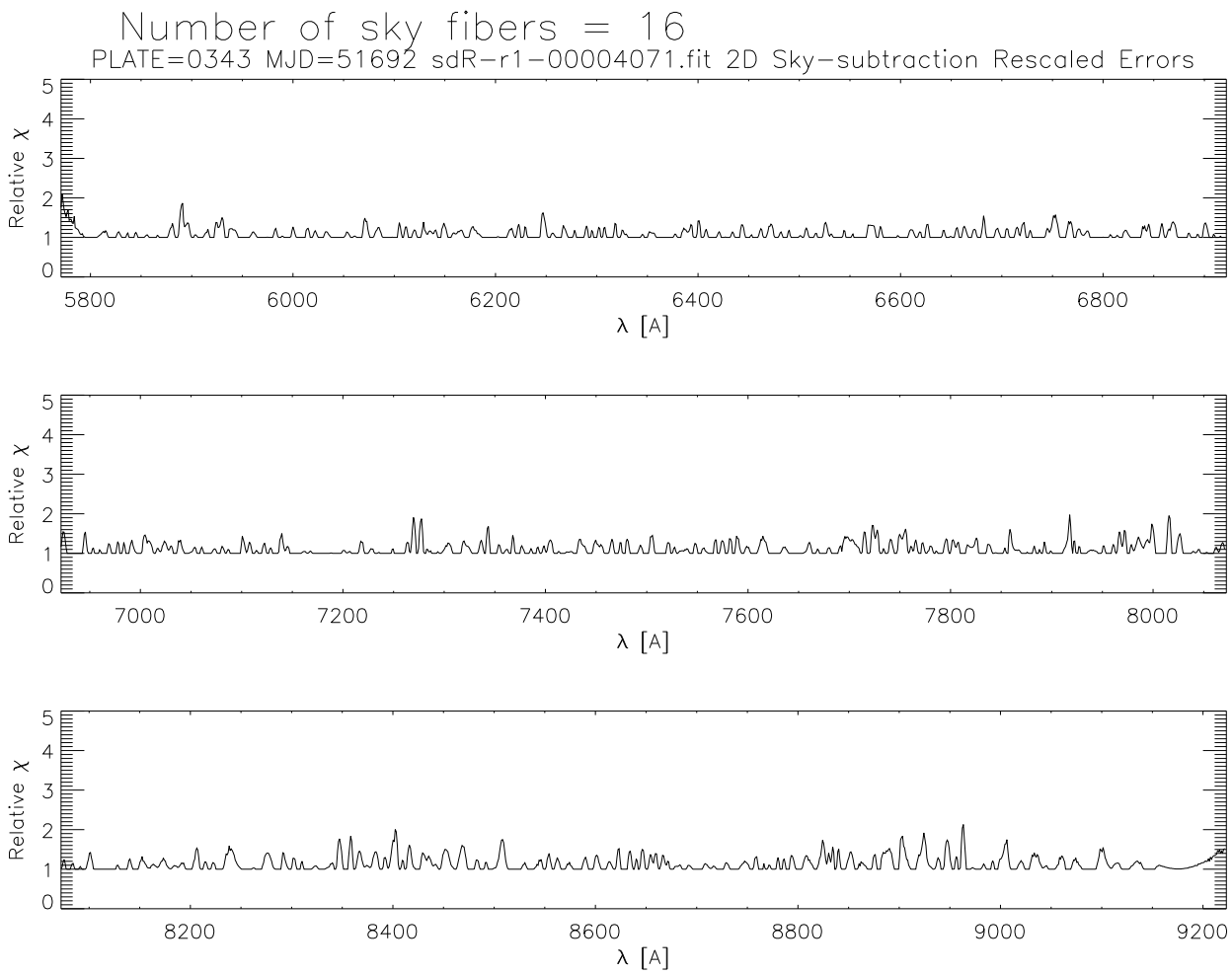

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

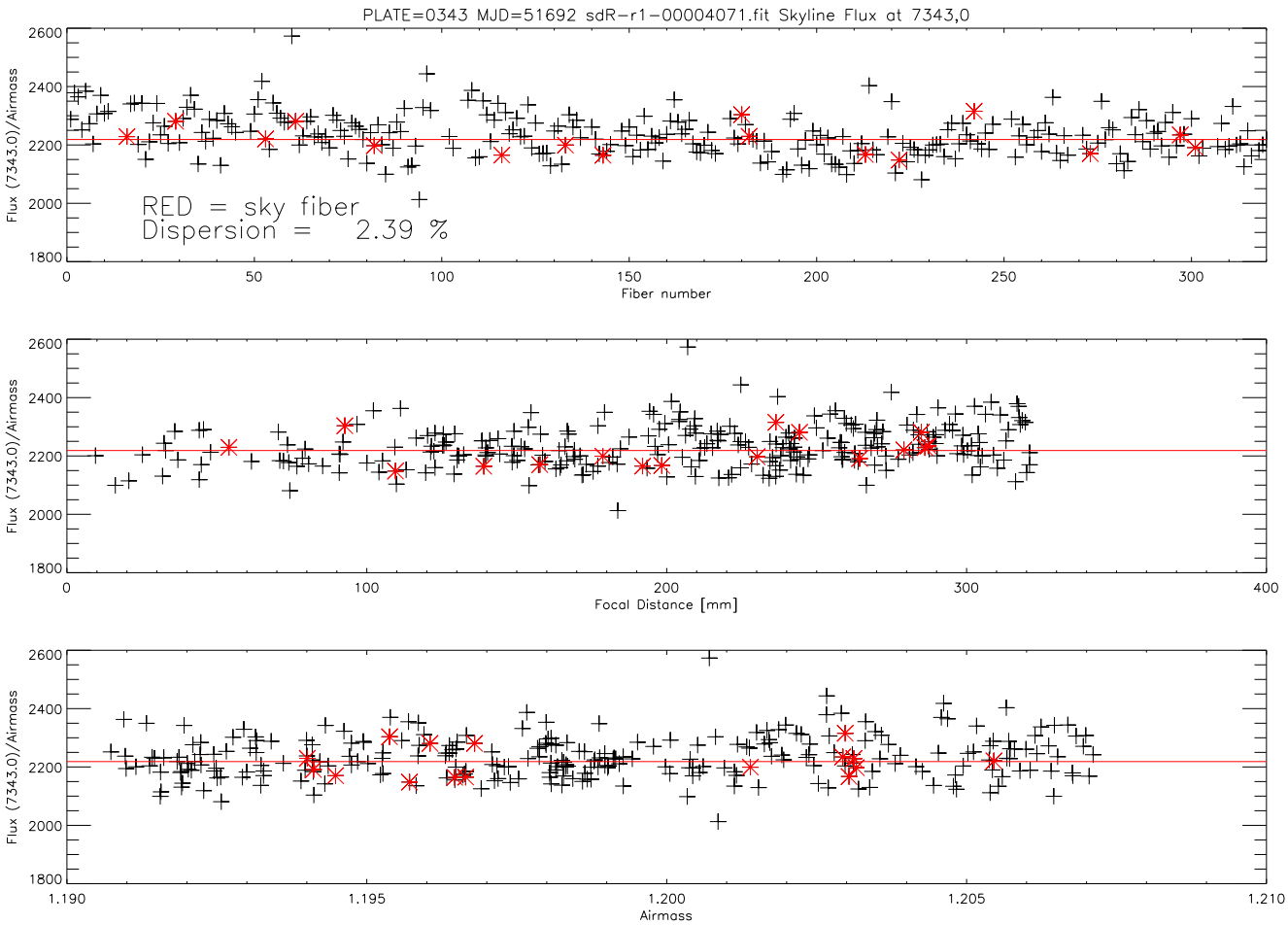

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004071.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

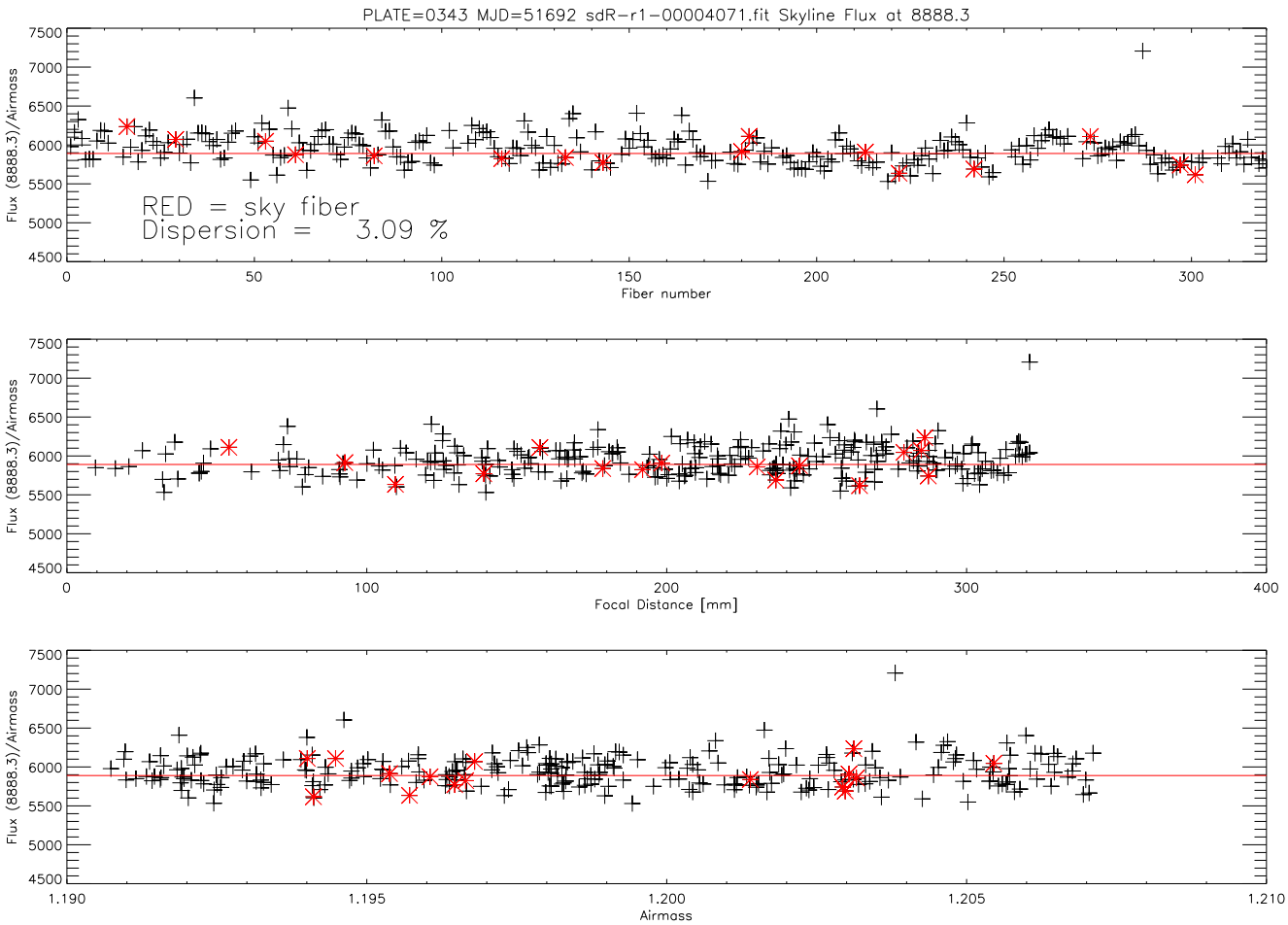

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

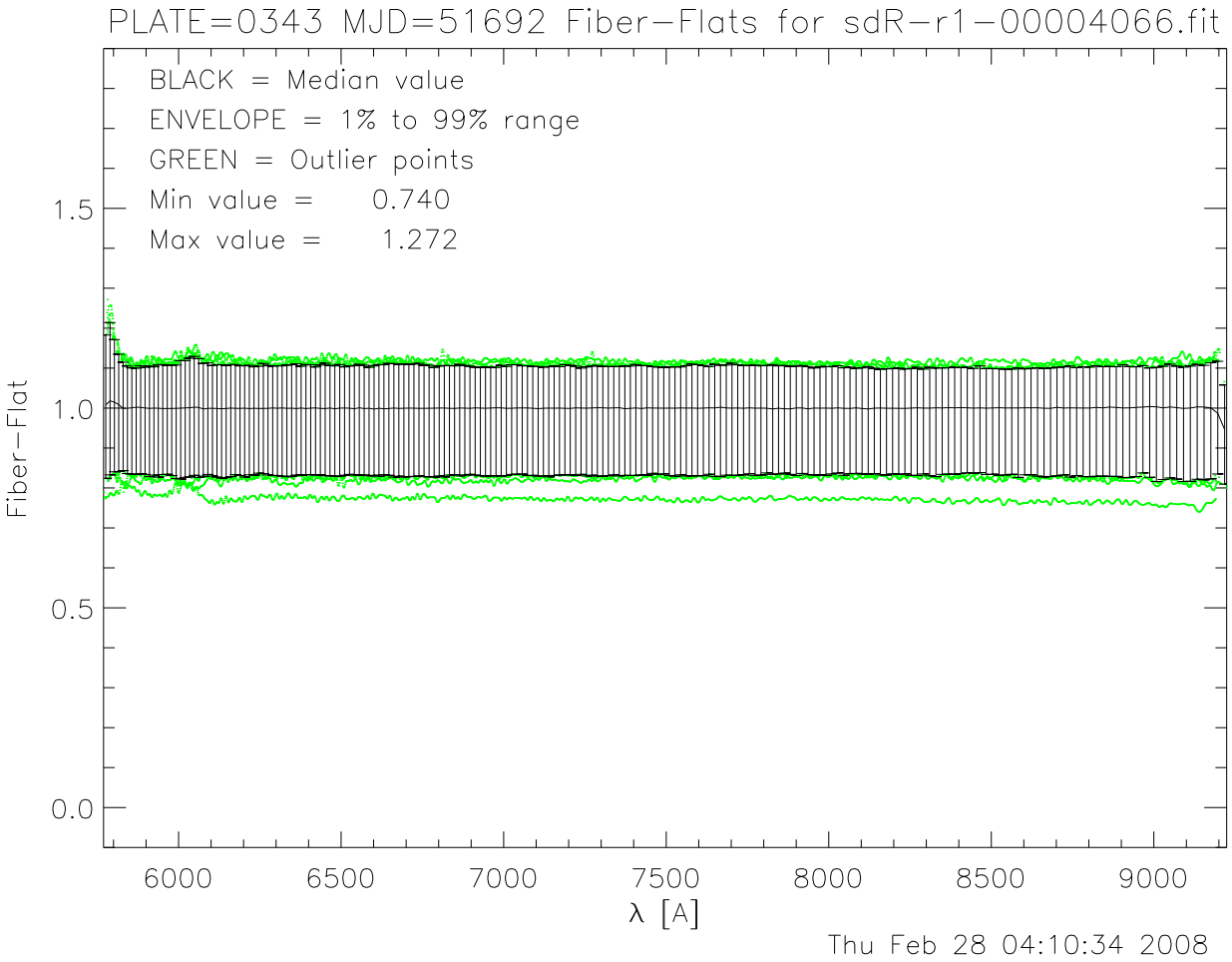

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

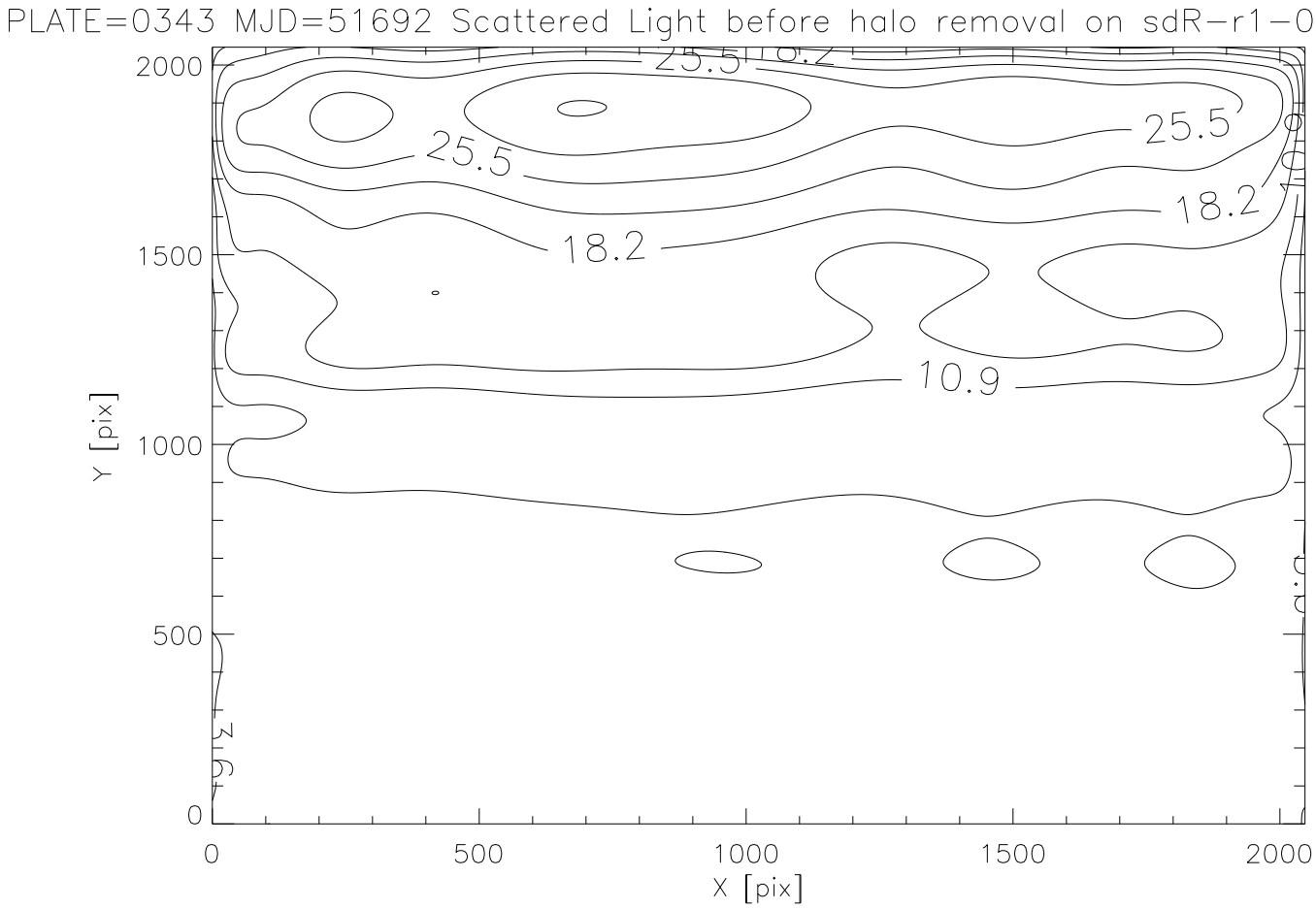

PLATE=0343 MJD=51692 sdR-r1-00004071.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

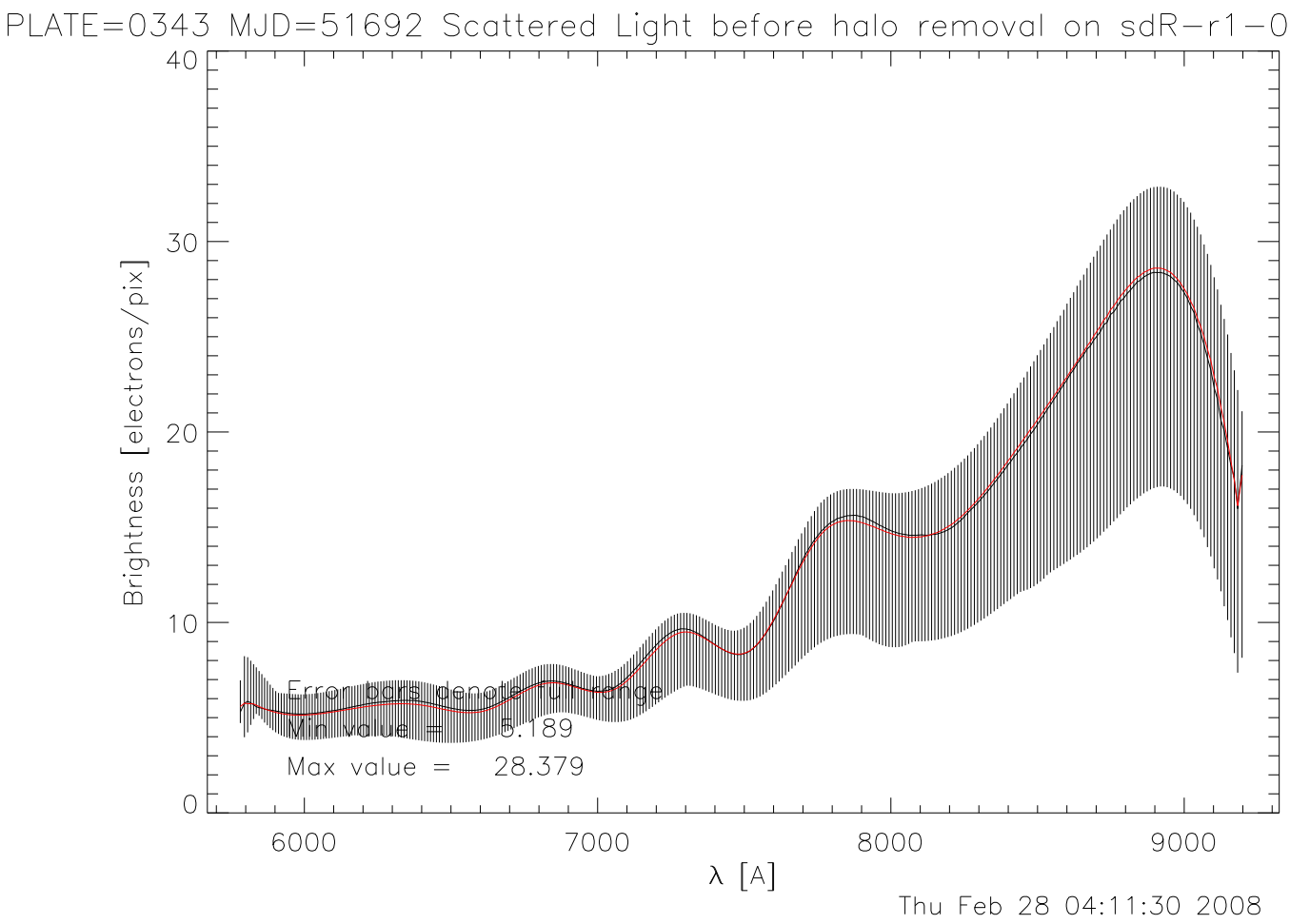

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004071.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

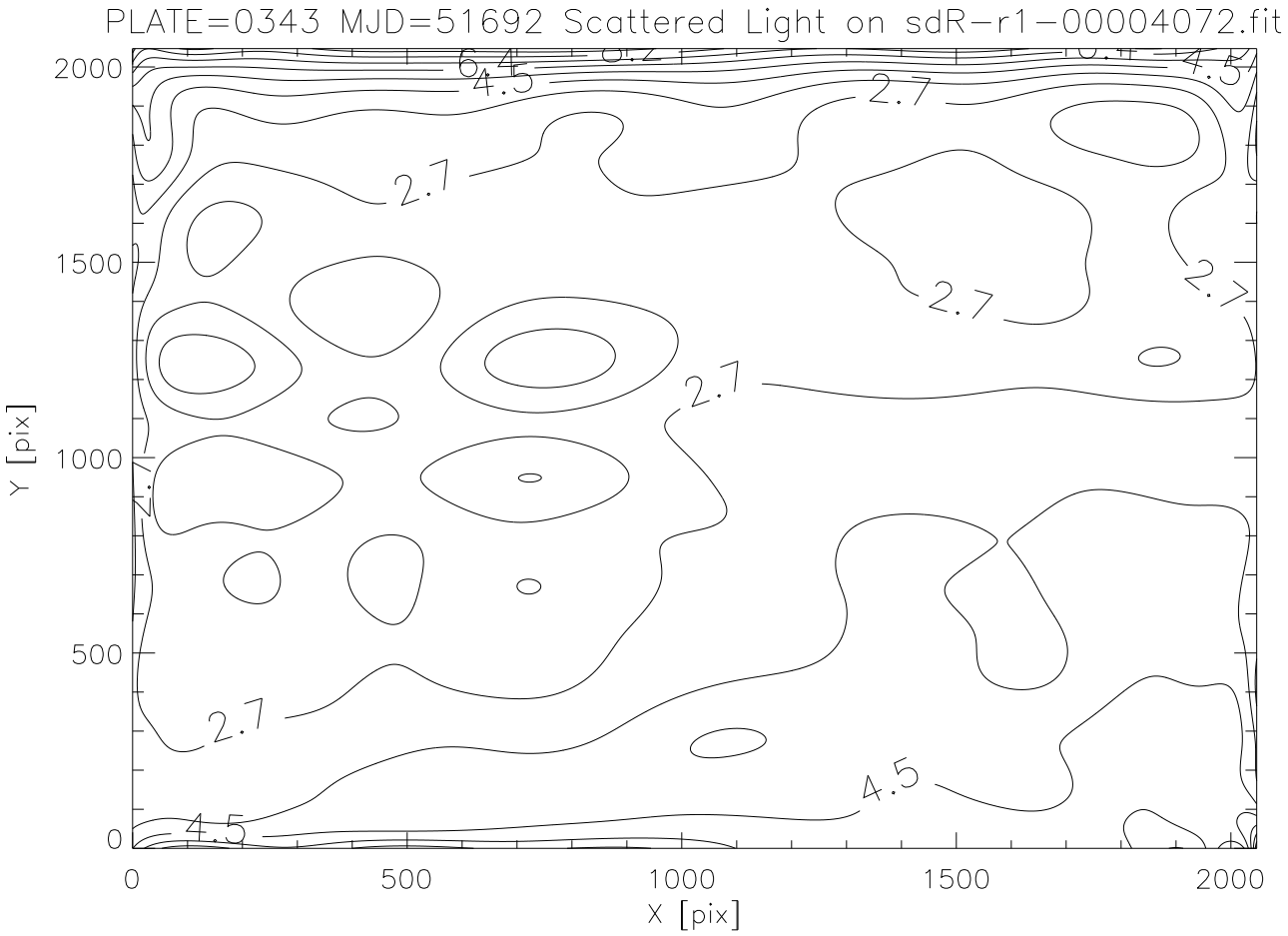

PLATE=0343 MJD=51692 sdR-r1-00004071.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.39 %
Fiber number
Focal Distance [mm]
Airmass

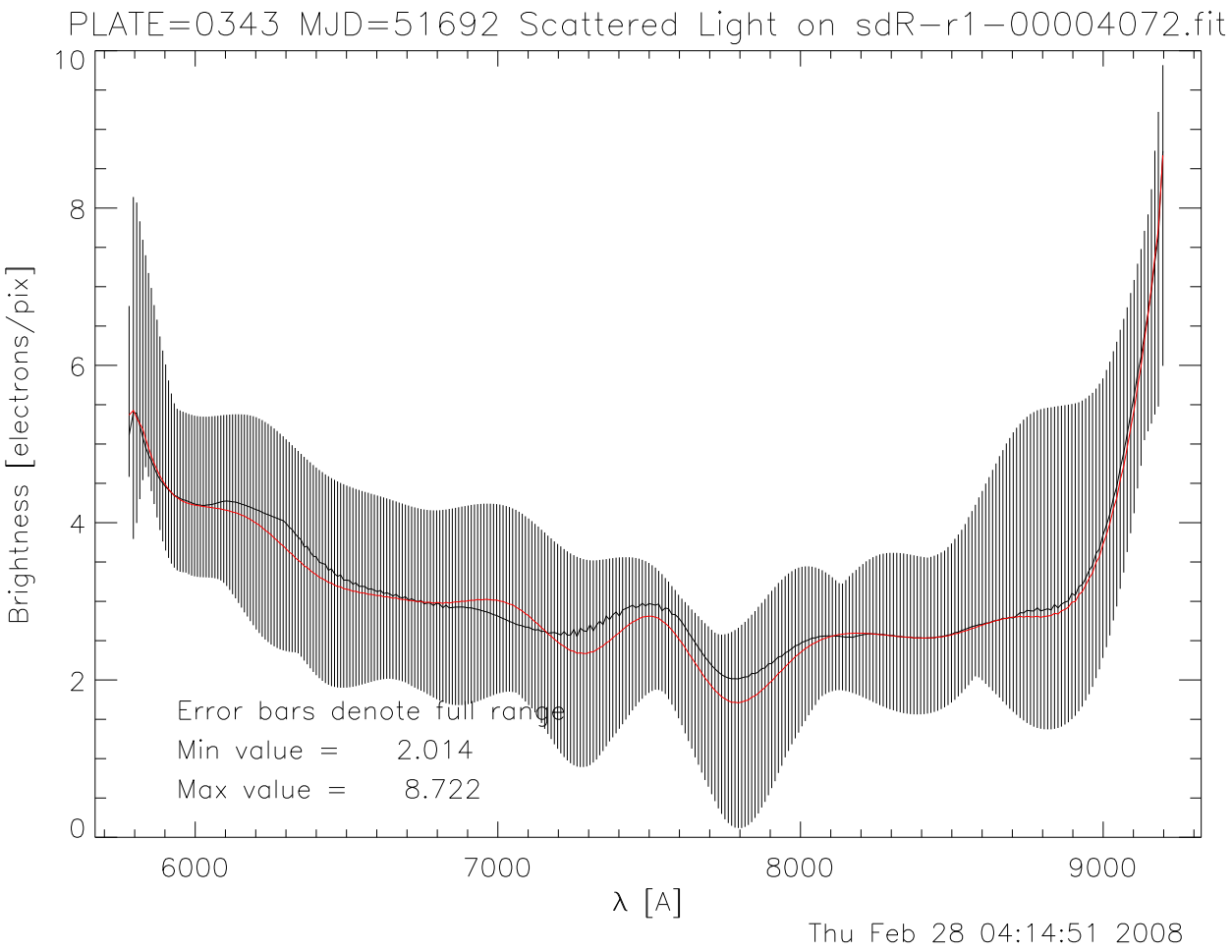

PLATE=0343 MJD=51692 sdR-r1-00004071.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.09 %
Fiber number
Focal Distance [mm]
Airmass

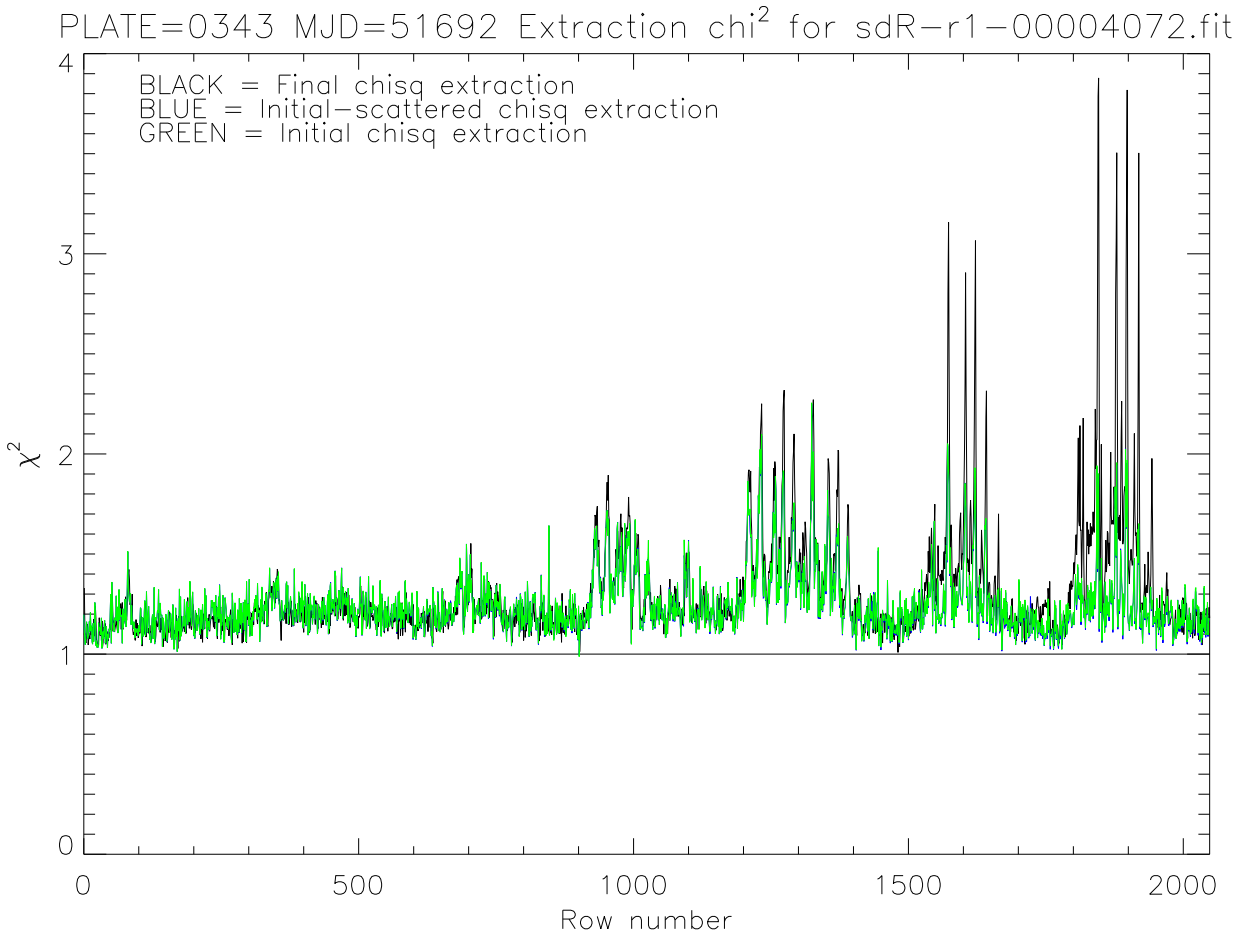

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:10:34 2008

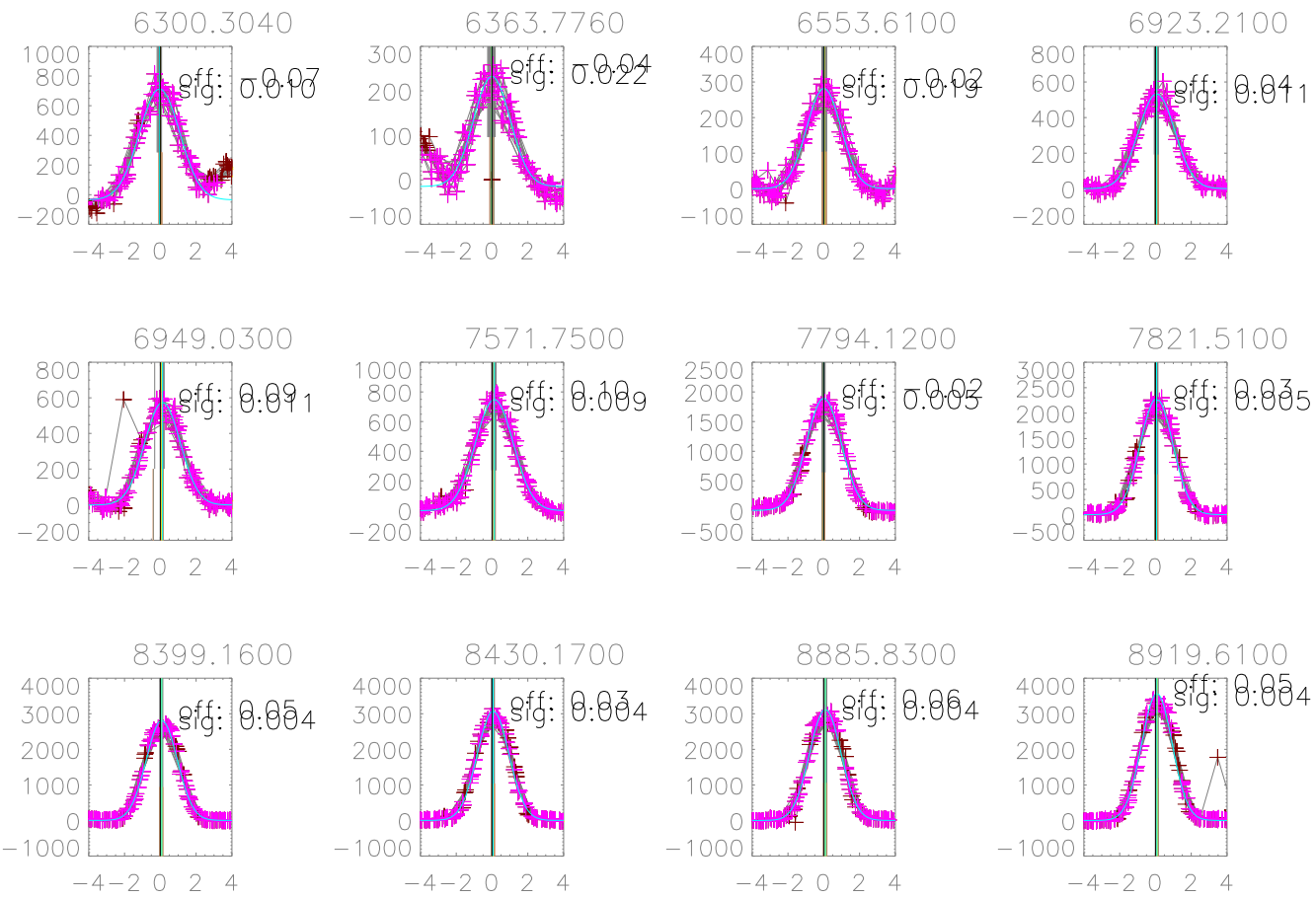

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004072.fi
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

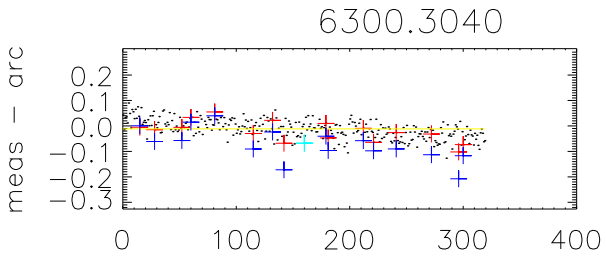

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−r1−00004072.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 5.189
Max value = 28.379
Thu Feb 28 04:11:30 2008

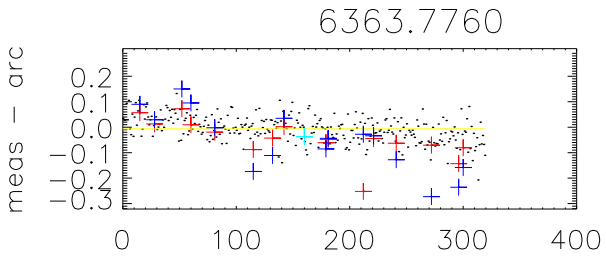

PLATE=0343 MJD=51692 Scattered Light on sdR−r1−00004072.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
2.7
4.5
6.4

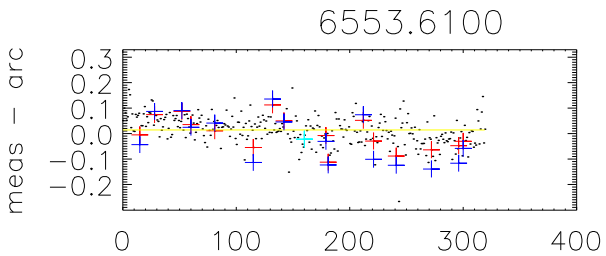

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004072.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.014
Max value = 8.722
Thu Feb 28 04:14:51 2008

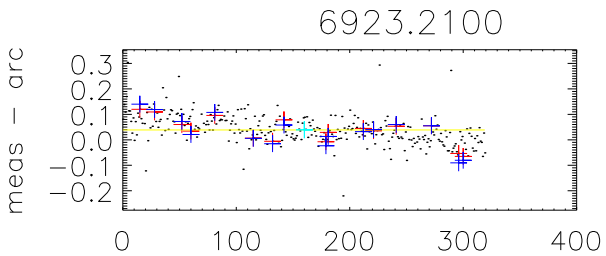

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004072.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

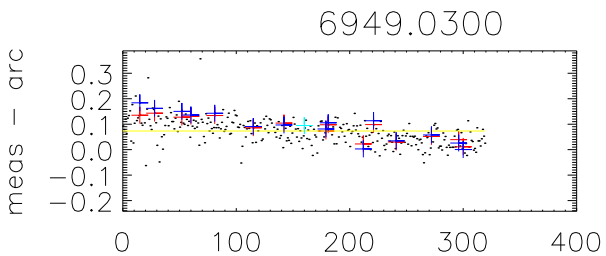

6300.3040
off: −0.07
sig: 0.010
6363.7760
off: −0.04
sig: 0.022
6553.6100
off: −0.02
sig: 0.013
6923.2100
off: 0.04
sig: 0.011
6949.0300
off: 0.09
sig: 0.011
7571.7500
off: 0.10
sig: 0.009
7794.1200
off: −0.02
sig: 0.005
7821.5100
off: 0.03
sig: 0.005
8399.1600
off: 0.05
sig: 0.004
8430.1700
off: 0.03
sig: 0.004
8885.8300
off: 0.06
sig: 0.004
8919.6100
off: 0.05
sig: 0.004

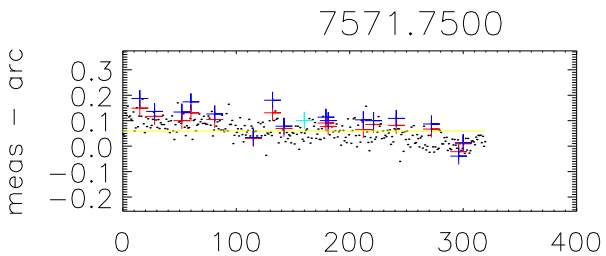

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

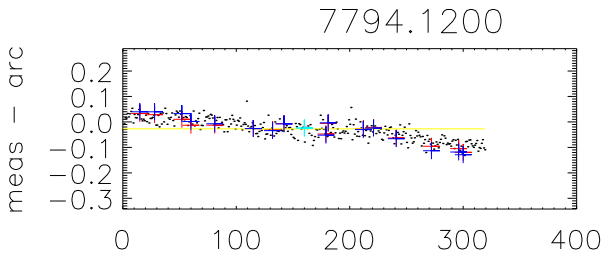

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

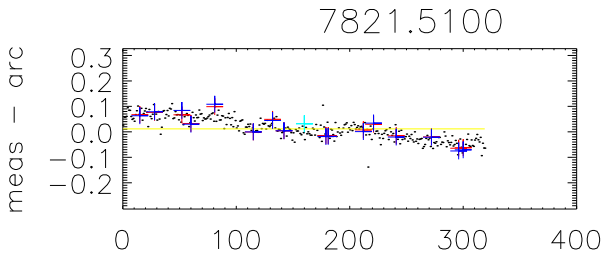

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

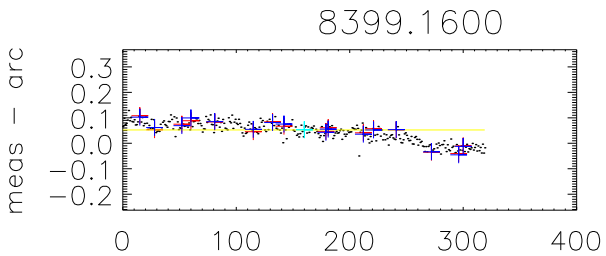

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

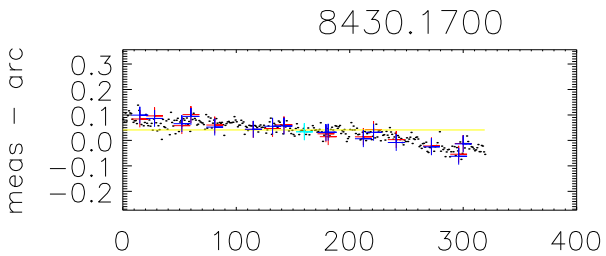

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

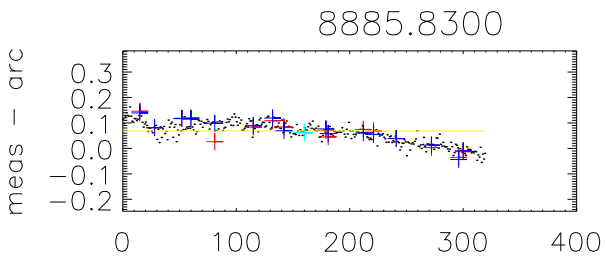

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

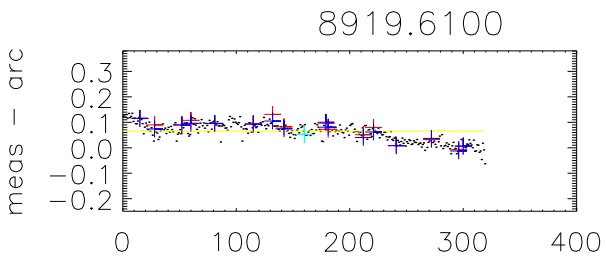

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

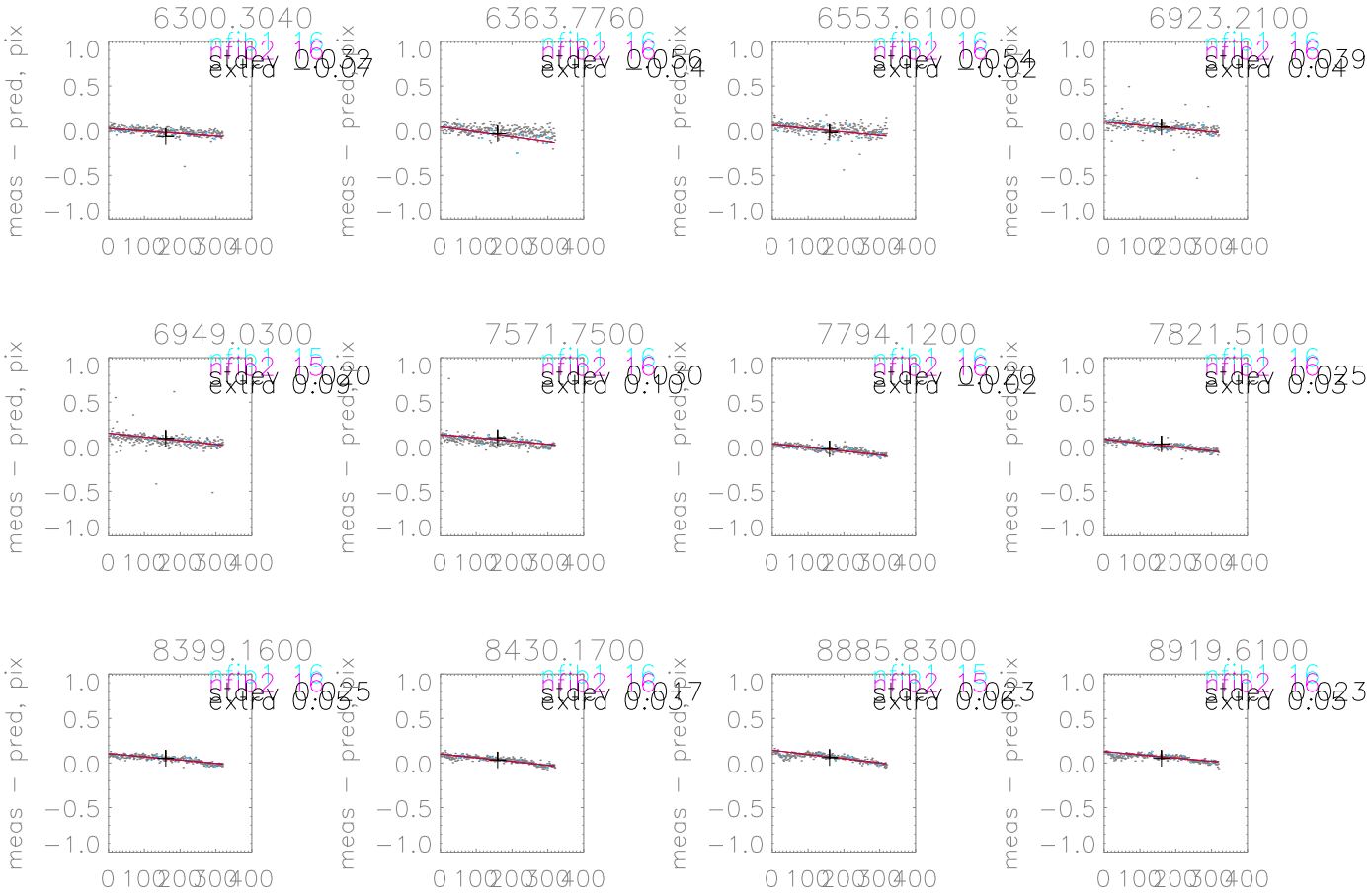

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

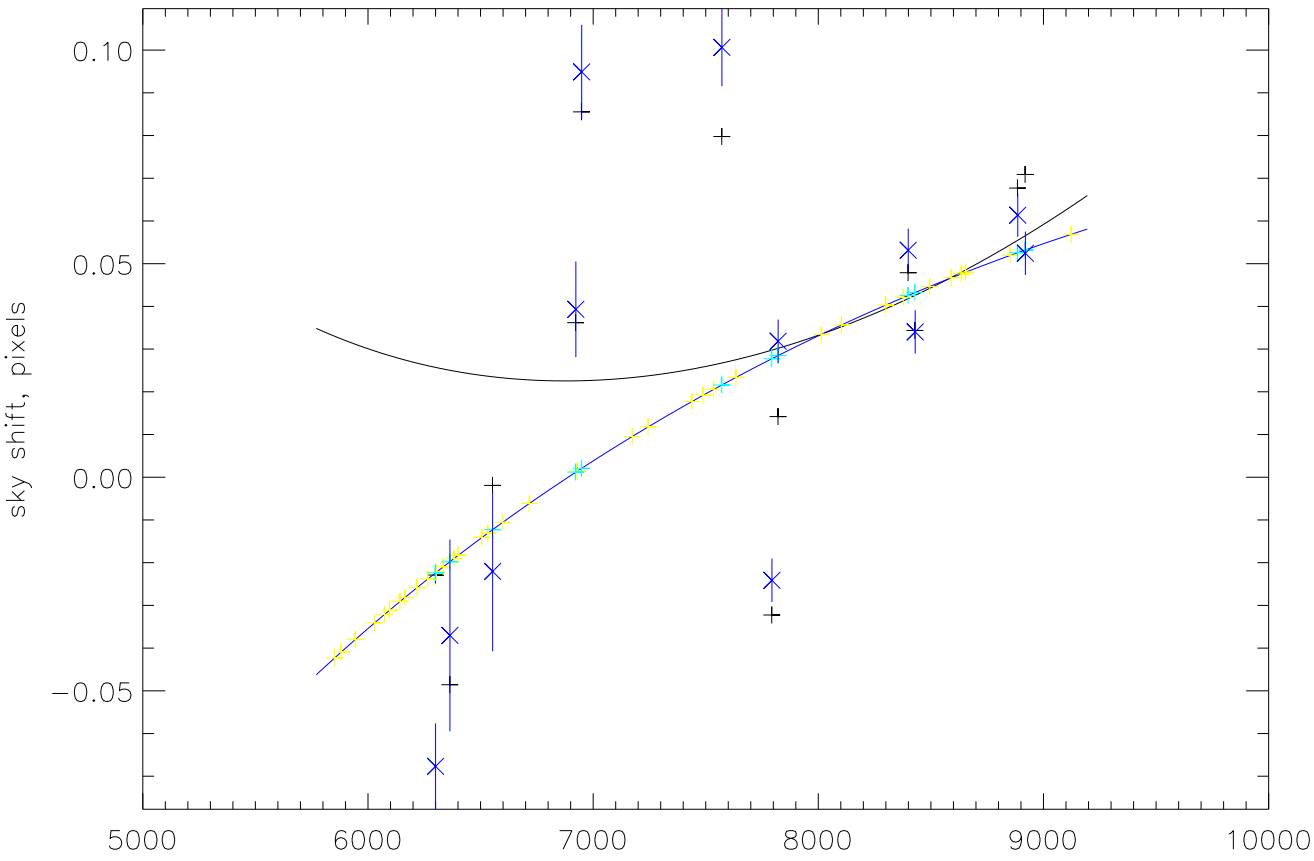

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

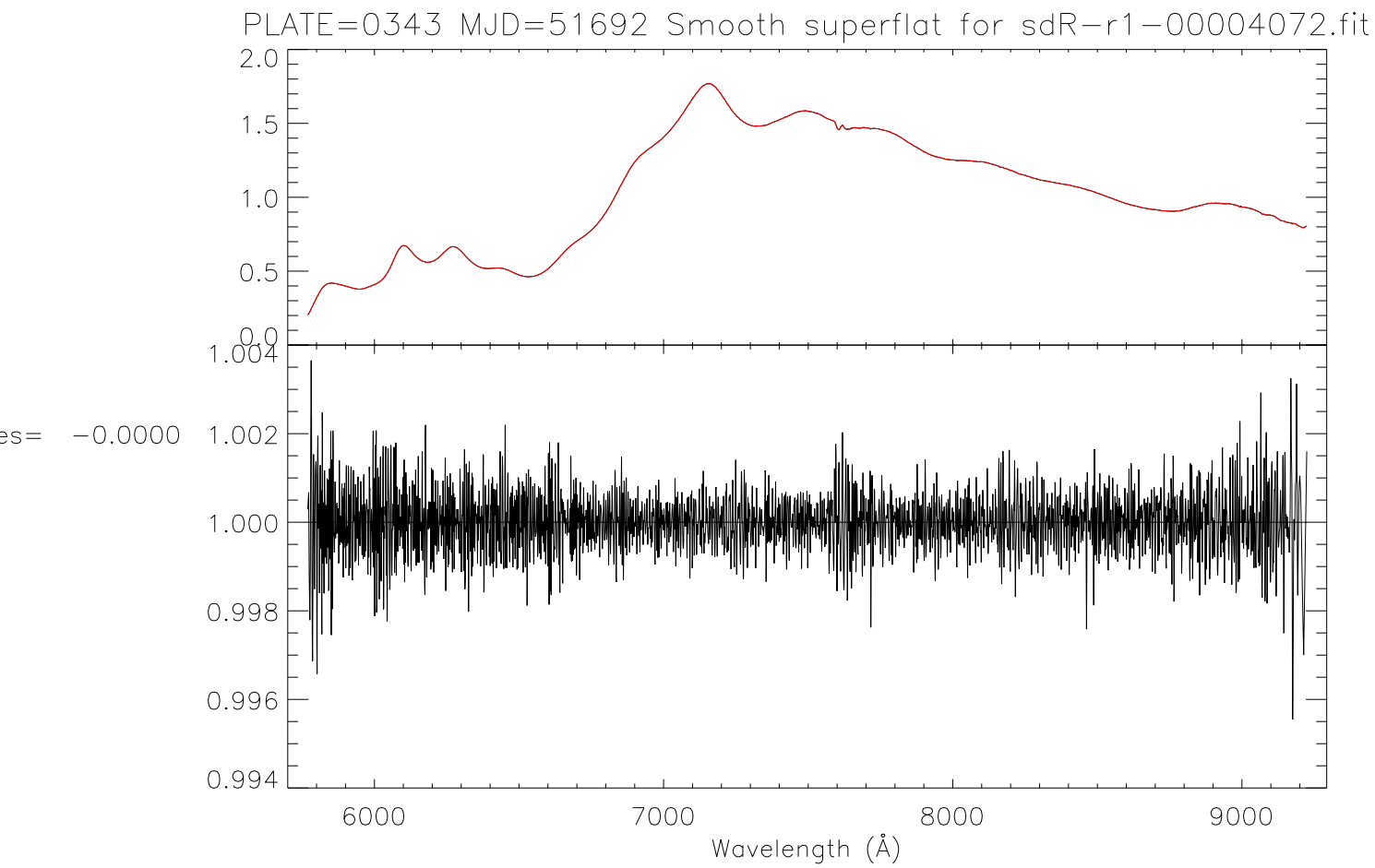

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

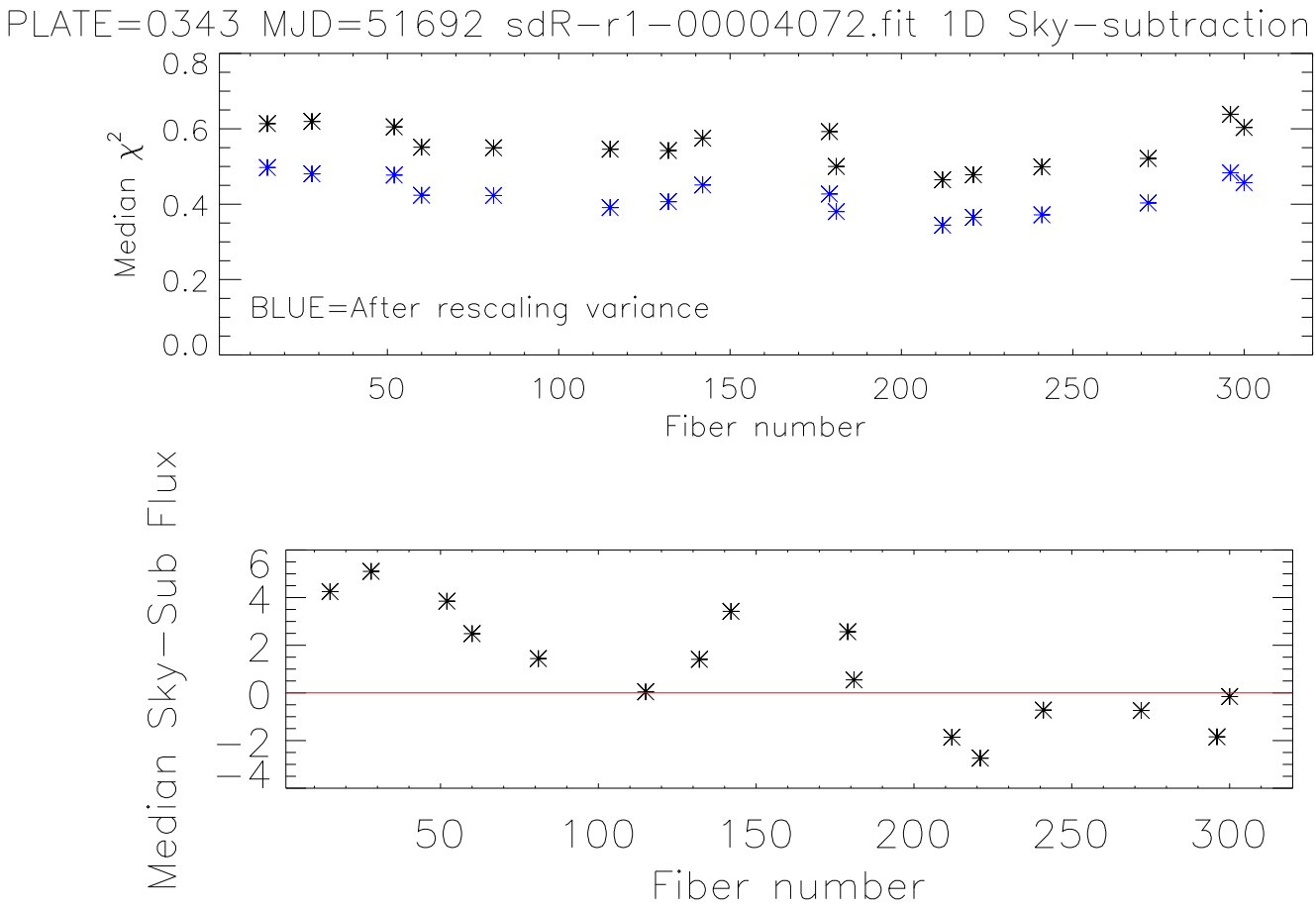

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

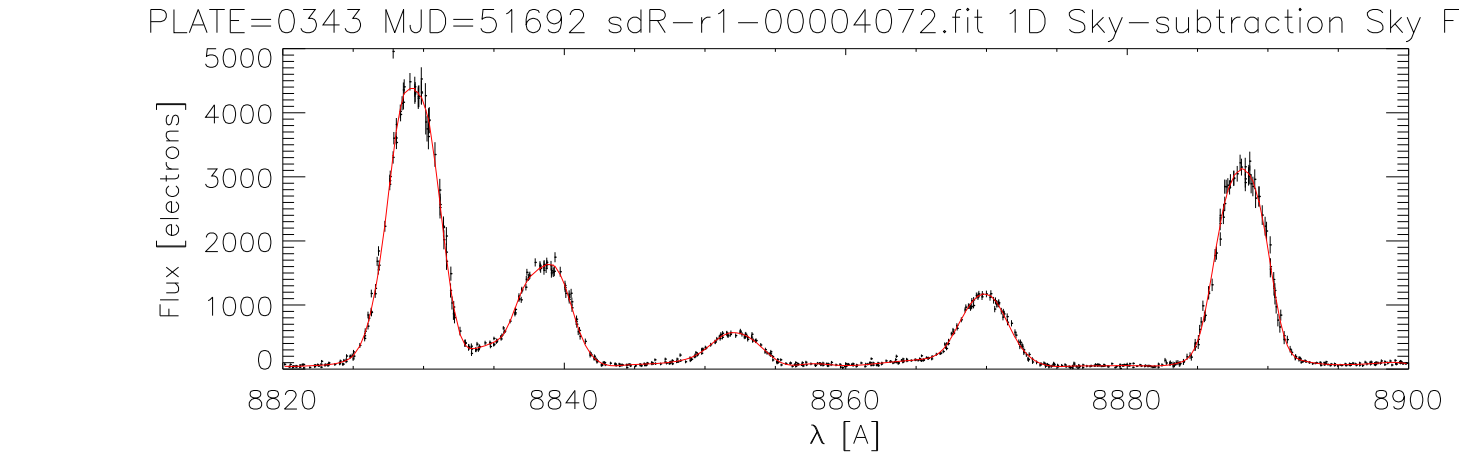

6300.3040
stdev 0.032
extra −0.007
6363.7760
stdev 0.056
extra −0.004
6553.6100
stdev 0.054
extra −0.002
6923.2100
stdev 0.039
extra 0.004
6949.0300
stdev 0.020
extra 0.004
7571.7500
stdev 0.030
extra 0.010
7794.1200
stdev 0.030
extra −0.002
7821.5100
stdev 0.025
extra 0.003
8399.1600
stdev 0.025
extra 0.003
8430.1700
stdev 0.037
extra 0.003
8885.8300
stdev 0.023
extra 0.006
8919.6100
stdev 0.023
extra 0.003
meas − pred, pix
meas − pred, pix
mfib1 16
mfib2 15
mfib2 16

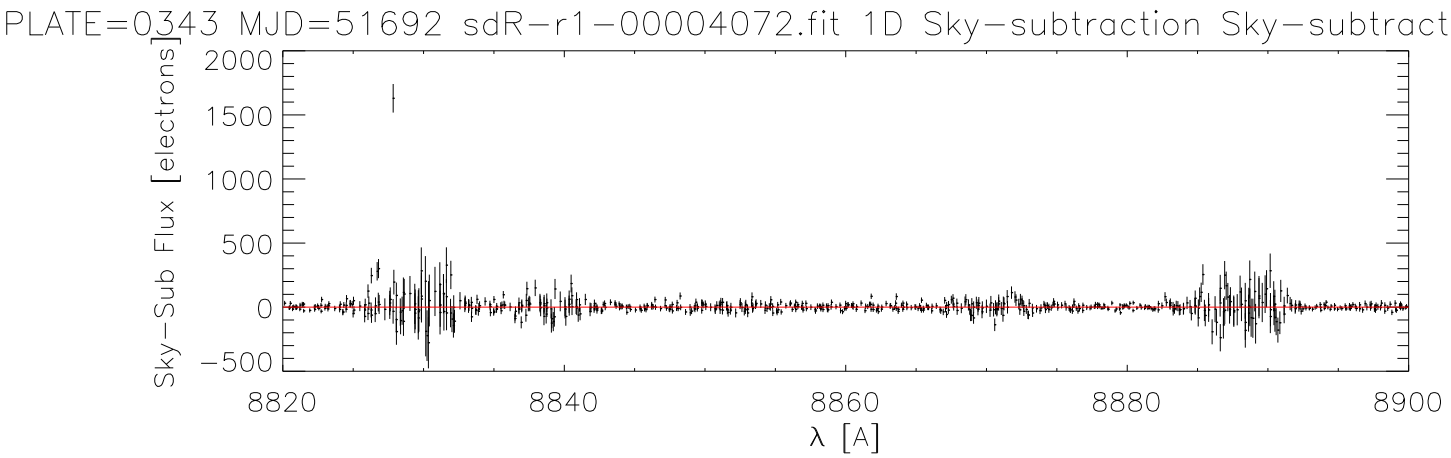

0.10
0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

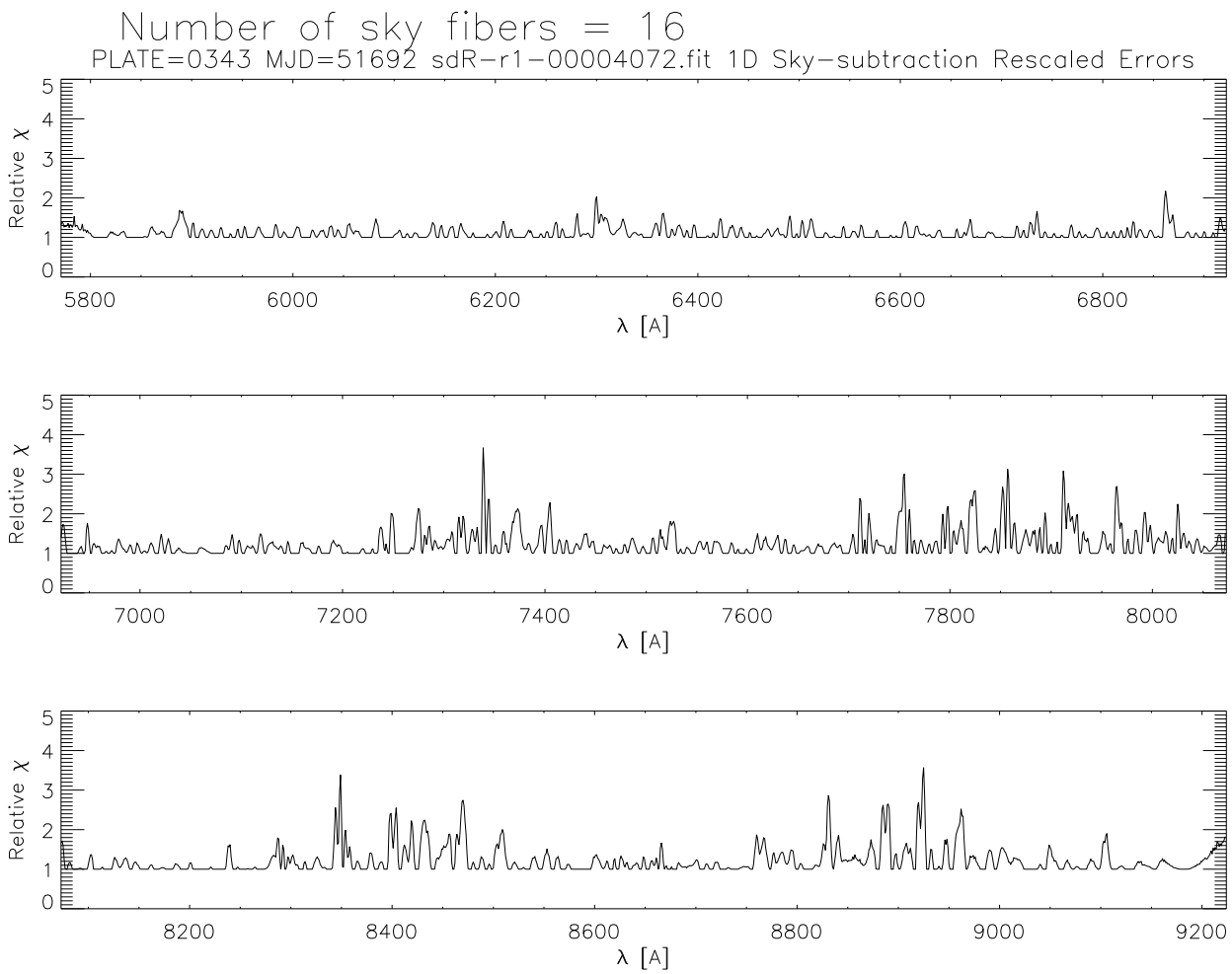

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004072.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

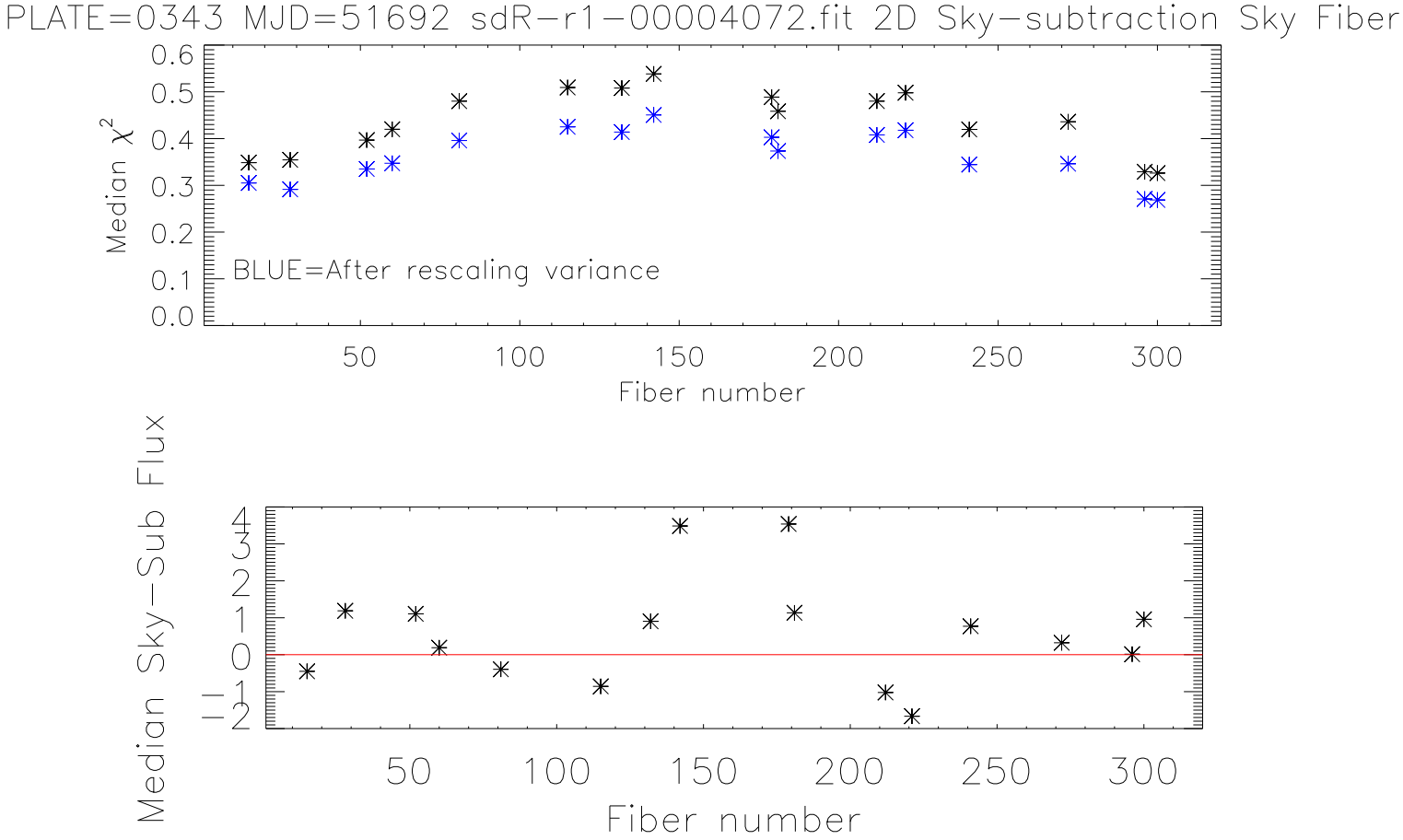

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

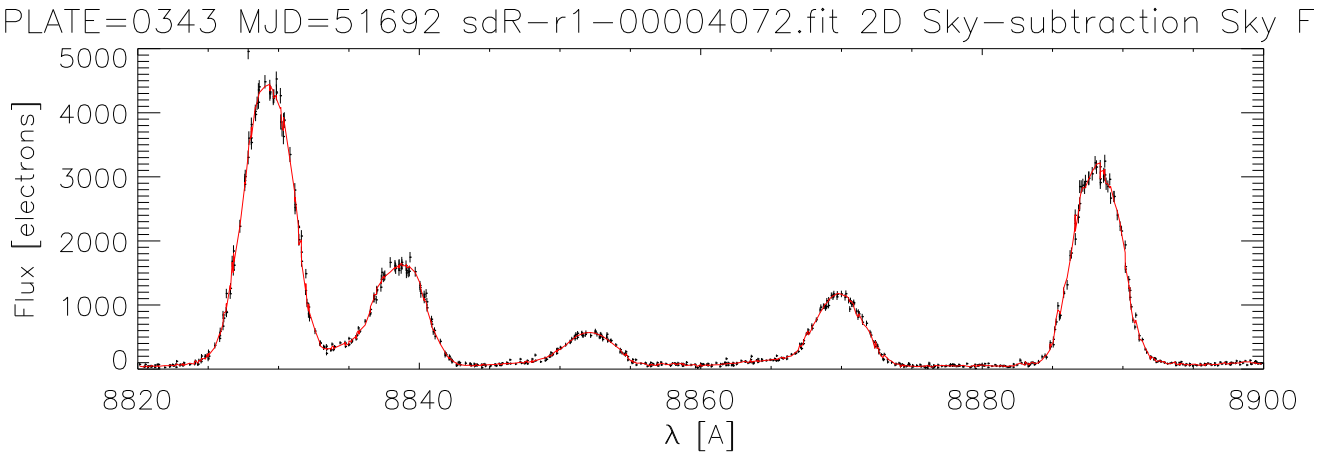
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

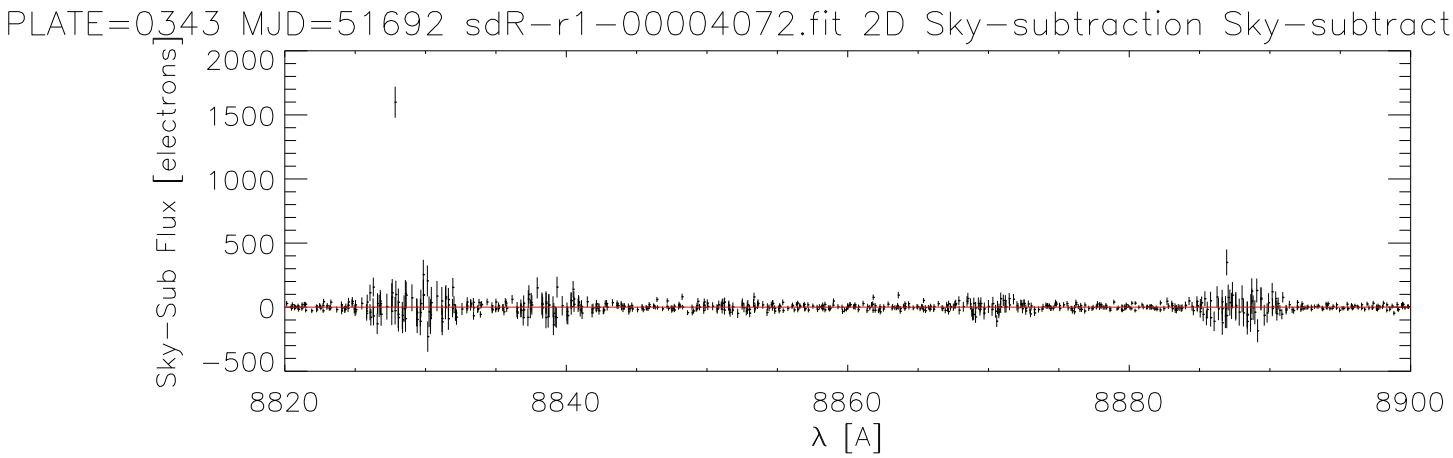

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

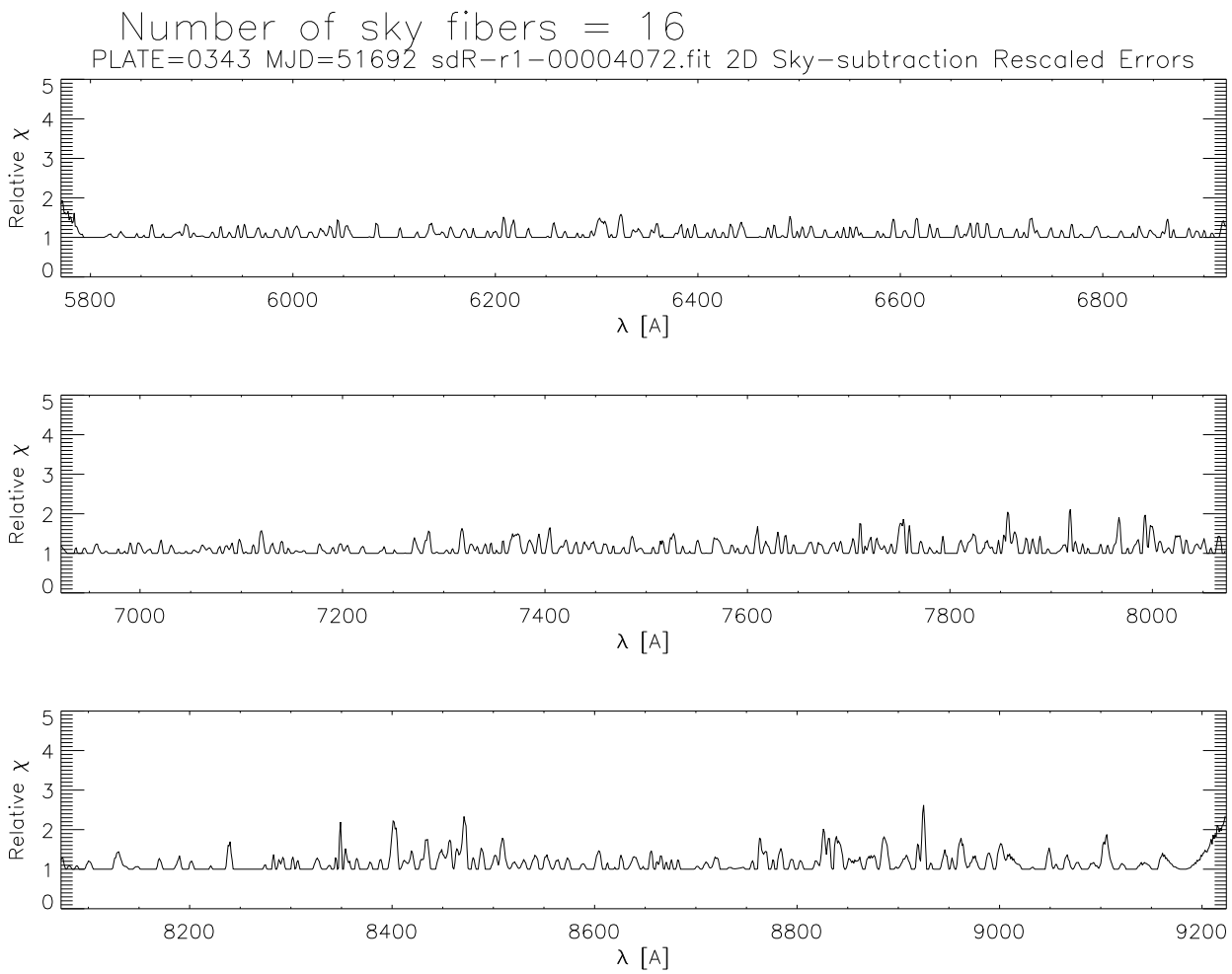

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

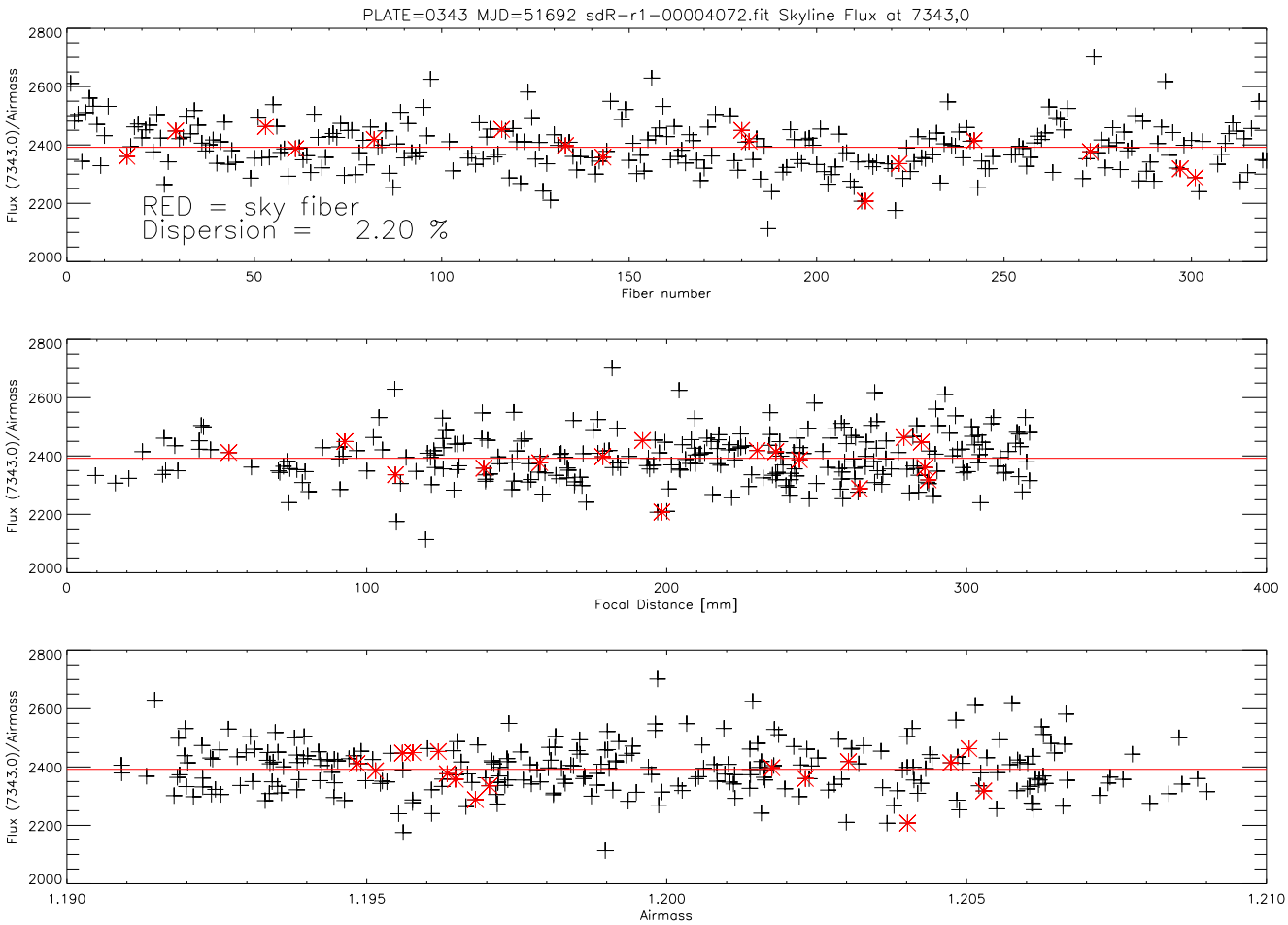

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004072.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

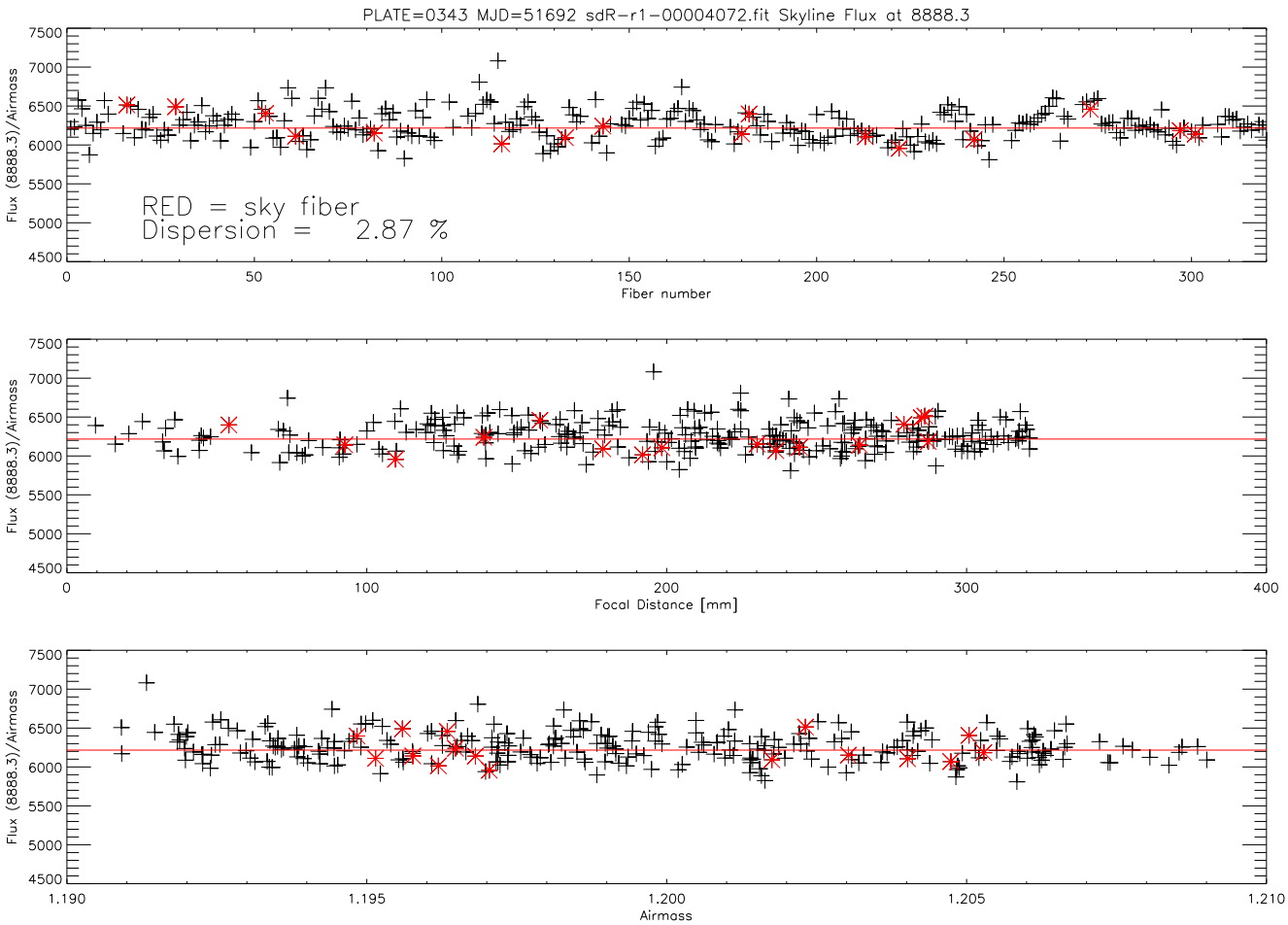

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

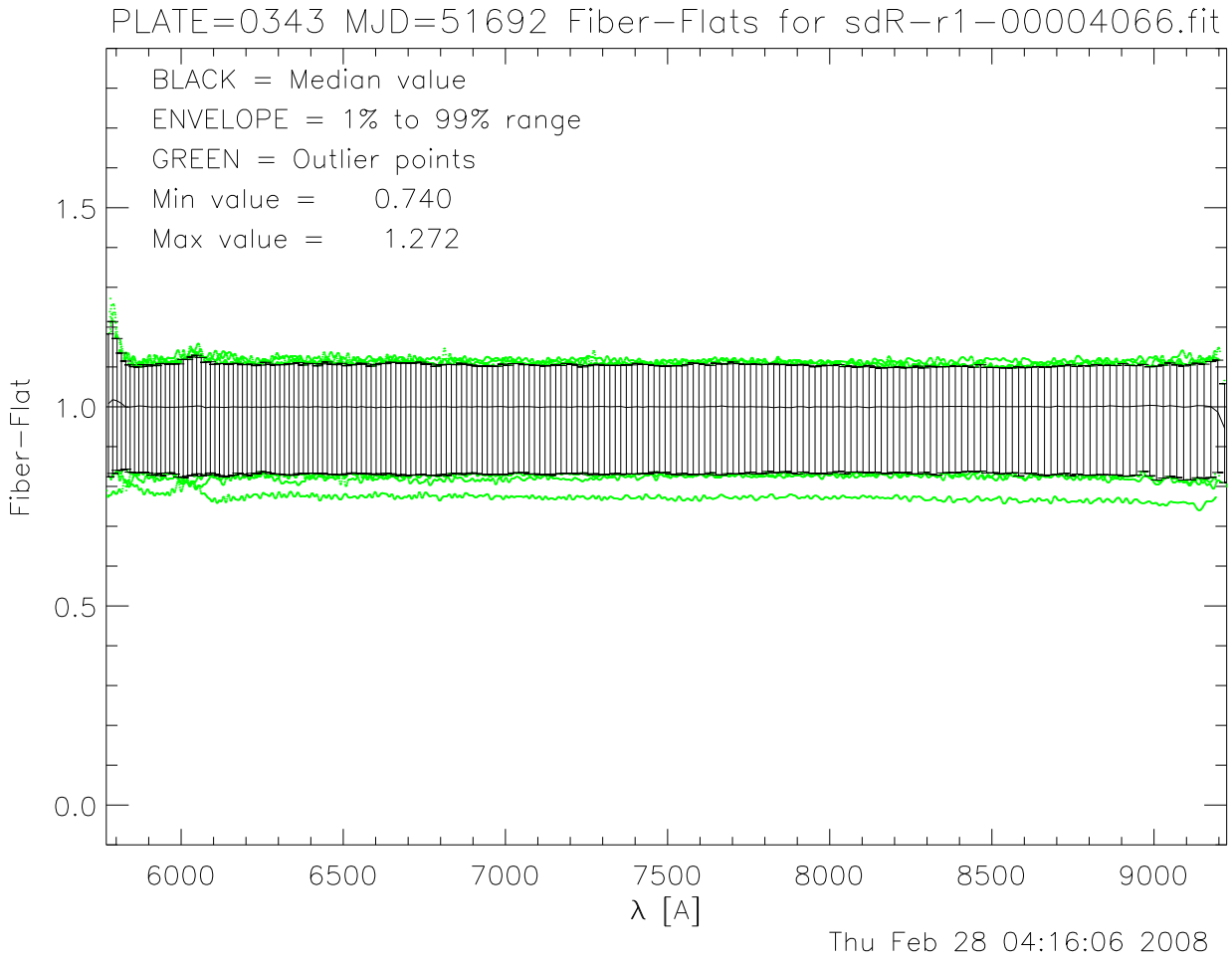

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

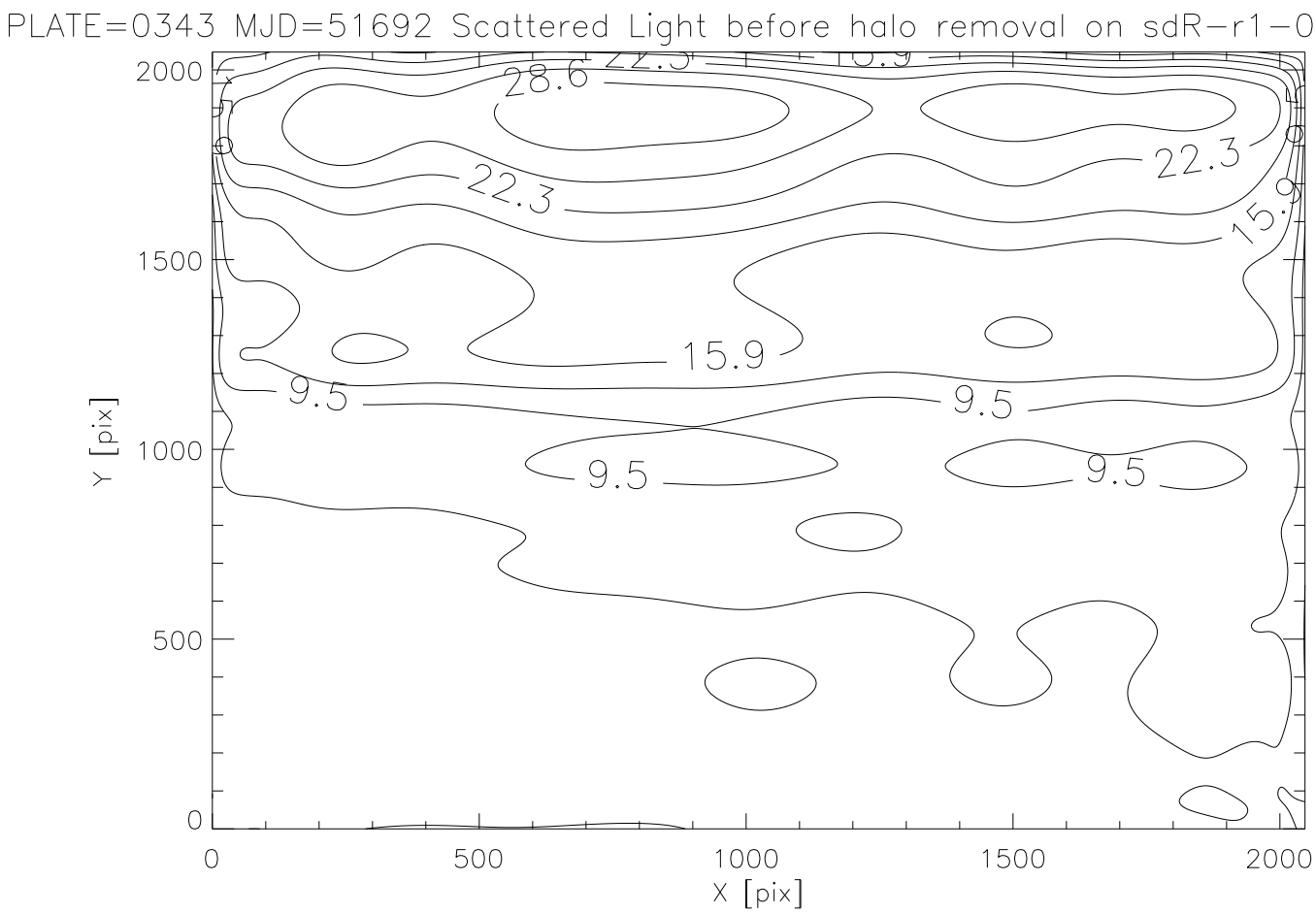

PLATE=0343 MJD=51692 sdR-r1-00004072.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

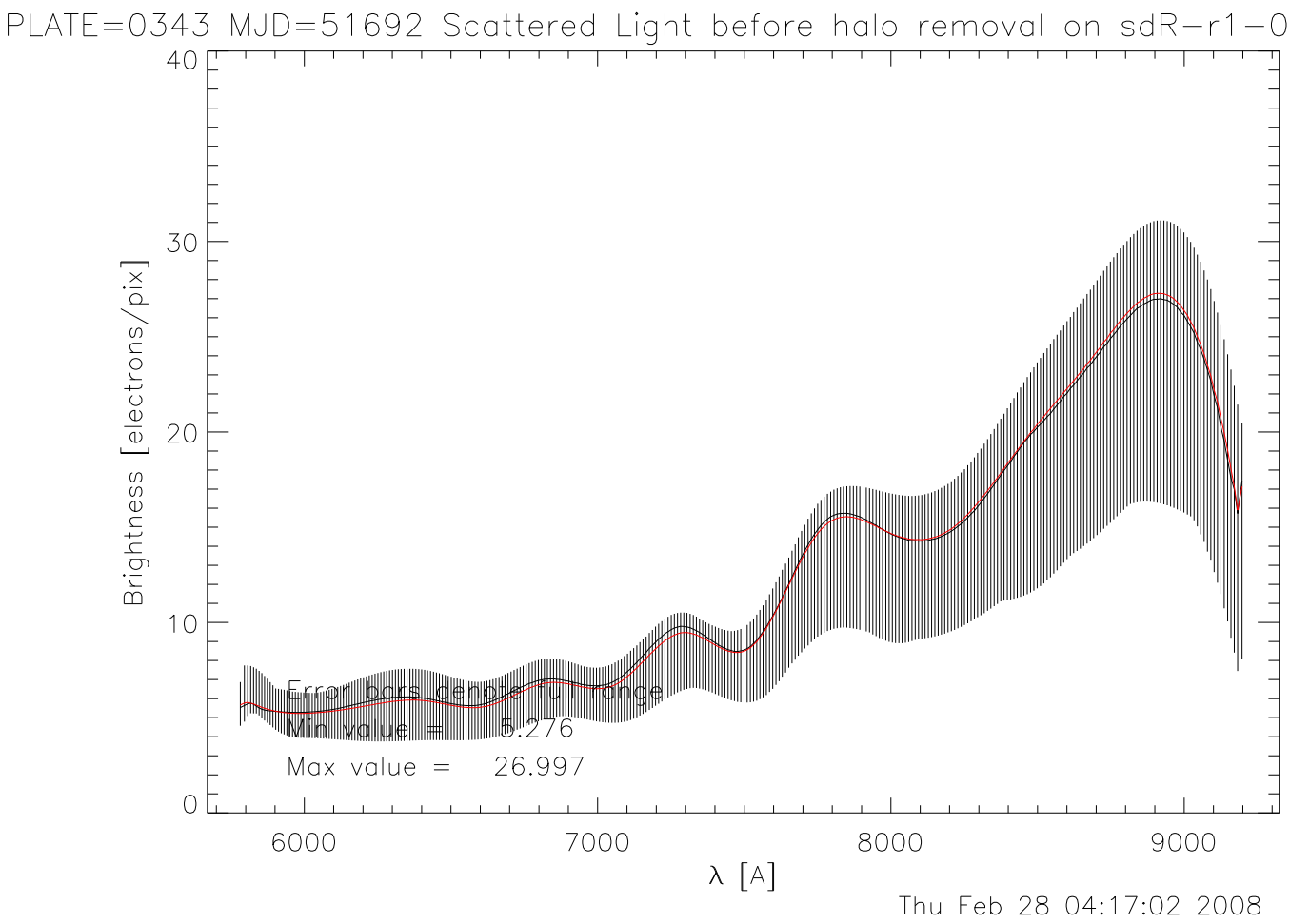

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004072.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

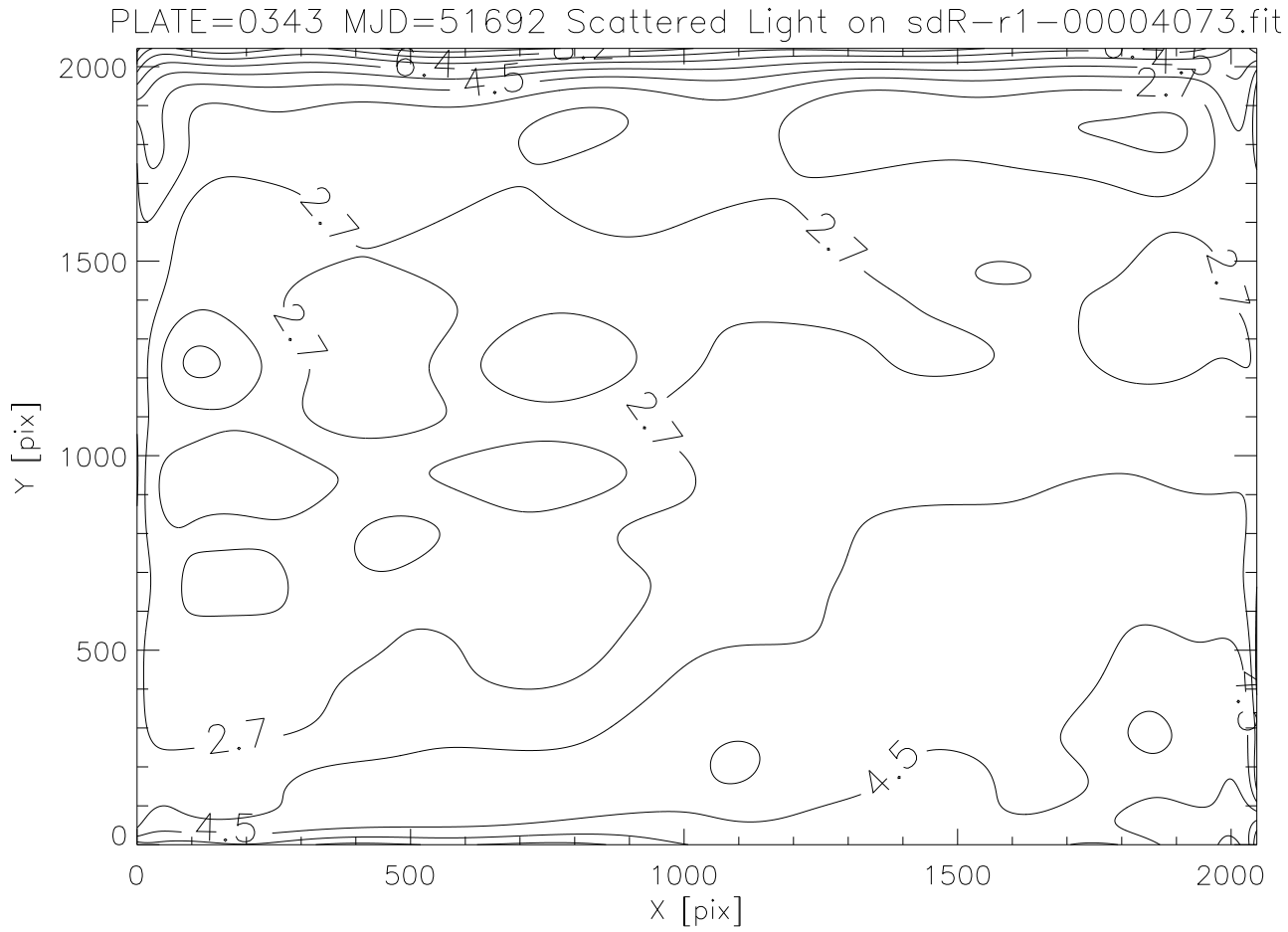

PLATE=0343 MJD=51692 sdR-r1-00004072.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.20 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

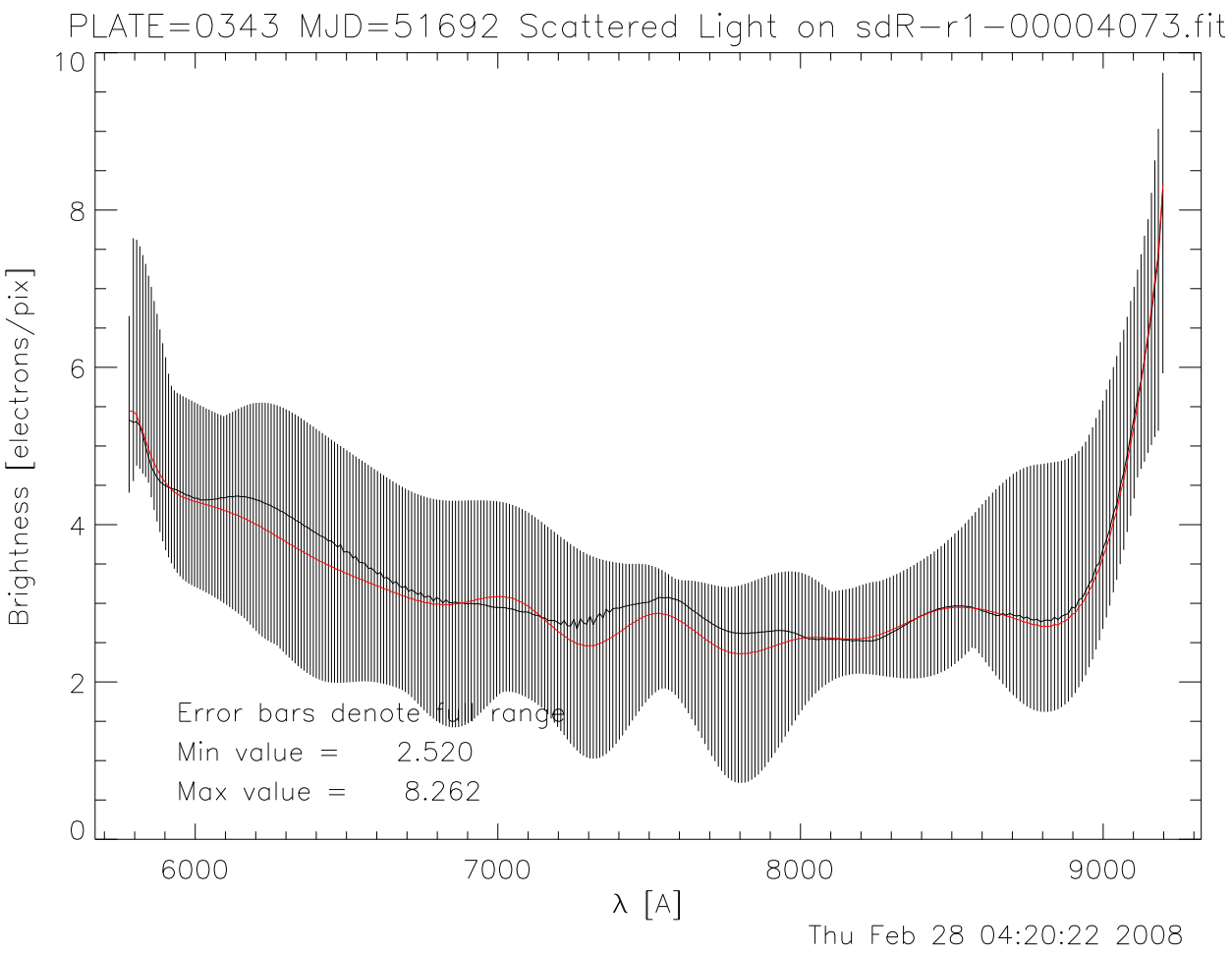

PLATE=0343 MJD=51692 sdR-r1-00004072.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.87 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

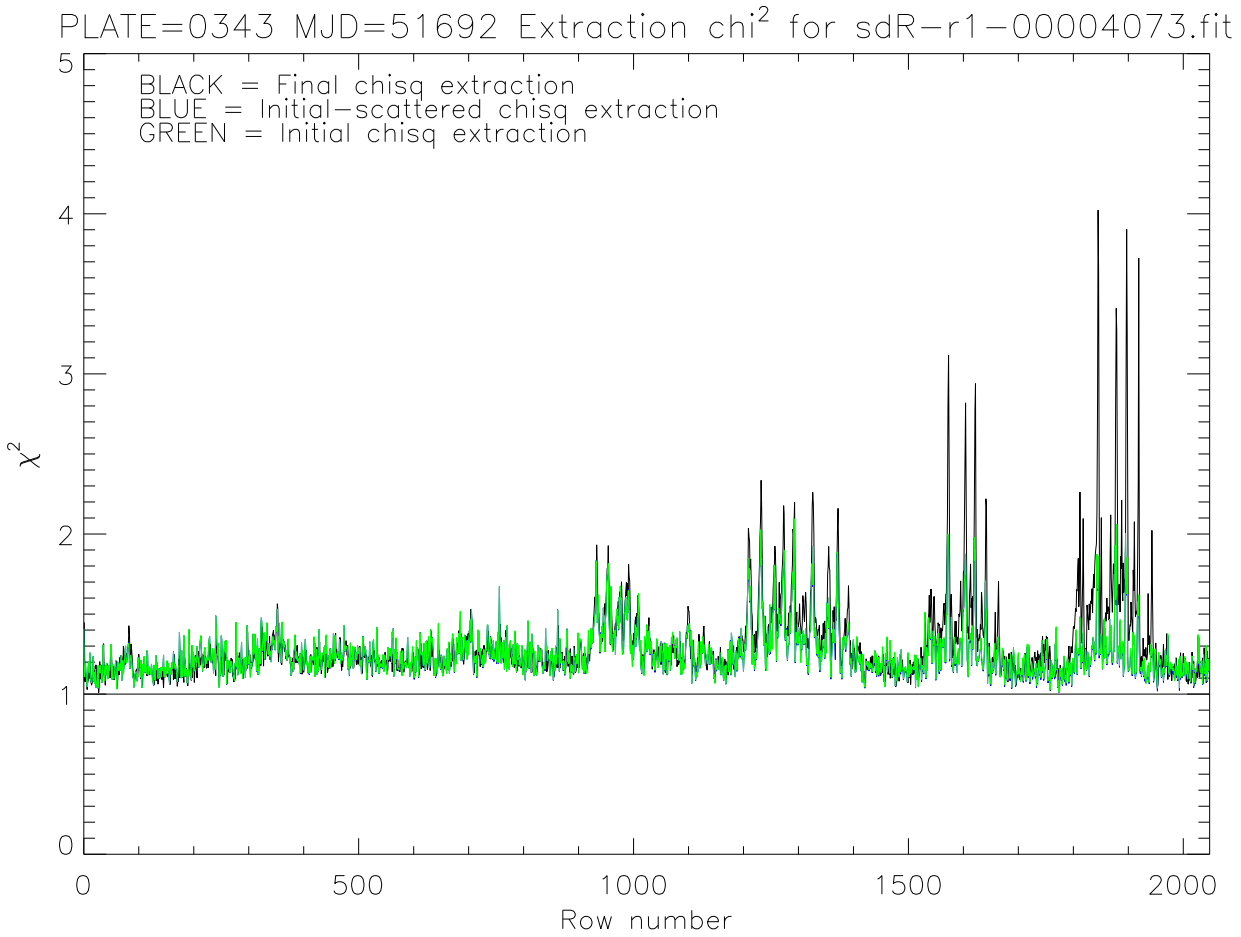

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:16:06 2008

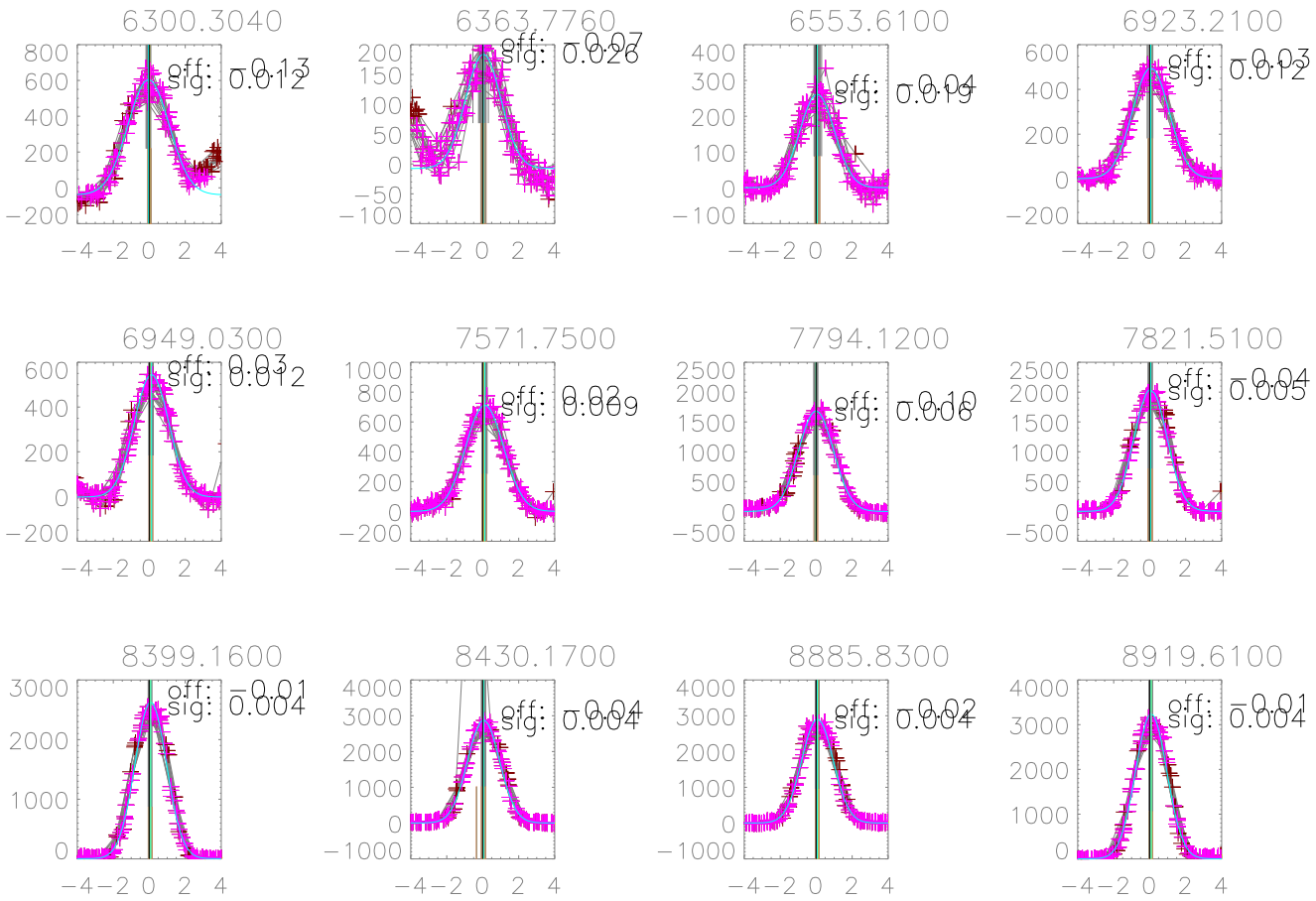

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004073.fi
28.6
22.3
22.3
15.9
15.9
9.5
9.5
9.5
9.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

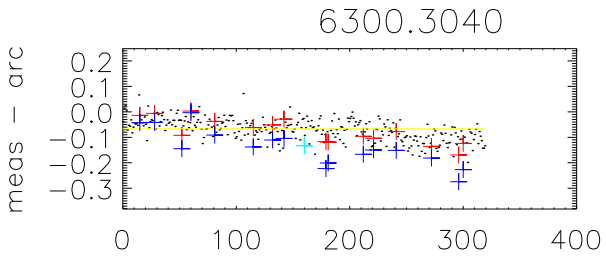

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004073.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.276
Max value = 26.997
Thu Feb 28 04:17:02 2008

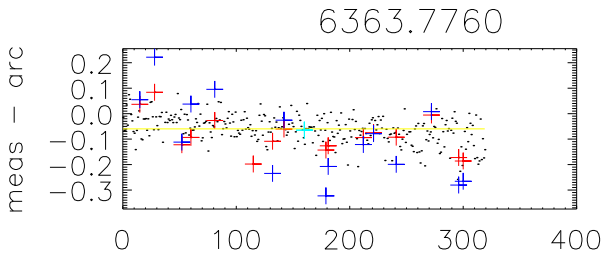

PLATE=0343 MJD=51692 Scattered Light on sdR−r1−00004073.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.4
4.5
2.7

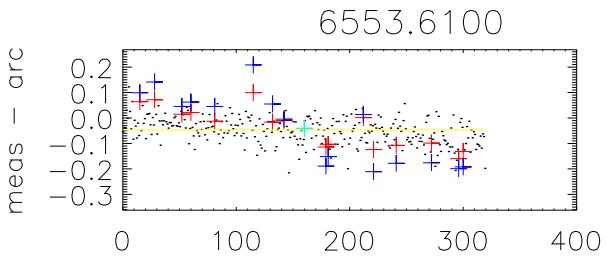

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004073.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.520
Max value = 8.262
Thu Feb 28 04:20:22 2008

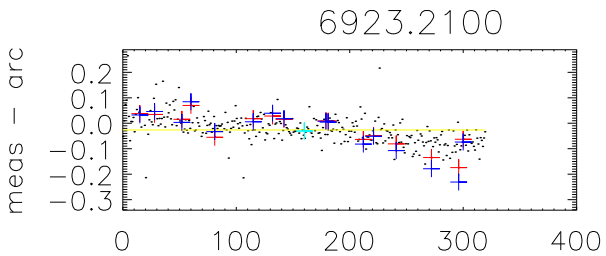

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004073.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

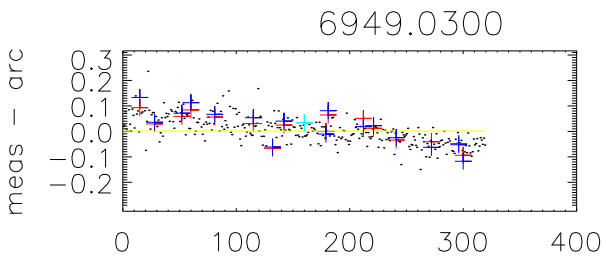

6300.3040
off: −0.13
sig: 0.012
6363.7760
off: −0.07
sig: 0.026
6553.6100
off: −0.04
sig: 0.019
6923.2100
off: −0.03
sig: 0.012
6949.0300
off: −0.03
sig: 0.012
7571.7500
off: 0.02
sig: 0.009
7794.1200
off: −0.10
sig: 0.006
7821.5100
off: −0.04
sig: 0.005
8399.1600
off: −0.01
sig: 0.004
8430.1700
off: −0.04
sig: 0.004
8885.8300
off: −0.02
sig: 0.004
8919.6100
off: −0.01
sig: 0.004

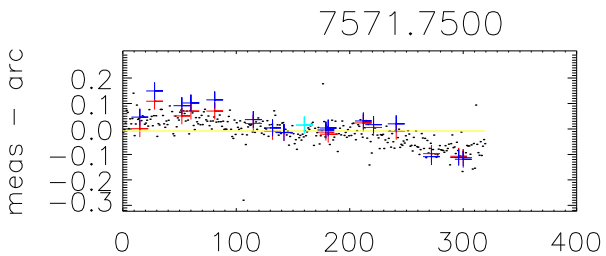

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

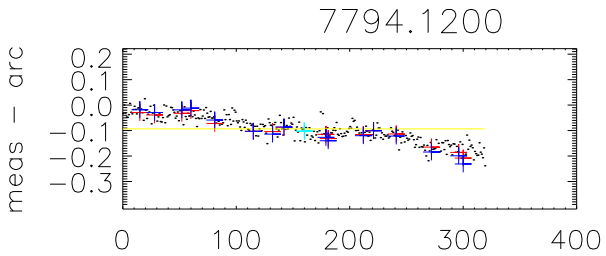

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

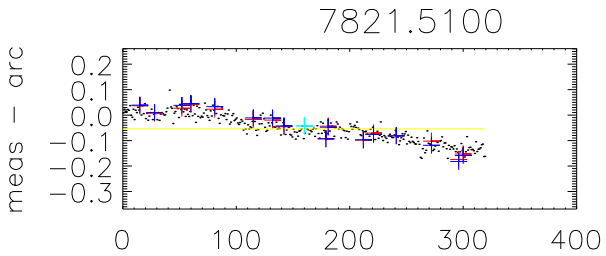

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

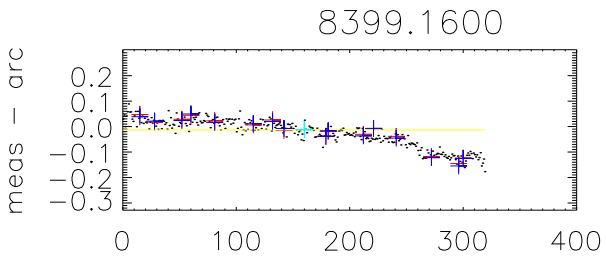

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

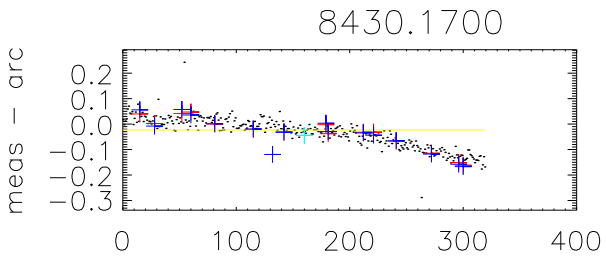

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

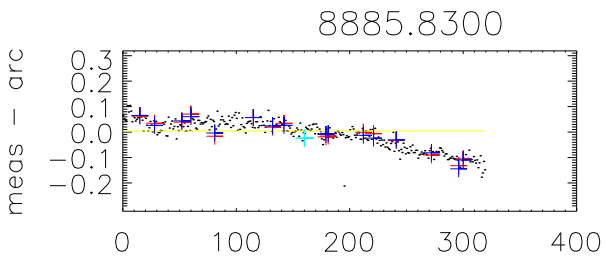

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

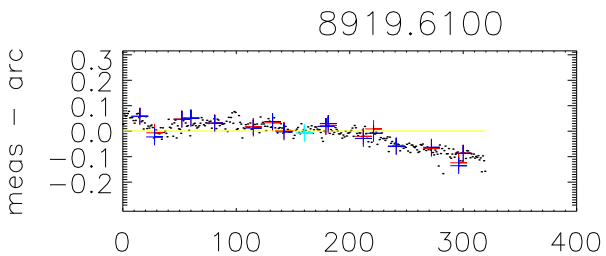

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

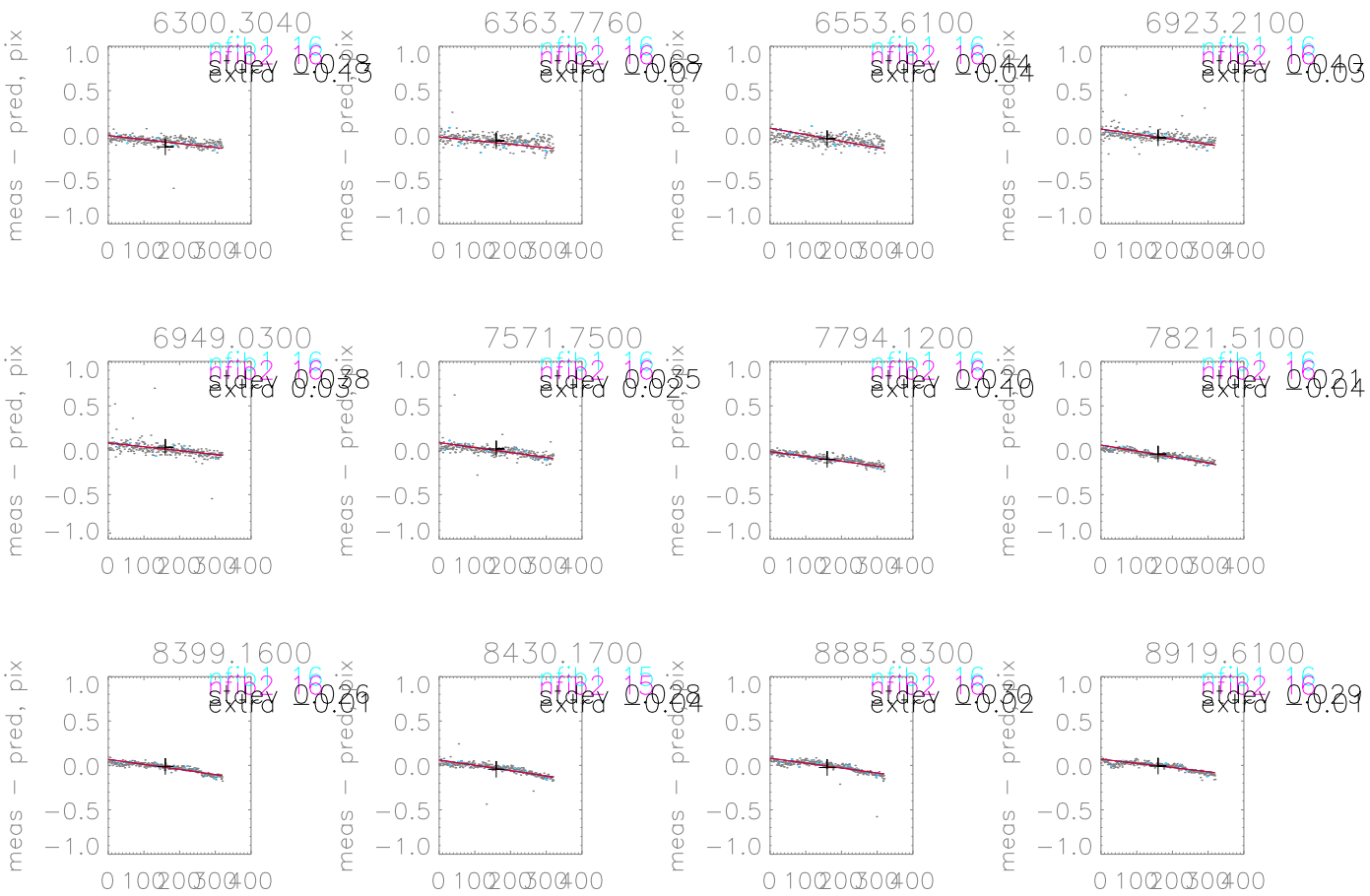

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

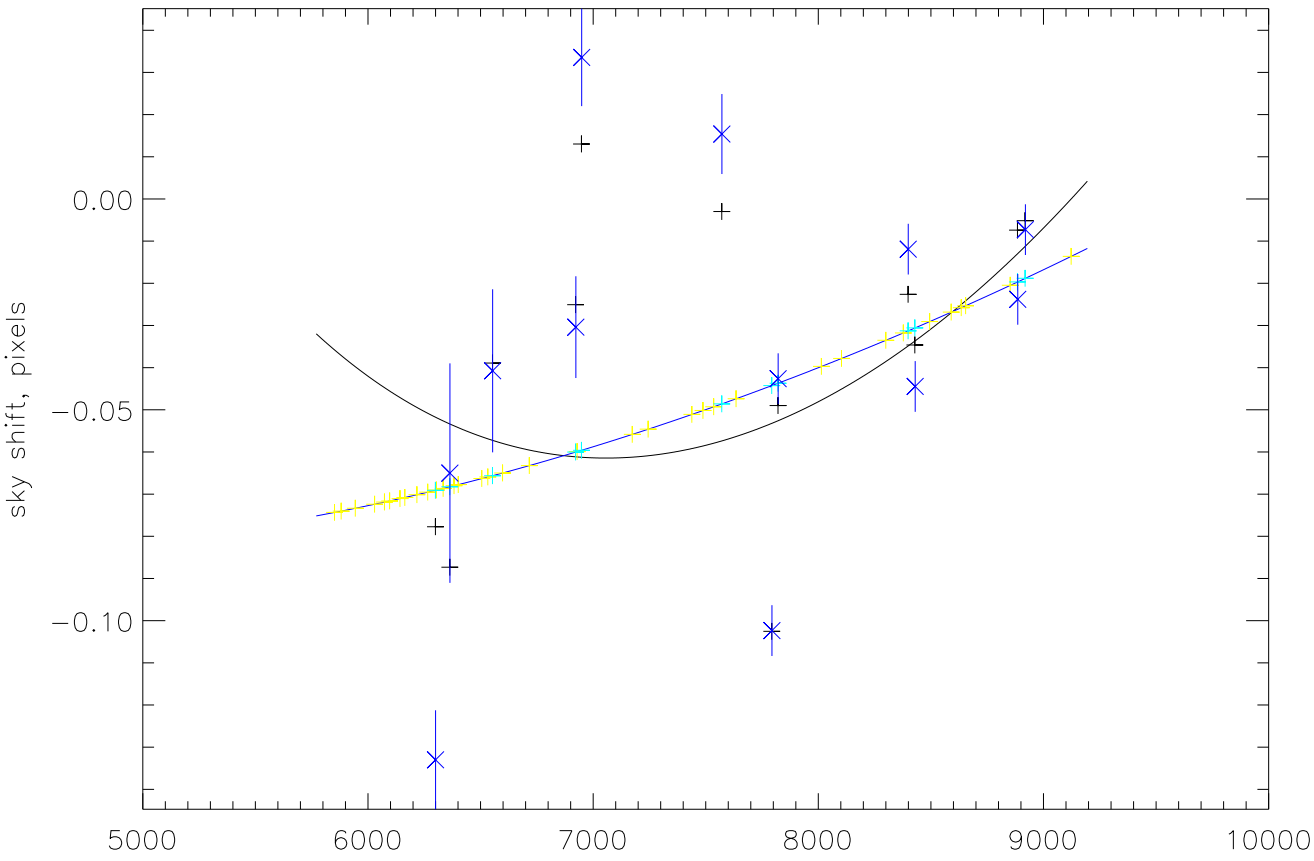

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

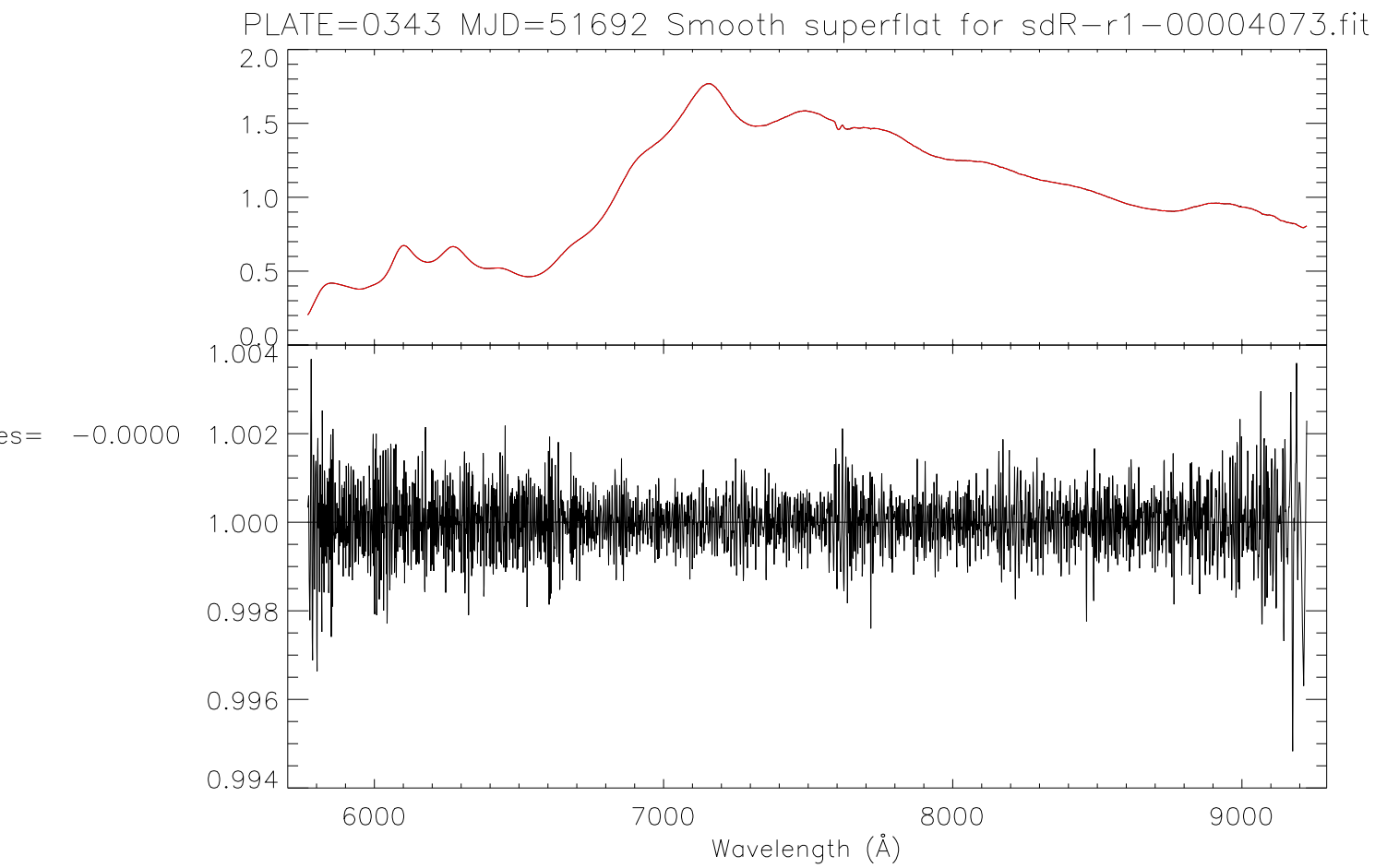

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

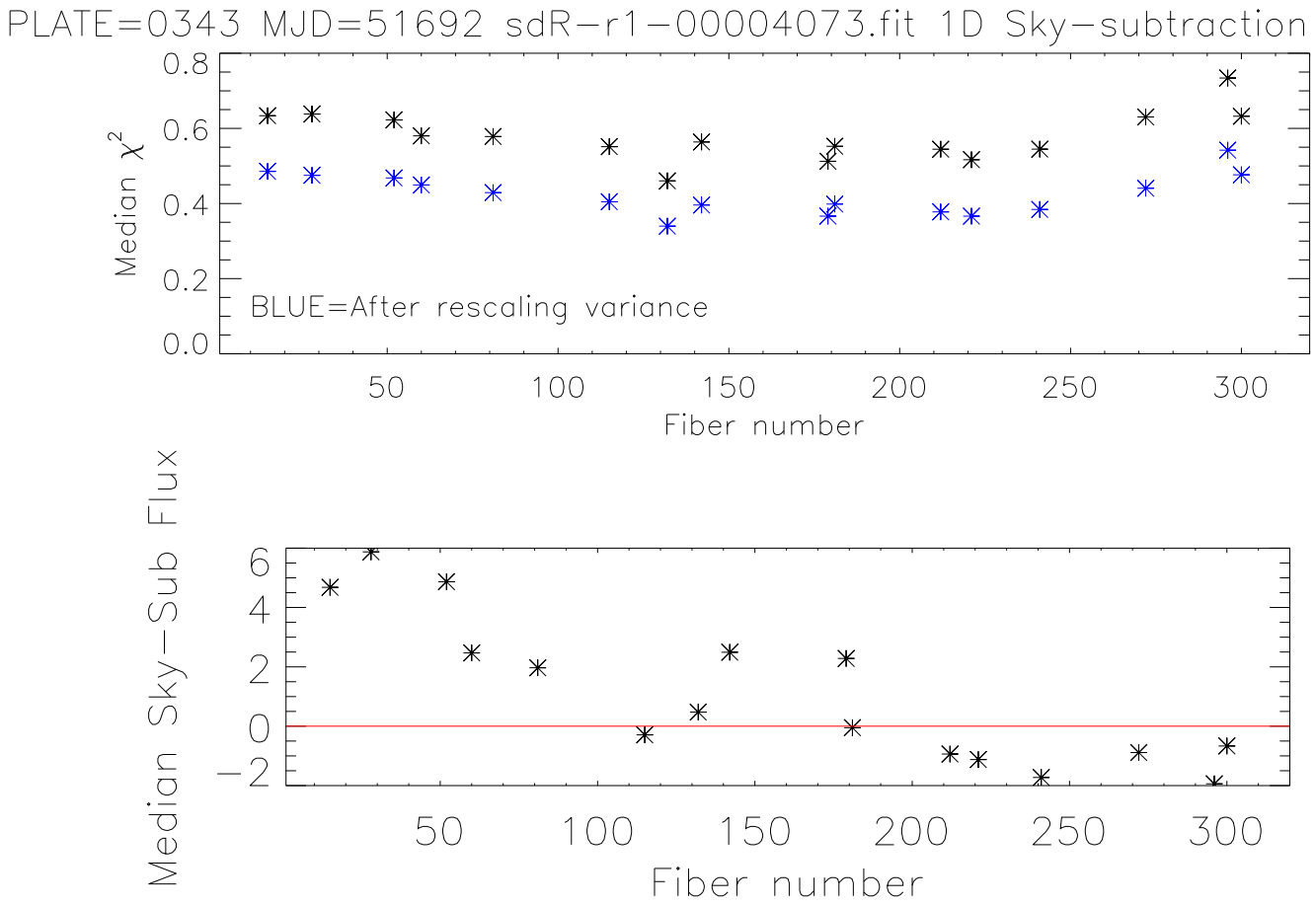

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

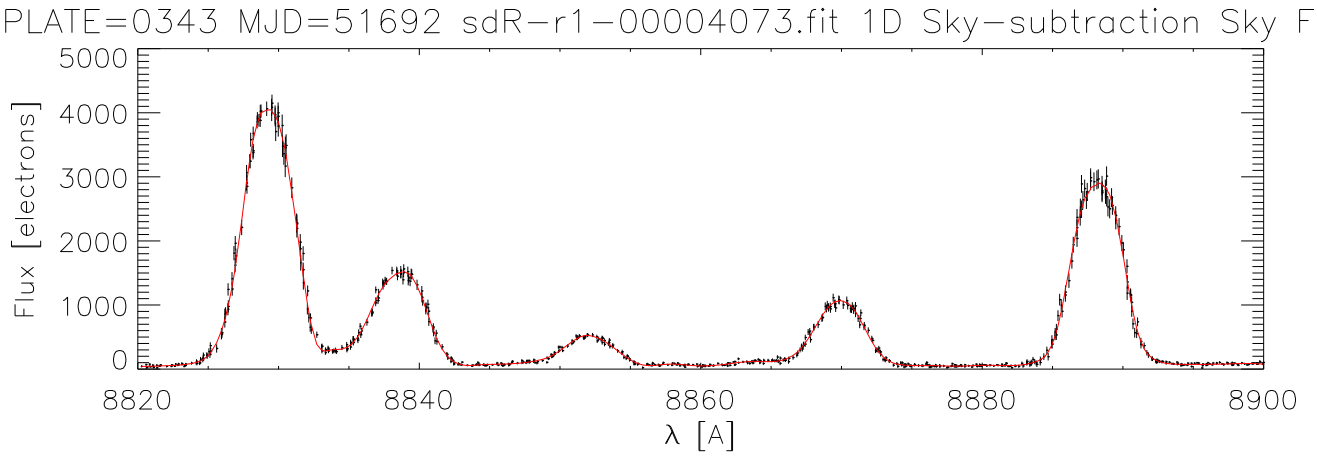

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

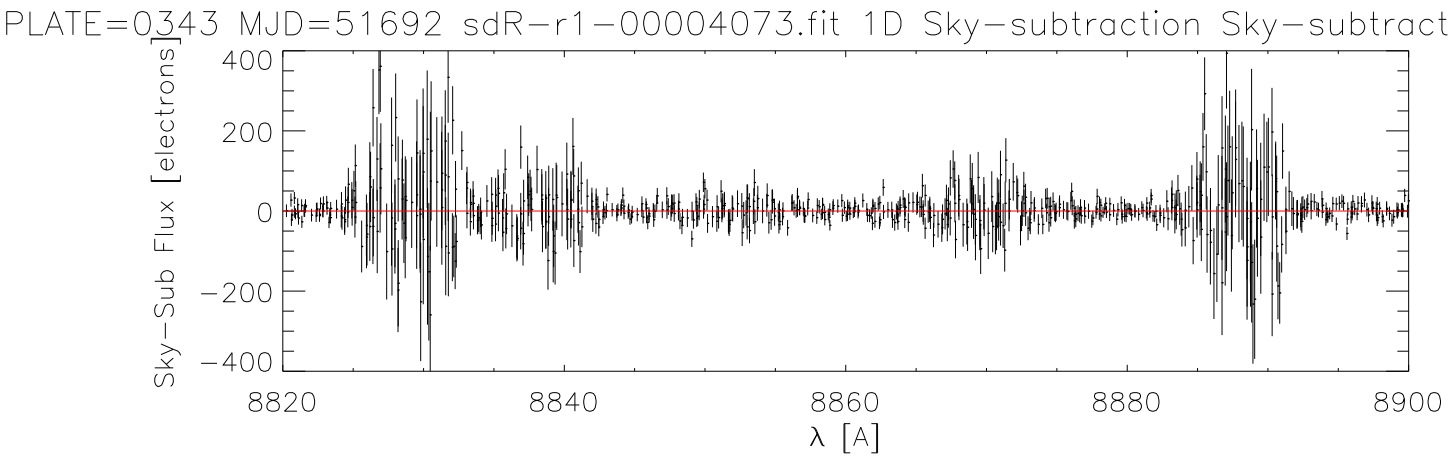

6300.3040
mfhd1 16
mfhd2 16
stdev 0.028
extra −0.03
6363.7760
mfhd1 16
mfhd2 16
stdev 0.068
extra −0.07
6553.6100
mfhd1 16
mfhd2 16
stdev 0.044
extra −0.04
6923.2100
mfhd1 16
mfhd2 16
stdev 0.040
extra −0.03
6949.0300
mfhd1 16
mfhd2 16
stdev 0.038
extra 0.03
7571.7500
mfhd1 16
mfhd2 16
stdev 0.035
extra 0.02
7794.1200
mfhd1 16
mfhd2 16
stdev 0.020
extra −0.00
7821.5100
mfhd1 16
mfhd2 16
stdev 0.021
extra −0.04
8399.1600
mfhd1 16
mfhd2 16
stdev 0.026
extra −0.01
8430.1700
mfhd1 15
mfhd2 16
stdev 0.028
extra −0.04
8885.8300
mfhd1 16
mfhd2 16
stdev 0.030
extra −0.02
8919.6100
mfhd1 16
mfhd2 16
stdev 0.029
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

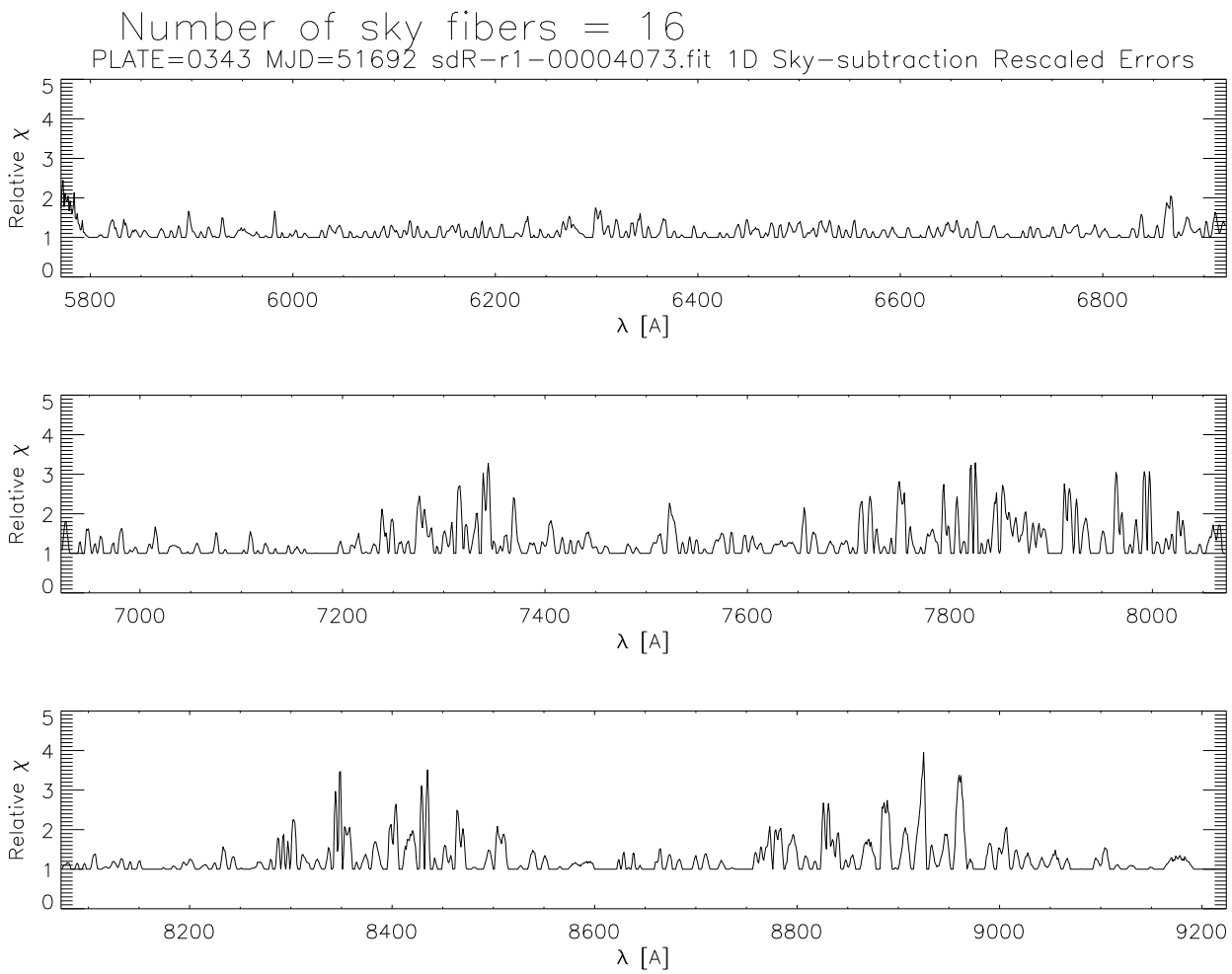

0.00
−0.05
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

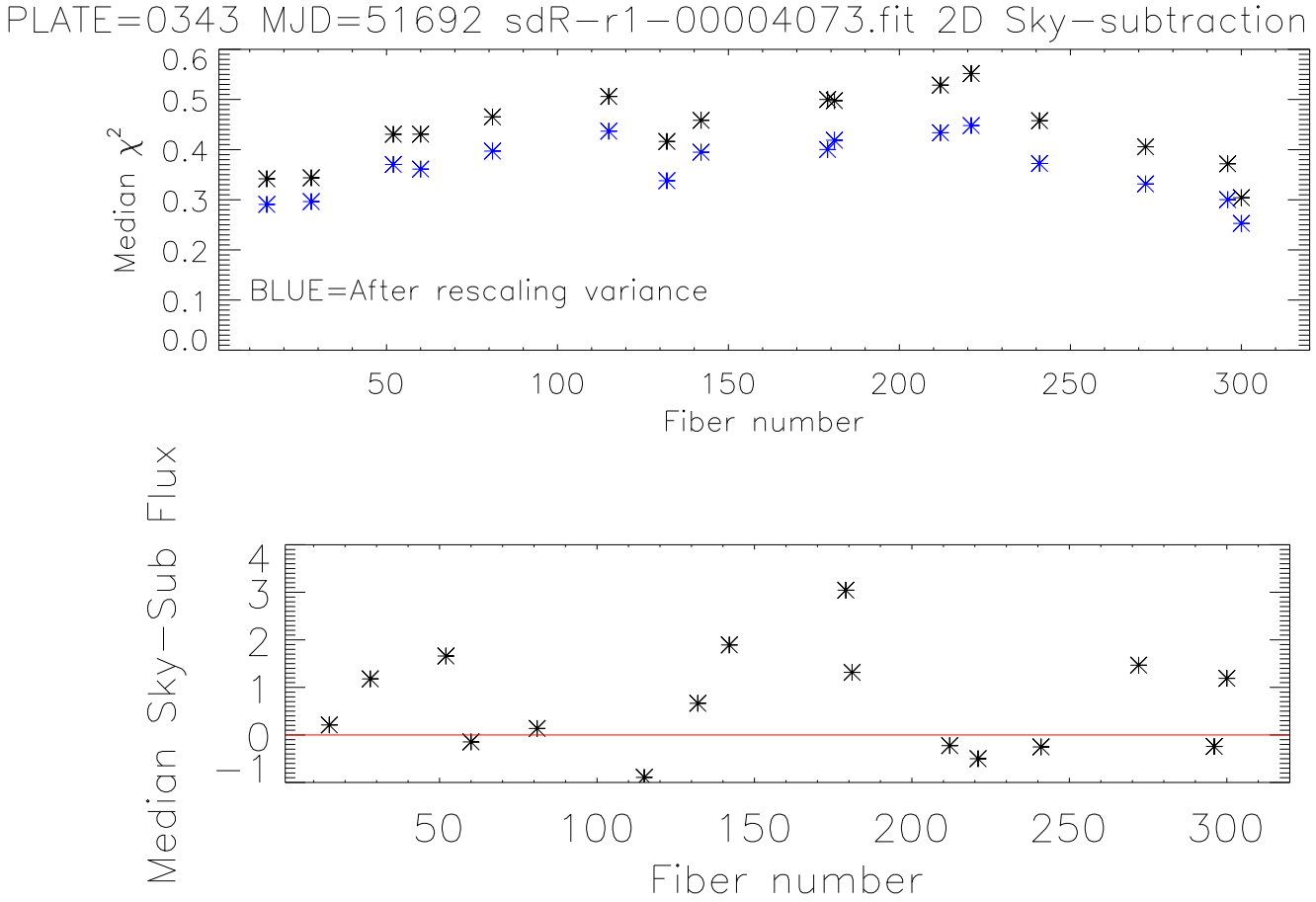

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004073.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

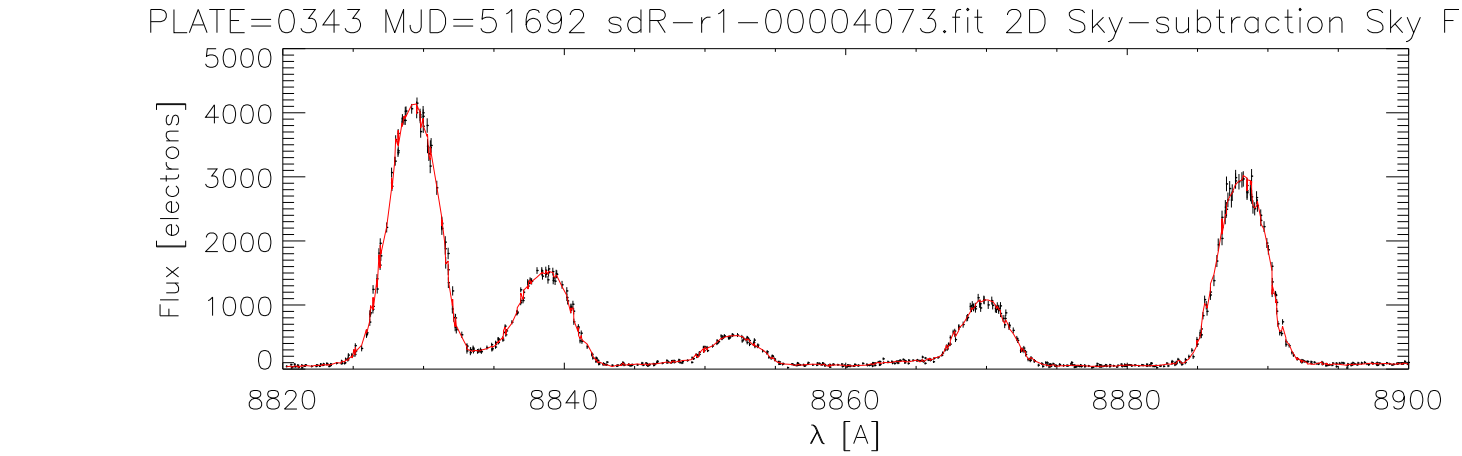

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

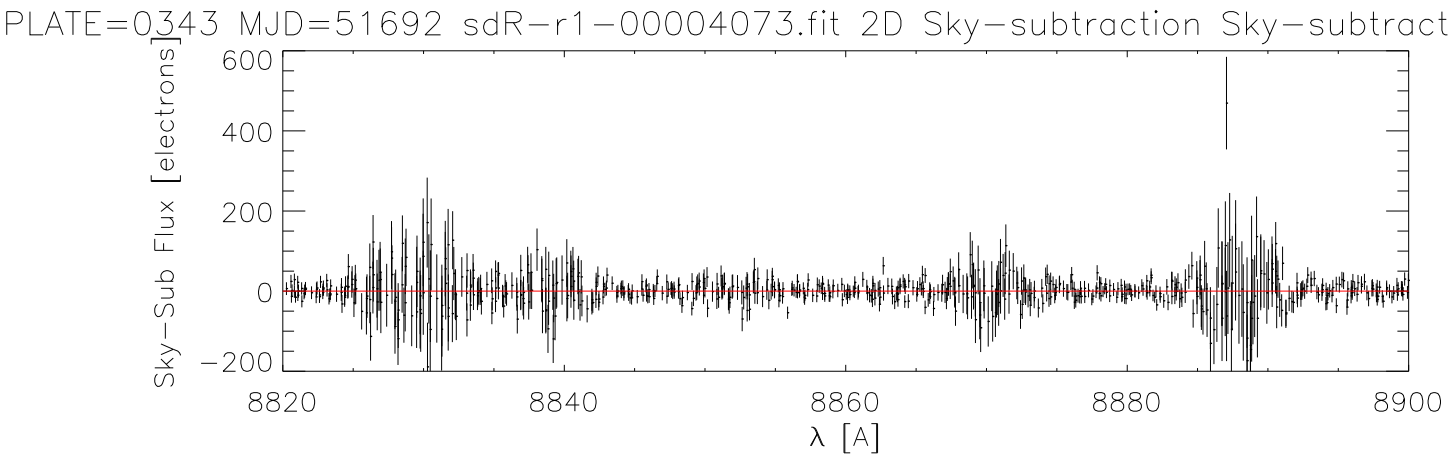

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

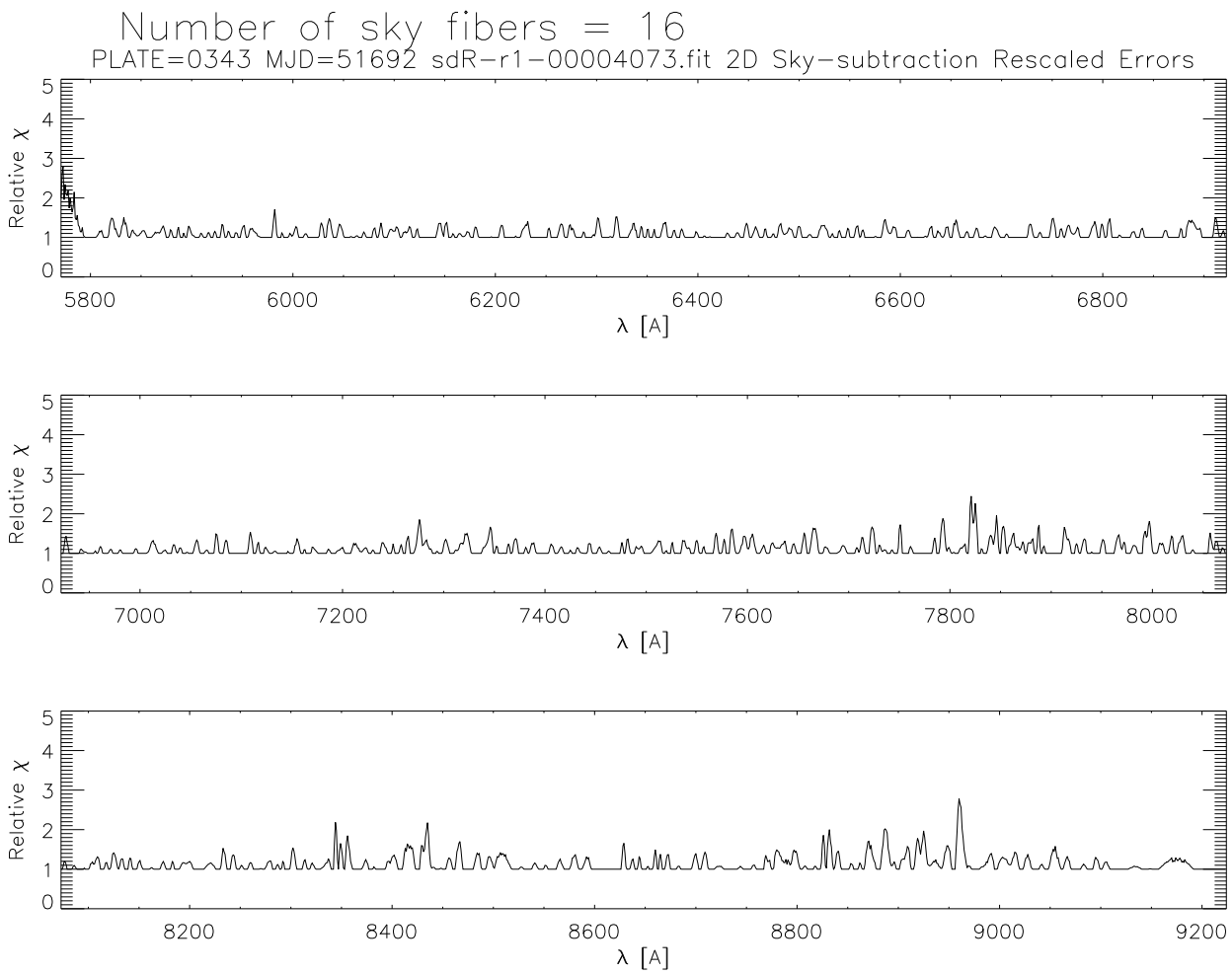

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

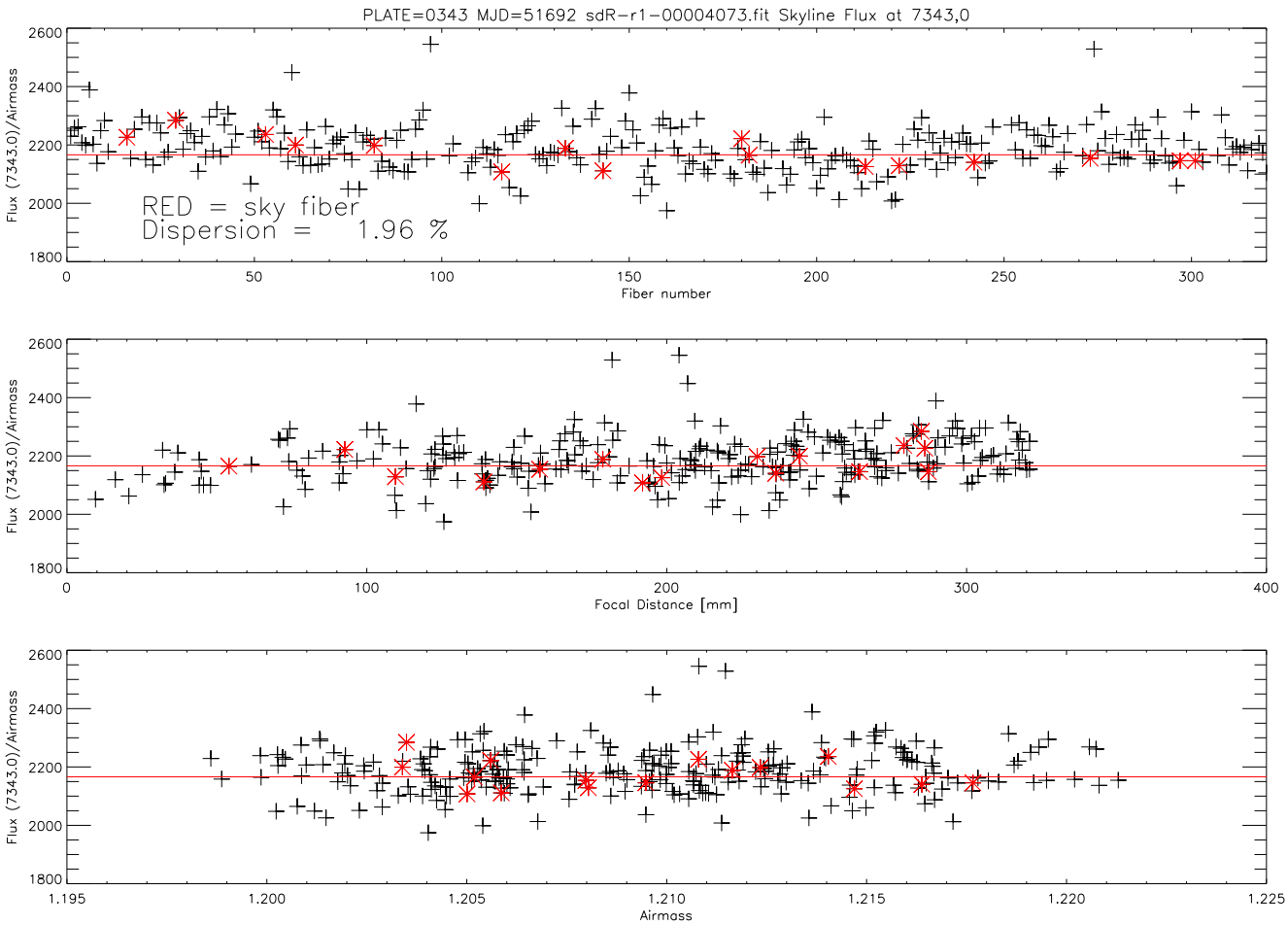

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004073.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

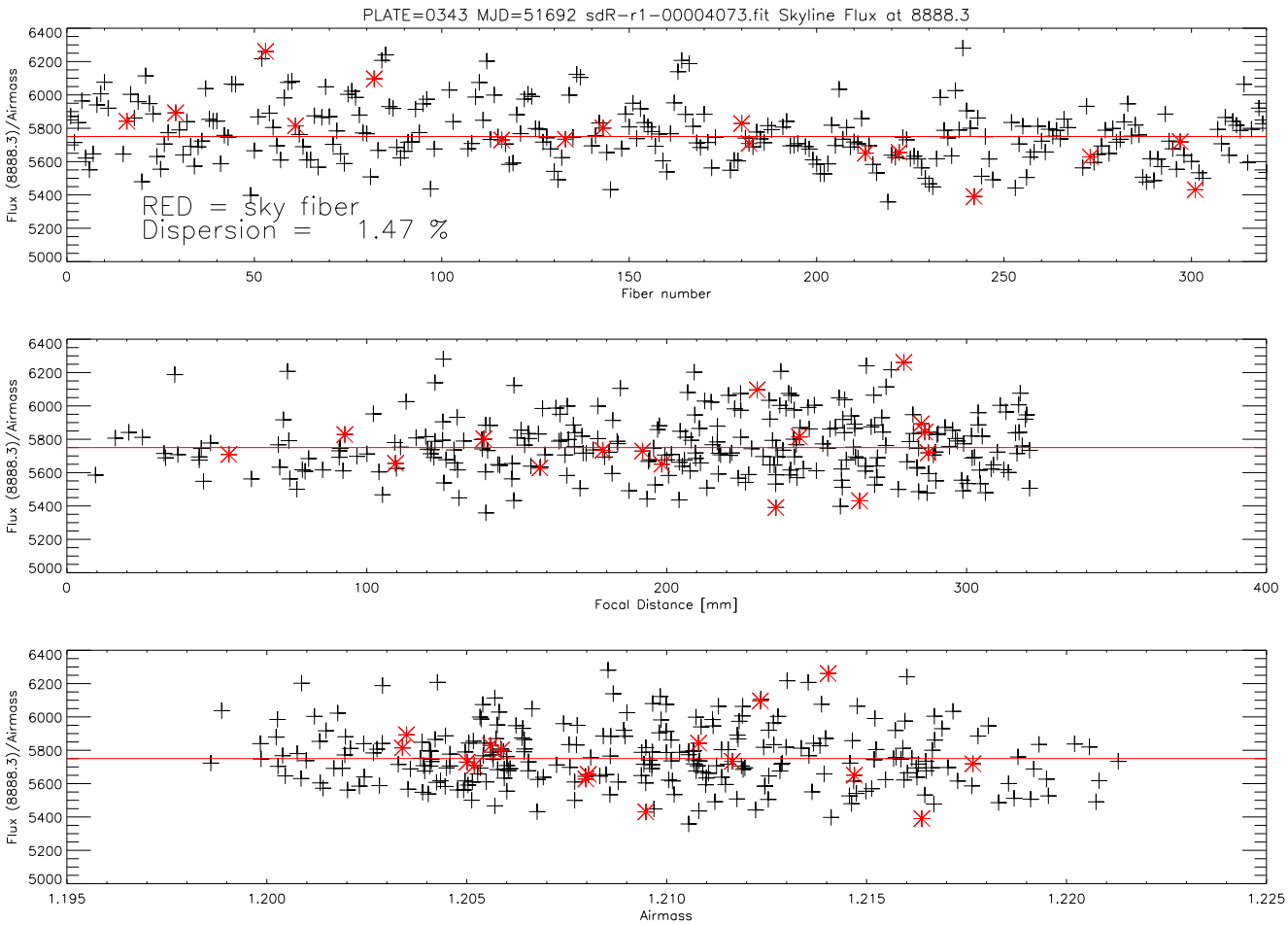

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

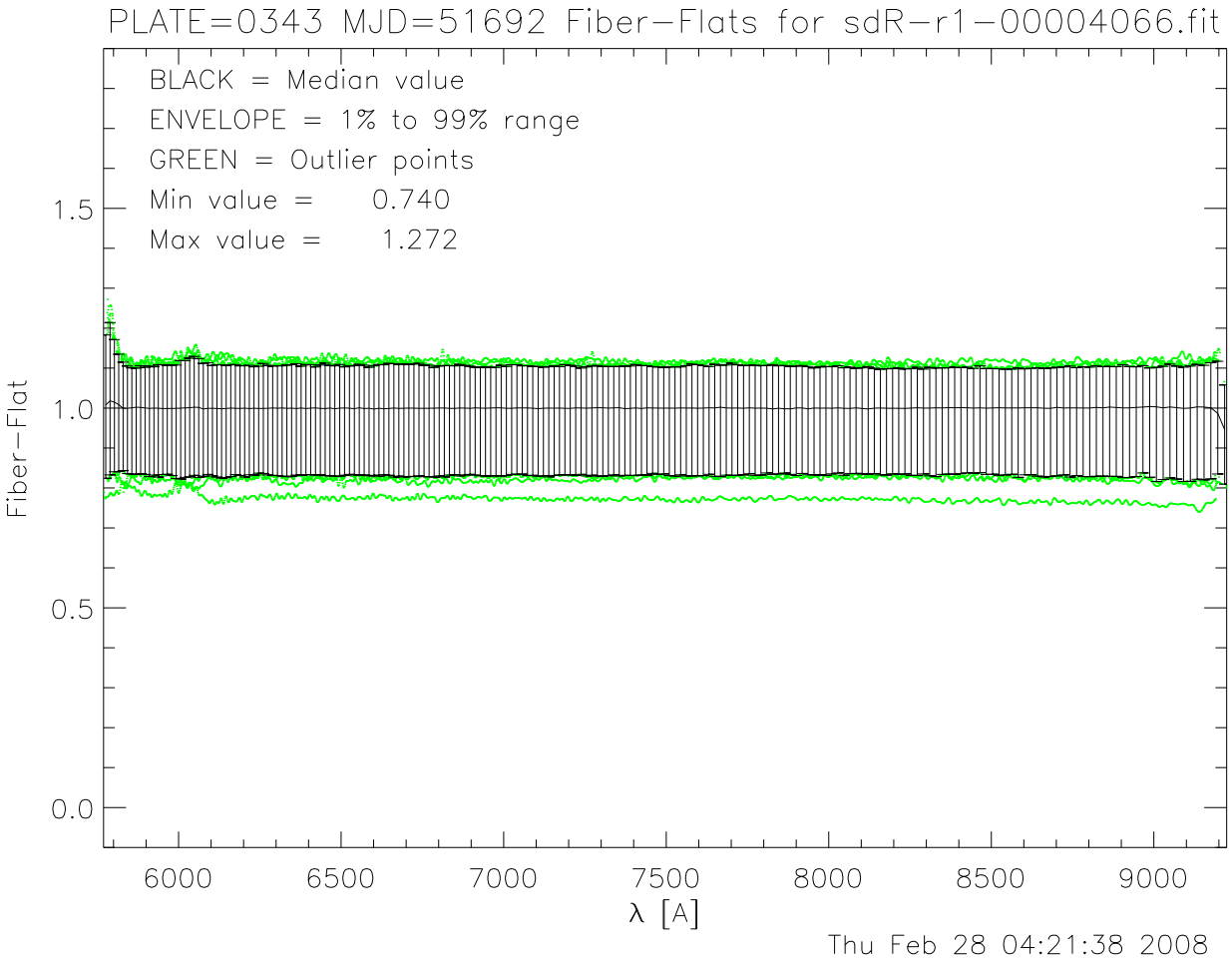

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

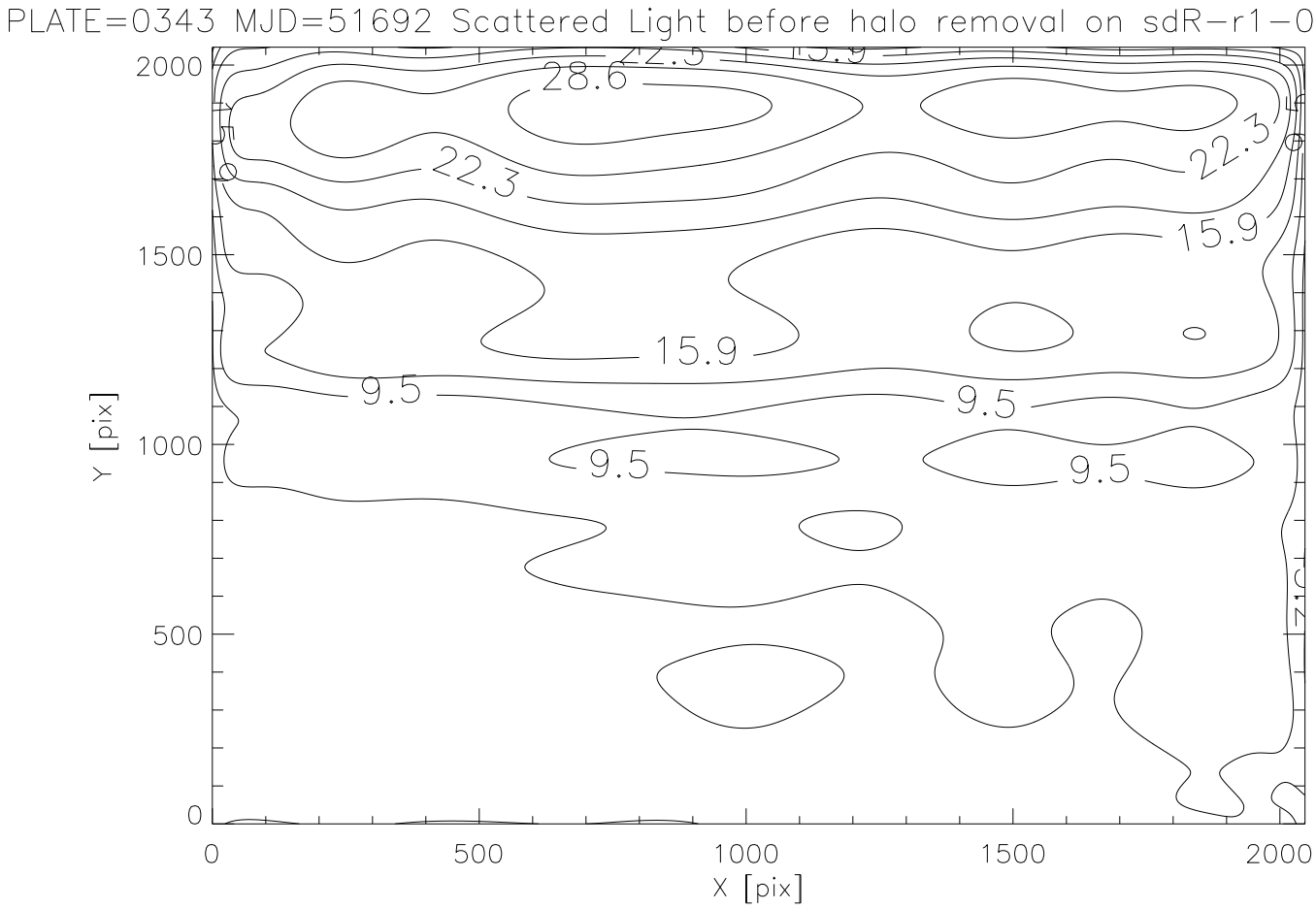

PLATE=0343 MJD=51692 sdR-r1-00004073.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

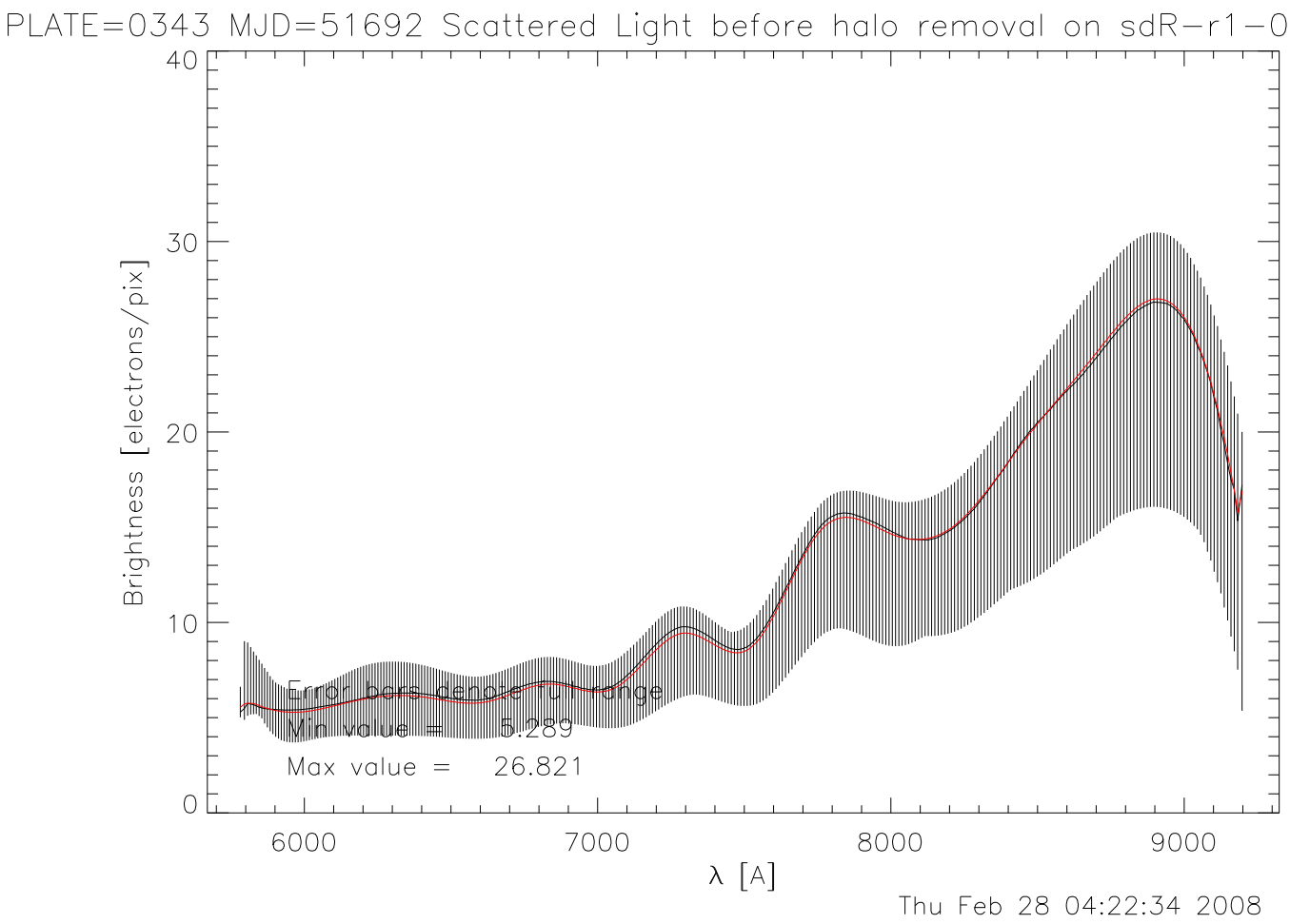

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004073.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

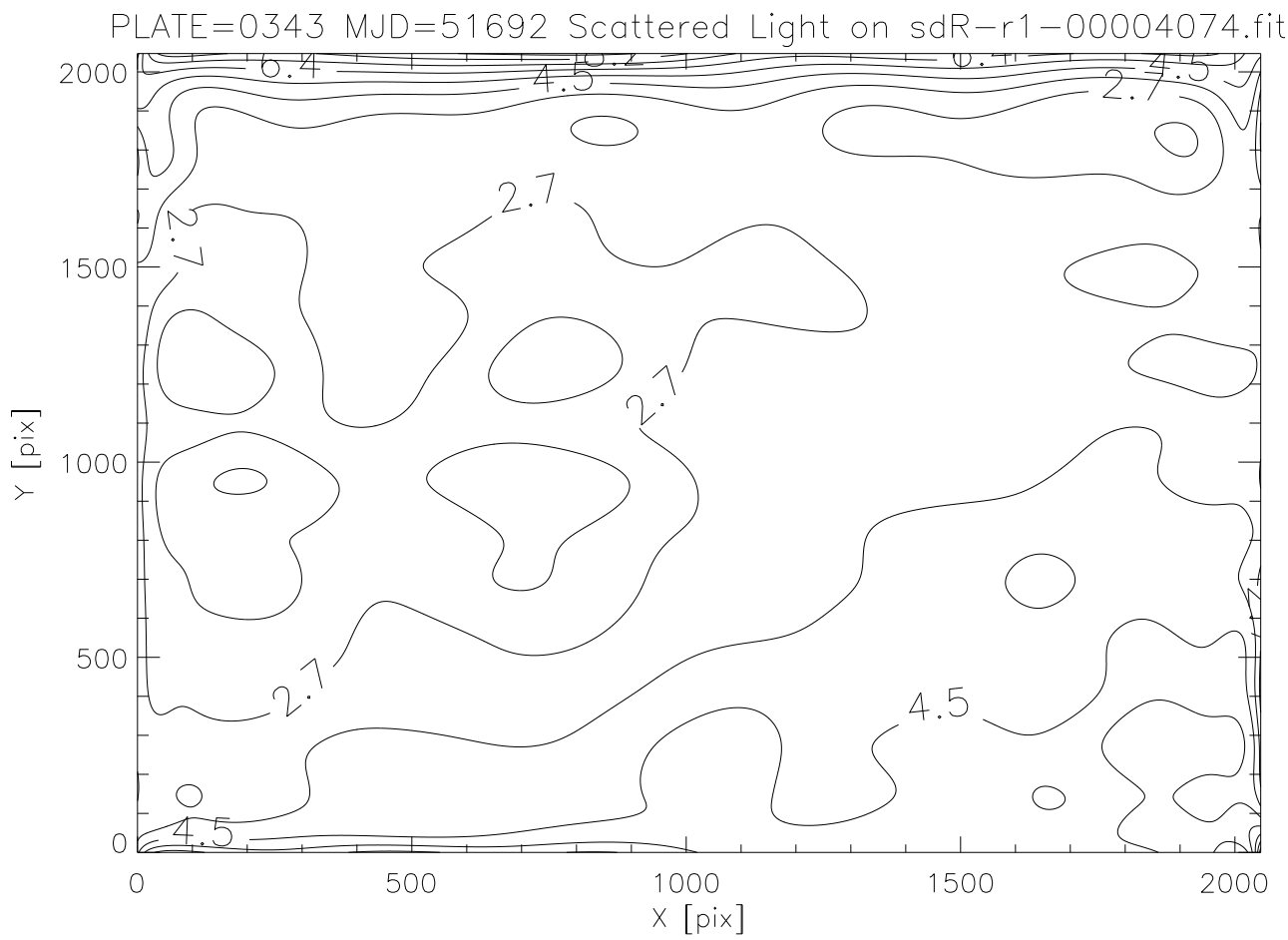

PLATE=0343 MJD=51692 sdR-r1-00004073.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Focal Distance [mm]
Airmass

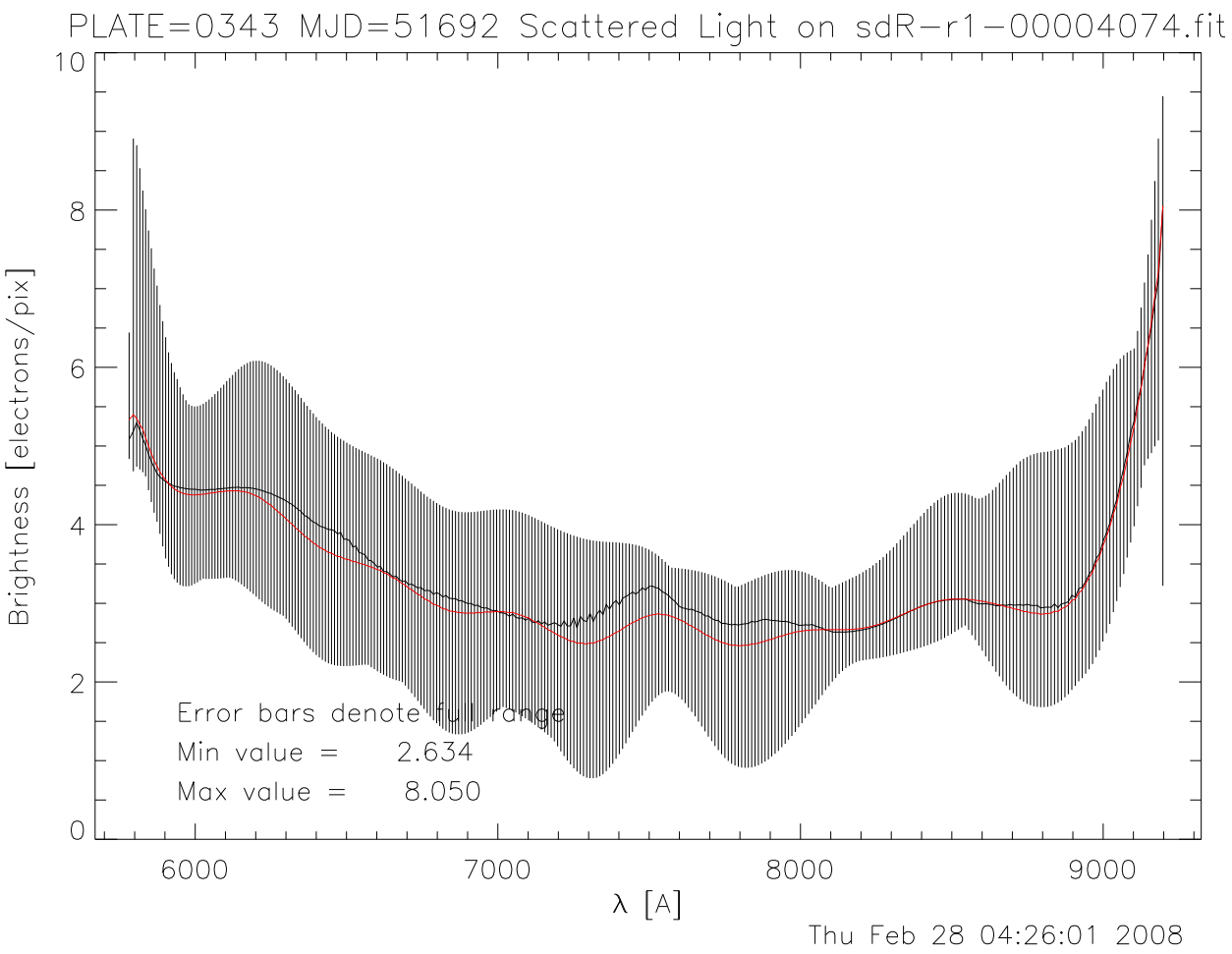

PLATE=0343 MJD=51692 sdR-r1-00004073.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.47 %
Fiber number
Focal Distance [mm]
Airmass

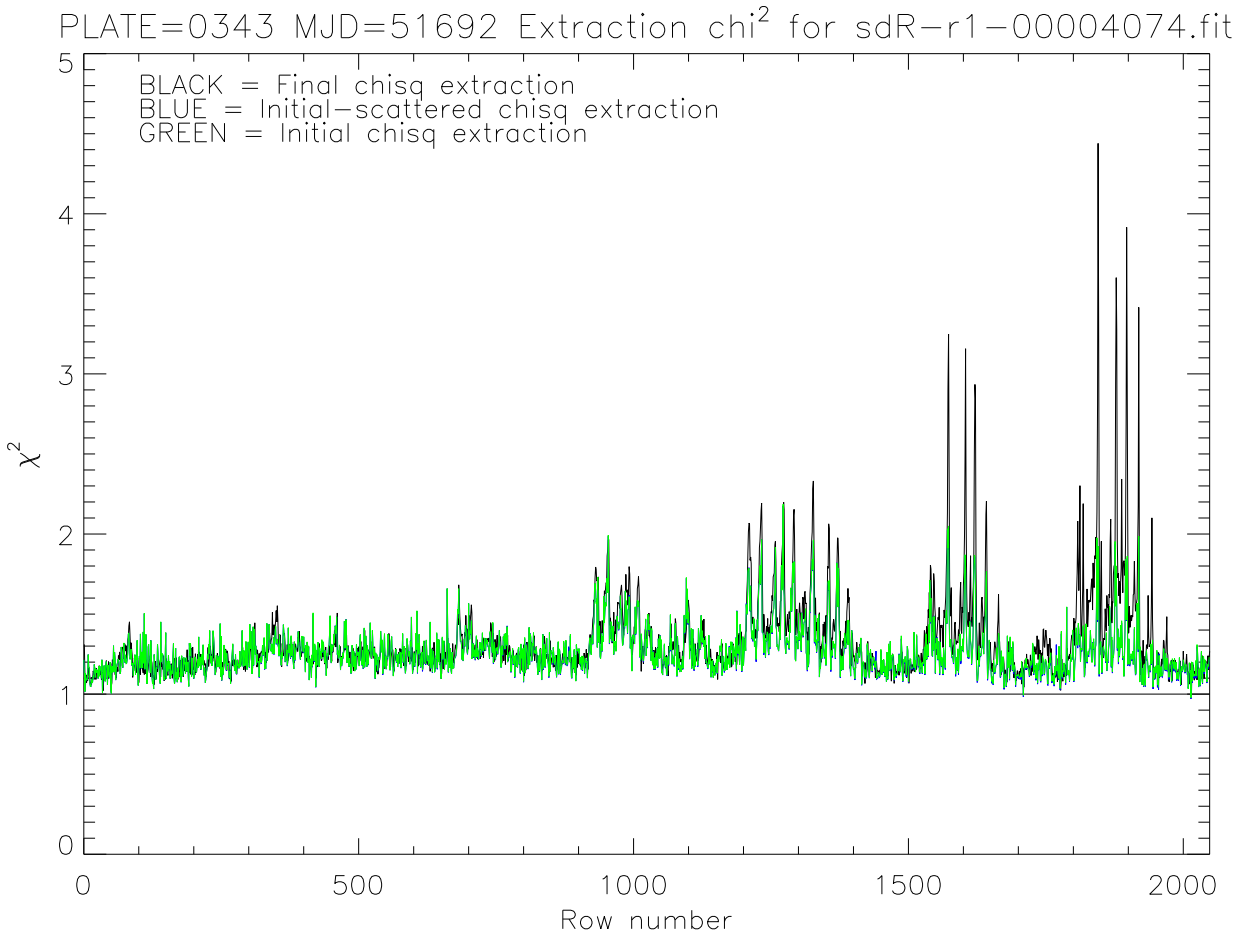

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:21:38 2008

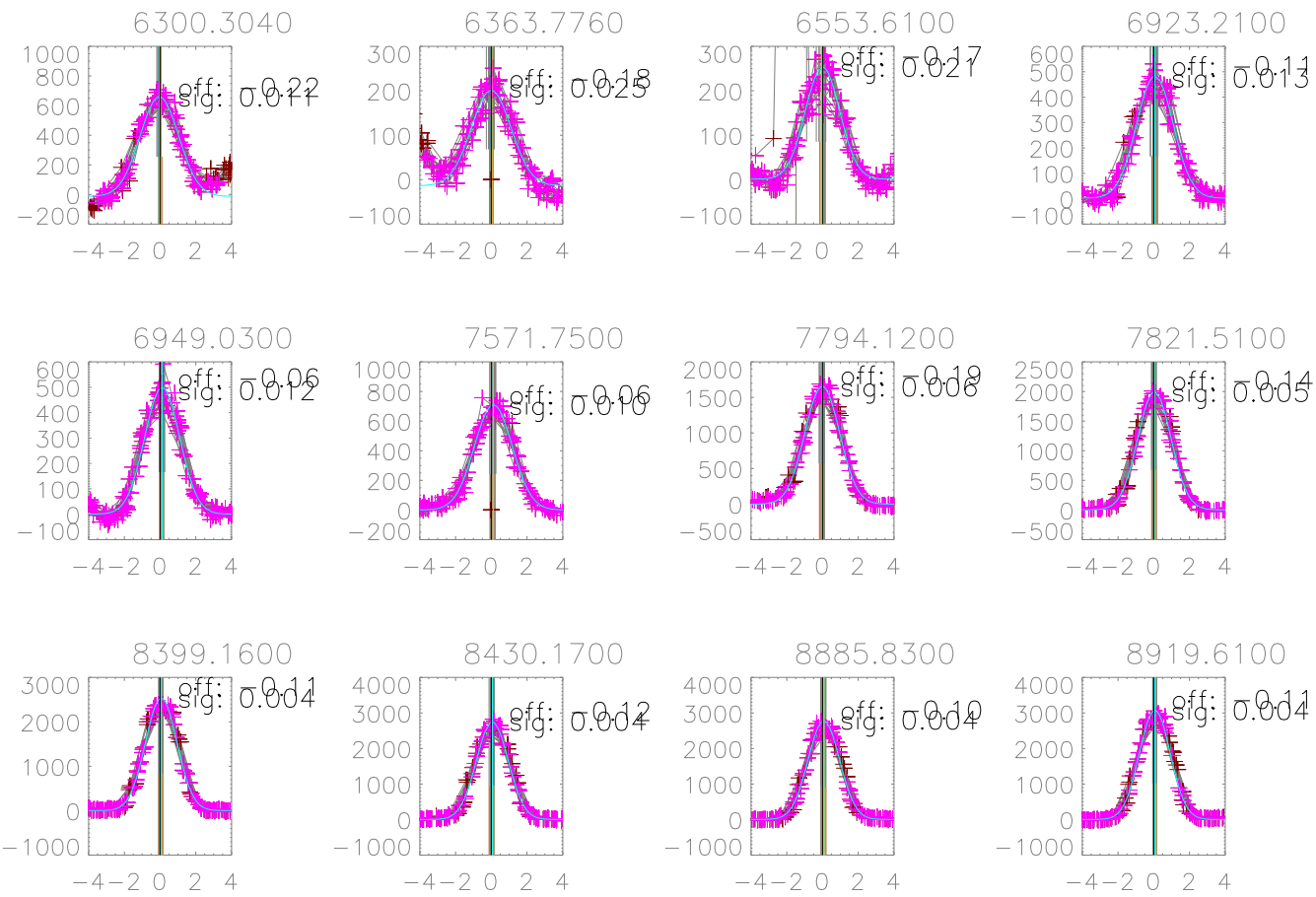

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004074.fi
28.6
22.3
22.3
15.9
15.9
9.5
9.5
9.5
9.5
Y [pix]
X [pix]
0
500
1000
1500
2000

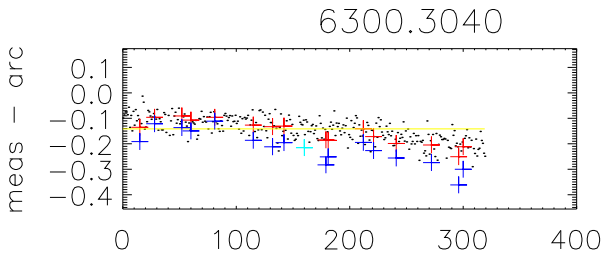

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004074.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 5.289
Max value = 26.821
Thu Feb 28 04:22:34 2008

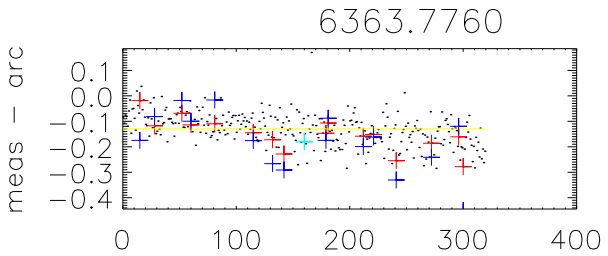

PLATE=0343 MJD=51692 Scattered Light on sdR−r1−00004074.fit
6.4
4.5
2.7
4.5
2.7
2.7
2.7
2.7
4.5
4.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

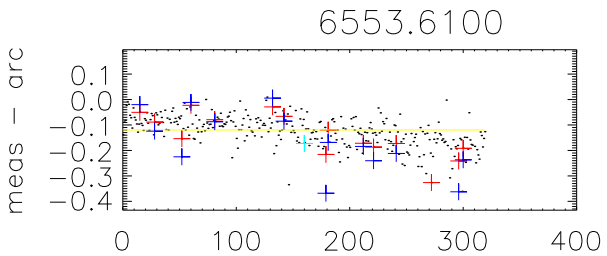

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004074.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.634
Max value = 8.050
Thu Feb 28 04:26:01 2008

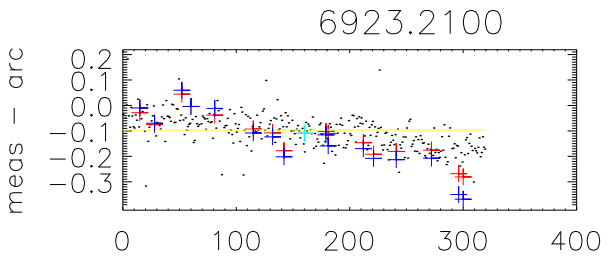

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004074.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

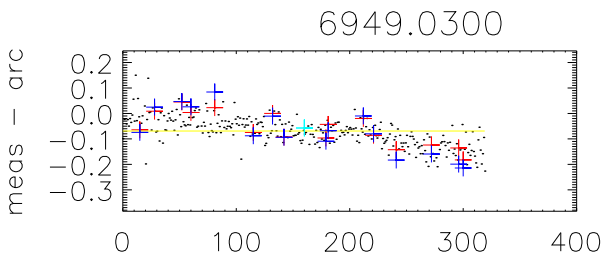

6300.3040
off: 0.22
sig: 0.011
6363.7760
off: 0.18
sig: 0.025
6553.6100
off: 0.17
sig: 0.021
6923.2100
off: 0.11
sig: 0.013
6949.0300
off: 0.06
sig: 0.012
7571.7500
off: 0.06
sig: 0.010
7794.1200
off: 0.19
sig: 0.006
7821.5100
off: 0.14
sig: 0.005
8399.1600
off: 0.11
sig: 0.004
8430.1700
off: 0.12
sig: 0.004
8885.8300
off: 0.10
sig: 0.004
8919.6100
off: 0.11
sig: 0.004

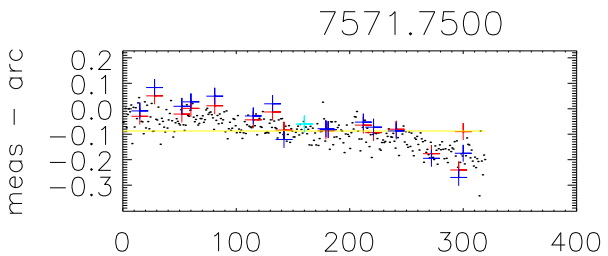

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

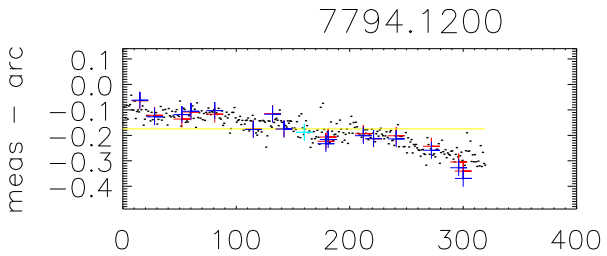

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

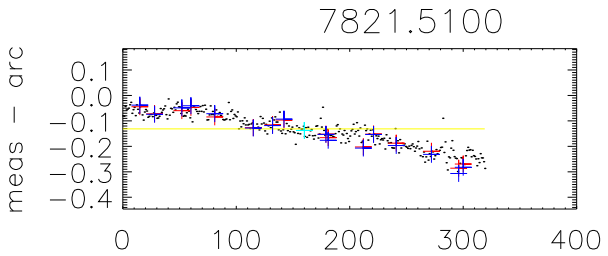

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

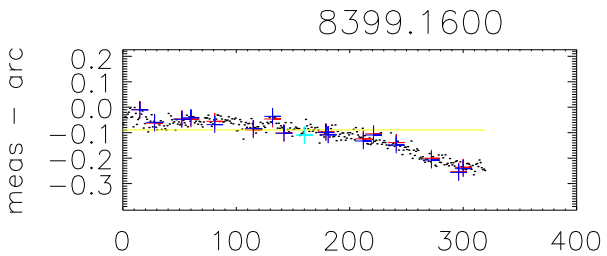

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

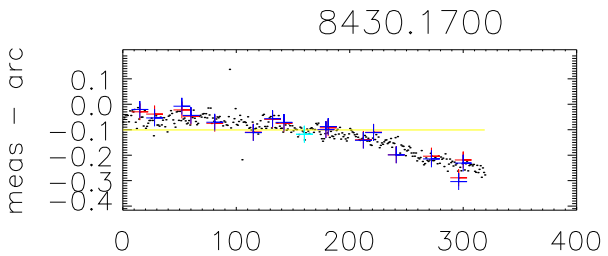

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

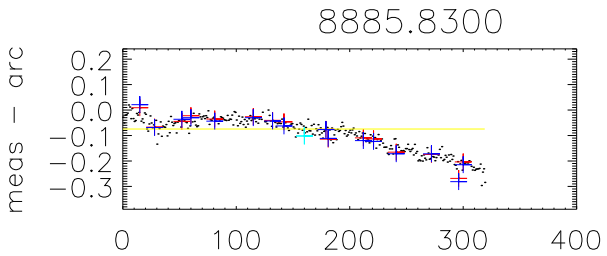

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

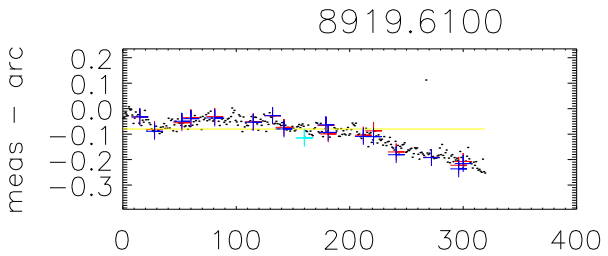

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

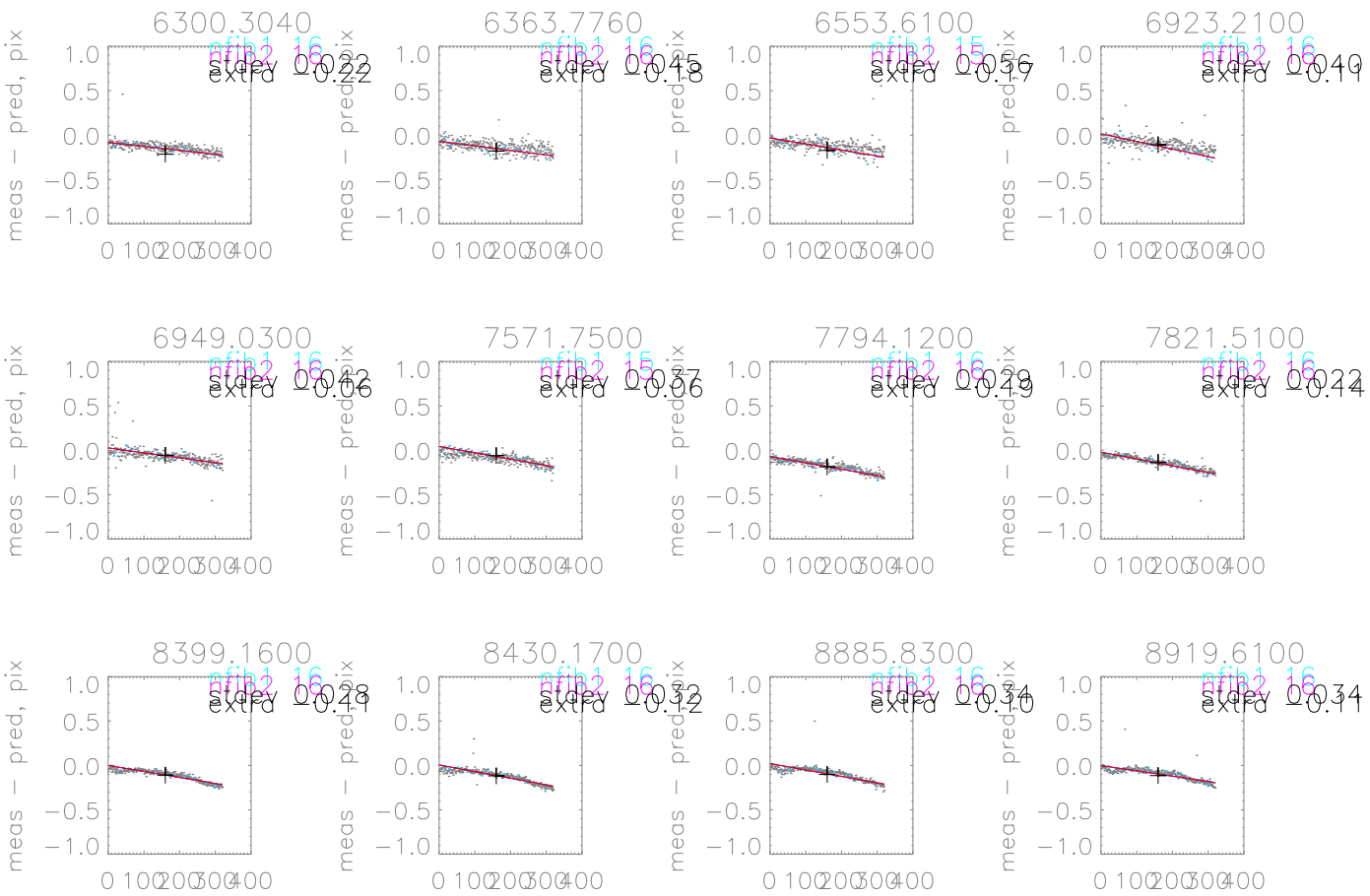

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

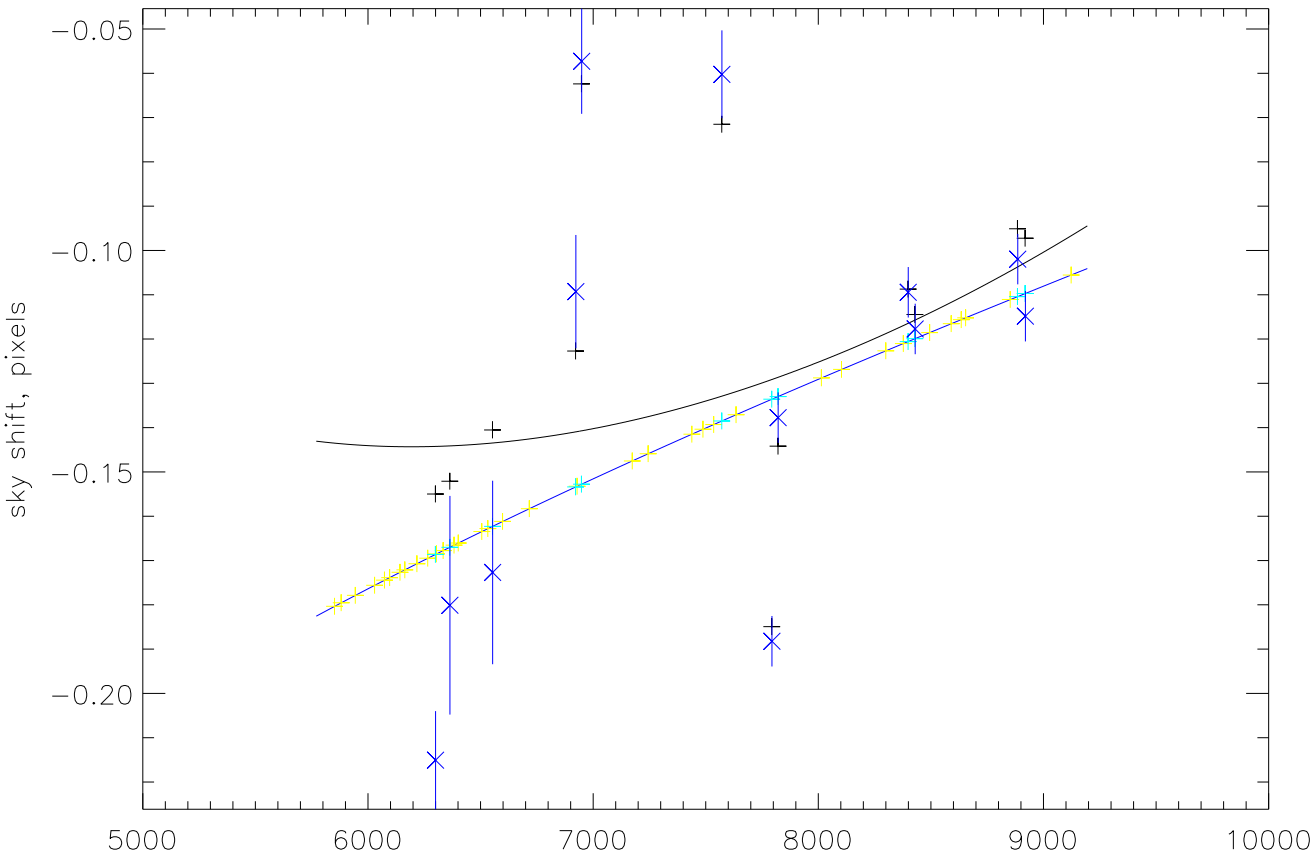

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

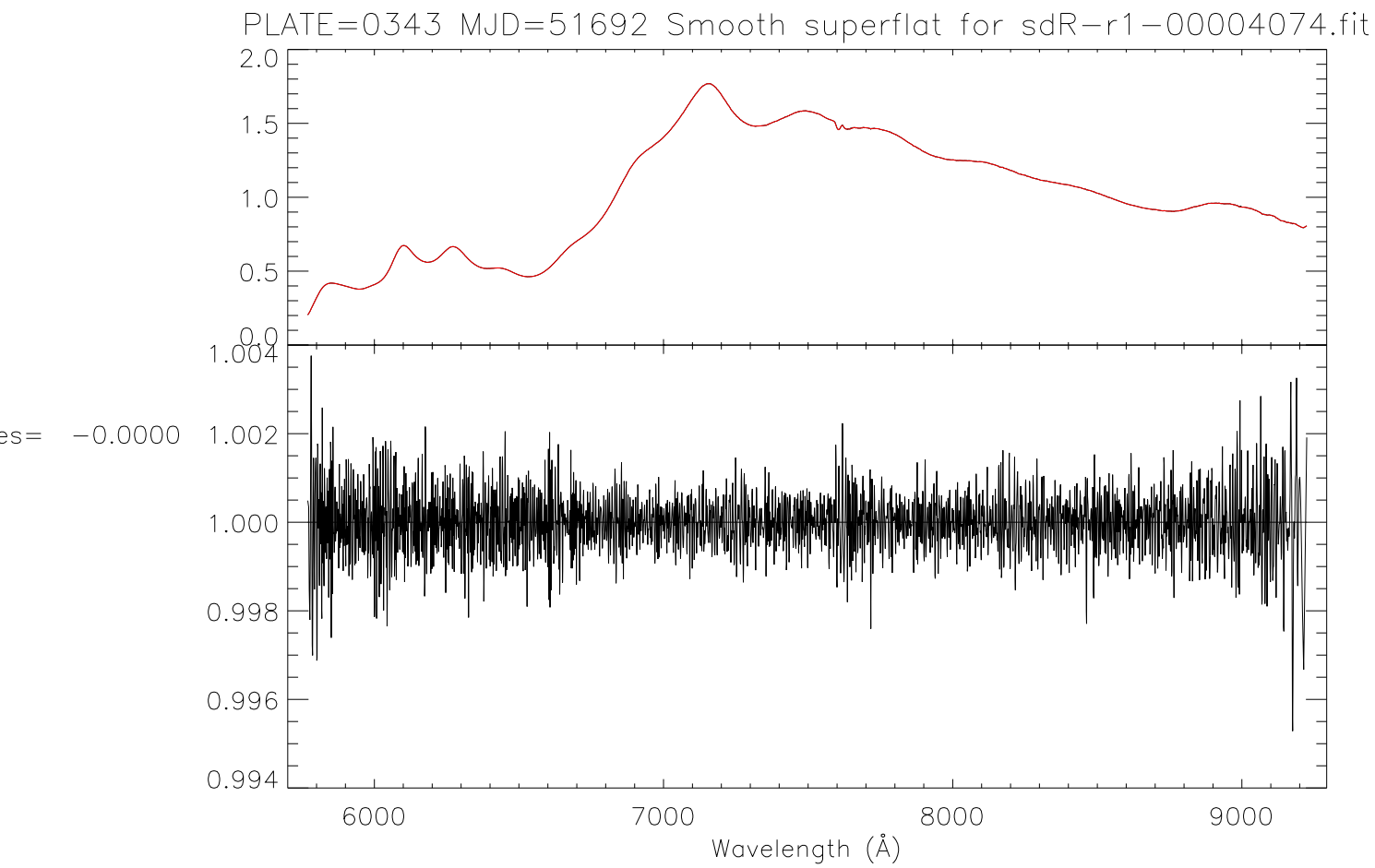

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

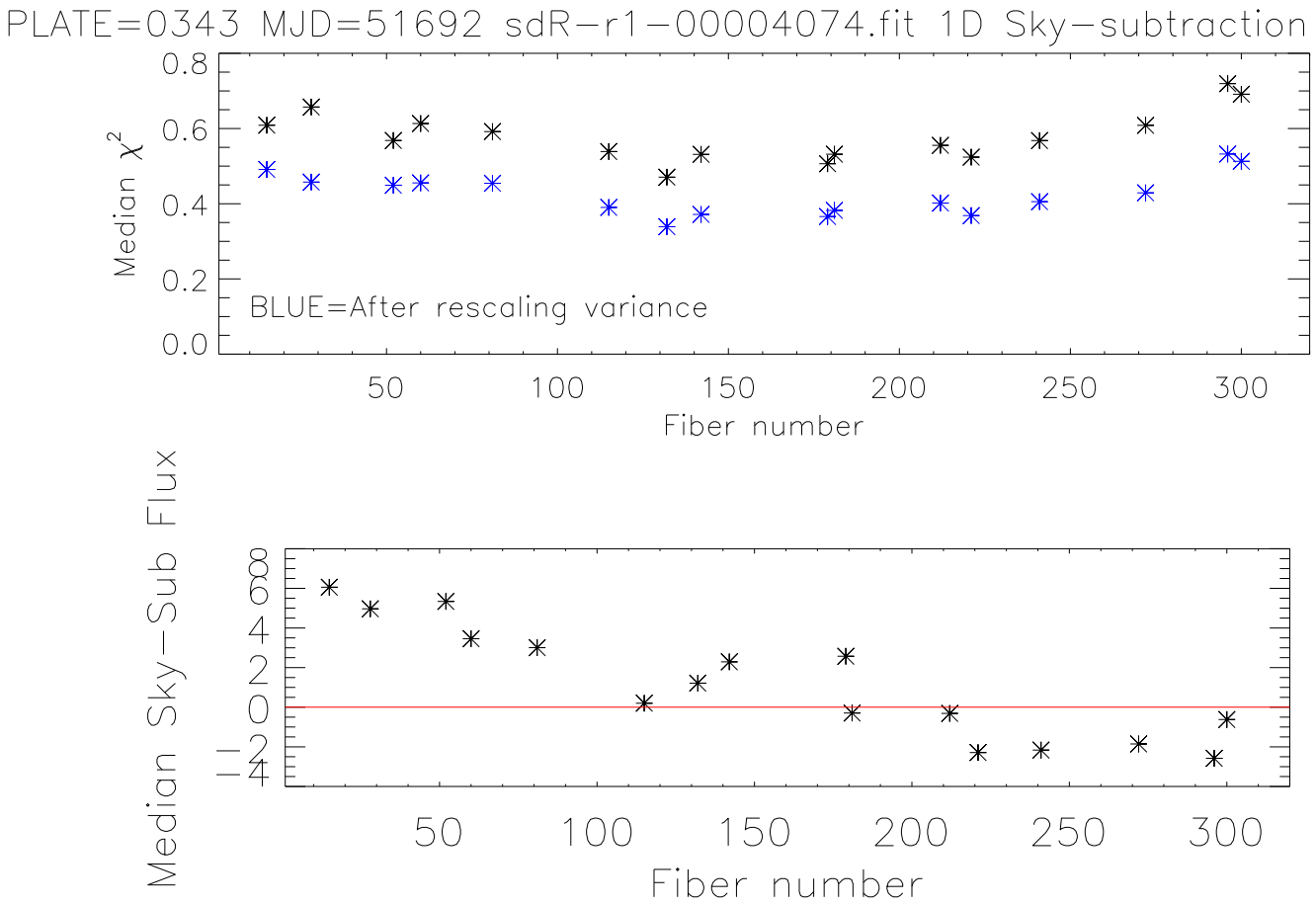

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

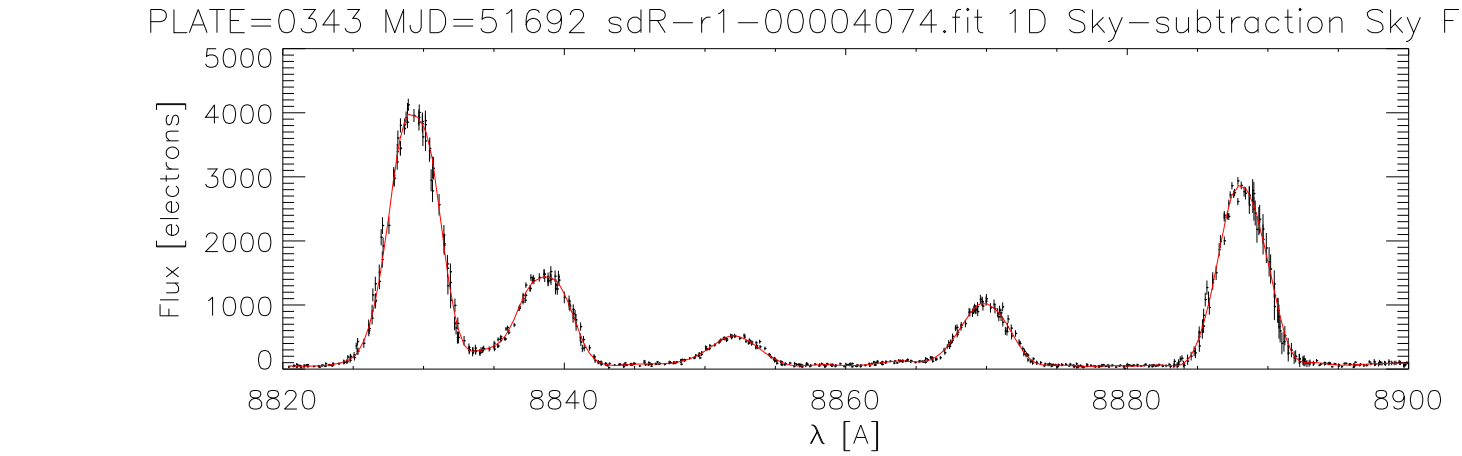

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

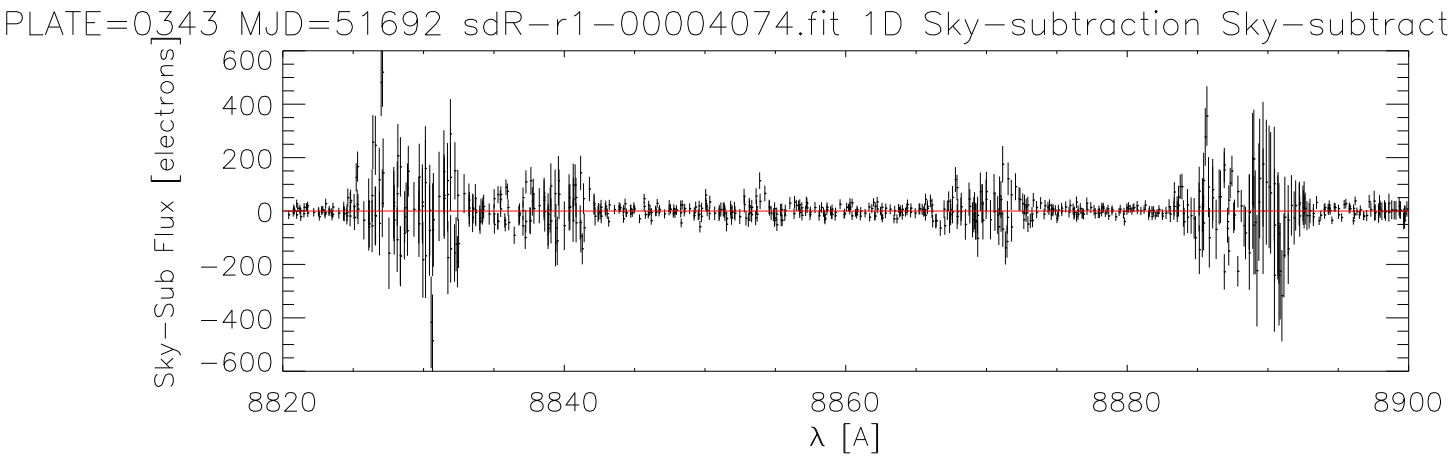

6300.3040
stdev 0.022
extra −0.22
6363.7760
stdev 0.045
extra −0.18
6553.6100
stdev 0.056
extra −0.17
6923.2100
stdev 0.040
extra −0.11
6949.0300
stdev 0.042
extra −0.06
7571.7500
stdev 0.037
extra −0.06
7794.1200
stdev 0.029
extra −0.09
7821.5100
stdev 0.022
extra −0.14
8399.1600
stdev 0.028
extra −0.11
8430.1700
stdev 0.032
extra −0.12
8885.8300
stdev 0.034
extra −0.10
8919.6100
stdev 0.034
extra −0.11
meas − pred, pix
mfhd2 16
mfhd1 16
mfhd2 15

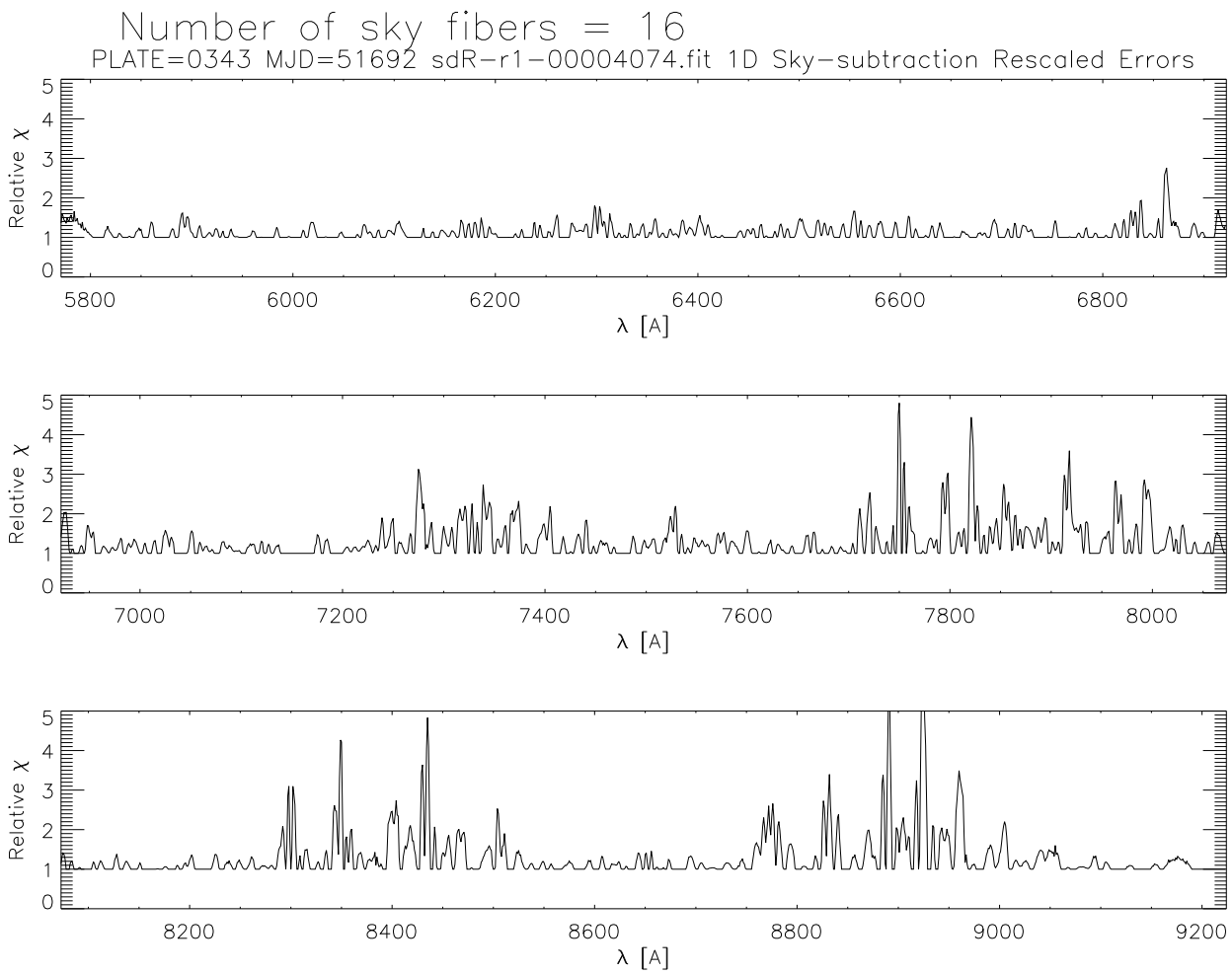

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

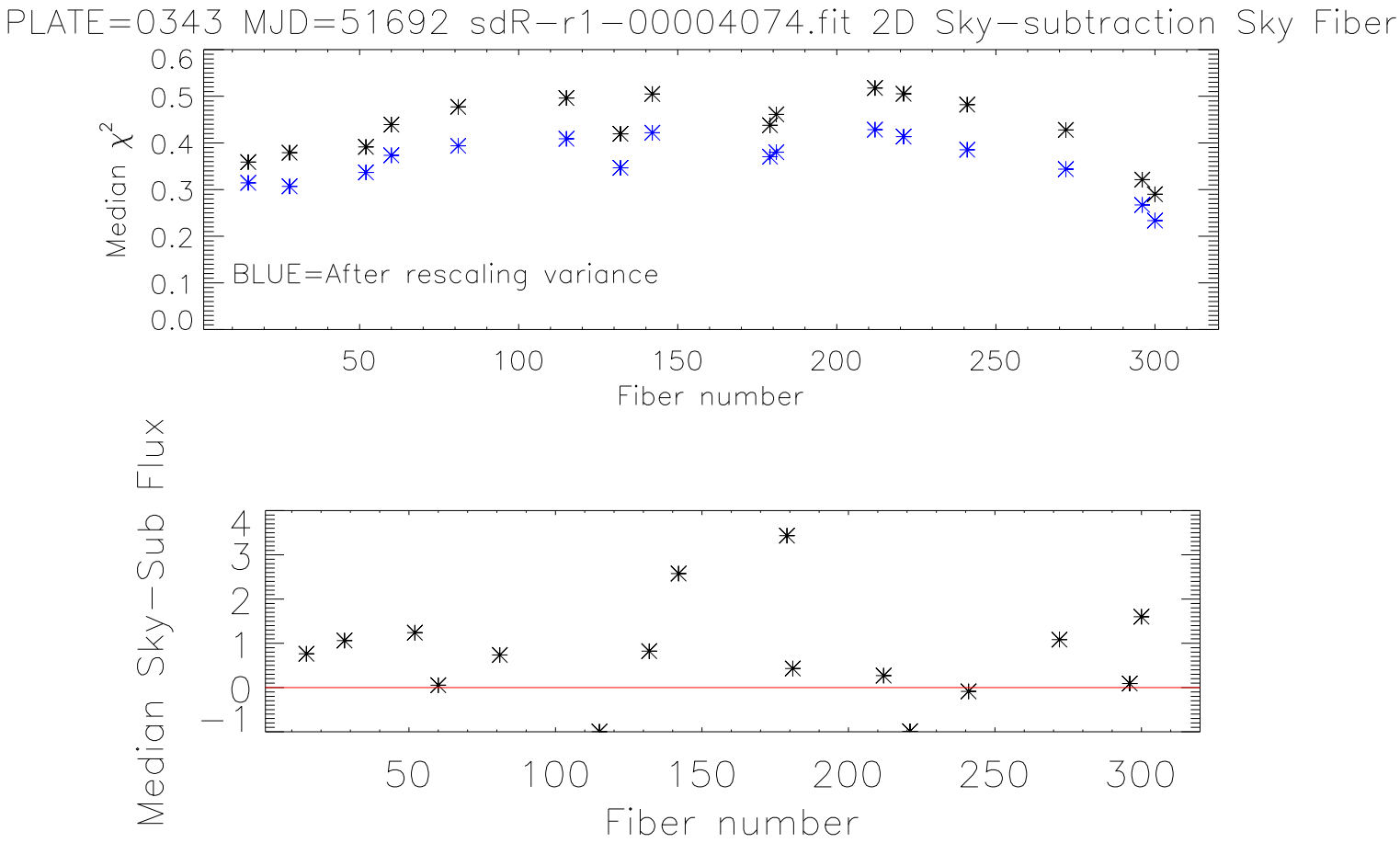

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004074.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

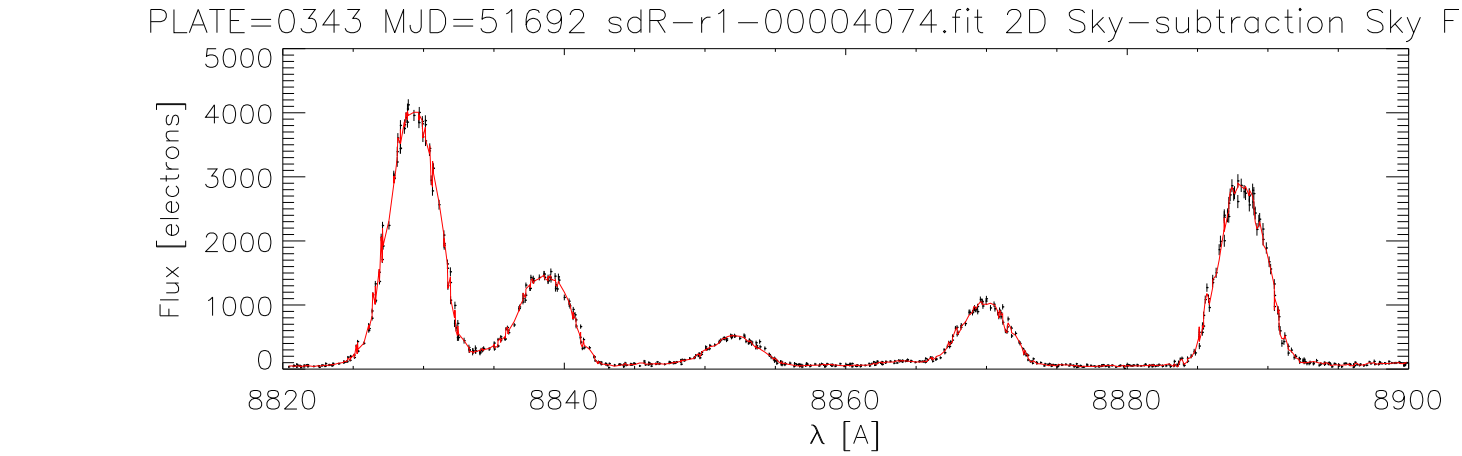

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

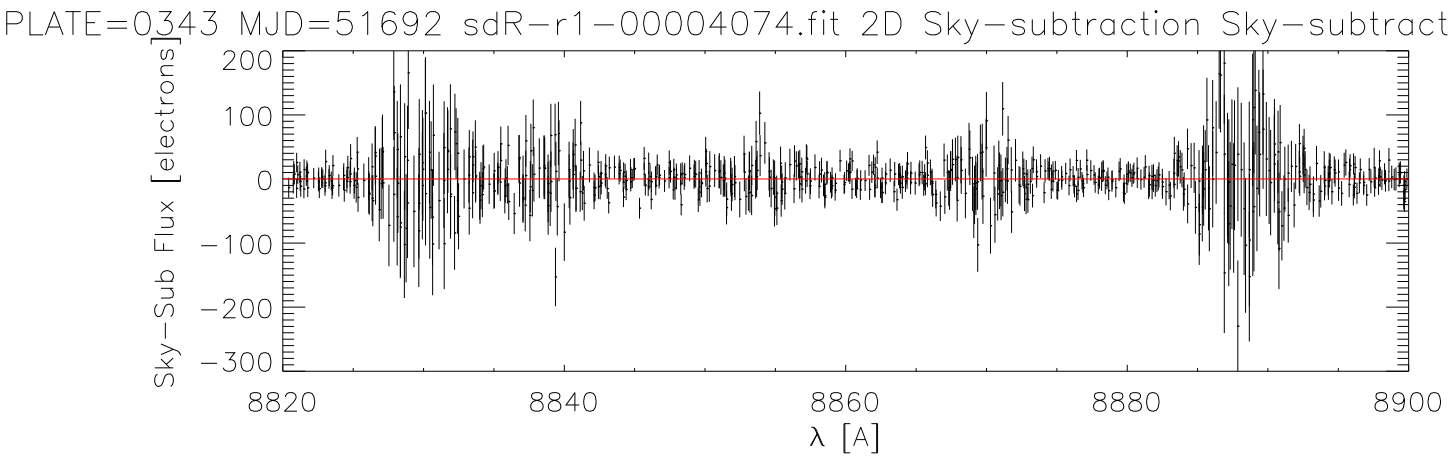

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

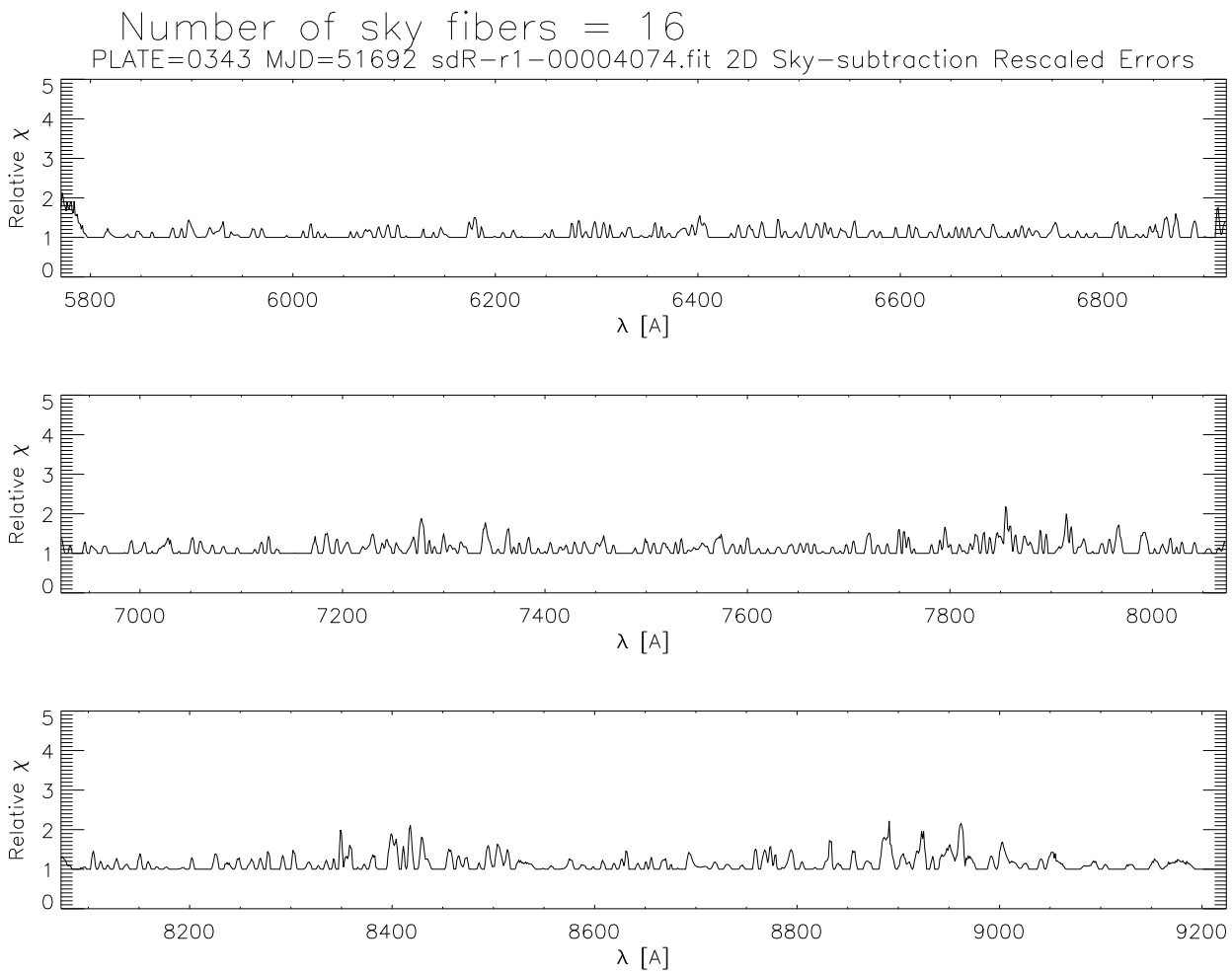

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

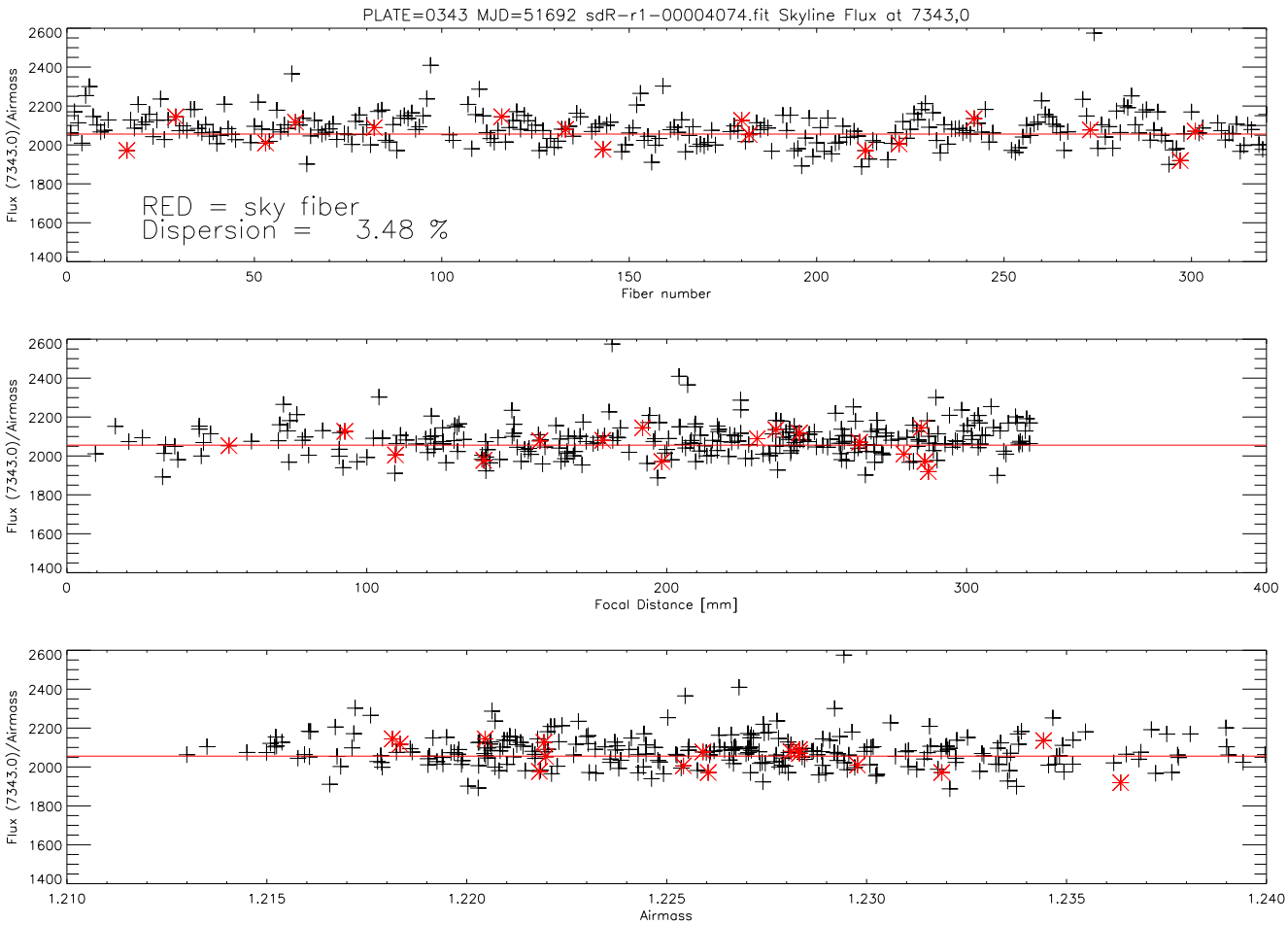

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004074.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

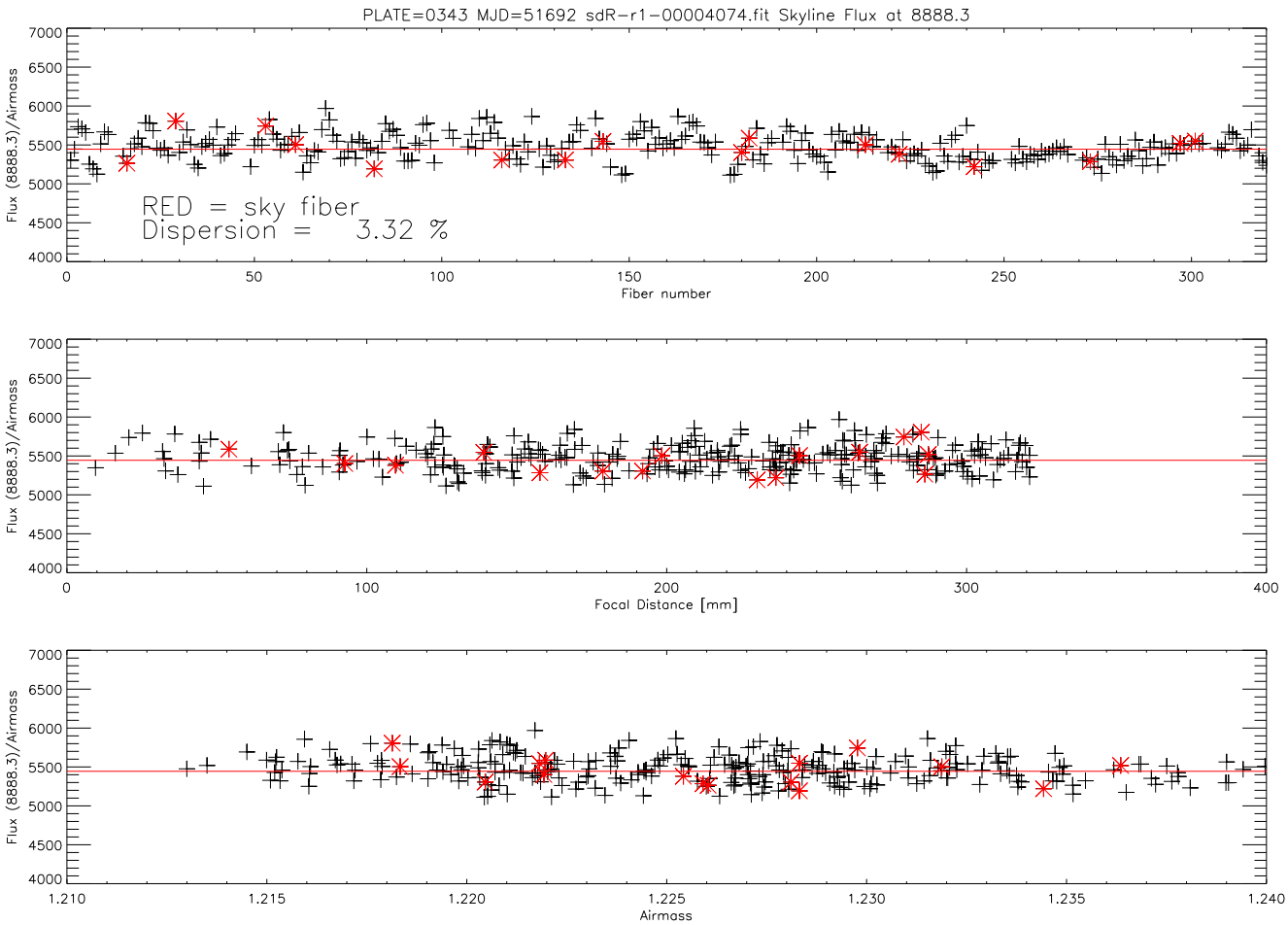

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

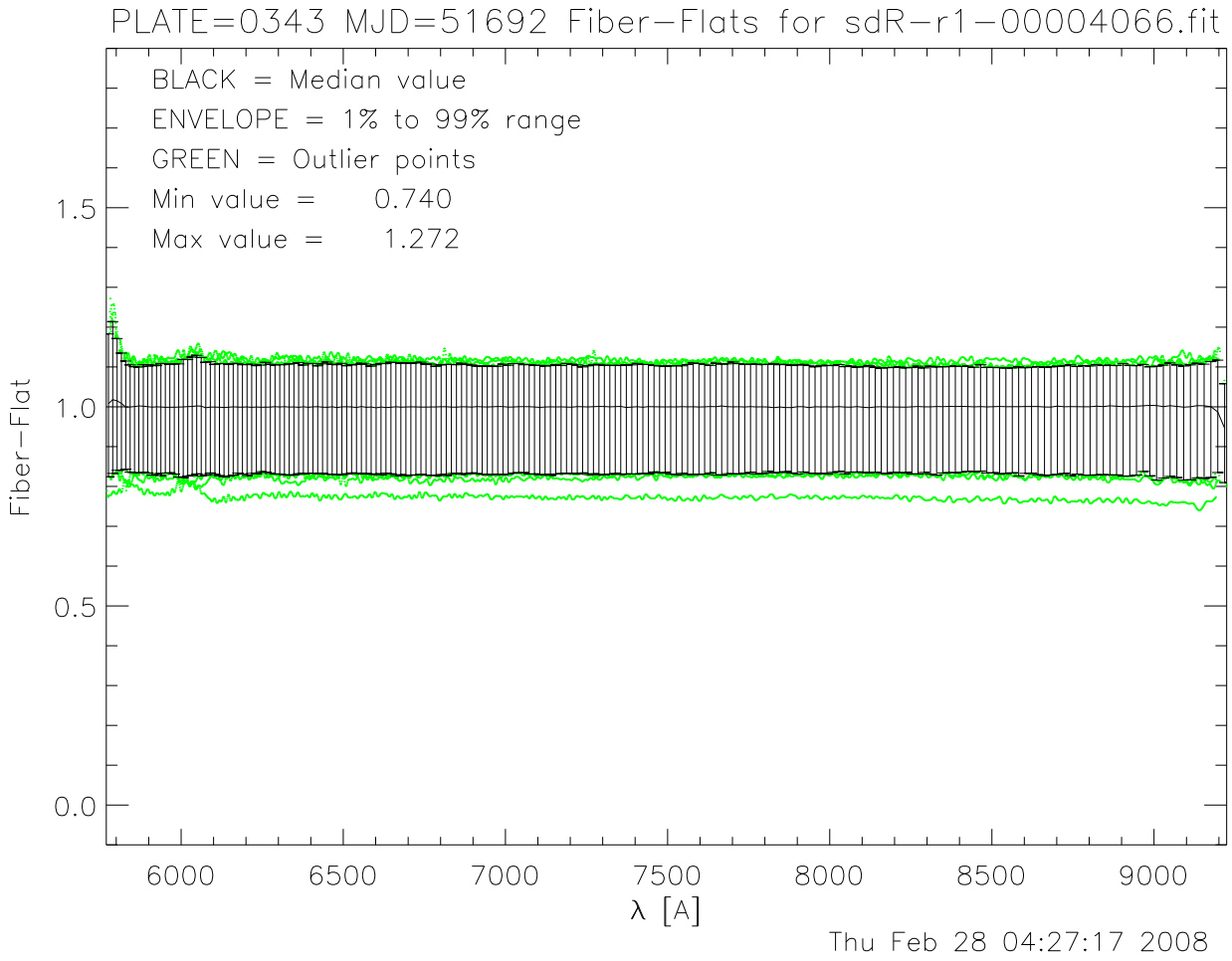

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

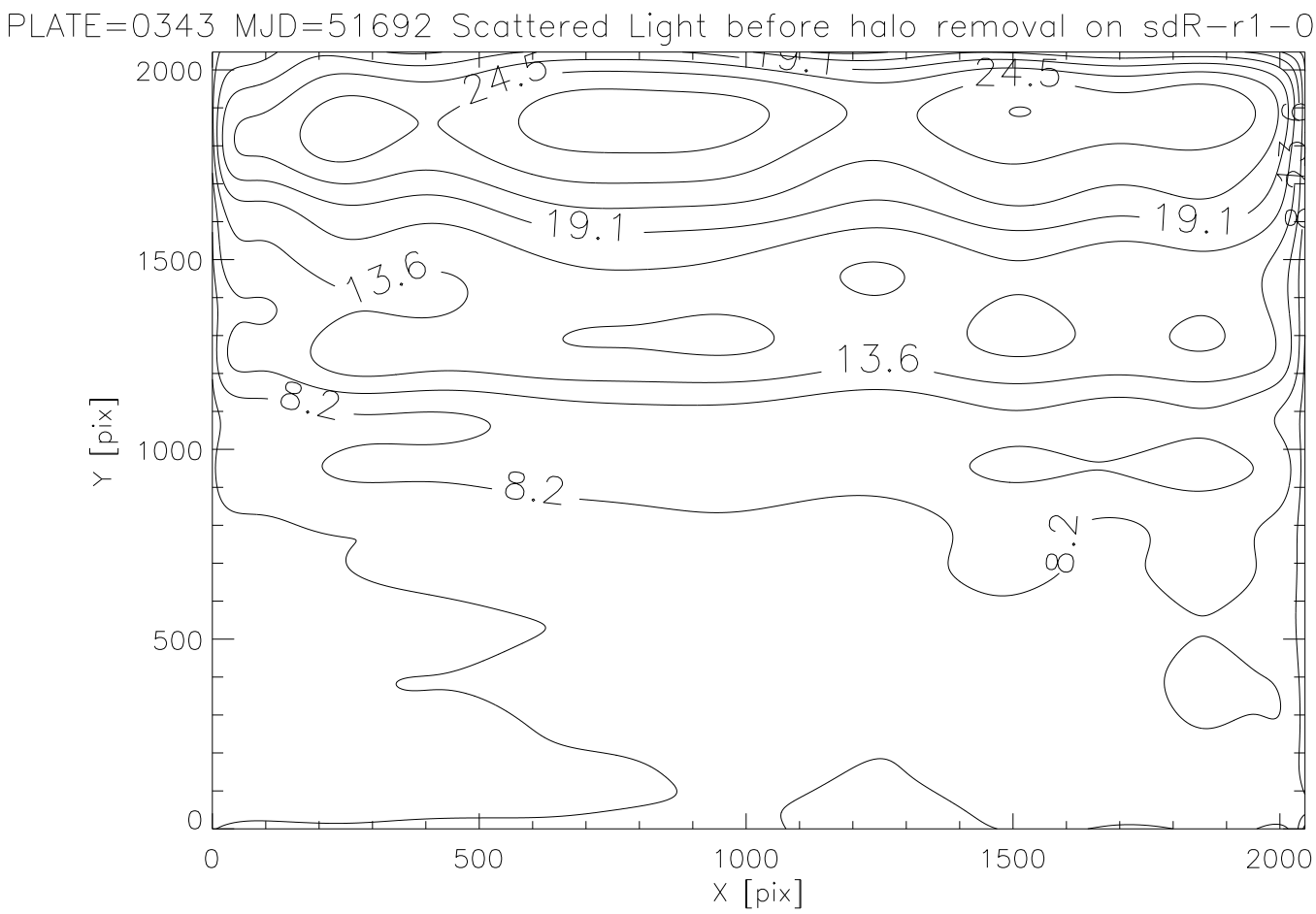

PLATE=0343 MJD=51692 sdR-r1-00004074.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

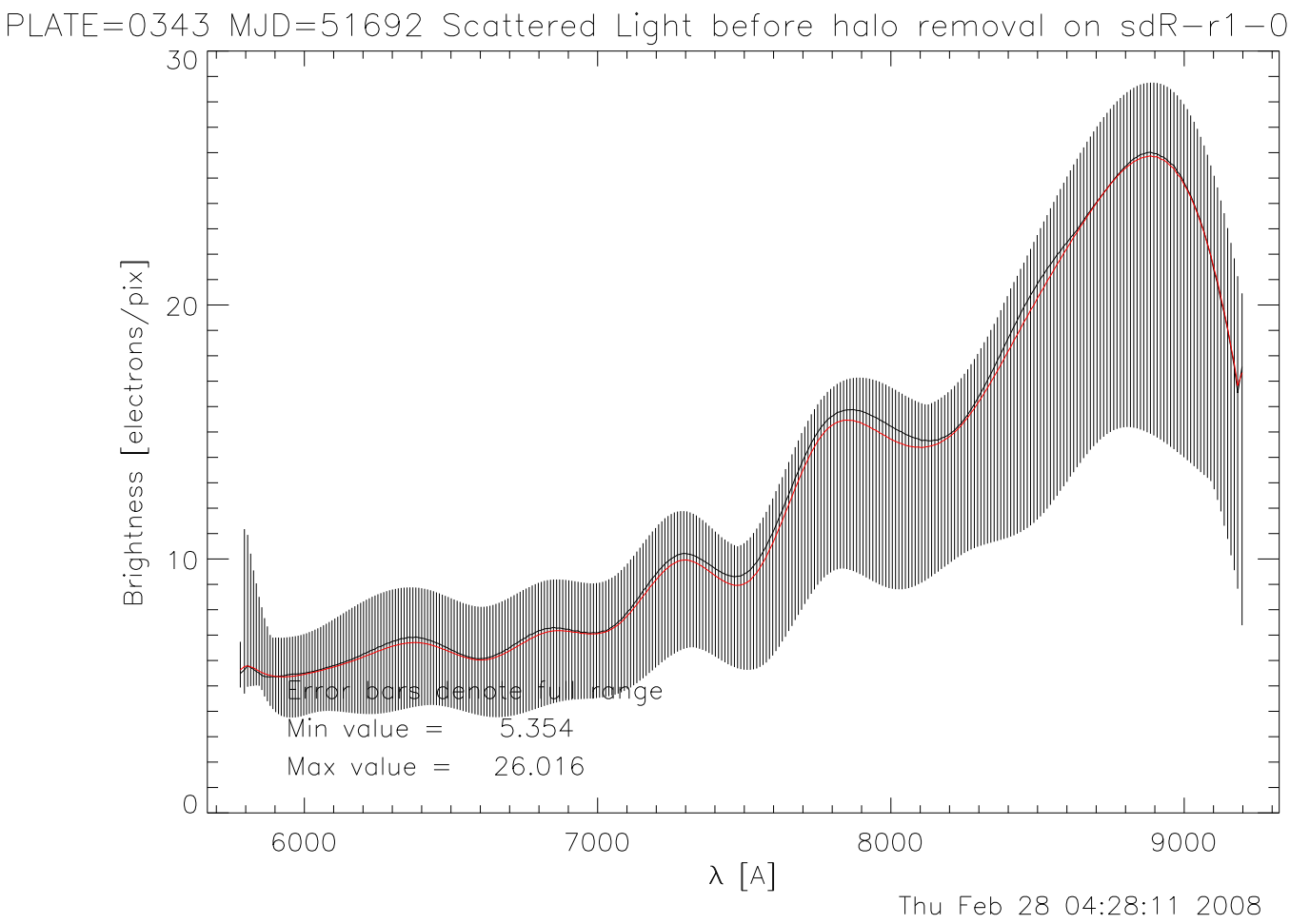

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004074.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

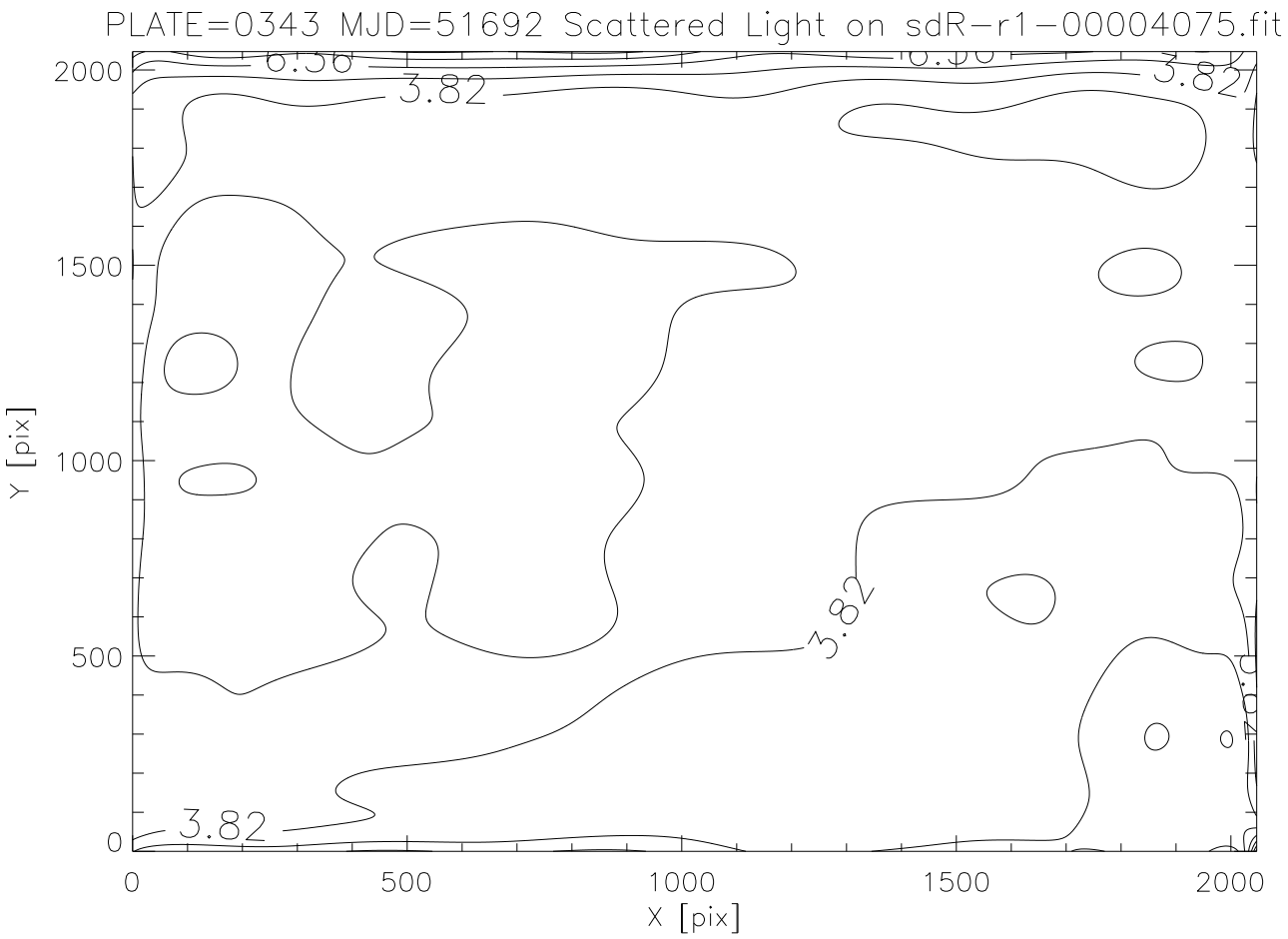

PLATE=0343 MJD=51692 sdR-r1-00004074.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.48 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

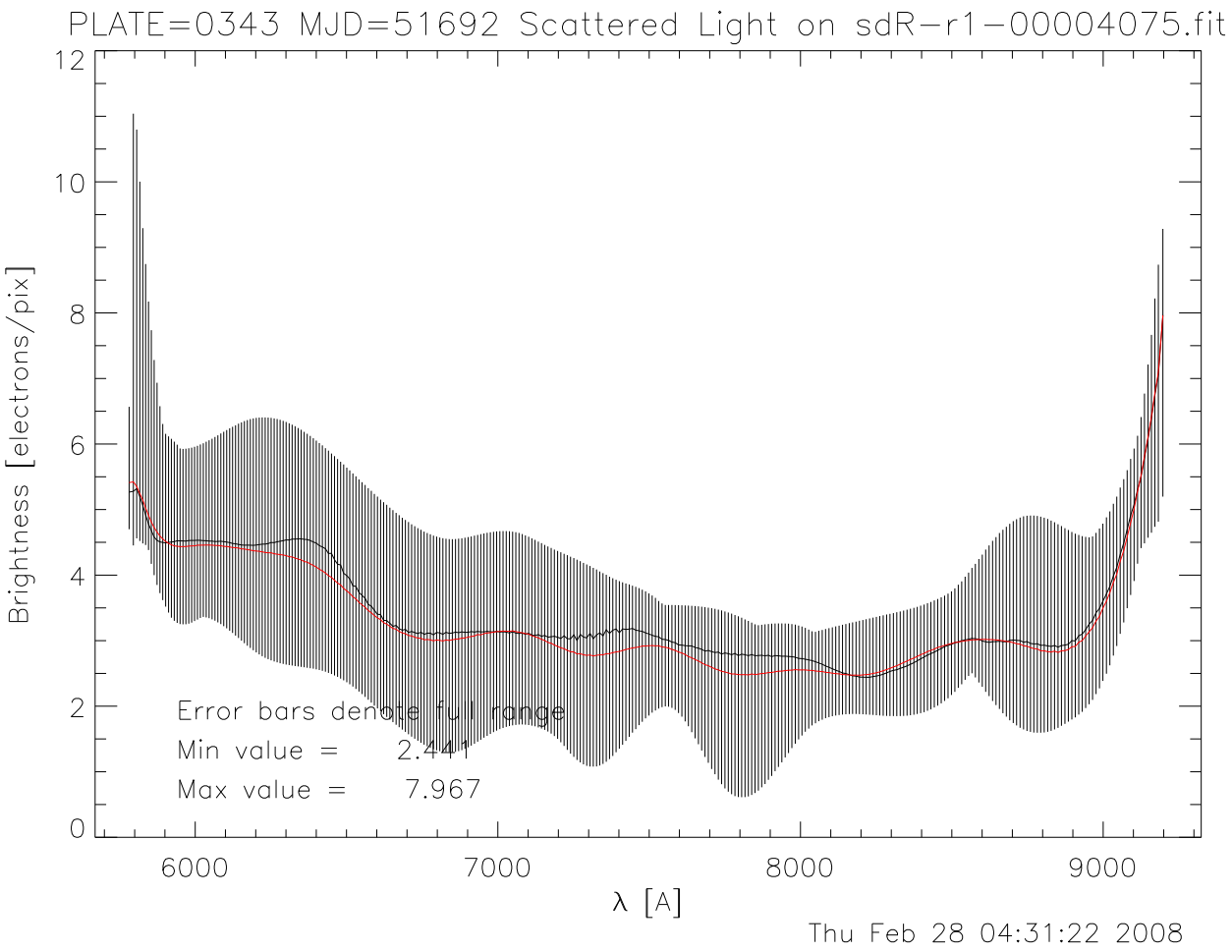

PLATE=0343 MJD=51692 sdR-r1-00004074.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.32 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

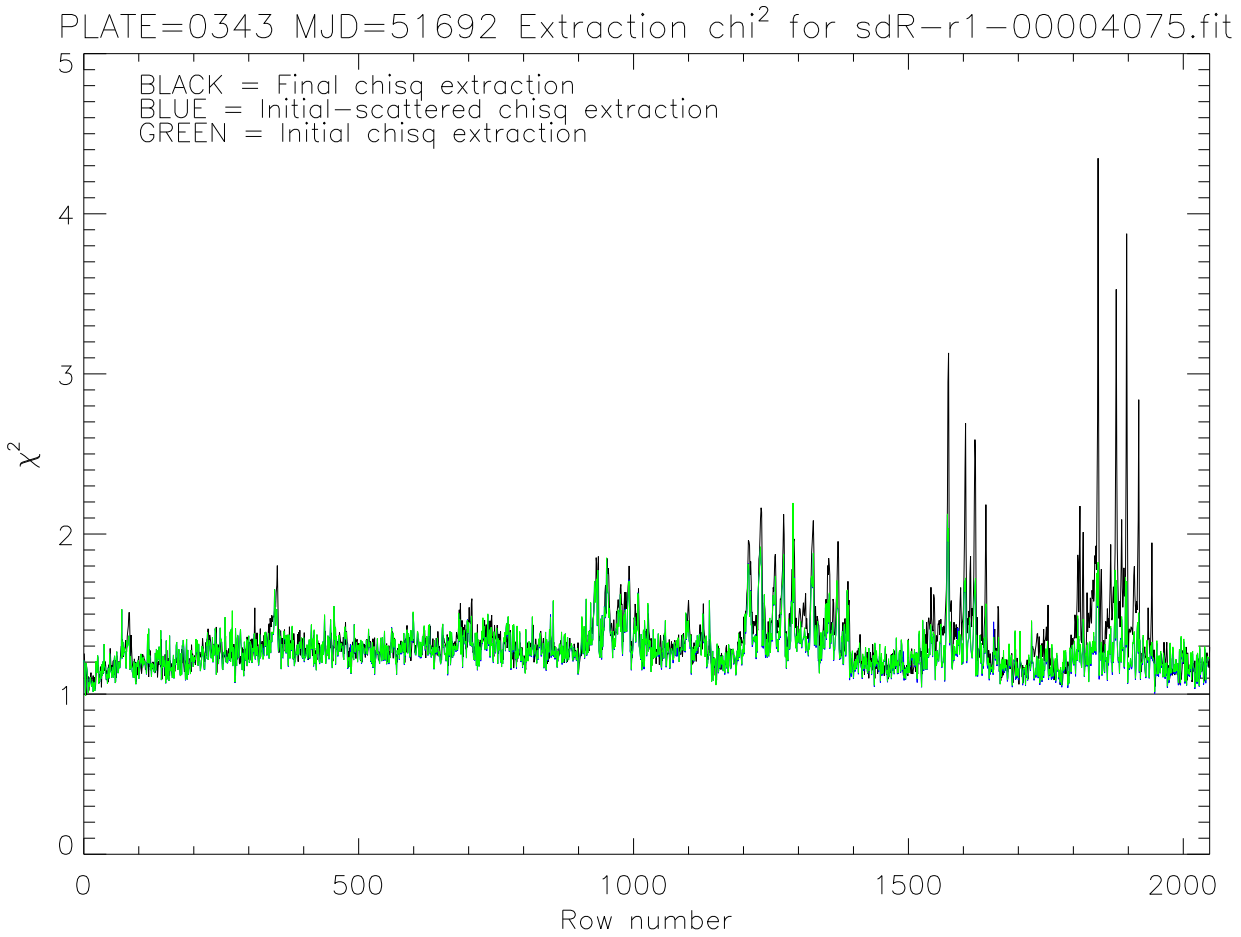

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:27:17 2008

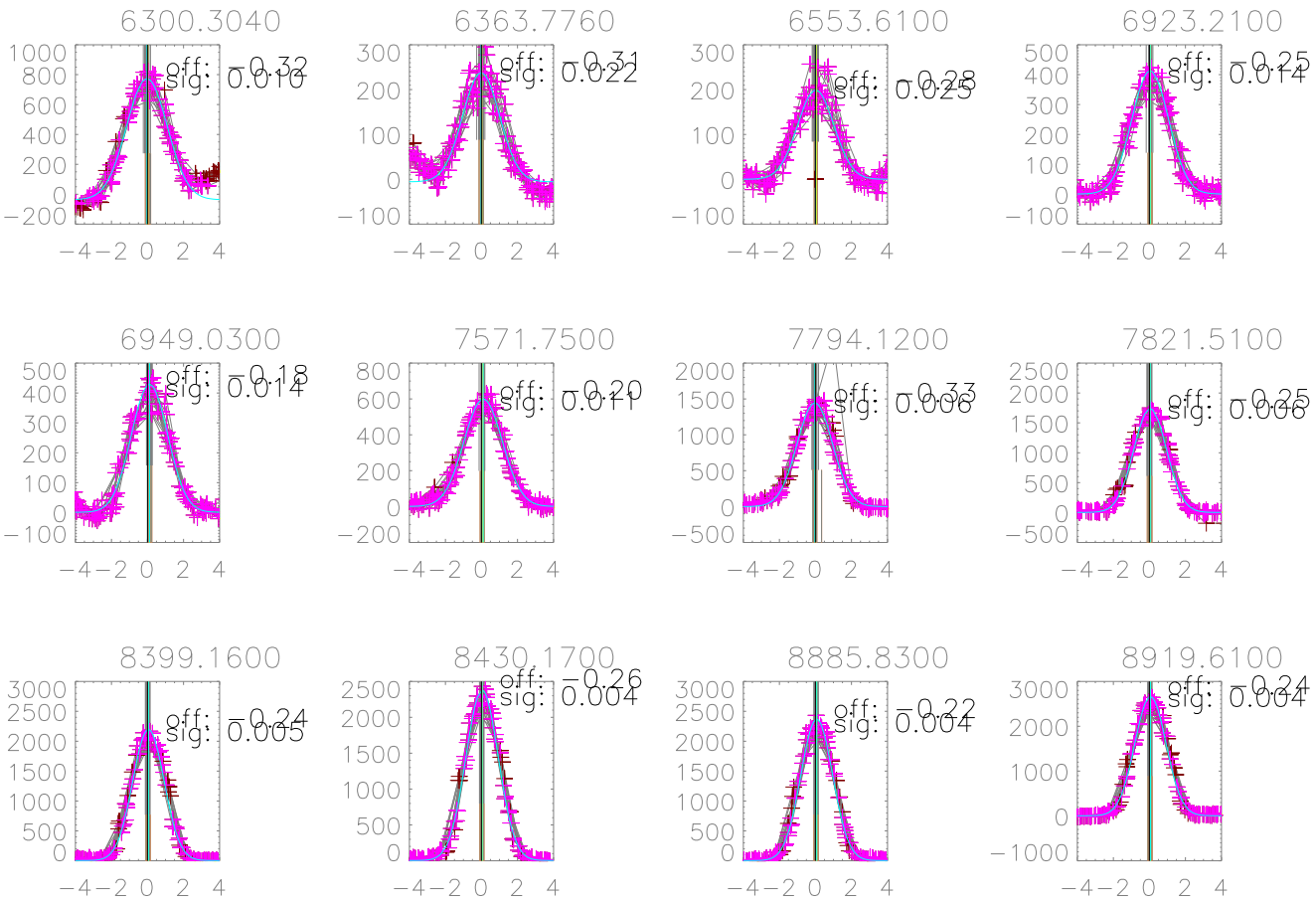

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004075.fi
24.5
19.1
13.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

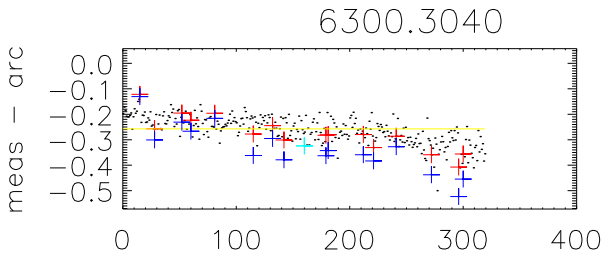

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004075.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.354
Max value = 26.016
Thu Feb 28 04:28:11 2008

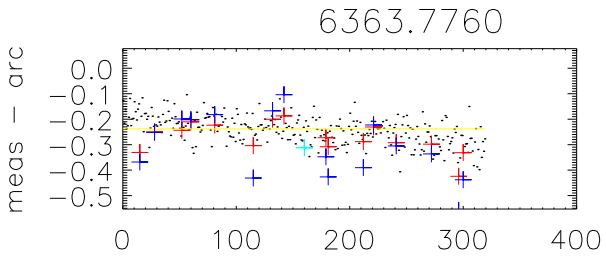

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004075.fit
3.82
3.82
3.82
3.82
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

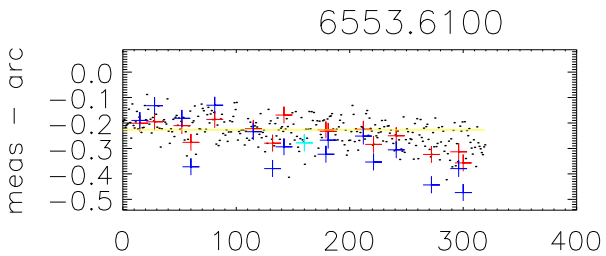

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004075.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.441
Max value = 7.967
Thu Feb 28 04:31:22 2008

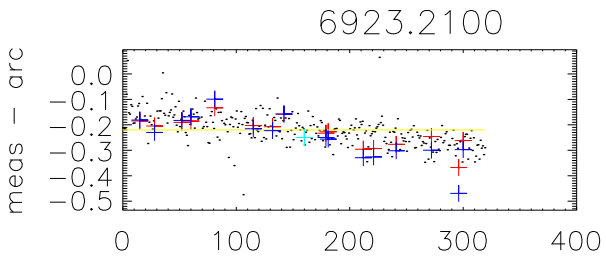

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004075.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

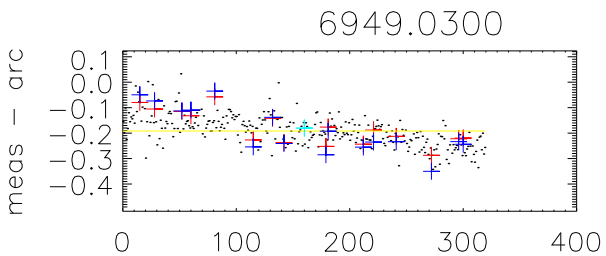

6300.3040
off: −0.32
sig: 0.010
6363.7760
off: −0.31
sig: 0.022
6553.6100
off: −0.28
sig: 0.025
6923.2100
off: −0.25
sig: 0.014
6949.0300
off: −0.18
sig: 0.014
7571.7500
off: −0.20
sig: 0.011
7794.1200
off: −0.33
sig: 0.006
7821.5100
off: −0.25
sig: 0.006
8399.1600
off: −0.24
sig: 0.005
8430.1700
off: −0.26
sig: 0.004
8885.8300
off: −0.22
sig: 0.004
8919.6100
off: −0.24
sig: 0.004

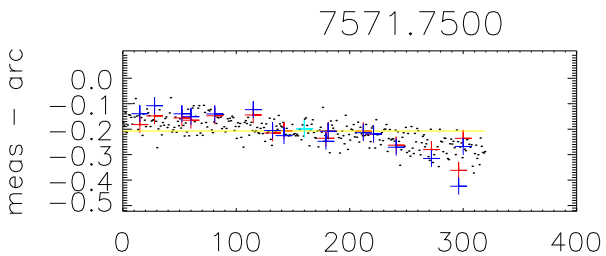

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

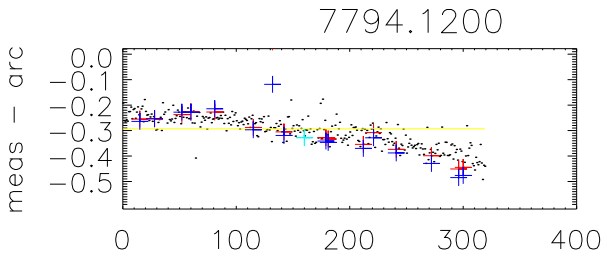

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

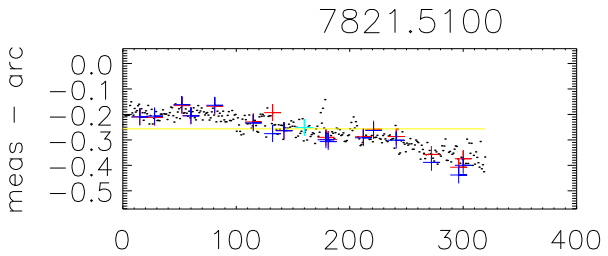

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

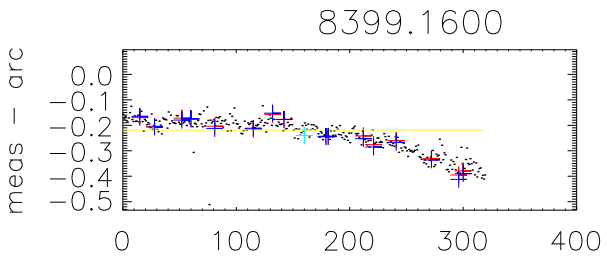

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

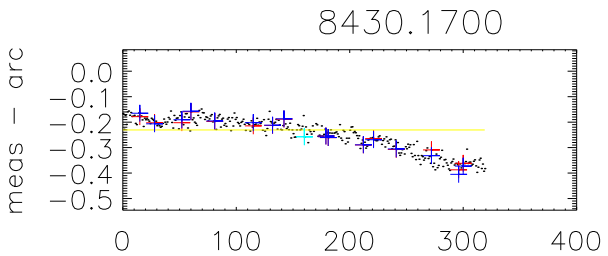

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

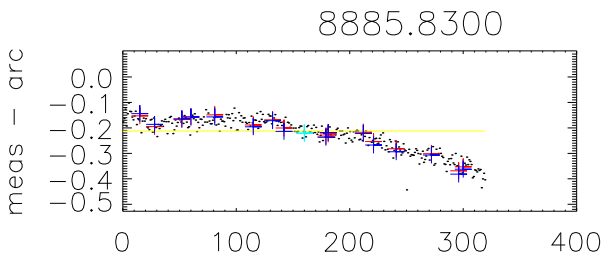

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

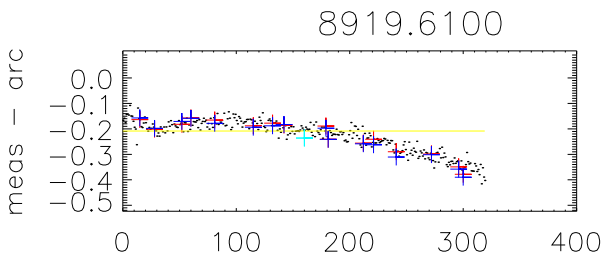

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

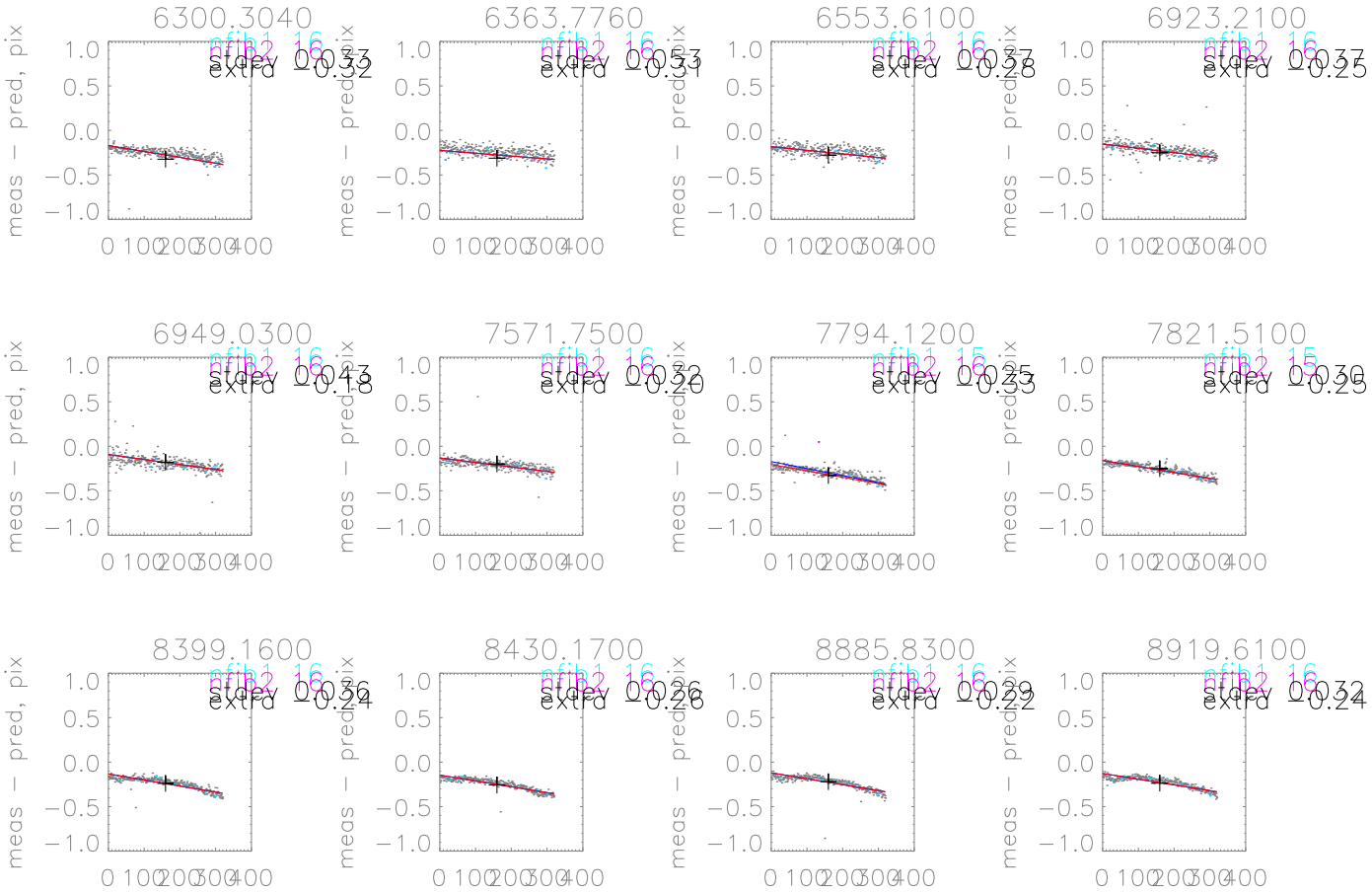

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

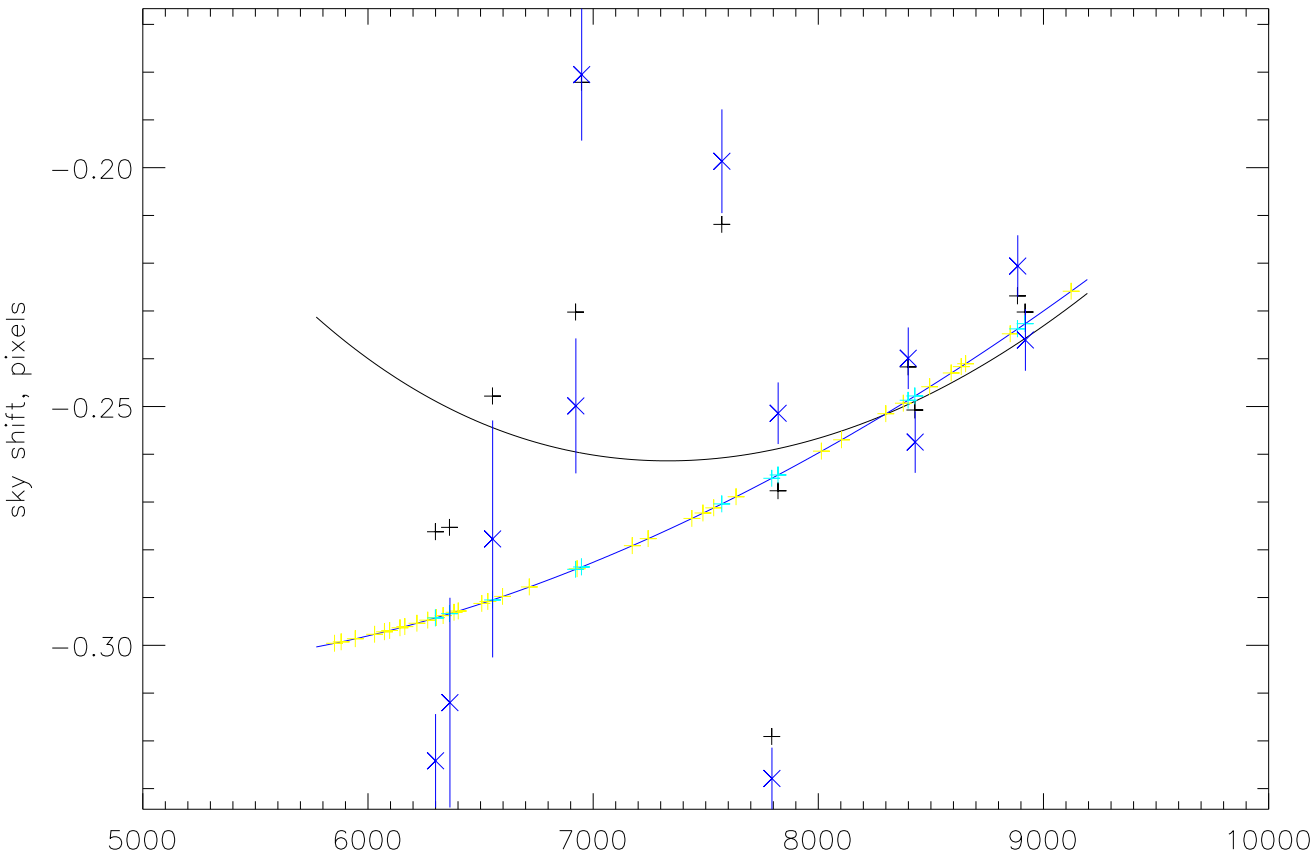

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

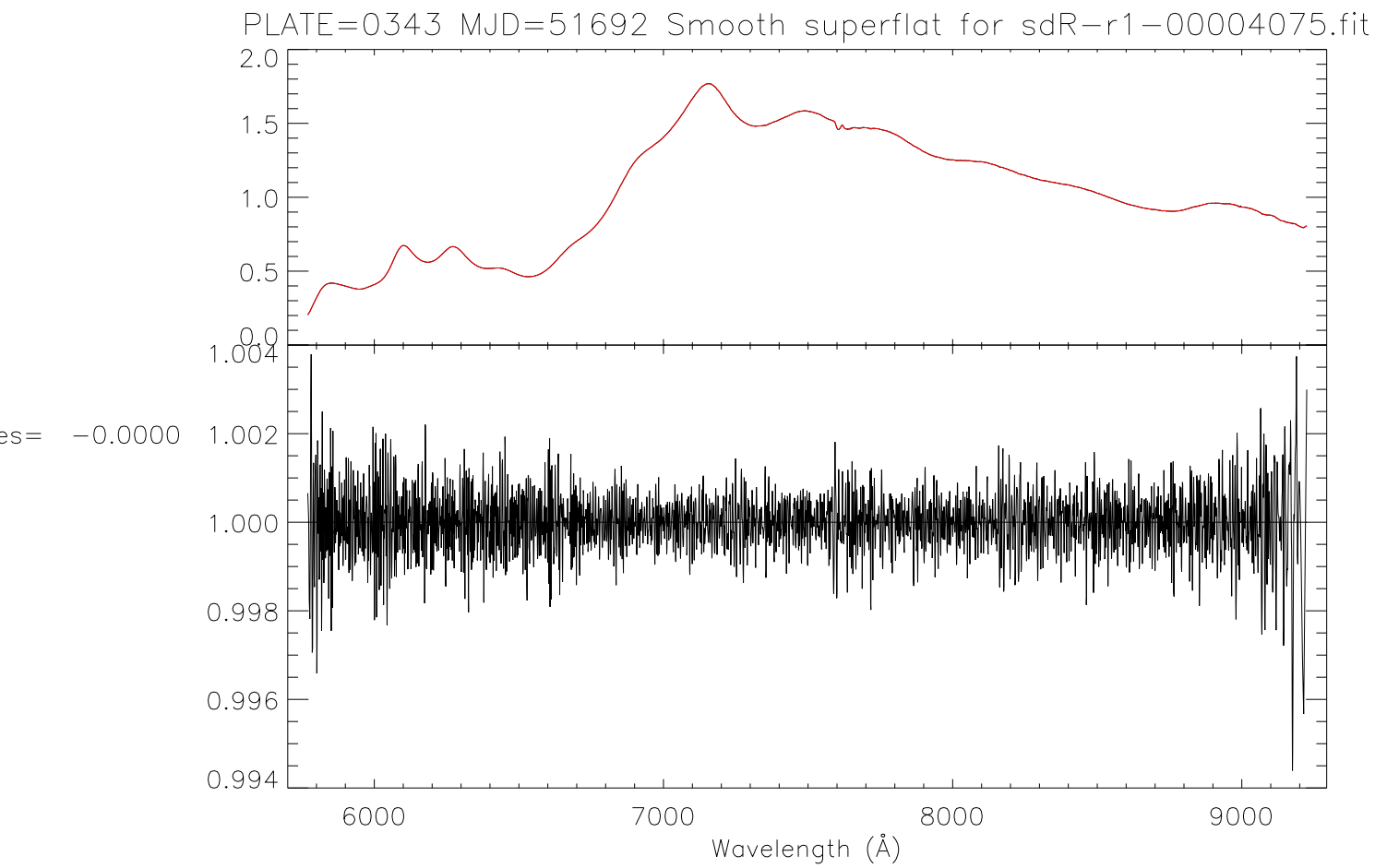

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

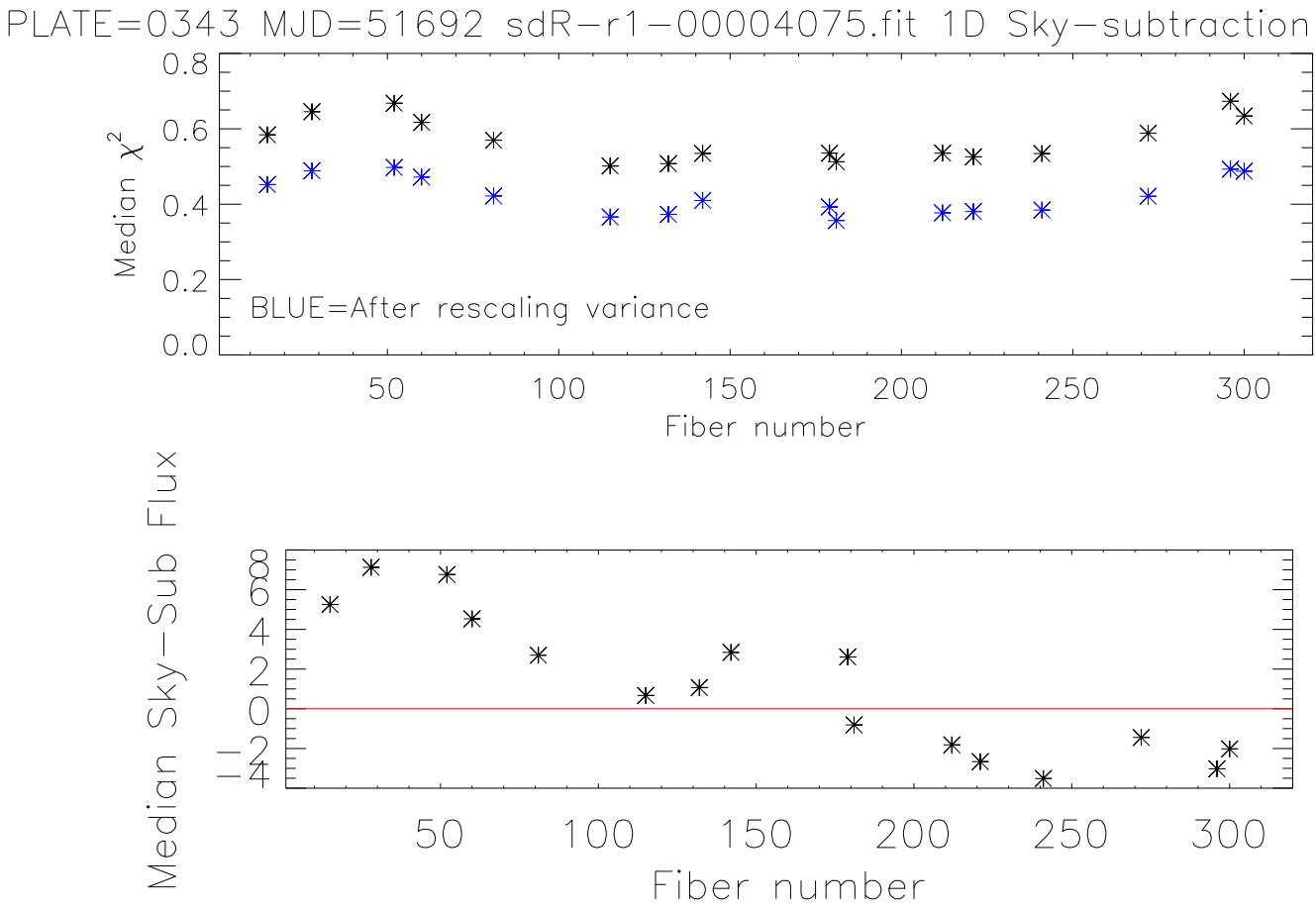

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

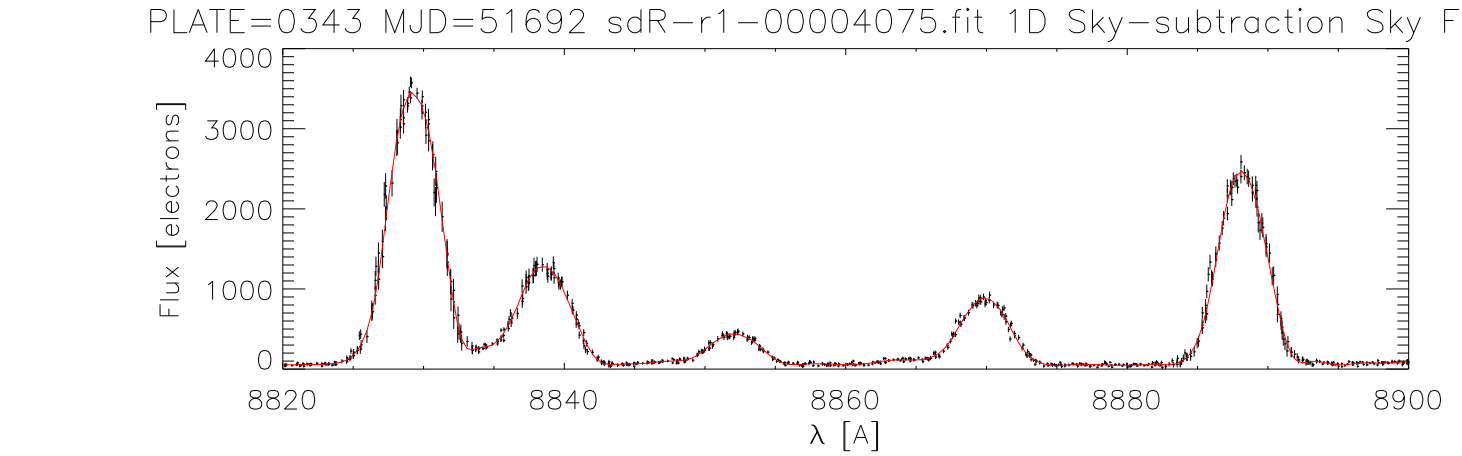

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd2 16
stdev 0.33
extrd 0.32
stdev 0.33
extrd 0.31
stdev 0.37
extrd 0.28
stdev 0.37
extrd 0.25
stdev 0.43
extrd 0.18
stdev 0.32
extrd 0.20
stdev 0.35
extrd 0.23
stdev 0.30
extrd 0.25
stdev 0.36
extrd 0.24
stdev 0.26
extrd 0.26
stdev 0.29
extrd 0.22
stdev 0.32
extrd 0.24

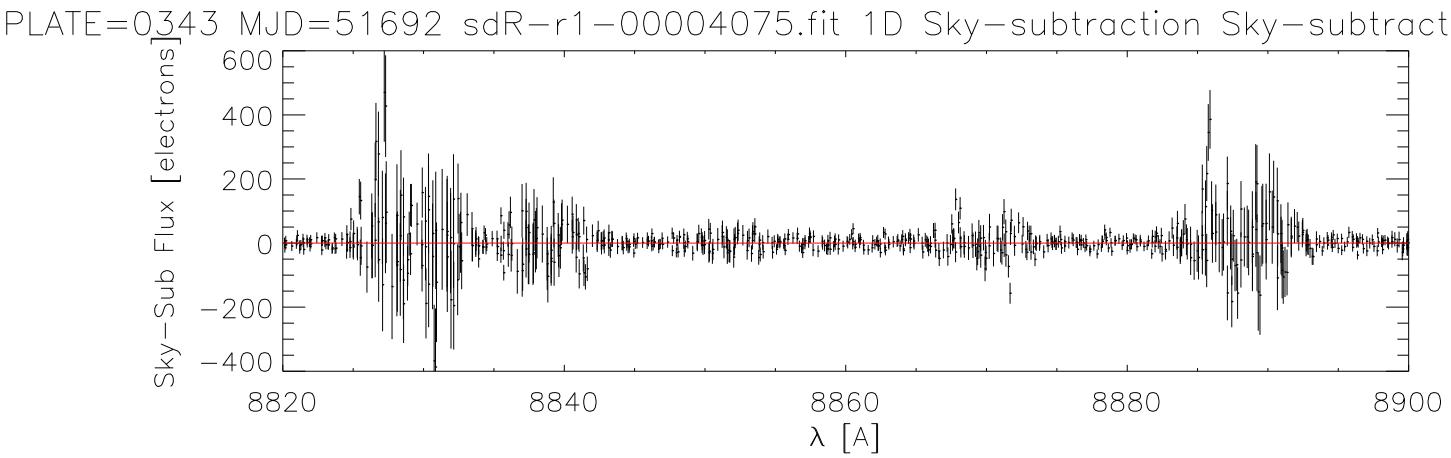

sky shift, pixels
−0.20
−0.25
−0.30
5000
6000
7000
8000
9000
10000

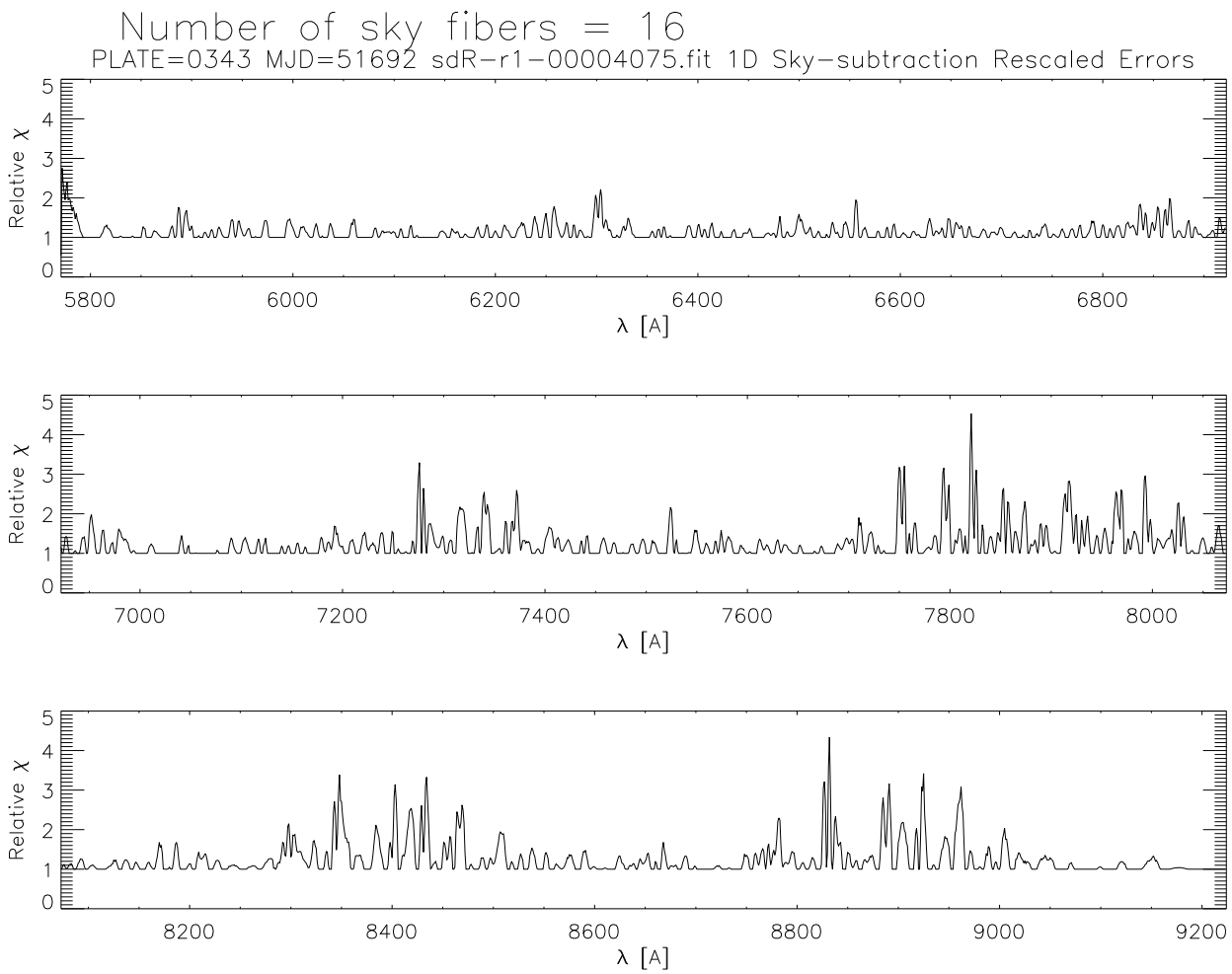

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004075.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

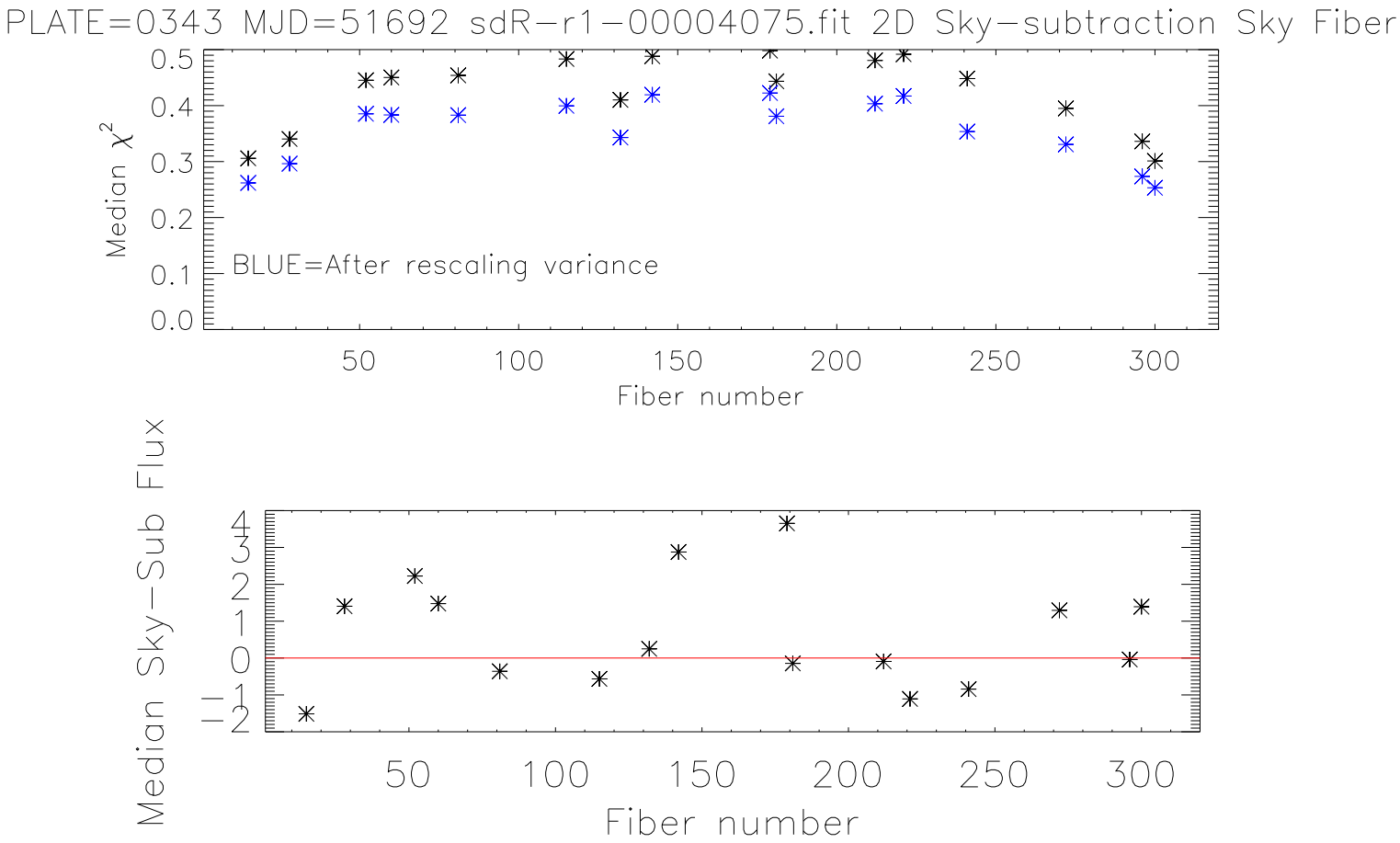

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

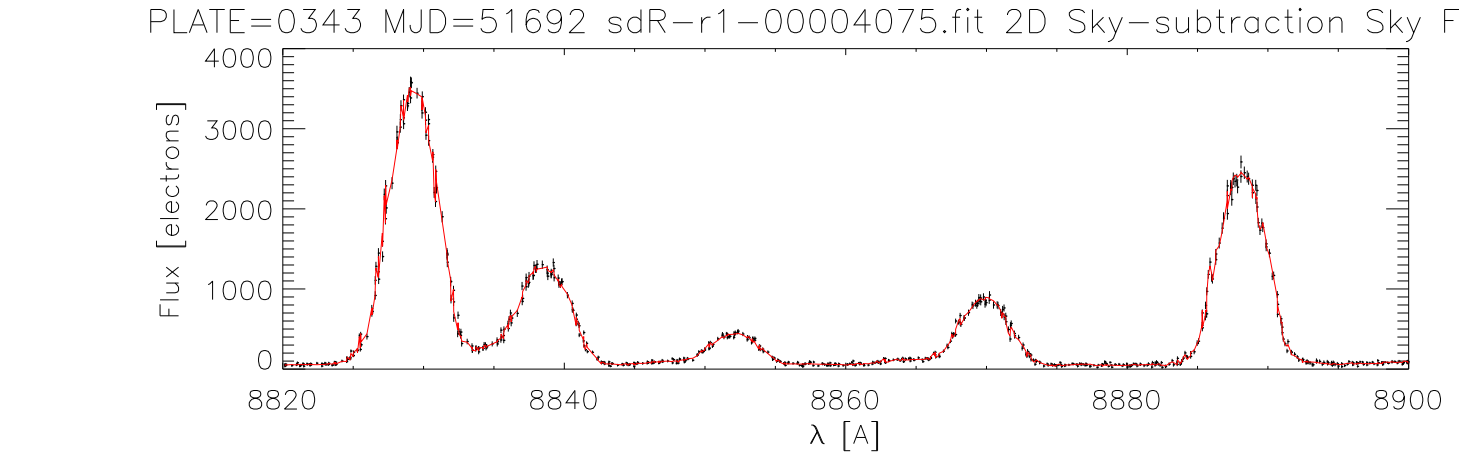
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

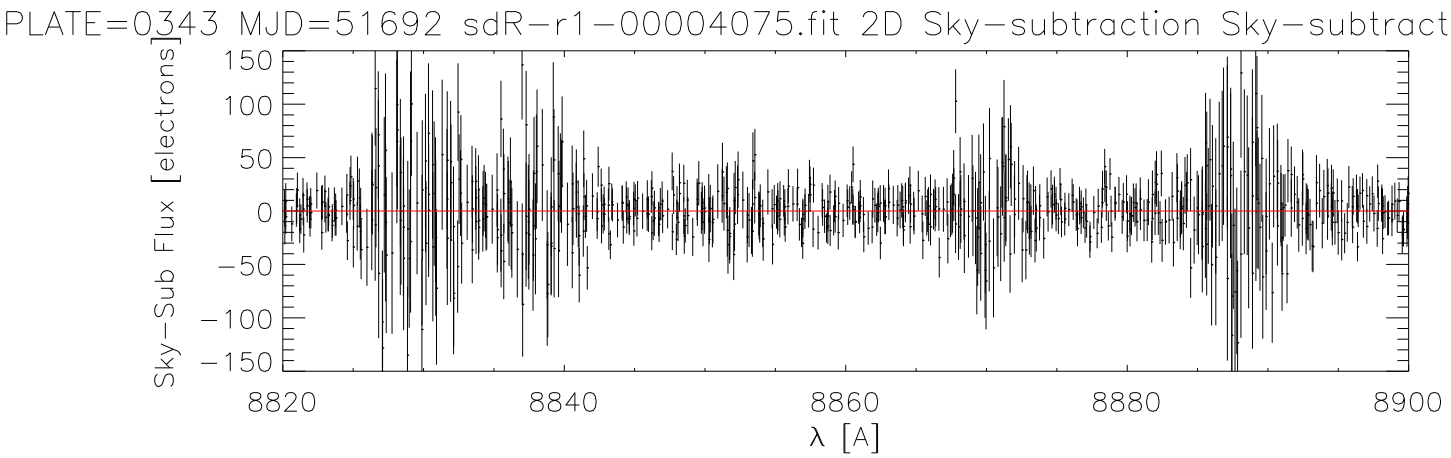

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

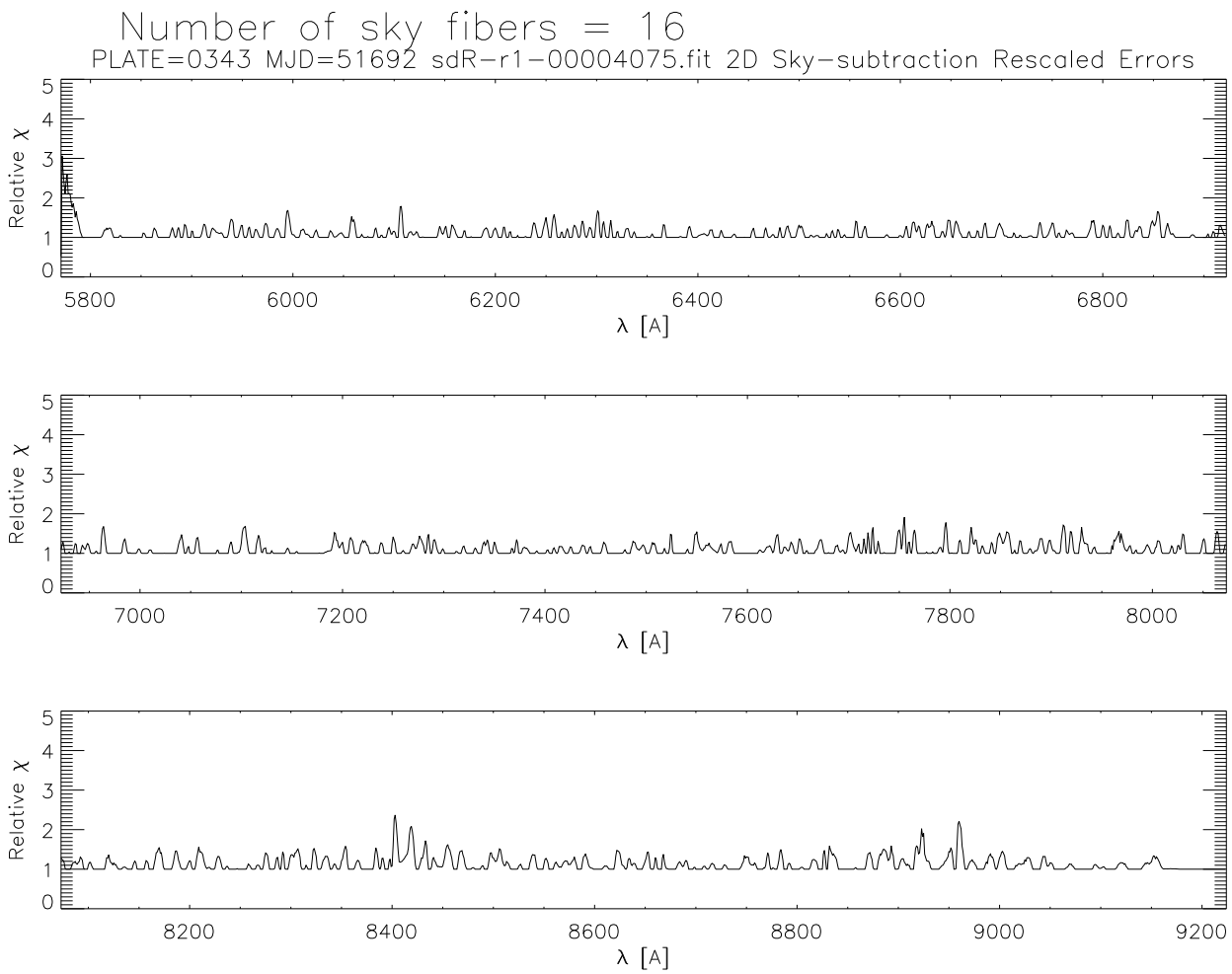

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

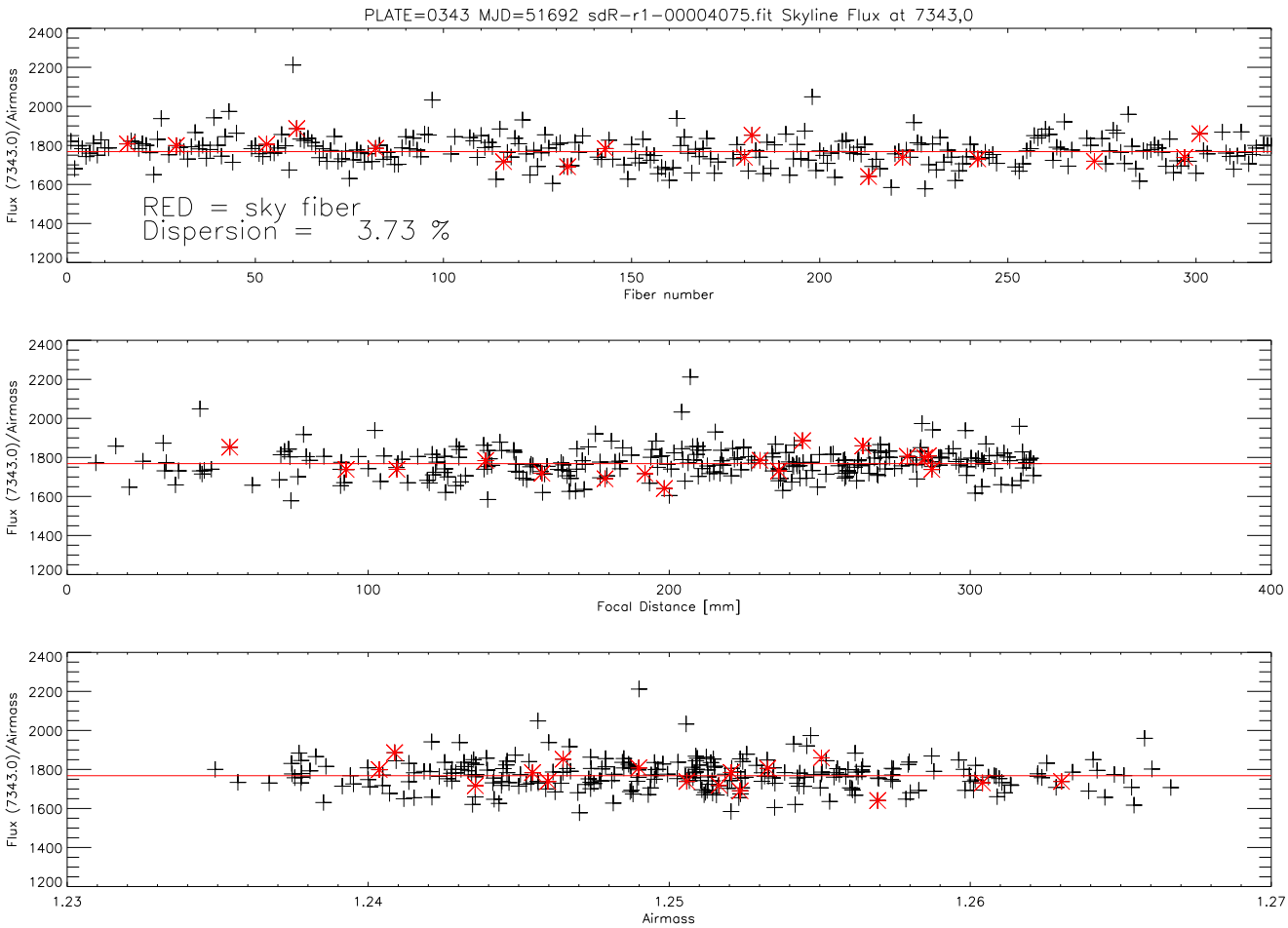

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004075.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

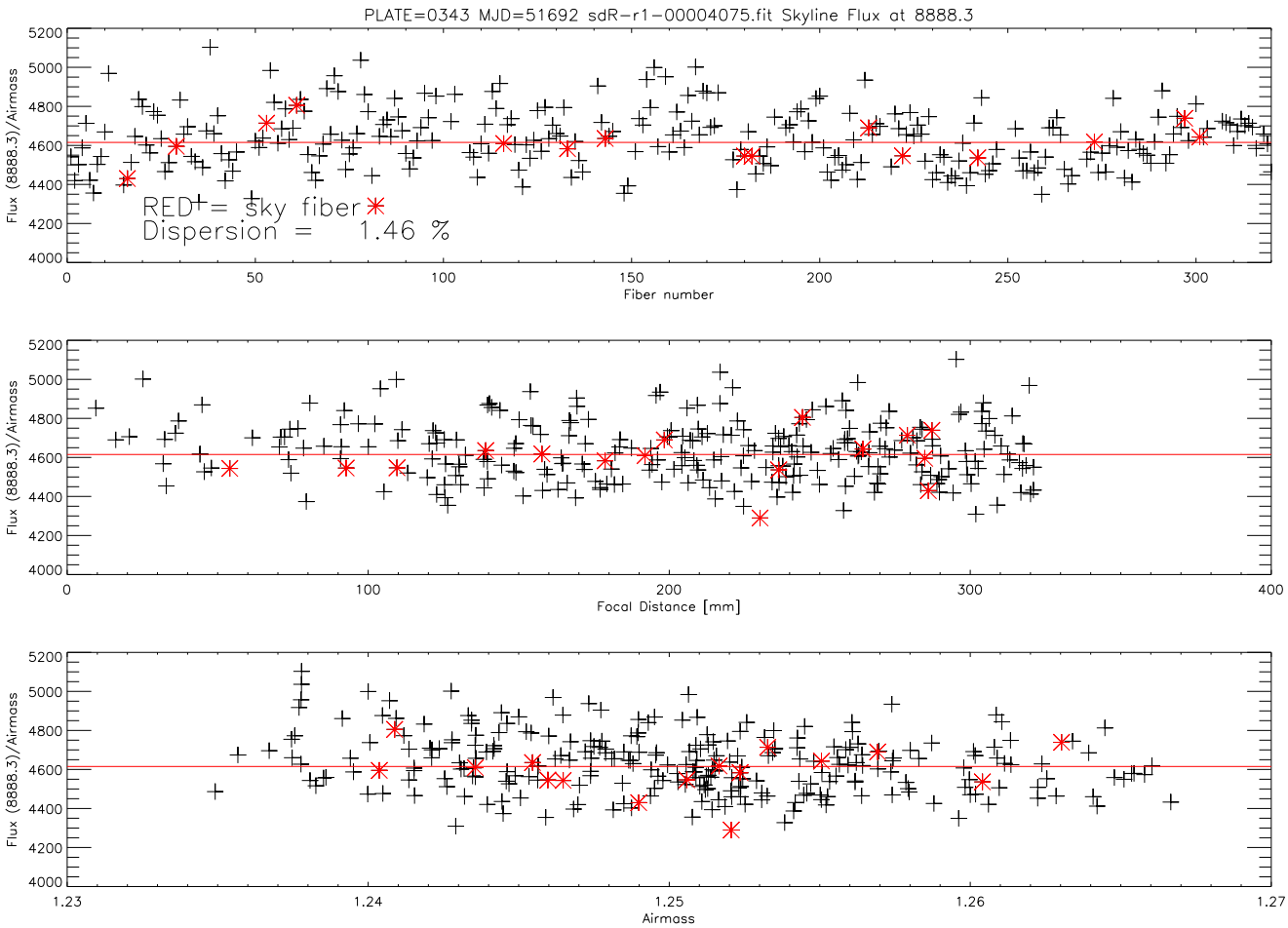

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

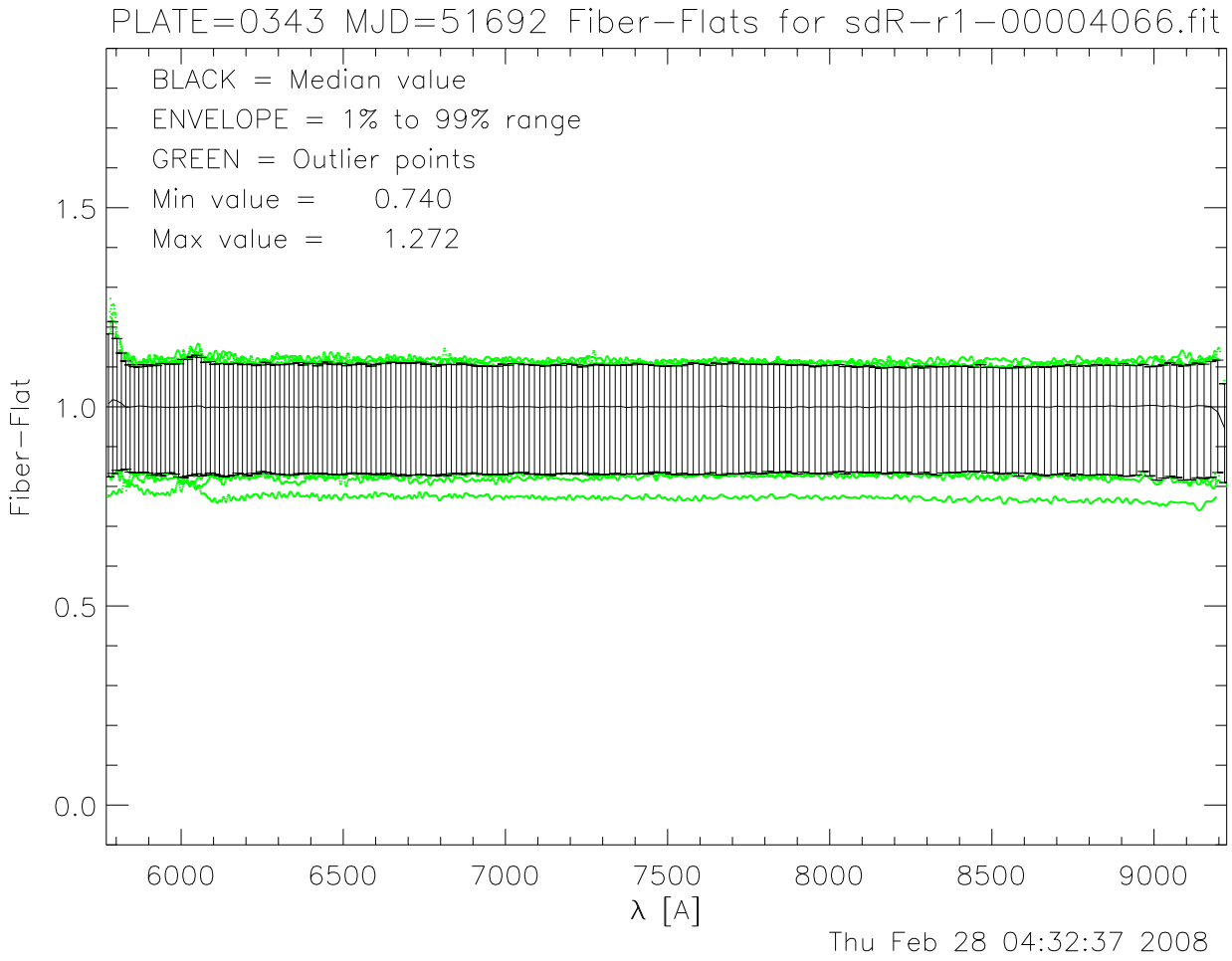

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

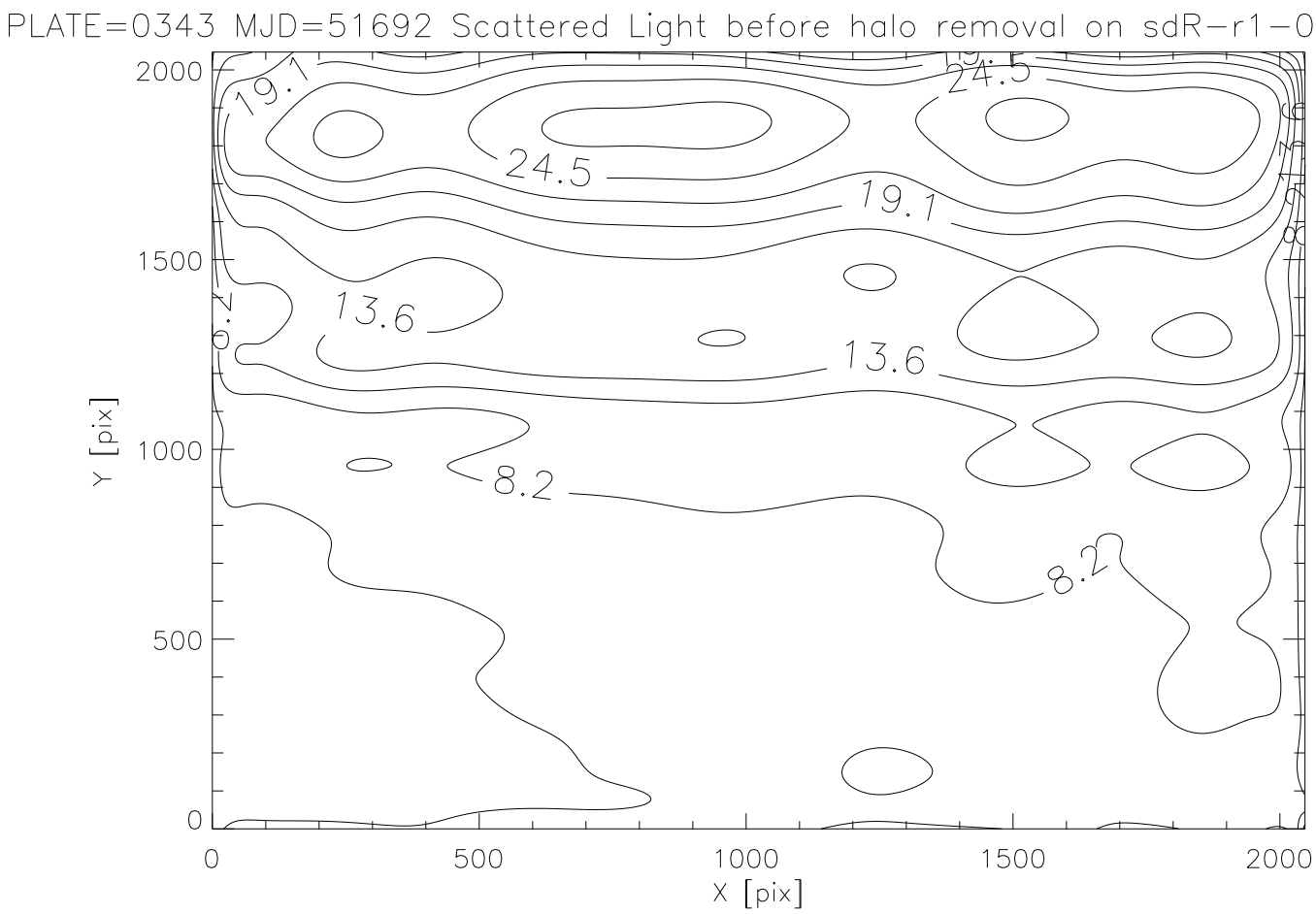

PLATE=0343 MJD=51692 sdR-r1-00004075.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

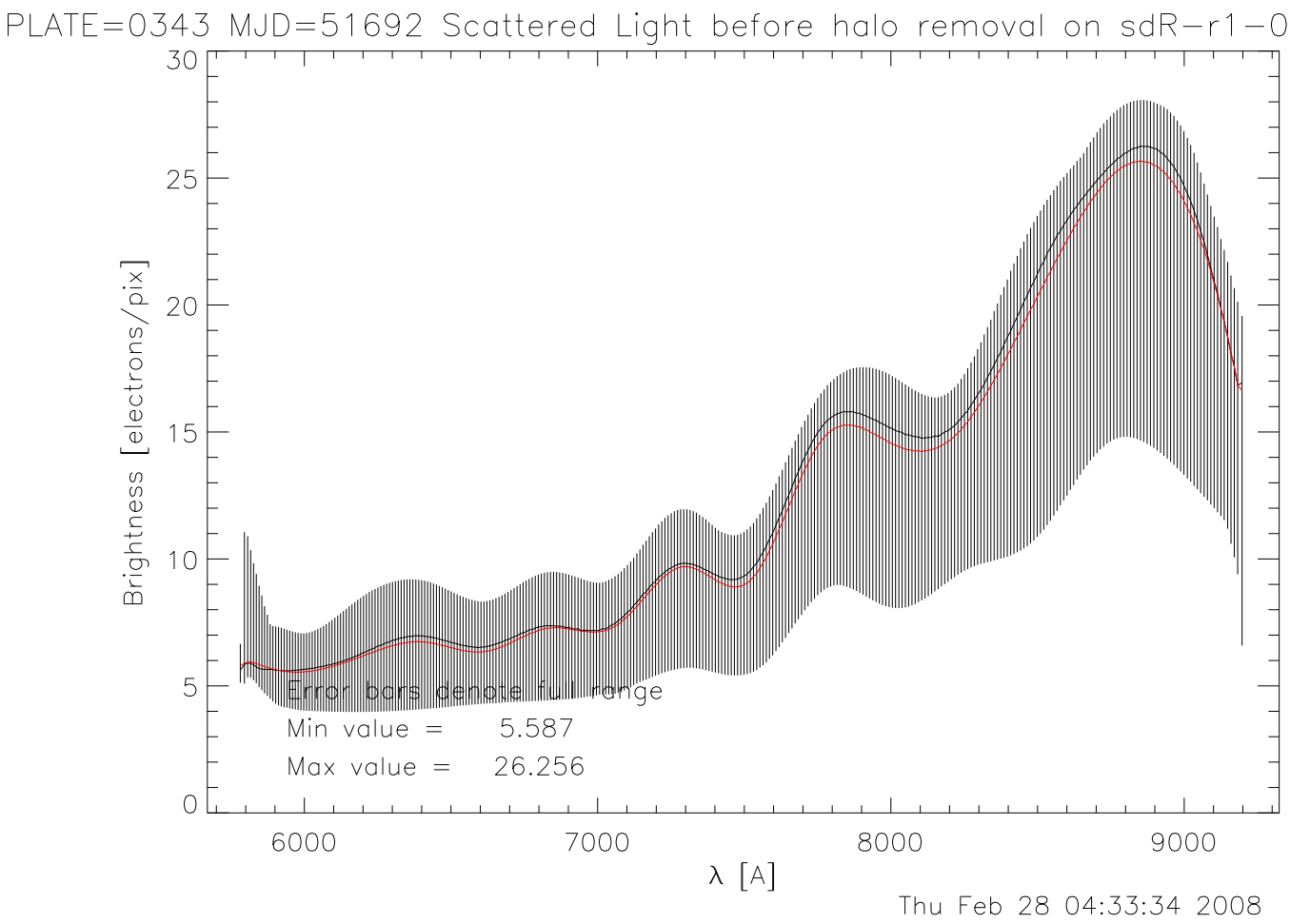

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004075.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

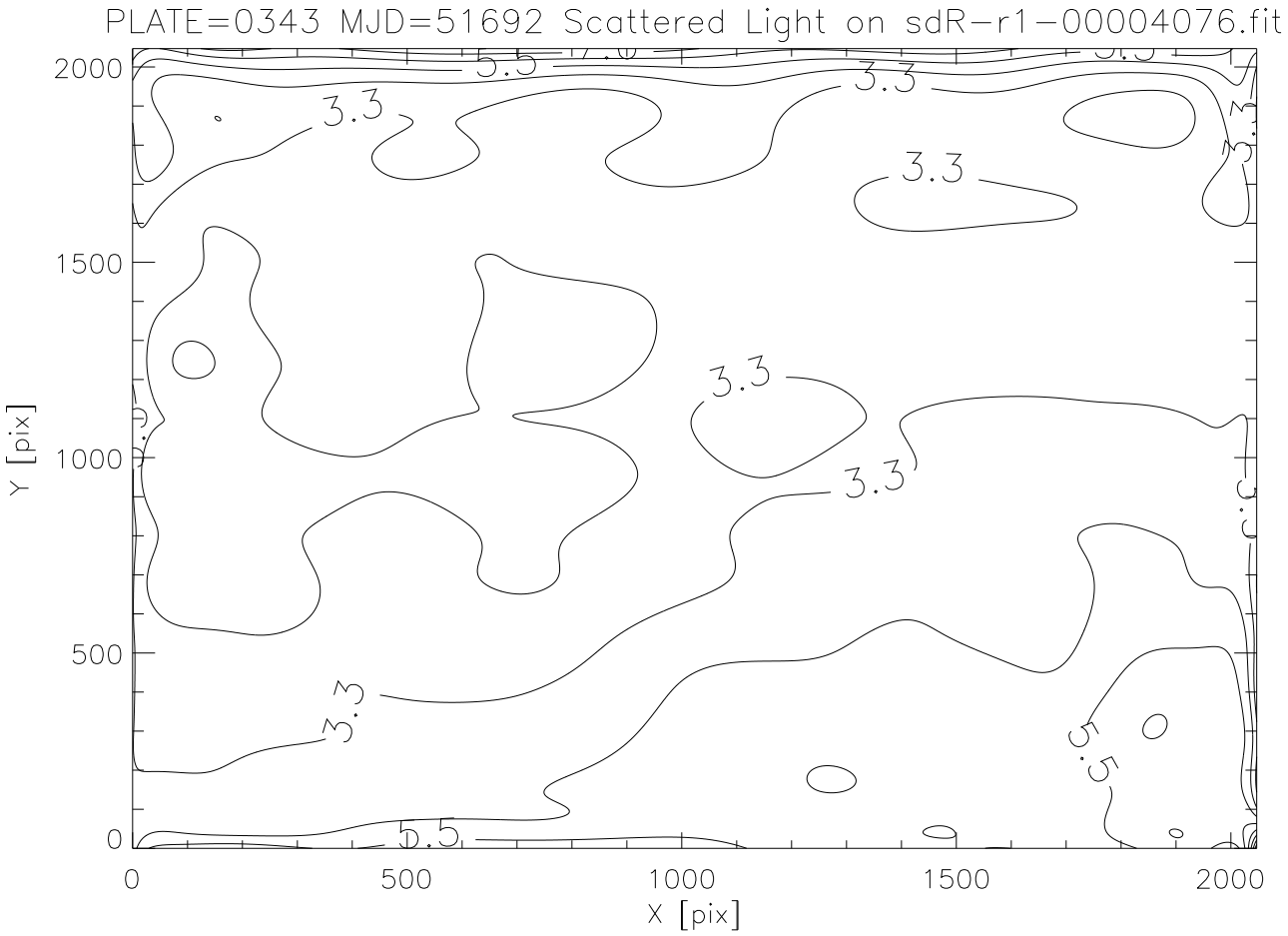

PLATE=0343 MJD=51692 sdR-r1-00004075.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.73 %
Fiber number
Focal Distance [mm]
Airmass

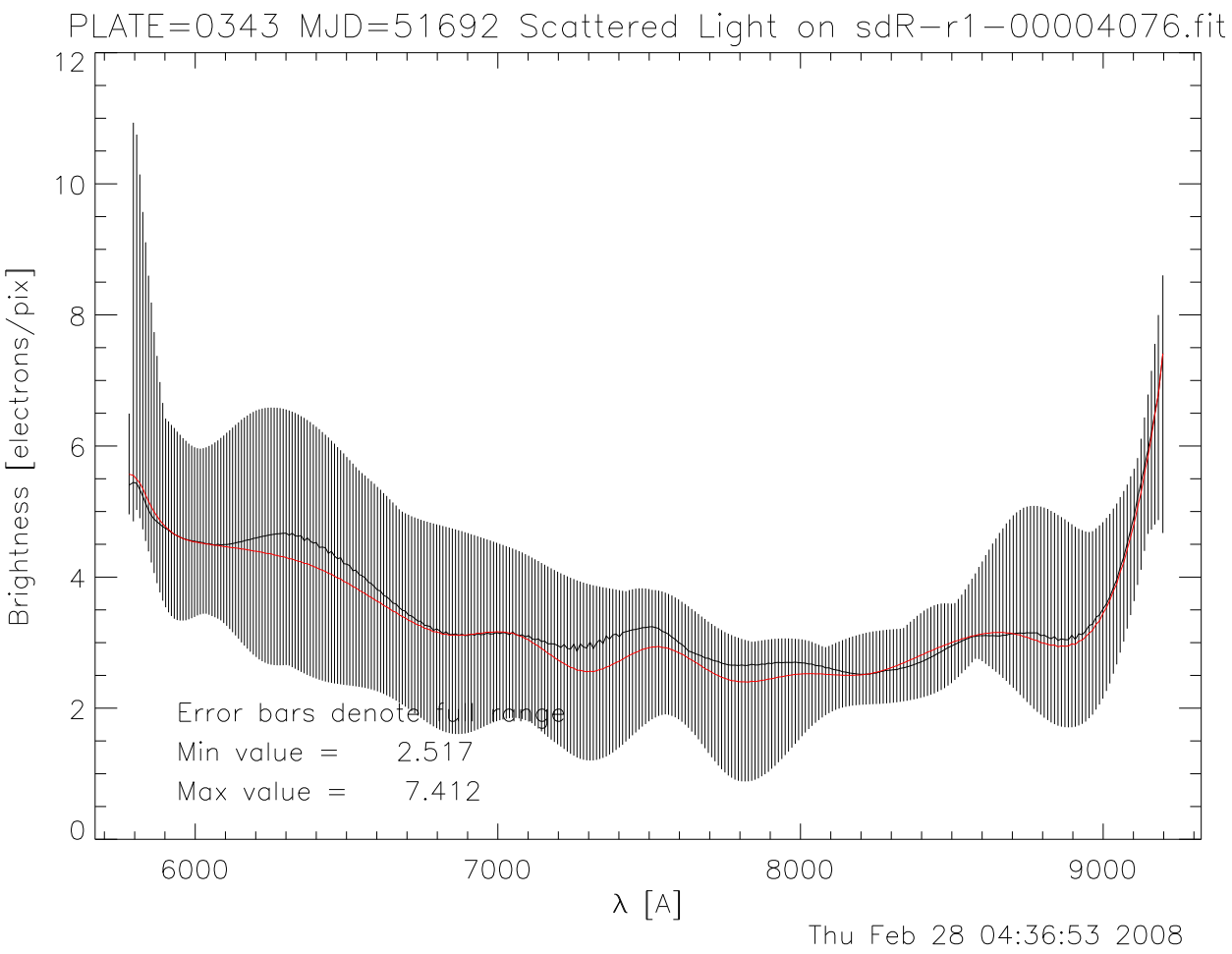

PLATE=0343 MJD=51692 sdR-r1-00004075.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED= sky fiber
Dispersion = 1.46 %
Fiber number
Focal Distance [mm]
Airmass

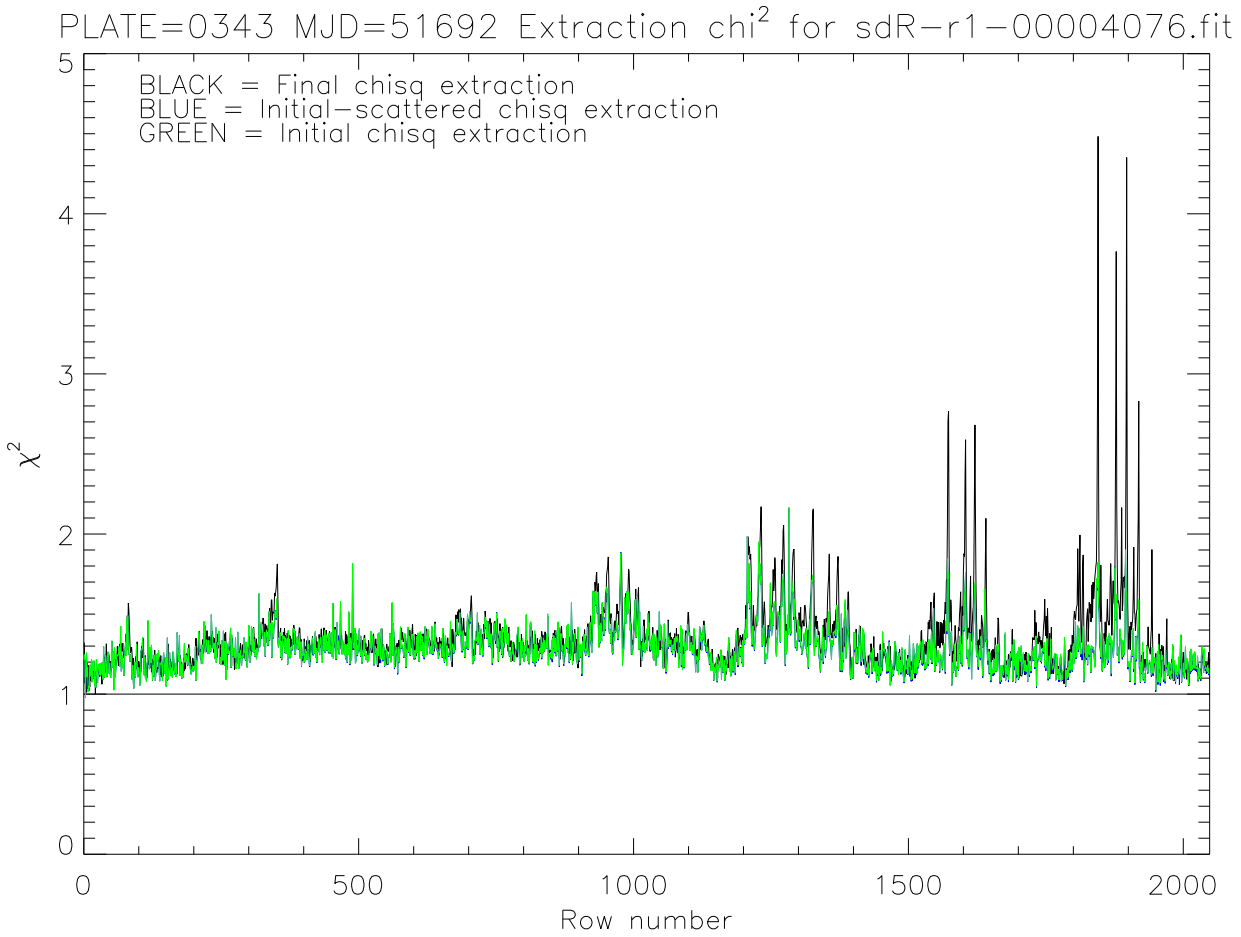

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r1-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.740
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:32:37 2008

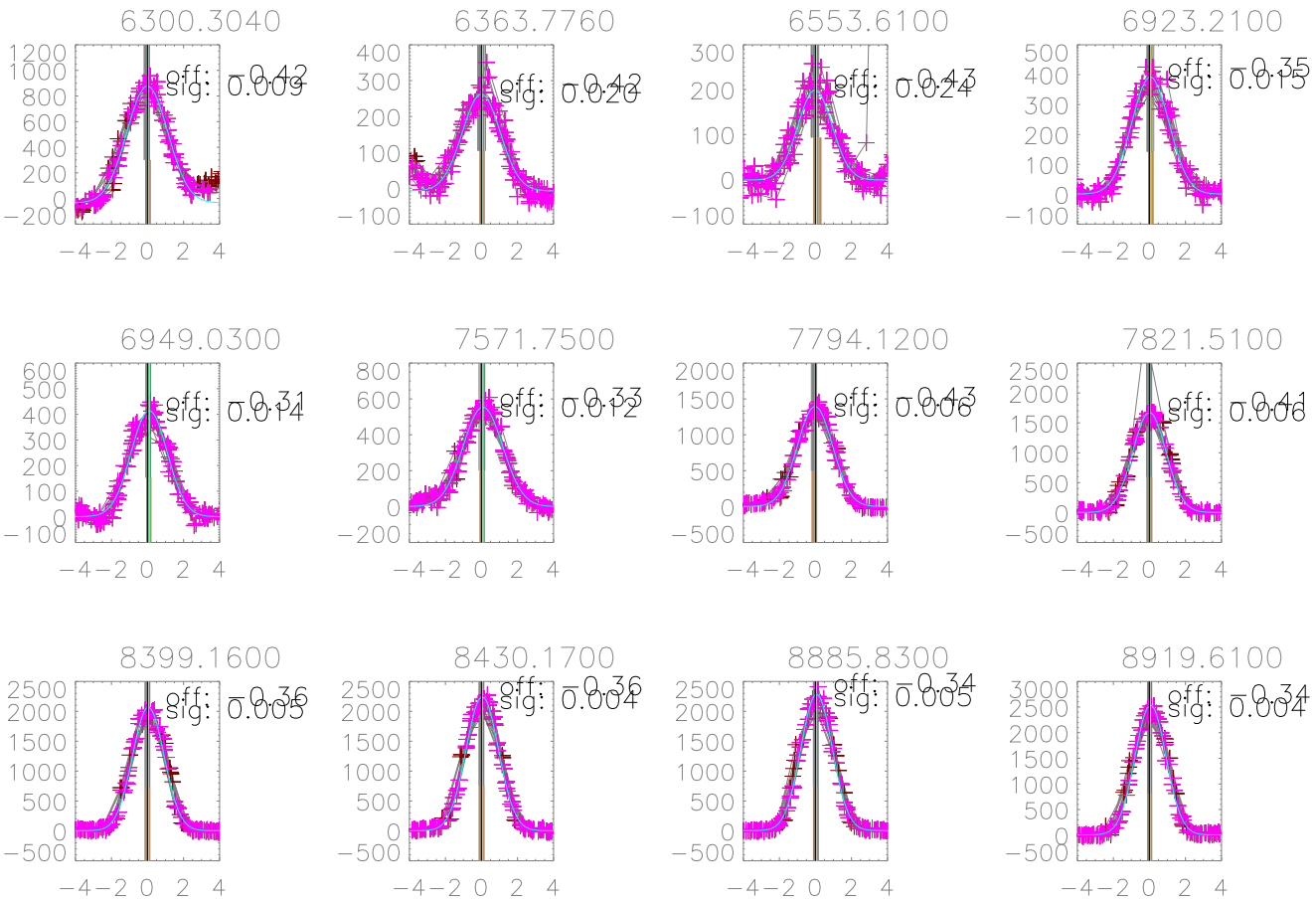

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004076.fi
24.5
19.1
13.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

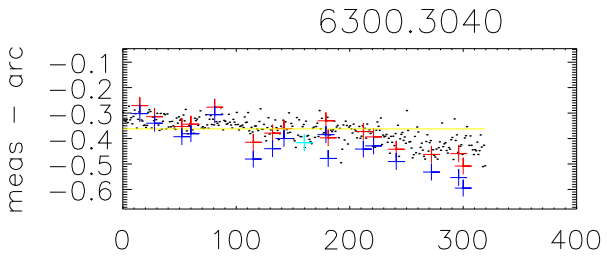

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r1-00004076.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.587
Max value = 26.256
Thu Feb 28 04:33:34 2008

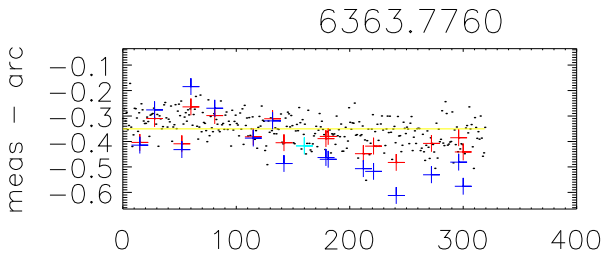

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004076.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.3
5.5

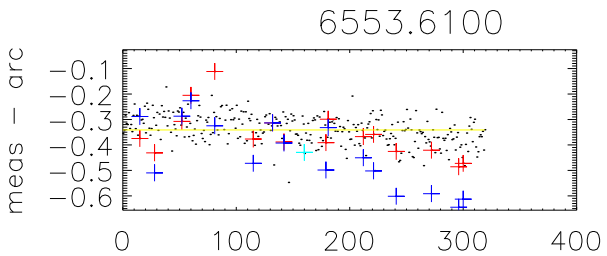

PLATE=0343 MJD=51692 Scattered Light on sdR-r1-00004076.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.517
Max value = 7.412
Thu Feb 28 04:36:53 2008

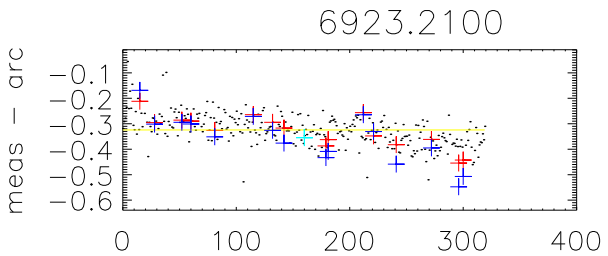

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r1−00004076.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

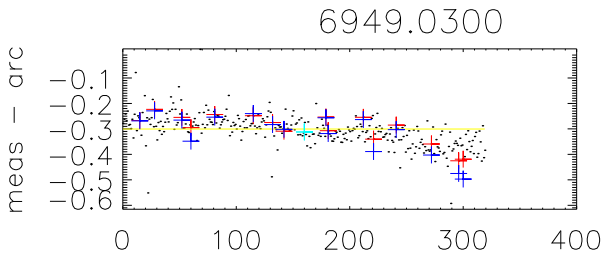

6300.3040
off: −0.42
sig: 0.009
6363.7760
off: −0.42
sig: 0.020
6553.6100
off: −0.43
sig: 0.024
6923.2100
off: −0.35
sig: 0.015
6949.0300
off: −0.31
sig: 0.014
7571.7500
off: −0.33
sig: 0.012
7794.1200
off: −0.43
sig: 0.006
7821.5100
off: −0.41
sig: 0.006
8399.1600
off: −0.36
sig: 0.005
8430.1700
off: −0.36
sig: 0.004
8885.8300
off: −0.34
sig: 0.005
8919.6100
off: −0.34
sig: 0.004

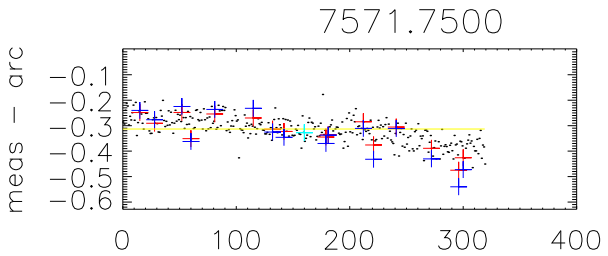

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

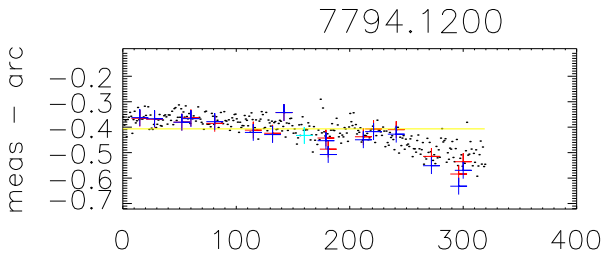

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

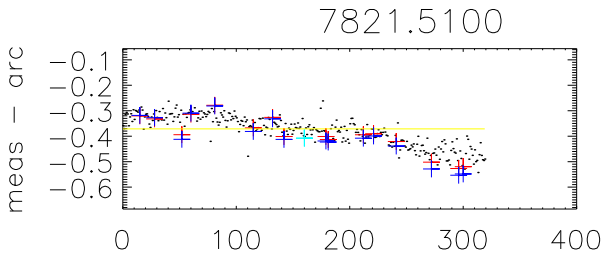

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

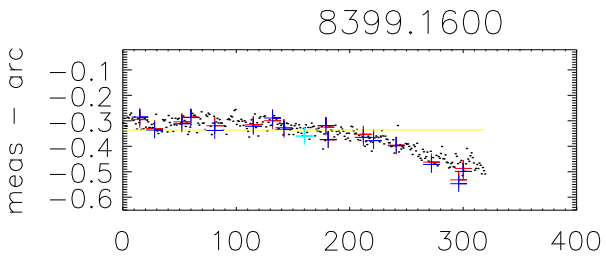

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

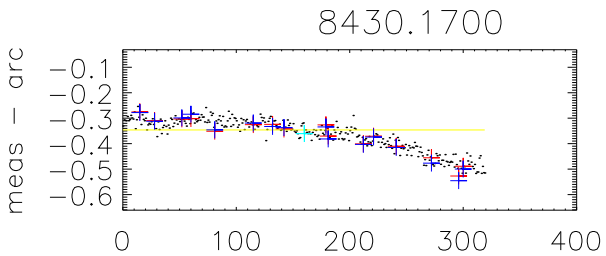

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

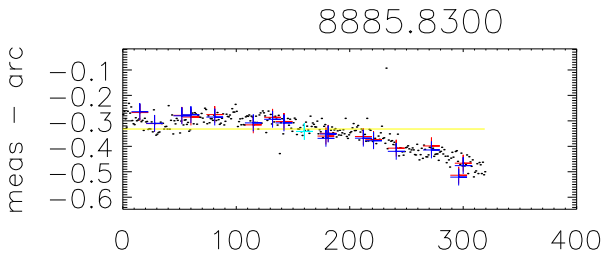

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

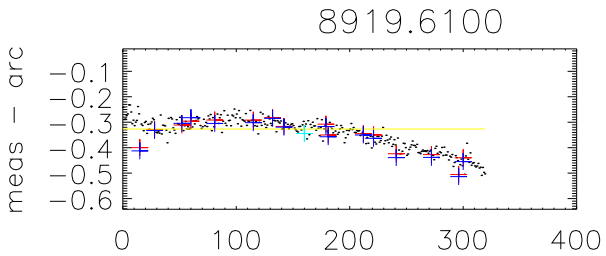

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

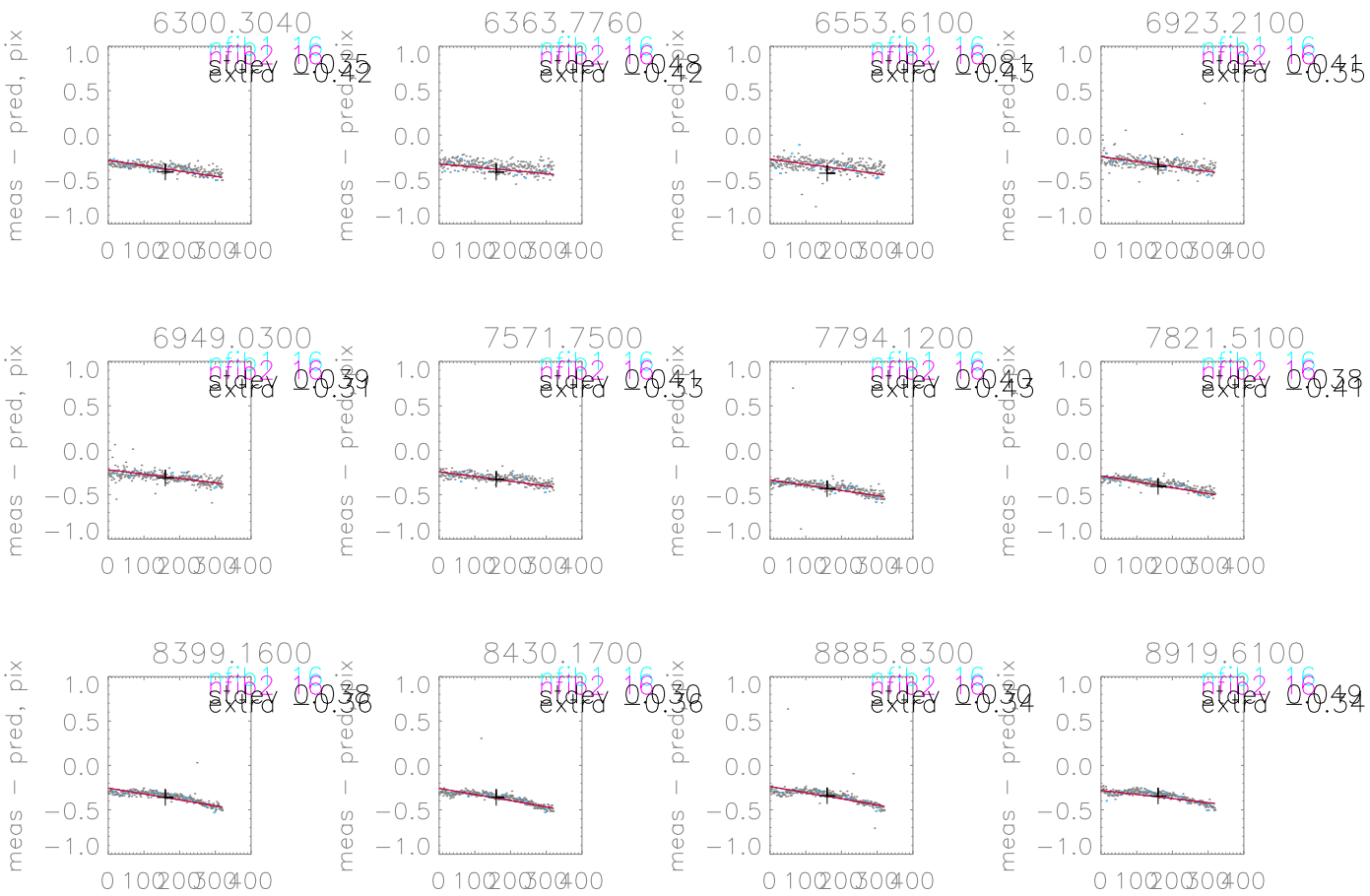

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

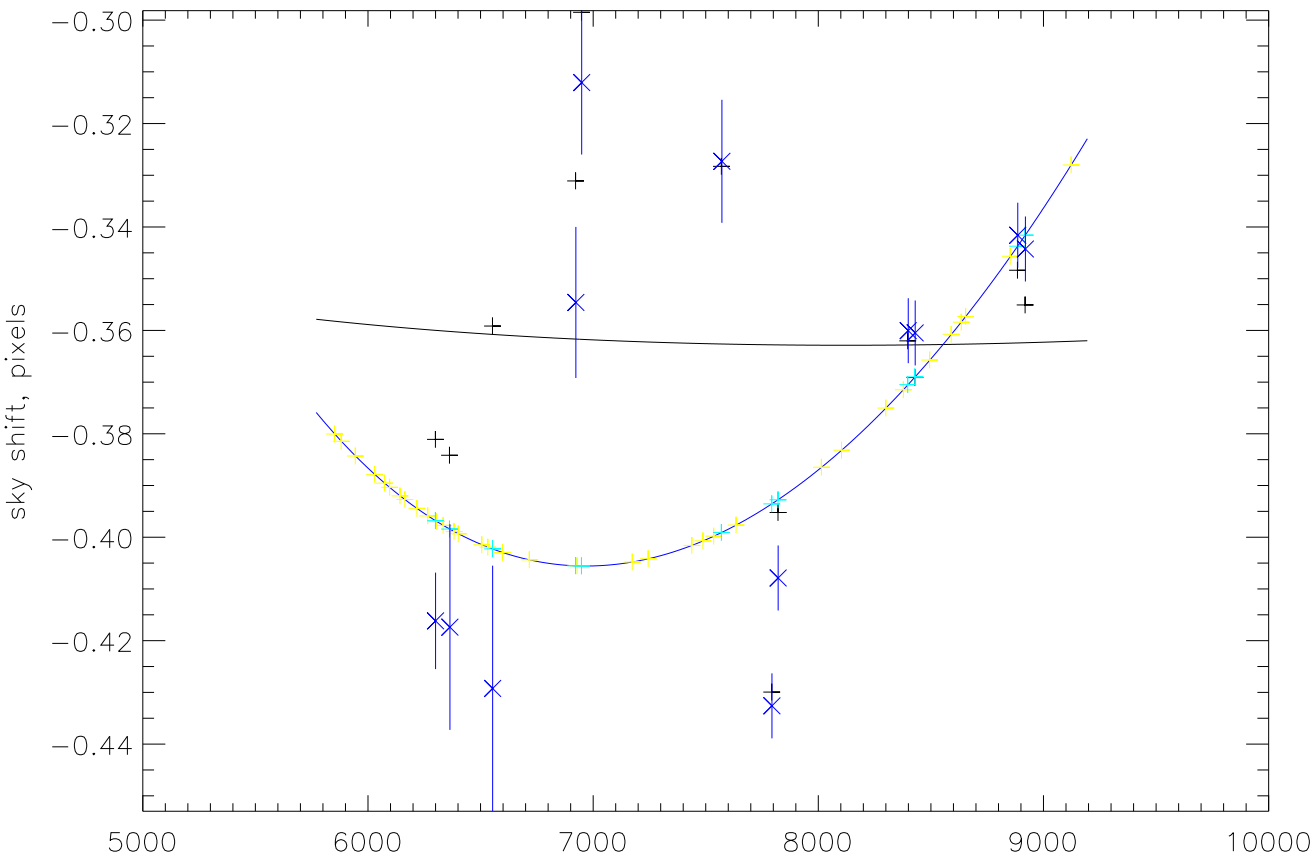

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

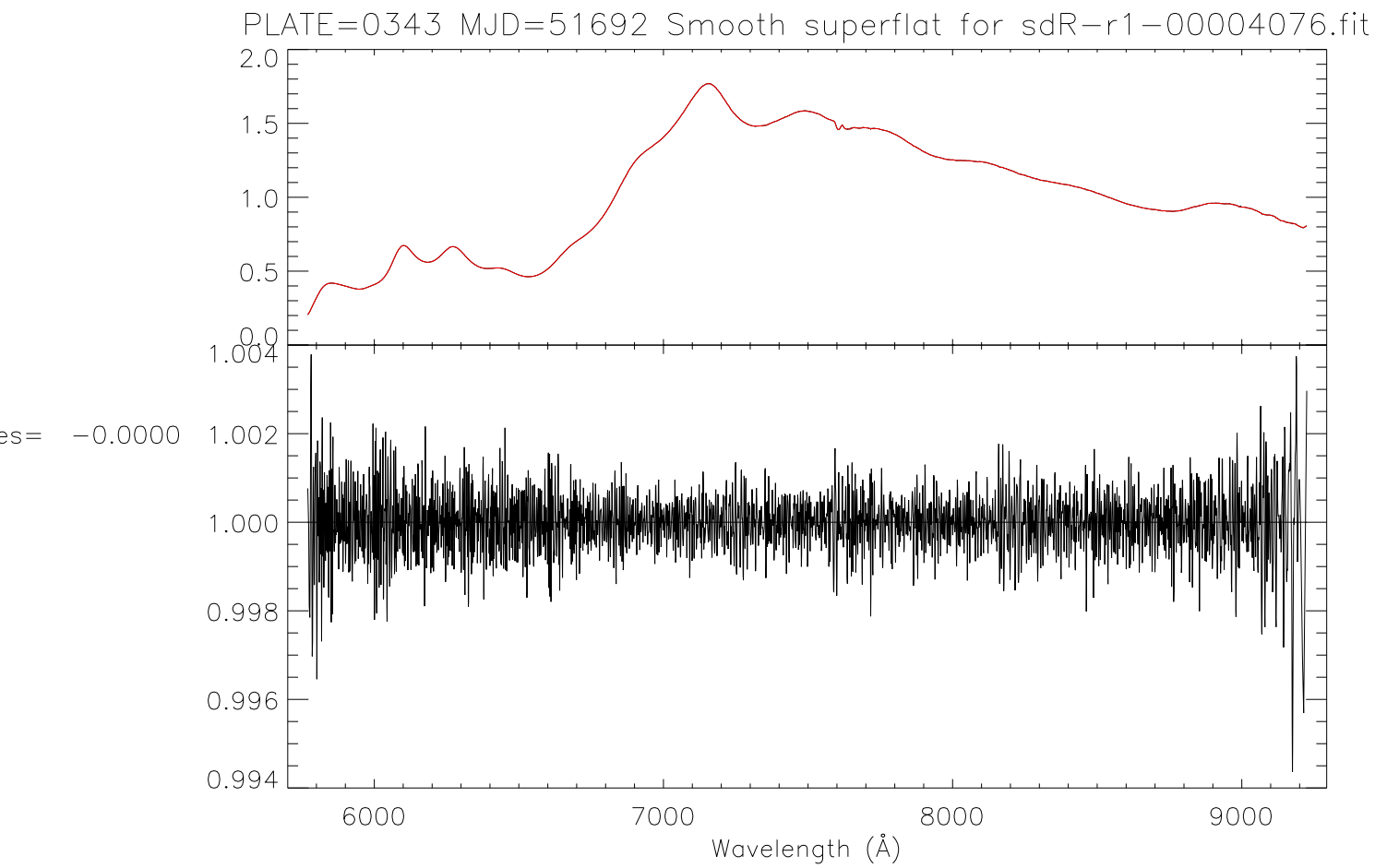

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

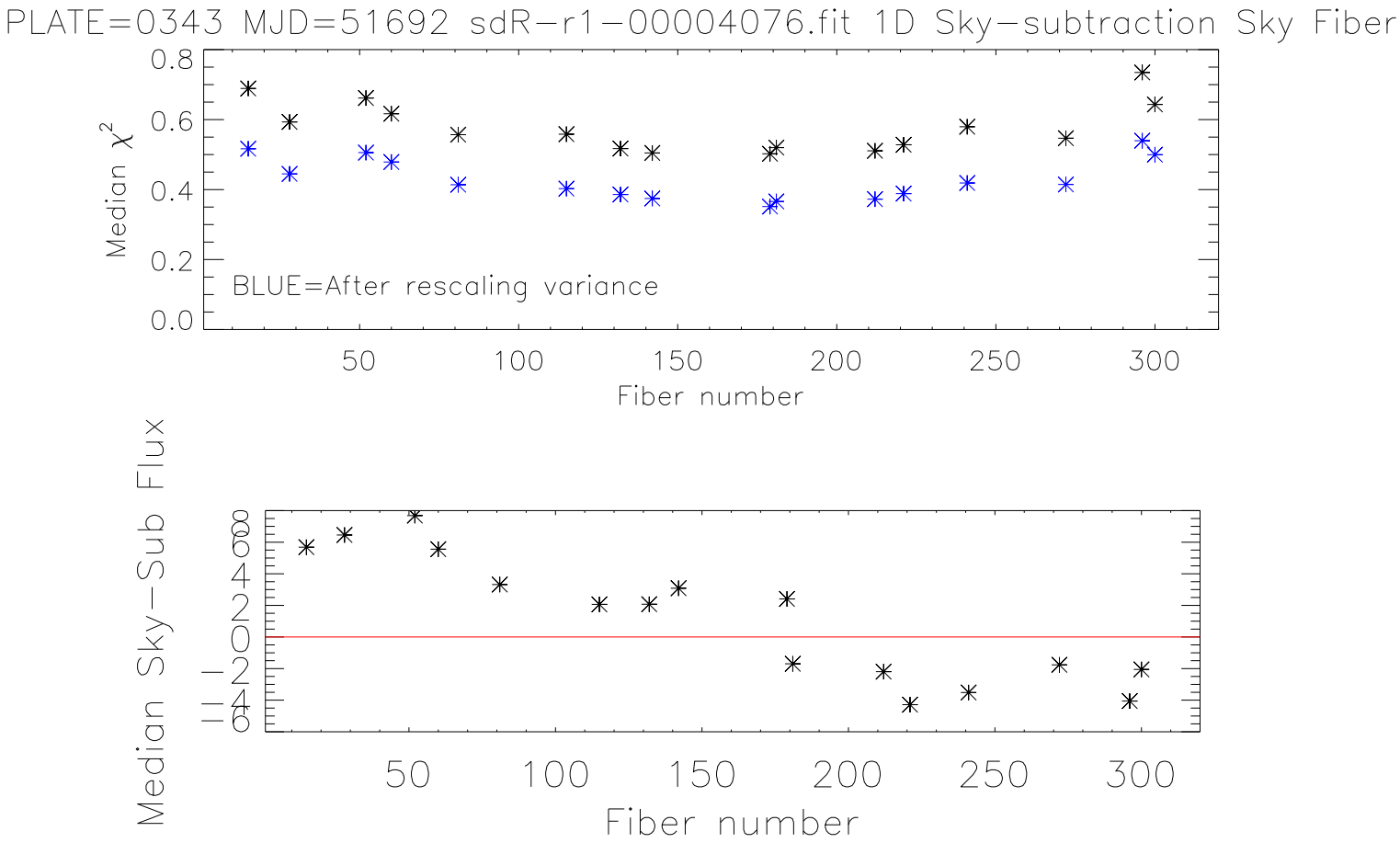

8885.8300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

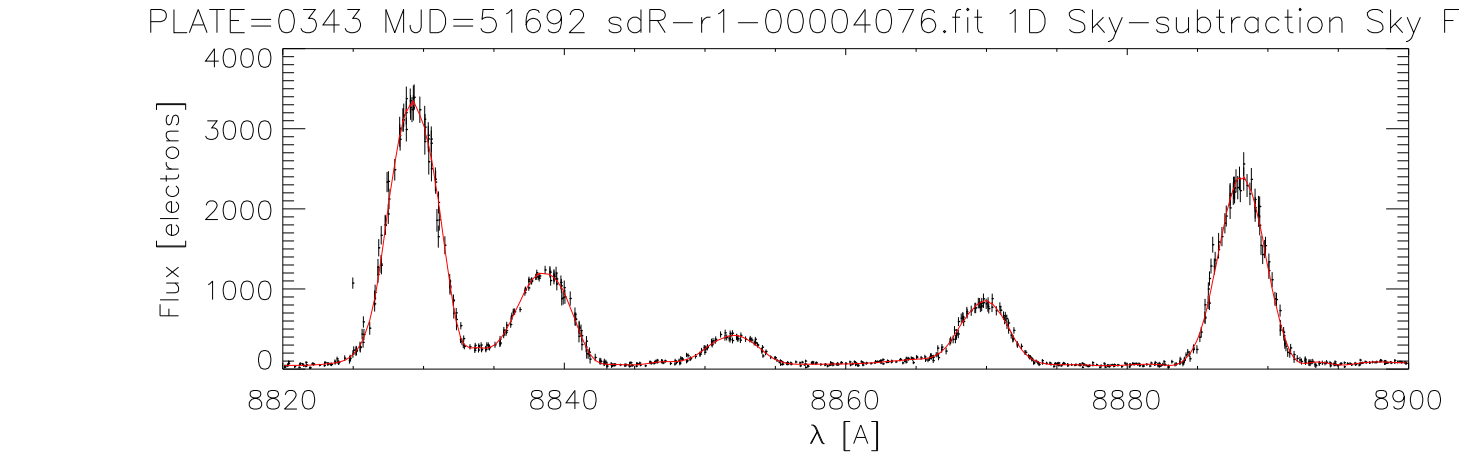

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

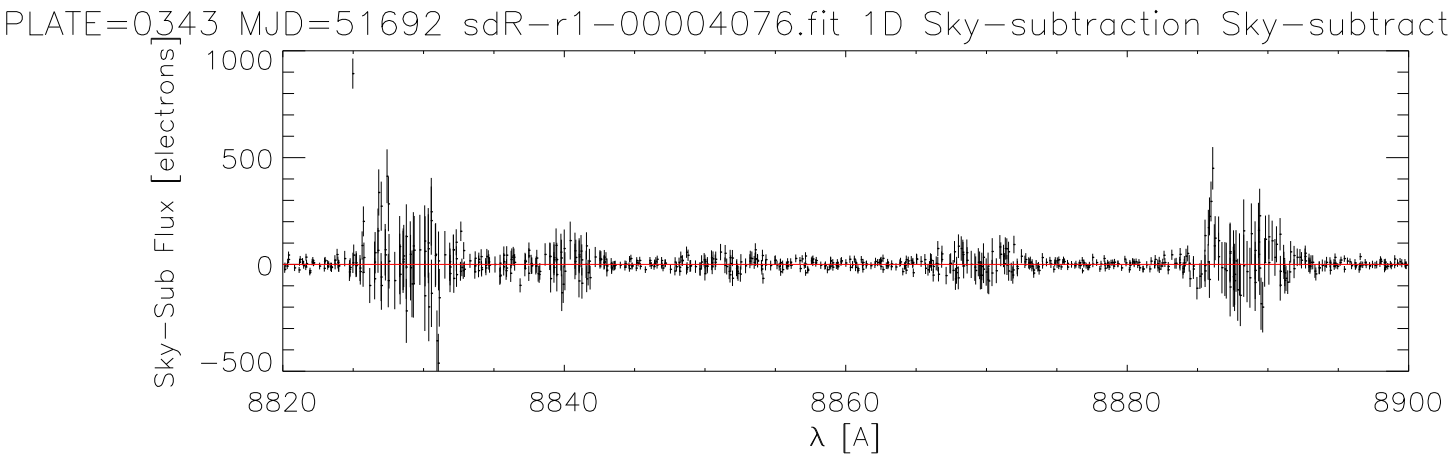

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 16
stdev 0.35
extrd 0.42
stdev 0.48
extrd 0.42
stdev 0.81
extrd 0.43
stdev 0.41
extrd 0.35
stdev 0.39
extrd 0.31
stdev 0.41
extrd 0.33
stdev 0.40
extrd 0.43
stdev 0.38
extrd 0.41
stdev 0.38
extrd 0.36
stdev 0.30
extrd 0.36
stdev 0.30
extrd 0.34
stdev 0.49
extrd 0.34

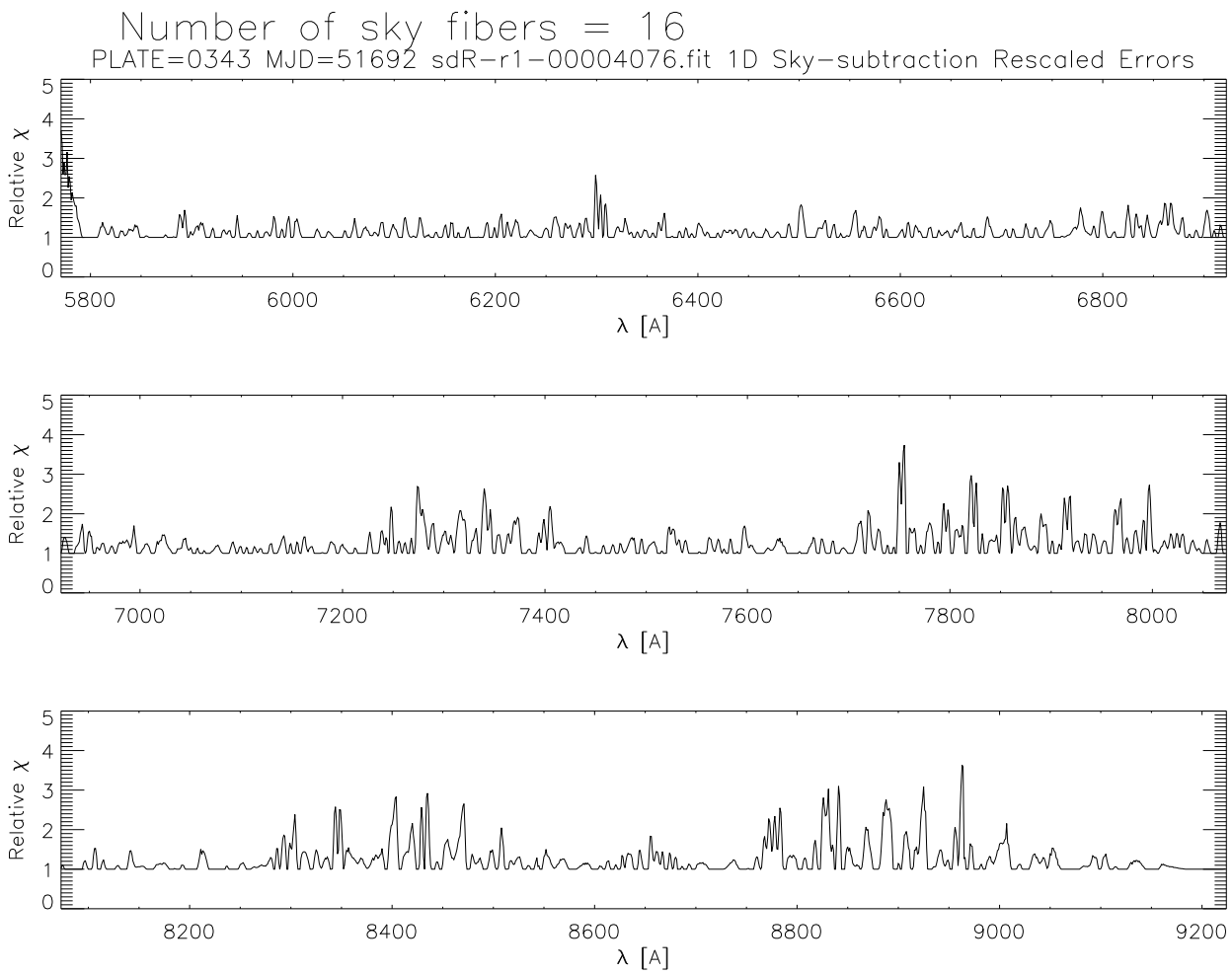

−0.30
−0.32
−0.34
−0.36
−0.38
−0.40
−0.42
−0.44
sky shift, pixels
5000
6000
7000
8000
9000
10000

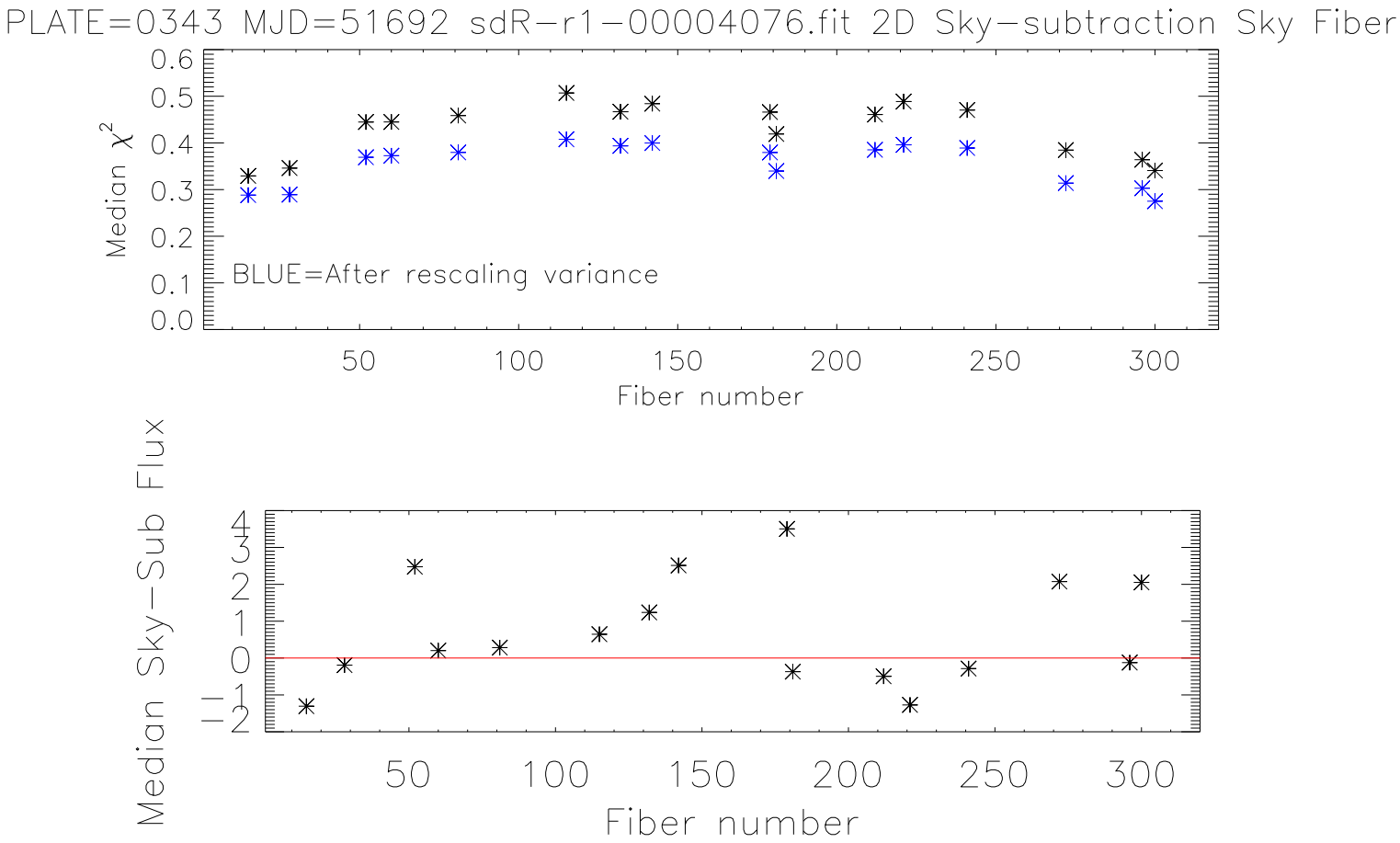

PLATE=0343 MJD=51692 Smooth superflat for sdR-r1-00004076.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

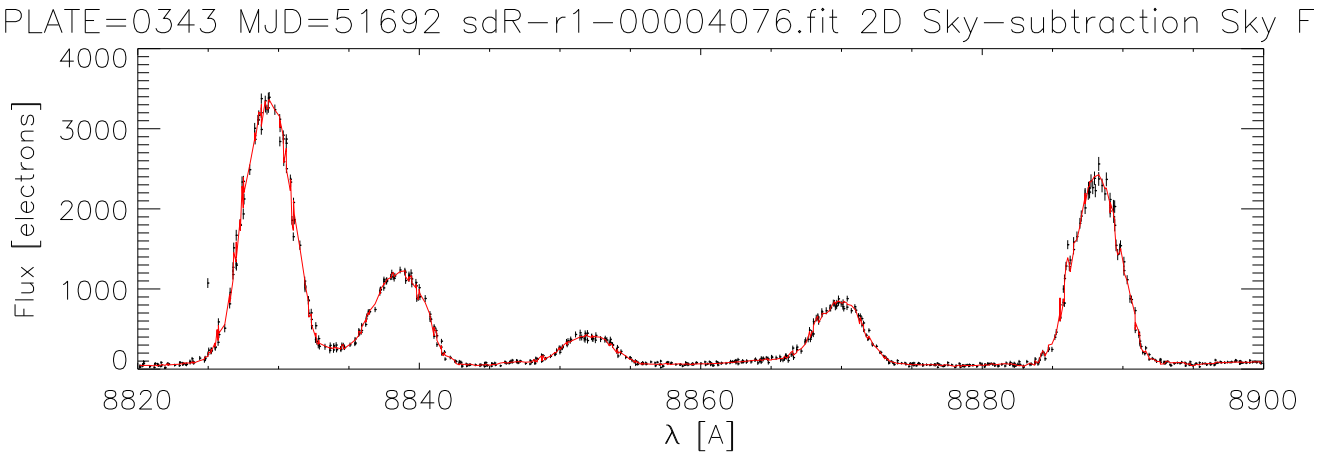

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

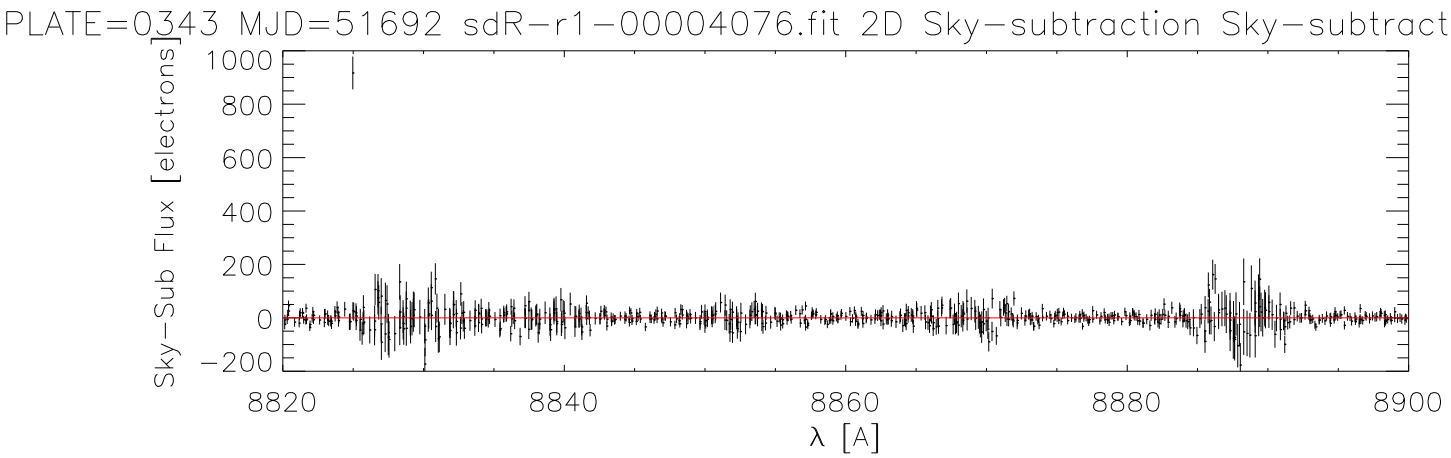

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

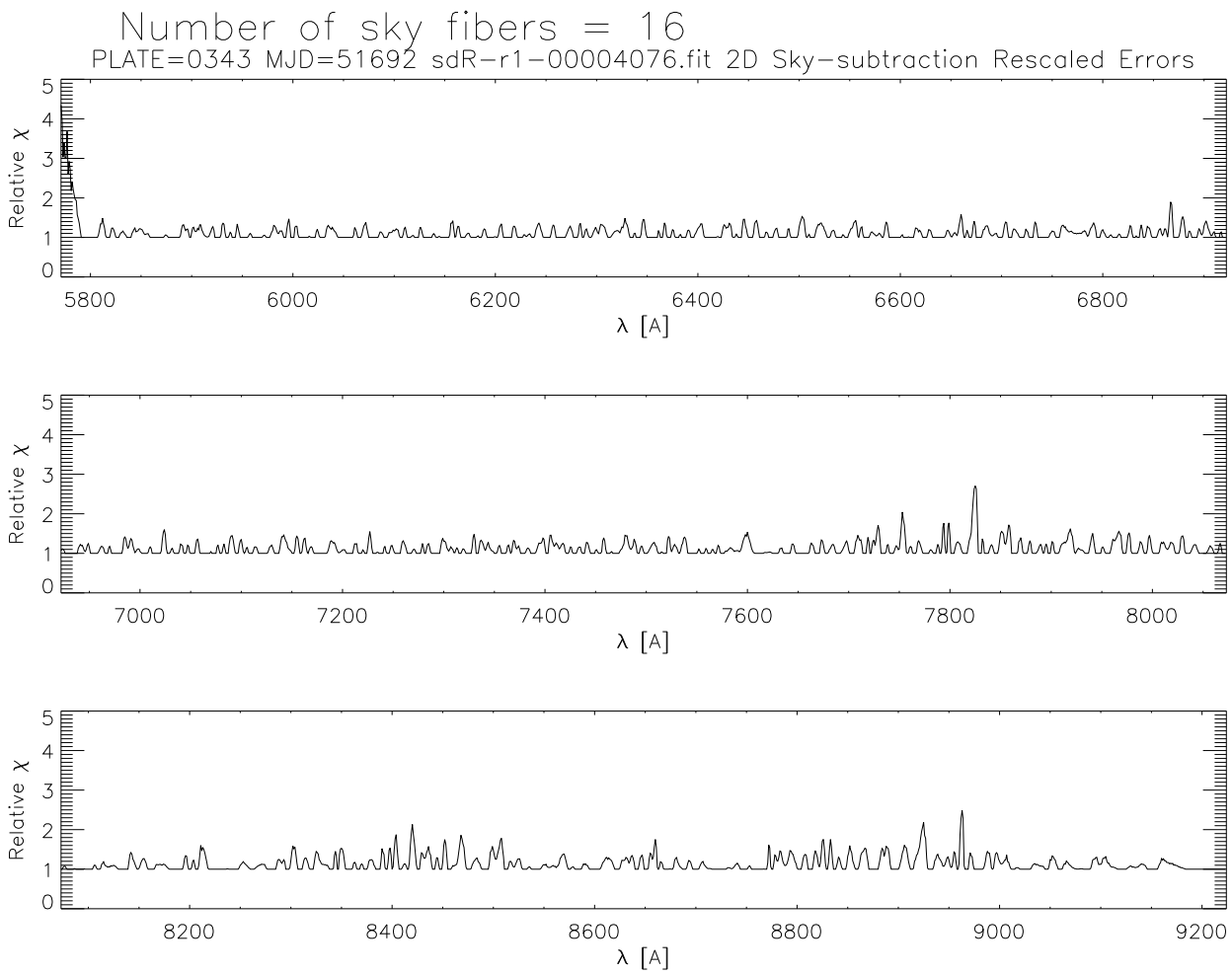

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

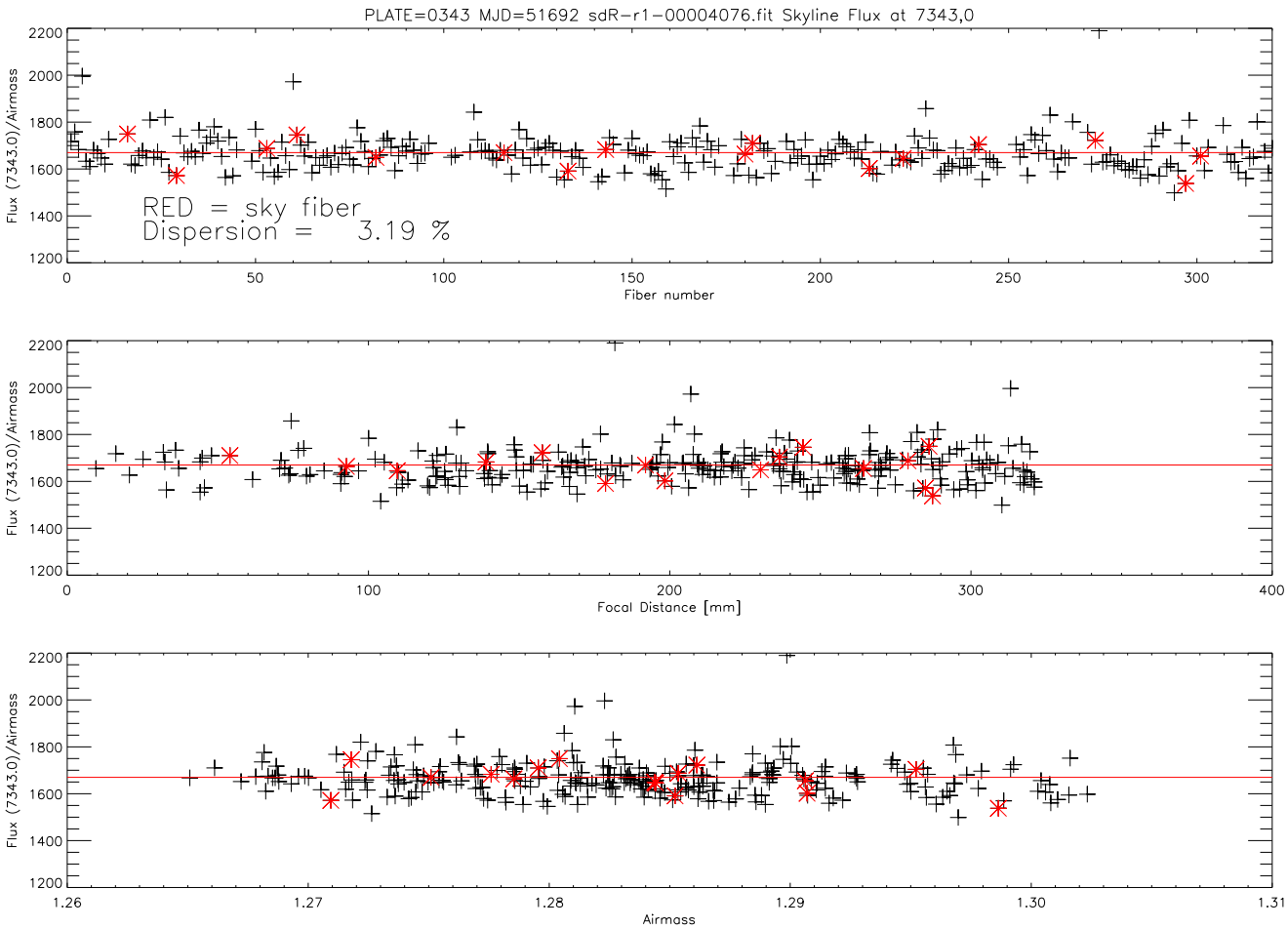

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004076.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

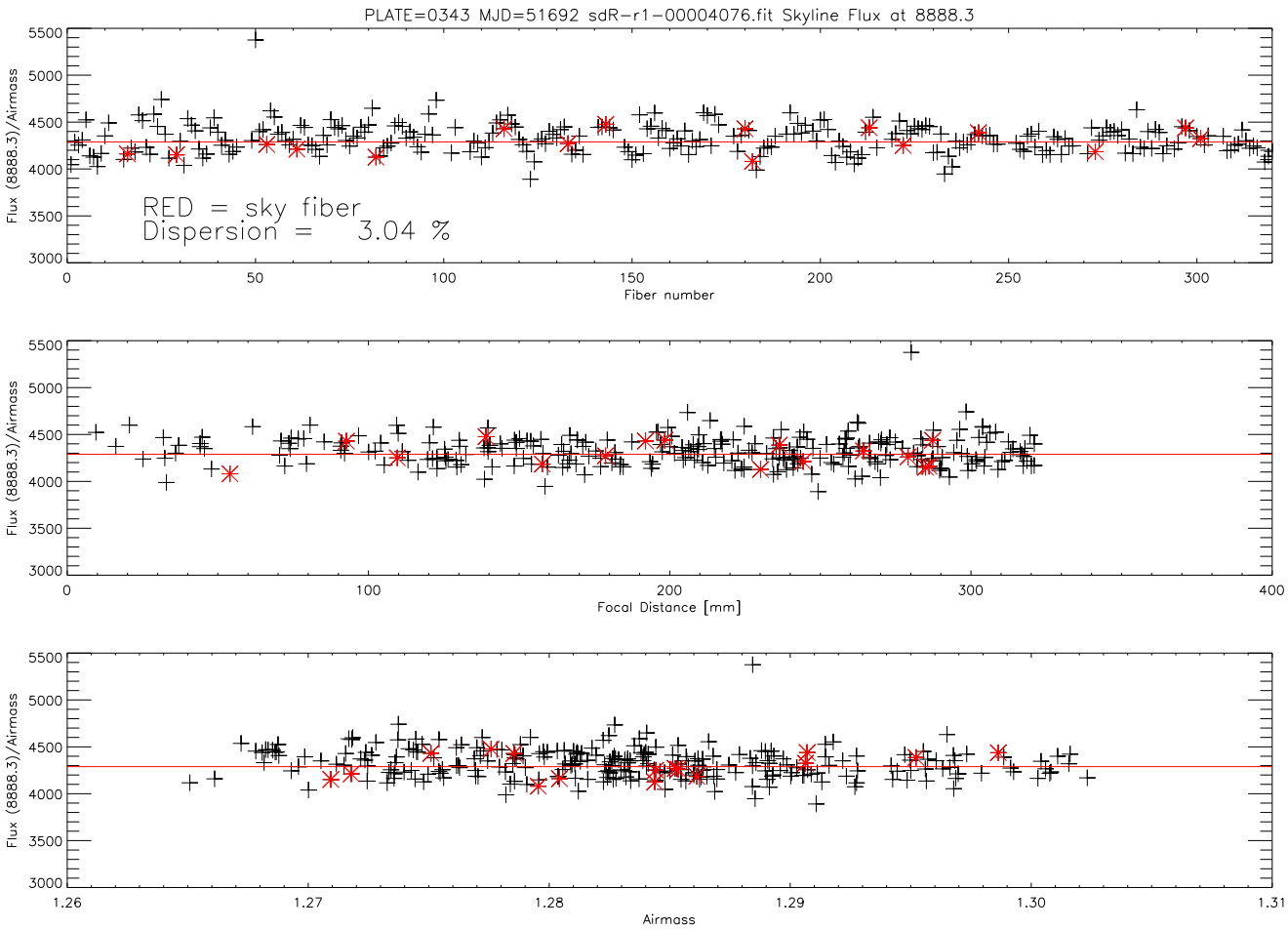

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

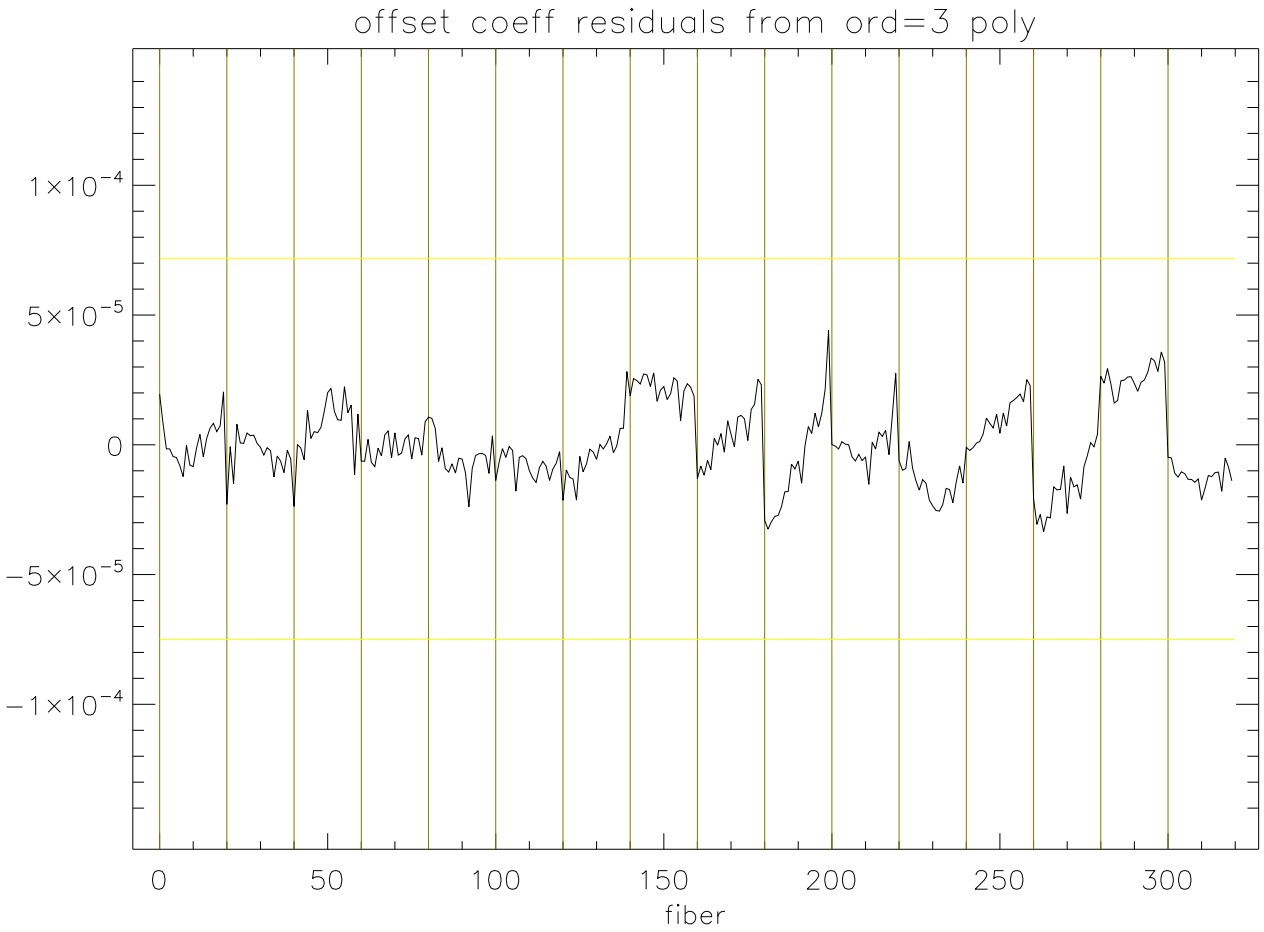

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

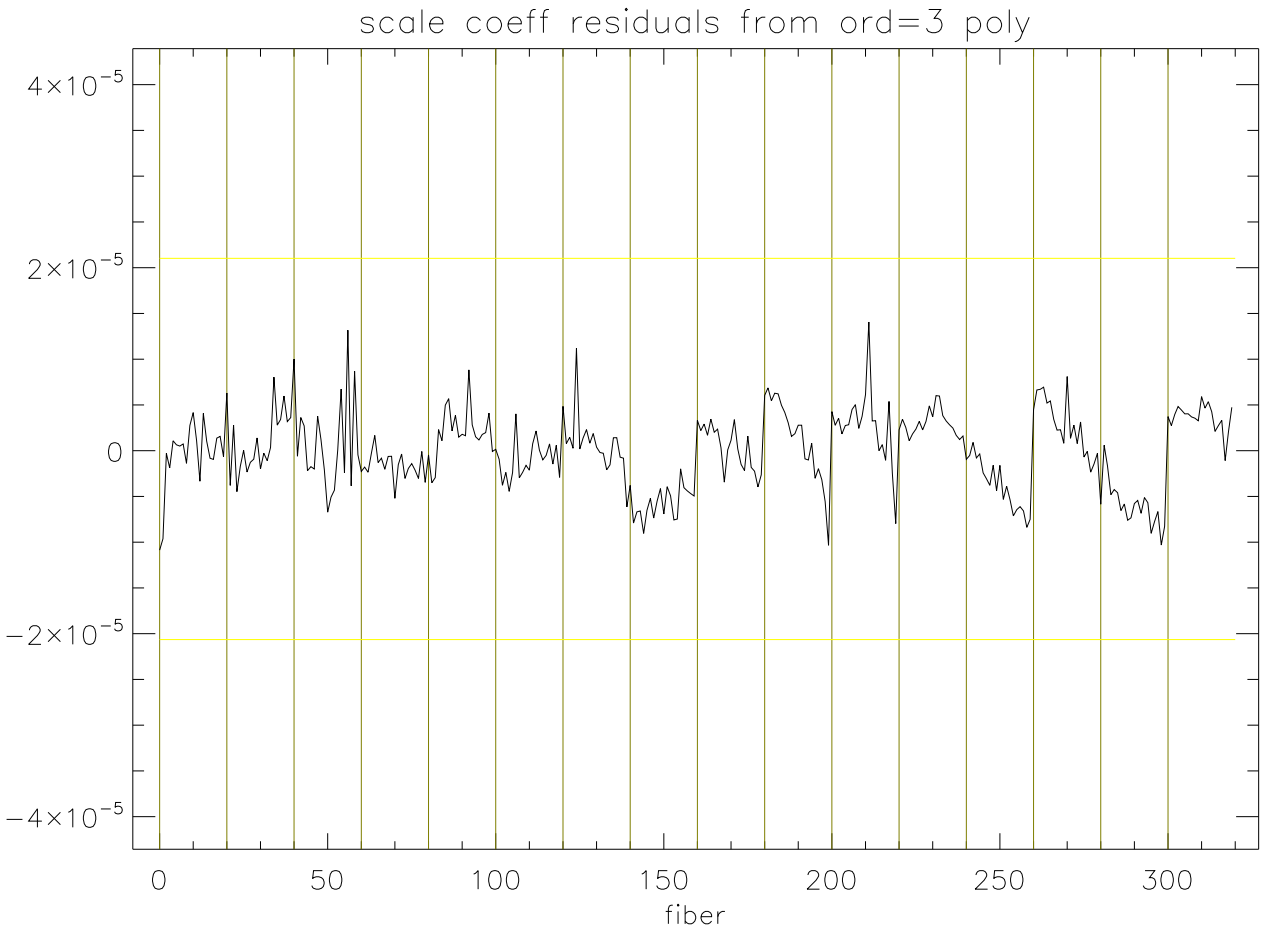

PLATE=0343 MJD=51692 sdR-r1-00004076.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

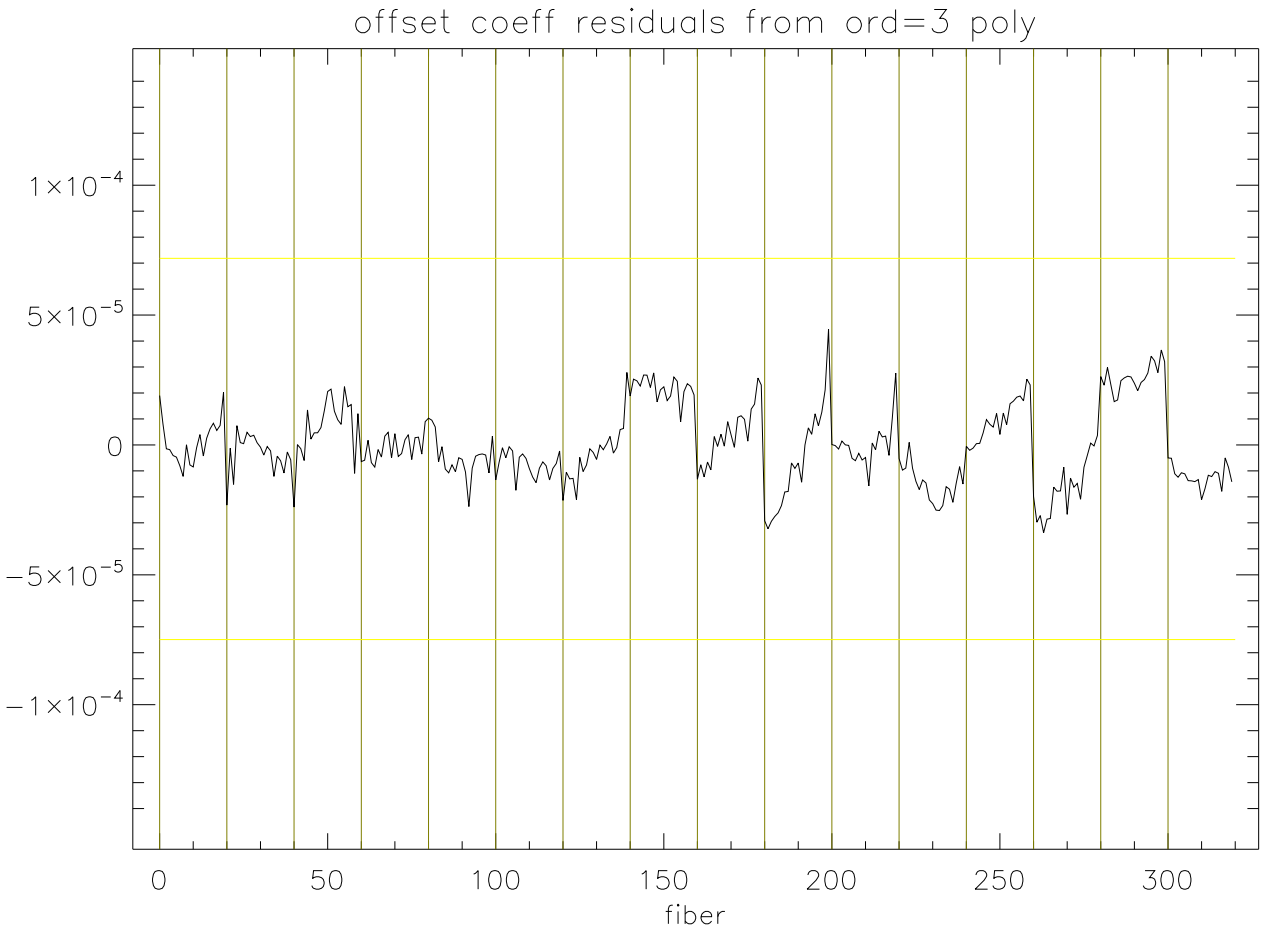

Number of sky fibers = 16
PLATE=0343 MJD=51692 sdR-r1-00004076.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

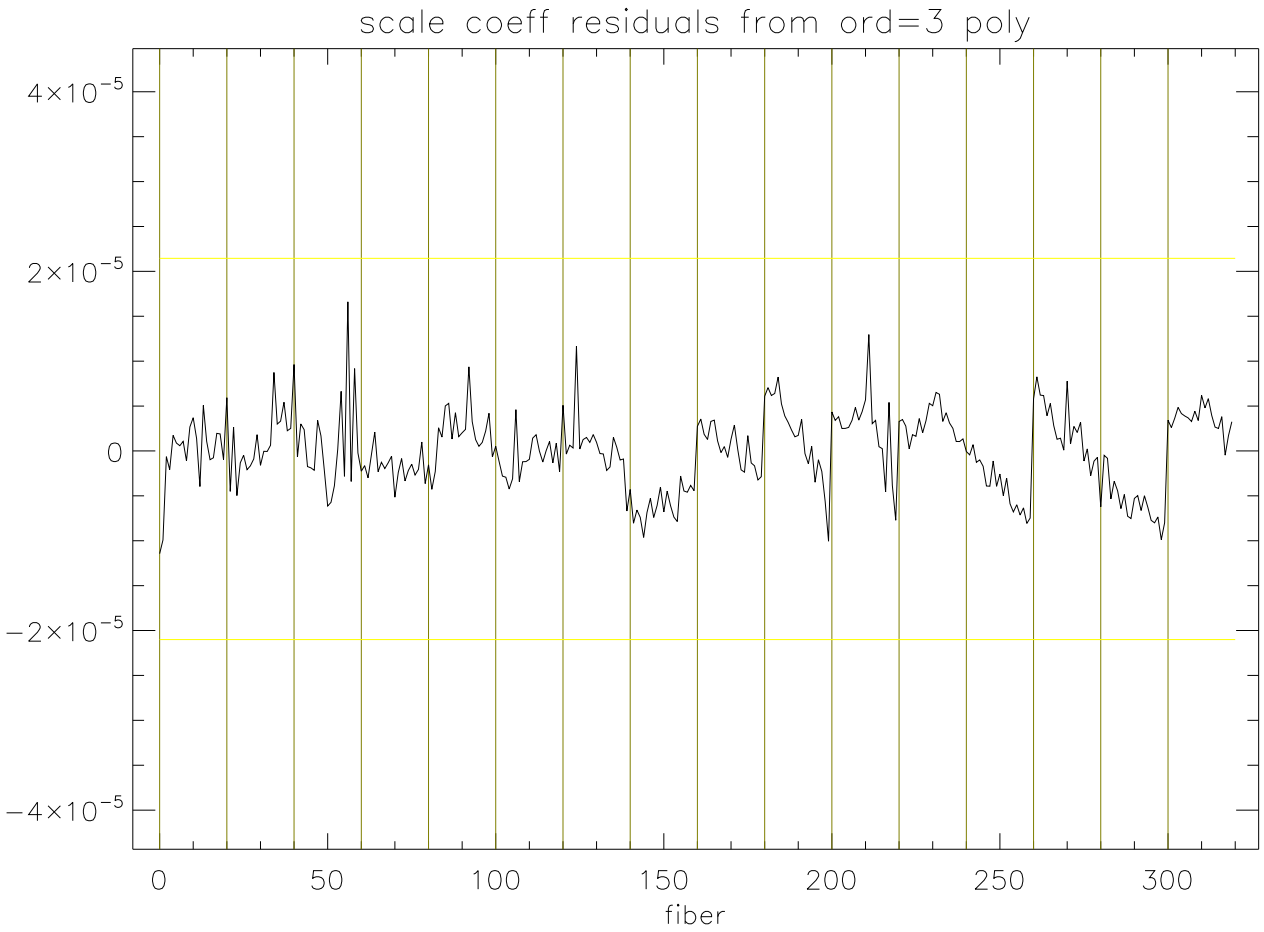

PLATE=0343 MJD=51692 sdR-r1-00004076.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.19 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

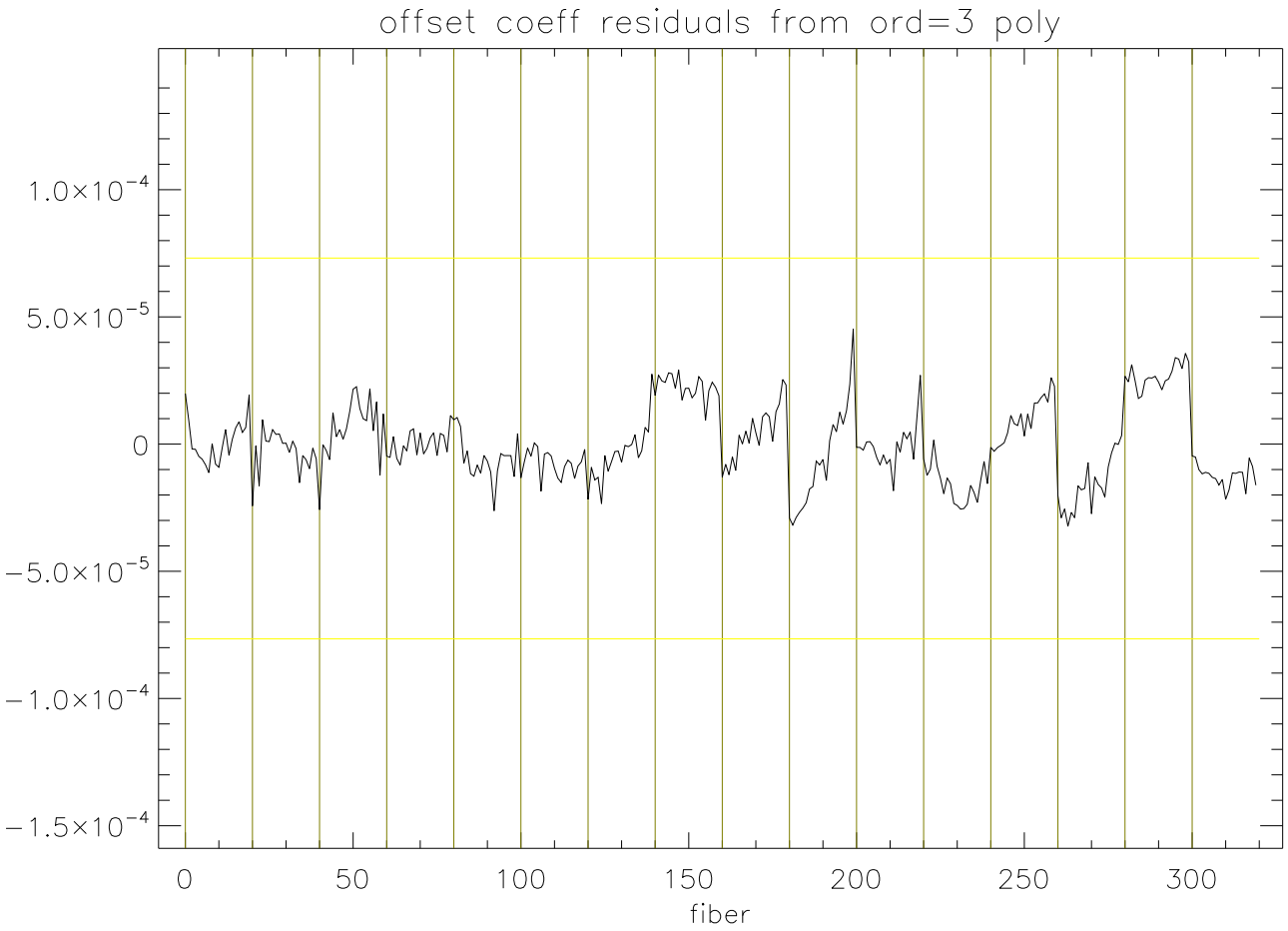

PLATE=0343 MJD=51692 sdR-r1-00004076.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.04 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

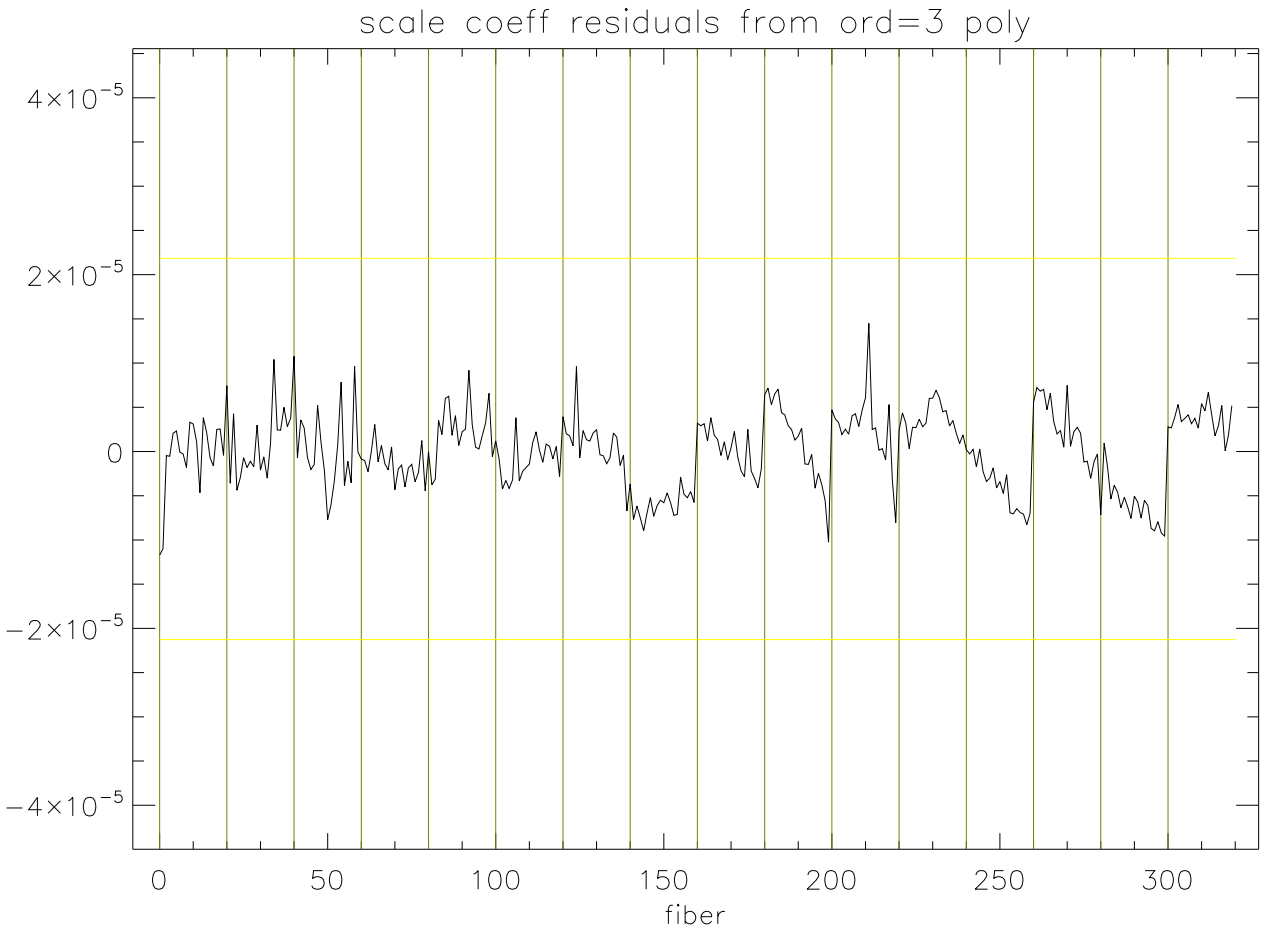

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

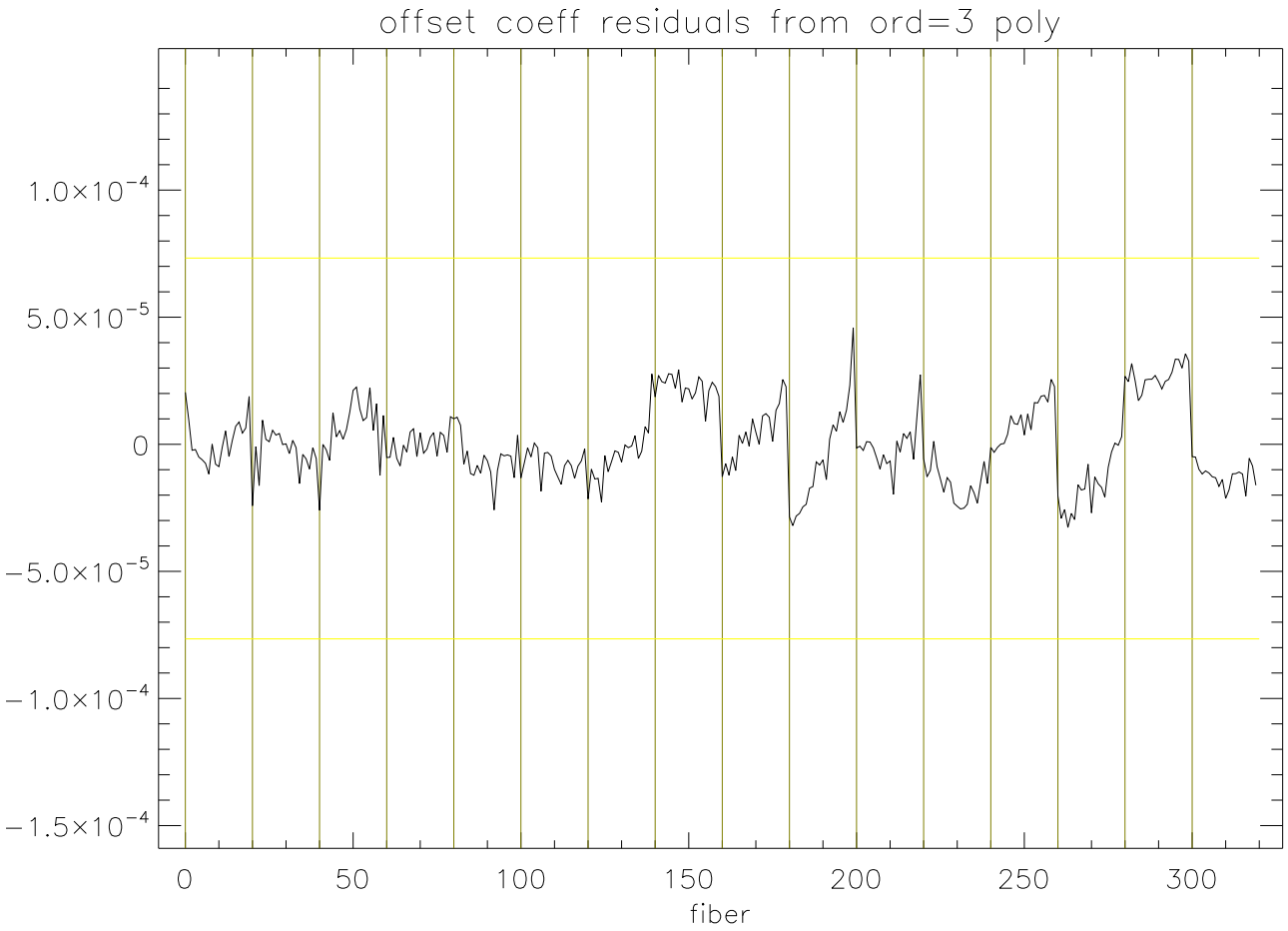

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

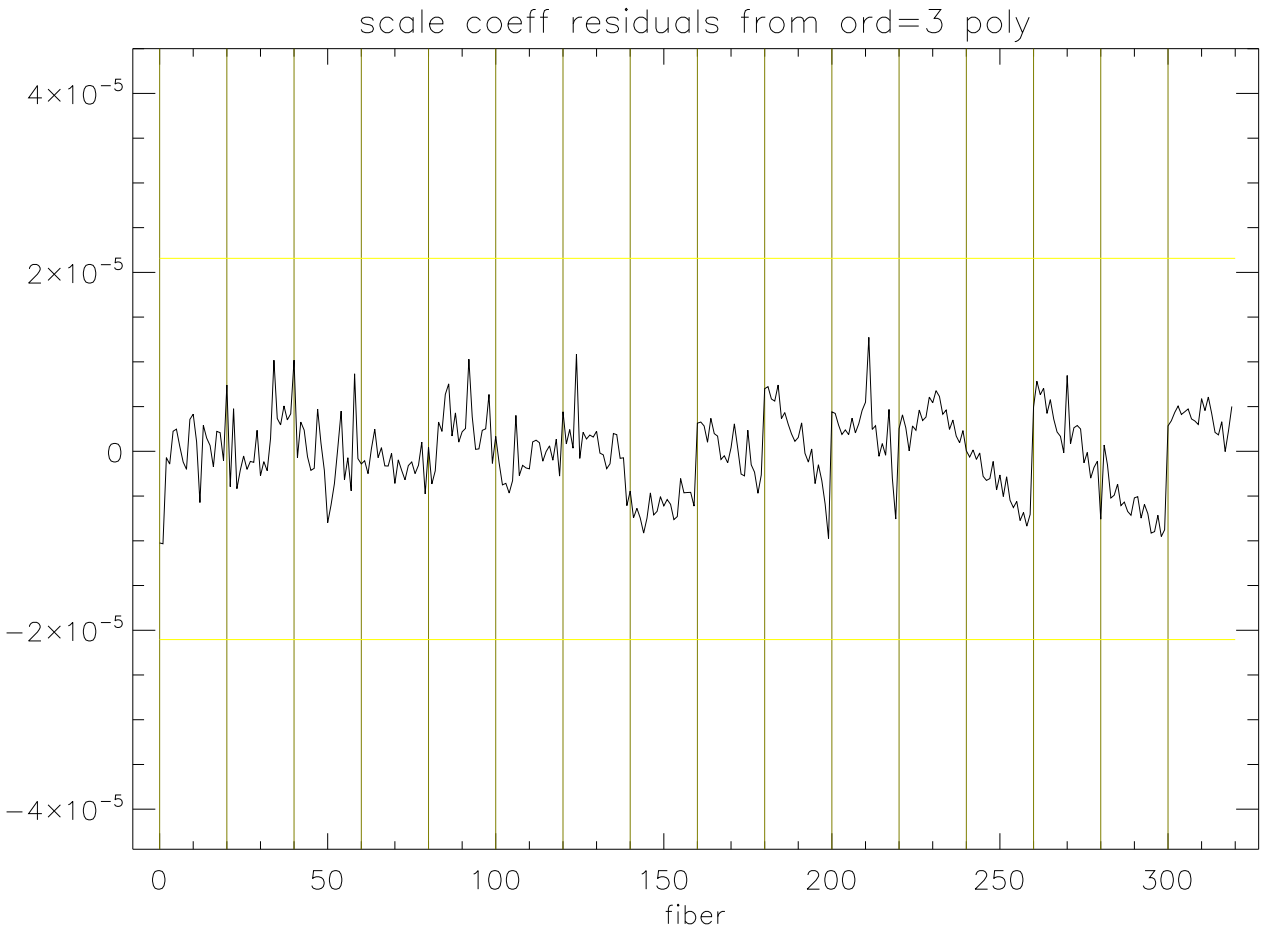

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

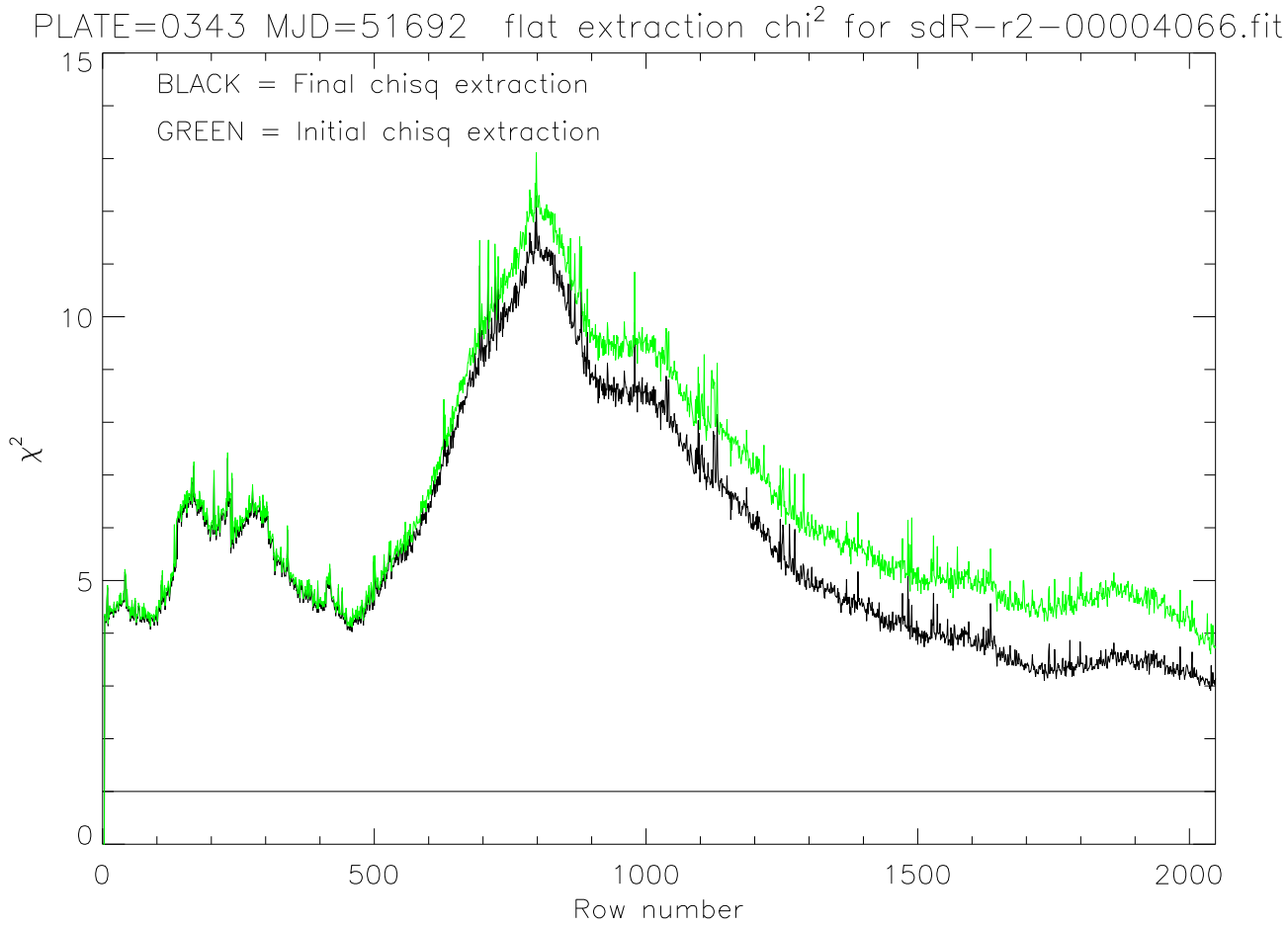

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

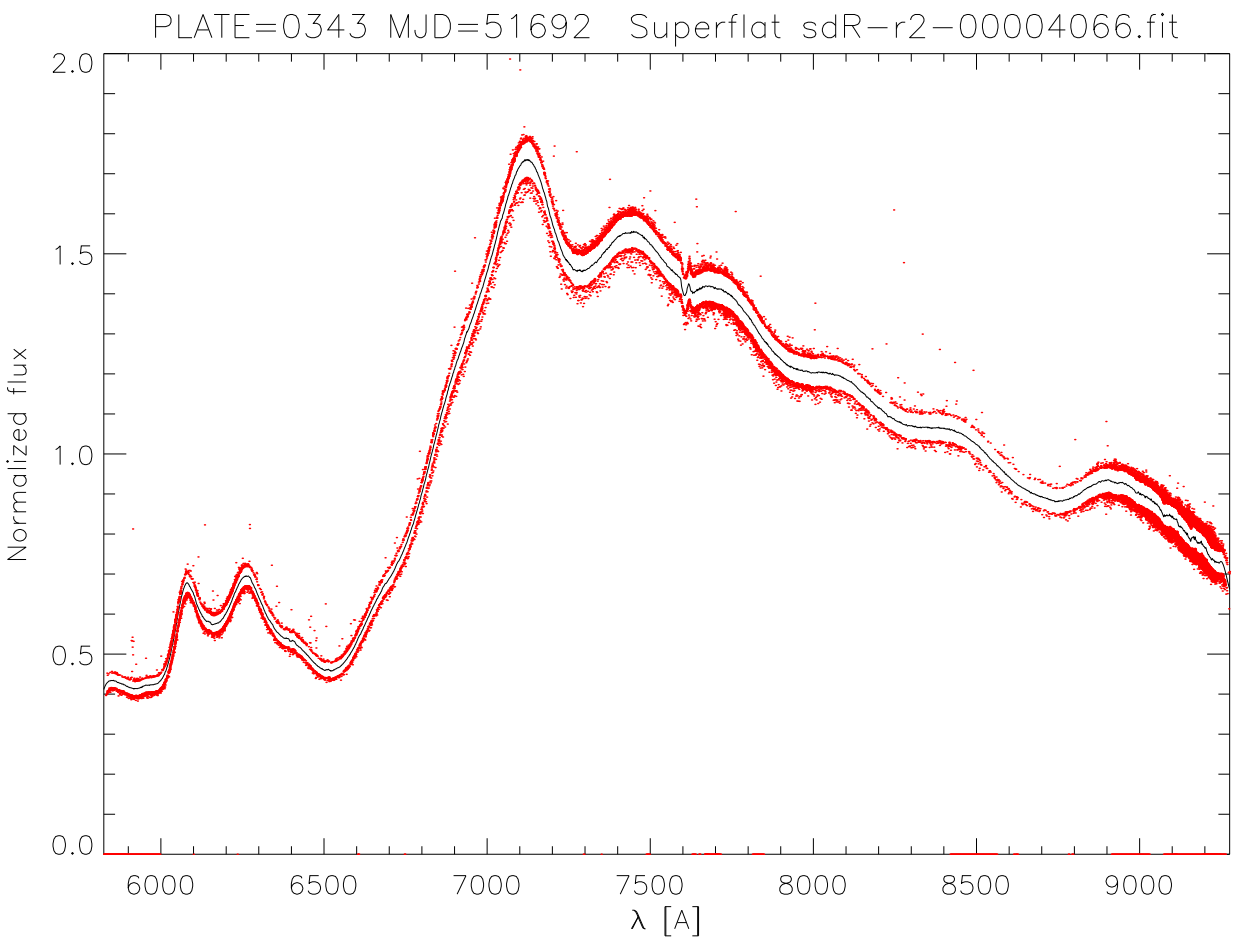

offset coeff residuals from ord=3 poly
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

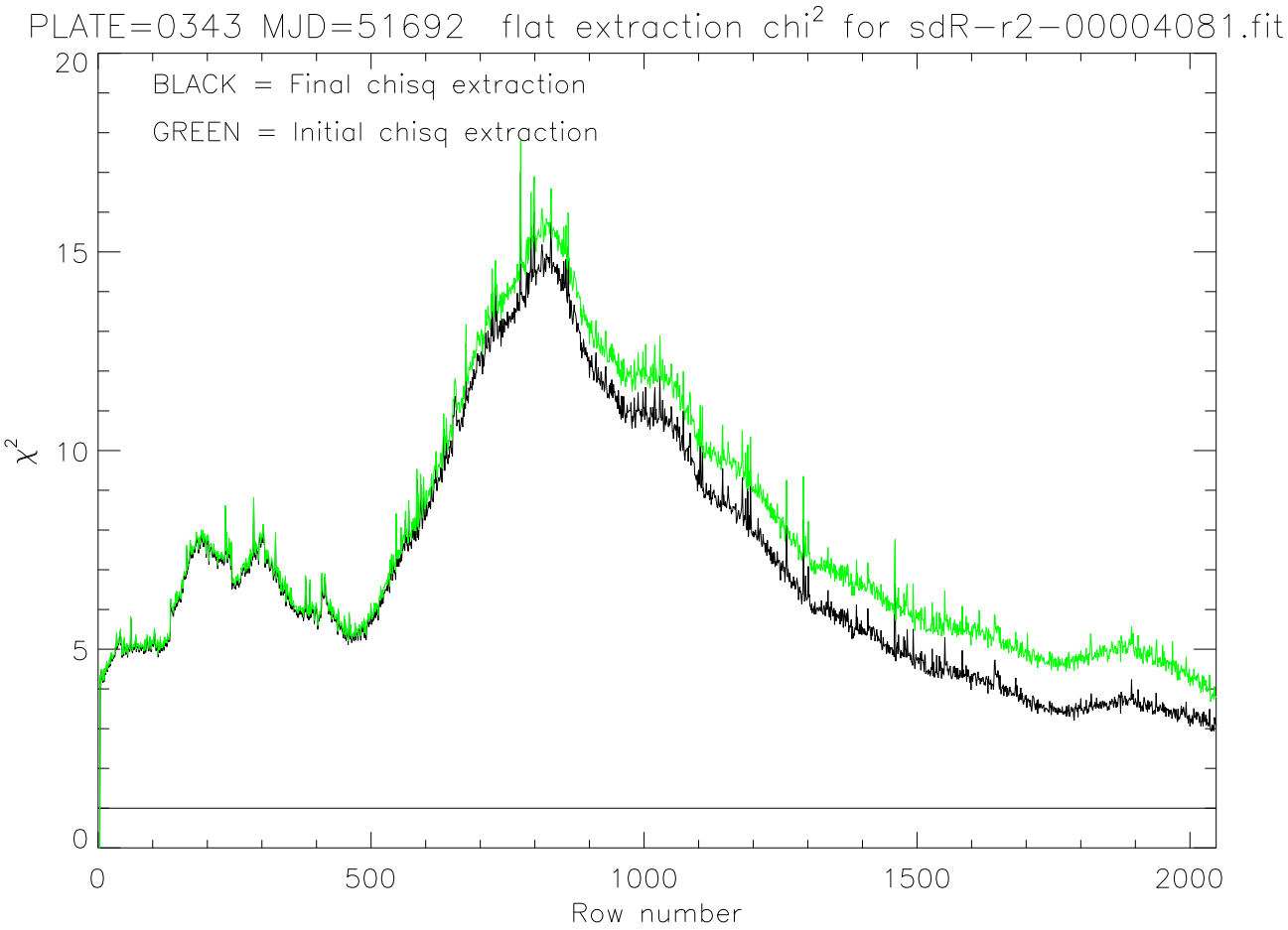

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

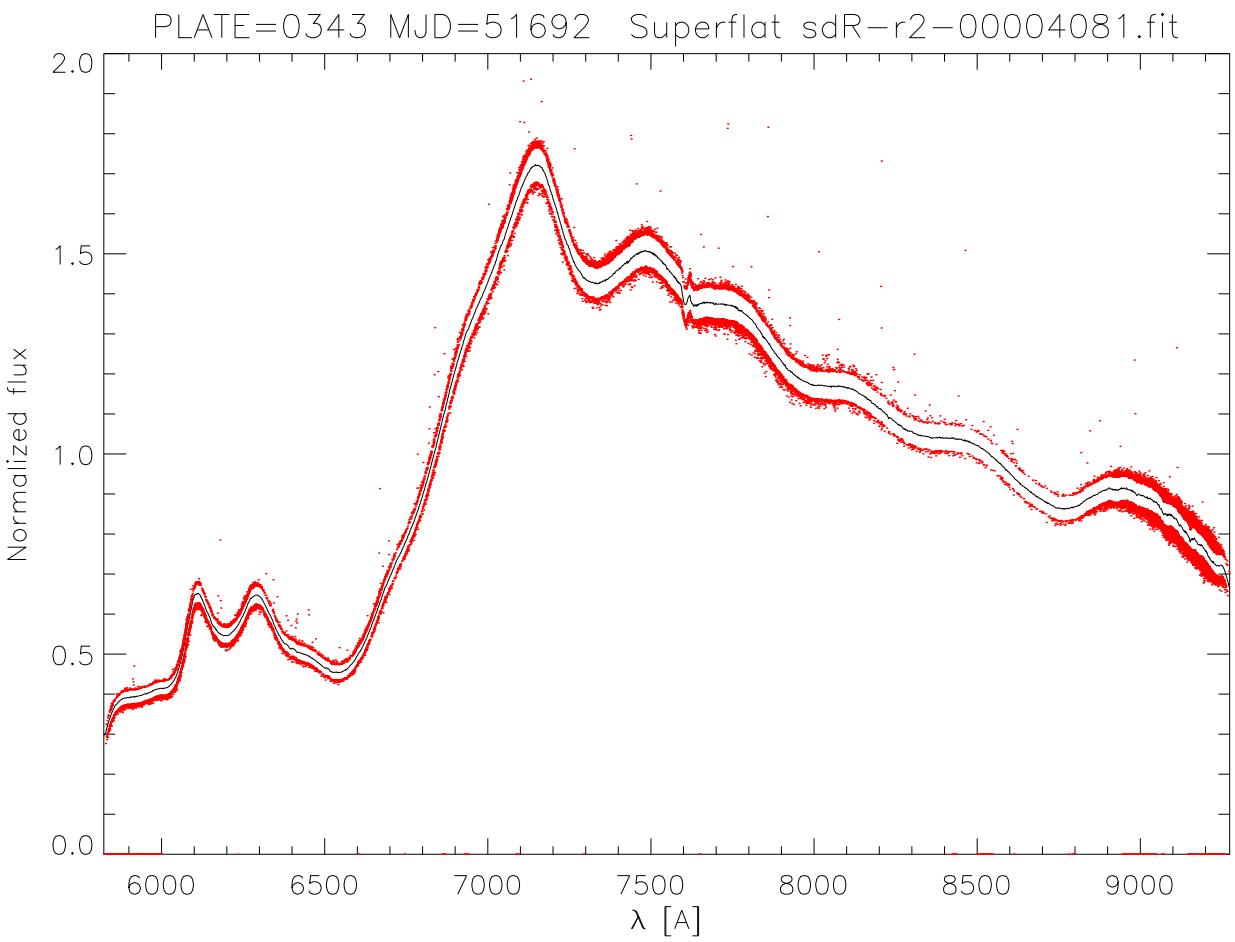

offset coeff residuals from ord=3 poly
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

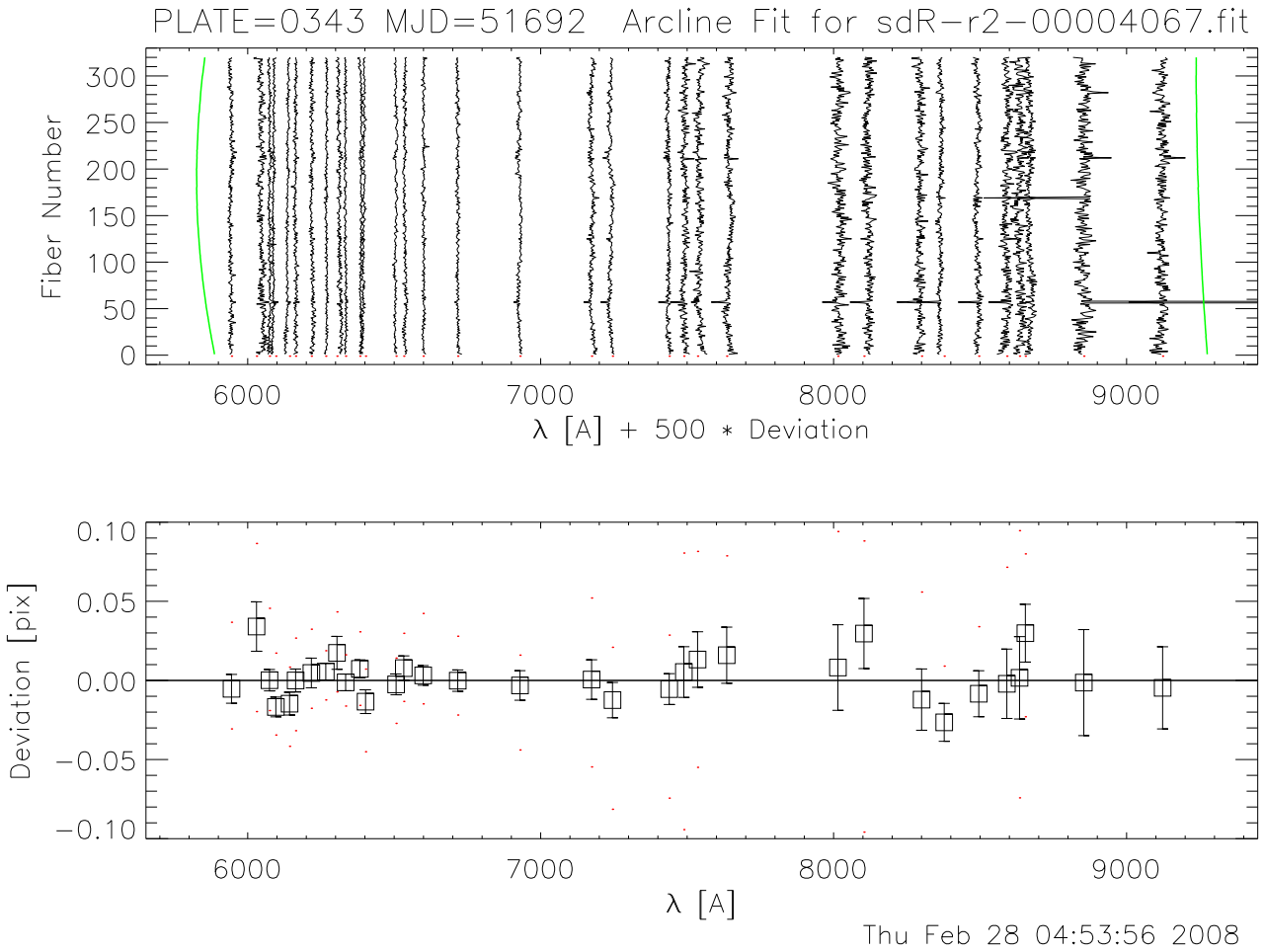

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

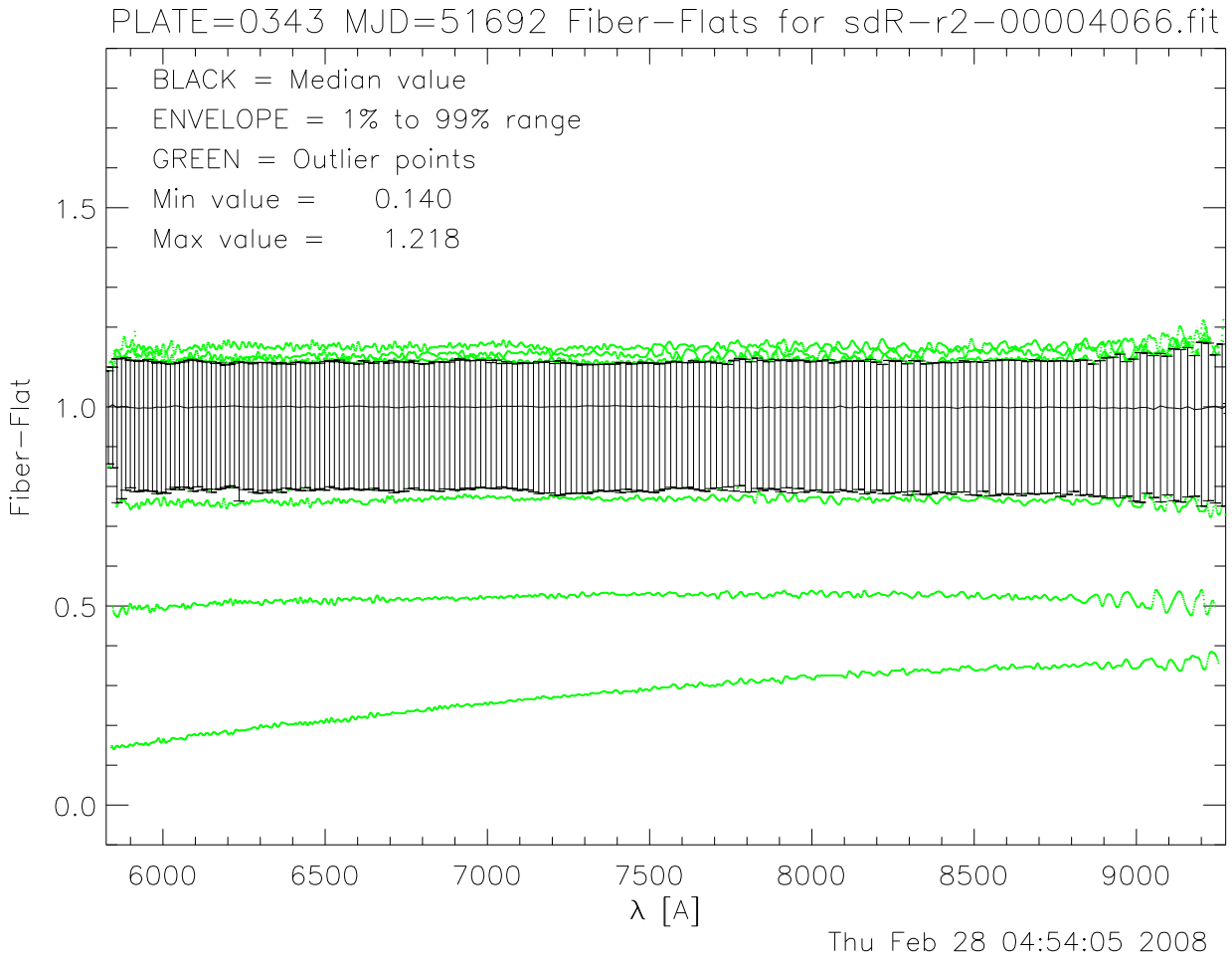

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−r2−00004066.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

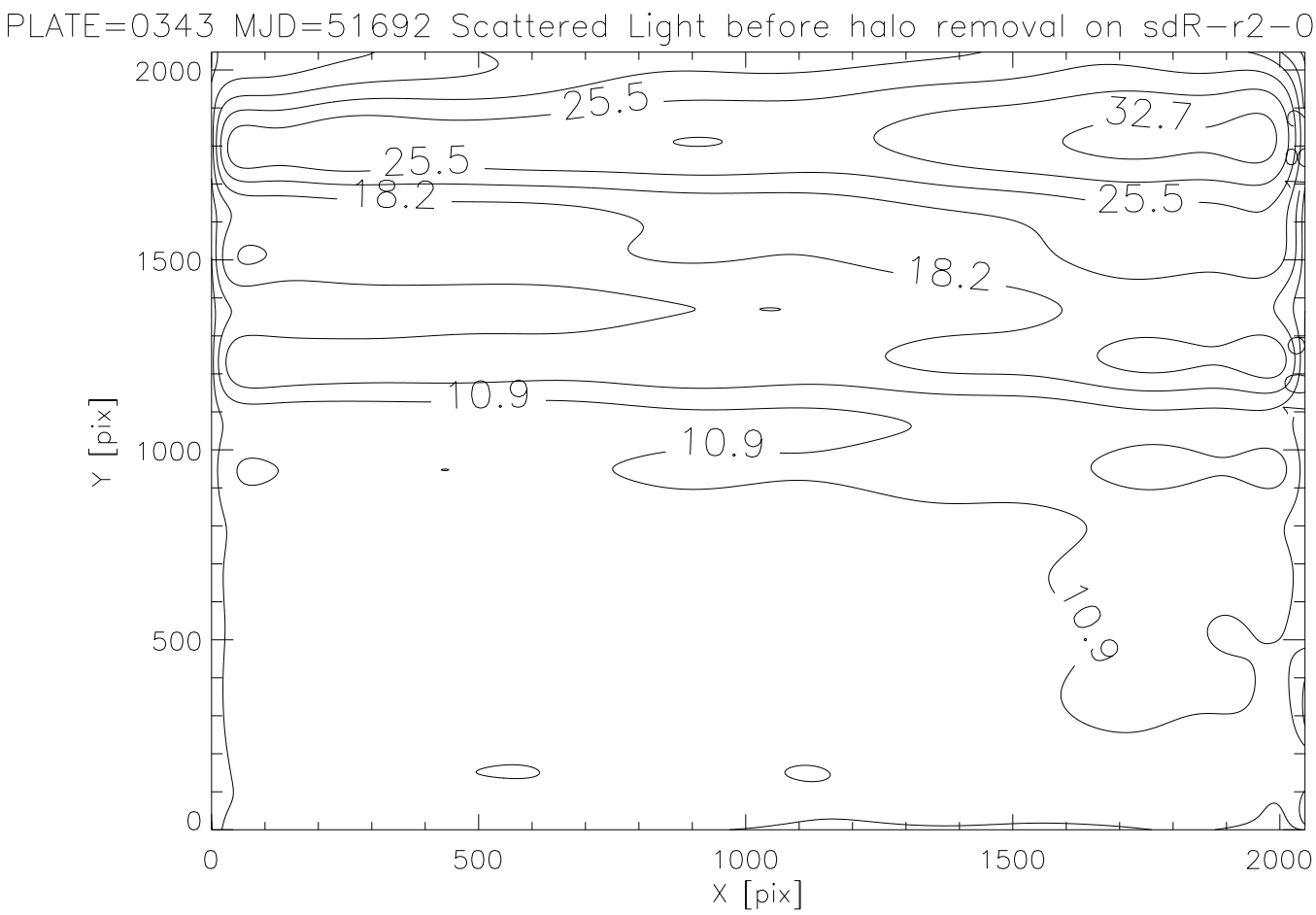

PLATE=0343 MJD=51692 Superflat sdR-r2-00004066.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

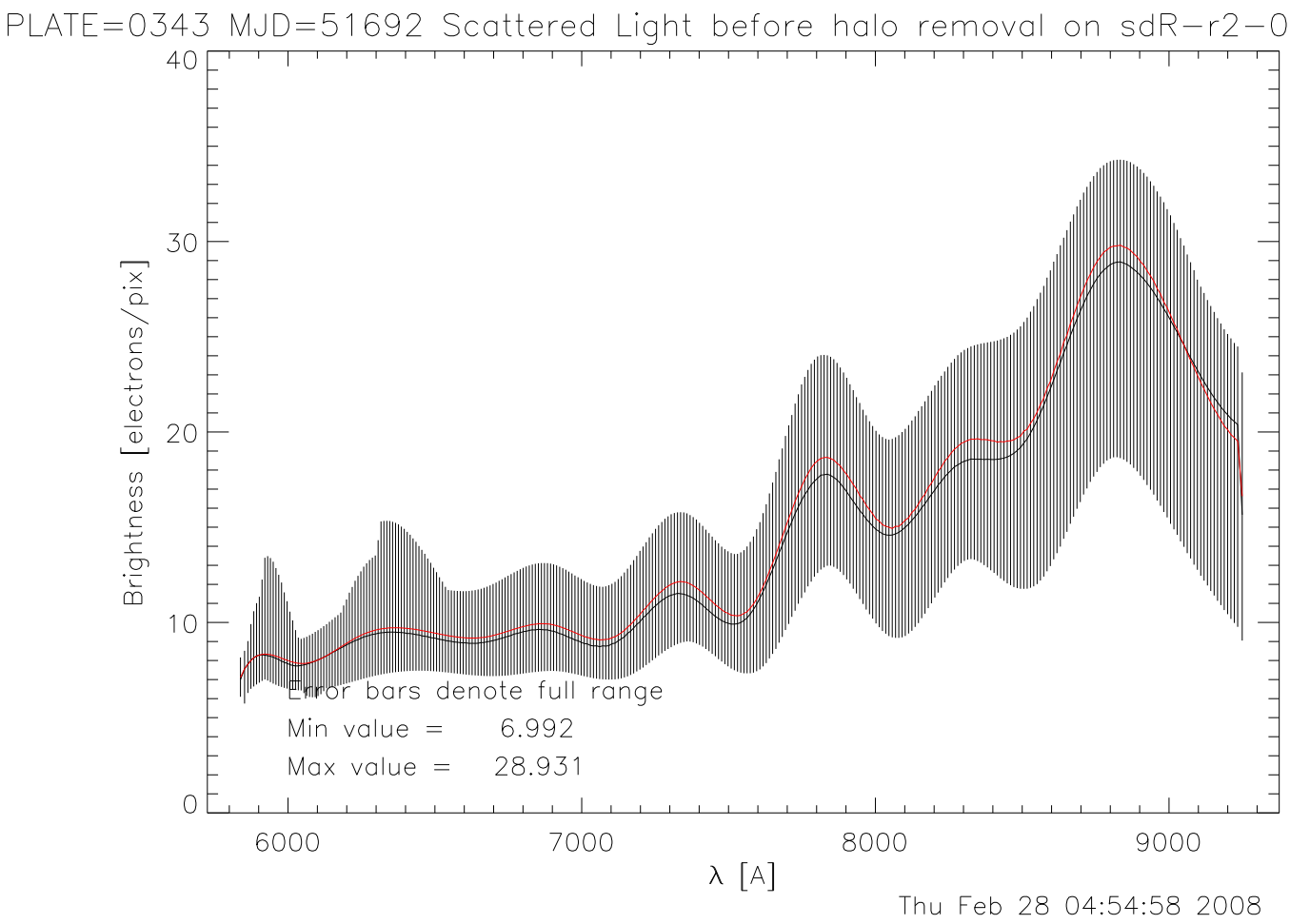

PLATE=0343 MJD=51692 flat extraction chi^2 for sdR−r2−00004081.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

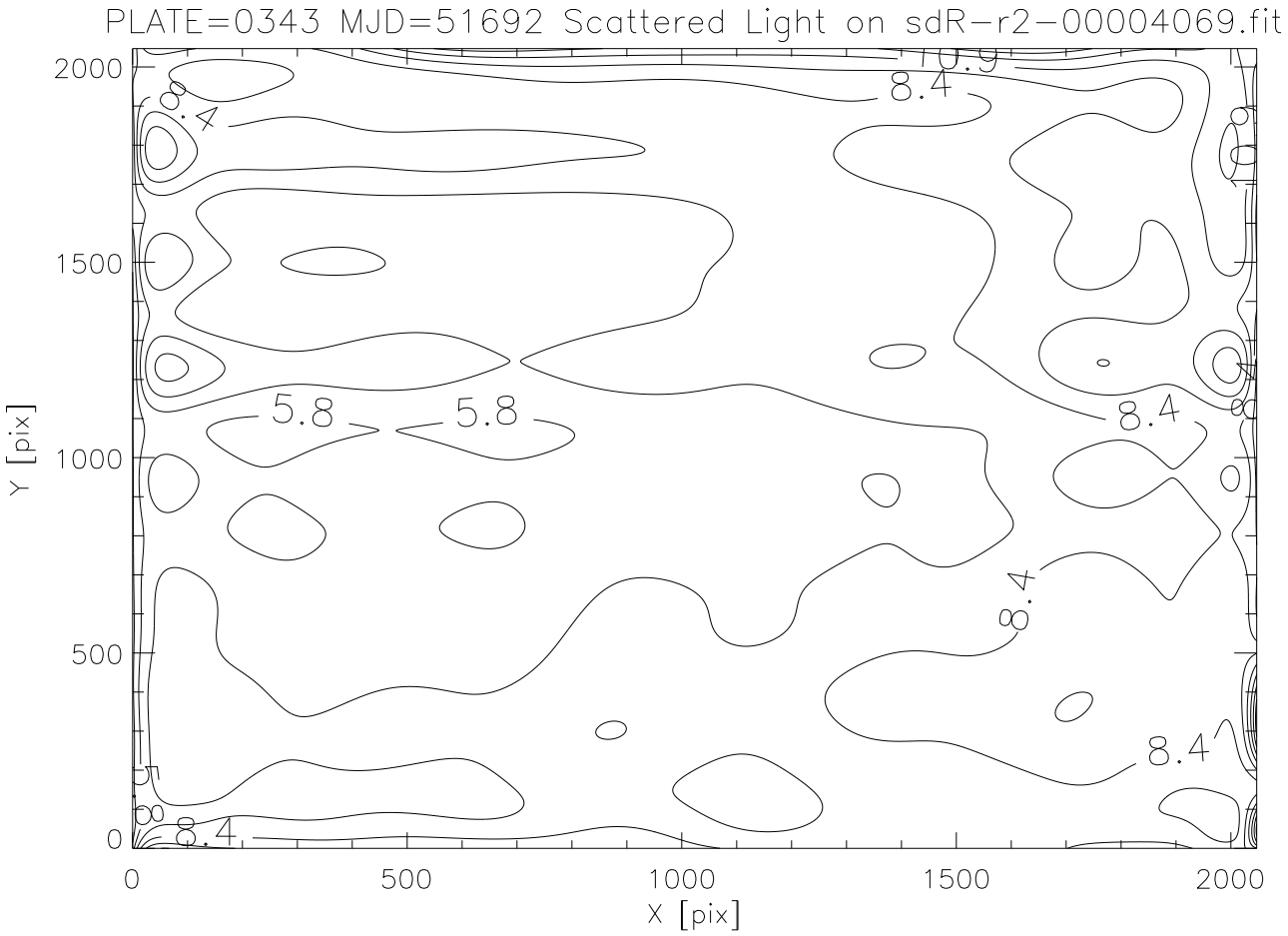

PLATE=0343 MJD=51692 Superflat sdR-r2-00004081.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

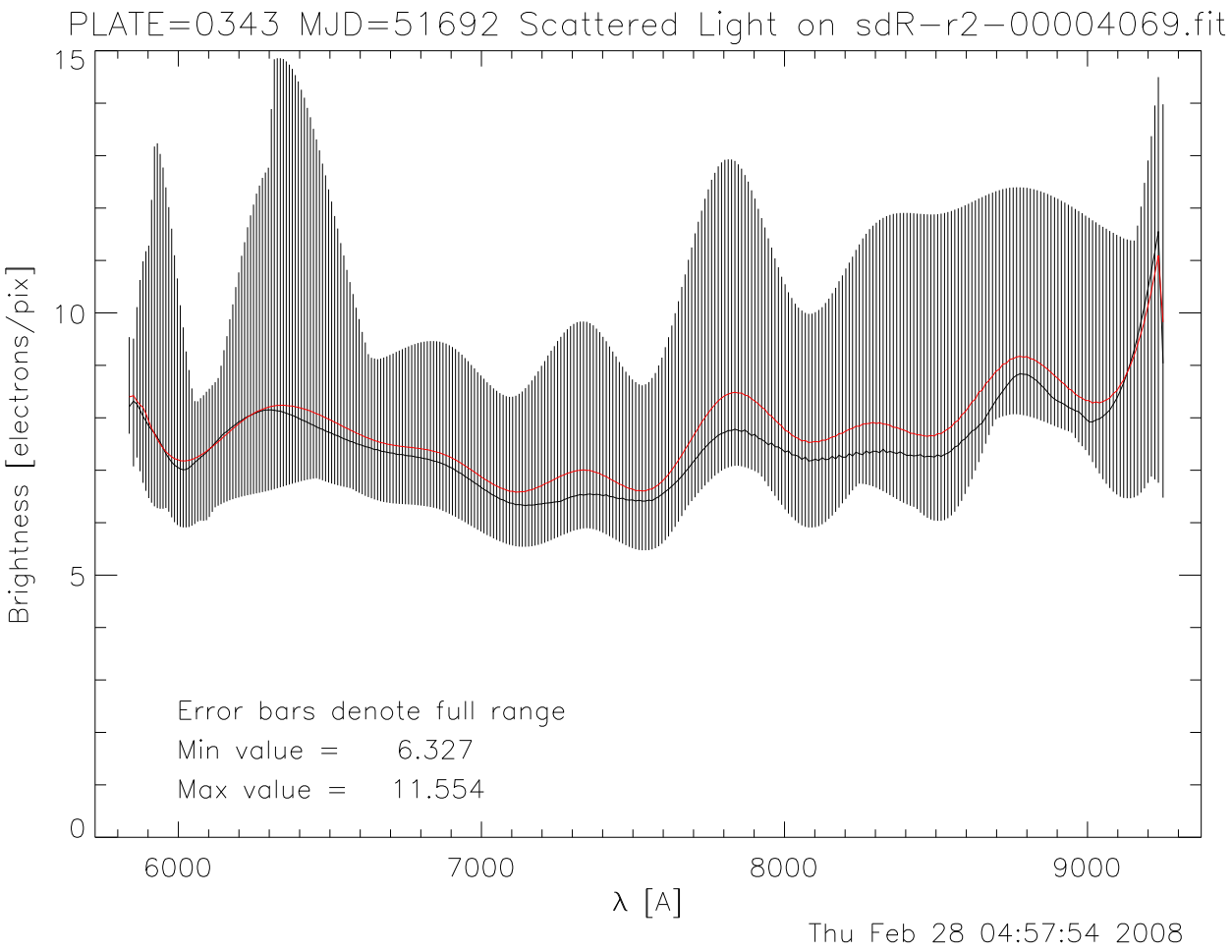

PLATE=0343 MJD=51692 Arcline Fit for sdR-r2-00004067.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu Feb 28 04:53:56 2008

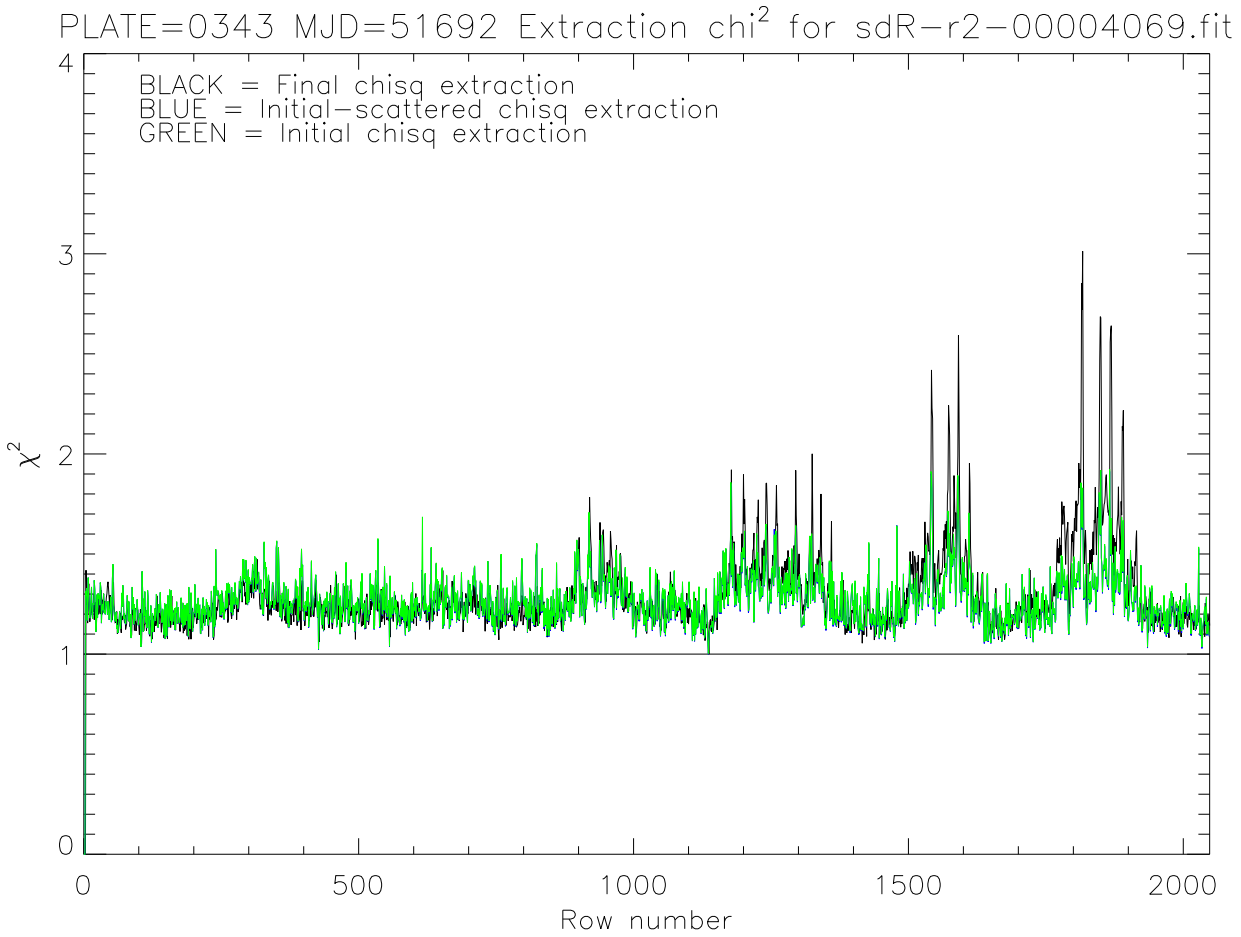

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:54:05 2008

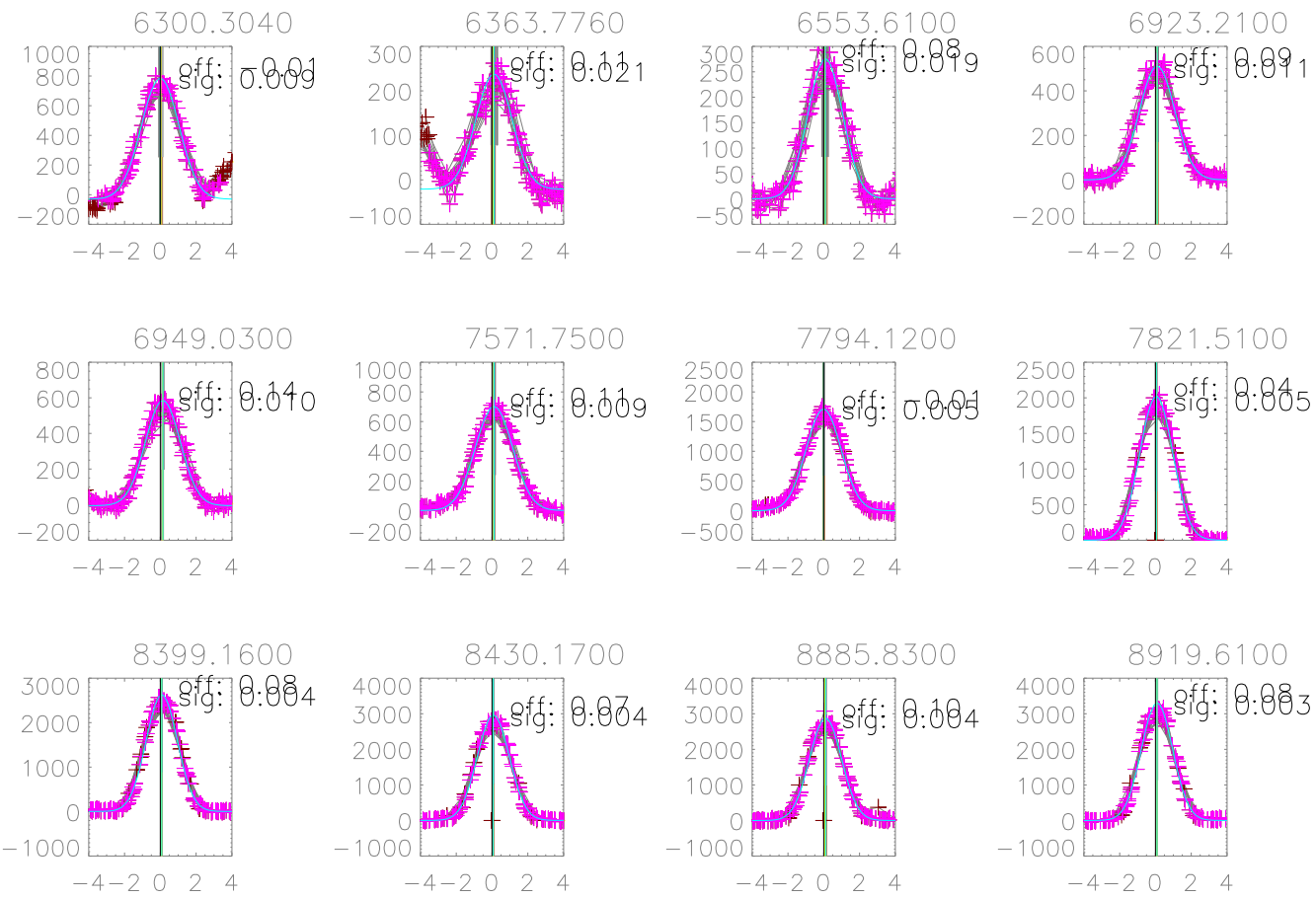

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004069.fi
25.5
25.5
18.2
32.7
25.5
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

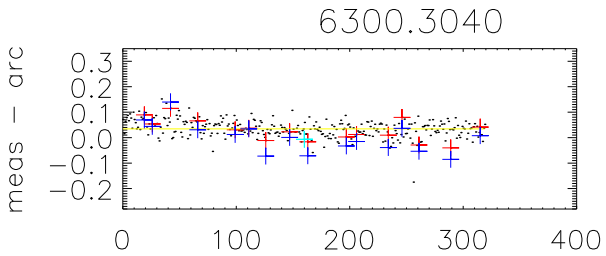

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004069.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.992
Max value = 28.931
Thu Feb 28 04:54:58 2008

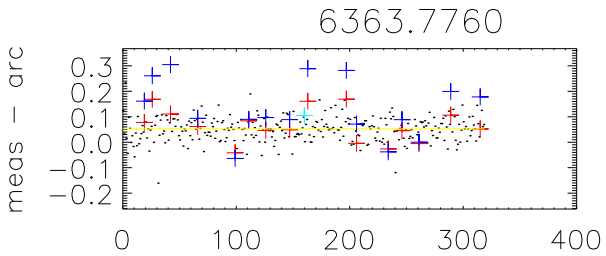

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004069.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
5.8
5.8
8.4
8.4
8.4

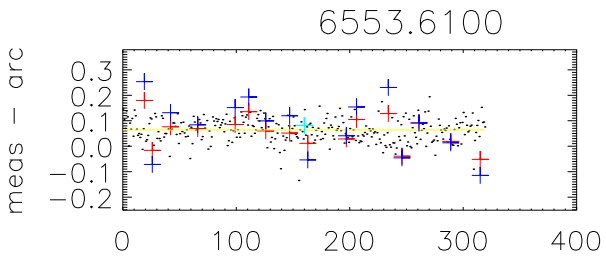

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004069.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.327
Max value = 11.554
Thu Feb 28 04:57:54 2008

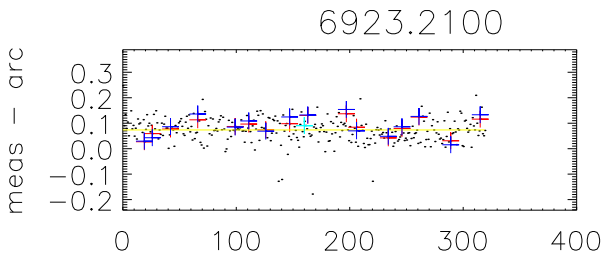

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r2−00004069.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

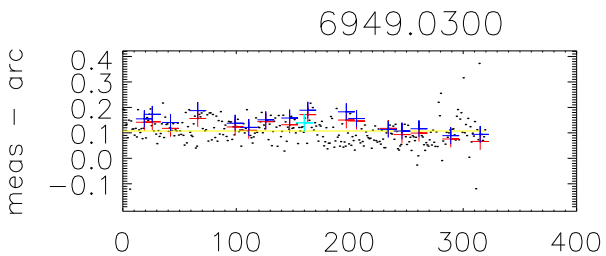

6300.3040
off: −0.01
sig: 0.009
6363.7760
off: 0.11
sig: 0.021
6553.6100
off: 0.08
sig: 0.019
6923.2100
off: 0.09
sig: 0.011
6949.0300
off: 0.14
sig: 0.010
7571.7500
off: 0.11
sig: 0.009
7794.1200
off: −0.01
sig: 0.005
7821.5100
off: 0.04
sig: 0.005
8399.1600
off: 0.08
sig: 0.004
8430.1700
off: 0.07
sig: 0.004
8885.8300
off: 0.10
sig: 0.004
8919.6100
off: 0.08
sig: 0.003

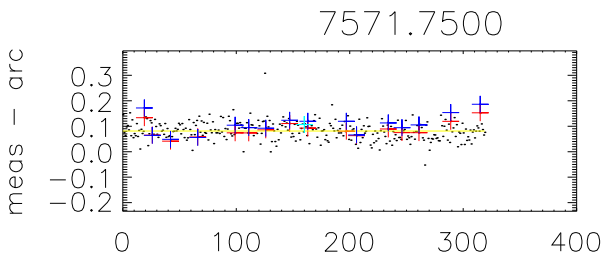

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

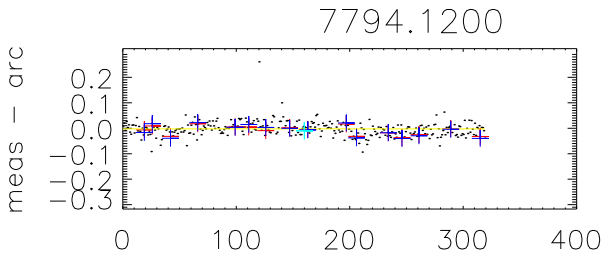

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

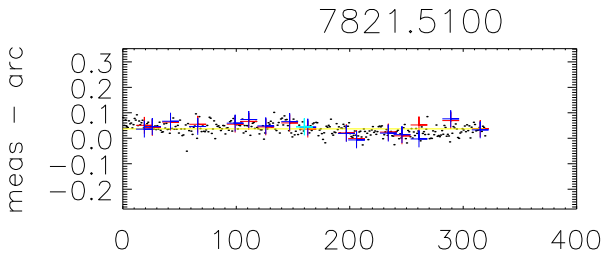

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

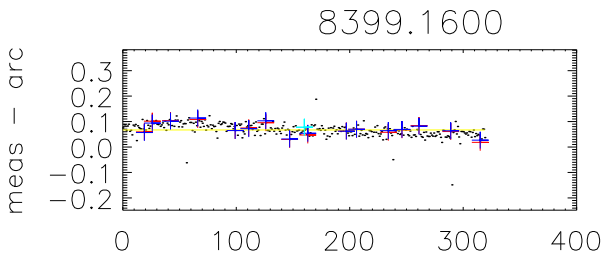

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

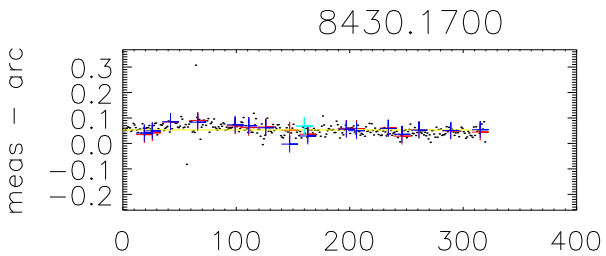

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

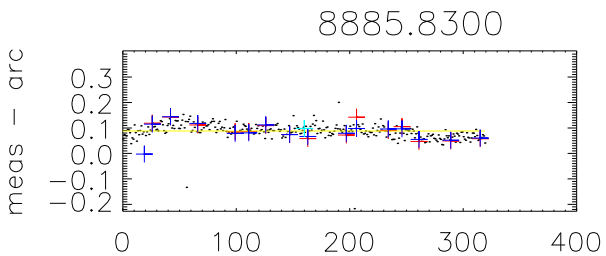

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

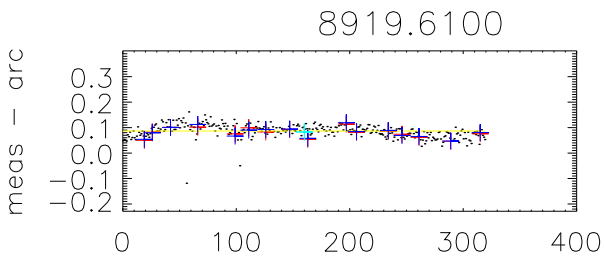

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

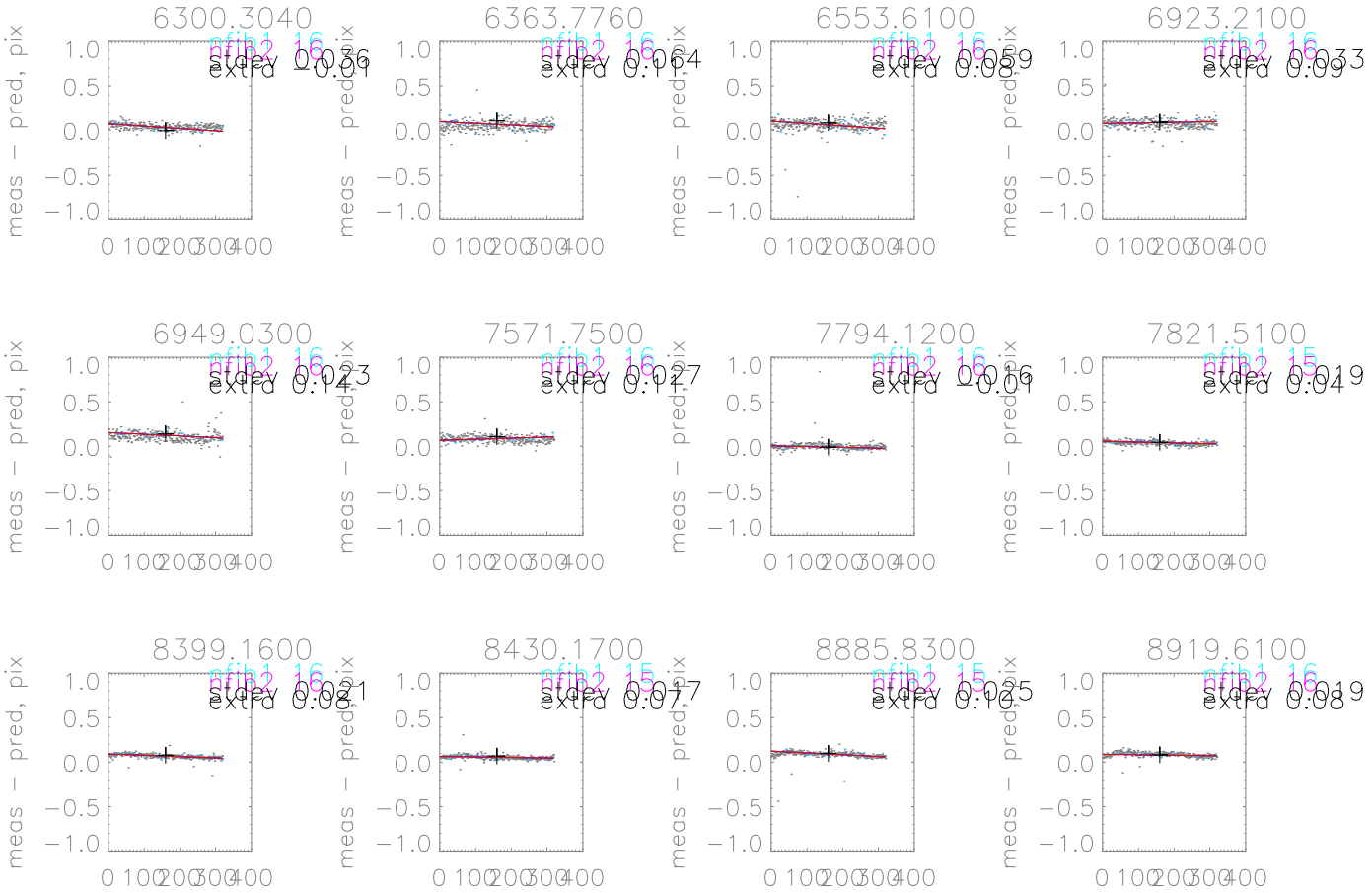

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

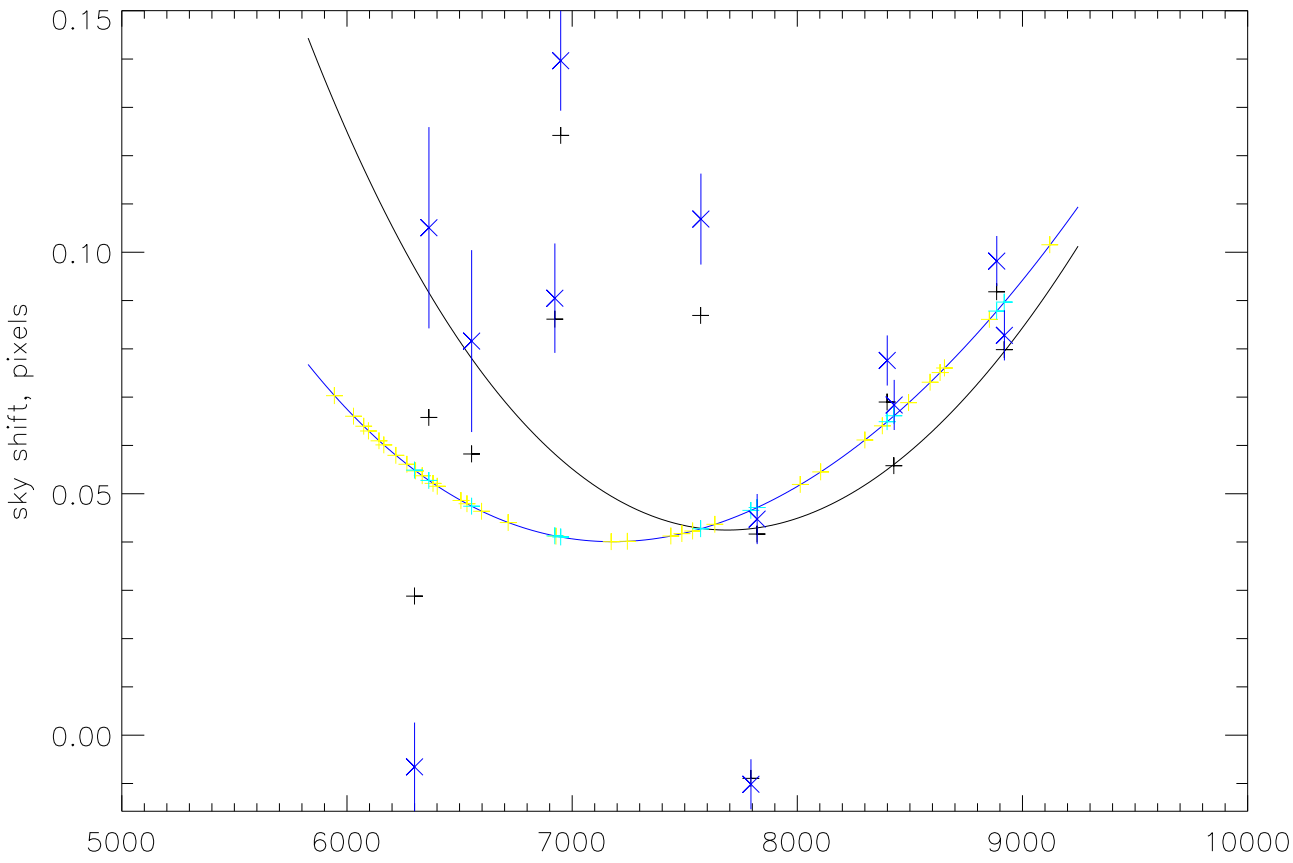

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

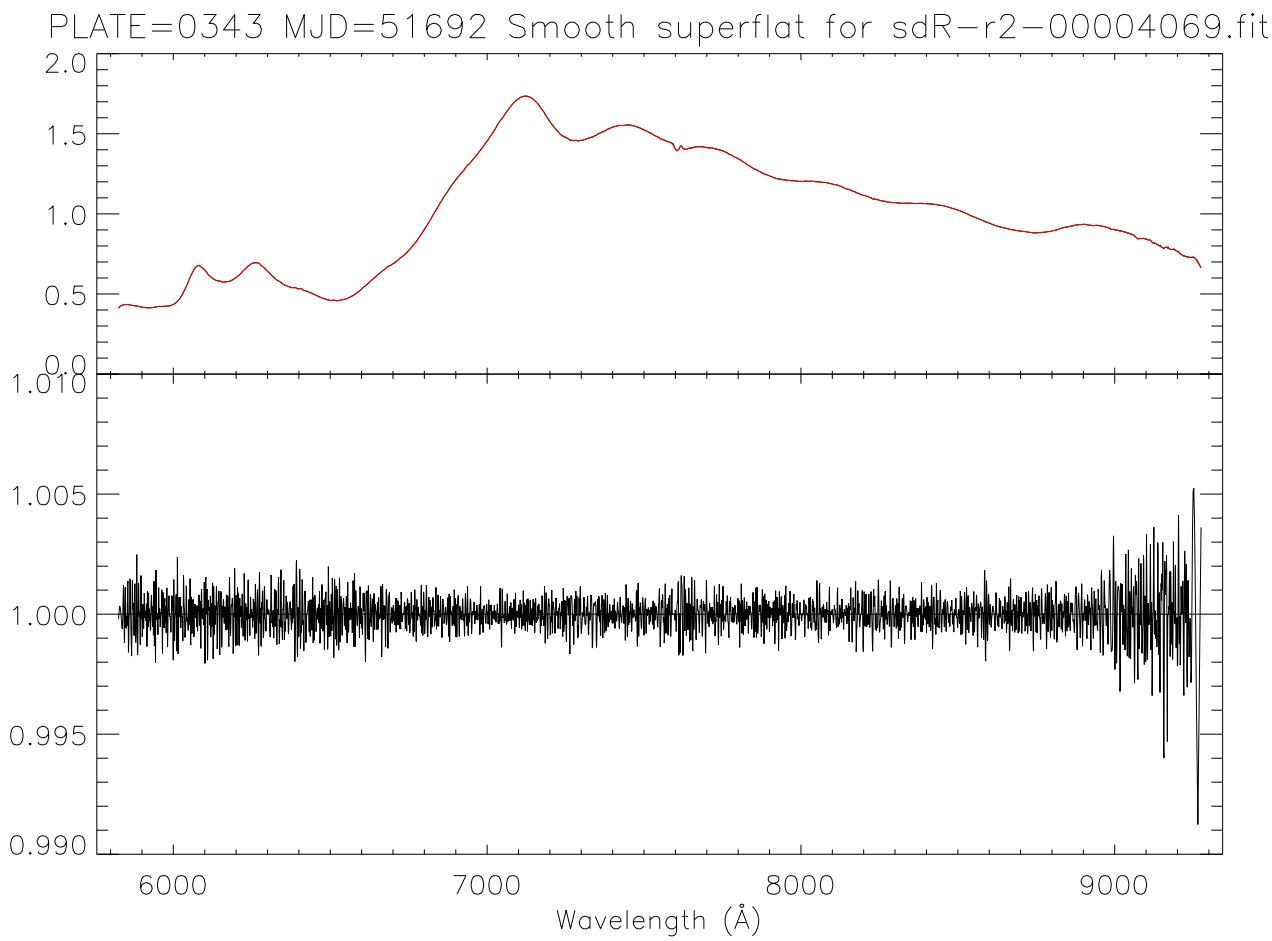

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

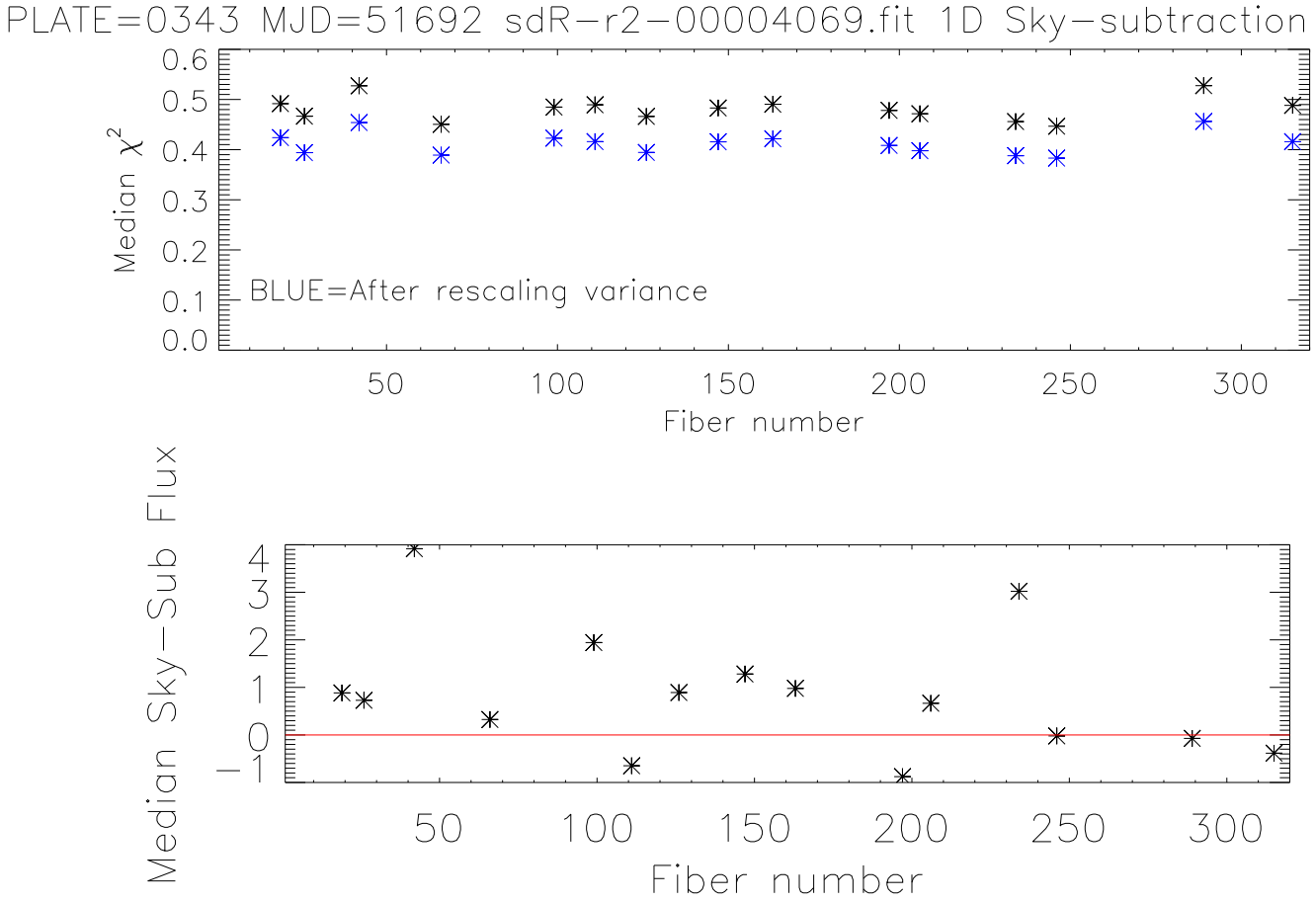

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

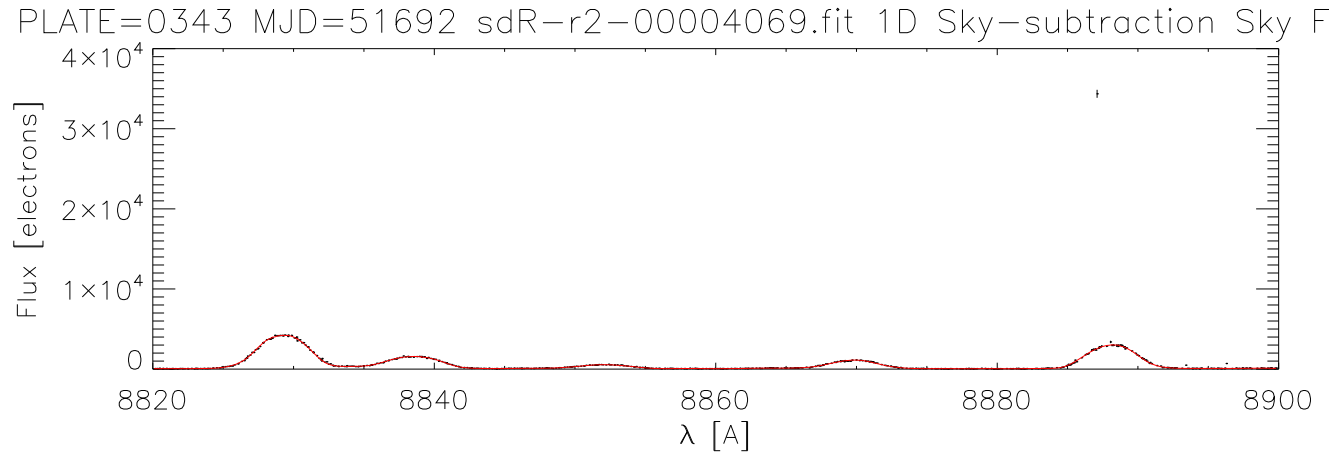

6300.3040
stdev 0.036
extra −0.01
6363.7760
stdev 0.064
extra 0.104
6553.6100
stdev 0.059
extra 0.089
6923.2100
stdev 0.033
extra 0.09
6949.0300
stdev 0.023
extra 0.14
7571.7500
stdev 0.027
extra 0.11
7794.1200
stdev 0.046
extra −0.01
7821.5100
stdev 0.019
extra 0.04
8399.1600
stdev 0.021
extra 0.08
8430.1700
stdev 0.017
extra 0.07
8885.8300
stdev 0.025
extra 0.12
8919.6100
stdev 0.019
extra 0.08
meas − pred, pix
mfb32 16
mfb32 15
mfb31 16
mfb31 15

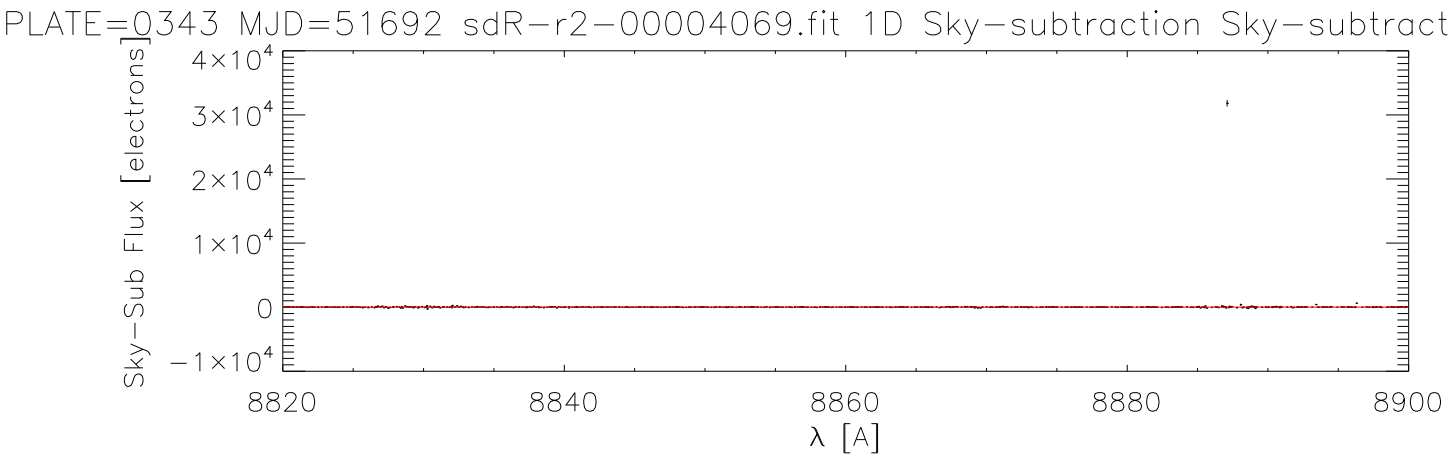

0.15
0.10
0.05
0.00
sky shift, pixels
5000
6000
7000
8000
9000
10000

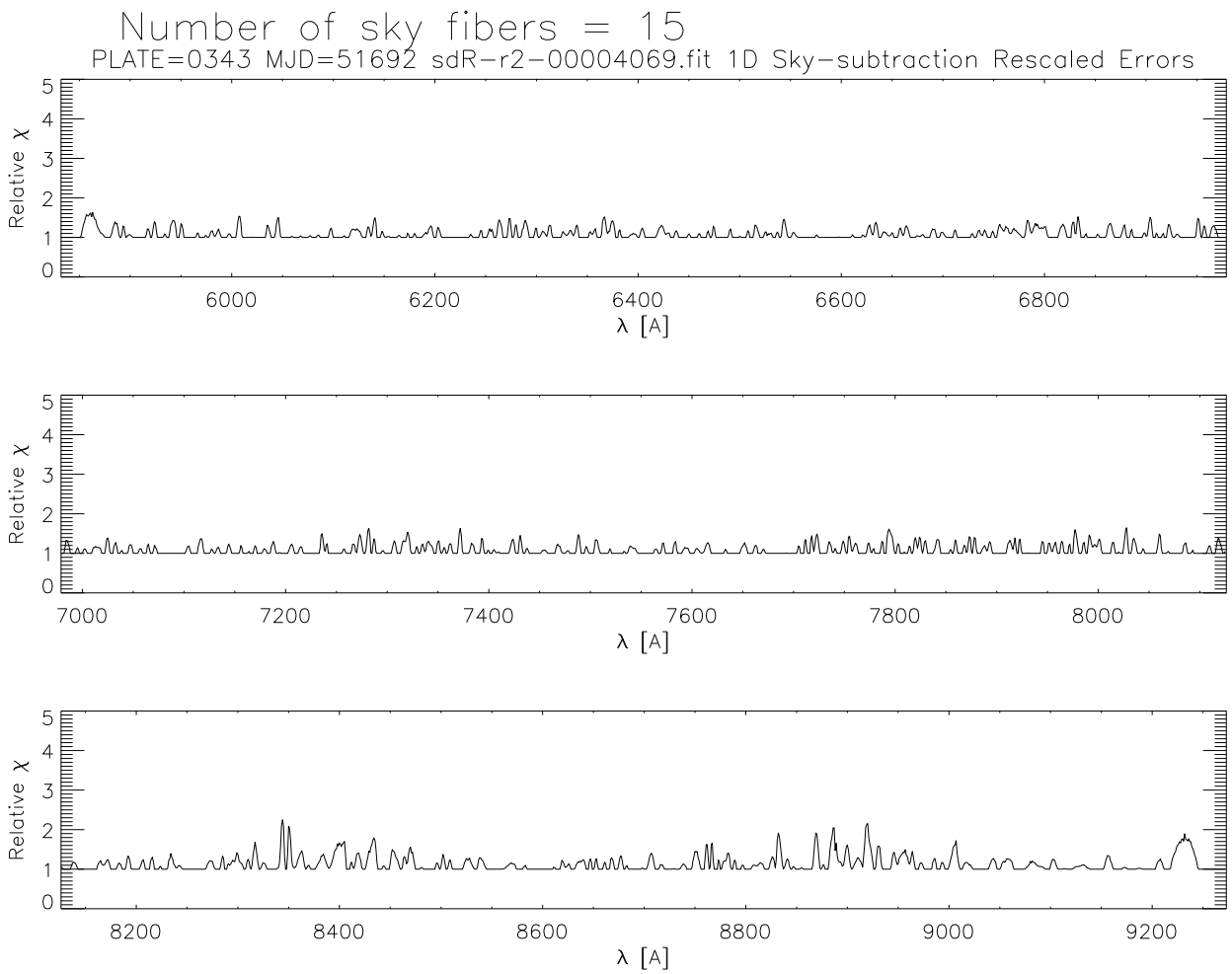
es= 0.0000

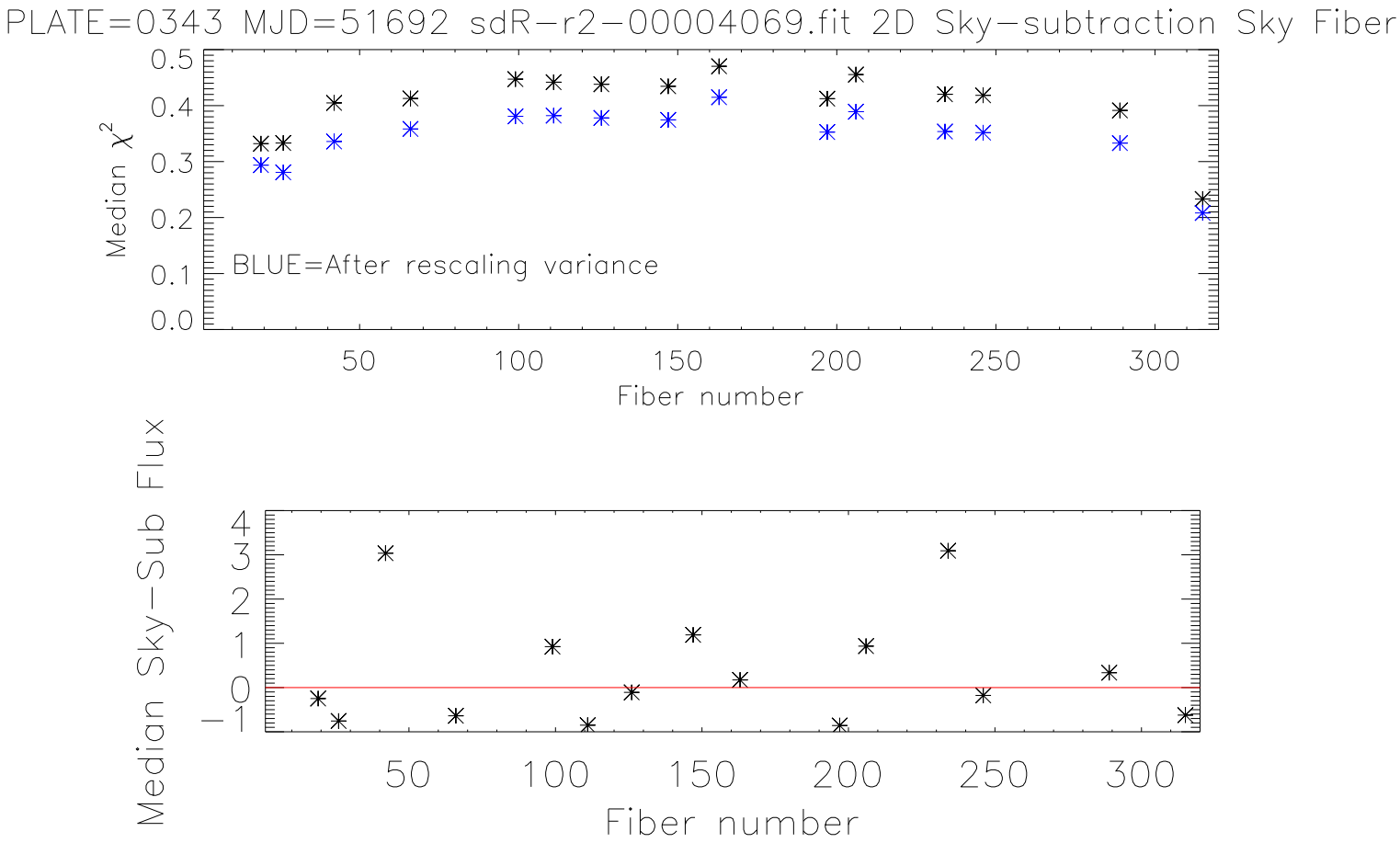

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004069.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

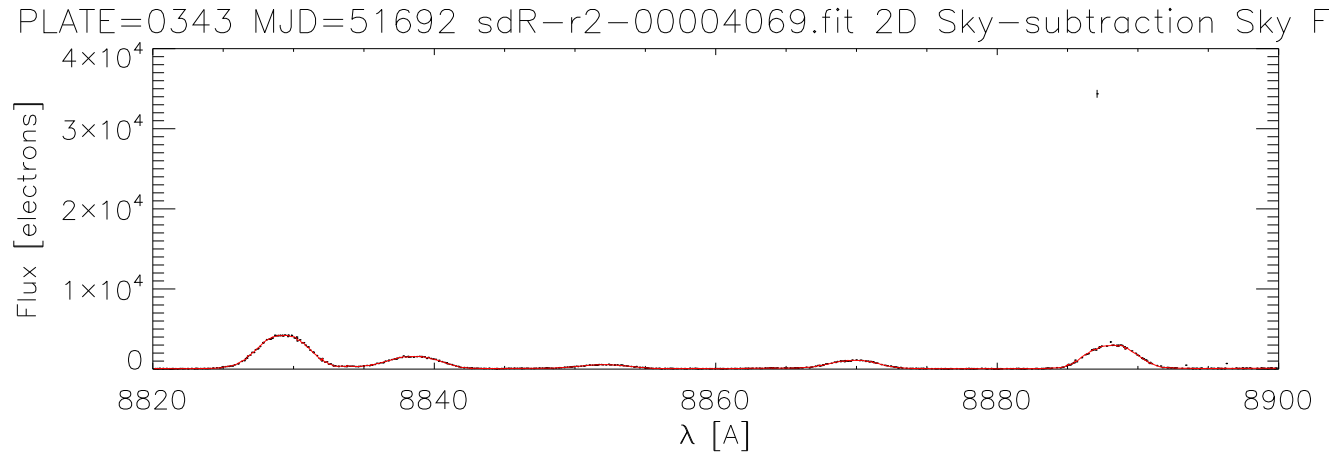

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

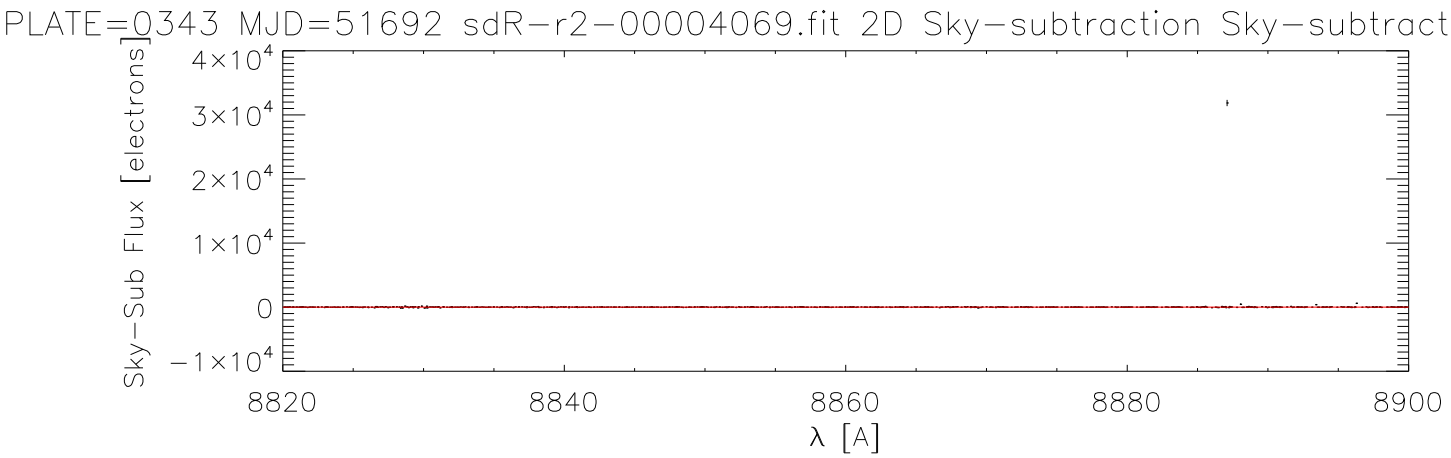

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
8820
8840
8860
8880
8900
λ [A]

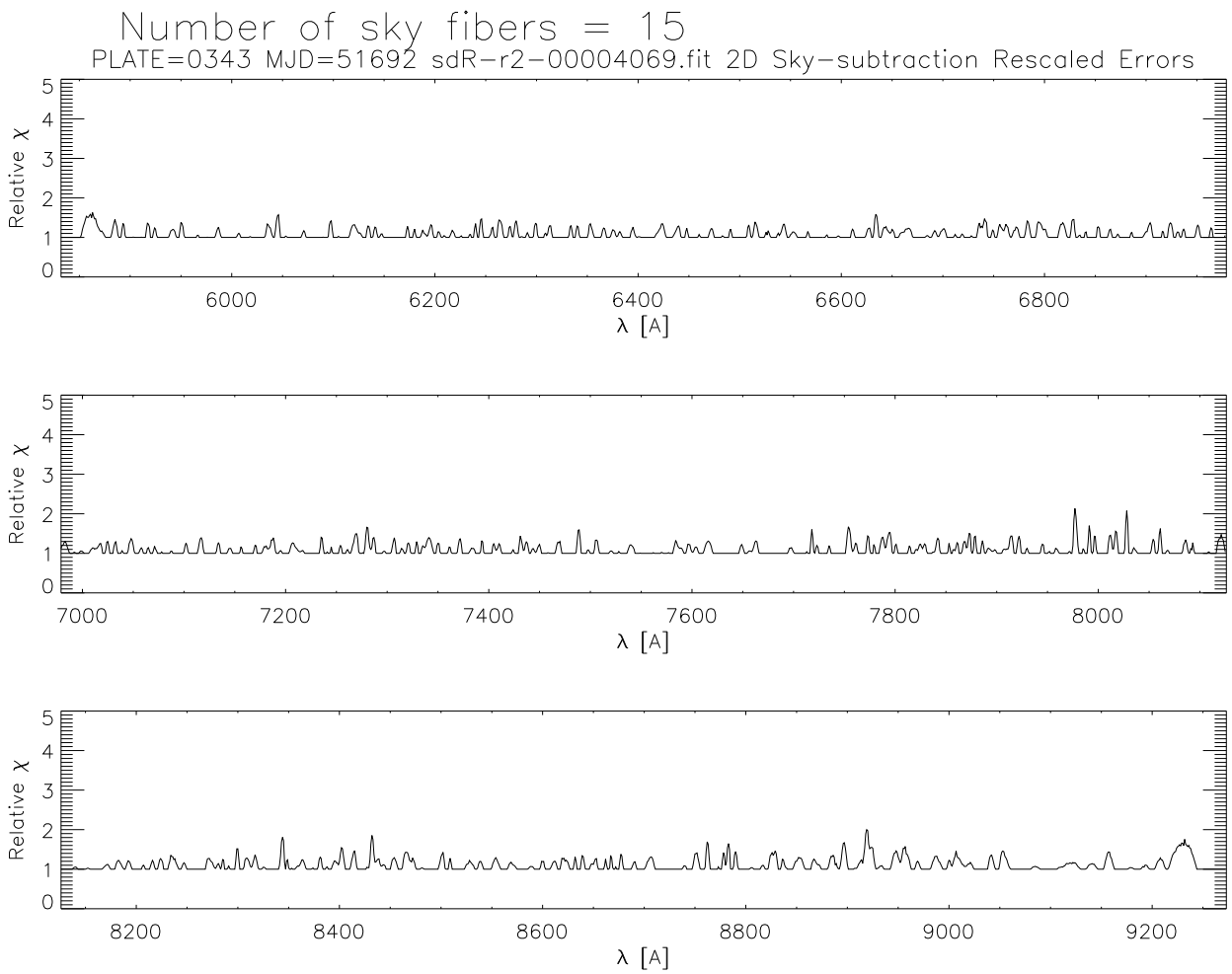

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
-1×10^4
8820
8840
8860
8880
8900
λ [A]

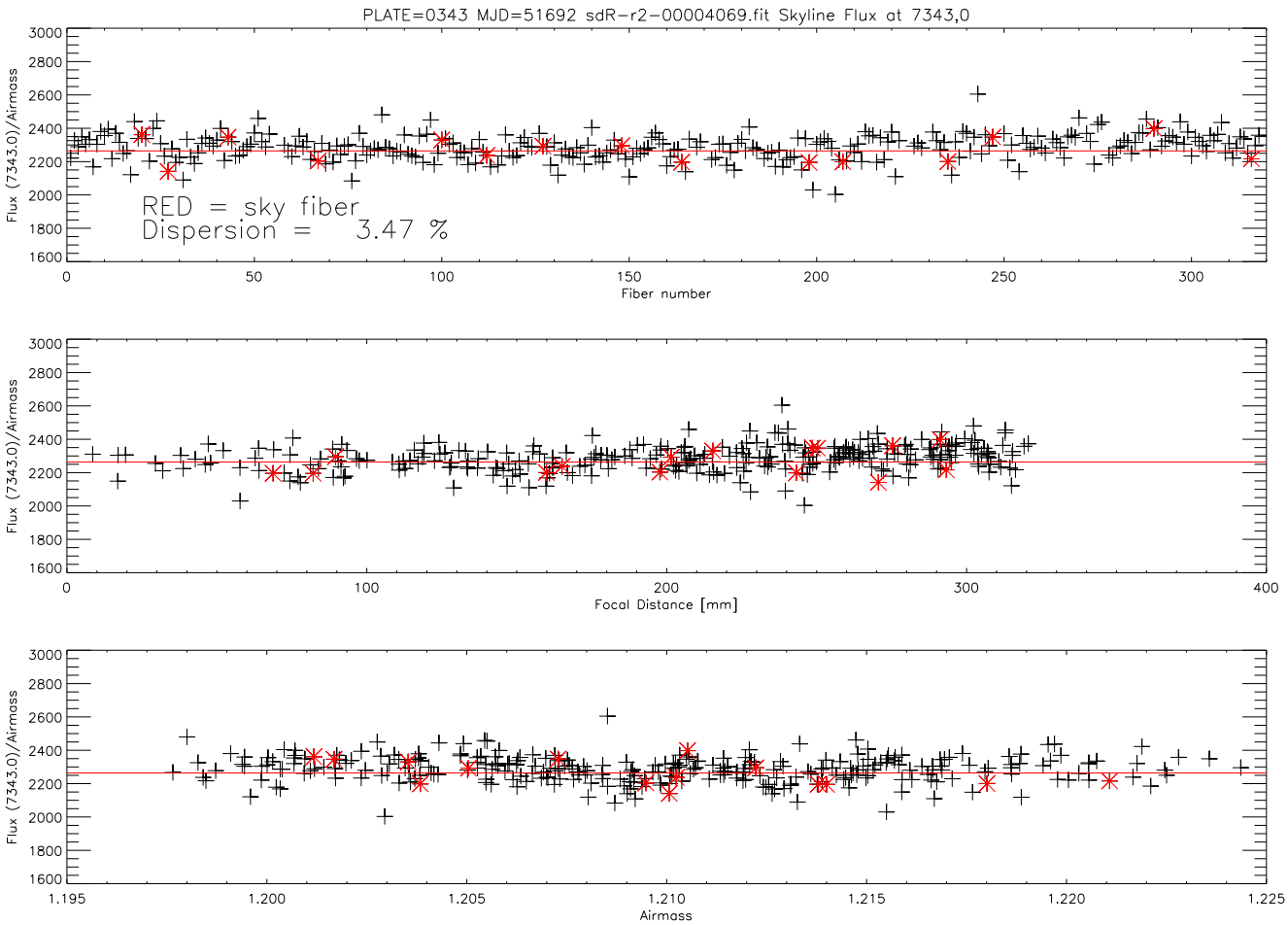

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004069.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

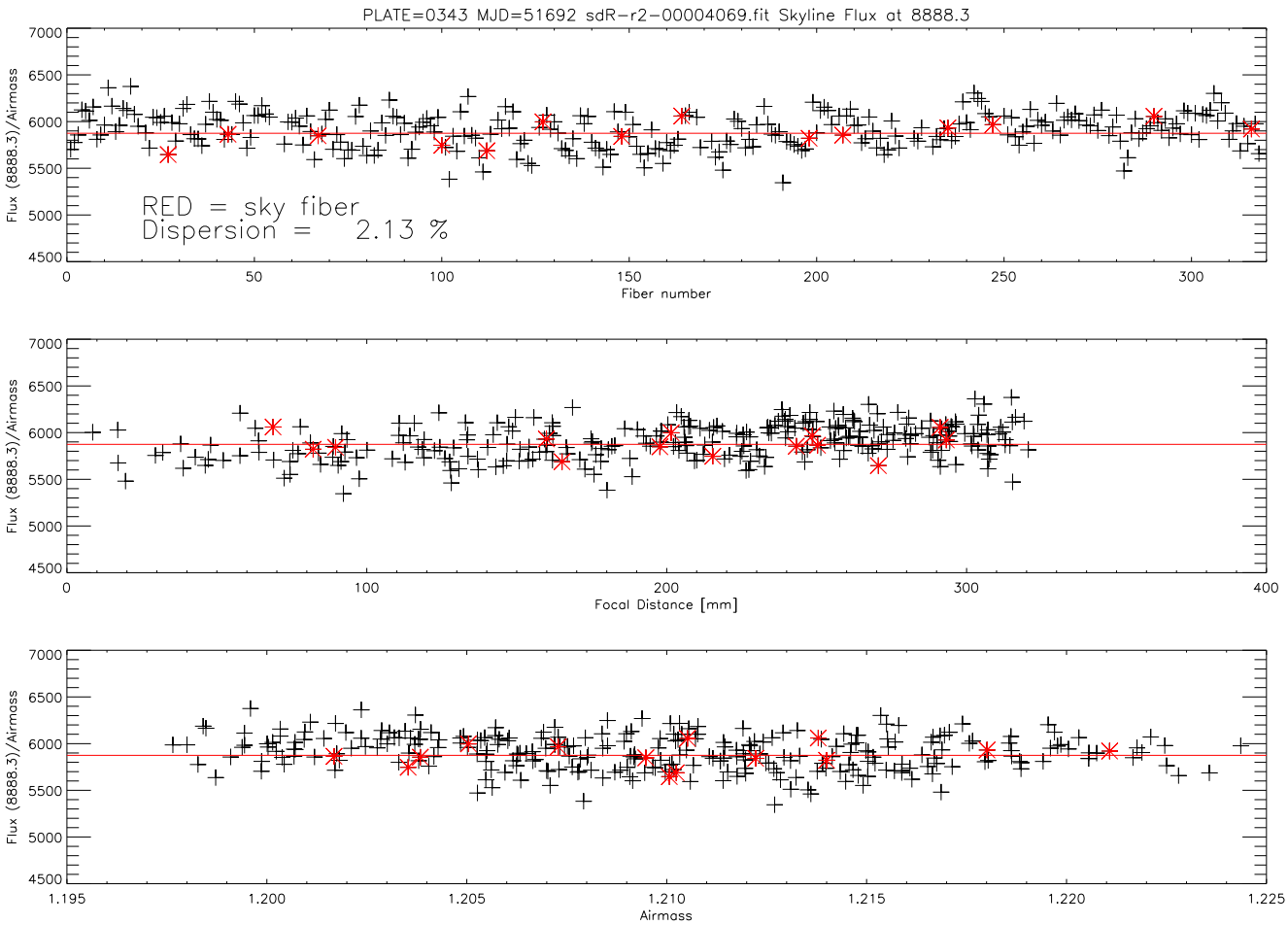

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

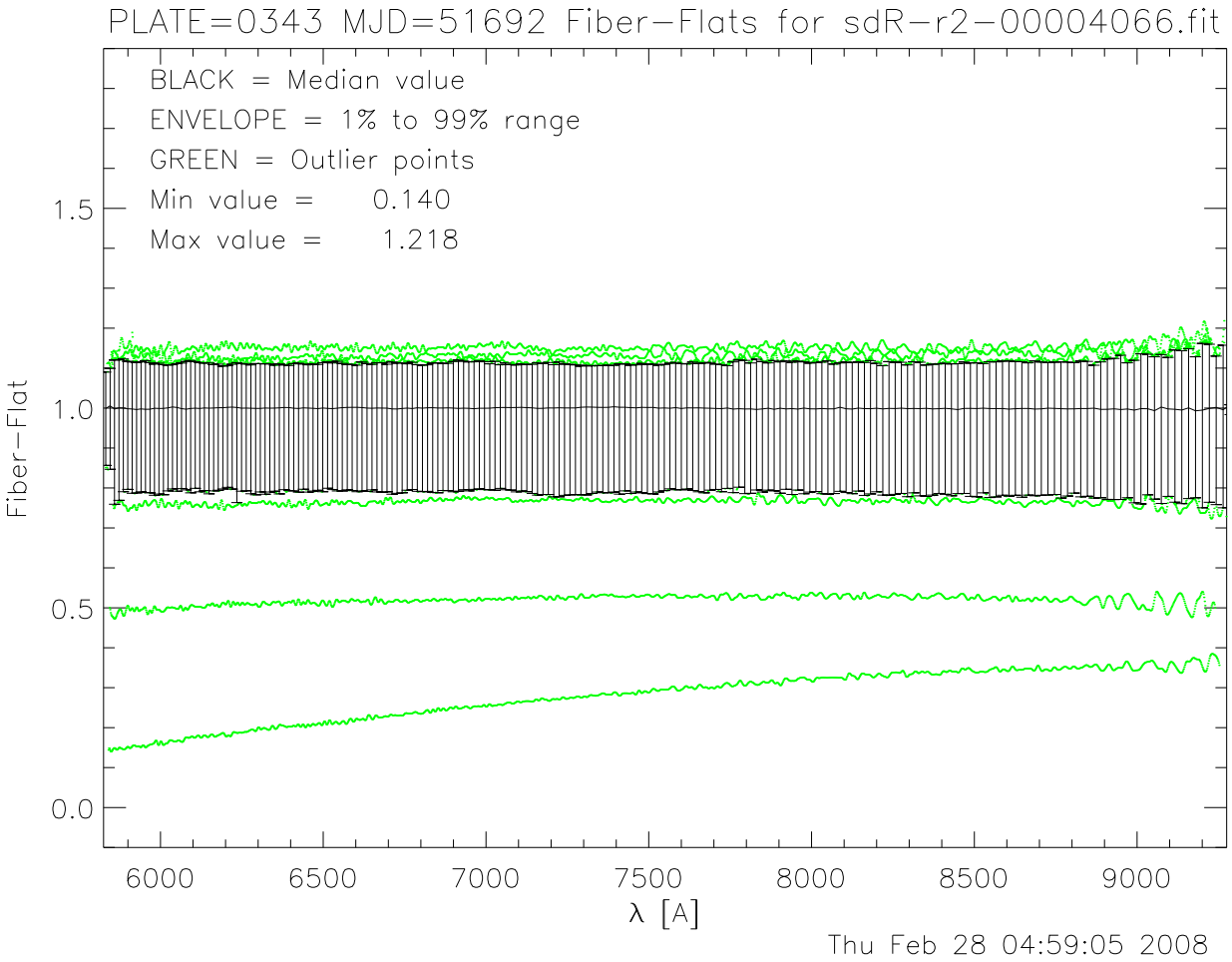

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
8820
8840
8860
8880
8900
λ [A]

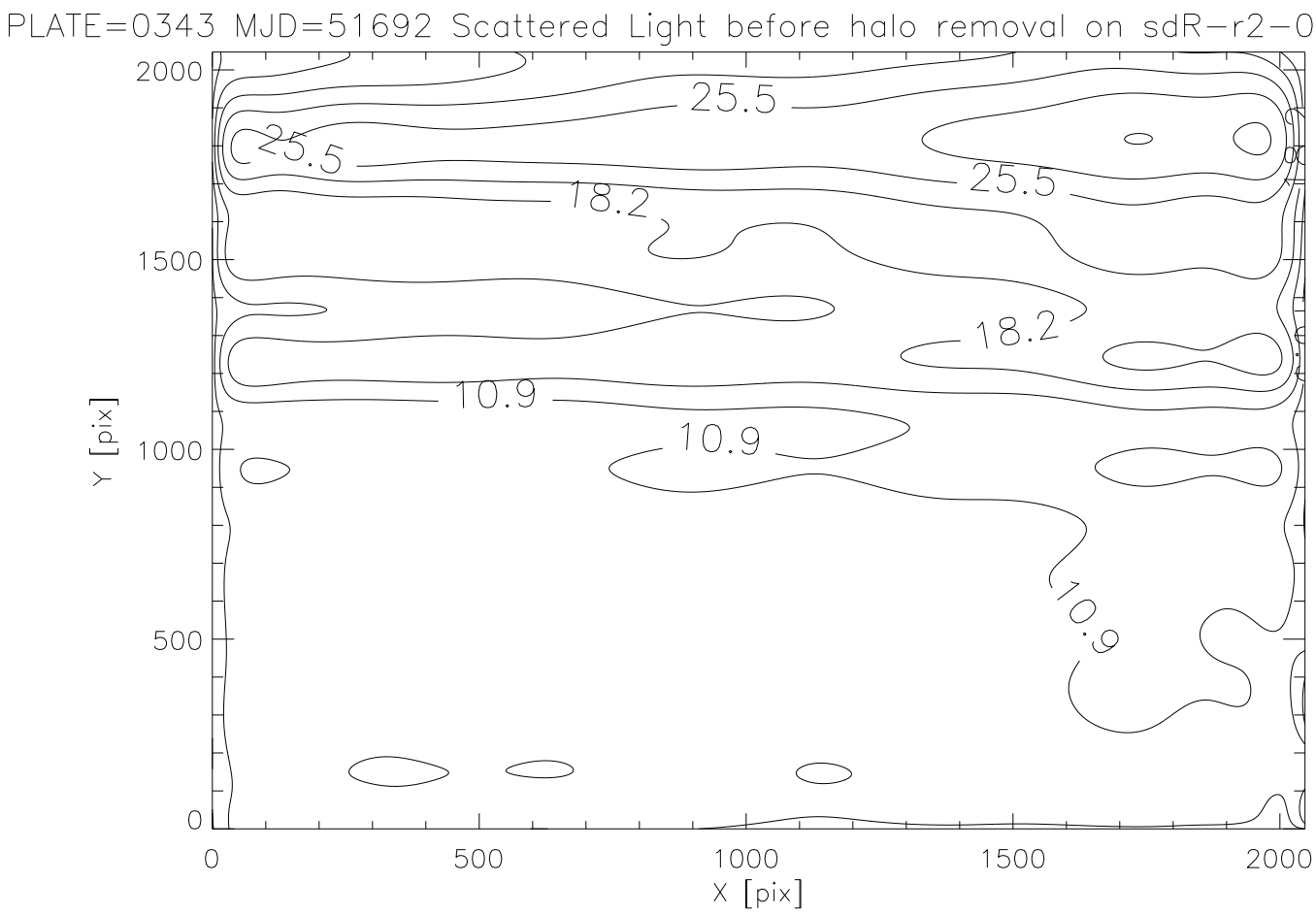

PLATE=0343 MJD=51692 sdR-r2-00004069.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
-1×10^4
8820
8840
8860
8880
8900
λ [A]

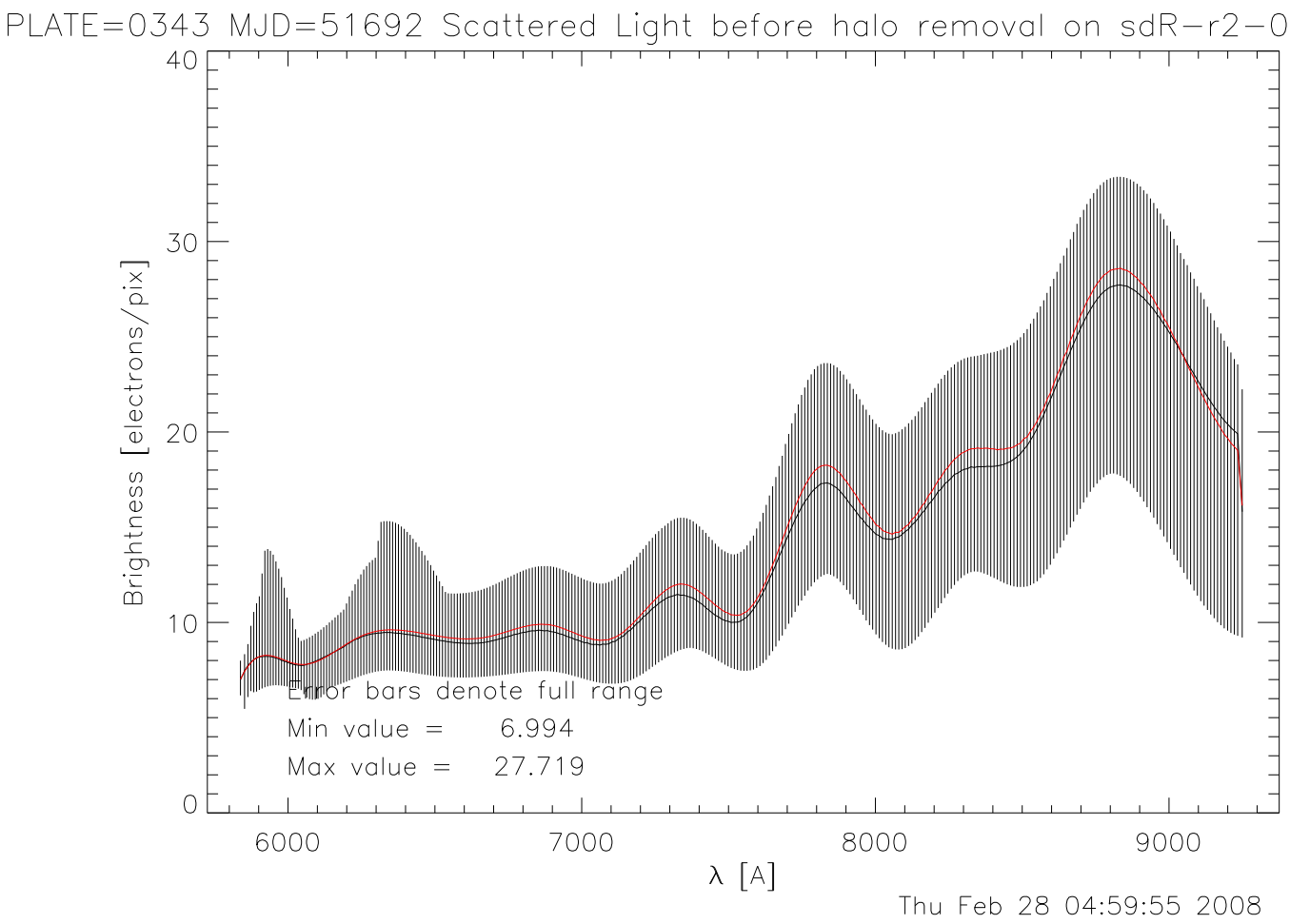

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004069.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

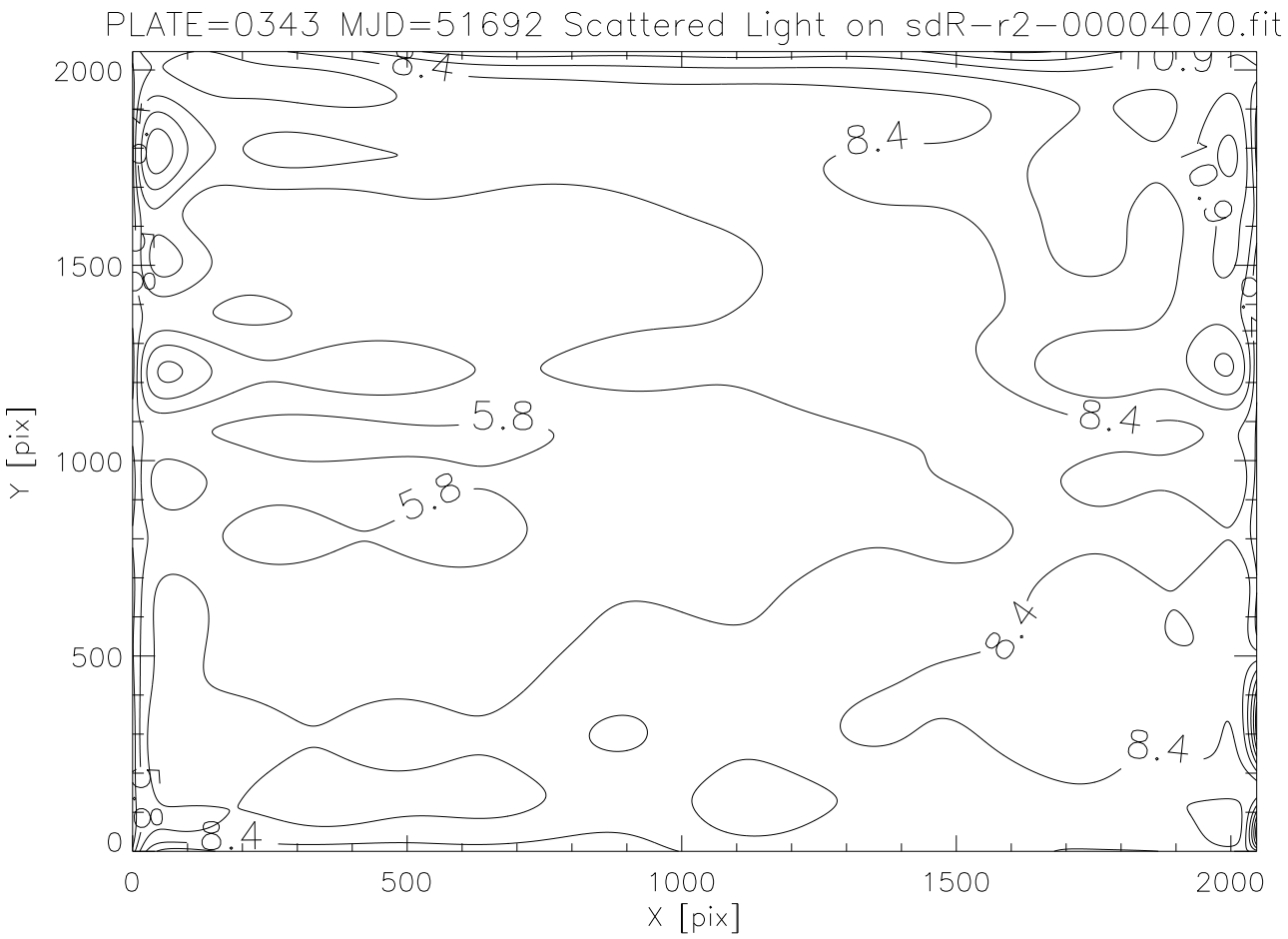

PLATE=0343 MJD=51692 sdR-r2-00004069.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.47 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

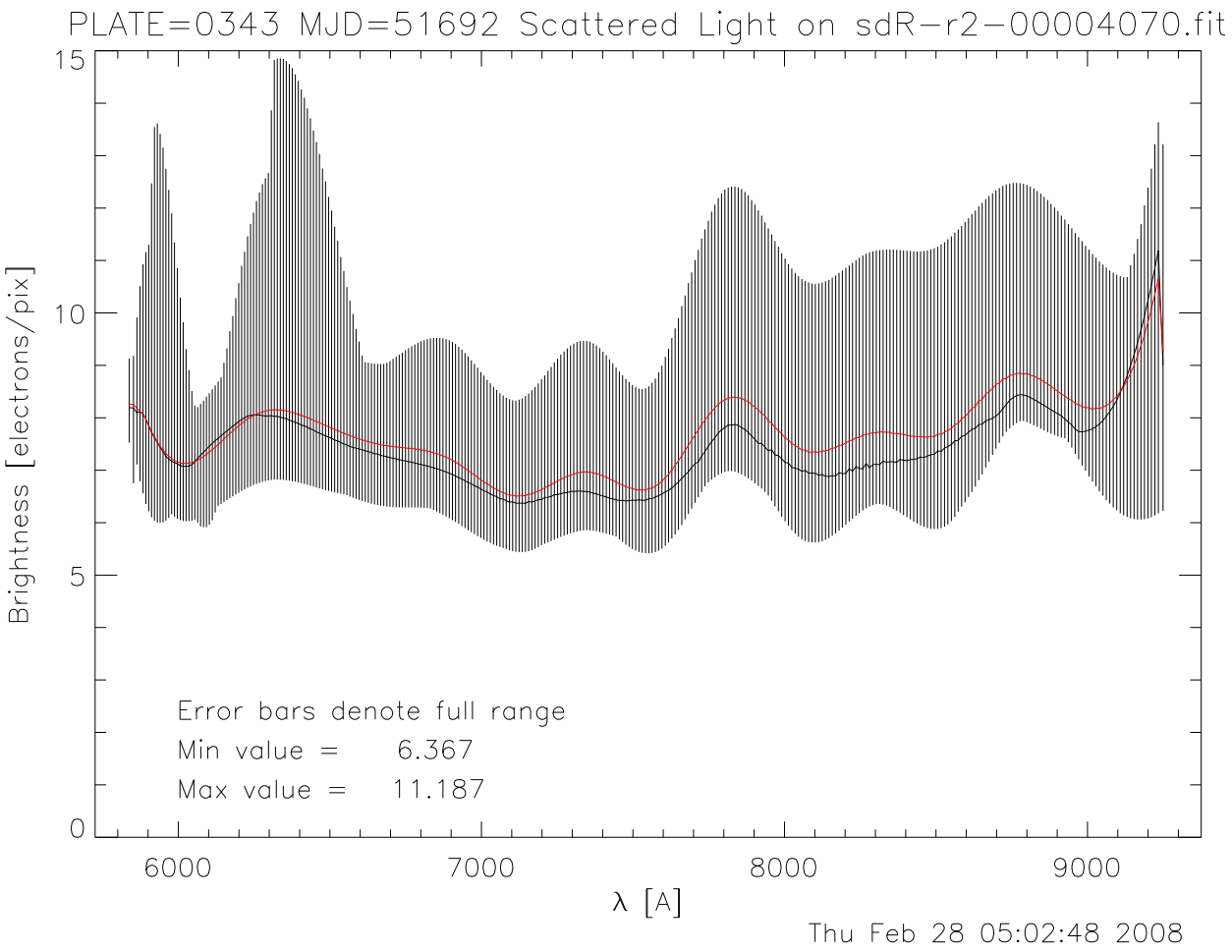

PLATE=0343 MJD=51692 sdR-r2-00004069.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.13 %
Fiber number
Focal Distance [mm]
Airmass

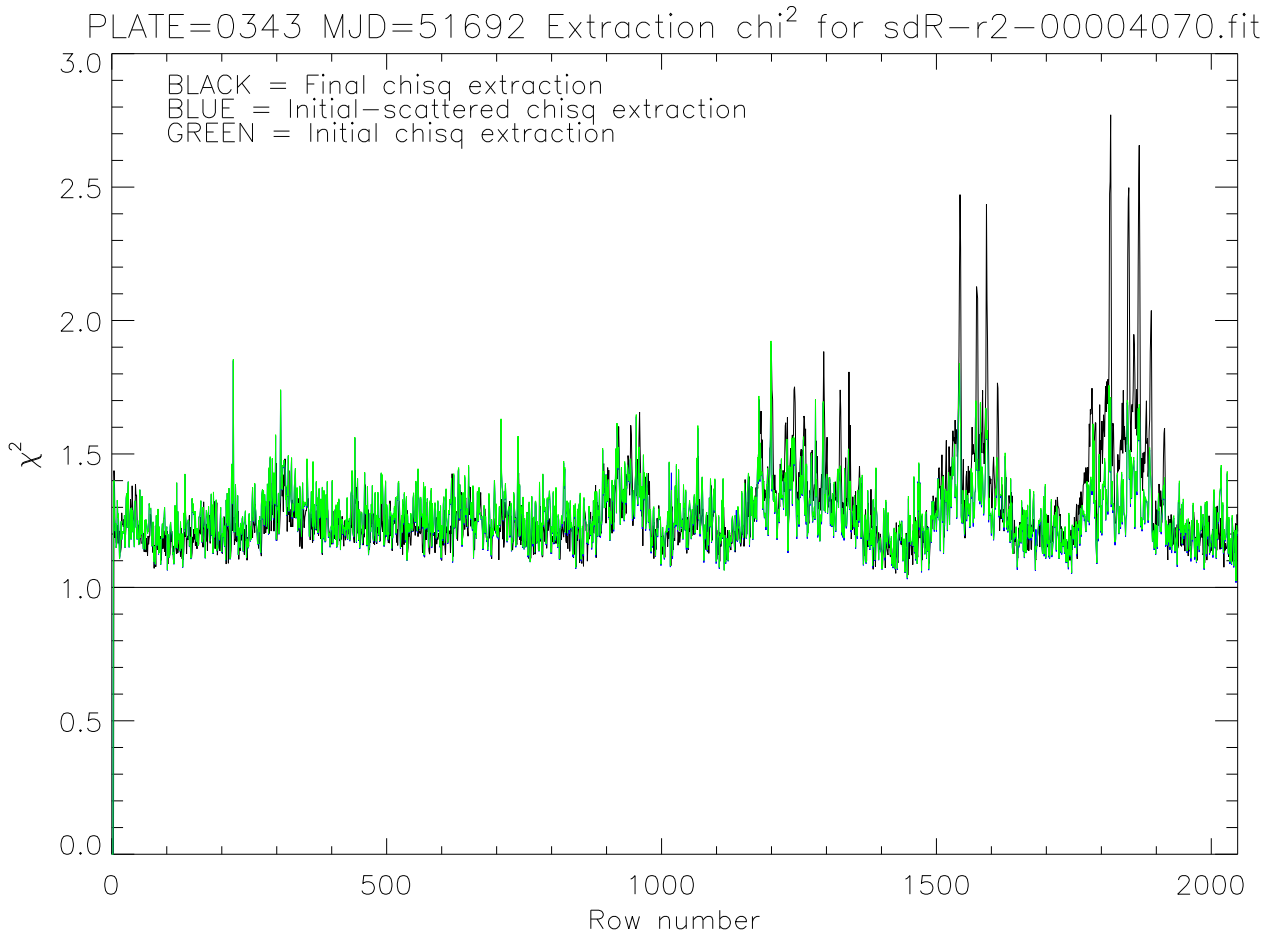

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 04:59:05 2008

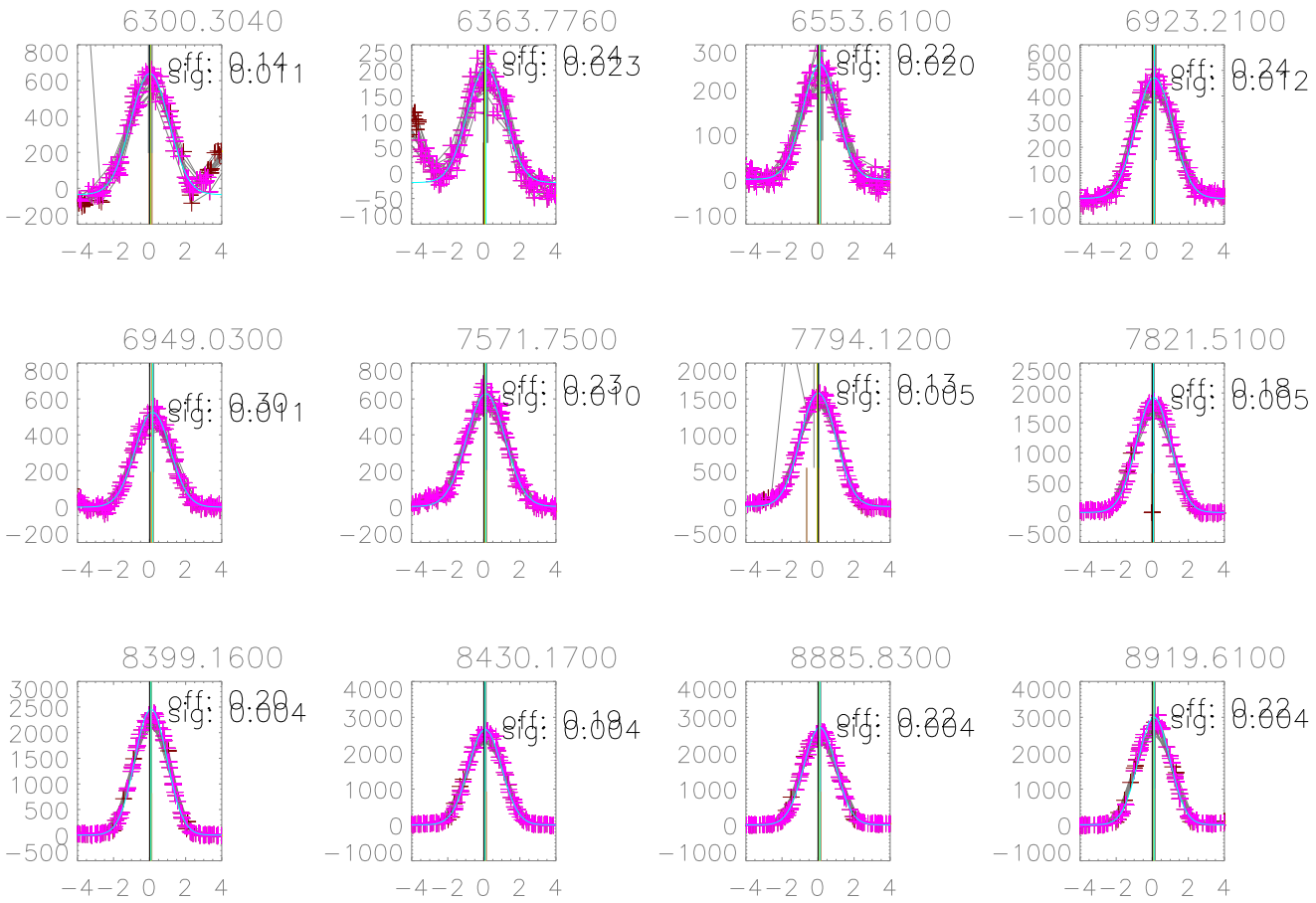

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004070.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

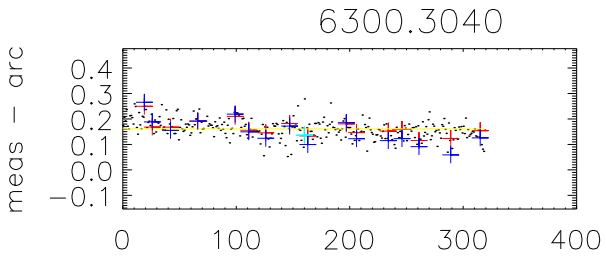

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004070.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.994
Max value = 27.719
Thu Feb 28 04:59:55 2008

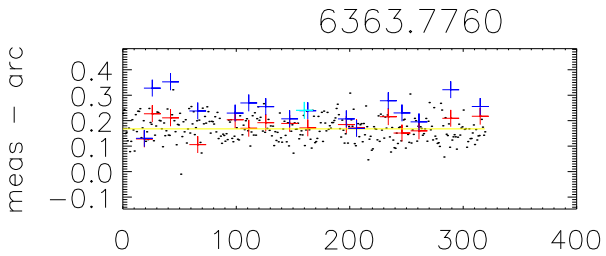

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004070.fit
8.4
8.4
5.8
5.8
8.4
8.4
8.4
Y [pix]
X [pix]
0
500
1000
1500
2000

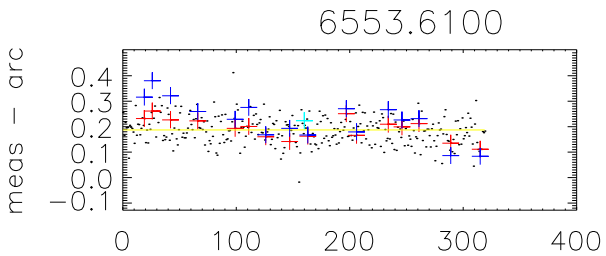

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004070.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.367
Max value = 11.187
Thu Feb 28 05:02:48 2008

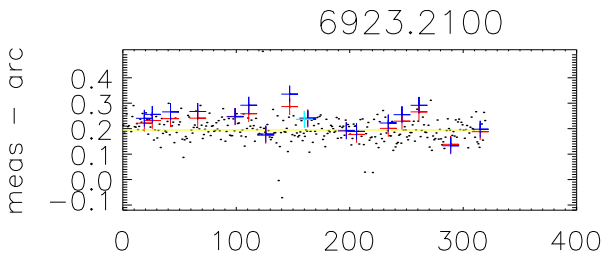

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r2−00004070.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

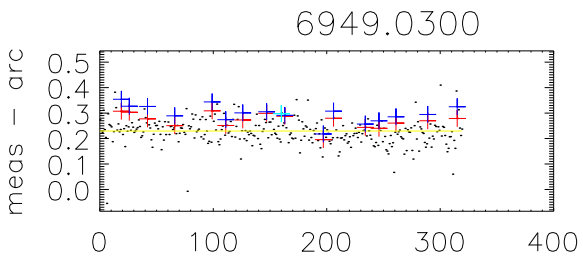

6300.3040
off: 0.14
sig: 0.011
6363.7760
off: 0.24
sig: 0.023
6553.6100
off: 0.22
sig: 0.020
6923.2100
off: 0.24
sig: 0.012
6949.0300
off: 0.30
sig: 0.011
7571.7500
off: 0.23
sig: 0.010
7794.1200
off: 0.13
sig: 0.005
7821.5100
off: 0.18
sig: 0.005
8399.1600
off: 0.20
sig: 0.004
8430.1700
off: 0.19
sig: 0.004
8885.8300
off: 0.22
sig: 0.004
8919.6100
off: 0.22
sig: 0.004

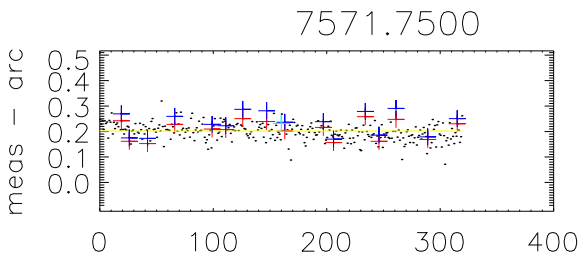

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

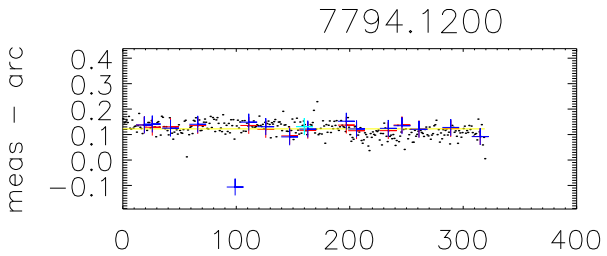

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

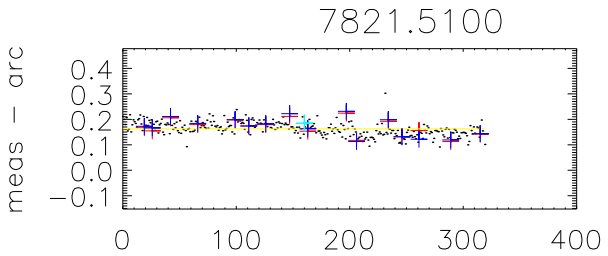

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

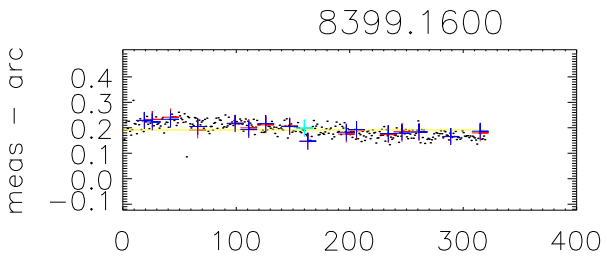

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

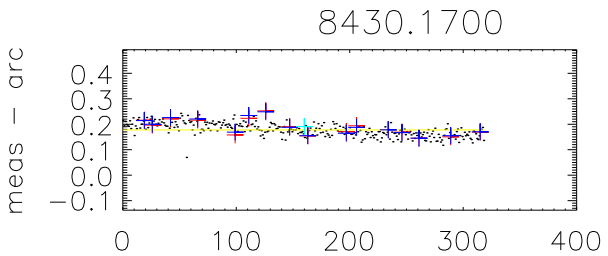

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

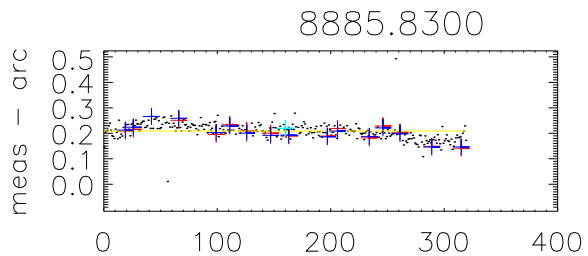

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

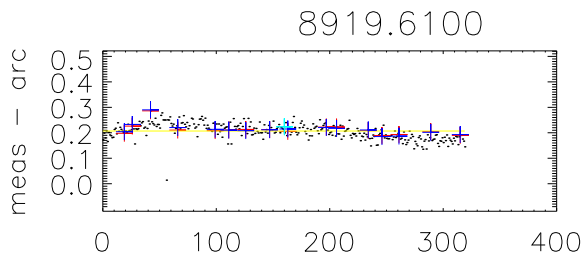

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

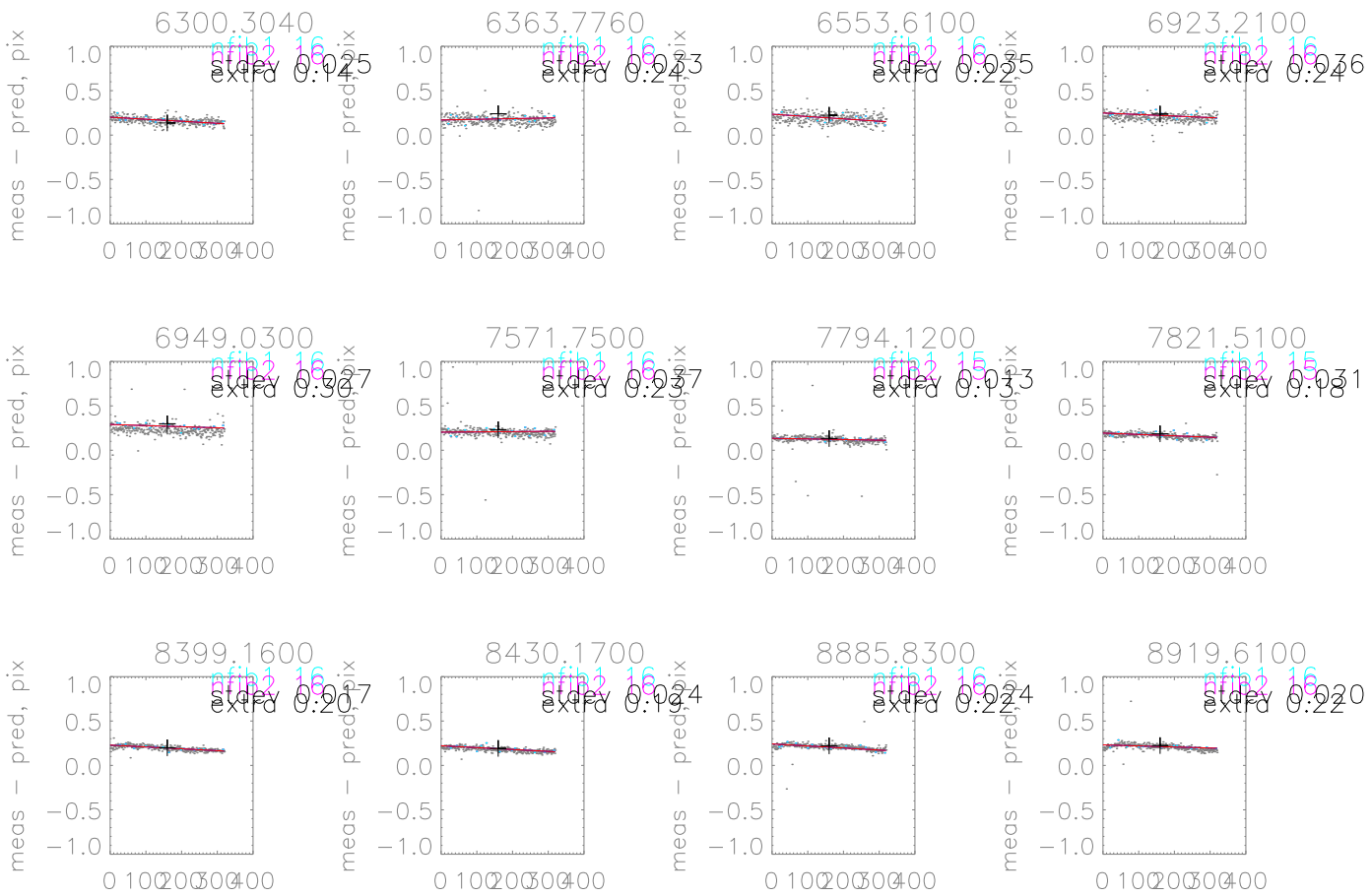

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

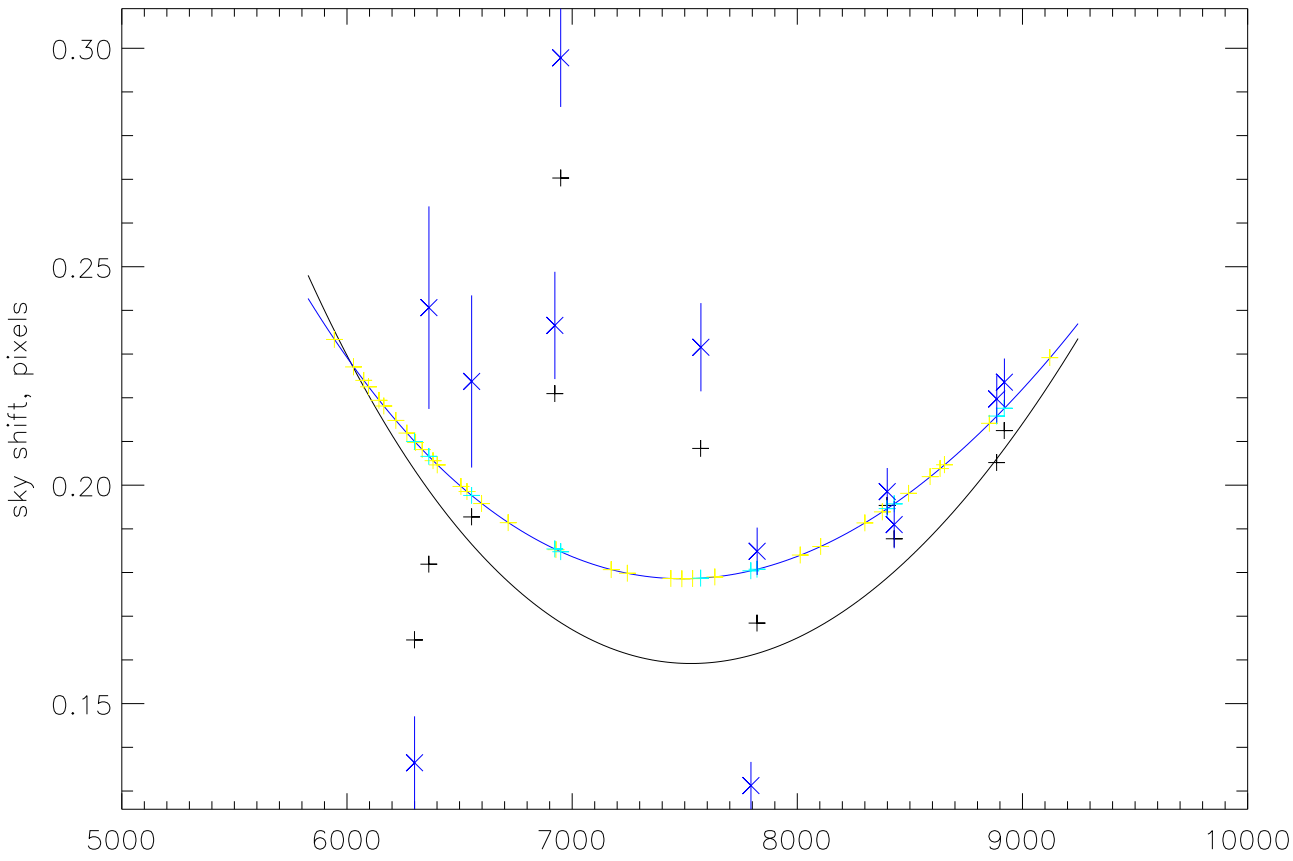

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

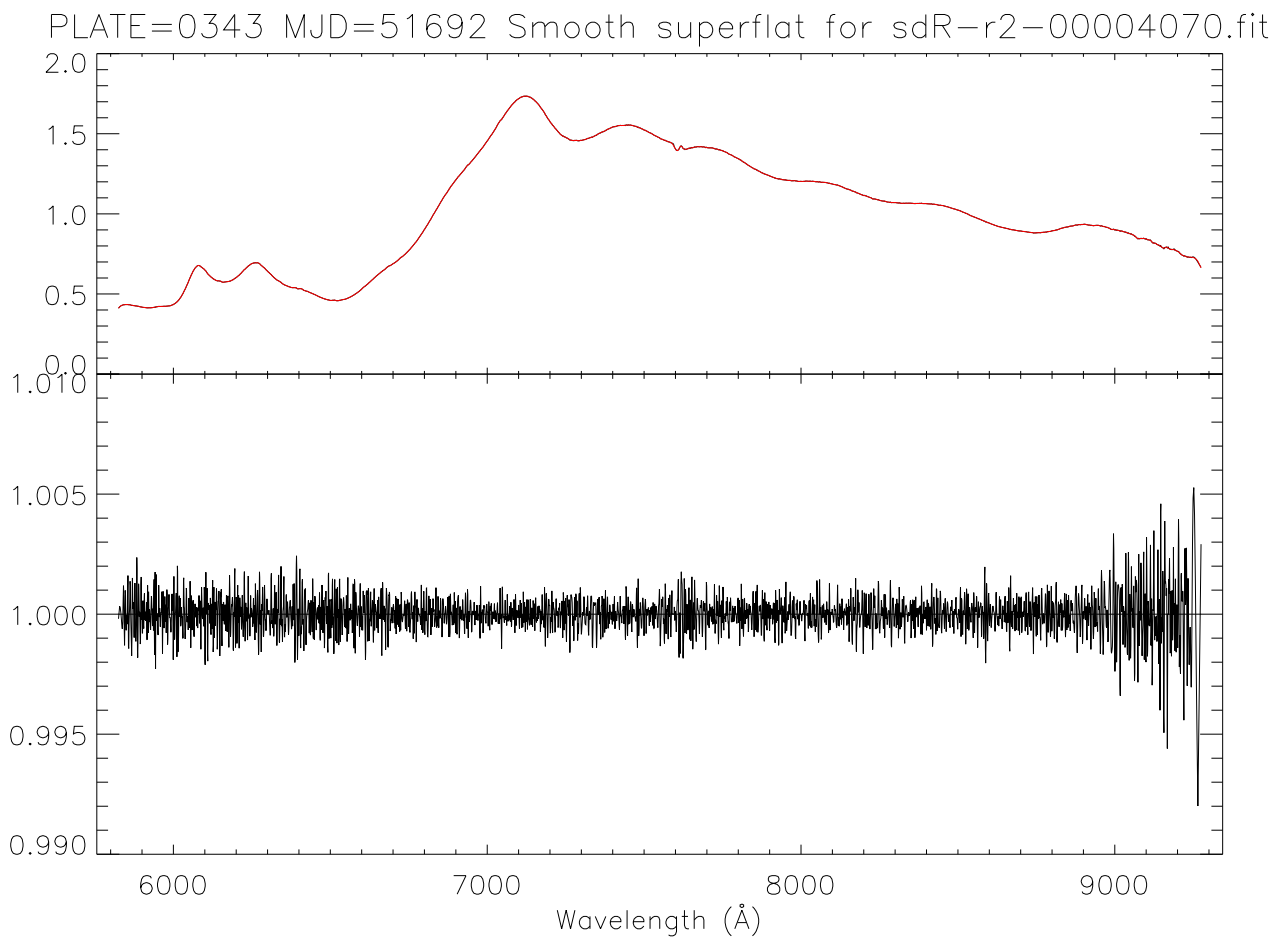

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

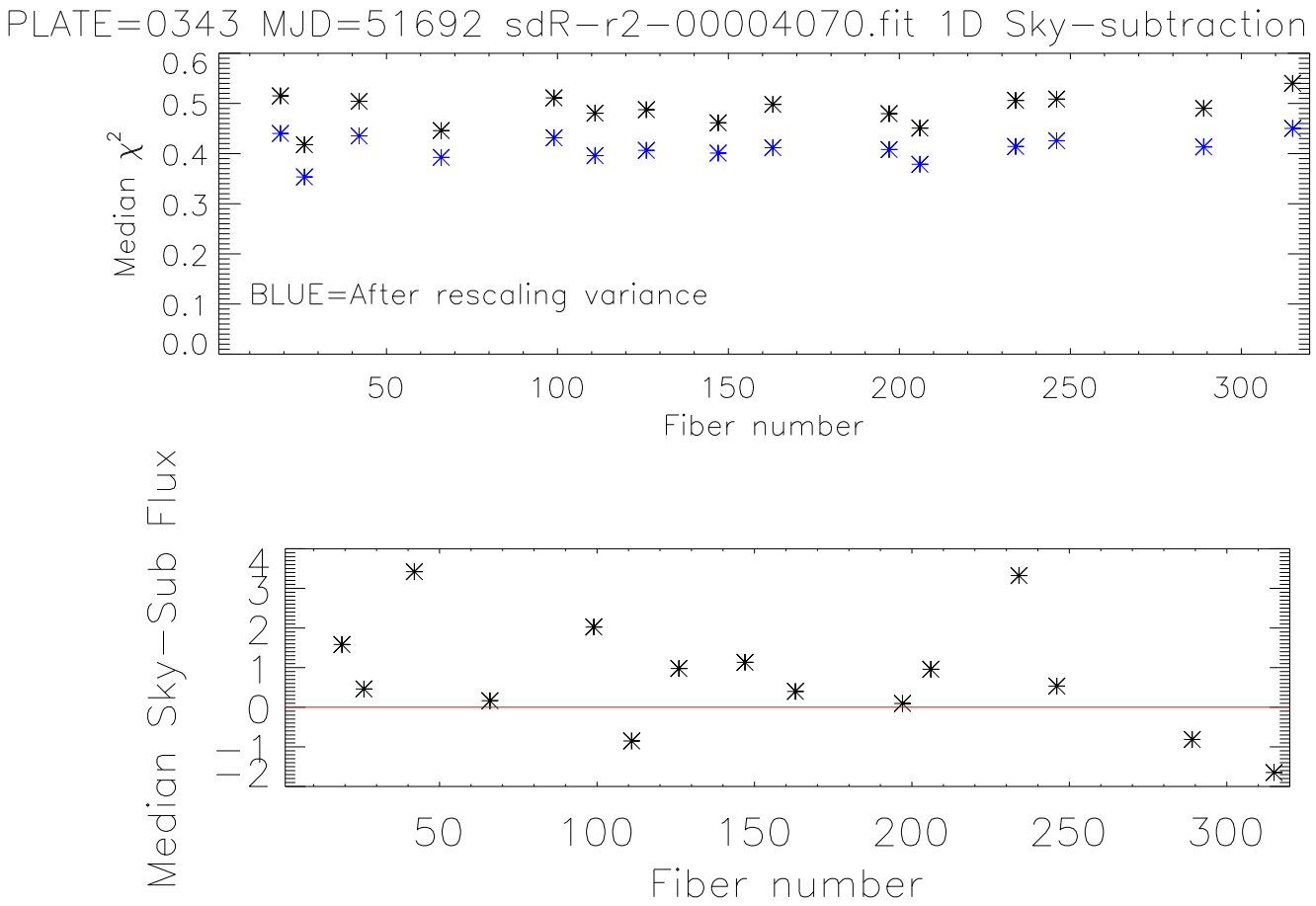

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

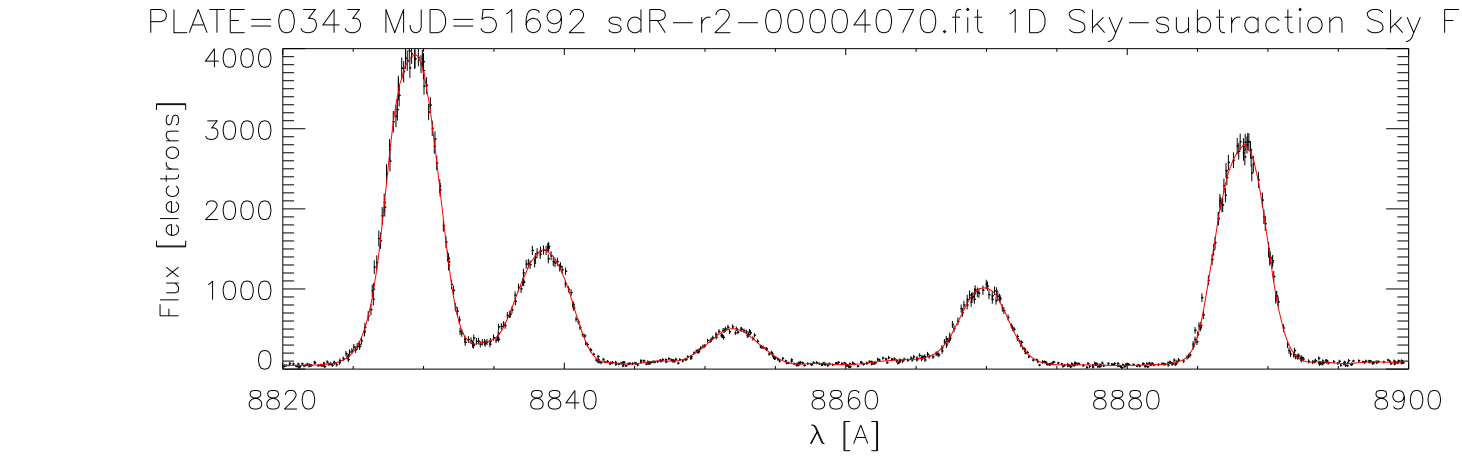

6300.3040
mfhd2 16
stdev 0.025
extra 0.14
6363.7760
mfhd2 16
stdev 0.033
extra 0.24
6553.6100
mfhd2 16
stdev 0.035
extra 0.22
6923.2100
mfhd2 16
stdev 0.036
extra 0.24
6949.0300
mfhd2 16
stdev 0.027
extra 0.30
7571.7500
mfhd2 16
stdev 0.037
extra 0.23
7794.1200
mfhd2 15
stdev 0.013
extra 0.13
7821.5100
mfhd2 15
stdev 0.031
extra 0.18
8399.1600
mfhd2 16
stdev 0.017
extra 0.20
8430.1700
mfhd2 16
stdev 0.024
extra 0.19
8885.8300
mfhd2 16
stdev 0.024
extra 0.22
8919.6100
mfhd2 16
stdev 0.020
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

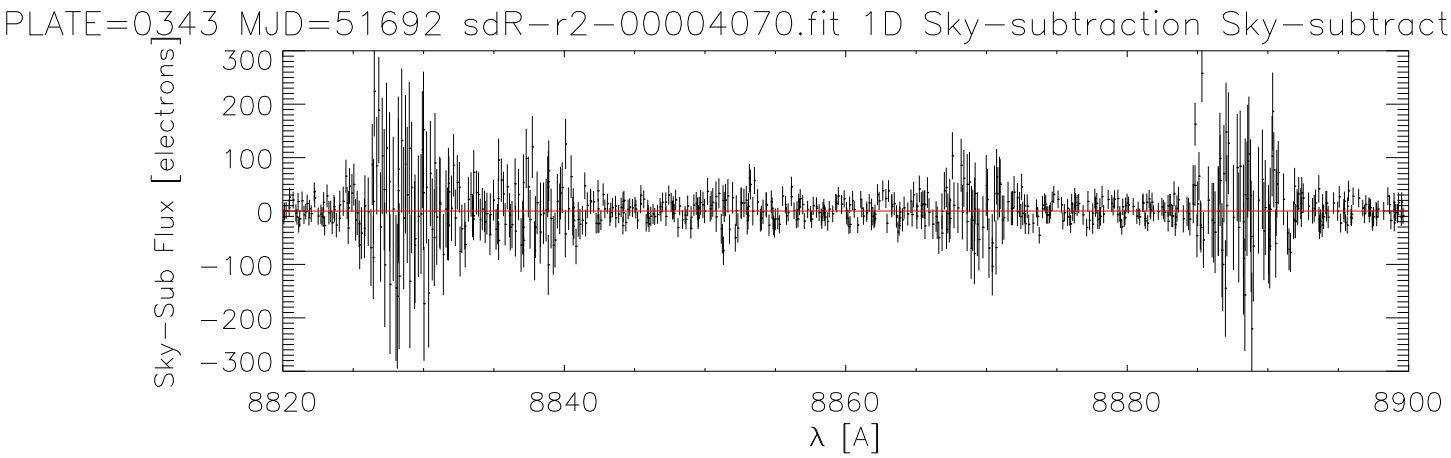

0.30
0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

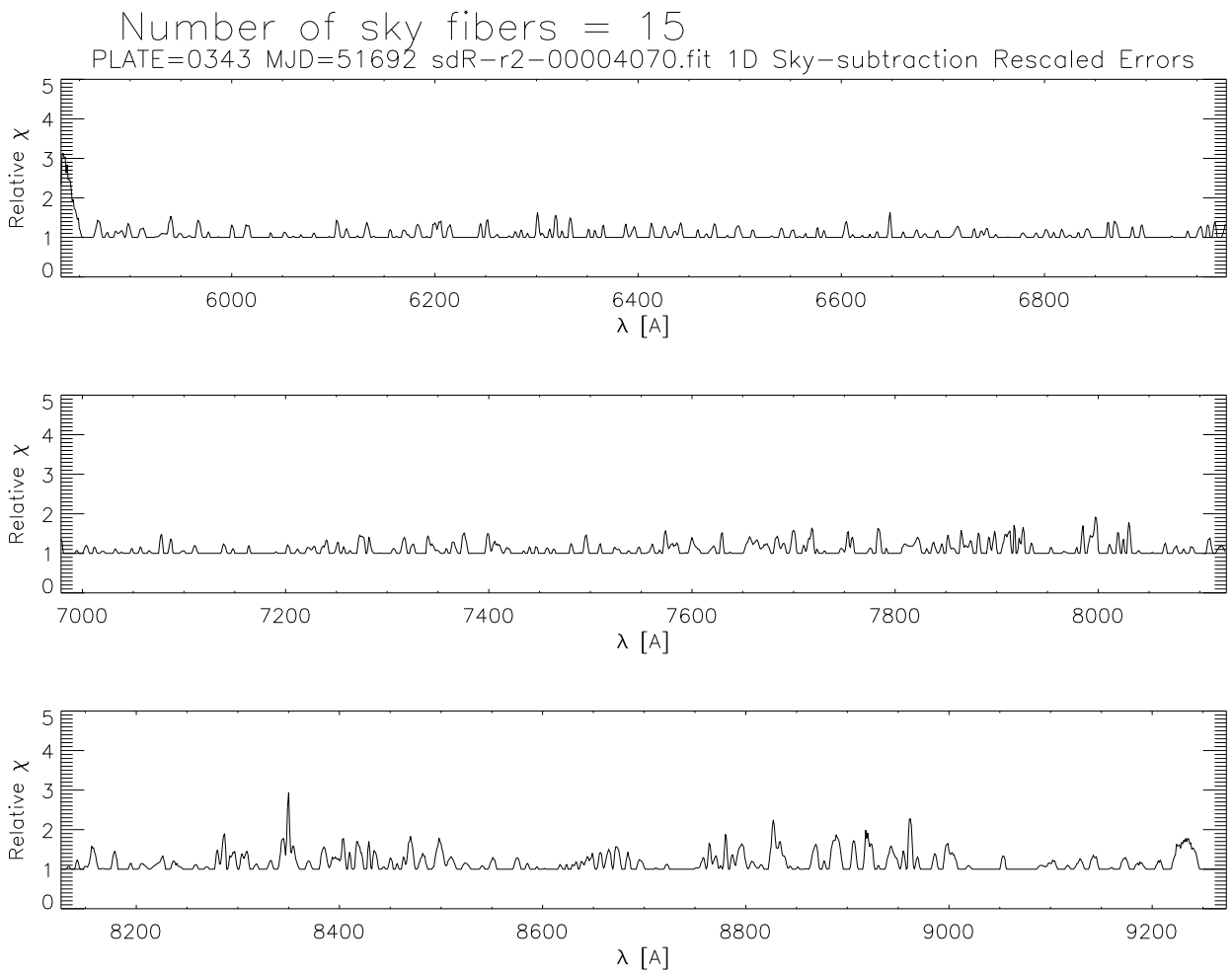
es= 0.0000

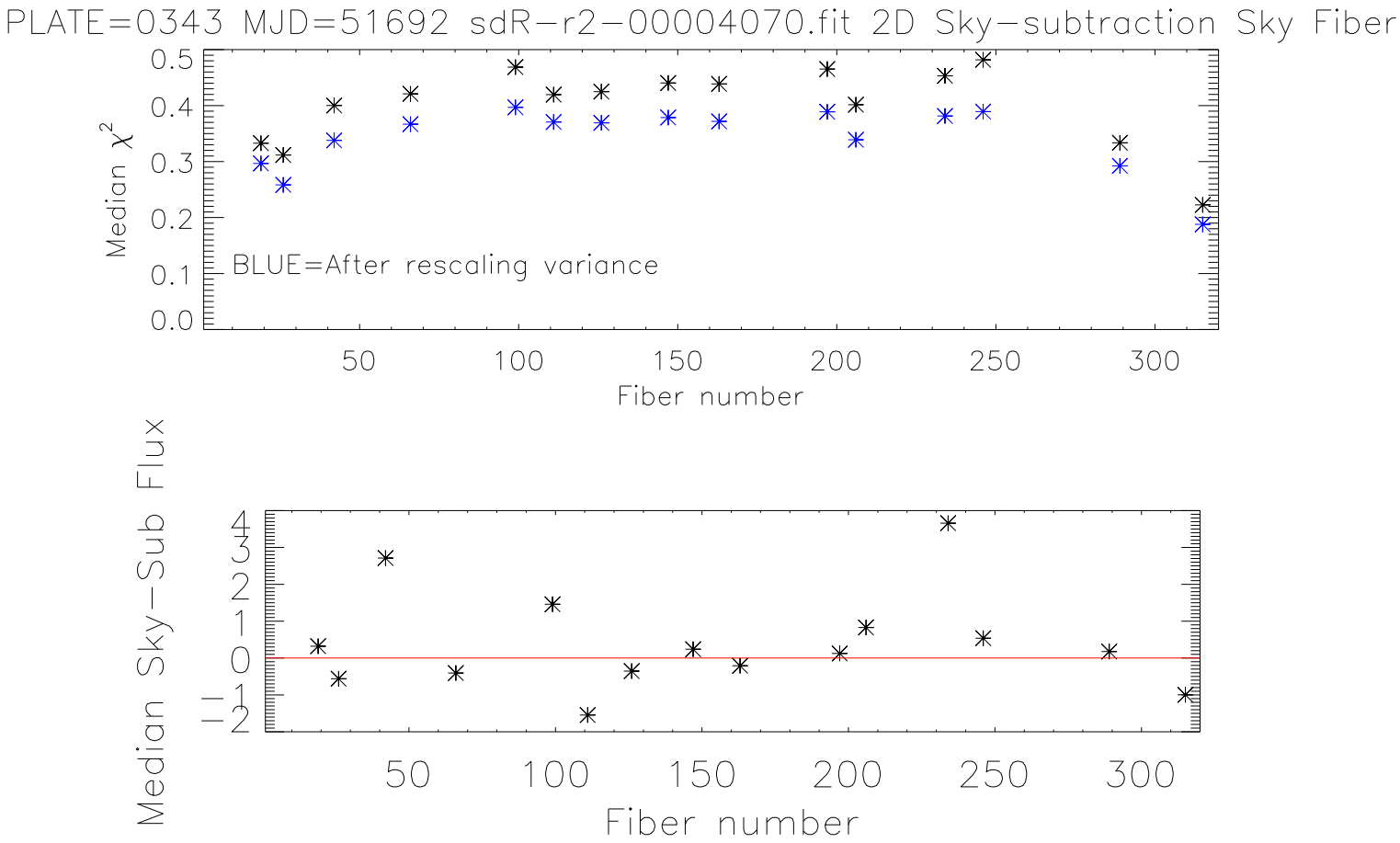

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004070.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

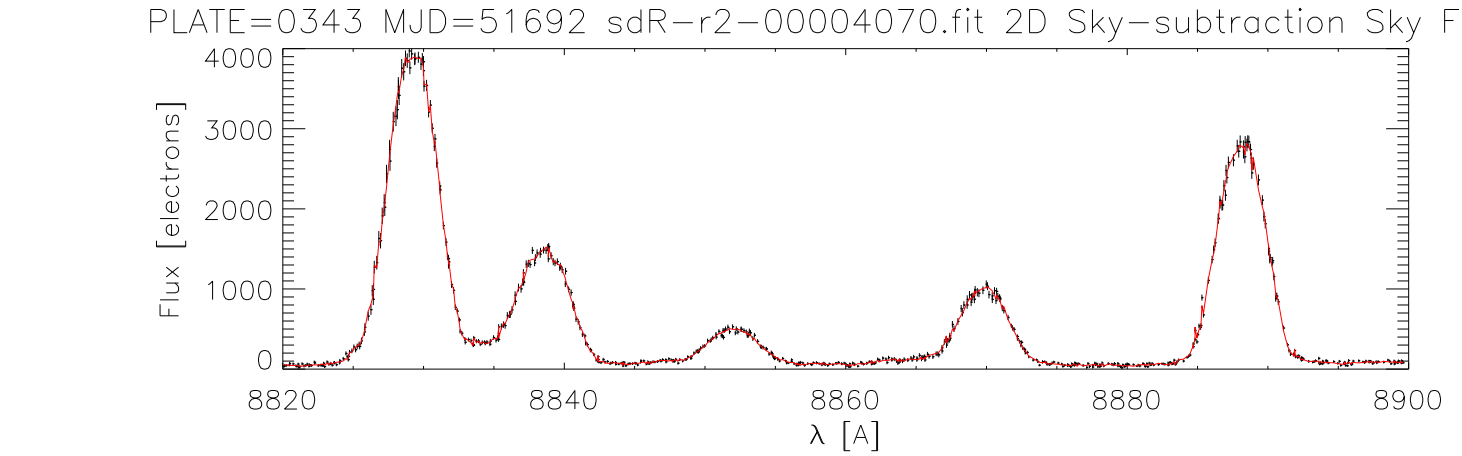

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

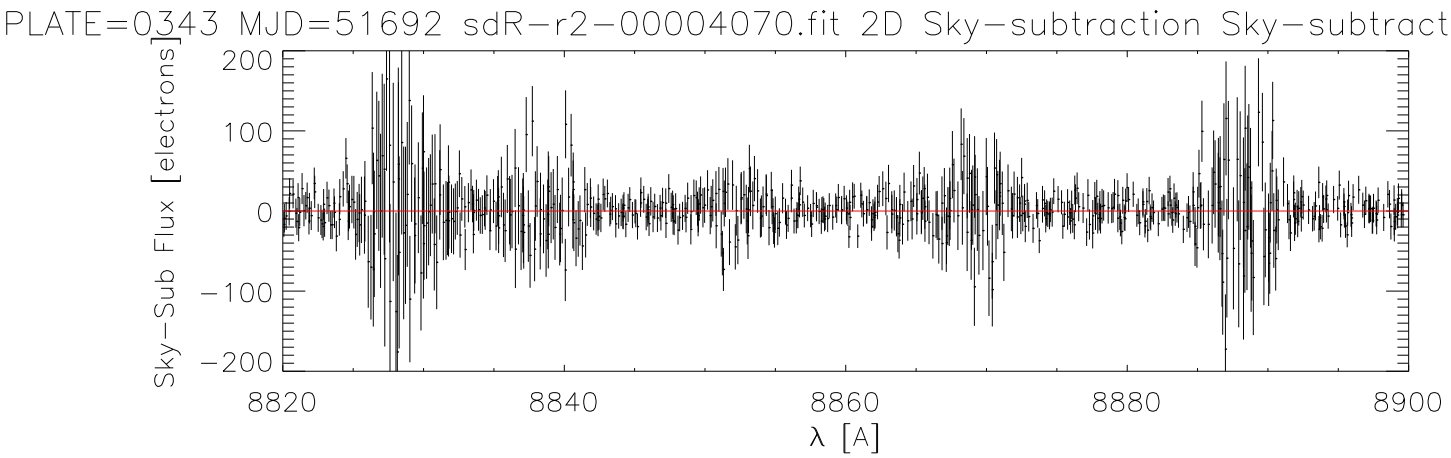

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

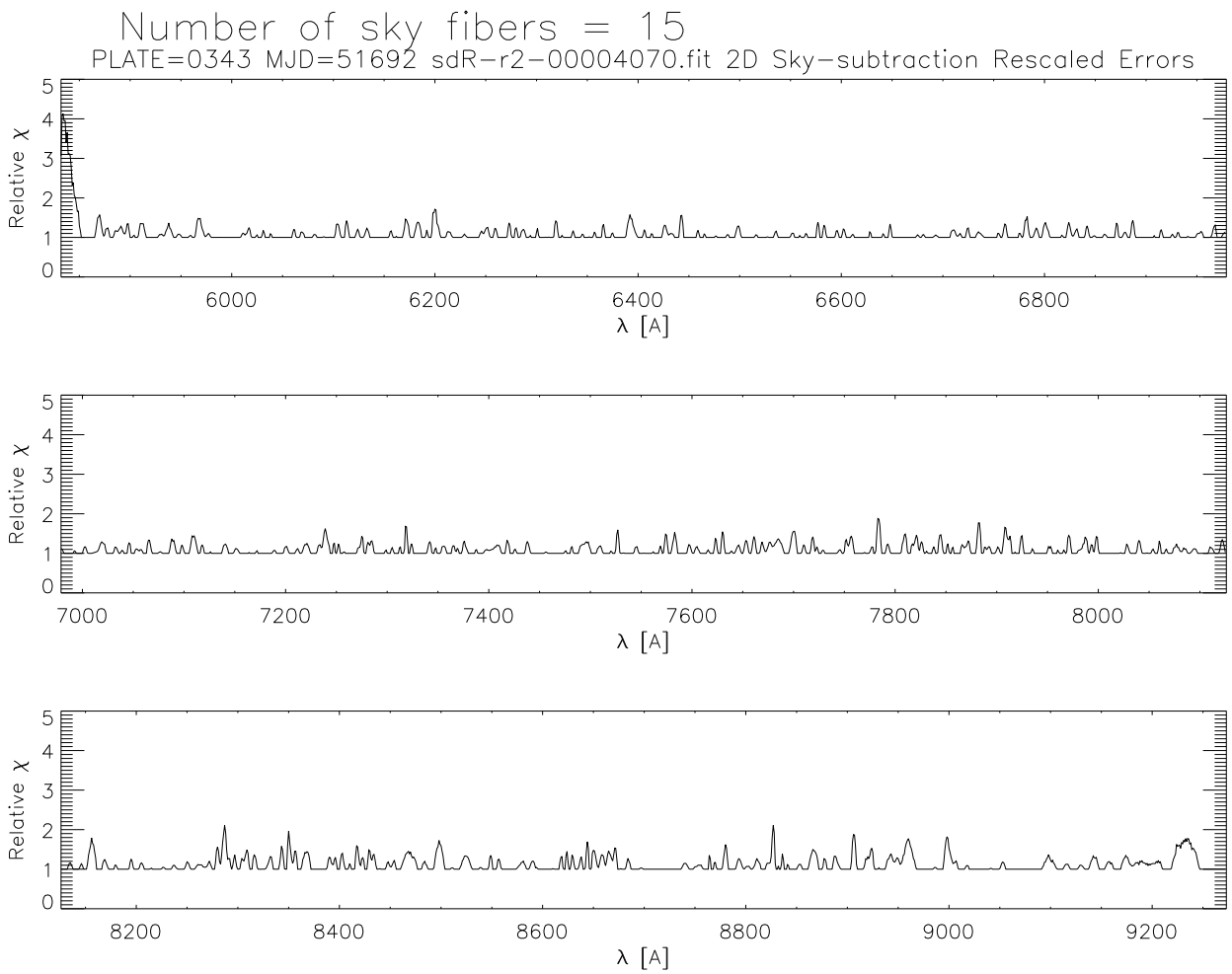

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

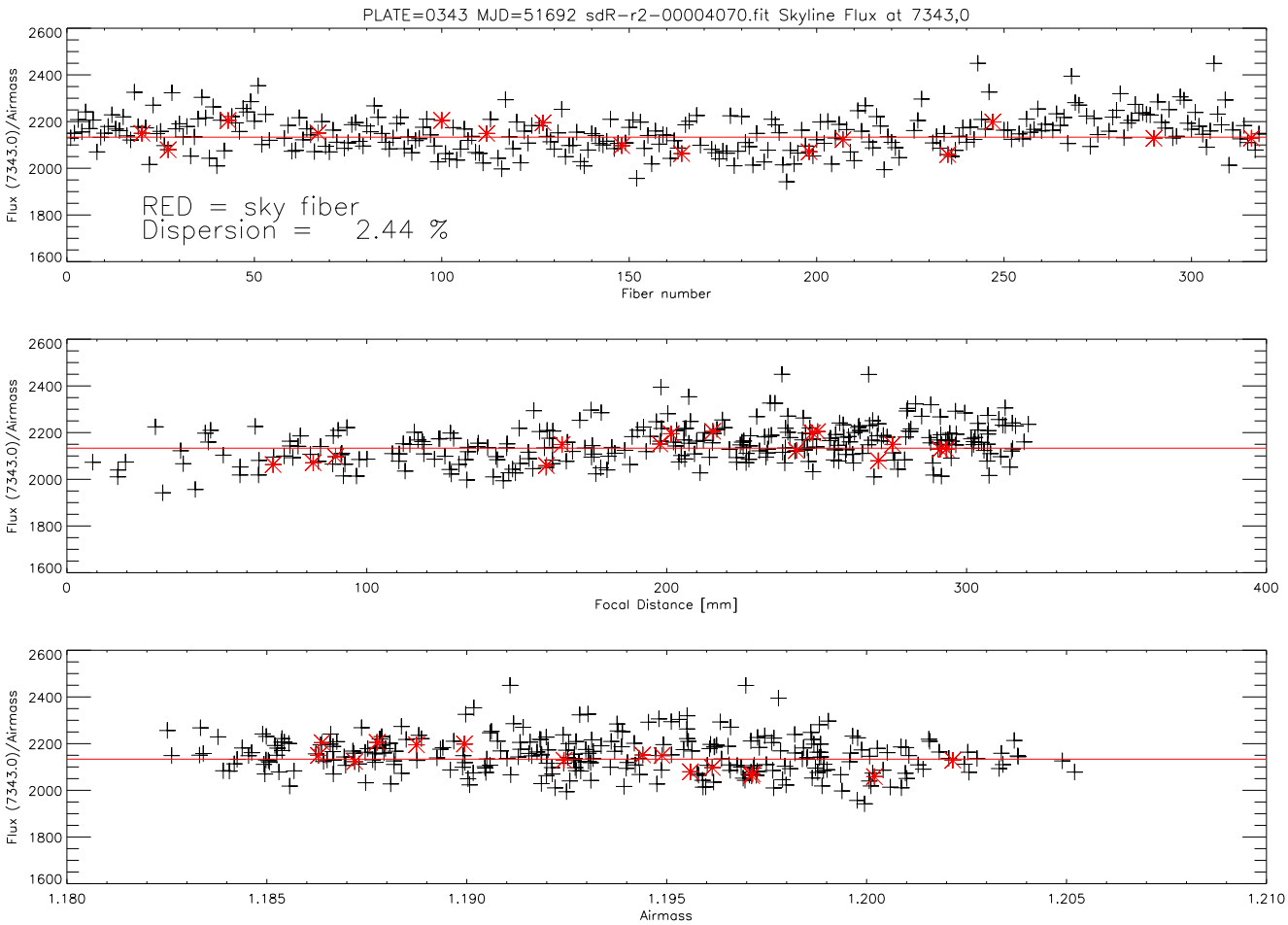

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004070.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

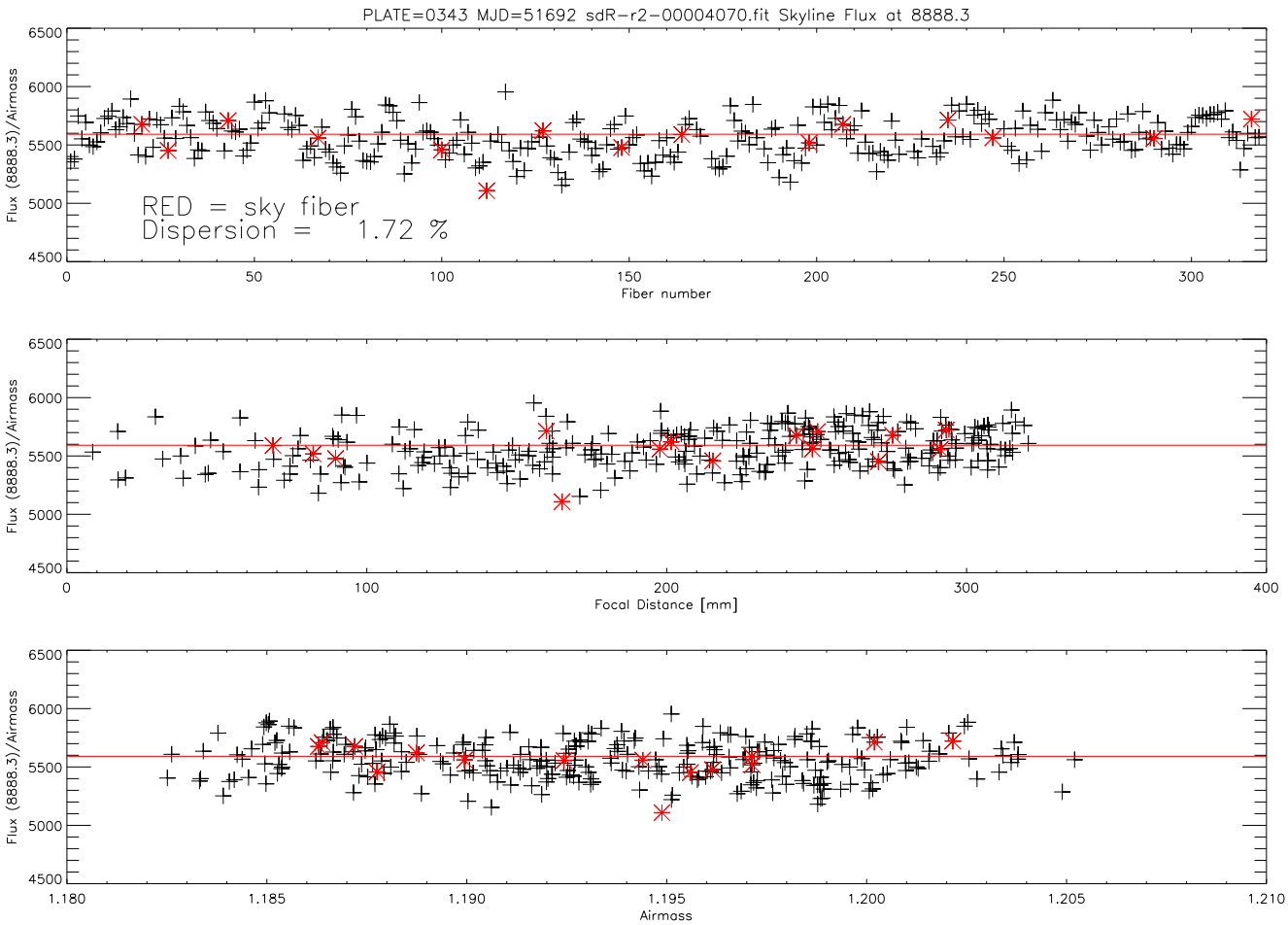

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

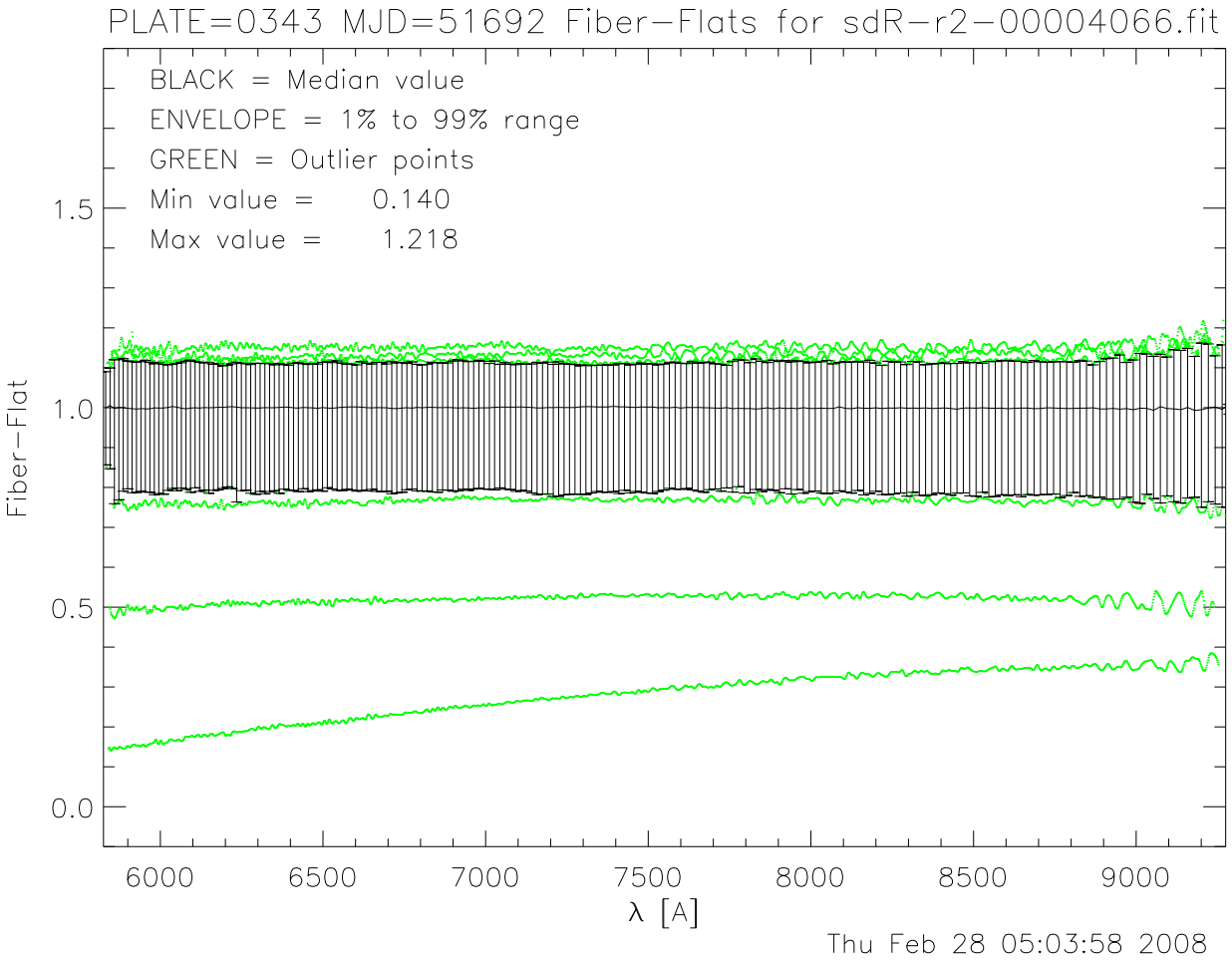

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

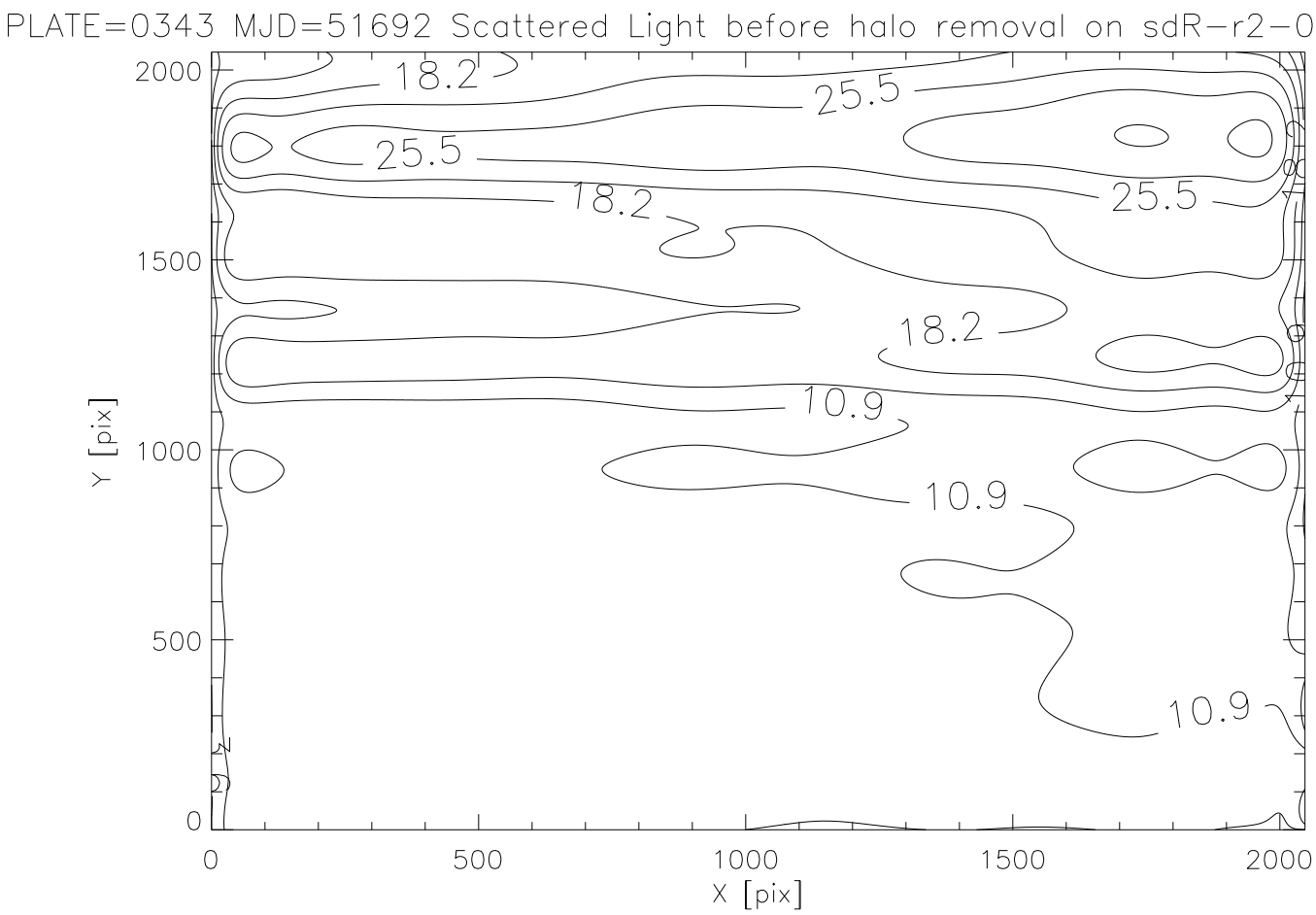

PLATE=0343 MJD=51692 sdR-r2-00004070.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

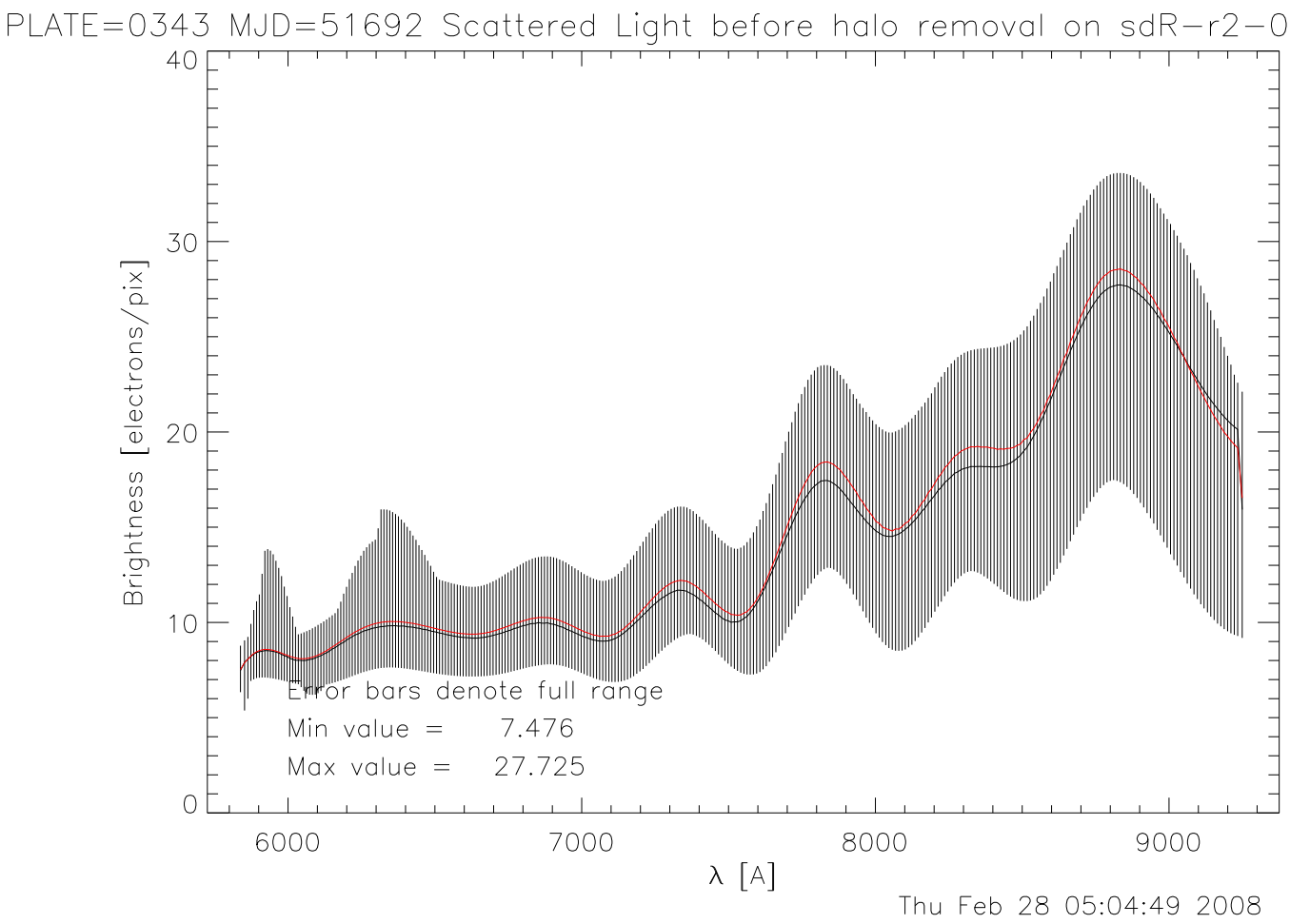

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004070.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

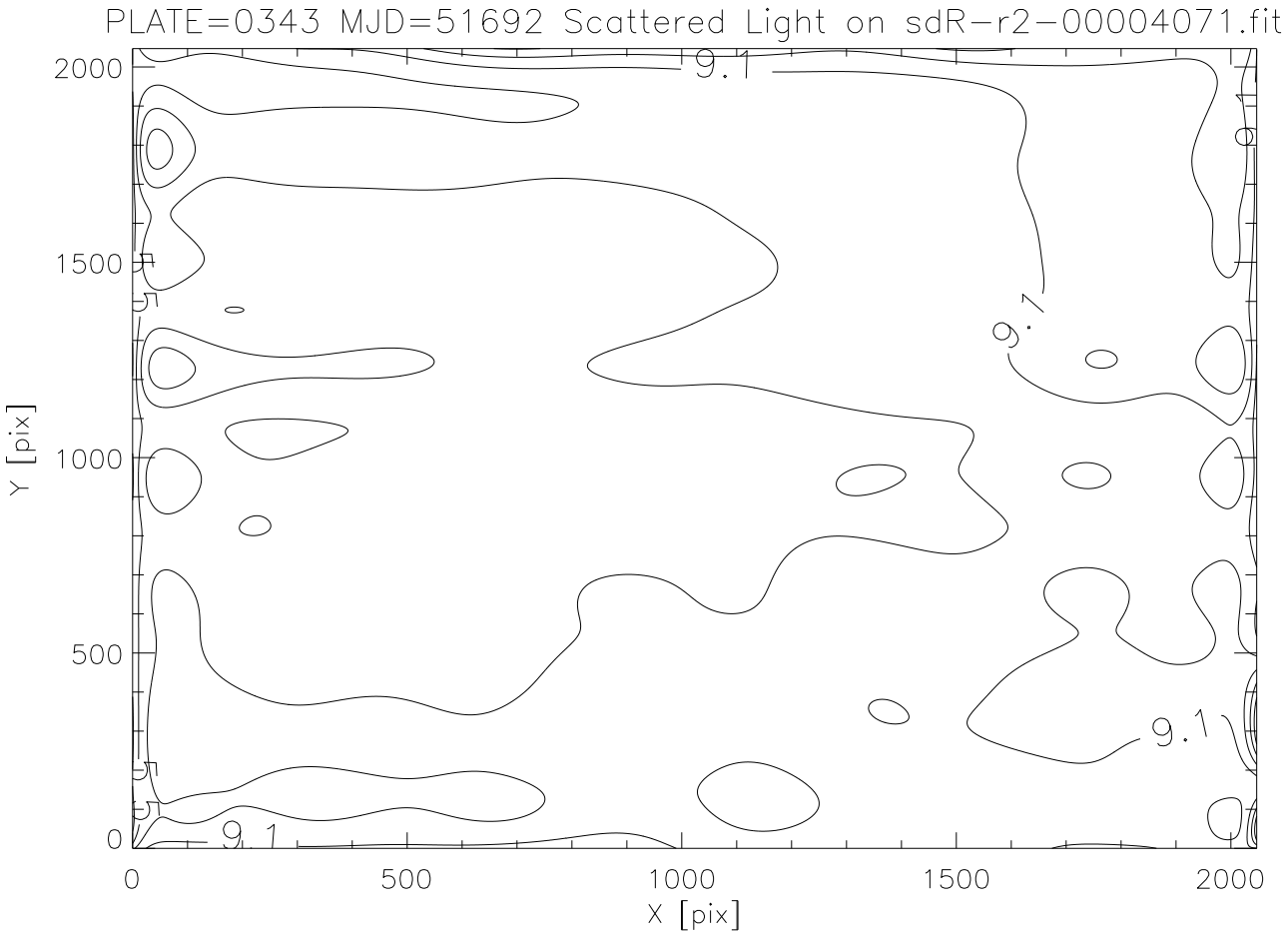

PLATE=0343 MJD=51692 sdR-r2-00004070.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

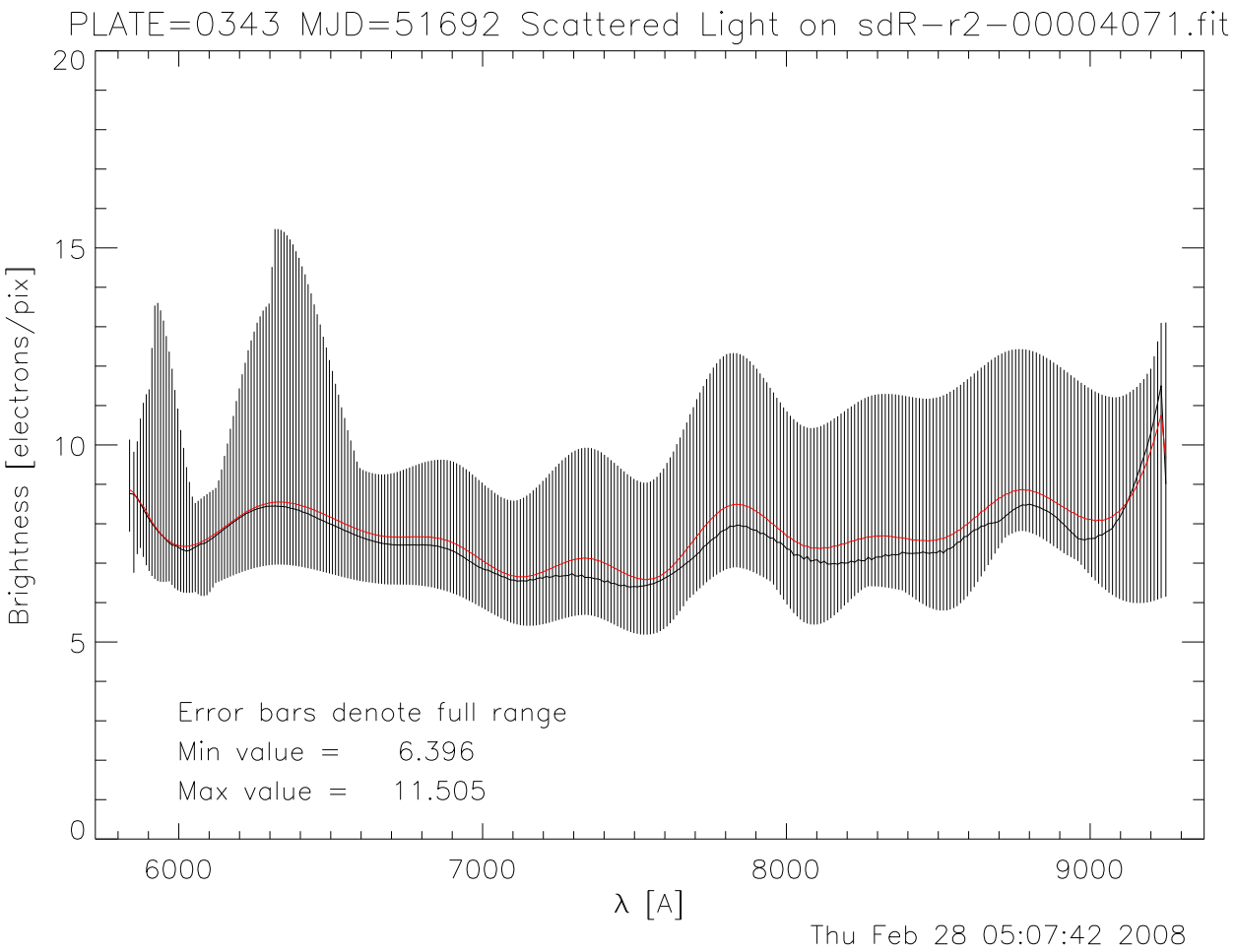

PLATE=0343 MJD=51692 sdR-r2-00004070.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Focal Distance [mm]
Airmass

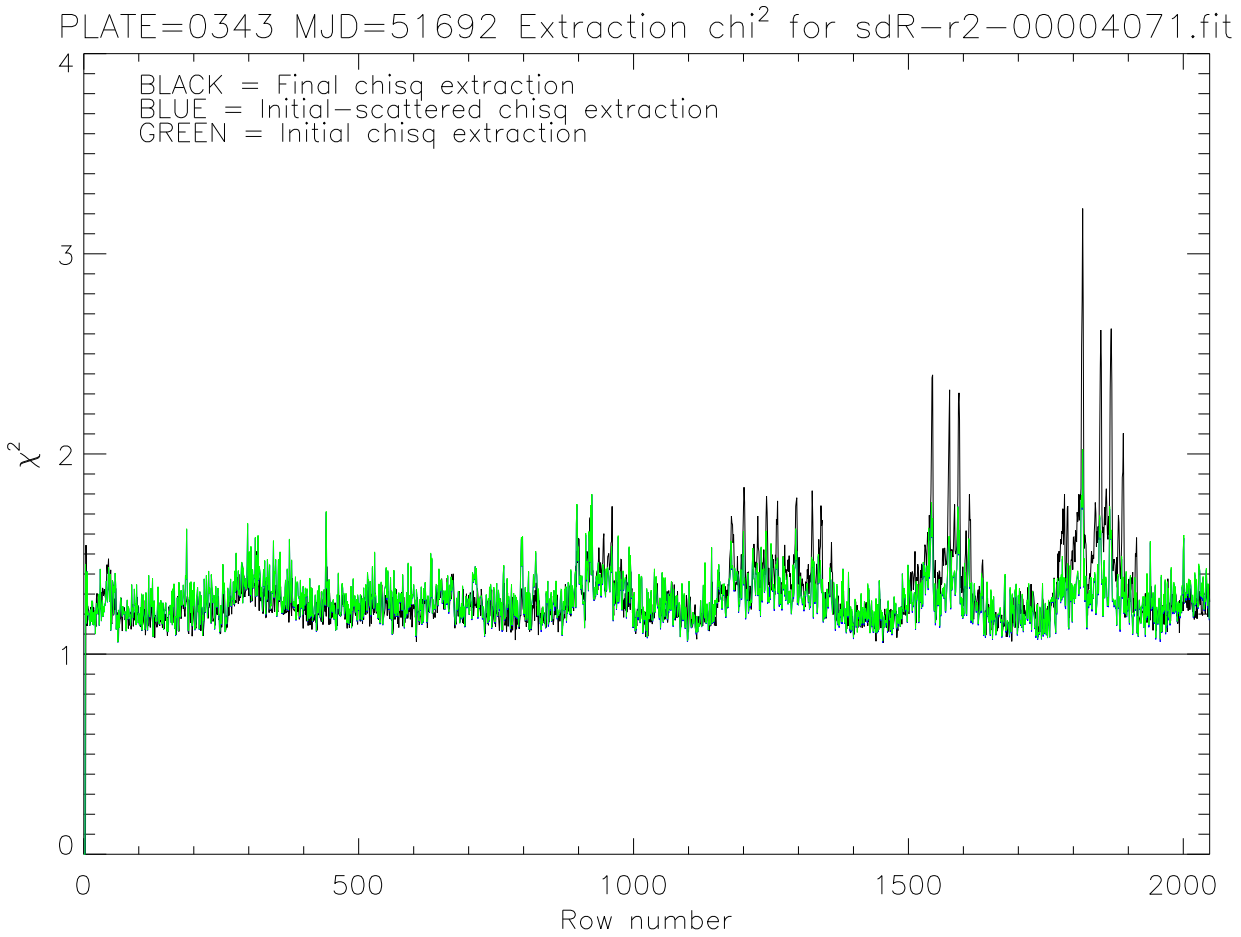

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:03:58 2008

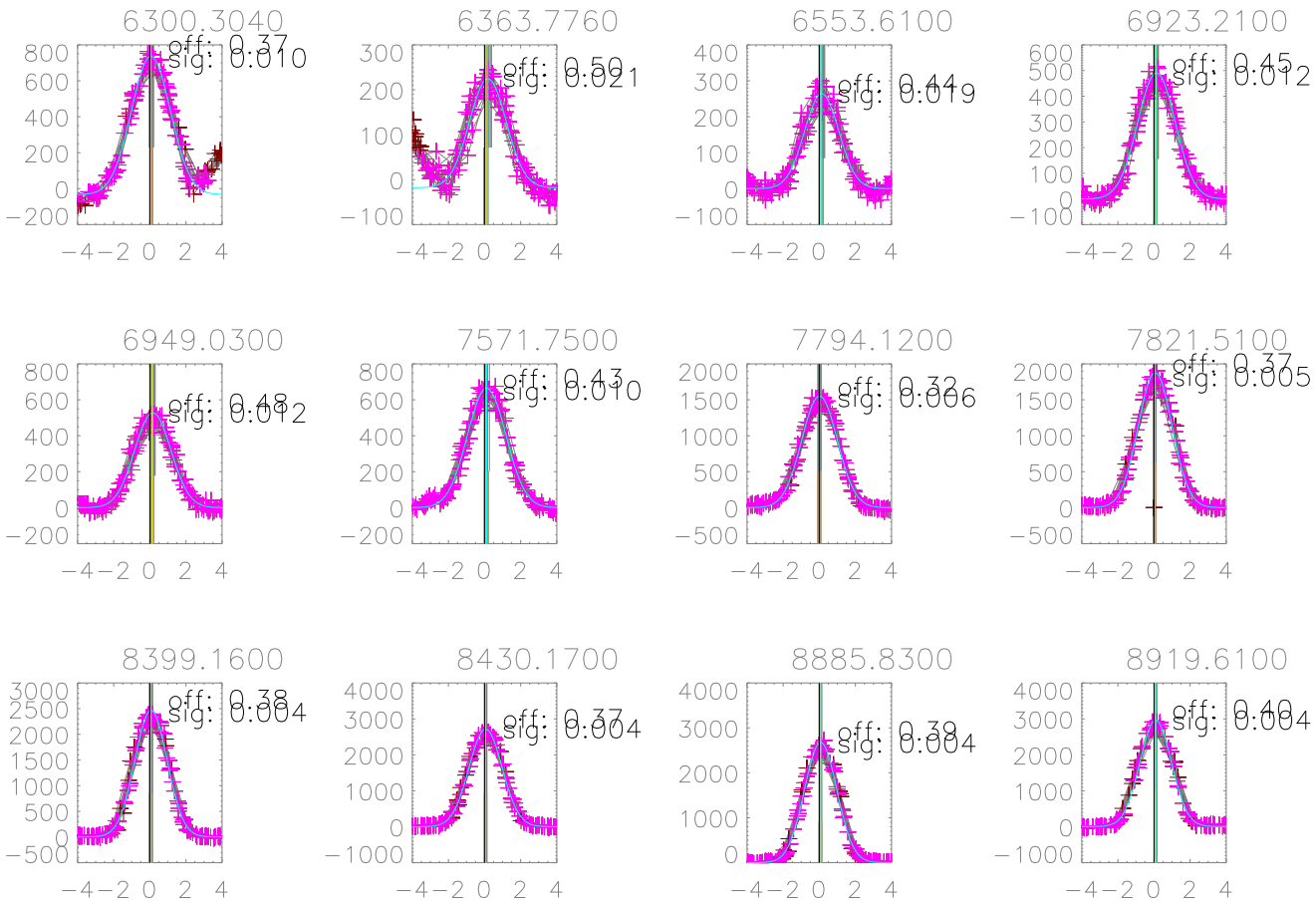

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR−r2−00004071.fi
18.2
25.5
25.5
18.2
25.5
18.2
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

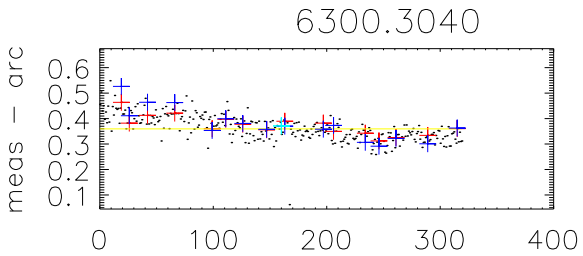

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004071.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.476
Max value = 27.725
Thu Feb 28 05:04:49 2008

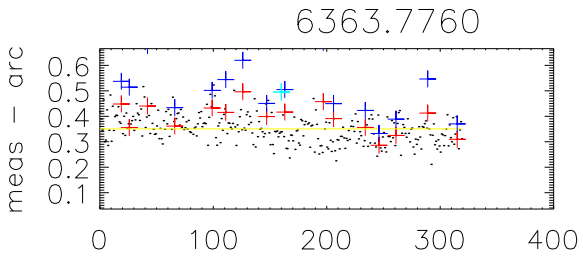

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004071.fit
9.1
9.1
9.1
9.1
9.1
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

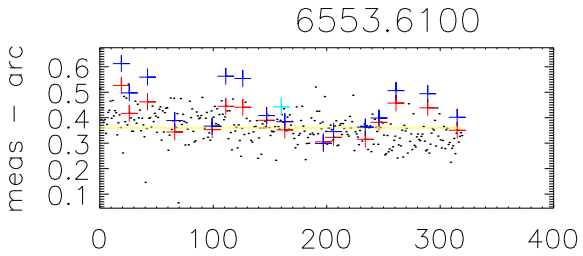

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004071.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.396
Max value = 11.505
Thu Feb 28 05:07:42 2008

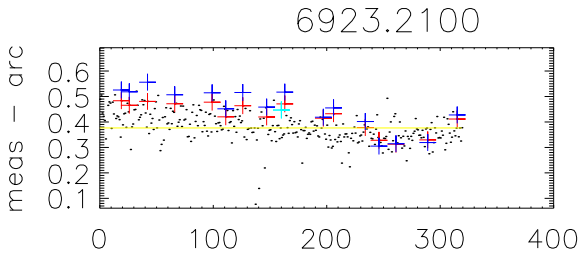

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-r2-00004071.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

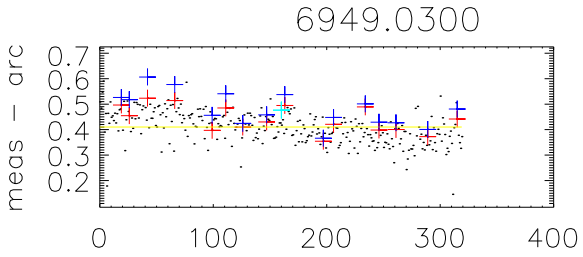

6300.3040
off: 0.37
sig: 0.010
6363.7760
off: 0.50
sig: 0.021
6553.6100
off: 0.44
sig: 0.019
6923.2100
off: 0.45
sig: 0.012
6949.0300
off: 0.48
sig: 0.012
7571.7500
off: 0.43
sig: 0.010
7794.1200
off: 0.32
sig: 0.006
7821.5100
off: 0.37
sig: 0.005
8399.1600
off: 0.38
sig: 0.004
8430.1700
off: 0.37
sig: 0.004
8885.8300
off: 0.38
sig: 0.004
8919.6100
off: 0.40
sig: 0.004

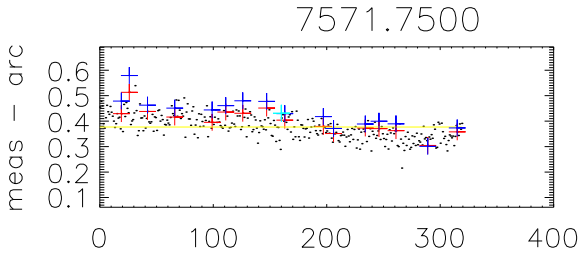

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

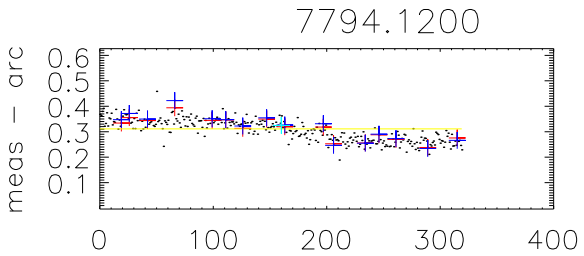

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

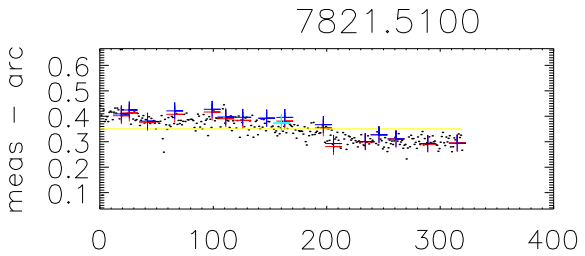

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

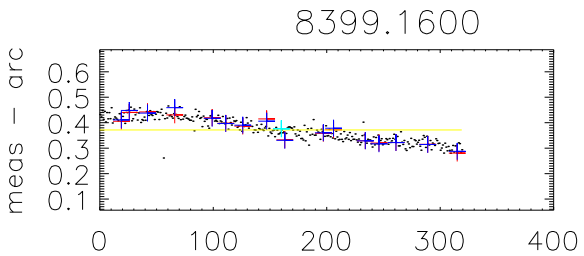

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

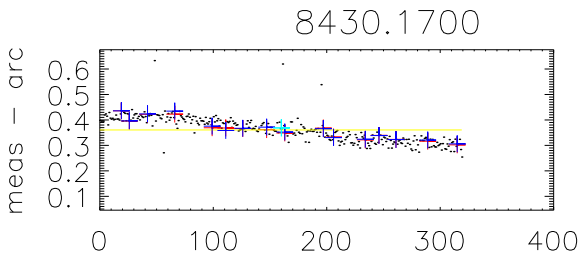

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

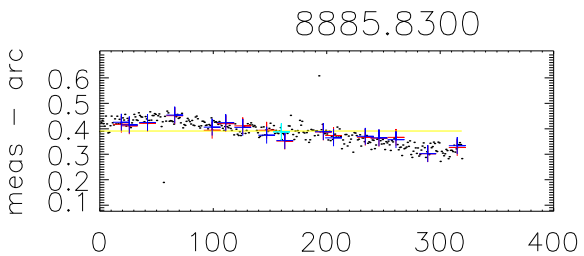

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

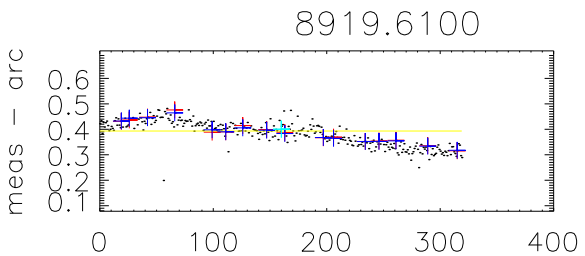

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

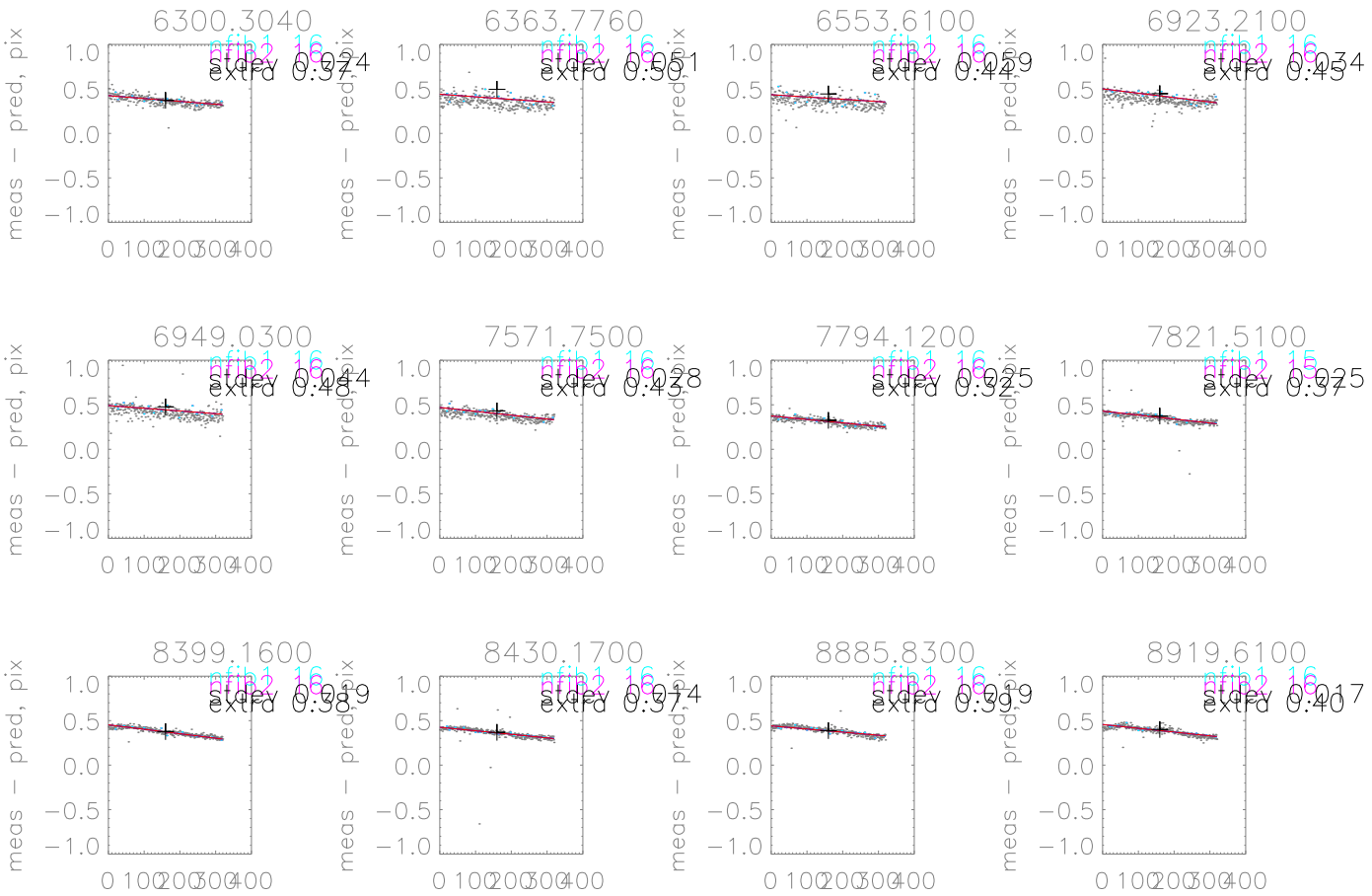

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

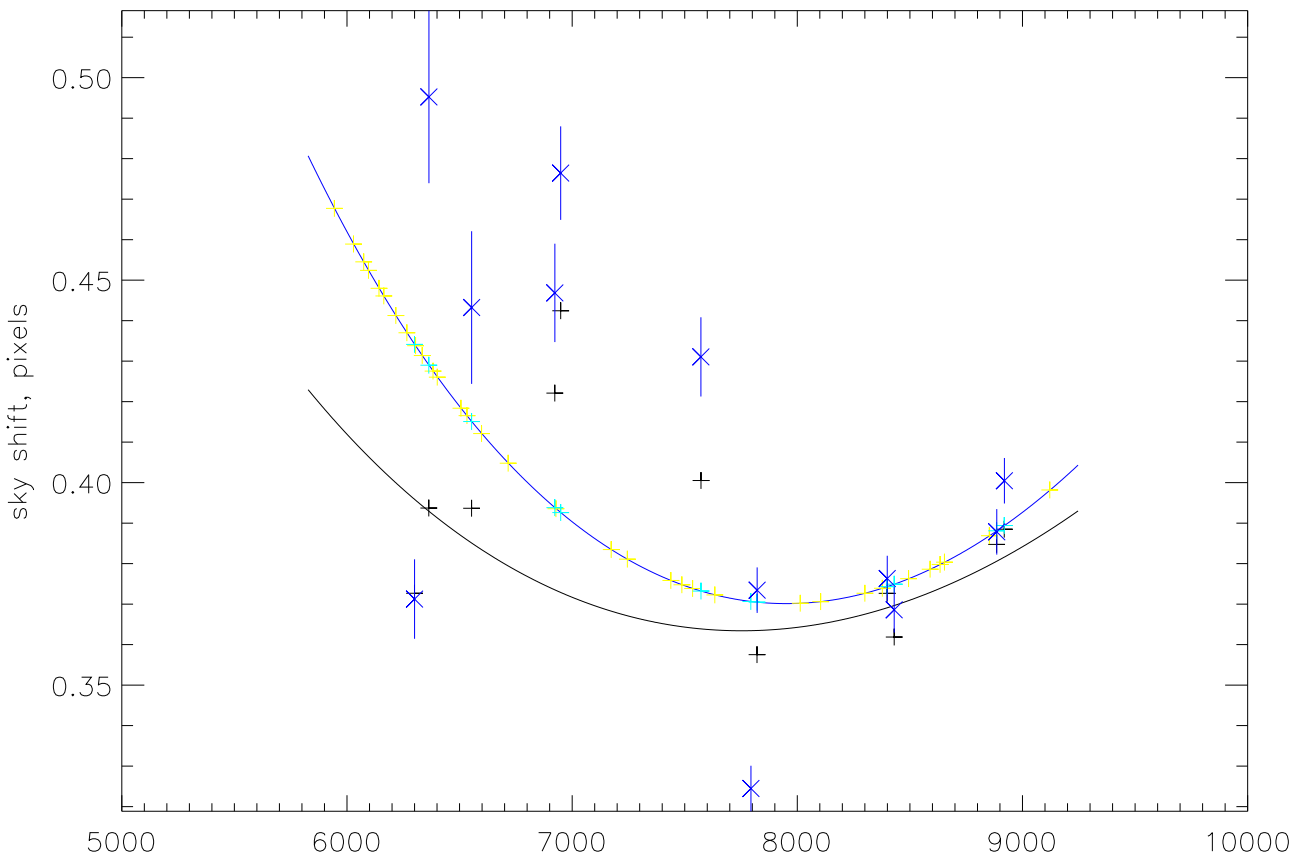

8399.1600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


8430.1700
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

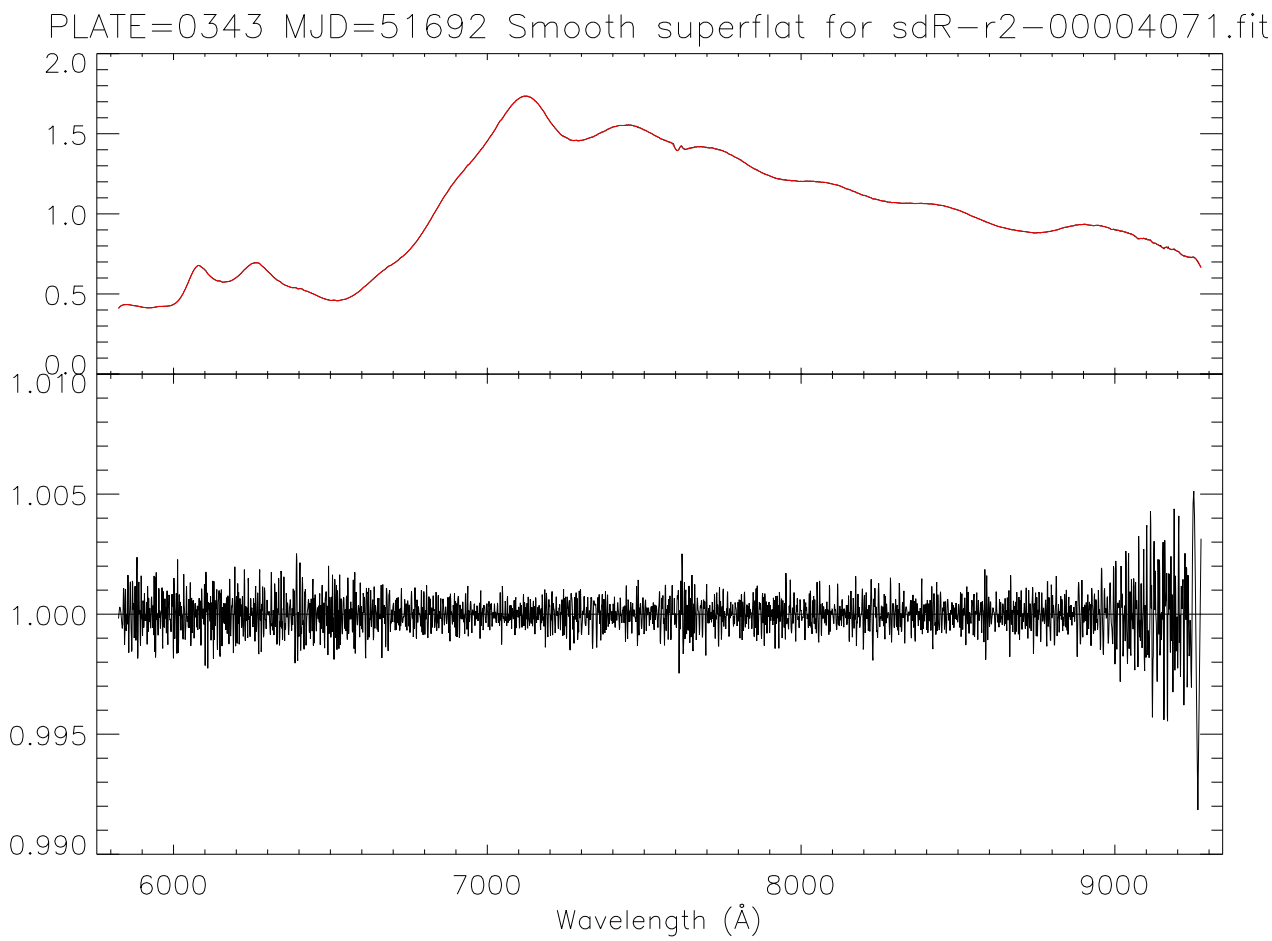

8885.8300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

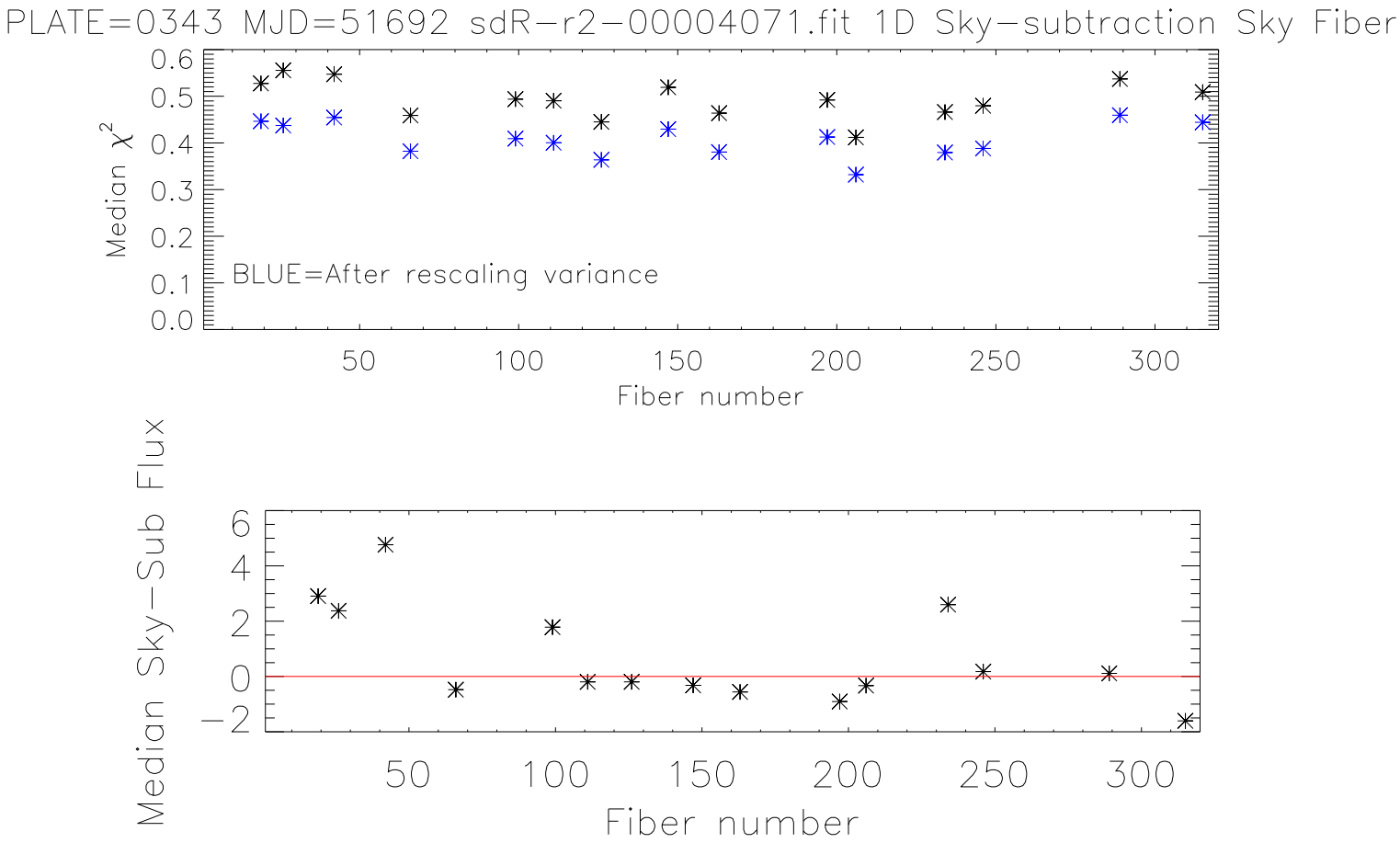

8919.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

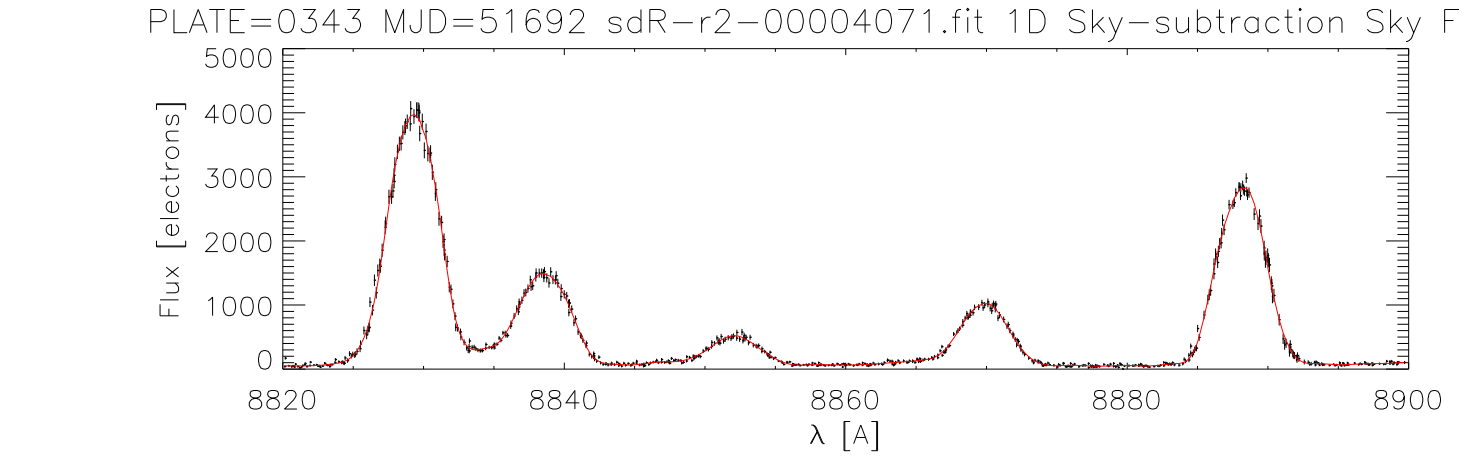

6300.3040
stdev 0.024
extra 0.37
6363.7760
stdev 0.051
extra 0.50
6553.6100
stdev 0.059
extra 0.44
6923.2100
stdev 0.034
extra 0.45
6949.0300
stdev 0.044
extra 0.48
7571.7500
stdev 0.028
extra 0.43
7794.1200
stdev 0.025
extra 0.32
7821.5100
stdev 0.025
extra 0.37
8399.1600
stdev 0.049
extra 0.38
8430.1700
stdev 0.074
extra 0.37
8885.8300
stdev 0.049
extra 0.39
8919.6100
stdev 0.017
extra 0.40
meas − pred, pix

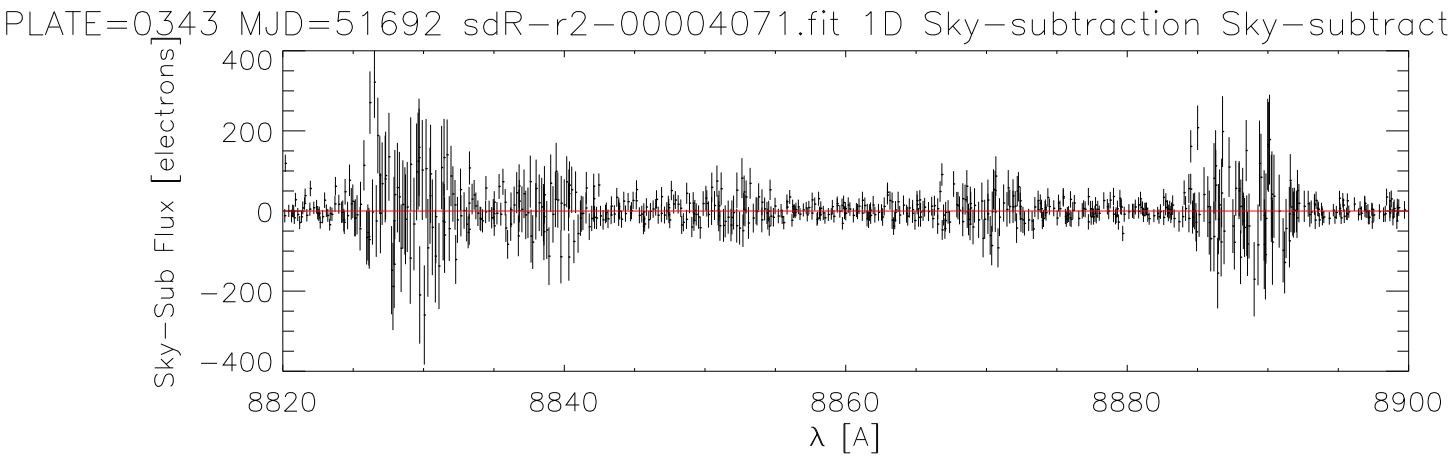

0.50
0.45
0.40
0.35
sky shift, pixels
5000
6000
7000
8000
9000
10000

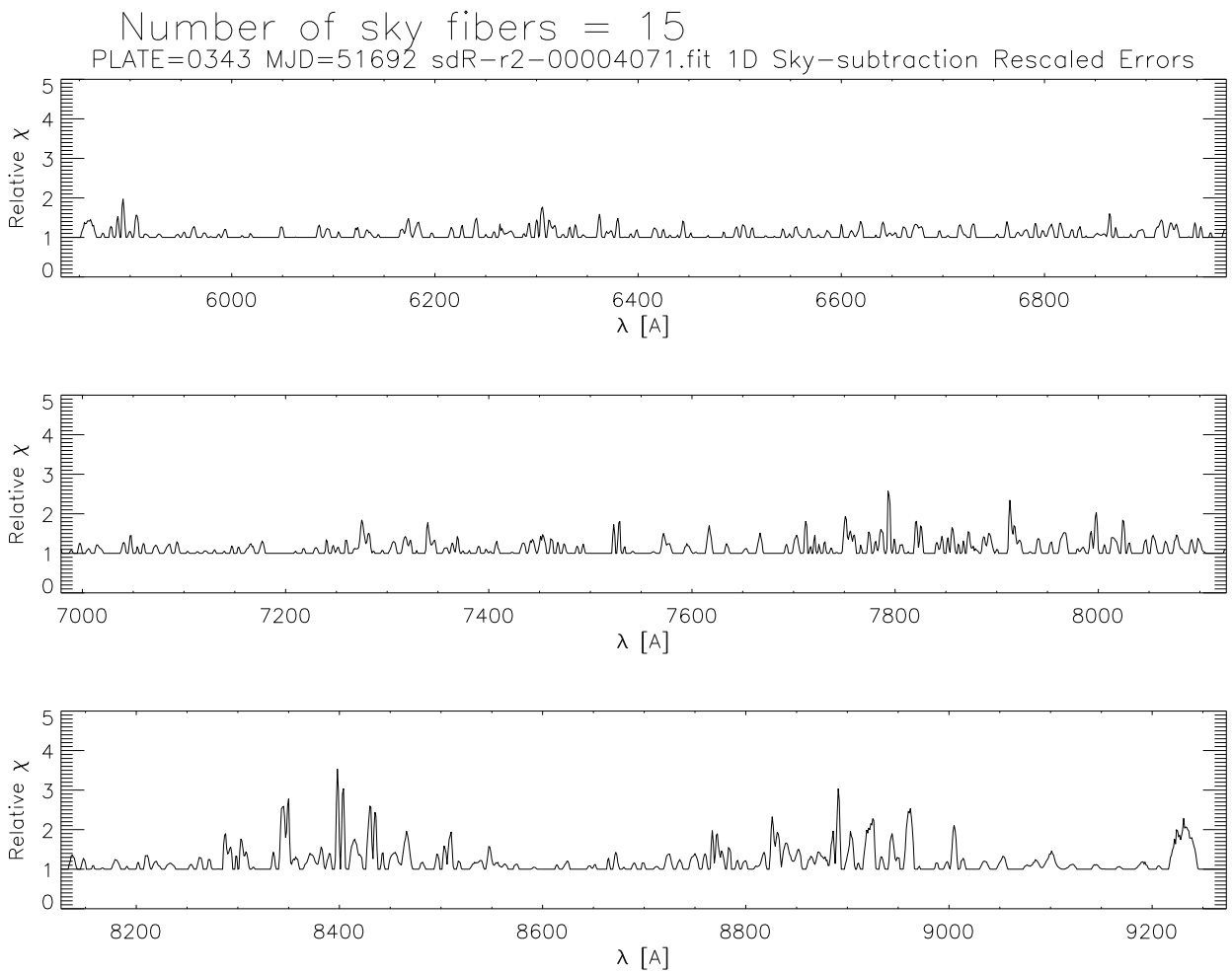
es= 0.0000

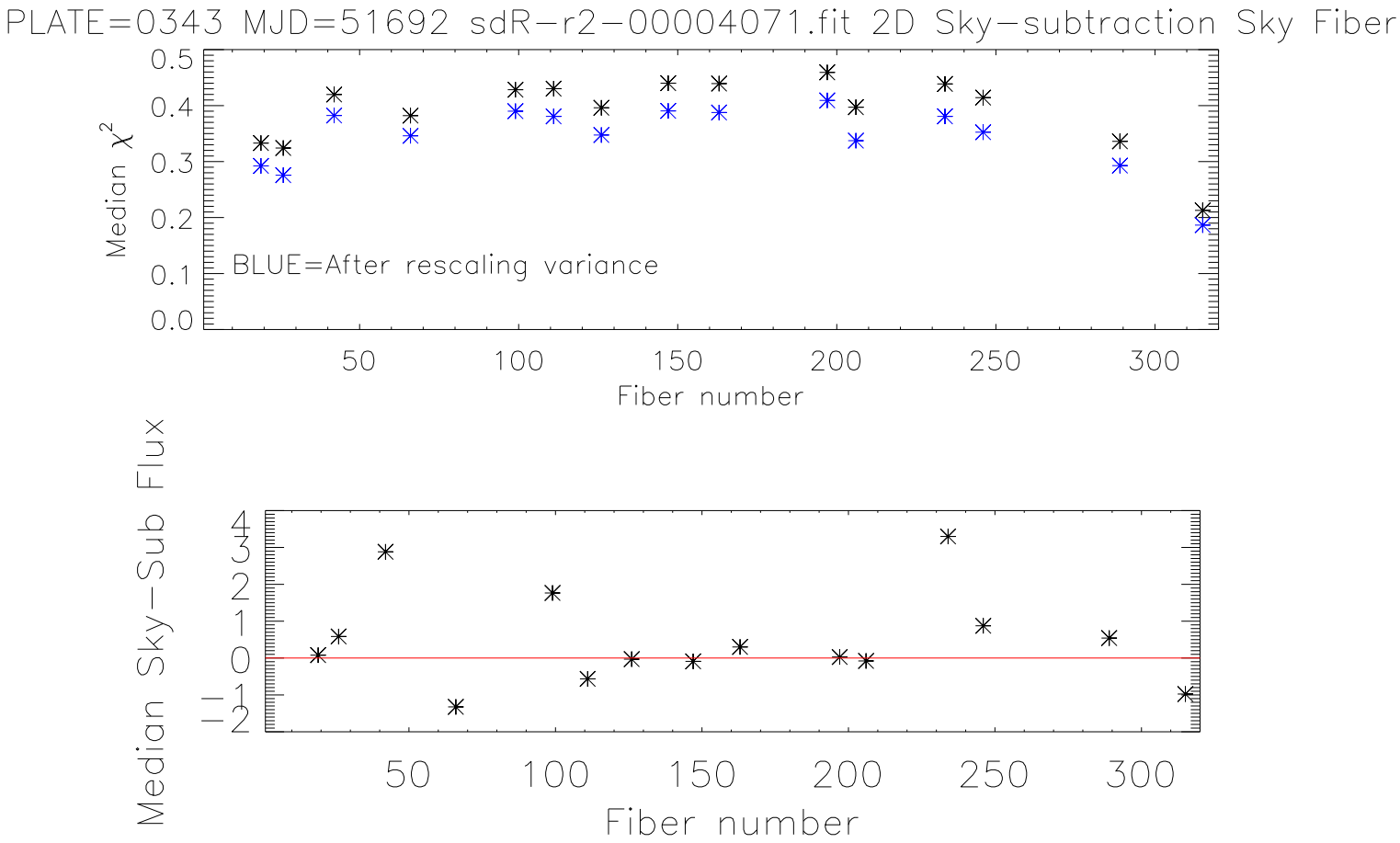

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004071.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

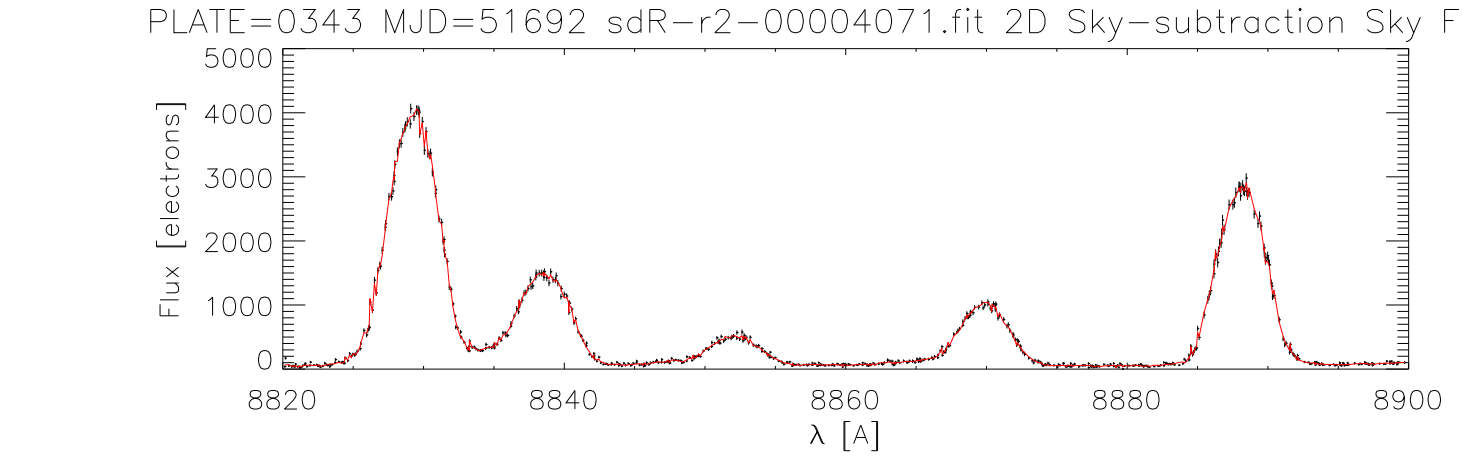

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

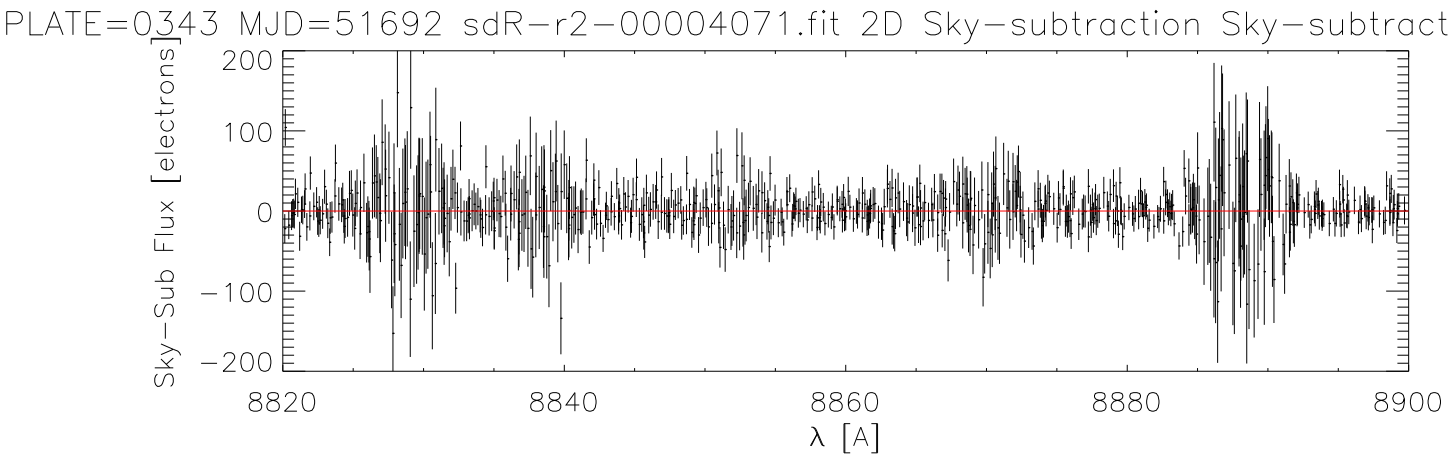

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

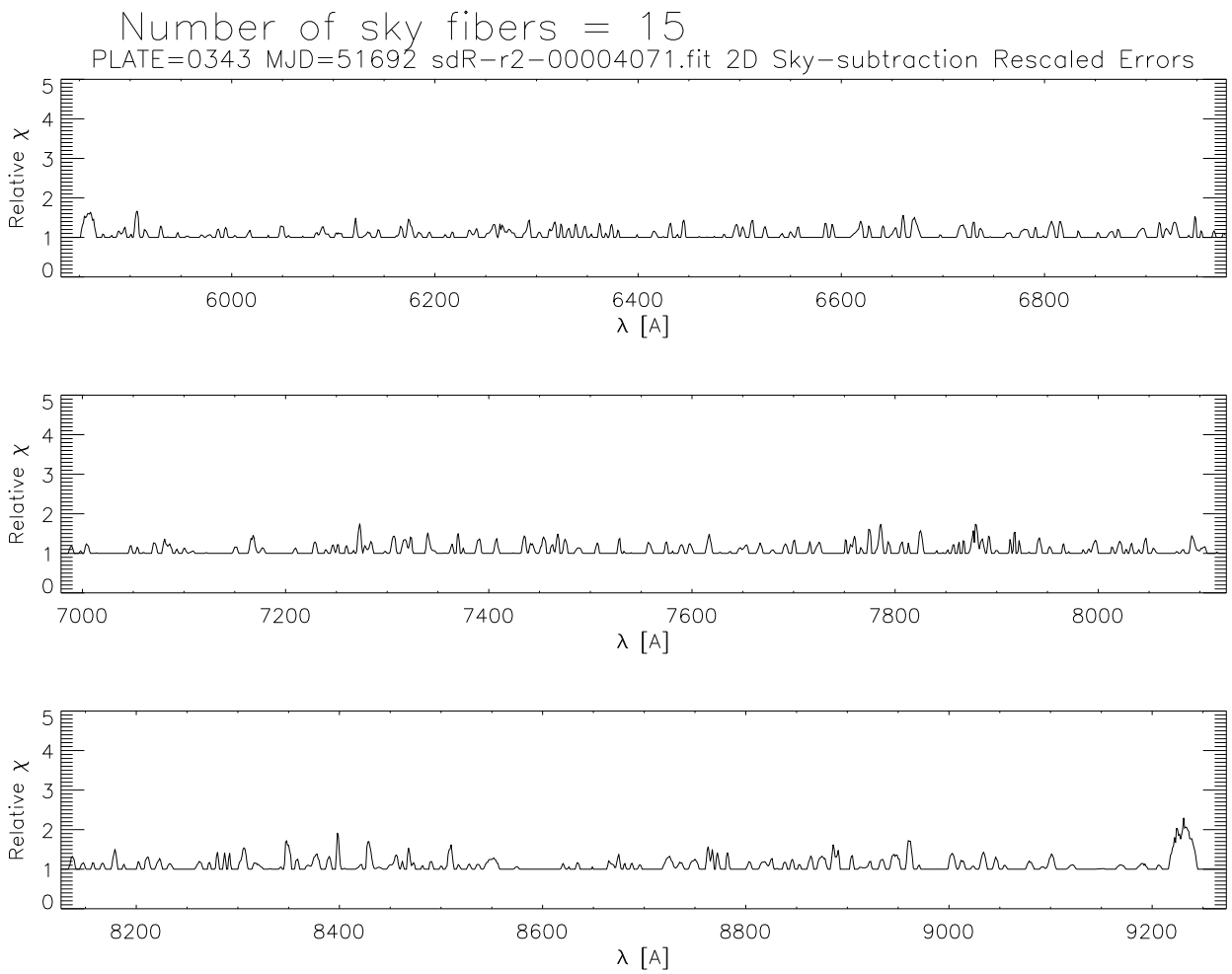

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

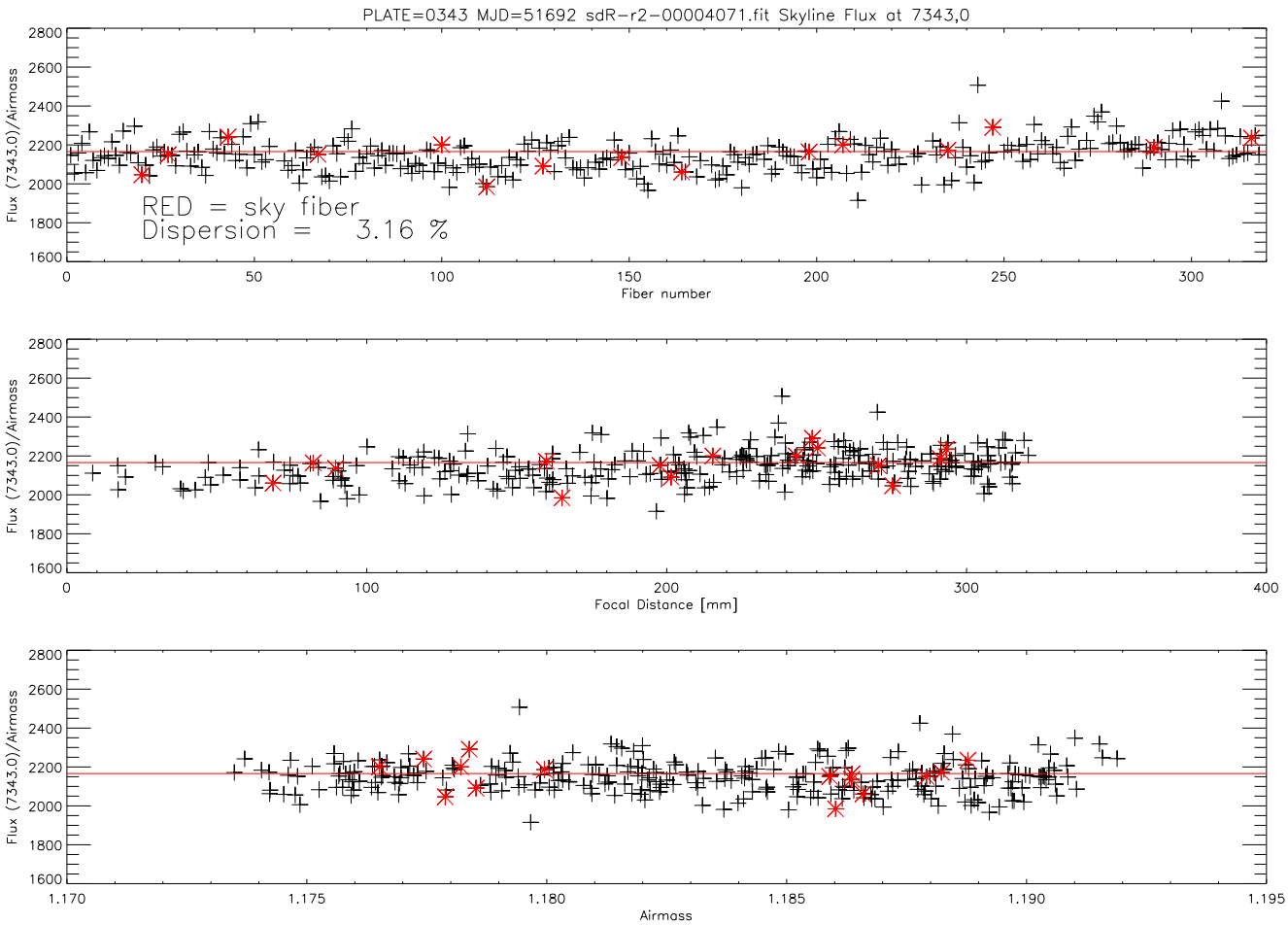

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004071.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

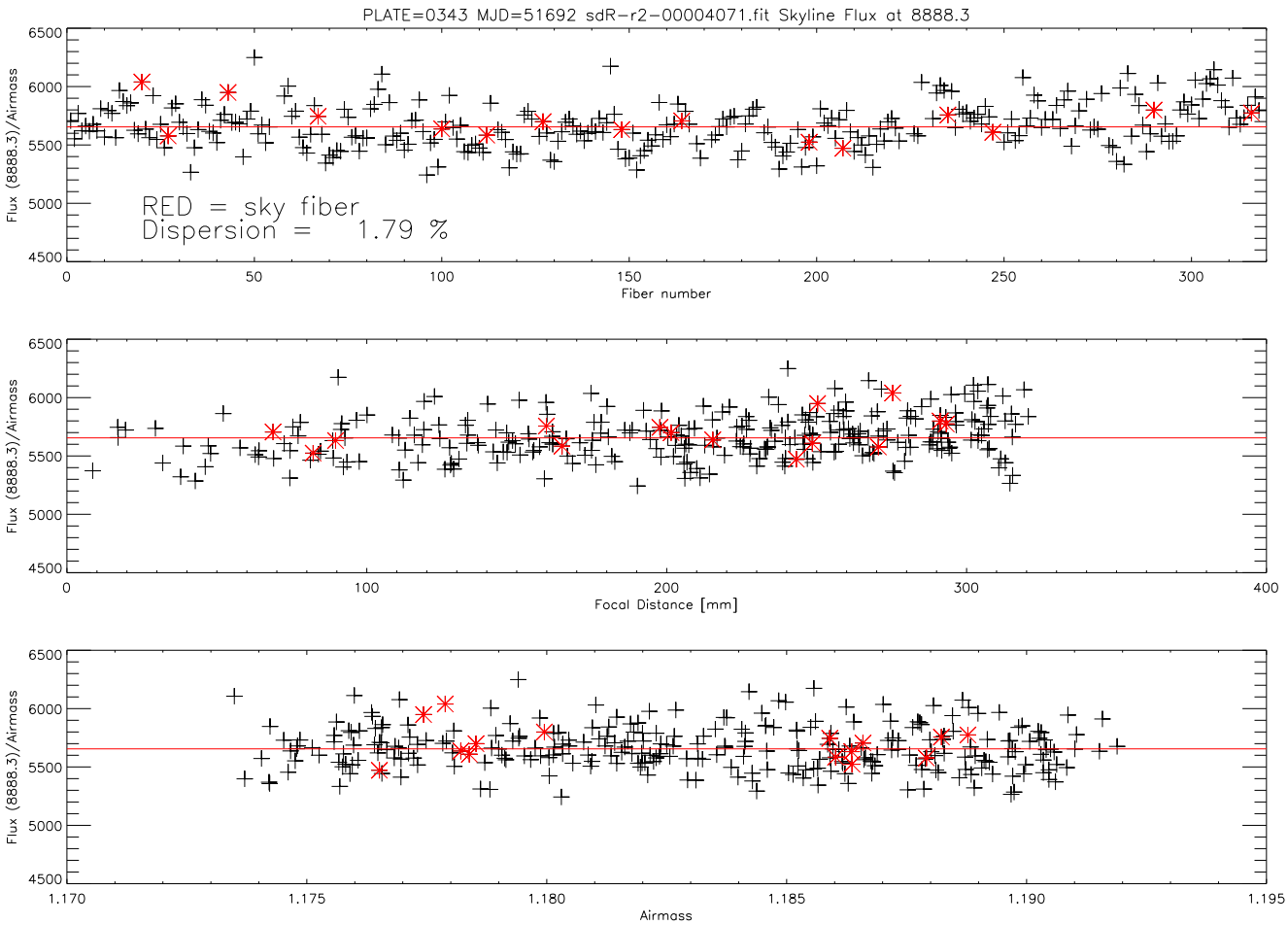

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

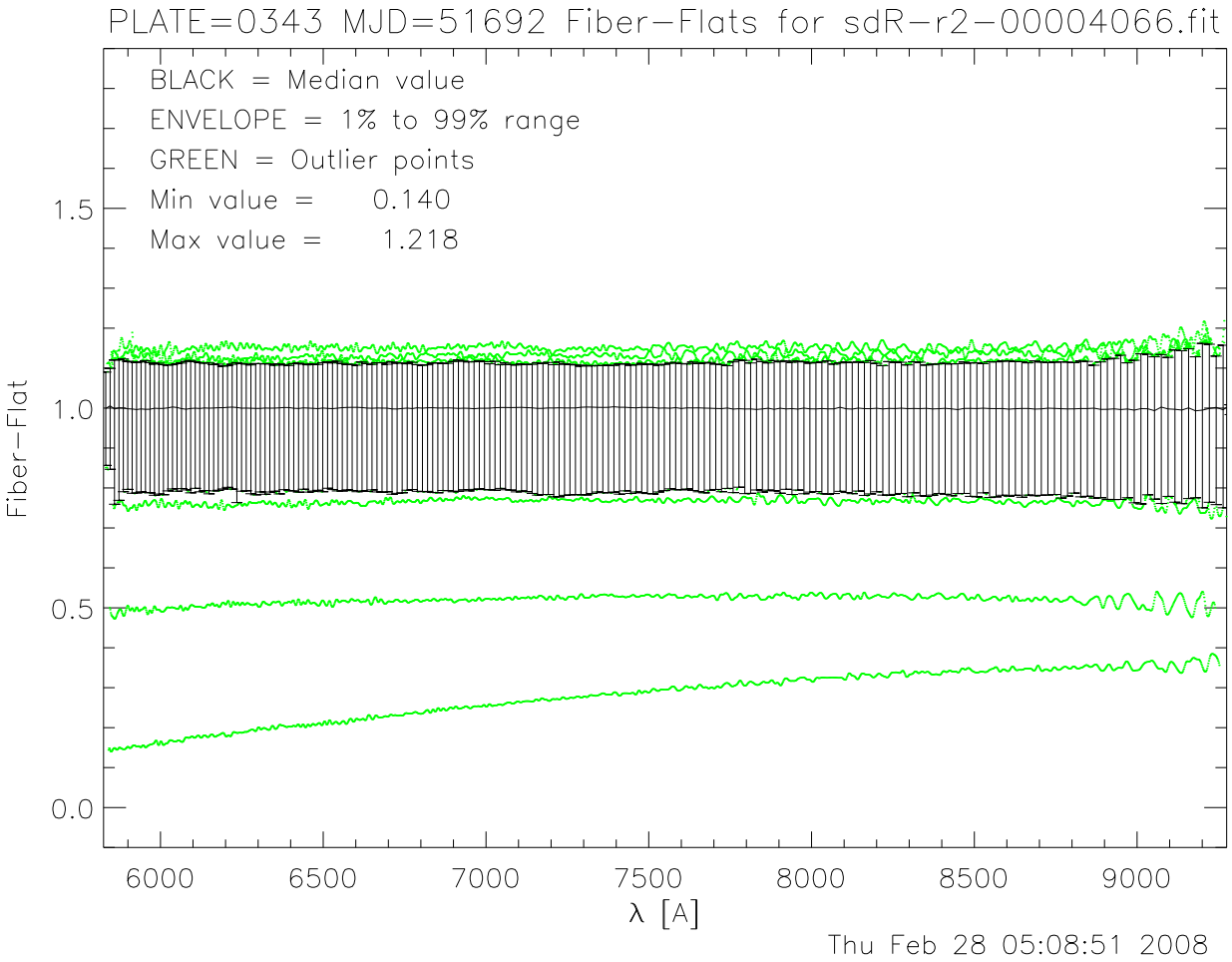

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

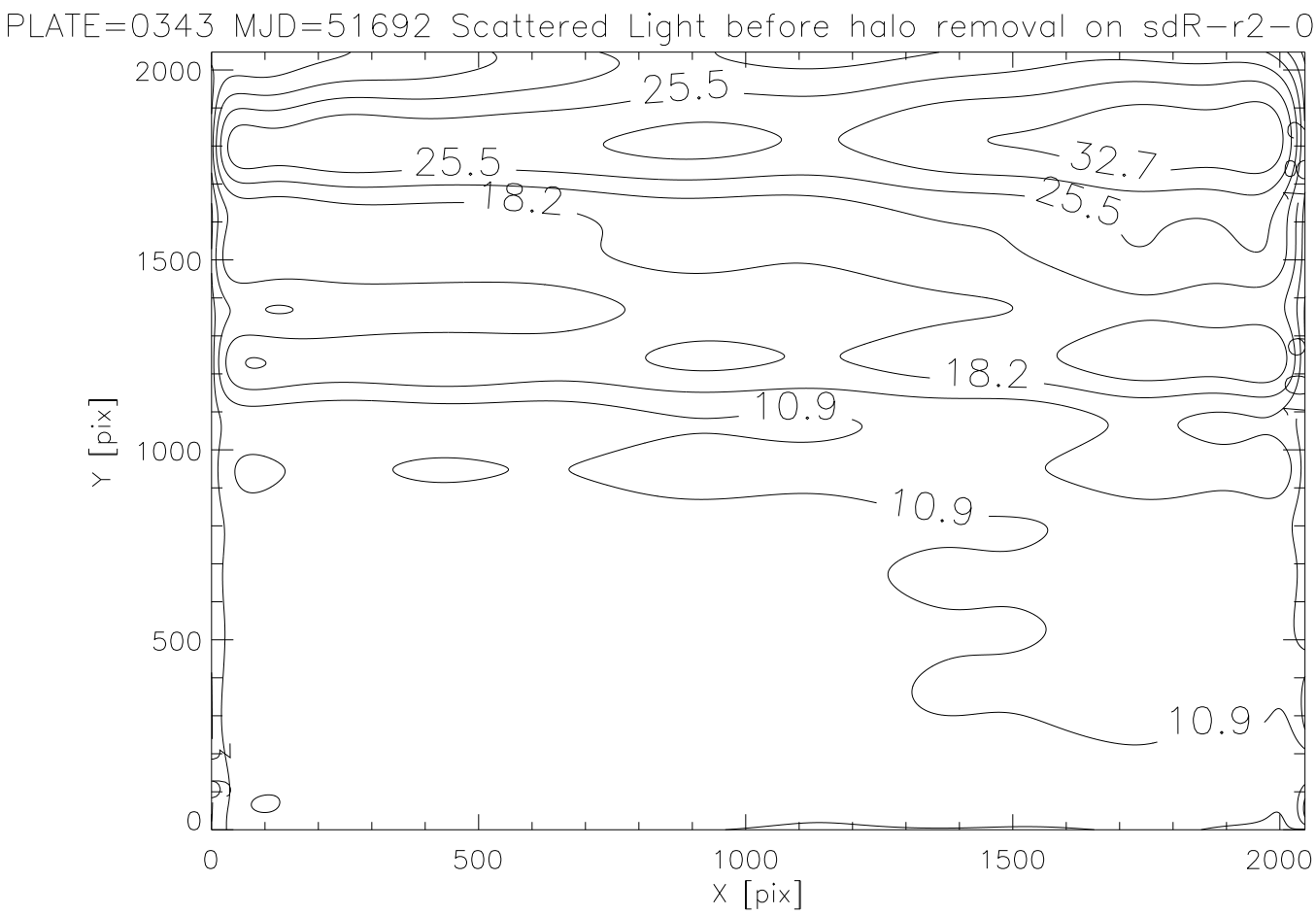

PLATE=0343 MJD=51692 sdR-r2-00004071.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

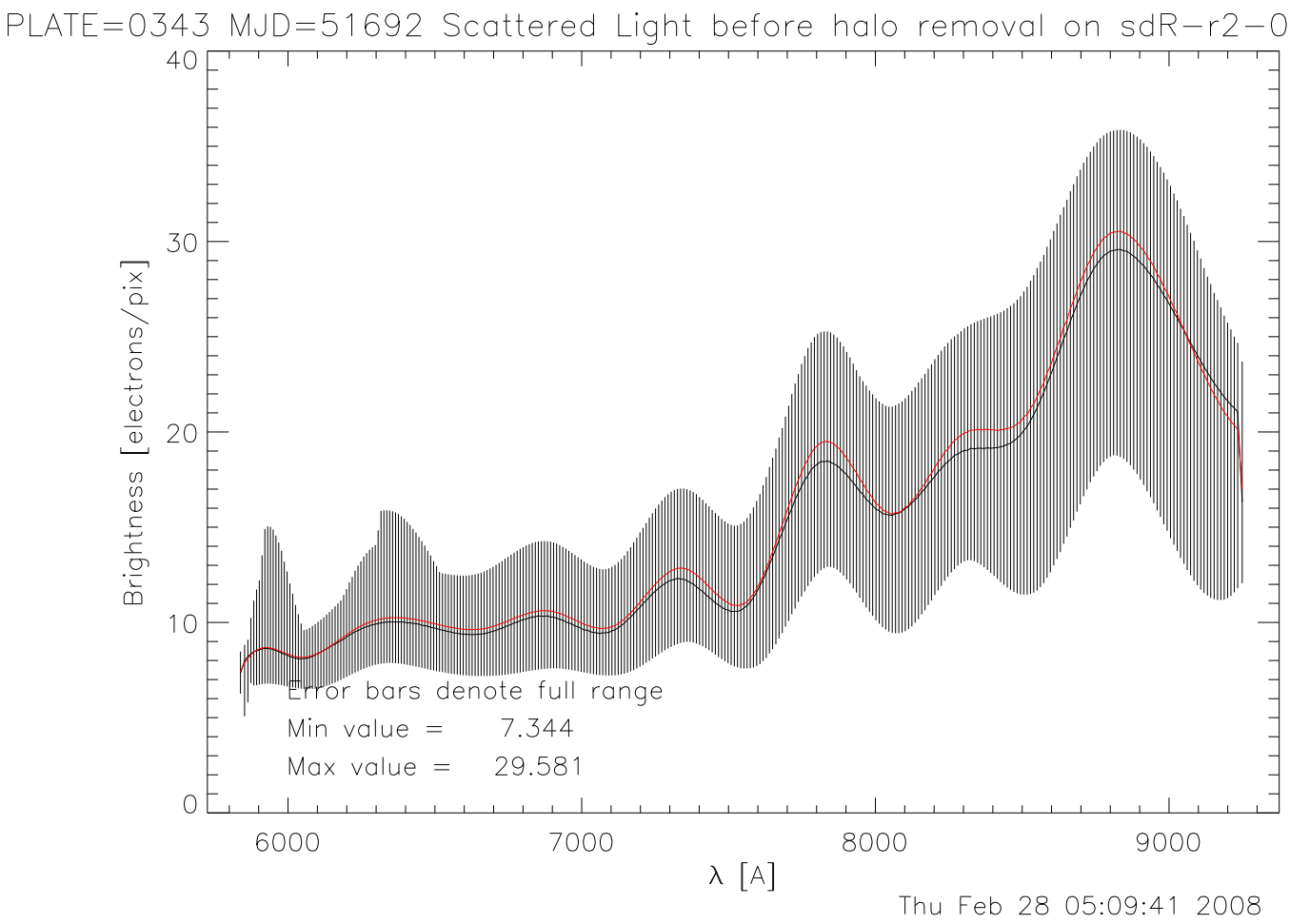

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004071.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

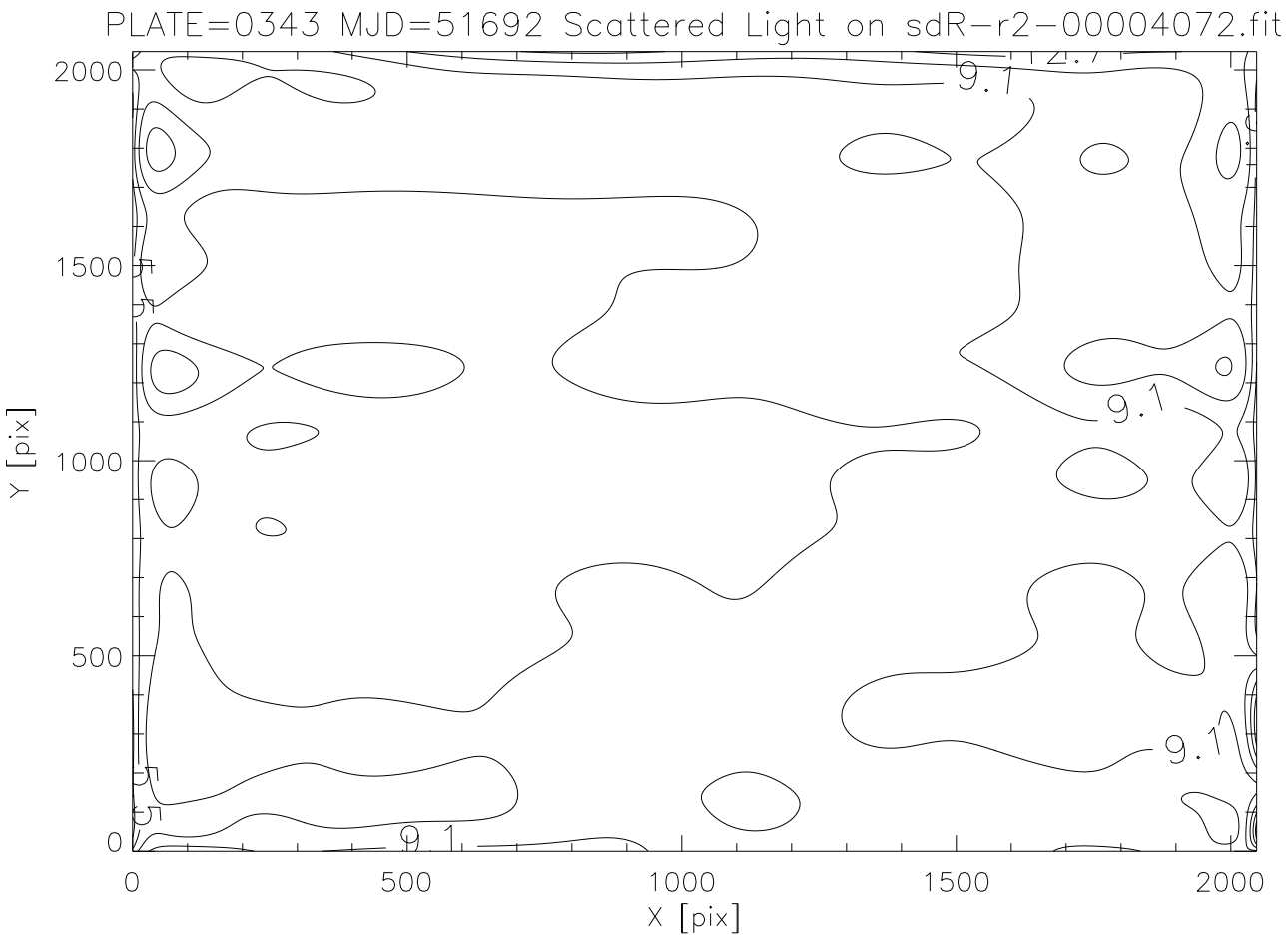

PLATE=0343 MJD=51692 sdR-r2-00004071.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.16 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

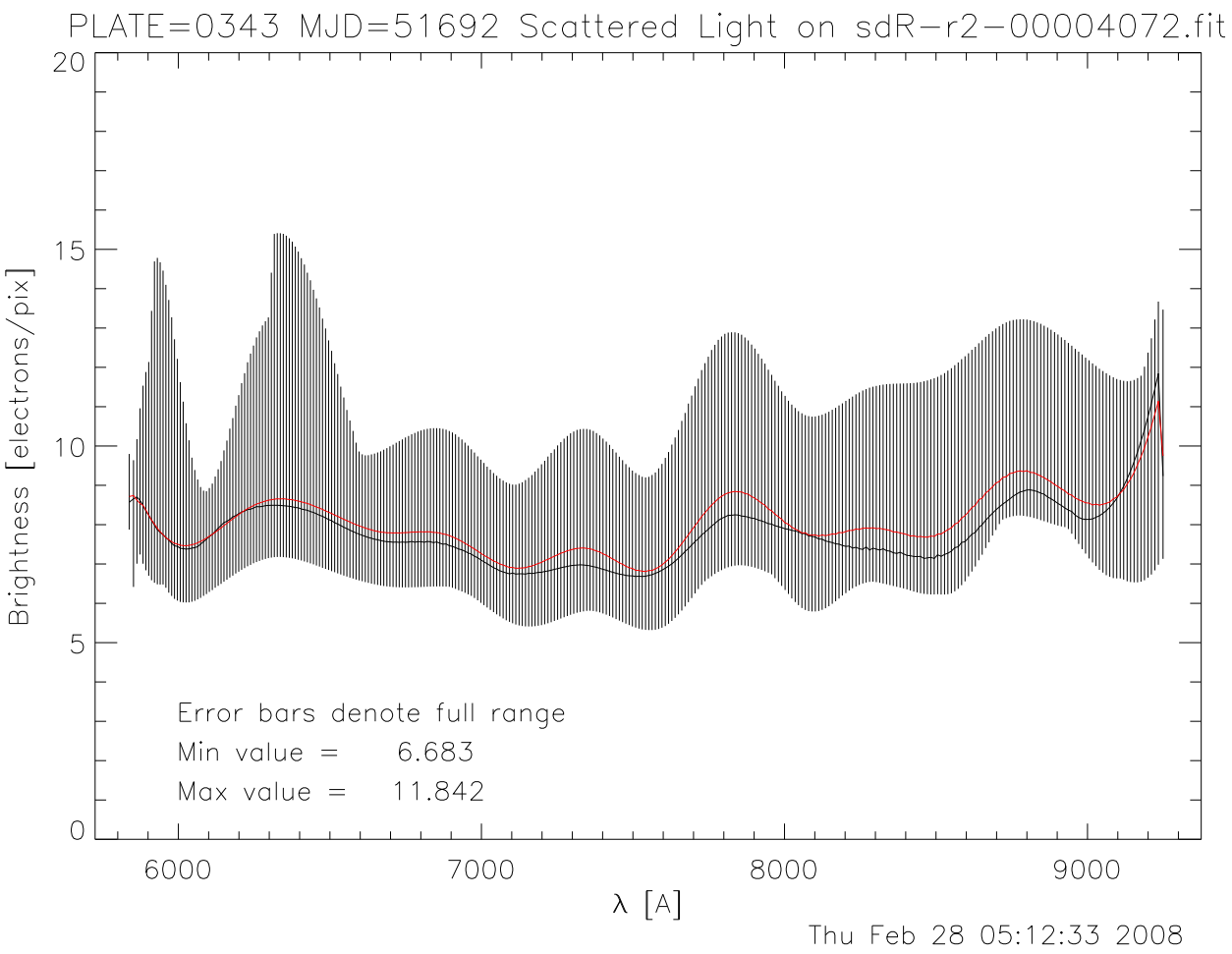

PLATE=0343 MJD=51692 sdR-r2-00004071.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.79 %
Fiber number
Focal Distance [mm]
Airmass

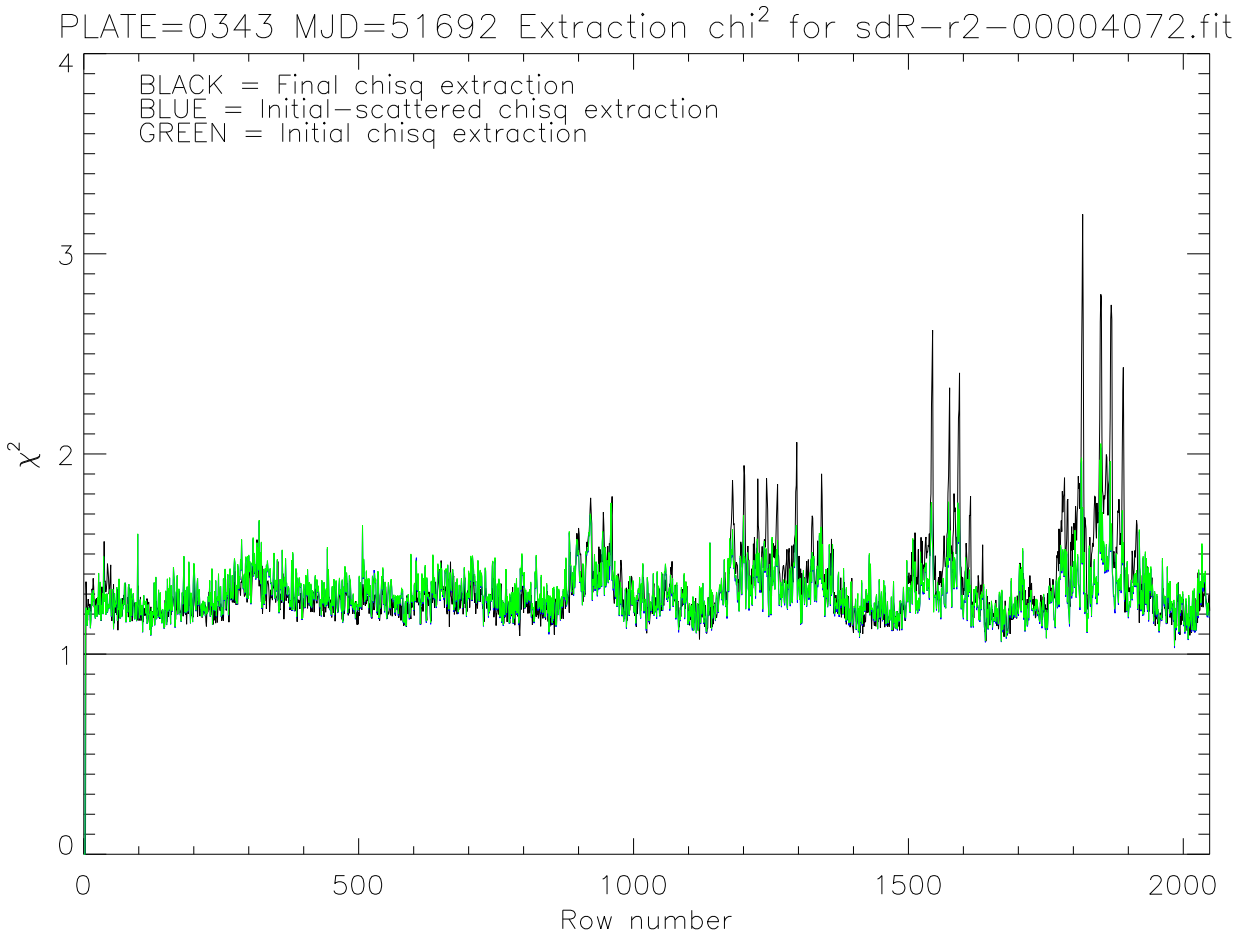

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:08:51 2008

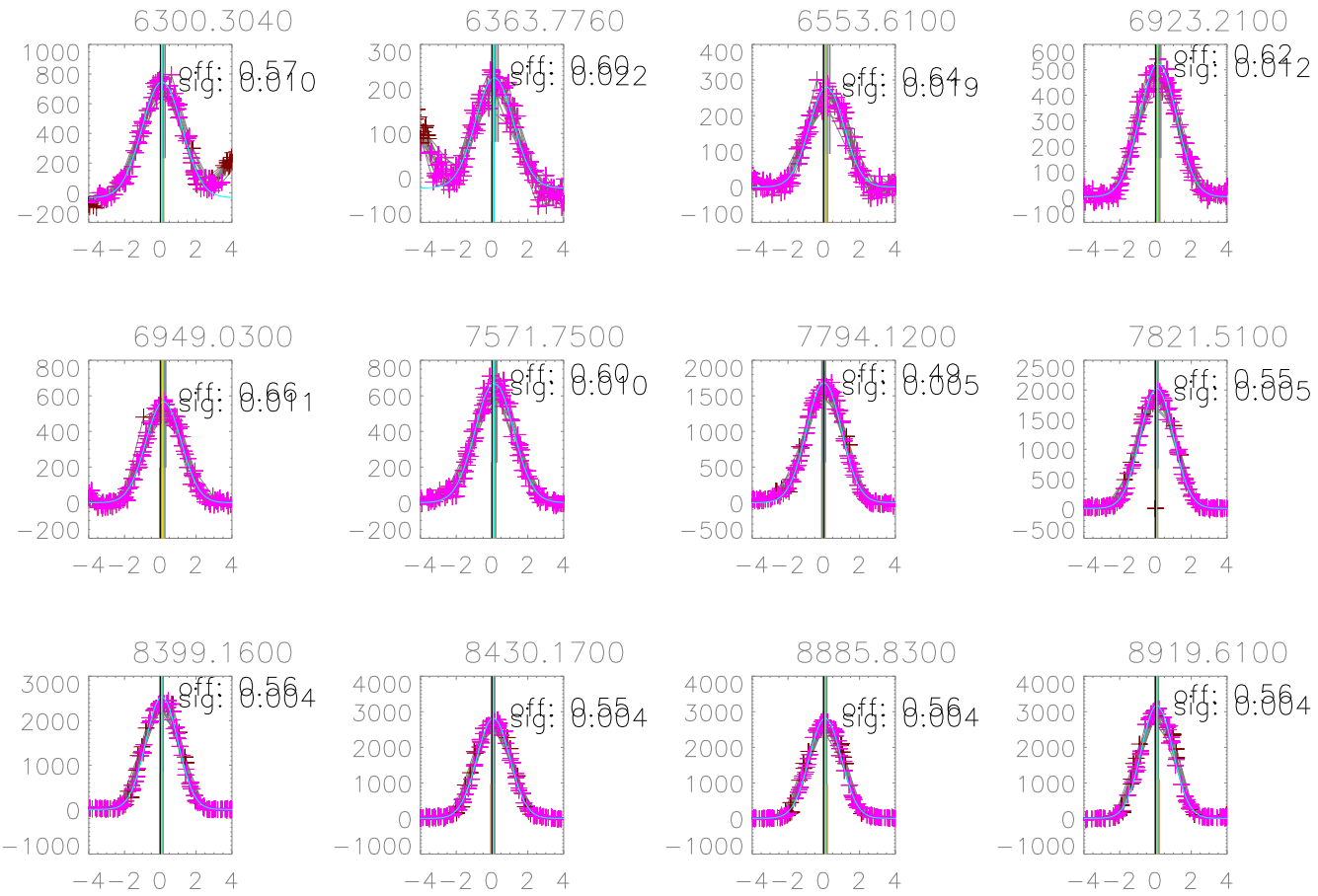

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004072.fi
25.5
25.5
32.7
18.2
25.5
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

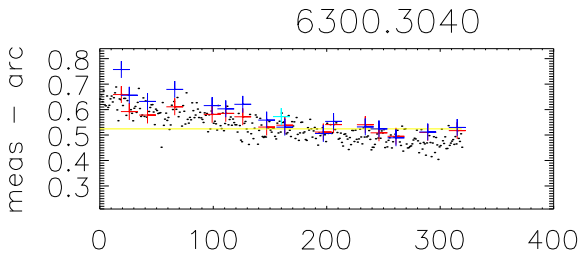

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004072.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.344
Max value = 29.581
Thu Feb 28 05:09:41 2008

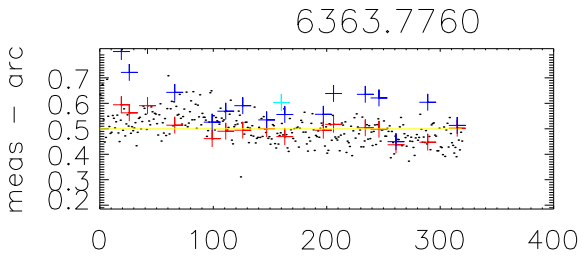

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004072.fit
9.1
9.1
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

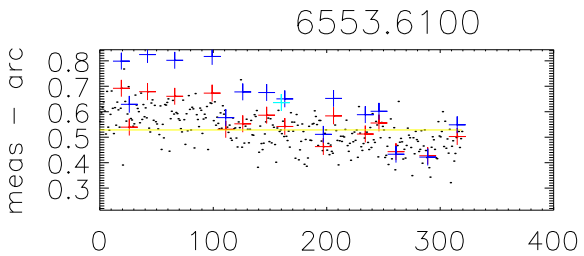

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004072.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.683
Max value = 11.842
Thu Feb 28 05:12:33 2008

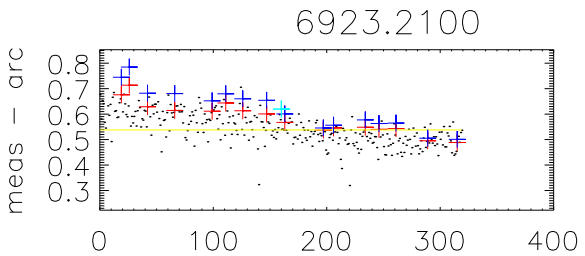

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-r2-00004072.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

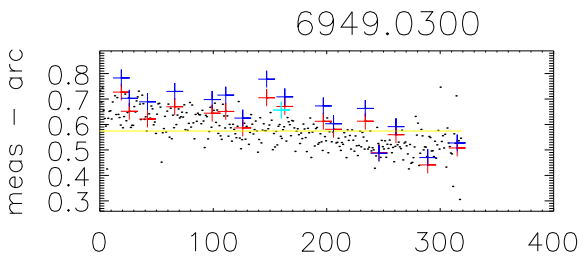

6300.3040
off: 0.57
sig: 0.010
6363.7760
off: 0.60
sig: 0.022
6553.6100
off: 0.64
sig: 0.019
6923.2100
off: 0.62
sig: 0.012
6949.0300
off: 0.66
sig: 0.011
7571.7500
off: 0.60
sig: 0.010
7794.1200
off: 0.49
sig: 0.005
7821.5100
off: 0.55
sig: 0.005
8399.1600
off: 0.56
sig: 0.004
8430.1700
off: 0.55
sig: 0.004
8885.8300
off: 0.56
sig: 0.004
8919.6100
off: 0.56
sig: 0.004

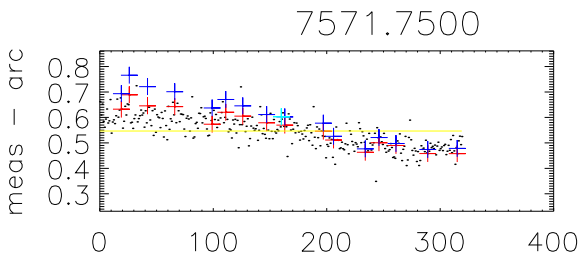

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

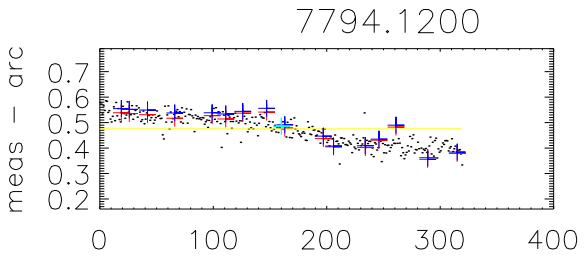

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

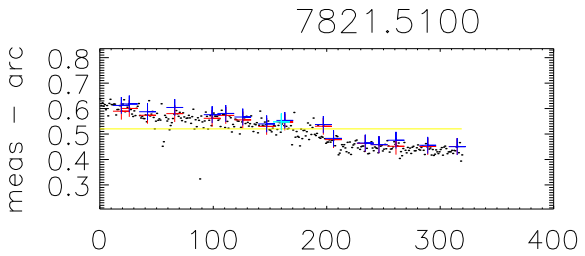

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

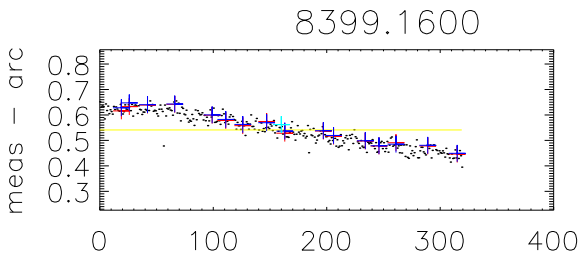

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

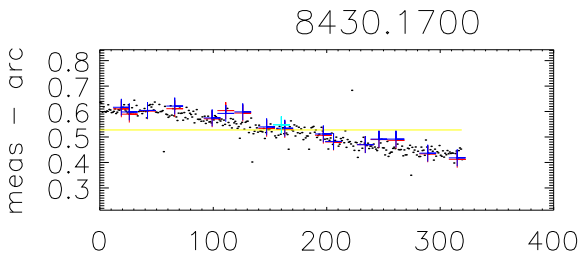

6949.0300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

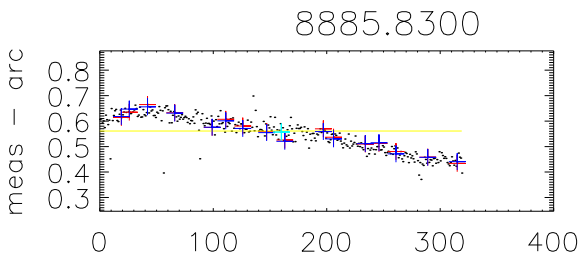

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

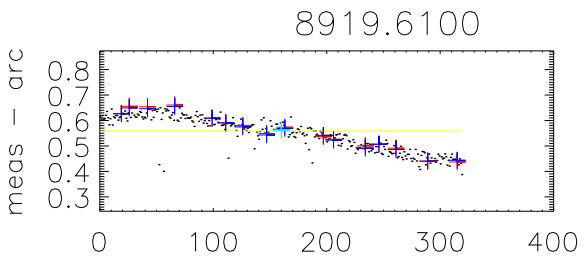

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

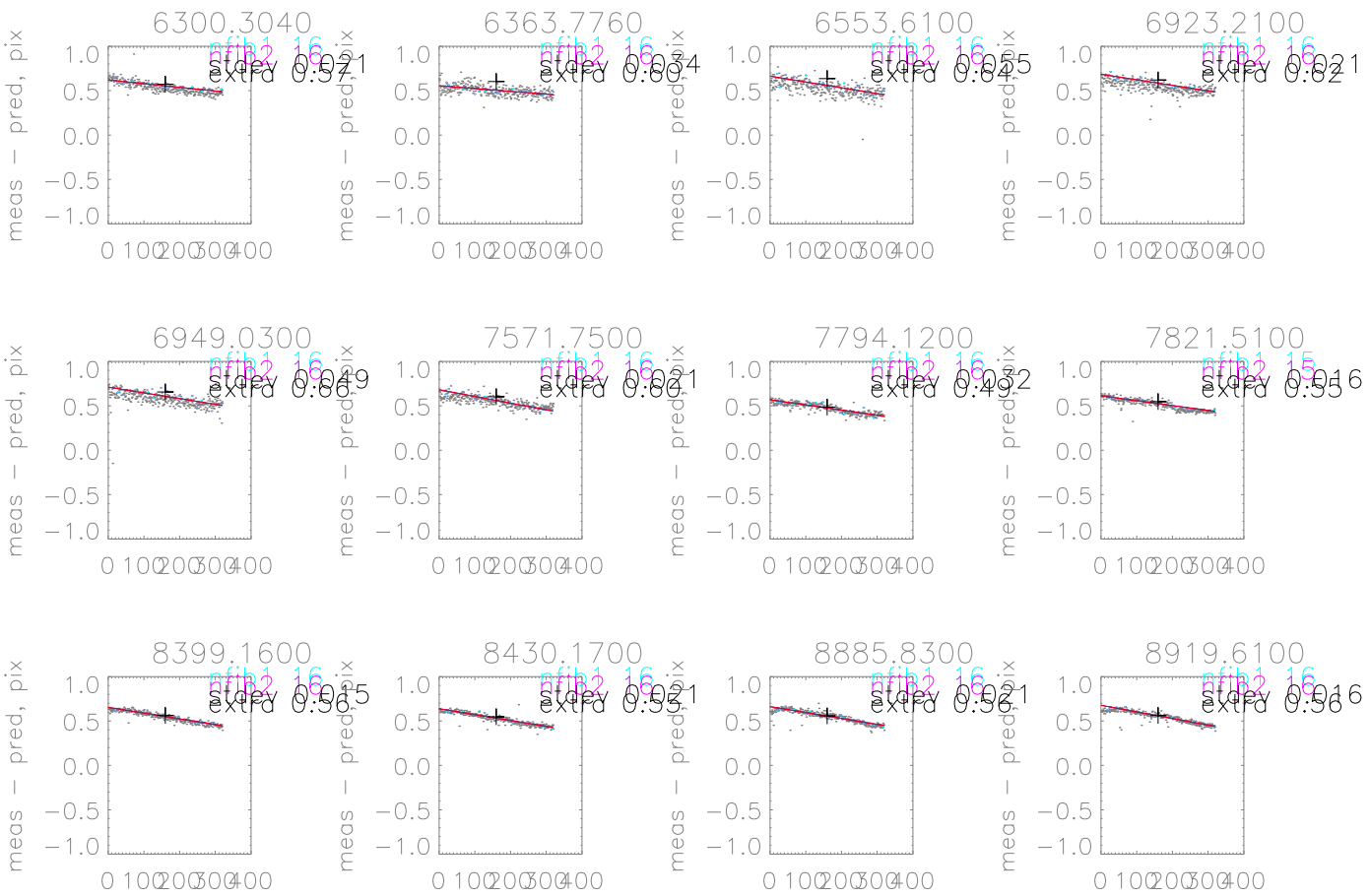

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

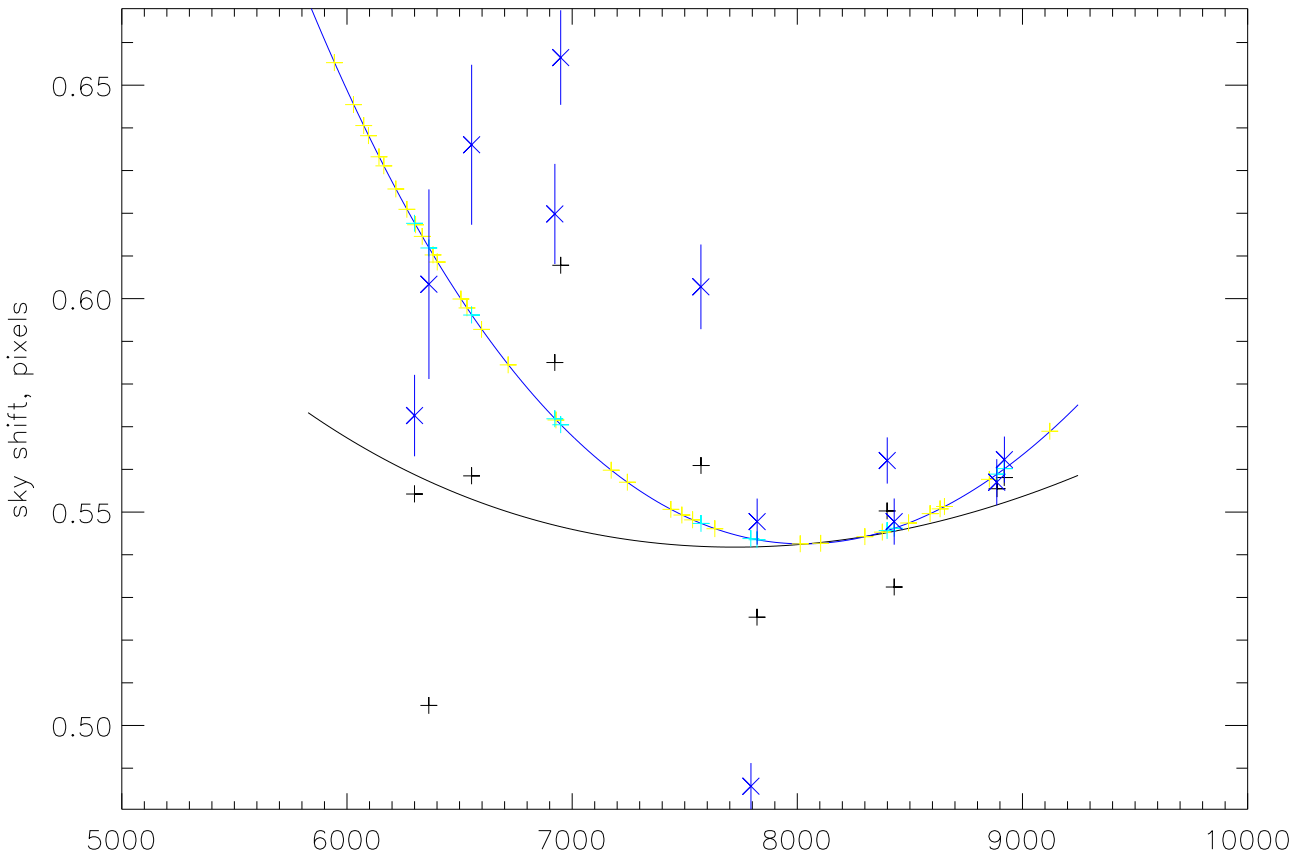

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

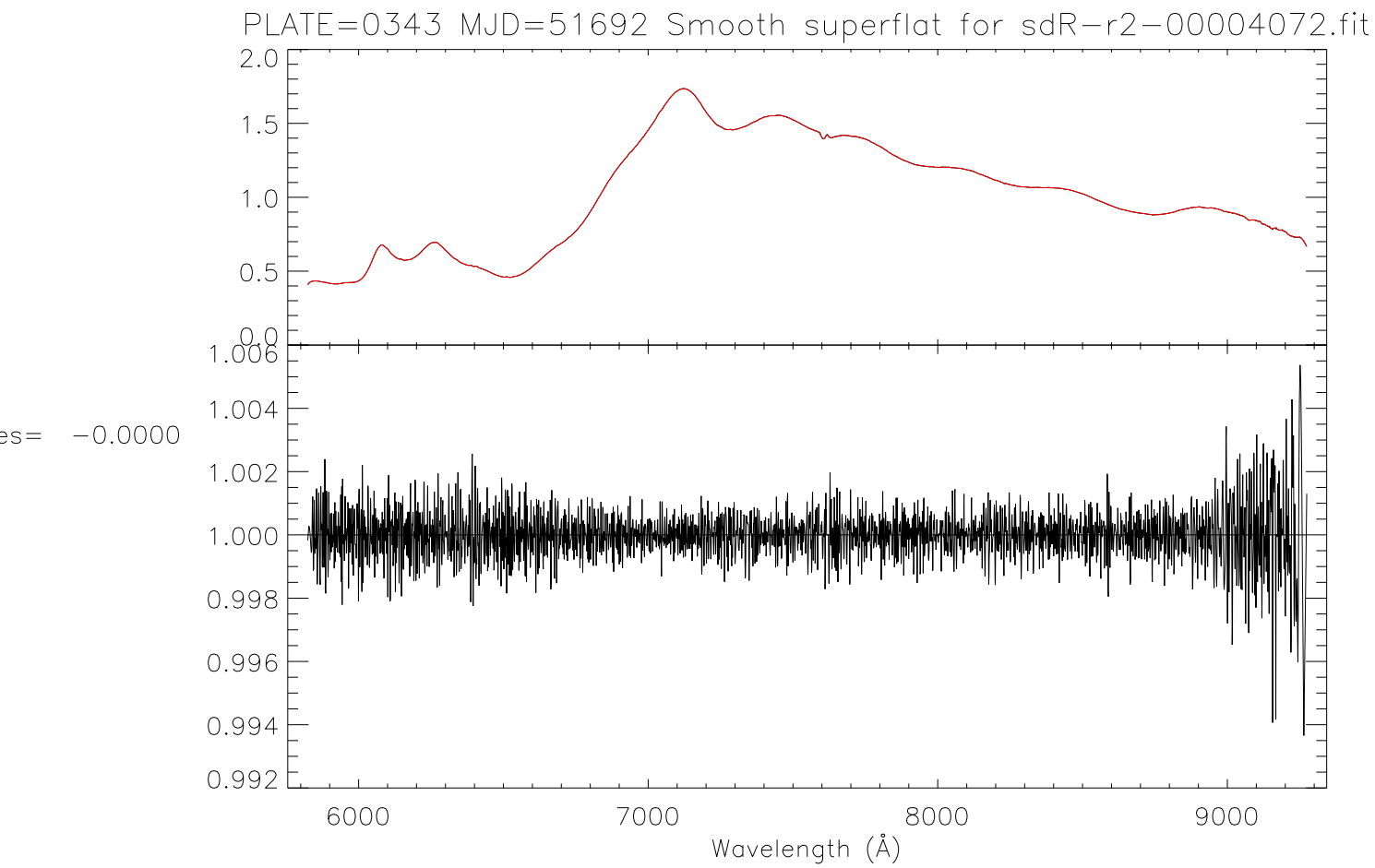

8430.1700
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


8885.8300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

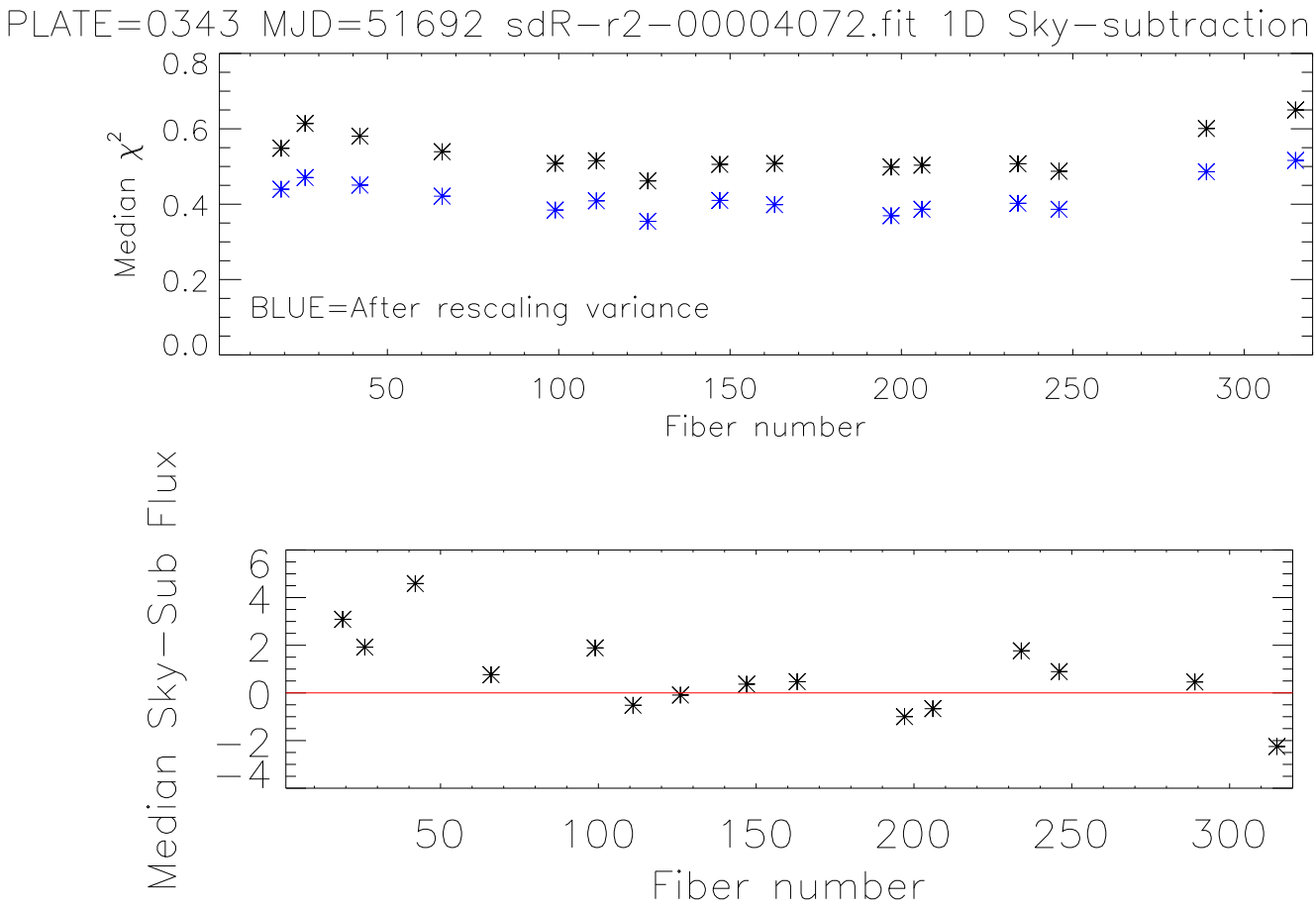

8919.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


6300.3040
stdev 0.021
extra 0.57
6363.7760
stdev 0.034
extra 0.60
6553.6100
stdev 0.055
extra 0.64
6923.2100
stdev 0.021
extra 0.62
6949.0300
stdev 0.049
extra 0.66
7571.7500
stdev 0.021
extra 0.60
7794.1200
stdev 0.032
extra 0.49
7821.5100
stdev 0.016
extra 0.55
8399.1600
stdev 0.045
extra 0.56
8430.1700
stdev 0.021
extra 0.53
8885.8300
stdev 0.021
extra 0.56
8919.6100
stdev 0.016
extra 0.56
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

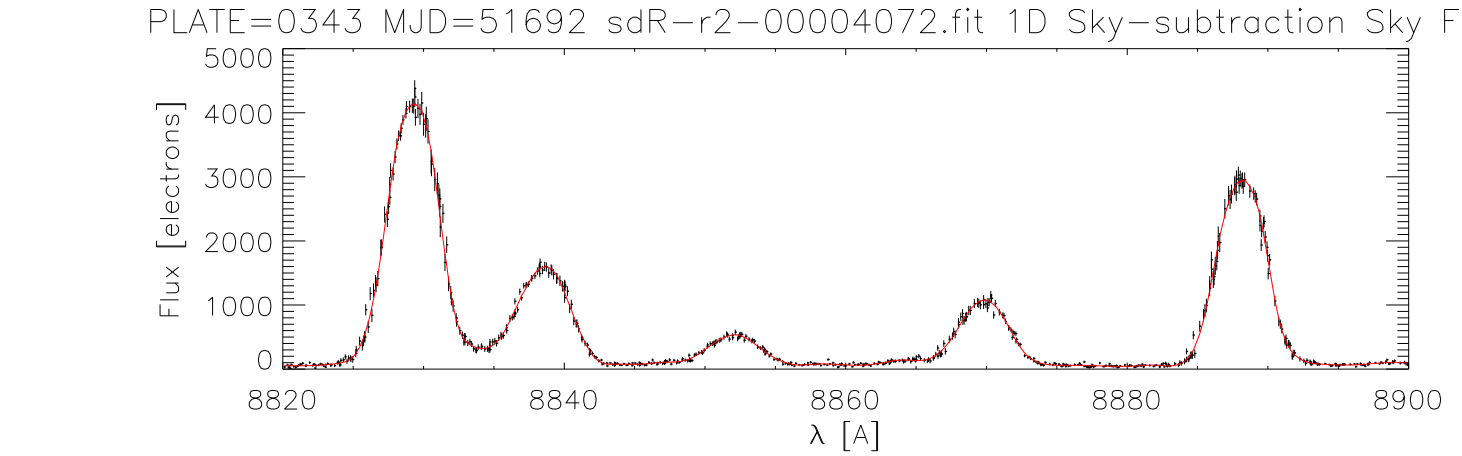

sky shift, pixels
0.65
0.60
0.55
0.50
5000
6000
7000
8000
9000
10000

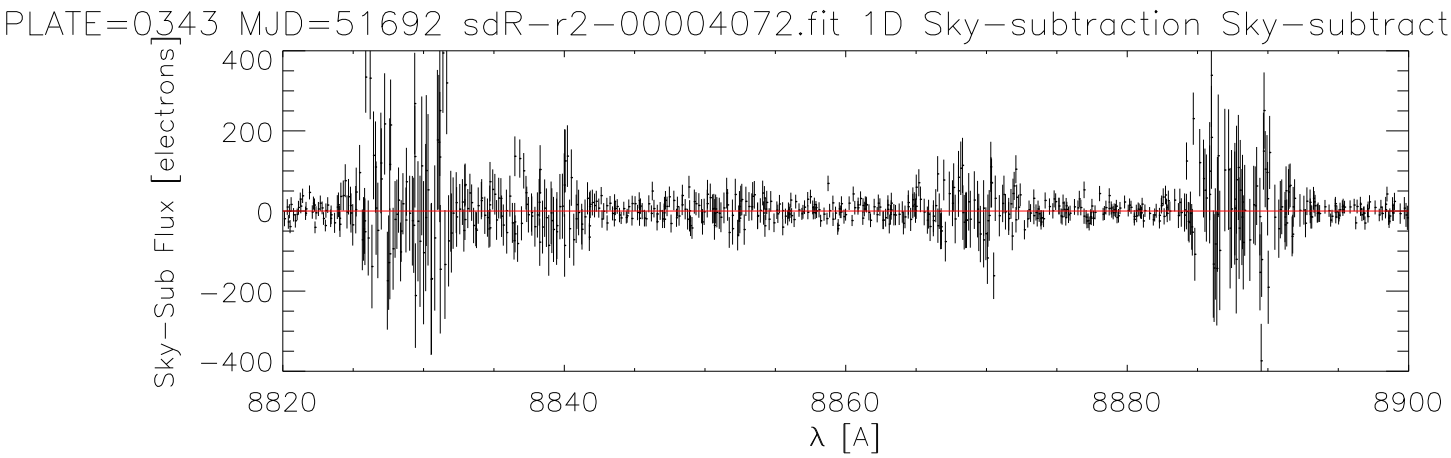

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004072.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

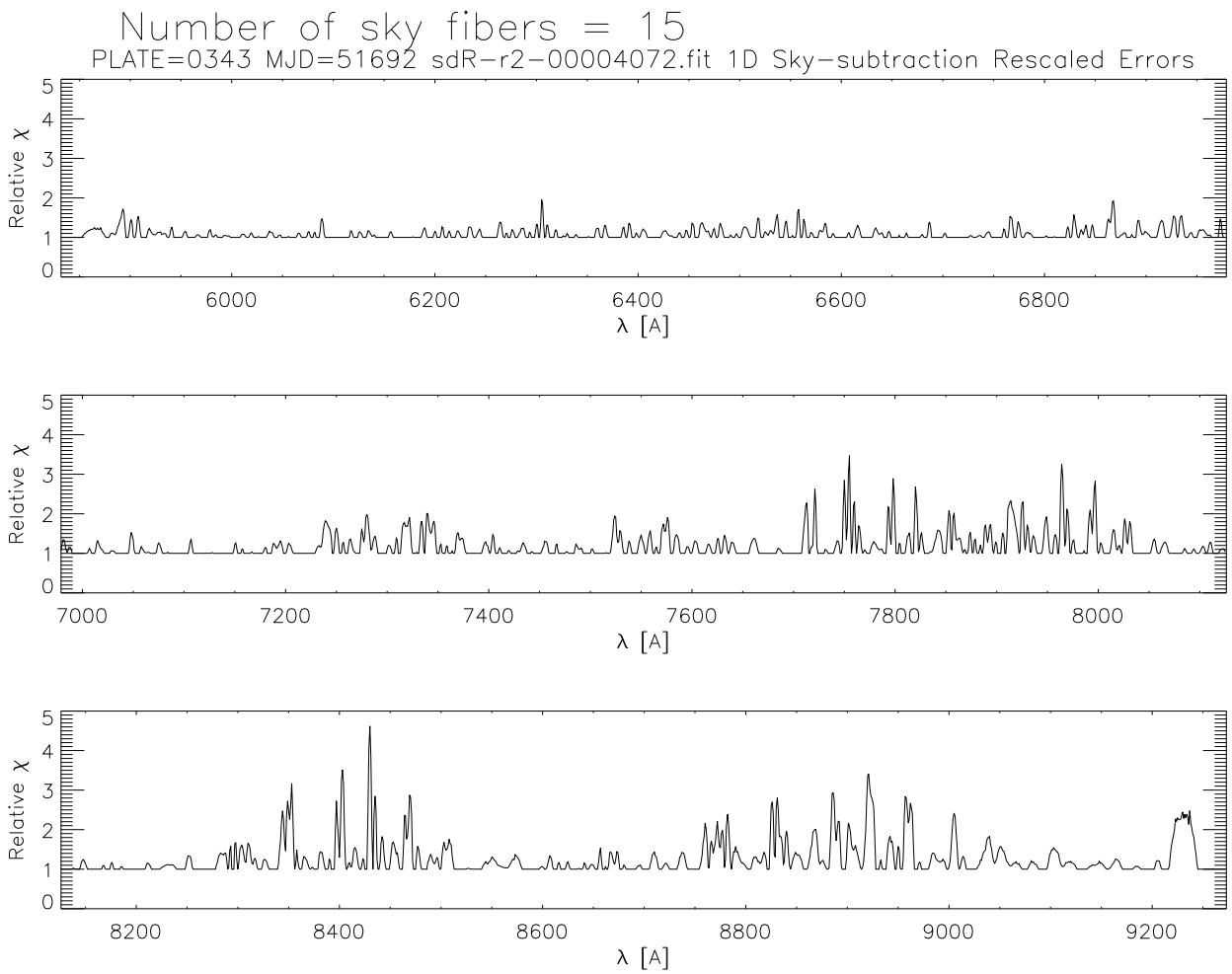
es= −0.0000

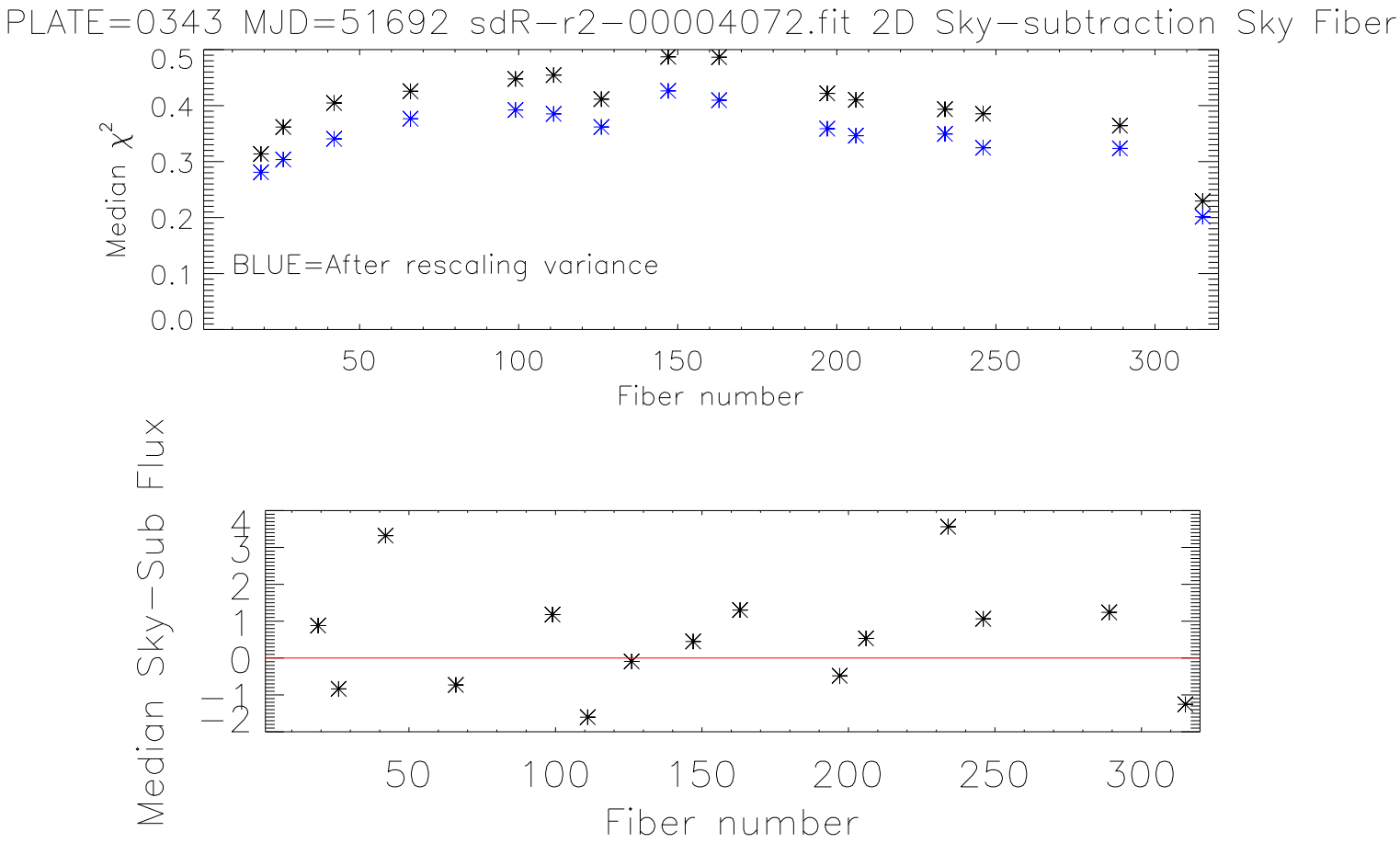

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

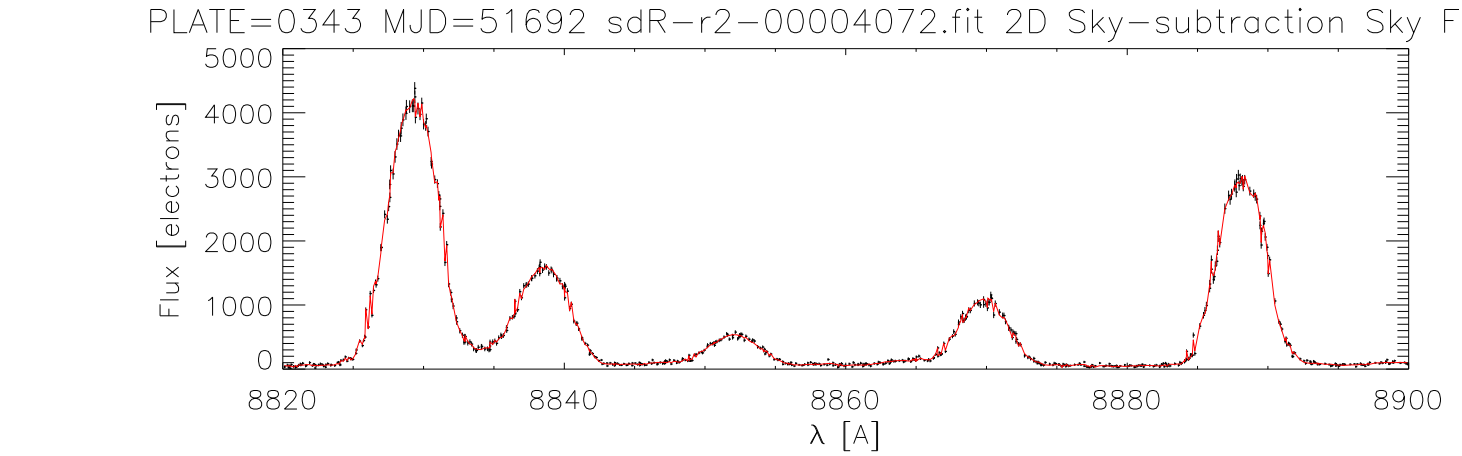
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

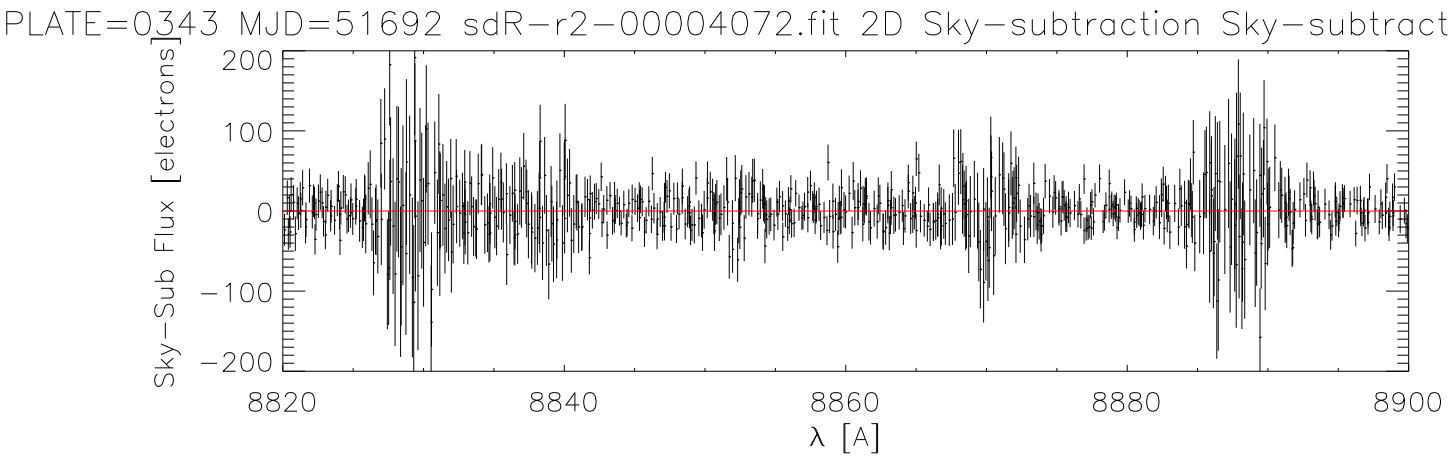

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

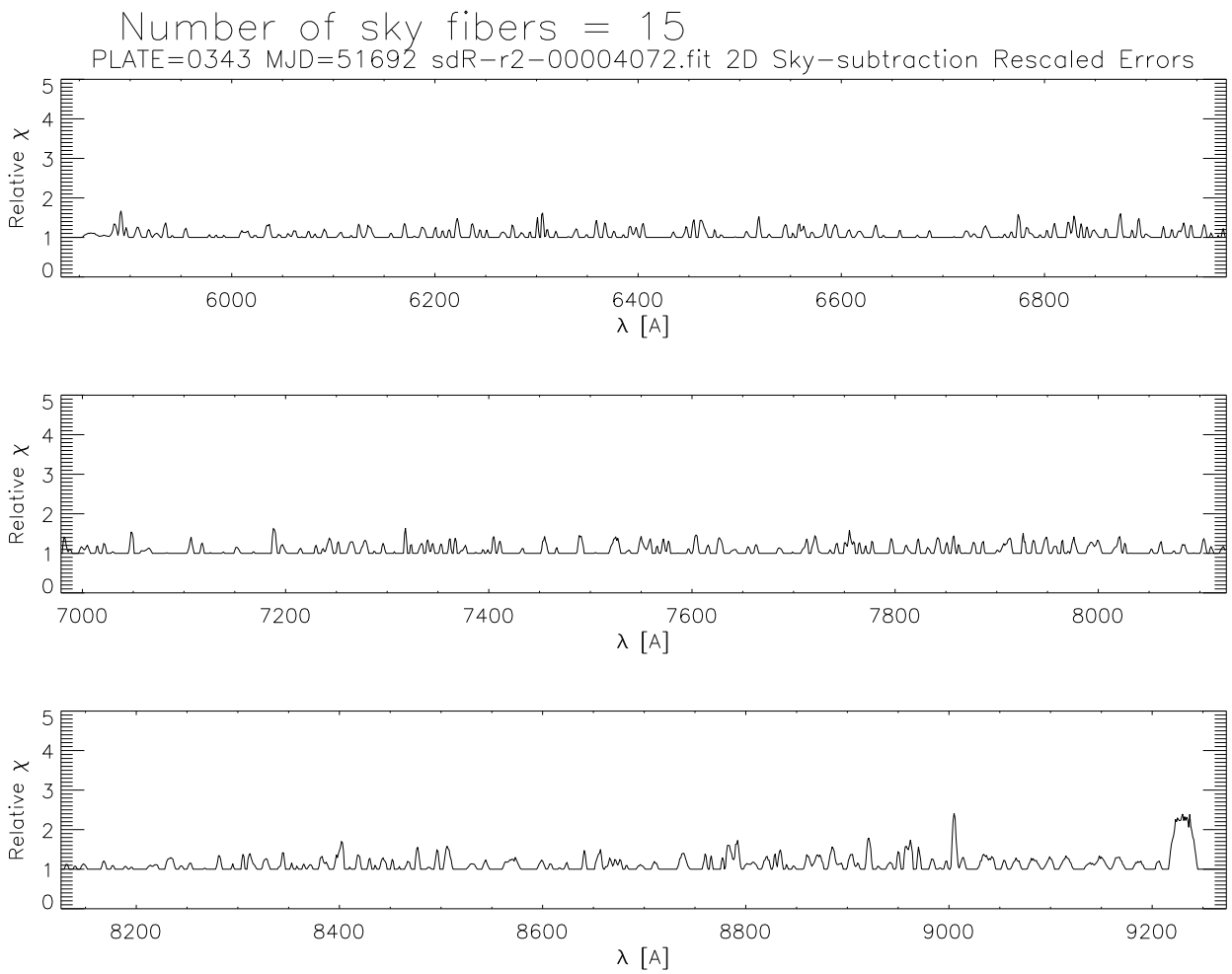

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

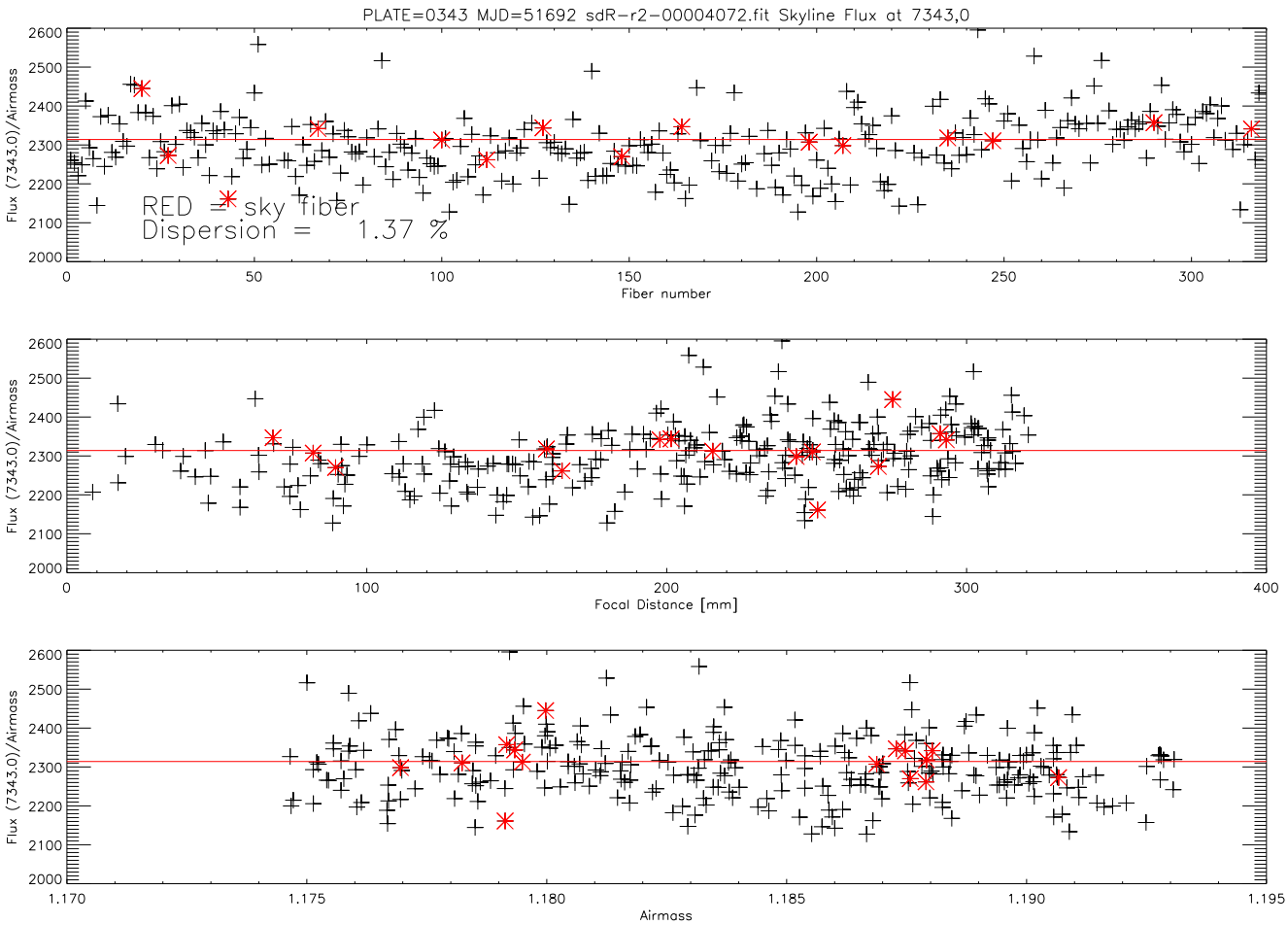

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004072.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

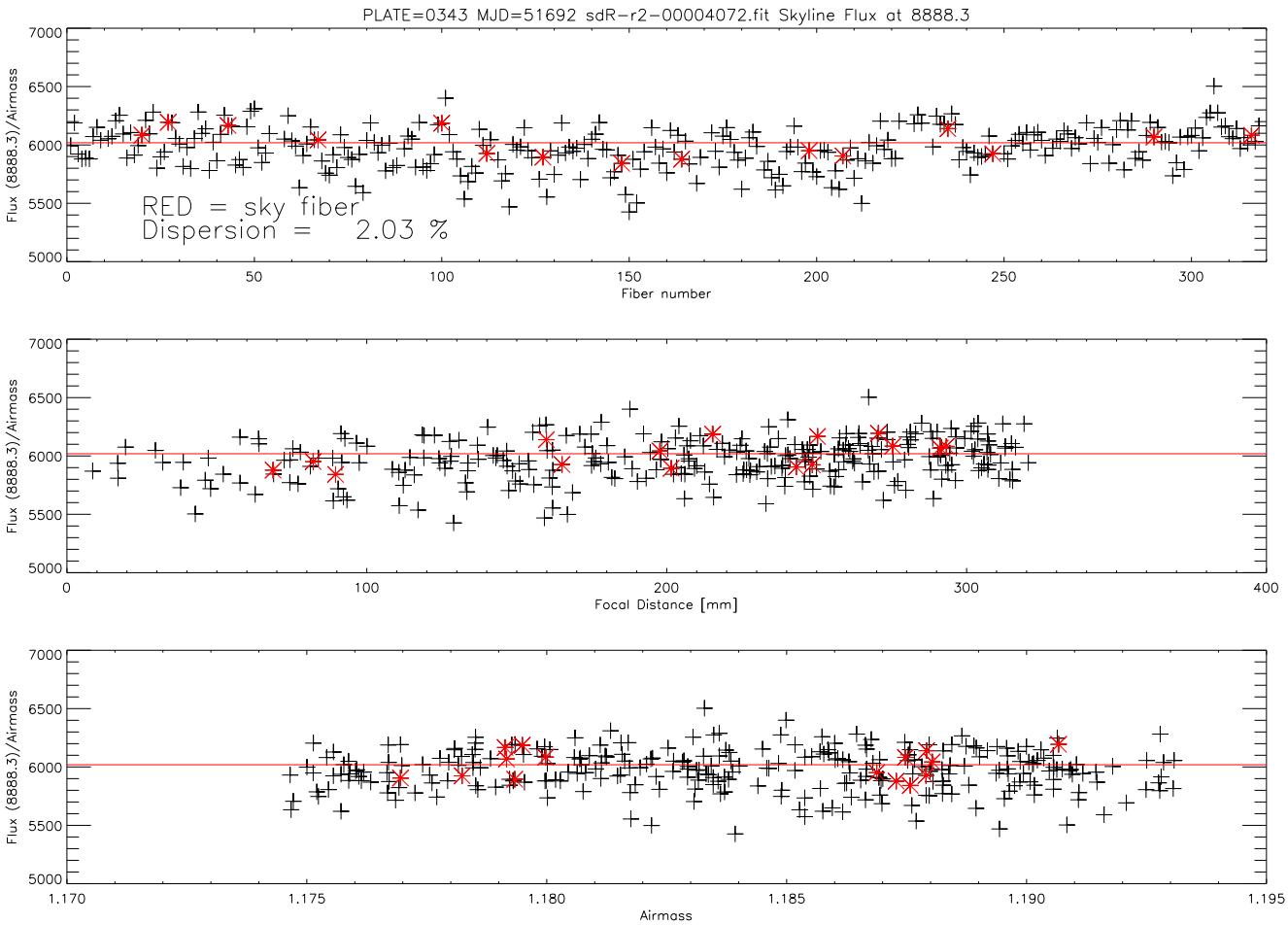

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

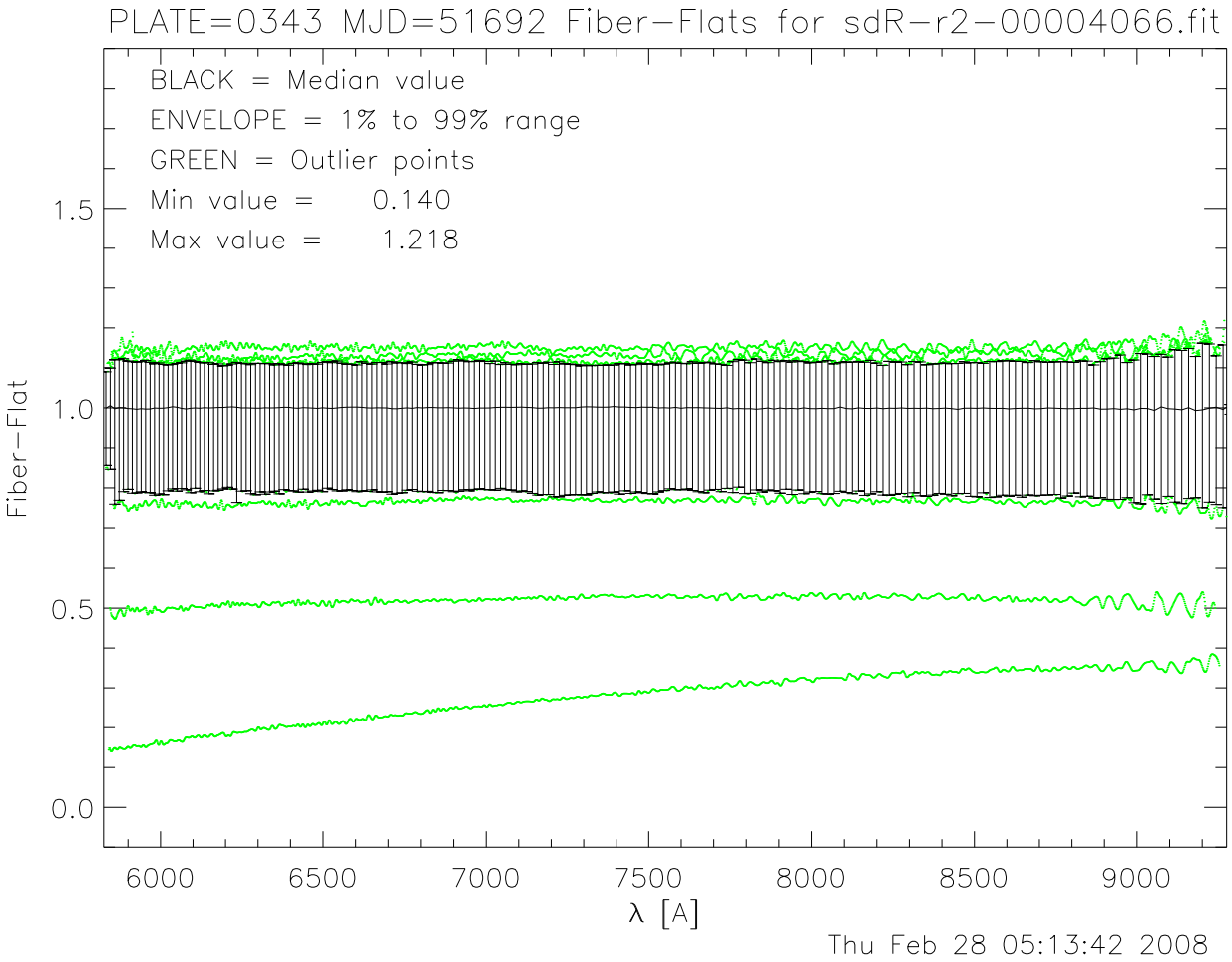

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

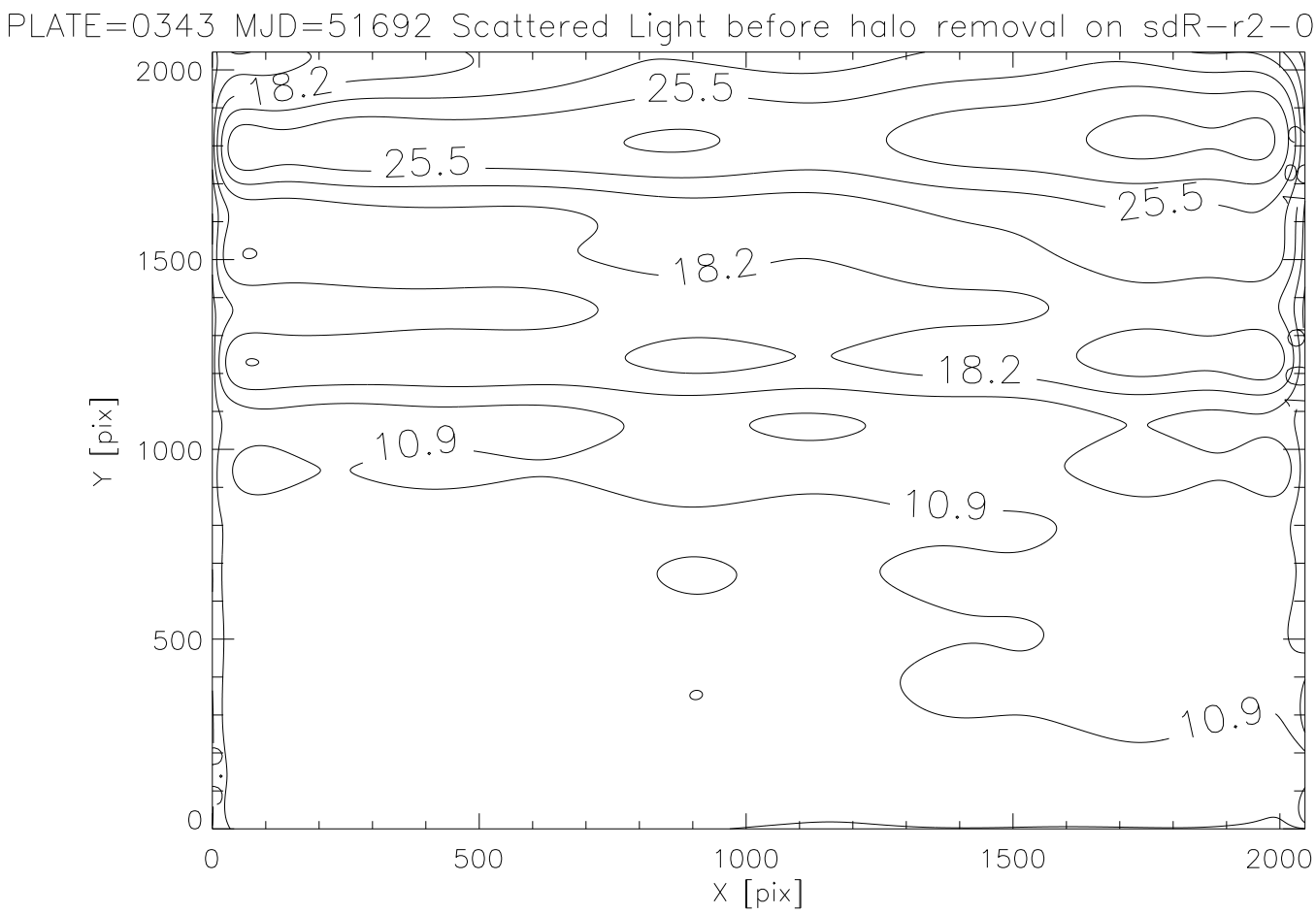

PLATE=0343 MJD=51692 sdR-r2-00004072.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

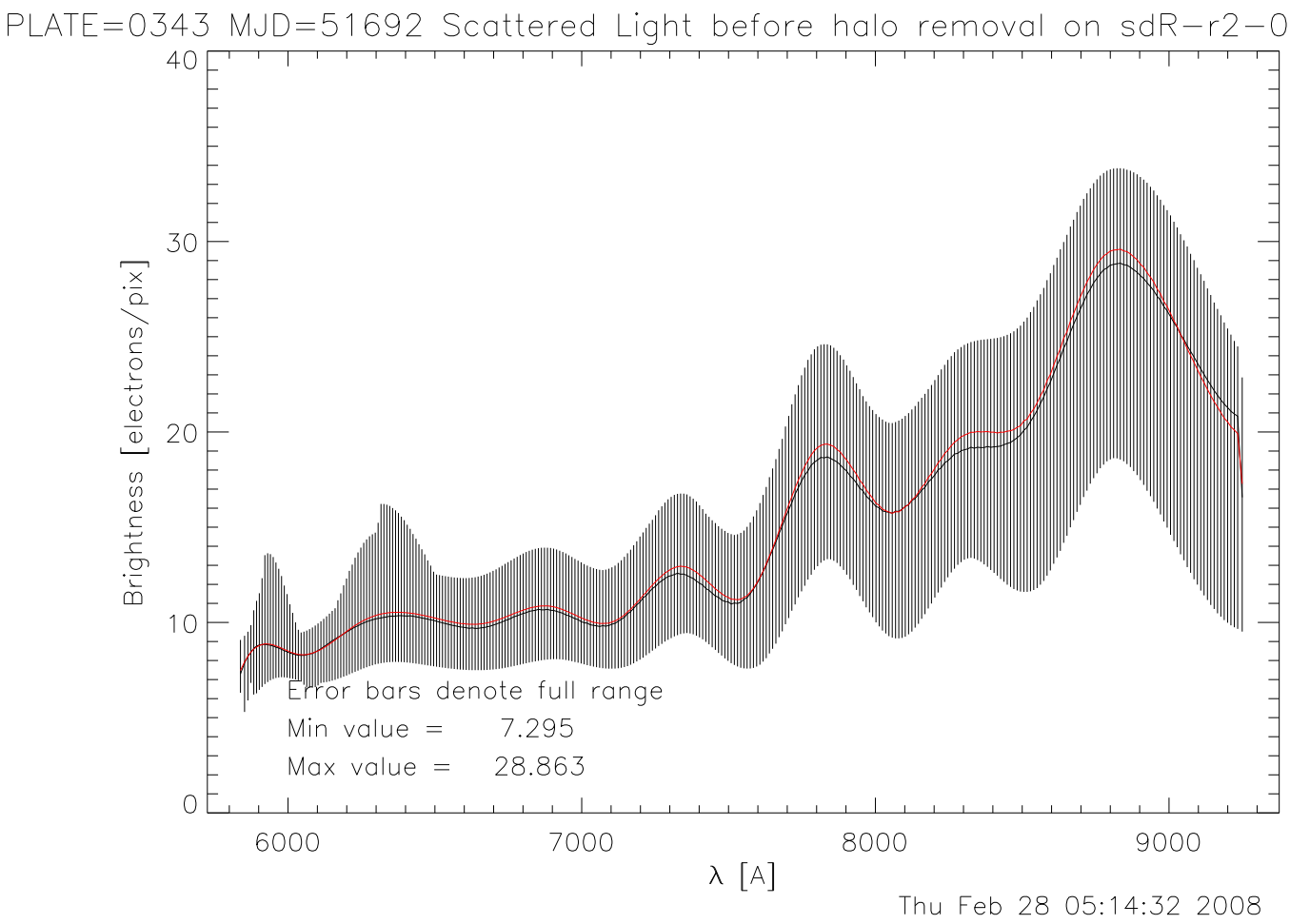

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004072.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

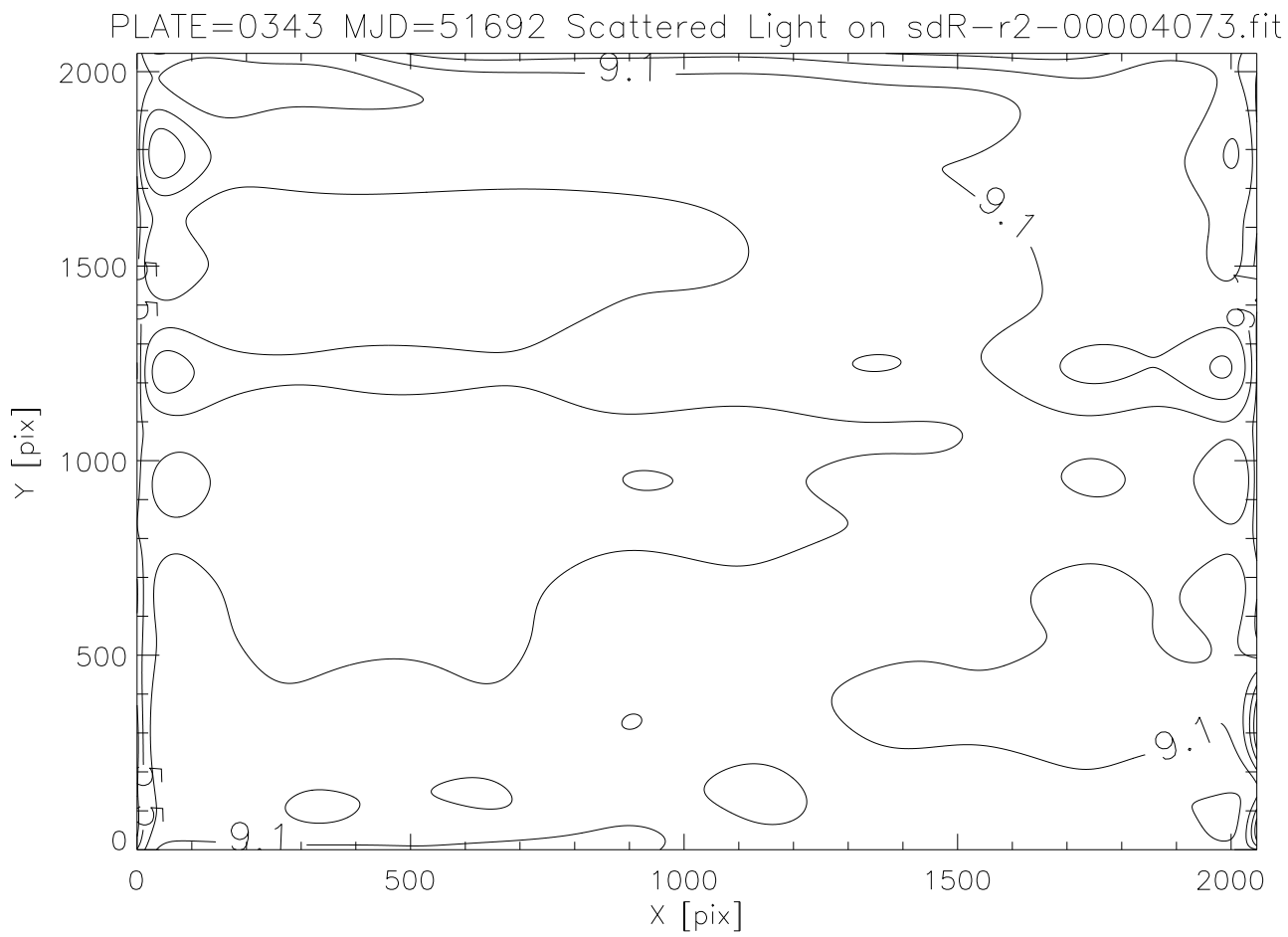

PLATE=0343 MJD=51692 sdR-r2-00004072.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.37 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

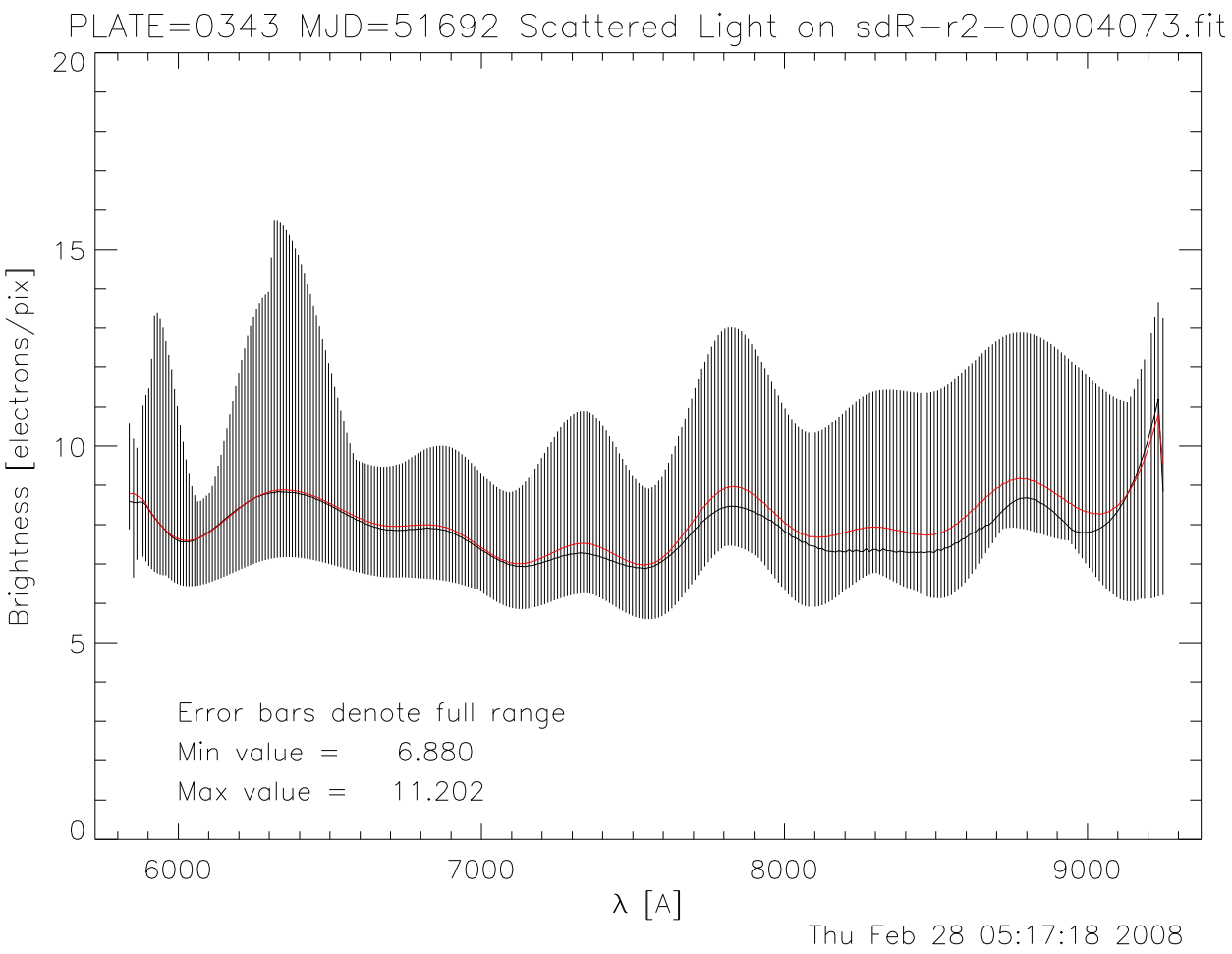

PLATE=0343 MJD=51692 sdR-r2-00004072.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.03 %
Fiber number
Focal Distance [mm]
Airmass

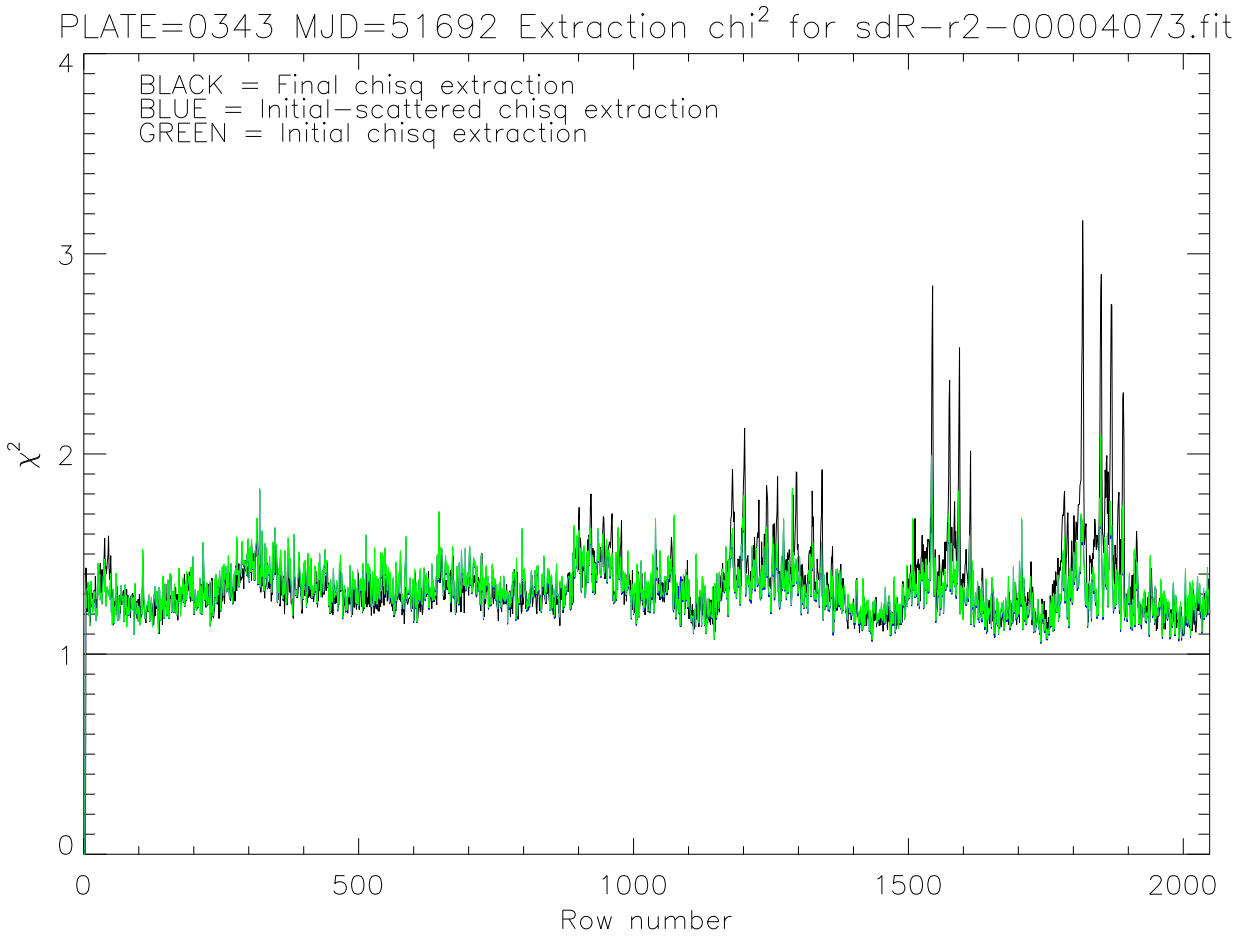

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:13:42 2008

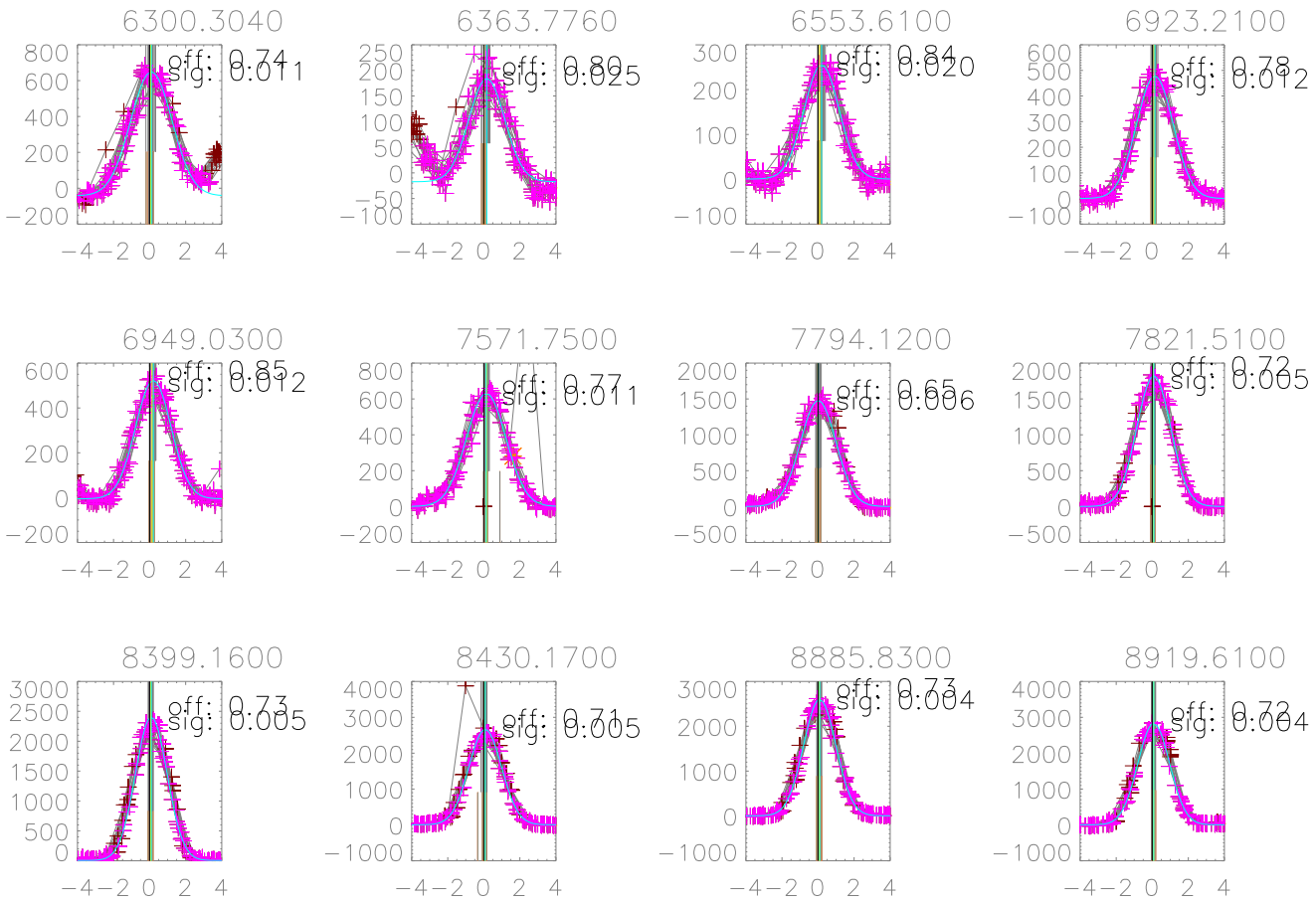

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004073.fi
18.2
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

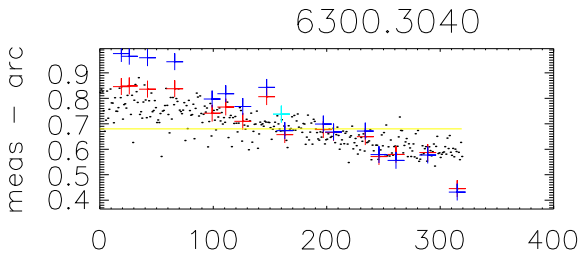

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004073.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.295
Max value = 28.863
Thu Feb 28 05:14:32 2008

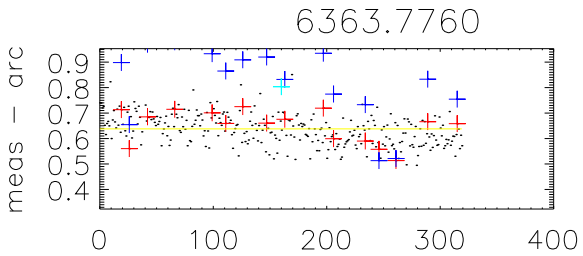

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004073.fit
9.1
9.1
9.1
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

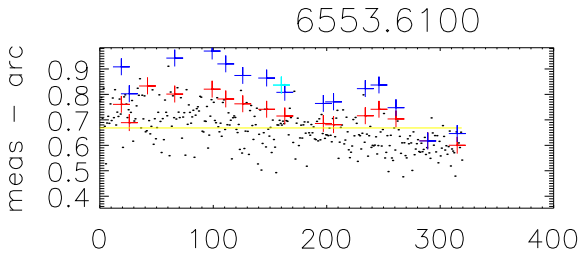

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004073.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.880
Max value = 11.202
Thu Feb 28 05:17:18 2008

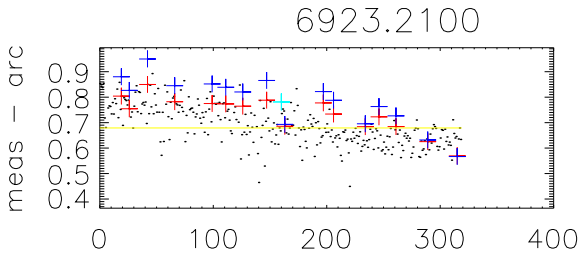

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r2−00004073.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

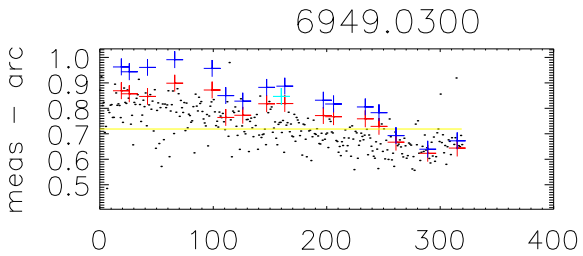

6300.3040
off: 0.74
sig: 0.011
6363.7760
off: 0.80
sig: 0.025
6553.6100
off: 0.84
sig: 0.020
6923.2100
off: 0.78
sig: 0.012
6949.0300
off: 0.85
sig: 0.012
7571.7500
off: 0.77
sig: 0.011
7794.1200
off: 0.65
sig: 0.006
7821.5100
off: 0.72
sig: 0.005
8399.1600
off: 0.73
sig: 0.005
8430.1700
off: 0.71
sig: 0.005
8885.8300
off: 0.73
sig: 0.004
8919.6100
off: 0.72
sig: 0.004

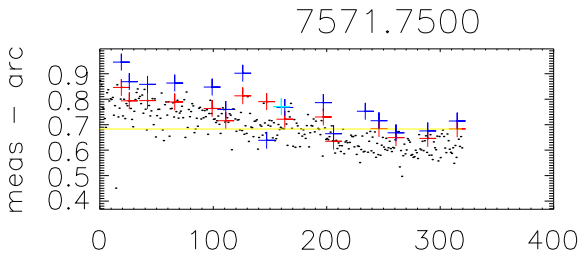

6300.3040
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

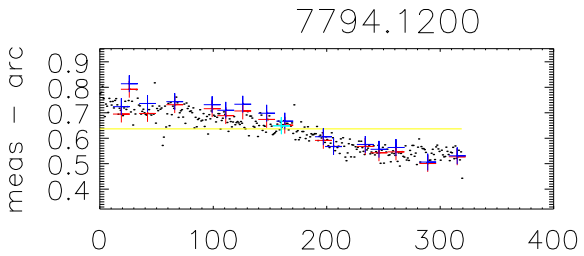

6363.7760
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

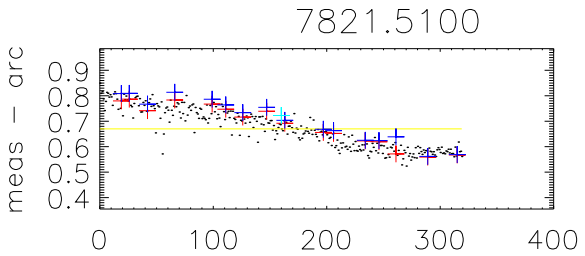

6553.6100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

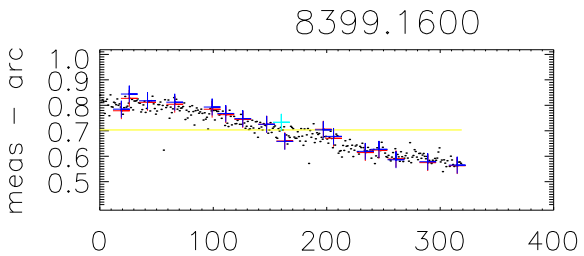

6923.2100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

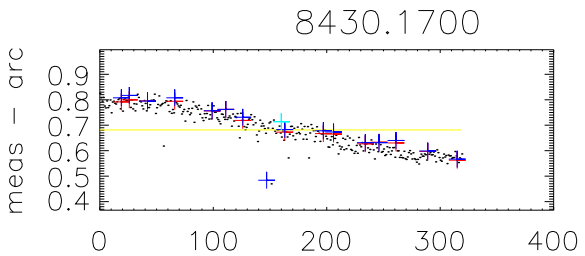

6949.0300
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

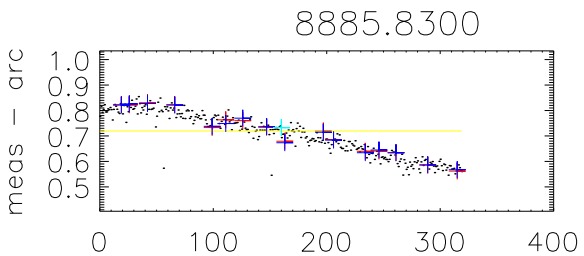

7571.7500
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

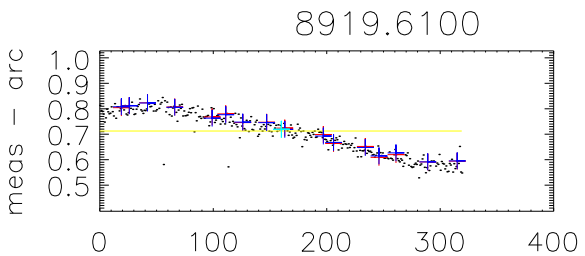

7794.1200
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

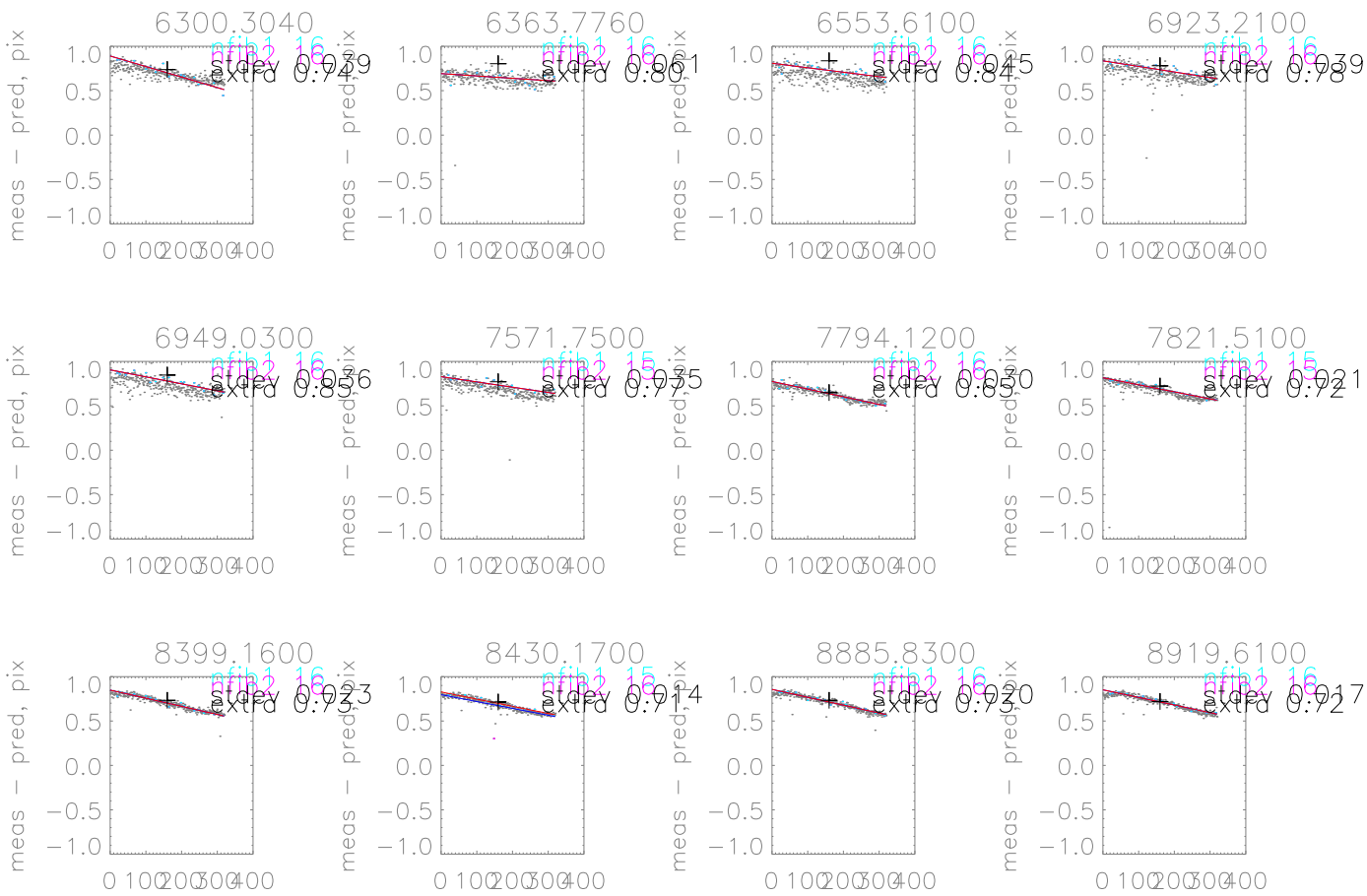

7821.5100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

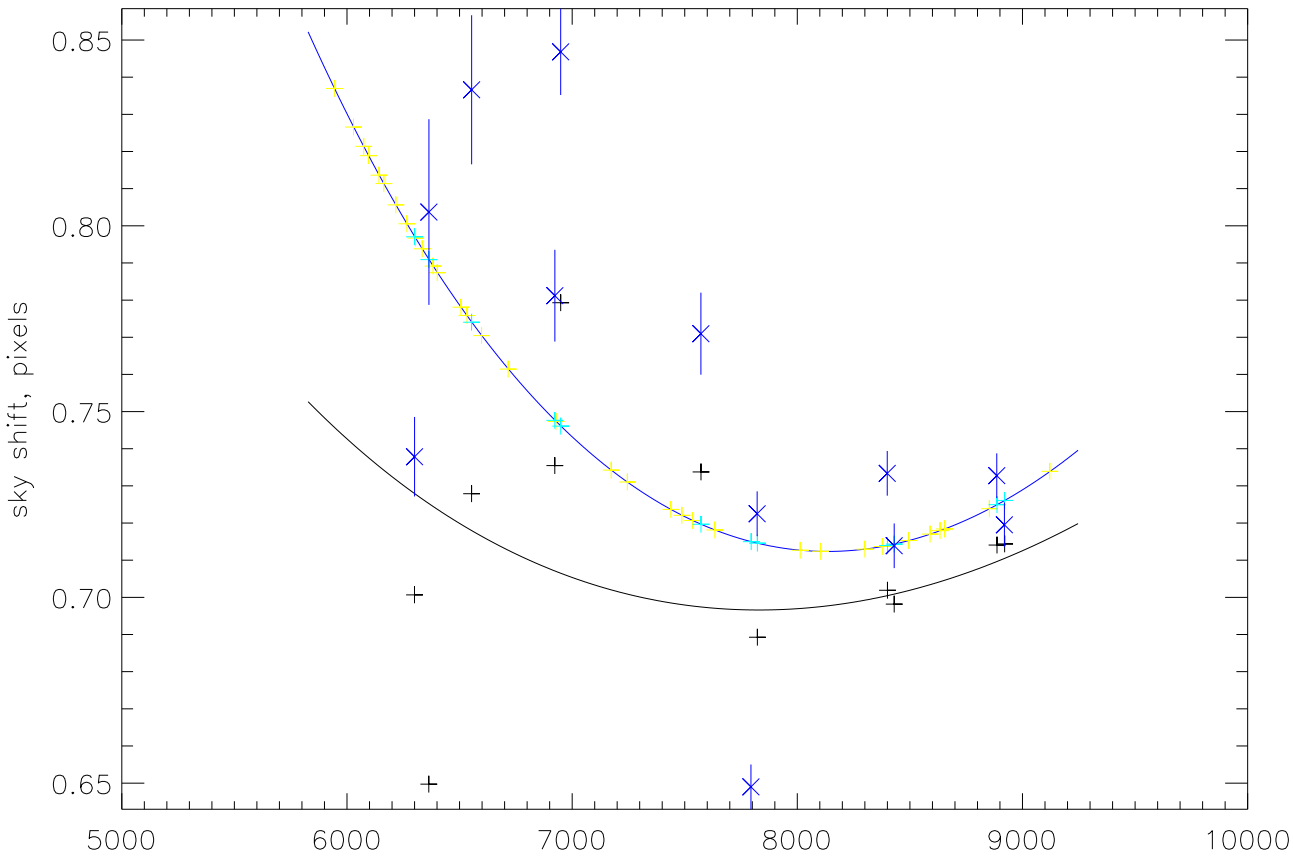

8399.1600
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400


8430.1700
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

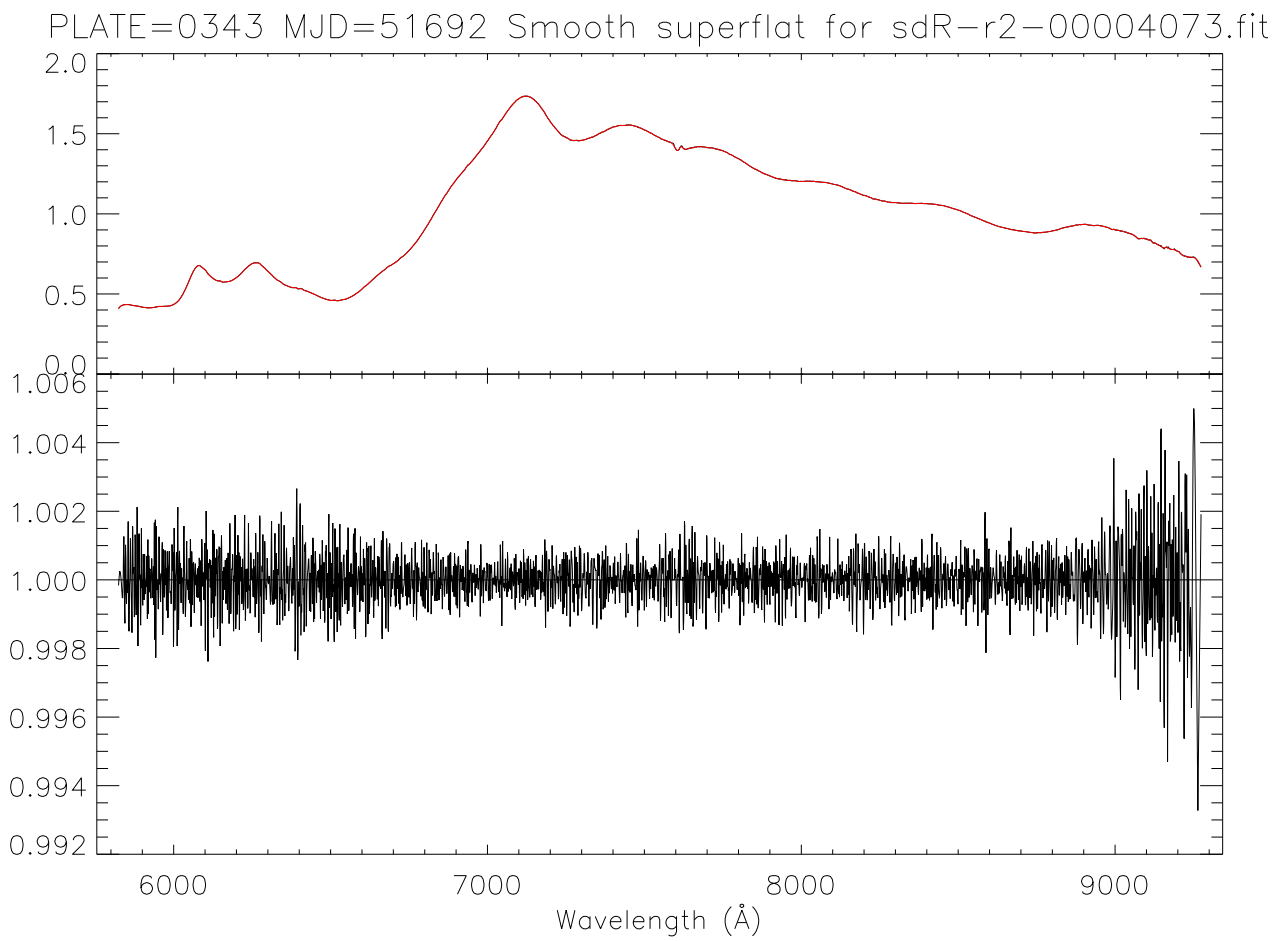

8885.8300
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

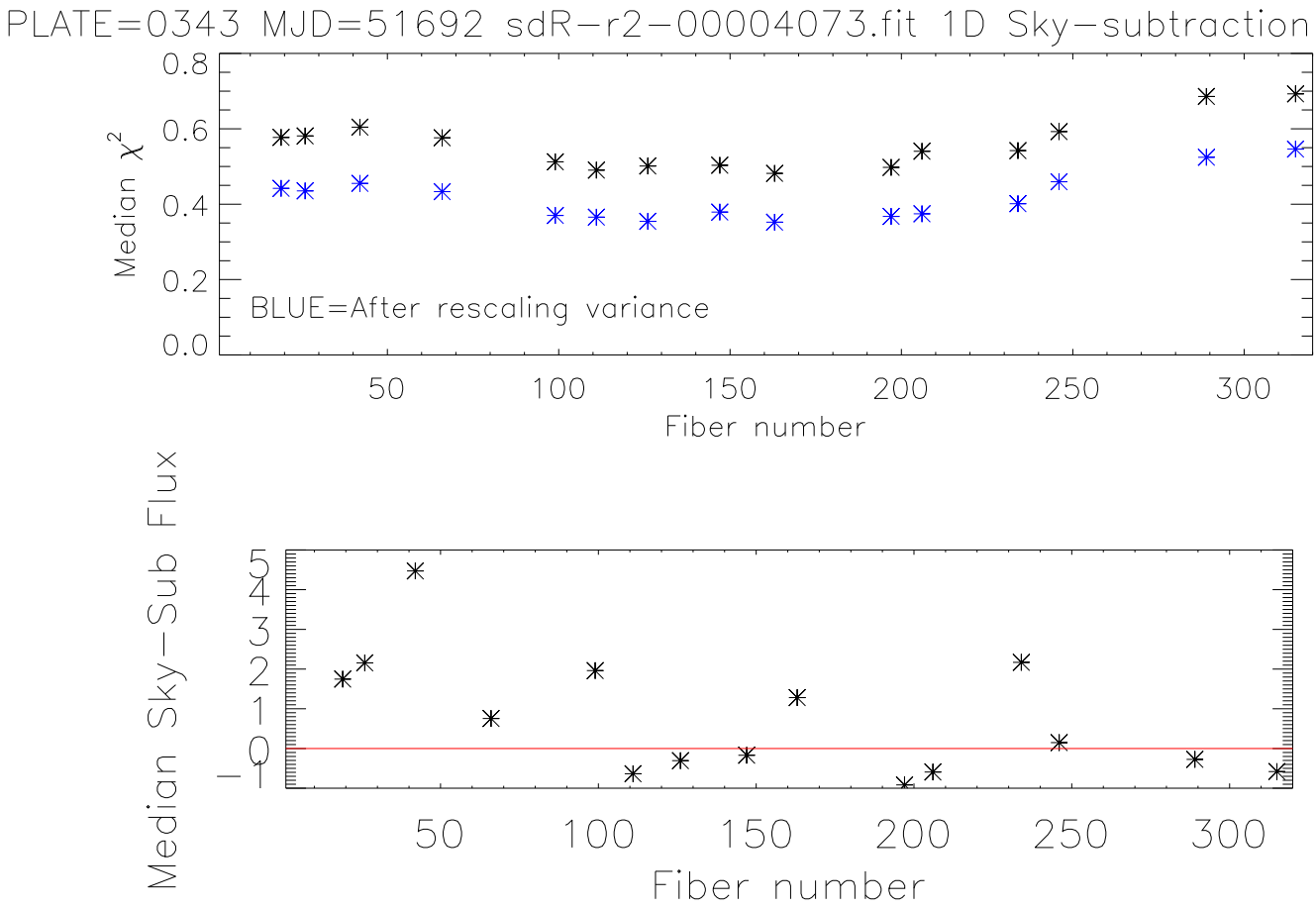

8919.6100
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400


6300.3040
stdev 0.939
extra 0.74
6363.7760
stdev 0.961
extra 0.80
6553.6100
stdev 0.945
extra 0.84
6923.2100
stdev 0.939
extra 0.78
6949.0300
stdev 0.936
extra 0.85
7571.7500
stdev 0.935
extra 0.77
7794.1200
stdev 0.930
extra 0.85
7821.5100
stdev 0.921
extra 0.72
8399.1600
stdev 0.923
extra 0.73
8430.1700
stdev 0.914
extra 0.71
8885.8300
stdev 0.920
extra 0.73
8919.6100
stdev 0.917
extra 0.72
meas − pred, pix
mfh32 16
mfh32 15

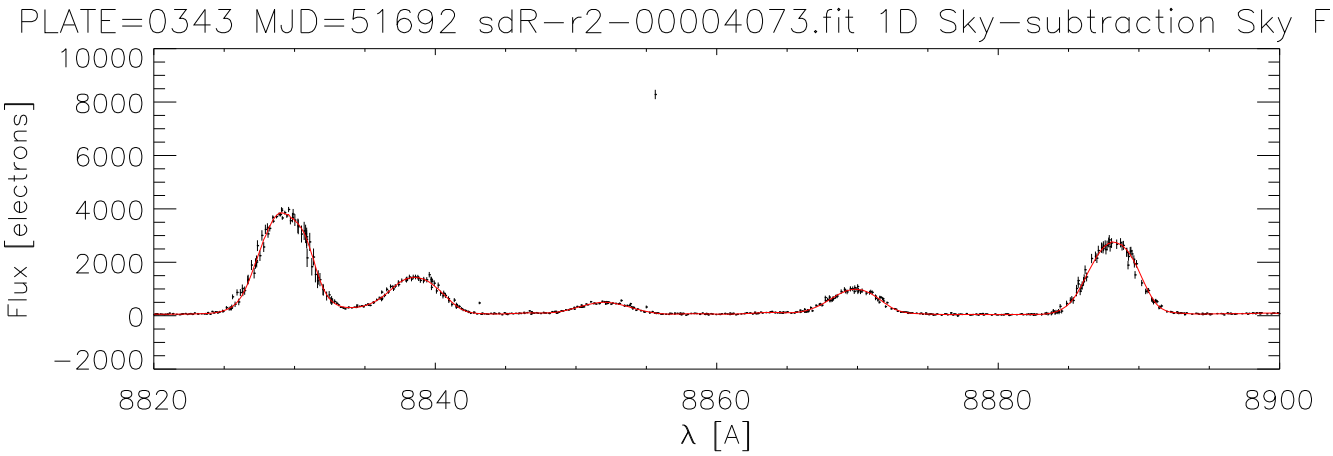

0.85
0.80
0.75
0.70
0.65
sky shift, pixels
5000
6000
7000
8000
9000
10000

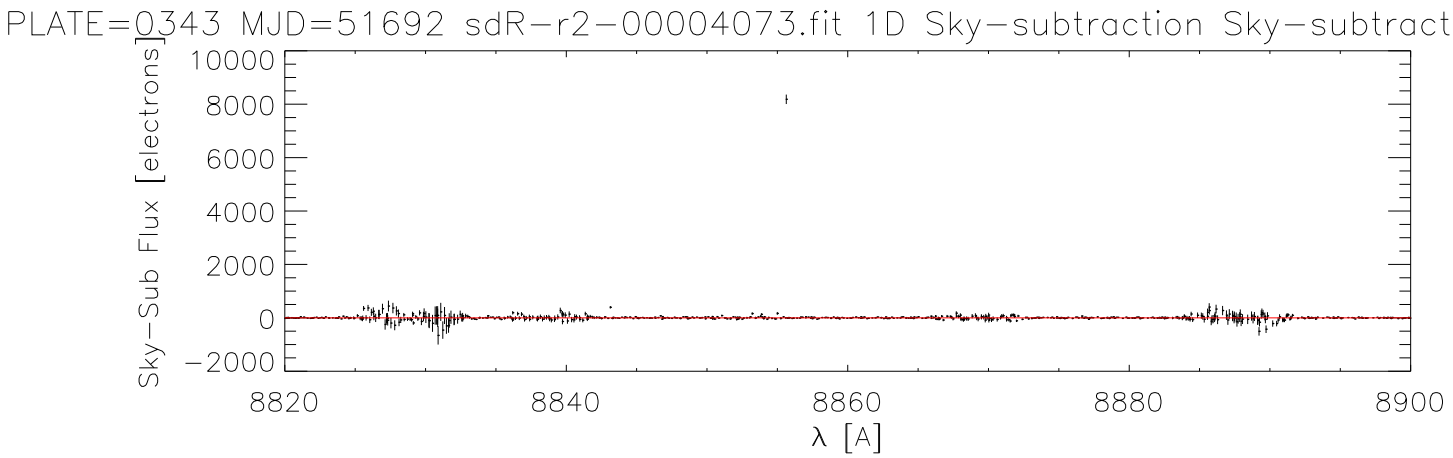
es= 0.0000

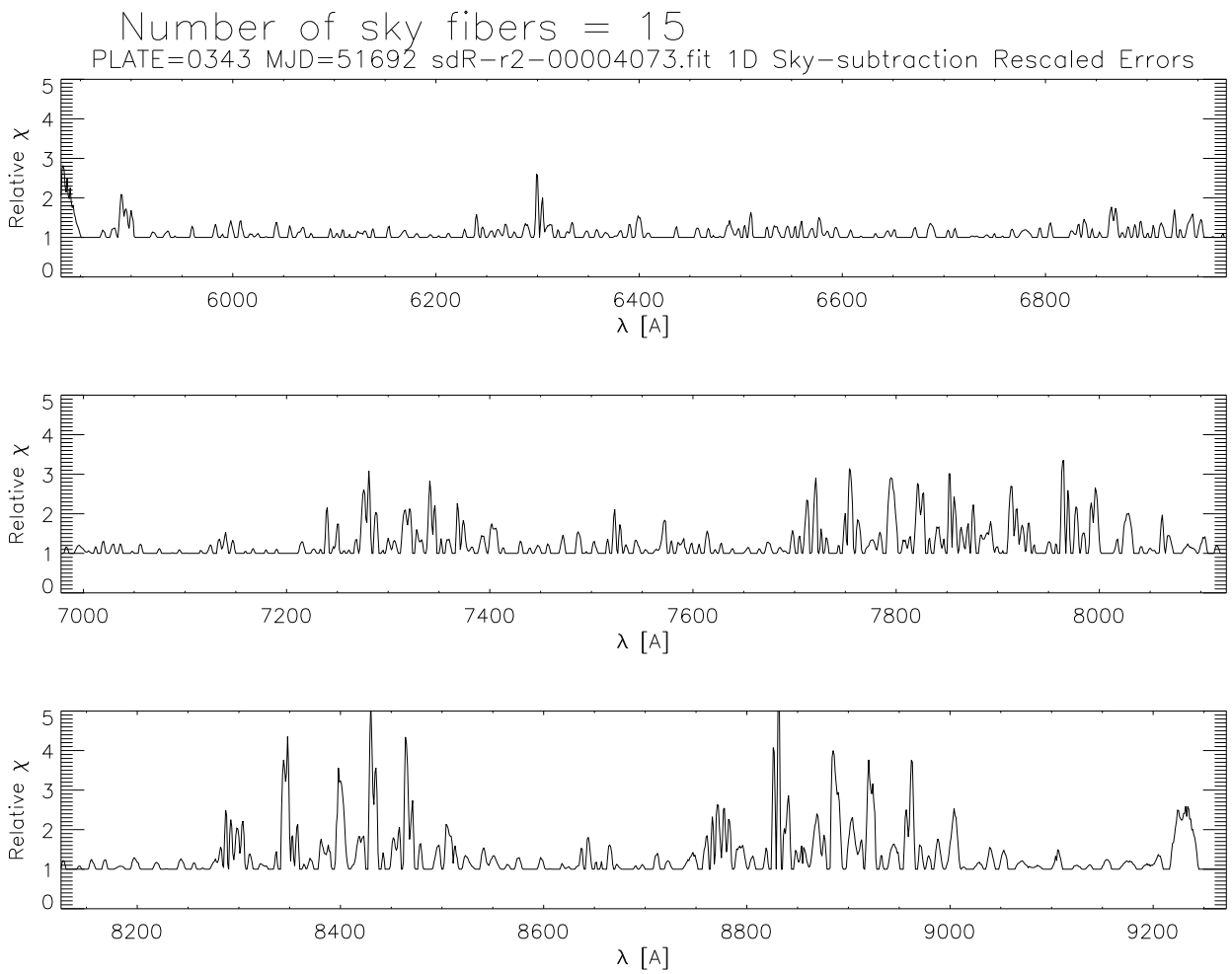

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004073.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

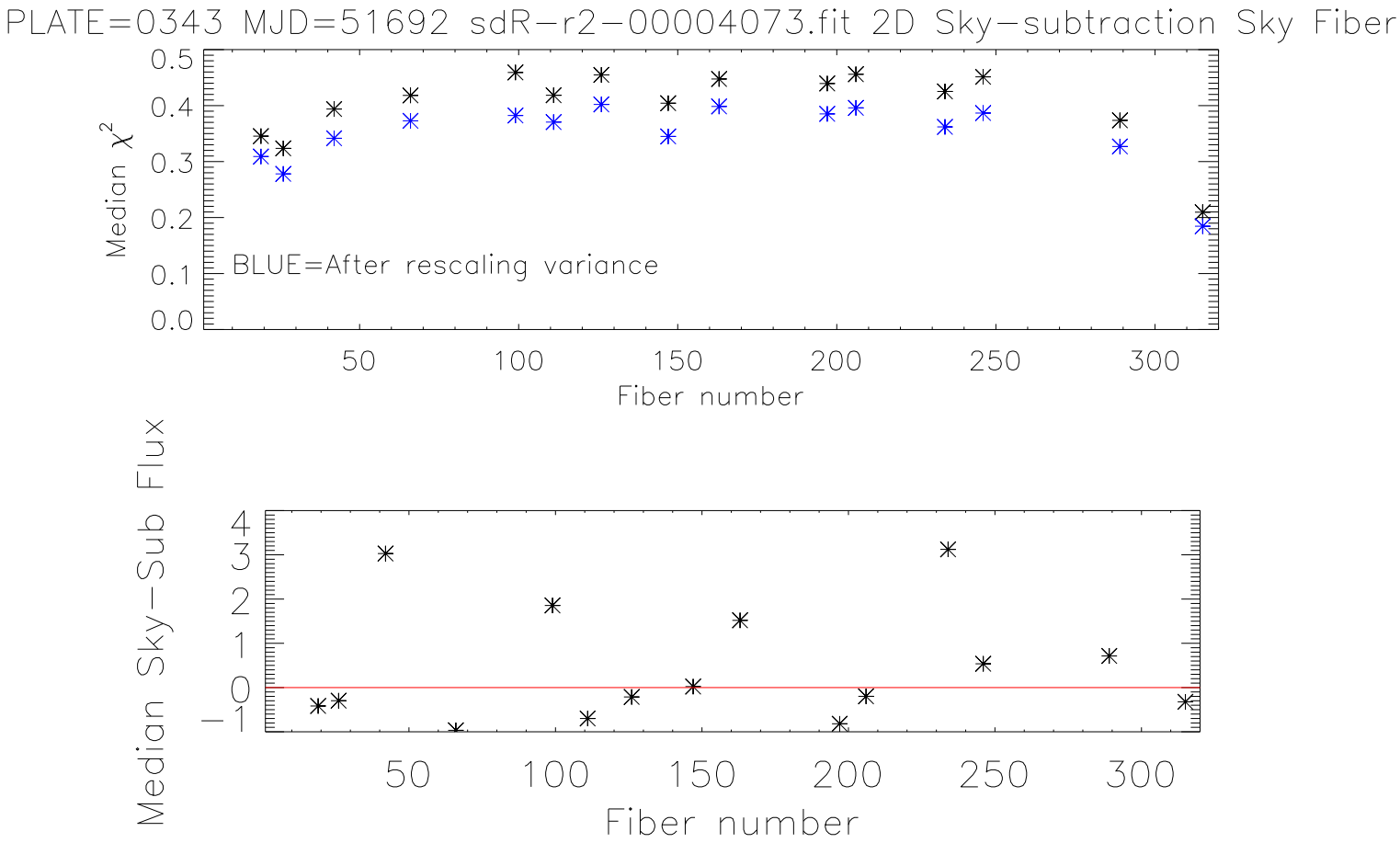

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

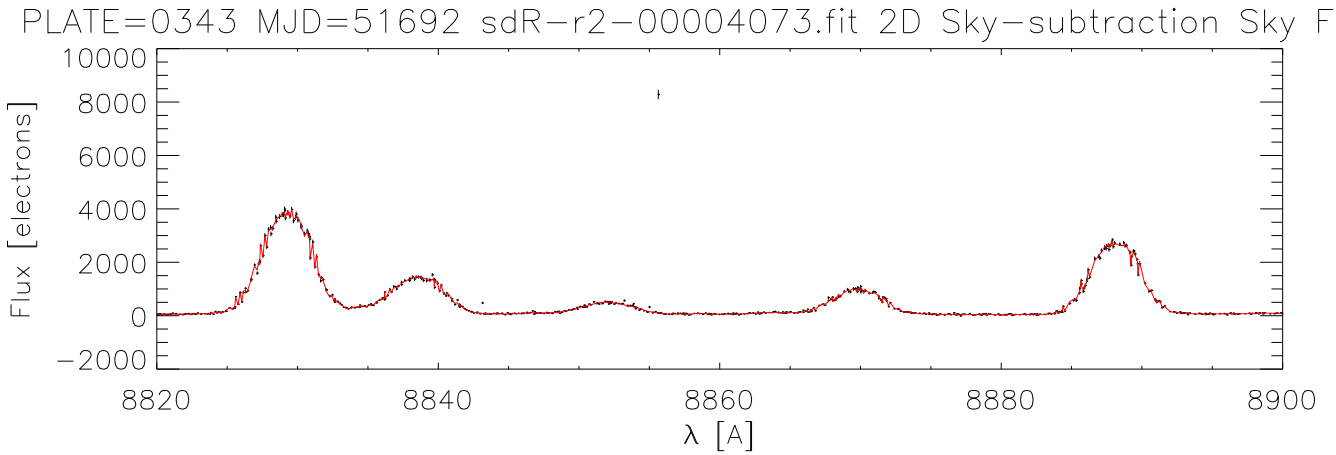
Median Sky-Sub Flux
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

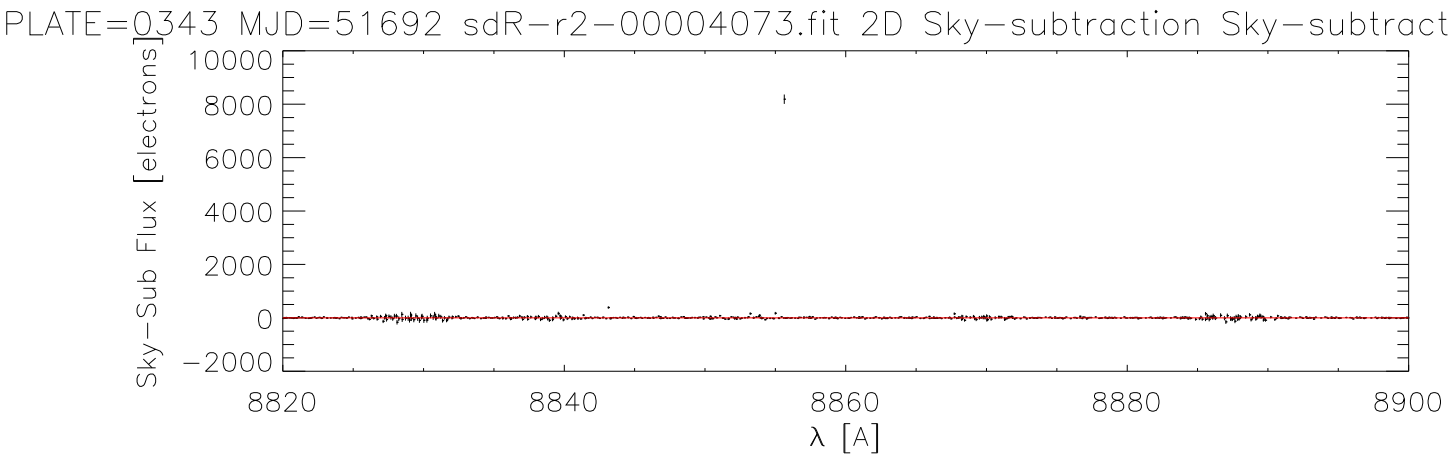

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

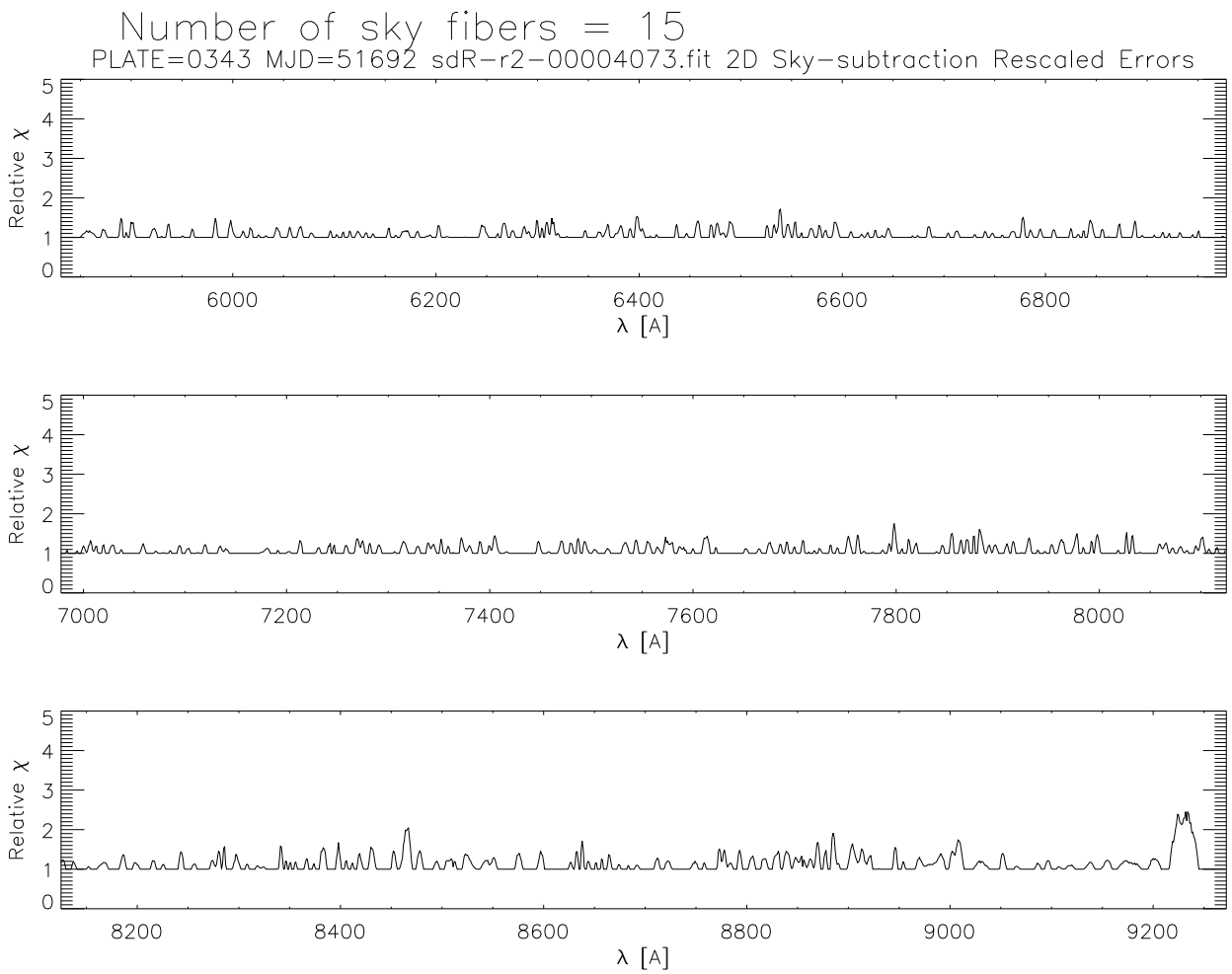

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

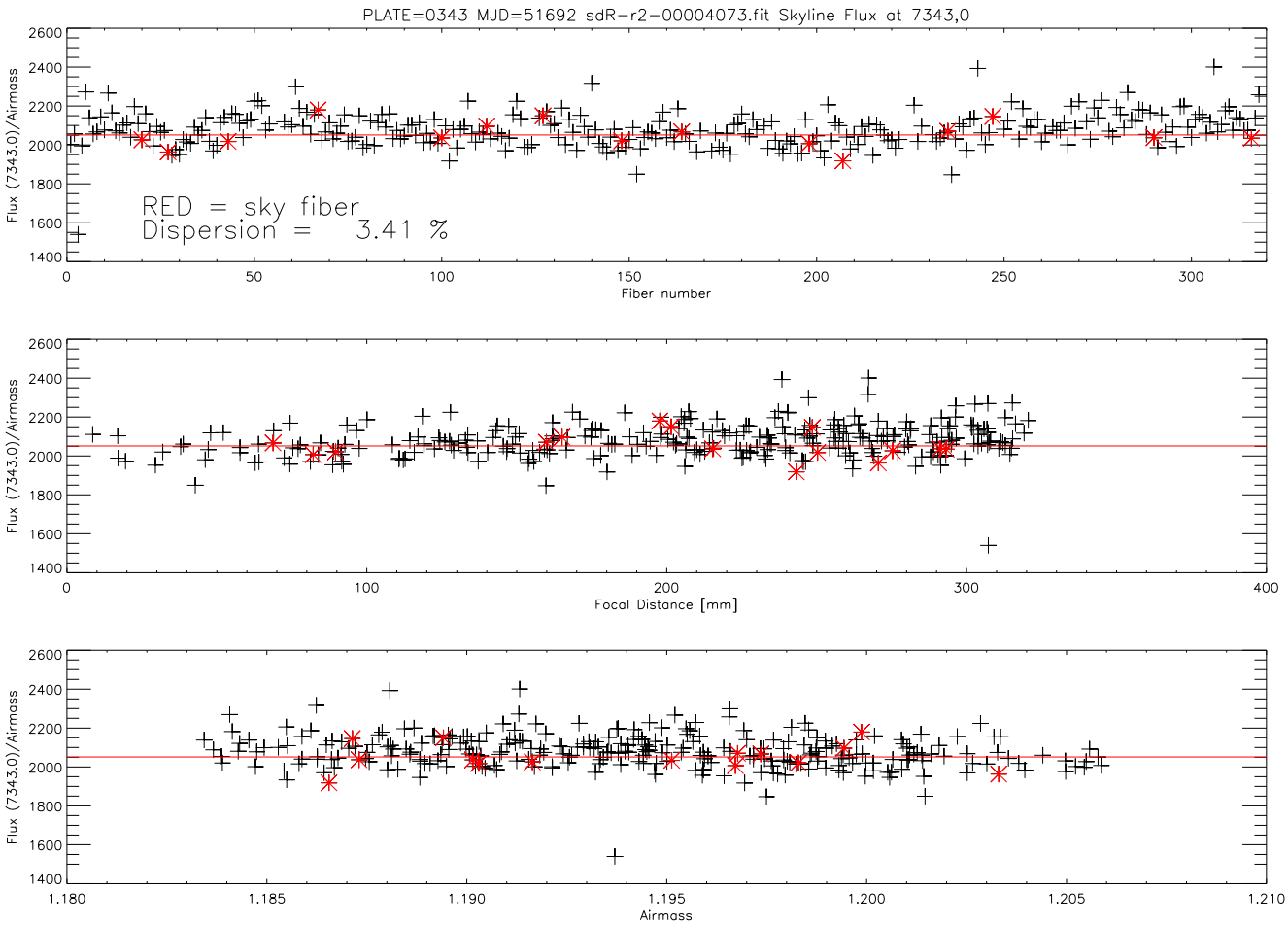

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004073.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

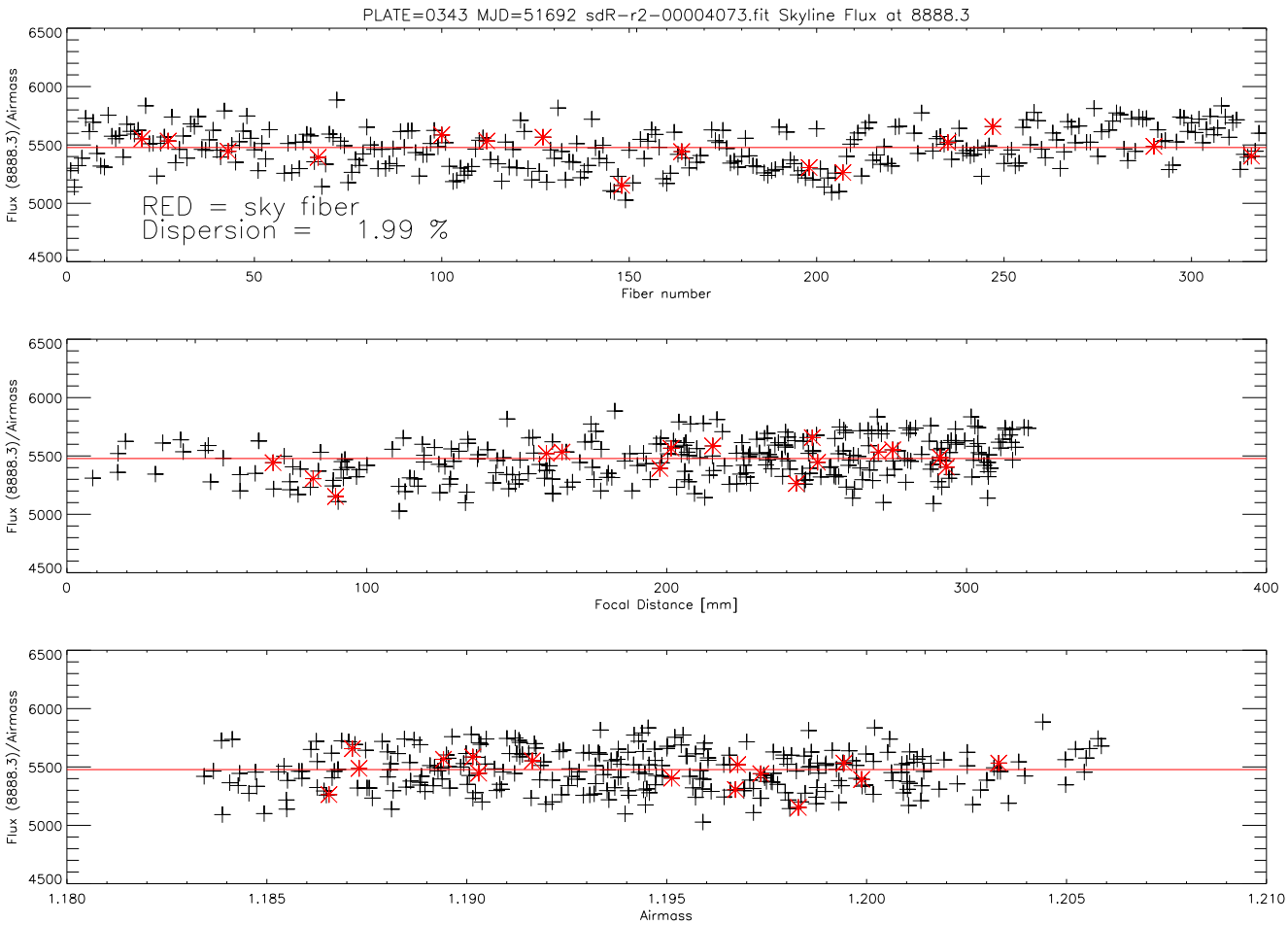

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

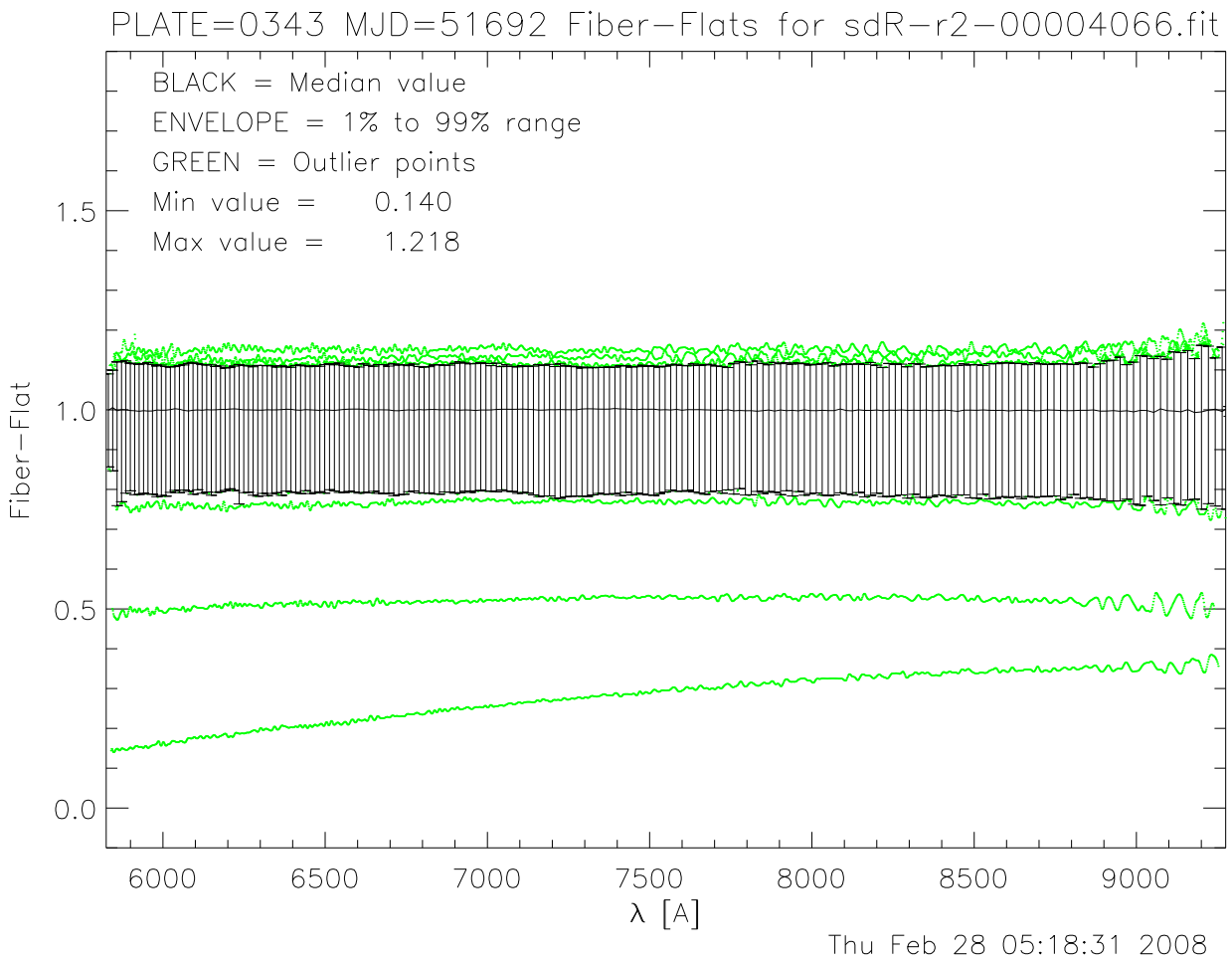

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

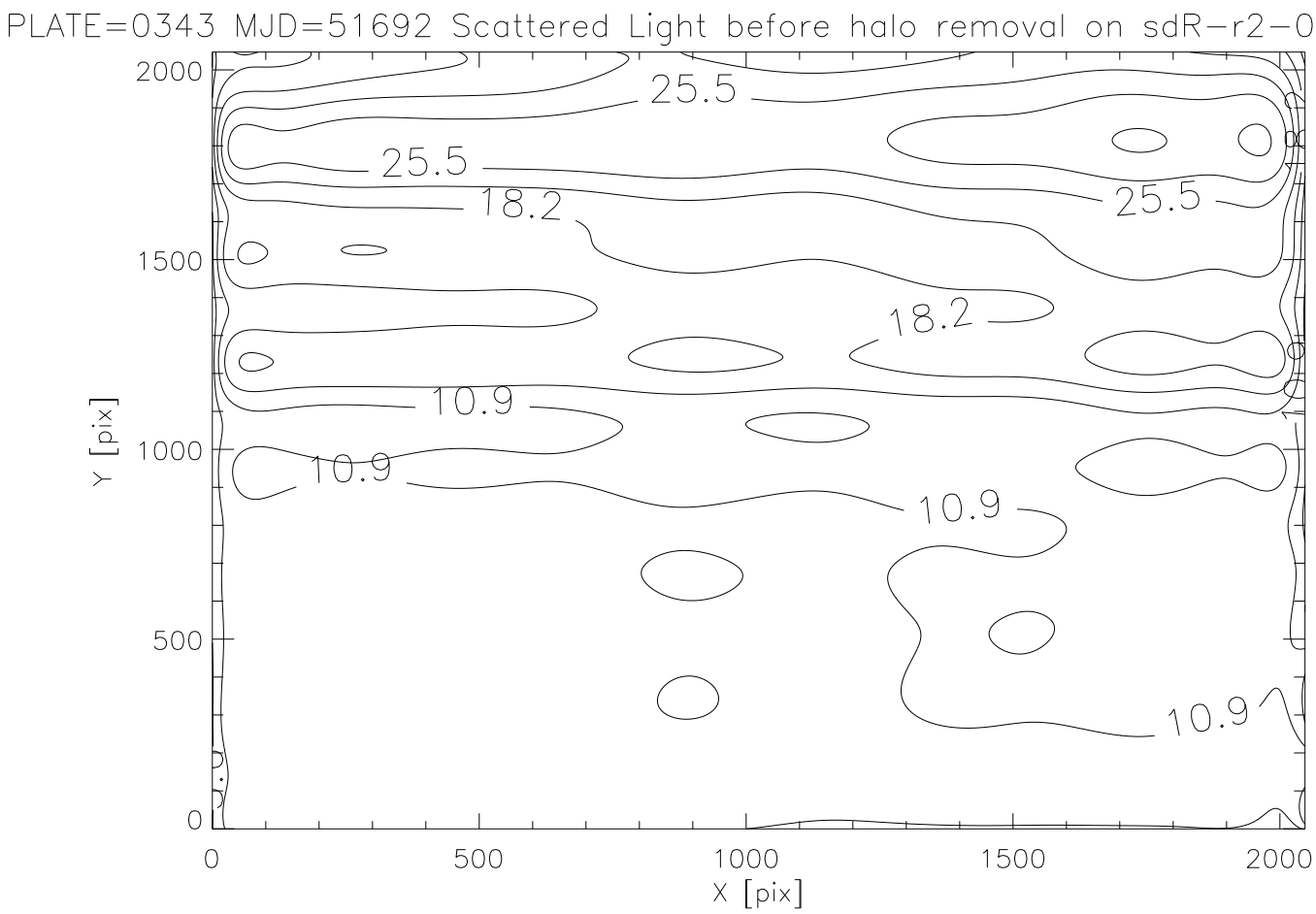

PLATE=0343 MJD=51692 sdR-r2-00004073.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

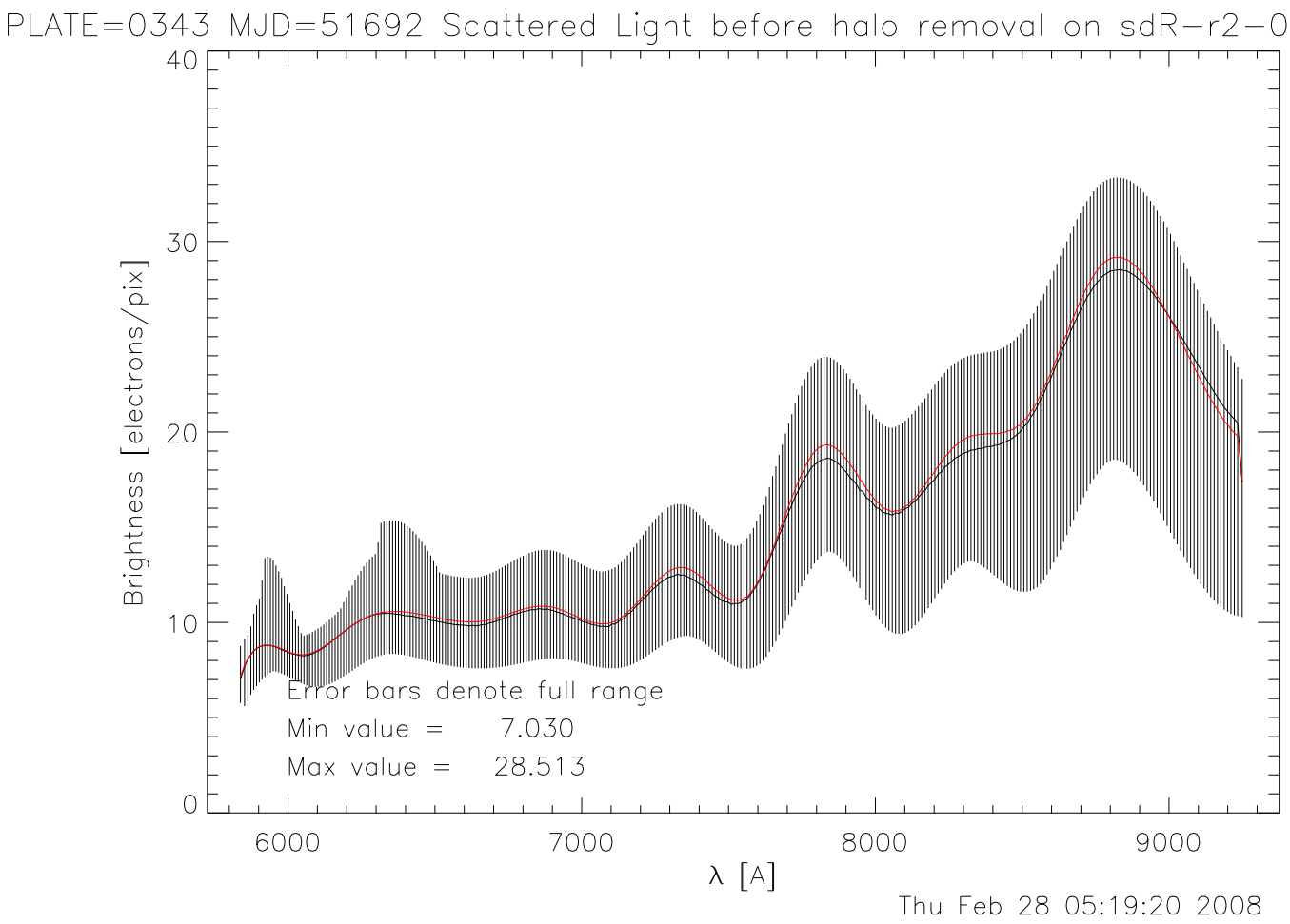

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004073.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

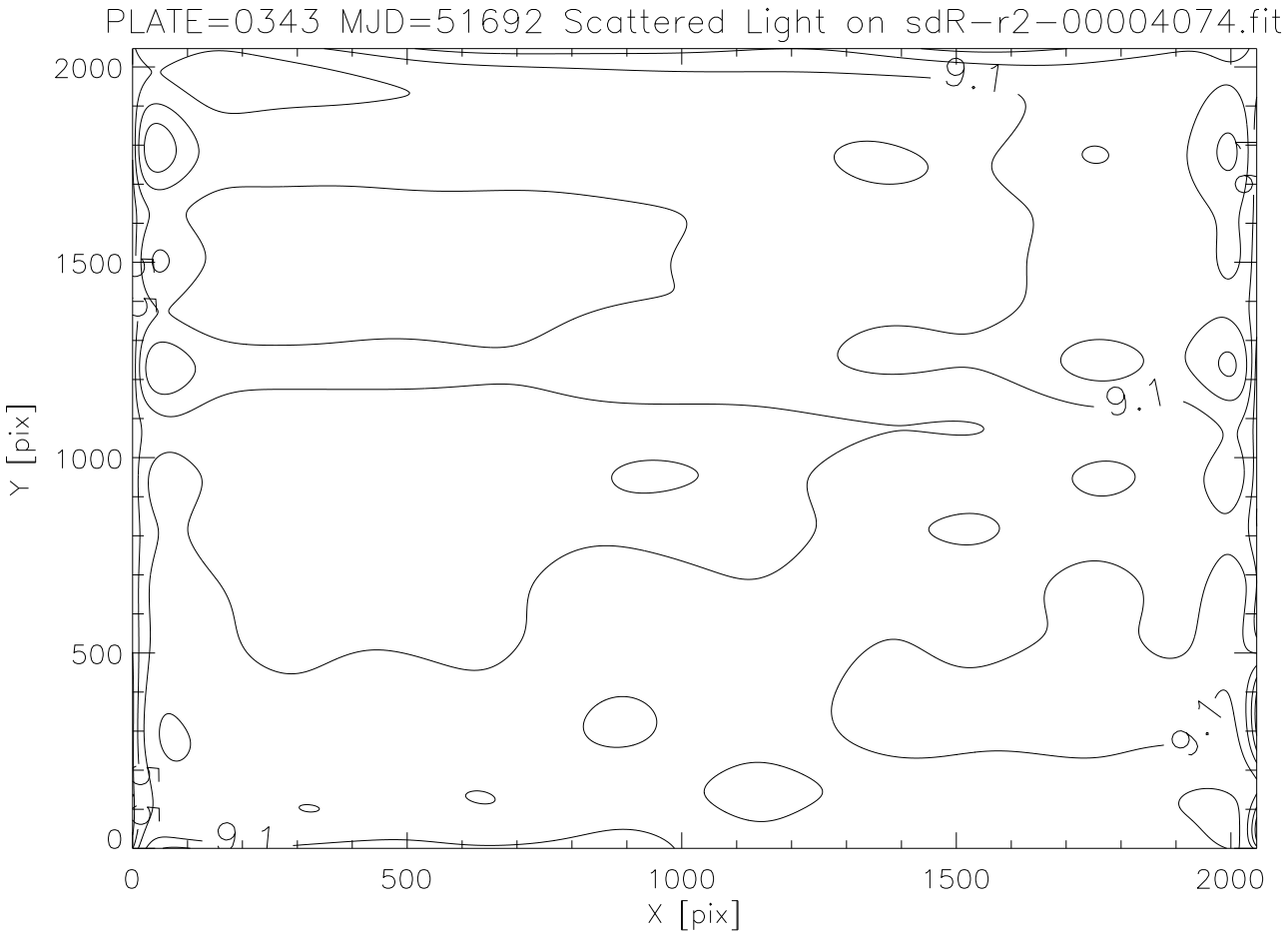

PLATE=0343 MJD=51692 sdR-r2-00004073.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.41 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

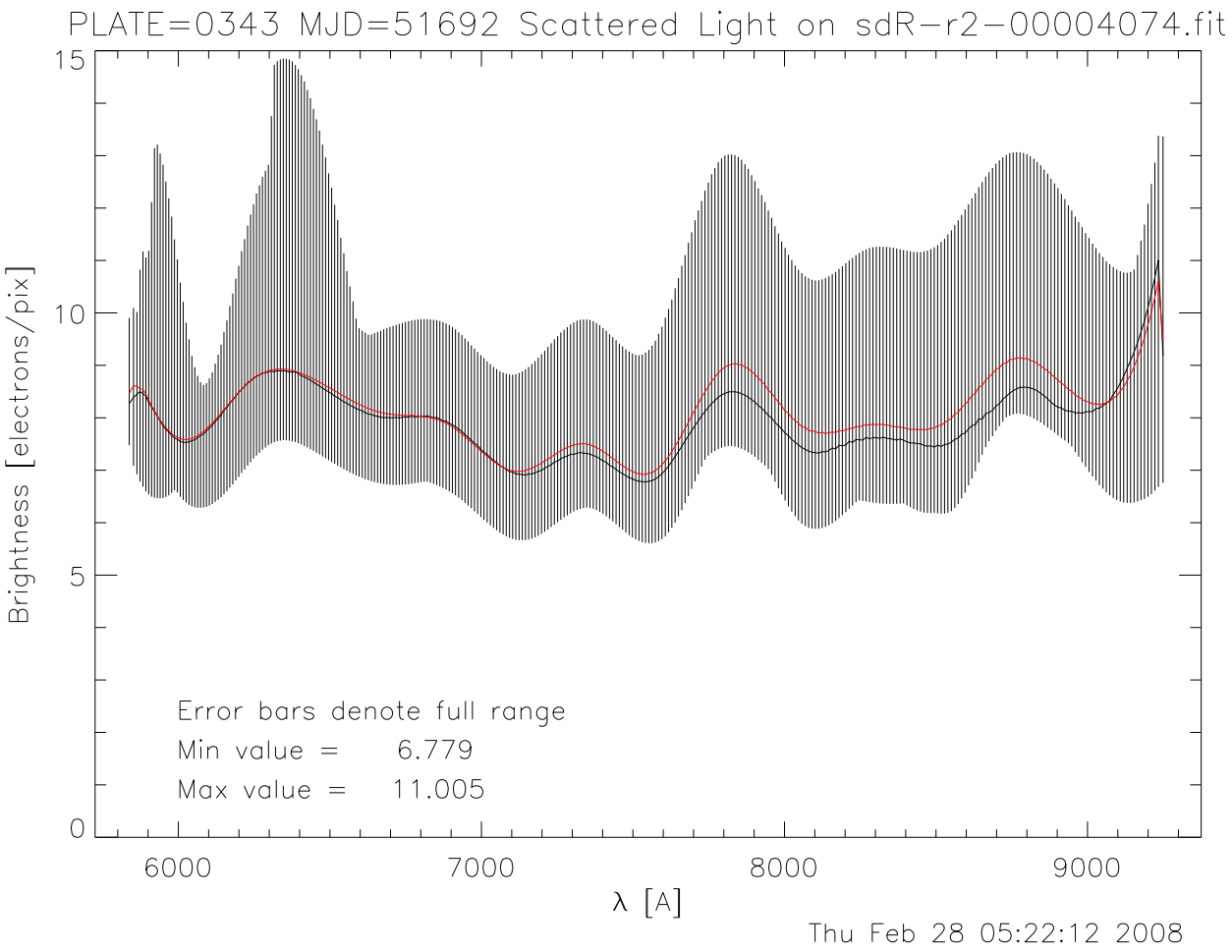

PLATE=0343 MJD=51692 sdR-r2-00004073.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

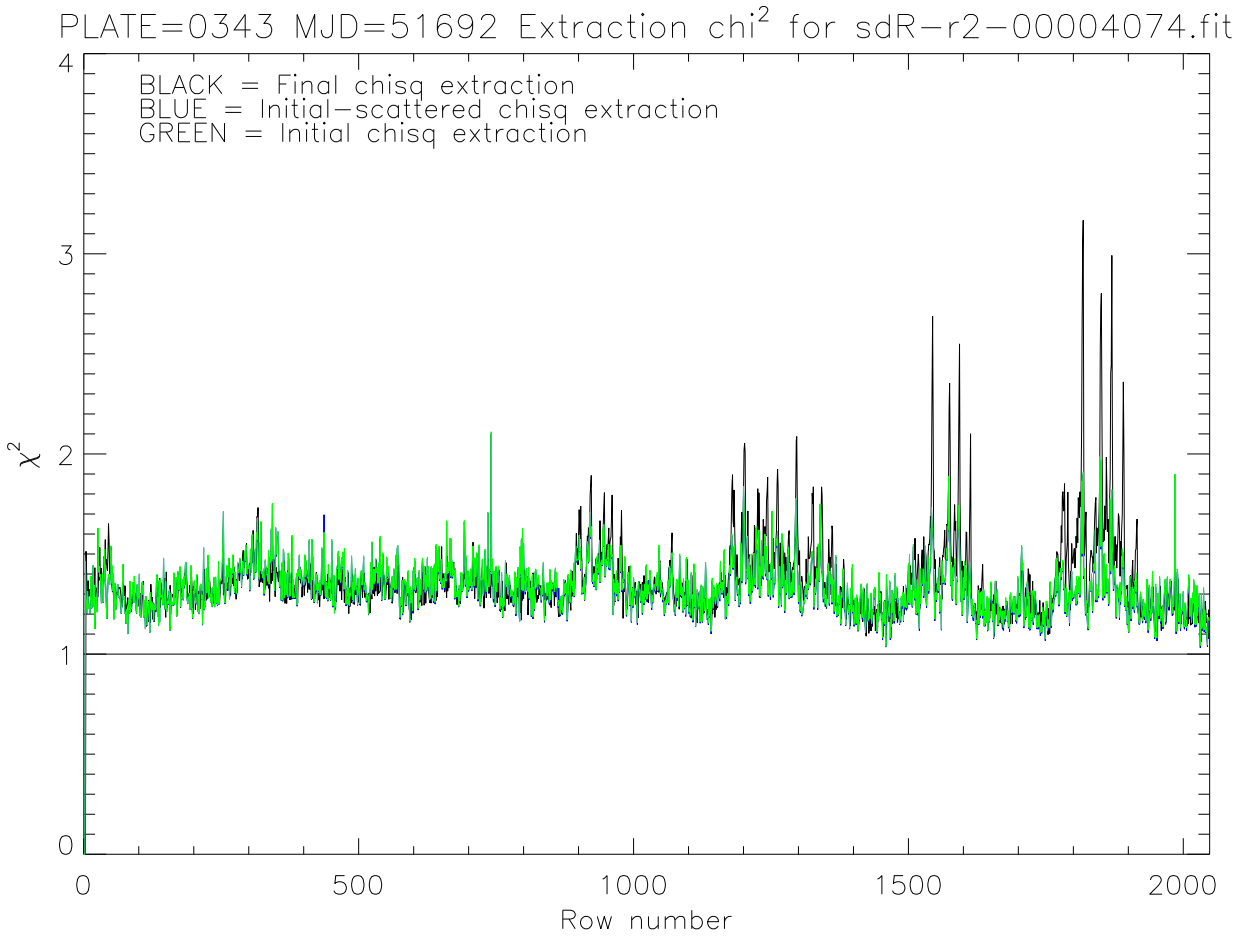

PLATE=0343 MJD=51692 Fiber-Flats for sdR-r2-00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:18:31 2008

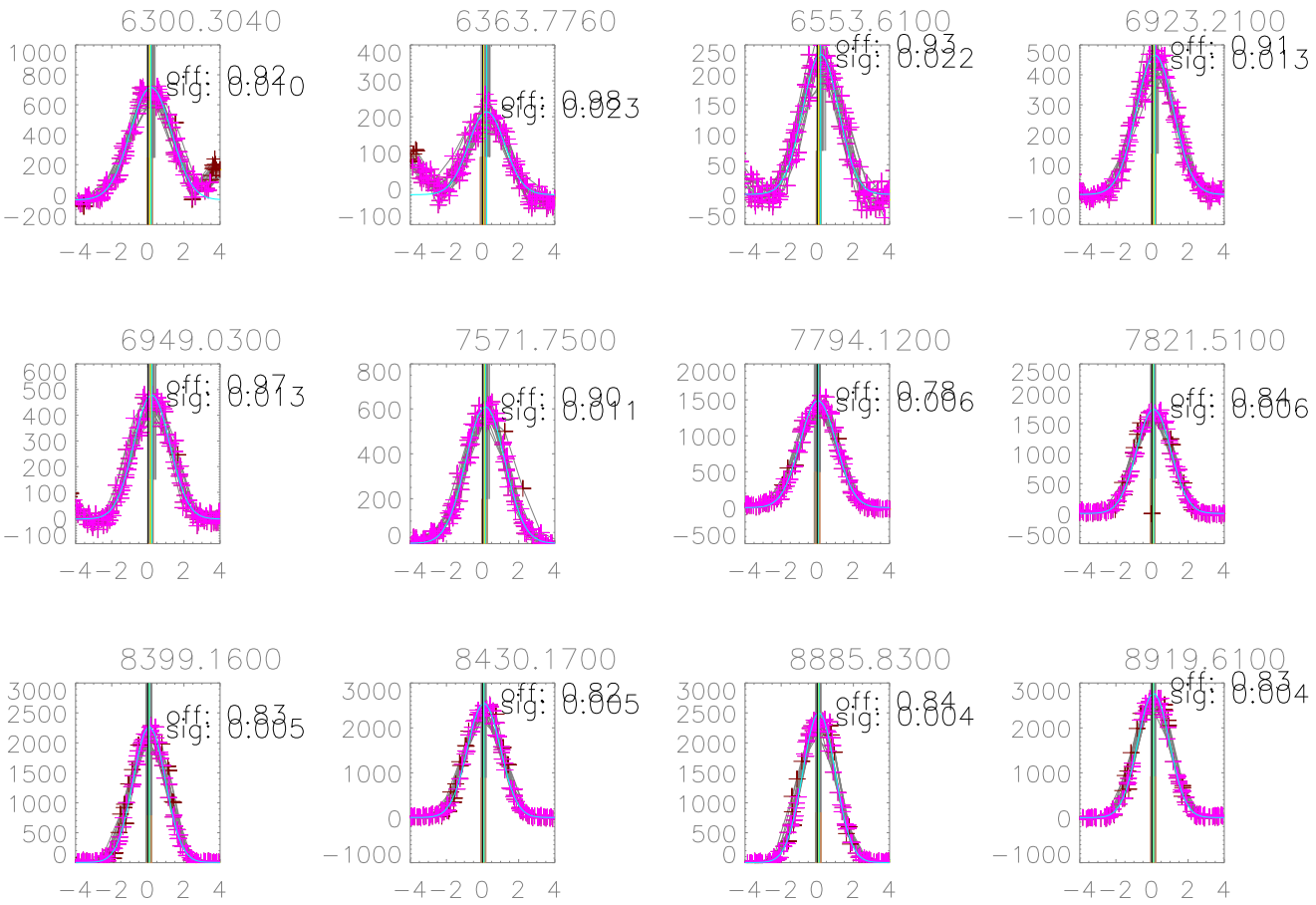

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004074.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

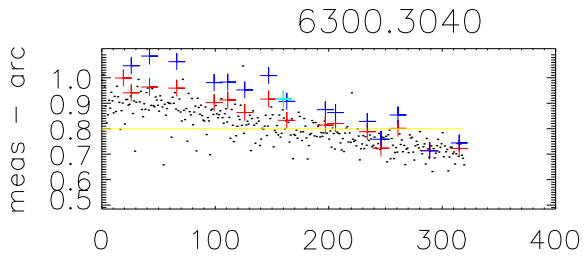

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004074.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.030
Max value = 28.513
Thu Feb 28 05:19:20 2008

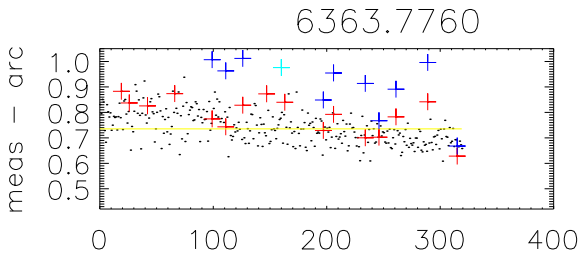

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004074.fit
9.1
9.1
9.1
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

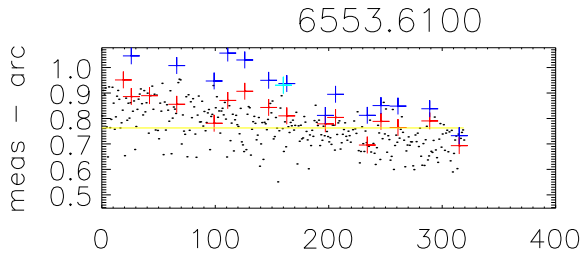

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004074.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.779
Max value = 11.005
Thu Feb 28 05:22:12 2008

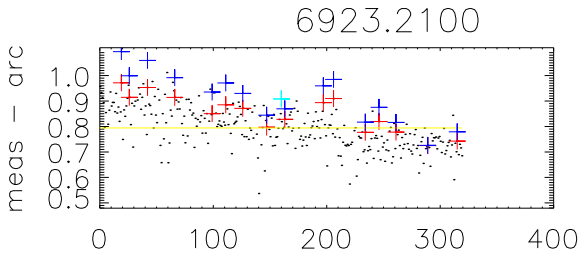

PLATE=0343 MJD=51692 Extraction chi^2 for sdR-r2-00004074.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

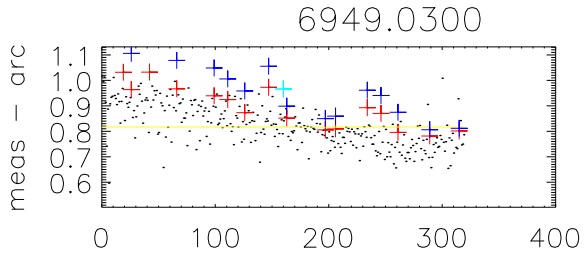

6300.3040
off: 0.82
sig: 0.040
6363.7760
off: 0.88
sig: 0.023
6553.6100
off: 0.93
sig: 0.022
6923.2100
off: 0.91
sig: 0.013
6949.0300
off: 0.87
sig: 0.013
7571.7500
off: 0.90
sig: 0.011
7794.1200
off: 0.78
sig: 0.006
7821.5100
off: 0.84
sig: 0.006
8399.1600
off: 0.83
sig: 0.005
8430.1700
off: 0.82
sig: 0.005
8885.8300
off: 0.84
sig: 0.004
8919.6100
off: 0.83
sig: 0.004

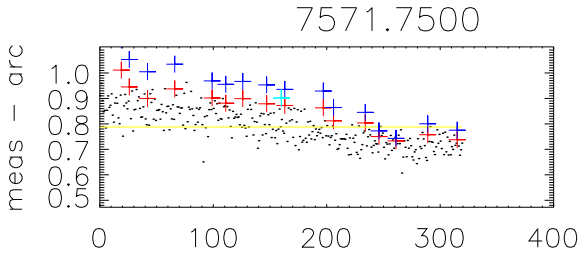

6300.3040
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

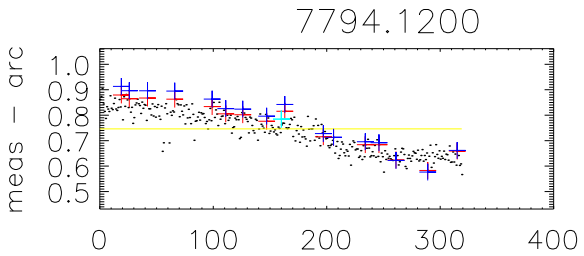

6363.7760
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

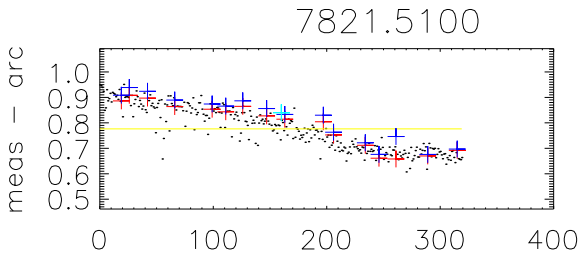

6553.6100
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

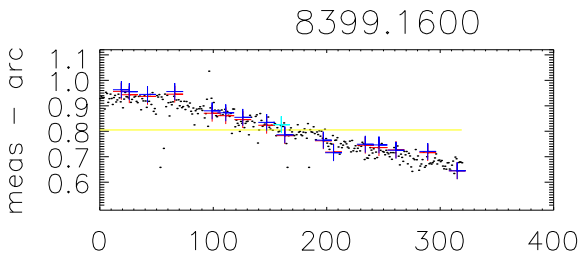

6923.2100
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

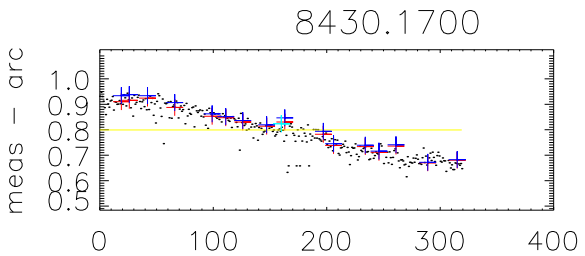

6949.0300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

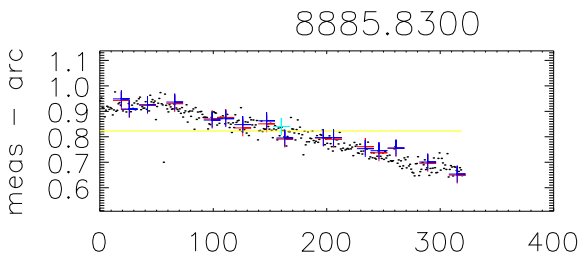

7571.7500
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

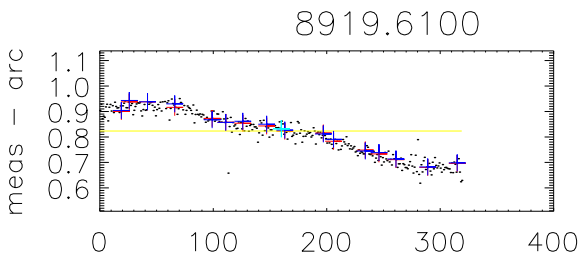

7794.1200
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

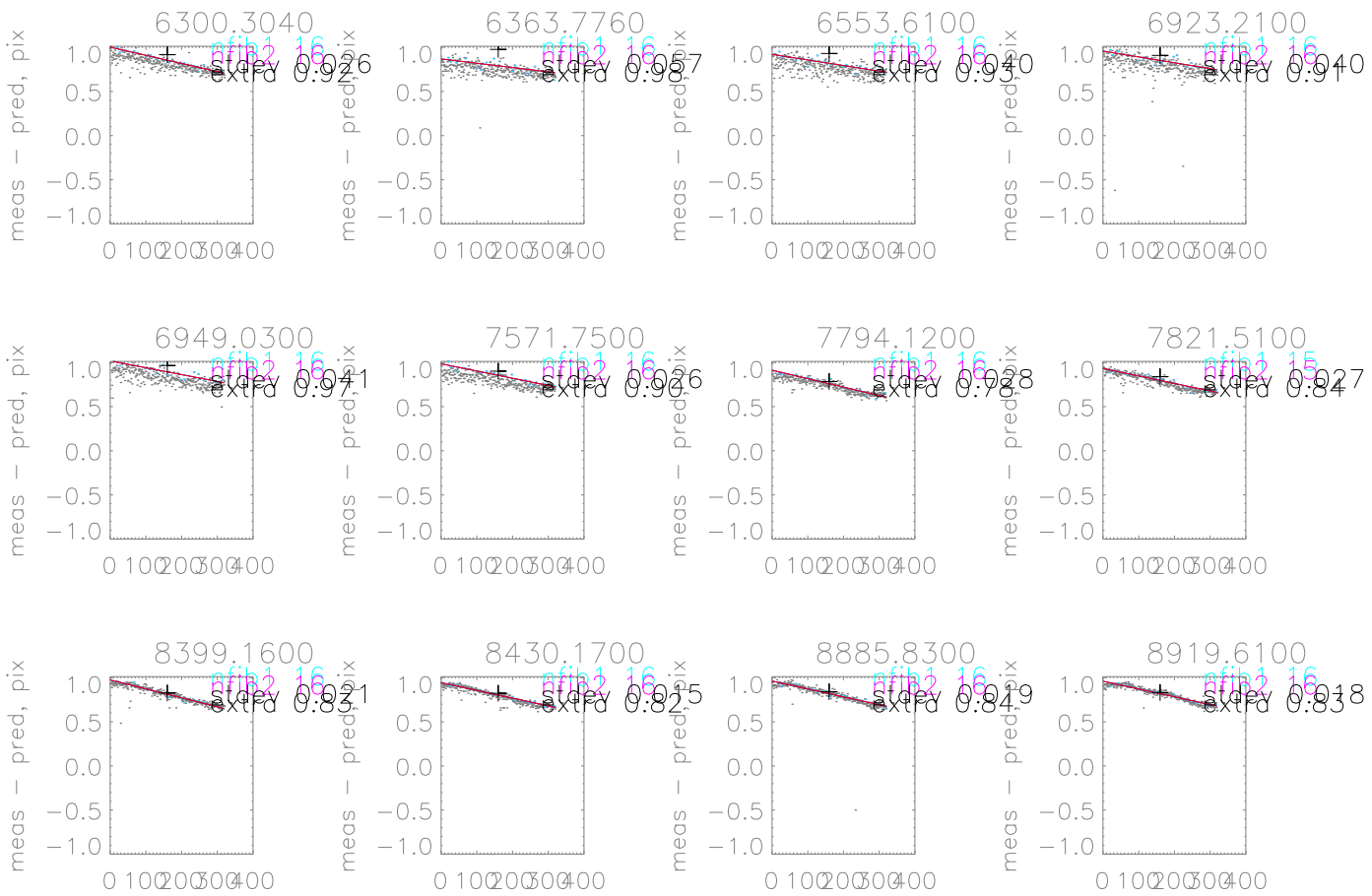

7821.5100
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

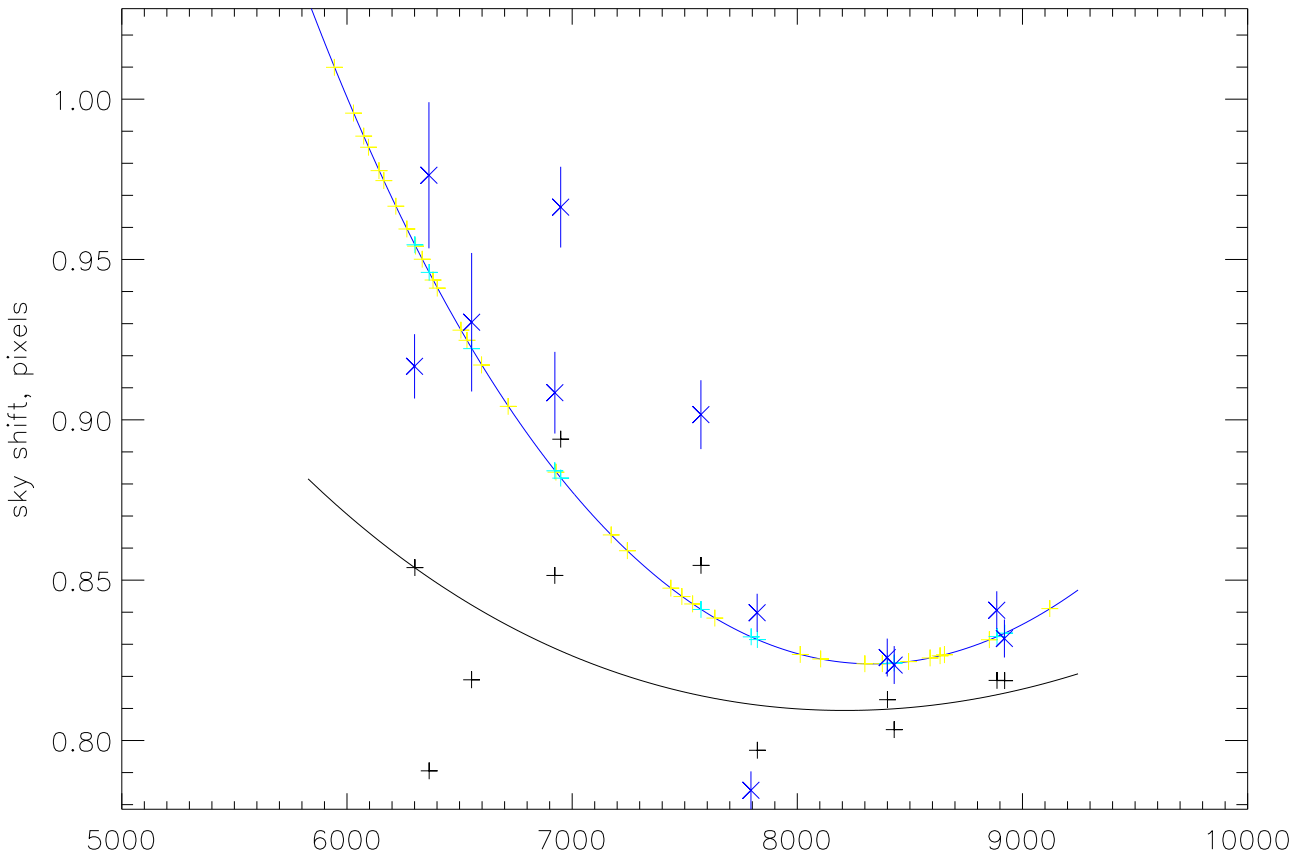

8399.1600
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

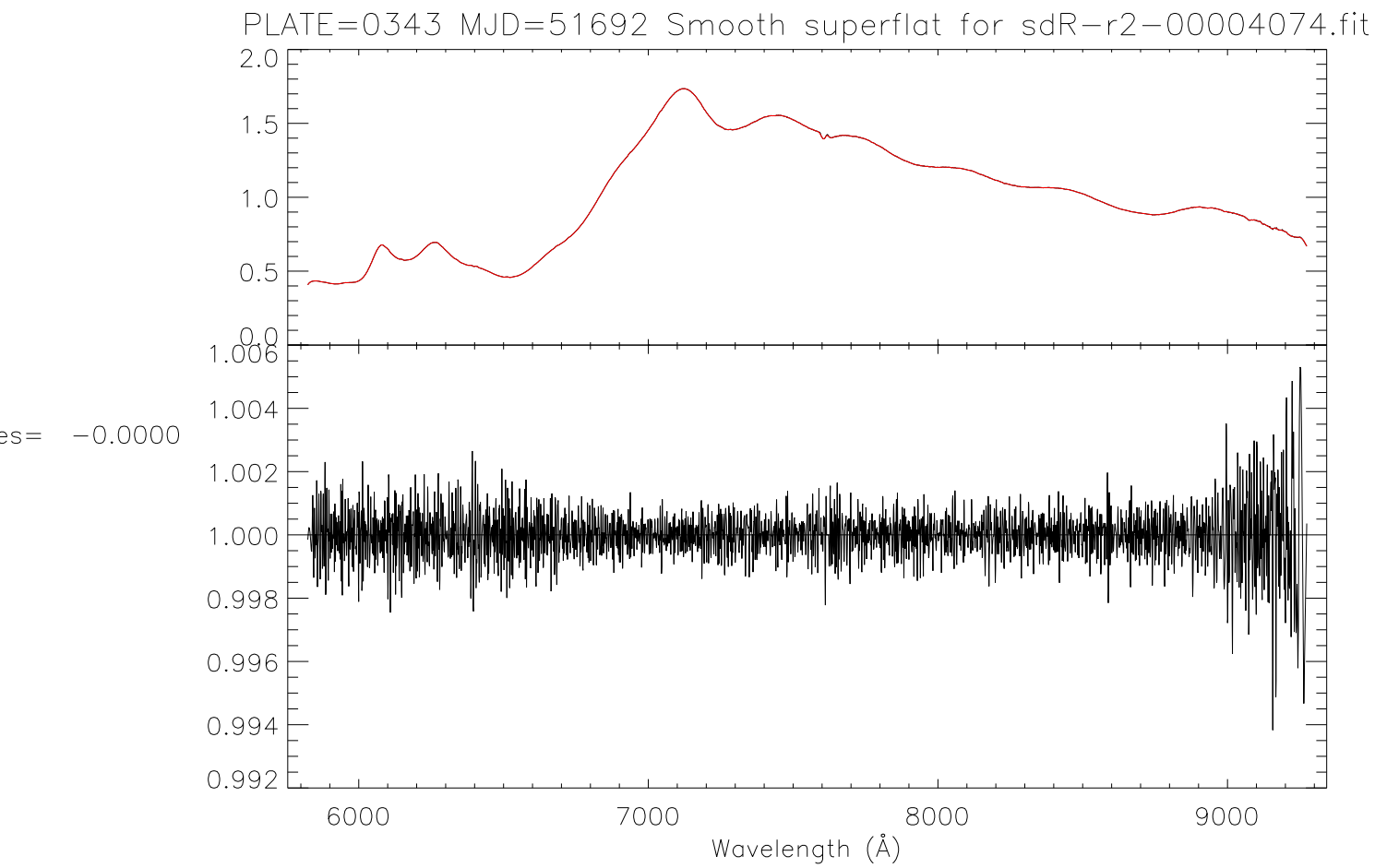

8430.1700
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400


8885.8300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

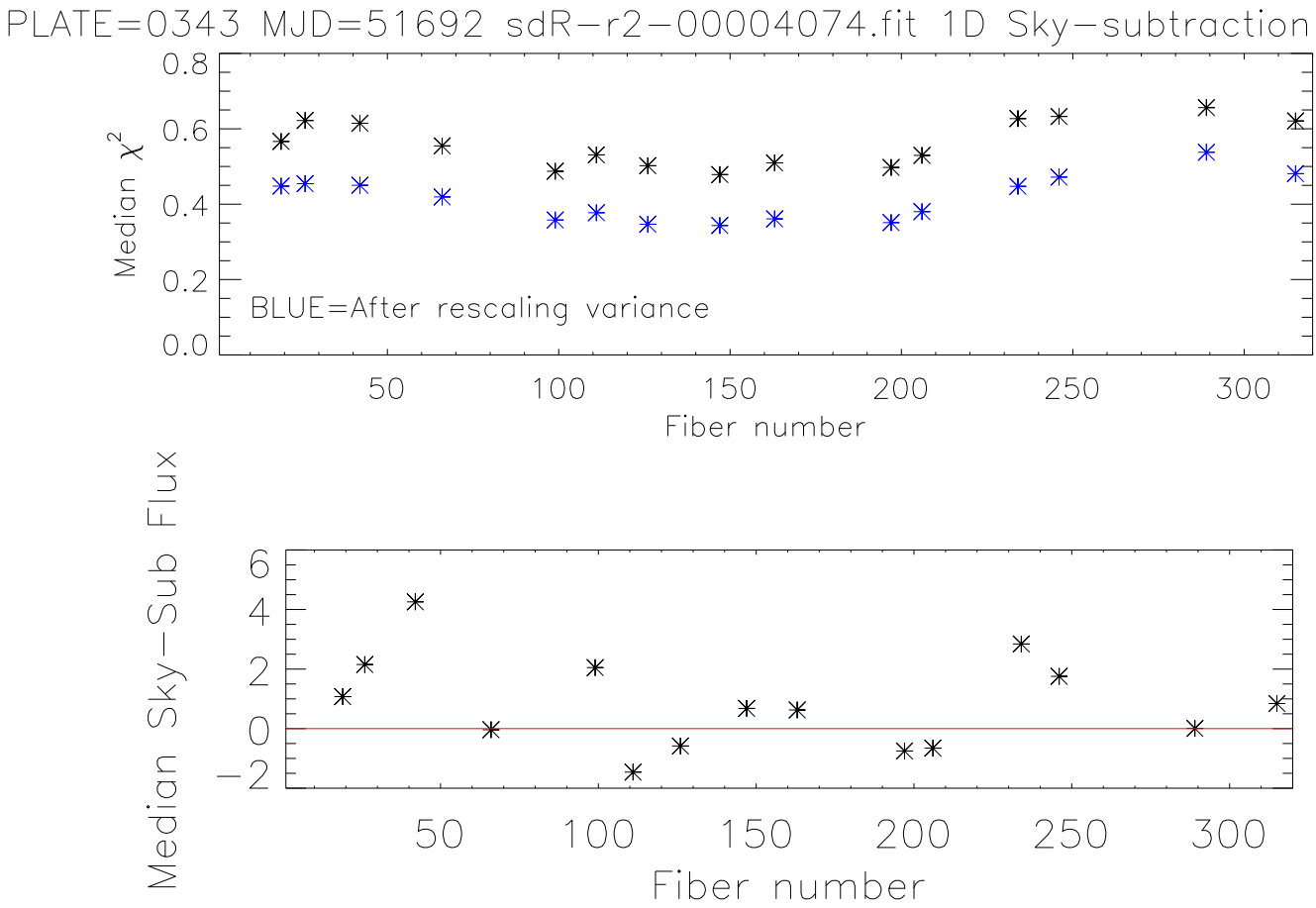

8919.6100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

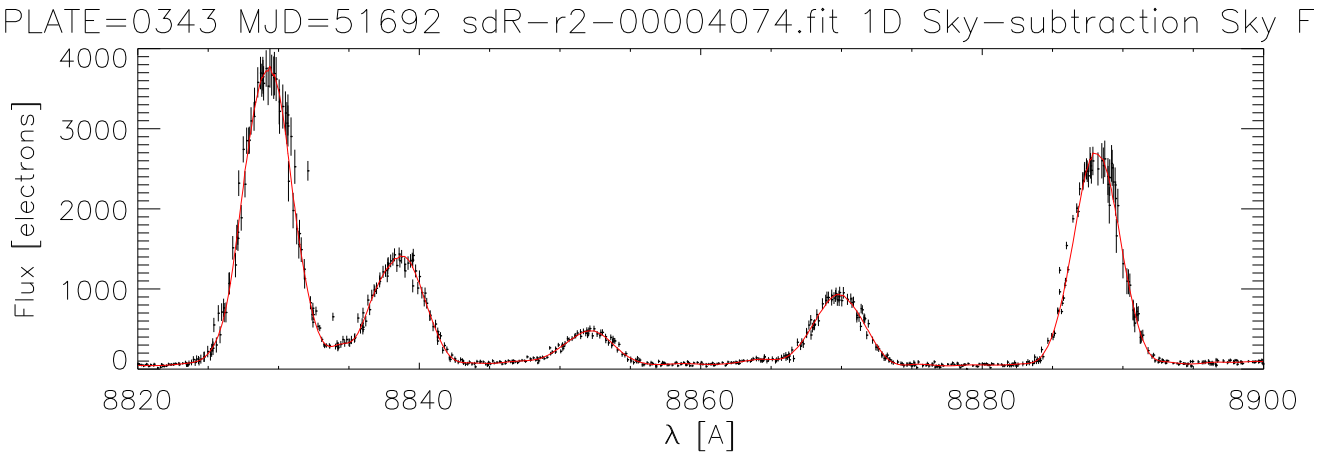

6300.3040
stdev 0.026
extra 0.92
6363.7760
stdev 0.057
extra 0.98
6553.6100
stdev 0.040
extra 0.93
6923.2100
stdev 0.040
extra 0.91
6949.0300
stdev 0.041
extra 0.97
7571.7500
stdev 0.026
extra 0.96
7794.1200
stdev 0.028
extra 0.78
7821.5100
stdev 0.027
extra 0.84
8399.1600
stdev 0.021
extra 0.83
8430.1700
stdev 0.015
extra 0.82
8885.8300
stdev 0.019
extra 0.84
8919.6100
stdev 0.018
extra 0.83
meas − pred, pix
mfb2 16
mfb1 16
mfb2 15

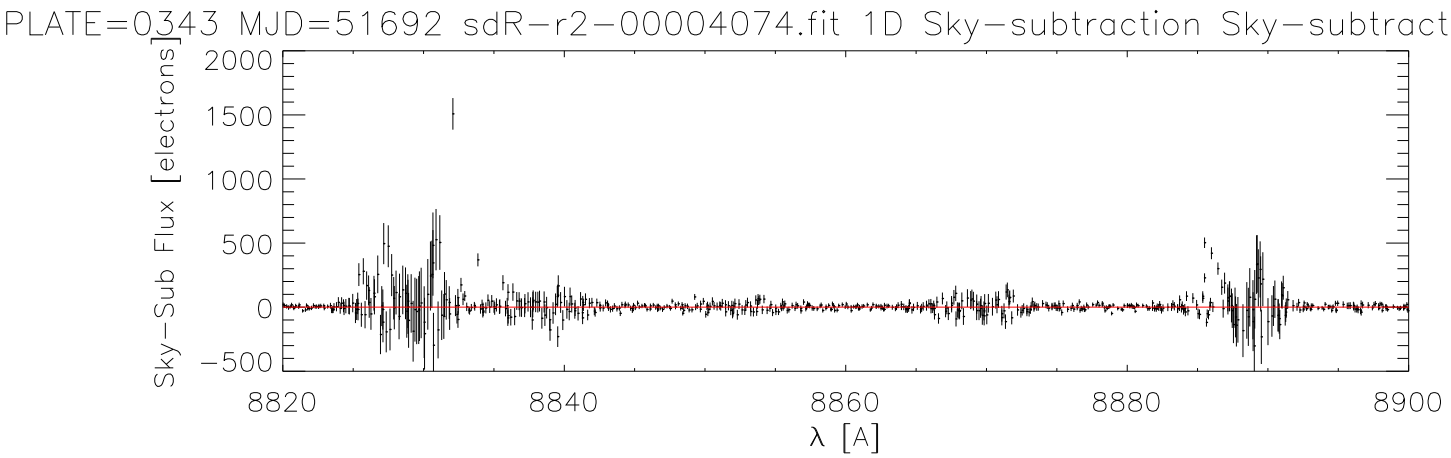

sky shift, pixels
1.00
0.95
0.90
0.85
0.80
5000
6000
7000
8000
9000
10000

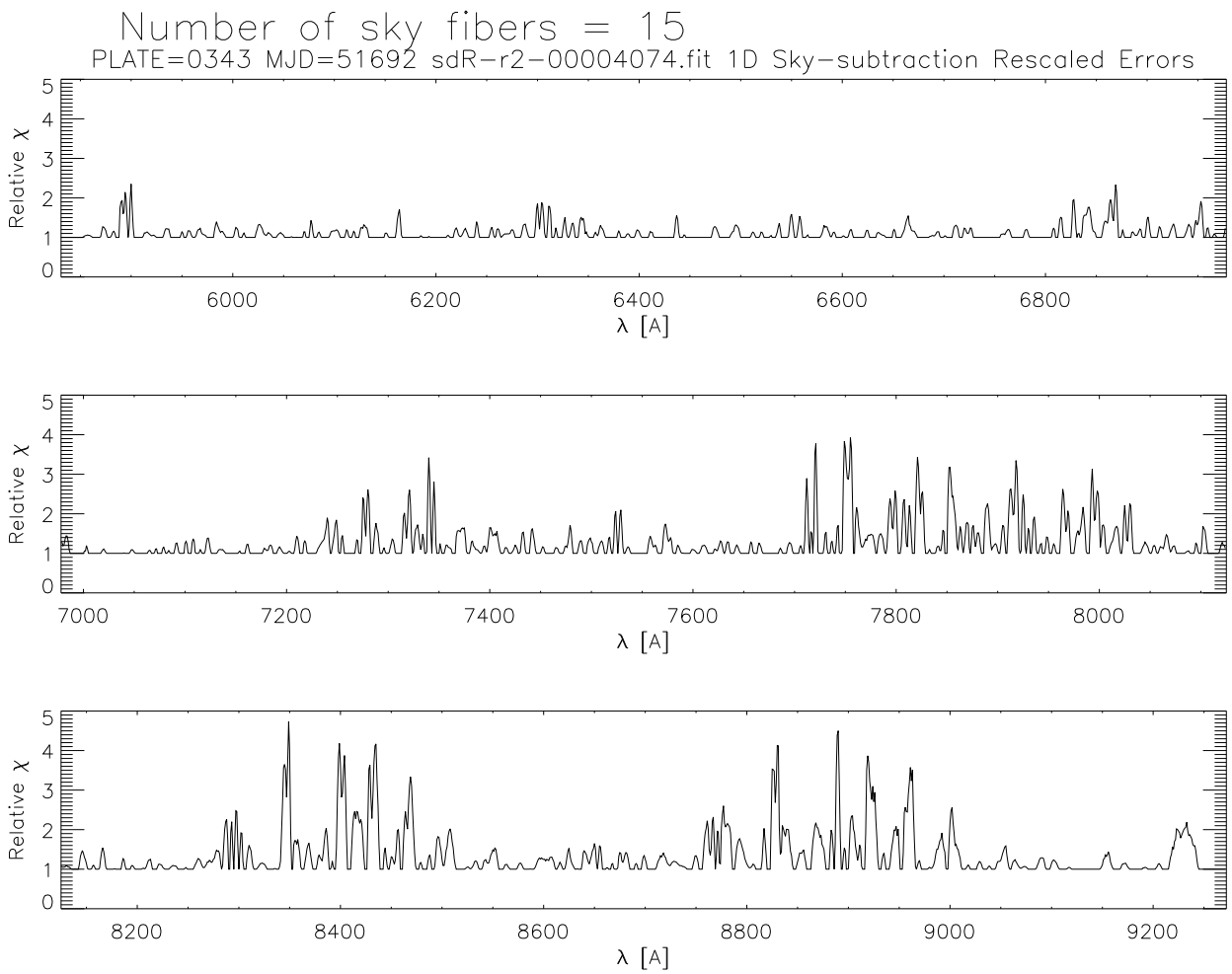

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004074.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

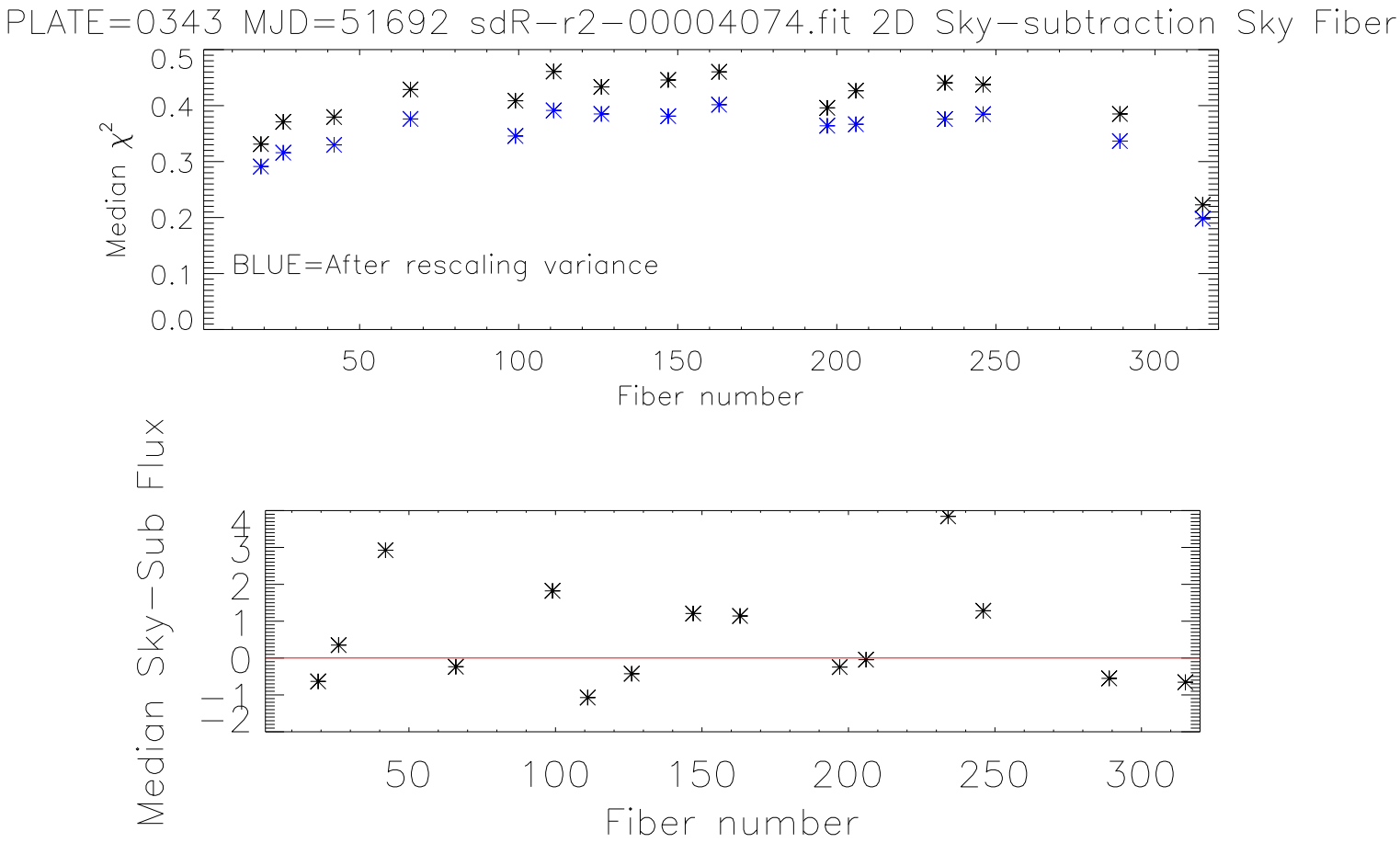
es= −0.0000

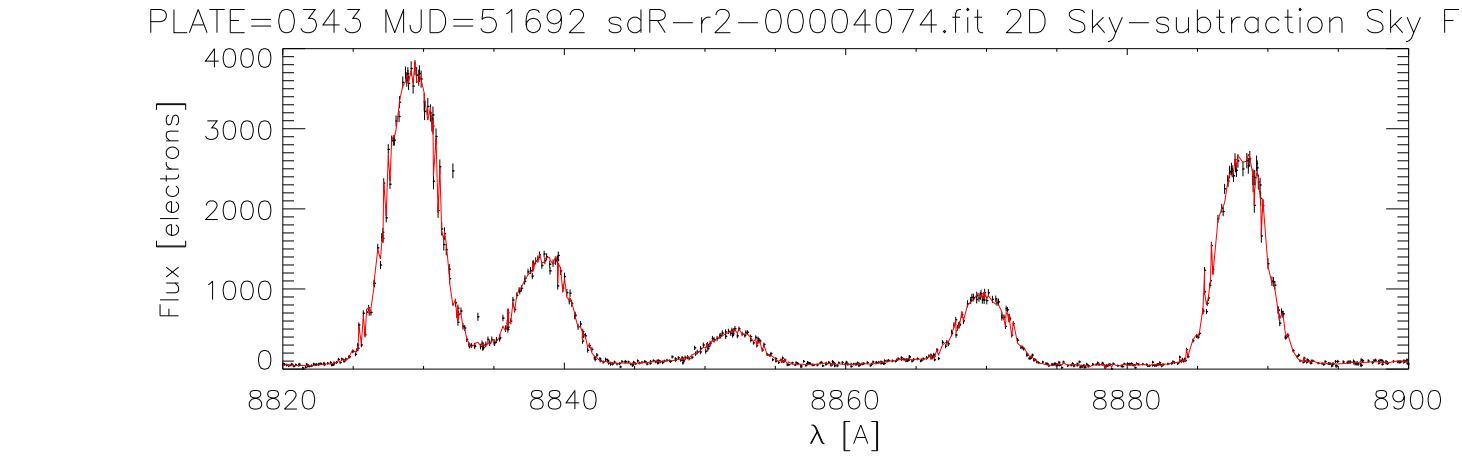

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

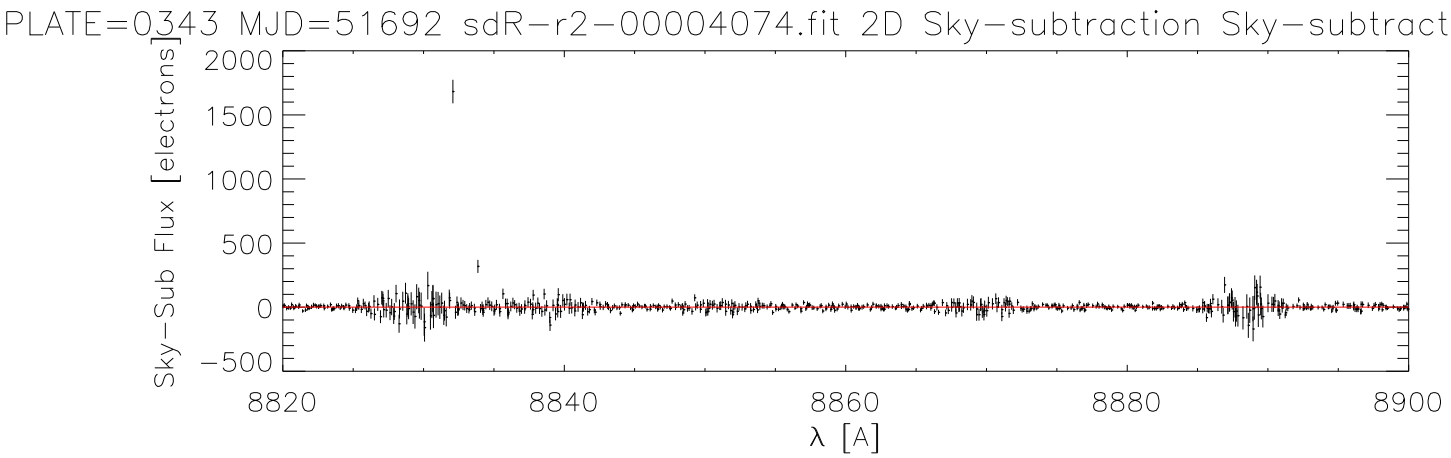

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

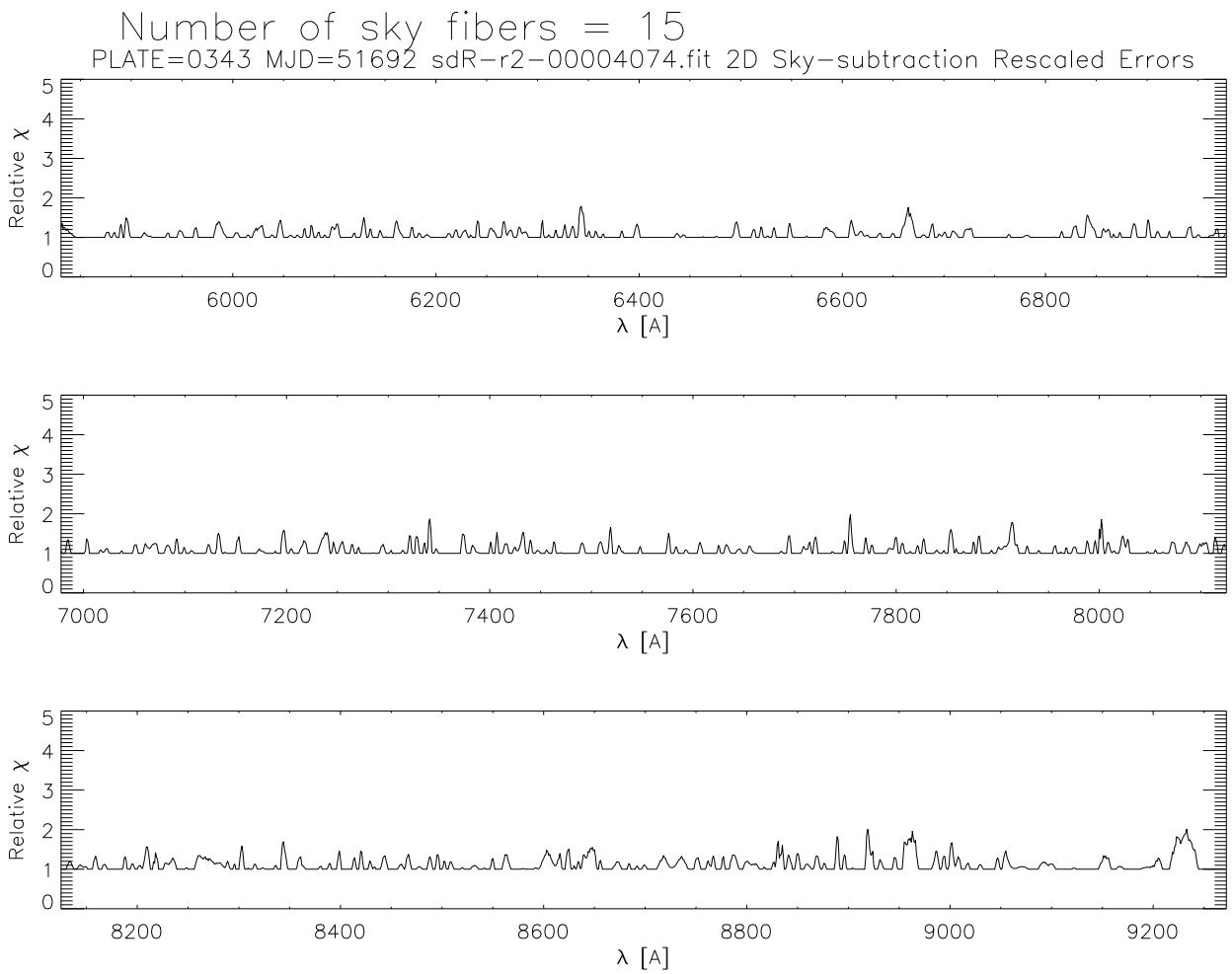

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

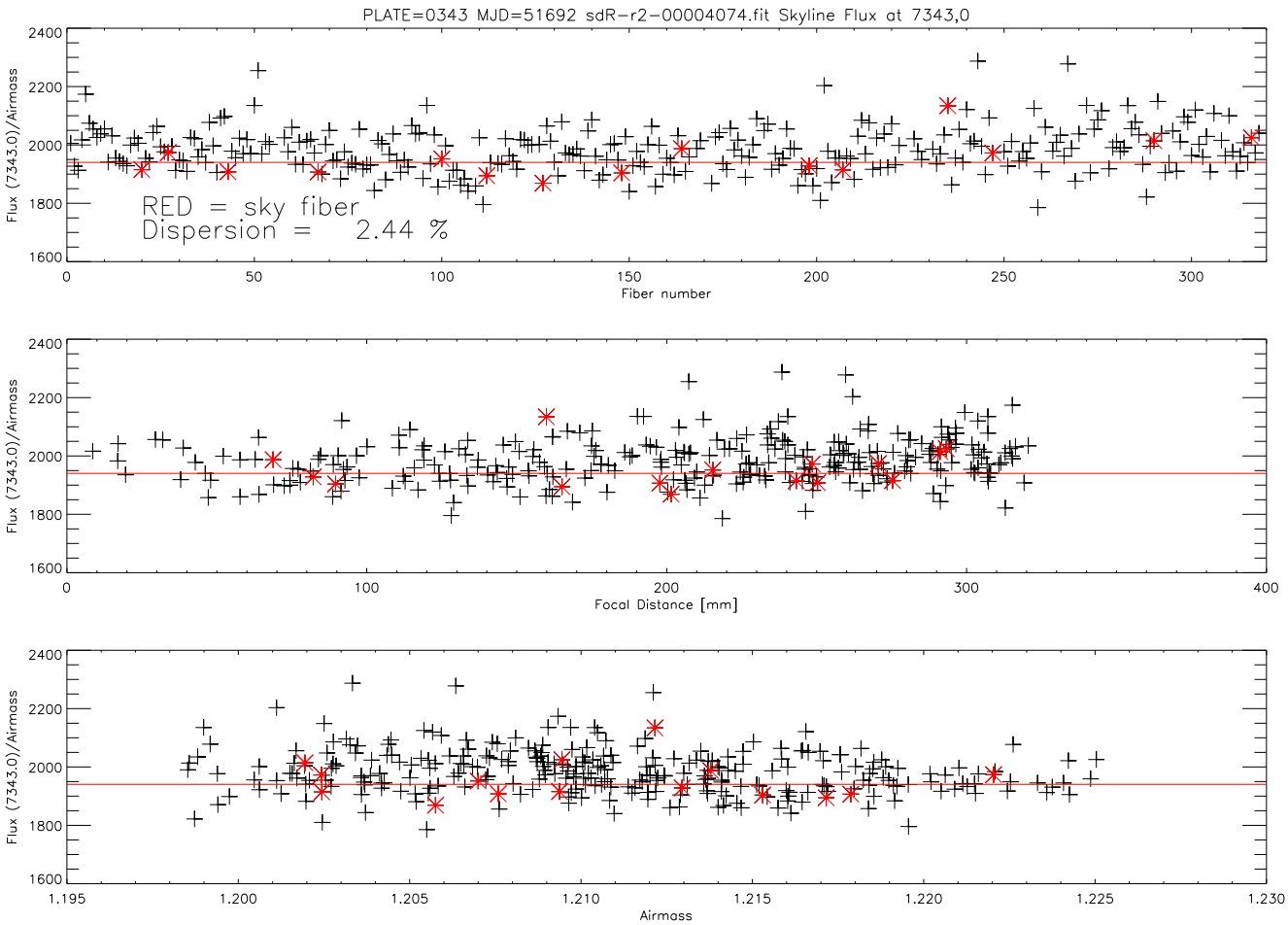

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004074.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

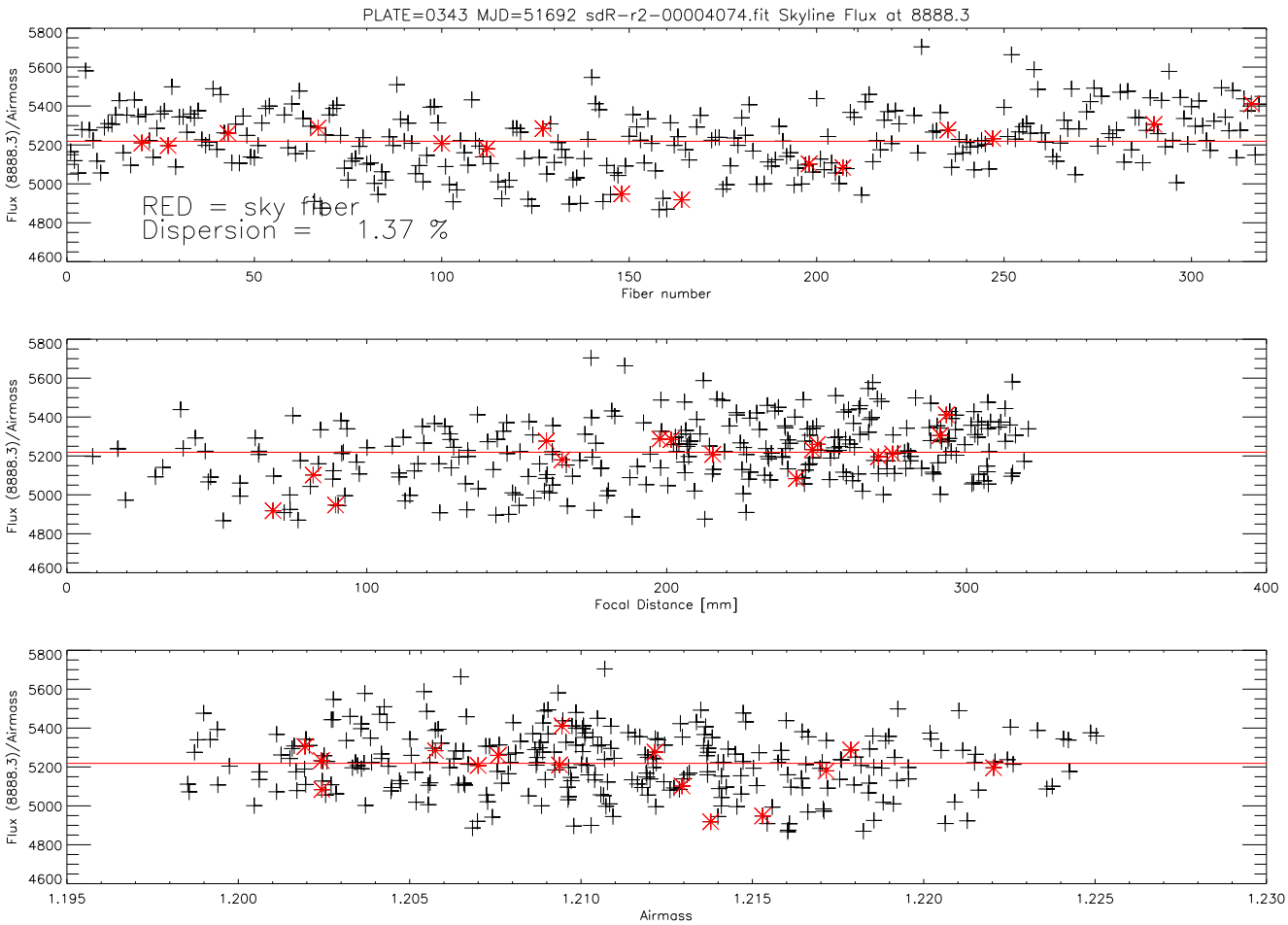

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

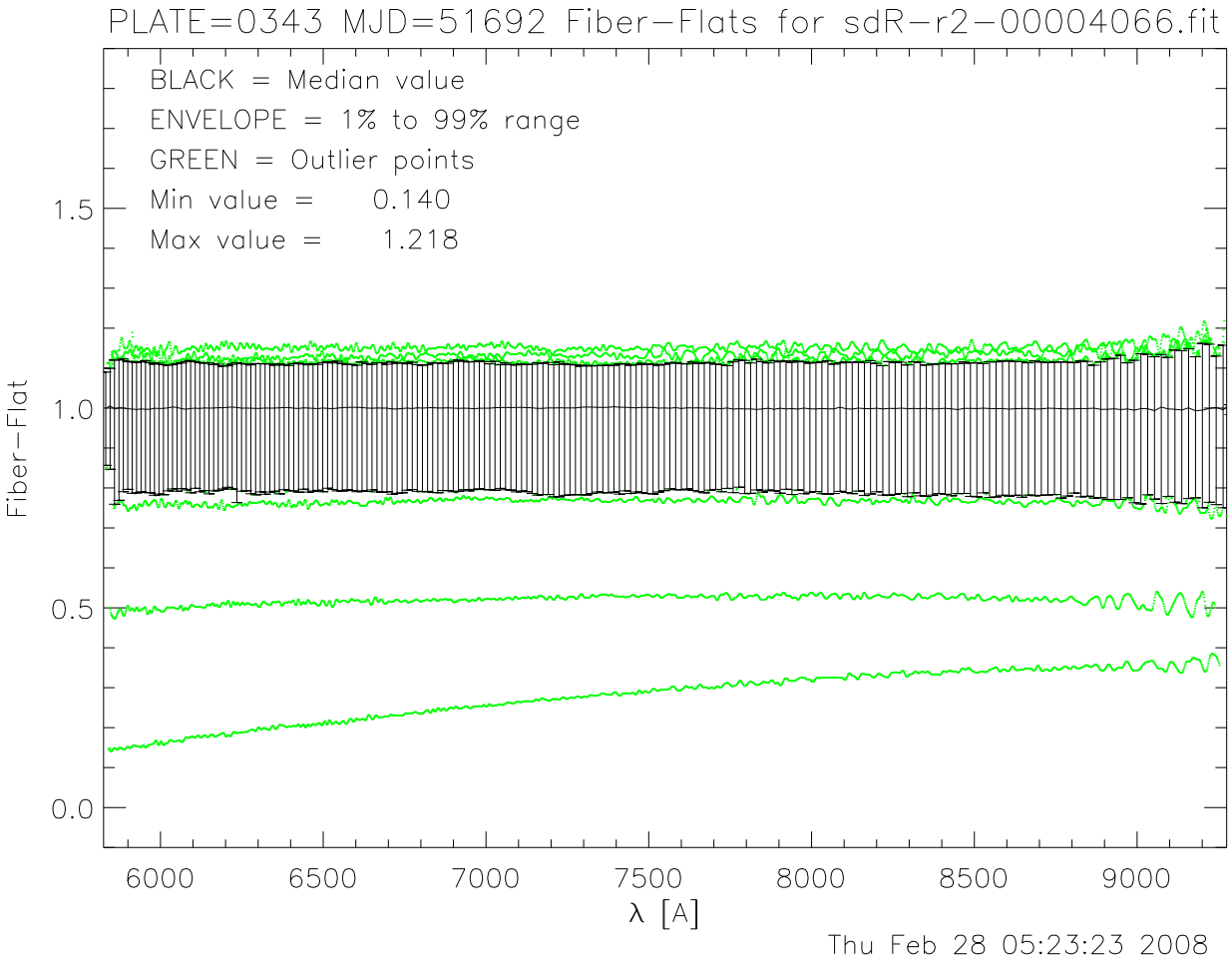

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

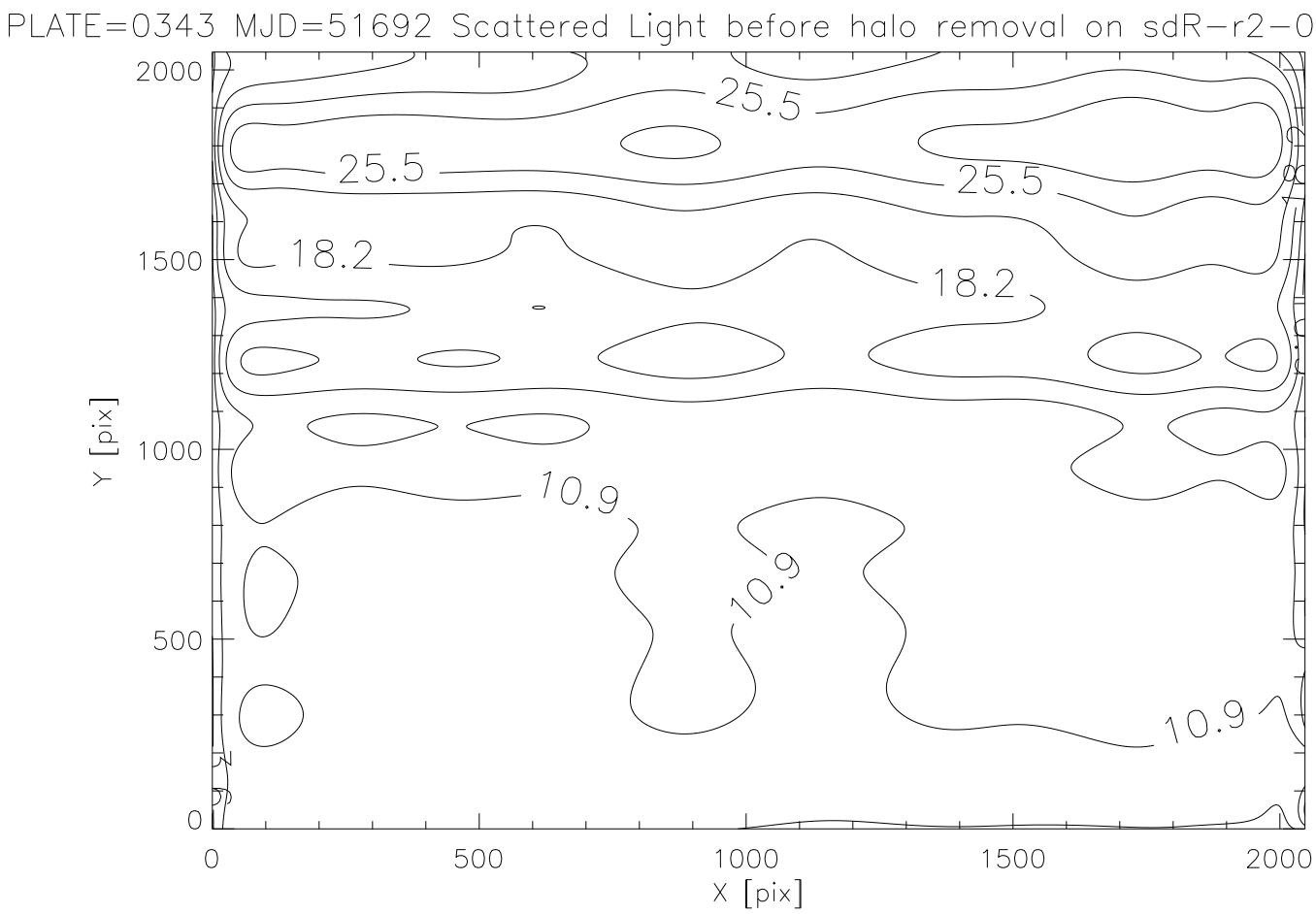

PLATE=0343 MJD=51692 sdR-r2-00004074.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

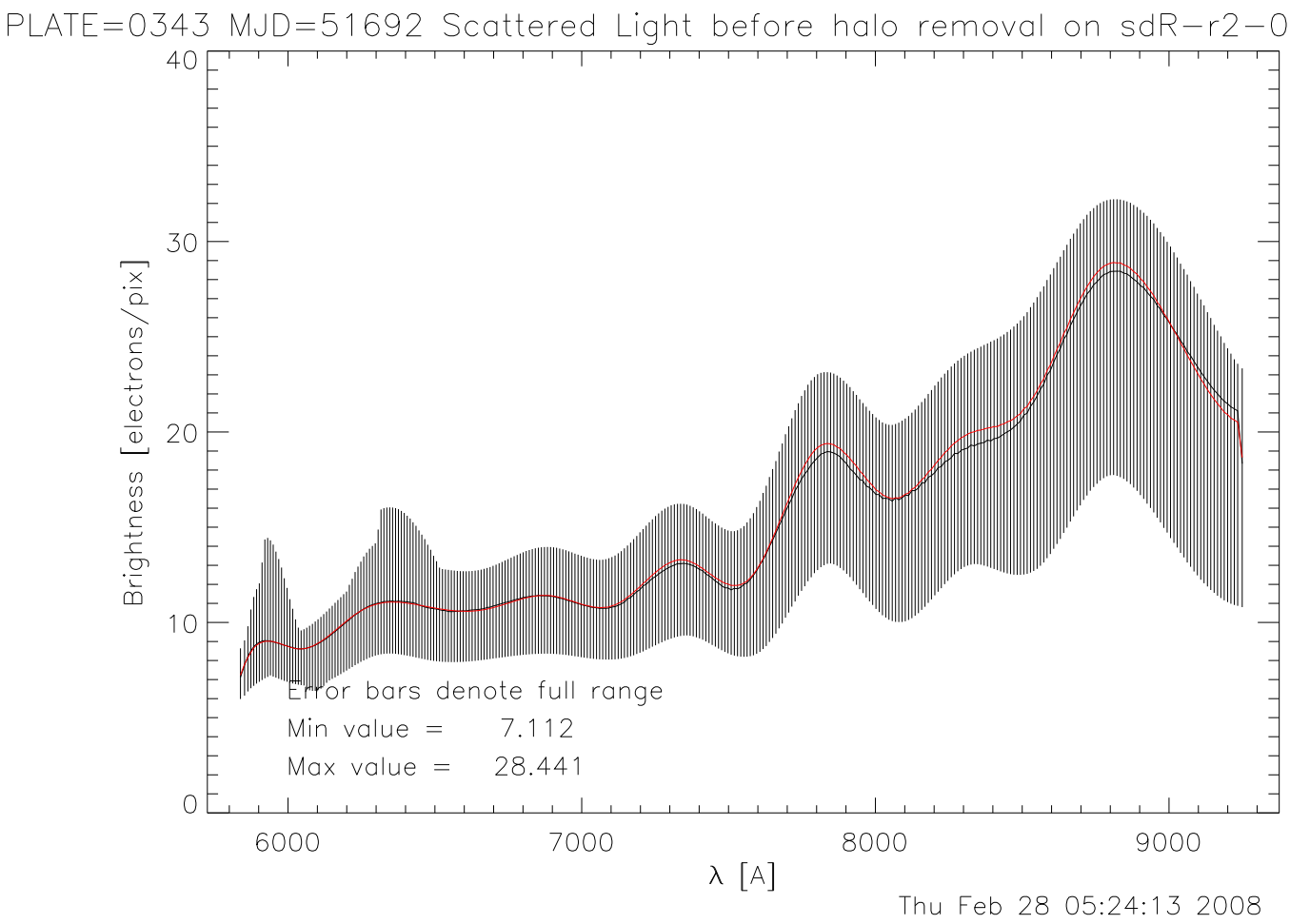

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004074.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

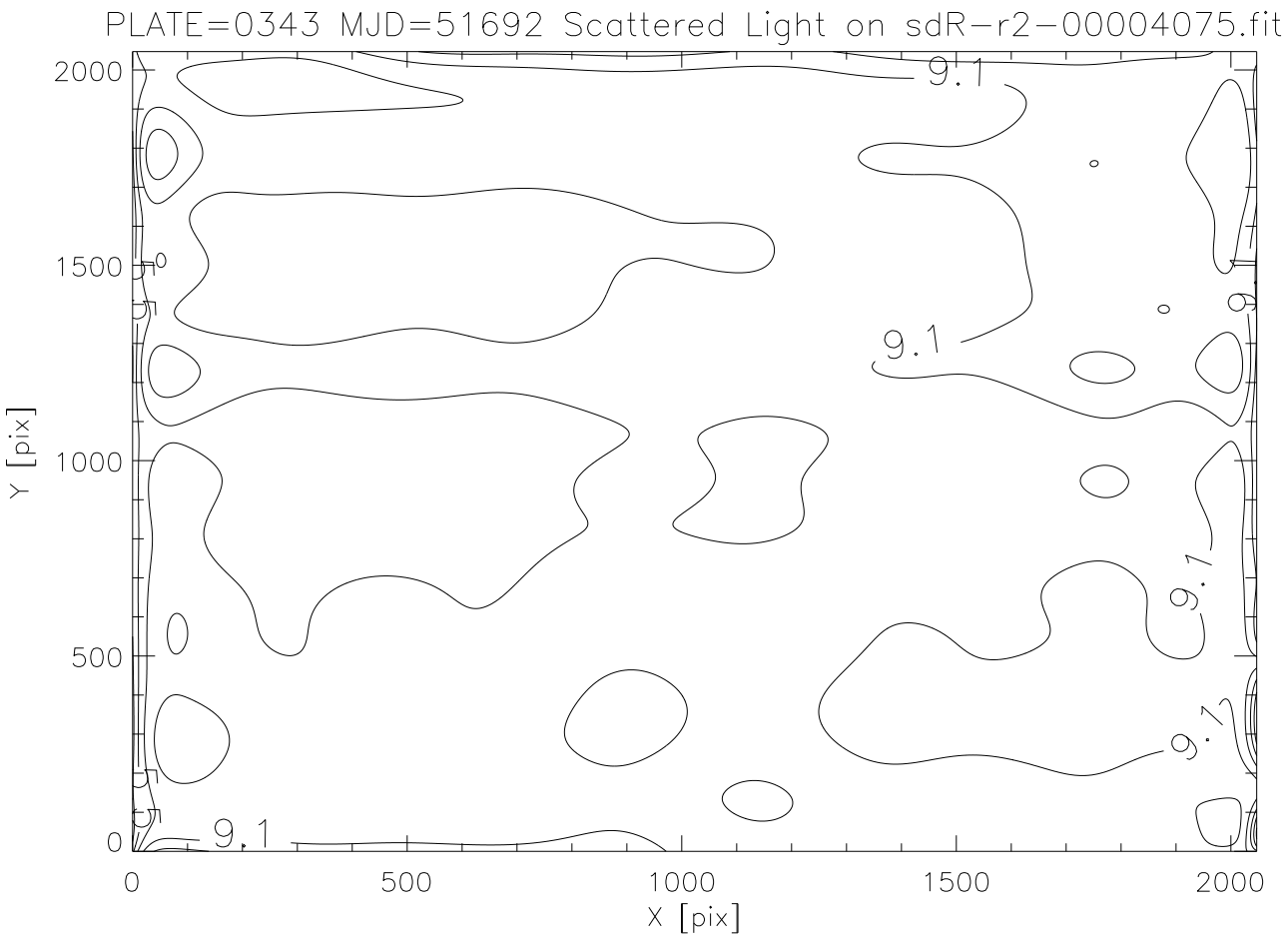

PLATE=0343 MJD=51692 sdR-r2-00004074.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

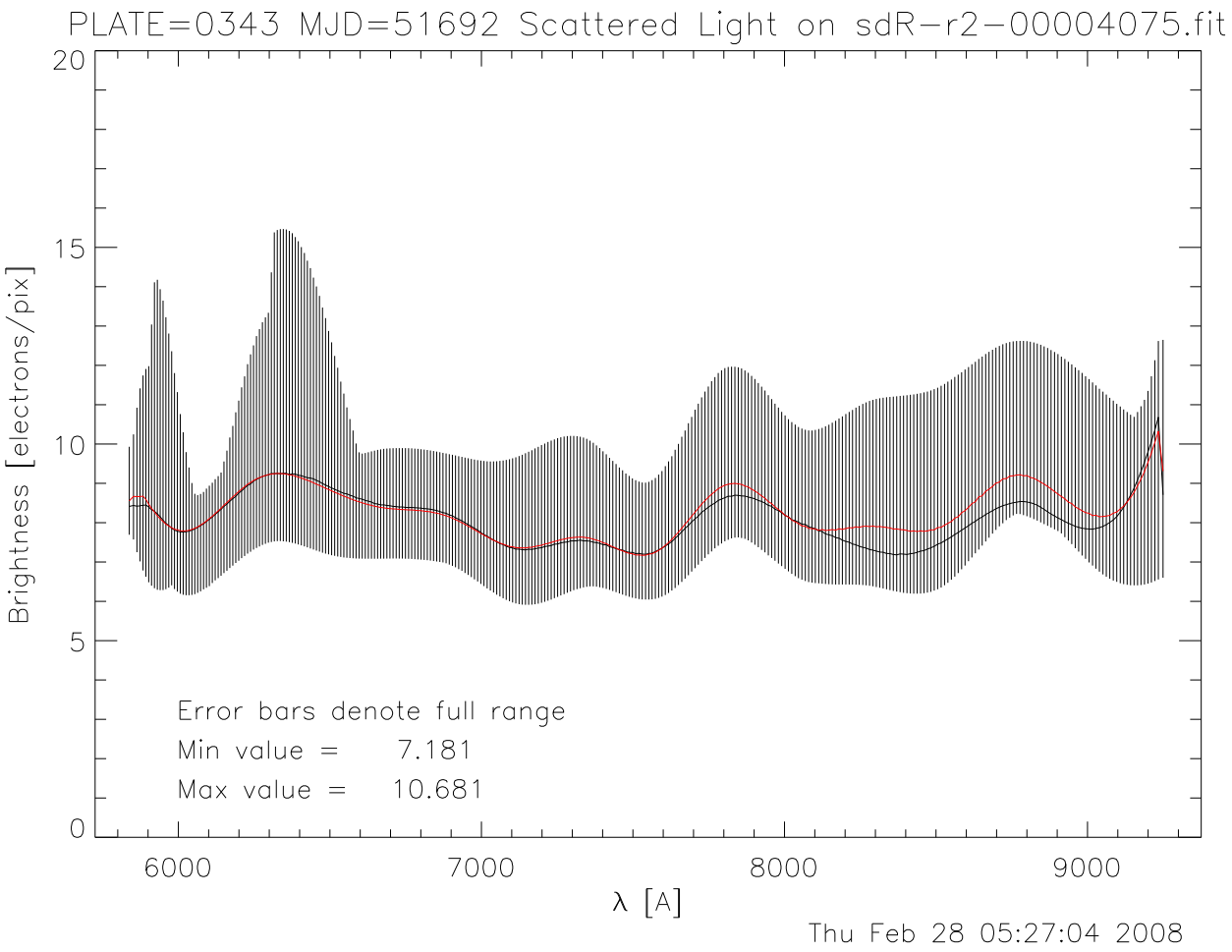

PLATE=0343 MJD=51692 sdR-r2-00004074.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.37 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

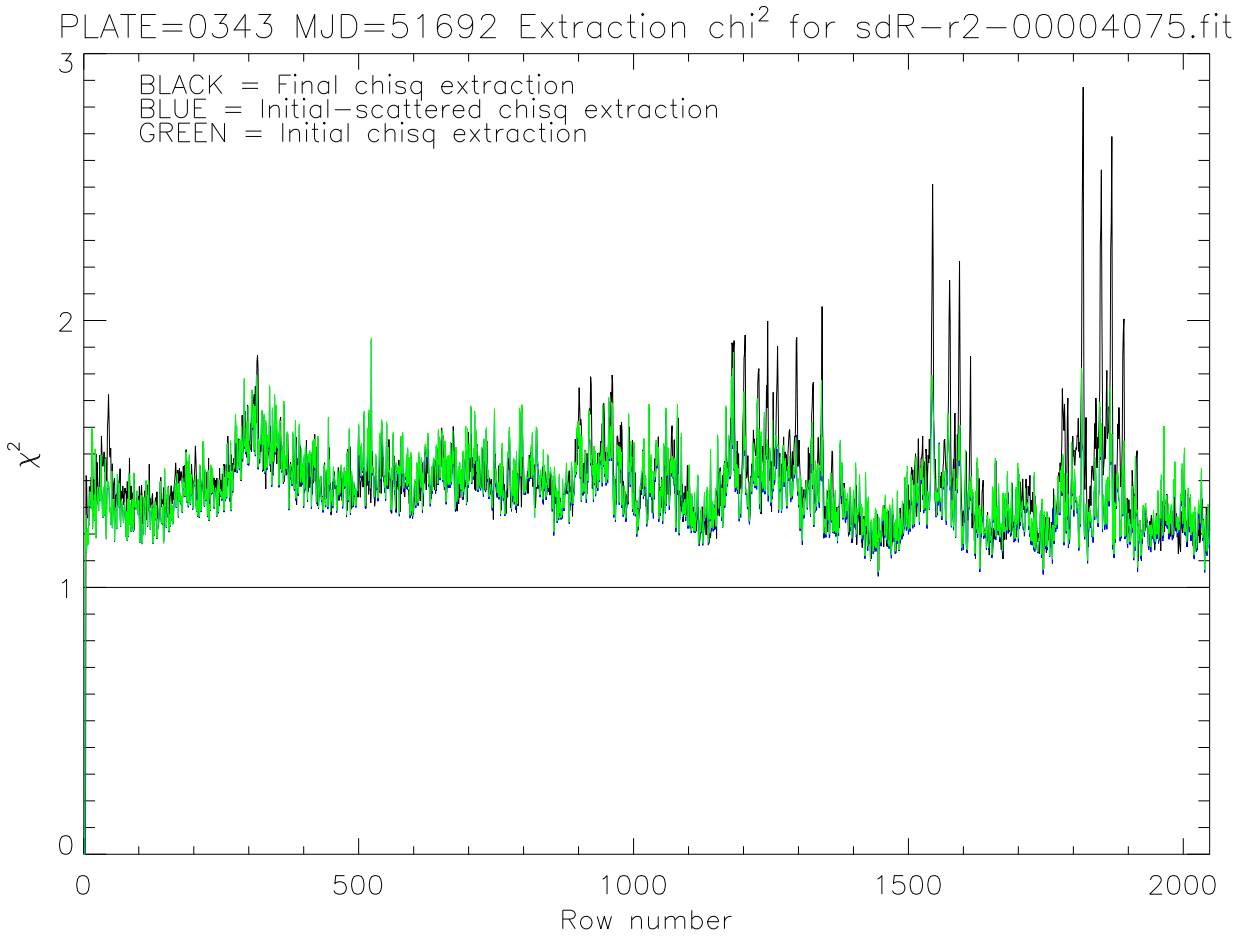

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:23:23 2008

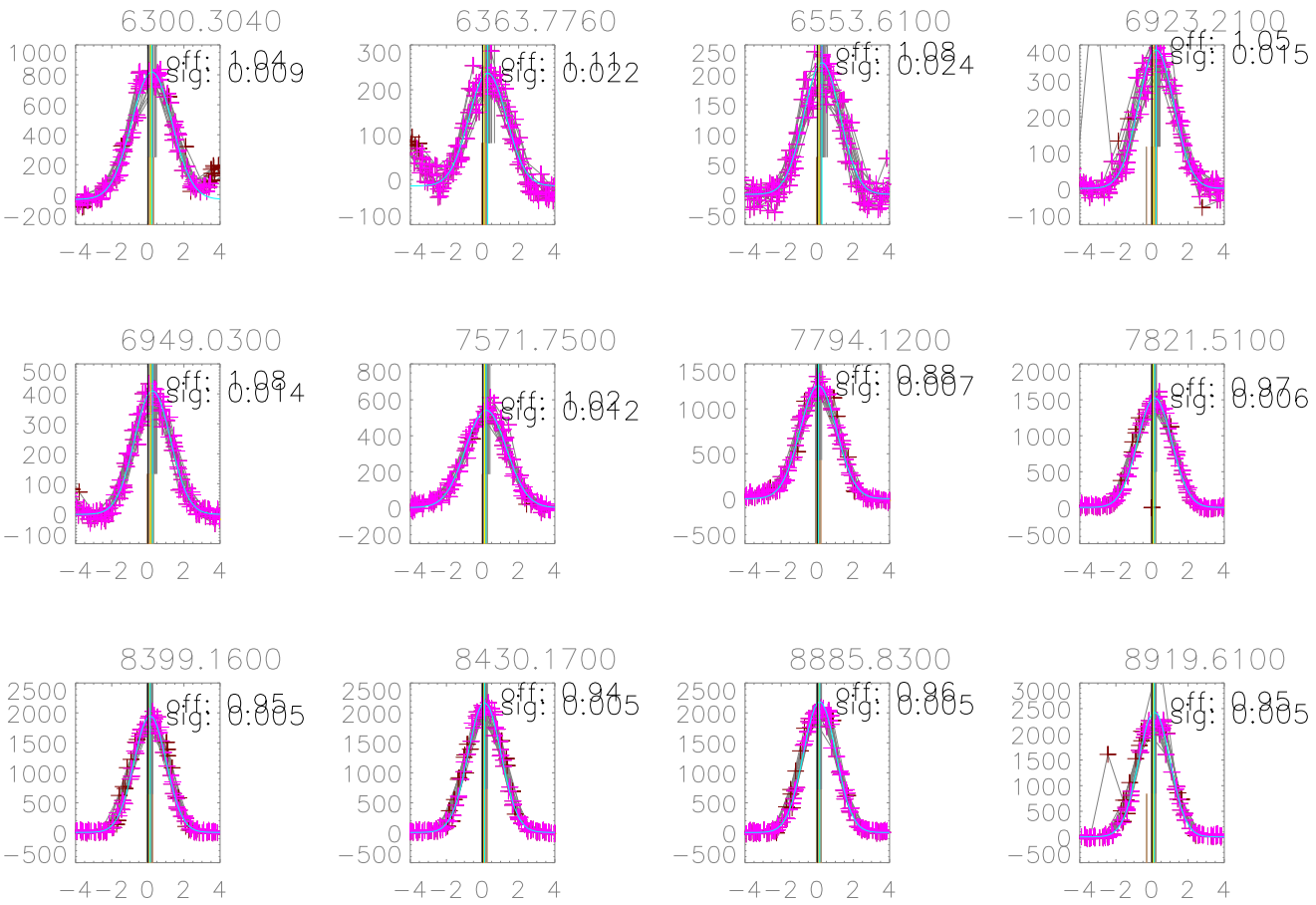

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004075.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

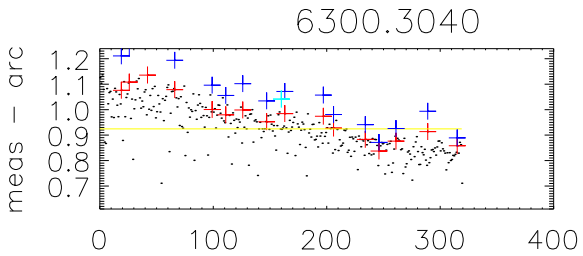

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004075.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.112
Max value = 28.441
Thu Feb 28 05:24:13 2008

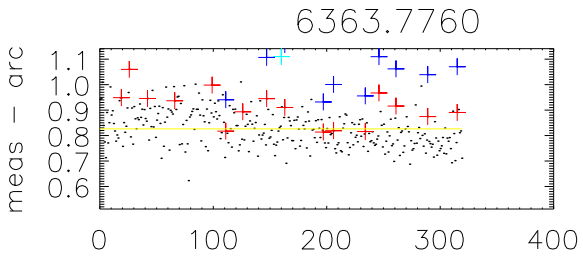

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004075.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
9.1
9.1
9.1
0
0
0

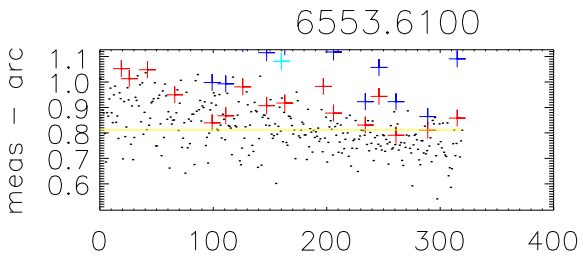

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004075.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.181
Max value = 10.681
Thu Feb 28 05:27:04 2008

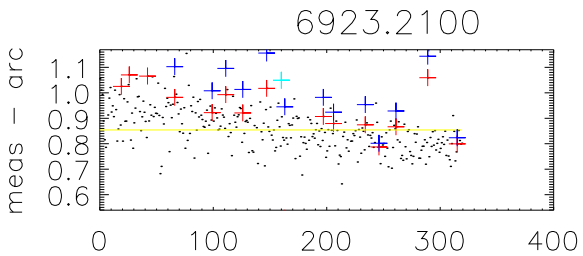

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r2−00004075.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

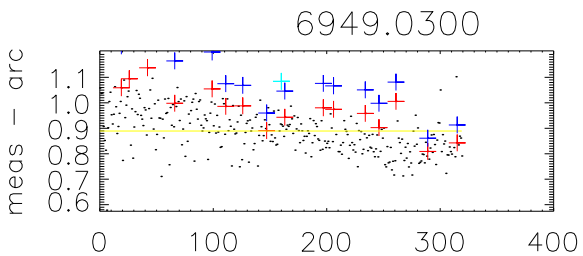

6300.3040
off: 1.04
sig: 0.009
6363.7760
off: 1.11
sig: 0.022
6553.6100
off: 1.08
sig: 0.024
6923.2100
off: 1.05
sig: 0.015
6949.0300
off: 1.08
sig: 0.014
7571.7500
off: 1.02
sig: 0.042
7794.1200
off: 0.88
sig: 0.007
7821.5100
off: 0.97
sig: 0.006
8399.1600
off: 0.95
sig: 0.005
8430.1700
off: 0.94
sig: 0.005
8885.8300
off: 0.96
sig: 0.005
8919.6100
off: 0.95
sig: 0.005

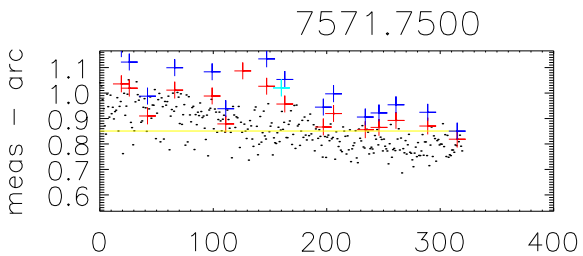

6300.3040
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

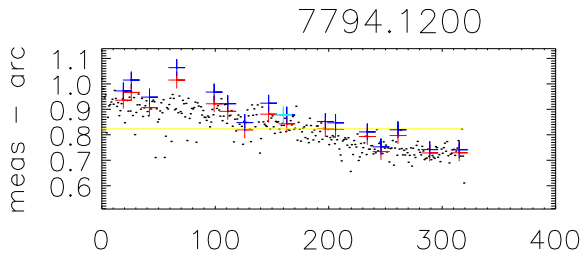

6363.7760
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

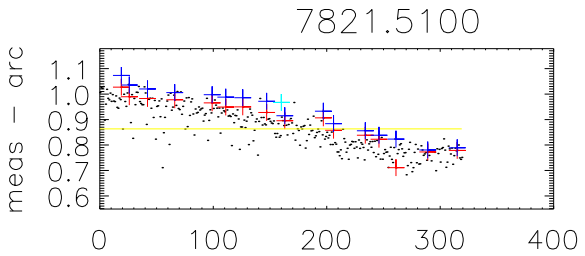

6553.6100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

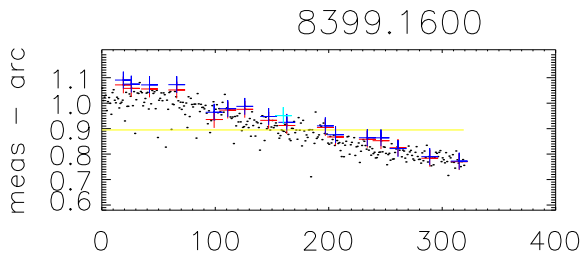

6923.2100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

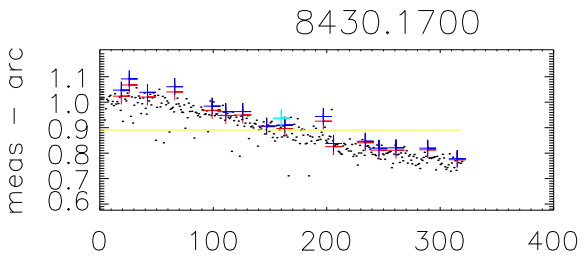

6949.0300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

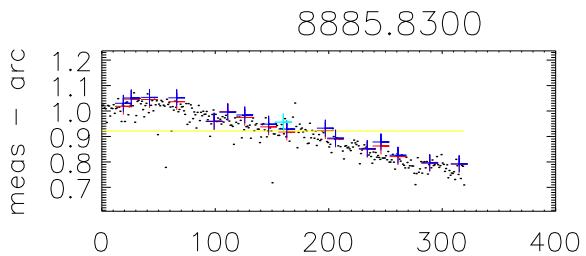

7571.7500
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

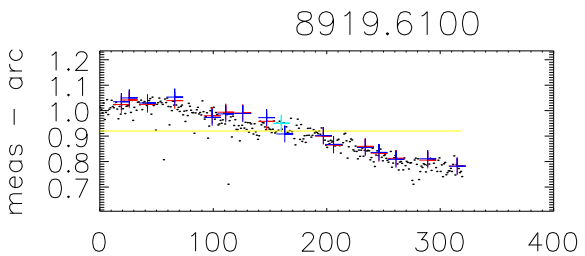

7794.1200
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

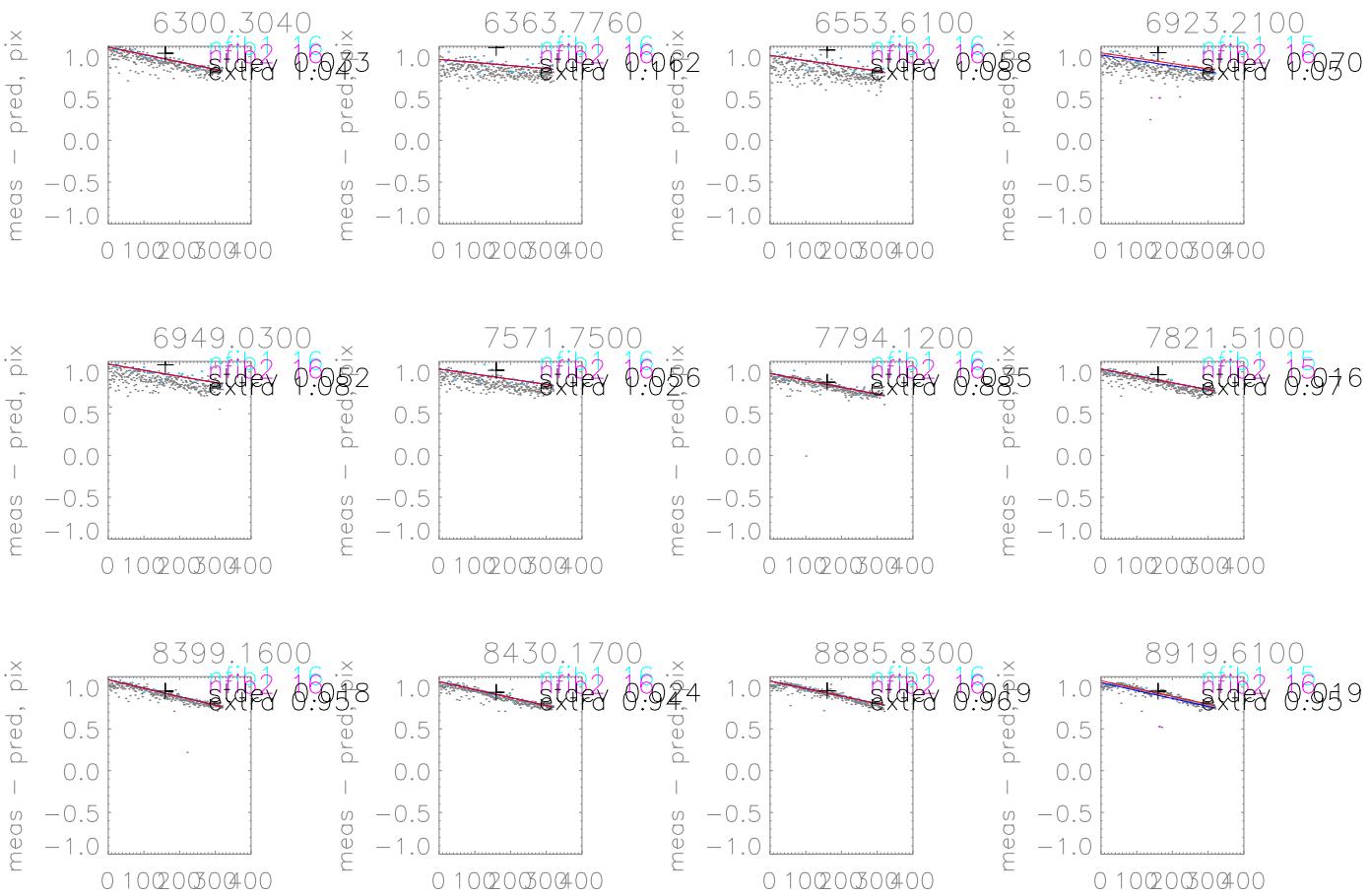

7821.5100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

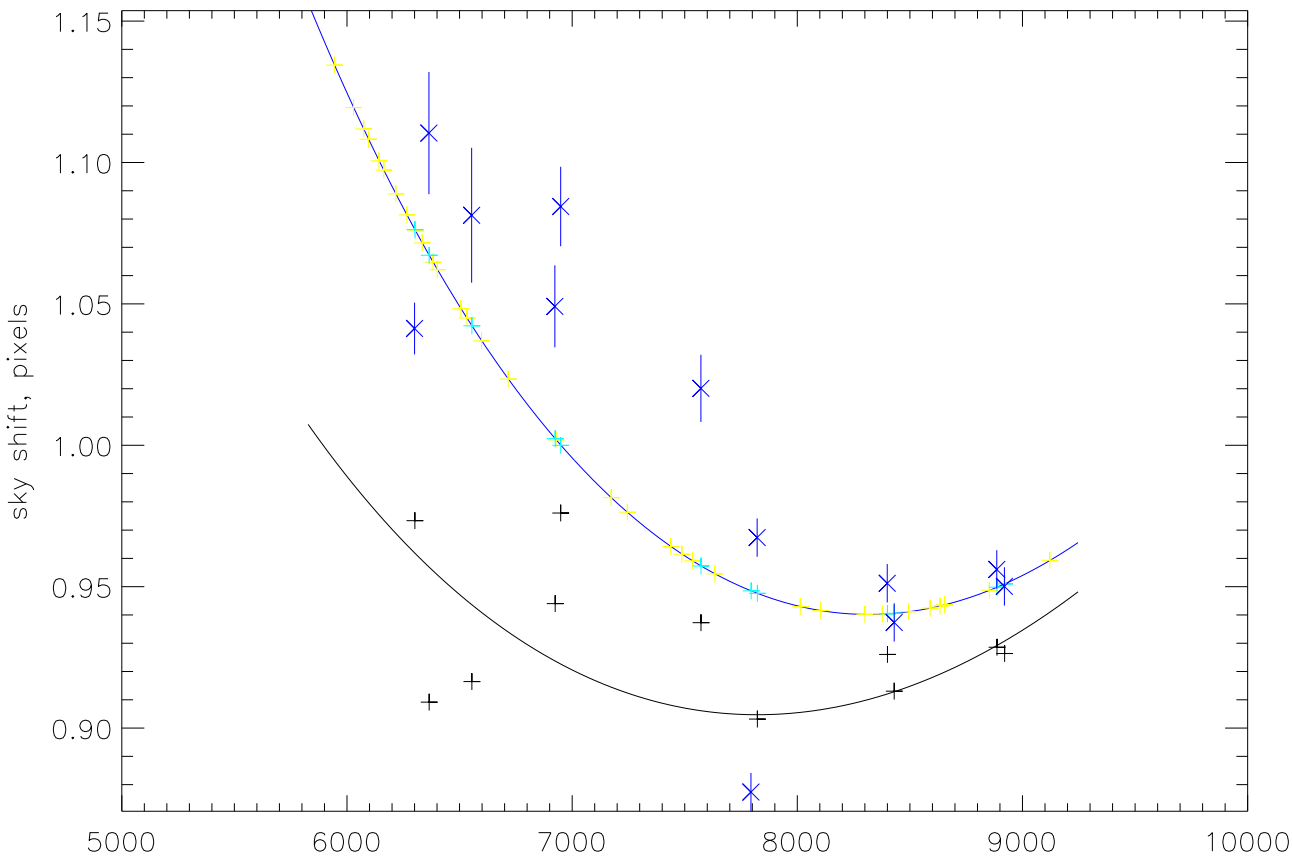

8399.1600
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400


8430.1700
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

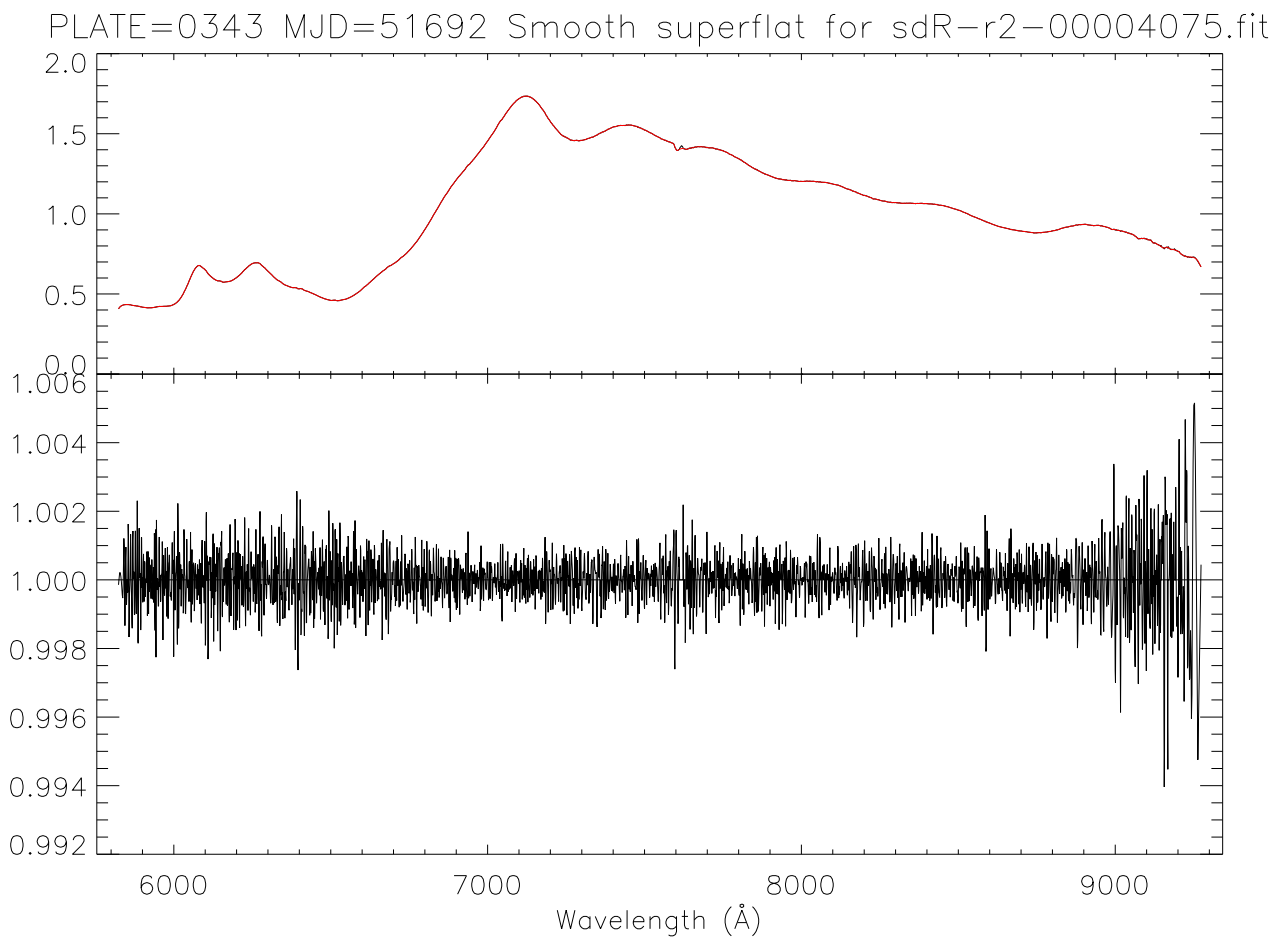

8885.8300
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

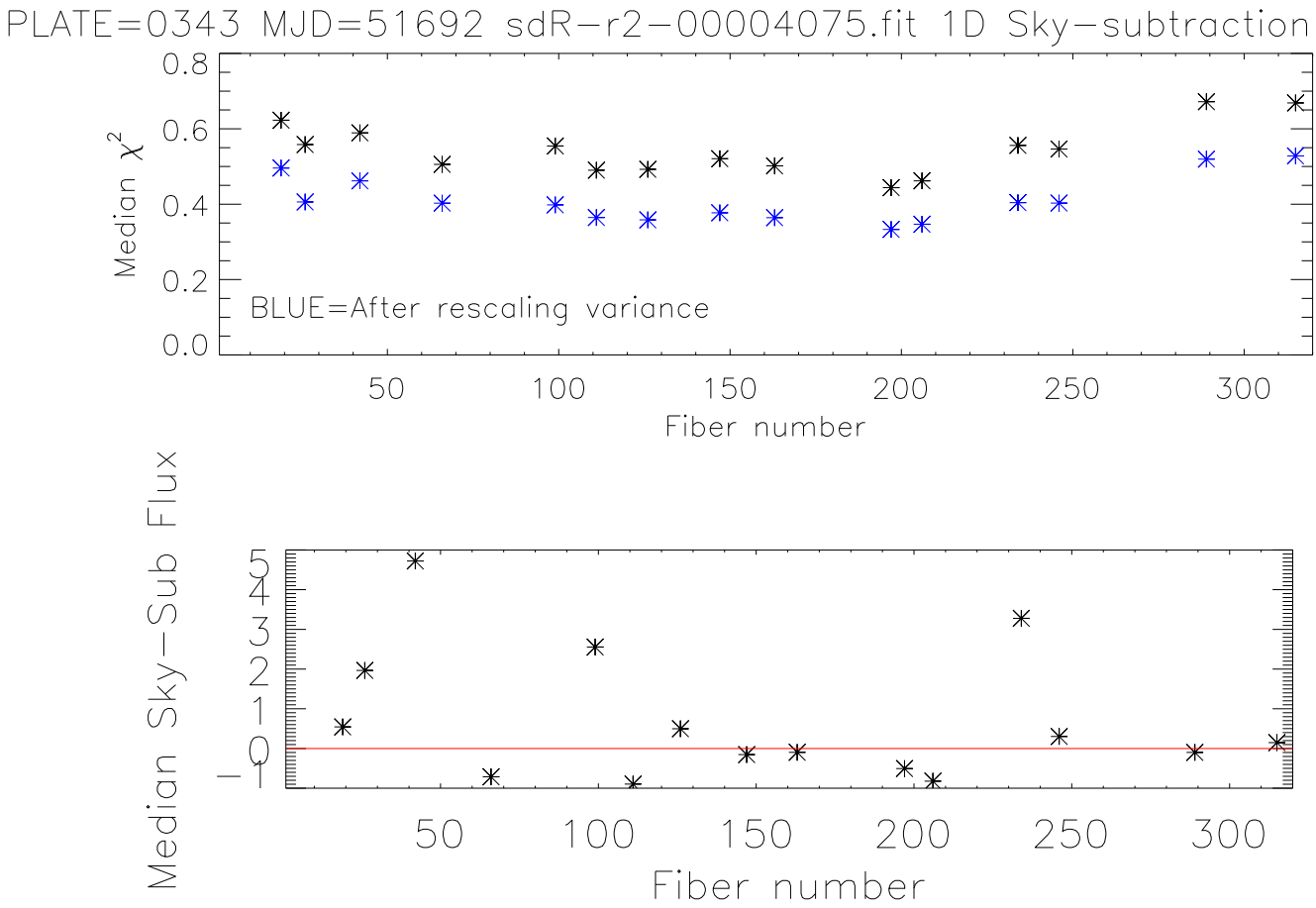

8919.6100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400


6300.3040
stdev 0.073
extra 1.04
6363.7760
stdev 0.062
extra 1.11
6553.6100
stdev 0.058
extra 1.08
6923.2100
stdev 0.070
extra 1.05
6949.0300
stdev 0.052
extra 1.08
7571.7500
stdev 0.056
extra 1.02
7794.1200
stdev 0.035
extra 0.88
7821.5100
stdev 0.016
extra 0.97
8399.1600
stdev 0.058
extra 0.95
8430.1700
stdev 0.024
extra 0.94
8885.8300
stdev 0.019
extra 0.96
8919.6100
stdev 0.019
extra 0.95
meas − pred, pix
mfib2 16
mfib1 16
mfib2 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

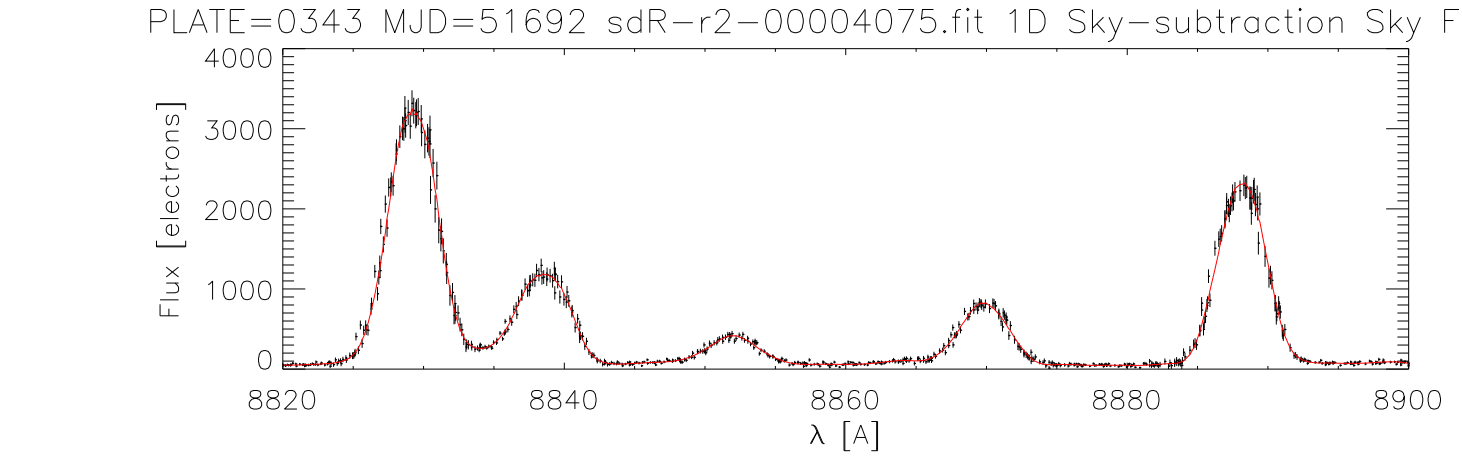

1.15
1.10
1.05
1.00
0.95
0.90
sky shift, pixels
5000
6000
7000
8000
9000
10000

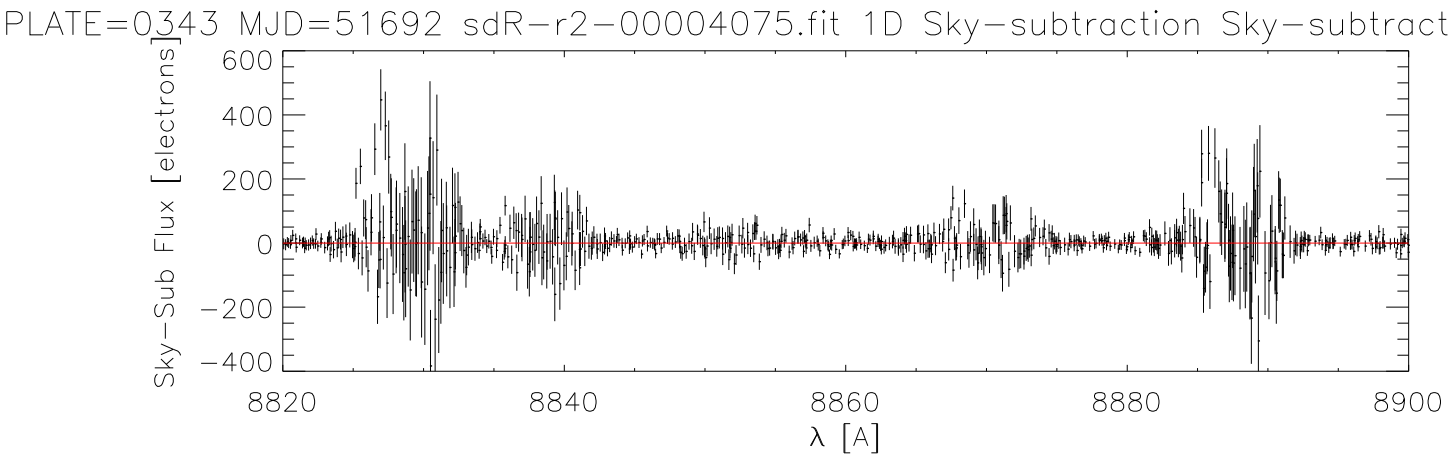
es= 0.0000

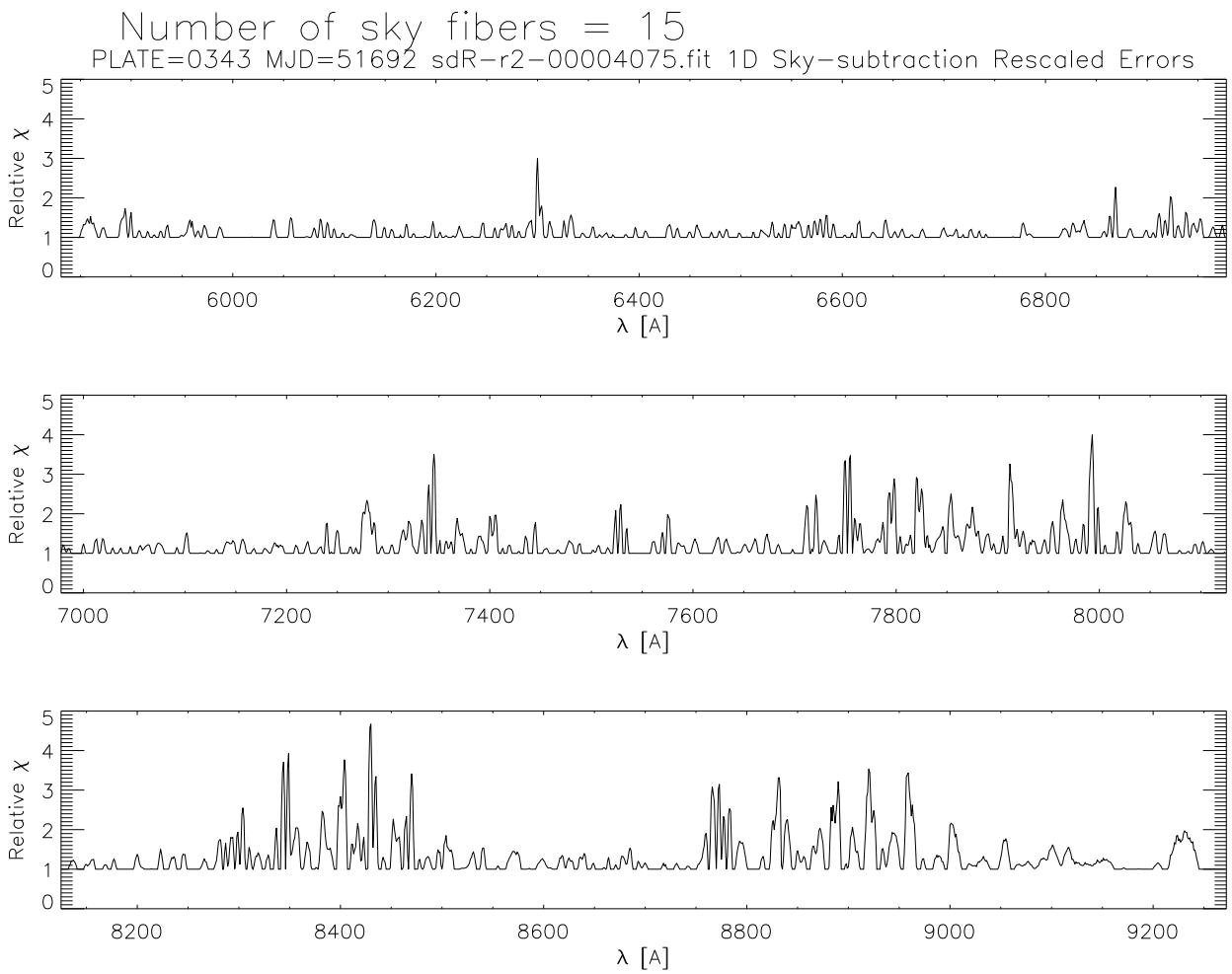

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004075.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

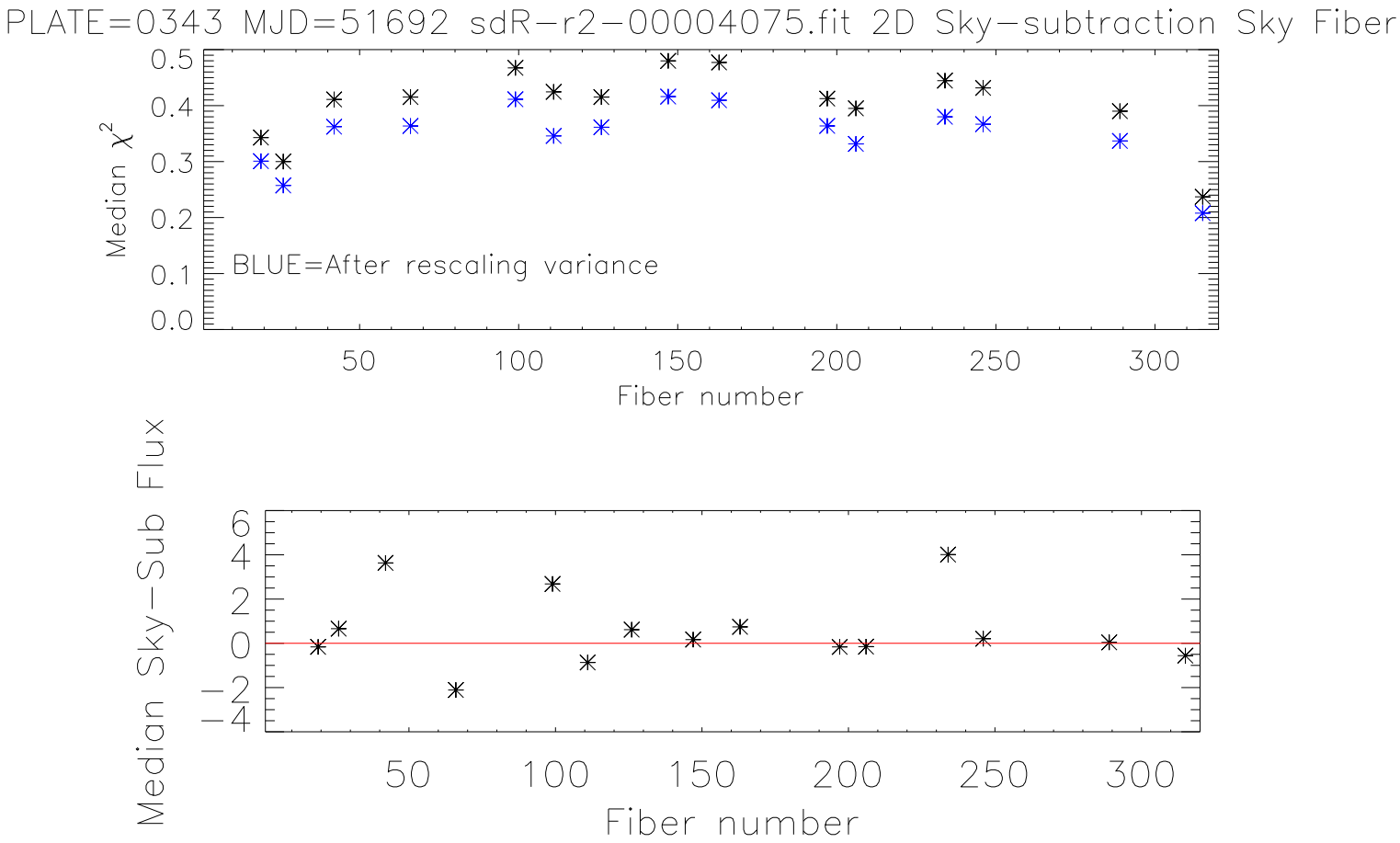

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

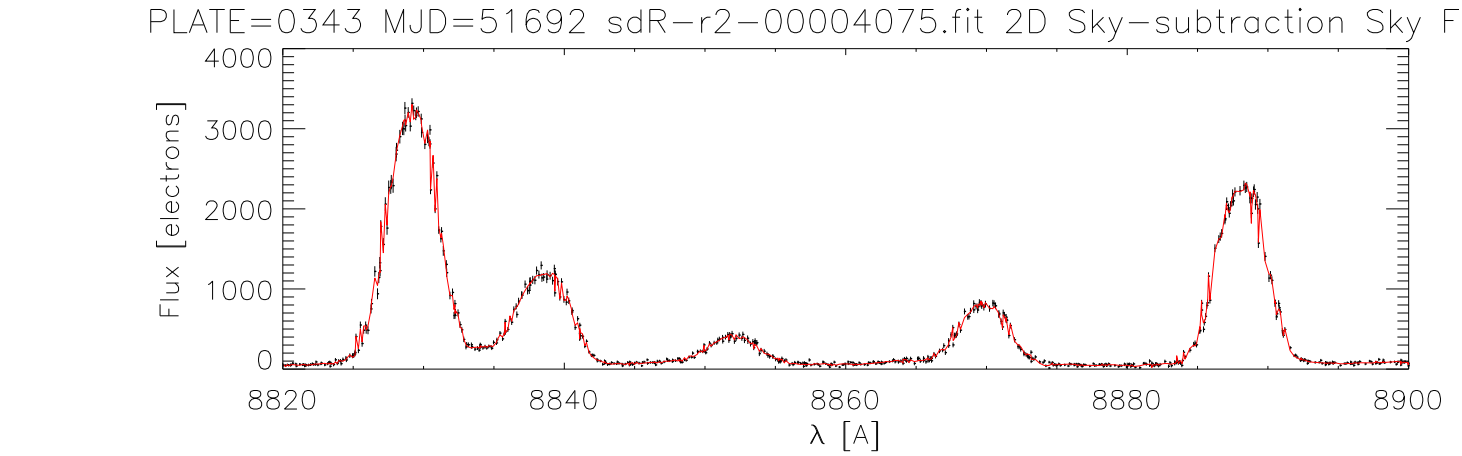
Median Sky-Sub Flux
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

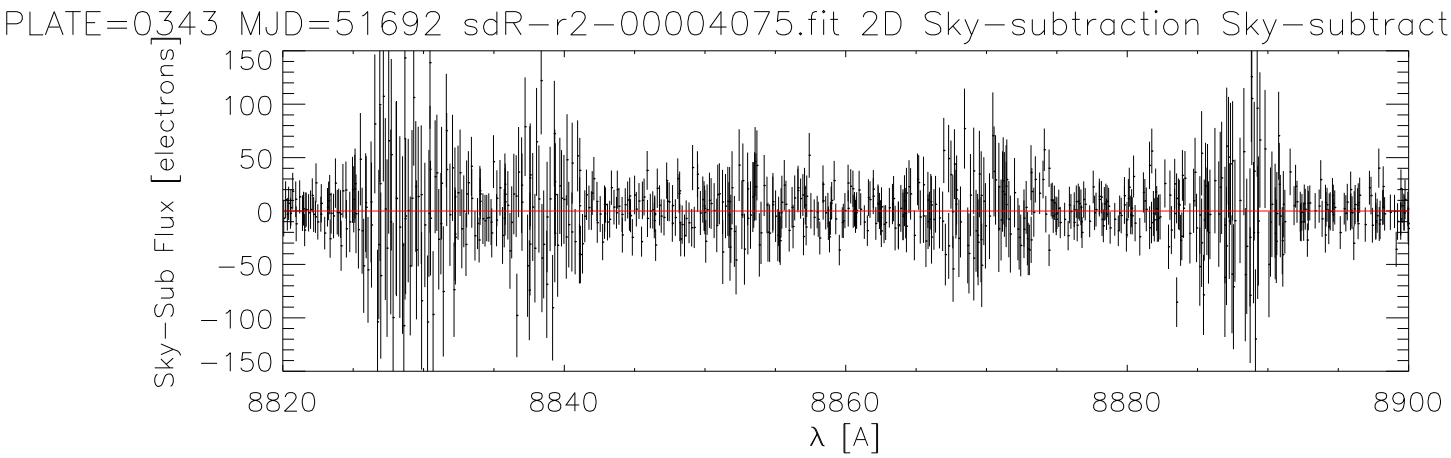

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

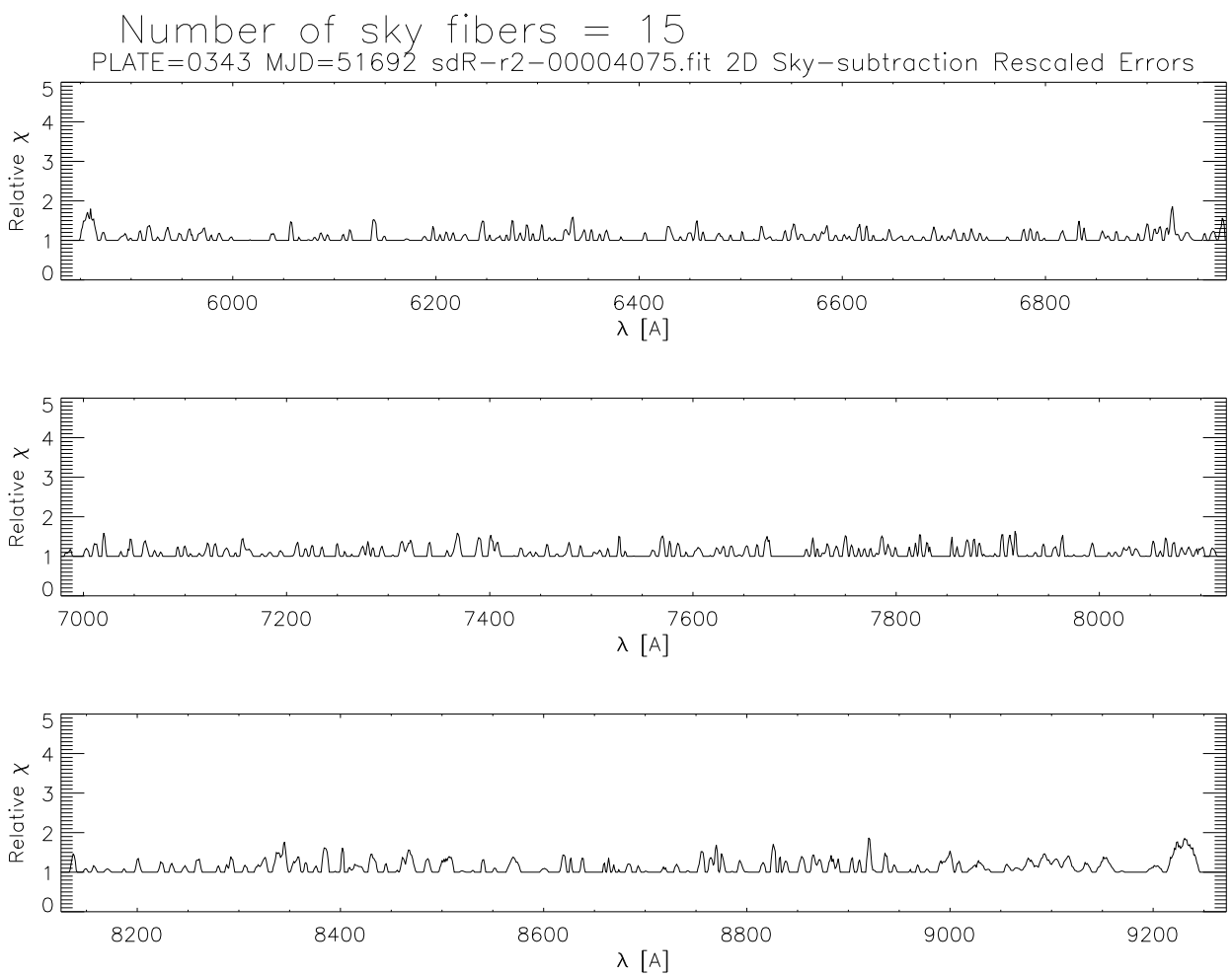

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

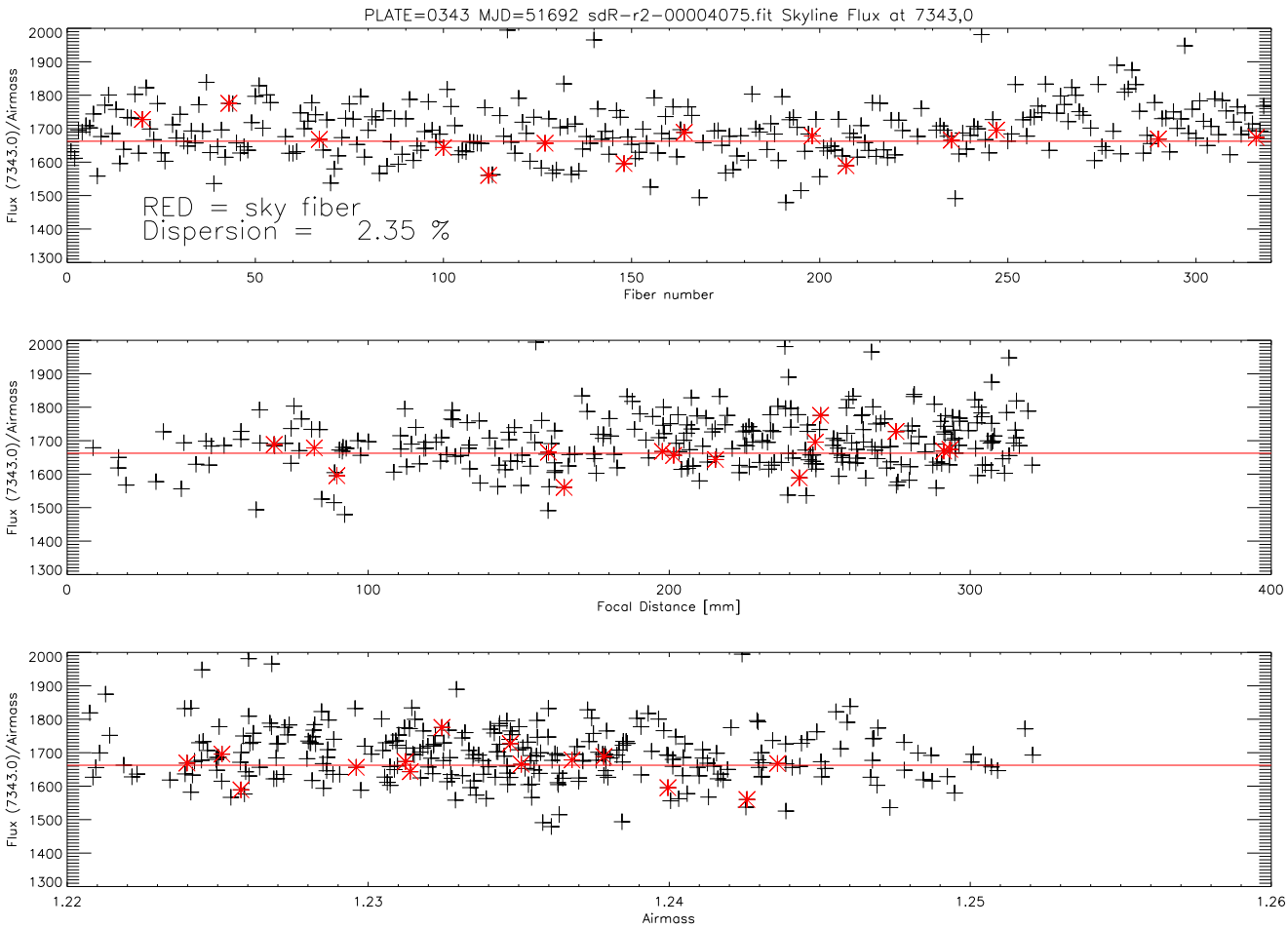

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004075.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

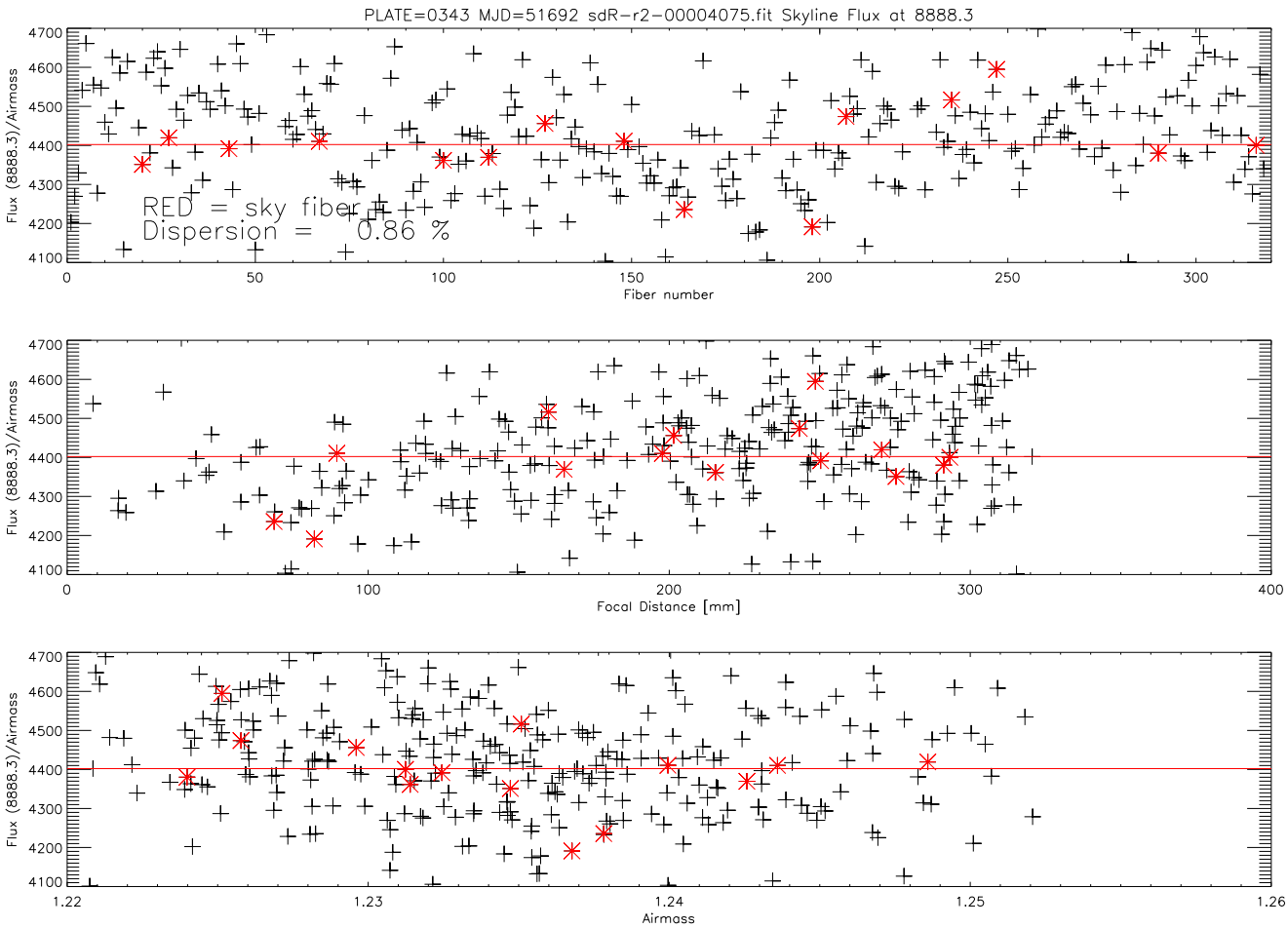

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

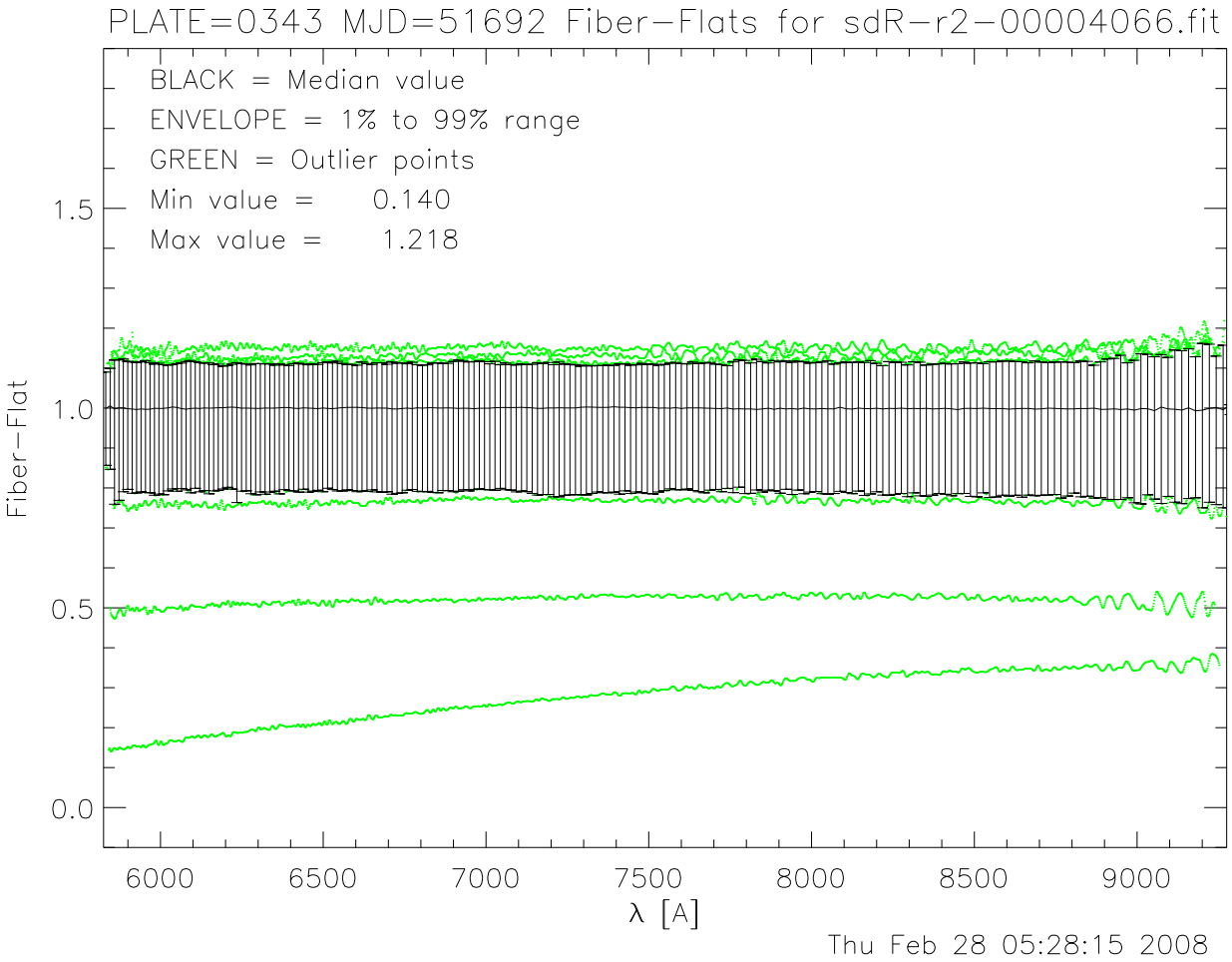

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

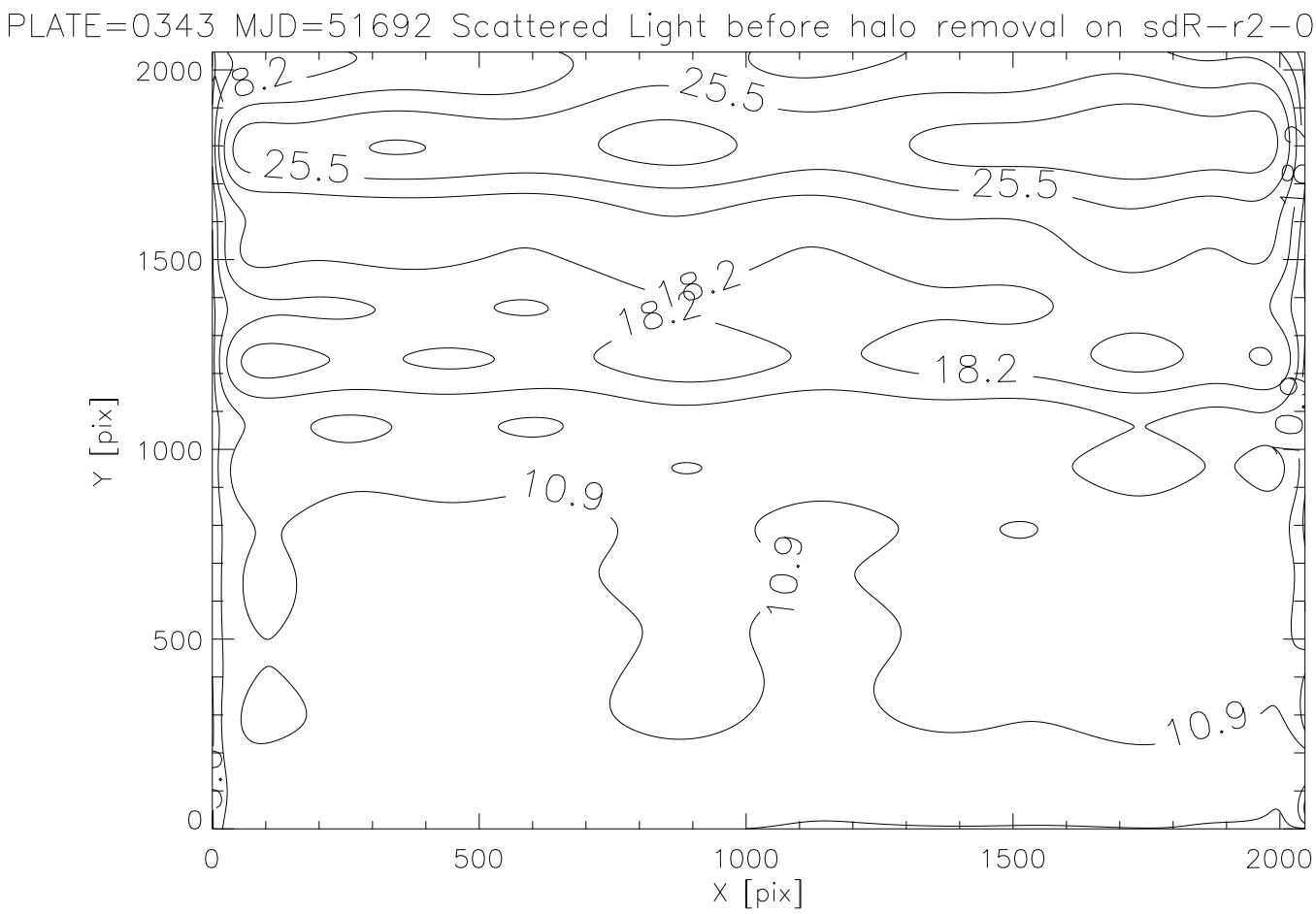

PLATE=0343 MJD=51692 sdR-r2-00004075.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

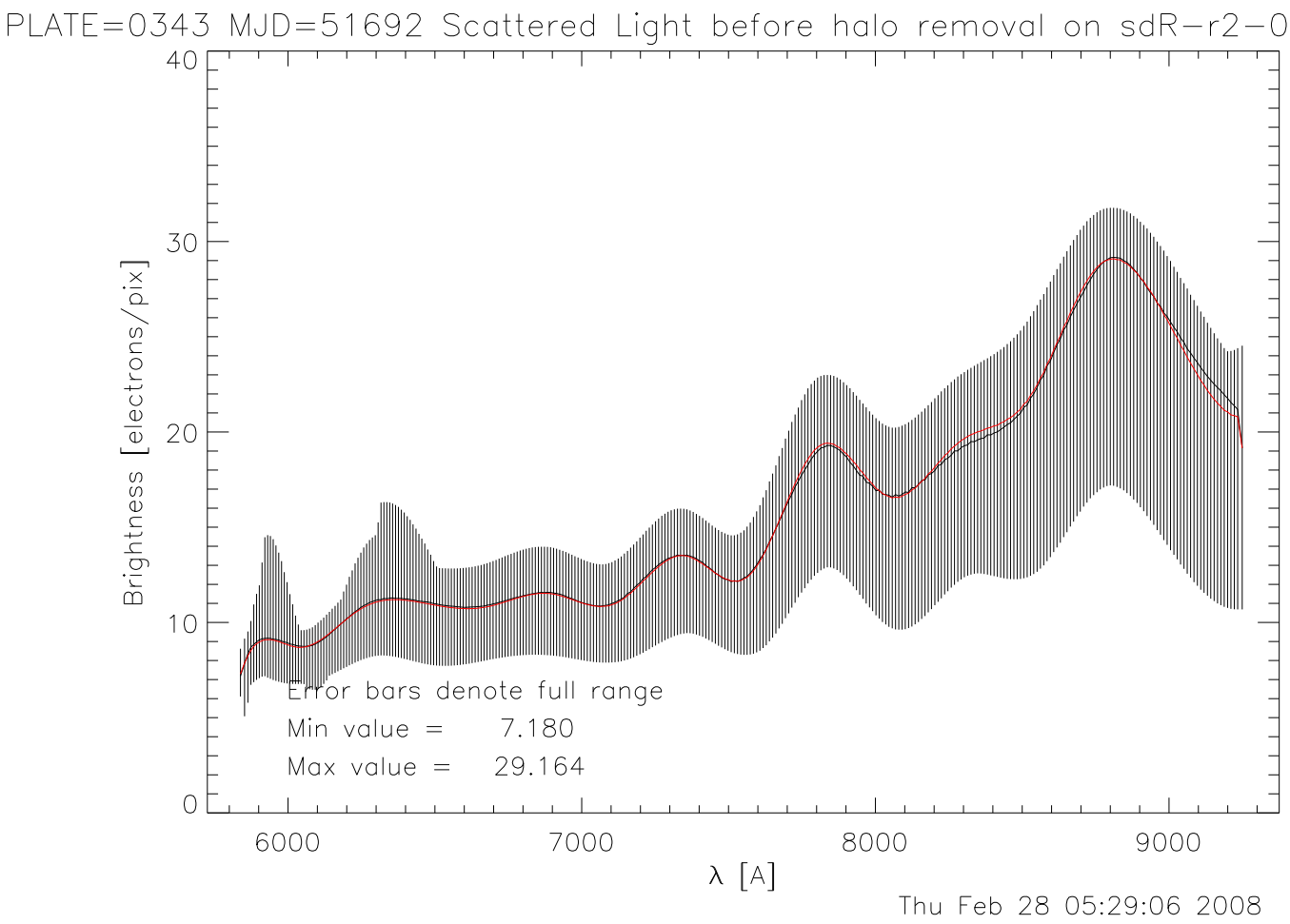

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004075.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

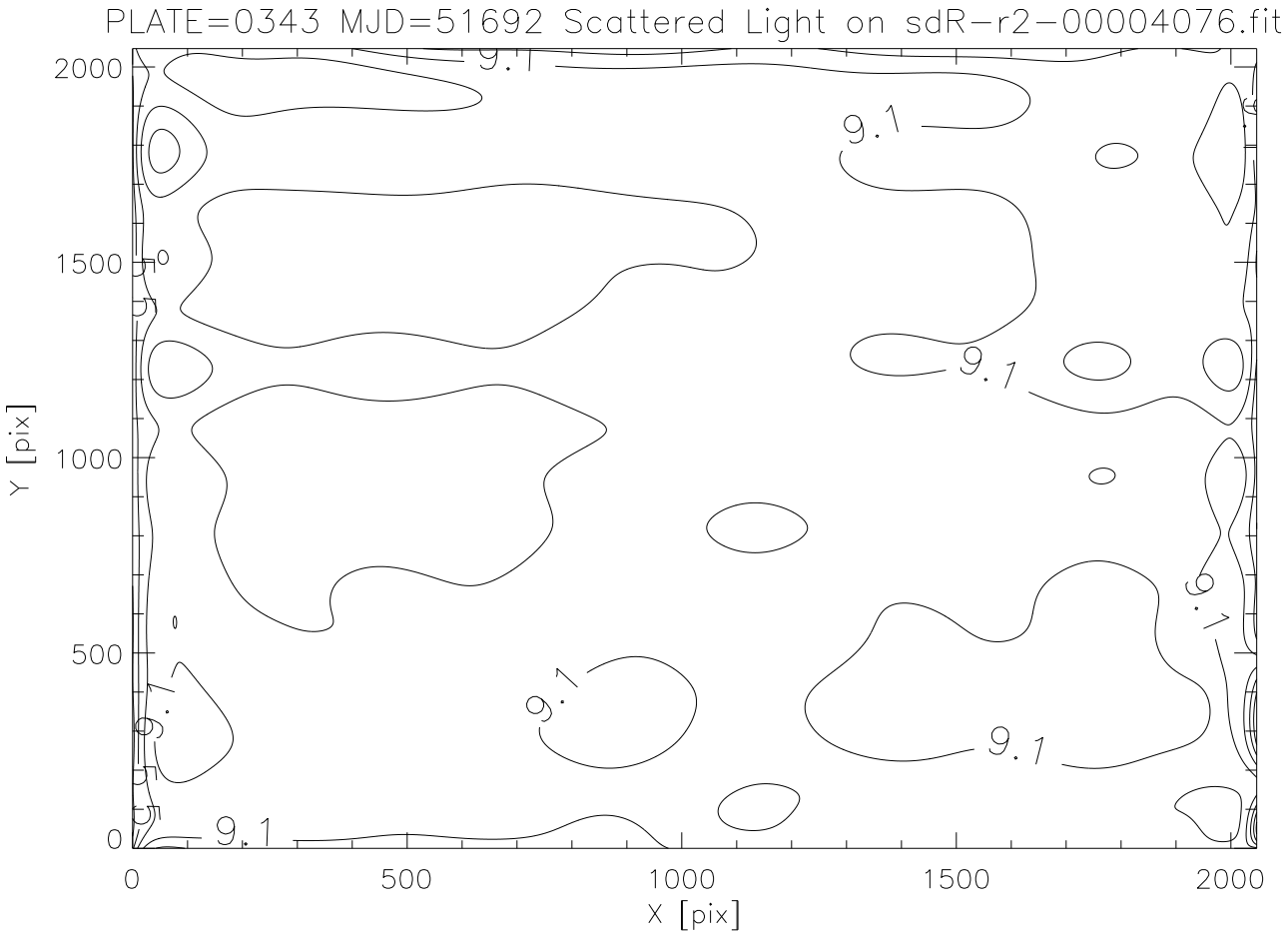

PLATE=0343 MJD=51692 sdR-r2-00004075.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.35 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

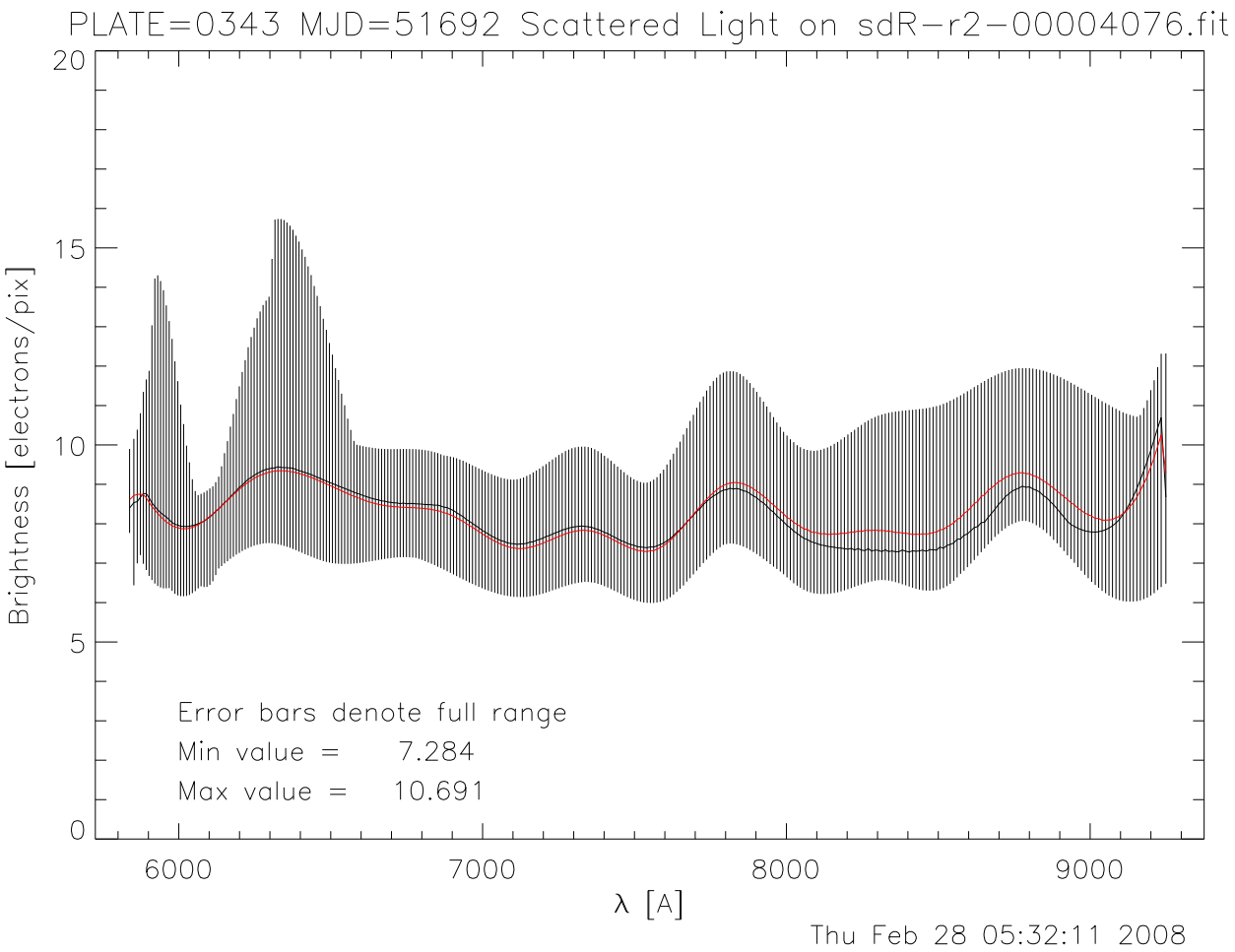

PLATE=0343 MJD=51692 sdR-r2-00004075.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 0.86 %
Fiber number
Focal Distance [mm]
Airmass

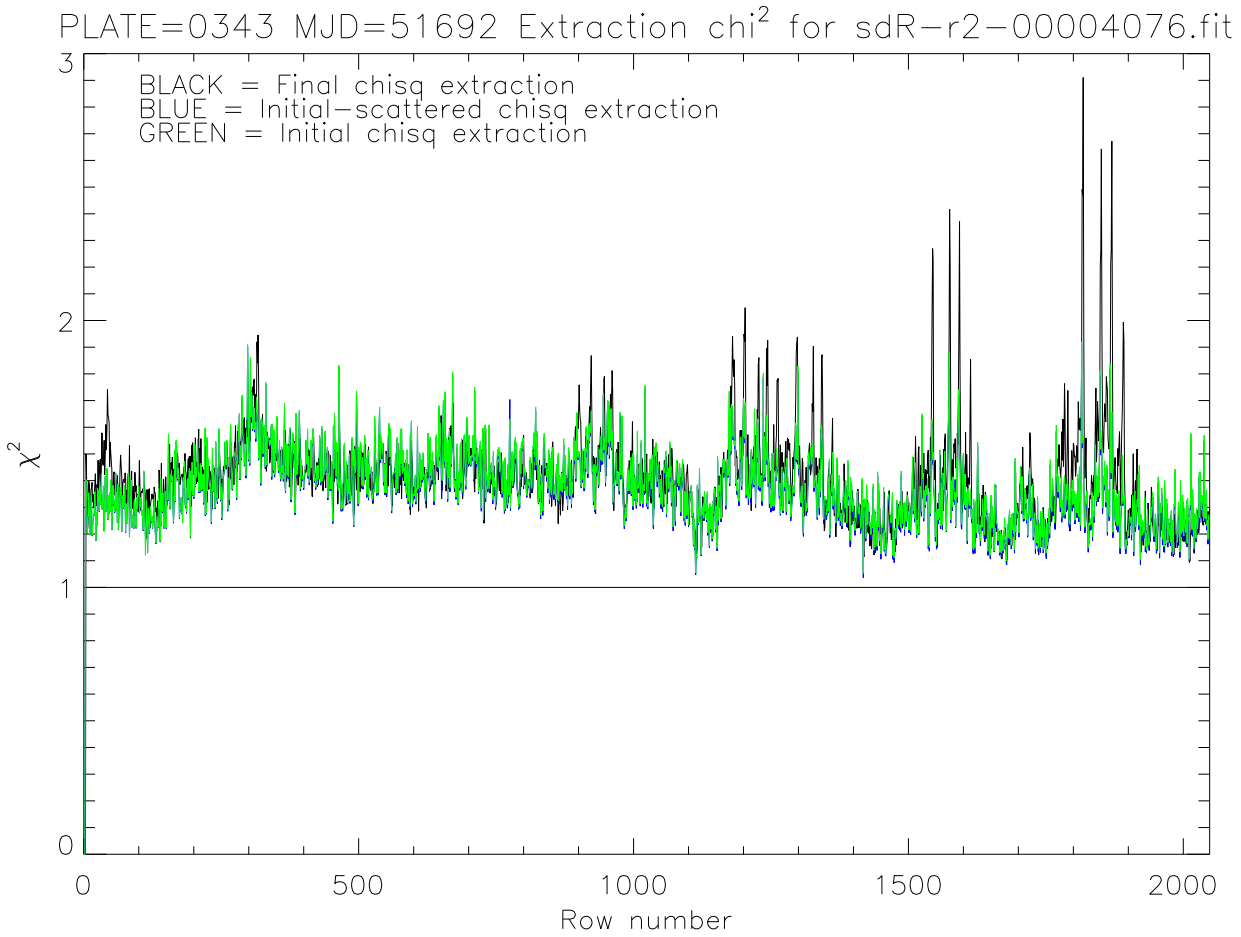

PLATE=0343 MJD=51692 Fiber−Flats for sdR−r2−00004066.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.140
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Feb 28 05:28:15 2008

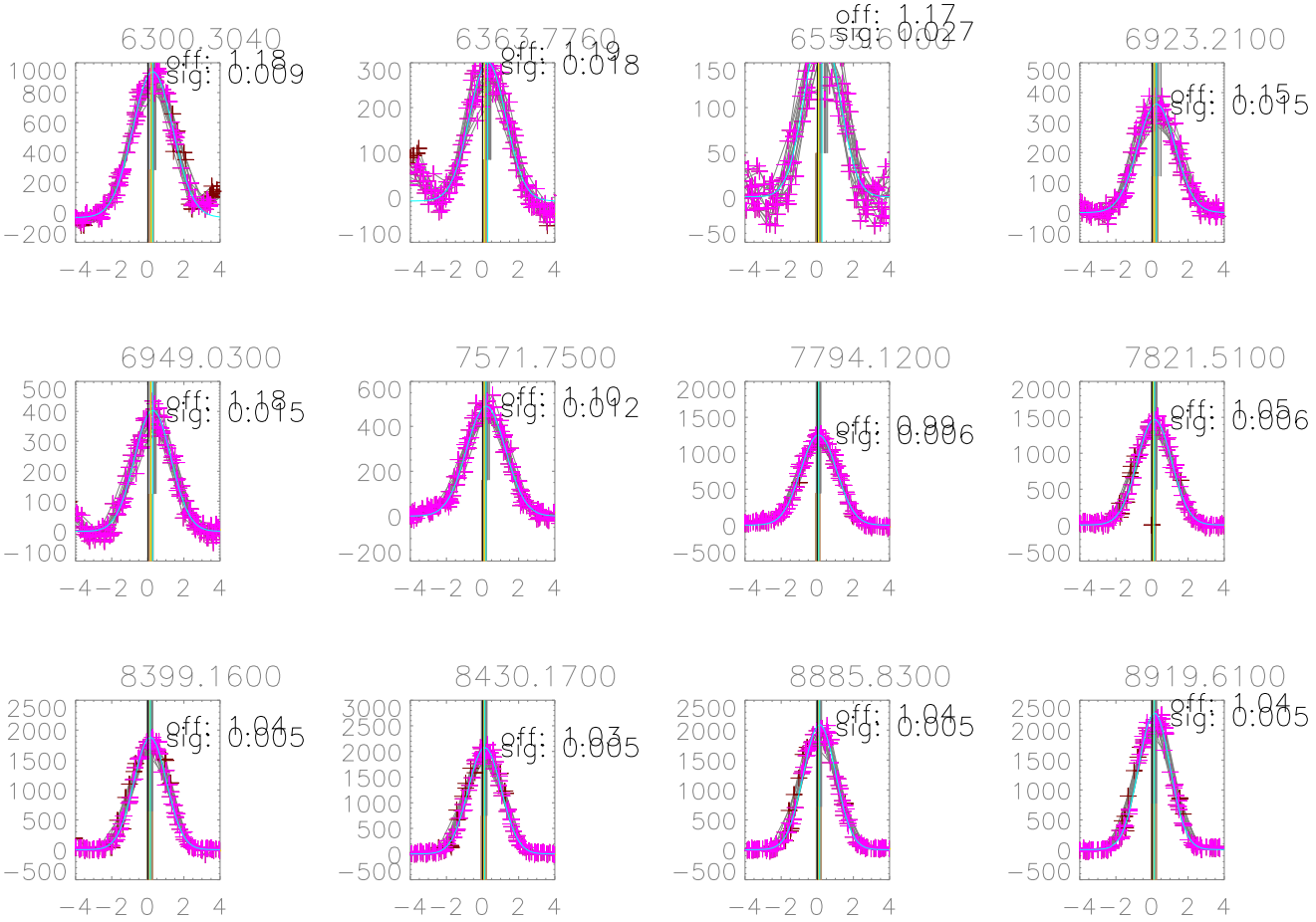

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004076.fi
18.2
25.5
25.5
25.5
18.2
18.2
18.2
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

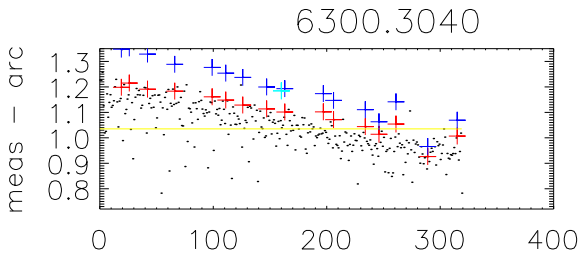

PLATE=0343 MJD=51692 Scattered Light before halo removal on sdR-r2-00004076.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.180
Max value = 29.164
Thu Feb 28 05:29:06 2008

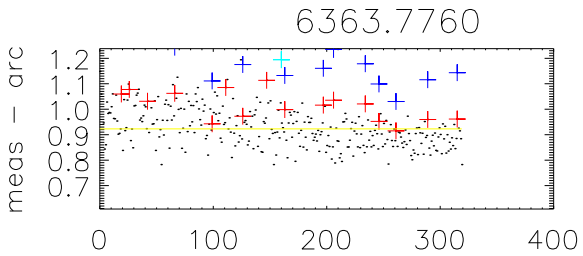

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004076.fit
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

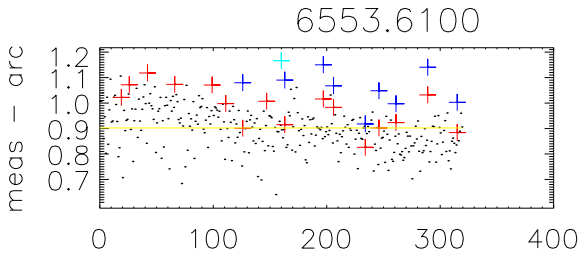

PLATE=0343 MJD=51692 Scattered Light on sdR-r2-00004076.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.284
Max value = 10.691
Thu Feb 28 05:32:11 2008

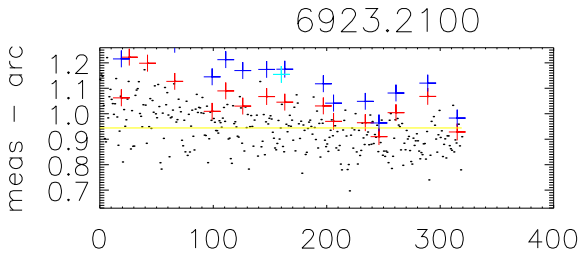

PLATE=0343 MJD=51692 Extraction chi^2 for sdR−r2−00004076.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

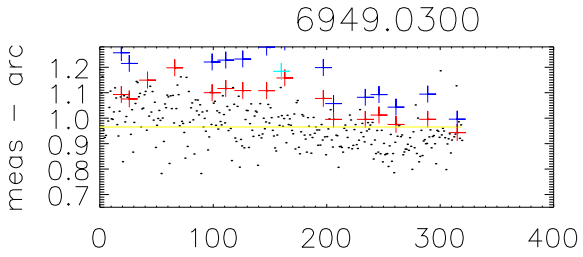

6300.3040
off: 1.18
sig: 0.009
6363.7760
off: 1.19
sig: 0.018
6553.6100
off: 1.17
sig: 0.027
6923.2100
off: 1.15
sig: 0.015
6949.0300
off: 1.18
sig: 0.015
7571.7500
off: 1.10
sig: 0.012
7794.1200
off: 0.99
sig: 0.006
7821.5100
off: 1.05
sig: 0.006
8399.1600
off: 1.04
sig: 0.005
8430.1700
off: 1.03
sig: 0.005
8885.8300
off: 1.04
sig: 0.005
8919.6100
off: 1.04
sig: 0.005

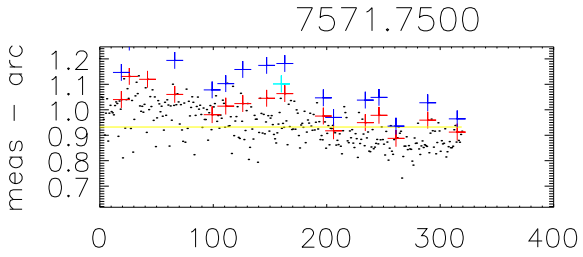

6300.3040
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

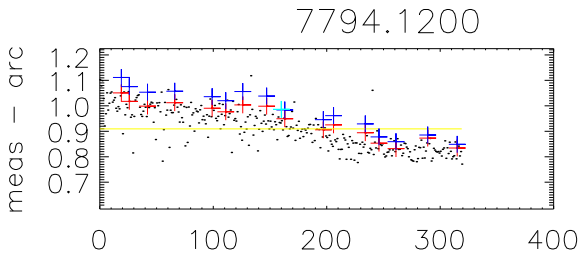

6363.7760
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

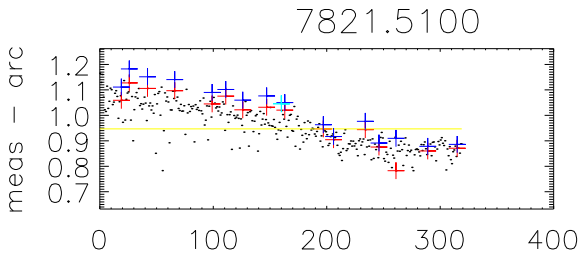

6553.6100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

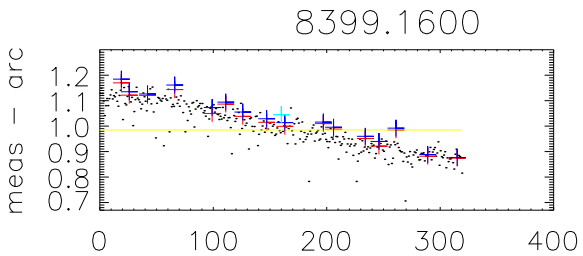

6923.2100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

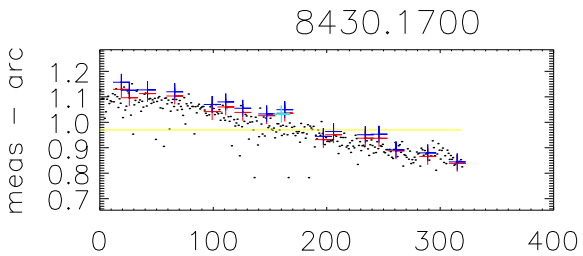

6949.0300
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

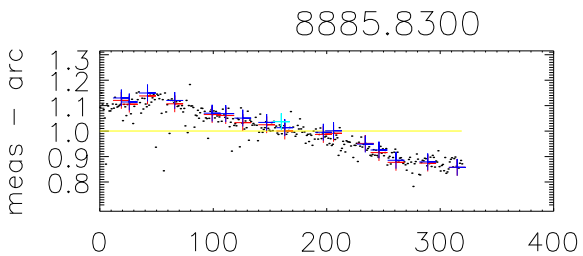

7571.7500
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

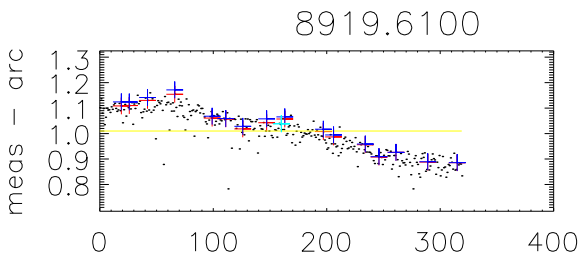

7794.1200
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

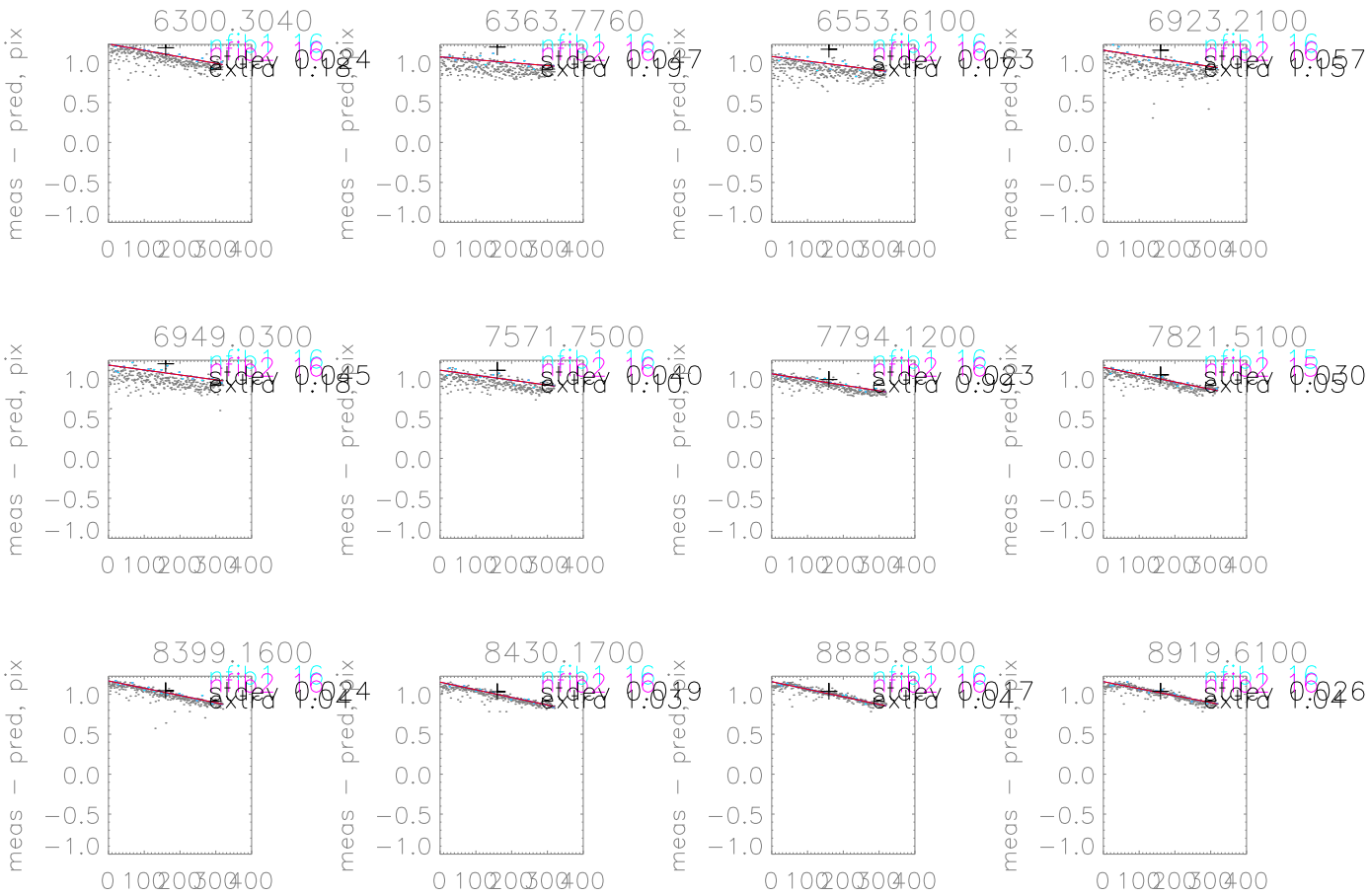

7821.5100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

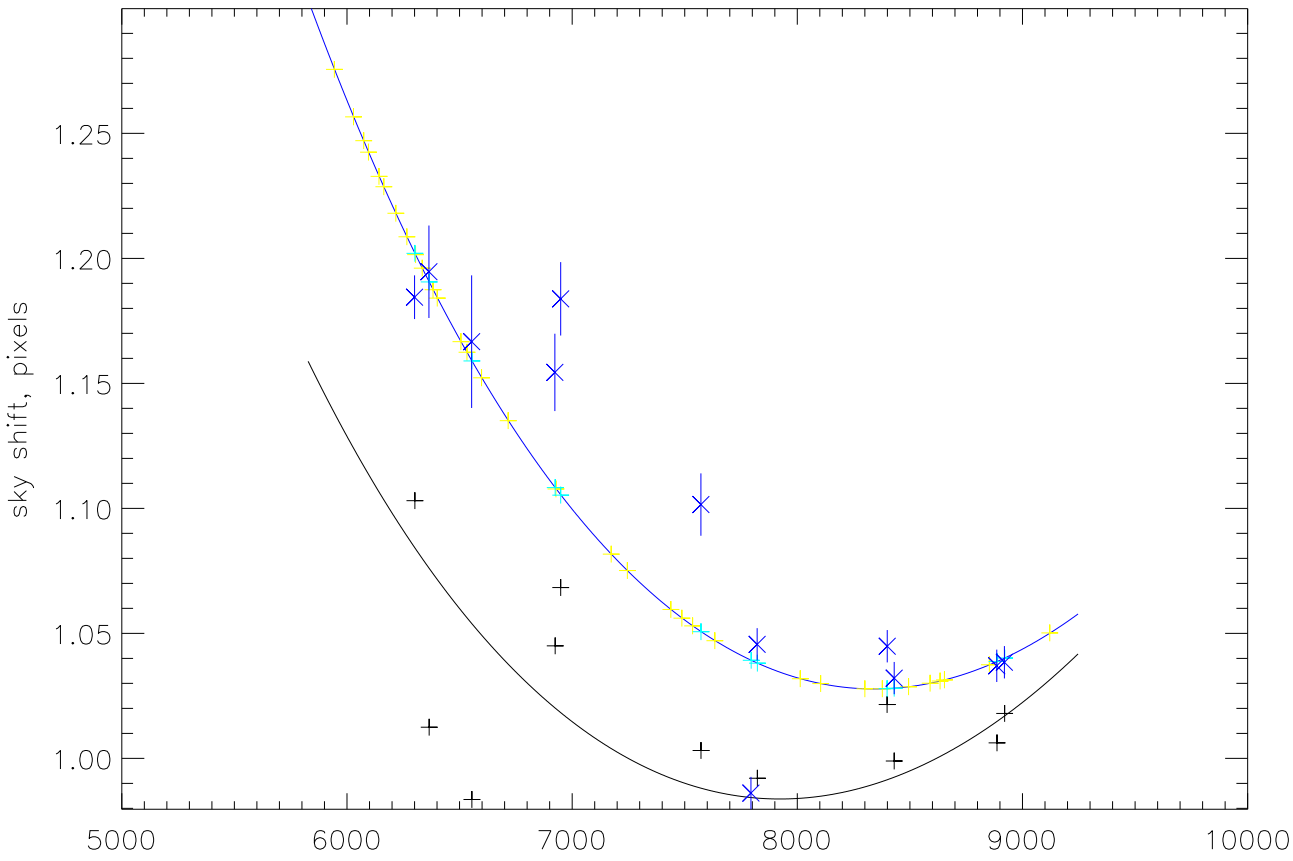

8399.1600
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

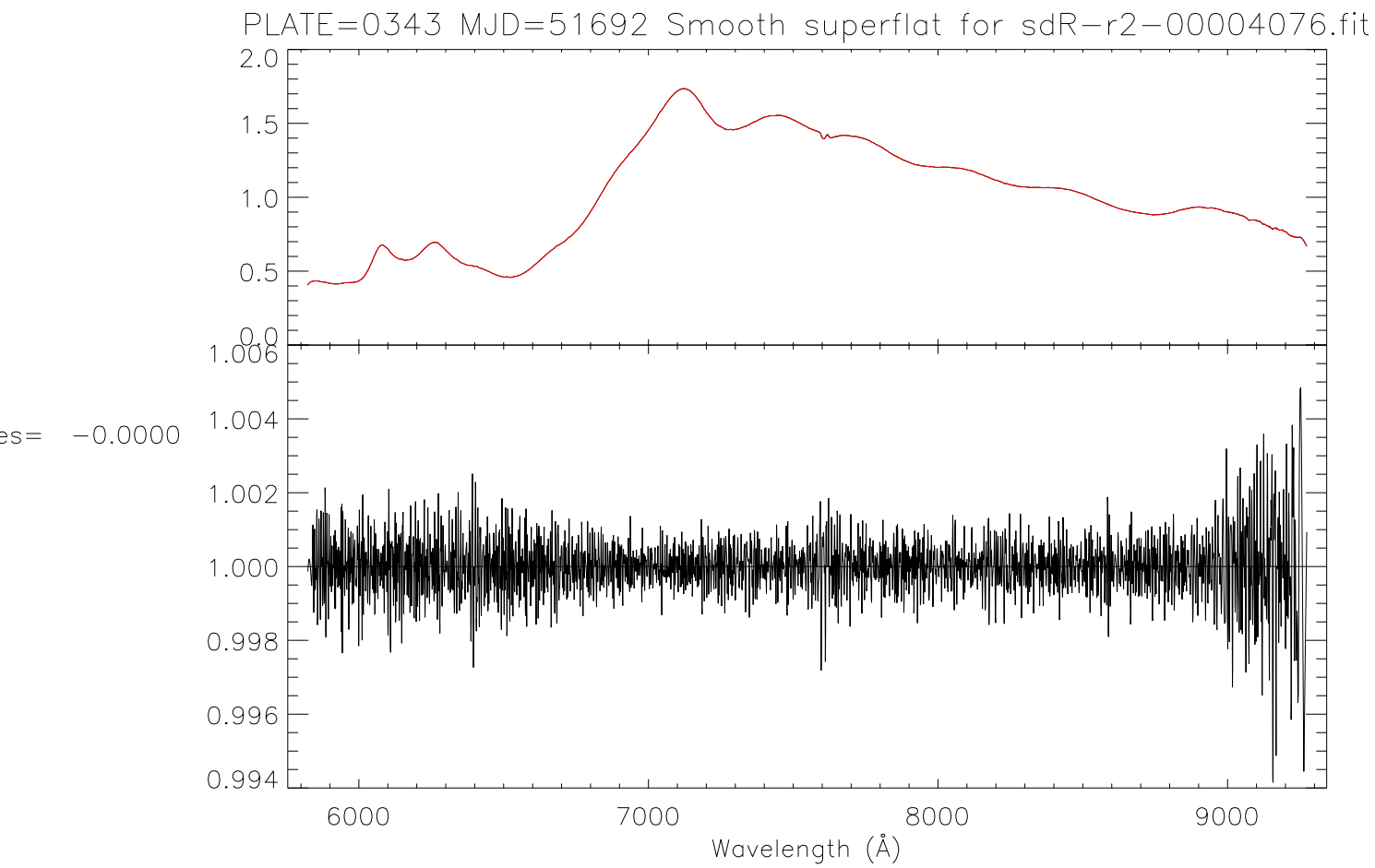

8430.1700
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400


8885.8300
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

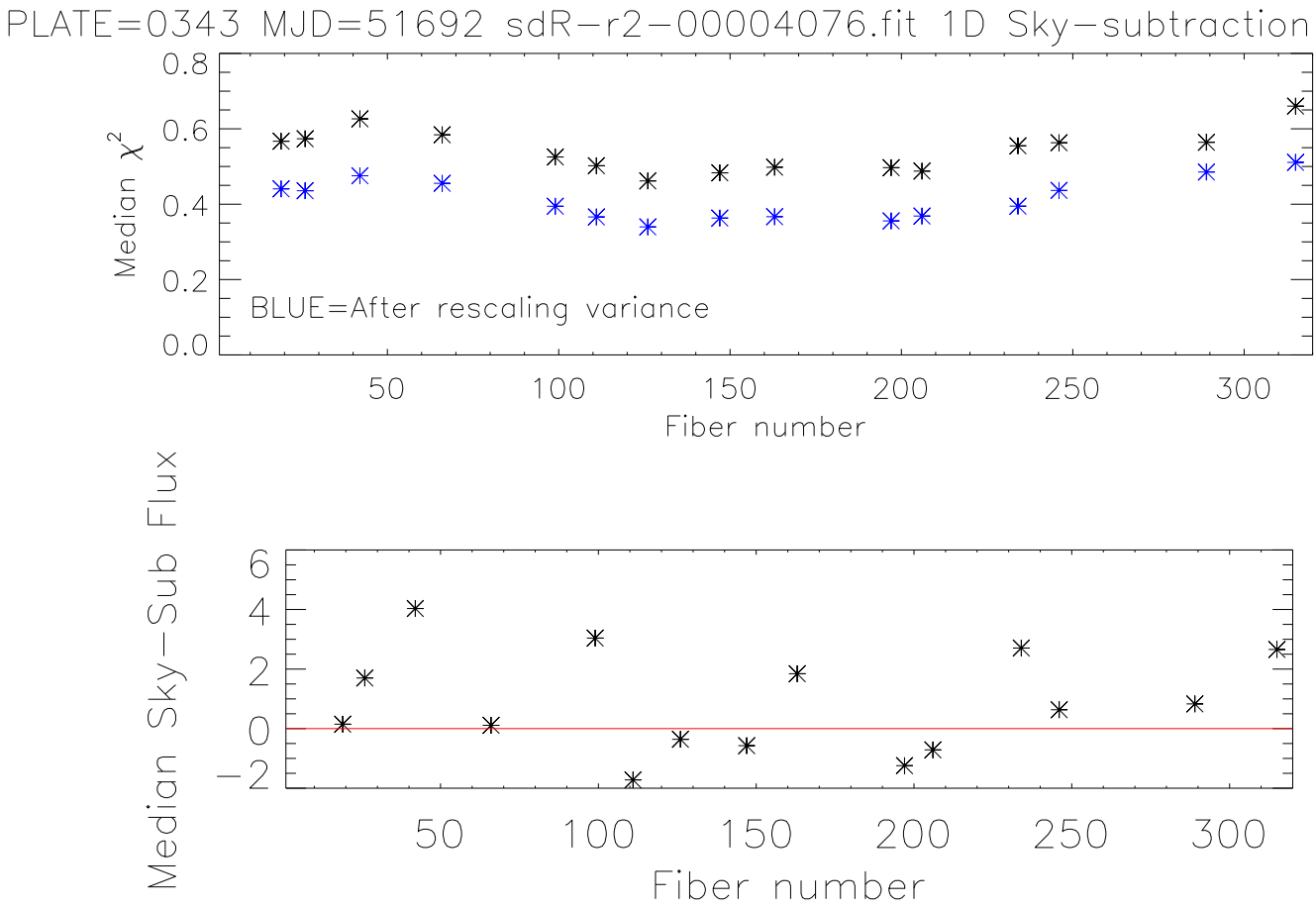

8919.6100
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400


6300.3040
stdev 0.024
extra 1.18
6363.7760
stdev 0.047
extra 1.19
6553.6100
stdev 0.063
extra 1.17
6923.2100
stdev 0.057
extra 1.15
6949.0300
stdev 0.045
extra 1.18
7571.7500
stdev 0.040
extra 1.10
7794.1200
stdev 0.023
extra 0.99
7821.5100
stdev 0.030
extra 1.05
8399.1600
stdev 0.024
extra 1.04
8430.1700
stdev 0.039
extra 1.03
8885.8300
stdev 0.047
extra 1.04
8919.6100
stdev 0.026
extra 1.04
meas − pred, pix
0 100 200 300 400
1.0
0.5
0.0
−0.5
−1.0

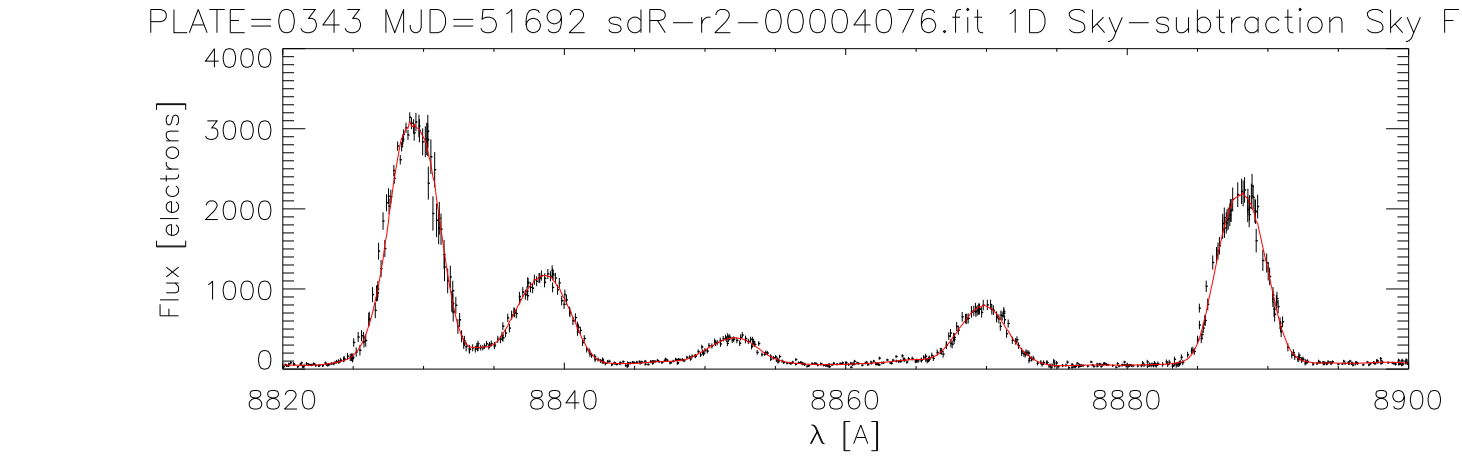

sky shift, pixels
1.25
1.20
1.15
1.10
1.05
1.00
5000
6000
7000
8000
9000
10000

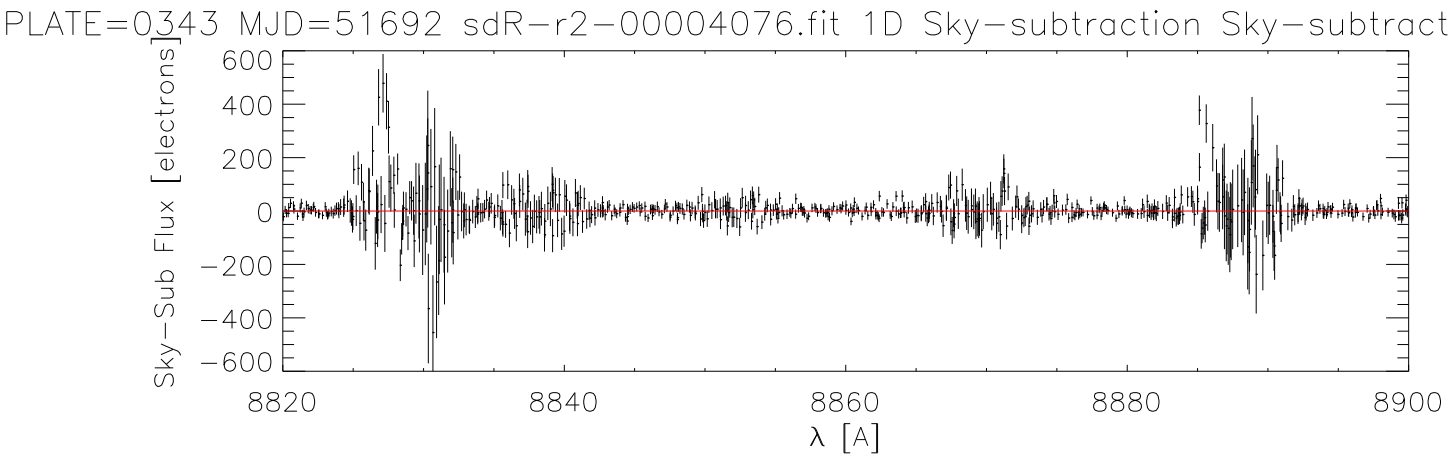

PLATE=0343 MJD=51692 Smooth superflat for sdR-r2-00004076.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

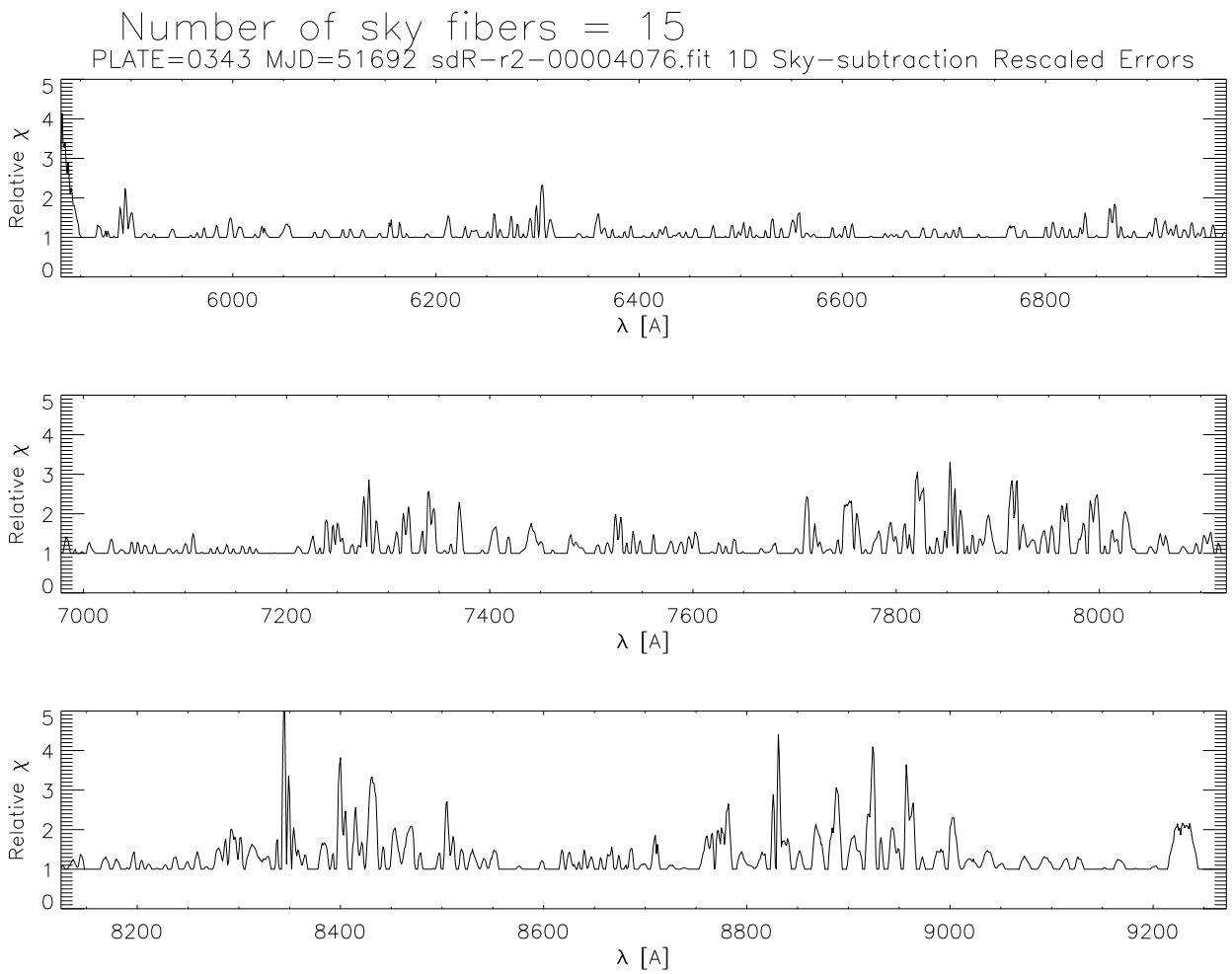
es= −0.0000

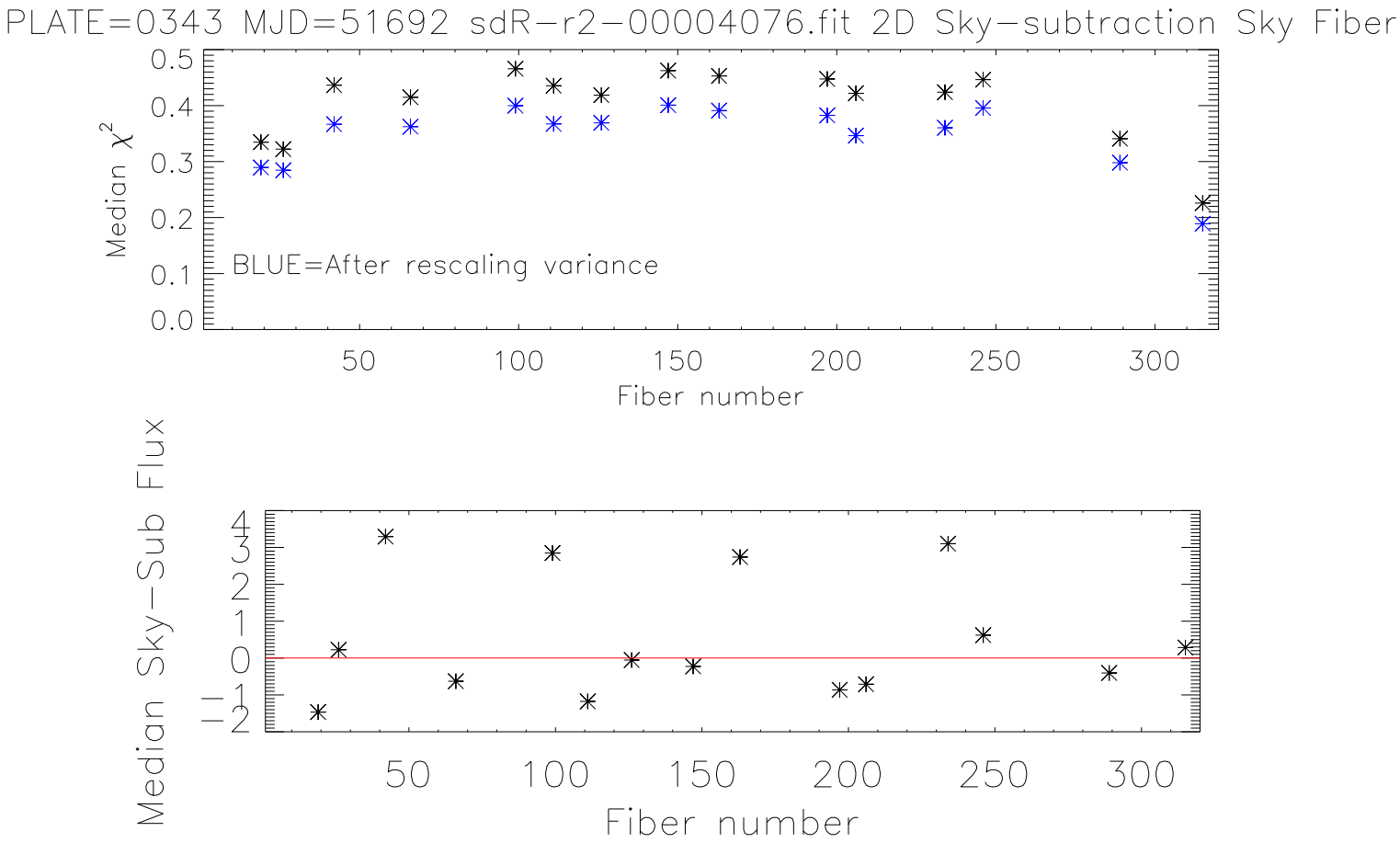

PLATE=0343 MJD=51692 sdR-r2-00004076.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

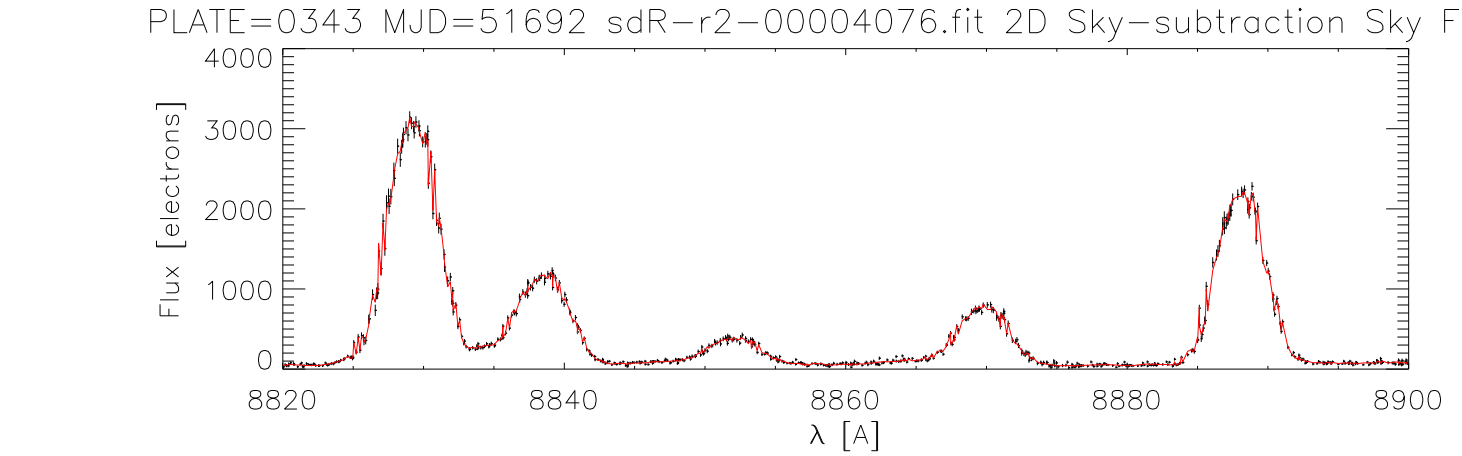
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

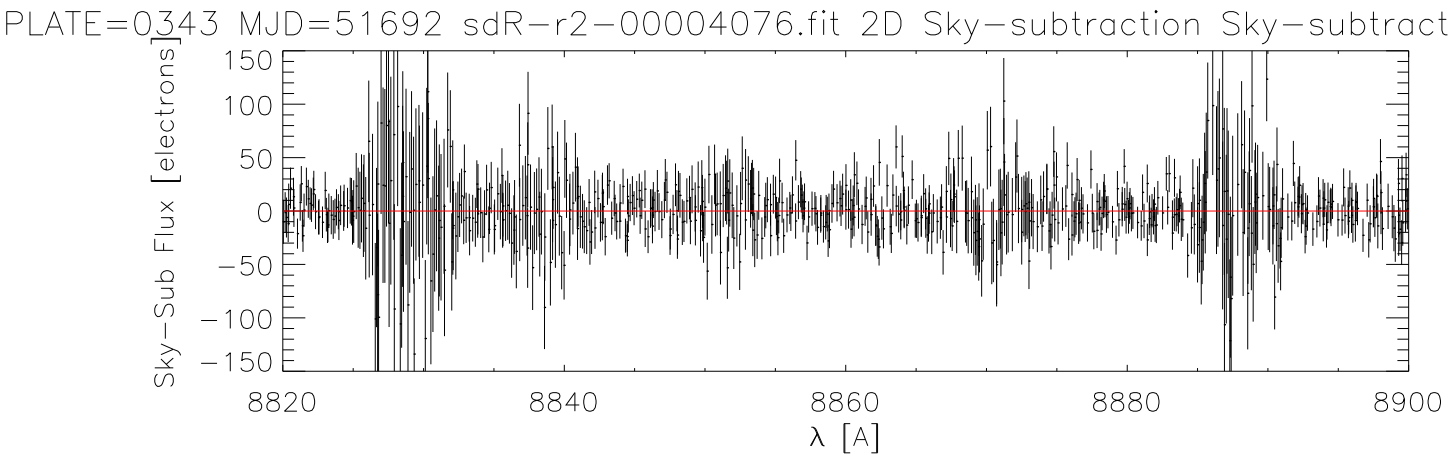

PLATE=0343 MJD=51692 sdR-r2-00004076.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

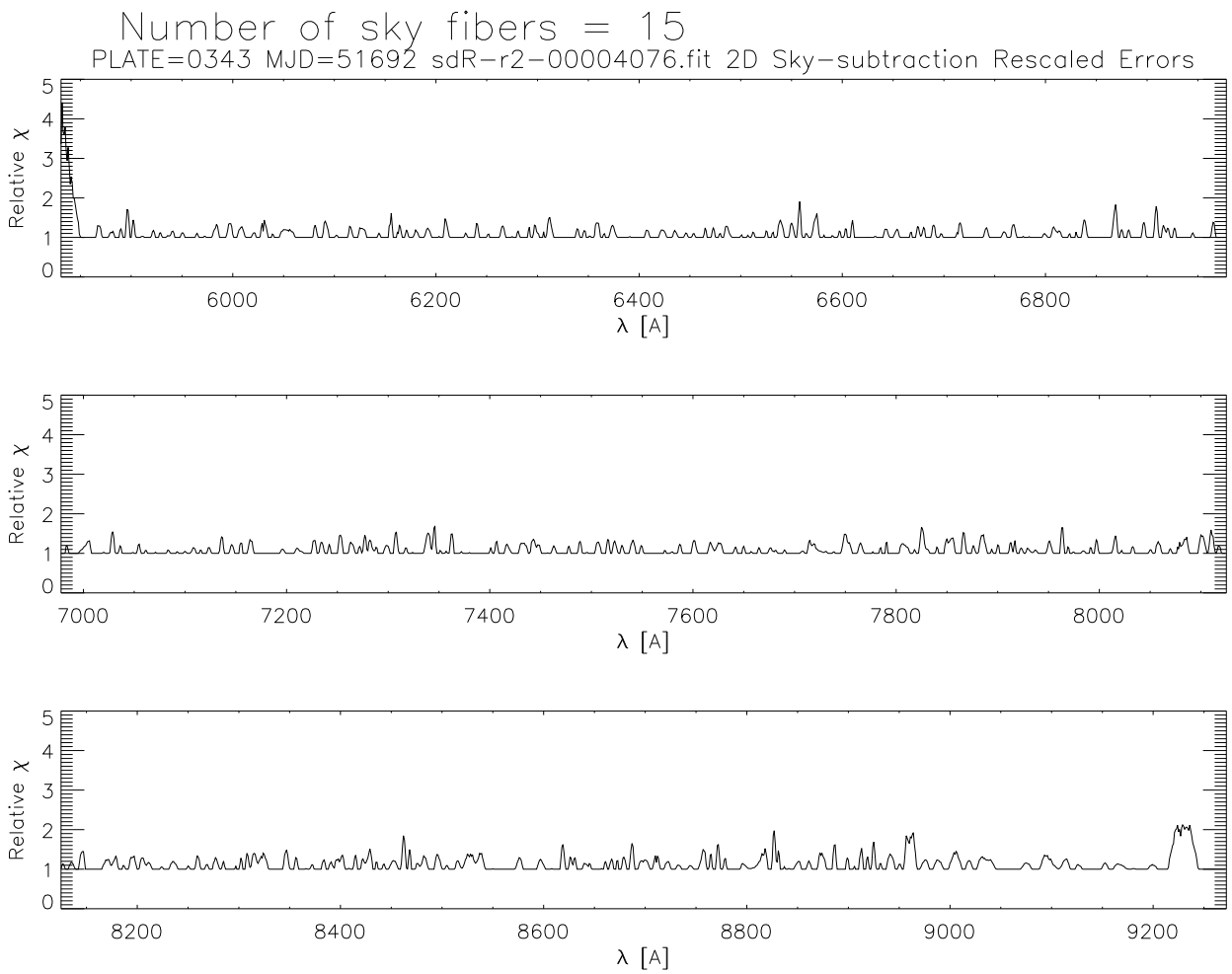

PLATE=0343 MJD=51692 sdR-r2-00004076.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

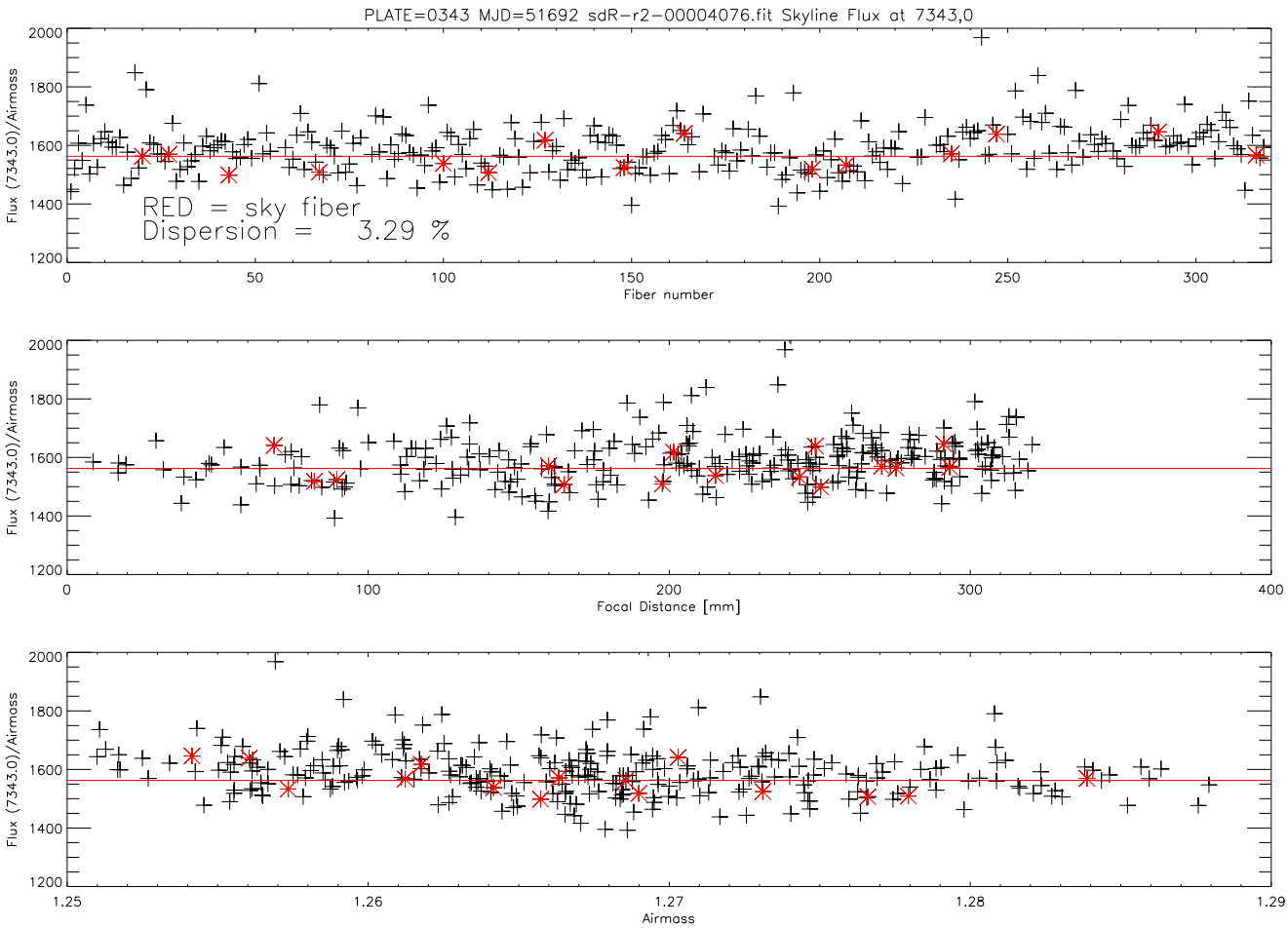

Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004076.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

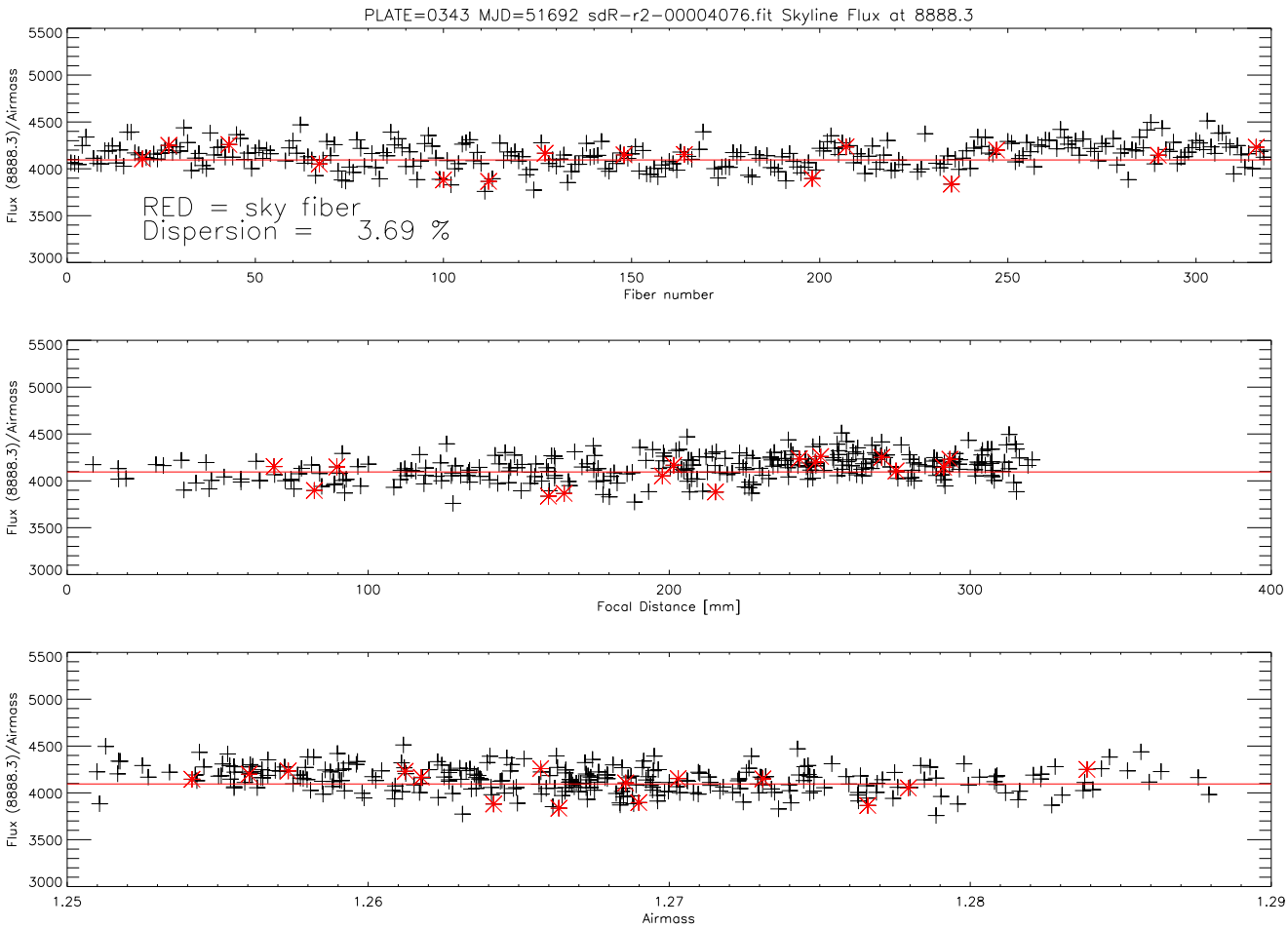

PLATE=0343 MJD=51692 sdR-r2-00004076.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0343 MJD=51692 sdR-r2-00004076.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0343 MJD=51692 sdR-r2-00004076.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=0343 MJD=51692 sdR-r2-00004076.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=0343 MJD=51692 sdR-r2-00004076.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.29 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0343 MJD=51692 sdR-r2-00004076.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.69 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass