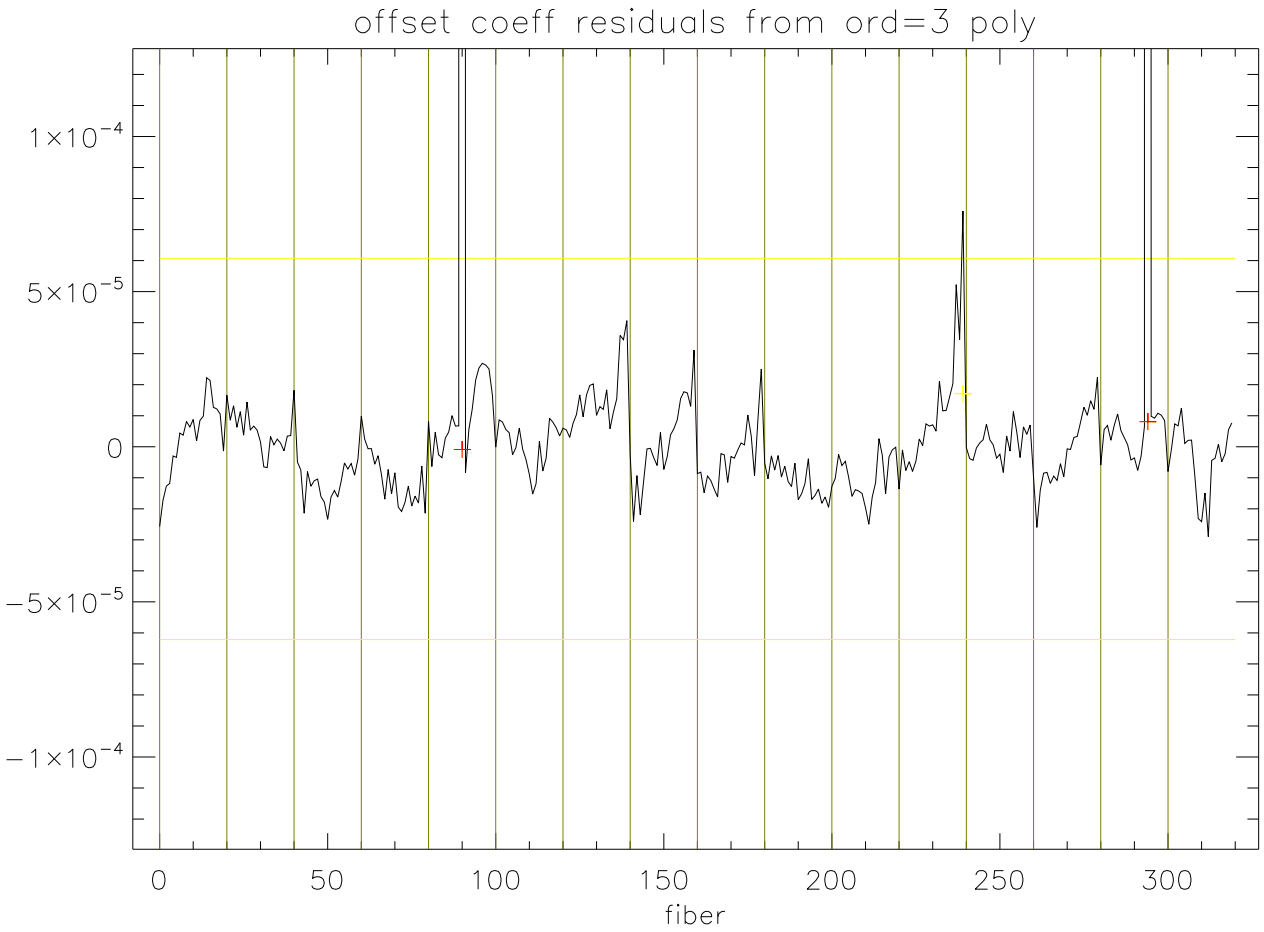
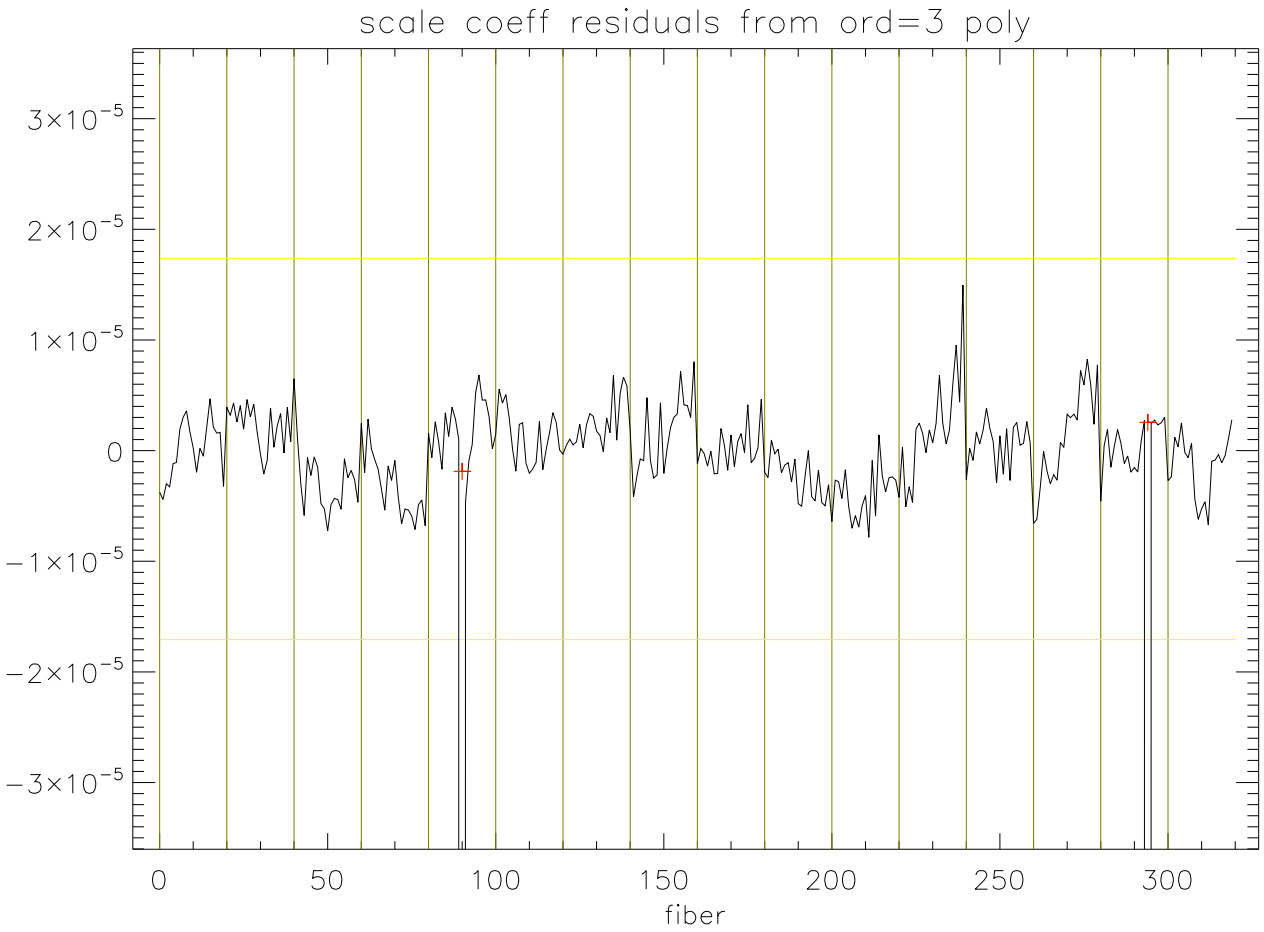
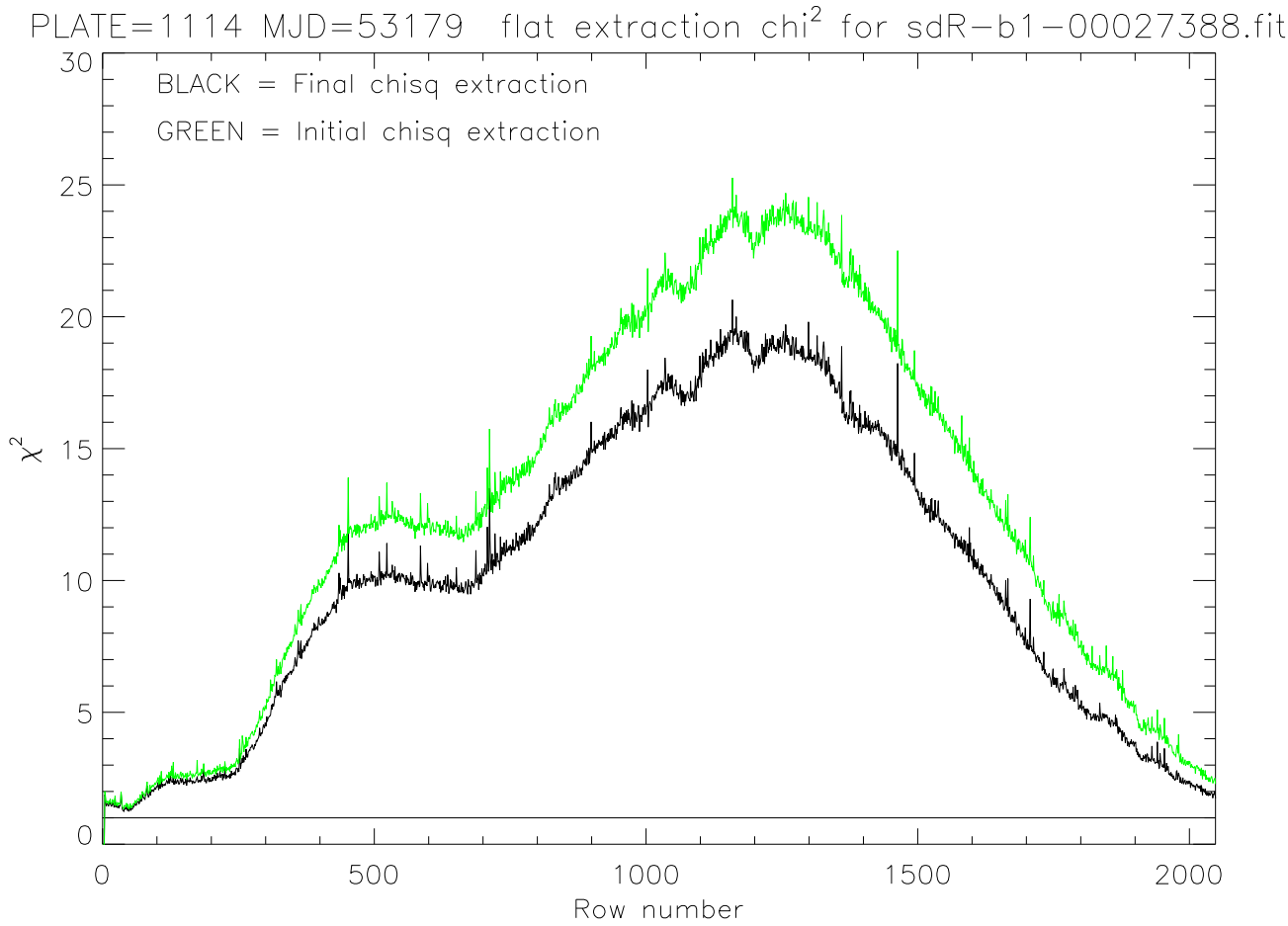
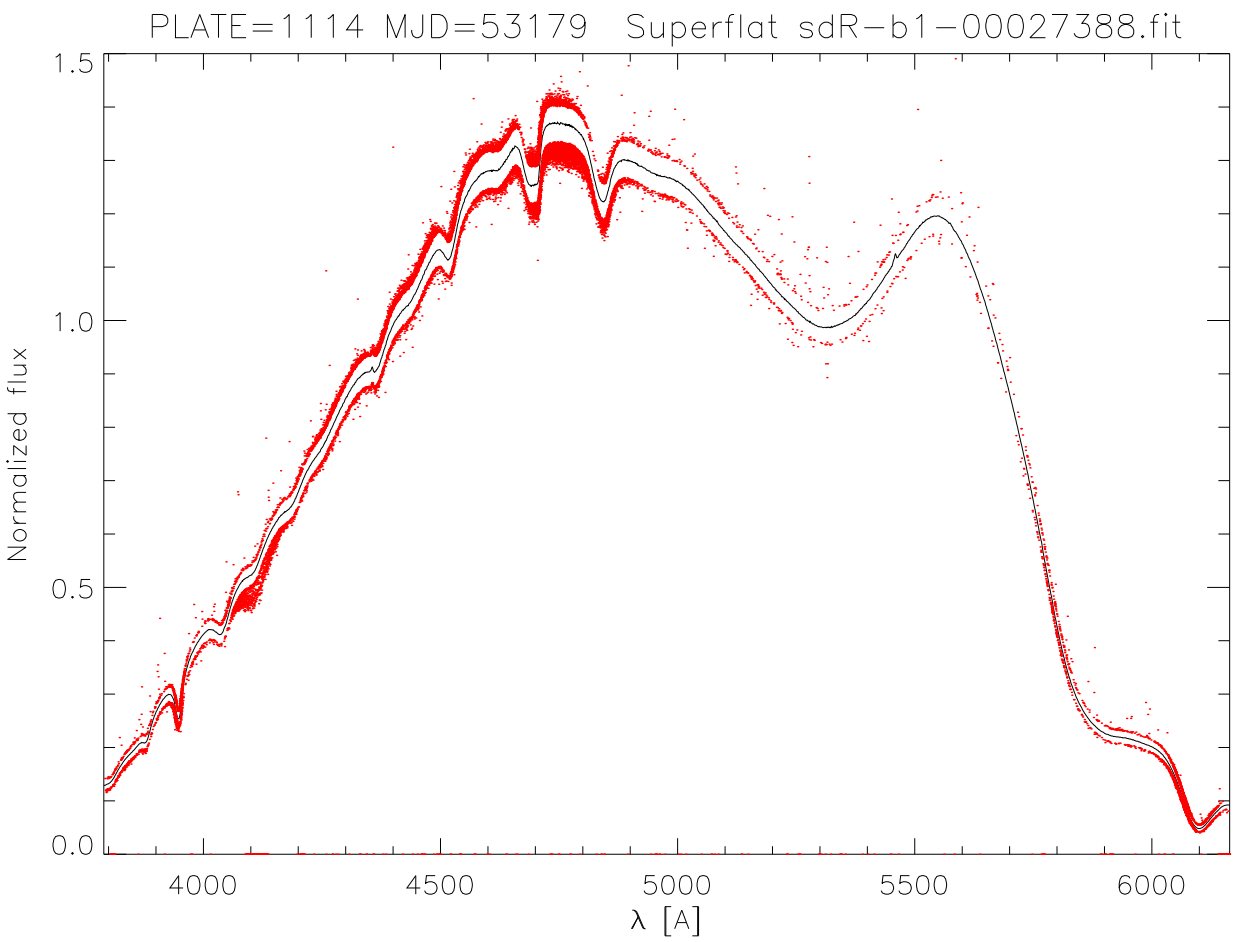
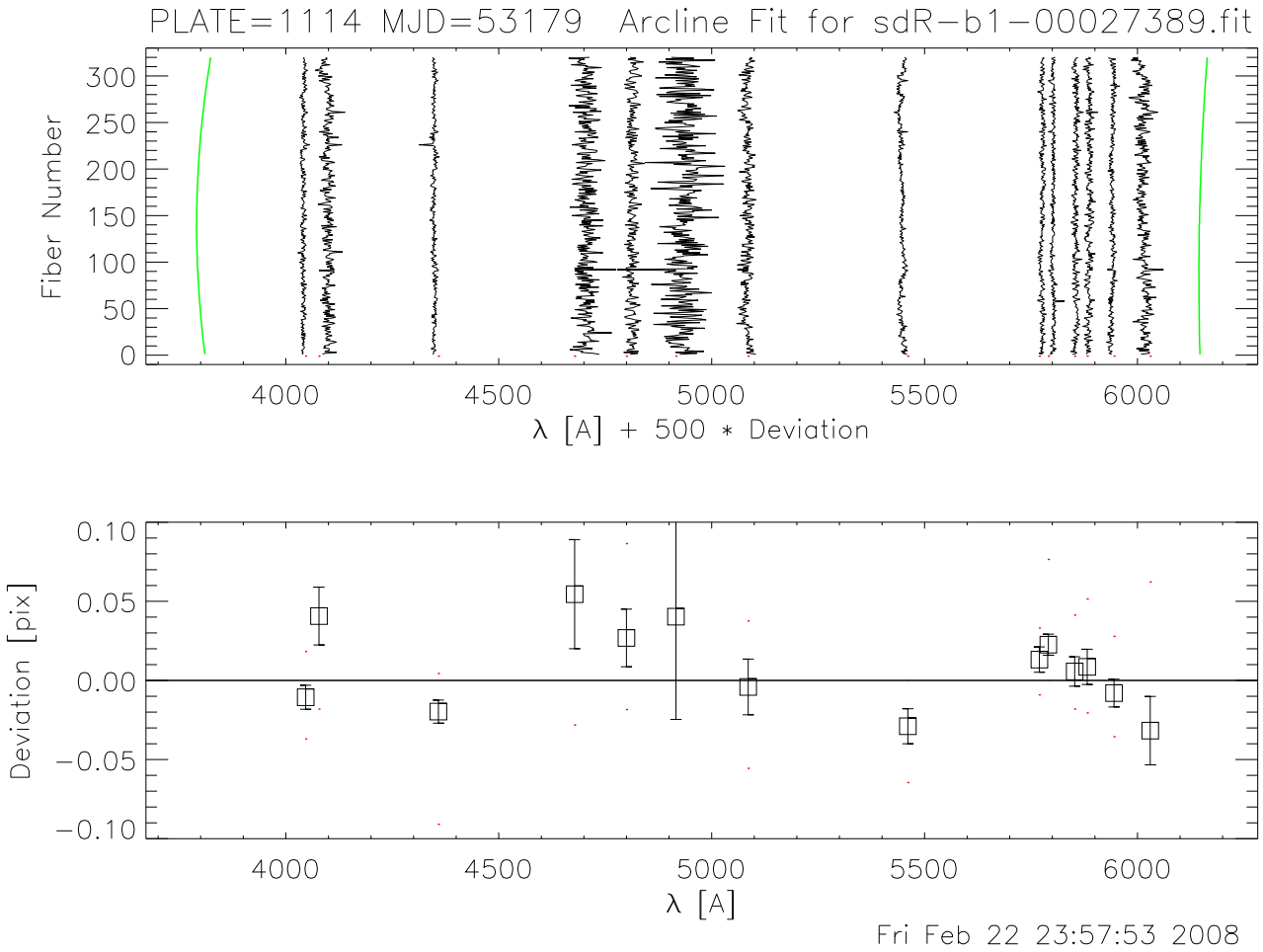
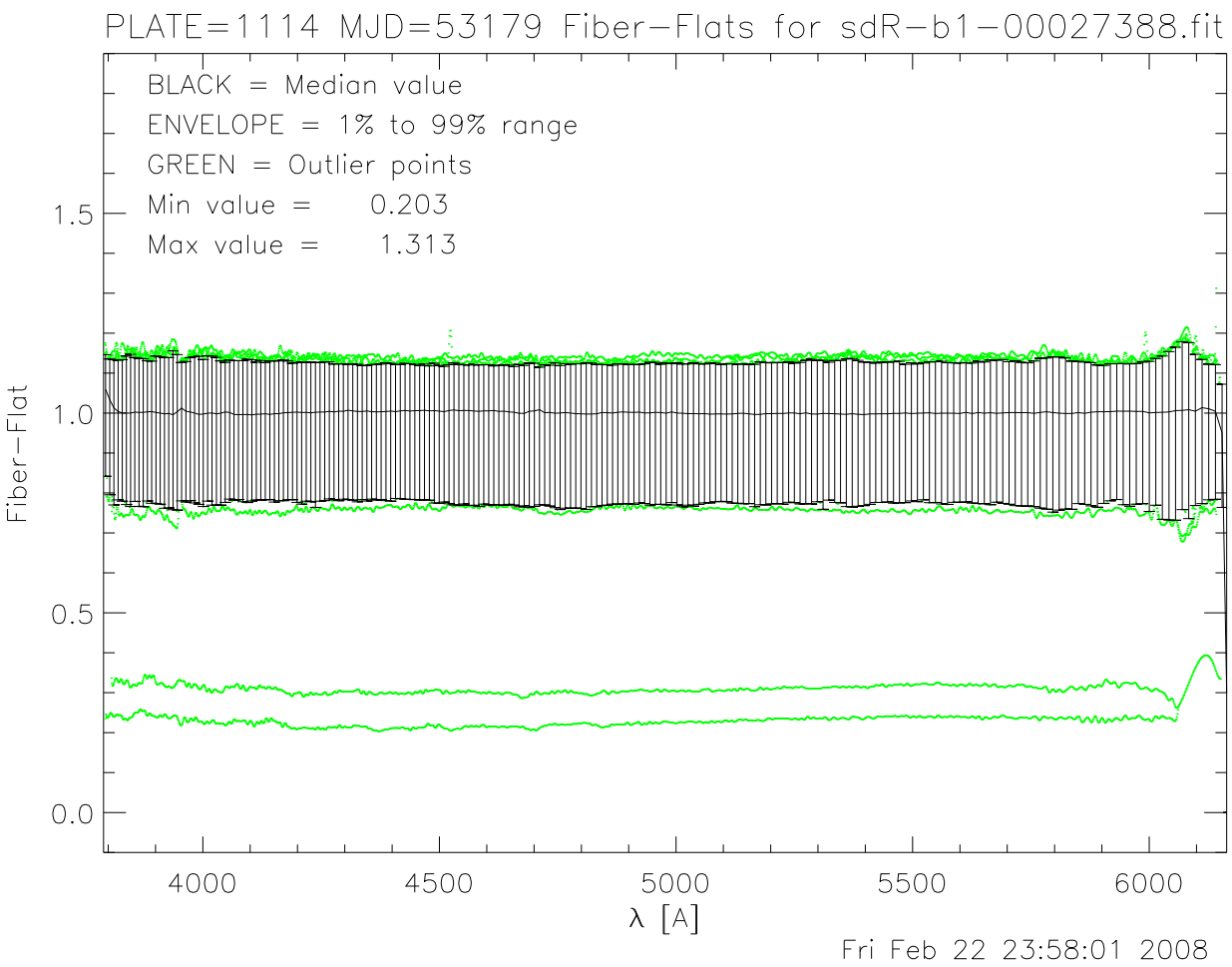

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

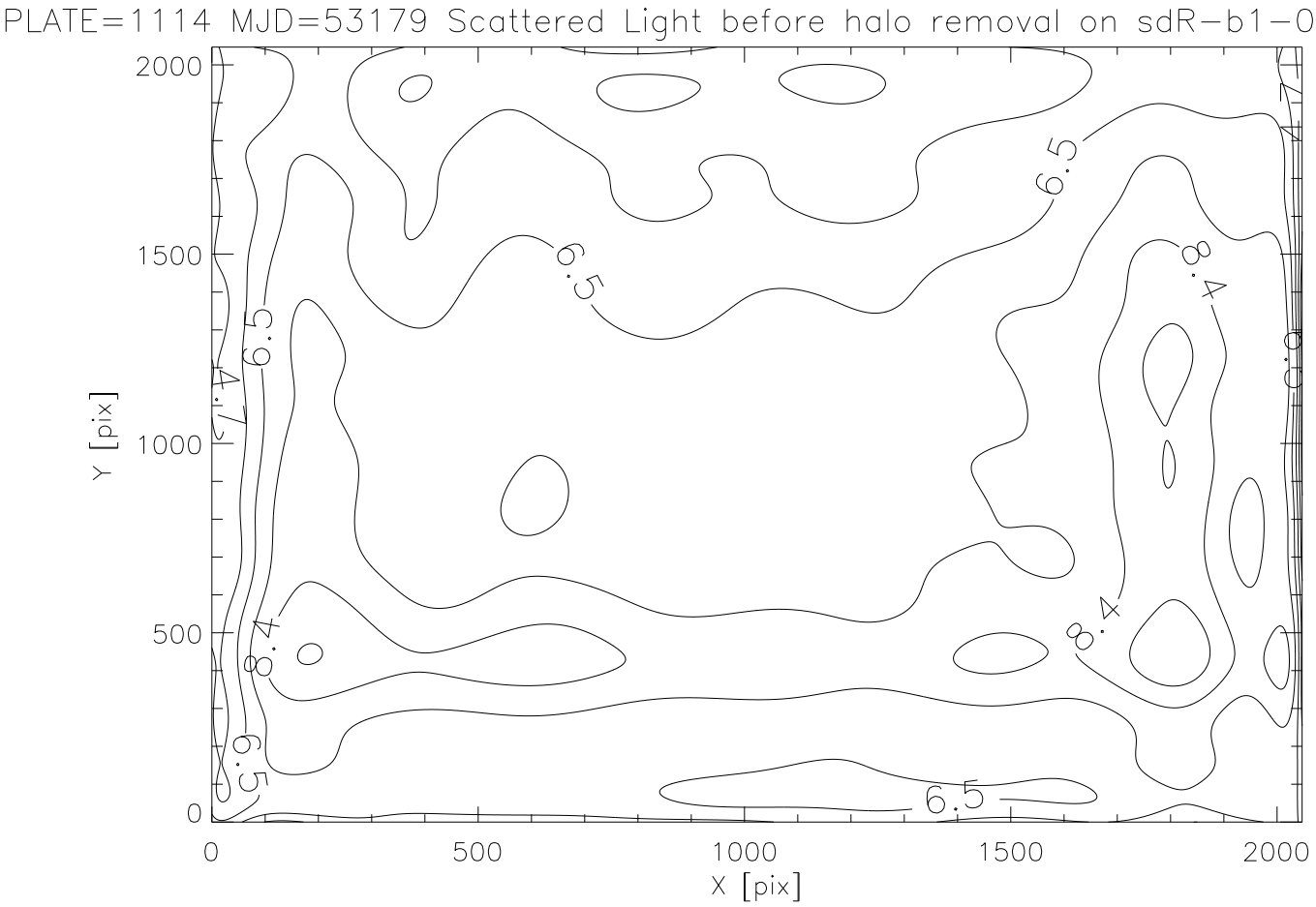

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

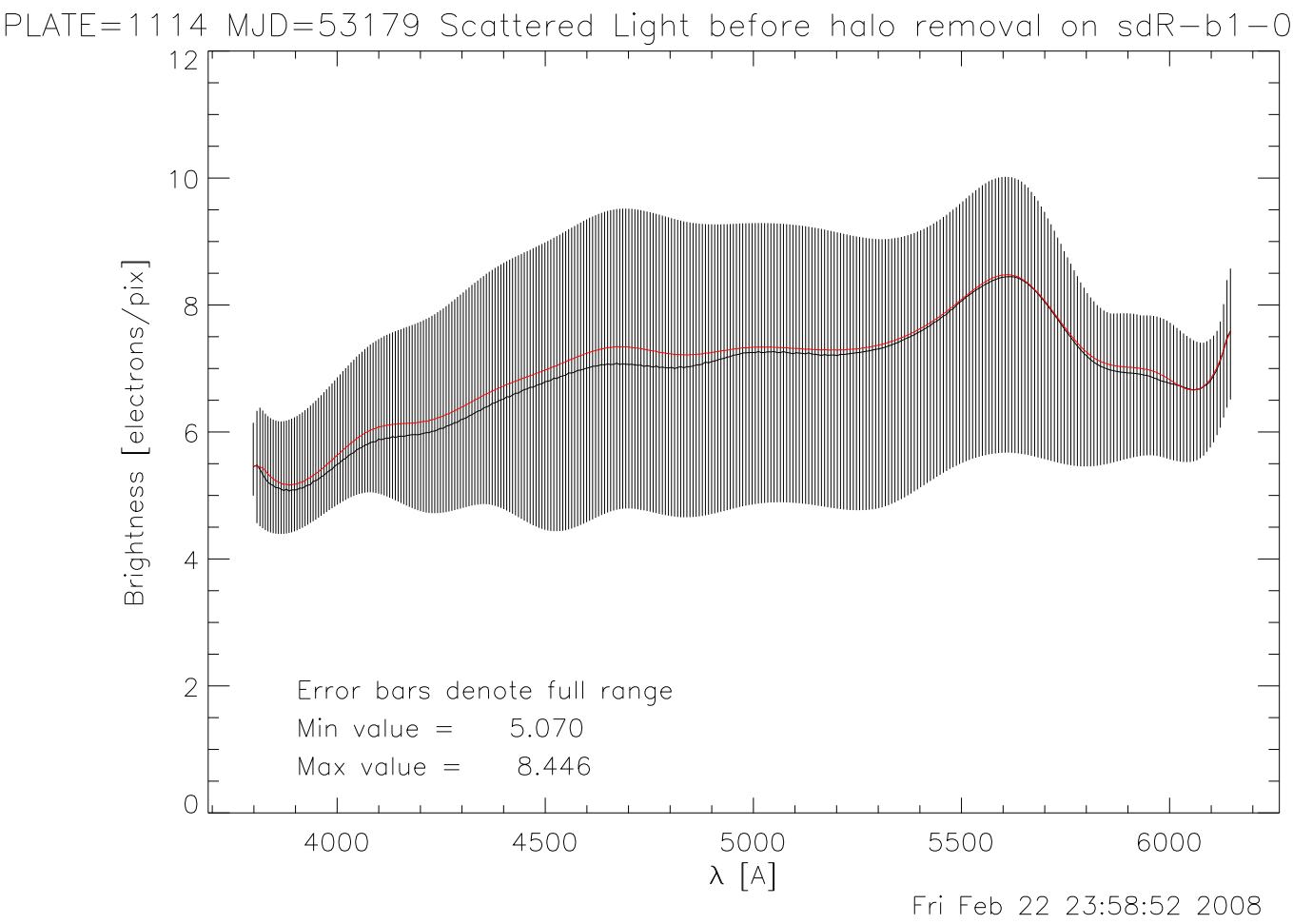

PLATE=1114 MJD=53179 flat extraction chi^2 for sdR−b1−00027388.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
30
0
500
1000
1500
2000

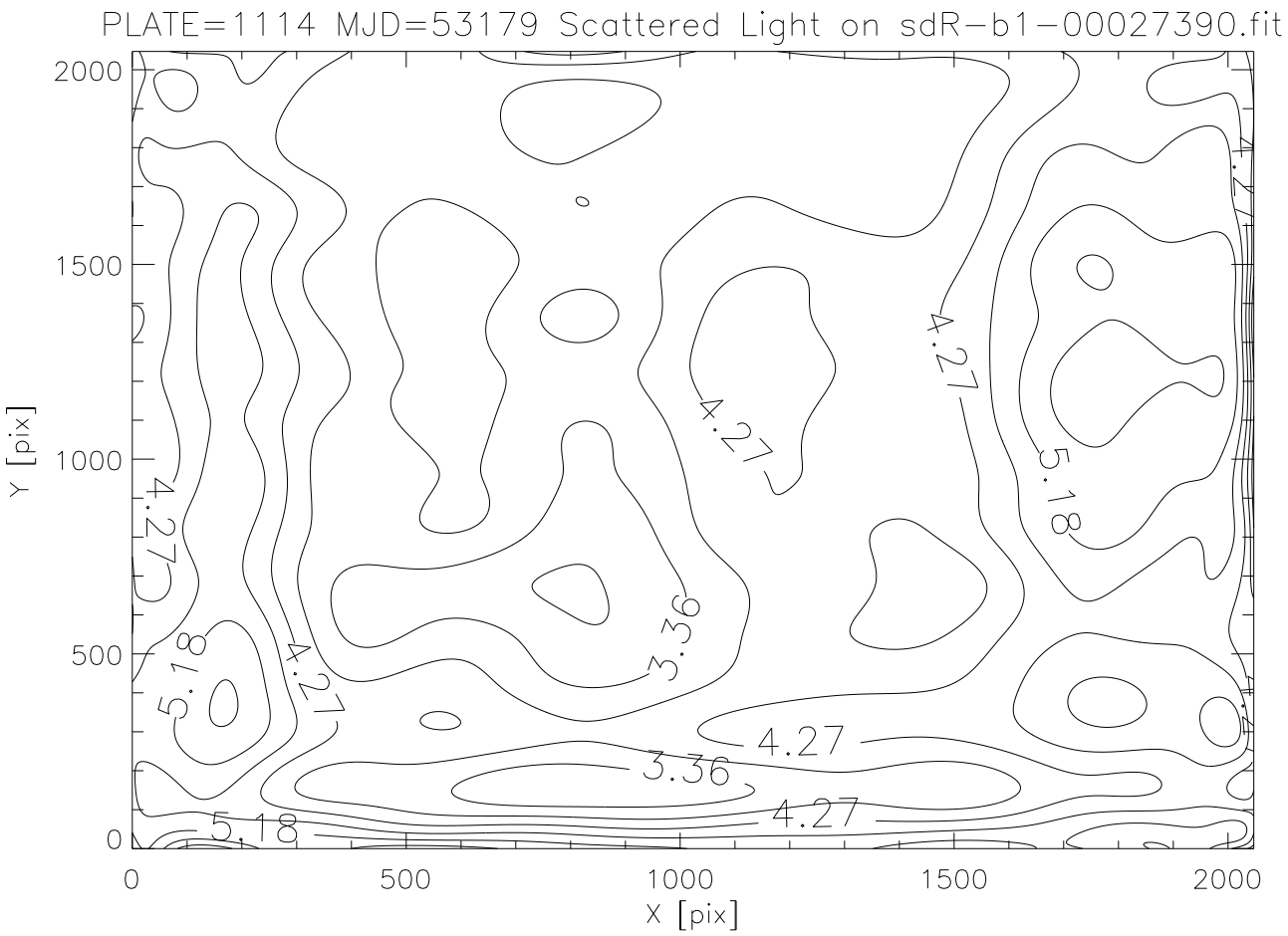

PLATE=1114 MJD=53179 Superflat sdR-b1-00027388.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

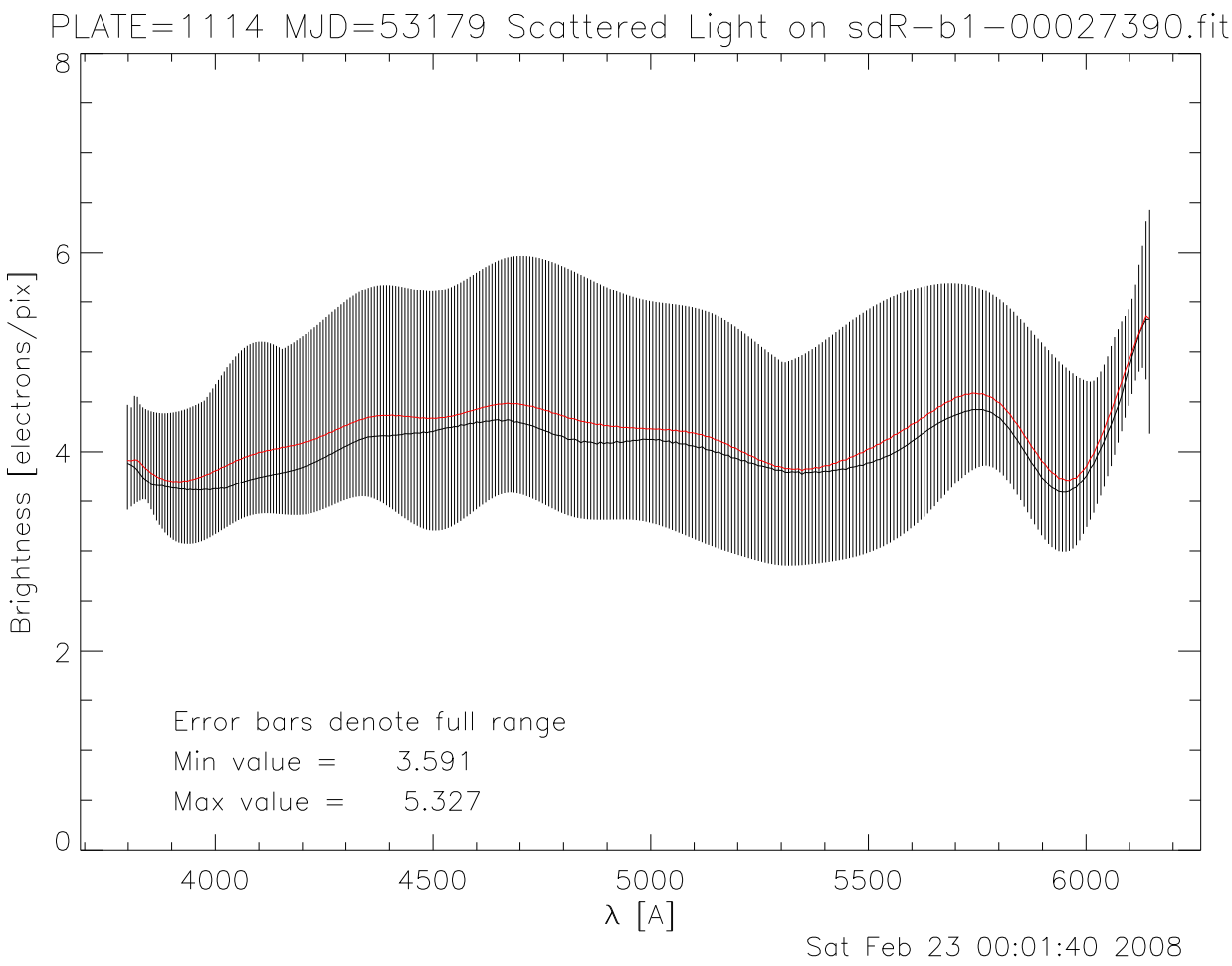

PLATE=1114 MJD=53179 Arcline Fit for sdR-b1-00027389.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Feb 22 23:57:53 2008

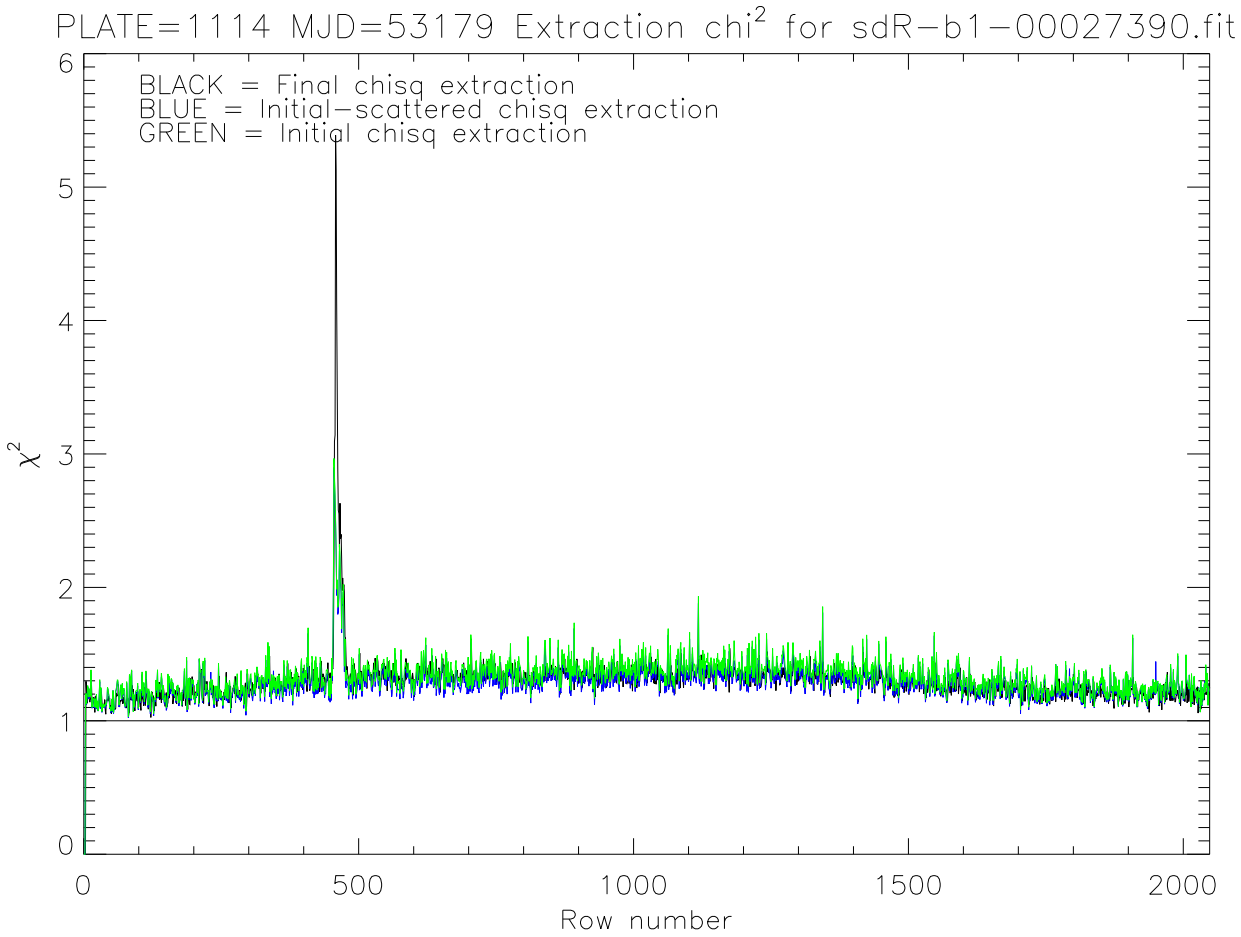

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b1-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.203
Max value = 1.313
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Feb 22 23:58:01 2008

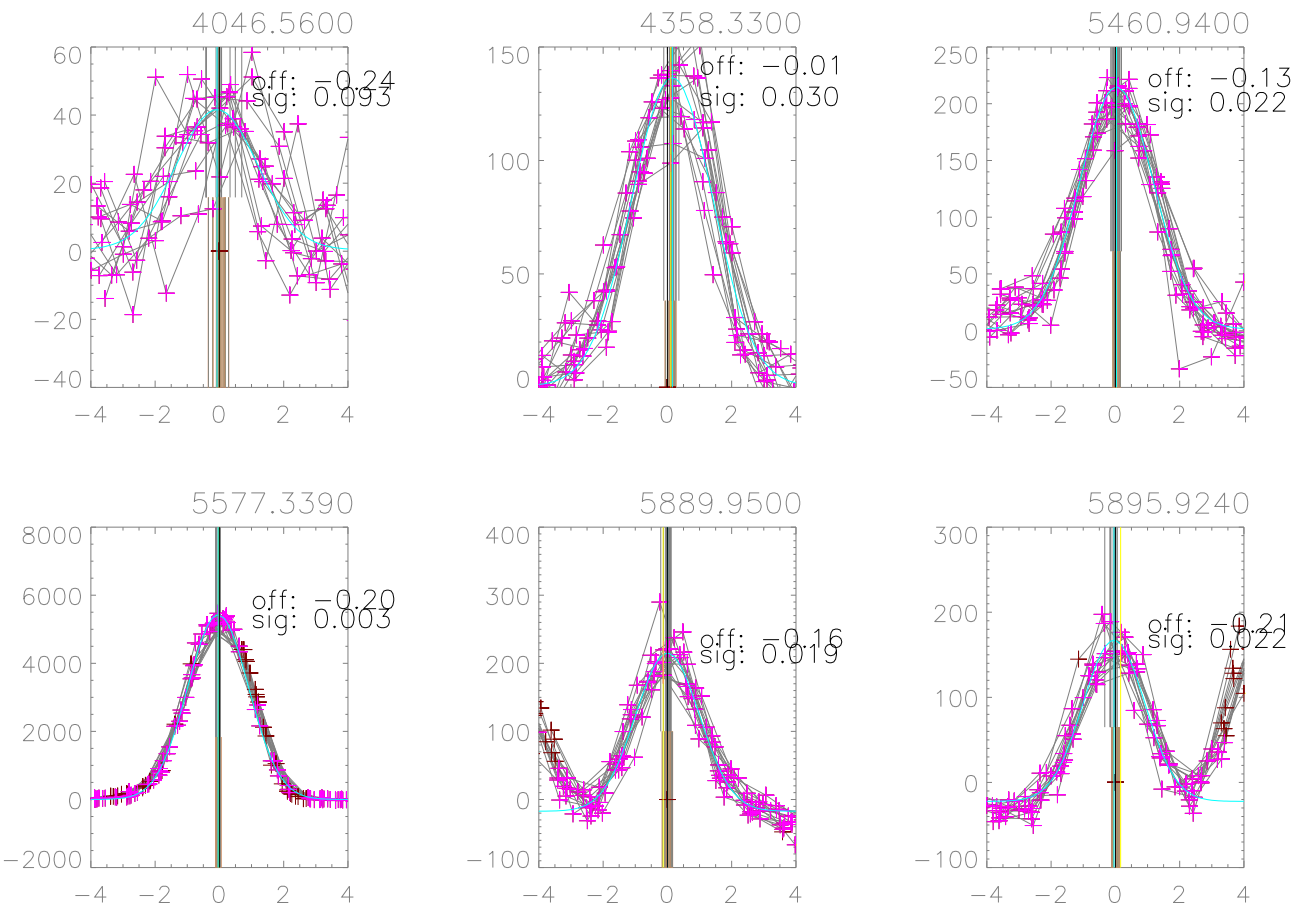

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b1-00027390.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
7.4

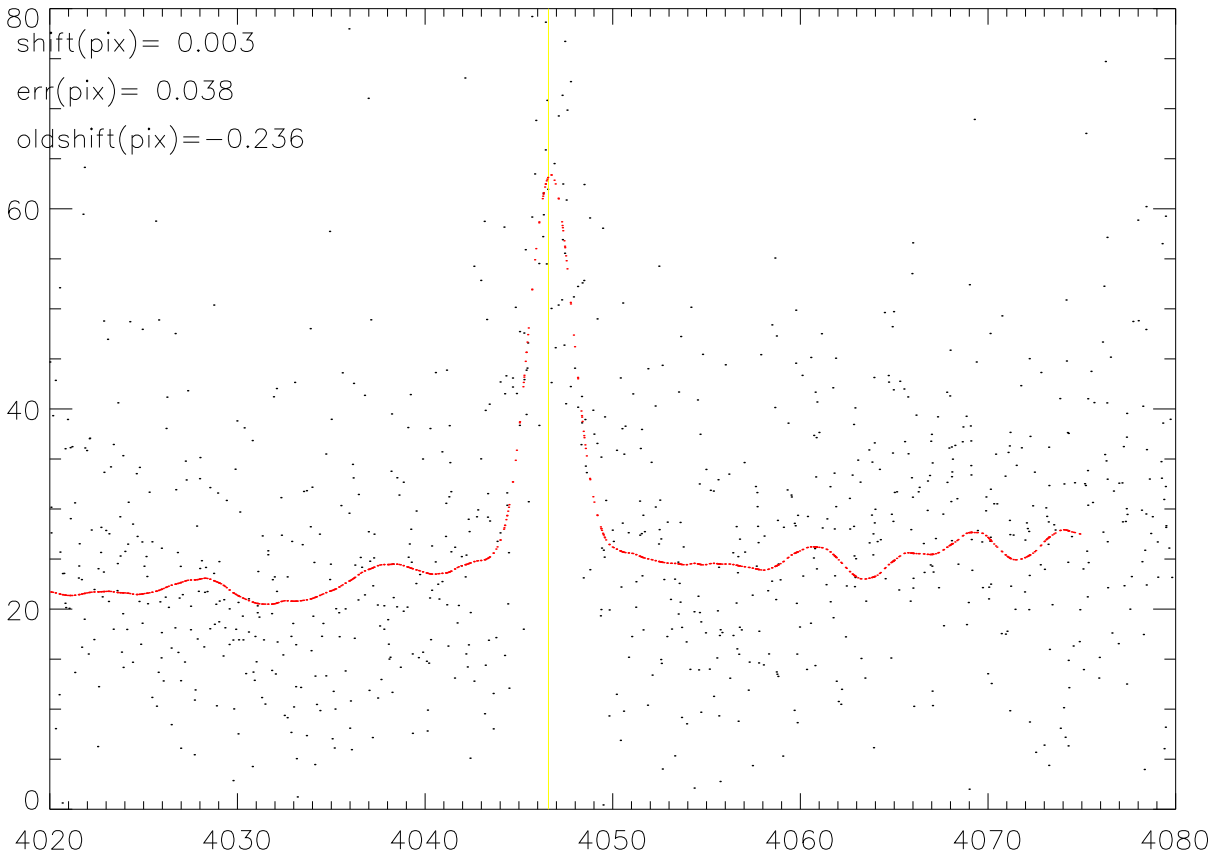

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b1-00027390.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.070
Max value = 8.446
Fri Feb 22 23:58:52 2008

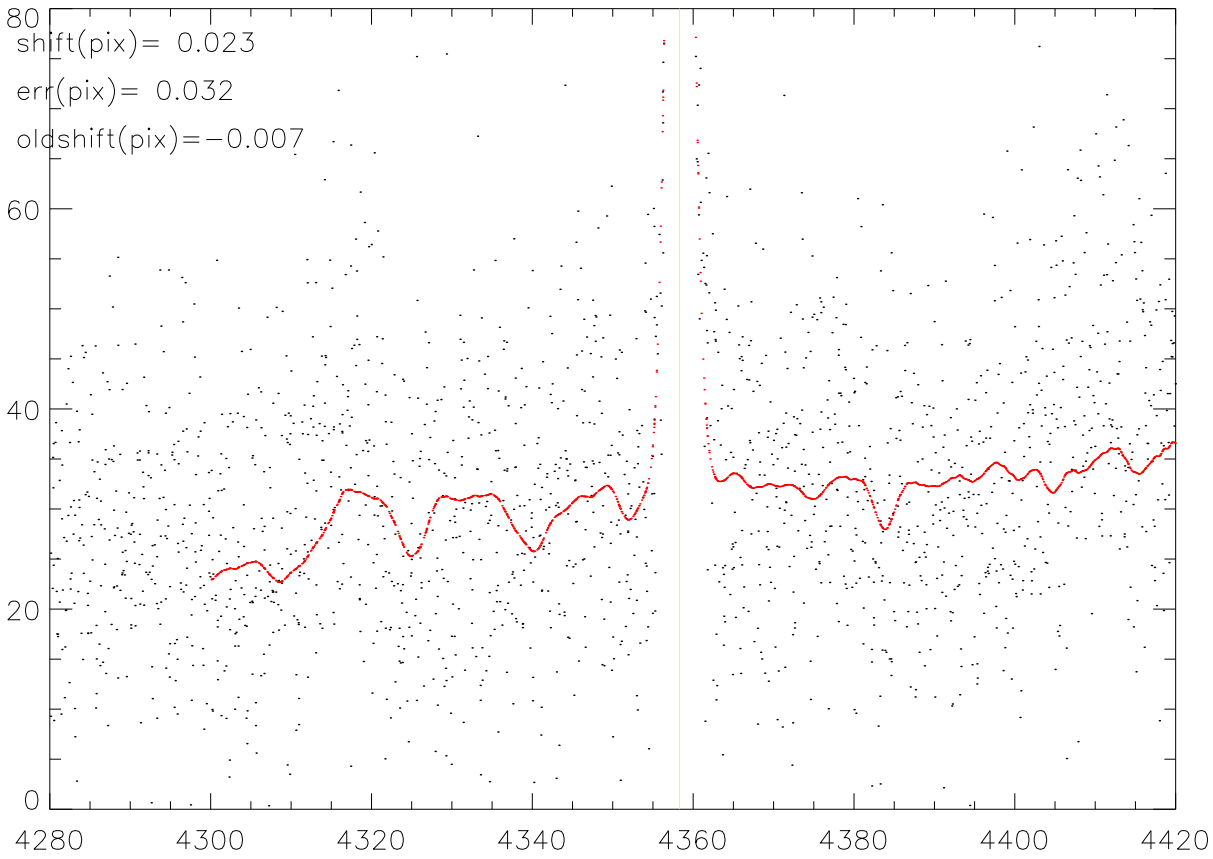

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027390.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.27
5.18
3.36

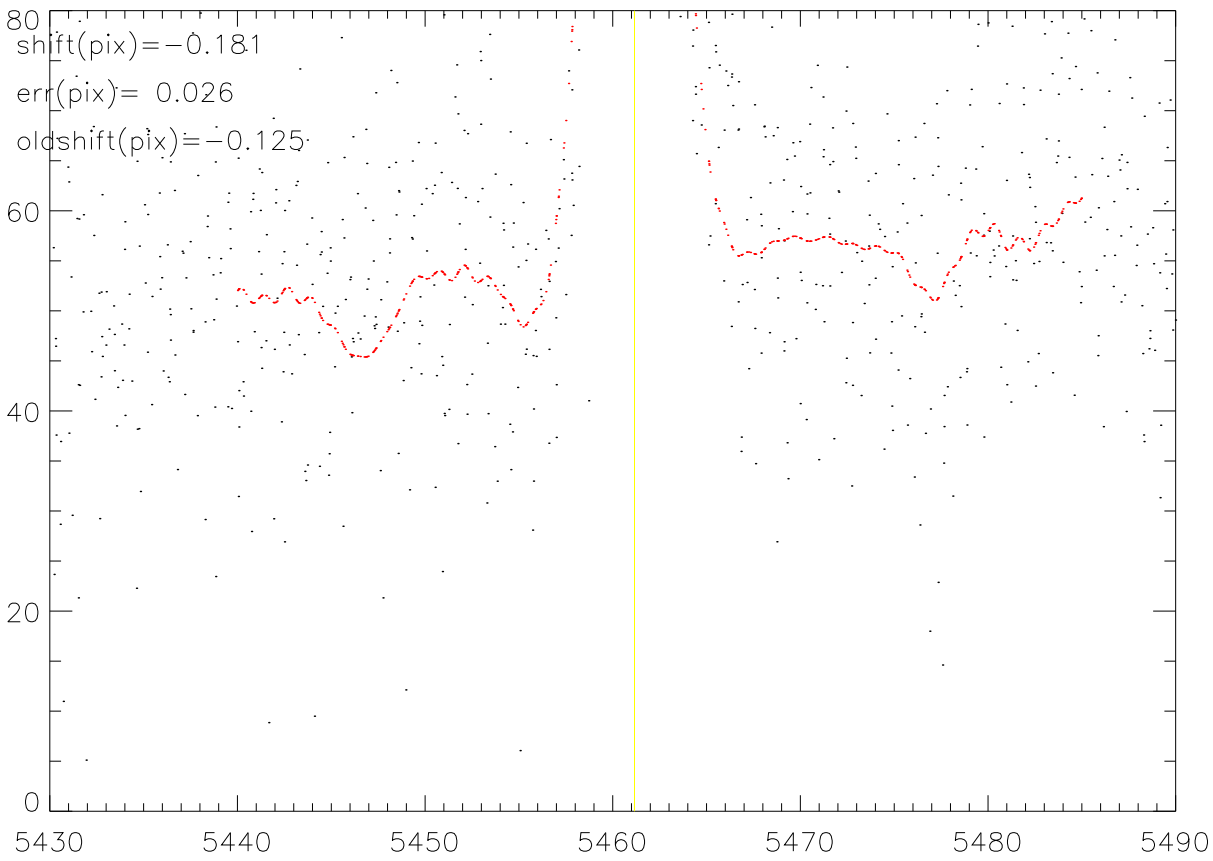

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027390.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.591
Max value = 5.327
Sat Feb 23 00:01:40 2008

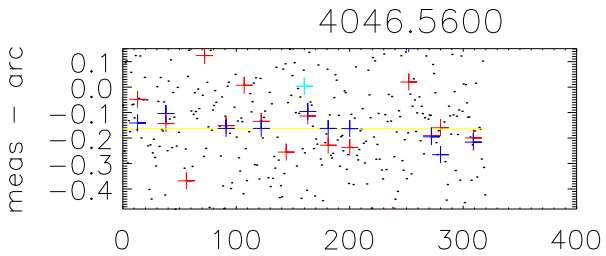

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b1-00027390.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

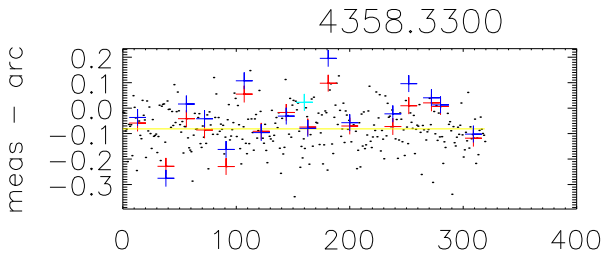

4046.5600
off: −0.24
sig: 0.093
4358.3300
off: −0.01
sig: 0.030
5460.9400
off: −0.13
sig: 0.022
5577.3390
off: −0.20
sig: 0.003
5889.9500
off: −0.16
sig: 0.019
5895.9240
off: −0.21
sig: 0.022

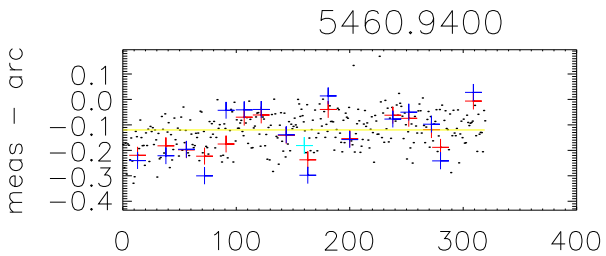

shift(pix)= 0.003
err(pix)= 0.038
oldshift(pix)=−0.236
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

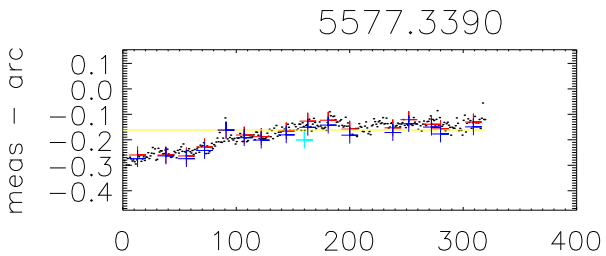

shift(pix)= 0.023
err(pix)= 0.032
oldshift(pix)=−0.007
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

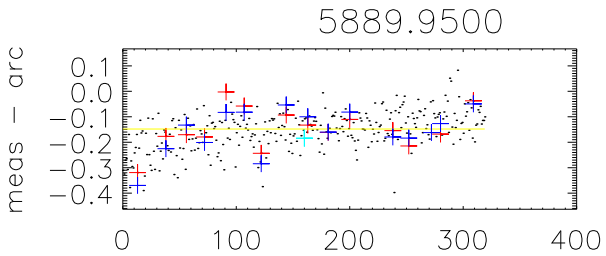

shift(pix)=−0.181
err(pix)= 0.026
oldshift(pix)=−0.125
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

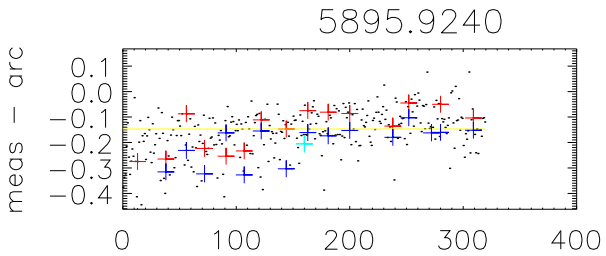

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

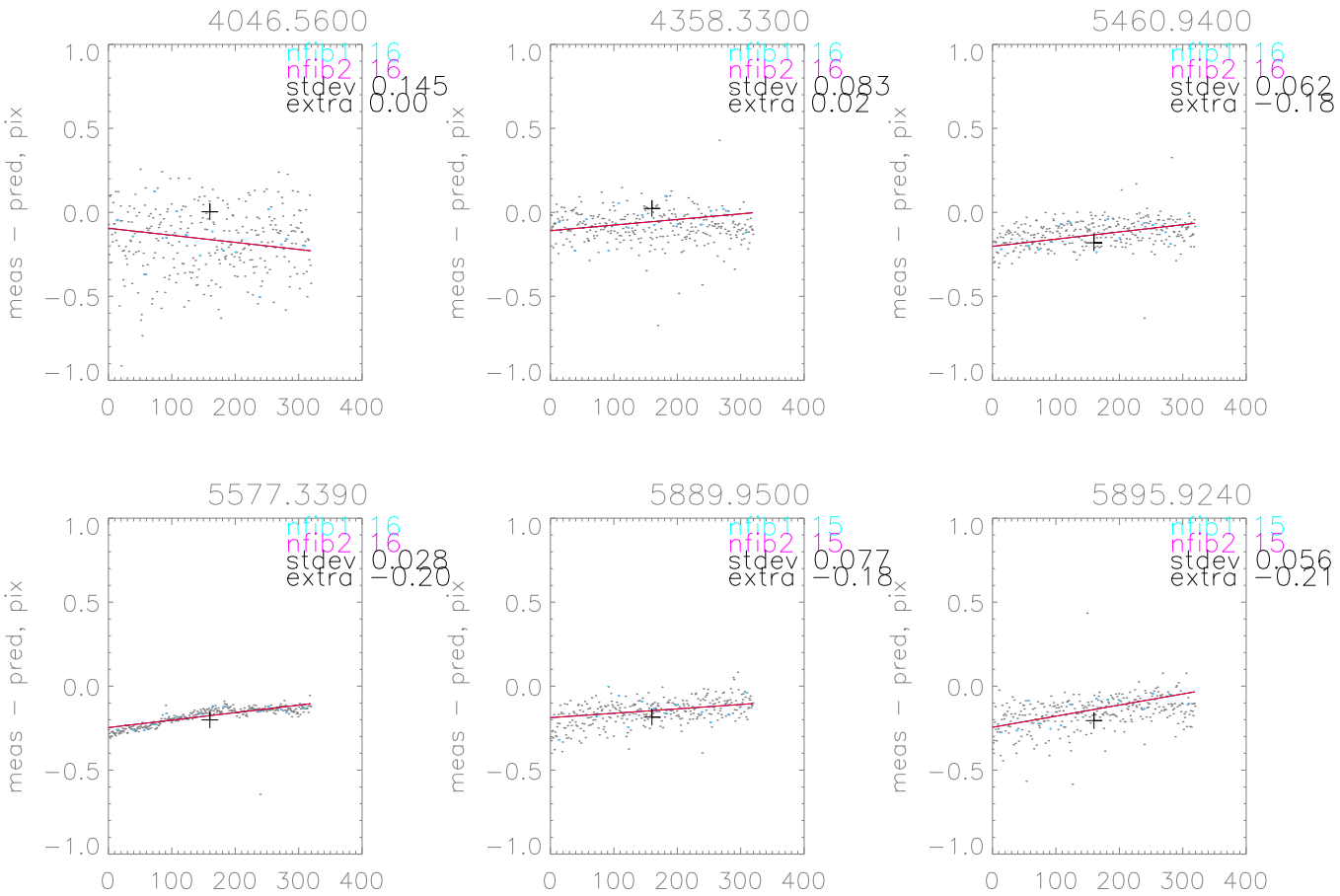

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

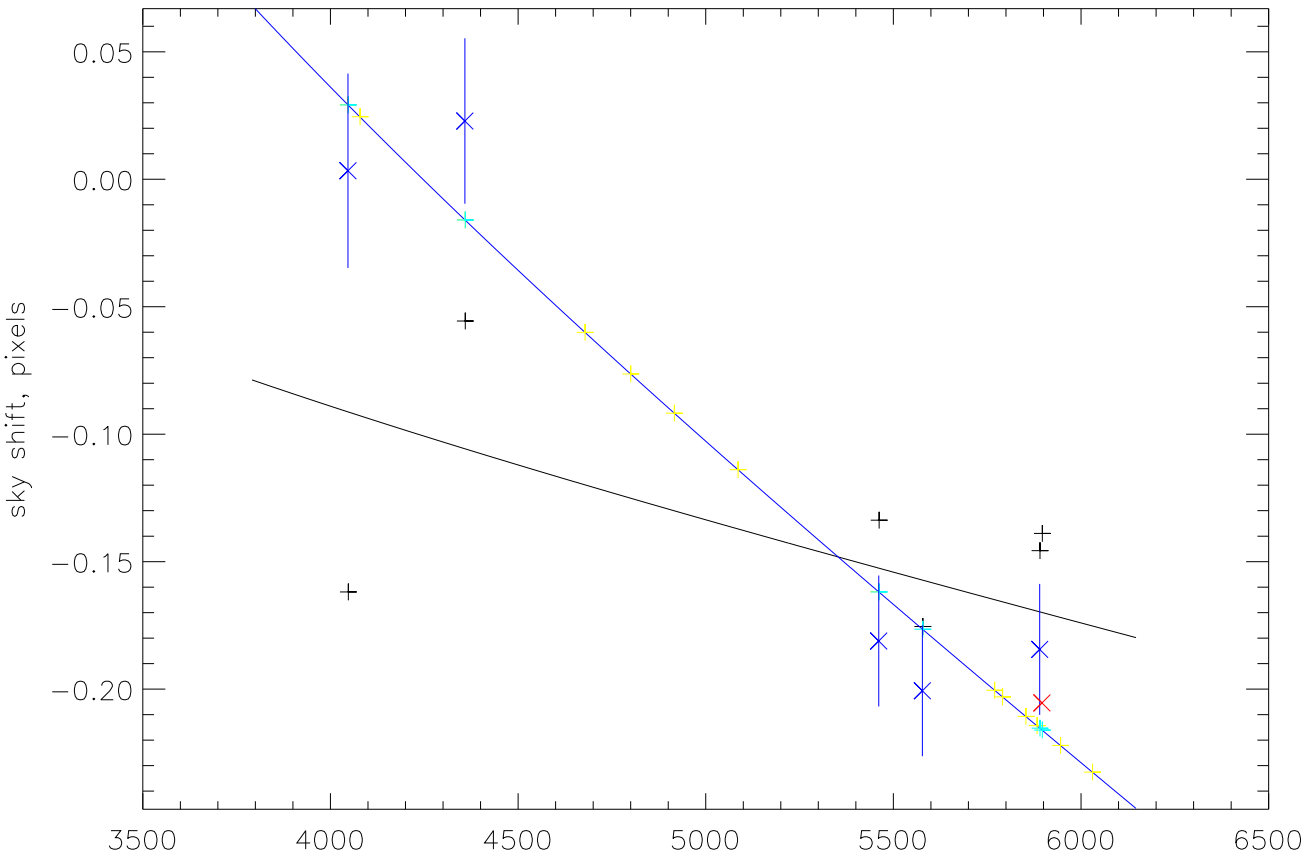

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

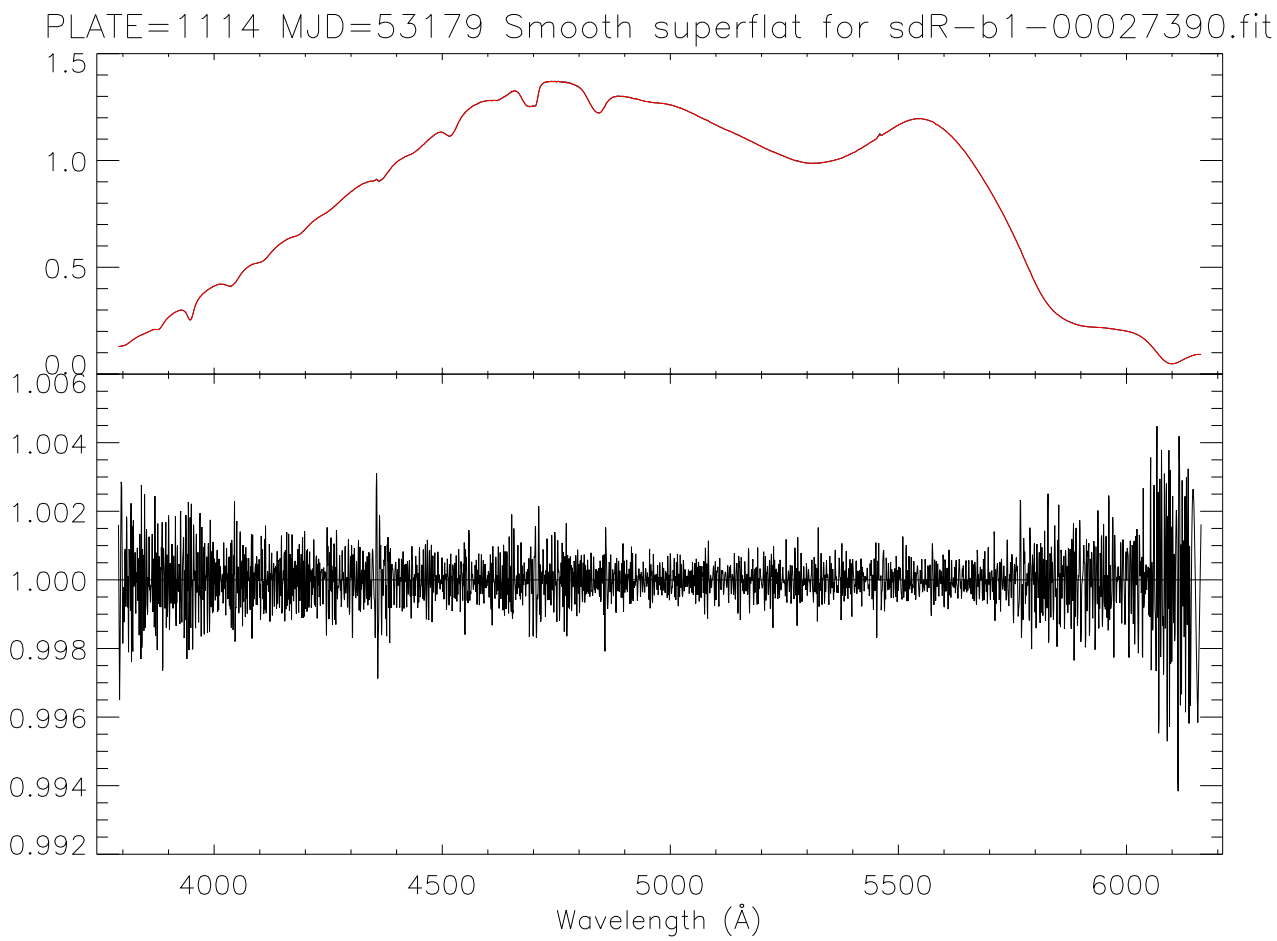

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

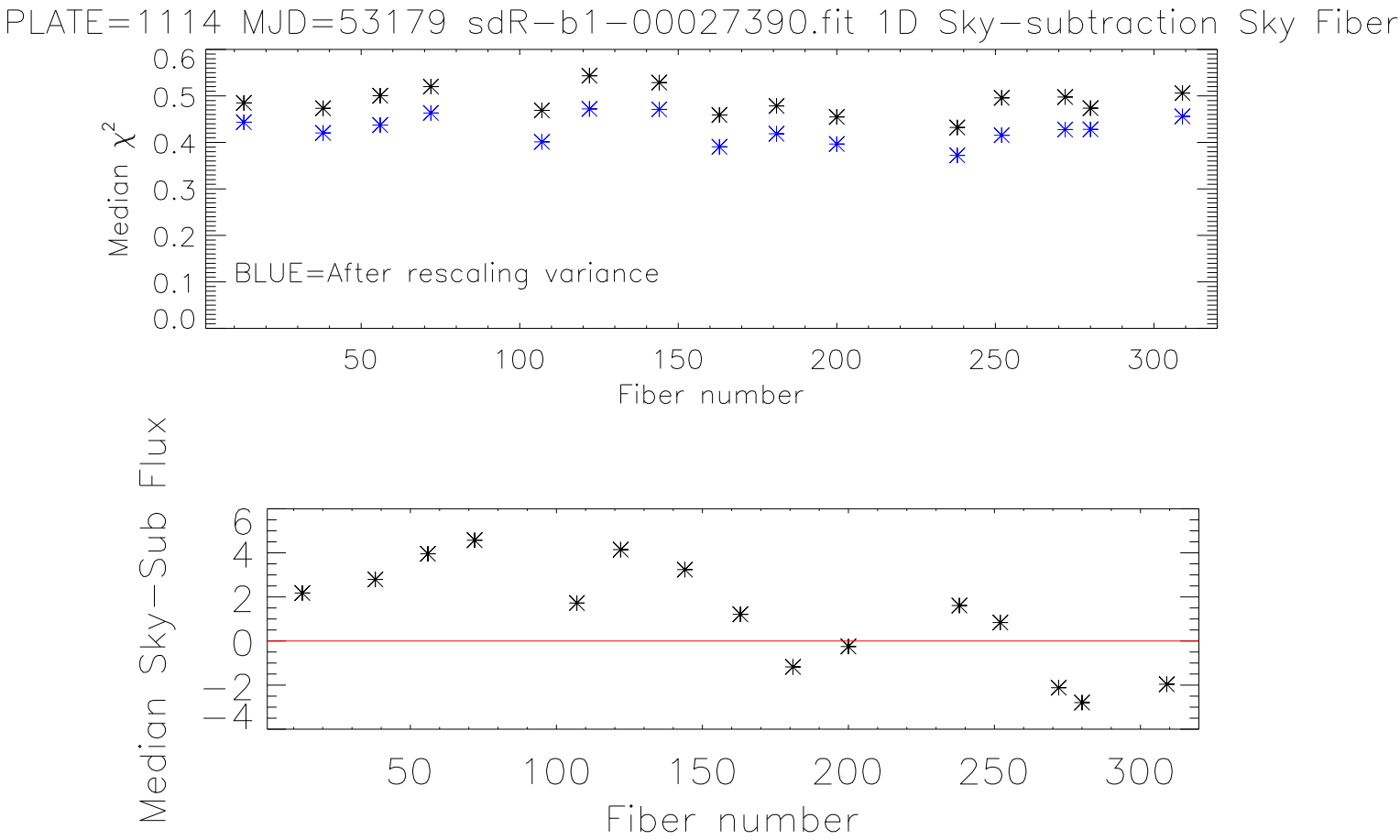

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

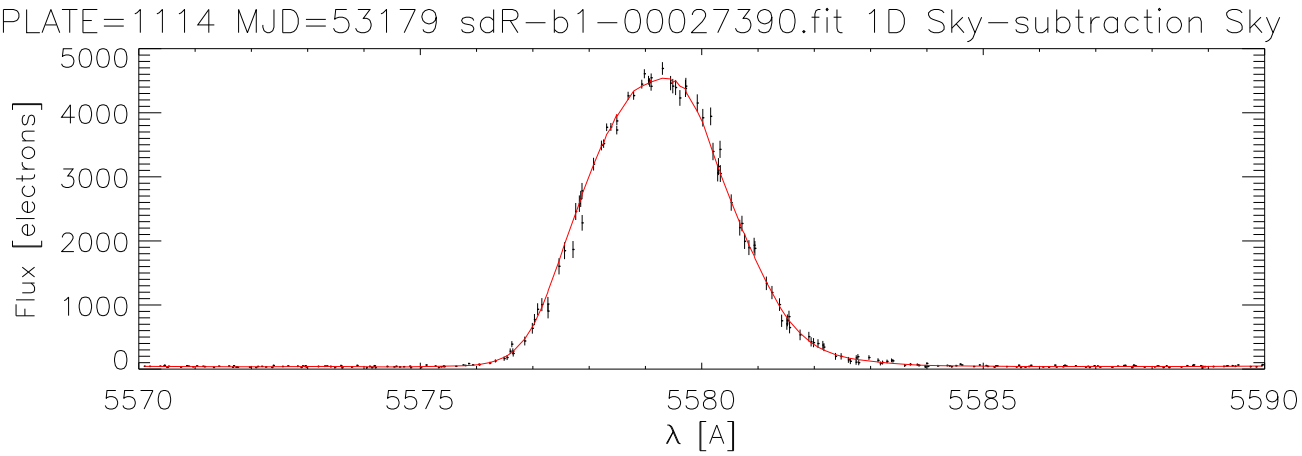

4046.5600
nfib1 16
nfib2 16
stdev 0.145
extra 0.00
4358.3300
nfib1 16
nfib2 16
stdev 0.083
extra 0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.062
extra −0.18
5577.3390
nfib1 16
nfib2 16
stdev 0.028
extra −0.20
5889.9500
nfib1 15
nfib2 15
stdev 0.077
extra −0.18
5895.9240
nfib1 15
nfib2 15
stdev 0.056
extra −0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

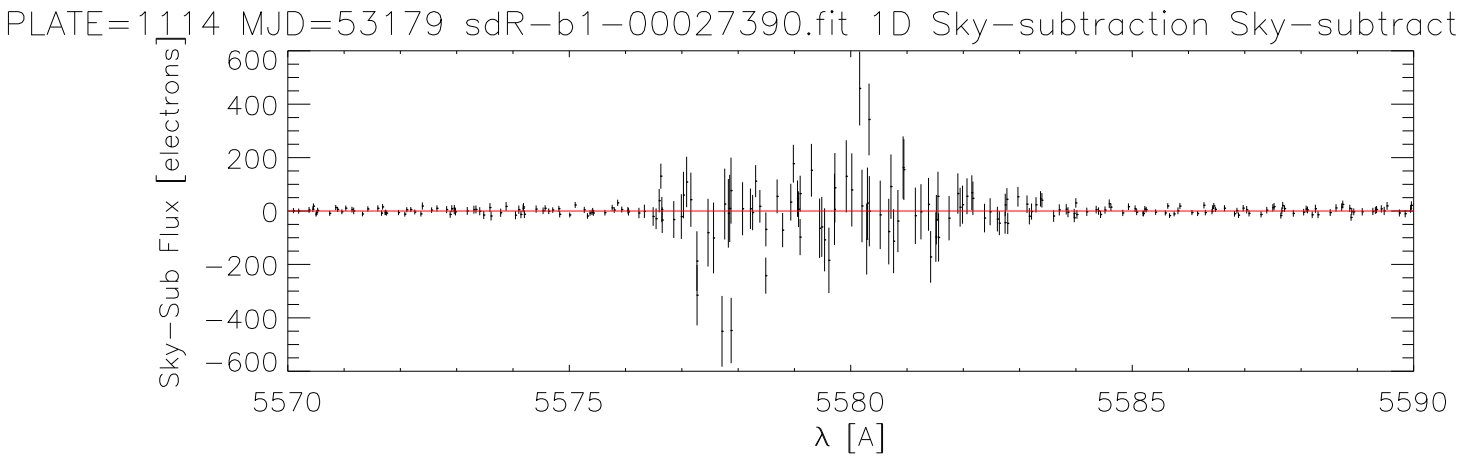

0.05
0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

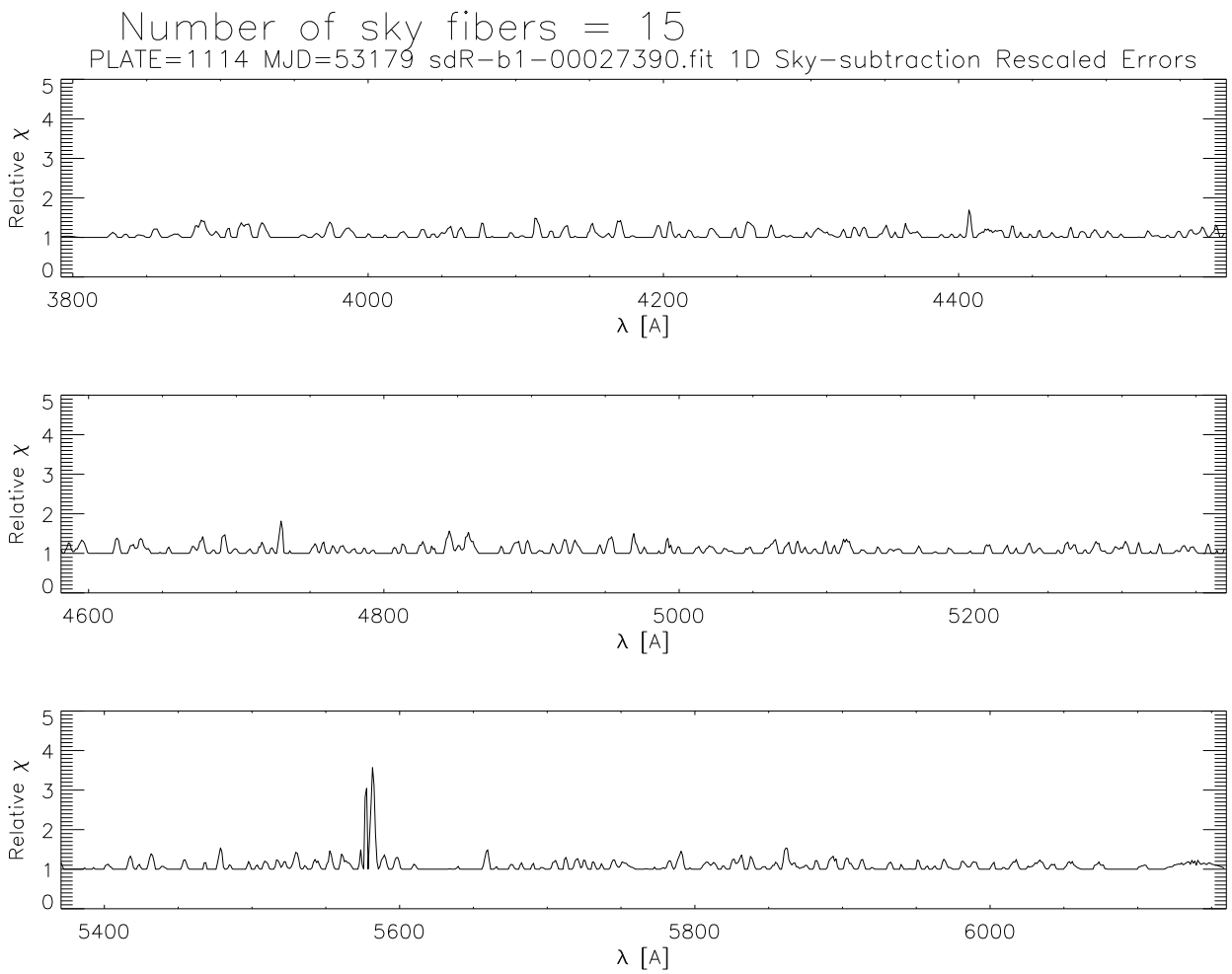
es= 0.0000

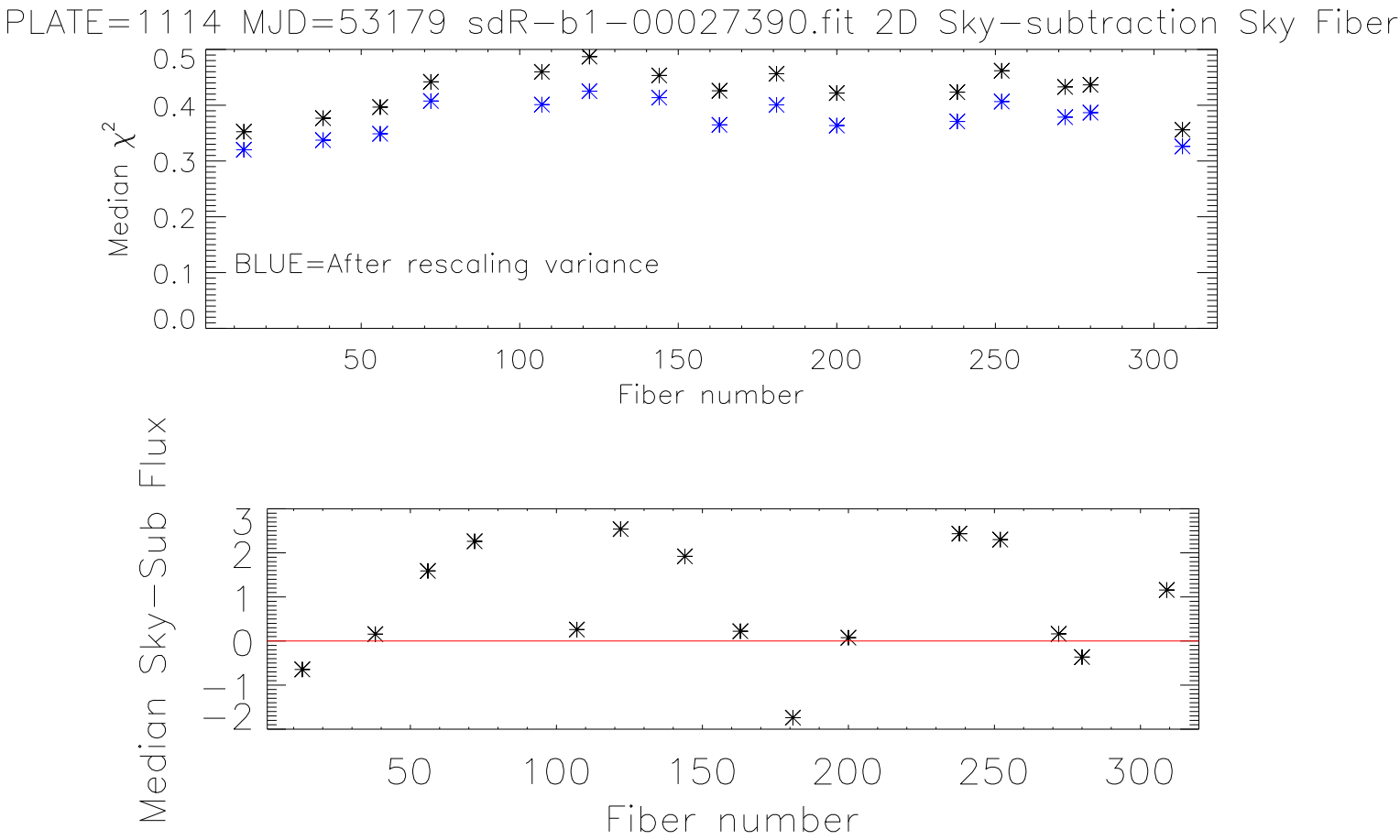

PLATE=1114 MJD=53179 Smooth superflat for sdR-b1-00027390.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

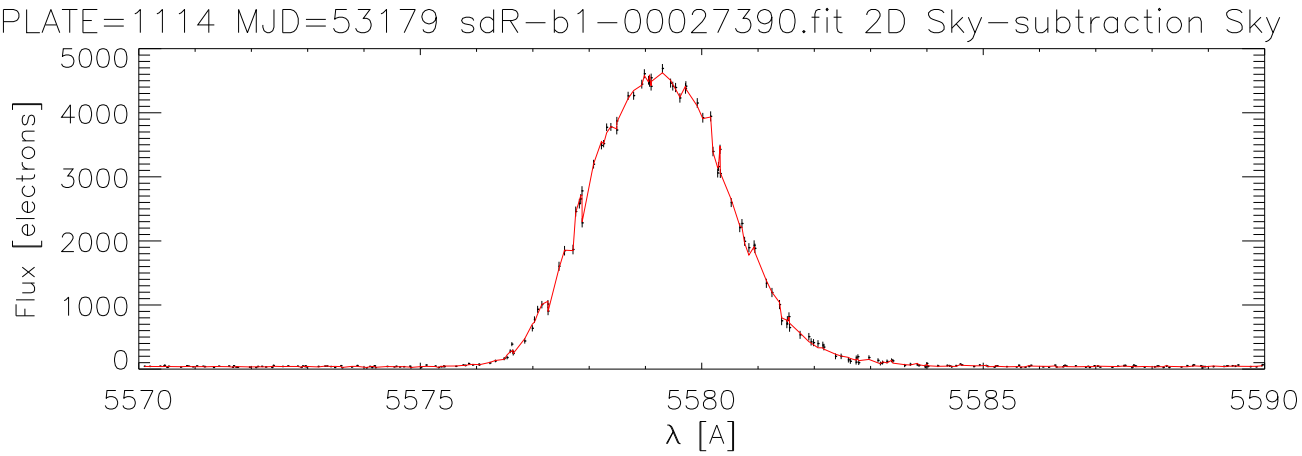

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

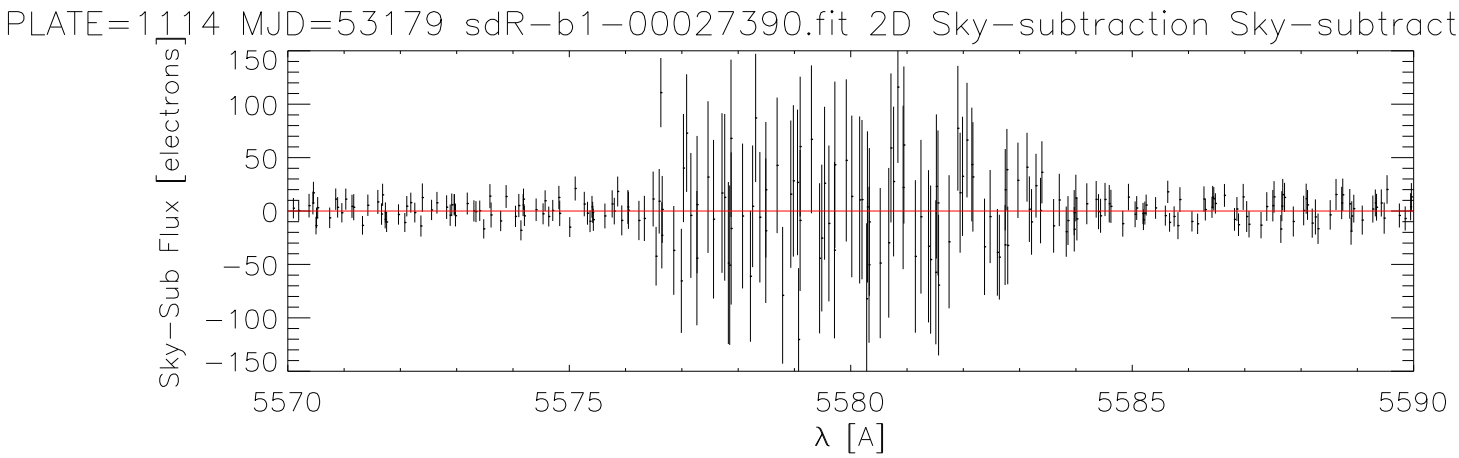

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

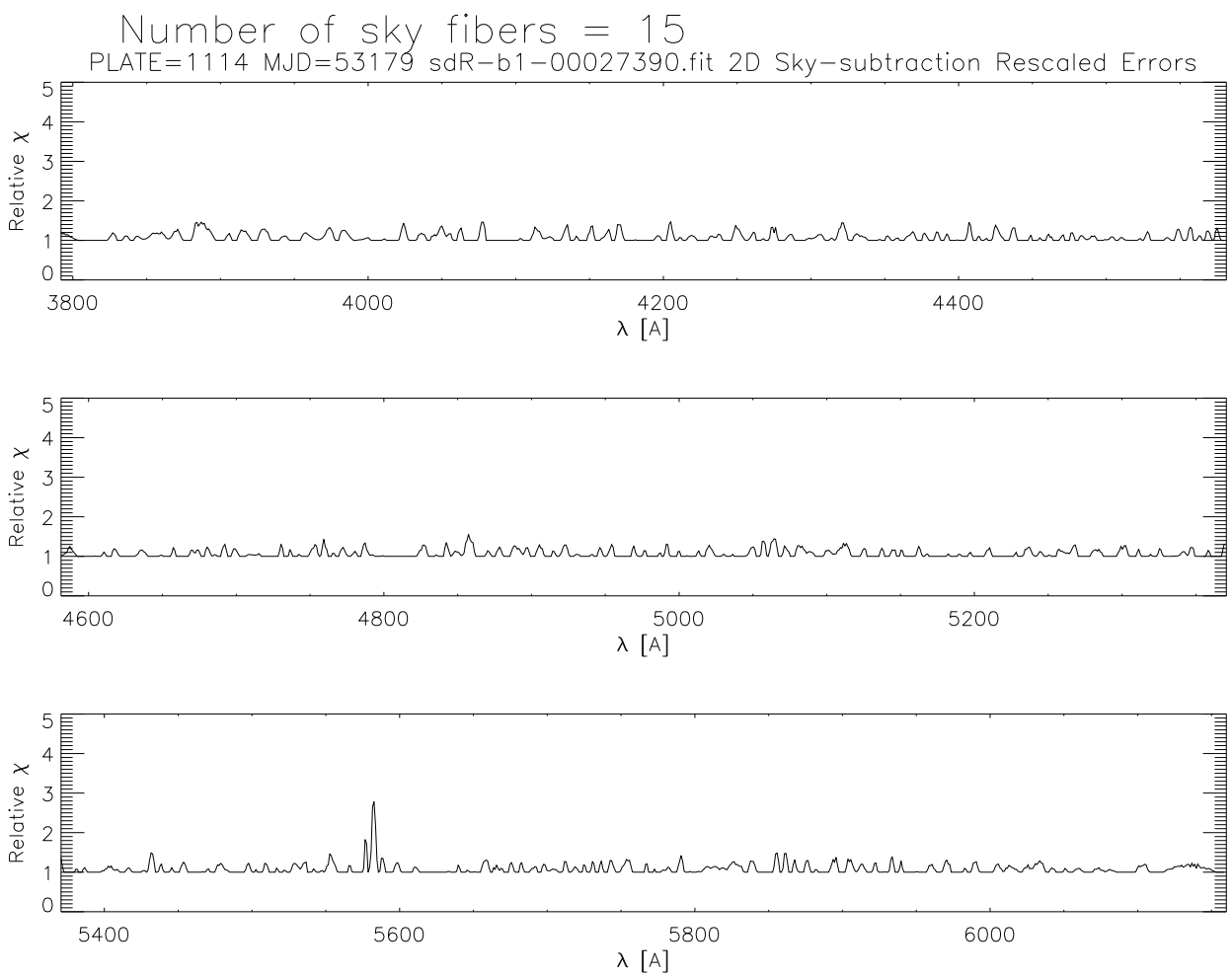

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

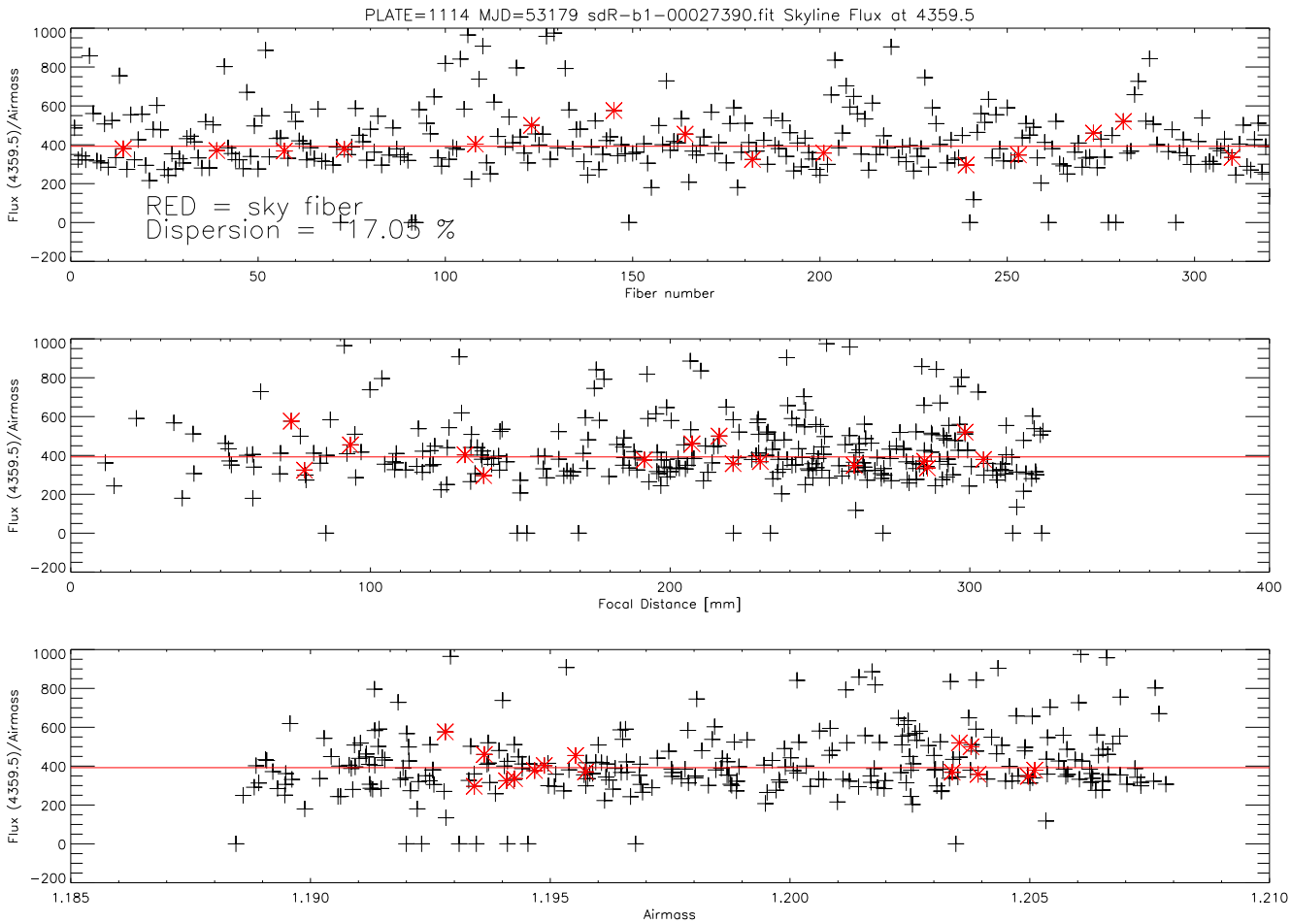

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027390.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

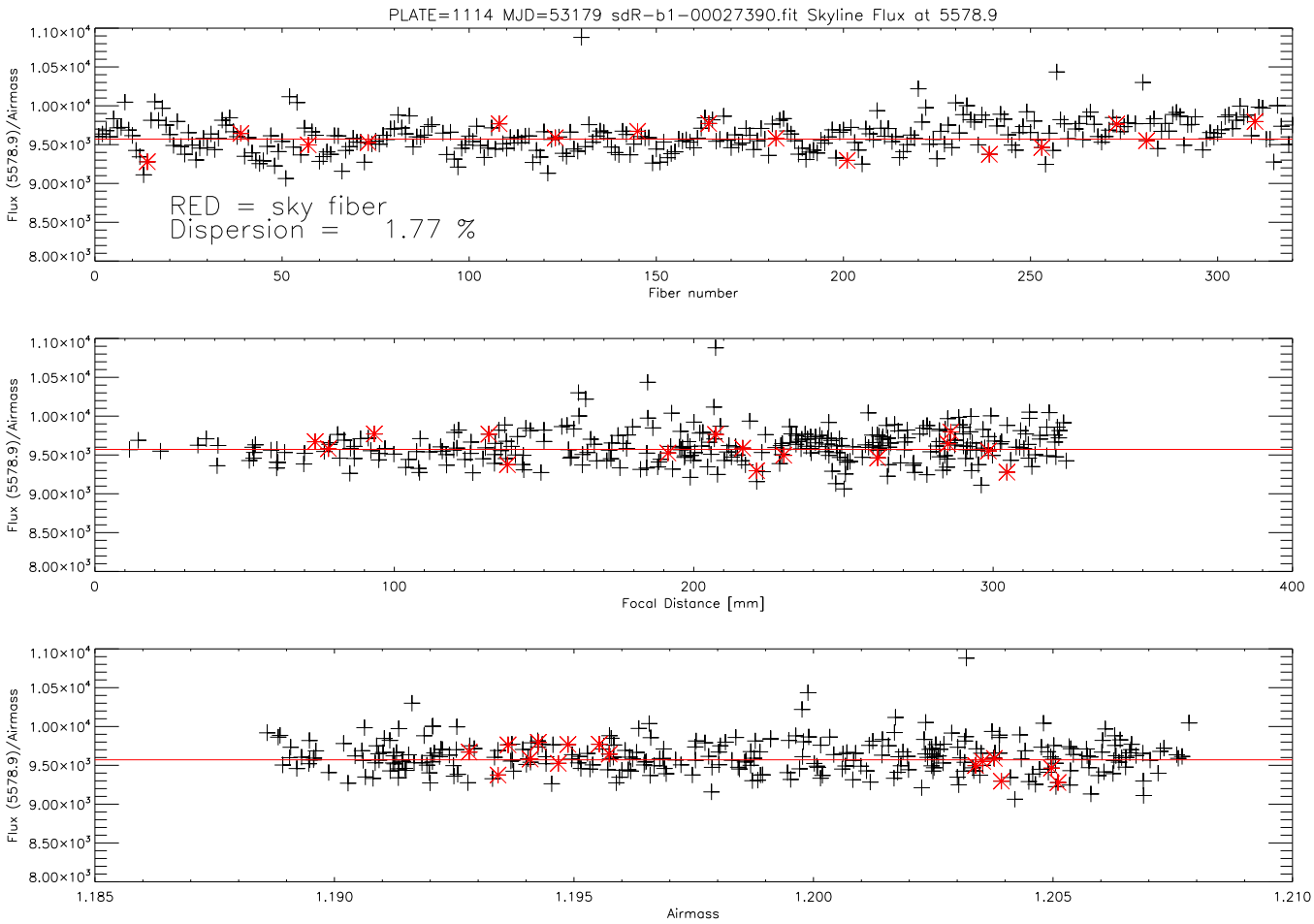

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

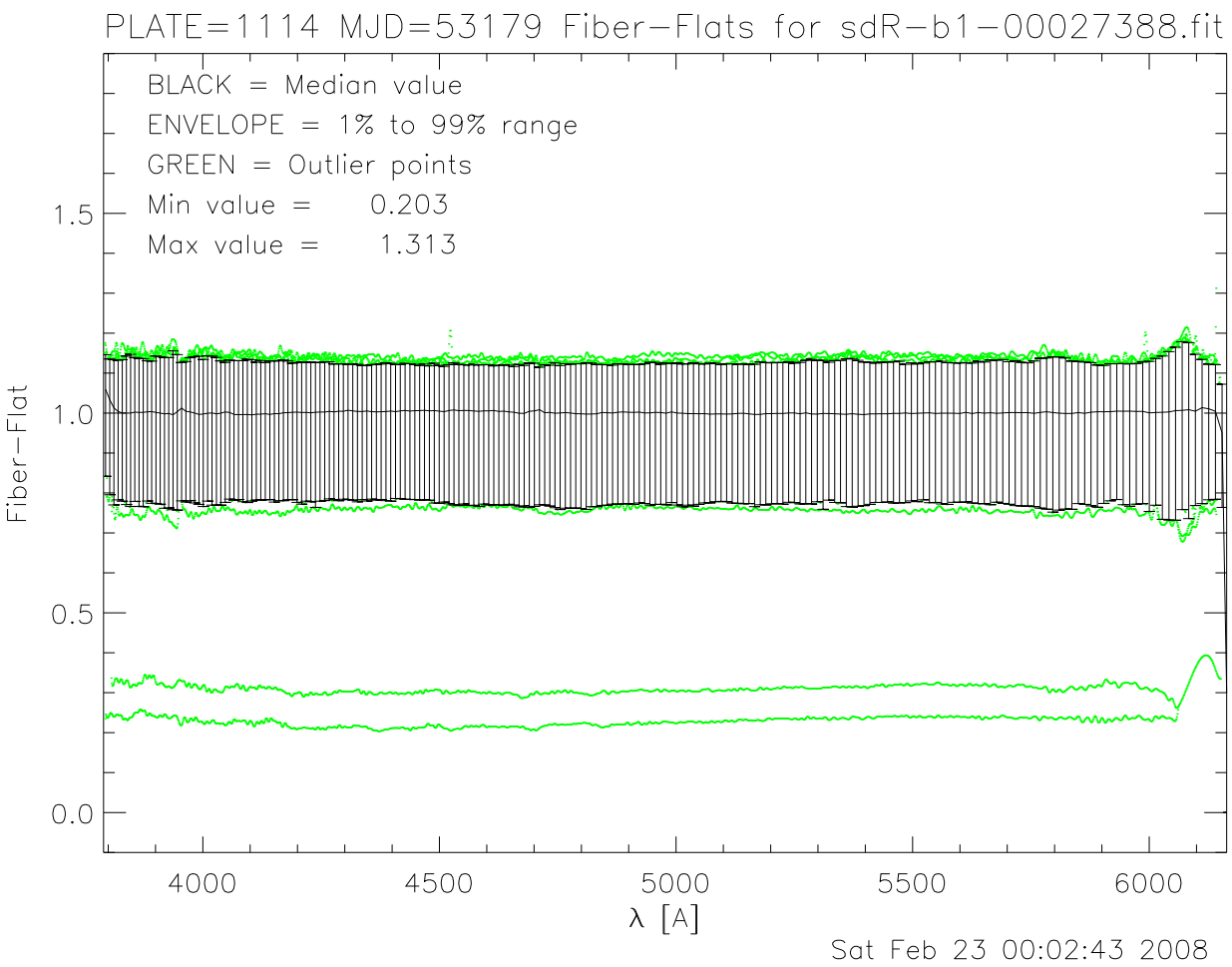

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

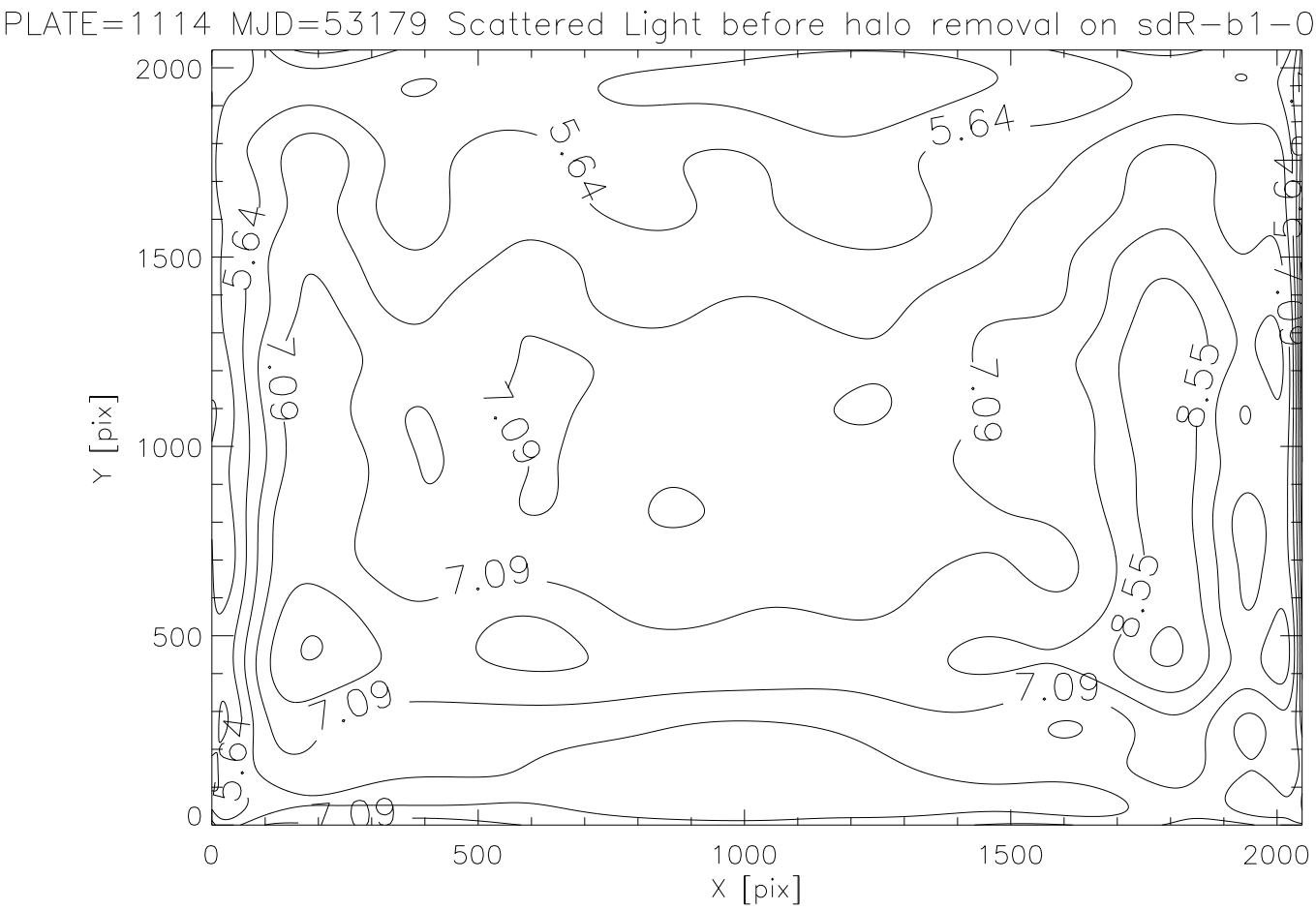

PLATE=1114 MJD=53179 sdR-b1-00027390.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

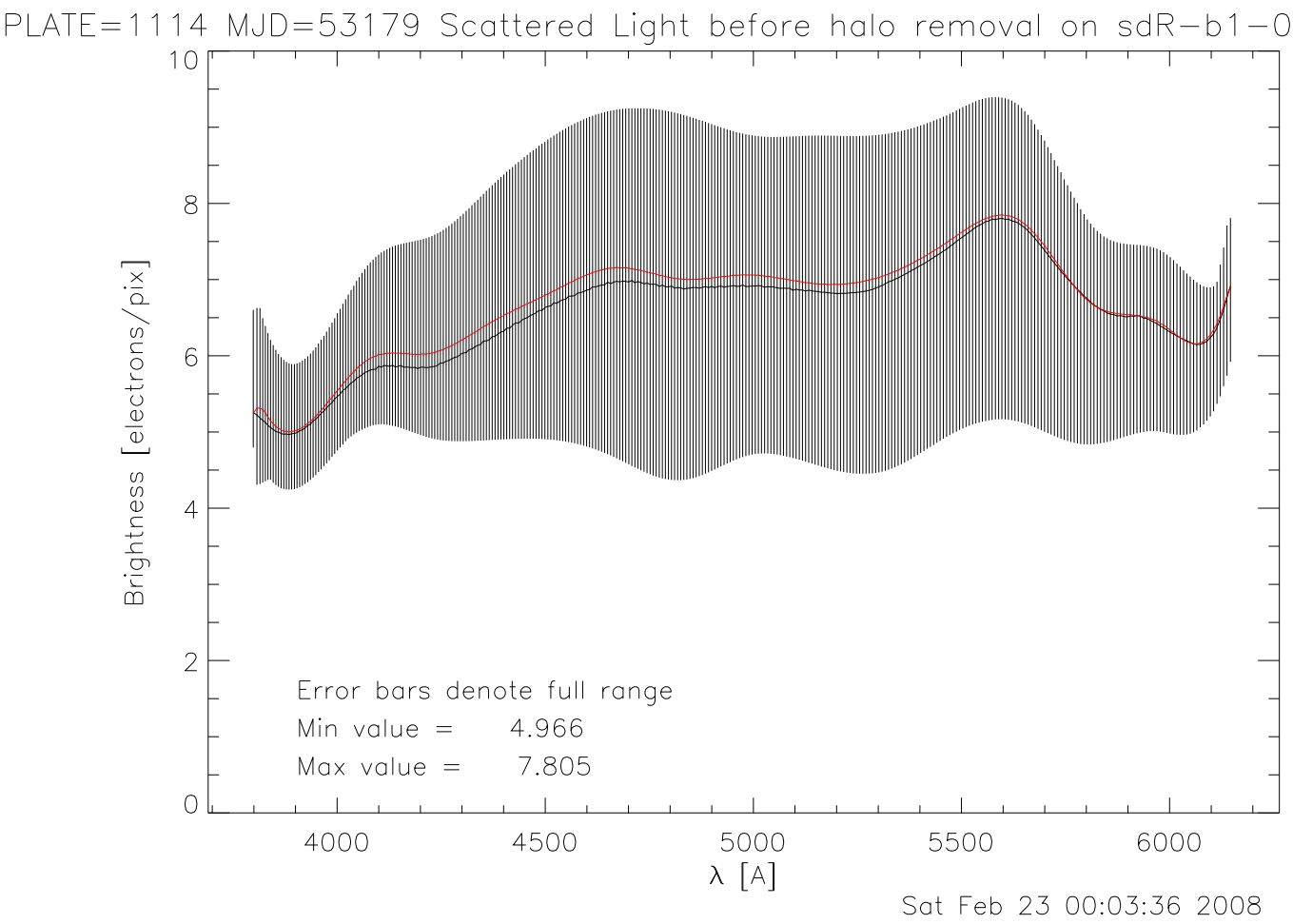

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027390.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

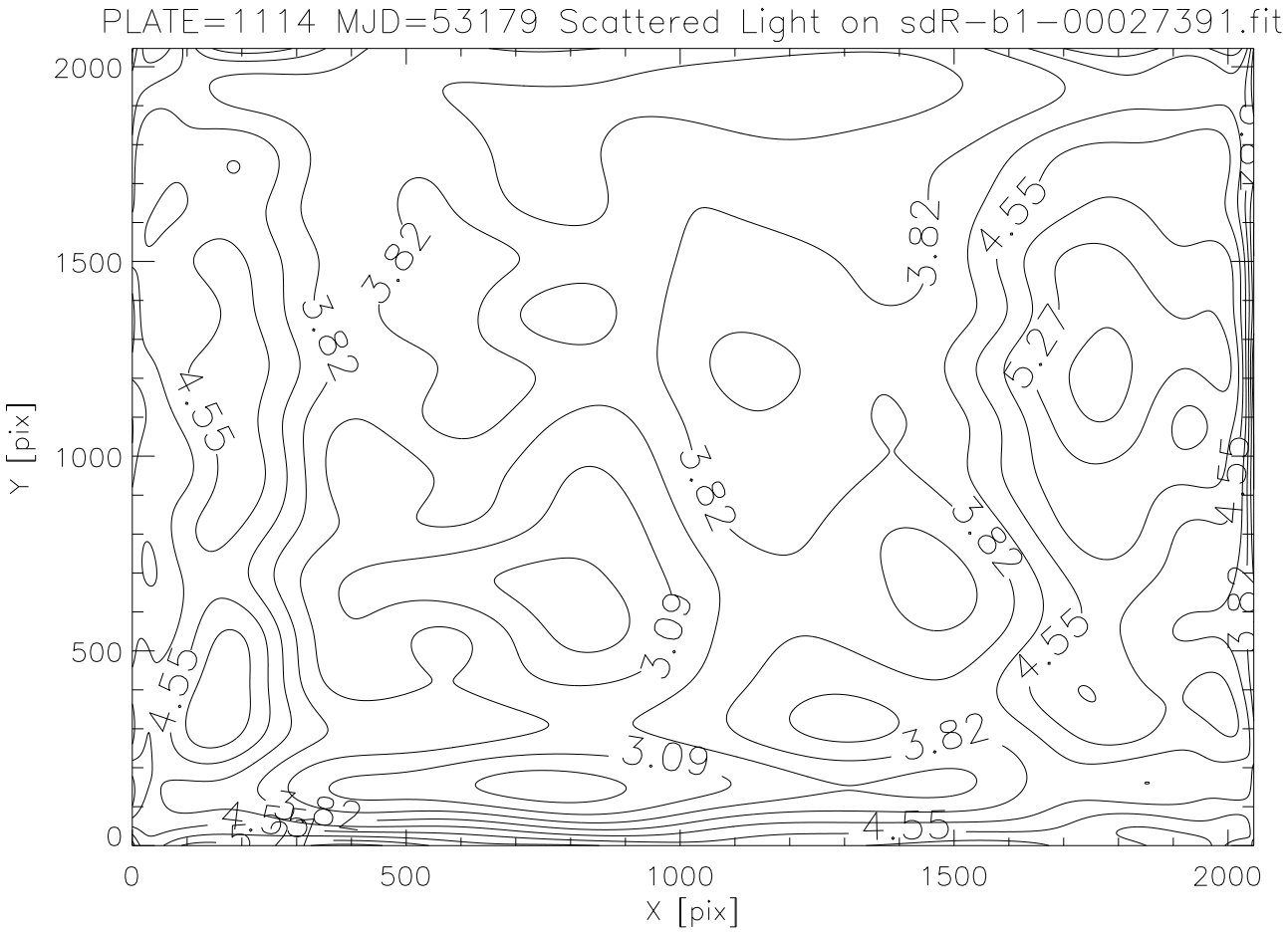

PLATE=1114 MJD=53179 sdR-b1-00027390.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 17.05 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

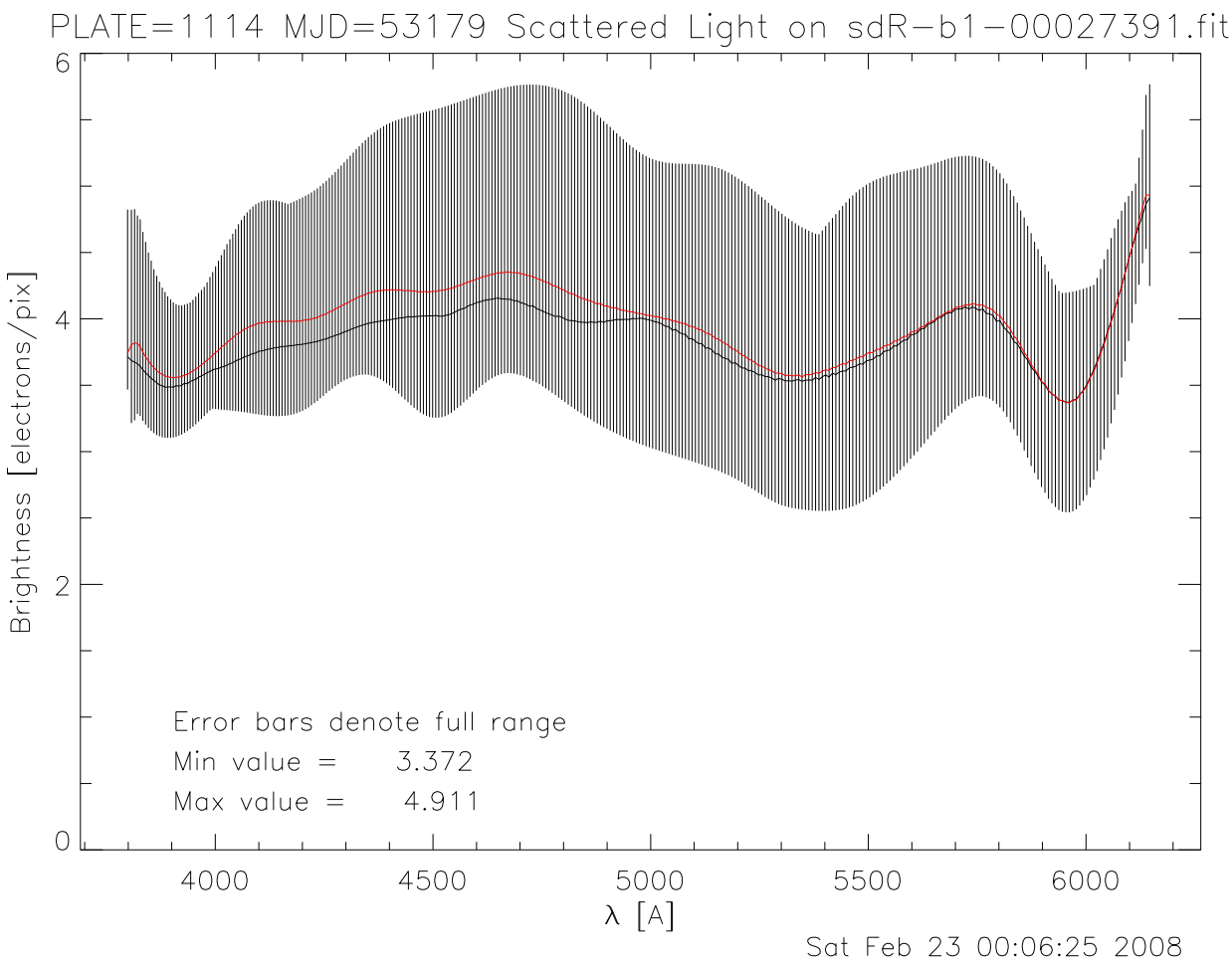

PLATE=1114 MJD=53179 sdR-b1-00027390.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.77 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

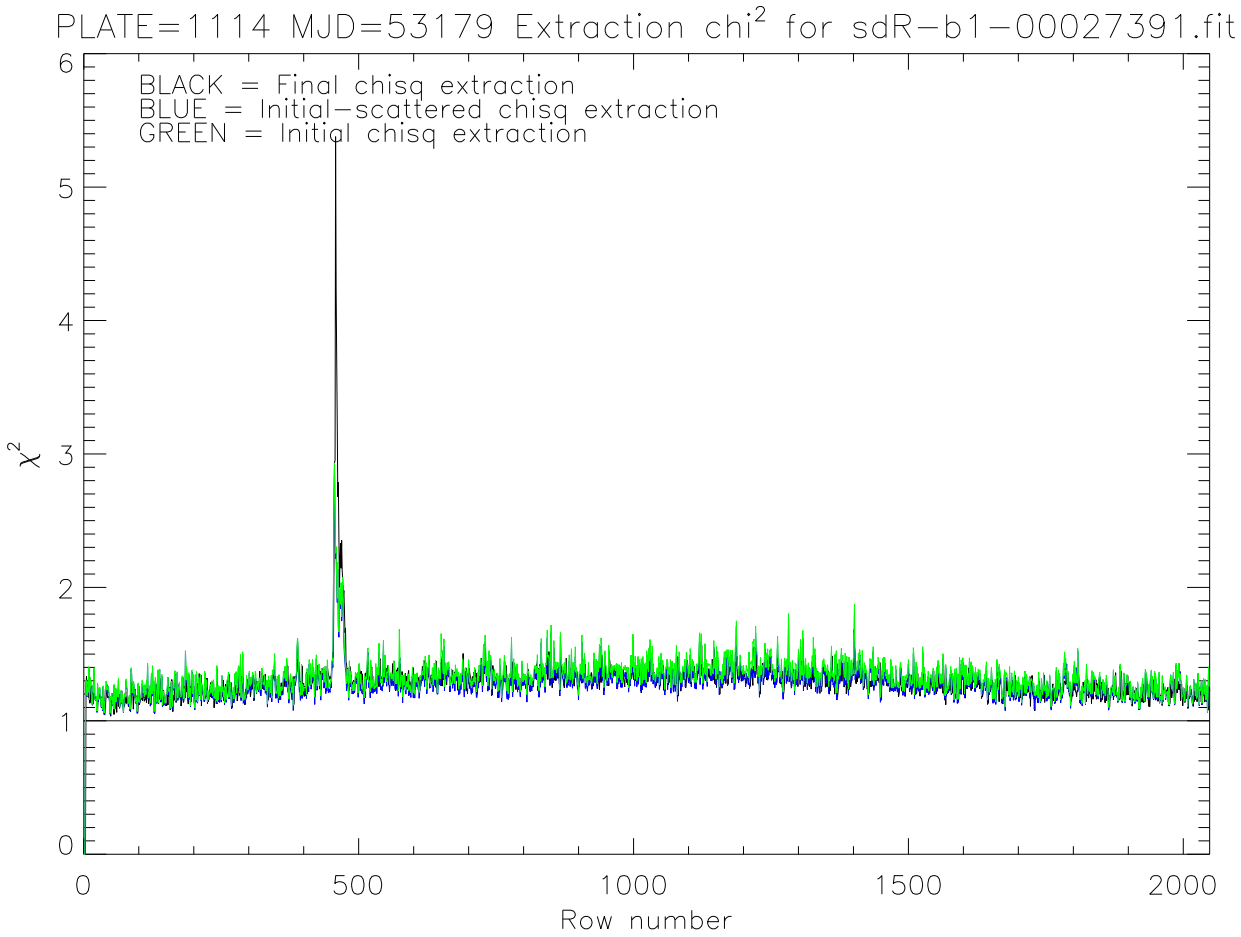

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b1-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.203
Max value = 1.313
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:02:43 2008

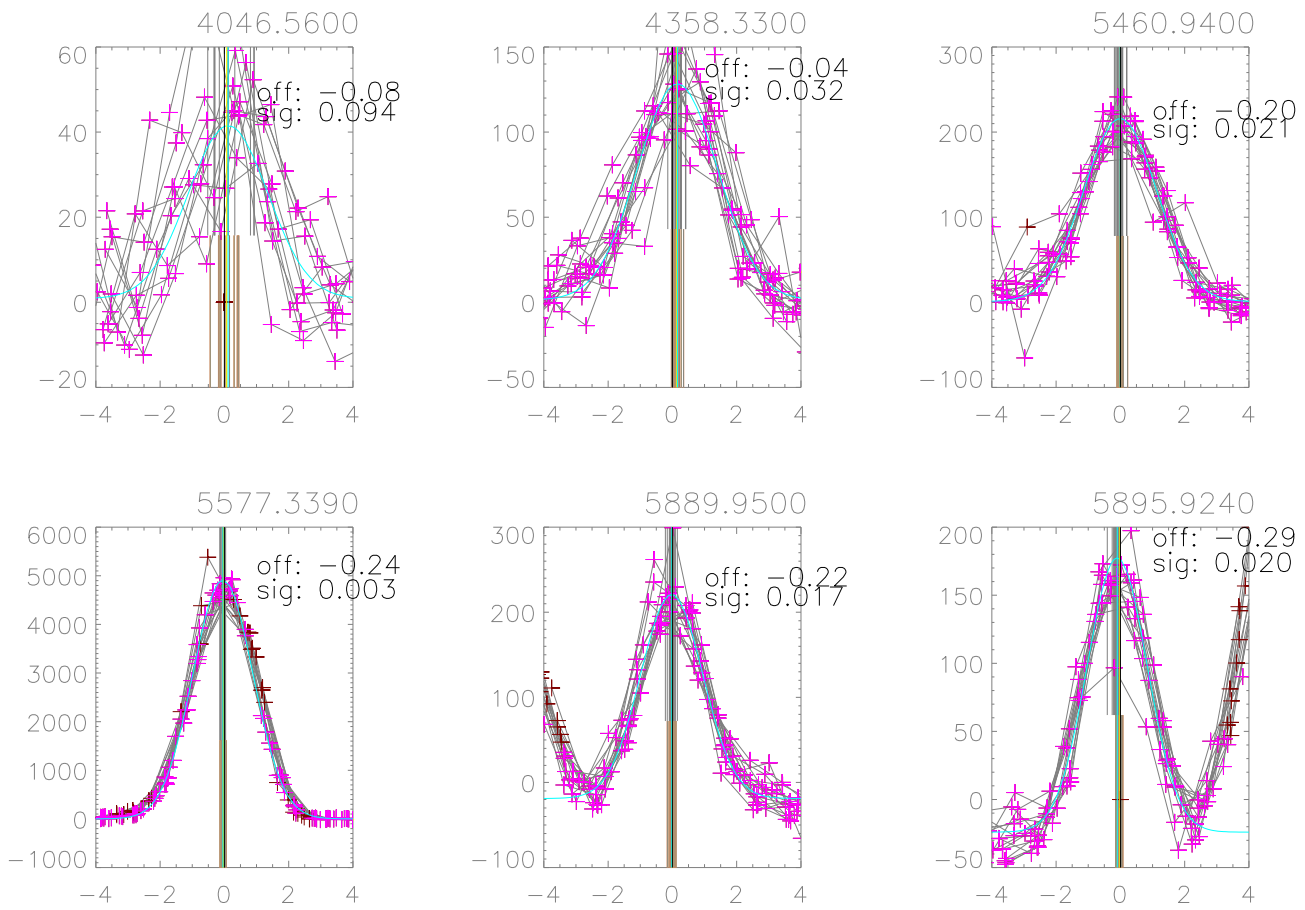

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR−b1−00027391.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.64
7.09
8.55

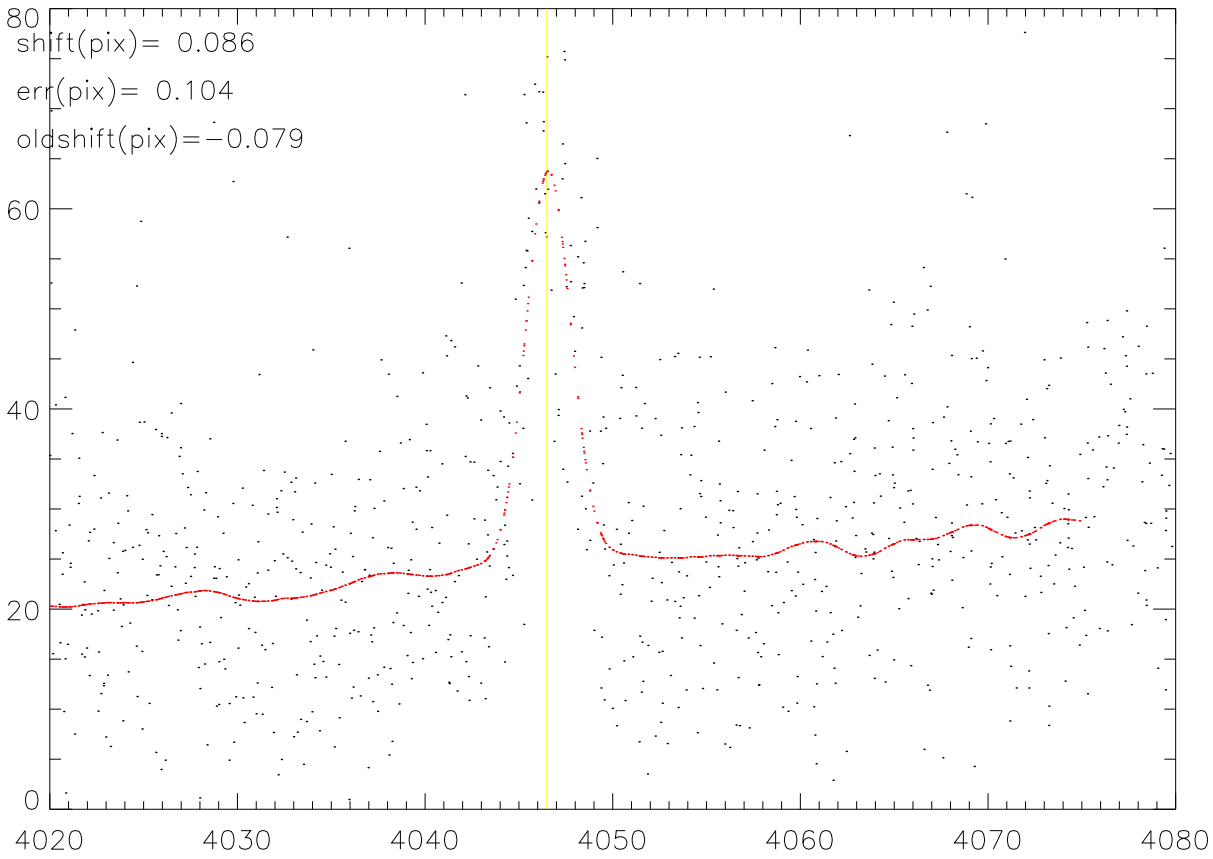

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b1-00027391.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.966
Max value = 7.805
Sat Feb 23 00:03:36 2008

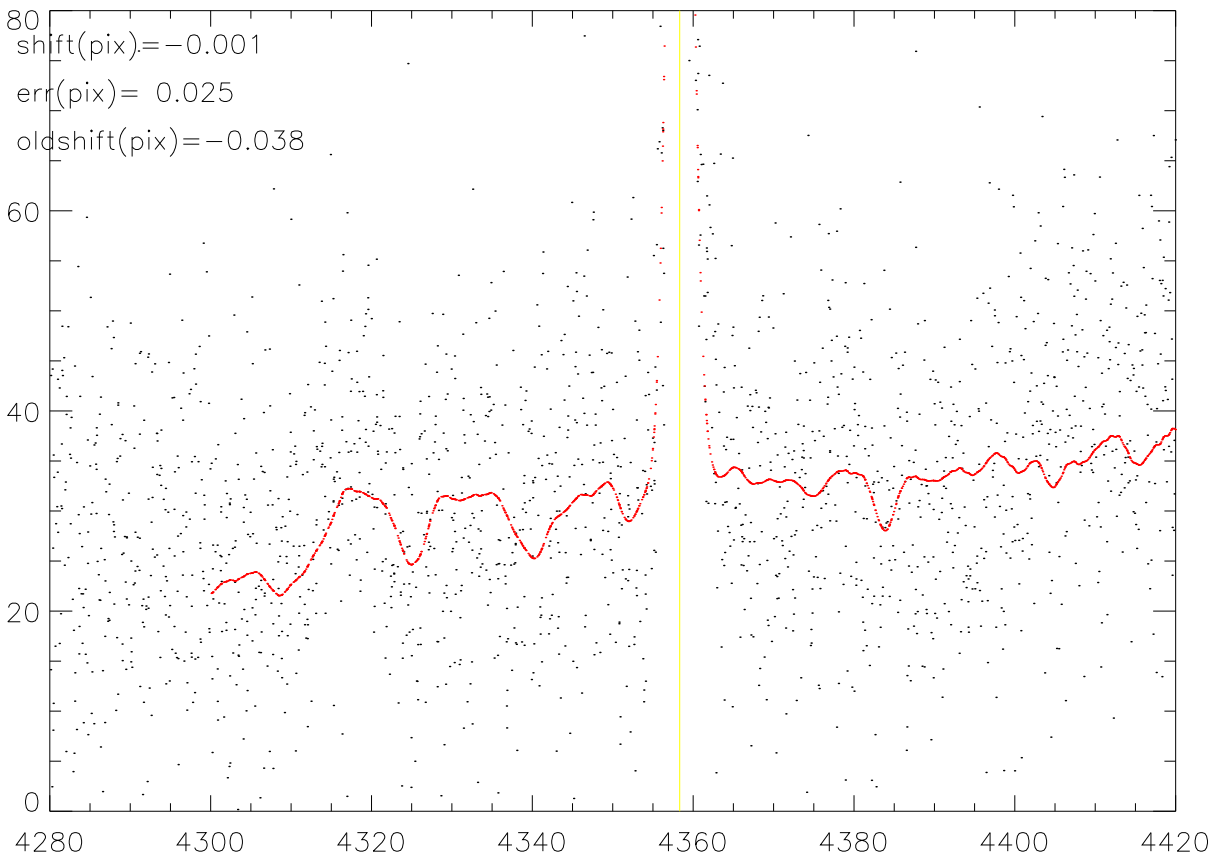

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027391.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
4.55
3.09
5.27

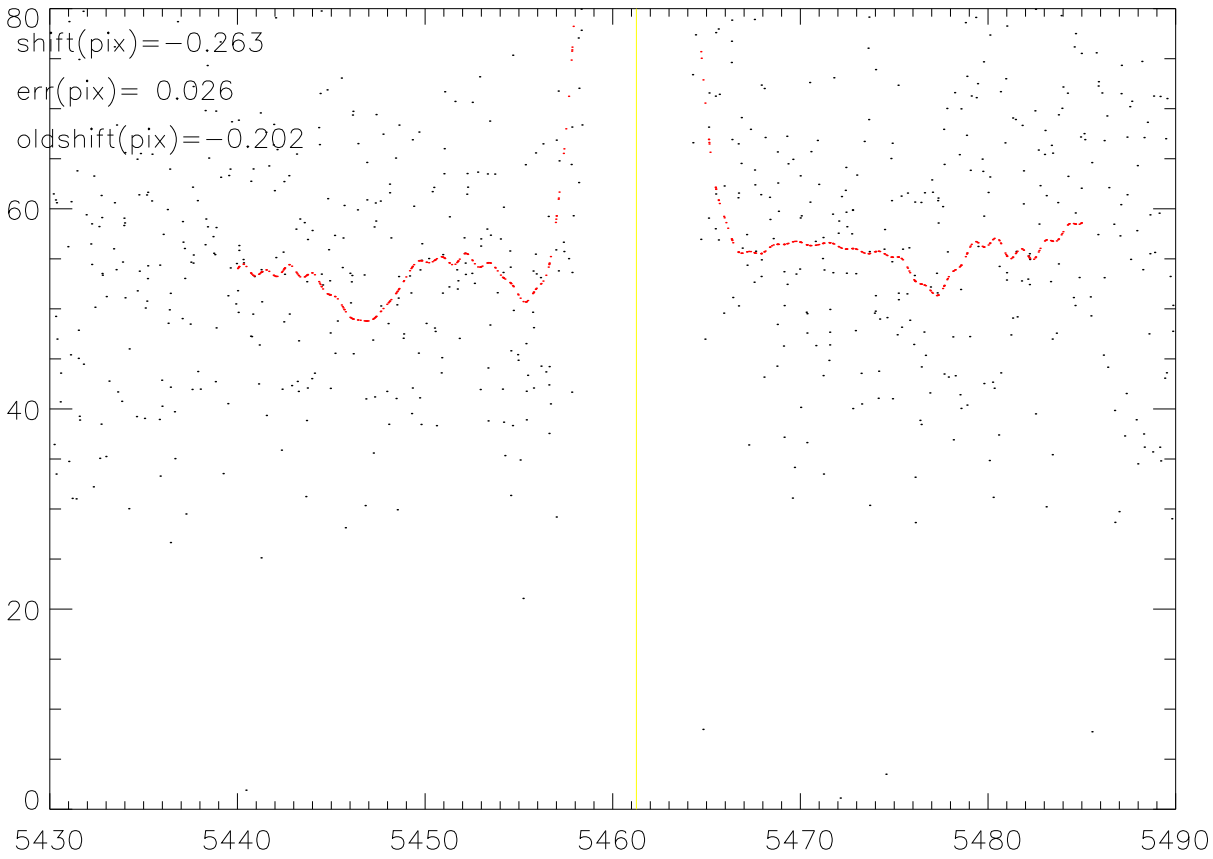

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027391.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.372
Max value = 4.911
Sat Feb 23 00:06:25 2008

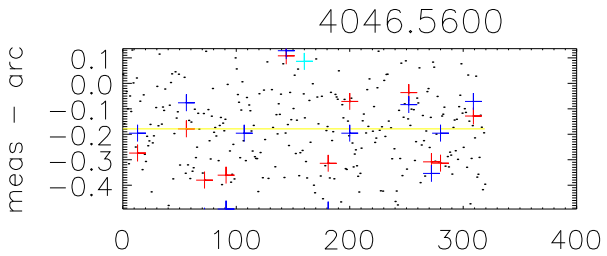

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b1-00027391.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

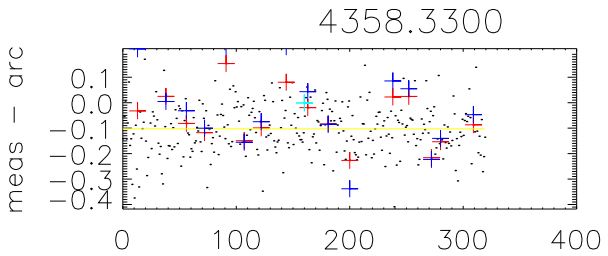

4046.5600
off: −0.08
sig: 0.094
4358.3300
off: −0.04
sig: 0.032
5460.9400
off: −0.20
sig: 0.021
5577.3390
off: −0.24
sig: 0.003
5889.9500
off: −0.22
sig: 0.017
5895.9240
off: −0.29
sig: 0.020

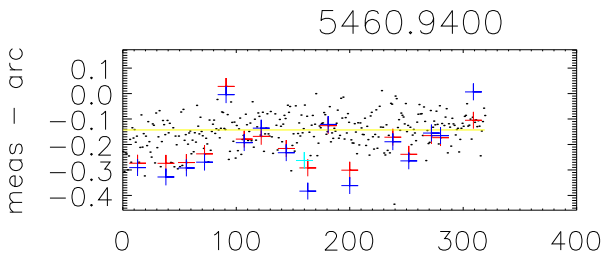

shift(pix)= 0.086
err(pix)= 0.104
oldshift(pix)=−0.079
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

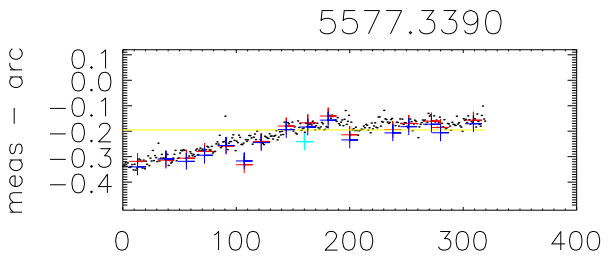

shift(pix)=−0.001
err(pix)= 0.025
oldshift(pix)=−0.038
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

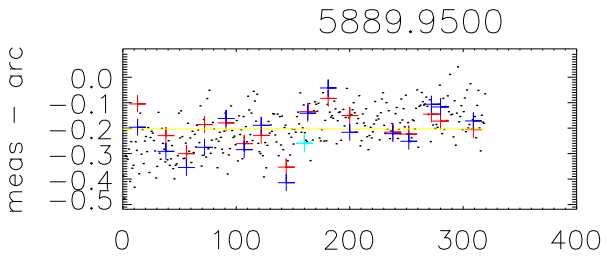

shift(pix)=−0.263
err(pix)= 0.026
oldshift(pix)=−0.202
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

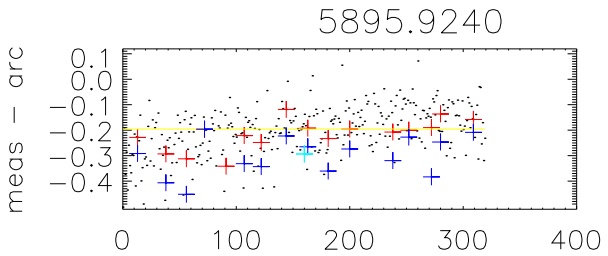

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

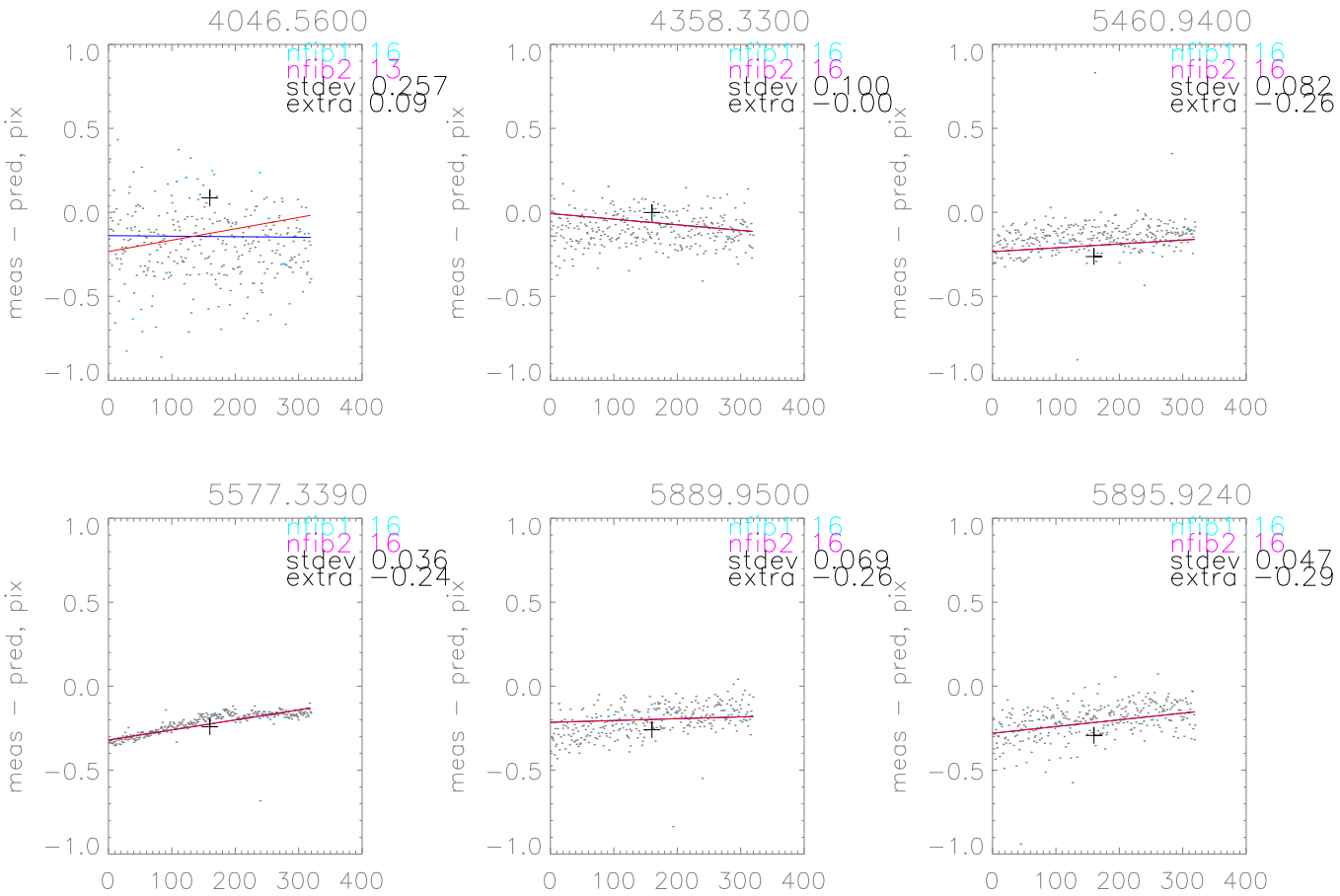

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

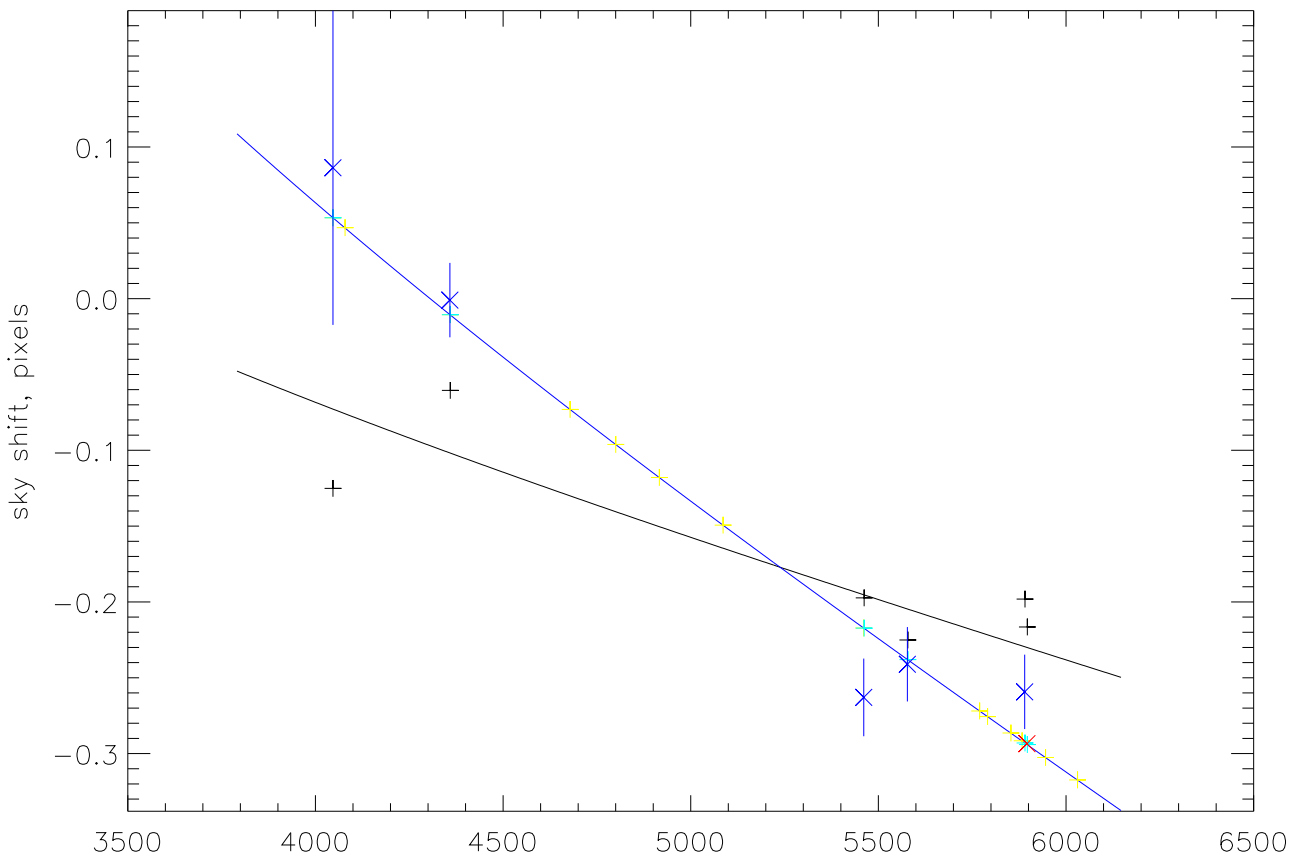

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

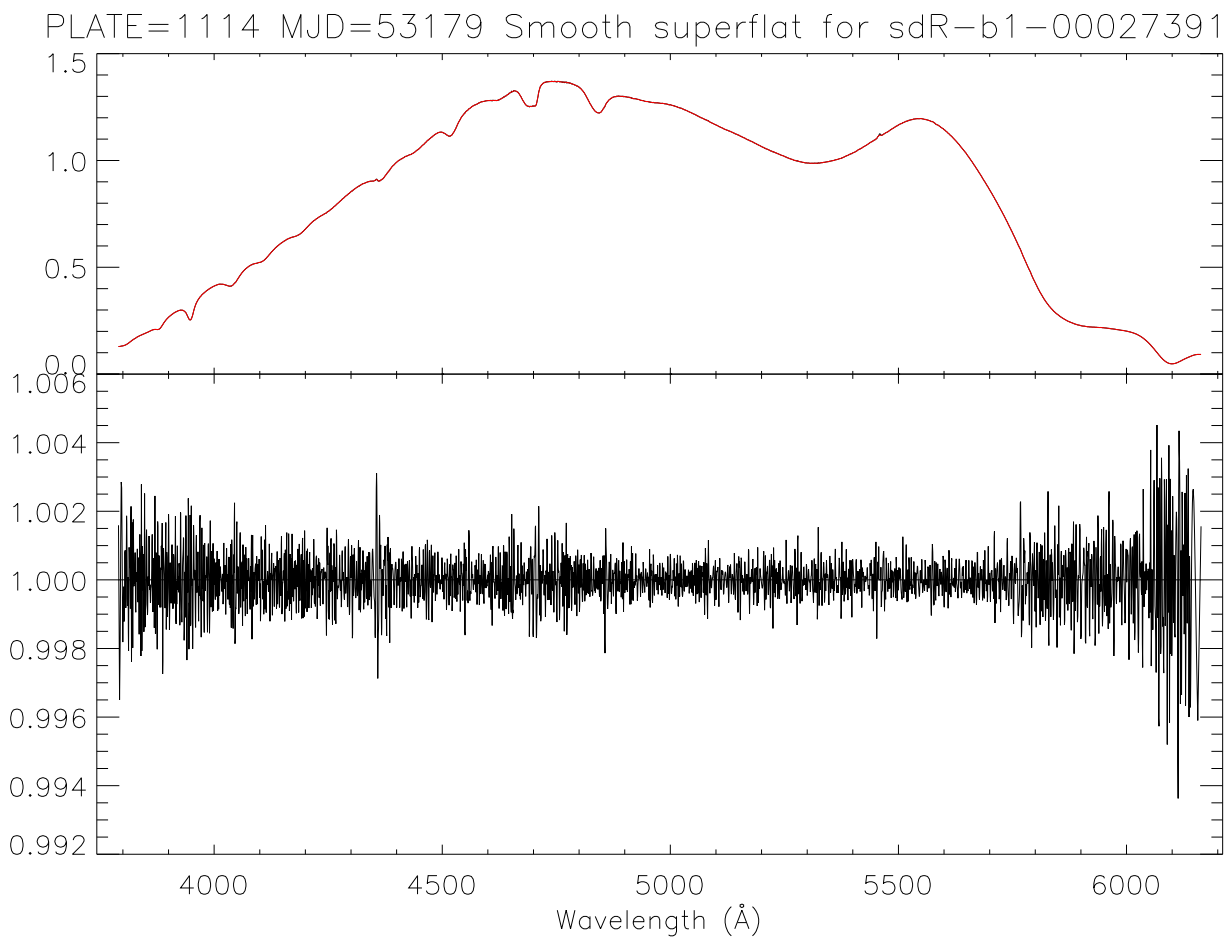

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

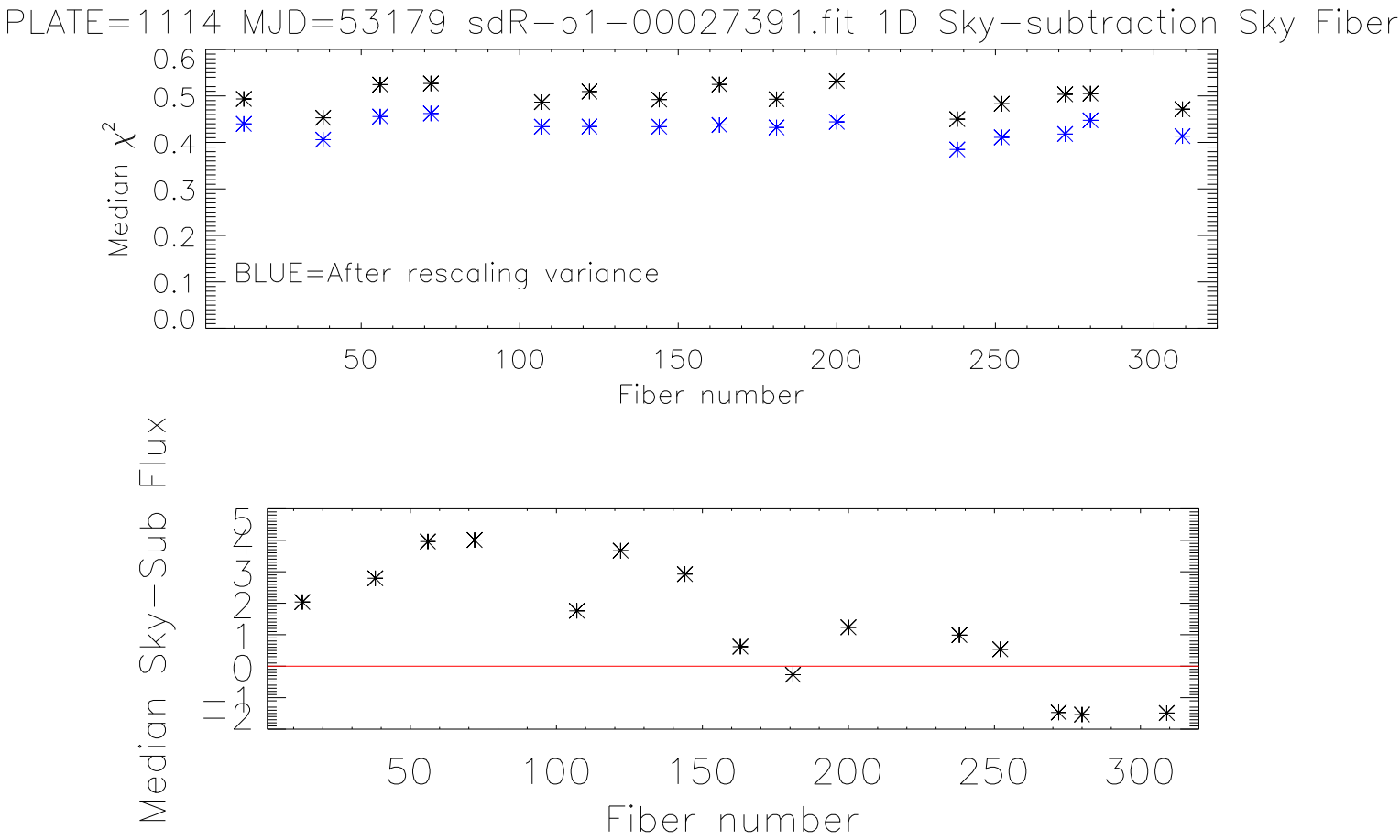

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

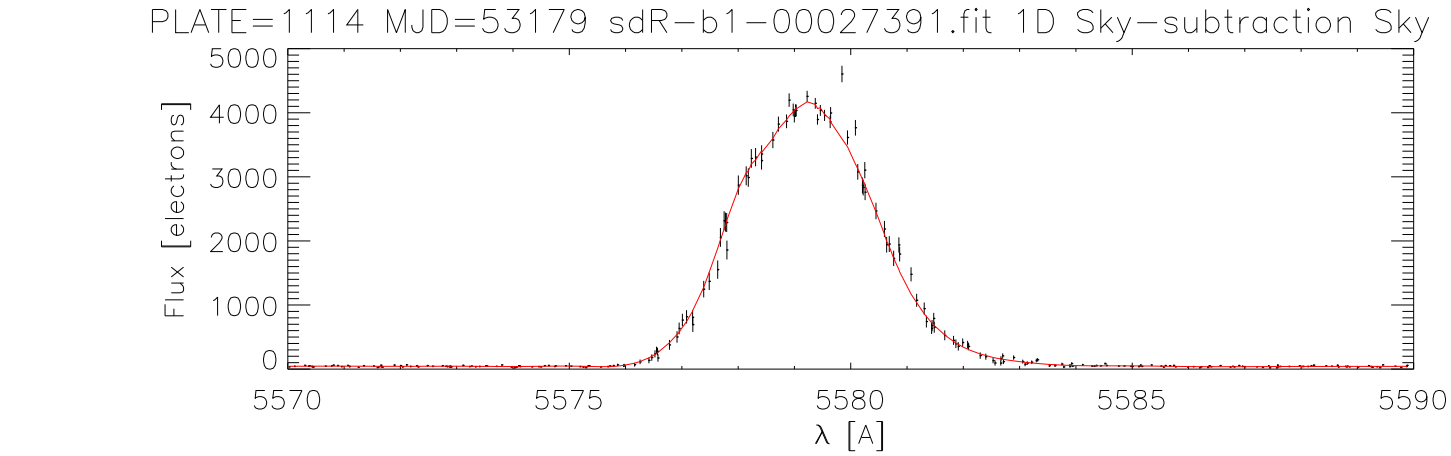

4046.5600
nfib1 16
nfib2 13
stdev 0.257
extra 0.09
4358.3300
nfib1 16
nfib2 16
stdev 0.100
extra −0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.082
extra −0.26
5577.3390
nfib1 16
nfib2 16
stdev 0.036
extra −0.24
5889.9500
nfib1 16
nfib2 16
stdev 0.069
extra −0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.047
extra −0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

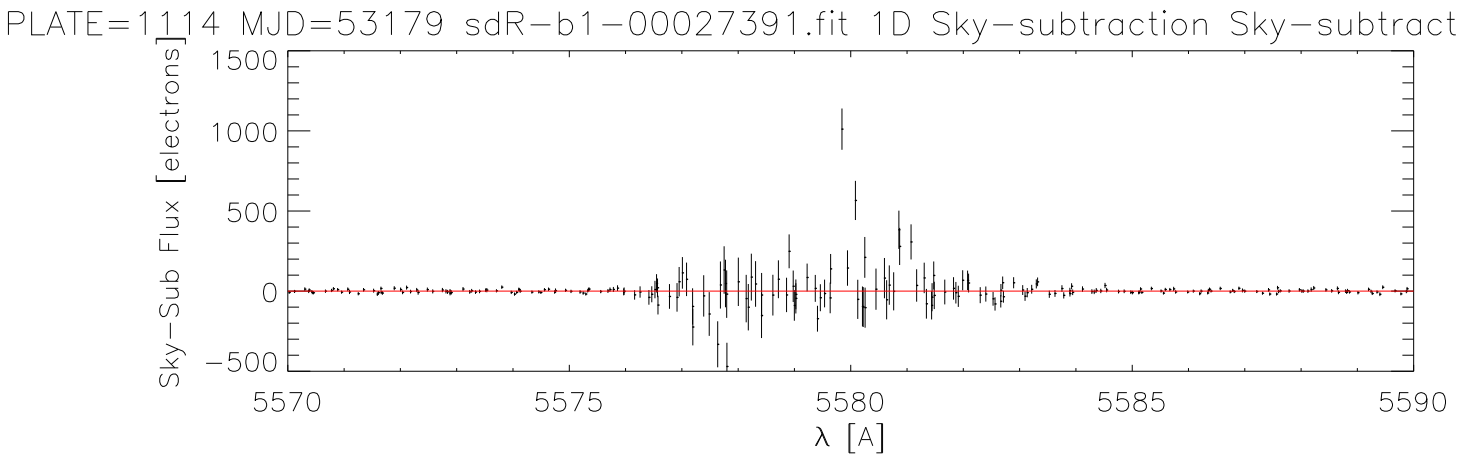

sky shift, pixels
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

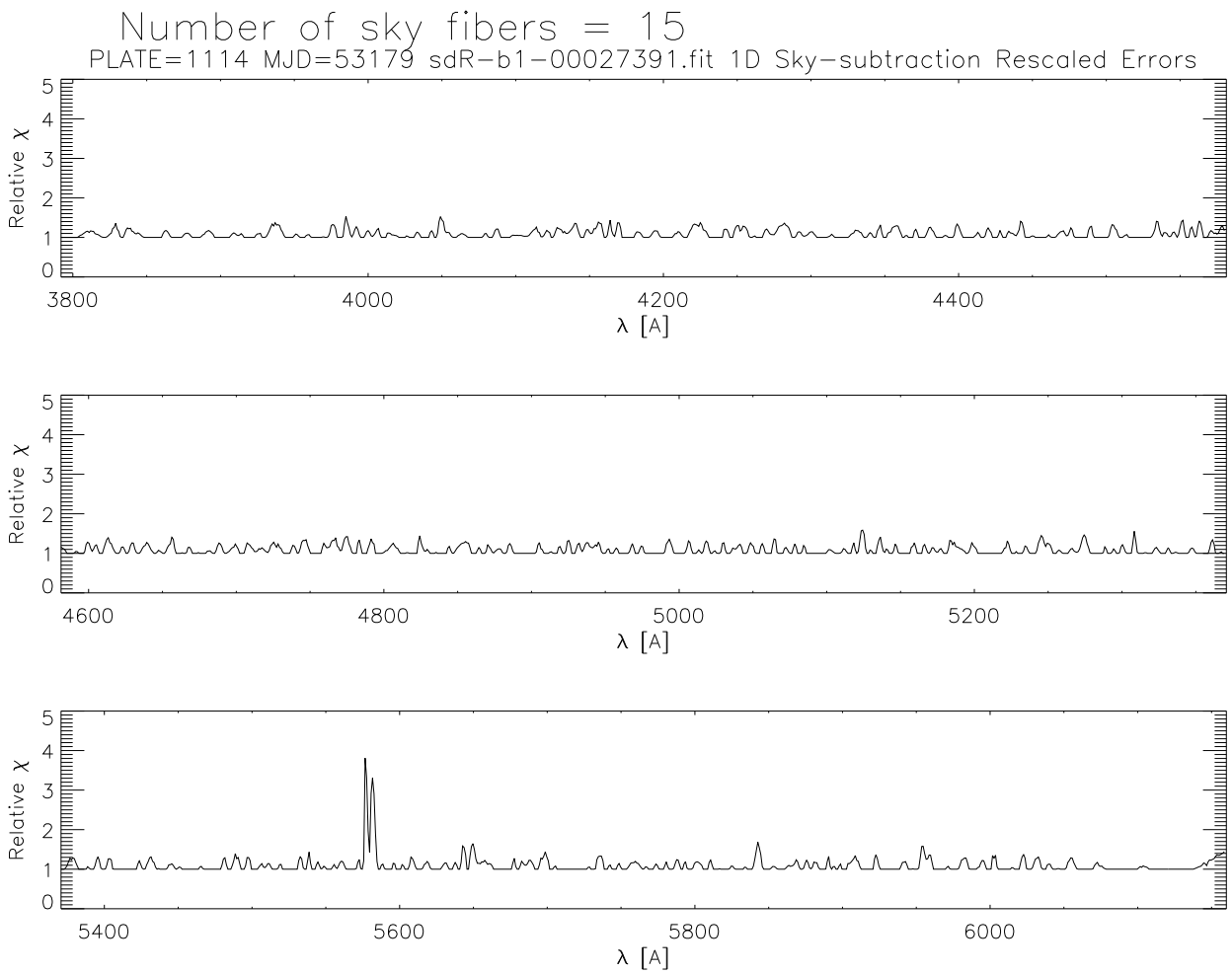
es= 0.0000

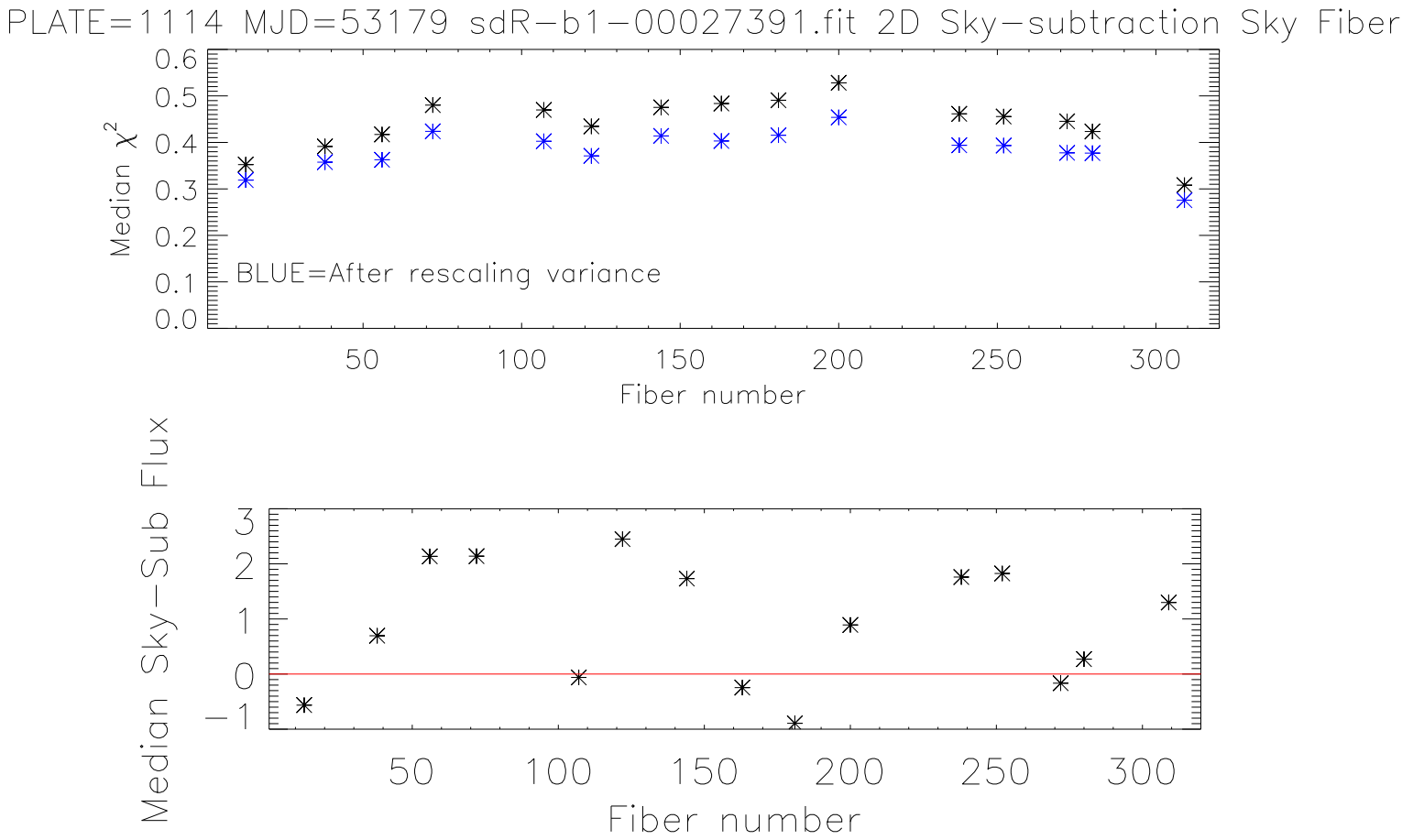

PLATE=1114 MJD=53179 Smooth superflat for sdR-b1-00027391.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

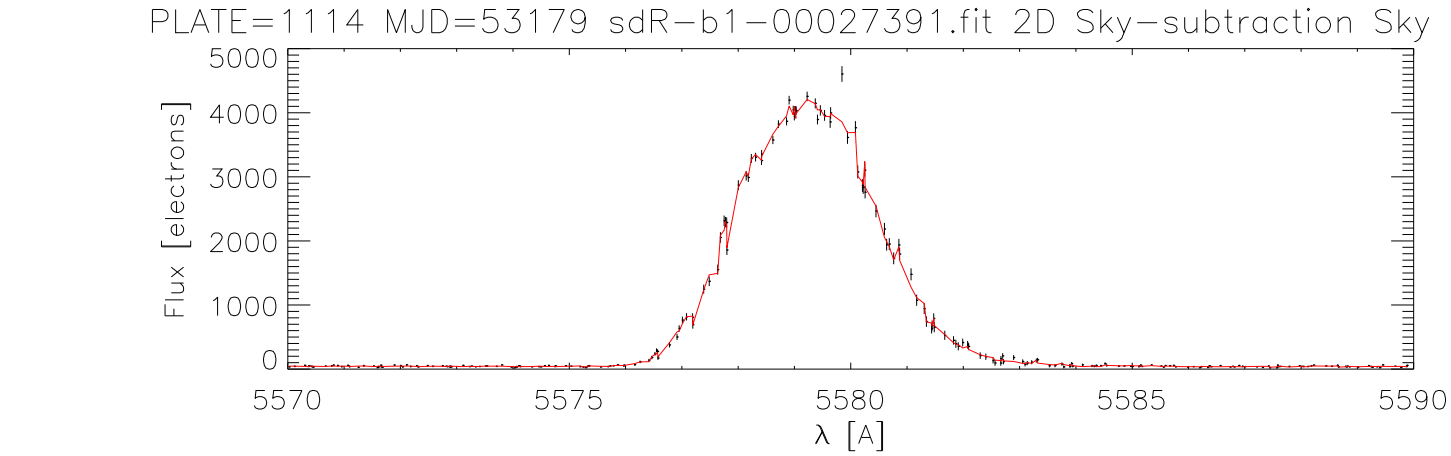

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

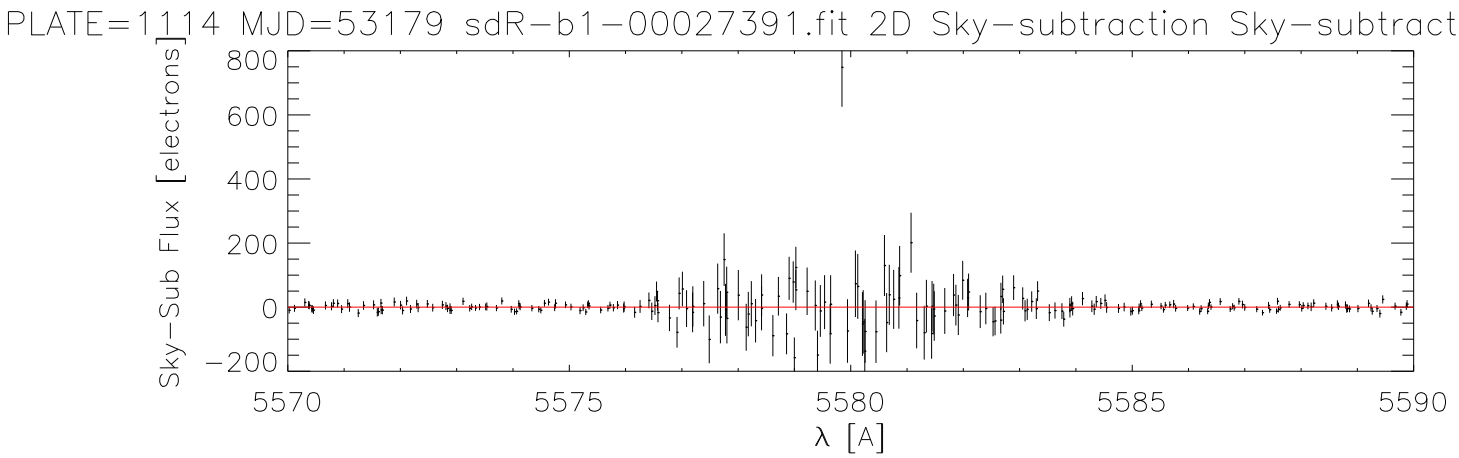

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

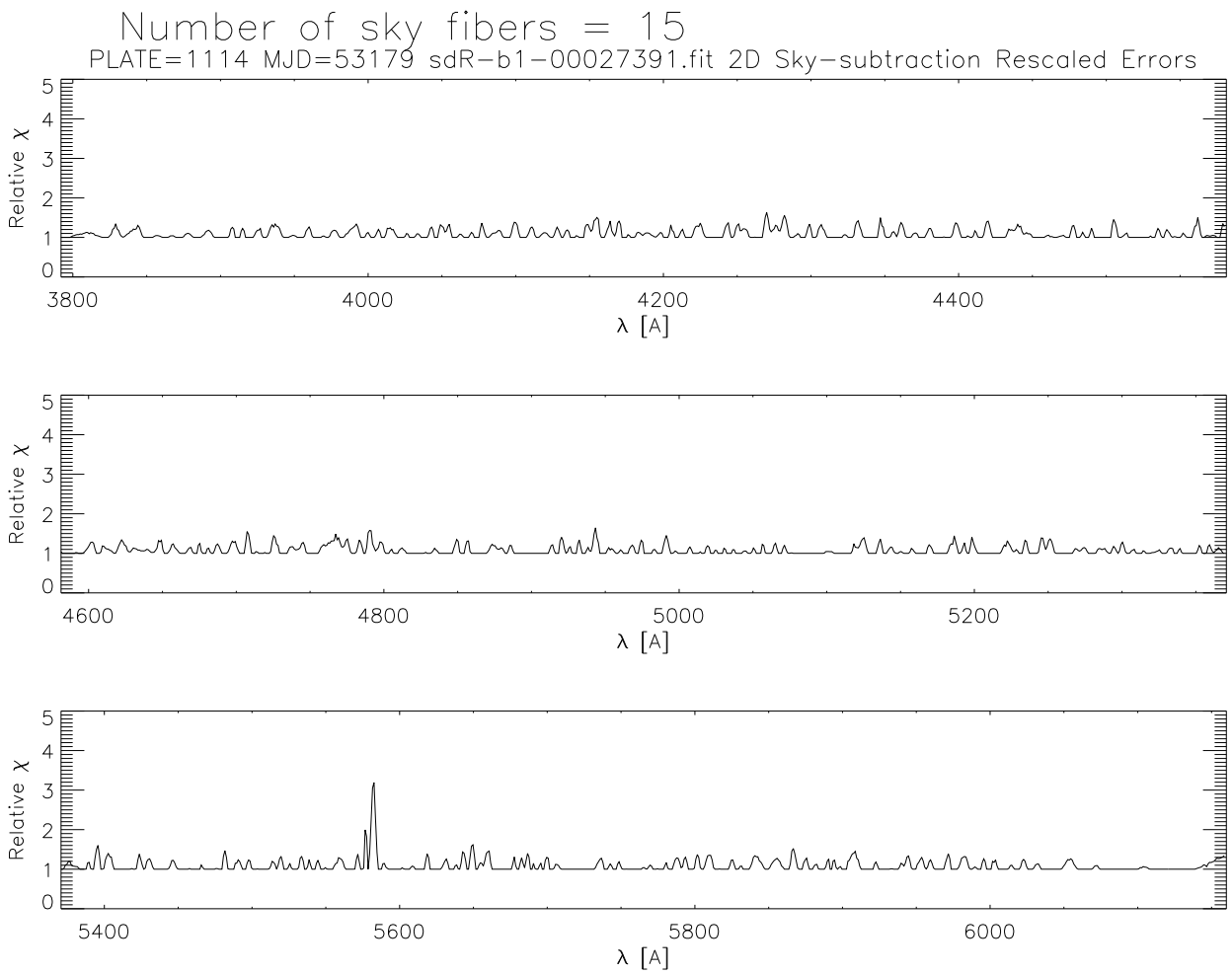

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

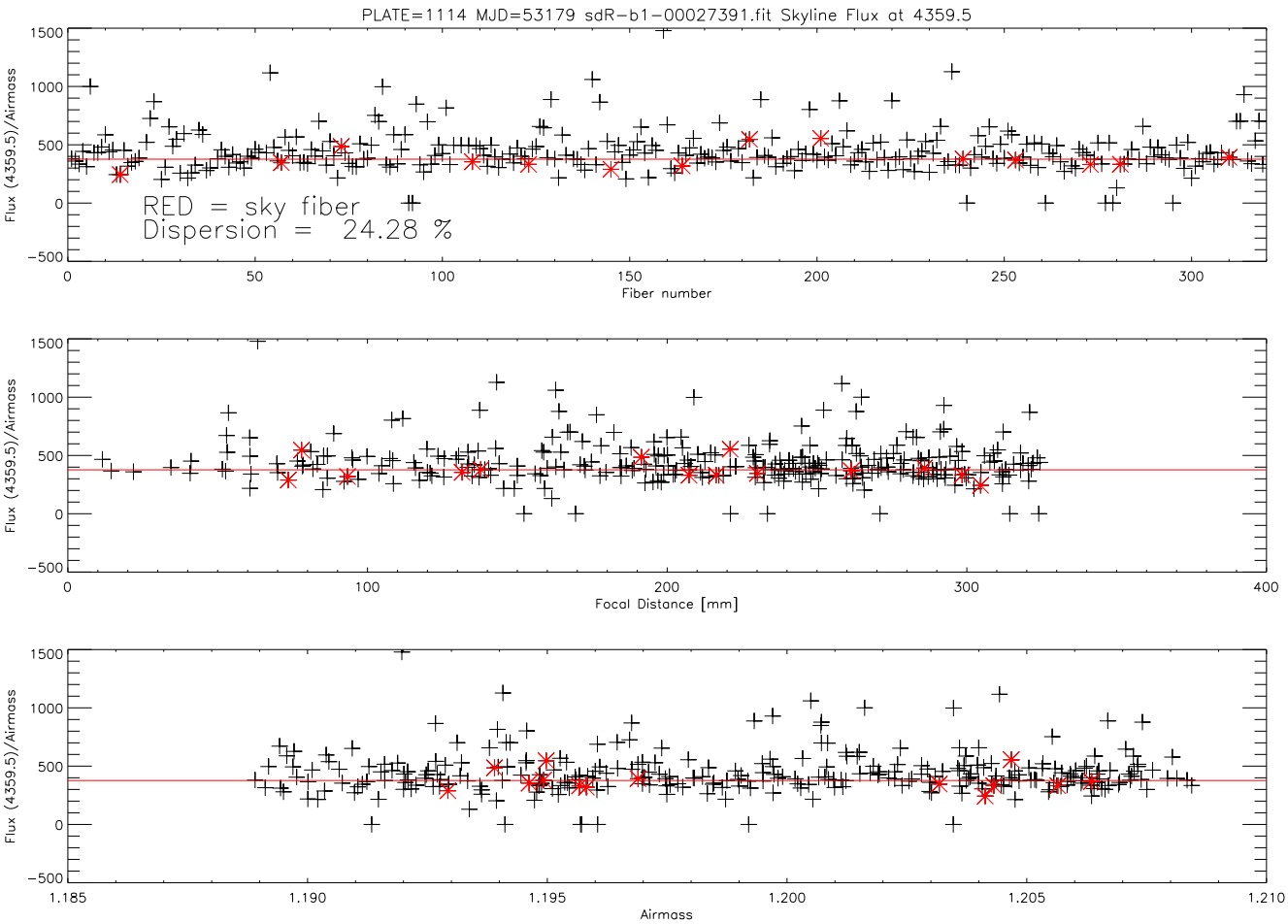

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027391.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

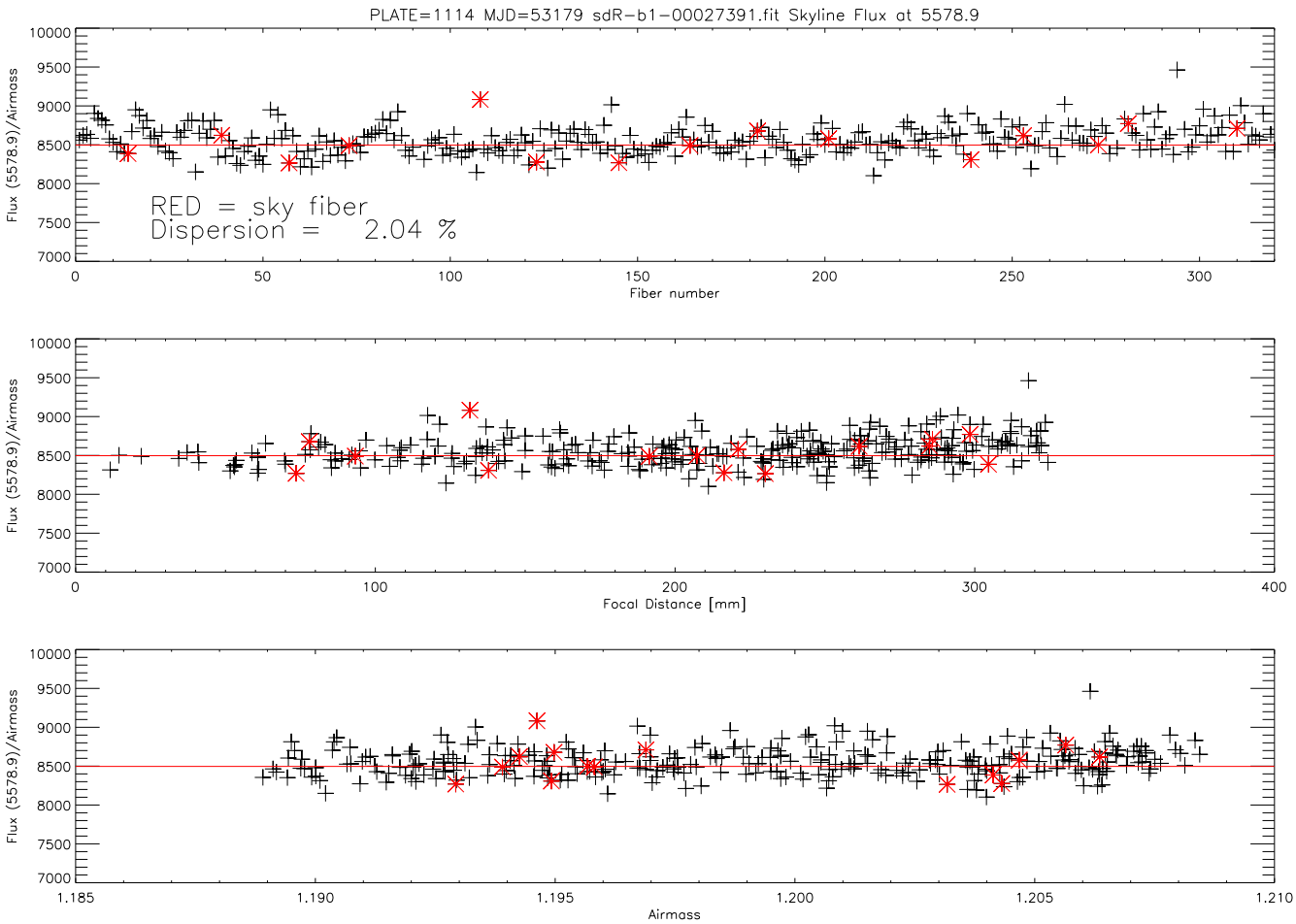

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

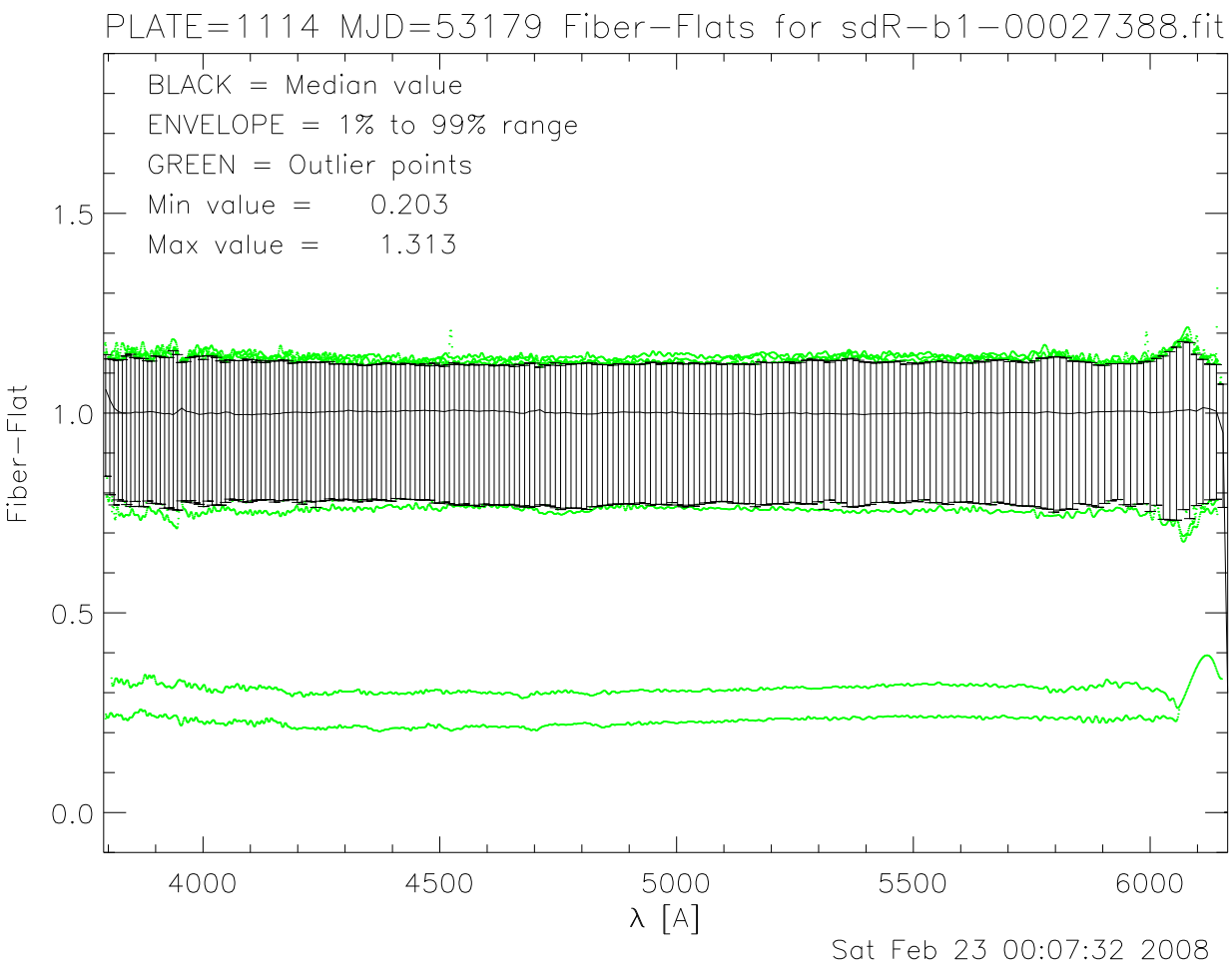

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

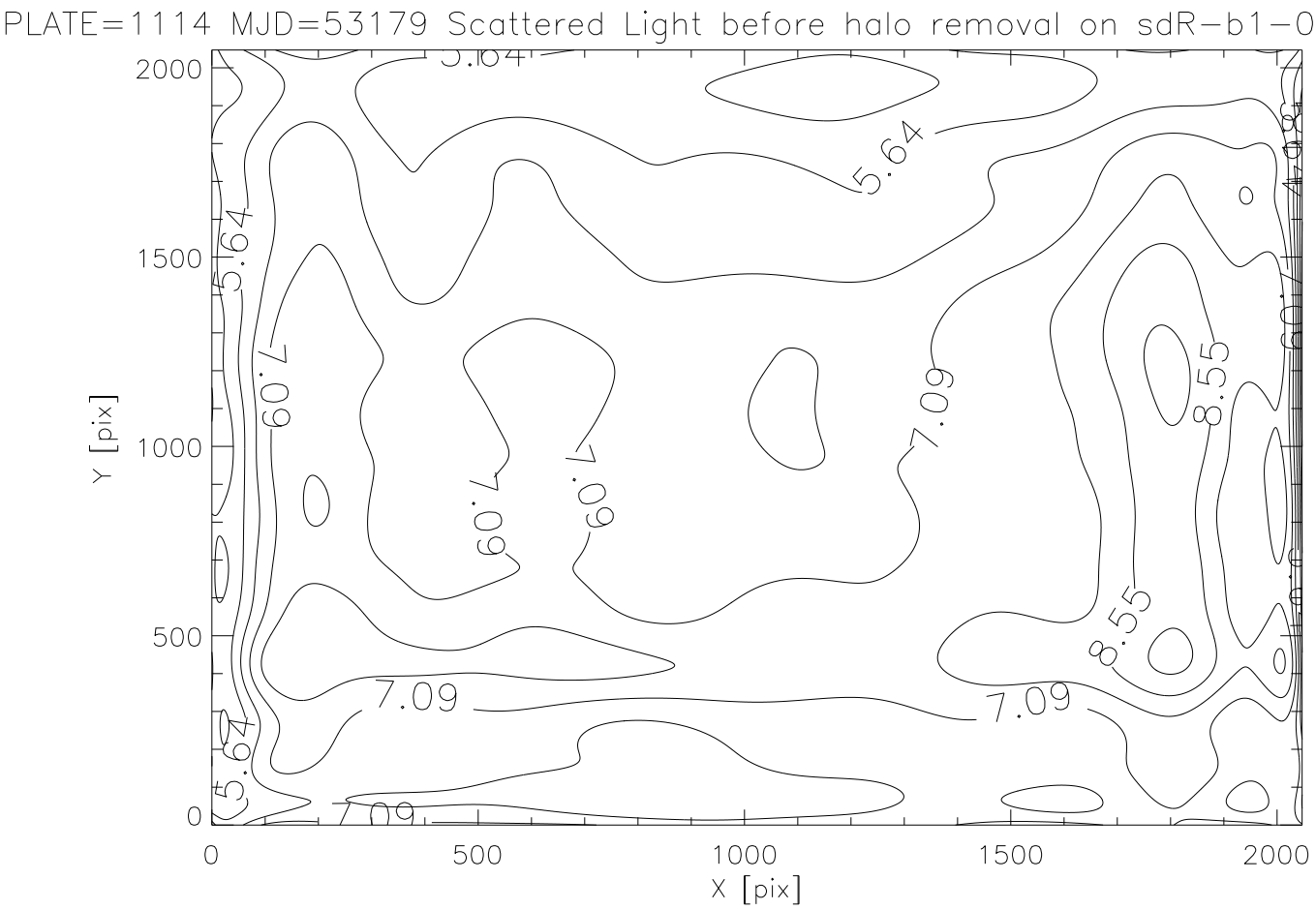

PLATE=1114 MJD=53179 sdR-b1-00027391.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

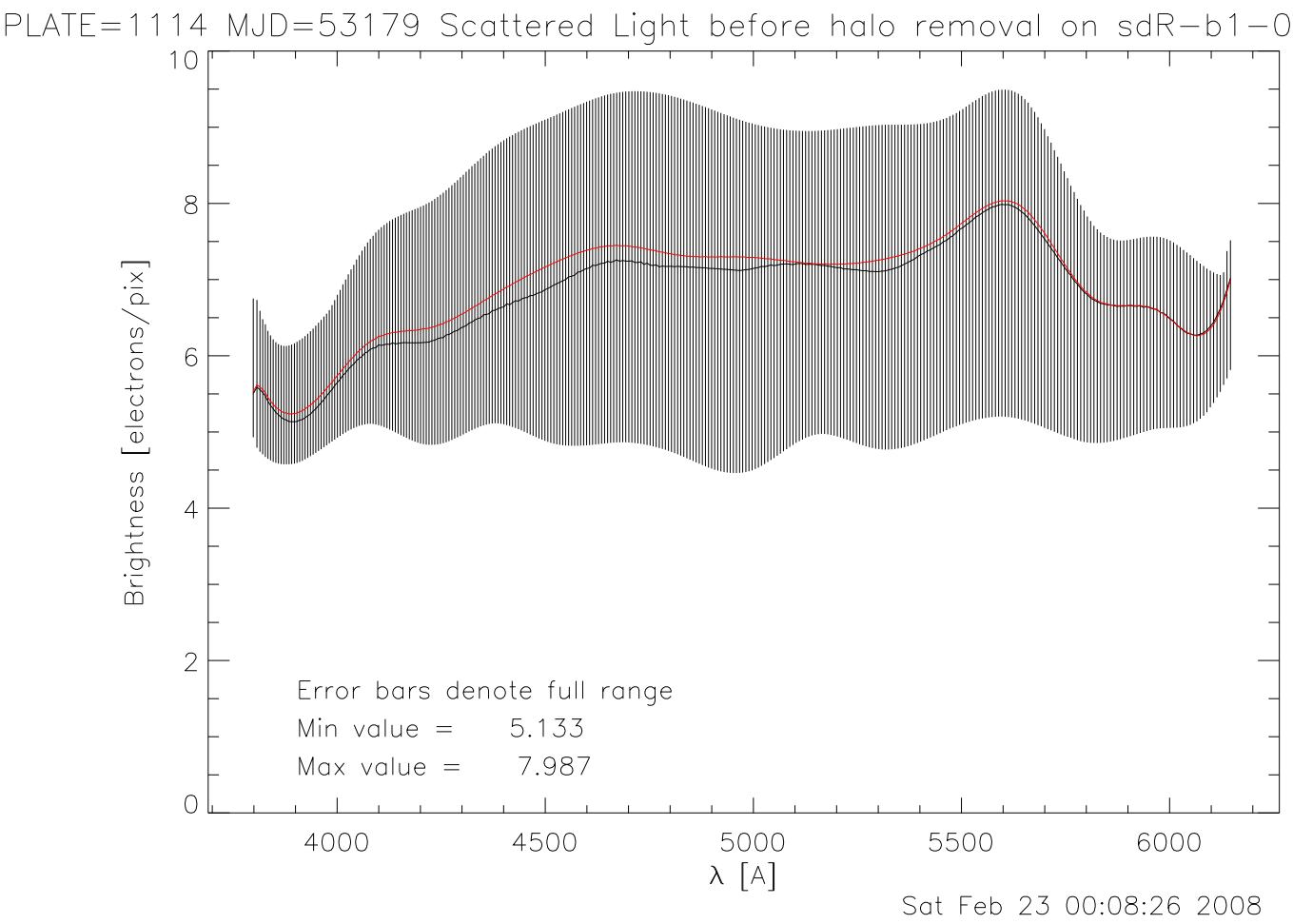

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027391.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

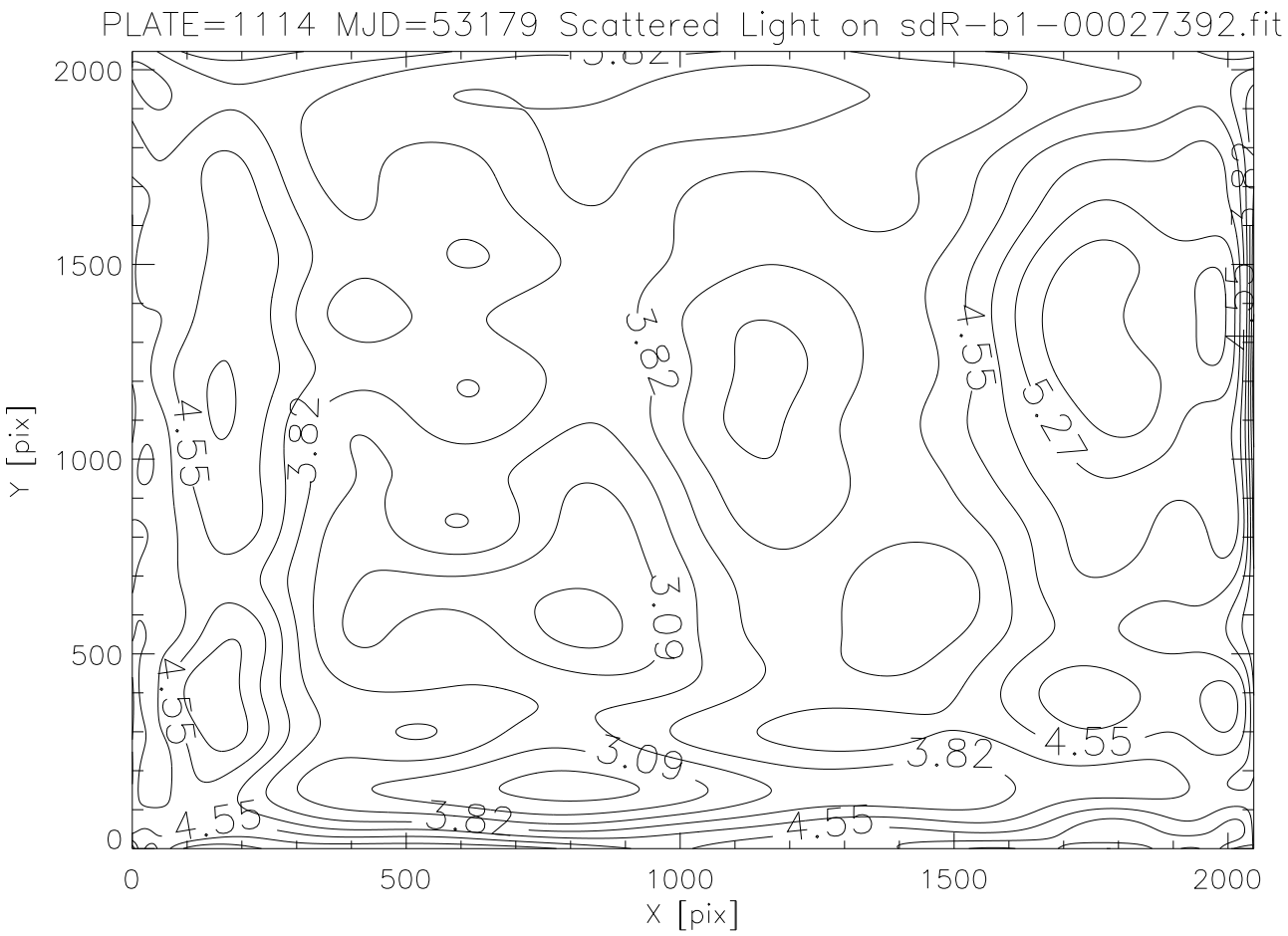

PLATE=1114 MJD=53179 sdR-b1-00027391.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 24.28 %
Fiber number
Focal Distance [mm]
Airmass

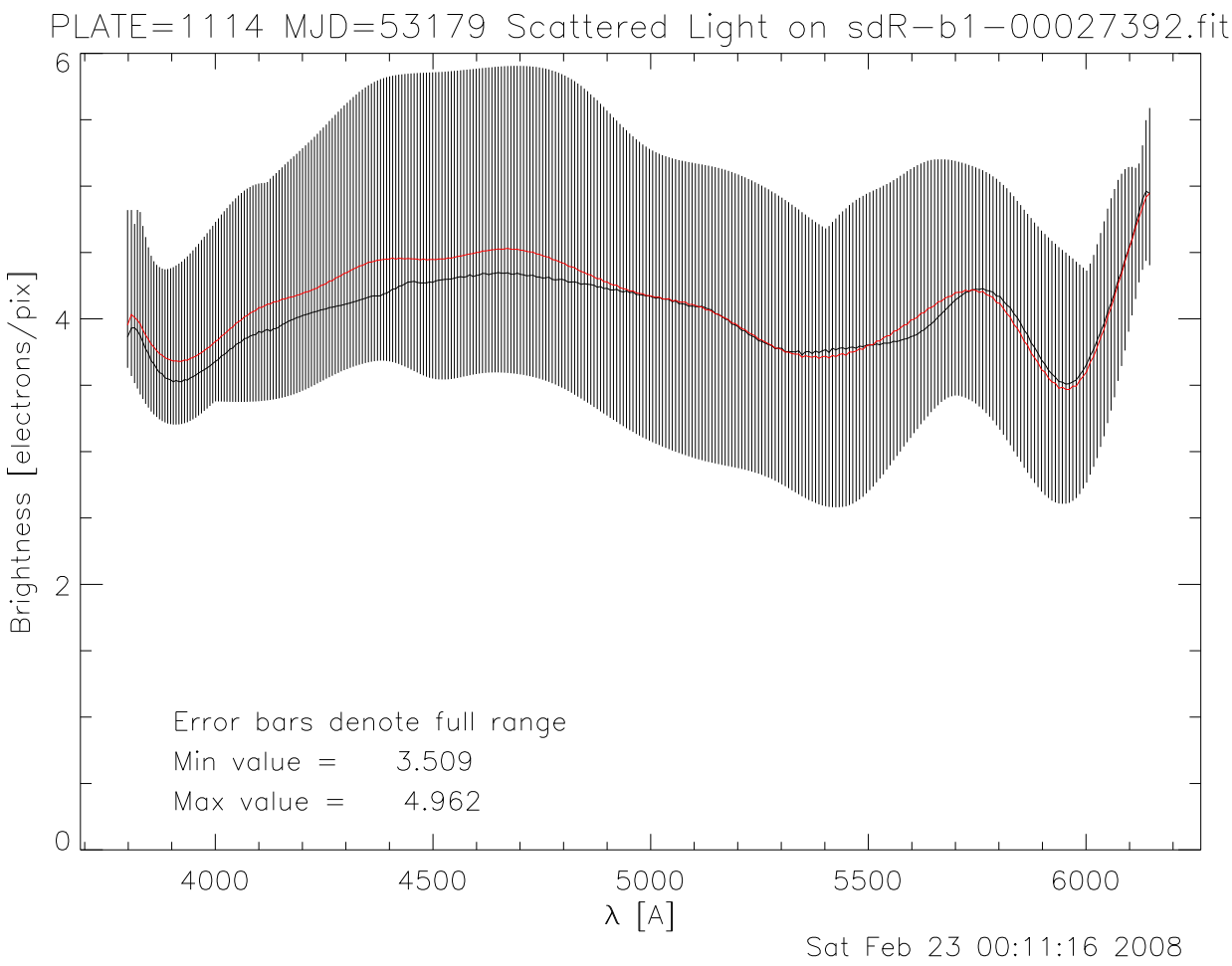

PLATE=1114 MJD=53179 sdR-b1-00027391.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.04 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

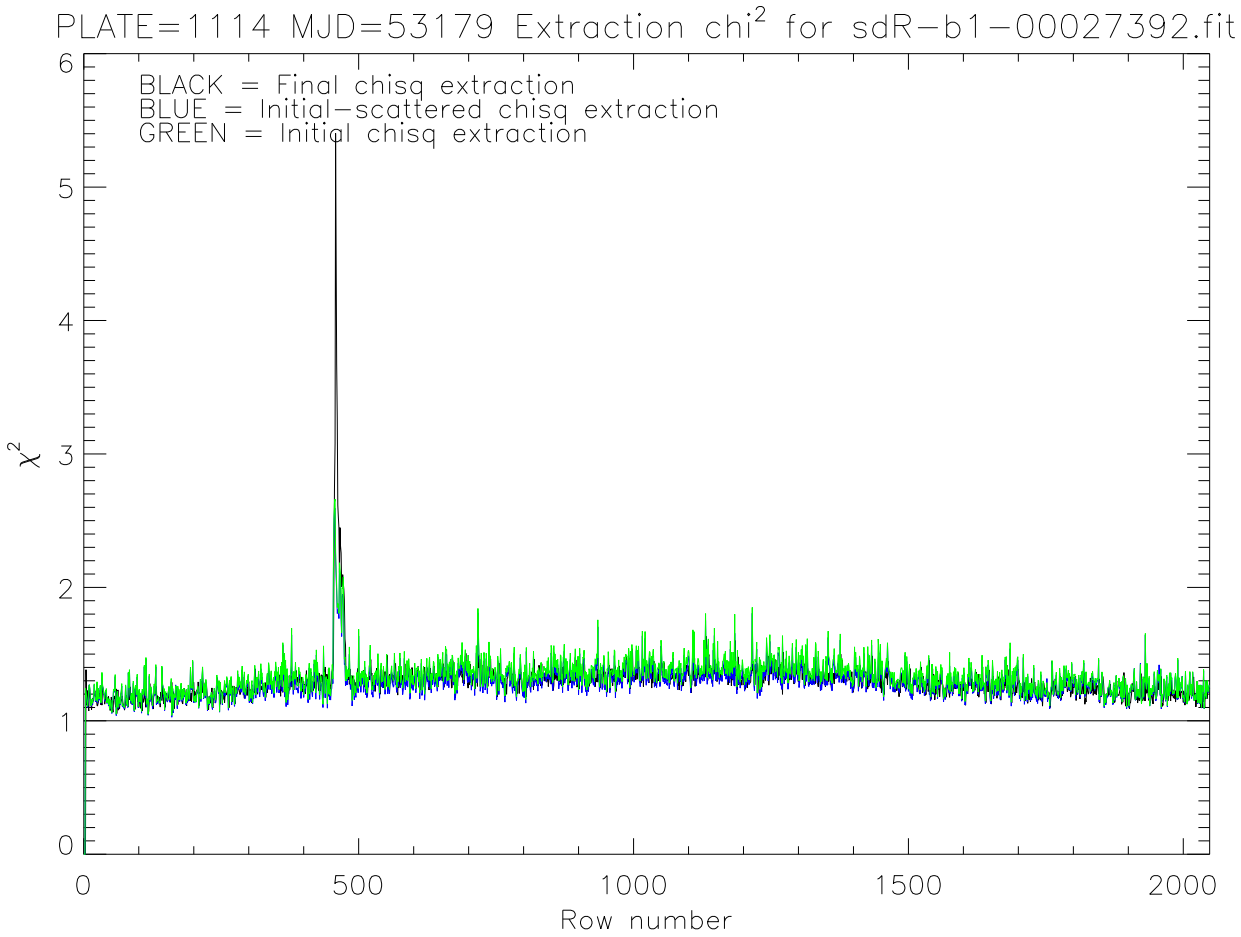

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b1-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.203
Max value = 1.313
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:07:32 2008

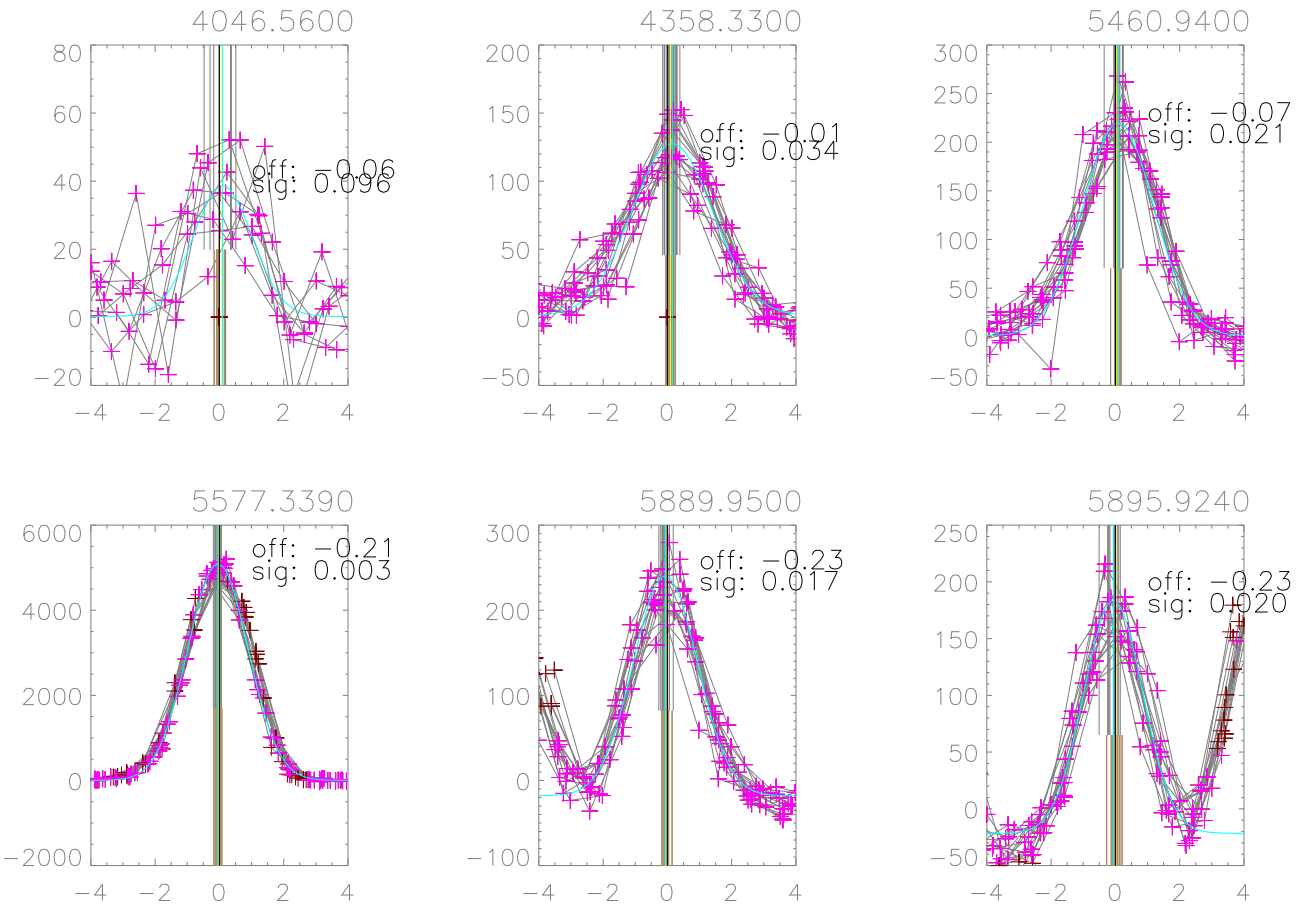

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b1-00027392.f
Y [pix]
X [pix]
0
500
1000
1500
2000
5.64
7.09
8.55

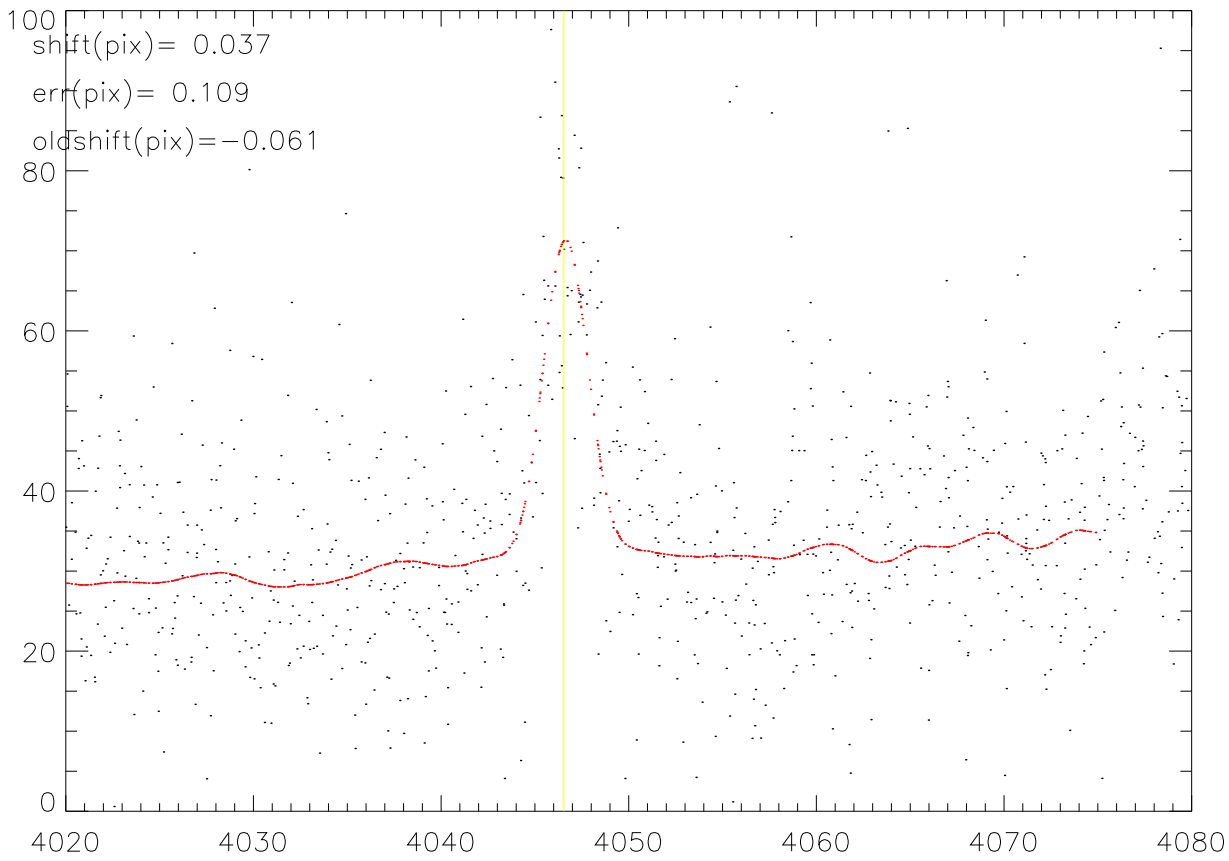

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b1-00027392.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.133
Max value = 7.987
Sat Feb 23 00:08:26 2008

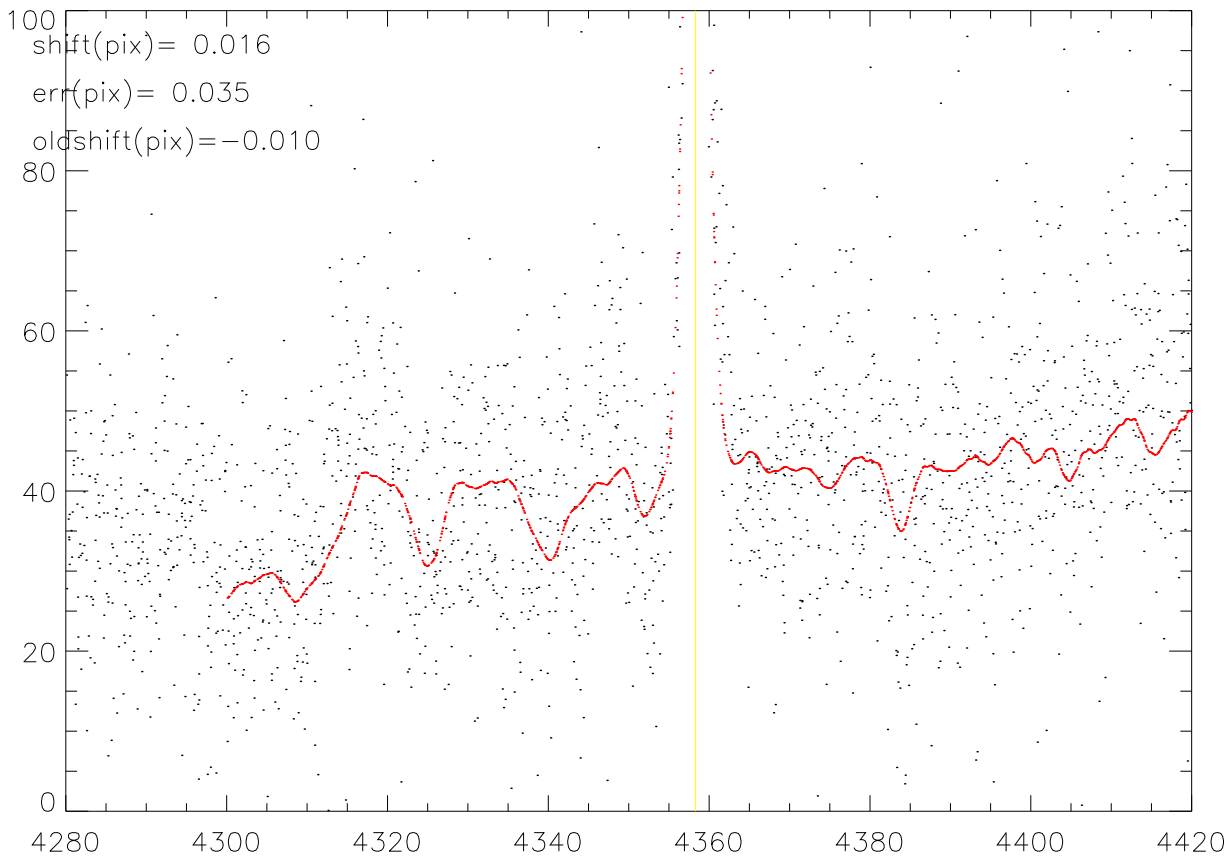

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027392.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
4.55
5.27
3.09

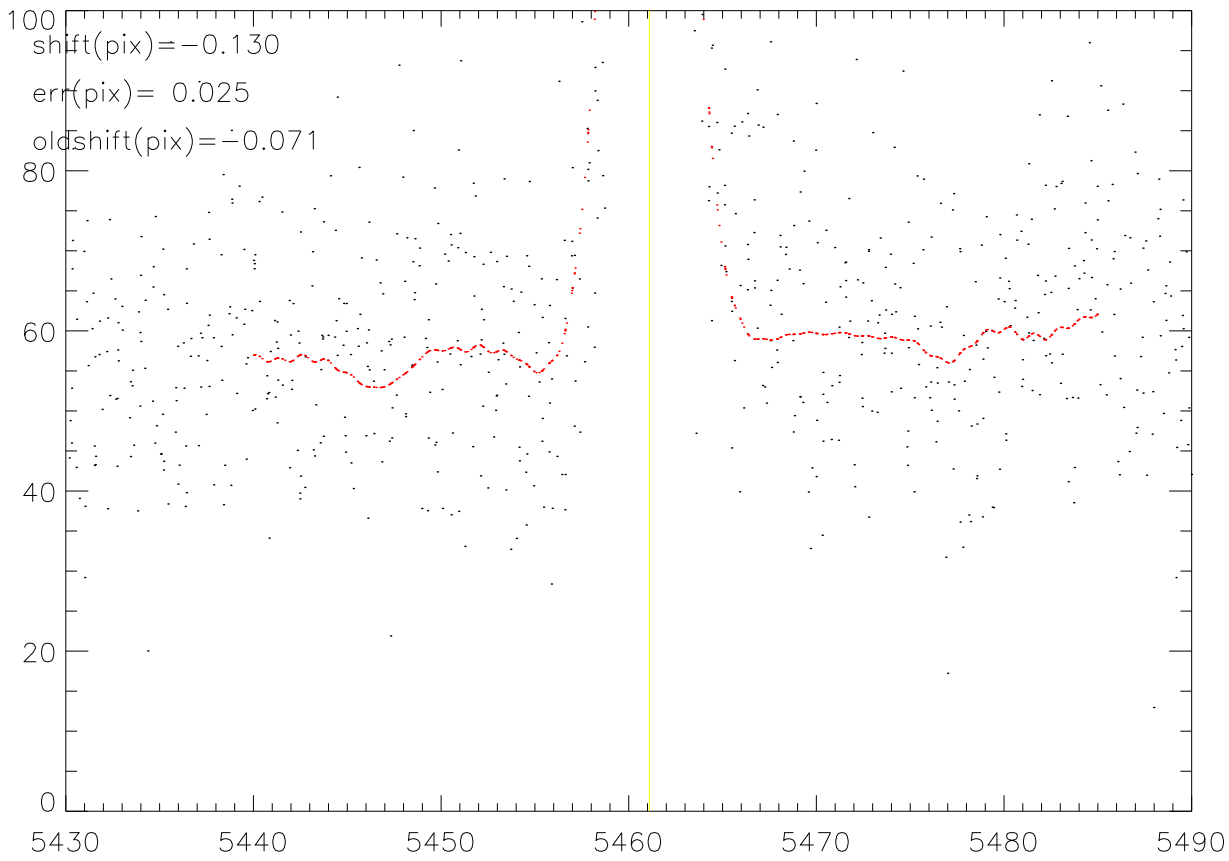

PLATE=1114 MJD=53179 Scattered Light on sdR-b1-00027392.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.509
Max value = 4.962
Sat Feb 23 00:11:16 2008

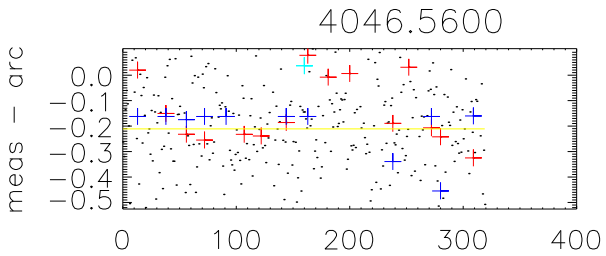

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b1-00027392.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

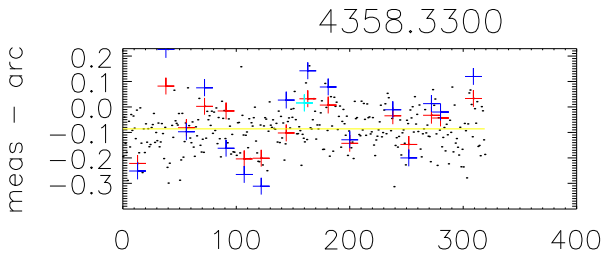

4046.5600
off: −0.06
sig: 0.096
4358.3300
off: −0.01
sig: 0.034
5460.9400
off: −0.07
sig: 0.021
5577.3390
off: −0.21
sig: 0.003
5889.9500
off: −0.23
sig: 0.017
5895.9240
off: −0.23
sig: 0.020

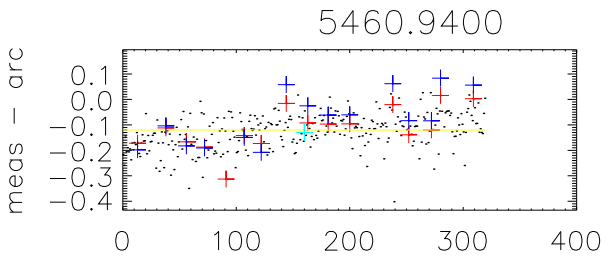

shift(pix)= 0.037
err(pix)= 0.109
oldshift(pix)=−0.061
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

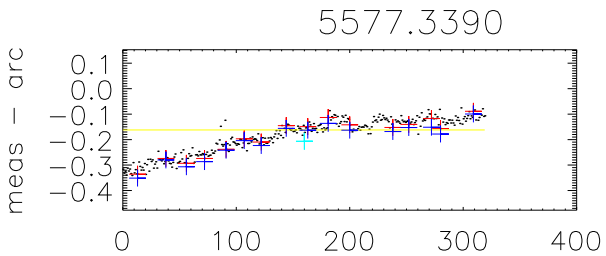

shift(pix)= 0.016
err(pix)= 0.035
oldshift(pix)=−0.010
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

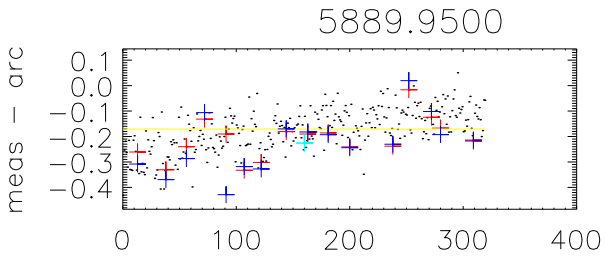

shift(pix)=−0.130
err(pix)= 0.025
oldshift(pix)=−0.071
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

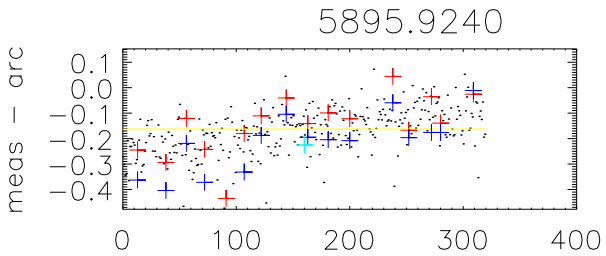

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

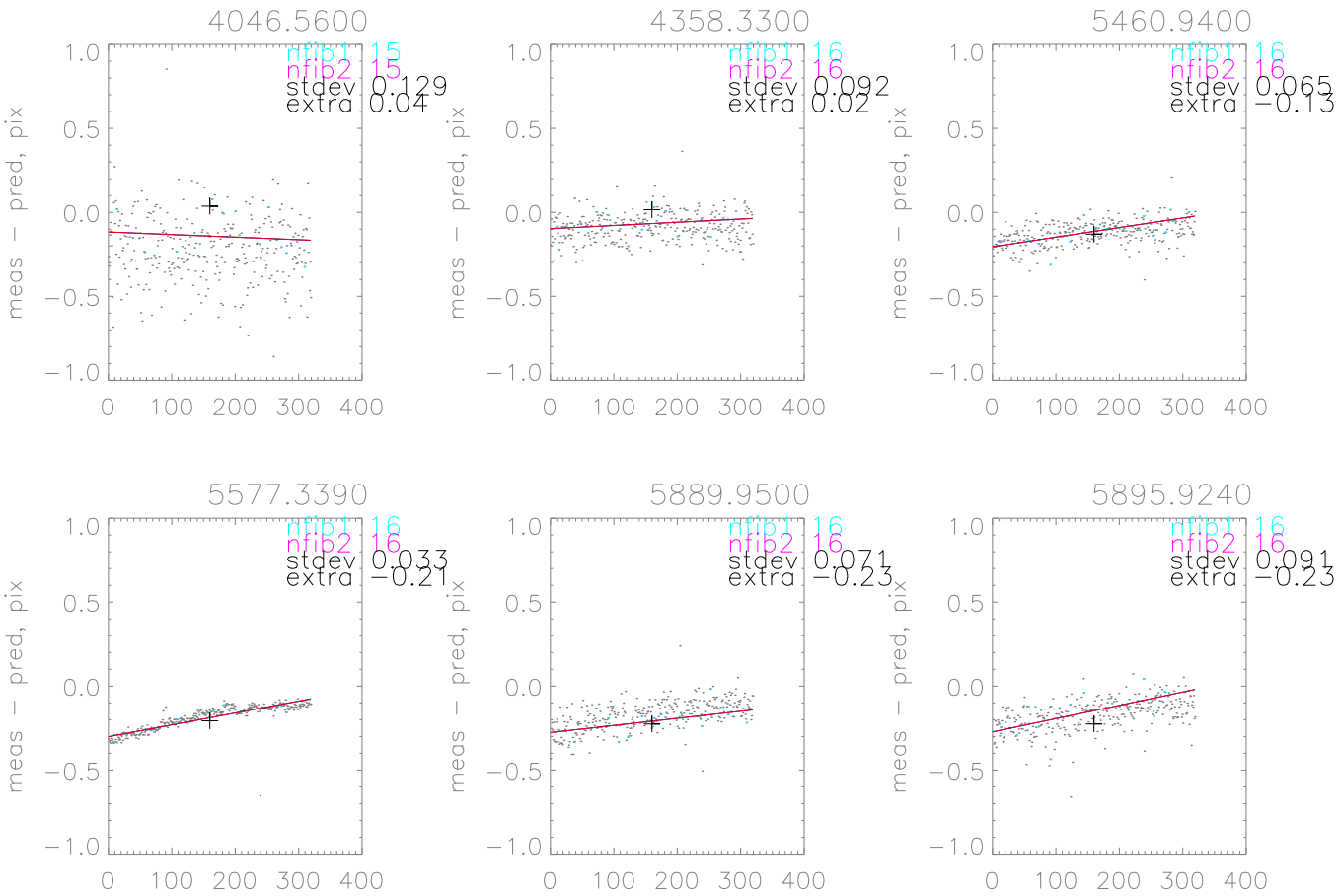

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

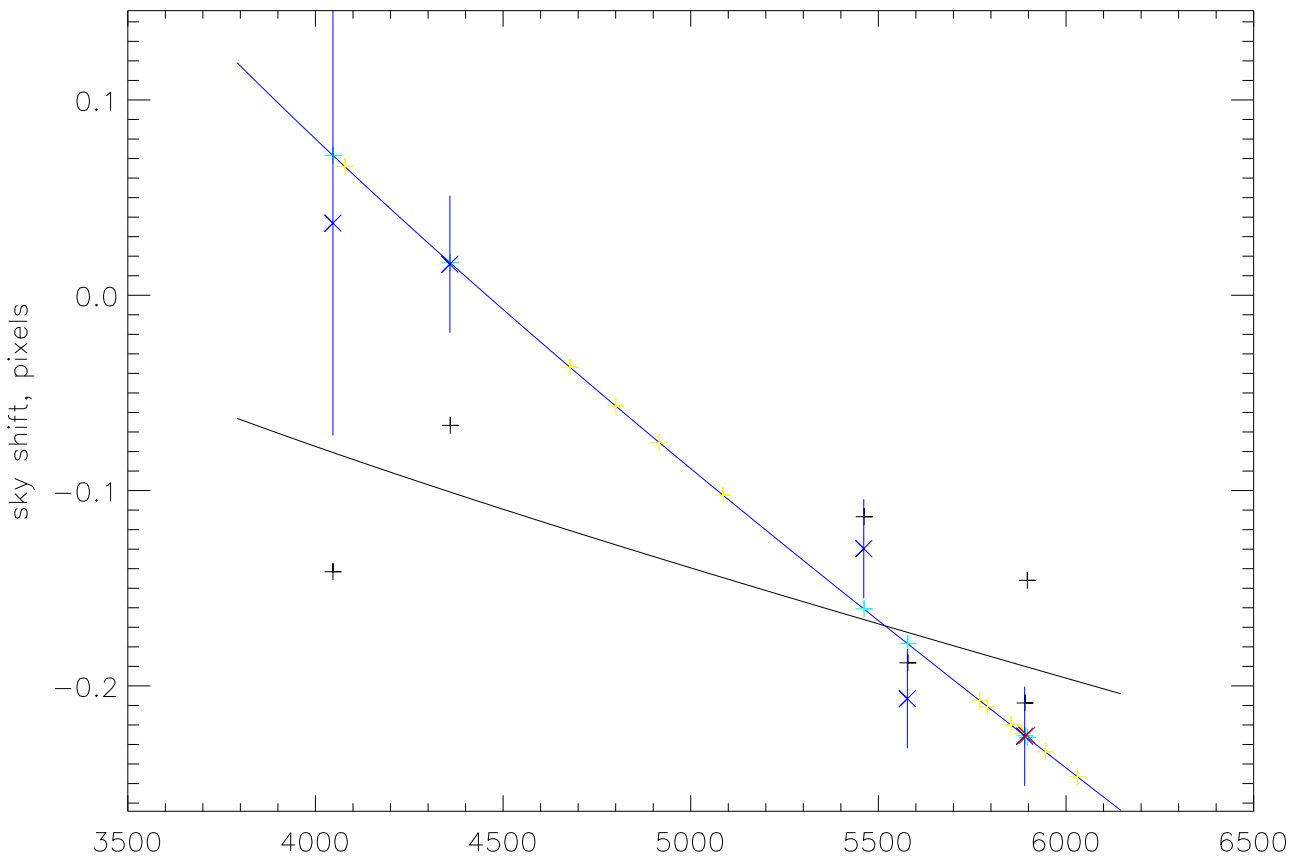

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

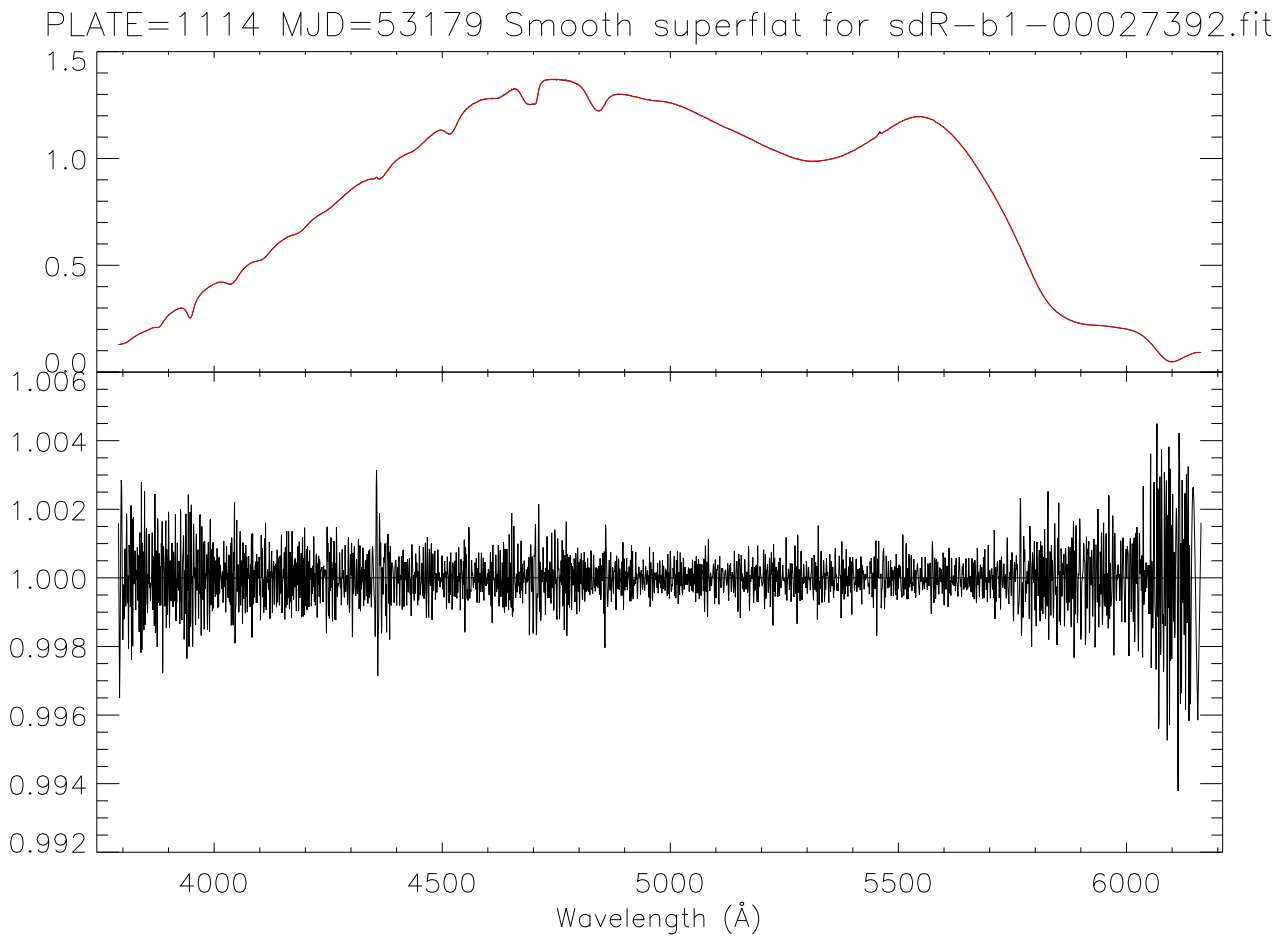

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

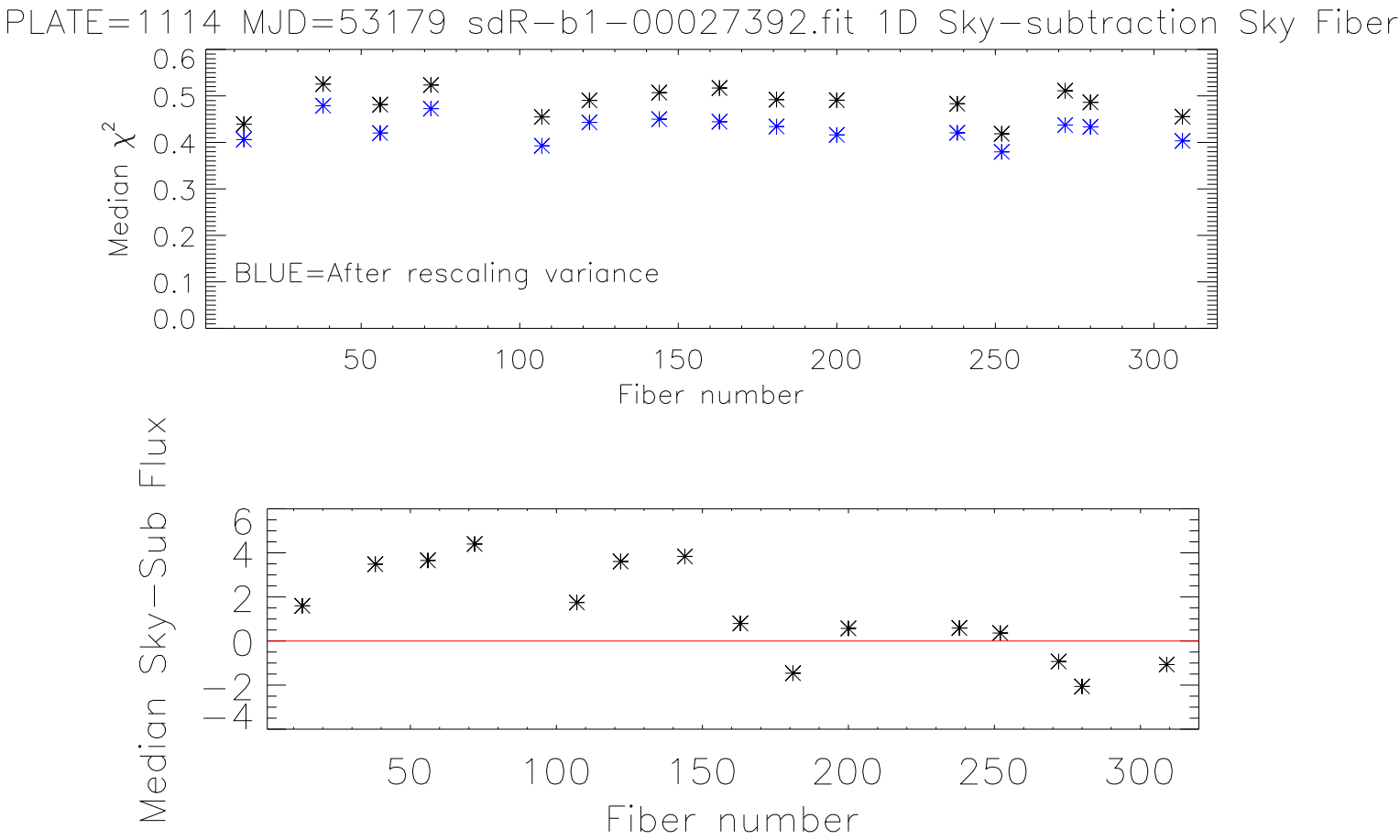

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

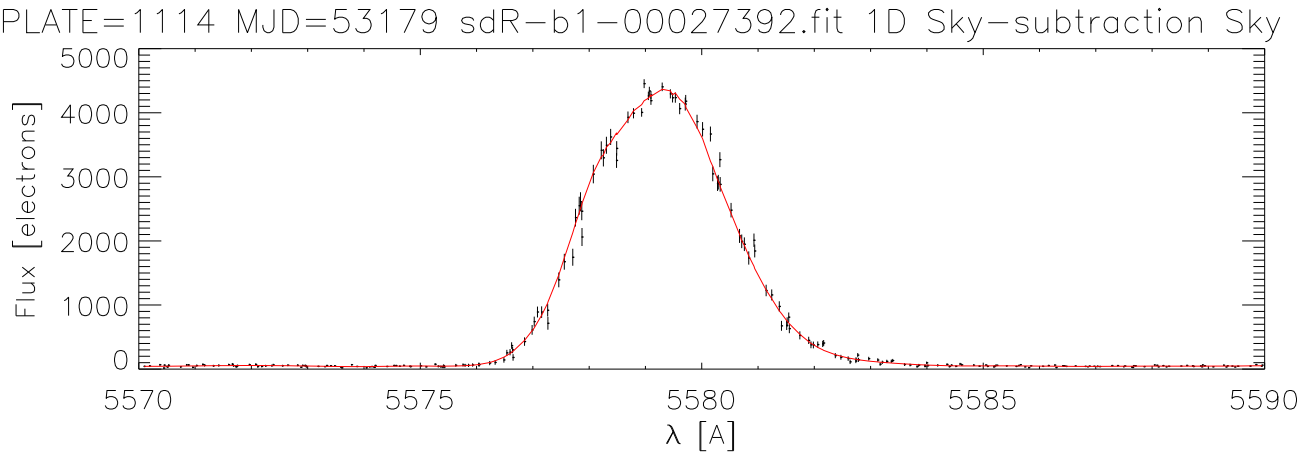

4046.5600
nfib1 15
nfib2 15
stdev 0.129
extra 0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.092
extra 0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.065
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.033
extra −0.21
5889.9500
nfib1 16
nfib2 16
stdev 0.071
extra −0.23
5895.9240
nfib1 16
nfib2 16
stdev 0.091
extra −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

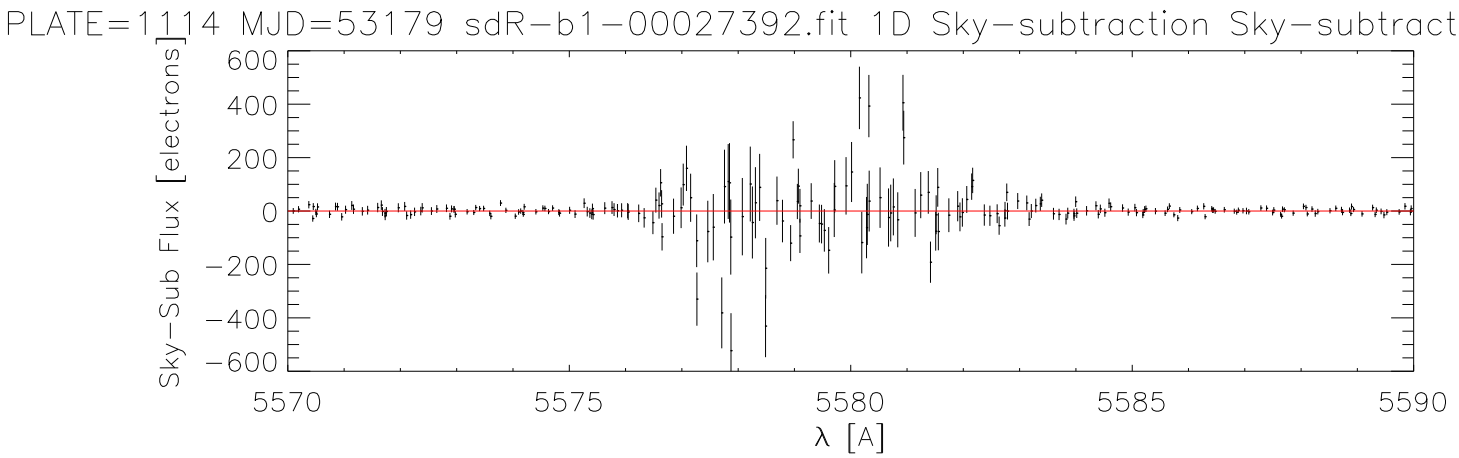

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

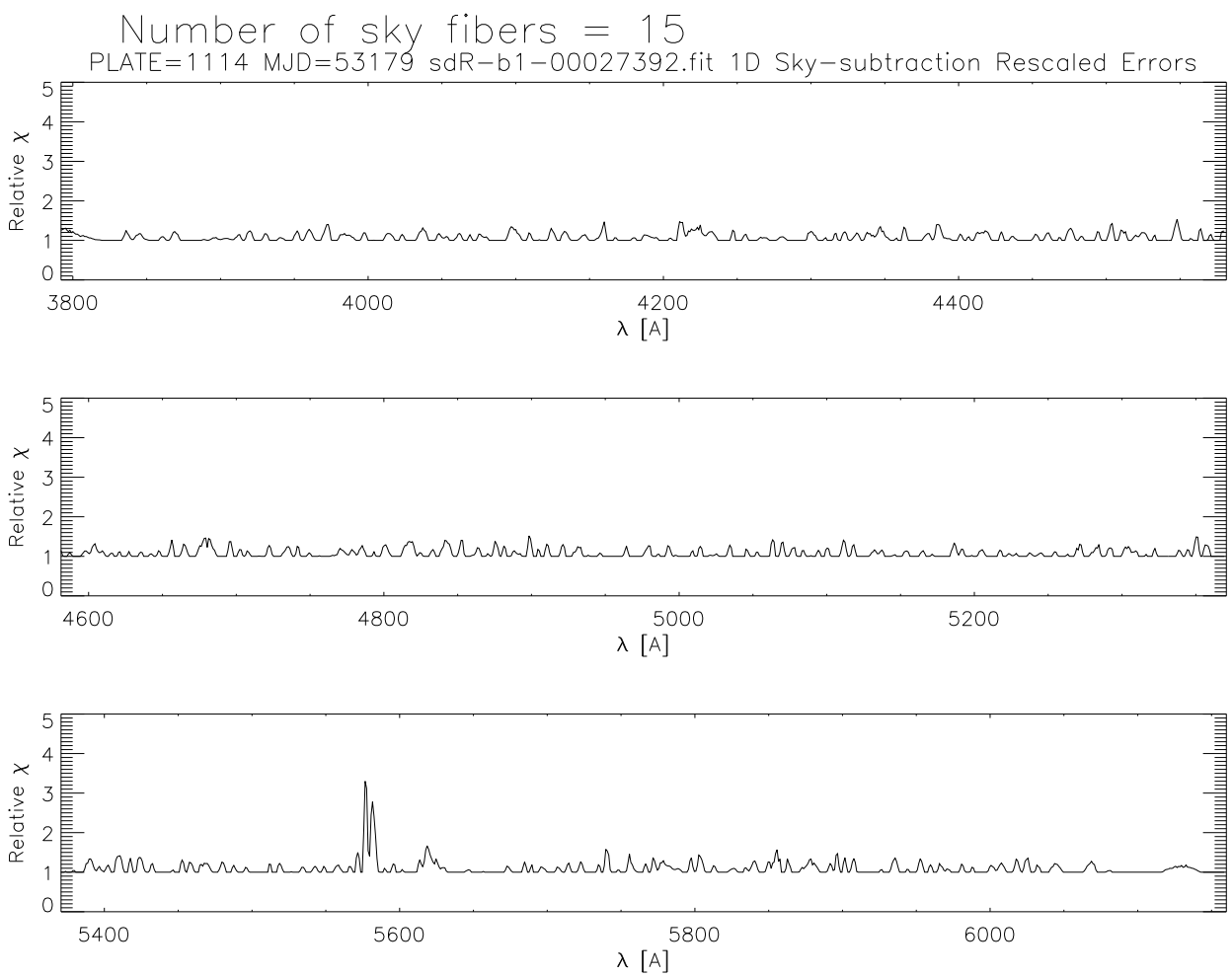
es= 0.0000

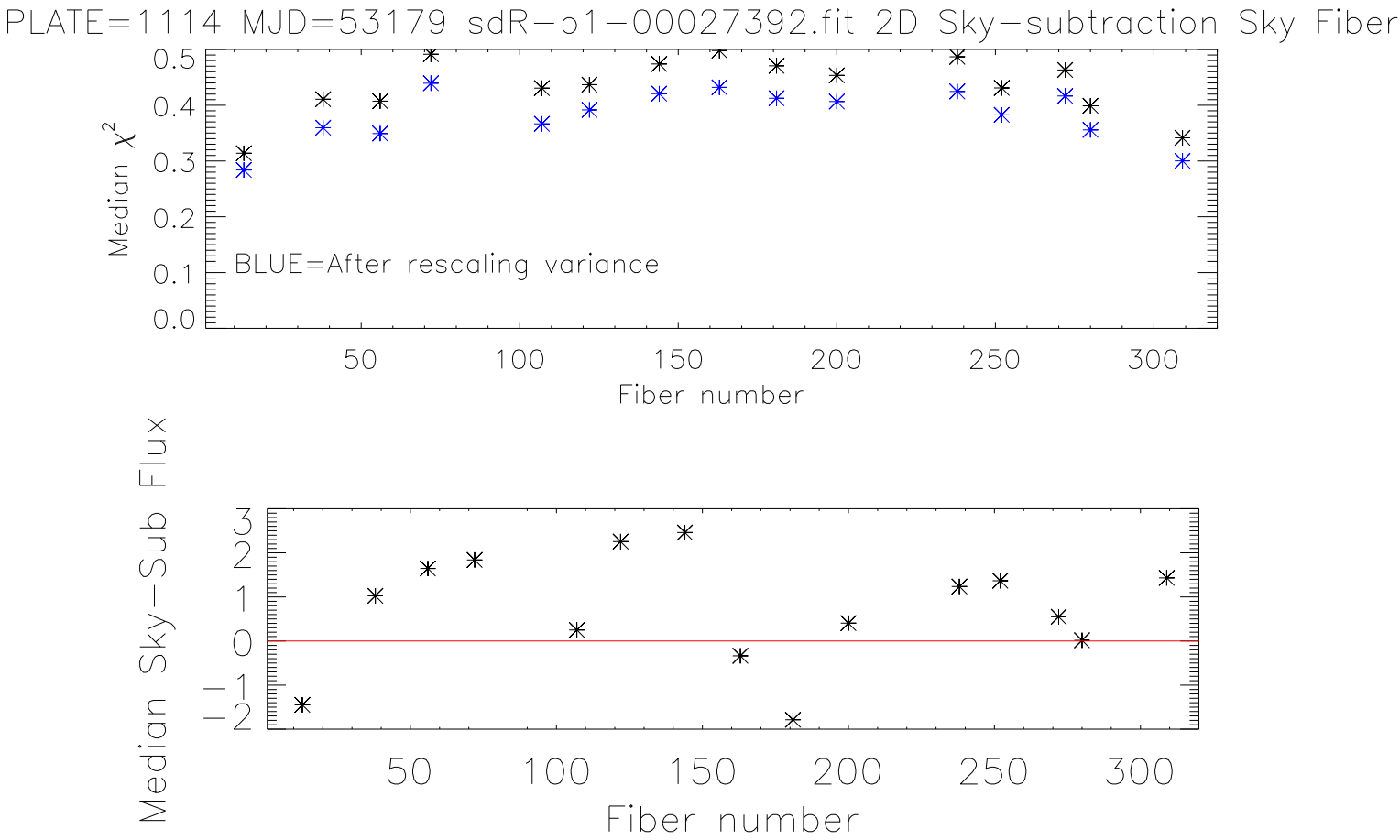

PLATE=1114 MJD=53179 Smooth superflat for sdR-b1-00027392.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

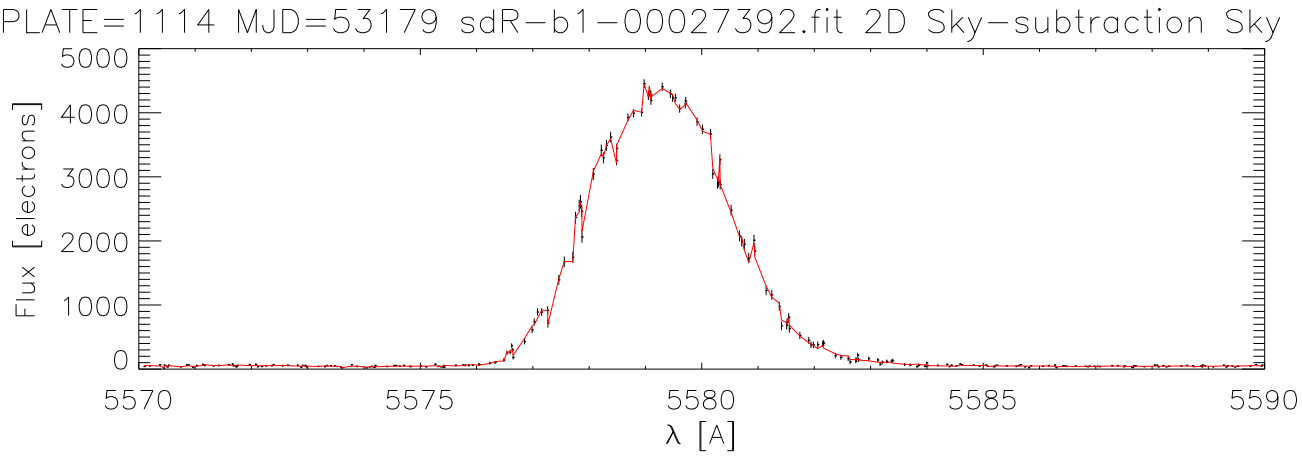

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

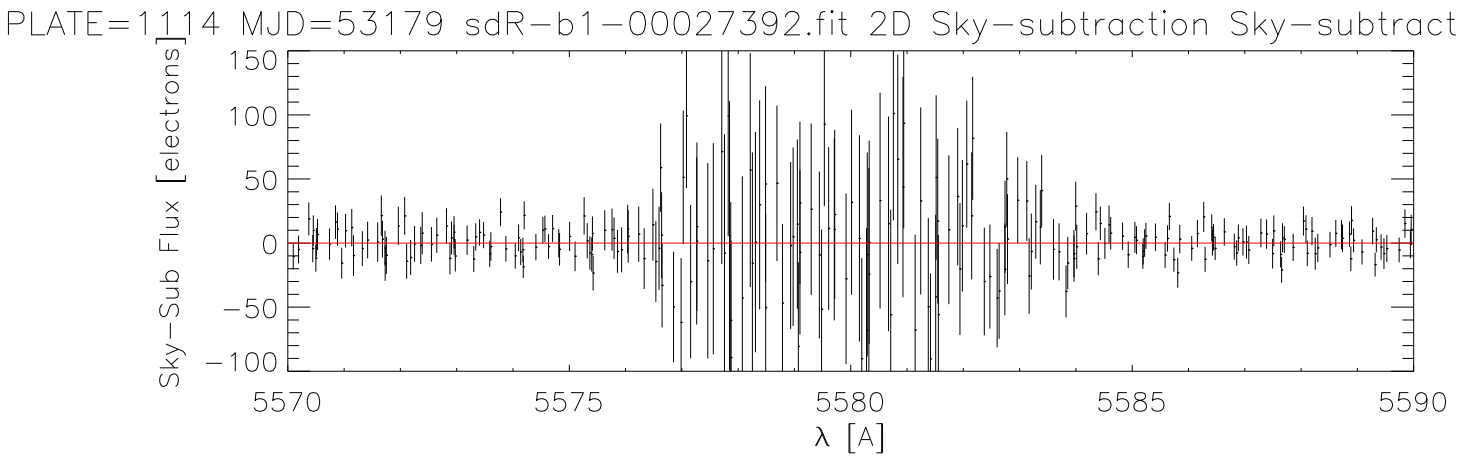

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

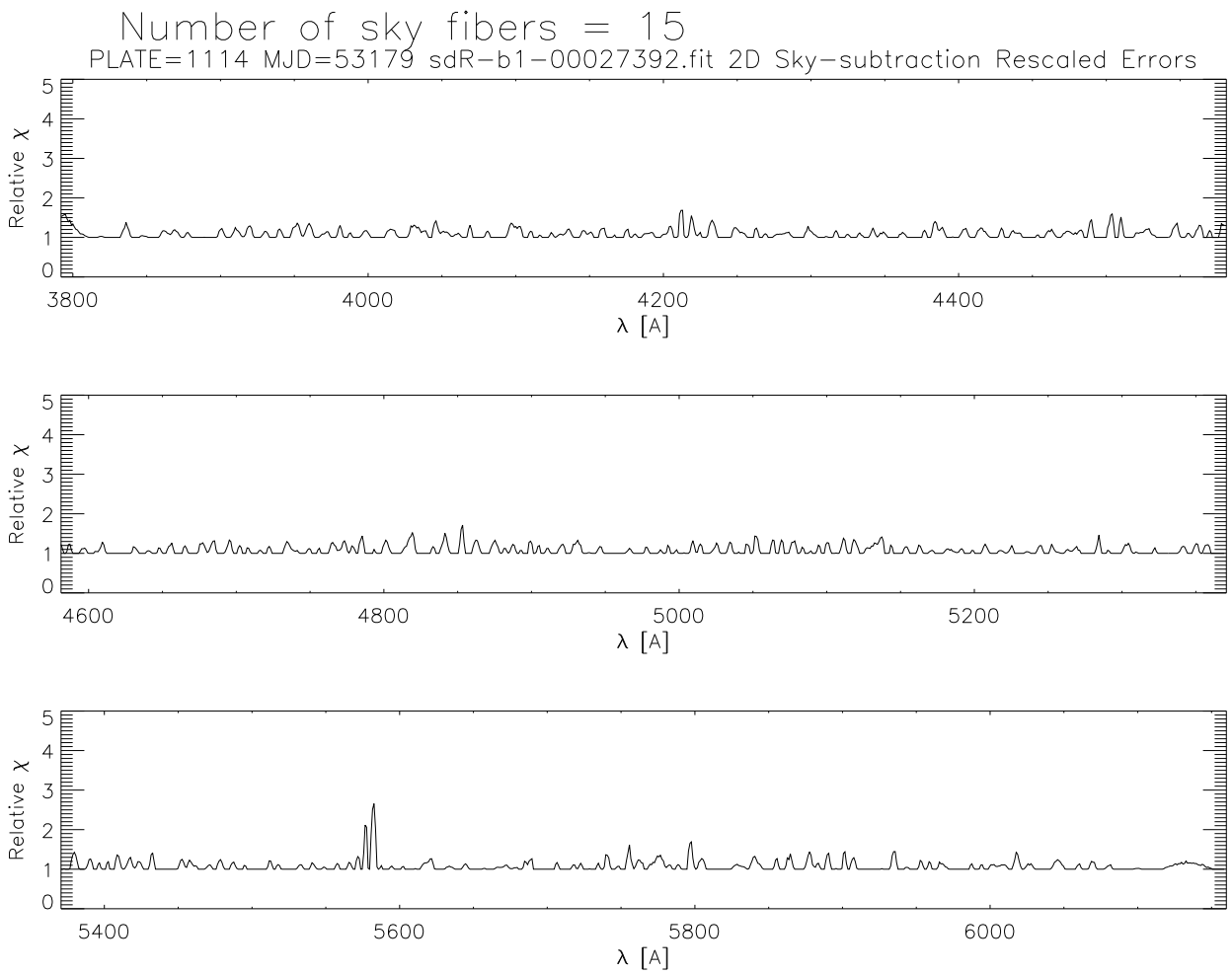

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

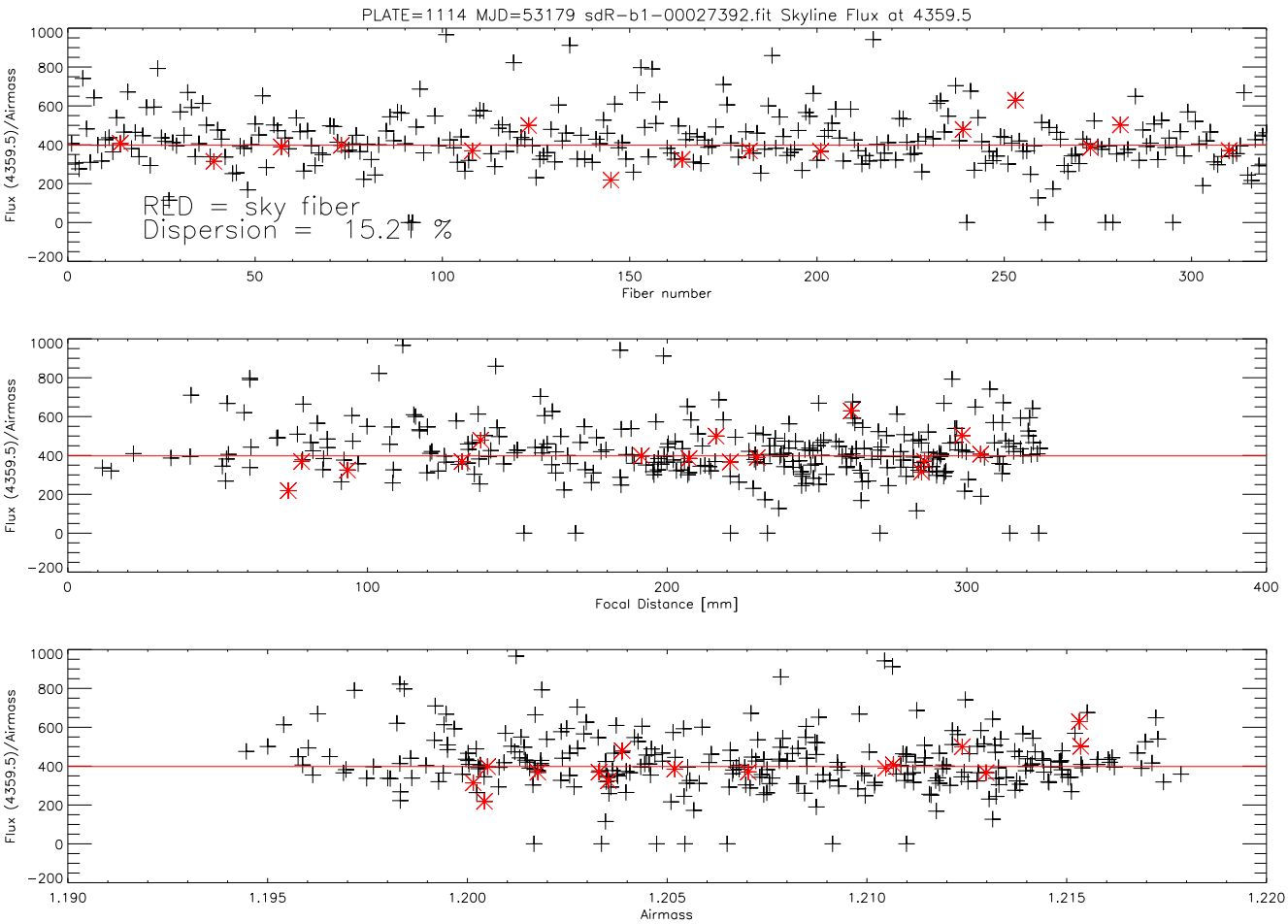

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027392.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

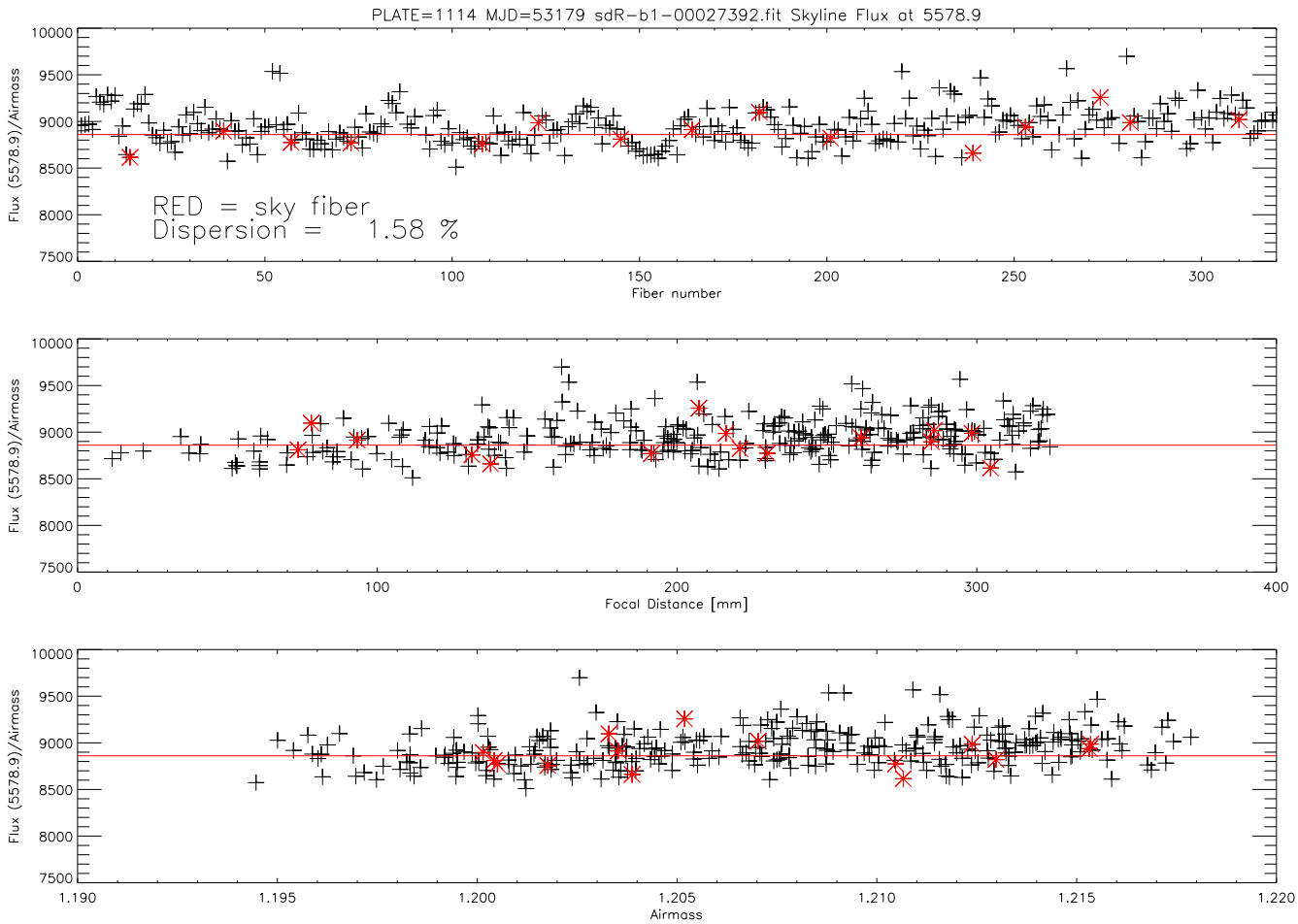

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

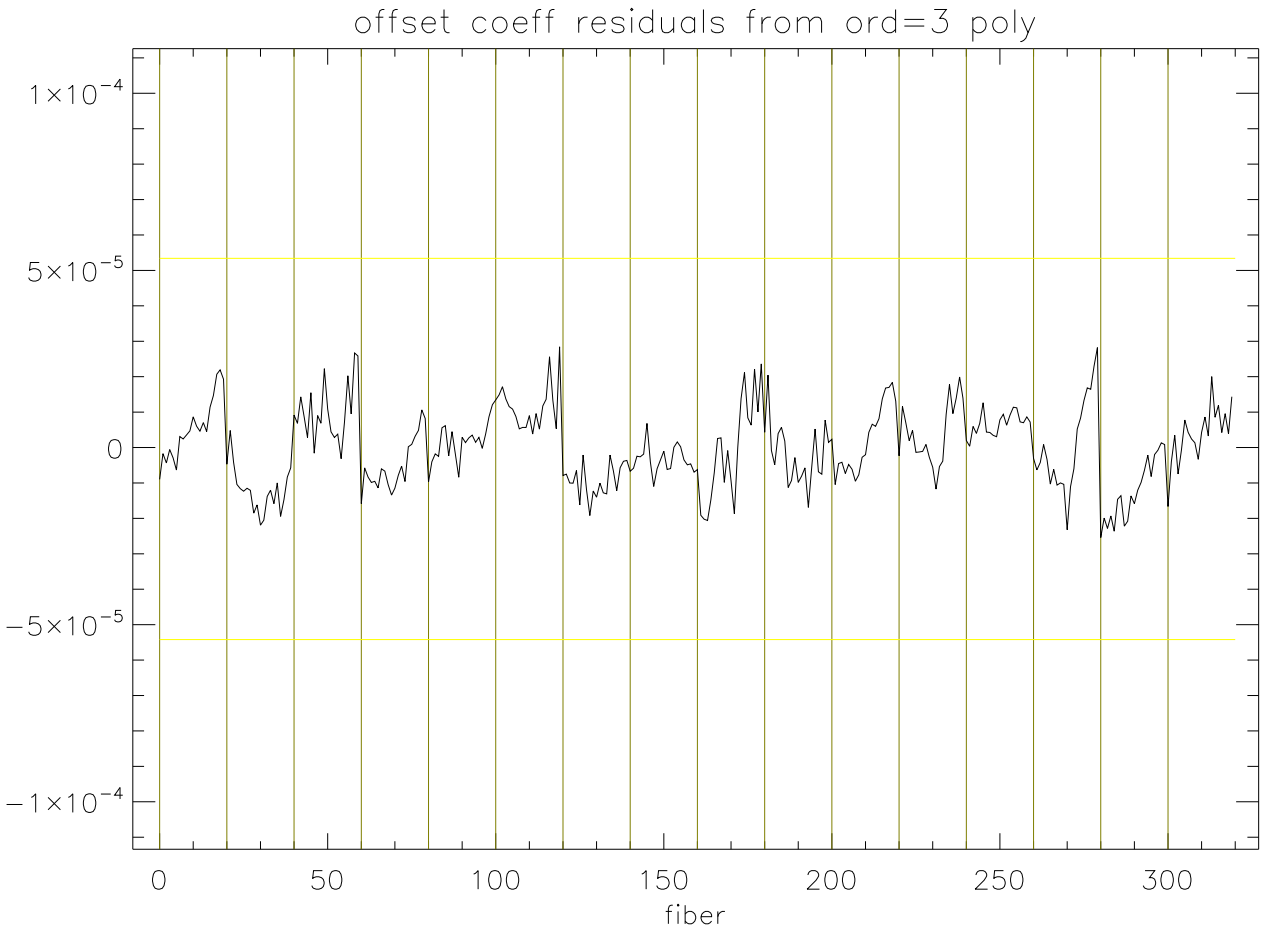

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

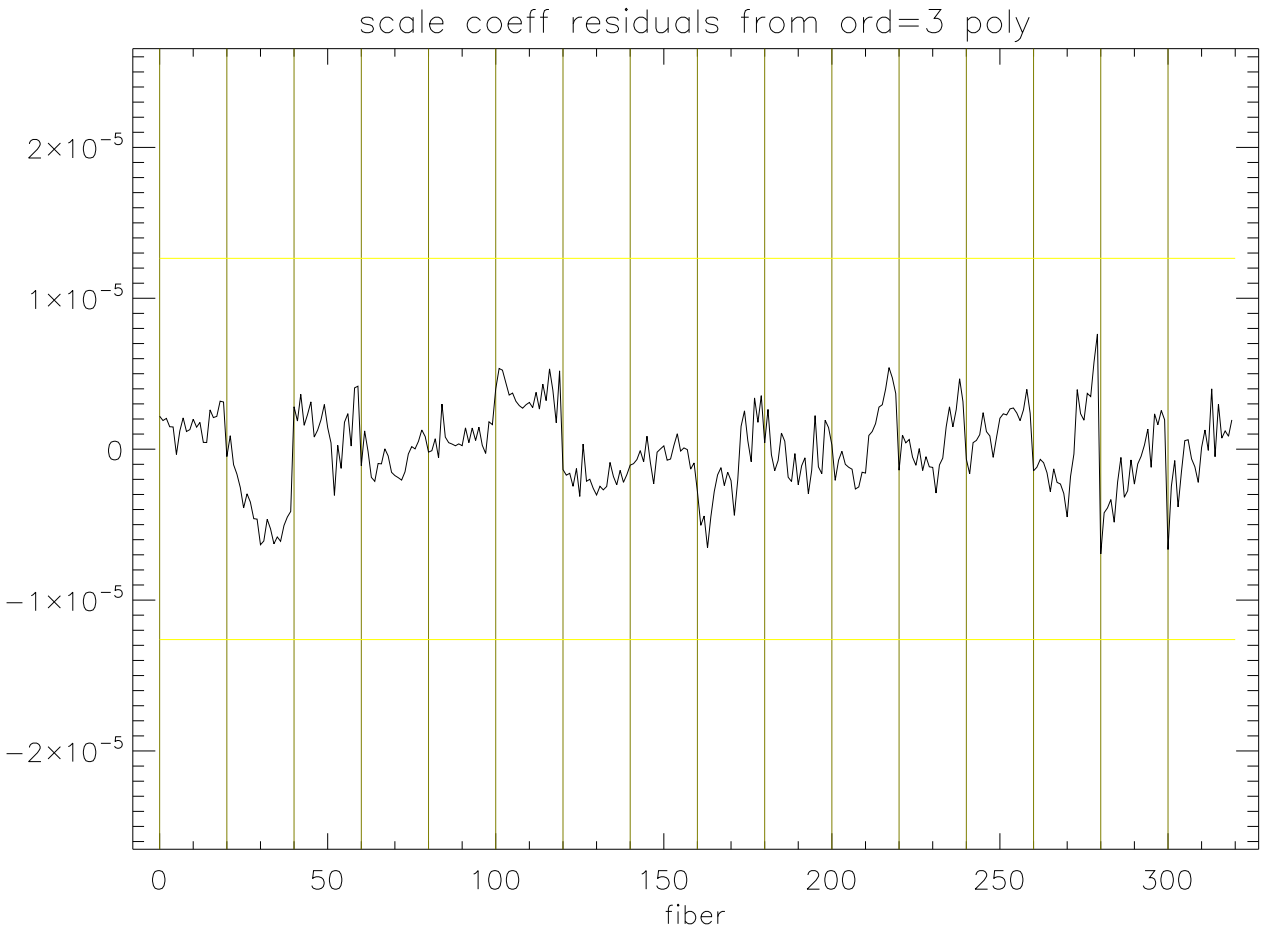

PLATE=1114 MJD=53179 sdR-b1-00027392.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

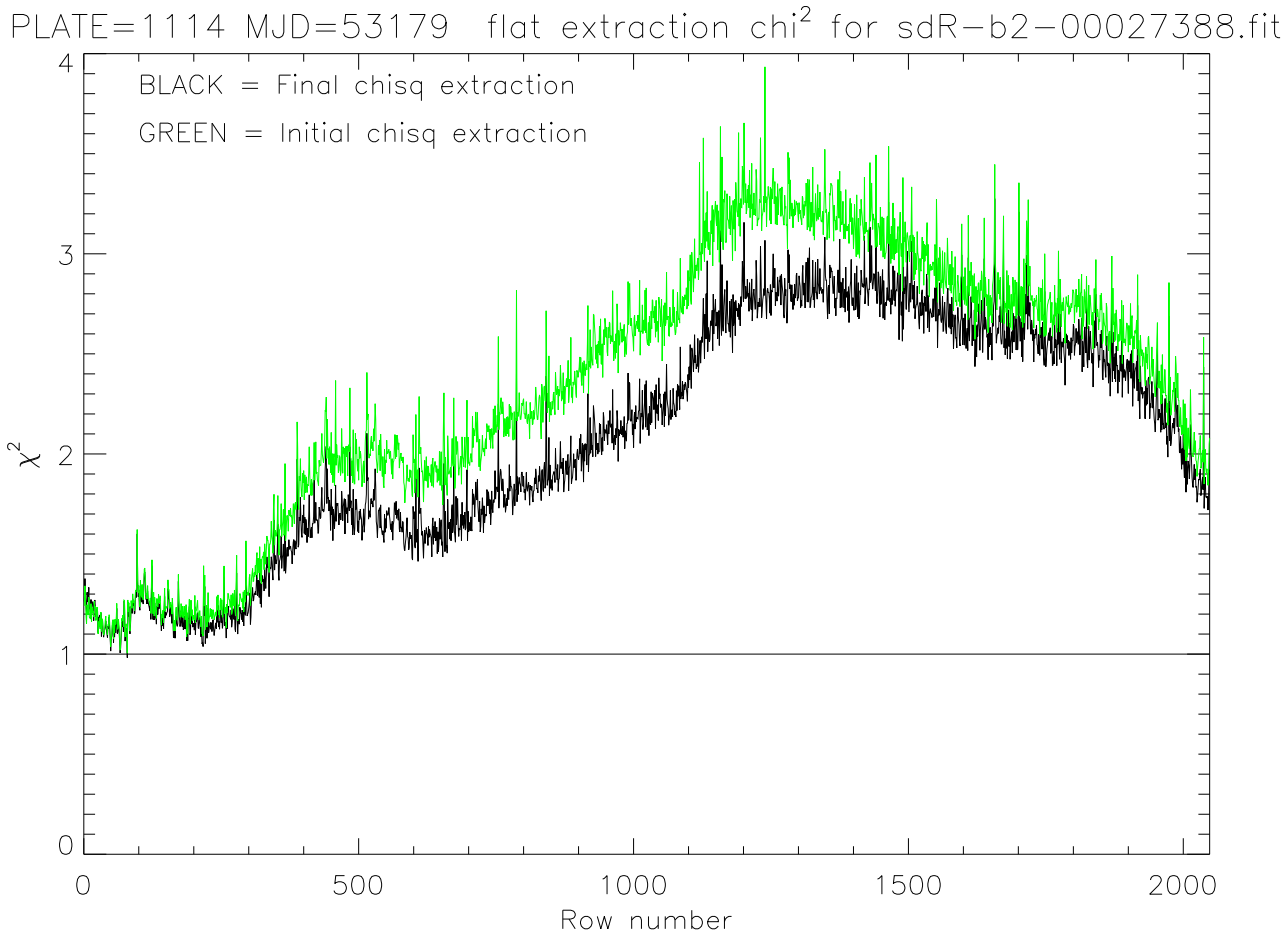

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b1-00027392.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

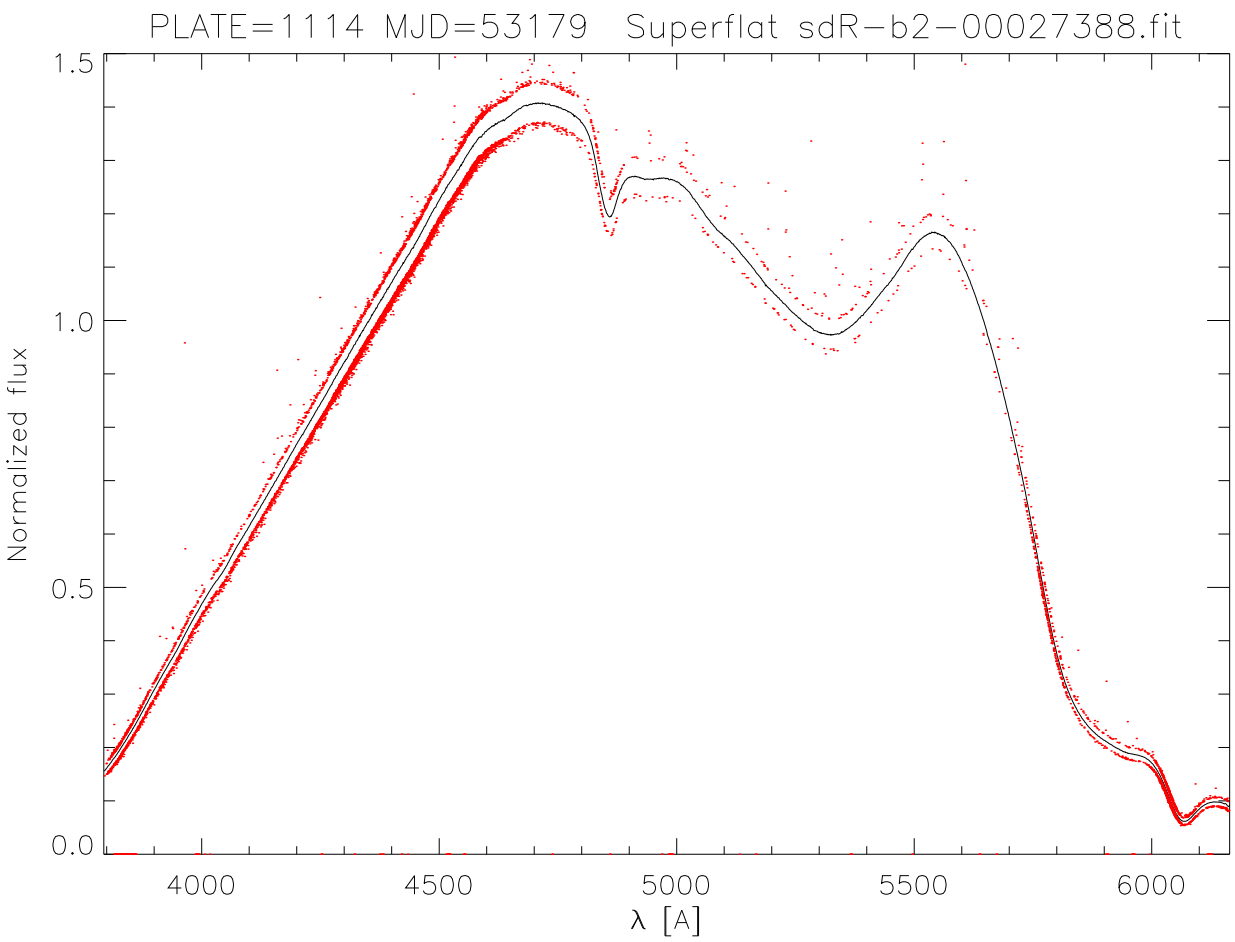

PLATE=1114 MJD=53179 sdR-b1-00027392.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.2 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

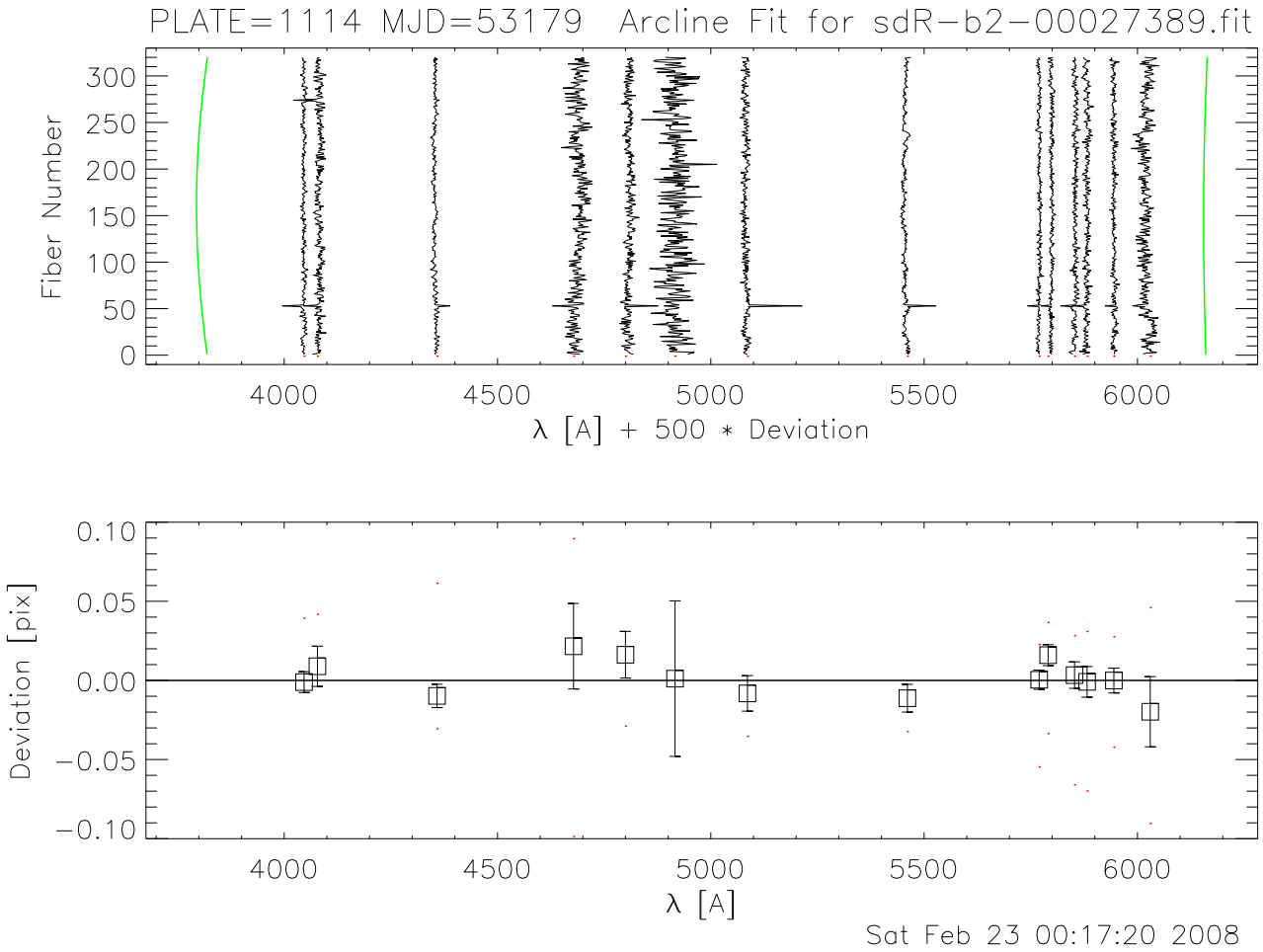

PLATE=1114 MJD=53179 sdR-b1-00027392.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.58 %
Fiber number
Focal Distance [mm]
Airmass

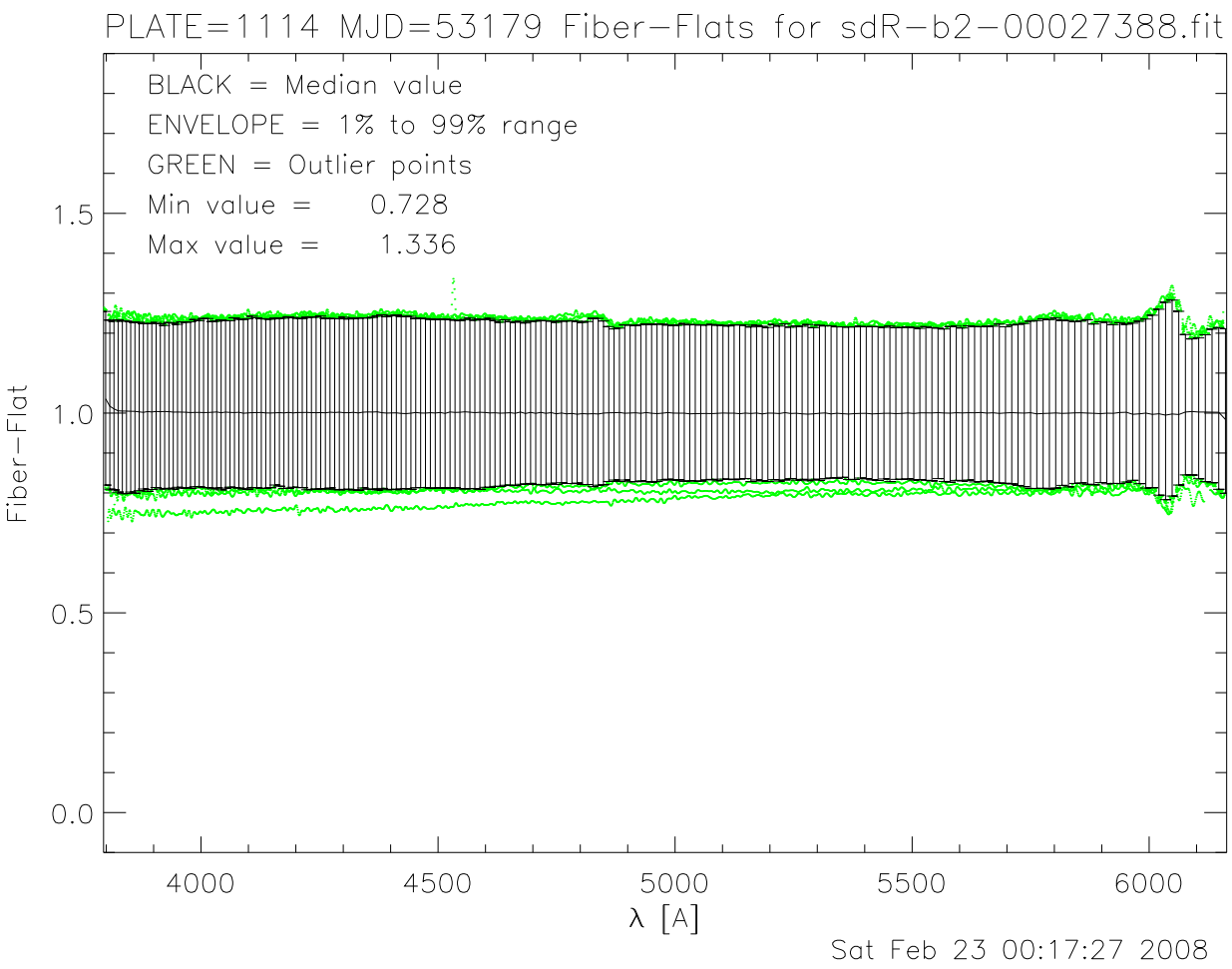

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

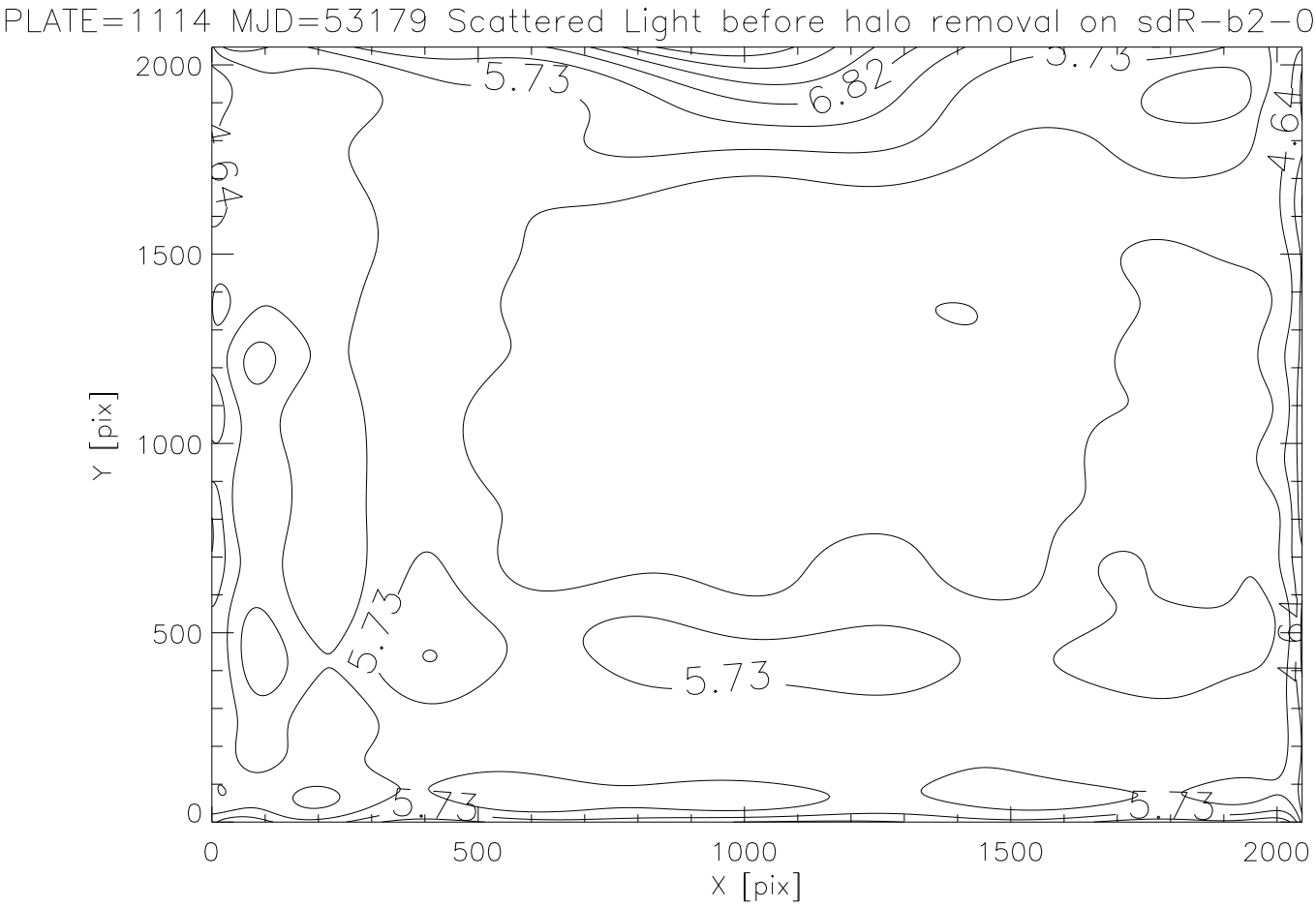

scale coeff residuals from ord=3 poly
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
0
50
100
150
200
250
300
fiber

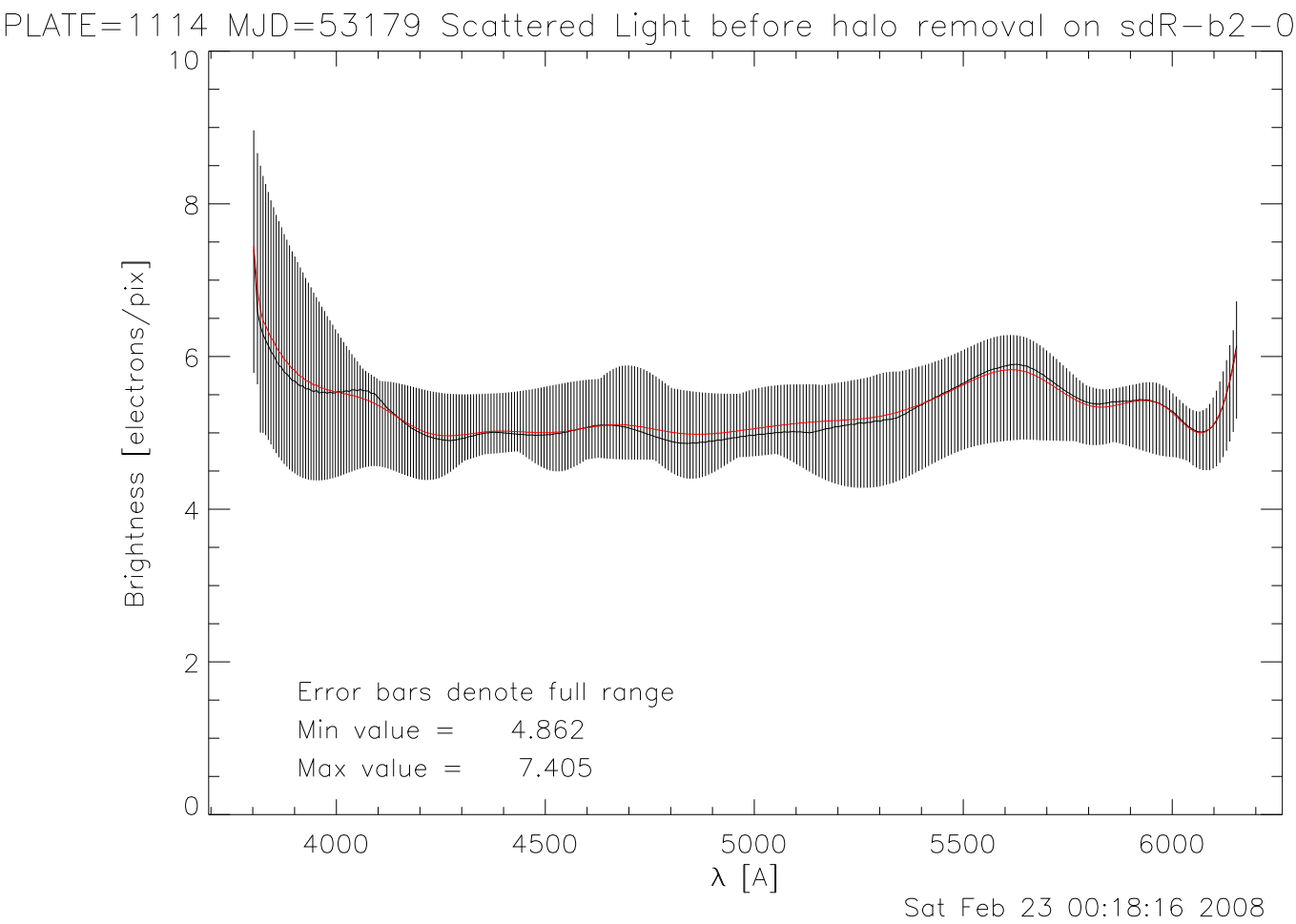

PLATE=1114 MJD=53179 flat extraction chi^2 for sdR-b2-00027388.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
0
500
1000
1500
2000

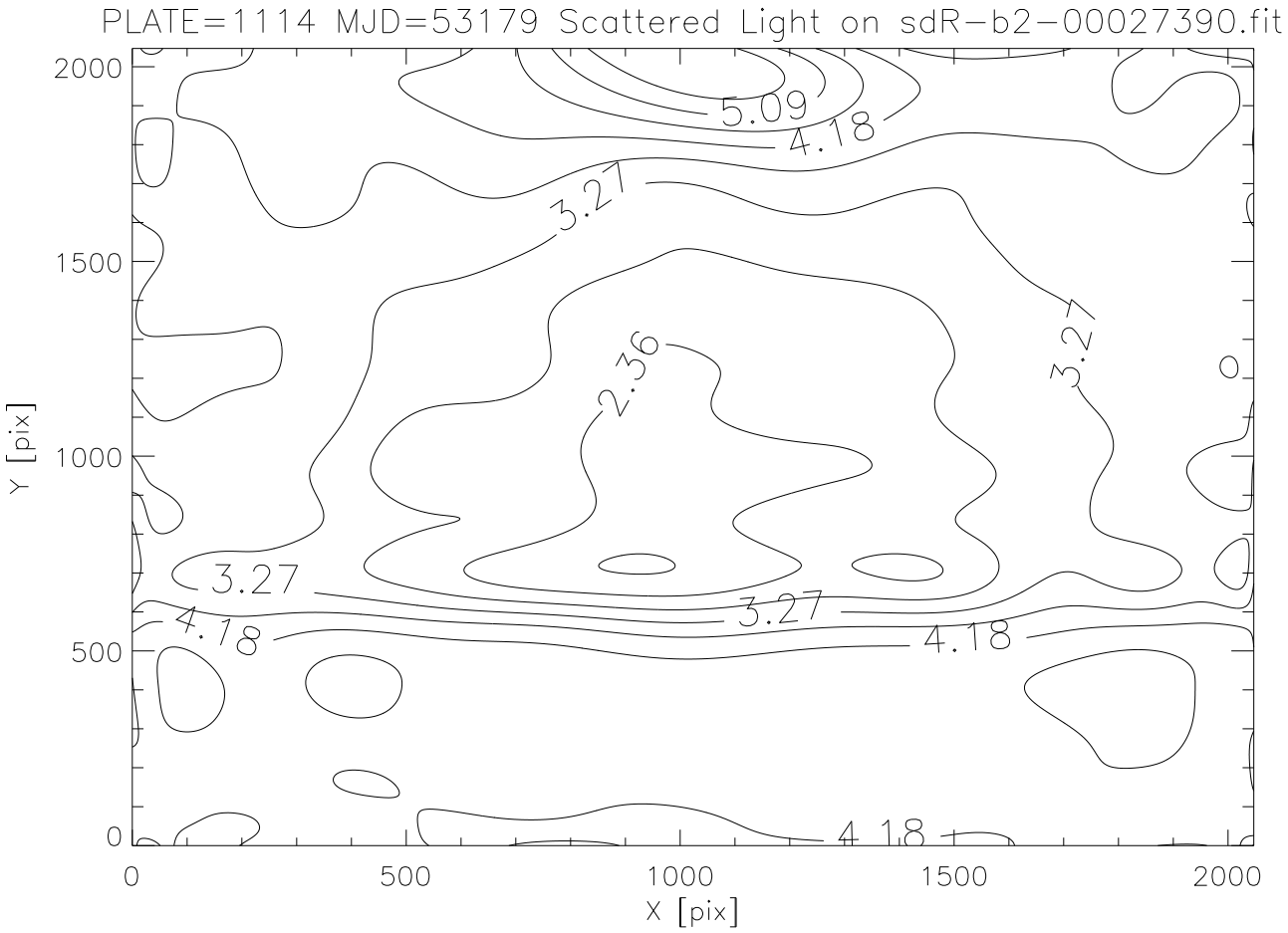

PLATE=1114 MJD=53179 Superflat sdR-b2-00027388.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

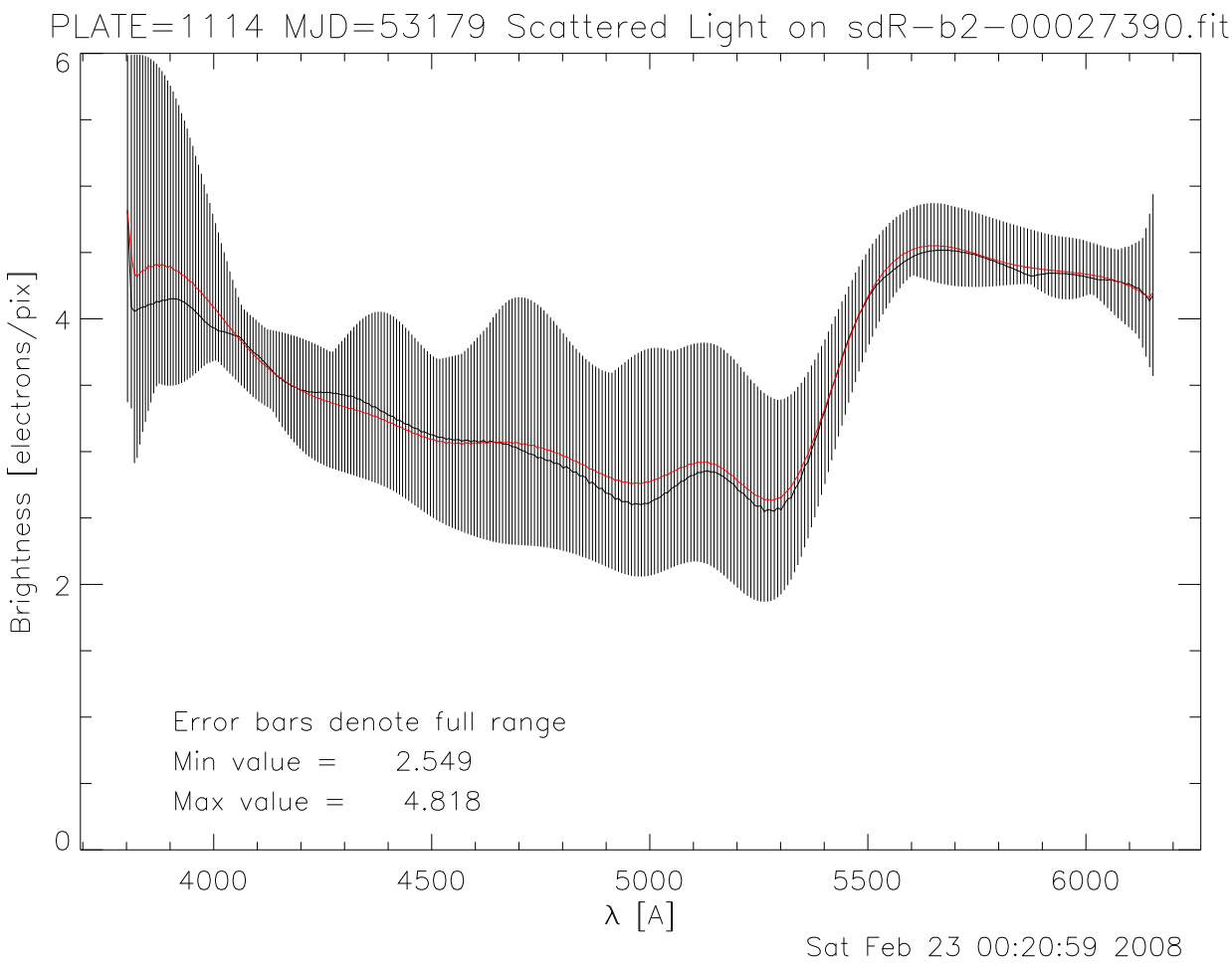

PLATE=1114 MJD=53179 Arcline Fit for sdR-b2-00027389.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:17:20 2008

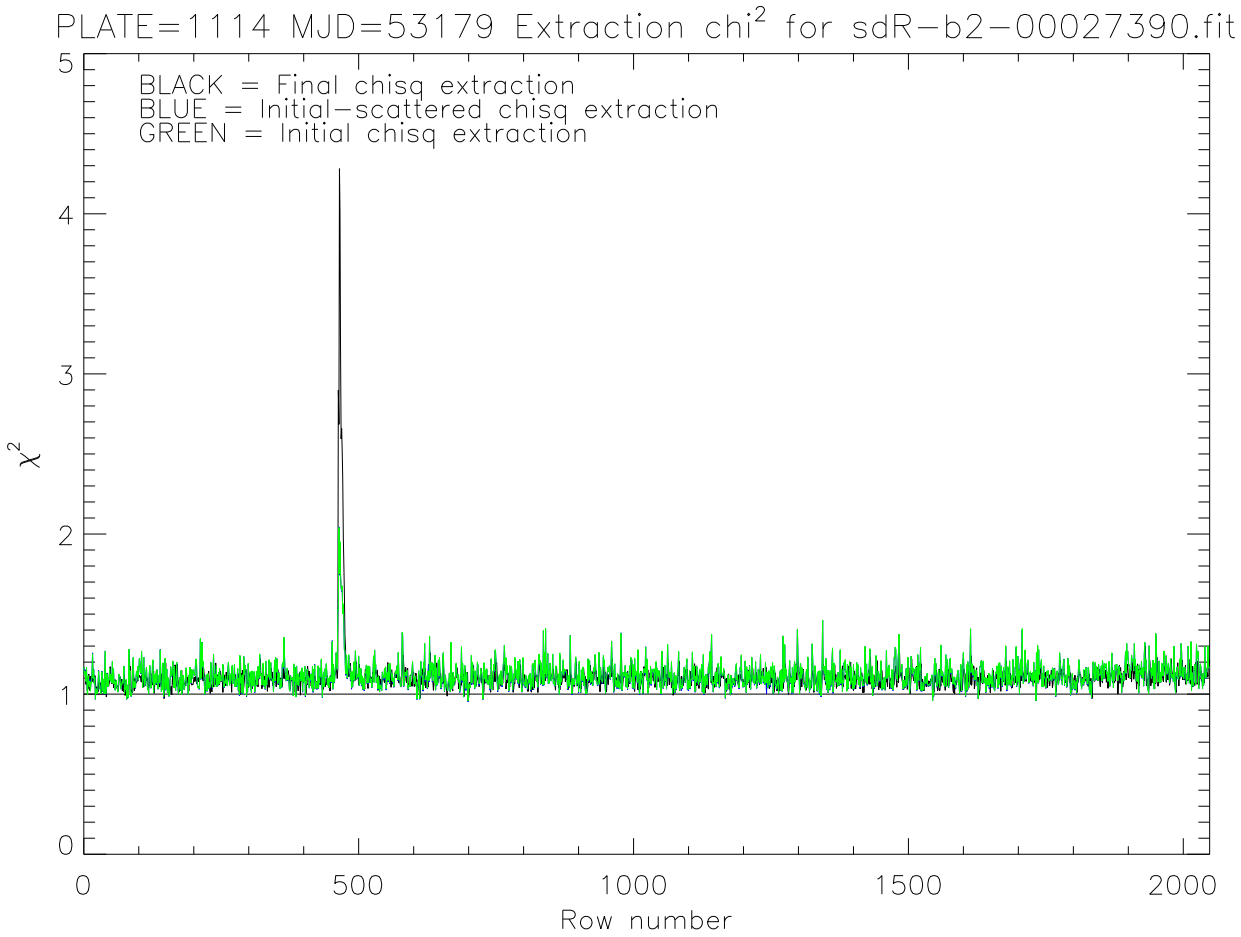

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b2-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.728
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:17:27 2008

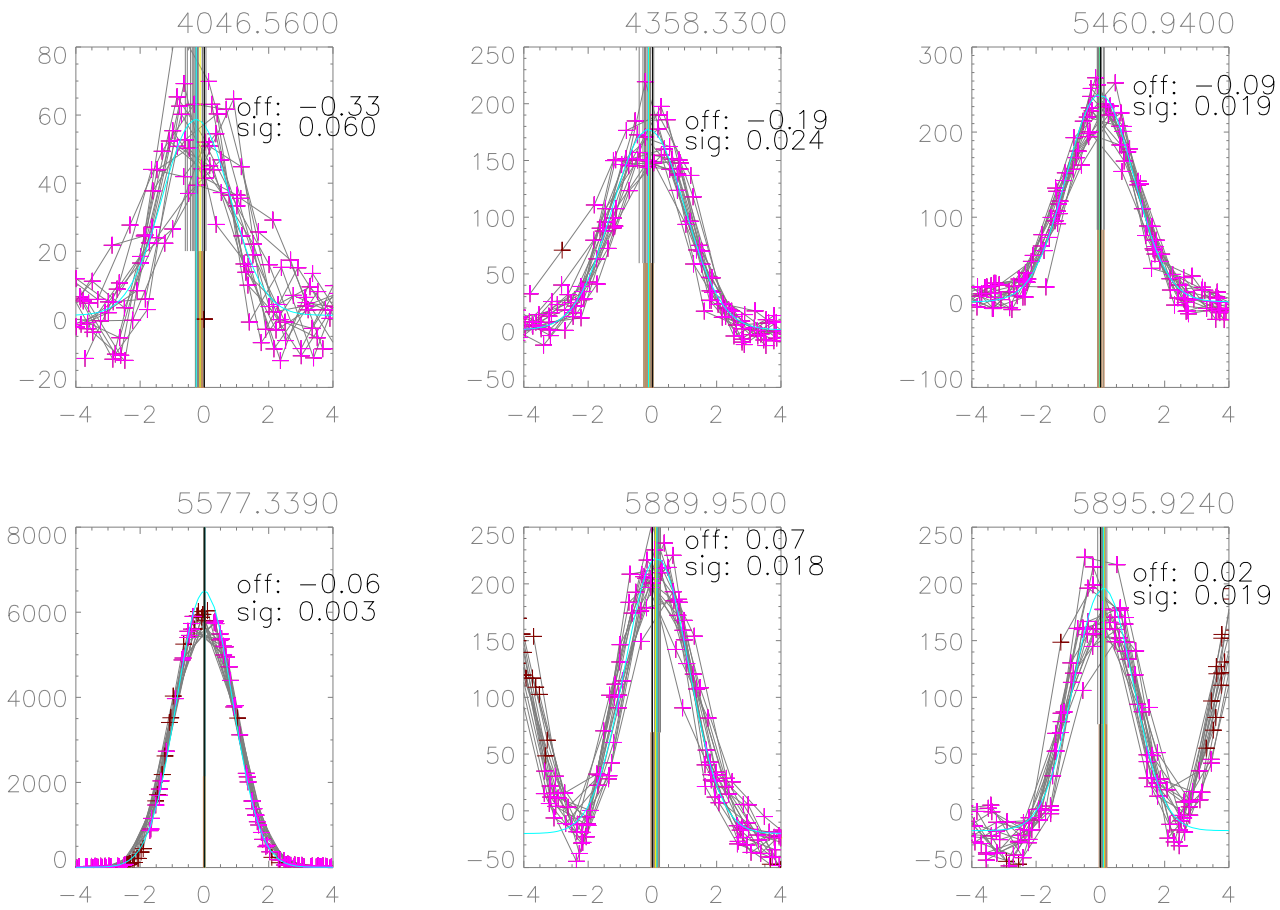

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027390.f
5.73
6.82
5.73
4.64
4.64
4.64
5.73
5.73
5.73
5.73
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

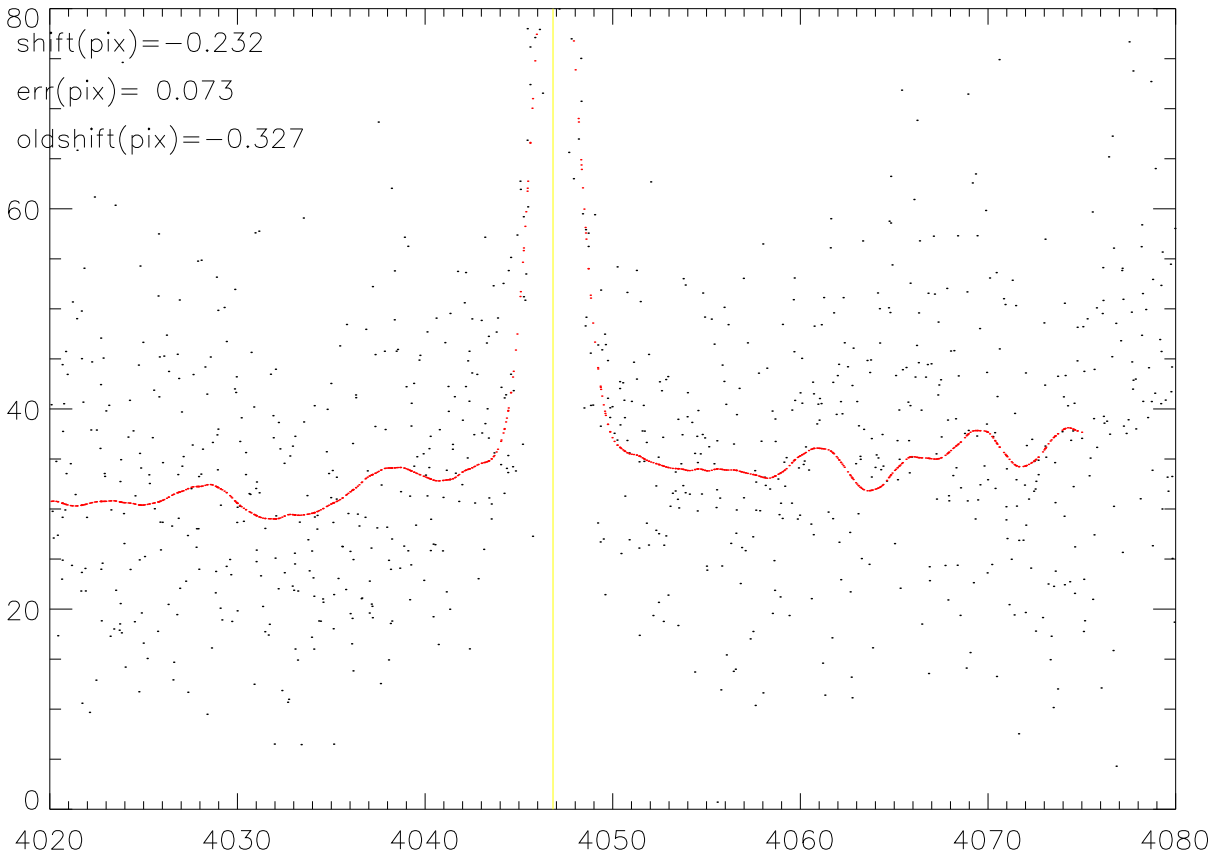

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027390.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.862
Max value = 7.405
Sat Feb 23 00:18:16 2008

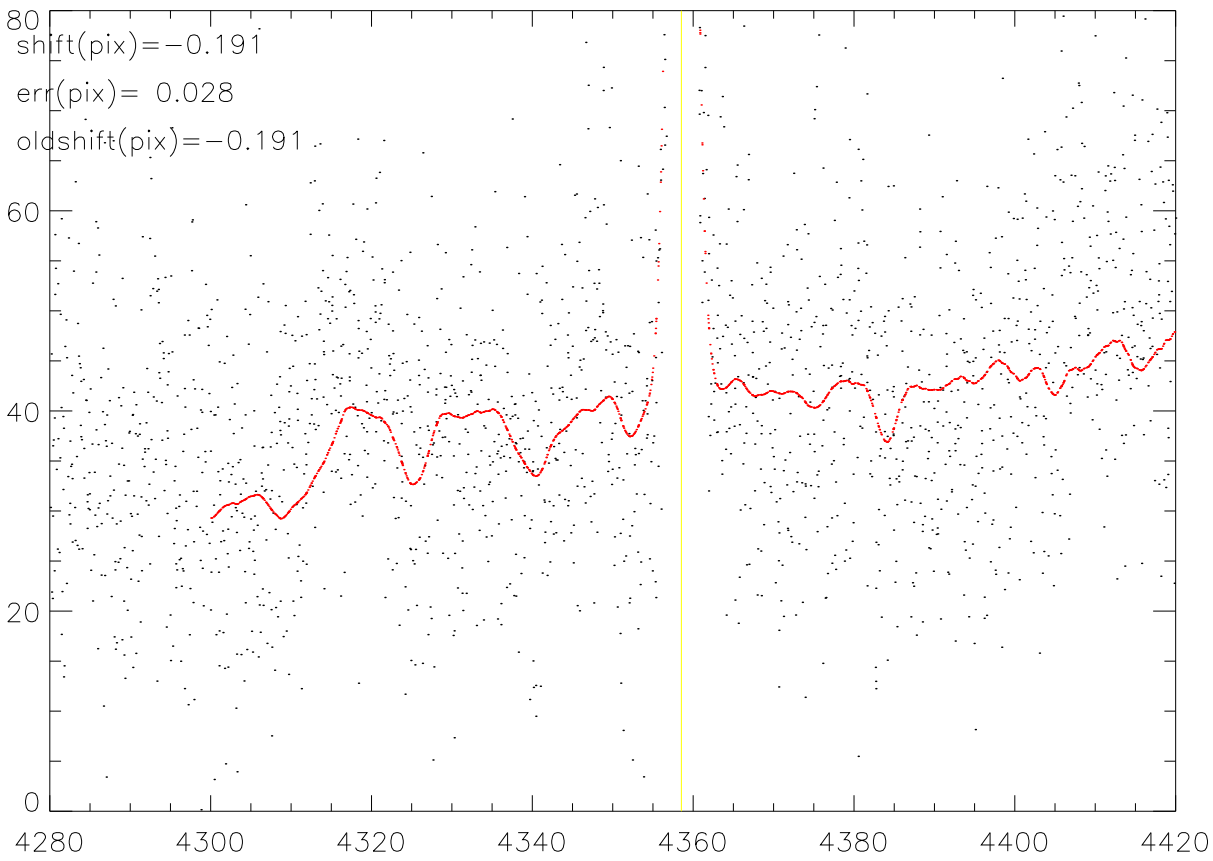

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027390.fit
5.09
4.18
3.27
2.36
3.27
0
3.27
3.27
4.18
4.18
4.18
Y [pix]
X [pix]
0
500
1000
1500
2000

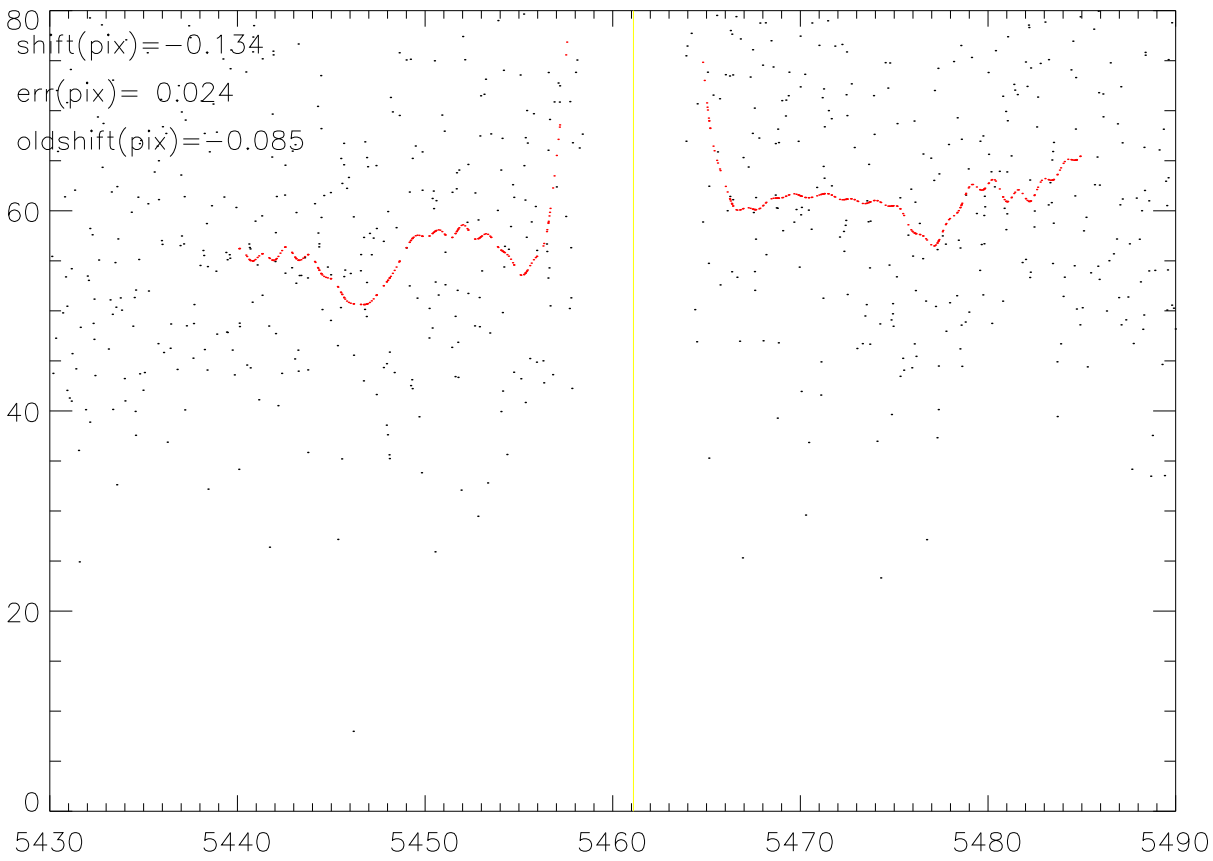

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027390.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.549
Max value = 4.818
Sat Feb 23 00:20:59 2008

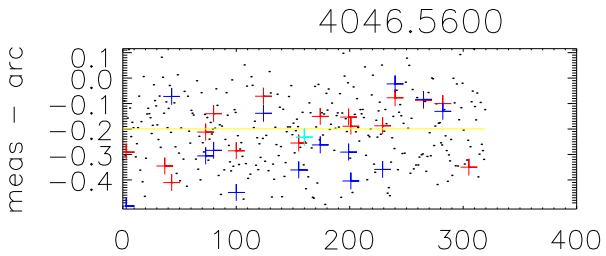

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b2-00027390.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

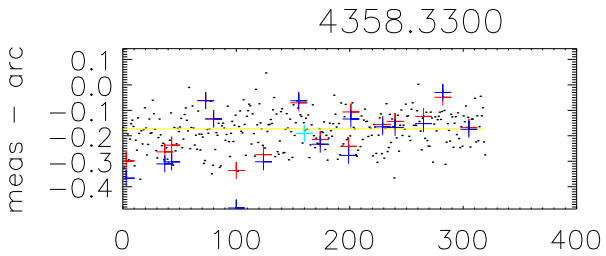

4046.5600
off: −0.33
sig: 0.060
4358.3300
off: −0.19
sig: 0.024
5460.9400
off: −0.09
sig: 0.019
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: 0.07
sig: 0.018
5895.9240
off: 0.02
sig: 0.019

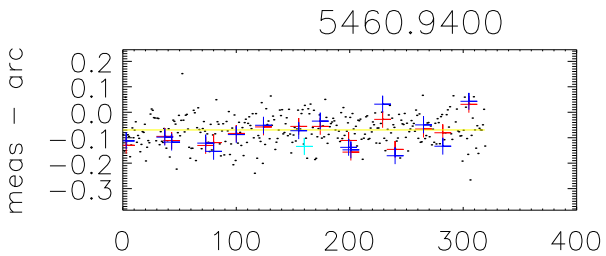

shift(pix)=−0.232
err(pix)= 0.073
oldshift(pix)=−0.327
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

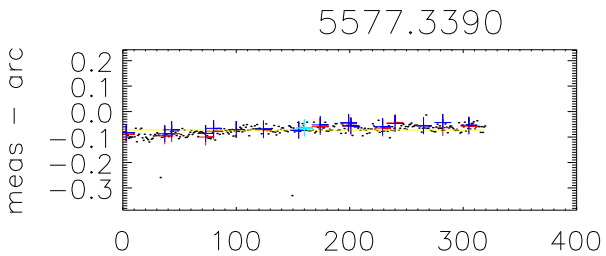

shift(pix)=−0.191
err(pix)= 0.028
oldshift(pix)=−0.191
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

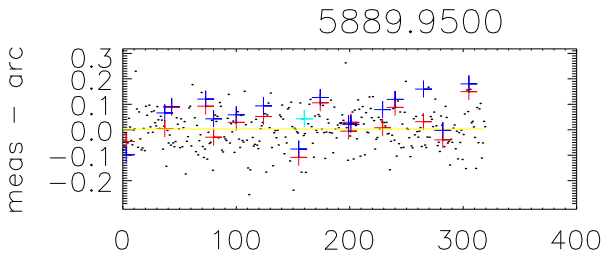

shift(pix)=−0.134
err(pix)= 0.024
oldshift(pix)=−0.085
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

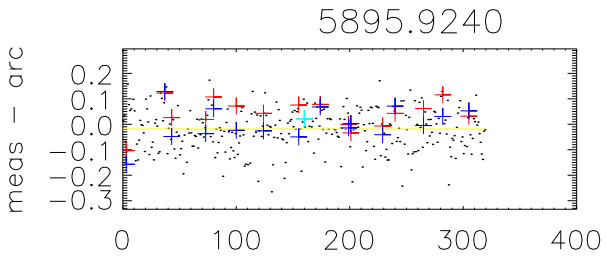

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

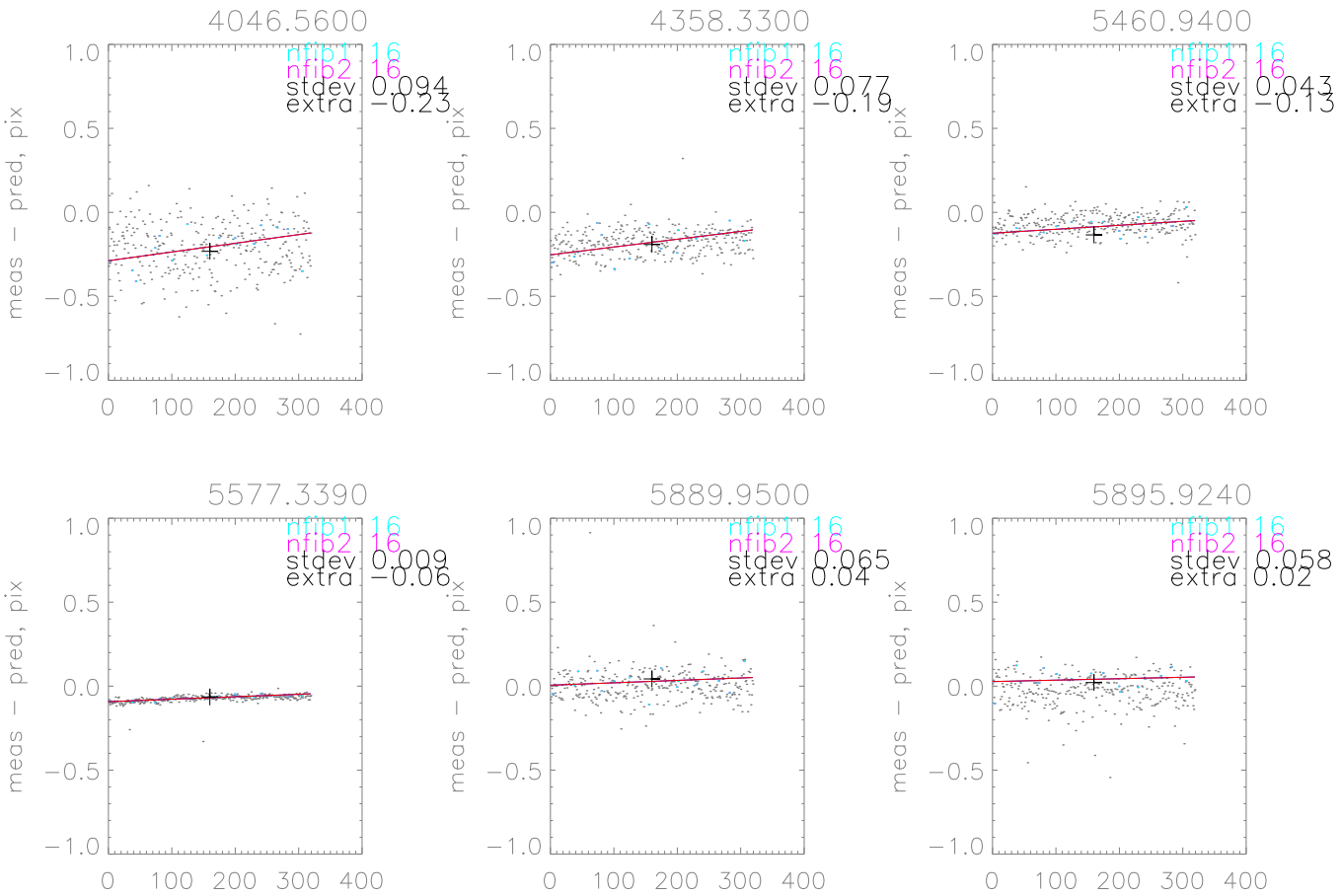

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

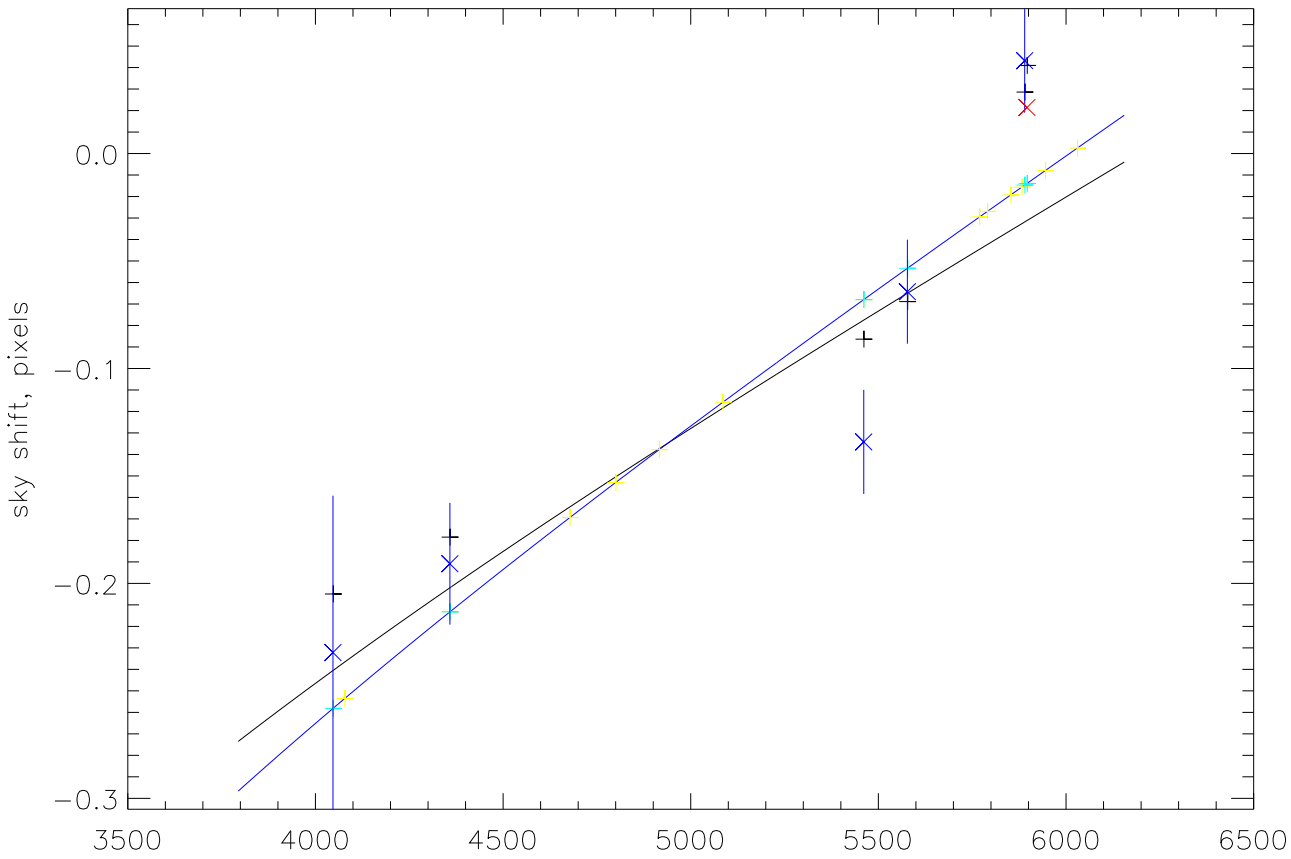

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

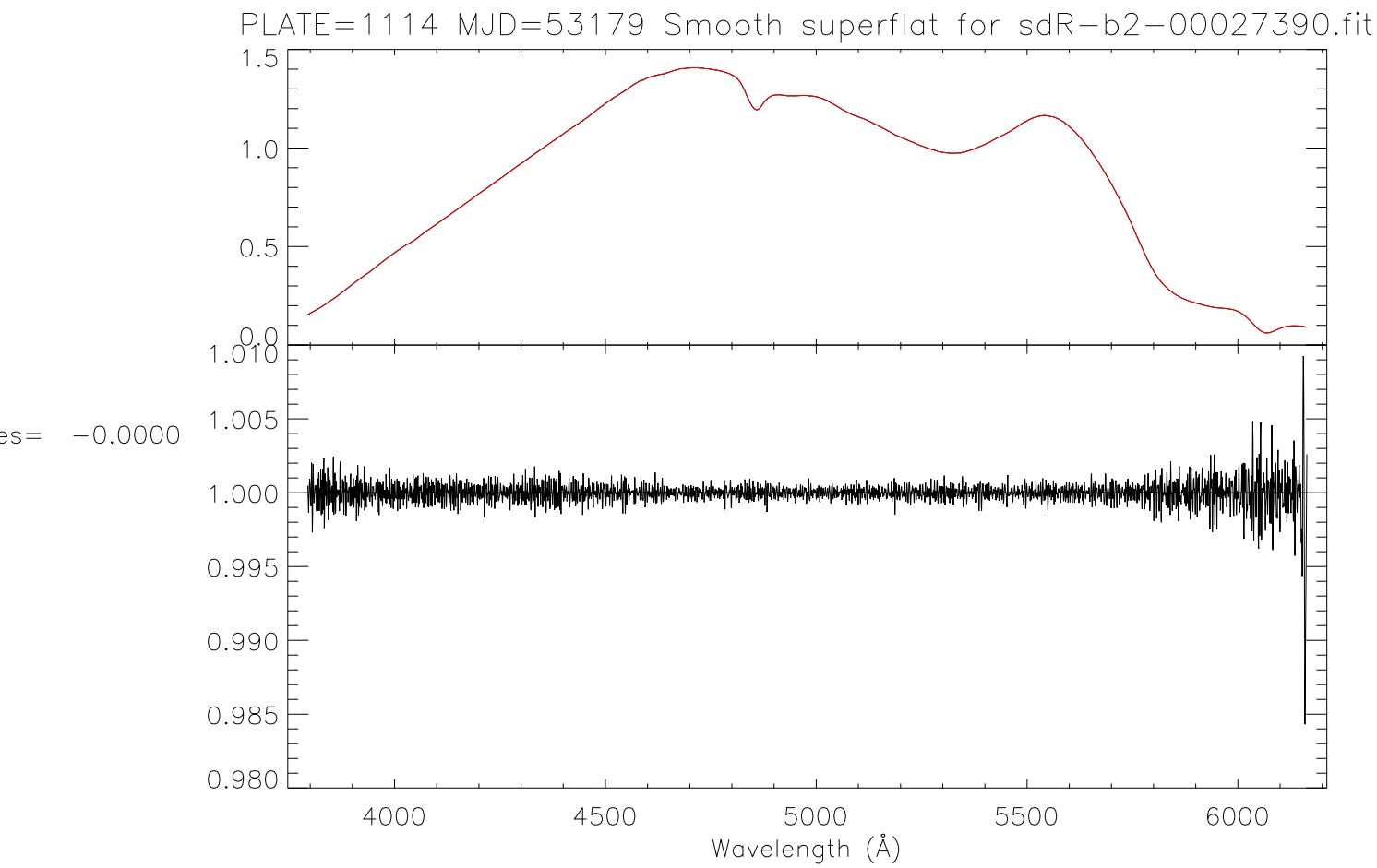

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

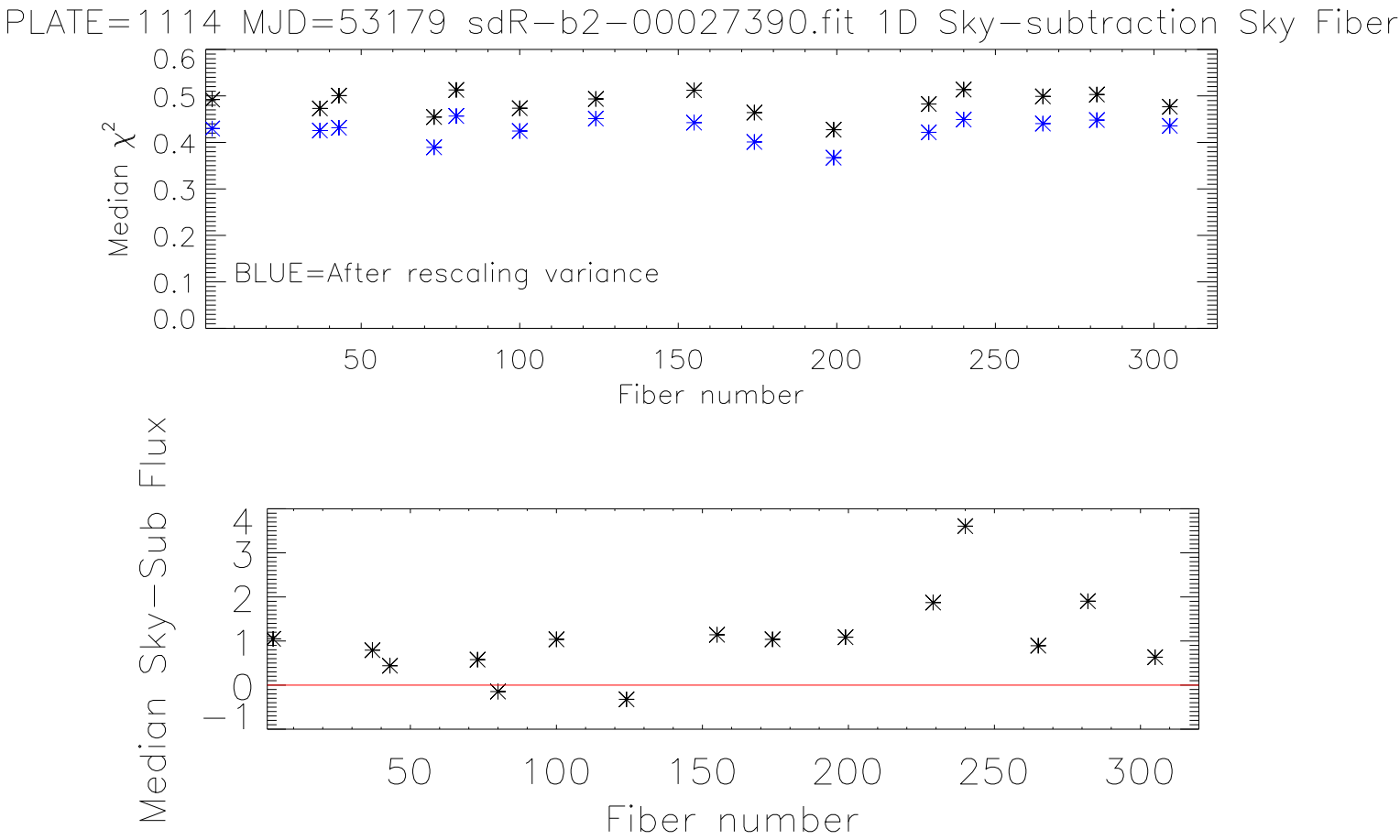

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

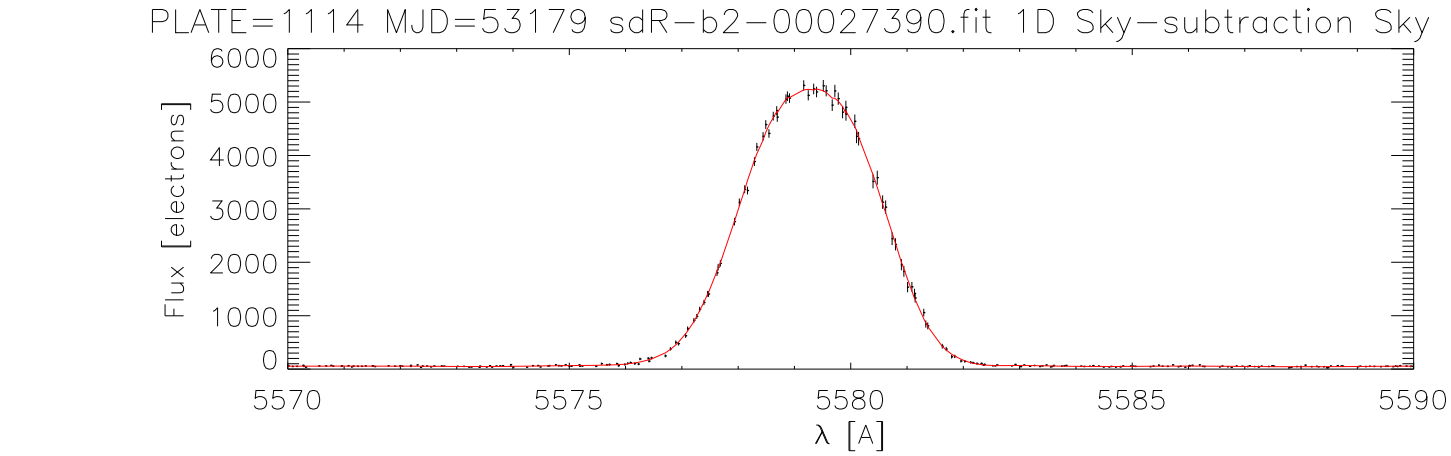

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

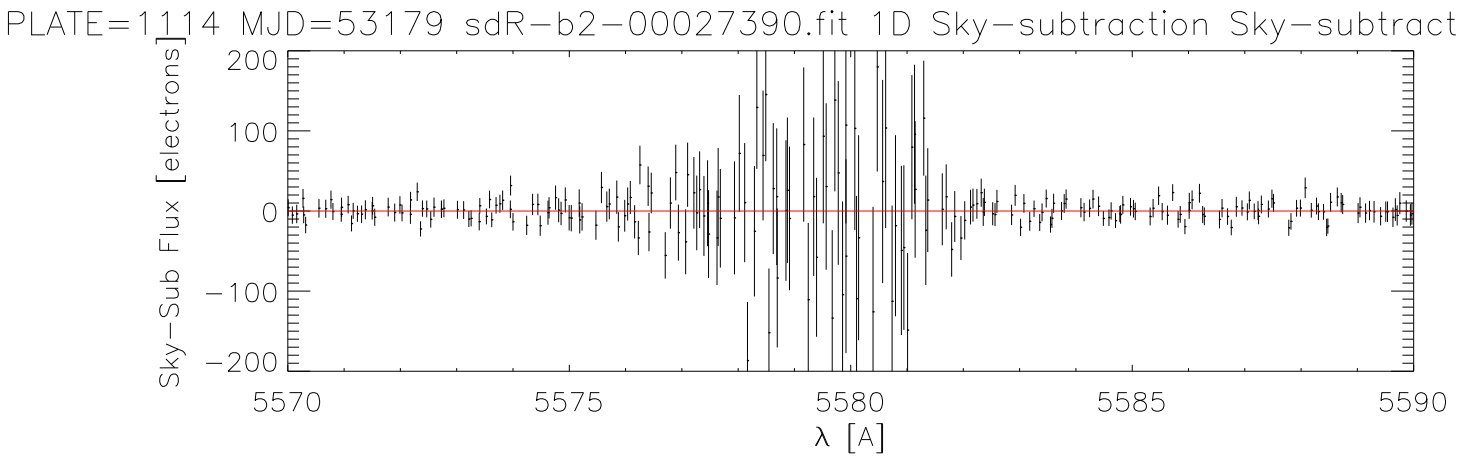

4046.5600
nfib1 16
nfib2 16
stdev 0.094
extra −0.23
4358.3300
nfib1 16
nfib2 16
stdev 0.077
extra −0.19
5460.9400
nfib1 16
nfib2 16
stdev 0.043
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.065
extra 0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.058
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

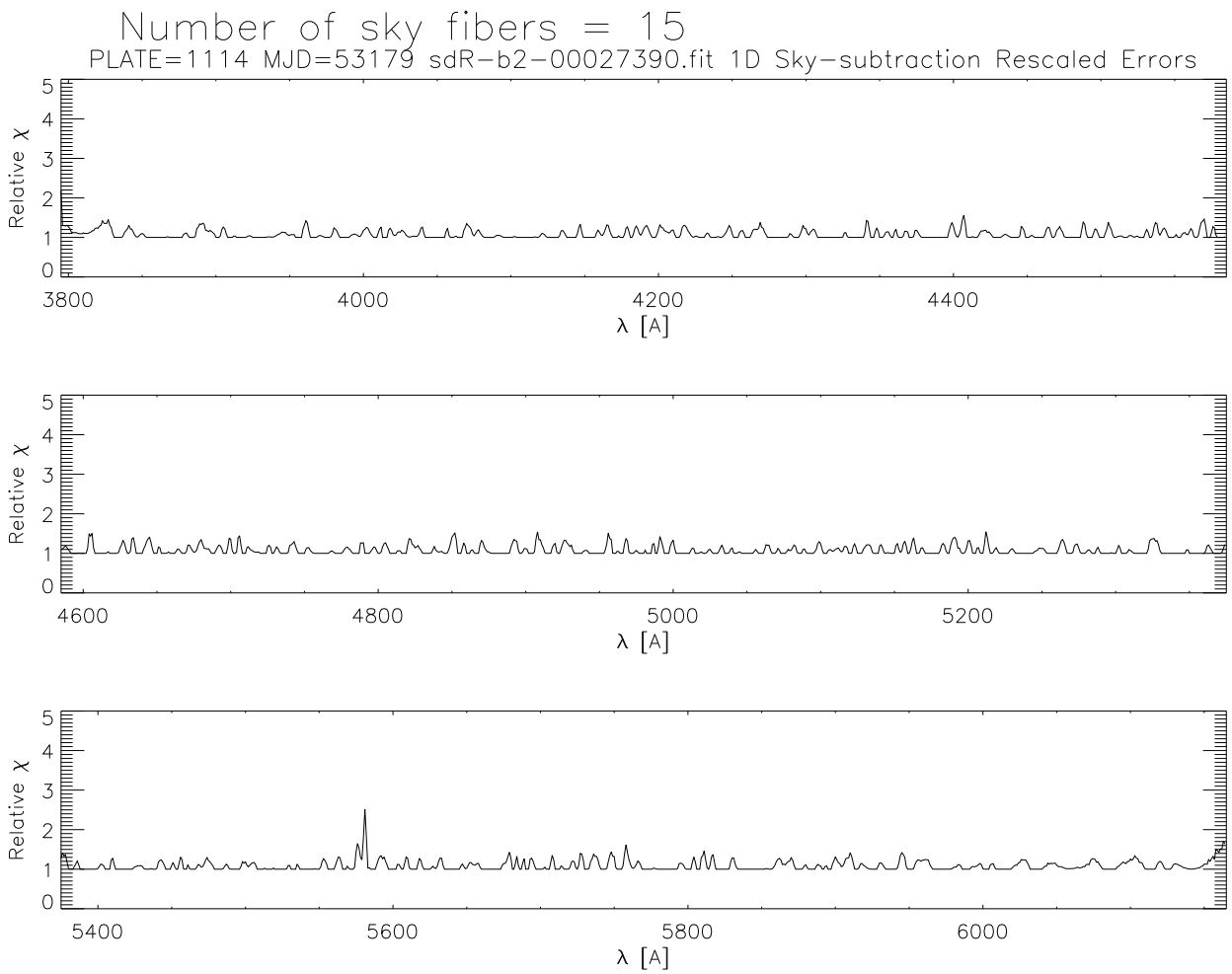

sky shift, pixels
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

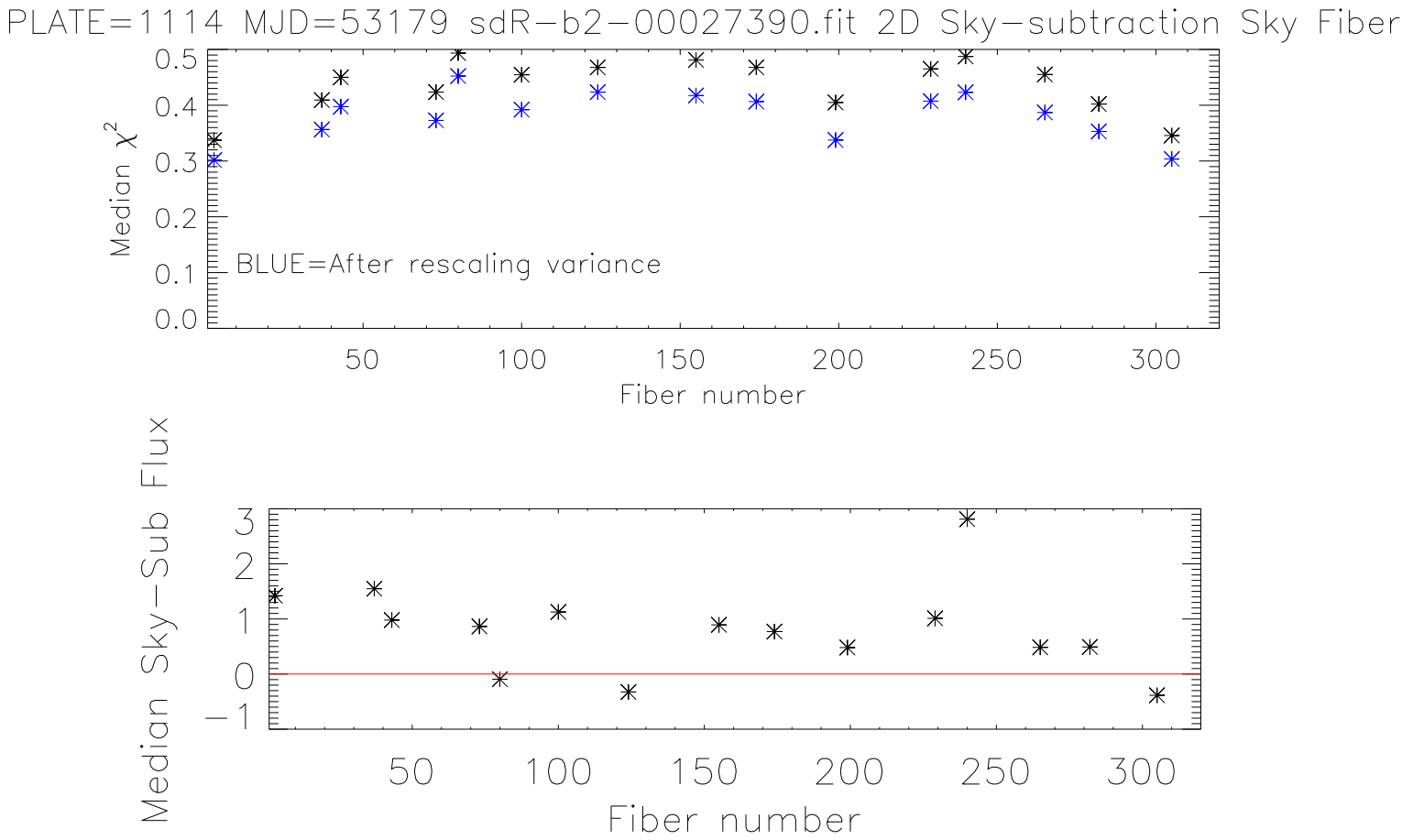

PLATE=1114 MJD=53179 Smooth superflat for sdR-b2-00027390.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

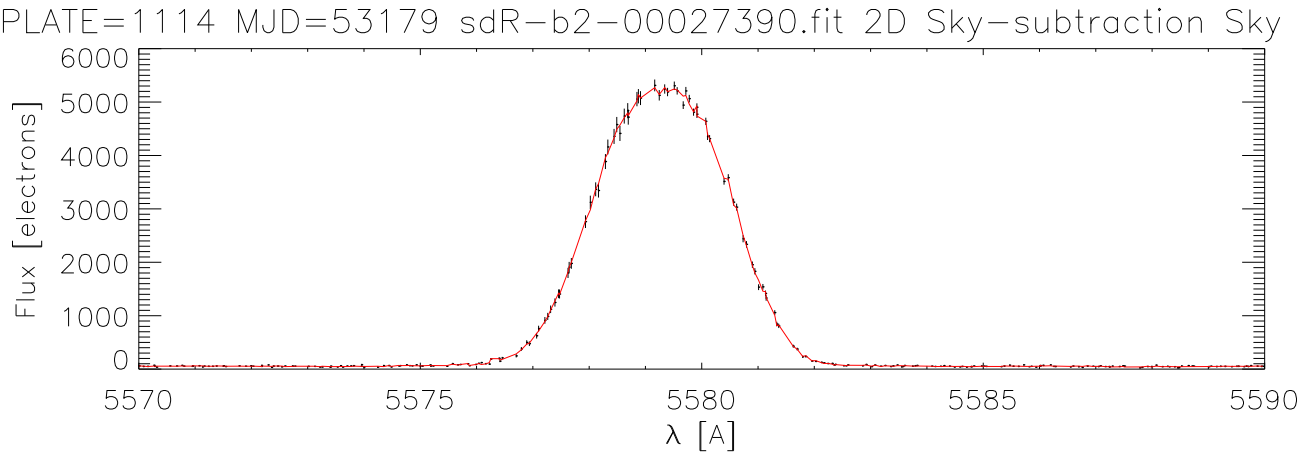

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

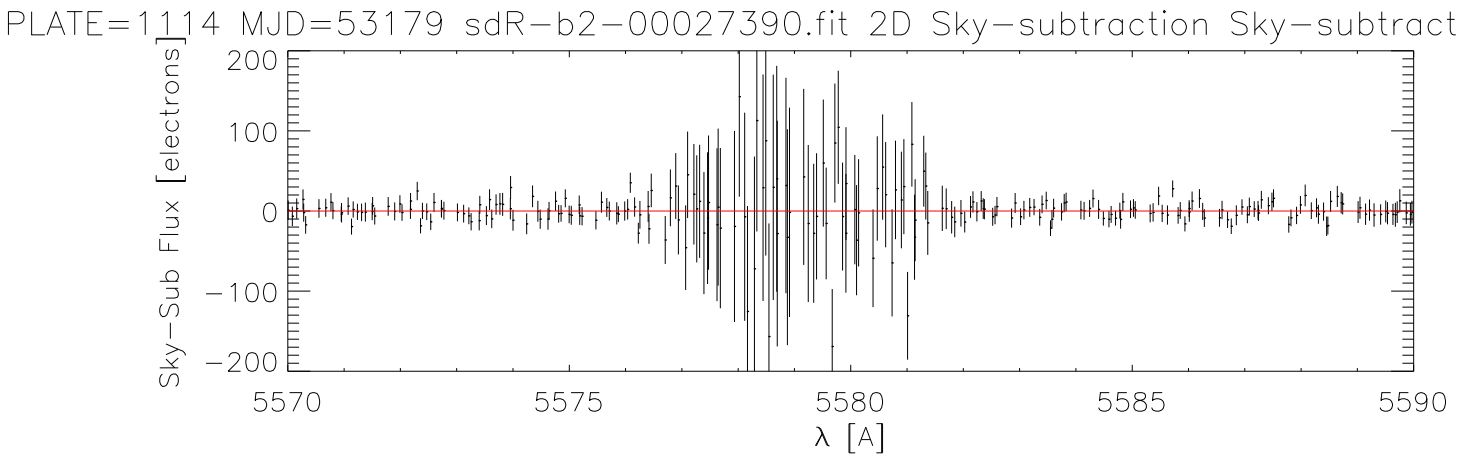

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

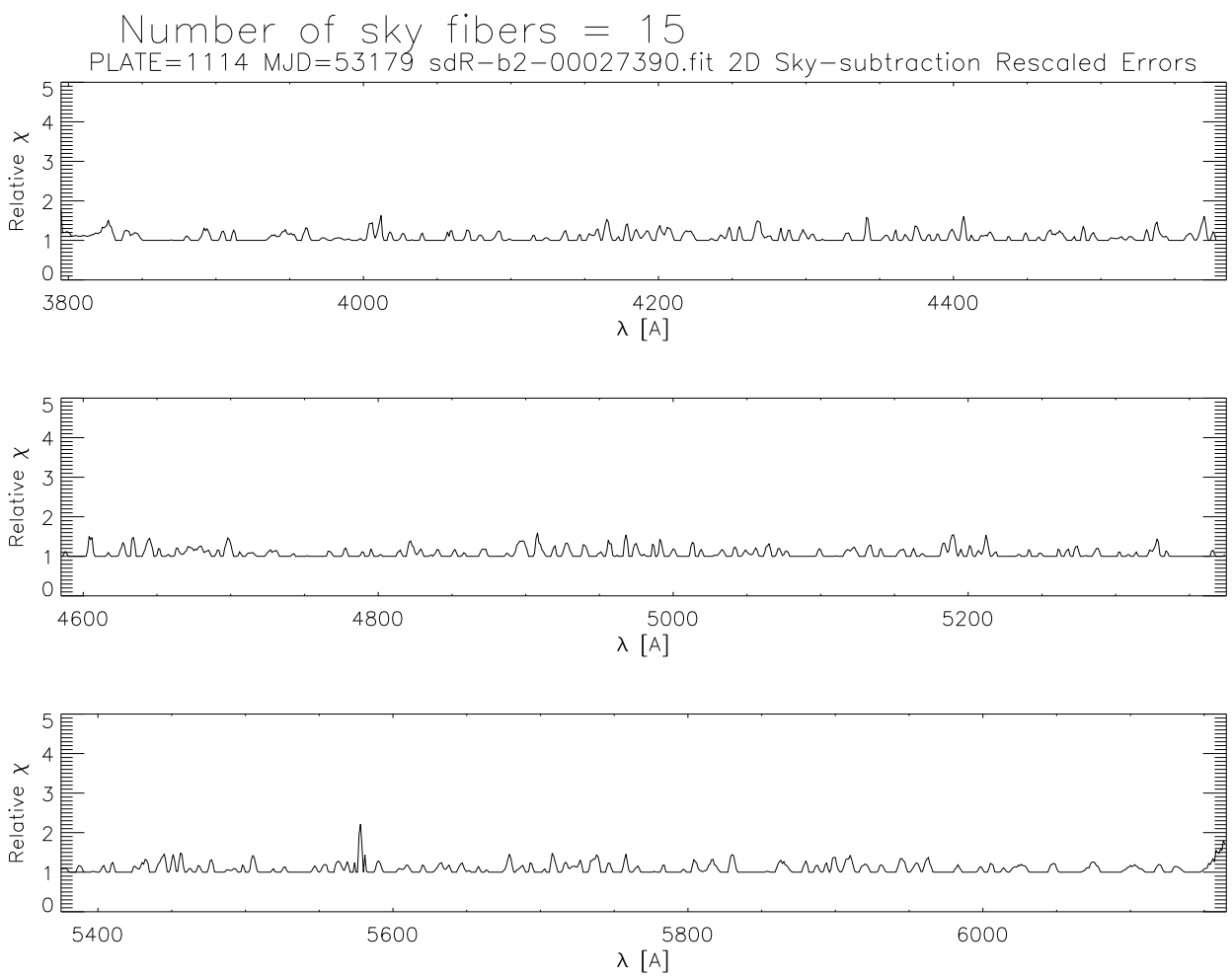

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

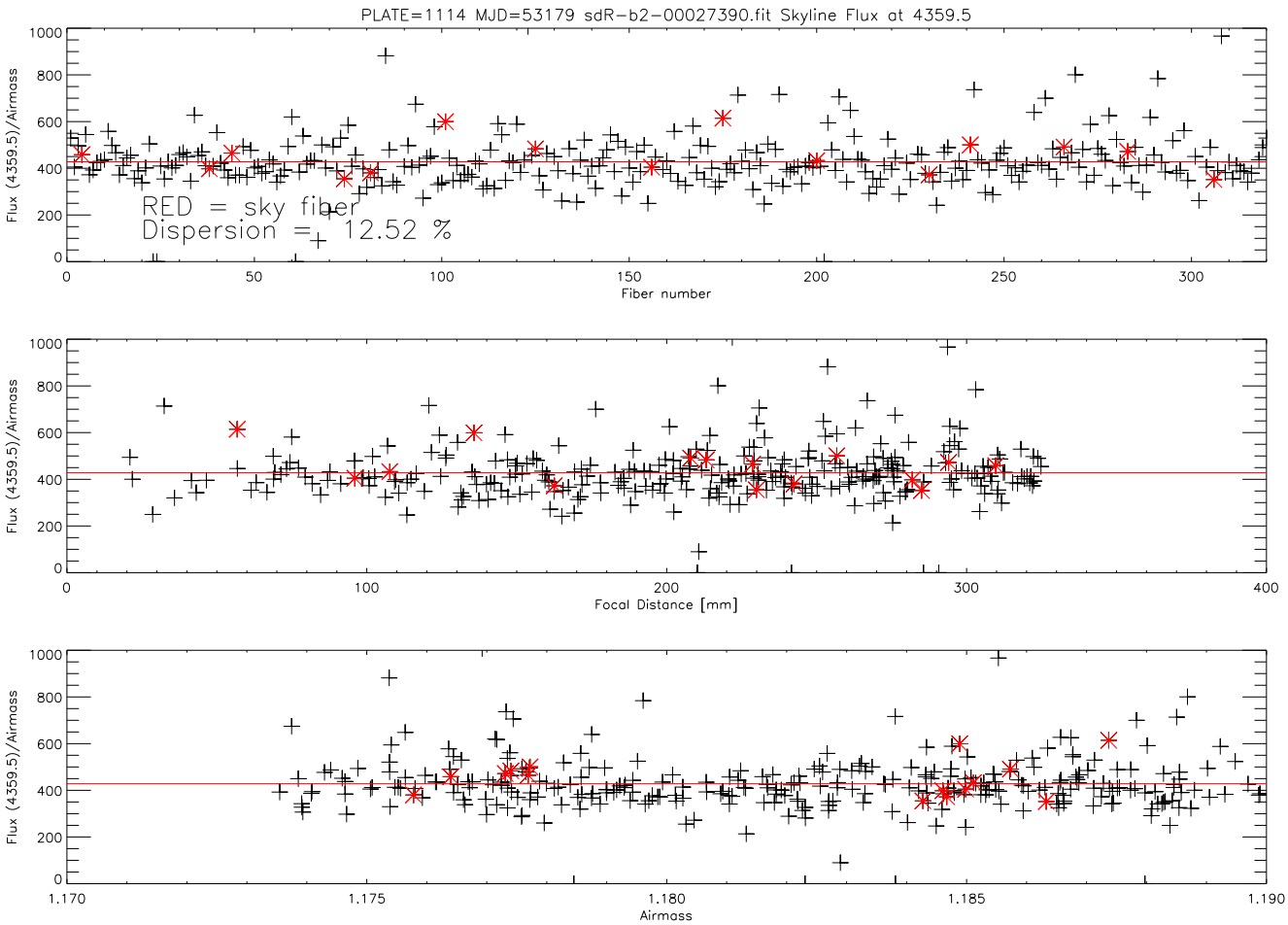

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027390.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

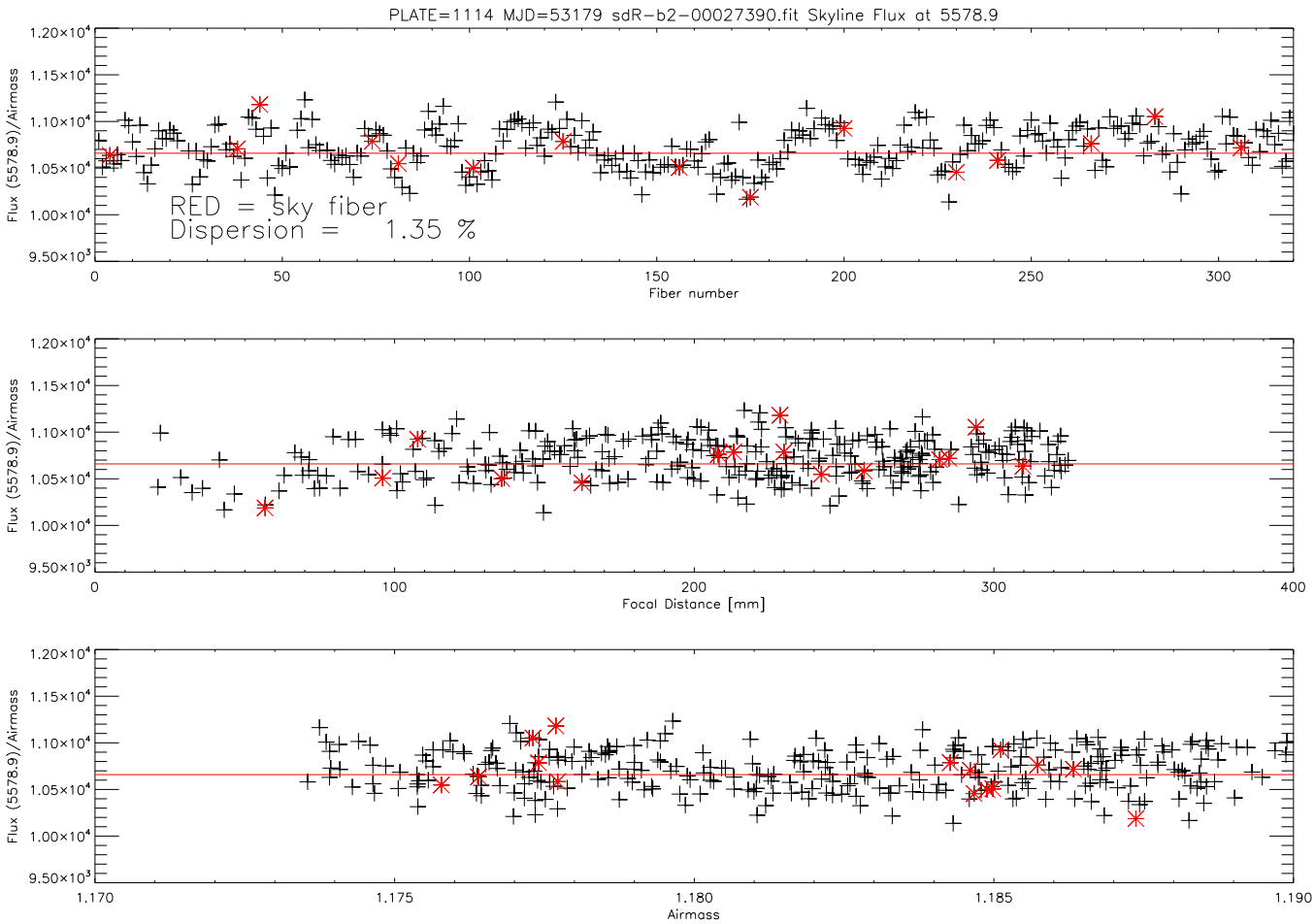

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

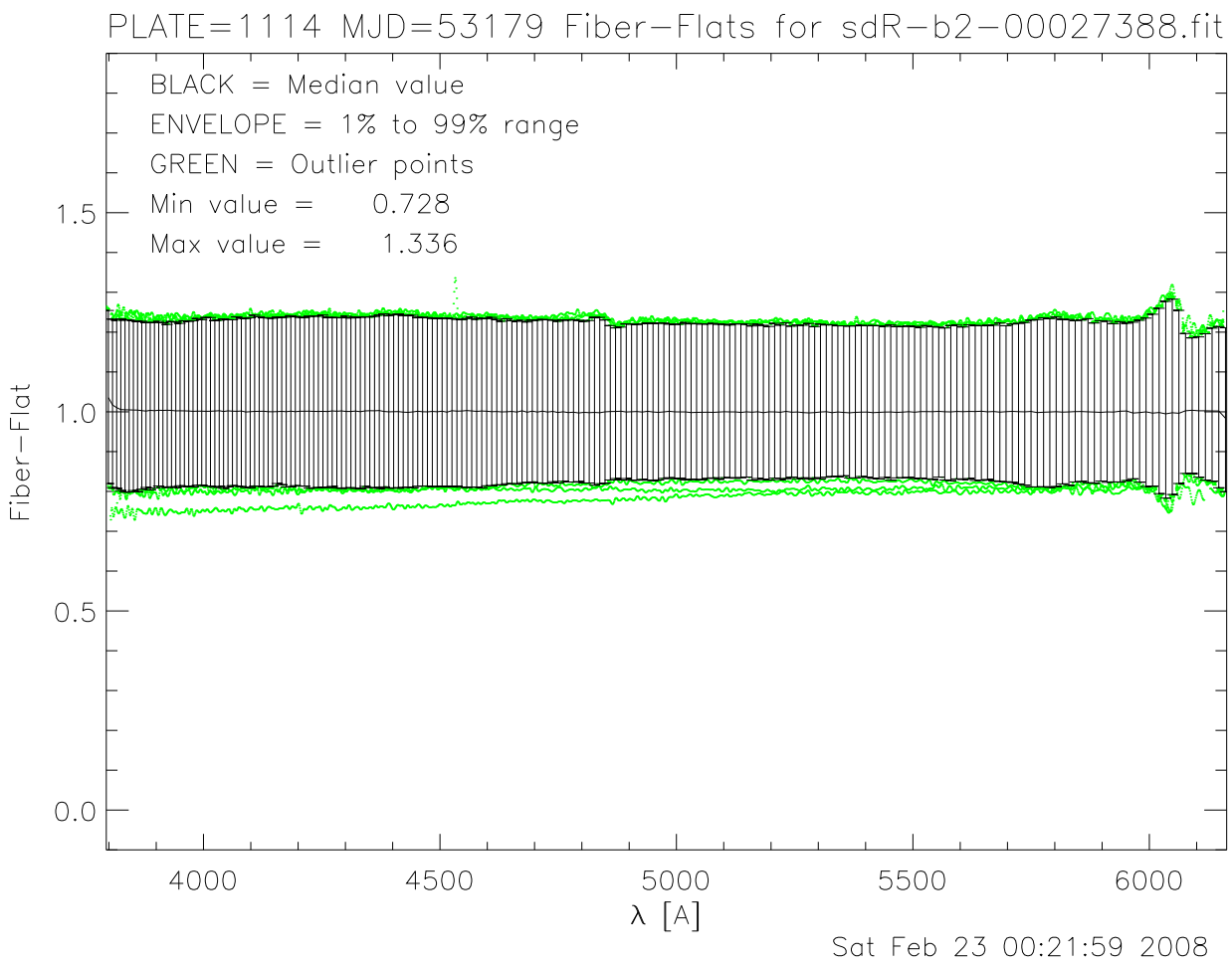

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

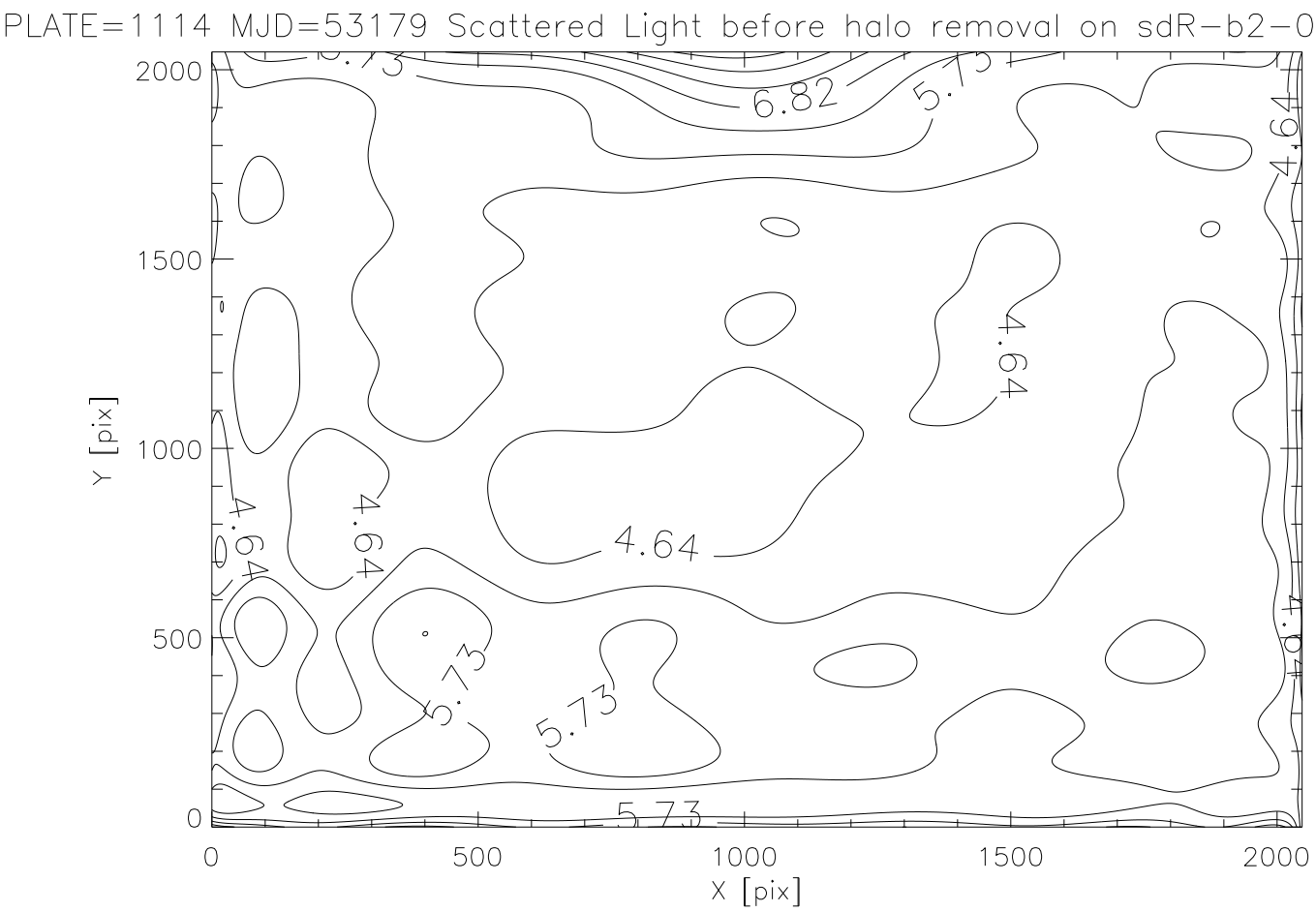

PLATE=1114 MJD=53179 sdR-b2-00027390.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

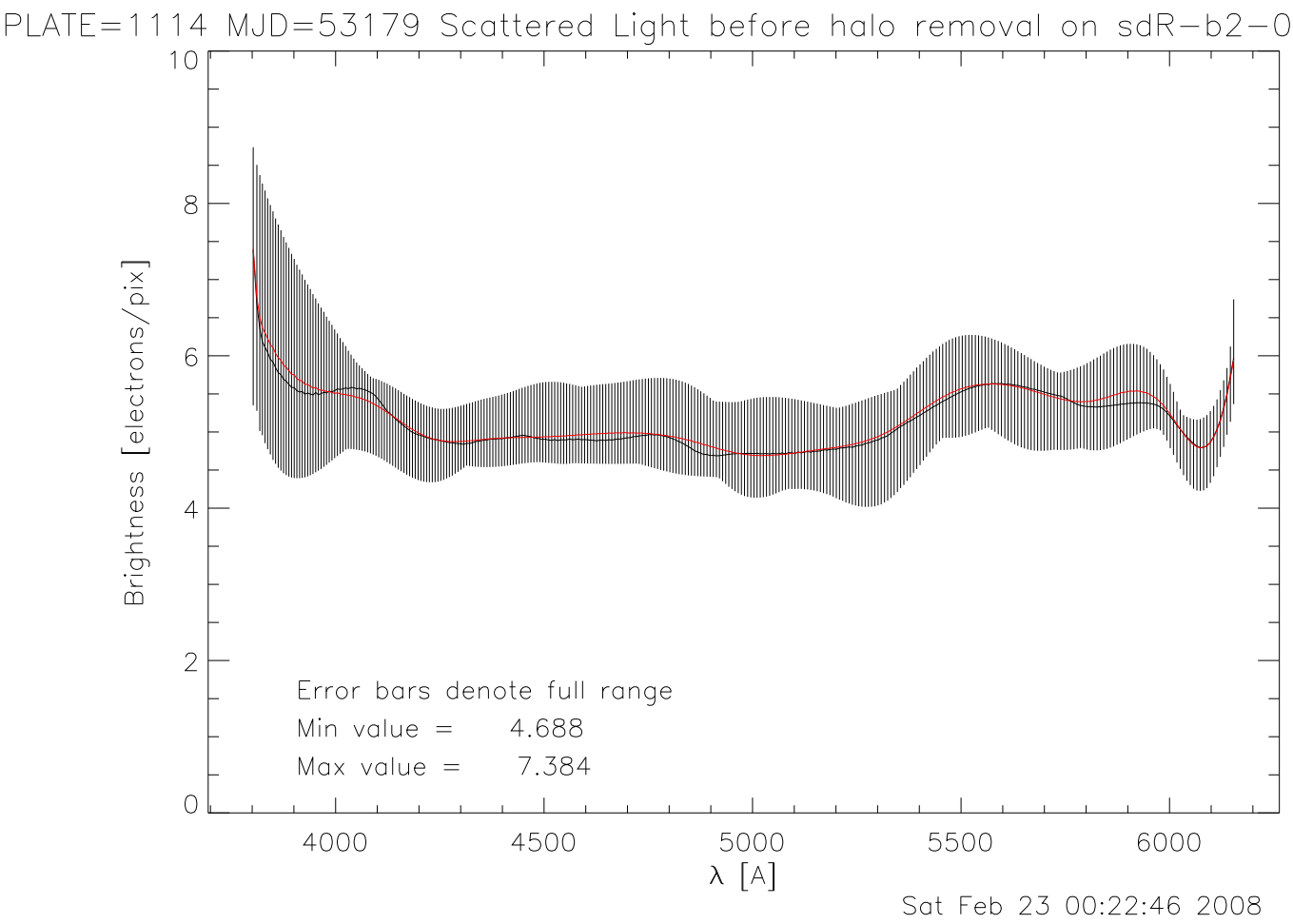

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027390.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

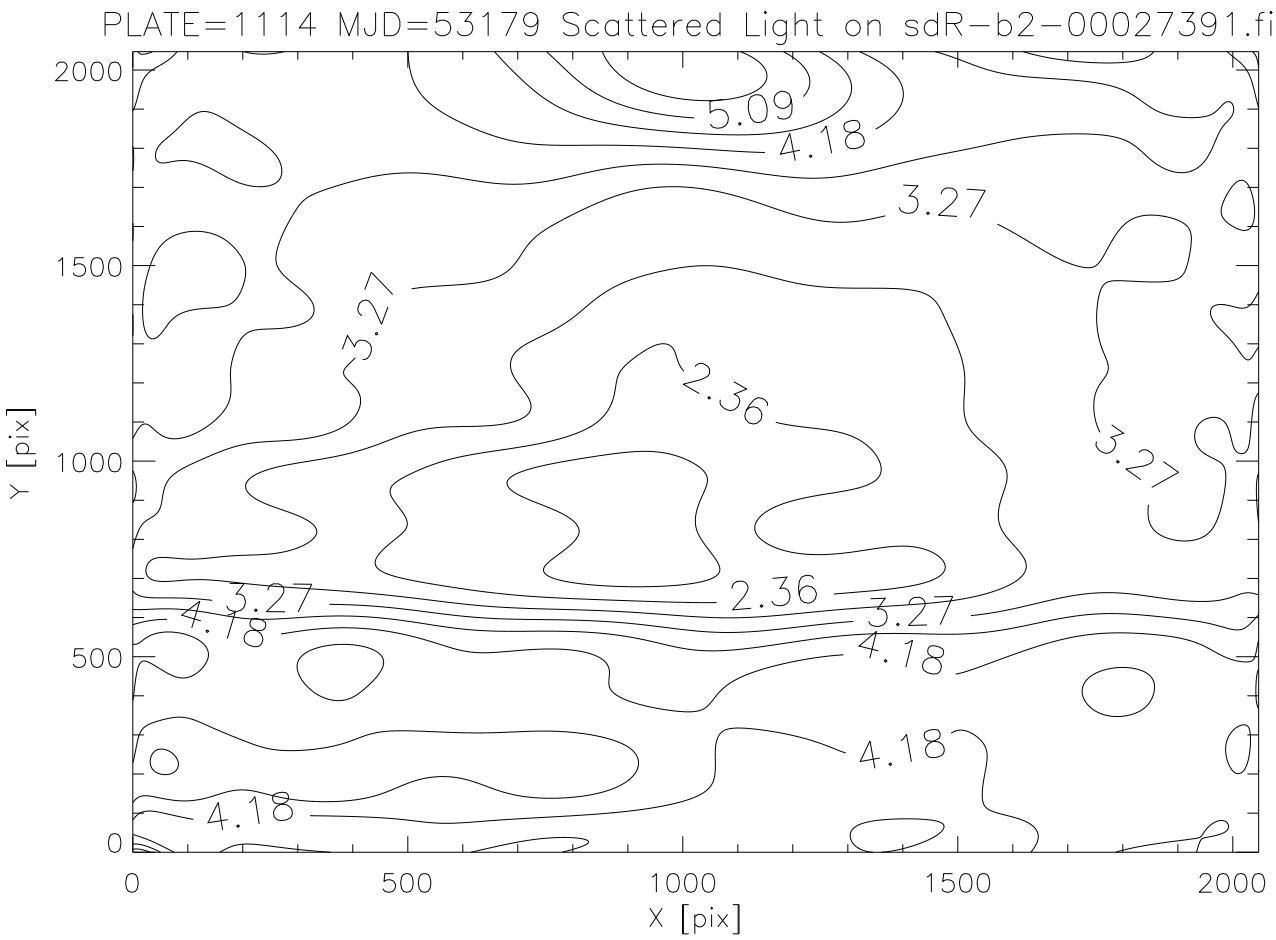

PLATE=1114 MJD=53179 sdR-b2-00027390.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion =+ 12.52 %
Fiber number
Focal Distance [mm]
Airmass

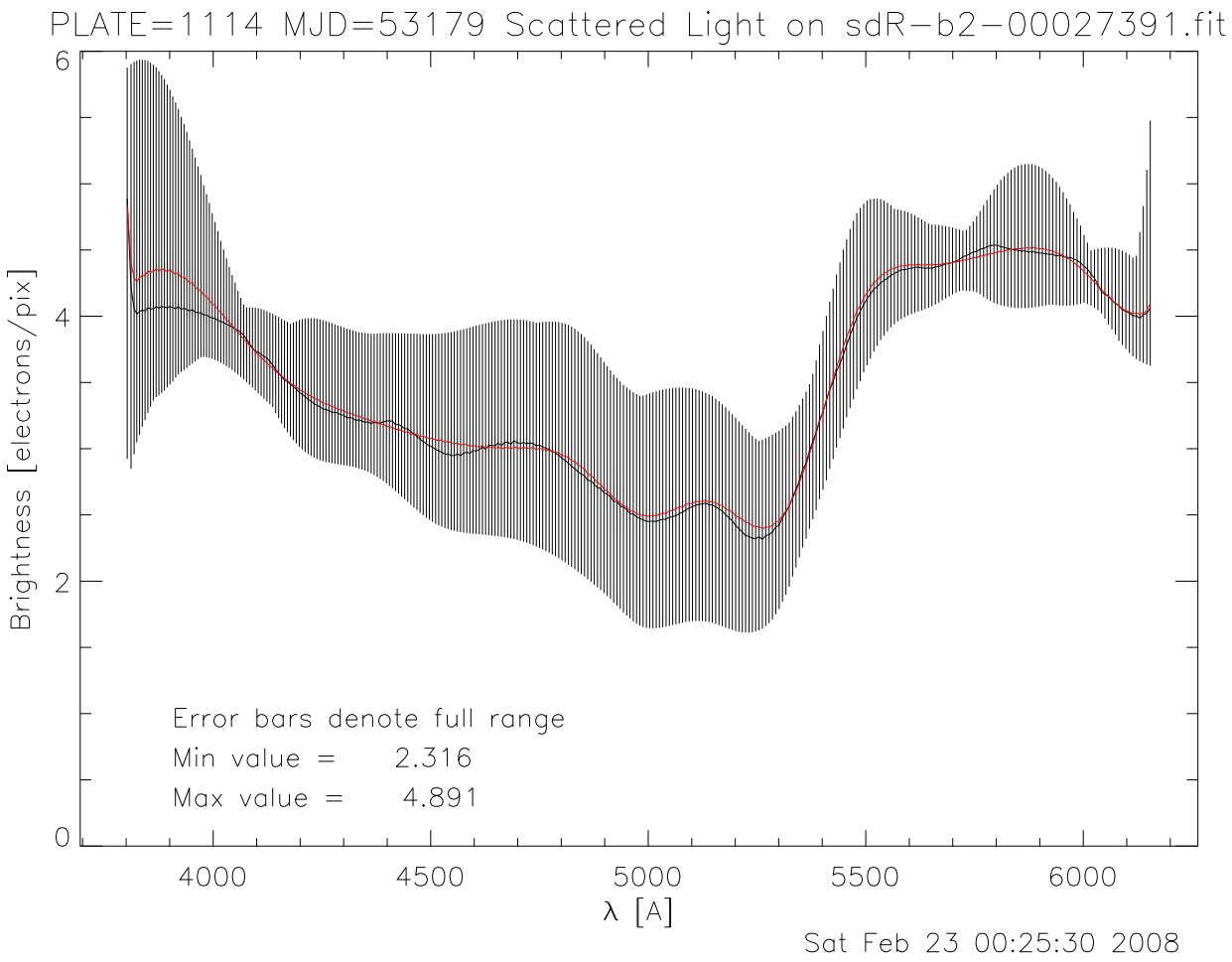

PLATE=1114 MJD=53179 sdR-b2-00027390.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.35 %
Fiber number
Focal Distance [mm]
Airmass

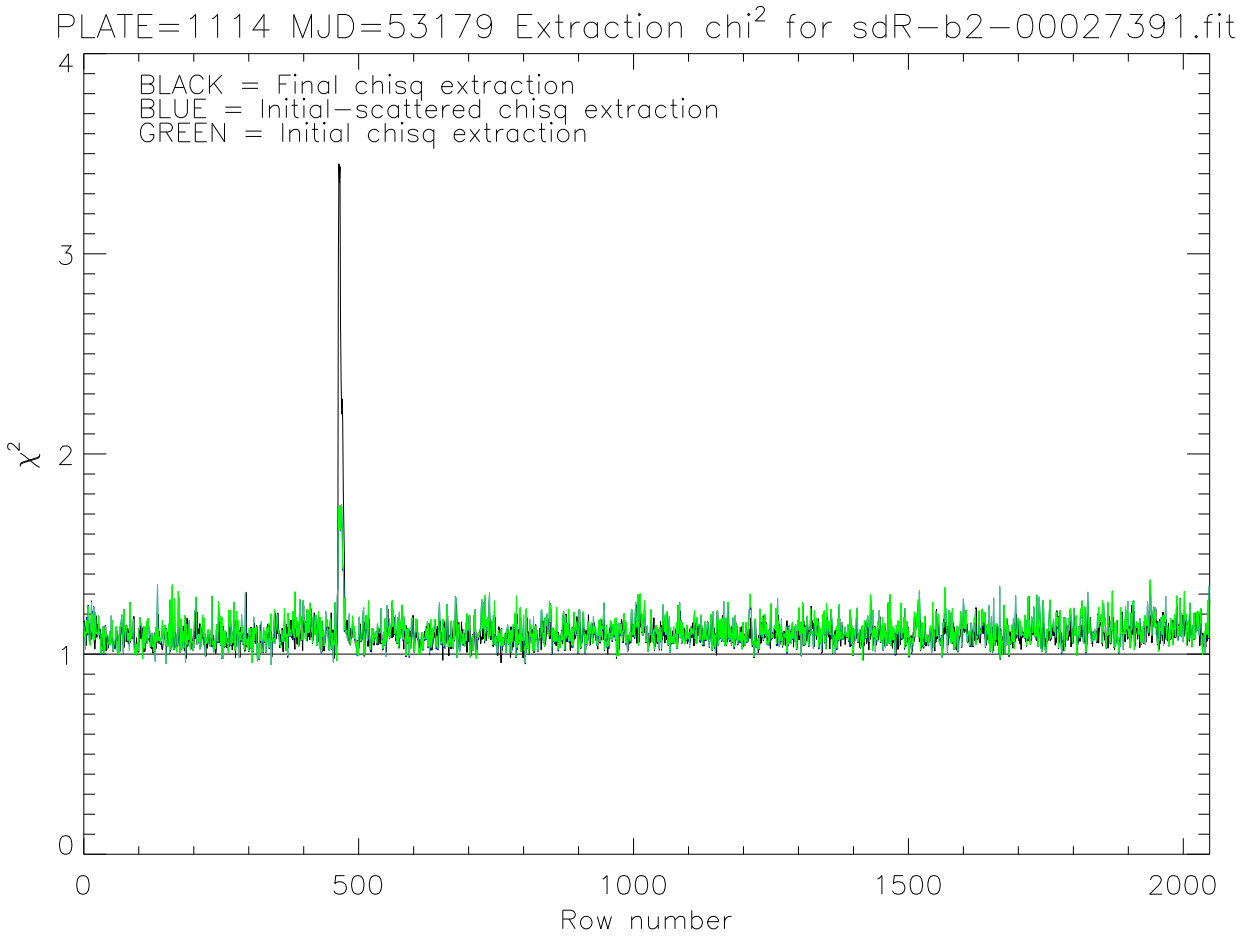

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b2-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.728
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:21:59 2008

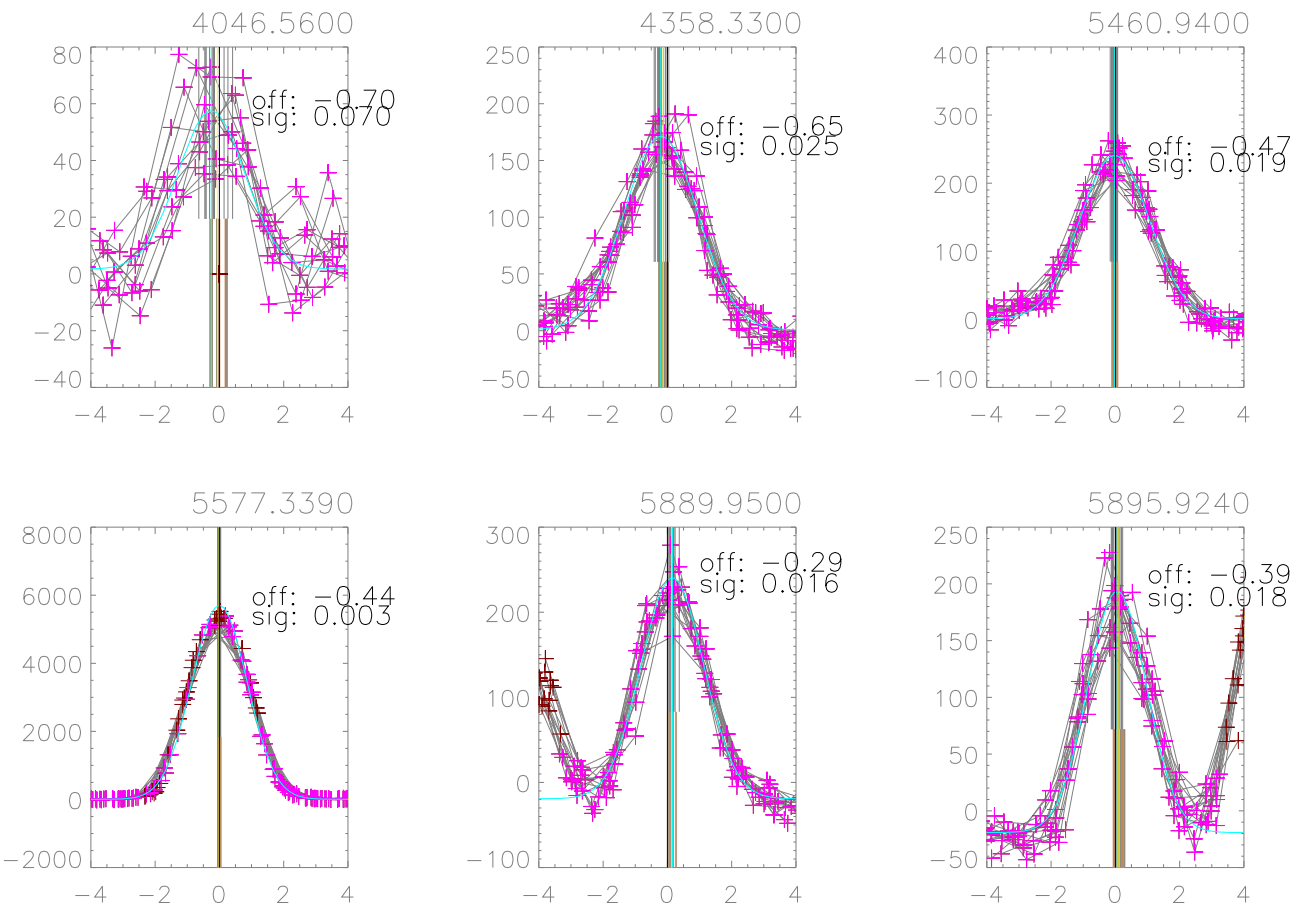

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027391.f
6.82
5.73
4.64
4.64
4.64
4.64
5.73
5.73
5.73
4.64
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

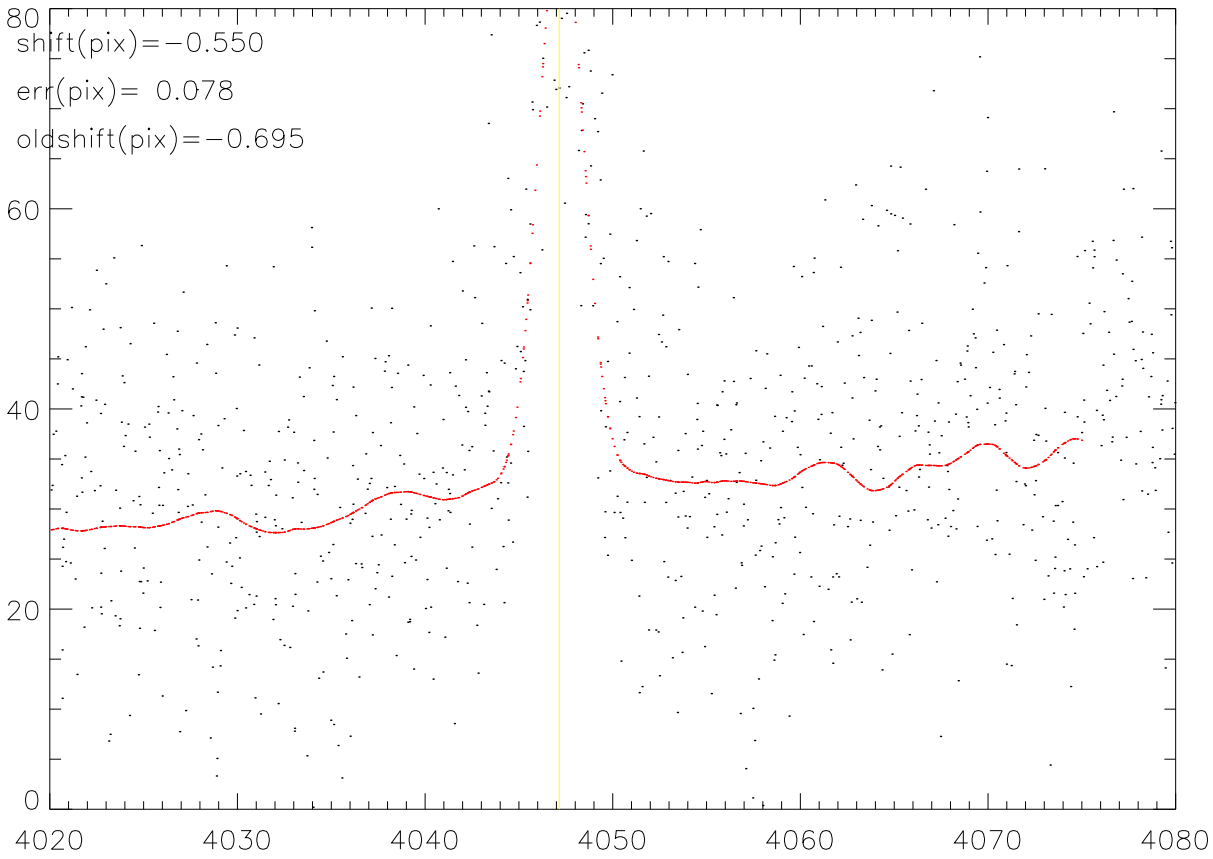

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027391.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.688
Max value = 7.384
Sat Feb 23 00:22:46 2008

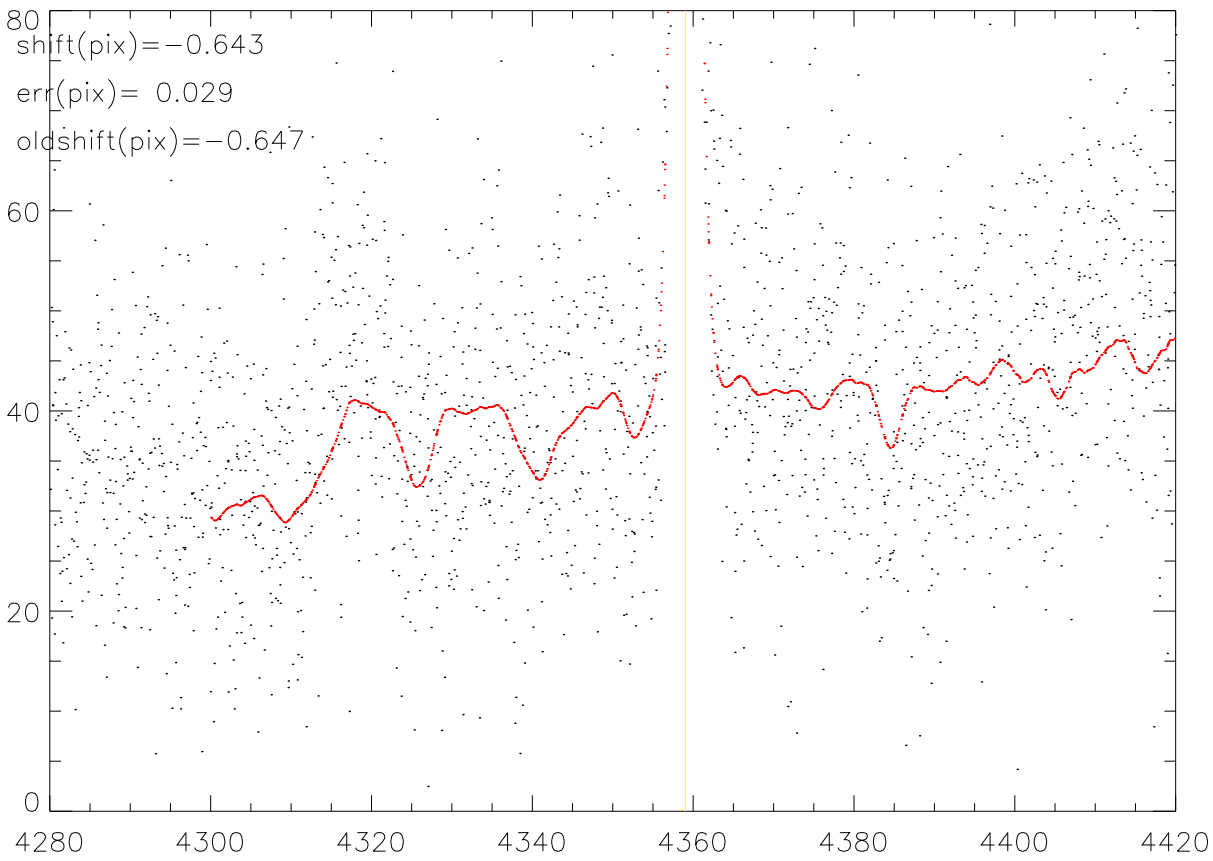

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027391.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.09
4.18
3.27
2.36
4.18

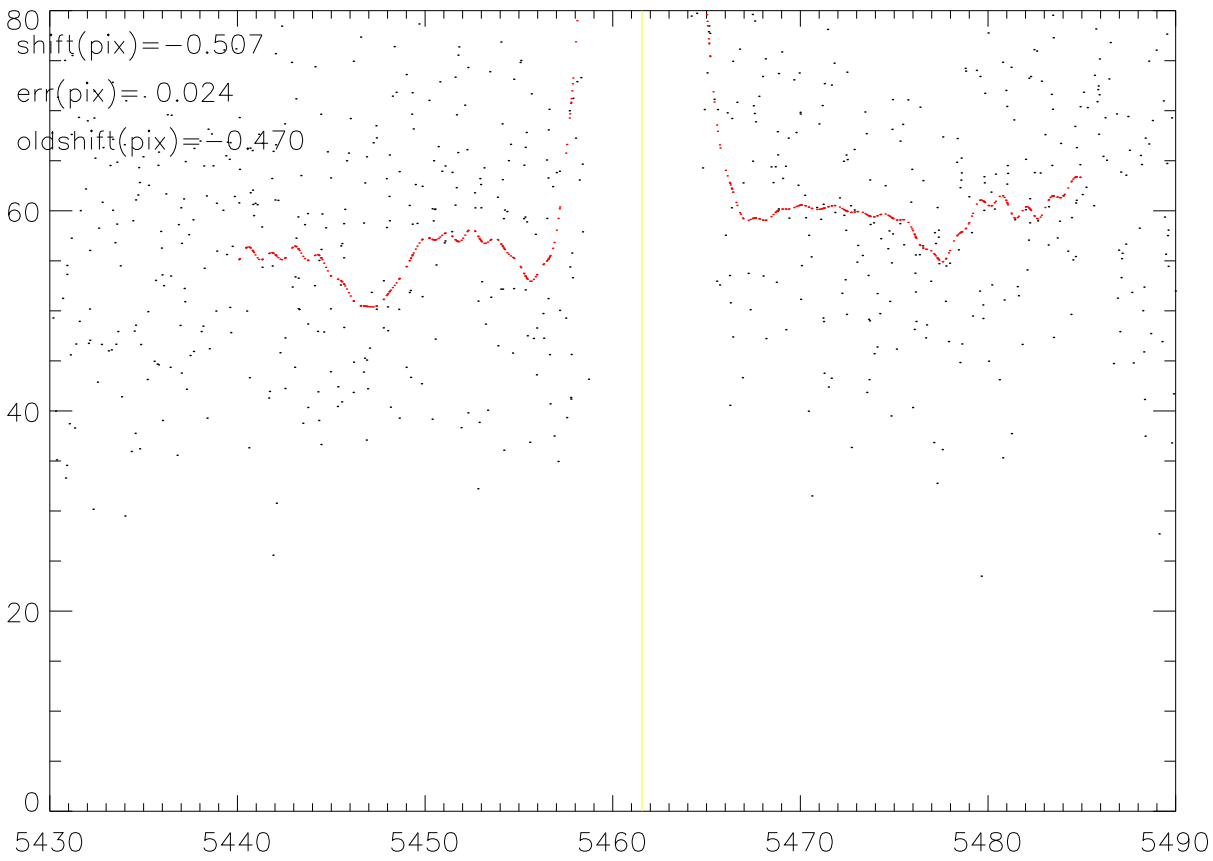

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027391.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.316
Max value = 4.891
Sat Feb 23 00:25:30 2008

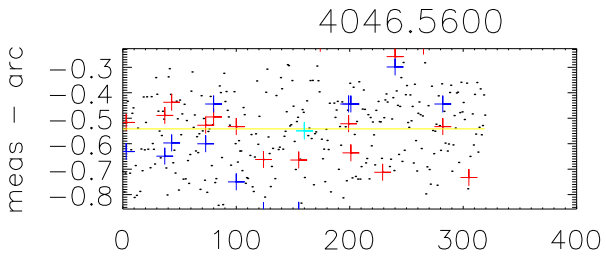

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b2-00027391.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

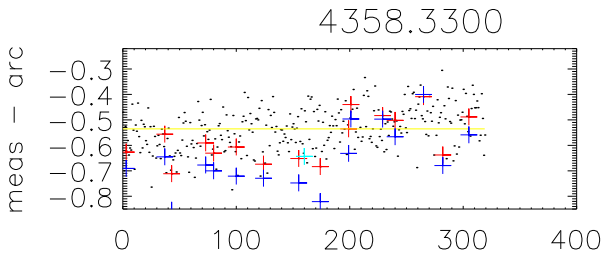

4046.5600
off: −0.70
sig: 0.070
4358.3300
off: −0.65
sig: 0.025
5460.9400
off: −0.47
sig: 0.019
5577.3390
off: −0.44
sig: 0.003
5889.9500
off: −0.29
sig: 0.016
5895.9240
off: −0.39
sig: 0.018

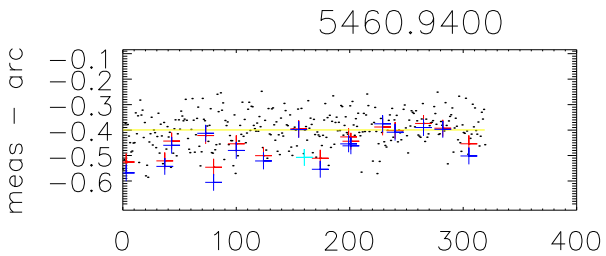

shift(pix)=−0.550
err(pix)= 0.078
oldshift(pix)=−0.695
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

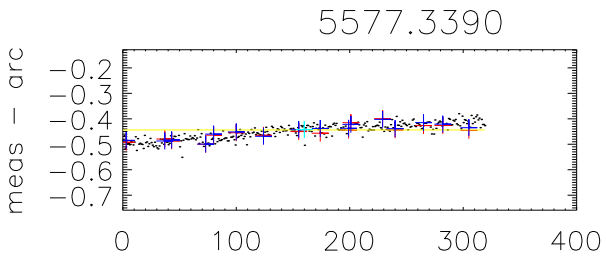

shift(pix)=−0.643
err(pix)= 0.029
oldshift(pix)=−0.647
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

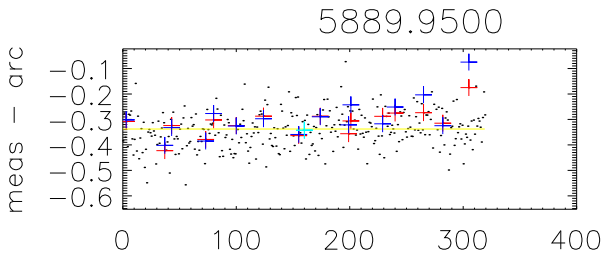

shift(pix)=−0.507
err(pix)=. 0.024
oldshift(pix)=−0.470
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

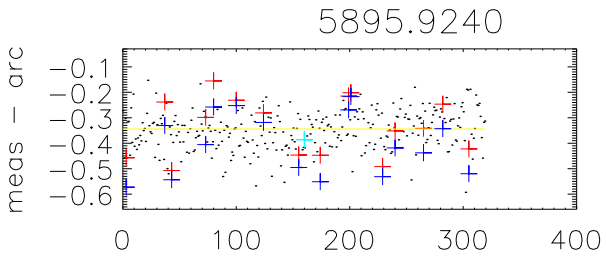

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

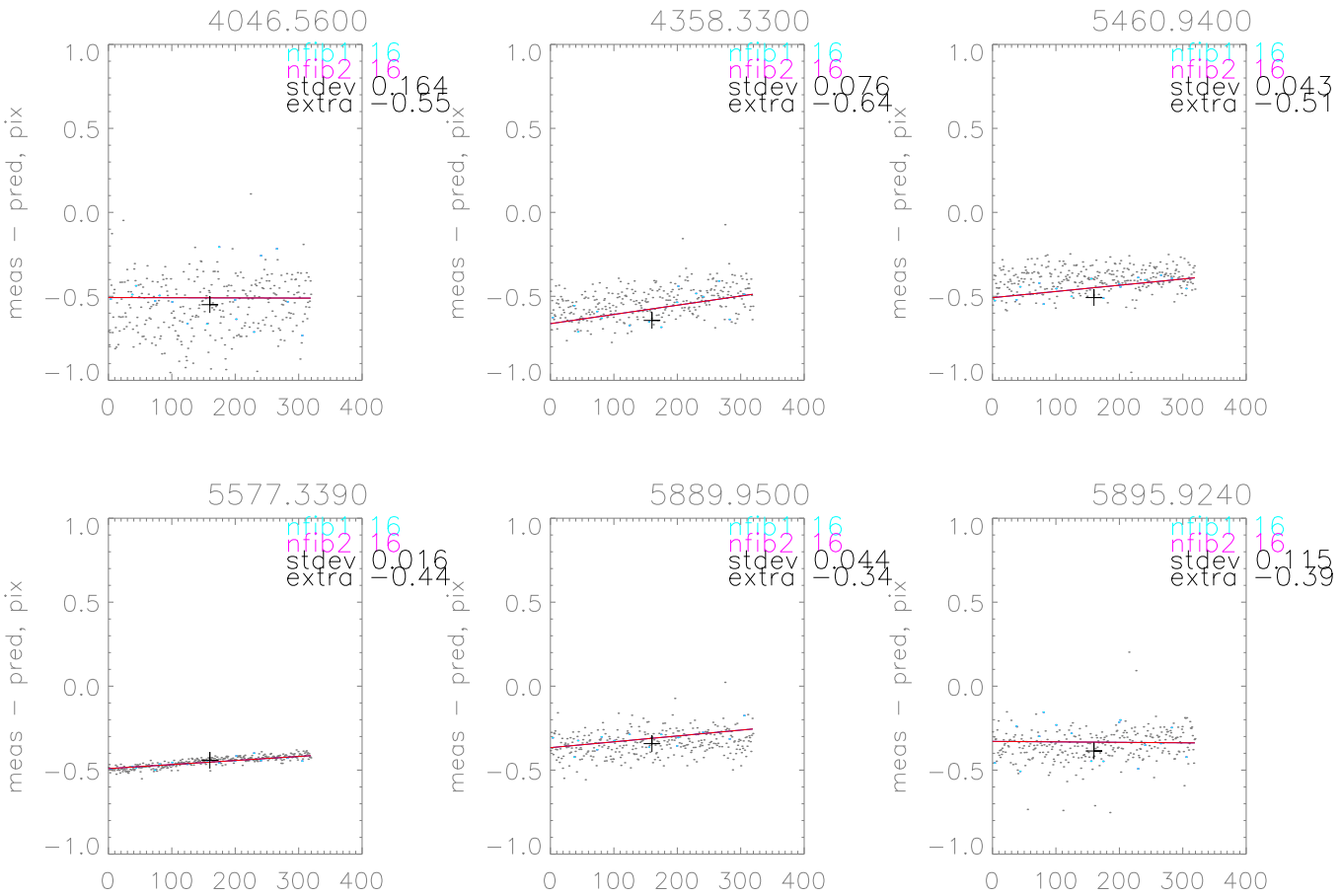

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

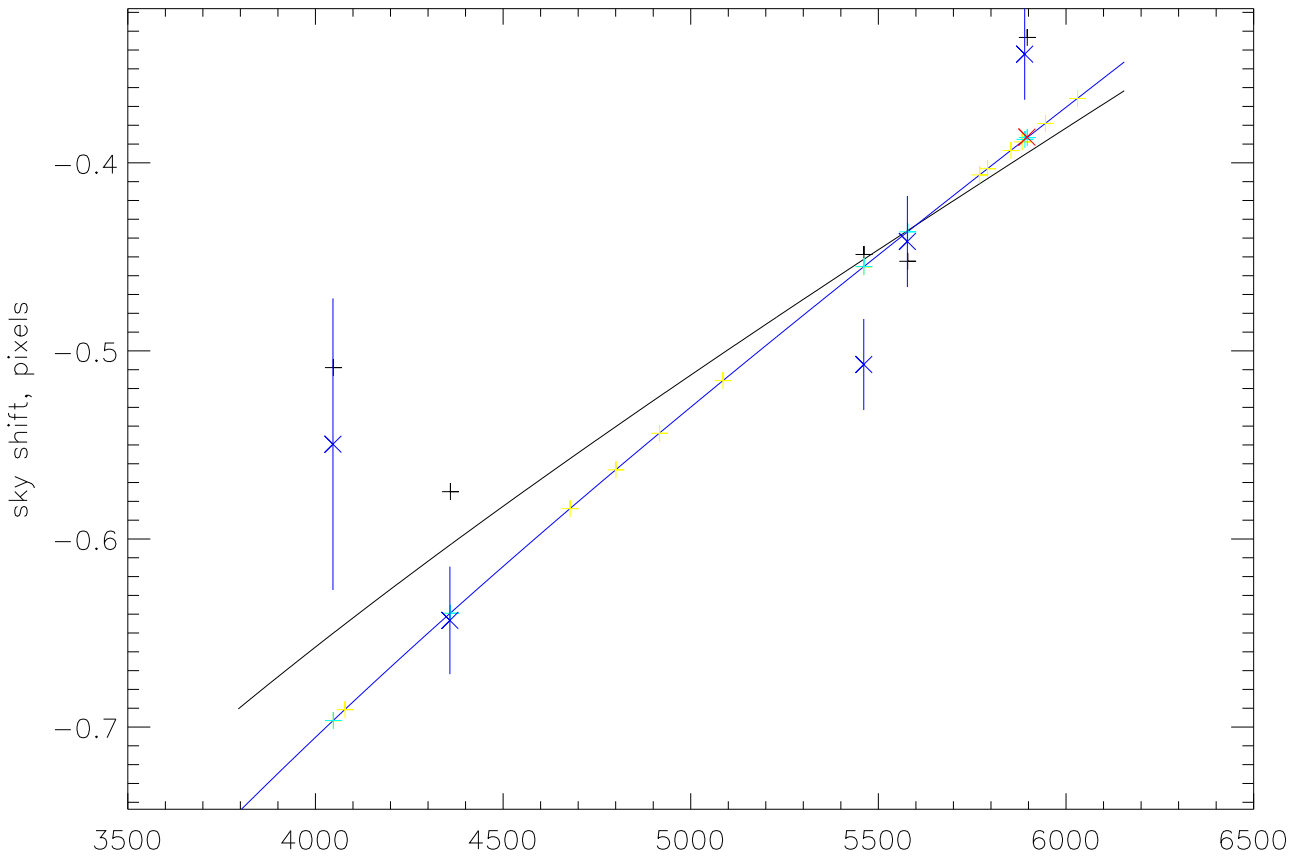

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

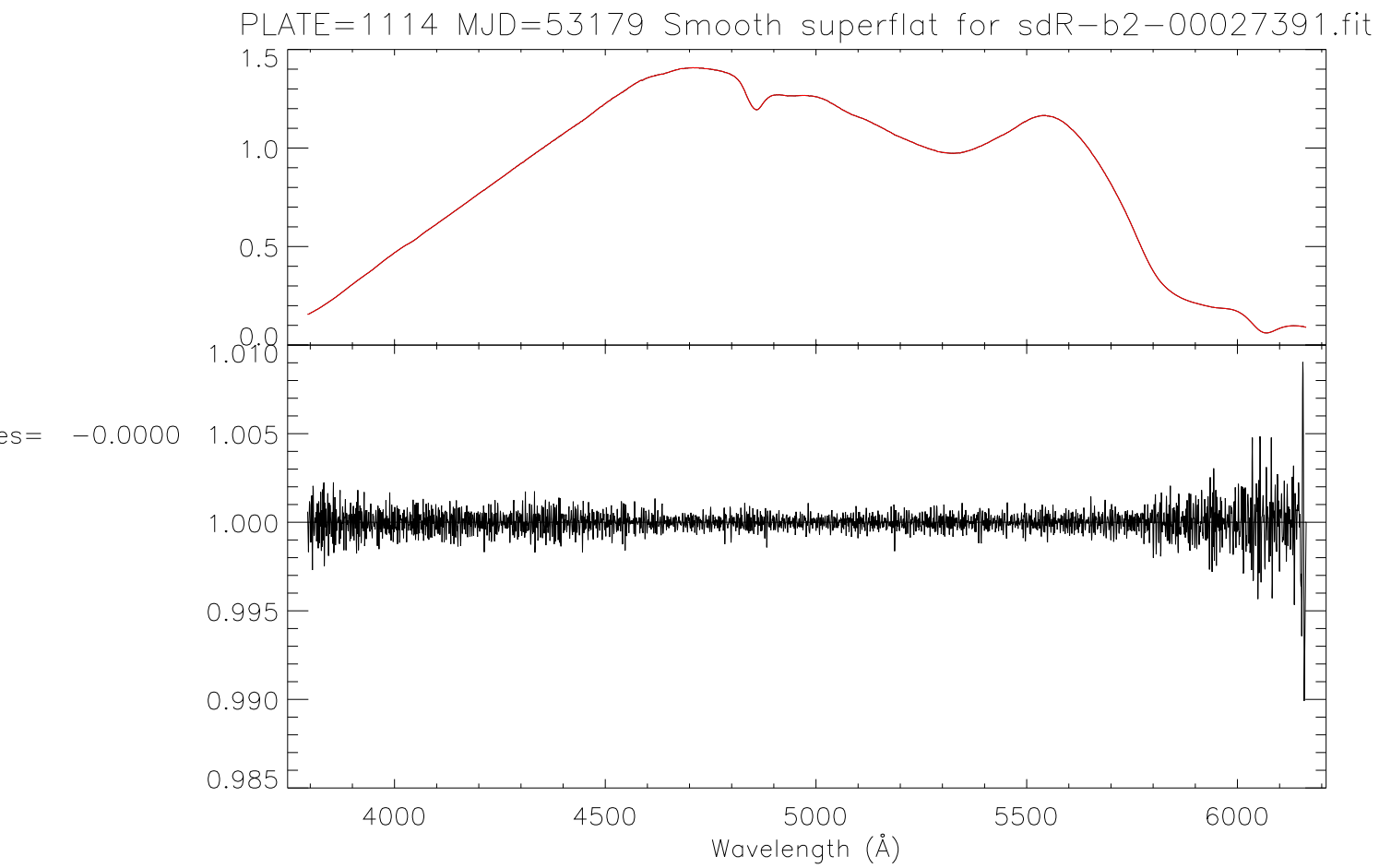

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

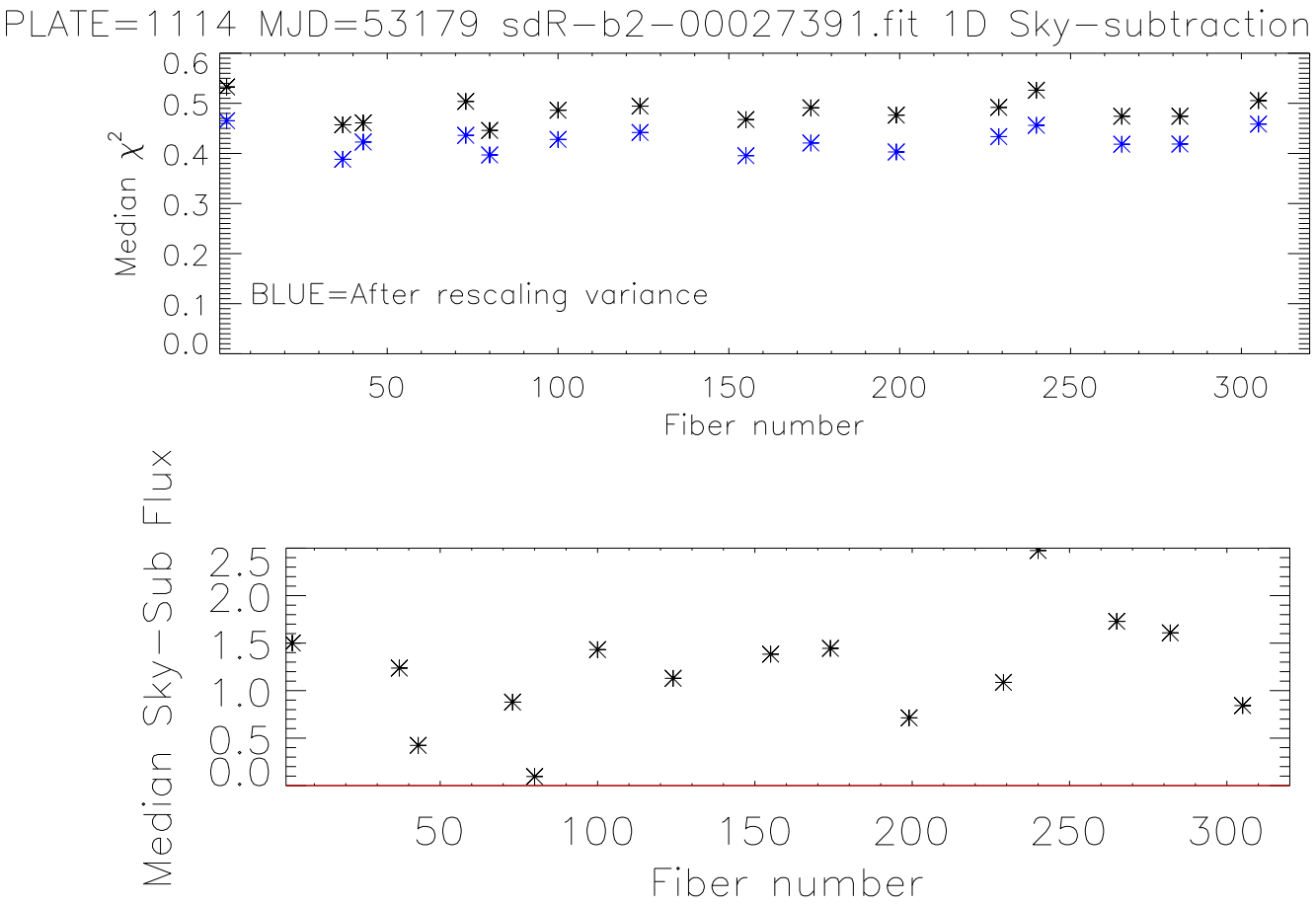

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

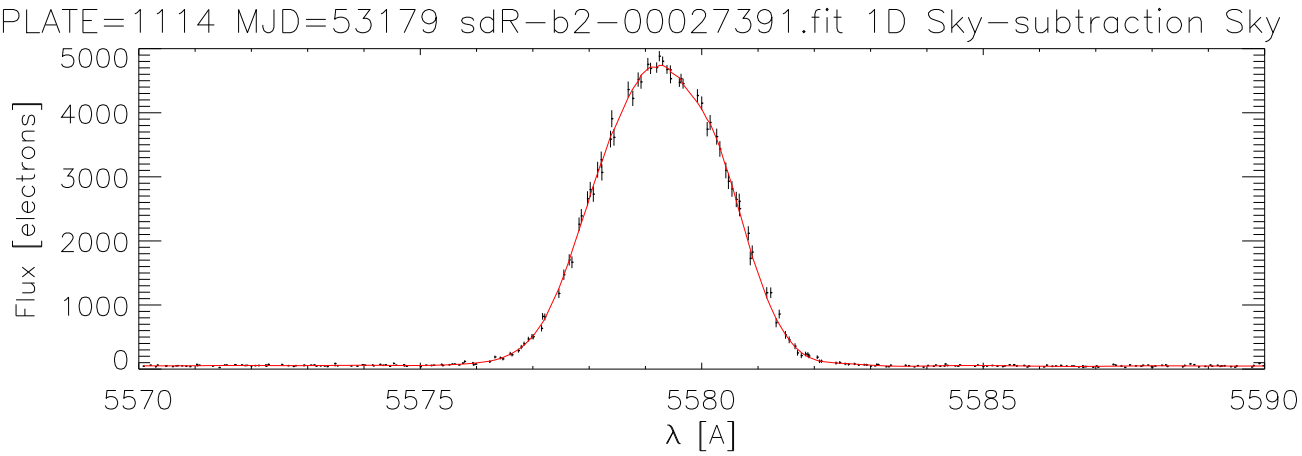

4046.5600
nfib1 16
nfib2 16
stdev 0.164
extra −0.55
4358.3300
nfib1 16
nfib2 16
stdev 0.076
extra −0.64
5460.9400
nfib1 16
nfib2 16
stdev 0.043
extra −0.51
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.44
5889.9500
nfib1 16
nfib2 16
stdev 0.044
extra −0.34
5895.9240
nfib1 16
nfib2 16
stdev 0.115
extra −0.39
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

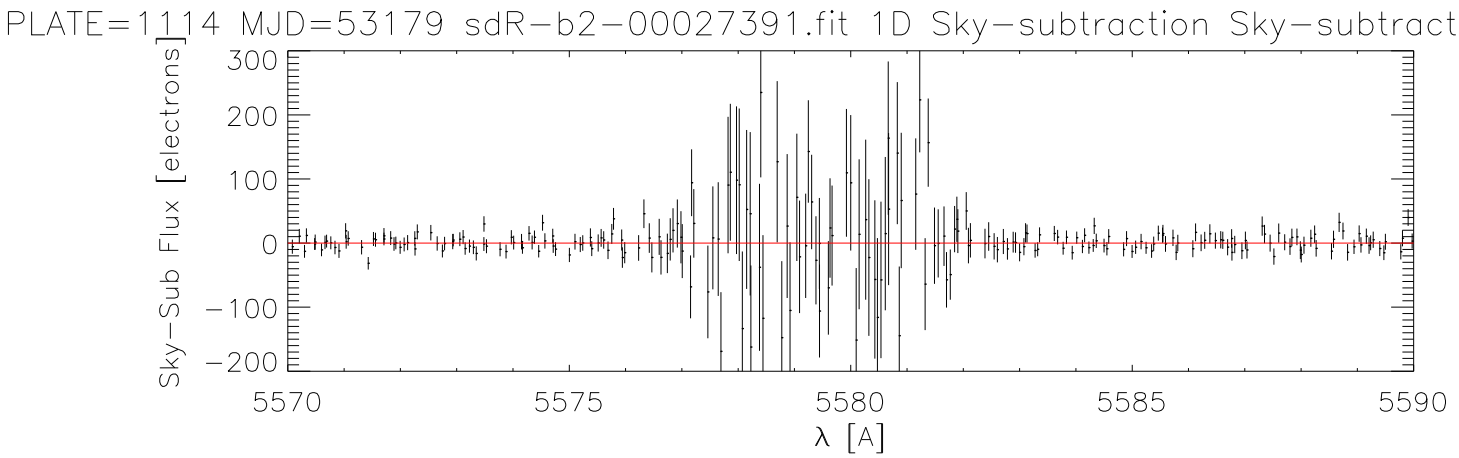

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

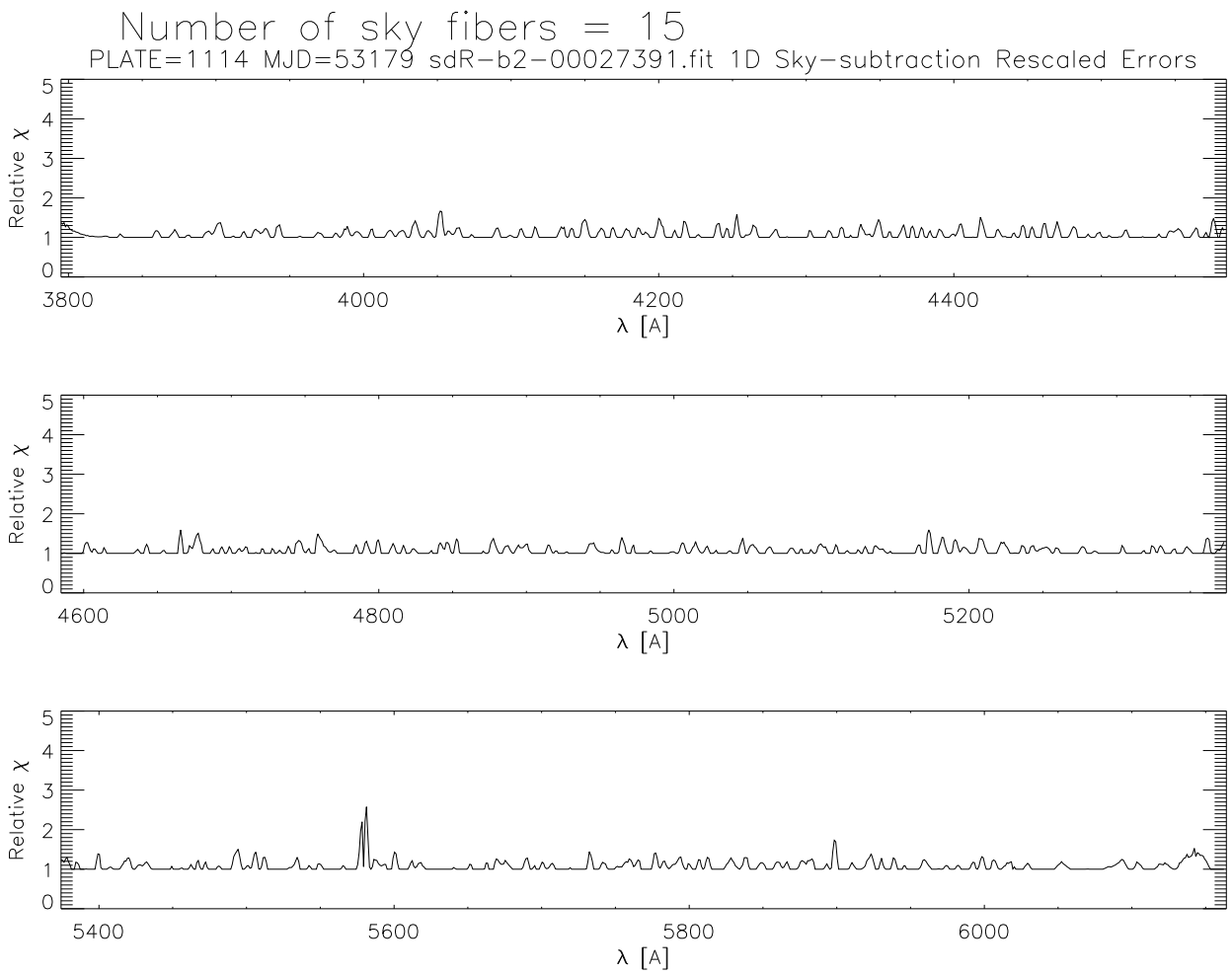

PLATE=1114 MJD=53179 Smooth superflat for sdR-b2-00027391.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

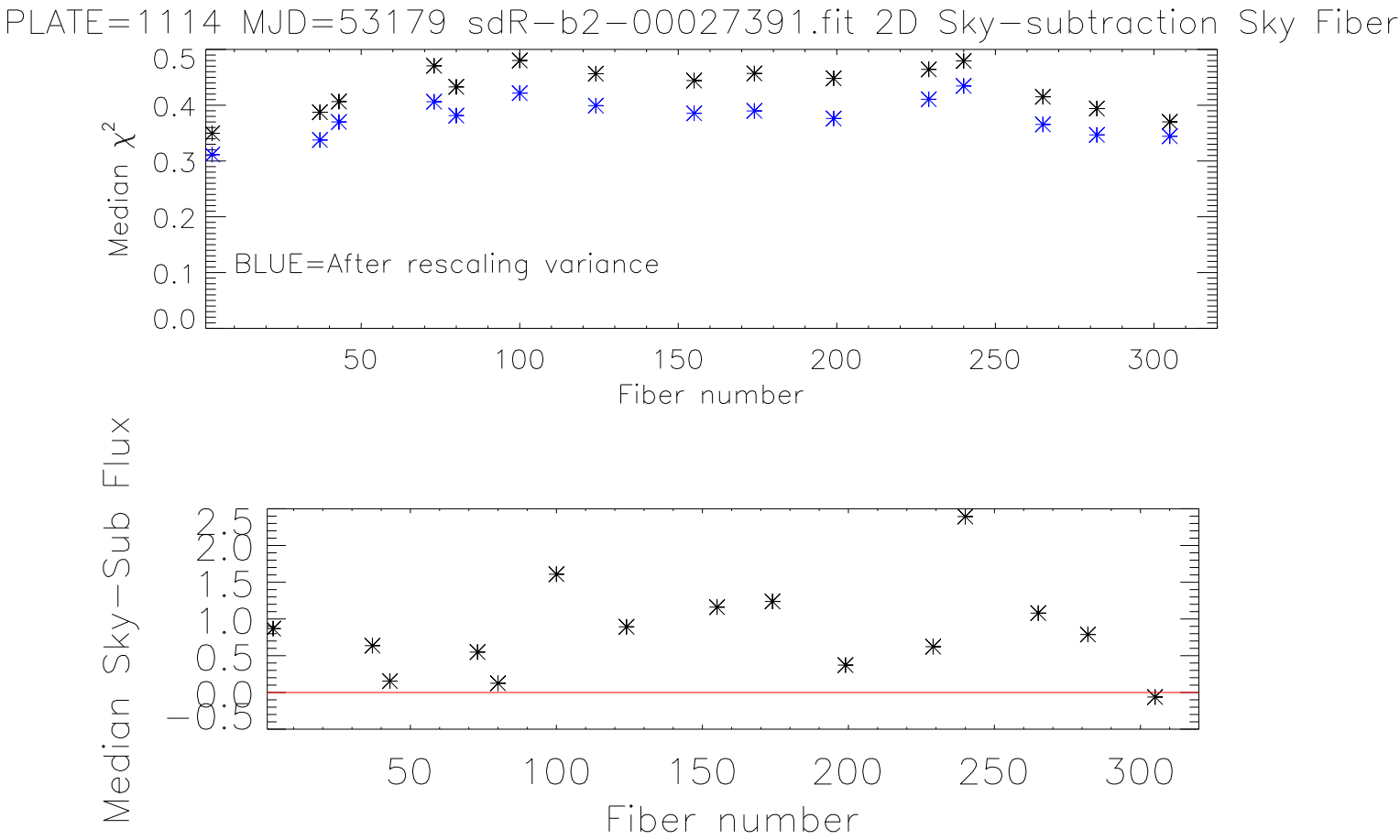
es= −0.0000

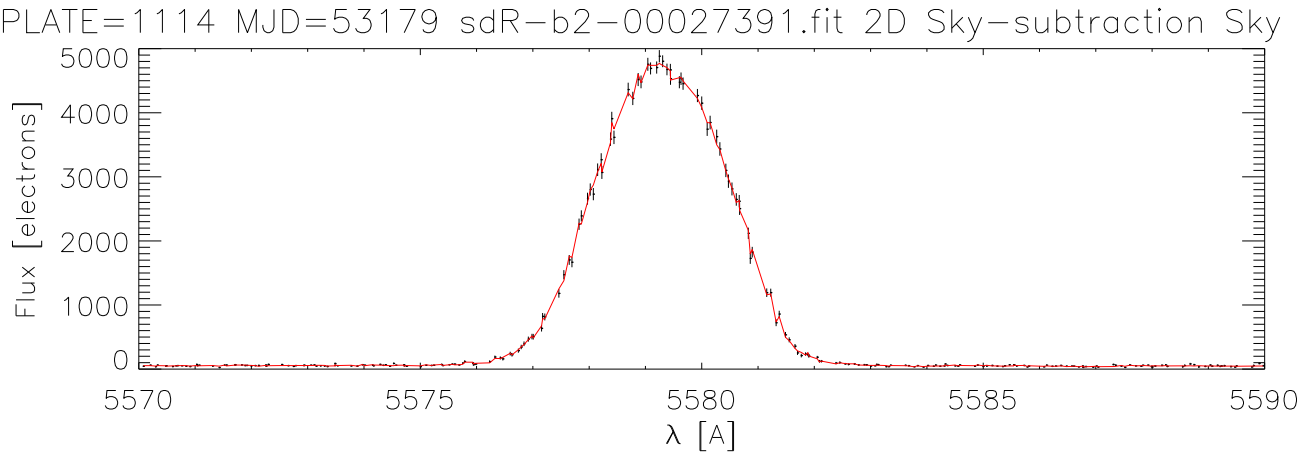

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

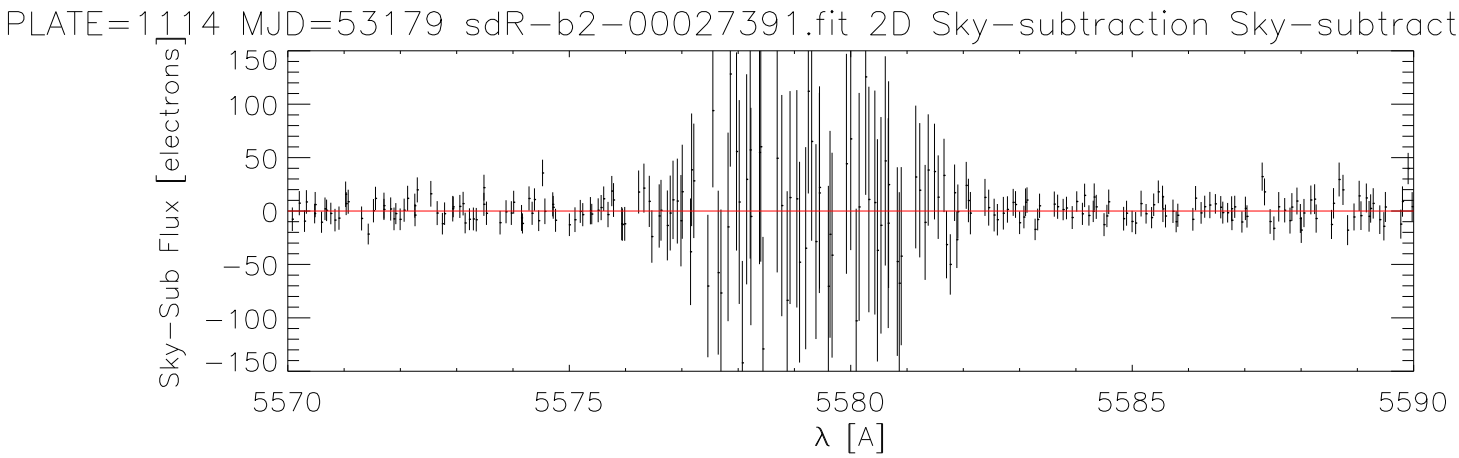

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

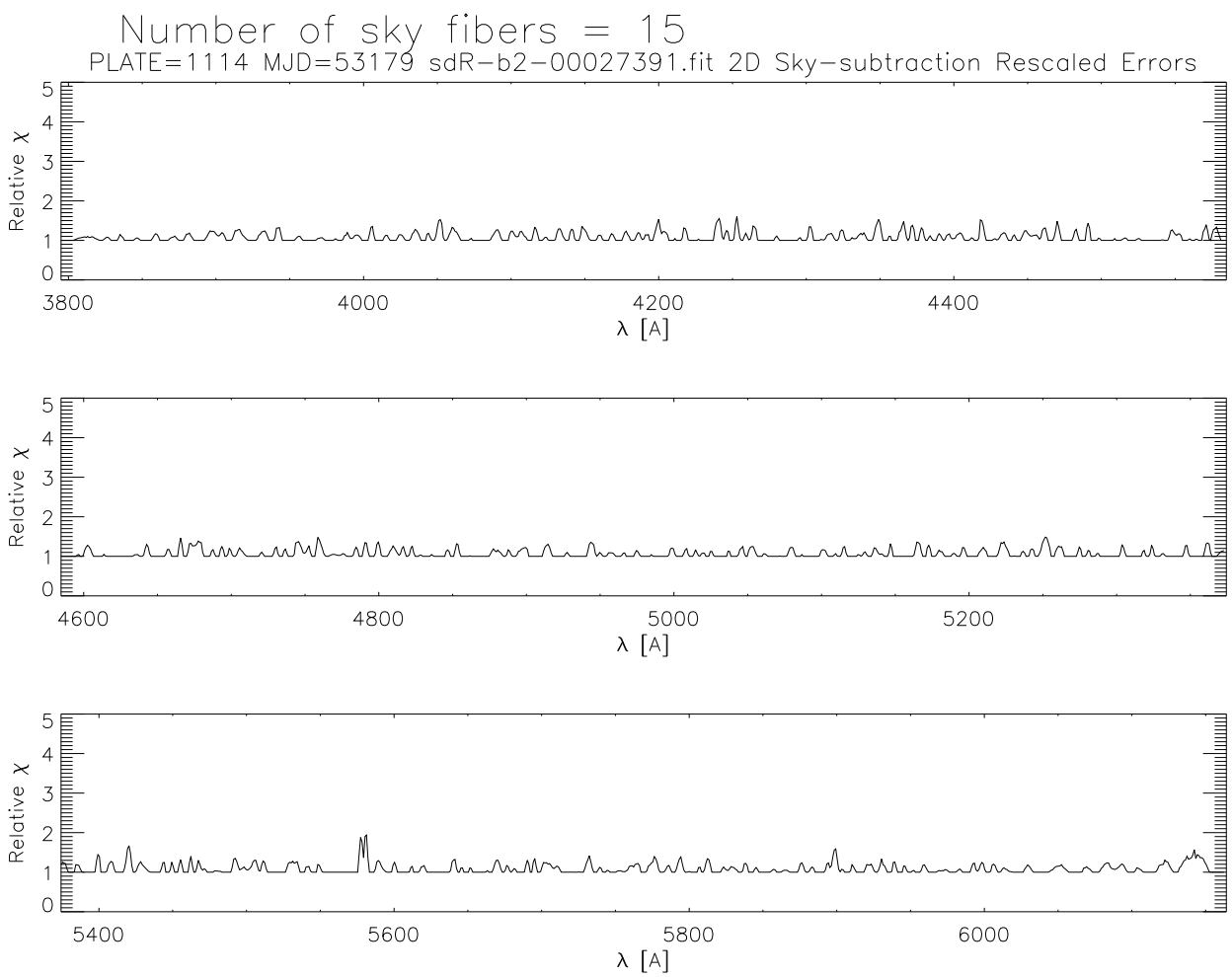

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

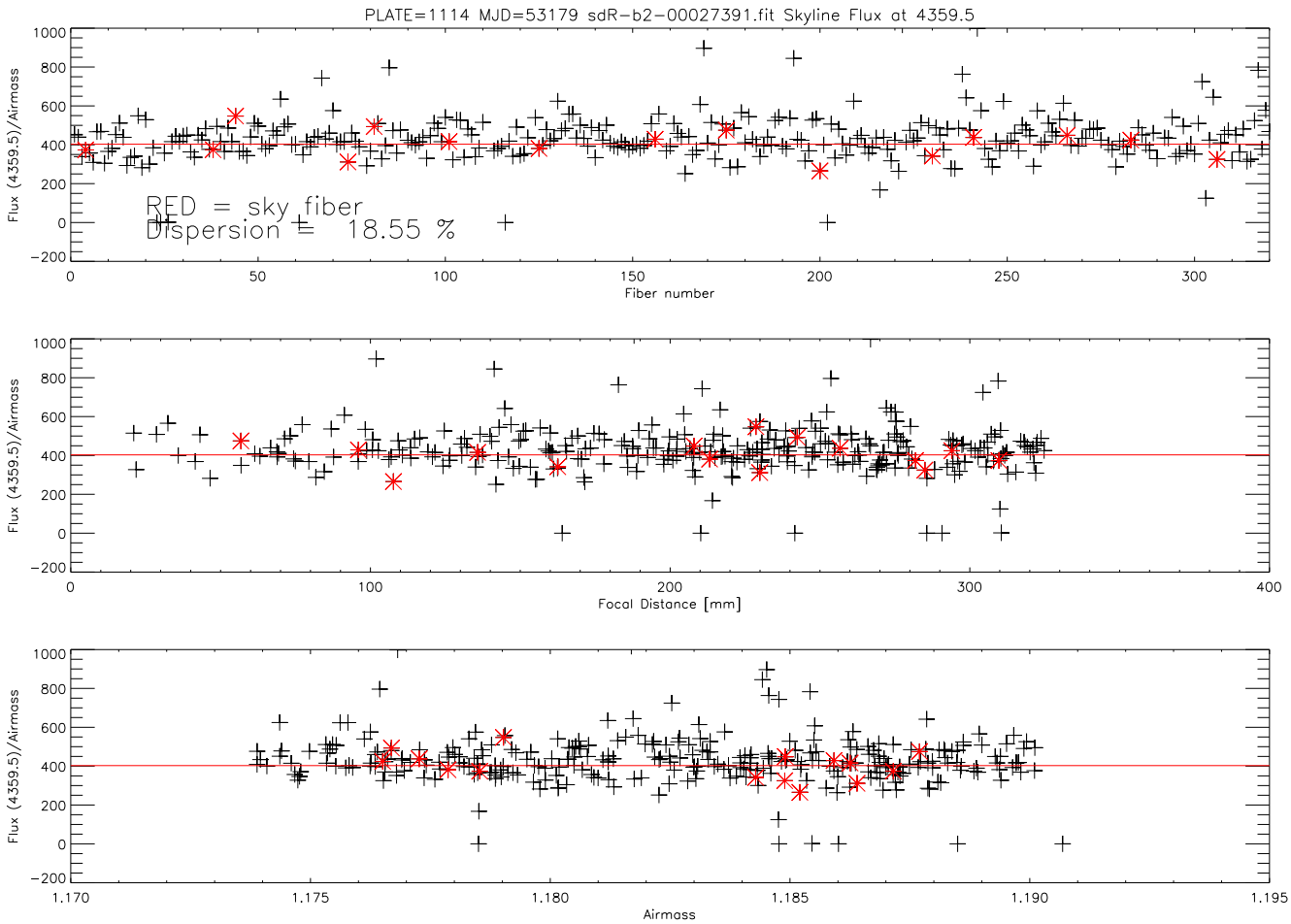

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027391.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

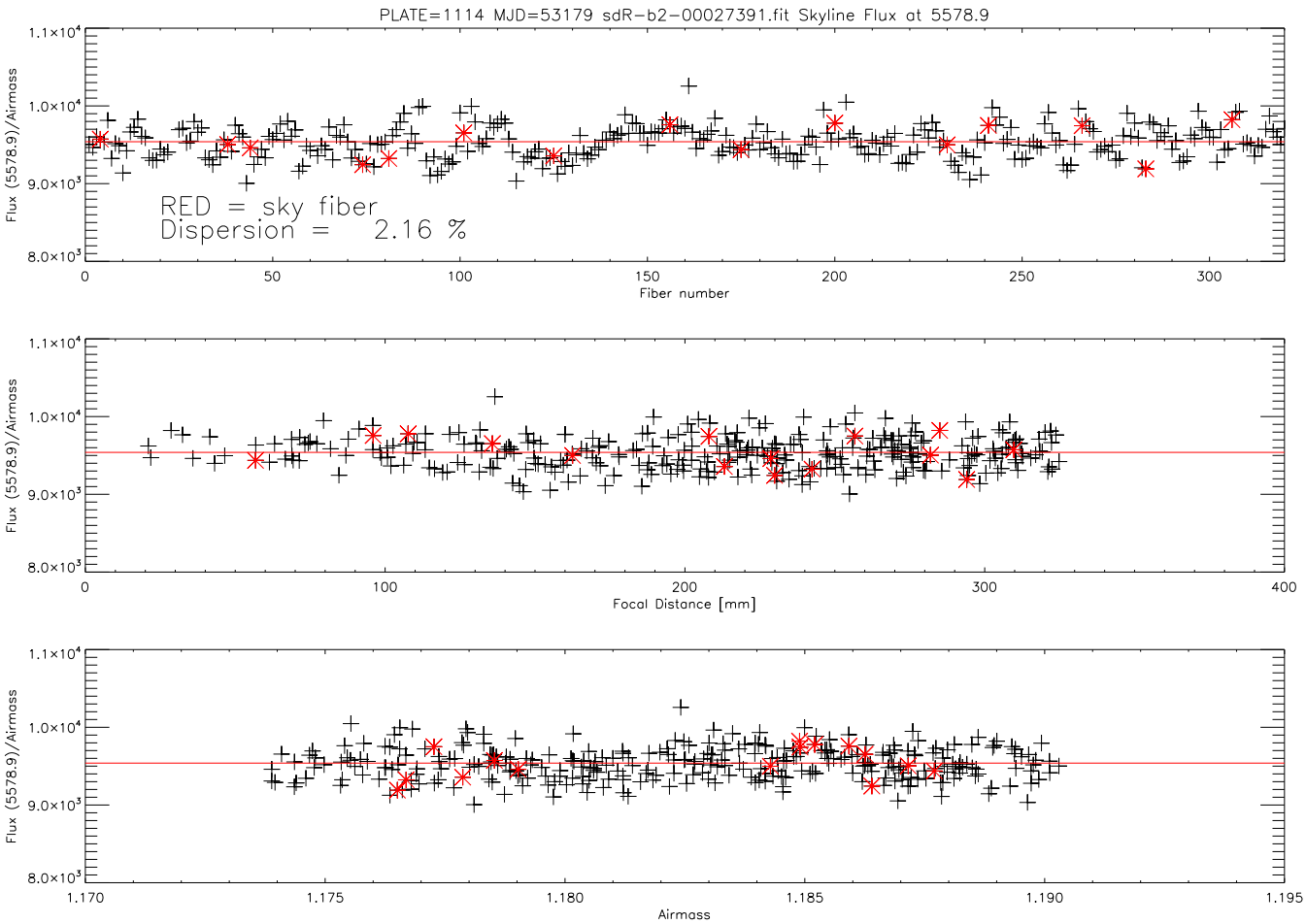

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

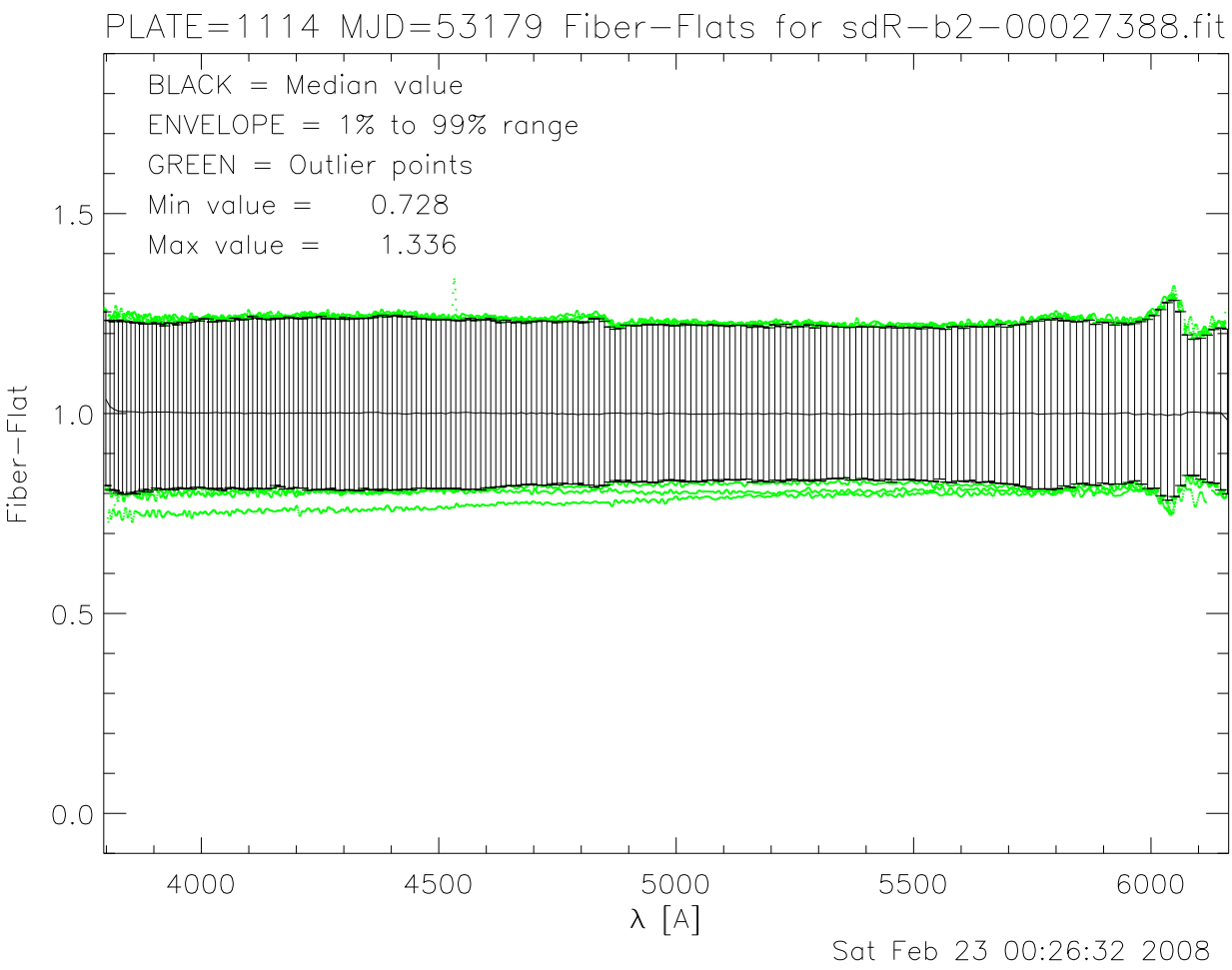

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

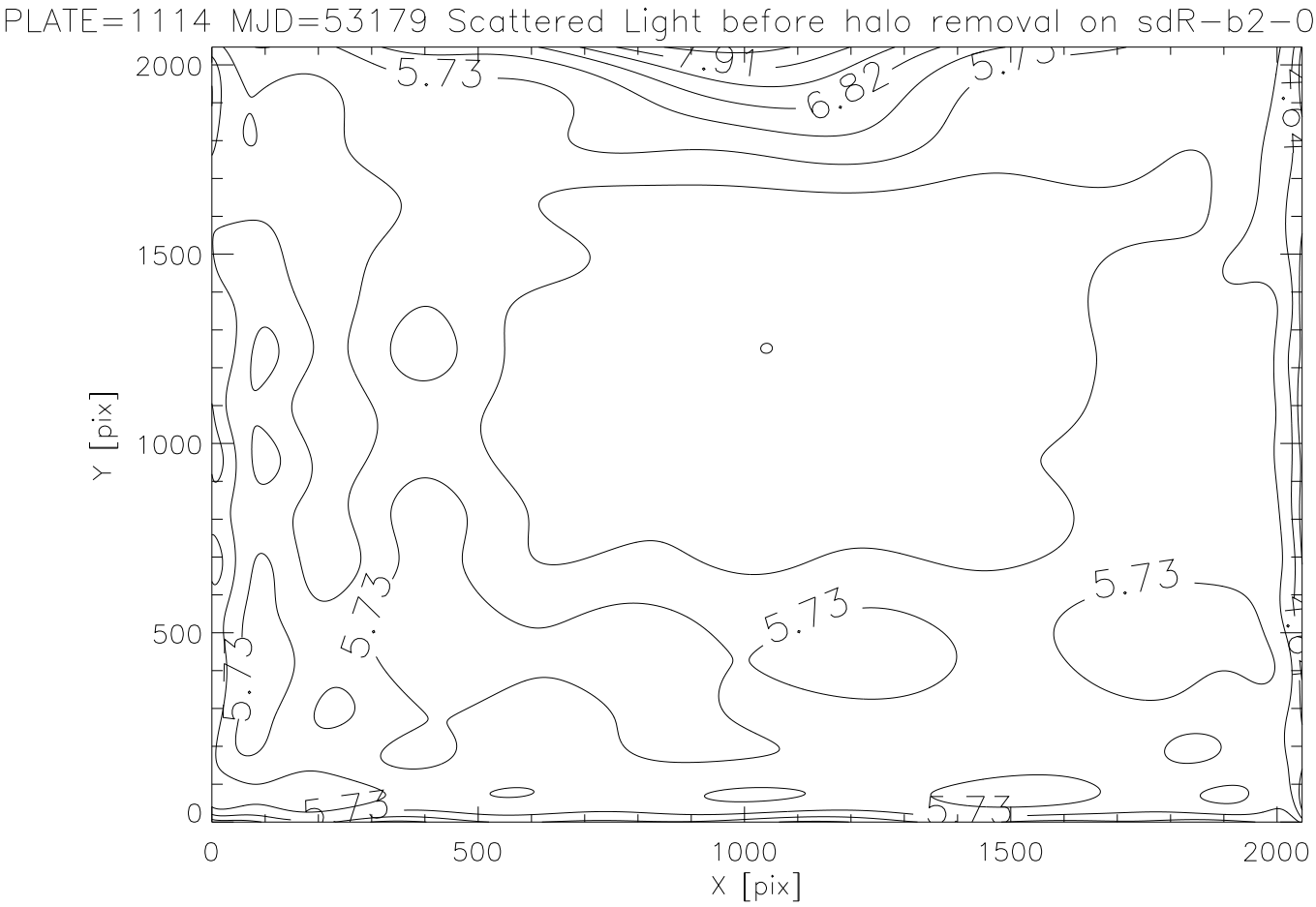

PLATE=1114 MJD=53179 sdR-b2-00027391.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

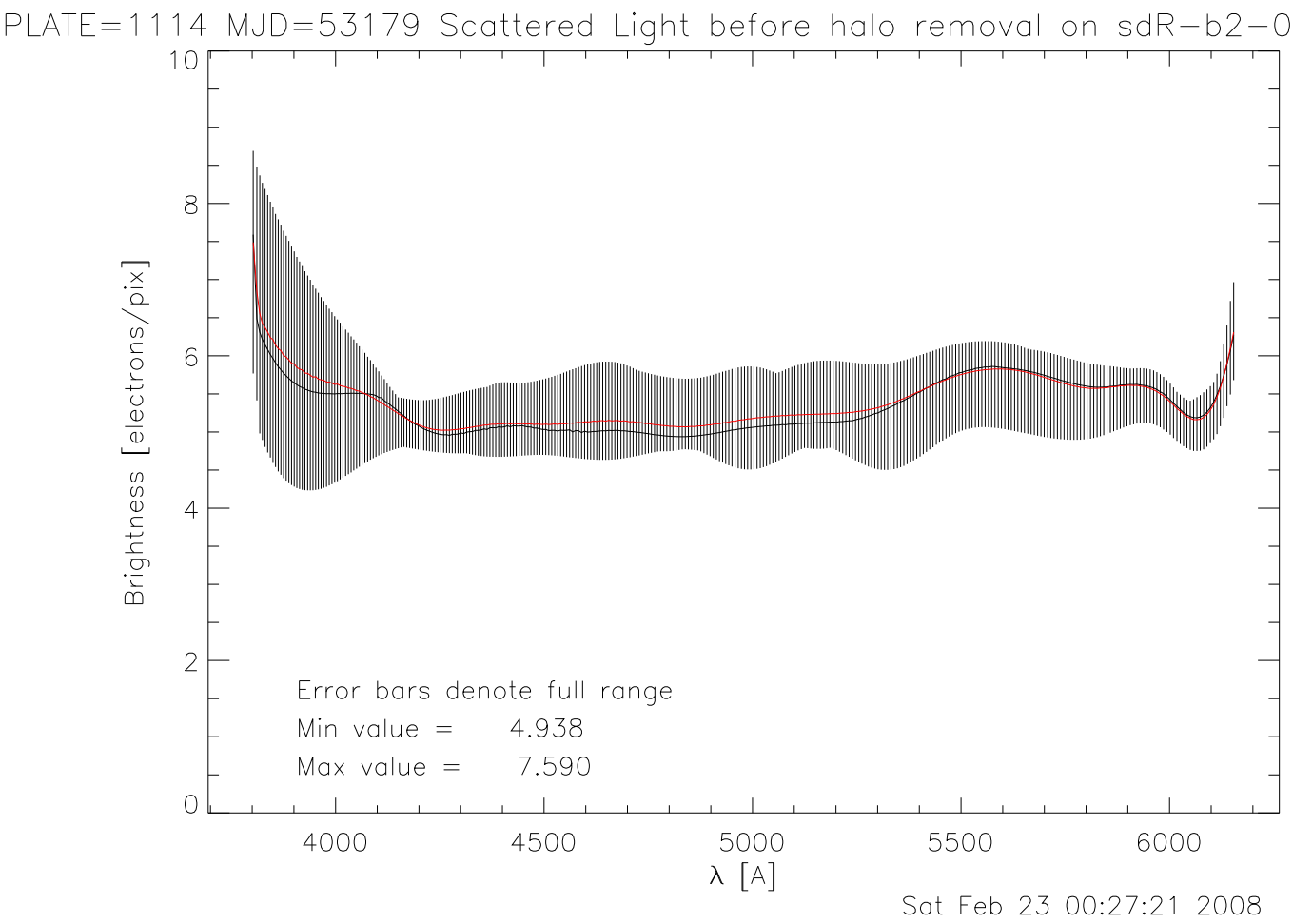

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027391.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

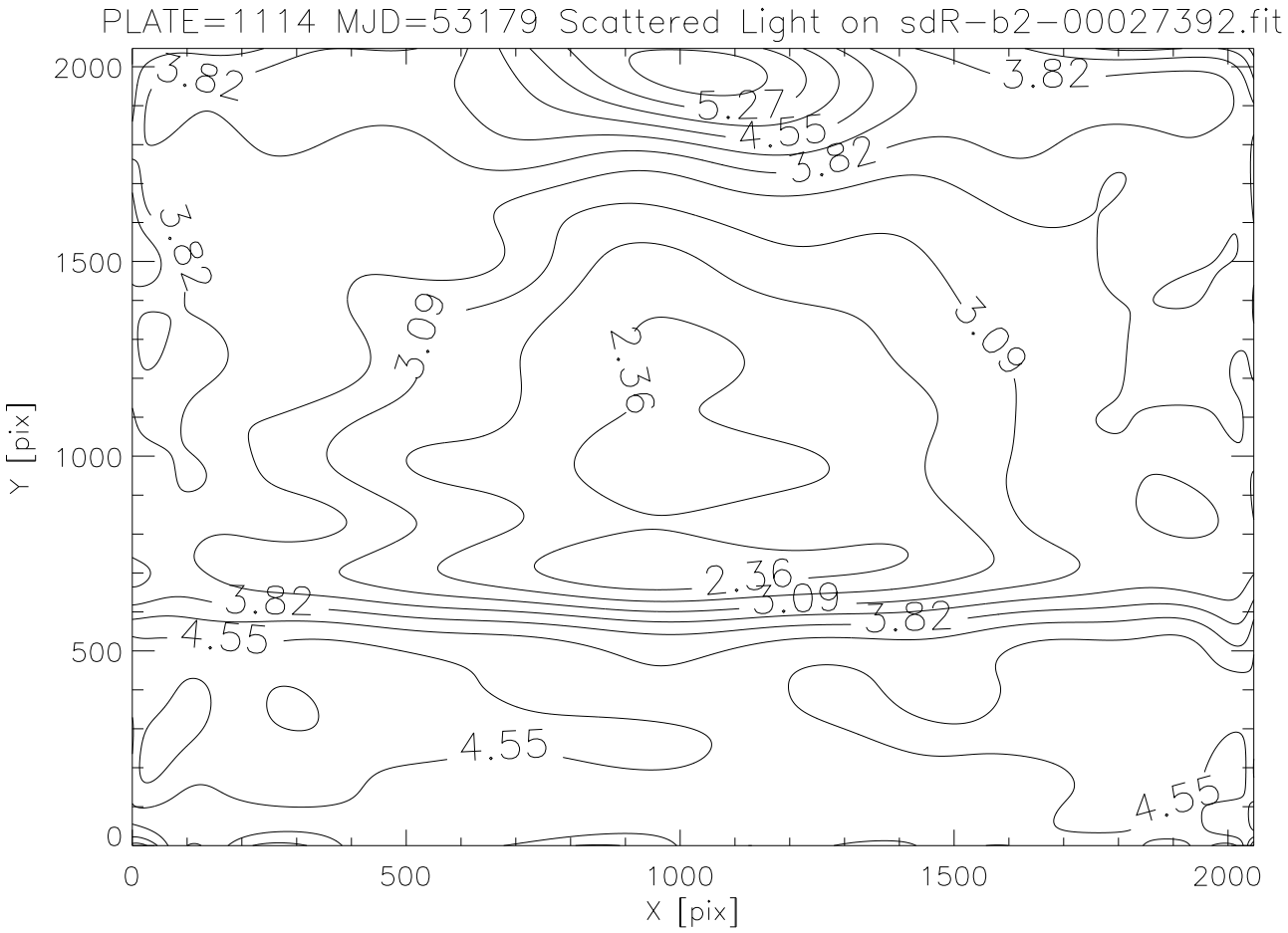

PLATE=1114 MJD=53179 sdR-b2-00027391.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.55 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

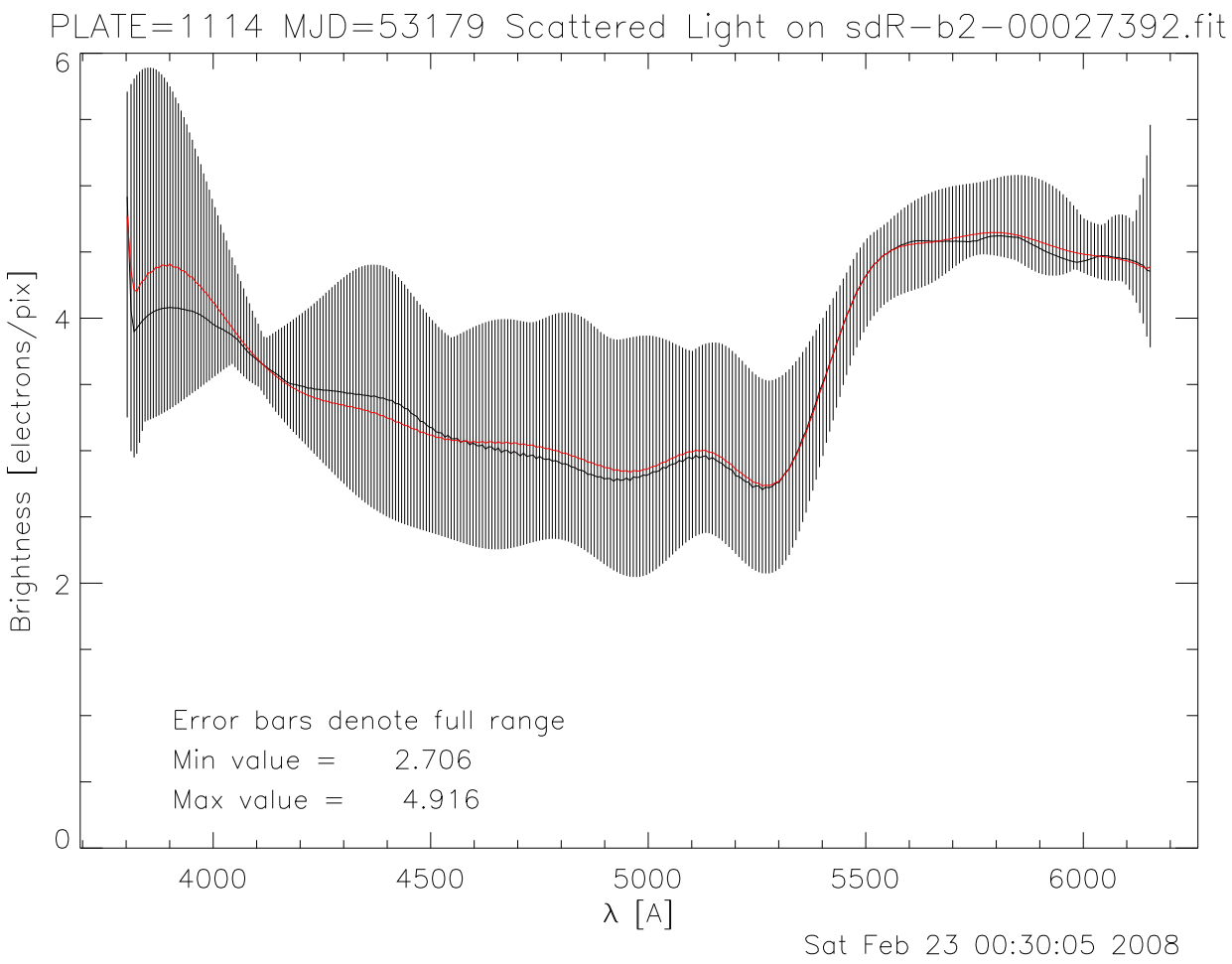

PLATE=1114 MJD=53179 sdR-b2-00027391.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
RED = sky fiber
Dispersion = 2.16 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
1.170
1.175
1.180
1.185
1.190
1.195
Airmass

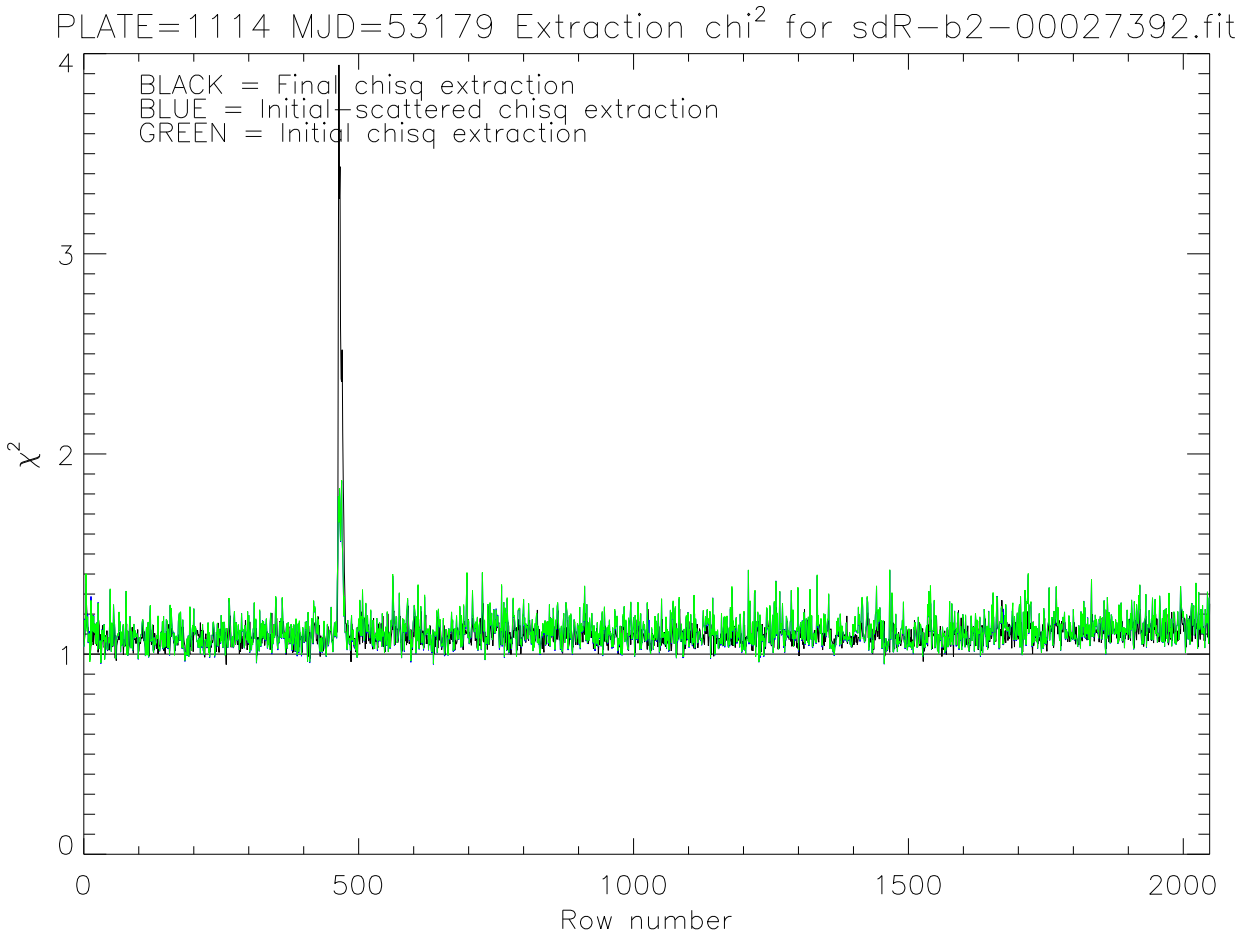

PLATE=1114 MJD=53179 Fiber-Flats for sdR-b2-00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.728
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 00:26:32 2008

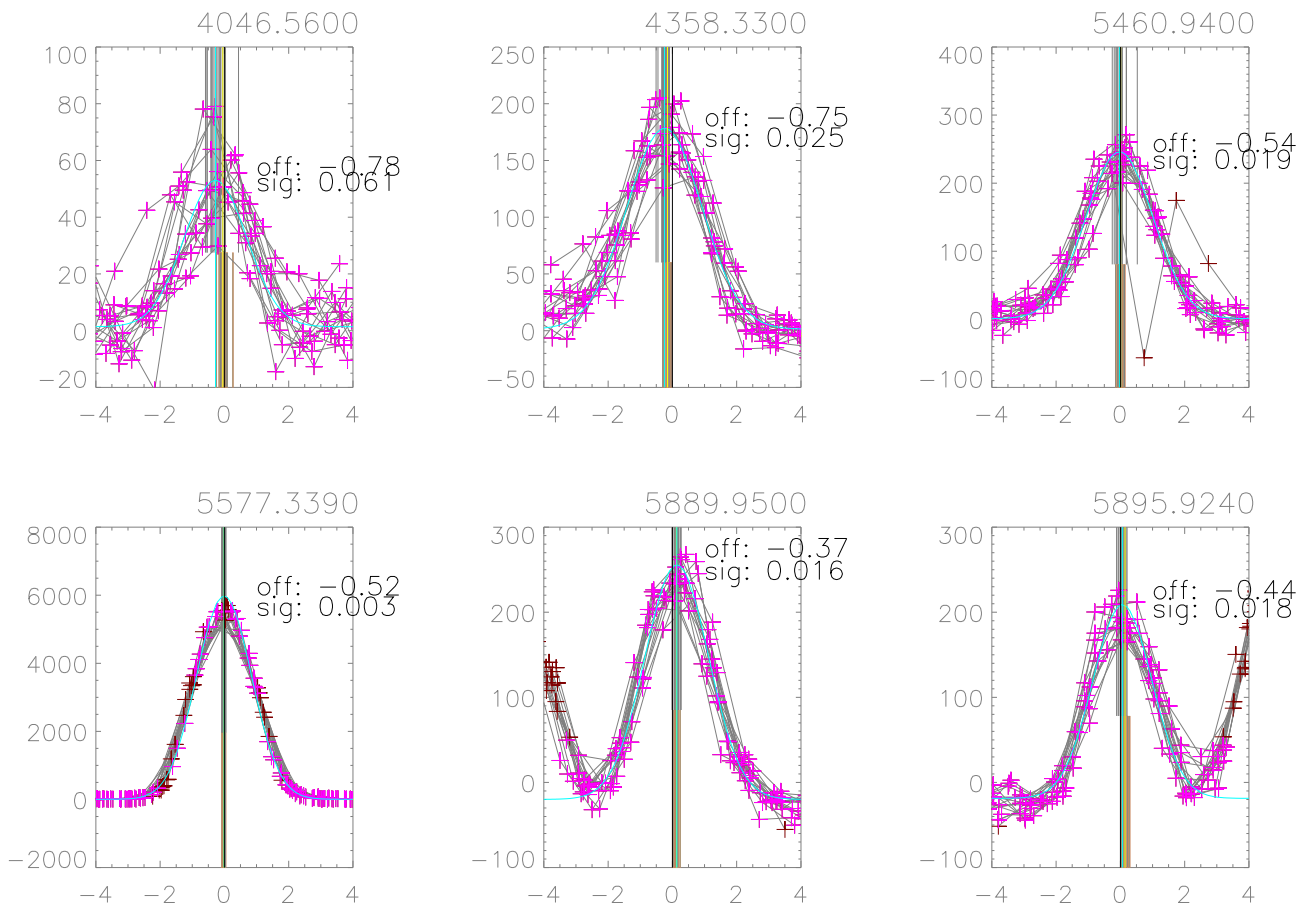

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027392.f
5.73
7.91
6.82
5.73
5.73
5.73
5.73
5.73
5.73
5.73
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

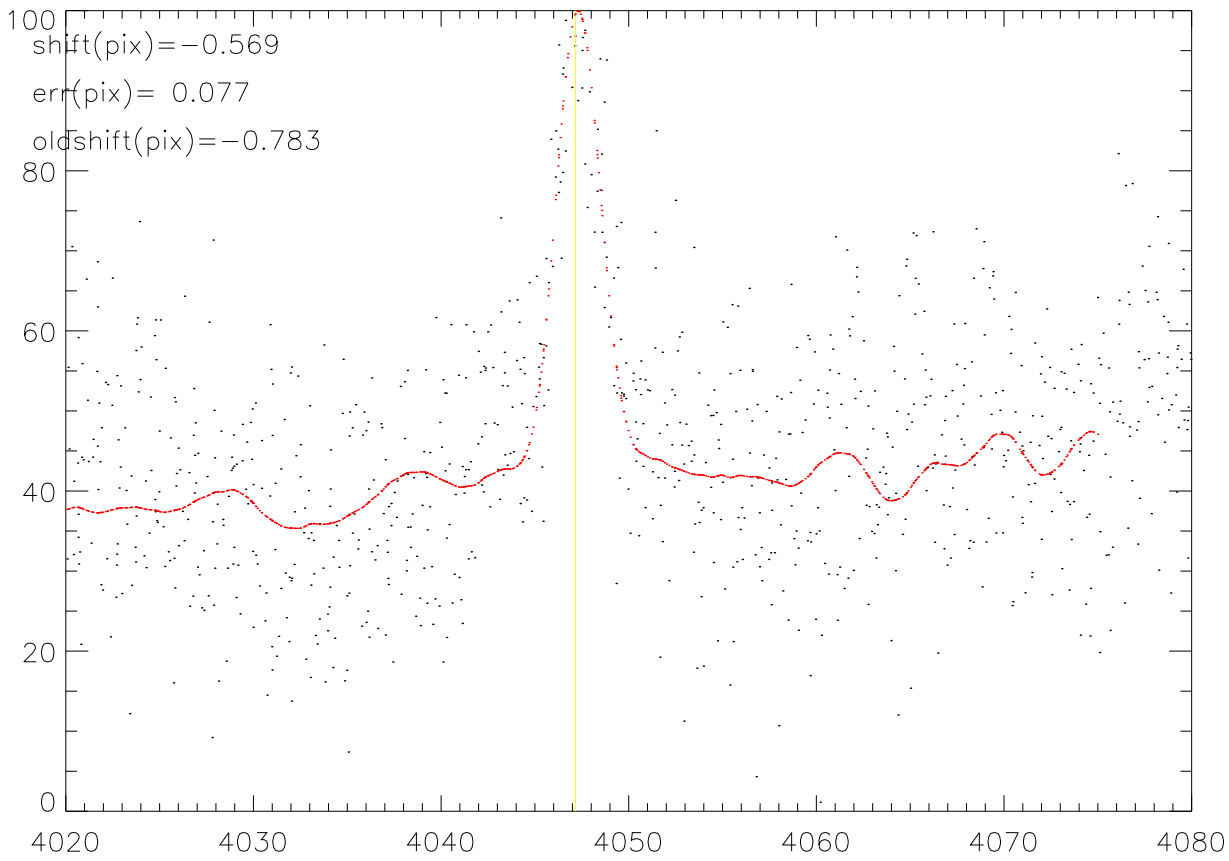

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-b2-00027392.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.938
Max value = 7.590
Sat Feb 23 00:27:21 2008

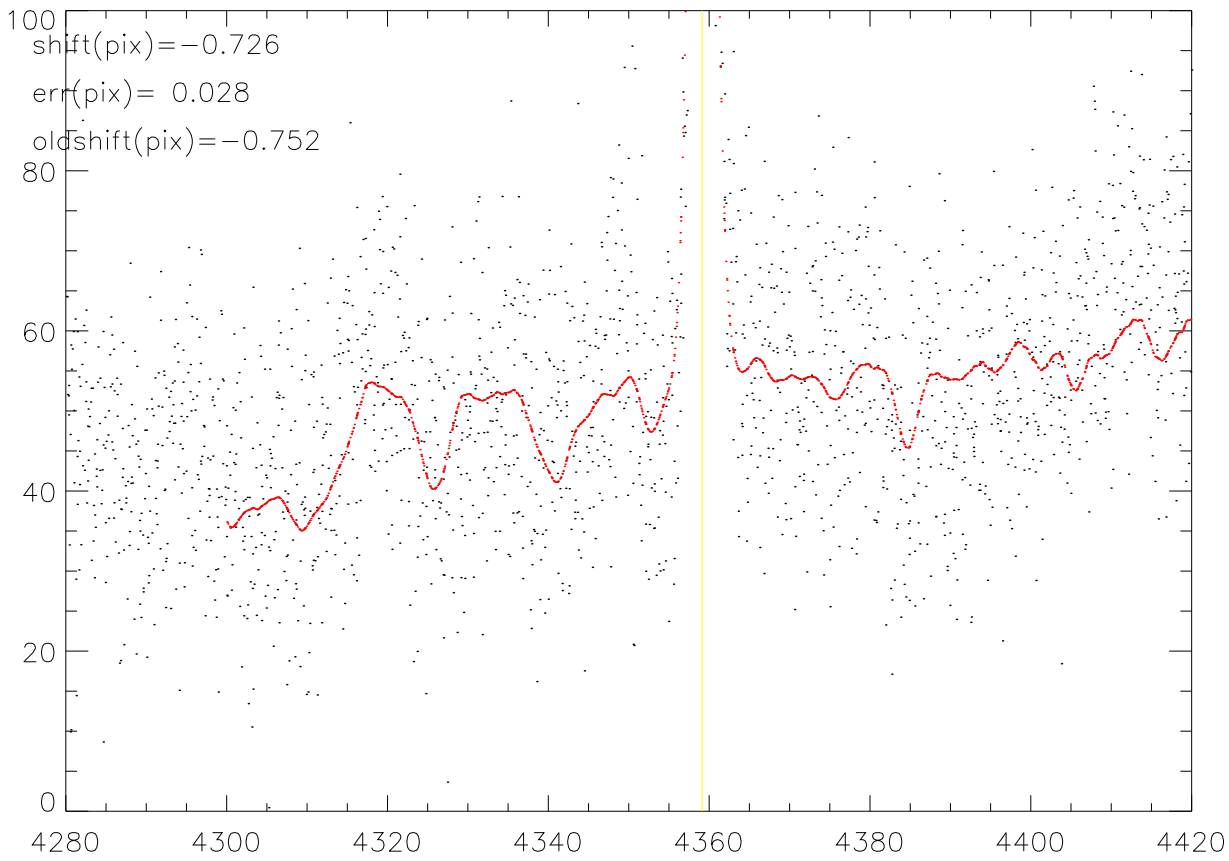

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027392.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
5.27
4.55
3.09
2.36

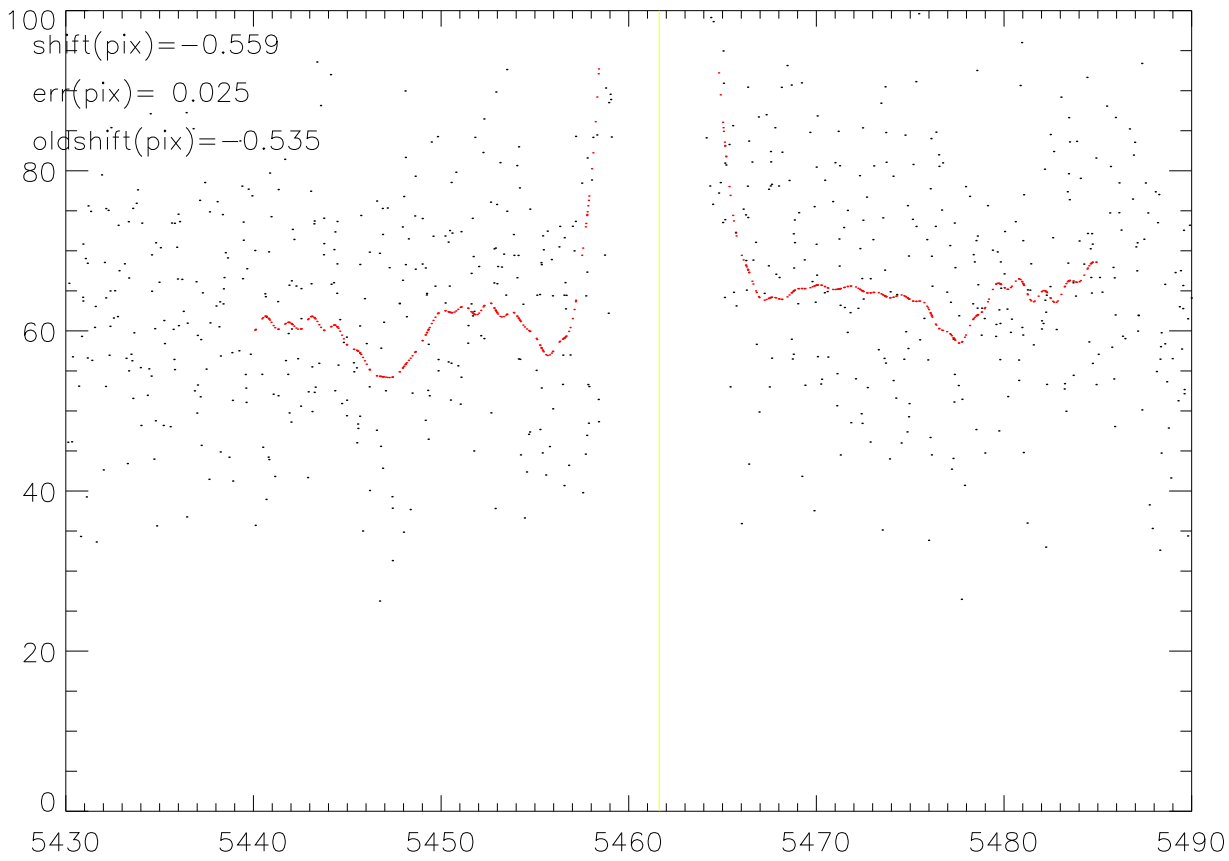

PLATE=1114 MJD=53179 Scattered Light on sdR-b2-00027392.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.706
Max value = 4.916
Sat Feb 23 00:30:05 2008

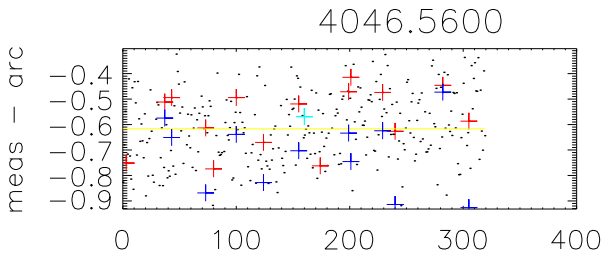

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-b2-00027392.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

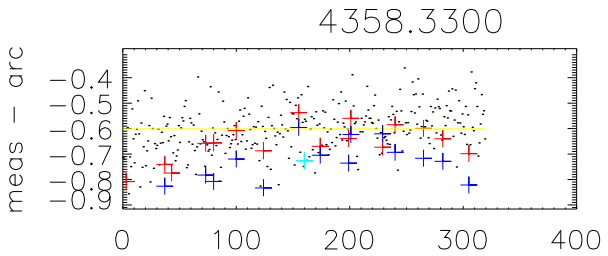

4046.5600
off: −0.78
sig: 0.061
4358.3300
off: −0.75
sig: 0.025
5460.9400
off: −0.54
sig: 0.019
5577.3390
off: −0.52
sig: 0.003
5889.9500
off: −0.37
sig: 0.016
5895.9240
off: −0.44
sig: 0.018

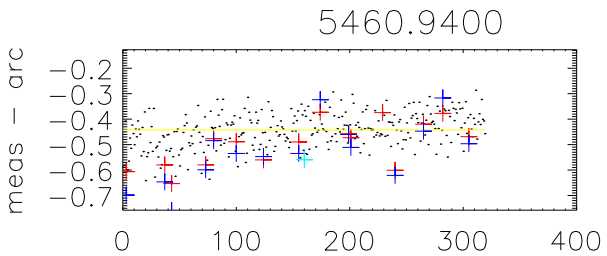

shift(pix)=−0.569
err(pix)= 0.077
oldshift(pix)=−0.783
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

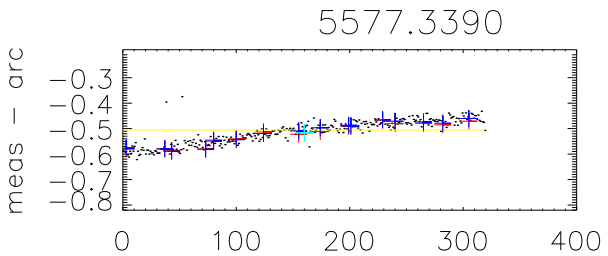

shift(pix)=−0.726
err(pix)= 0.028
oldshift(pix)=−0.752
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

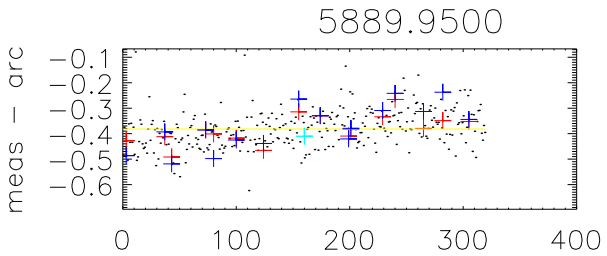

shift(pix)=−0.559
err(pix)= 0.025
oldshift(pix)=−0.535
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

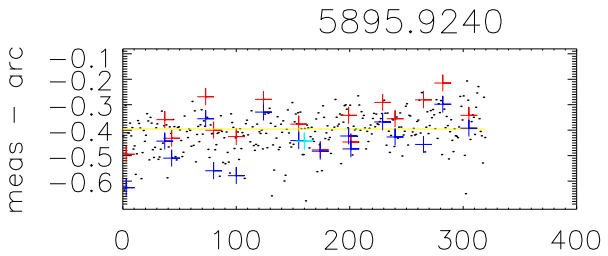

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

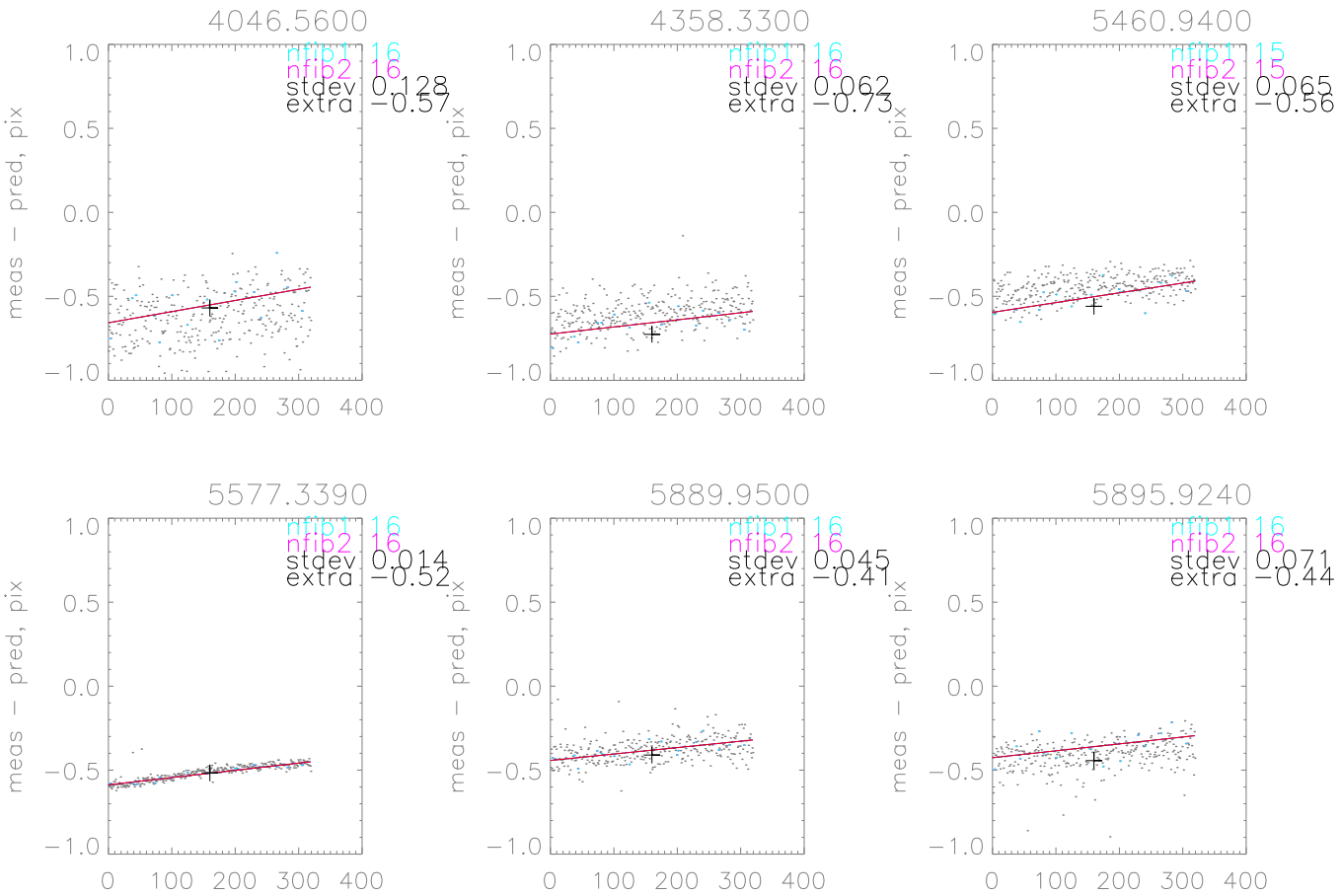

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

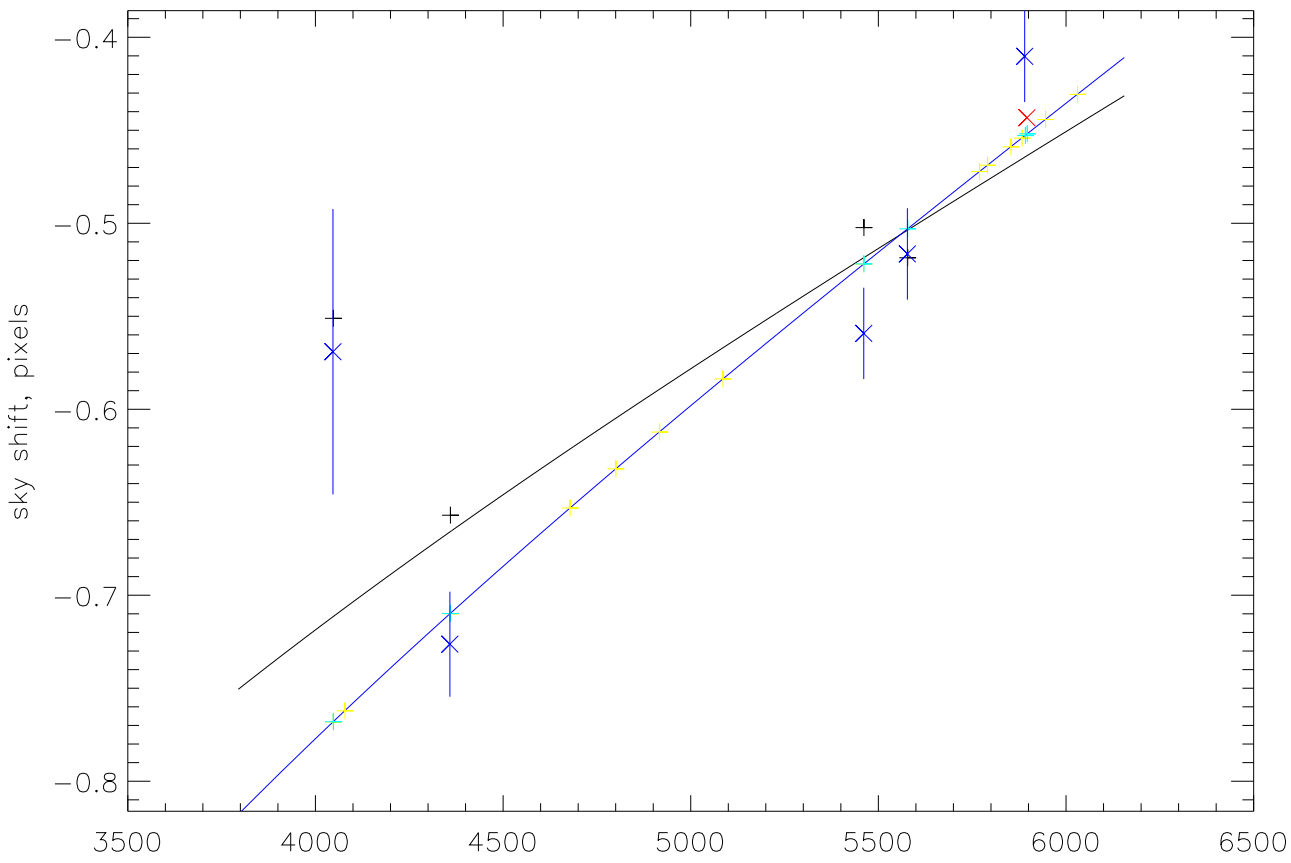

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

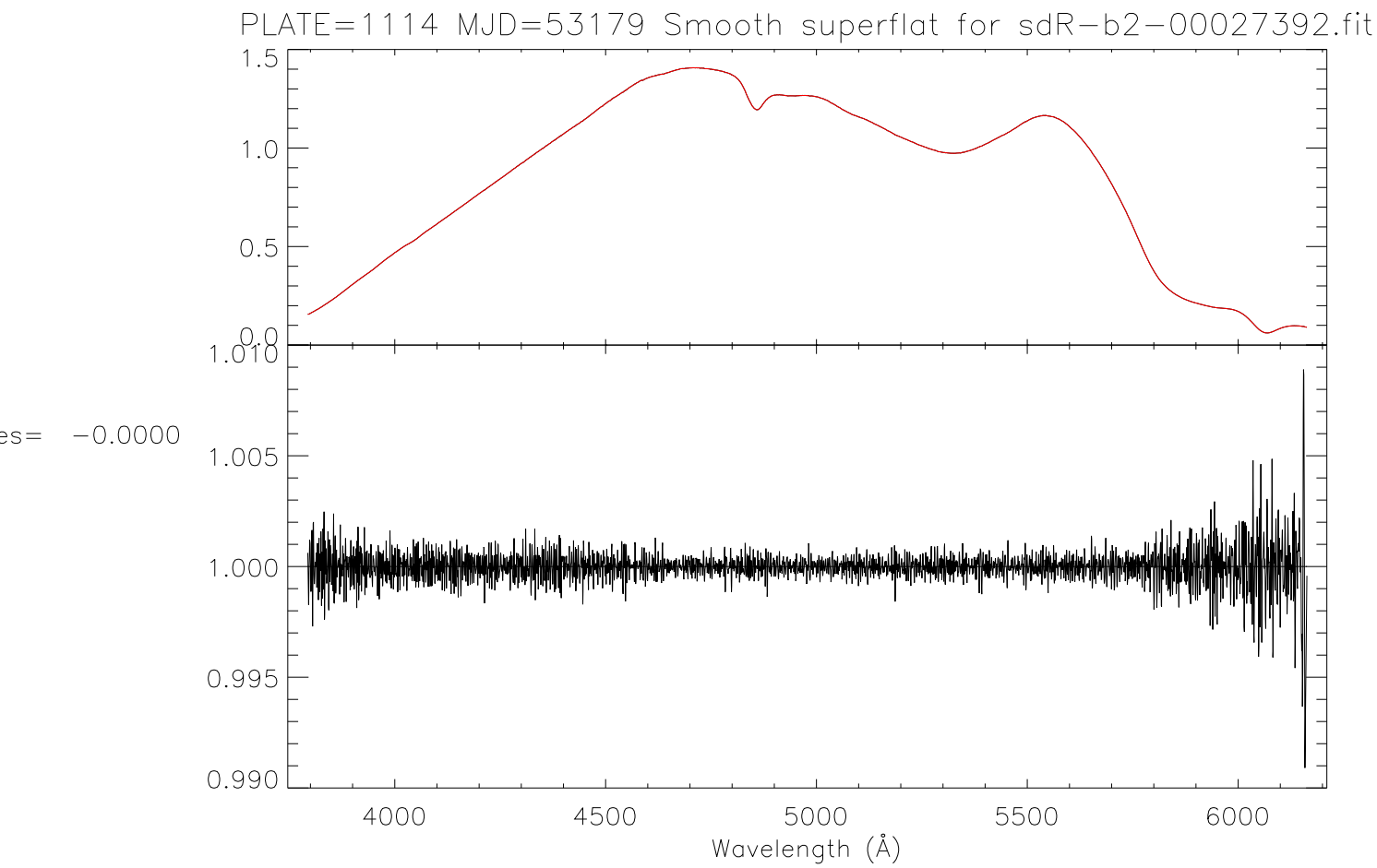

5577.3390
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

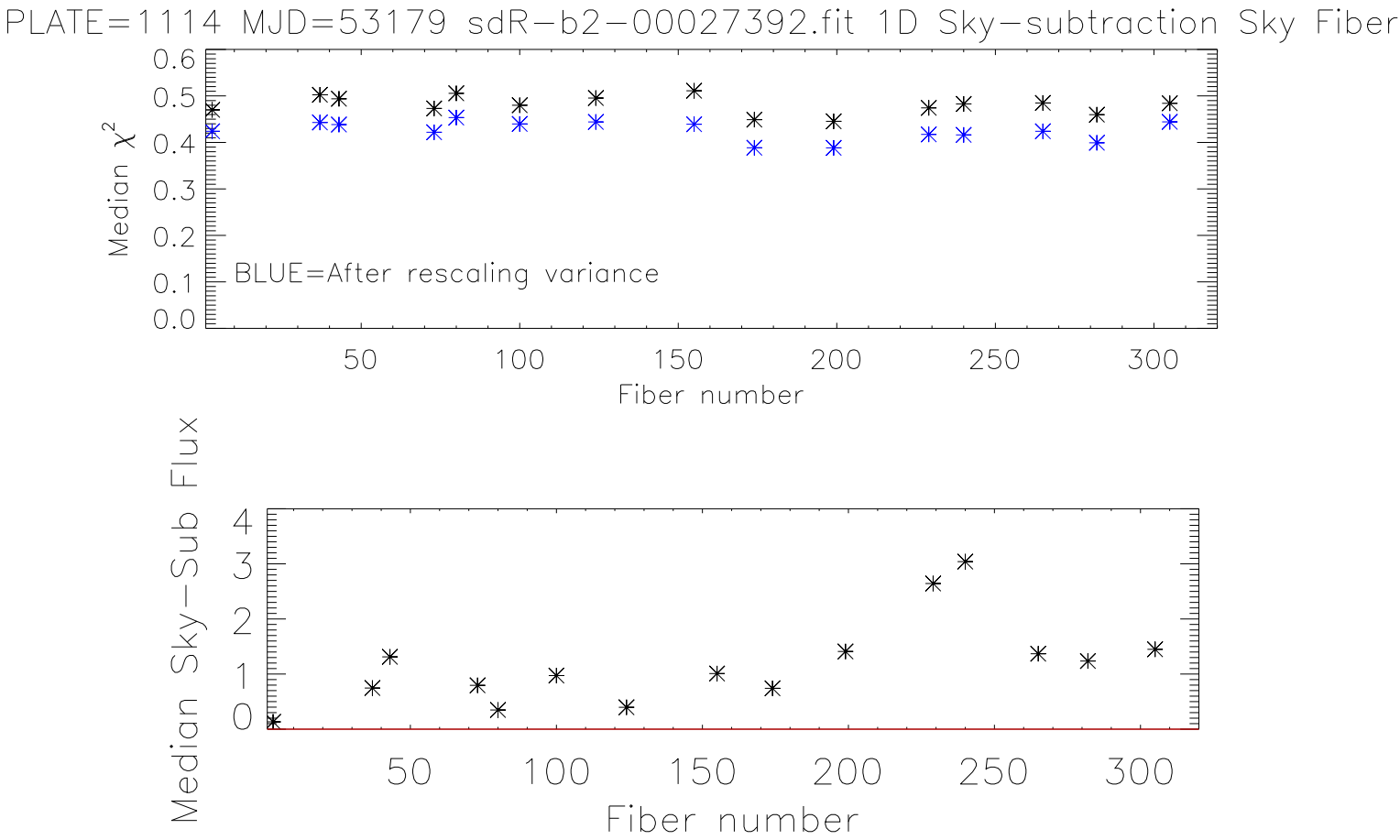

5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

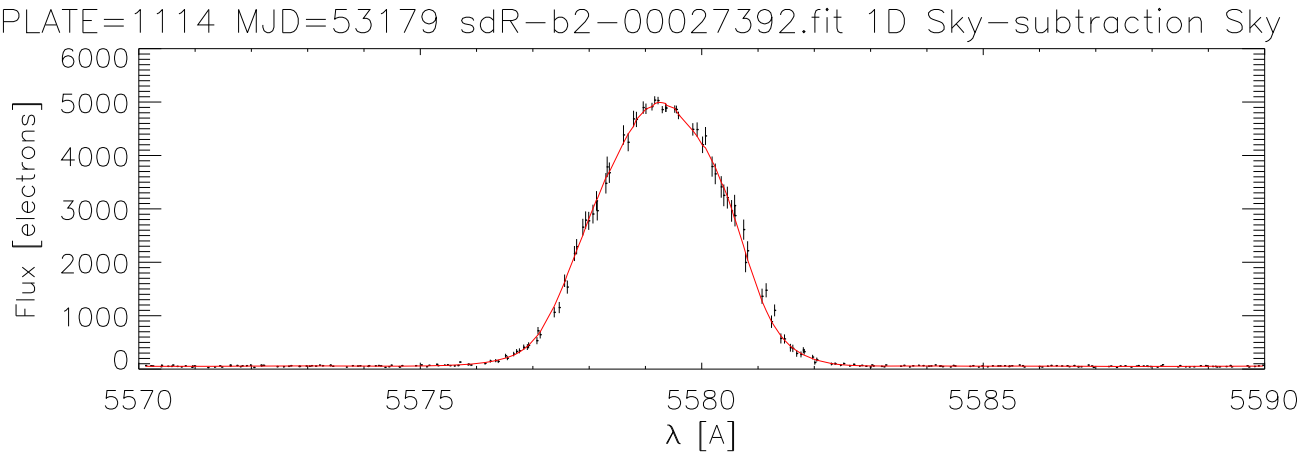

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

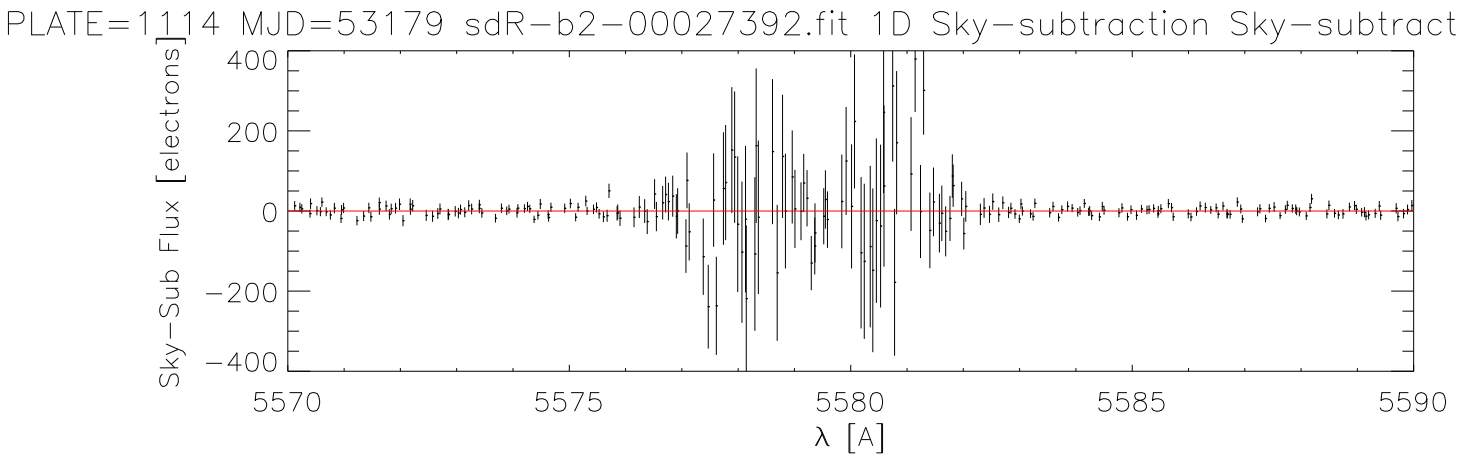

4046.5600
nfib1 16
nfib2 16
stdev 0.128
extra −0.57
4358.3300
nfib1 16
nfib2 16
stdev 0.062
extra −0.73
5460.9400
nfib1 15
nfib2 15
stdev 0.065
extra −0.56
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra −0.52
5889.9500
nfib1 16
nfib2 16
stdev 0.045
extra −0.41
5895.9240
nfib1 16
nfib2 16
stdev 0.071
extra −0.44
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

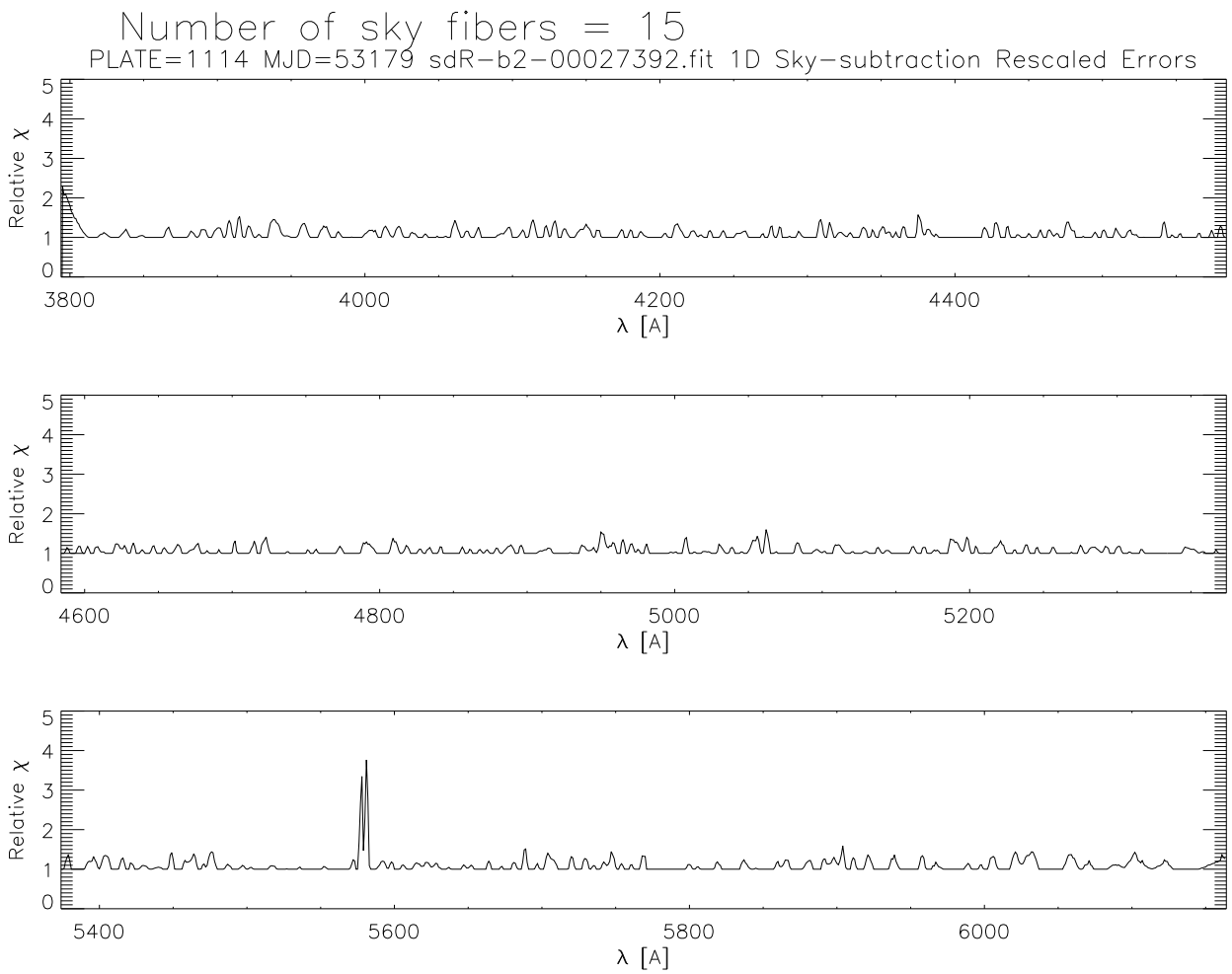

−0.4
−0.5
−0.6
−0.7
−0.8
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

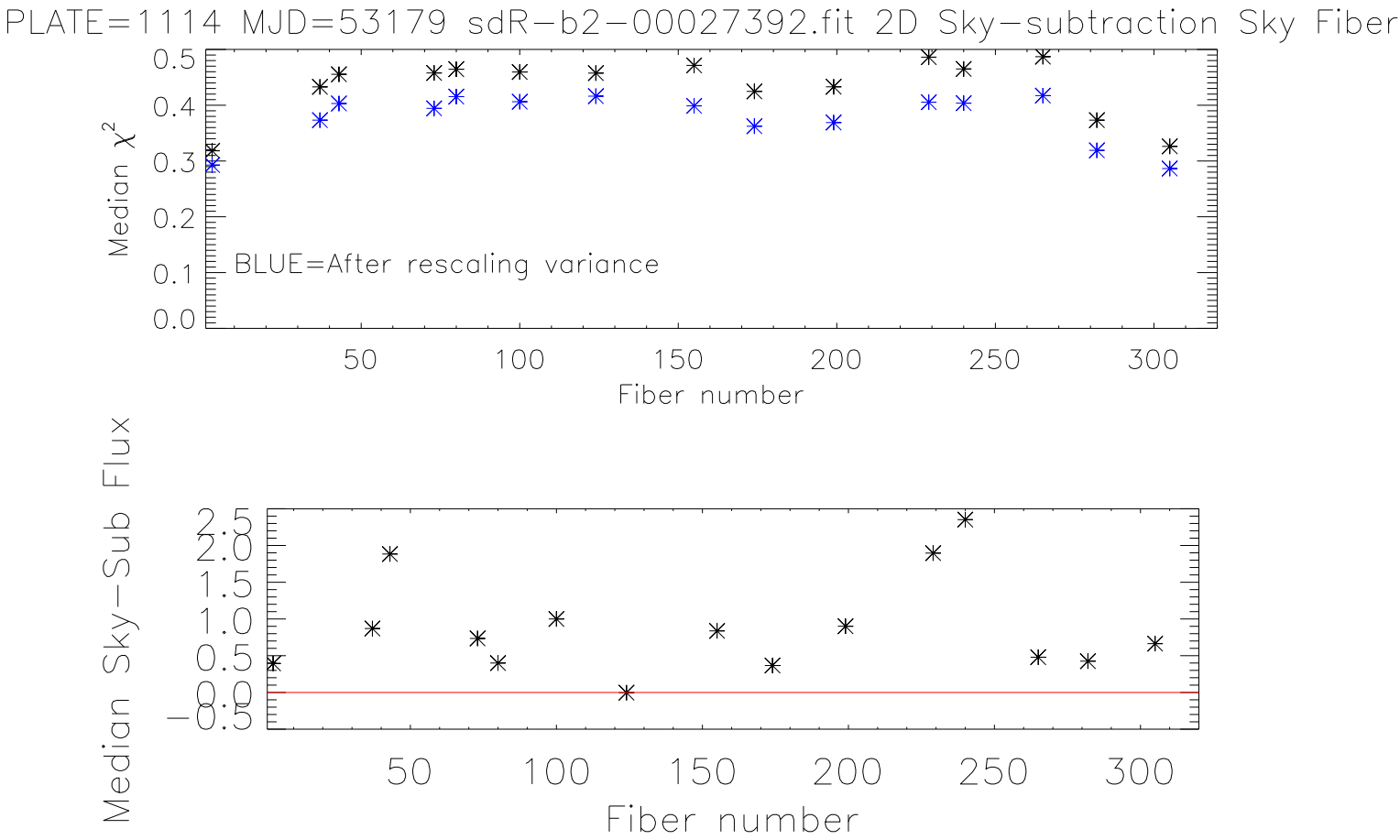

PLATE=1114 MJD=53179 Smooth superflat for sdR-b2-00027392.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

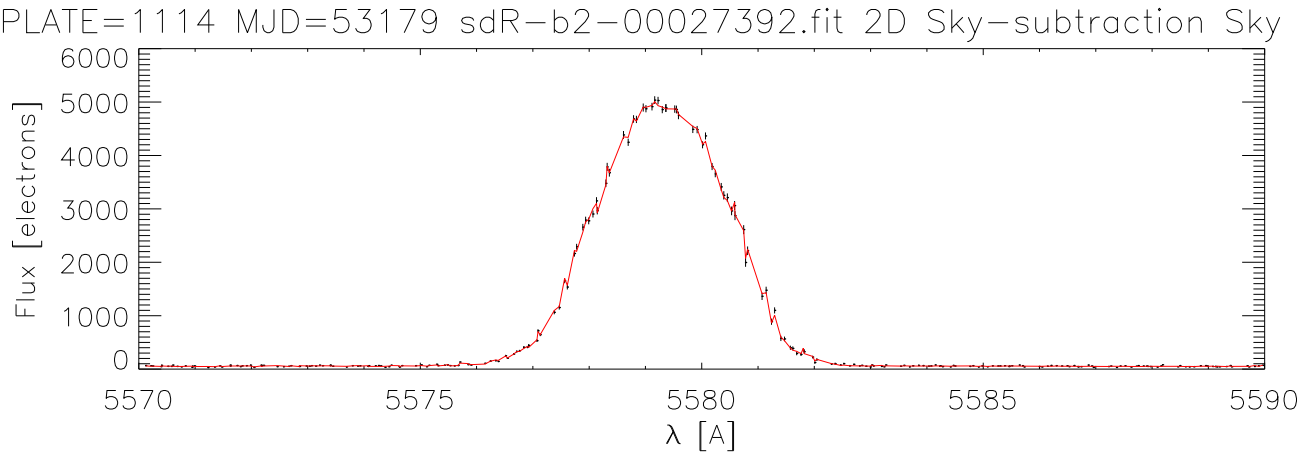

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

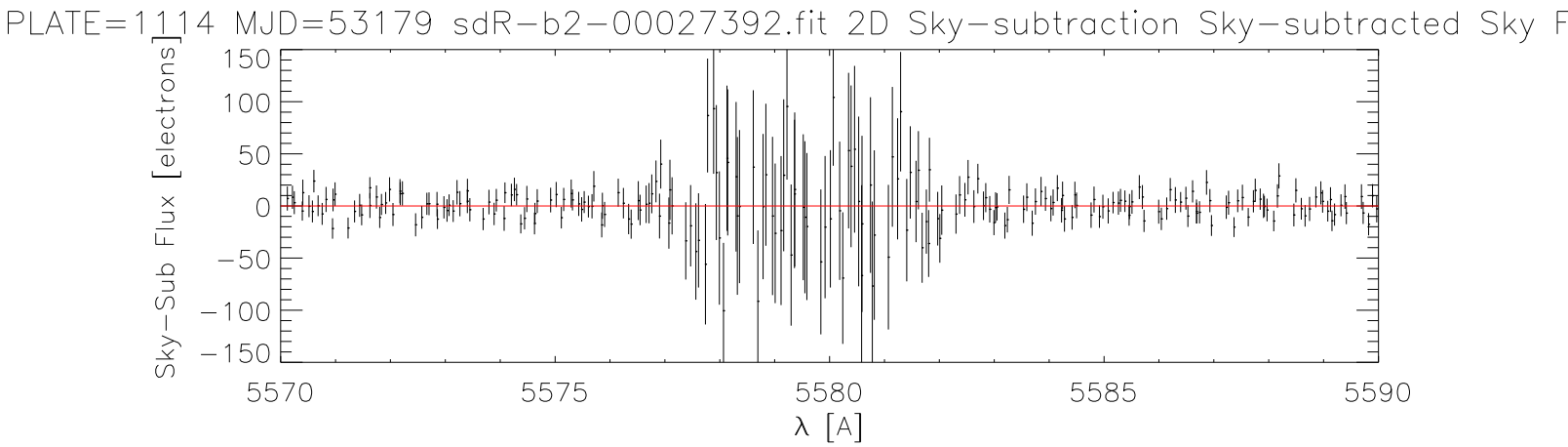

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

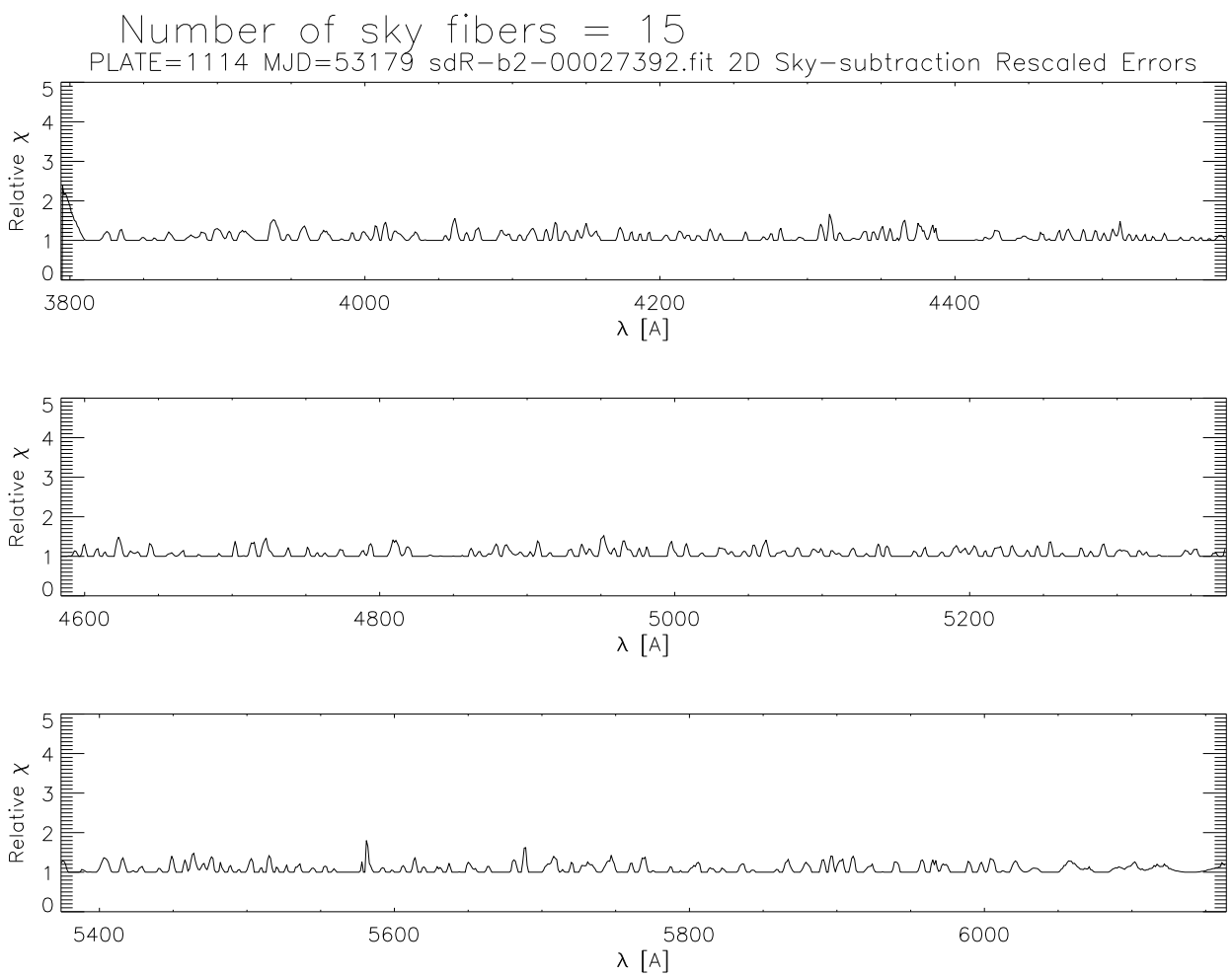

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

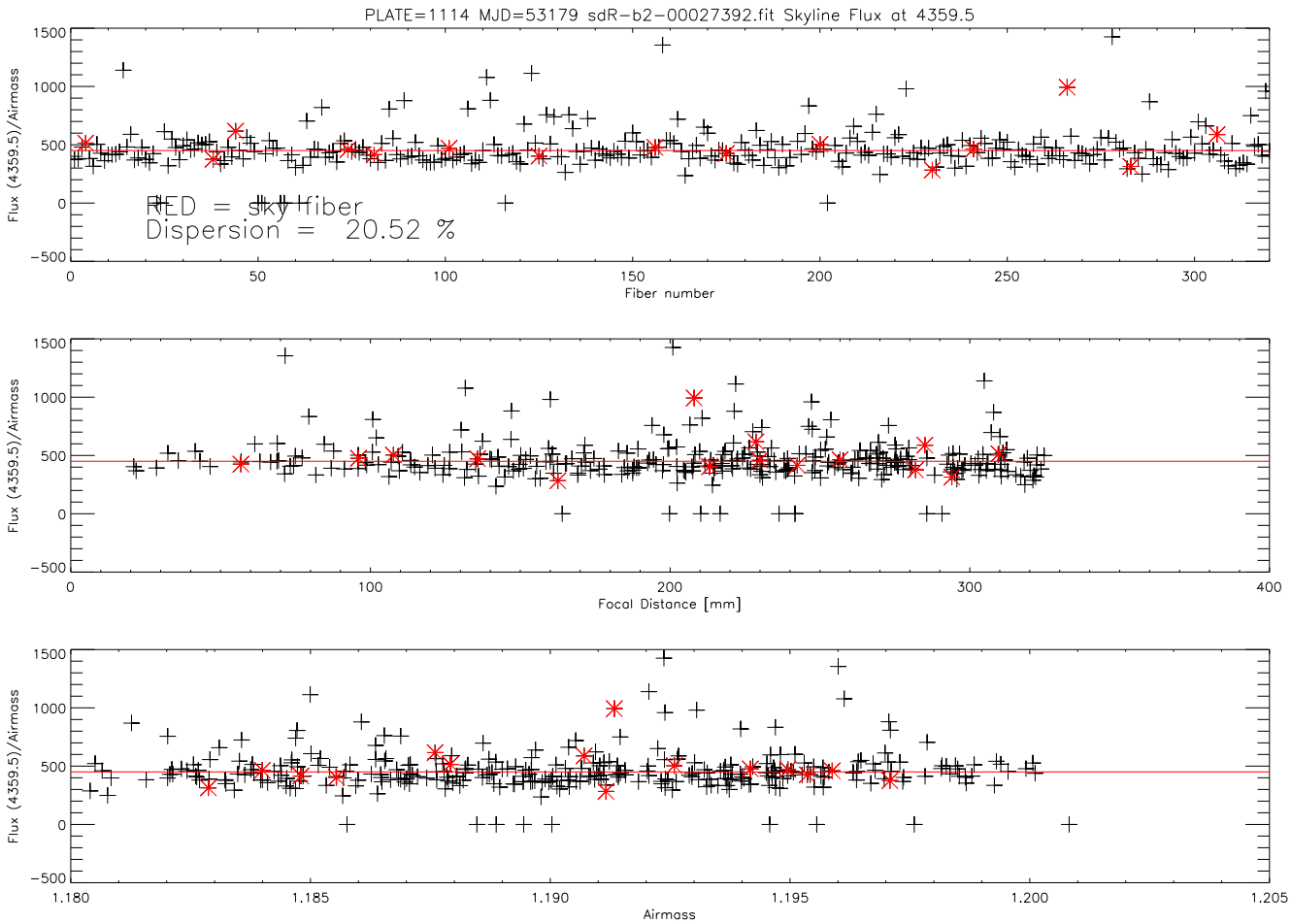

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027392.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

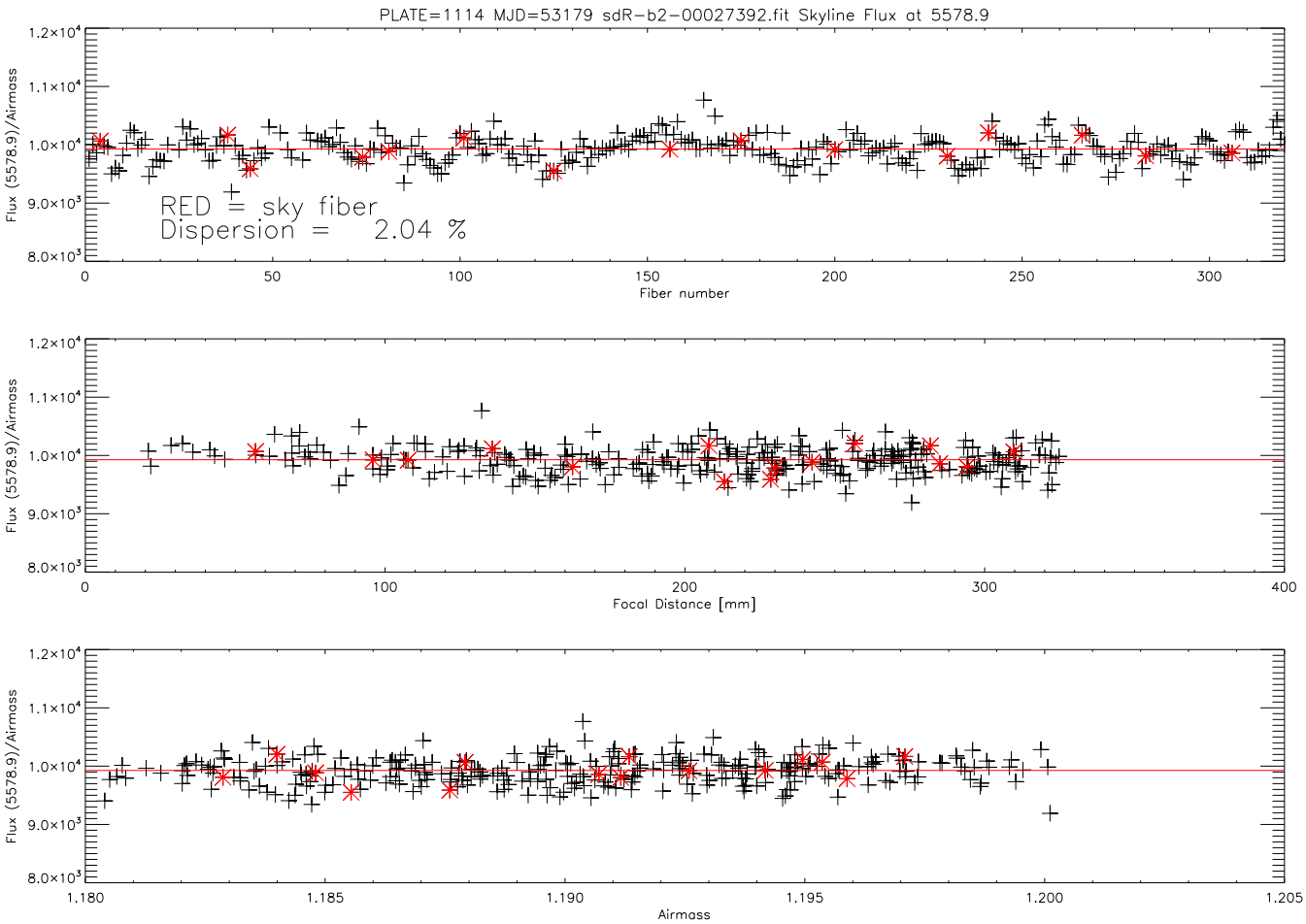

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

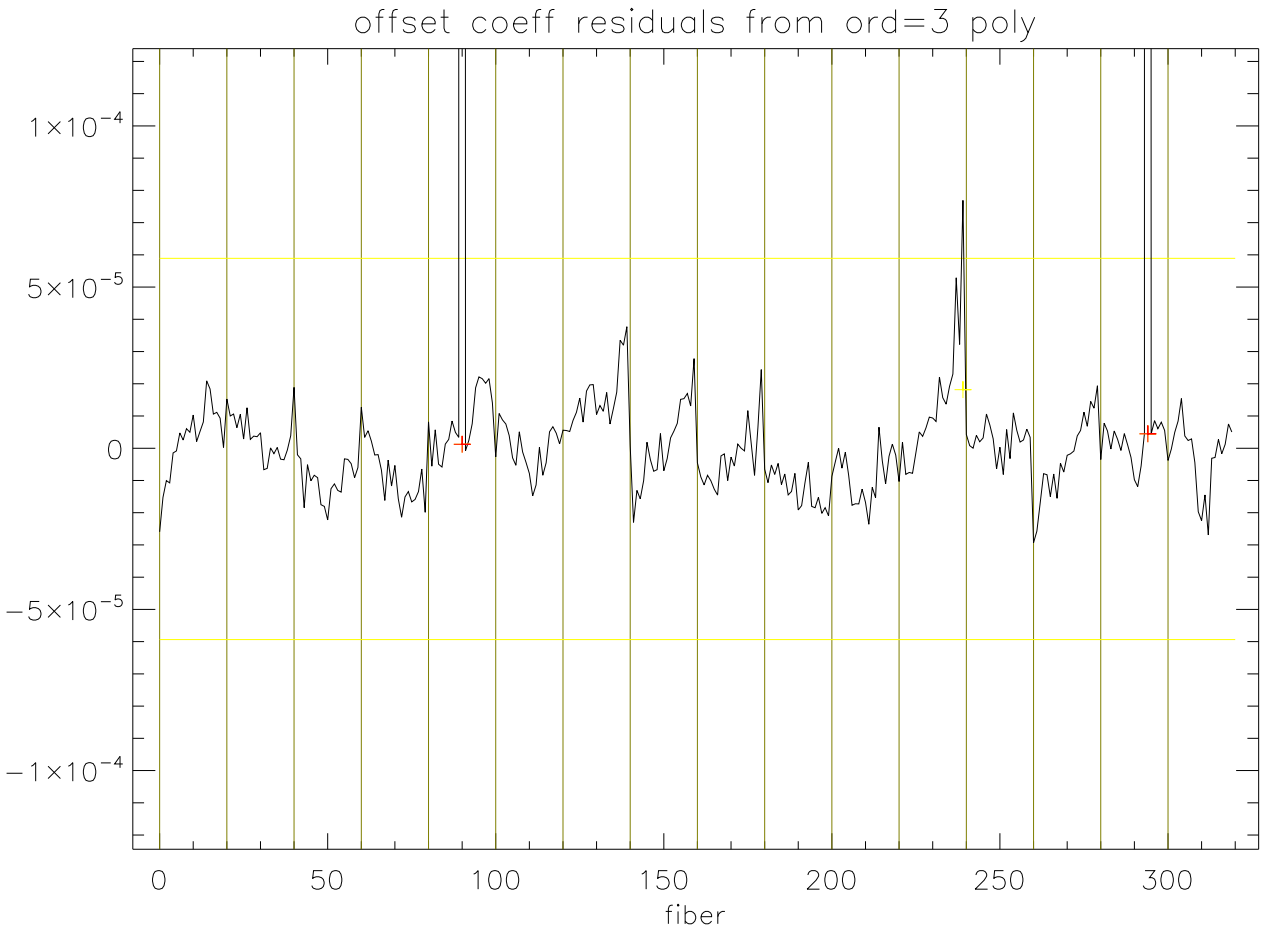

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

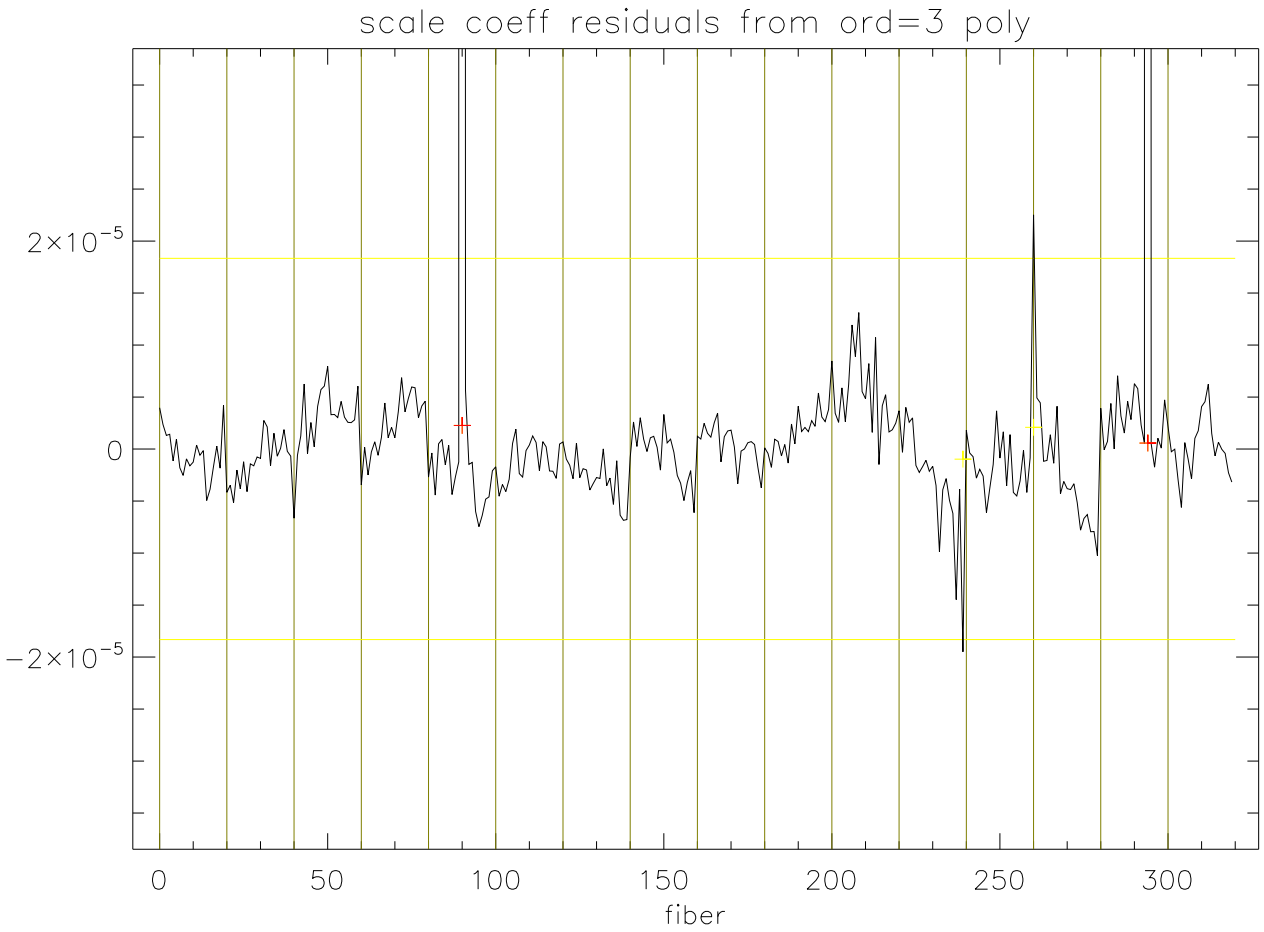

PLATE=1114 MJD=53179 sdR-b2-00027392.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

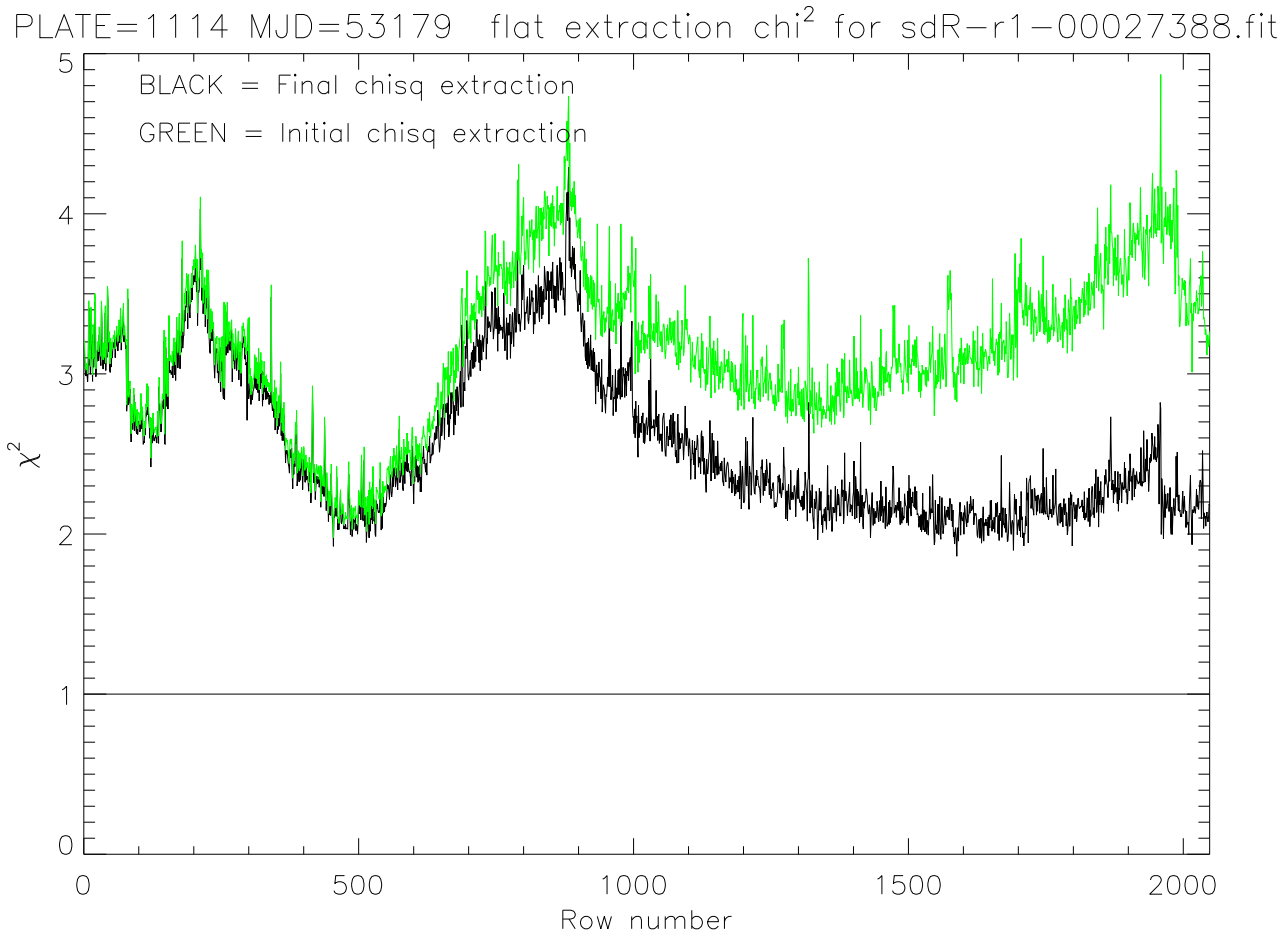

Number of sky fibers = 15
PLATE=1114 MJD=53179 sdR-b2-00027392.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

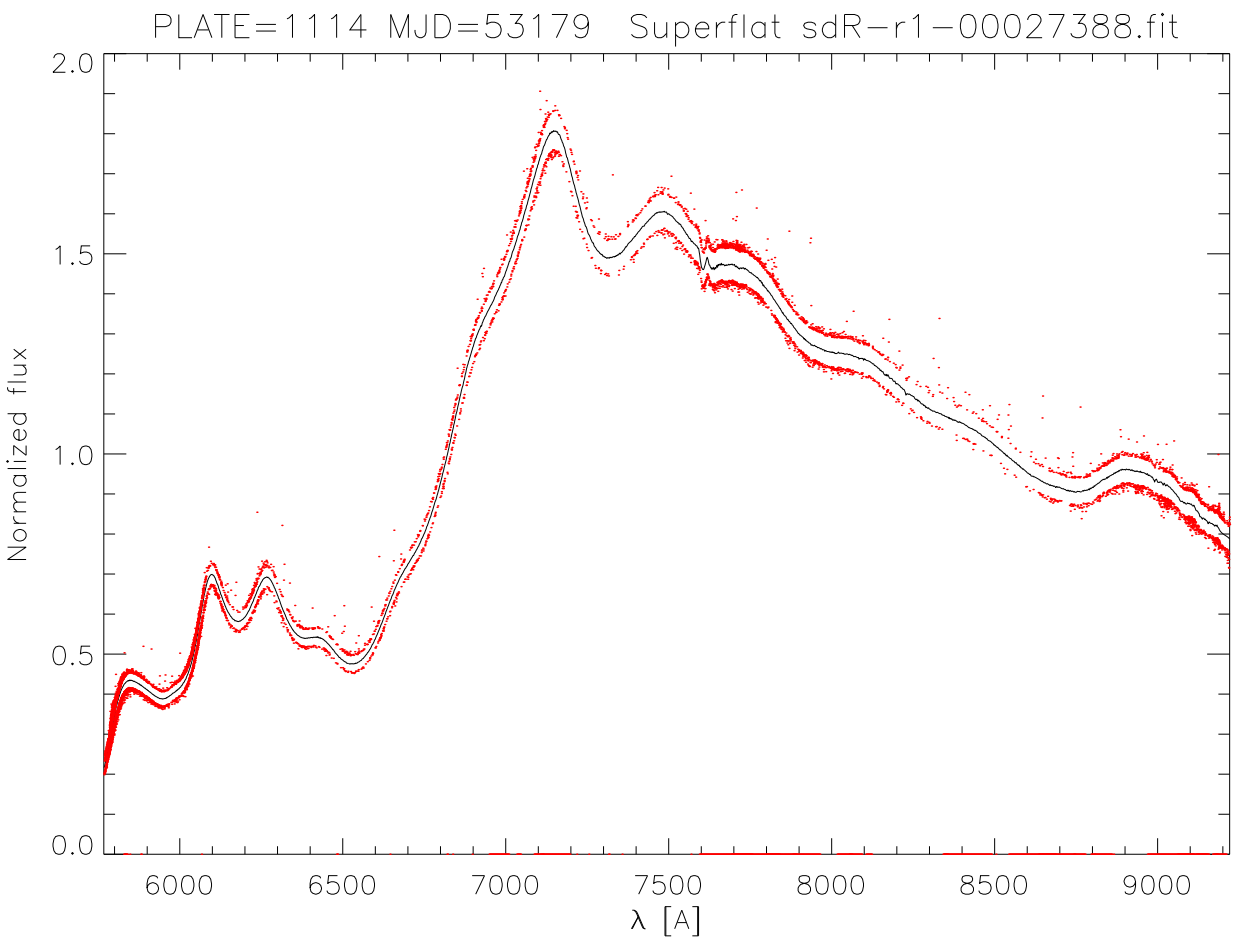

PLATE=1114 MJD=53179 sdR-b2-00027392.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 20.52 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

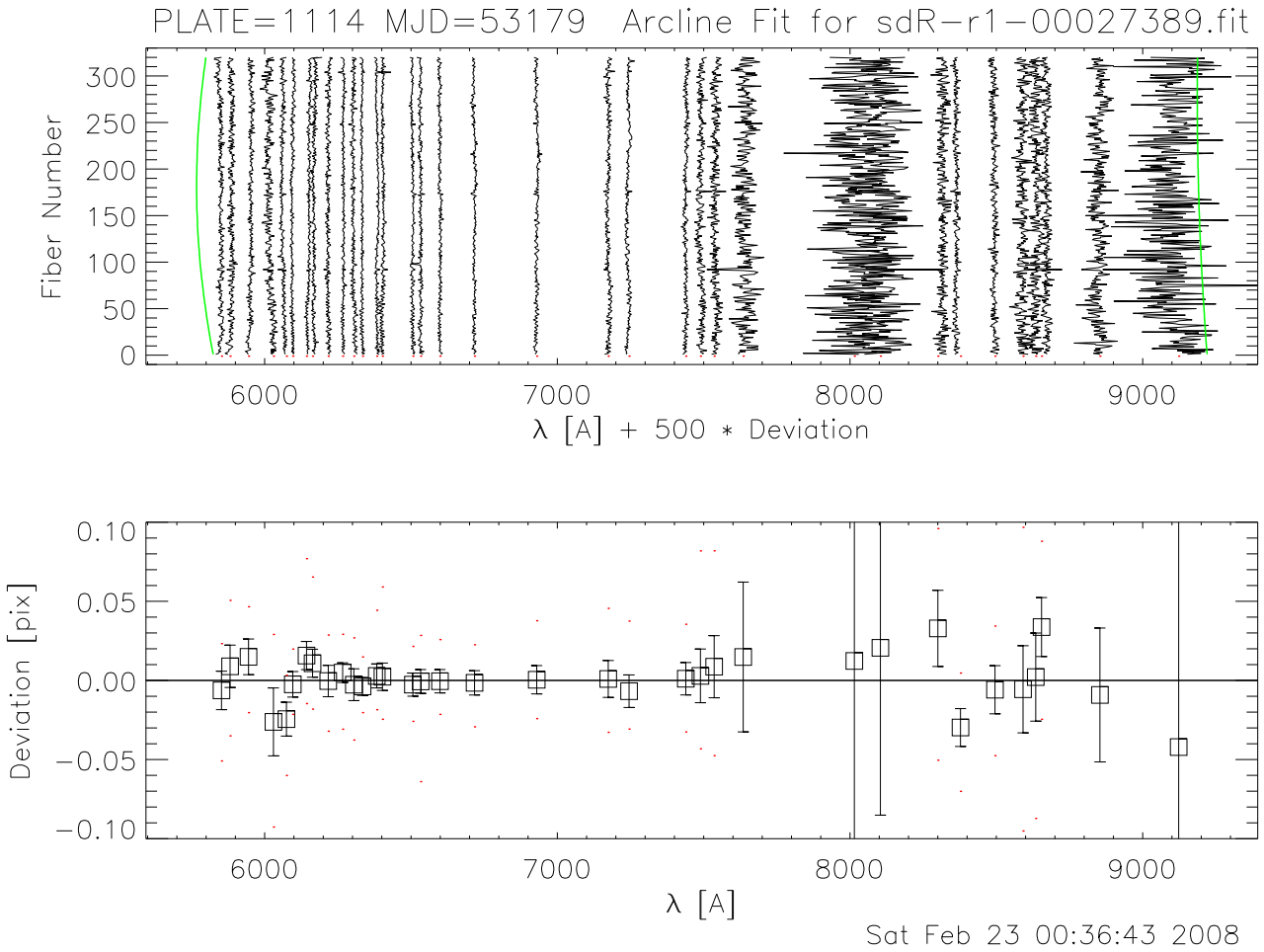

PLATE=1114 MJD=53179 sdR-b2-00027392.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.04 %
Fiber number
Focal Distance [mm]
Airmass

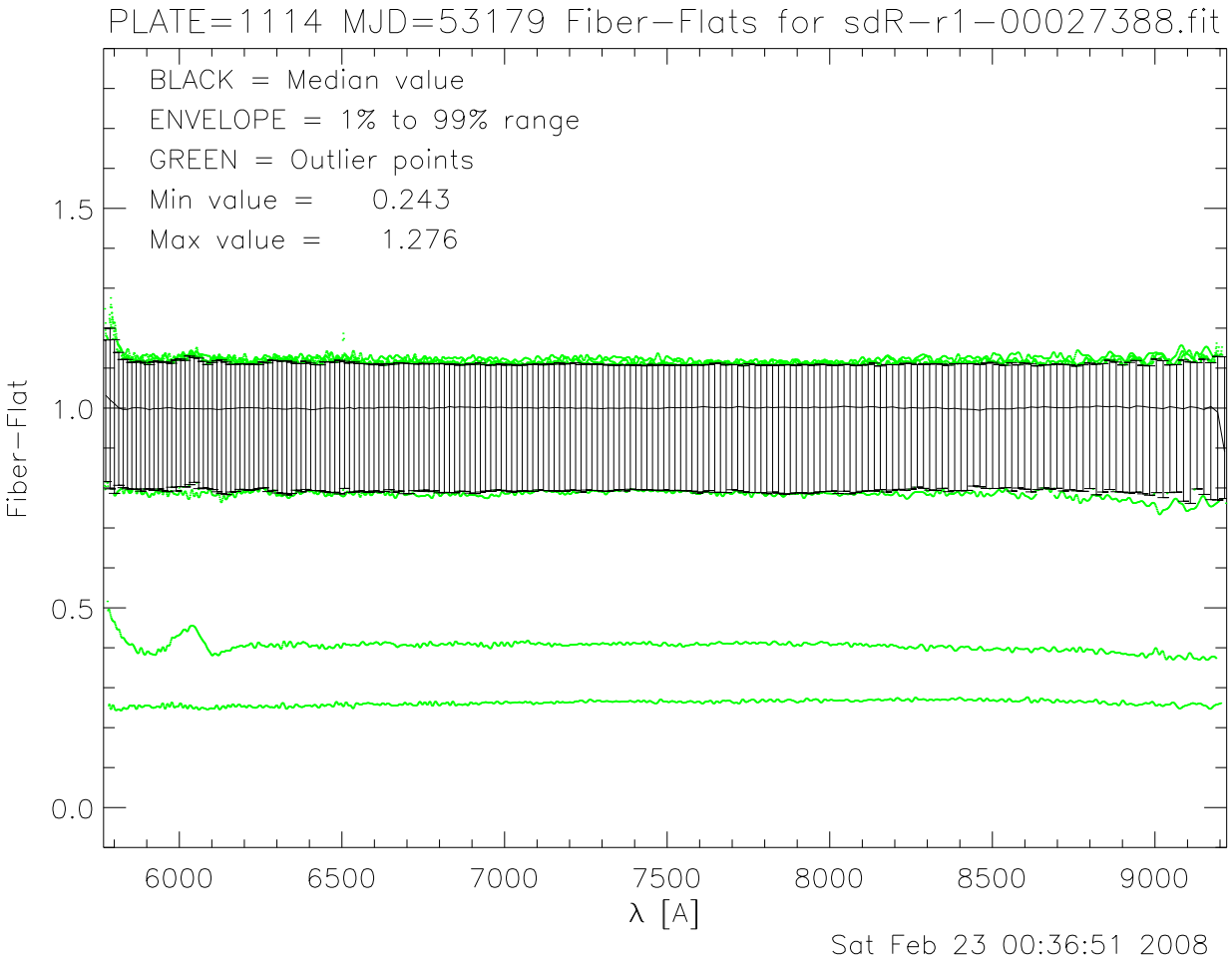

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

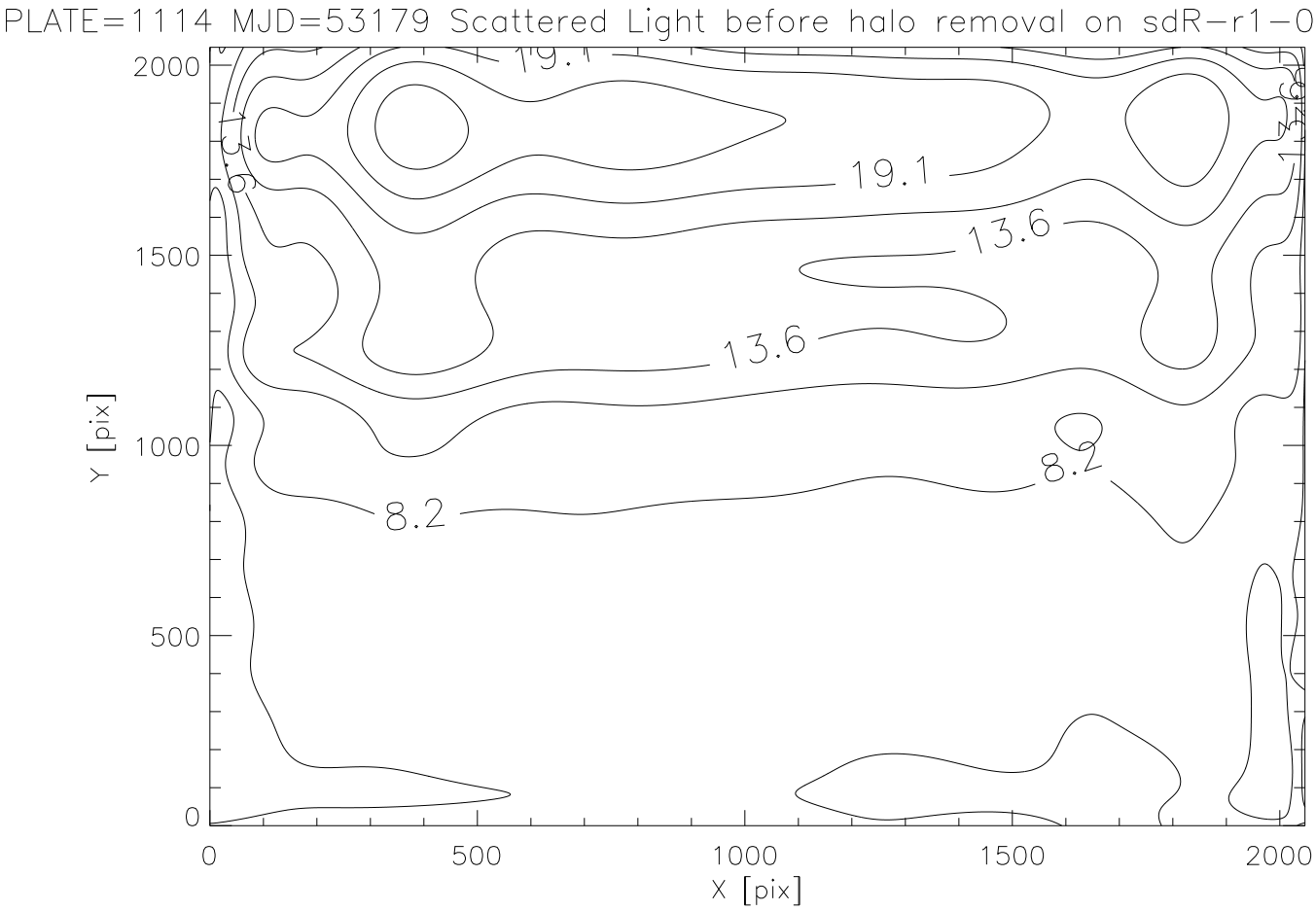

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

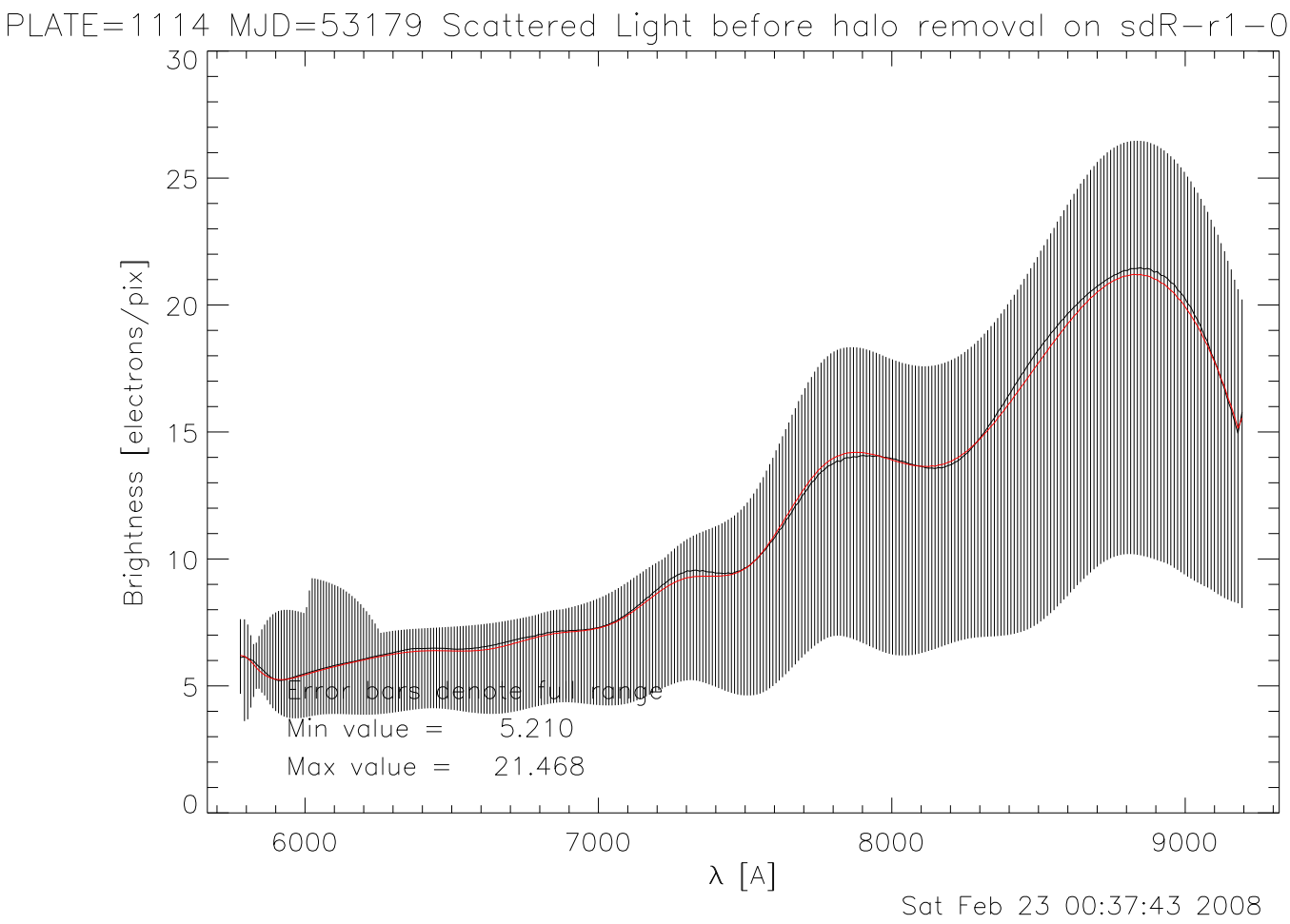

PLATE=1114 MJD=53179 flat extraction chi^2 for sdR−r1−00027388.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

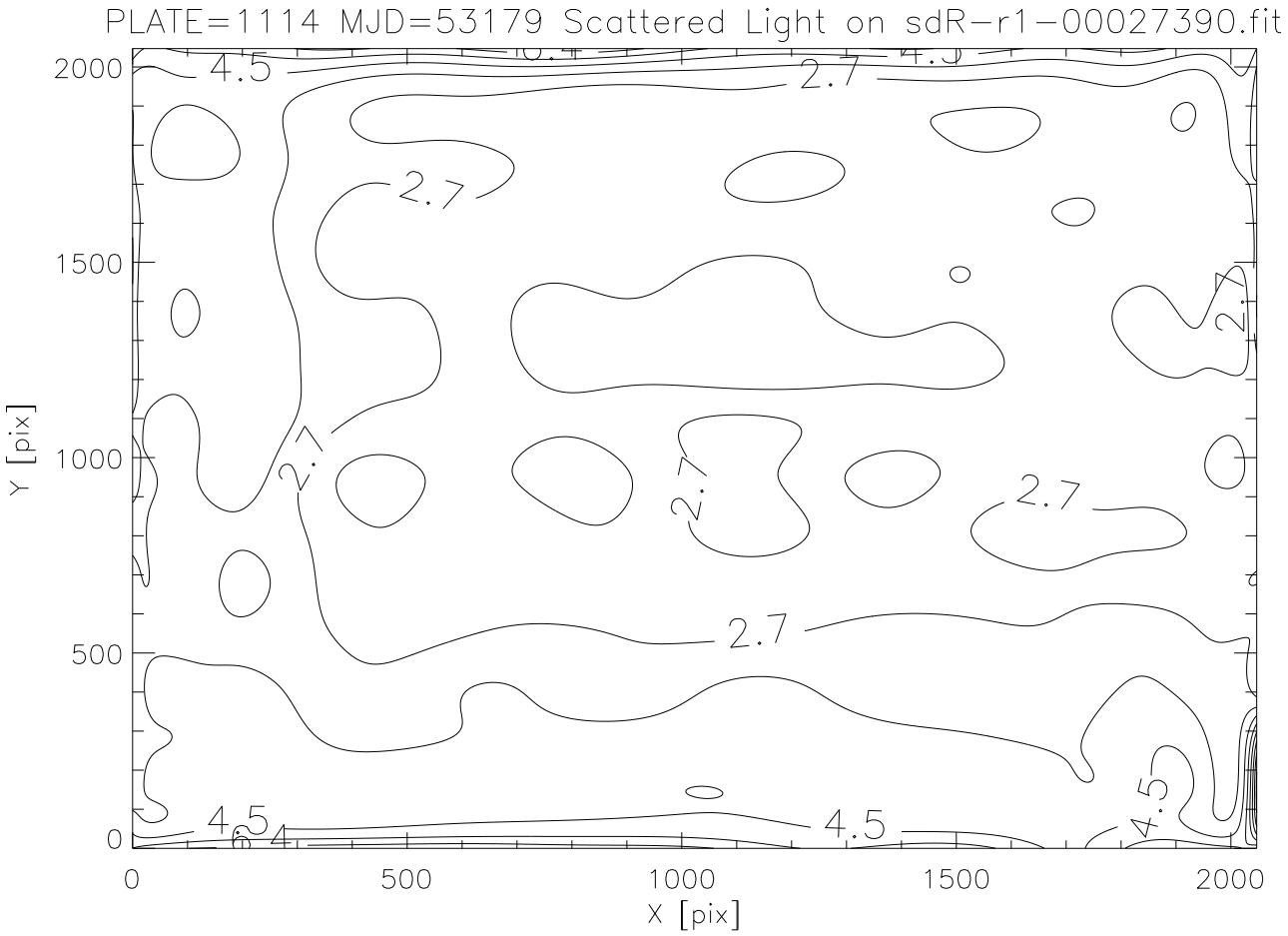

PLATE=1114 MJD=53179 Superflat sdR-r1-00027388.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

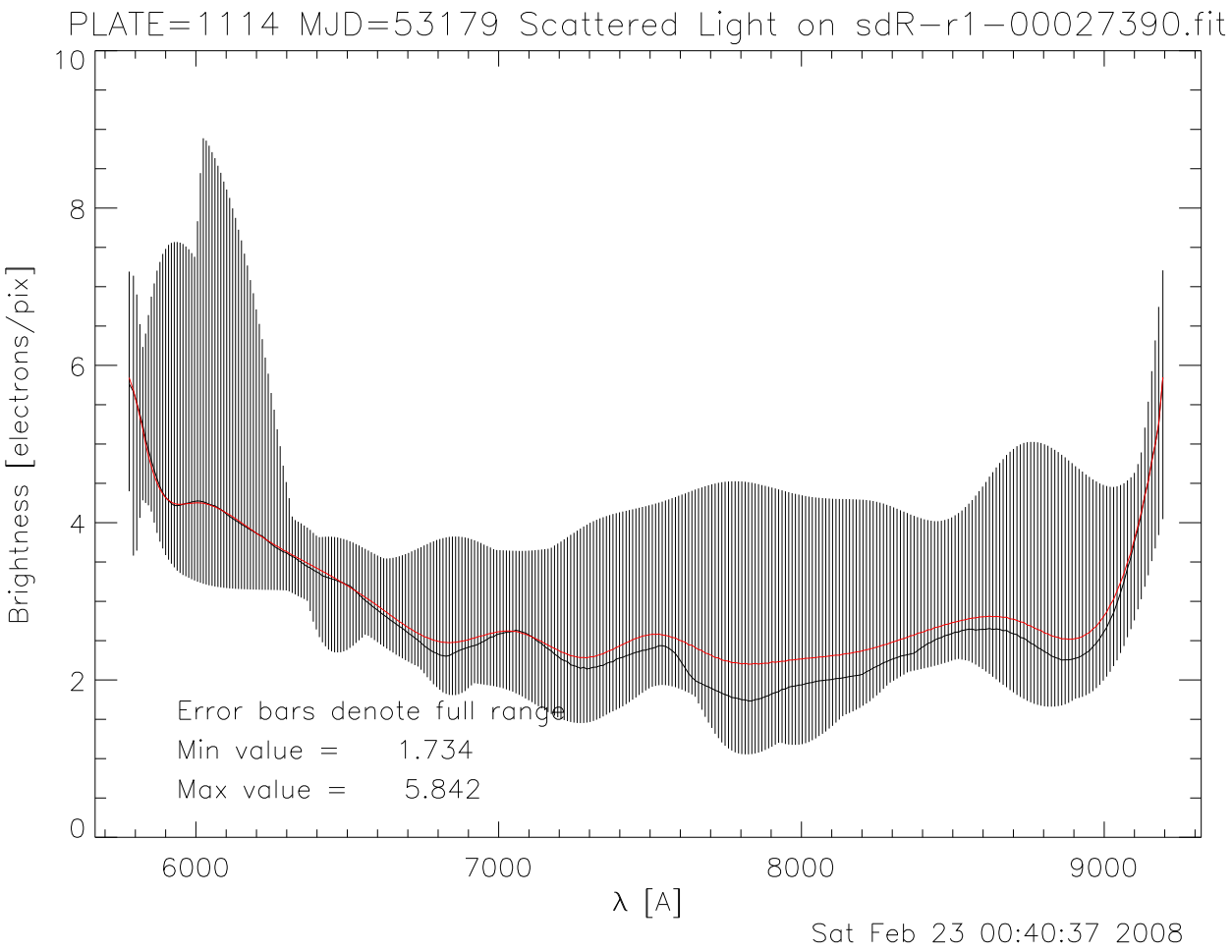

PLATE=1114 MJD=53179 Arcline Fit for sdR-r1-00027389.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 00:36:43 2008

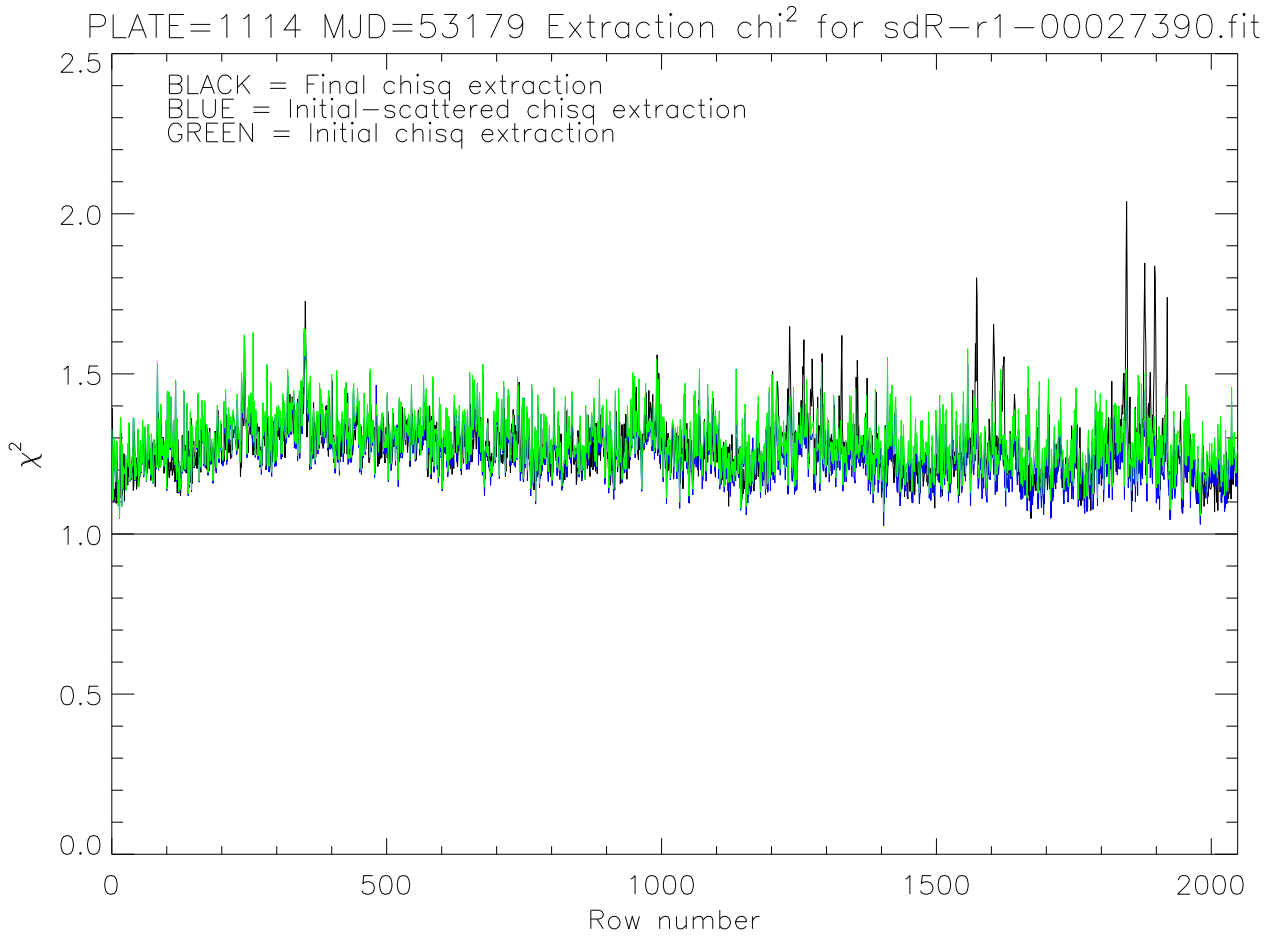

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r1−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.243
Max value = 1.276
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 00:36:51 2008

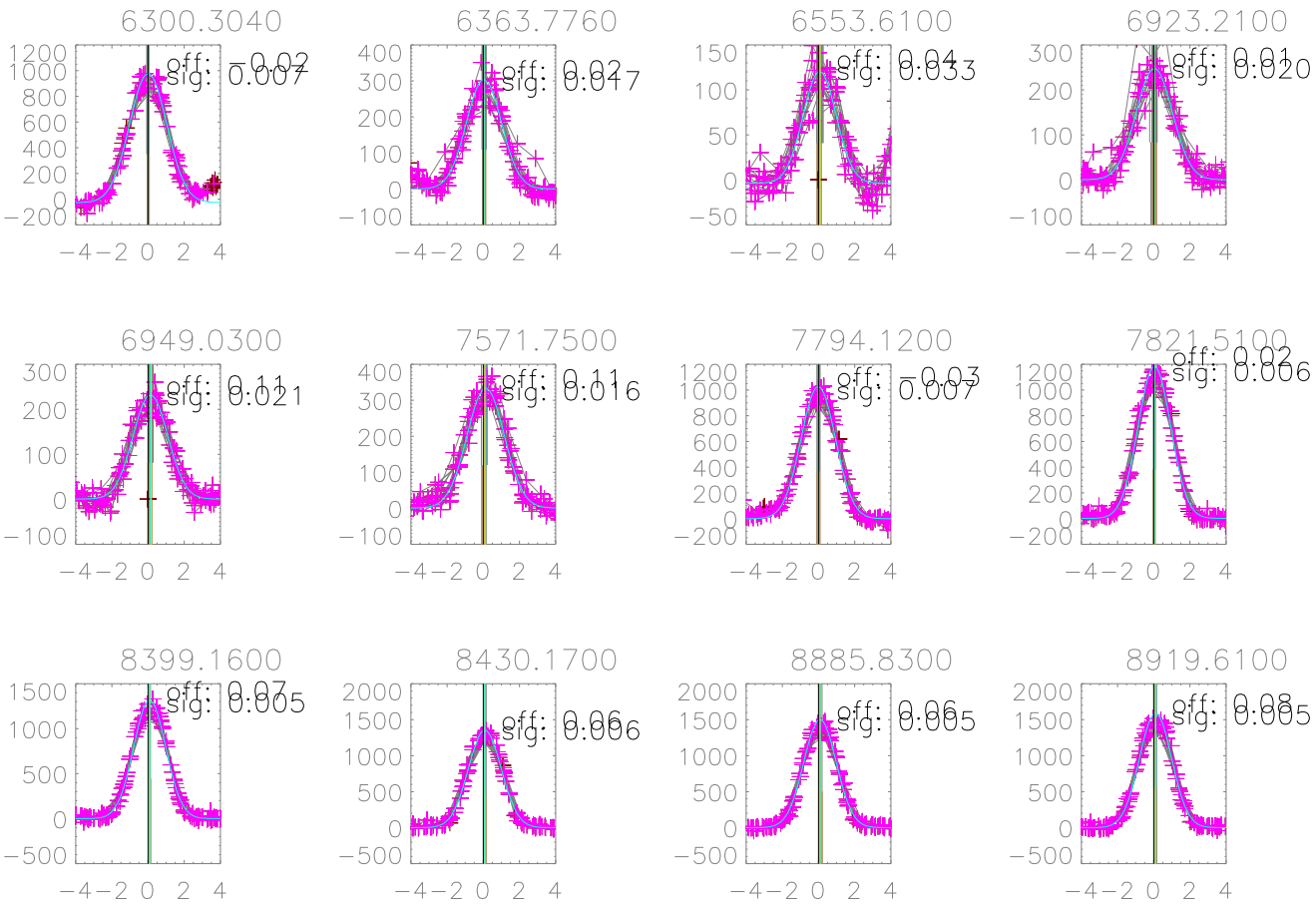

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027390.fi
19.1
13.6
13.6
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

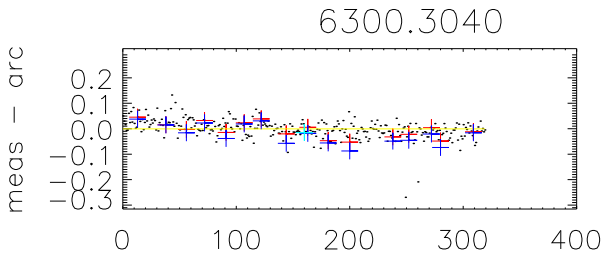

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027390.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.210
Max value = 21.468
Sat Feb 23 00:37:43 2008

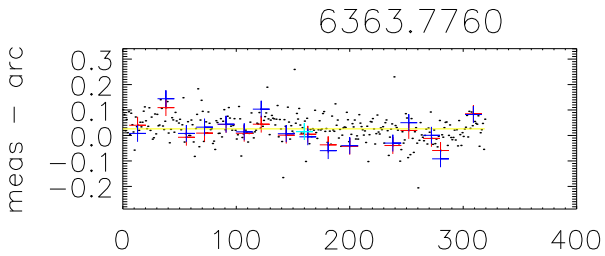

PLATE=1114 MJD=53179 Scattered Light on sdR-r1-00027390.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.5
2.7
4.5

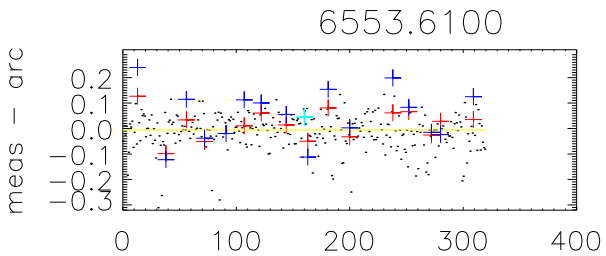

PLATE=1114 MJD=53179 Scattered Light on sdR-r1-00027390.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.734
Max value = 5.842
Sat Feb 23 00:40:37 2008

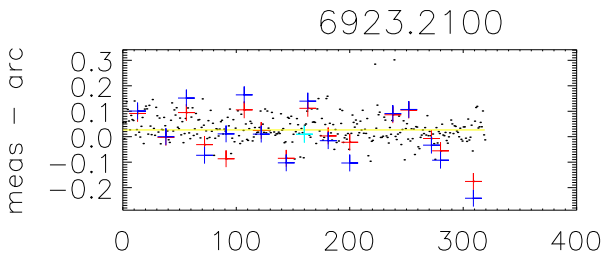

PLATE=1114 MJD=53179 Extraction chi^2 for sdR−r1−00027390.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

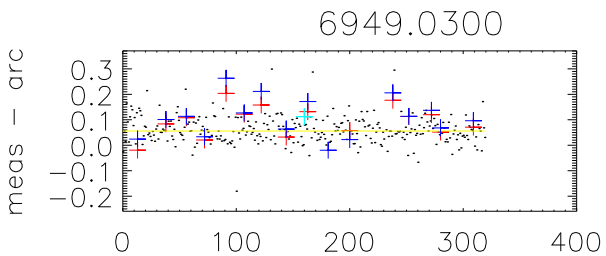

6300.3040
off: −0.02
sig: 0.007
6363.7760
off: 0.02
sig: 0.017
6553.6100
off: 0.04
sig: 0.033
6923.2100
off: 0.01
sig: 0.020
6949.0300
off: 0.11
sig: 0.021
7571.7500
off: 0.11
sig: 0.016
7794.1200
off: −0.03
sig: 0.007
7821.5100
off: 0.02
sig: 0.006
8399.1600
off: 0.07
sig: 0.005
8430.1700
off: 0.06
sig: 0.006
8885.8300
off: 0.06
sig: 0.005
8919.6100
off: 0.08
sig: 0.005

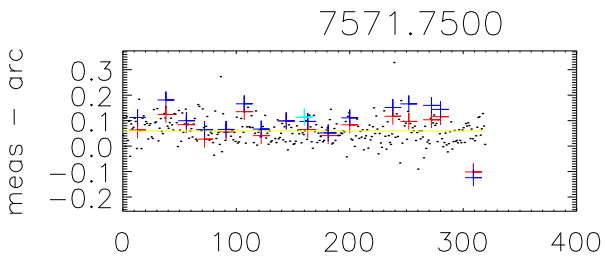

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

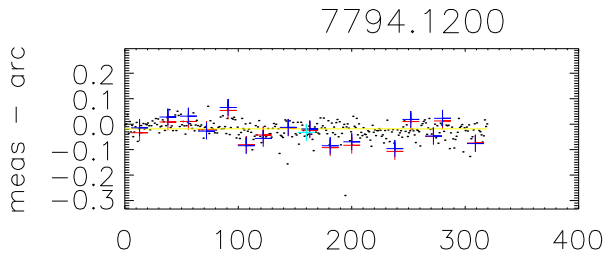

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

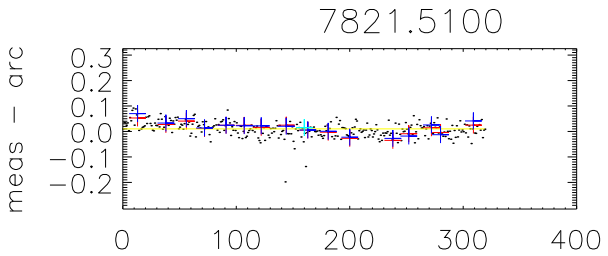

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

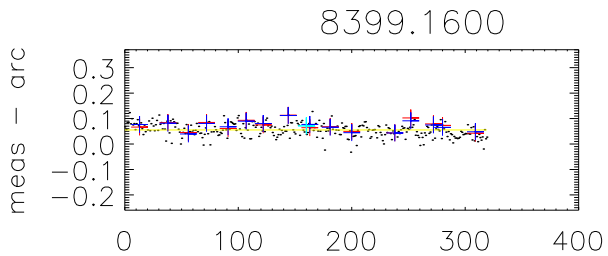

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

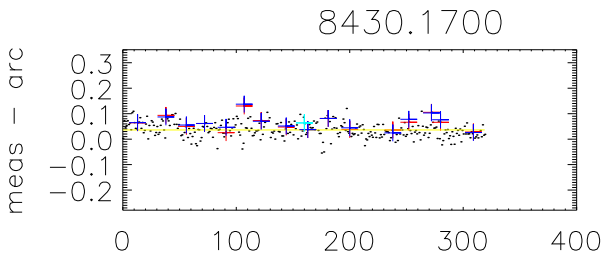

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

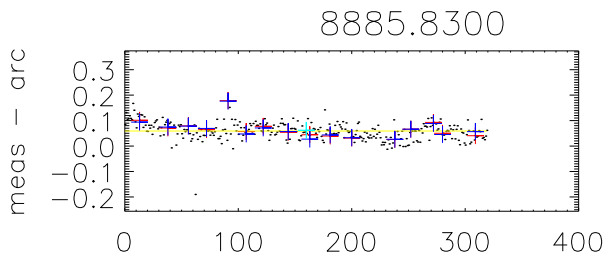

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

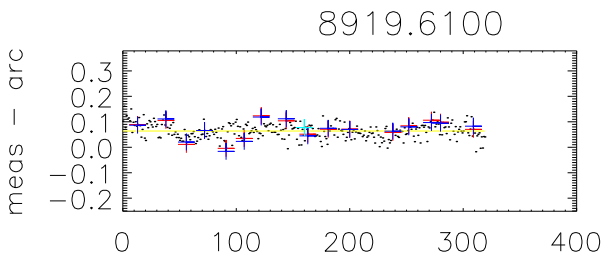

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

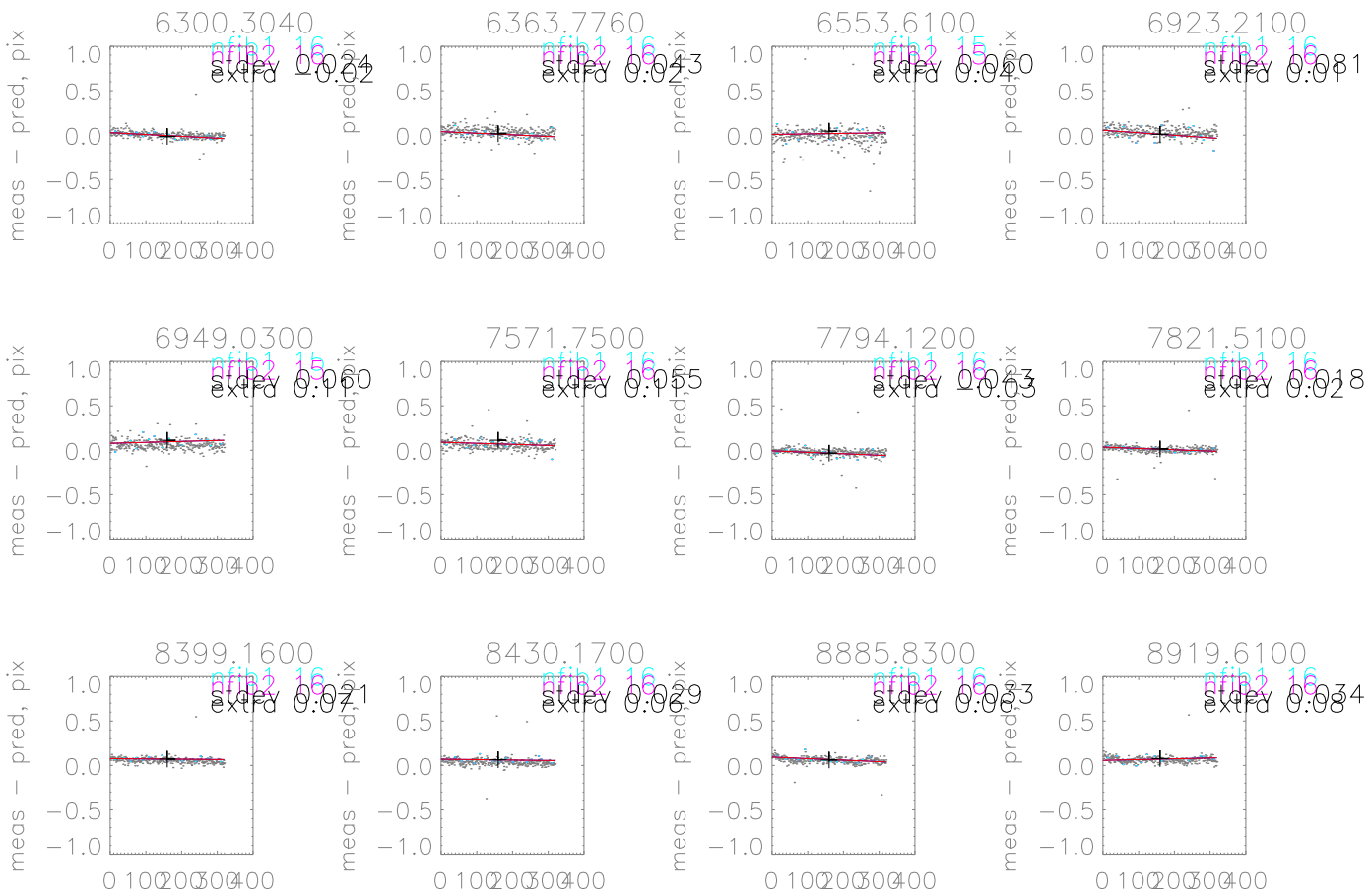

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

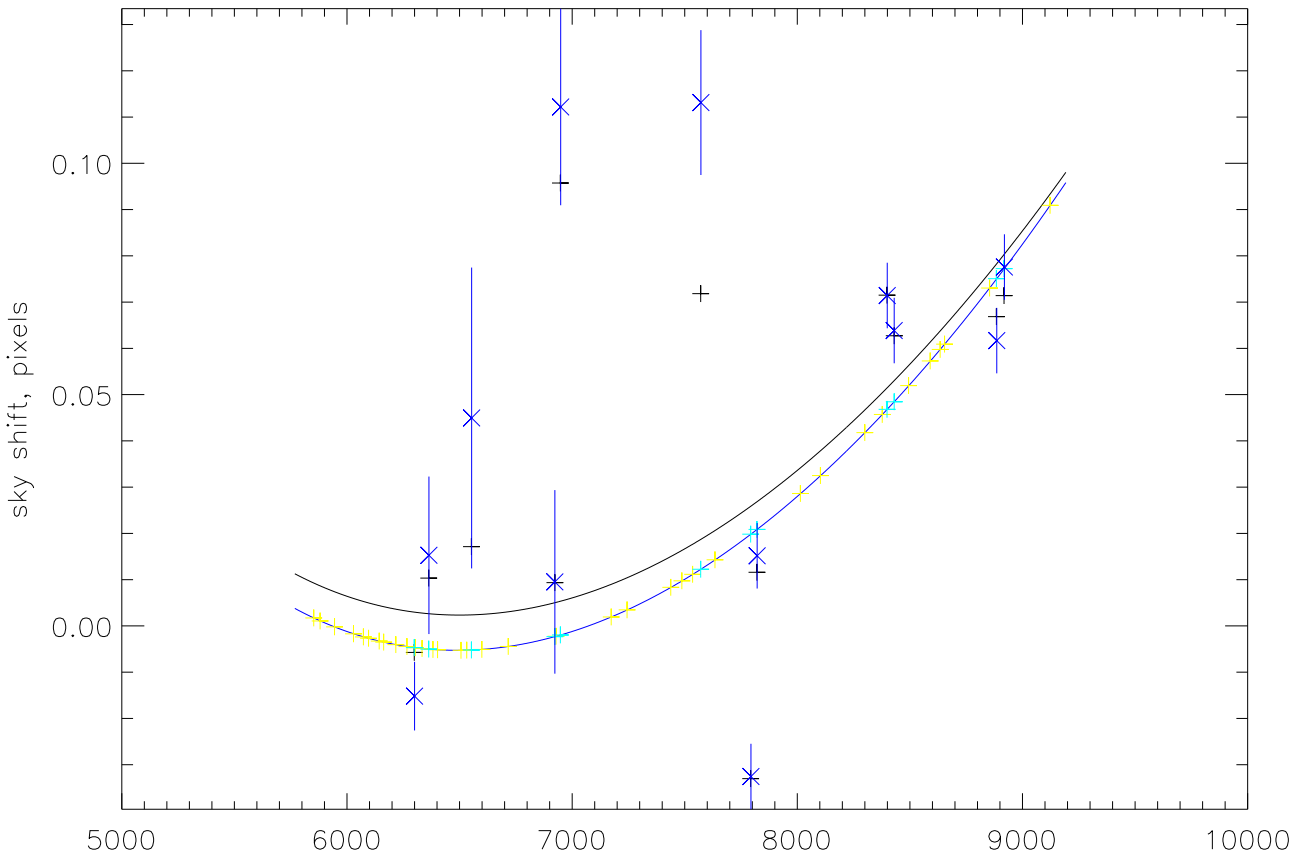

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

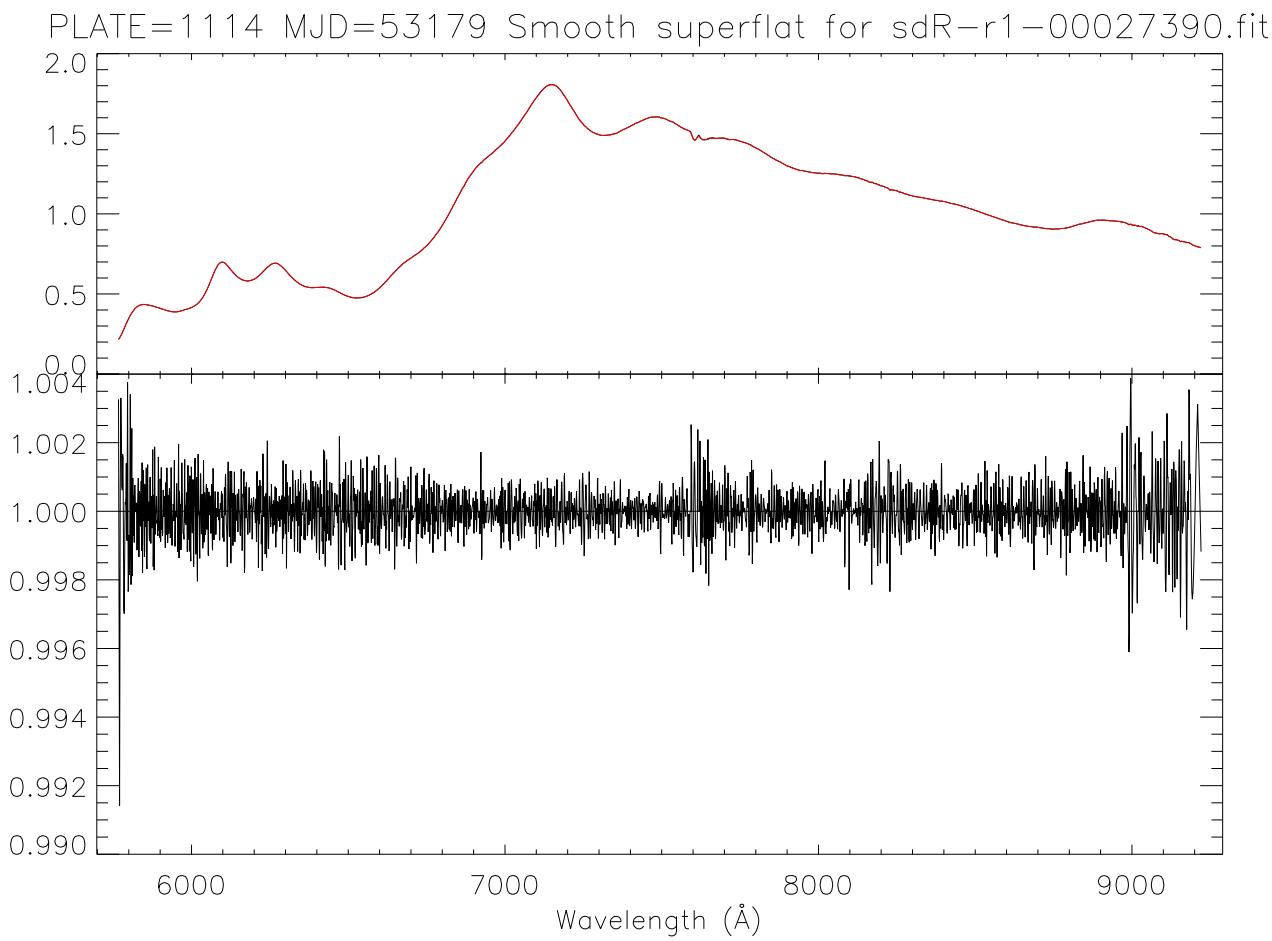

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

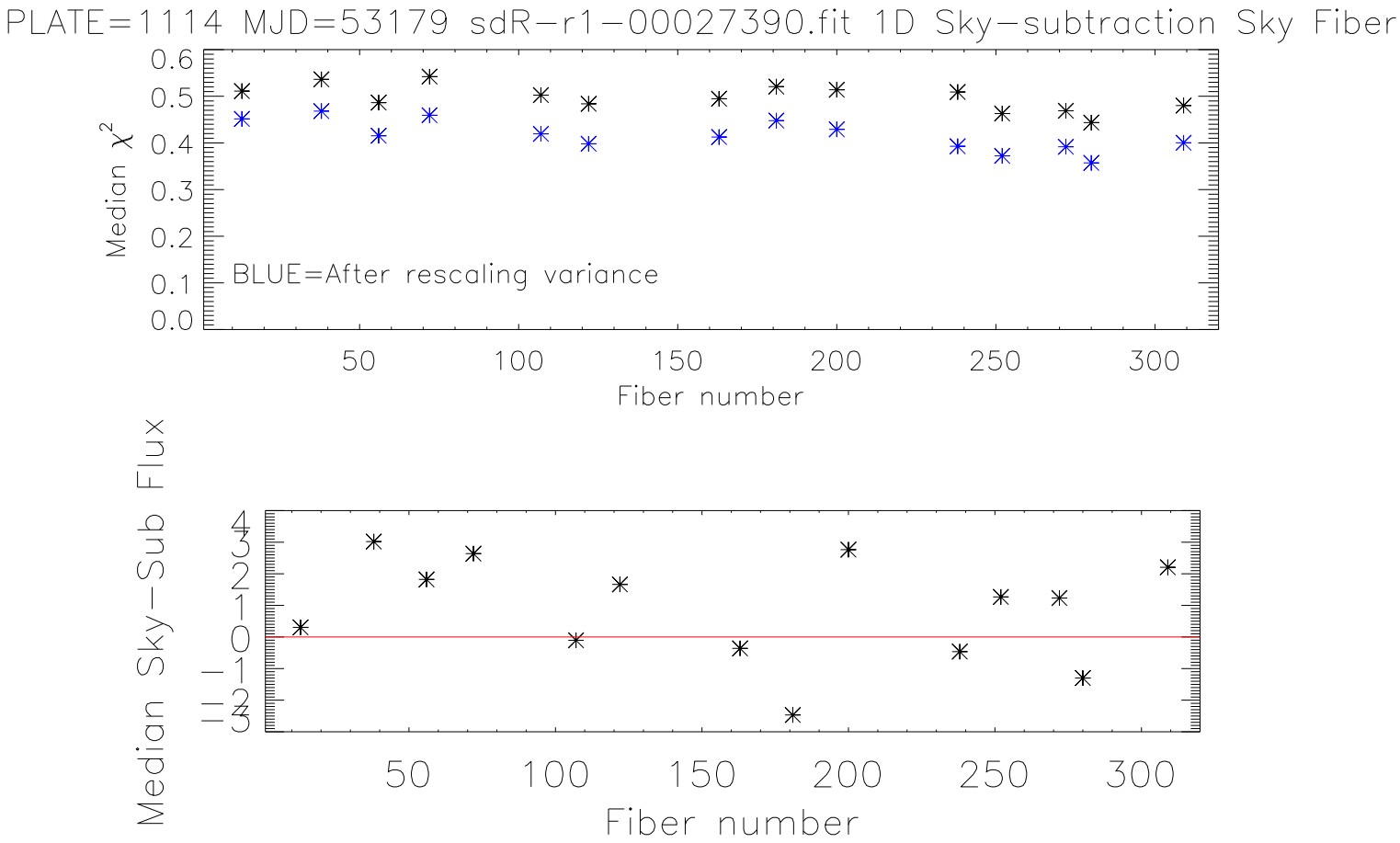

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

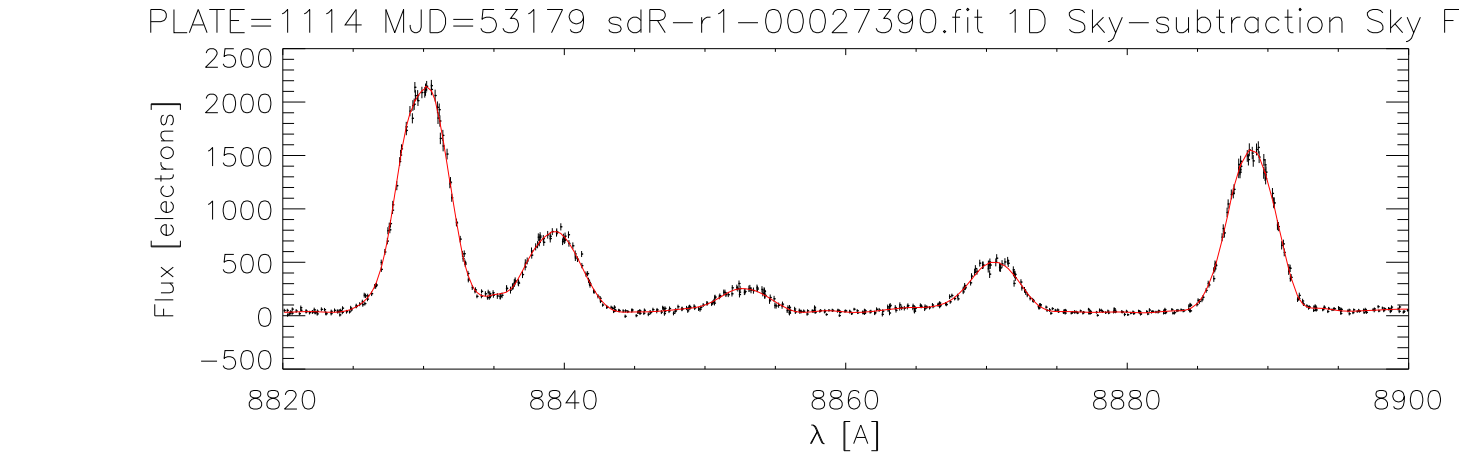

6300.3040
stdev 0.024
extra −0.02
6363.7760
stdev 0.043
extra 0.02
6553.6100
stdev 0.060
extra 0.04
6923.2100
stdev 0.081
extra 0.01
6949.0300
stdev 0.060
extra 0.00
7571.7500
stdev 0.055
extra 0.01
7794.1200
stdev 0.043
extra −0.03
7821.5100
stdev 0.018
extra 0.02
8399.1600
stdev 0.071
extra 0.07
8430.1700
stdev 0.029
extra 0.06
8885.8300
stdev 0.033
extra 0.06
8919.6100
stdev 0.034
extra 0.08
meas − pred, pix
mfb32 16
mfb31 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

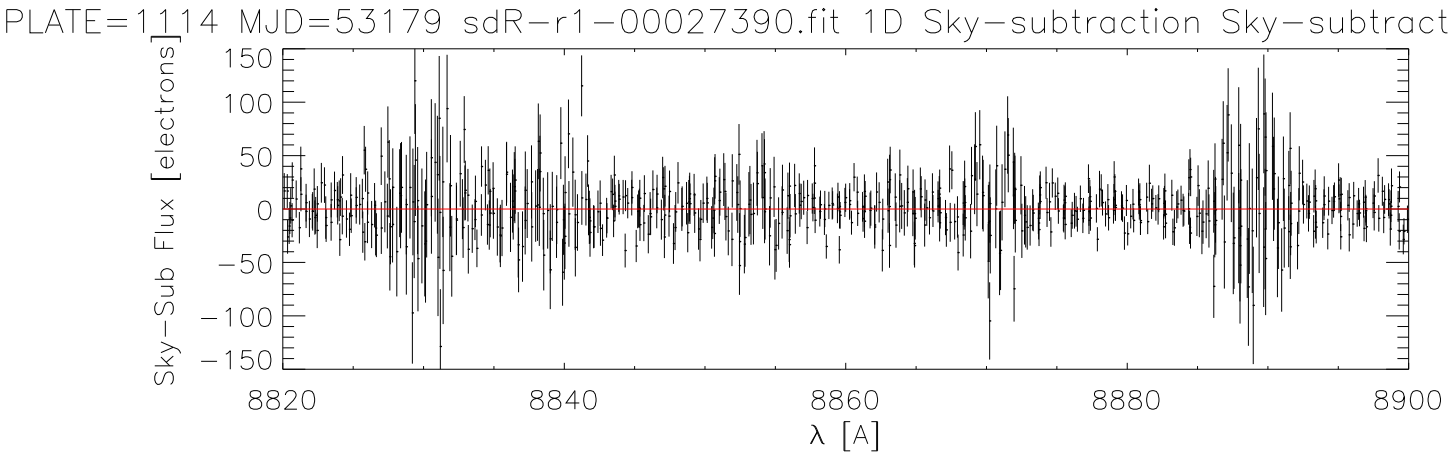

0.10
0.05
0.00
sky shift, pixels
5000
6000
7000
8000
9000
10000

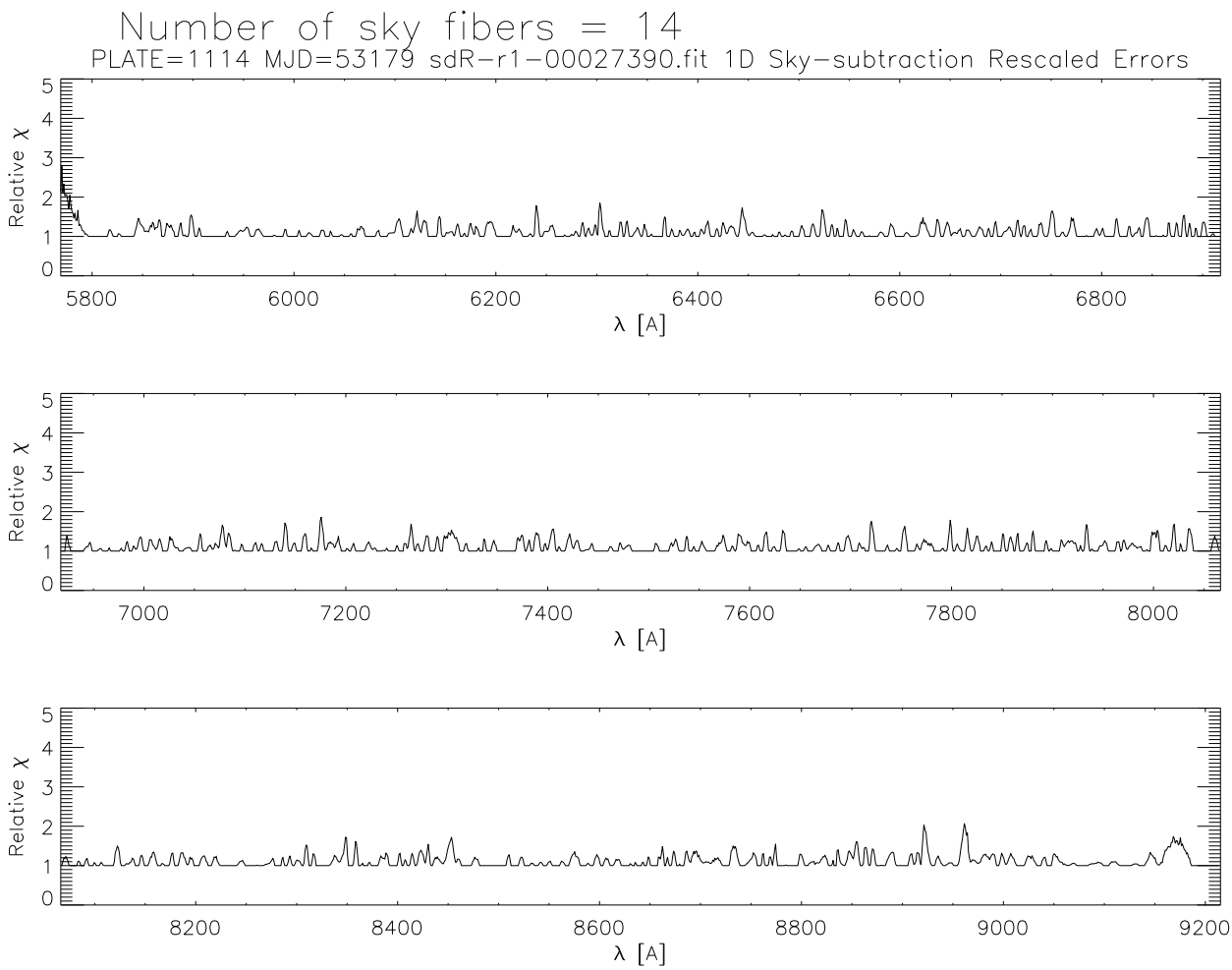
es= 0.0000

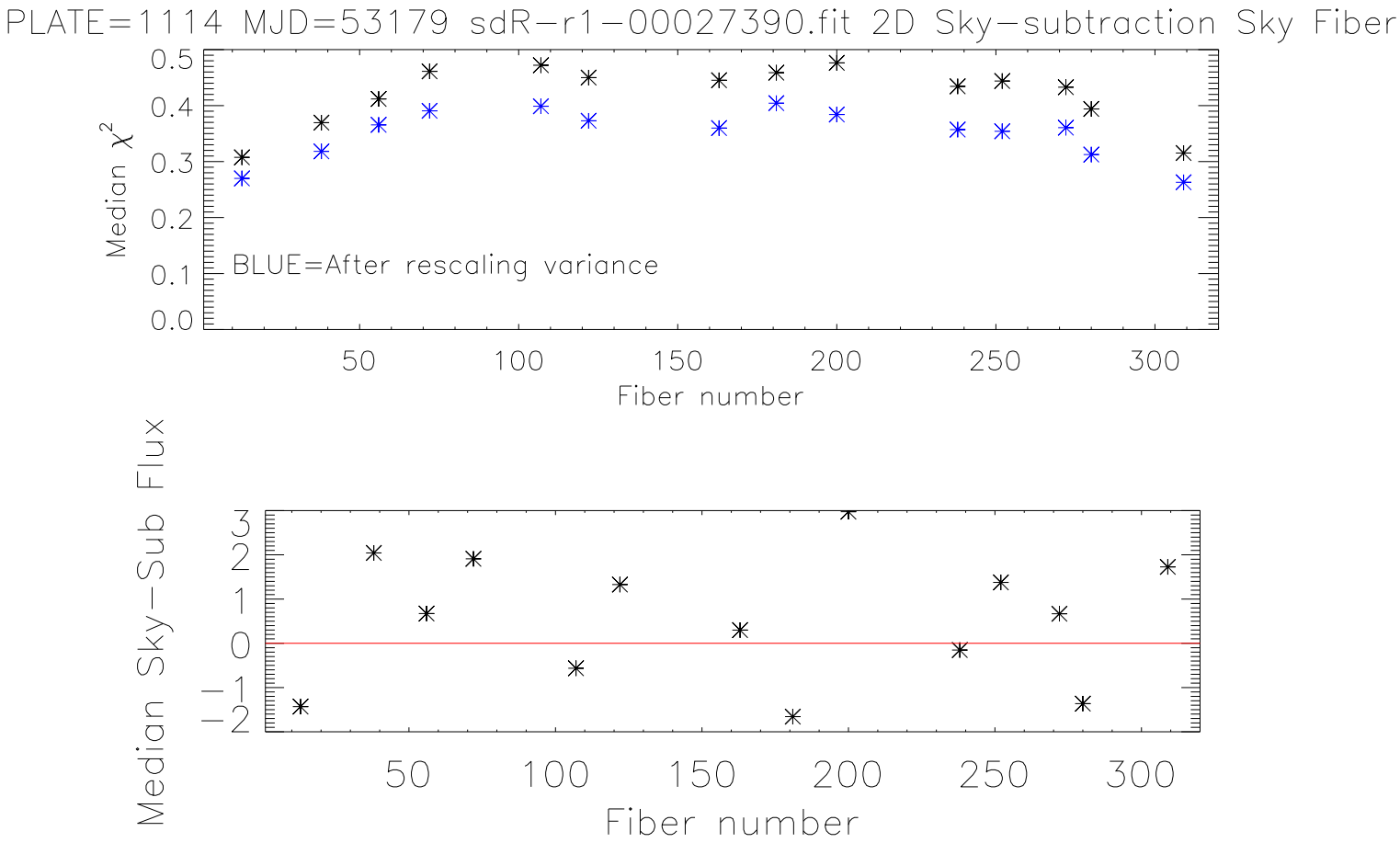

PLATE=1114 MJD=53179 Smooth superflat for sdR-r1-00027390.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
6000
7000
8000
9000
Wavelength (Å)

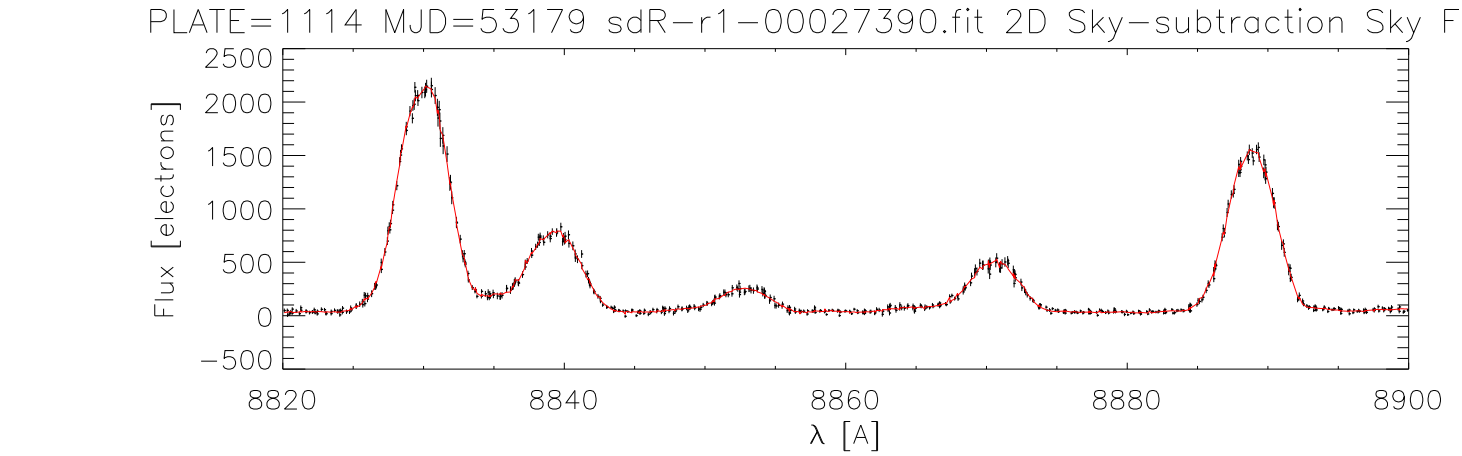

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

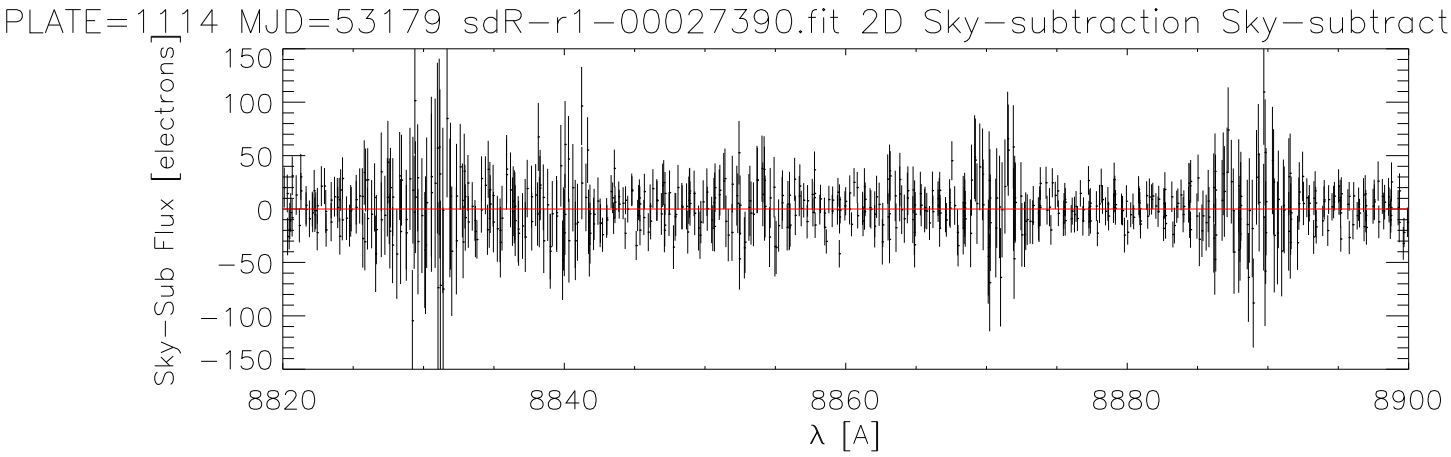

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

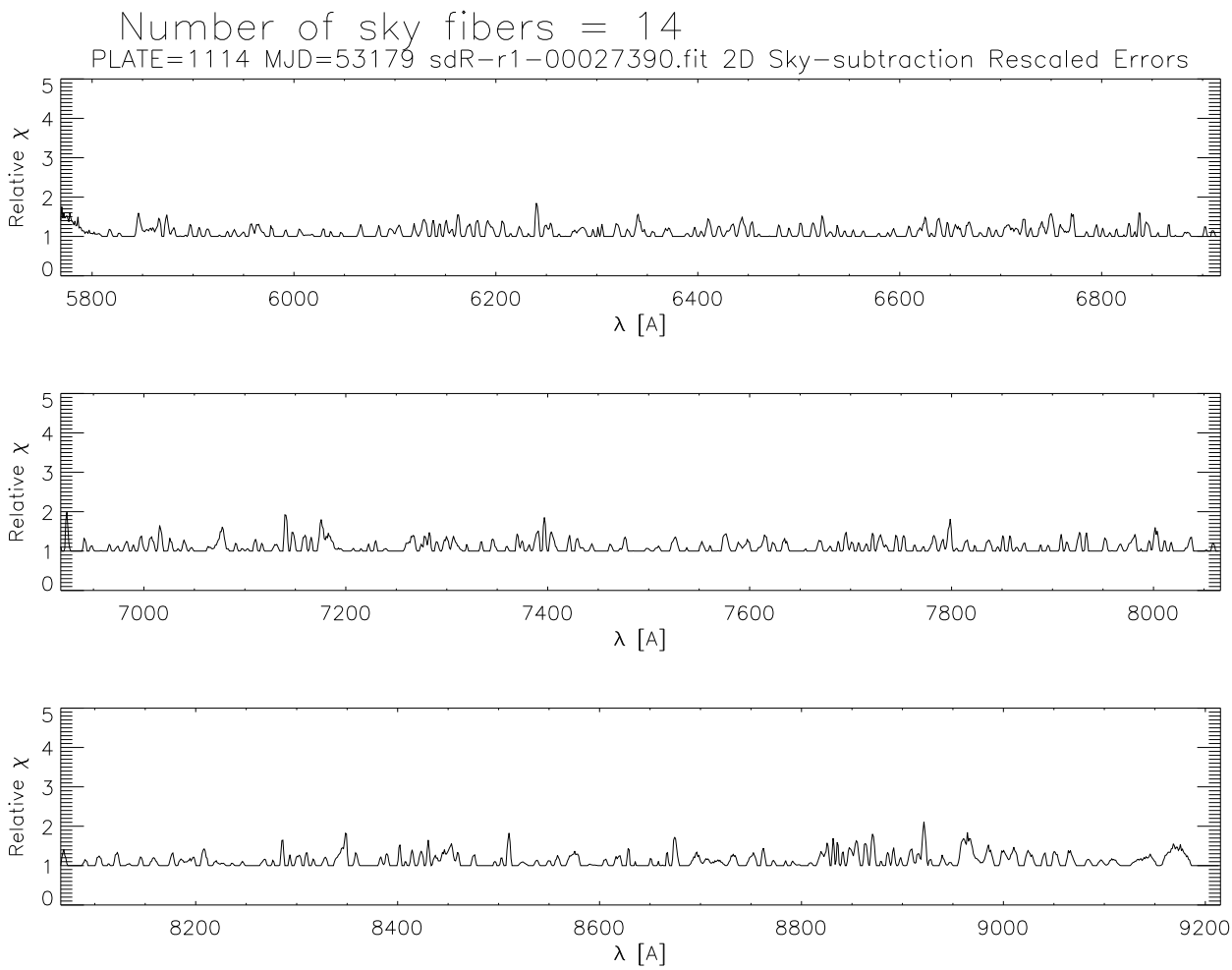

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]

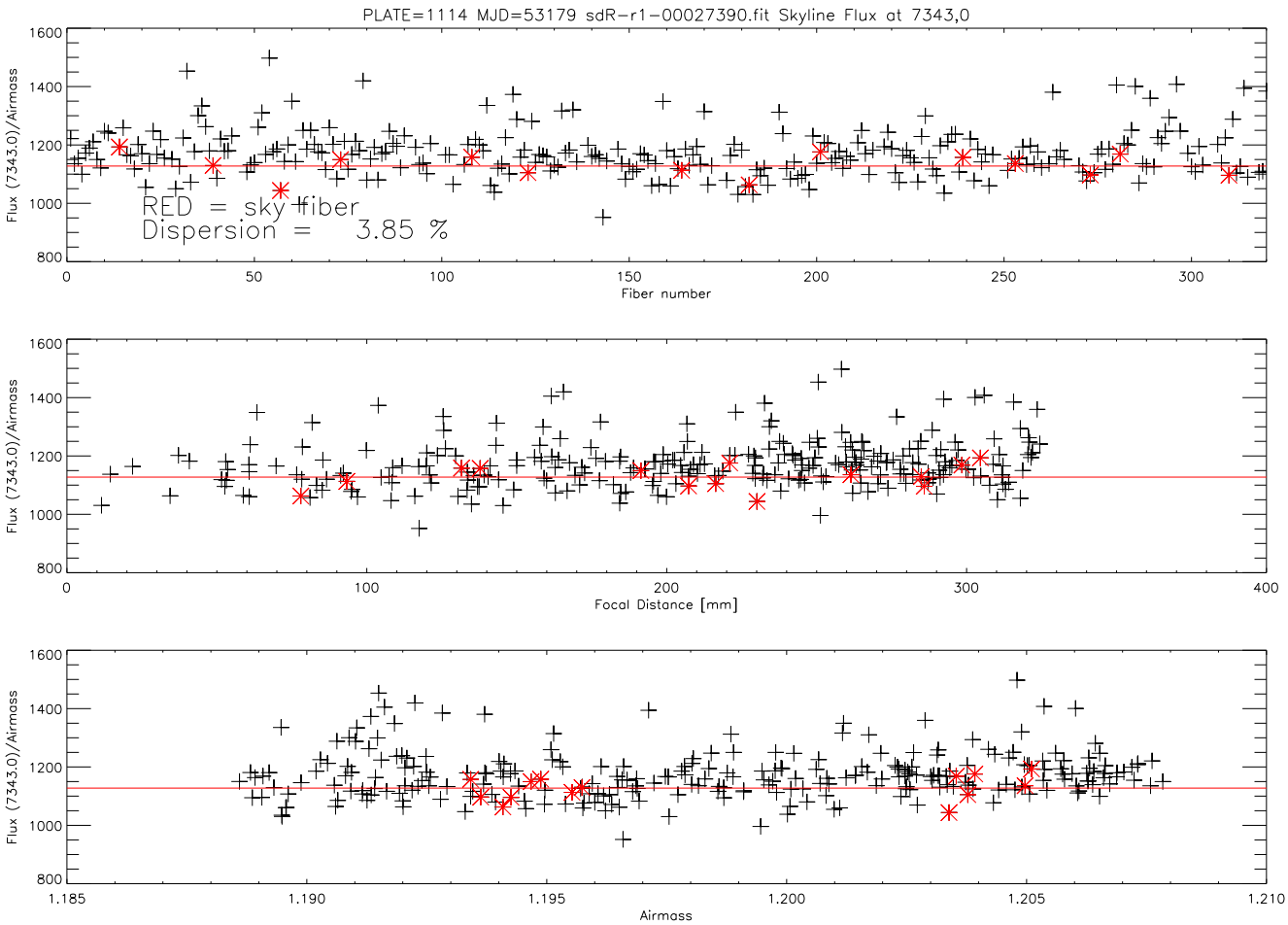

Number of sky fibers = 14
PLATE=1114 MJD=53179 sdR-r1-00027390.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

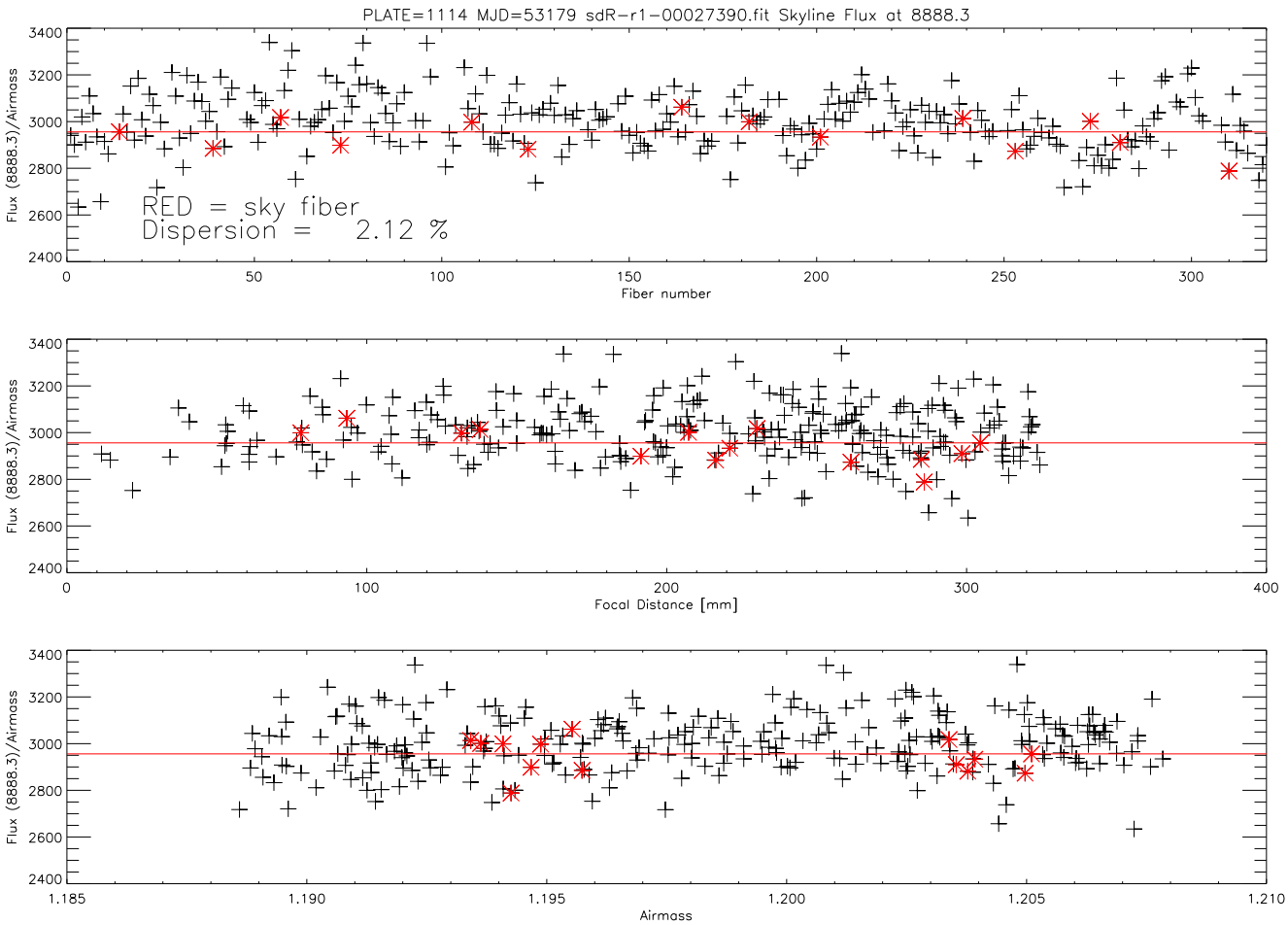

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

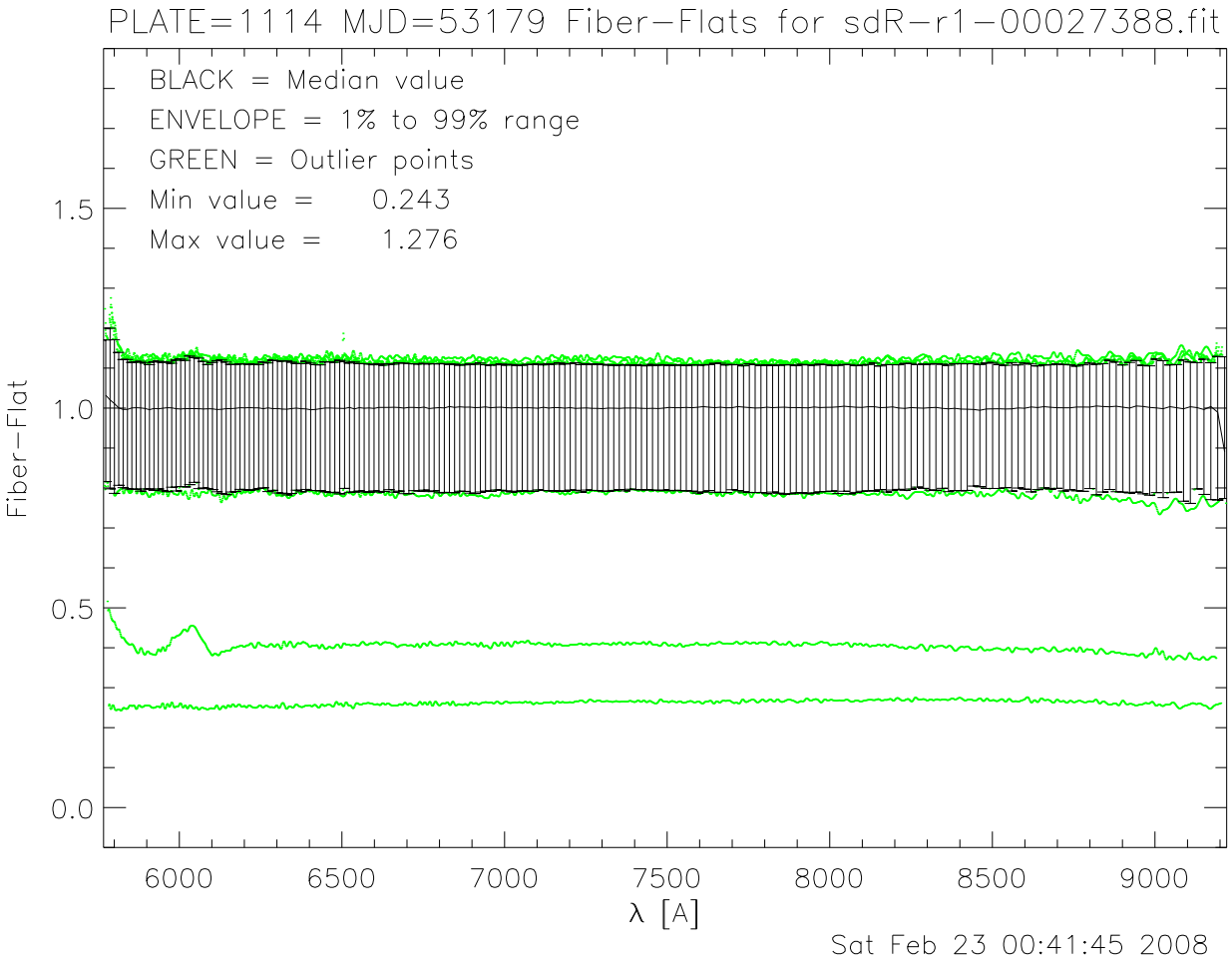

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

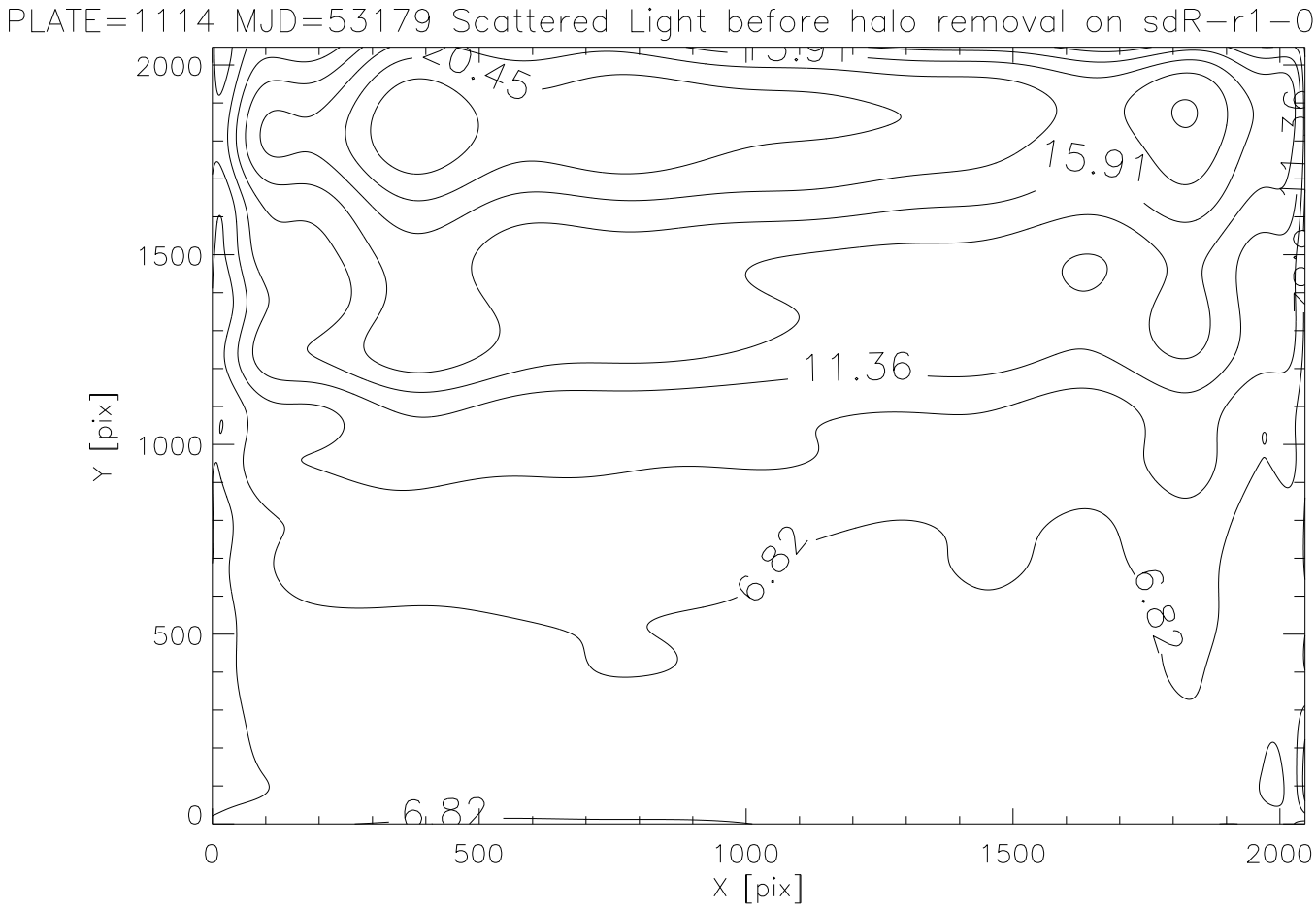

PLATE=1114 MJD=53179 sdR-r1-00027390.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]

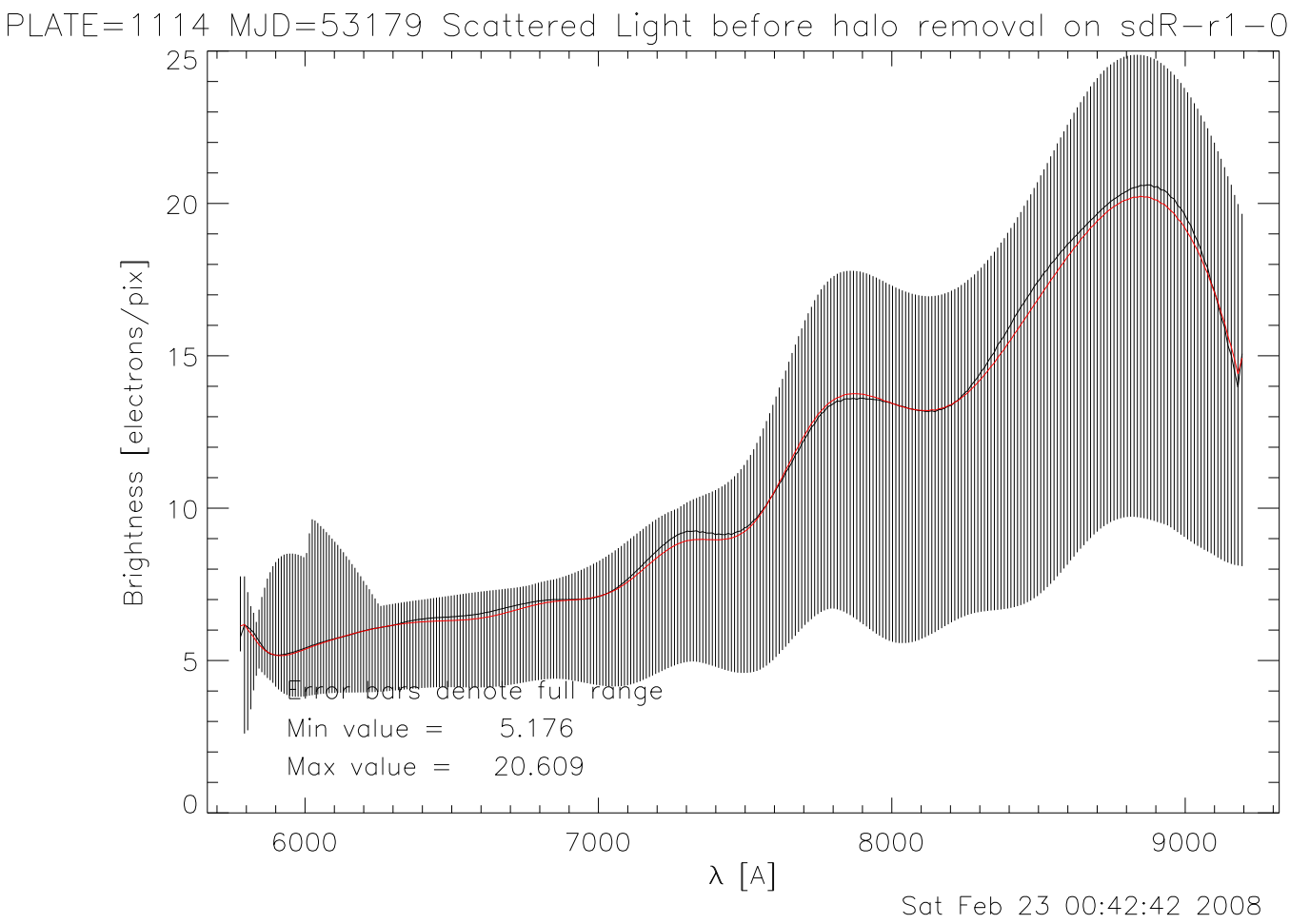

Number of sky fibers = 14
PLATE=1114 MJD=53179 sdR-r1-00027390.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

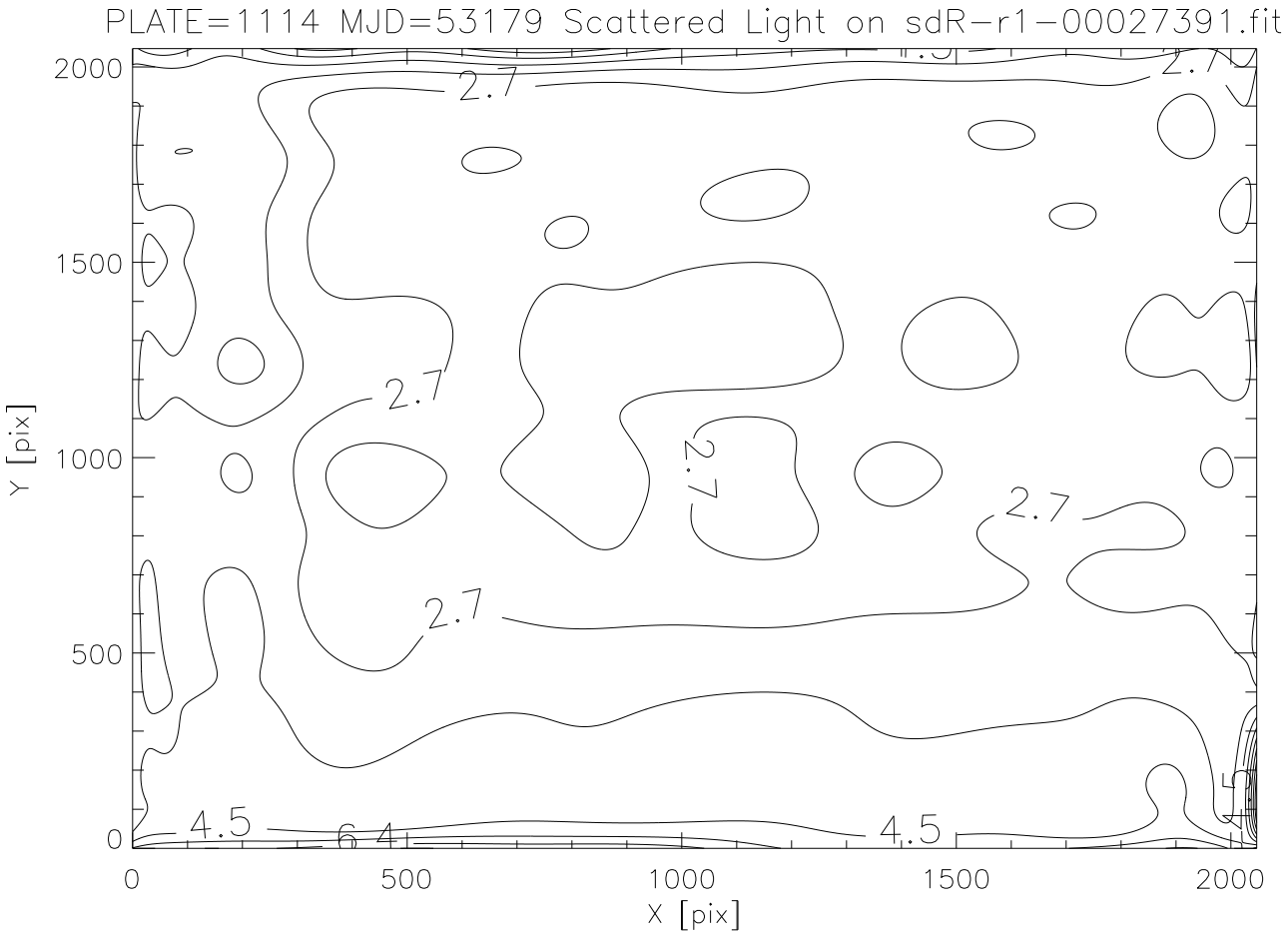

PLATE=1114 MJD=53179 sdR-r1-00027390.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.85 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

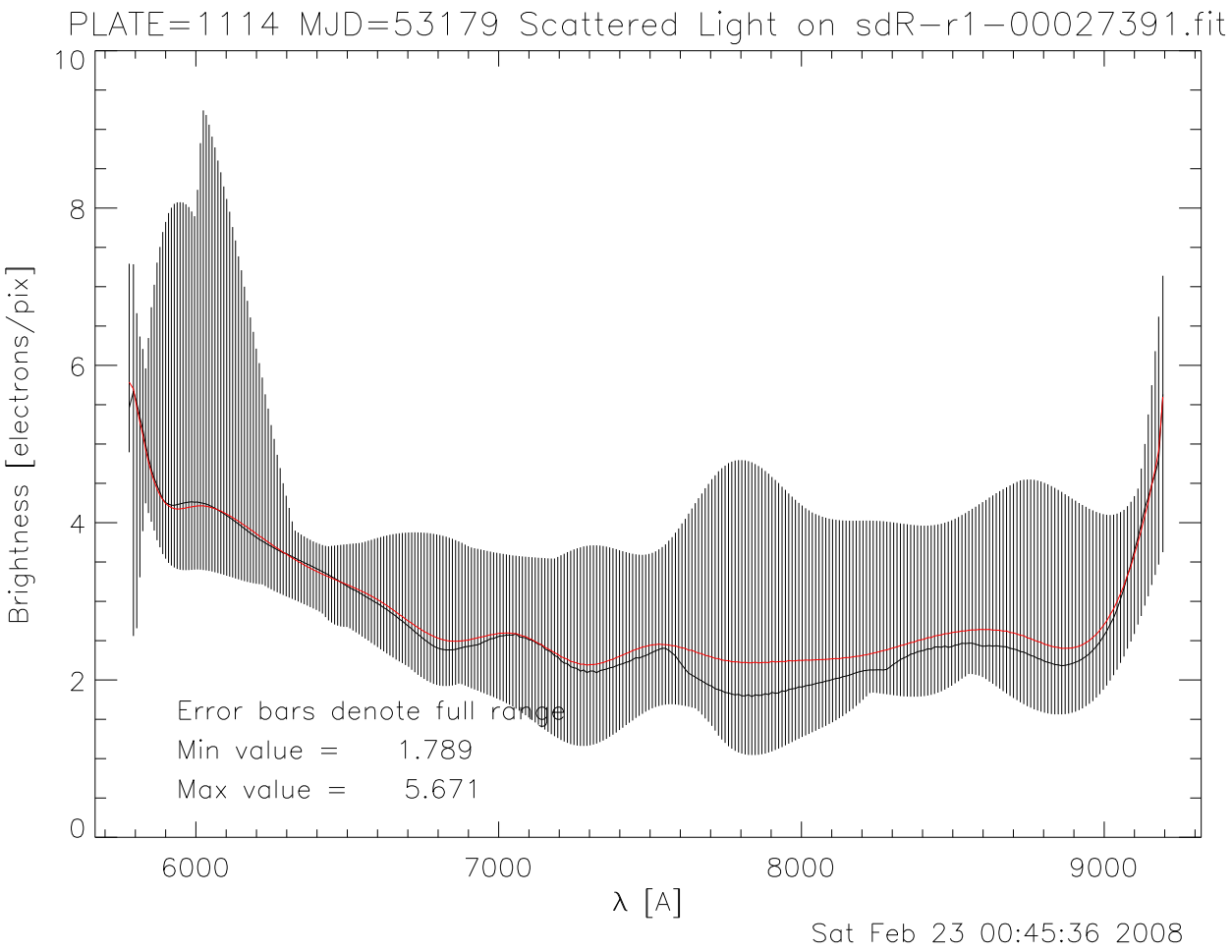

PLATE=1114 MJD=53179 sdR-r1-00027390.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.12 %
Fiber number
Focal Distance [mm]
Airmass

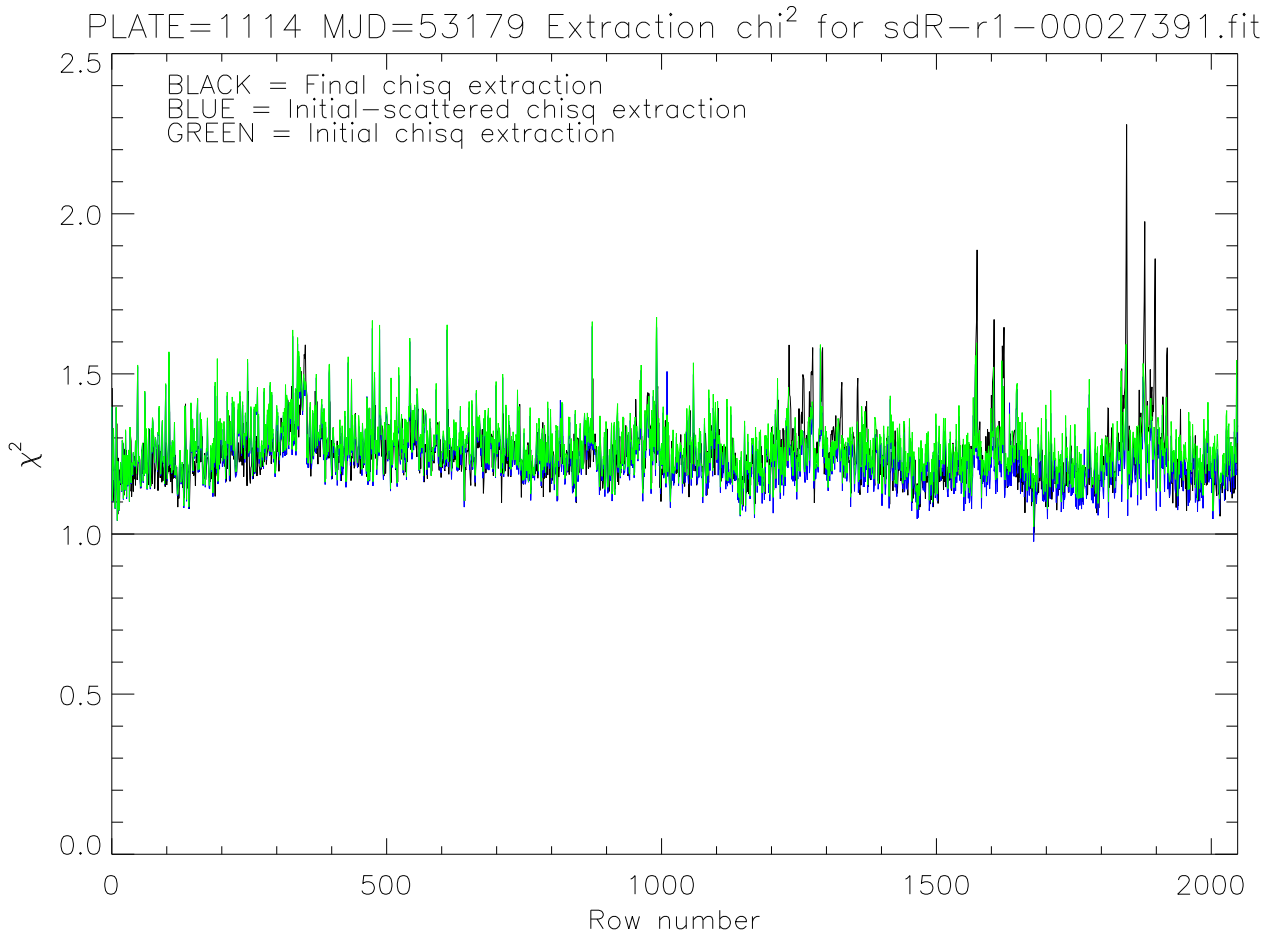

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r1−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.243
Max value = 1.276
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 00:41:45 2008

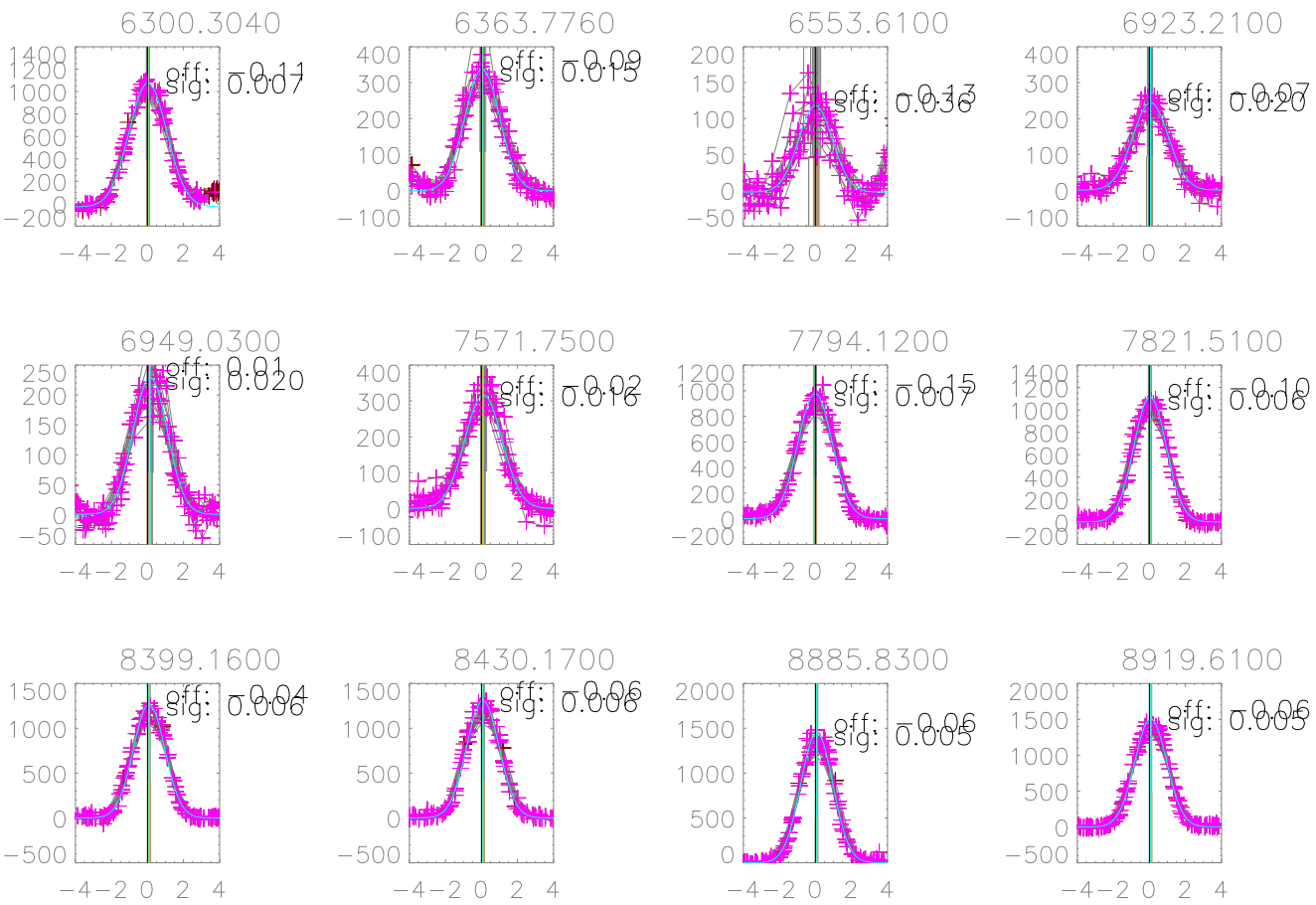

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027391.fi
20.45
15.91
11.36
6.82
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

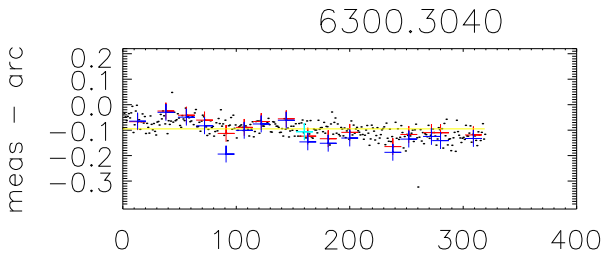

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027391.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.176
Max value = 20.609
Sat Feb 23 00:42:42 2008

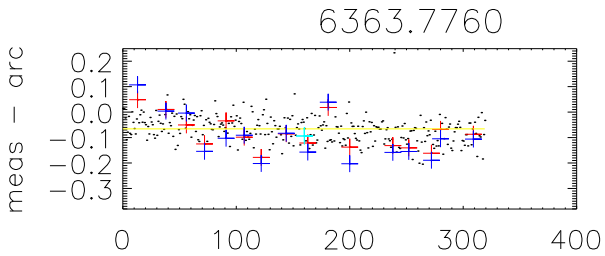

PLATE=1114 MJD=53179 Scattered Light on sdR−r1−00027391.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.7
2.7
2.7
2.7
2.7
4.5
4.5

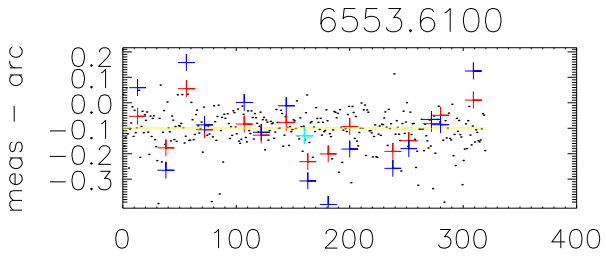

PLATE=1114 MJD=53179 Scattered Light on sdR-r1-00027391.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.789
Max value = 5.671
Sat Feb 23 00:45:36 2008

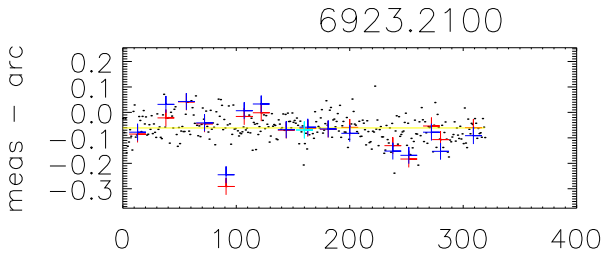

PLATE=1114 MJD=53179 Extraction chi^2 for sdR−r1−00027391.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

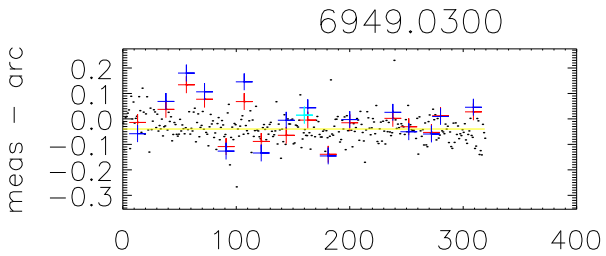

6300.3040
off: −0.11
sig: 0.007
6363.7760
off: −0.09
sig: 0.015
6553.6100
off: −0.13
sig: 0.036
6923.2100
off: −0.07
sig: 0.020
6949.0300
off: 0.01
sig: 0.020
7571.7500
off: −0.02
sig: 0.016
7794.1200
off: −0.15
sig: 0.007
7821.5100
off: −0.10
sig: 0.006
8399.1600
off: −0.04
sig: 0.006
8430.1700
off: −0.06
sig: 0.006
8885.8300
off: −0.06
sig: 0.005
8919.6100
off: −0.06
sig: 0.005

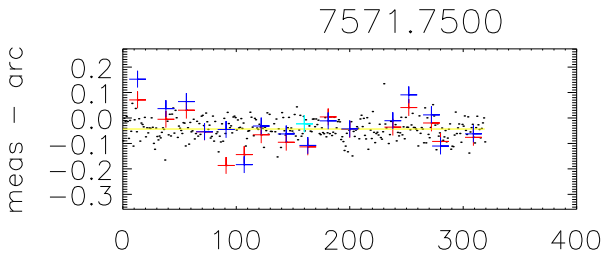

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

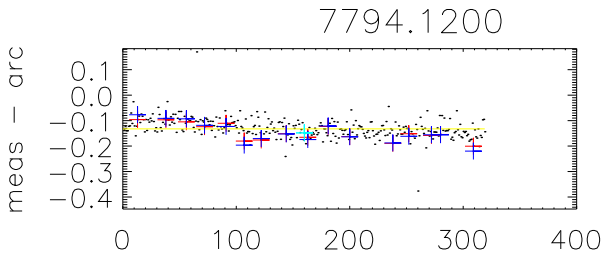

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

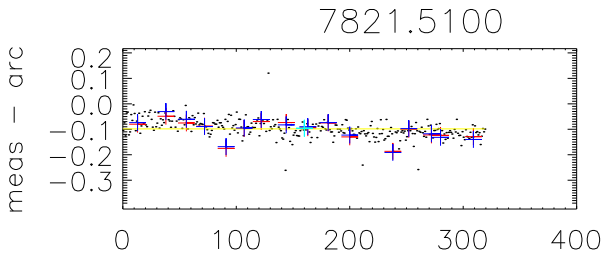

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

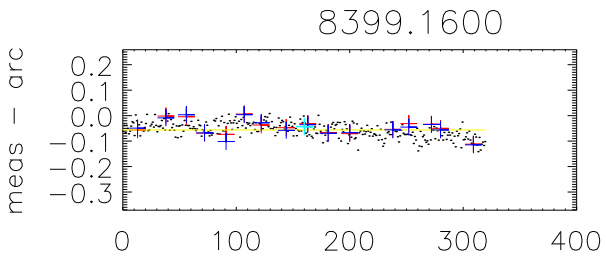

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

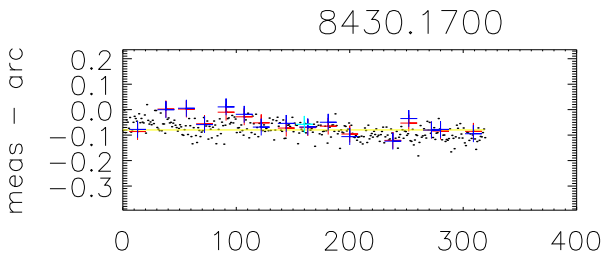

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

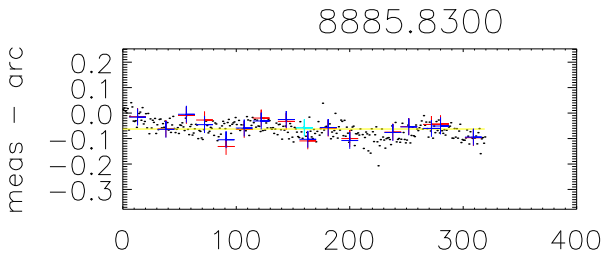

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

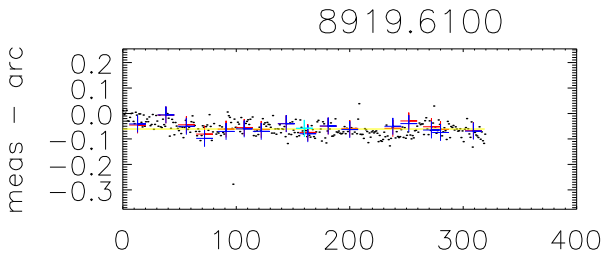

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

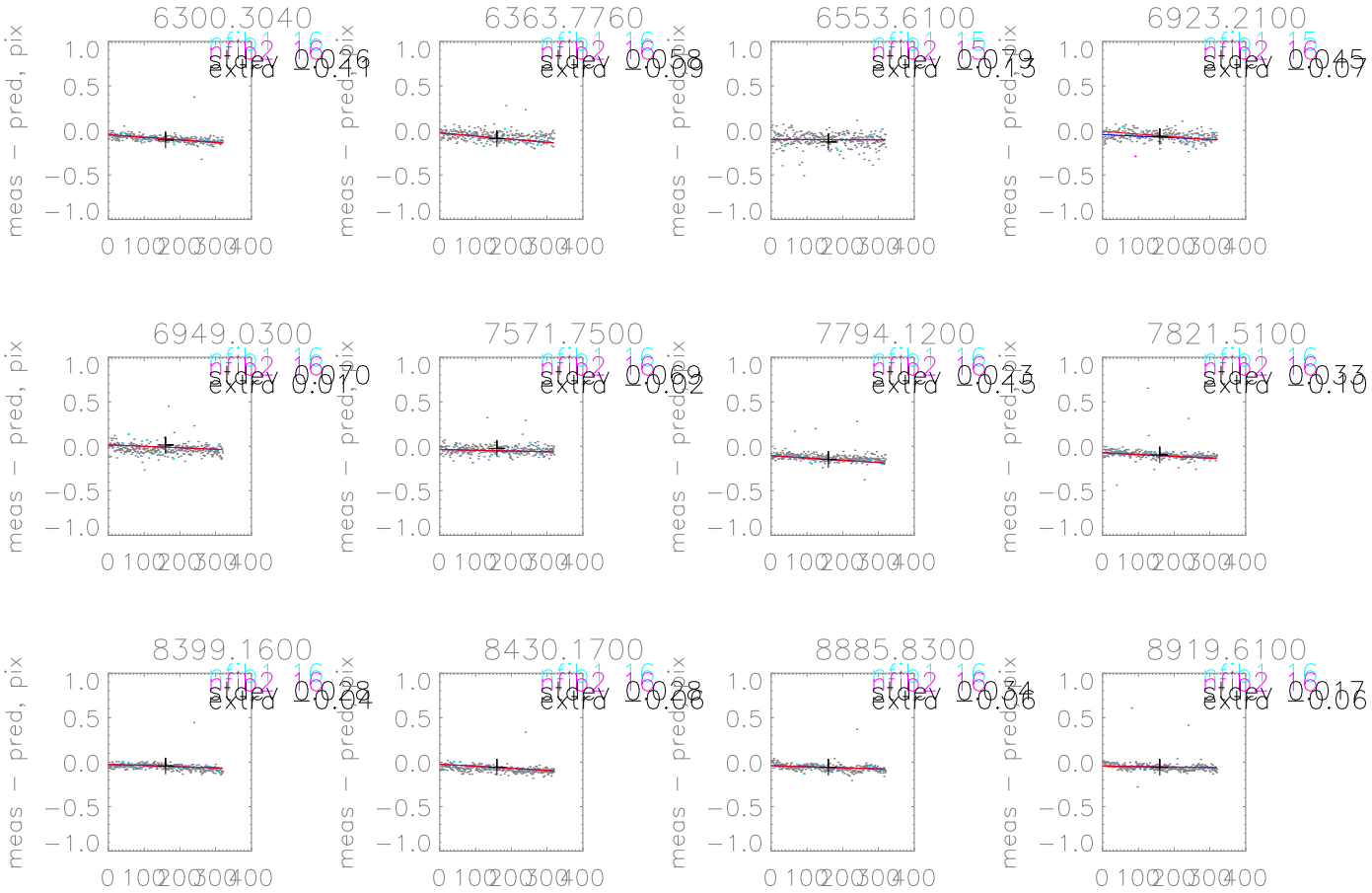

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

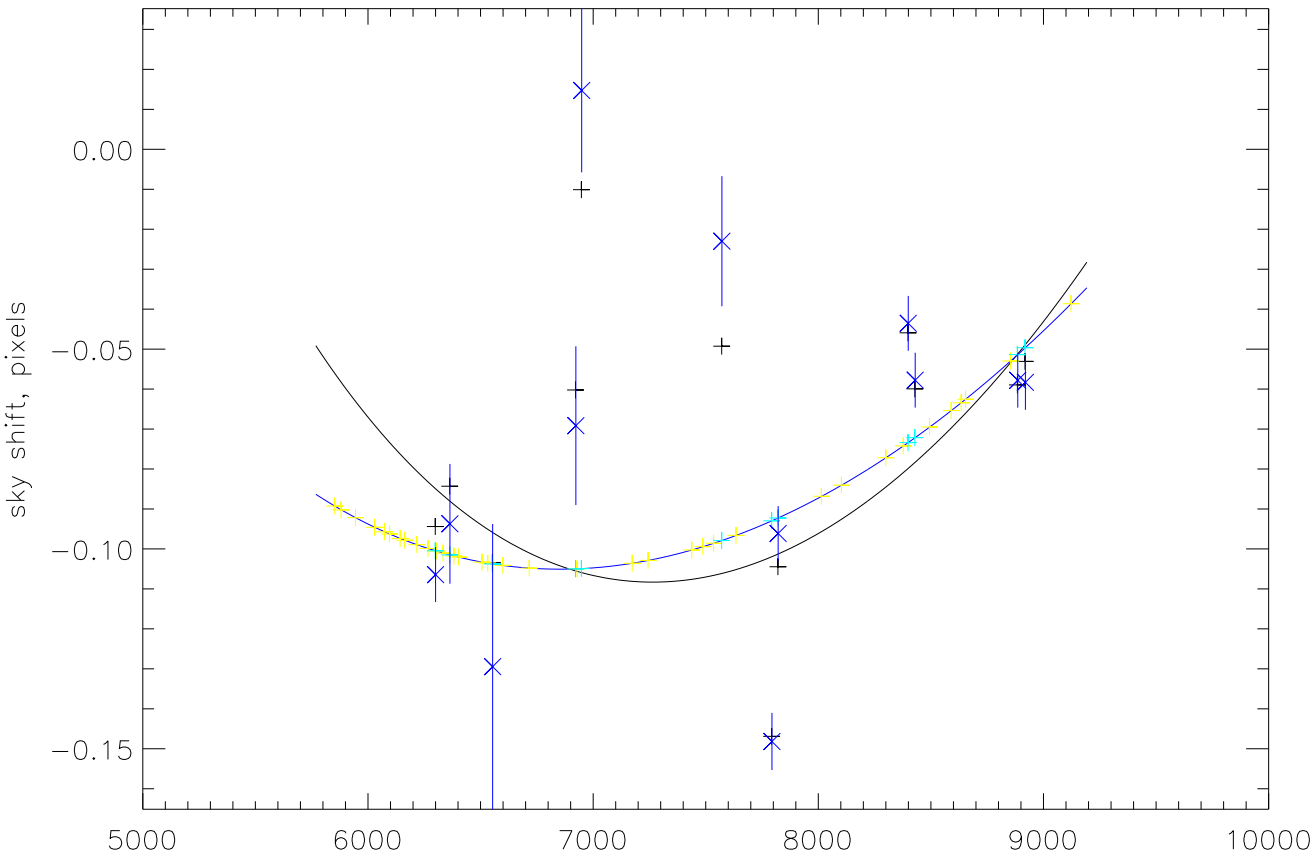

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

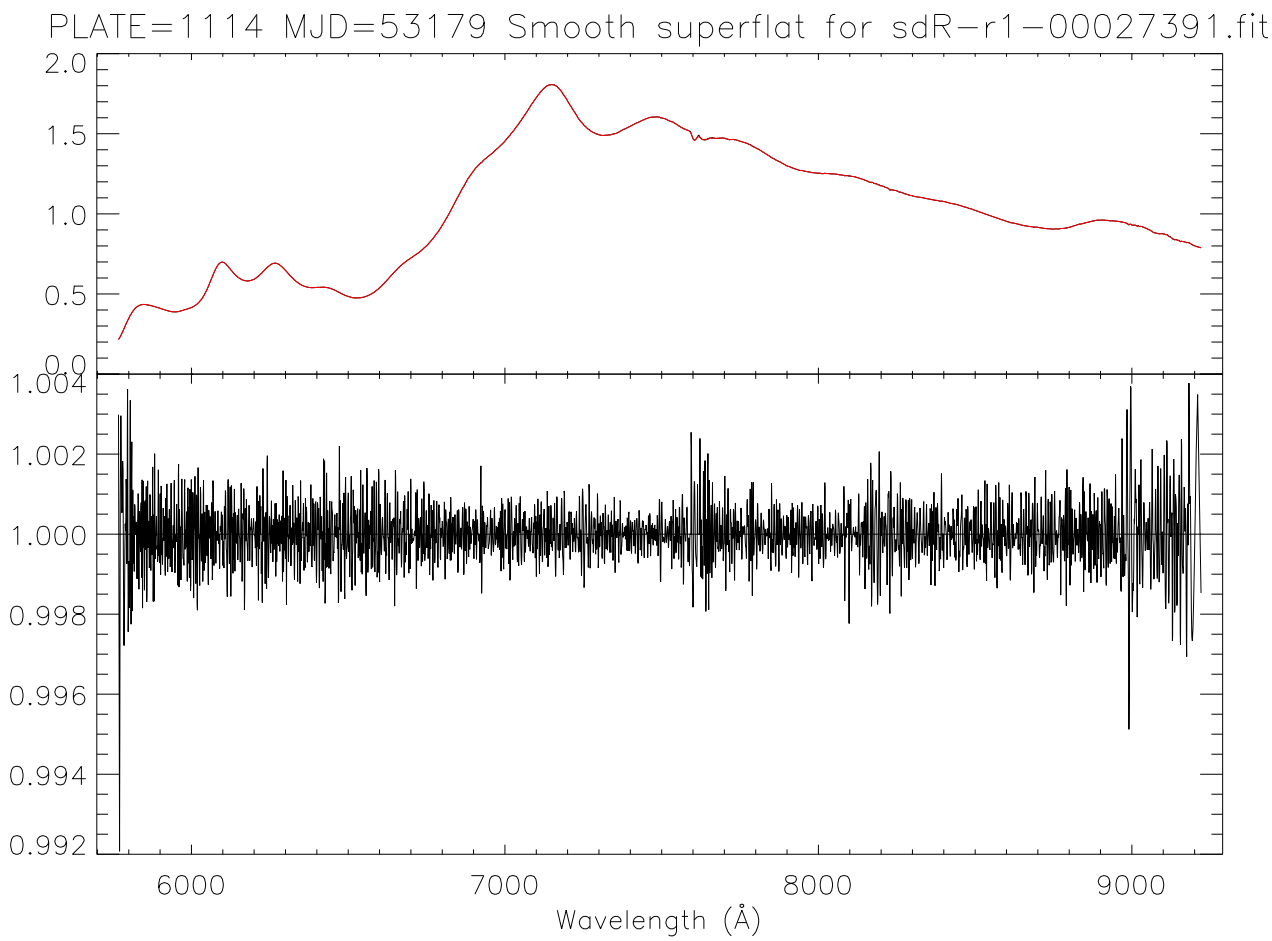

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

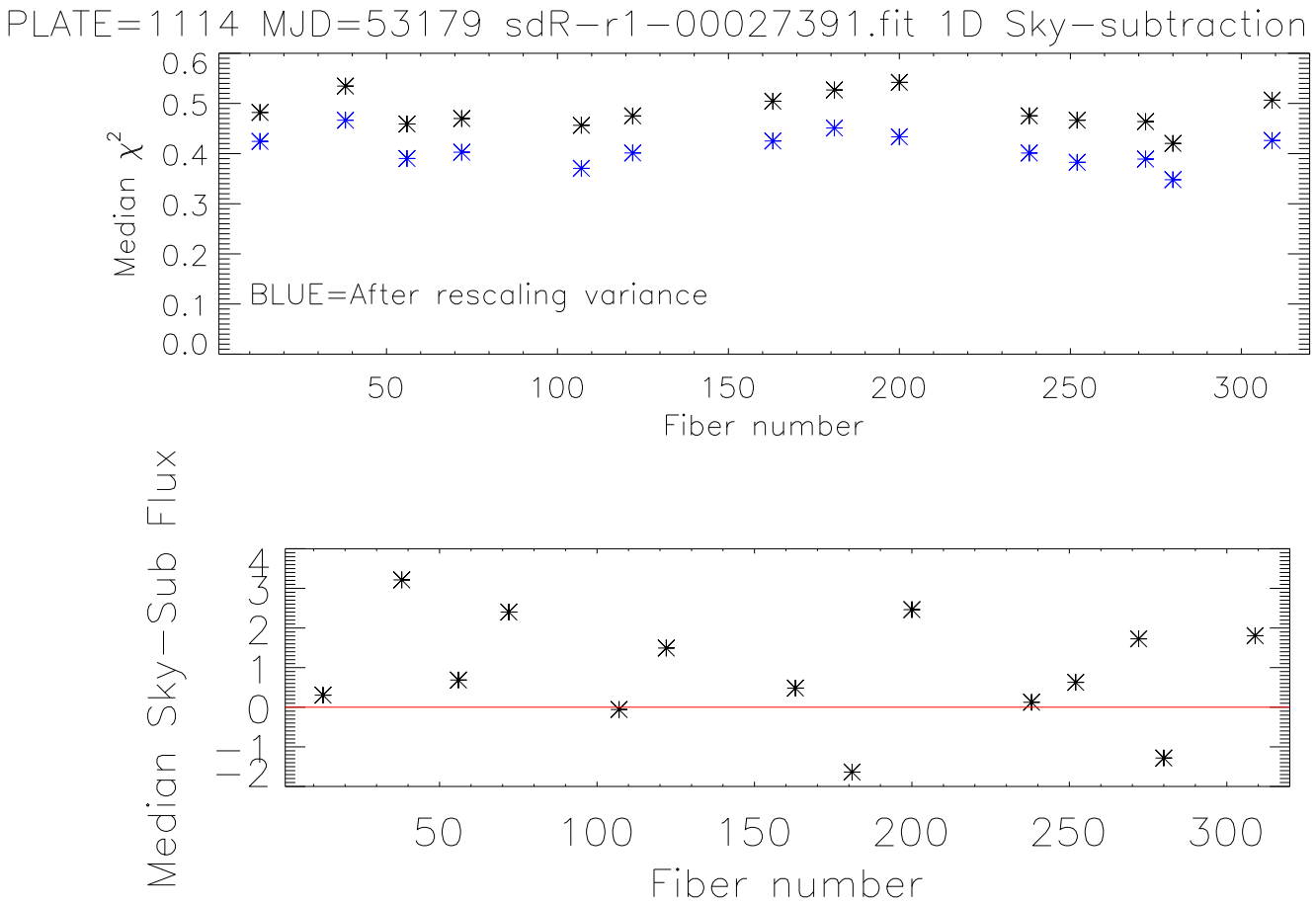

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

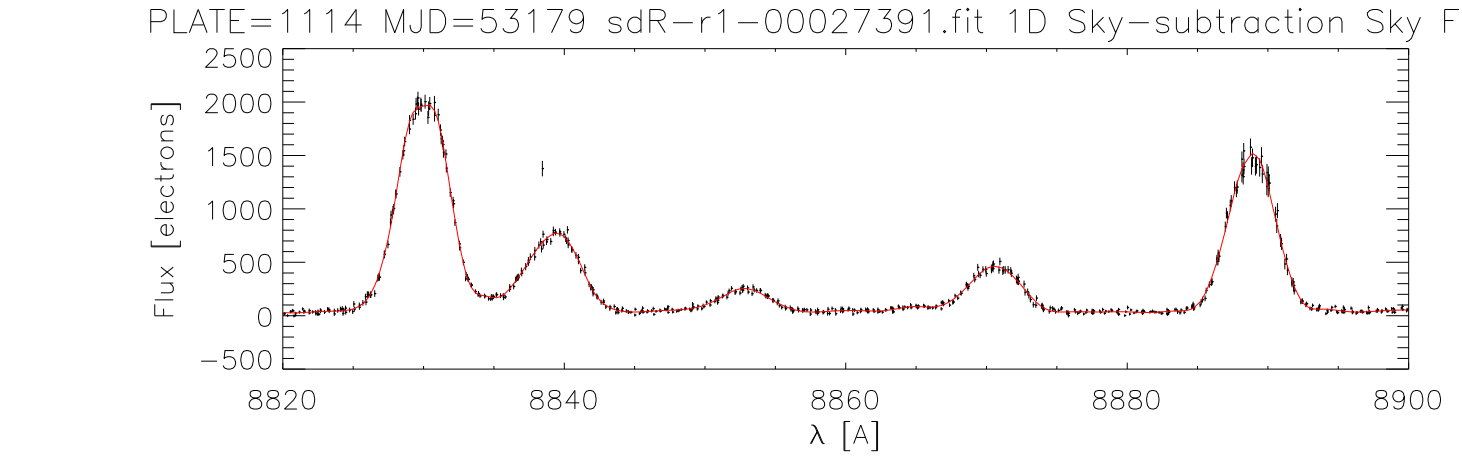

6300.3040
stdev 0.041
extra 0.026
6363.7760
stdev 0.09
extra 0.058
6553.6100
stdev 0.13
extra 0.079
6923.2100
stdev 0.07
extra 0.045
6949.0300
stdev 0.01
extra 0.070
7571.7500
stdev 0.02
extra 0.069
7794.1200
stdev 0.05
extra 0.023
7821.5100
stdev 0.10
extra 0.033
8399.1600
stdev 0.04
extra 0.028
8430.1700
stdev 0.06
extra 0.028
8885.8300
stdev 0.06
extra 0.034
8919.6100
stdev 0.06
extra 0.017
meas − pred, pix
mfhs2 16
mfhs1 16
mfhs2 15
0 100 200 300 400
1.0
0.5
0.0
−0.5
−1.0

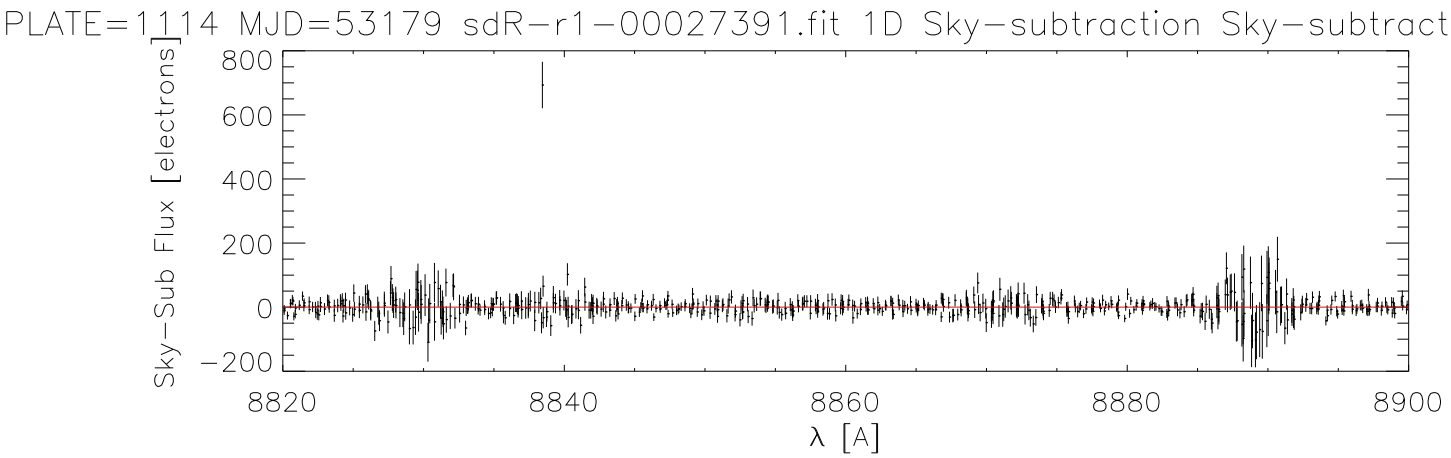

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

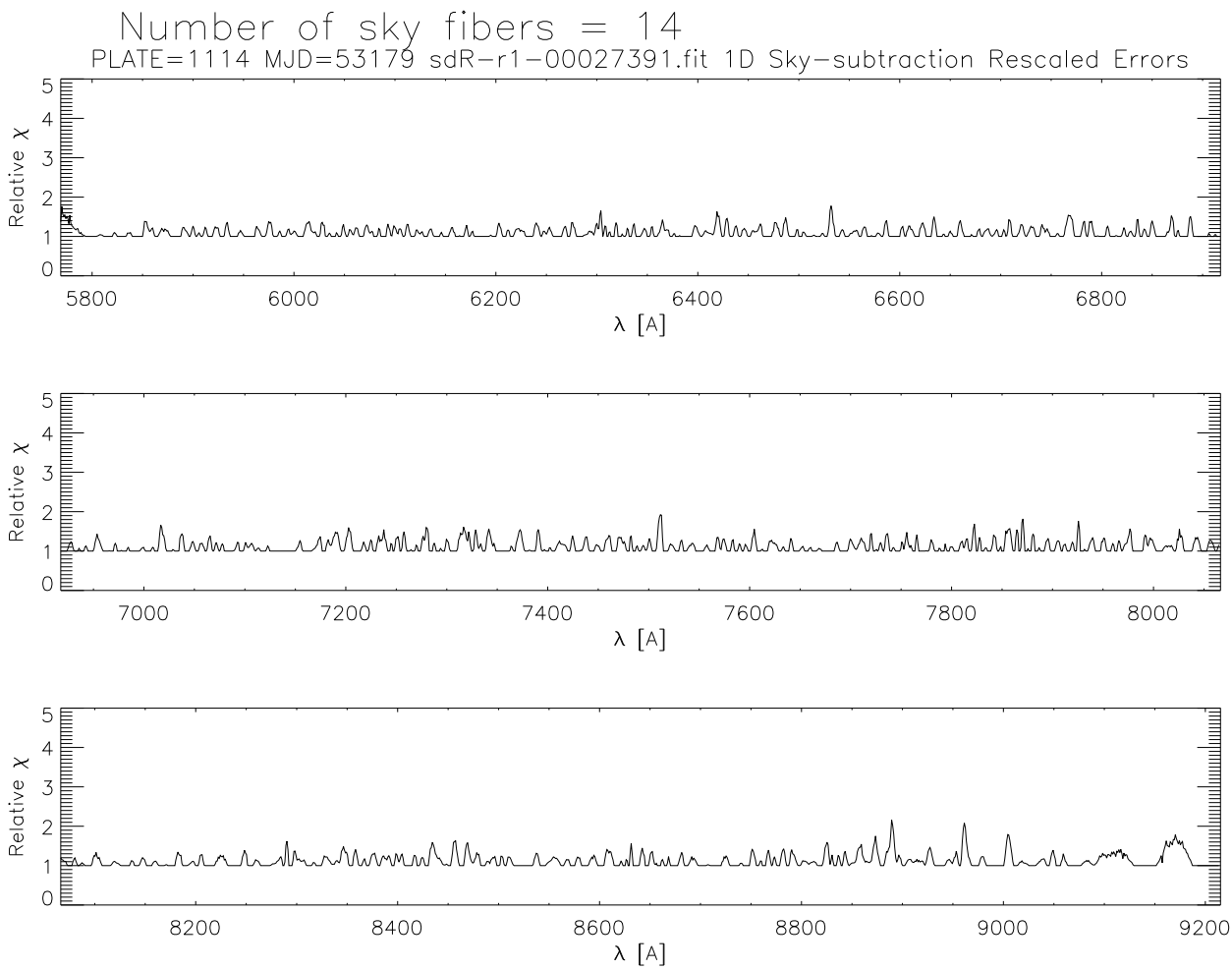
es= 0.0000

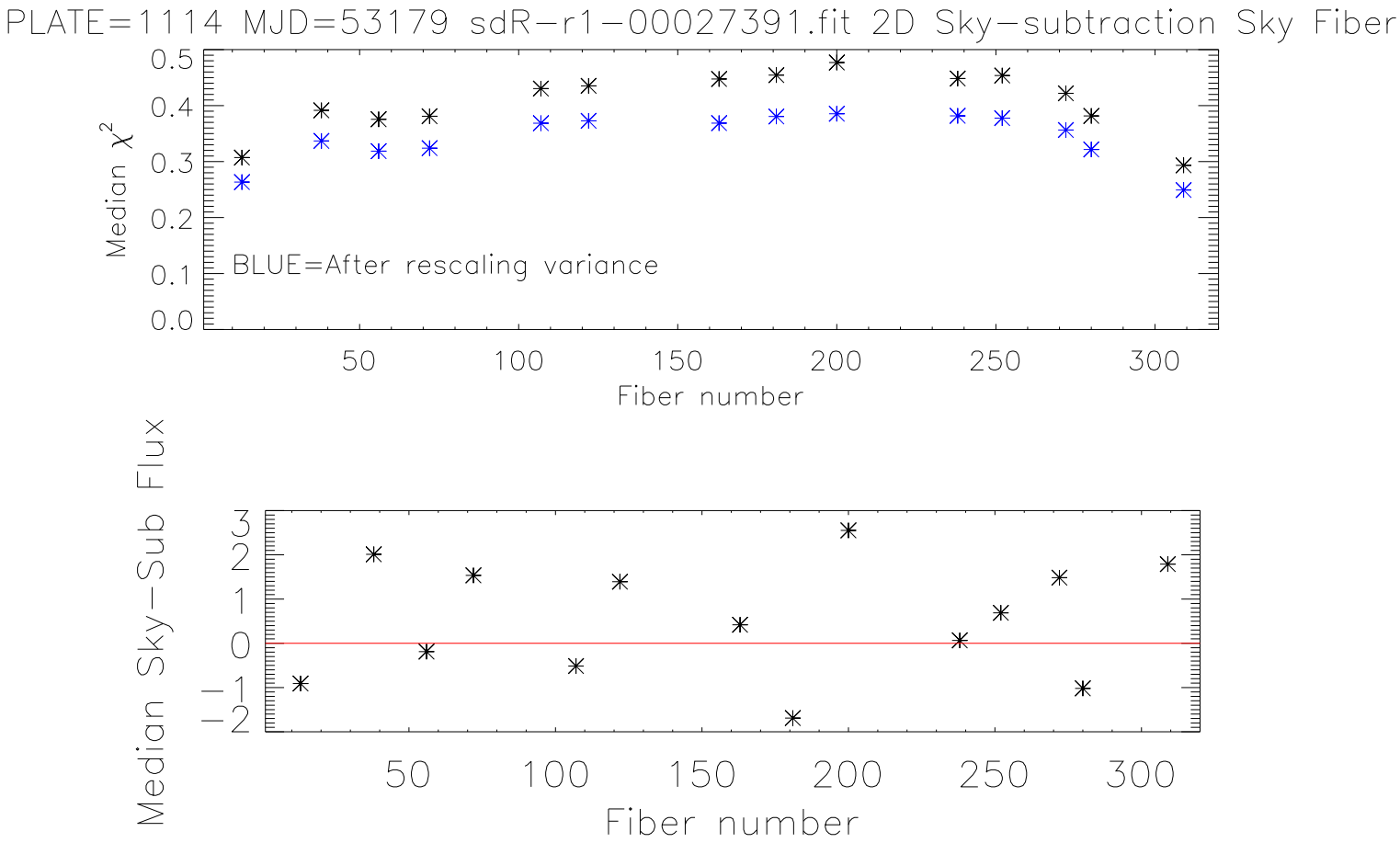

PLATE=1114 MJD=53179 Smooth superflat for sdR-r1-00027391.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

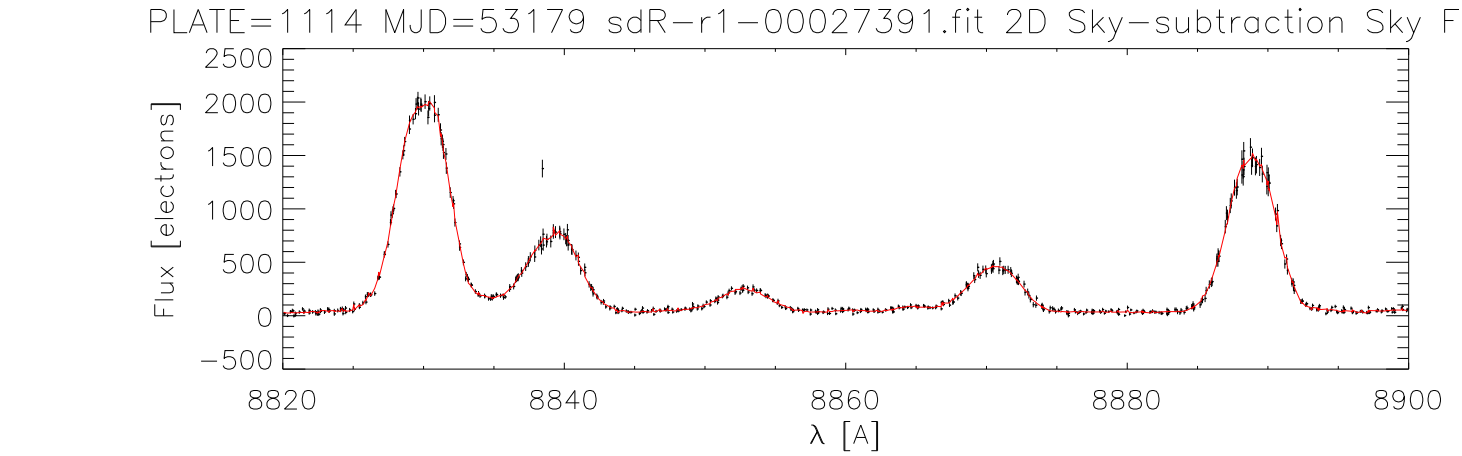

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

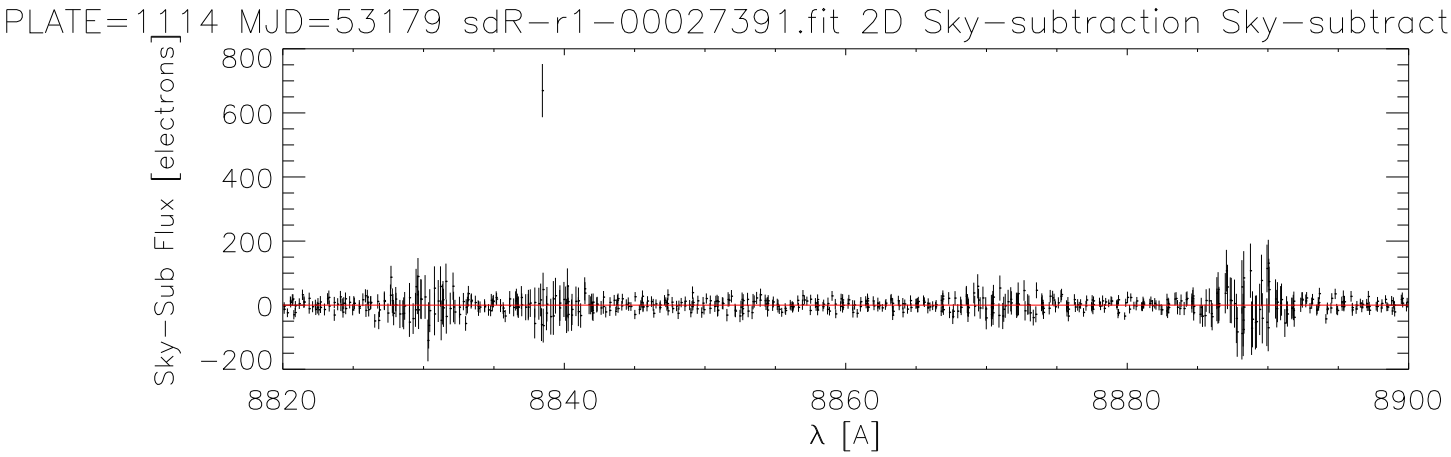

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

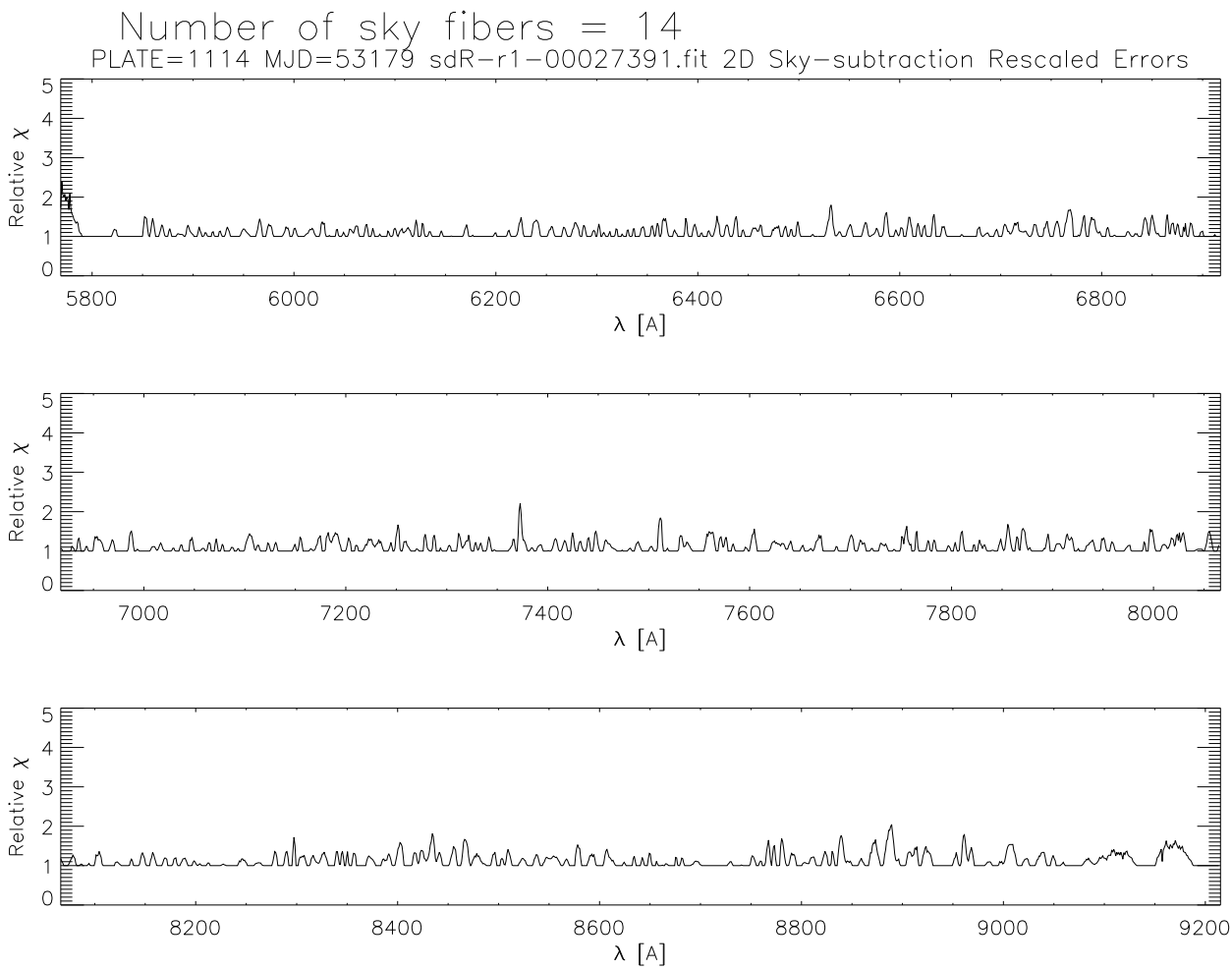

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

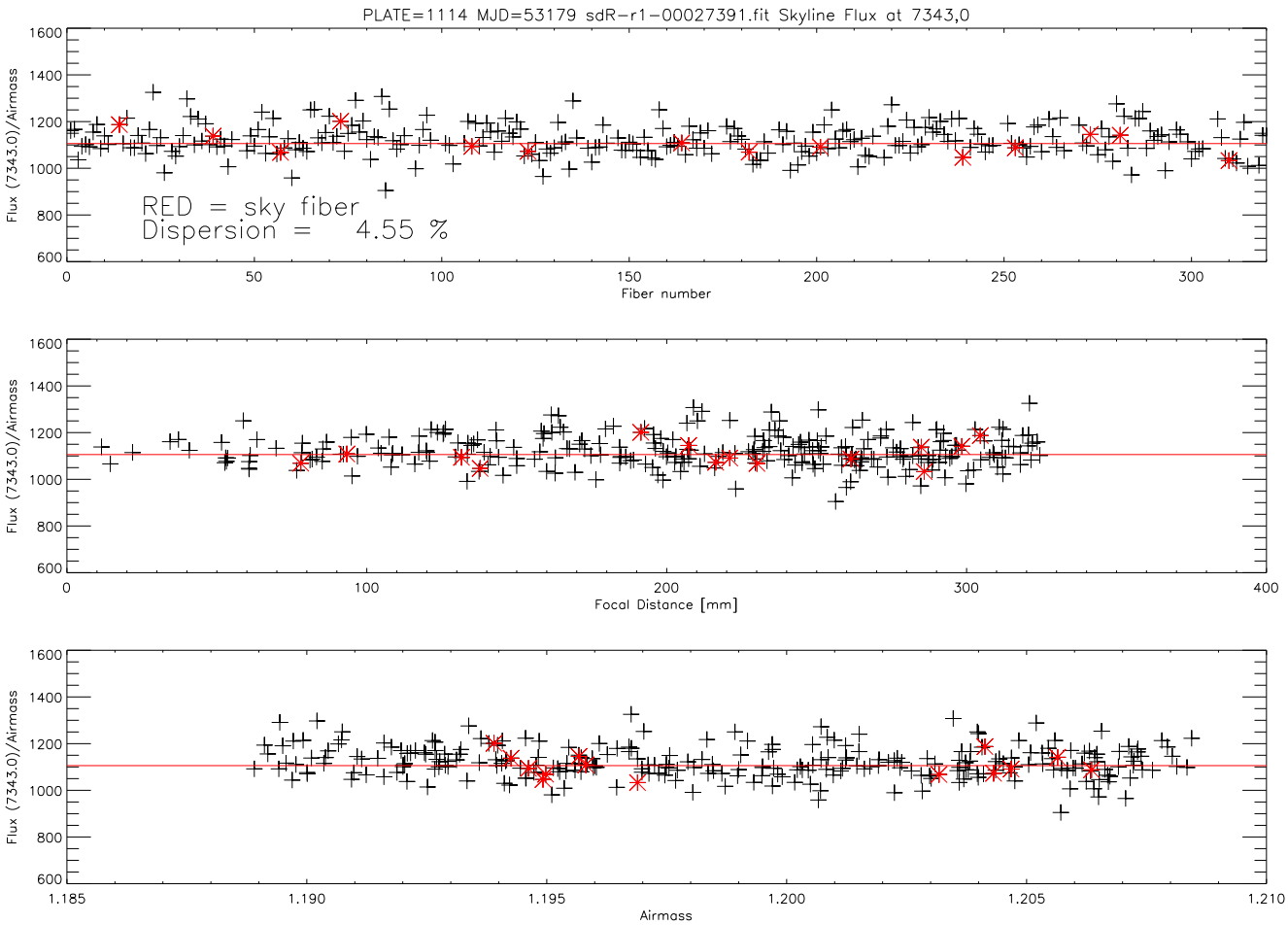

Number of sky fibers = 14
PLATE=1114 MJD=53179 sdR-r1-00027391.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

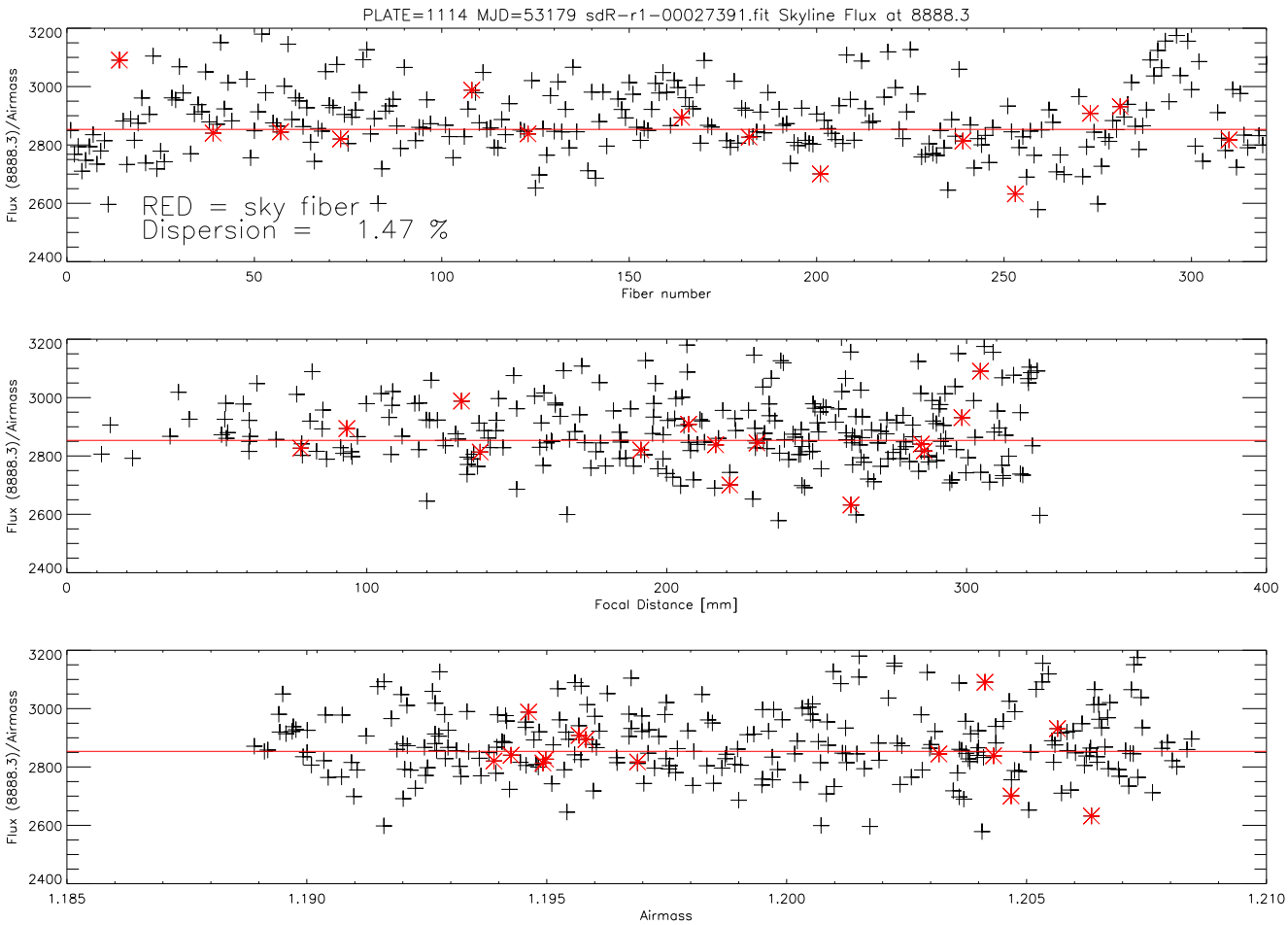

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

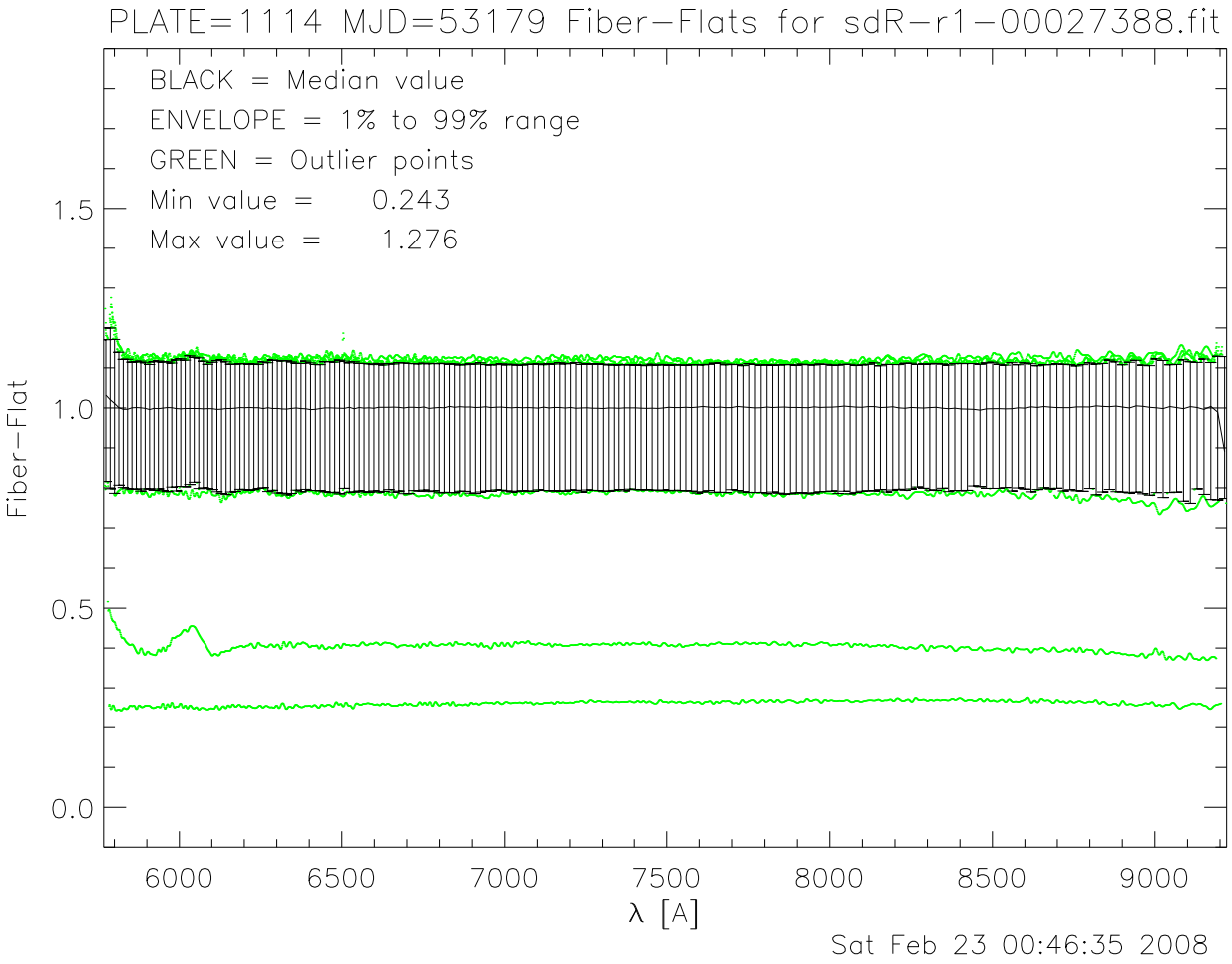

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

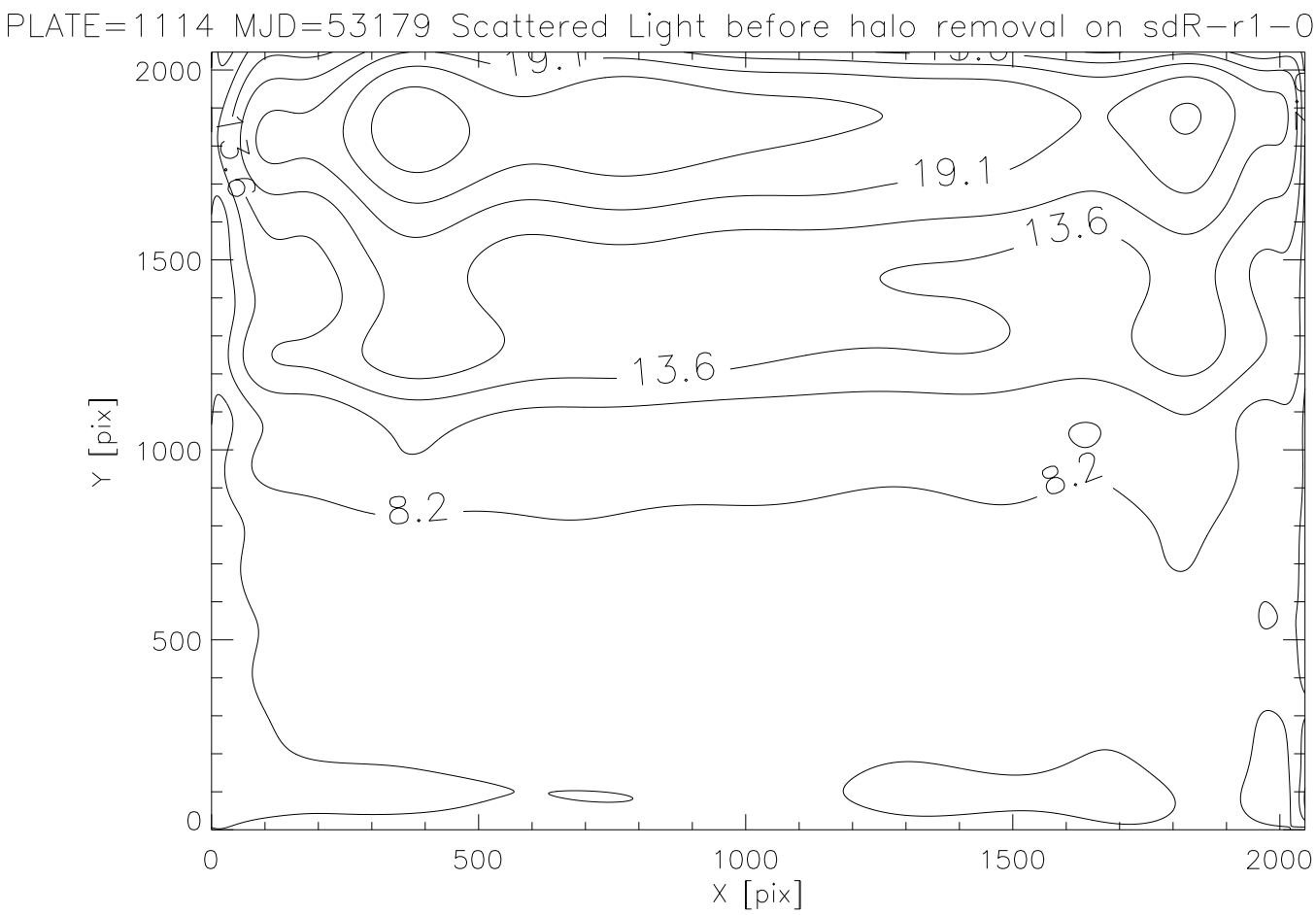

PLATE=1114 MJD=53179 sdR-r1-00027391.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

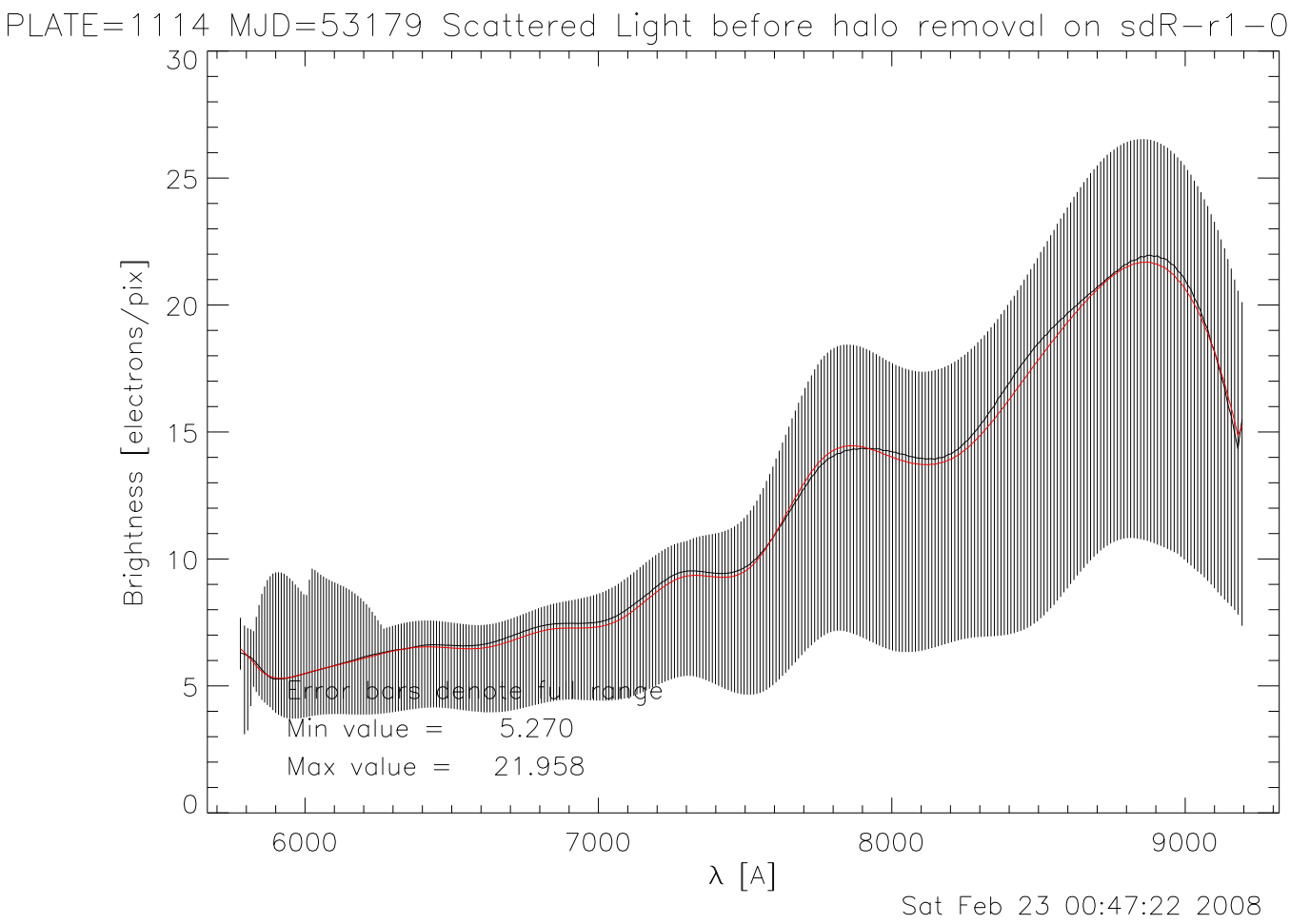

Number of sky fibers = 14
PLATE=1114 MJD=53179 sdR-r1-00027391.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

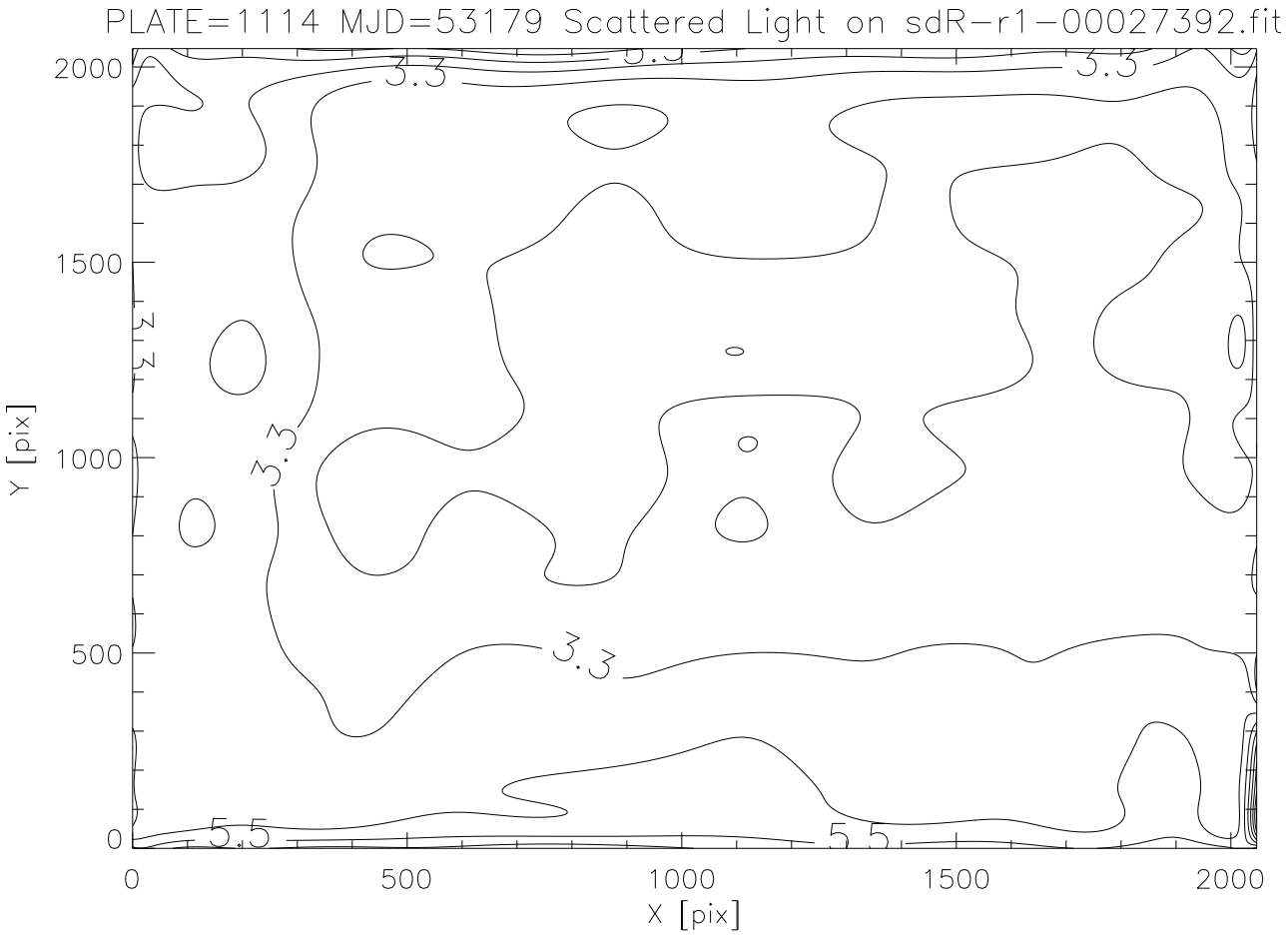

PLATE=1114 MJD=53179 sdR-r1-00027391.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.55 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

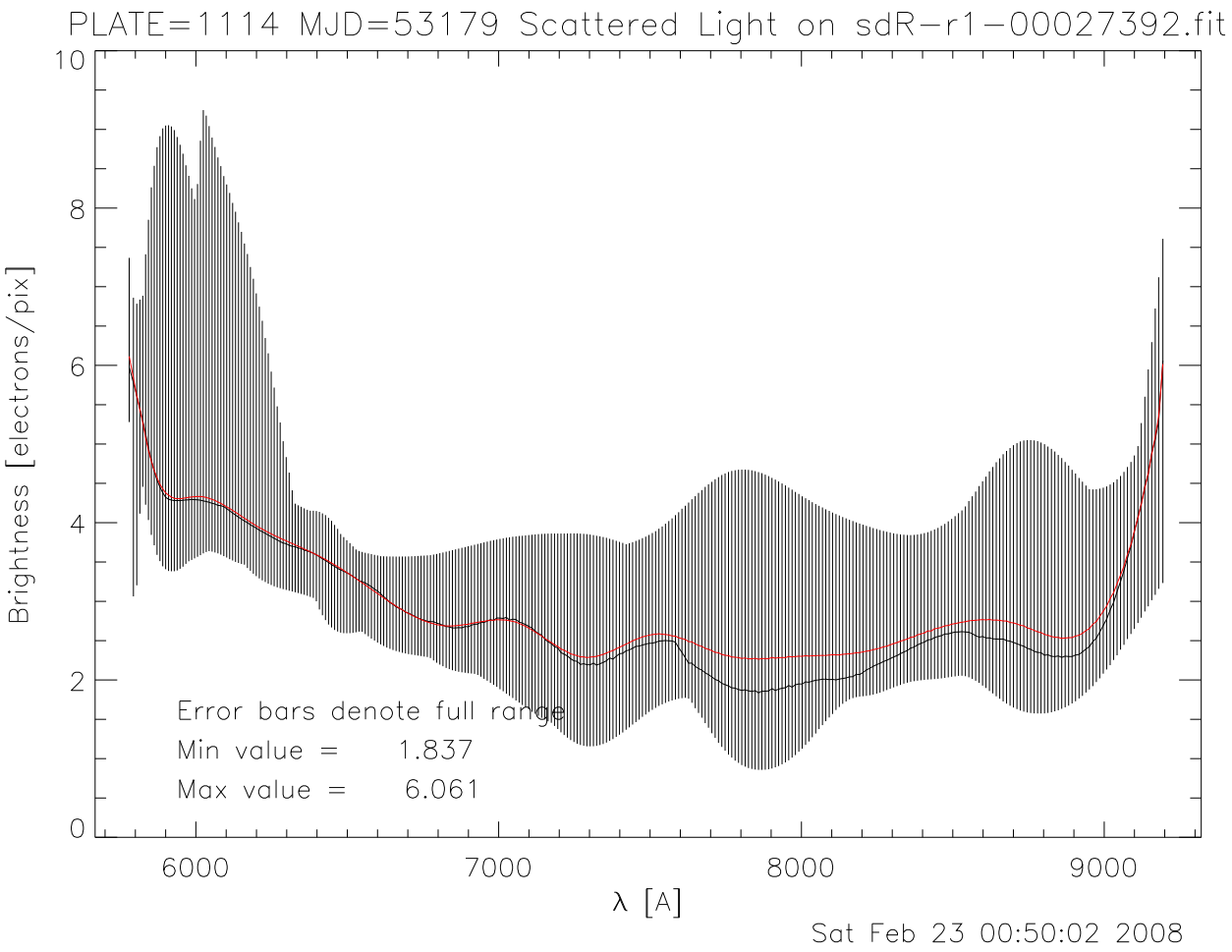

PLATE=1114 MJD=53179 sdR-r1-00027391.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 1.47 %
Flux (8888.3)/Airmass
Fiber number
Focal Distance [mm]
Airmass

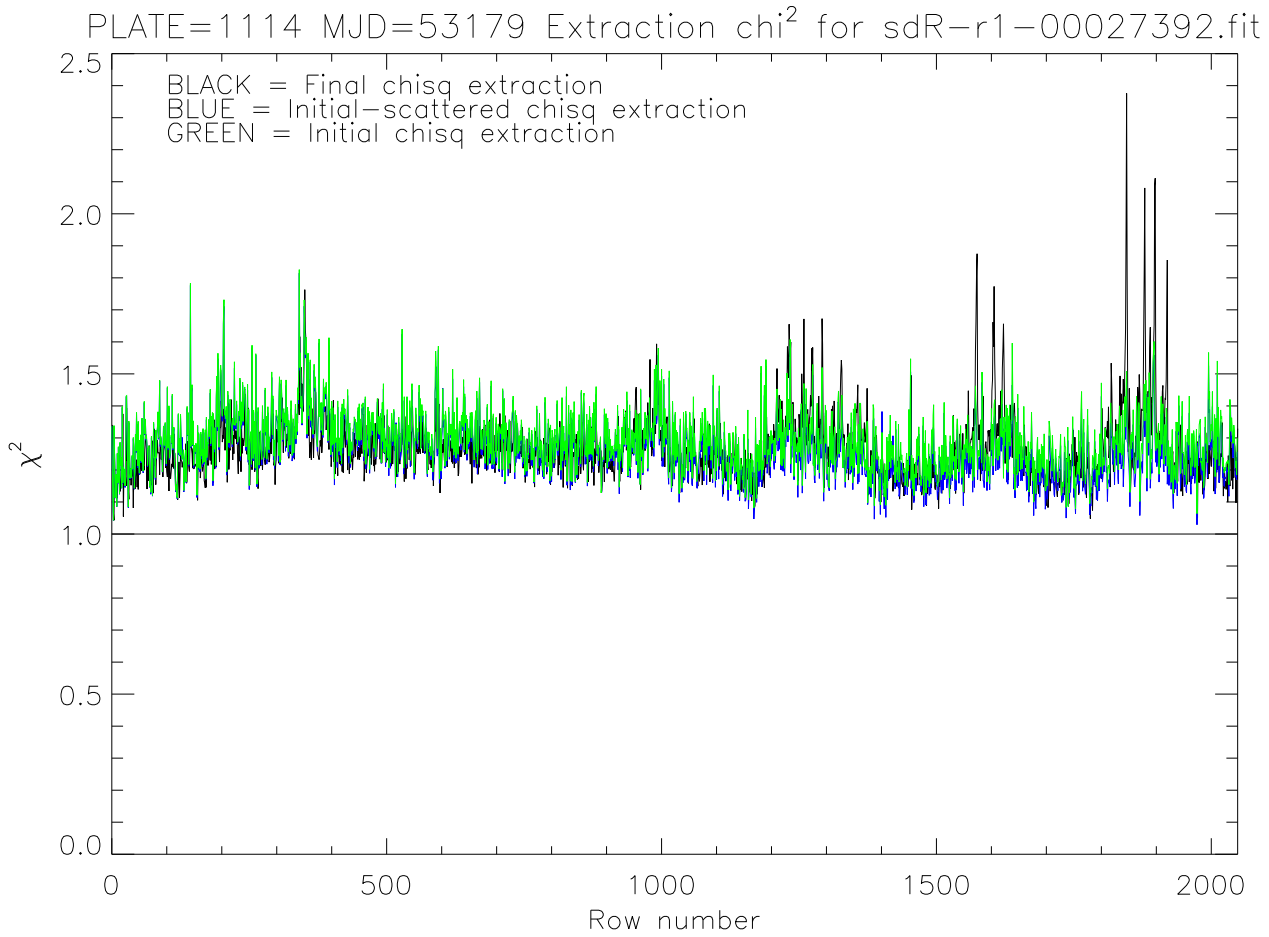

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r1−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.243
Max value = 1.276
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 00:46:35 2008

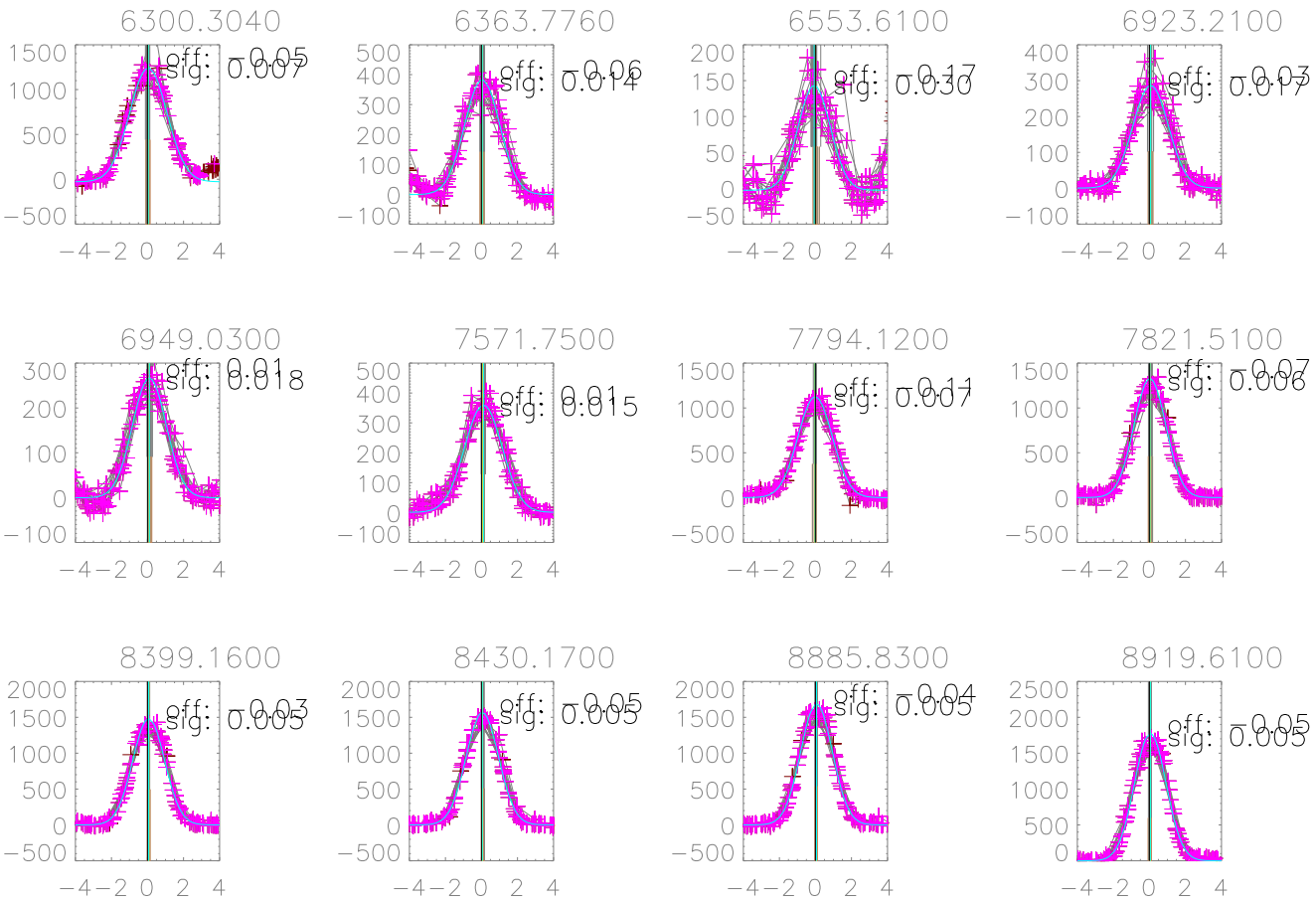

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027392.fi
19.1
13.6
8.2
0
Y [pix]
X [pix]
0
500
1000
1500
2000

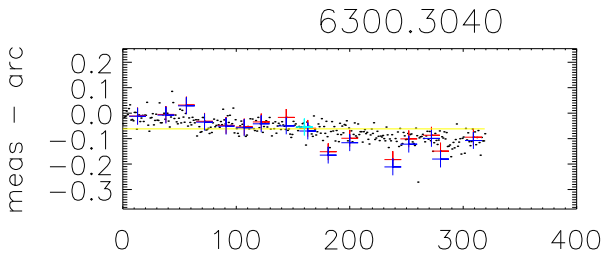

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r1-00027392.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.270
Max value = 21.958
Sat Feb 23 00:47:22 2008

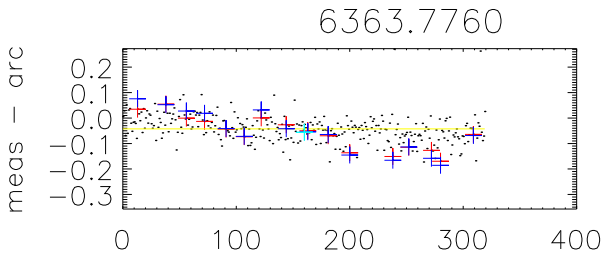

PLATE=1114 MJD=53179 Scattered Light on sdR-r1-00027392.fit
3.3
3.3
3.3
3.3
3.3
5.5
5.5
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

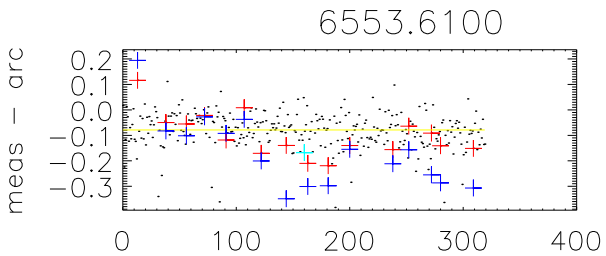

PLATE=1114 MJD=53179 Scattered Light on sdR-r1-00027392.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.837
Max value = 6.061
Sat Feb 23 00:50:02 2008

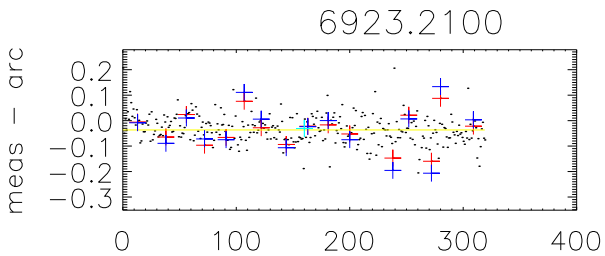

PLATE=1114 MJD=53179 Extraction chi^2 for sdR−r1−00027392.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

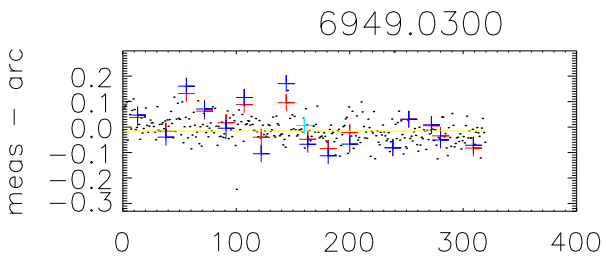

6300.3040
off: −0.05
sig: 0.007
6363.7760
off: −0.06
sig: 0.014
6553.6100
off: −0.17
sig: 0.030
6923.2100
off: −0.03
sig: 0.017
6949.0300
off: 0.01
sig: 0.018
7571.7500
off: 0.01
sig: 0.015
7794.1200
off: −0.11
sig: 0.007
7821.5100
off: −0.07
sig: 0.006
8399.1600
off: −0.03
sig: 0.005
8430.1700
off: −0.05
sig: 0.005
8885.8300
off: −0.04
sig: 0.005
8919.6100
off: −0.05
sig: 0.005

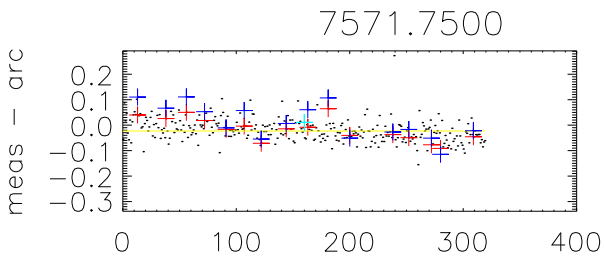

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

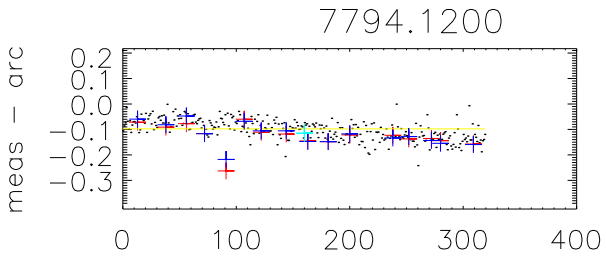

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

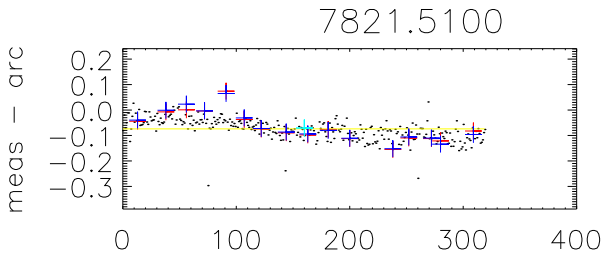

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

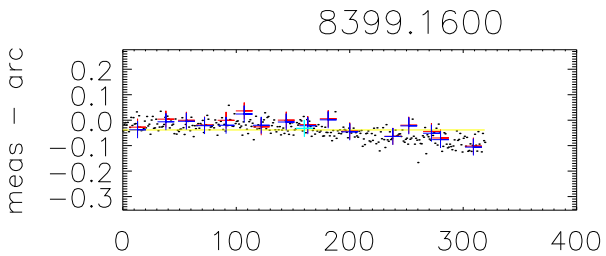

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

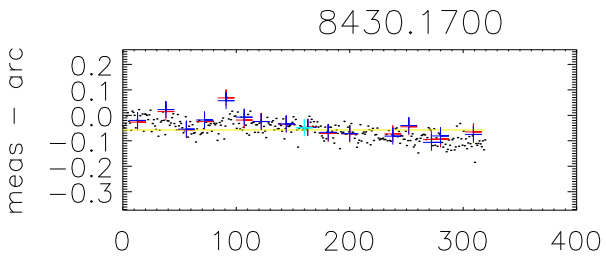

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

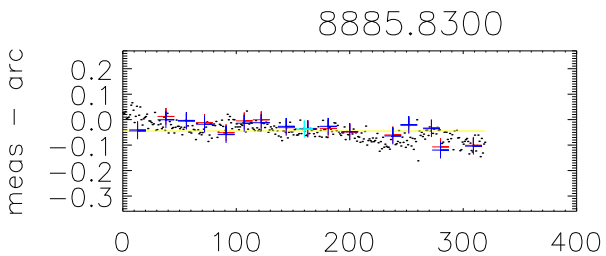

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

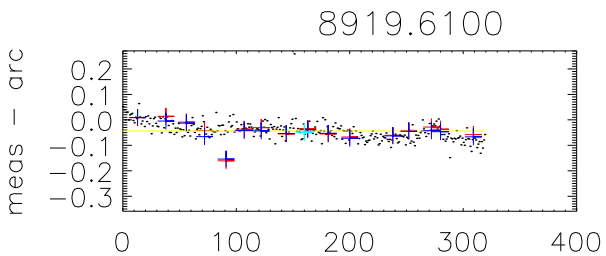

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

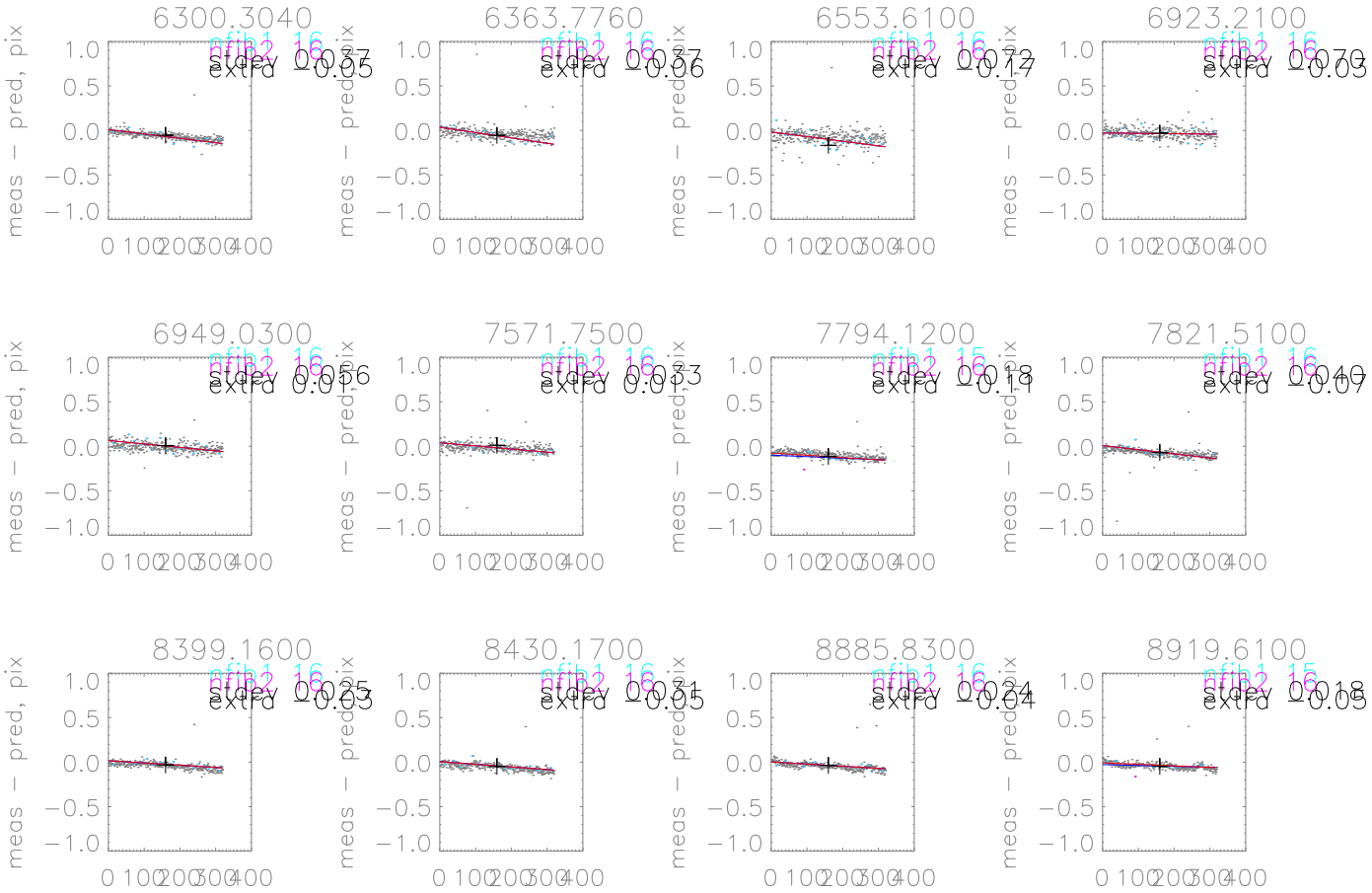

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

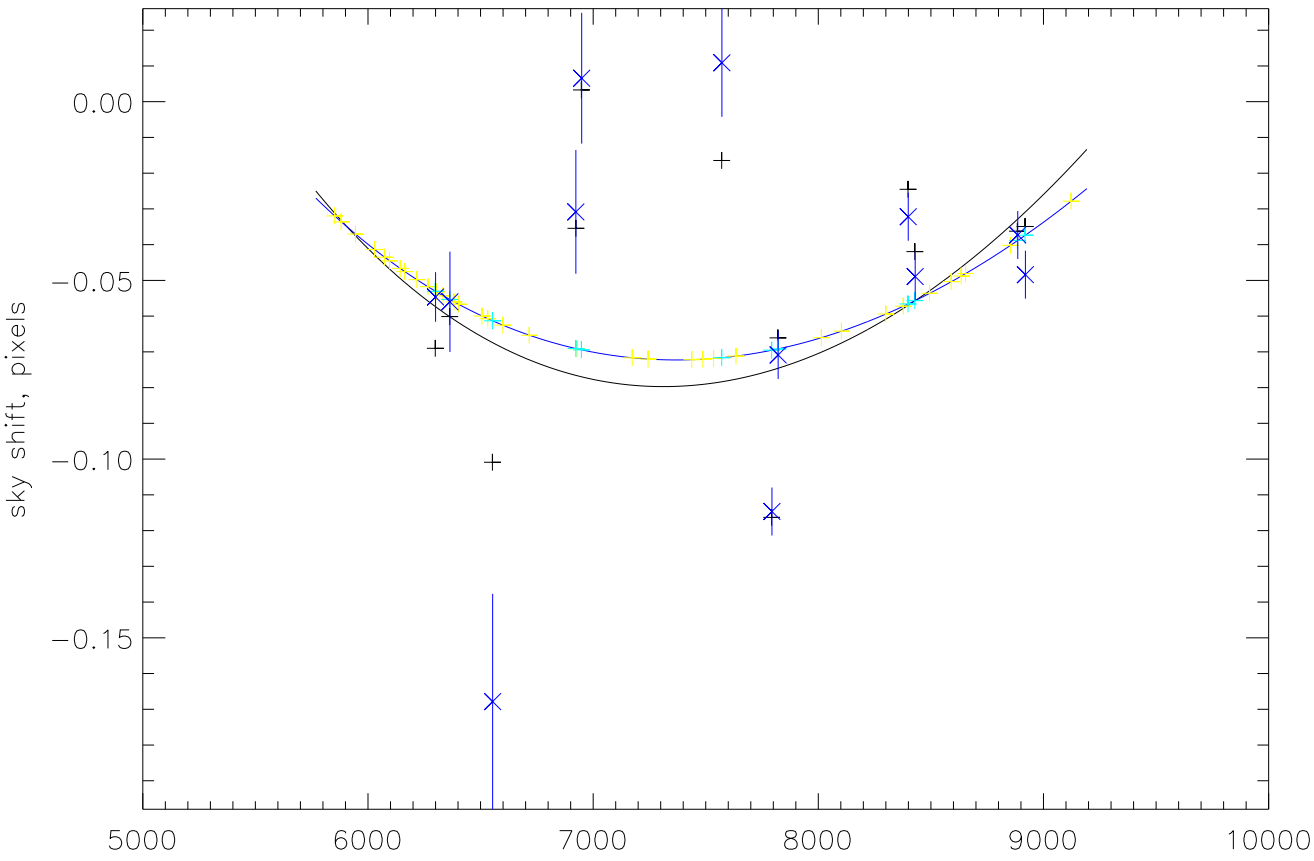

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

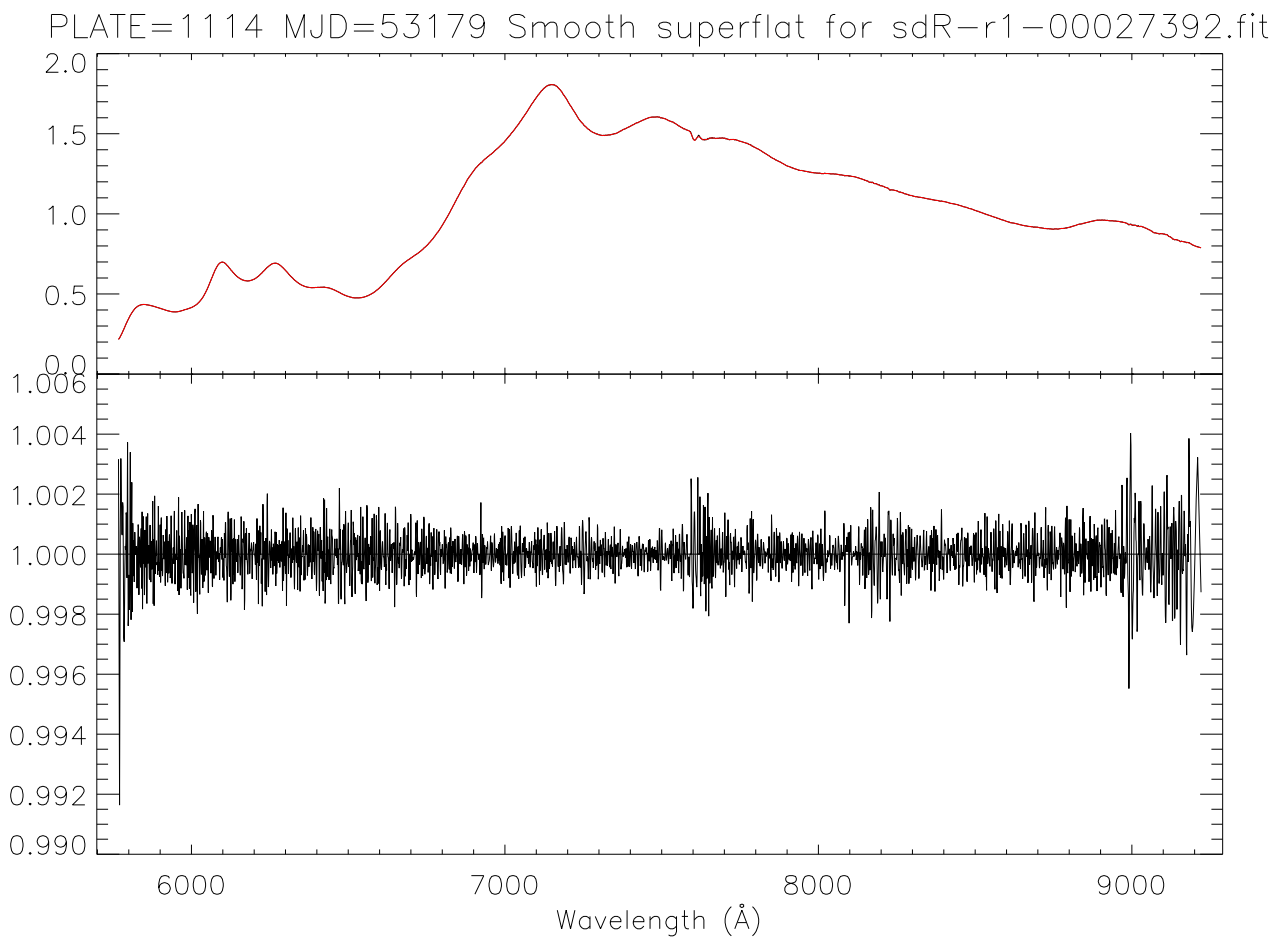

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

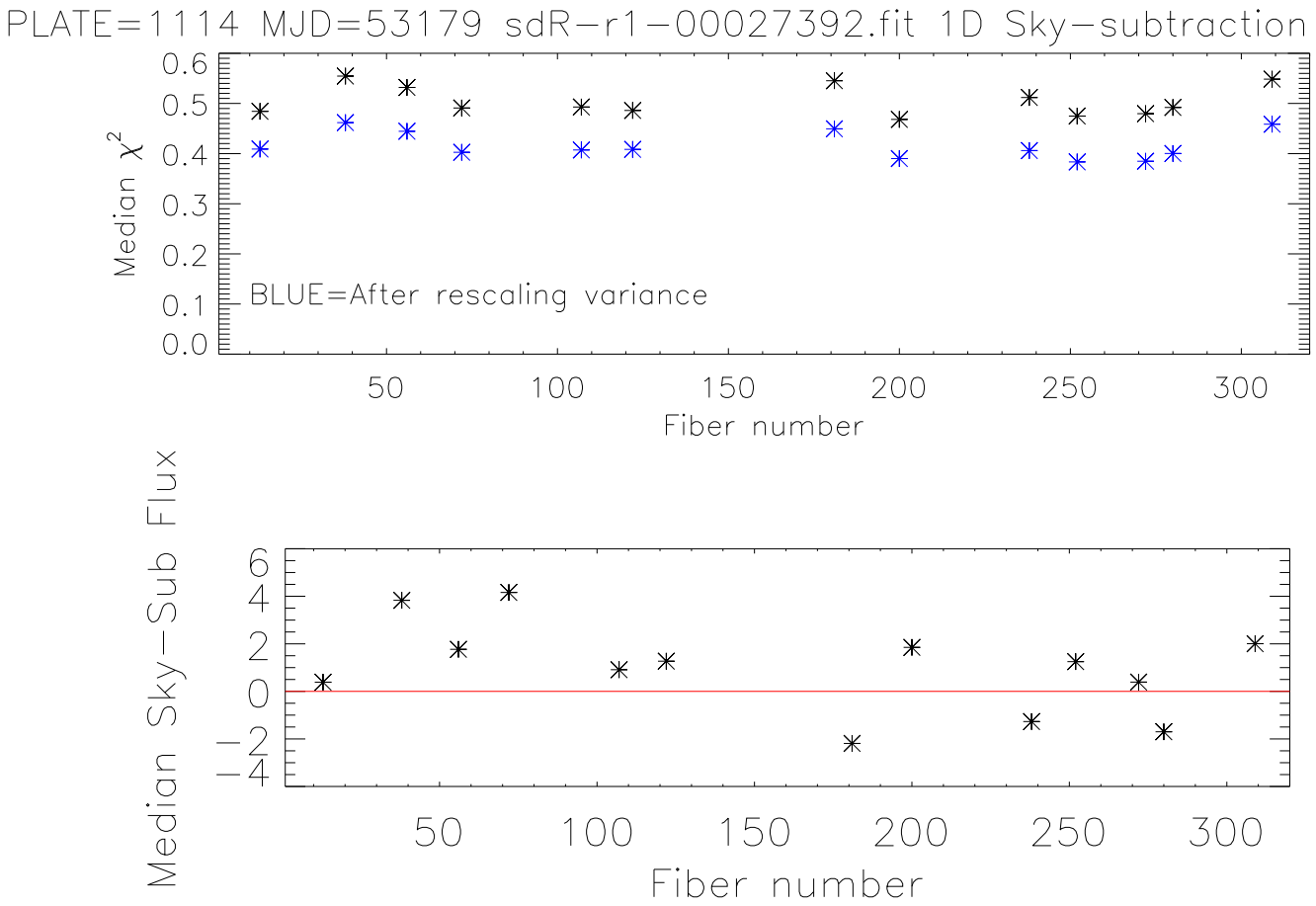

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

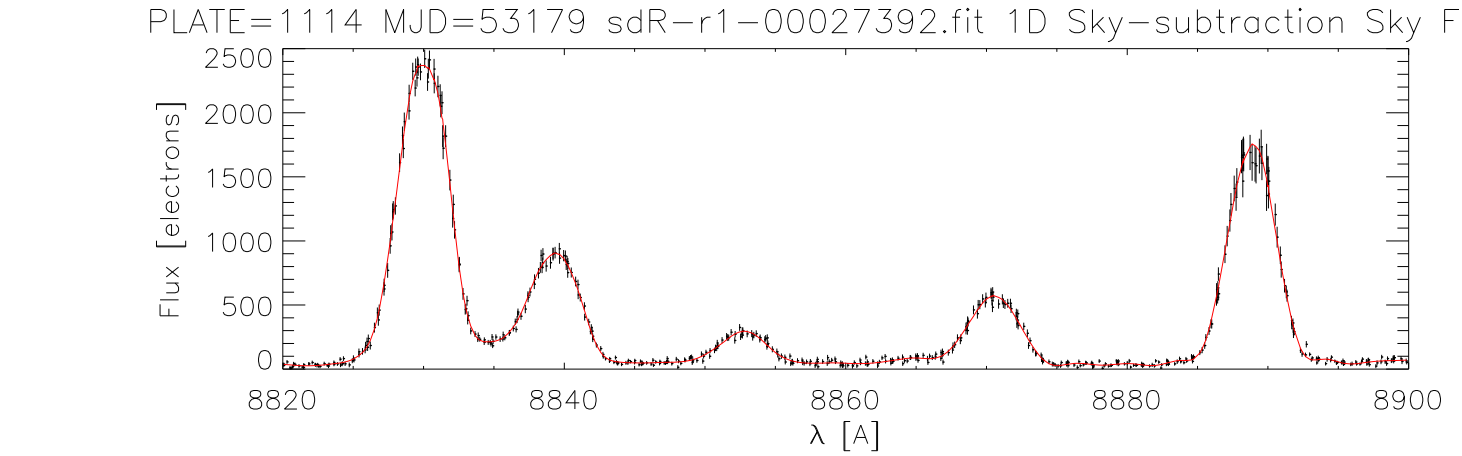

6300.3040
stdev 0.037
extra 0.05
6363.7760
stdev 0.037
extra 0.06
6553.6100
stdev 0.072
extra 0.17
6923.2100
stdev 0.070
extra 0.03
6949.0300
stdev 0.056
extra 0.01
7571.7500
stdev 0.033
extra 0.01
7794.1200
stdev 0.018
extra 0.01
7821.5100
stdev 0.040
extra 0.07
8399.1600
stdev 0.025
extra 0.03
8430.1700
stdev 0.031
extra 0.05
8885.8300
stdev 0.024
extra 0.04
8919.6100
stdev 0.018
extra 0.05
meas − pred, pix

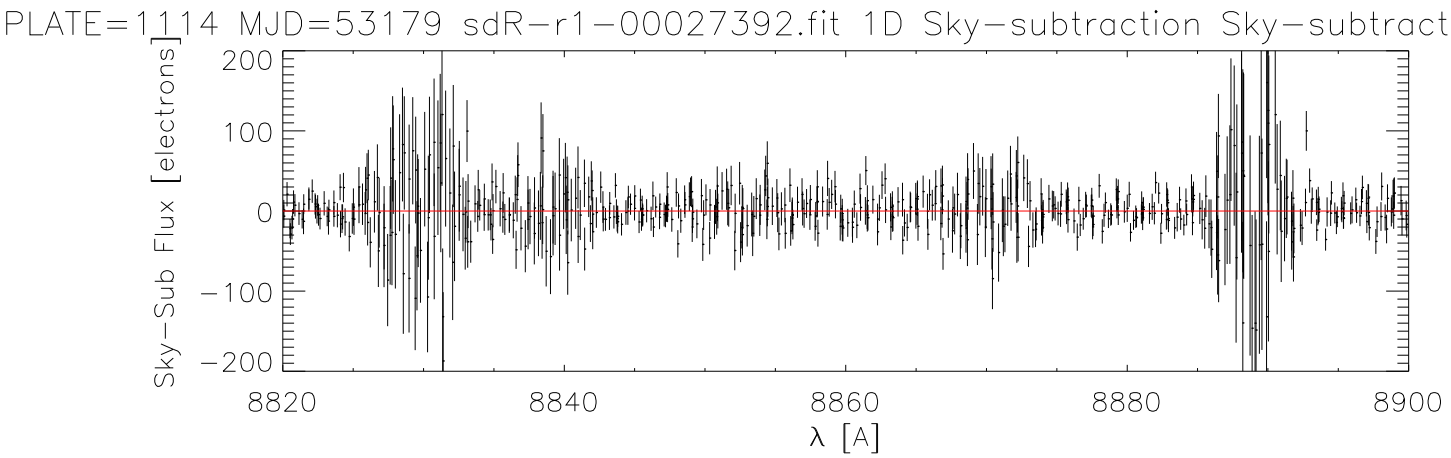

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

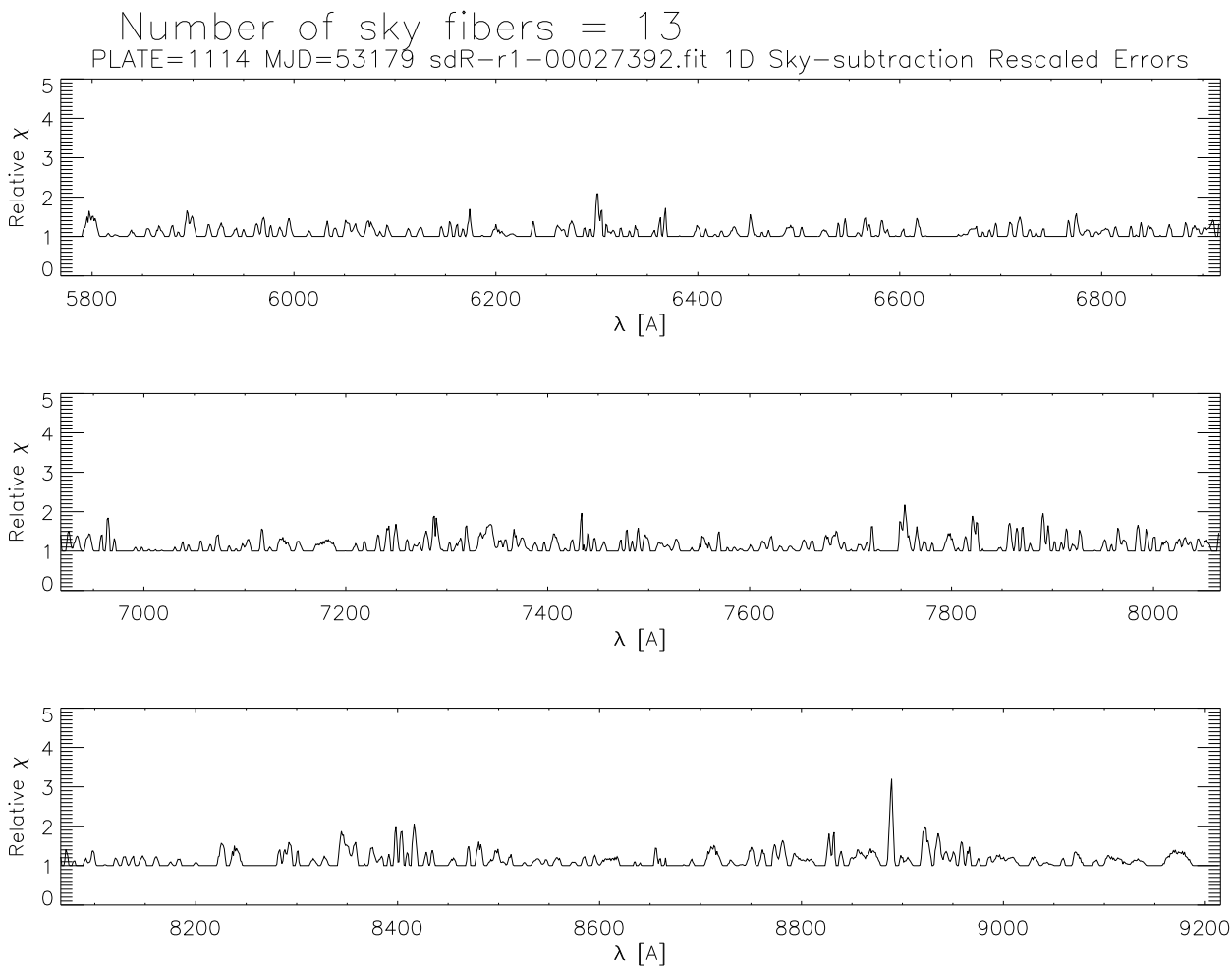
es= 0.0000

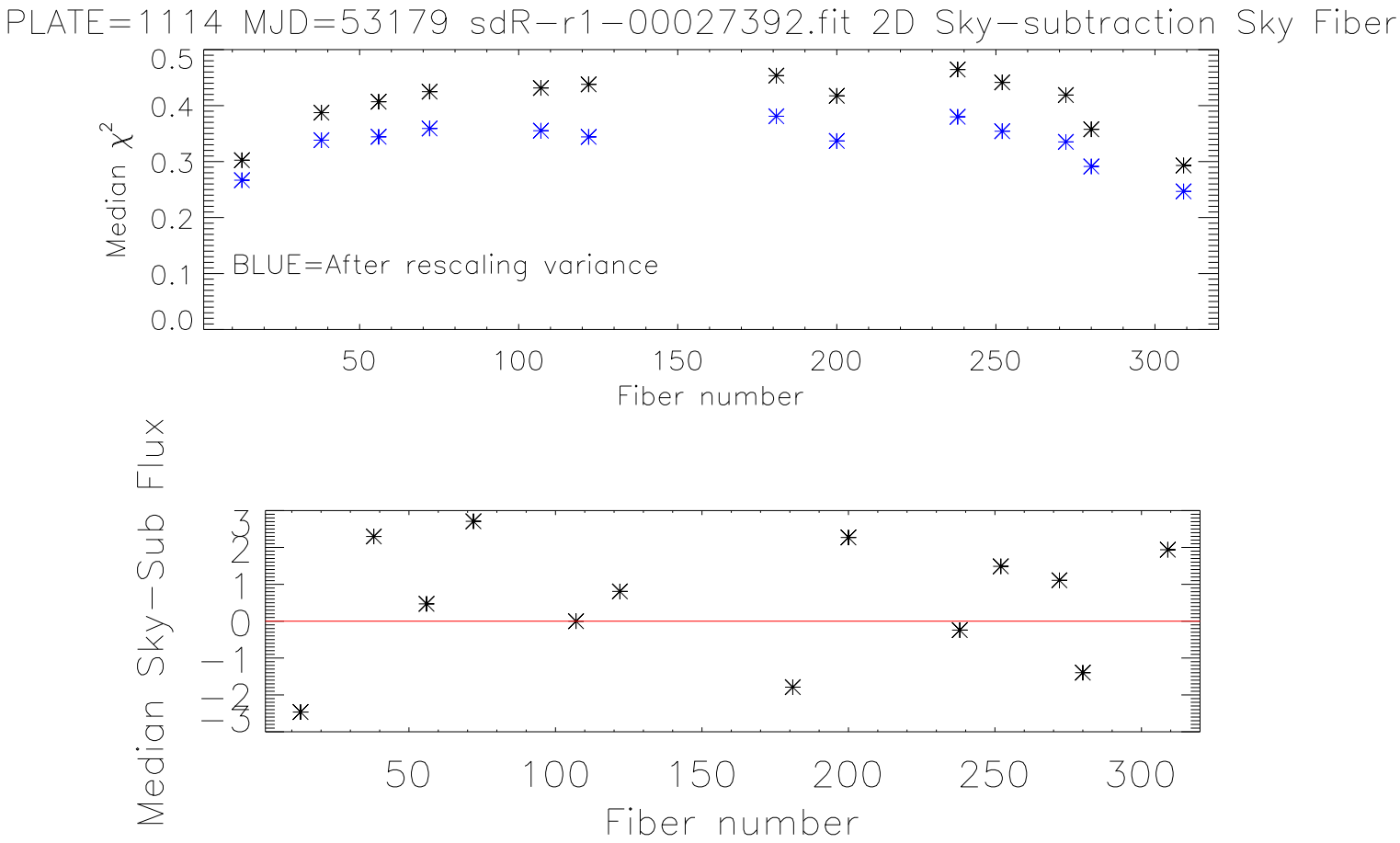

PLATE=1114 MJD=53179 Smooth superflat for sdR-r1-00027392.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
0.990
6000
7000
8000
9000
Wavelength (Å)

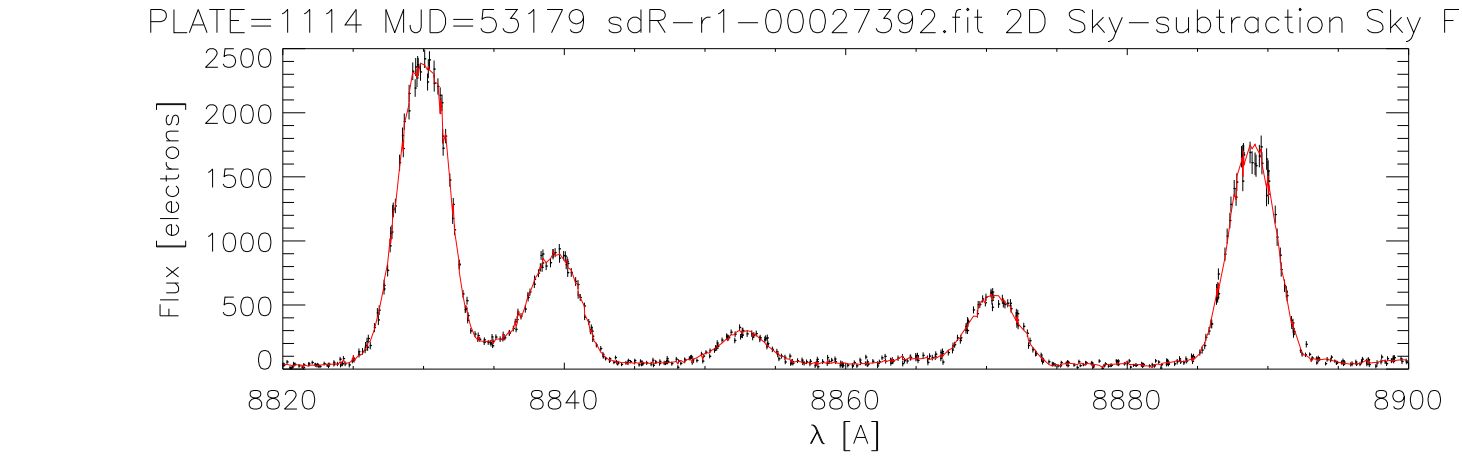

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

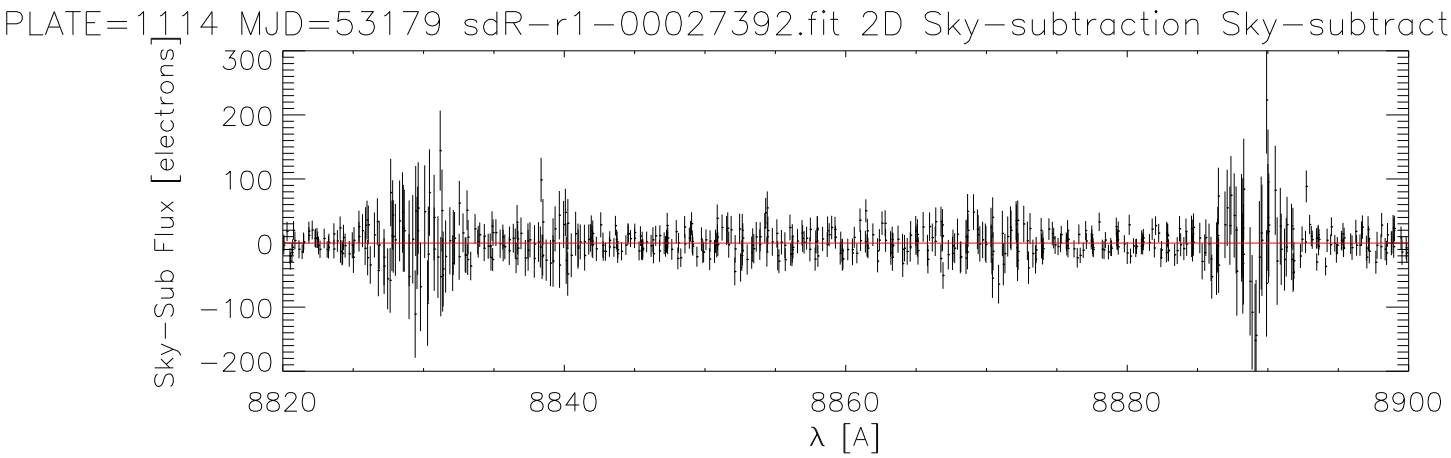

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

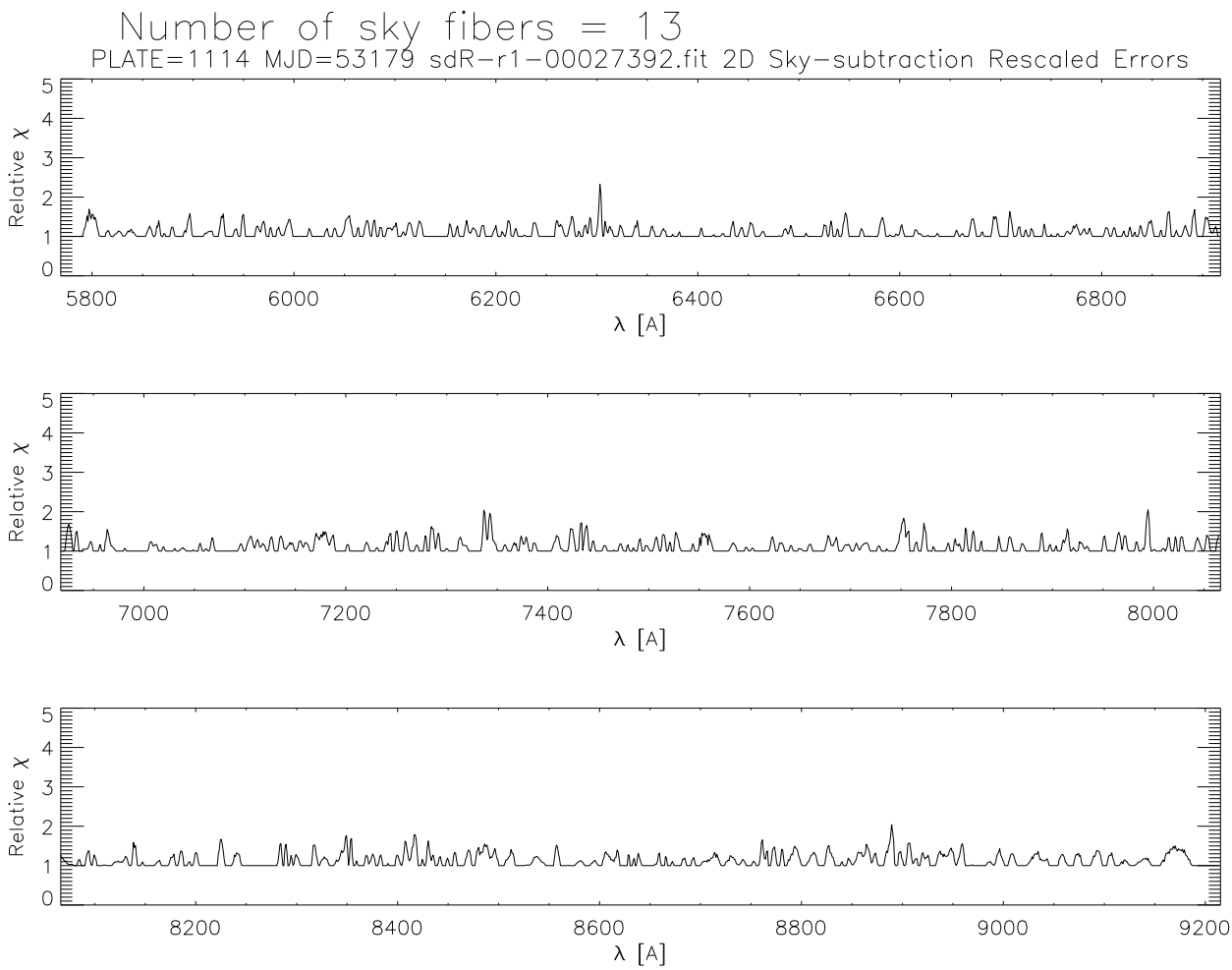

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

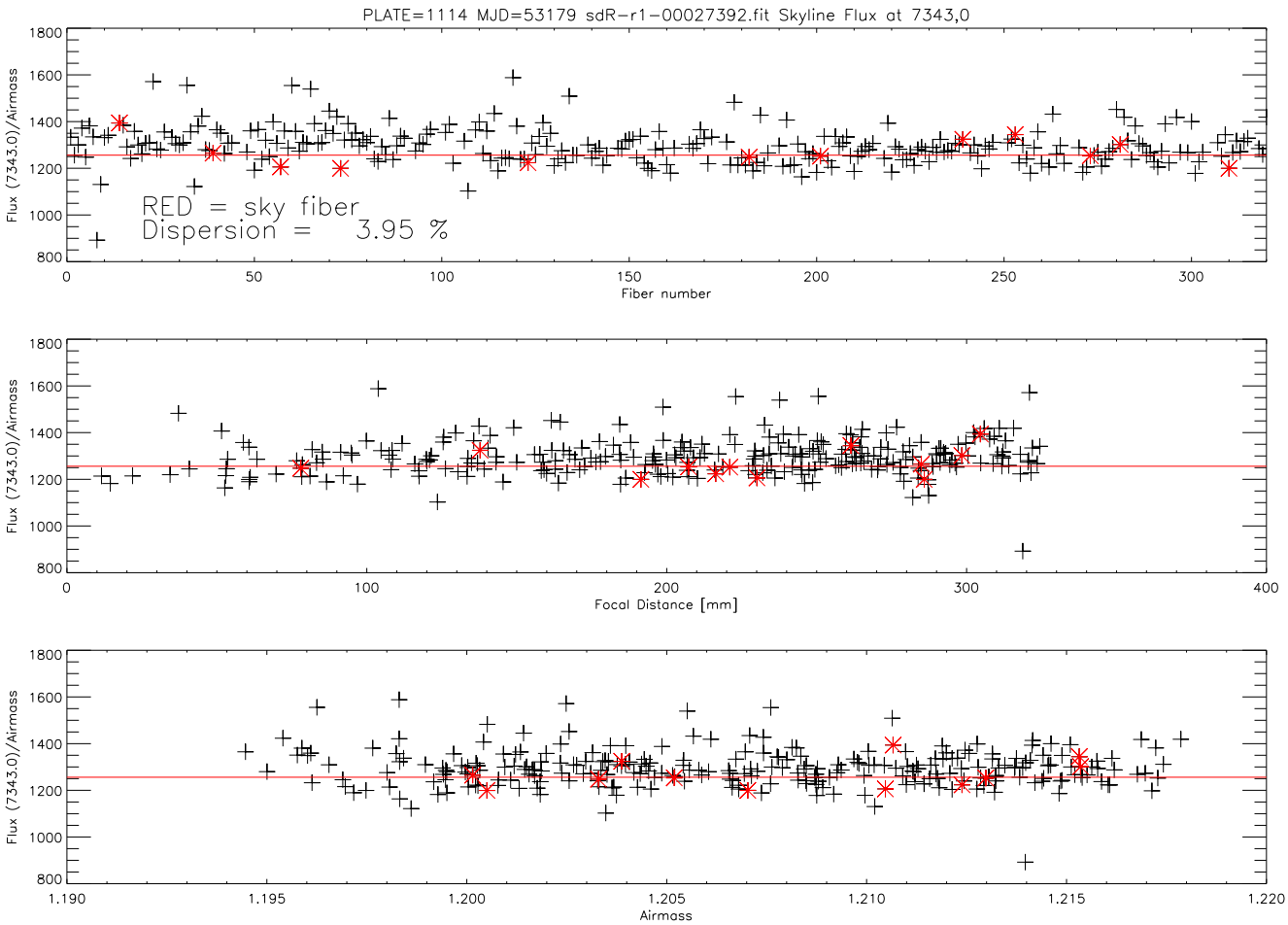

Number of sky fibers = 13
PLATE=1114 MJD=53179 sdR-r1-00027392.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

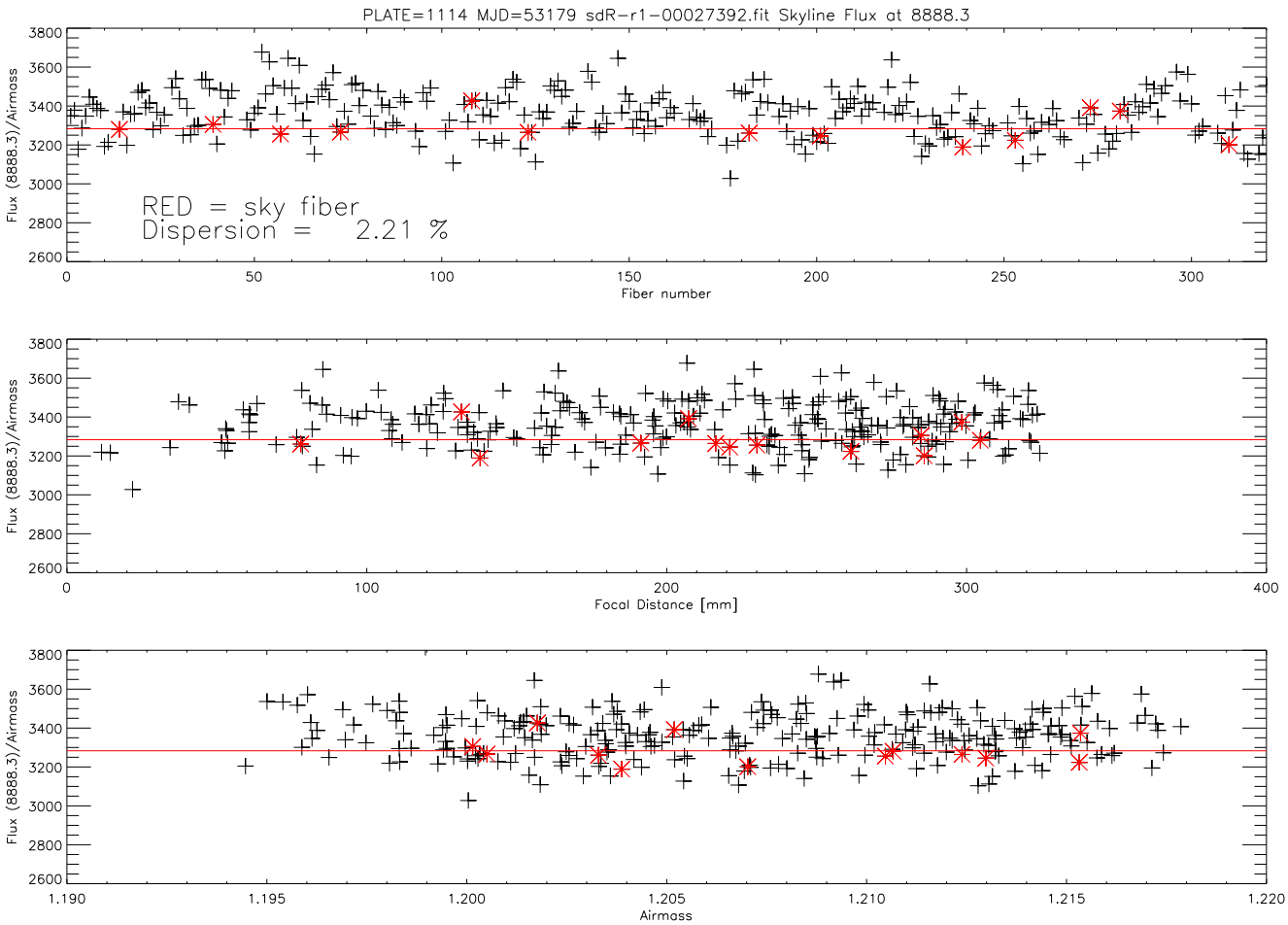

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

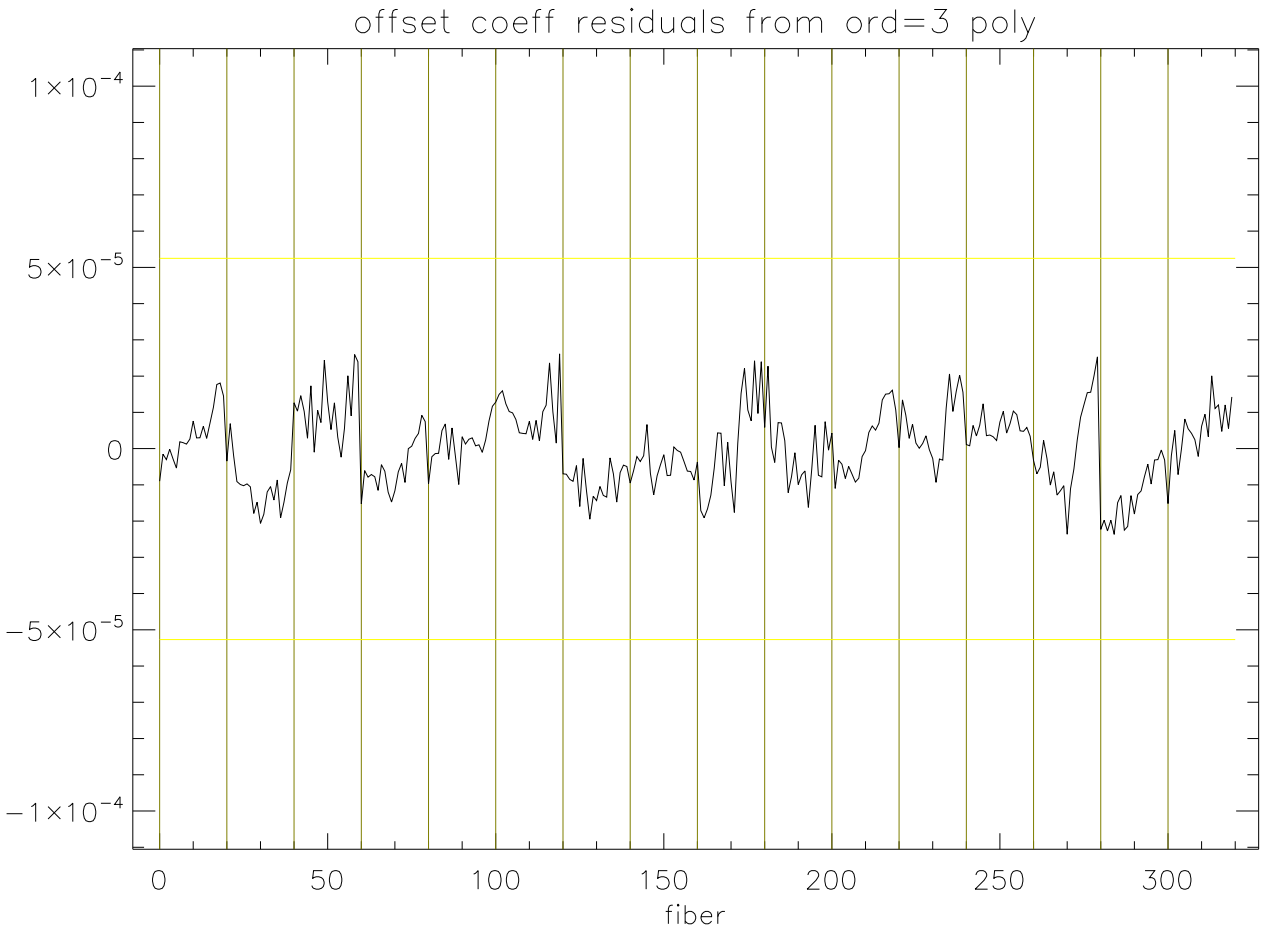

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

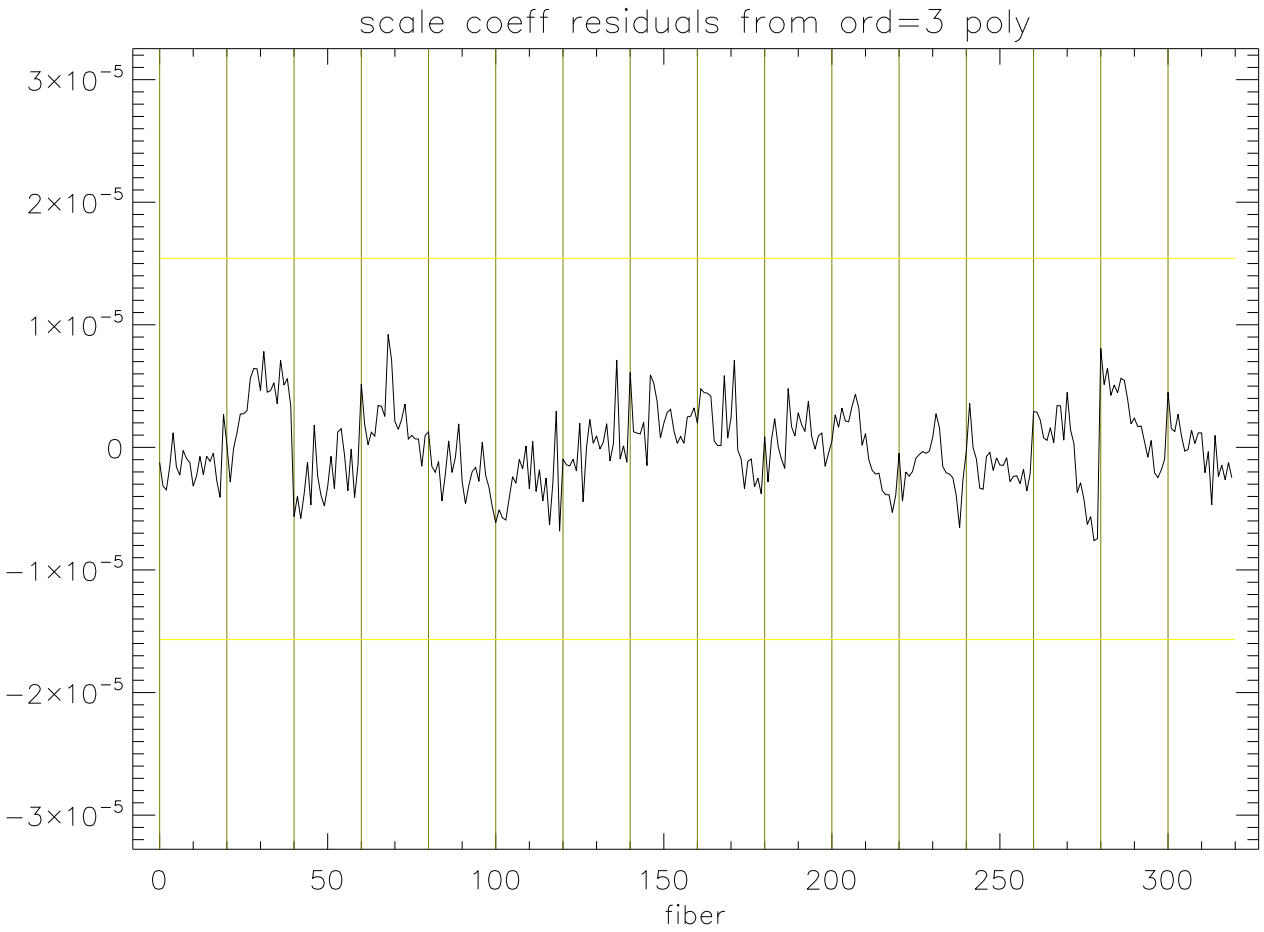

PLATE=1114 MJD=53179 sdR-r1-00027392.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

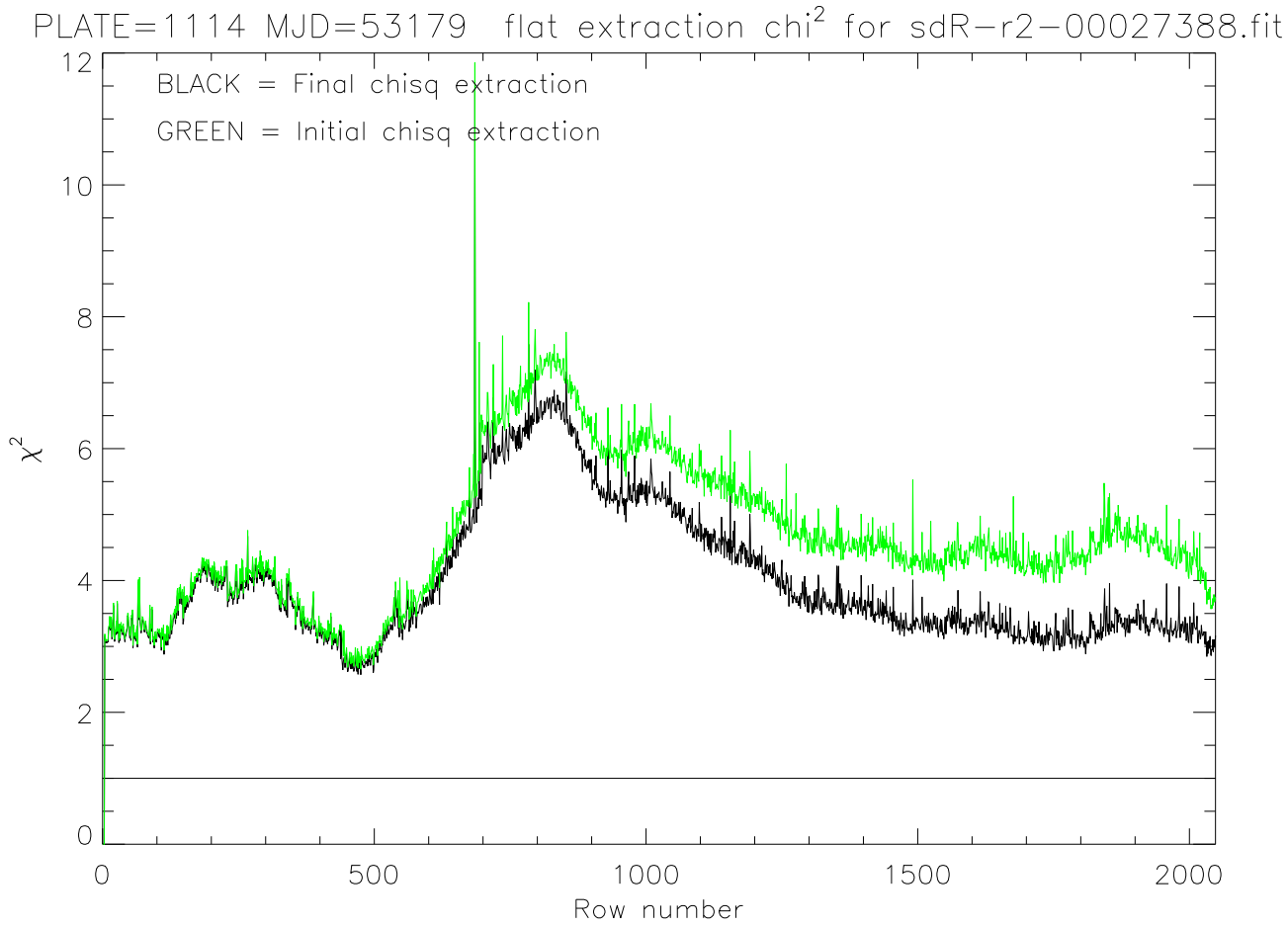

Number of sky fibers = 13
PLATE=1114 MJD=53179 sdR-r1-00027392.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

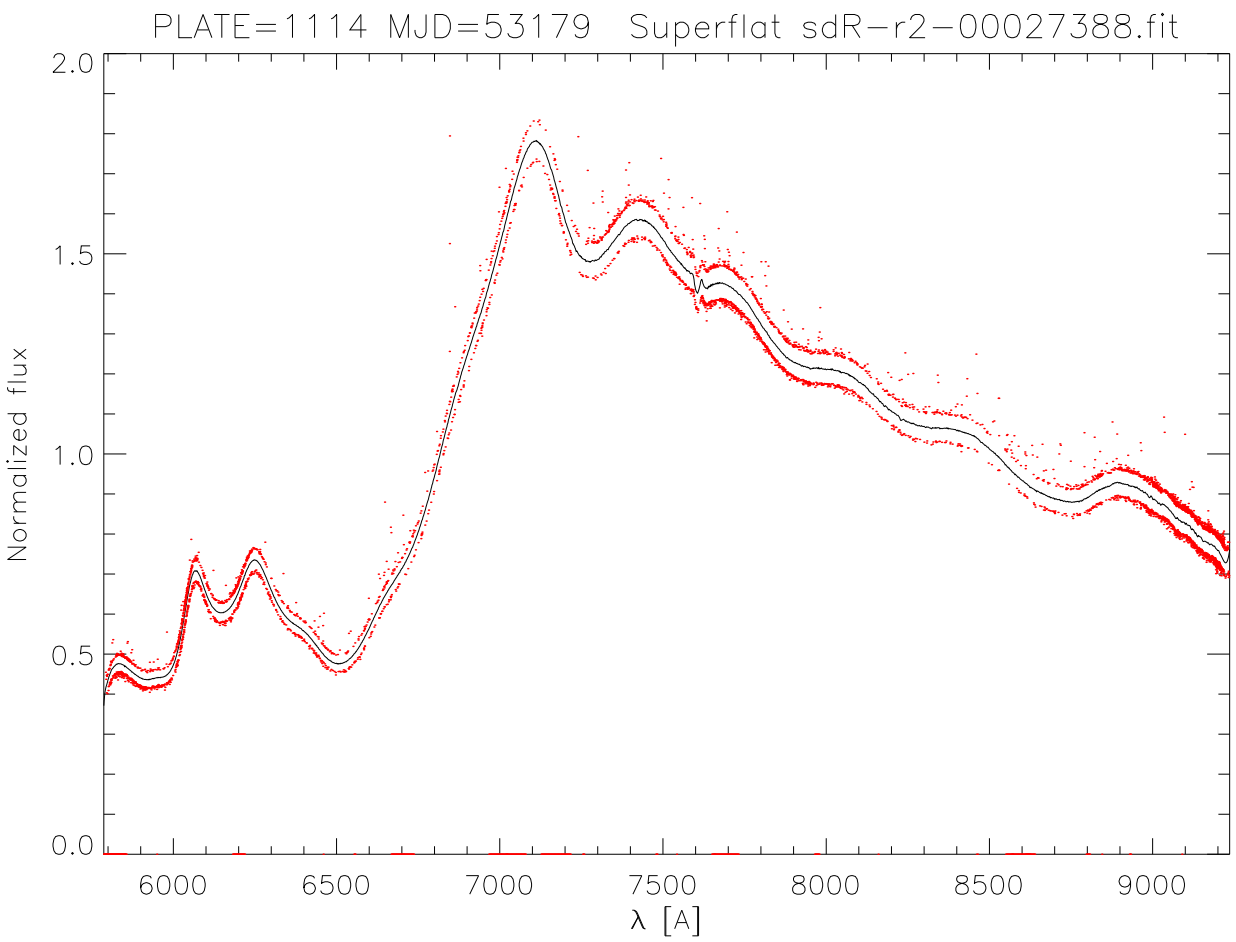

PLATE=1114 MJD=53179 sdR-r1-00027392.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.95 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

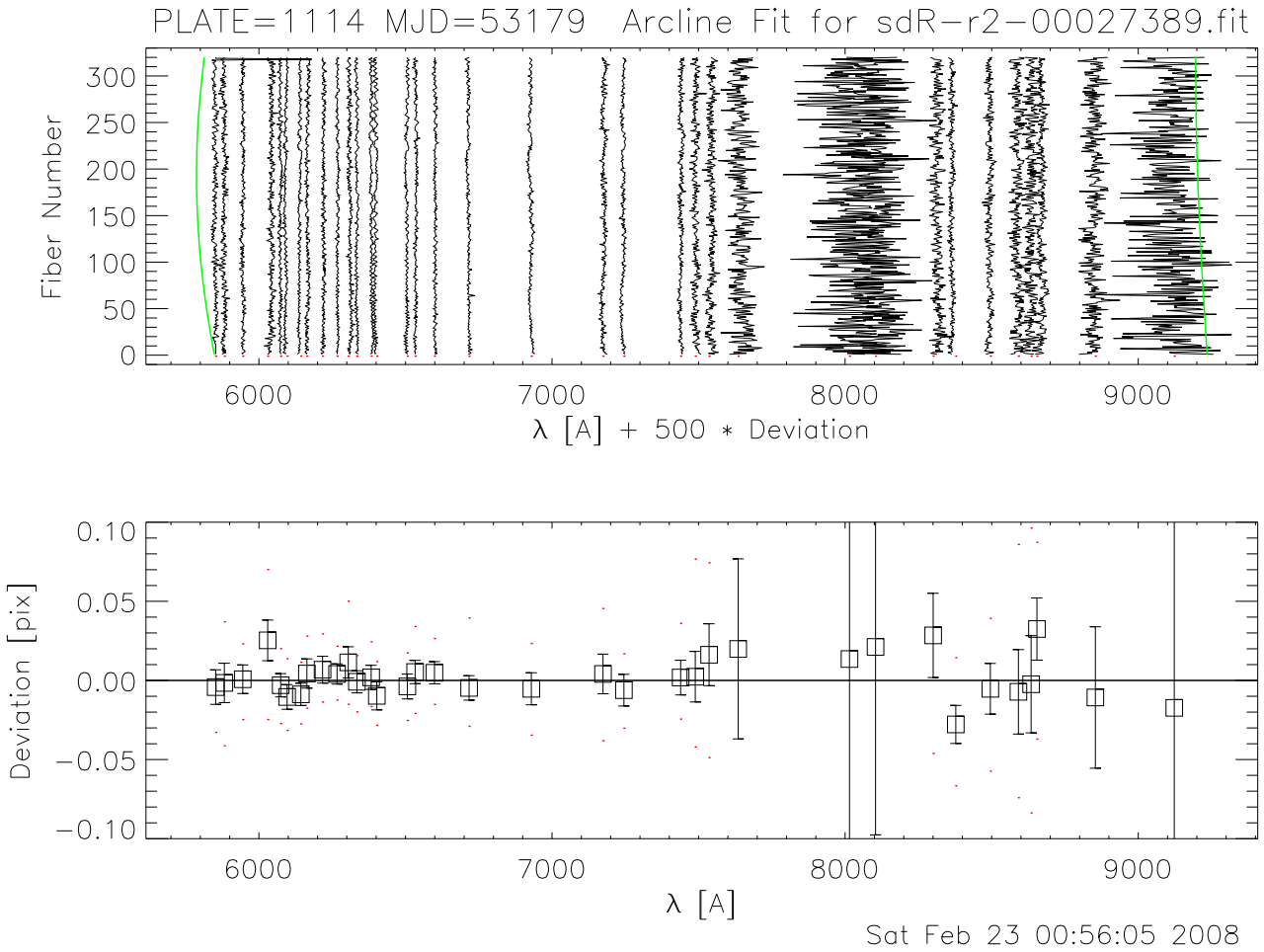

PLATE=1114 MJD=53179 sdR-r1-00027392.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

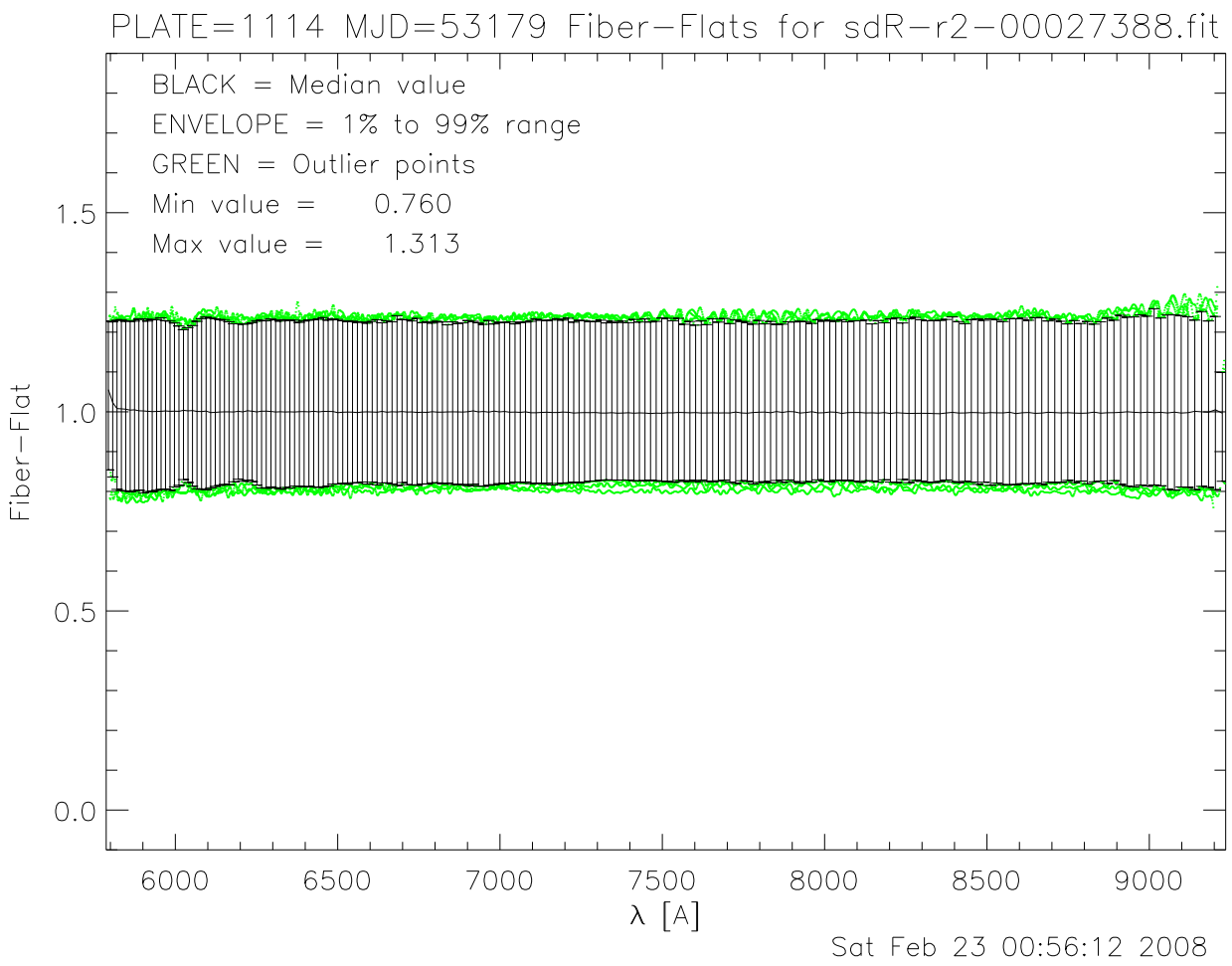

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

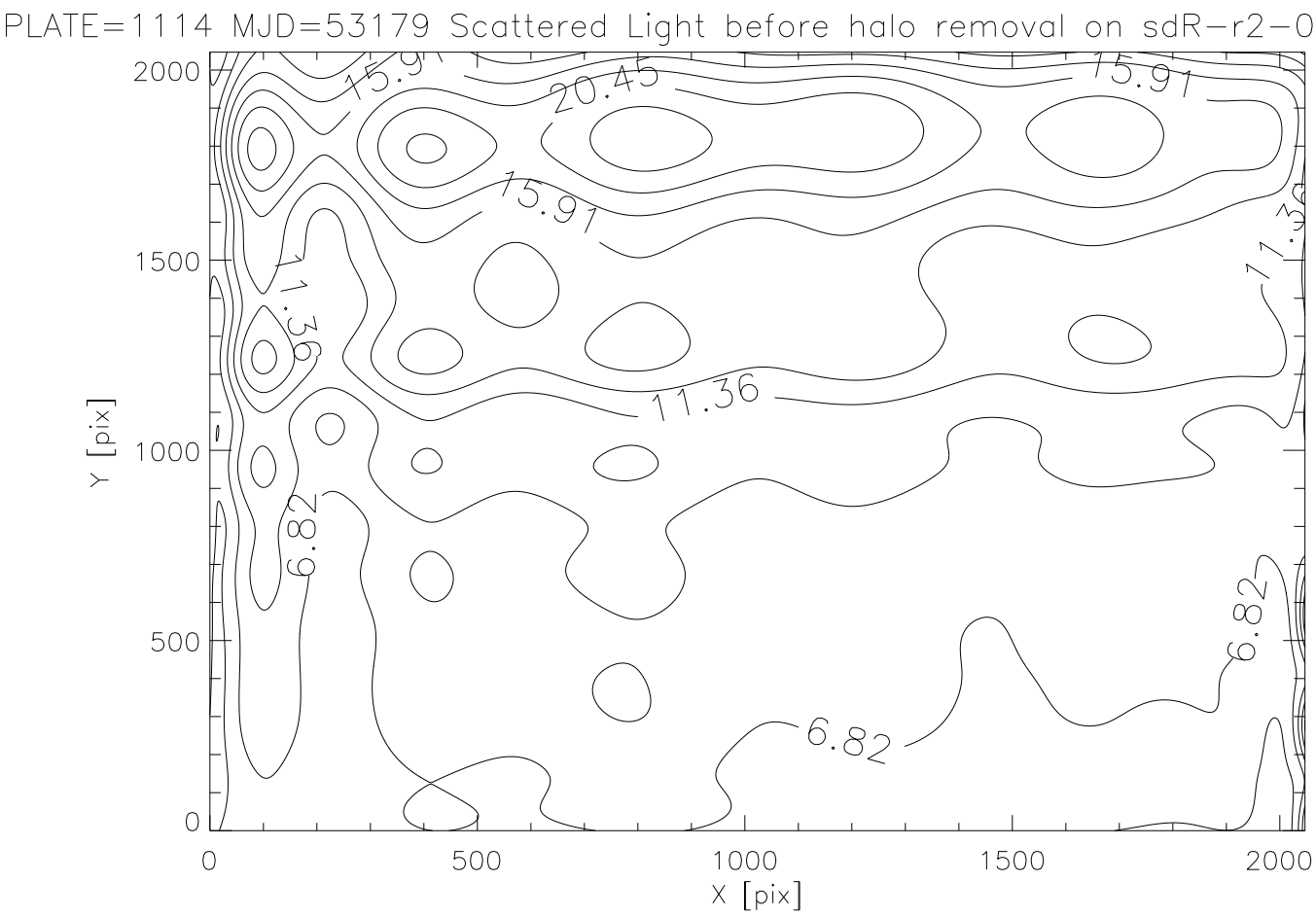

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

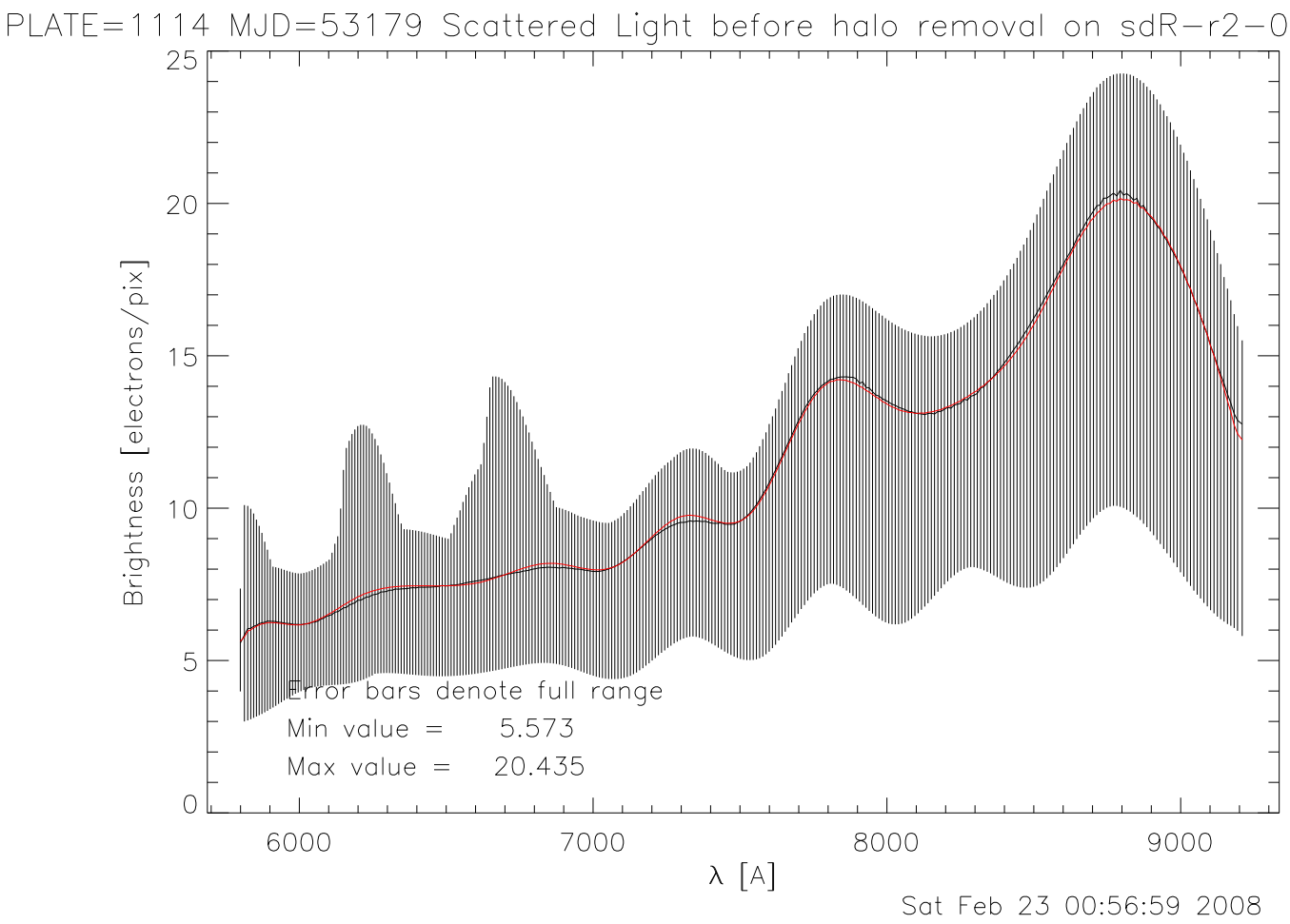

PLATE=1114 MJD=53179 flat extraction chi^2 for sdR−r2−00027388.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

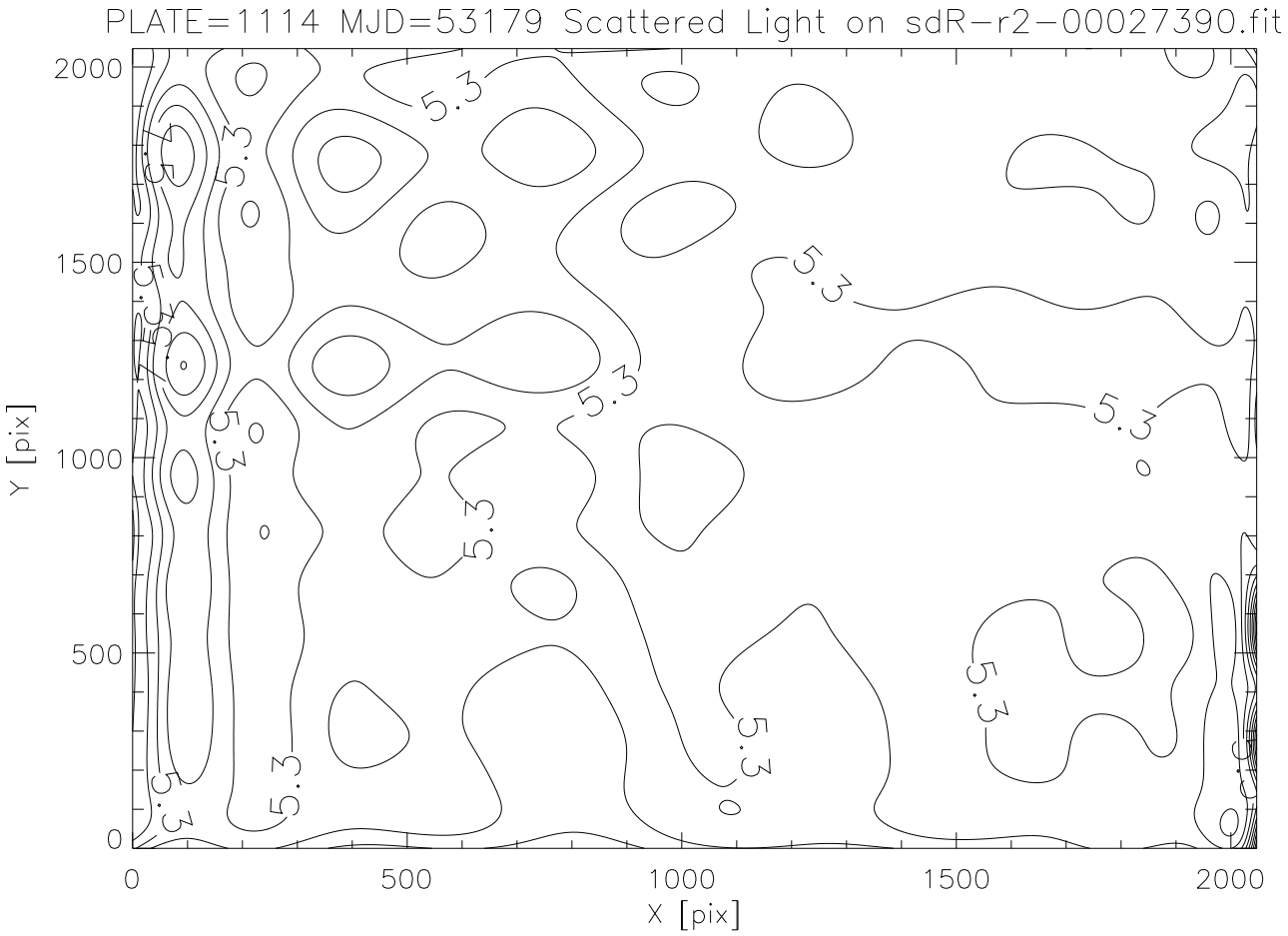

PLATE=1114 MJD=53179 Superflat sdR-r2-00027388.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

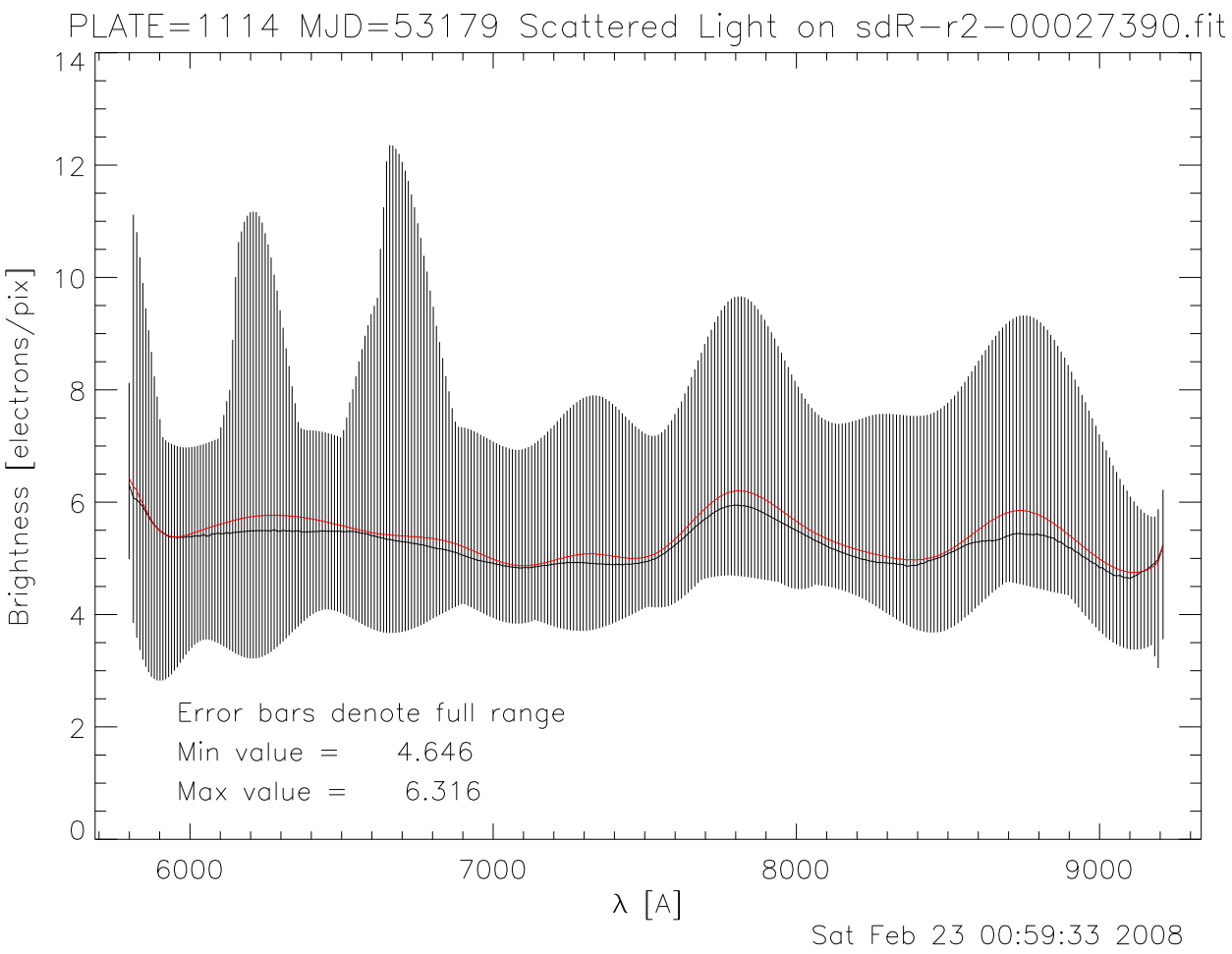

PLATE=1114 MJD=53179 Arcline Fit for sdR-r2-00027389.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 00:56:05 2008

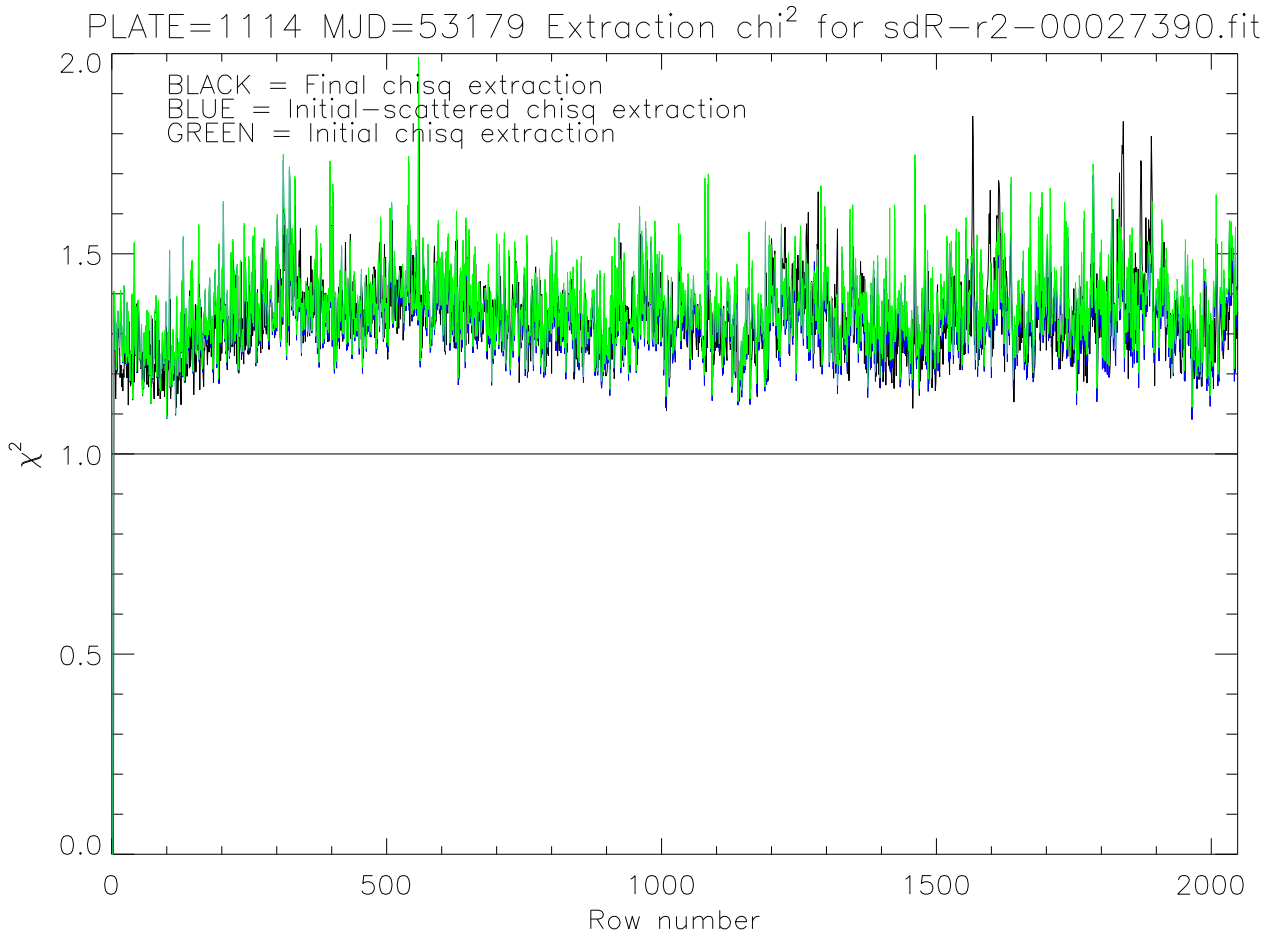

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r2−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.760
Max value = 1.313
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 00:56:12 2008

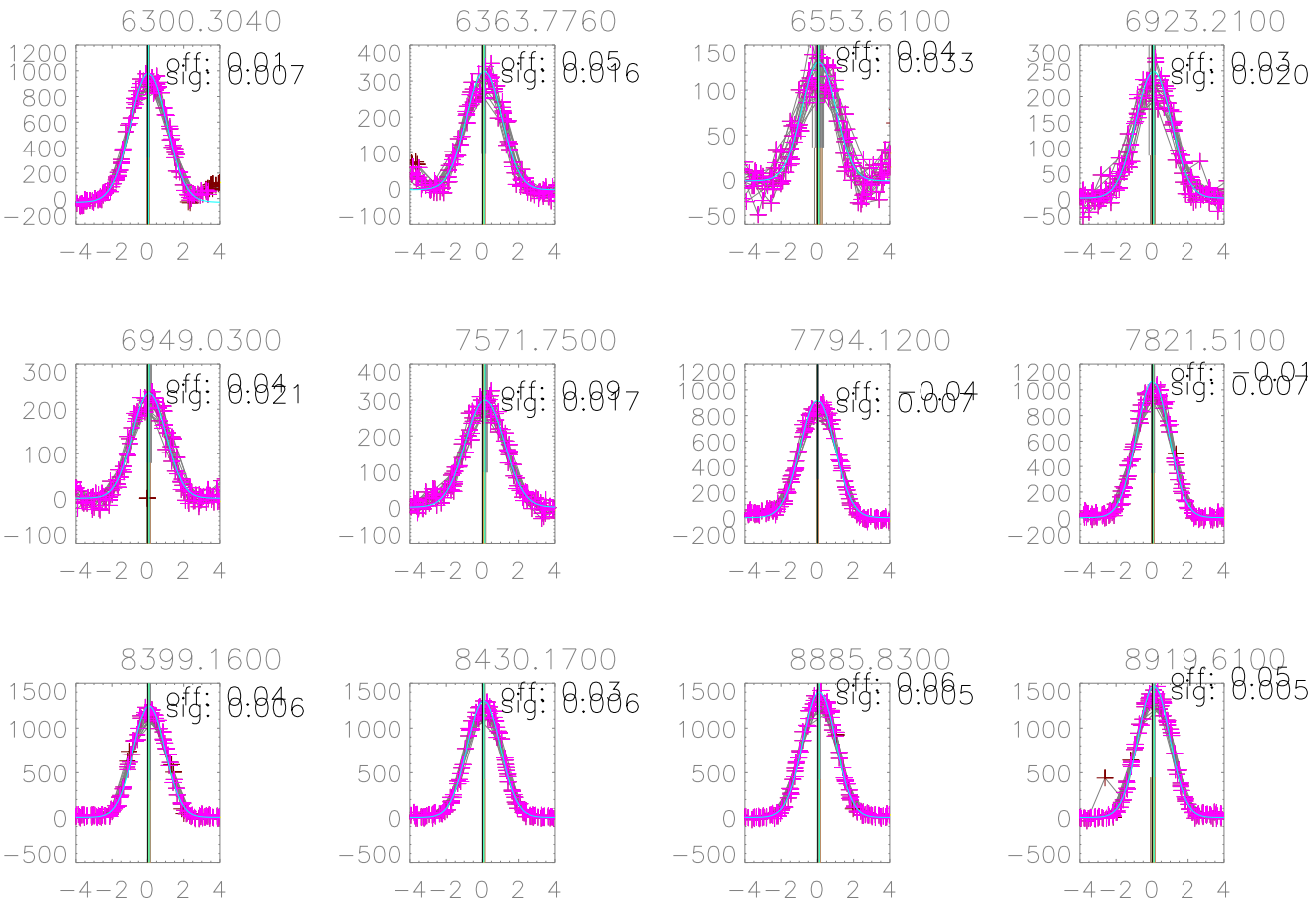

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027390.fi
15.91
20.45
15.91
15.91
11.36
11.36
11.36
6.82
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

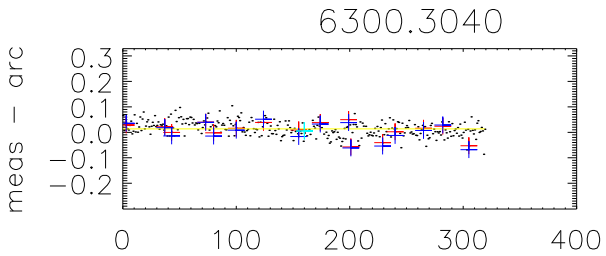

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027390.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.573
Max value = 20.435
Sat Feb 23 00:56:59 2008

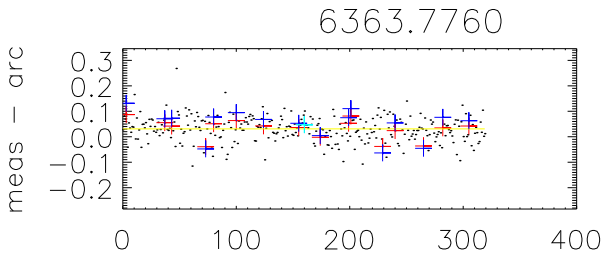

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027390.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3

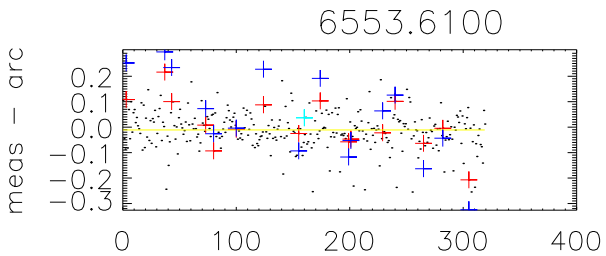

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027390.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.646
Max value = 6.316
Sat Feb 23 00:59:33 2008

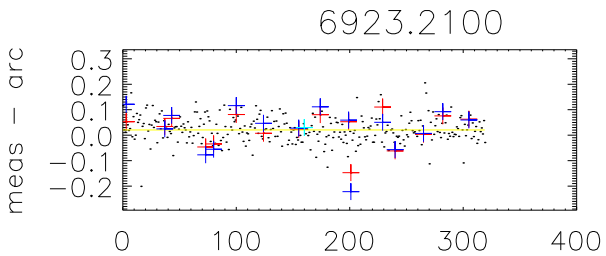

PLATE=1114 MJD=53179 Extraction chi^2 for sdR−r2−00027390.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

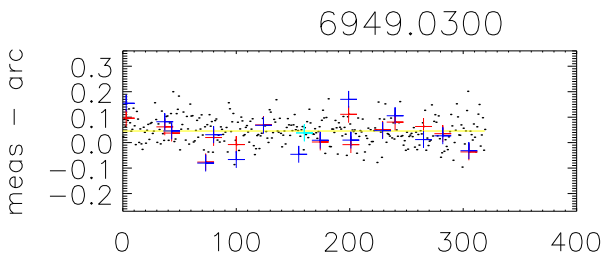

6300.3040
off: 0.01
sig: 0.007
6363.7760
off: 0.05
sig: 0.016
6553.6100
off: 0.04
sig: 0.033
6923.2100
off: 0.03
sig: 0.020
6949.0300
off: 0.04
sig: 0.021
7571.7500
off: 0.09
sig: 0.017
7794.1200
off: −0.04
sig: 0.007
7821.5100
off: −0.01
sig: 0.007
8399.1600
off: 0.04
sig: 0.006
8430.1700
off: 0.03
sig: 0.006
8885.8300
off: 0.06
sig: 0.005
8919.6100
off: 0.05
sig: 0.005

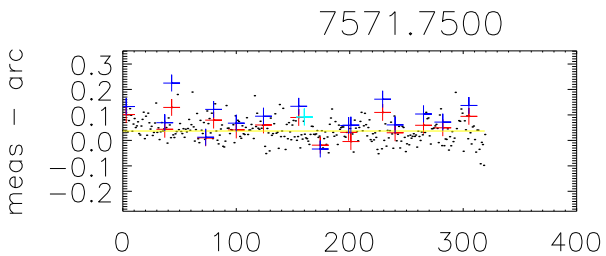

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

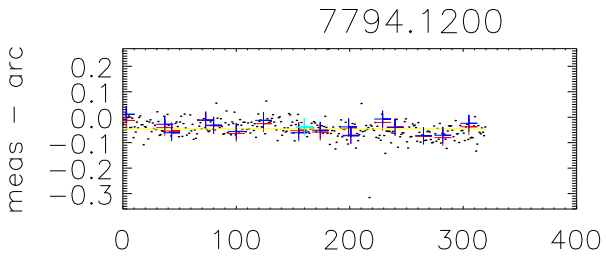

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

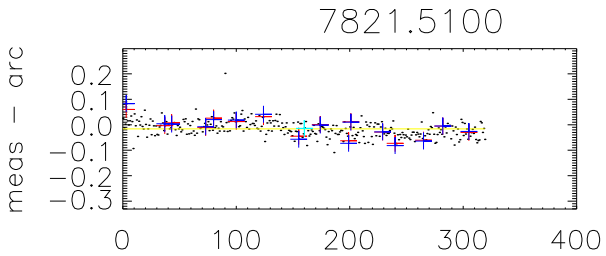

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

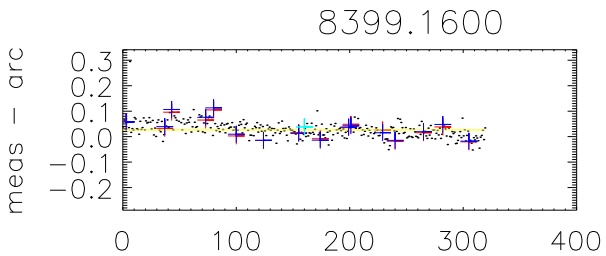

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

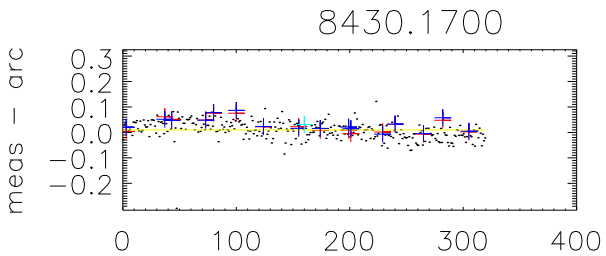

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

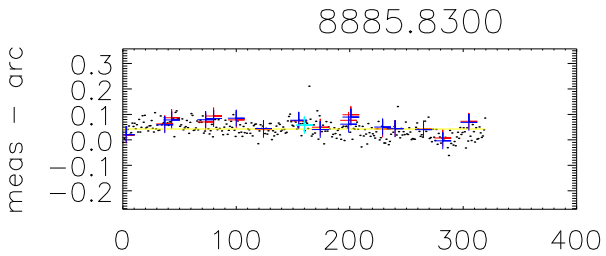

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

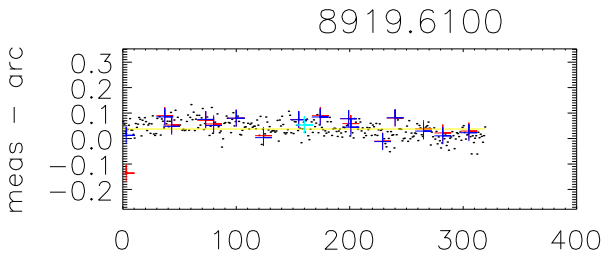

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

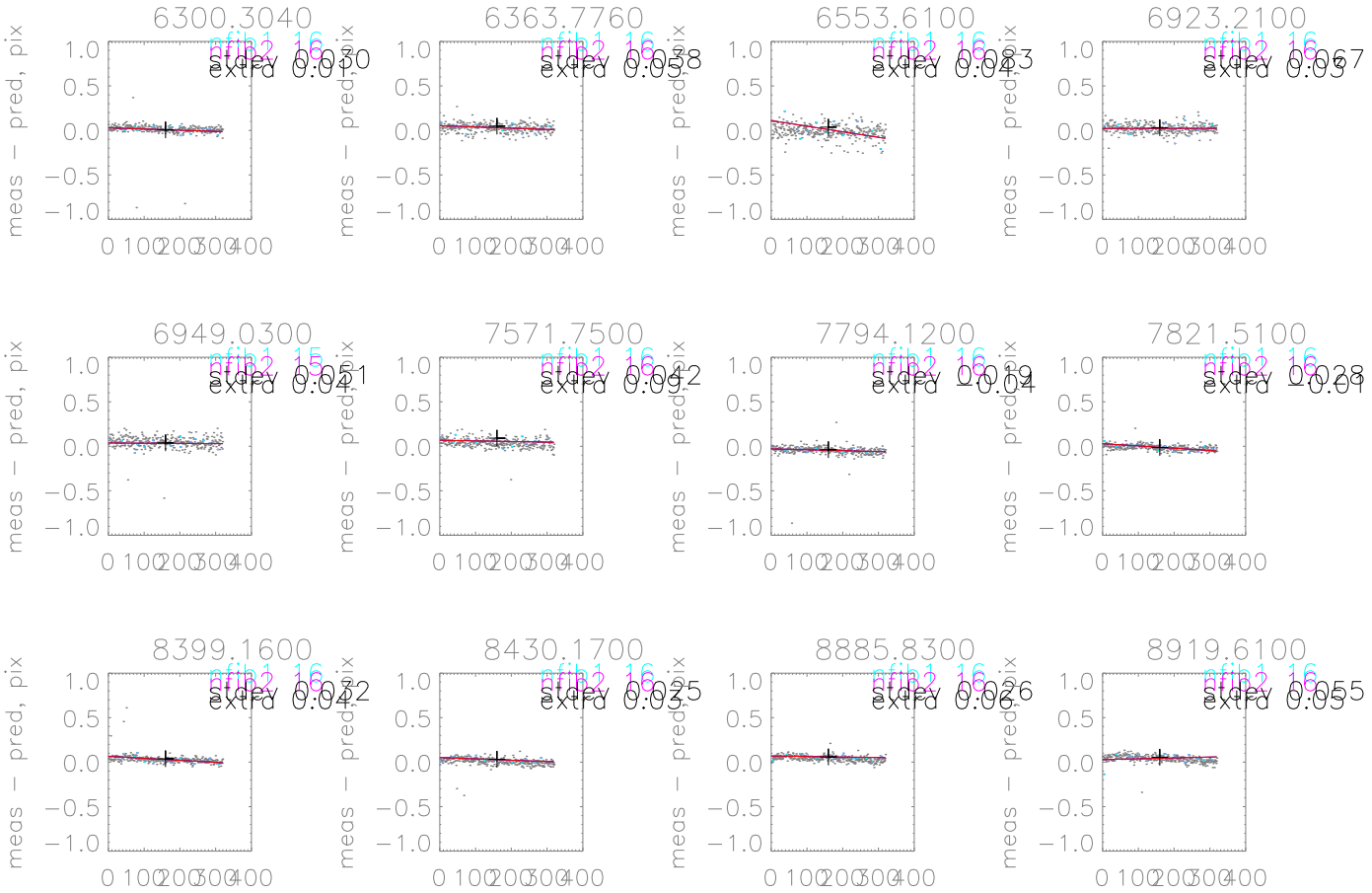

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

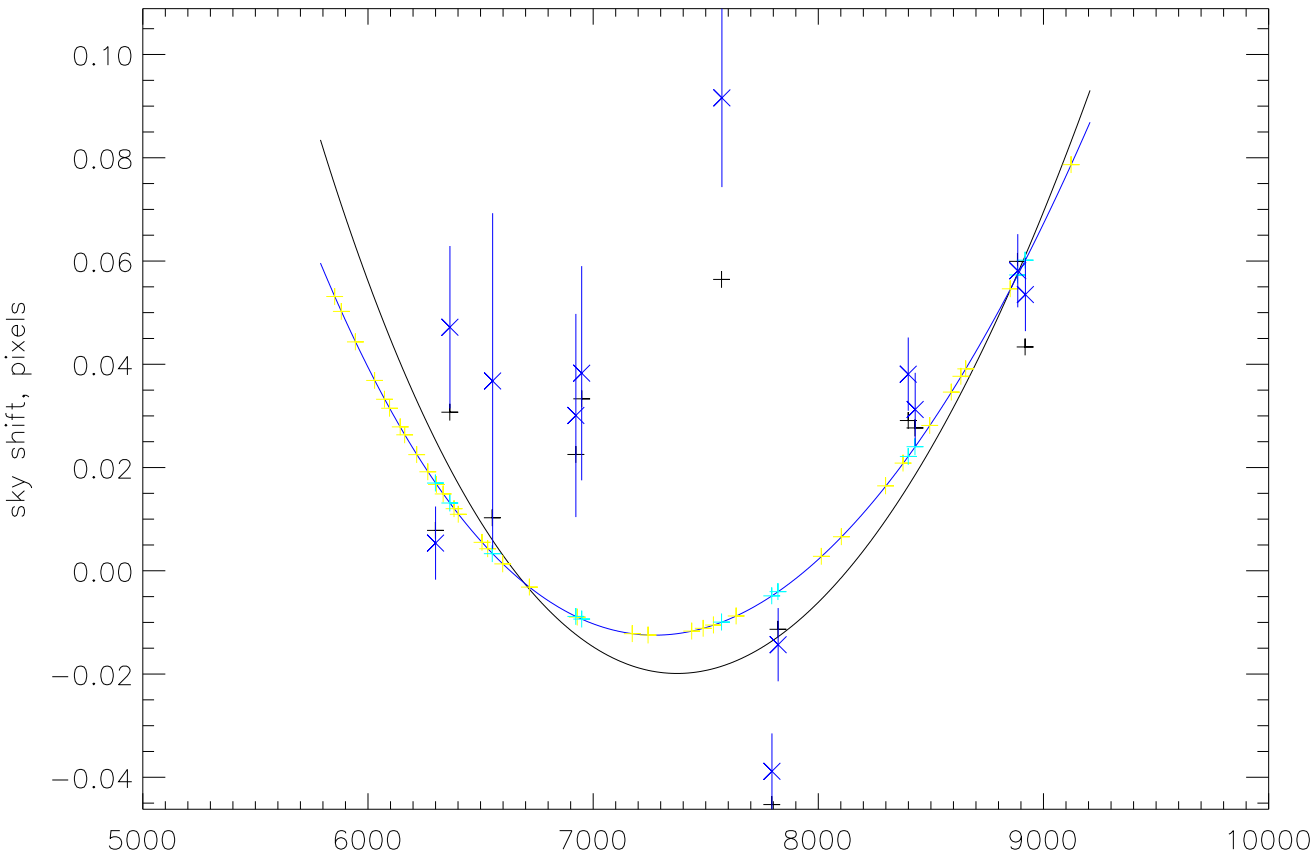

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

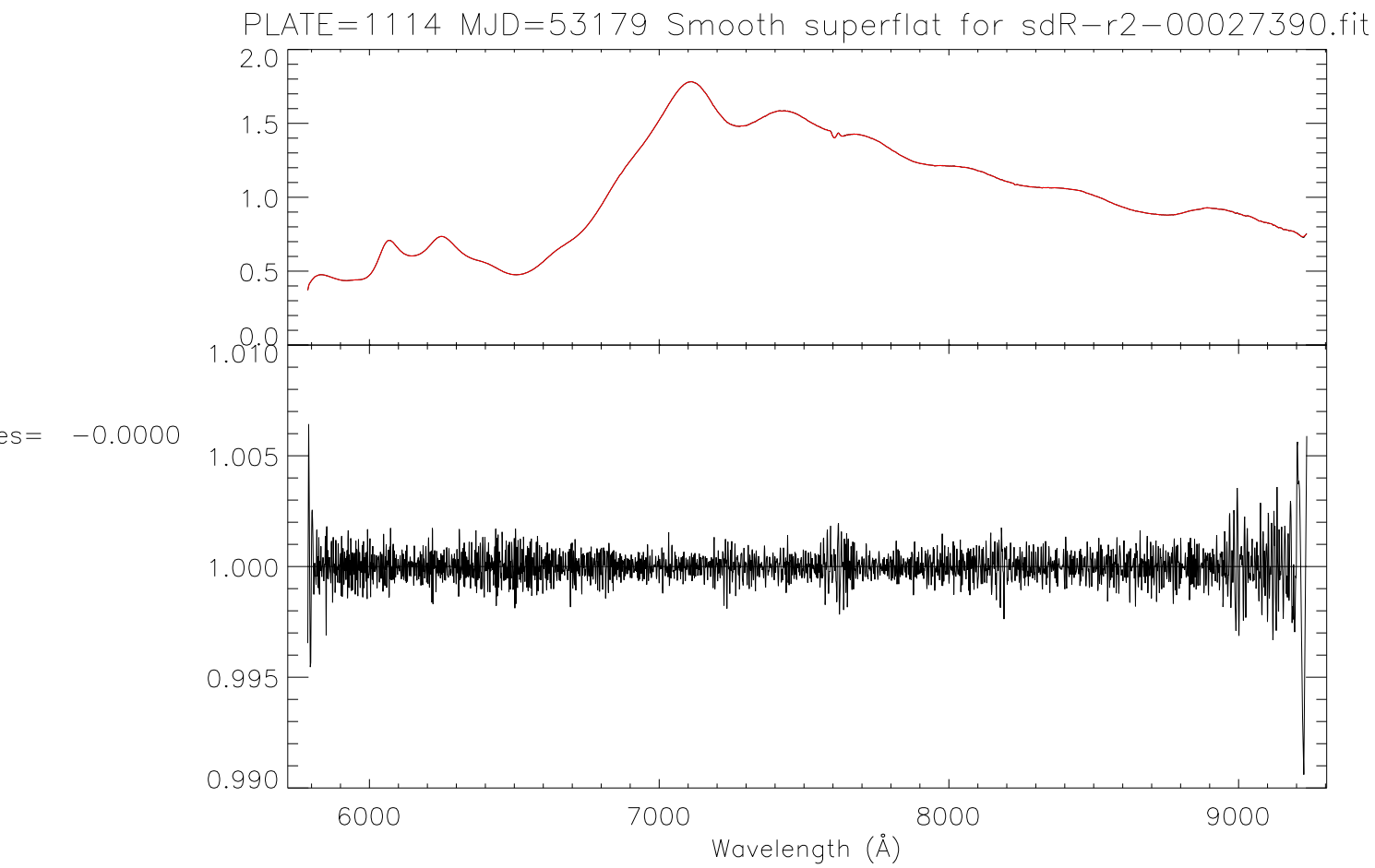

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

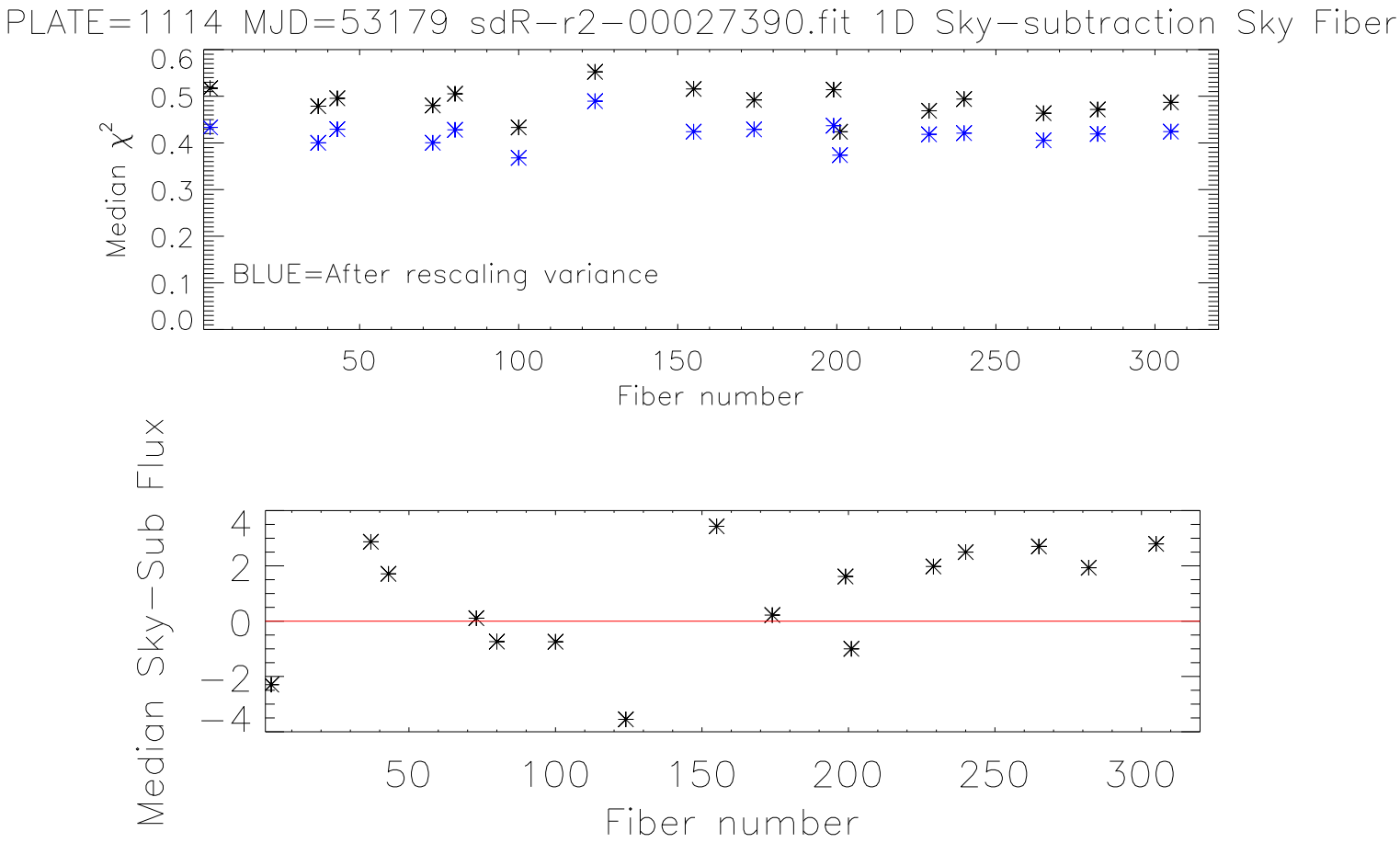

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

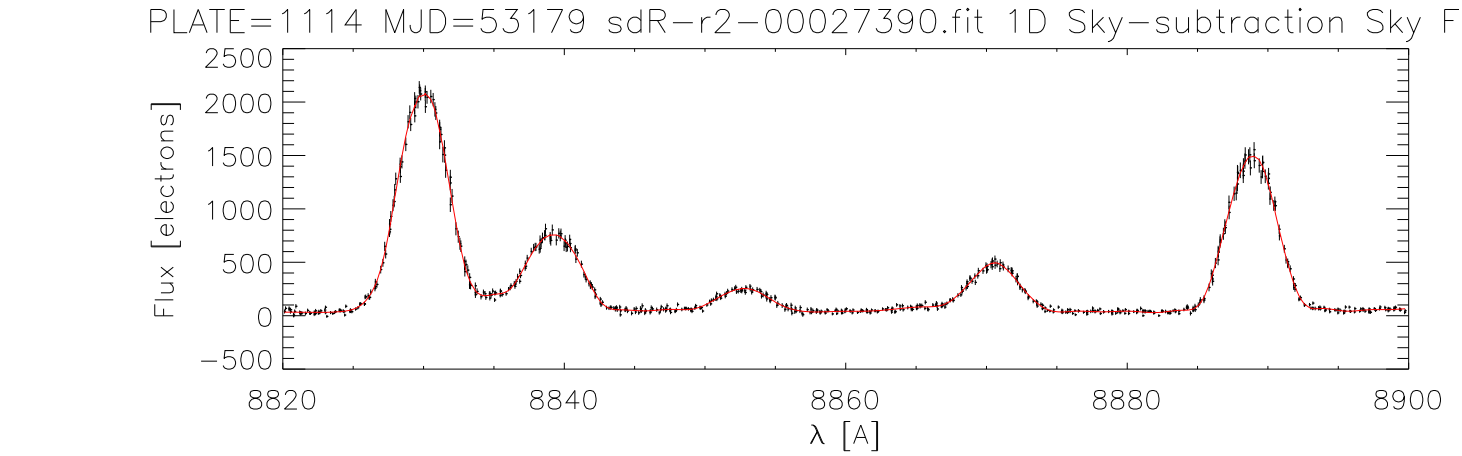

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

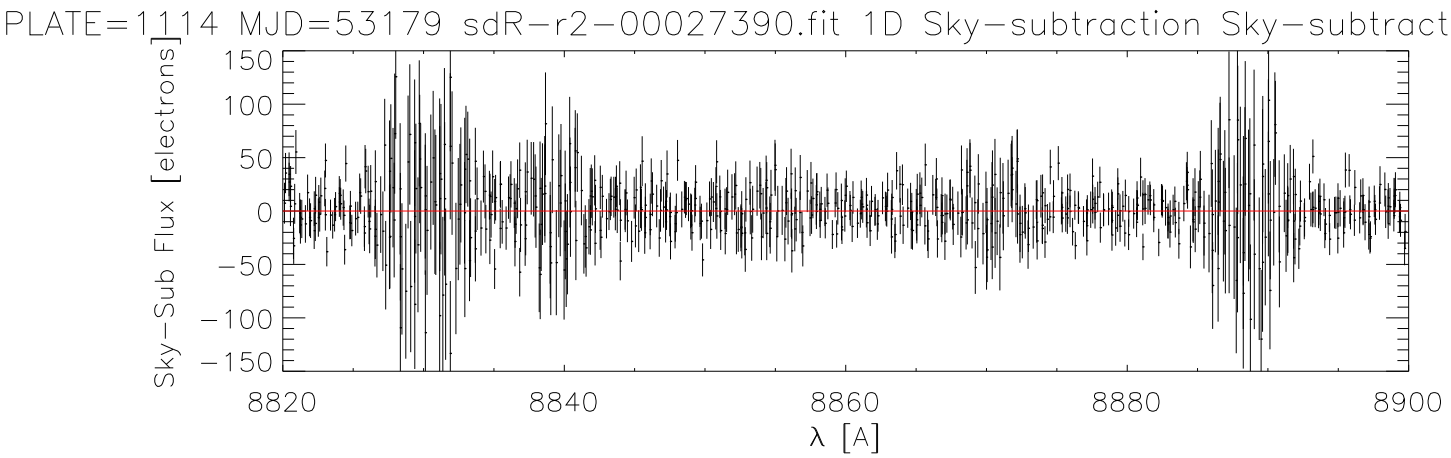

6300.3040
stdev 0.030
extra 0.01
6363.7760
stdev 0.038
extra 0.05
6553.6100
stdev 0.083
extra 0.04
6923.2100
stdev 0.067
extra 0.03
6949.0300
stdev 0.051
extra 0.04
7571.7500
stdev 0.042
extra 0.09
7794.1200
stdev 0.019
extra −0.04
7821.5100
stdev 0.028
extra −0.01
8399.1600
stdev 0.032
extra 0.04
8430.1700
stdev 0.025
extra 0.03
8885.8300
stdev 0.026
extra 0.06
8919.6100
stdev 0.055
extra 0.05
meas − pred, pix
mfb1 16
mfb2 16

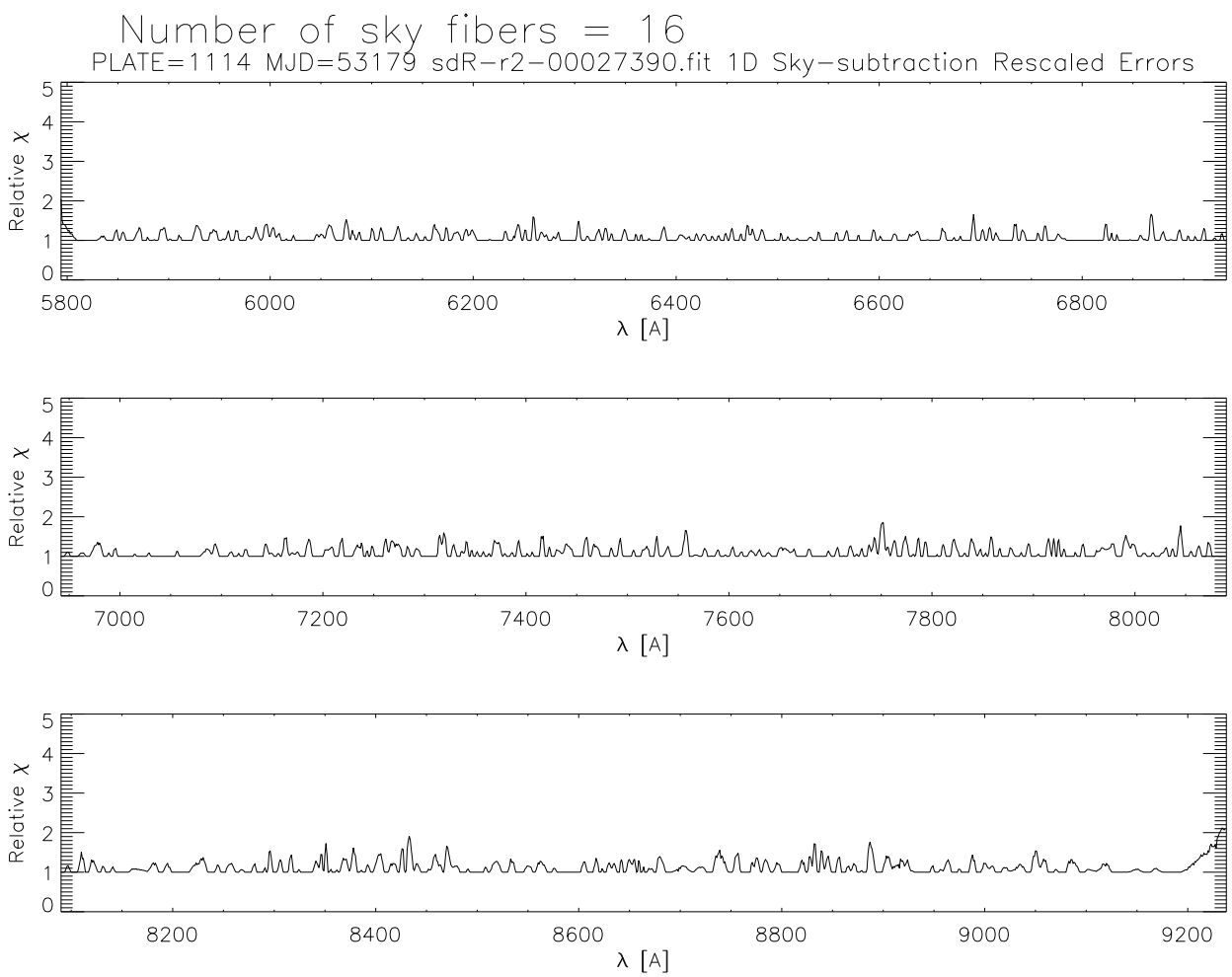

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

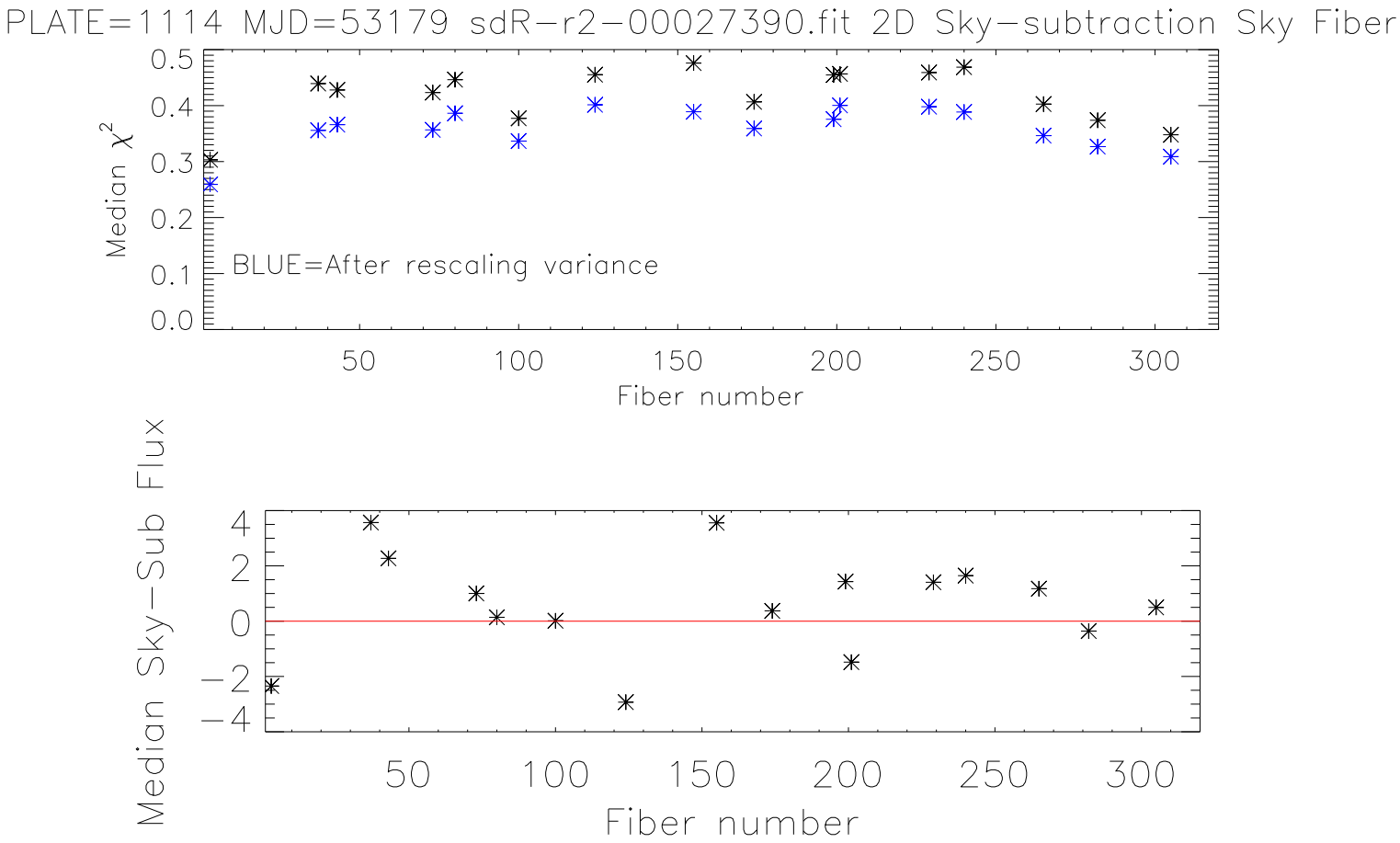

PLATE=1114 MJD=53179 Smooth superflat for sdR-r2-00027390.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

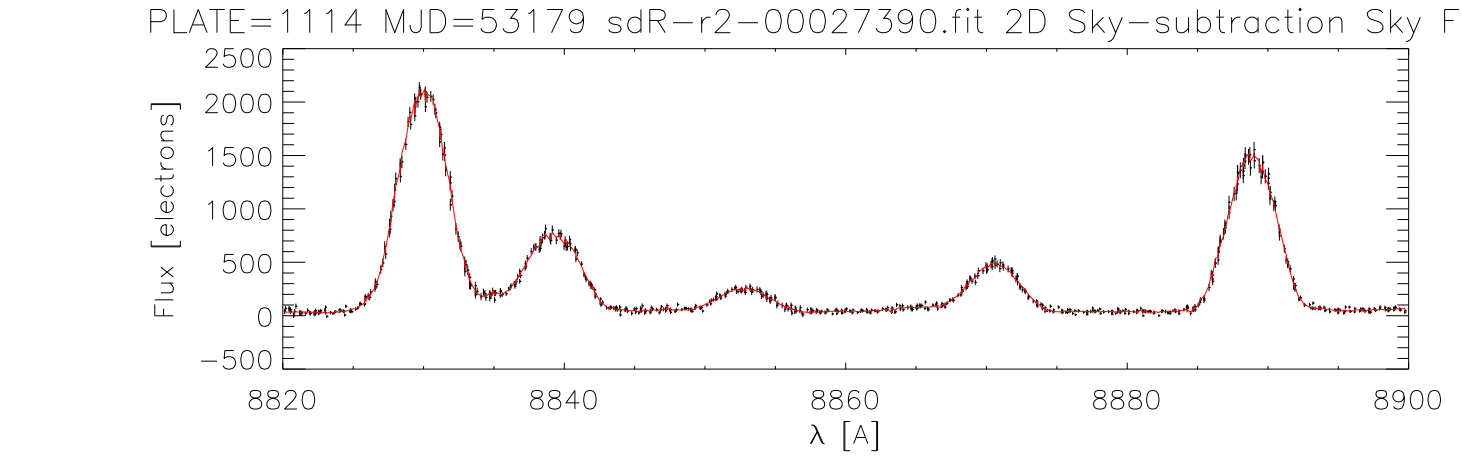

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

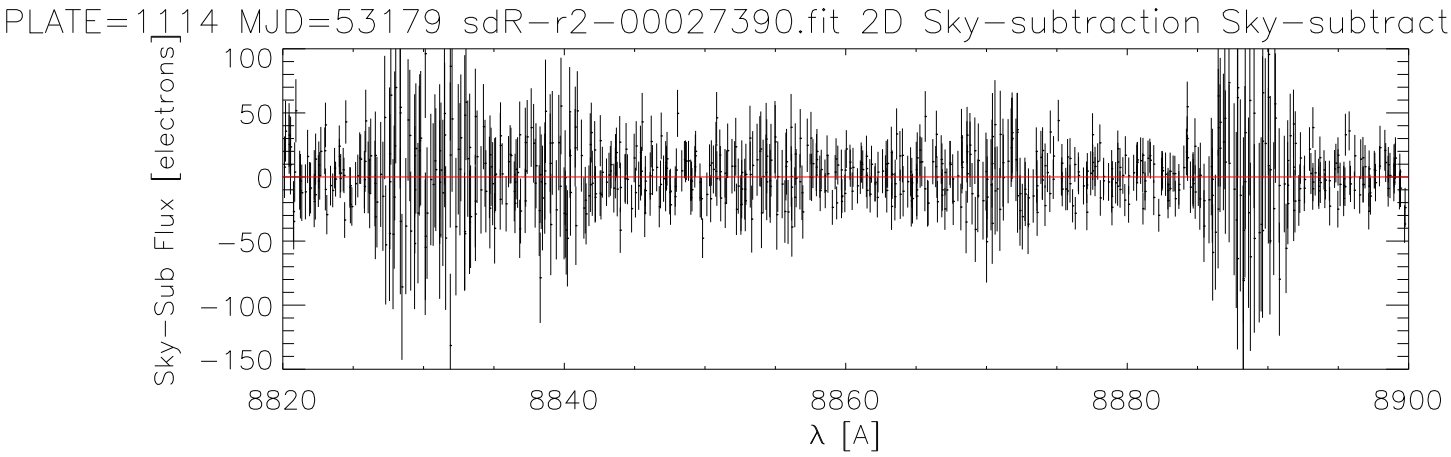

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

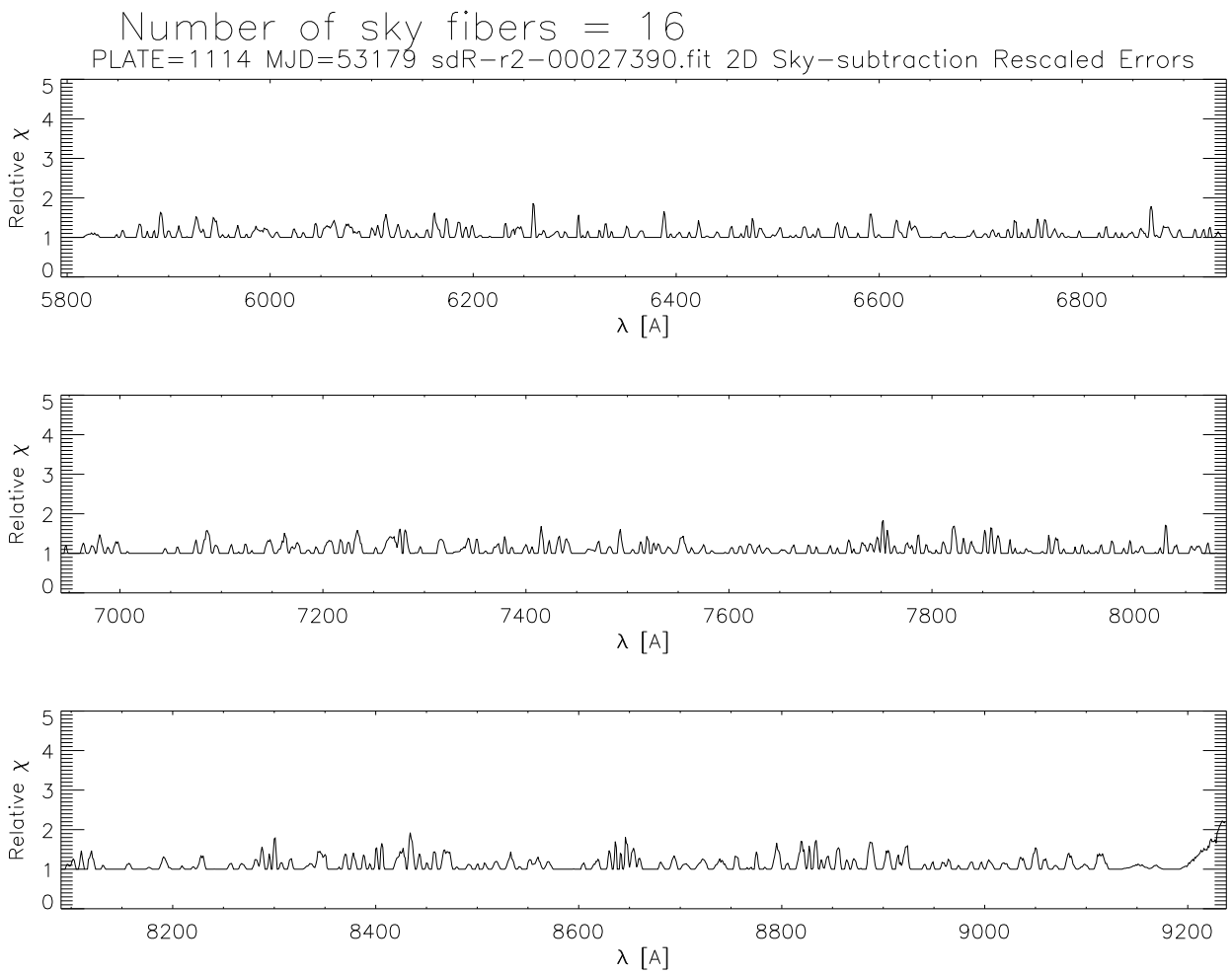

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

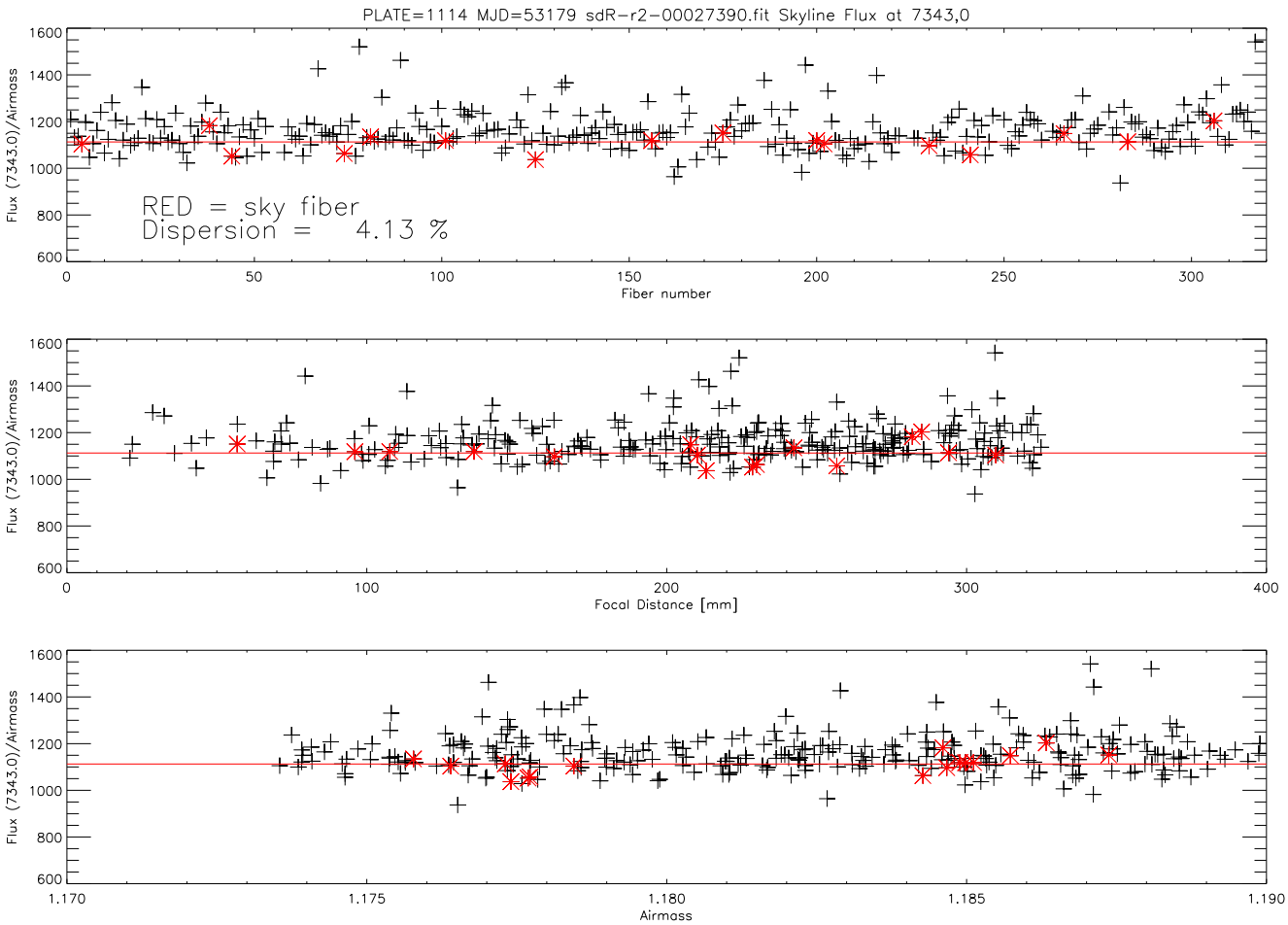

Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027390.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

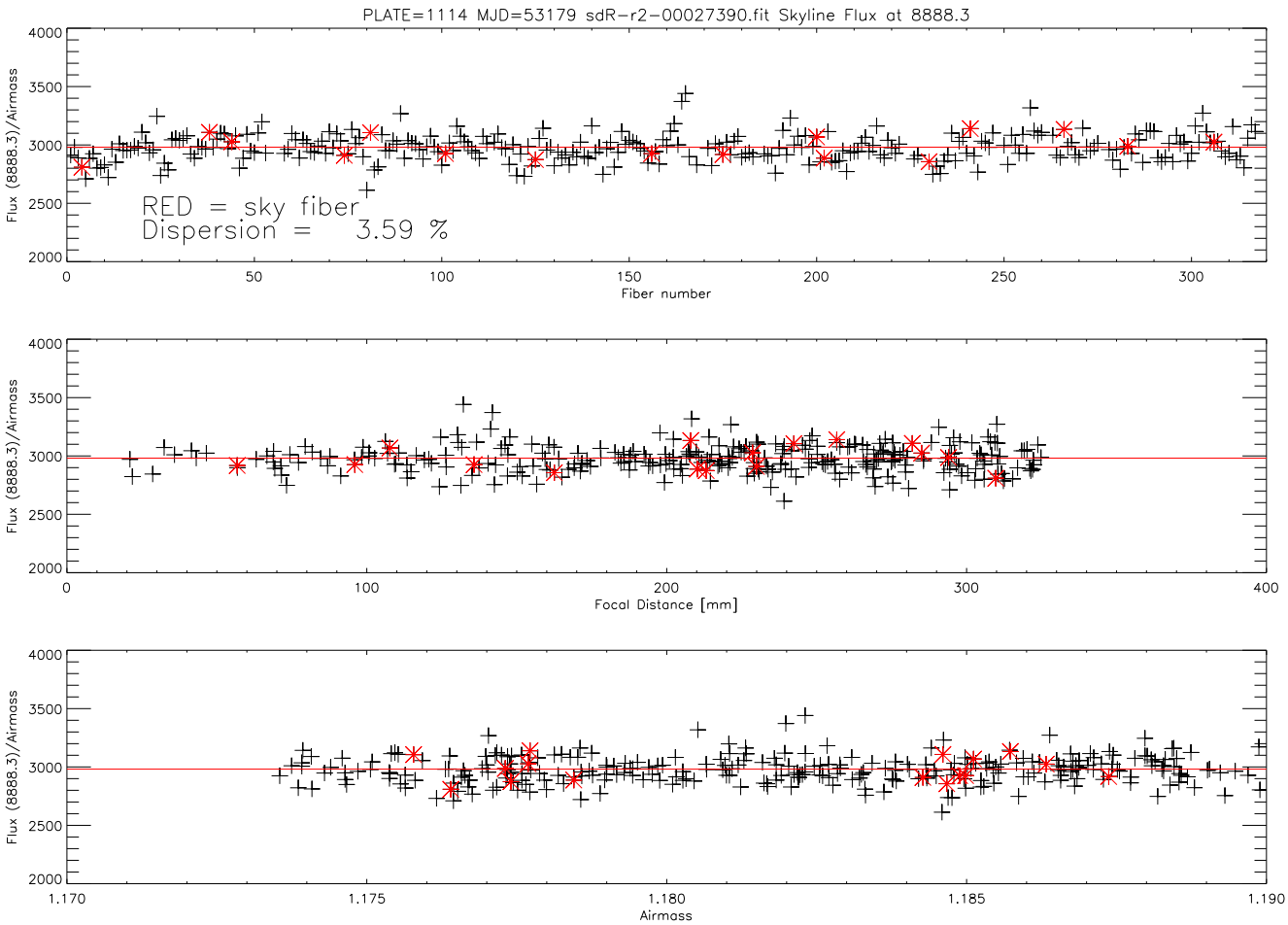

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

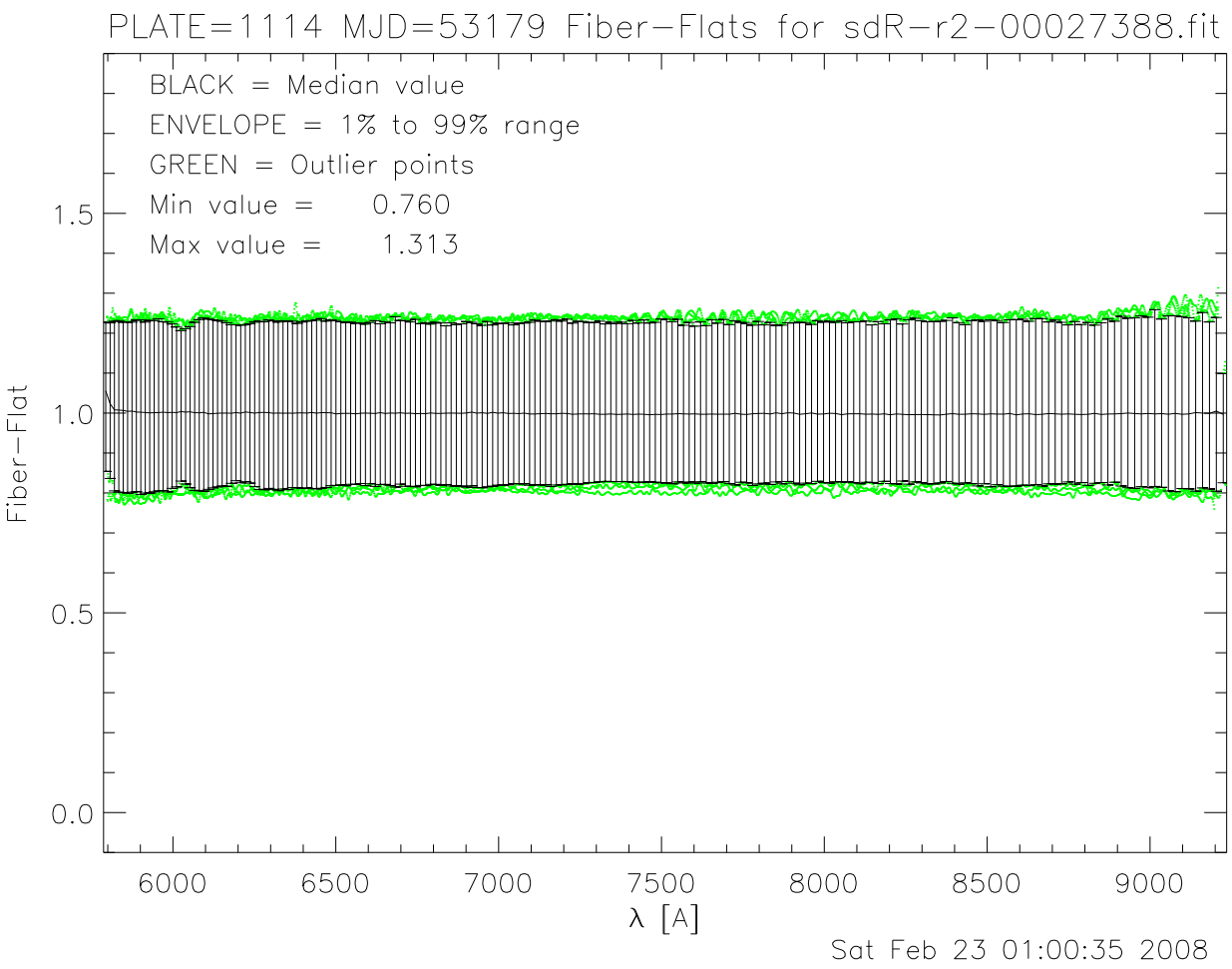

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

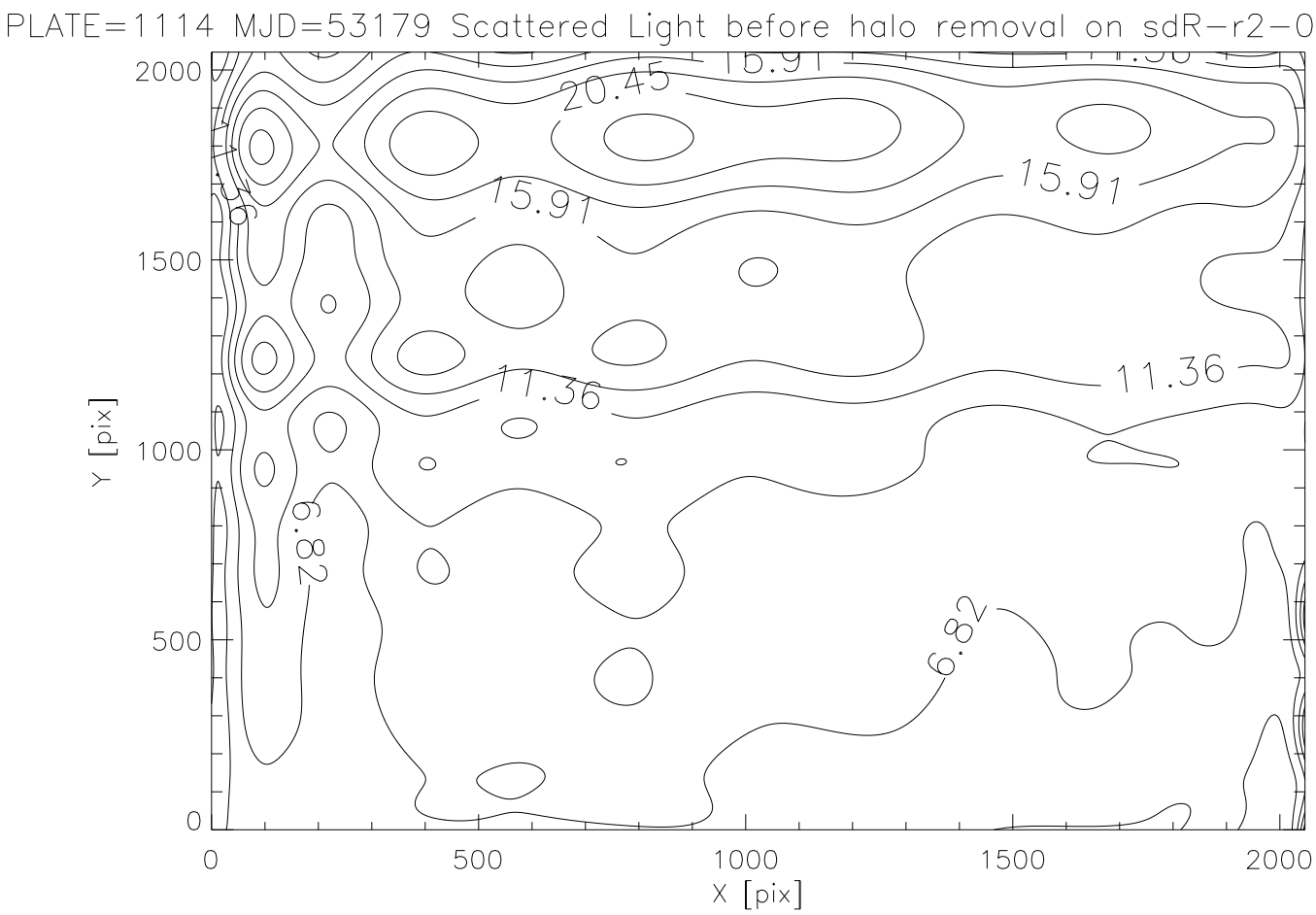

PLATE=1114 MJD=53179 sdR-r2-00027390.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]

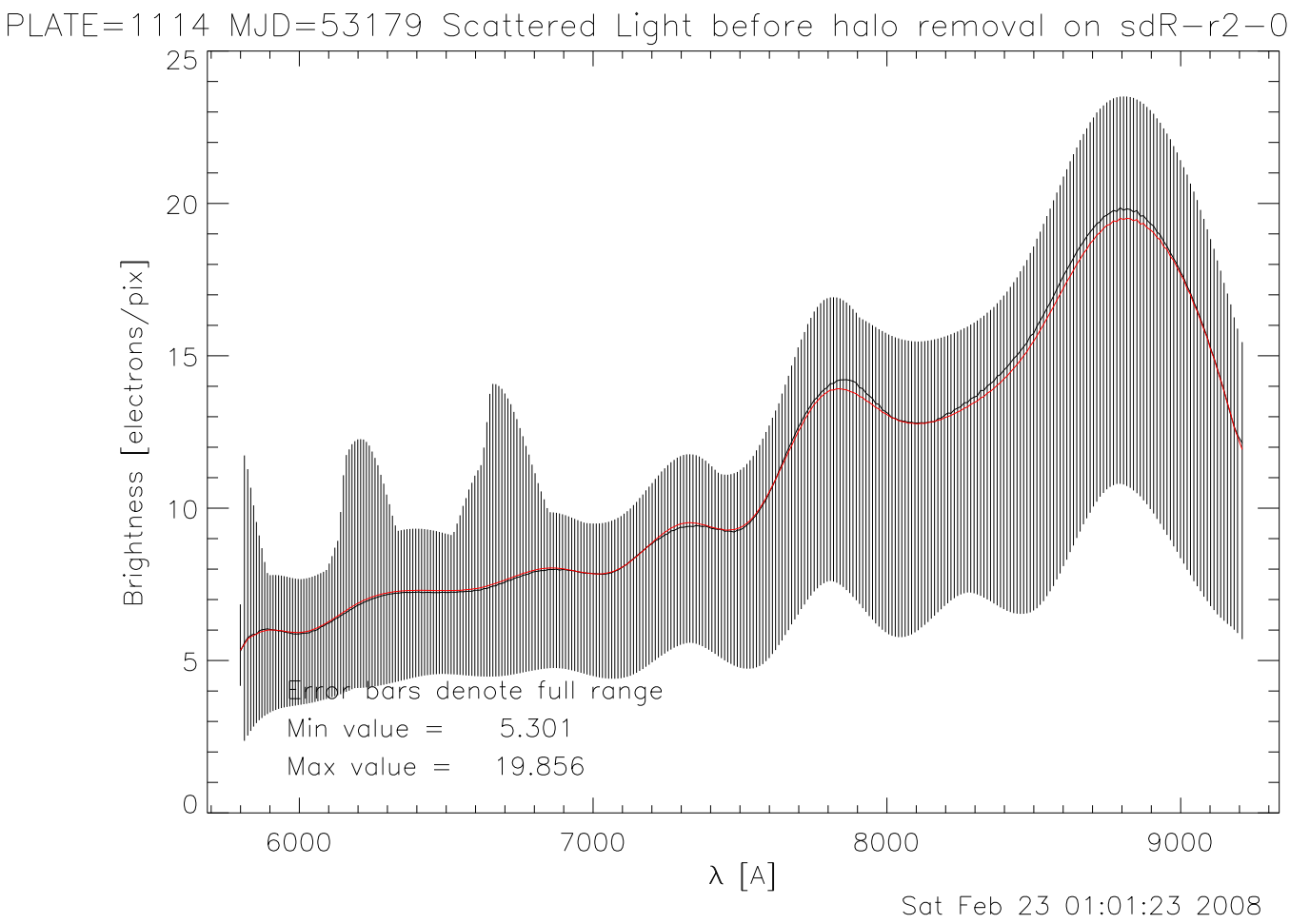

Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027390.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

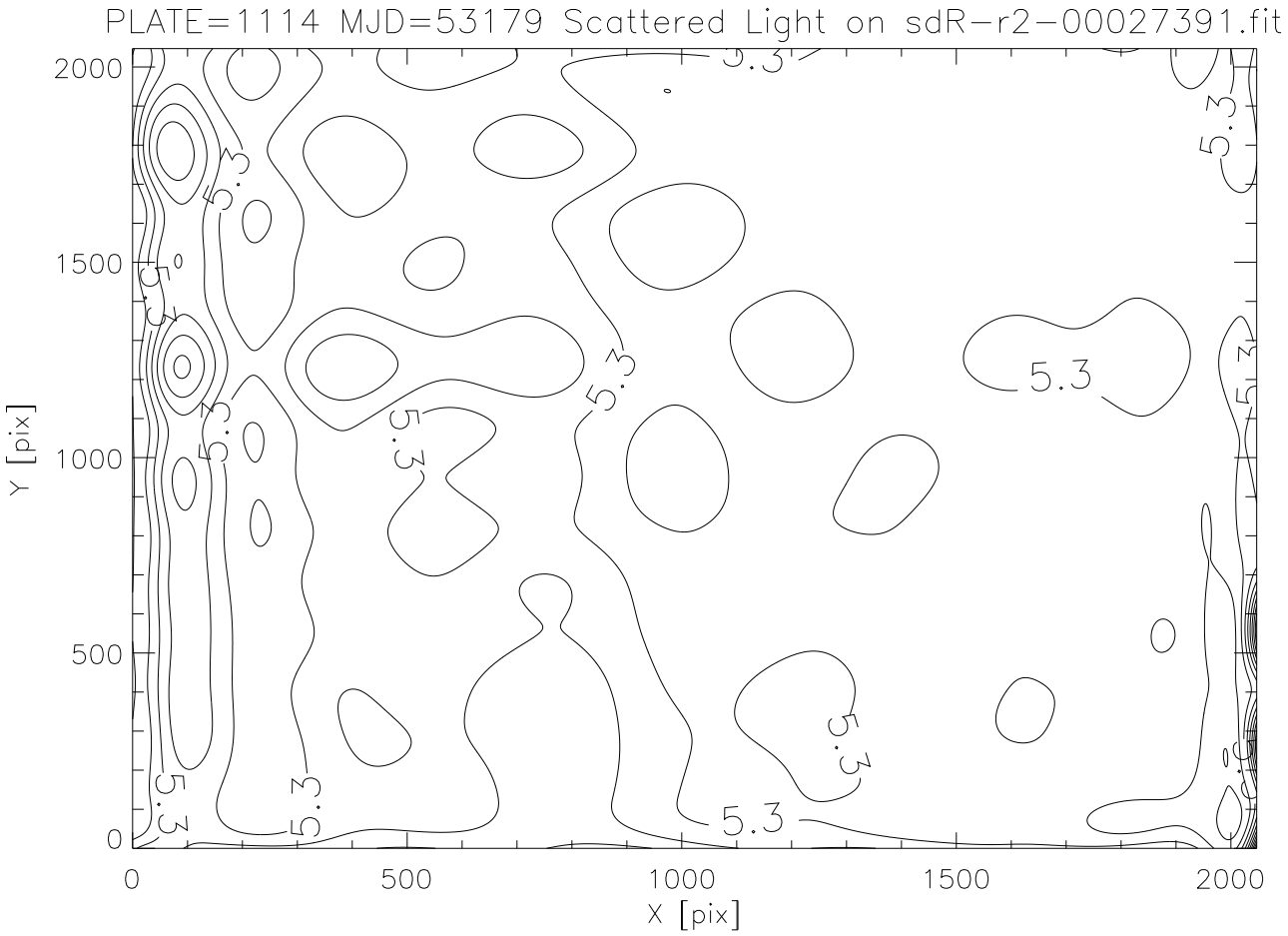

PLATE=1114 MJD=53179 sdR-r2-00027390.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.13 %
Fiber number
Focal Distance [mm]
Airmass

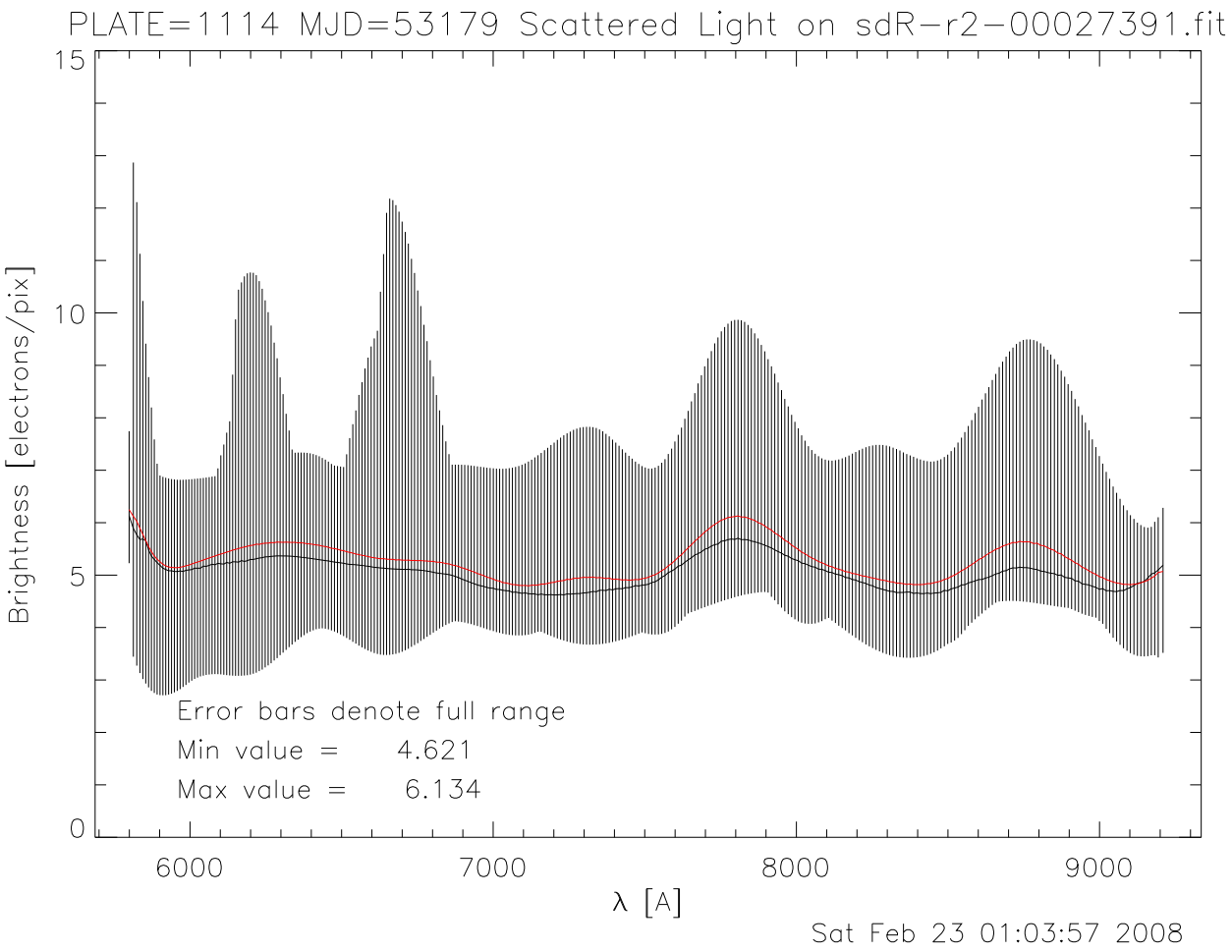

PLATE=1114 MJD=53179 sdR-r2-00027390.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.59 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

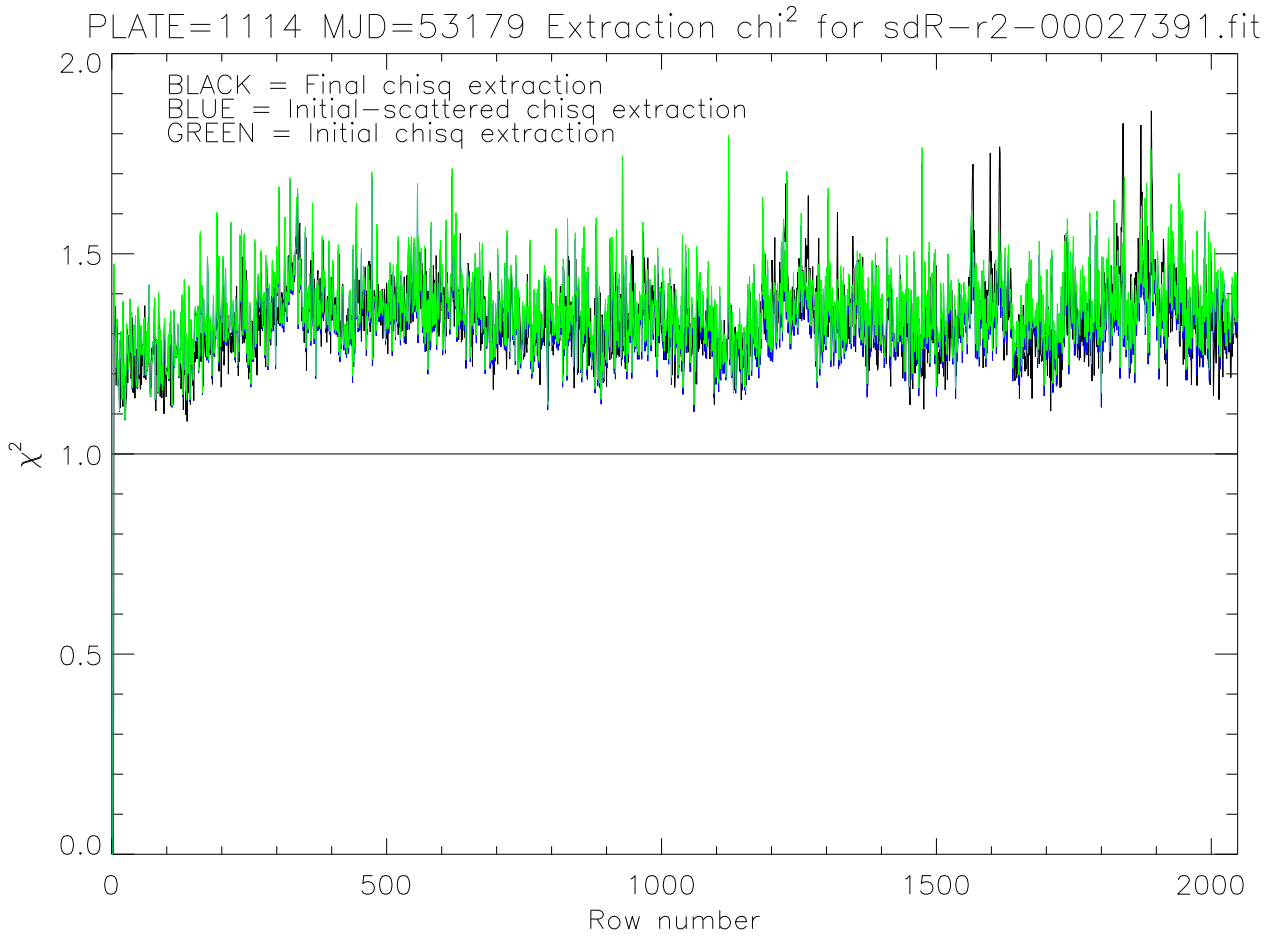

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r2−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.760
Max value = 1.313
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 01:00:35 2008

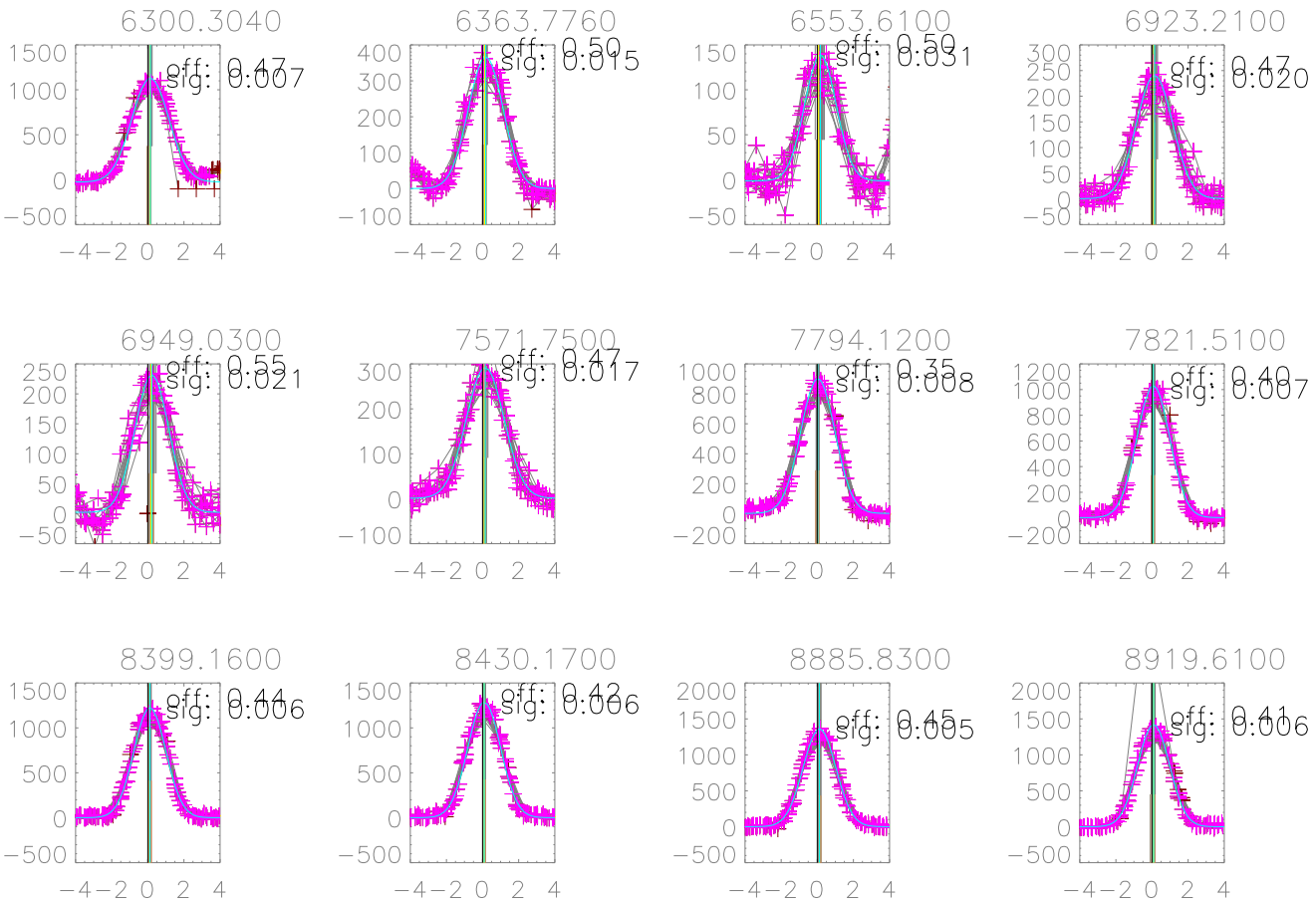

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027391.fi
20.45
15.91
15.91
11.36
11.36
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

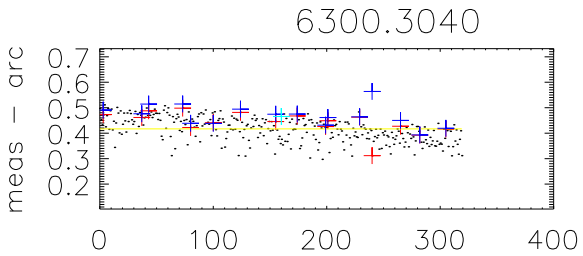

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027391.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.301
Max value = 19.856
Sat Feb 23 01:01:23 2008

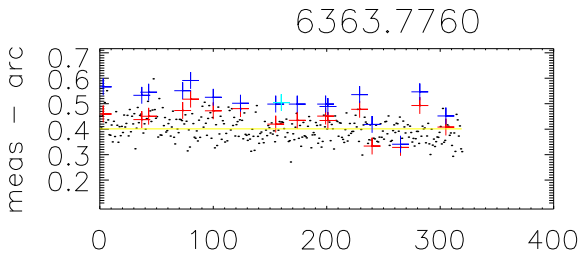

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027391.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
0

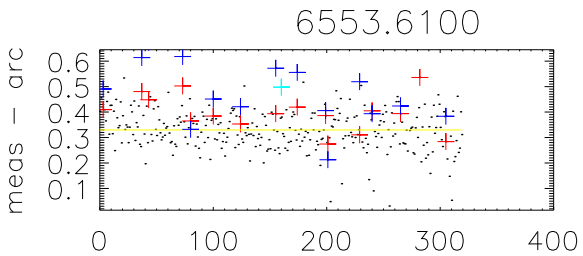

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027391.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.621
Max value = 6.134
Sat Feb 23 01:03:57 2008

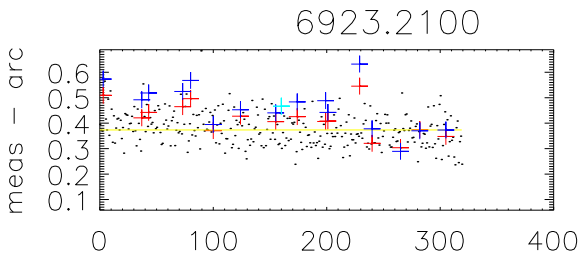

PLATE=1114 MJD=53179 Extraction chi^2 for sdR-r2-00027391.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

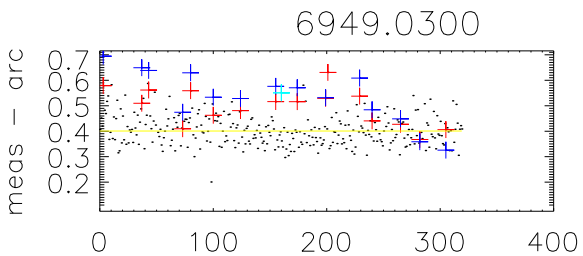

6300.3040
off: 0.47
sig: 0.007
6363.7760
off: 0.50
sig: 0.015
6553.6100
off: 0.50
sig: 0.031
6923.2100
off: 0.47
sig: 0.020
6949.0300
off: 0.55
sig: 0.021
7571.7500
off: 0.47
sig: 0.017
7794.1200
off: 0.35
sig: 0.008
7821.5100
off: 0.40
sig: 0.007
8399.1600
off: 0.44
sig: 0.006
8430.1700
off: 0.42
sig: 0.006
8885.8300
off: 0.45
sig: 0.005
8919.6100
off: 0.41
sig: 0.006

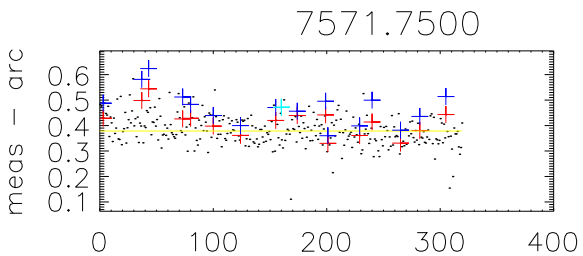

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

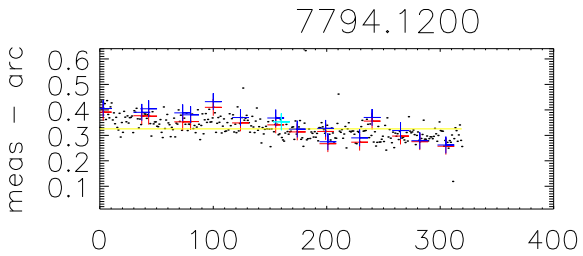

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

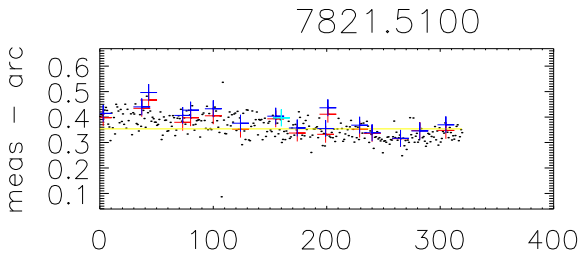

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

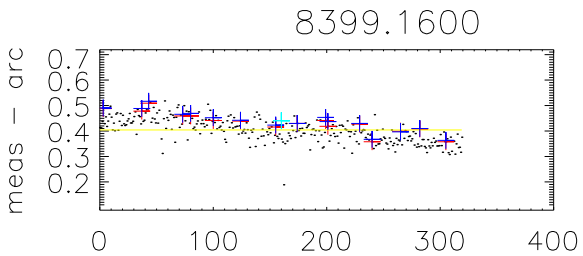

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

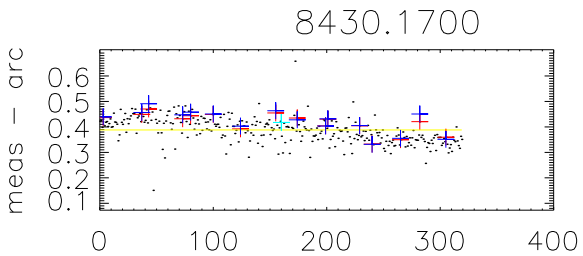

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

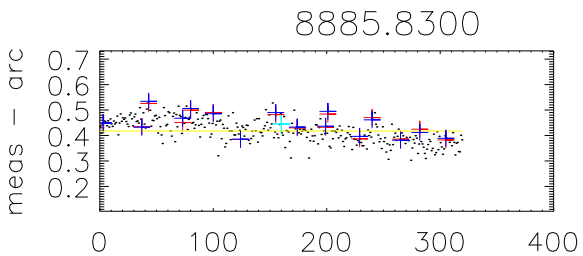

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

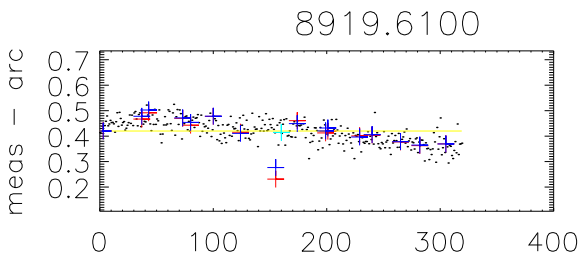

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

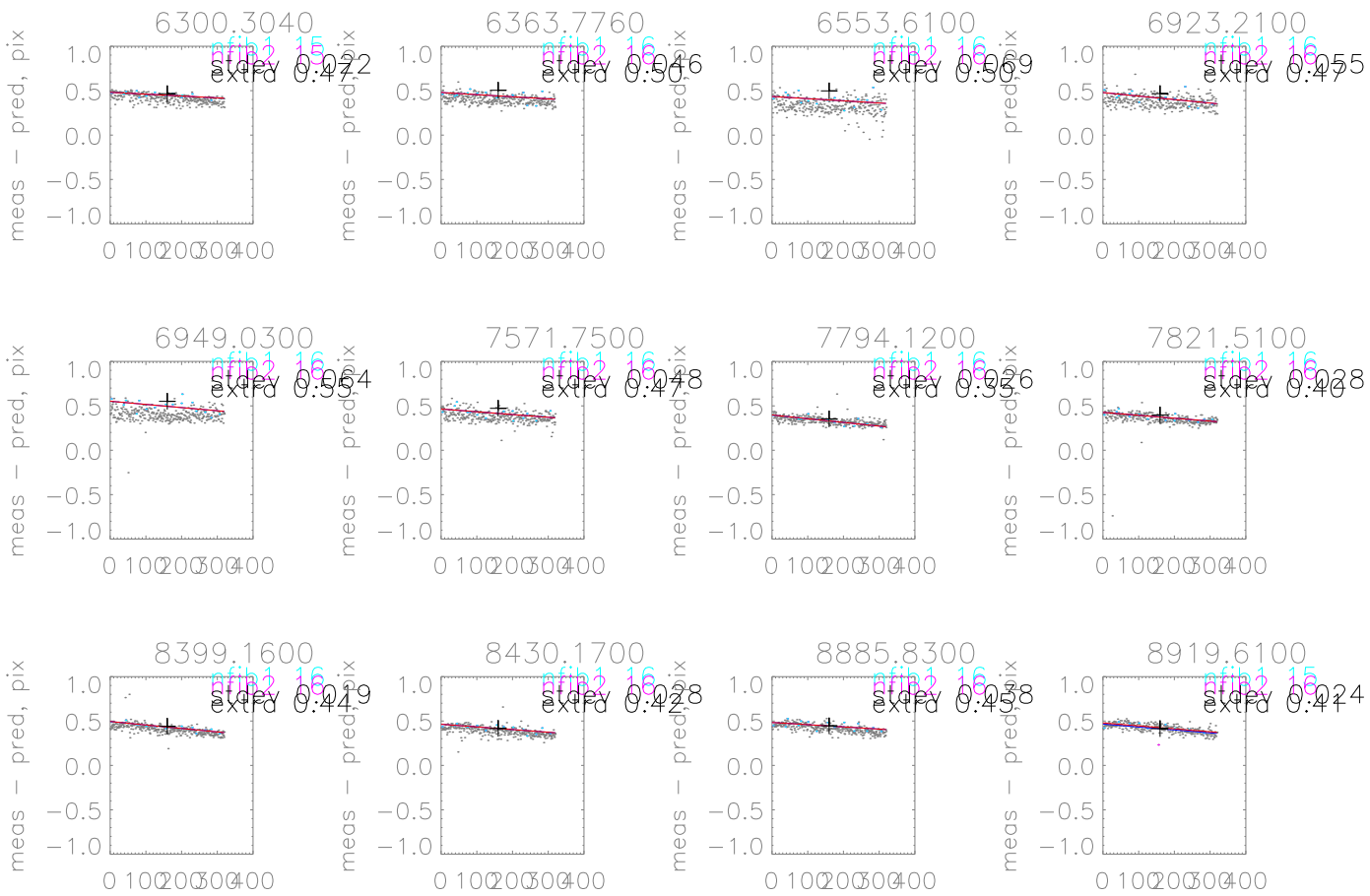

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

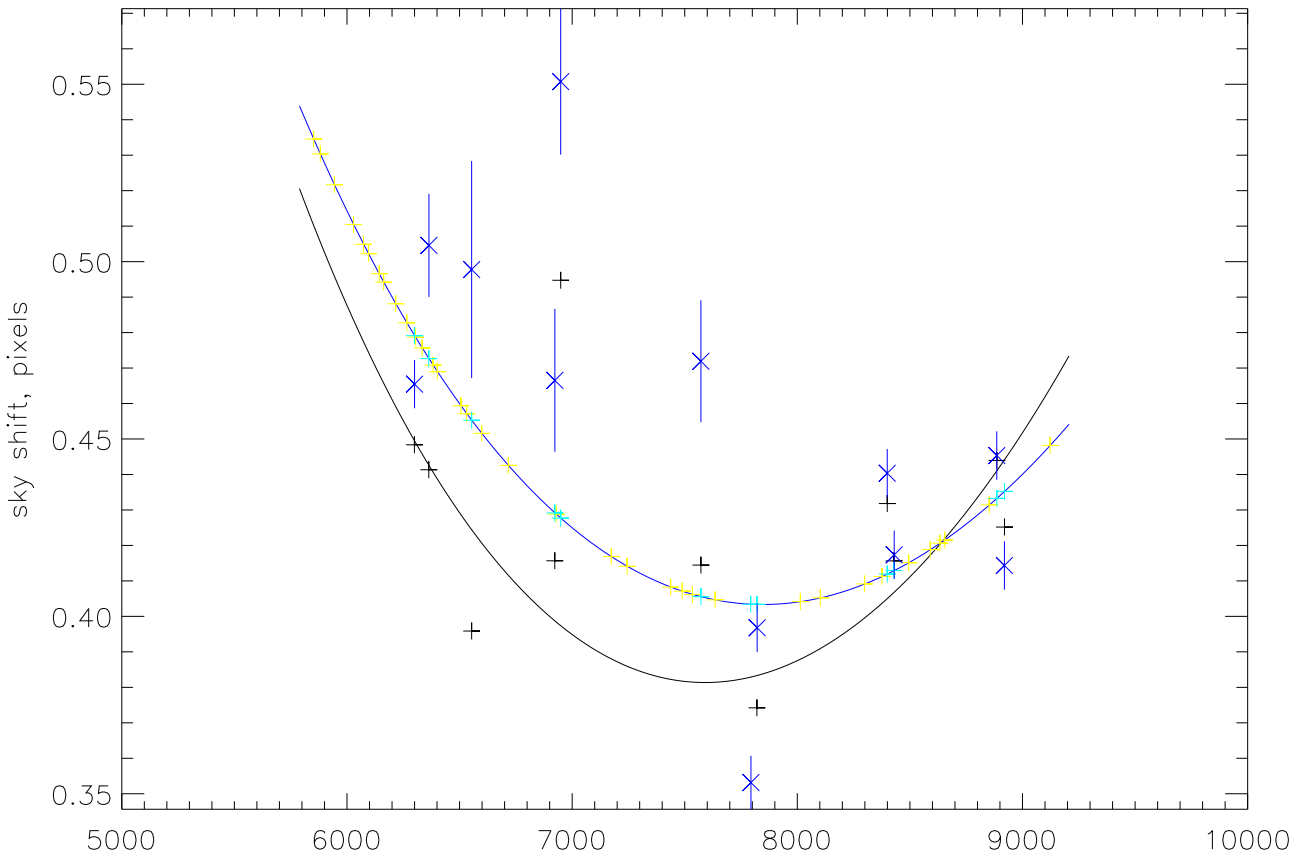

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

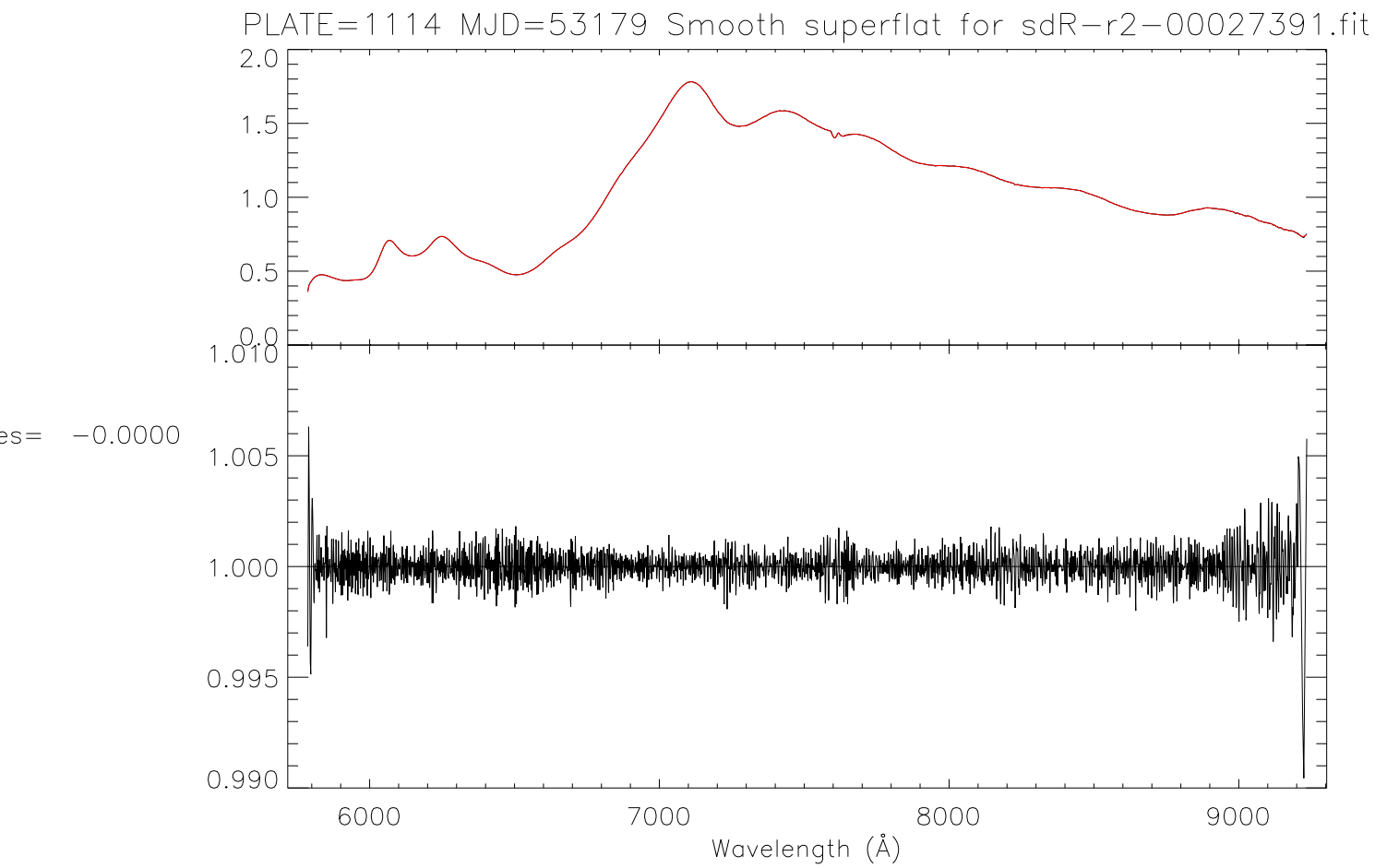

8430.1700
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

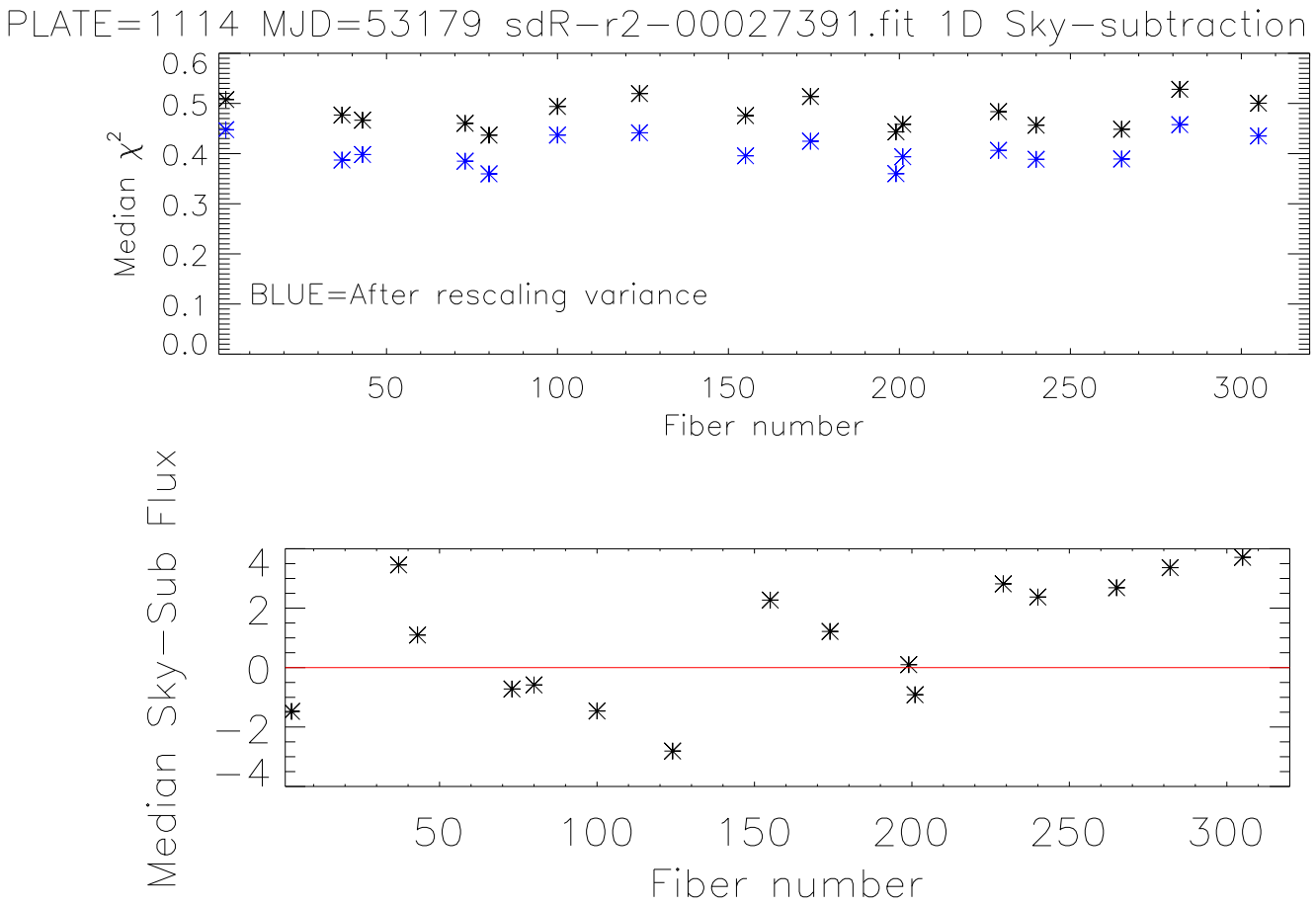

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

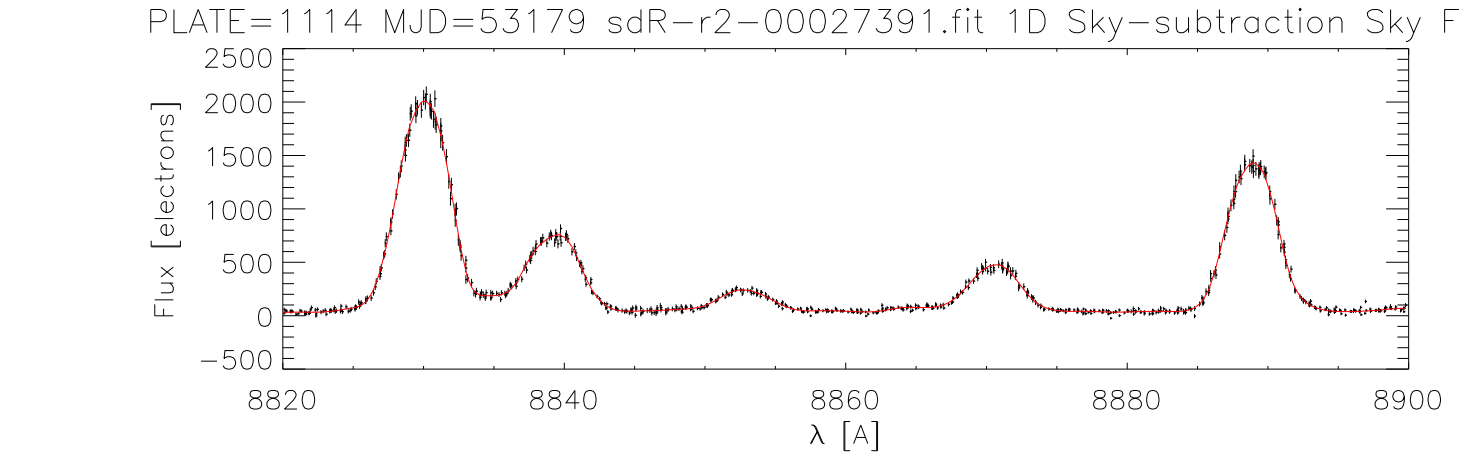

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

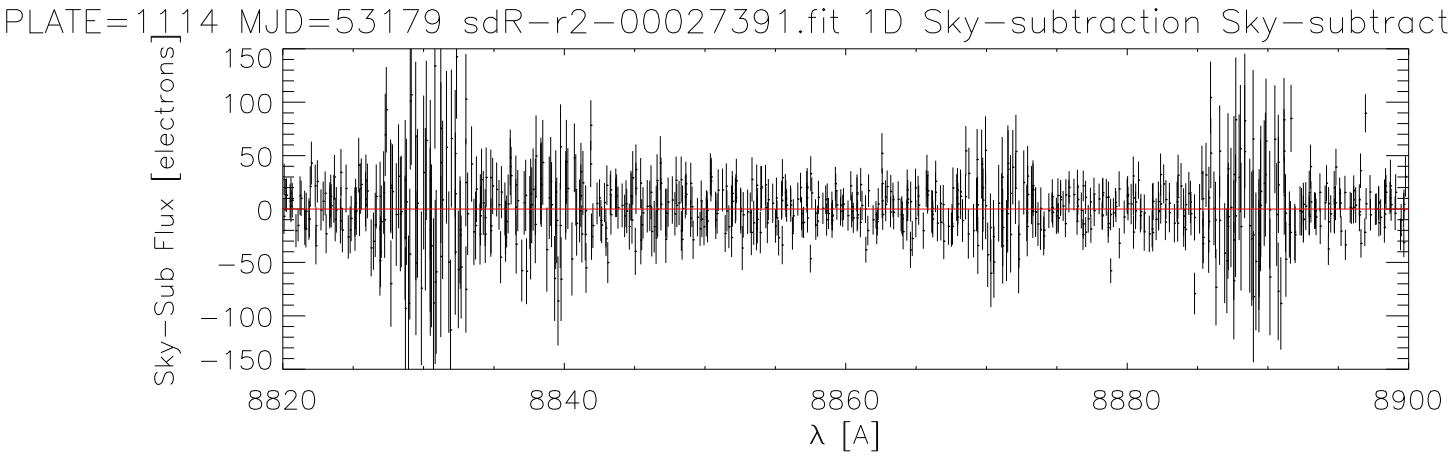

6300.3040
stdev 0.022
extra 0.47
6363.7760
stdev 0.046
extra 0.50
6553.6100
stdev 0.069
extra 0.50
6923.2100
stdev 0.055
extra 0.47
6949.0300
stdev 0.064
extra 0.55
7571.7500
stdev 0.048
extra 0.47
7794.1200
stdev 0.026
extra 0.35
7821.5100
stdev 0.028
extra 0.46
8399.1600
stdev 0.019
extra 0.44
8430.1700
stdev 0.028
extra 0.42
8885.8300
stdev 0.038
extra 0.45
8919.6100
stdev 0.024
extra 0.41
meas − pred, pix
mfb1 16
mfb2 15
mfb2 16

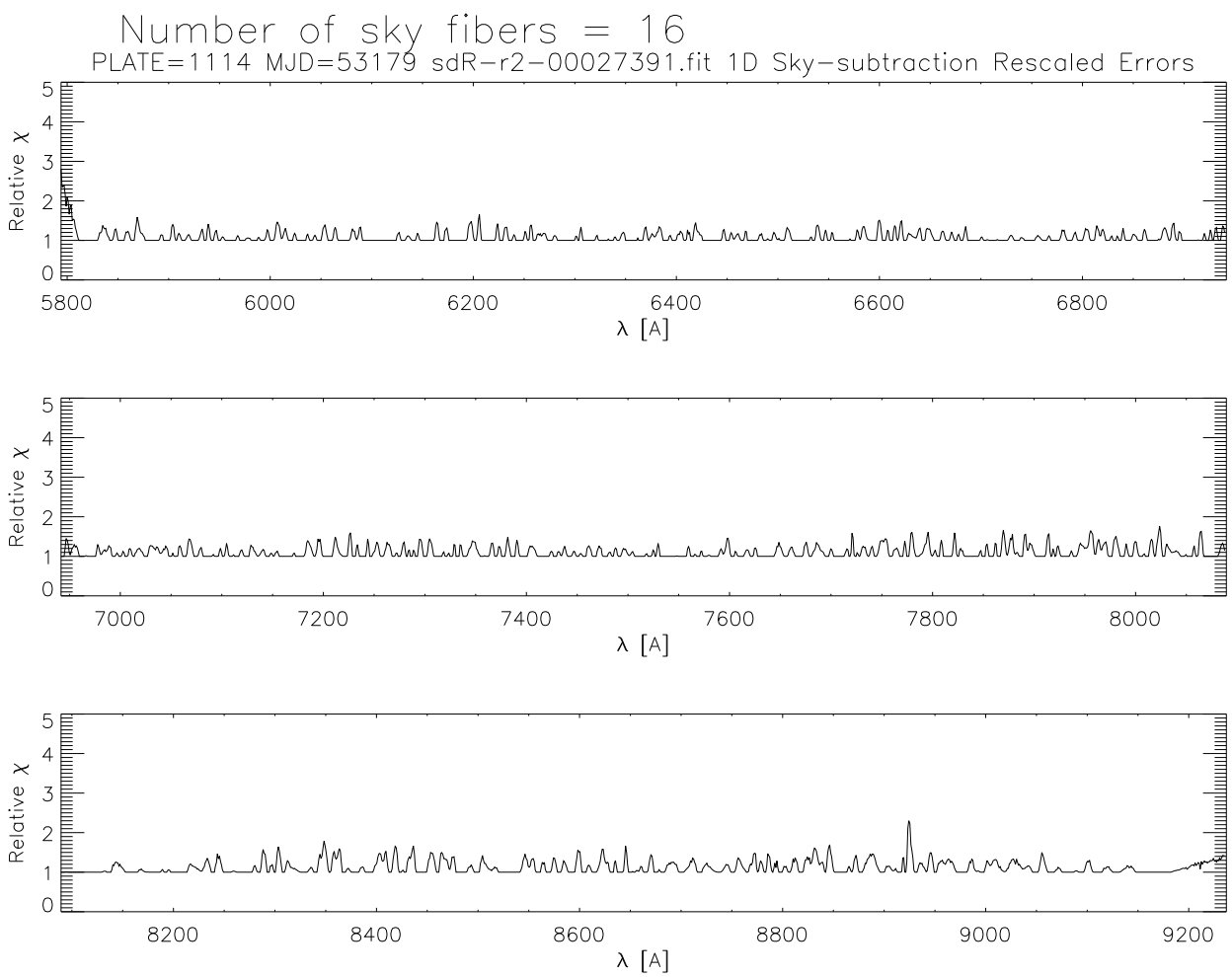

sky shift, pixels
0.55
0.50
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000

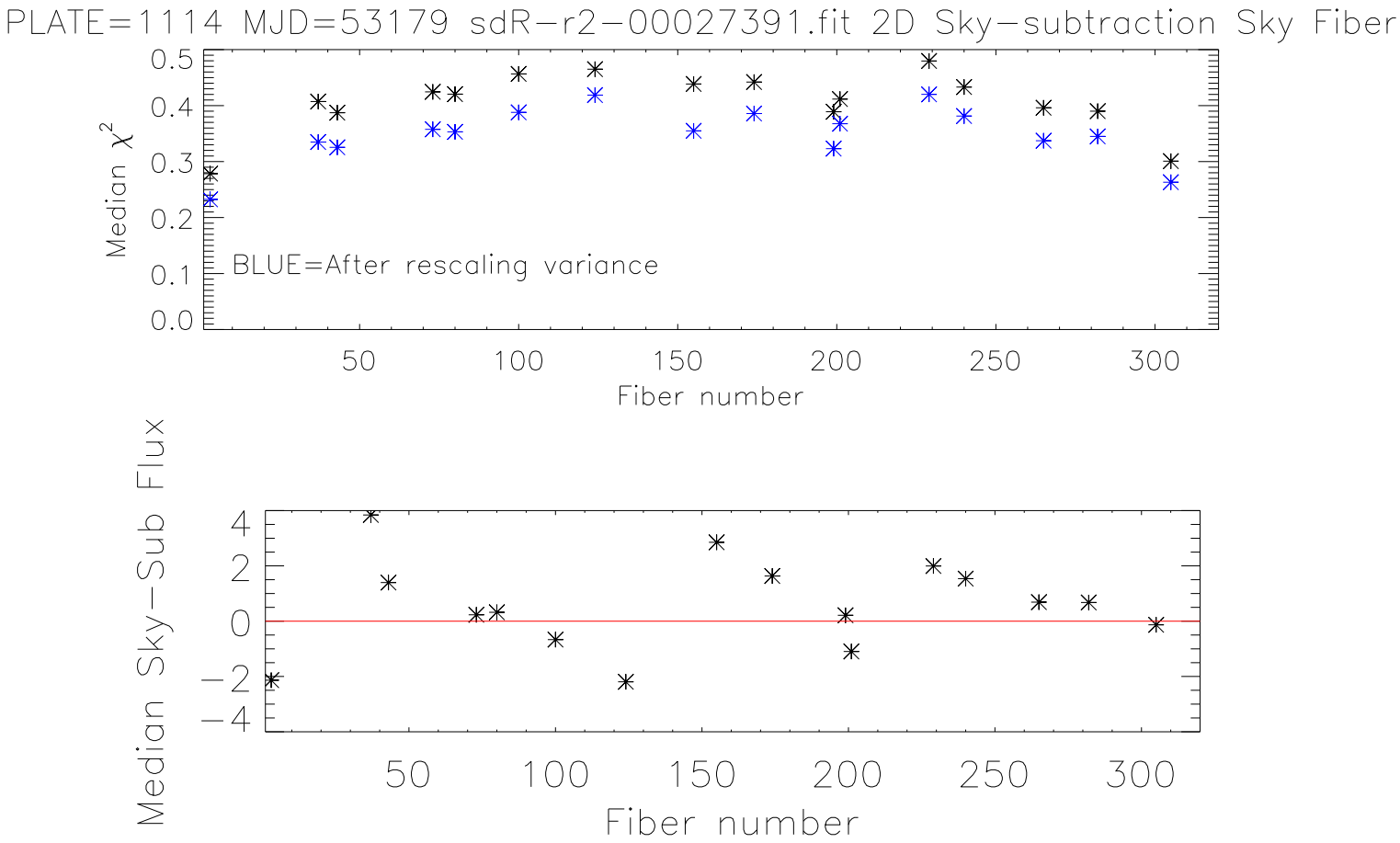

PLATE=1114 MJD=53179 Smooth superflat for sdR-r2-00027391.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

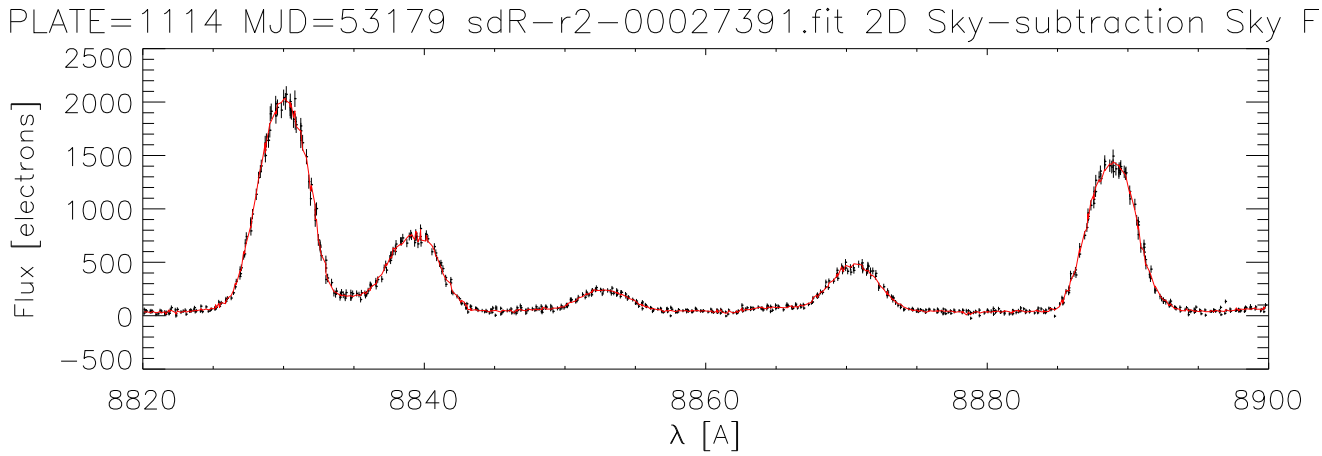

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

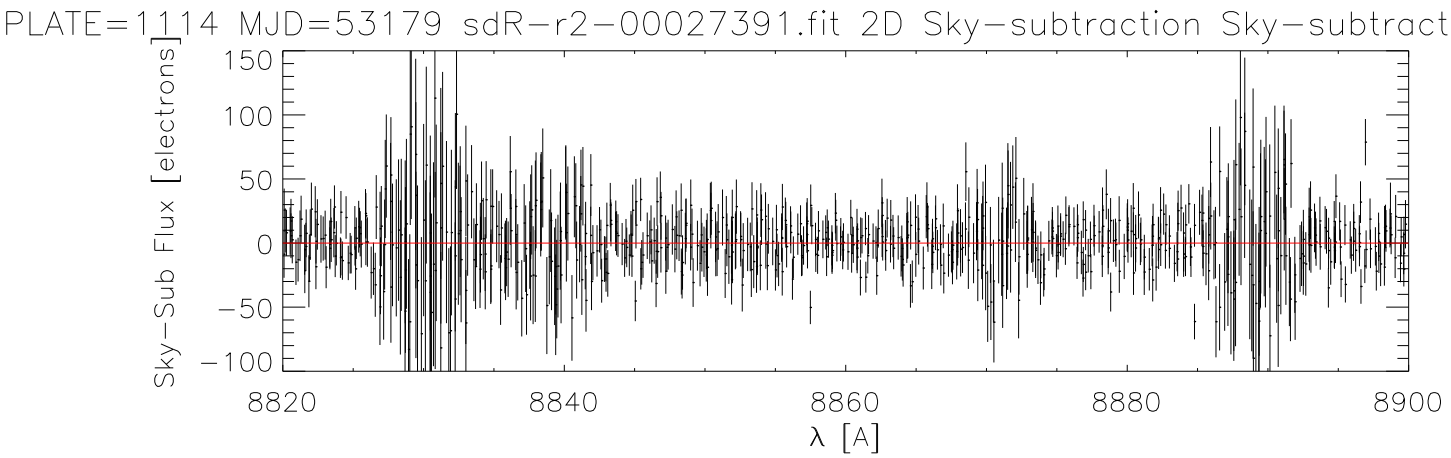

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

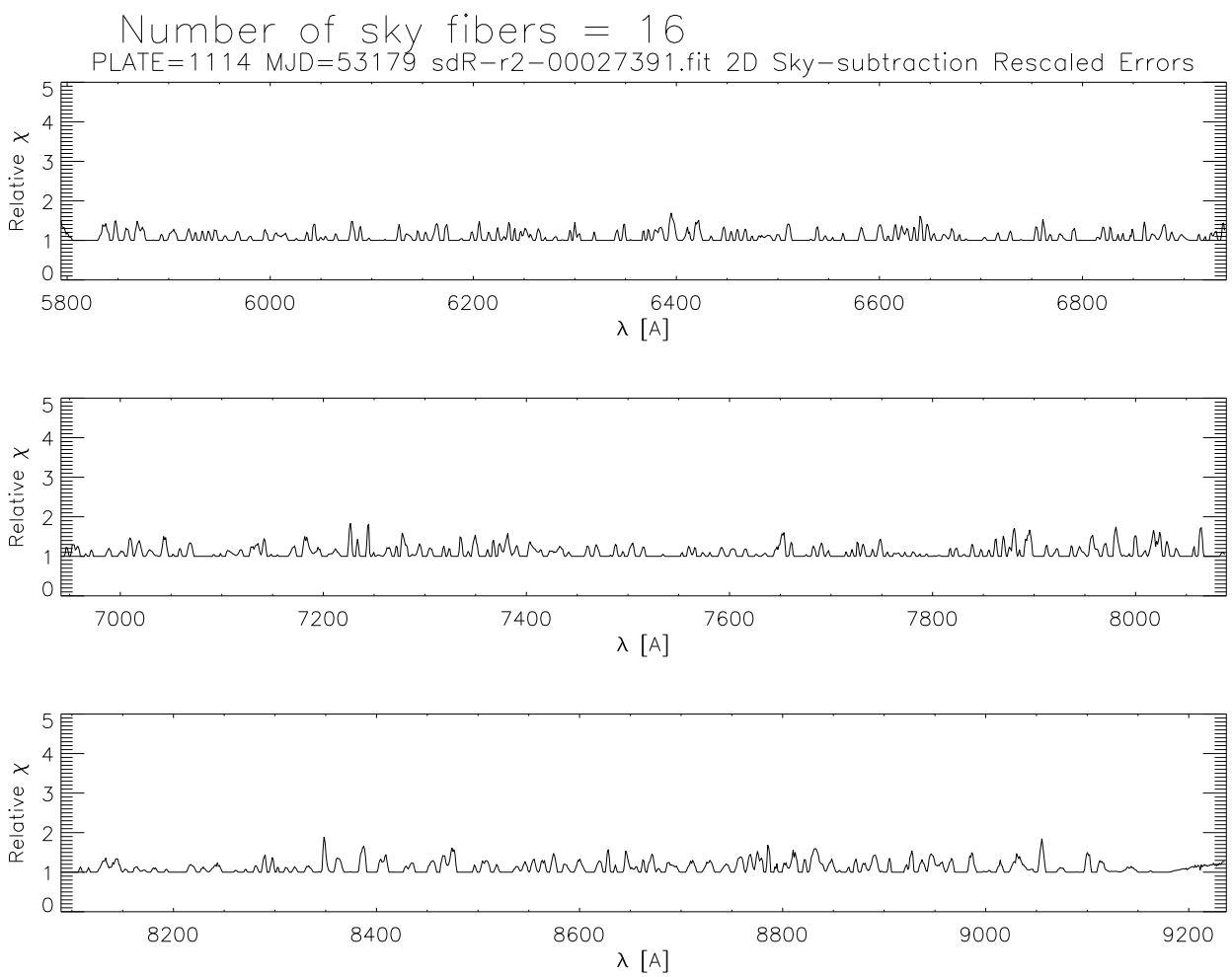

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]

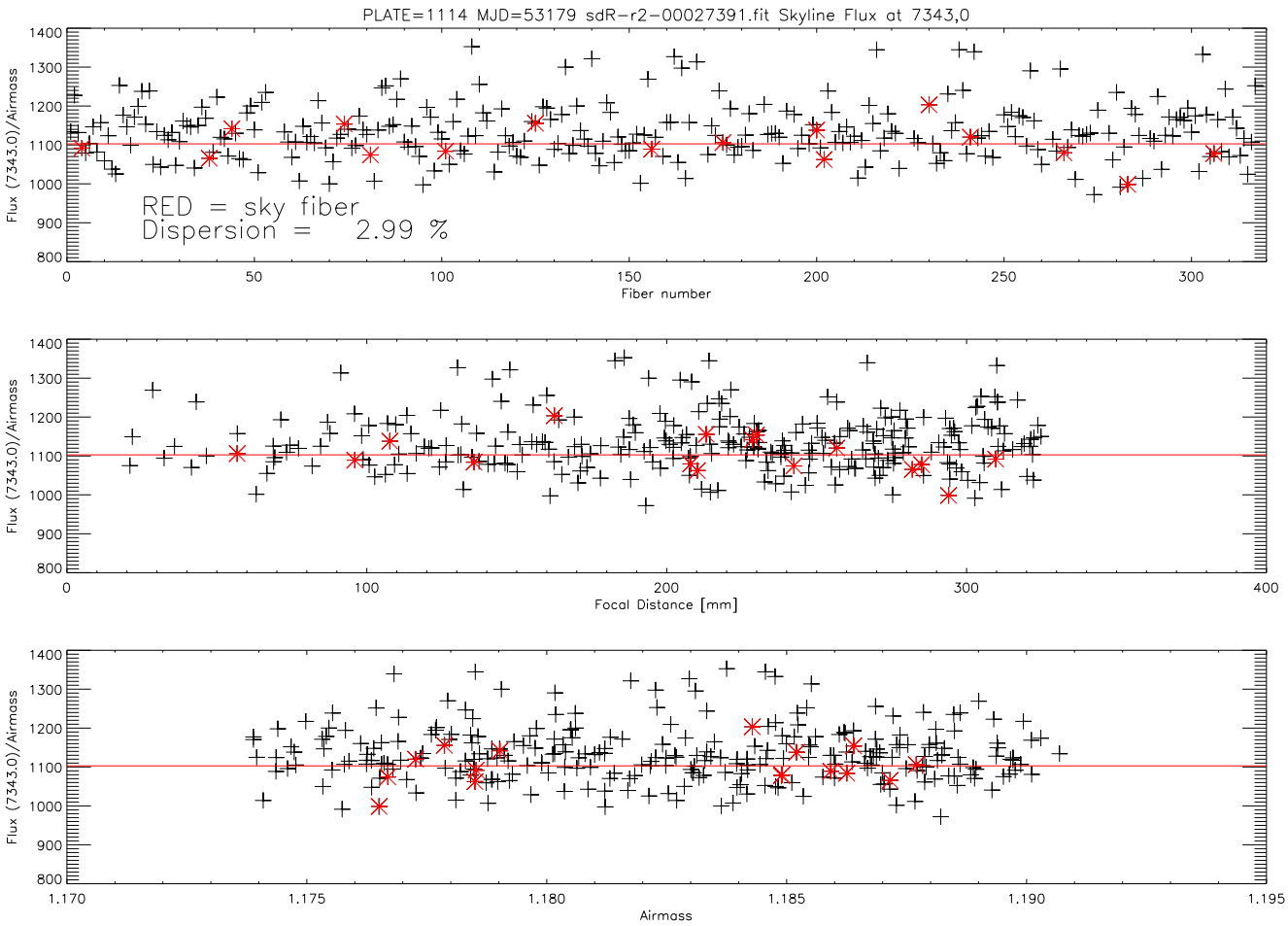

Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027391.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

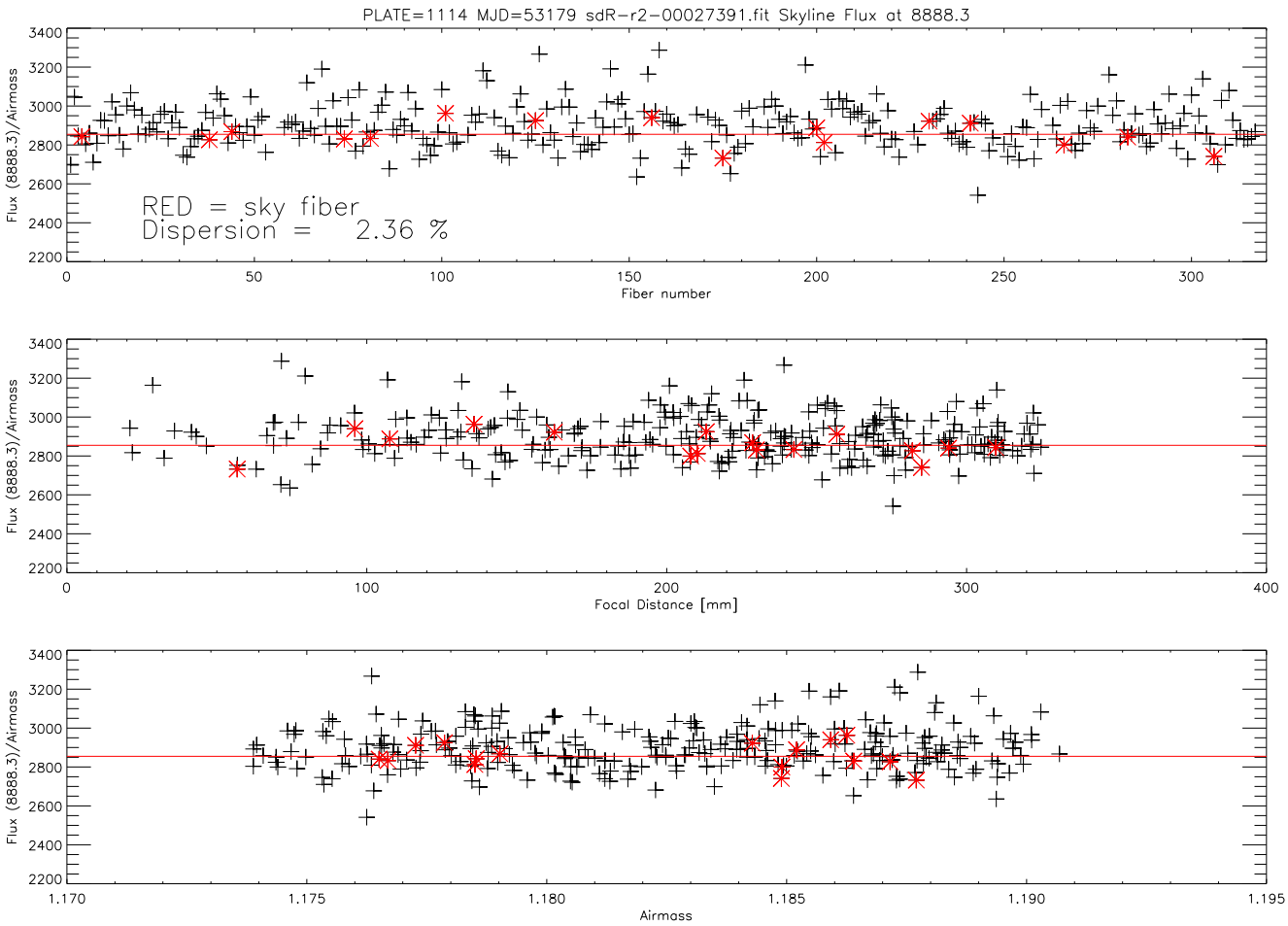

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

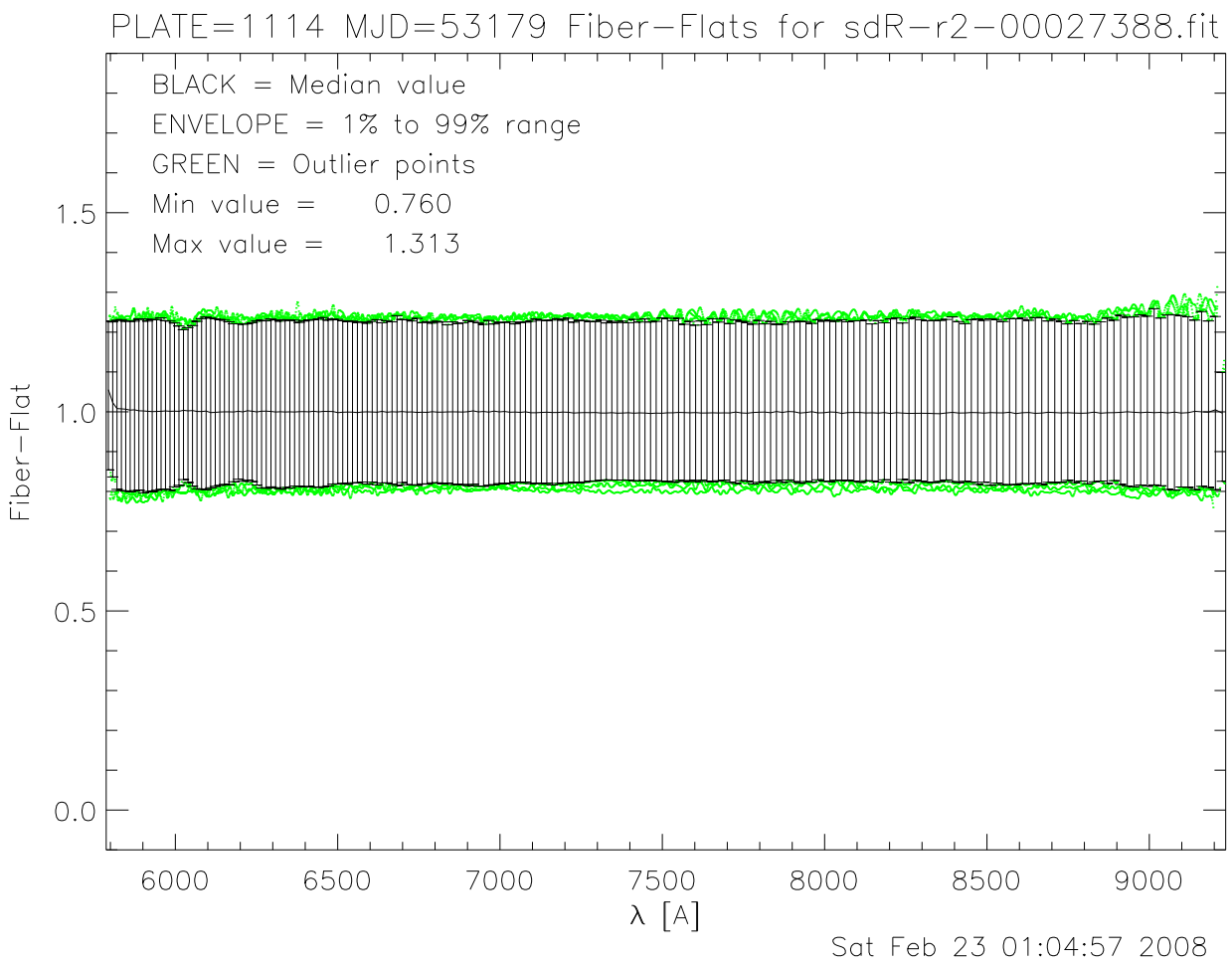

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

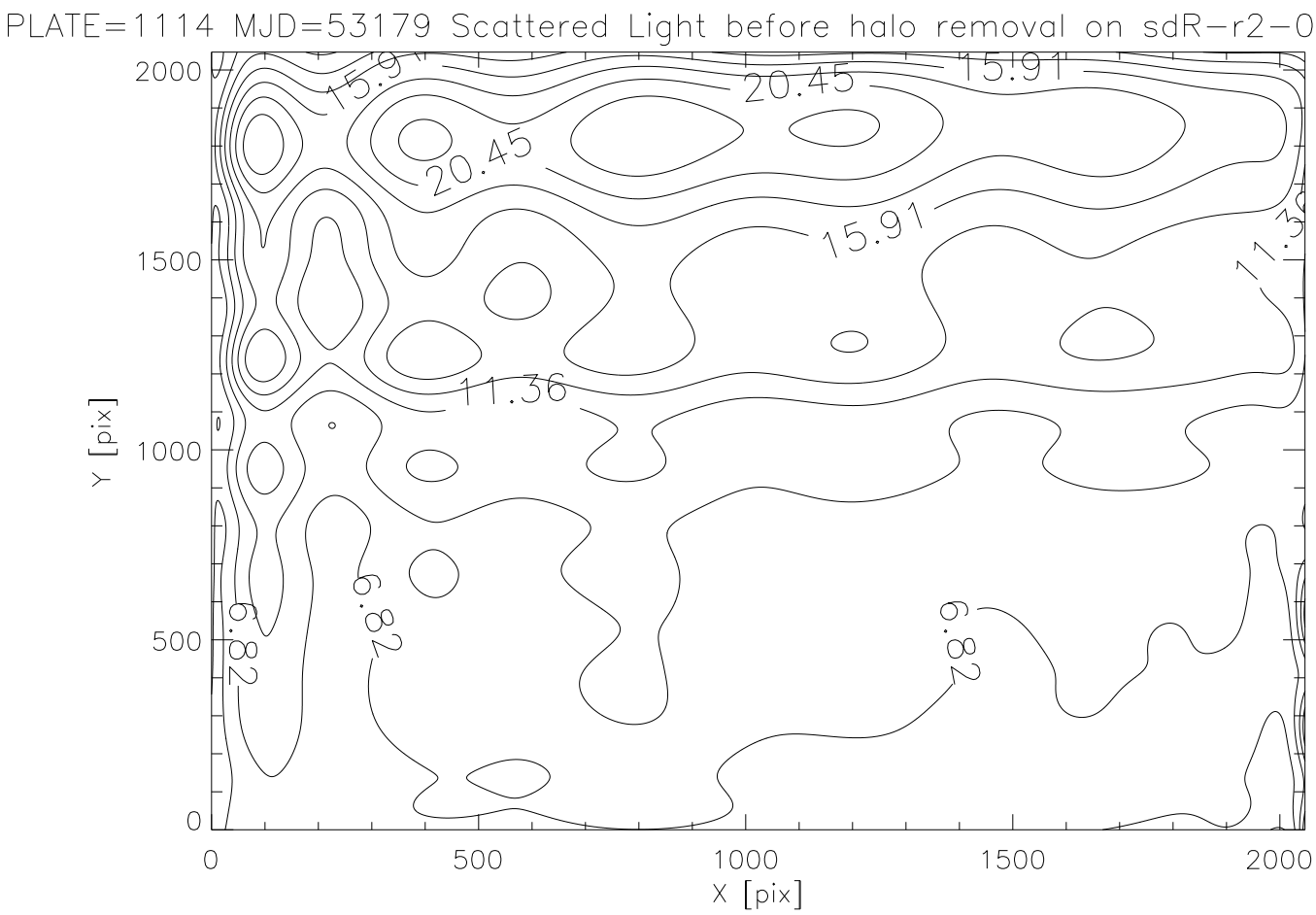

PLATE=1114 MJD=53179 sdR-r2-00027391.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
8820
8840
8860
8880
8900
λ [A]

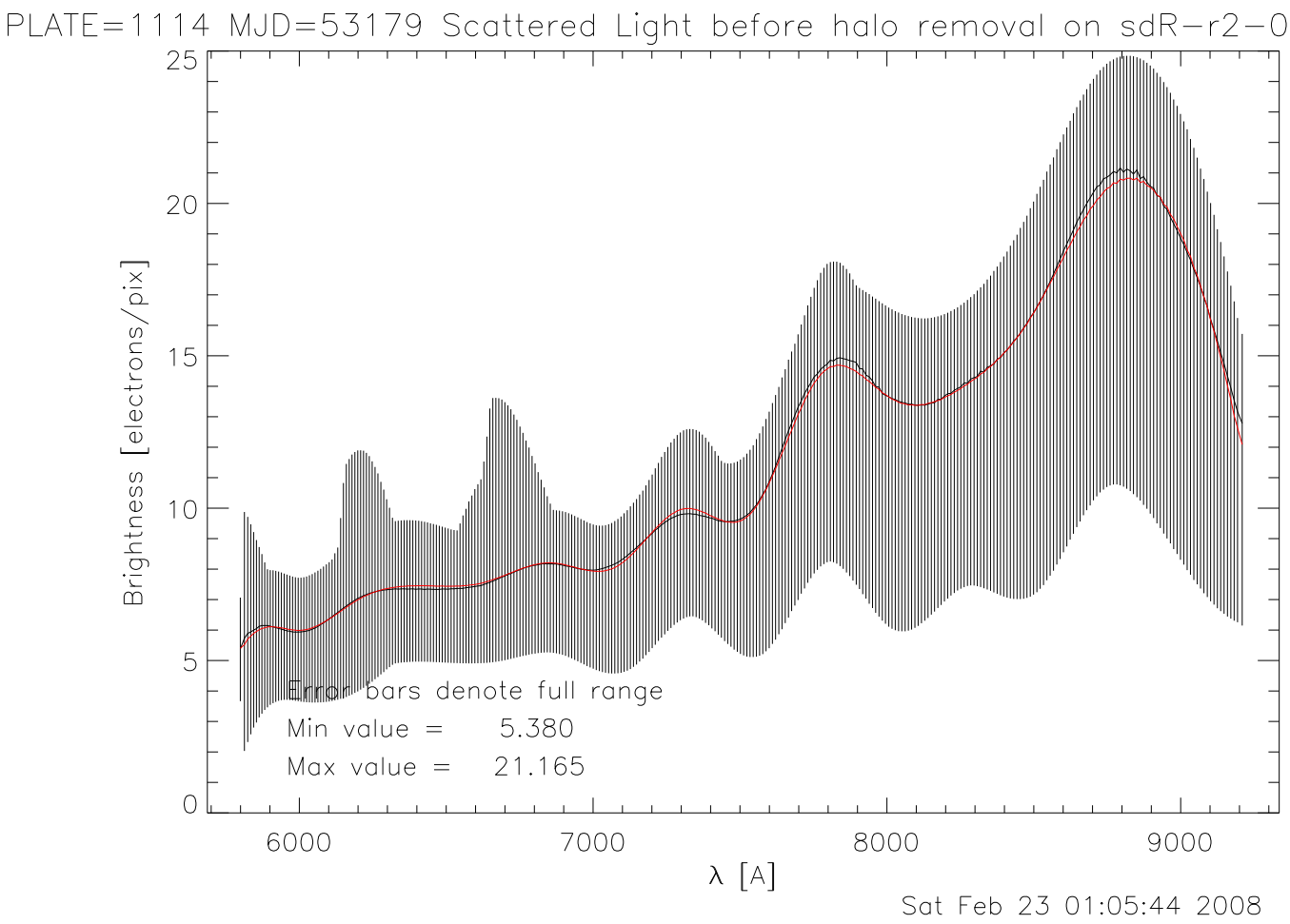

Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027391.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

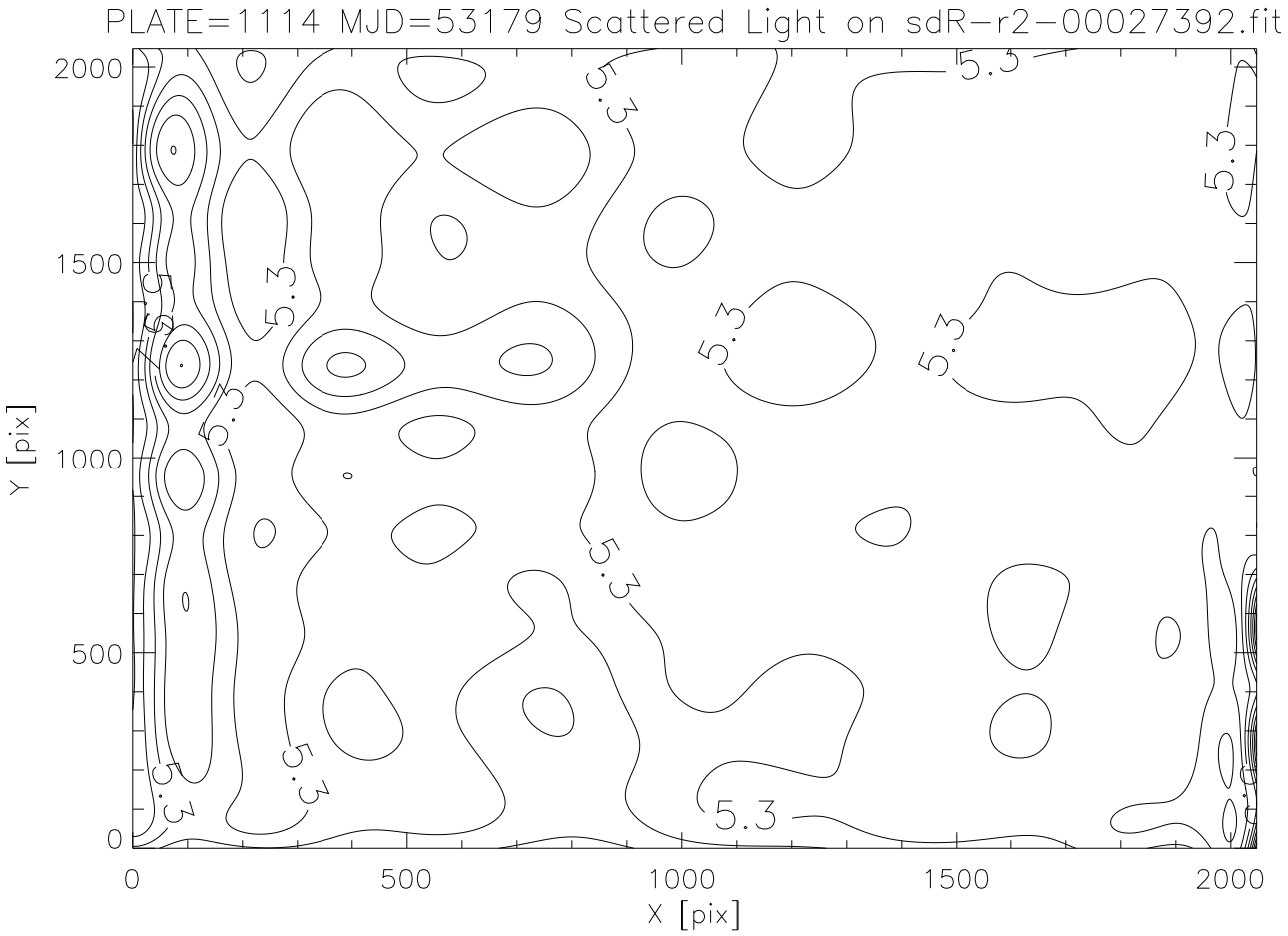

PLATE=1114 MJD=53179 sdR-r2-00027391.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.99 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

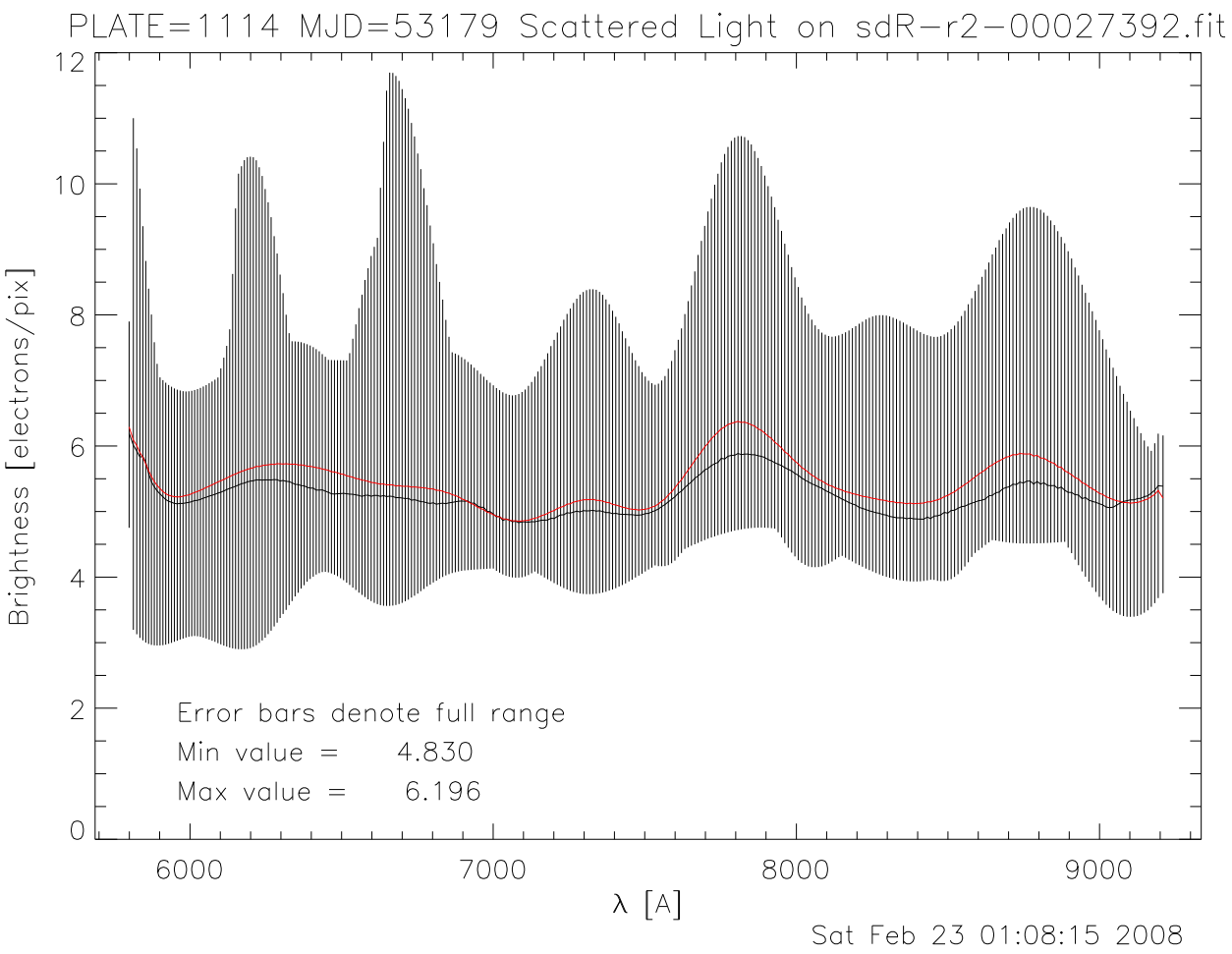

PLATE=1114 MJD=53179 sdR-r2-00027391.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.36 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

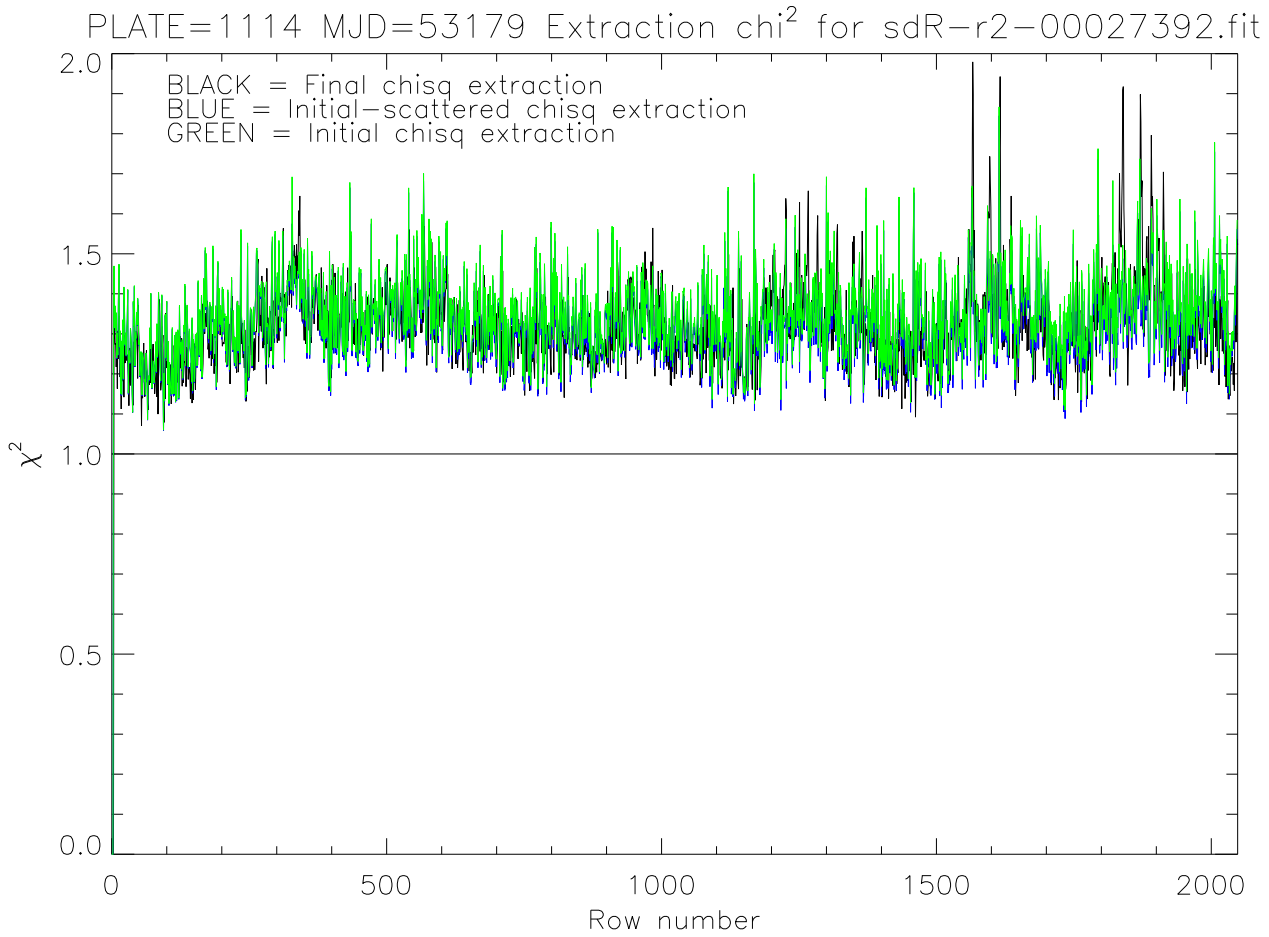

PLATE=1114 MJD=53179 Fiber−Flats for sdR−r2−00027388.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.760
Max value = 1.313
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 01:04:57 2008

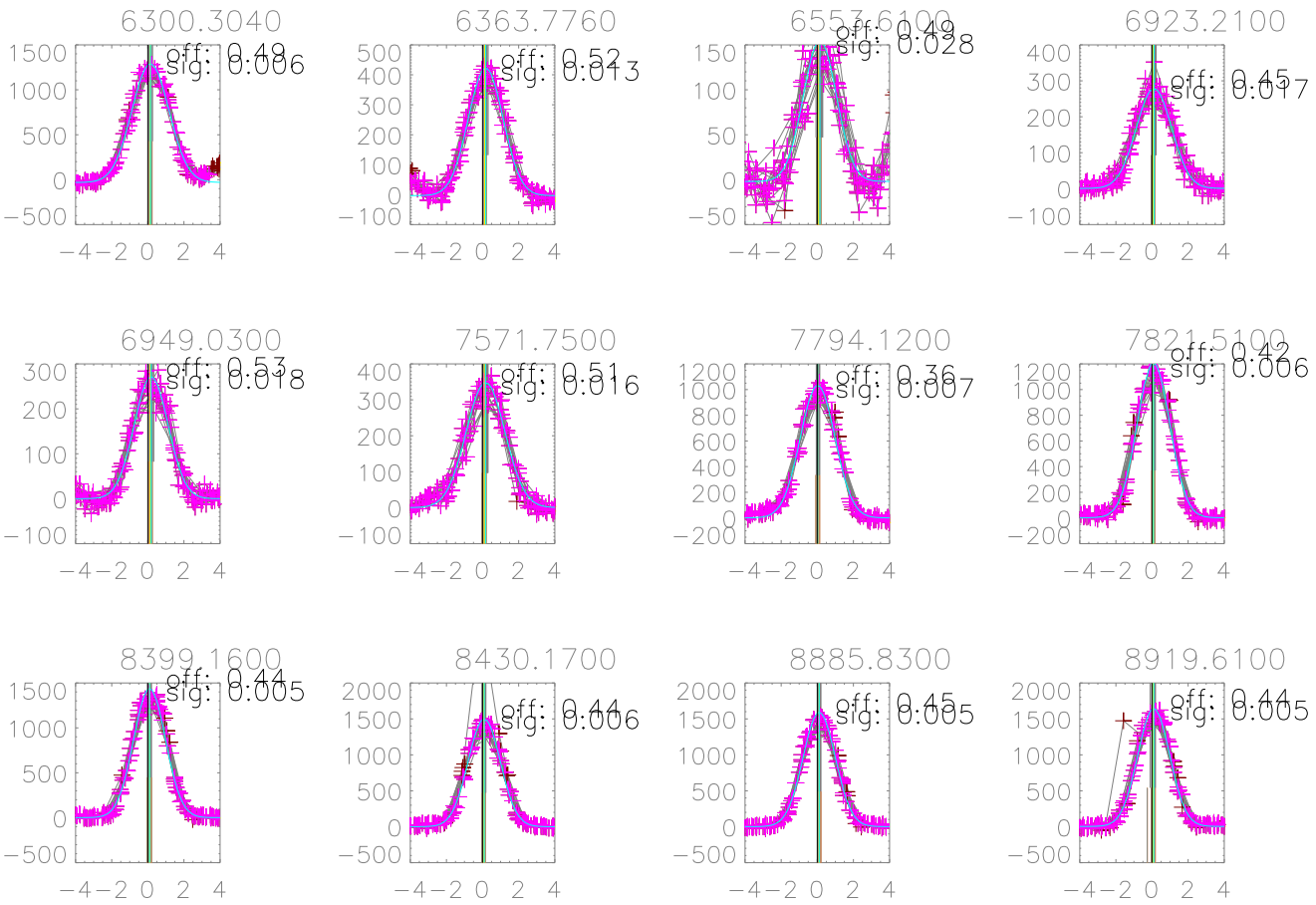

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027392.fi
20.45
15.91
20.45
15.91
11.36
6.82
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

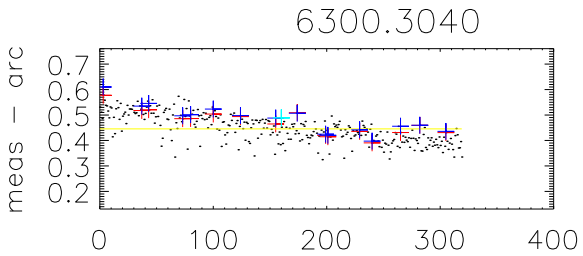

PLATE=1114 MJD=53179 Scattered Light before halo removal on sdR-r2-00027392.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.380
Max value = 21.165
Sat Feb 23 01:05:44 2008

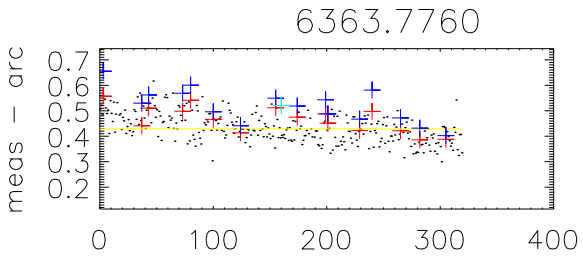

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027392.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3

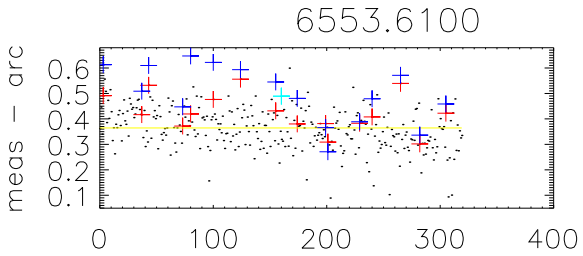

PLATE=1114 MJD=53179 Scattered Light on sdR-r2-00027392.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.830
Max value = 6.196
Sat Feb 23 01:08:15 2008

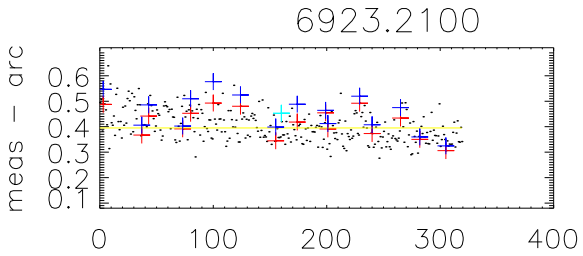

PLATE=1114 MJD=53179 Extraction chi^2 for sdR−r2−00027392.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

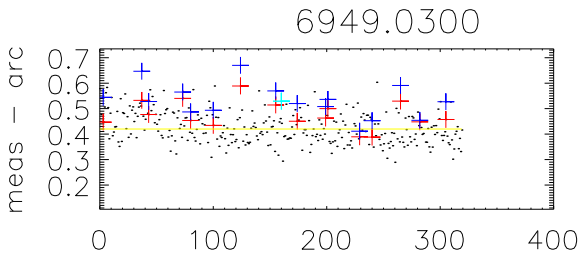

6300.3040
off: 0.48
sig: 0.006
6363.7760
off: 0.52
sig: 0.013
6553.6100
off: 0.49
sig: 0.028
6923.2100
off: 0.45
sig: 0.017
6949.0300
off: 0.53
sig: 0.018
7571.7500
off: 0.51
sig: 0.016
7794.1200
off: 0.36
sig: 0.007
7821.5100
off: 0.42
sig: 0.006
8399.1600
off: 0.44
sig: 0.005
8430.1700
off: 0.44
sig: 0.006
8885.8300
off: 0.45
sig: 0.005
8919.6100
off: 0.44
sig: 0.005

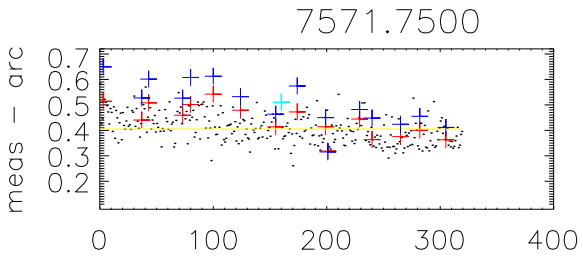

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

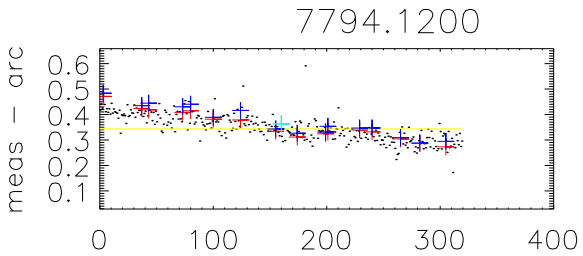

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

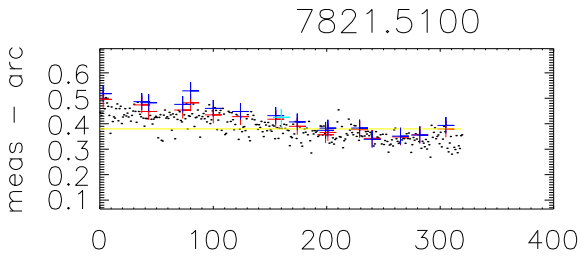

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

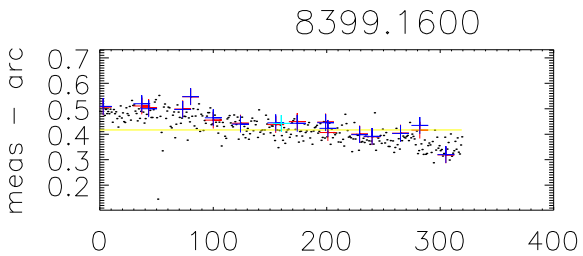

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

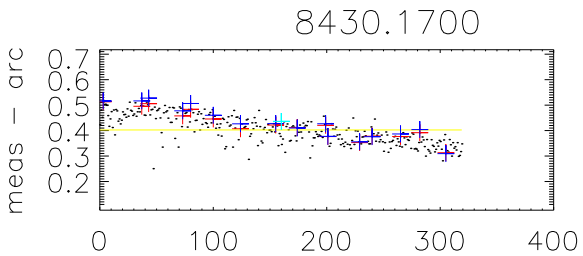

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

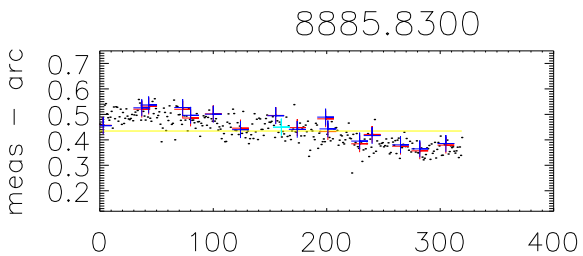

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

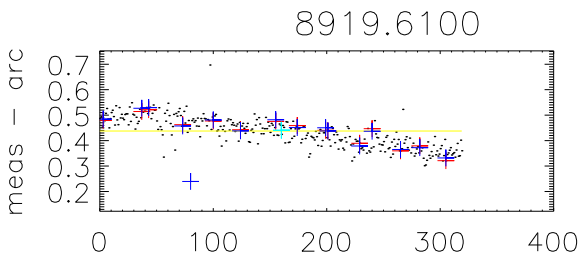

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

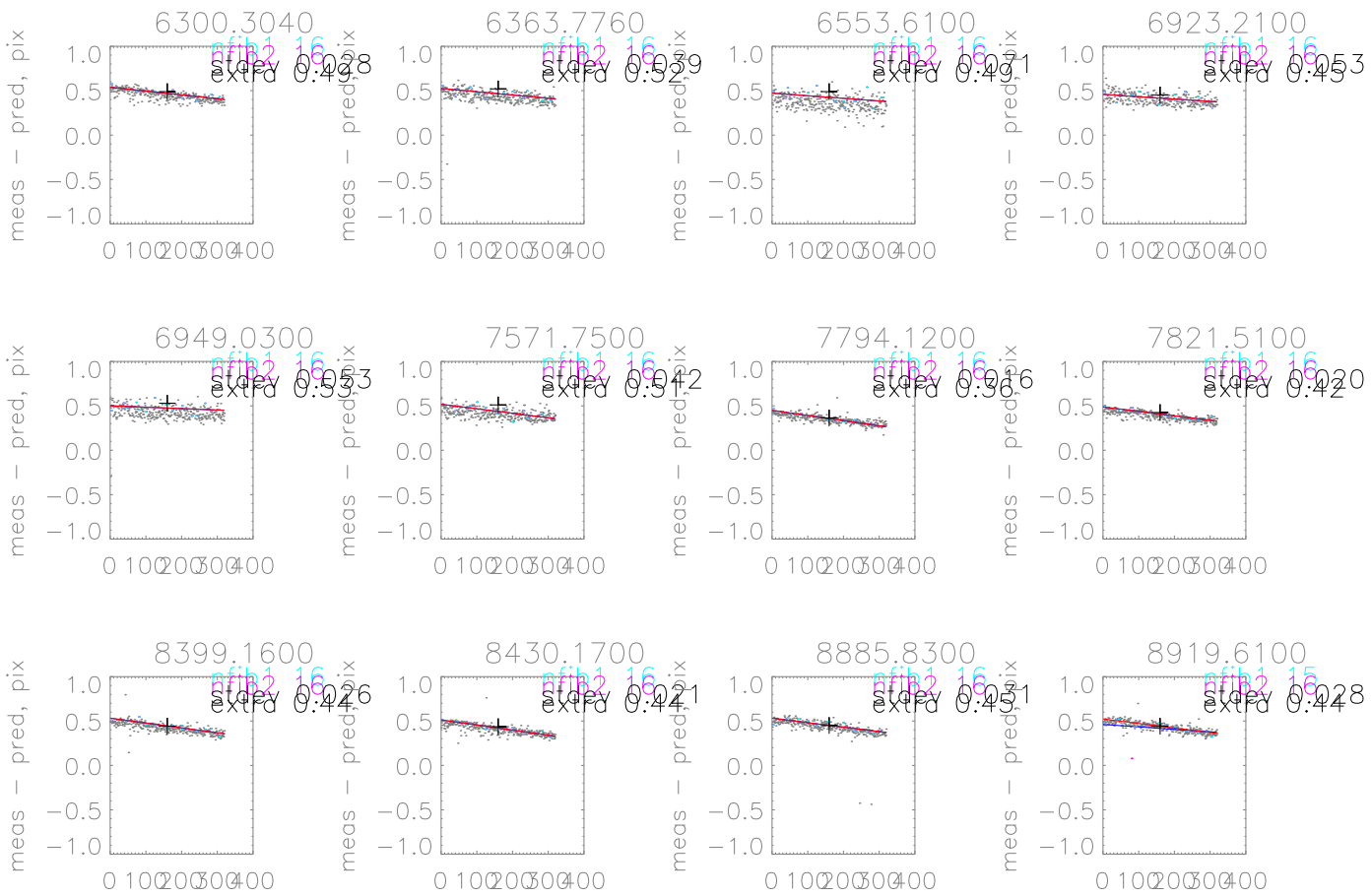

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

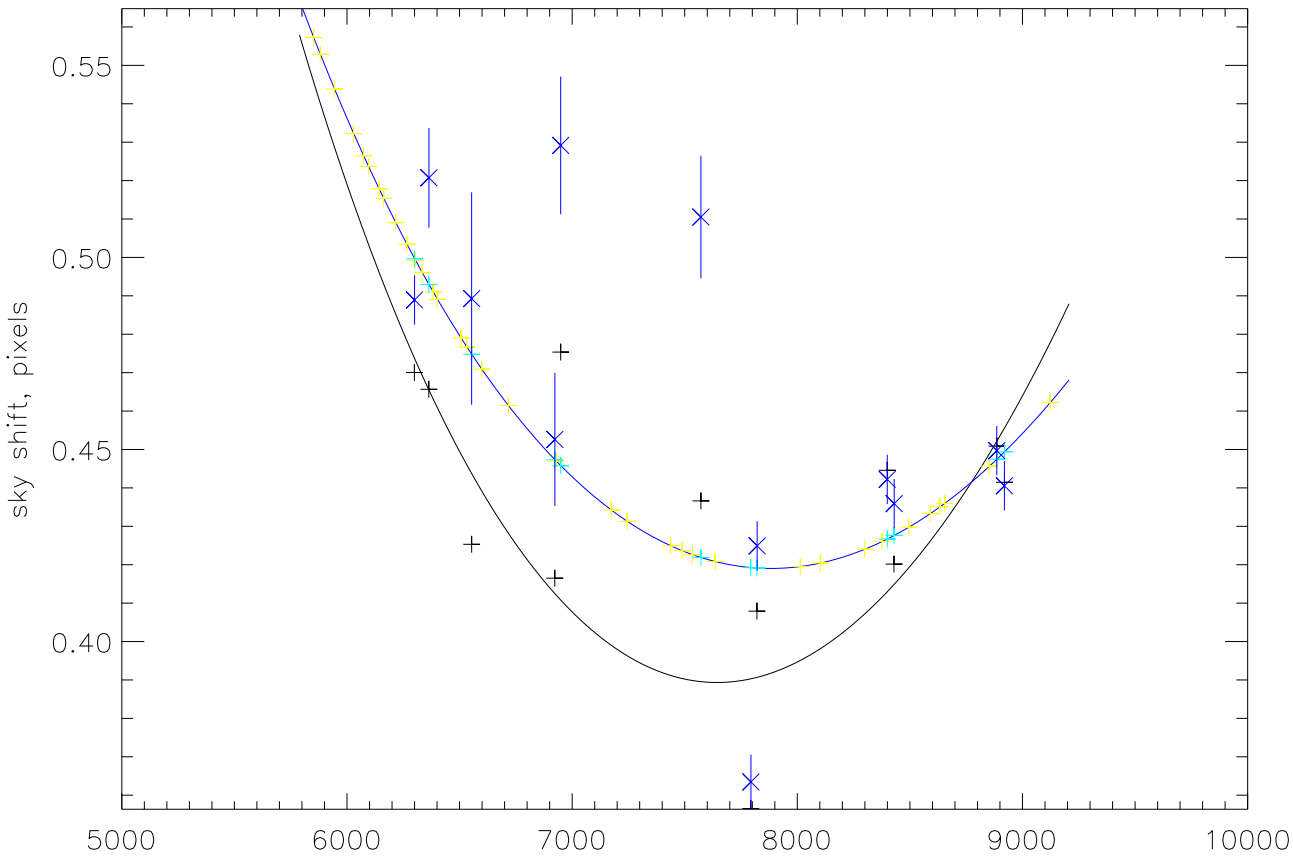

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

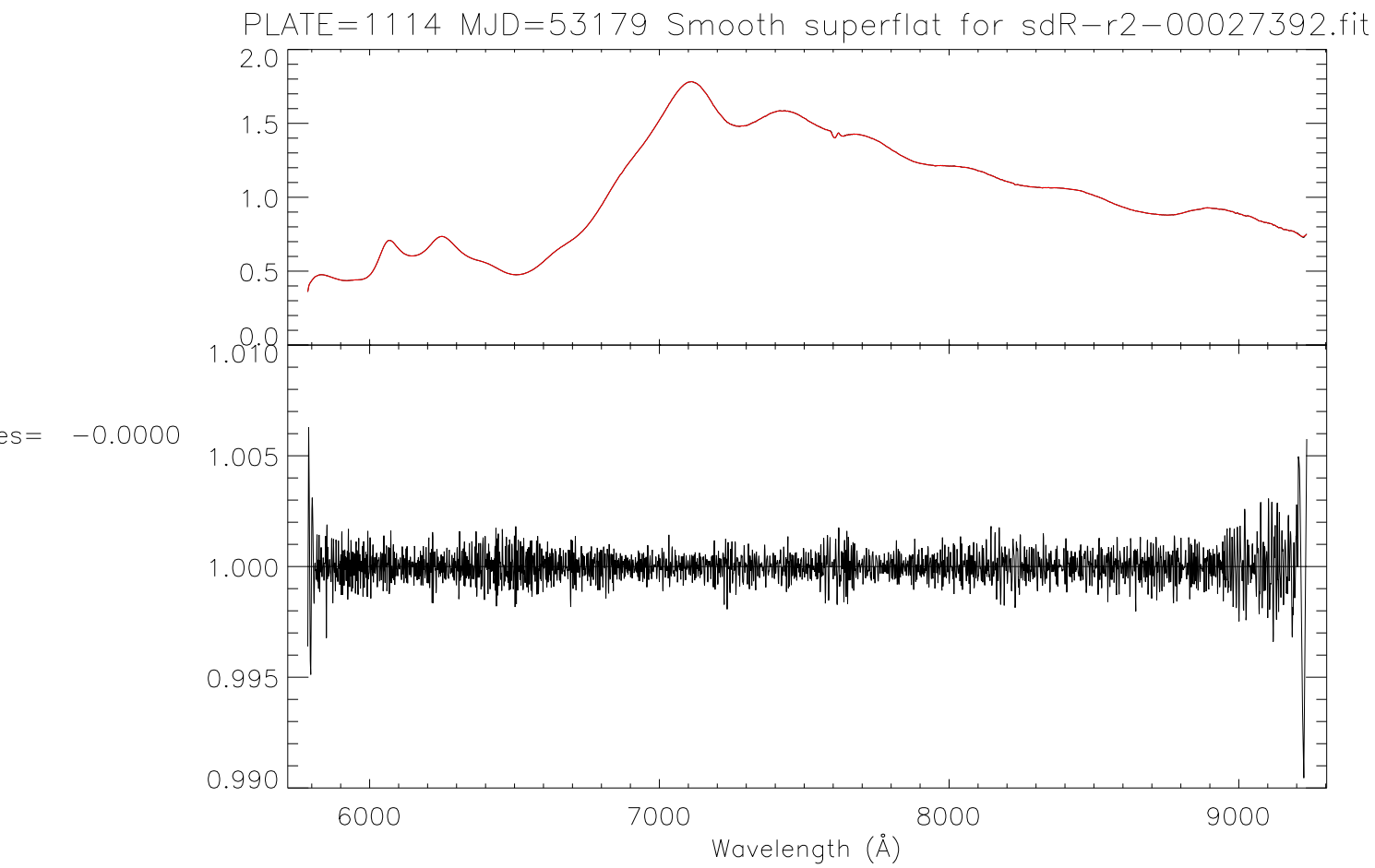

8430.1700
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

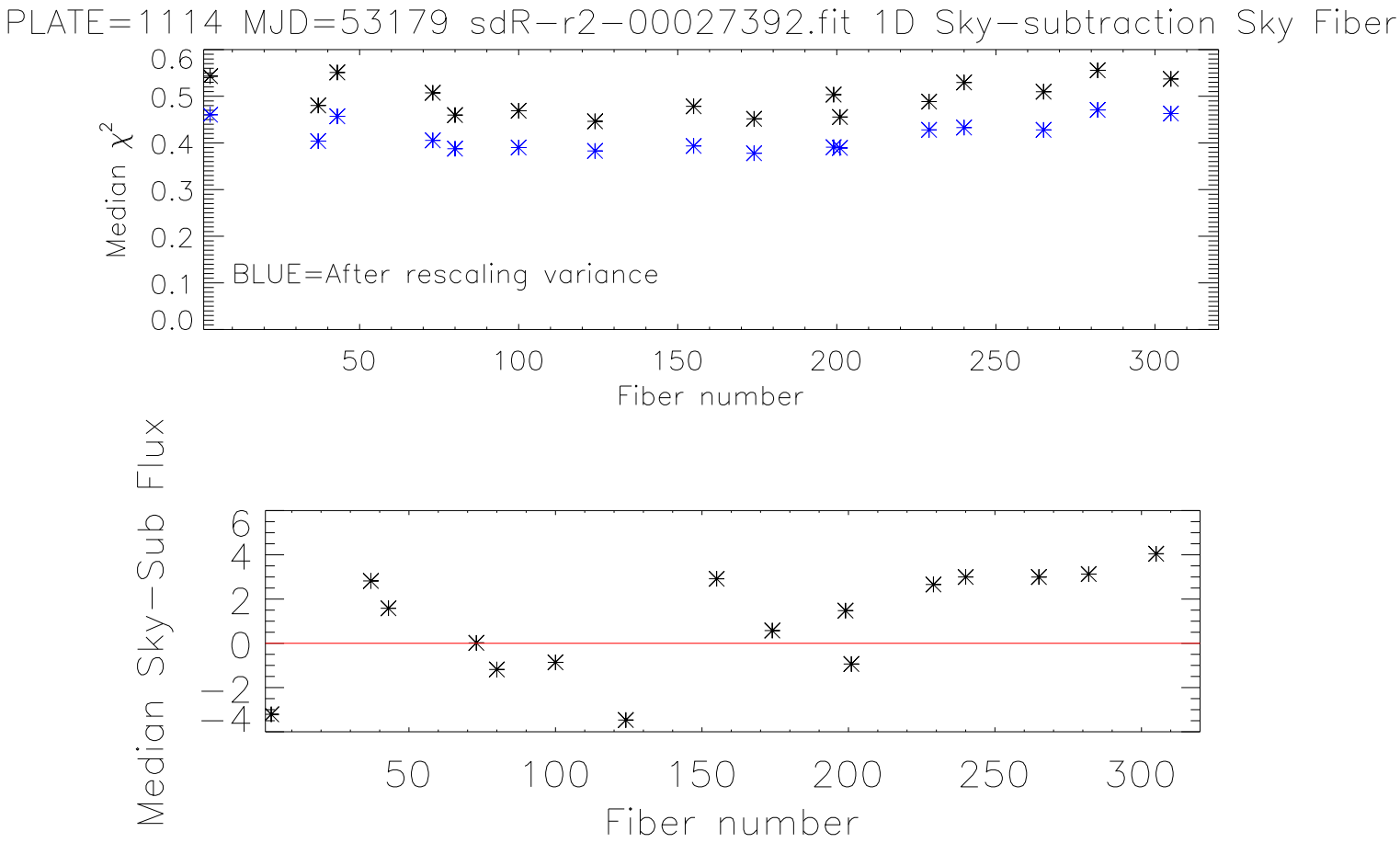

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

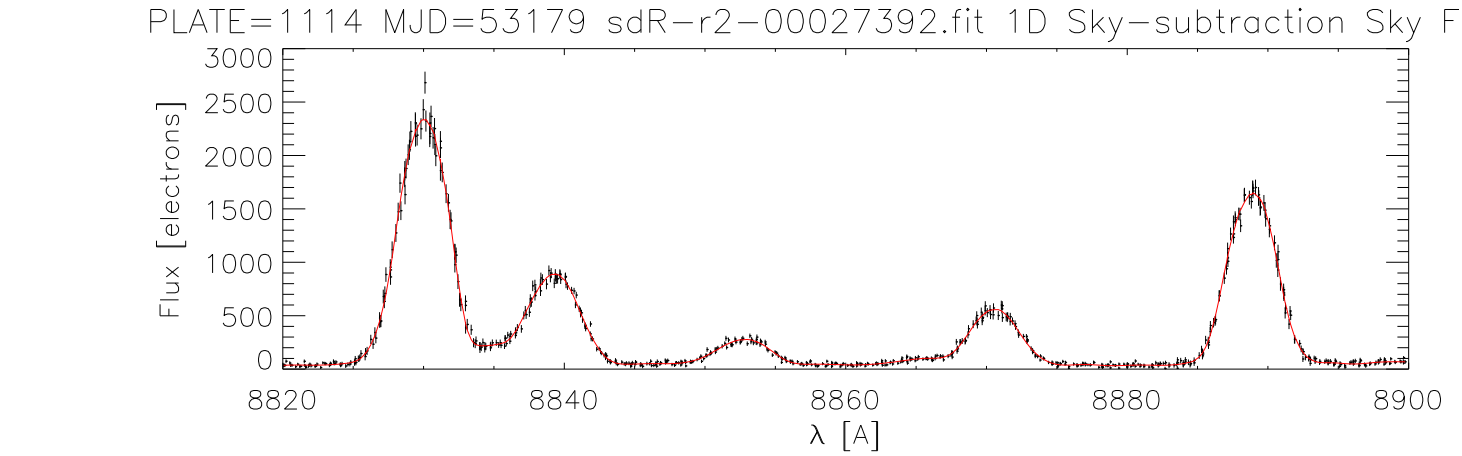

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

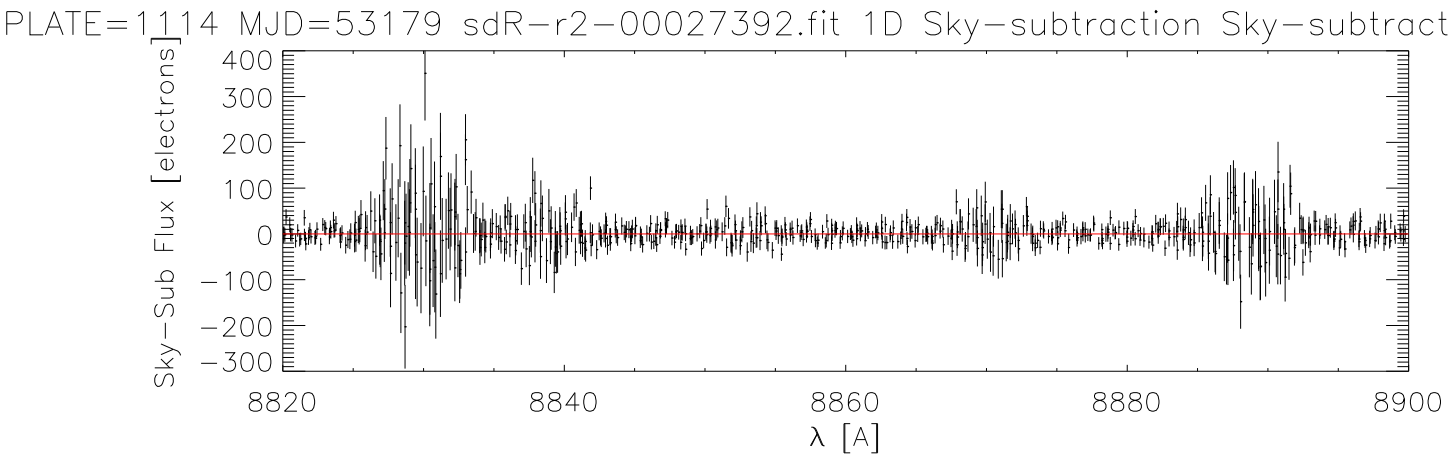

6300.3040
stdev 0.028
extra 0.46
6363.7760
stdev 0.039
extra 0.52
6553.6100
stdev 0.071
extra 0.49
6923.2100
stdev 0.053
extra 0.45
6949.0300
stdev 0.053
extra 0.53
7571.7500
stdev 0.042
extra 0.51
7794.1200
stdev 0.046
extra 0.36
7821.5100
stdev 0.020
extra 0.42
8399.1600
stdev 0.026
extra 0.44
8430.1700
stdev 0.021
extra 0.44
8885.8300
stdev 0.031
extra 0.45
8919.6100
stdev 0.028
extra 0.44
meas − pred, pix
meas − pred, pix
mfib2 16
mfib1 16
mfib1 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

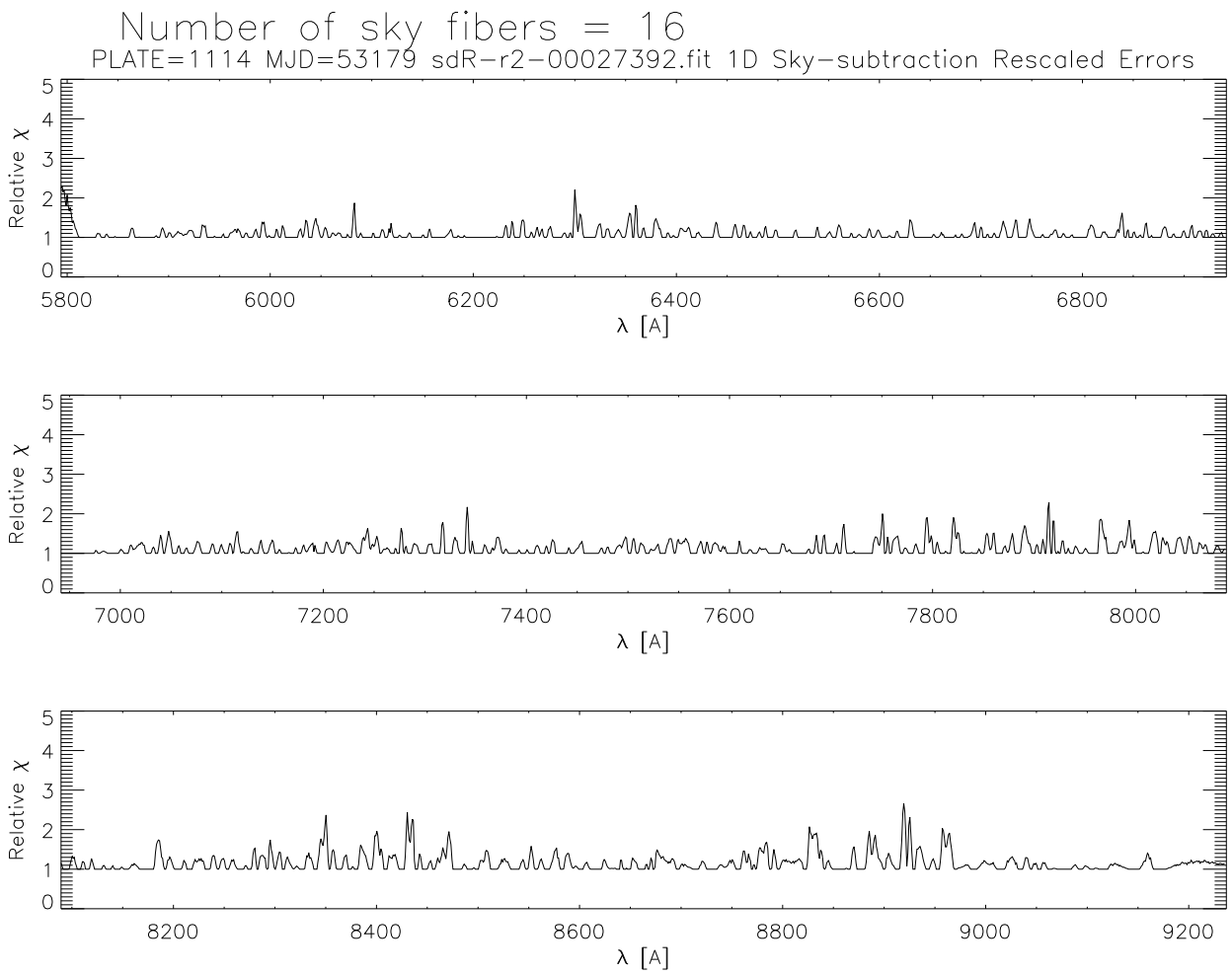

0.55
0.50
0.45
0.40
sky shift, pixels
5000
6000
7000
8000
9000
10000

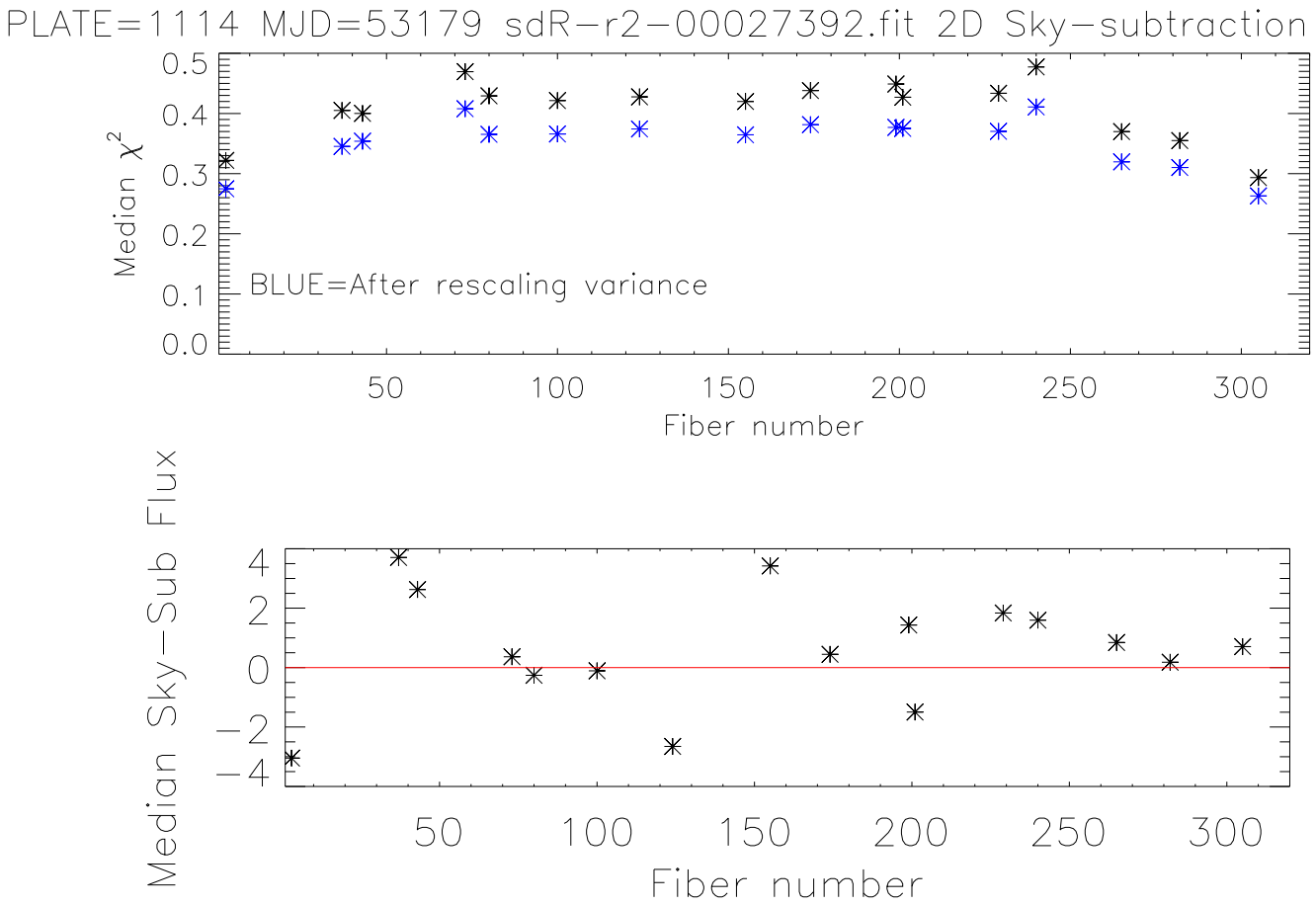

PLATE=1114 MJD=53179 Smooth superflat for sdR-r2-00027392.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

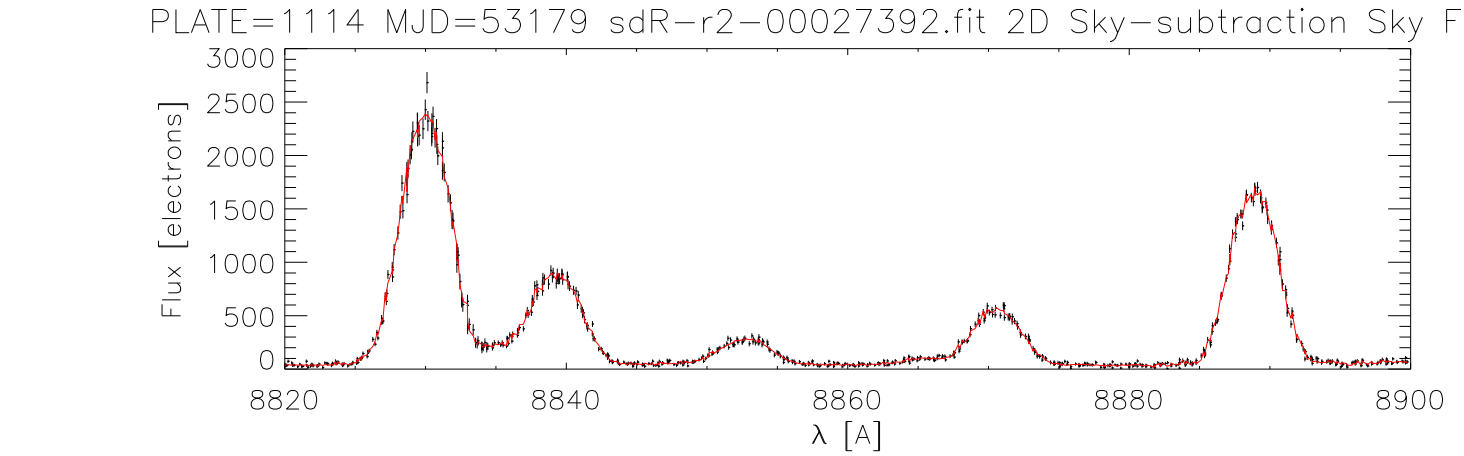

PLATE=1114 MJD=53179 sdR-r2-00027392.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

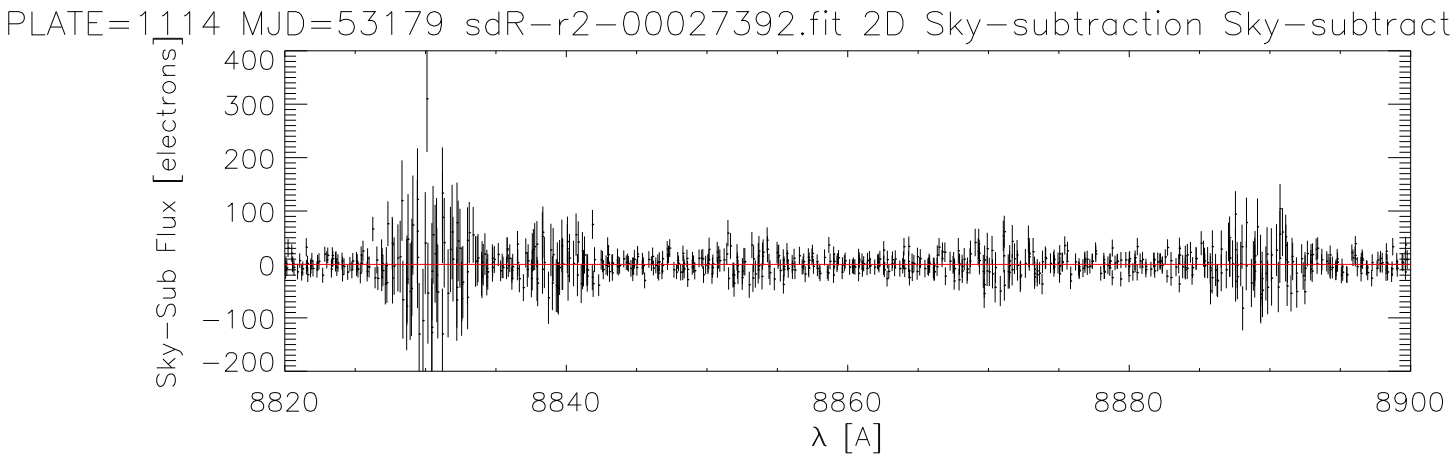

PLATE=1114 MJD=53179 sdR-r2-00027392.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

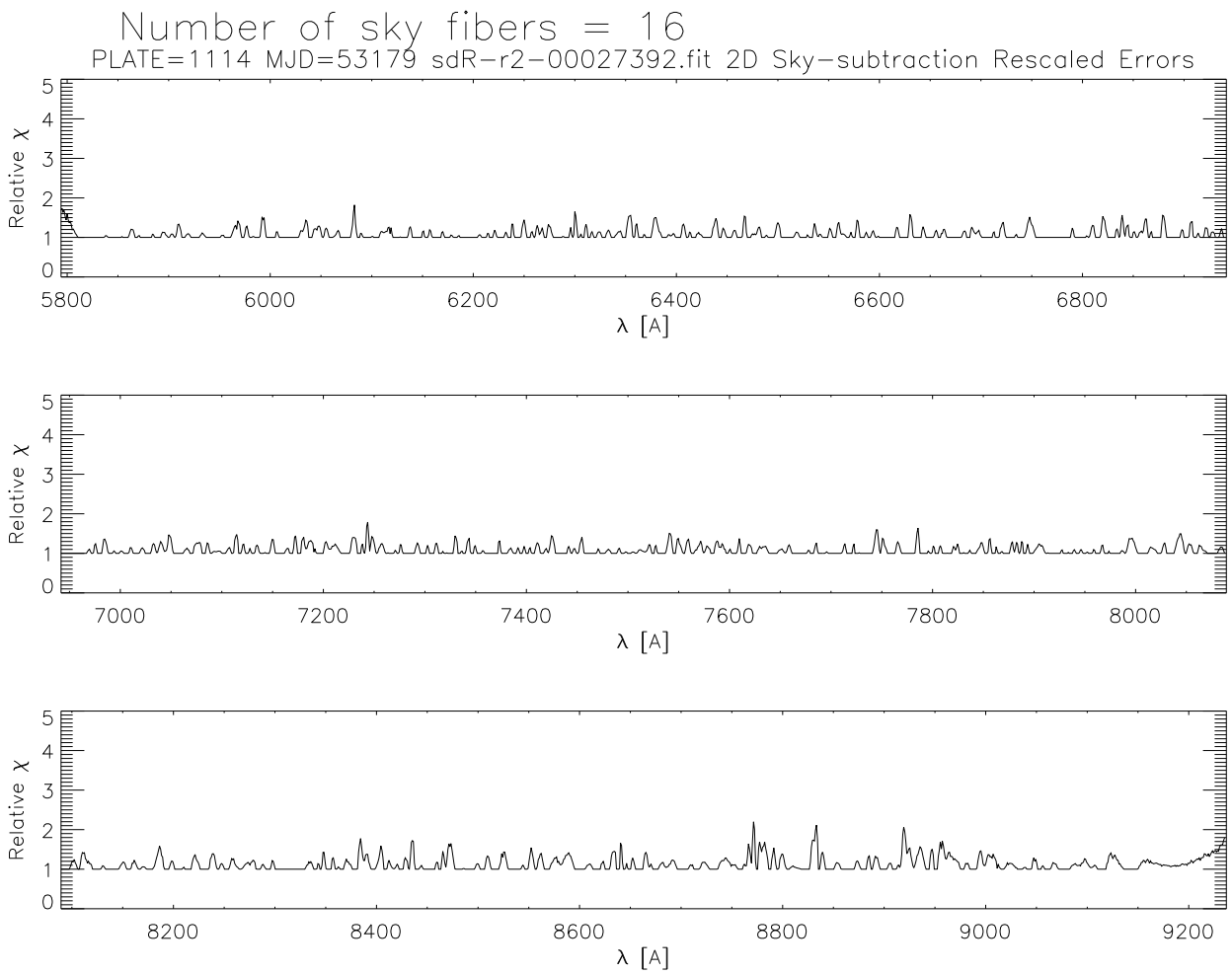

PLATE=1114 MJD=53179 sdR-r2-00027392.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

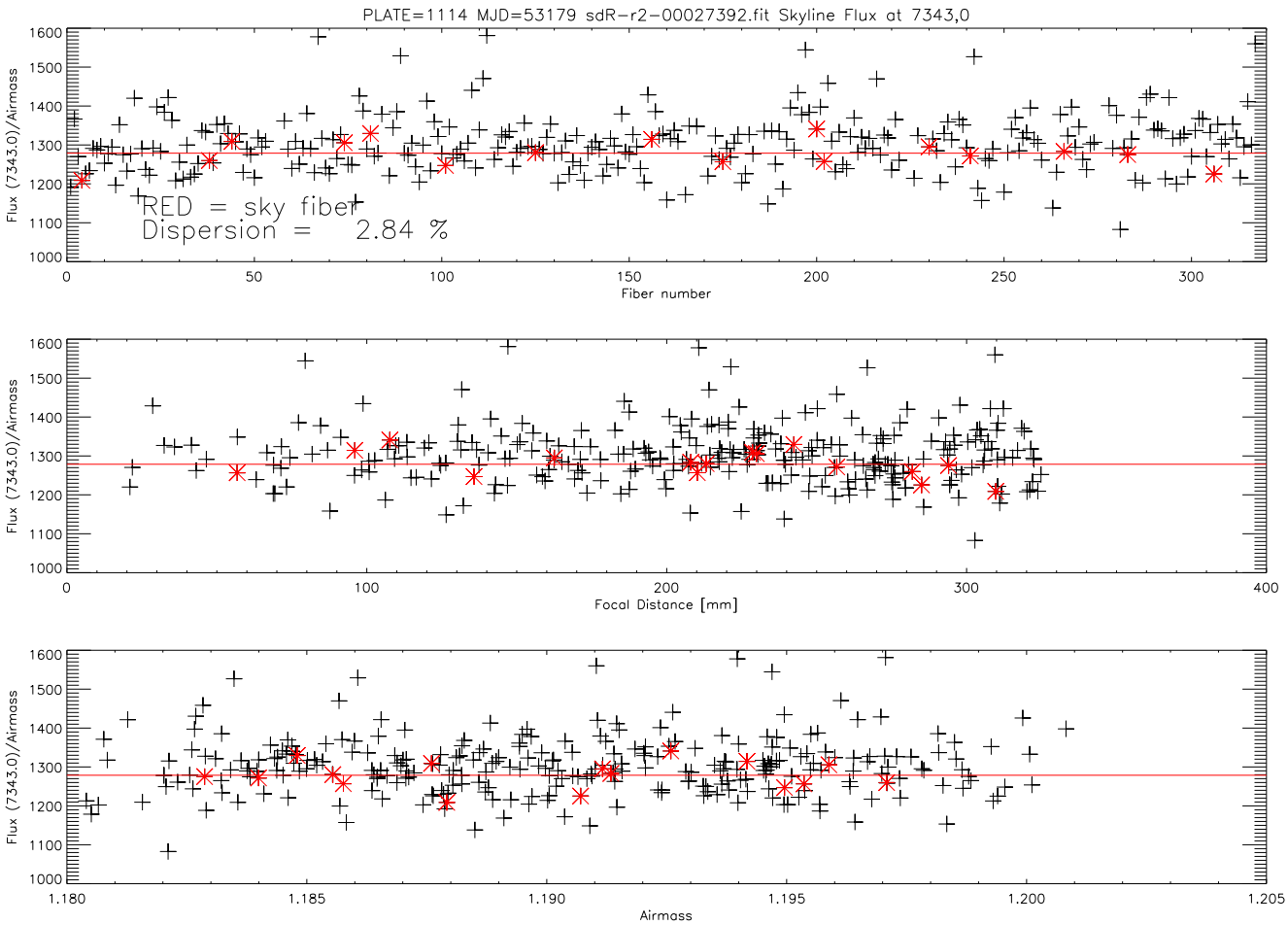

Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027392.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

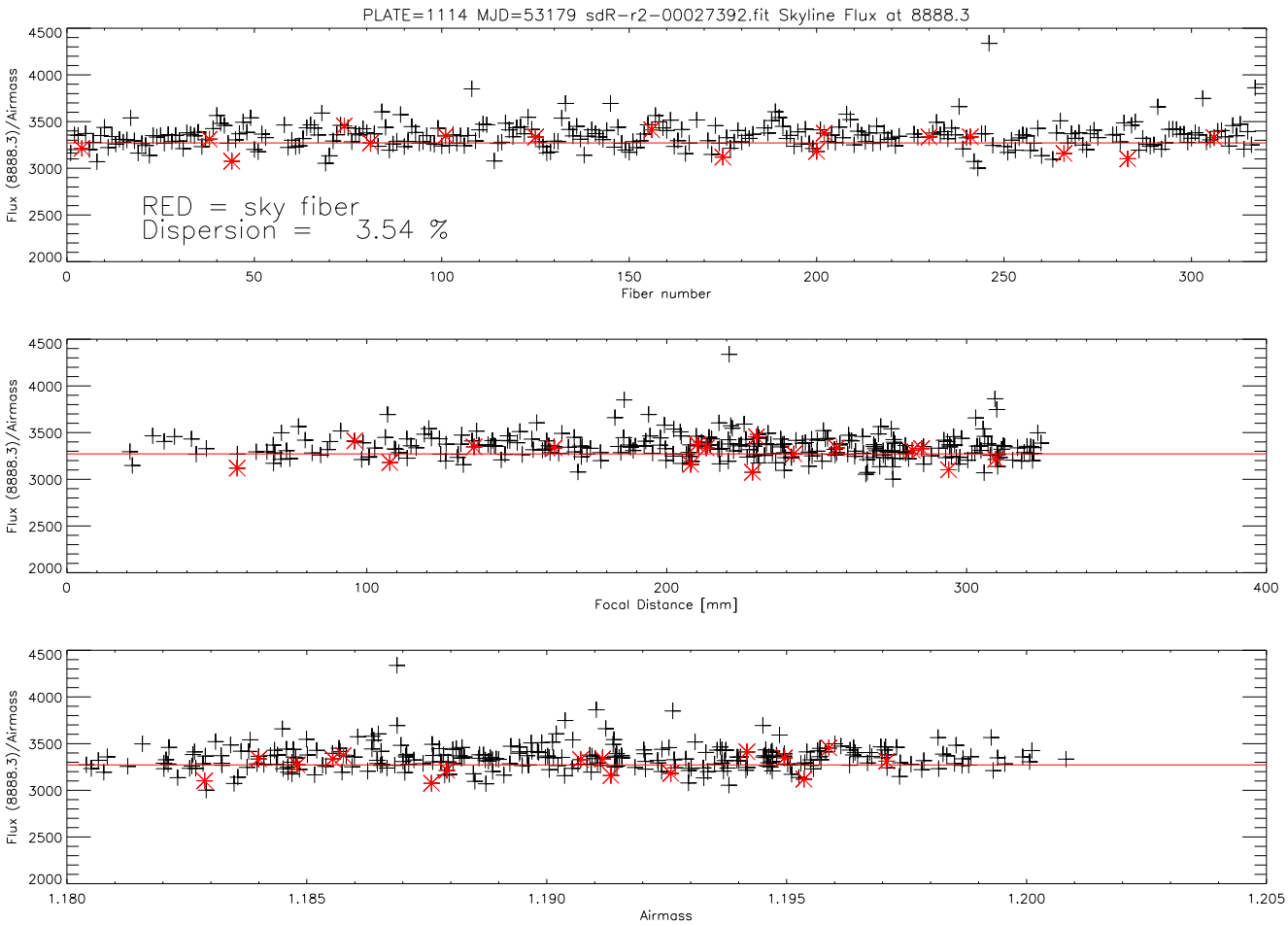

PLATE=1114 MJD=53179 sdR-r2-00027392.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1114 MJD=53179 sdR-r2-00027392.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1114 MJD=53179 sdR-r2-00027392.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=1114 MJD=53179 sdR-r2-00027392.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=1114 MJD=53179 sdR-r2-00027392.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.84 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1114 MJD=53179 sdR-r2-00027392.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.54 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass