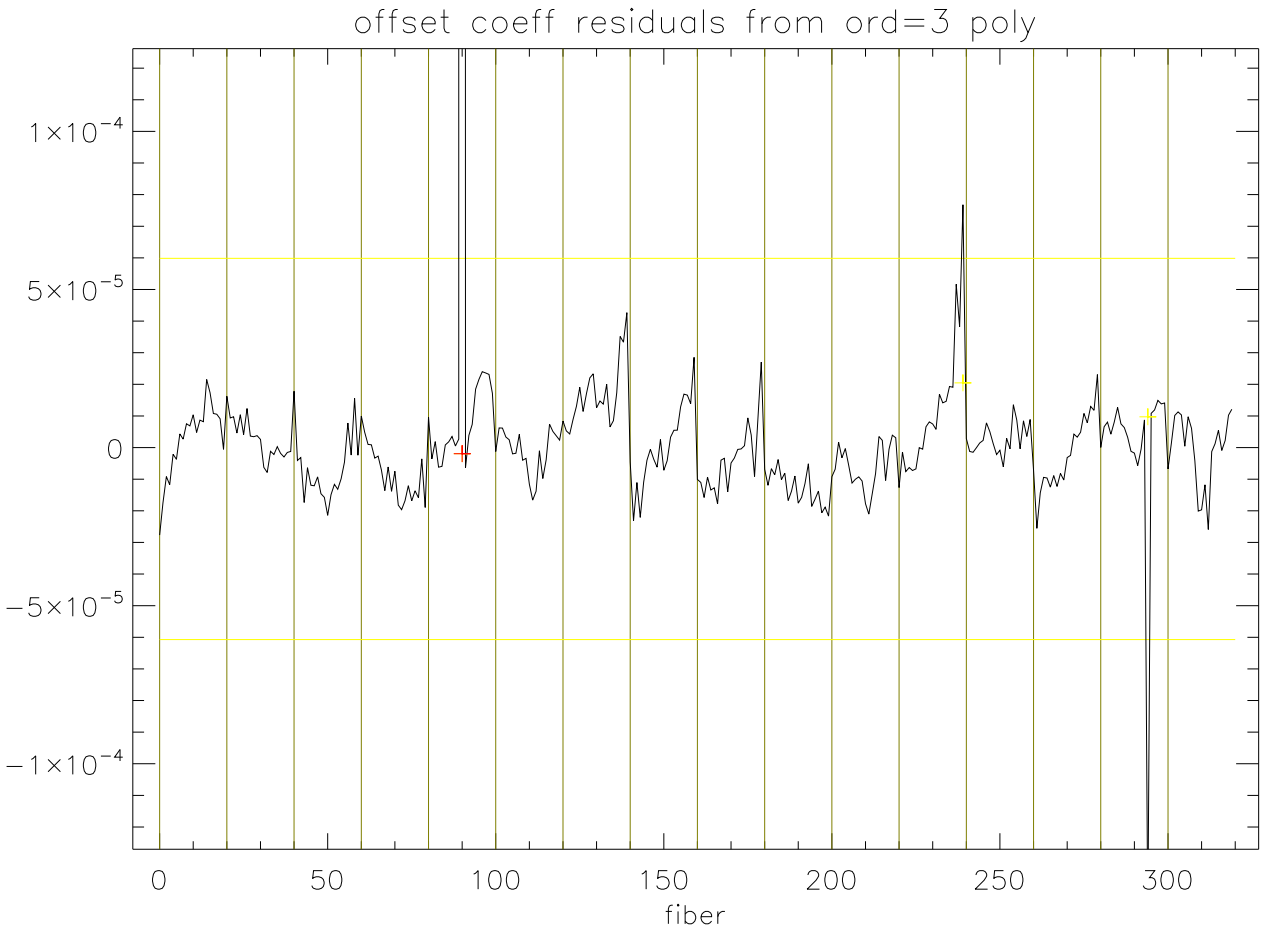
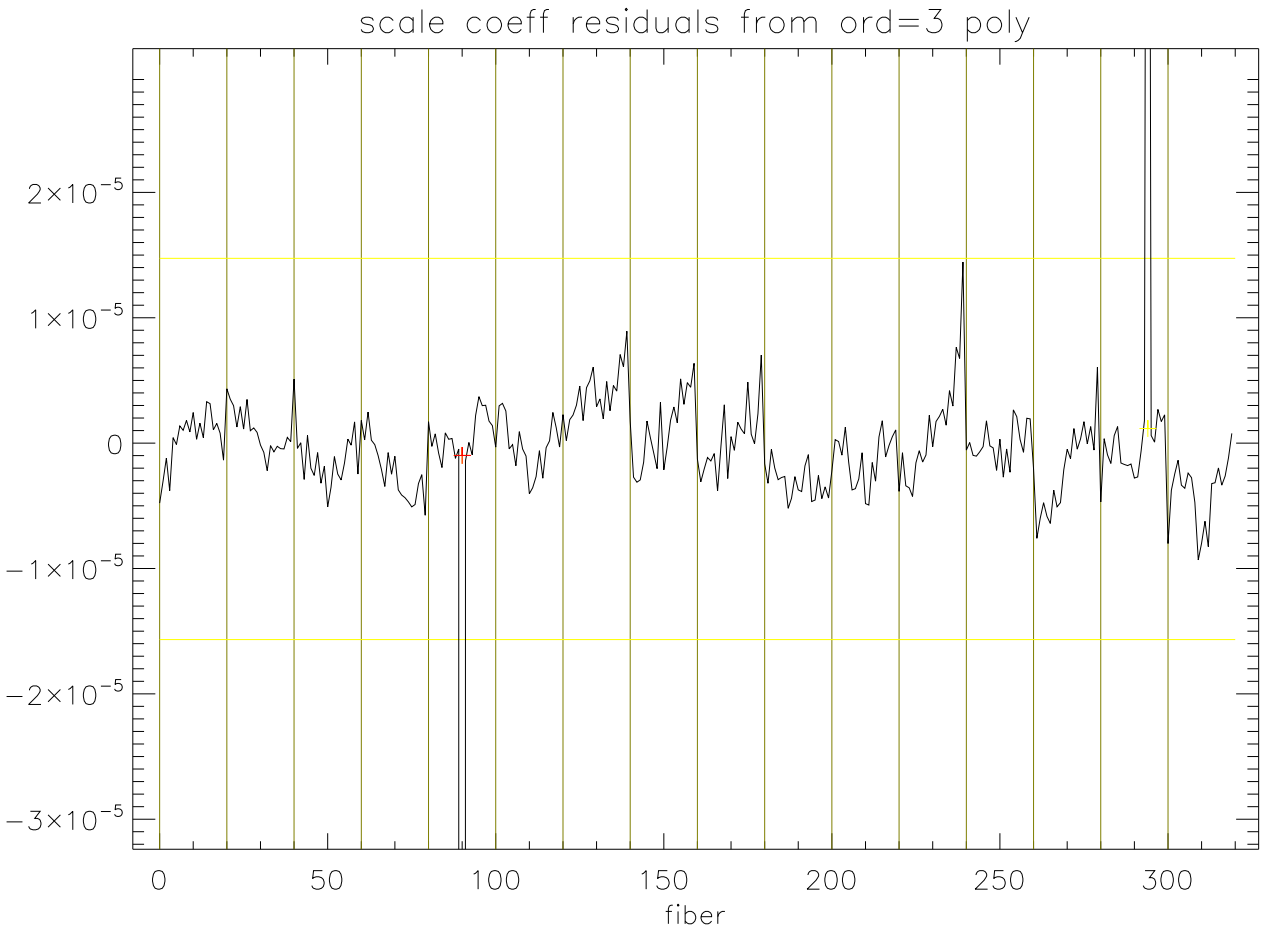
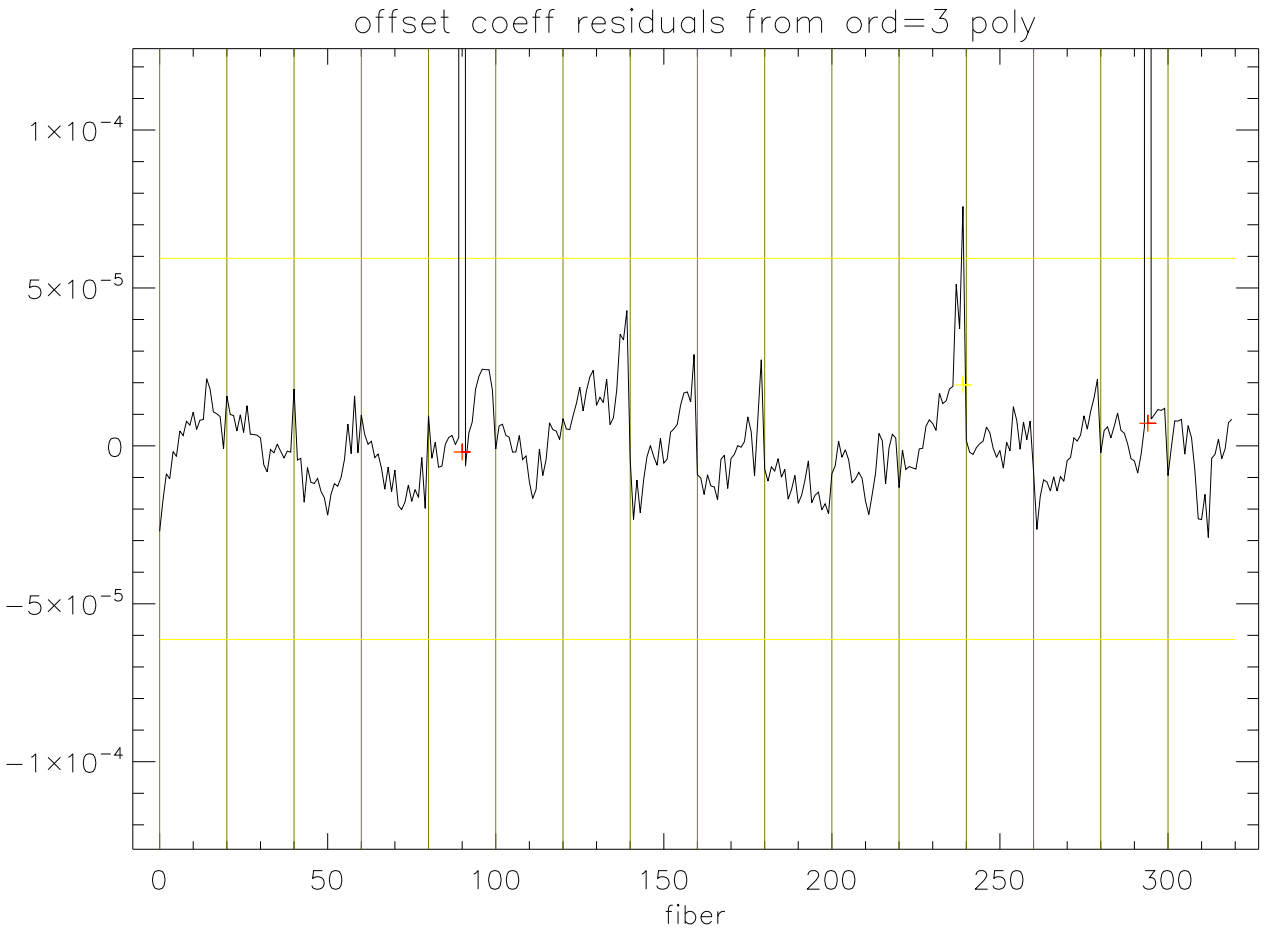
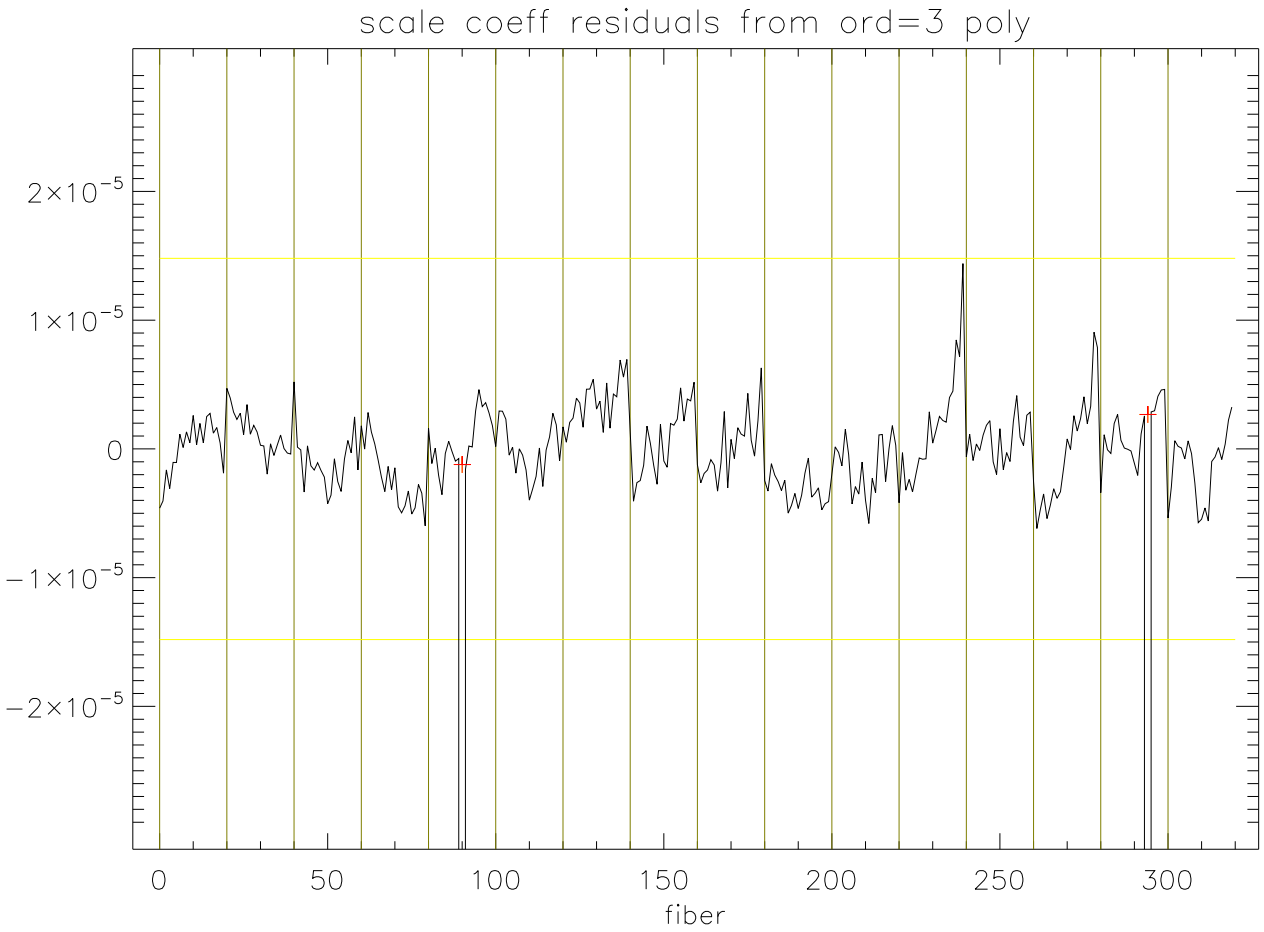
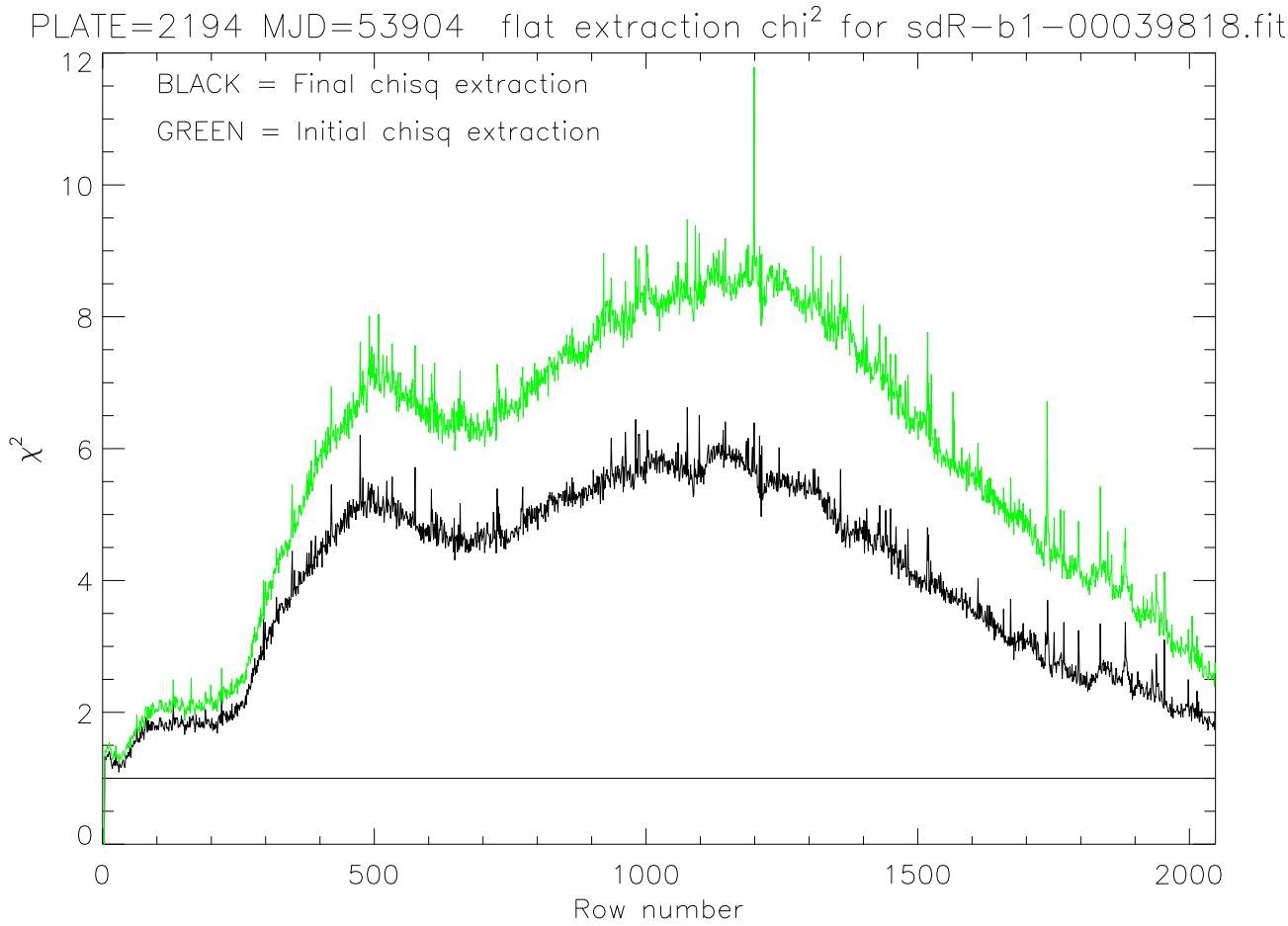
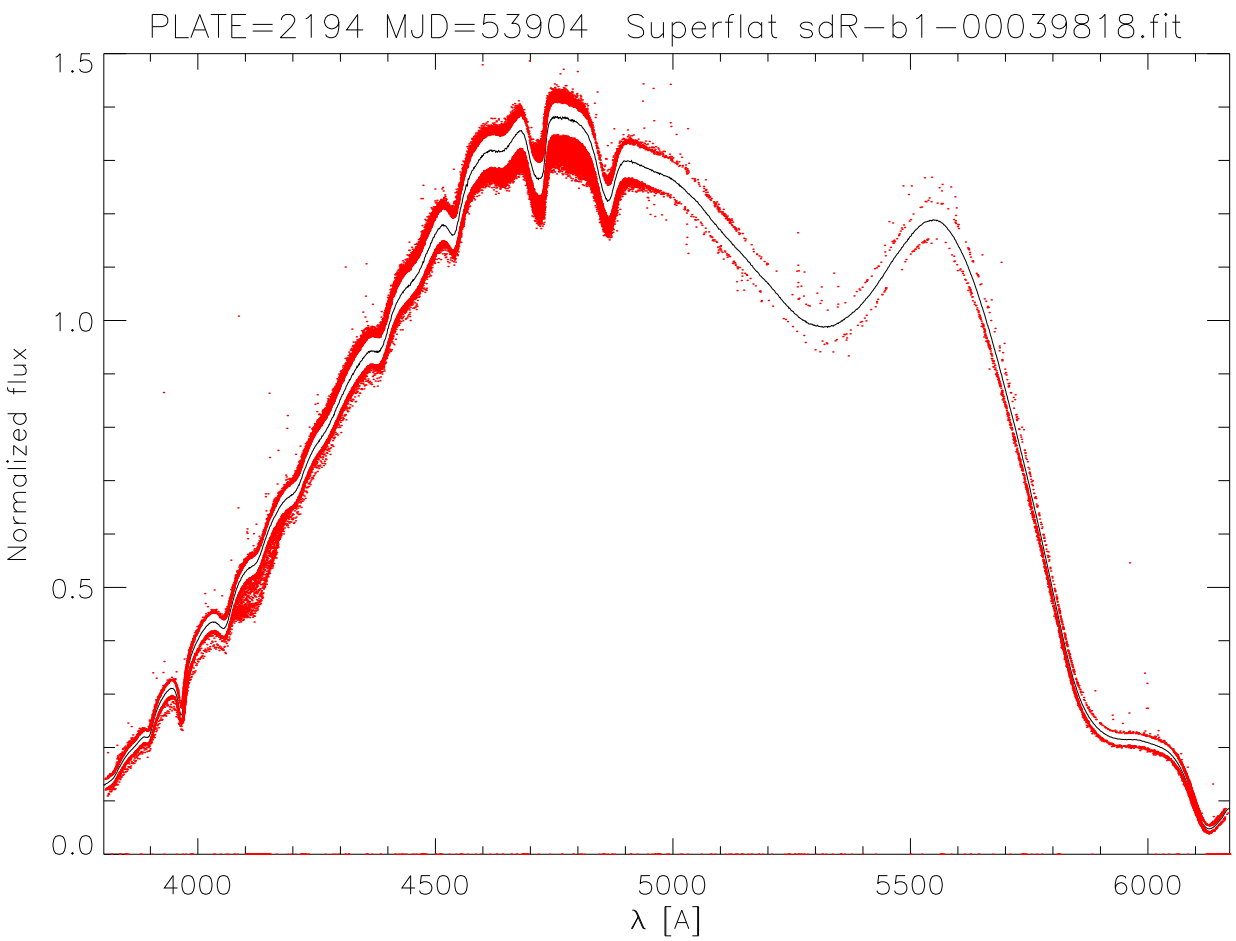

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

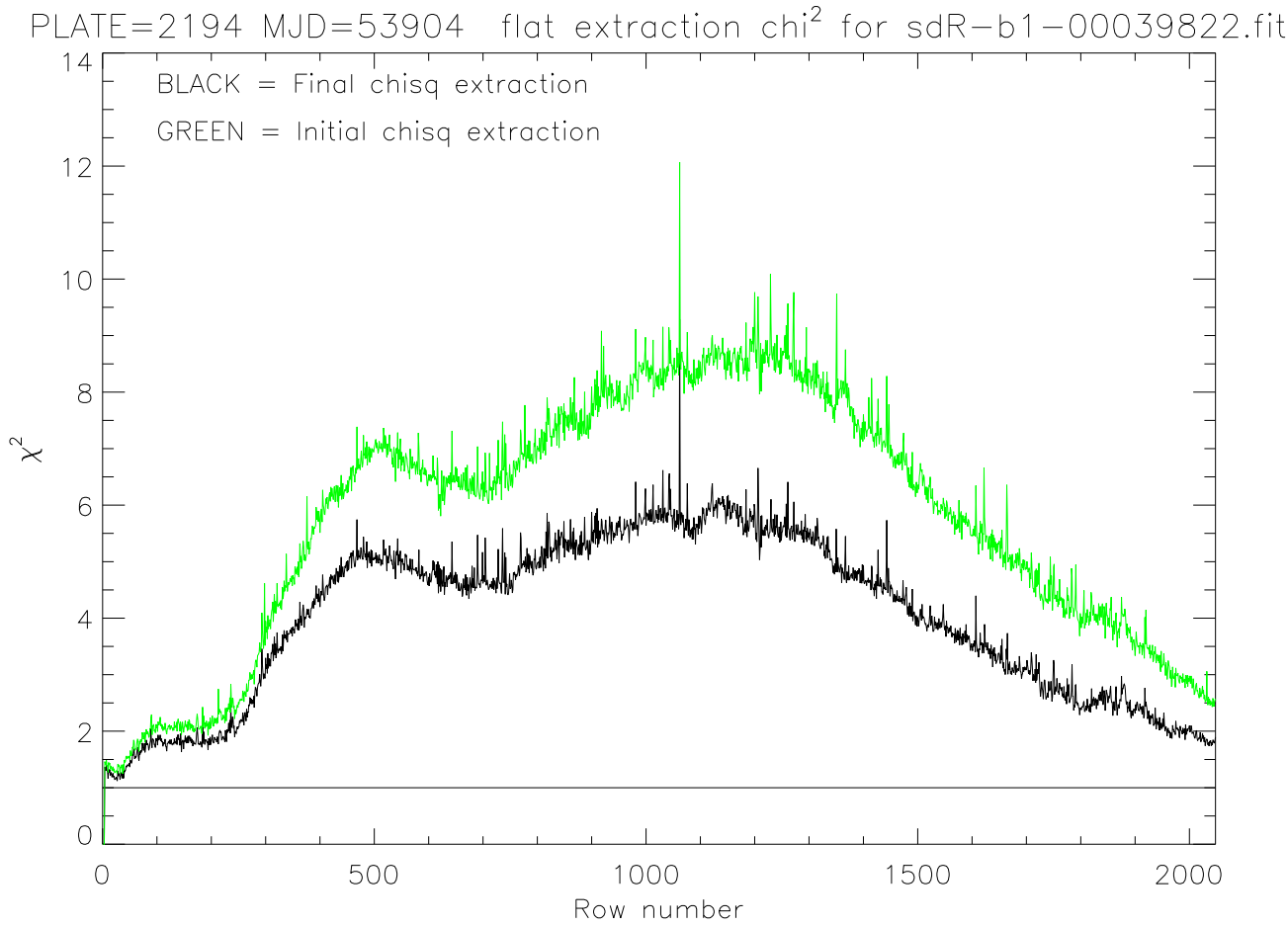

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

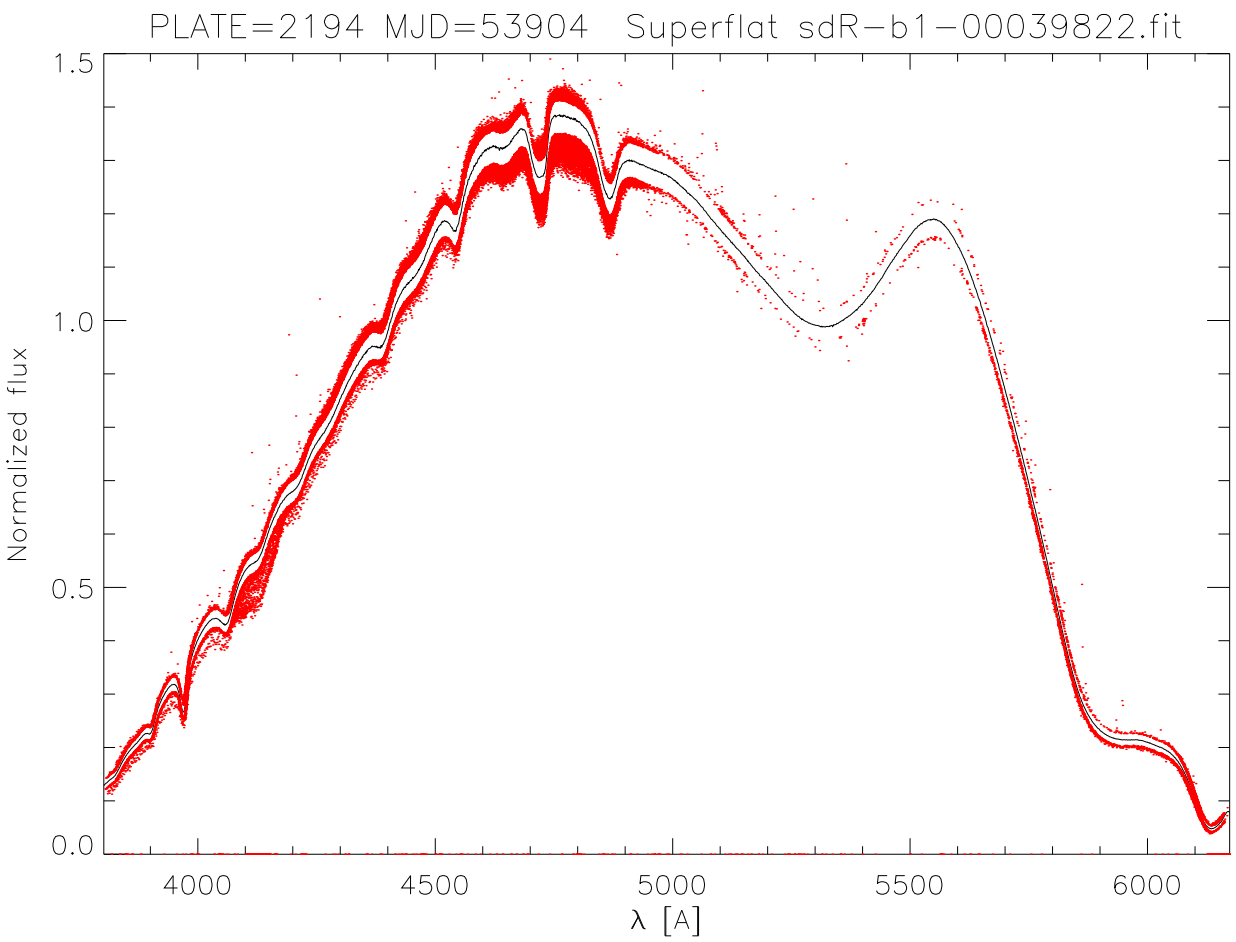

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

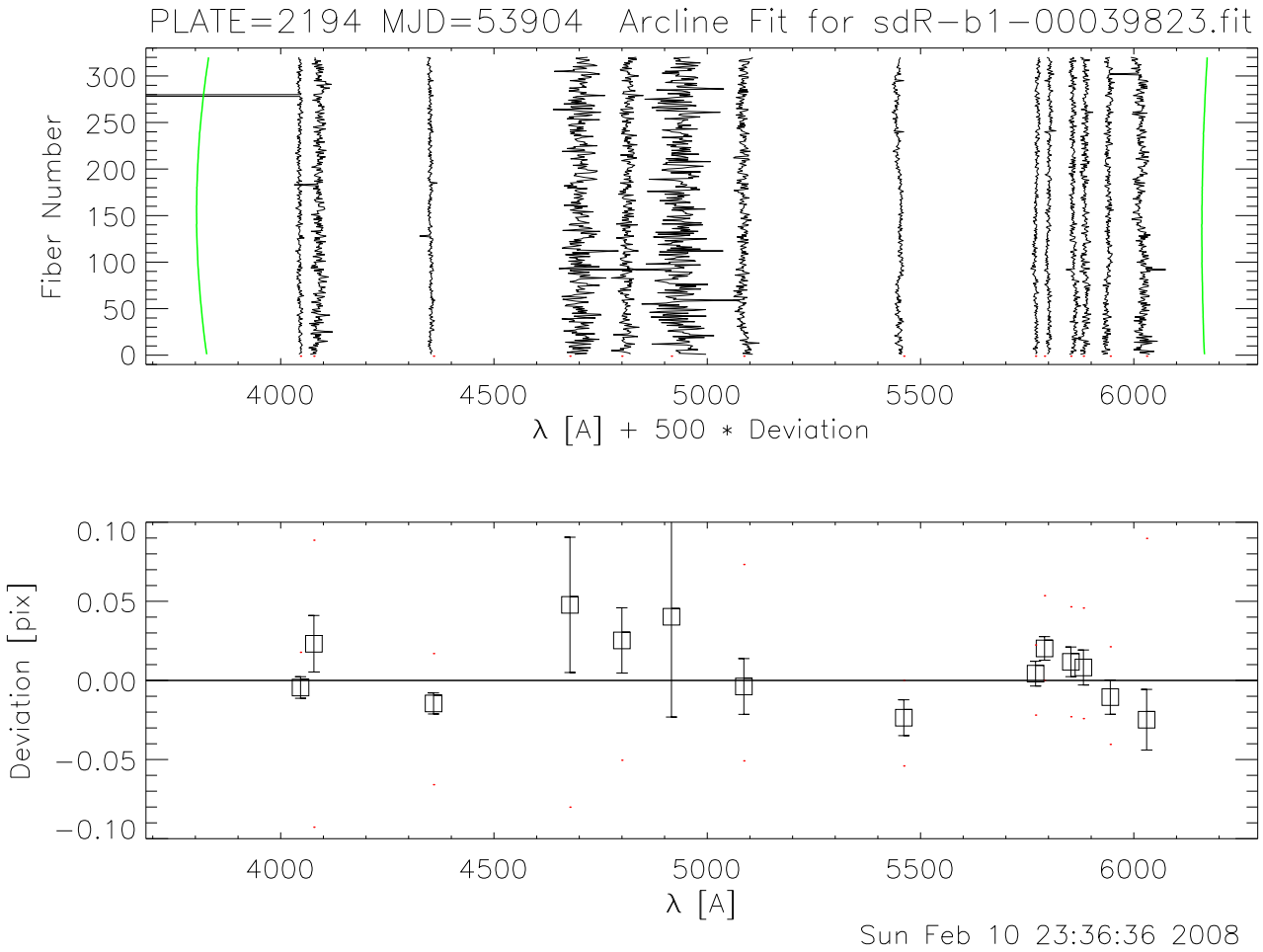

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

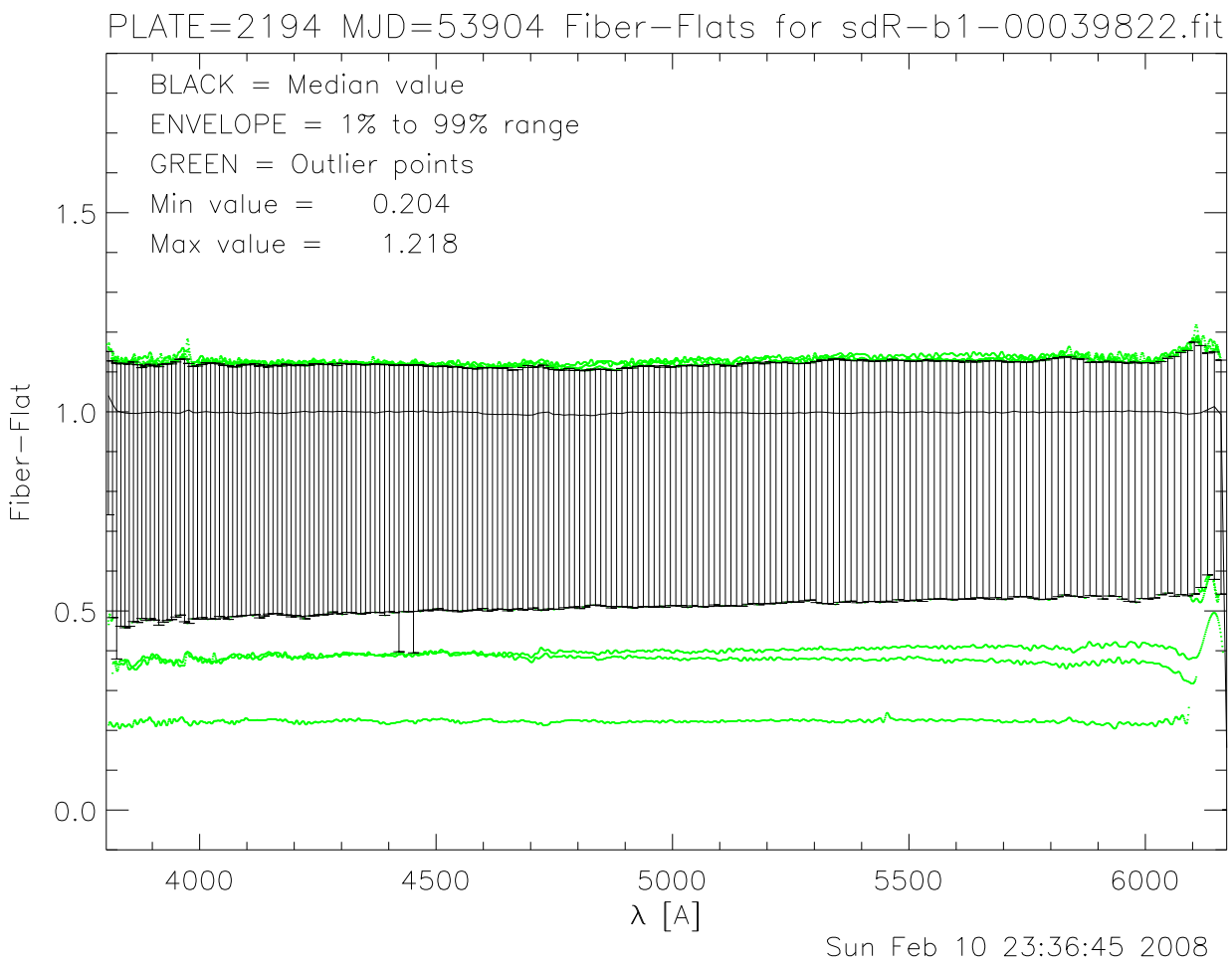

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−b1−00039818.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

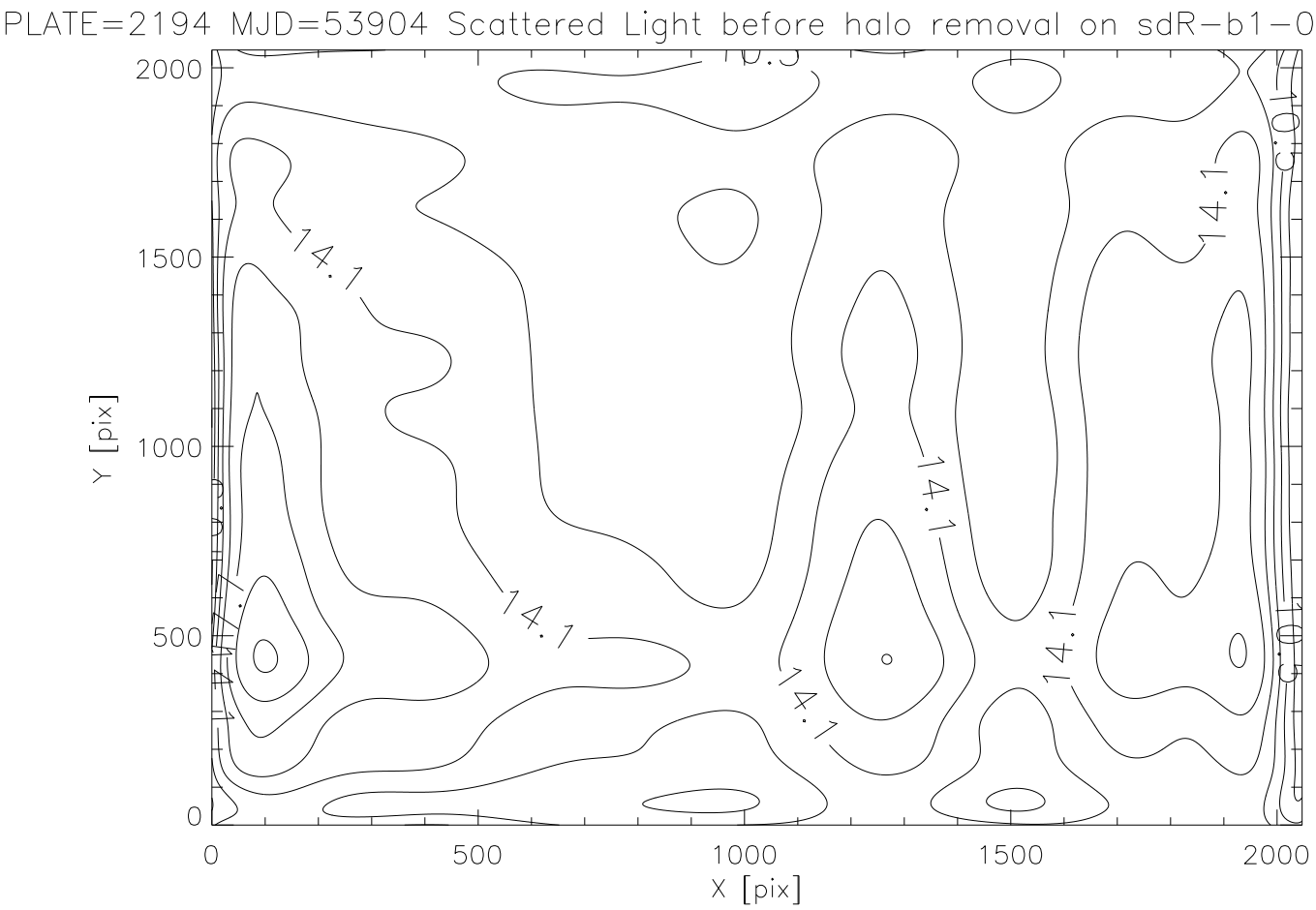

PLATE=2194 MJD=53904 Superflat sdR-b1-00039818.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

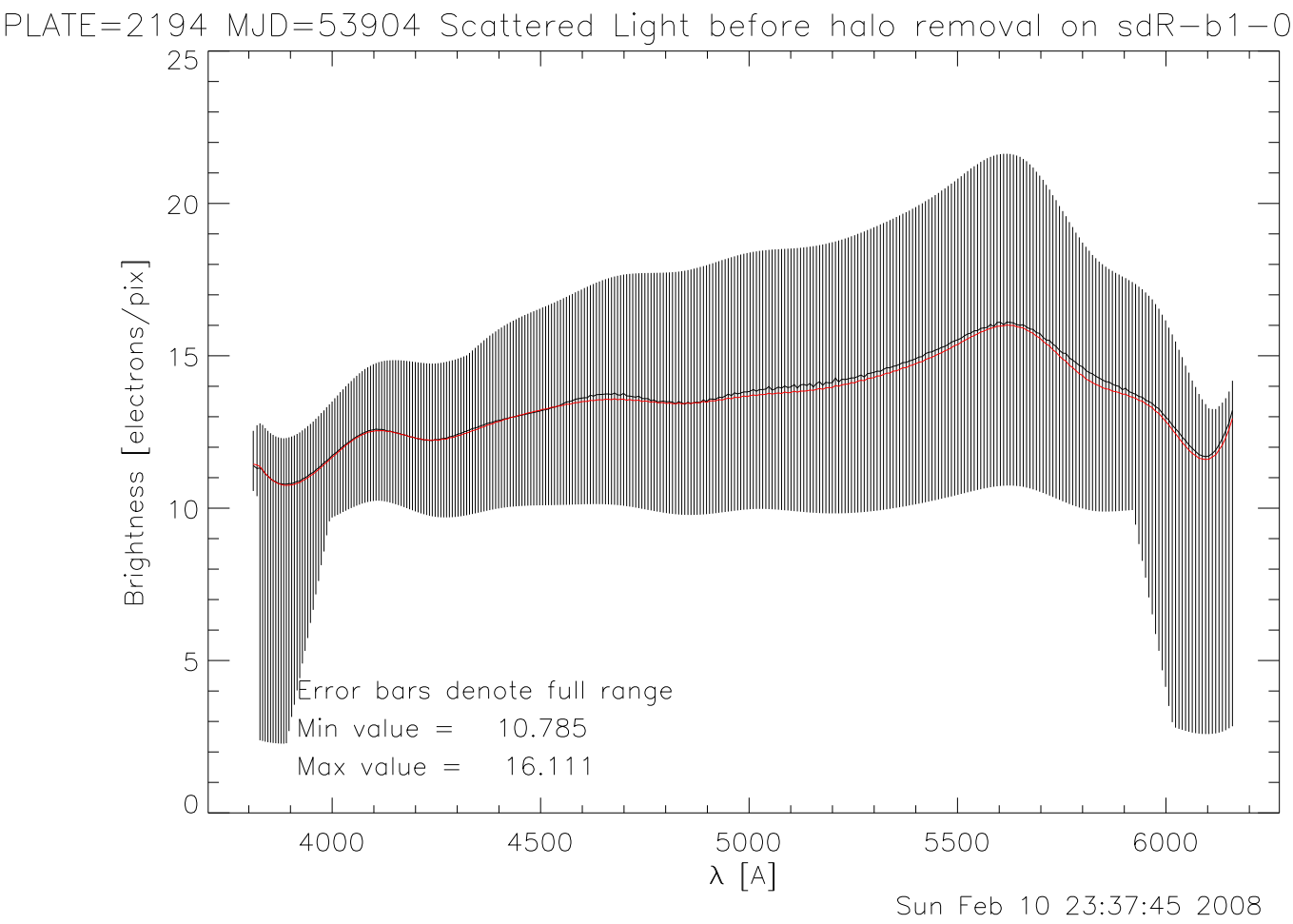

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−b1−00039822.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

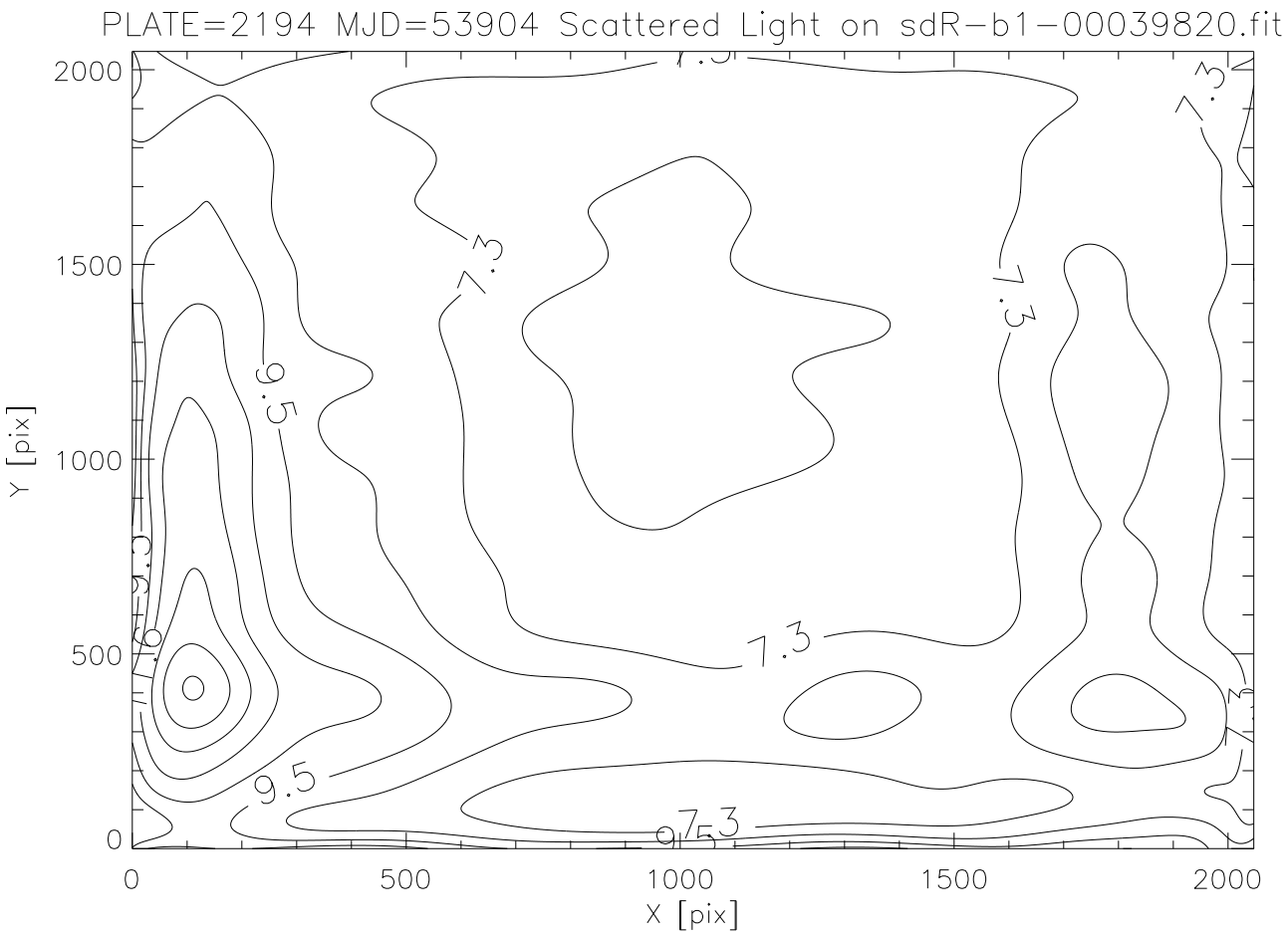

PLATE=2194 MJD=53904 Superflat sdR-b1-00039822.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

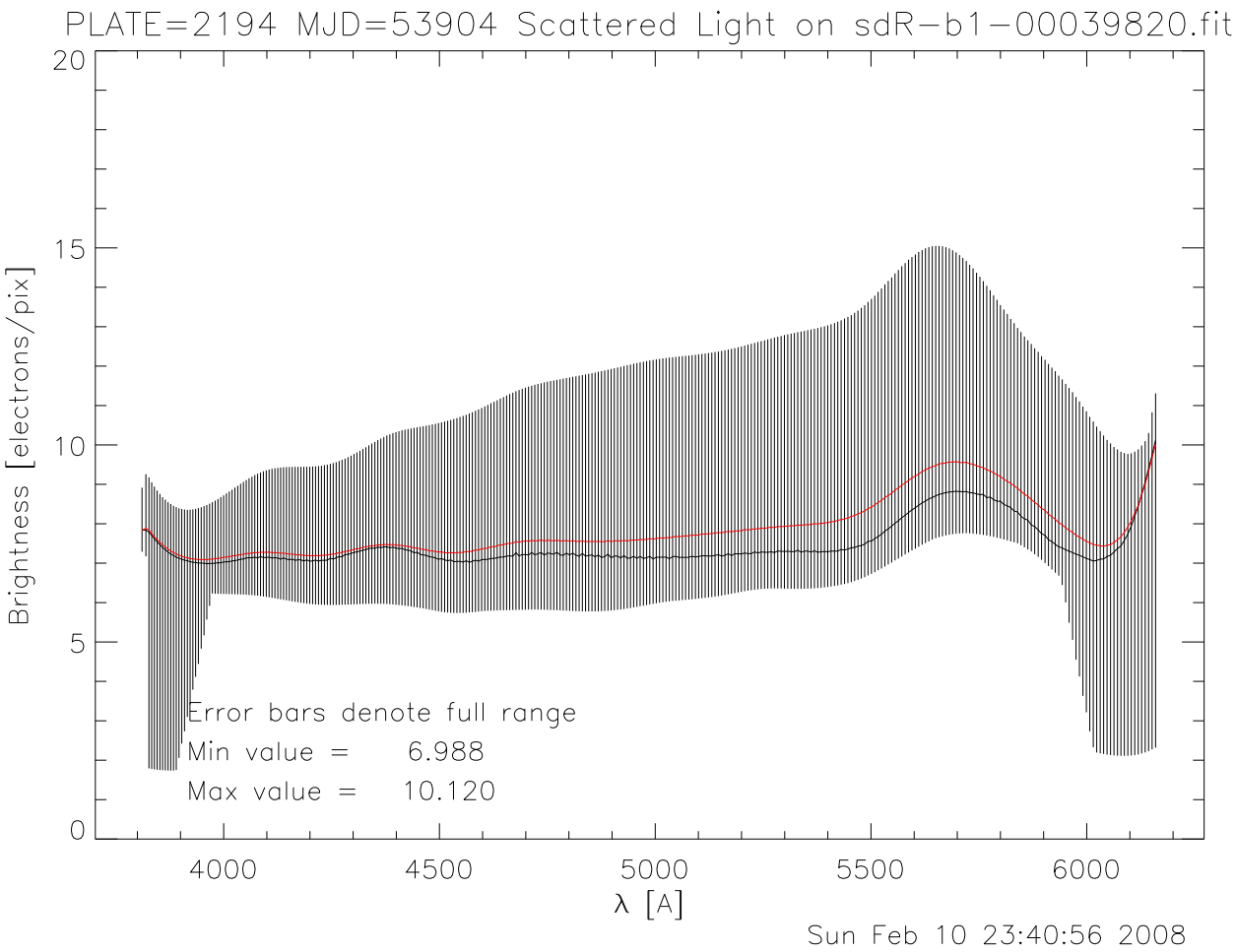

PLATE=2194 MJD=53904 Arcline Fit for sdR-b1-00039823.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:36:36 2008

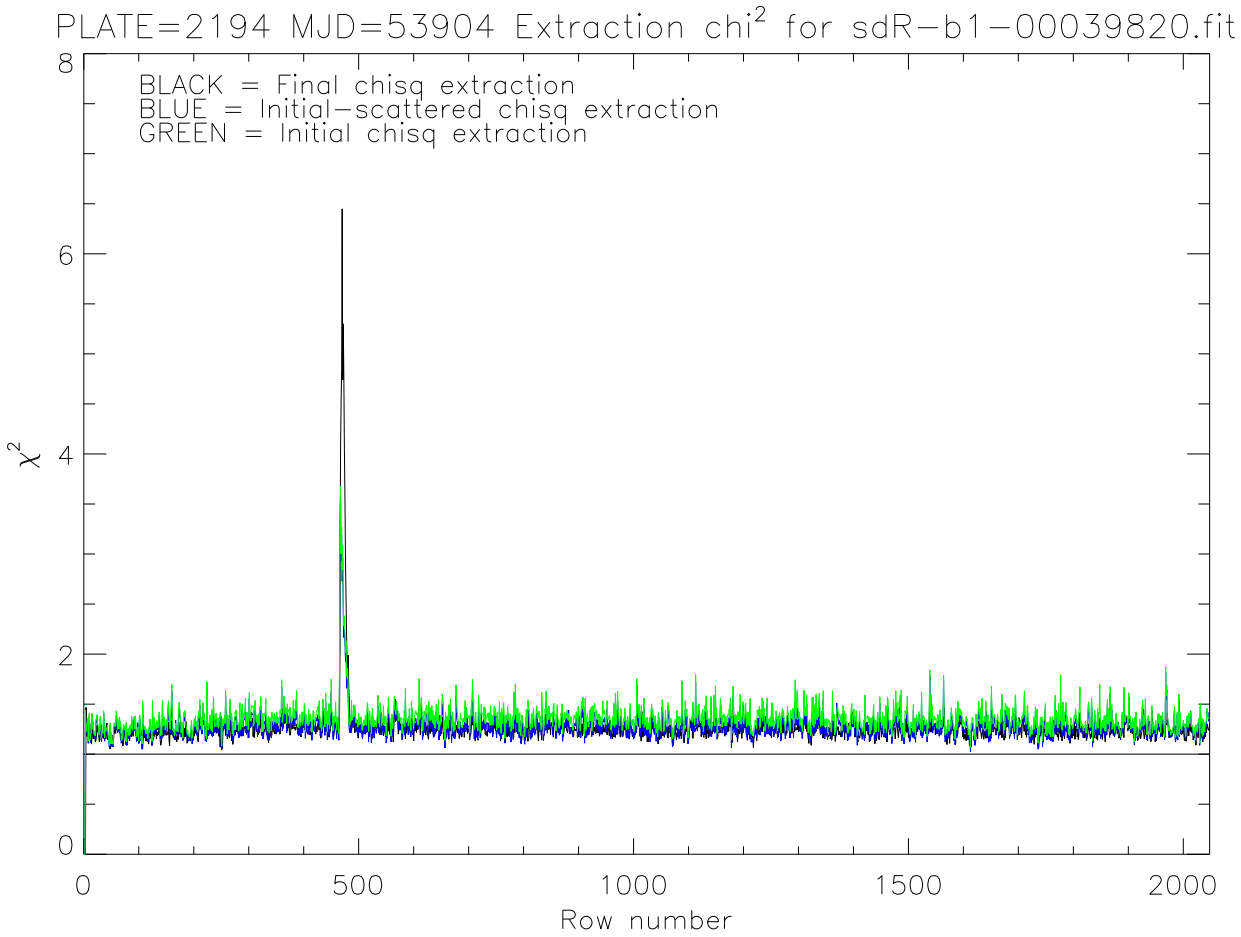

PLATE=2194 MJD=53904 Fiber−Flats for sdR−b1−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.204
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:36:45 2008

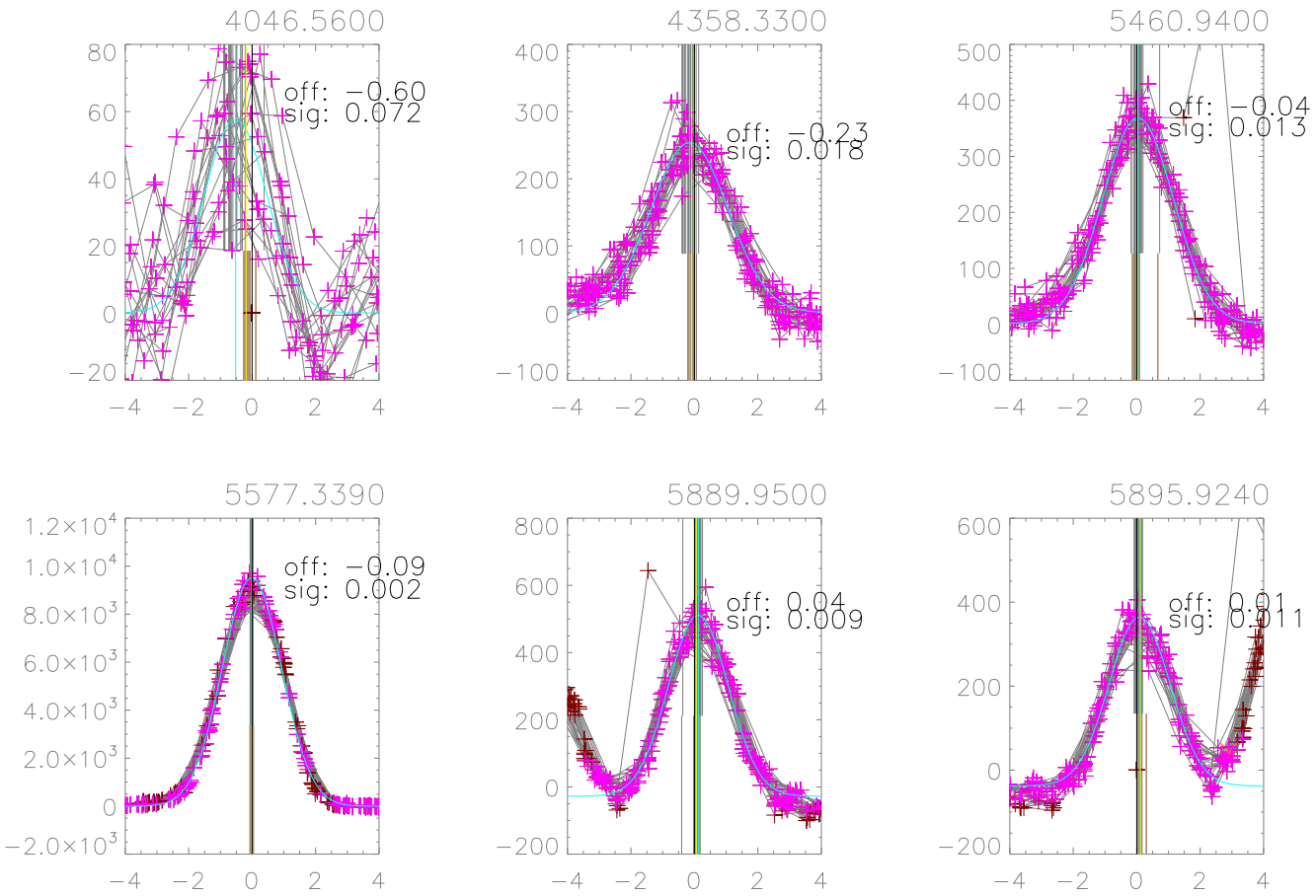

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b1-00039820.f
14.1
14.1
14.1

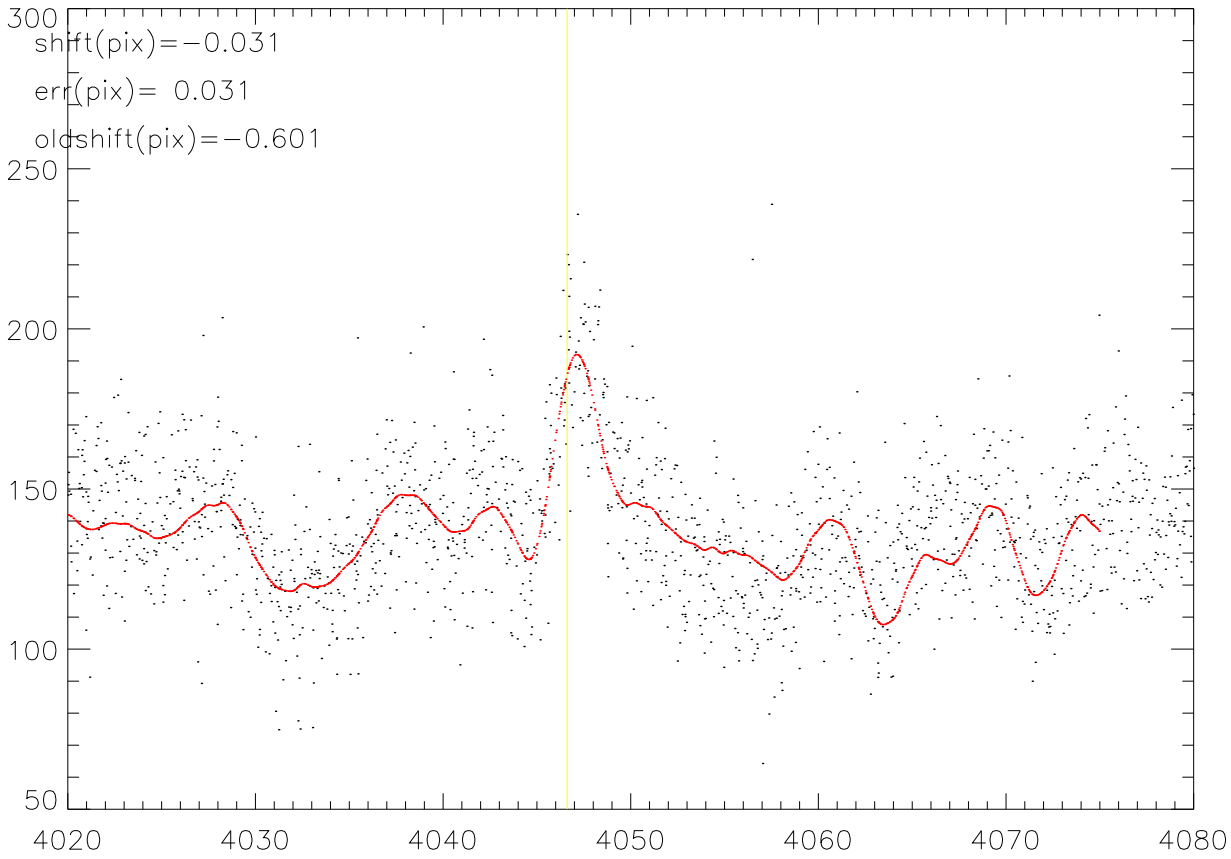

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b1-00039820.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 10.785
Max value = 16.111
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:37:45 2008

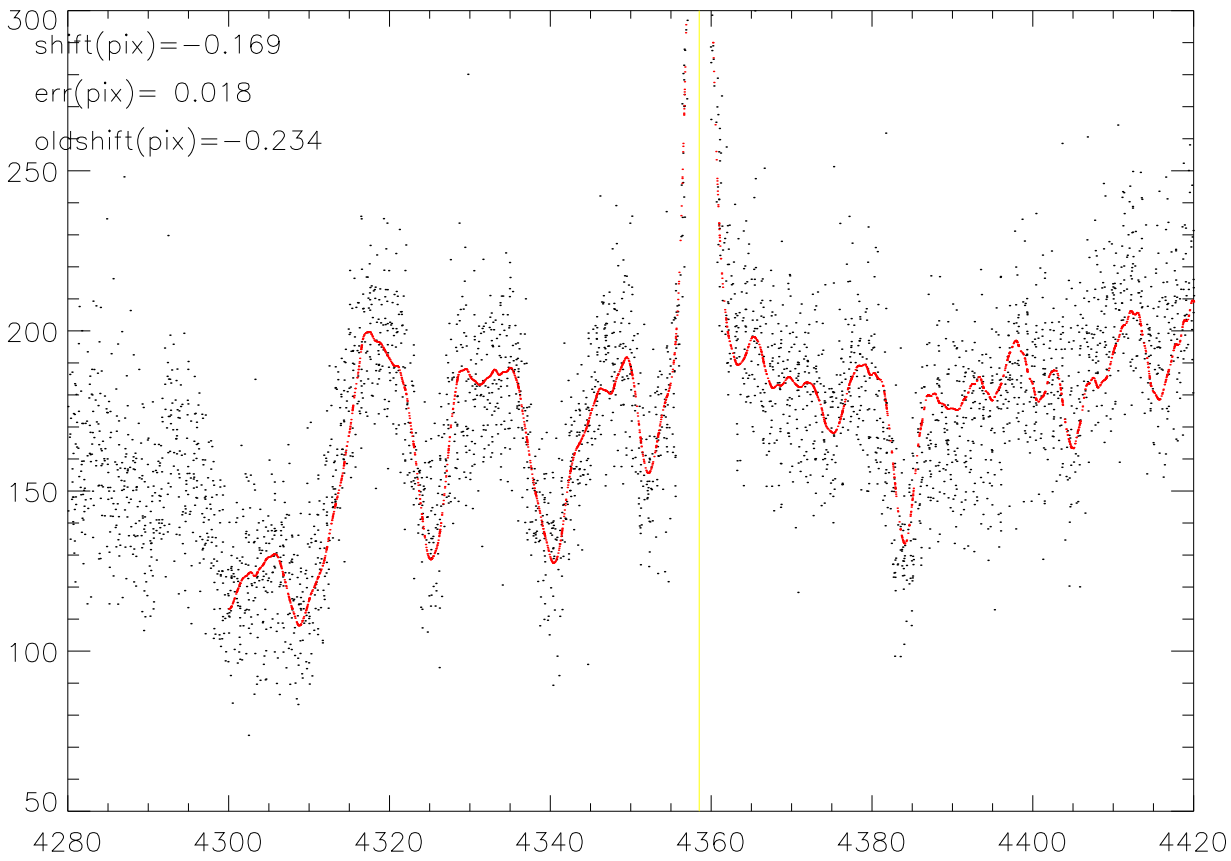

PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039820.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.3
9.5


PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039820.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.988
Max value = 10.120
Sun Feb 10 23:40:56 2008

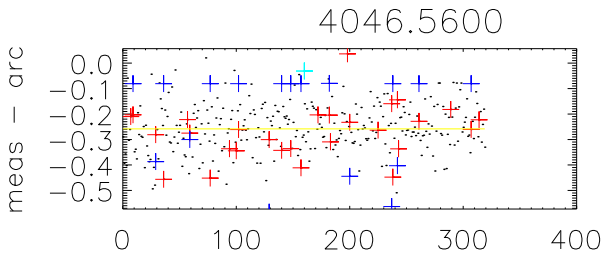

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b1-00039820.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

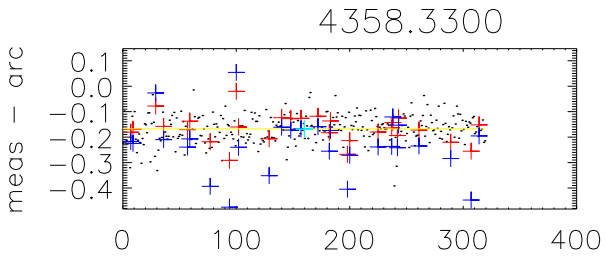

4046.5600
off: −0.60
sig: 0.072
4358.3300
off: −0.23
sig: 0.018
5460.9400
off: −0.04
sig: 0.013
5577.3390
off: −0.09
sig: 0.002
5889.9500
off: 0.04
sig: 0.009
5895.9240
off: 0.01
sig: 0.011

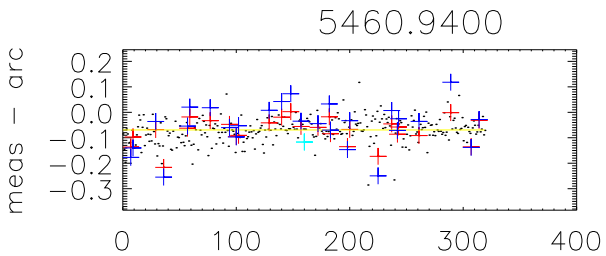

shift(pix)=−0.031
err(pix)= 0.031
oldshift(pix)=−0.601
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

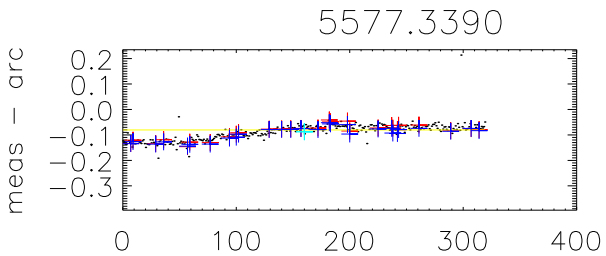

shift(pix)=−0.169
err(pix)= 0.018
oldshift(pix)=−0.234
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

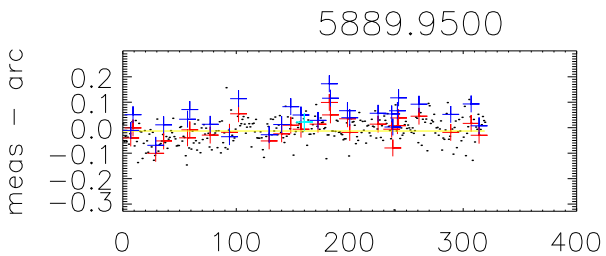
shift(pix)=−0.117
err(pix)= 0.015
oldshift(pix)=−0.040
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

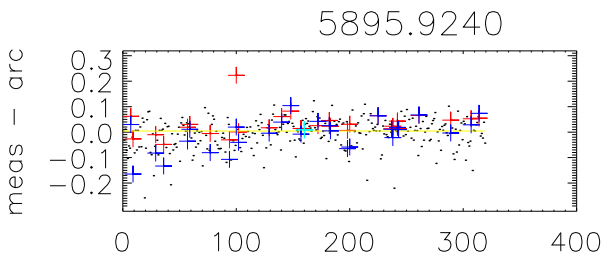

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

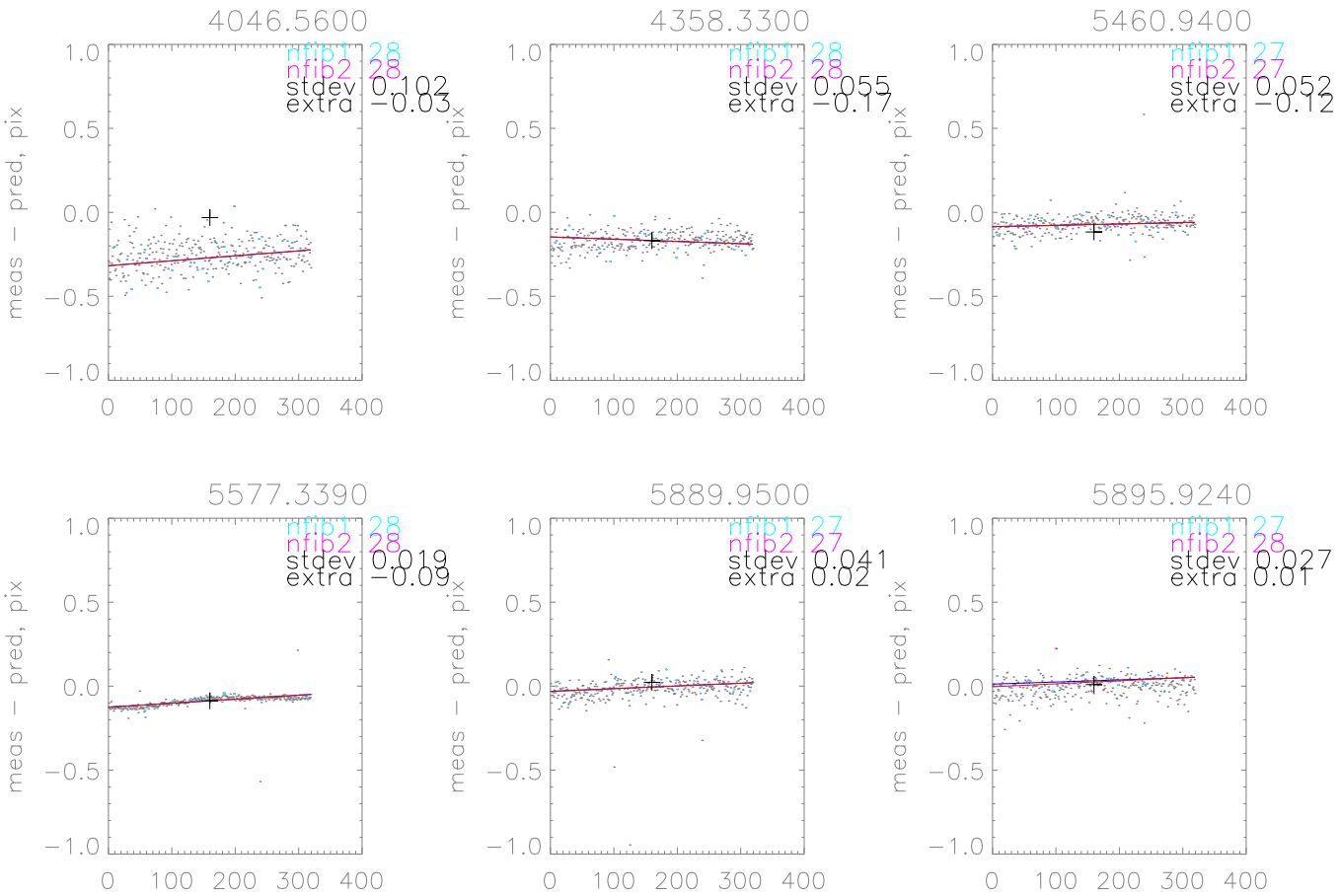

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

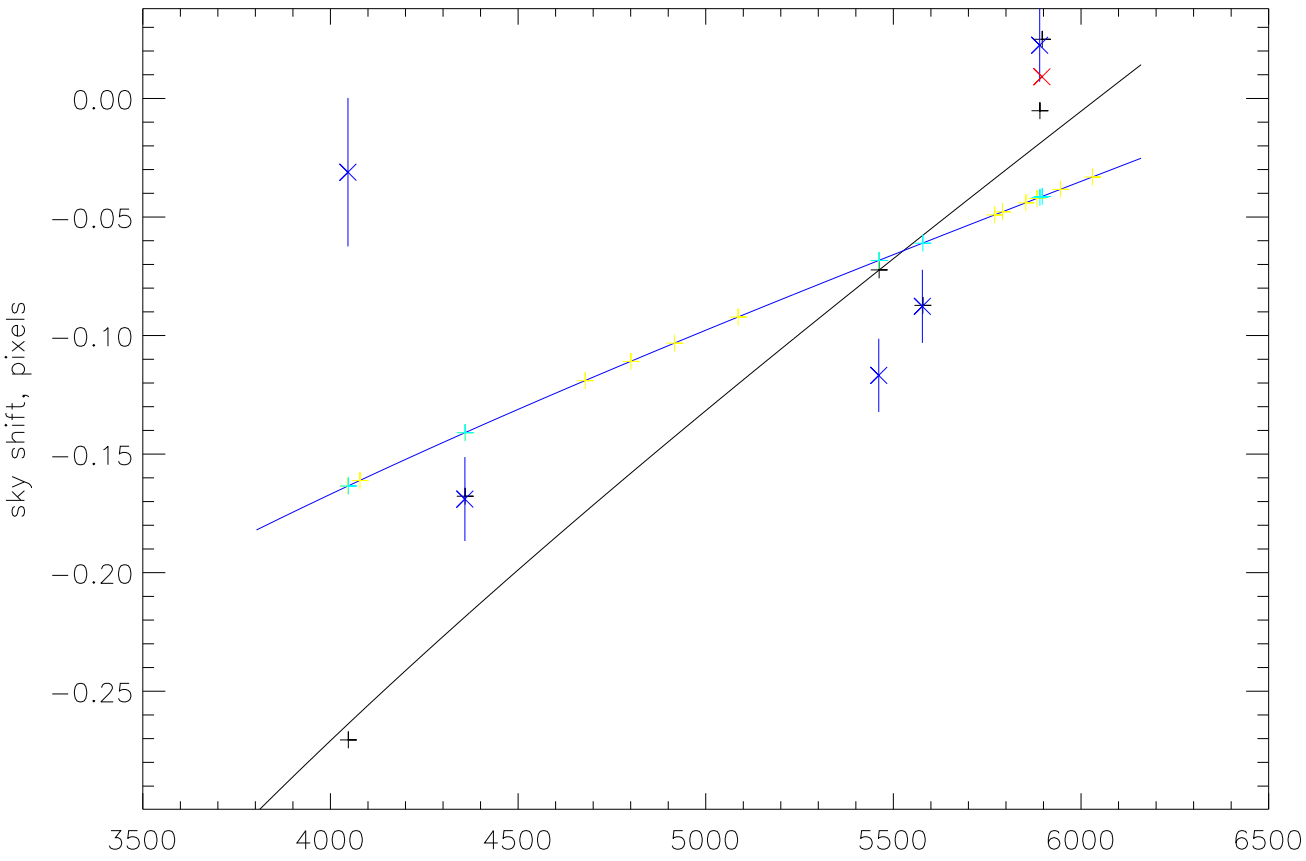

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

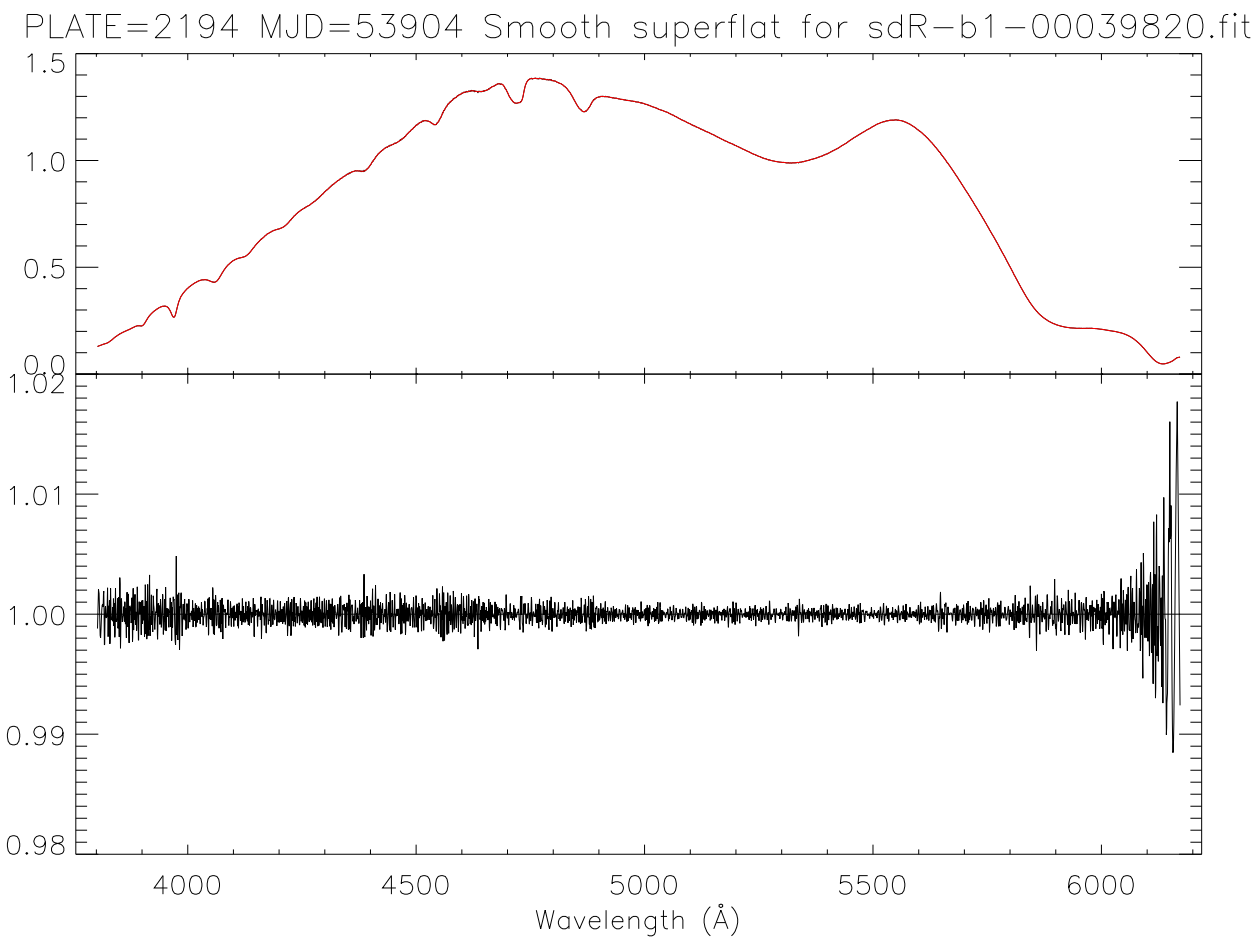

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

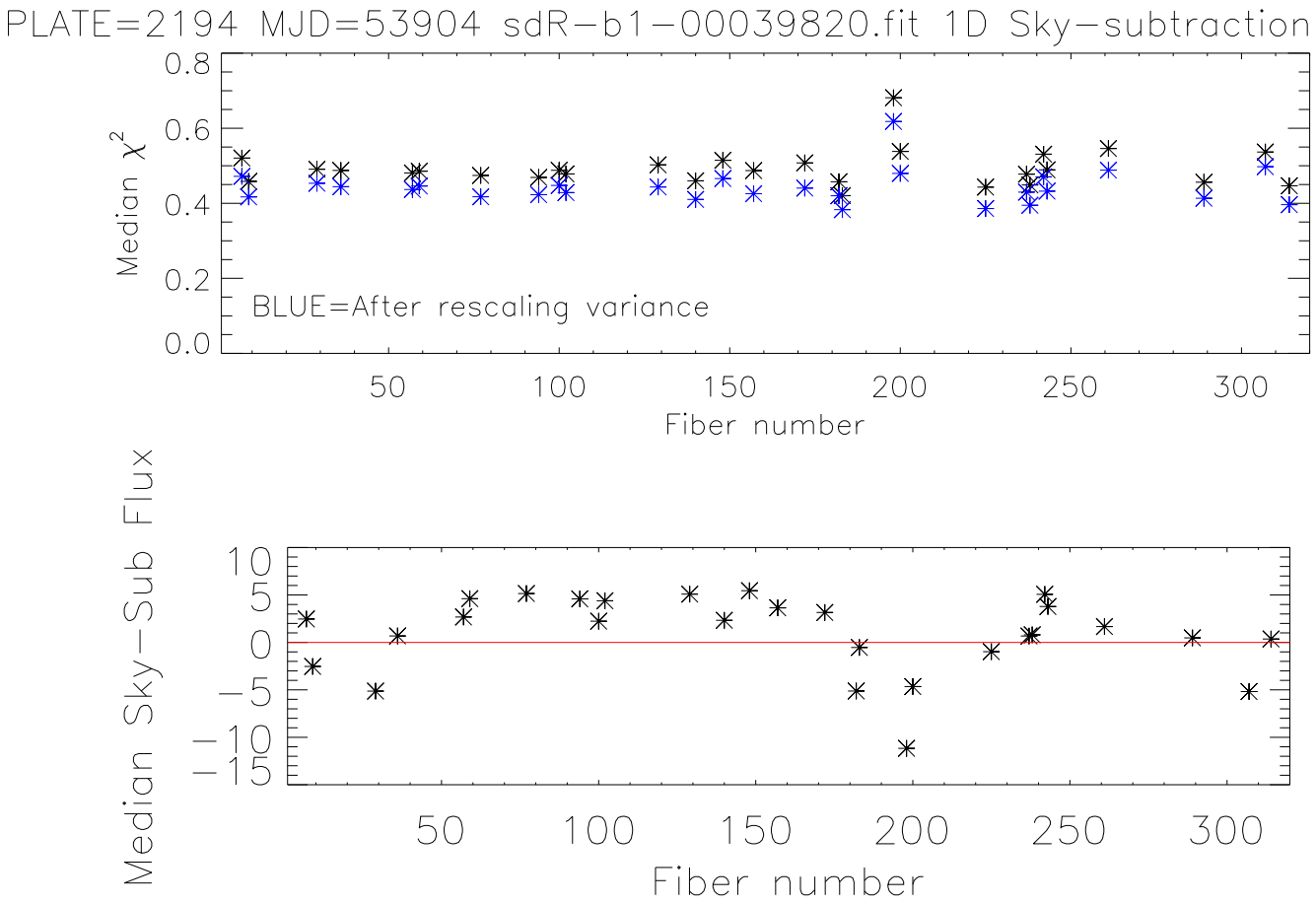

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

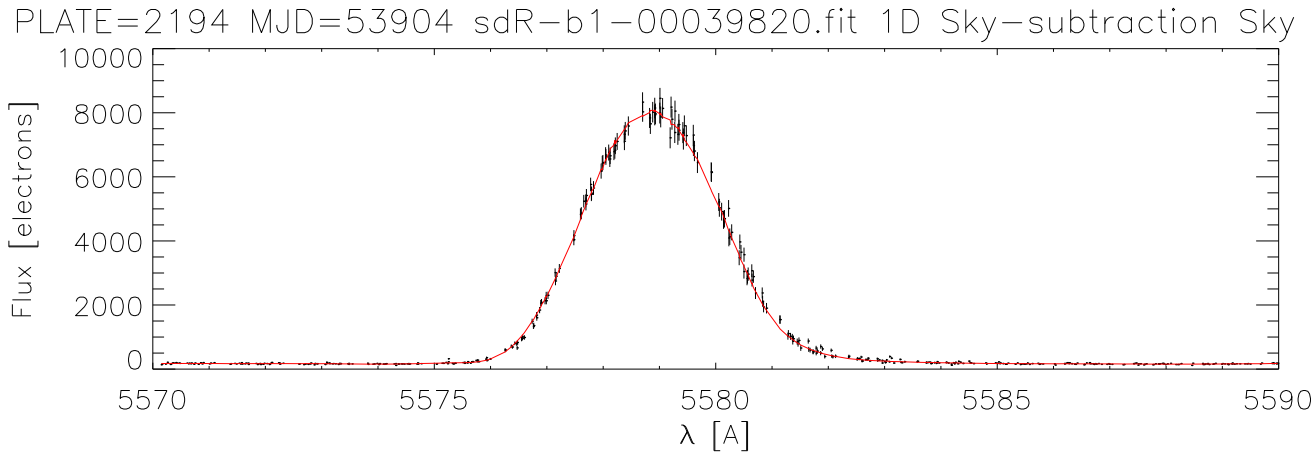

4046.5600
nfib1 28
nfib2 28
stdev 0.102
extra −0.03
4358.3300
nfib1 28
nfib2 28
stdev 0.055
extra −0.17
5460.9400
nfib1 27
nfib2 27
stdev 0.052
extra −0.12
5577.3390
nfib1 28
nfib2 28
stdev 0.019
extra −0.09
5889.9500
nfib1 27
nfib2 27
stdev 0.041
extra 0.02
5895.9240
nfib1 27
nfib2 28
stdev 0.027
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

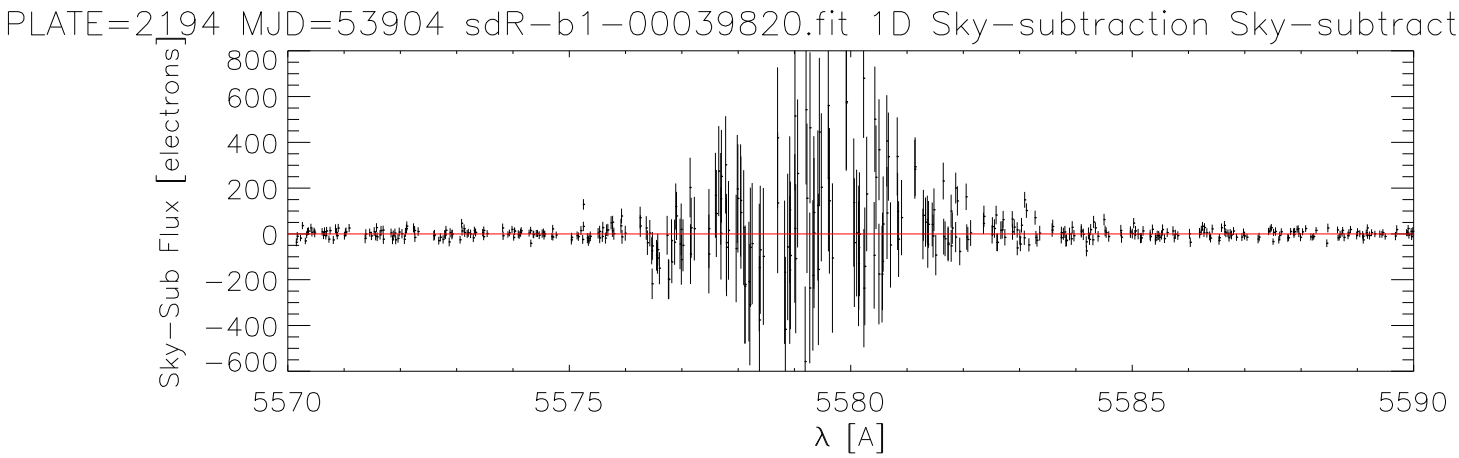

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

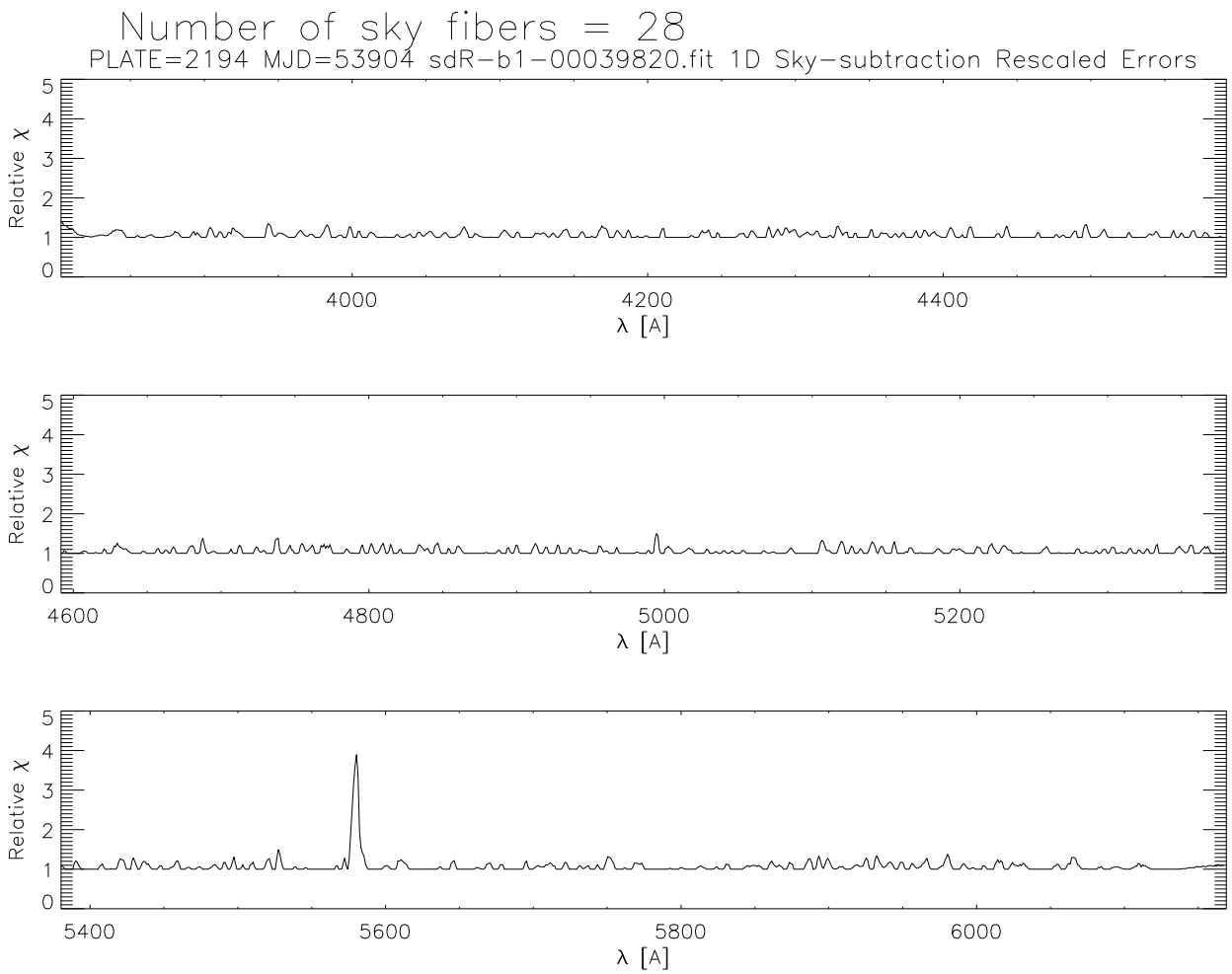
es= −0.0000

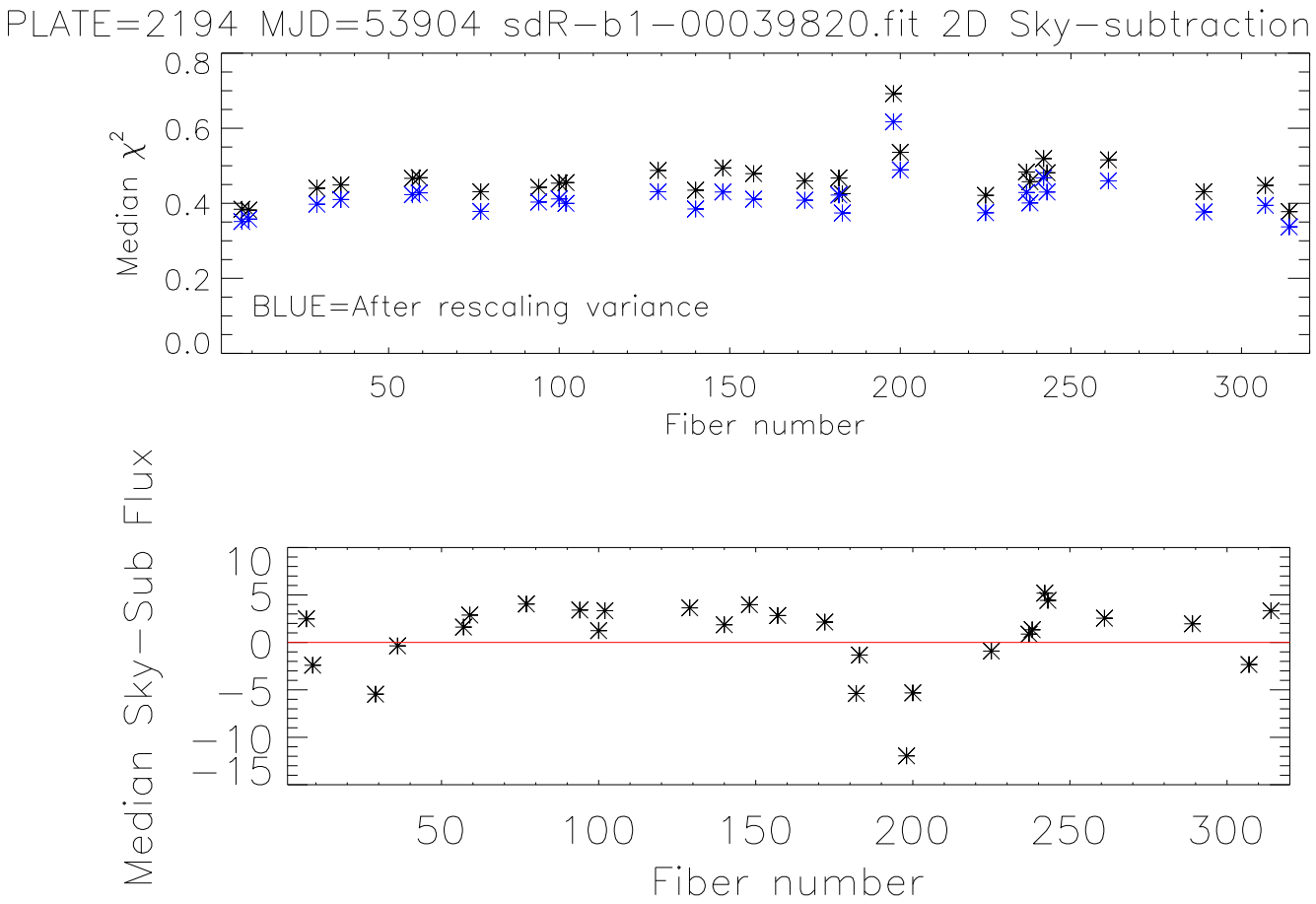

PLATE=2194 MJD=53904 Smooth superflat for sdR−b1−00039820.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

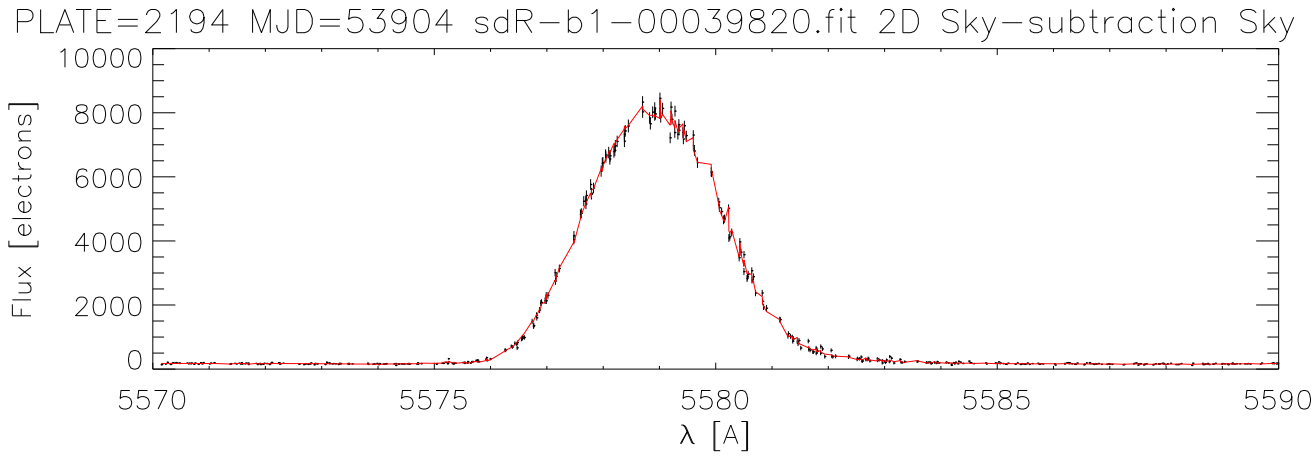

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

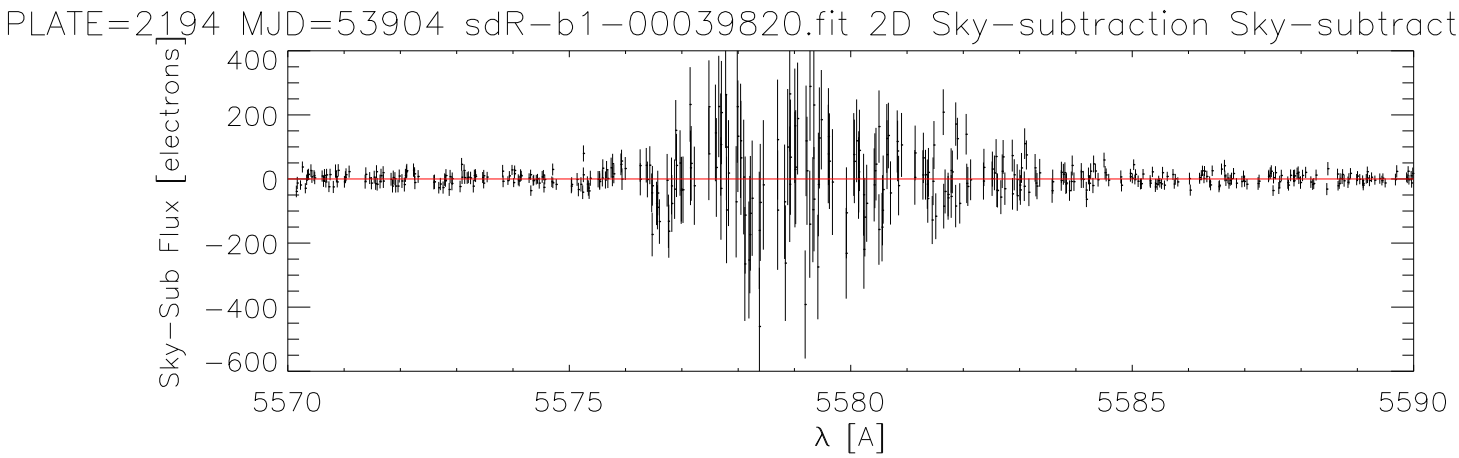

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

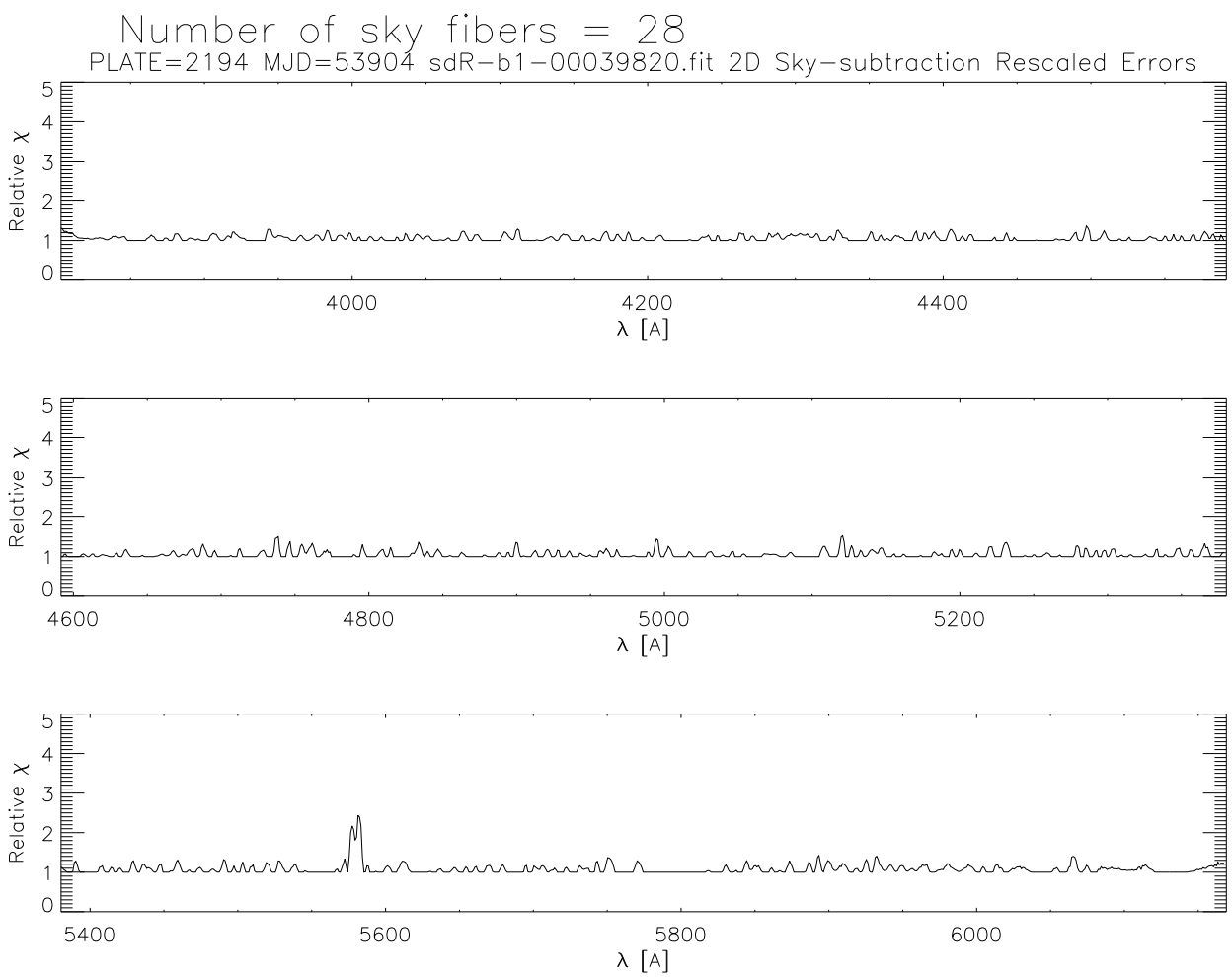

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

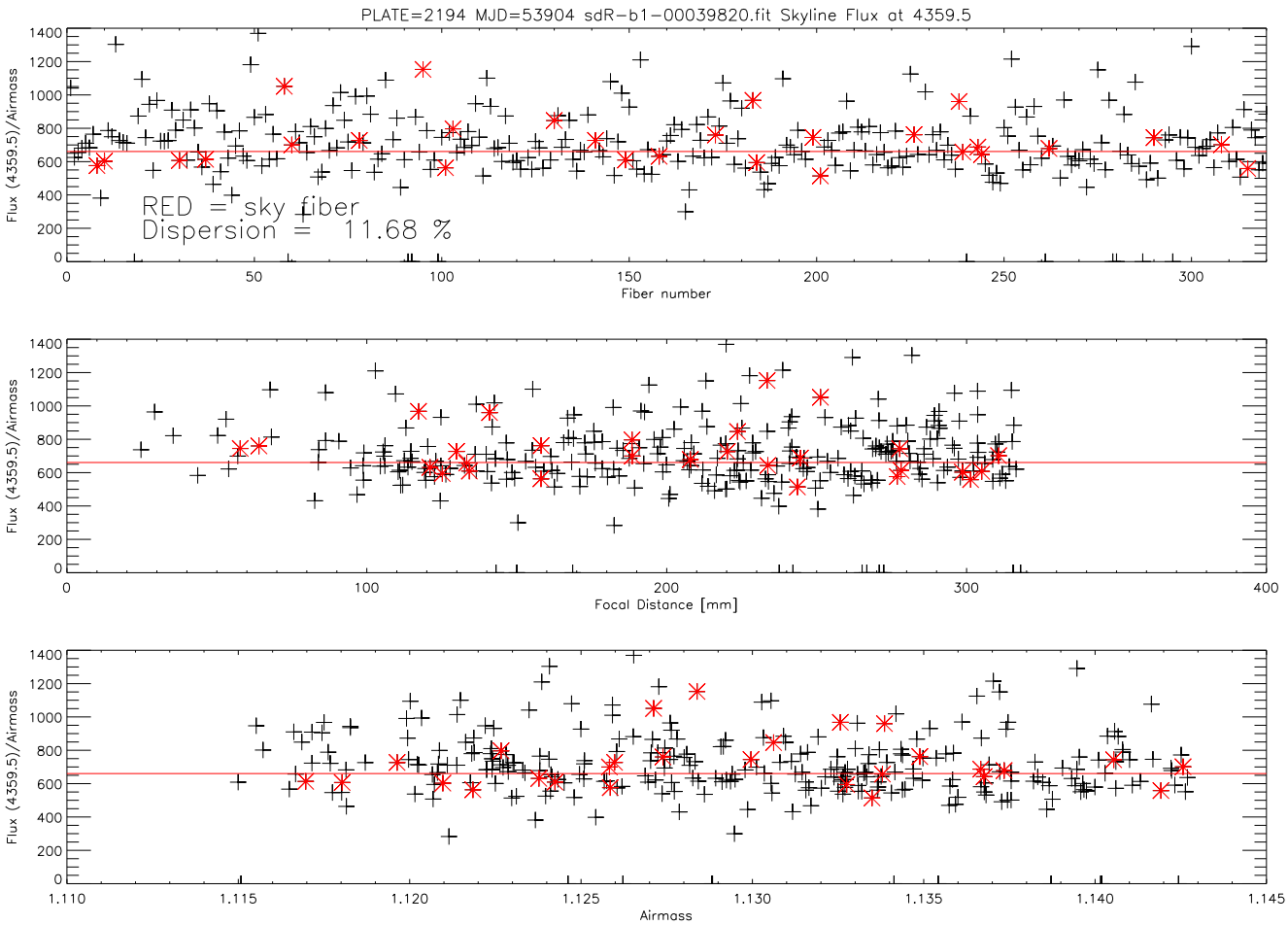

Number of sky fibers = 28
PLATE=2194 MJD=53904 sdR-b1-00039820.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

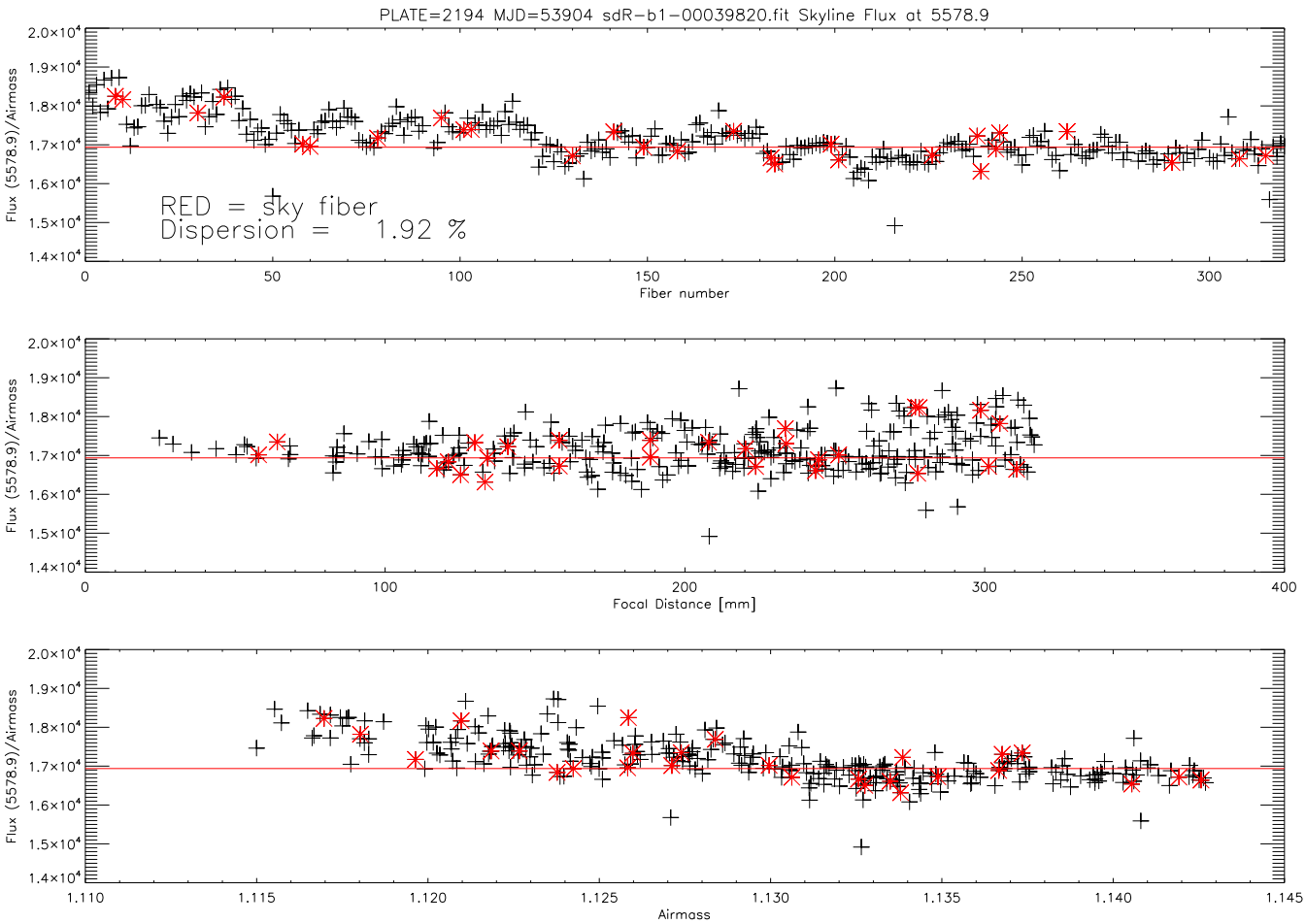

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

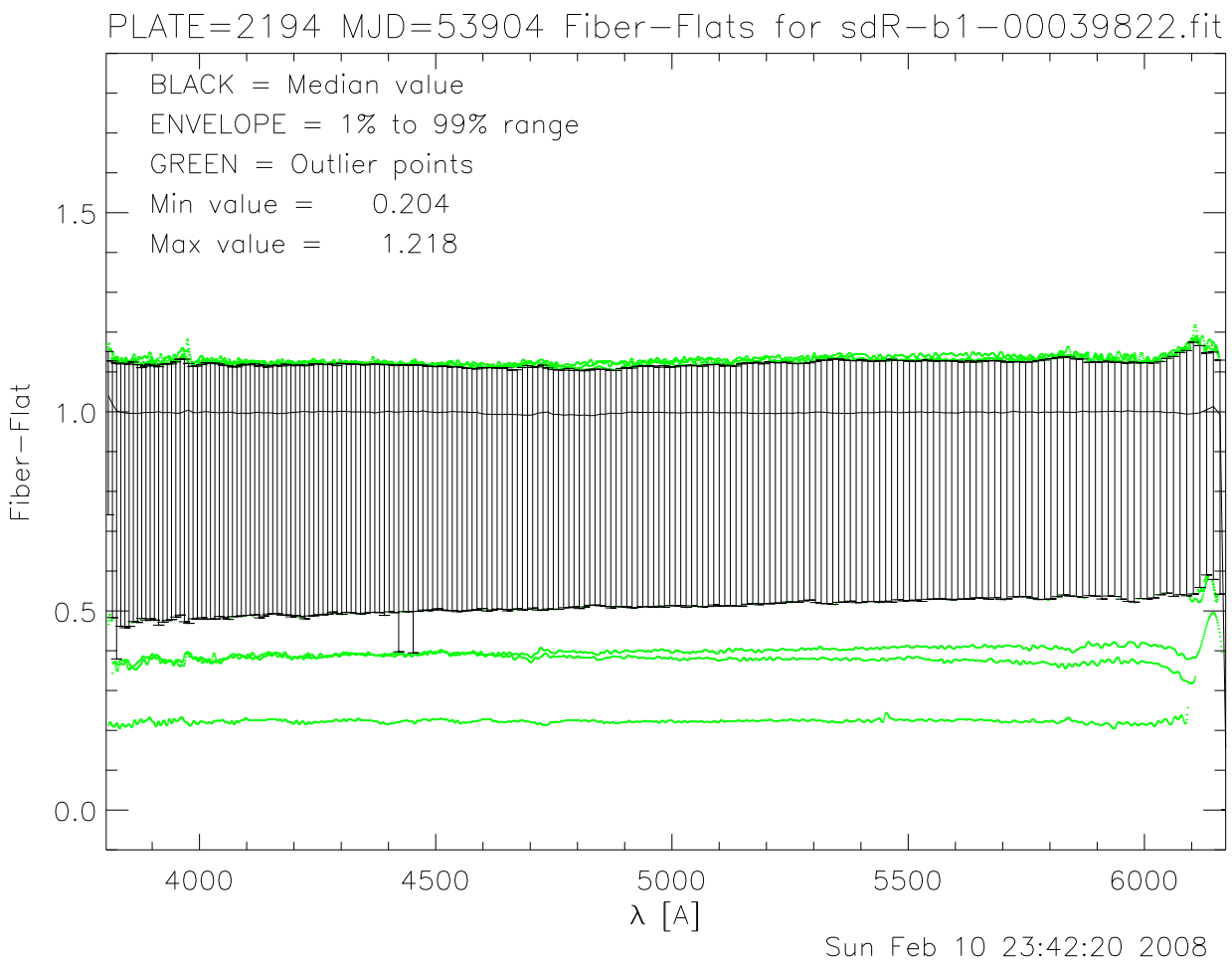

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

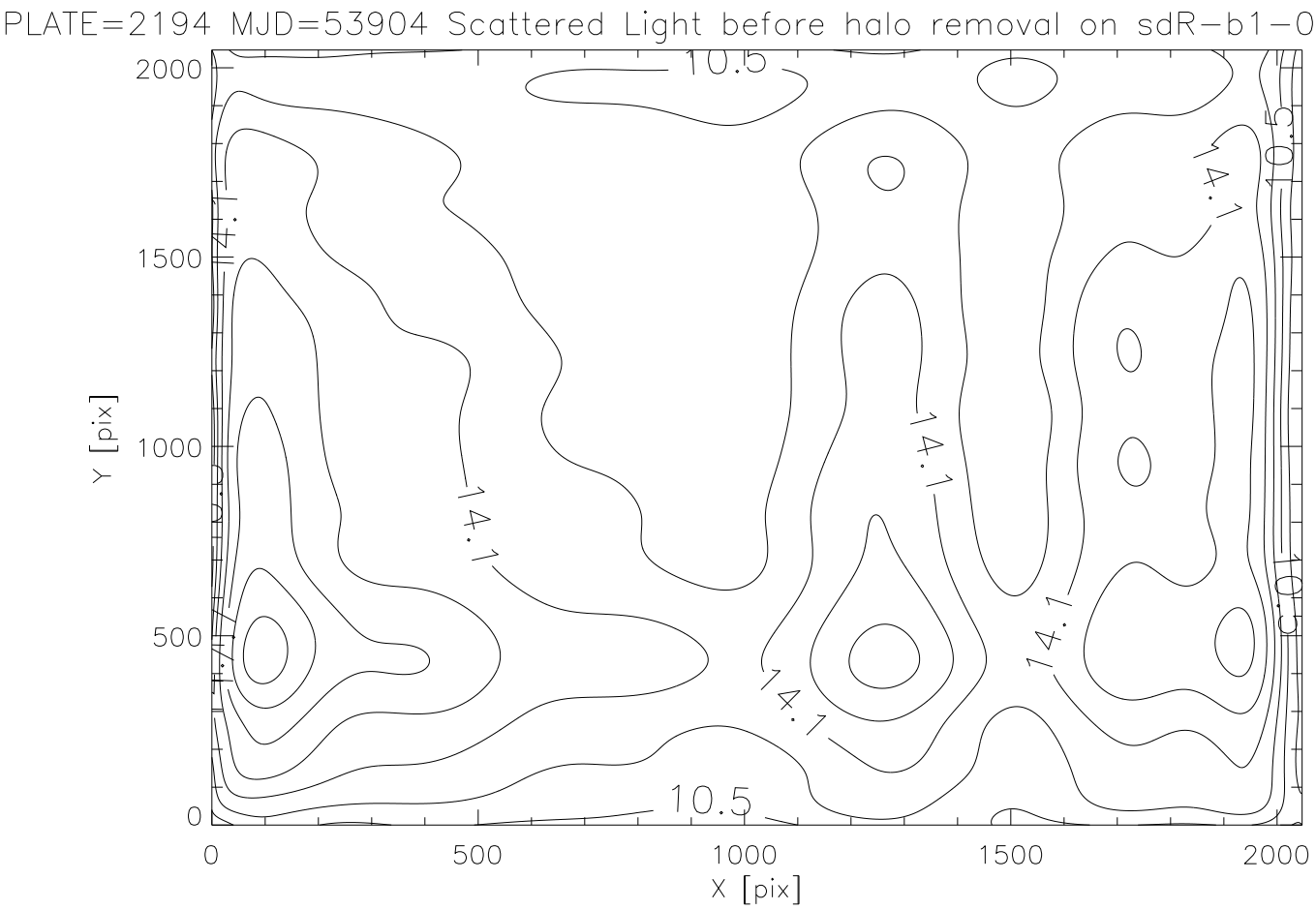

PLATE=2194 MJD=53904 sdR-b1-00039820.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

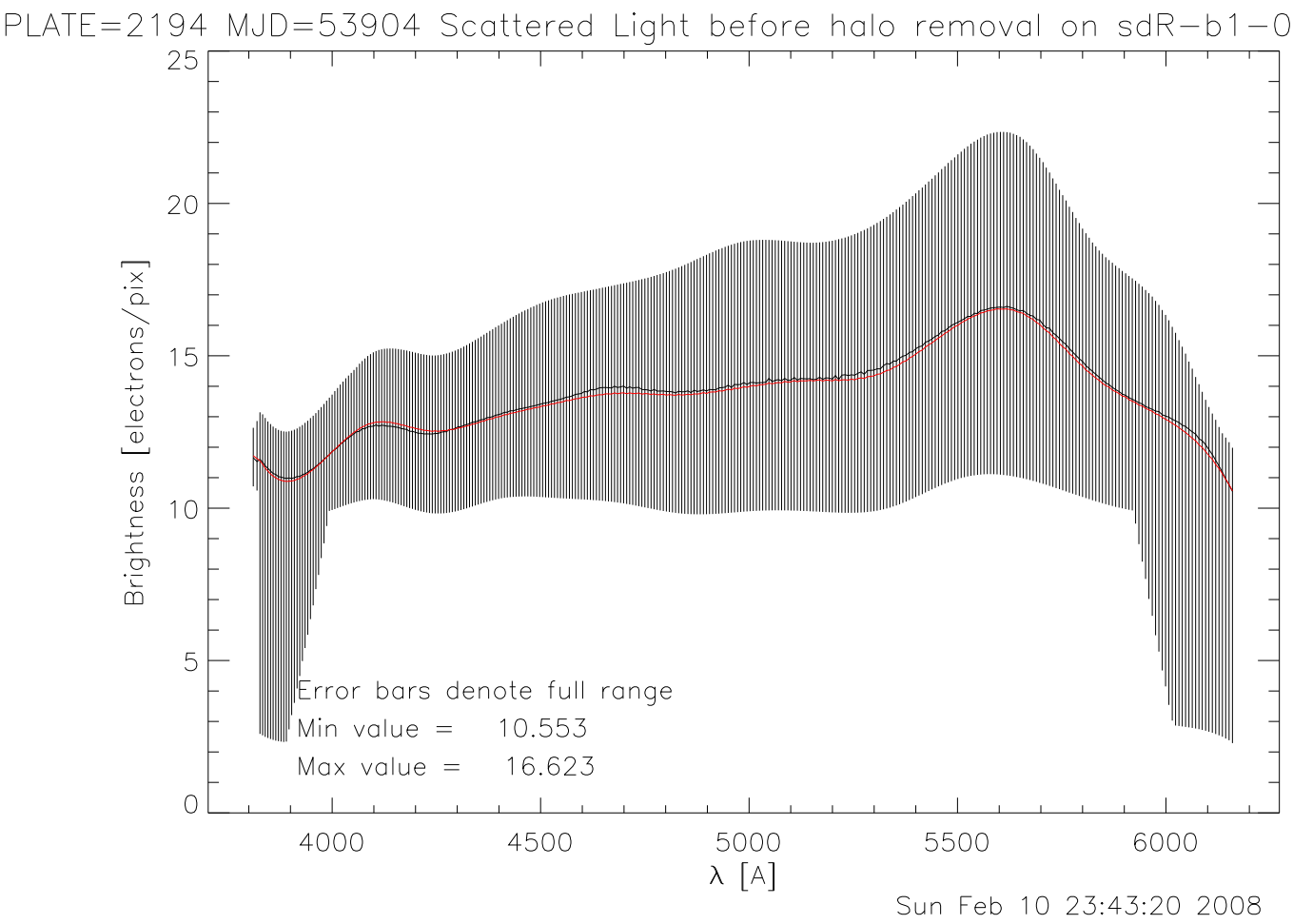

Number of sky fibers = 28
PLATE=2194 MJD=53904 sdR-b1-00039820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

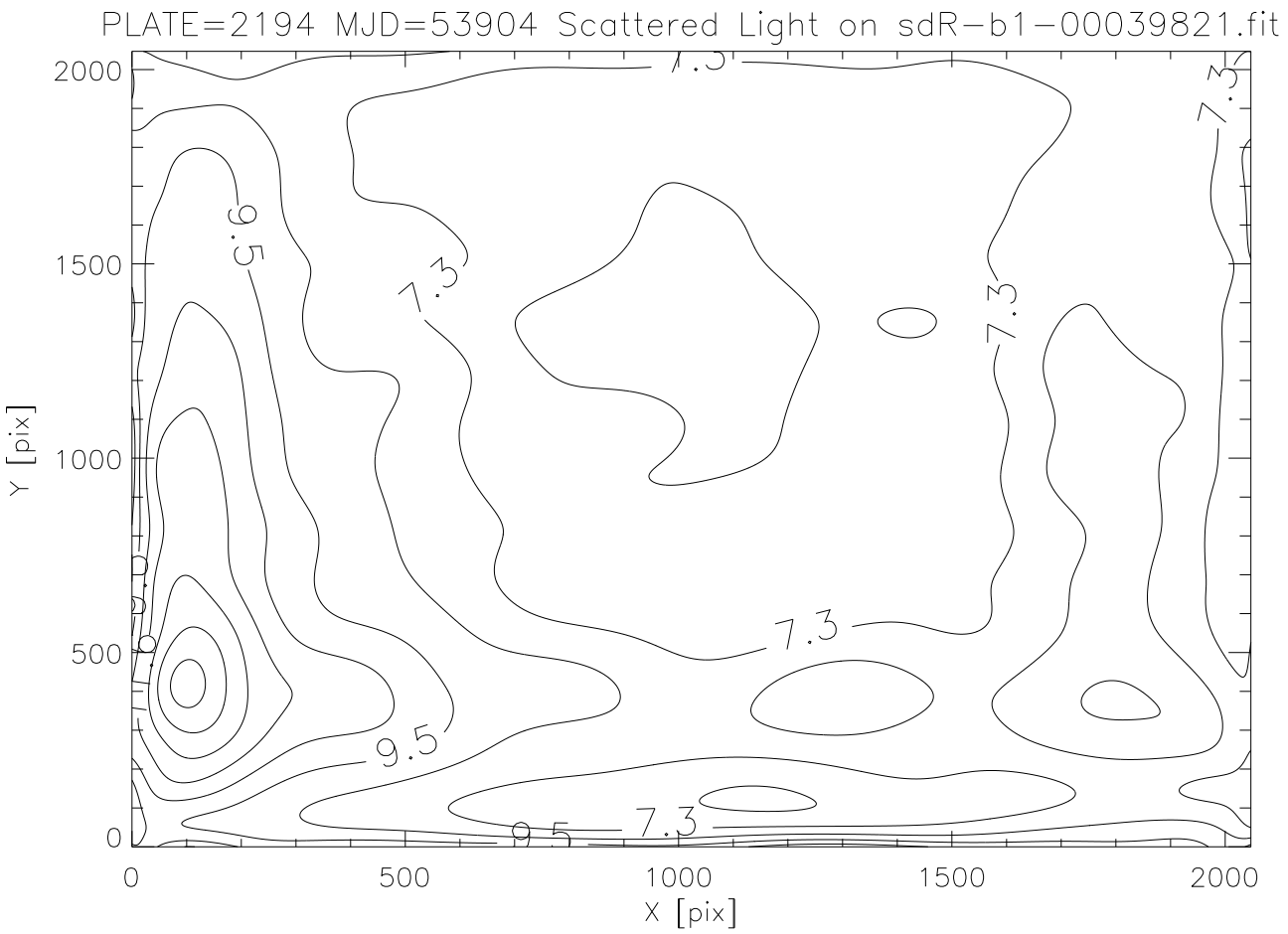

PLATE=2194 MJD=53904 sdR-b1-00039820.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.68 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

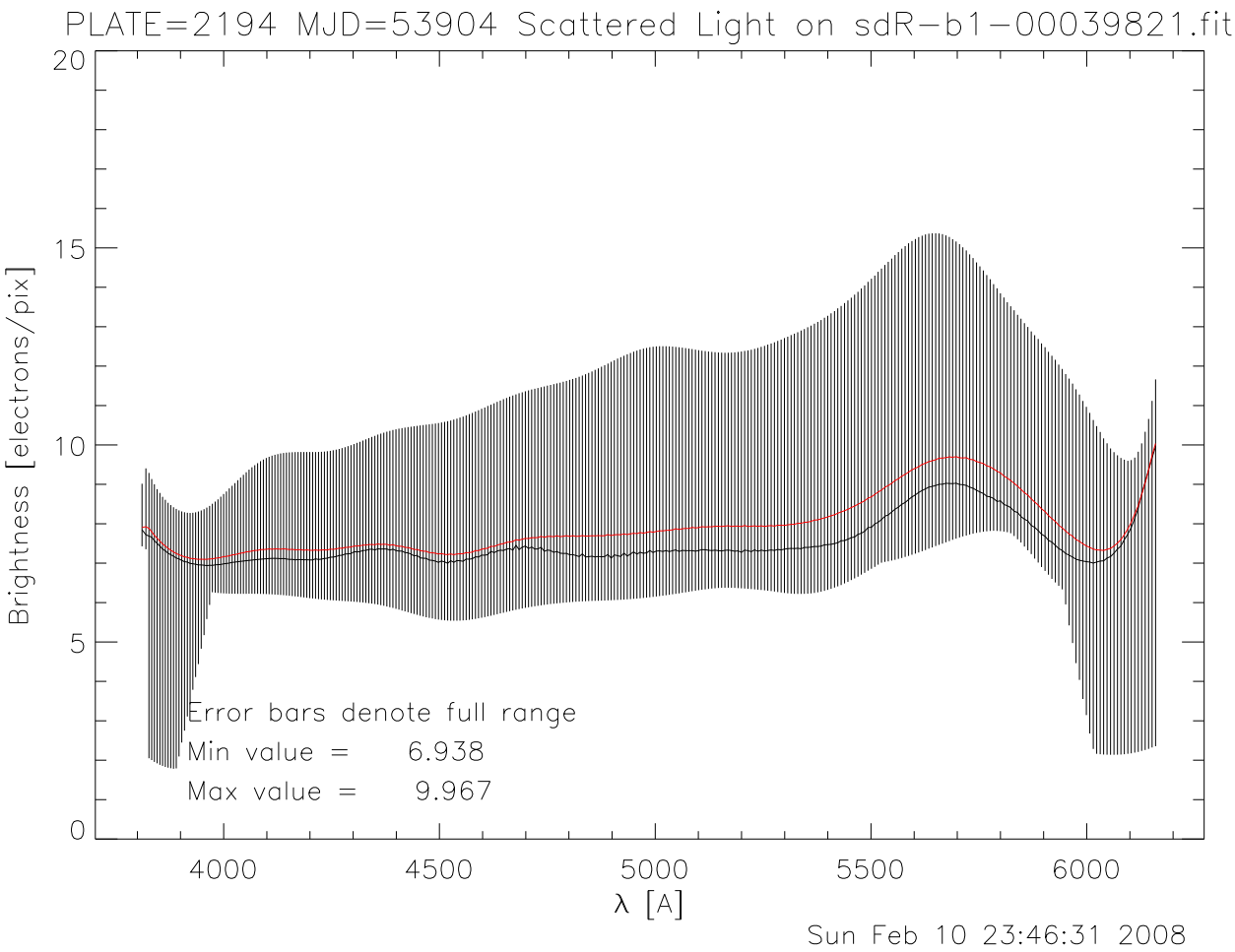

PLATE=2194 MJD=53904 sdR-b1-00039820.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Focal Distance [mm]
Airmass

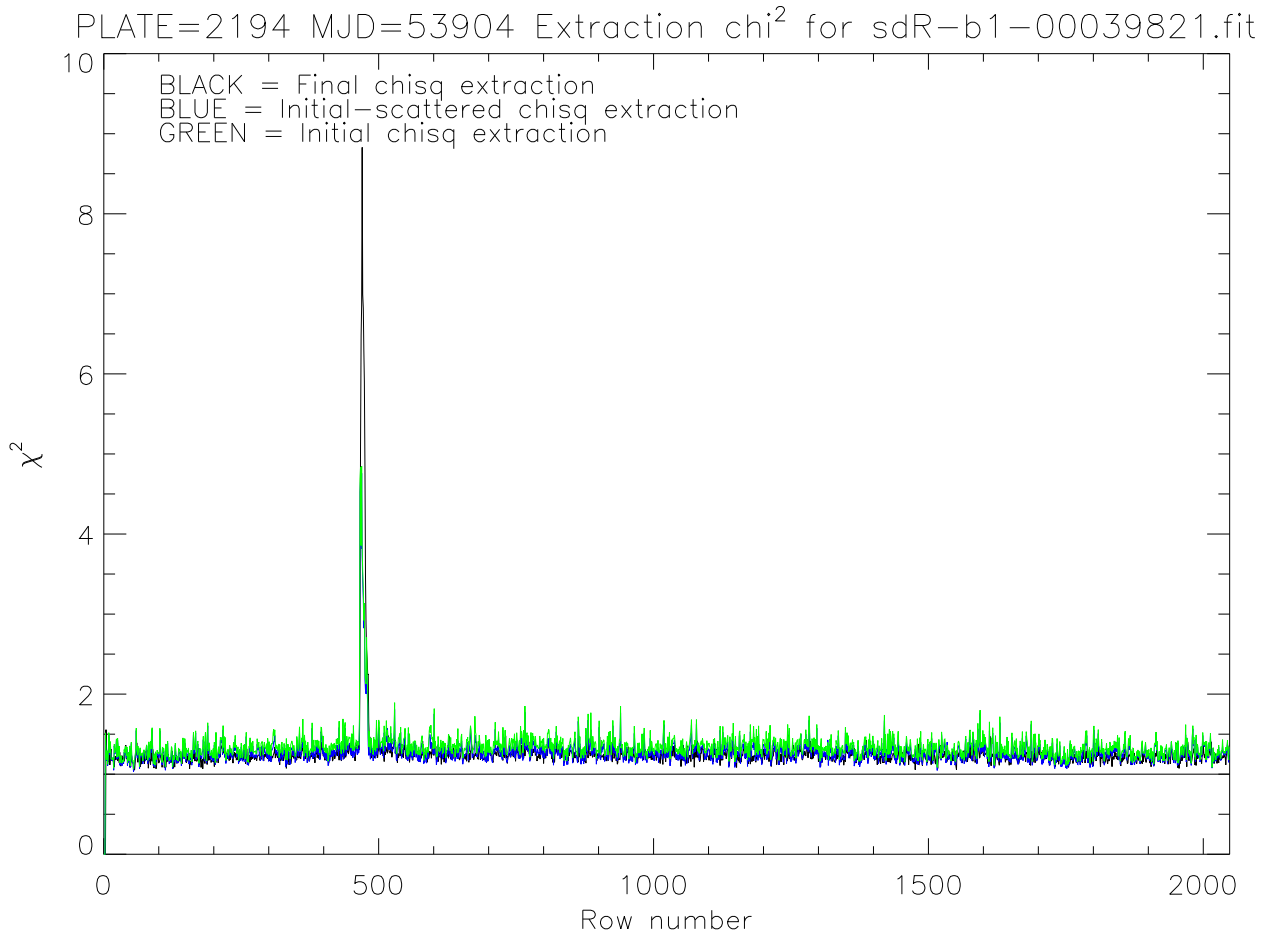

PLATE=2194 MJD=53904 Fiber-Flats for sdR-b1-00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.204
Max value = 1.218
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:42:20 2008

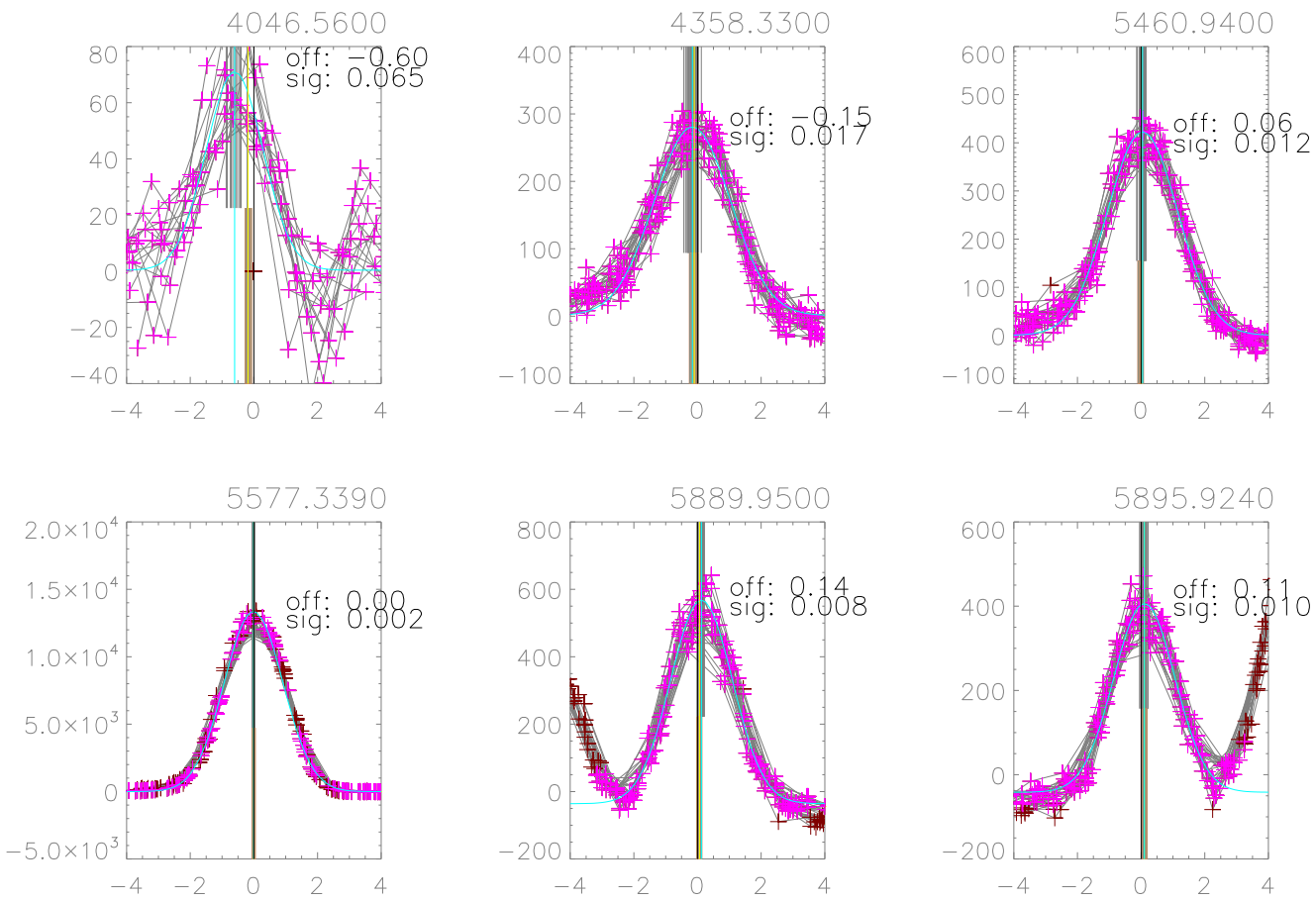

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR−b1−00039821.f
10.5
14.1
Y [pix]
X [pix]
0
500
1000
1500
2000

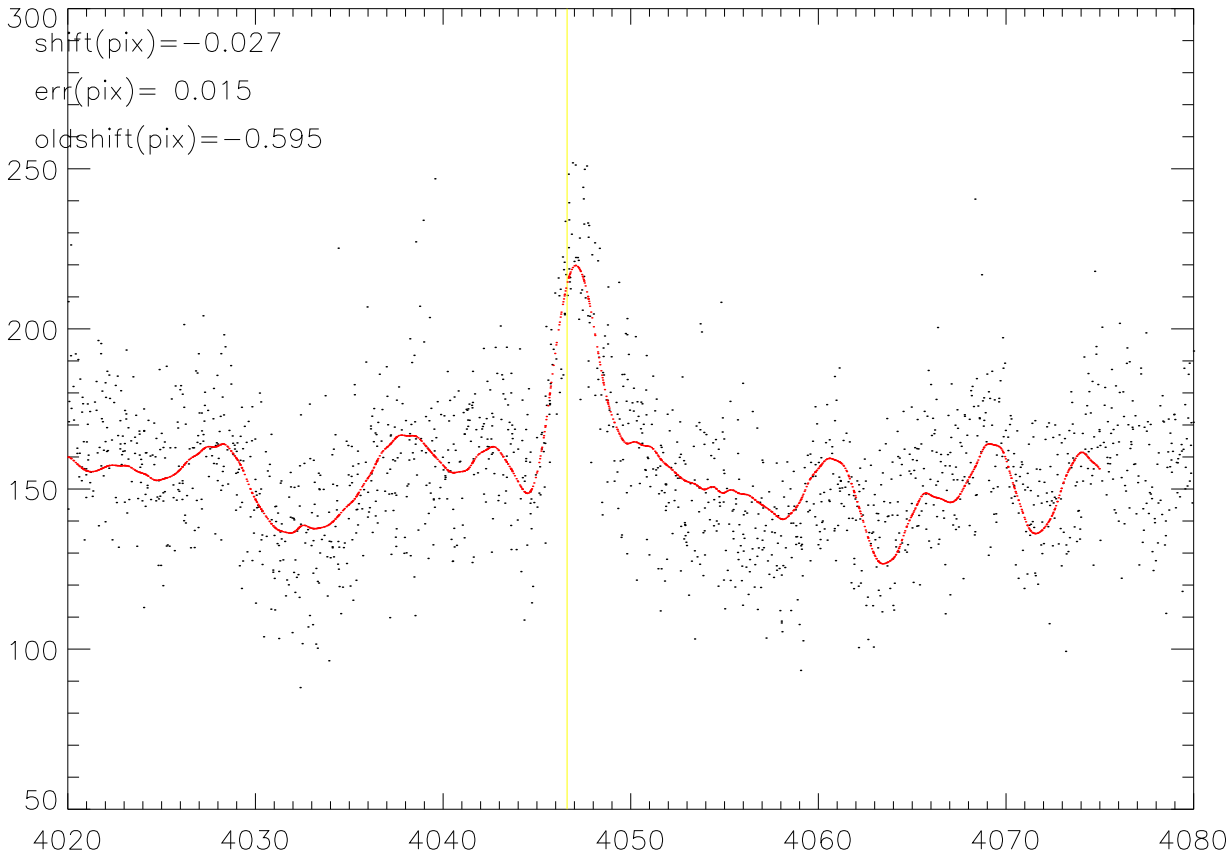

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b1-00039821.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 10.553
Max value = 16.623
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:43:20 2008

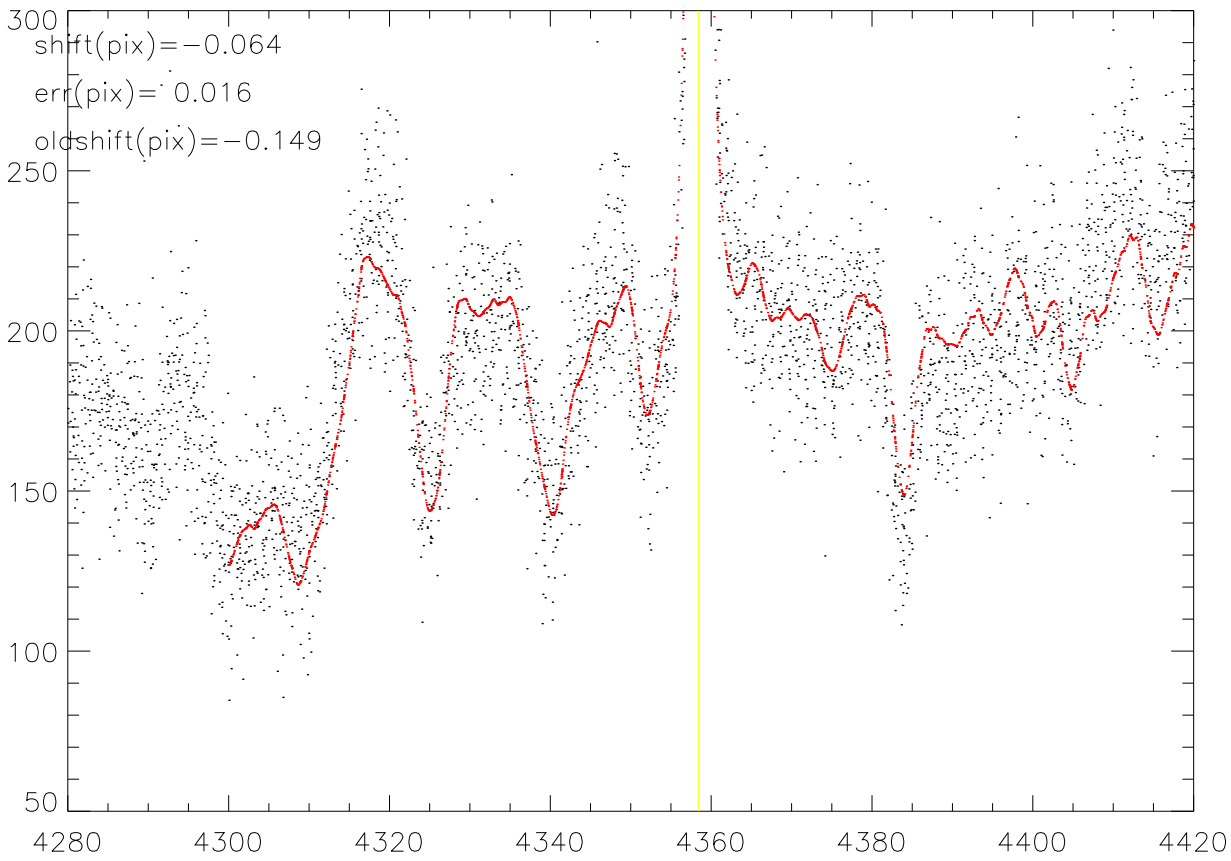

PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039821.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.5
7.3

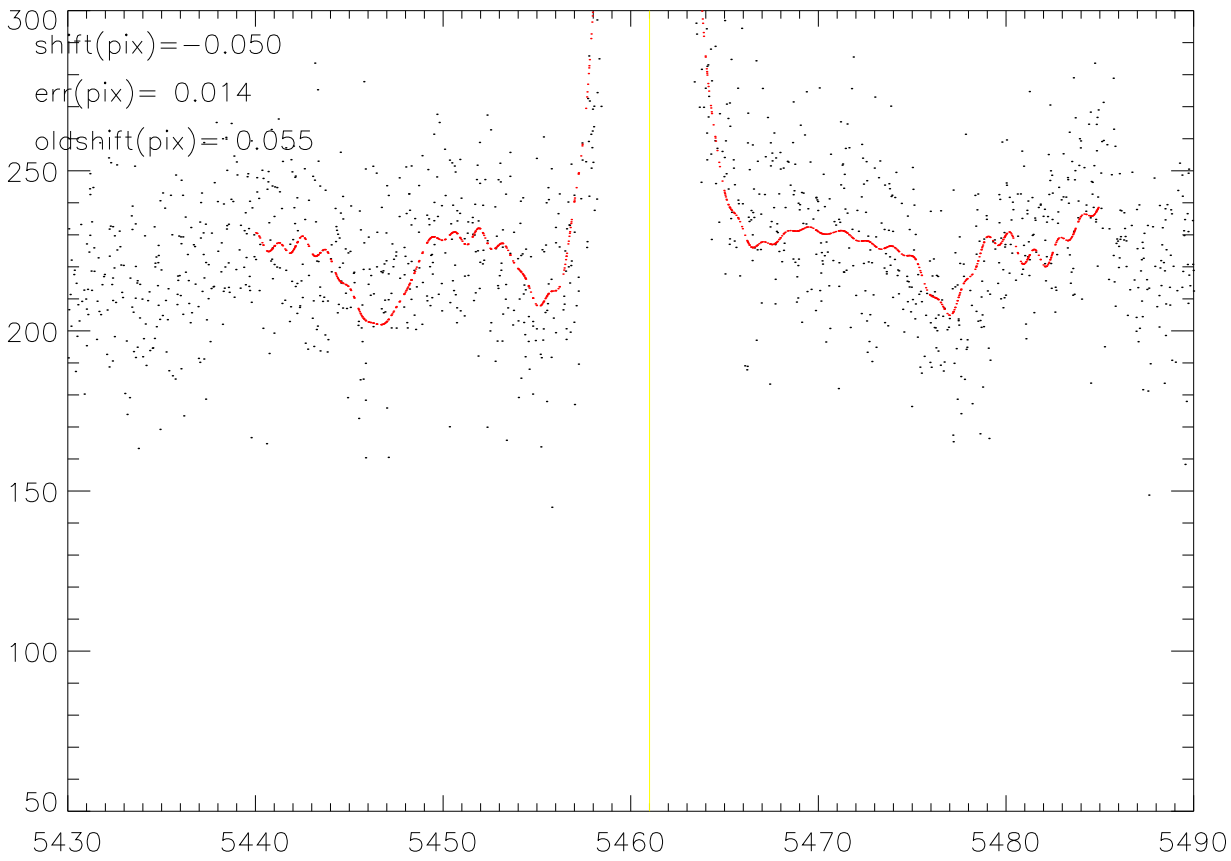

PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039821.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 6.938
Max value = 9.967
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:46:31 2008

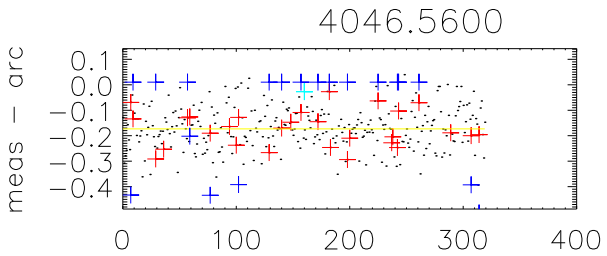

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b1-00039821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

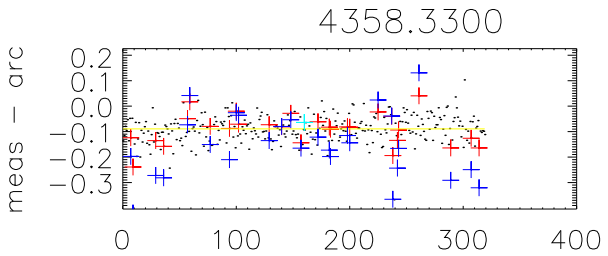

4046.5600
off: −0.60
sig: 0.065
4358.3300
off: −0.15
sig: 0.017
5460.9400
off: 0.06
sig: 0.012
5577.3390
off: 0.00
sig: 0.002
5889.9500
off: 0.14
sig: 0.008
5895.9240
off: 0.11
sig: 0.010

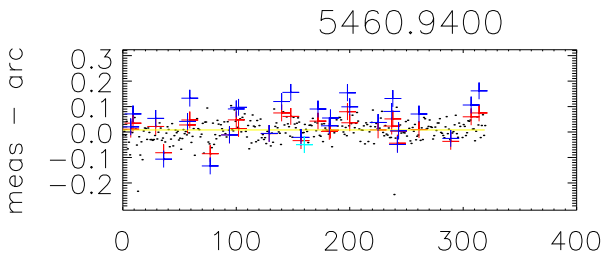

shift(pix)=−0.027
err(pix)= 0.015
oldshift(pix)=−0.595
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

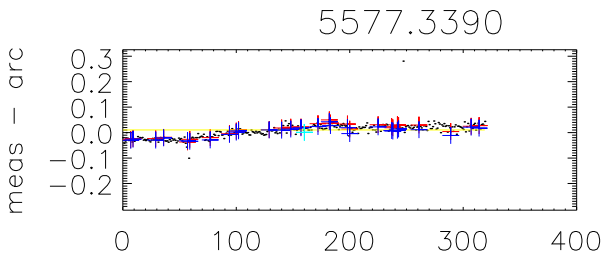

shift(pix)=−0.064
err(pix)= 0.016
oldshift(pix)=−0.149
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

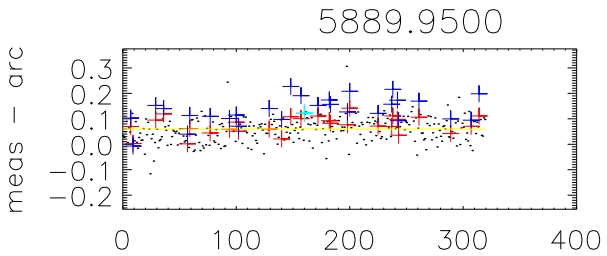

shift(pix)=−0.050
err(pix)= 0.014
oldshift(pix)=−0.055
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

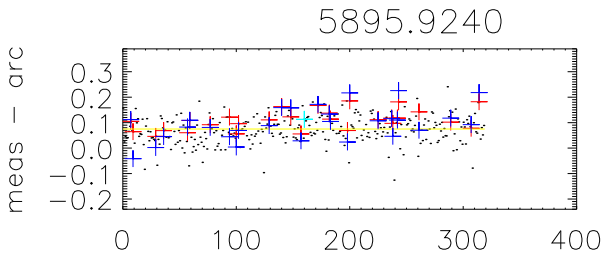

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

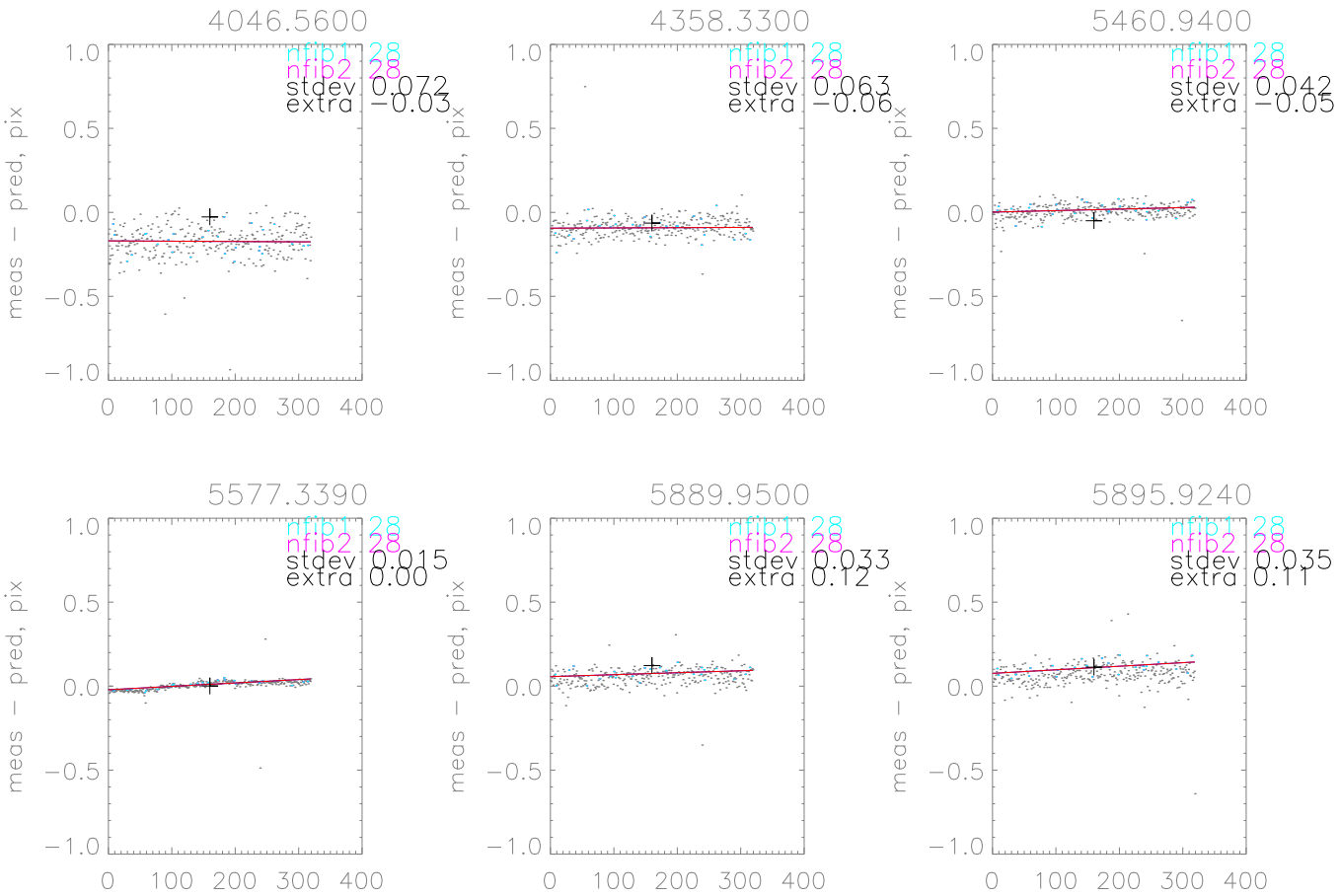

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

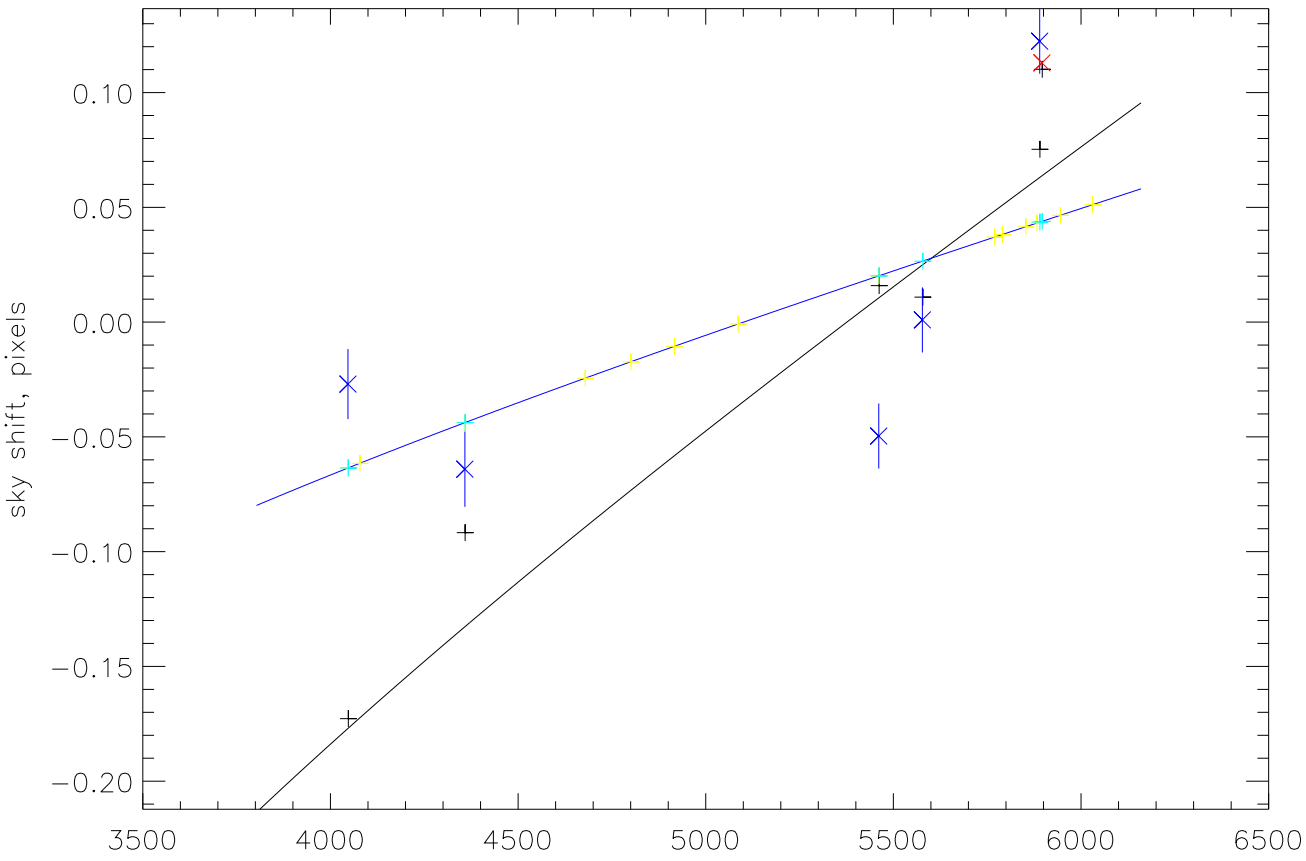

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

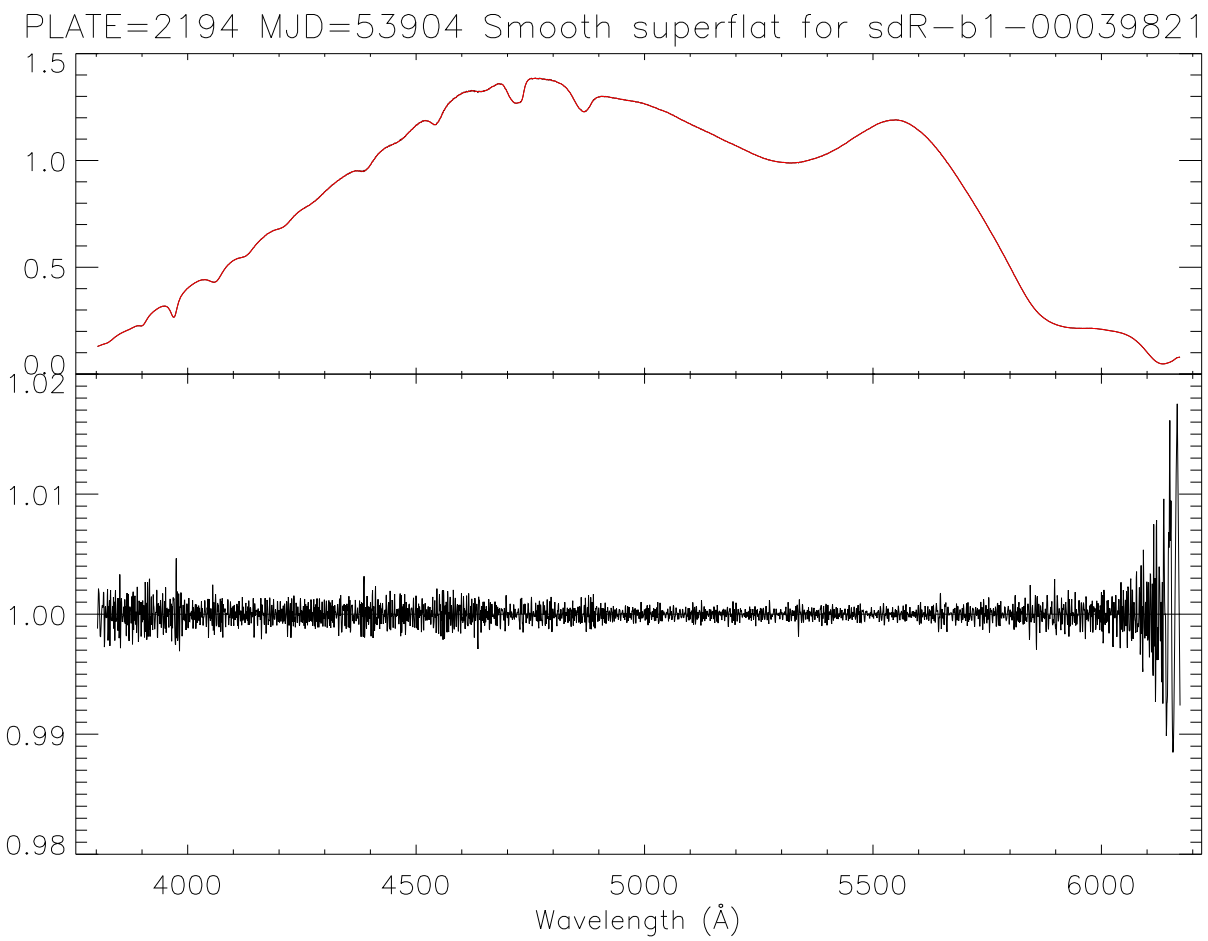

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

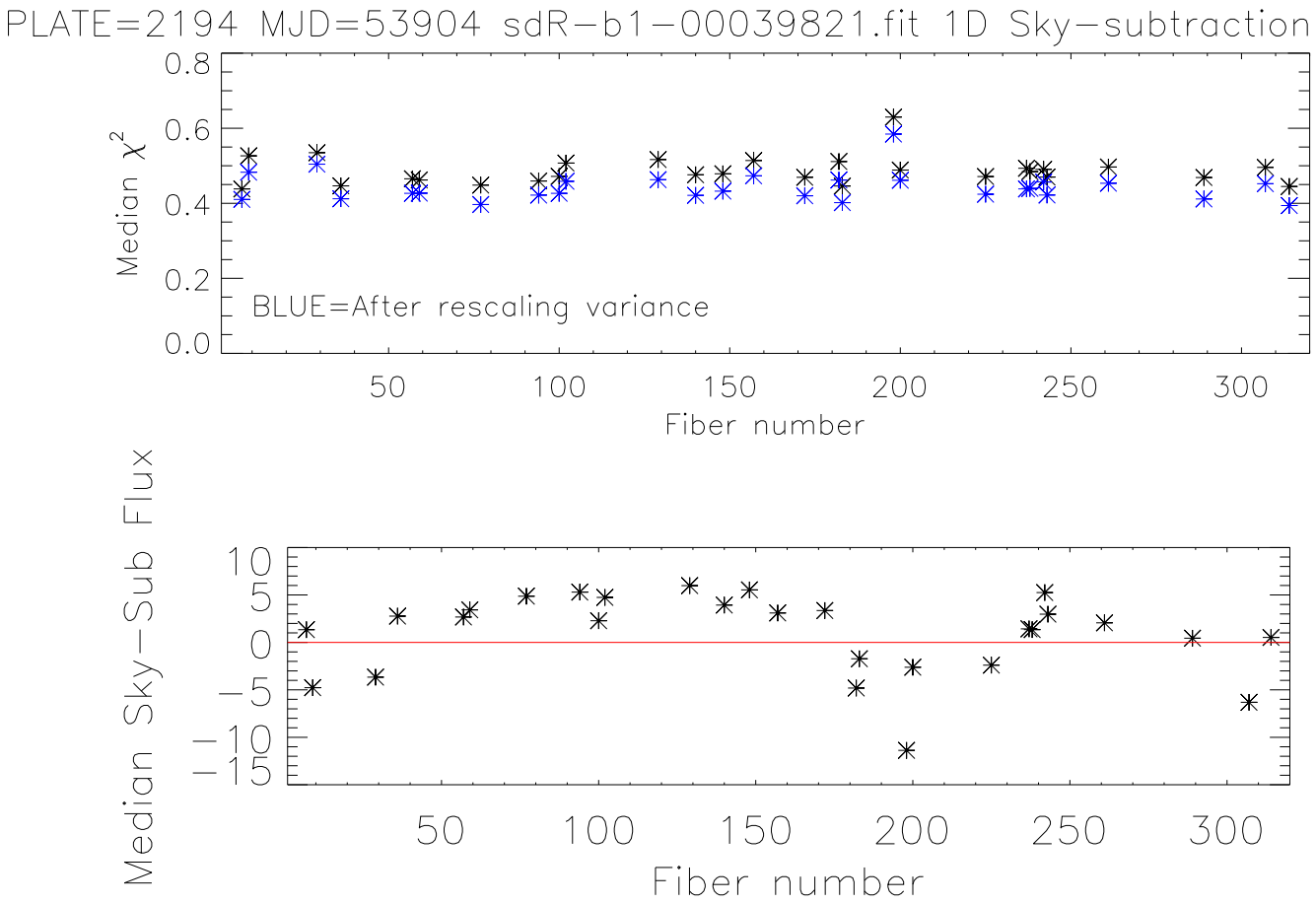

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

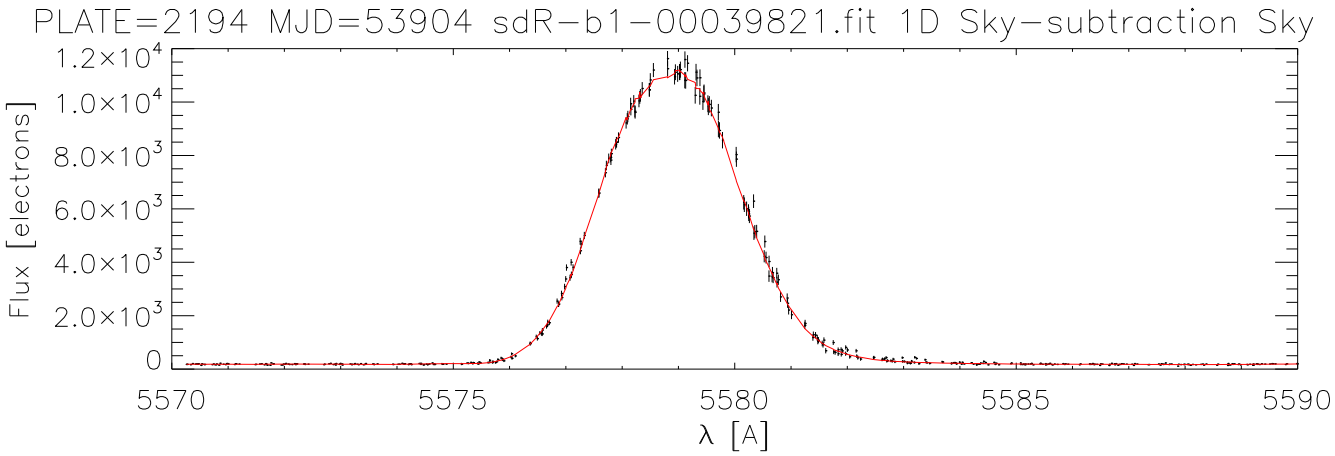

4046.5600
nfib1 28
nfib2 28
stdev 0.072
extra −0.03
4358.3300
nfib1 28
nfib2 28
stdev 0.063
extra −0.06
5460.9400
nfib1 28
nfib2 28
stdev 0.042
extra −0.05
5577.3390
nfib1 28
nfib2 28
stdev 0.015
extra 0.00
5889.9500
nfib1 28
nfib2 28
stdev 0.033
extra 0.12
5895.9240
nfib1 28
nfib2 28
stdev 0.035
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

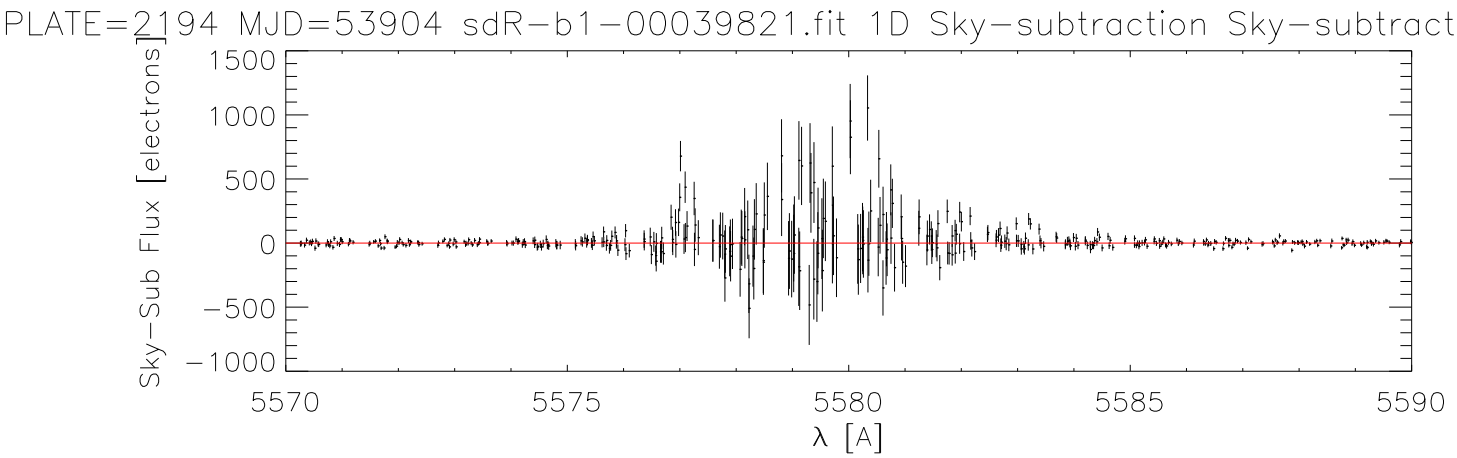

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
3500
4000
4500
5000
5500
6000
6500

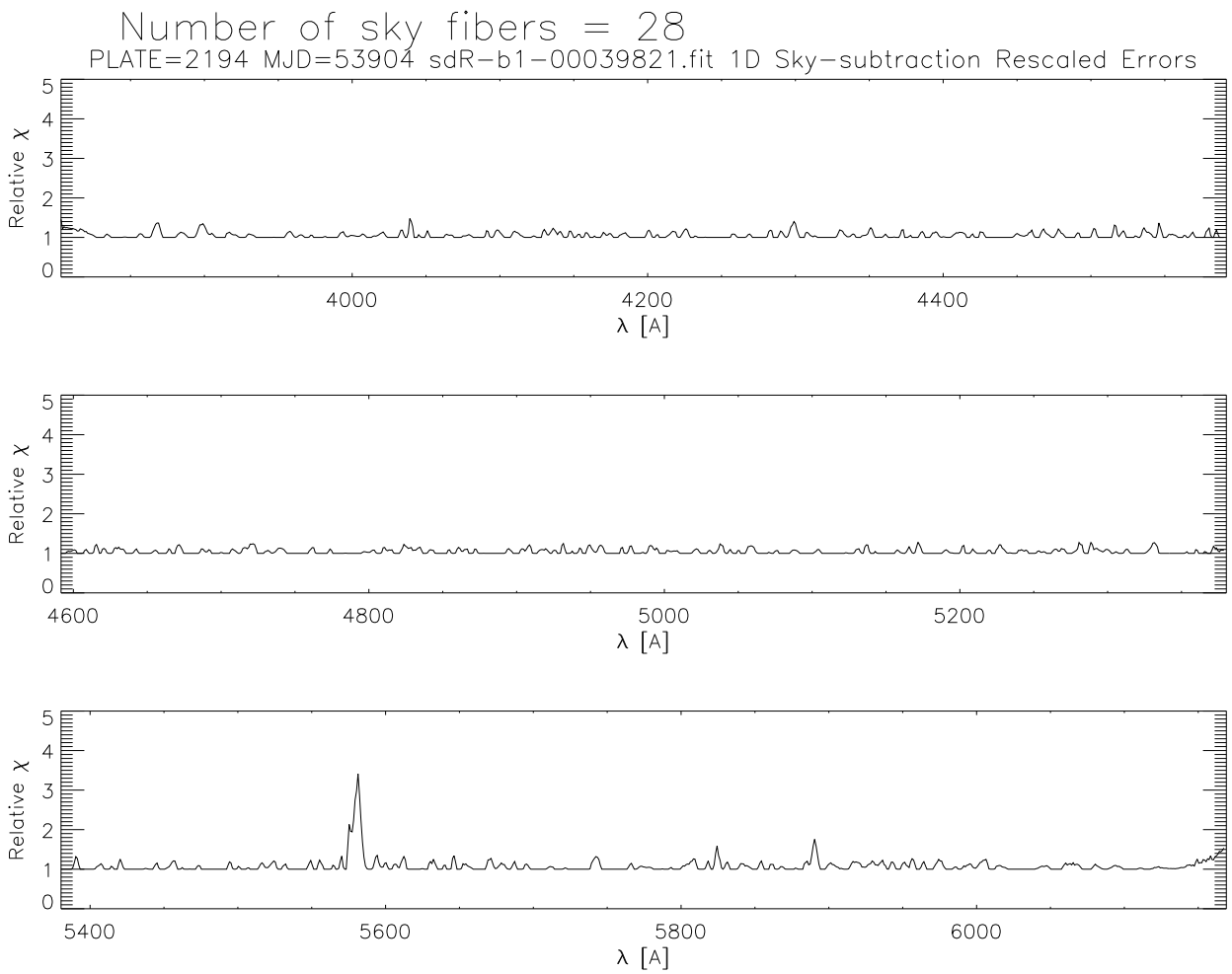
es= −0.0000

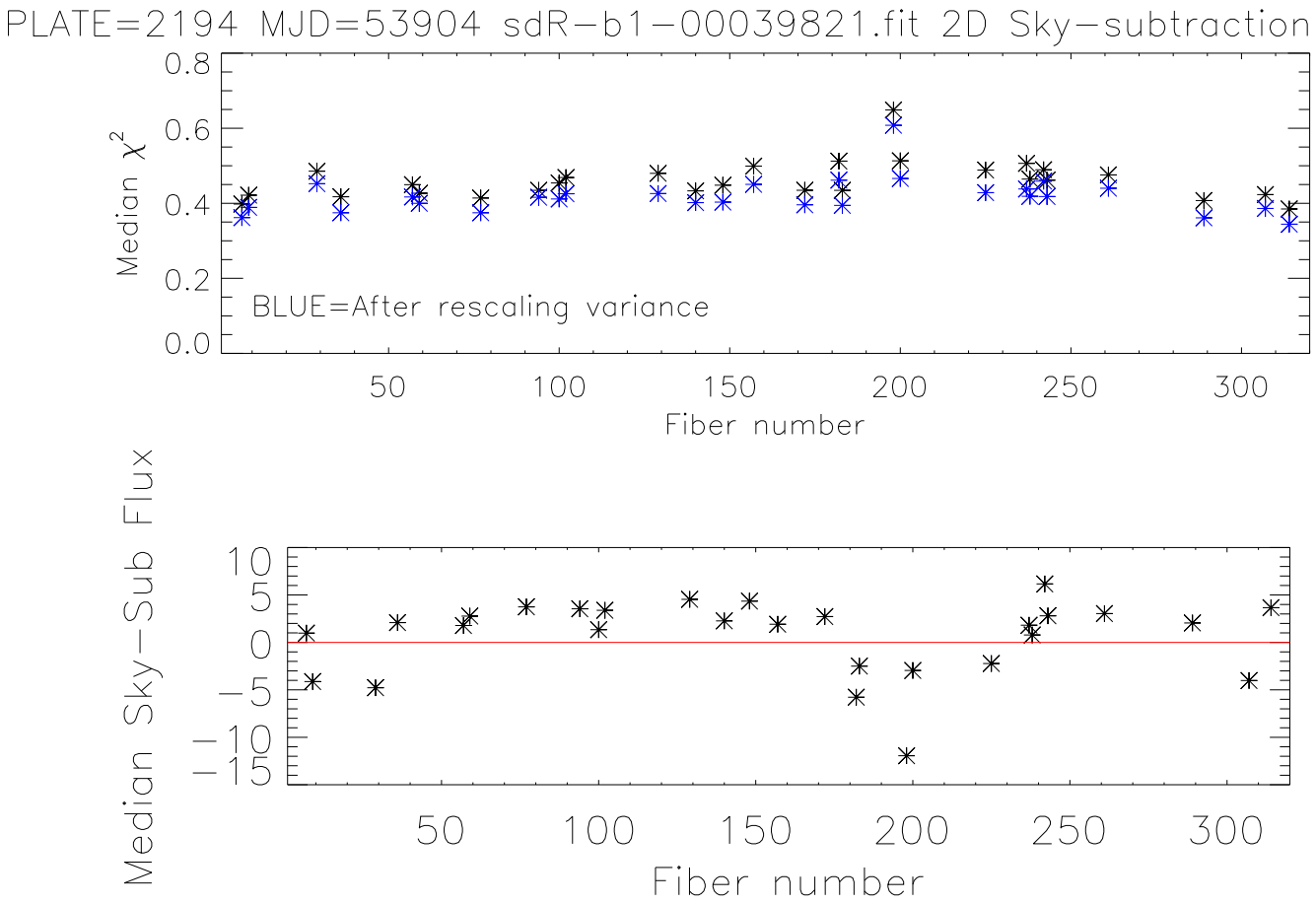

PLATE=2194 MJD=53904 Smooth superflat for sdR−b1−00039821.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

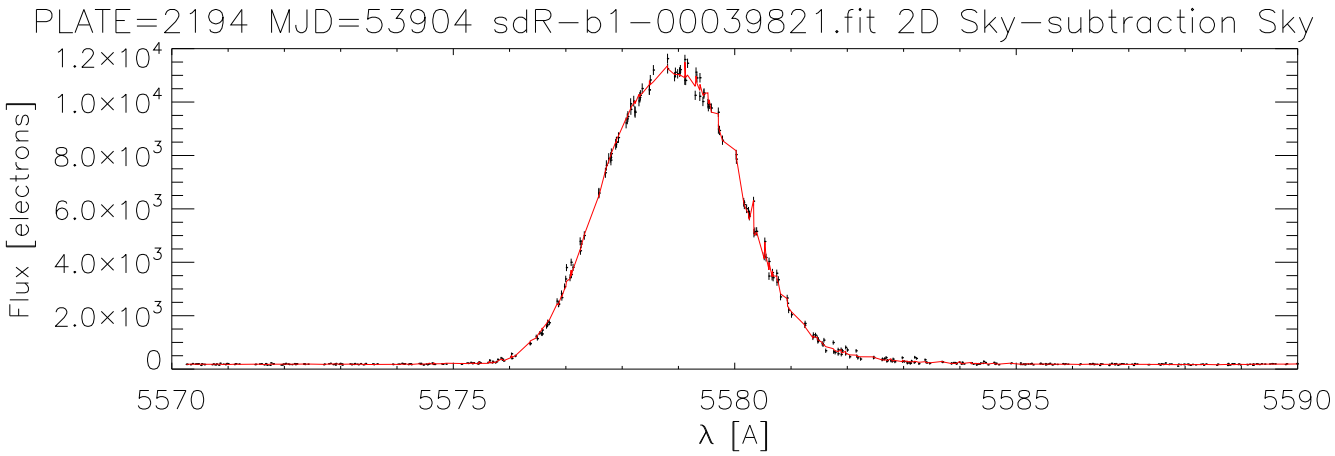

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

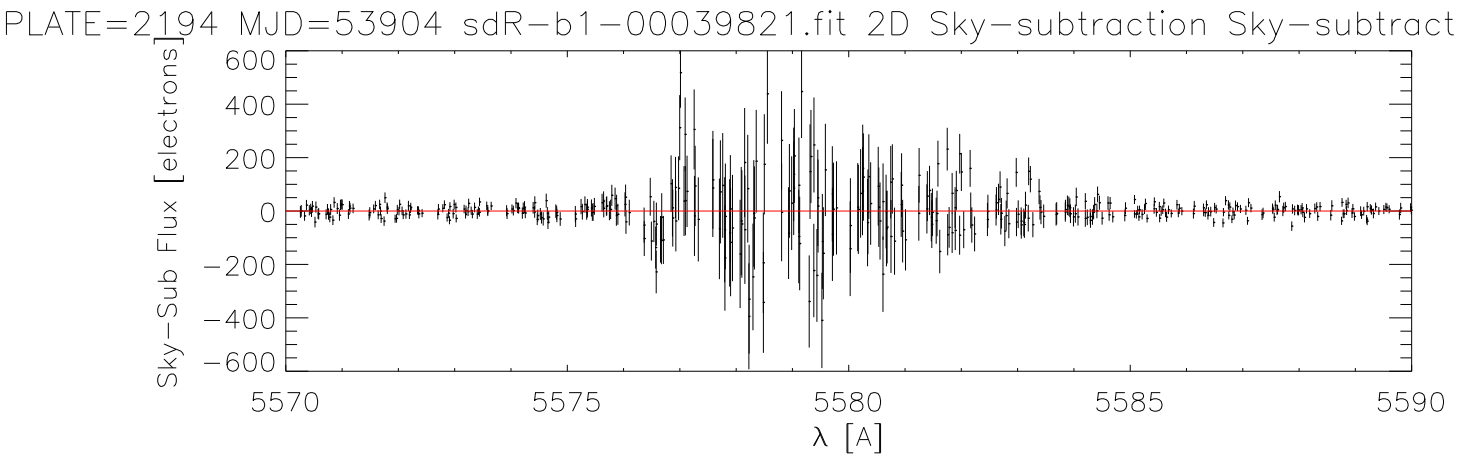

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

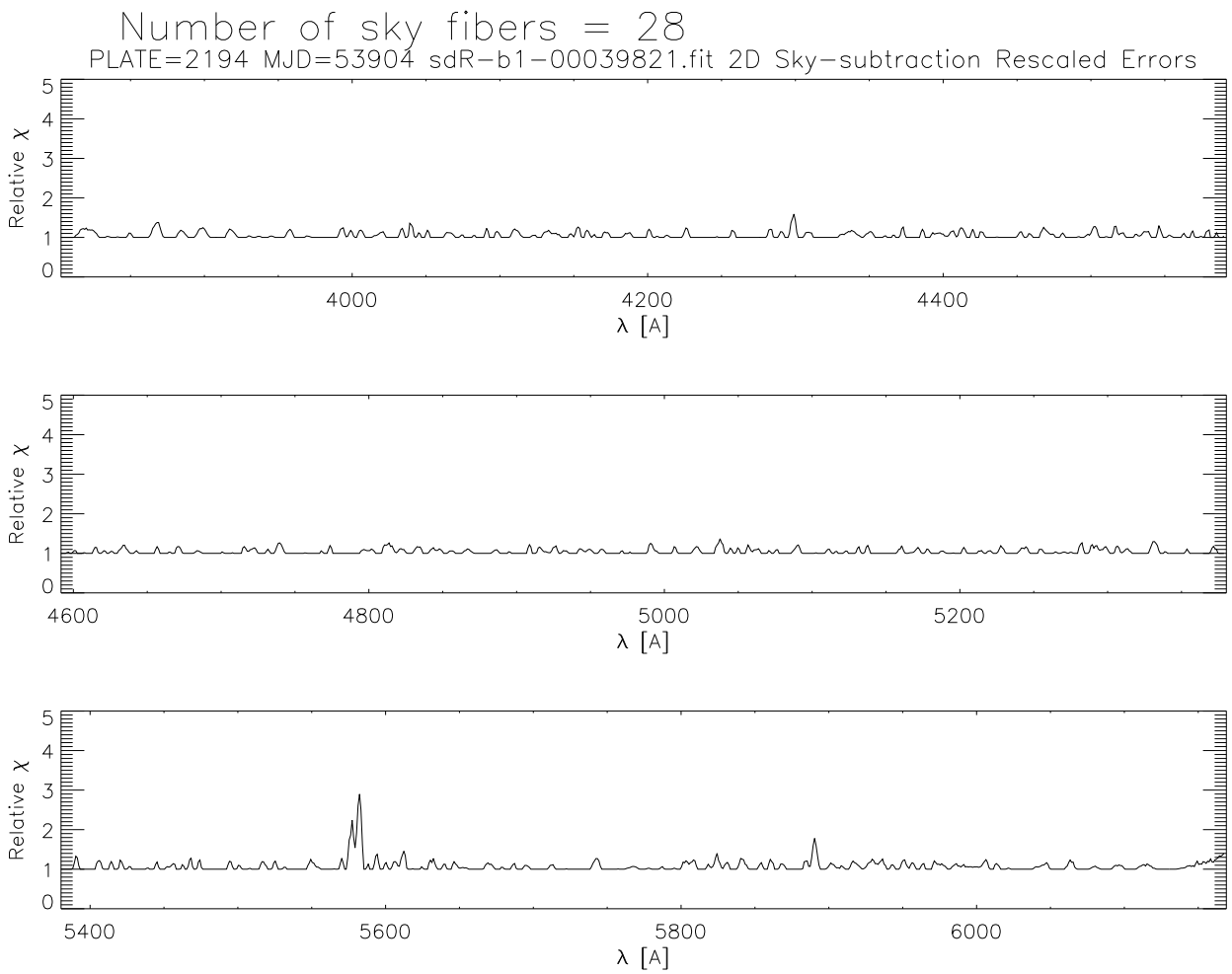

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

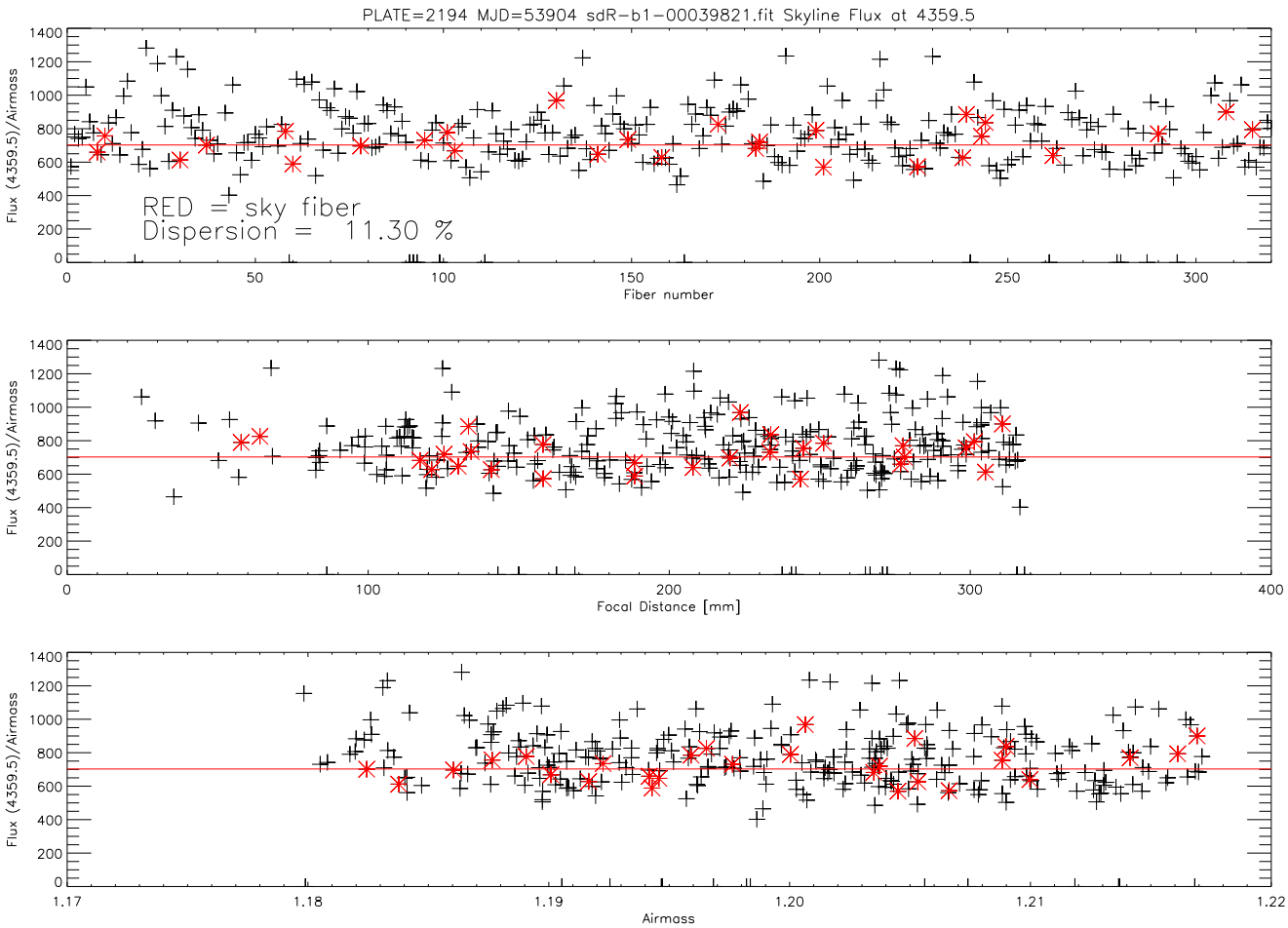

Number of sky fibers = 28
PLATE=2194 MJD=53904 sdR-b1-00039821.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

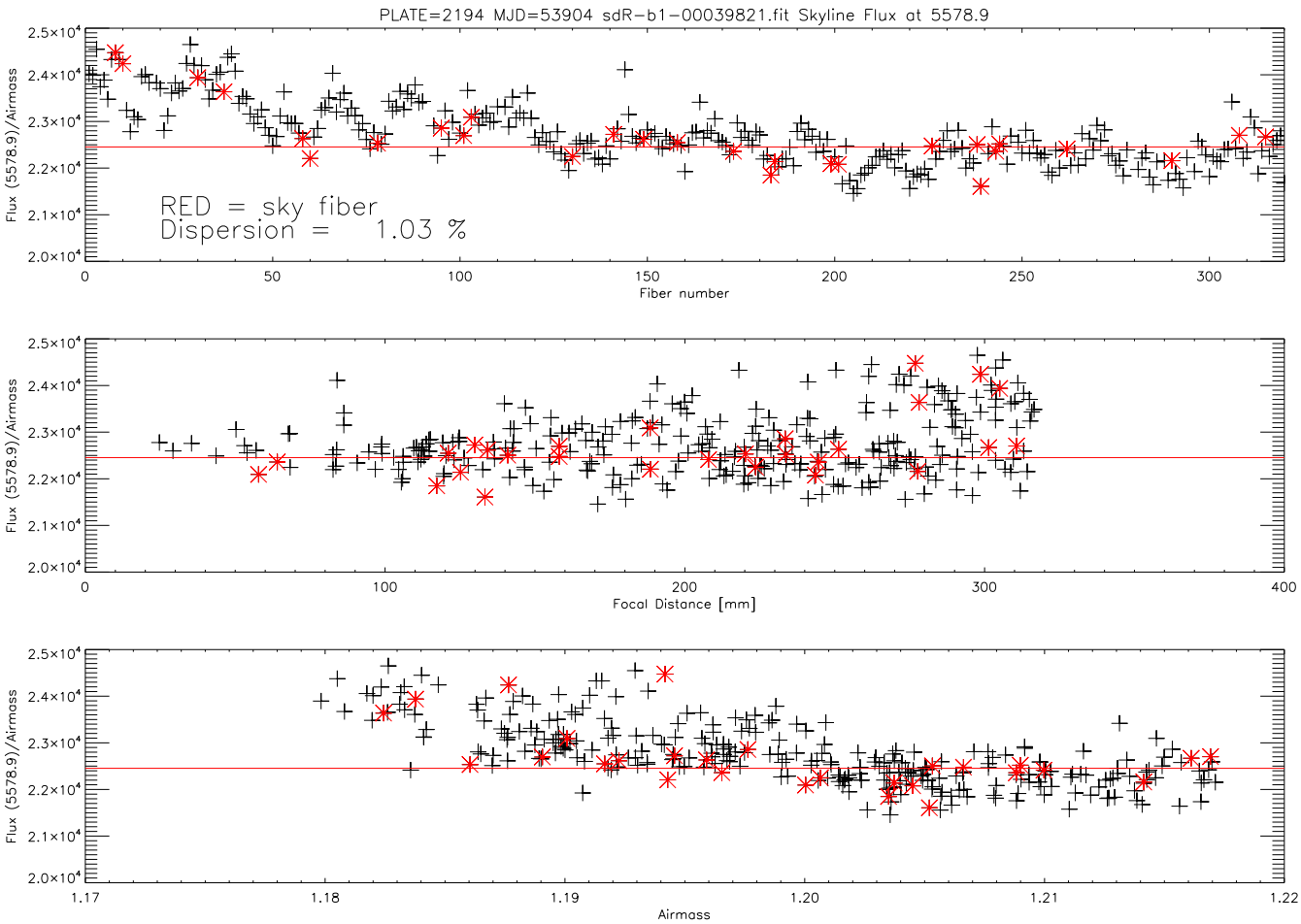

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

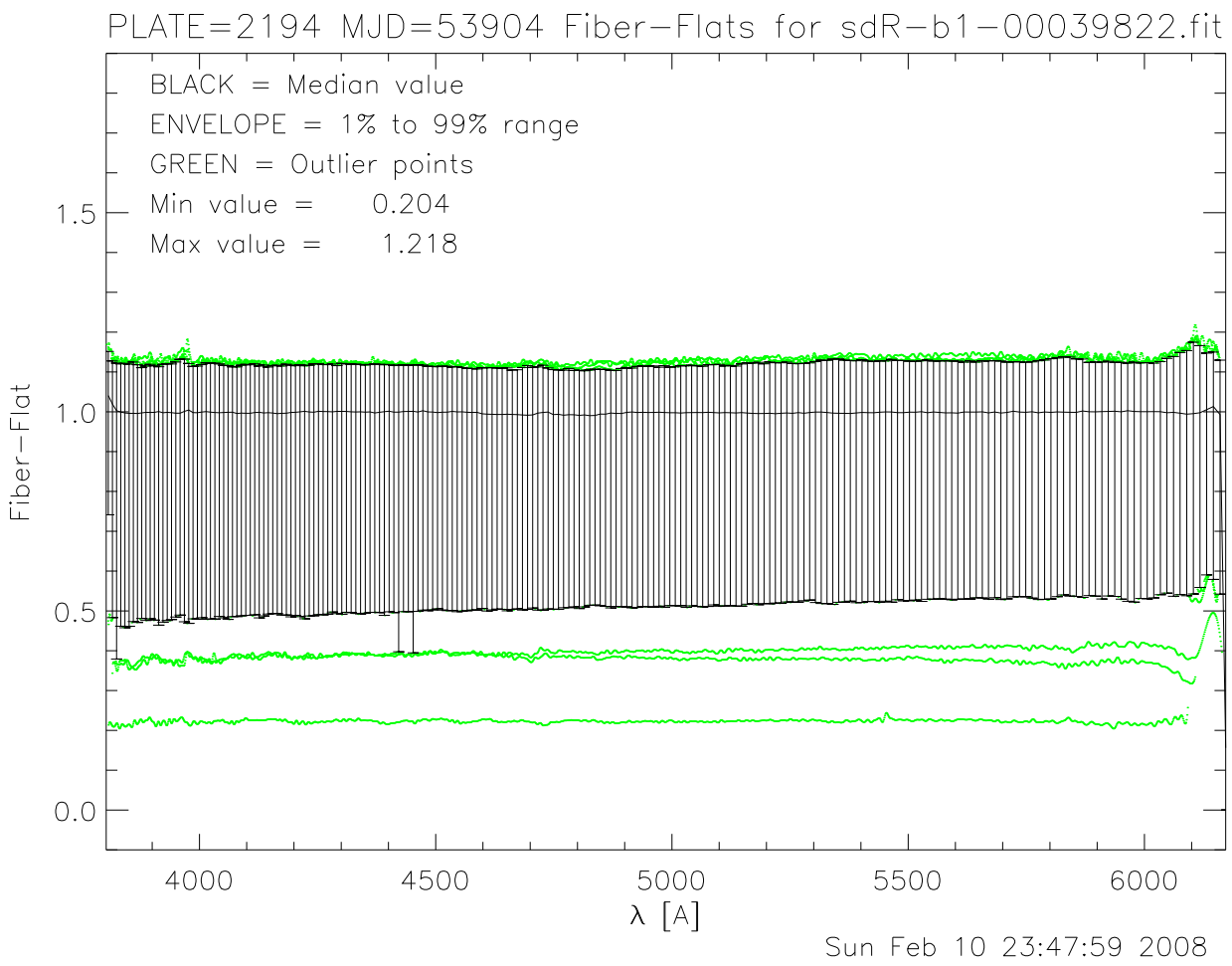

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

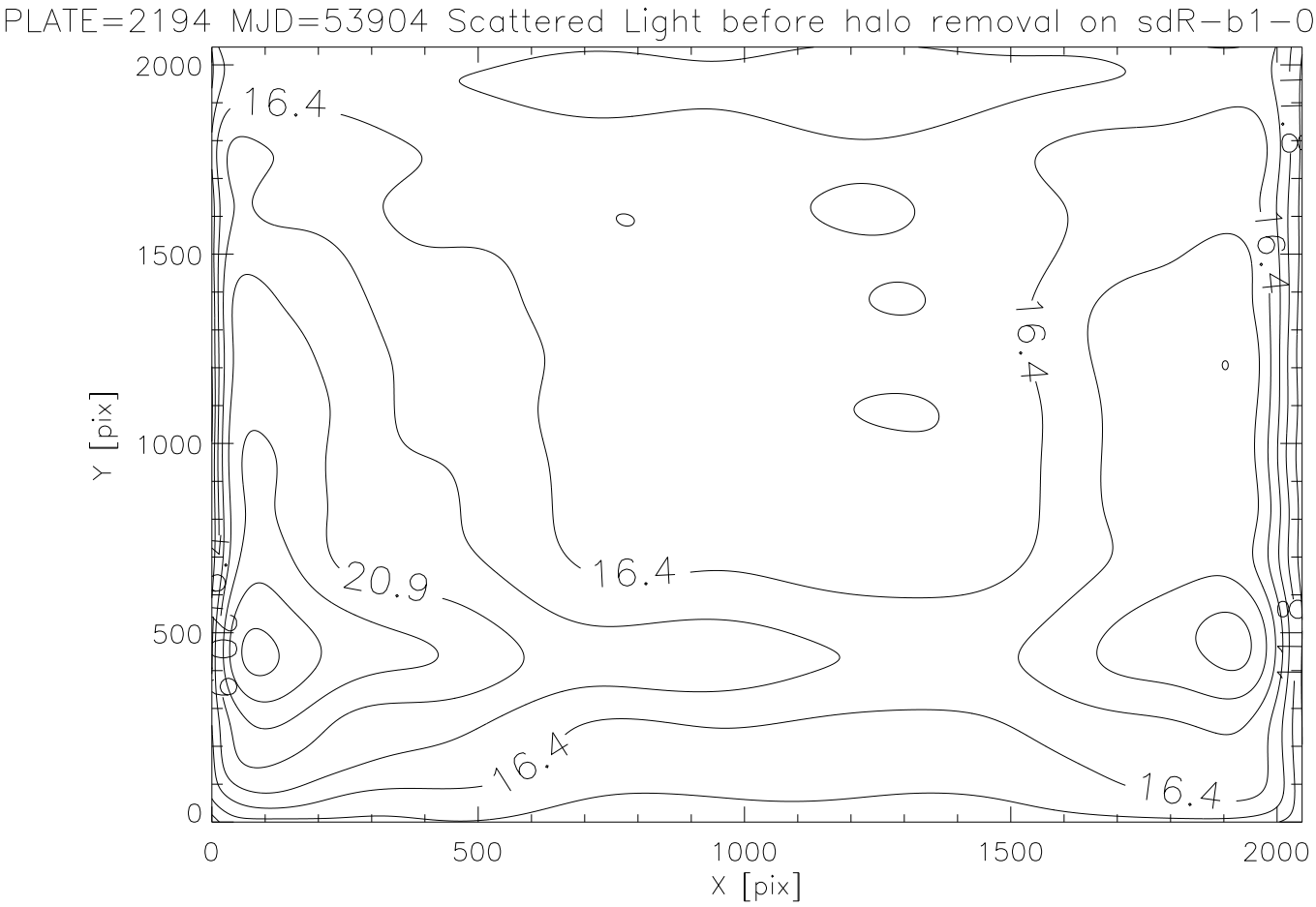

PLATE=2194 MJD=53904 sdR-b1-00039821.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

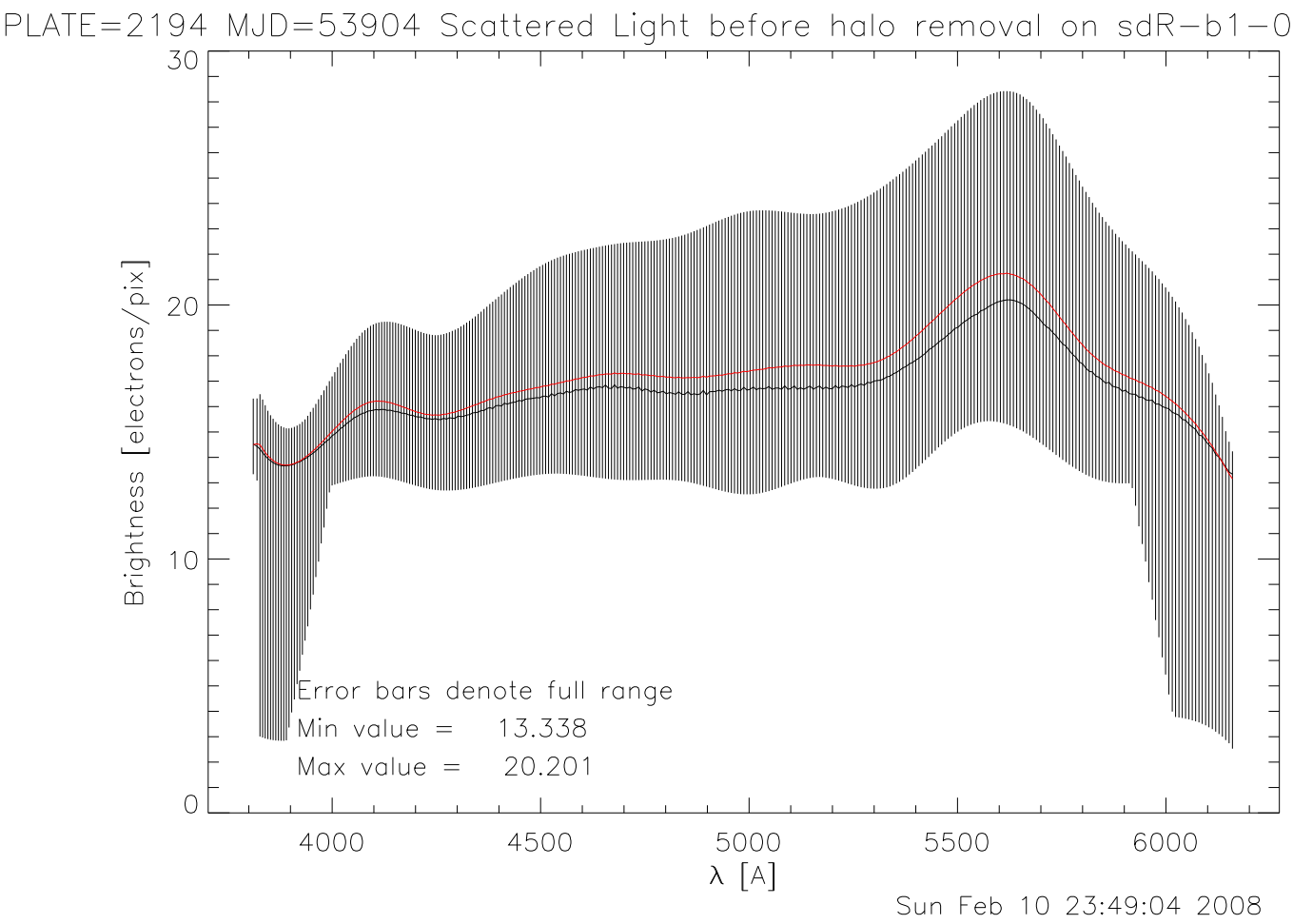

Number of sky fibers = 28
PLATE=2194 MJD=53904 sdR-b1-00039821.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

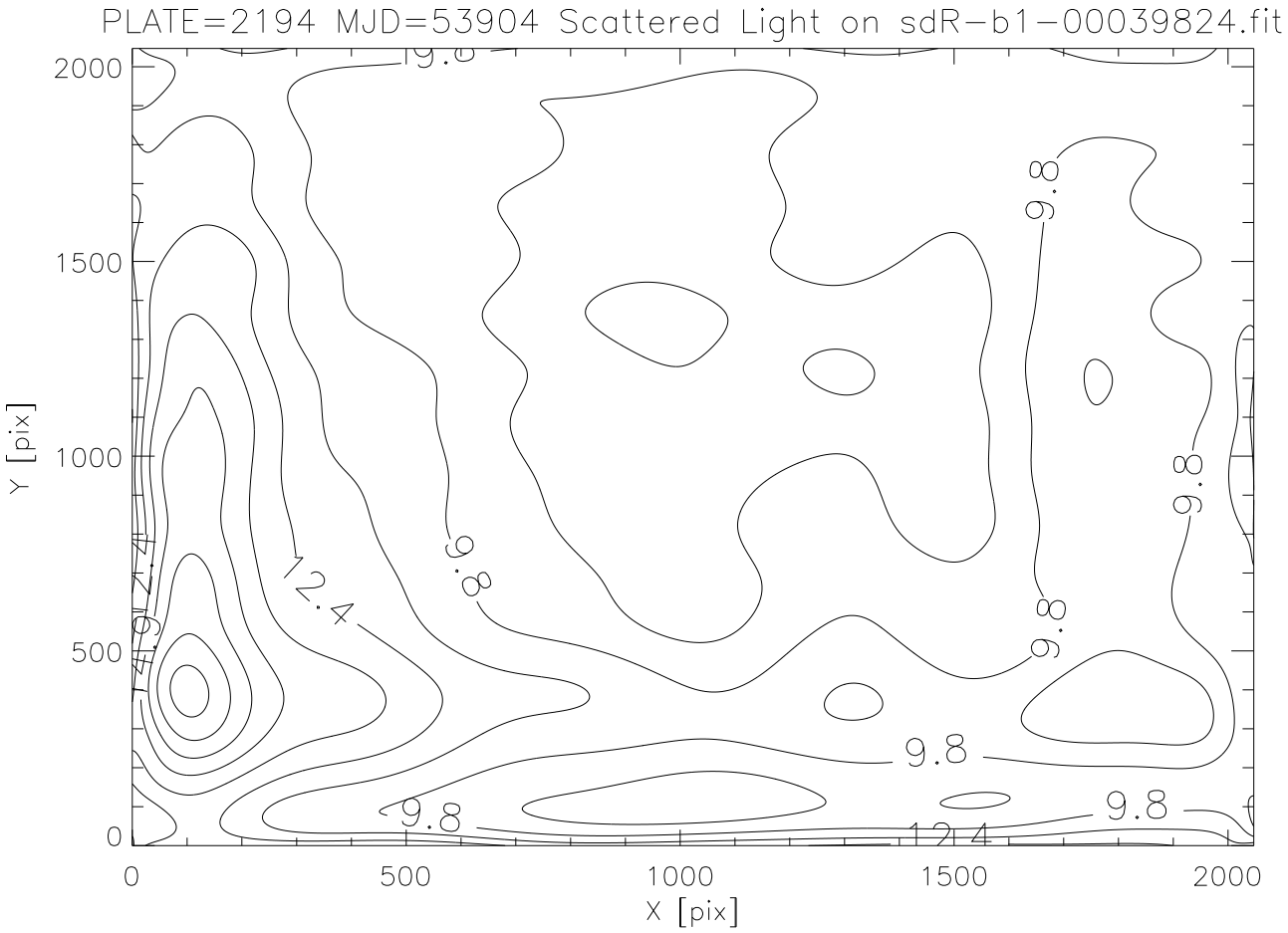

PLATE=2194 MJD=53904 sdR-b1-00039821.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.30 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

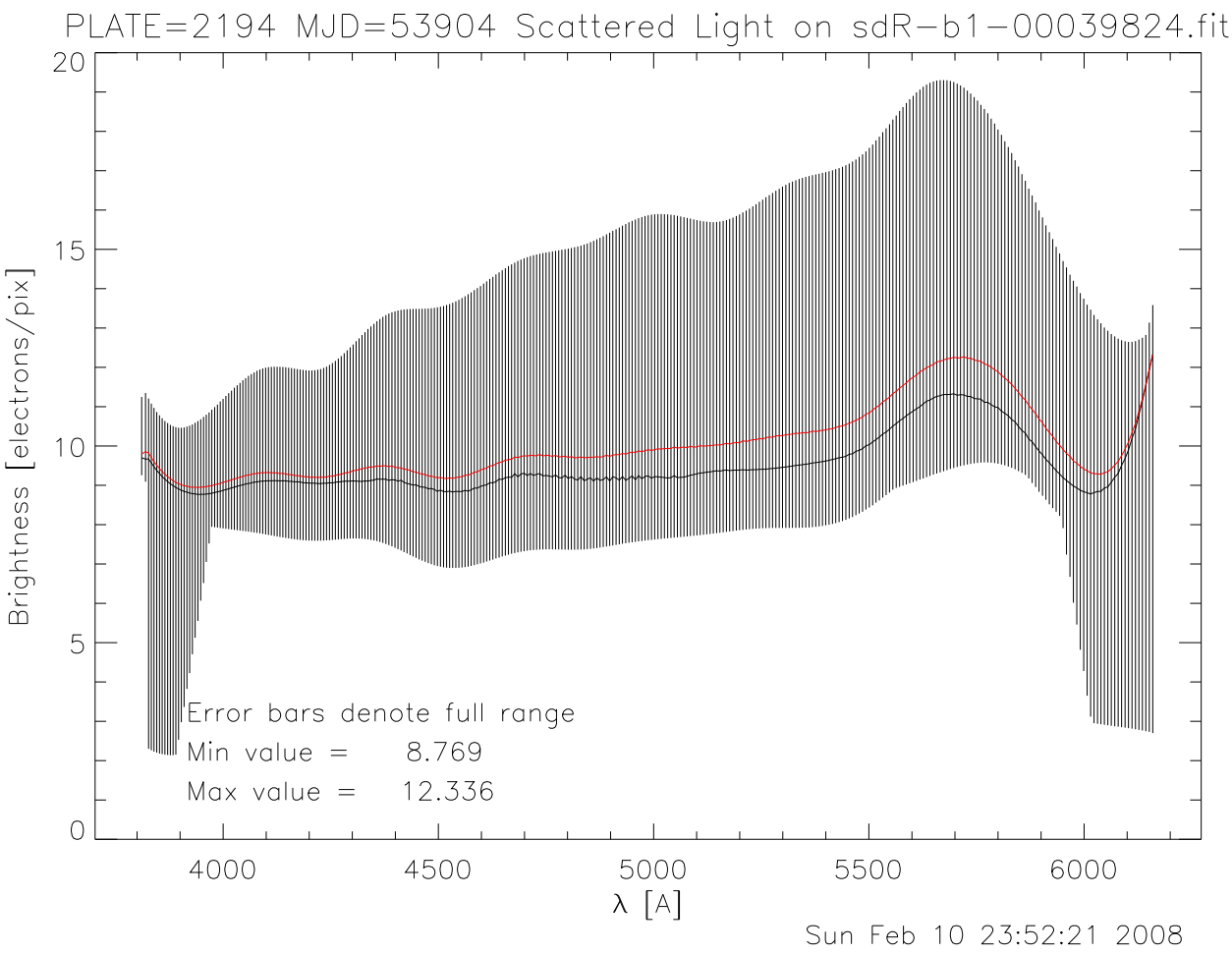

PLATE=2194 MJD=53904 sdR-b1-00039821.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.03 %
Fiber number
Focal Distance [mm]
Airmass

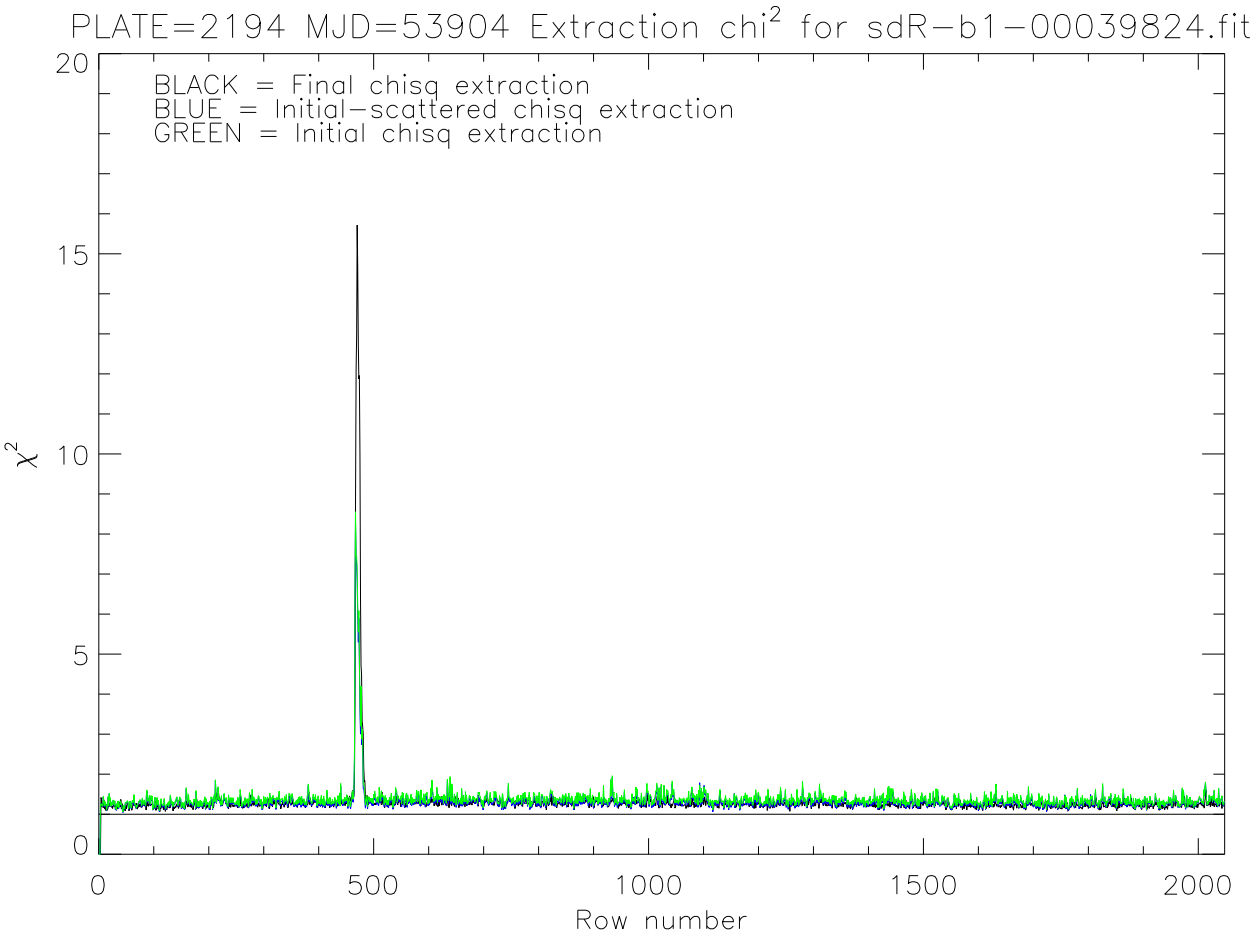

PLATE=2194 MJD=53904 Fiber−Flats for sdR−b1−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.204
Max value = 1.218
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:47:59 2008

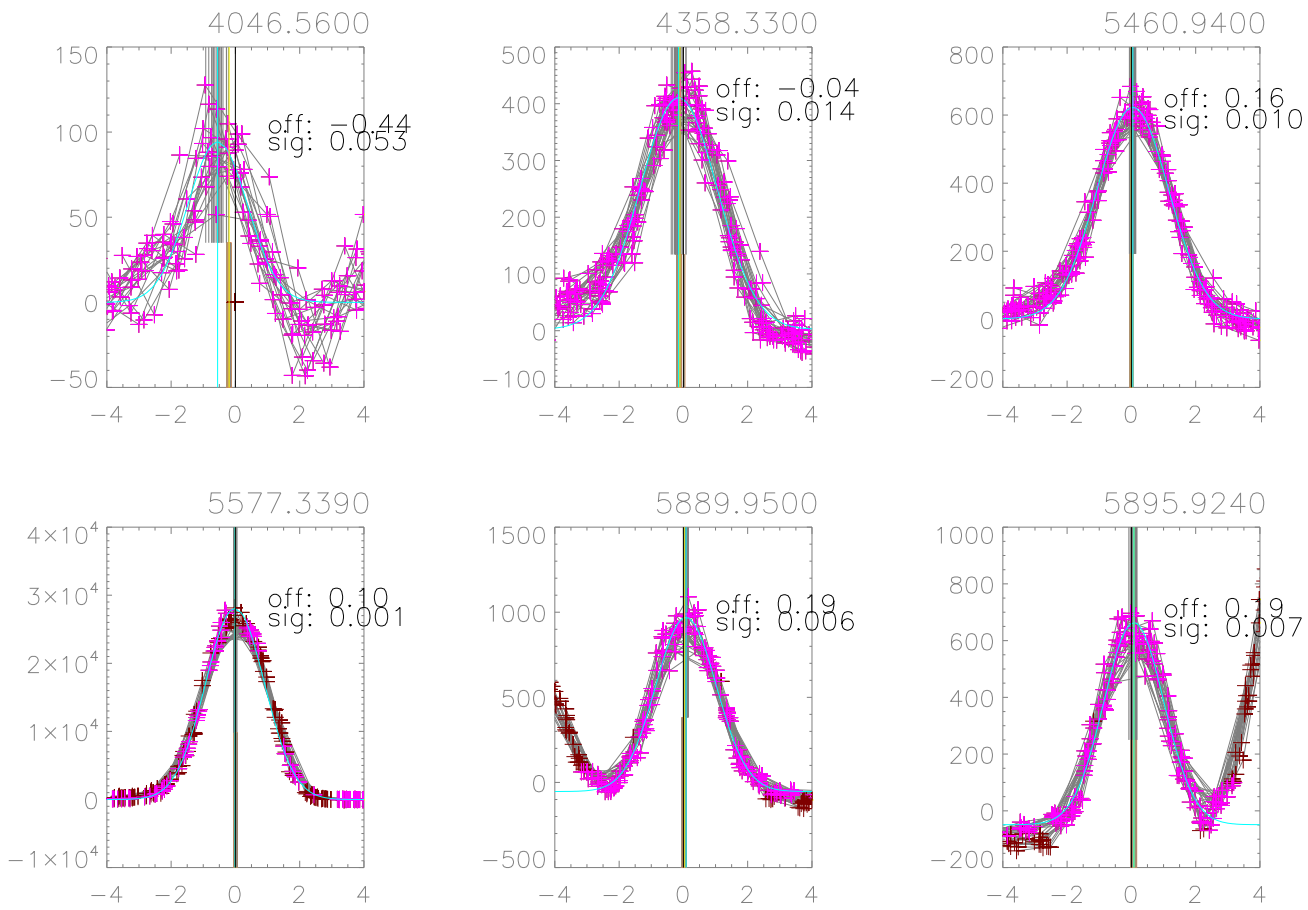

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR−b1−00039824.f
16.4
16.4
16.4
20.9
16.4
16.4
16.4
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

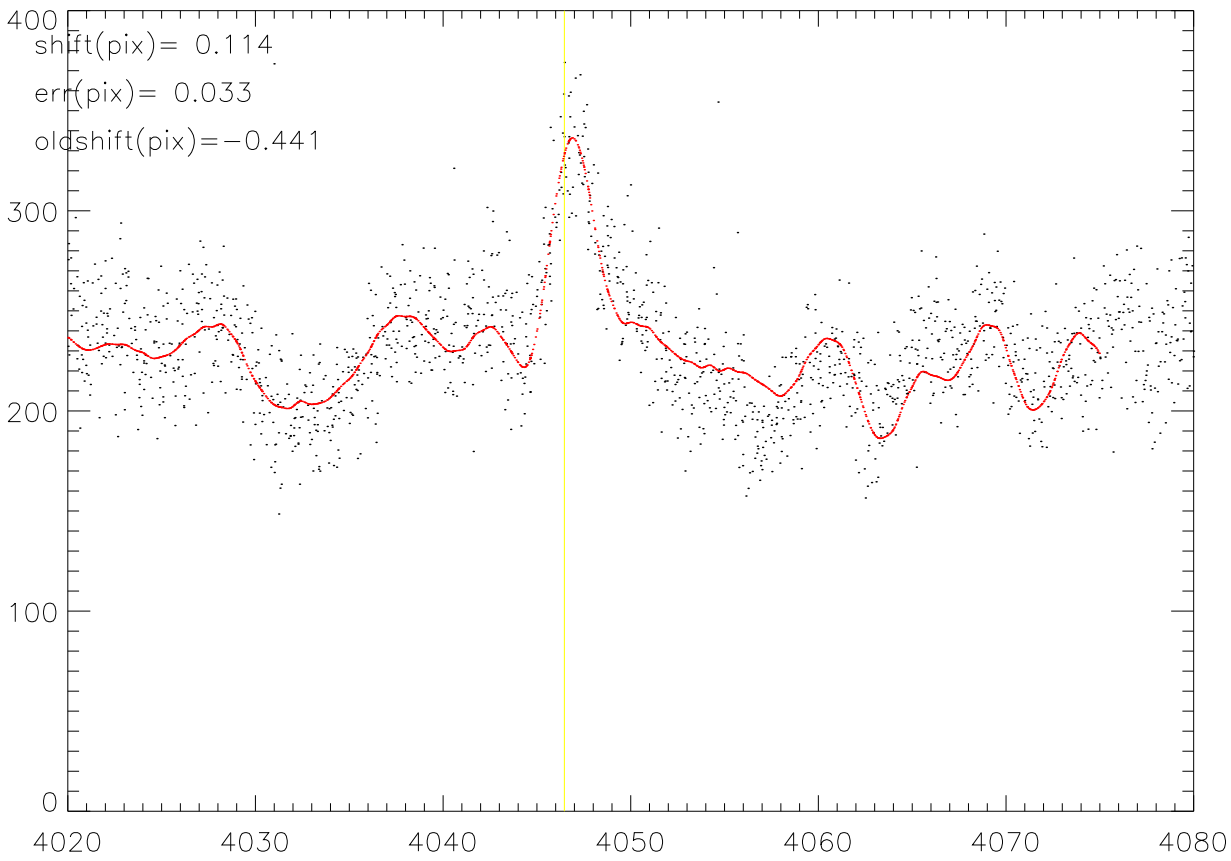

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b1-00039824.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 13.338
Max value = 20.201
4000
4500
5000
5500
6000
λ [A]
Sun Feb 10 23:49:04 2008

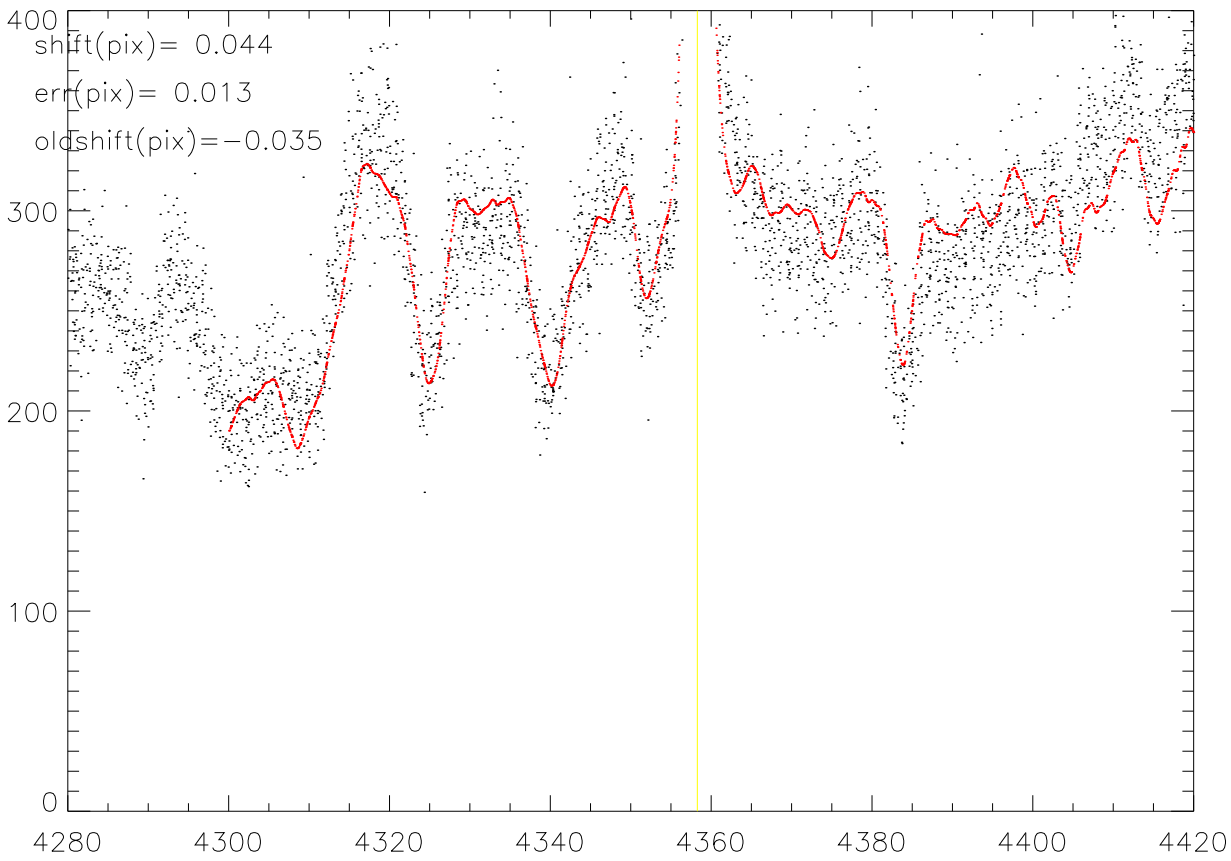

PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039824.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.8
12.4
14.9

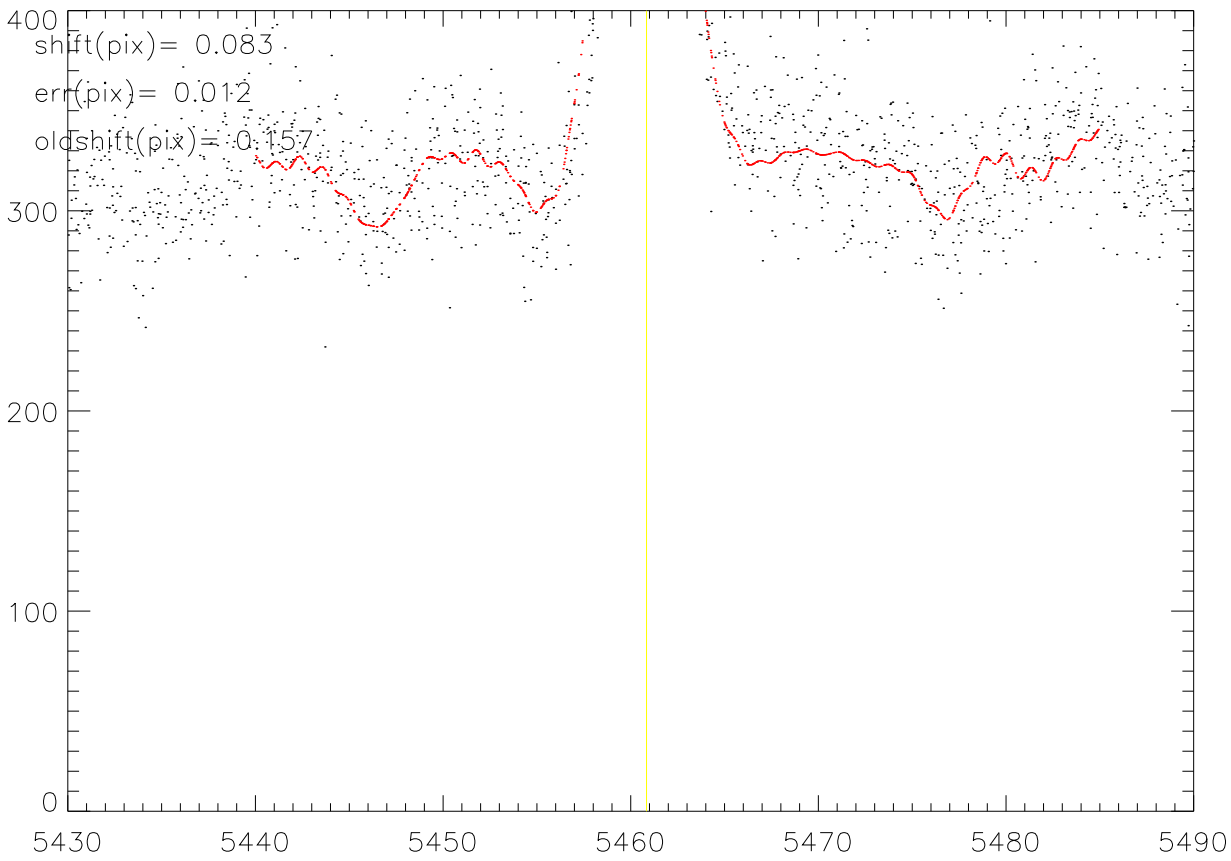

PLATE=2194 MJD=53904 Scattered Light on sdR-b1-00039824.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.769
Max value = 12.336
Sun Feb 10 23:52:21 2008

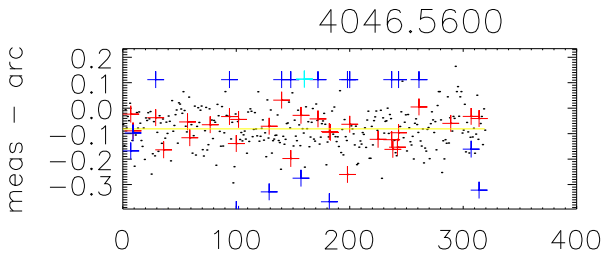

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b1-00039824.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

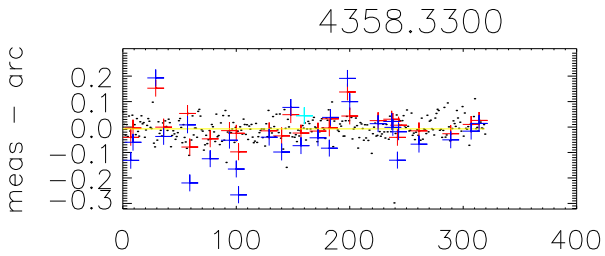

4046.5600
off: −0.44
sig: 0.053
4358.3300
off: −0.04
sig: 0.014
5460.9400
off: 0.16
sig: 0.010
5577.3390
off: 0.10
sig: 0.001
5889.9500
off: 0.19
sig: 0.006
5895.9240
off: 0.19
sig: 0.007

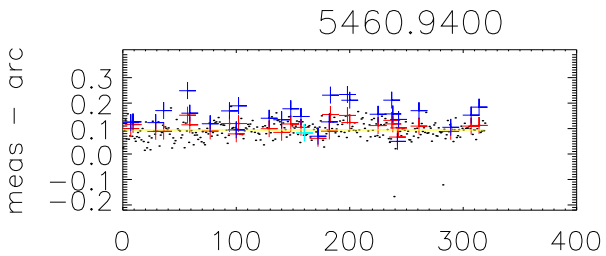

shift(pix)= 0.114
err(pix)= 0.033
oldshift(pix)=−0.441
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

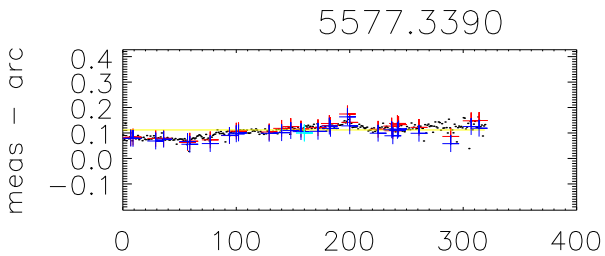

shift(pix)= 0.044
err(pix)= 0.013
oldshift(pix)=−0.035
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

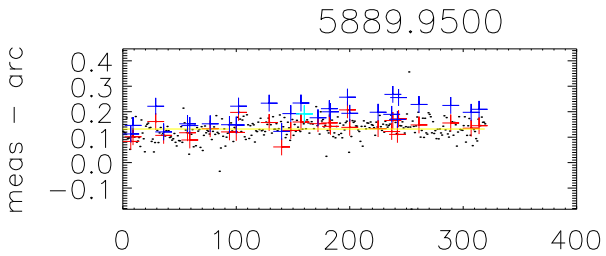

shift(pix)= 0.083
err(pix)= 0.012
oldshift(pix)= 0.157
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

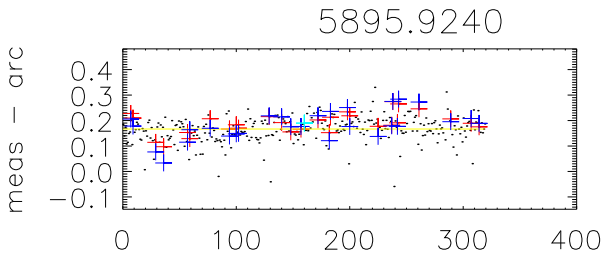

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

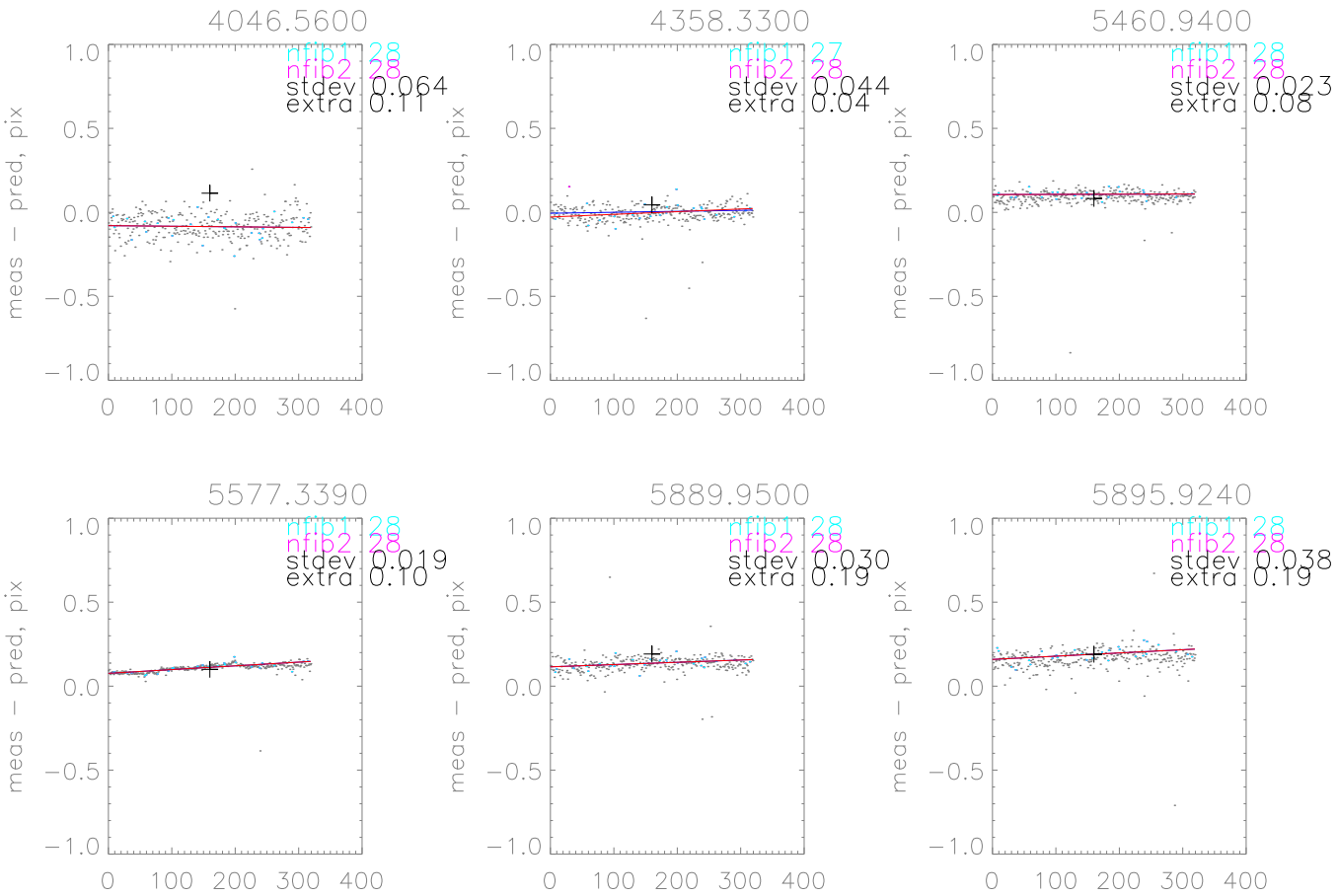

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

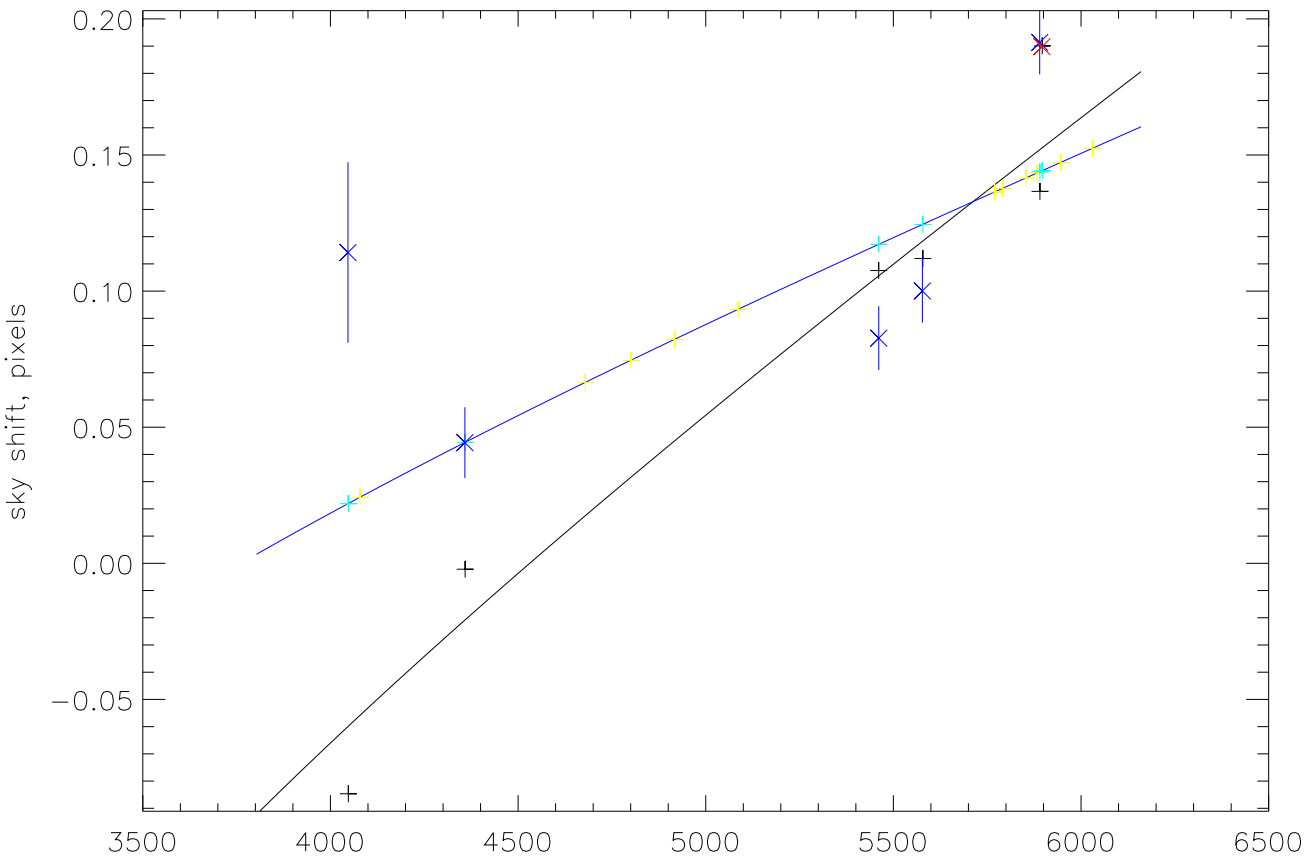

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

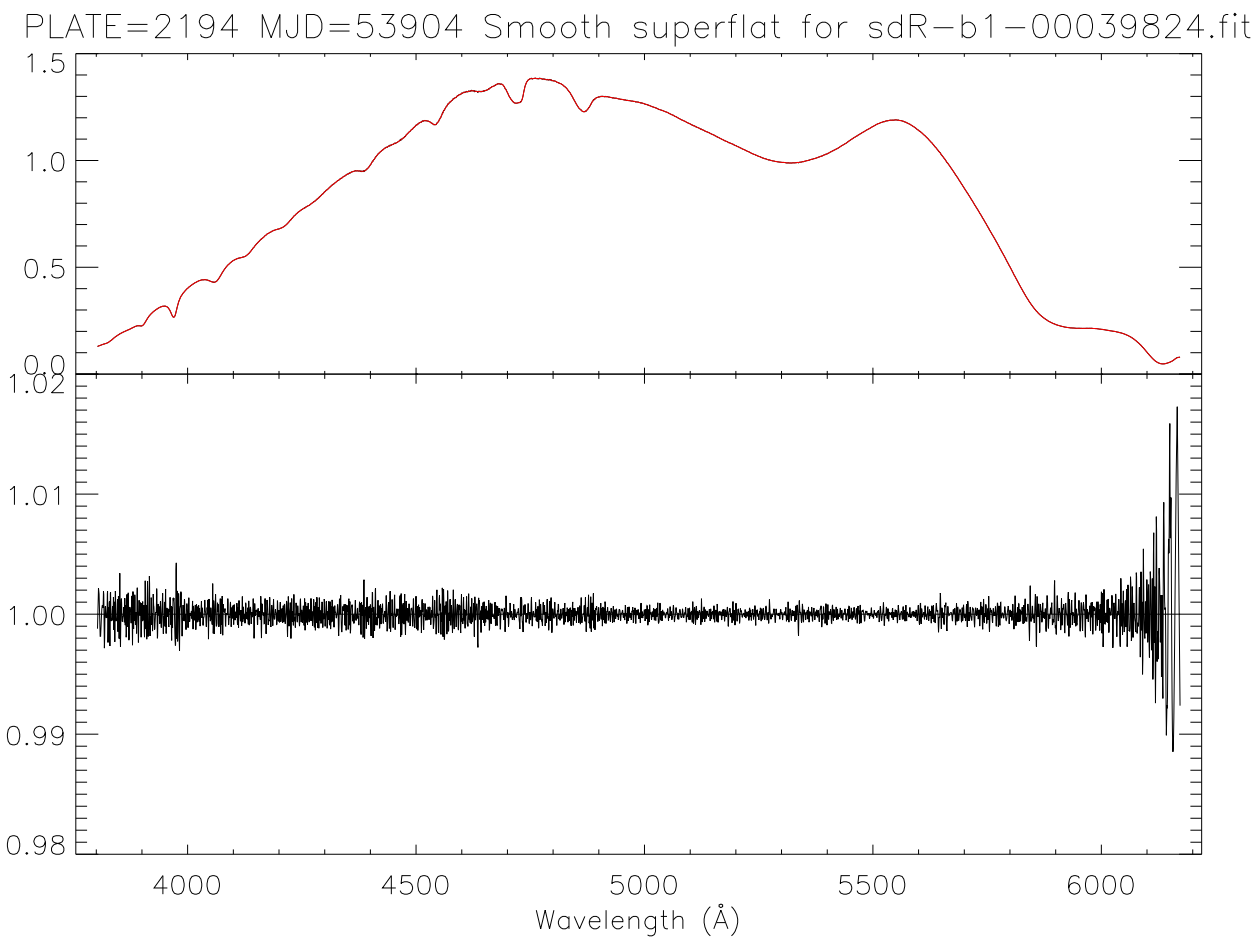

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

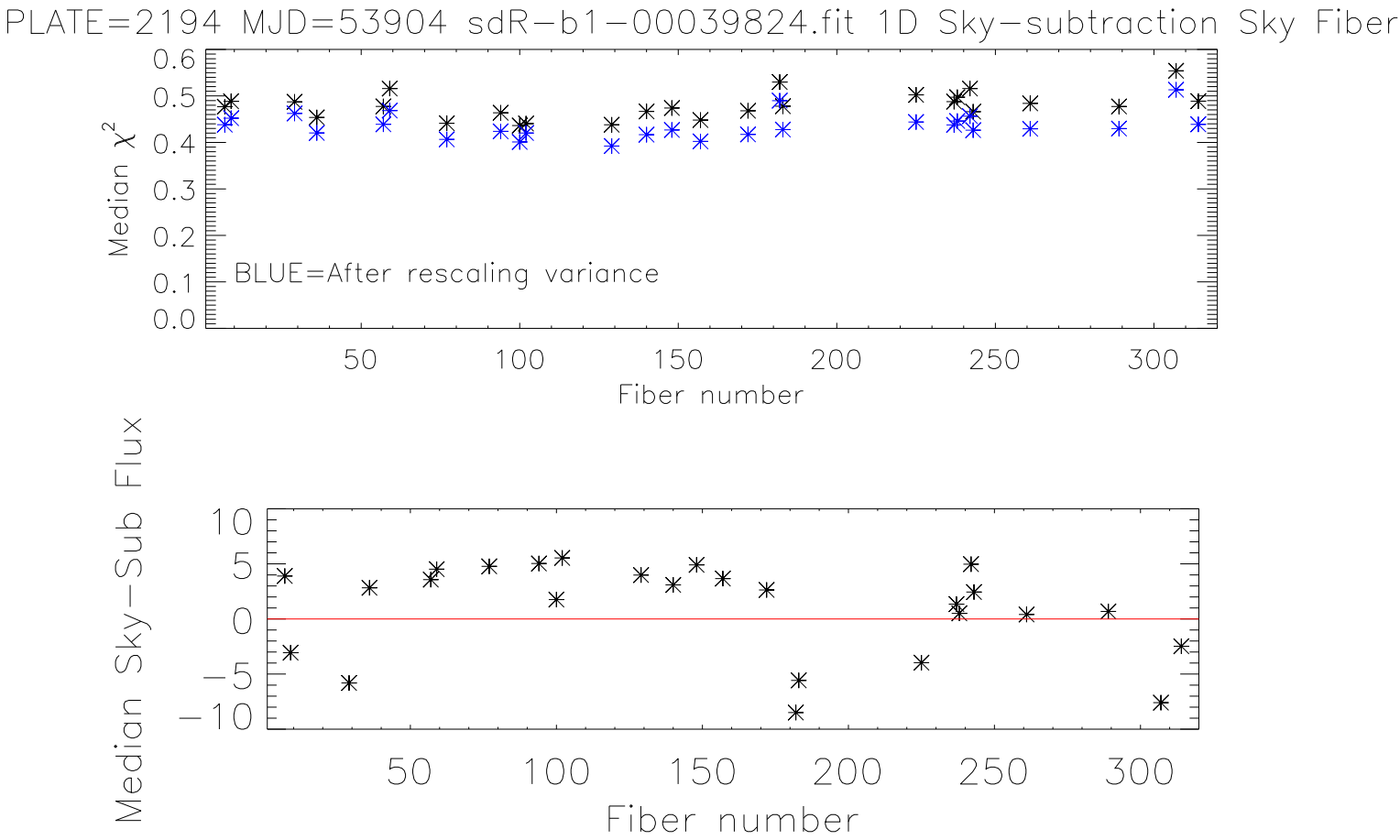

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

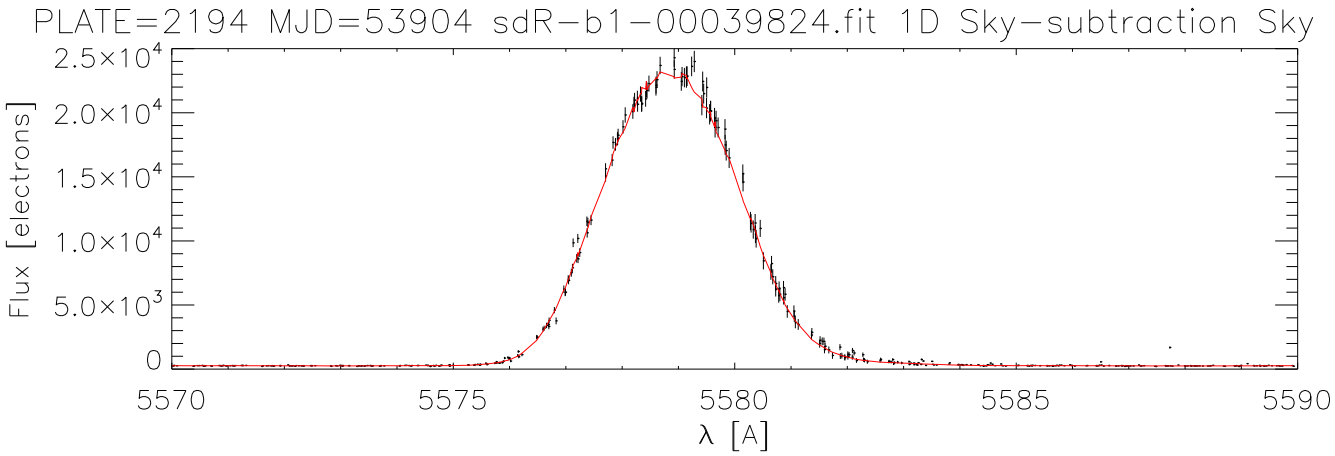

4046.5600
nfib1 28
nfib2 28
stdev 0.064
extra 0.11
4358.3300
nfib1 27
nfib2 28
stdev 0.044
extra 0.04
5460.9400
nfib1 28
nfib2 28
stdev 0.023
extra 0.08
5577.3390
nfib1 28
nfib2 28
stdev 0.019
extra 0.10
5889.9500
nfib1 28
nfib2 28
stdev 0.030
extra 0.19
5895.9240
nfib1 28
nfib2 28
stdev 0.038
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

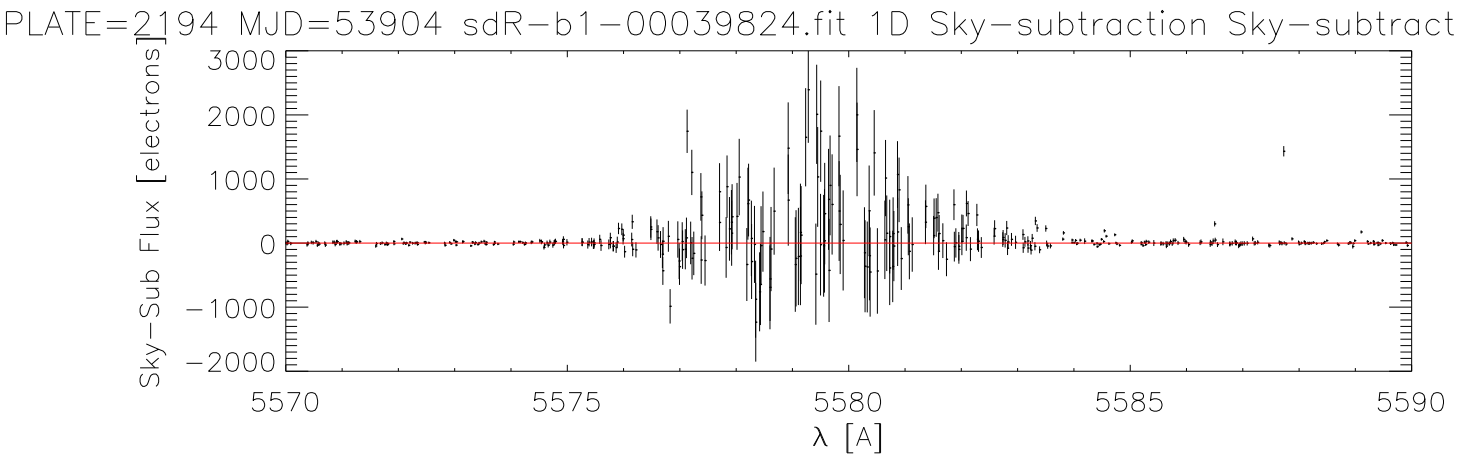

0.20
0.15
0.10
0.05
0.00
−0.05
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

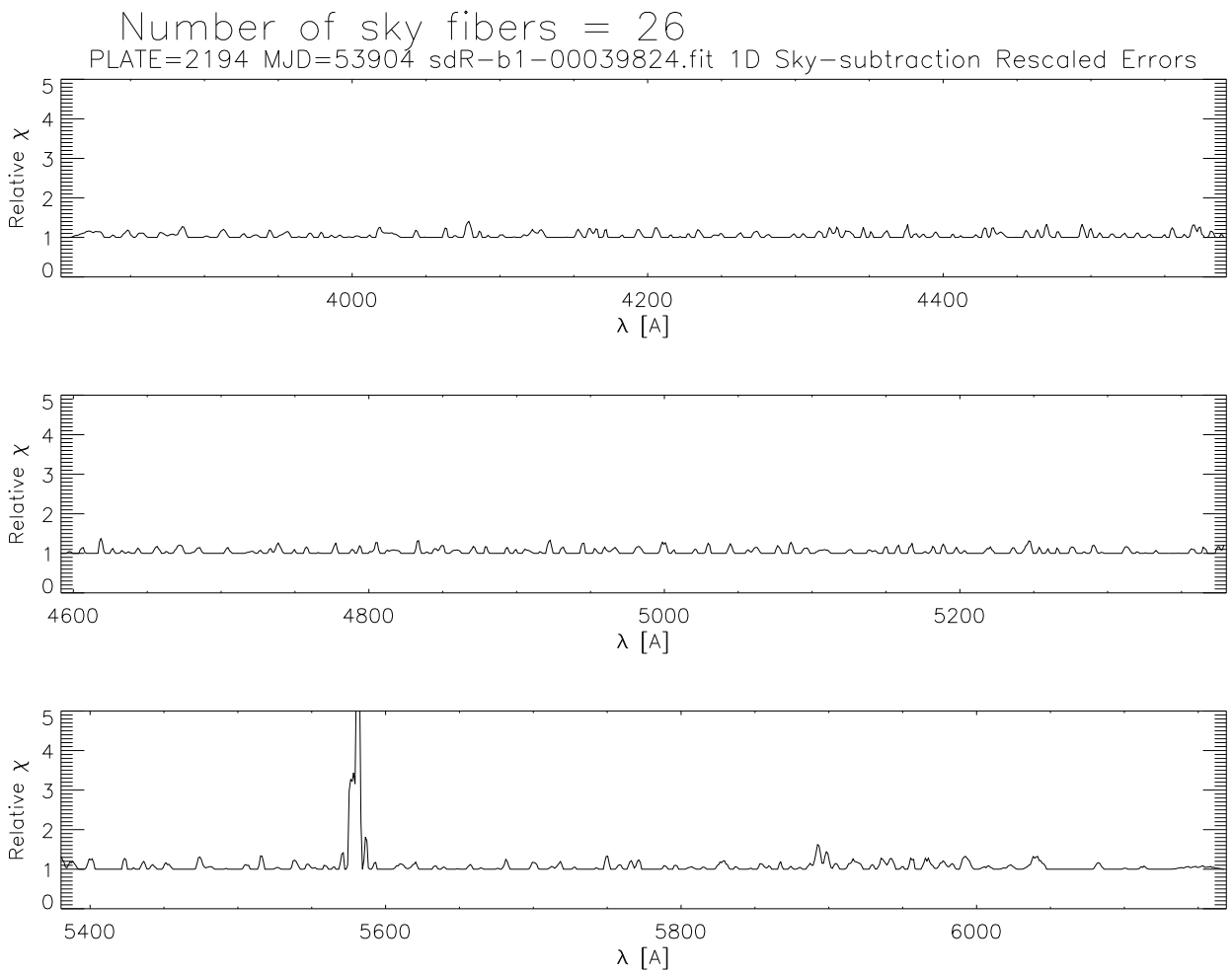
es= −0.0000

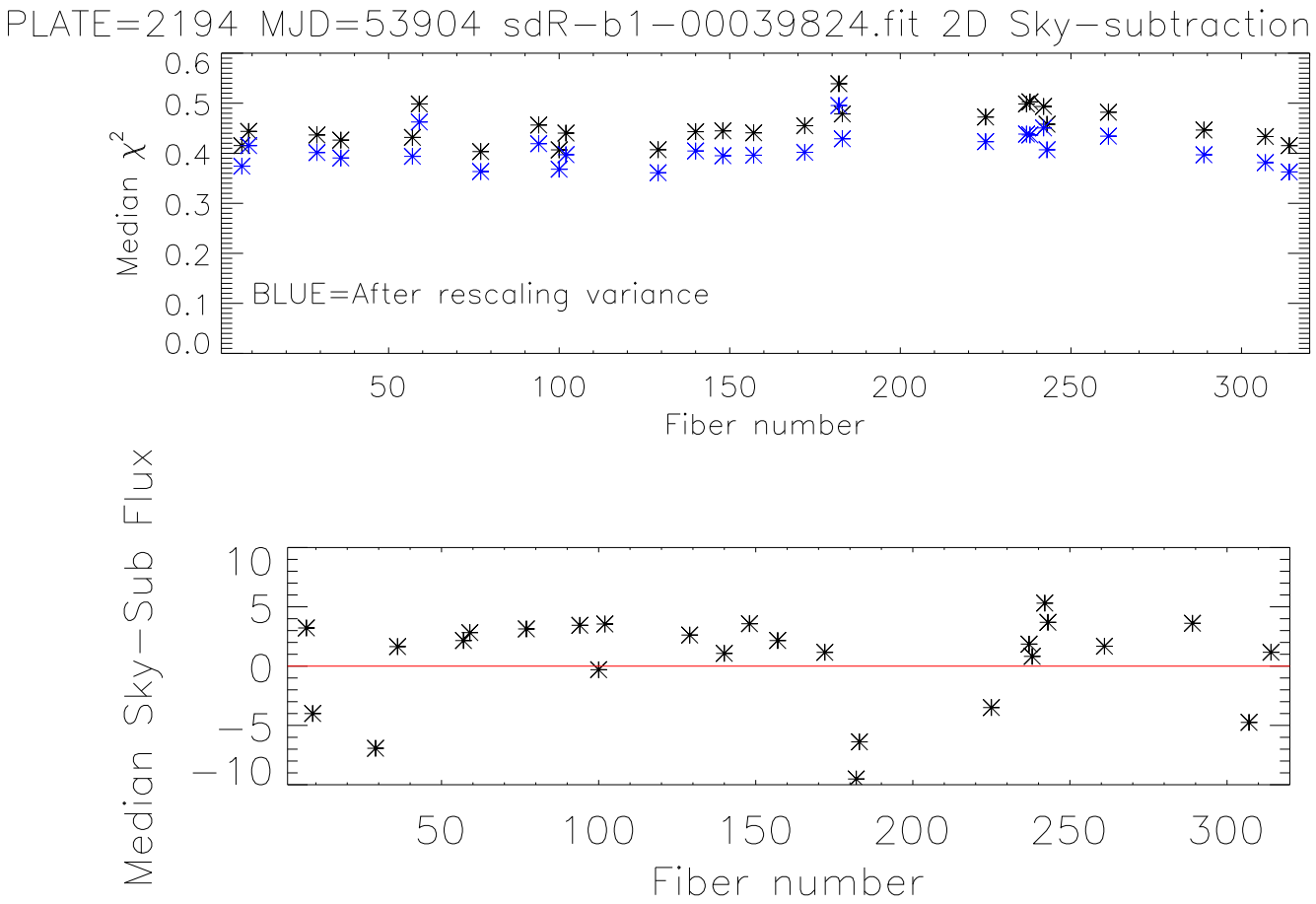

PLATE=2194 MJD=53904 Smooth superflat for sdR−b1−00039824.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

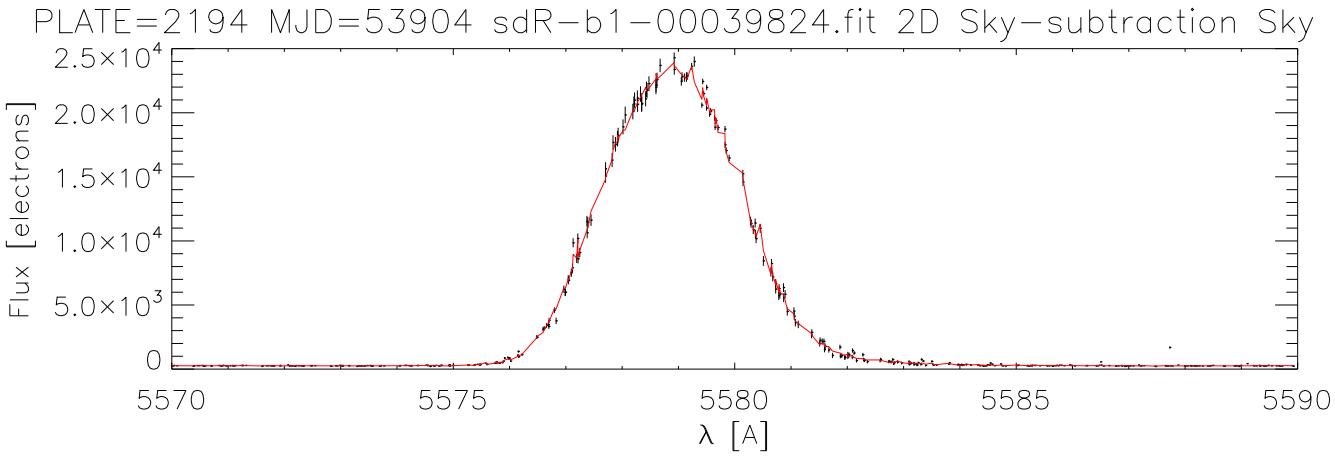

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

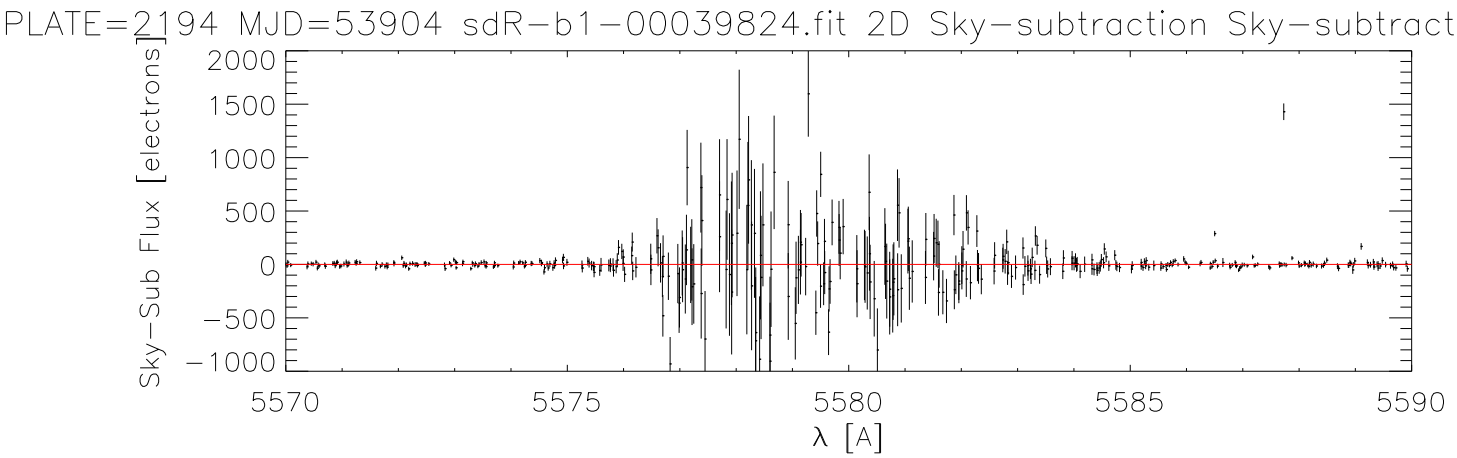

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

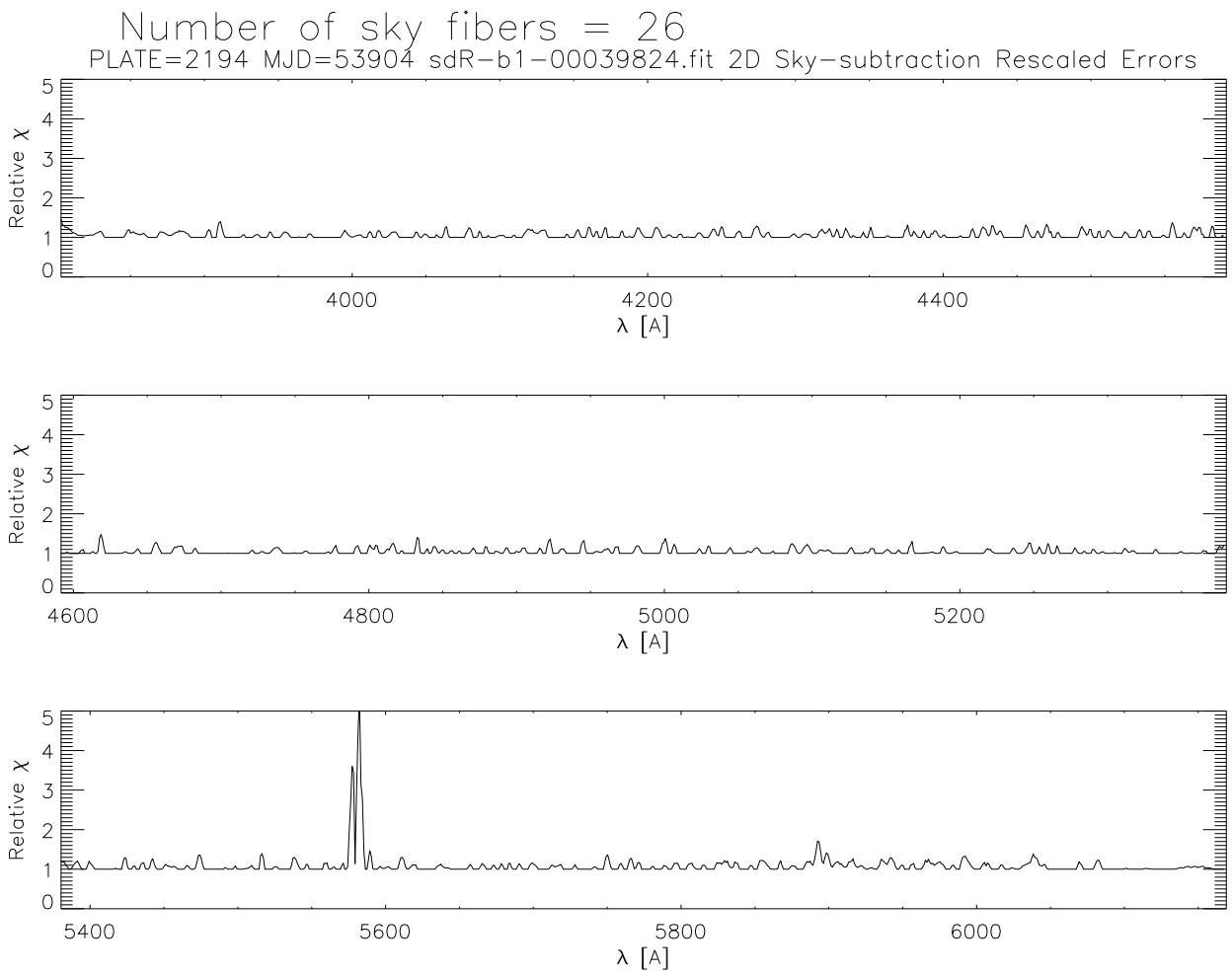

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

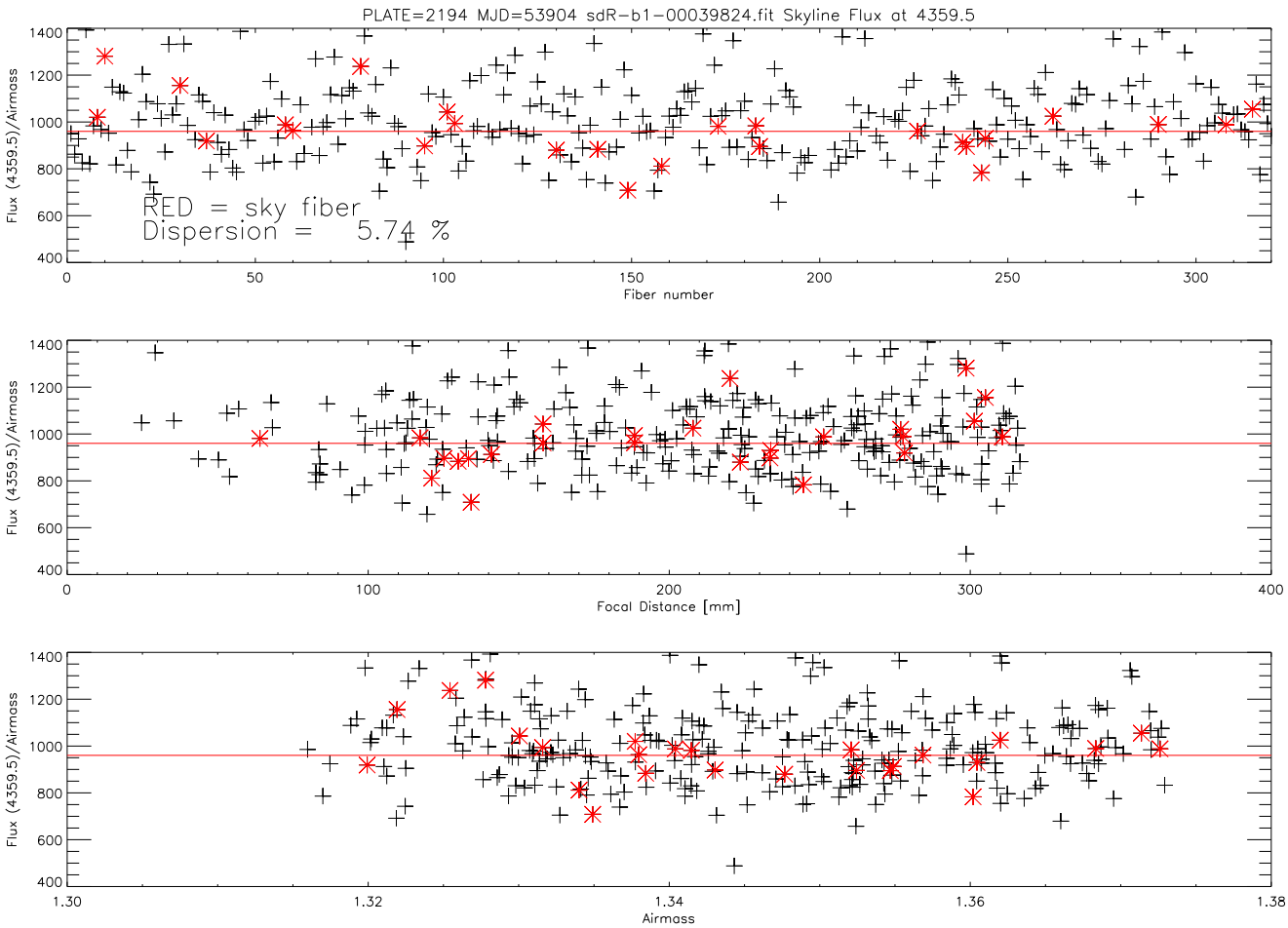

Number of sky fibers = 26
PLATE=2194 MJD=53904 sdR-b1-00039824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

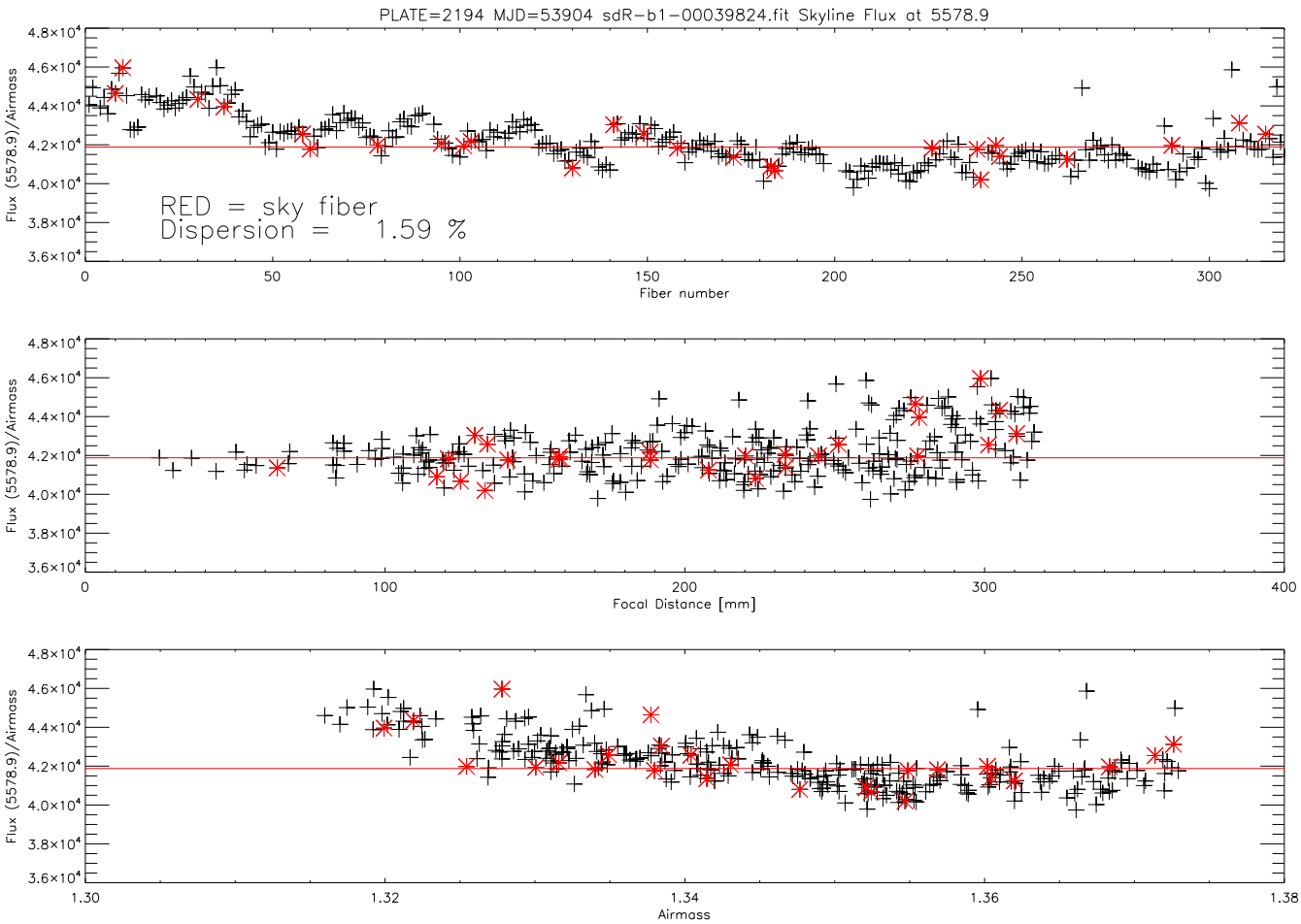

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

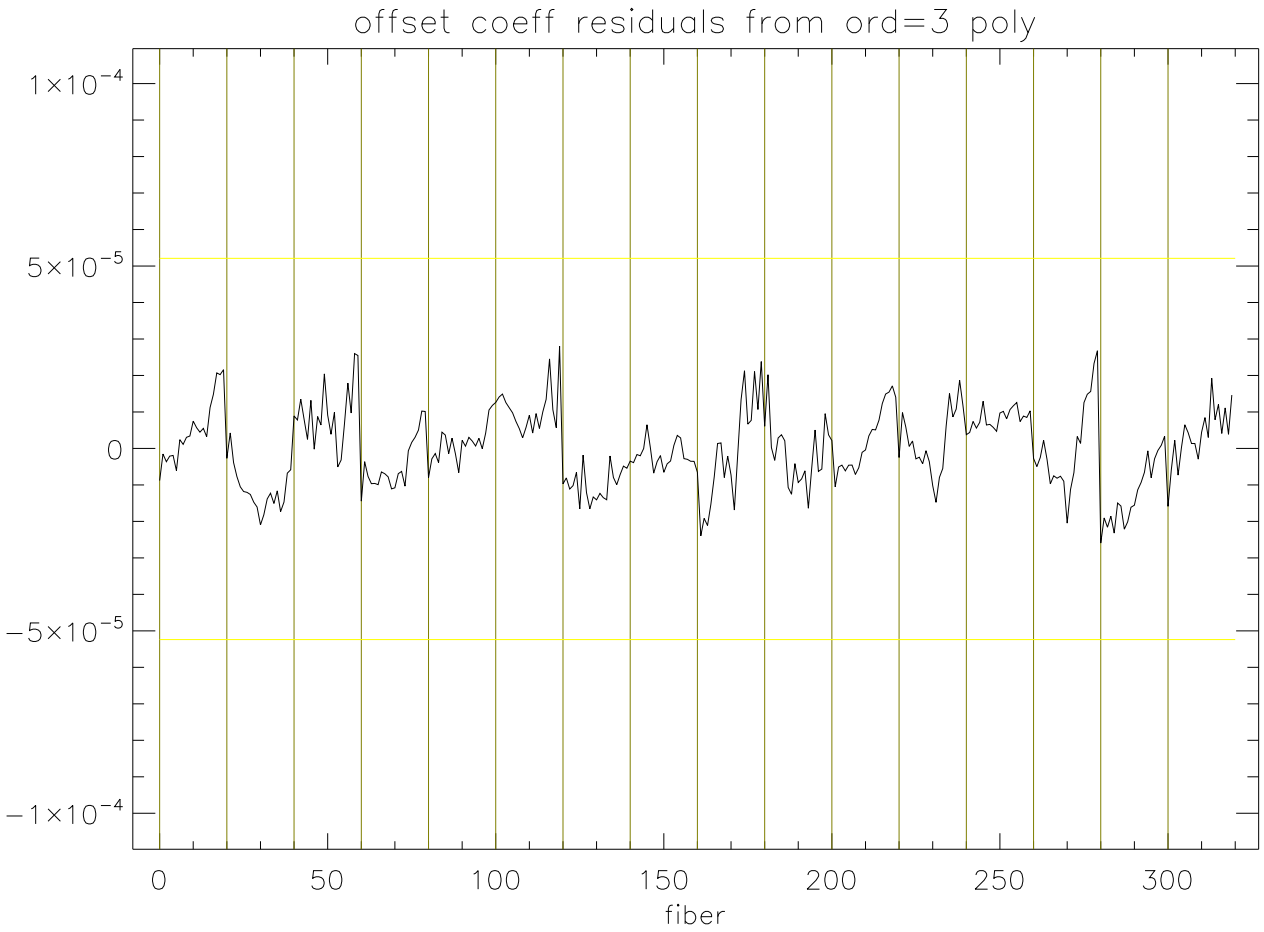

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

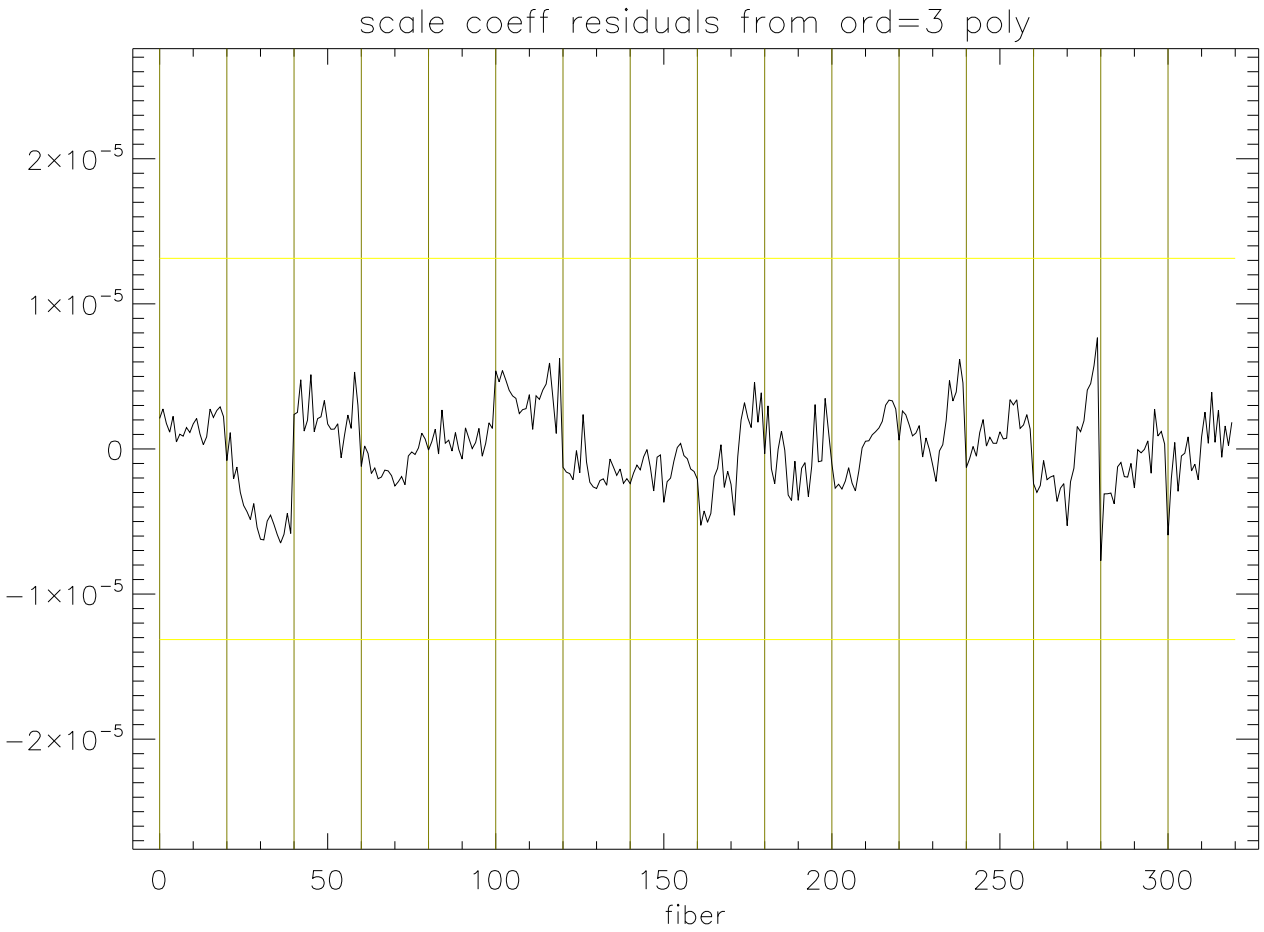

PLATE=2194 MJD=53904 sdR-b1-00039824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

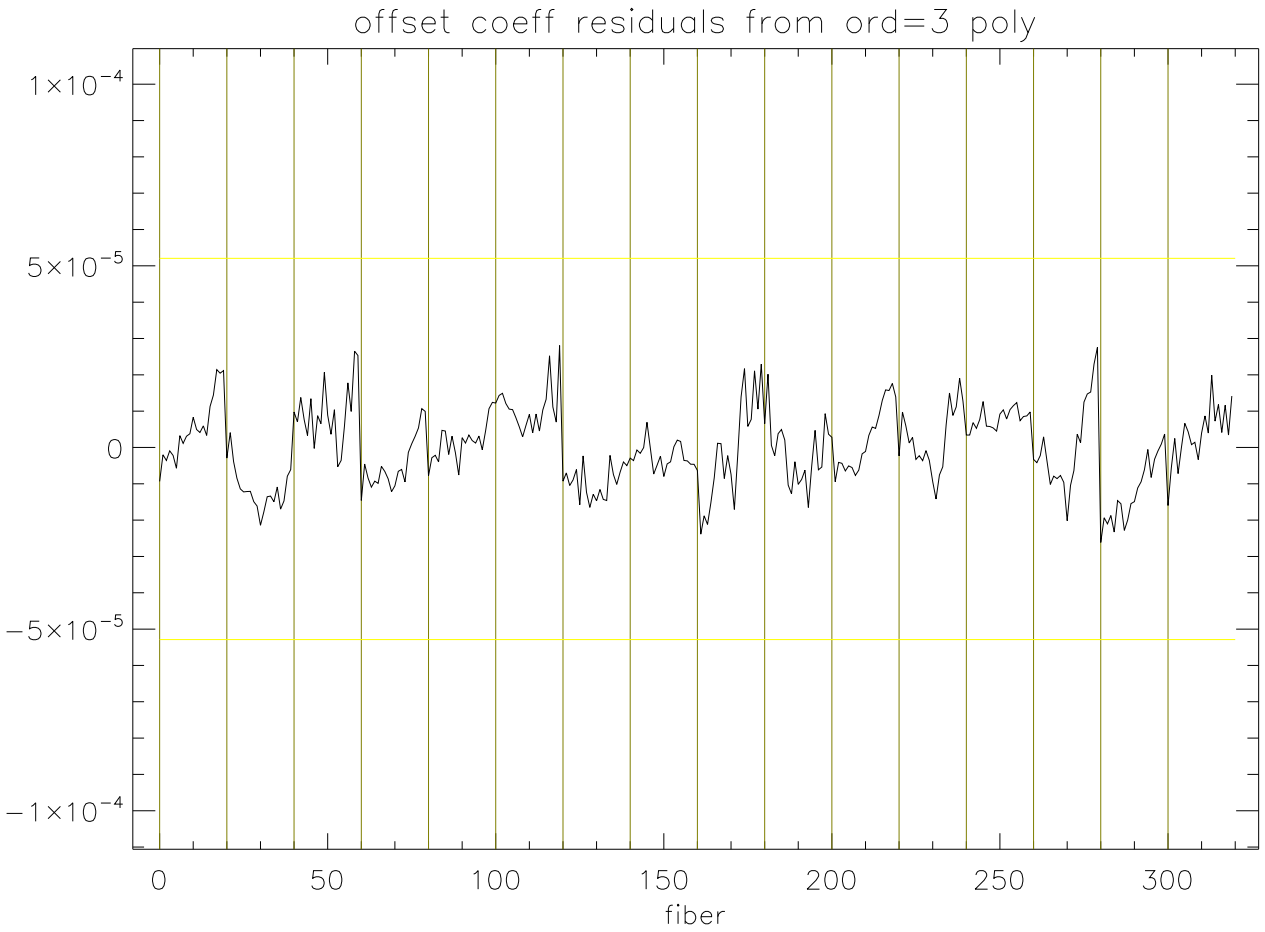

Number of sky fibers = 26
PLATE=2194 MJD=53904 sdR-b1-00039824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

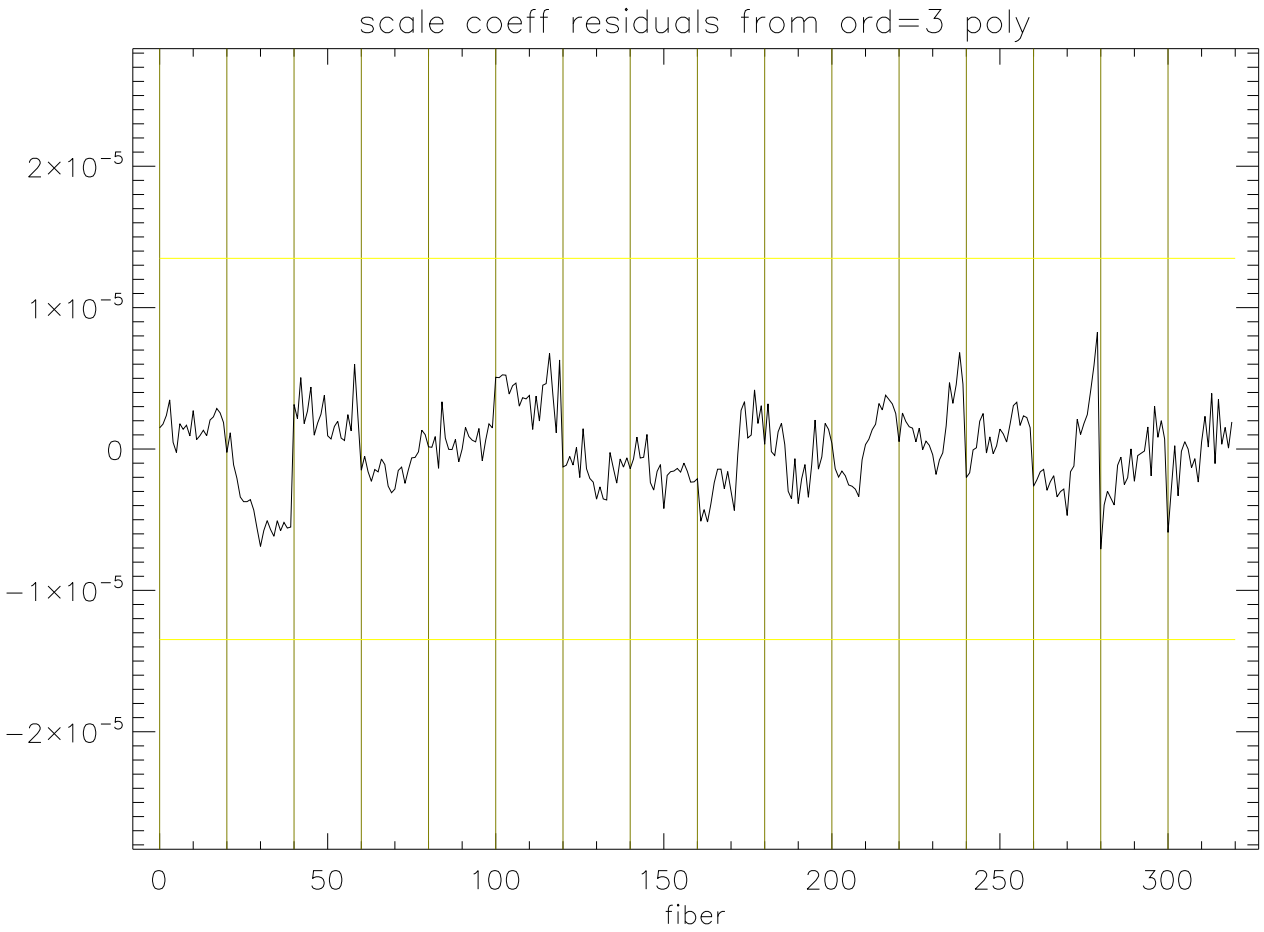

PLATE=2194 MJD=53904 sdR-b1-00039824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.74 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

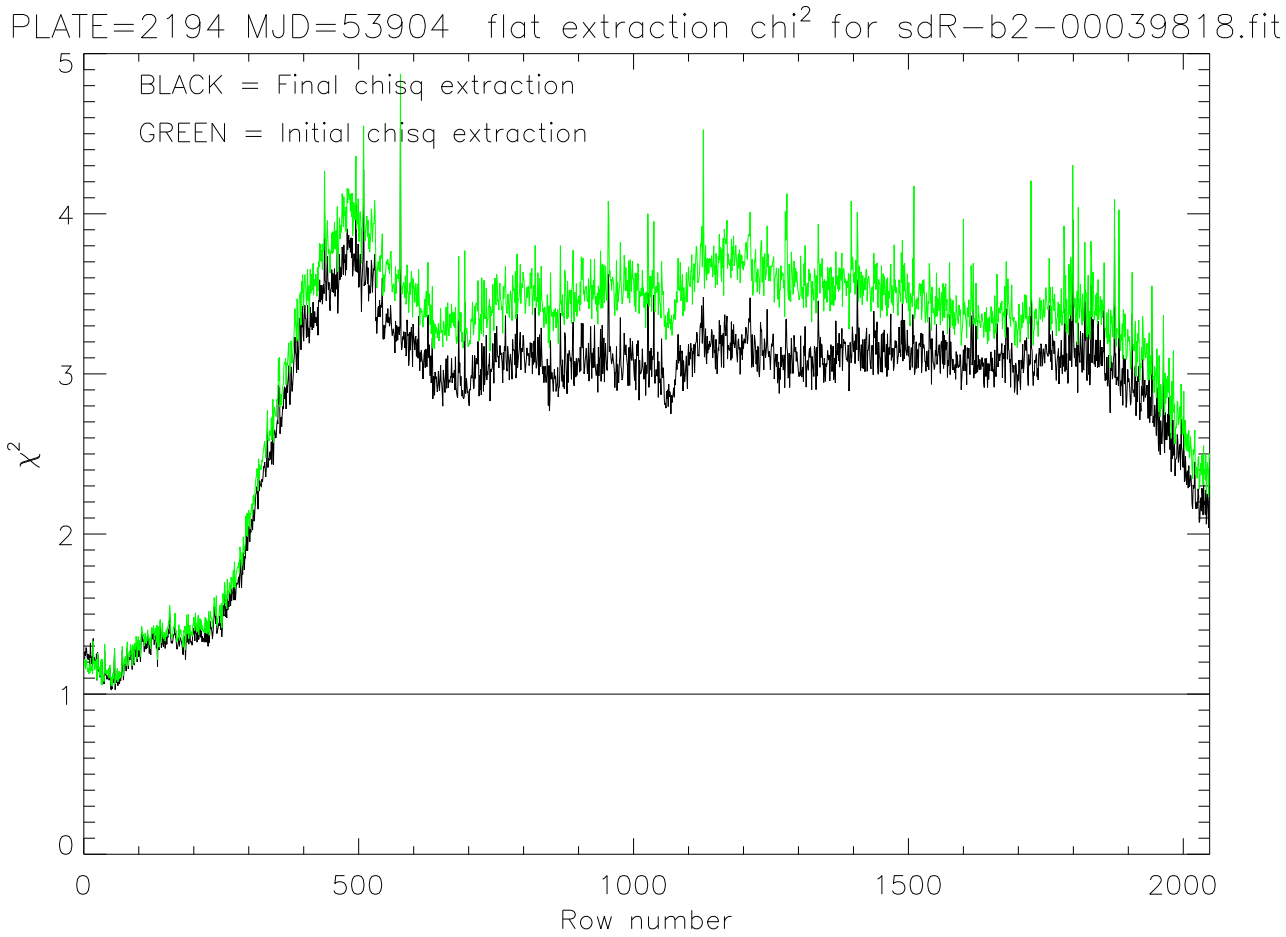

PLATE=2194 MJD=53904 sdR-b1-00039824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Focal Distance [mm]
Airmass

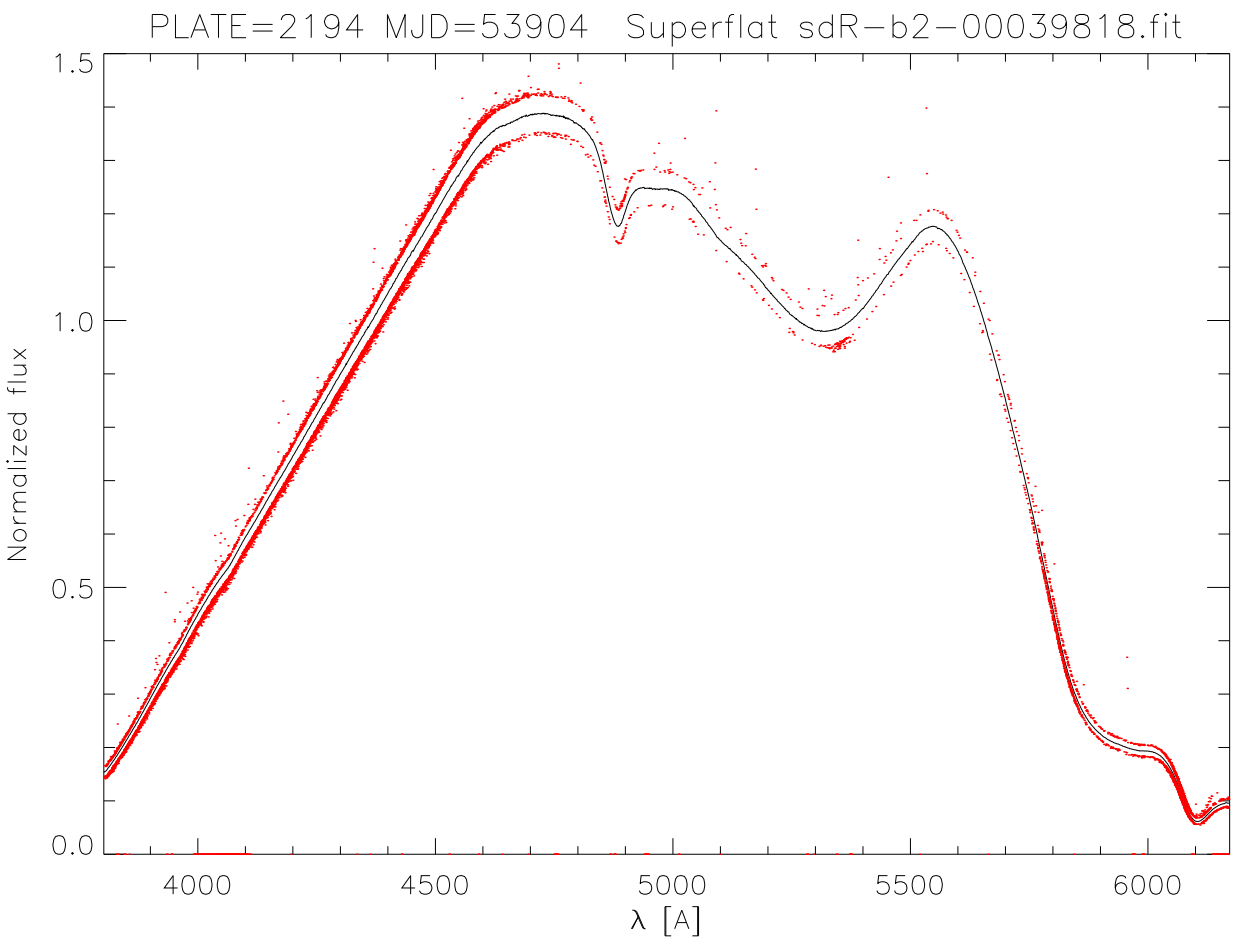

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

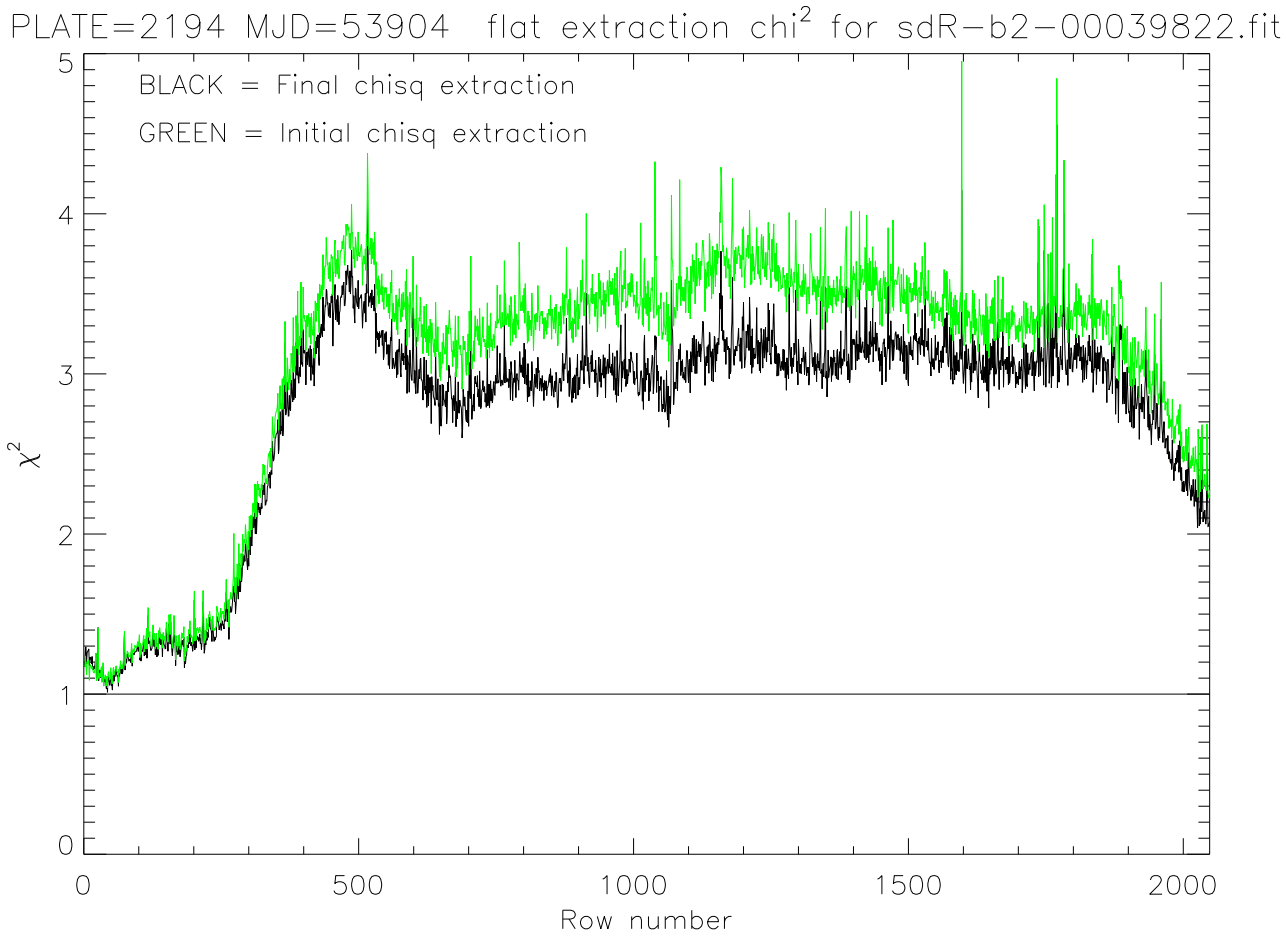

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

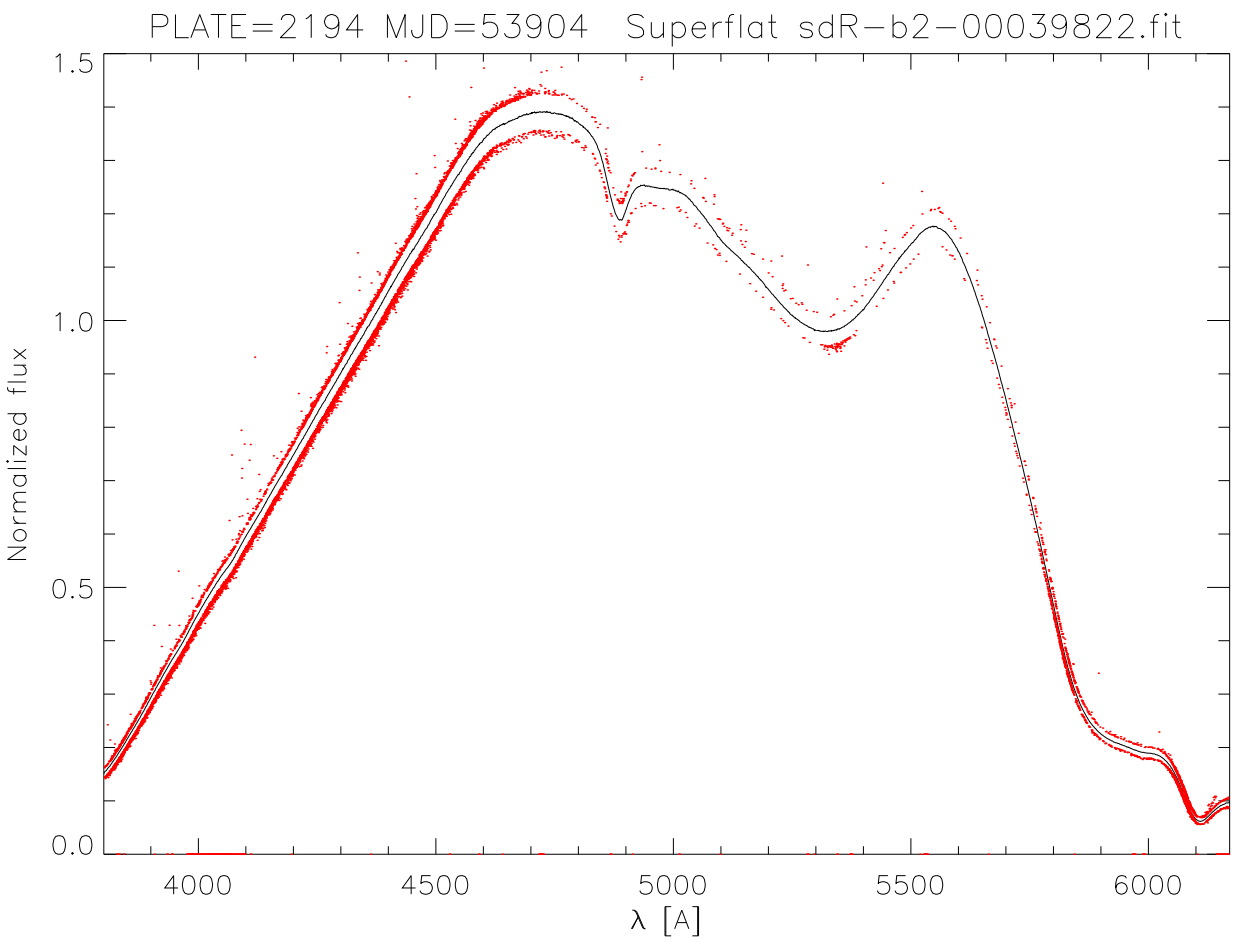

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

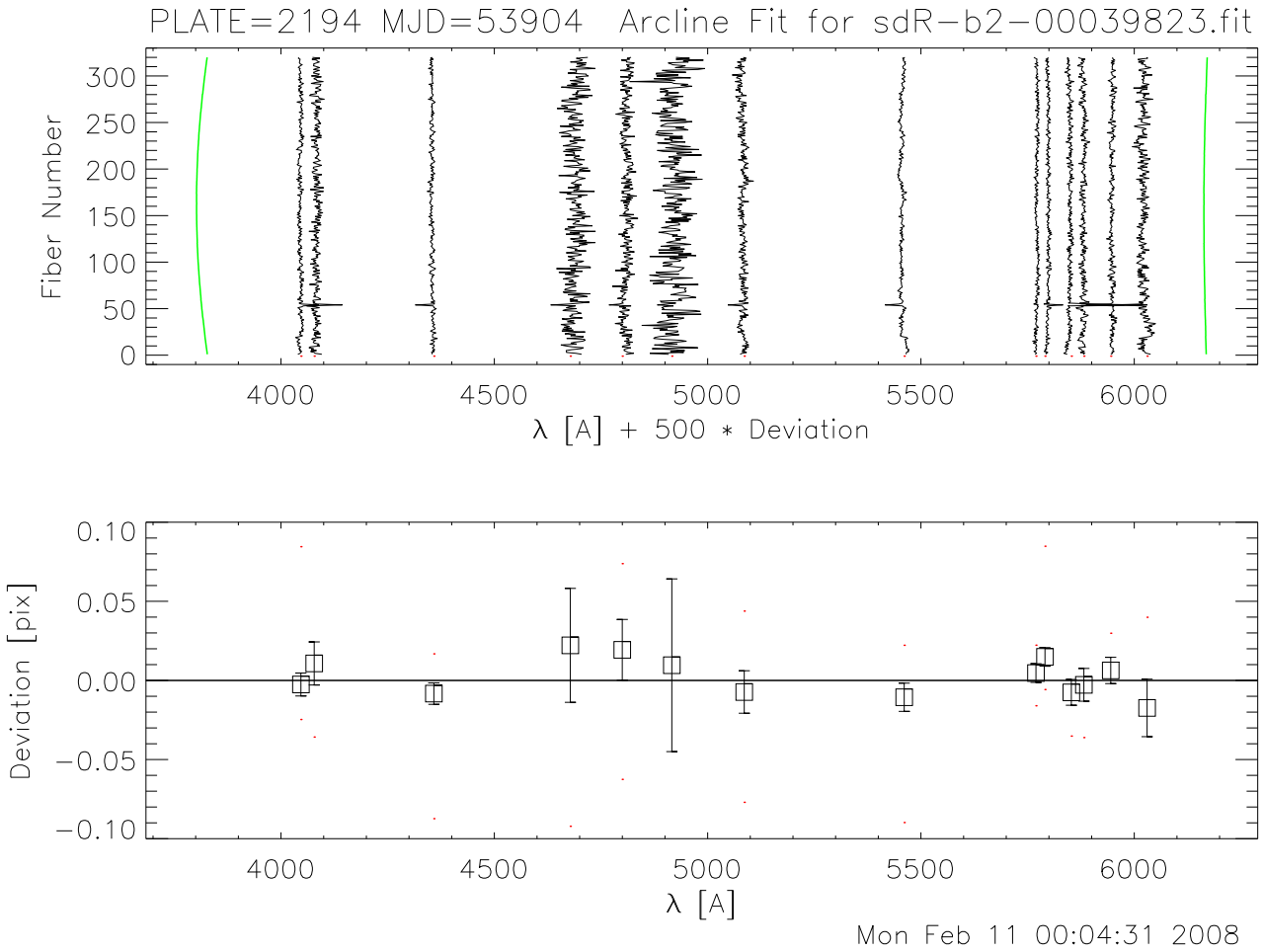

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

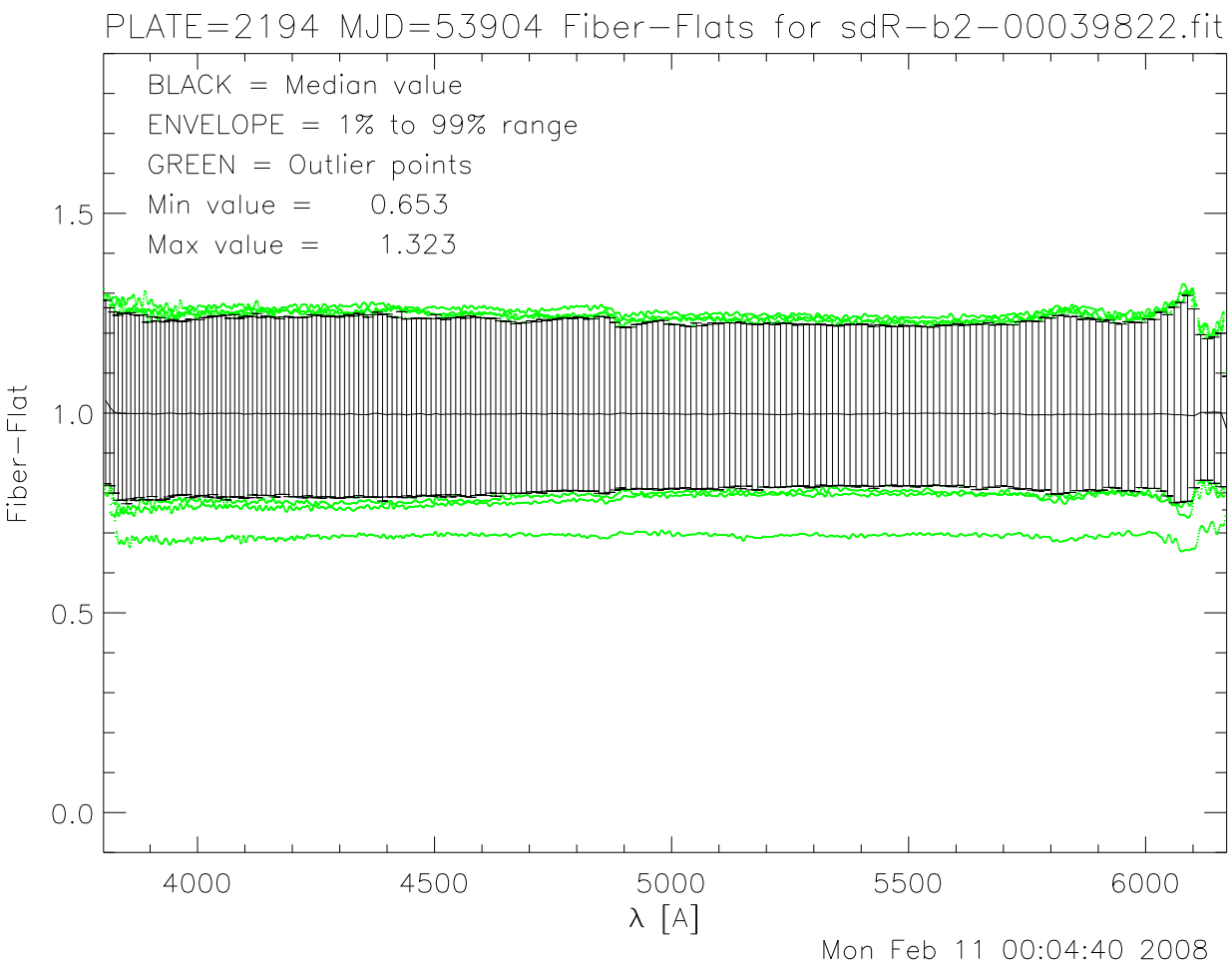

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−b2−00039818.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

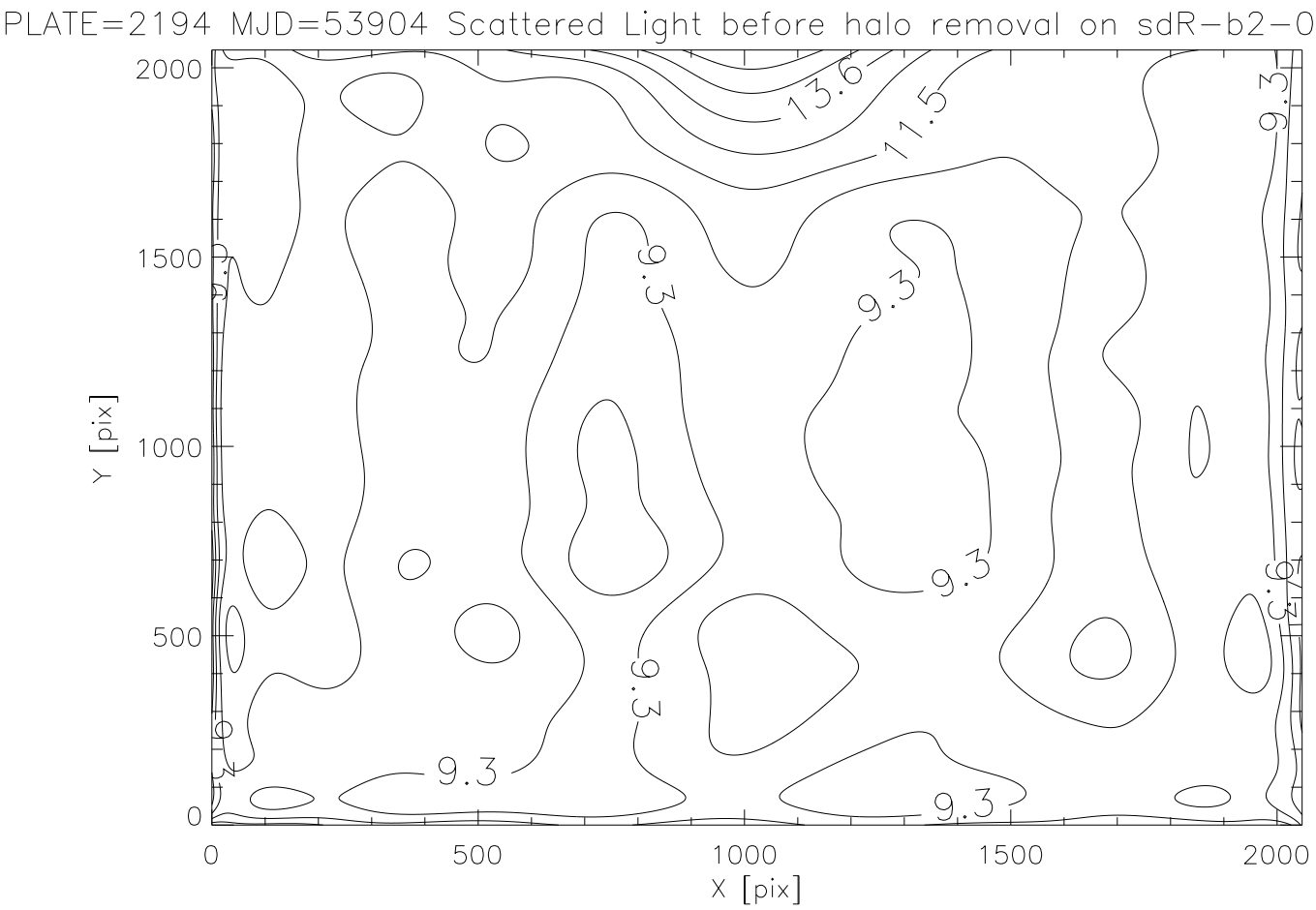

PLATE=2194 MJD=53904 Superflat sdR-b2-00039818.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

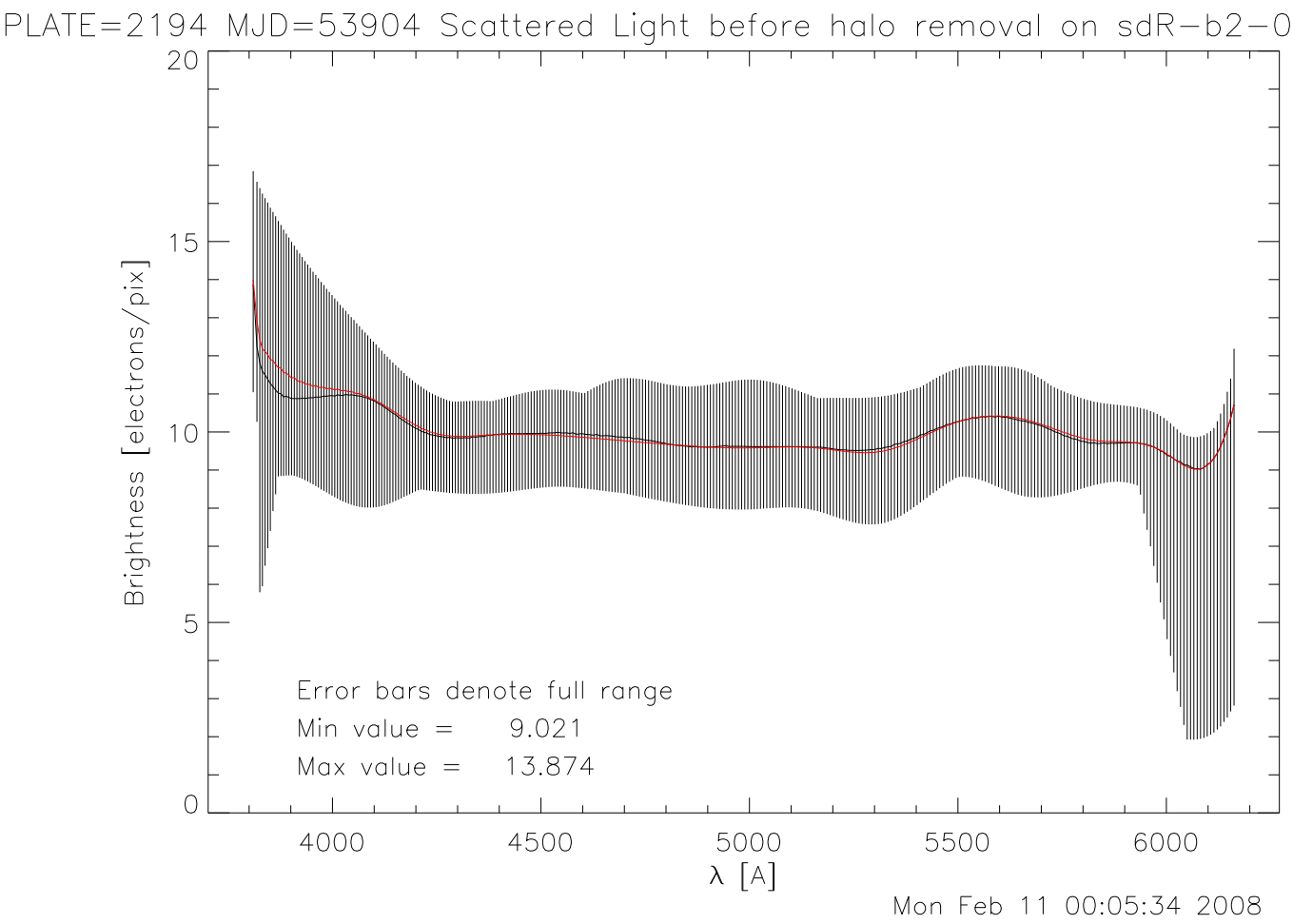

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−b2−00039822.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

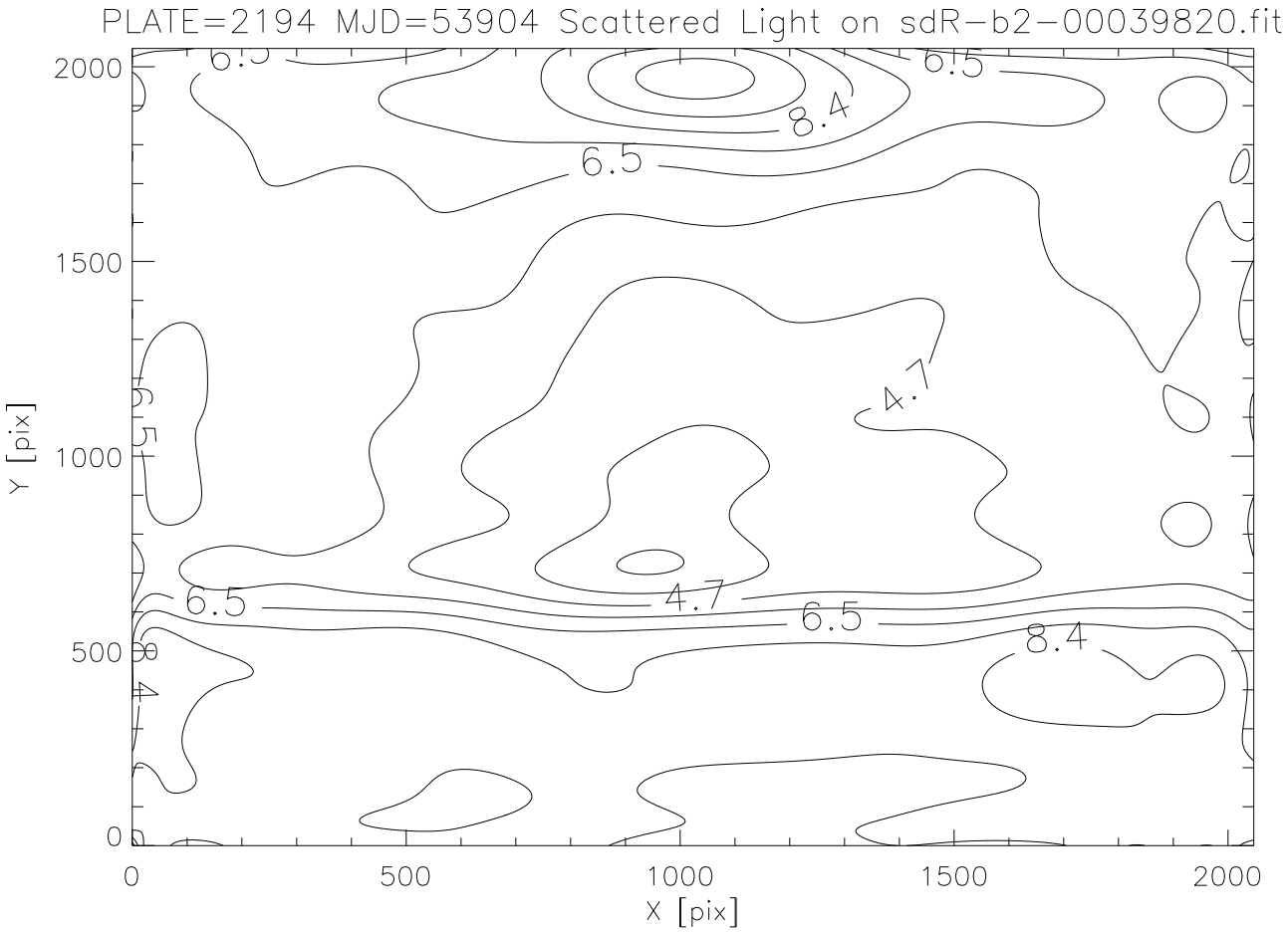

PLATE=2194 MJD=53904 Superflat sdR-b2-00039822.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

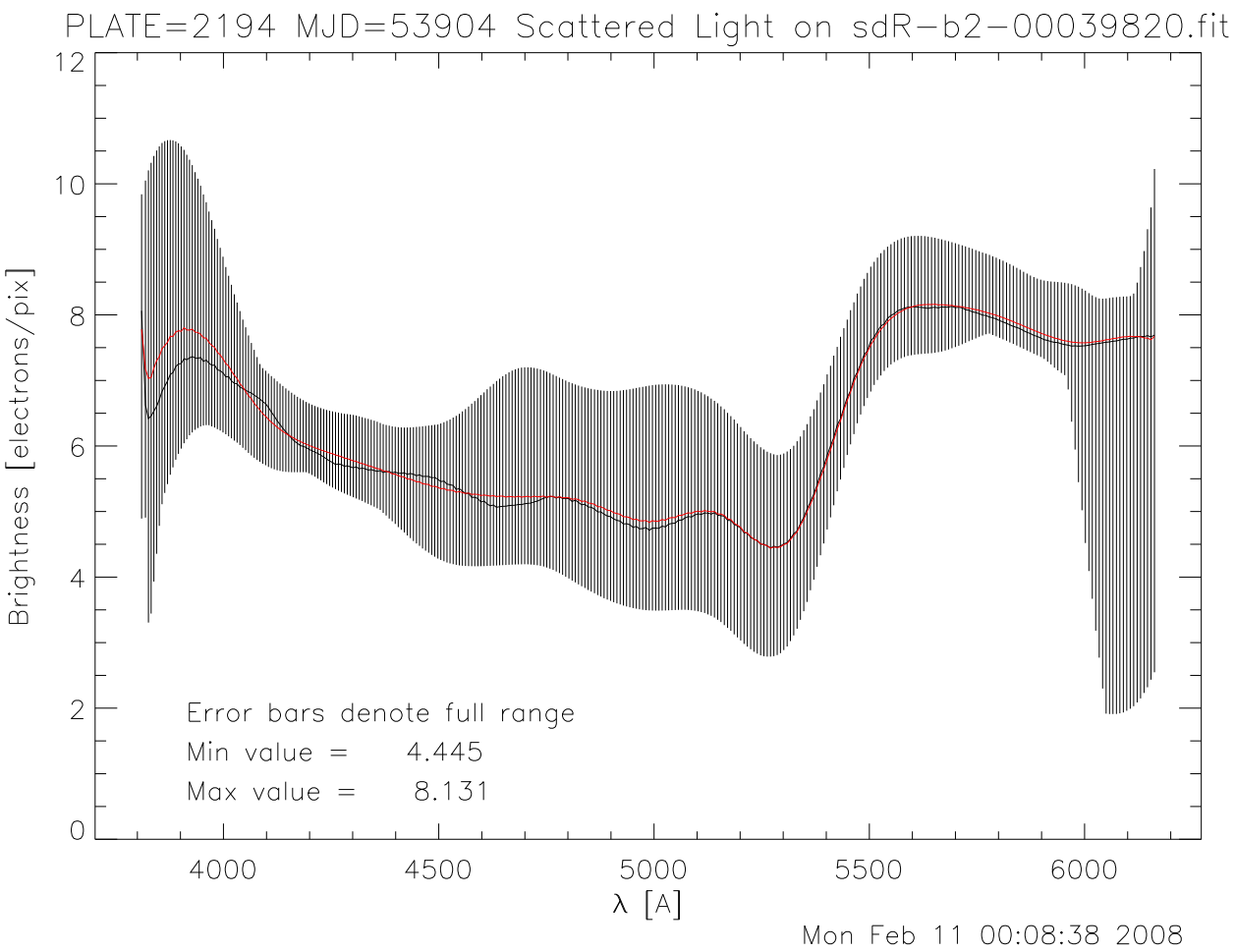

PLATE=2194 MJD=53904 Arcline Fit for sdR-b2-00039823.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:04:31 2008

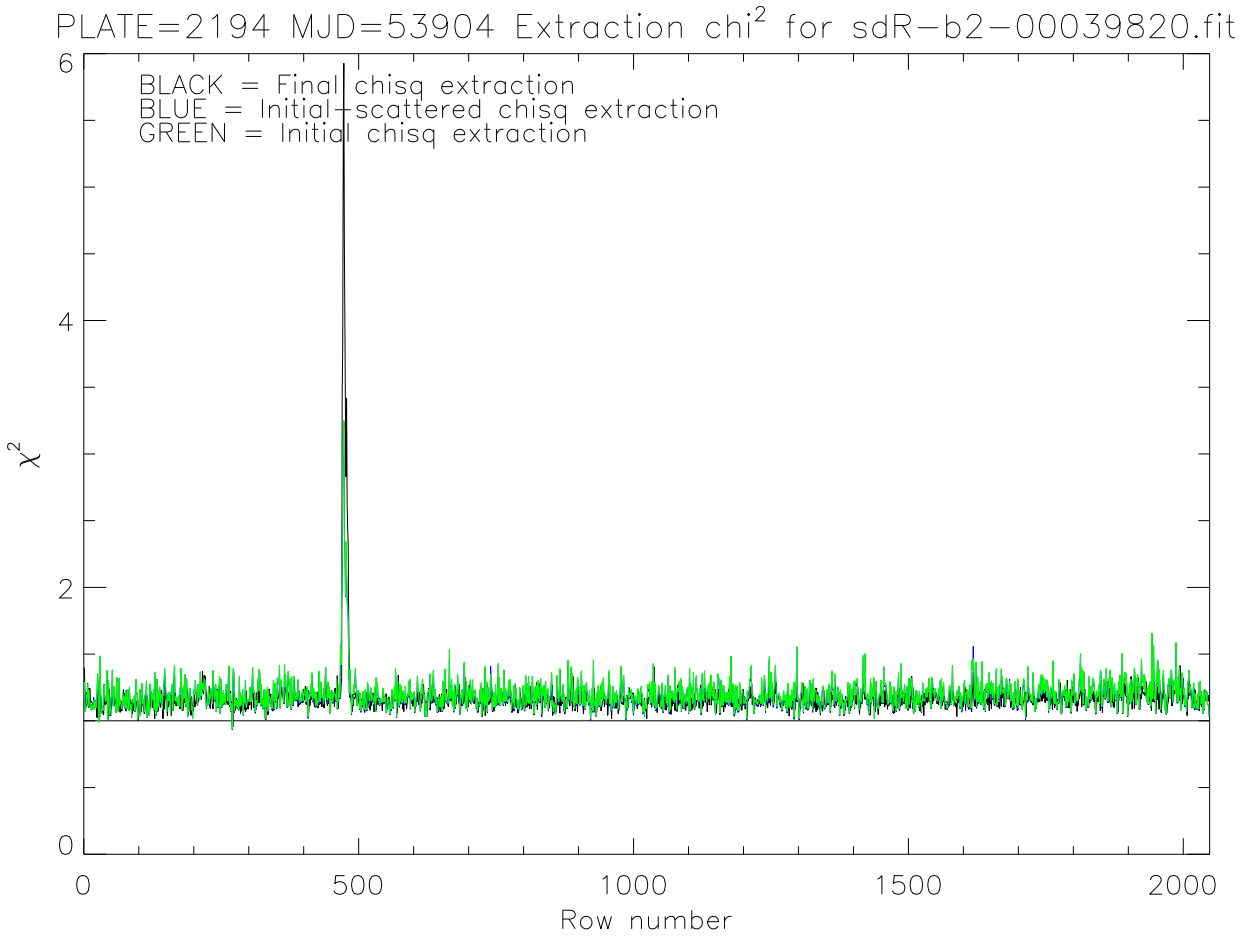

PLATE=2194 MJD=53904 Fiber-Flats for sdR-b2-00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.653
Max value = 1.323
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:04:40 2008

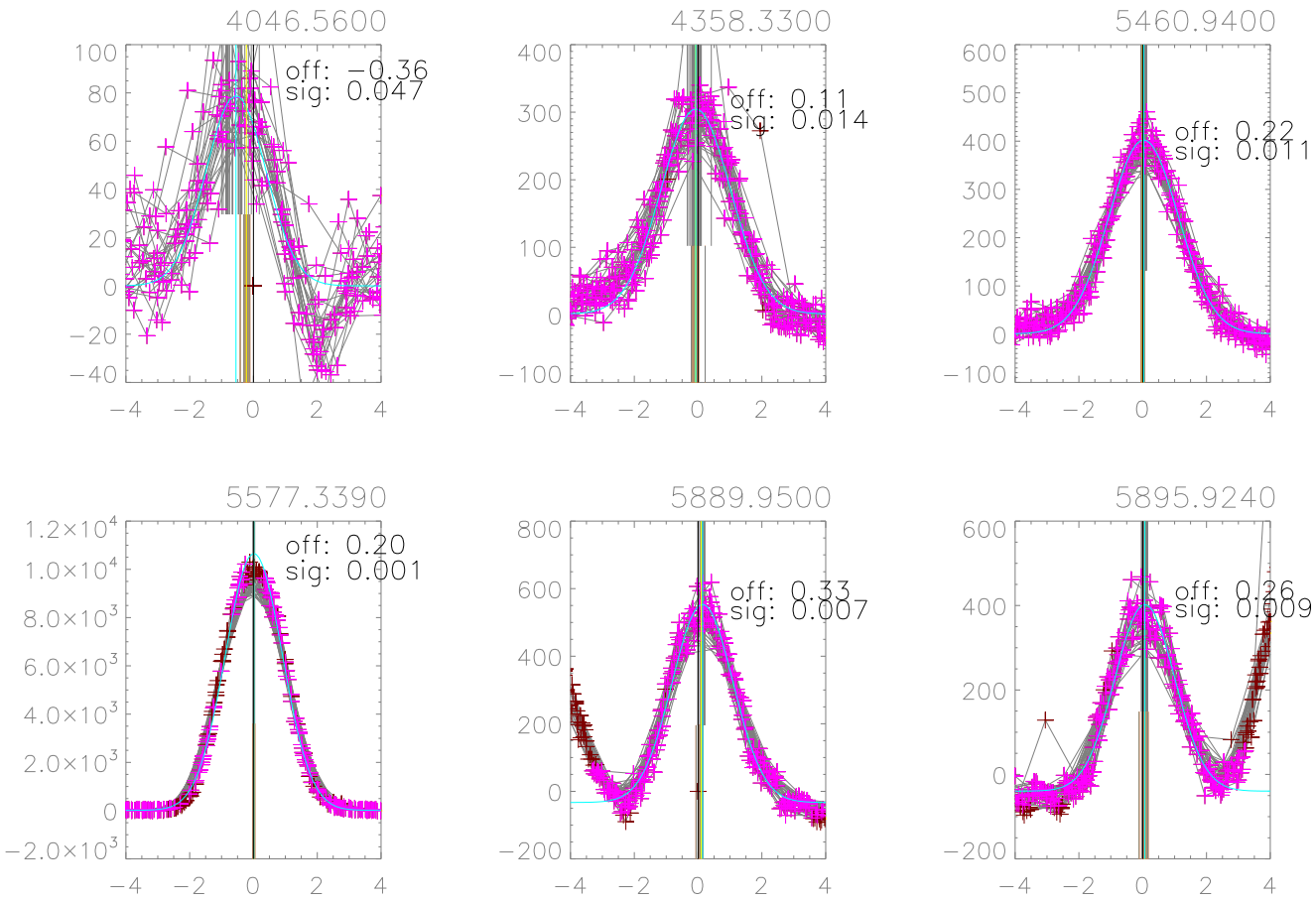

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR−b2−00039820.f
13.6
11.5
9.3
Y [pix]
X [pix]
0
500
1000
1500
2000

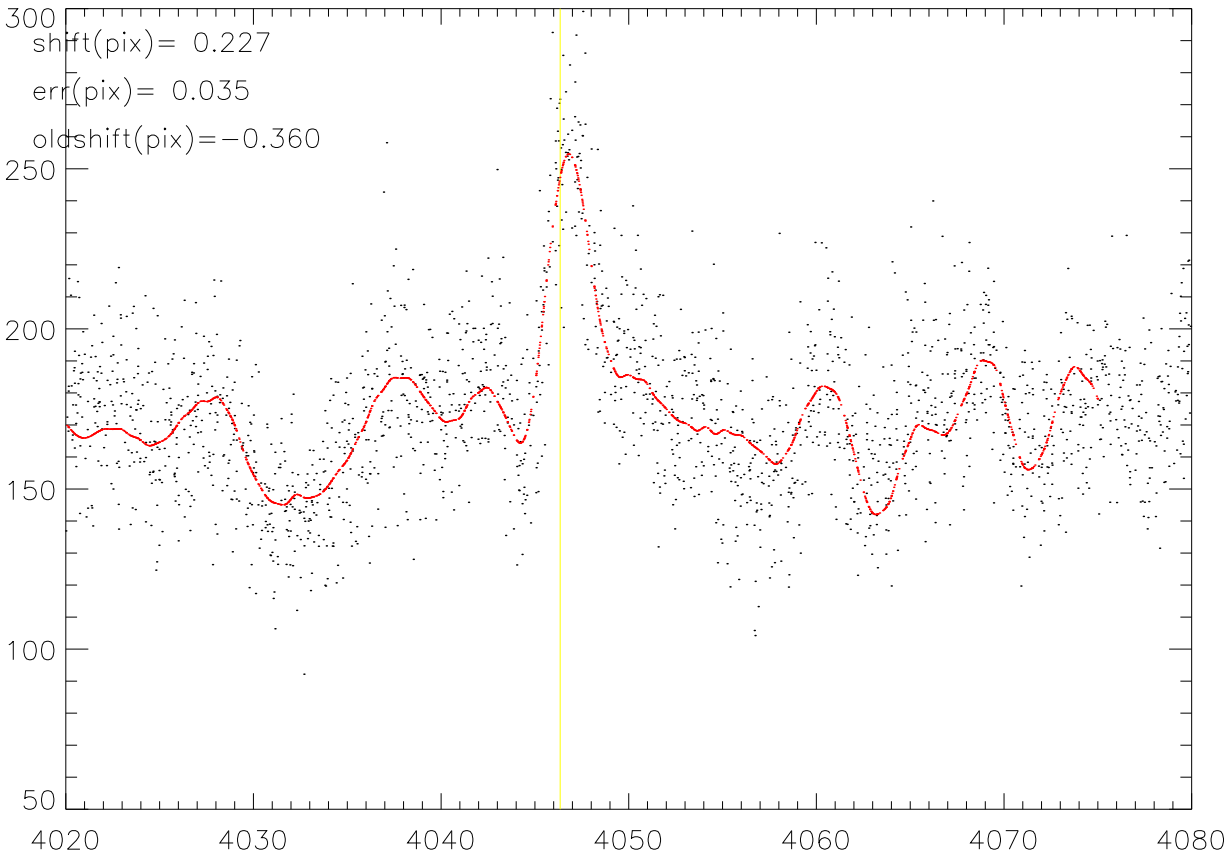

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b2-00039820.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.021
Max value = 13.874
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:05:34 2008

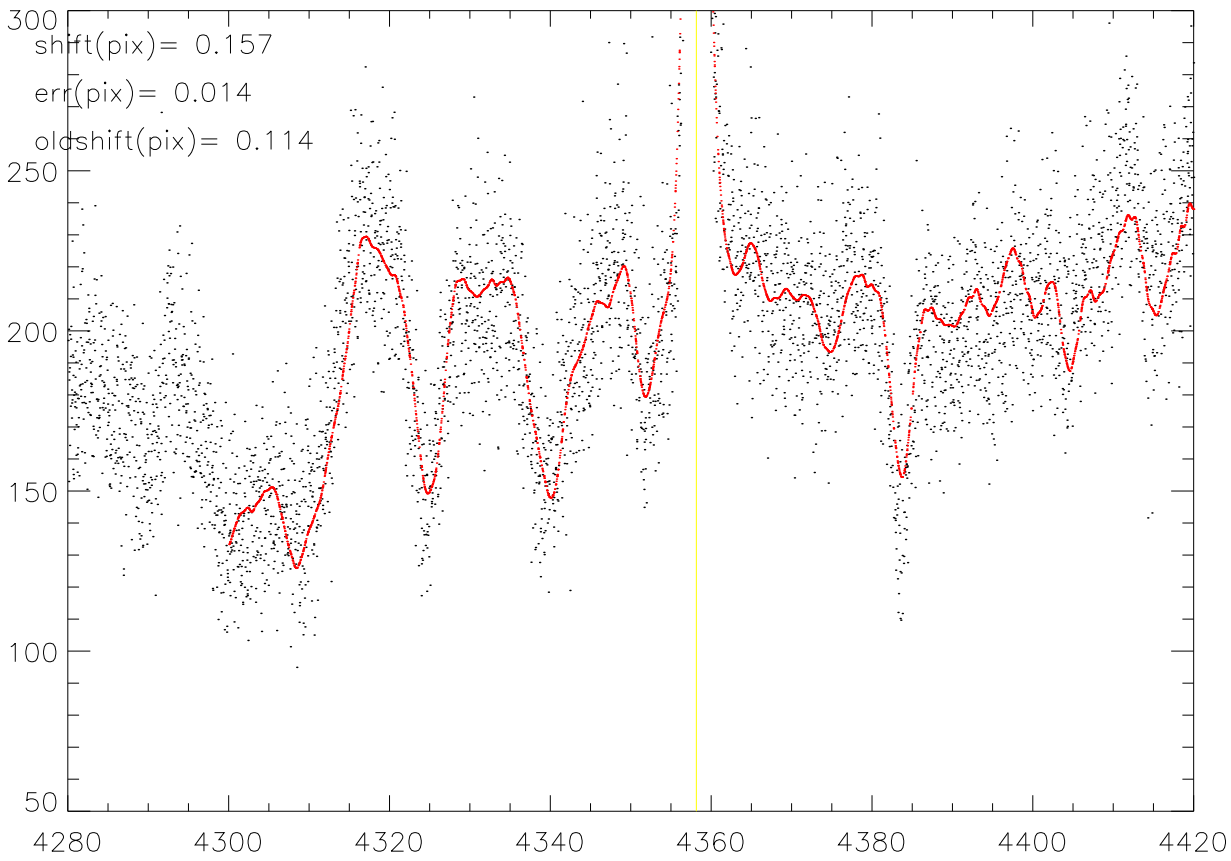

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039820.fit
6.5
8.4
6.5
6.5
4.7
6.5
4.7
6.5
8.4
Y [pix]
X [pix]
0
500
1000
1500
2000

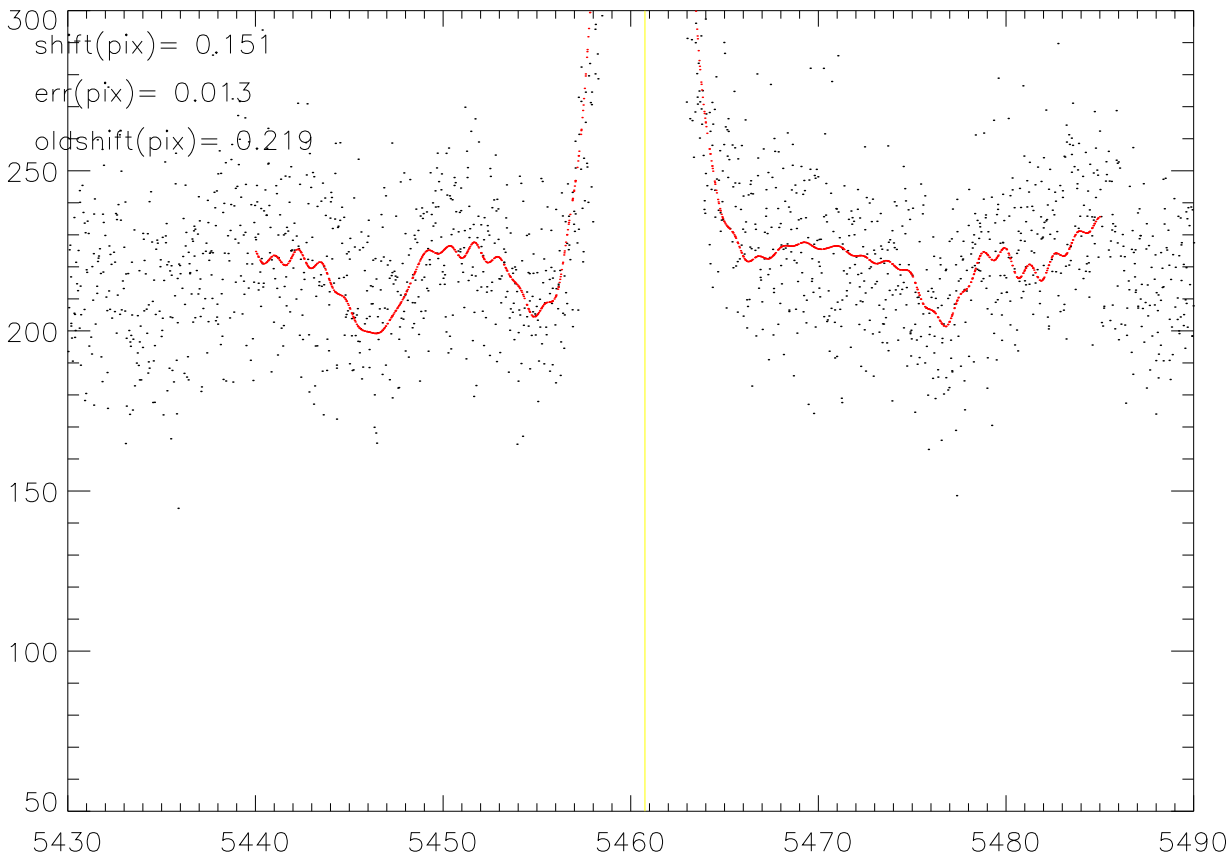

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039820.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.445
Max value = 8.131
Mon Feb 11 00:08:38 2008

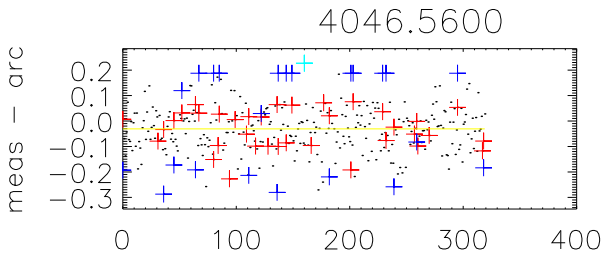

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b2-00039820.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

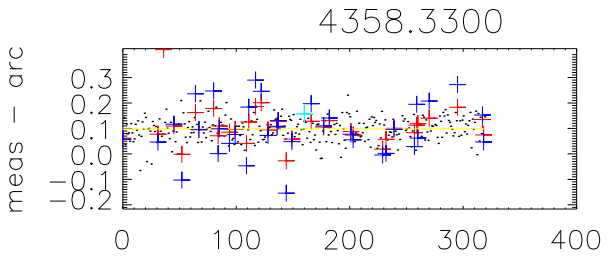

4046.5600
off: −0.36
sig: 0.047
4358.3300
off: 0.11
sig: 0.014
5460.9400
off: 0.22
sig: 0.011
5577.3390
off: 0.20
sig: 0.001
5889.9500
off: 0.33
sig: 0.007
5895.9240
off: 0.26
sig: 0.009

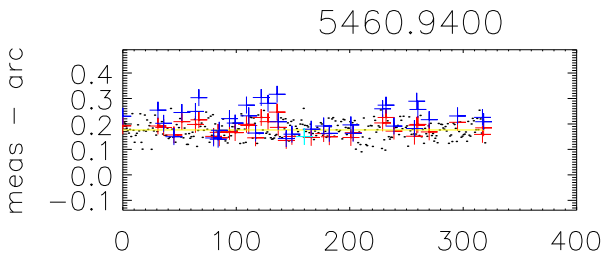

shift(pix)= 0.227
err(pix)= 0.035
oldshift(pix)=−0.360
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

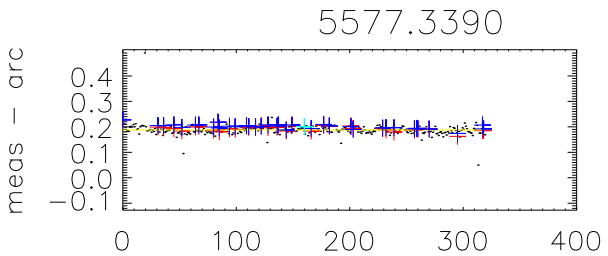

shift(pix)= 0.157
err(pix)= 0.014
oldshift(pix)= 0.114
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

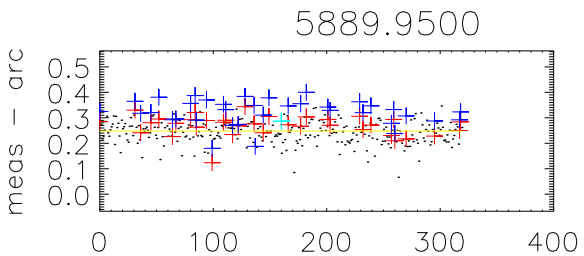

shift(pix)= 0.151
err(pix)= 0.013
oldshift(pix)= 0.219
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

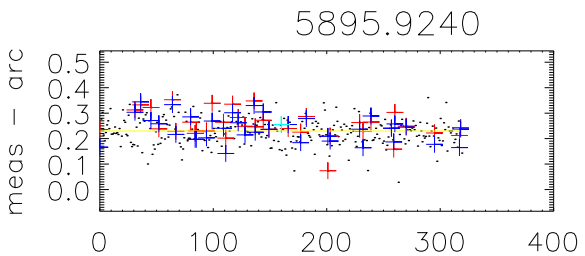

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

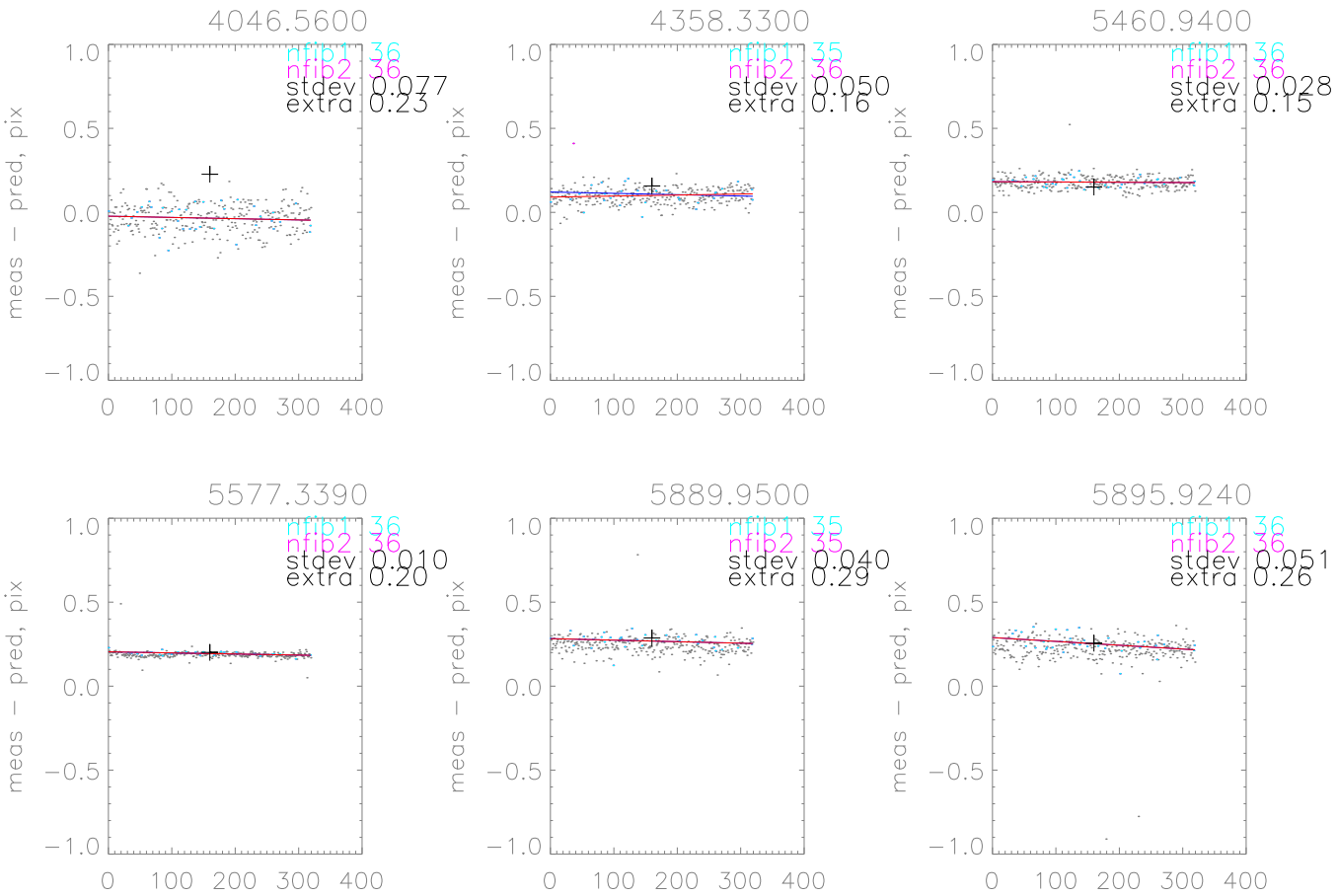

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

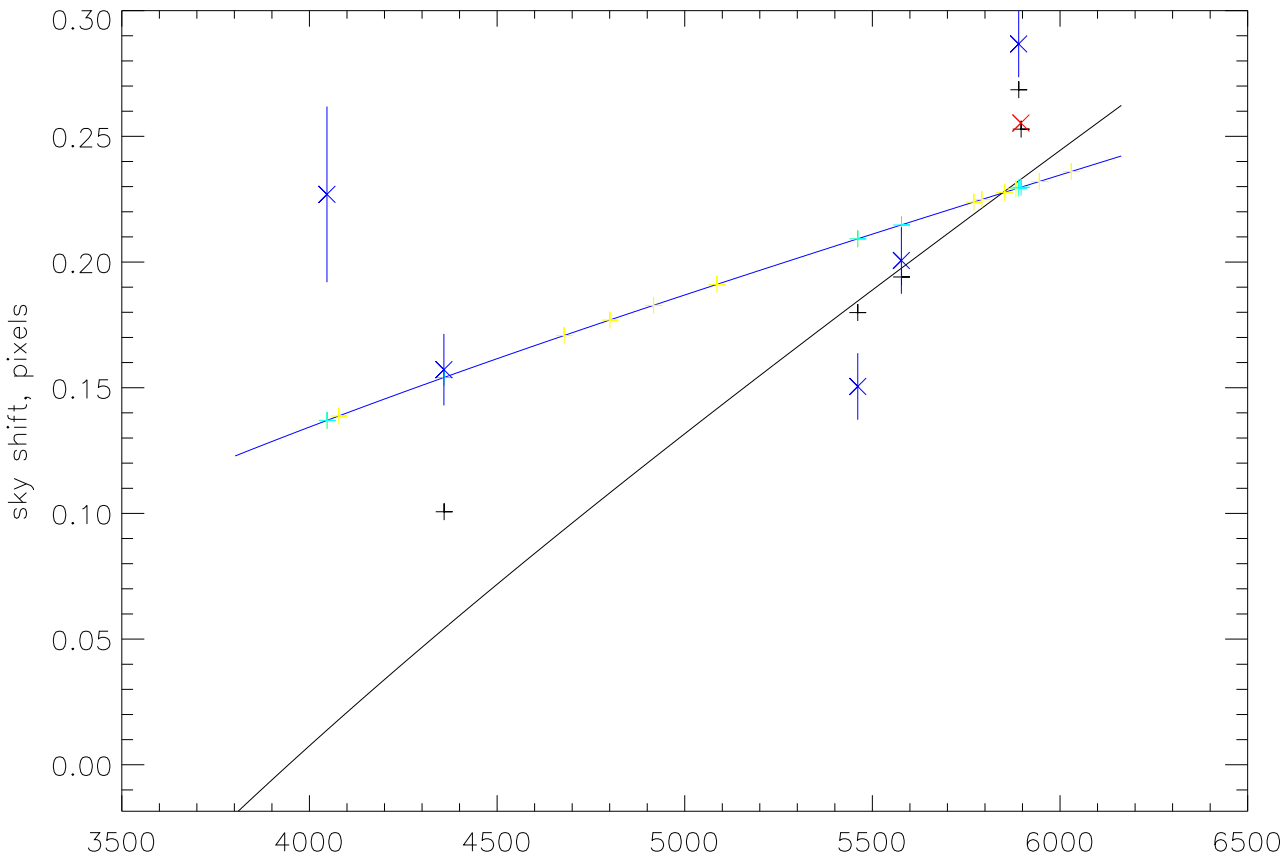

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

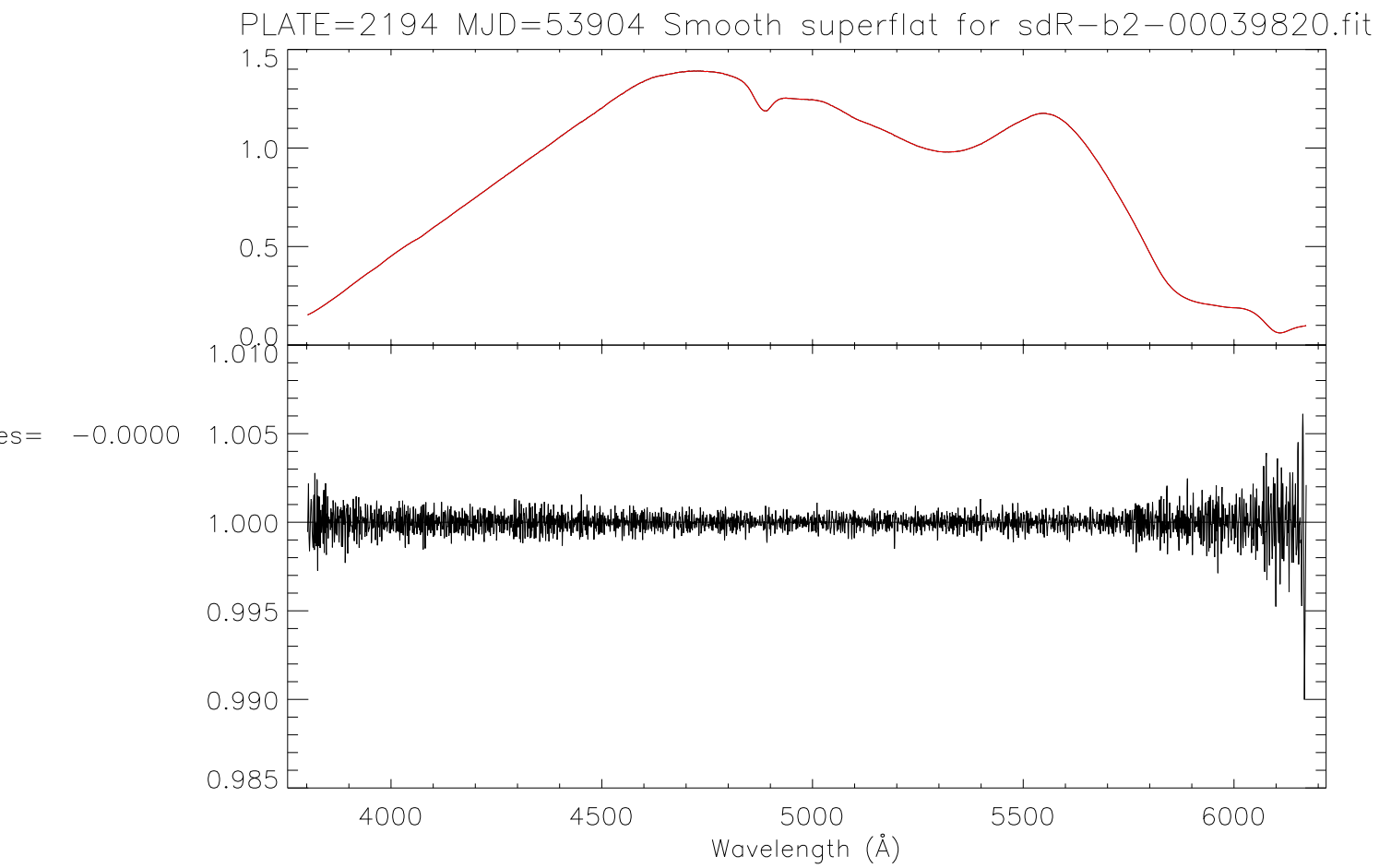

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

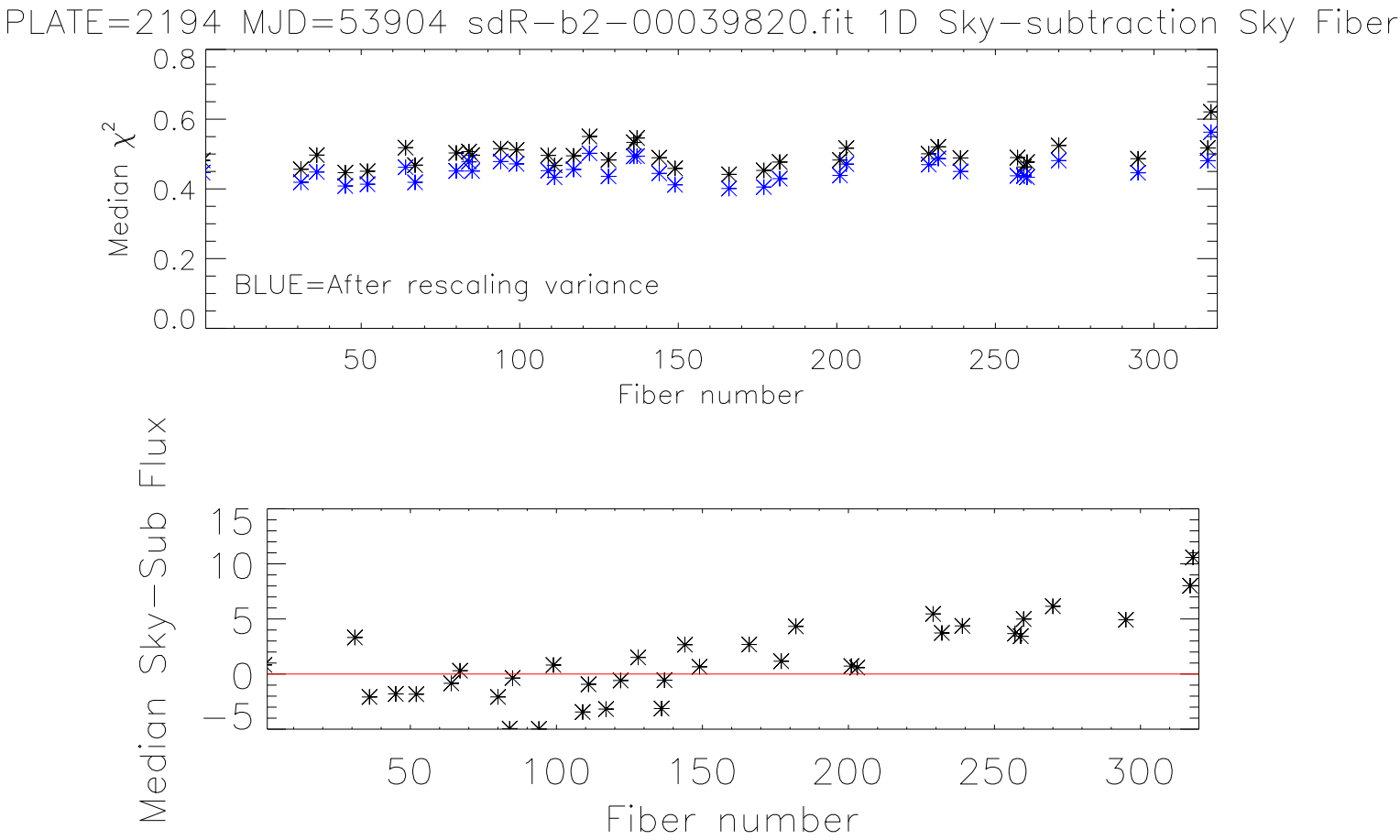

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

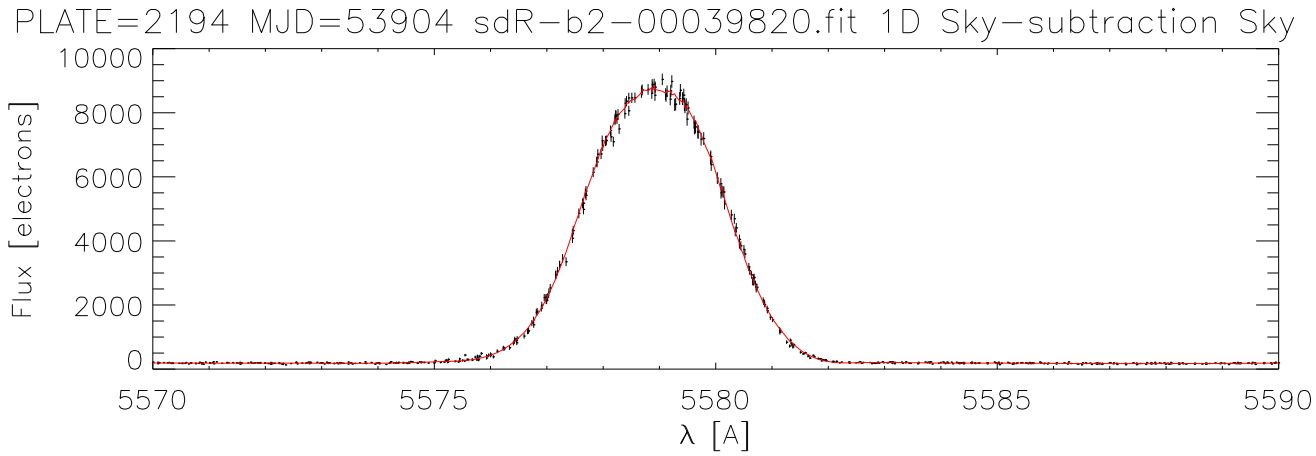

4046.5600
nfib1 36
nfib2 36
stdev 0.077
extra 0.23
4358.3300
nfib1 35
nfib2 36
stdev 0.050
extra 0.16
5460.9400
nfib1 36
nfib2 36
stdev 0.028
extra 0.15
5577.3390
nfib1 36
nfib2 36
stdev 0.010
extra 0.20
5889.9500
nfib1 35
nfib2 35
stdev 0.040
extra 0.29
5895.9240
nfib1 36
nfib2 36
stdev 0.051
extra 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

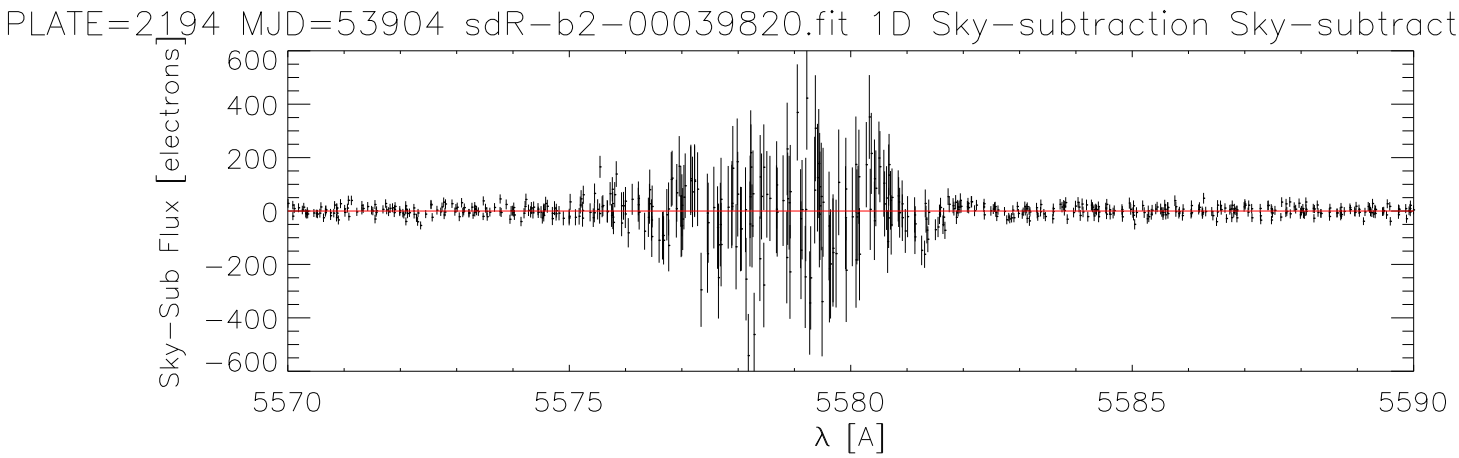

0.30
0.25
0.20
0.15
0.10
0.05
0.00
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

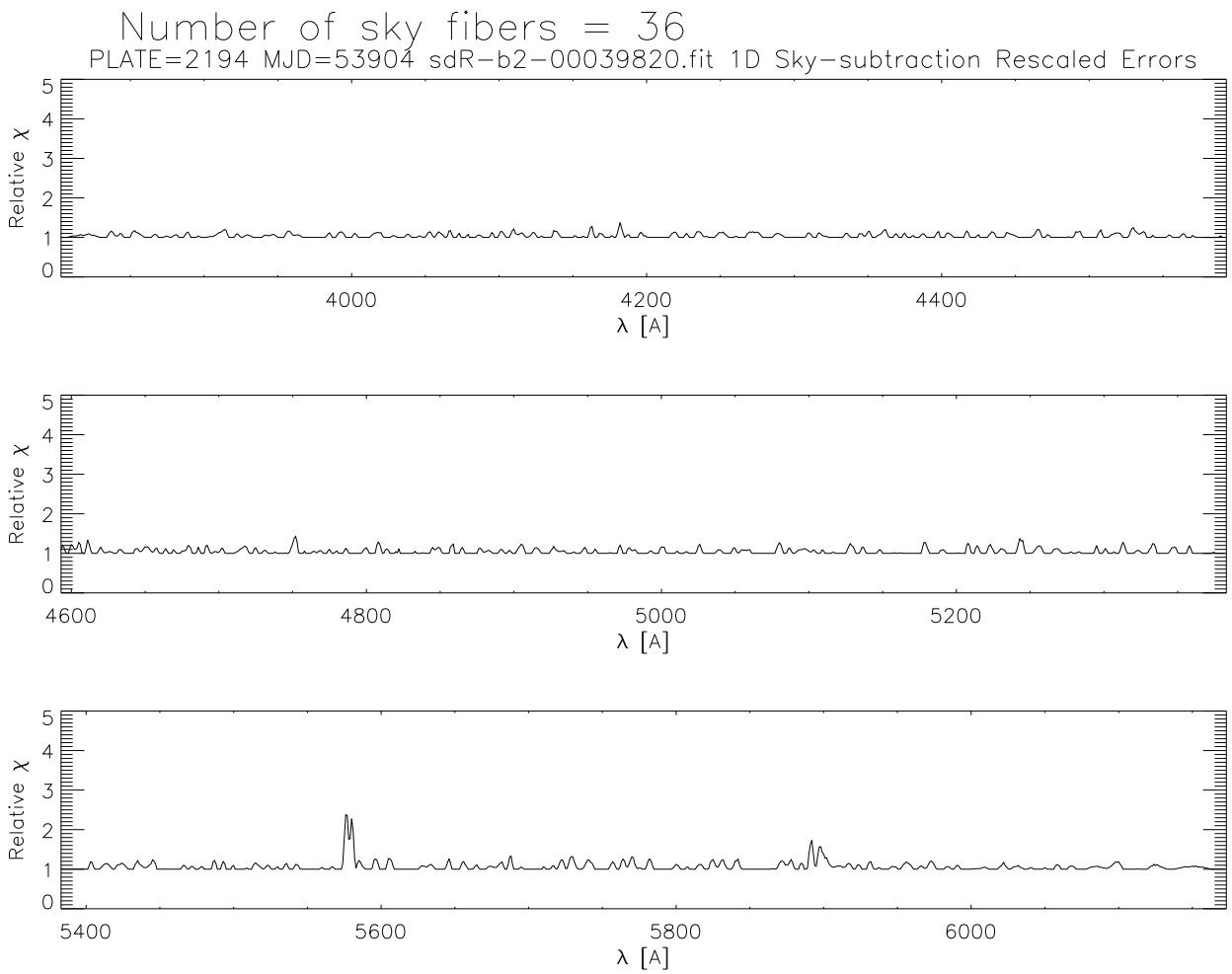

PLATE=2194 MJD=53904 Smooth superflat for sdR-b2-00039820.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

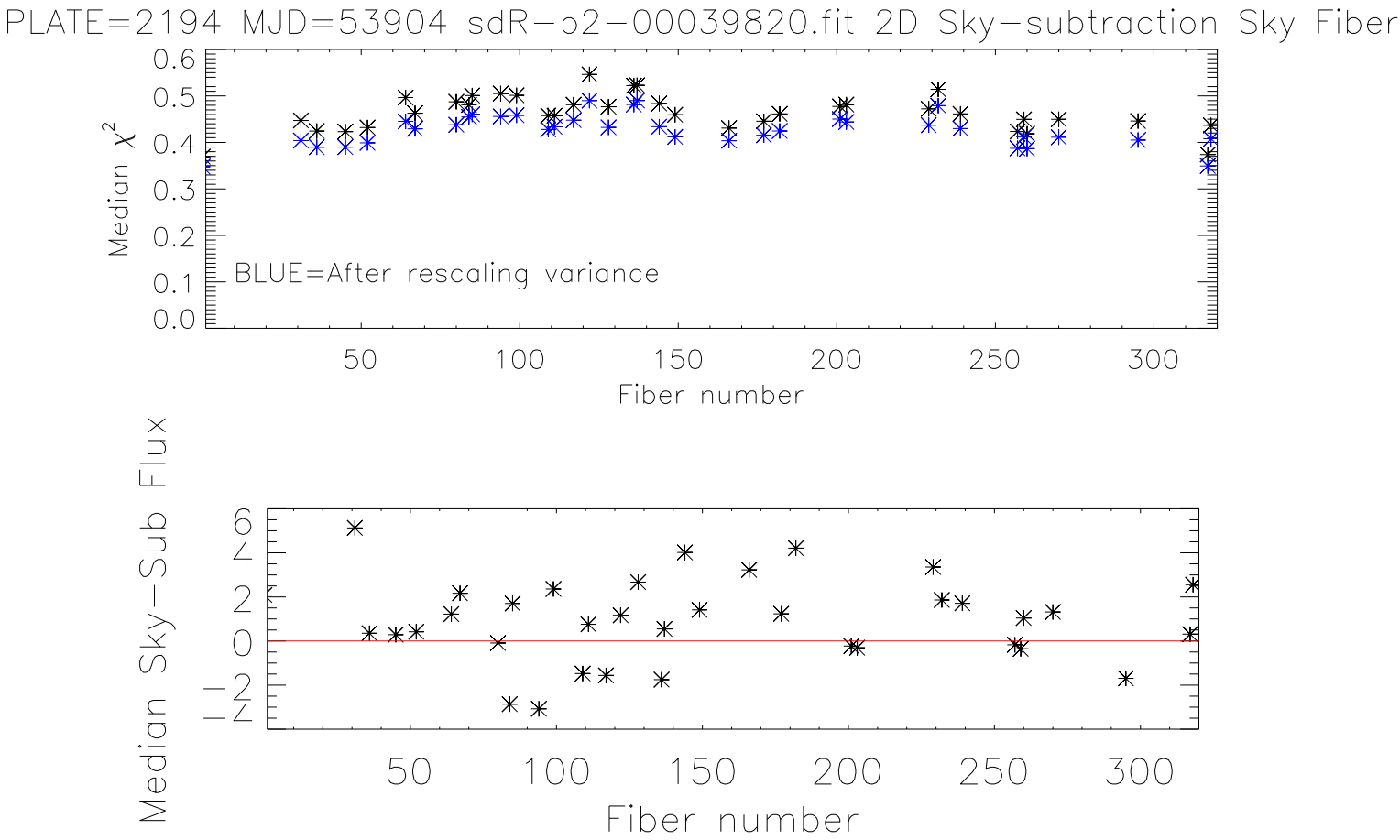
es= −0.0000

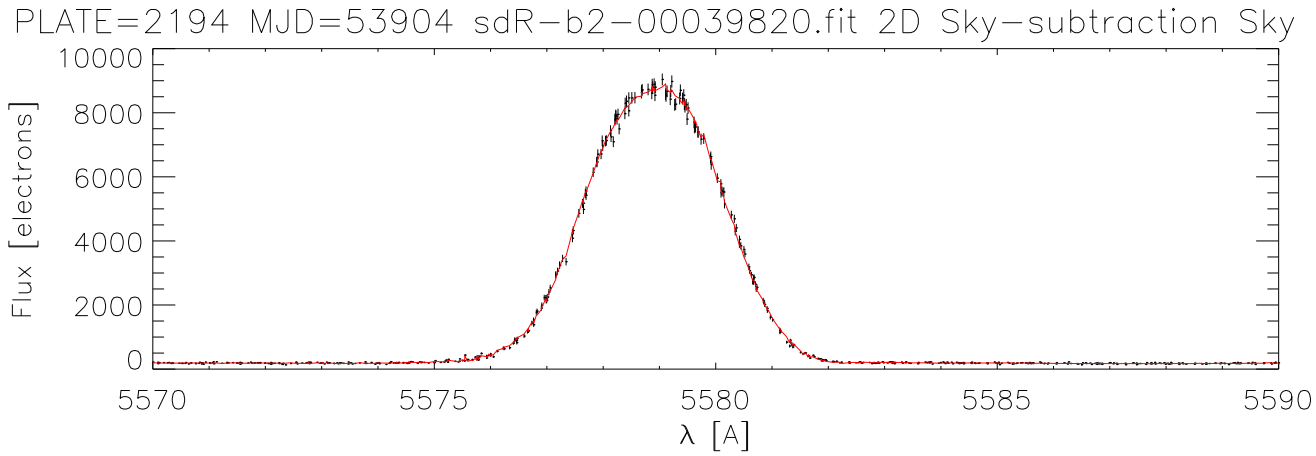

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

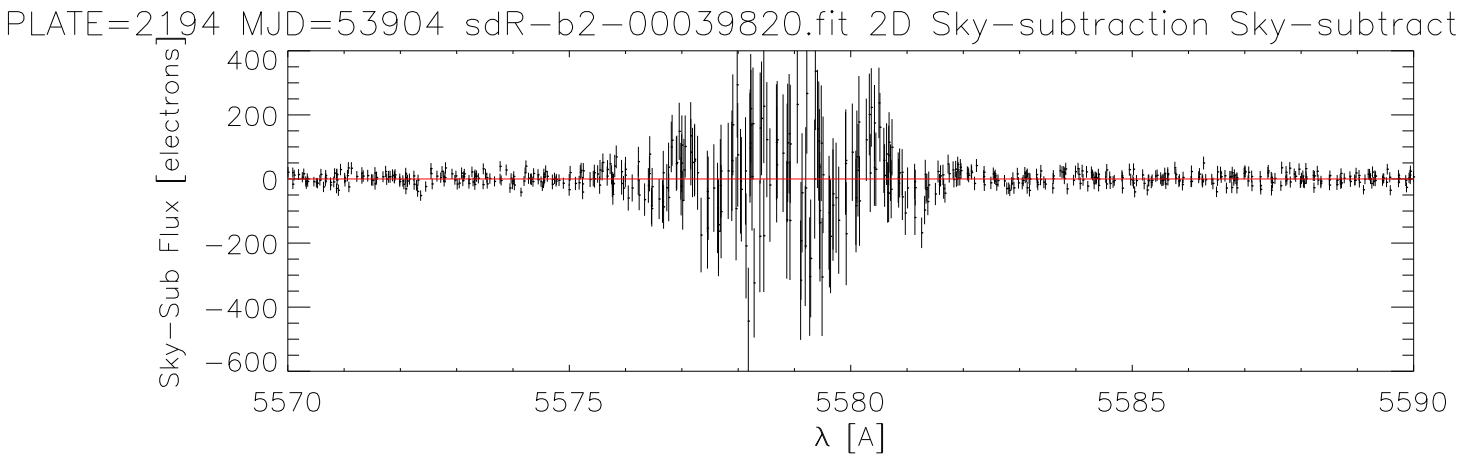

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

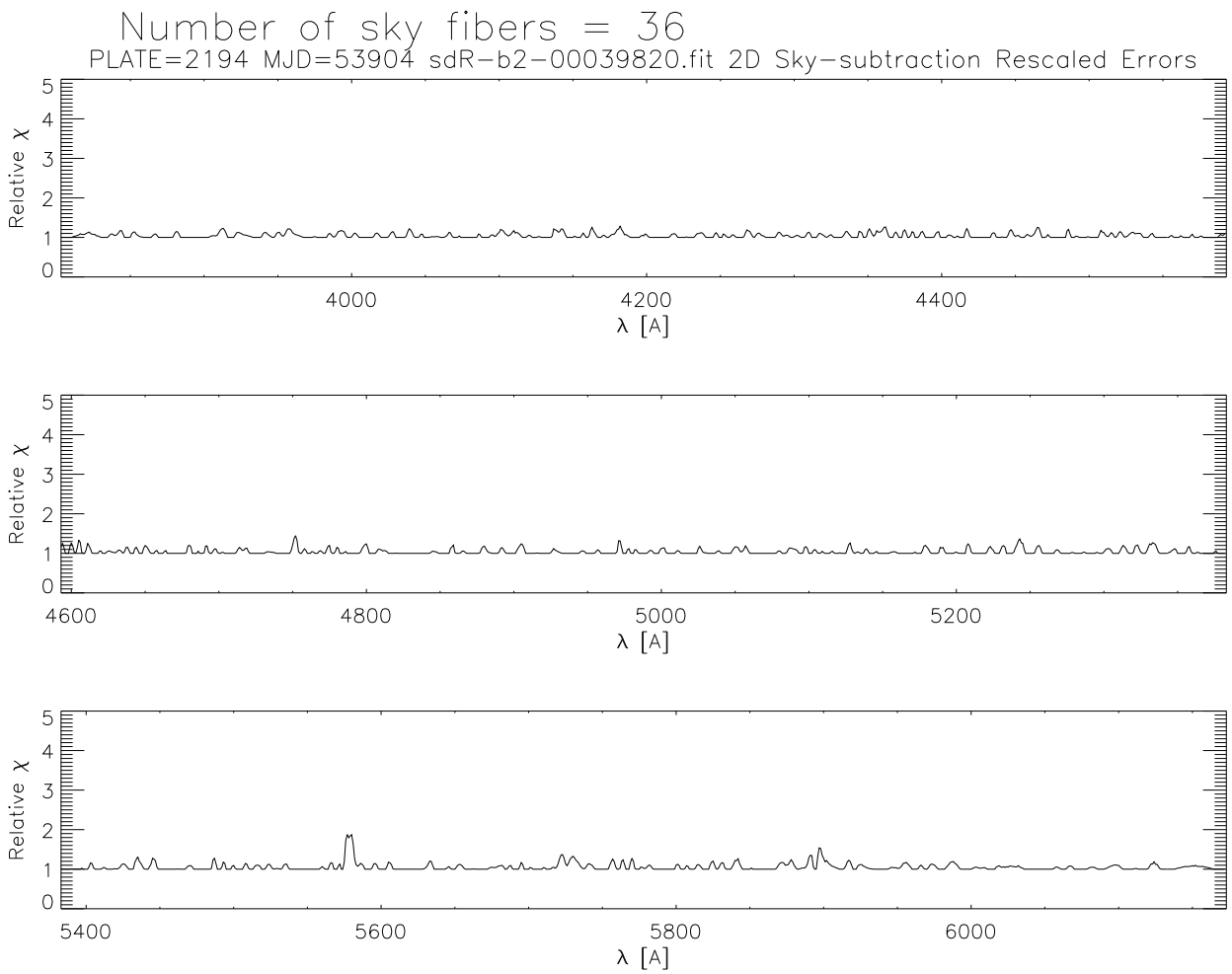

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

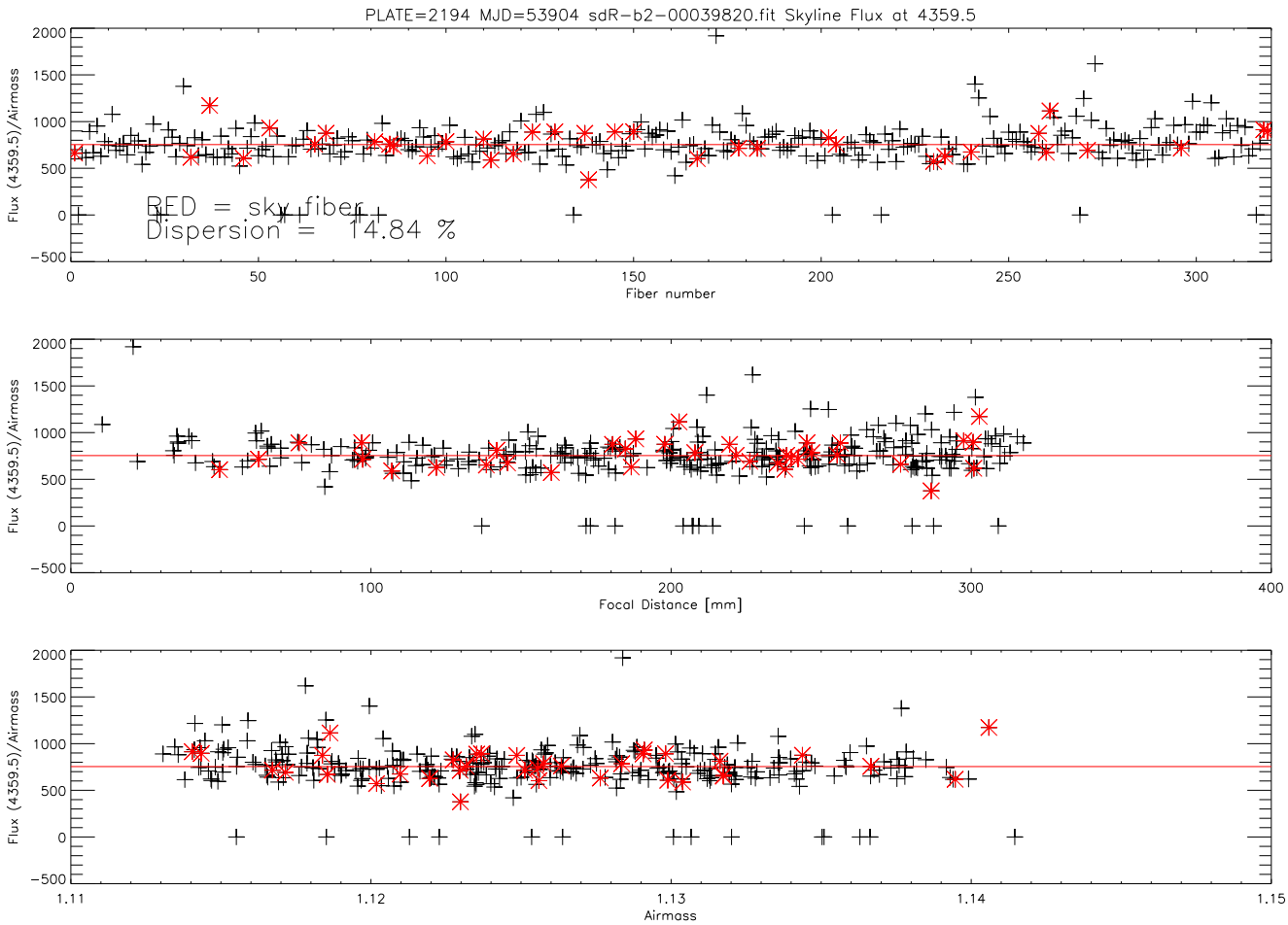

Number of sky fibers = 36
PLATE=2194 MJD=53904 sdR-b2-00039820.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

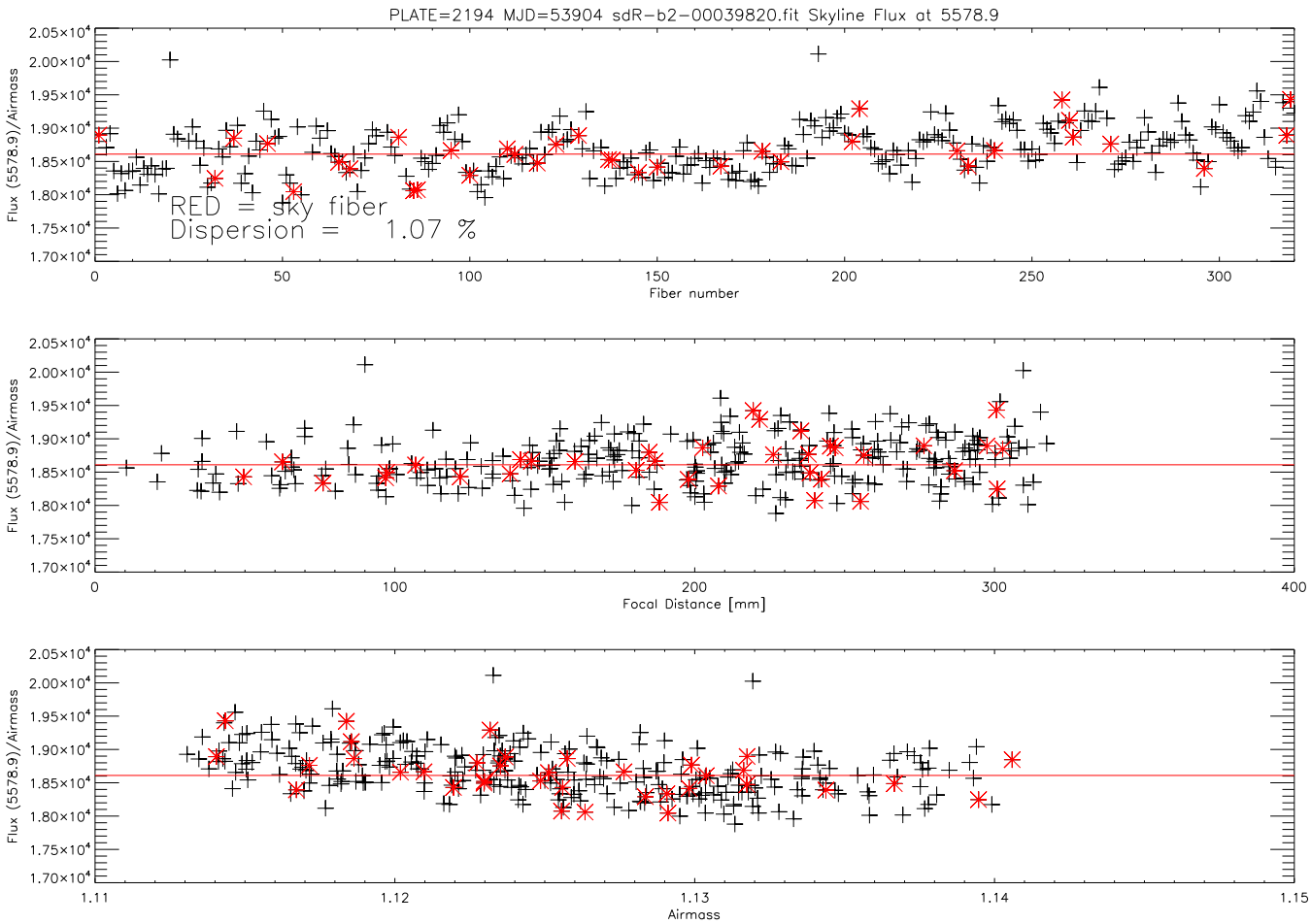

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

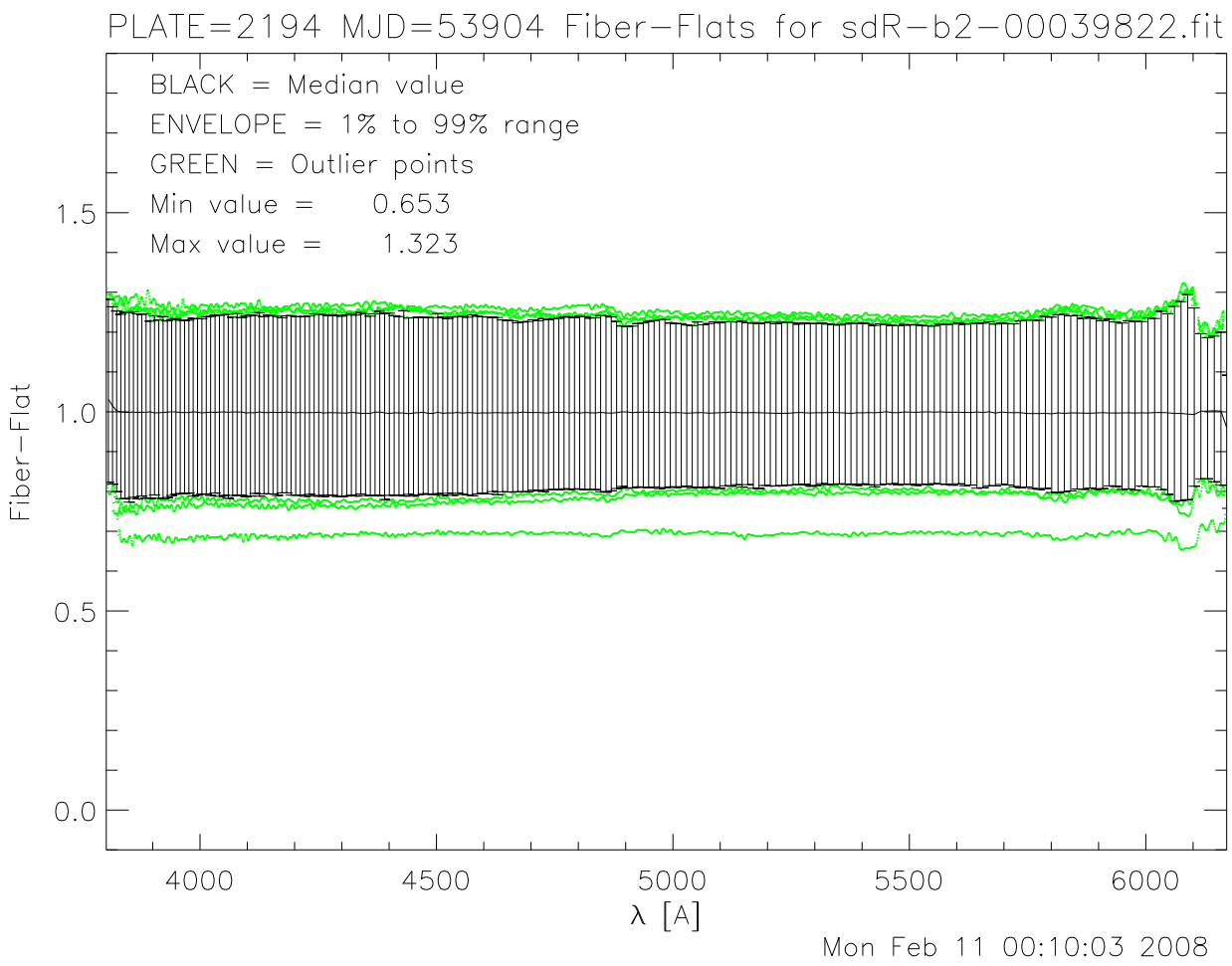

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

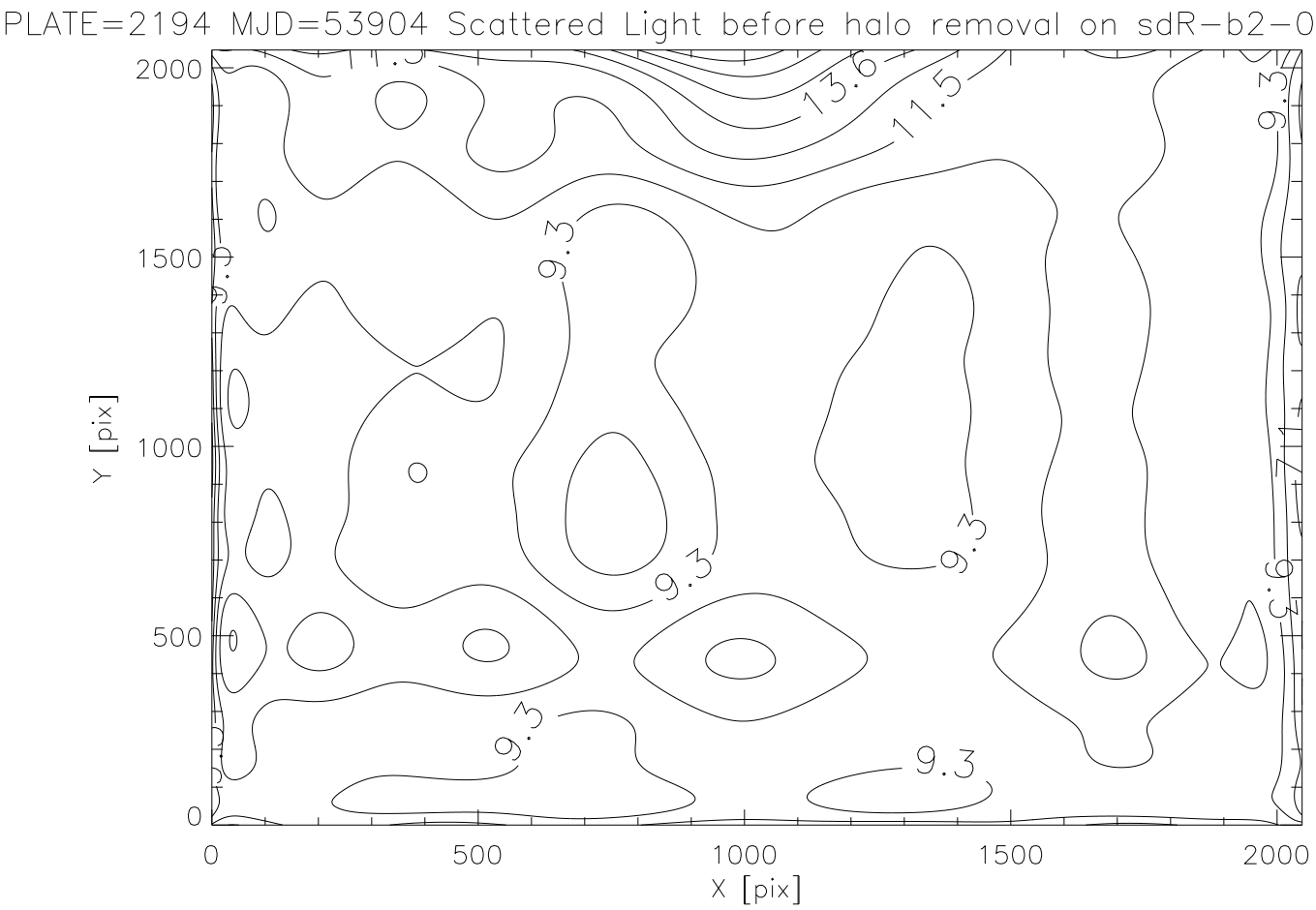

PLATE=2194 MJD=53904 sdR-b2-00039820.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

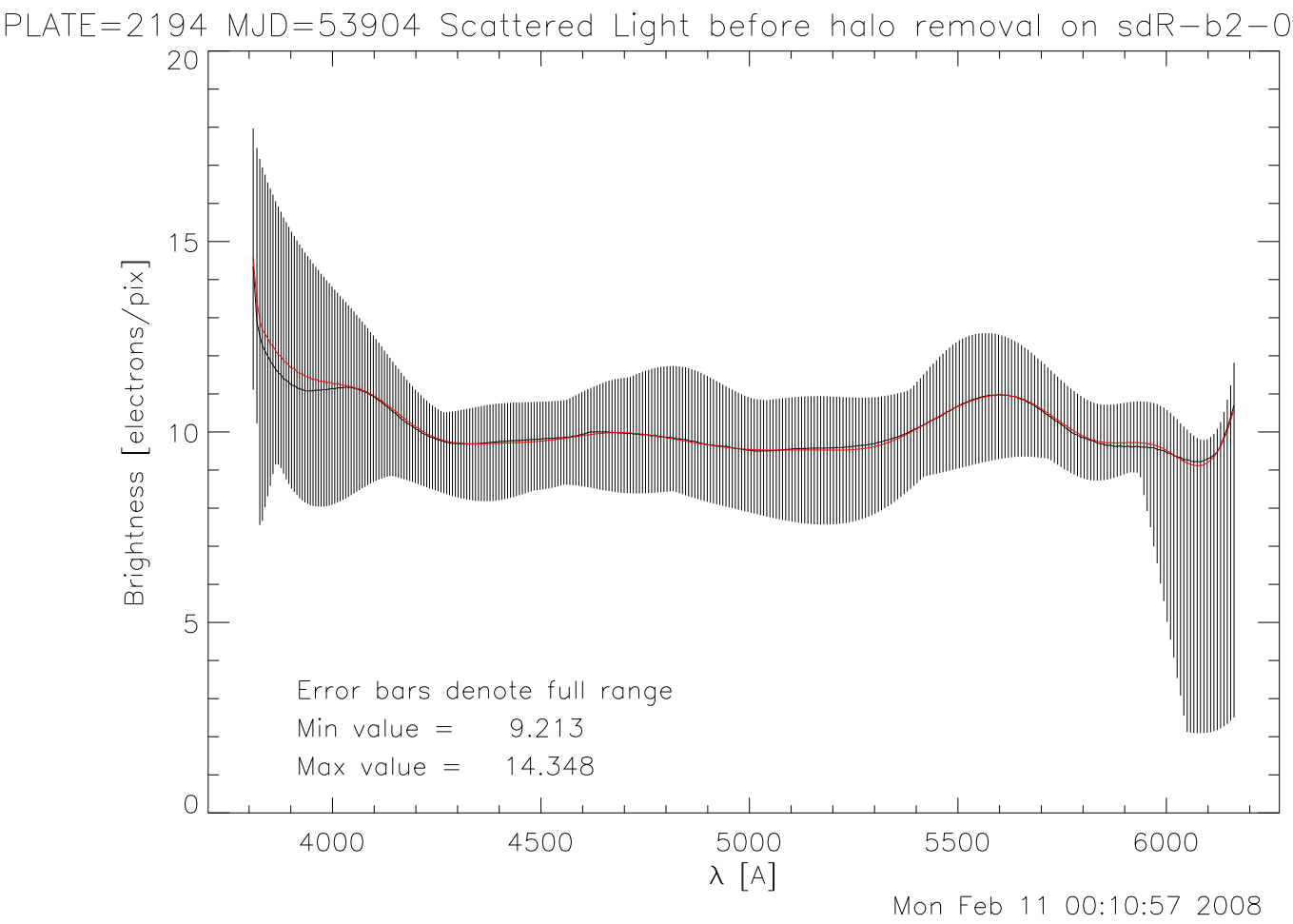

Number of sky fibers = 36
PLATE=2194 MJD=53904 sdR-b2-00039820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

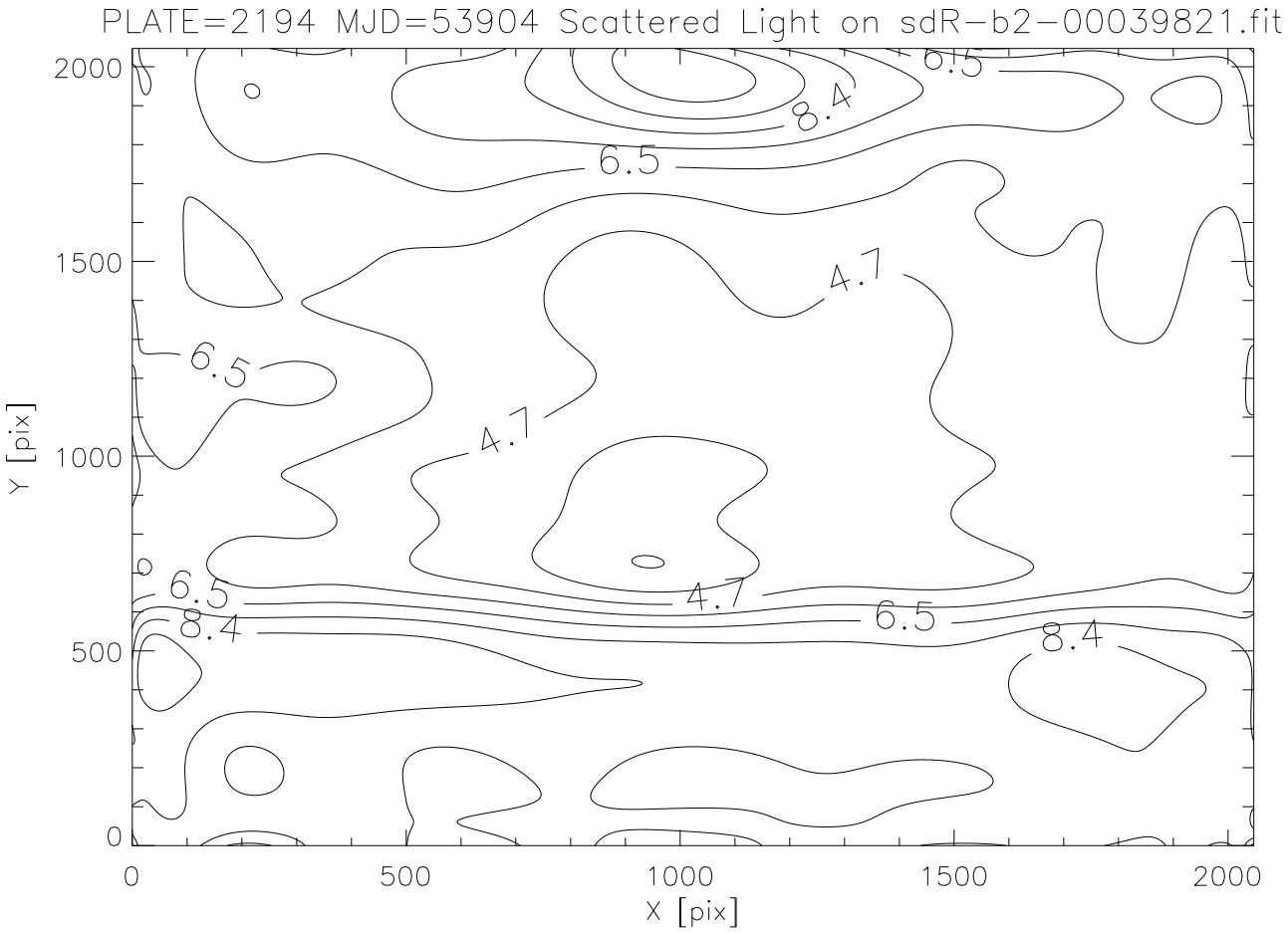

PLATE=2194 MJD=53904 sdR-b2-00039820.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.84 %
Fiber number
Focal Distance [mm]
Airmass

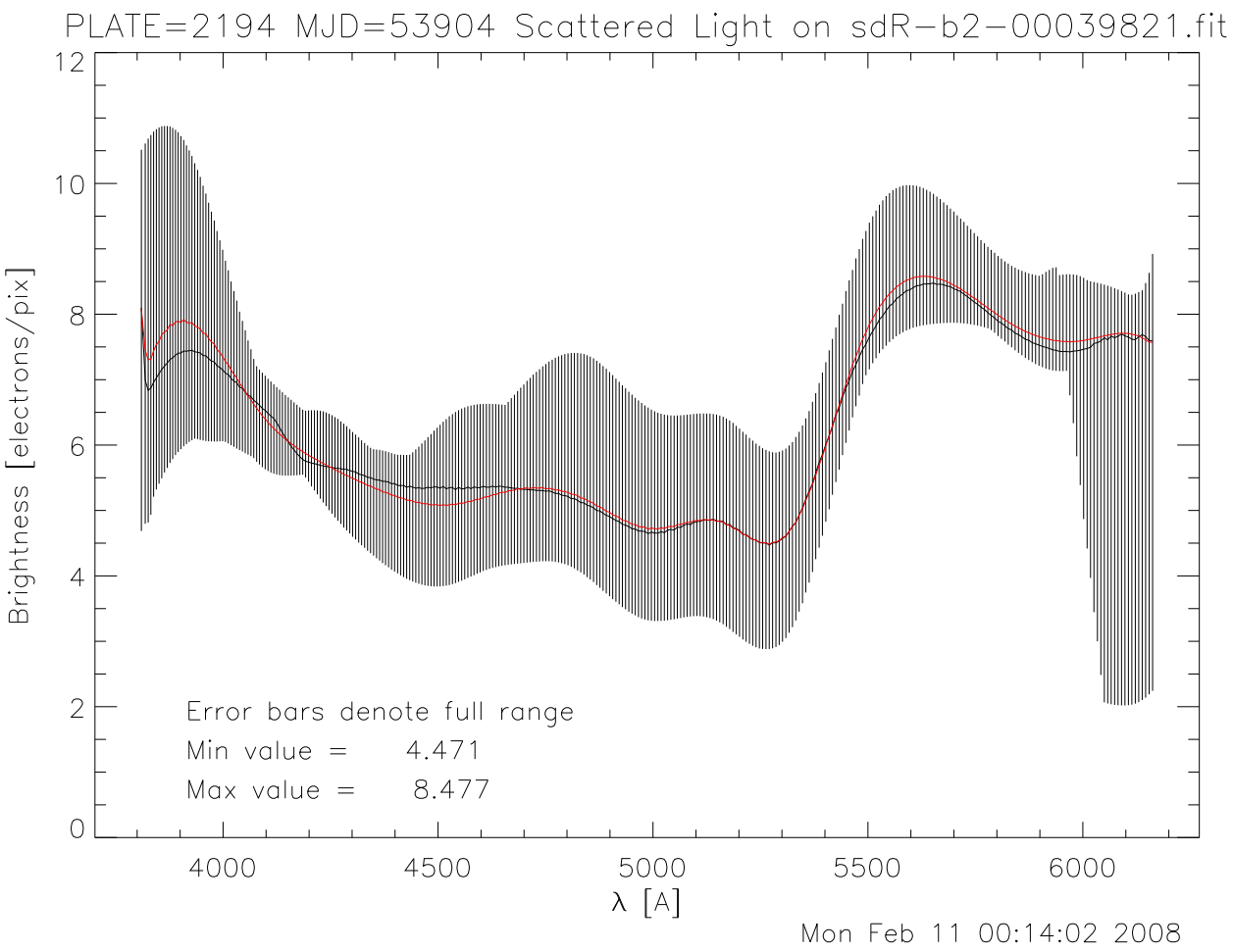

PLATE=2194 MJD=53904 sdR-b2-00039820.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.07 %
Fiber number
Focal Distance [mm]
Airmass

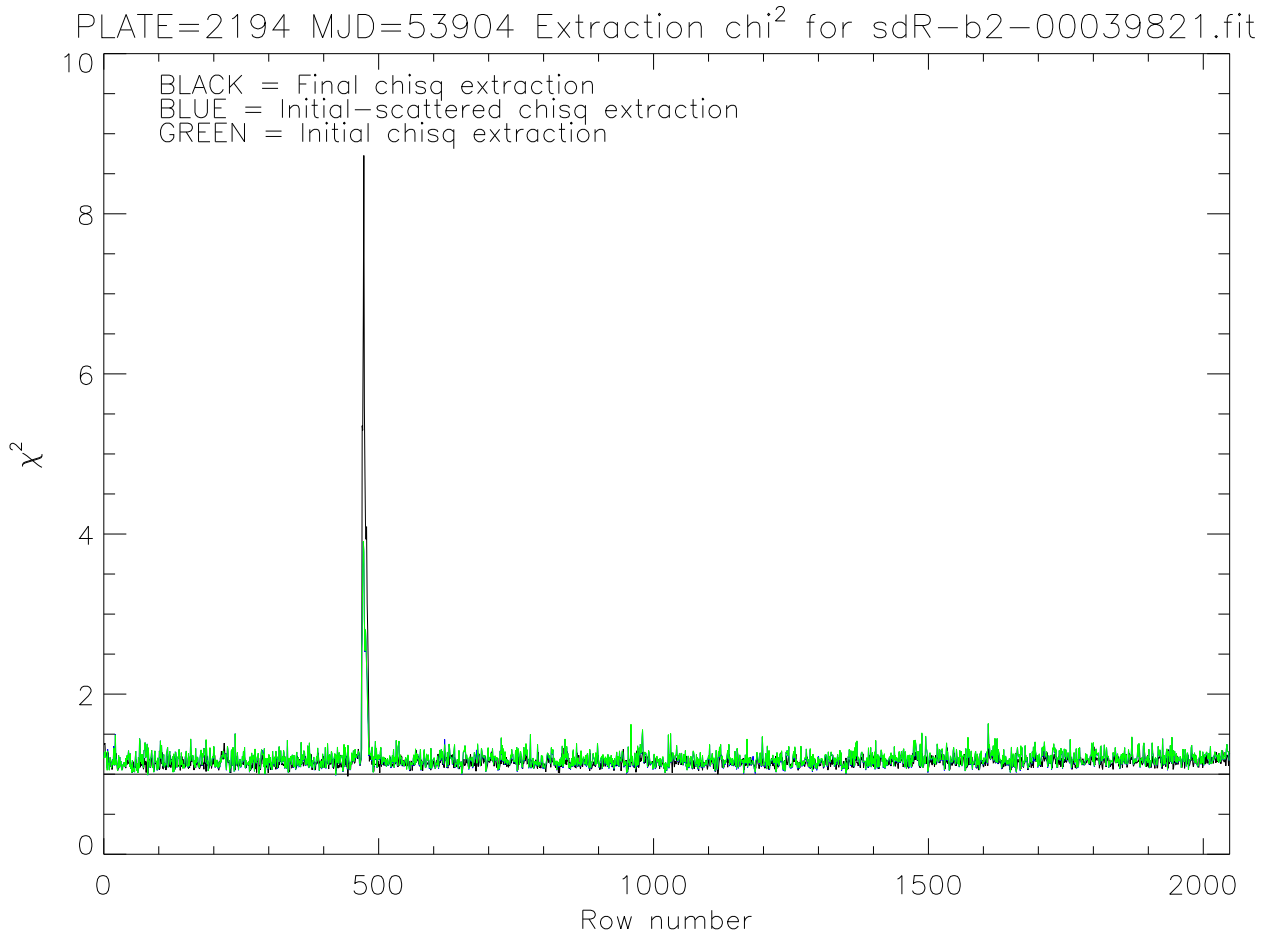

PLATE=2194 MJD=53904 Fiber-Flats for sdR-b2-00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.653
Max value = 1.323
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:10:03 2008

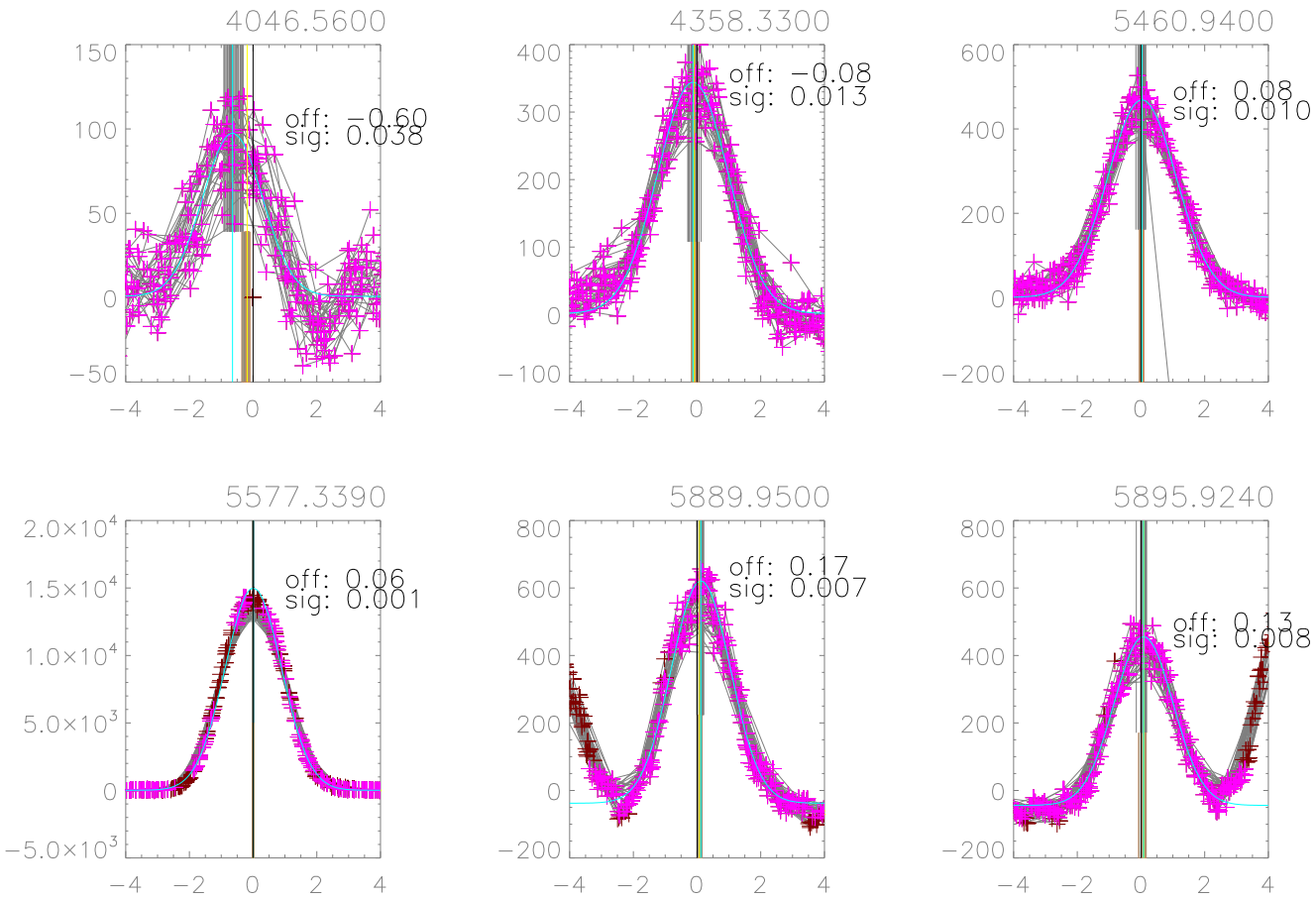

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR−b2−00039821.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
13.6
11.5
9.3
9.3
9.3

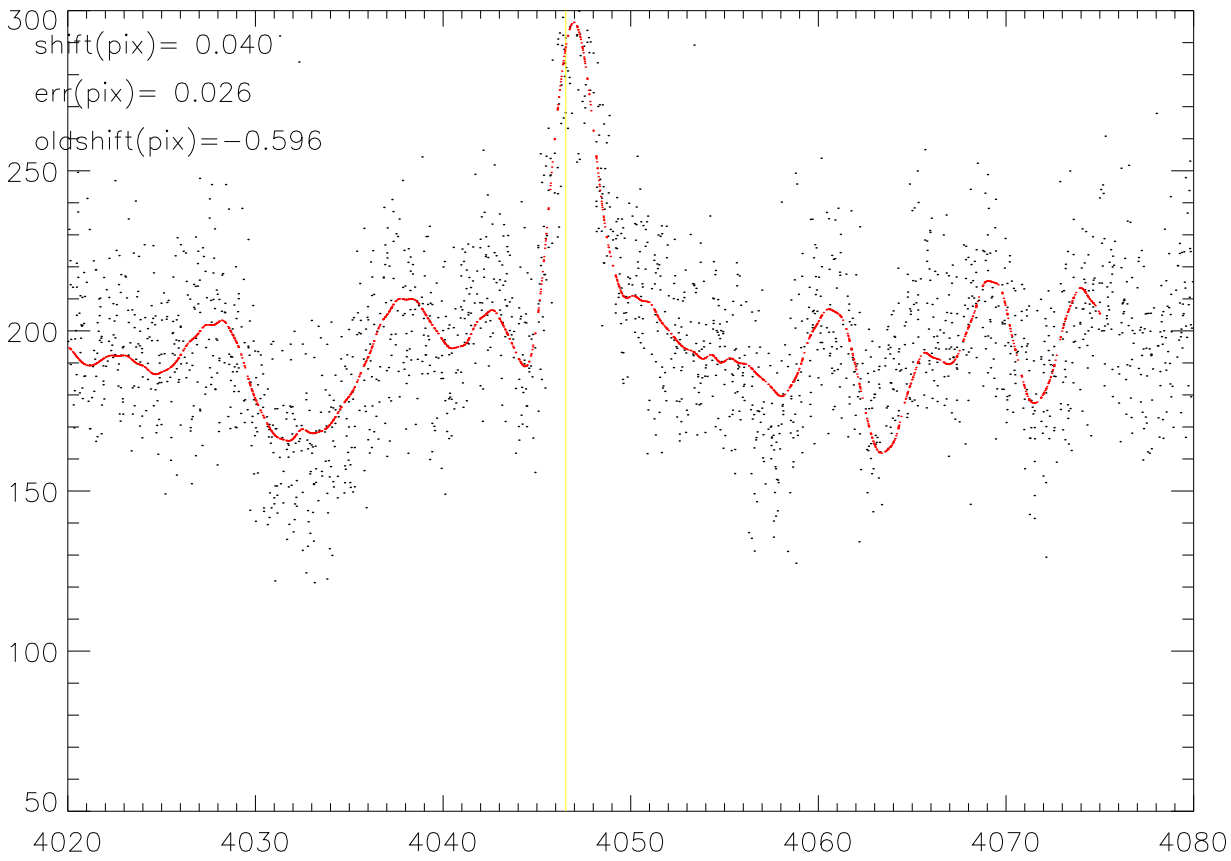

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b2-00039821.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.213
Max value = 14.348
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:10:57 2008

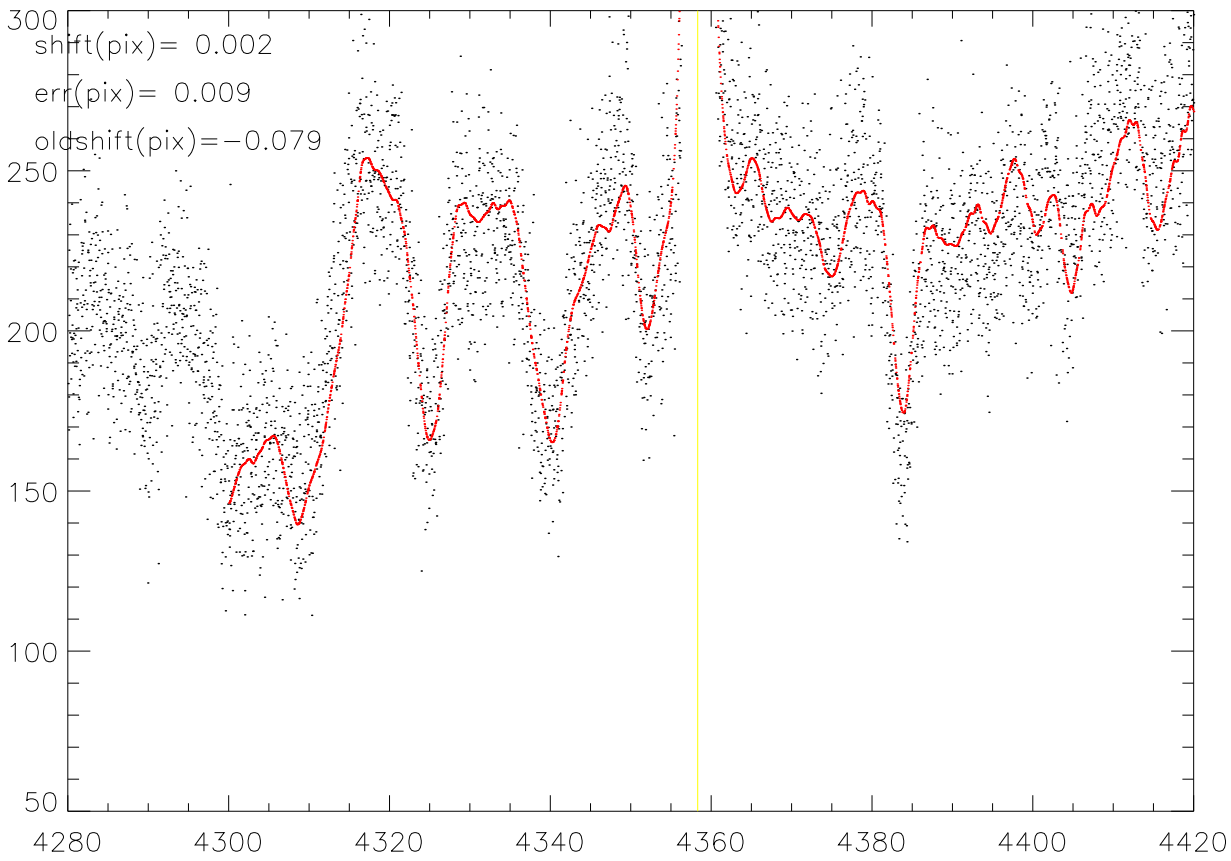

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039821.fit
6.5
8.4
6.5
4.7
6.5
4.7
6.5
8.4
4.7
6.5
8.4
Y [pix]
X [pix]
0
500
1000
1500
2000

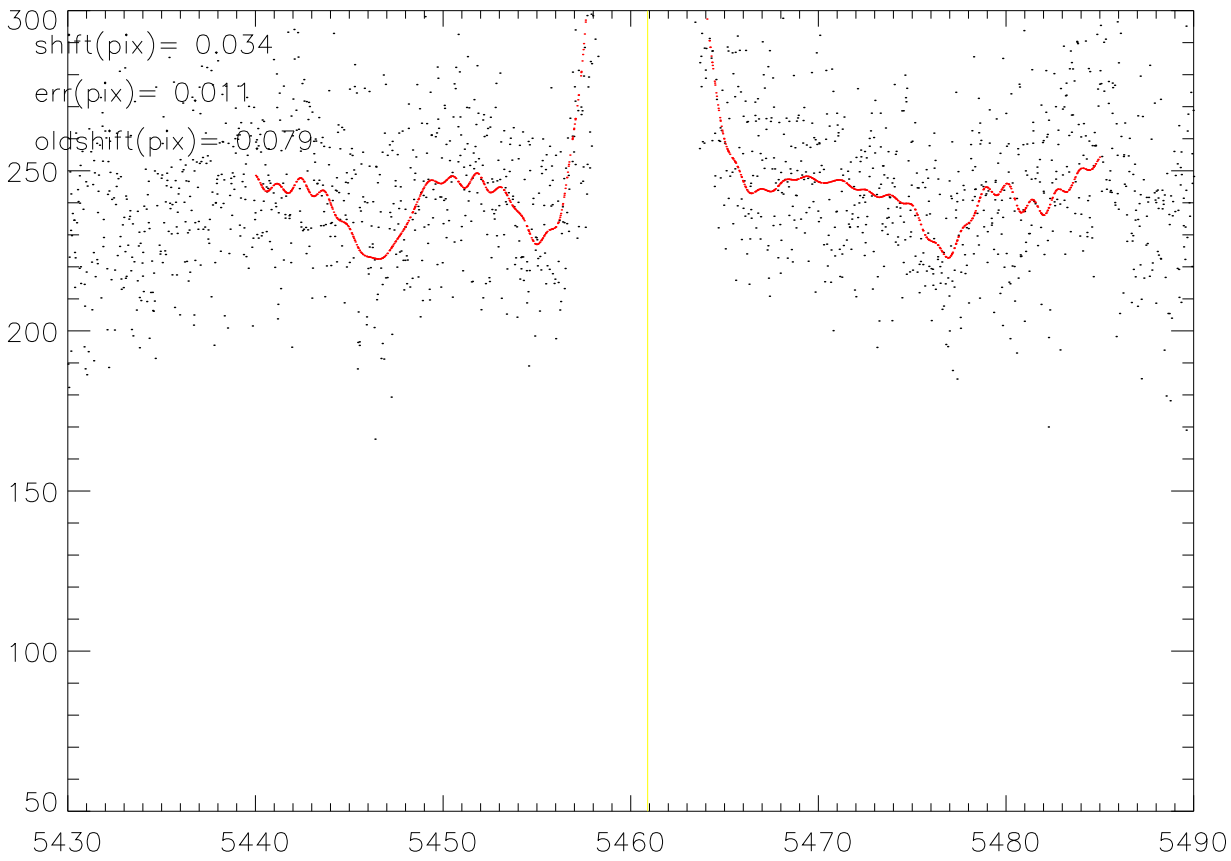

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039821.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.471
Max value = 8.477
Mon Feb 11 00:14:02 2008

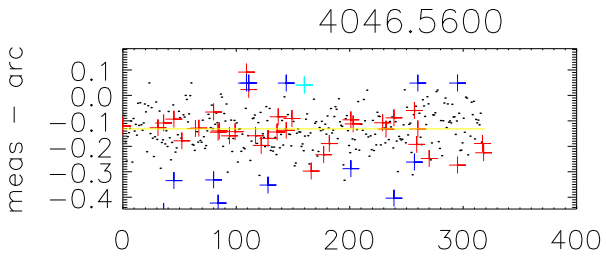

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b2-00039821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

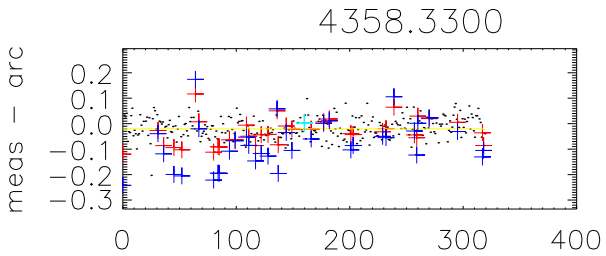

4046.5600
off: −0.60
sig: 0.038
4358.3300
off: −0.08
sig: 0.013
5460.9400
off: 0.08
sig: 0.010
5577.3390
off: 0.06
sig: 0.001
5889.9500
off: 0.17
sig: 0.007
5895.9240
off: 0.13
sig: 0.008

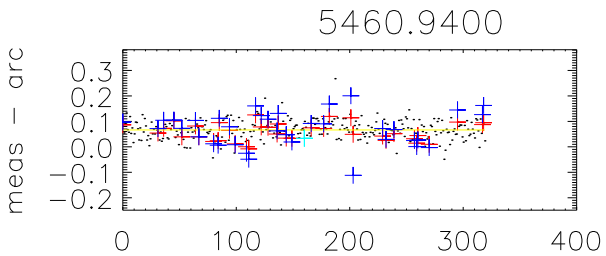

shift(pix)= 0.040
err(pix)= 0.026
oldshift(pix)=−0.596
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

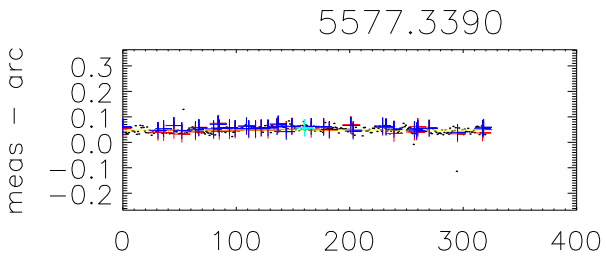

shift(pix)= 0.002
err(pix)= 0.009
oldshift(pix)=−0.079
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

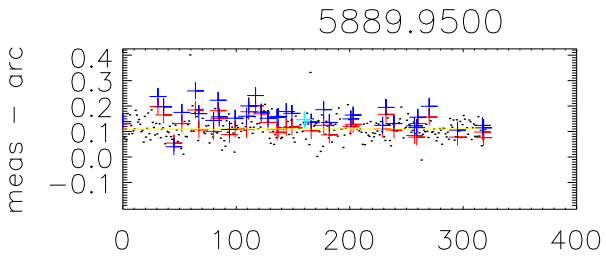

shift(pix)= 0.034
err(pix)= 0.011
oldshift(pix)= 0.079
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

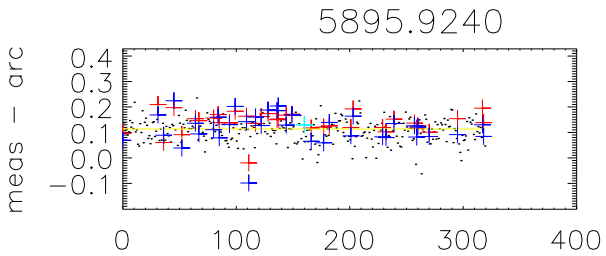

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

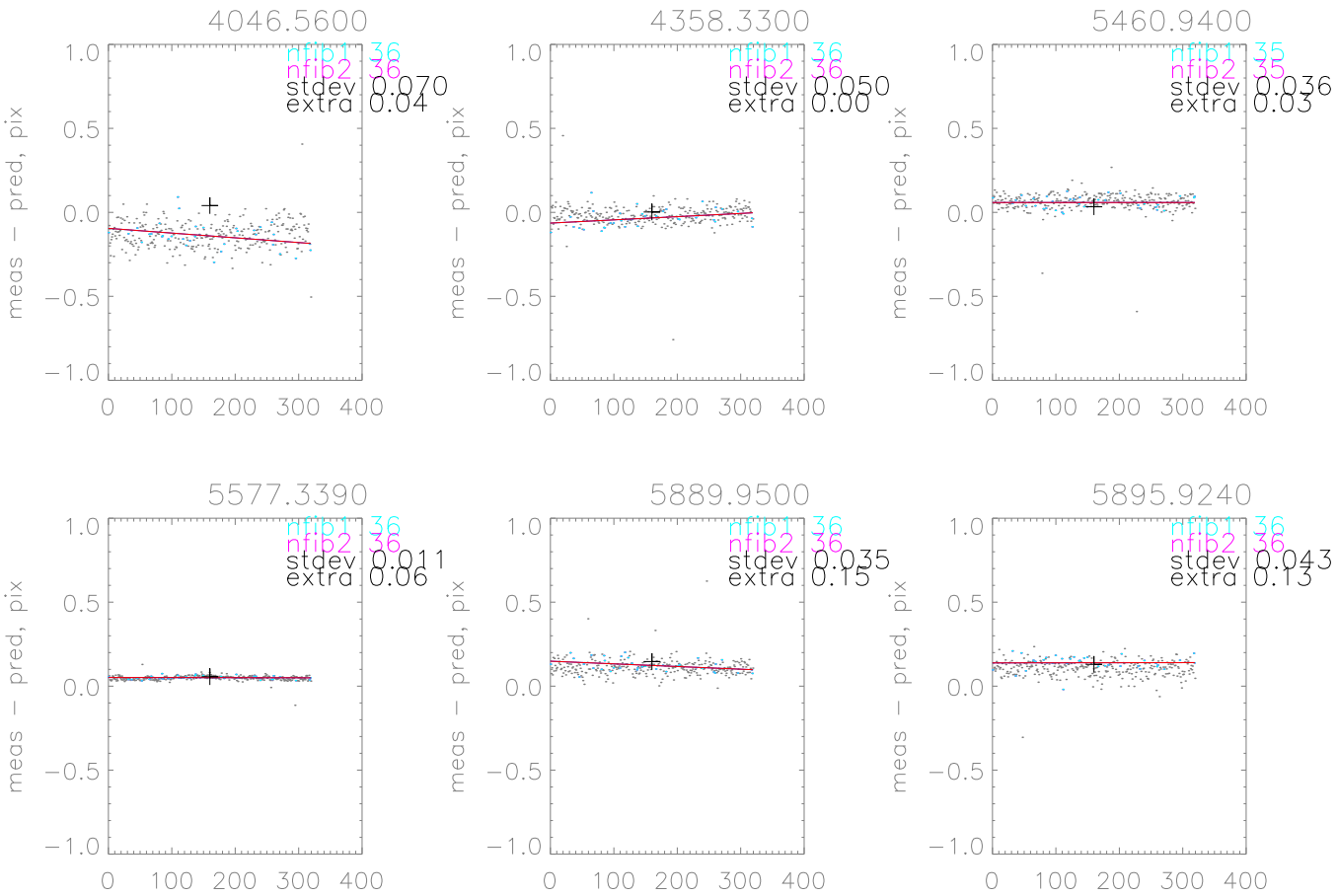

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

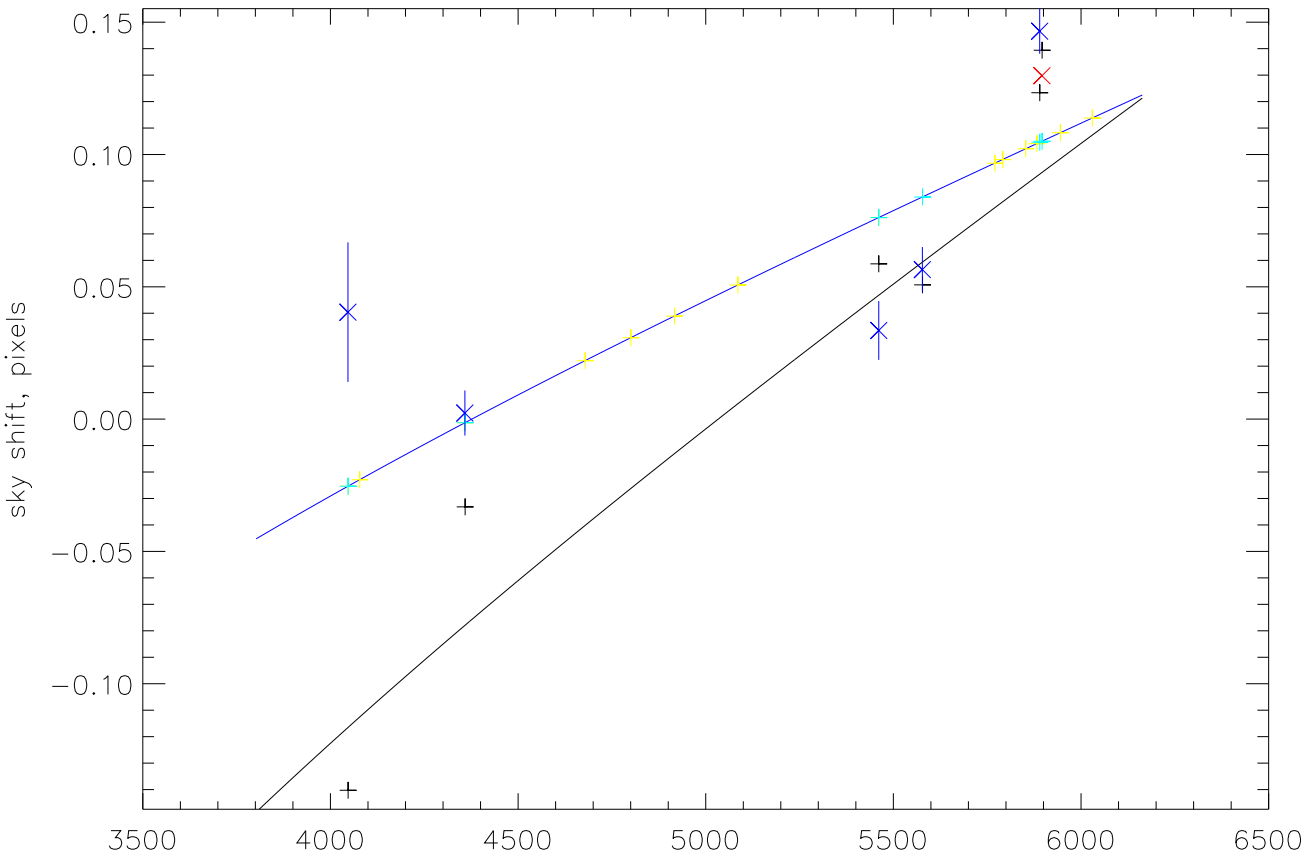

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

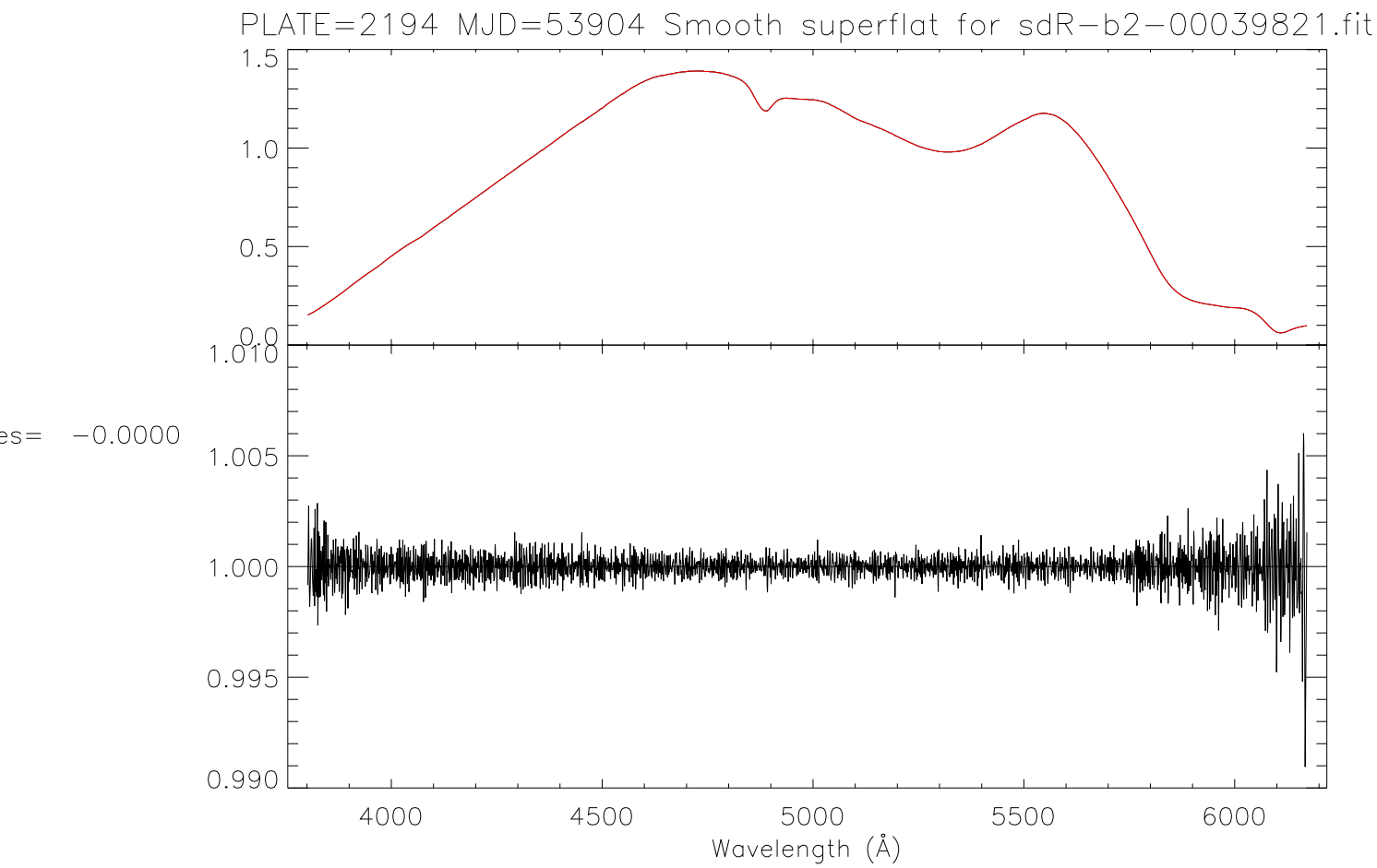

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

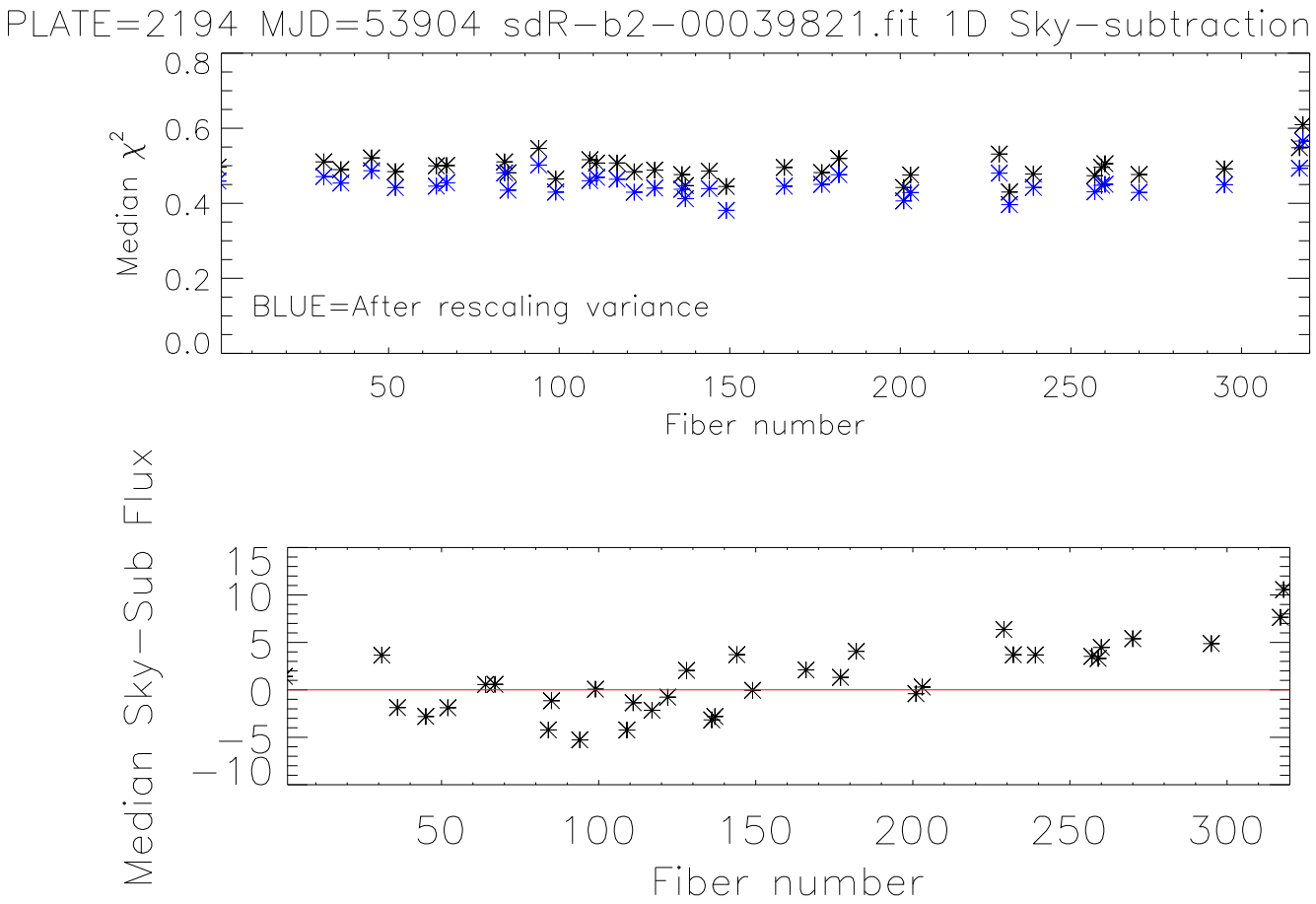

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

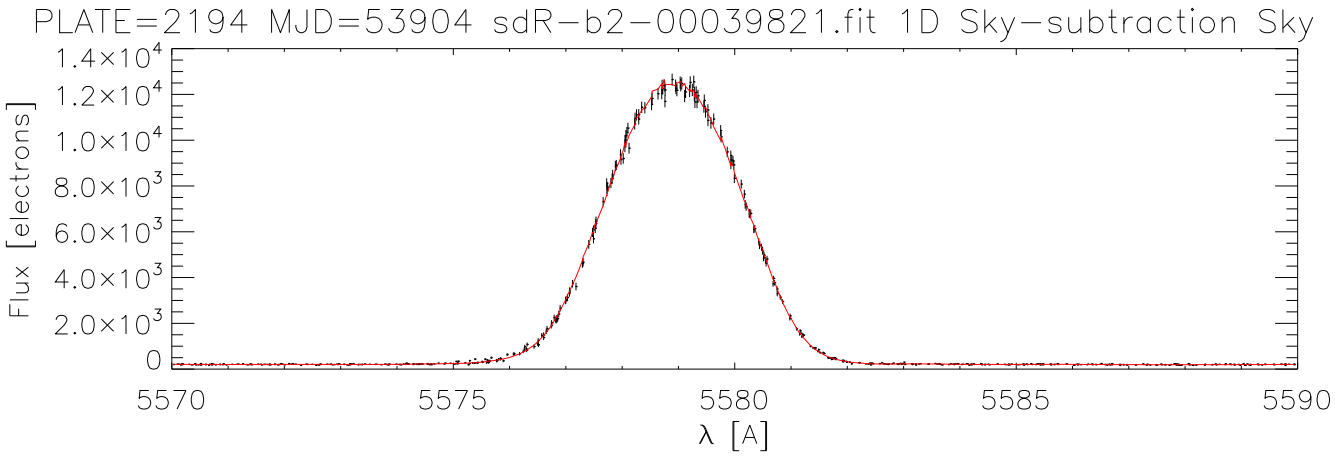

4046.5600
nfib1 36
nfib2 36
stdev 0.070
extra 0.04
4358.3300
nfib1 36
nfib2 36
stdev 0.050
extra 0.00
5460.9400
nfib1 35
nfib2 35
stdev 0.036
extra 0.03
5577.3390
nfib1 36
nfib2 36
stdev 0.011
extra 0.06
5889.9500
nfib1 36
nfib2 36
stdev 0.035
extra 0.15
5895.9240
nfib1 36
nfib2 36
stdev 0.043
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

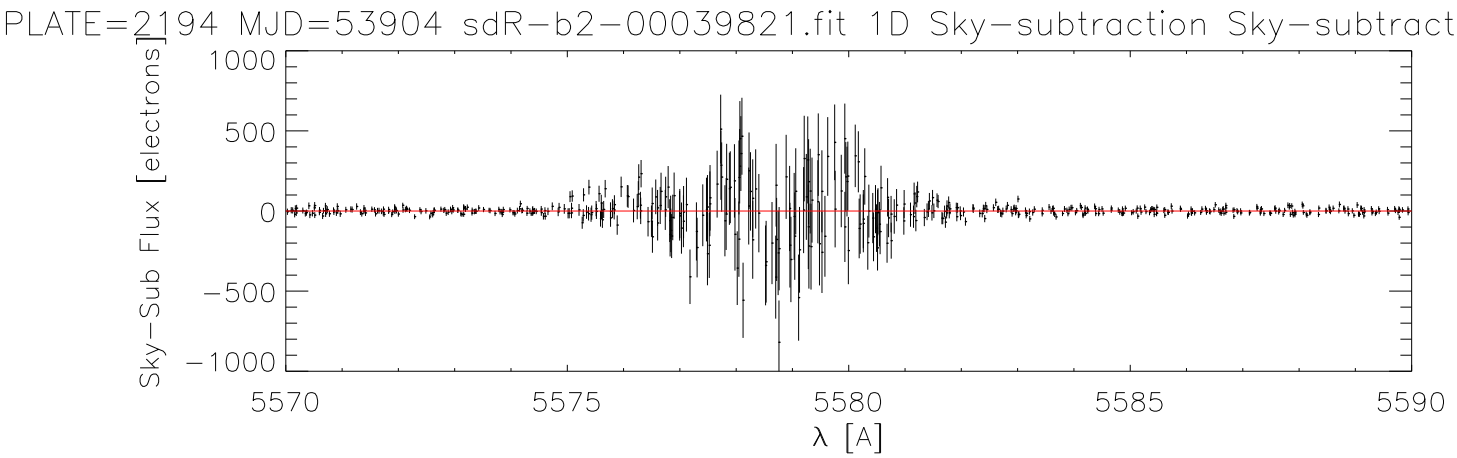

0.15
0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

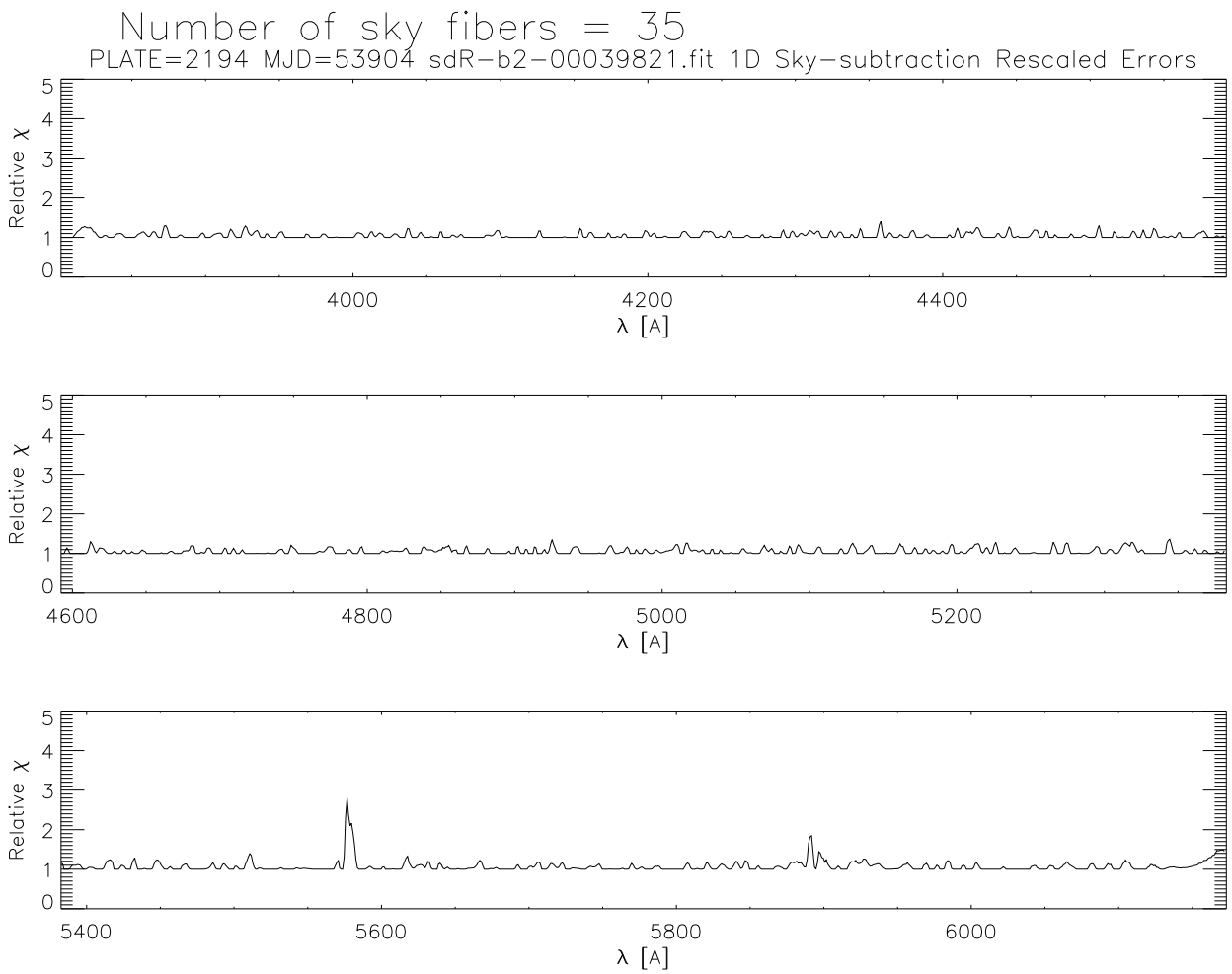

PLATE=2194 MJD=53904 Smooth superflat for sdR-b2-00039821.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

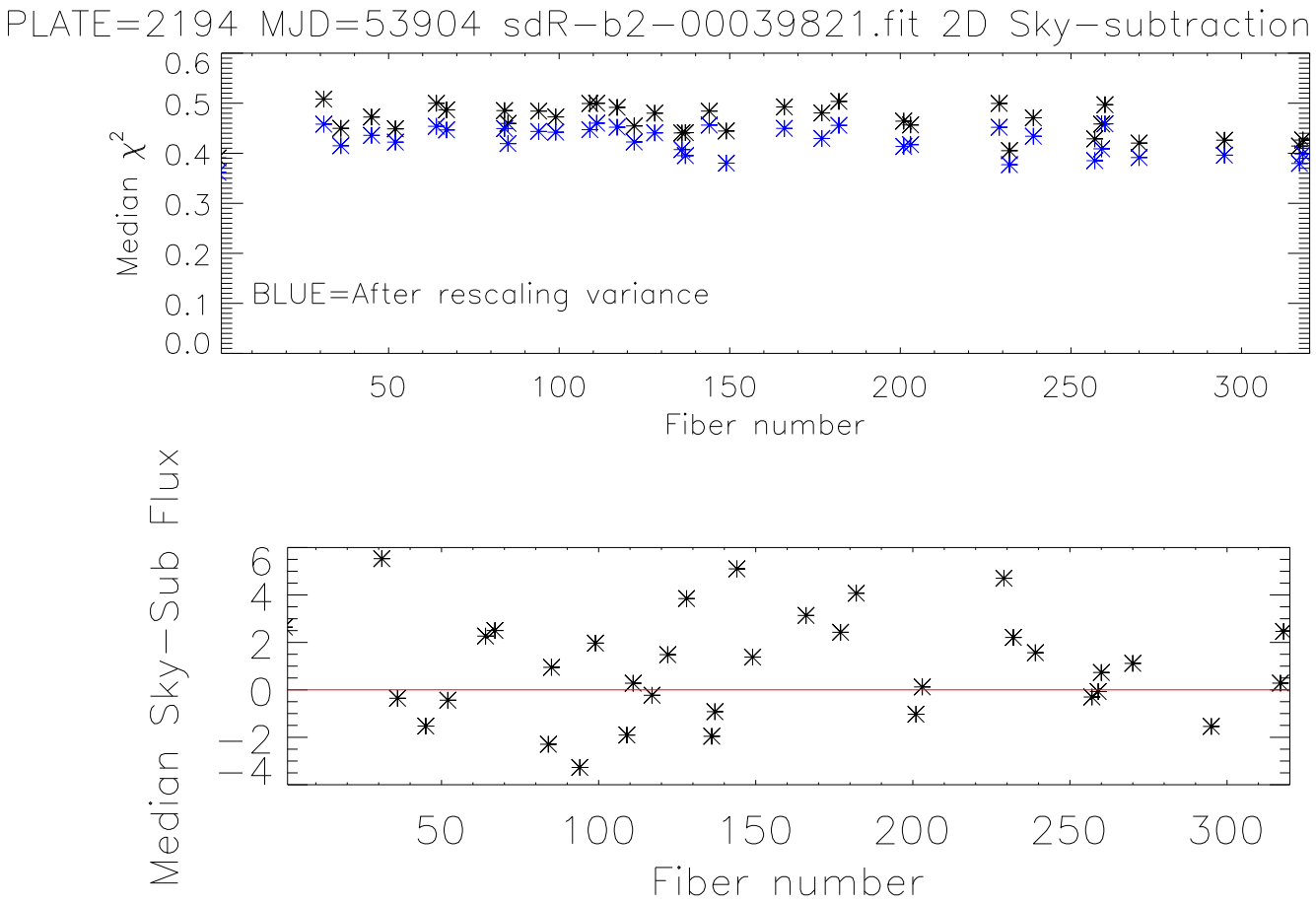
es= −0.0000

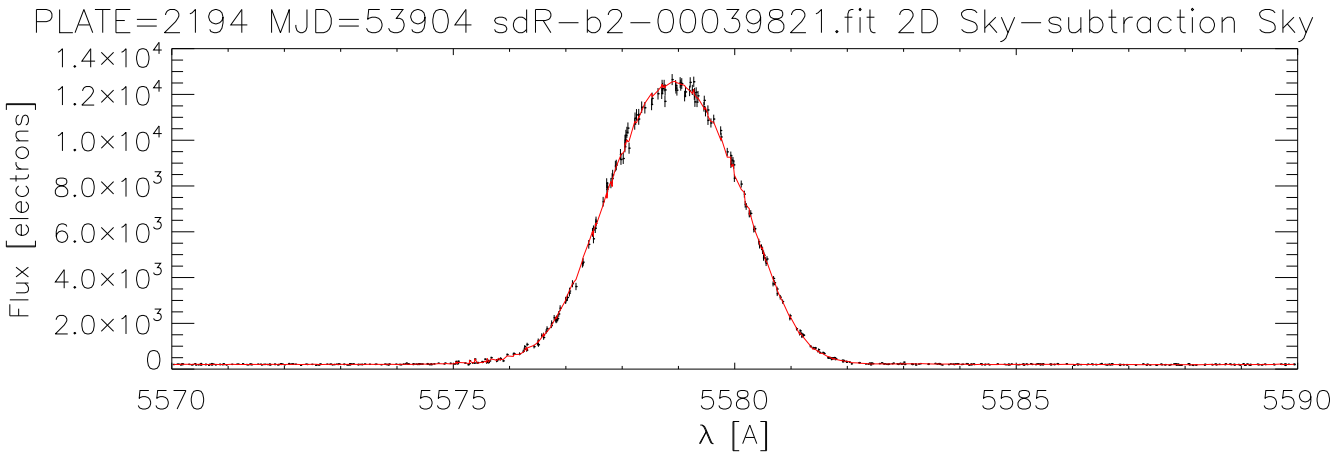

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

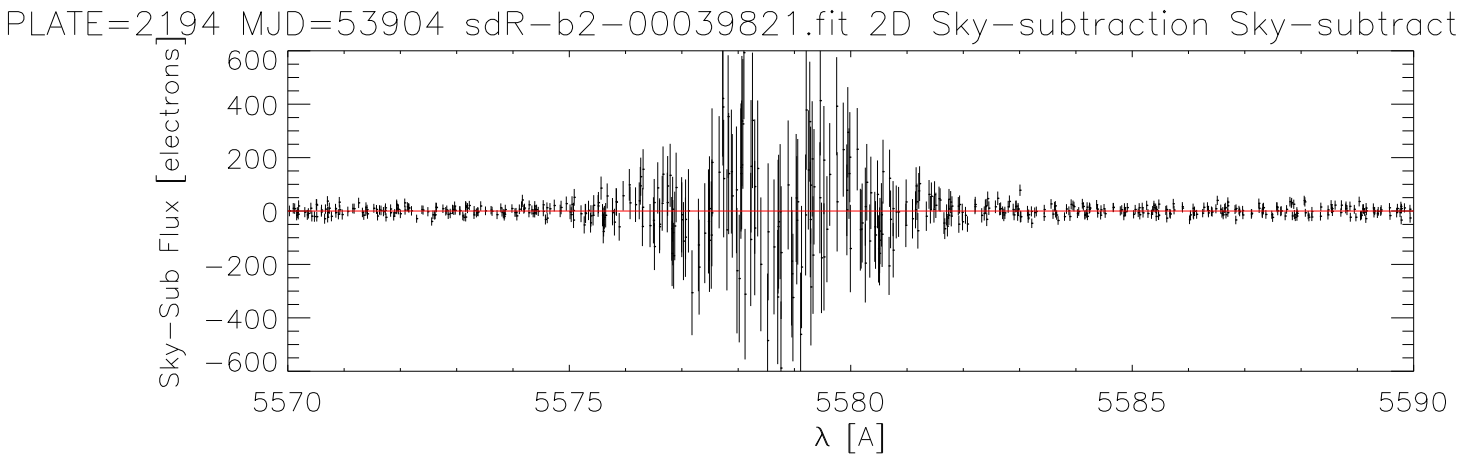

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

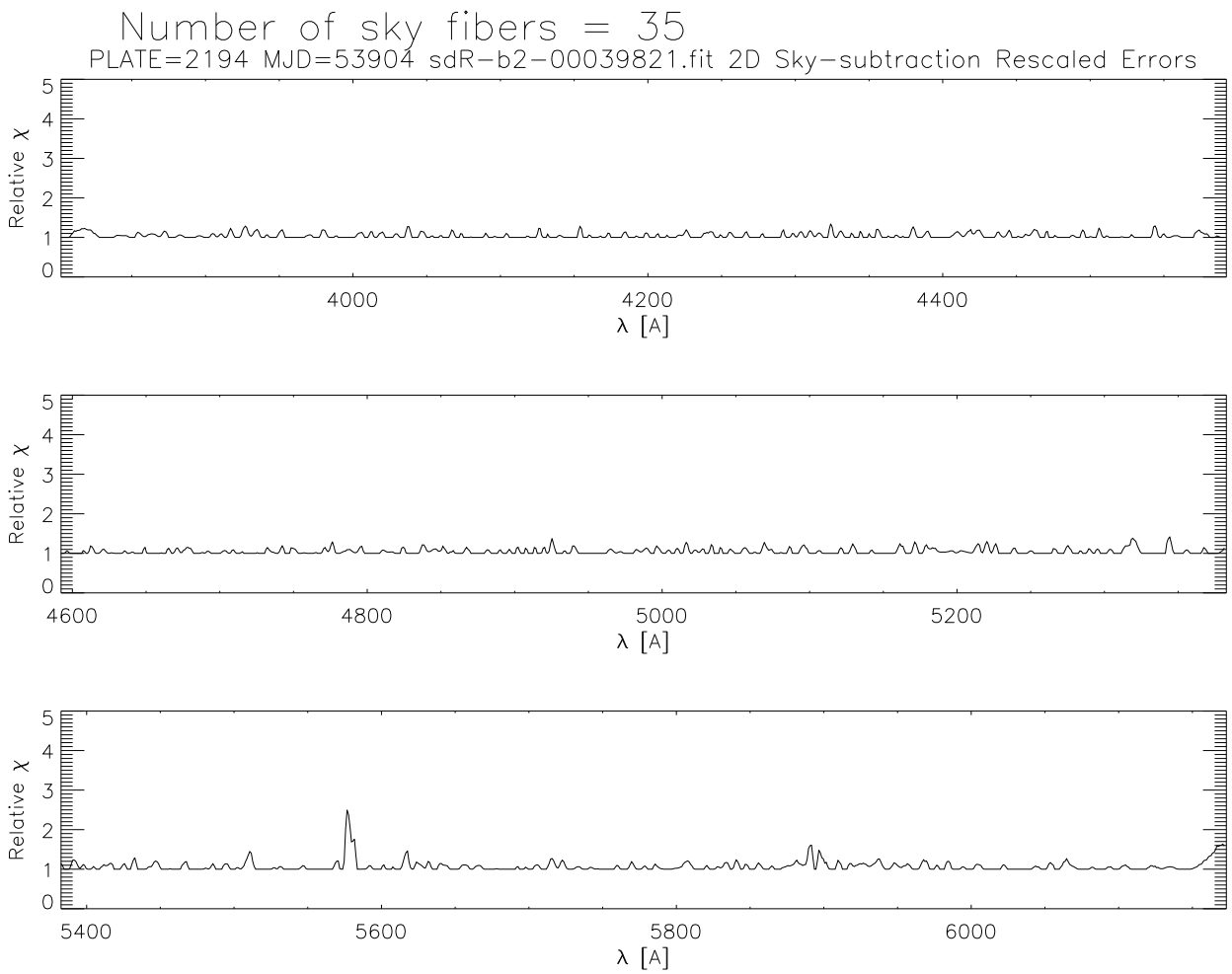

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

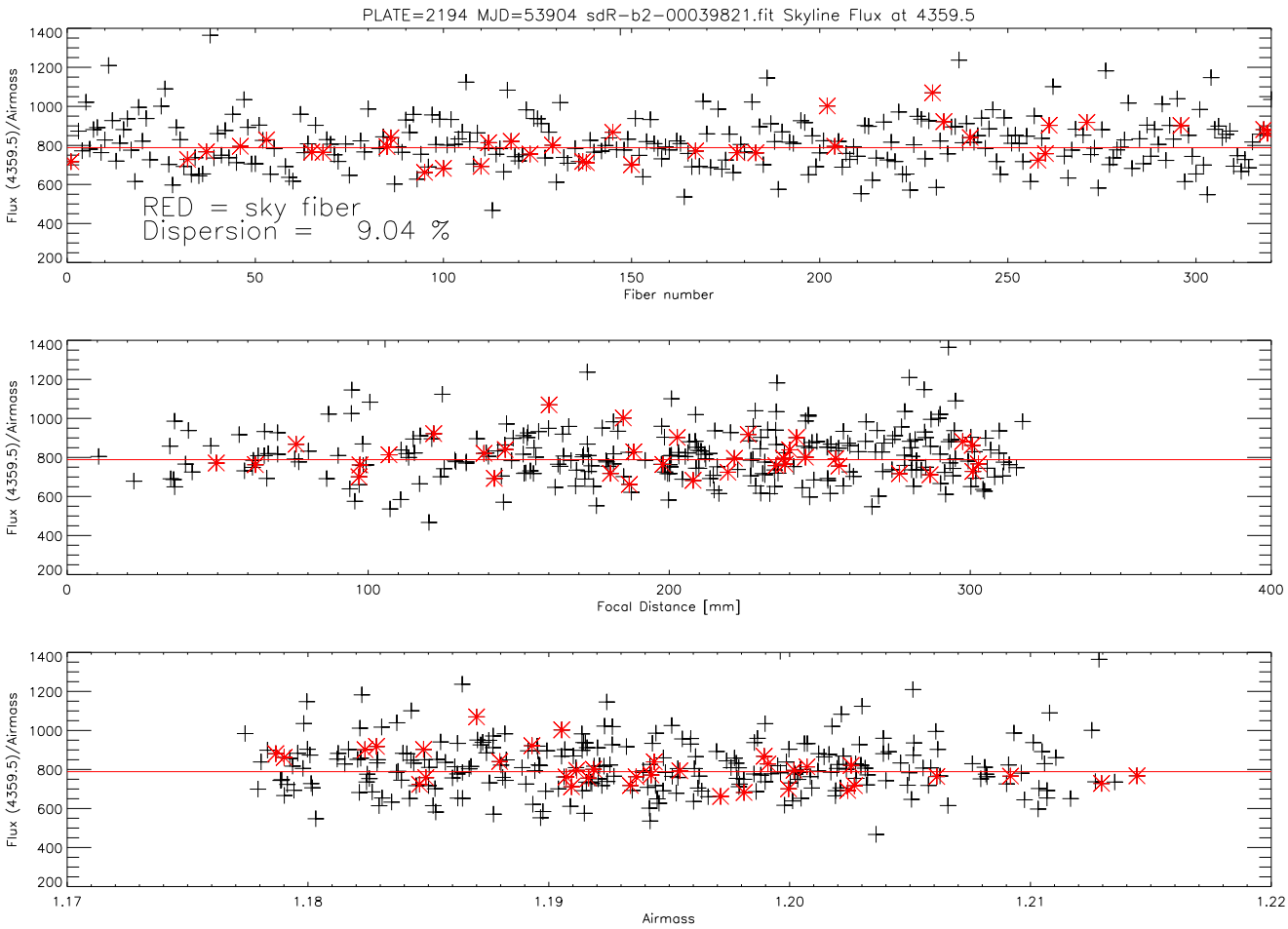

Number of sky fibers = 35
PLATE=2194 MJD=53904 sdR-b2-00039821.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

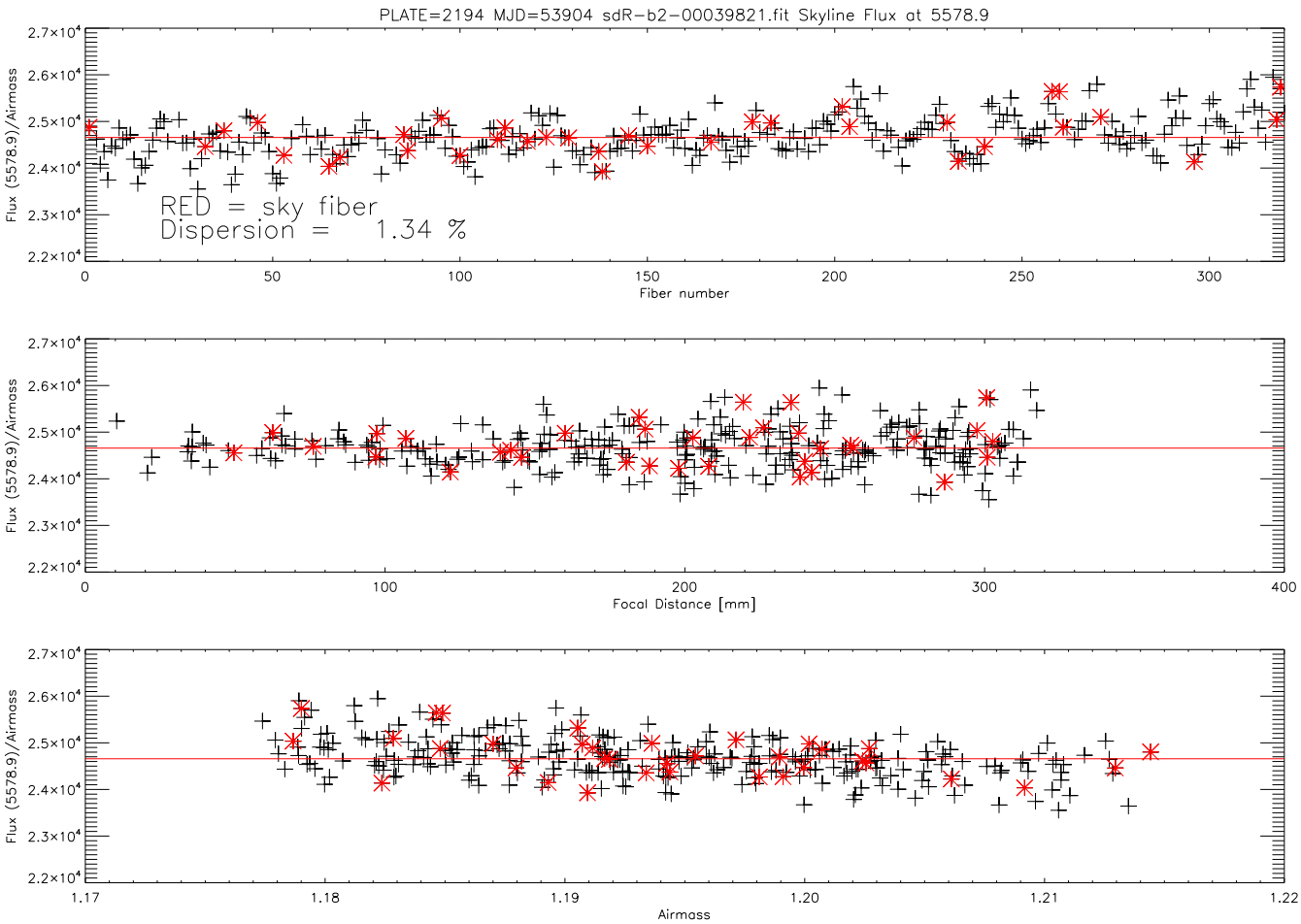

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

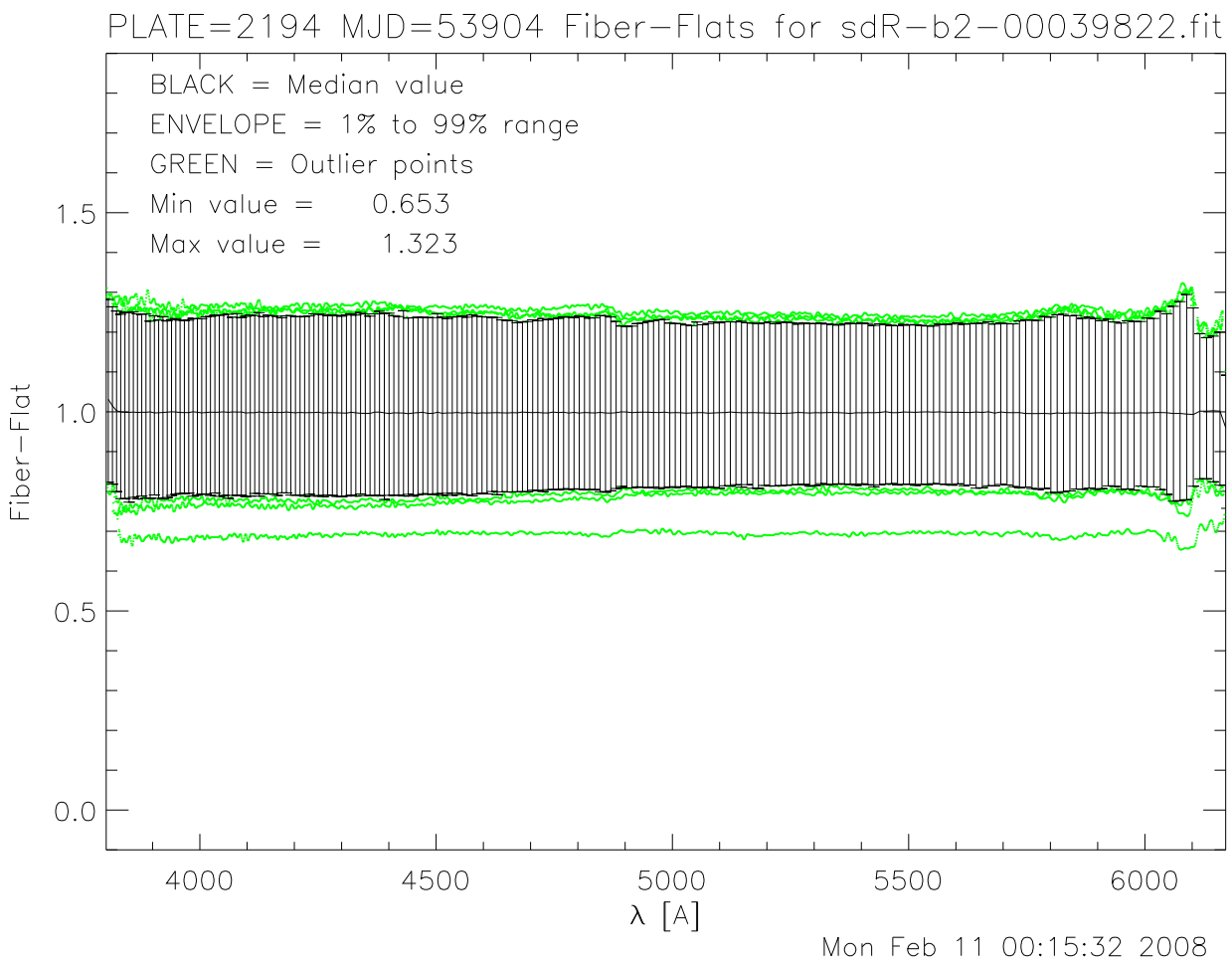

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

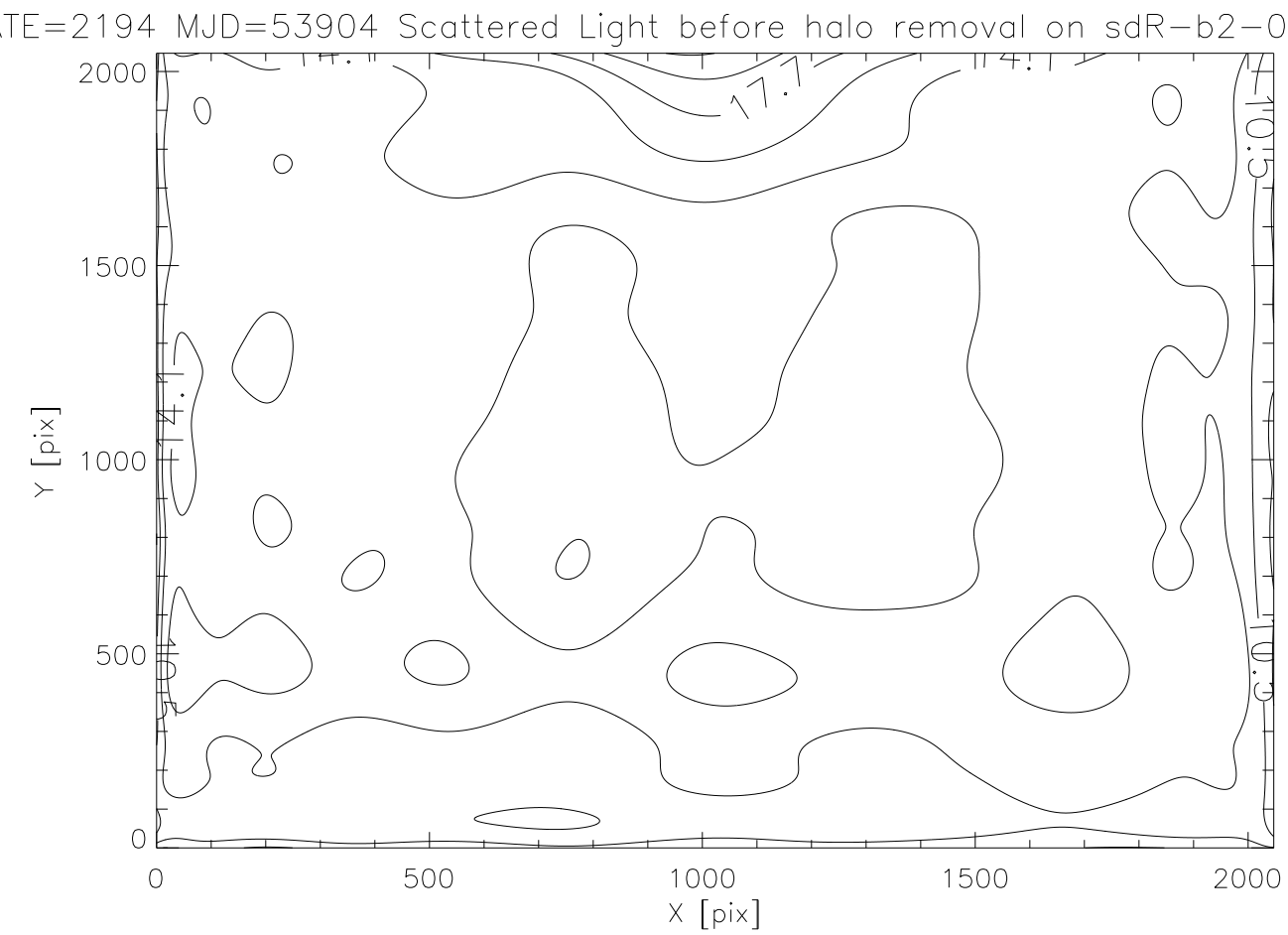

PLATE=2194 MJD=53904 sdR-b2-00039821.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

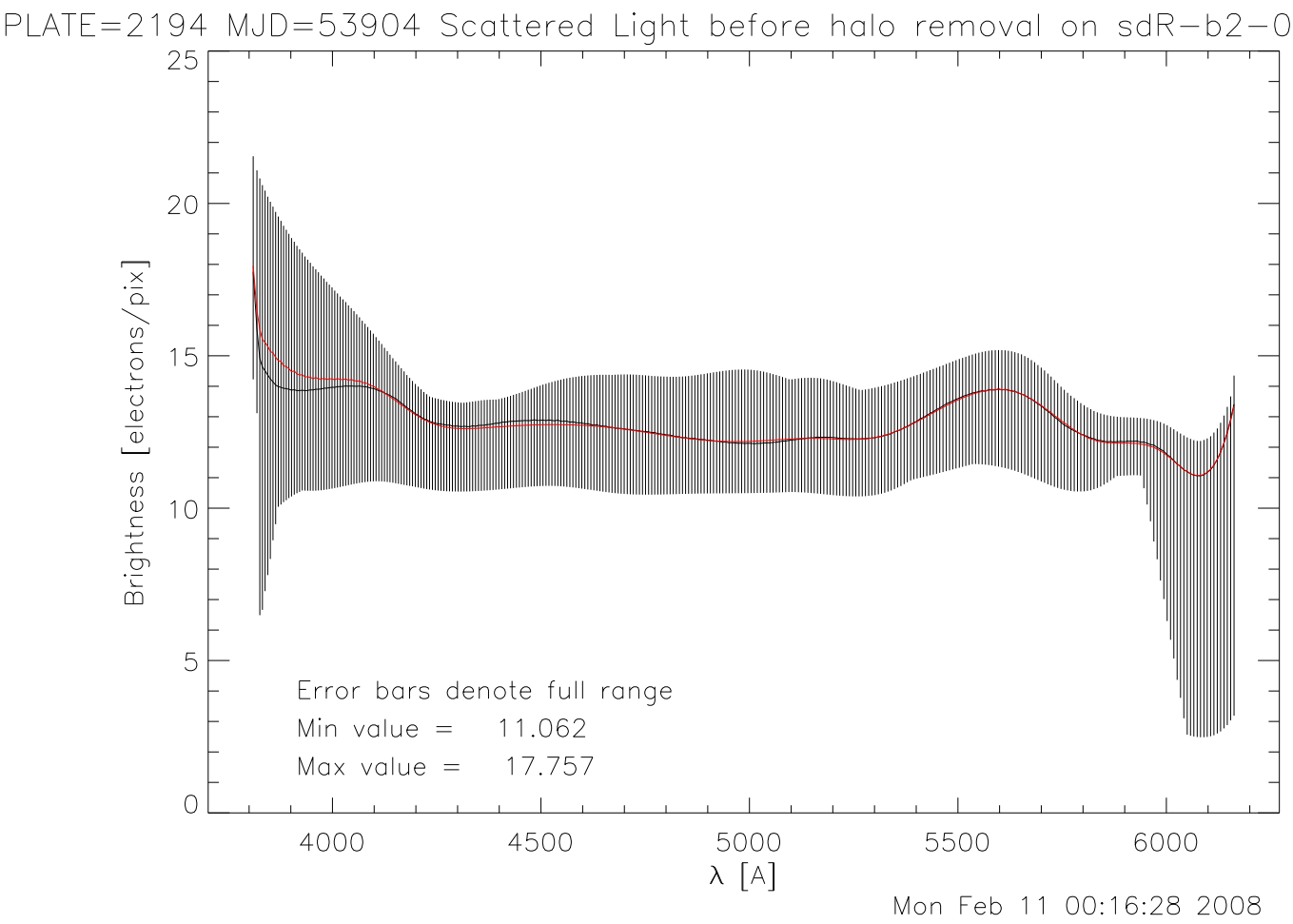

Number of sky fibers = 35
PLATE=2194 MJD=53904 sdR-b2-00039821.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

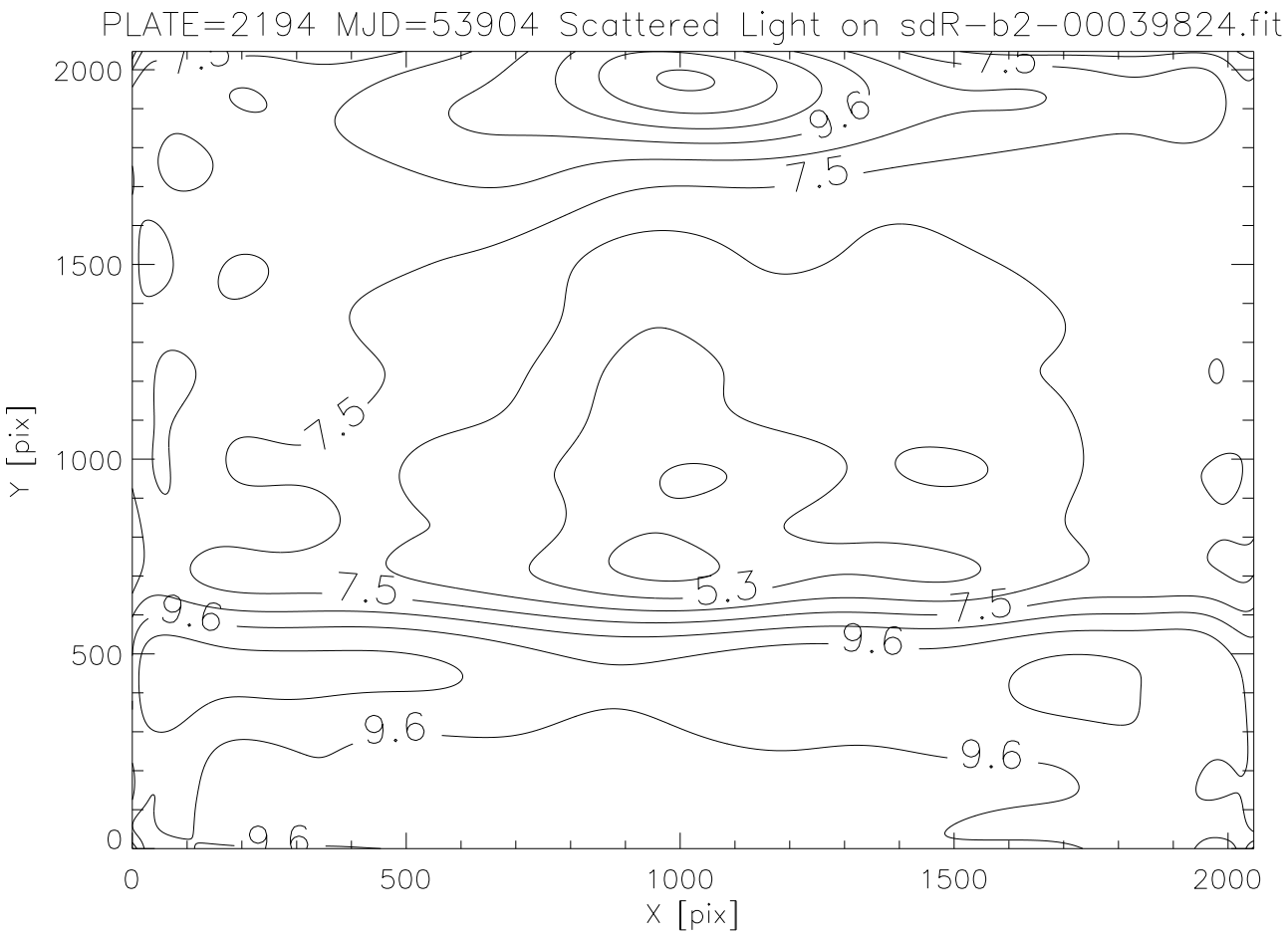

PLATE=2194 MJD=53904 sdR-b2-00039821.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.04 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

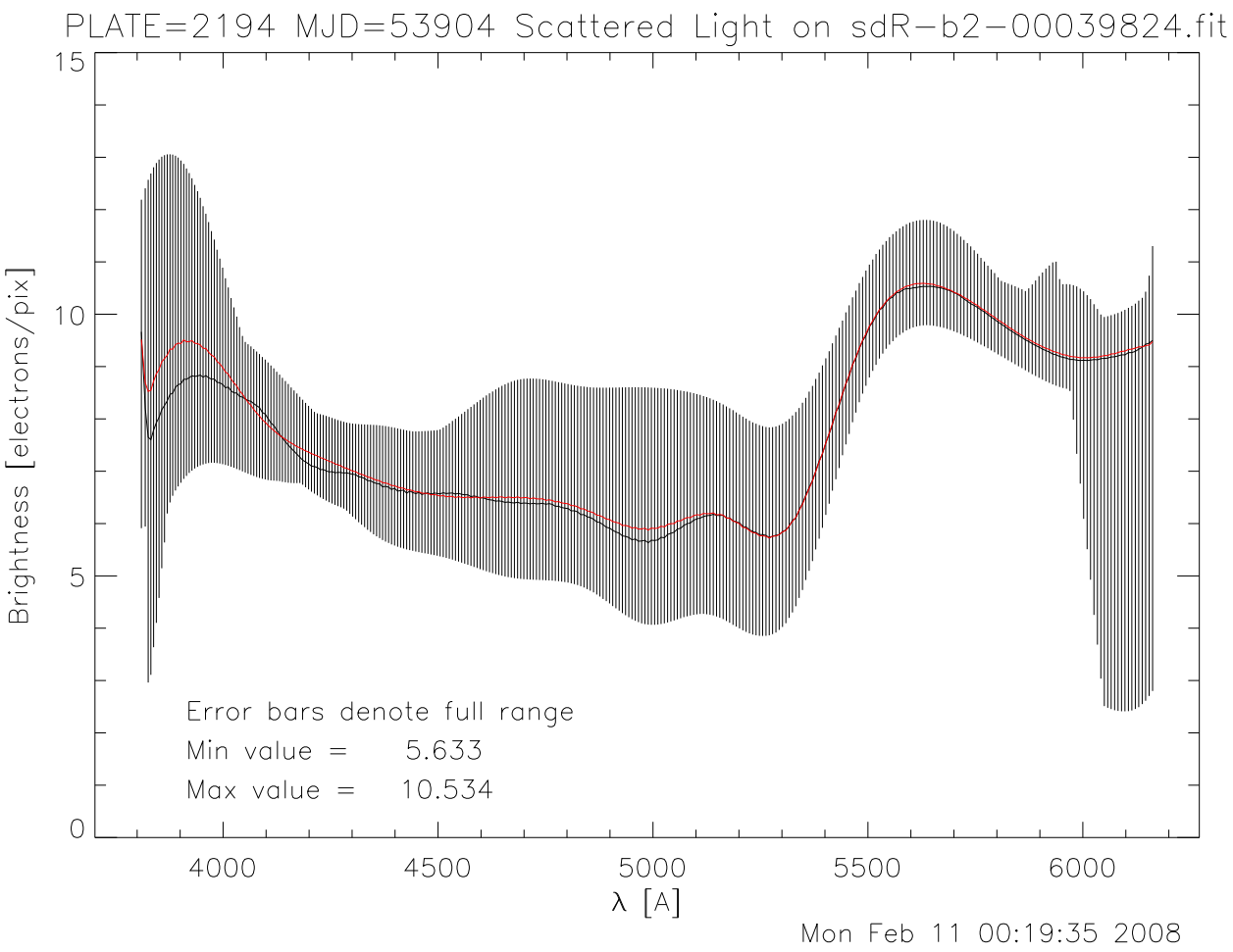

PLATE=2194 MJD=53904 sdR-b2-00039821.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.34 %
Fiber number
Focal Distance [mm]
Airmass

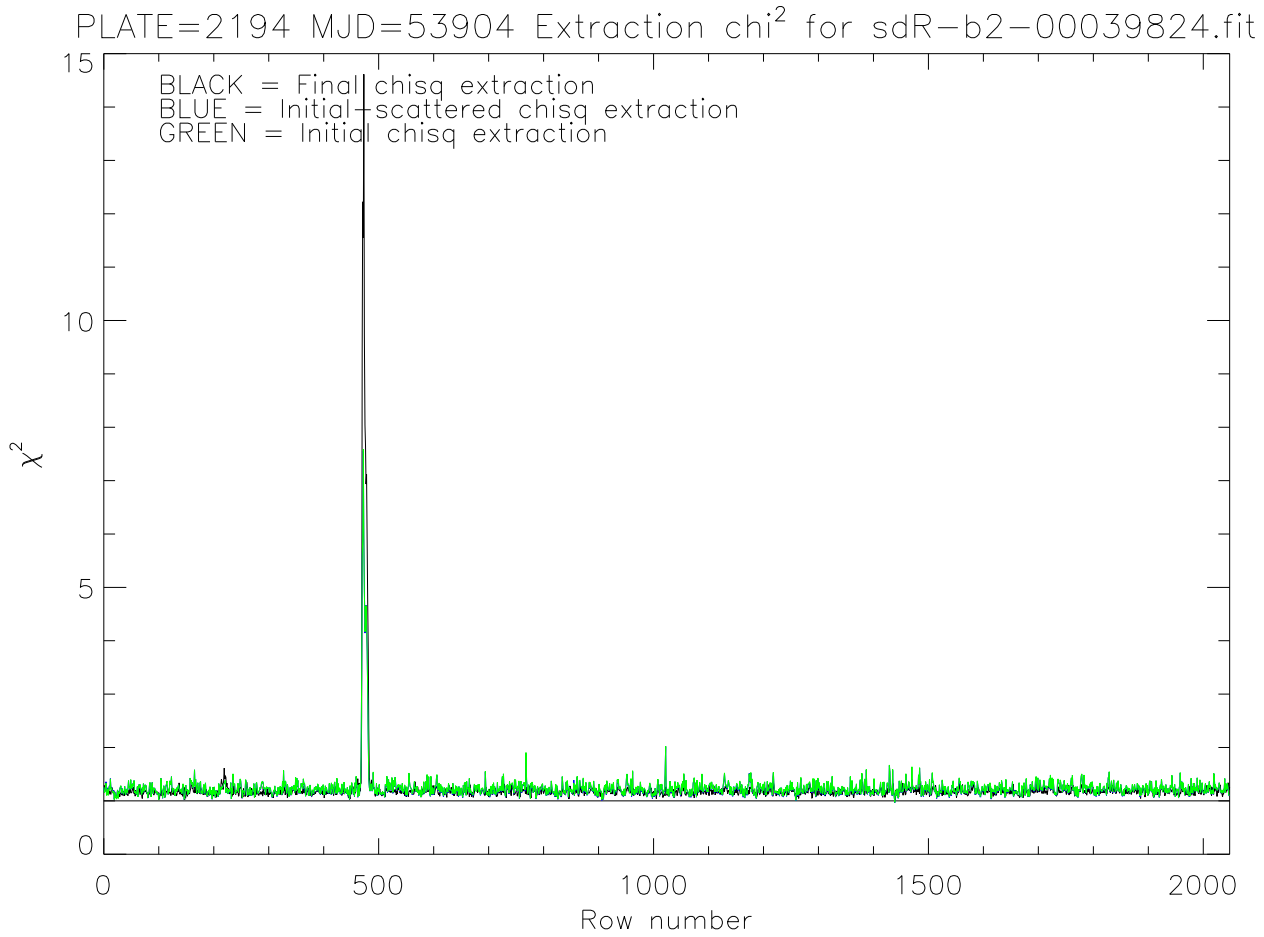

PLATE=2194 MJD=53904 Fiber−Flats for sdR−b2−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.653
Max value = 1.323
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:15:32 2008

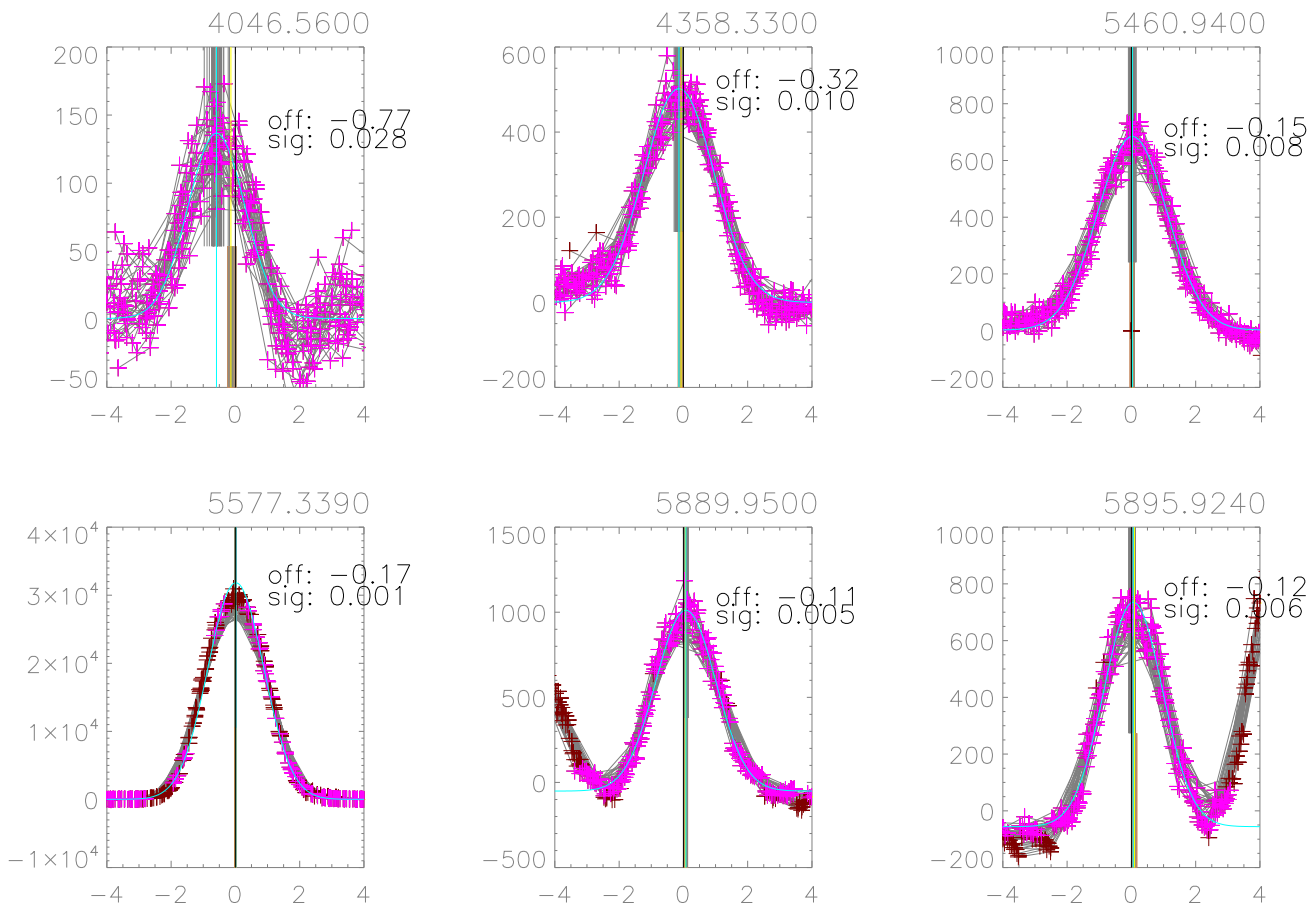

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b2-00039824.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
17.7
14.1
10.5
10.5

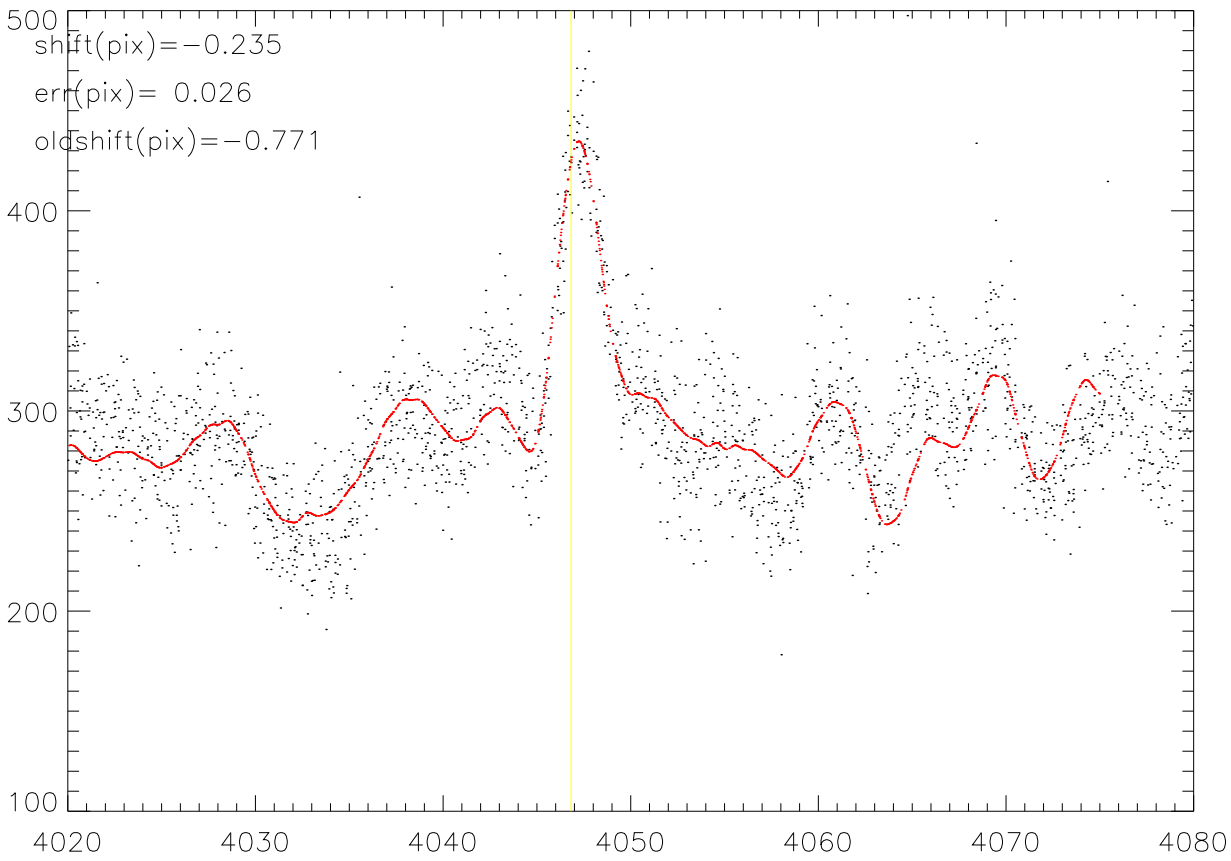

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-b2-00039824.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 11.062
Max value = 17.757
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 00:16:28 2008

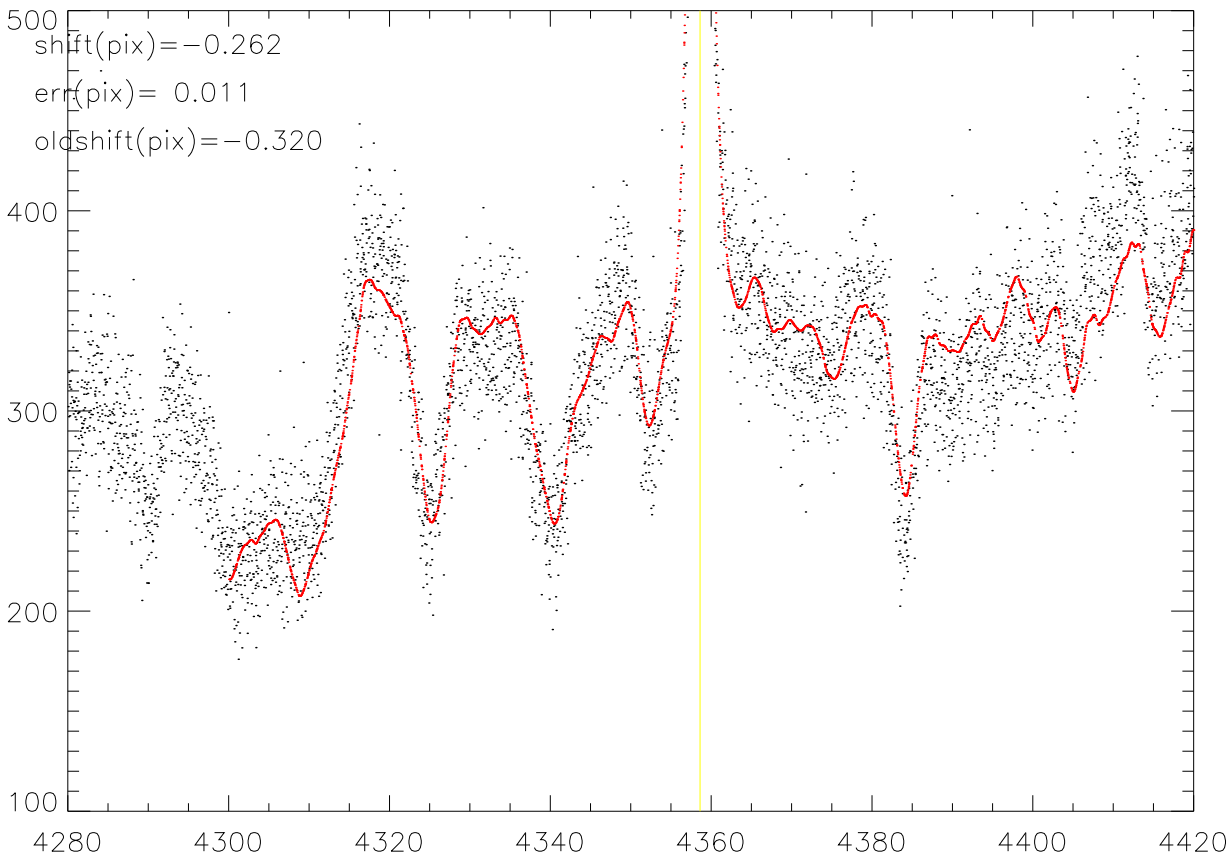

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039824.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
9.6
5.3

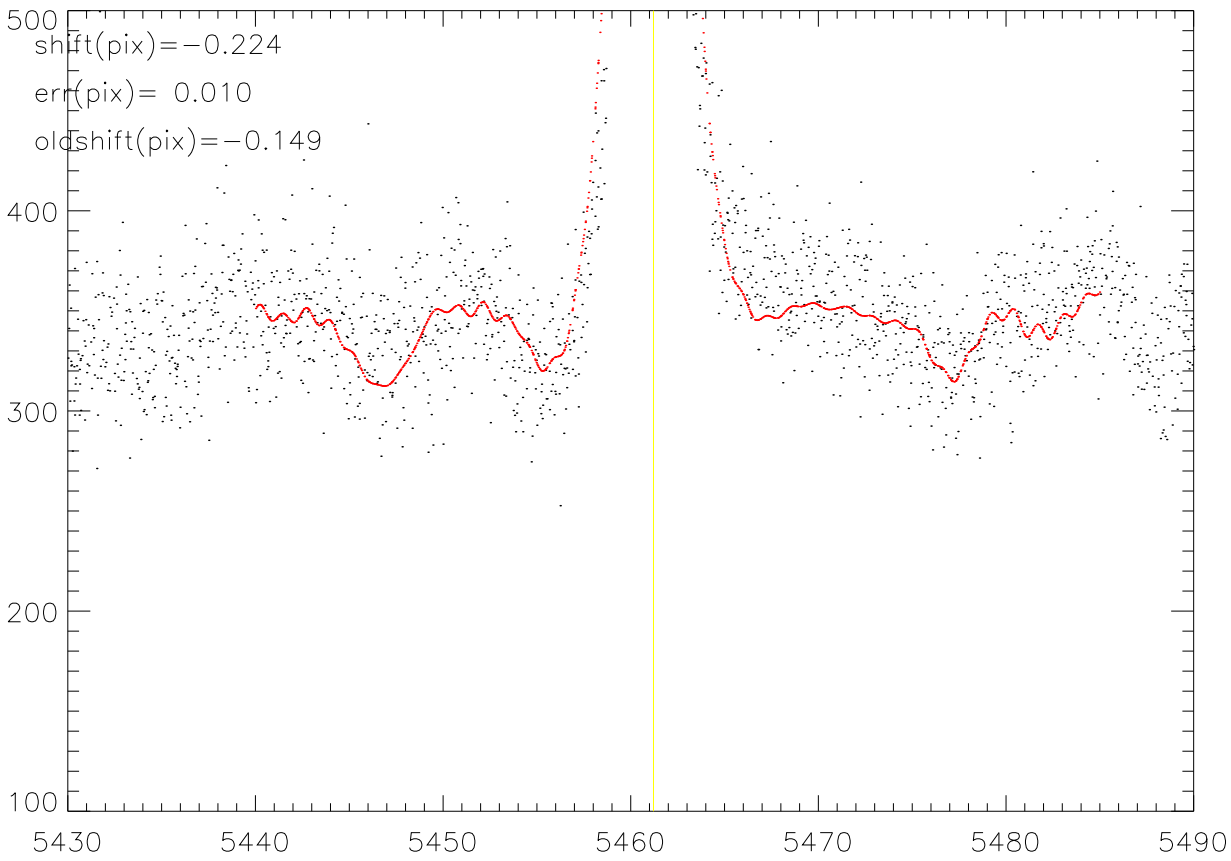

PLATE=2194 MJD=53904 Scattered Light on sdR-b2-00039824.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.633
Max value = 10.534
Mon Feb 11 00:19:35 2008

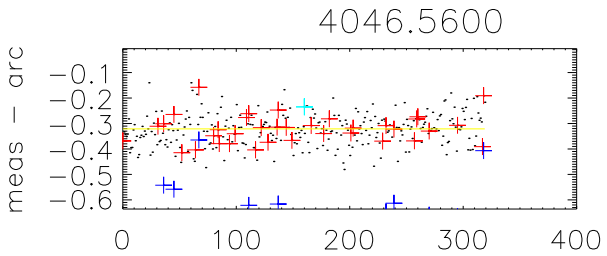

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-b2-00039824.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

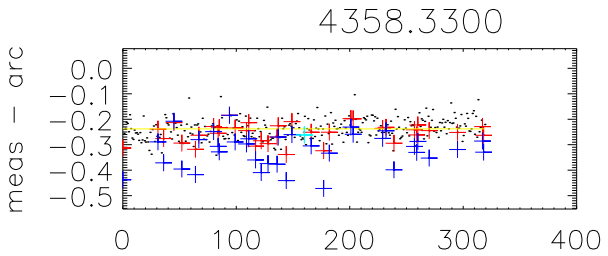

4046.5600
off: −0.77
sig: 0.028
4358.3300
off: −0.32
sig: 0.010
5460.9400
off: −0.15
sig: 0.008
5577.3390
off: −0.17
sig: 0.001
5889.9500
off: −0.11
sig: 0.005
5895.9240
off: −0.12
sig: 0.006

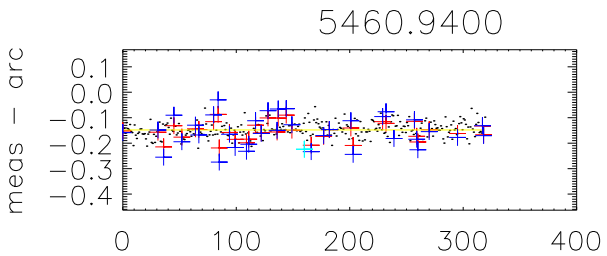

shift(pix)=−0.235
err(pix)= 0.026
oldshift(pix)=−0.771
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

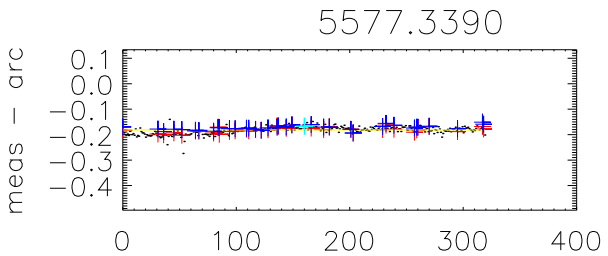

shift(pix)=−0.262
err(pix)= 0.011
oldshift(pix)=−0.320
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

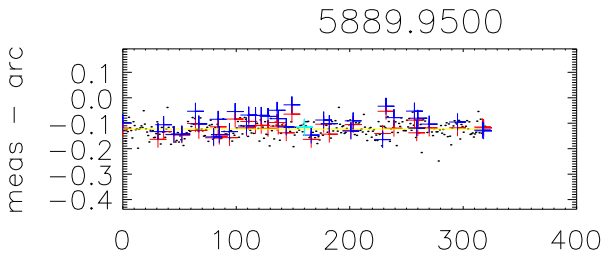

shift(pix)=−0.224
err(pix)= 0.010
oldshift(pix)=−0.149
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

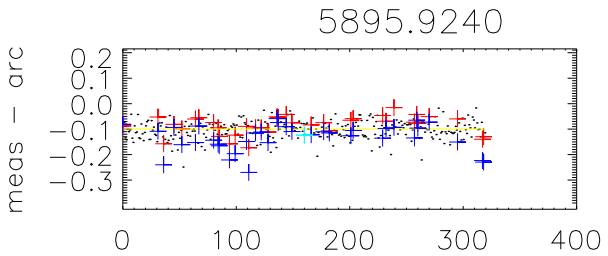

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

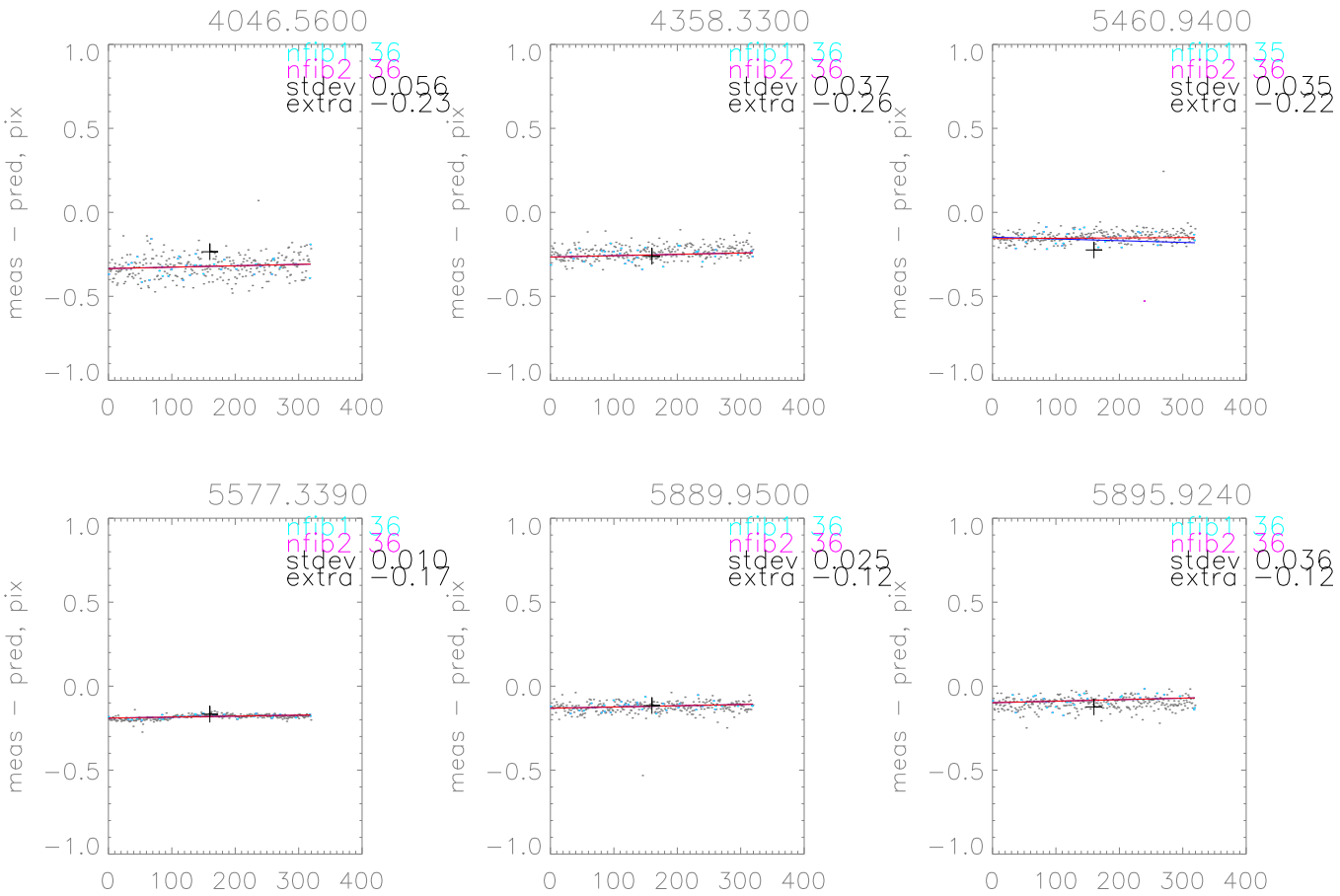

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

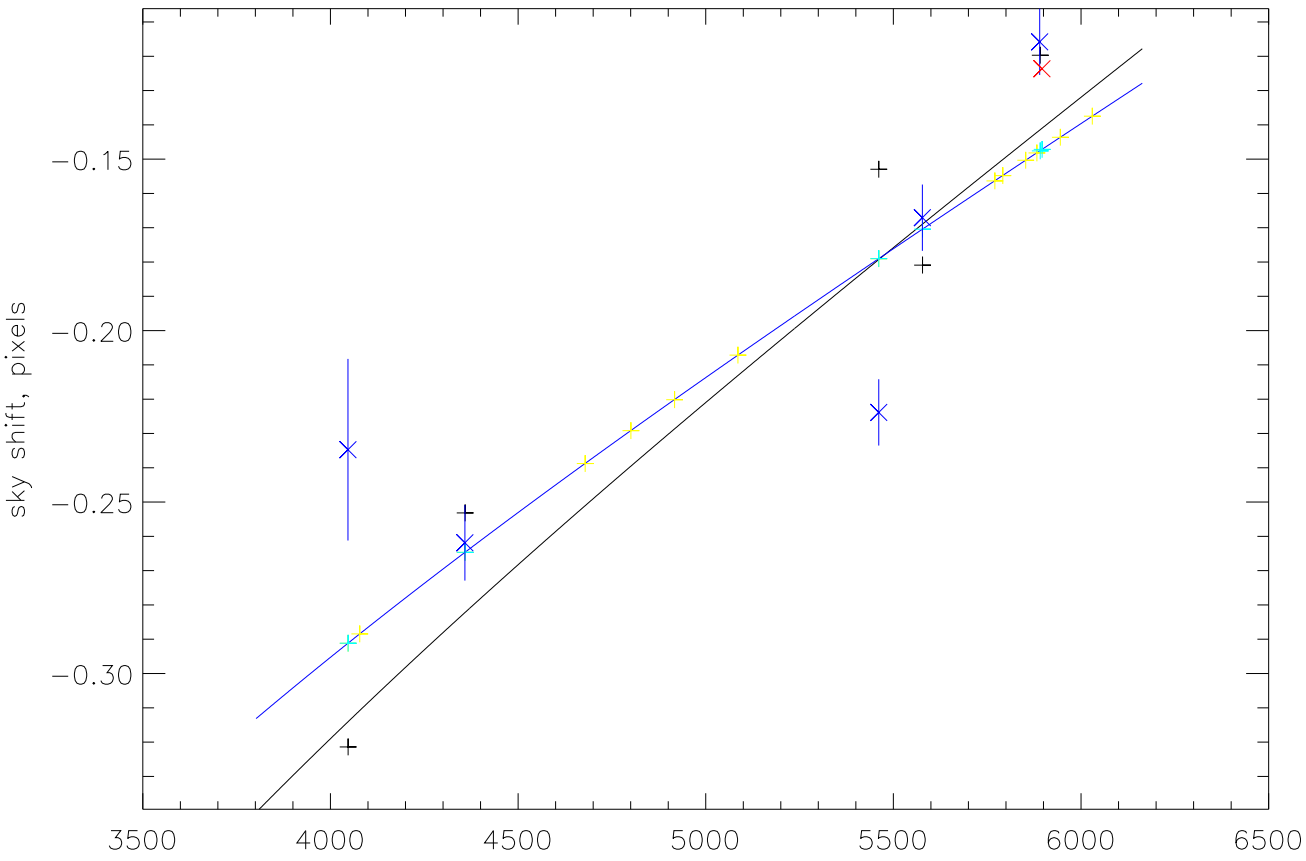

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

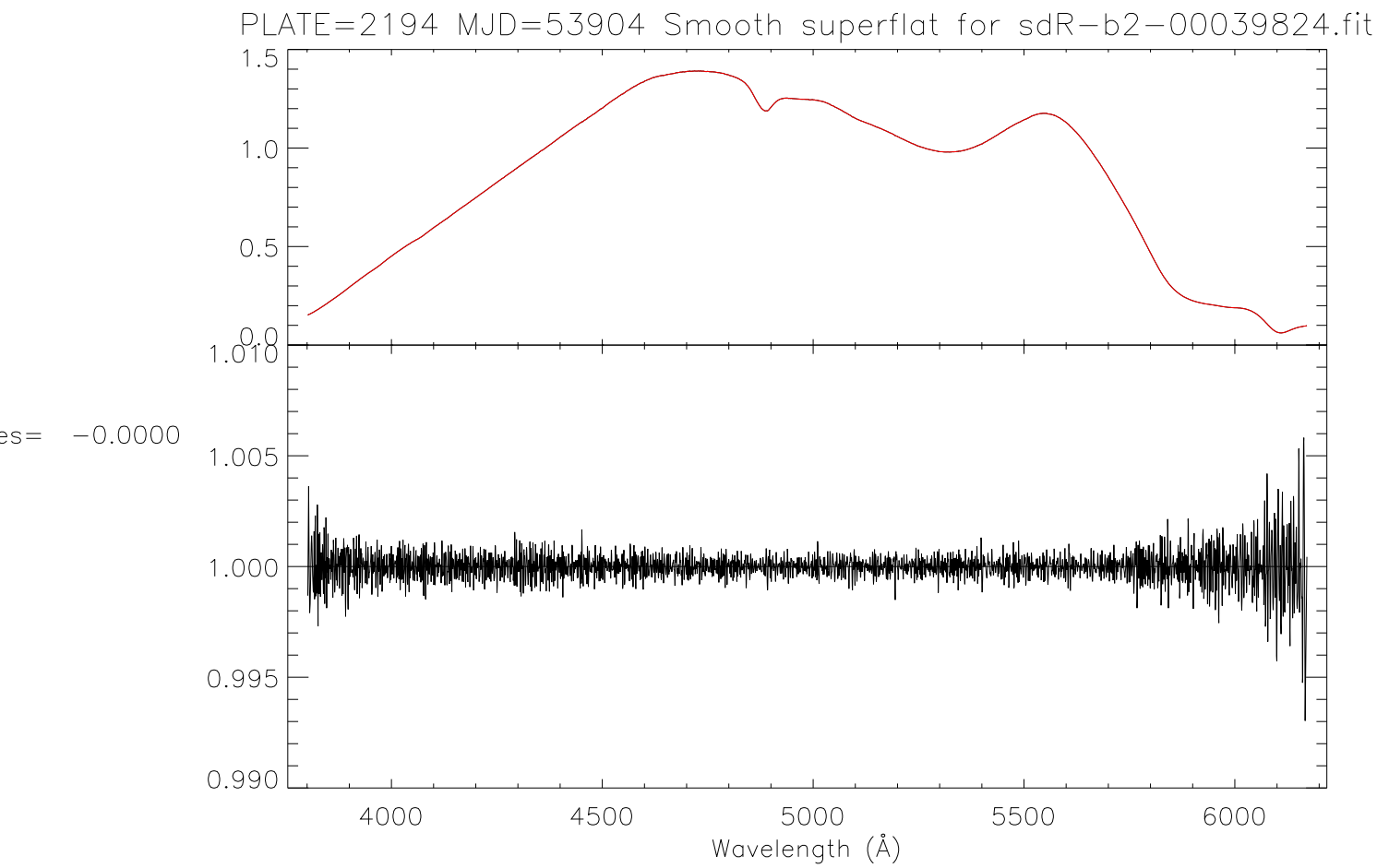

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

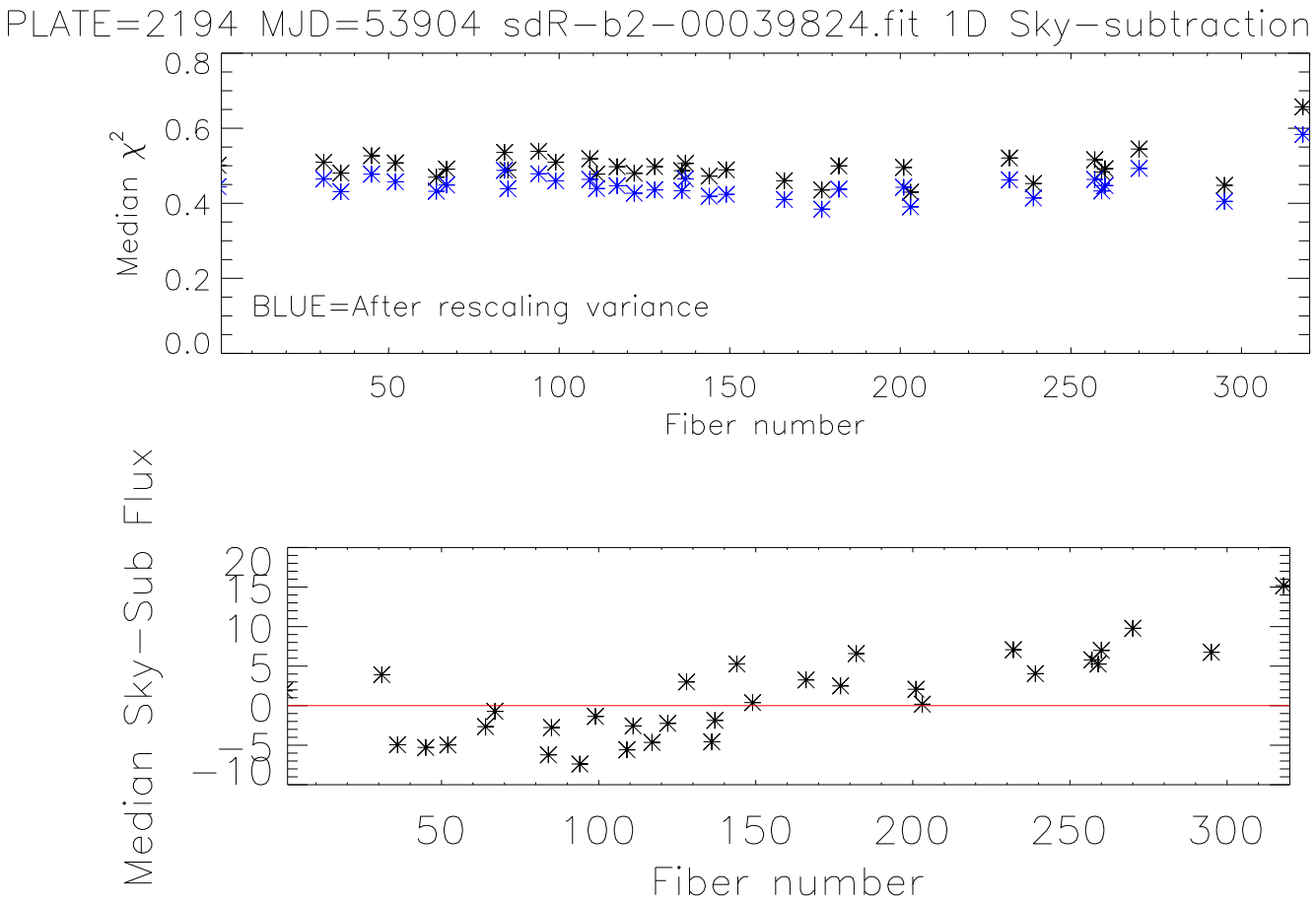

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

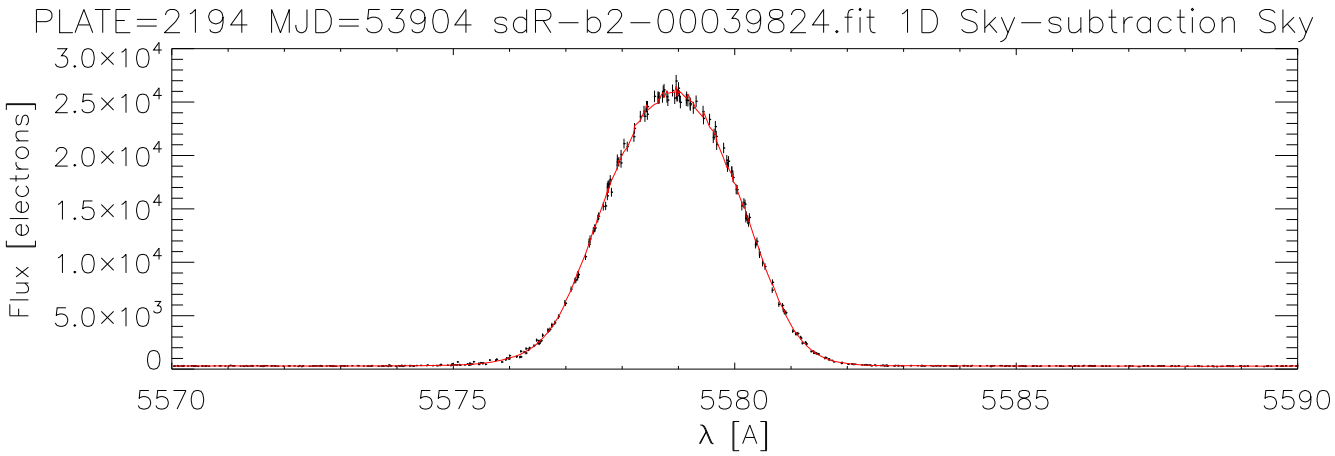

4046.5600
nfib1 36
nfib2 36
stdev 0.056
extra −0.23
4358.3300
nfib1 36
nfib2 36
stdev 0.037
extra −0.26
5460.9400
nfib1 35
nfib2 36
stdev 0.035
extra −0.22
5577.3390
nfib1 36
nfib2 36
stdev 0.010
extra −0.17
5889.9500
nfib1 36
nfib2 36
stdev 0.025
extra −0.12
5895.9240
nfib1 36
nfib2 36
stdev 0.036
extra −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

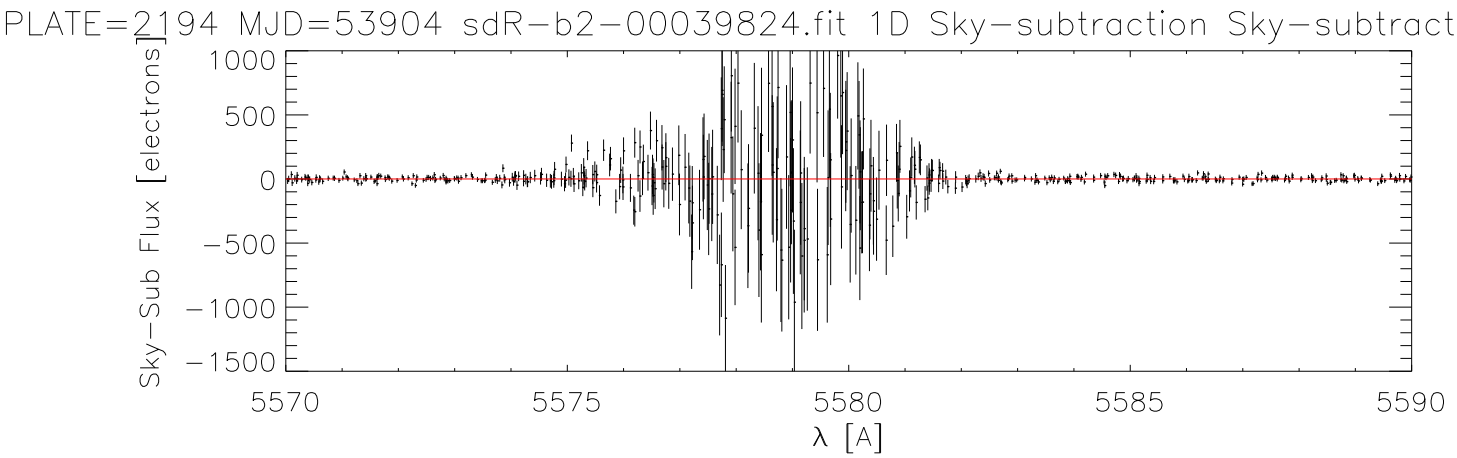

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

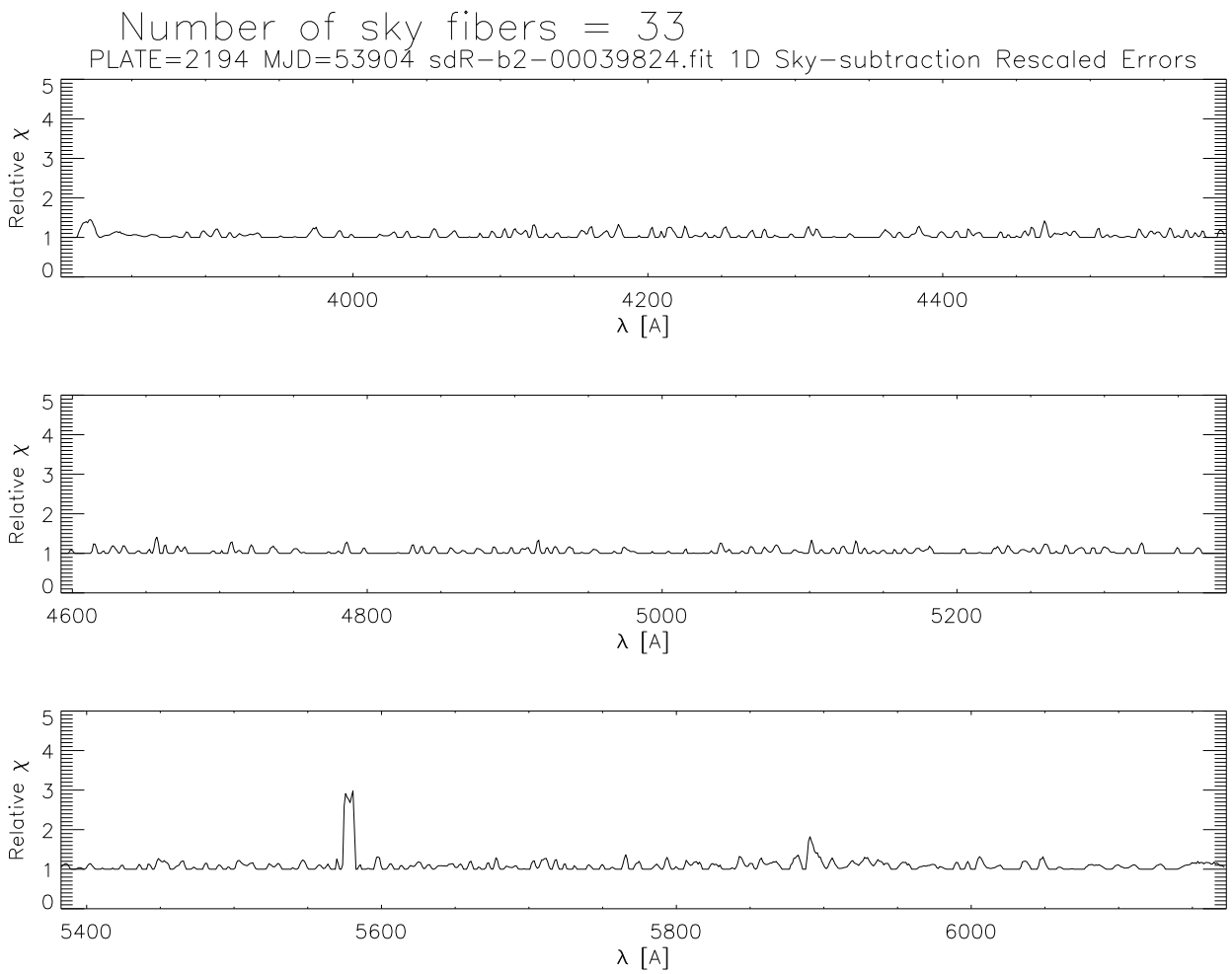

PLATE=2194 MJD=53904 Smooth superflat for sdR-b2-00039824.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

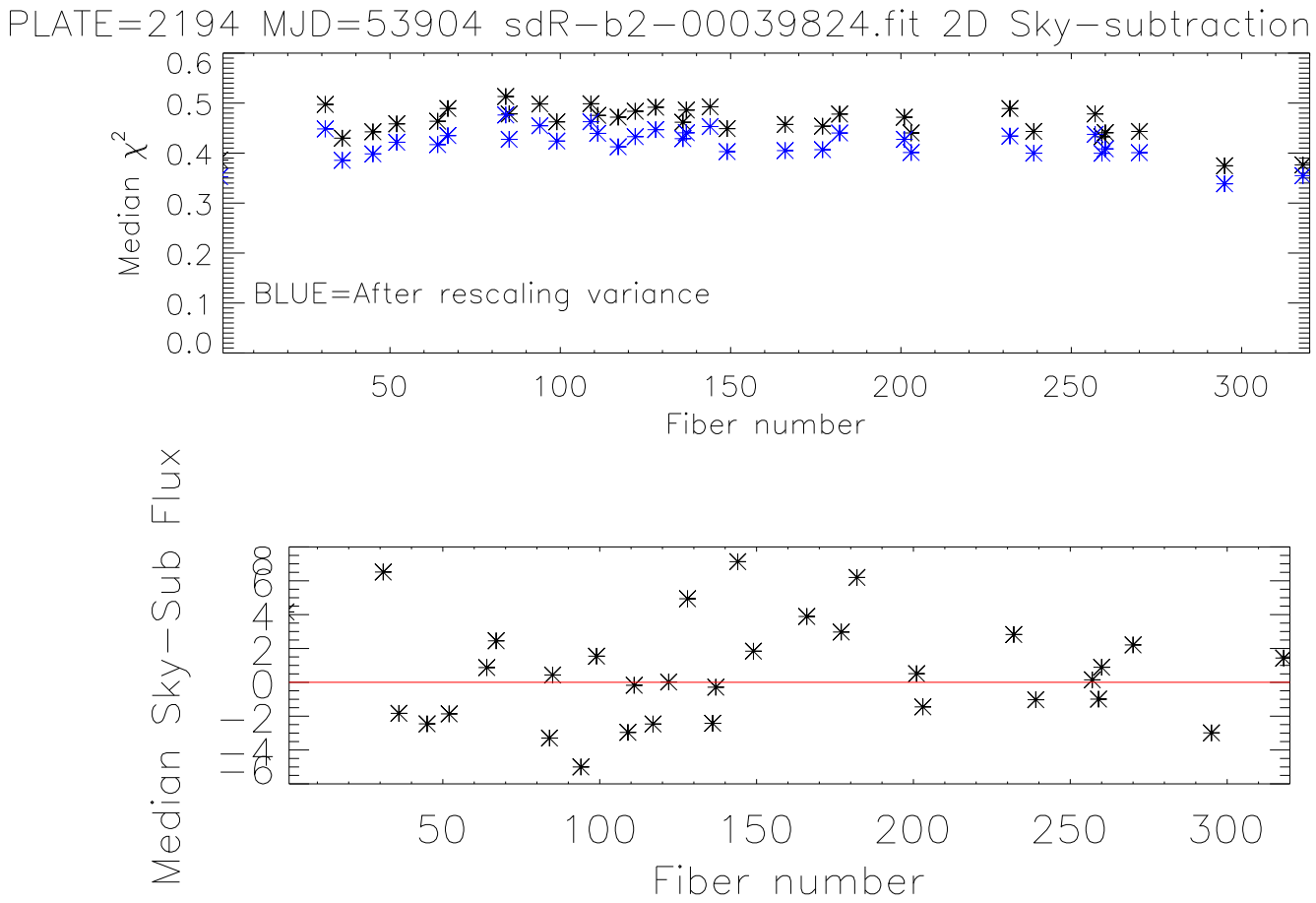
es= −0.0000

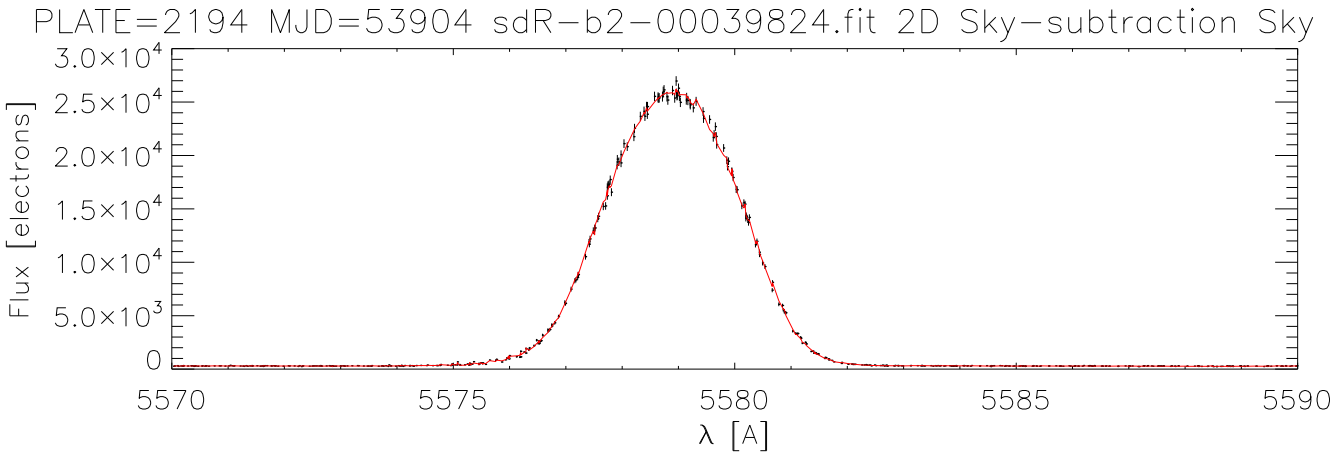

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
20
50
100
150
200
250
300
Fiber number

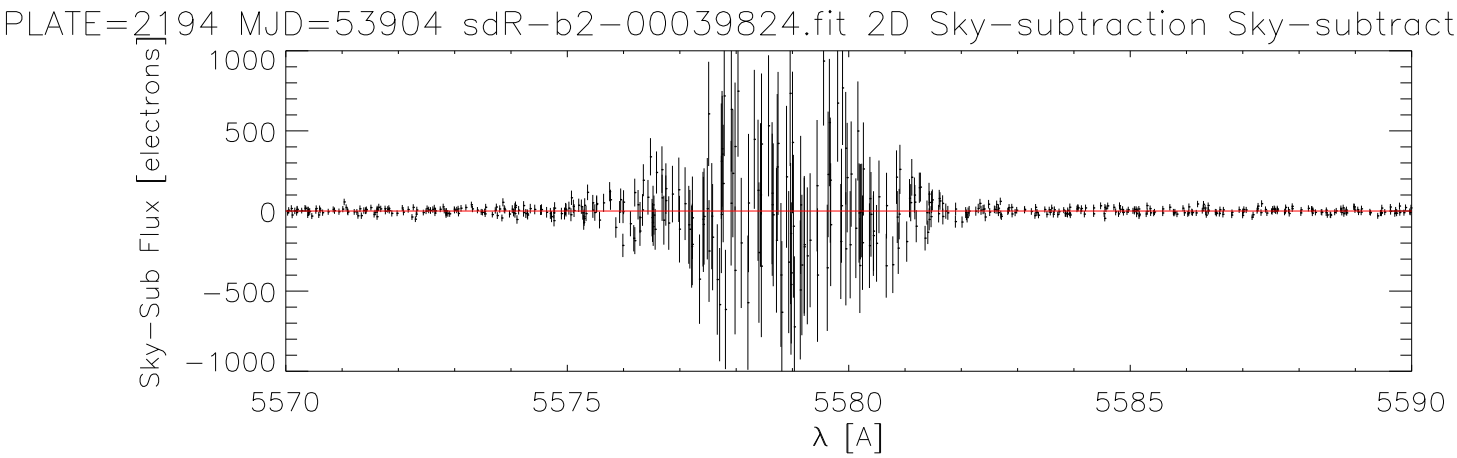

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

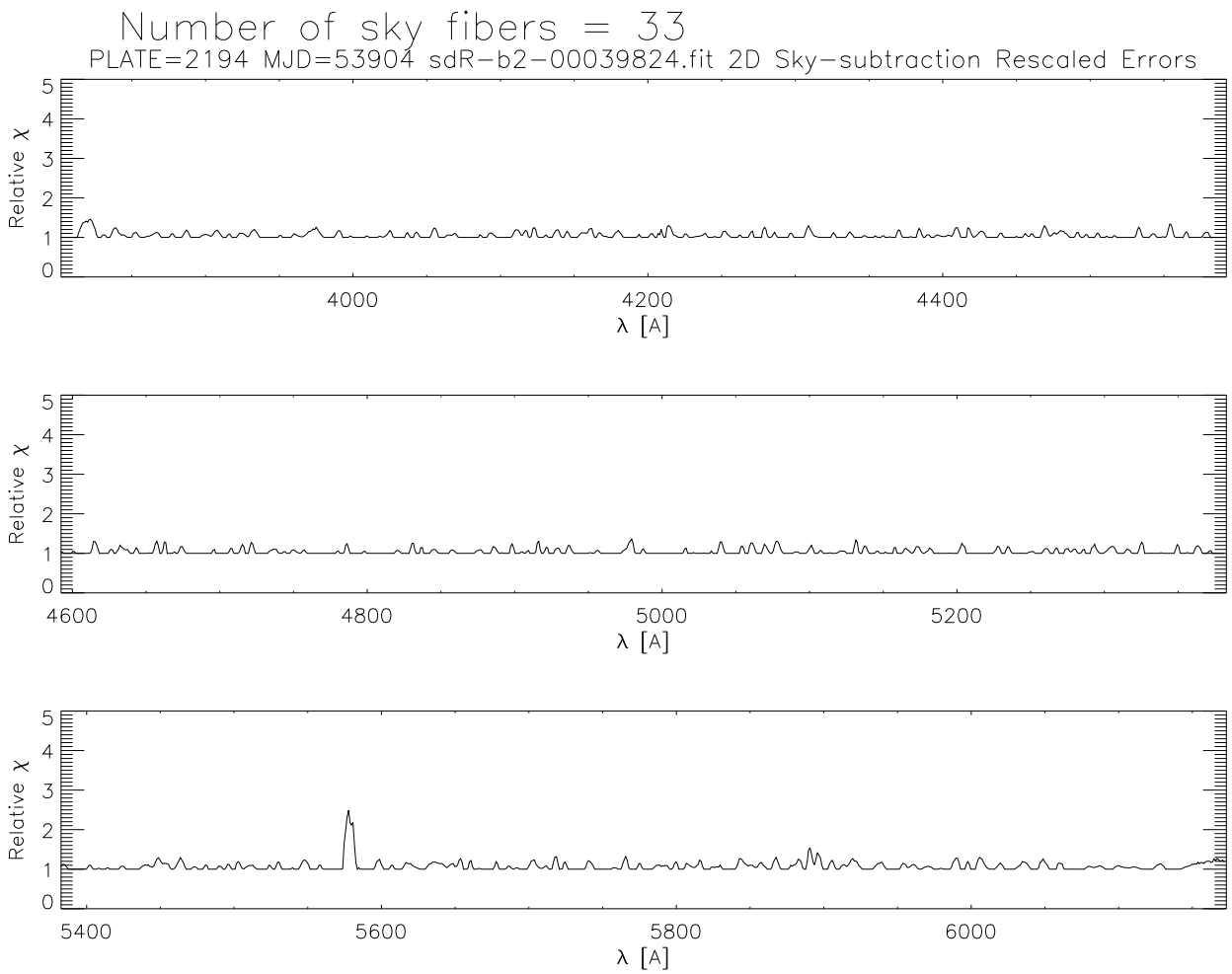

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

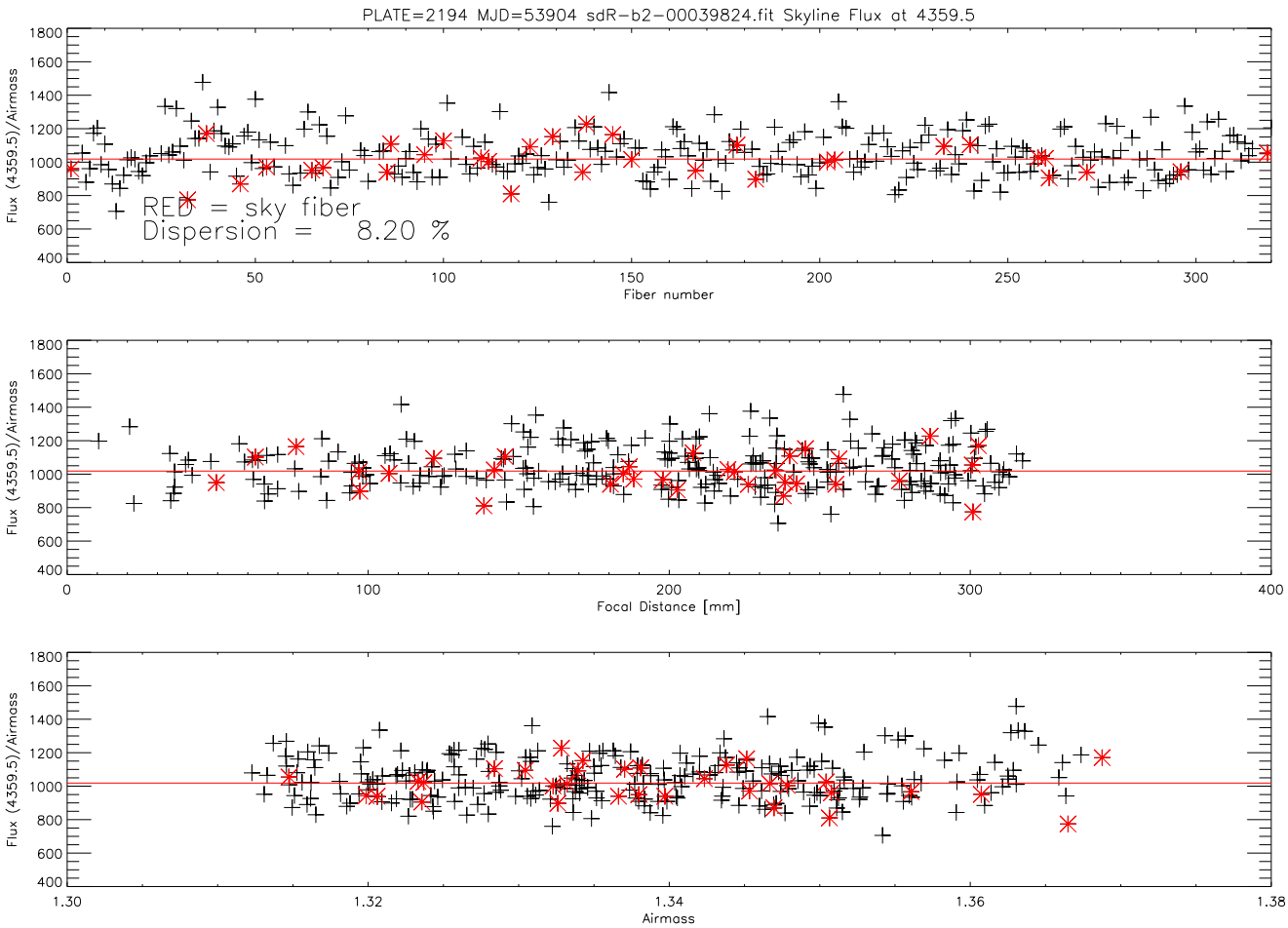

Number of sky fibers = 33
PLATE=2194 MJD=53904 sdR-b2-00039824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

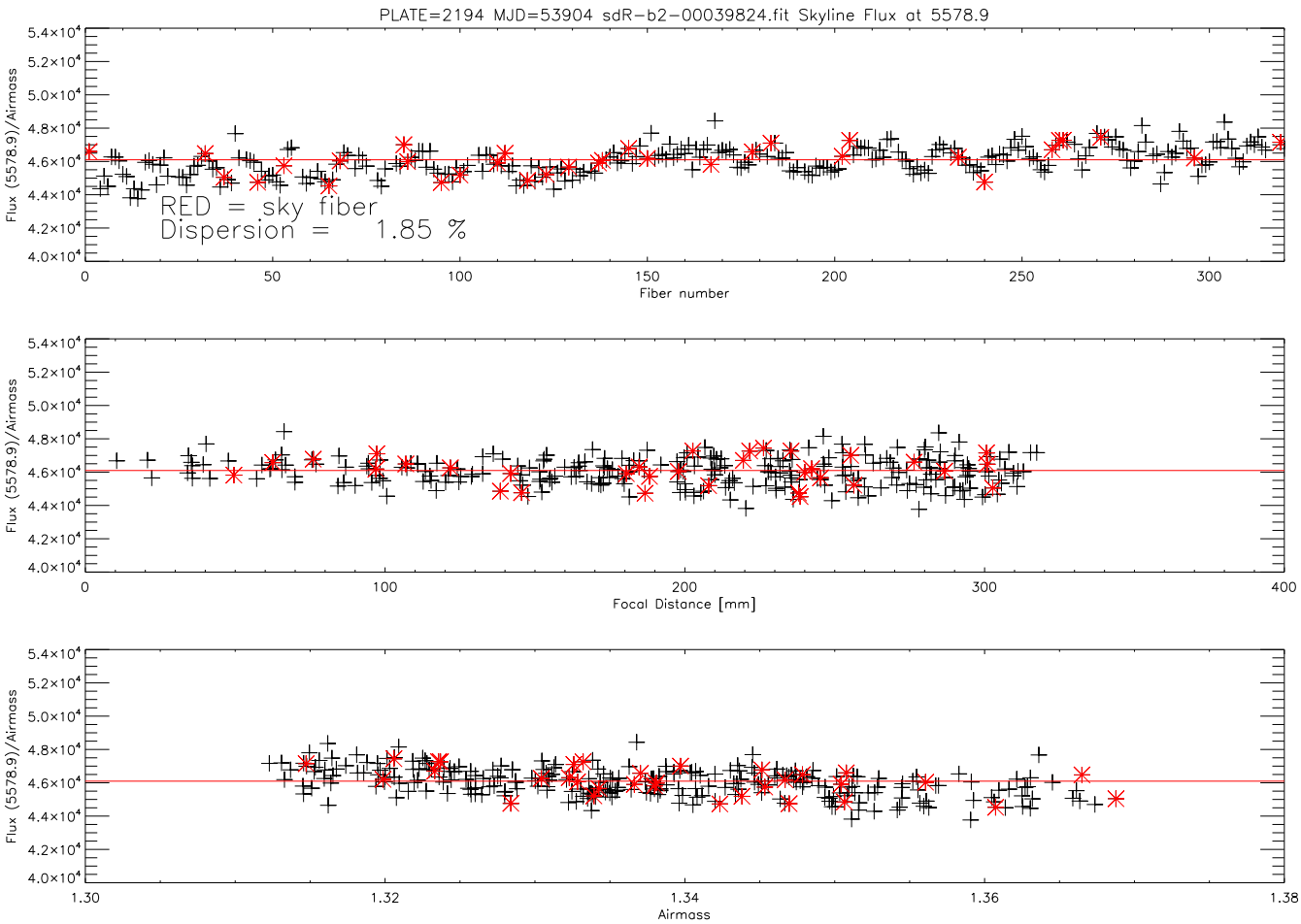

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

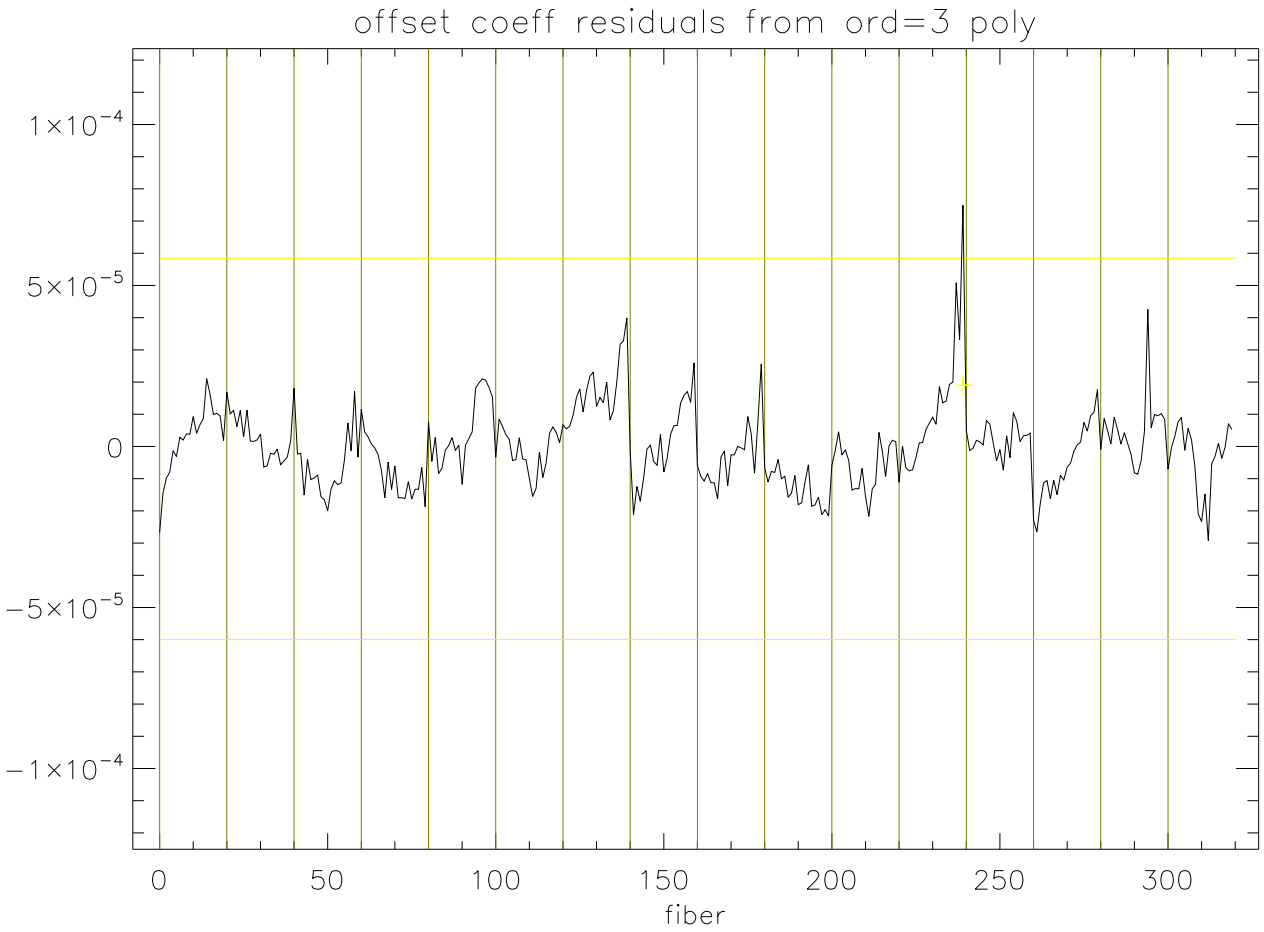

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

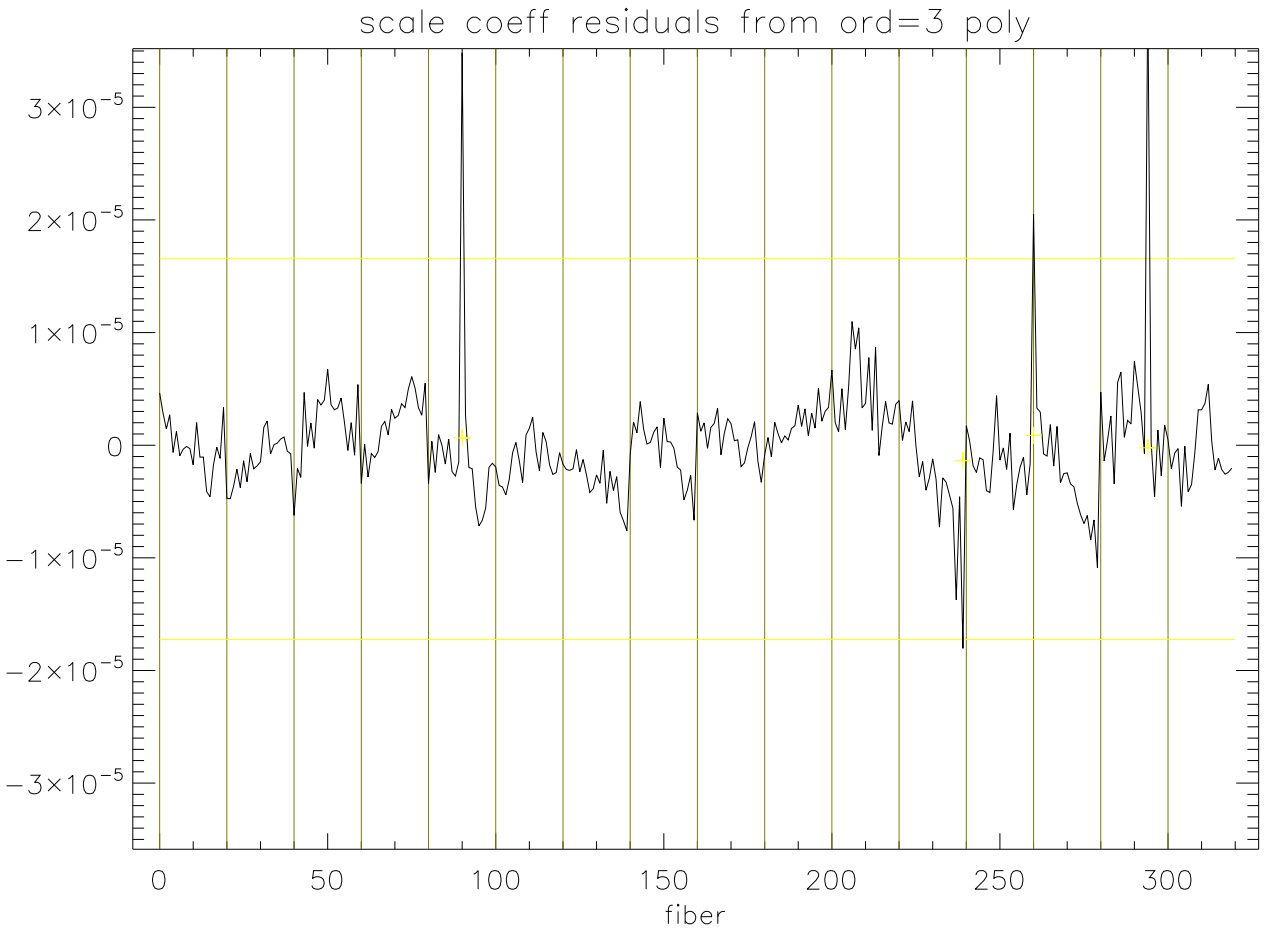

PLATE=2194 MJD=53904 sdR-b2-00039824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

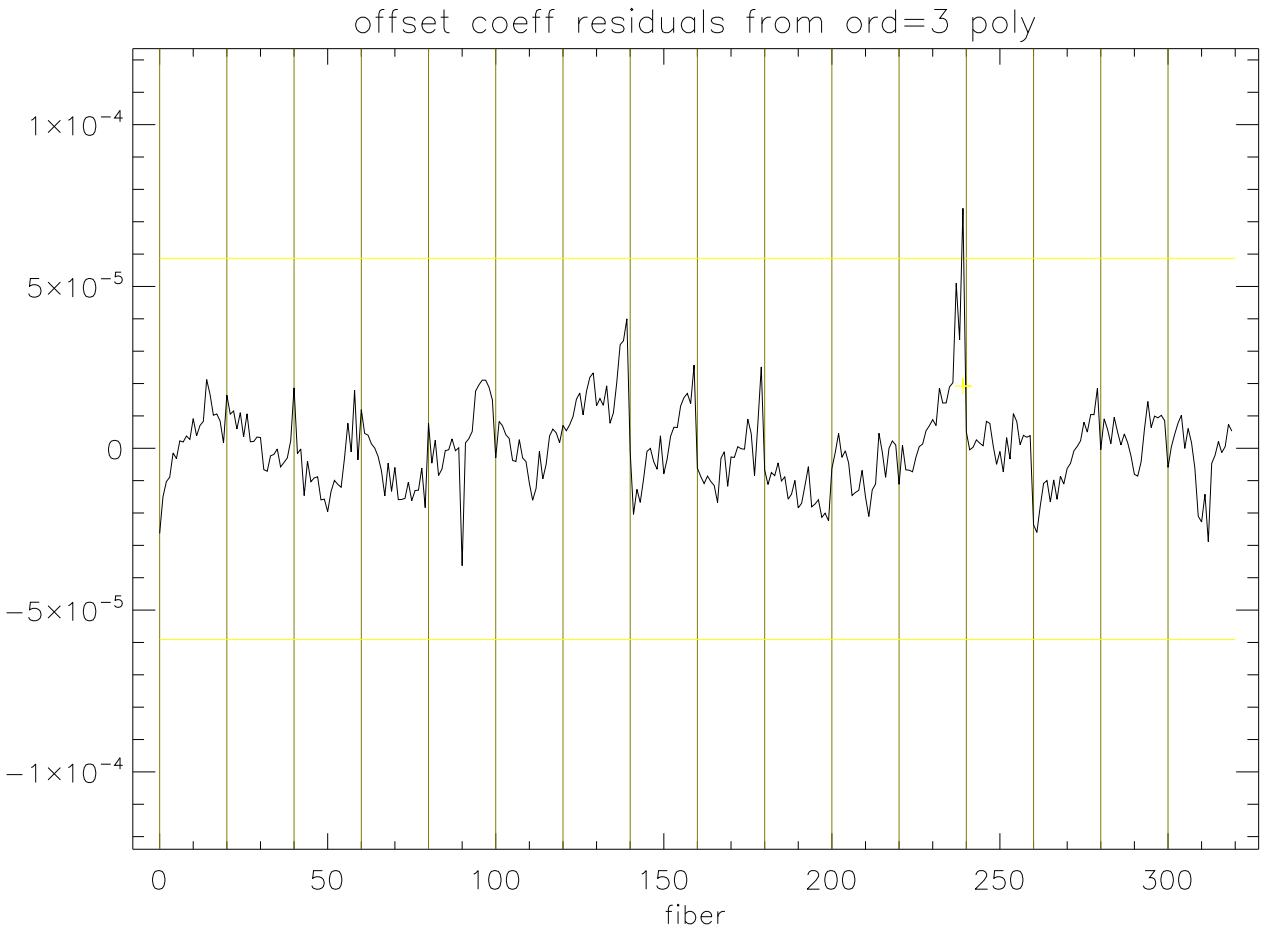

Number of sky fibers = 33
PLATE=2194 MJD=53904 sdR-b2-00039824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

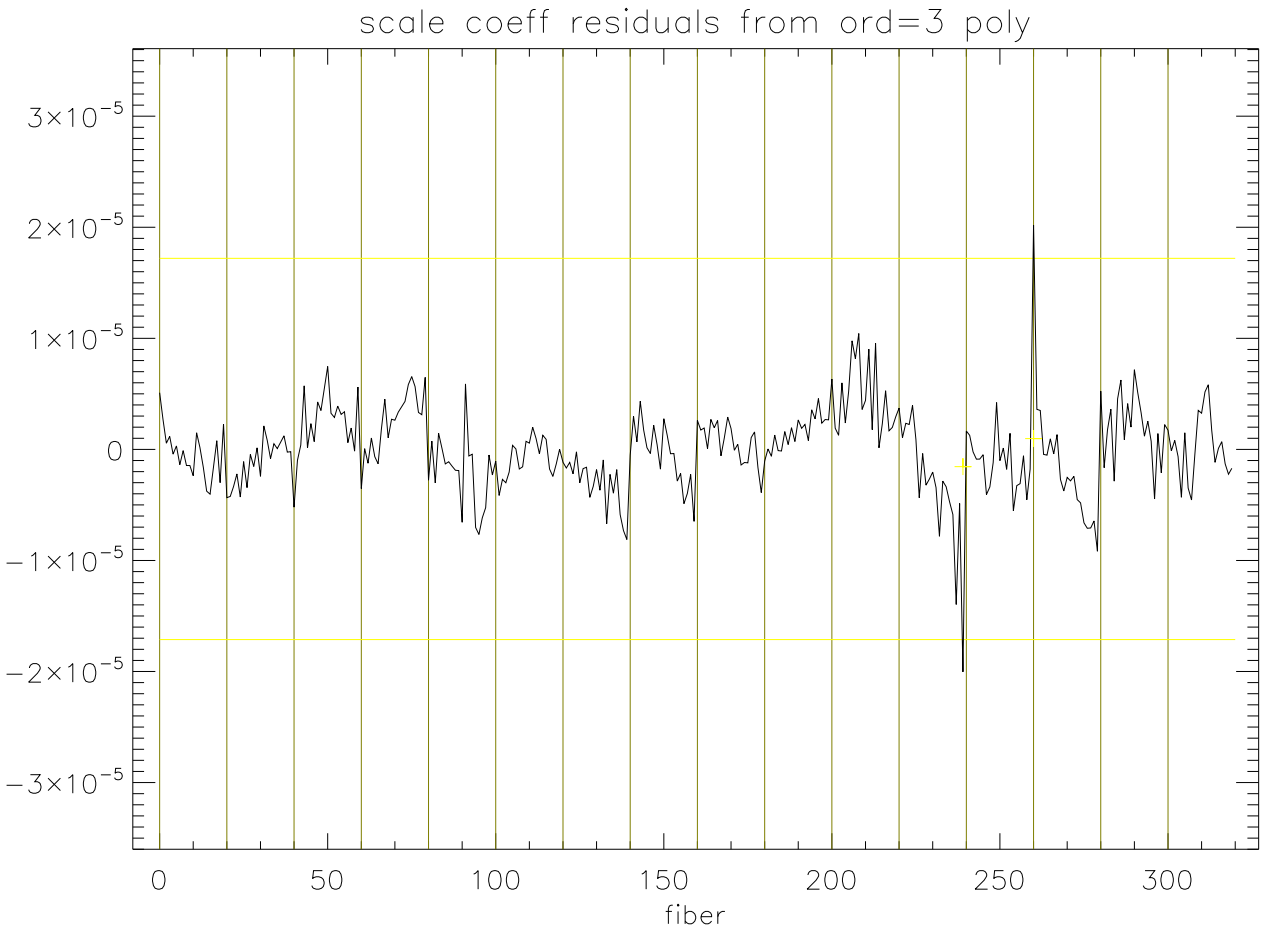

PLATE=2194 MJD=53904 sdR-b2-00039824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.20 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

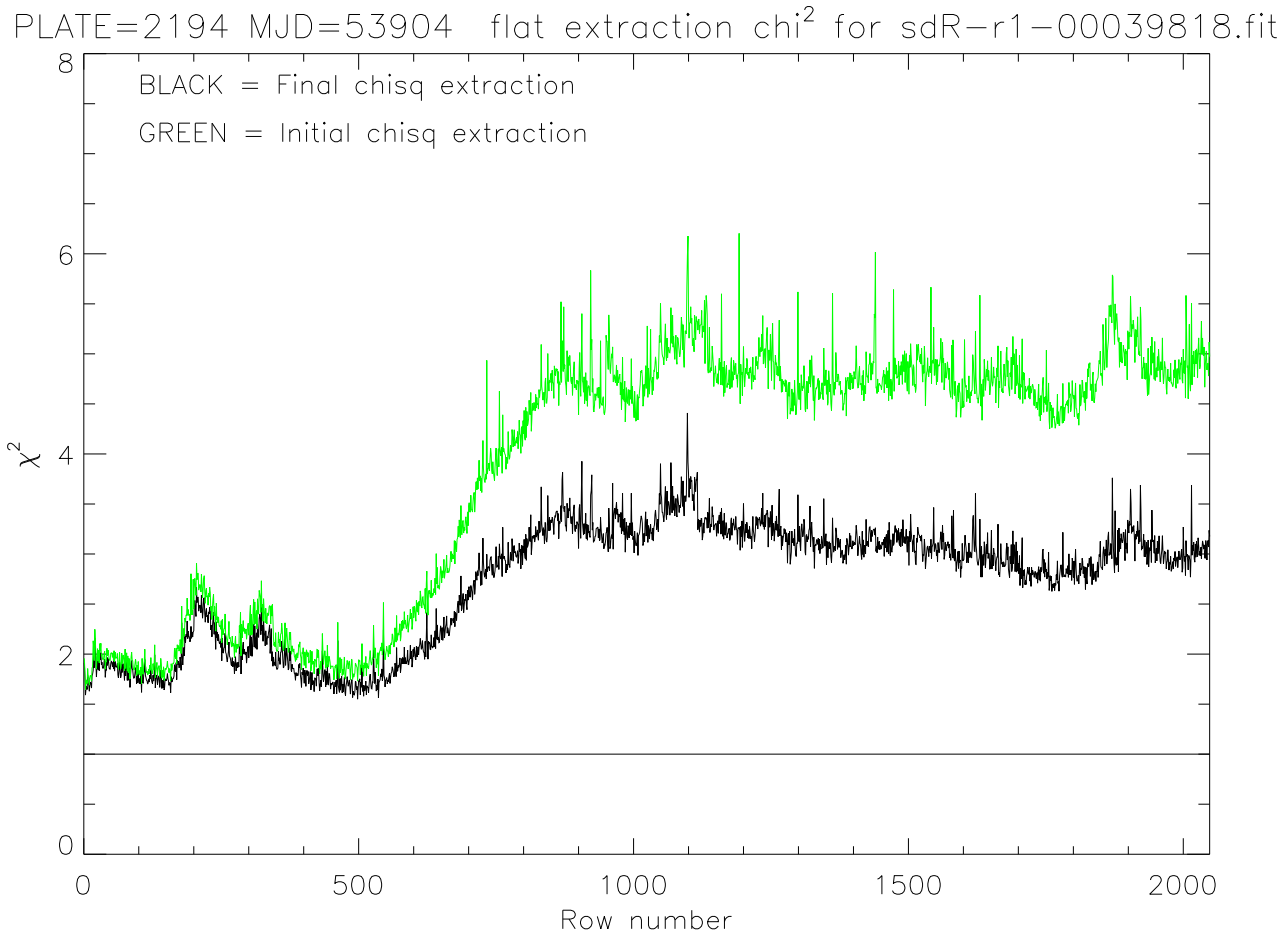

PLATE=2194 MJD=53904 sdR-b2-00039824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.85 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

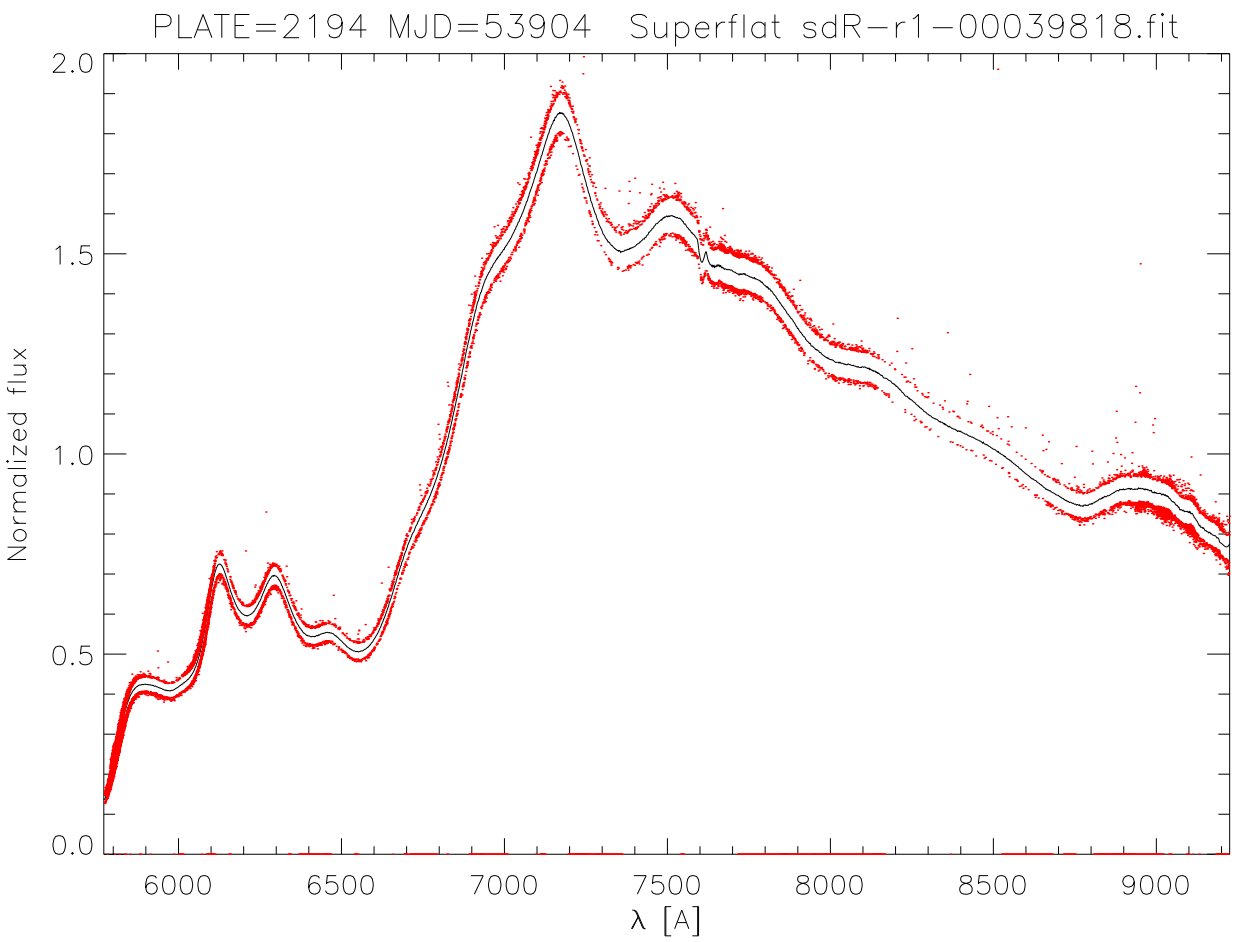

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

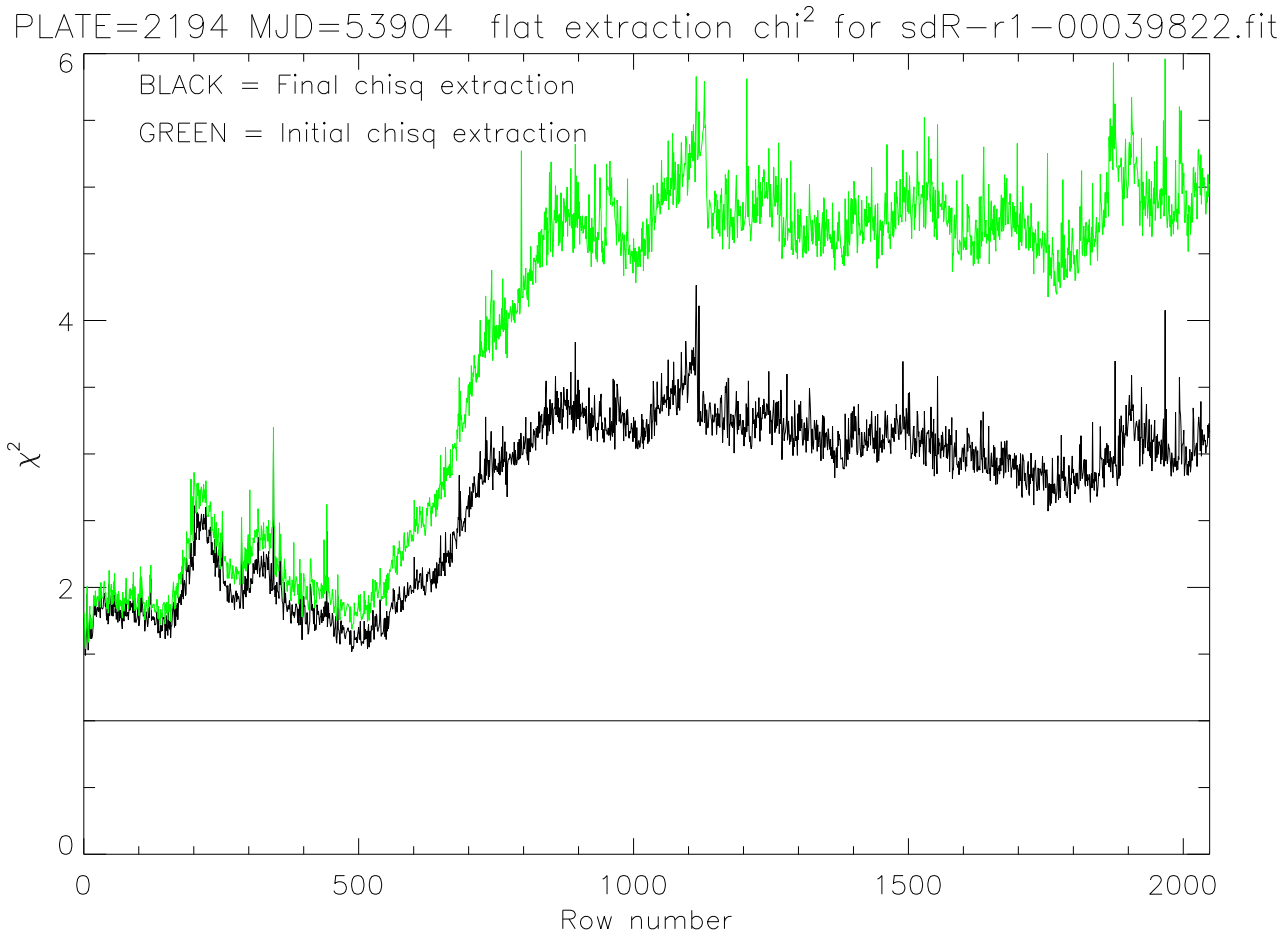

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

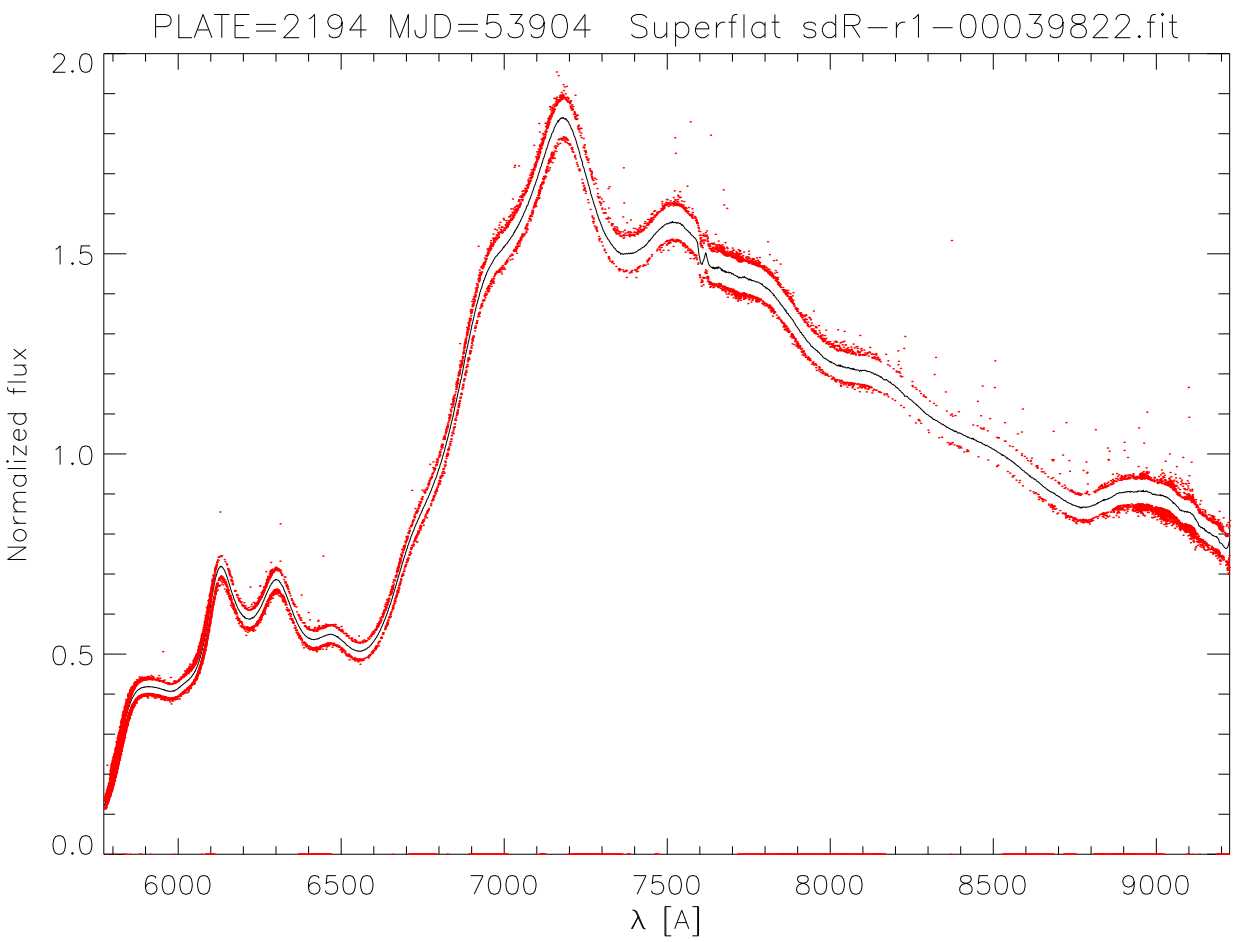

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

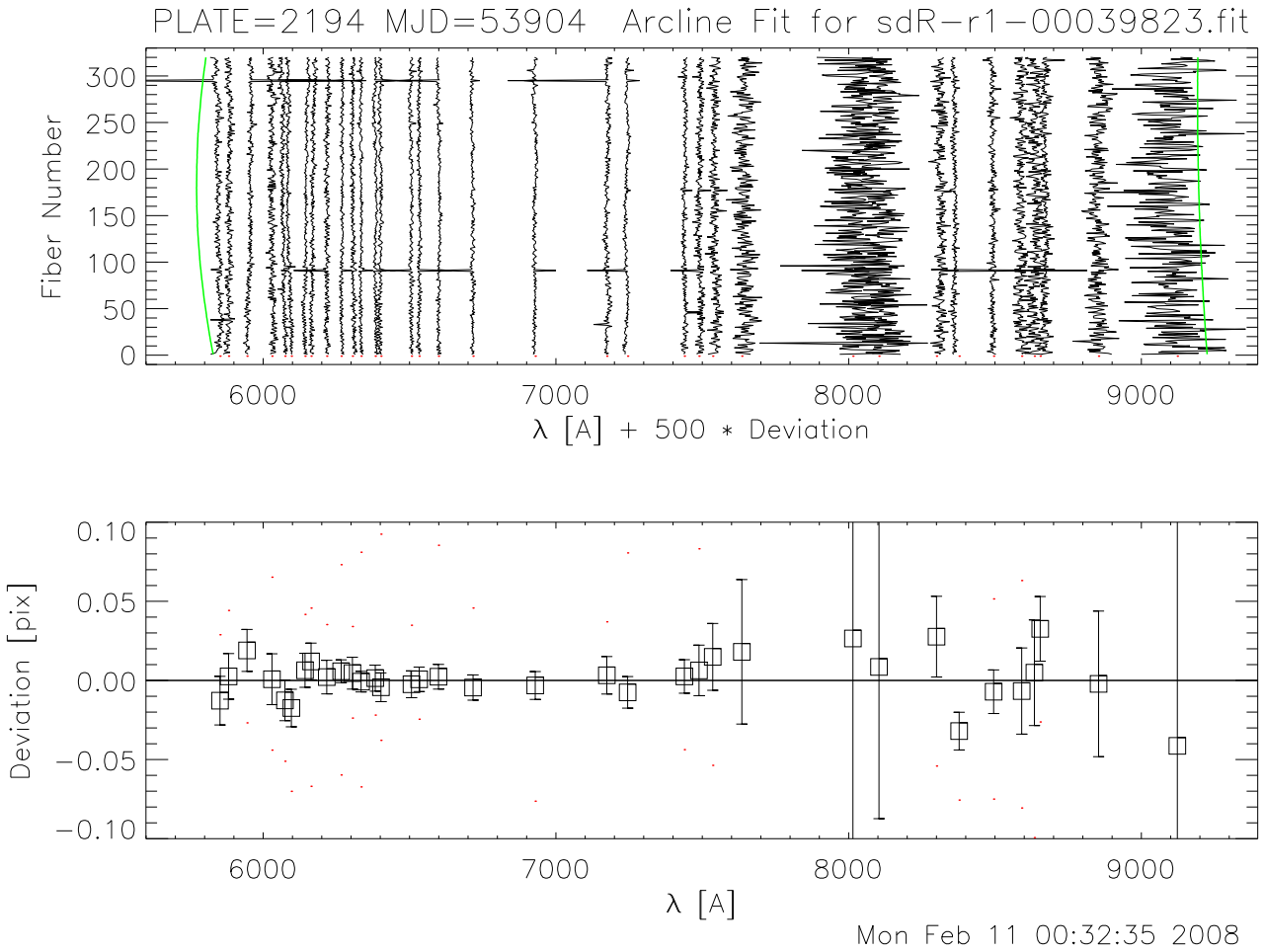

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

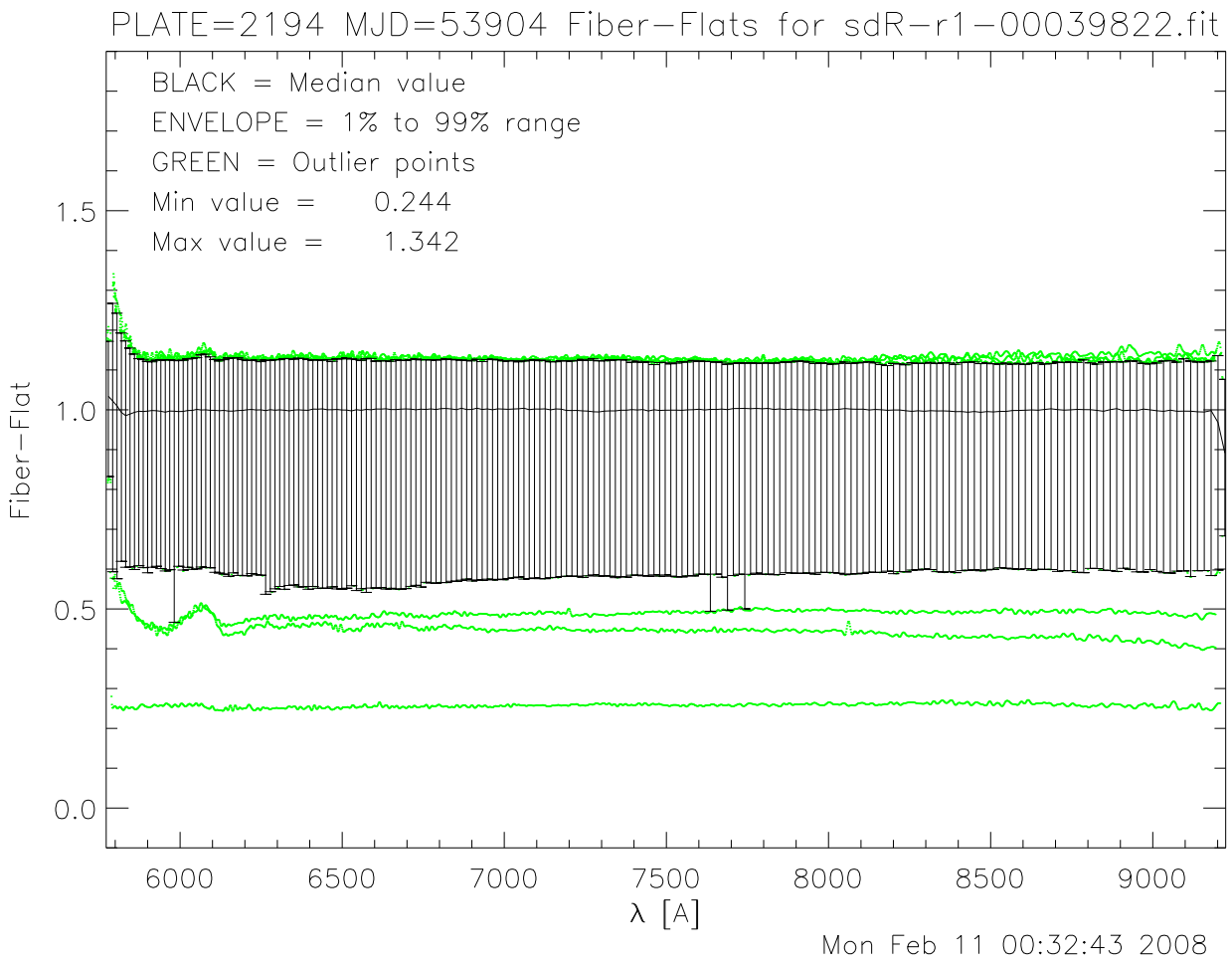

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−r1−00039818.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

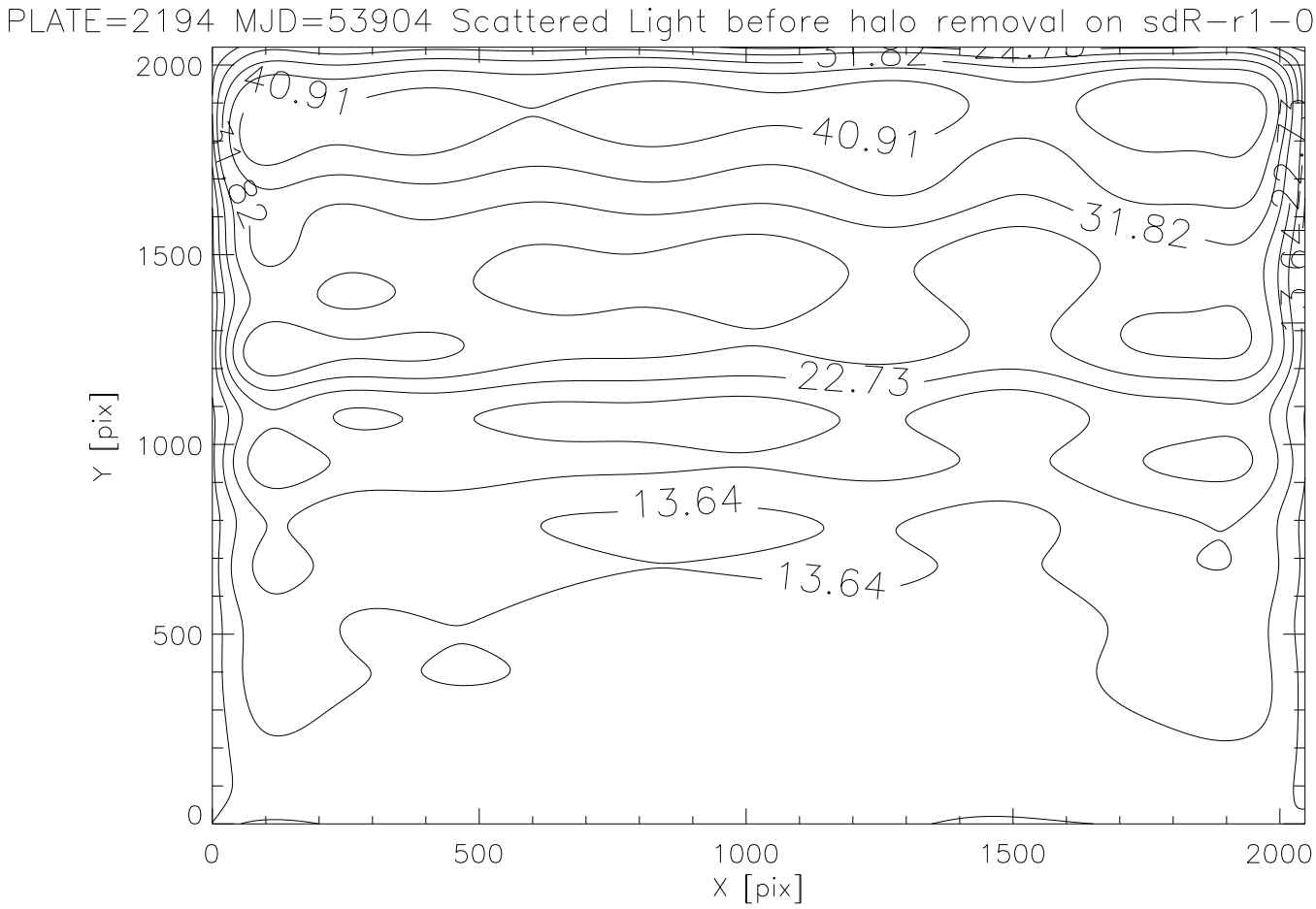

PLATE=2194 MJD=53904 Superflat sdR-r1-00039818.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

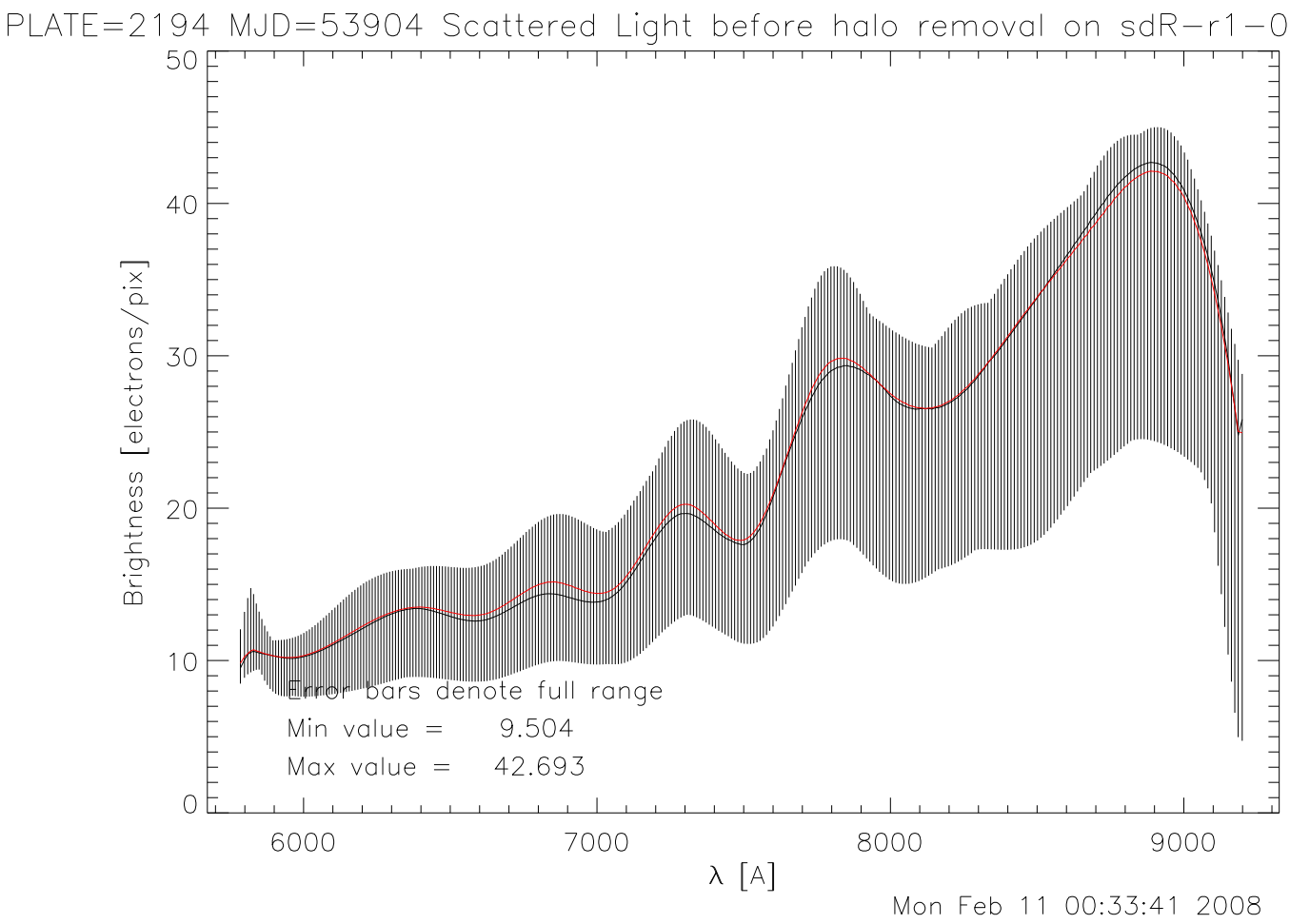

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−r1−00039822.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

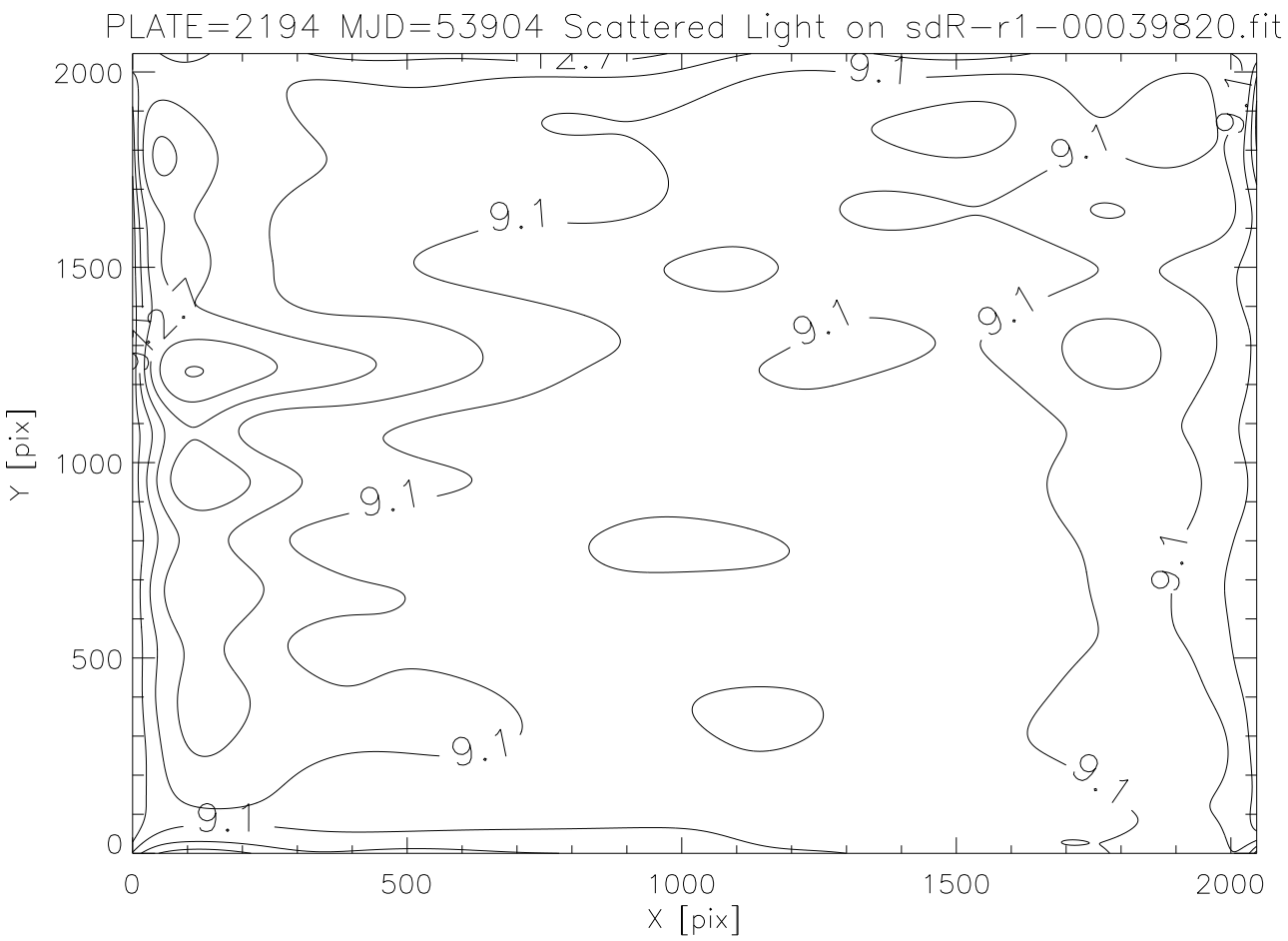

PLATE=2194 MJD=53904 Superflat sdR-r1-00039822.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

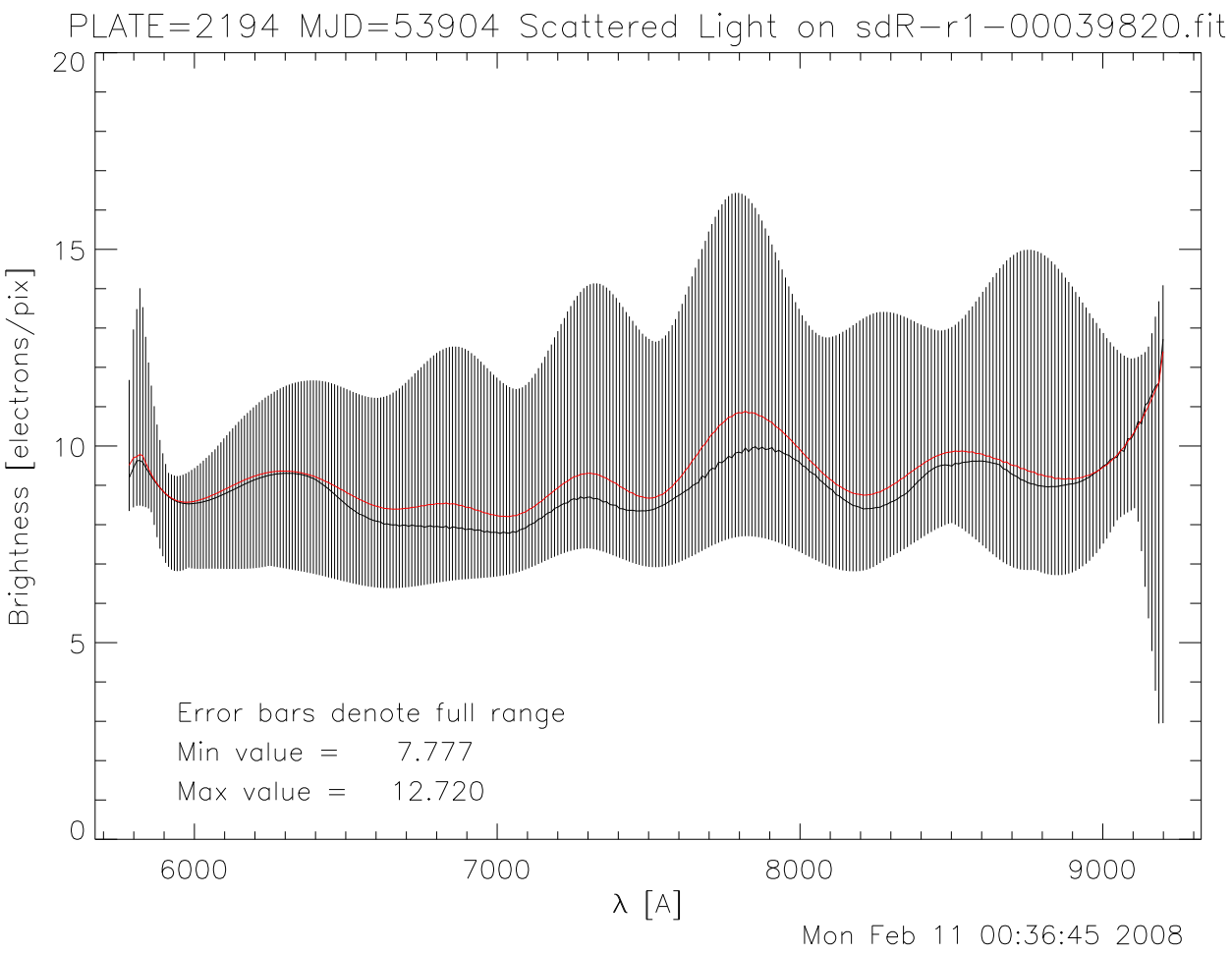

PLATE=2194 MJD=53904 Arcline Fit for sdR-r1-00039823.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 00:32:35 2008

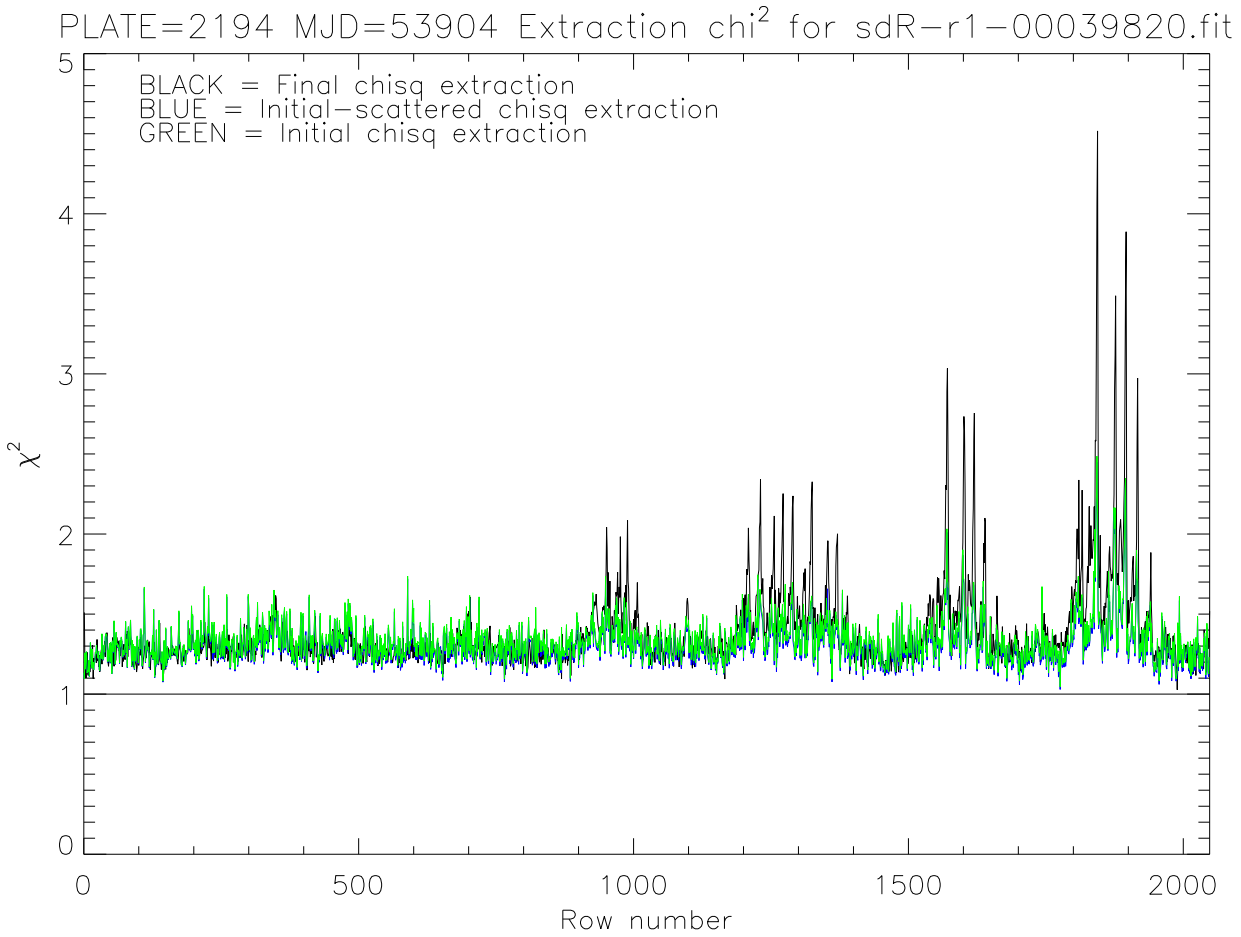

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r1−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.244
Max value = 1.342
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 00:32:43 2008

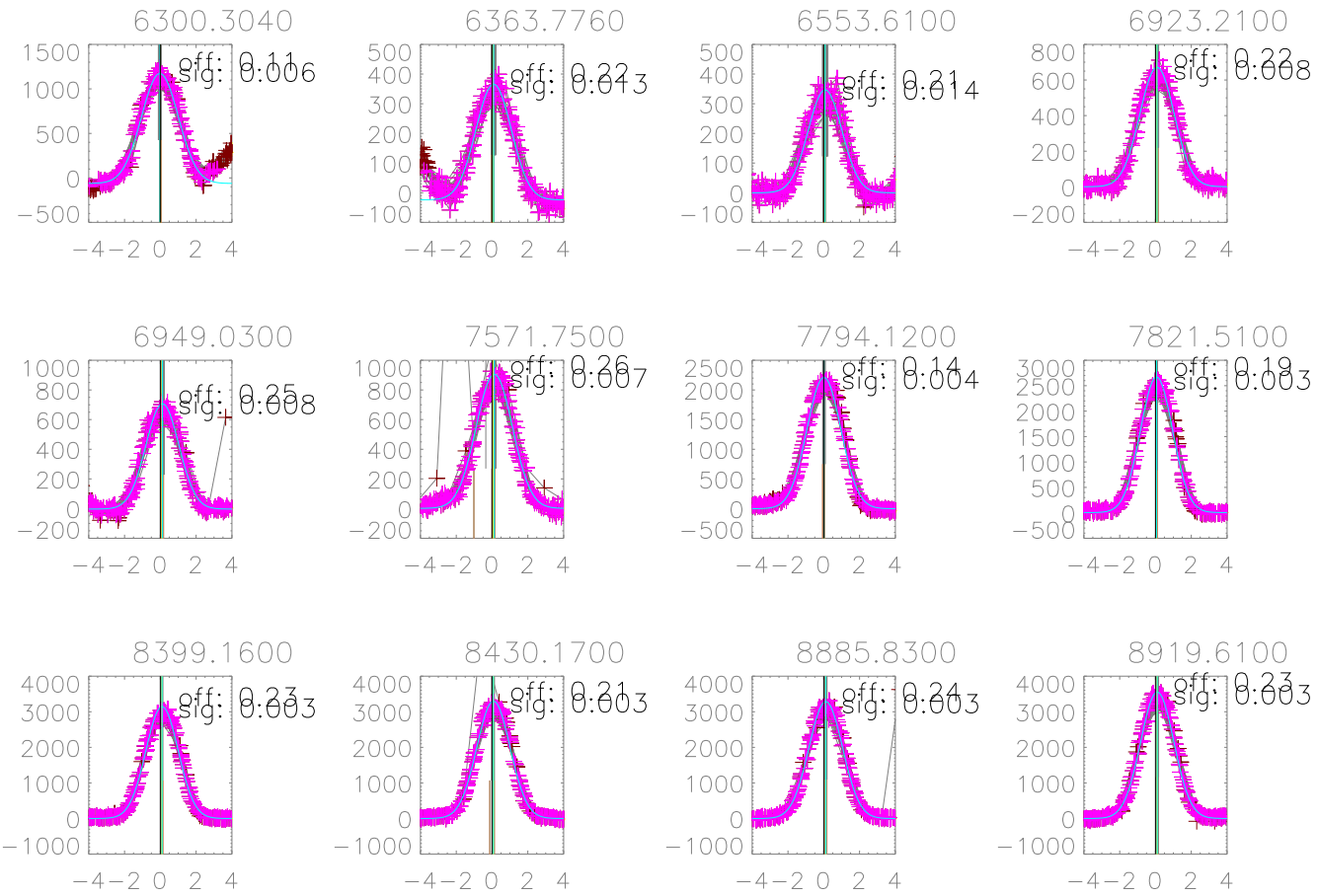

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR−r1−00039820.fi
40.91
40.91
31.82
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

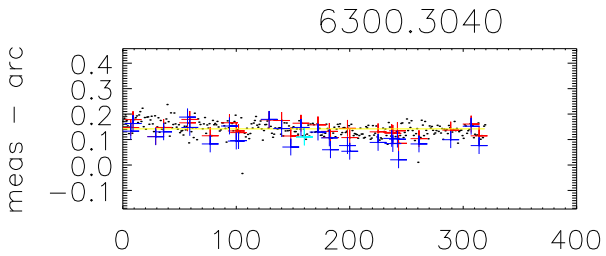

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r1-00039820.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.504
Max value = 42.693
Mon Feb 11 00:33:41 2008

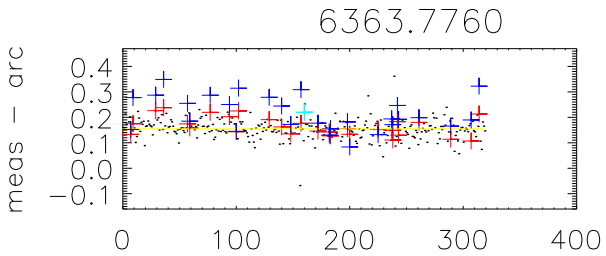

PLATE=2194 MJD=53904 Scattered Light on sdR−r1−00039820.fit
9.1
9.1
9.1
9.1
9.1
9.1
9.1
9.1
9.1
9.1
9.1
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

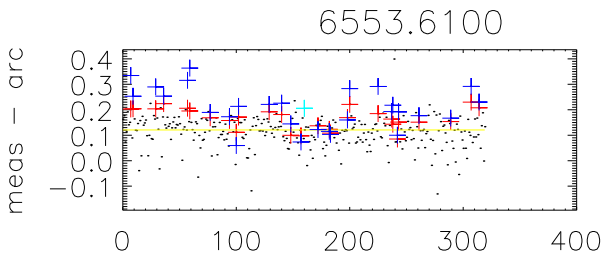

PLATE=2194 MJD=53904 Scattered Light on sdR-r1-00039820.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.777
Max value = 12.720
Mon Feb 11 00:36:45 2008

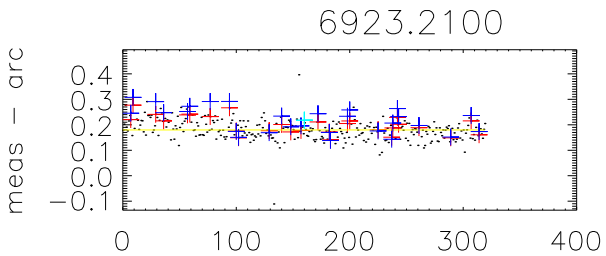

PLATE=2194 MJD=53904 Extraction chi^2 for sdR−r1−00039820.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

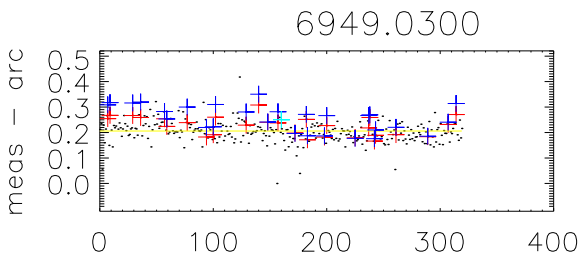

6300.3040
off: 0.11
sig: 0.006
6363.7760
off: 0.22
sig: 0.013
6553.6100
off: 0.21
sig: 0.014
6923.2100
off: 0.22
sig: 0.008
6949.0300
off: 0.25
sig: 0.008
7571.7500
off: 0.26
sig: 0.007
7794.1200
off: 0.14
sig: 0.004
7821.5100
off: 0.19
sig: 0.003
8399.1600
off: 0.23
sig: 0.003
8430.1700
off: 0.21
sig: 0.003
8885.8300
off: 0.24
sig: 0.003
8919.6100
off: 0.23
sig: 0.003

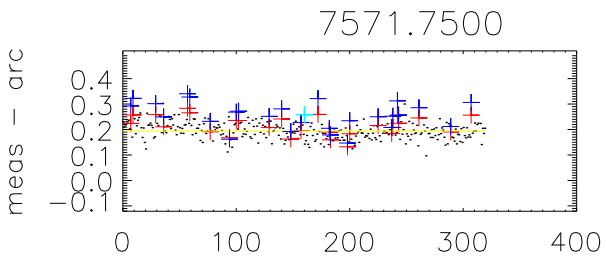

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

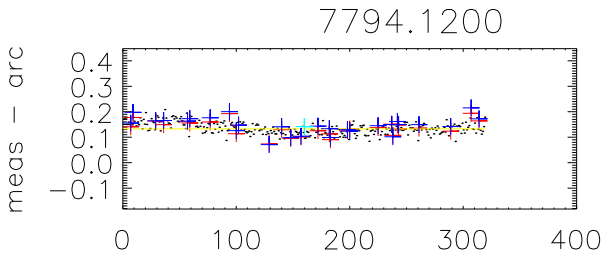

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

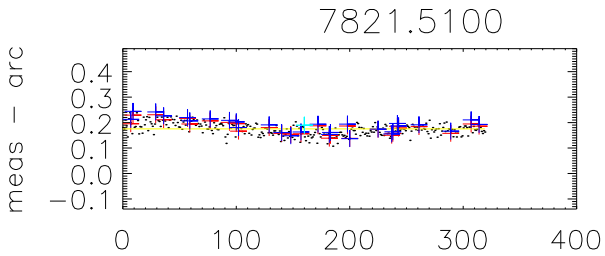

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

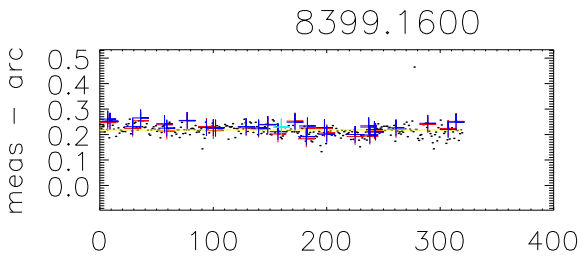

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

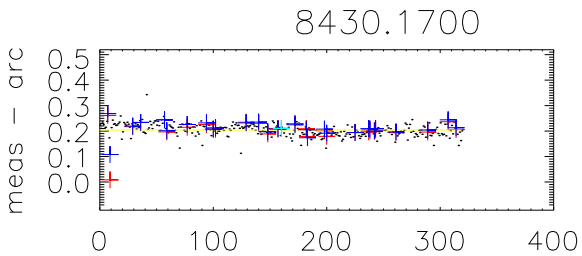

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

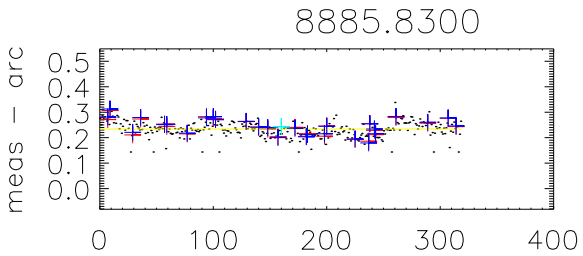

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

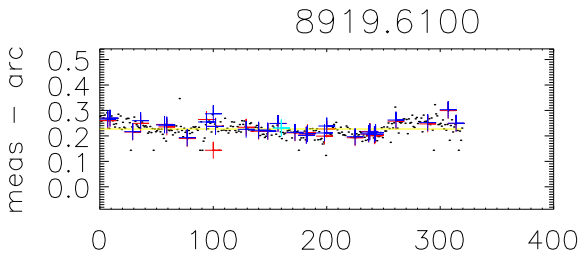

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

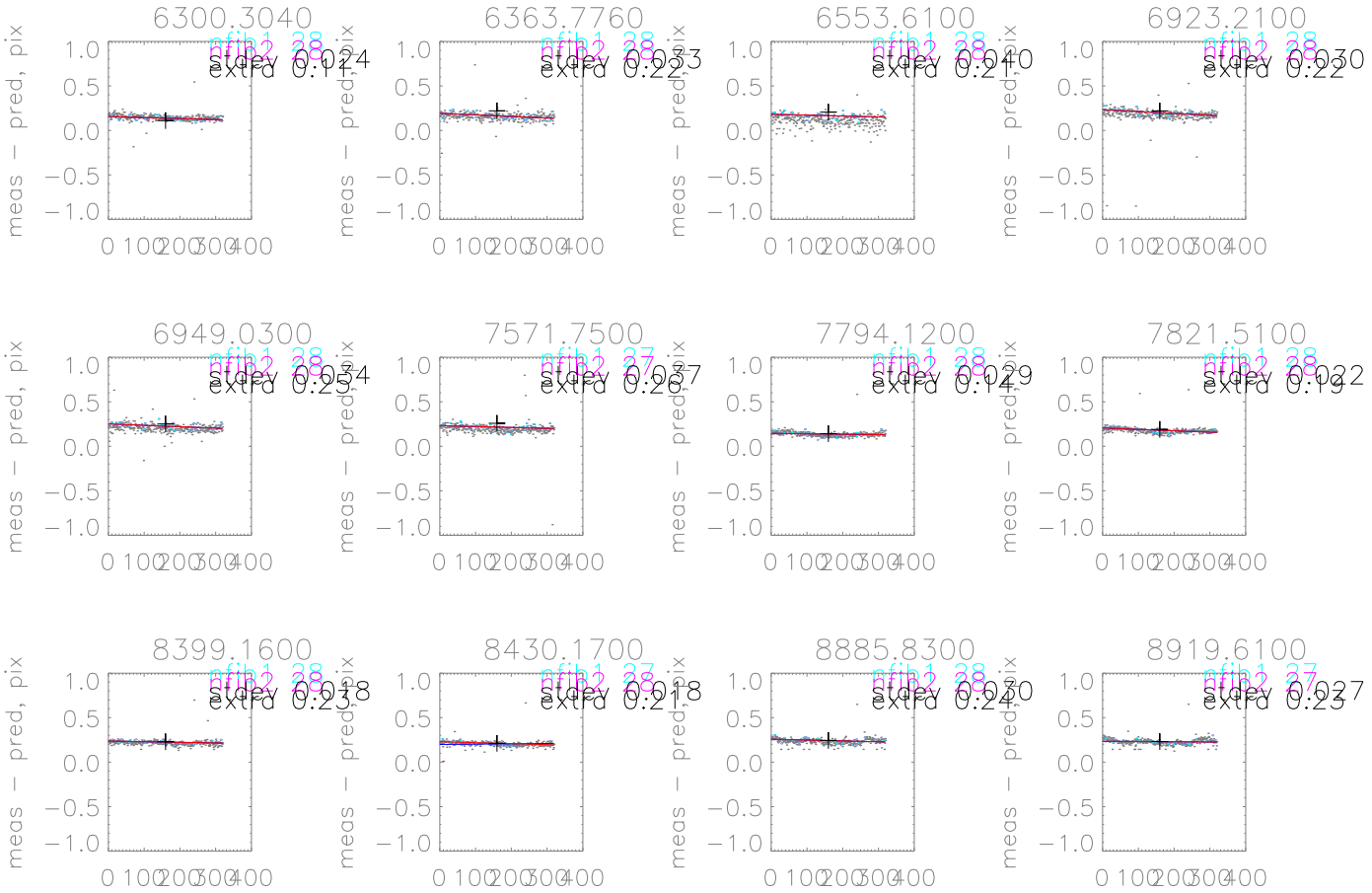

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

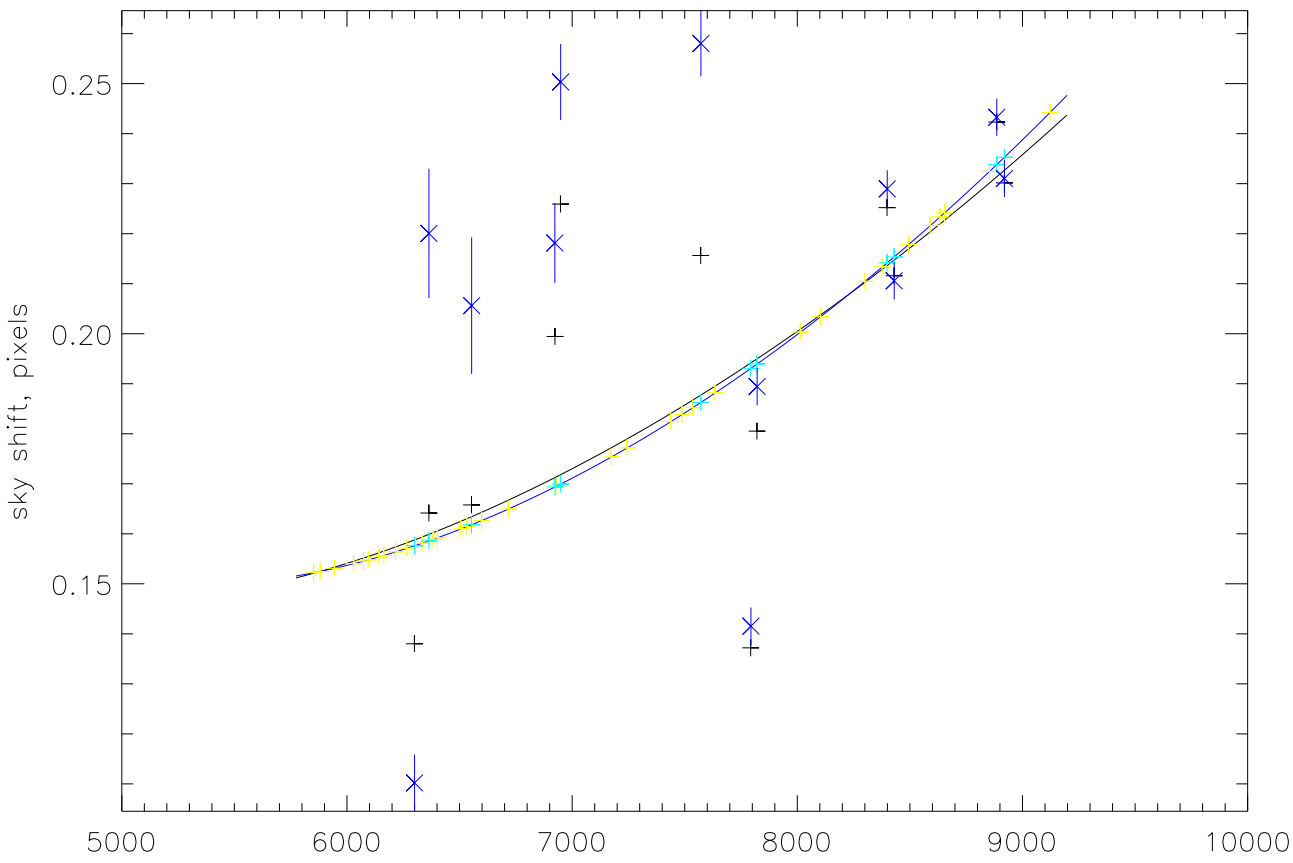

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

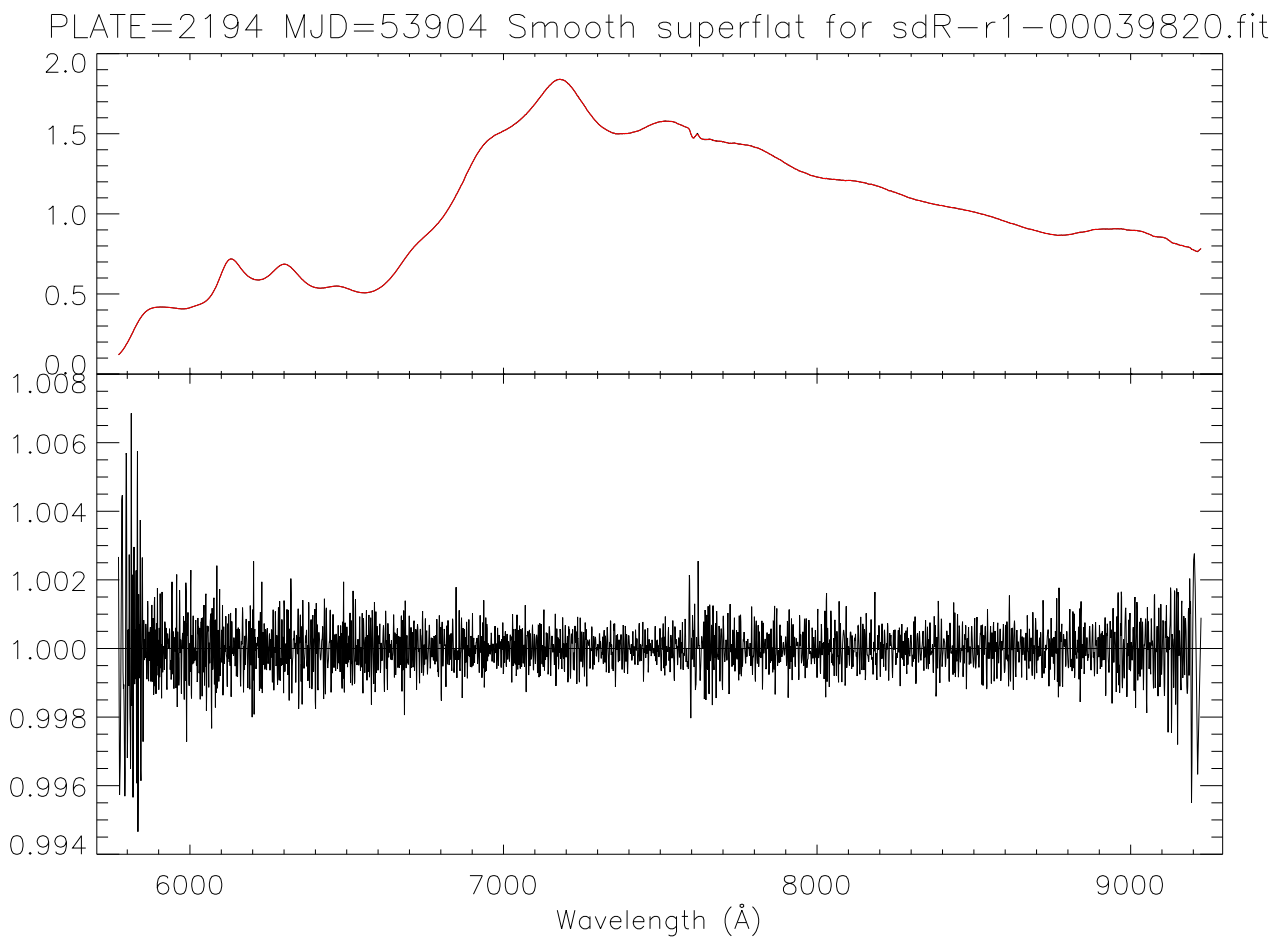

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

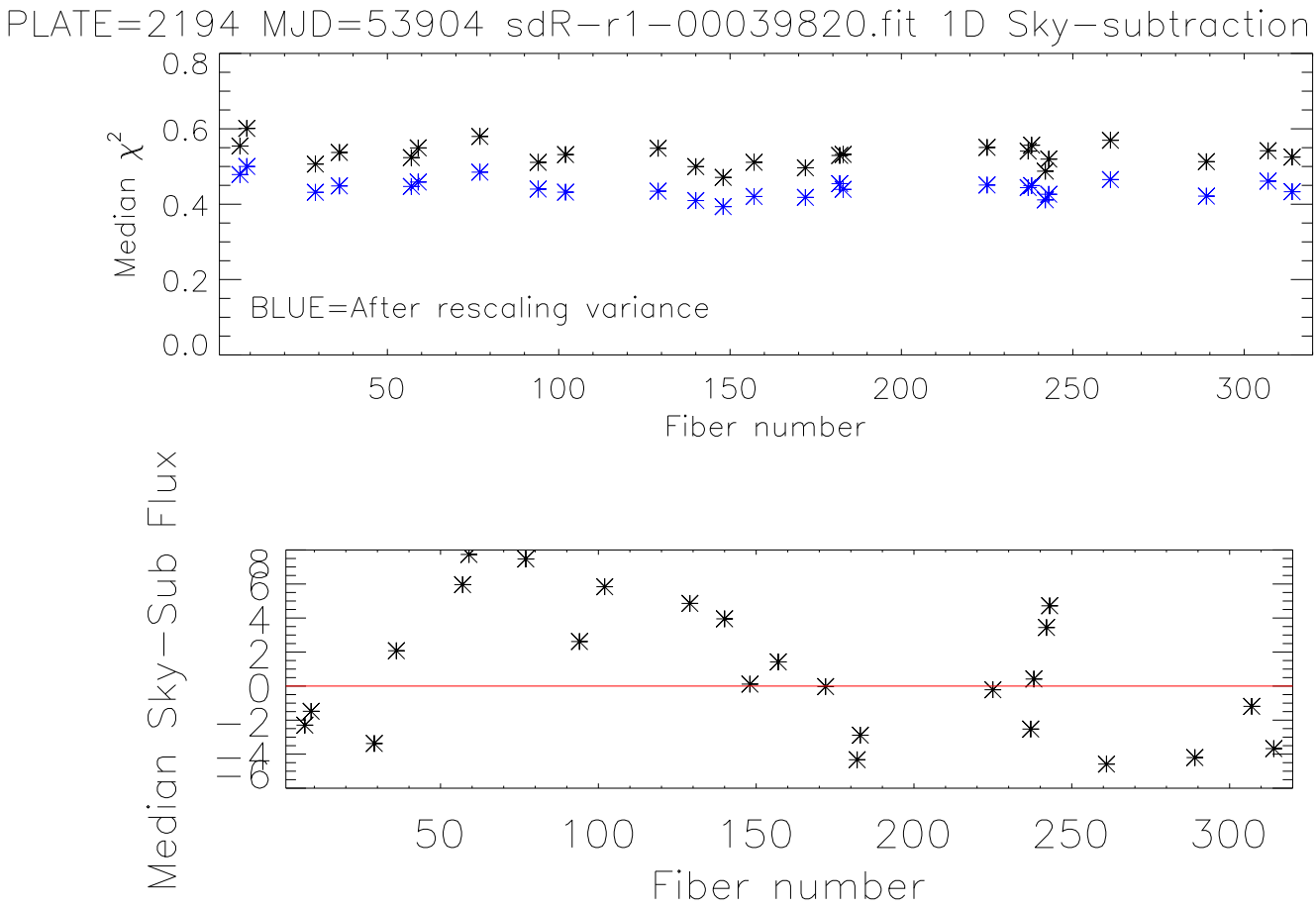

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


6300.3040
mfhd1 28
mfhd2 28
stdev 0.024
extra 0.11
6363.7760
mfhd1 28
mfhd2 28
stdev 0.033
extra 0.22
6553.6100
mfhd1 28
mfhd2 28
stdev 0.040
extra 0.21
6923.2100
mfhd1 28
mfhd2 28
stdev 0.030
extra 0.22
6949.0300
mfhd1 28
mfhd2 28
stdev 0.034
extra 0.25
7571.7500
mfhd1 27
mfhd2 28
stdev 0.037
extra 0.26
7794.1200
mfhd1 28
mfhd2 28
stdev 0.029
extra 0.14
7821.5100
mfhd1 28
mfhd2 28
stdev 0.032
extra 0.19
8399.1600
mfhd1 28
mfhd2 28
stdev 0.018
extra 0.23
8430.1700
mfhd1 27
mfhd2 28
stdev 0.018
extra 0.21
8885.8300
mfhd1 28
mfhd2 28
stdev 0.030
extra 0.24
8919.6100
mfhd1 27
mfhd2 27
stdev 0.027
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

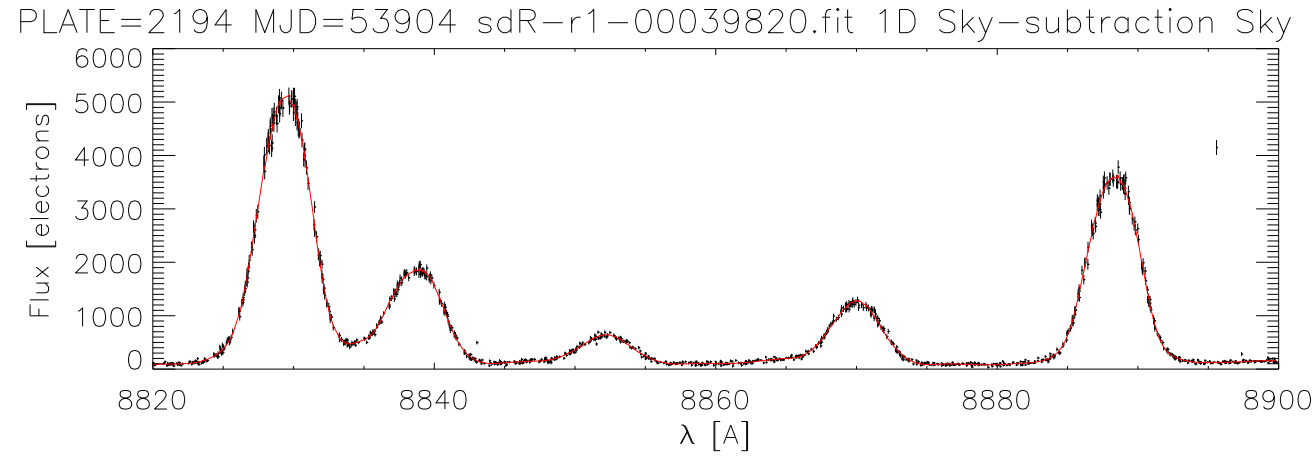

0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

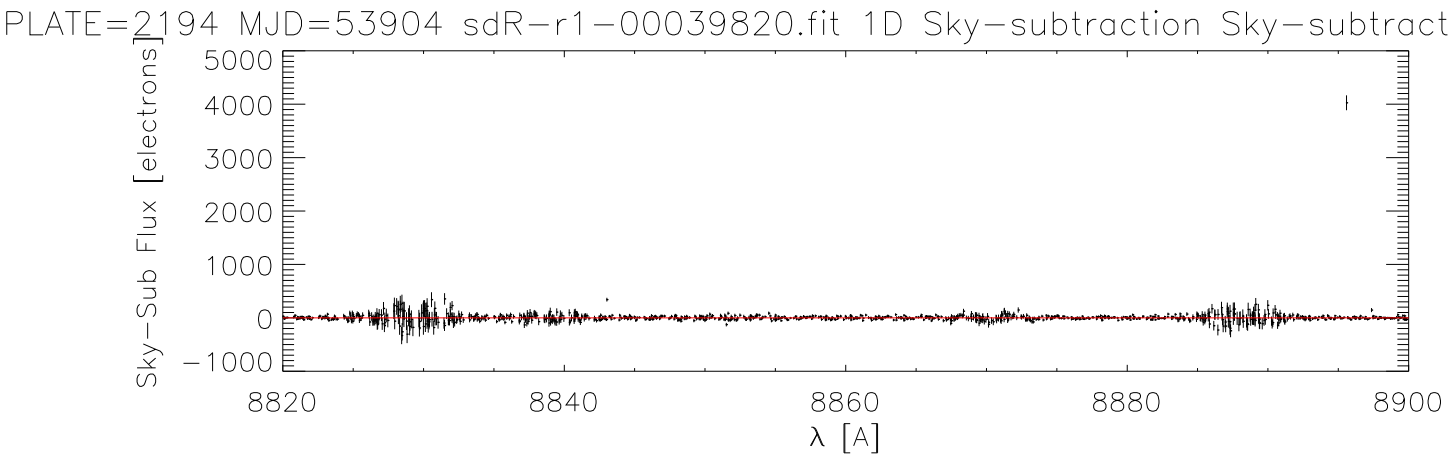
es= 0.0000

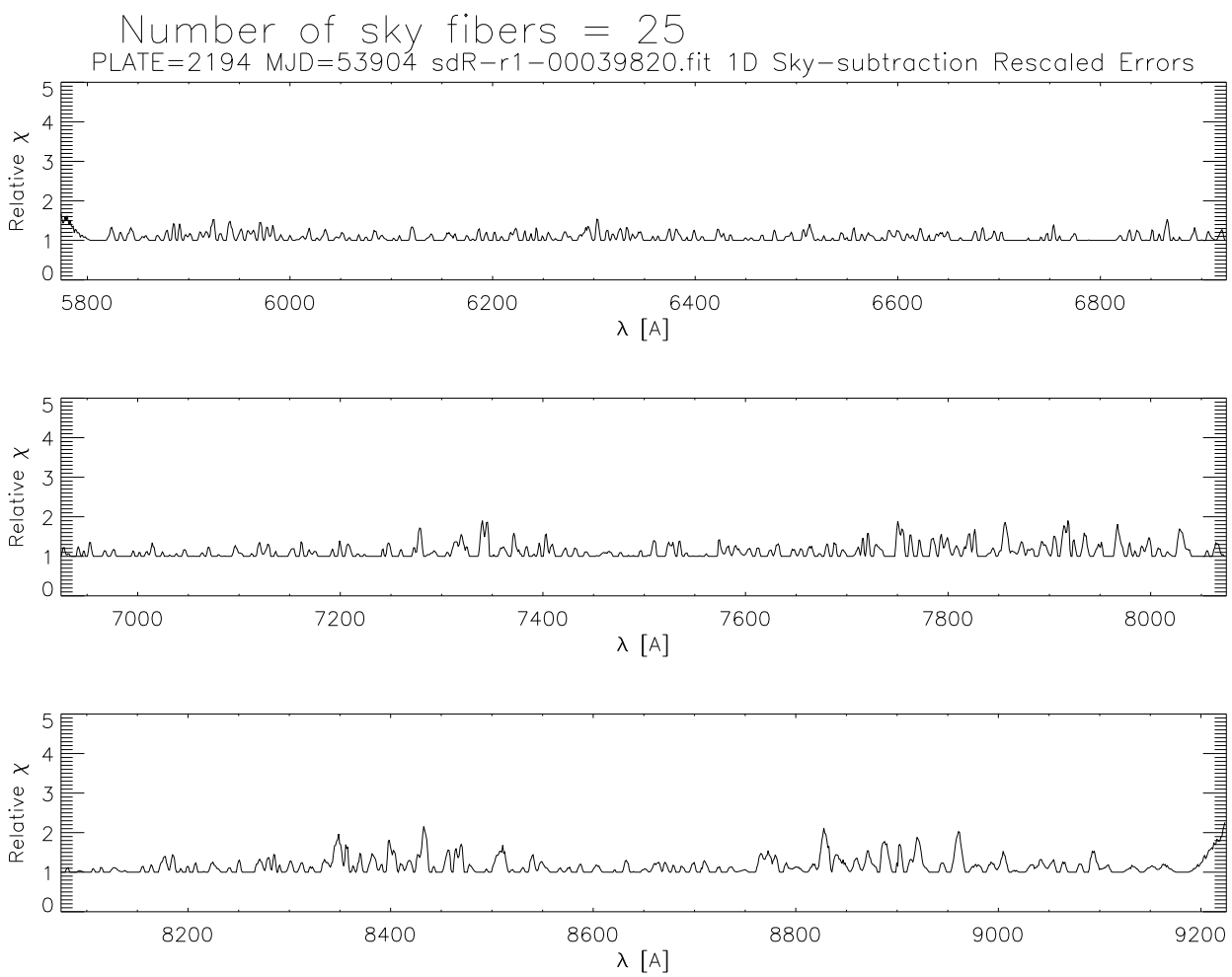

PLATE=2194 MJD=53904 Smooth superflat for sdR-r1-00039820.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

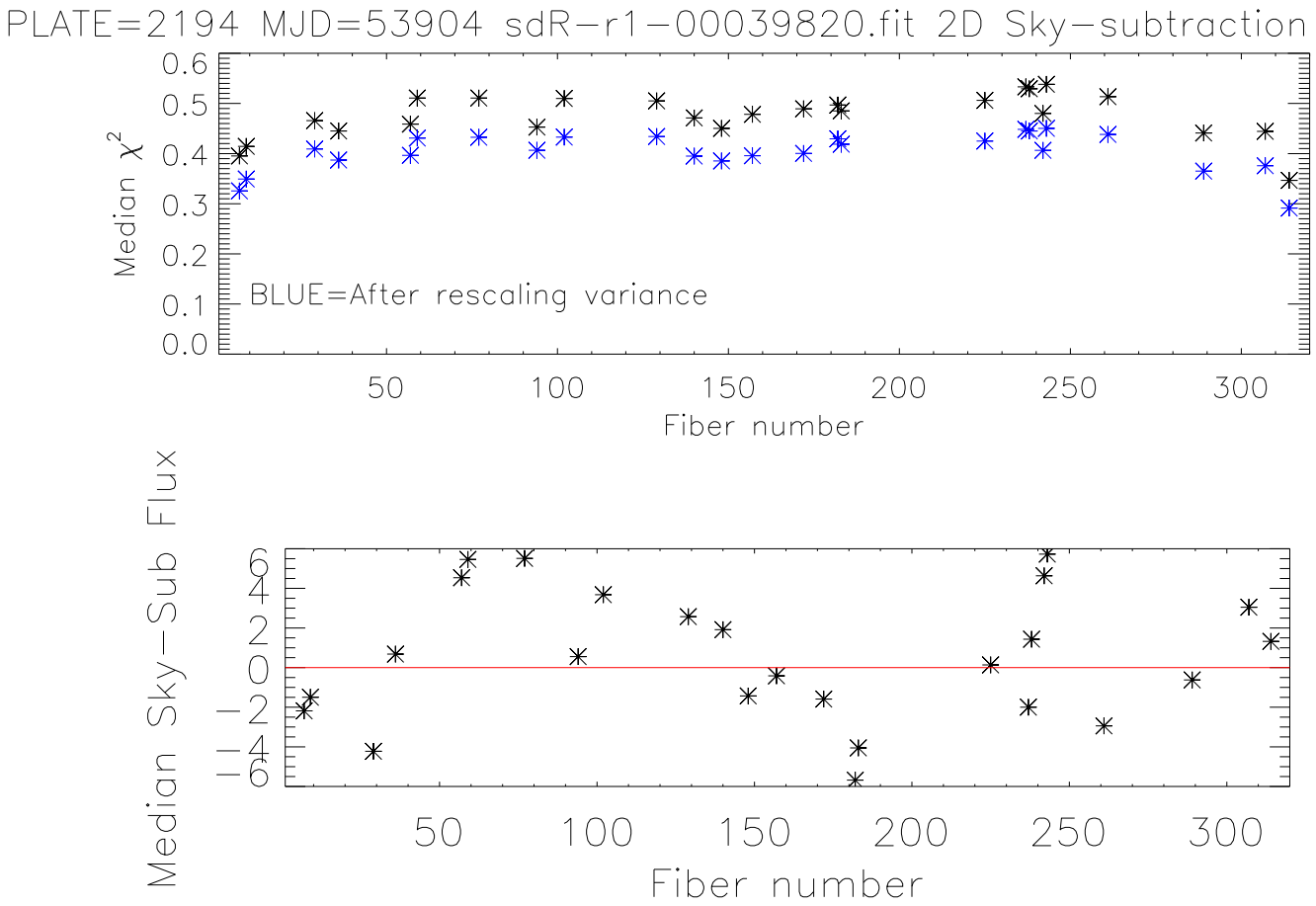

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

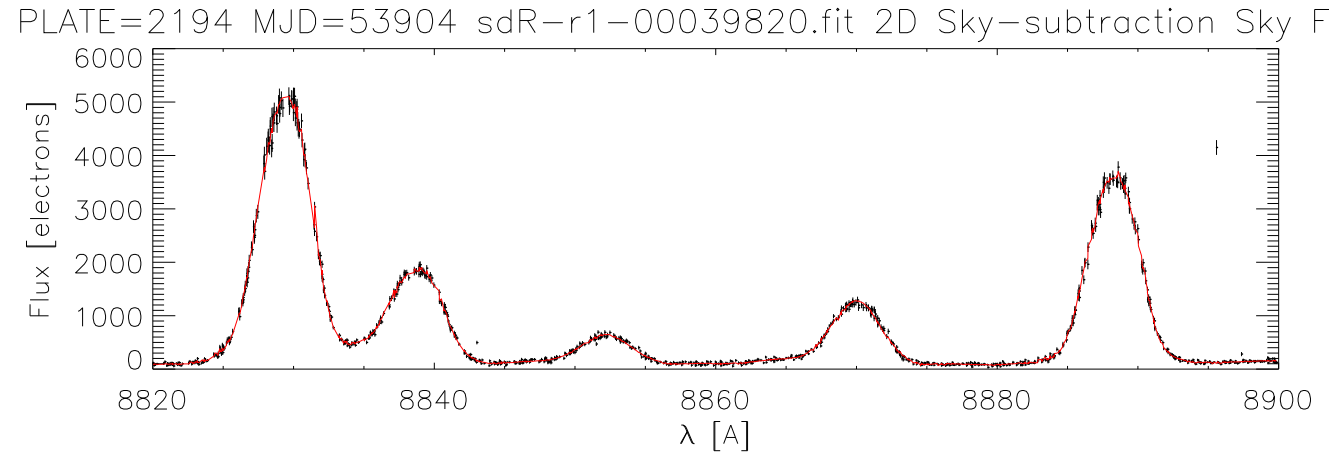
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

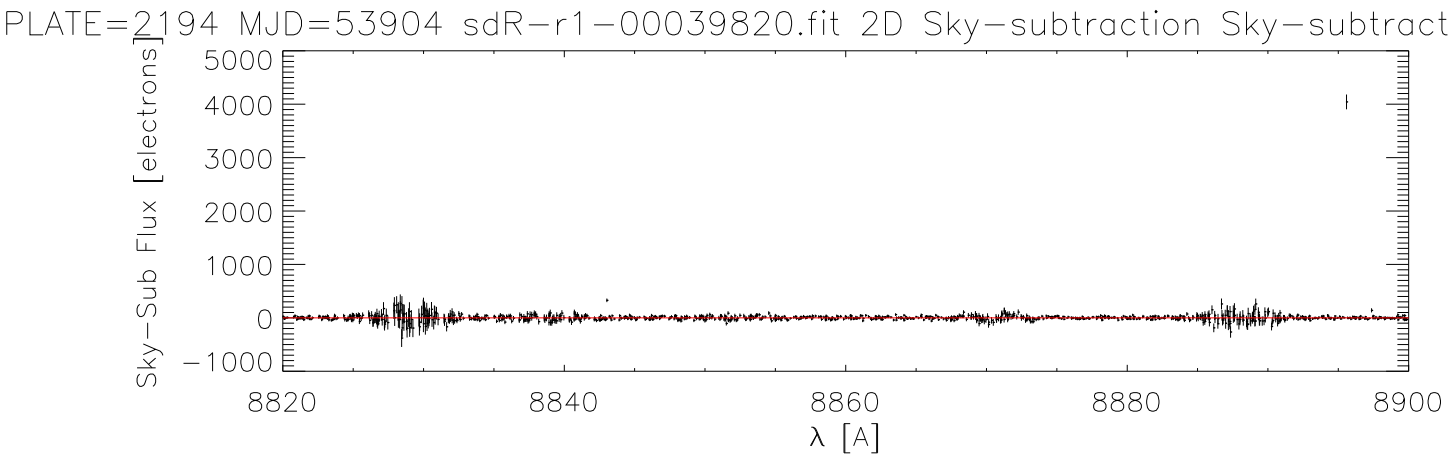

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

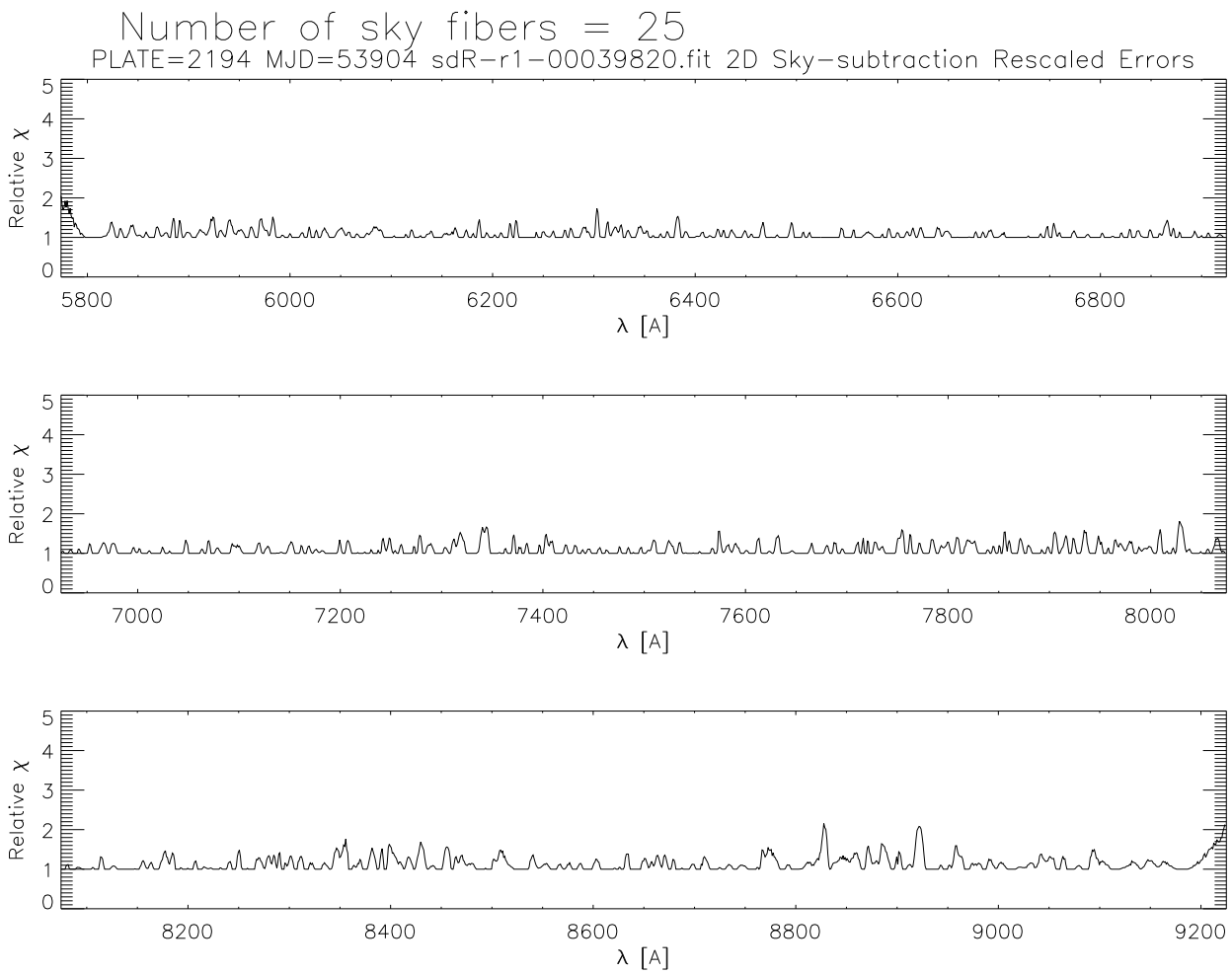

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

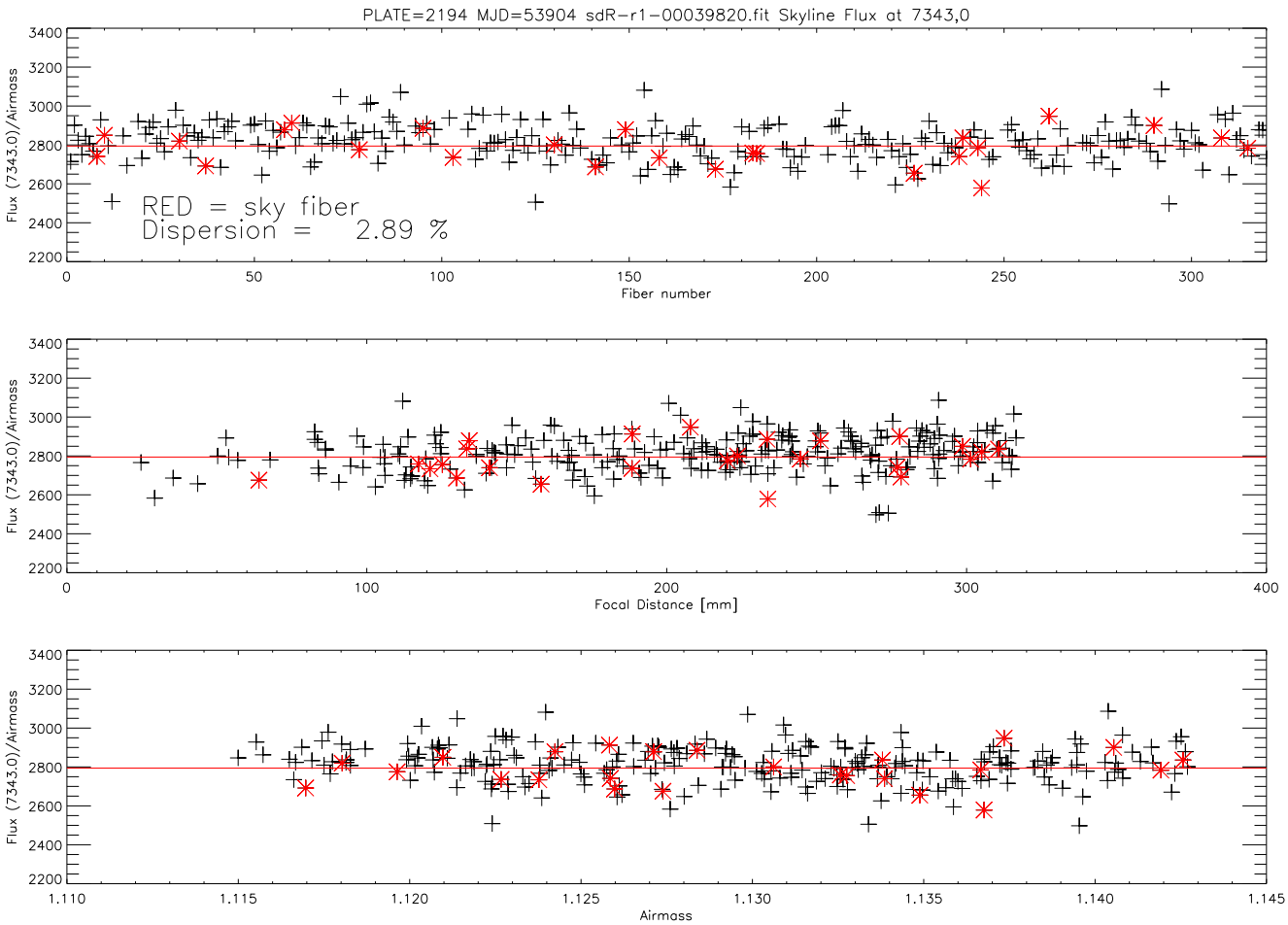

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039820.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

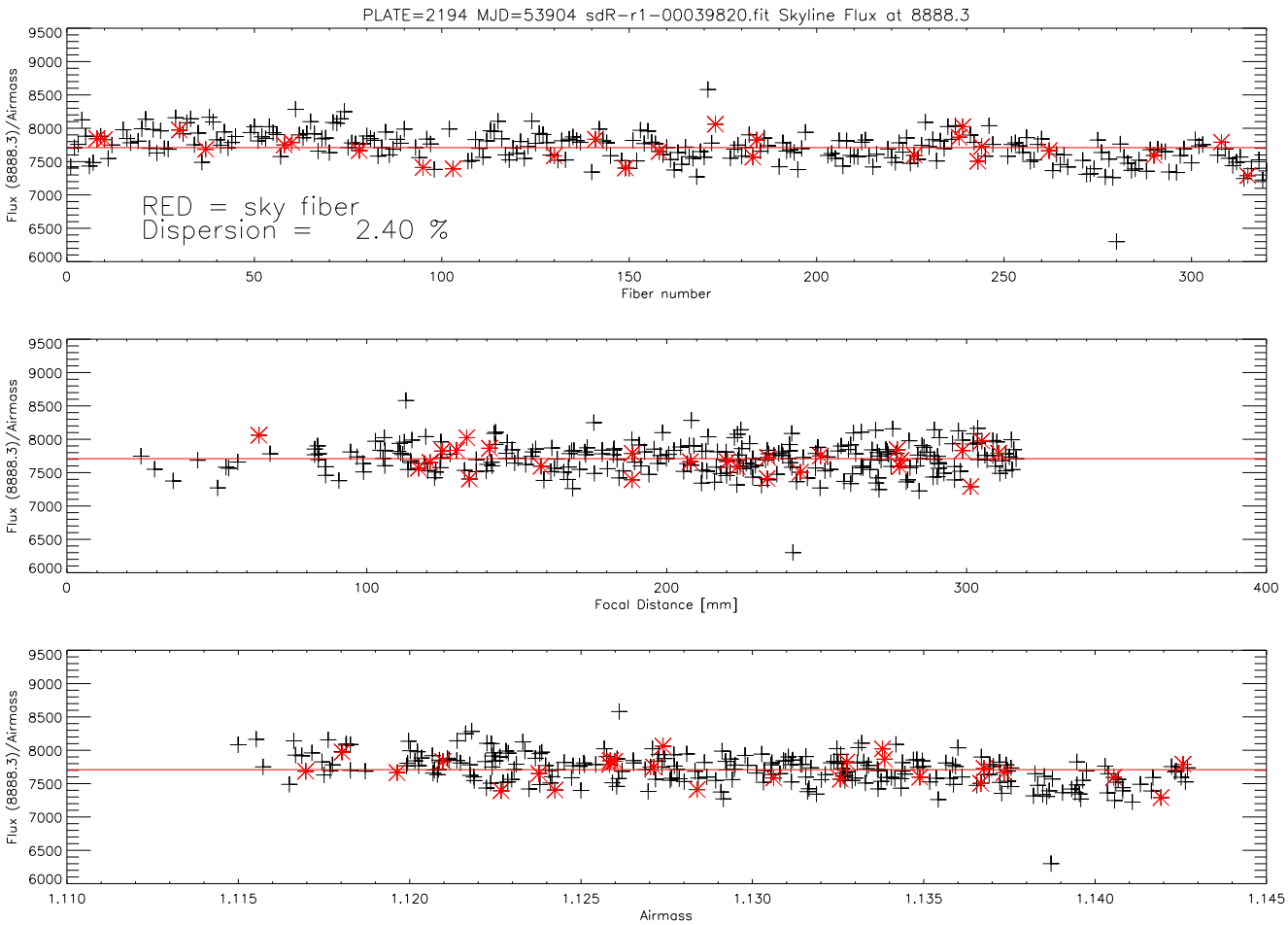

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

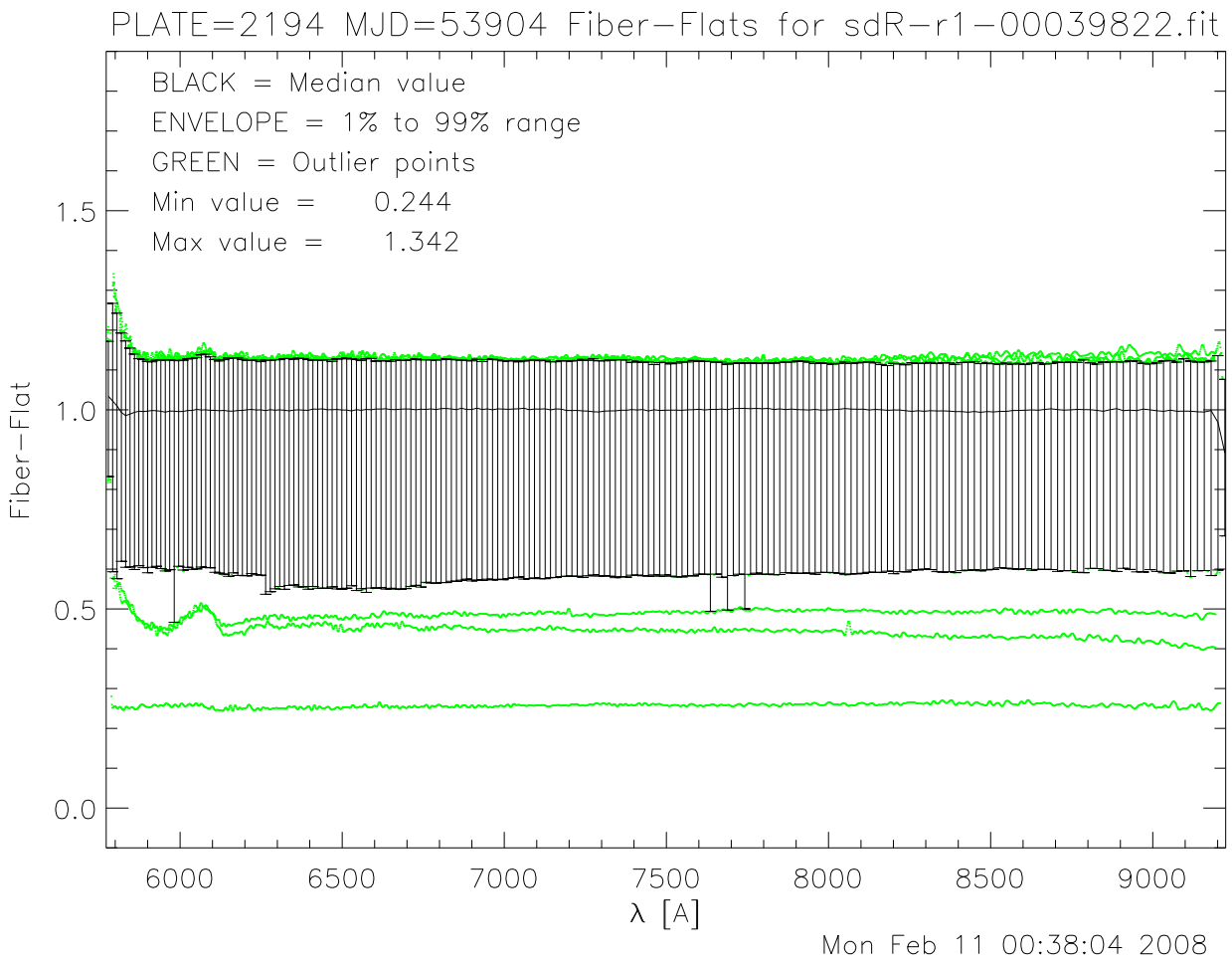

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

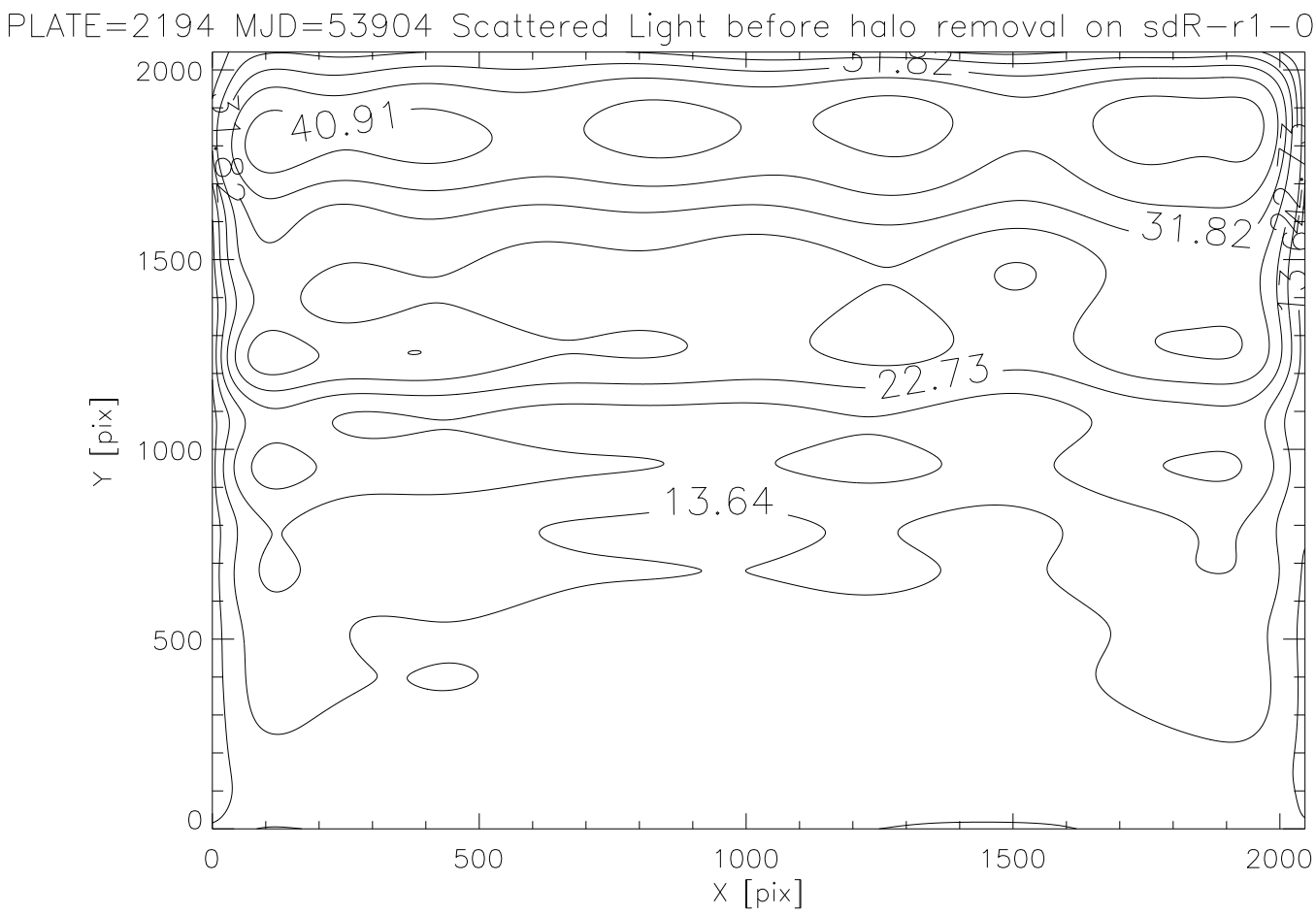

PLATE=2194 MJD=53904 sdR-r1-00039820.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

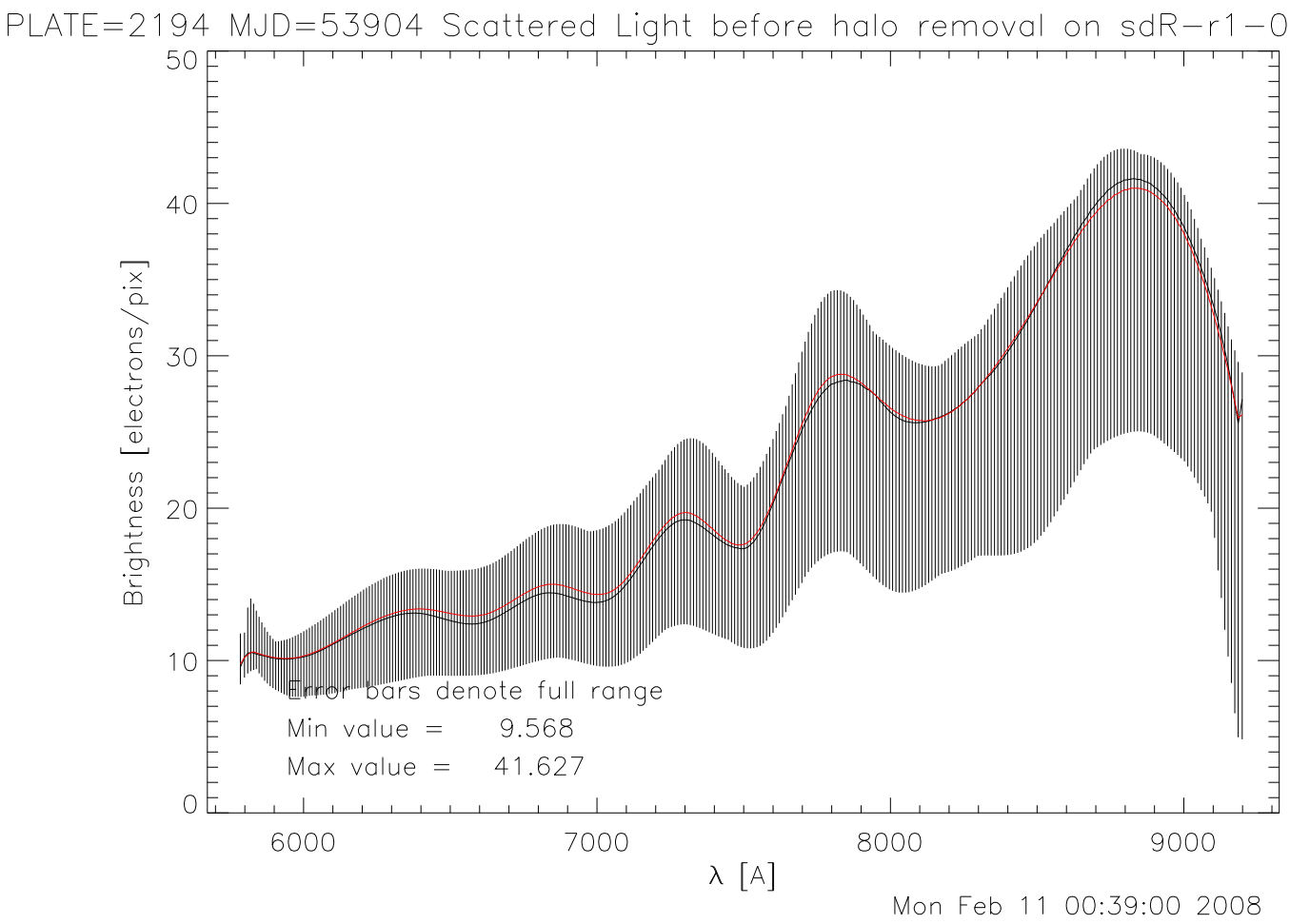

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

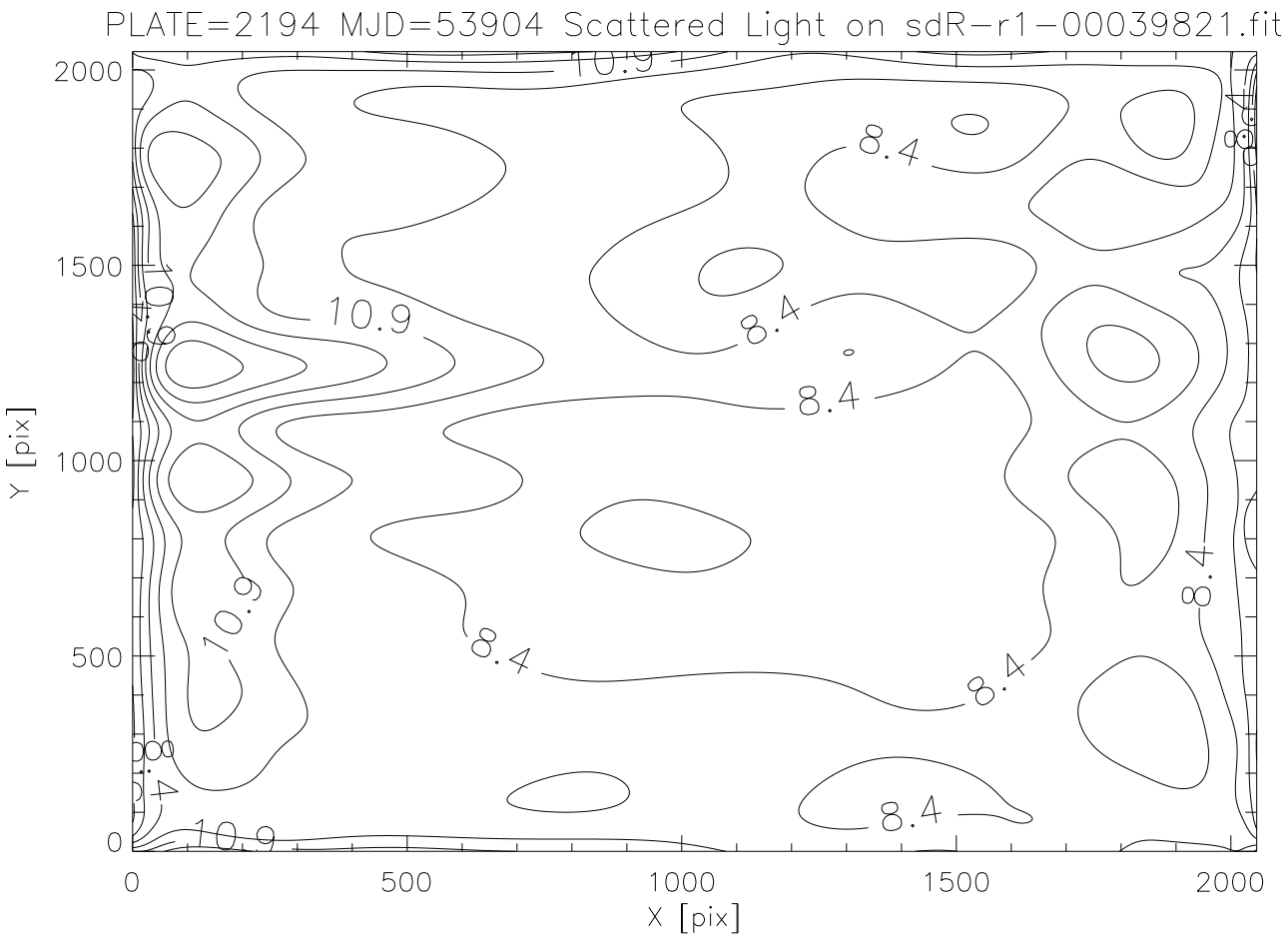

PLATE=2194 MJD=53904 sdR-r1-00039820.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.89 %
Fiber number
Focal Distance [mm]
Airmass

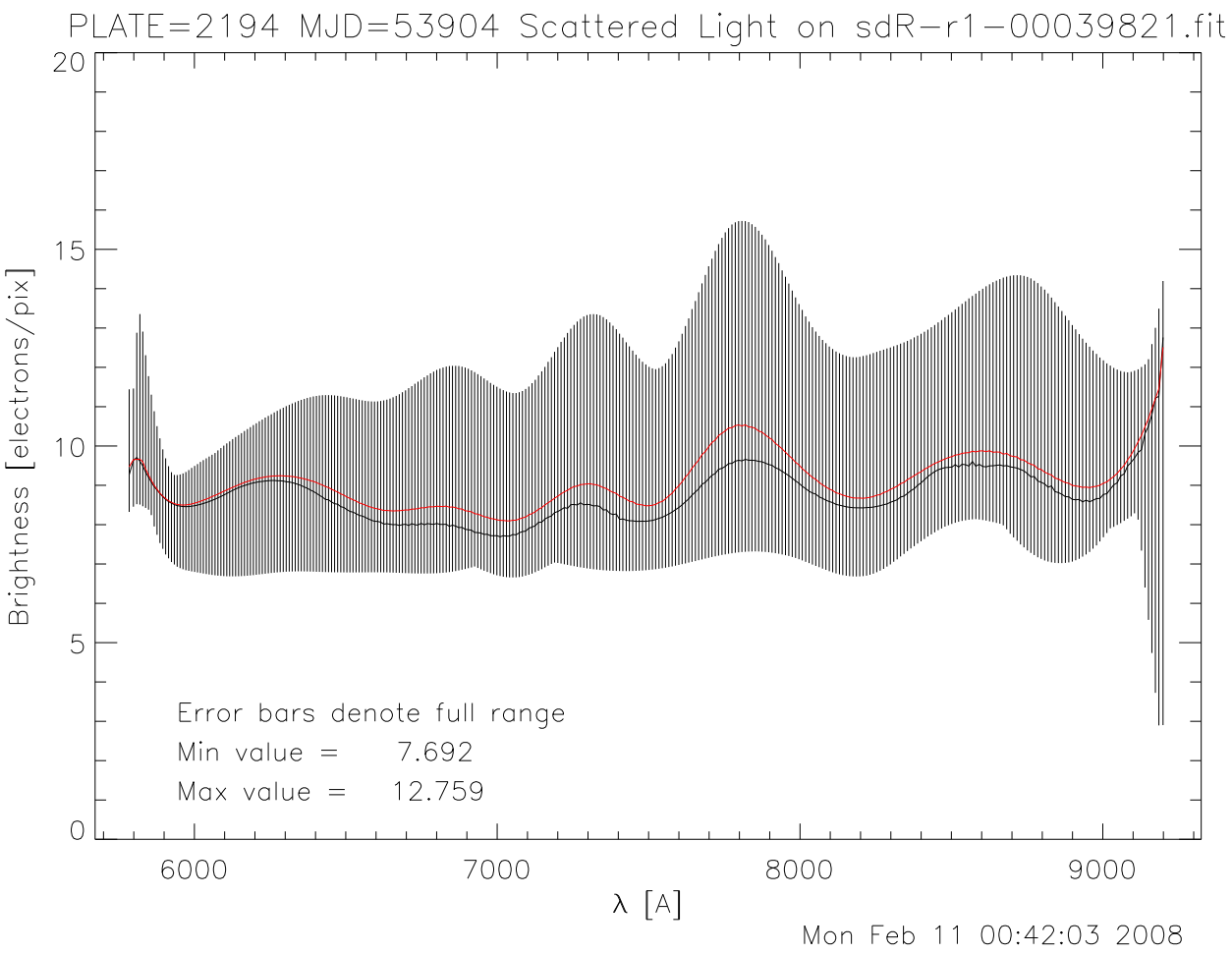

PLATE=2194 MJD=53904 sdR-r1-00039820.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.40 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

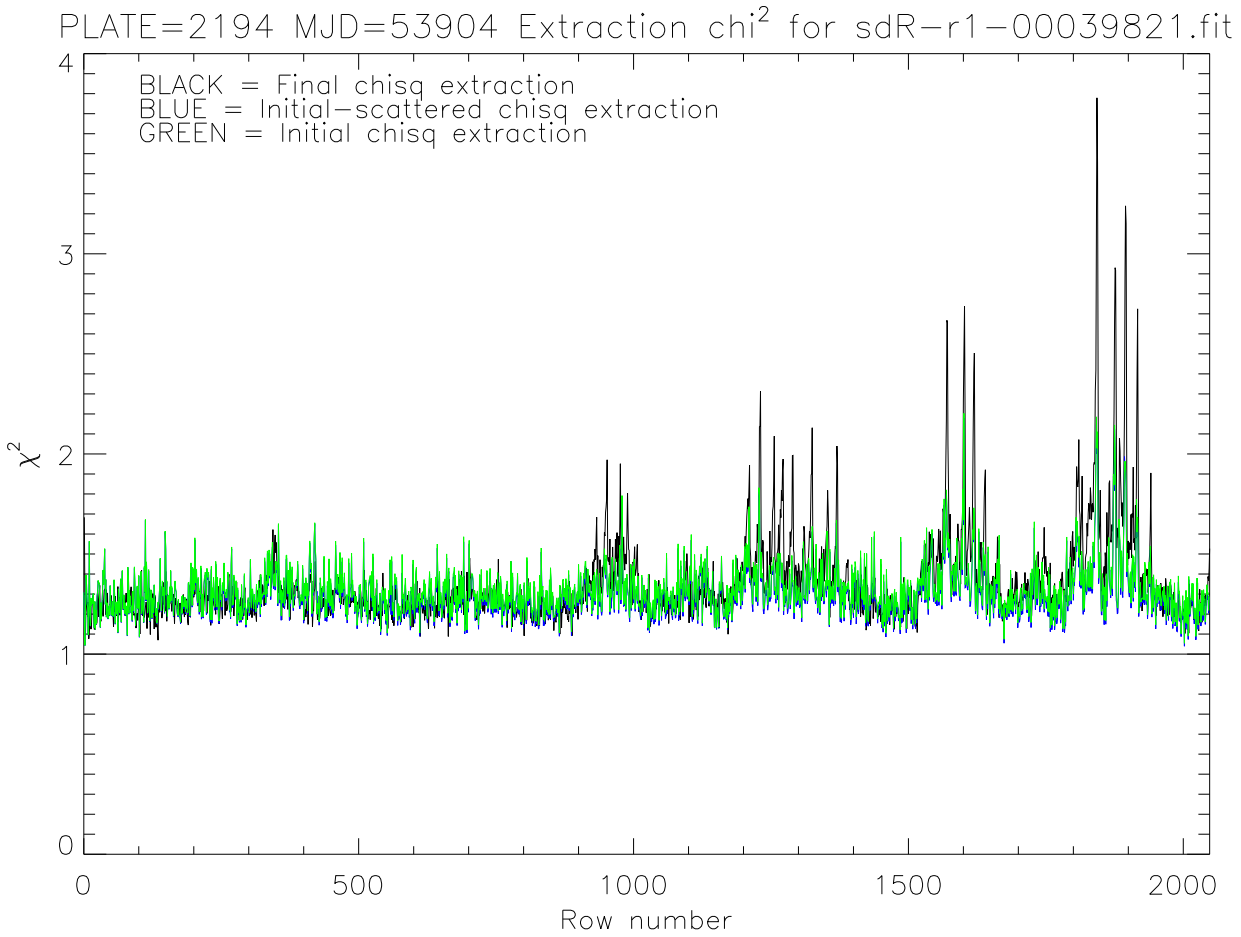

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r1−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.244
Max value = 1.342
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 00:38:04 2008

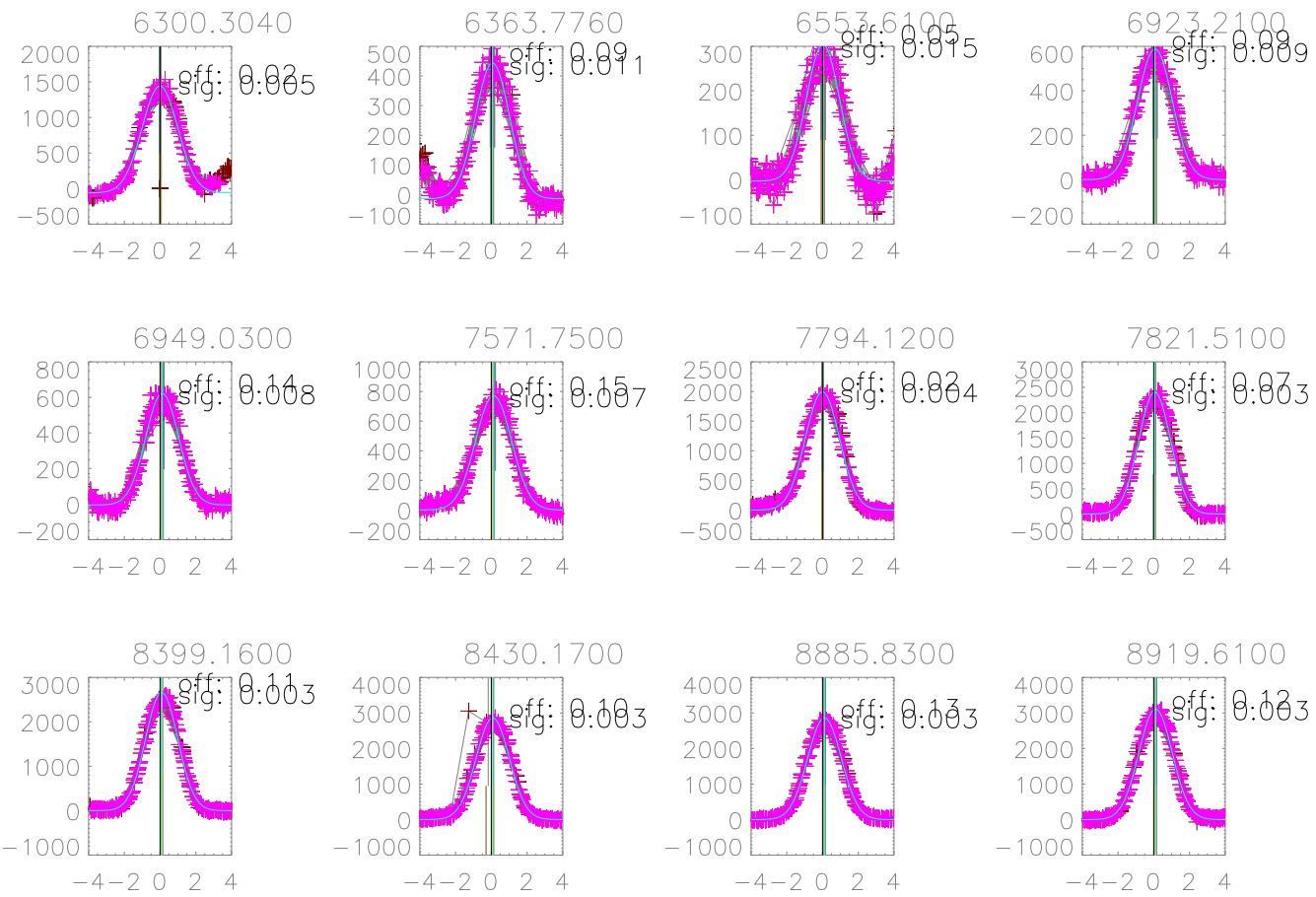

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r1-00039821.fi
51.82
40.91
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

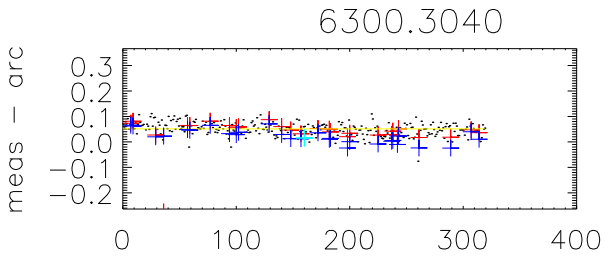

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r1-00039821.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.568
Max value = 41.627
Mon Feb 11 00:39:00 2008

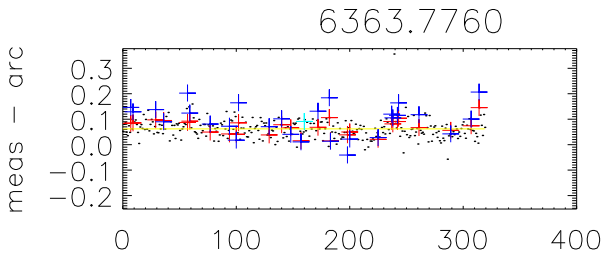

PLATE=2194 MJD=53904 Scattered Light on sdR−r1−00039821.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
8.4

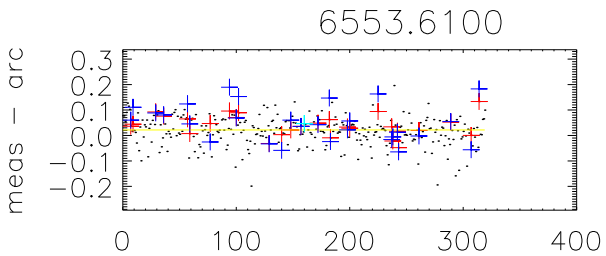

PLATE=2194 MJD=53904 Scattered Light on sdR-r1-00039821.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.692
Max value = 12.759
Mon Feb 11 00:42:03 2008

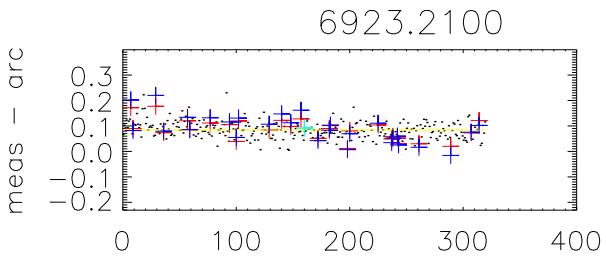

PLATE=2194 MJD=53904 Extraction chi^2 for sdR−r1−00039821.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

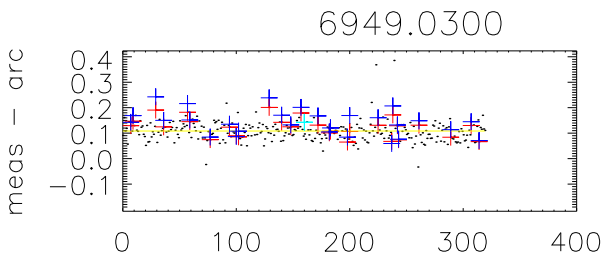

6300.3040
off: 0.02
sig: 0.005
6363.7760
off: 0.09
sig: 0.011
6553.6100
off: 0.05
sig: 0.015
6923.2100
off: 0.09
sig: 0.009
6949.0300
off: 0.14
sig: 0.008
7571.7500
off: 0.15
sig: 0.007
7794.1200
off: 0.02
sig: 0.004
7821.5100
off: 0.07
sig: 0.003
8399.1600
off: 0.11
sig: 0.003
8430.1700
off: 0.10
sig: 0.003
8885.8300
off: 0.13
sig: 0.003
8919.6100
off: 0.12
sig: 0.003

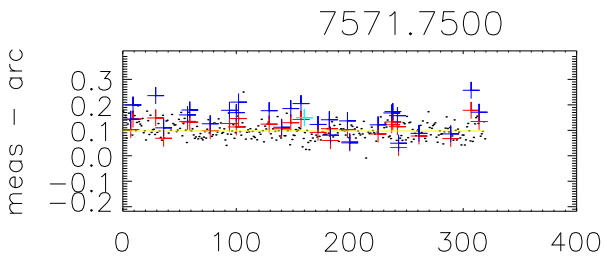

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

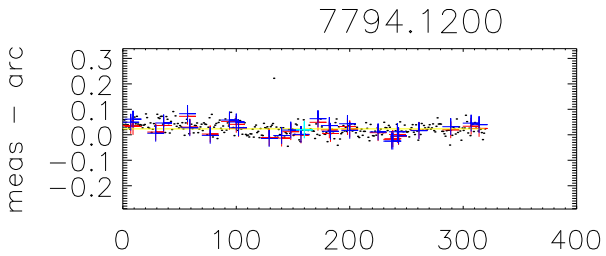

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

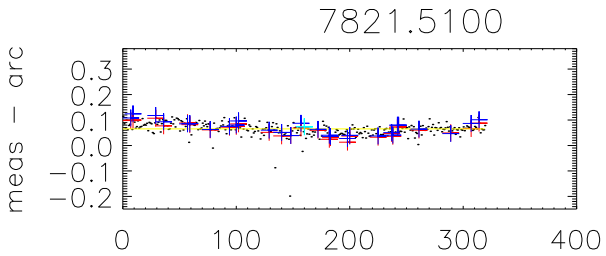

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

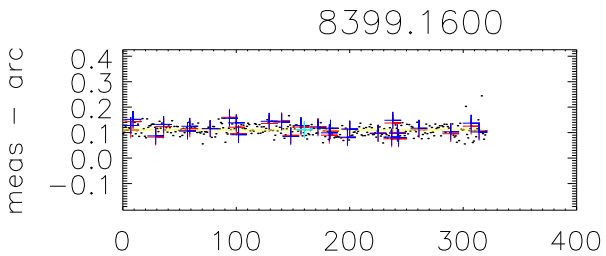

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

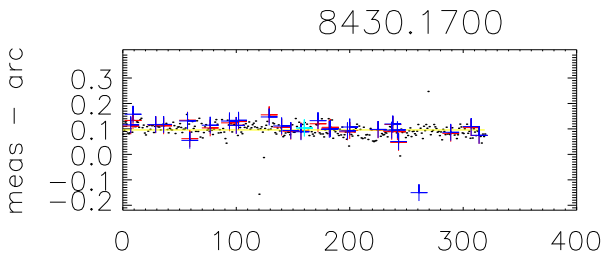

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

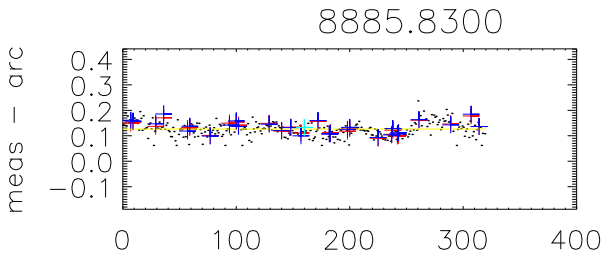

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

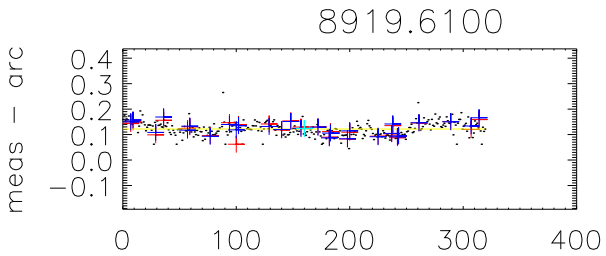

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

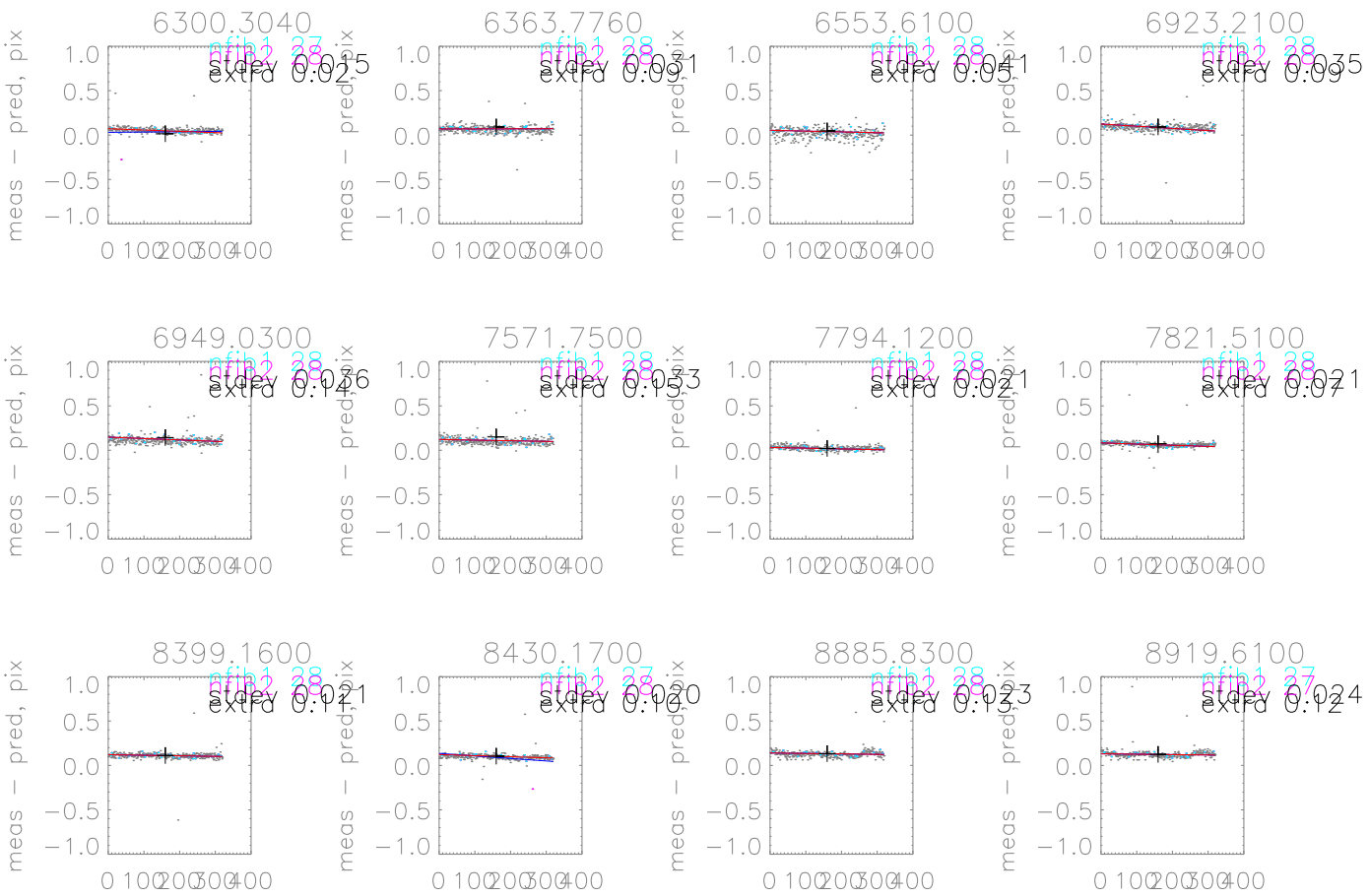

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

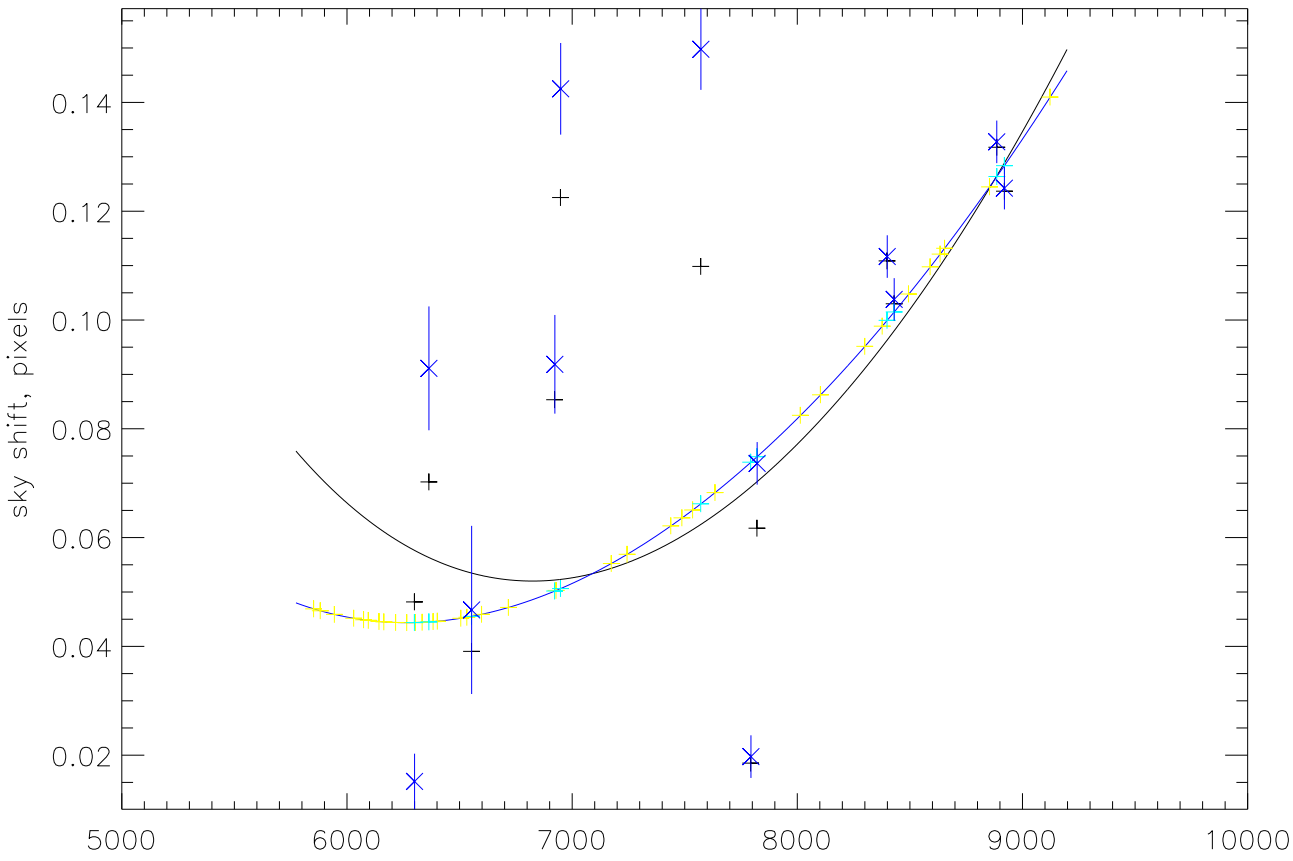

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

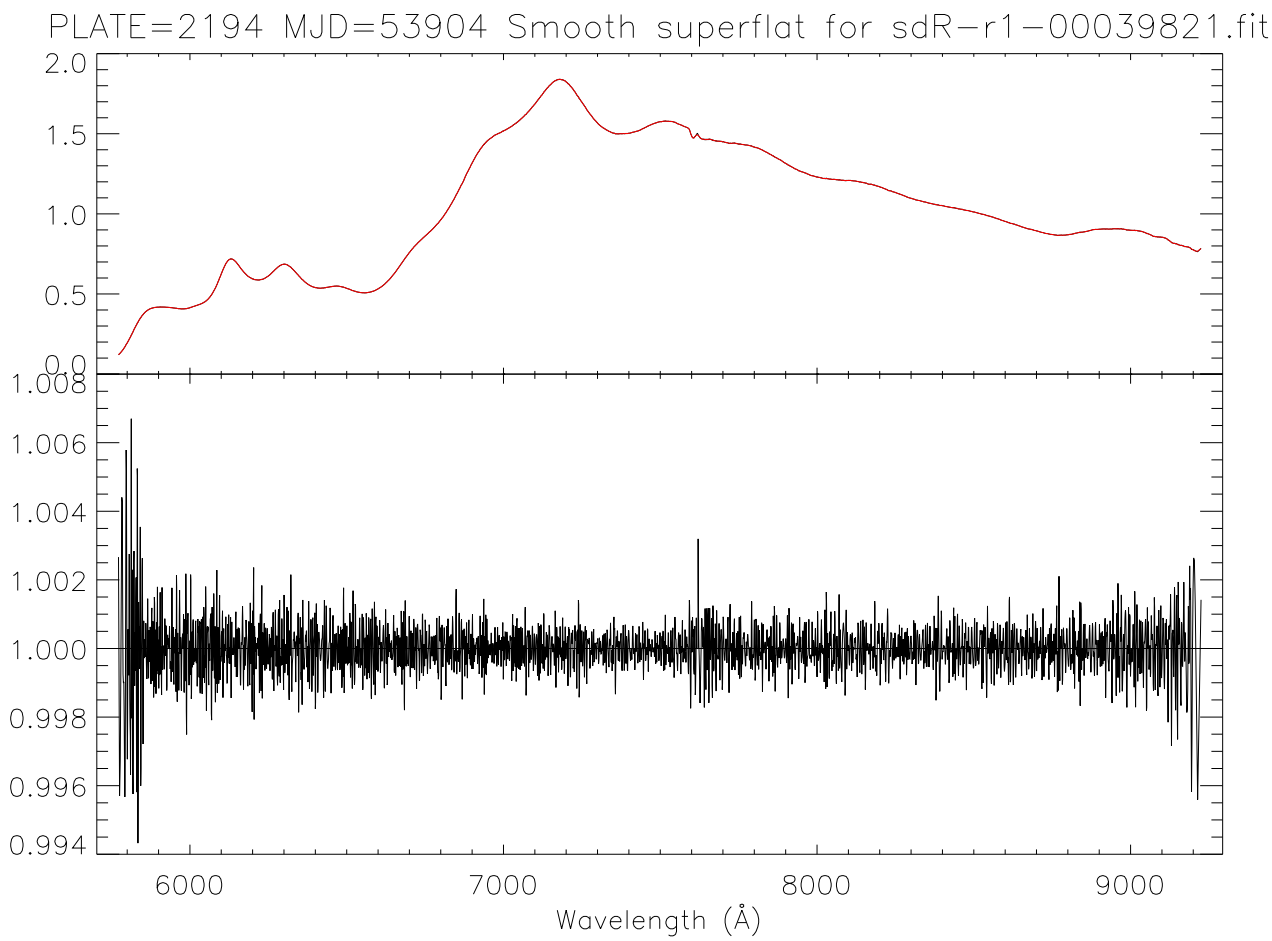

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

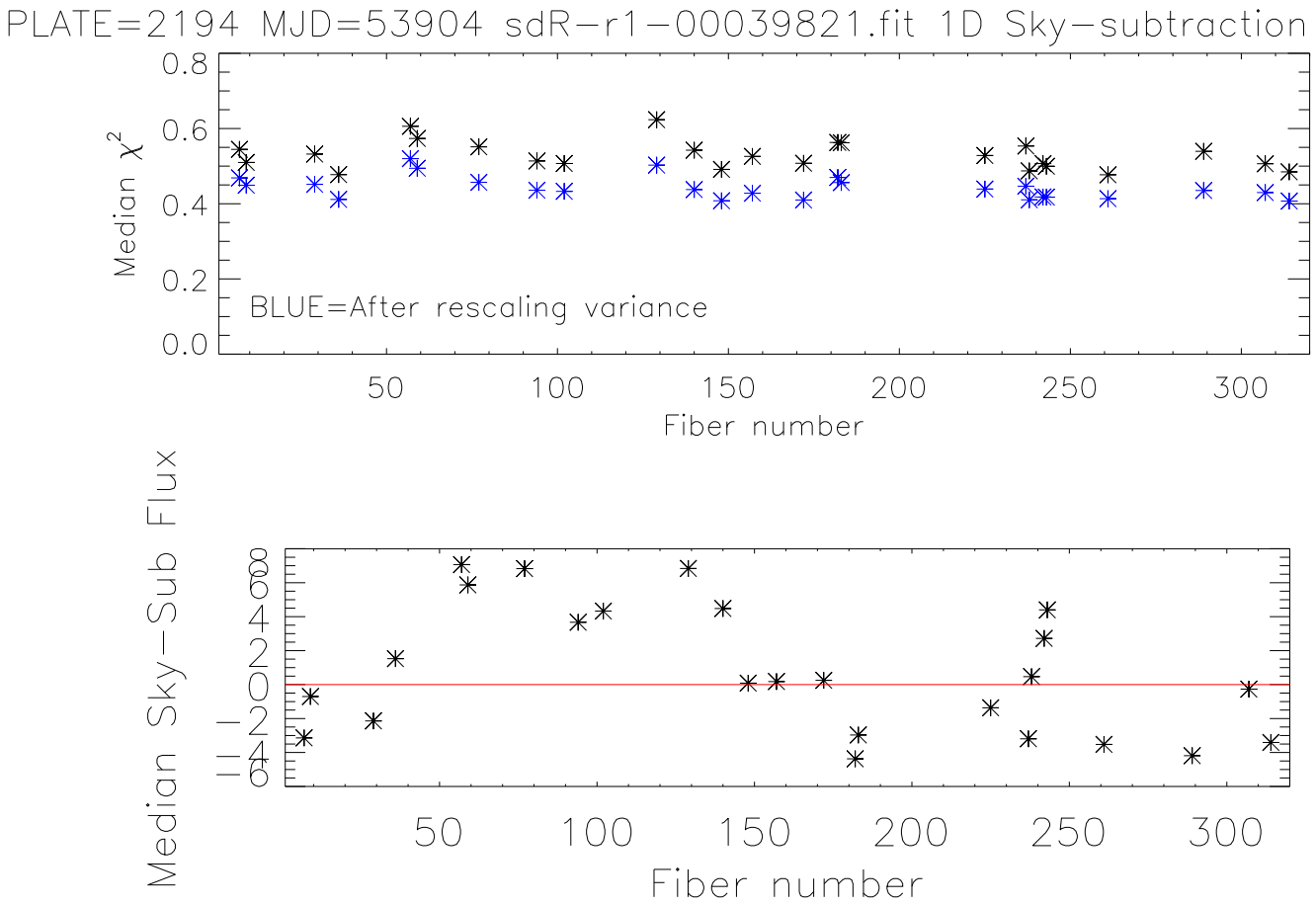

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


6300.3040
mfhi1 28
mfhi2 27
stdev 0.015
extra 0.025
6363.7760
mfhi1 28
mfhi2 28
stdev 0.031
extra 0.091
6553.6100
mfhi1 28
mfhi2 28
stdev 0.041
extra 0.051
6923.2100
mfhi1 28
mfhi2 28
stdev 0.035
extra 0.09
6949.0300
mfhi1 28
mfhi2 28
stdev 0.036
extra 0.14
7571.7500
mfhi1 28
mfhi2 28
stdev 0.033
extra 0.153
7794.1200
mfhi1 28
mfhi2 28
stdev 0.021
extra 0.021
7821.5100
mfhi1 28
mfhi2 28
stdev 0.021
extra 0.07
8399.1600
mfhi1 28
mfhi2 28
stdev 0.021
extra 0.111
8430.1700
mfhi1 27
mfhi2 28
stdev 0.030
extra 0.16
8885.8300
mfhi1 28
mfhi2 28
stdev 0.023
extra 0.13
8919.6100
mfhi1 27
mfhi2 27
stdev 0.024
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

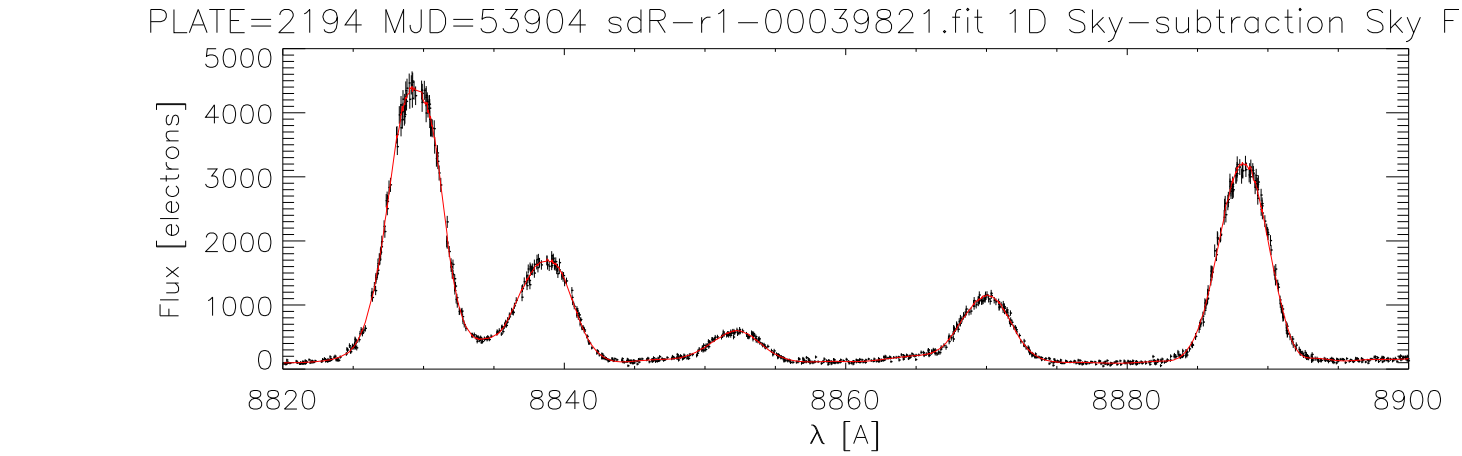

sky shift, pixels
0.14
0.12
0.10
0.08
0.06
0.04
0.02
5000
6000
7000
8000
9000
10000

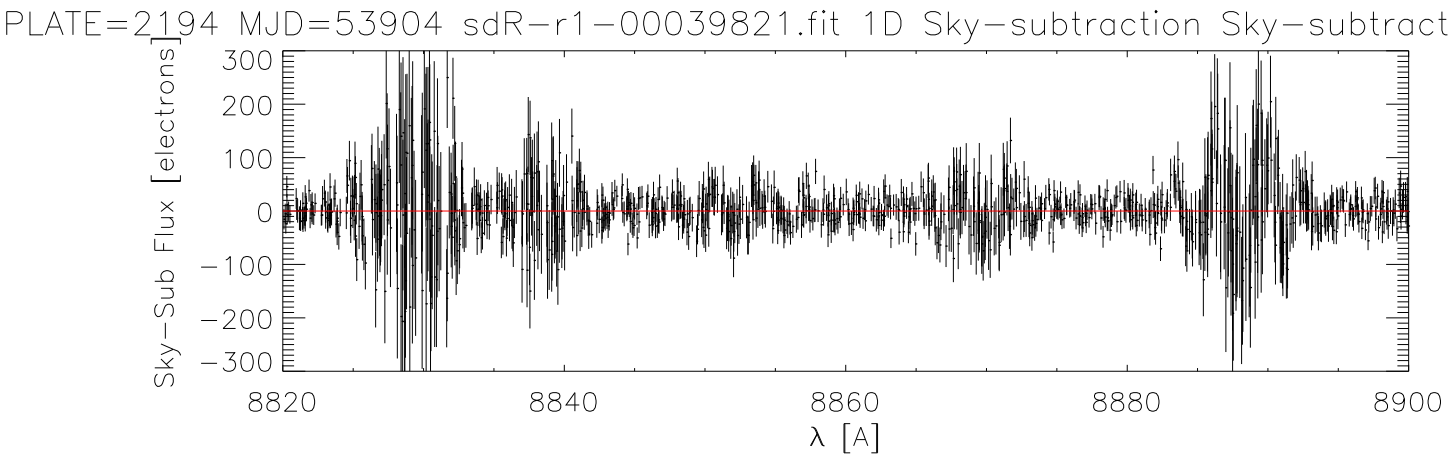
es= 0.0000

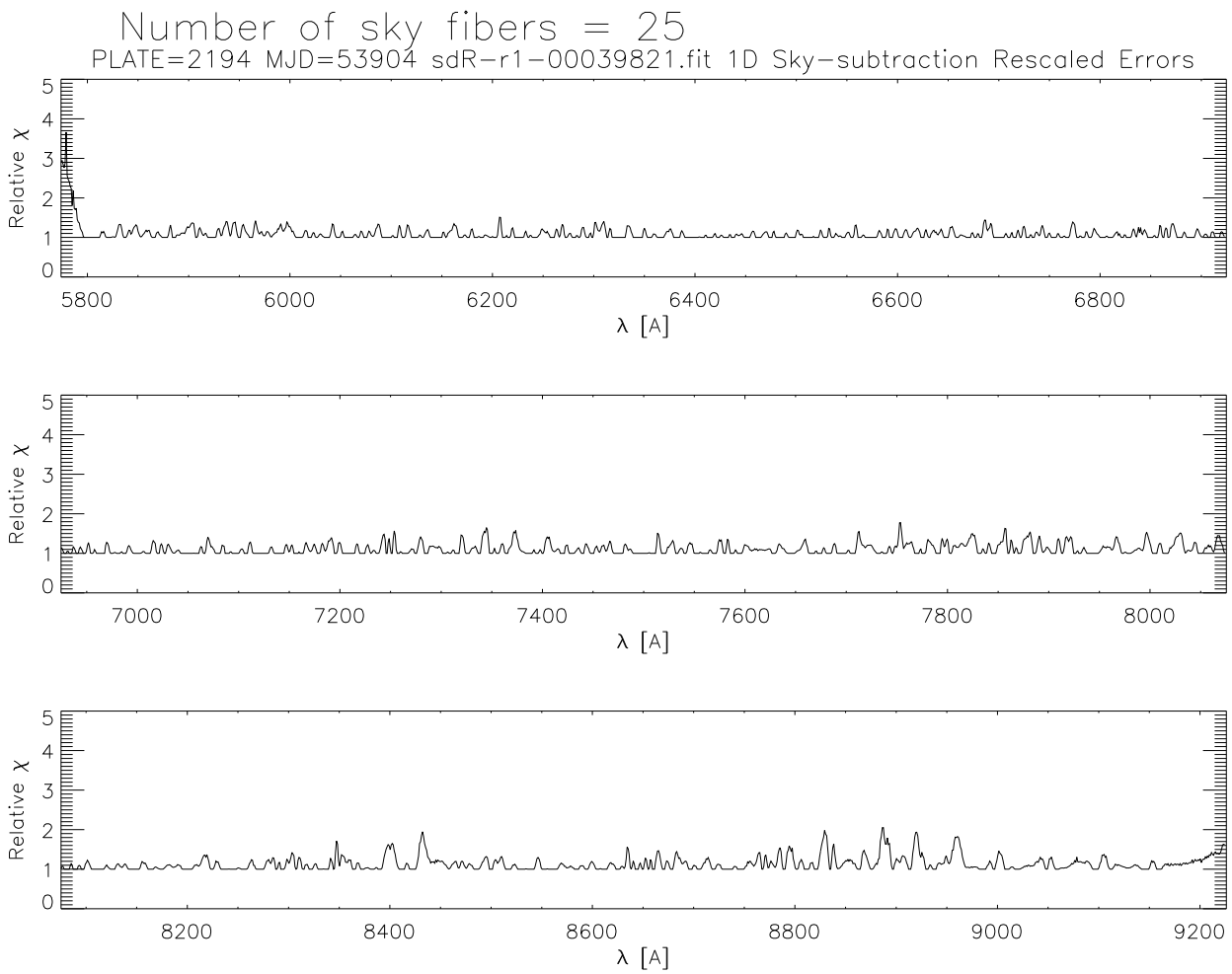

PLATE=2194 MJD=53904 Smooth superflat for sdR-r1-00039821.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

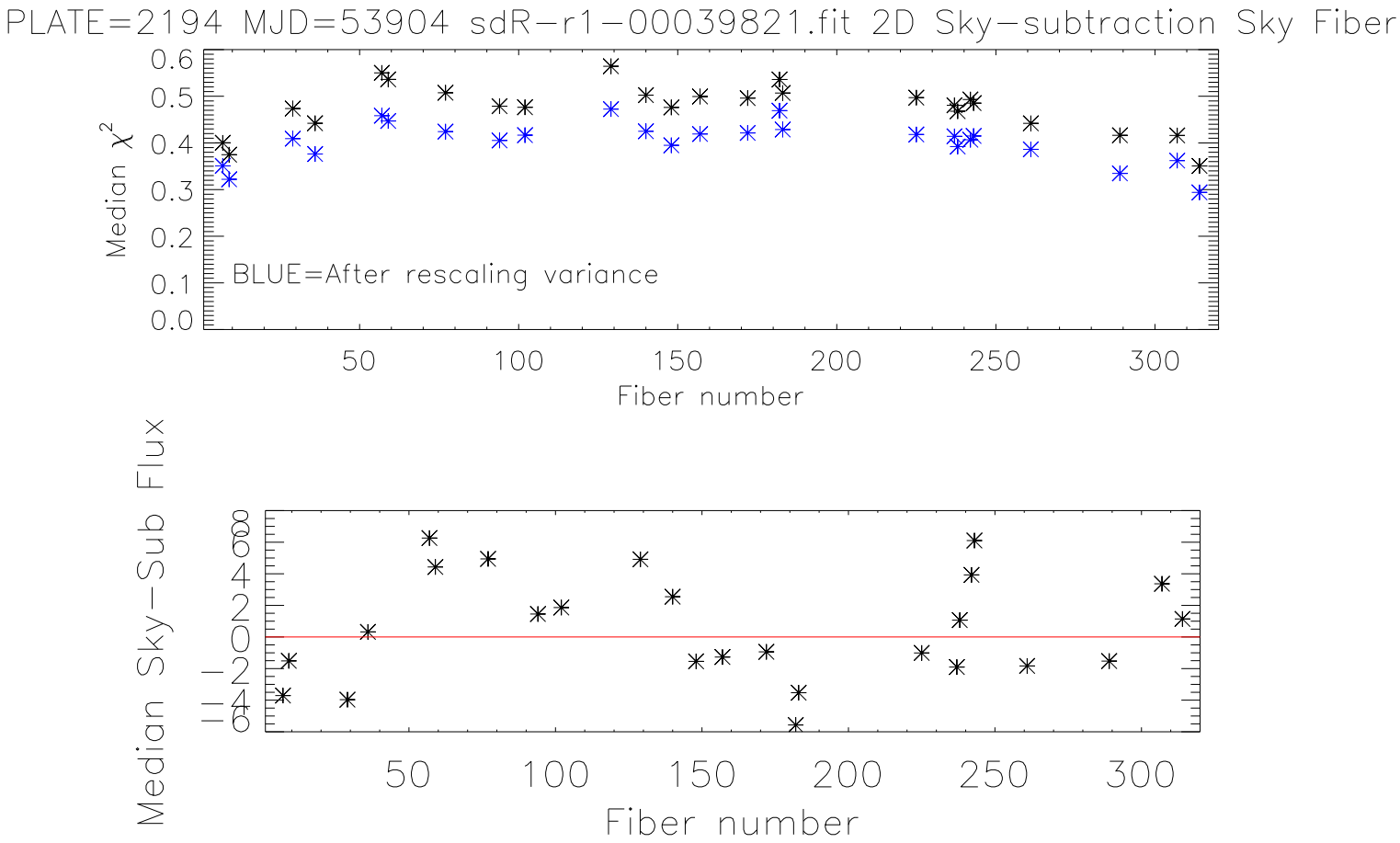

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

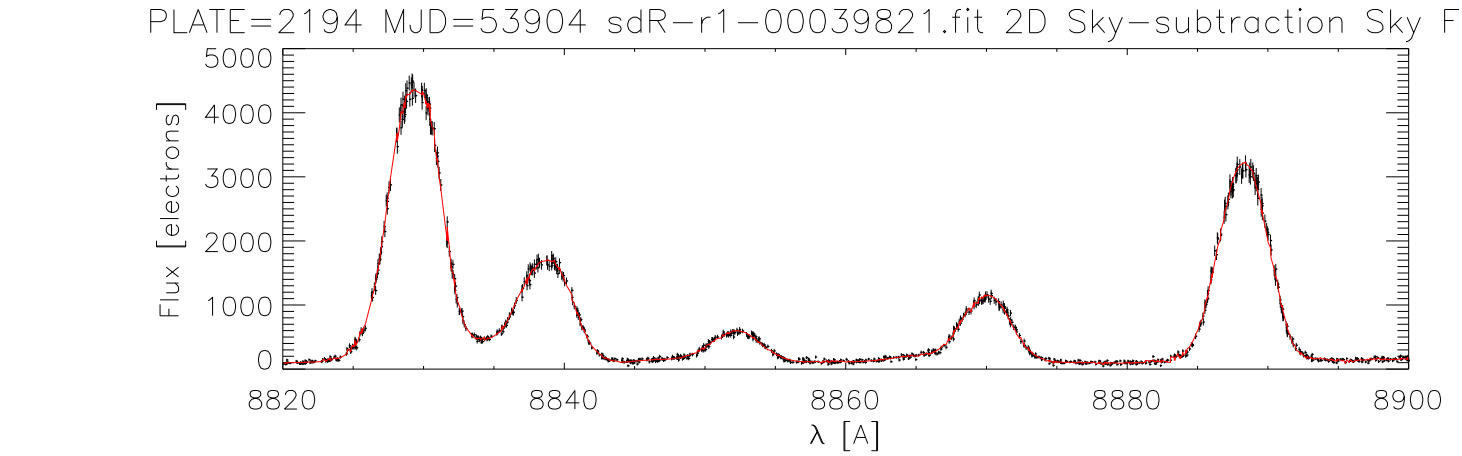
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

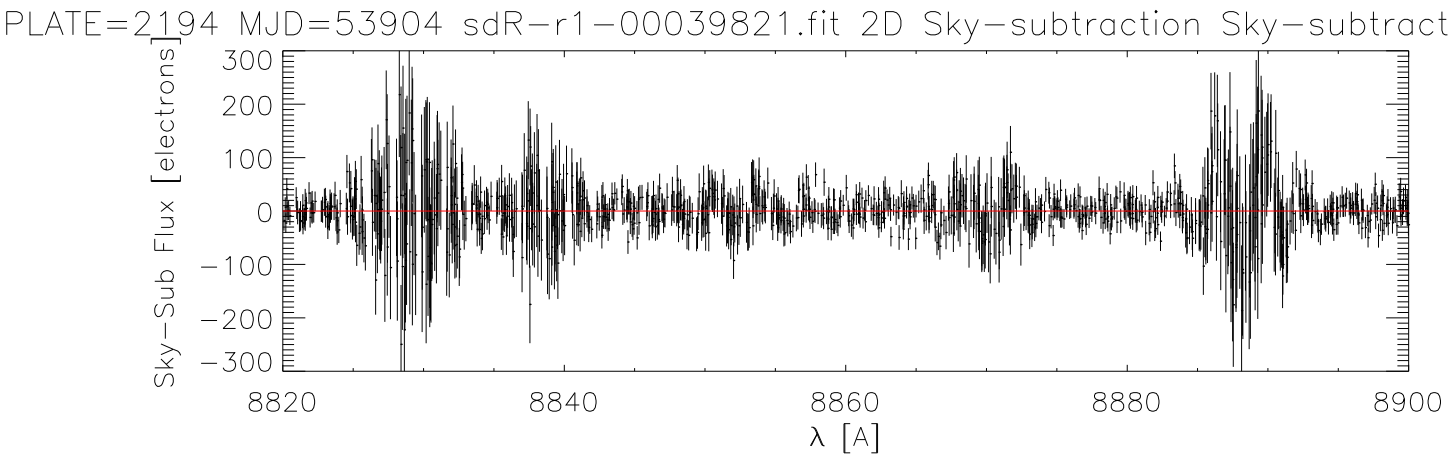

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

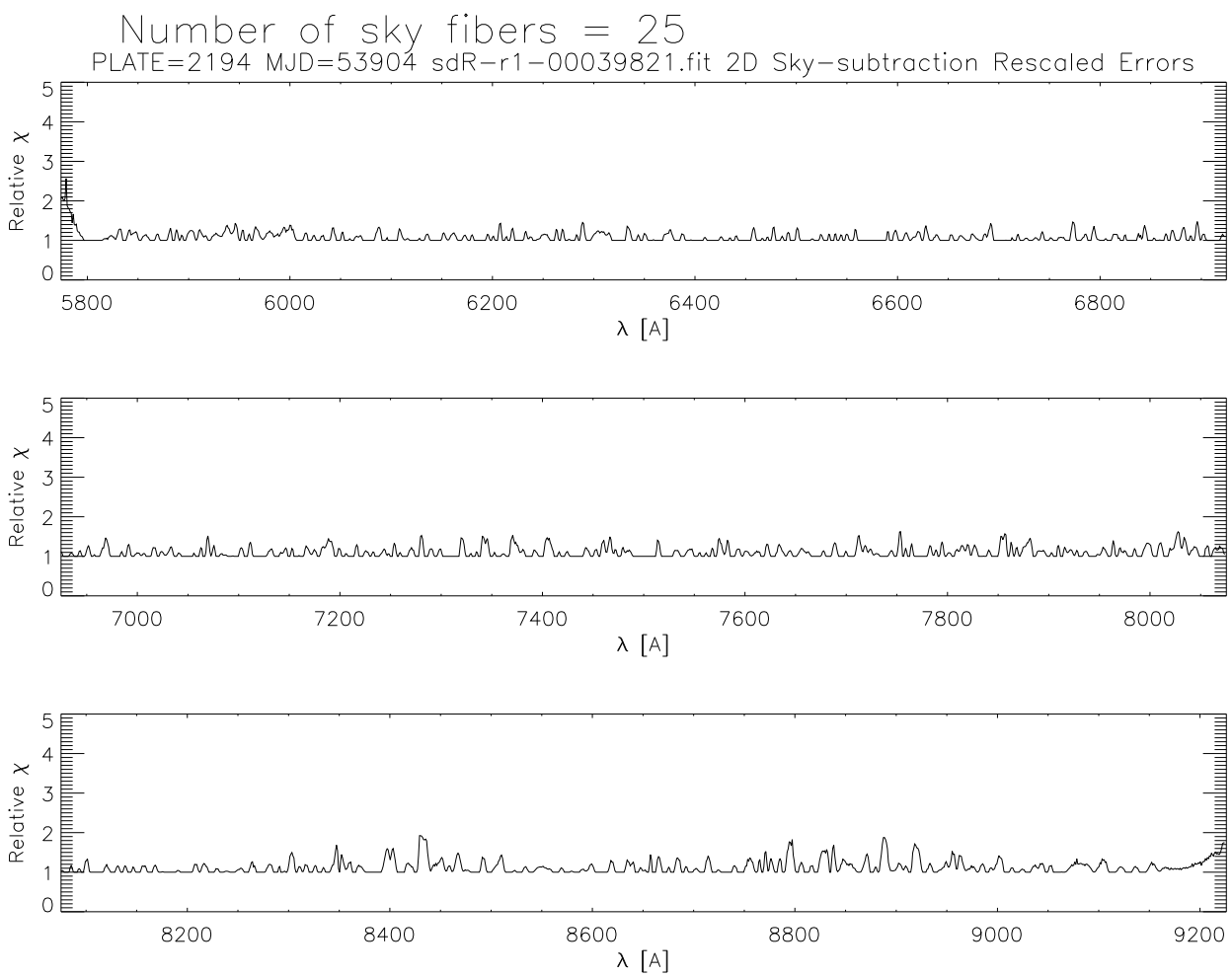

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

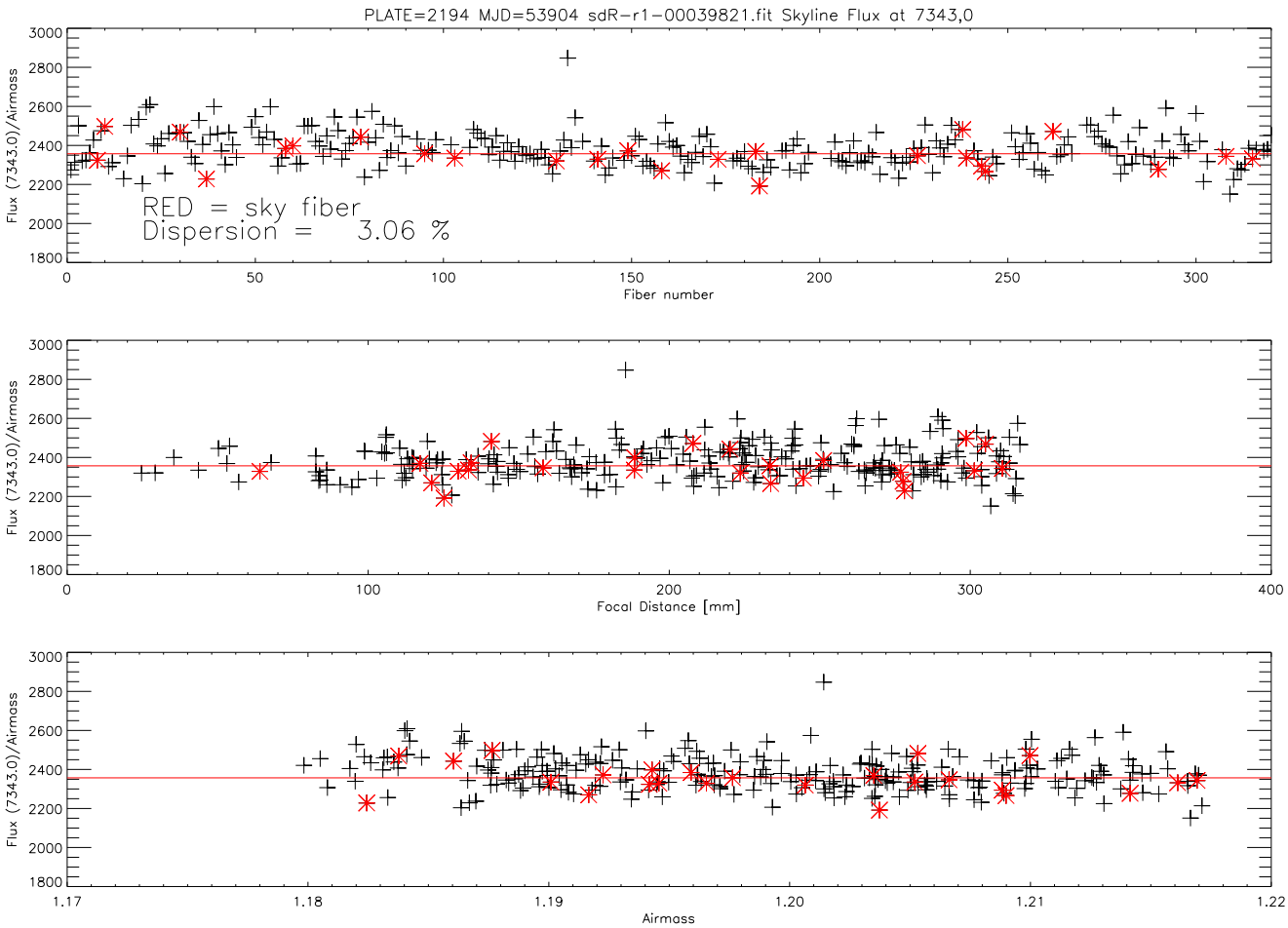

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039821.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

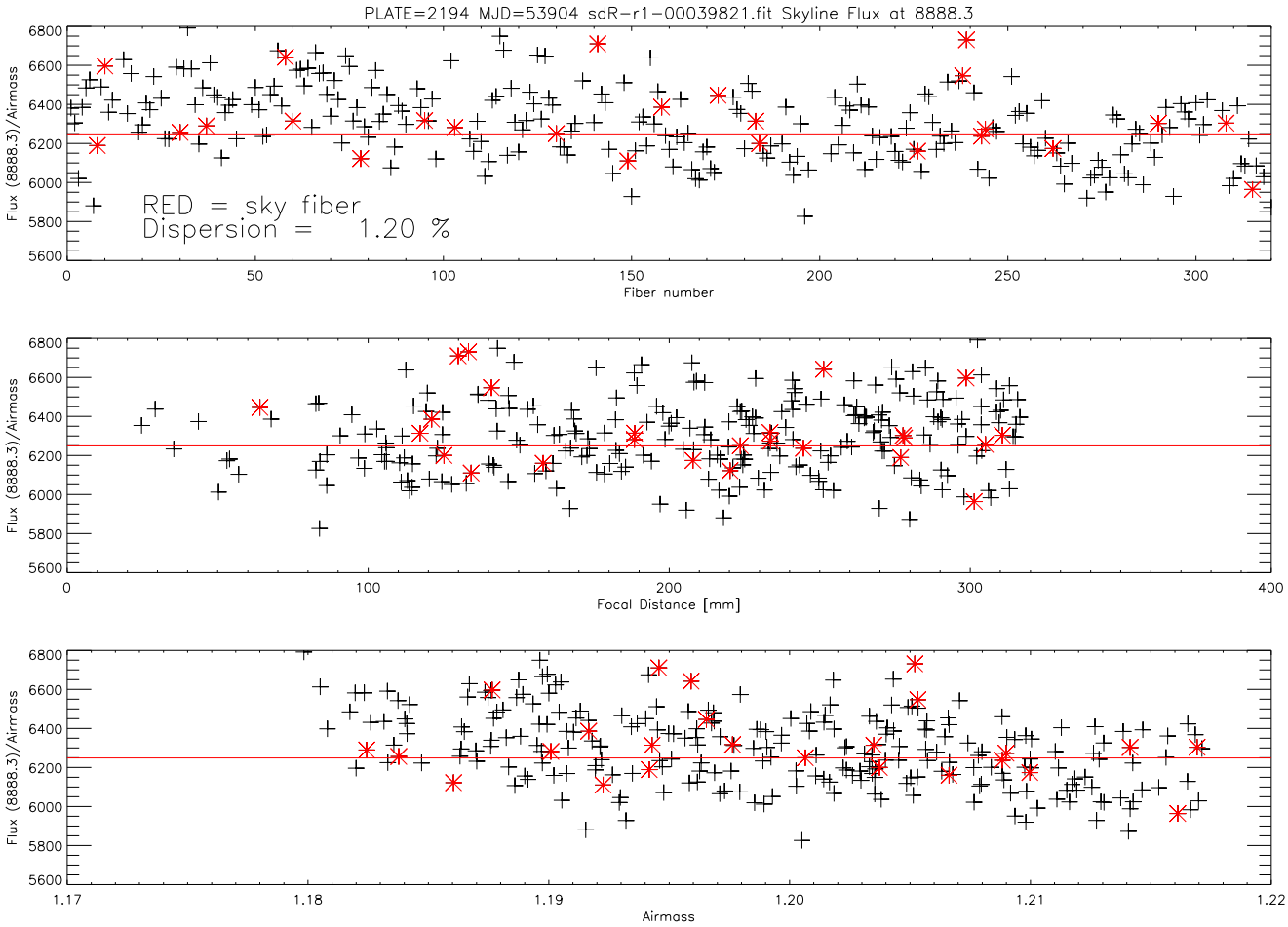

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

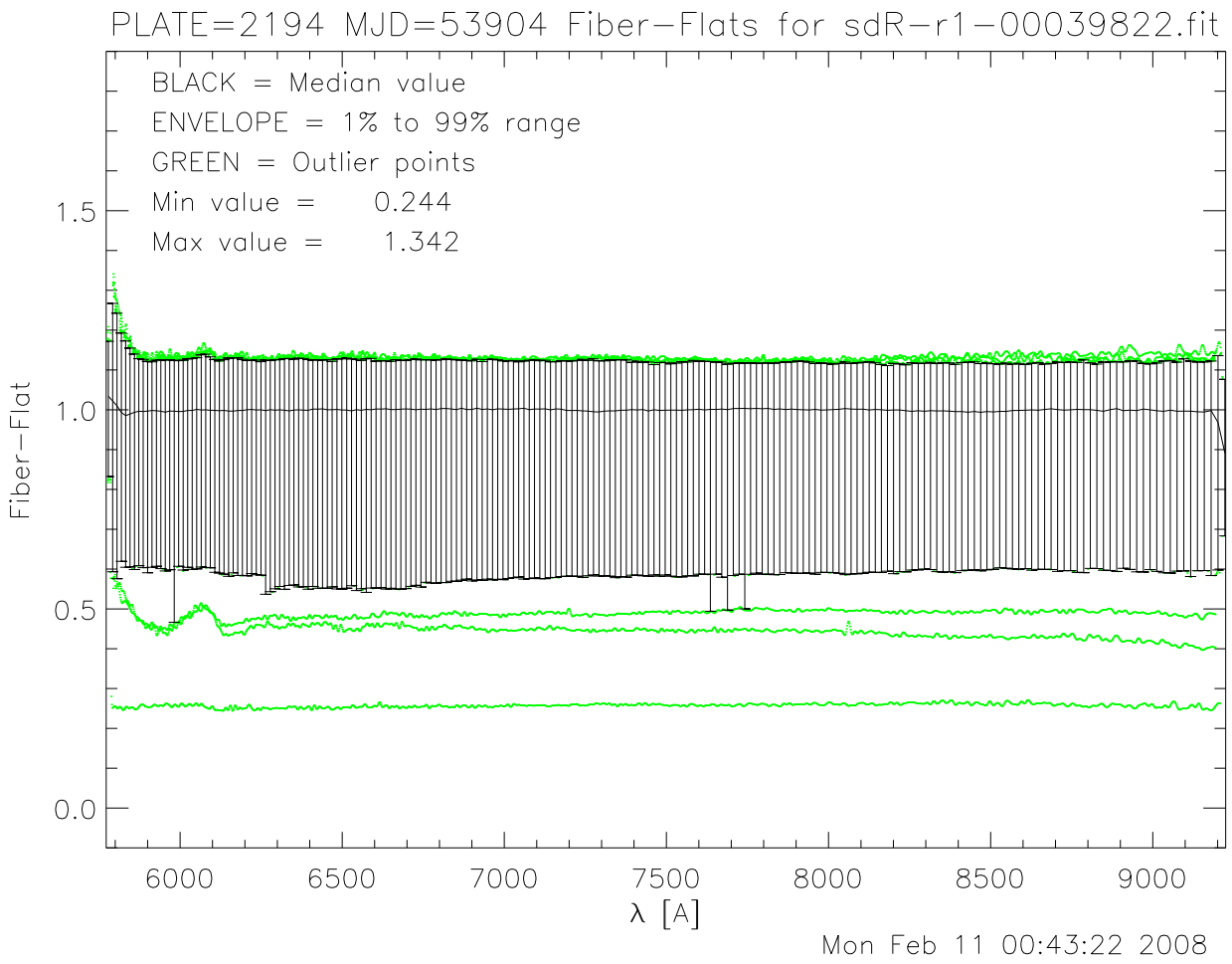

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

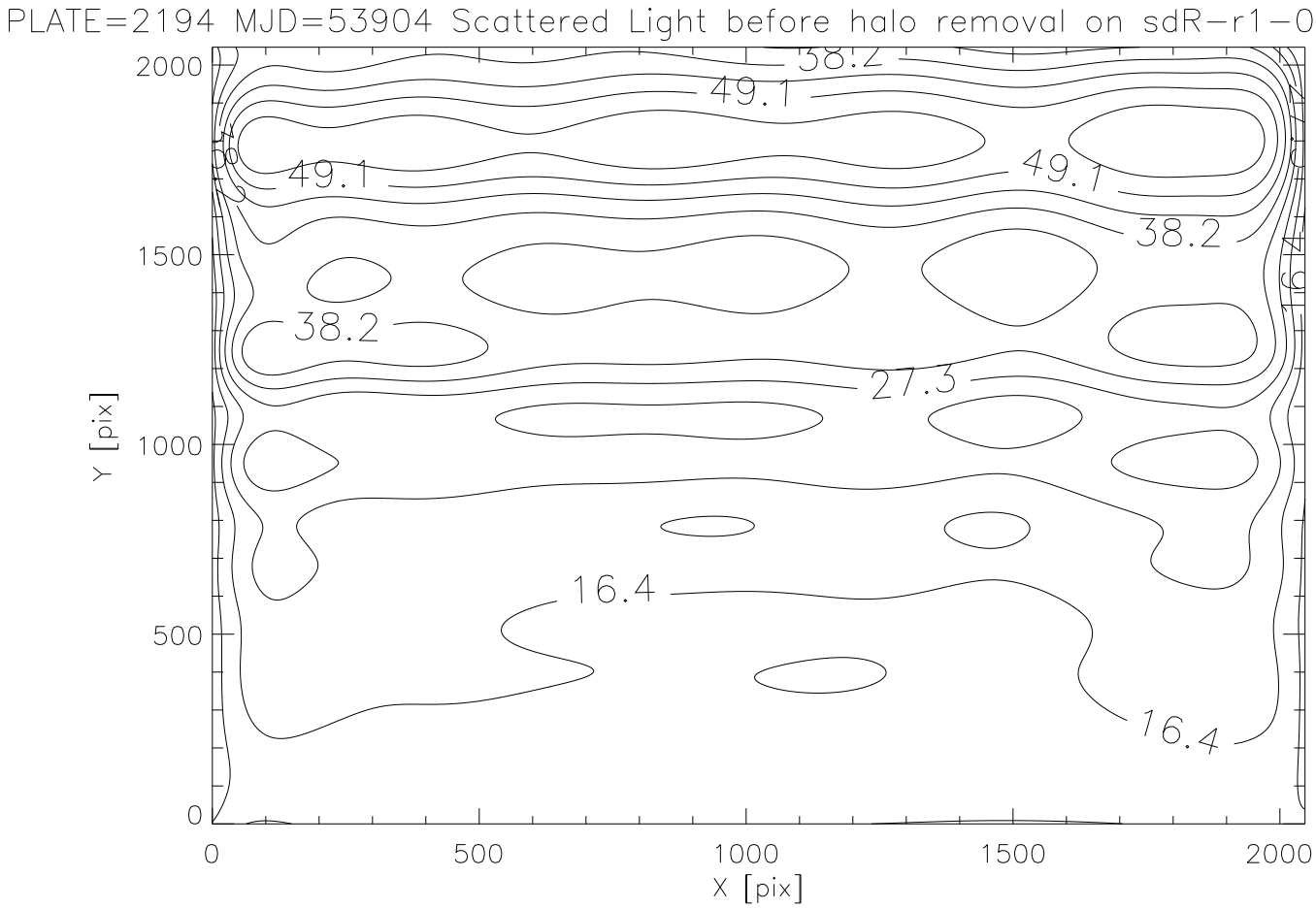

PLATE=2194 MJD=53904 sdR-r1-00039821.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

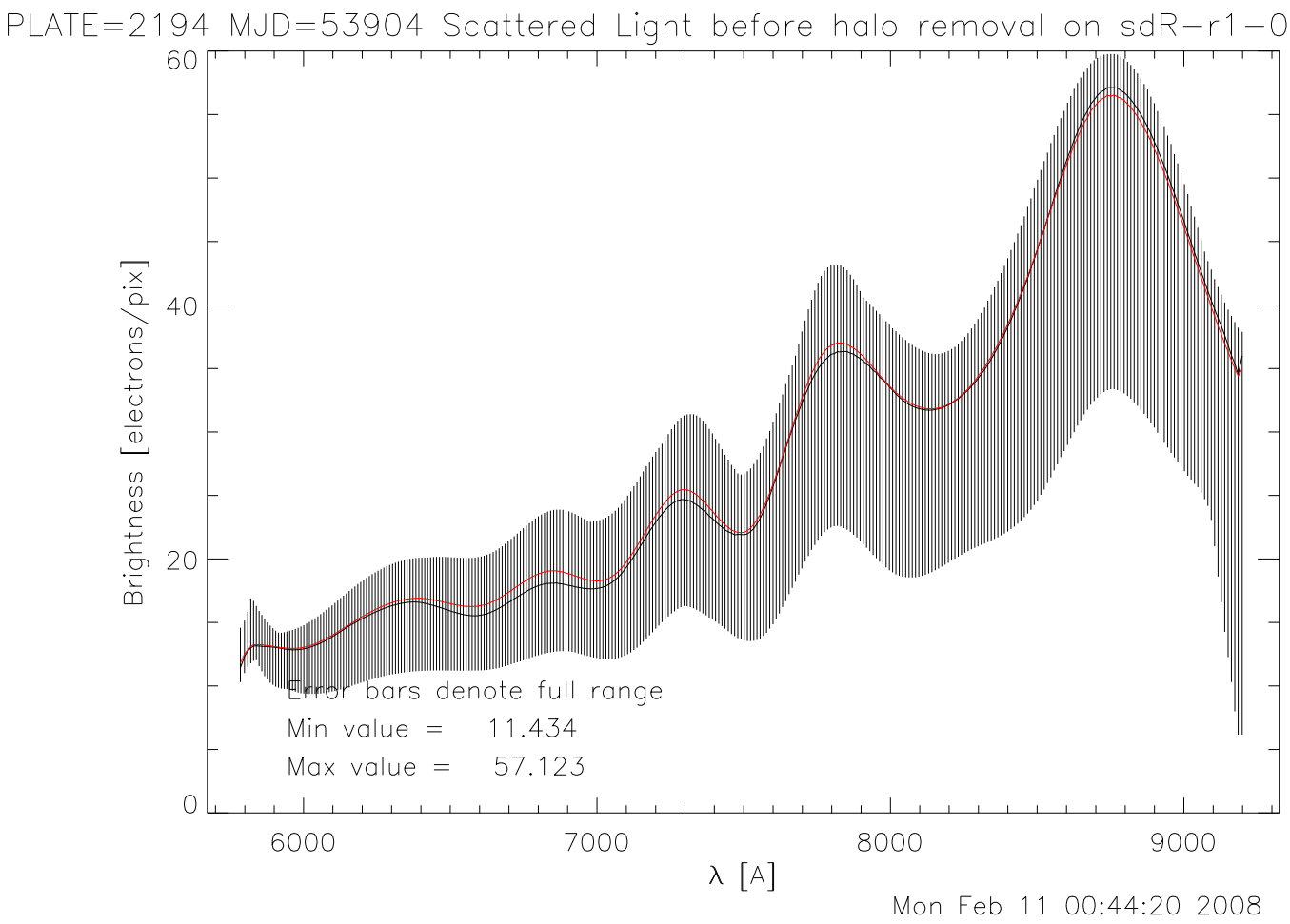

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039821.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

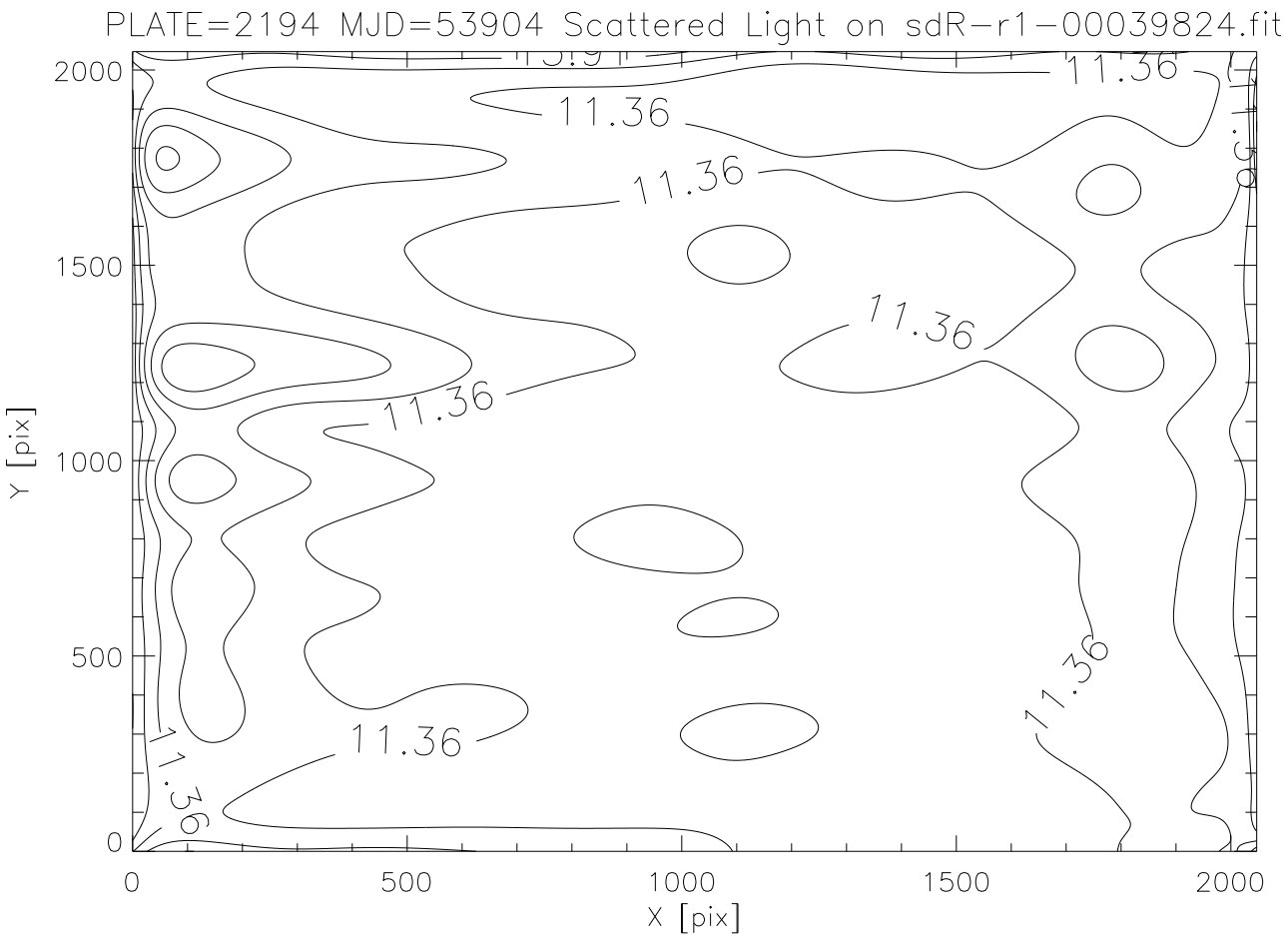

PLATE=2194 MJD=53904 sdR-r1-00039821.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.06 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

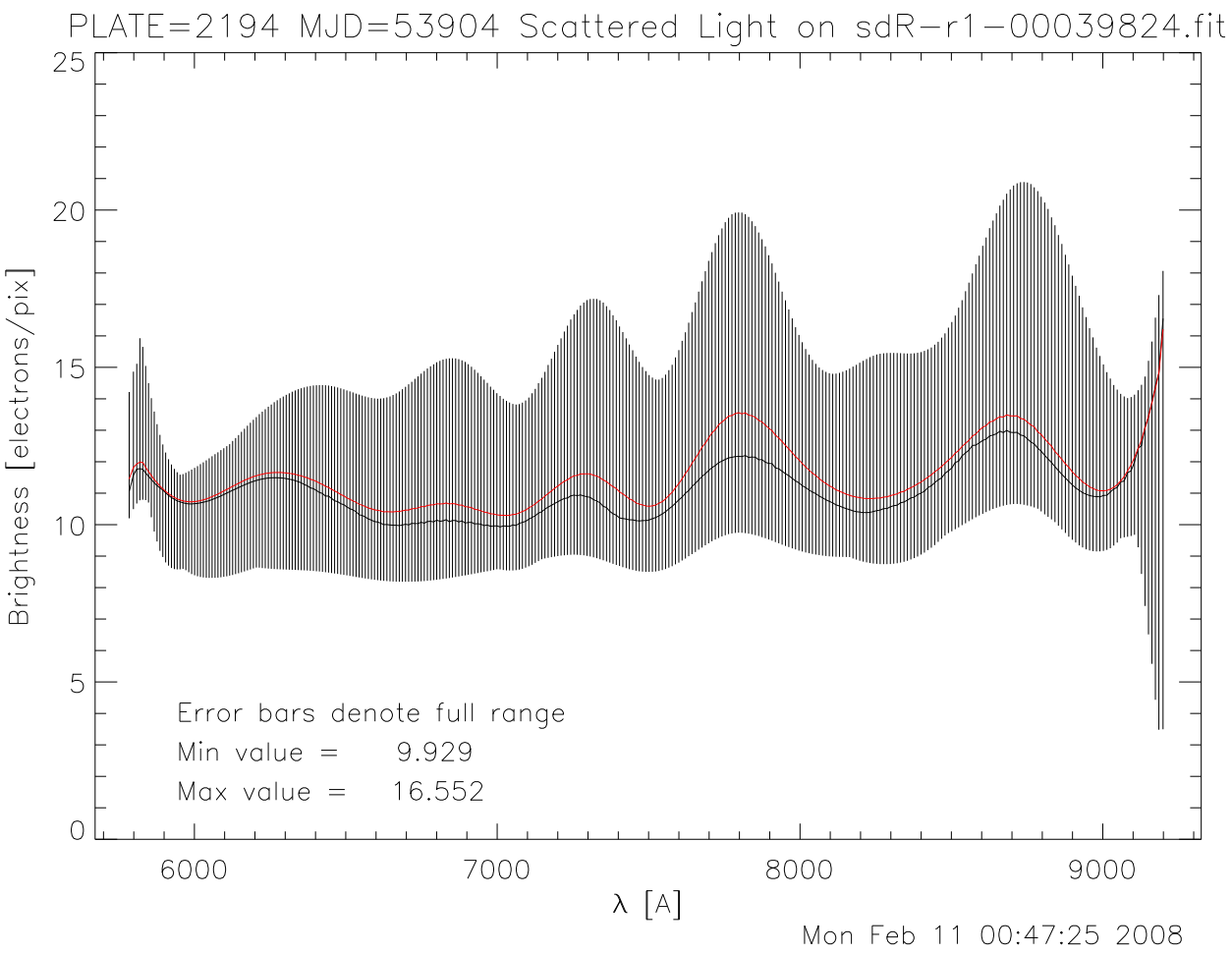

PLATE=2194 MJD=53904 sdR-r1-00039821.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.20 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

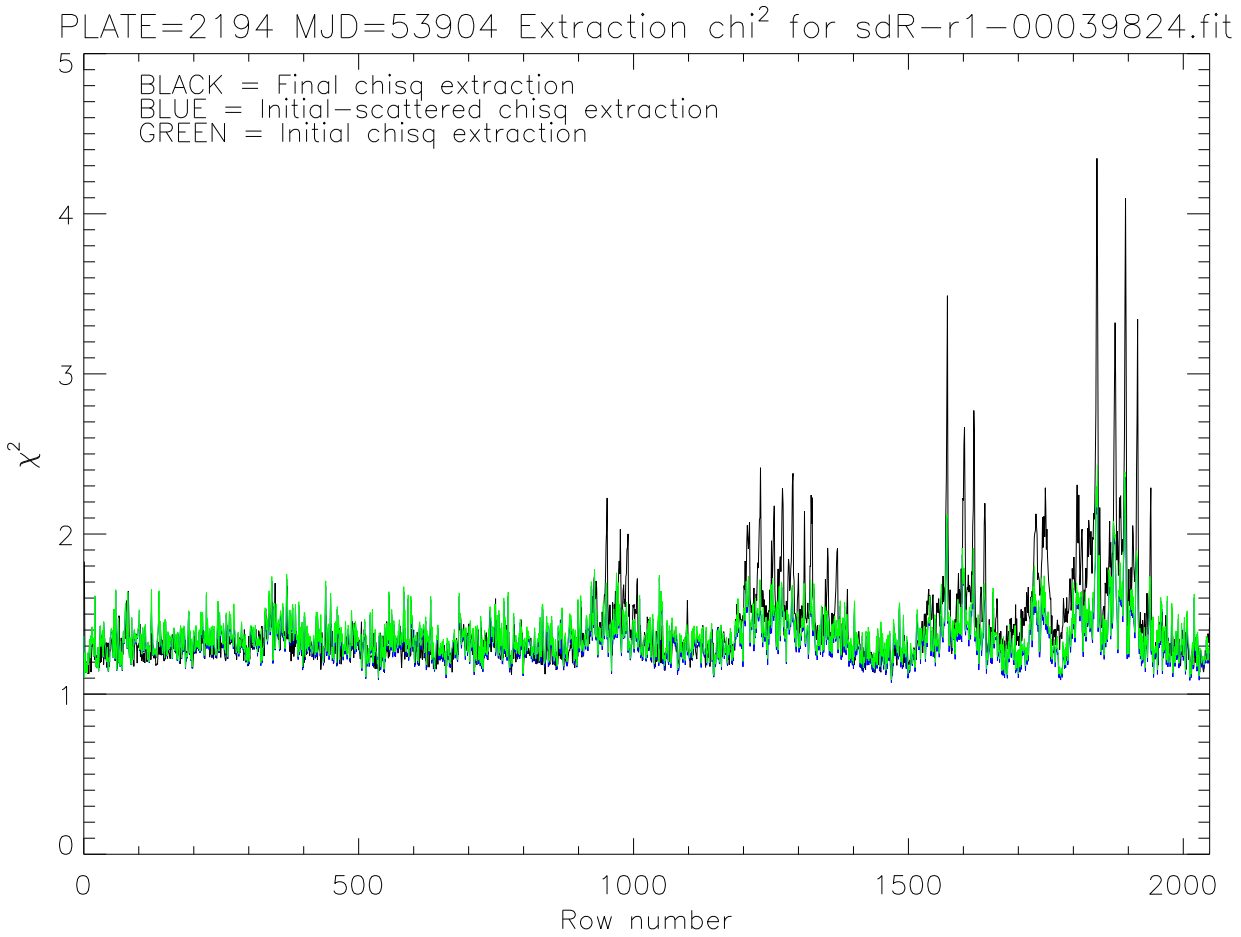

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r1−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.244
Max value = 1.342
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 00:43:22 2008

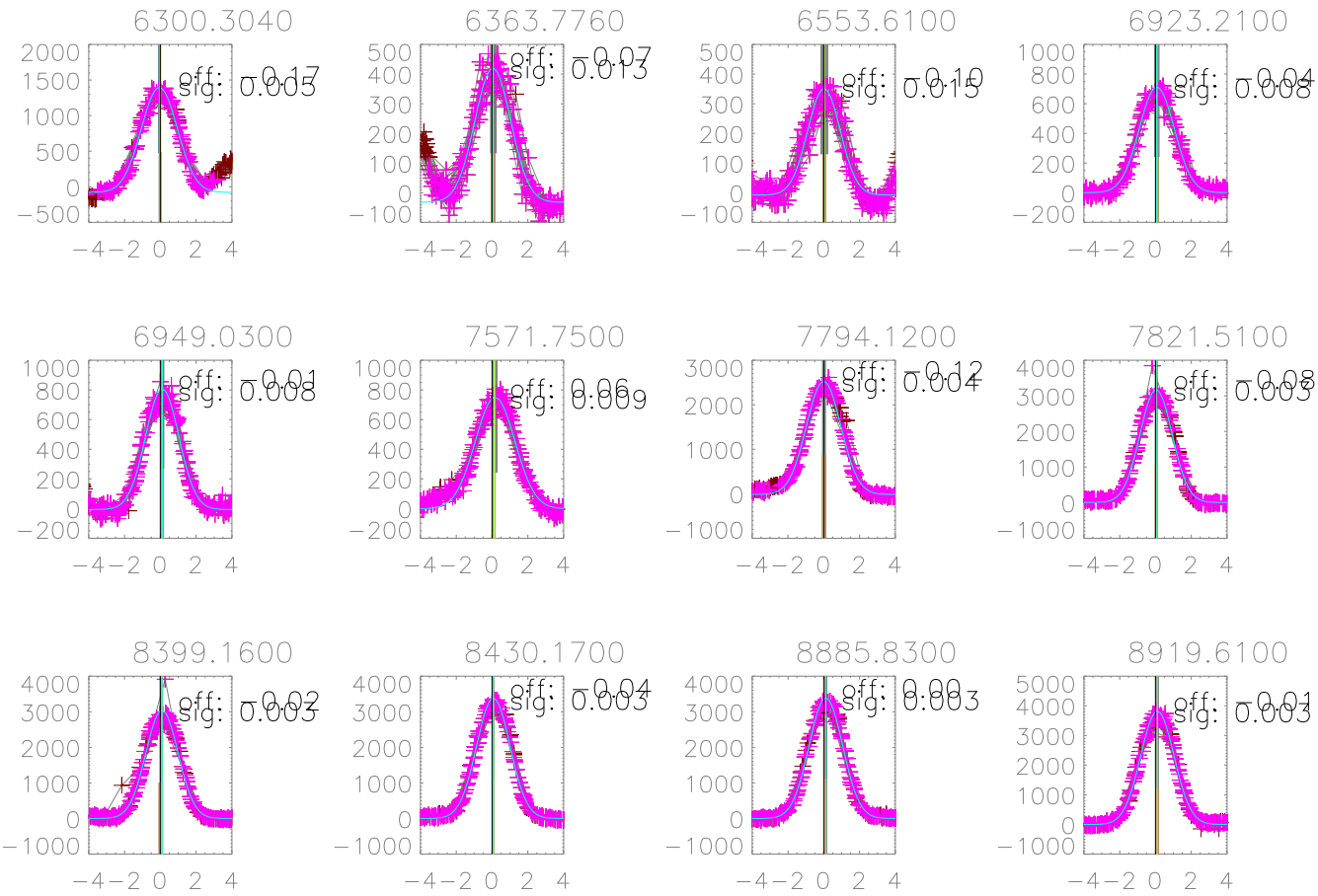

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r1-00039824.fi
38.2
49.1
49.1
49.1
38.2
38.2
27.3
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

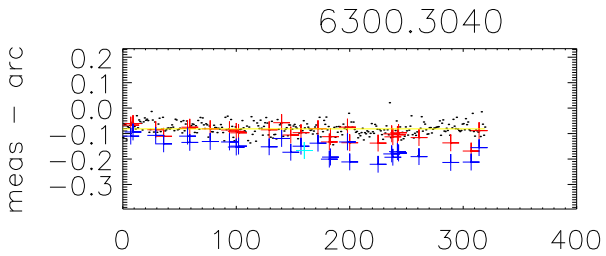

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r1-00039824.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.434
Max value = 57.123
Mon Feb 11 00:44:20 2008

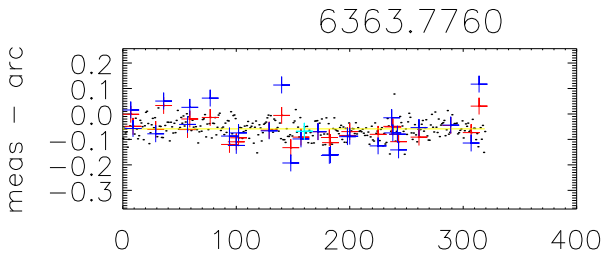

PLATE=2194 MJD=53904 Scattered Light on sdR−r1−00039824.fit
11.36
11.36
11.36
11.36
11.36
11.36
11.36
11.36
11.36
Y [pix]
X [pix]
0
500
1000
1500
2000

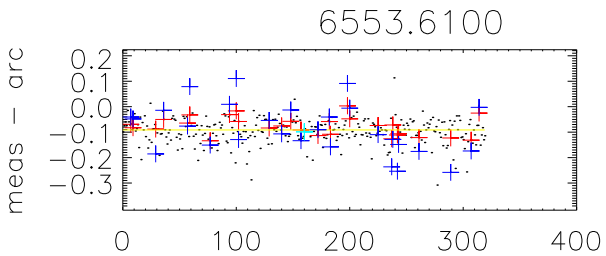

PLATE=2194 MJD=53904 Scattered Light on sdR-r1-00039824.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.929
Max value = 16.552
Mon Feb 11 00:47:25 2008

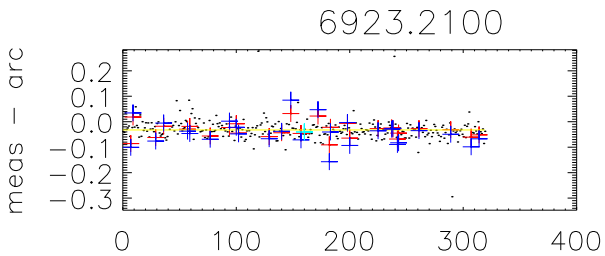

PLATE=2194 MJD=53904 Extraction chi^2 for sdR−r1−00039824.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

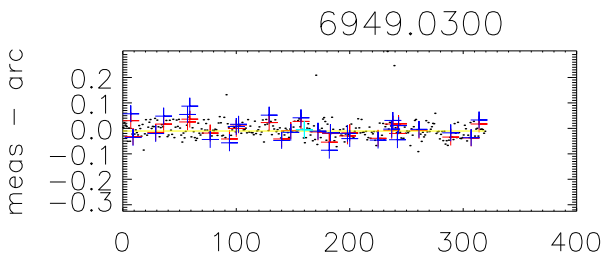

6300.3040
off: −0.17
sig: 0.005
6363.7760
off: −0.07
sig: 0.013
6553.6100
off: −0.10
sig: 0.015
6923.2100
off: −0.04
sig: 0.008
6949.0300
off: −0.01
sig: 0.008
7571.7500
off: 0.06
sig: 0.009
7794.1200
off: −0.12
sig: 0.004
7821.5100
off: −0.08
sig: 0.003
8399.1600
off: −0.02
sig: 0.003
8430.1700
off: −0.04
sig: 0.003
8885.8300
off: 0.00
sig: 0.003
8919.6100
off: −0.01
sig: 0.003

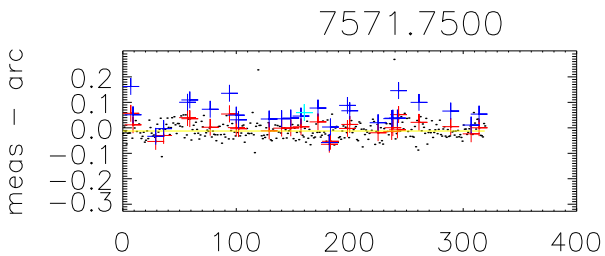

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

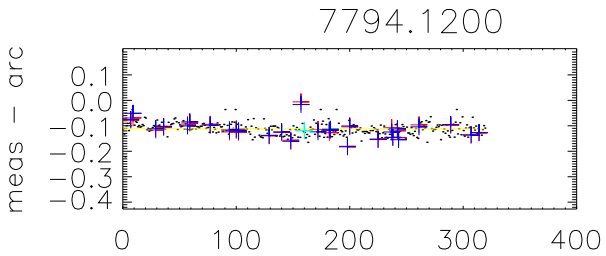

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

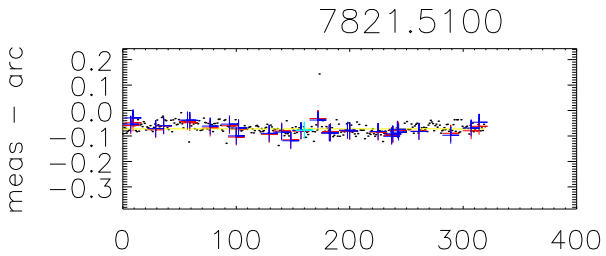

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

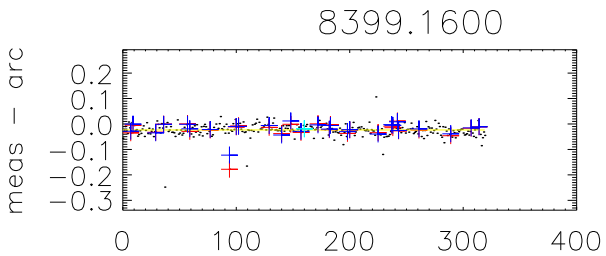

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

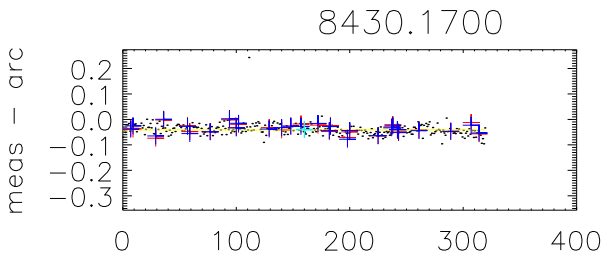

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

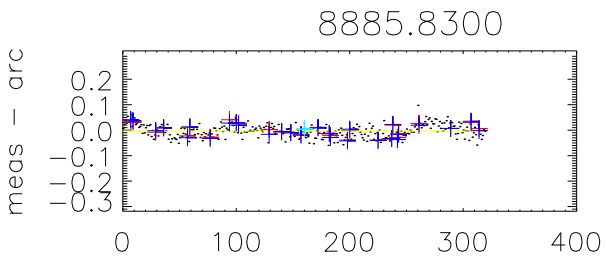

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

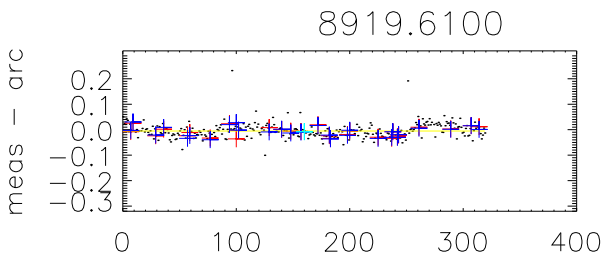

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

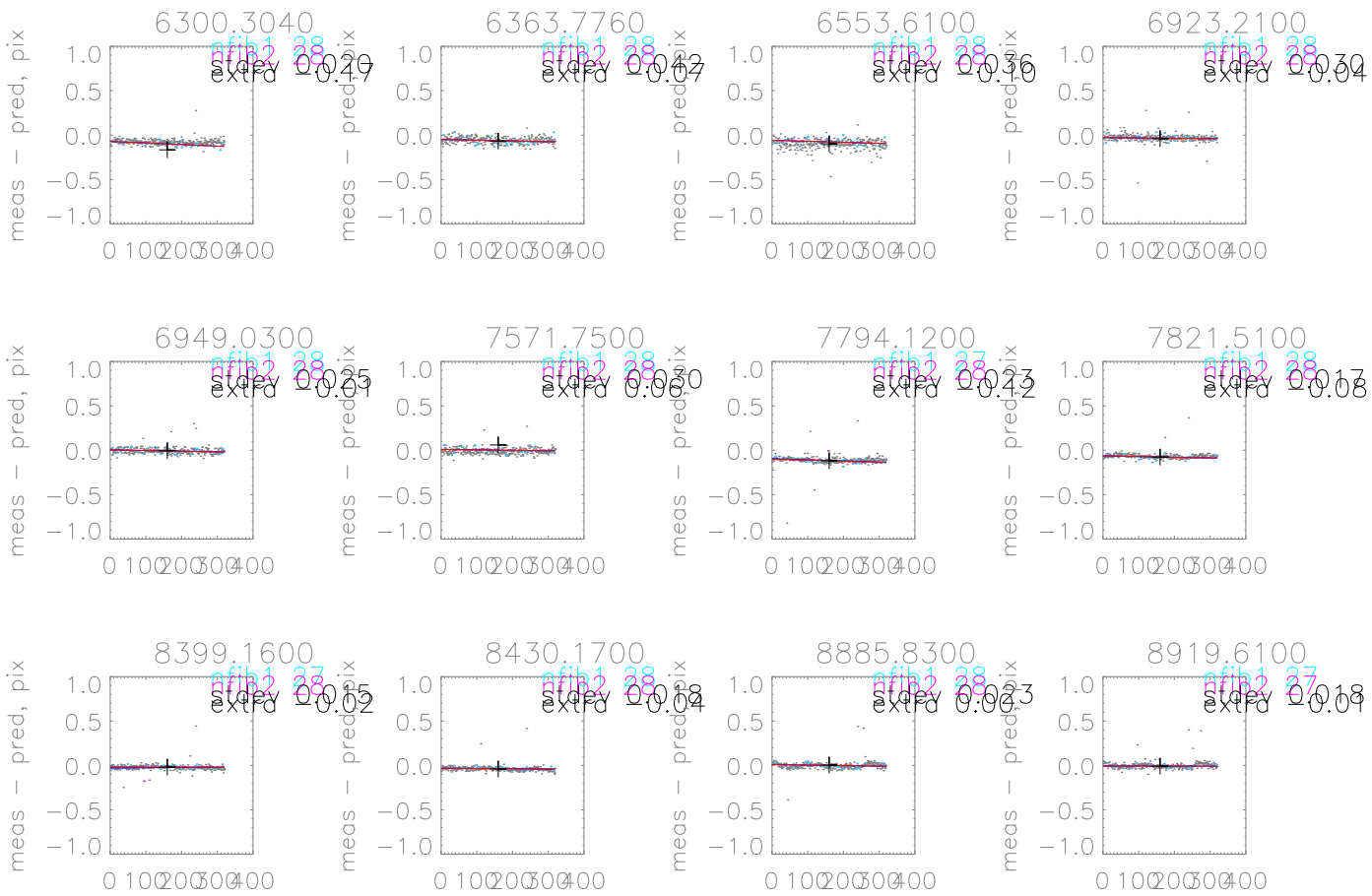

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

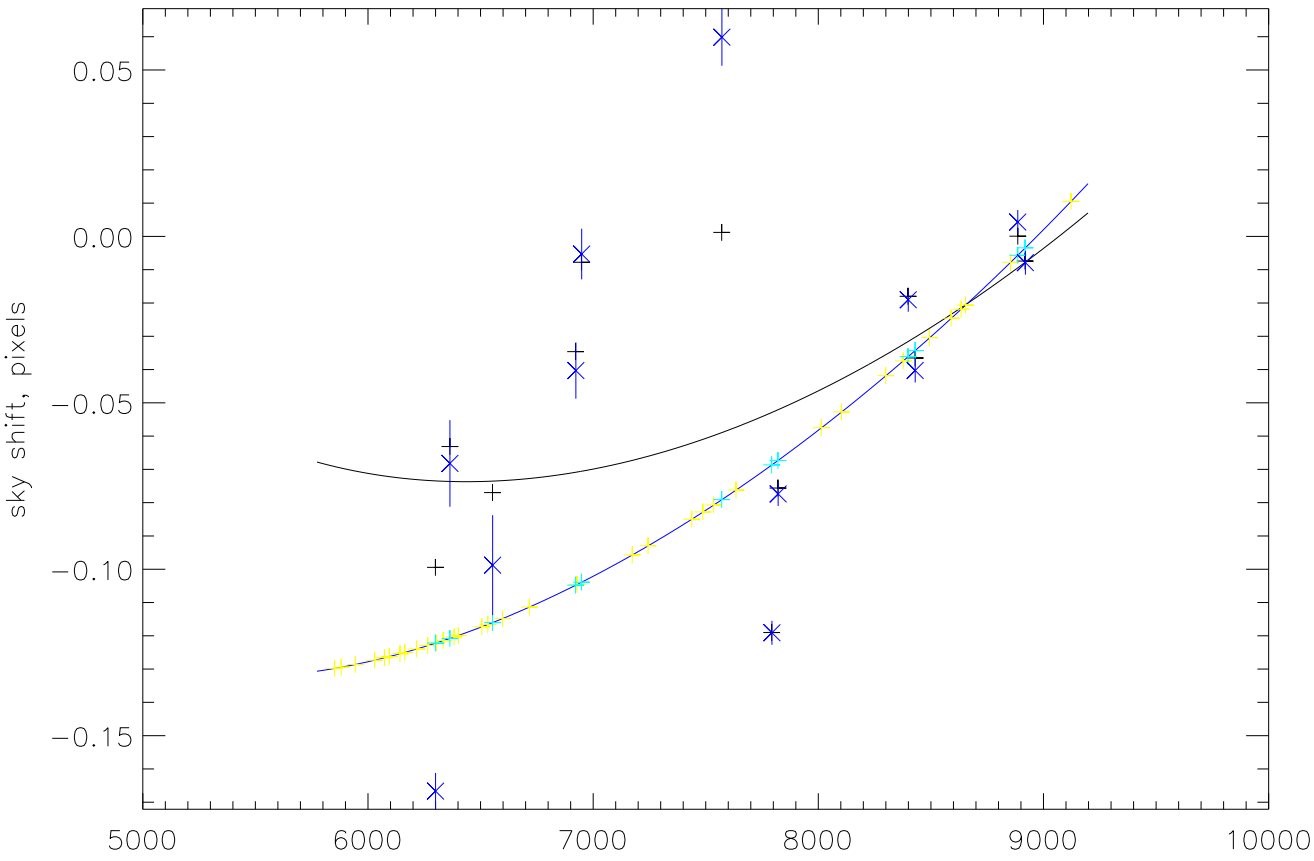

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

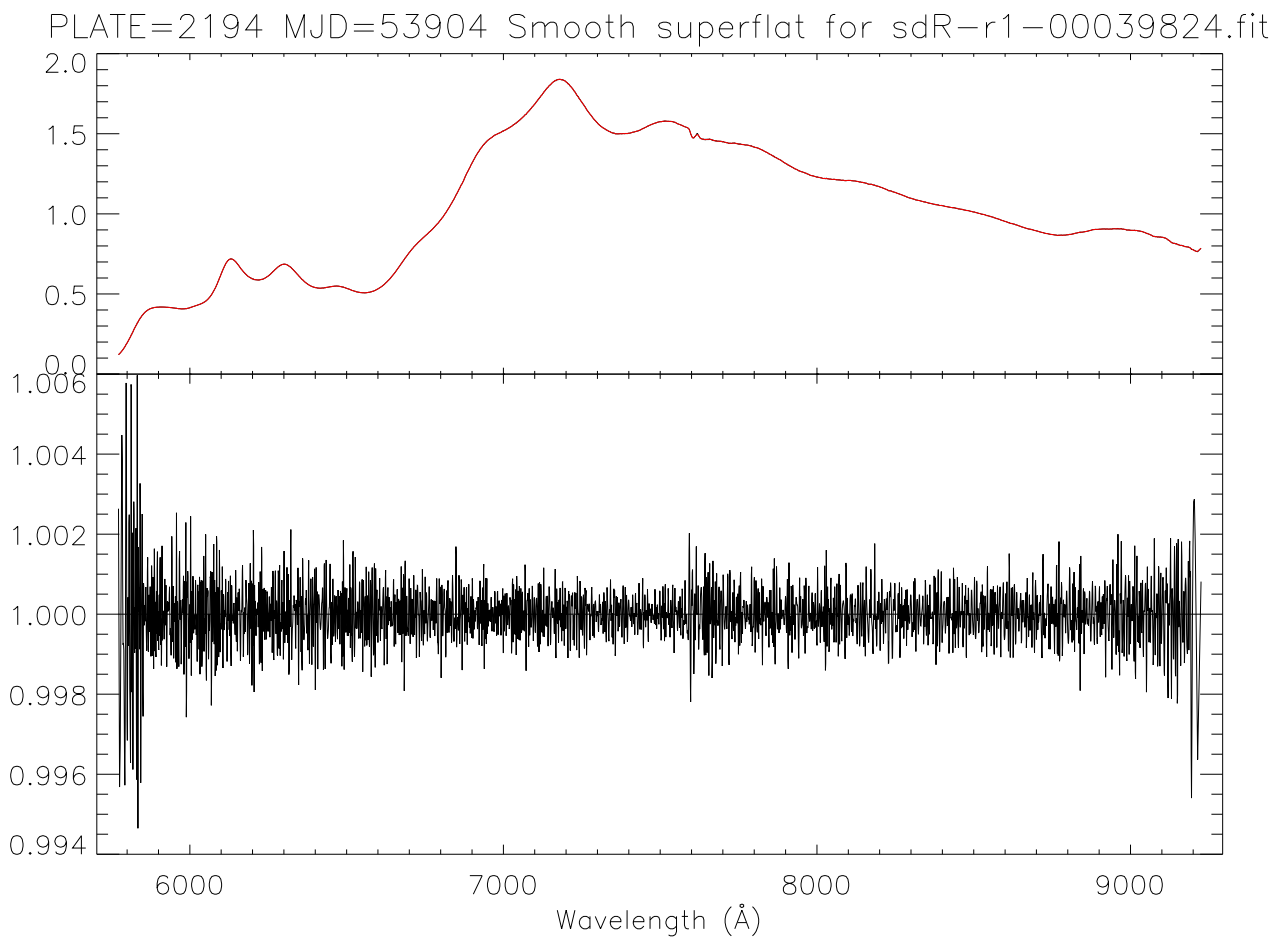

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

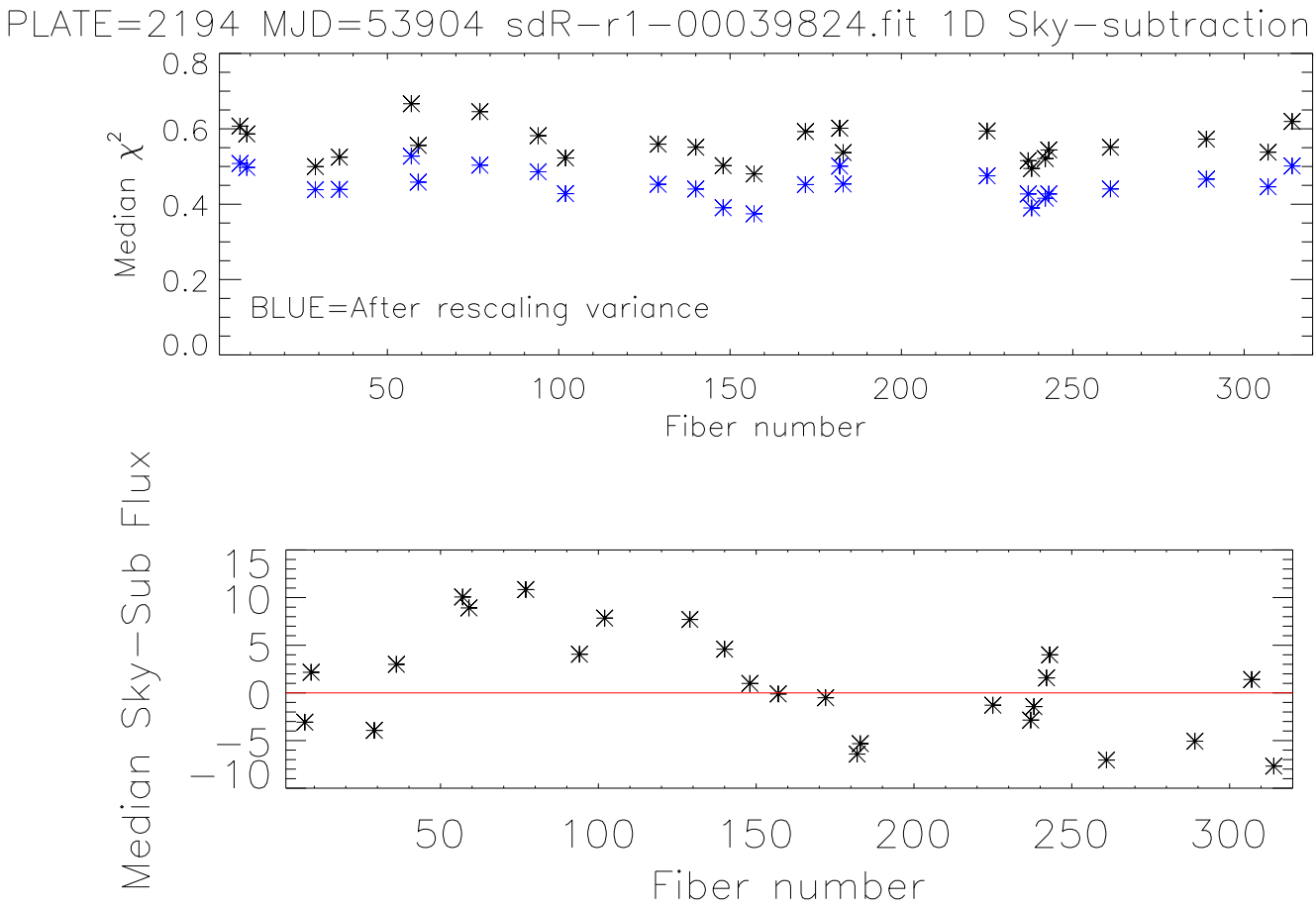

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

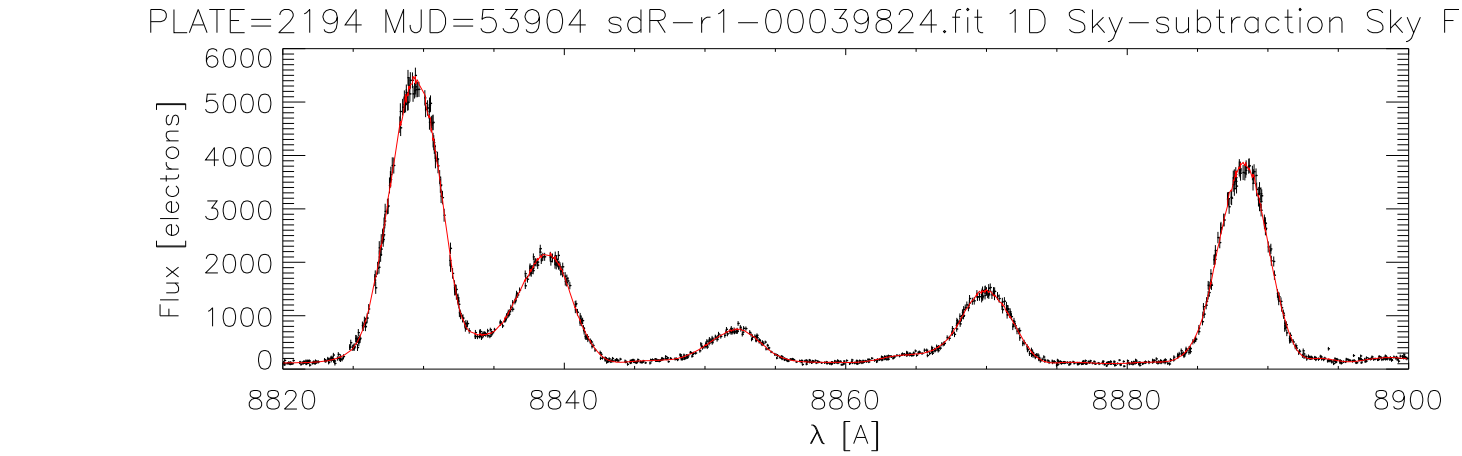

6300.3040
mfhd1 28
mfhd2 28
stdev 0.20
extra −0.47
6363.7760
mfhd1 28
mfhd2 28
stdev 0.42
extra −0.07
6553.6100
mfhd1 28
mfhd2 28
stdev 0.36
extra −0.10
6923.2100
mfhd1 28
mfhd2 28
stdev 0.30
extra −0.04
6949.0300
mfhd1 28
mfhd2 28
stdev 0.25
extra −0.01
7571.7500
mfhd1 28
mfhd2 28
stdev 0.30
extra 0.06
7794.1200
mfhd1 27
mfhd2 28
stdev 0.23
extra −0.42
7821.5100
mfhd1 28
mfhd2 28
stdev 0.17
extra −0.08
8399.1600
mfhd1 27
mfhd2 28
stdev 0.15
extra −0.02
8430.1700
mfhd1 28
mfhd2 28
stdev 0.18
extra −0.04
8885.8300
mfhd1 28
mfhd2 28
stdev 0.23
extra 0.06
8919.6100
mfhd1 27
mfhd2 27
stdev 0.18
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

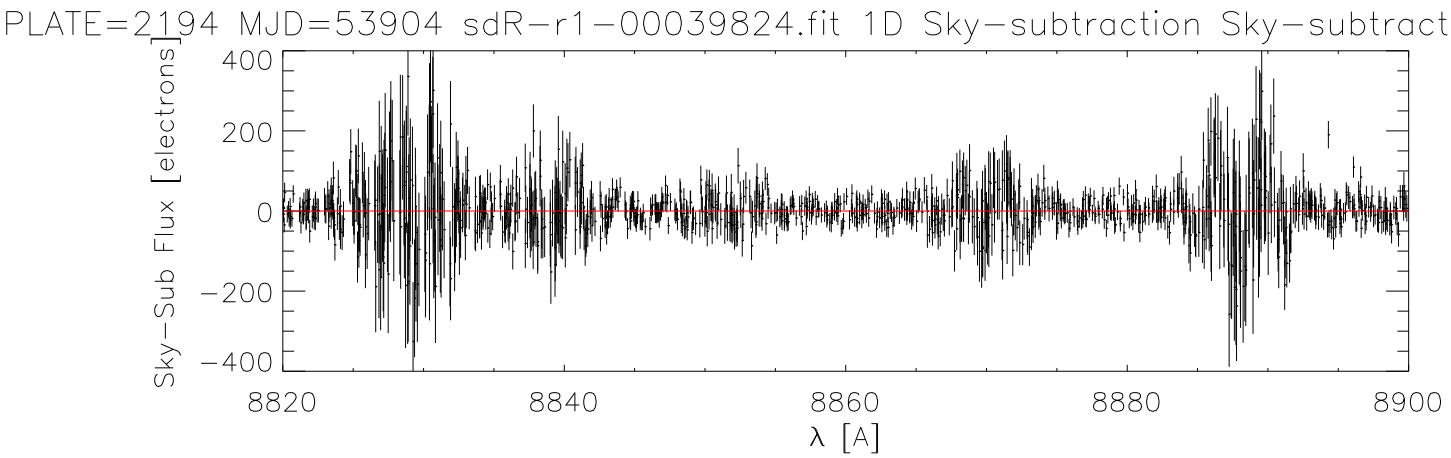

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

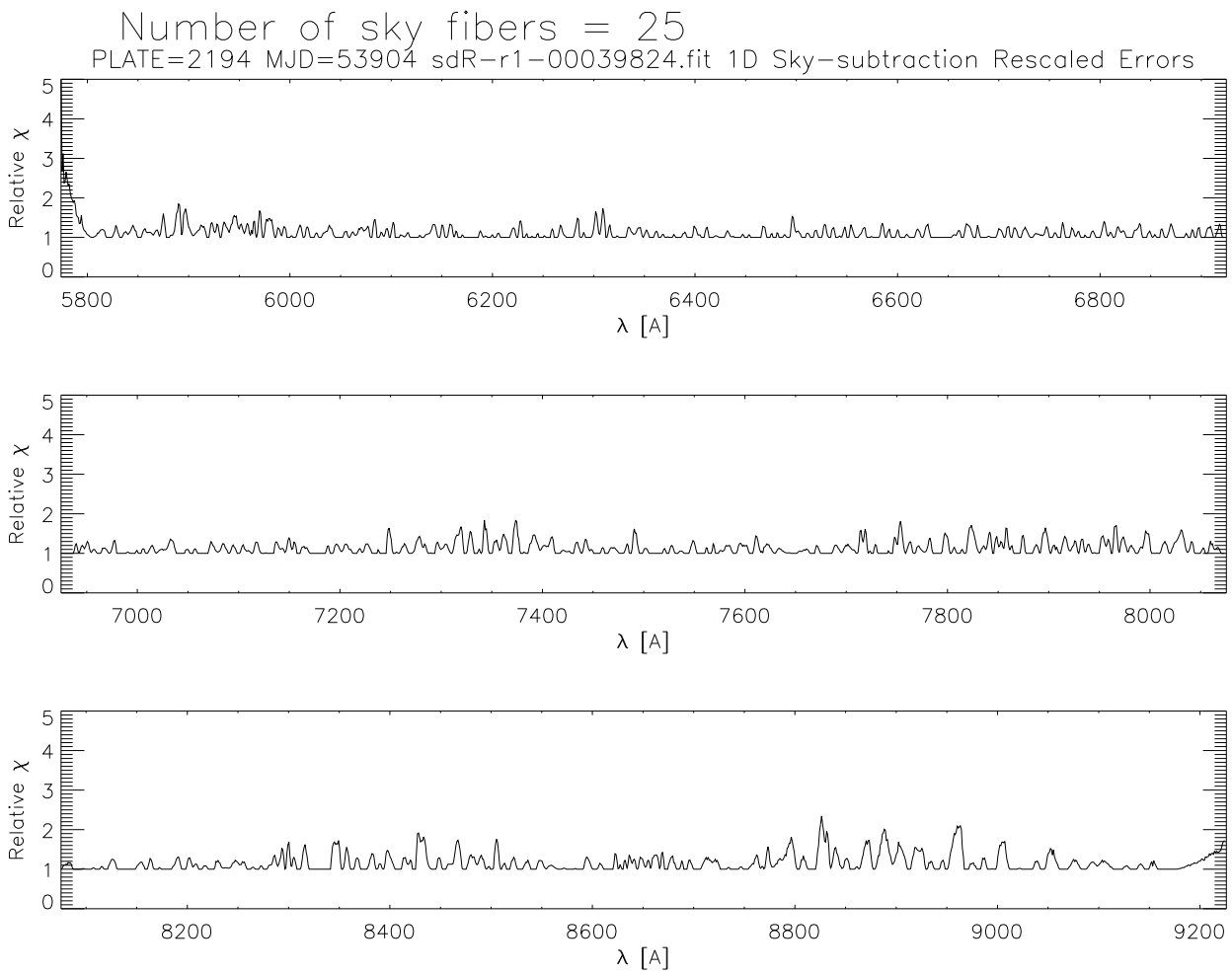
es= 0.0000

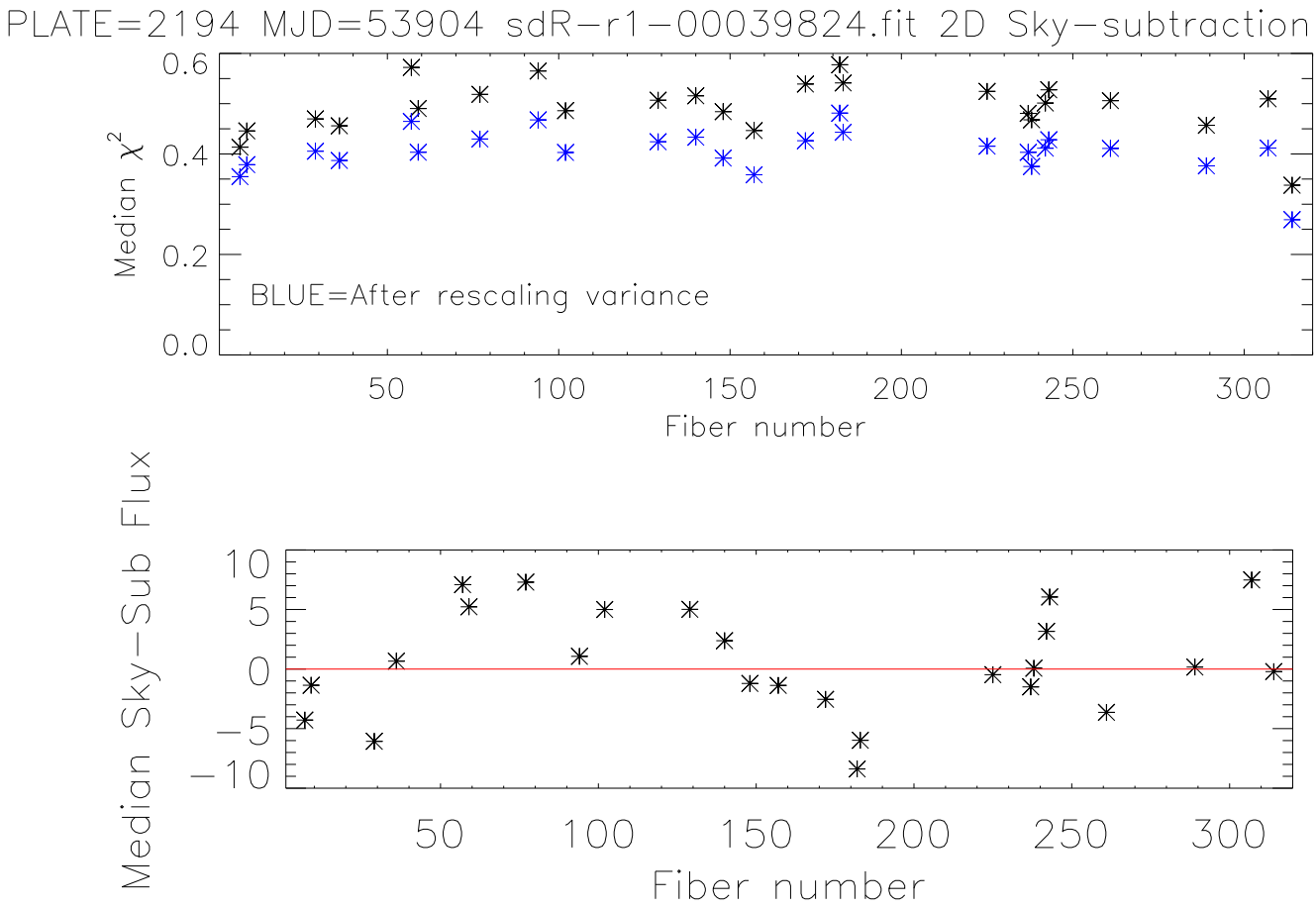

PLATE=2194 MJD=53904 Smooth superflat for sdR-r1-00039824.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

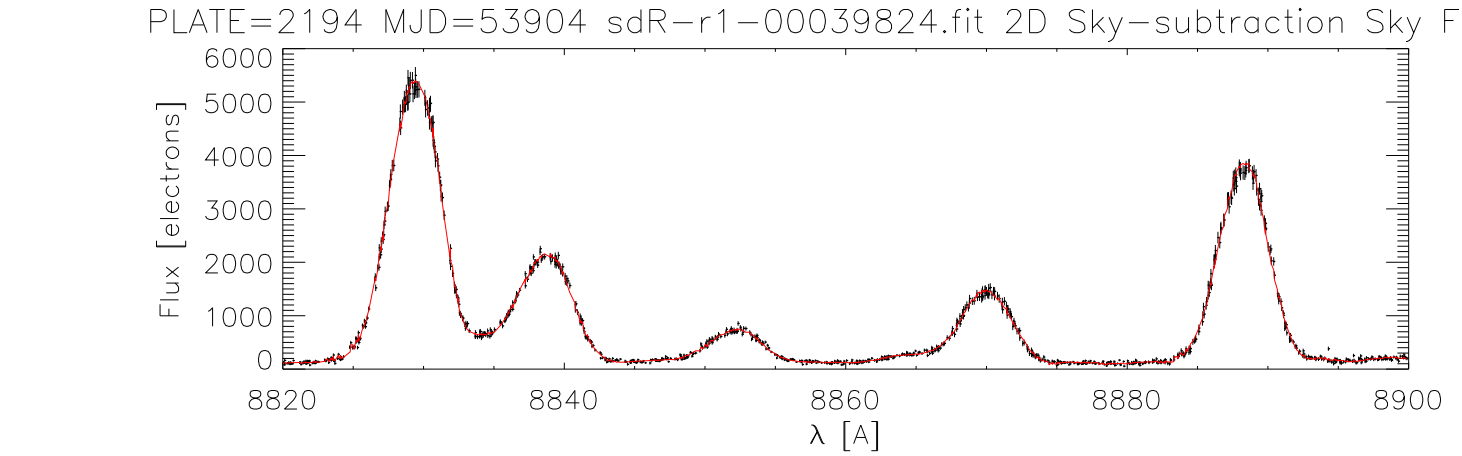

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

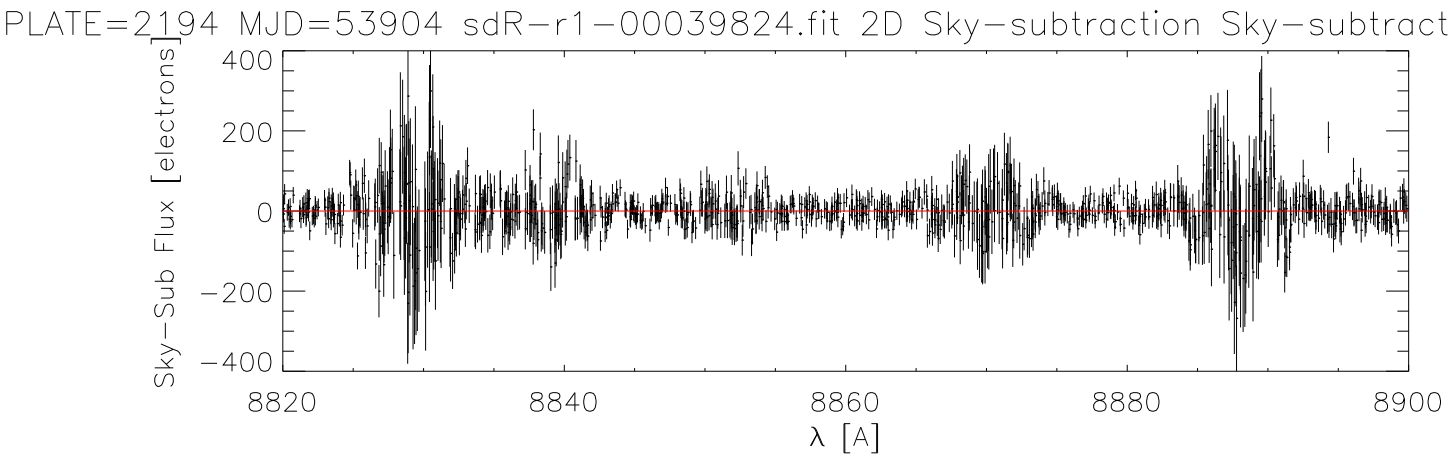

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

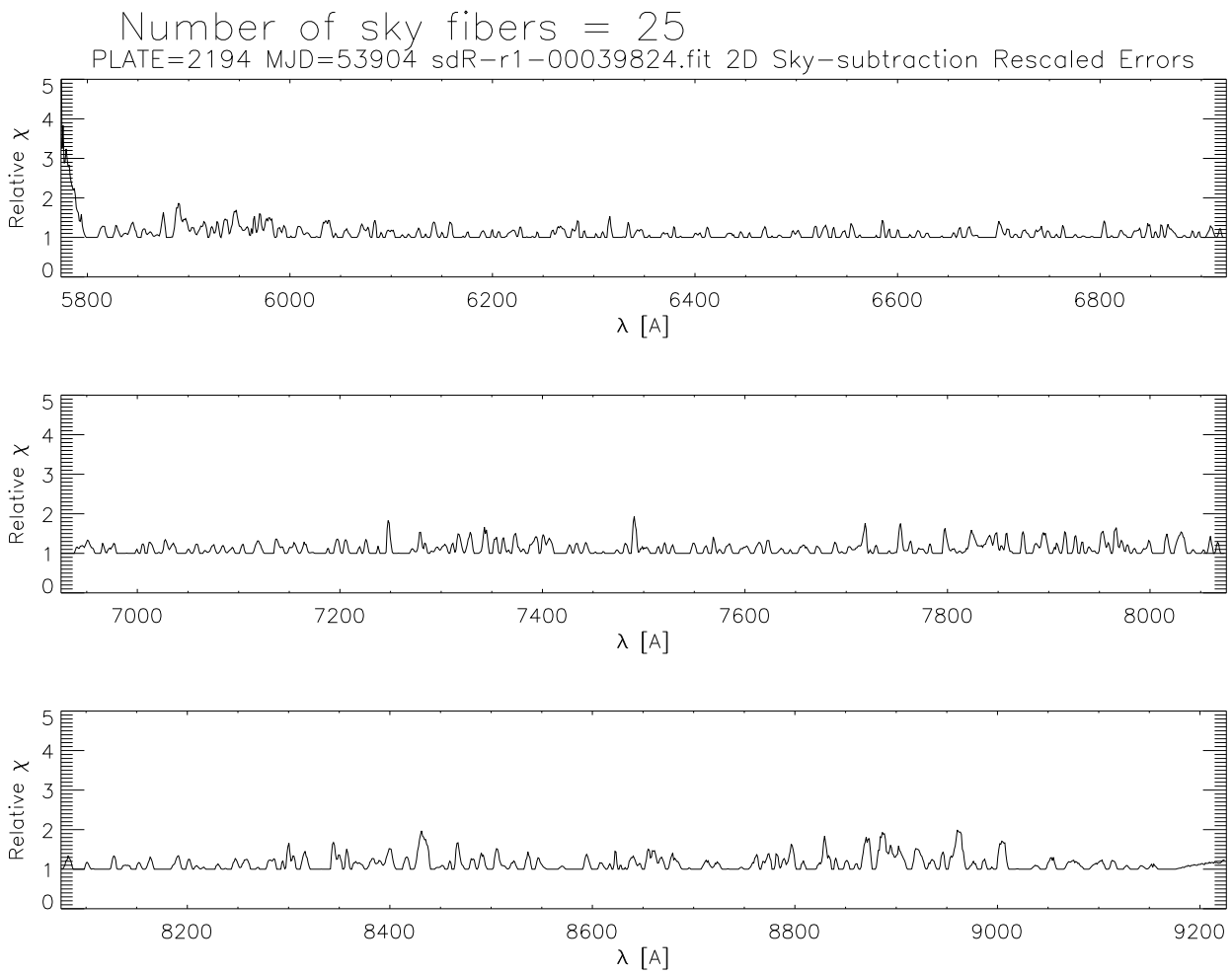

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

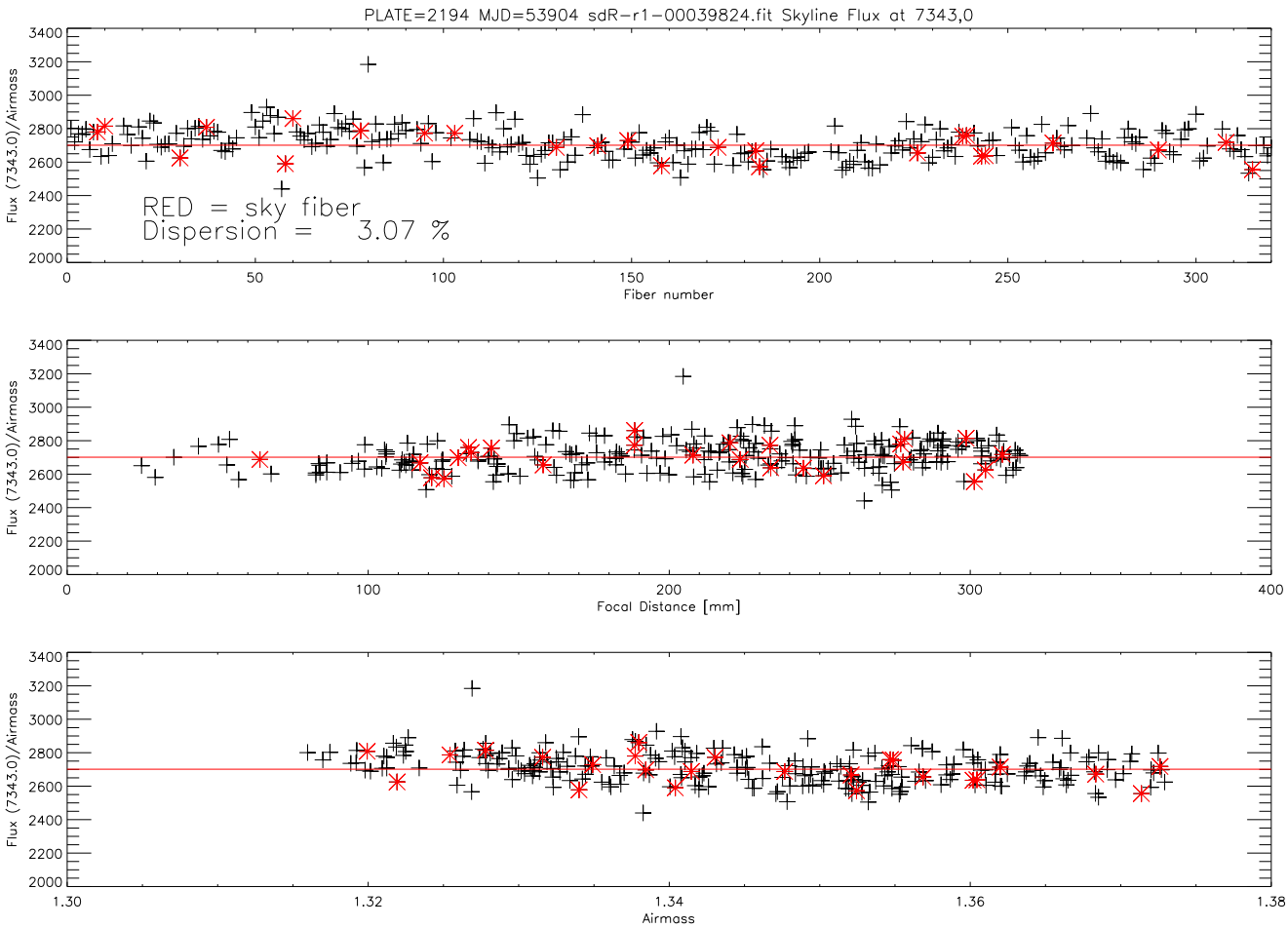

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

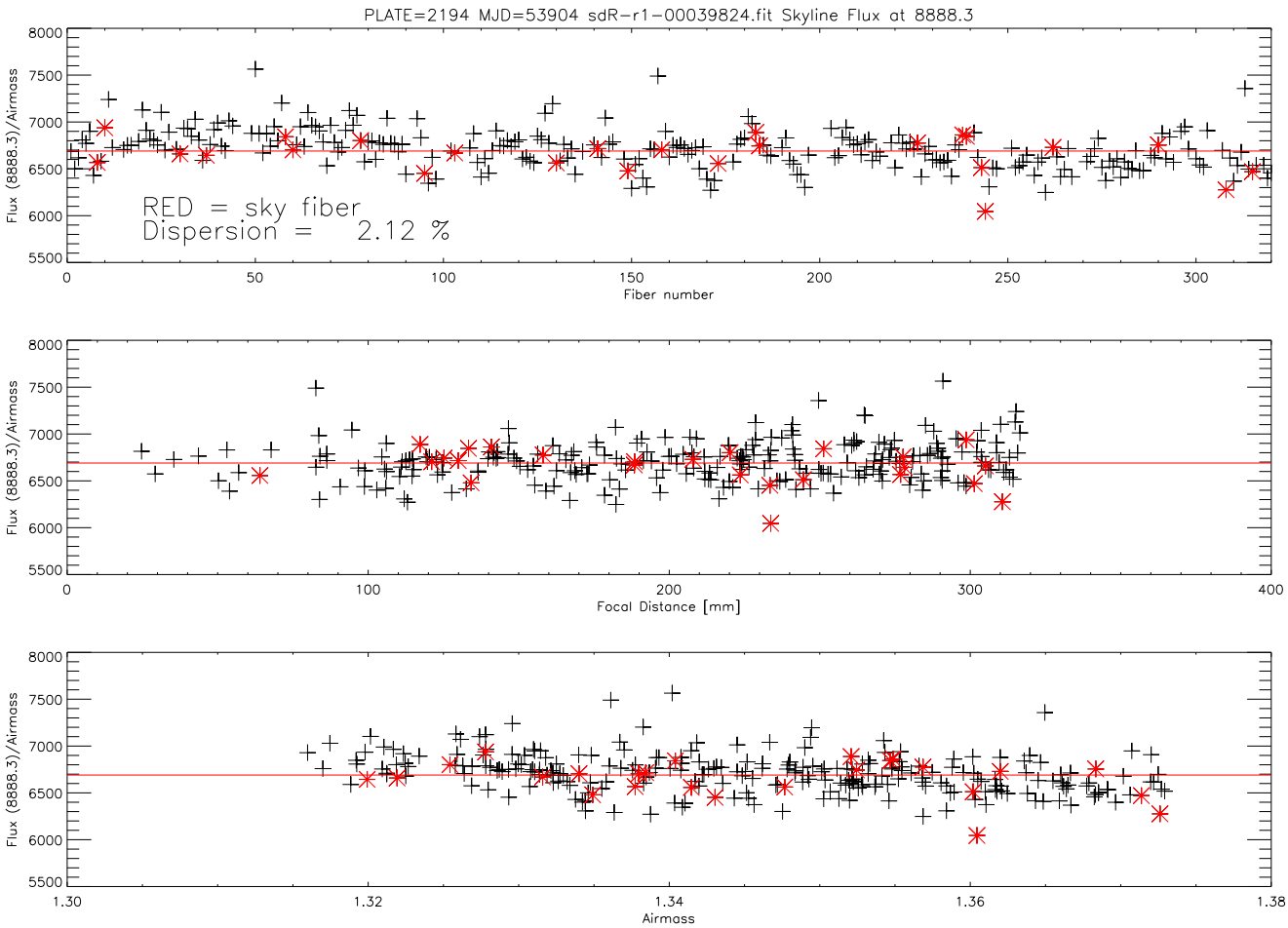

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

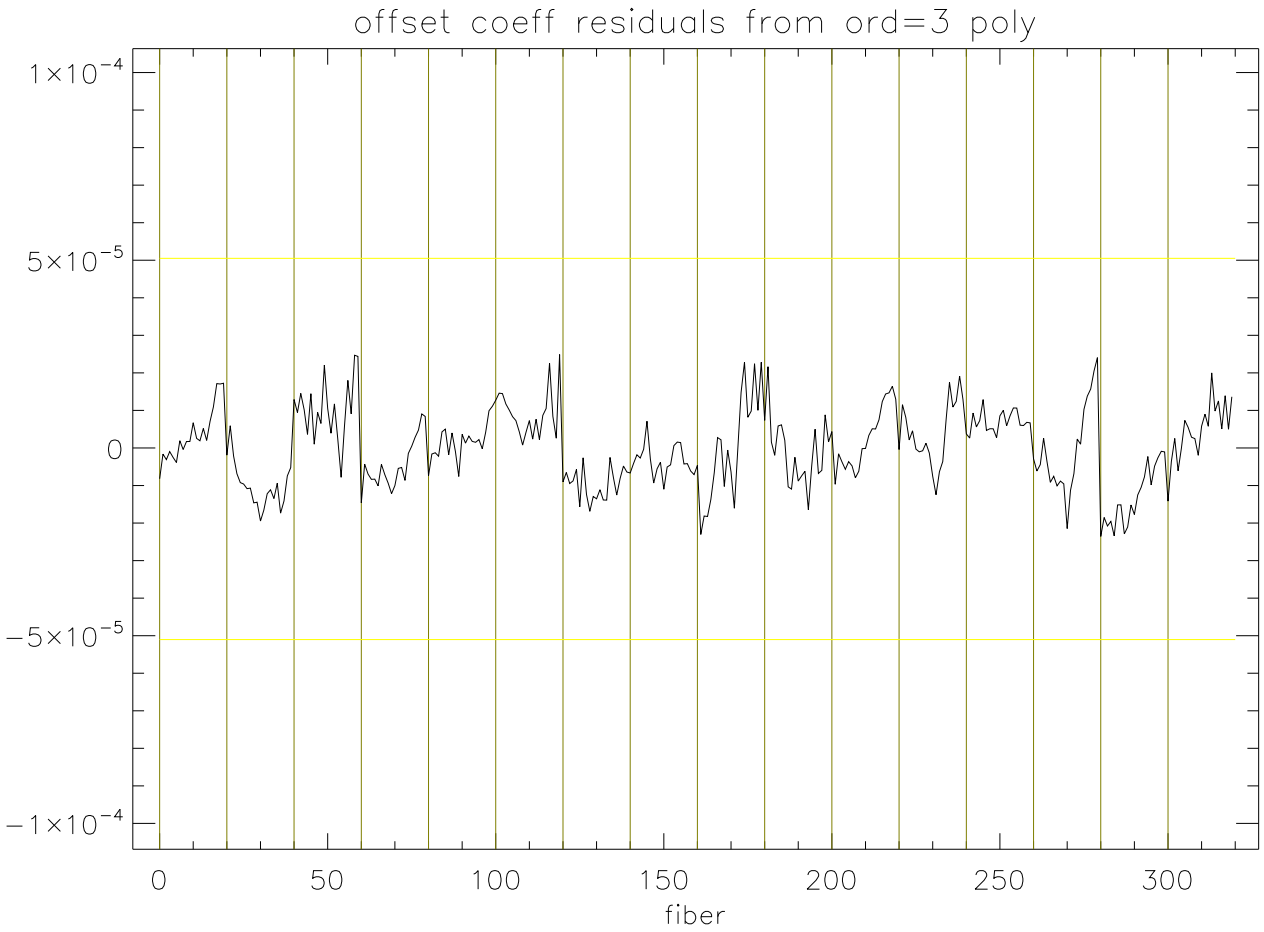

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

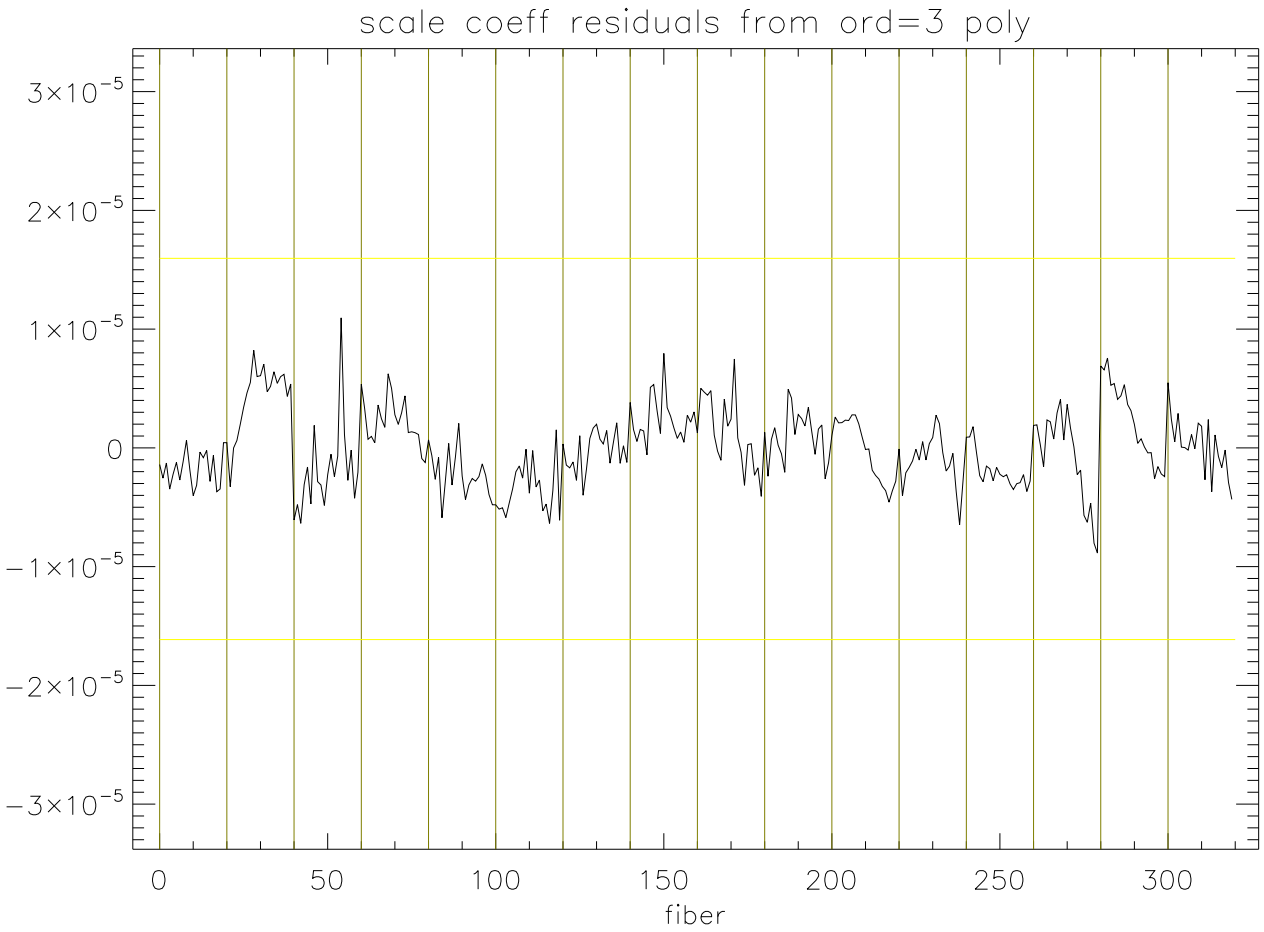

PLATE=2194 MJD=53904 sdR-r1-00039824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

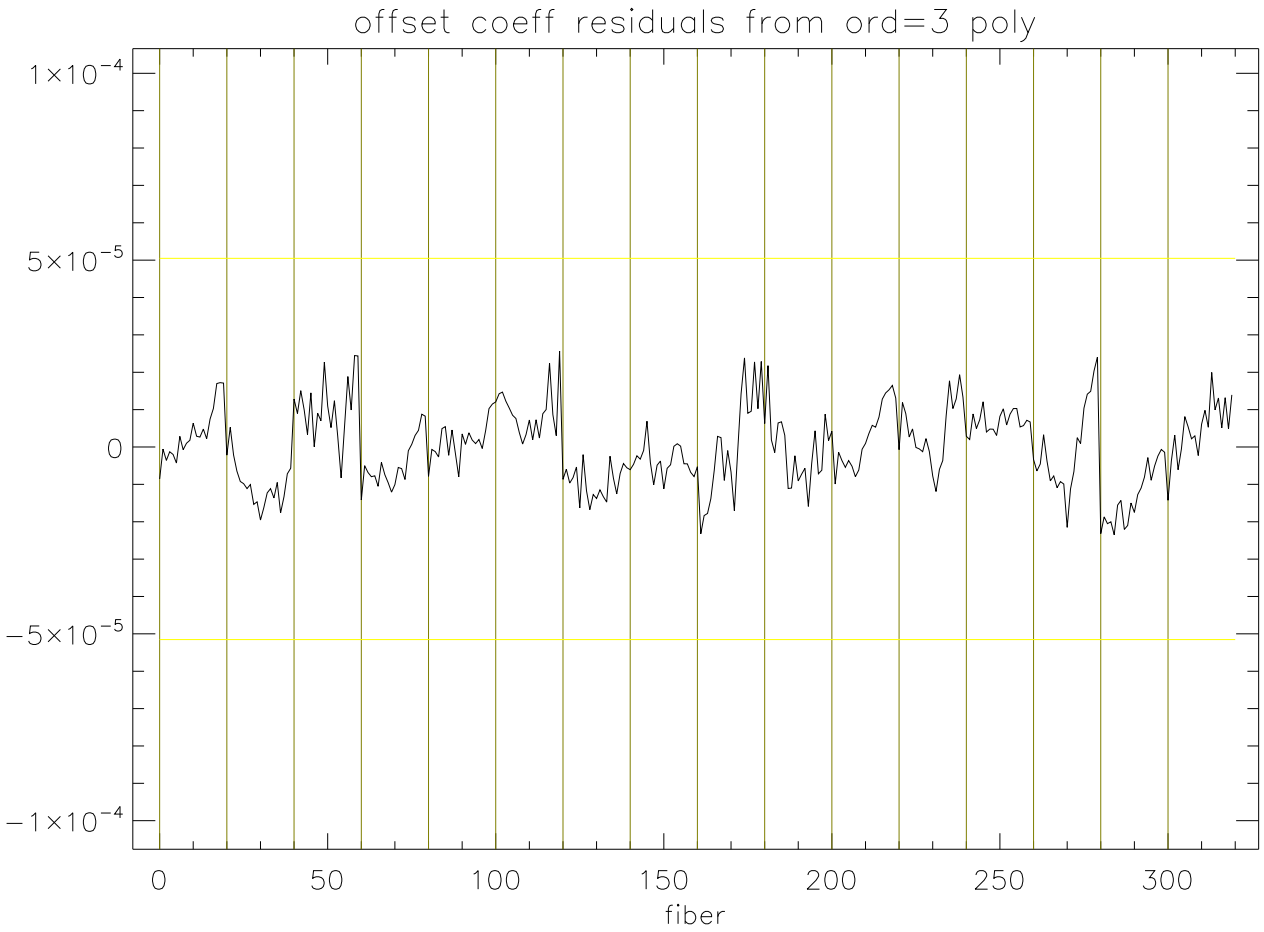

Number of sky fibers = 25
PLATE=2194 MJD=53904 sdR-r1-00039824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

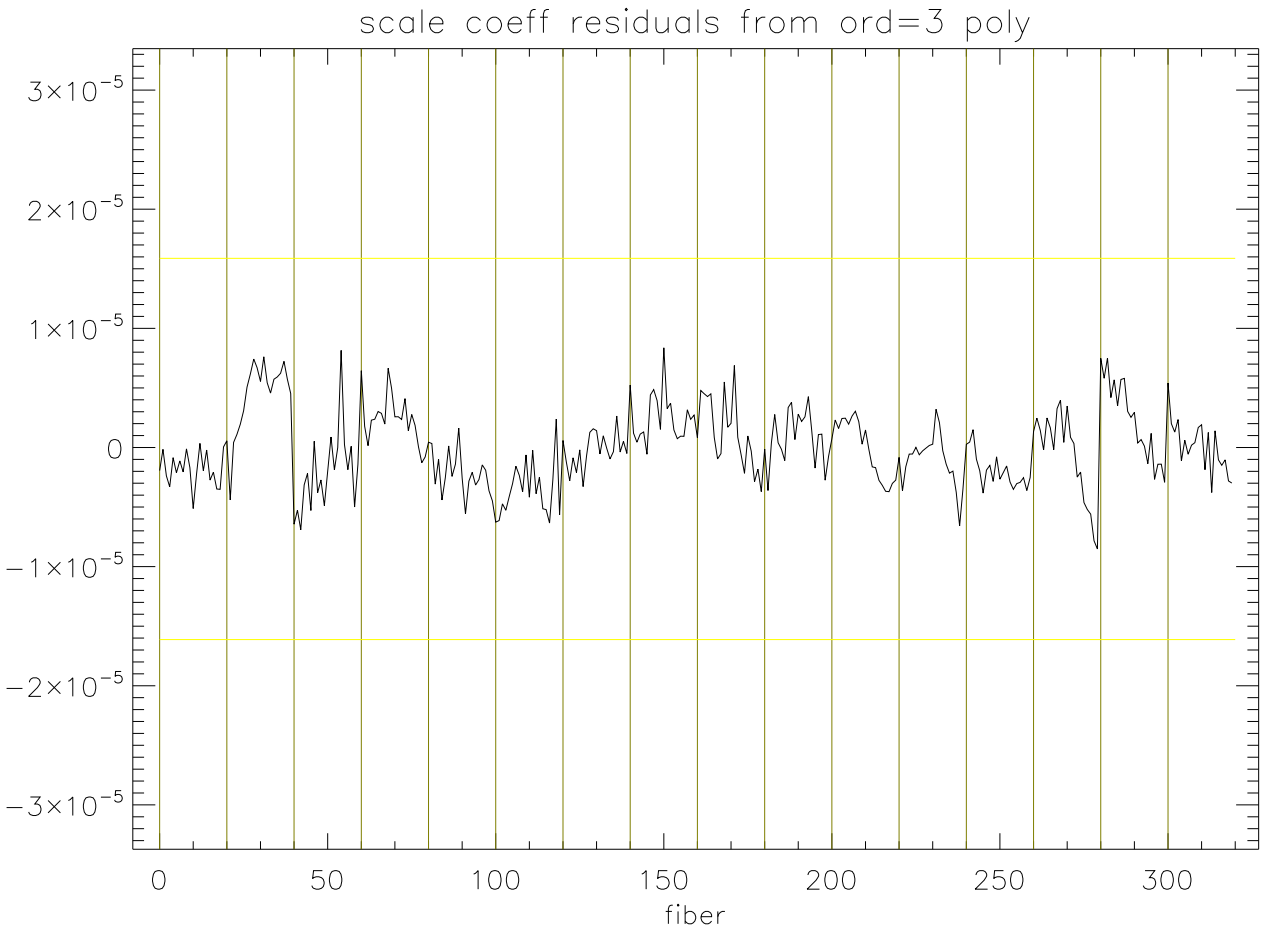

PLATE=2194 MJD=53904 sdR-r1-00039824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.07 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

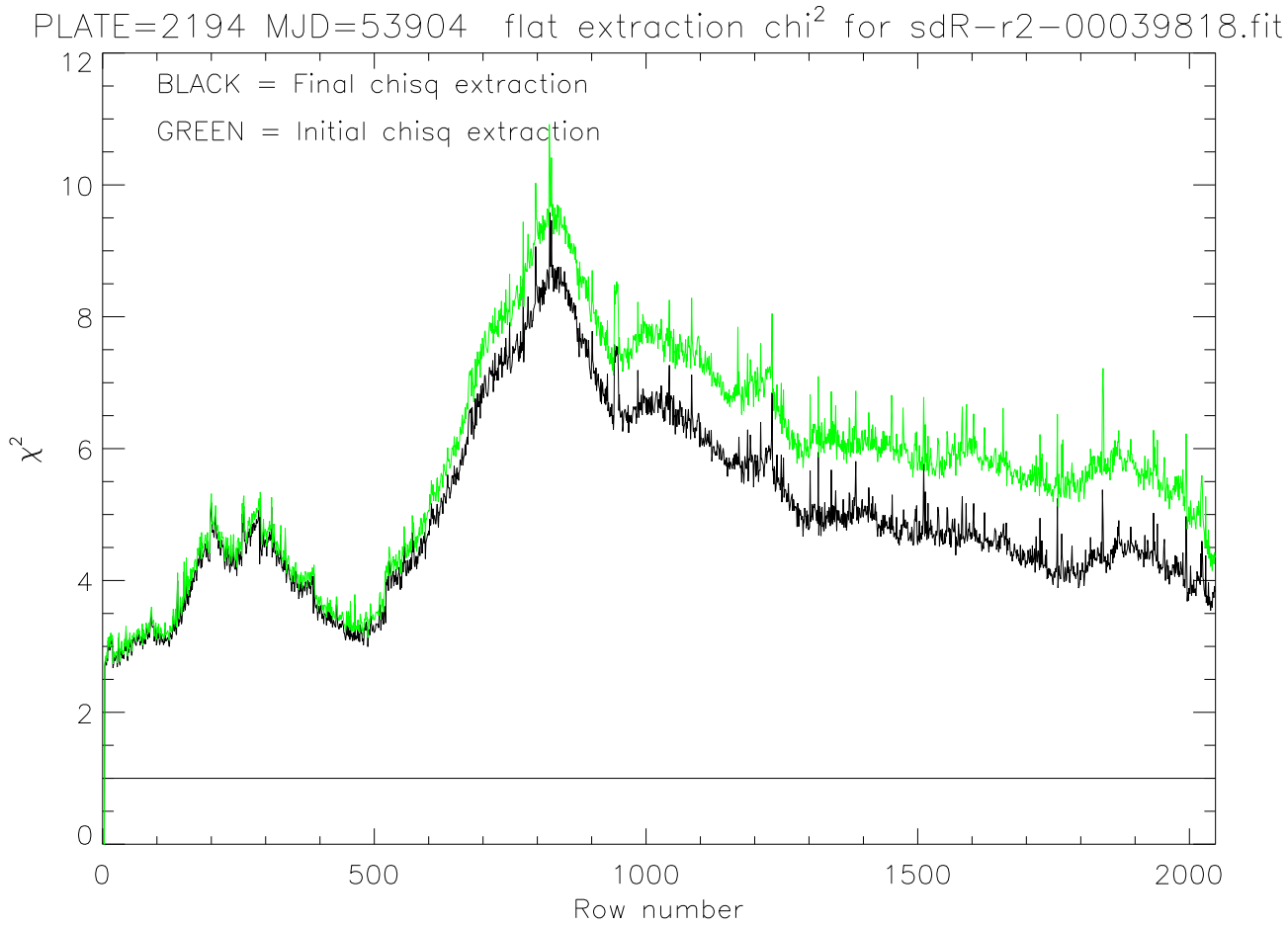

PLATE=2194 MJD=53904 sdR-r1-00039824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.12 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

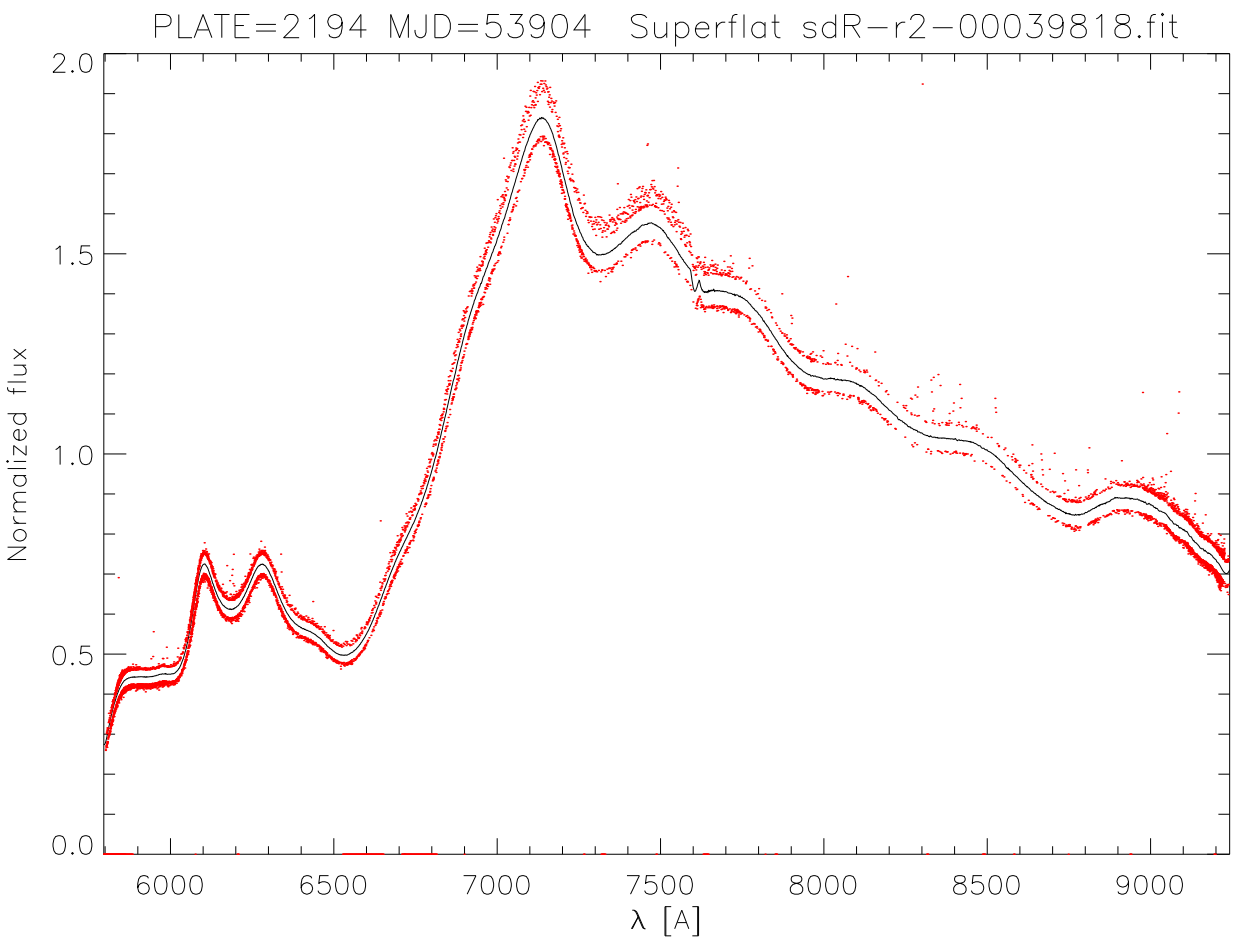

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

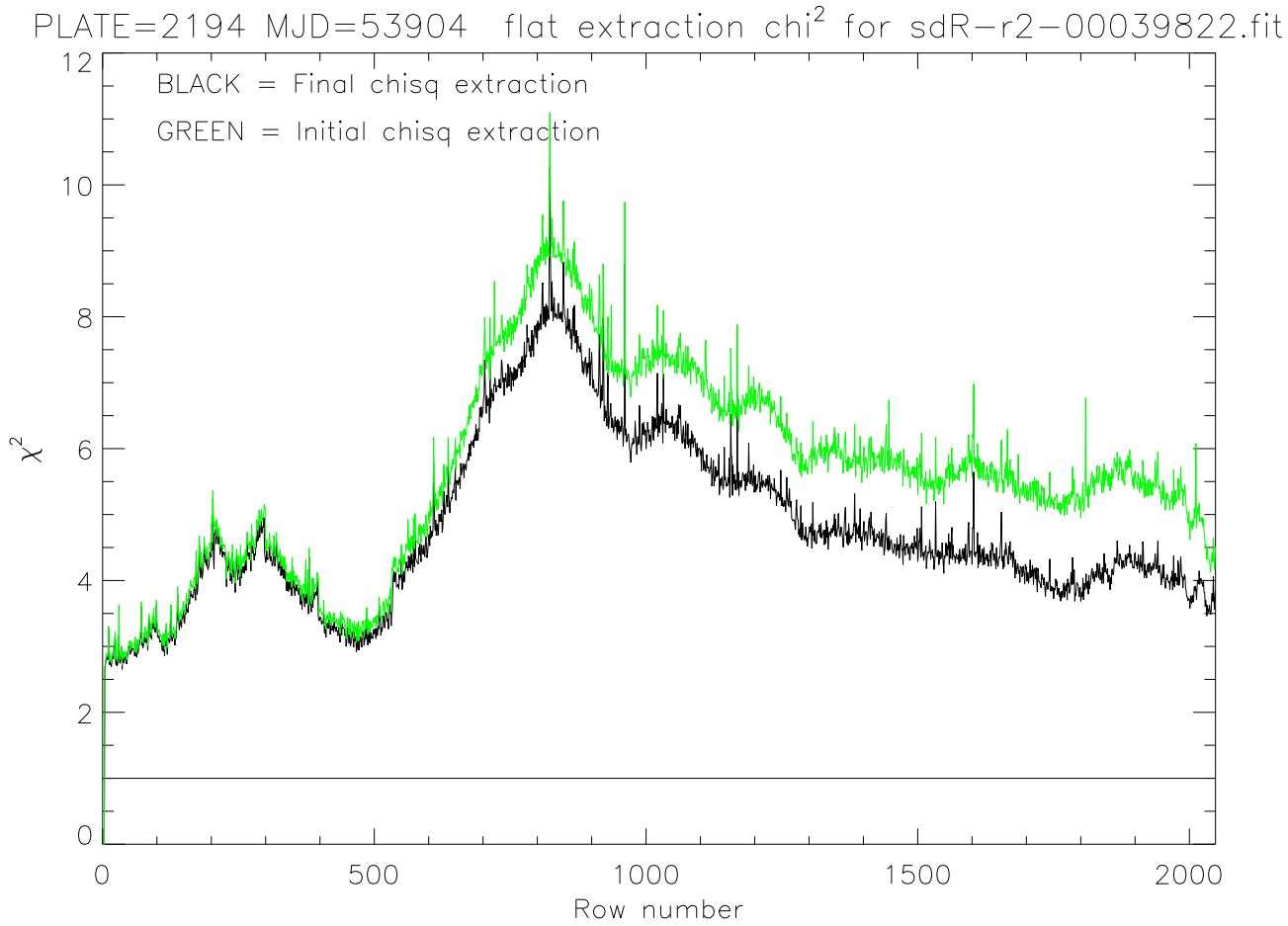

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

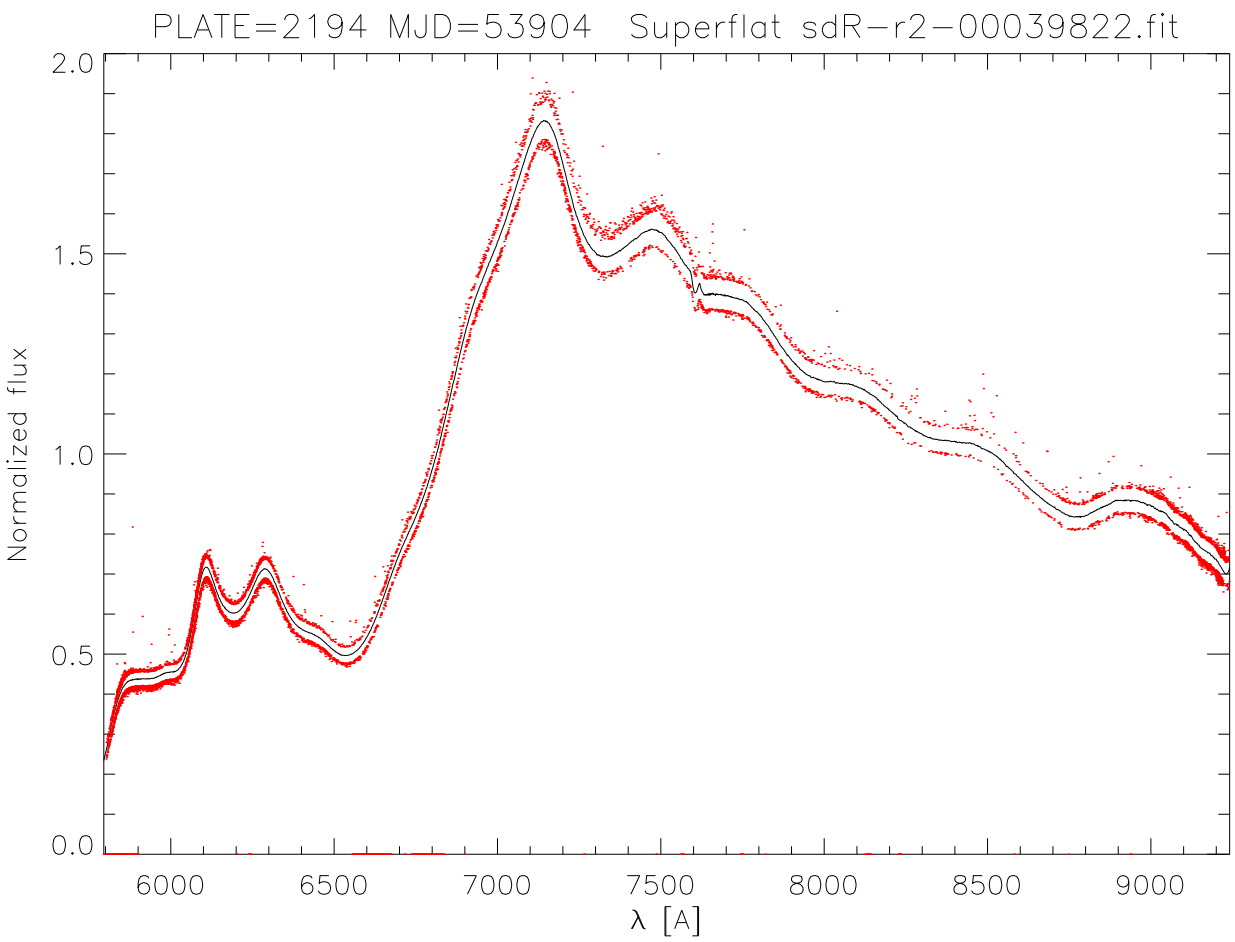

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

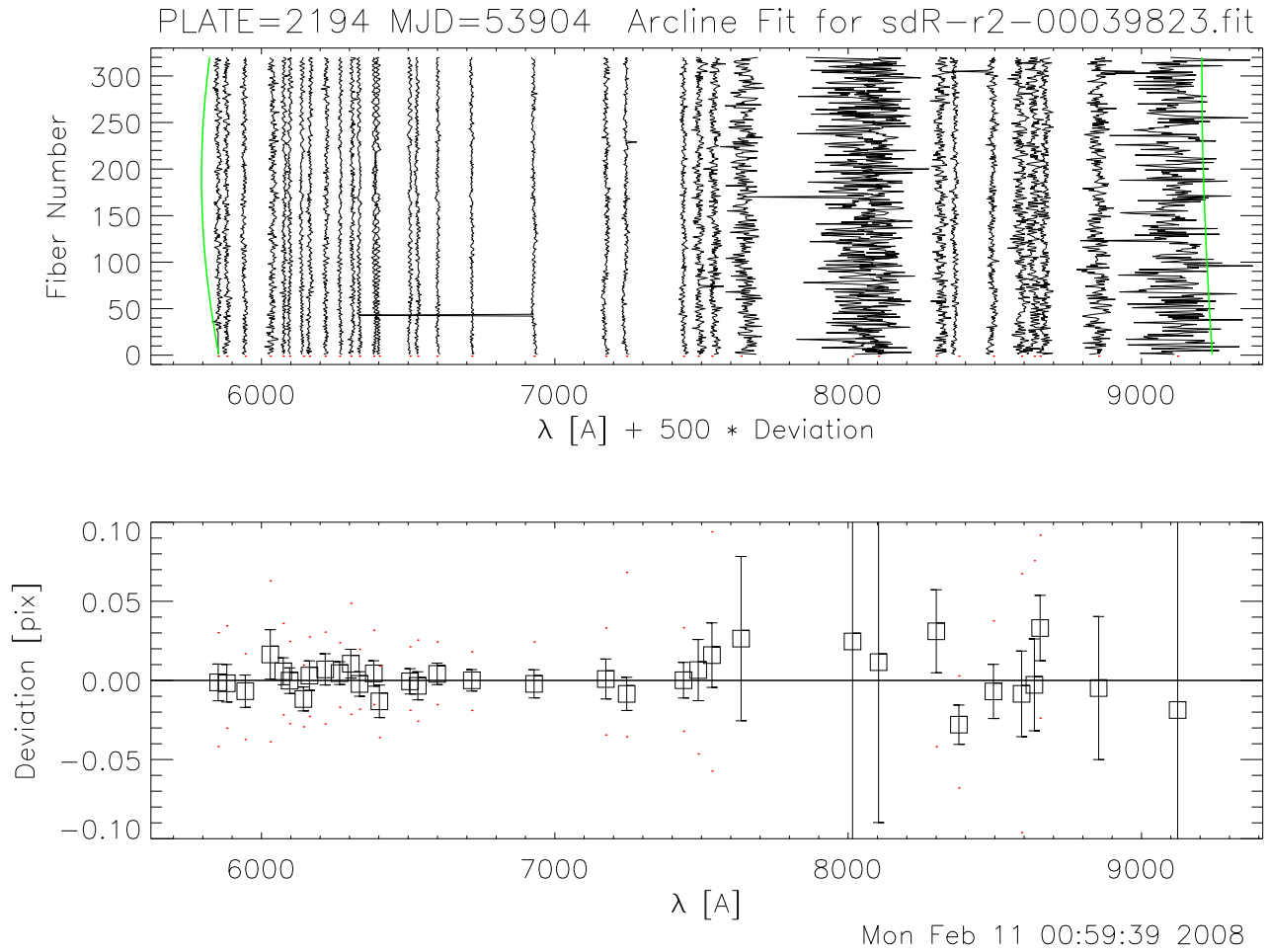

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

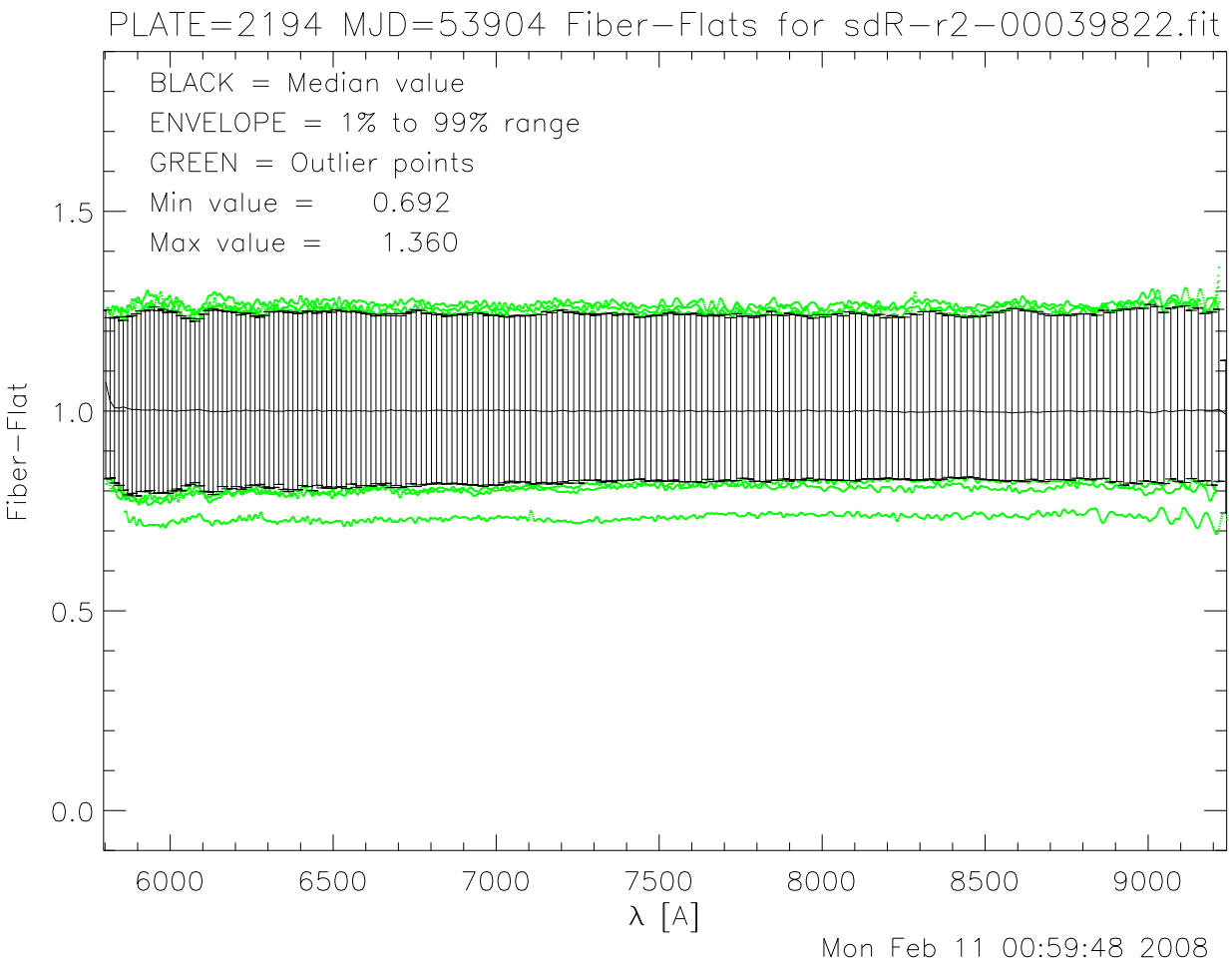

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR-r2-00039818.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

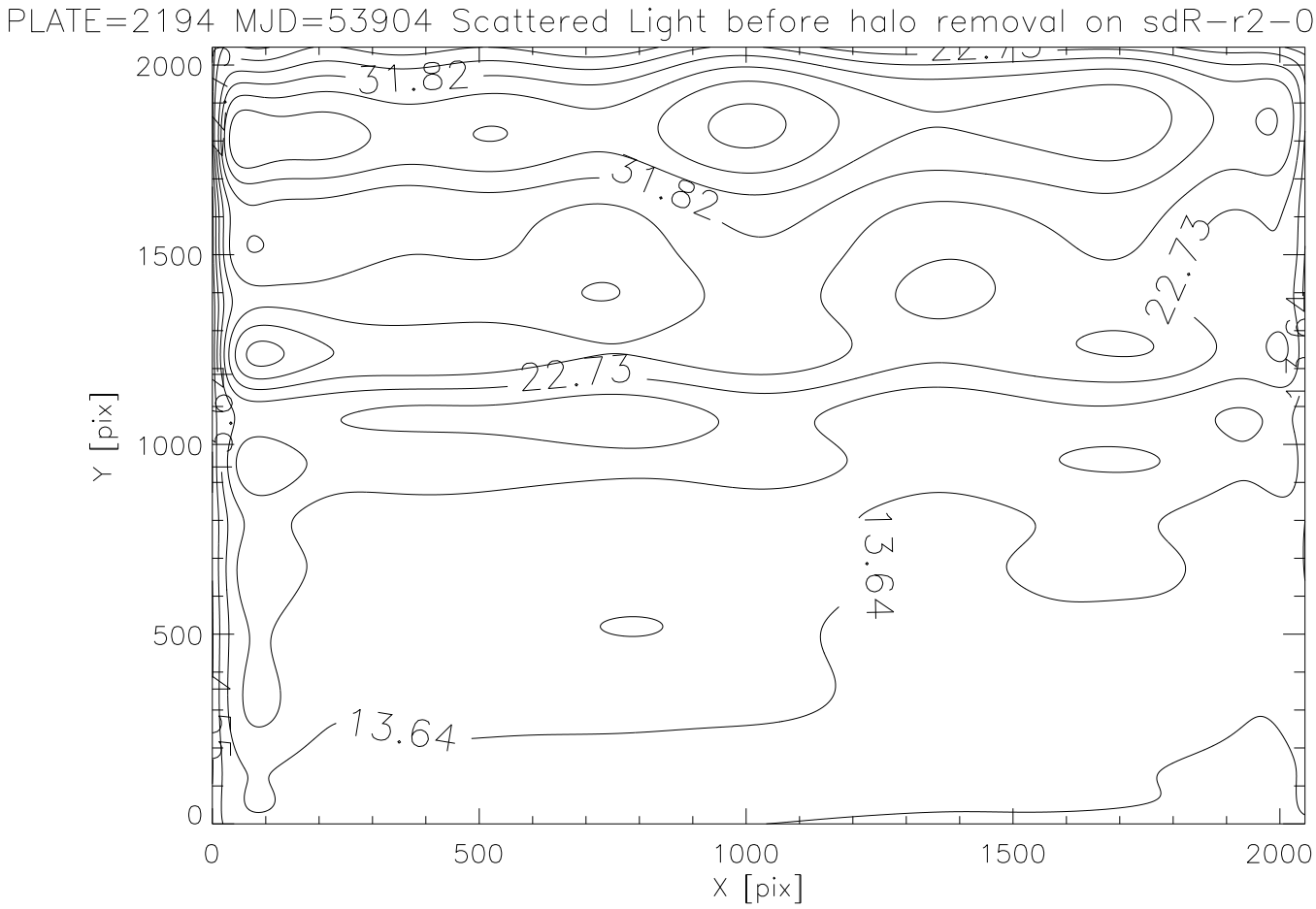

PLATE=2194 MJD=53904 Superflat sdR-r2-00039818.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

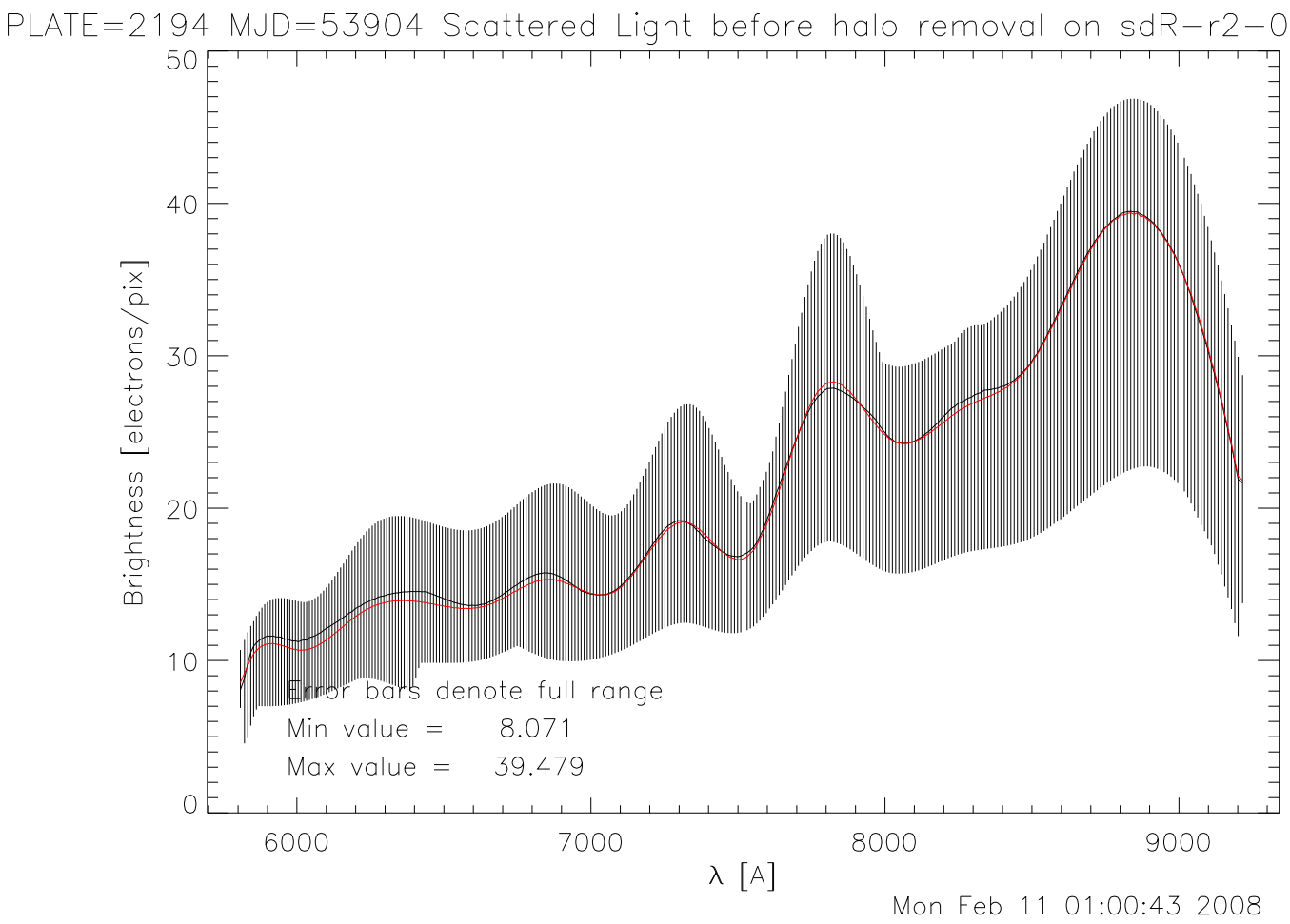

PLATE=2194 MJD=53904 flat extraction chi^2 for sdR−r2−00039822.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

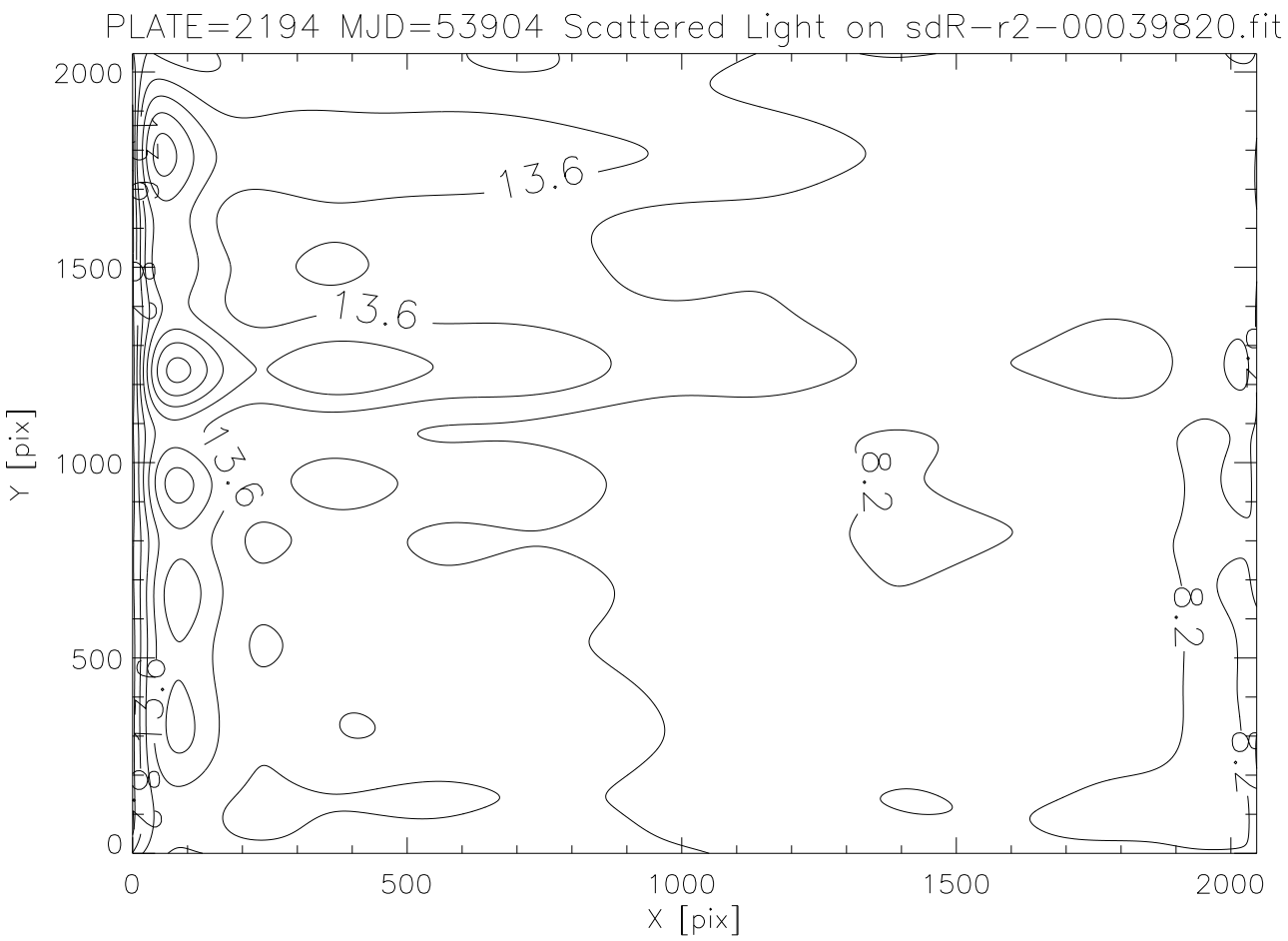

PLATE=2194 MJD=53904 Superflat sdR-r2-00039822.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

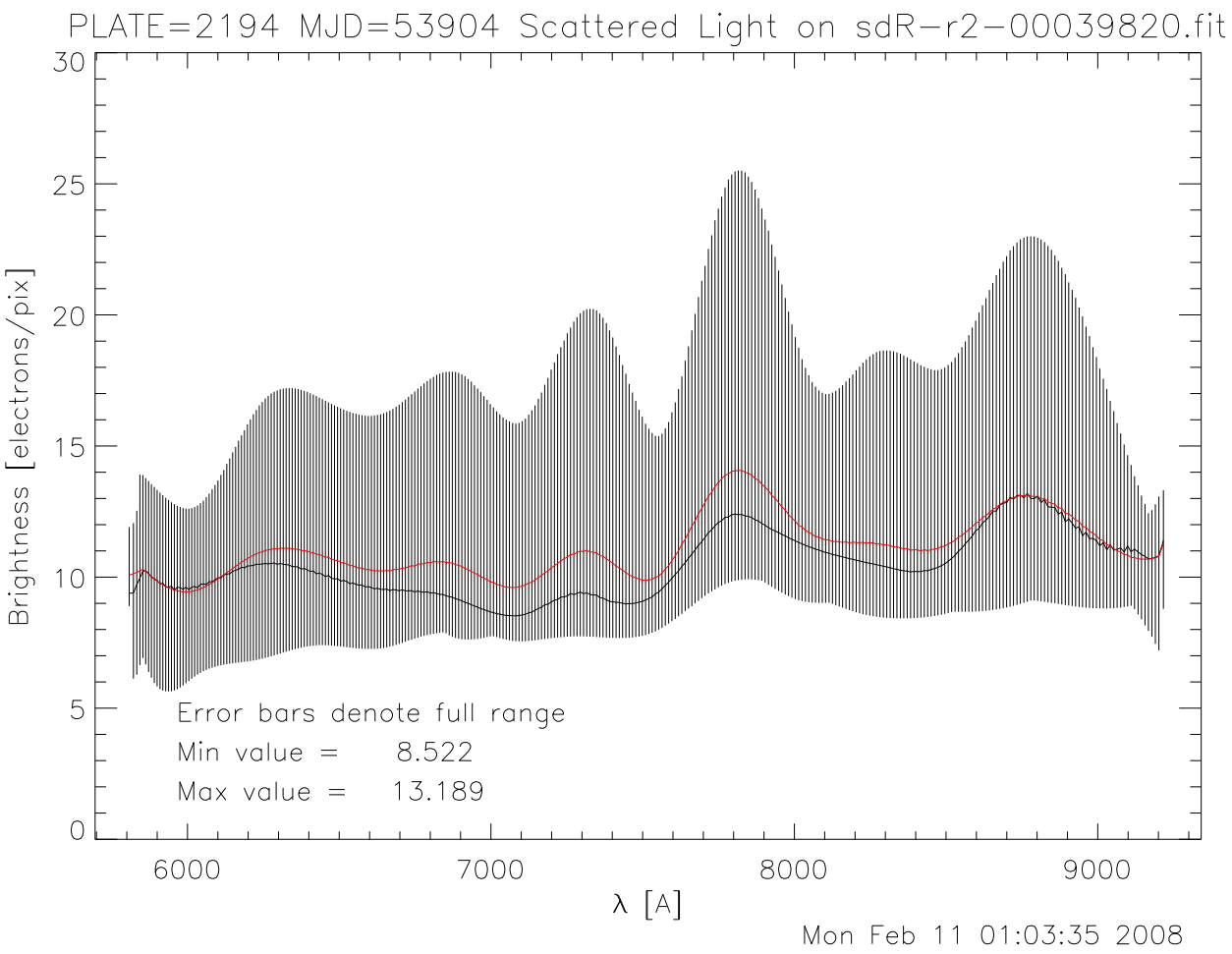

PLATE=2194 MJD=53904 Arcline Fit for sdR-r2-00039823.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 00:59:39 2008

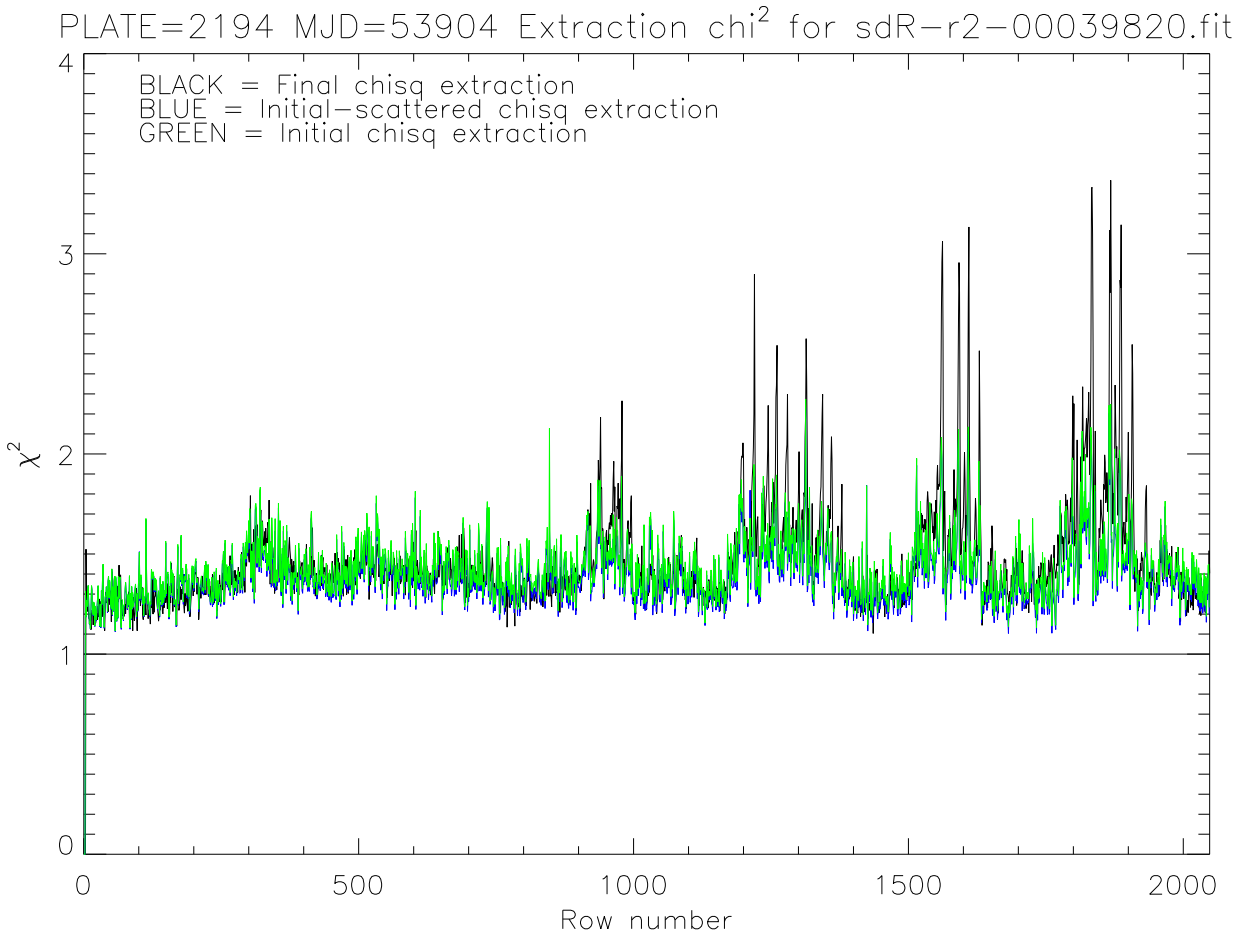

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r2−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.692
Max value = 1.360
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 00:59:48 2008

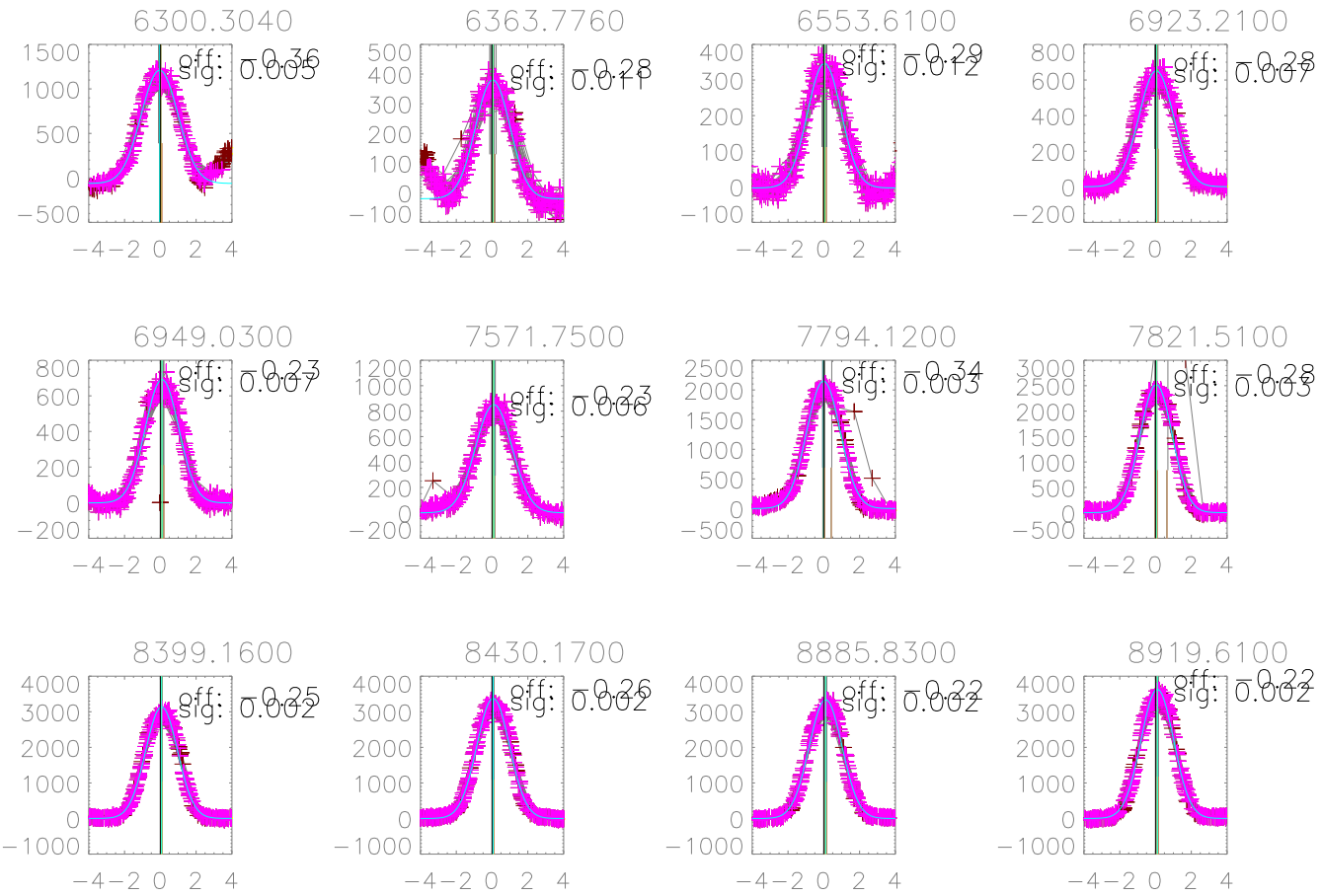

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039820.fi
31.82
31.82
22.73
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

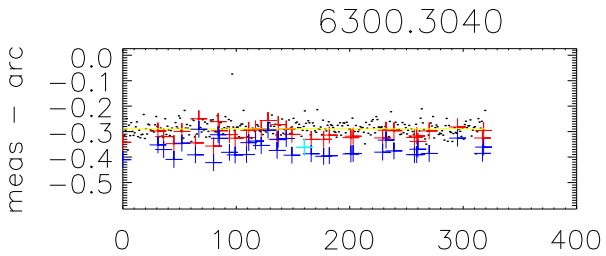

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039820.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.071
Max value = 39.479
Mon Feb 11 01:00:43 2008

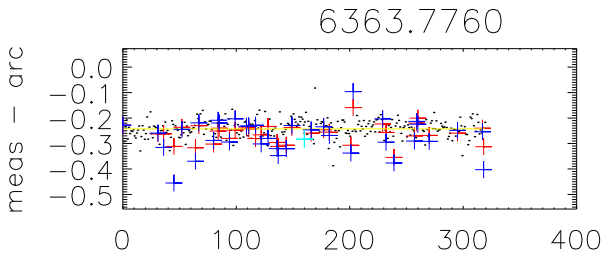

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039820.fit
13.6
13.6
13.6
8.2
8.2
8.2
0.0
0
500
1000
1500
2000
X [pix]
Y [pix]

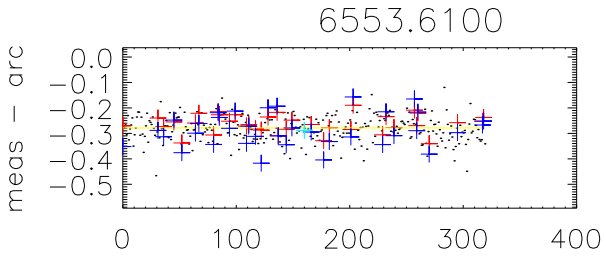

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039820.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.522
Max value = 13.189
Mon Feb 11 01:03:35 2008

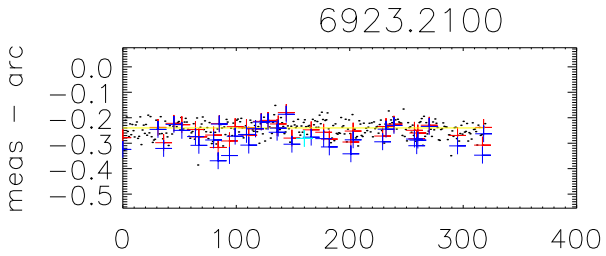

PLATE=2194 MJD=53904 Extraction chi^2 for sdR-r2-00039820.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

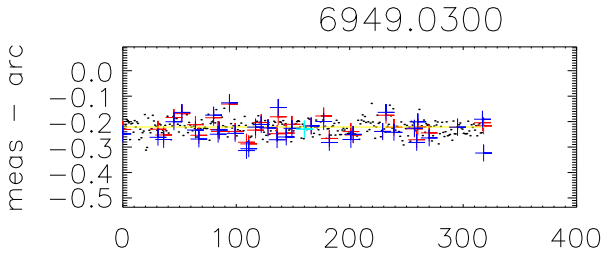

6300.3040
off: −0.36
sig: 0.005
6363.7760
off: −0.28
sig: 0.011
6553.6100
off: −0.29
sig: 0.012
6923.2100
off: −0.28
sig: 0.007
6949.0300
off: −0.23
sig: 0.007
7571.7500
off: −0.23
sig: 0.006
7794.1200
off: −0.34
sig: 0.003
7821.5100
off: −0.28
sig: 0.003
8399.1600
off: −0.25
sig: 0.002
8430.1700
off: −0.26
sig: 0.002
8885.8300
off: −0.22
sig: 0.002
8919.6100
off: −0.22
sig: 0.002

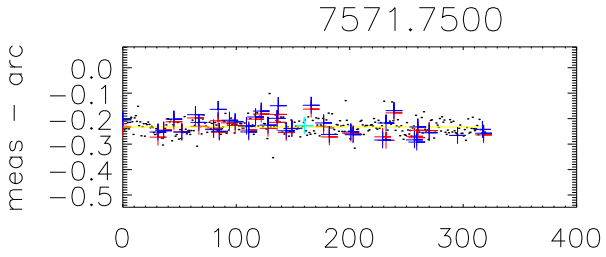

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

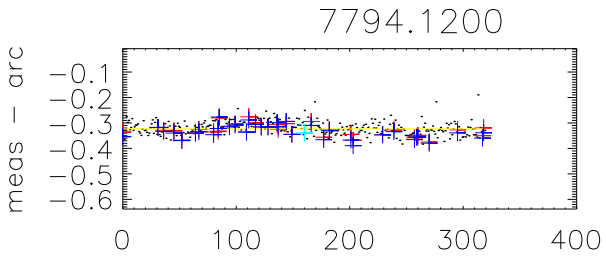

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

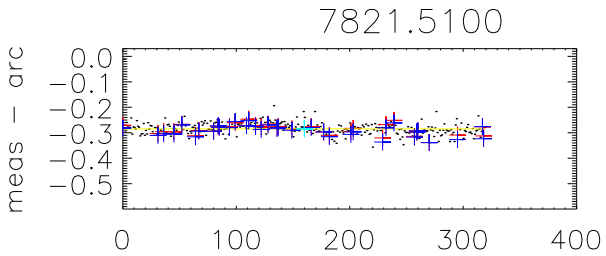

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

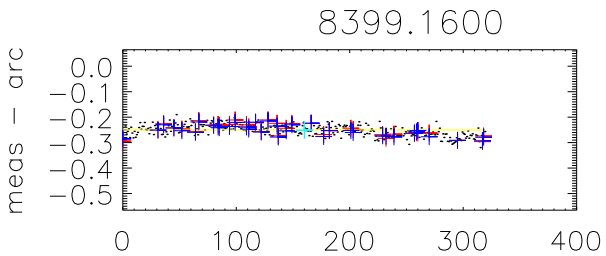

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

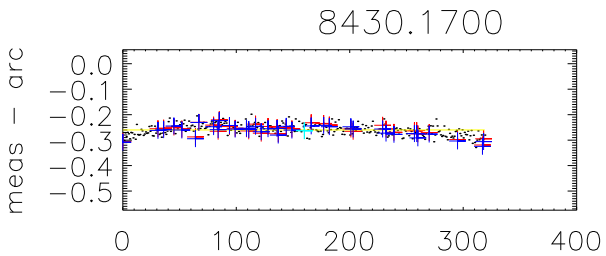

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

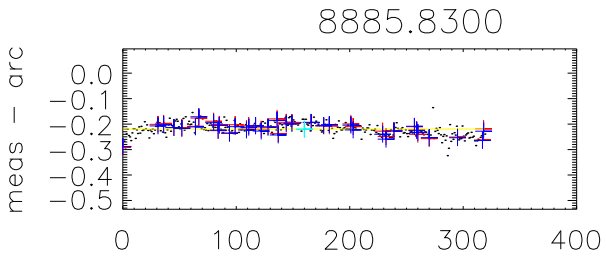

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

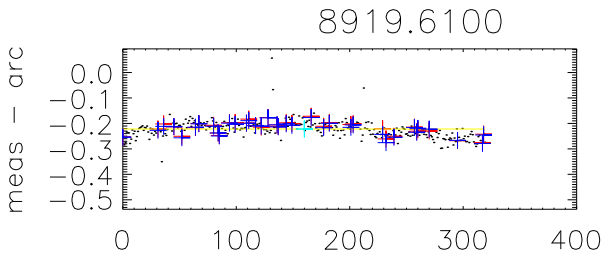

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

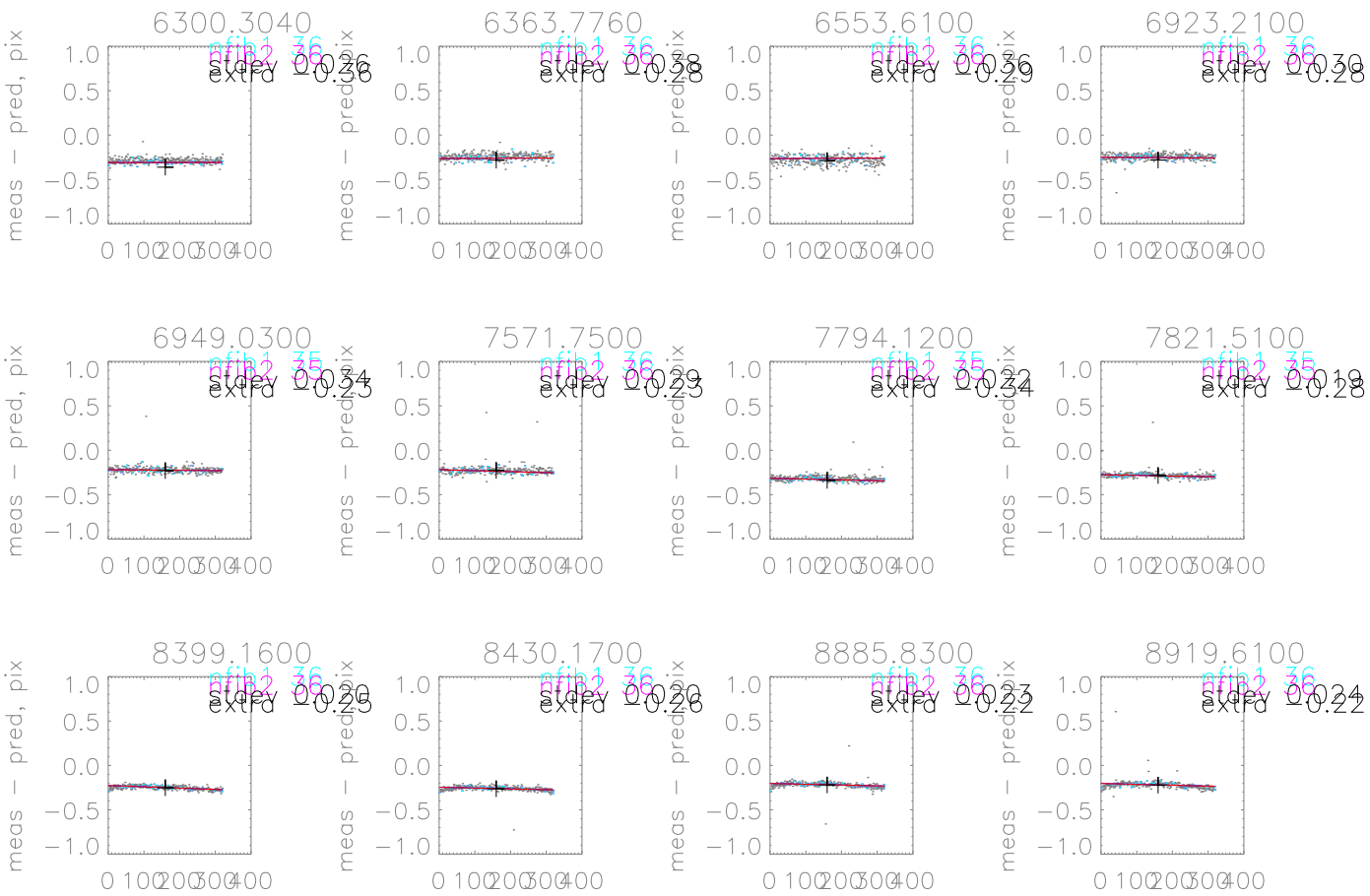

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

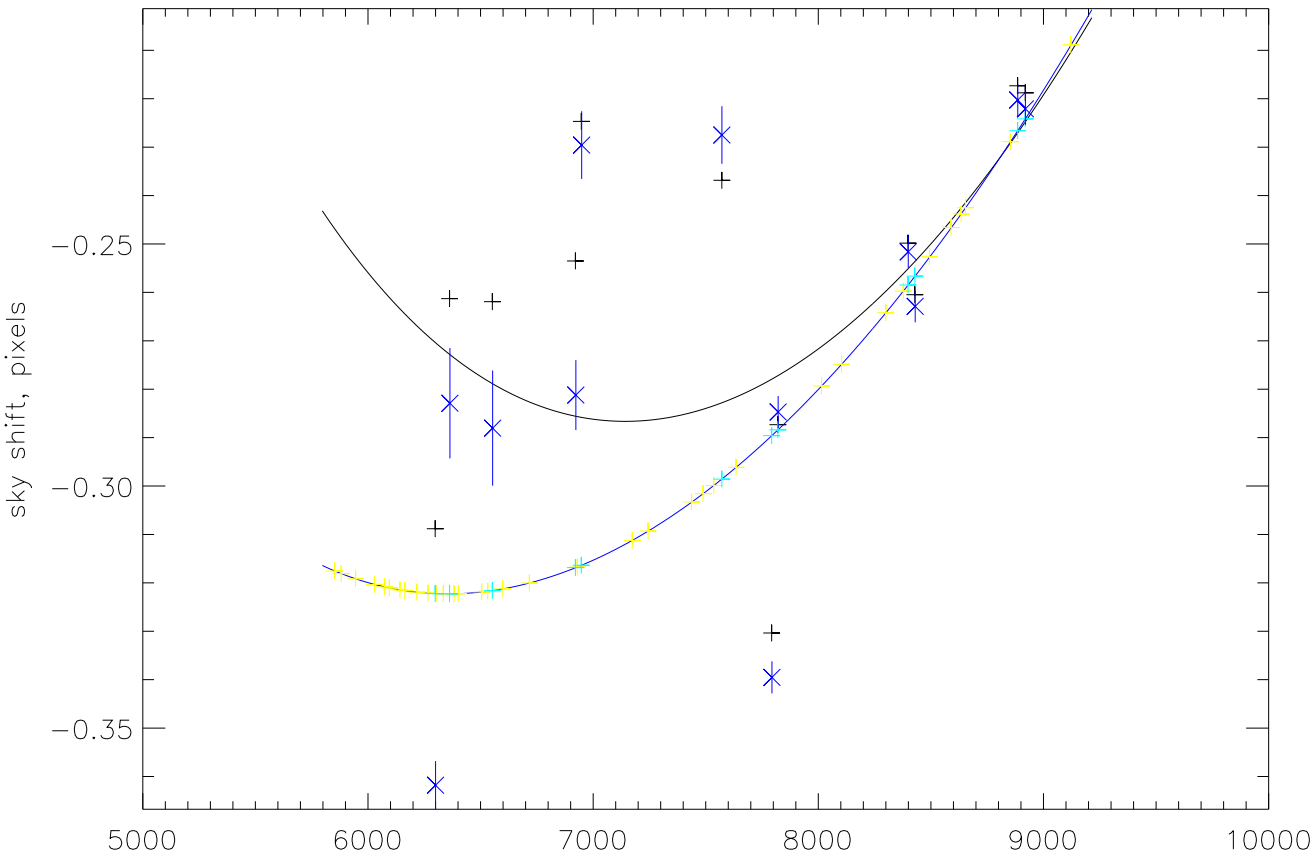

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

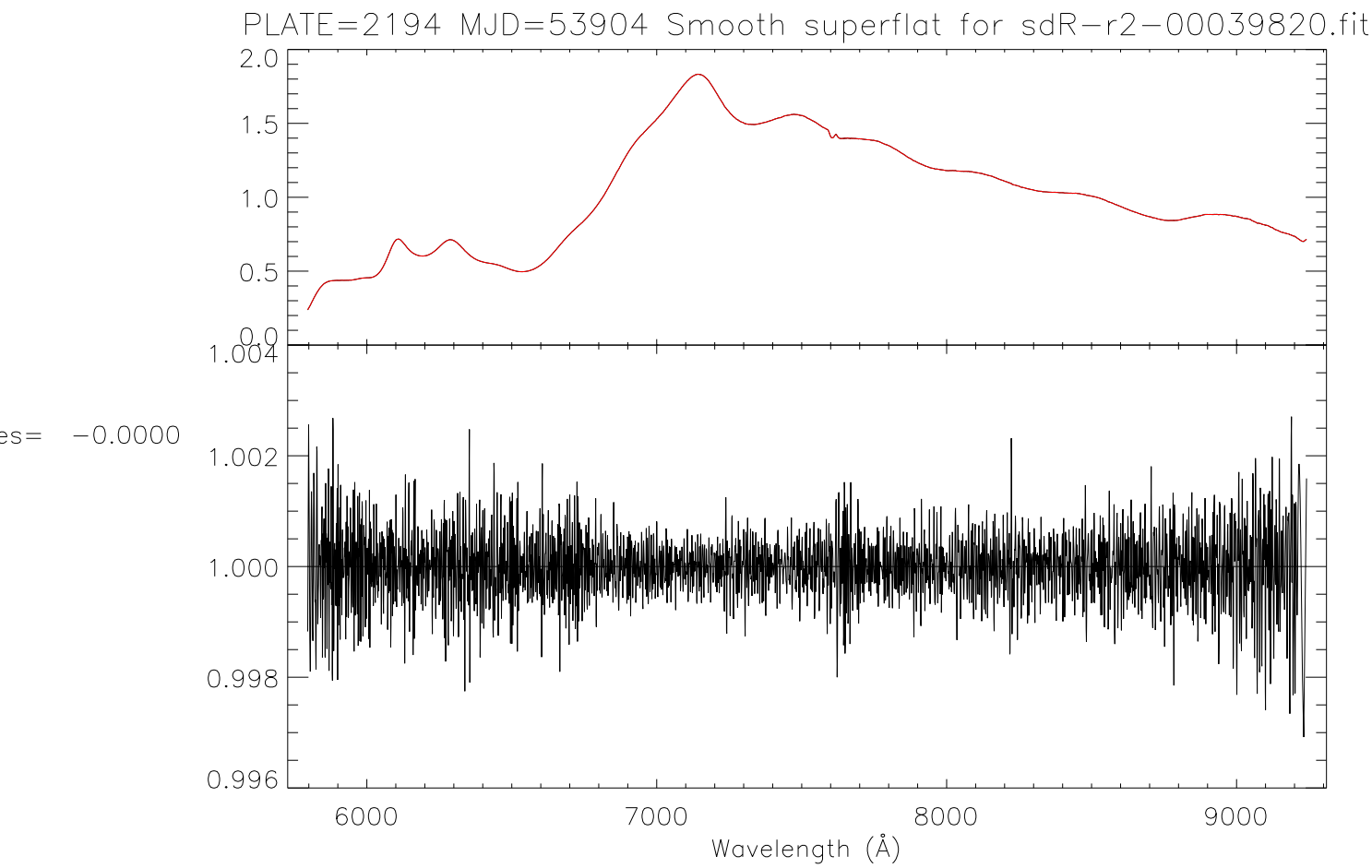

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

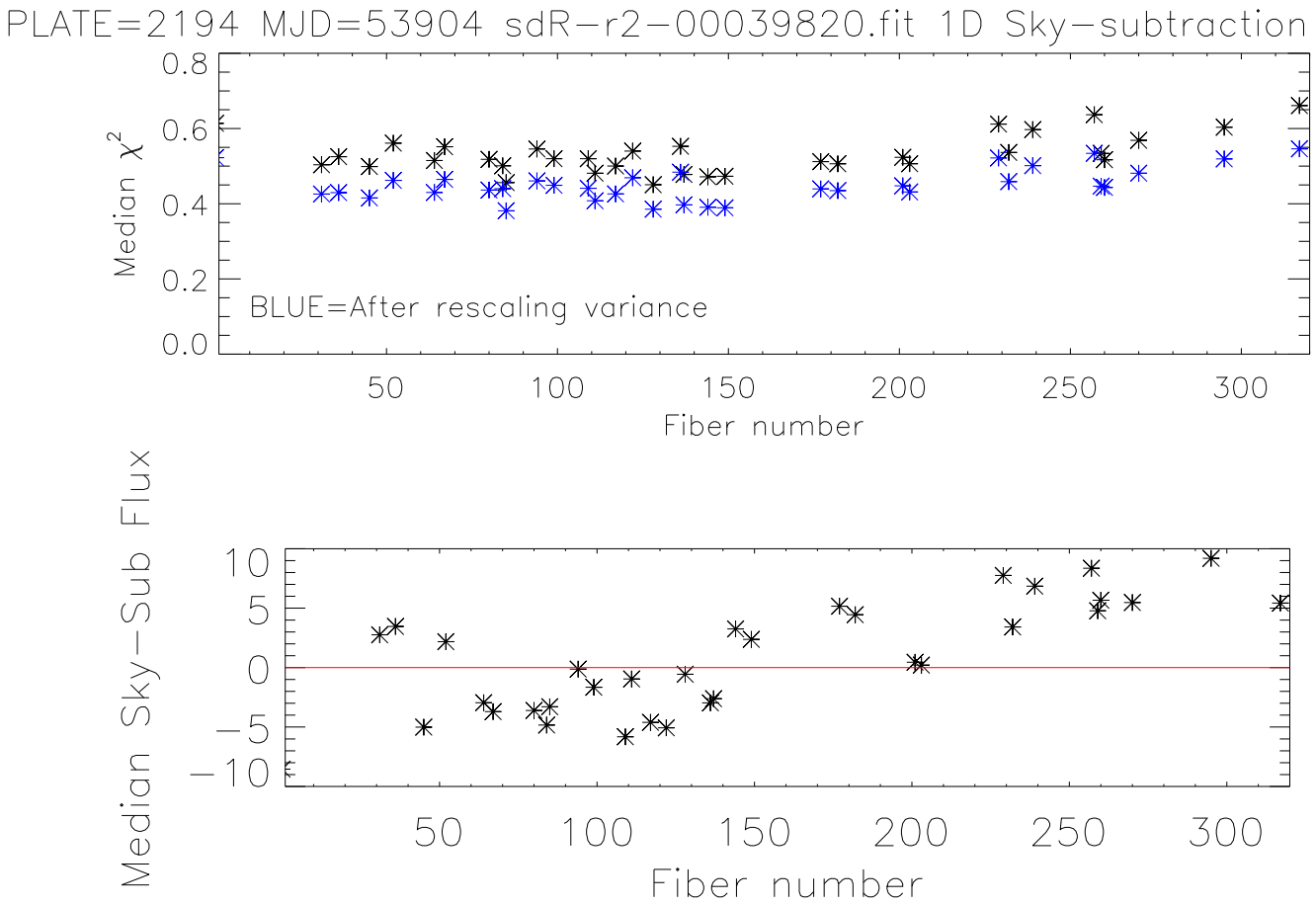

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

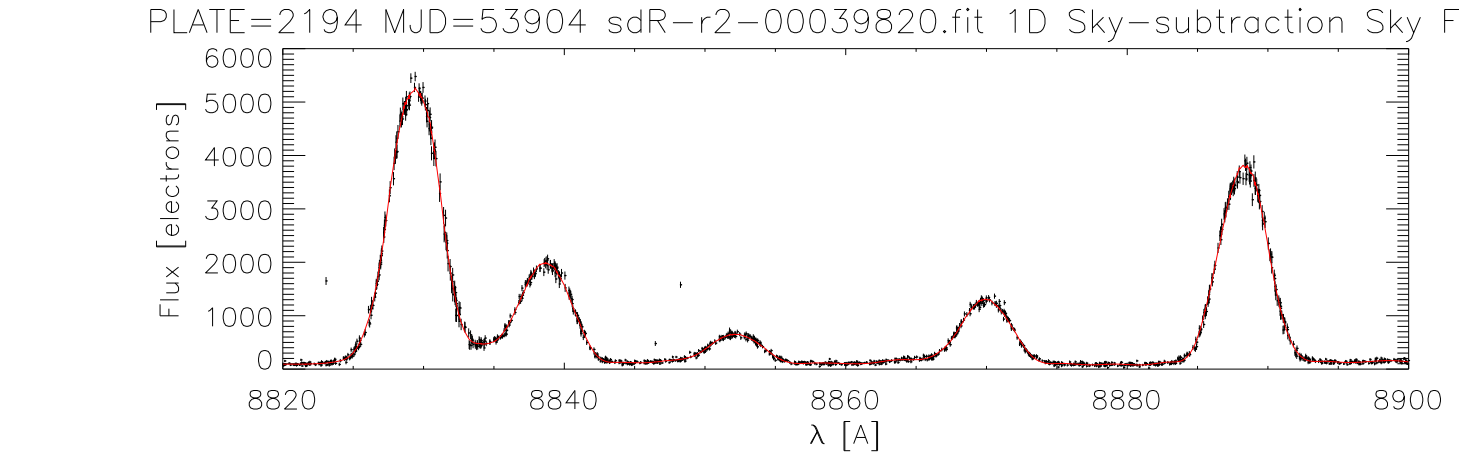

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

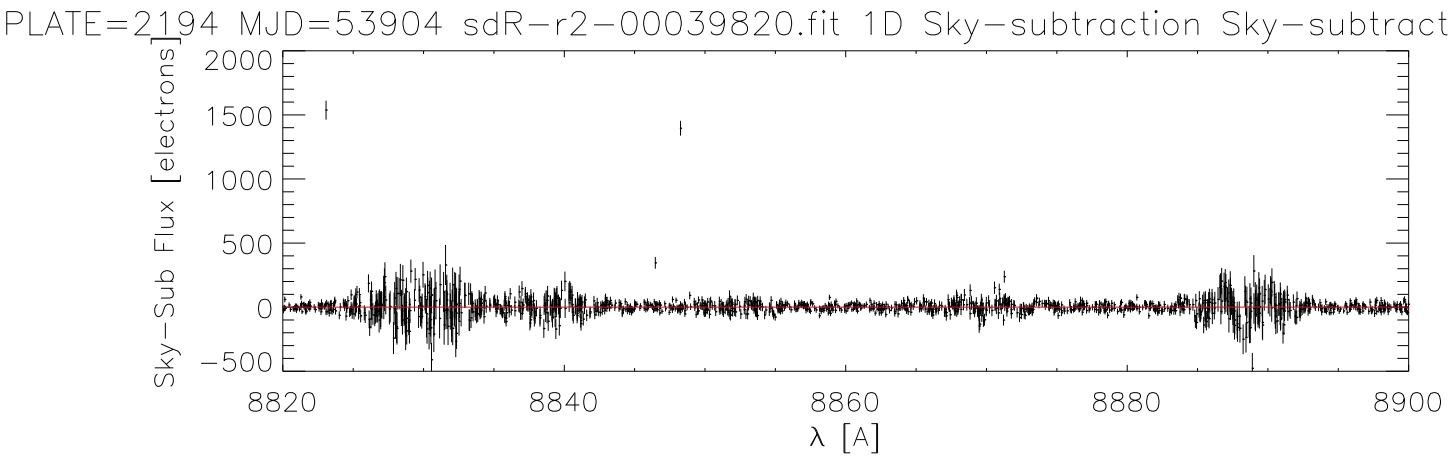

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 36
mfib2 36
mfib1 35
mfib2 35
stdev 0.26
extrd 0.36
stdev 0.28
extrd 0.28
stdev 0.29
extrd 0.29
stdev 0.30
extrd 0.28
stdev 0.34
extrd 0.23
stdev 0.29
extrd 0.23
stdev 0.32
extrd 0.34
stdev 0.19
extrd 0.28
stdev 0.20
extrd 0.25
stdev 0.20
extrd 0.26
stdev 0.23
extrd 0.22
stdev 0.24
extrd 0.22

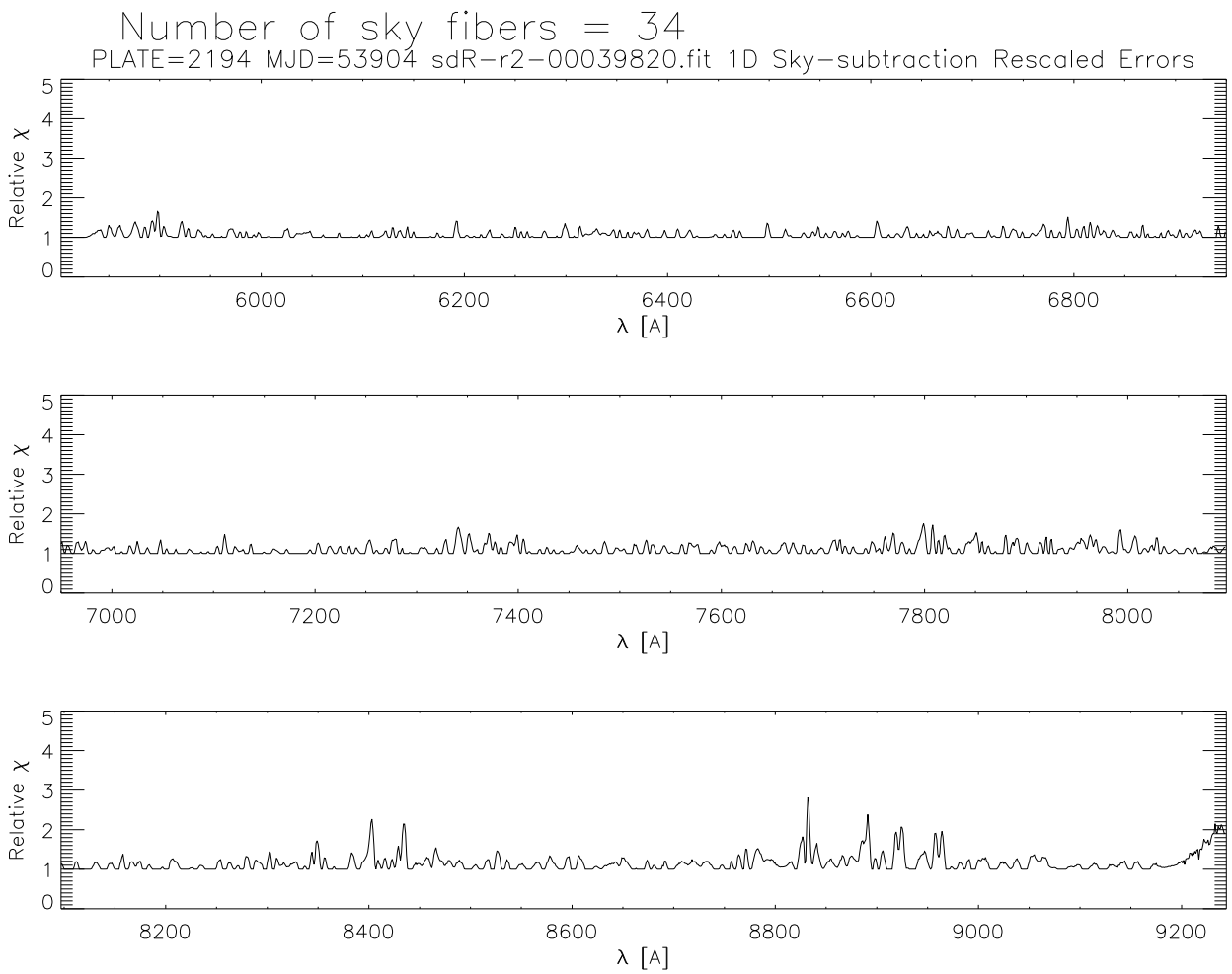

sky shift, pixels
−0.25
−0.30
−0.35
5000
6000
7000
8000
9000
10000

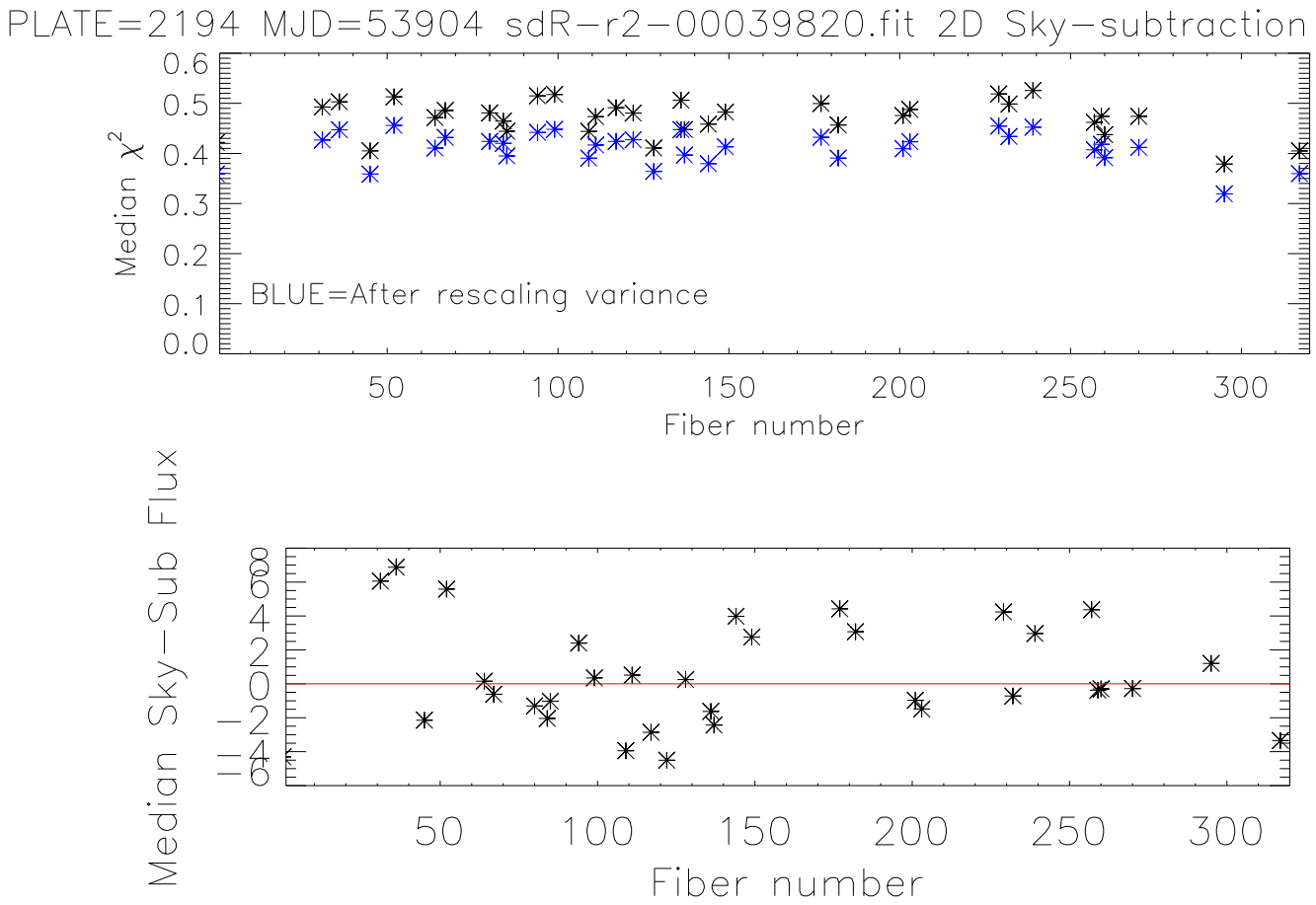

PLATE=2194 MJD=53904 Smooth superflat for sdR-r2-00039820.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

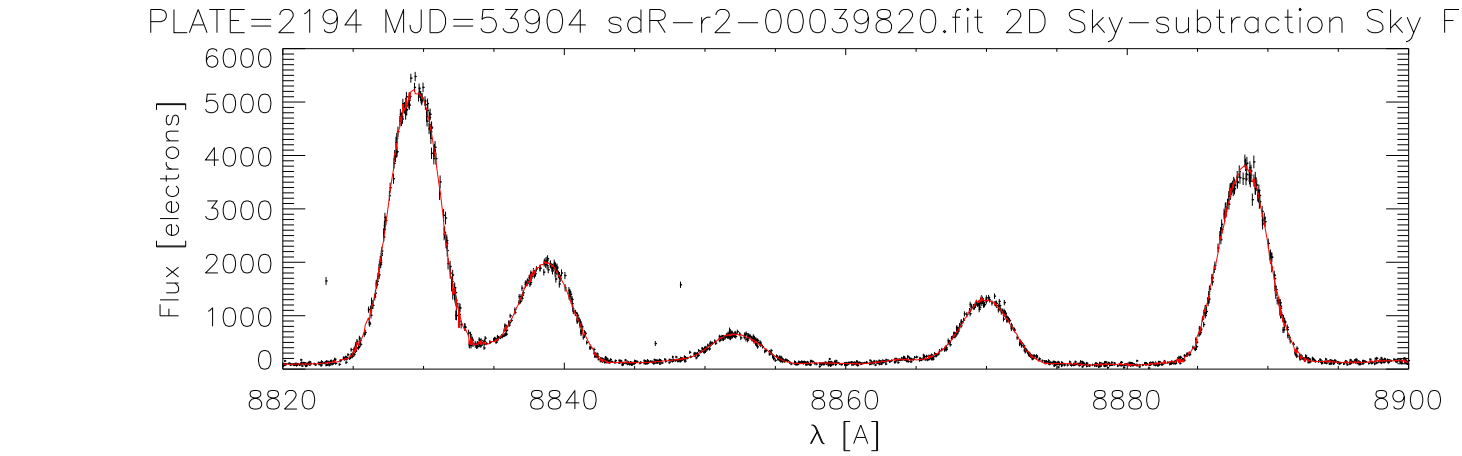

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

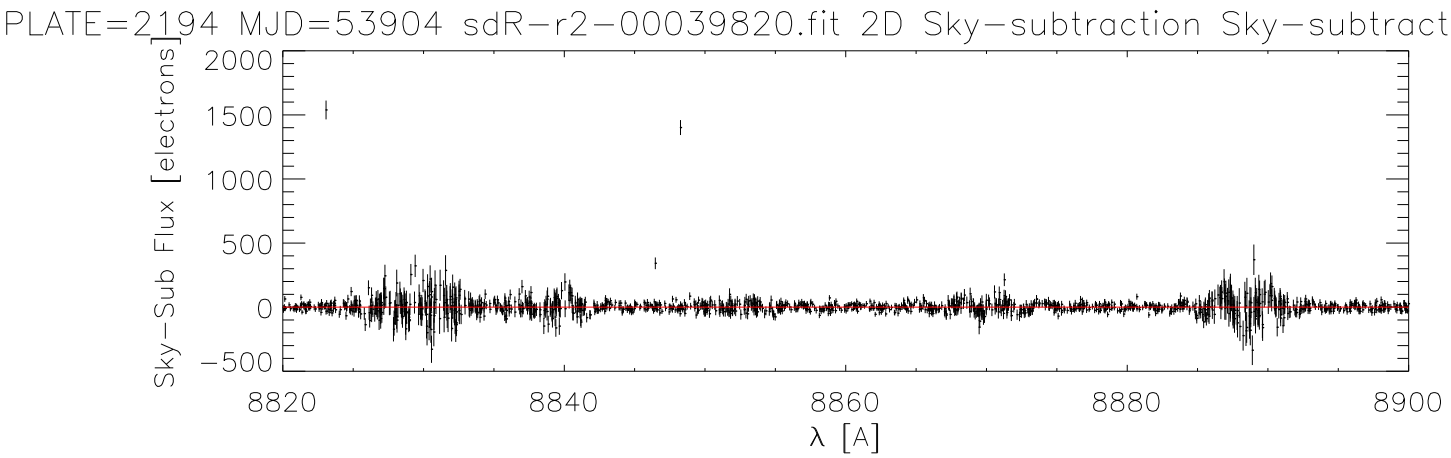

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

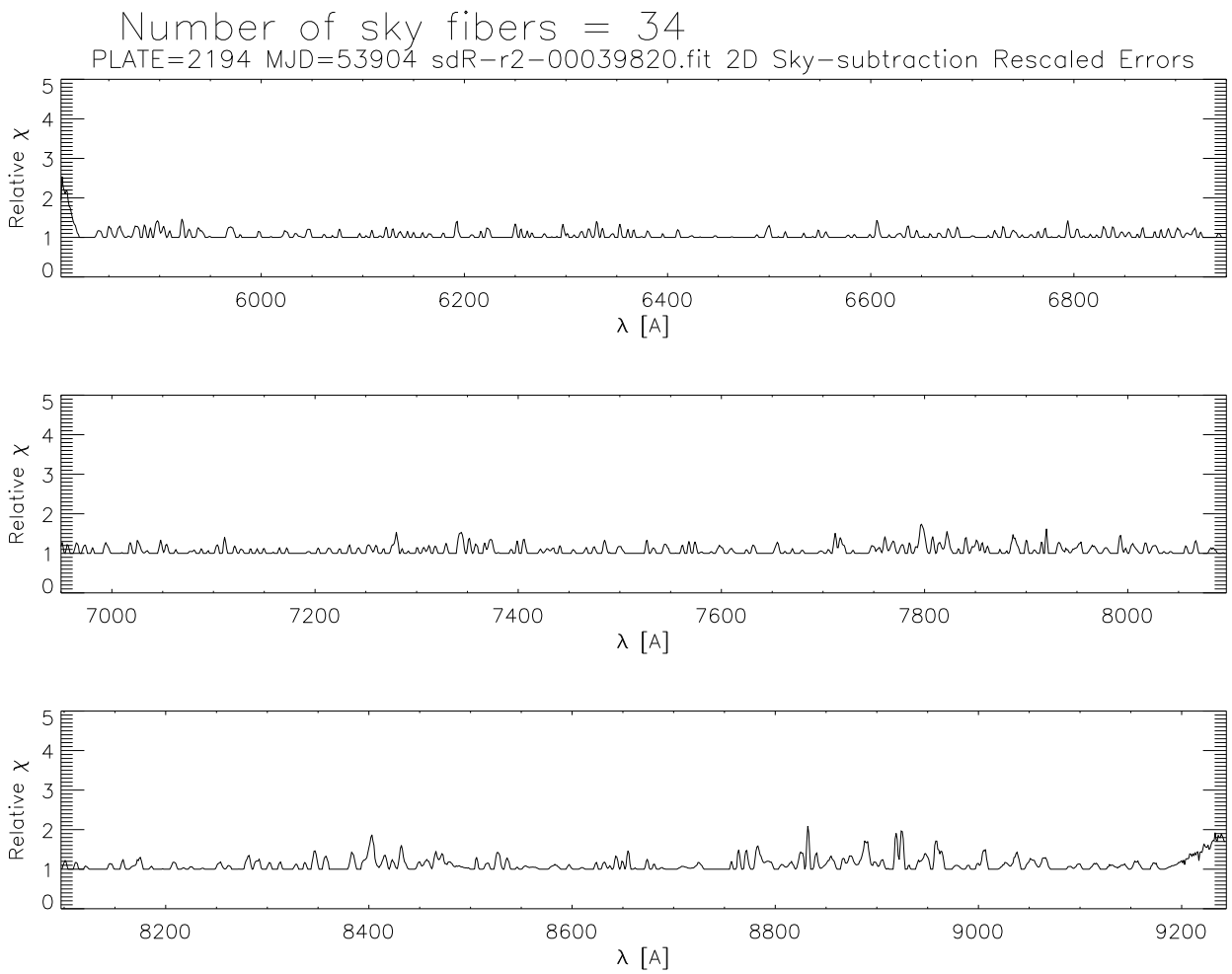

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

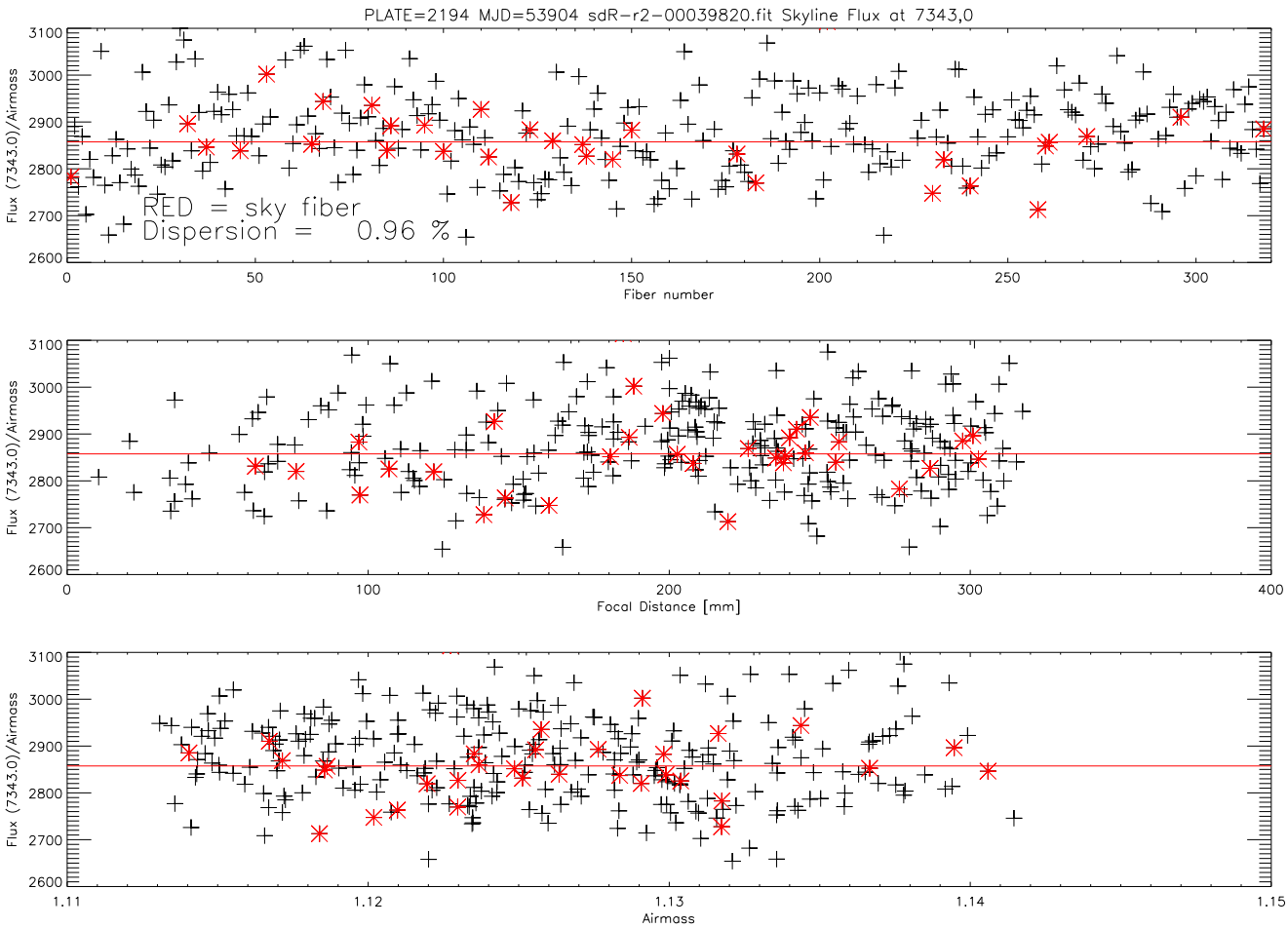

Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039820.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

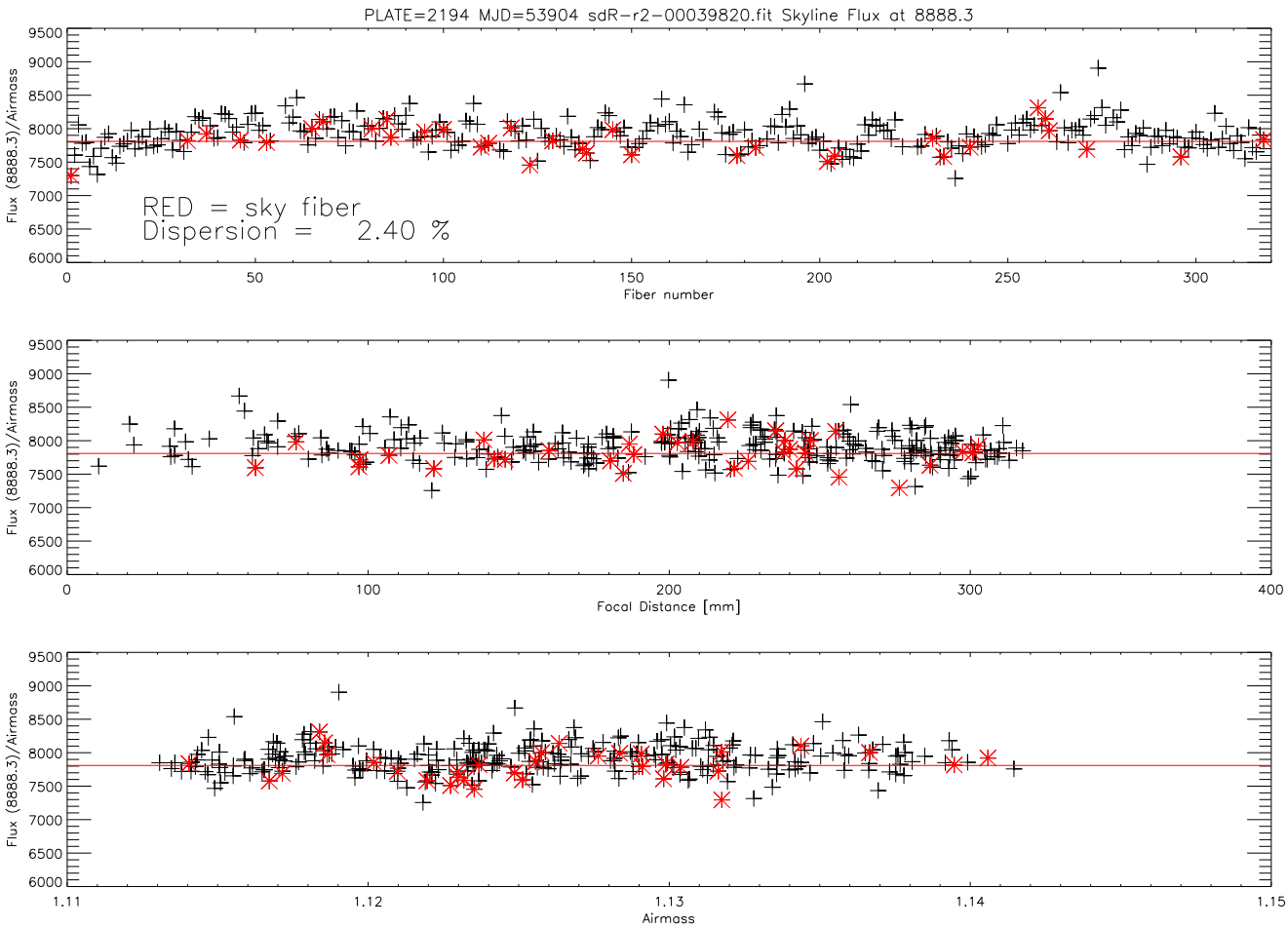

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

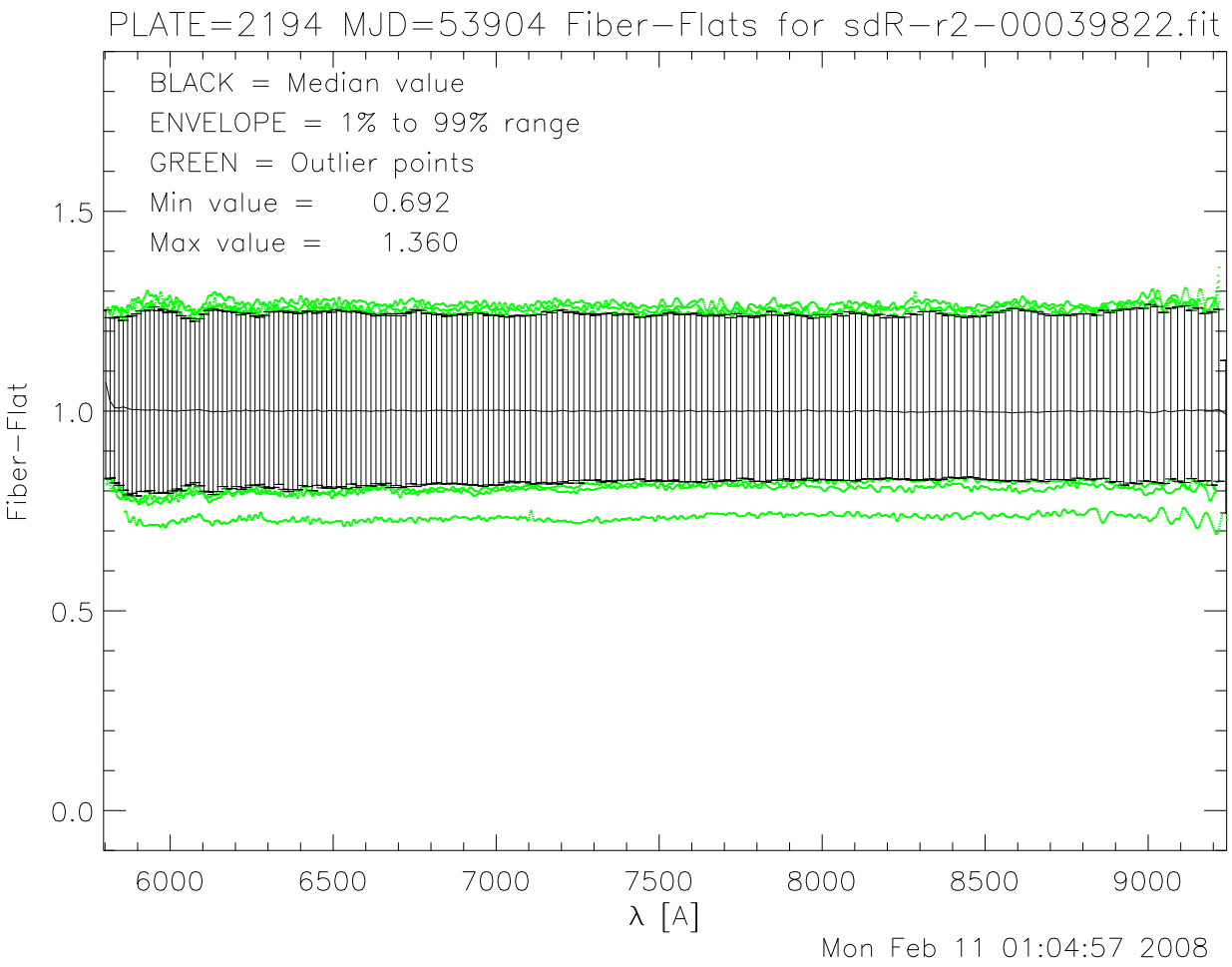

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

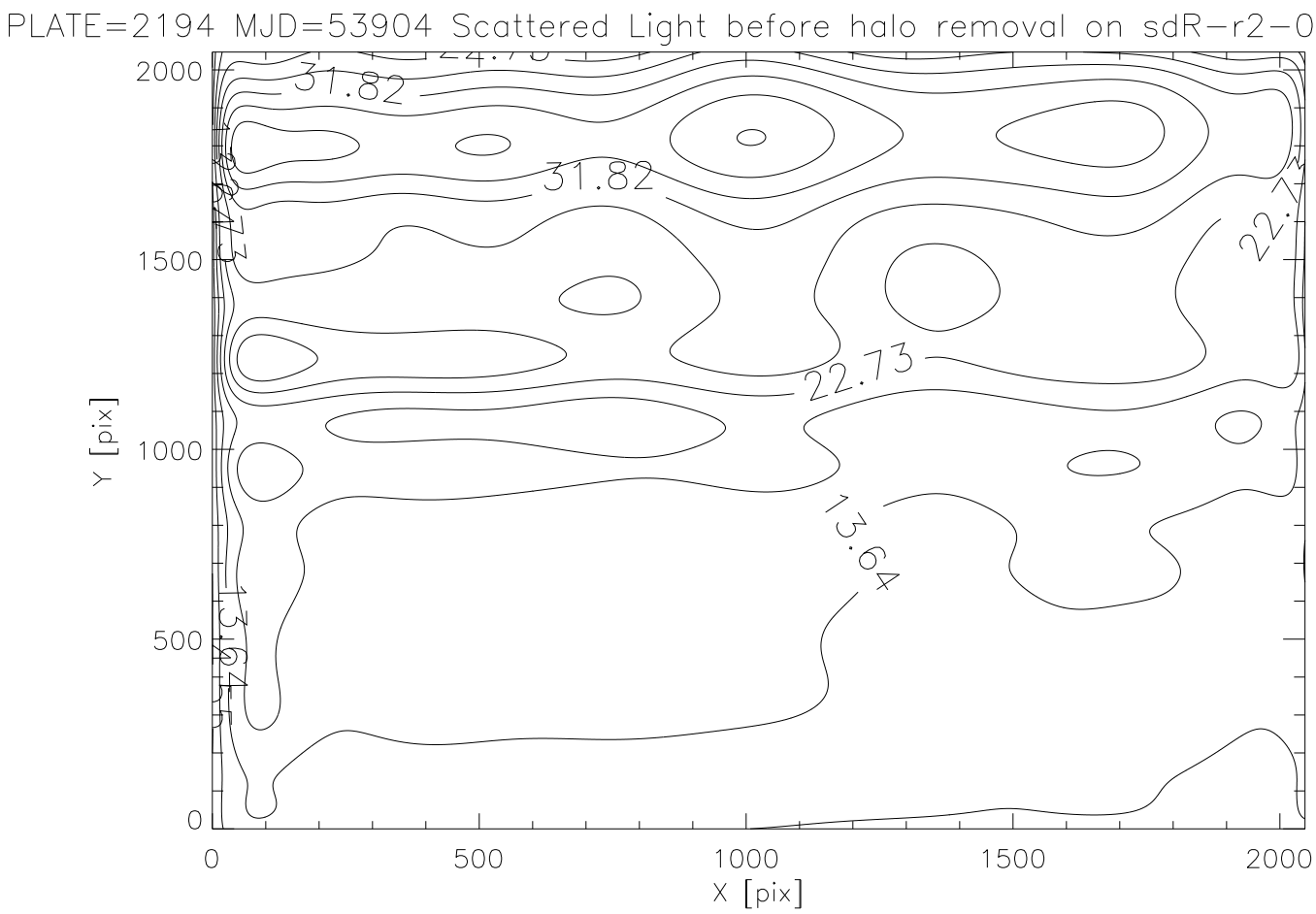

PLATE=2194 MJD=53904 sdR-r2-00039820.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

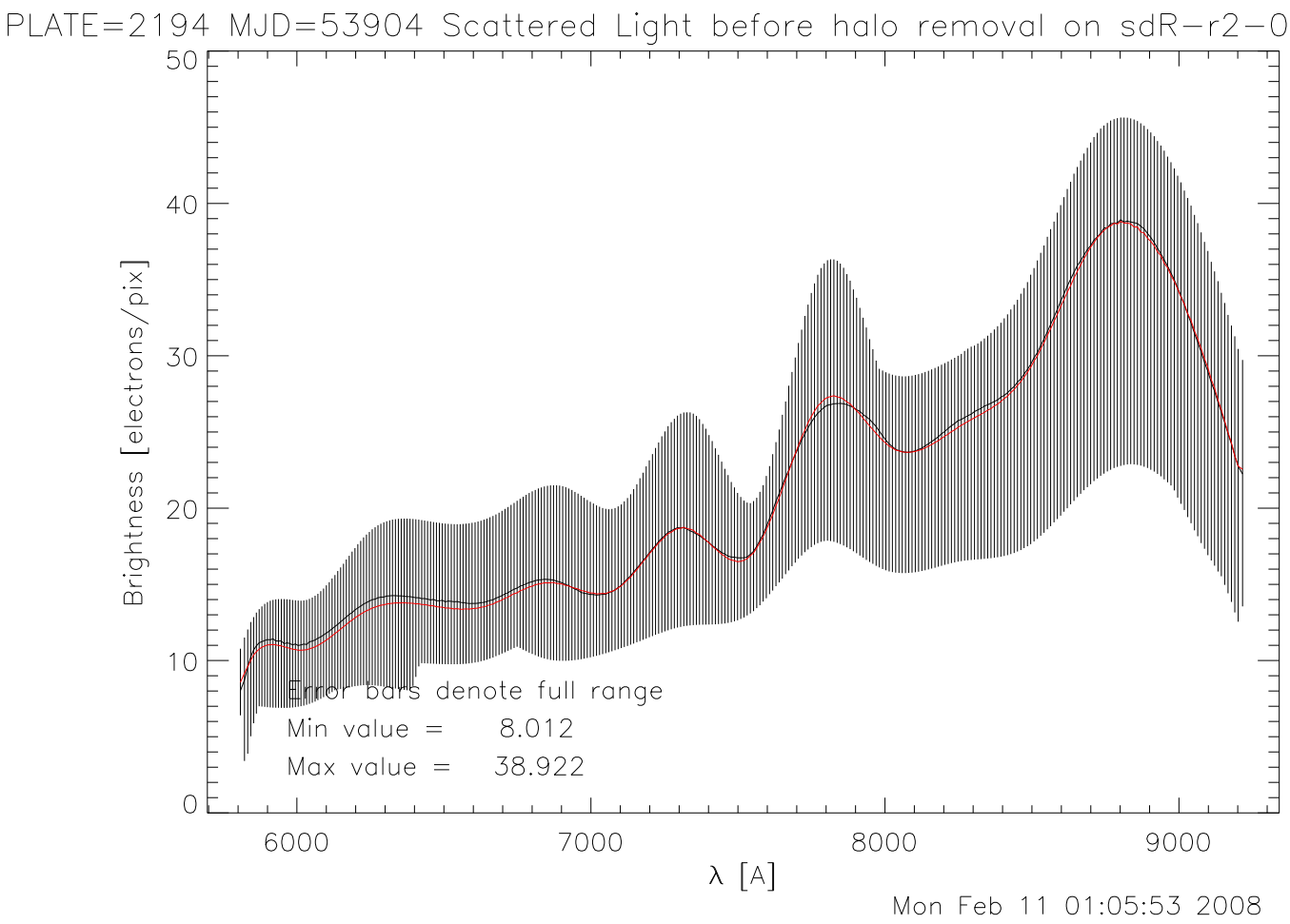

Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

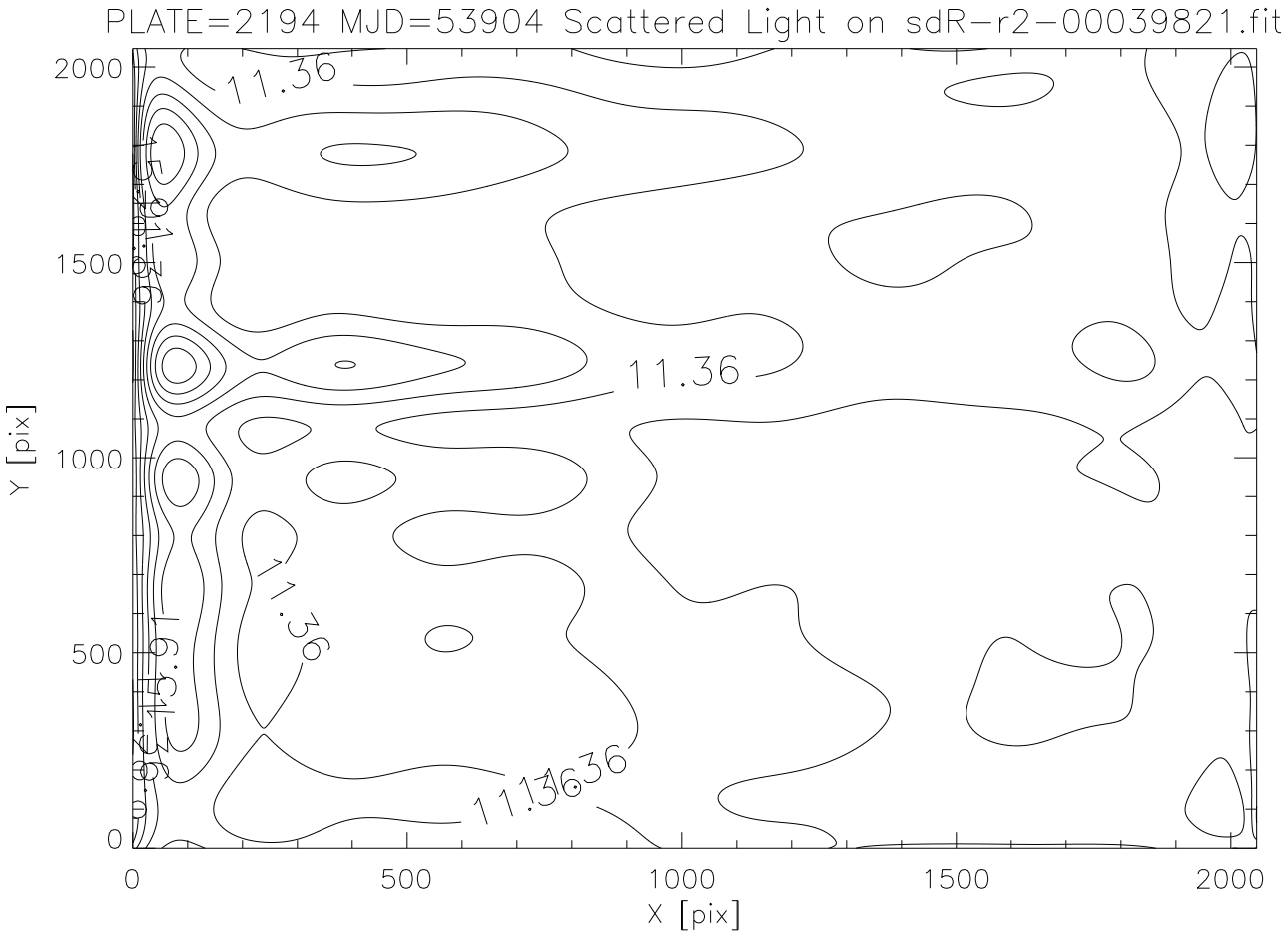

PLATE=2194 MJD=53904 sdR-r2-00039820.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.96 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

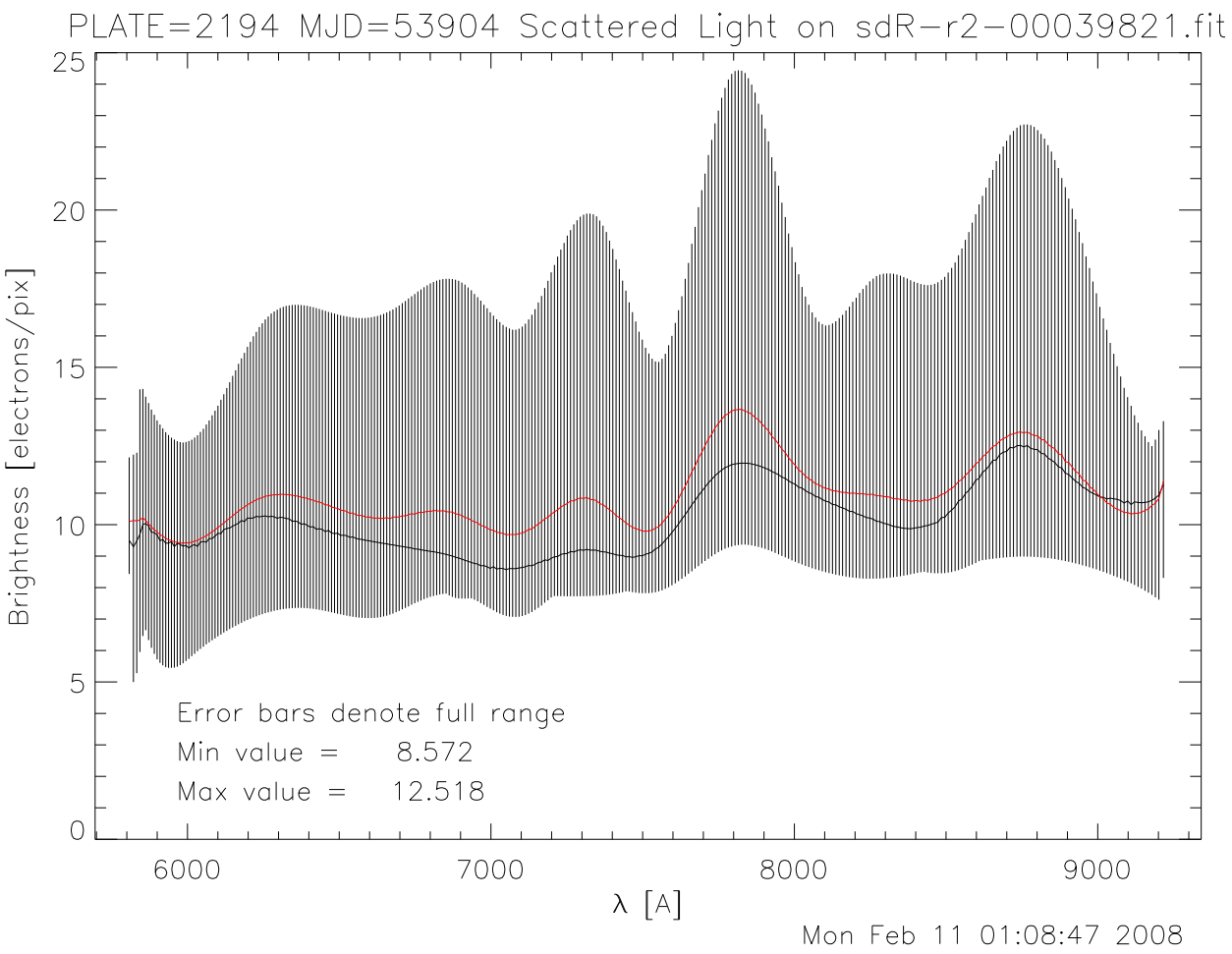

PLATE=2194 MJD=53904 sdR-r2-00039820.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.40 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

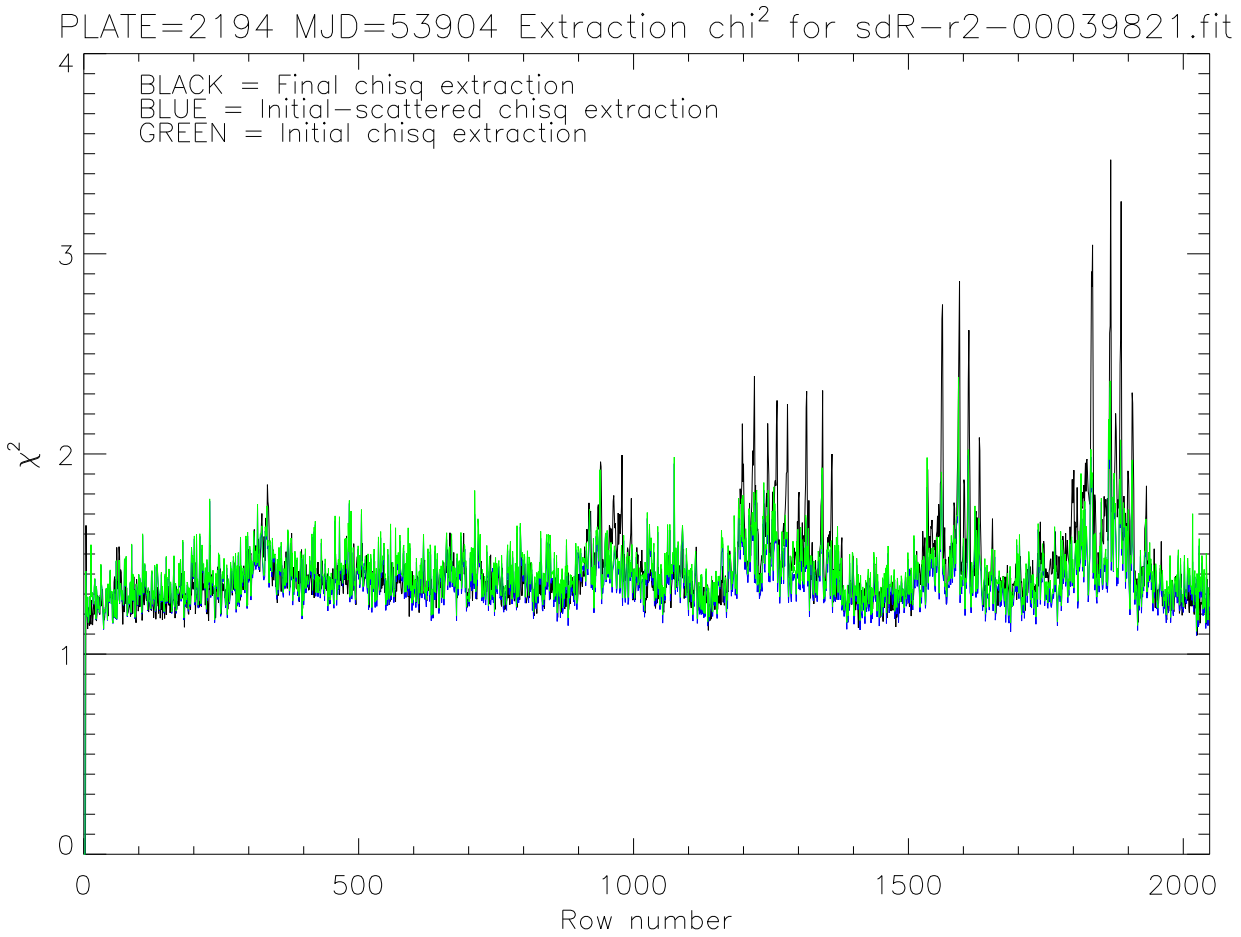

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r2−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.692
Max value = 1.360
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 01:04:57 2008

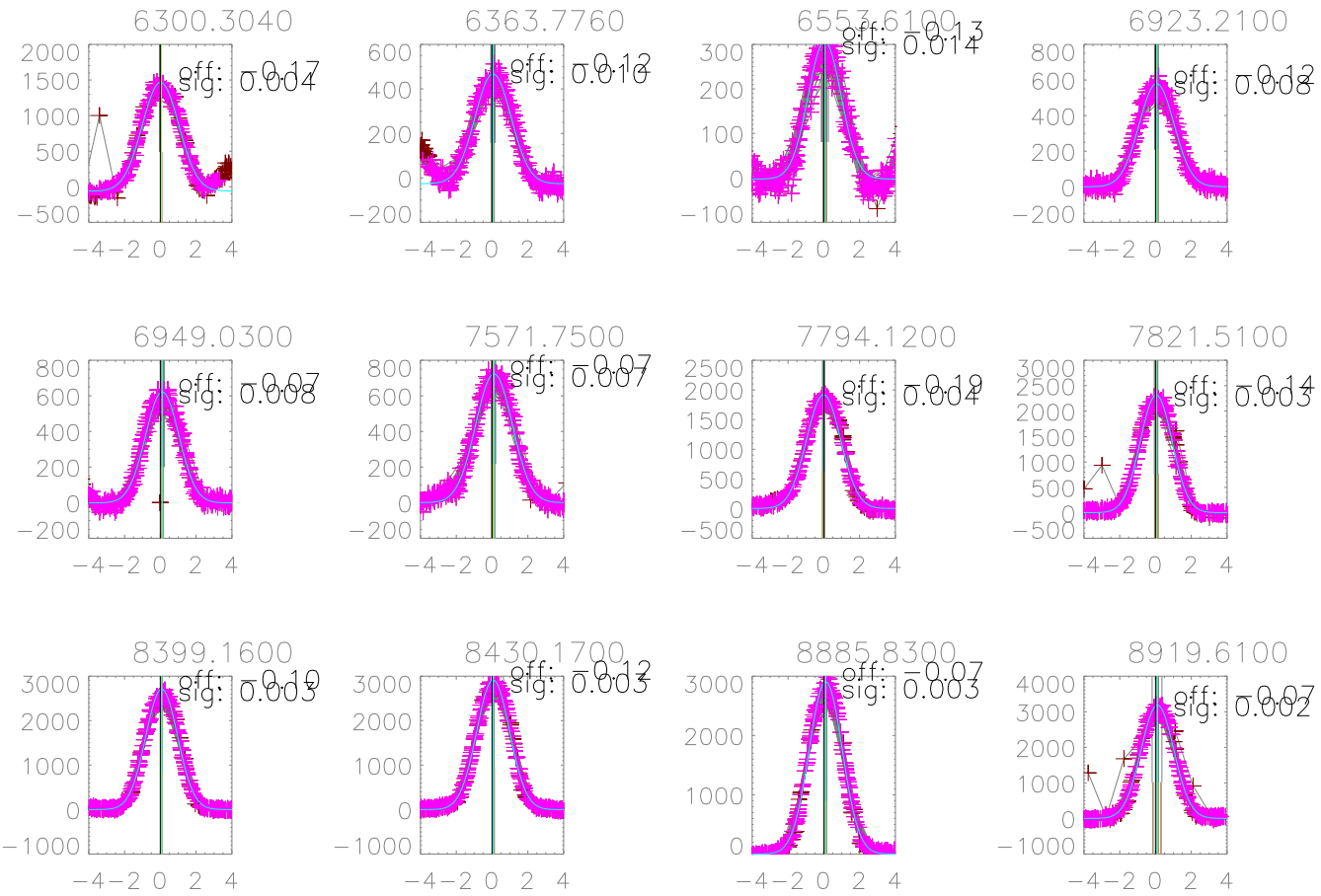

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039821.fi
31.82
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

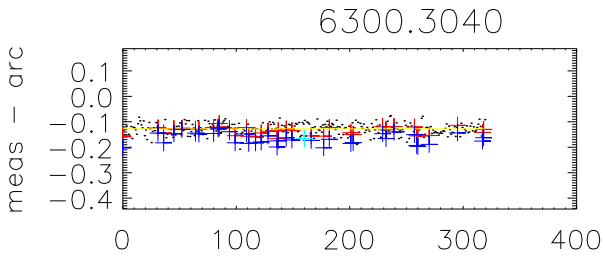

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039821.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.012
Max value = 38.922
Mon Feb 11 01:05:53 2008

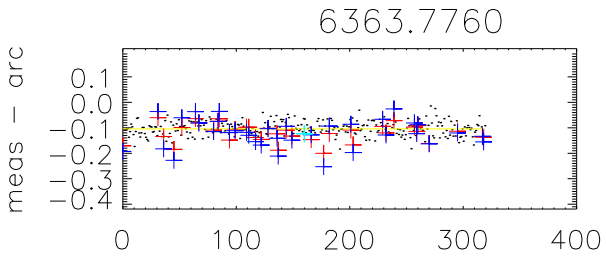

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039821.fit
11.36
11.36
11.36

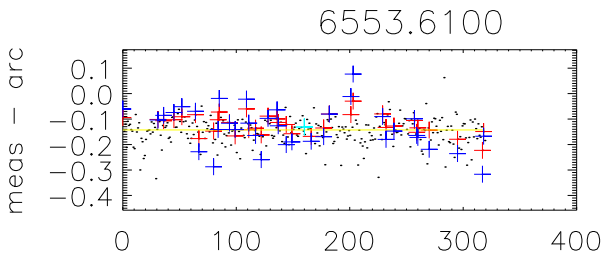

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039821.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.572
Max value = 12.518
Mon Feb 11 01:08:47 2008

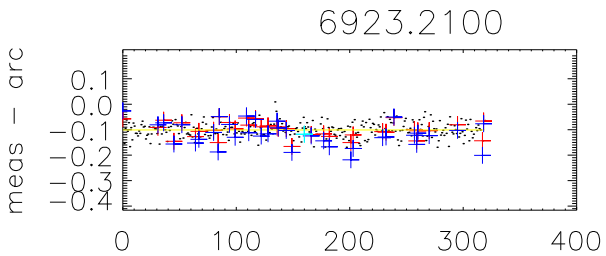

PLATE=2194 MJD=53904 Extraction chi^2 for sdR−r2−00039821.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

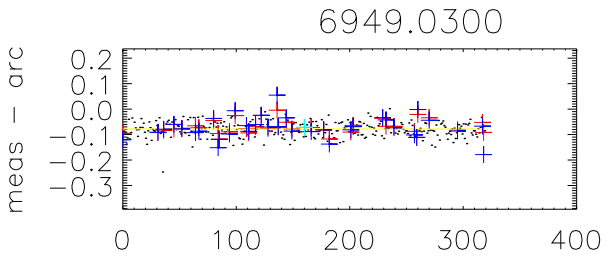

6300.3040
off: −0.17
sig: 0.004
6363.7760
off: −0.12
sig: 0.010
6553.6100
off: −0.13
sig: 0.014
6923.2100
off: −0.12
sig: 0.008
6949.0300
off: −0.07
sig: 0.008
7571.7500
off: −0.07
sig: 0.007
7794.1200
off: −0.19
sig: 0.004
7821.5100
off: −0.14
sig: 0.003
8399.1600
off: −0.10
sig: 0.003
8430.1700
off: −0.12
sig: 0.003
8885.8300
off: −0.07
sig: 0.003
8919.6100
off: −0.07
sig: 0.002

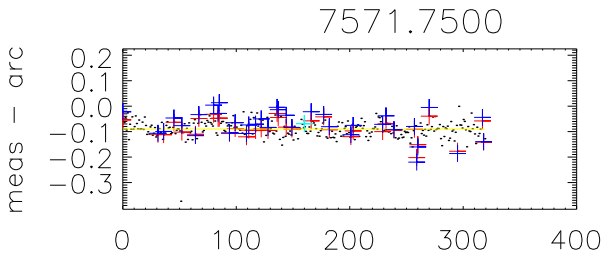

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

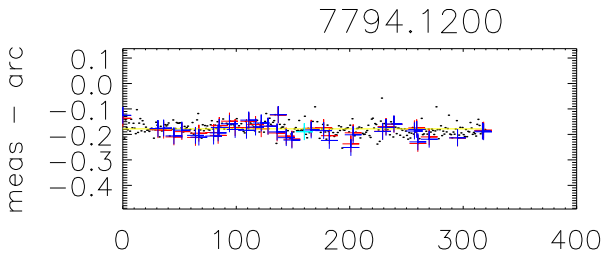

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

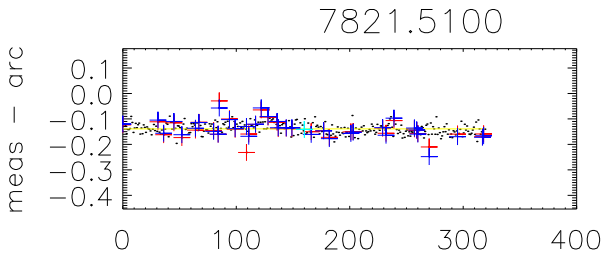

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

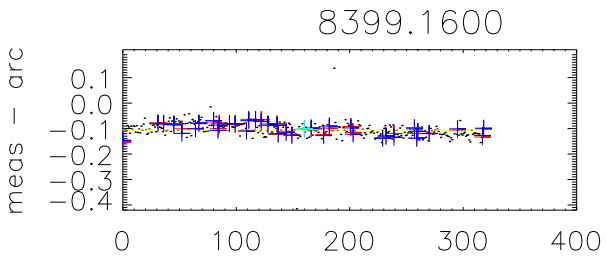

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

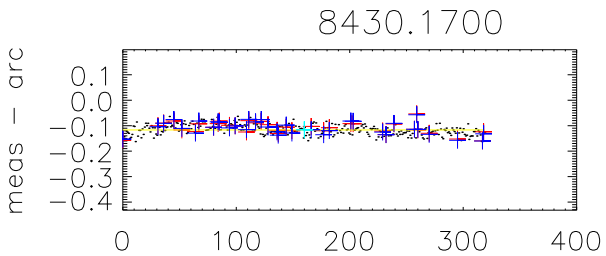

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

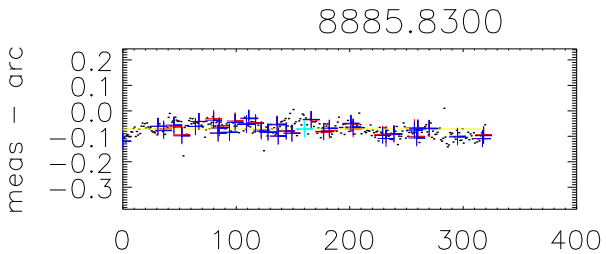

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

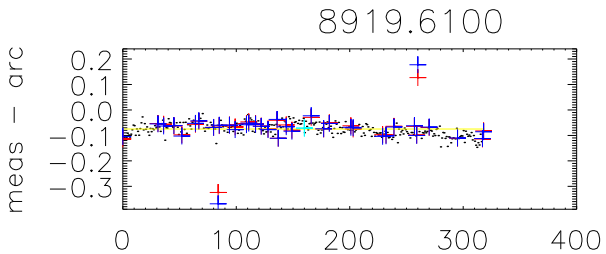

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

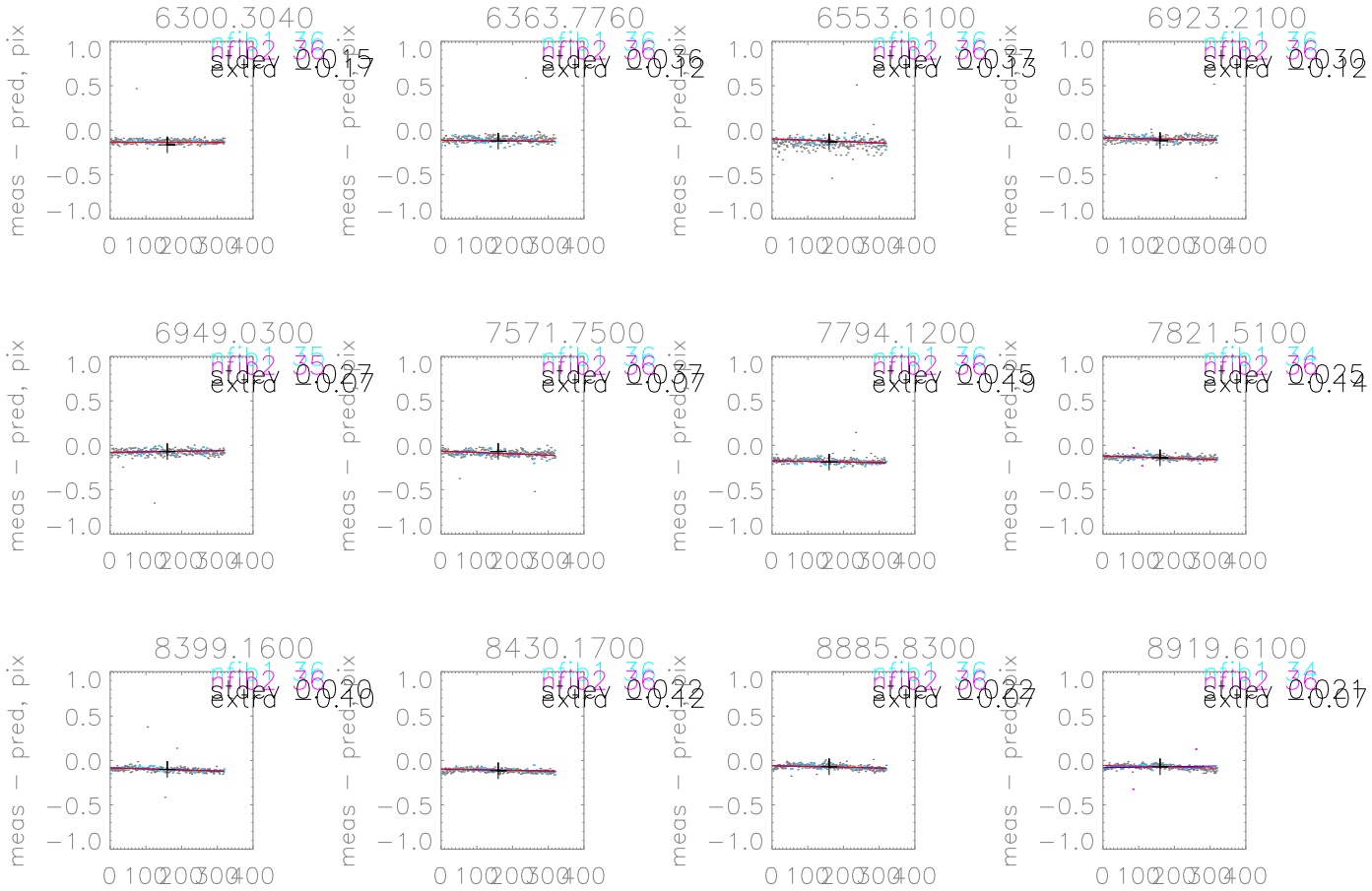

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

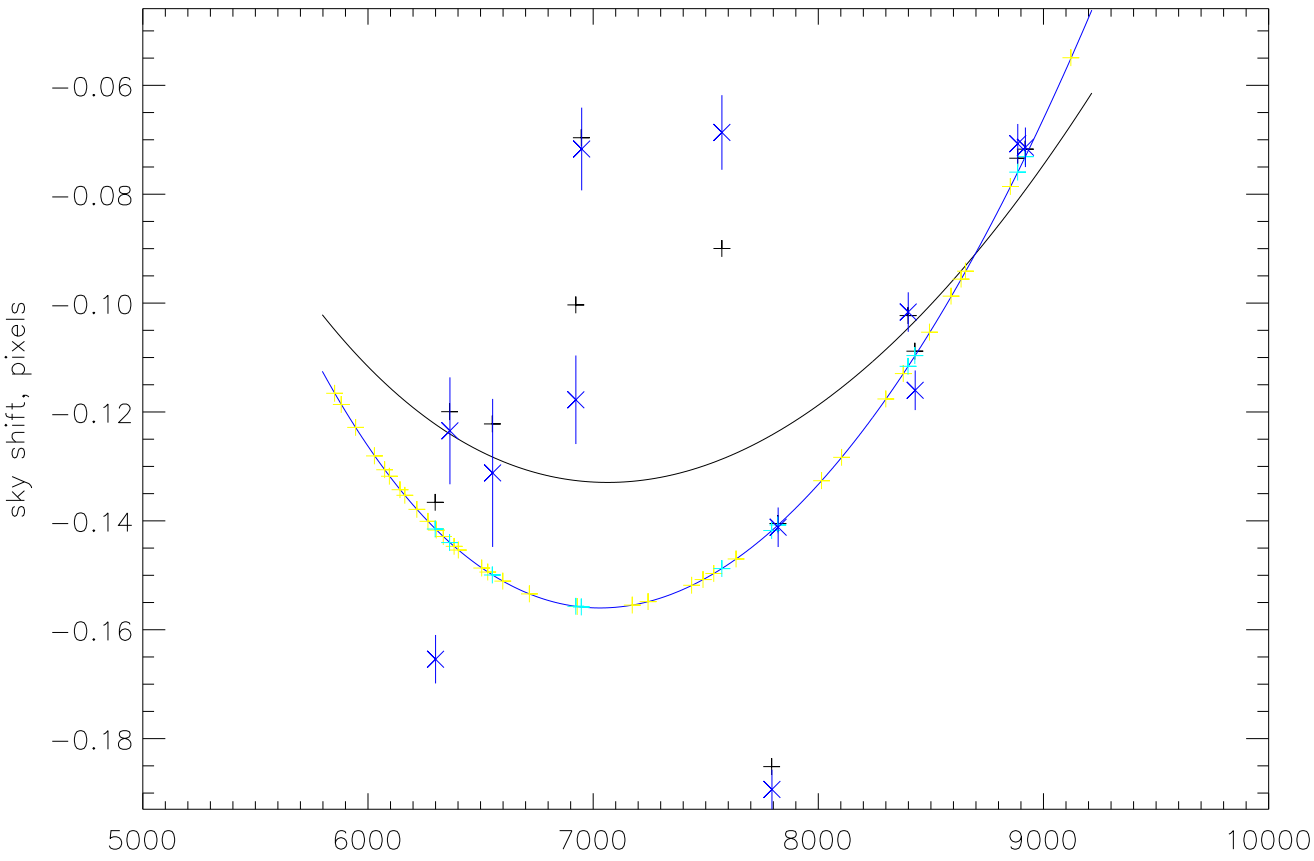

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

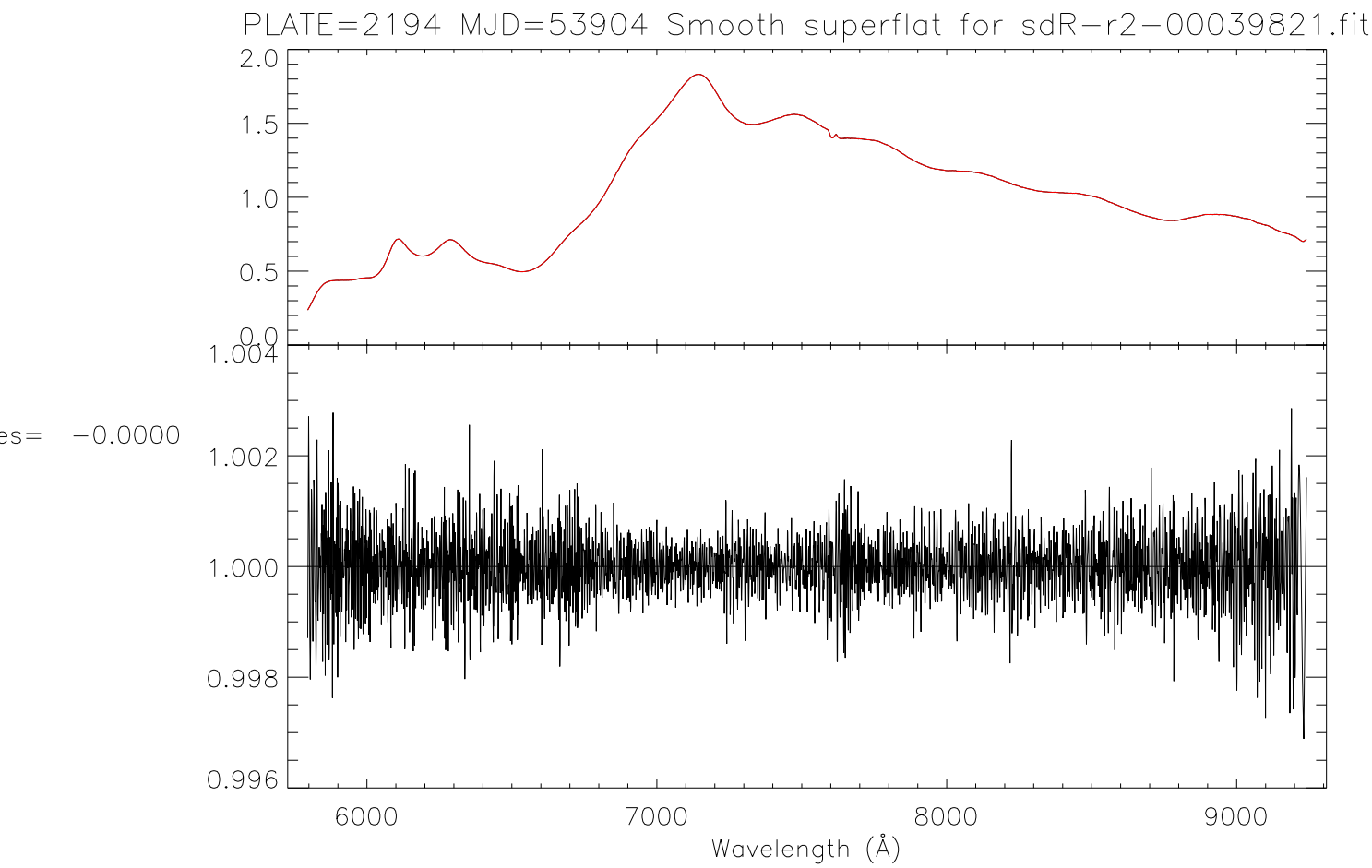

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

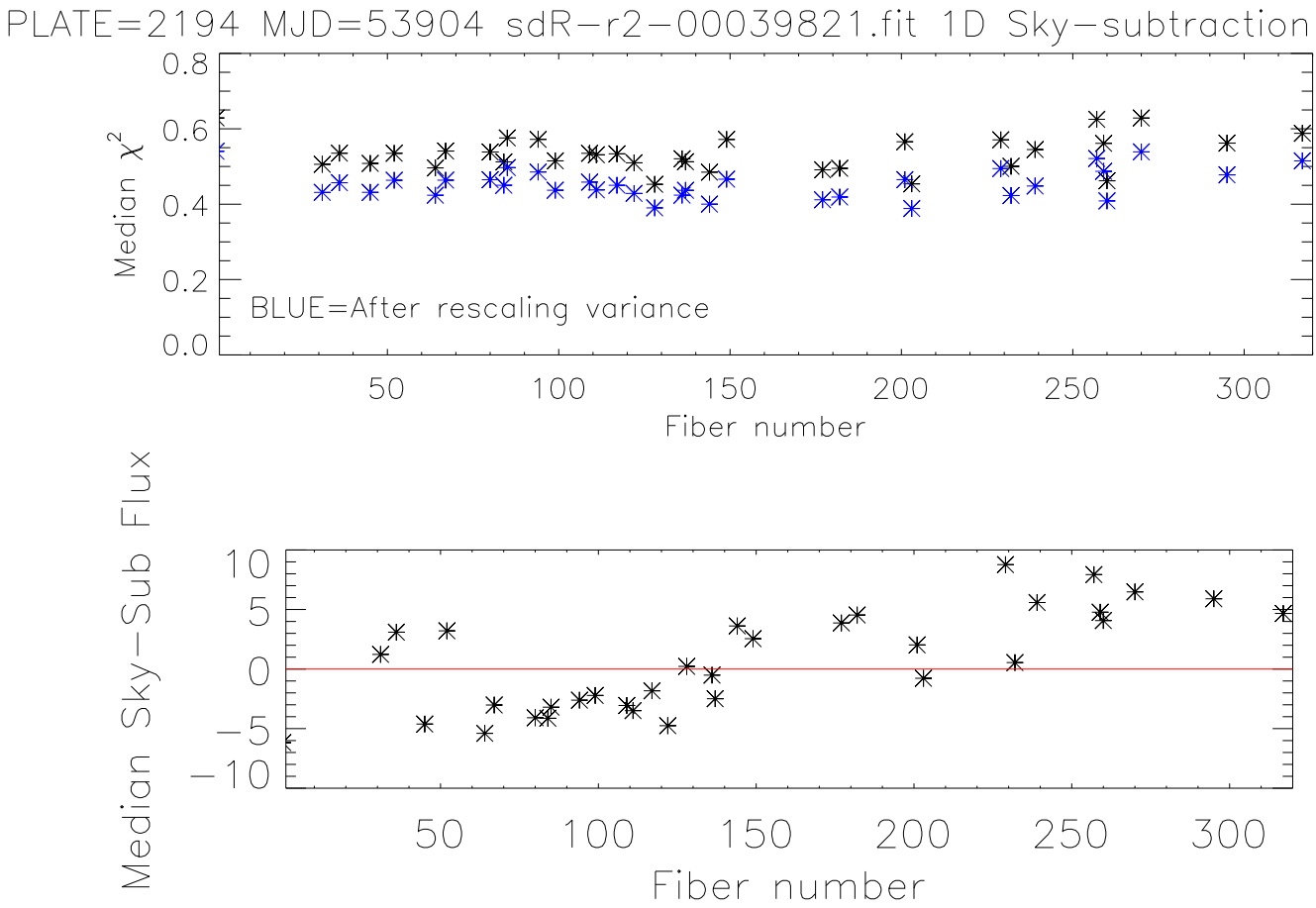

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

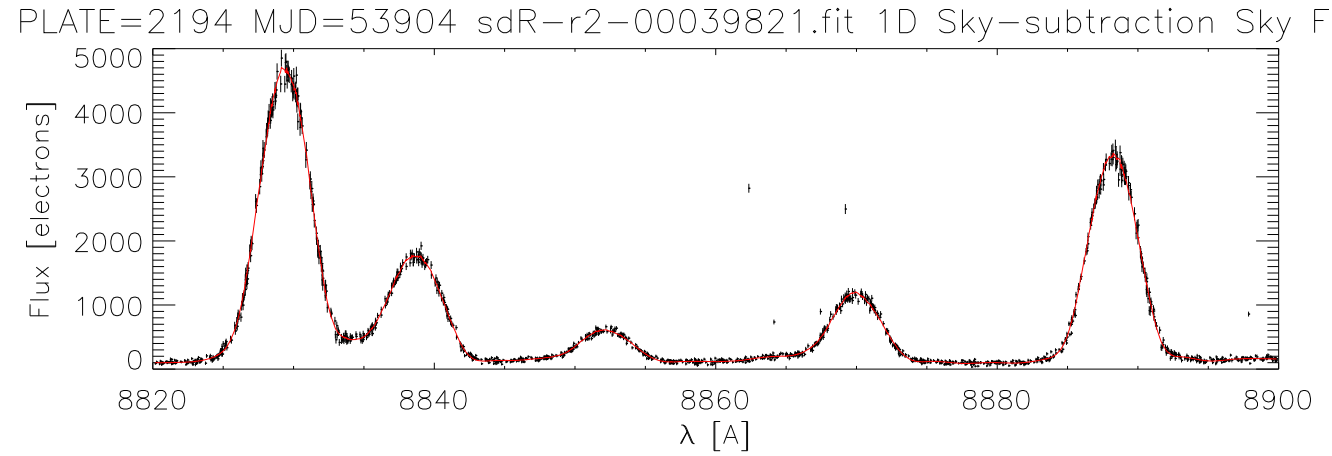

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

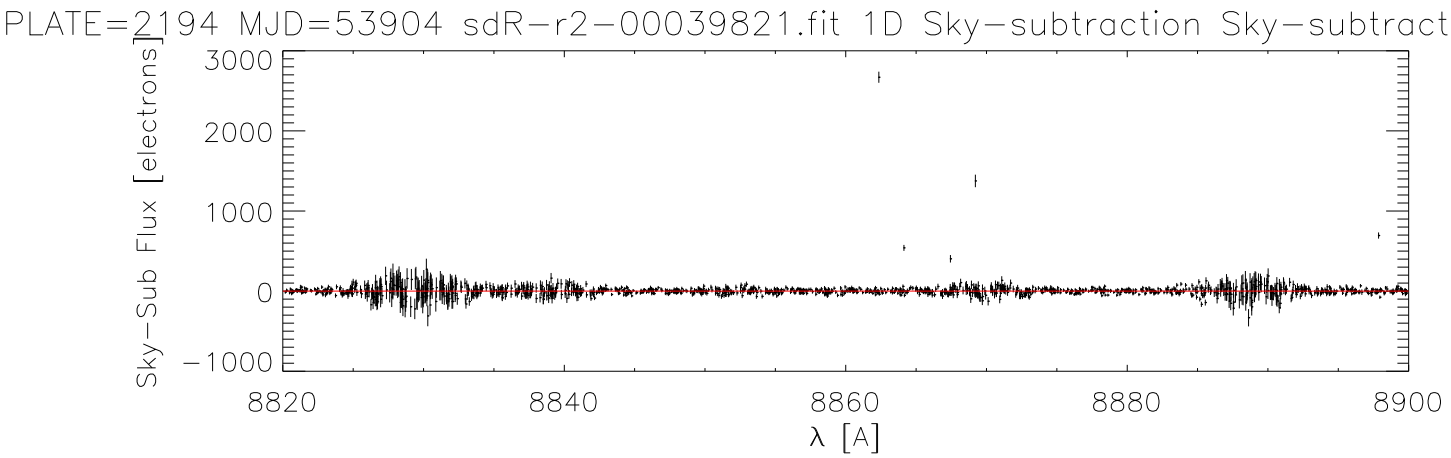

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 36
mfib2 36
stdev 0.015
extra −0.17
stdev 0.036
extra −0.12
stdev 0.037
extra −0.13
stdev 0.030
extra −0.12
mfib1 35
mfib2 35
stdev 0.027
extra −0.07
mfib1 36
mfib2 36
stdev 0.037
extra −0.07
mfib1 36
mfib2 36
stdev 0.025
extra −0.49
mfib1 34
mfib2 36
stdev 0.025
extra −0.44
mfib1 36
mfib2 36
stdev 0.020
extra −0.40
mfib1 36
mfib2 36
stdev 0.022
extra −0.42
mfib1 36
mfib2 36
stdev 0.022
extra −0.07
mfib1 34
mfib2 36
stdev 0.021
extra −0.07

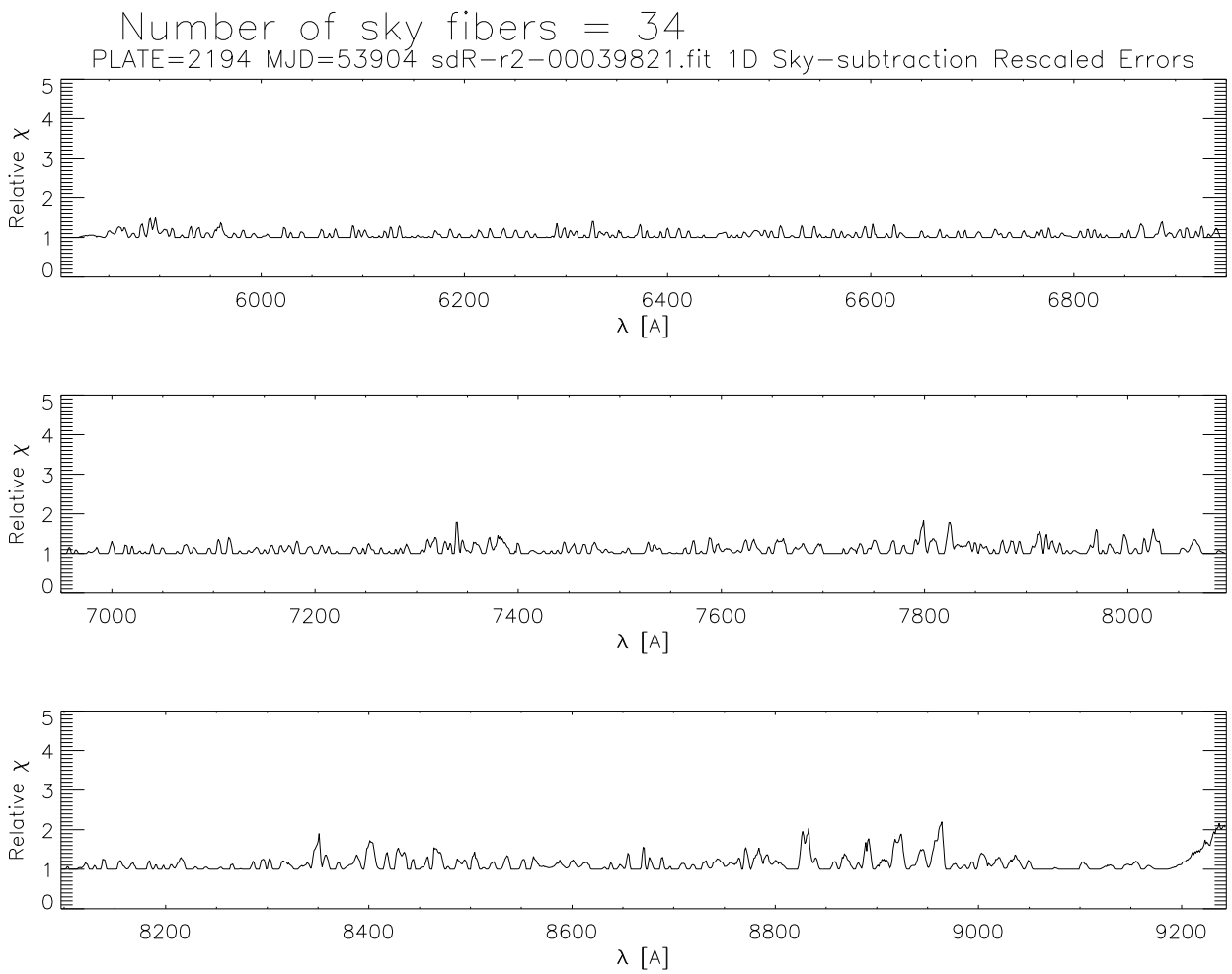

sky shift, pixels
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
5000
6000
7000
8000
9000
10000

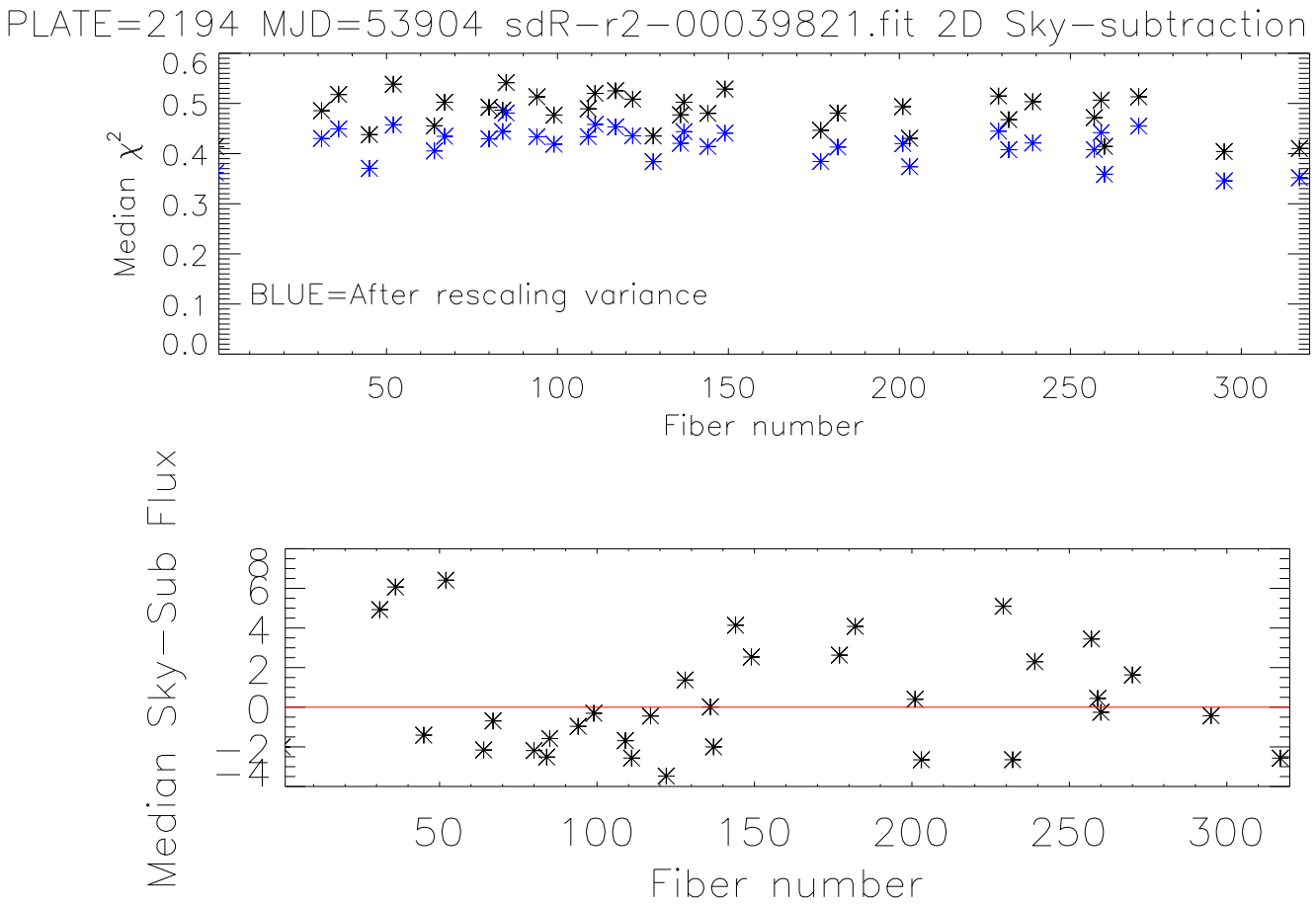

PLATE=2194 MJD=53904 Smooth superflat for sdR-r2-00039821.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

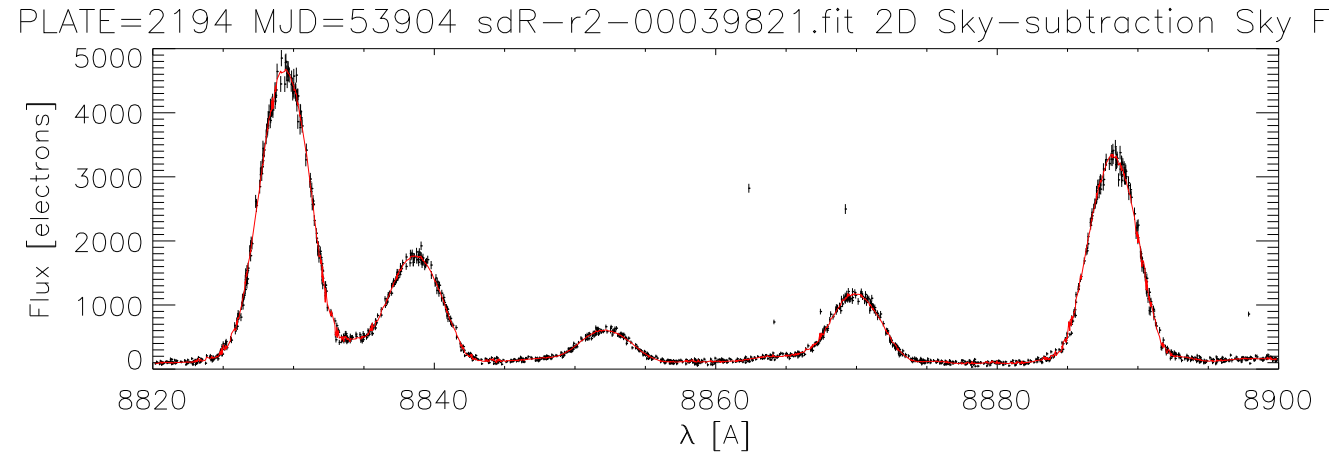

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

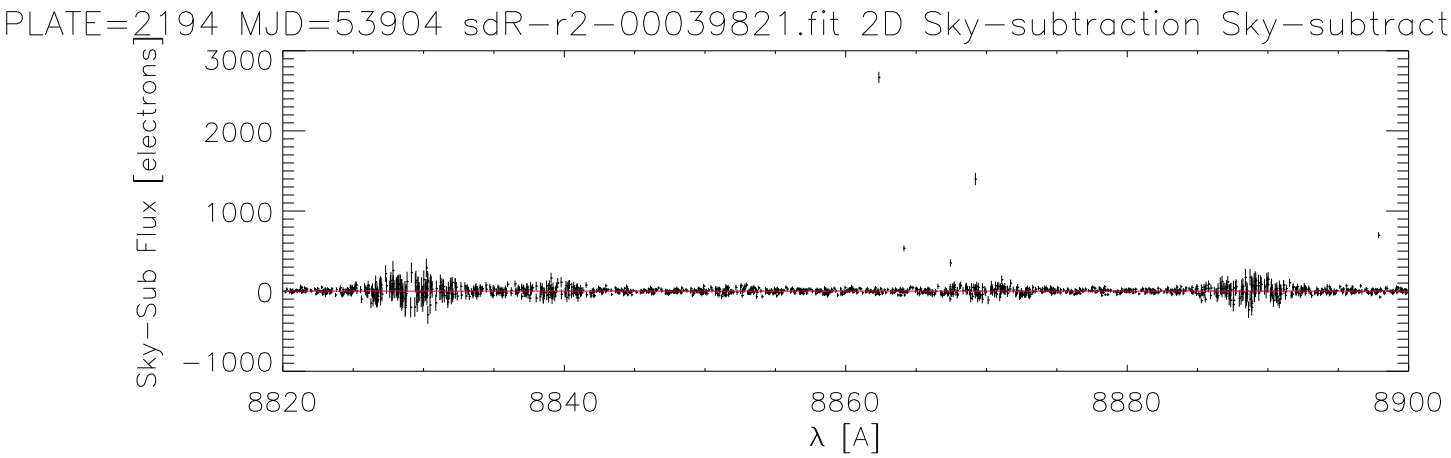

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

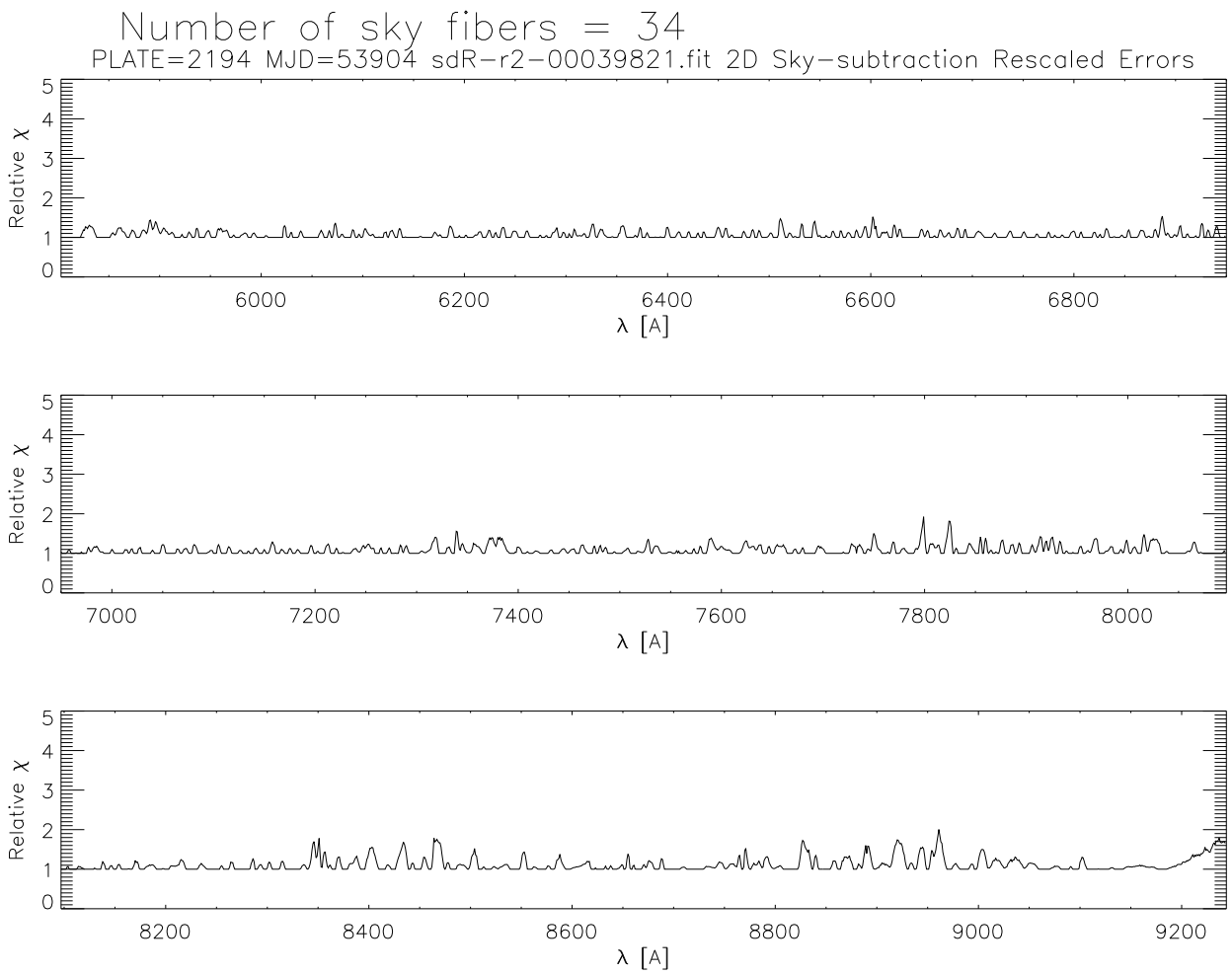

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

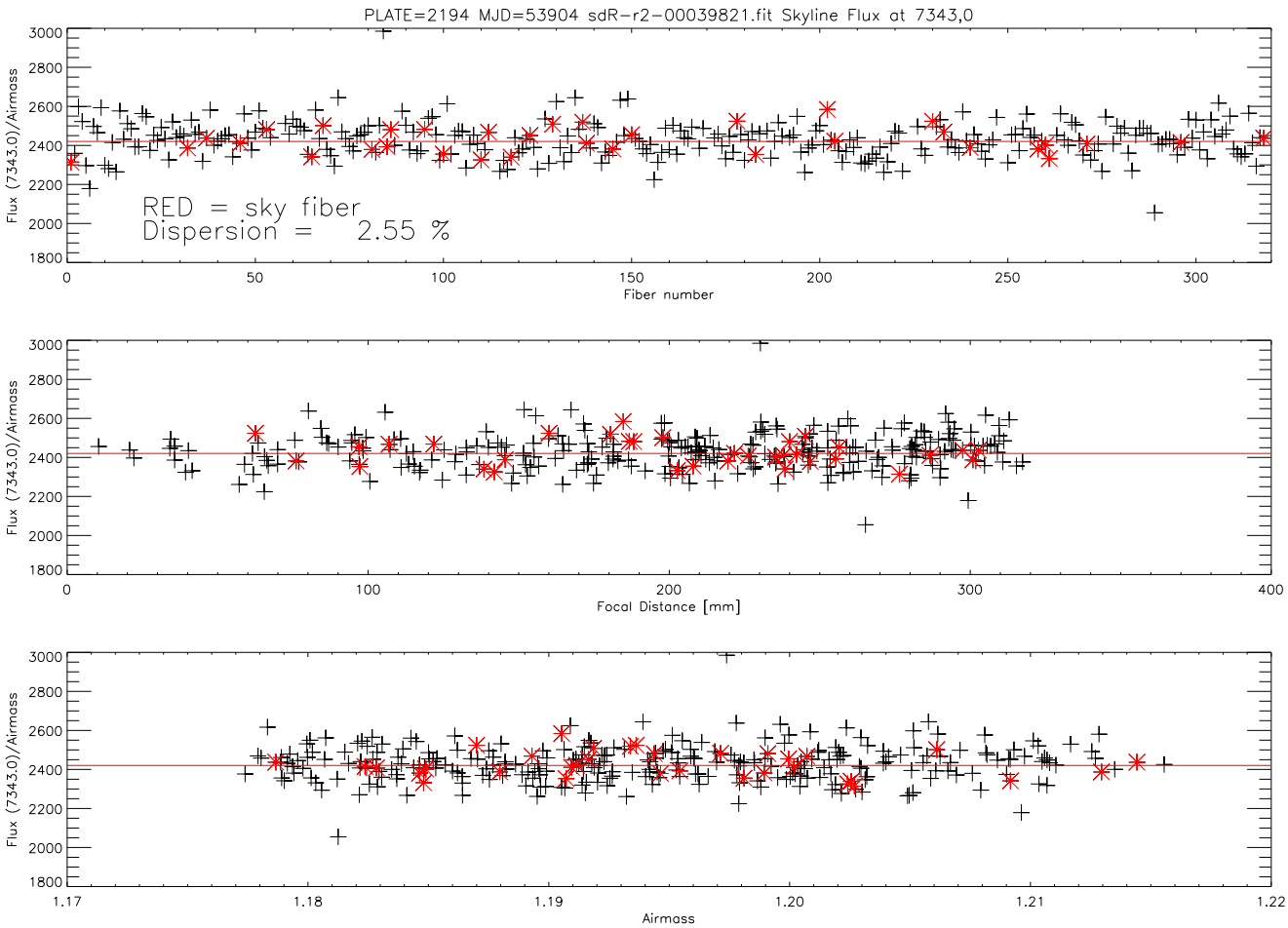

Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039821.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

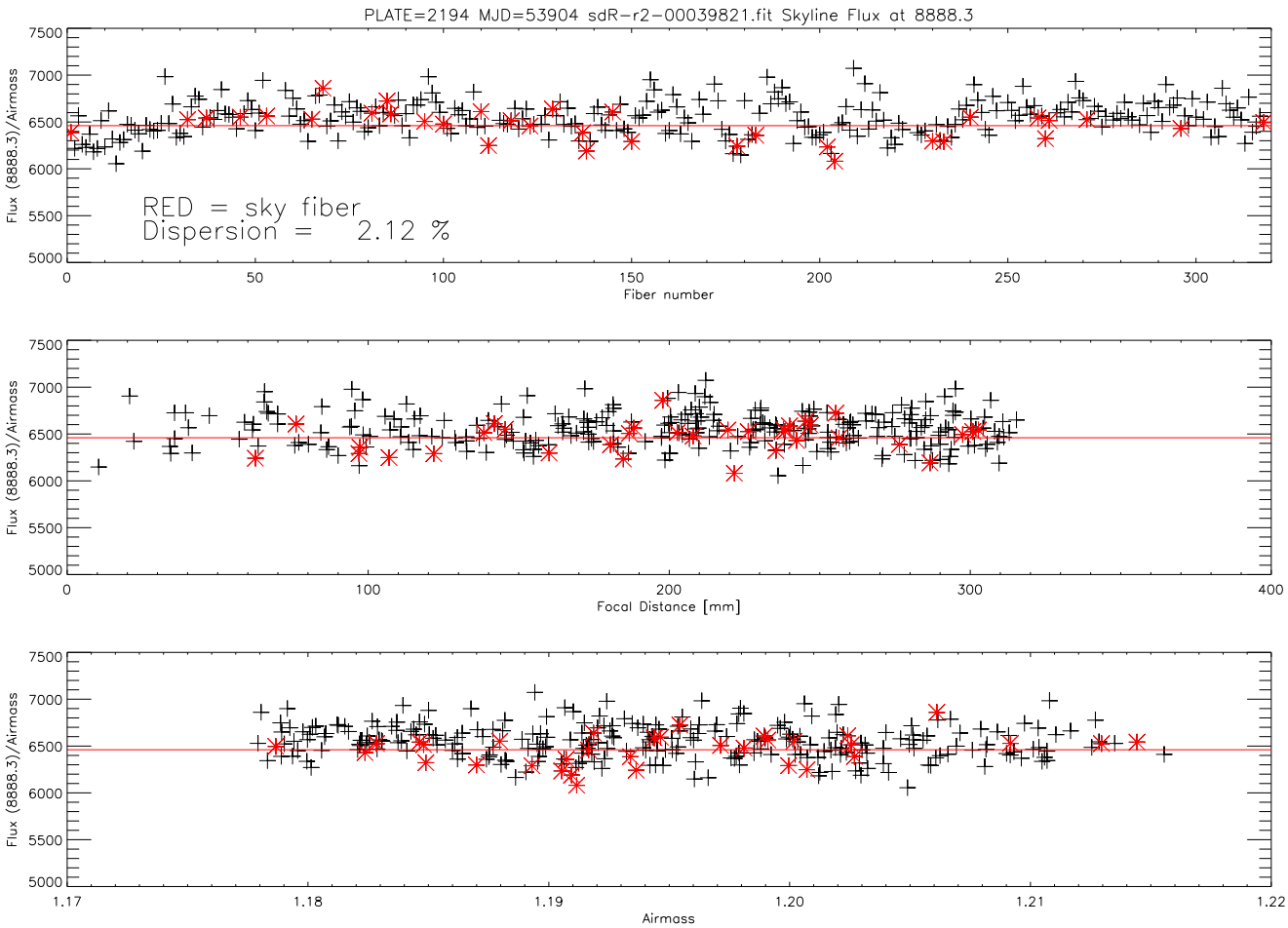

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

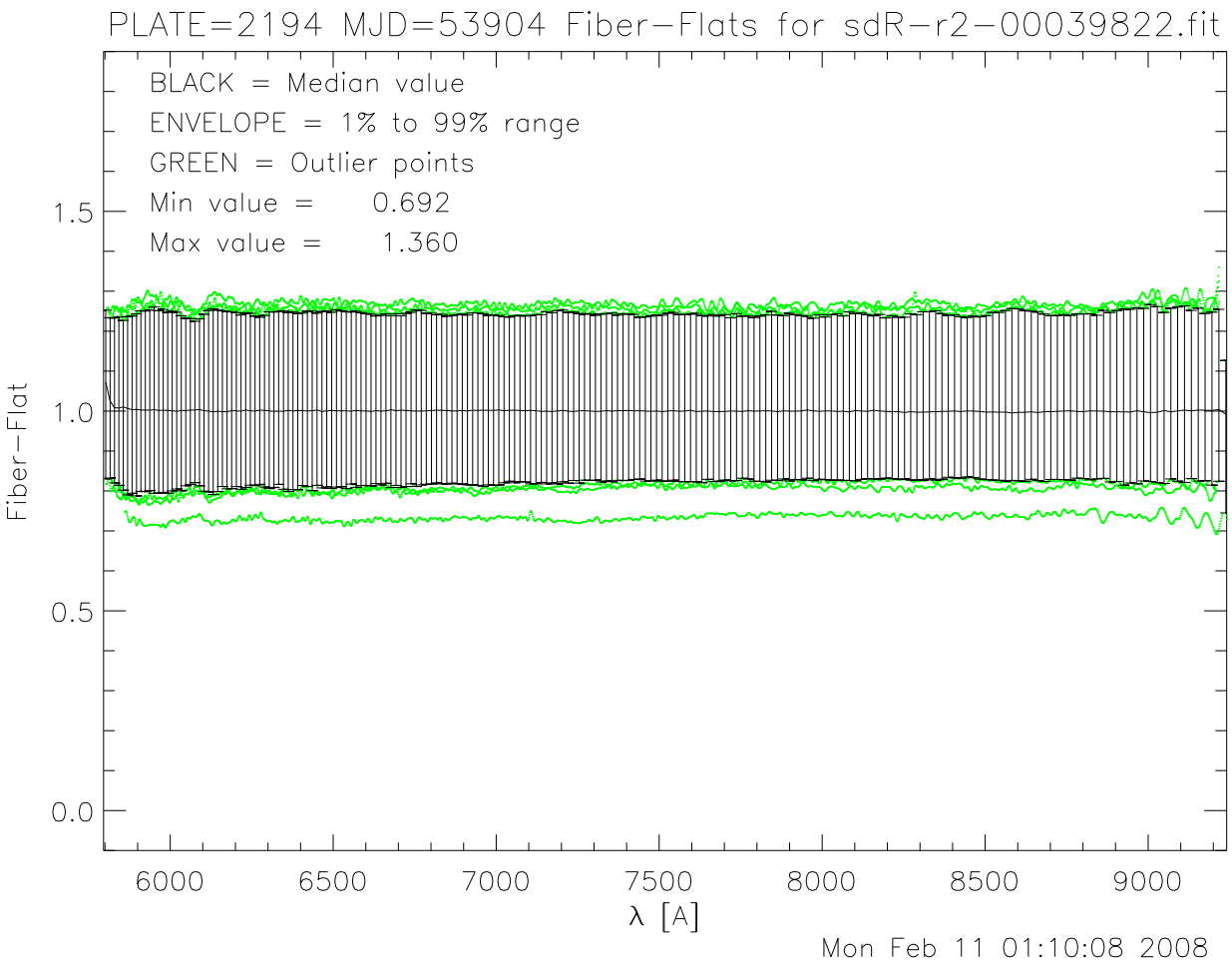

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

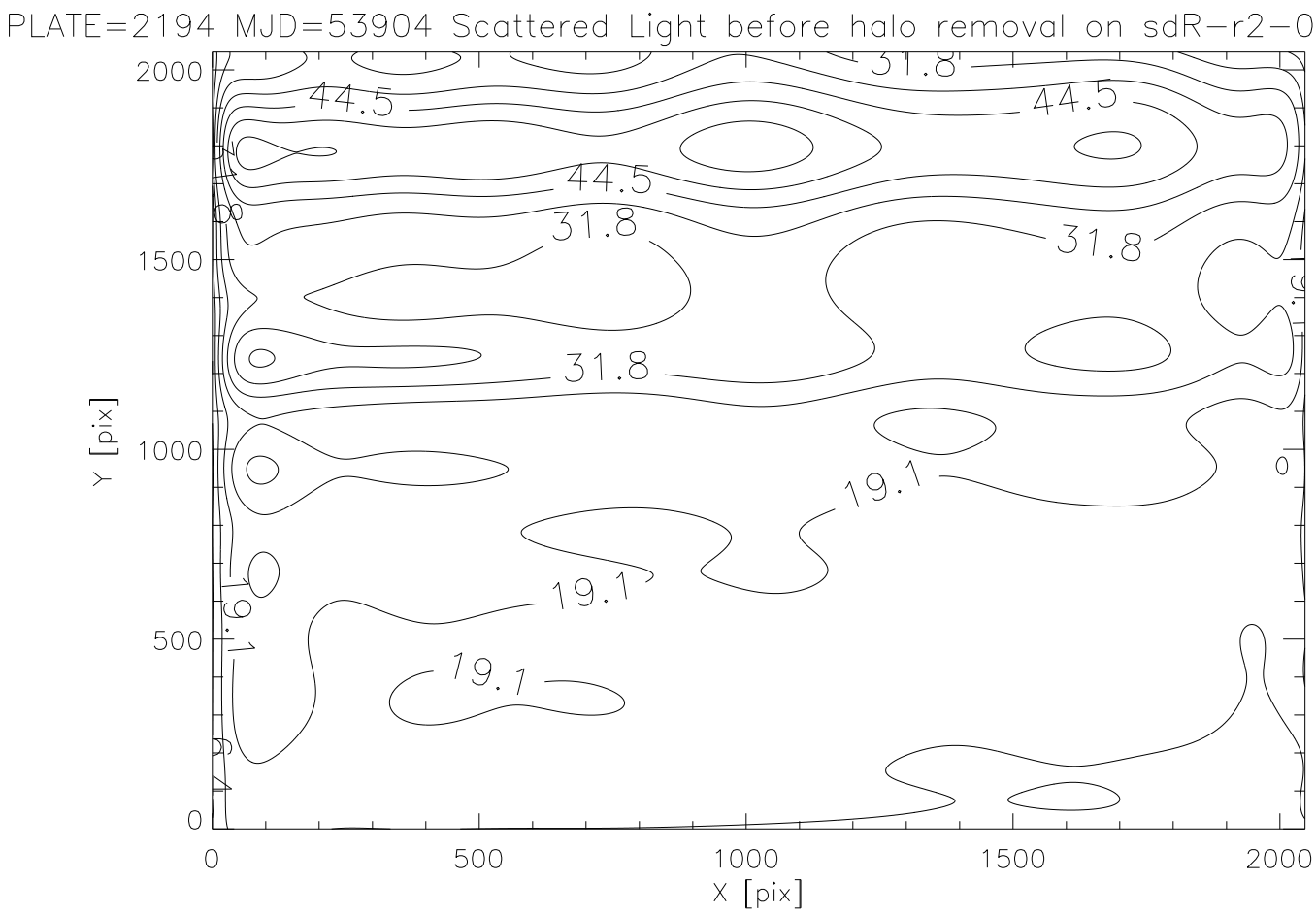

PLATE=2194 MJD=53904 sdR-r2-00039821.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

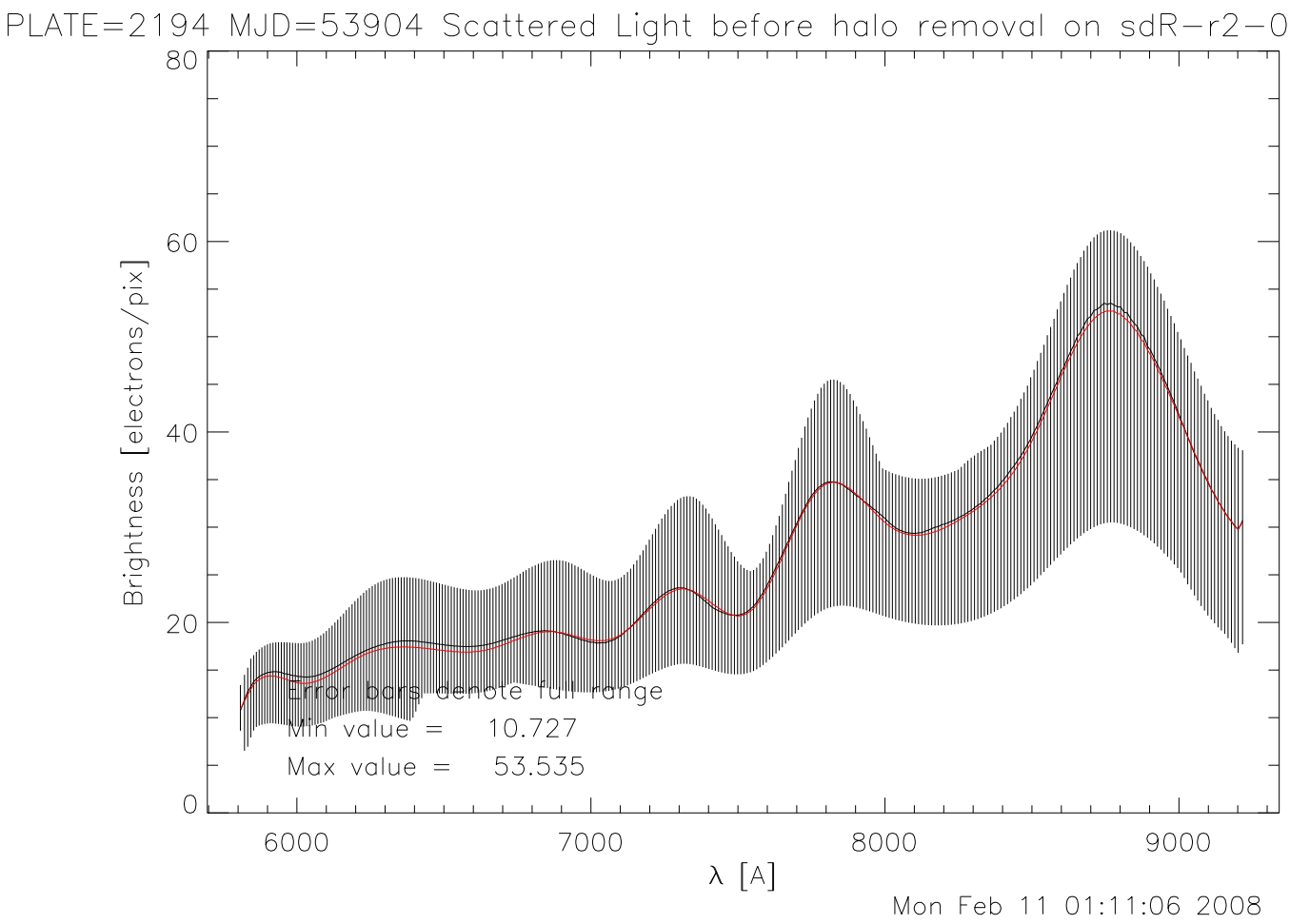

Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039821.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

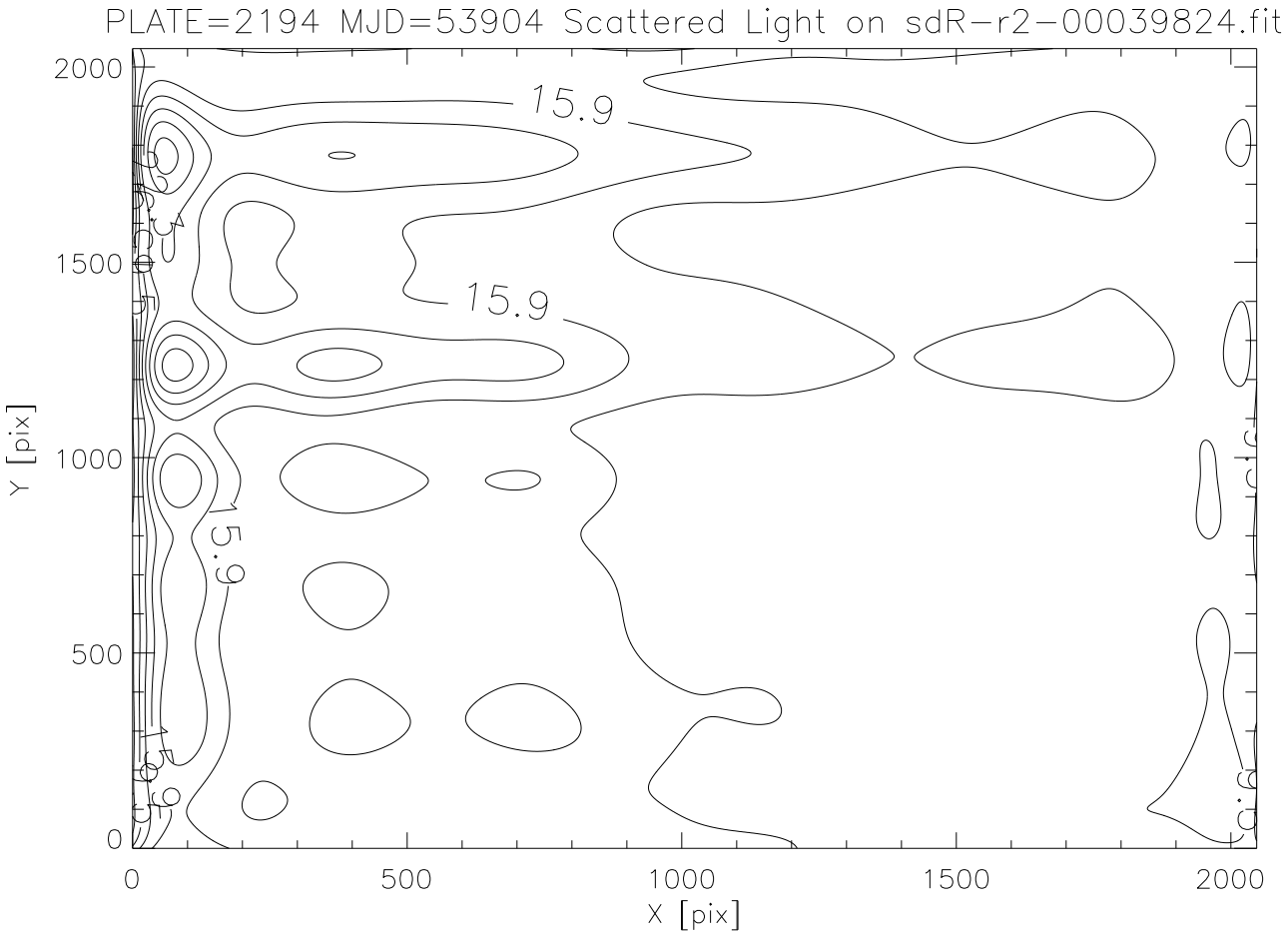

PLATE=2194 MJD=53904 sdR-r2-00039821.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.55 %
Fiber number
Focal Distance [mm]
Airmass

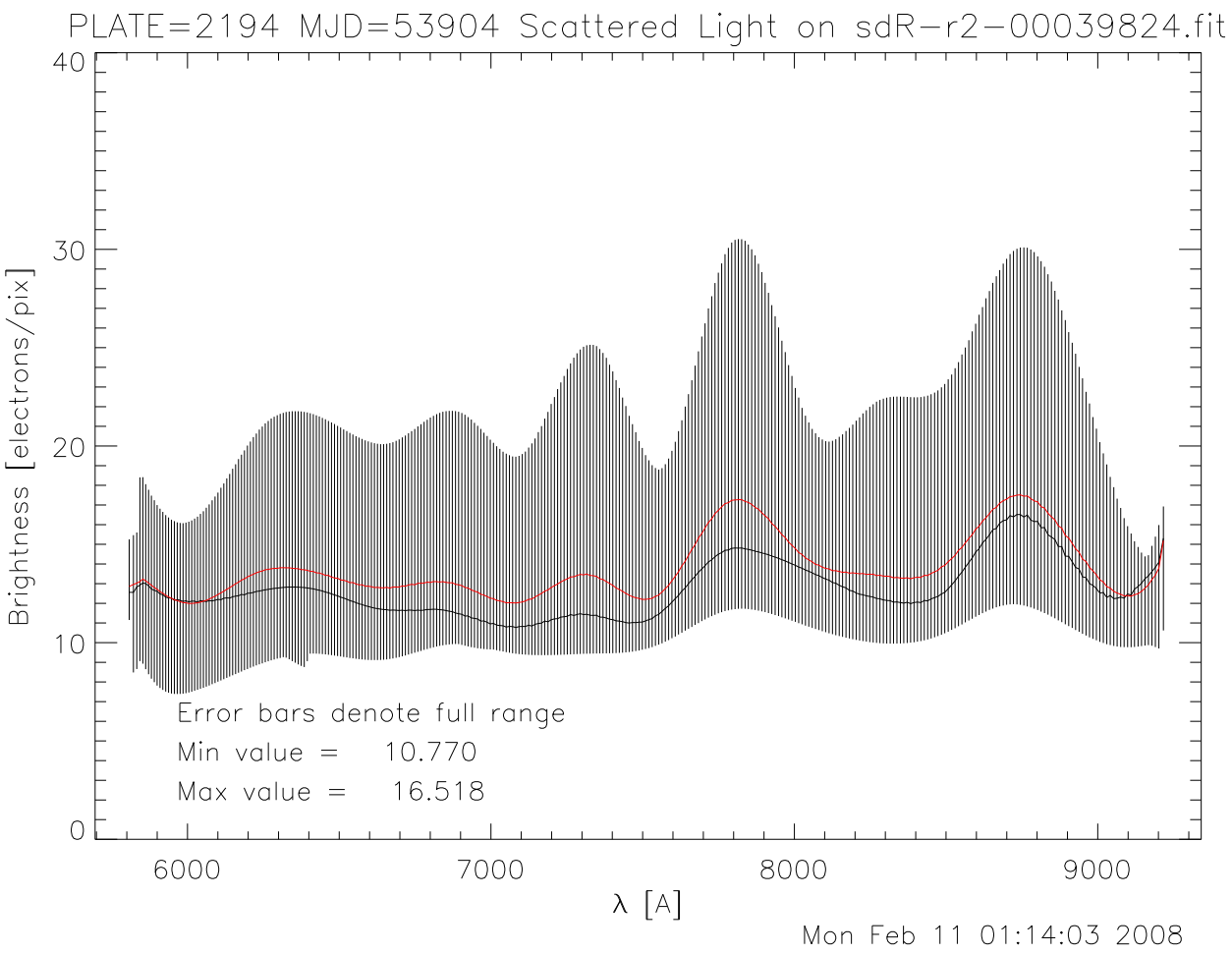

PLATE=2194 MJD=53904 sdR-r2-00039821.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.12 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

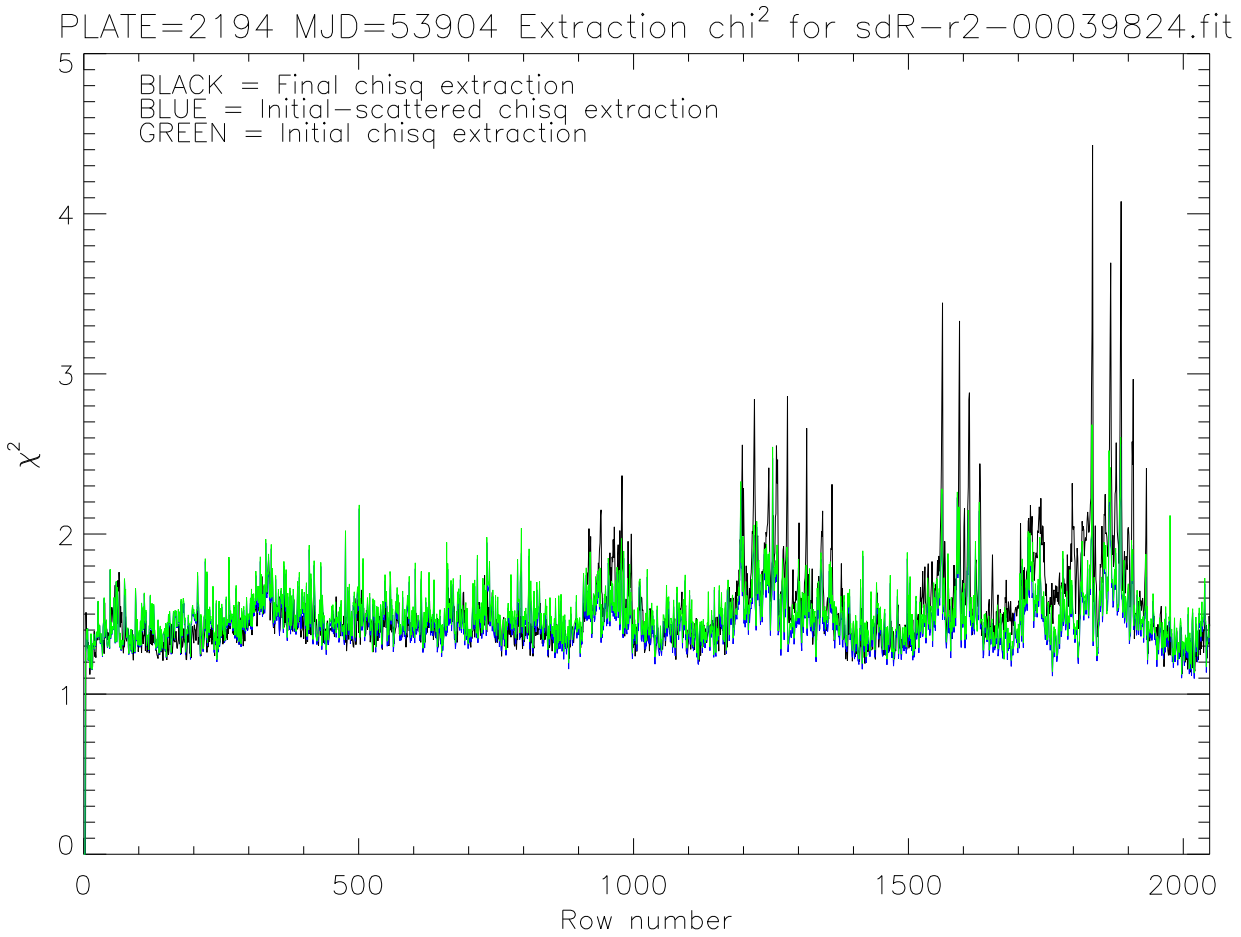

PLATE=2194 MJD=53904 Fiber−Flats for sdR−r2−00039822.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.692
Max value = 1.360
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 01:10:08 2008

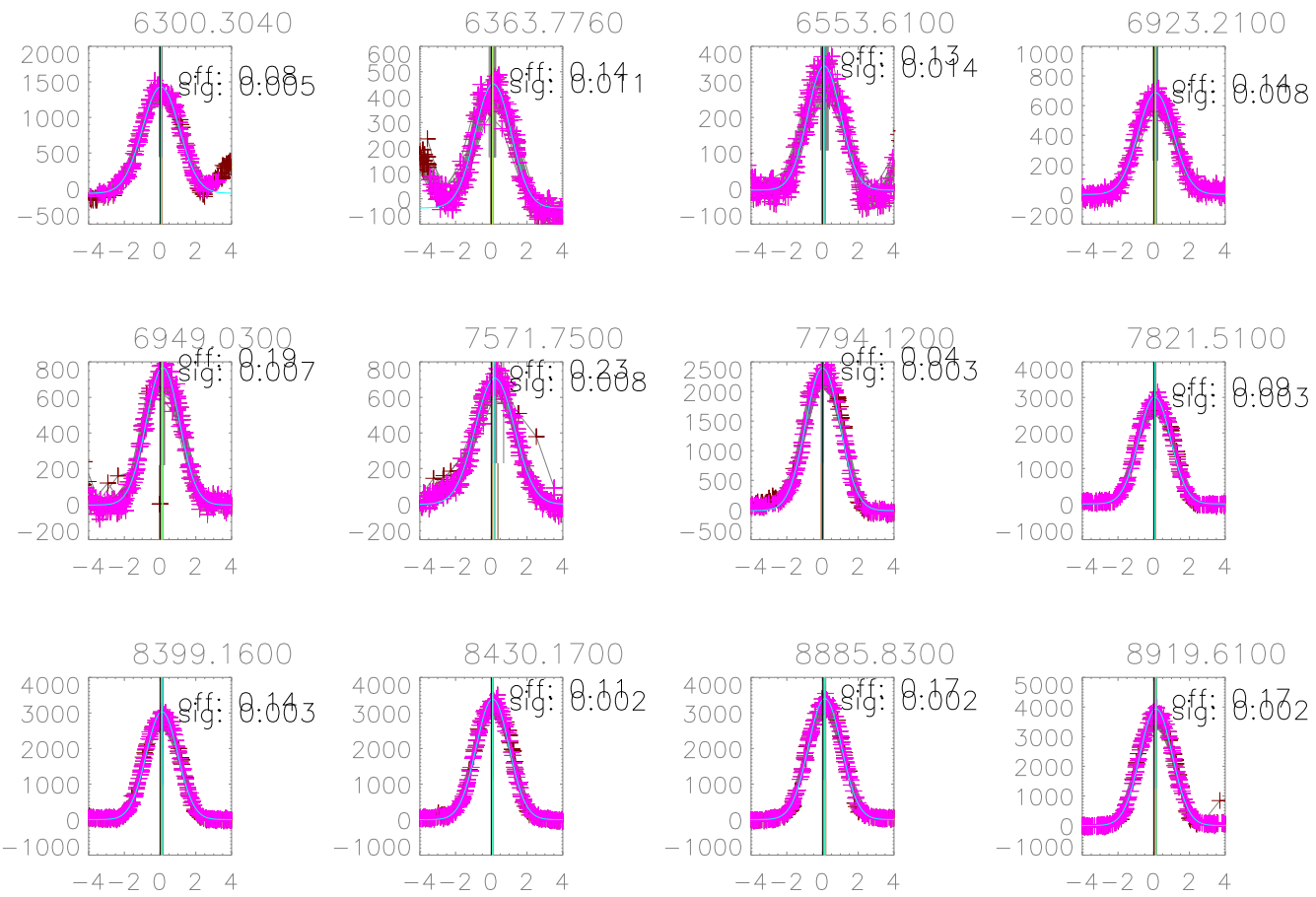

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039824.fi
44.5
31.8
19.1
Y [pix]
X [pix]
0
500
1000
1500
2000

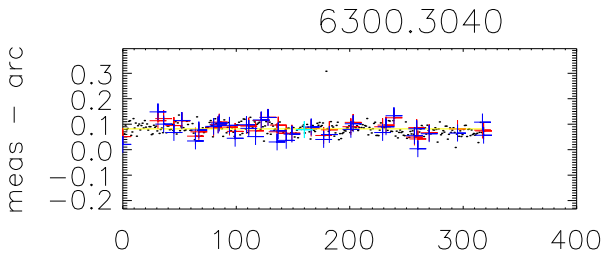

PLATE=2194 MJD=53904 Scattered Light before halo removal on sdR-r2-00039824.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.727
Max value = 53.535
Mon Feb 11 01:11:06 2008

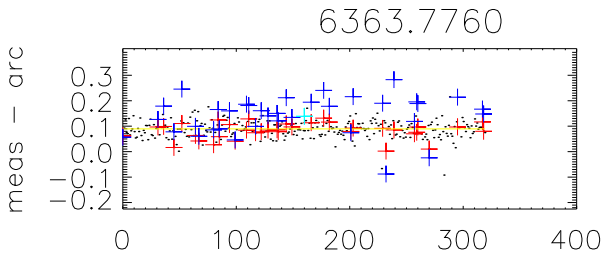

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039824.fit
15.9
15.9
15.9
15.9
15.9
15.9
15.9
Y [pix]
X [pix]
0
500
1000
1500
2000

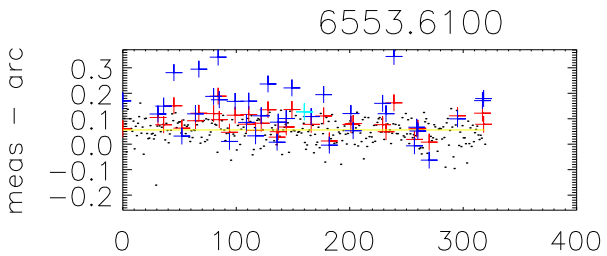

PLATE=2194 MJD=53904 Scattered Light on sdR-r2-00039824.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.770
Max value = 16.518
Mon Feb 11 01:14:03 2008

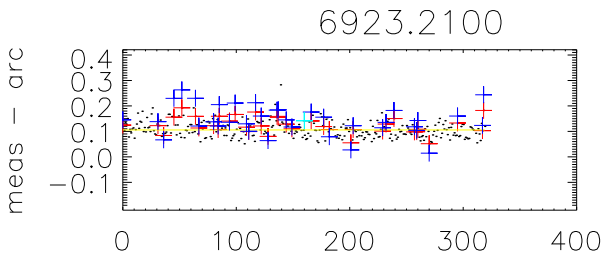

PLATE=2194 MJD=53904 Extraction chi^2 for sdR−r2−00039824.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

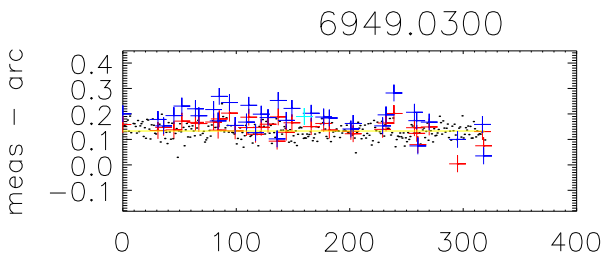

6300.3040
off: 0.08
sig: 0.005
6363.7760
off: 0.14
sig: 0.011
6553.6100
off: 0.13
sig: 0.014
6923.2100
off: 0.14
sig: 0.008
6949.0300
off: 0.19
sig: 0.007
7571.7500
off: 0.23
sig: 0.008
7794.1200
off: 0.04
sig: 0.003
7821.5100
off: 0.08
sig: 0.003
8399.1600
off: 0.14
sig: 0.003
8430.1700
off: 0.11
sig: 0.002
8885.8300
off: 0.17
sig: 0.002
8919.6100
off: 0.17
sig: 0.002

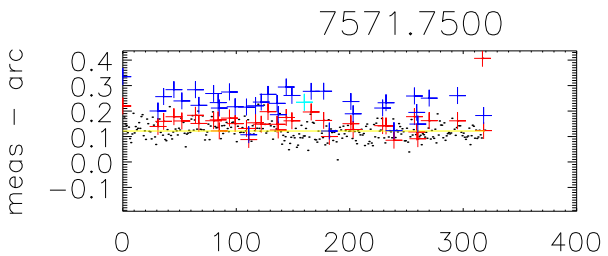

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

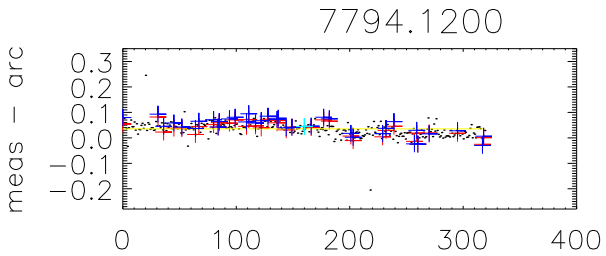

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

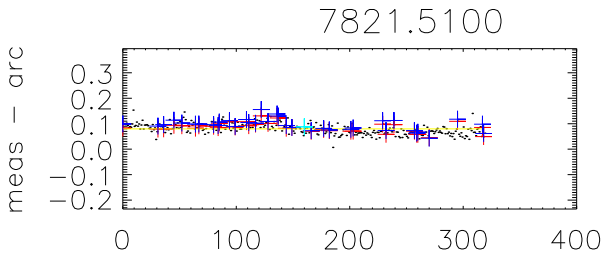

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

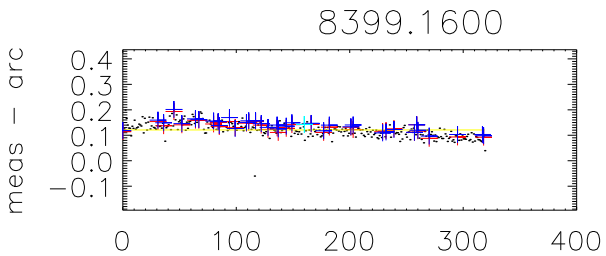

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

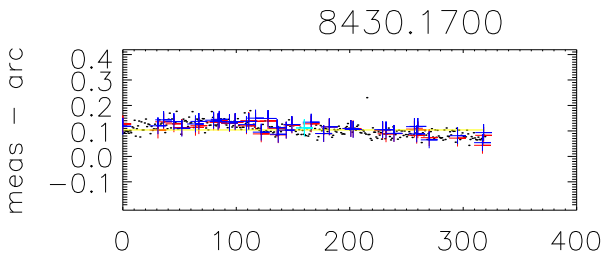

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

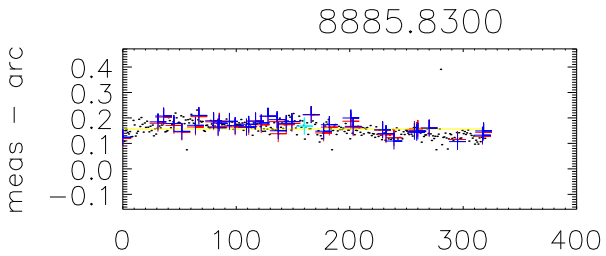

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

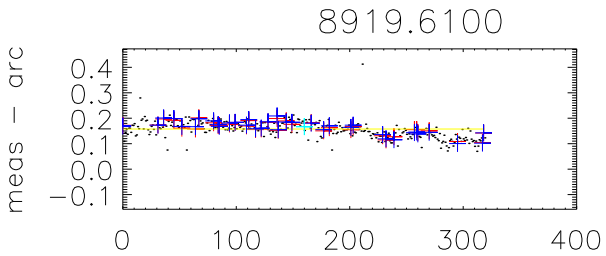

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

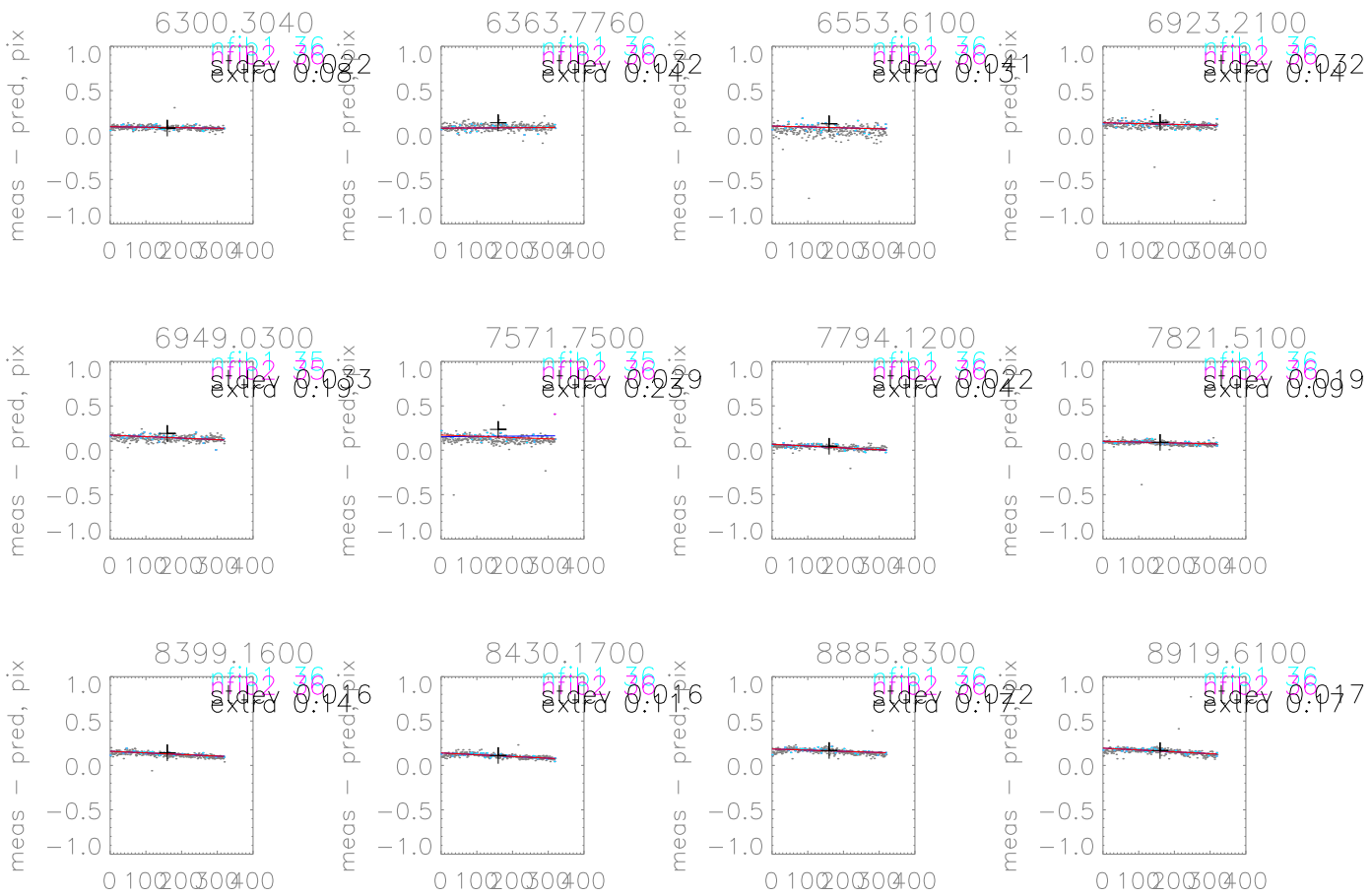

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

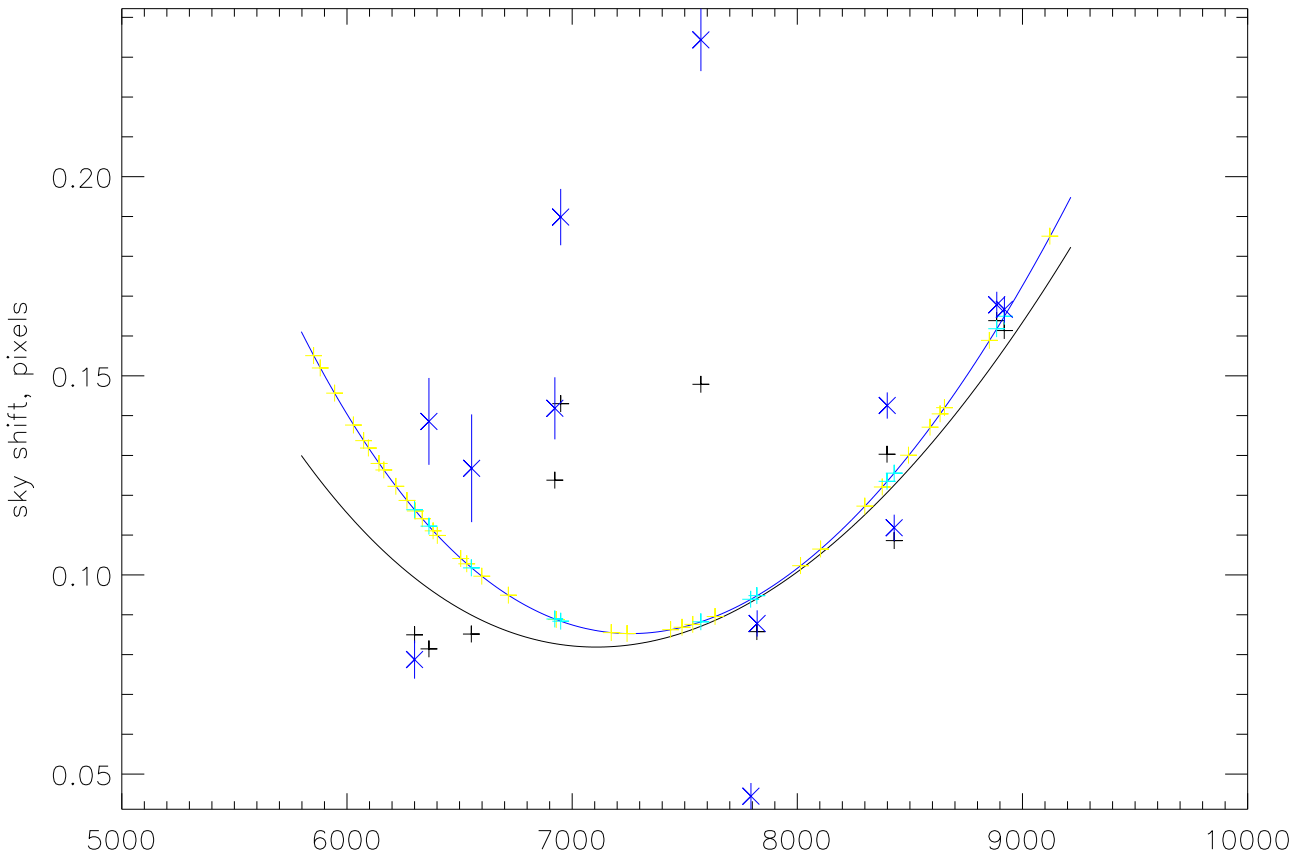

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

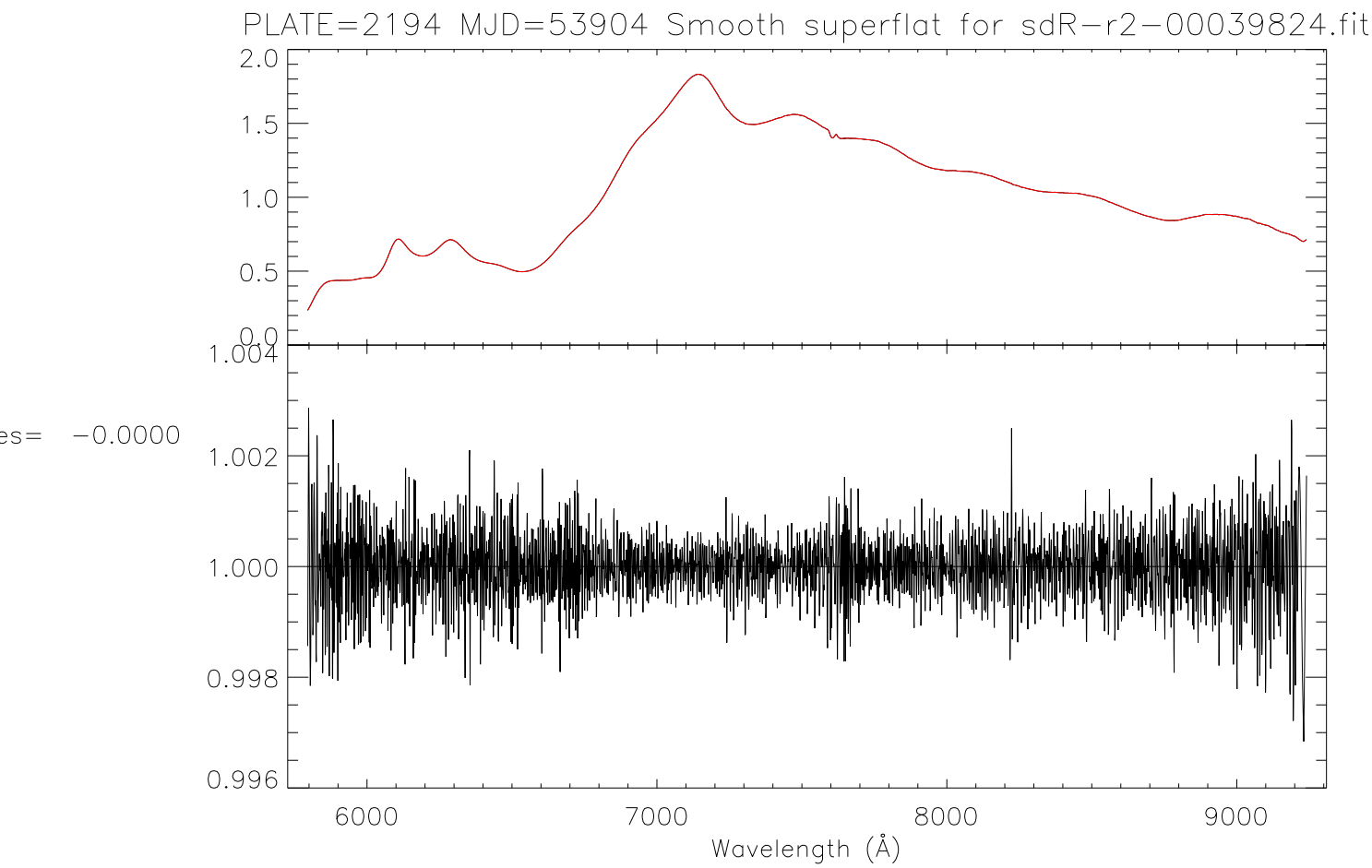

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

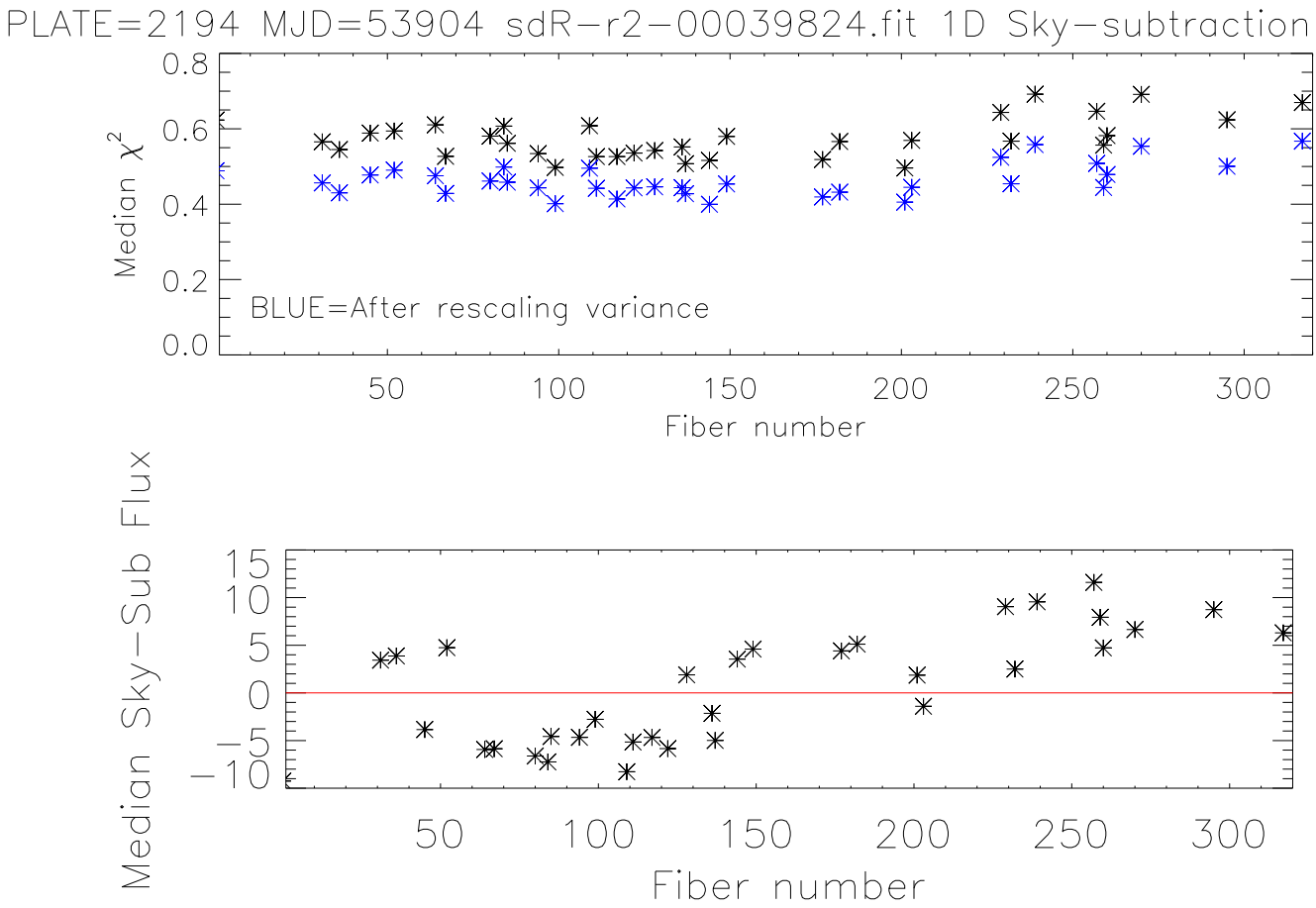

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

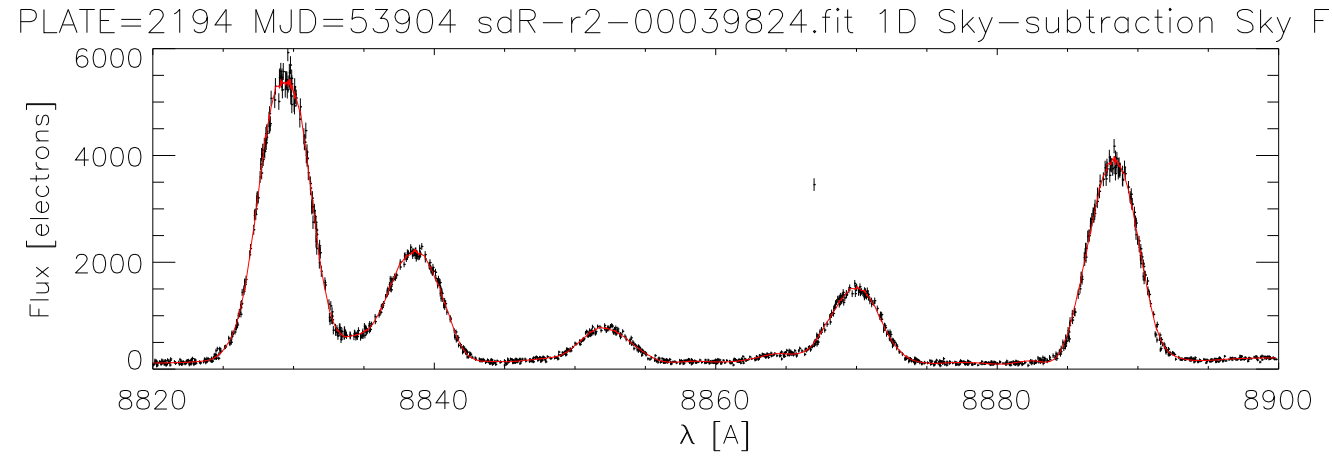

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

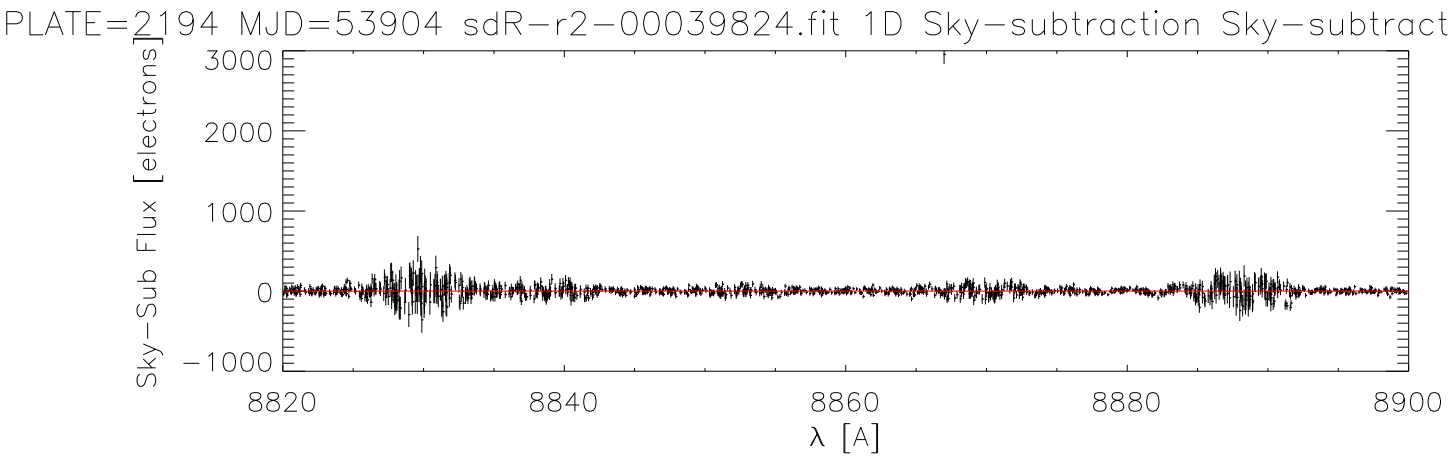

6300.3040
stdev 0.022
extra 0.082
6363.7760
stdev 0.032
extra 0.142
6553.6100
stdev 0.041
extra 0.131
6923.2100
stdev 0.032
extra 0.14
6949.0300
stdev 0.033
extra 0.193
7571.7500
stdev 0.029
extra 0.237
7794.1200
stdev 0.022
extra 0.047
7821.5100
stdev 0.019
extra 0.093
8399.1600
stdev 0.016
extra 0.141
8430.1700
stdev 0.016
extra 0.111
8885.8300
stdev 0.022
extra 0.172
8919.6100
stdev 0.017
extra 0.17
meas − pred, pix
mfib1 36
mfib2 36

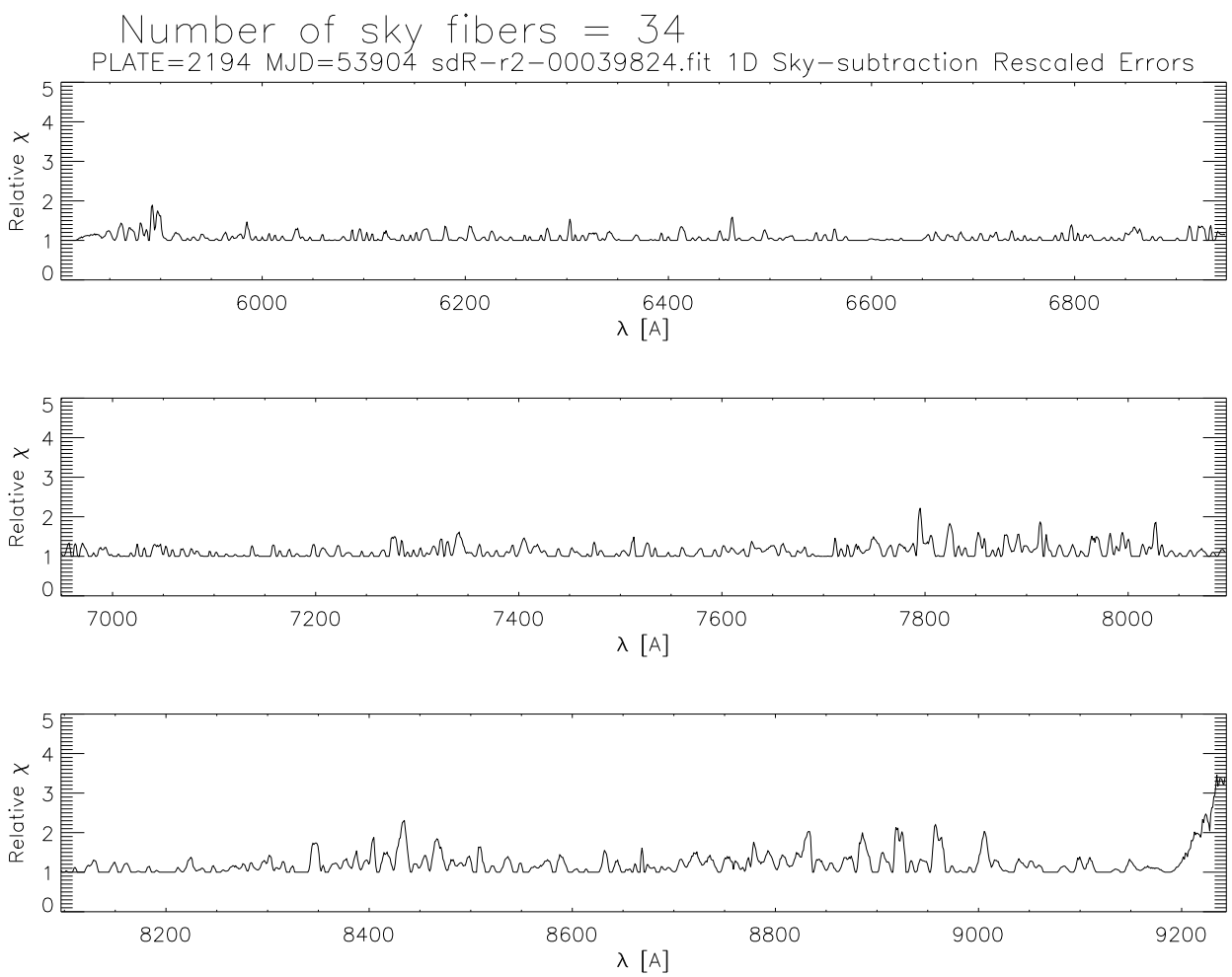

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

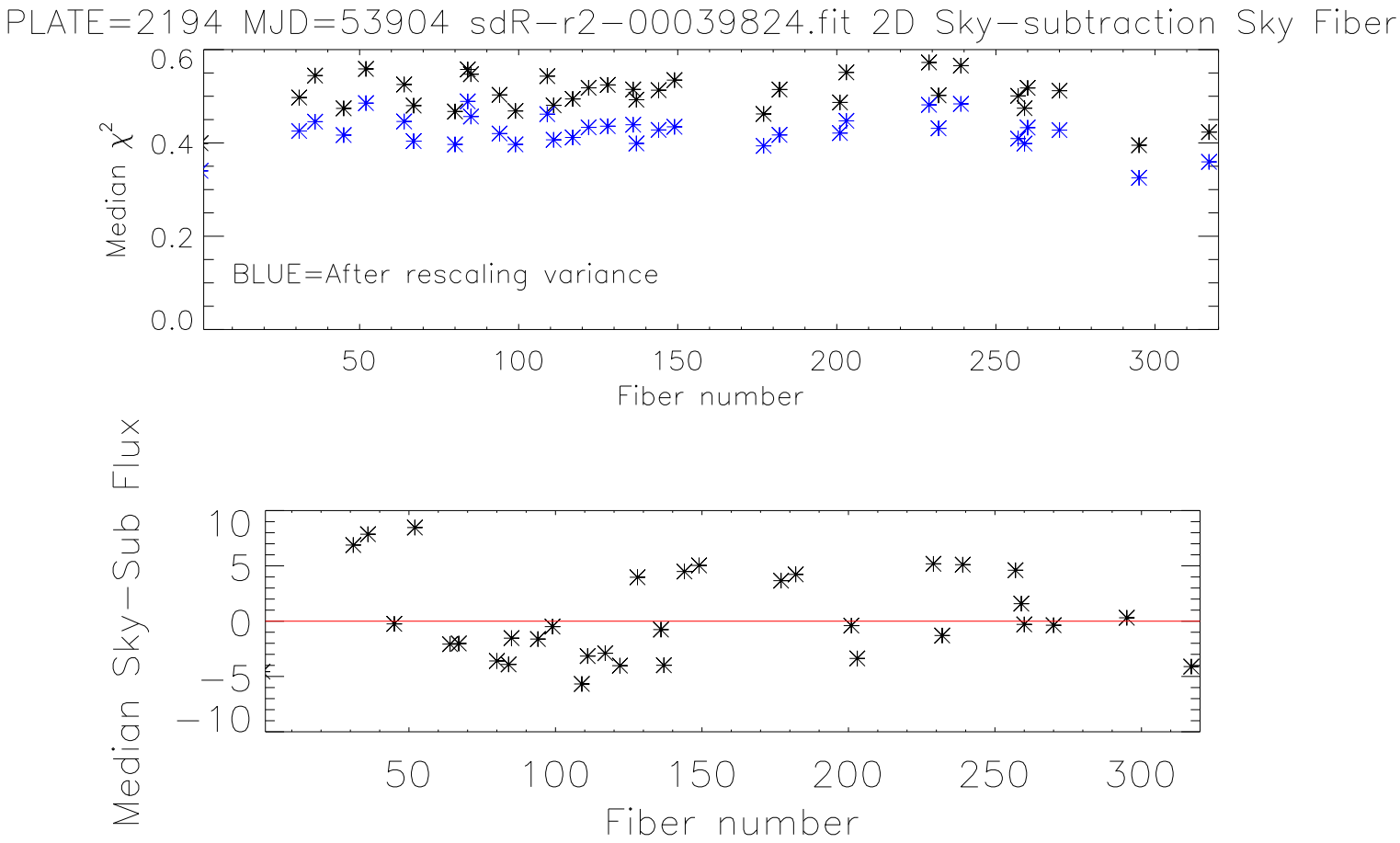

PLATE=2194 MJD=53904 Smooth superflat for sdR-r2-00039824.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

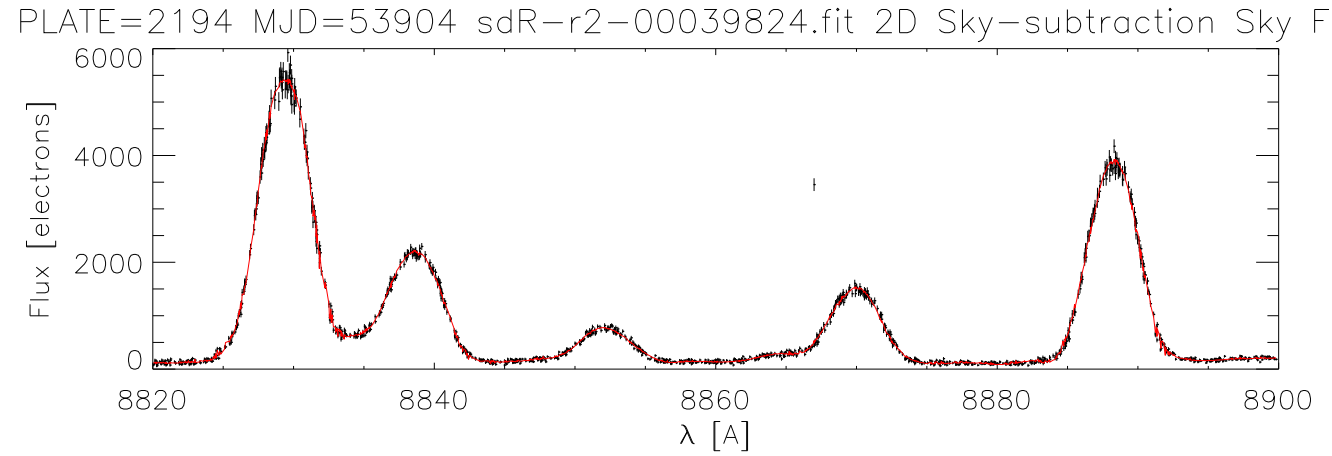

PLATE=2194 MJD=53904 sdR-r2-00039824.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

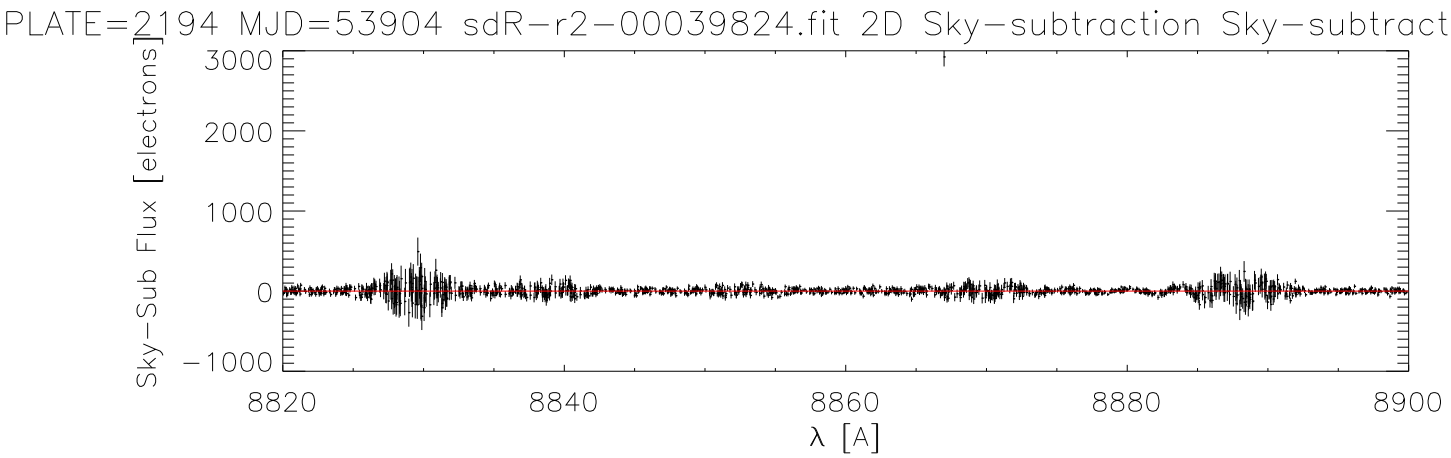

PLATE=2194 MJD=53904 sdR-r2-00039824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

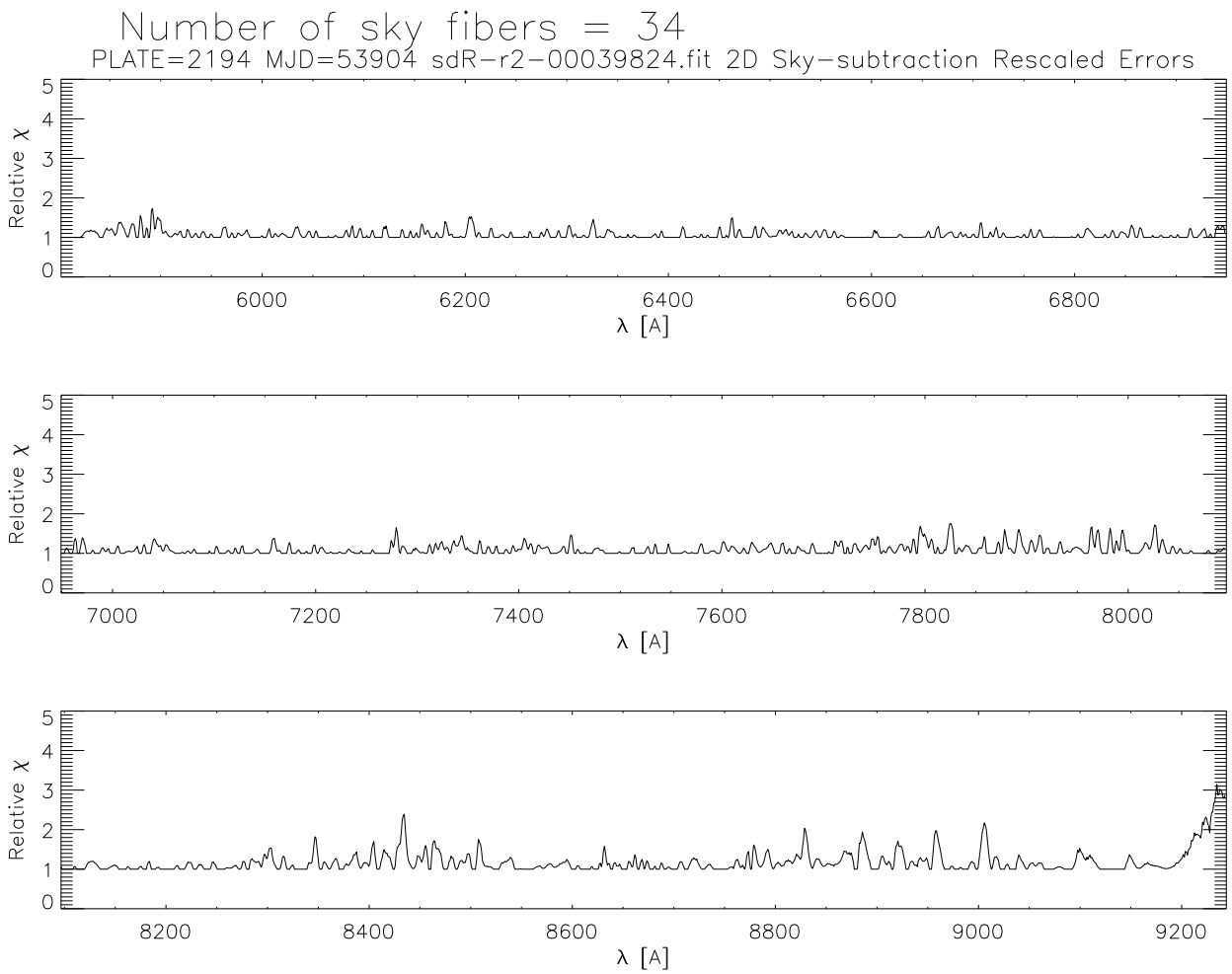

PLATE=2194 MJD=53904 sdR-r2-00039824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

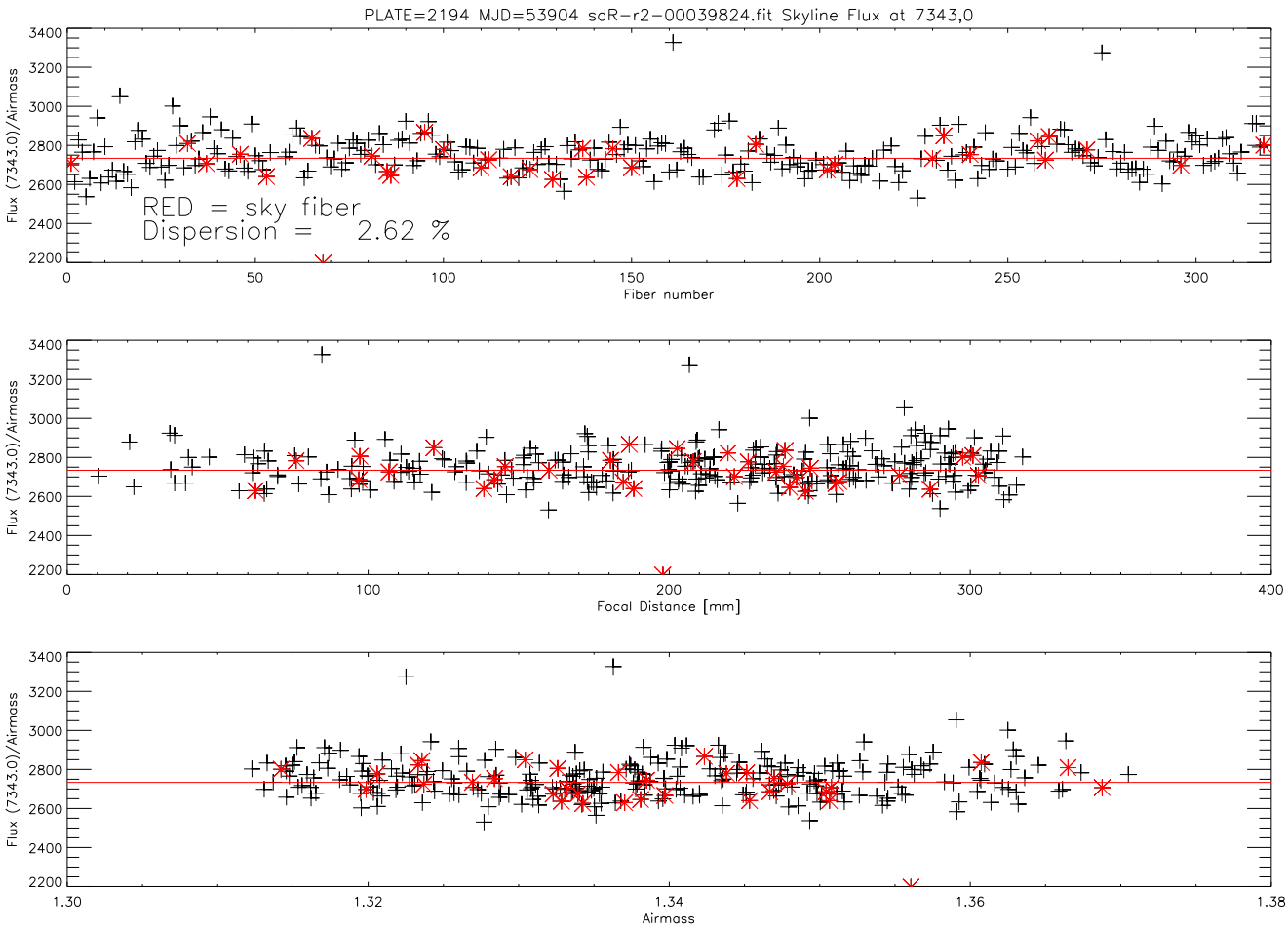

Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

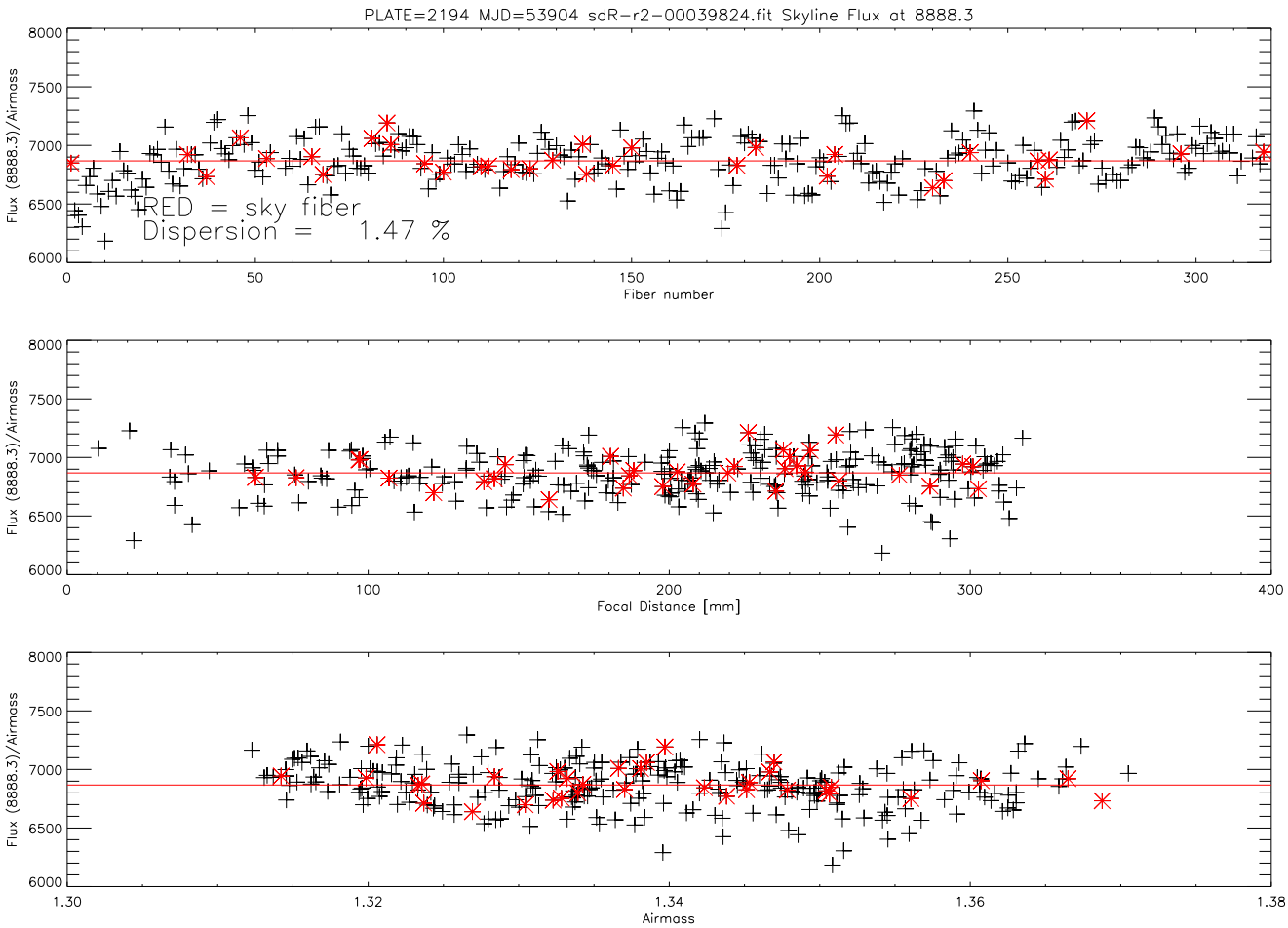

PLATE=2194 MJD=53904 sdR-r2-00039824.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=2194 MJD=53904 sdR-r2-00039824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2194 MJD=53904 sdR-r2-00039824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 34
PLATE=2194 MJD=53904 sdR-r2-00039824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=2194 MJD=53904 sdR-r2-00039824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.62 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2194 MJD=53904 sdR-r2-00039824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.47 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass