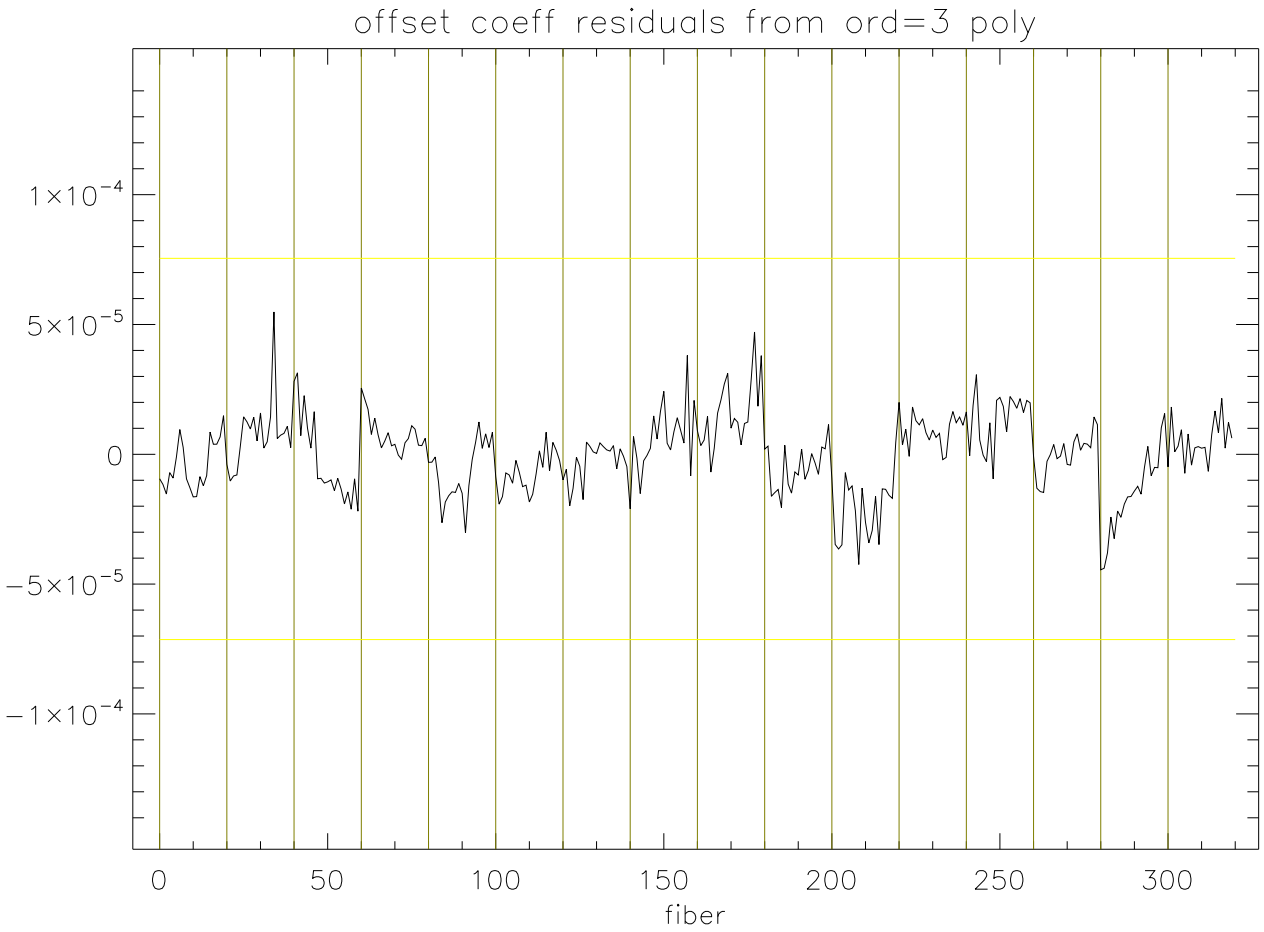
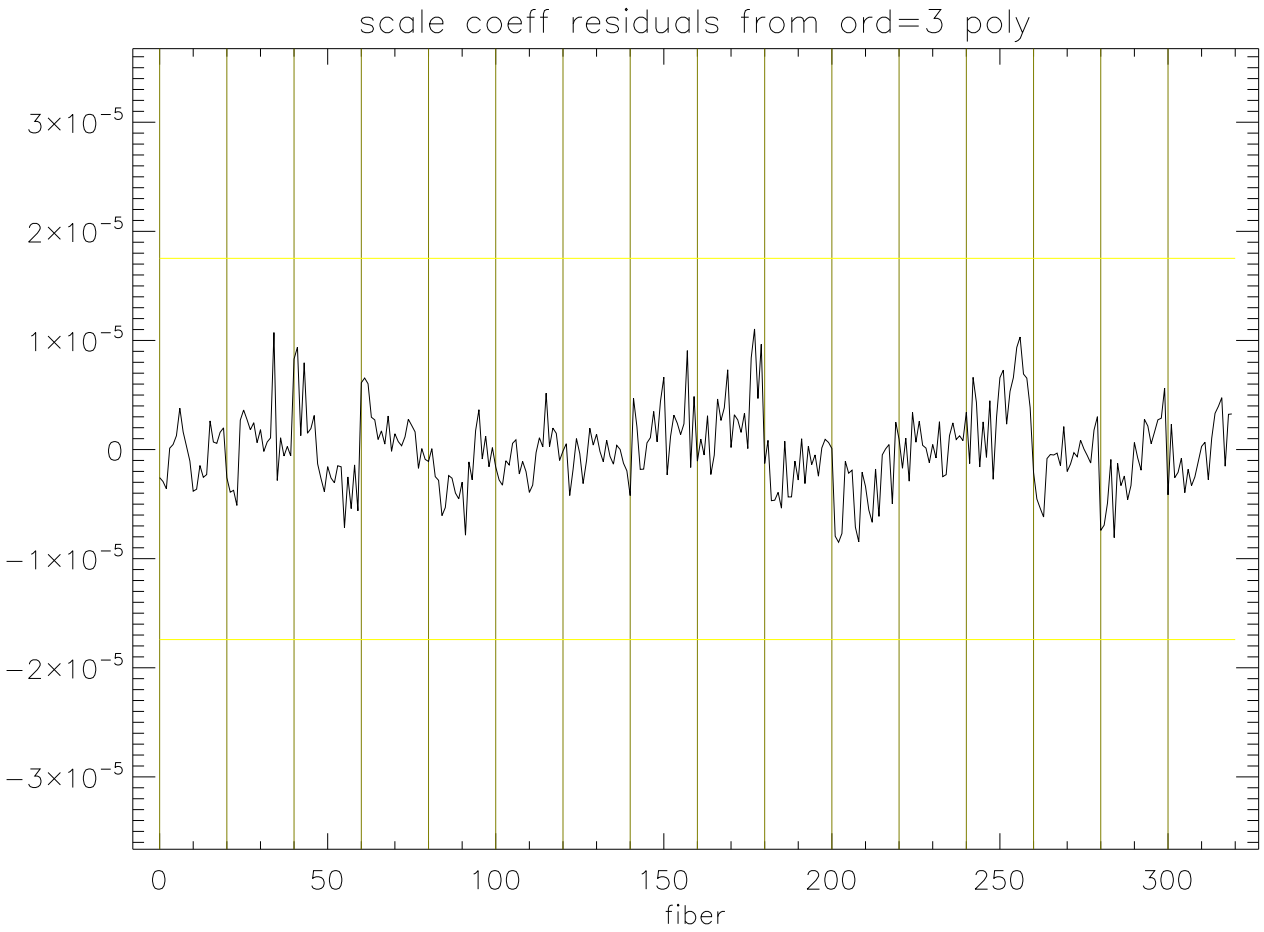
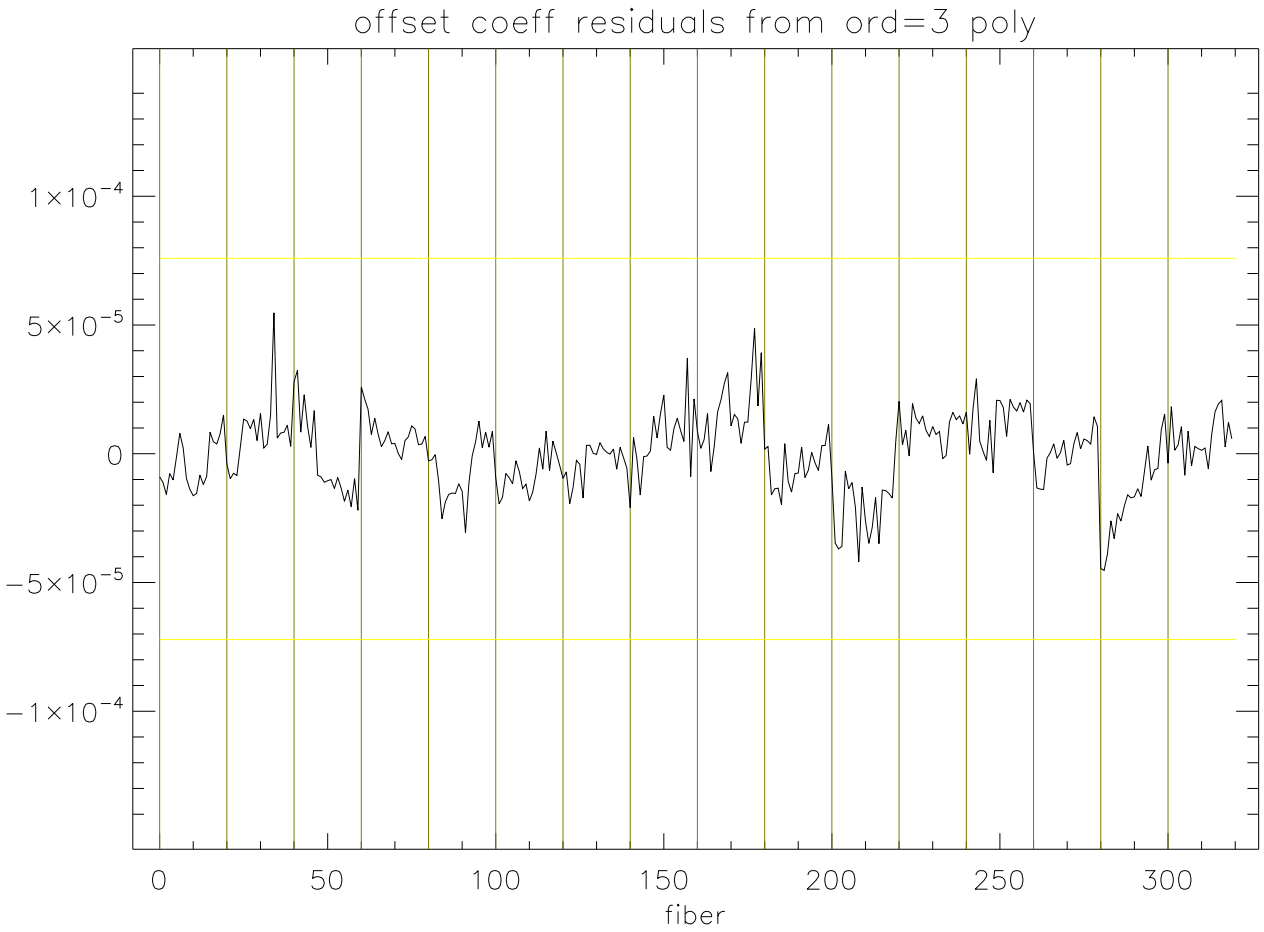
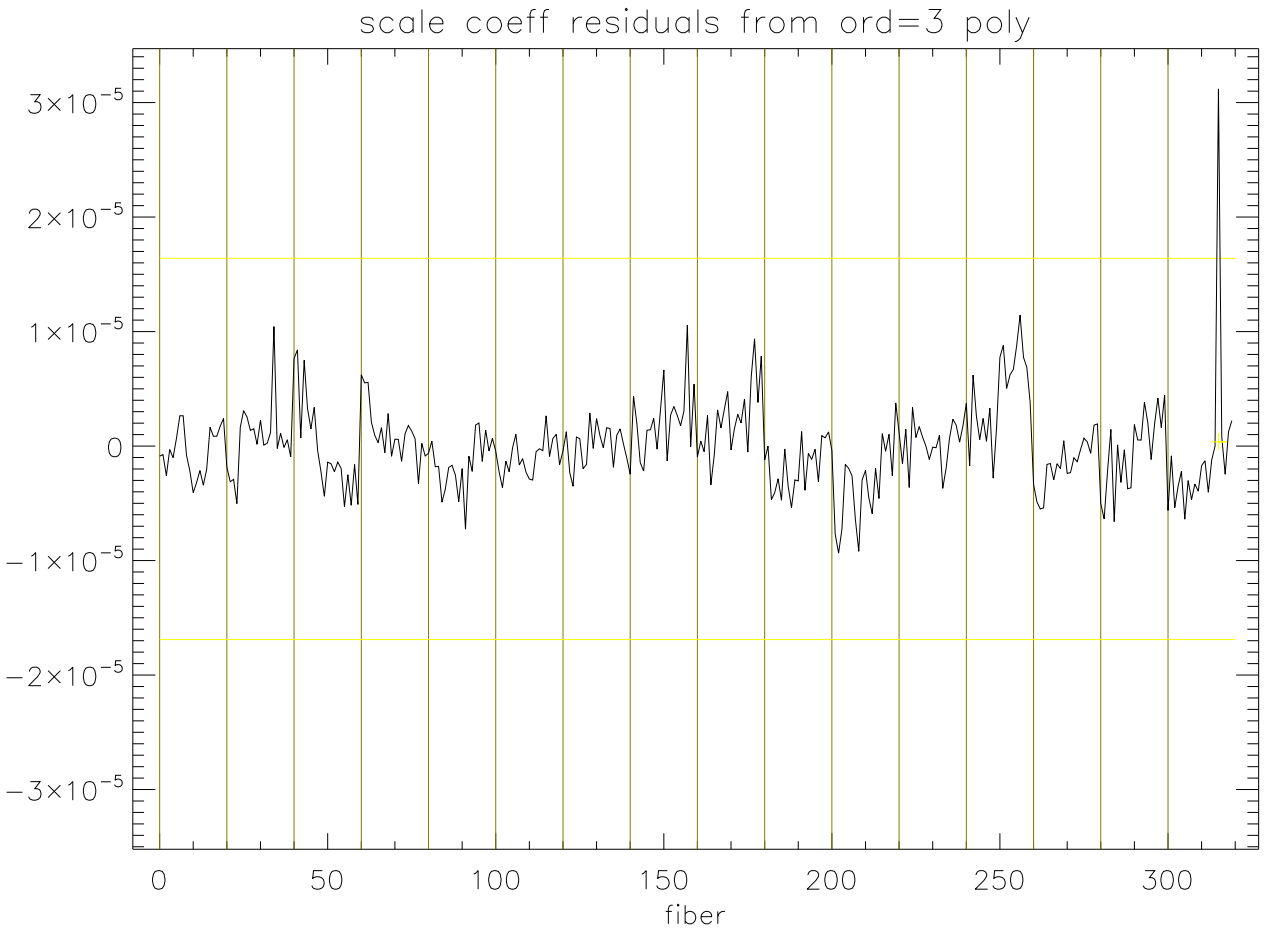
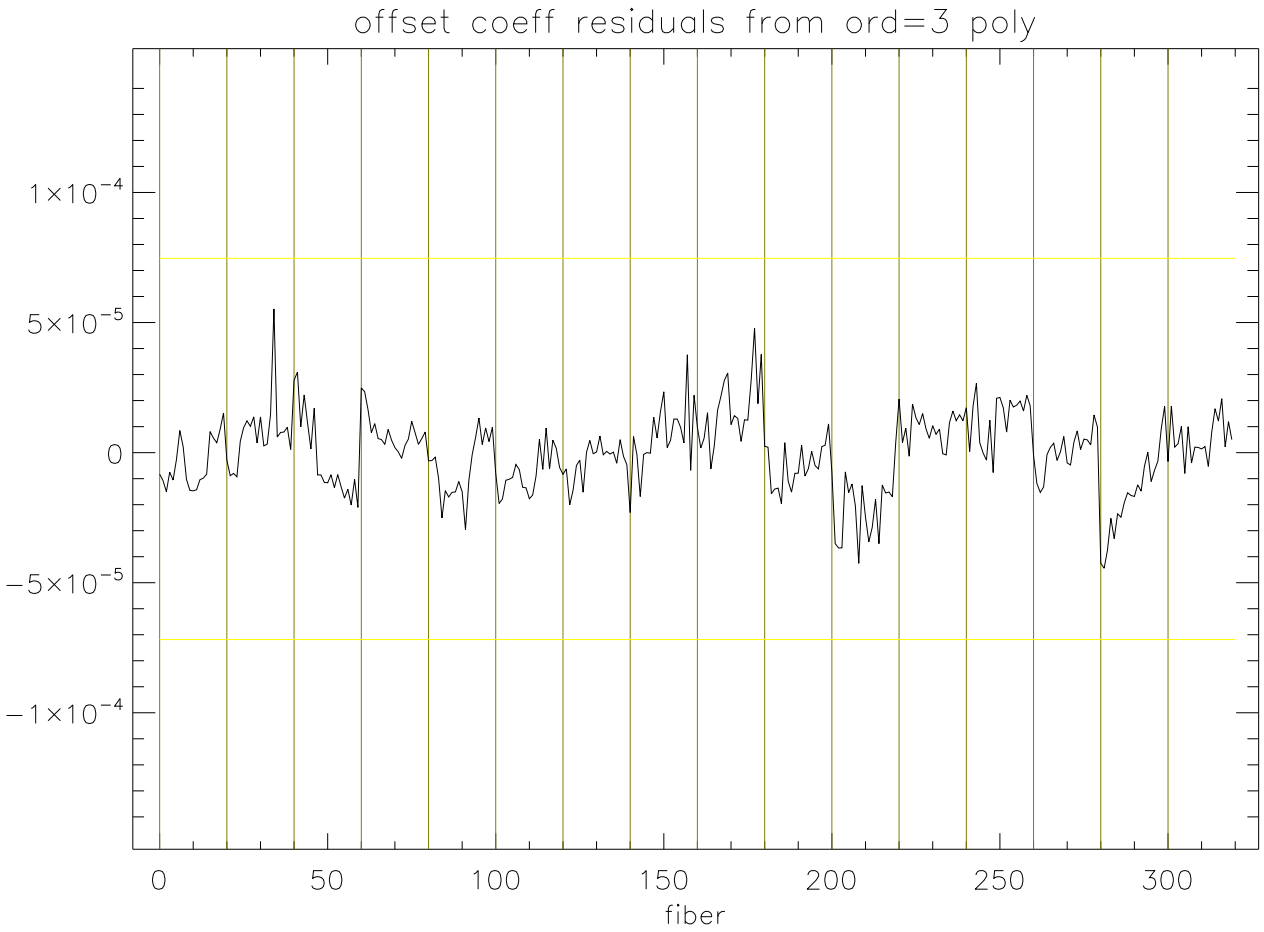
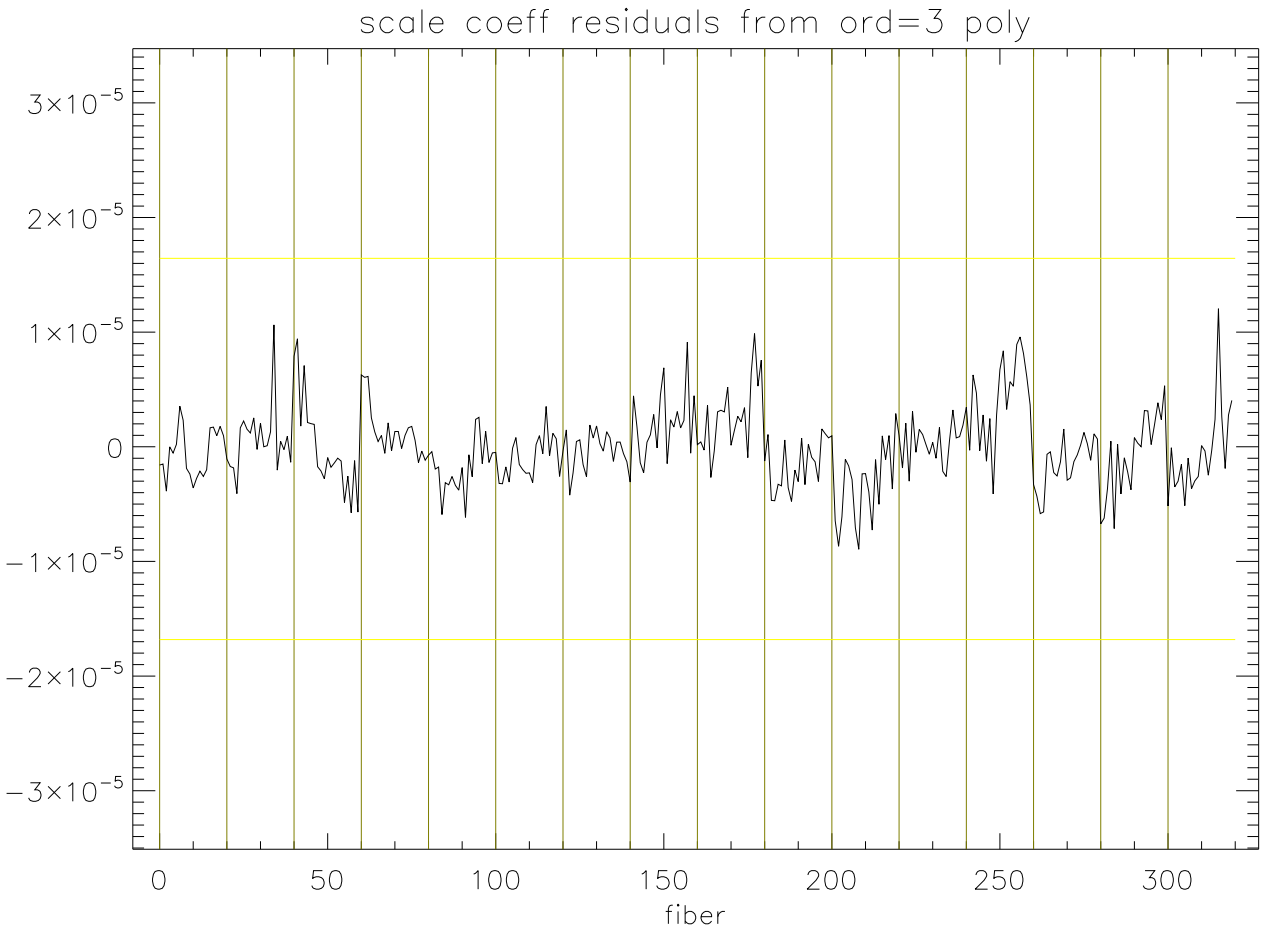

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

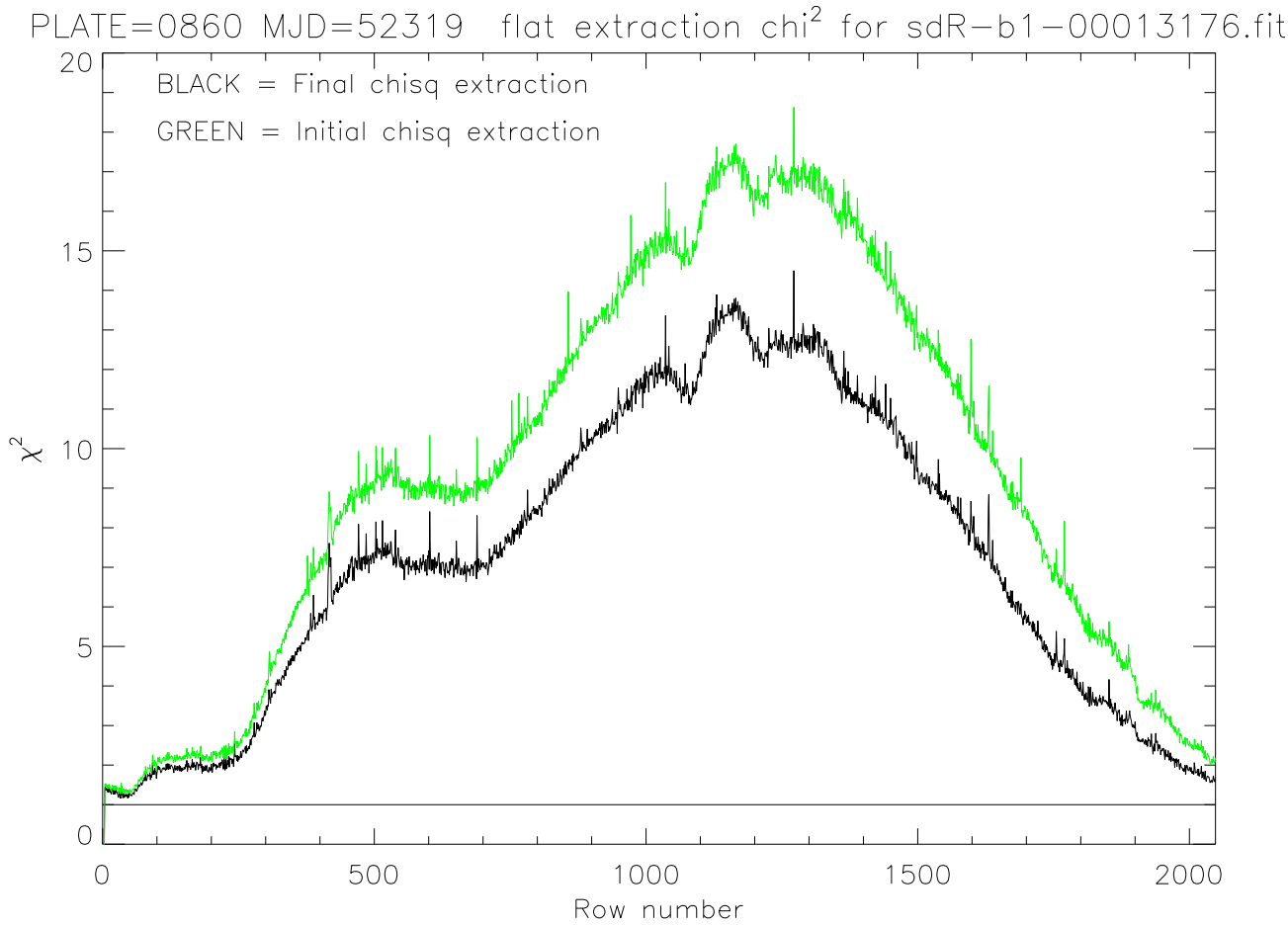

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

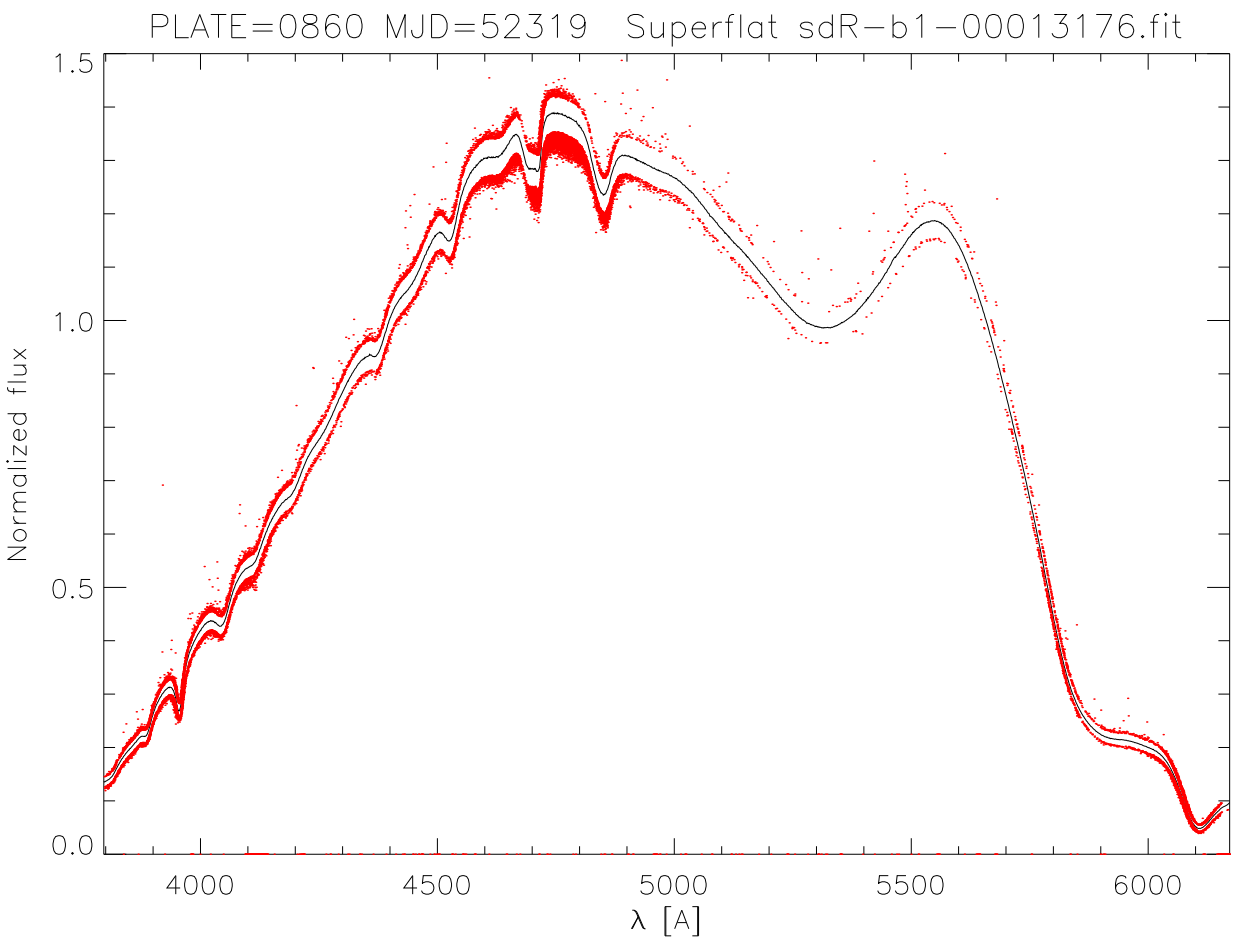

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

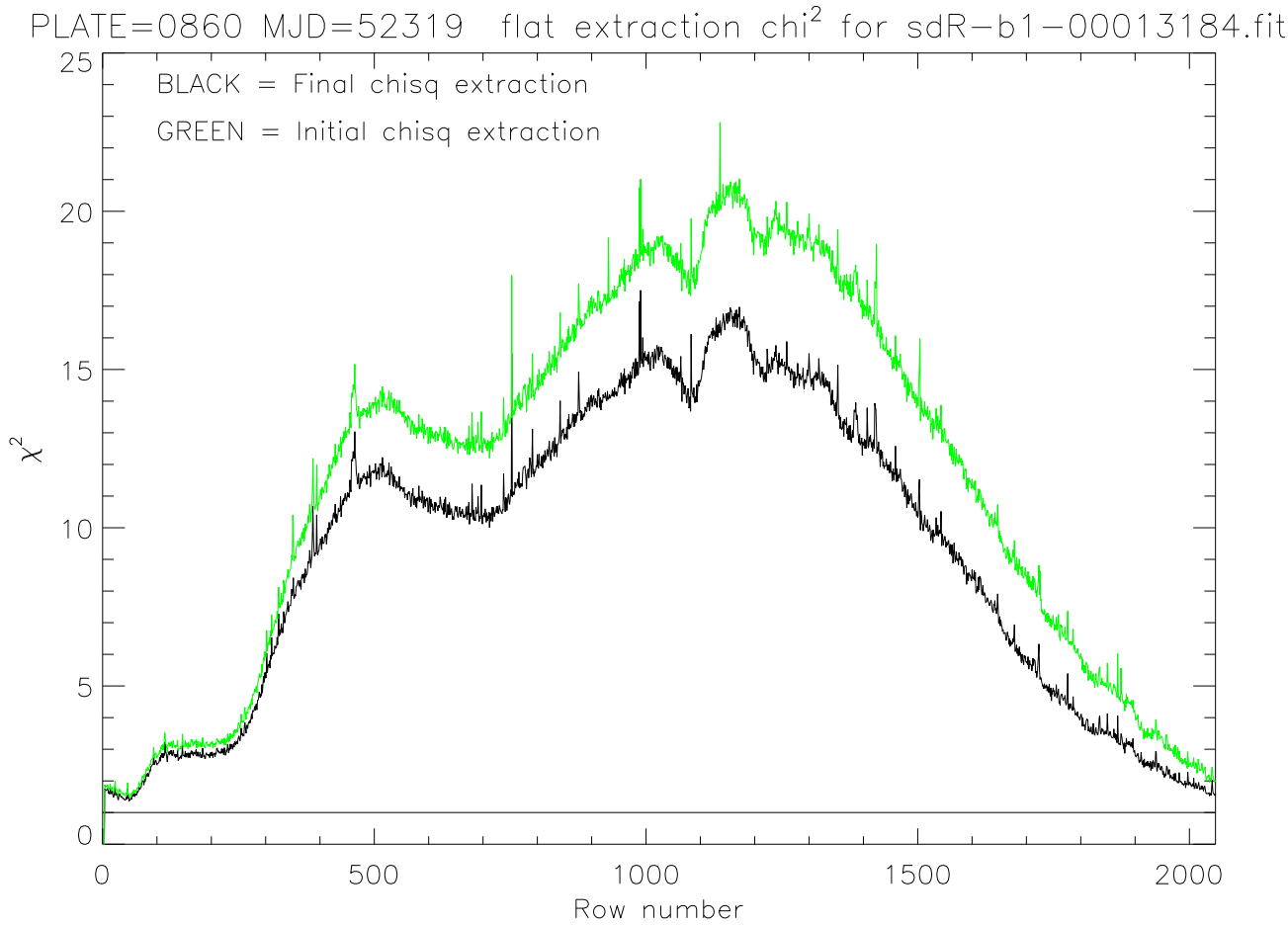

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

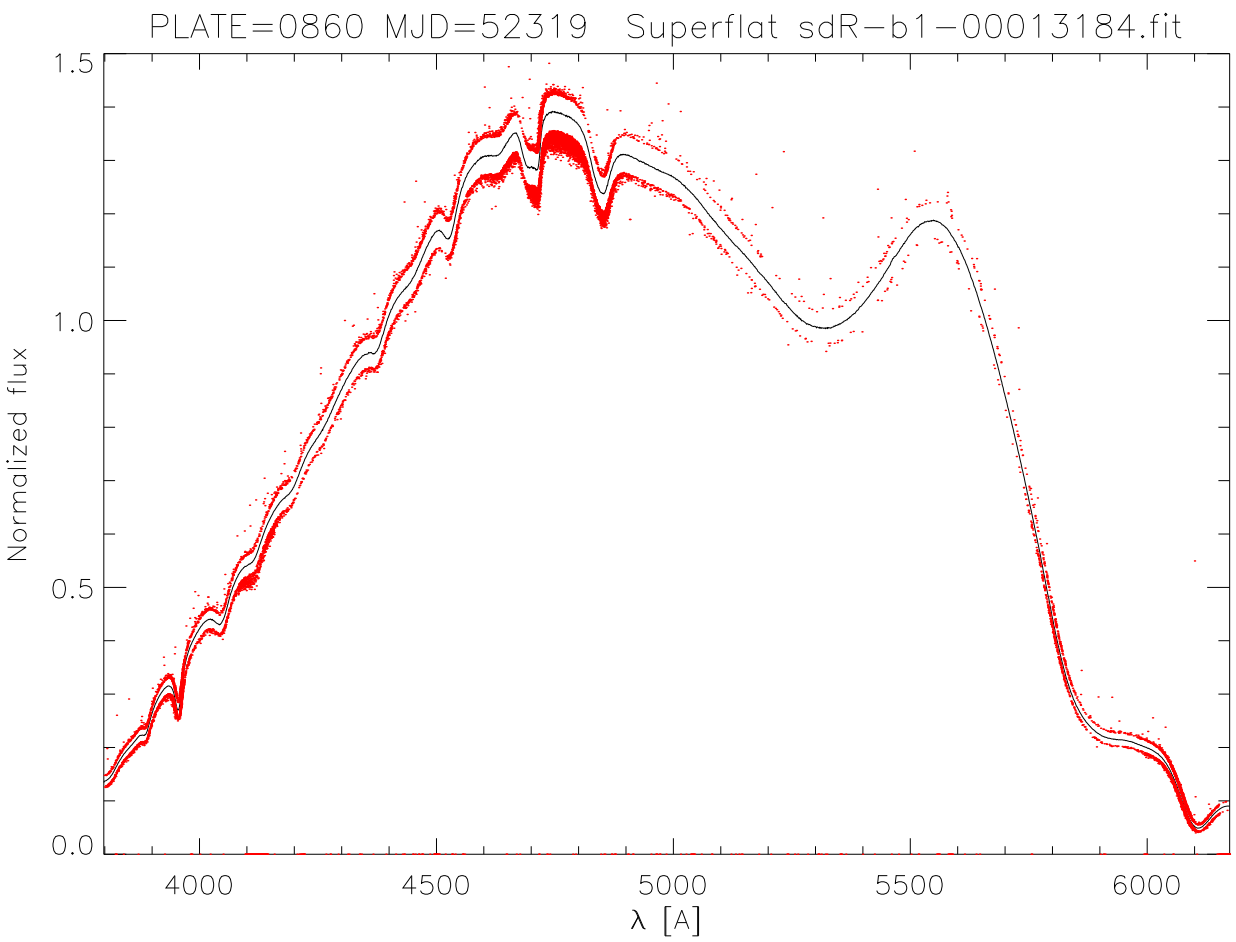

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

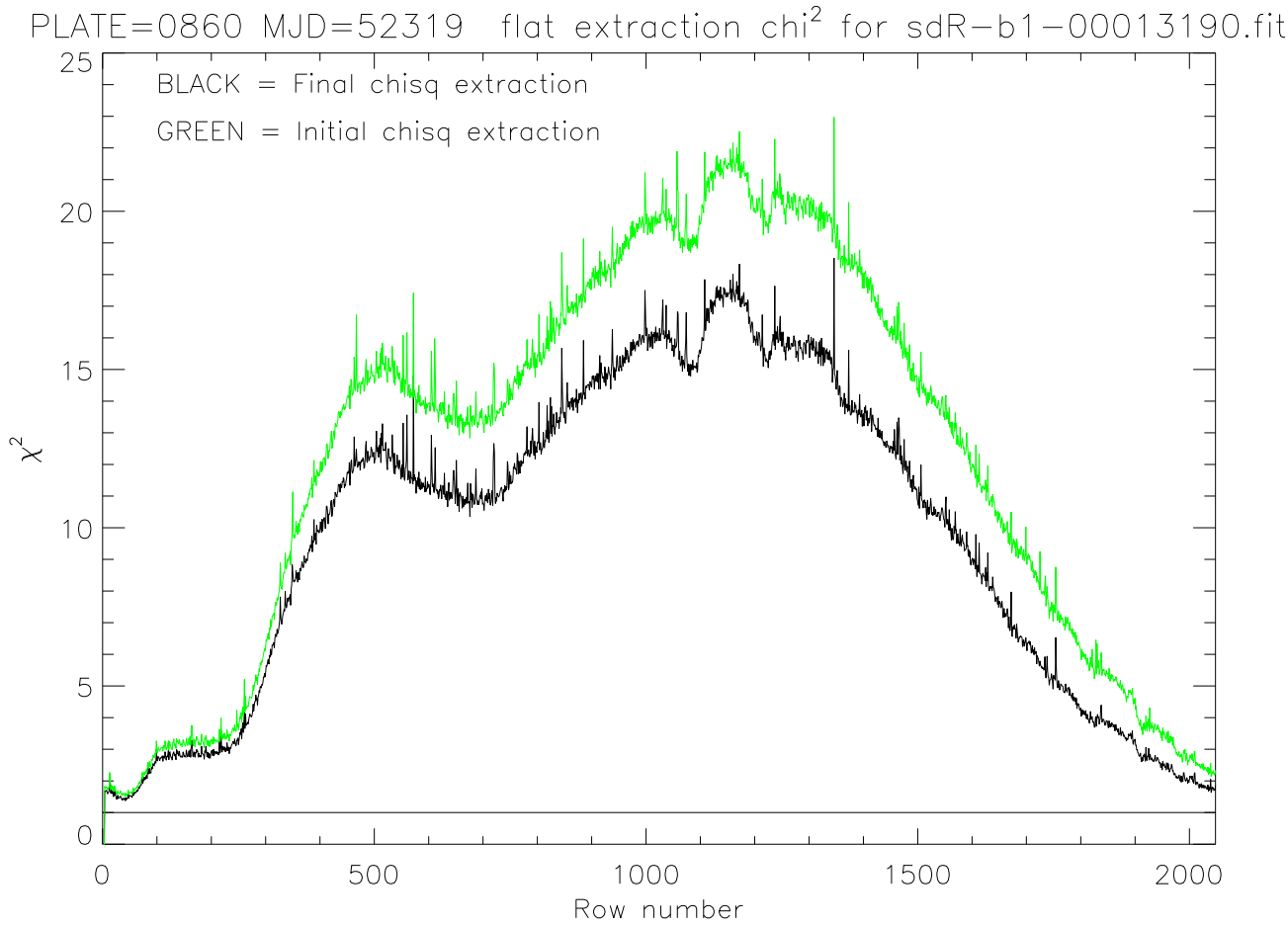

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

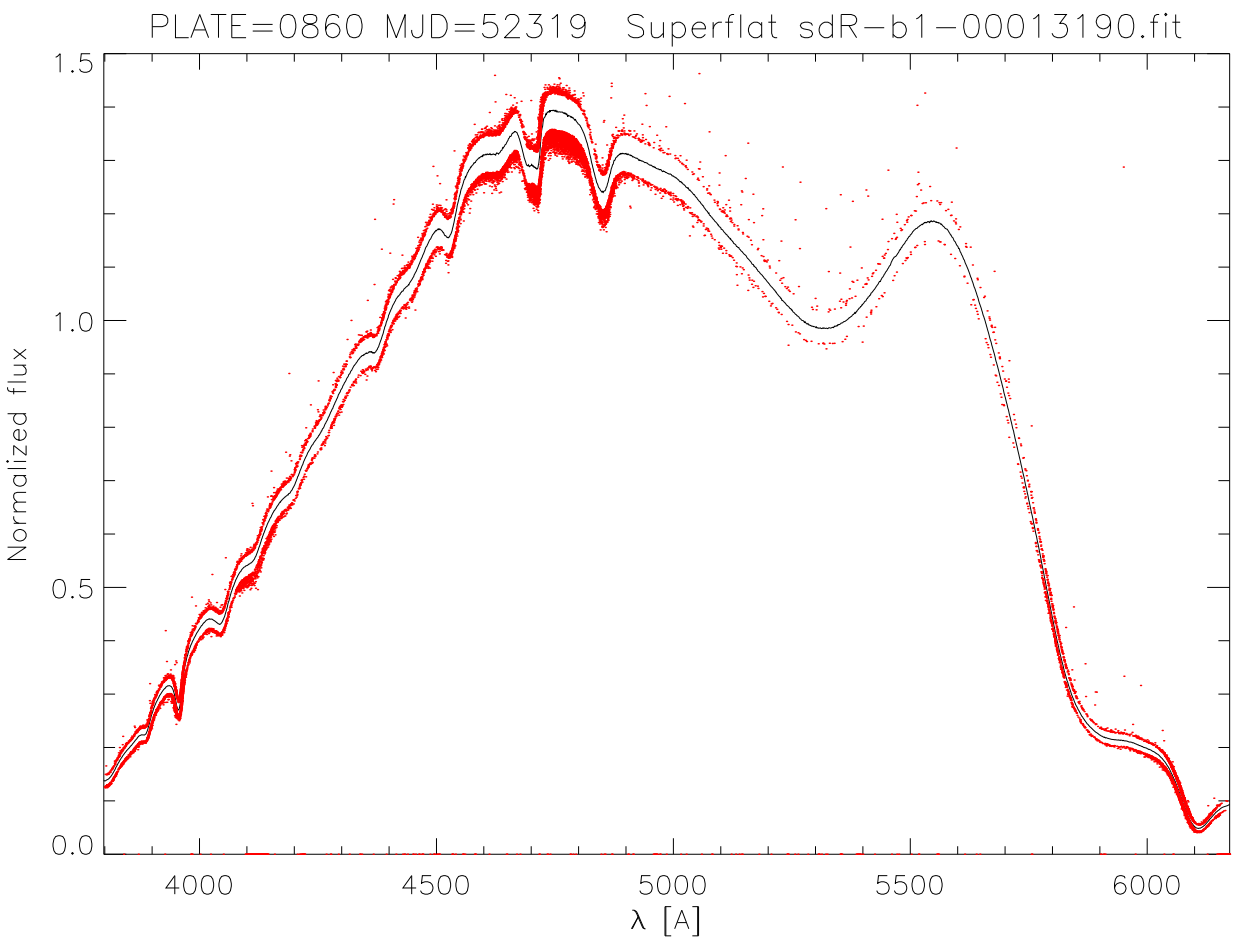

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b1−00013176.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

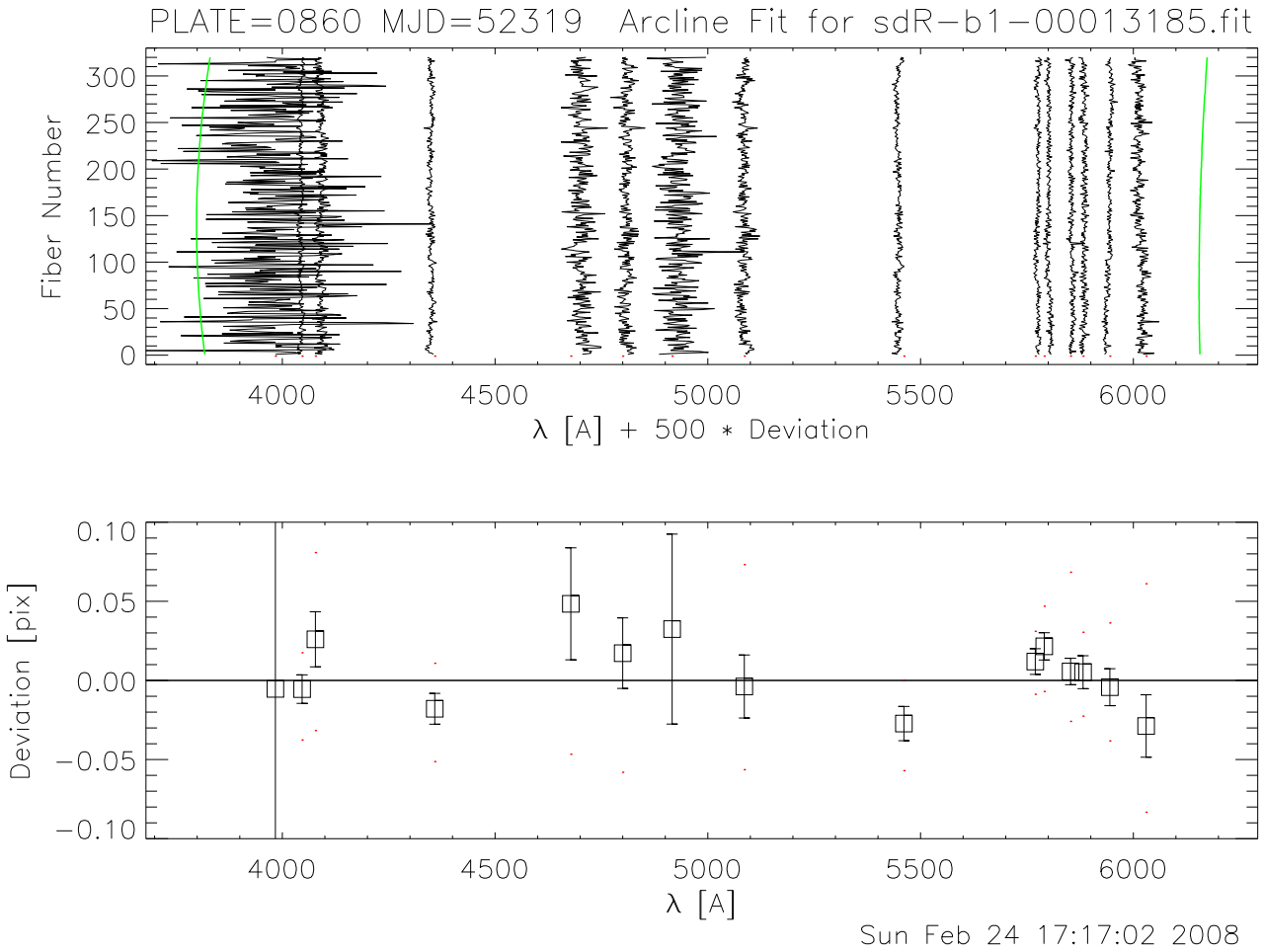

PLATE=0860 MJD=52319 Superflat sdR-b1-00013176.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

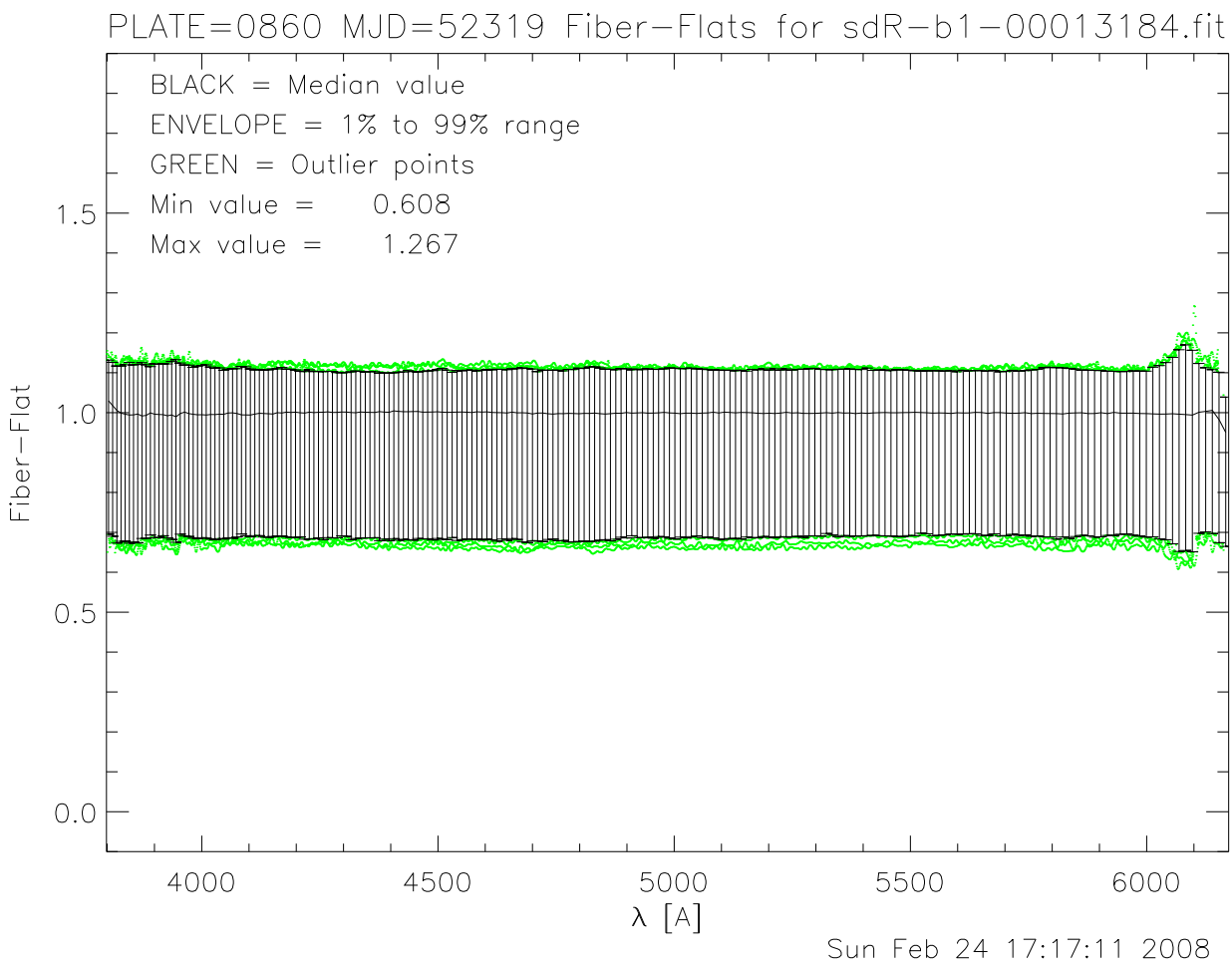

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b1−00013184.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

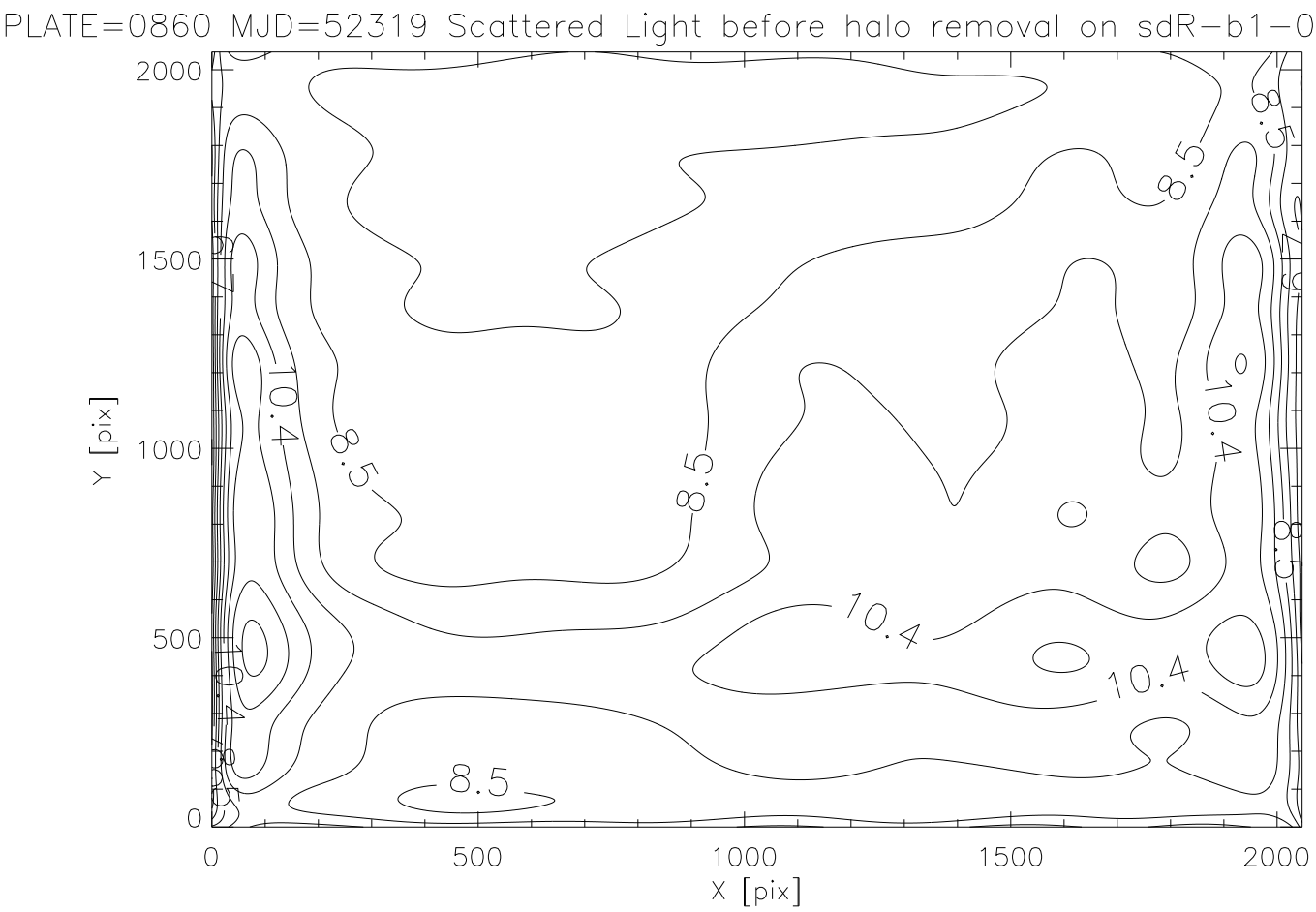

PLATE=0860 MJD=52319 Superflat sdR-b1-00013184.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

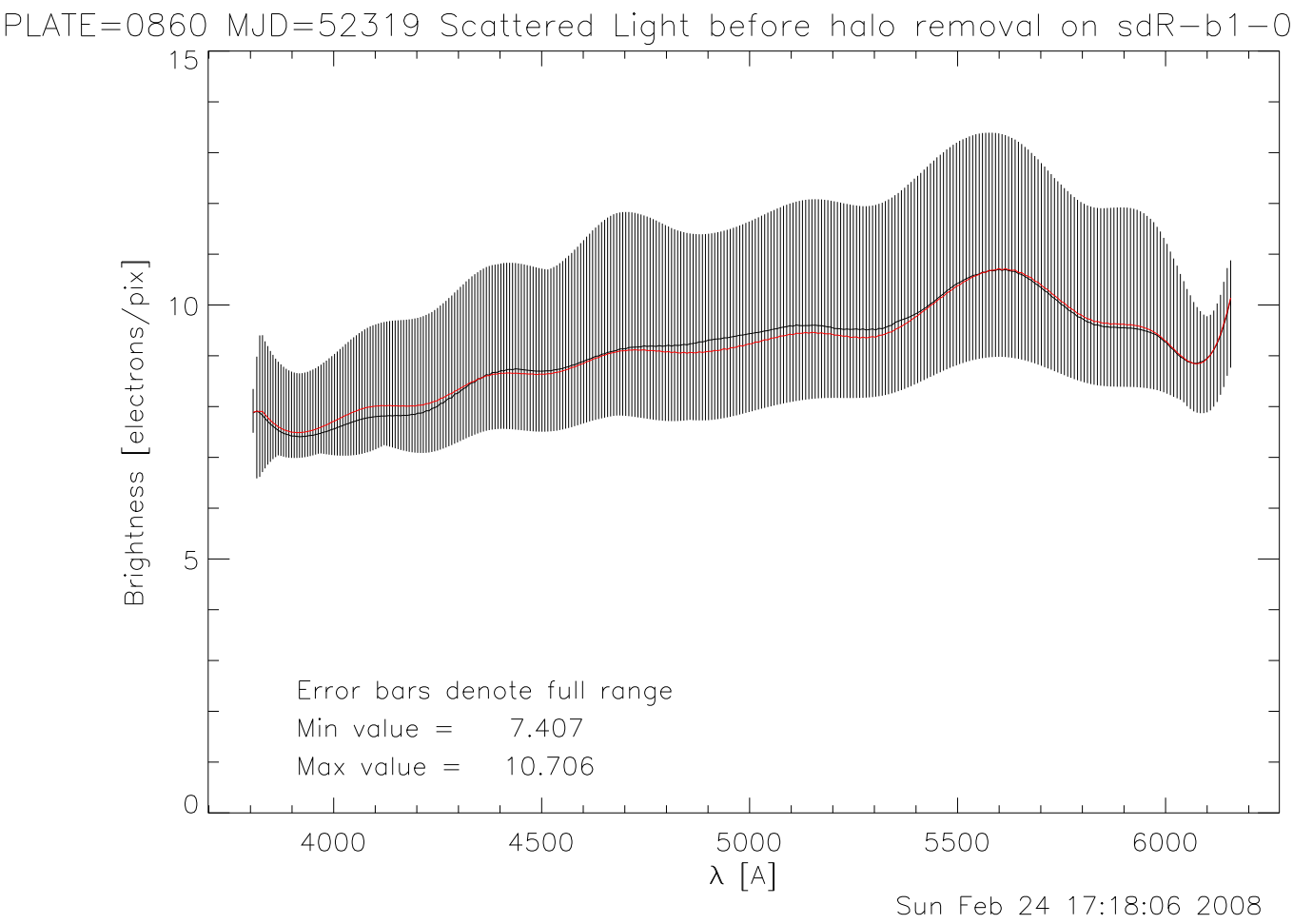

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b1−00013190.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

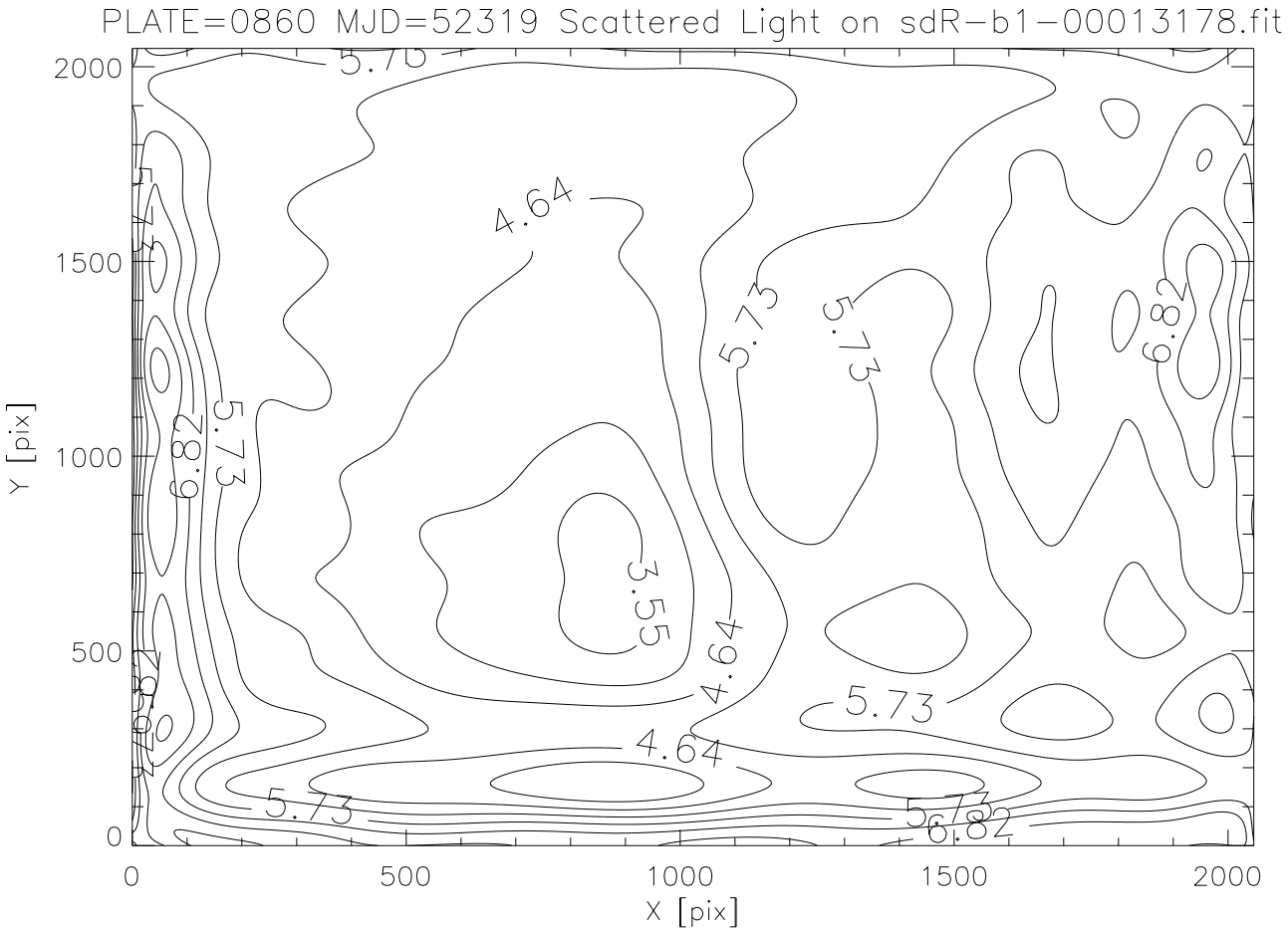

PLATE=0860 MJD=52319 Superflat sdR-b1-00013190.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

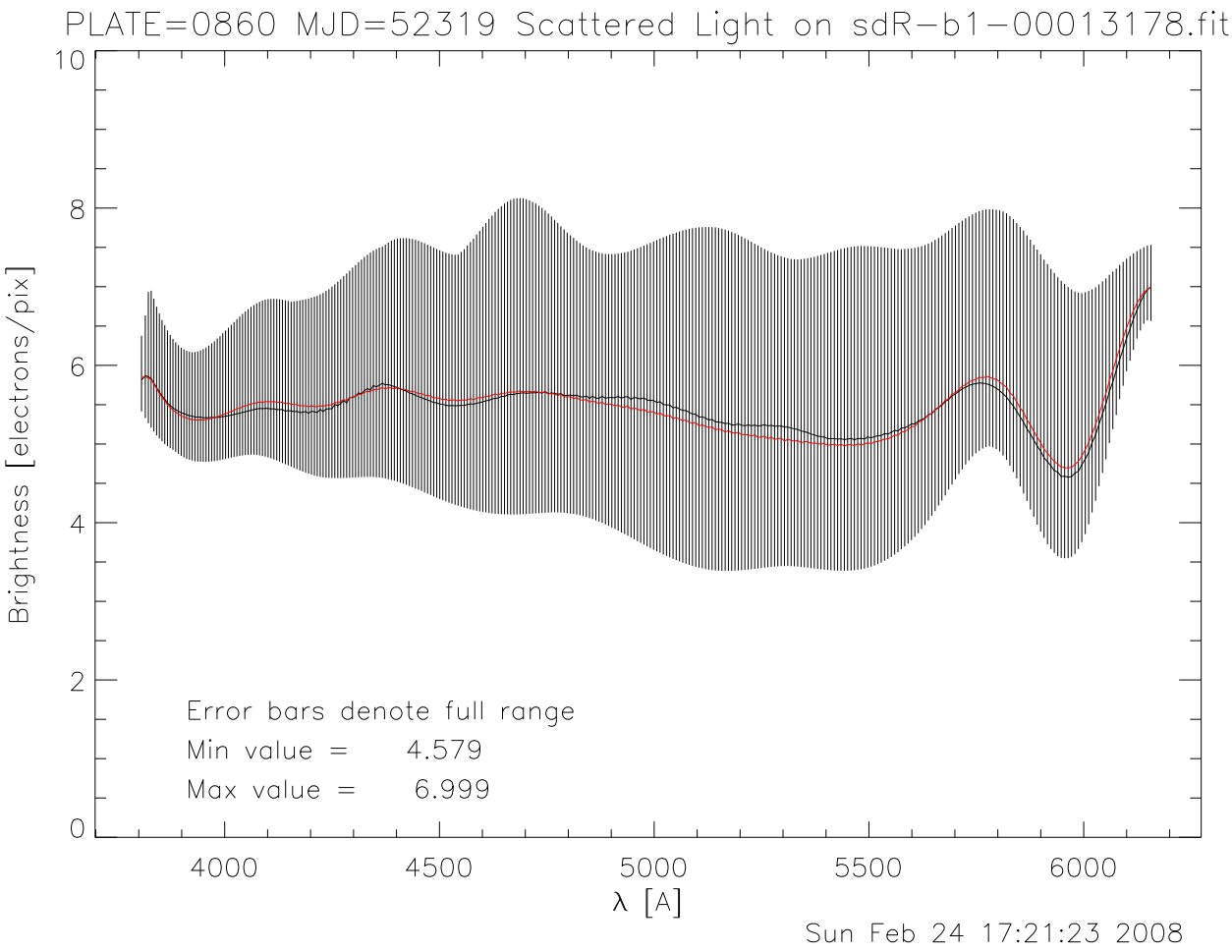

PLATE=0860 MJD=52319 Arcline Fit for sdR-b1-00013185.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:17:02 2008

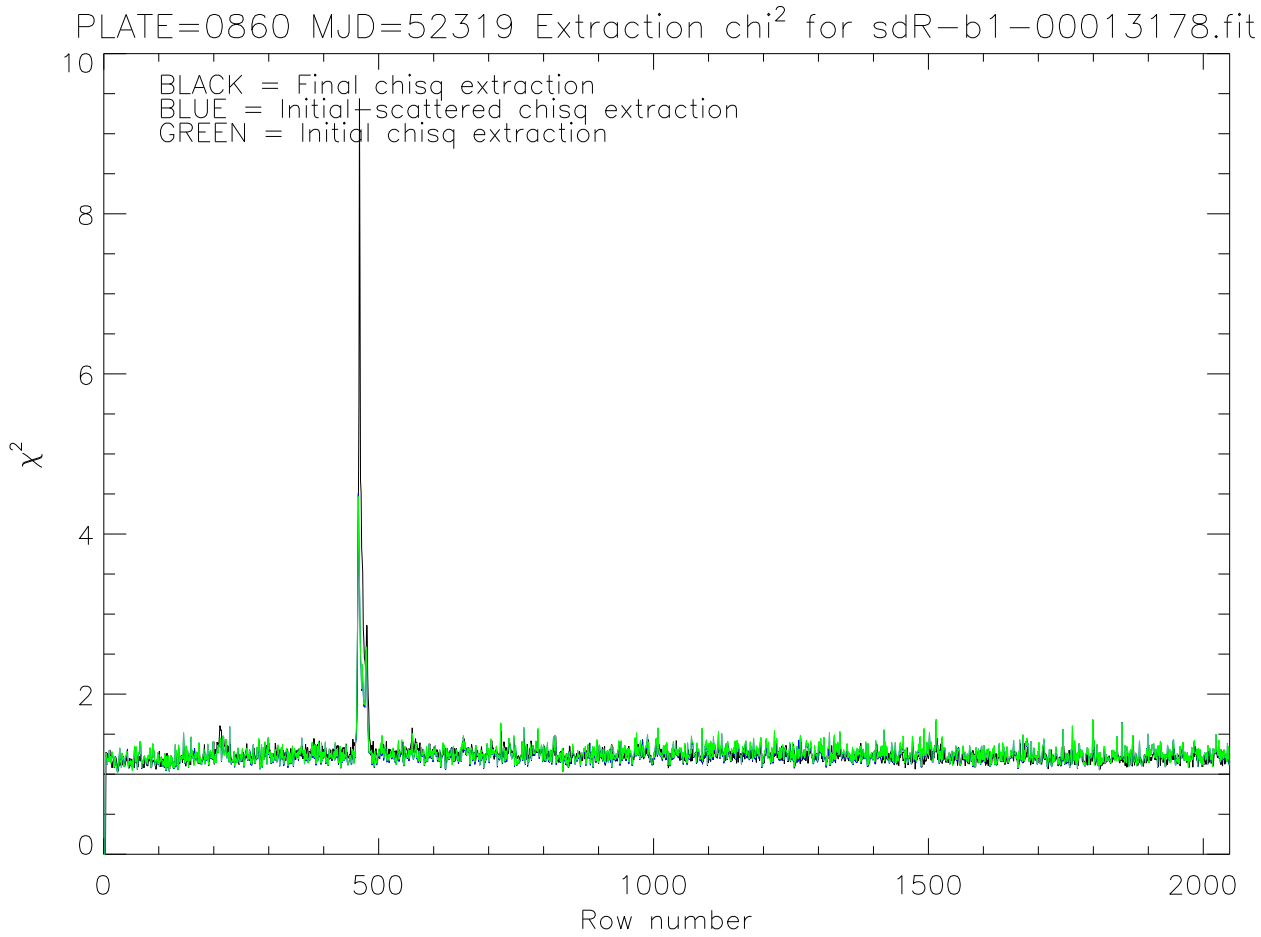

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:17:11 2008

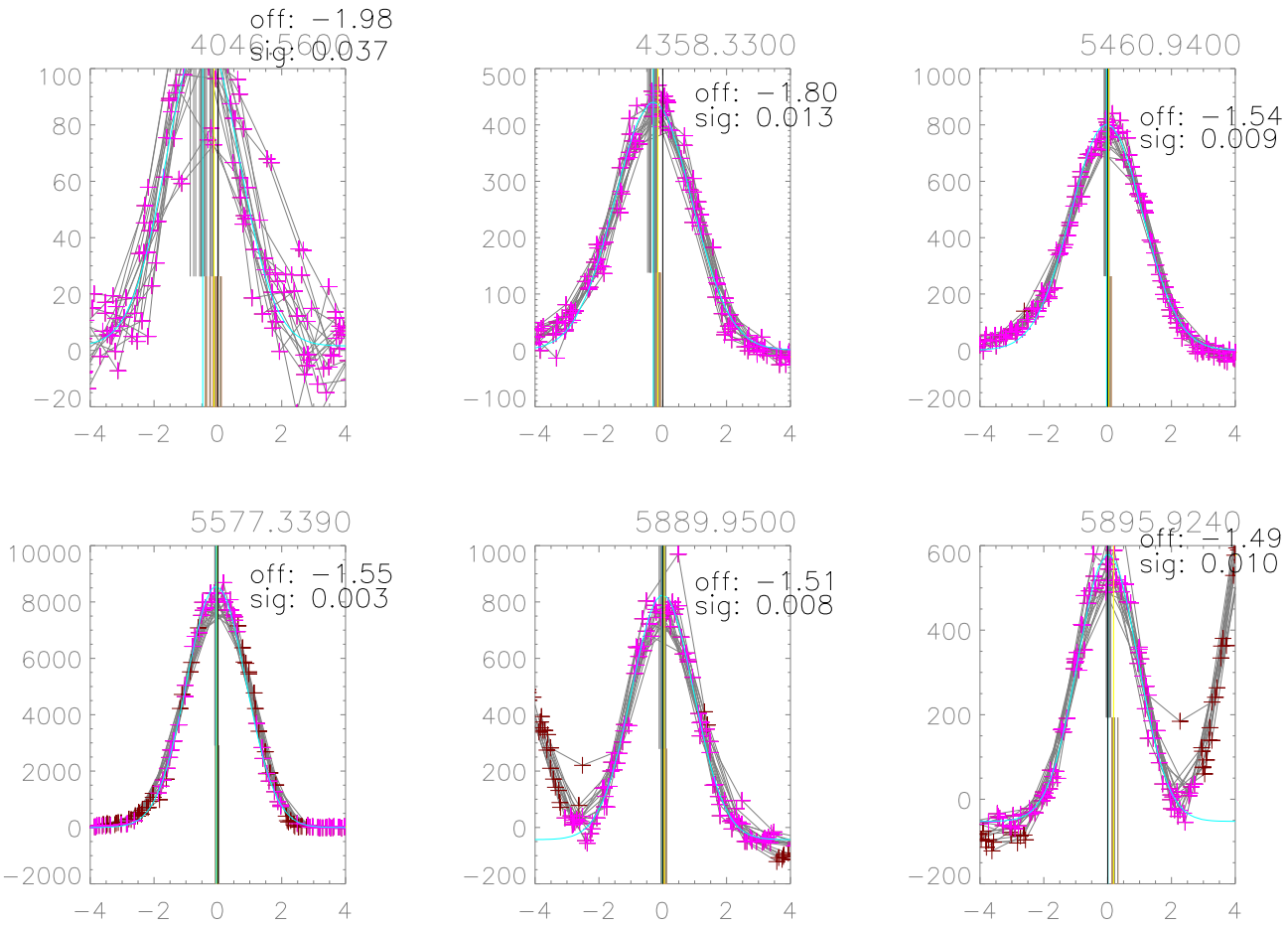

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013178.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
8.5
10.4

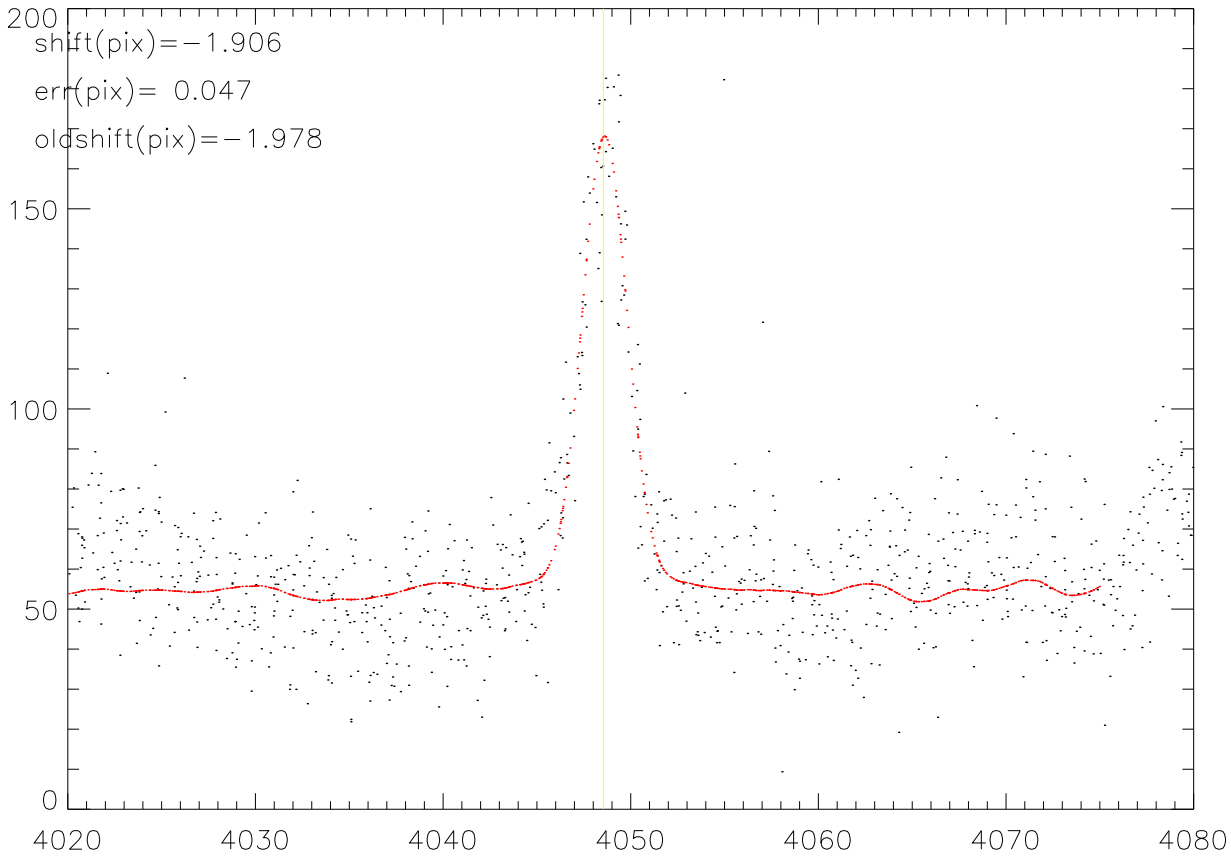

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013178.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 7.407
Max value = 10.706
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:18:06 2008

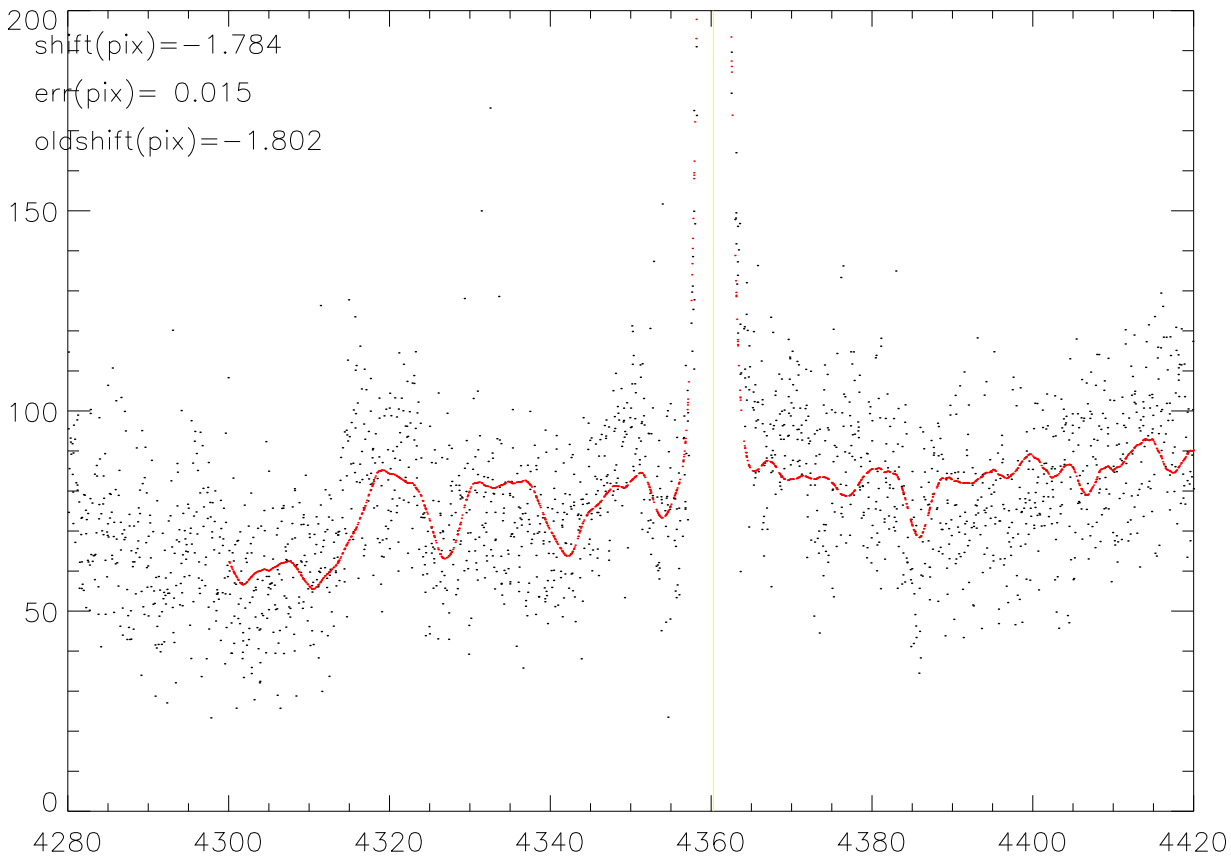

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013178.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.73
4.64
3.55
6.82

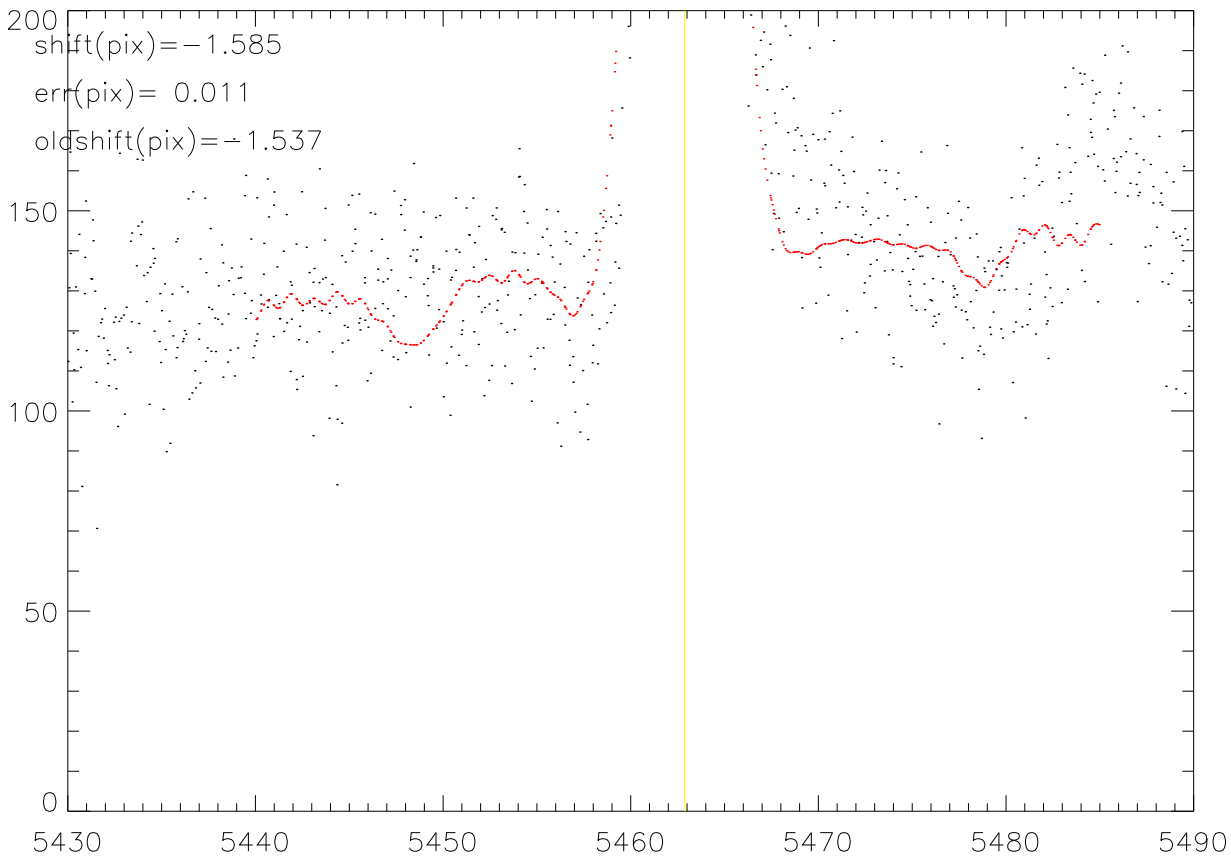

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013178.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 4.579
Max value = 6.999
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:21:23 2008

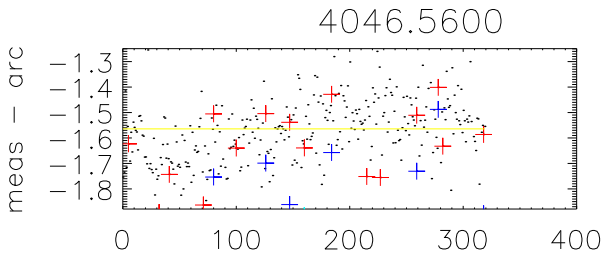

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013178.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

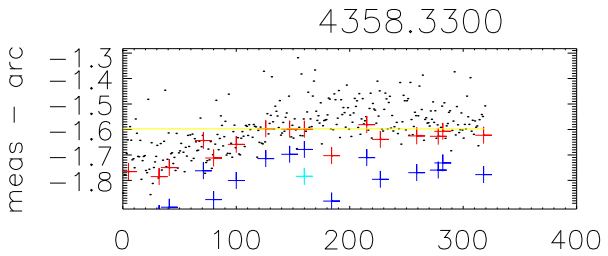

4046.5600
off: −1.98
sig: 0.037
4358.3300
off: −1.80
sig: 0.013
5460.9400
off: −1.54
sig: 0.009
5577.3390
off: −1.55
sig: 0.003
5889.9500
off: −1.51
sig: 0.008
5895.9240
off: −1.49
sig: 0.010

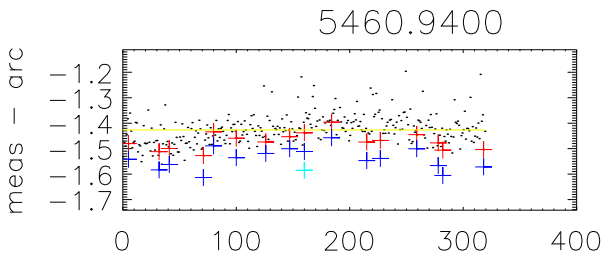

shift(pix)=−1.906
err(pix)= 0.047
oldshift(pix)=−1.978
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

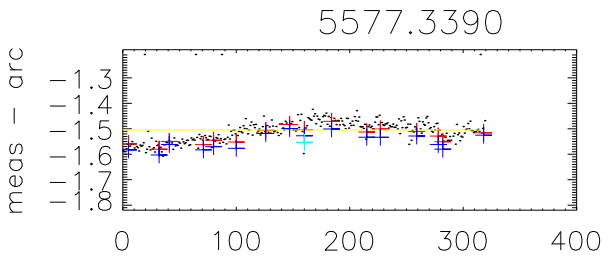

shift(pix)=−1.784
err(pix)= 0.015
oldshift(pix)=−1.802
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

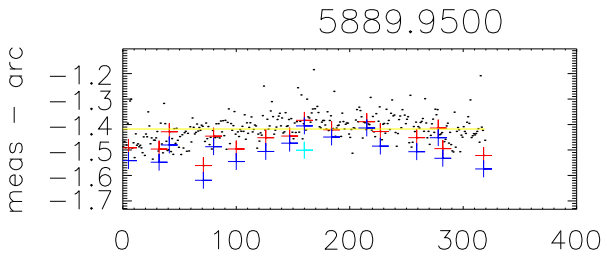

shift(pix)=−1.585
err(pix)= 0.011
oldshift(pix)=−1.537
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

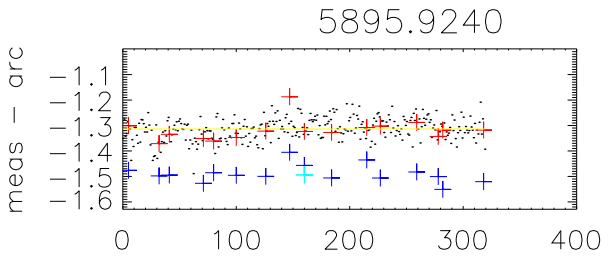

4046.5600
meas − arc
−1.3
−1.4
−1.5
−1.6
−1.7
−1.8
0
100
200
300
400

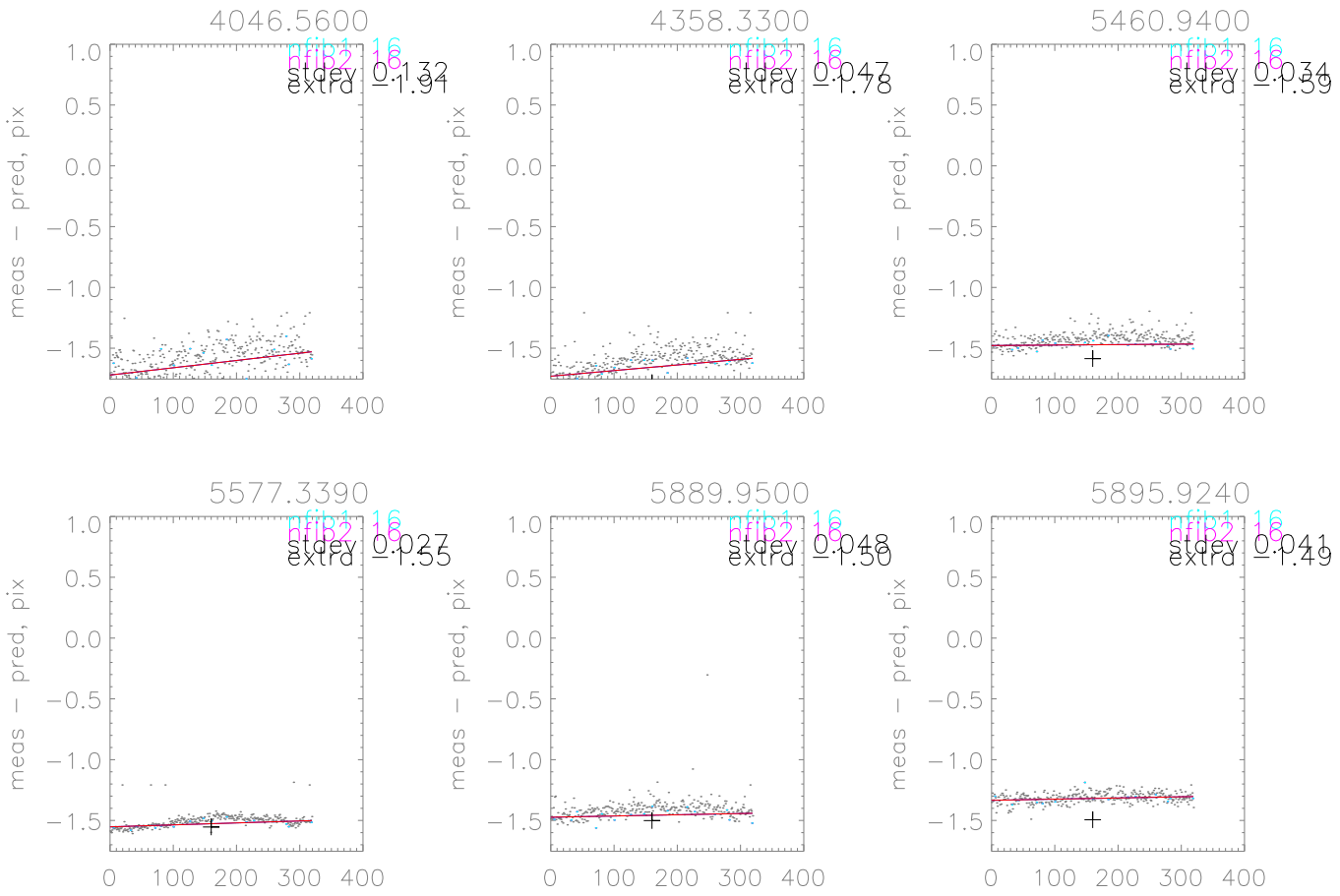

4358.3300
meas − arc
−1.3
−1.4
−1.5
−1.6
−1.7
−1.8
0
100
200
300
400

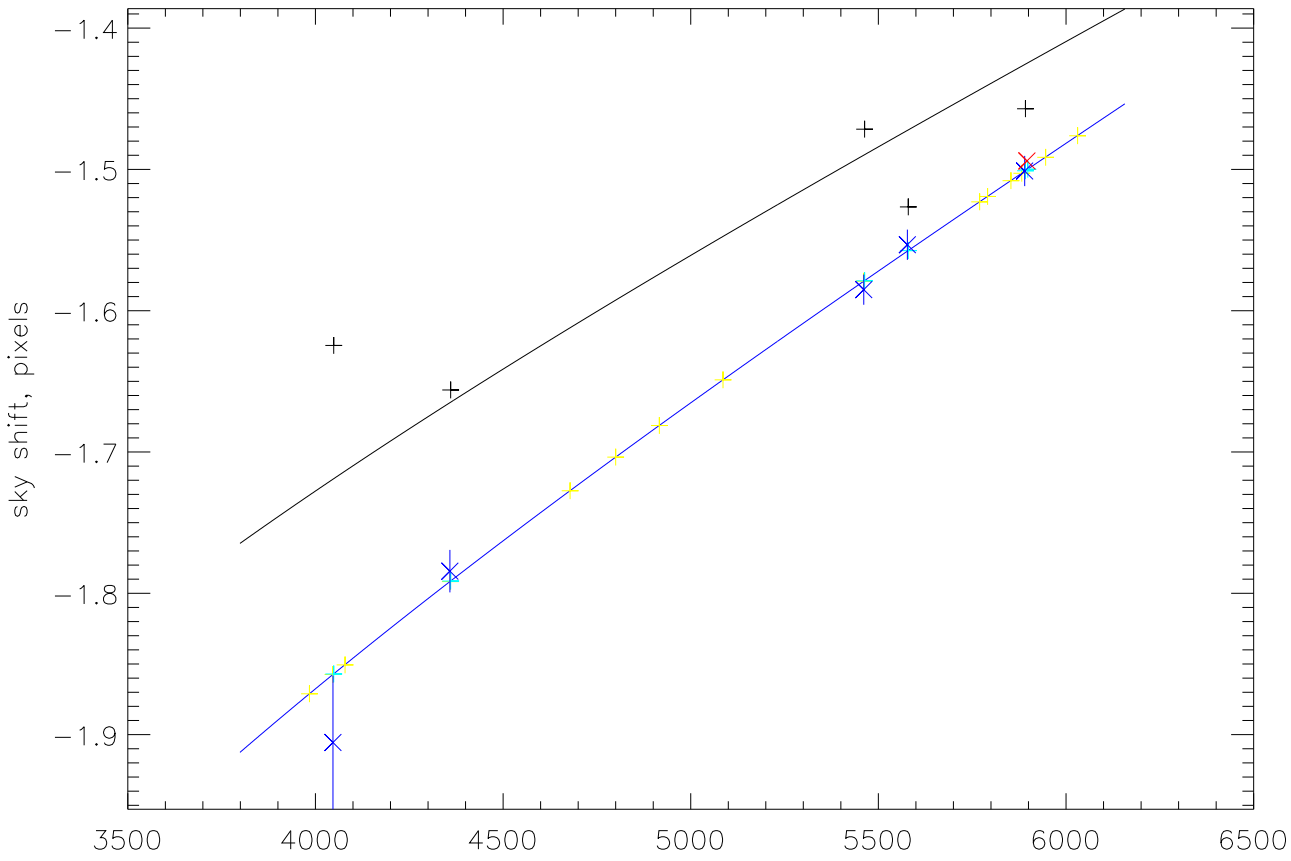

5460.9400
meas − arc
−1.2
−1.3
−1.4
−1.5
−1.6
−1.7
0
100
200
300
400

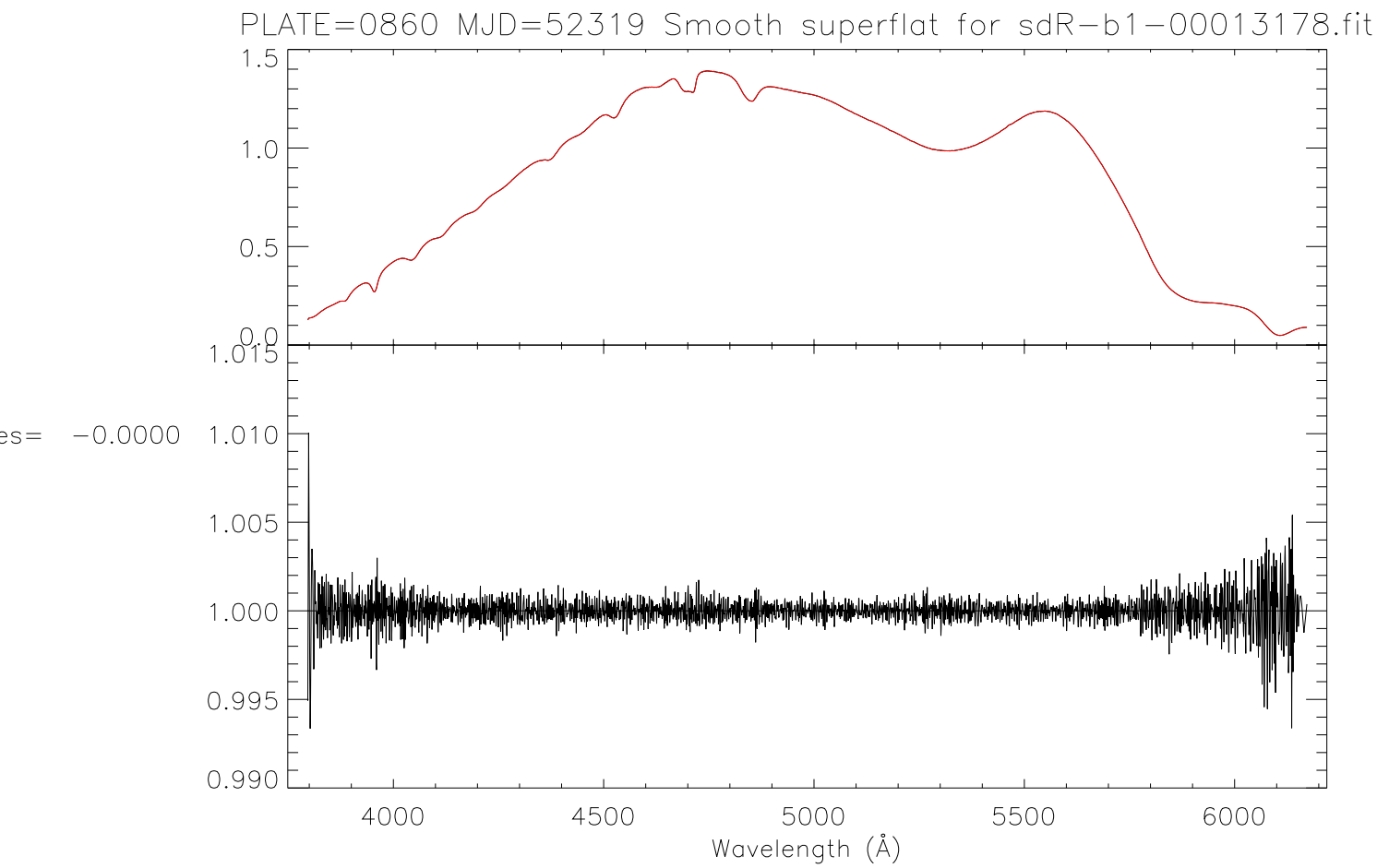

5577.3390
meas − arc
−1.3
−1.4
−1.5
−1.6
−1.7
−1.8
0
100
200
300
400

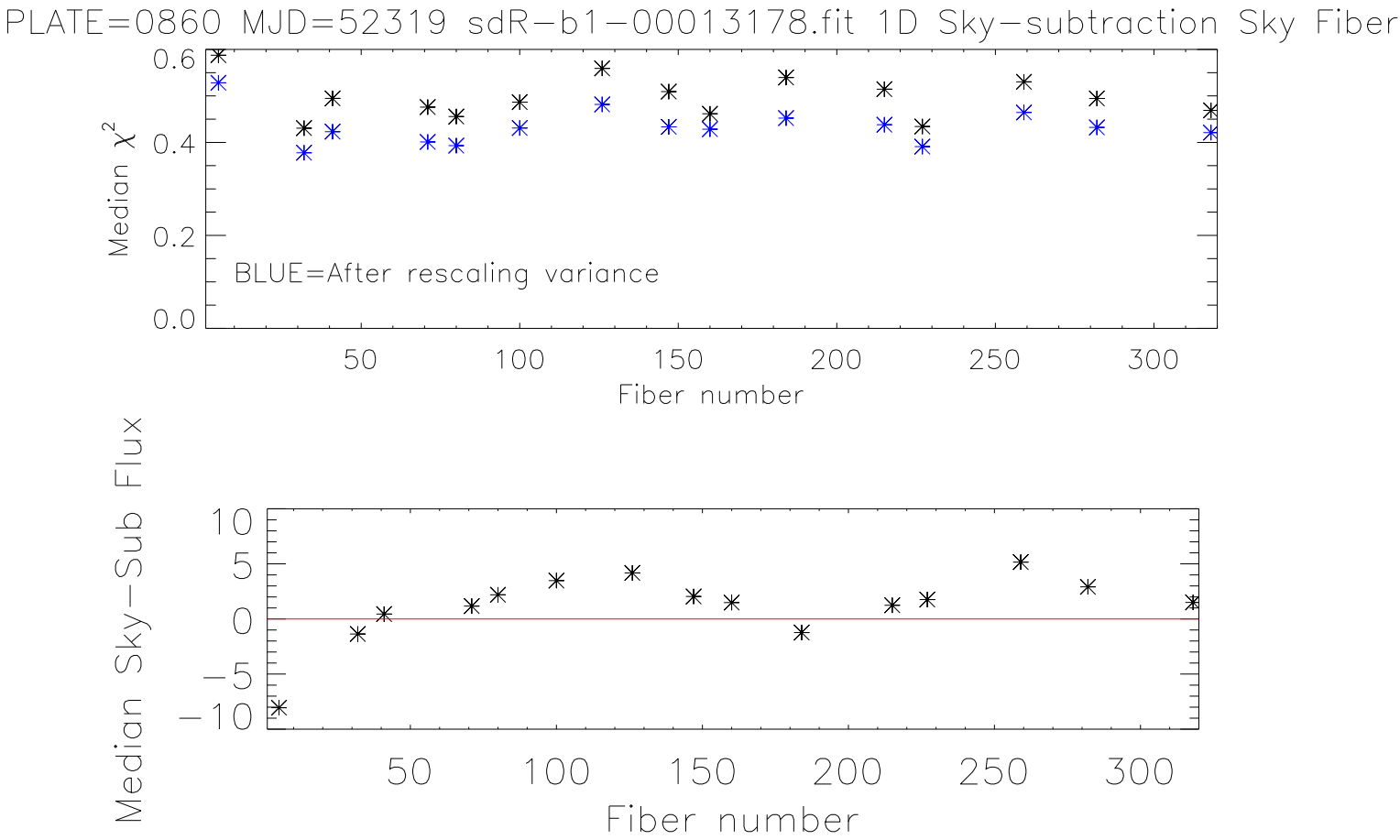

5889.9500
meas − arc
−1.2
−1.3
−1.4
−1.5
−1.6
−1.7
0
100
200
300
400

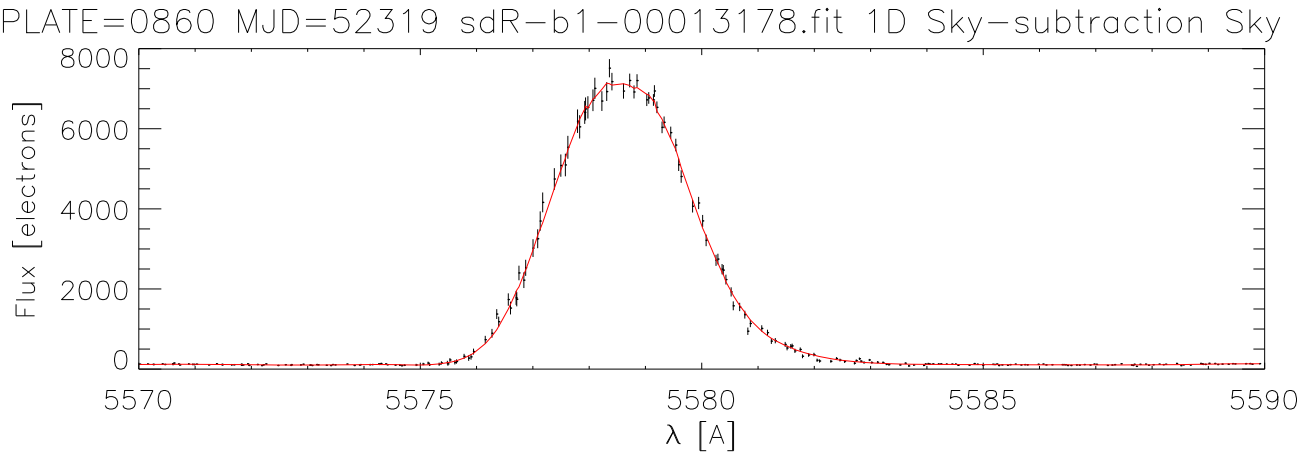

5895.9240
meas − arc
−1.1
−1.2
−1.3
−1.4
−1.5
−1.6
0
100
200
300
400

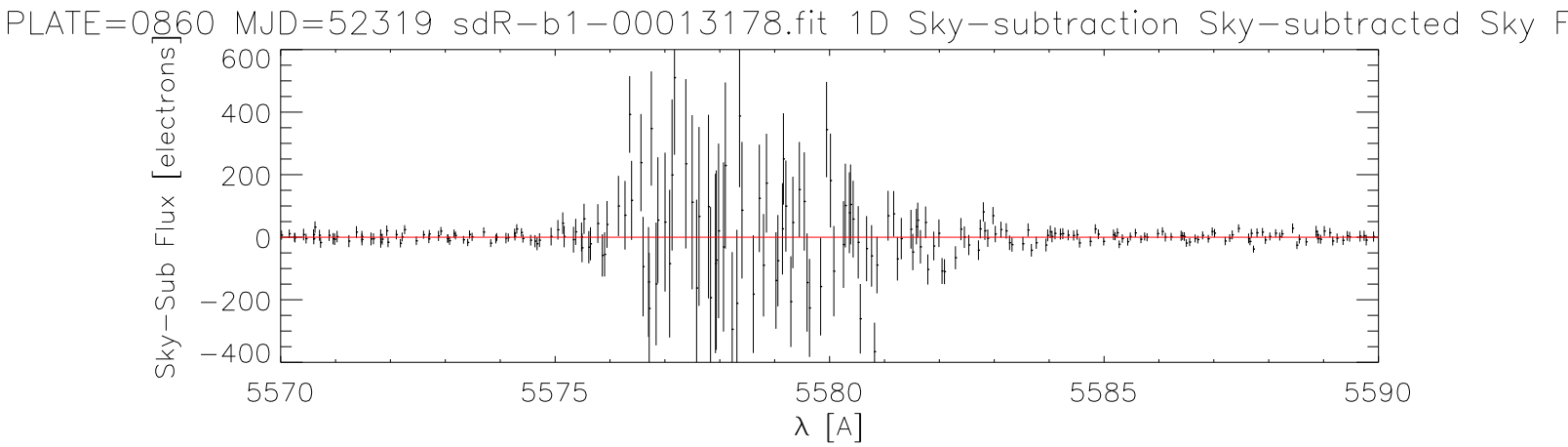

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
−1.5
0
100
200
300
400
nfib1 16
nfib2 16
stdev 0.132
extrd −1.94
stdev 0.047
extrd −1.78
stdev 0.034
extrd −1.59
stdev 0.027
extrd −1.55
stdev 0.048
extrd −1.50
stdev 0.041
extrd −1.49

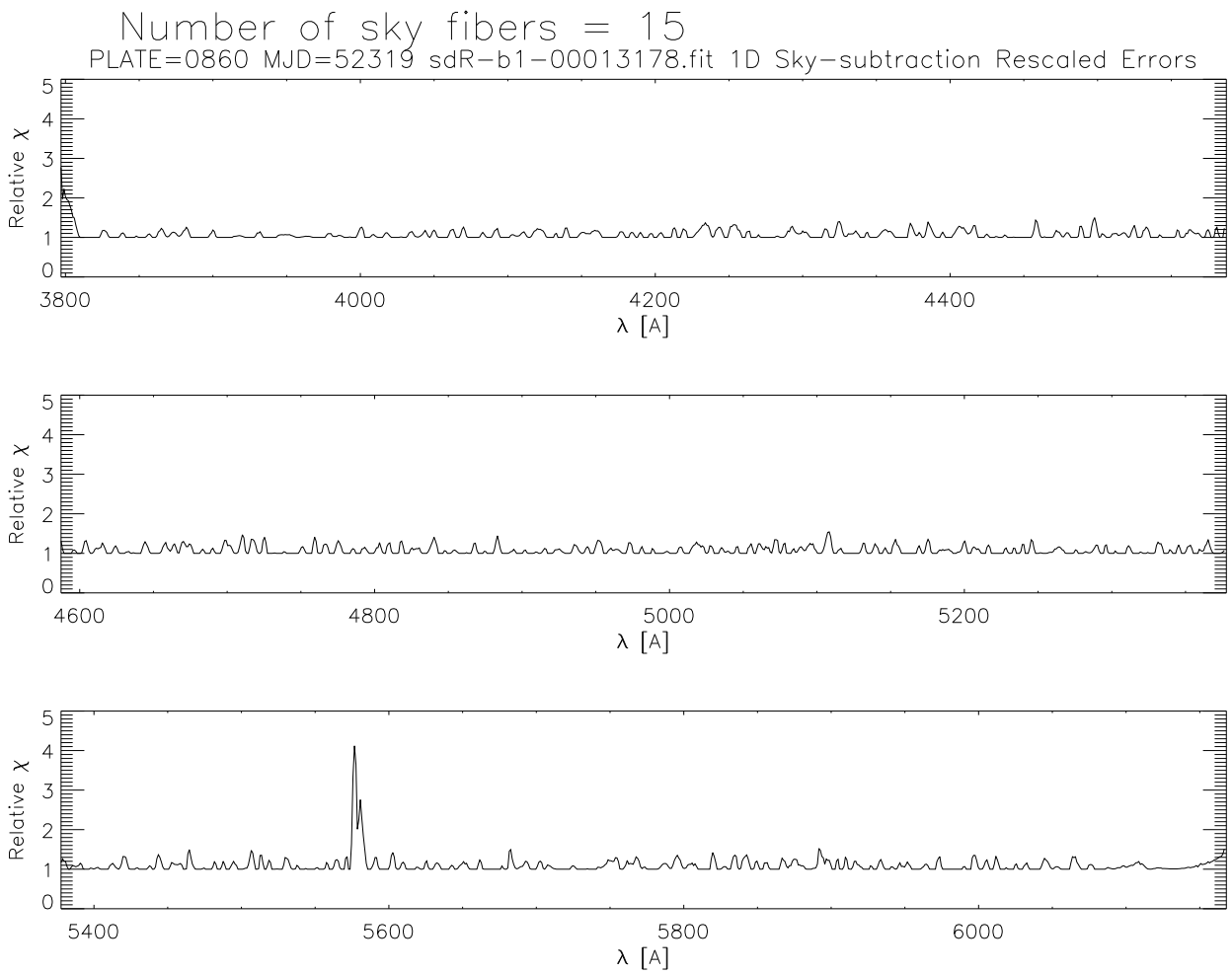

sky shift, pixels
−1.4
−1.5
−1.6
−1.7
−1.8
−1.9
3500
4000
4500
5000
5500
6000
6500

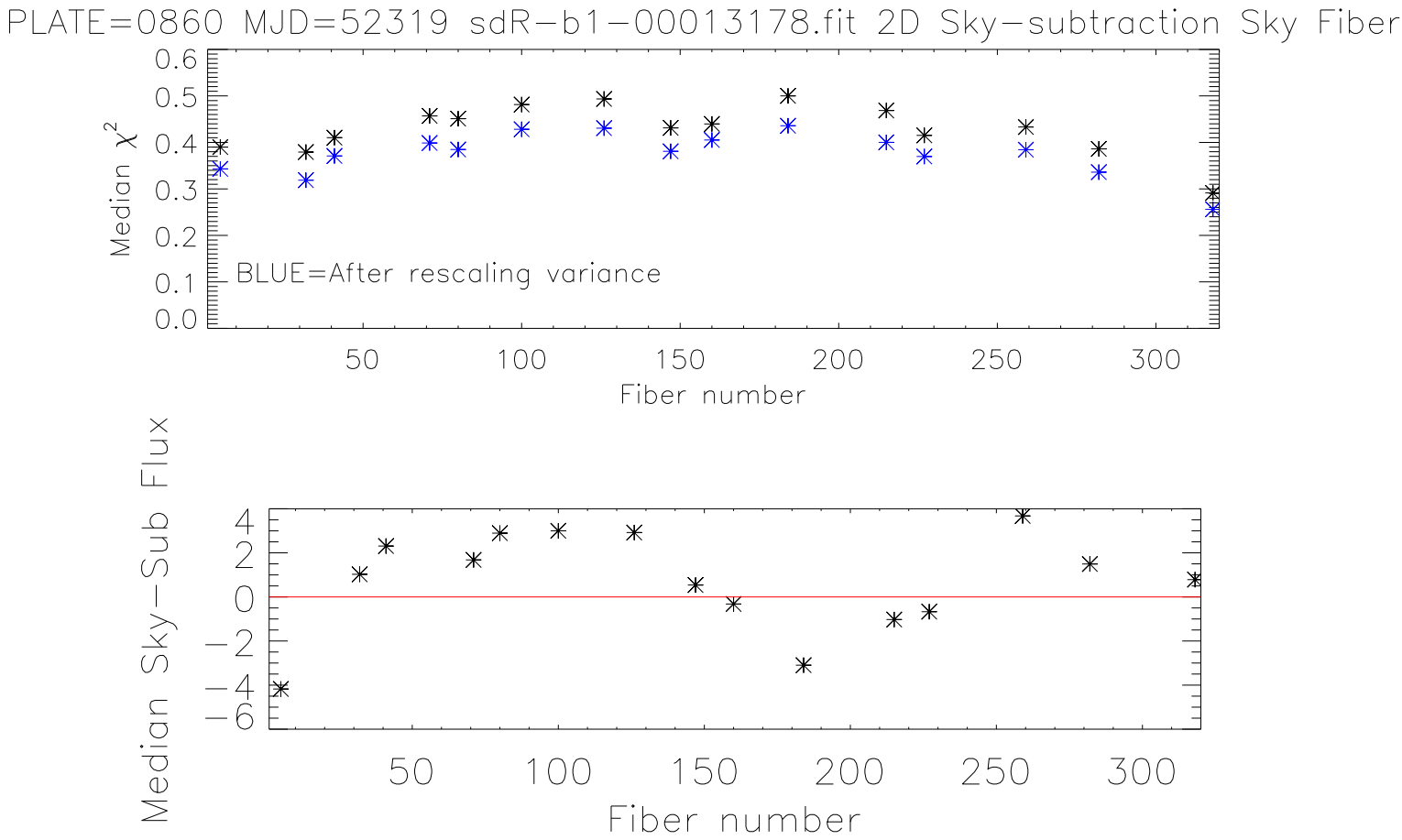

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013178.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

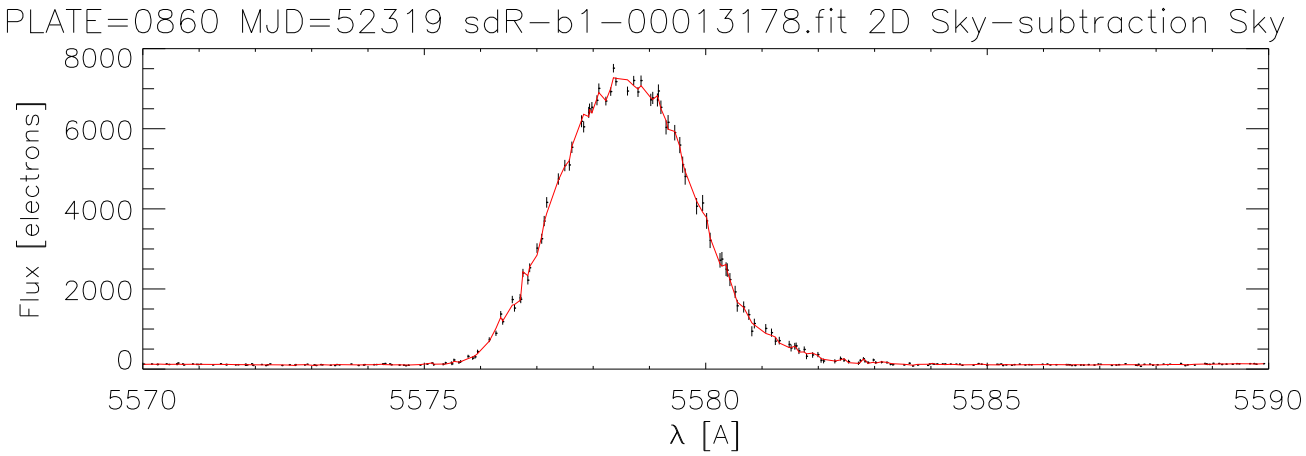

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

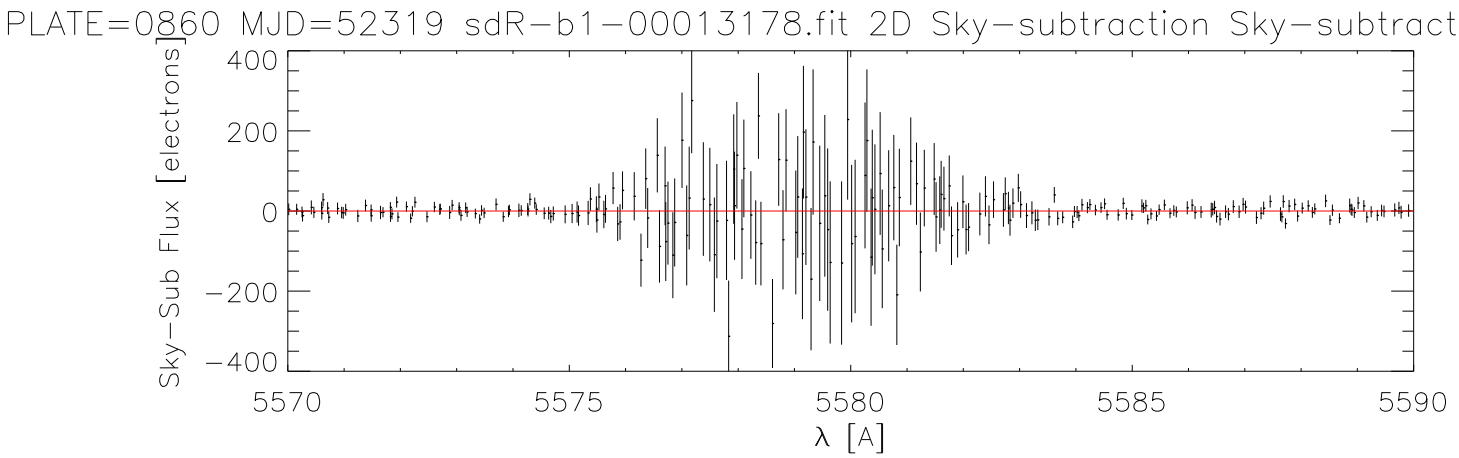

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

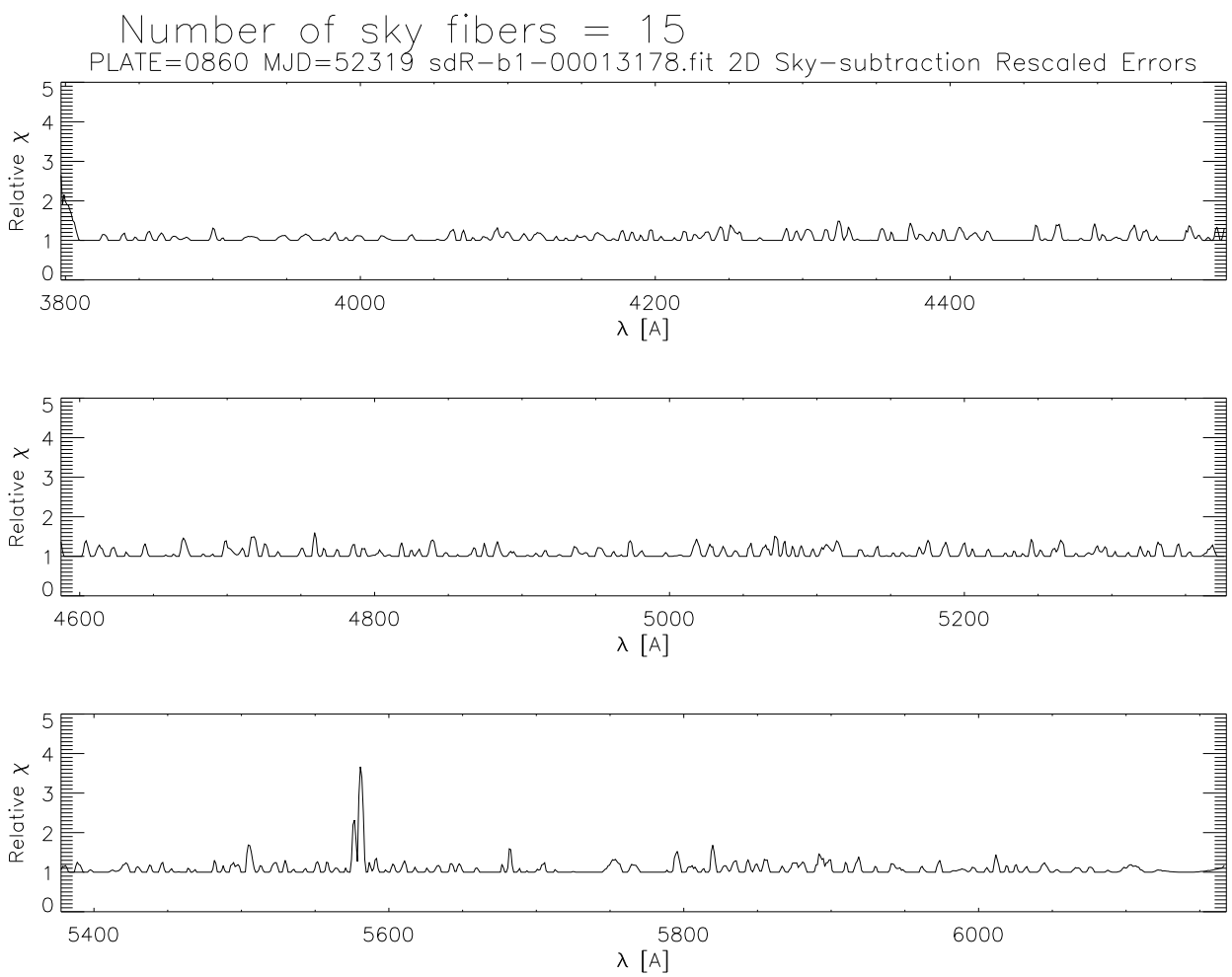

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

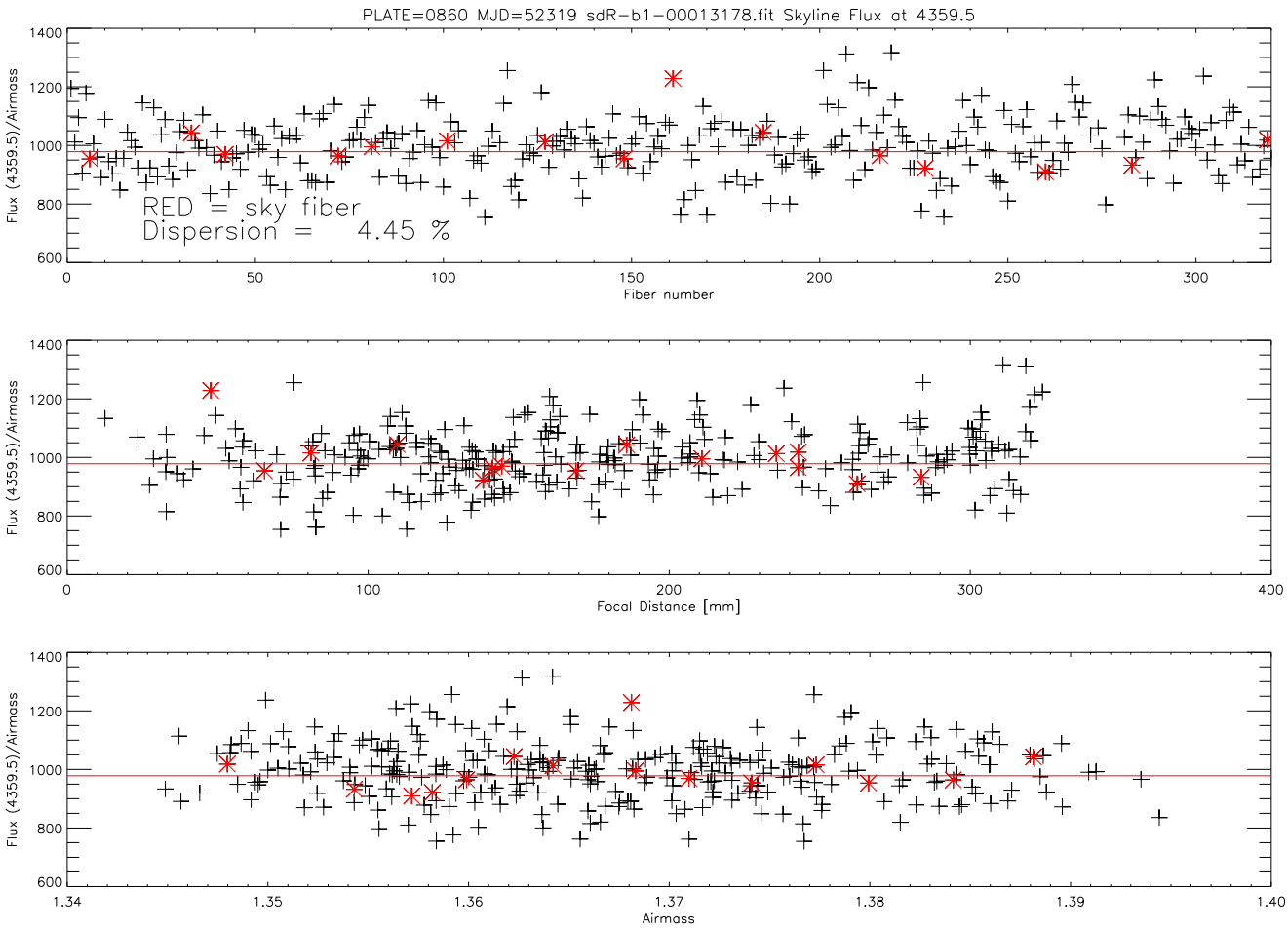

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013178.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

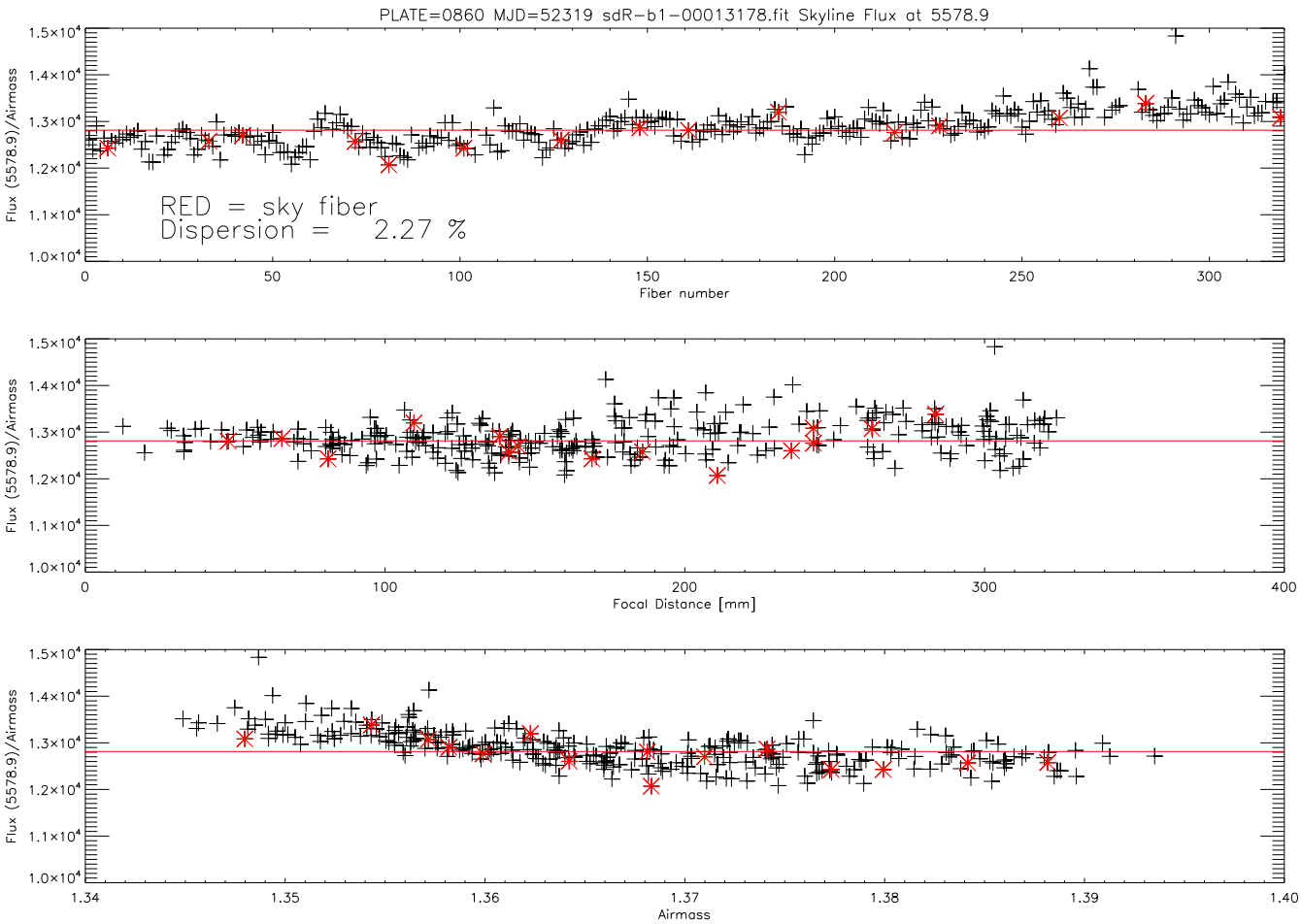

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

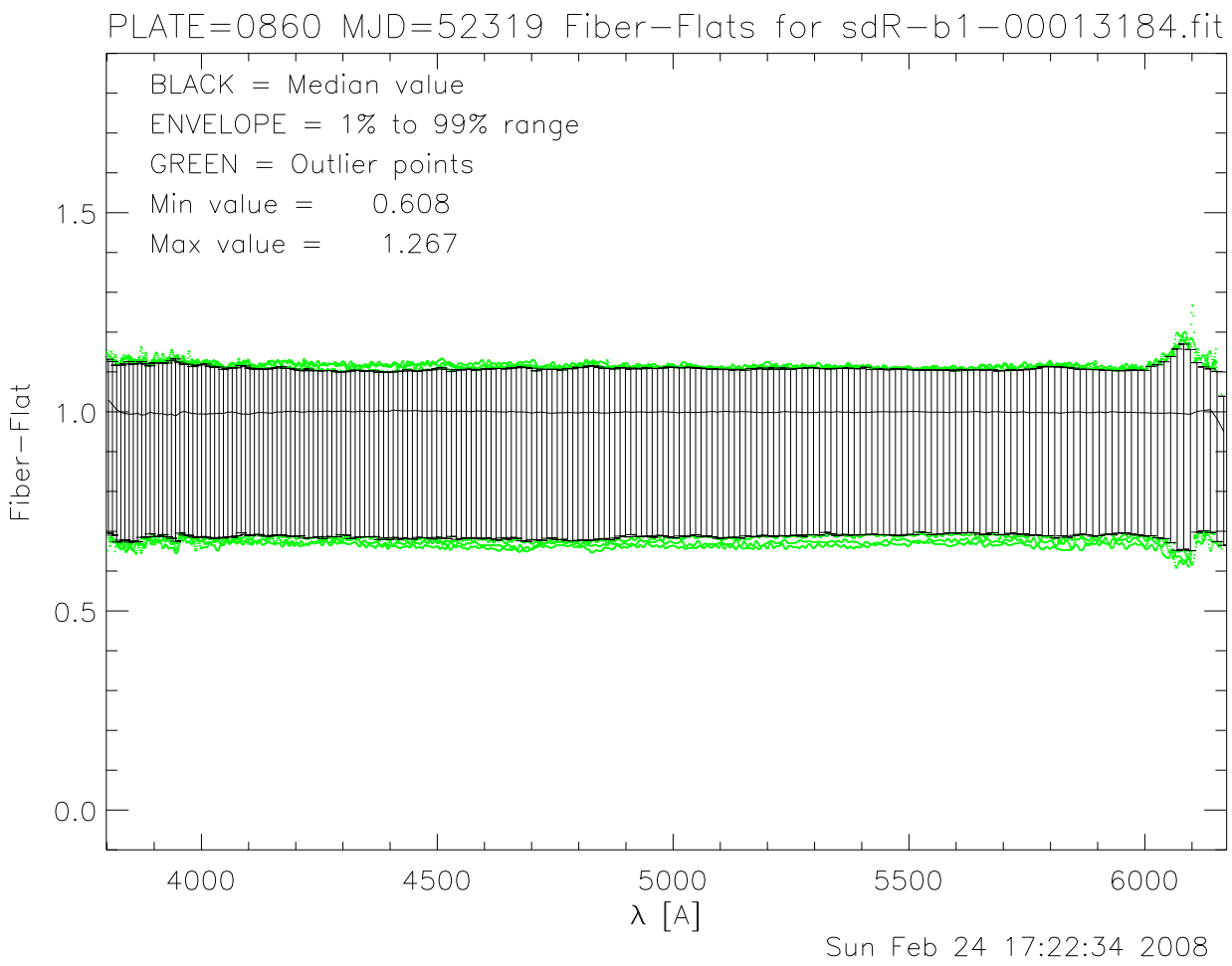

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

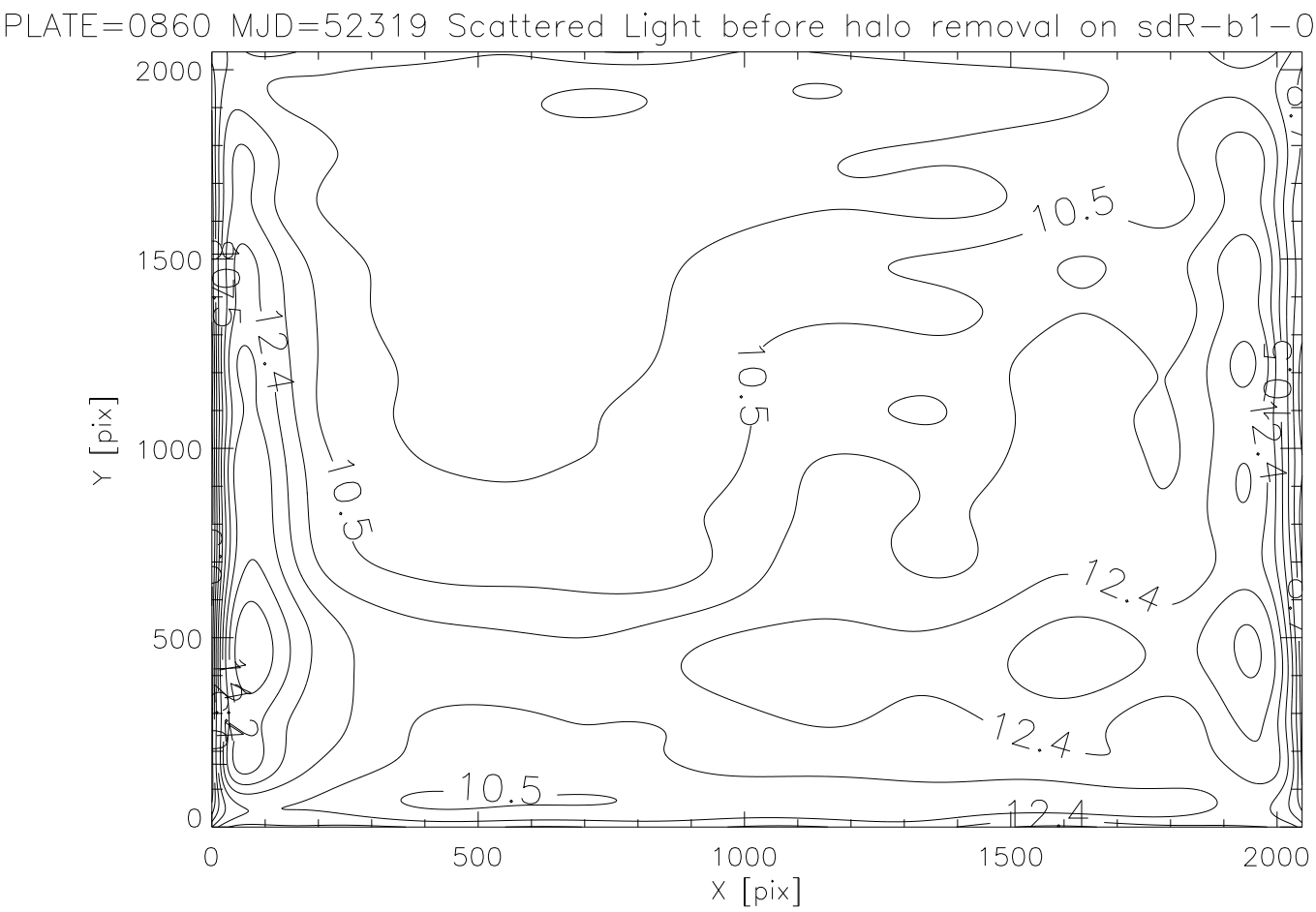

PLATE=0860 MJD=52319 sdR-b1-00013178.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

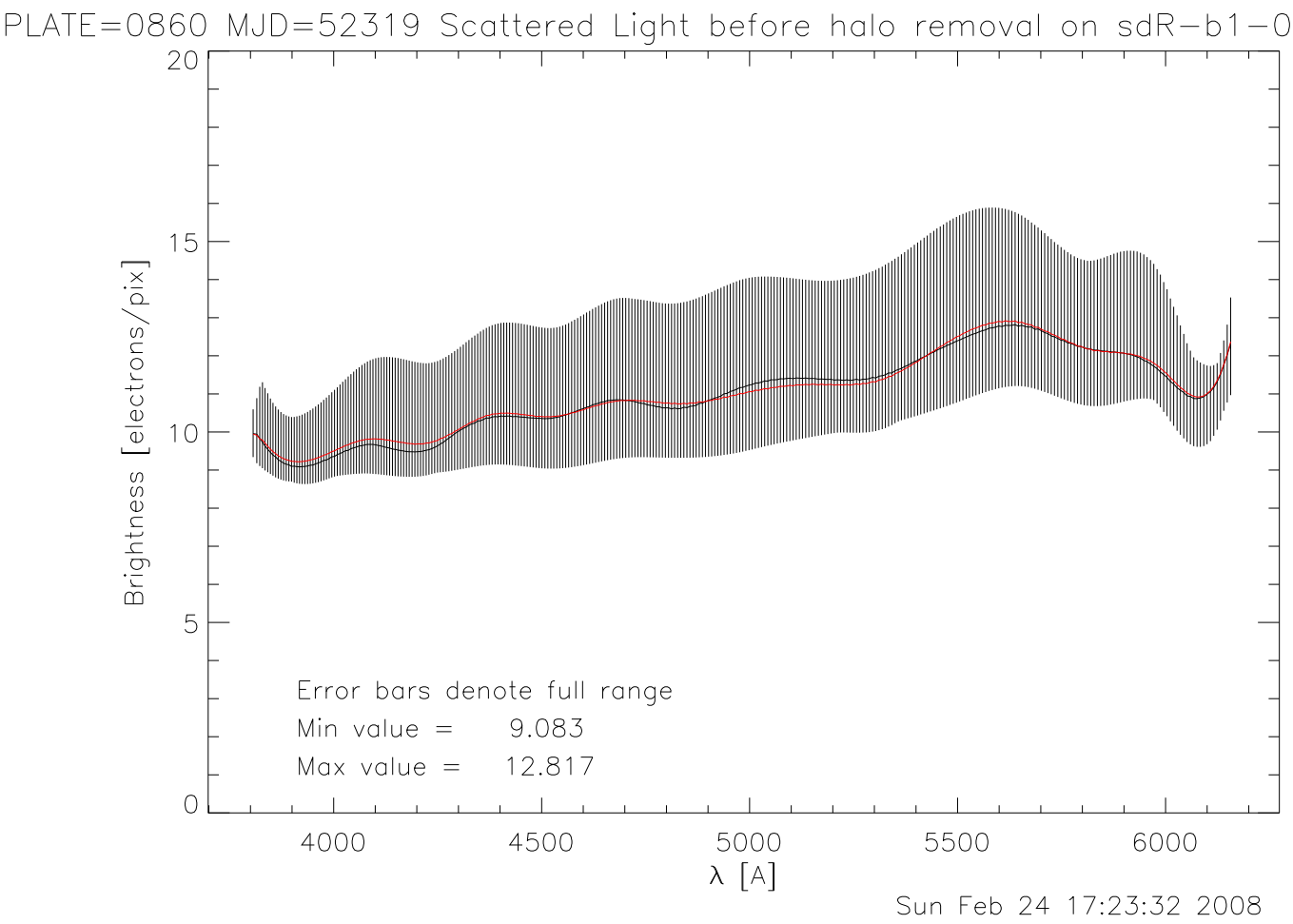

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013178.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

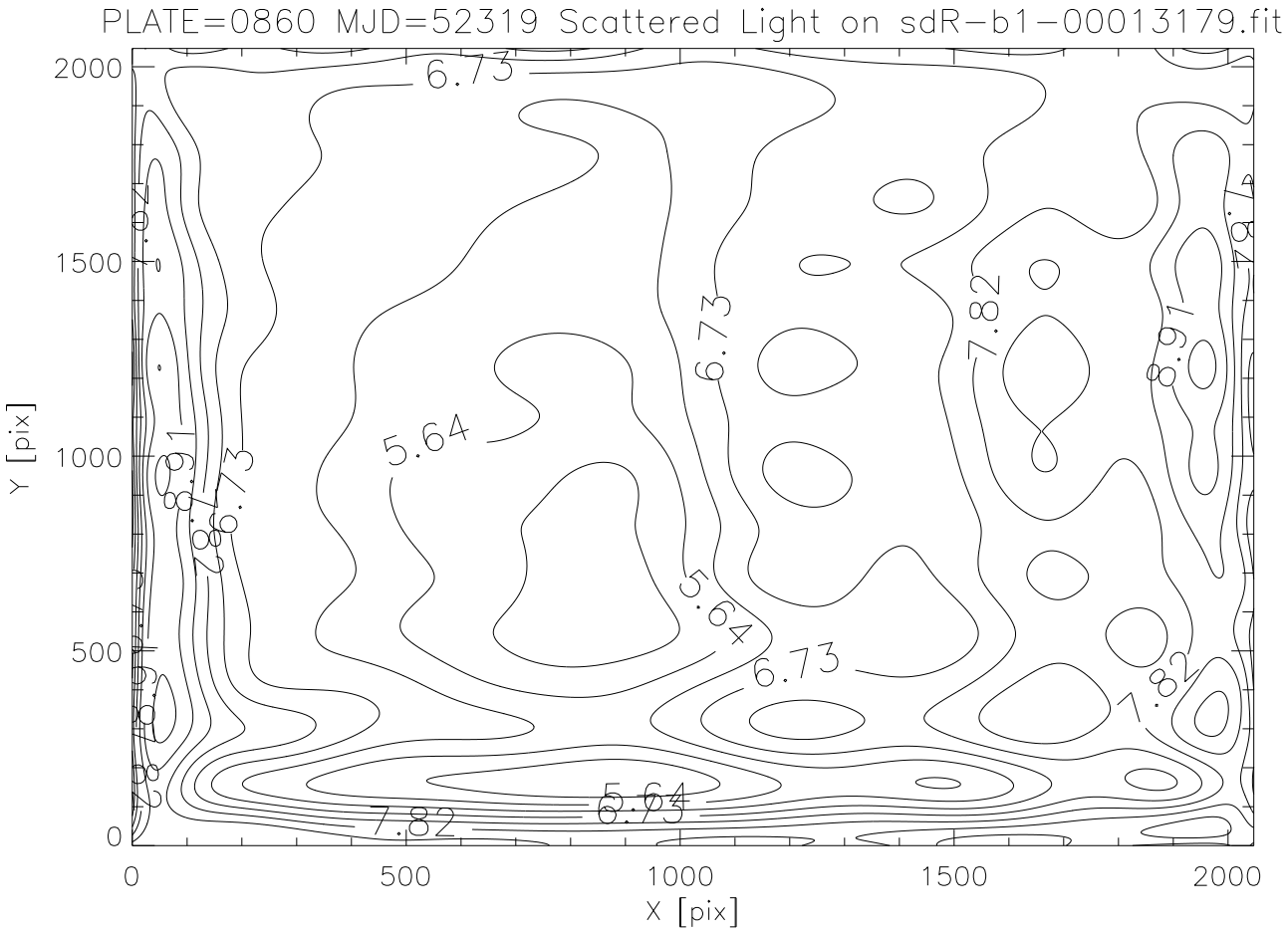

PLATE=0860 MJD=52319 sdR-b1-00013178.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 4.45 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

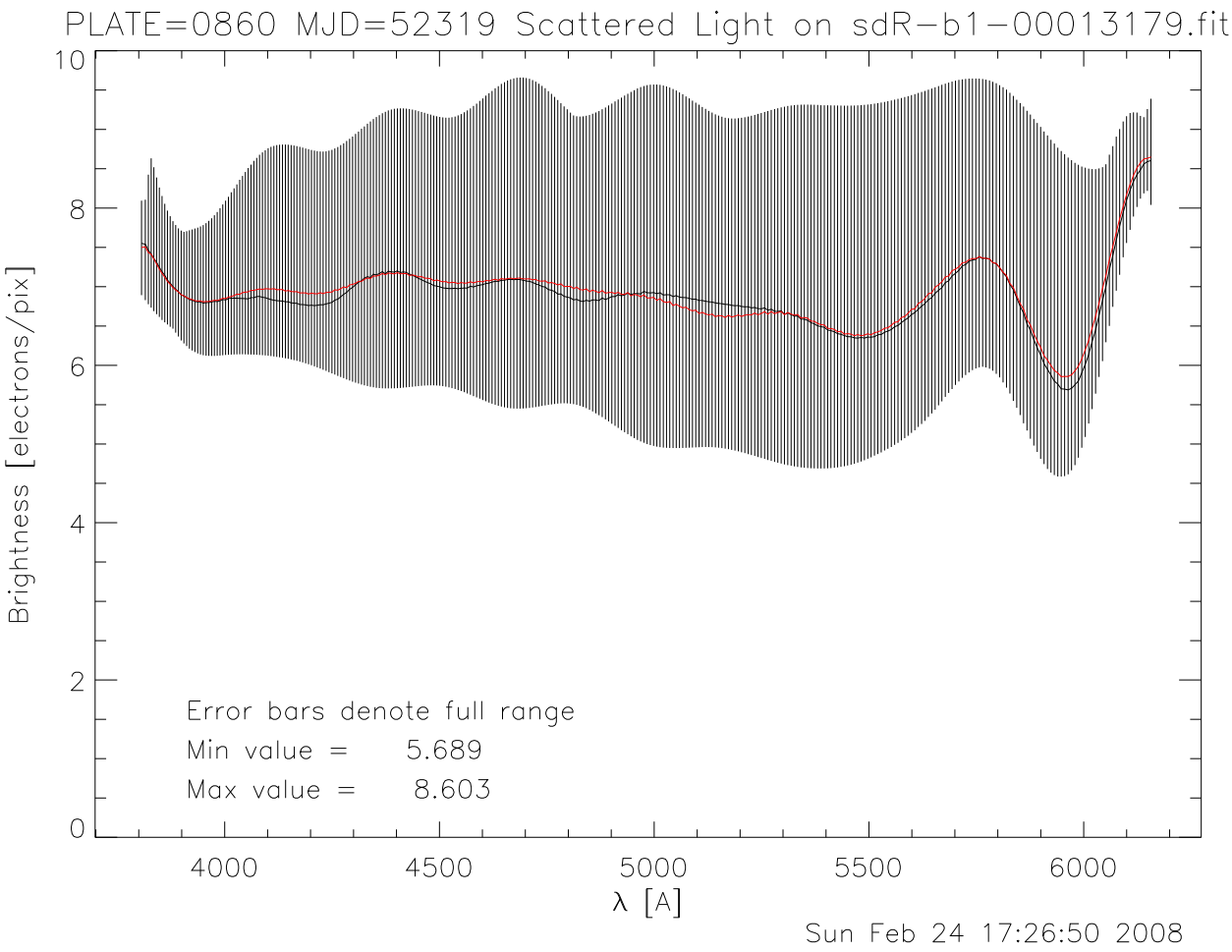

PLATE=0860 MJD=52319 sdR-b1-00013178.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.27 %
Fiber number
Focal Distance [mm]
Airmass

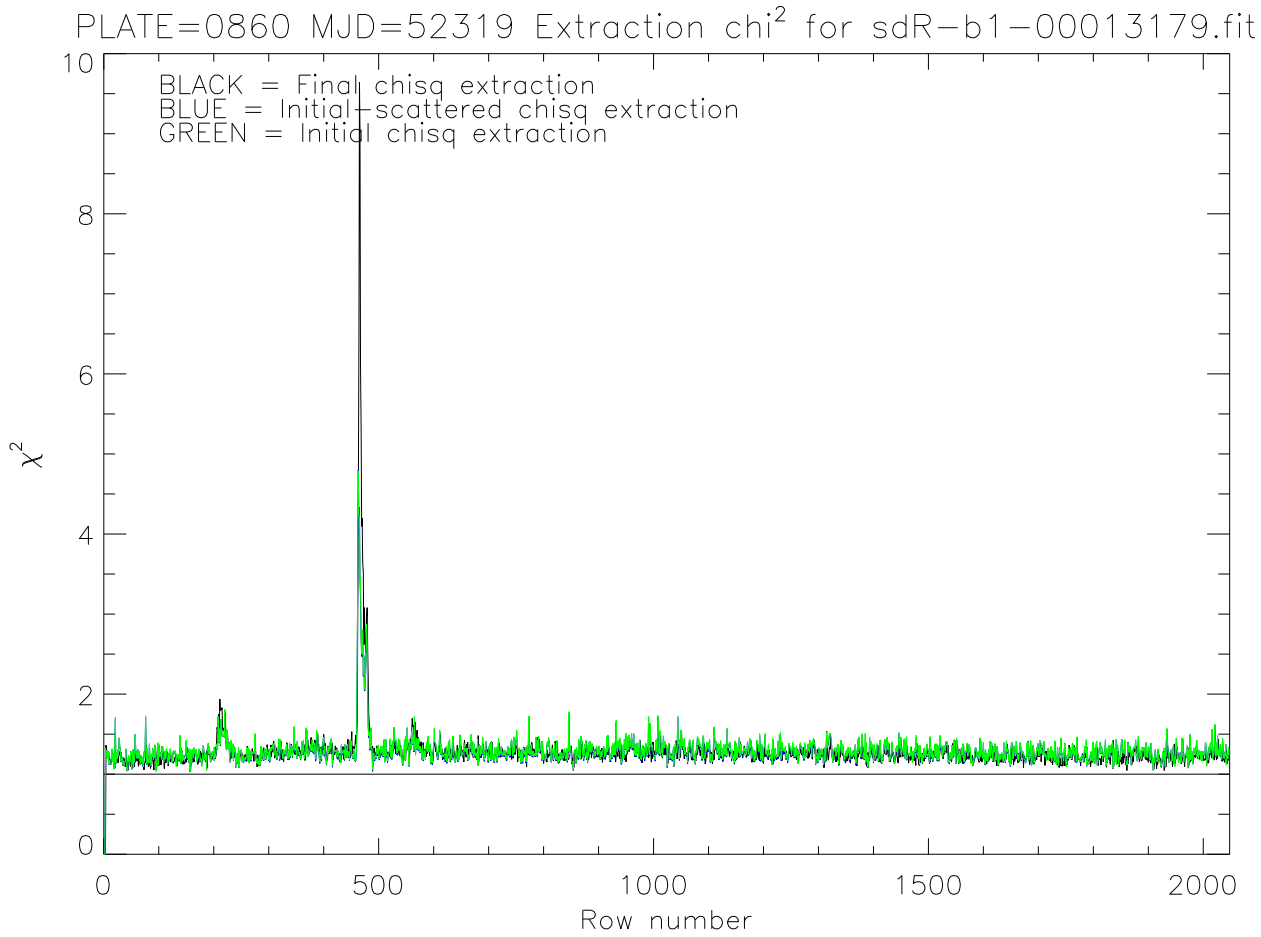

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:22:34 2008

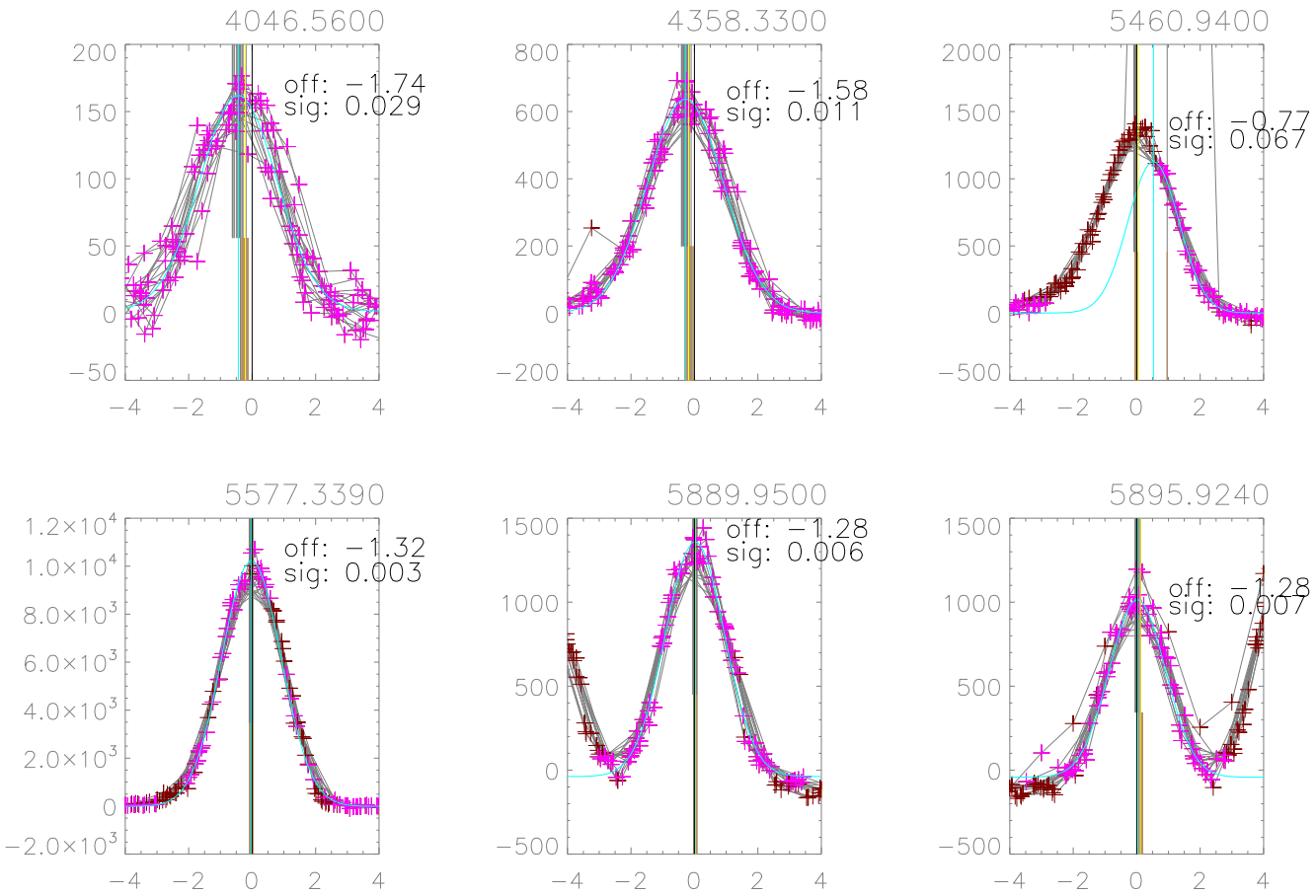

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013179.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
12.4

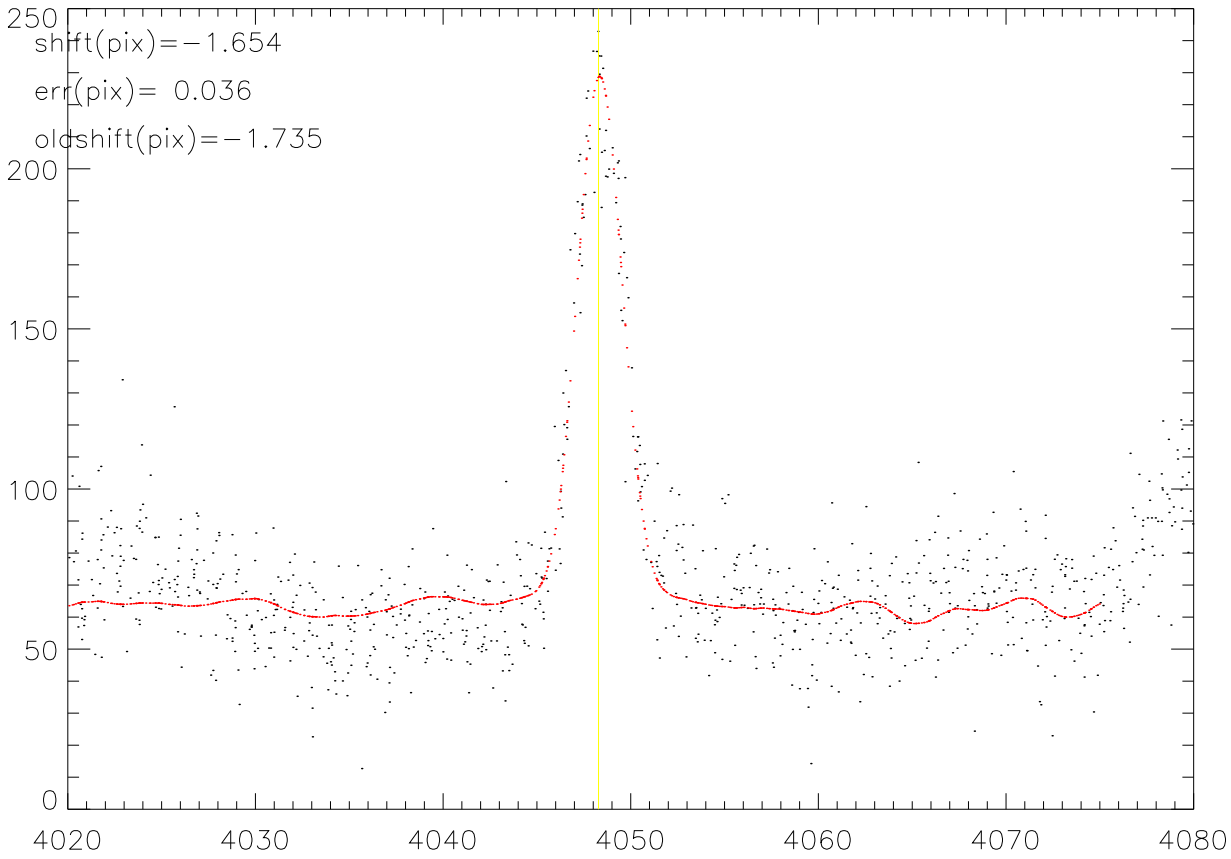

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013179.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.083
Max value = 12.817
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:23:32 2008

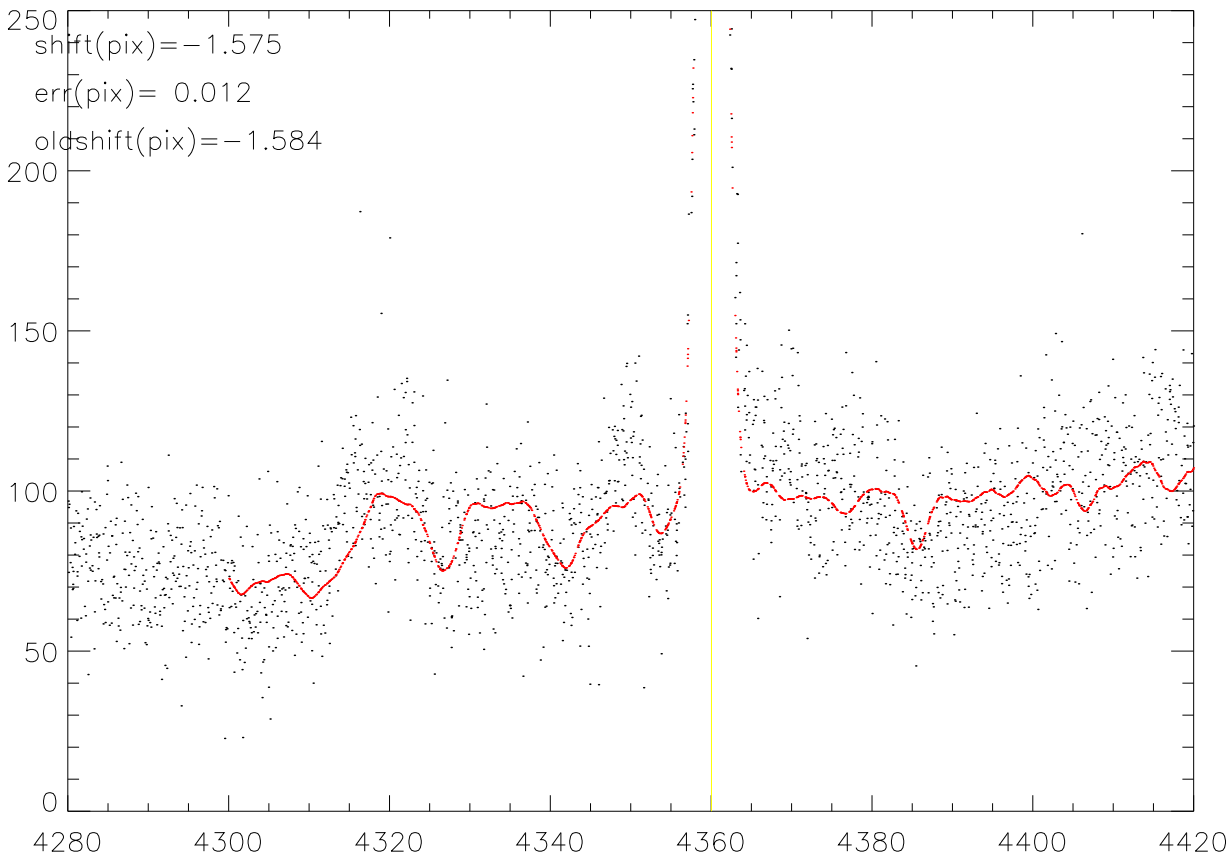

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013179.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.73
5.64
7.82
8.91

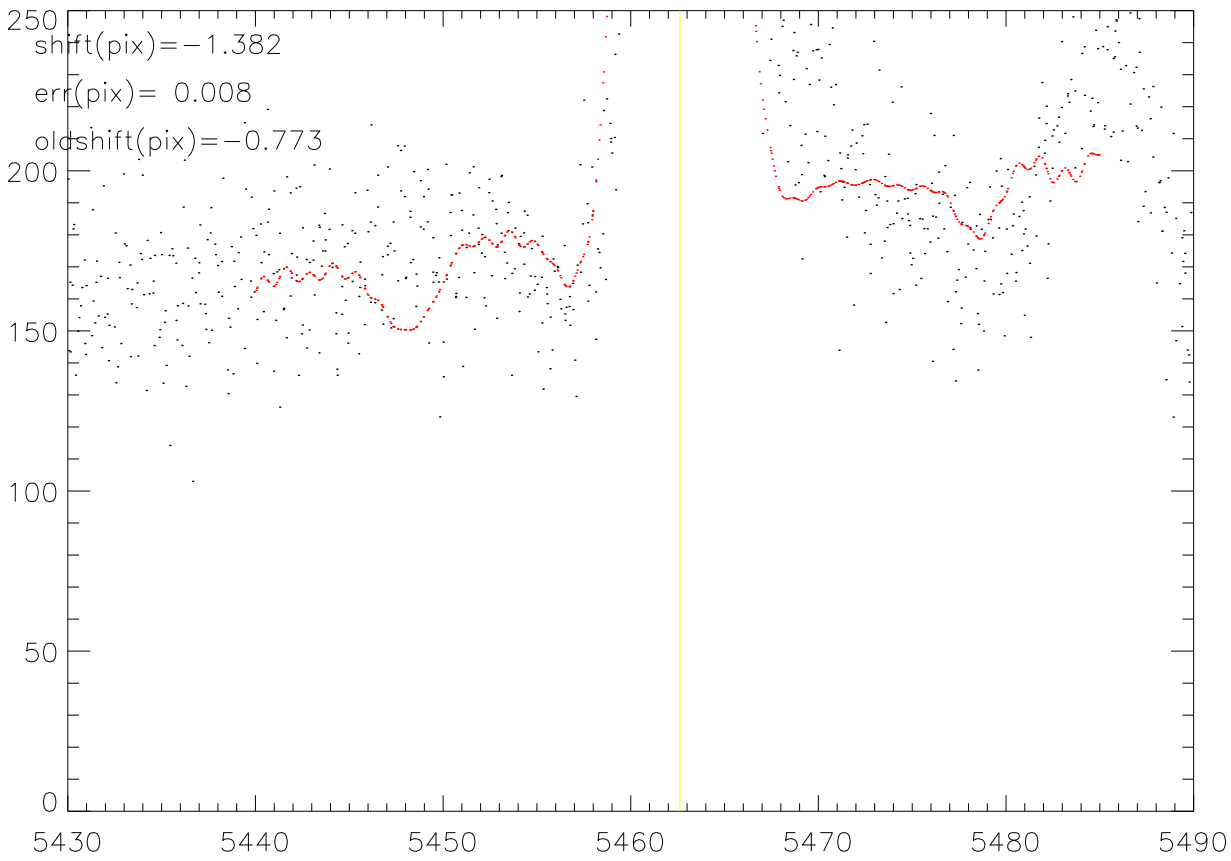

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013179.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.689
Max value = 8.603
Sun Feb 24 17:26:50 2008

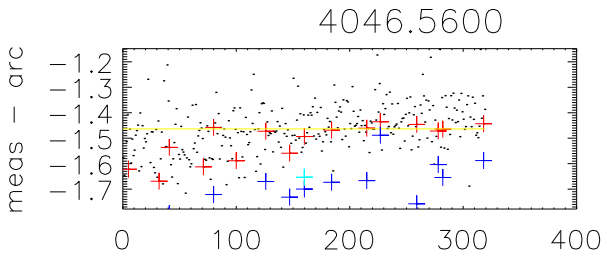

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013179.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

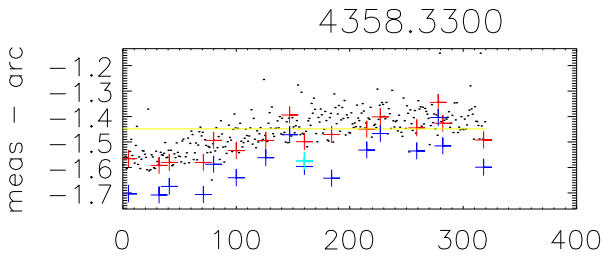

4046.5600
off: −1.74
sig: 0.029
4358.3300
off: −1.58
sig: 0.011
5460.9400
off: −0.77
sig: 0.067
5577.3390
off: −1.32
sig: 0.003
5889.9500
off: −1.28
sig: 0.006
5895.9240
off: −1.28
sig: 0.007

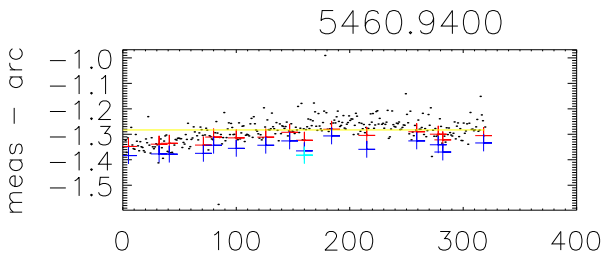

shift(pix)=−1.654
err(pix)= 0.036
oldshift(pix)=−1.735
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

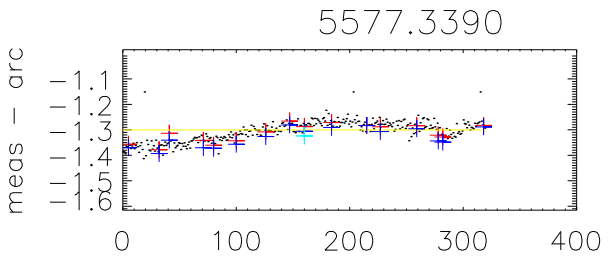

shift(pix)=−1.575
err(pix)= 0.012
oldshift(pix)=−1.584
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

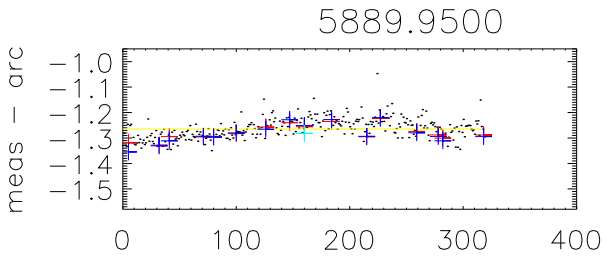

shift(pix)=−1.382
err(pix)= 0.008
oldshift(pix)=−0.773
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

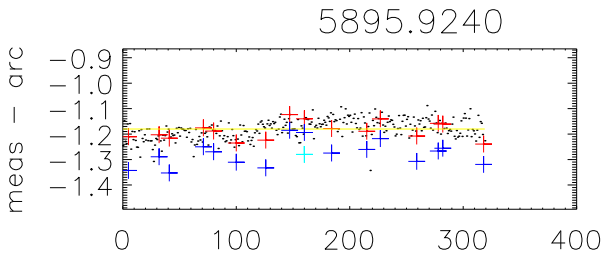

4046.5600
meas − arc
−1.2
−1.3
−1.4
−1.5
−1.6
−1.7
0
100
200
300
400

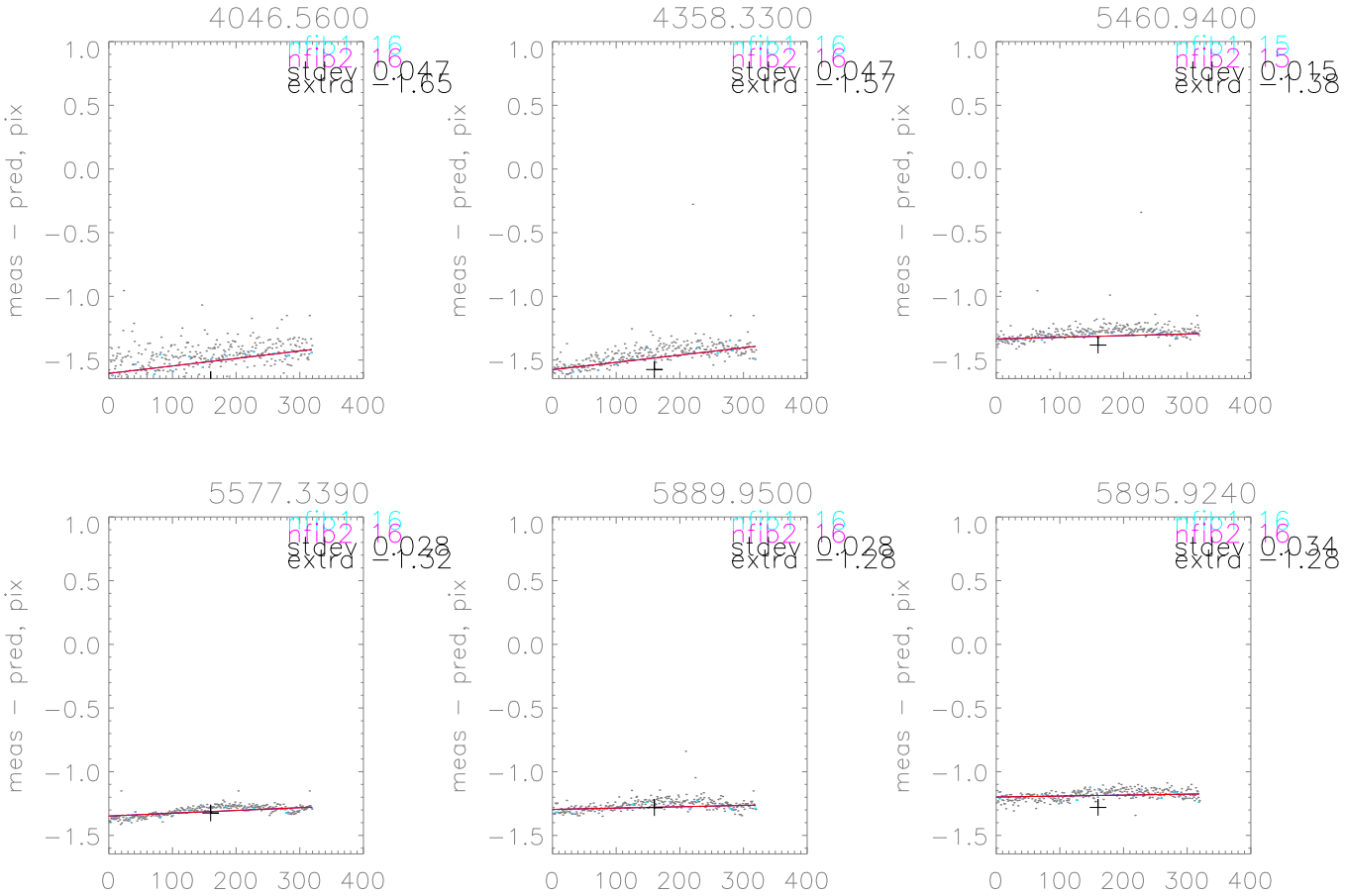

4358.3300
meas − arc
−1.2
−1.3
−1.4
−1.5
−1.6
−1.7
0
100
200
300
400

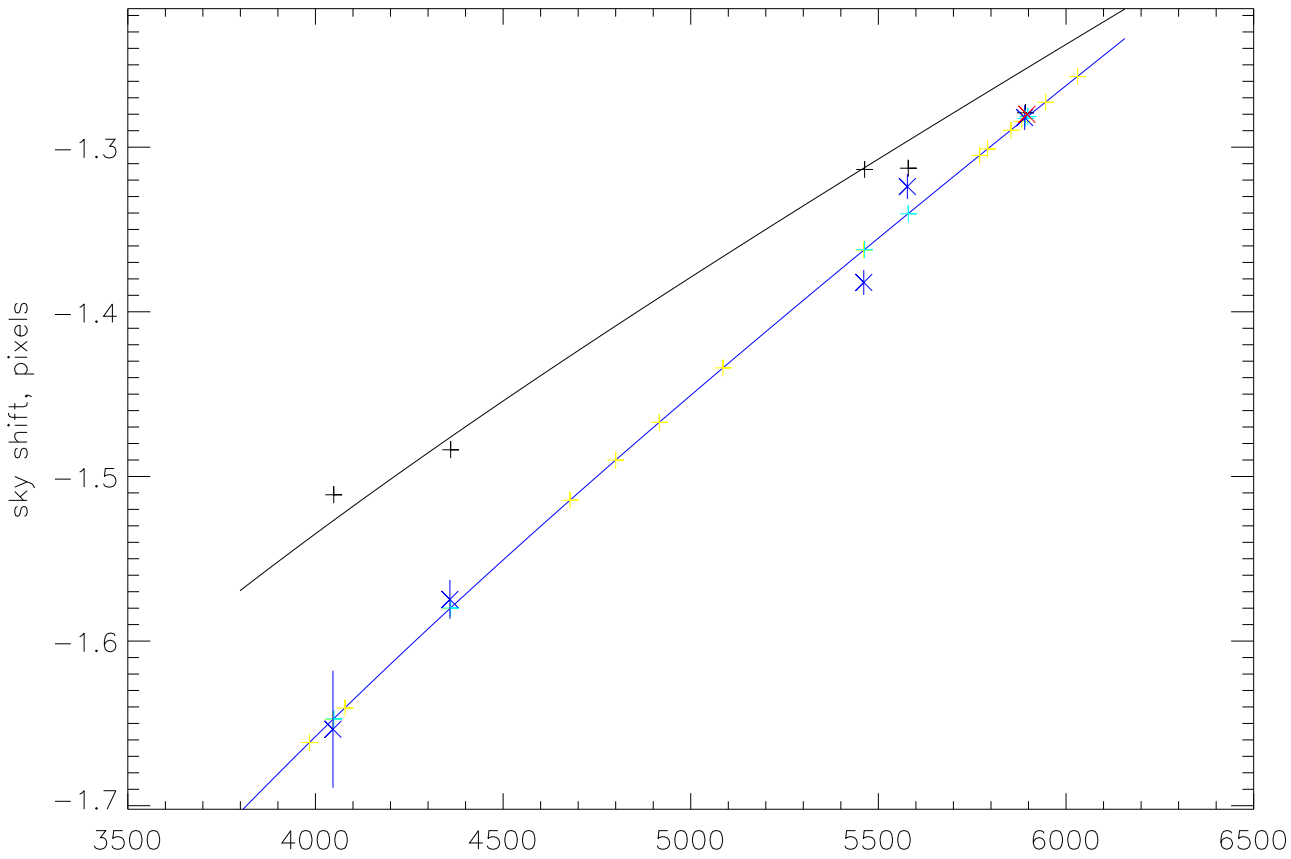

5460.9400
meas − arc
−1.0
−1.1
−1.2
−1.3
−1.4
−1.5
0
100
200
300
400

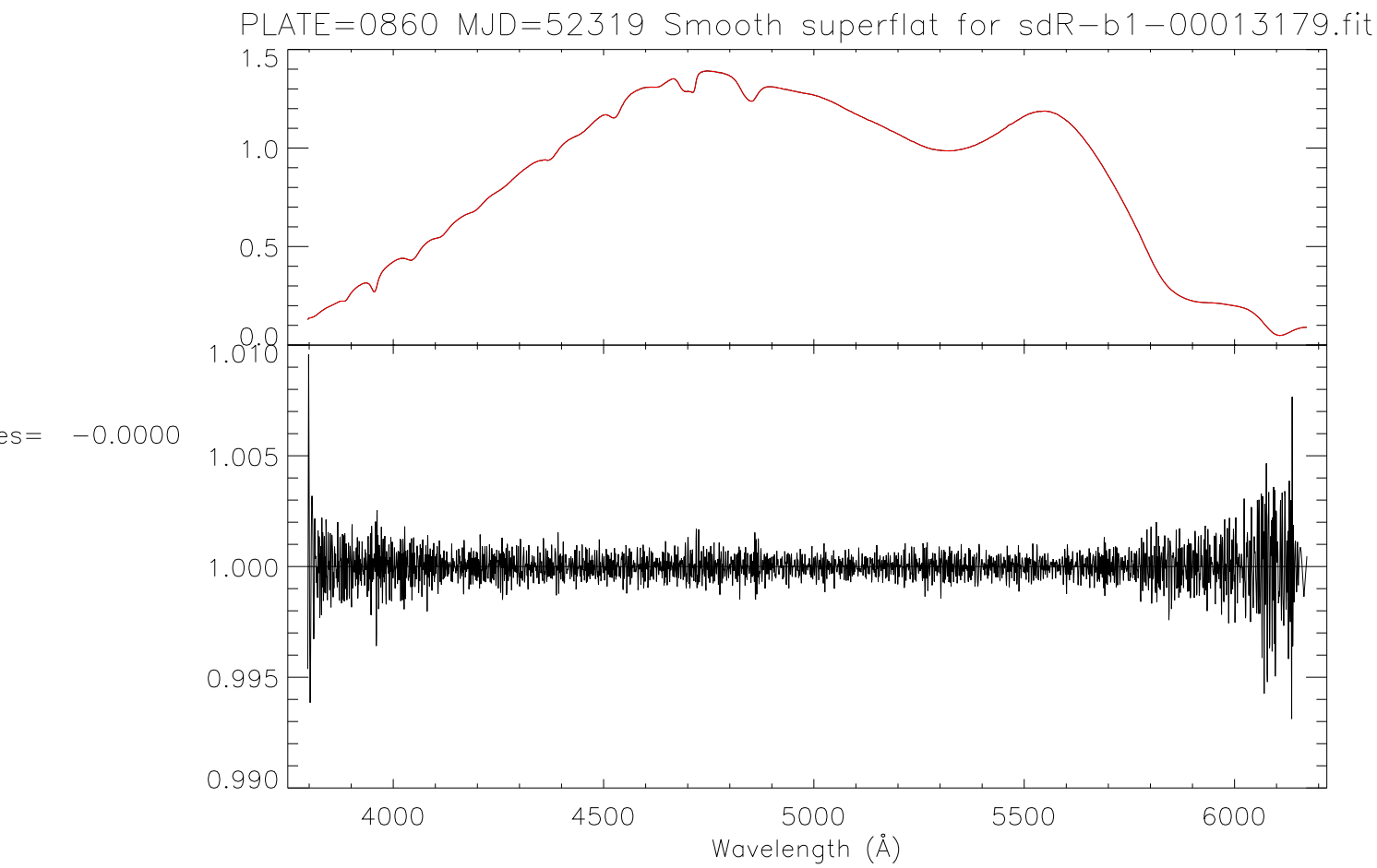

5577.3390
meas − arc
−1.1
−1.2
−1.3
−1.4
−1.5
−1.6
0
100
200
300
400


5889.9500
meas − arc
−1.0
−1.1
−1.2
−1.3
−1.4
−1.5
0
100
200
300
400

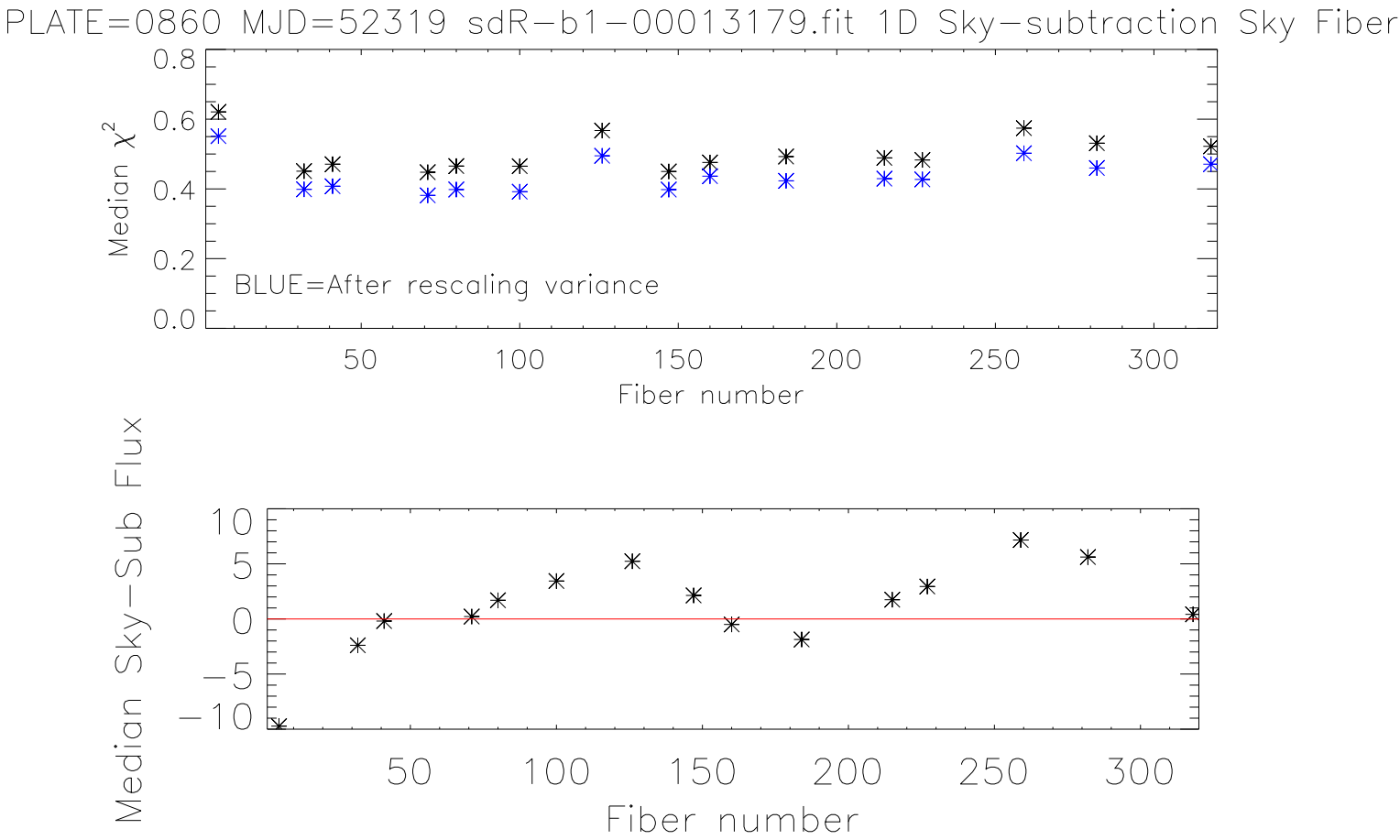

5895.9240
meas − arc
−0.9
−1.0
−1.1
−1.2
−1.3
−1.4
0
100
200
300
400

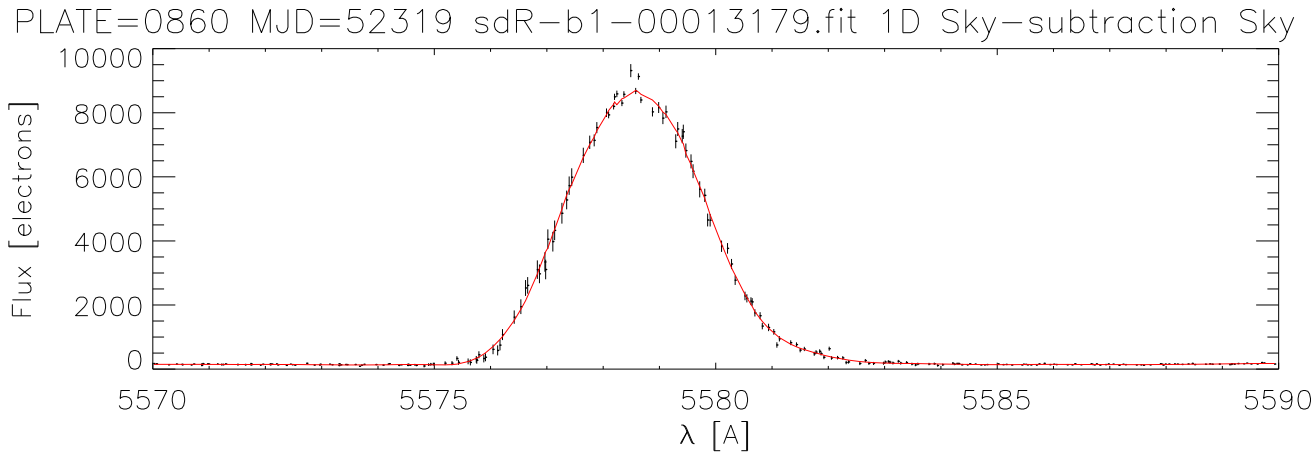

4046.5600
nfib1 16
nfib2 16
stdev 0.047
extrd −1.65
4358.3300
nfib1 16
nfib2 16
stdev 0.047
extrd −1.57
5460.9400
nfib1 15
nfib2 15
stdev 0.015
extrd −1.38
5577.3390
nfib1 16
nfib2 16
stdev 0.028
extrd −1.32
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extrd −1.28
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extrd −1.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
−1.5
0
100
200
300
400

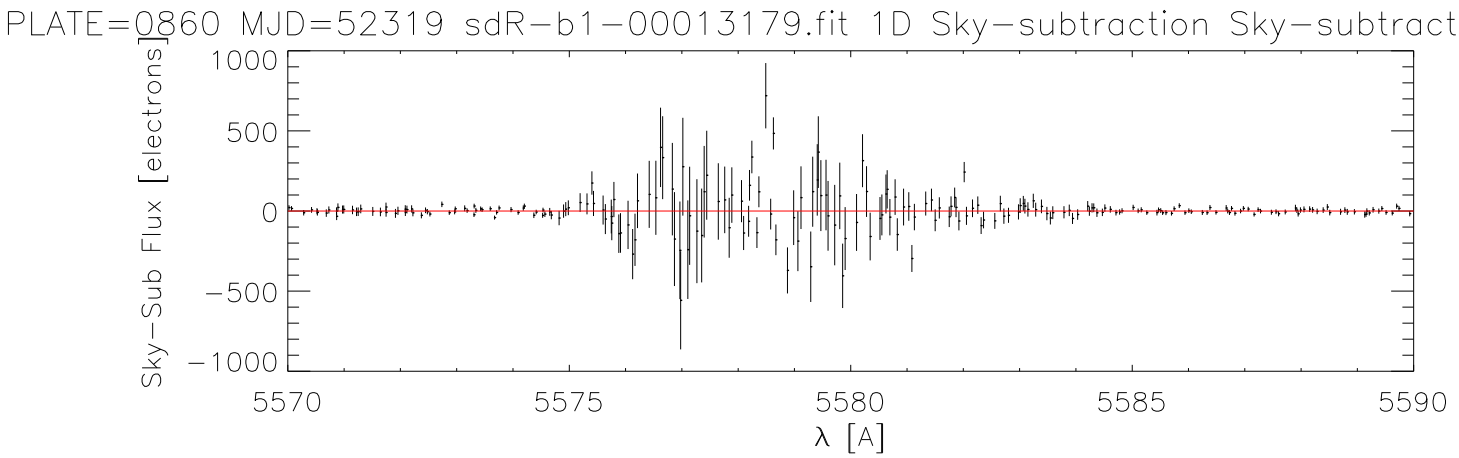

sky shift, pixels
−1.3
−1.4
−1.5
−1.6
−1.7
3500
4000
4500
5000
5500
6000
6500

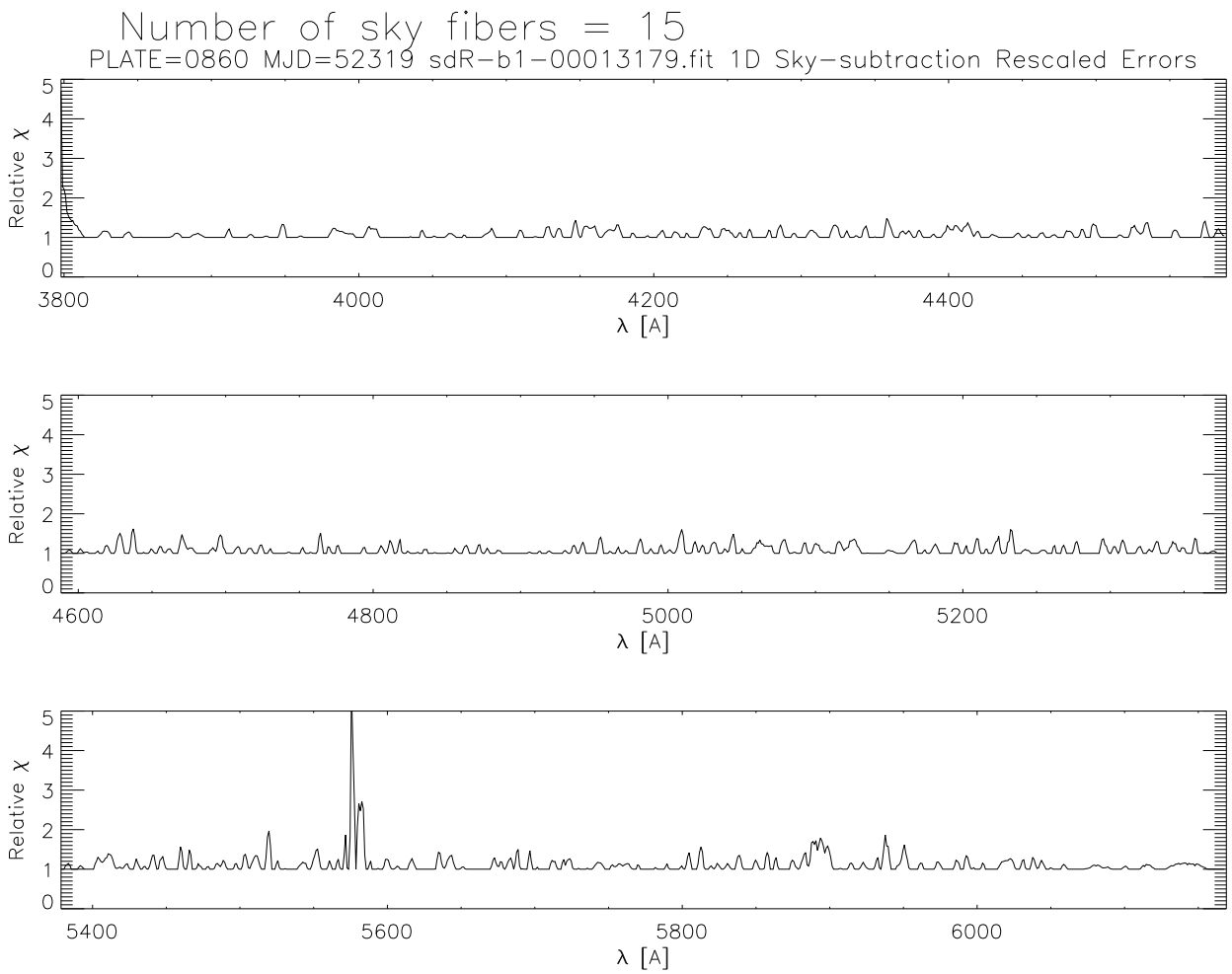

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013179.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

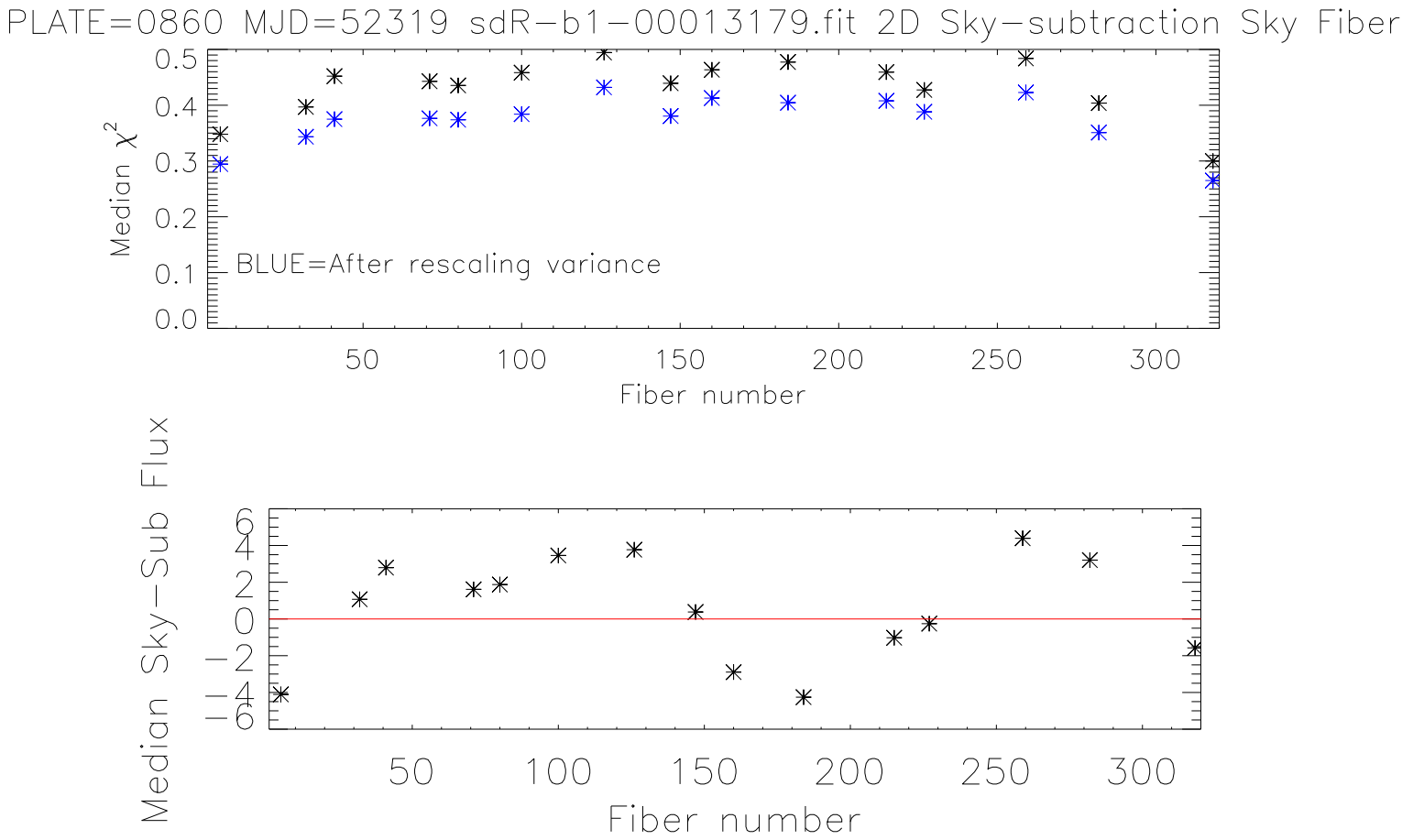
es= −0.0000

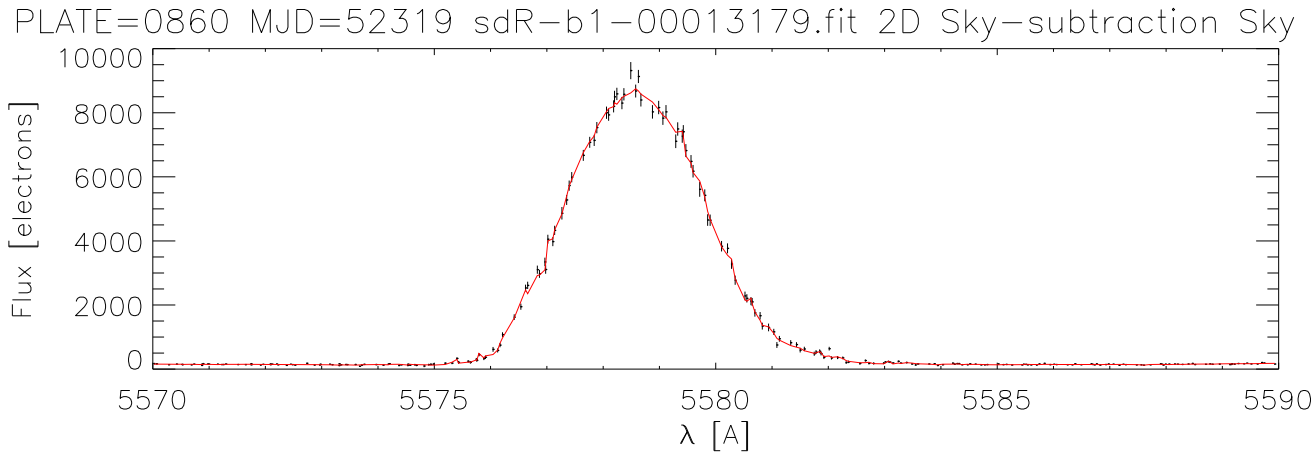

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

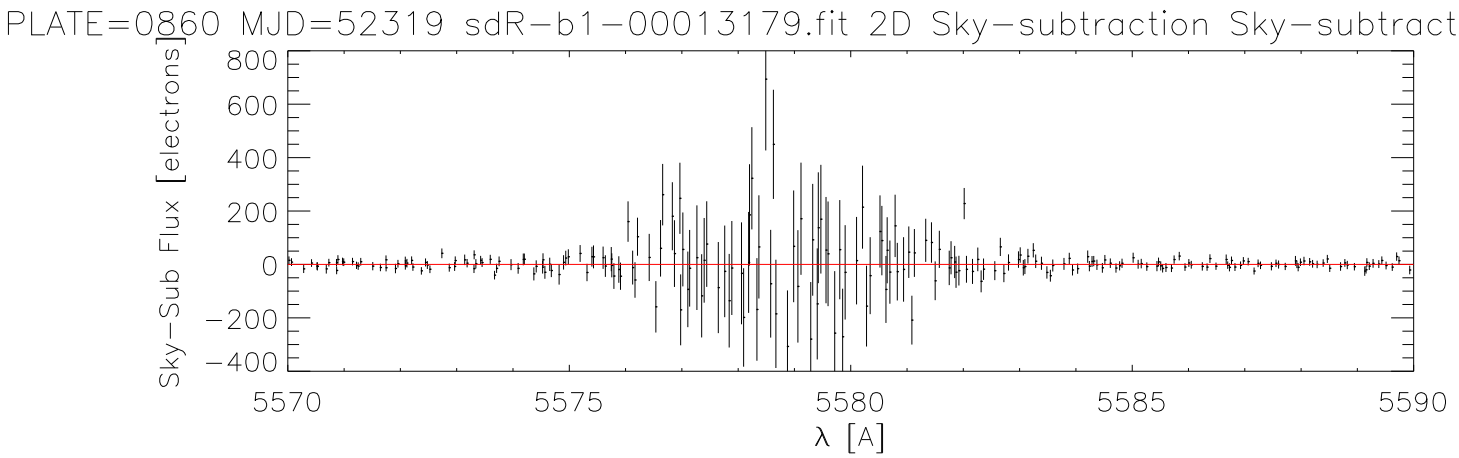

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

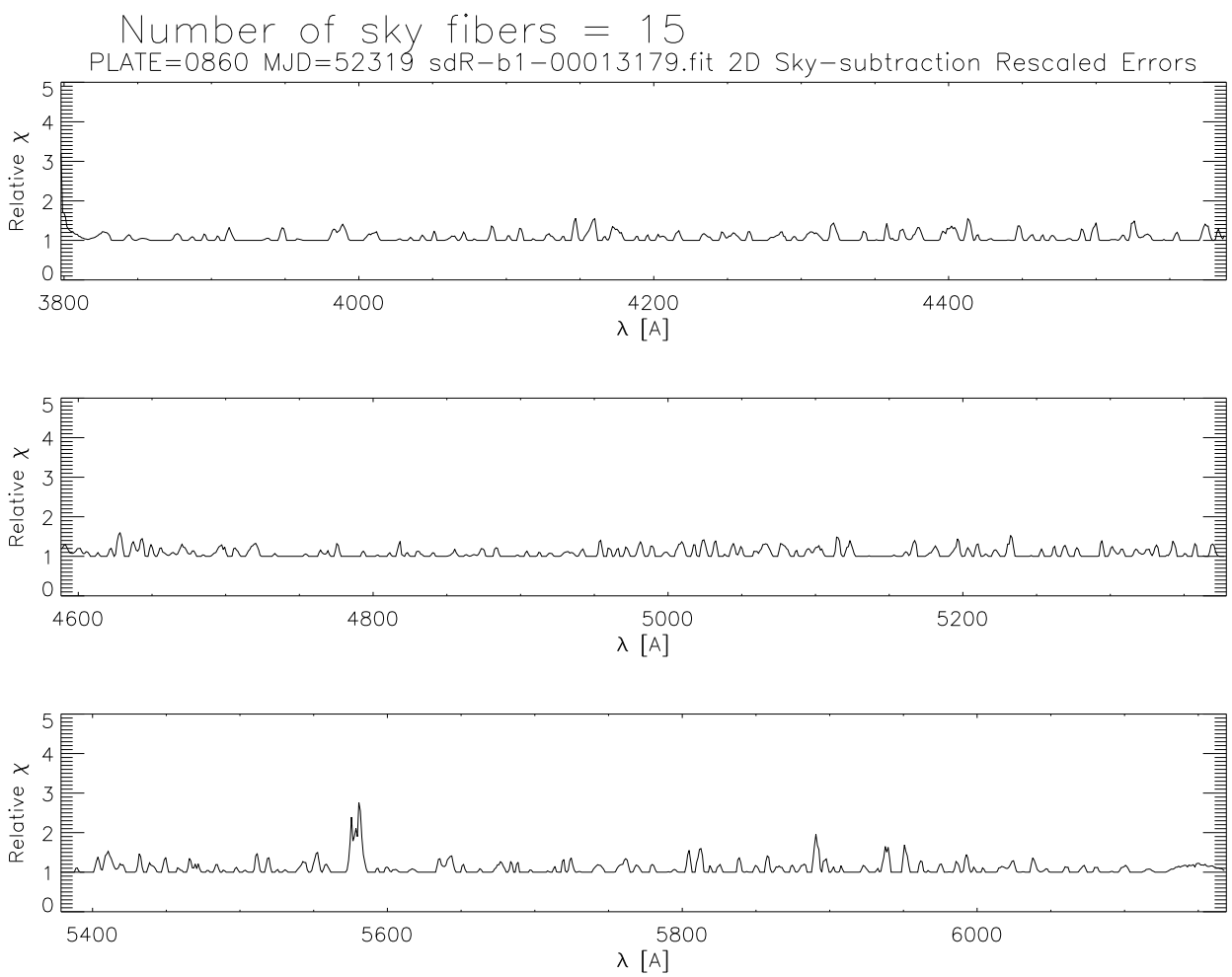

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

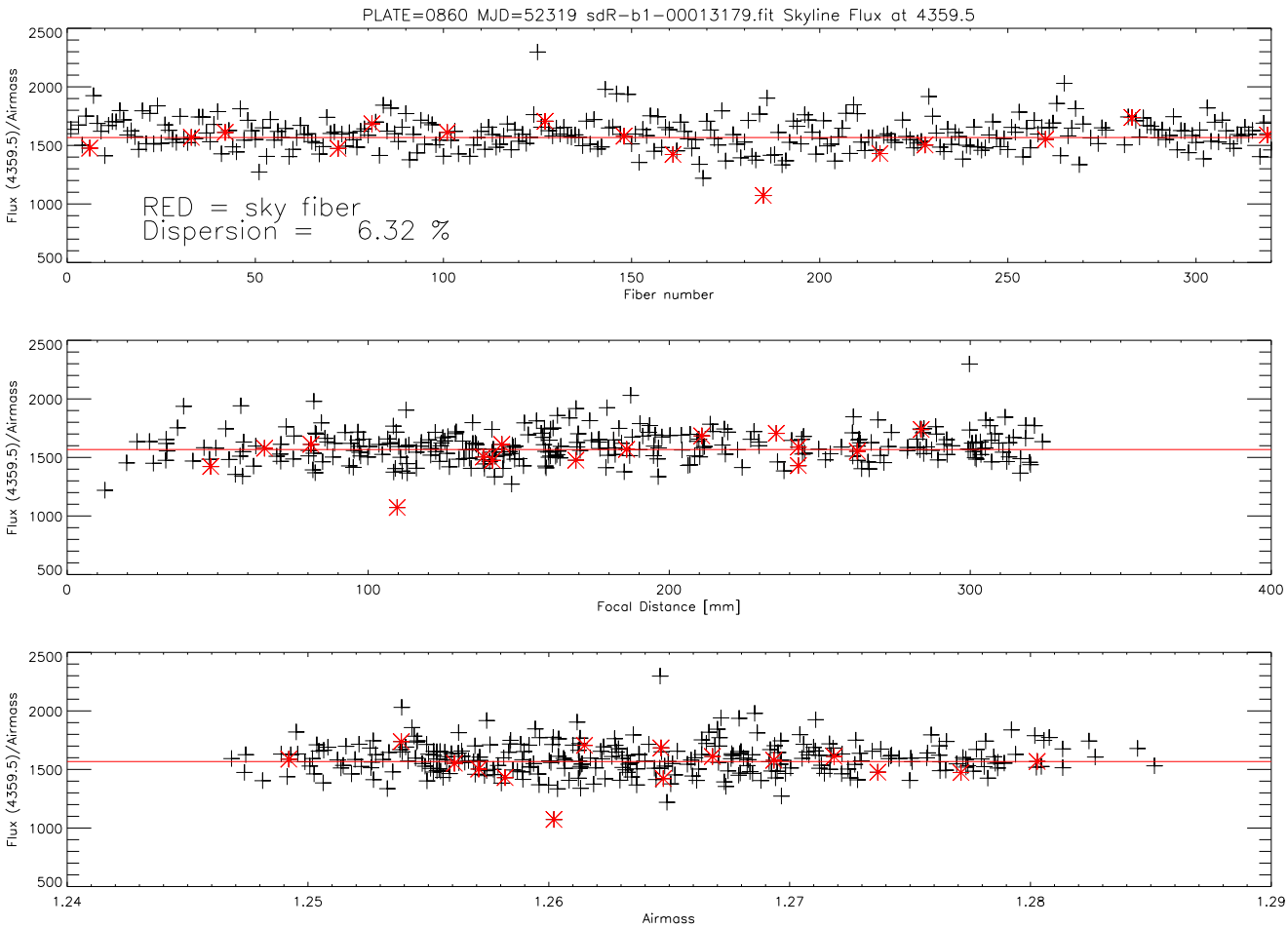

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013179.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

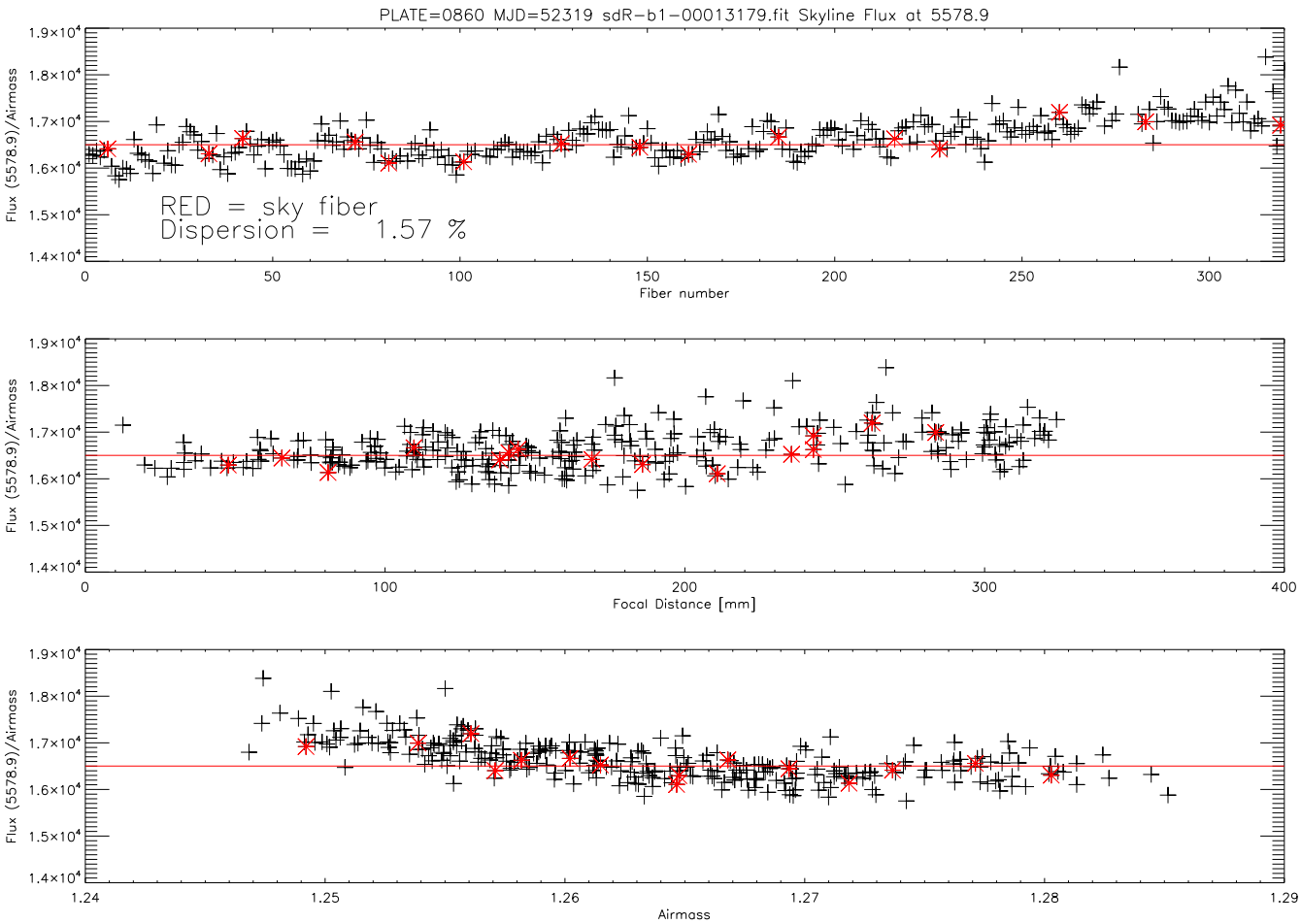

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

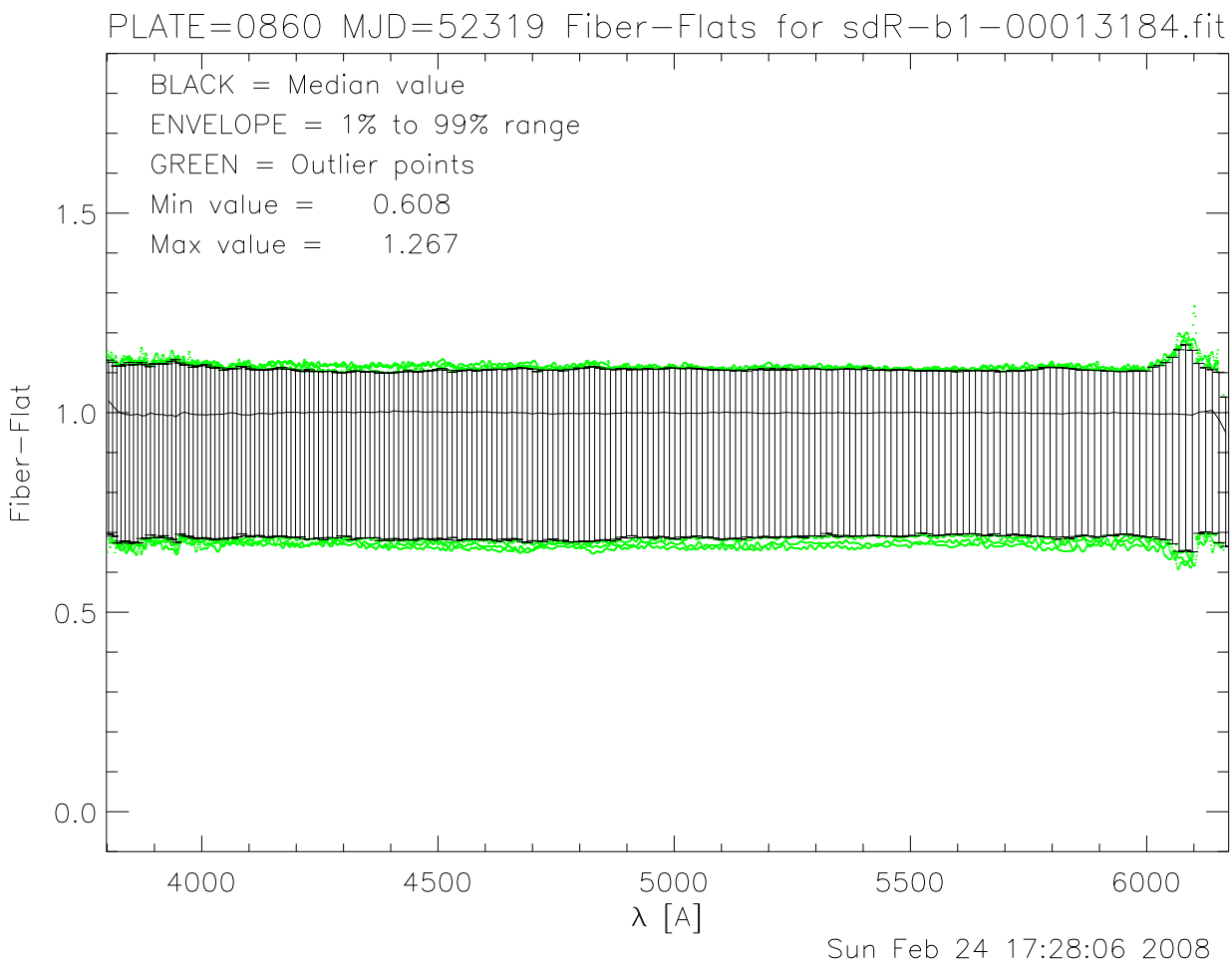

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

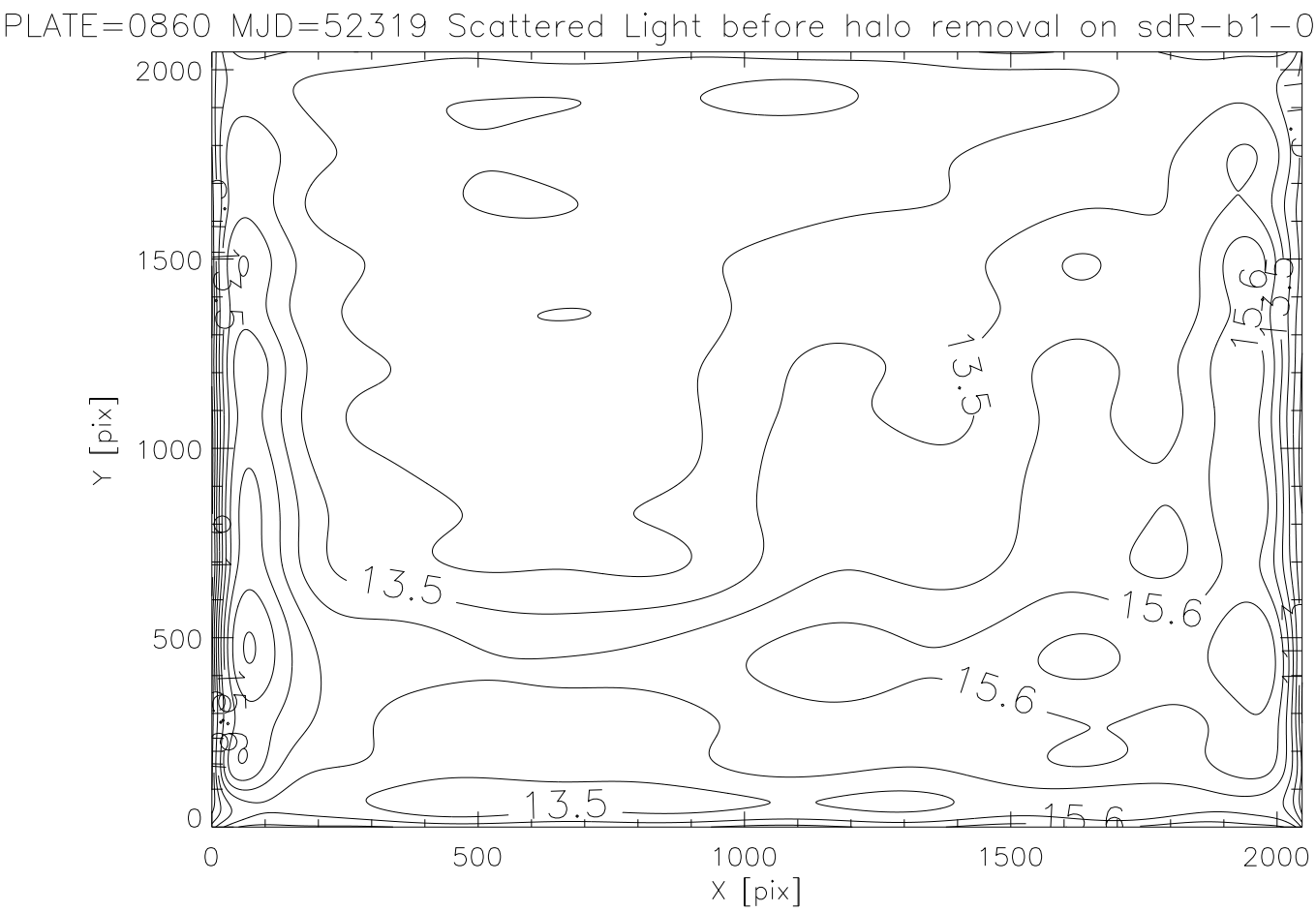

PLATE=0860 MJD=52319 sdR-b1-00013179.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

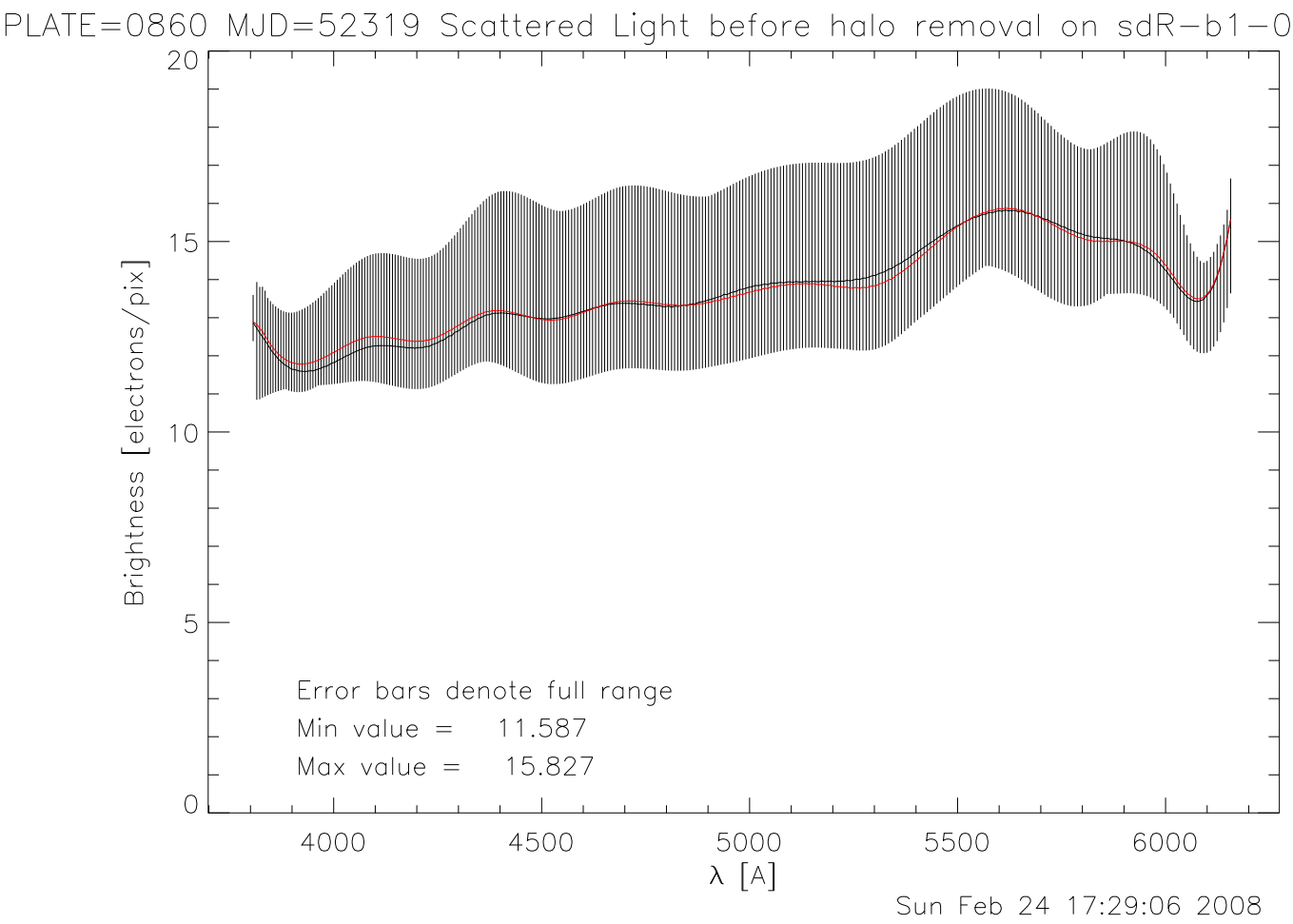

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013179.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

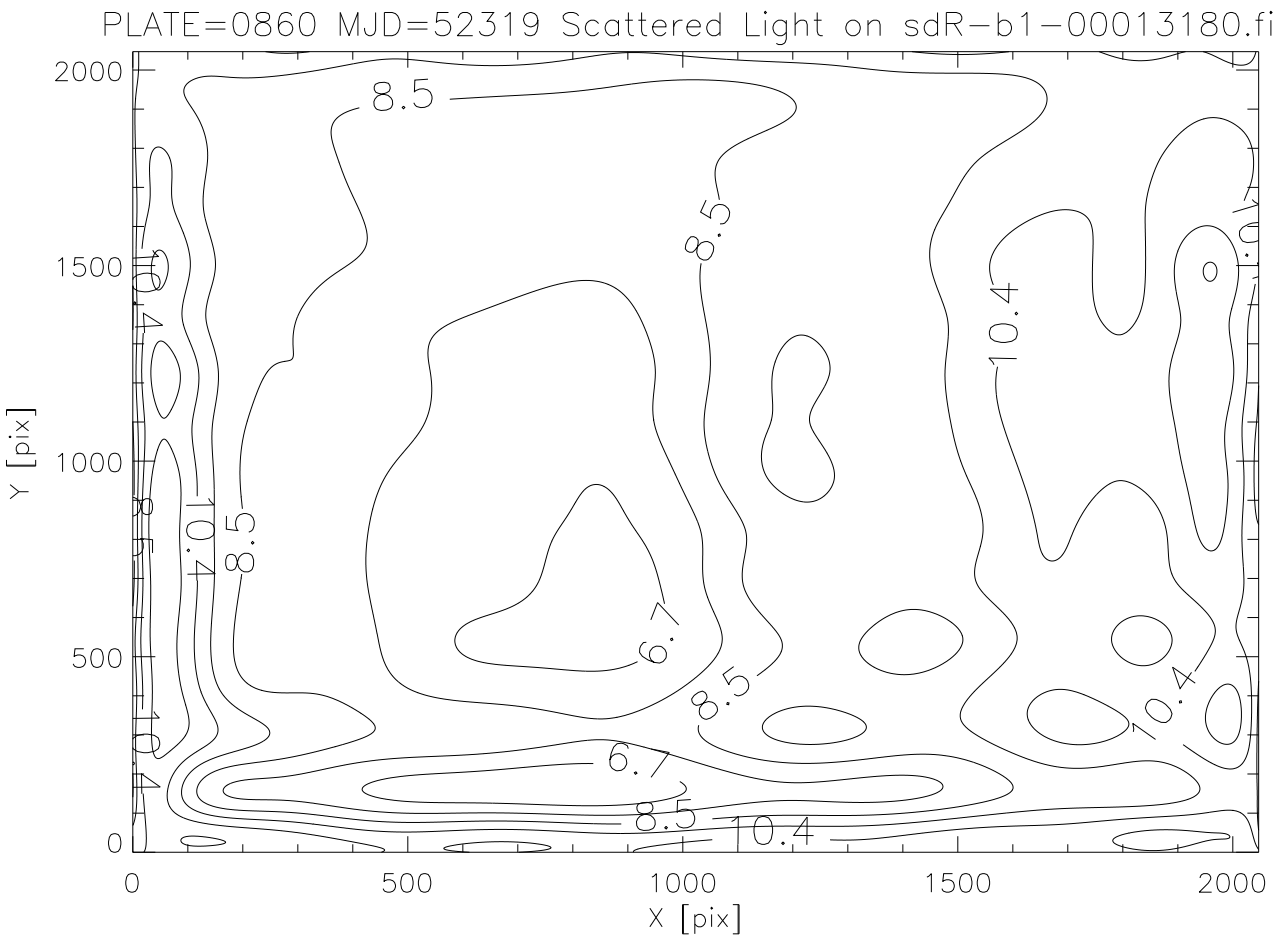

PLATE=0860 MJD=52319 sdR-b1-00013179.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.32 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

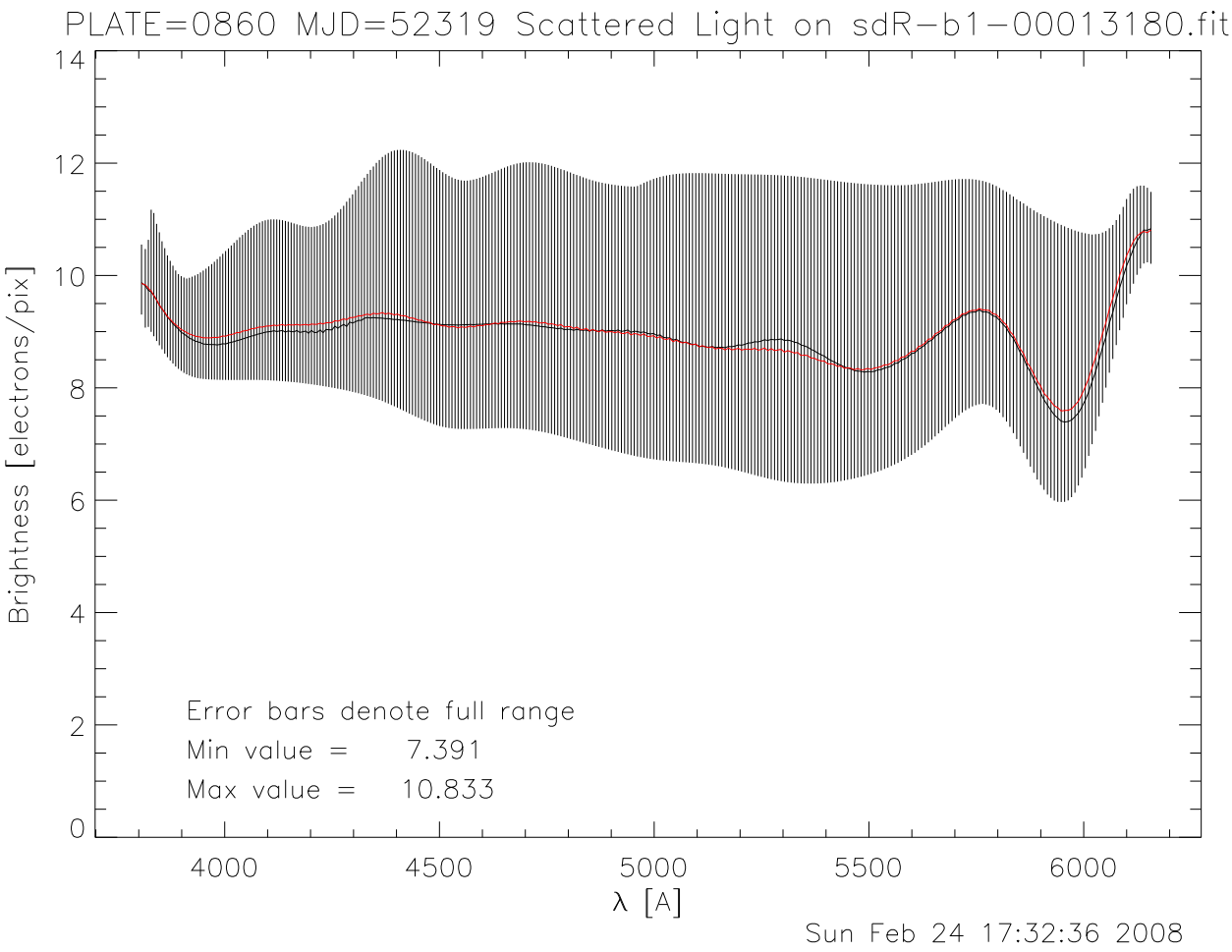

PLATE=0860 MJD=52319 sdR-b1-00013179.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:28:06 2008


PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013180.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
13.5
15.6


PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013180.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.587
Max value = 15.827
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:29:06 2008


PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013180.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
10.4
6.7


PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013180.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.391
Max value = 10.833
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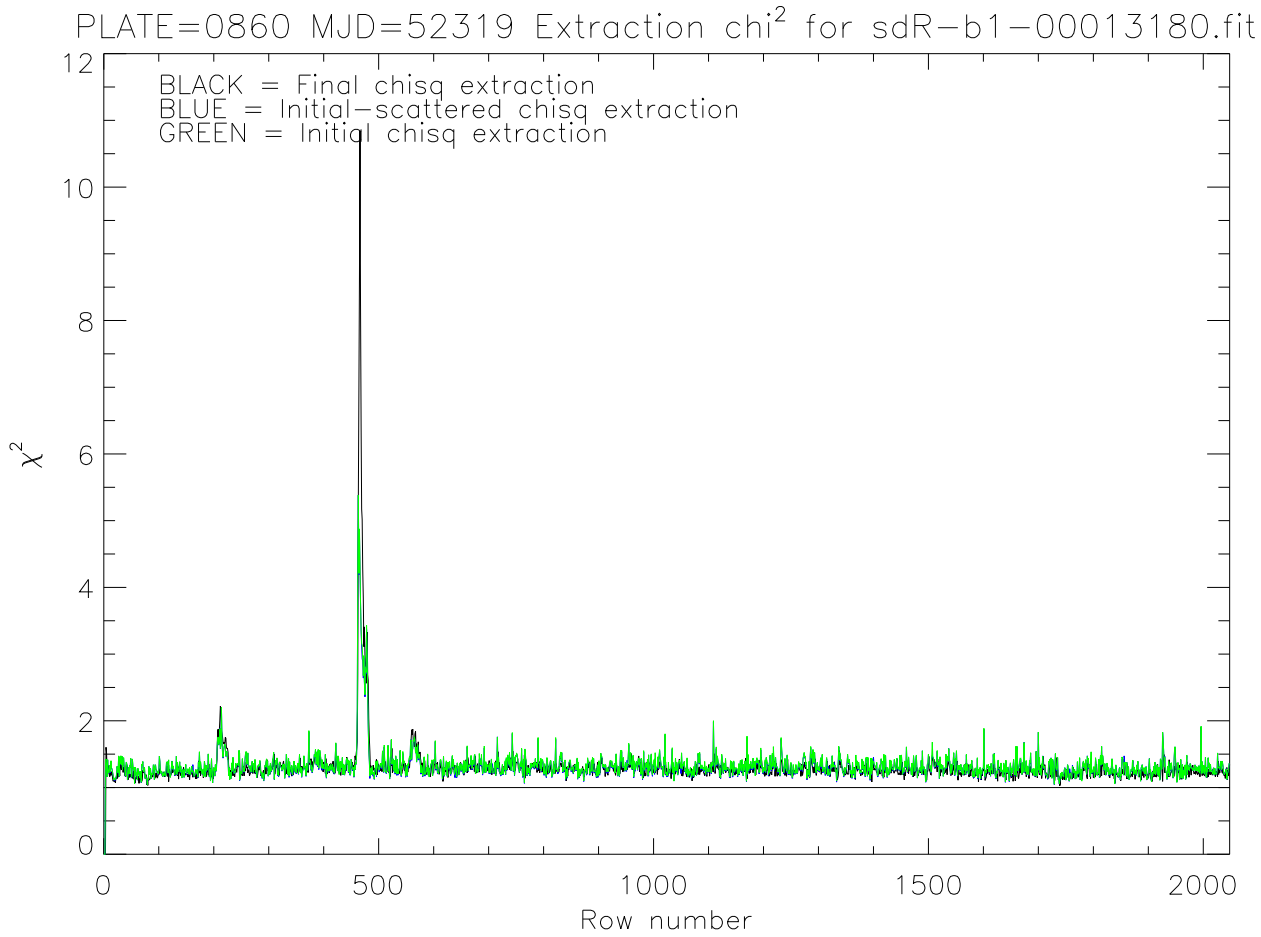
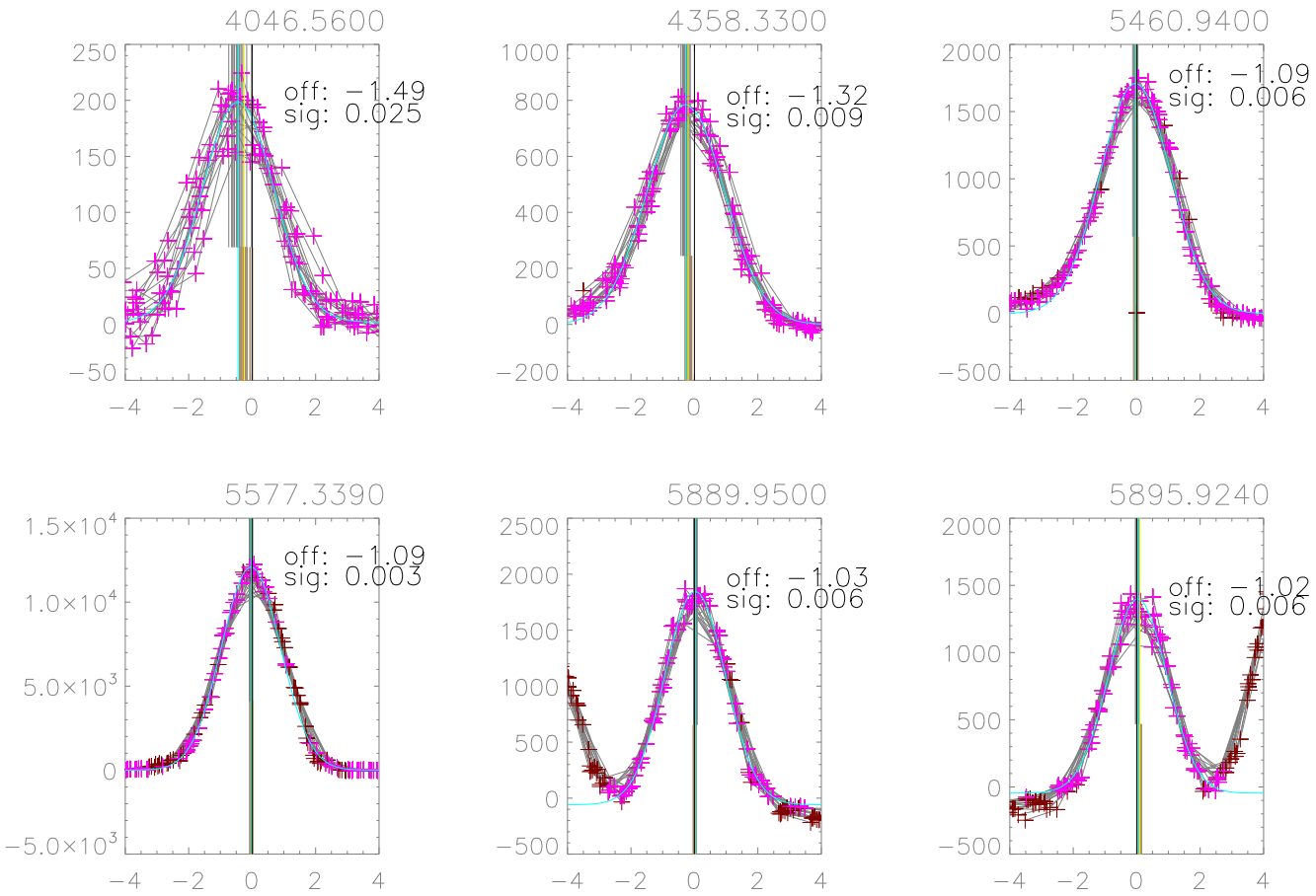
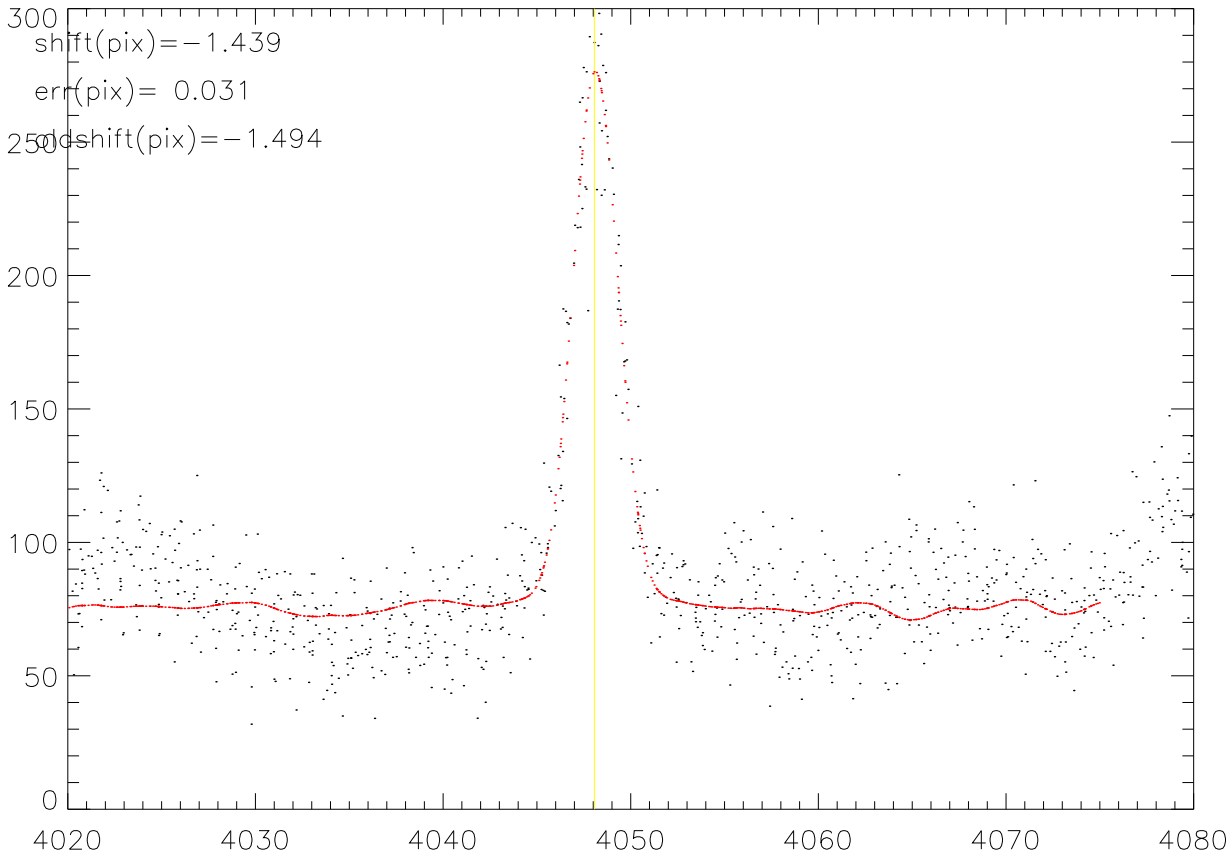
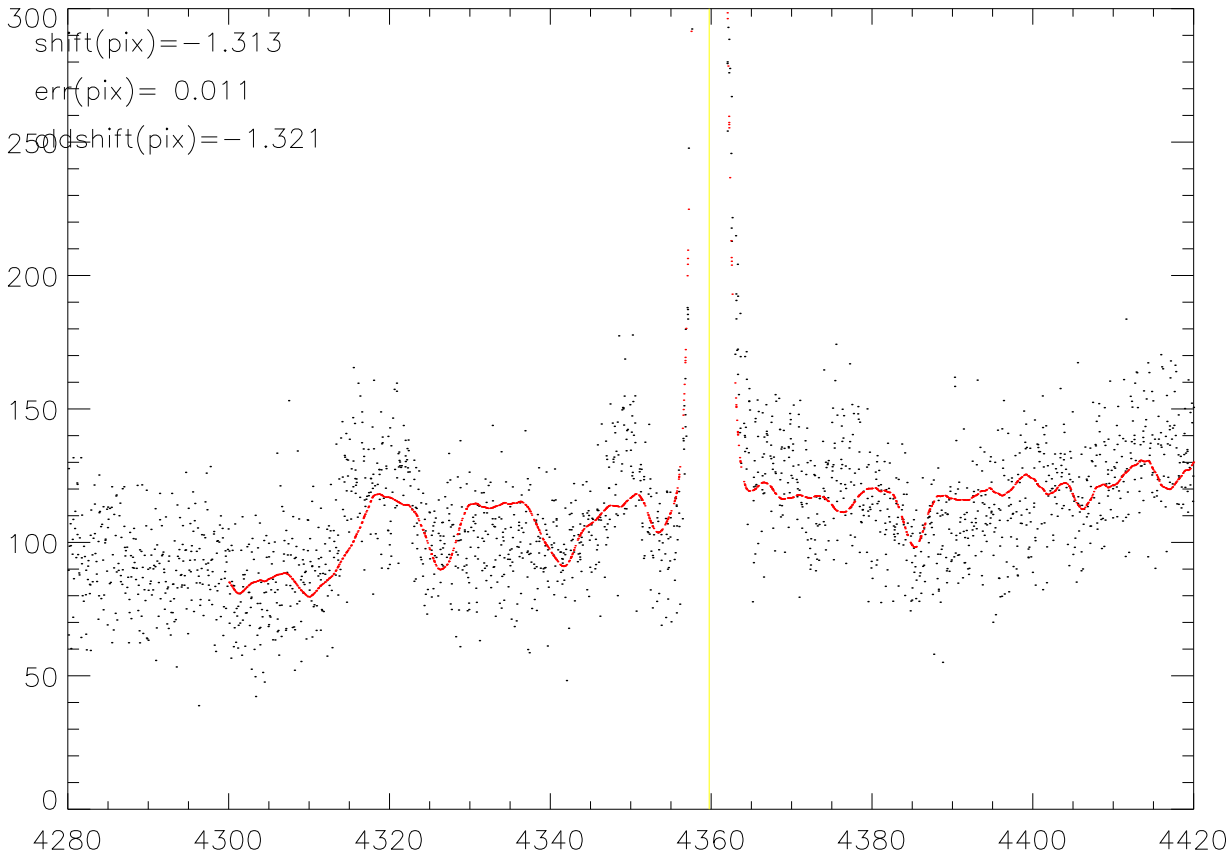
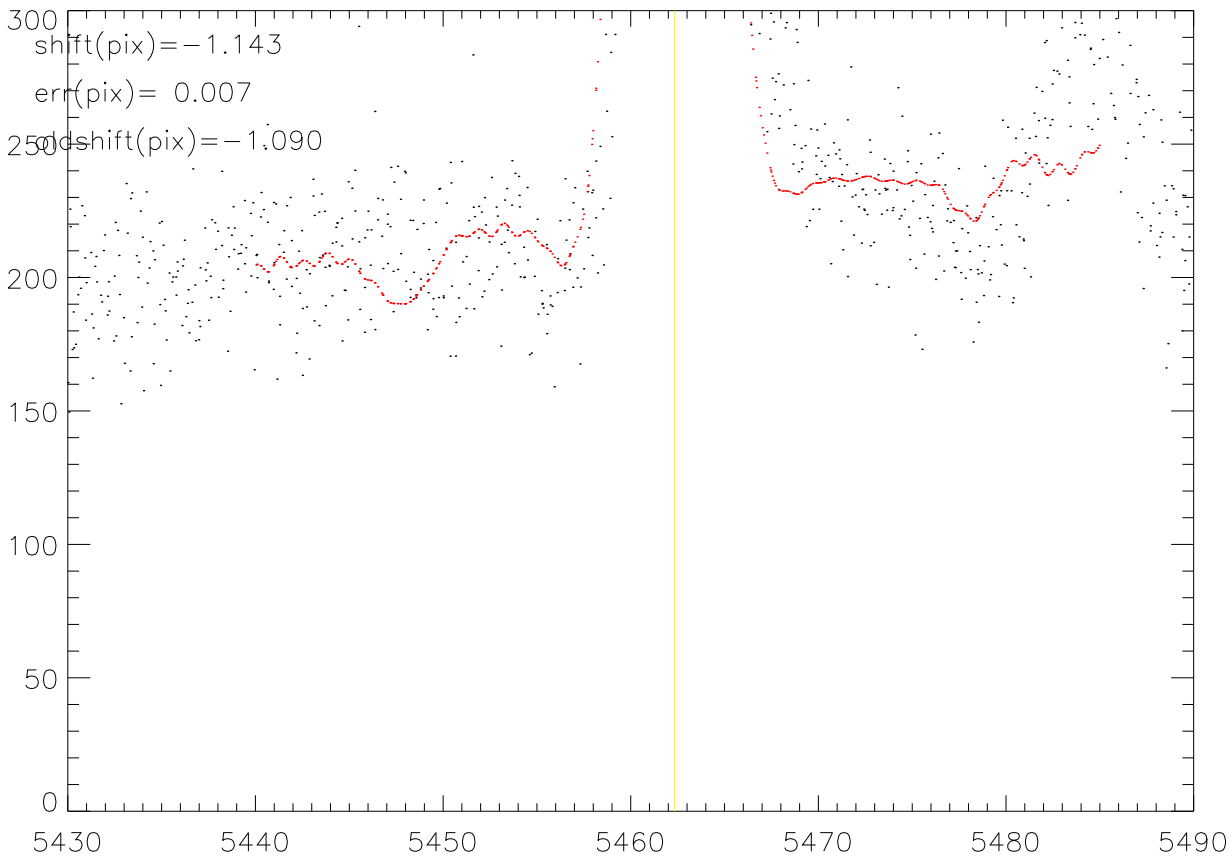
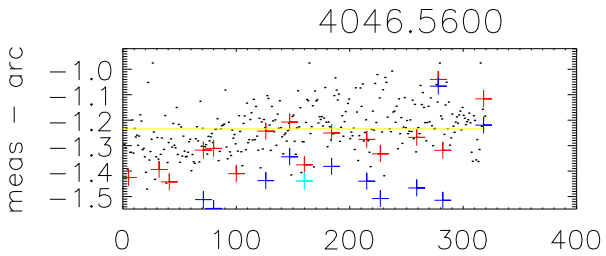

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013180.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

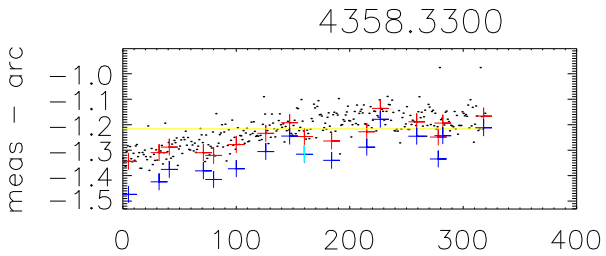

4046.5600
off: −1.49
sig: 0.025
4358.3300
off: −1.32
sig: 0.009
5460.9400
off: −1.09
sig: 0.006
5577.3390
off: −1.09
sig: 0.003
5889.9500
off: −1.03
sig: 0.006
5895.9240
off: −1.02
sig: 0.006

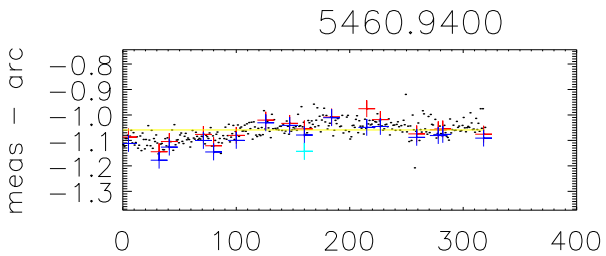

shift(pix)=−1.439
err(pix)= 0.031
oldshift(pix)=−1.494
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

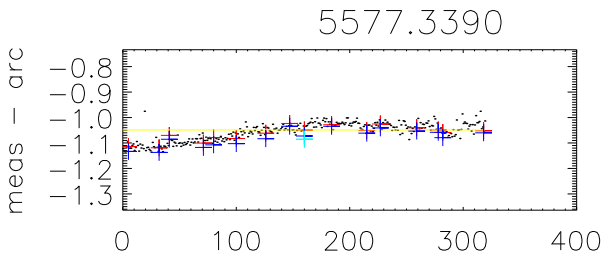

shift(pix)=−1.313
err(pix)= 0.011
oldshift(pix)=−1.321
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

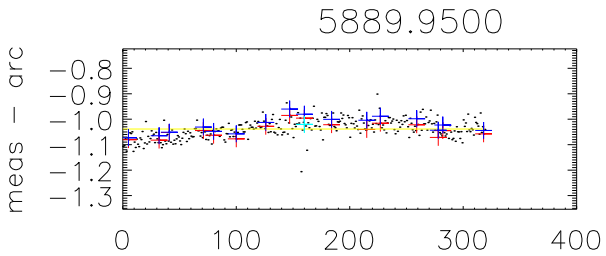

shift(pix)=−1.143
err(pix)= 0.007
oldshift(pix)=−1.090
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

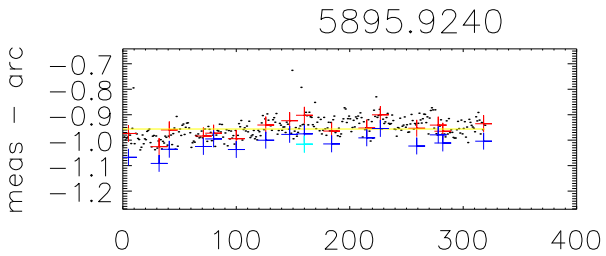

4046.5600
meas − arc
−1.0
−1.1
−1.2
−1.3
−1.4
−1.5
0
100
200
300
400

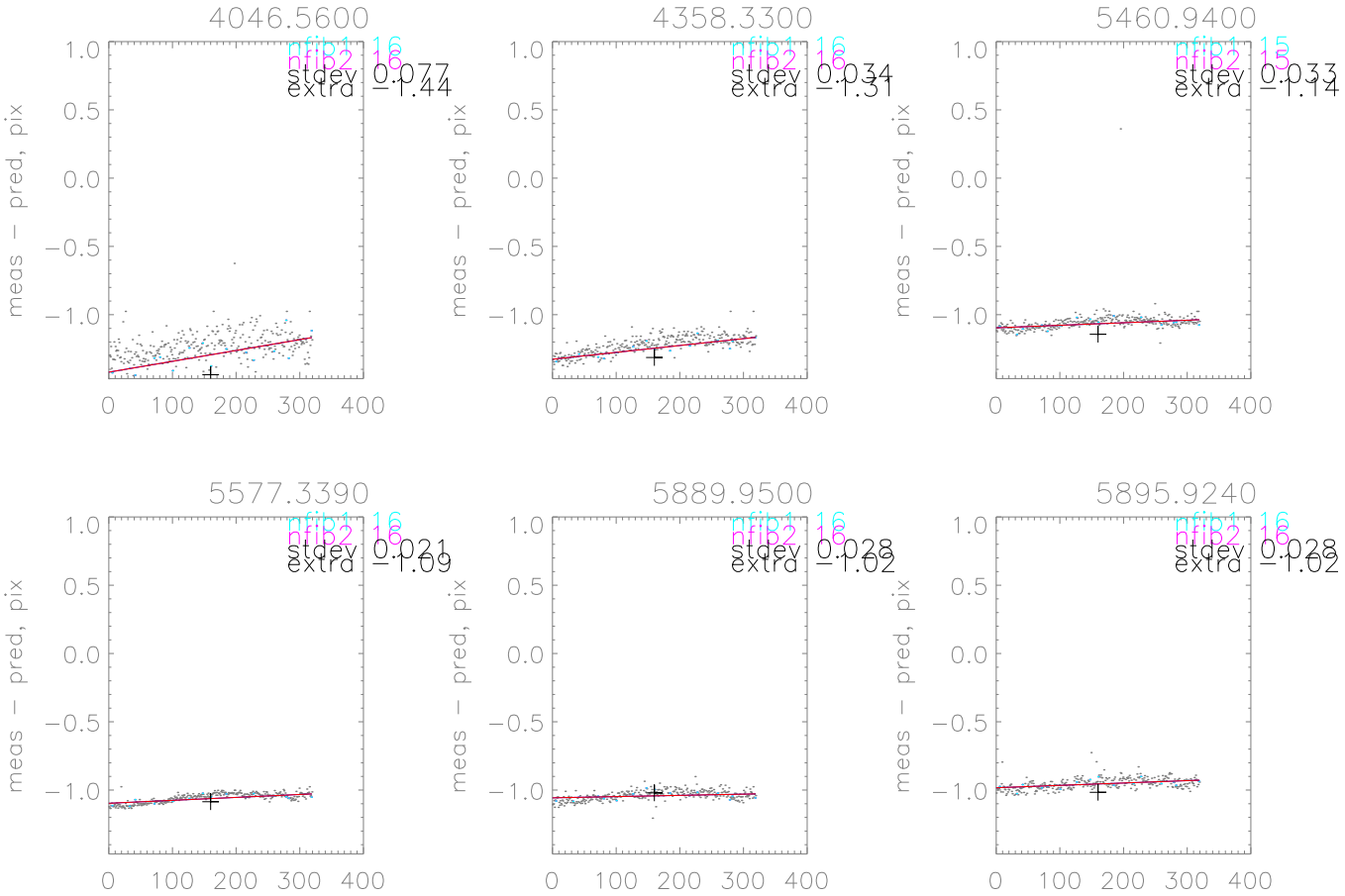

4358.3300
meas − arc
−1.0
−1.1
−1.2
−1.3
−1.4
−1.5
0
100
200
300
400

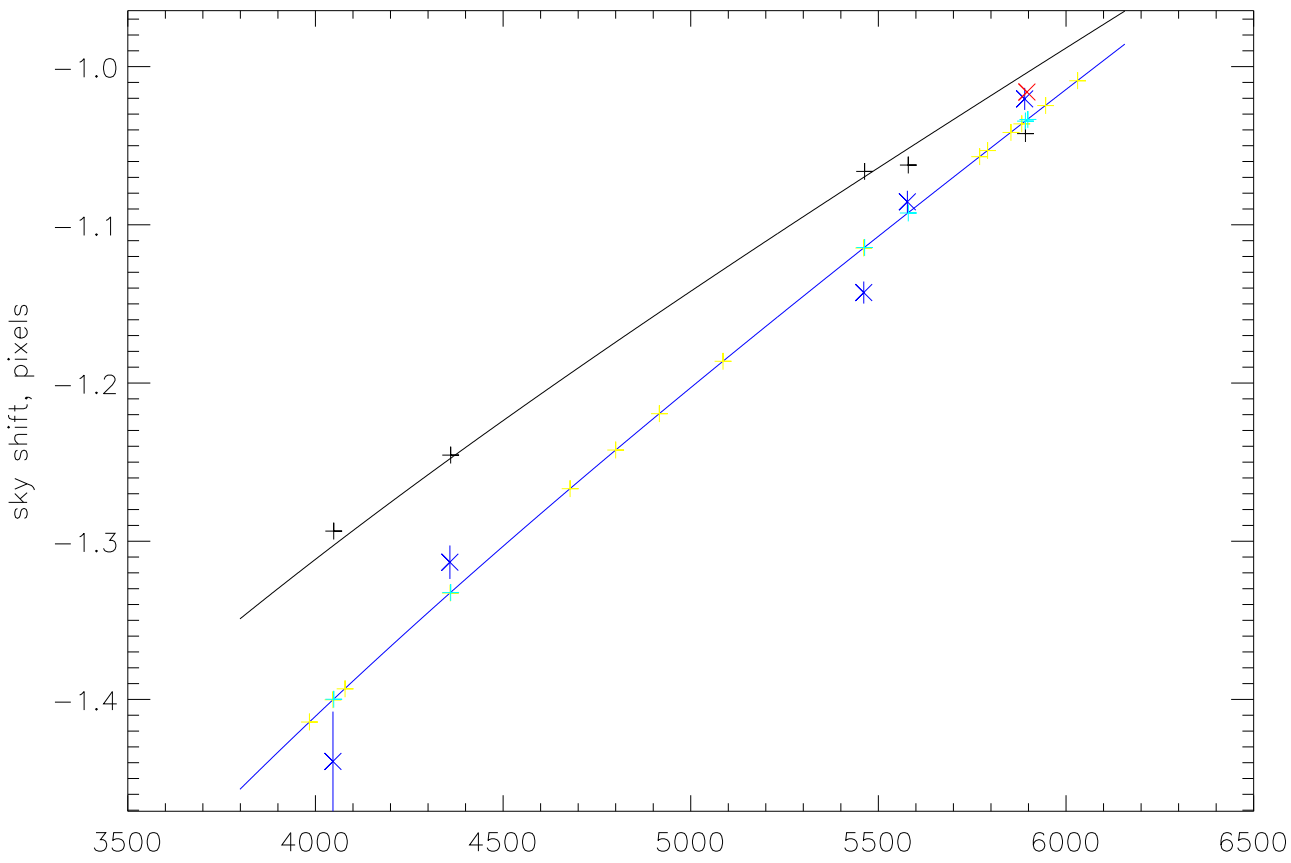

5460.9400
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

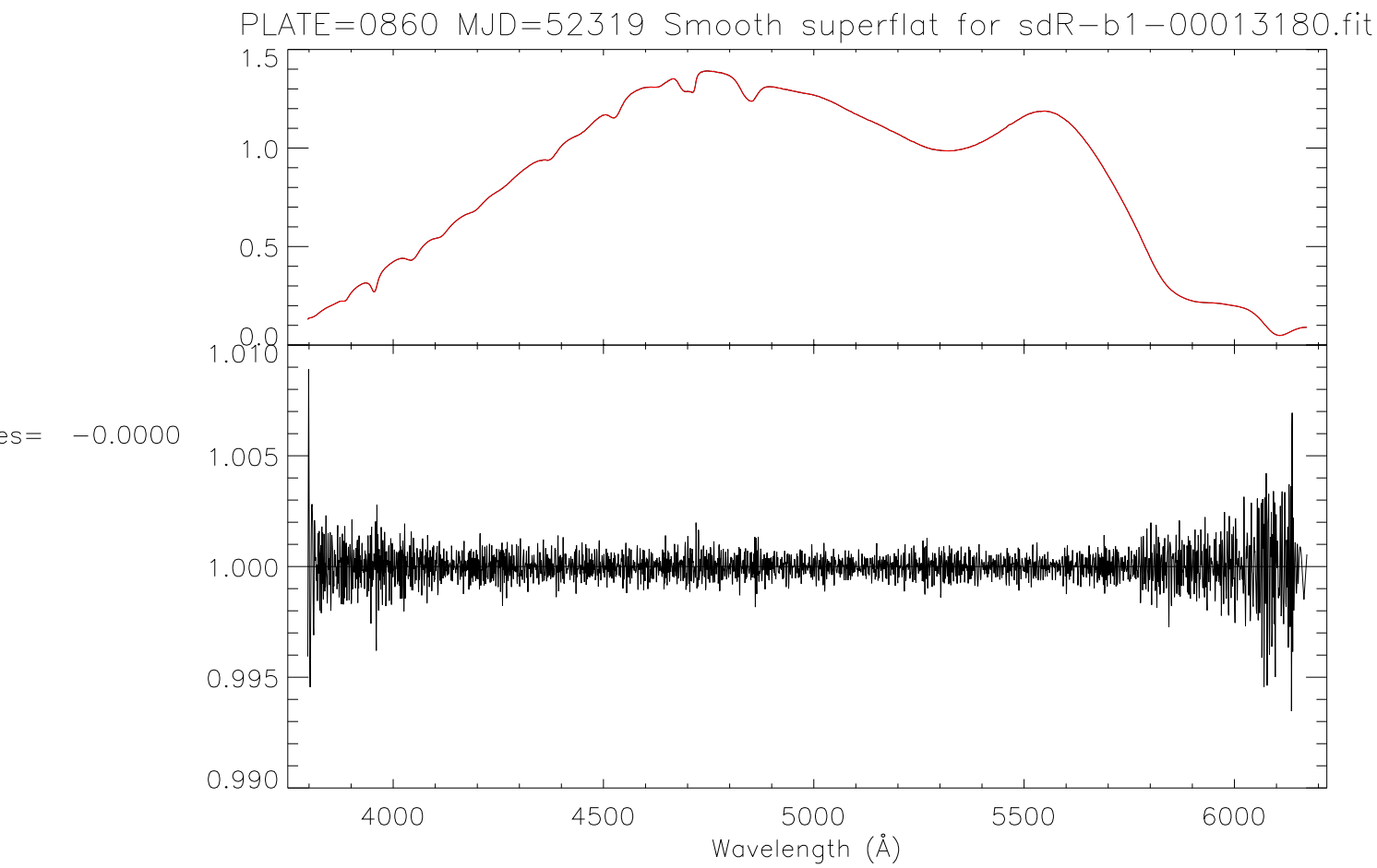

5577.3390
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400


5889.9500
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

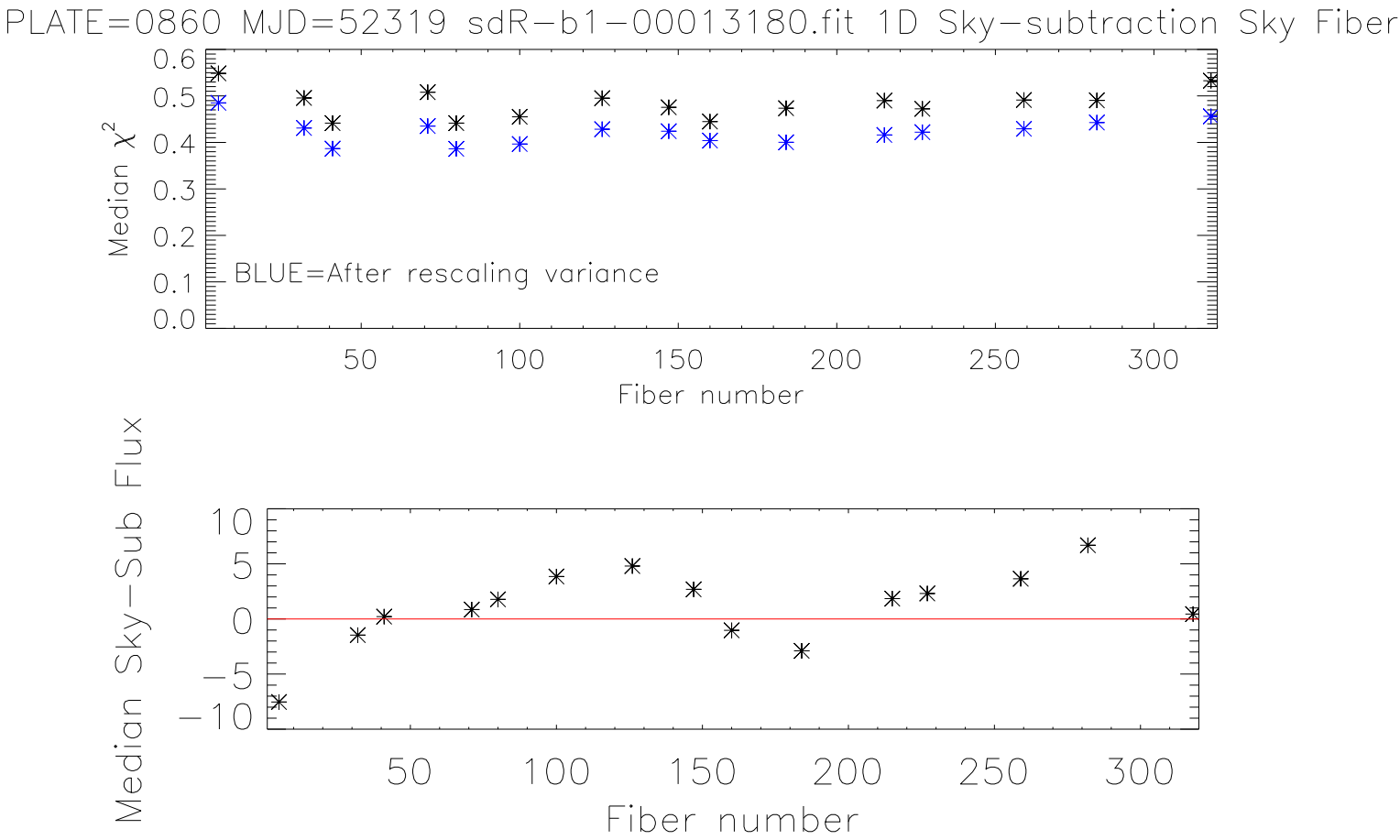

5895.9240
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

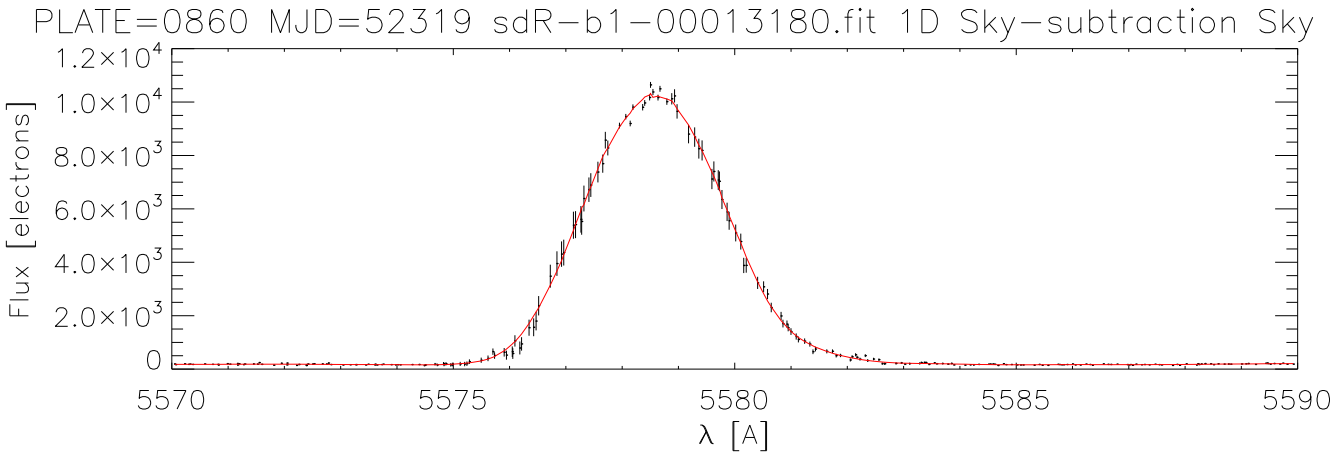

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
nfib1 16
nfib2 16
nfib1 15
nfib2 15
stdev 0.077
extrd −1.44
stdev 0.034
extrd −1.31
stdev 0.033
extrd −1.14
stdev 0.021
extrd −1.09
stdev 0.028
extrd −1.02
stdev 0.028
extrd −1.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

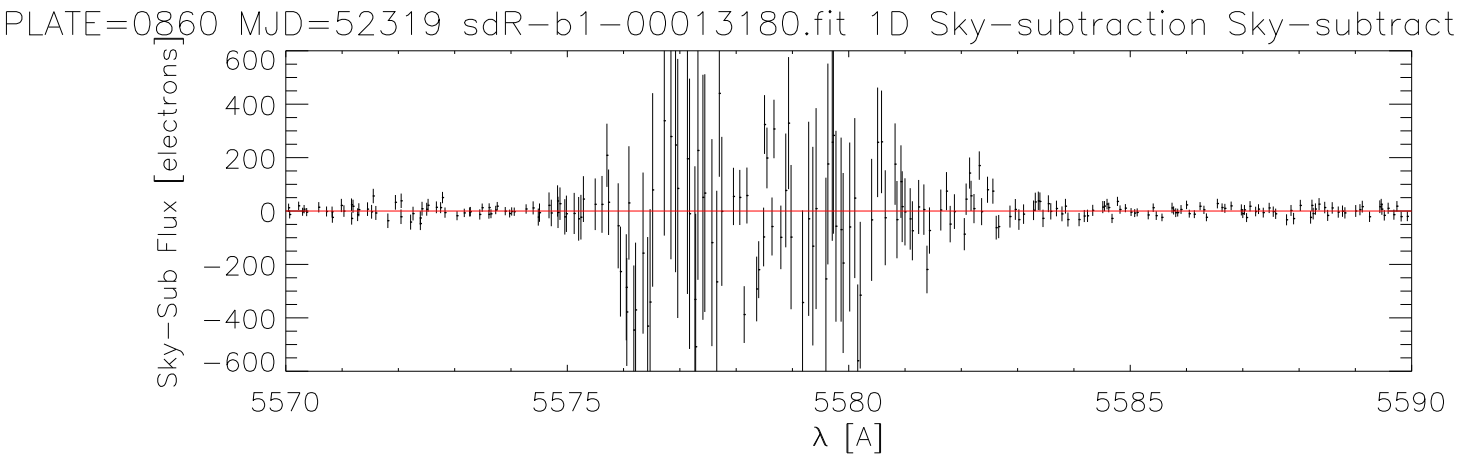

sky shift, pixels
−1.0
−1.1
−1.2
−1.3
−1.4
3500
4000
4500
5000
5500
6000
6500

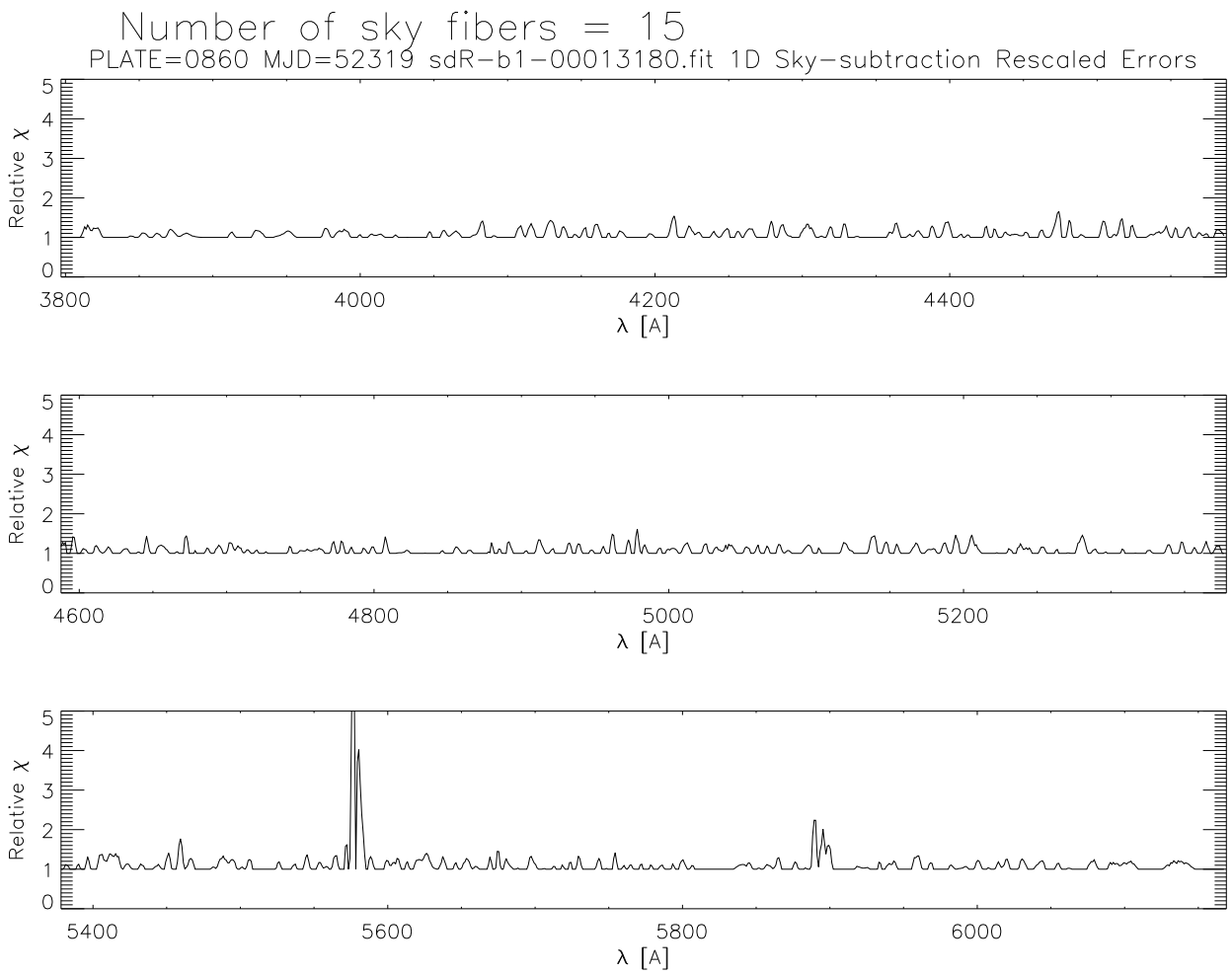

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013180.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

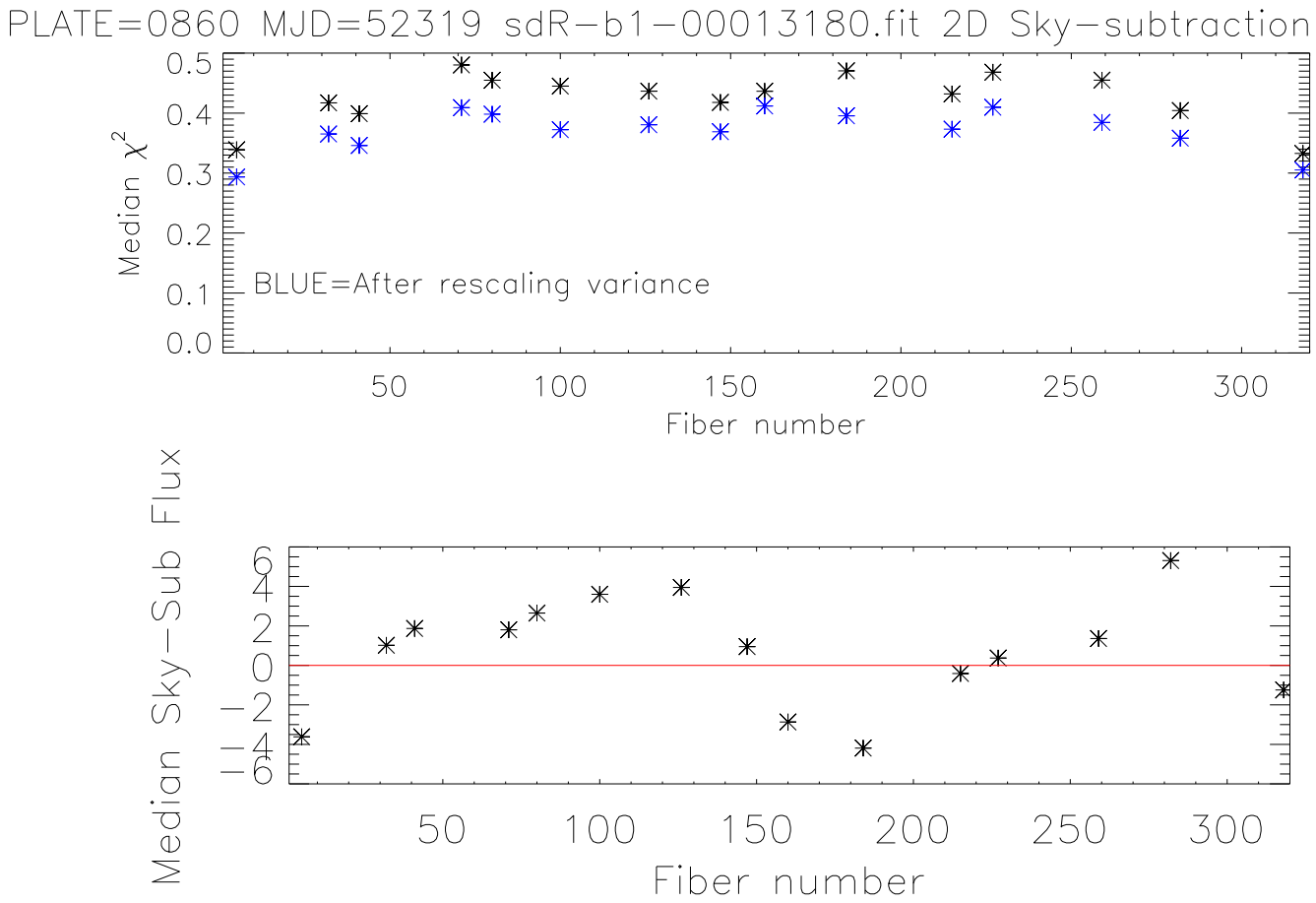
es= −0.0000

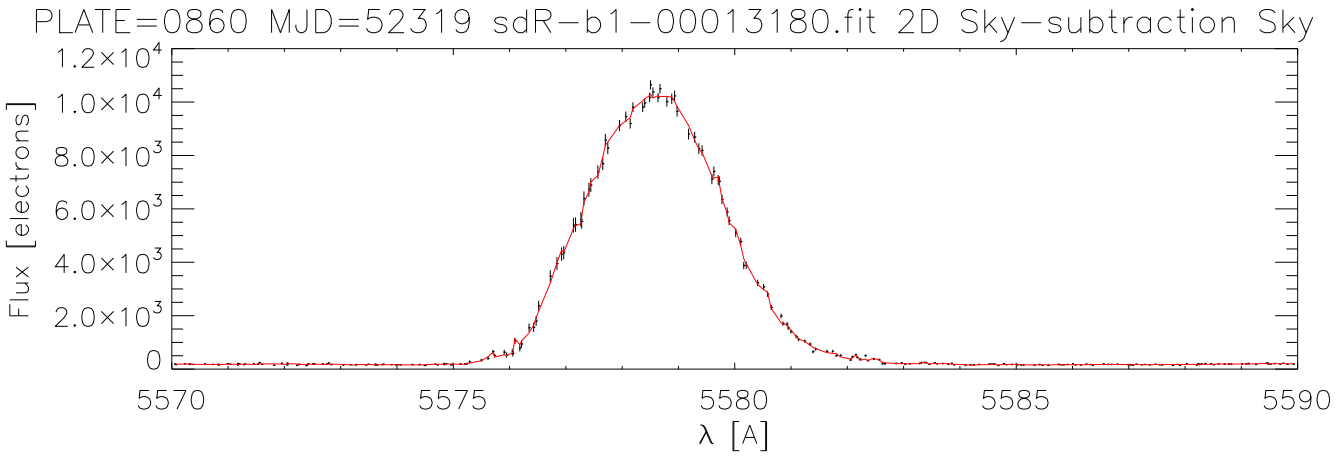

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

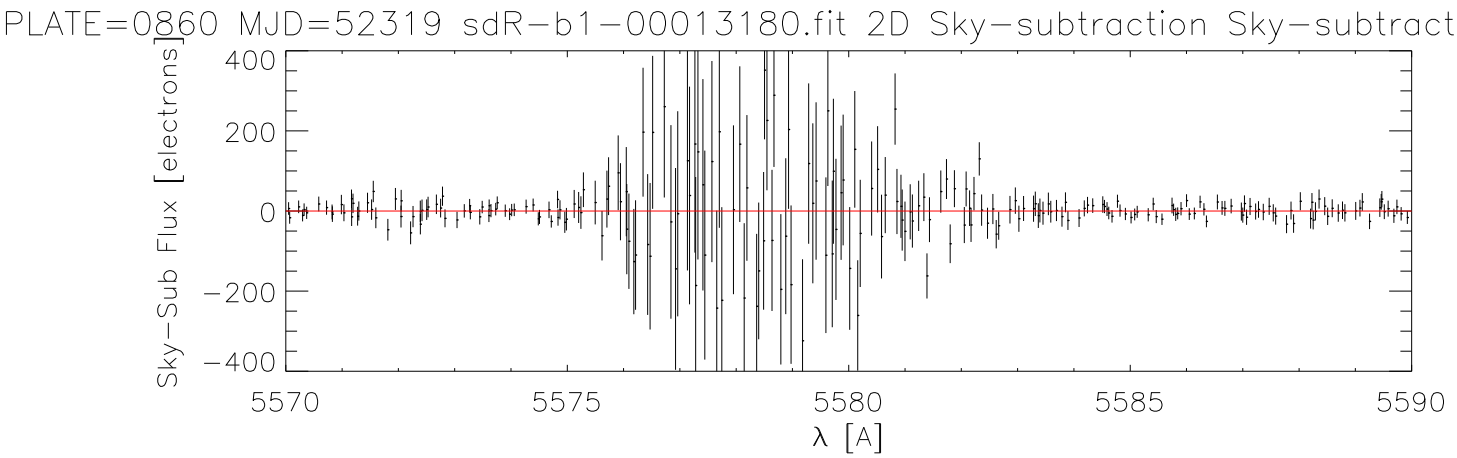

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

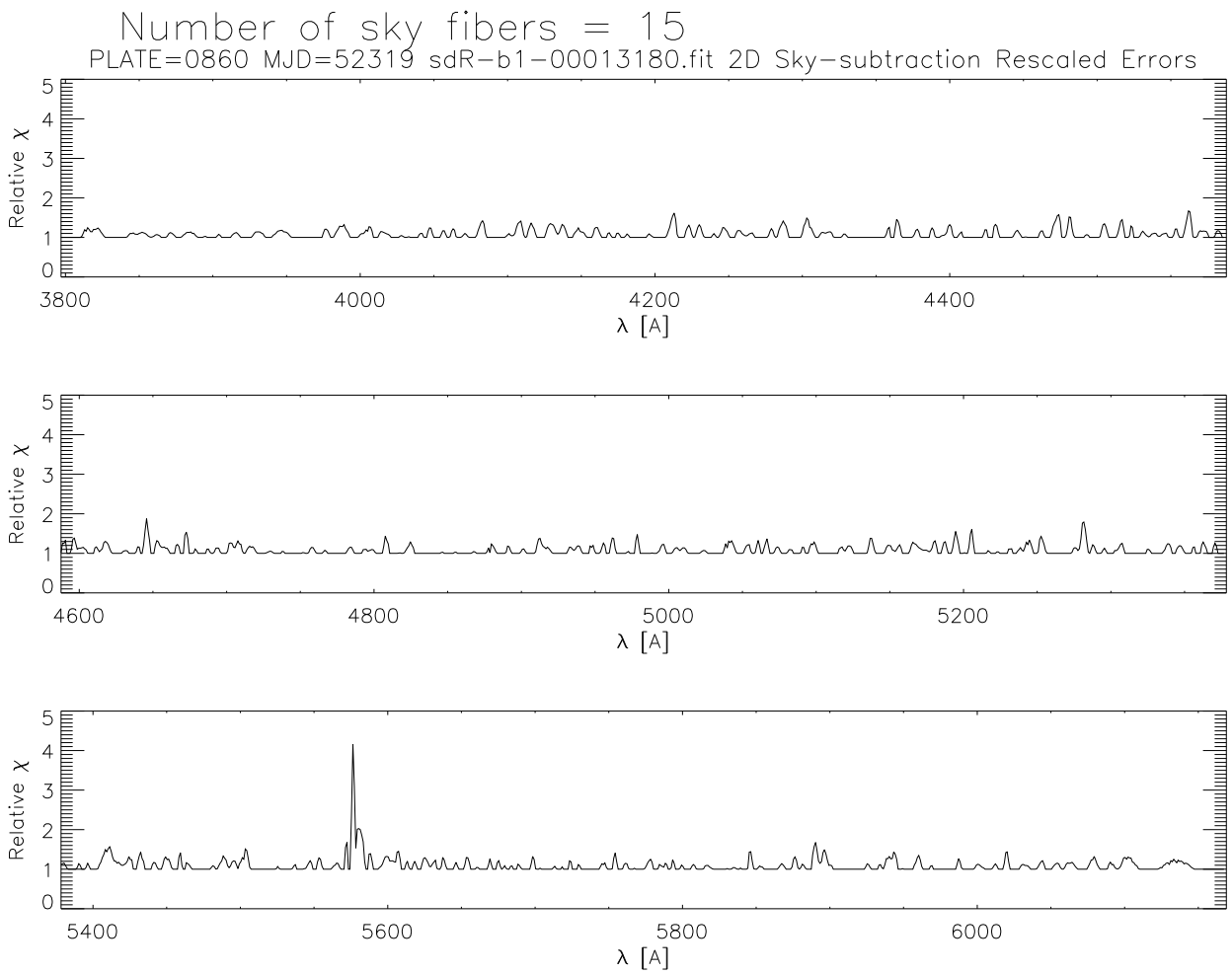

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

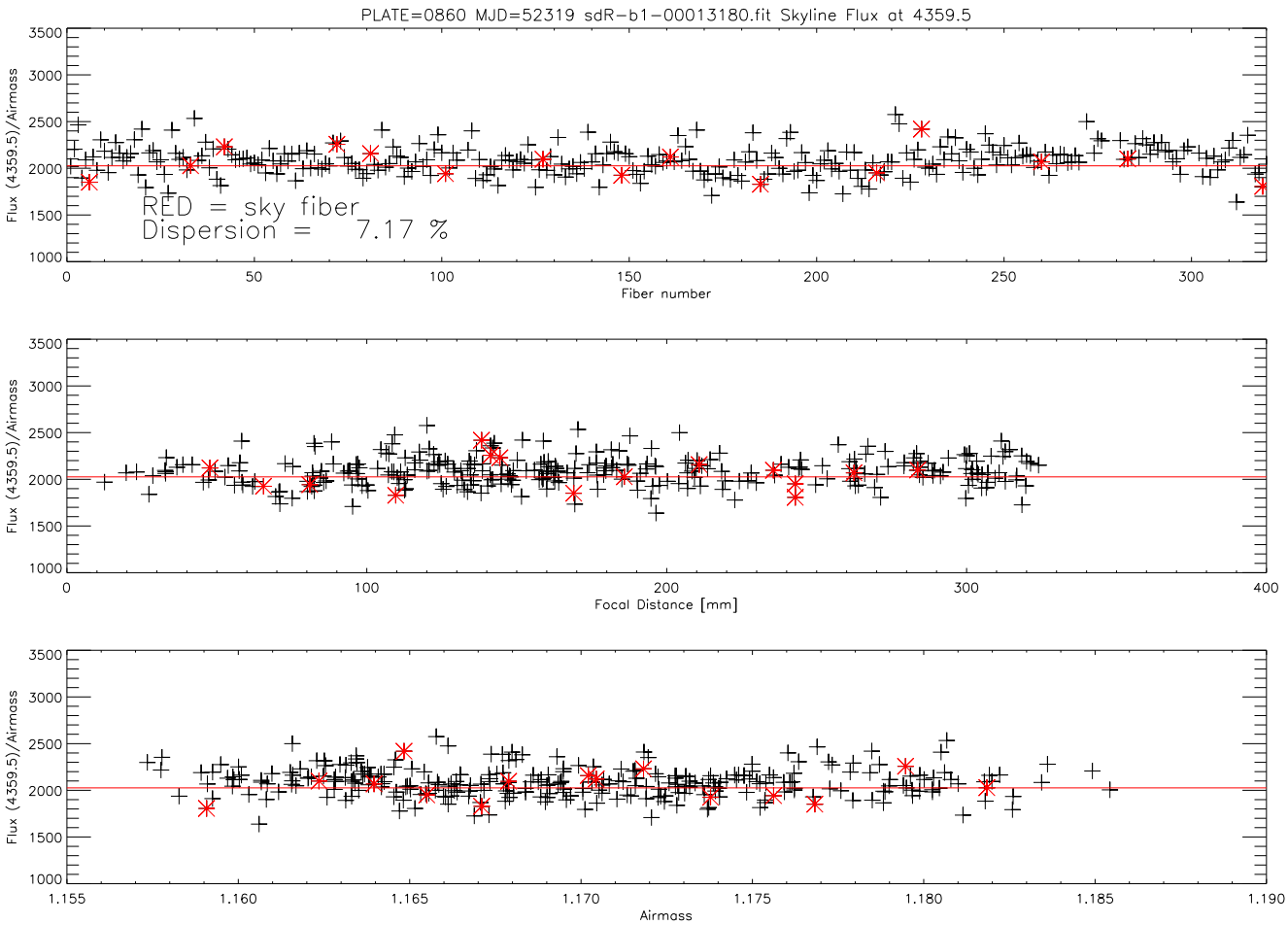

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013180.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

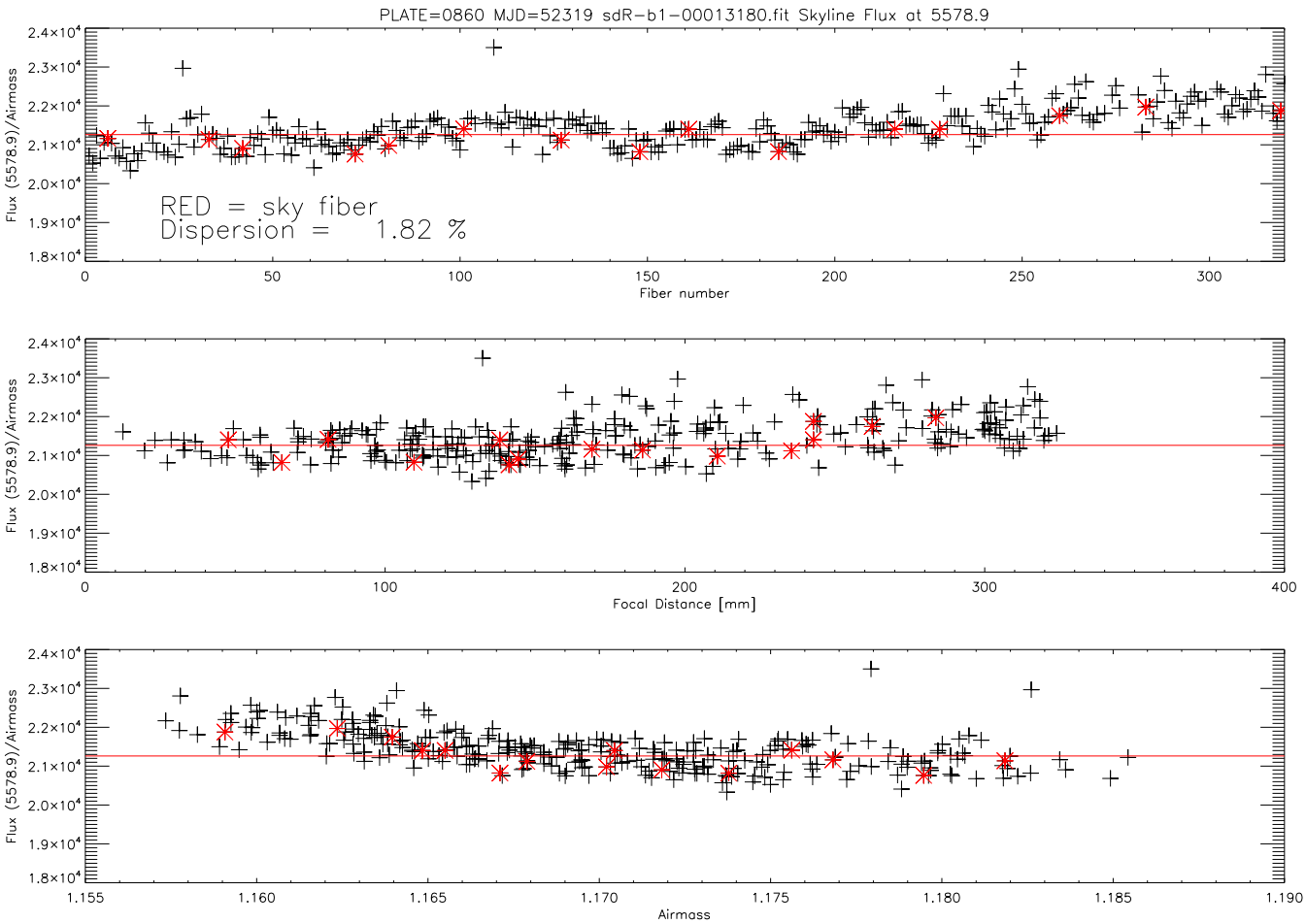

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

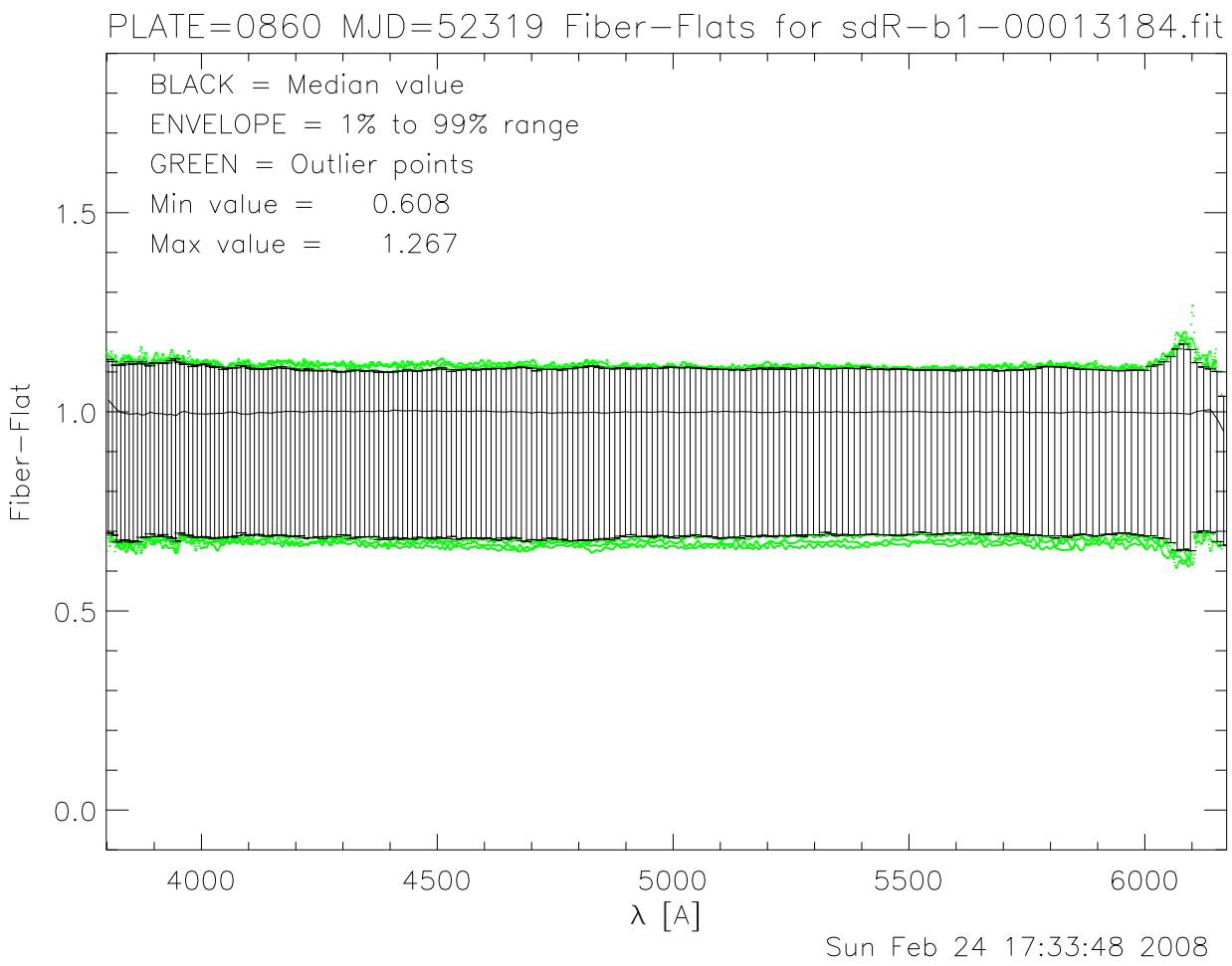

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

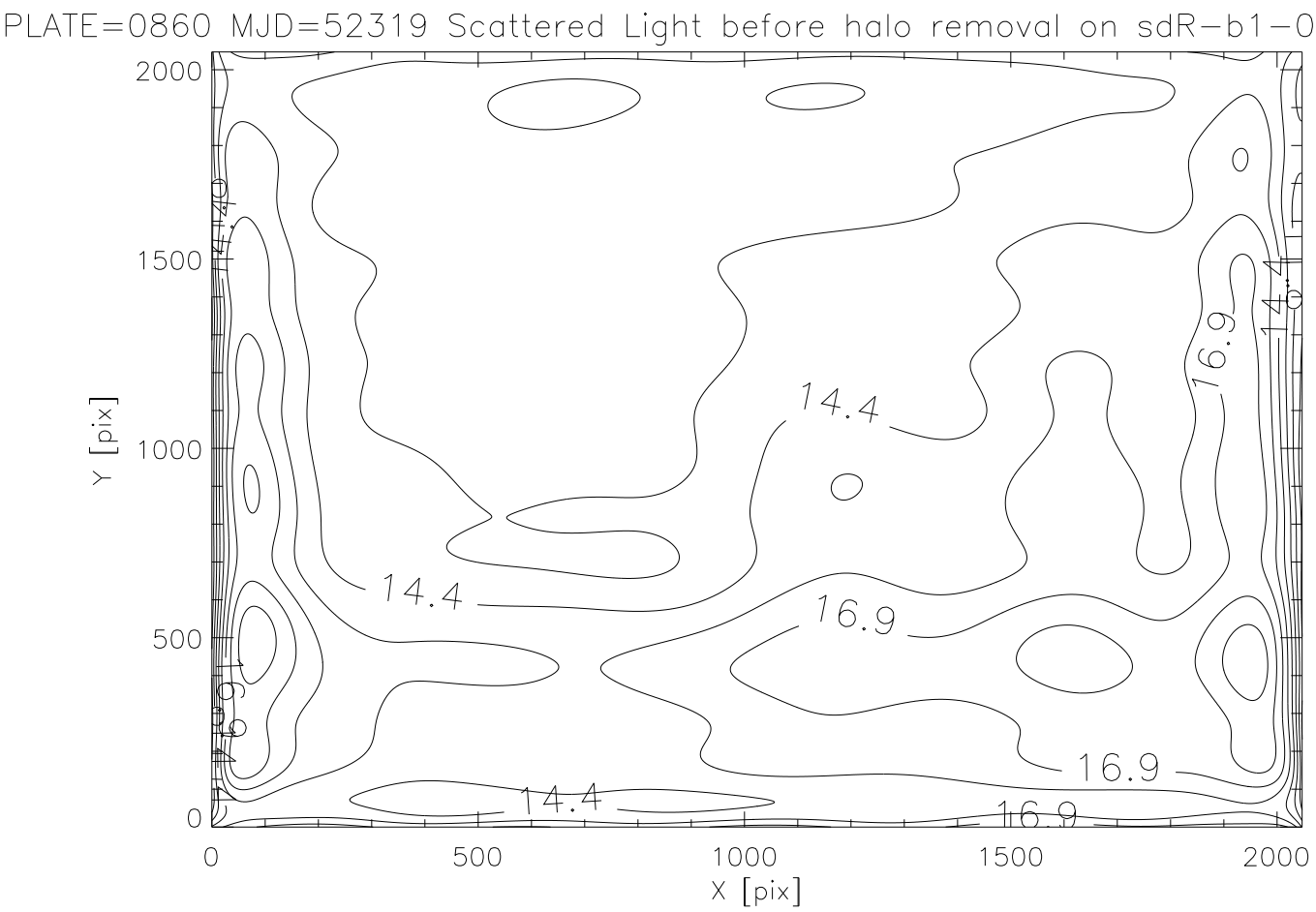

PLATE=0860 MJD=52319 sdR-b1-00013180.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

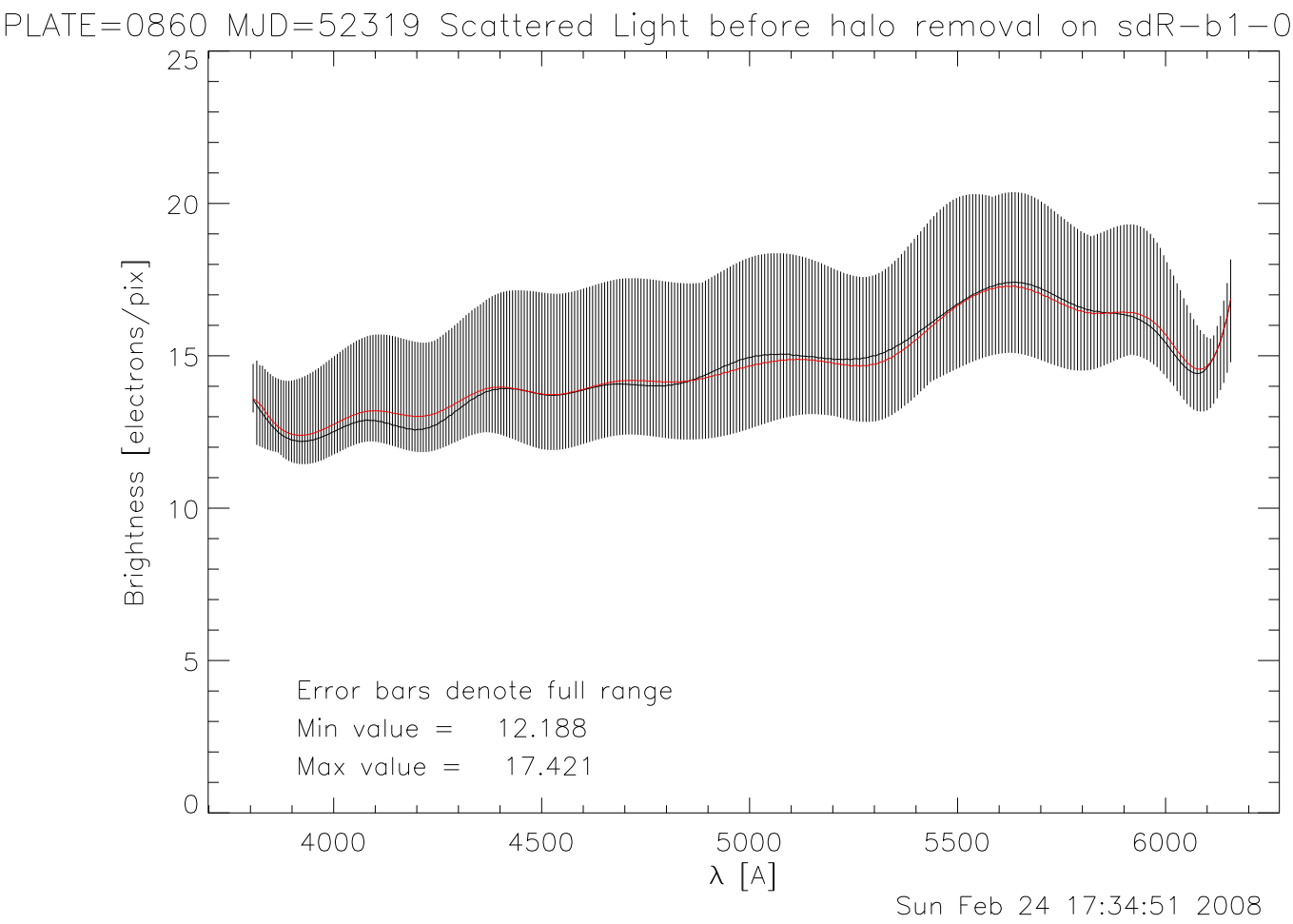

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013180.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

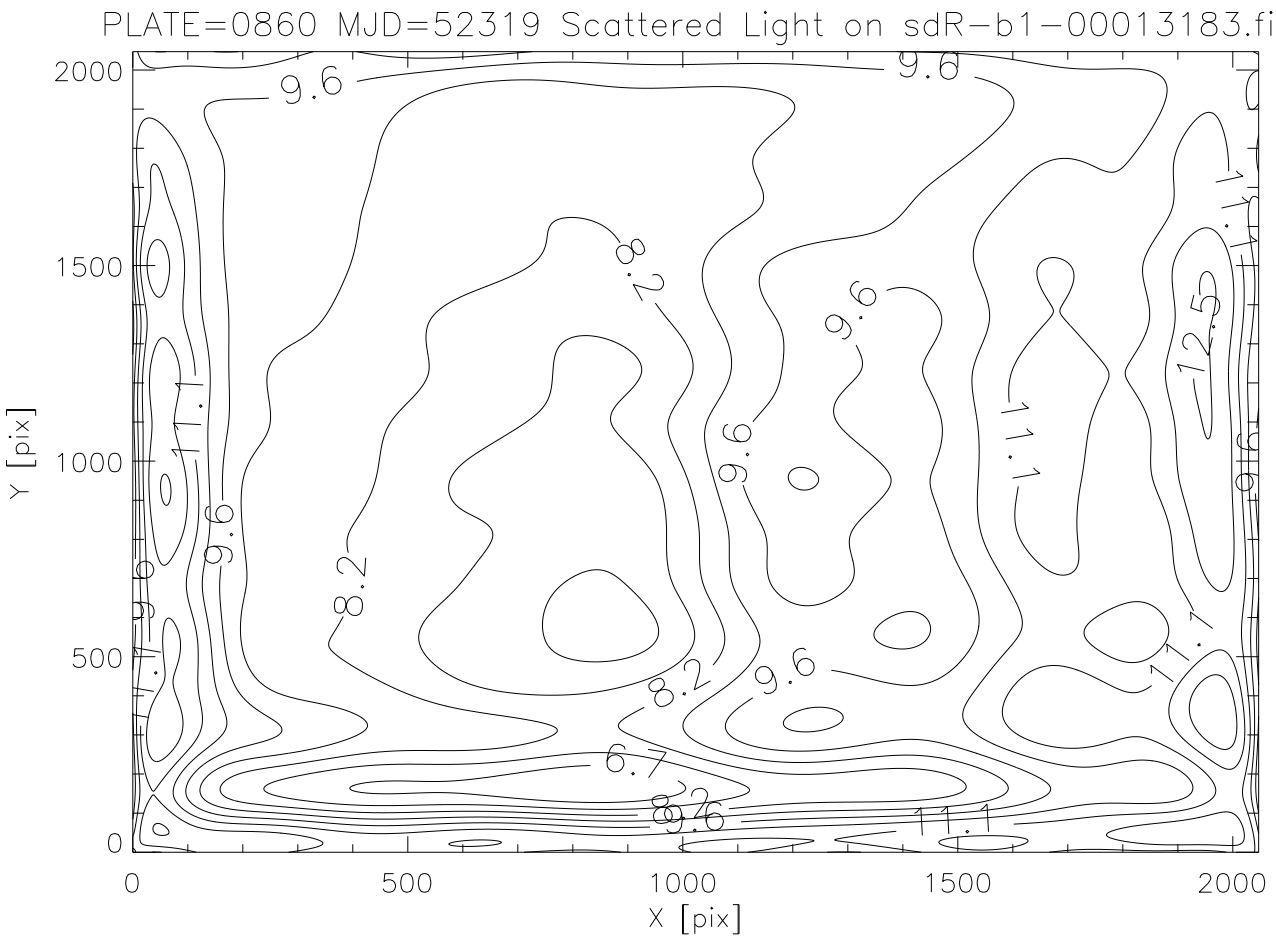

PLATE=0860 MJD=52319 sdR-b1-00013180.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.17 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

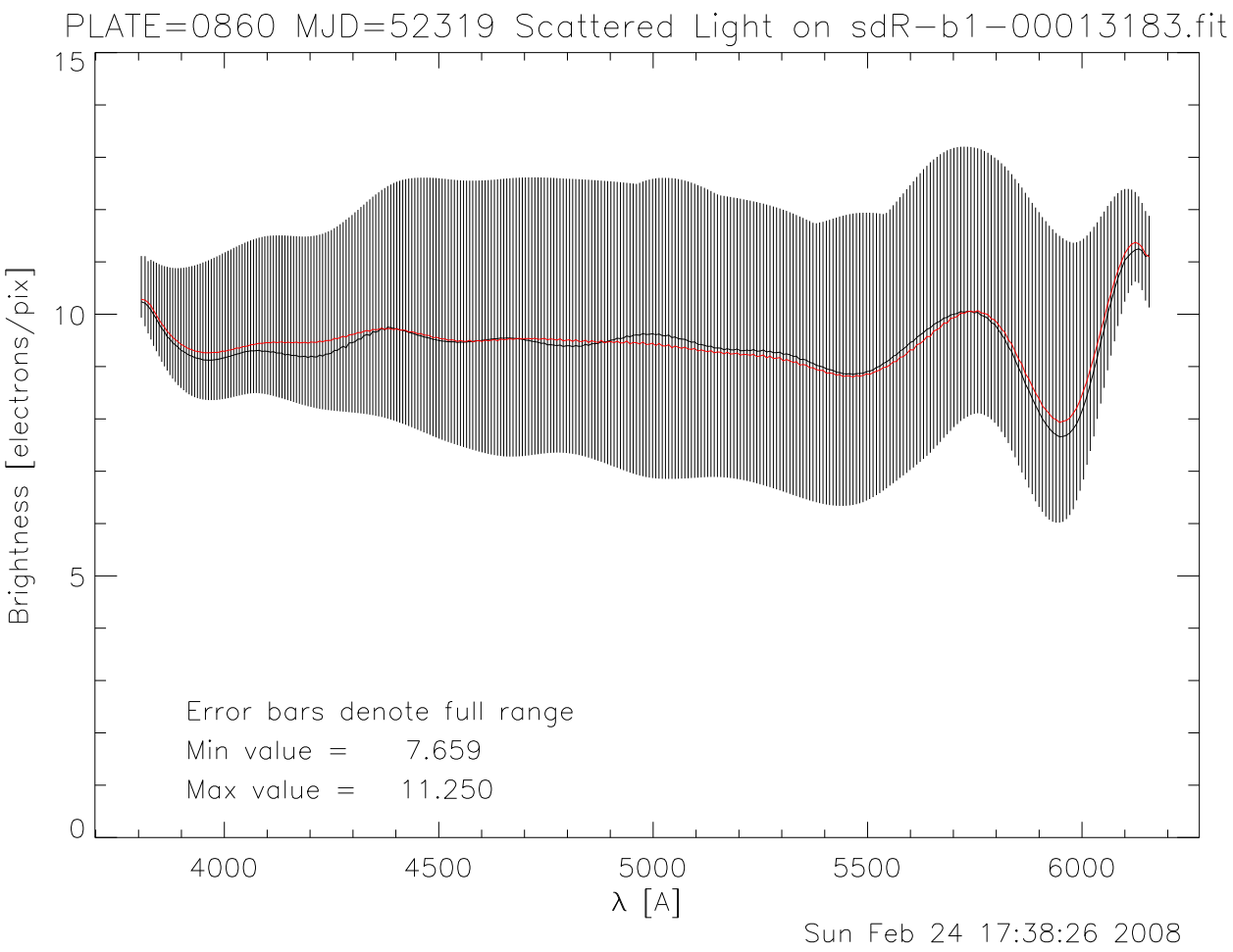

PLATE=0860 MJD=52319 sdR-b1-00013180.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.82 %
Fiber number
Focal Distance [mm]
Airmass

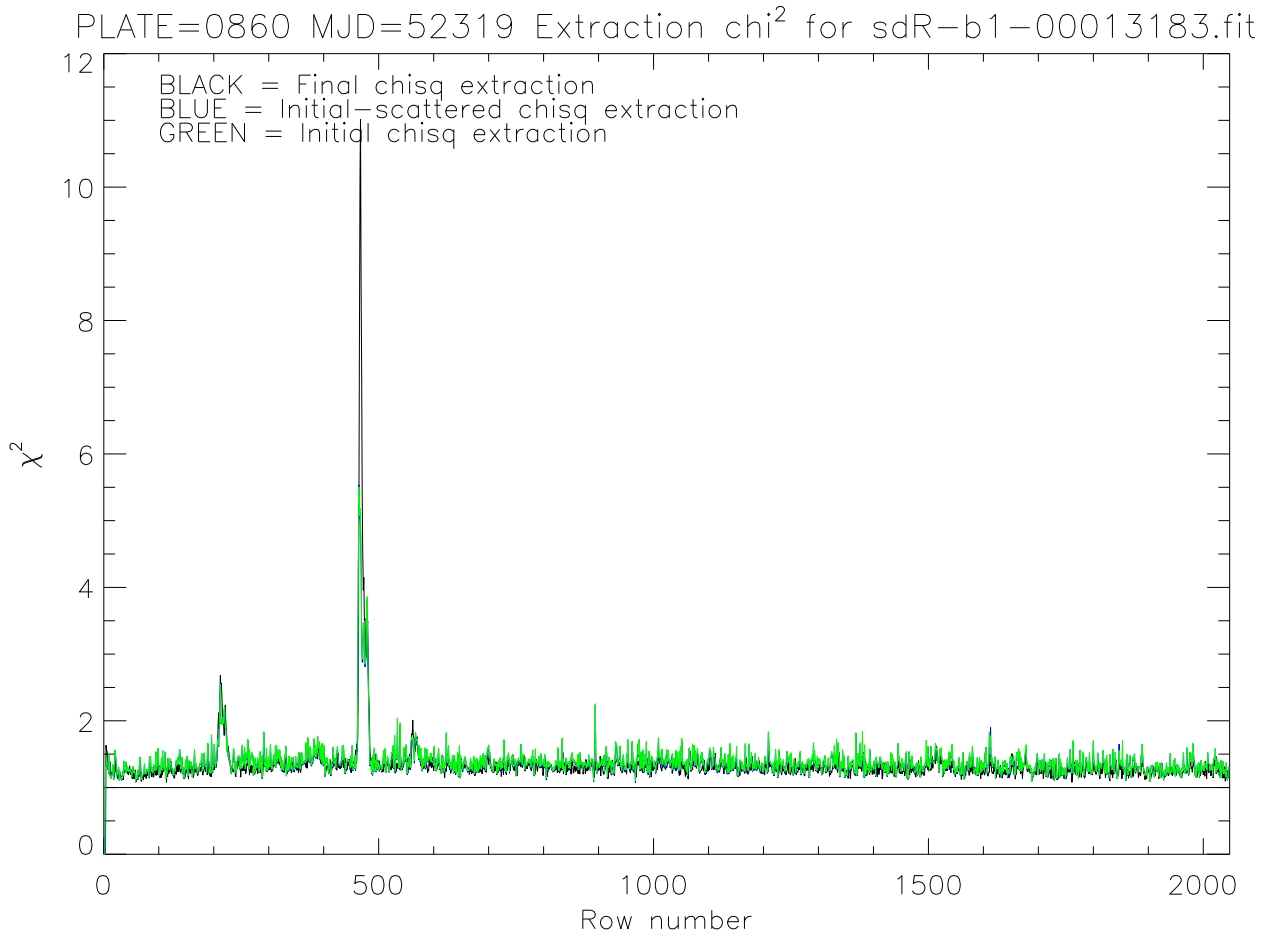

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:33:48 2008

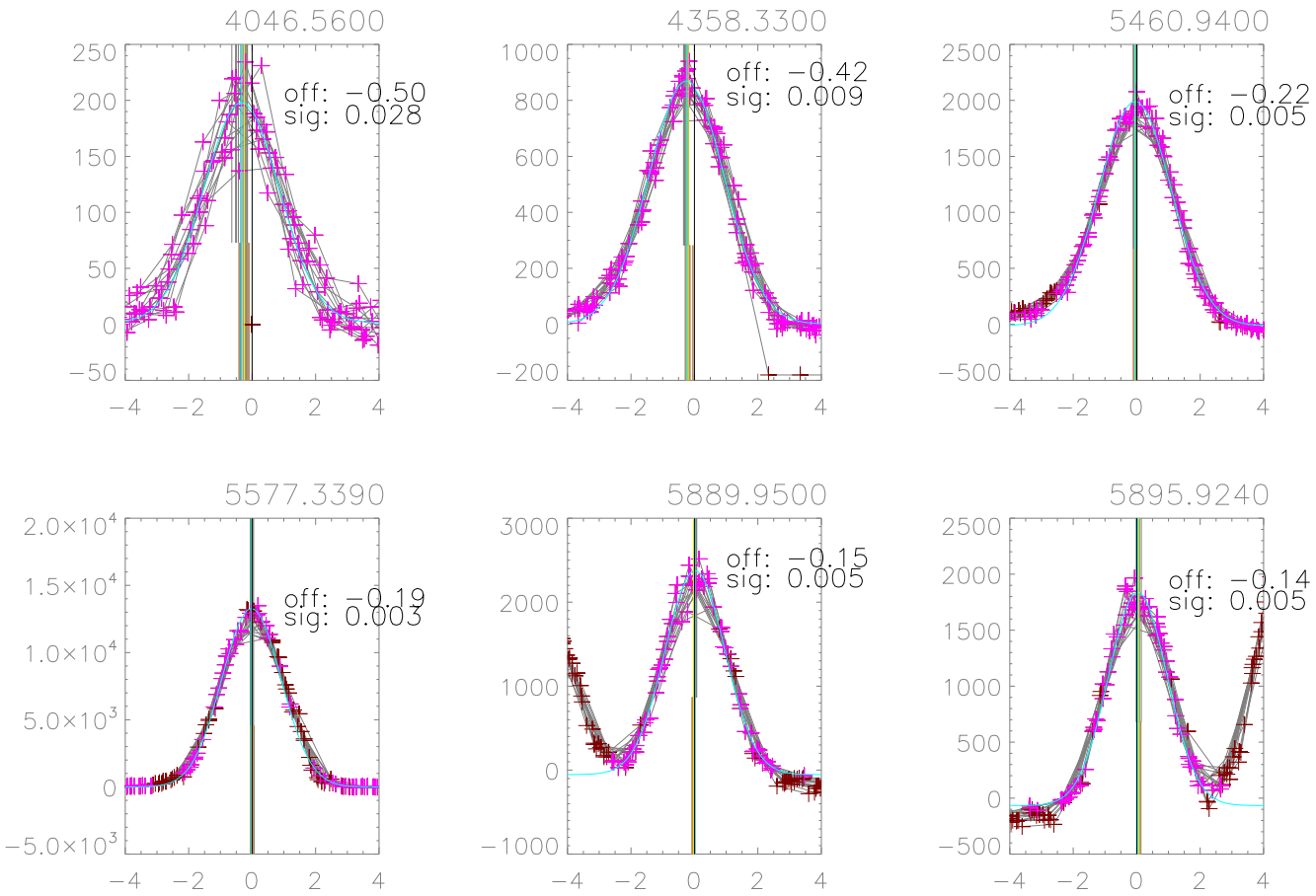

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013183.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
14.4
16.9
0

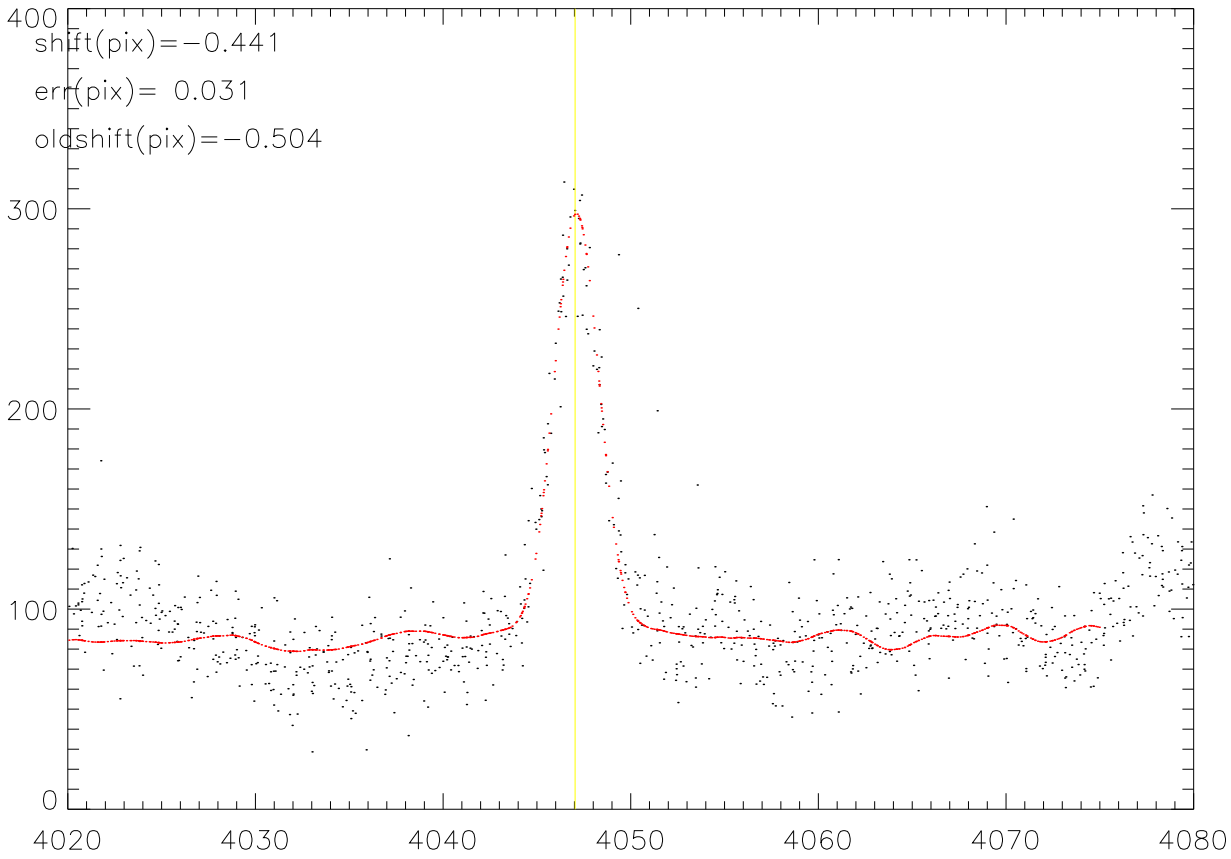

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013183.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.188
Max value = 17.421
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:34:51 2008

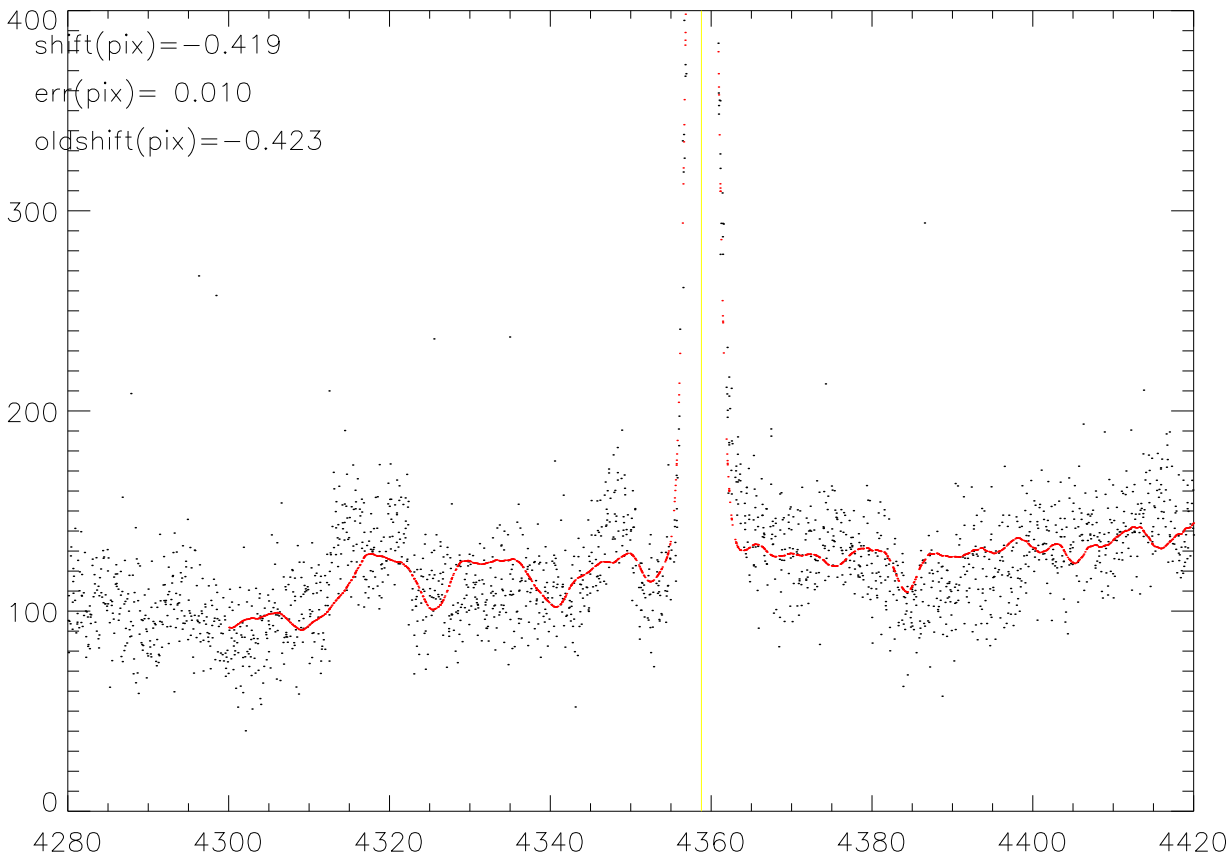

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013183.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.6
8.2
6.7
11.1
12.5

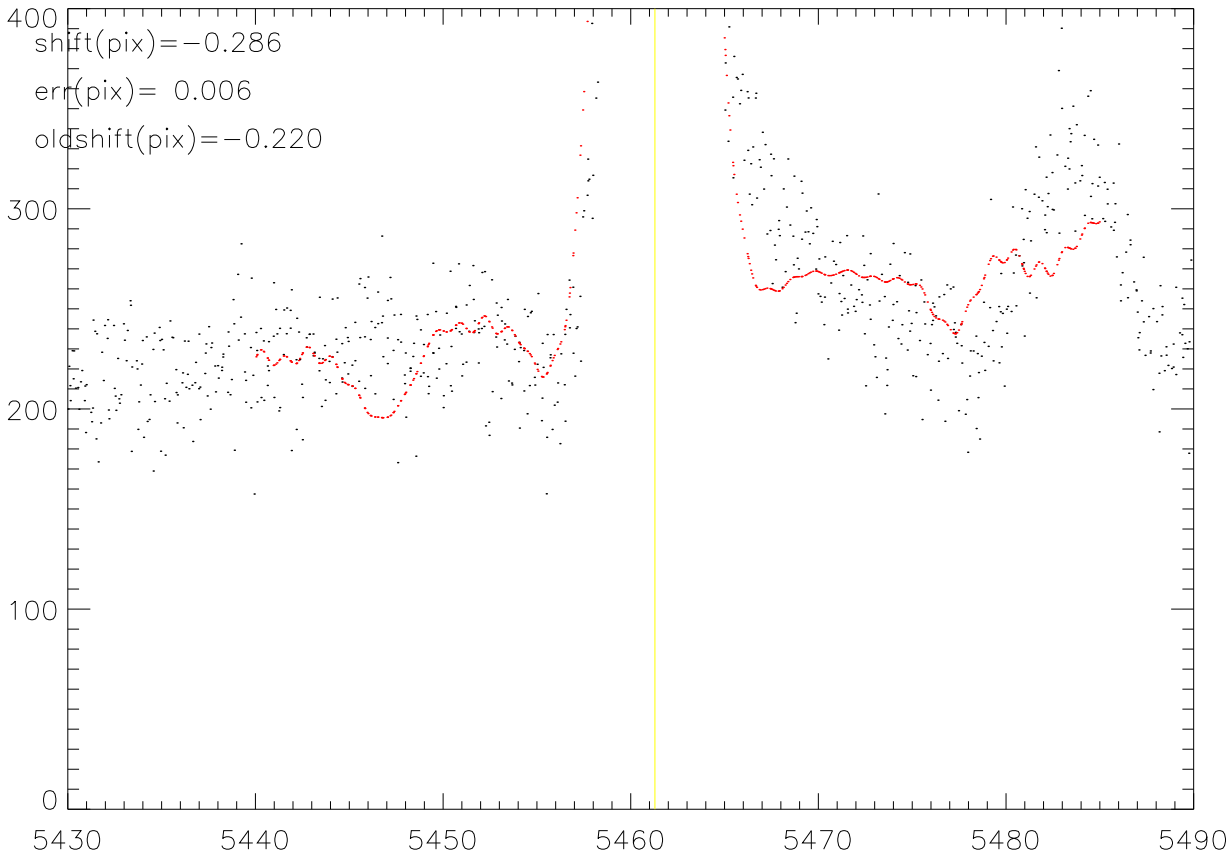

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013183.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 7.659
Max value = 11.250
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:38:26 2008

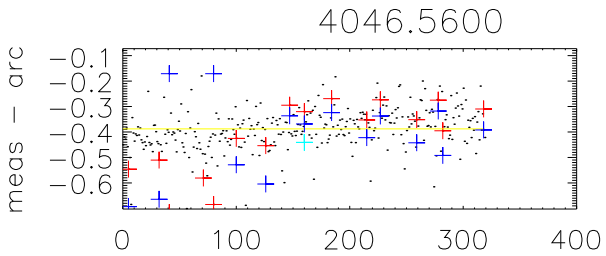

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

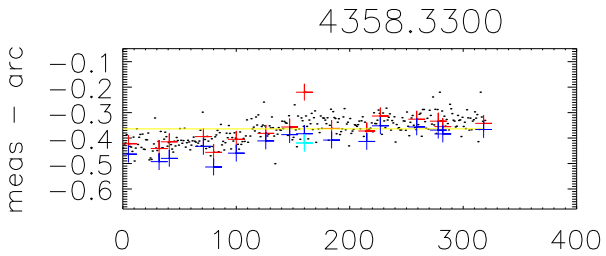

4046.5600
off: −0.50
sig: 0.028
4358.3300
off: −0.42
sig: 0.009
5460.9400
off: −0.22
sig: 0.005
5577.3390
off: −0.19
sig: 0.003
5889.9500
off: −0.15
sig: 0.005
5895.9240
off: −0.14
sig: 0.005

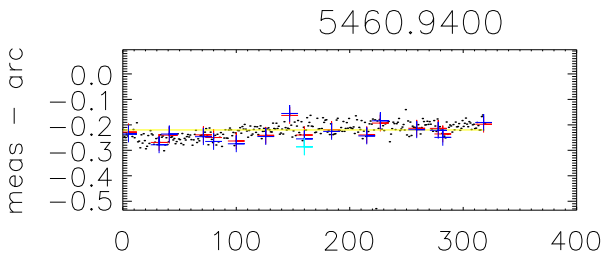

shift(pix)=−0.441
err(pix)= 0.031
oldshift(pix)=−0.504
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

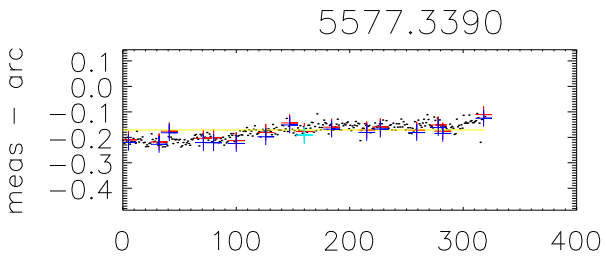

shift(pix)=−0.419
err(pix)= 0.010
oldshift(pix)=−0.423
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

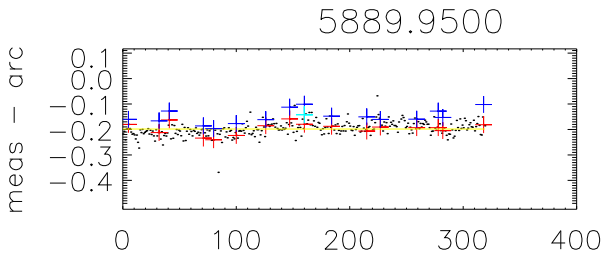

shift(pix)=−0.286
err(pix)= 0.006
oldshift(pix)=−0.220
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

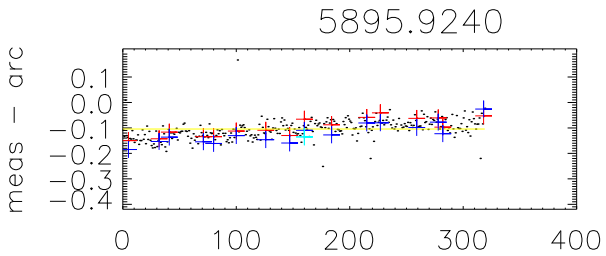

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

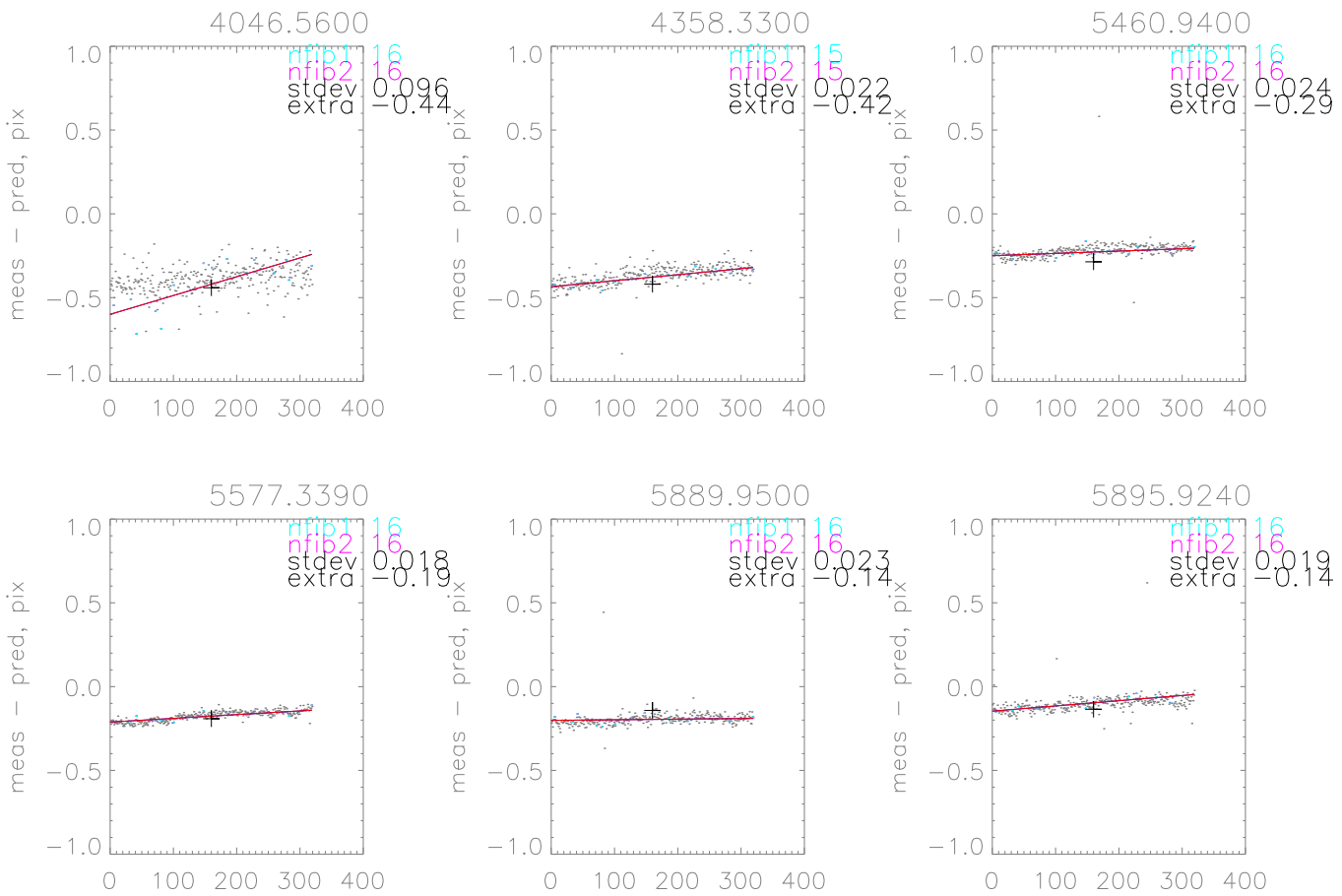

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

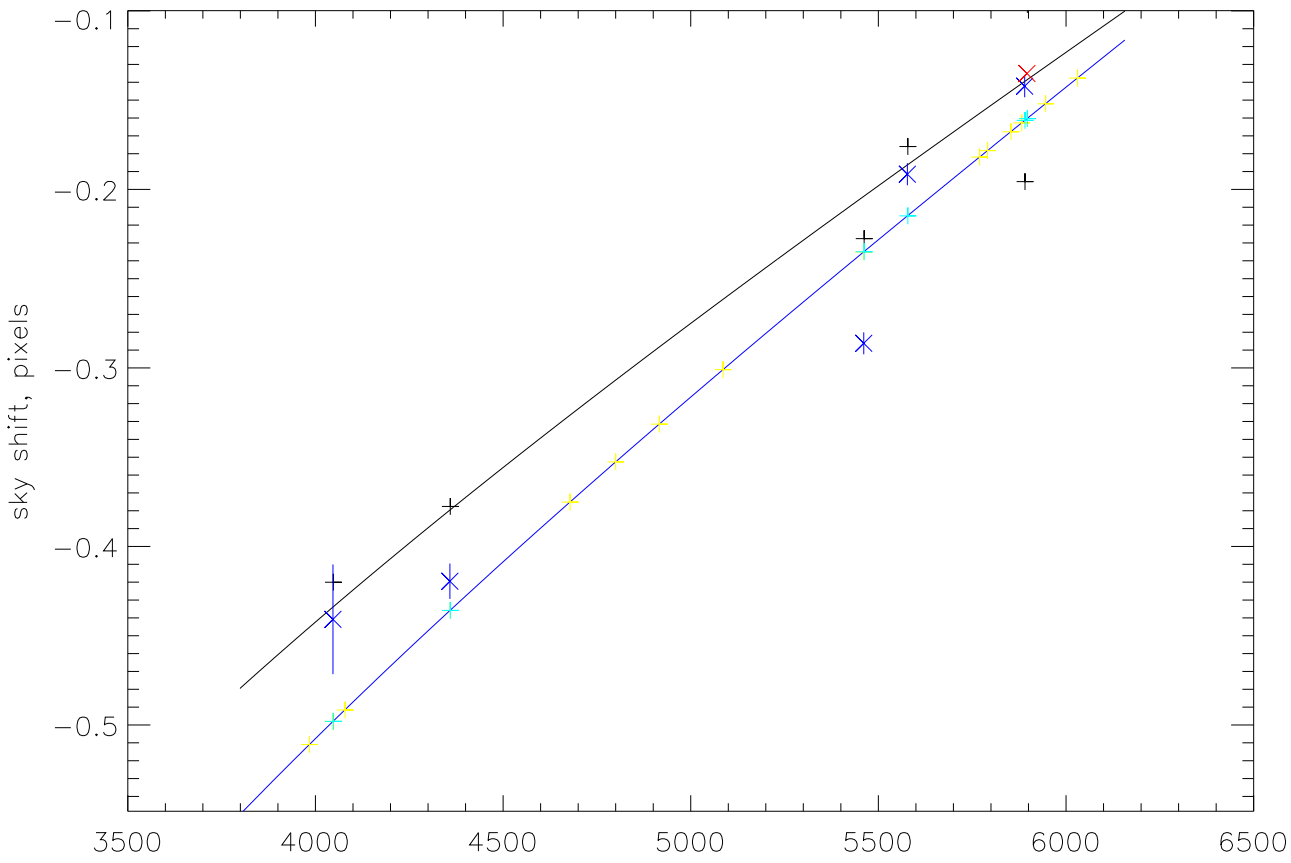

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

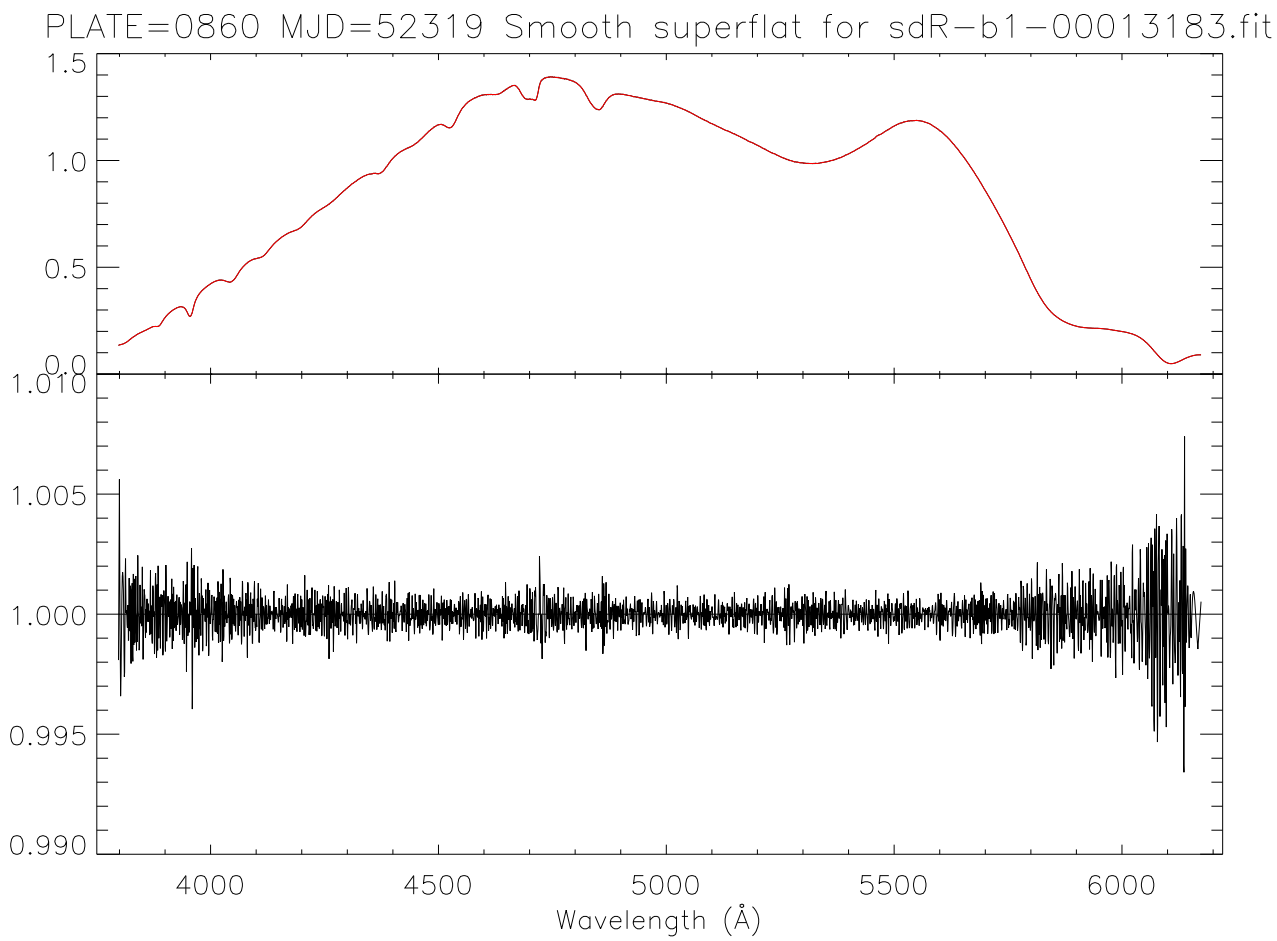

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

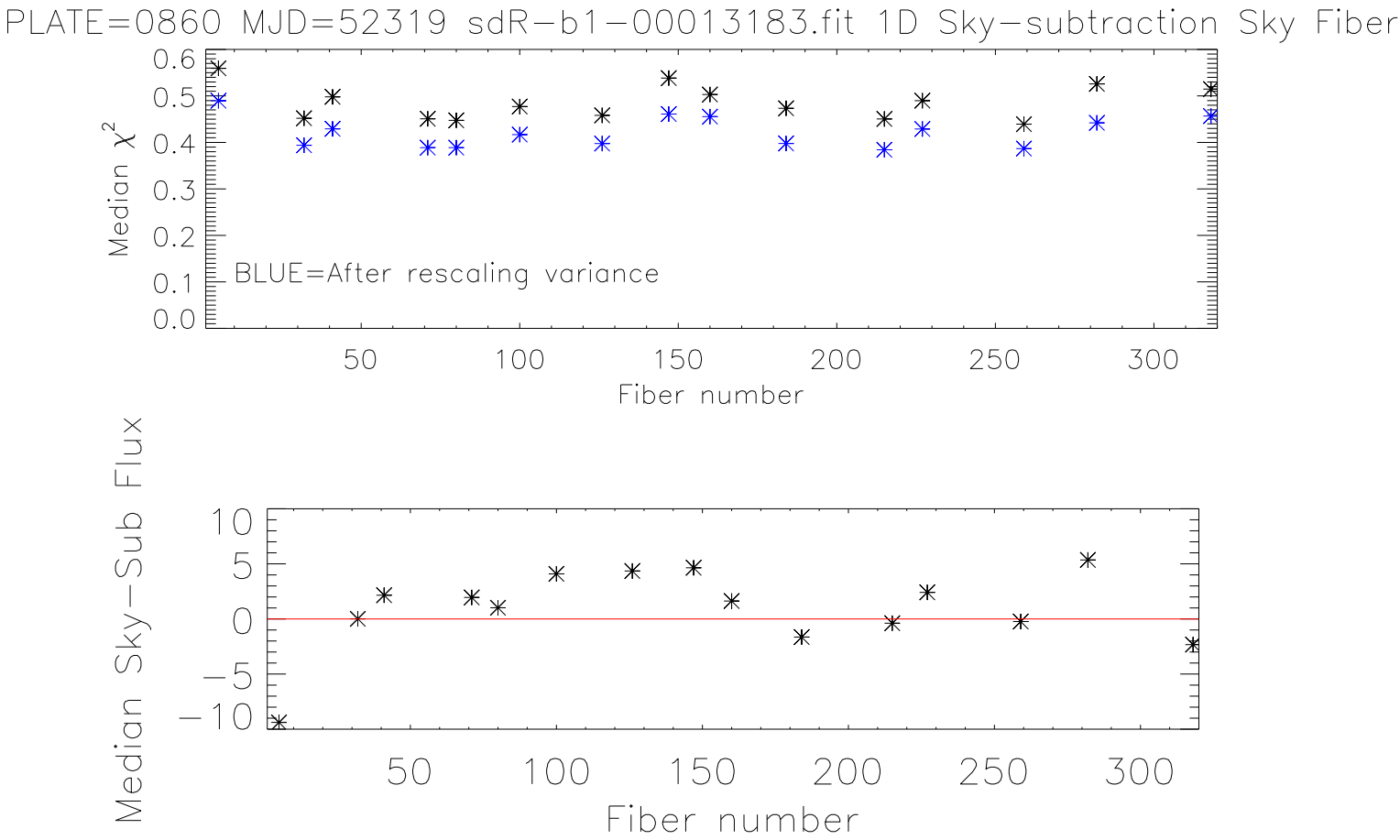

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

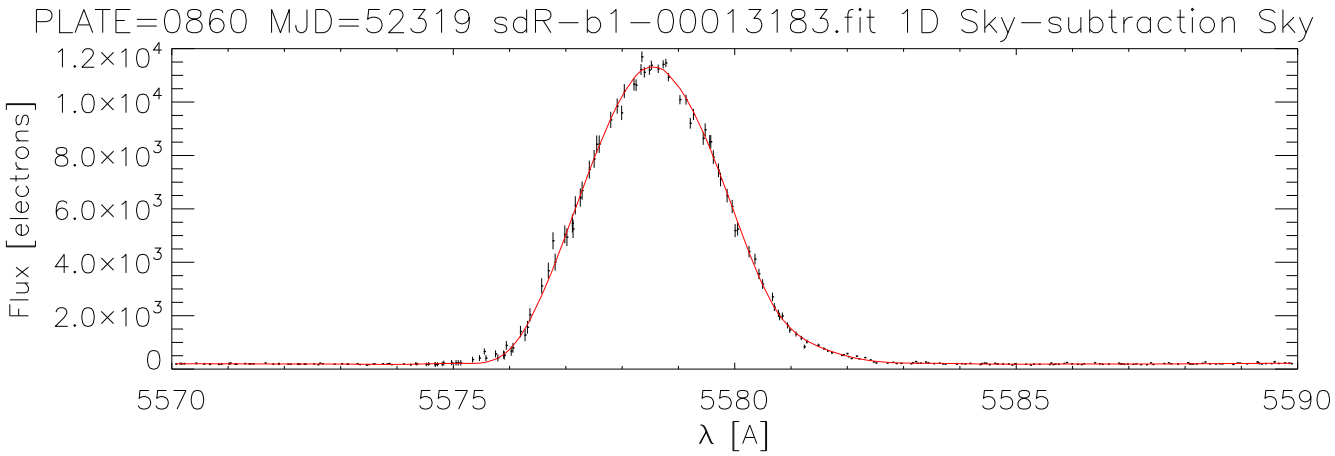

4046.5600
nfib1 16
nfib2 16
stdev 0.096
extra −0.44
4358.3300
nfib1 15
nfib2 15
stdev 0.022
extra −0.42
5460.9400
nfib1 16
nfib2 16
stdev 0.024
extra −0.29
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.19
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra −0.14
5895.9240
nfib1 16
nfib2 16
stdev 0.019
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

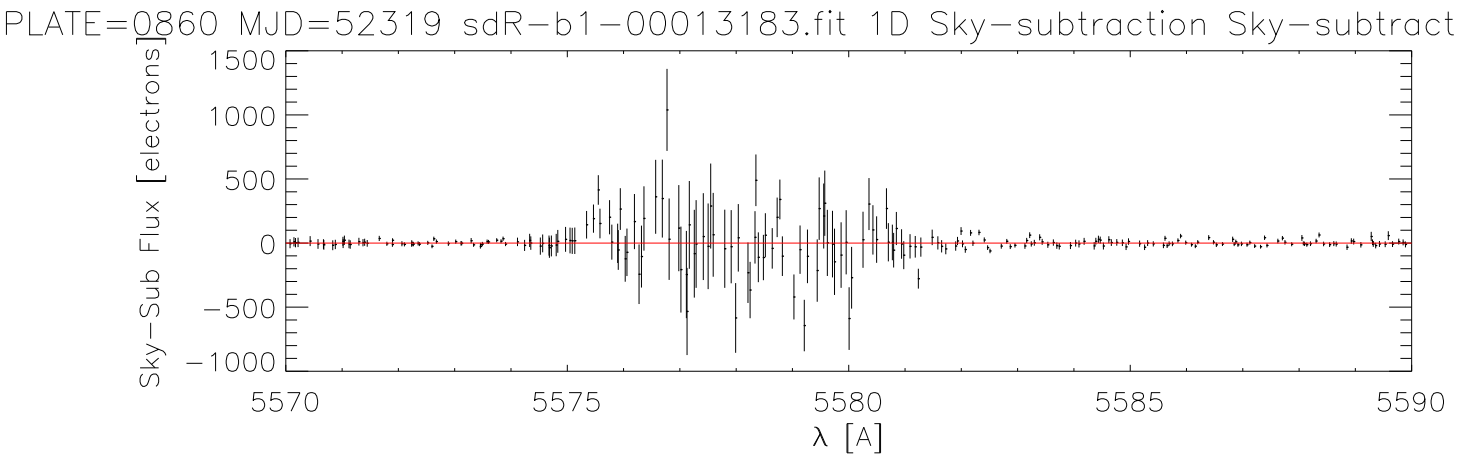

−0.1
−0.2
−0.3
−0.4
−0.5
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

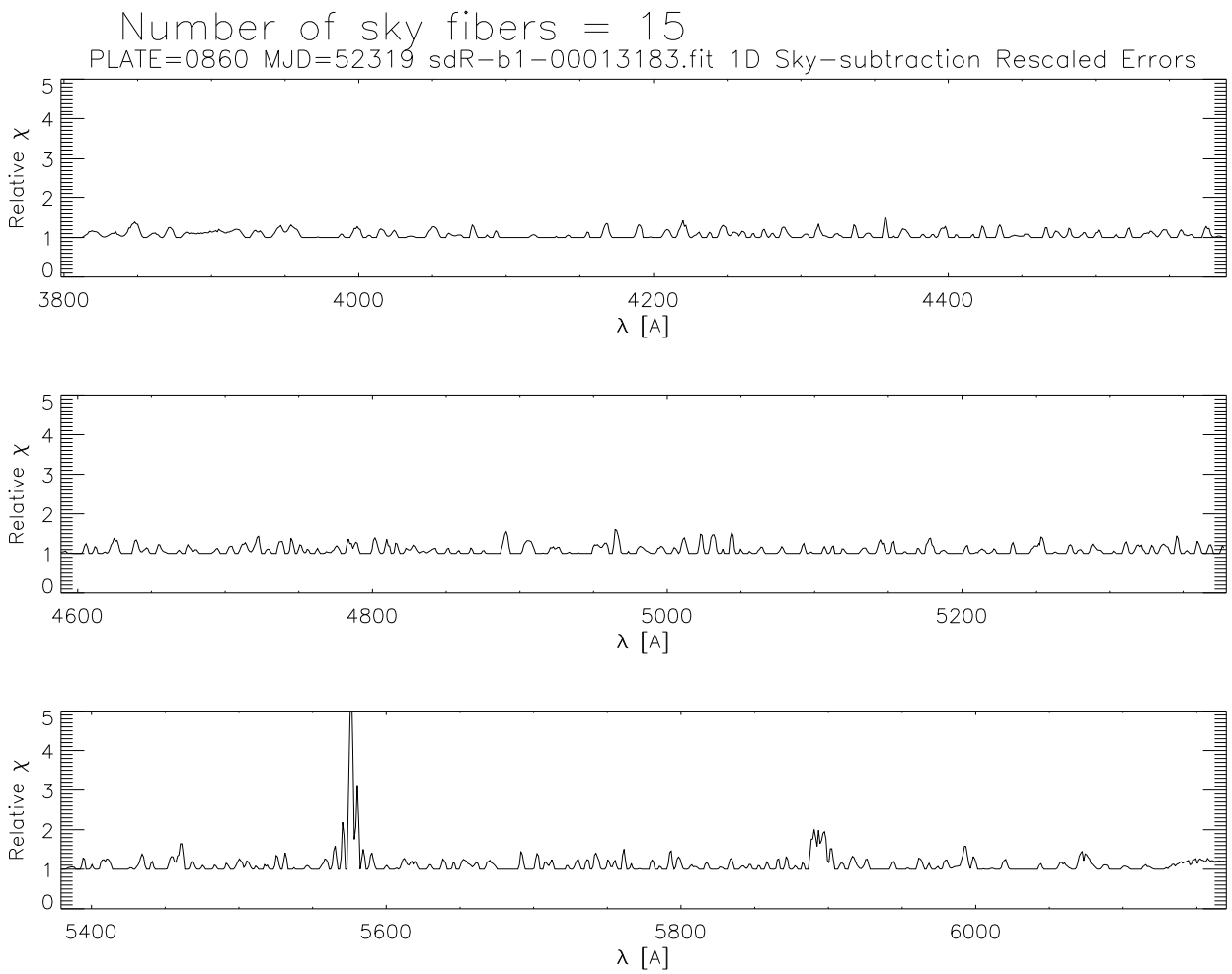
es= 0.0000

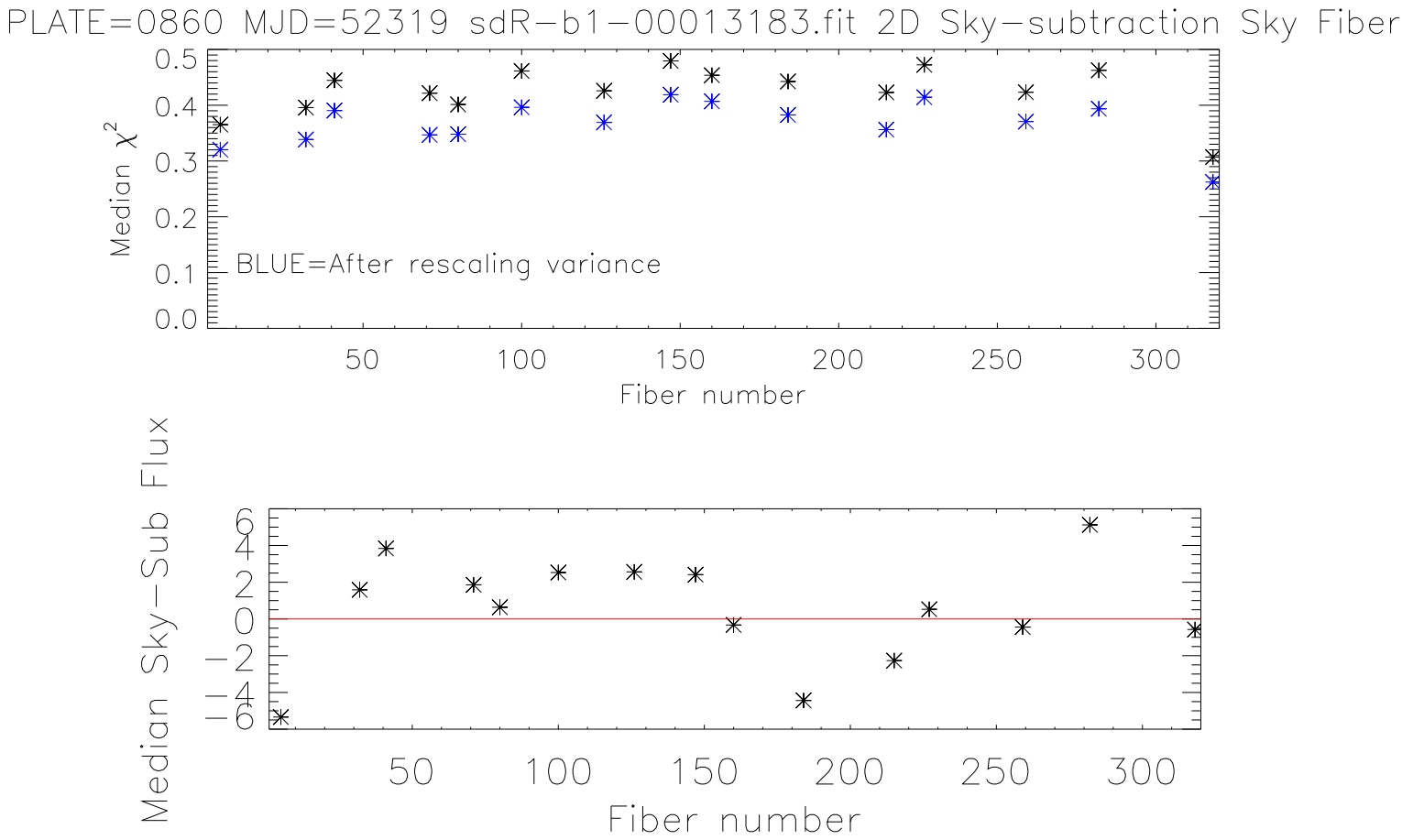

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013183.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

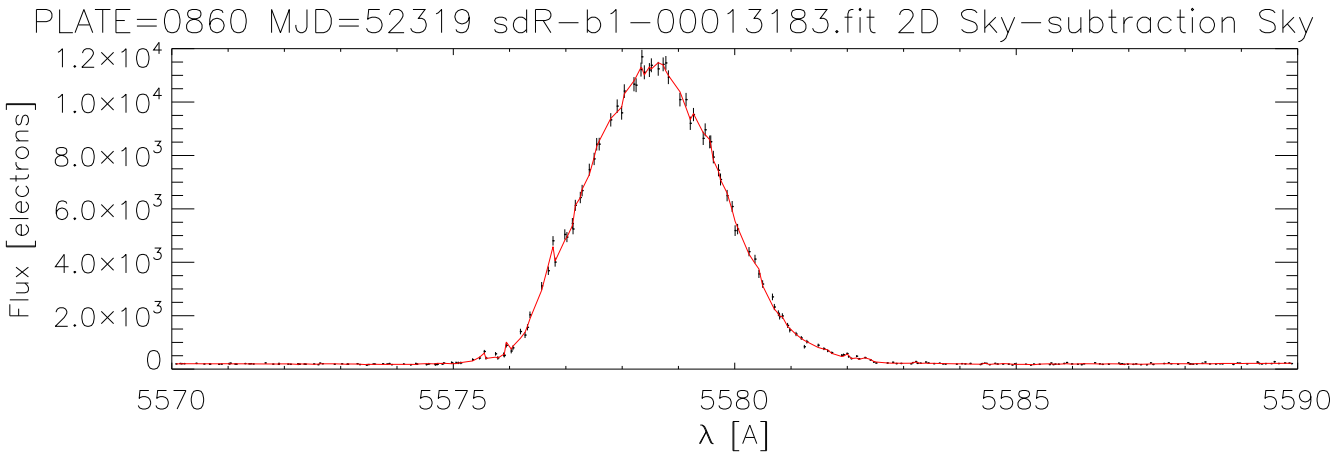

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

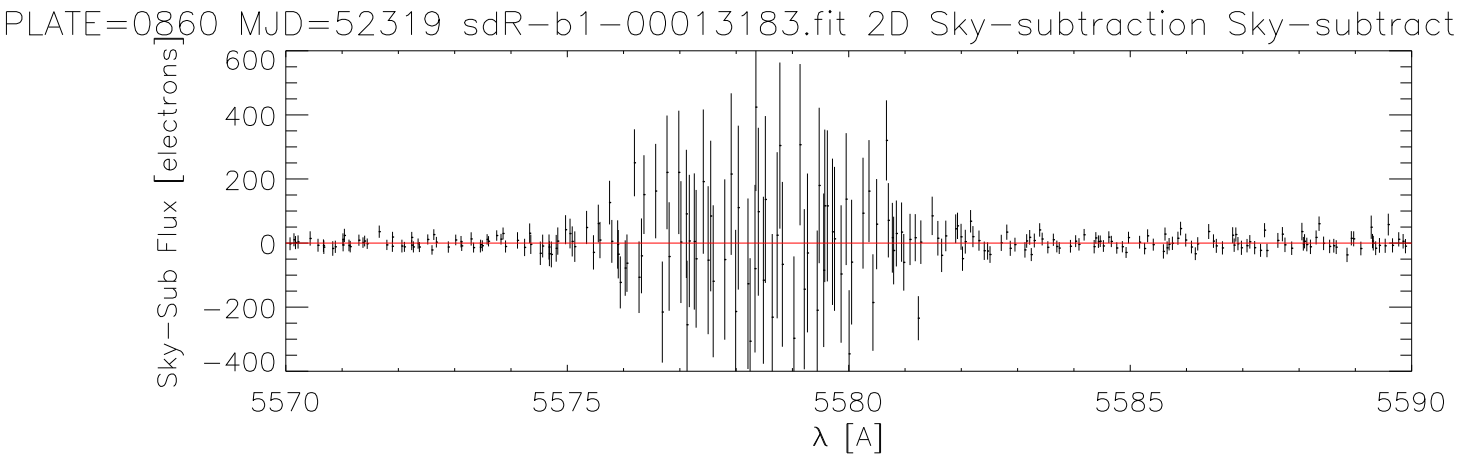

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

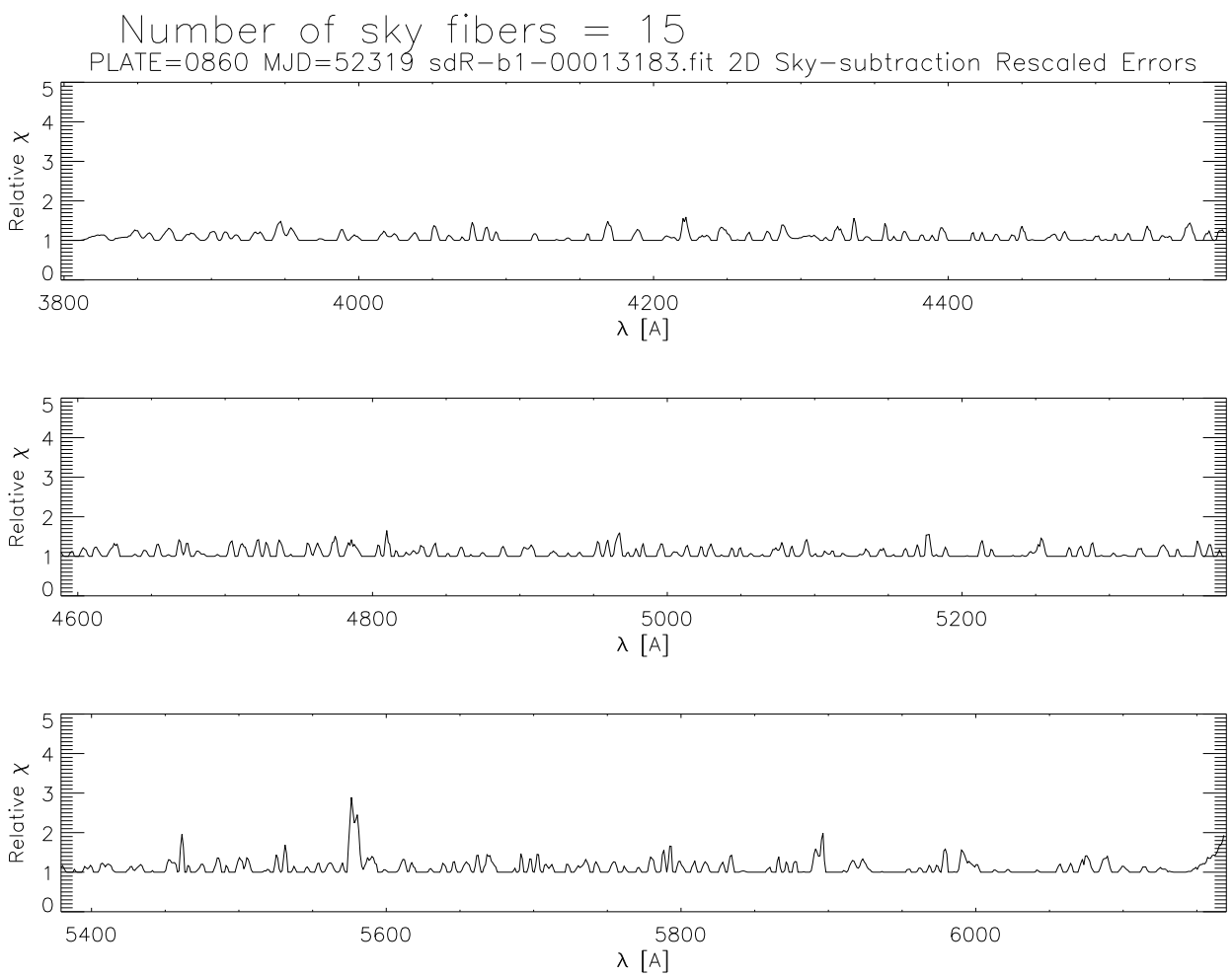

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

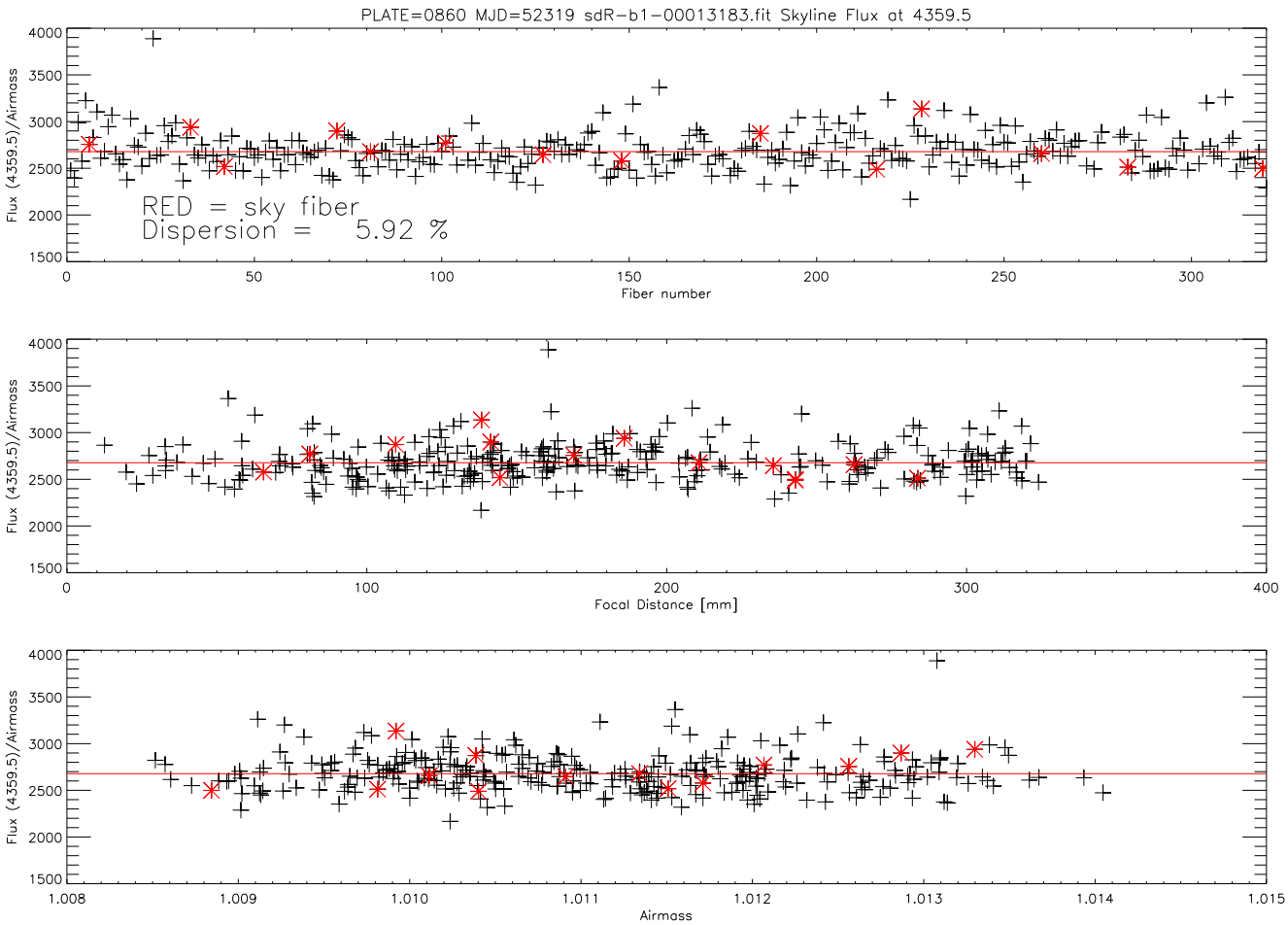

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

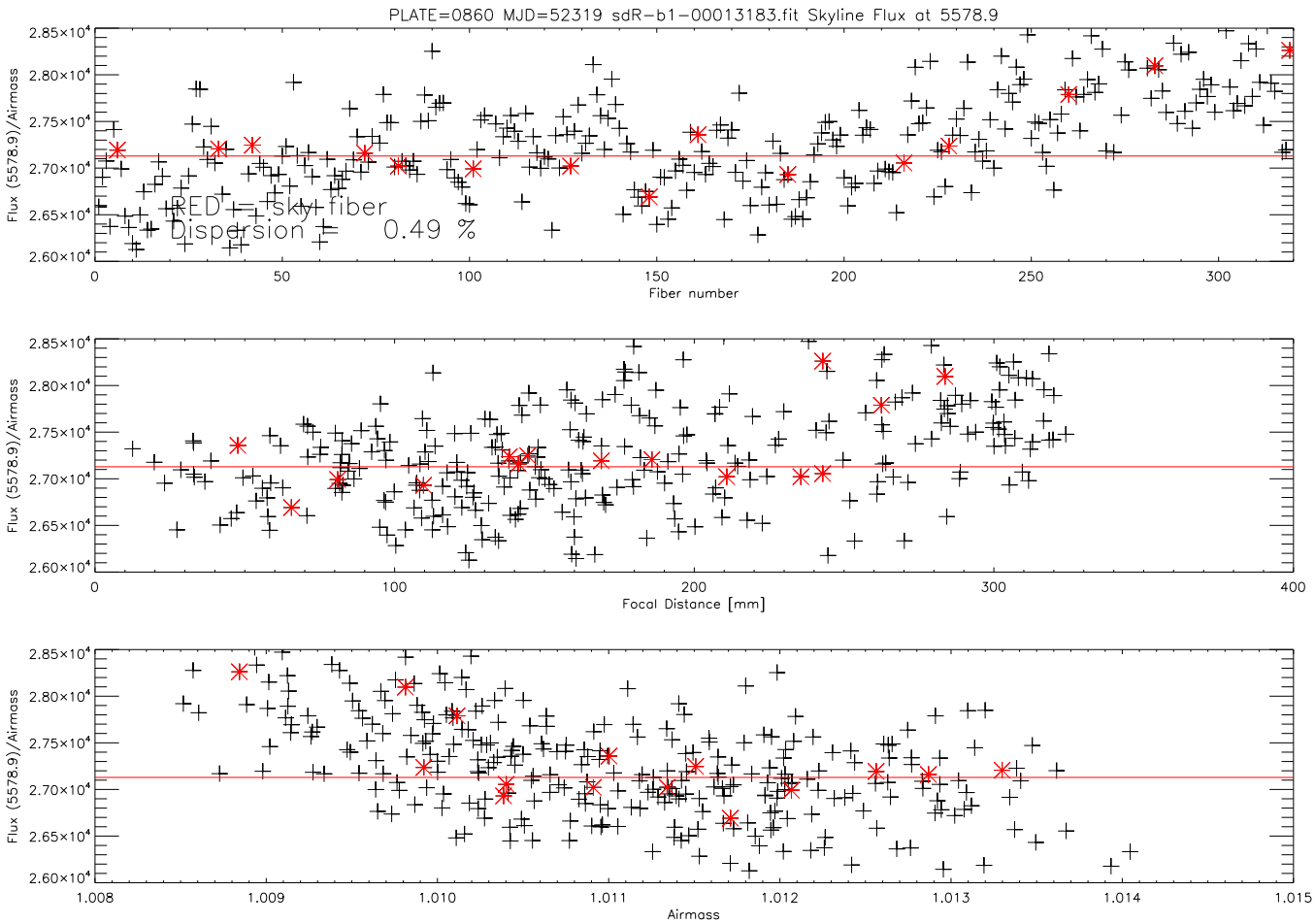

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

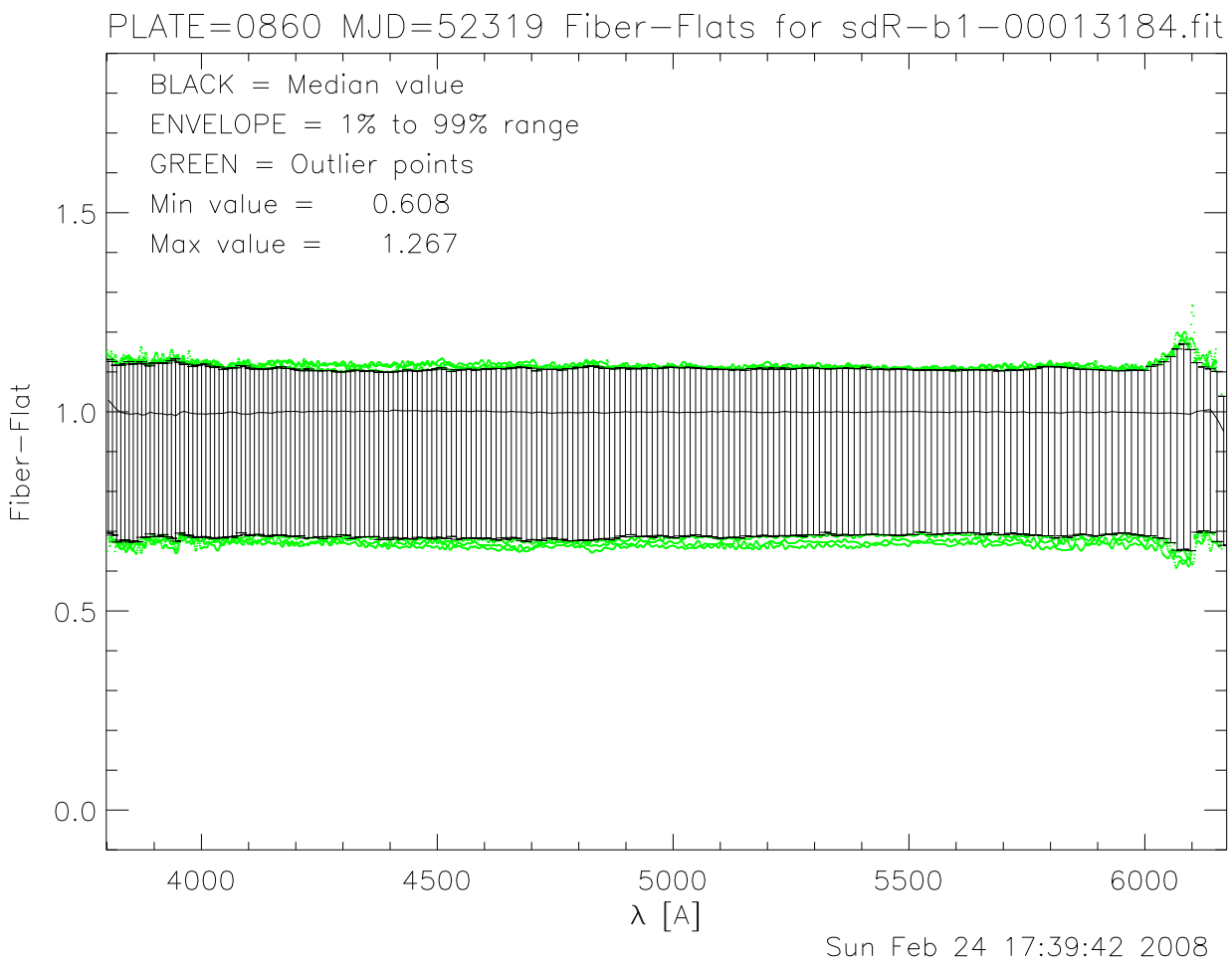

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

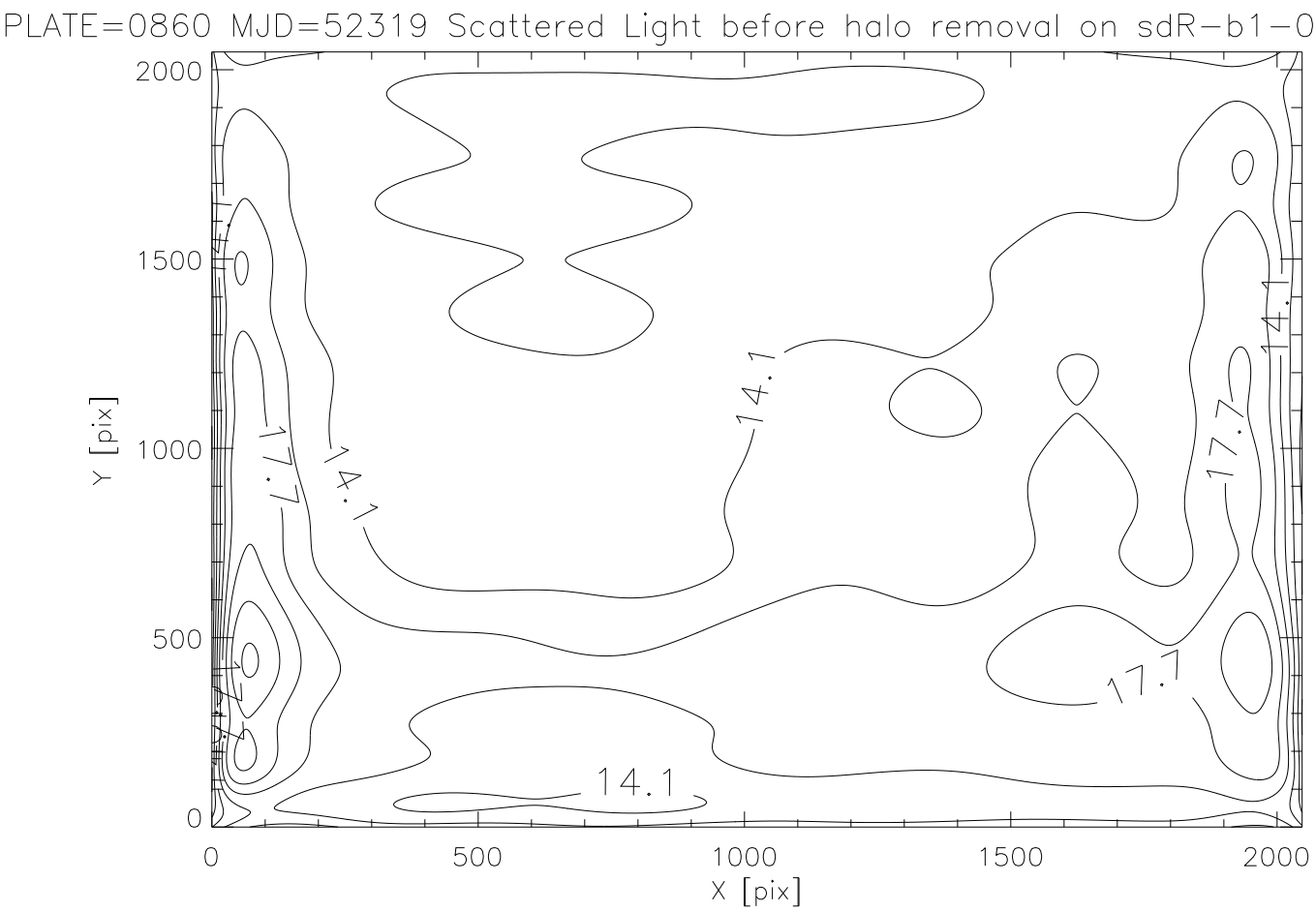

PLATE=0860 MJD=52319 sdR-b1-00013183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

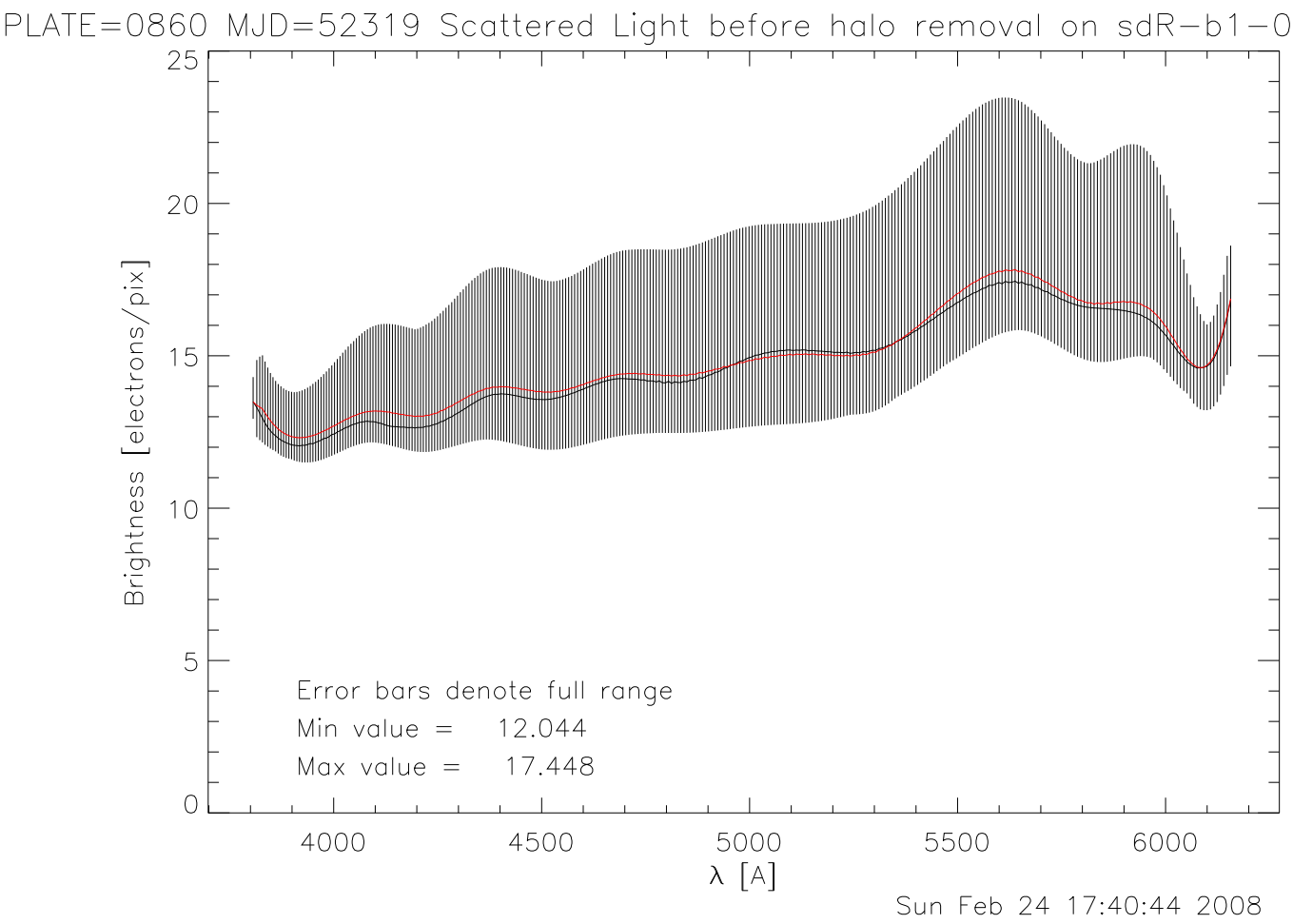

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

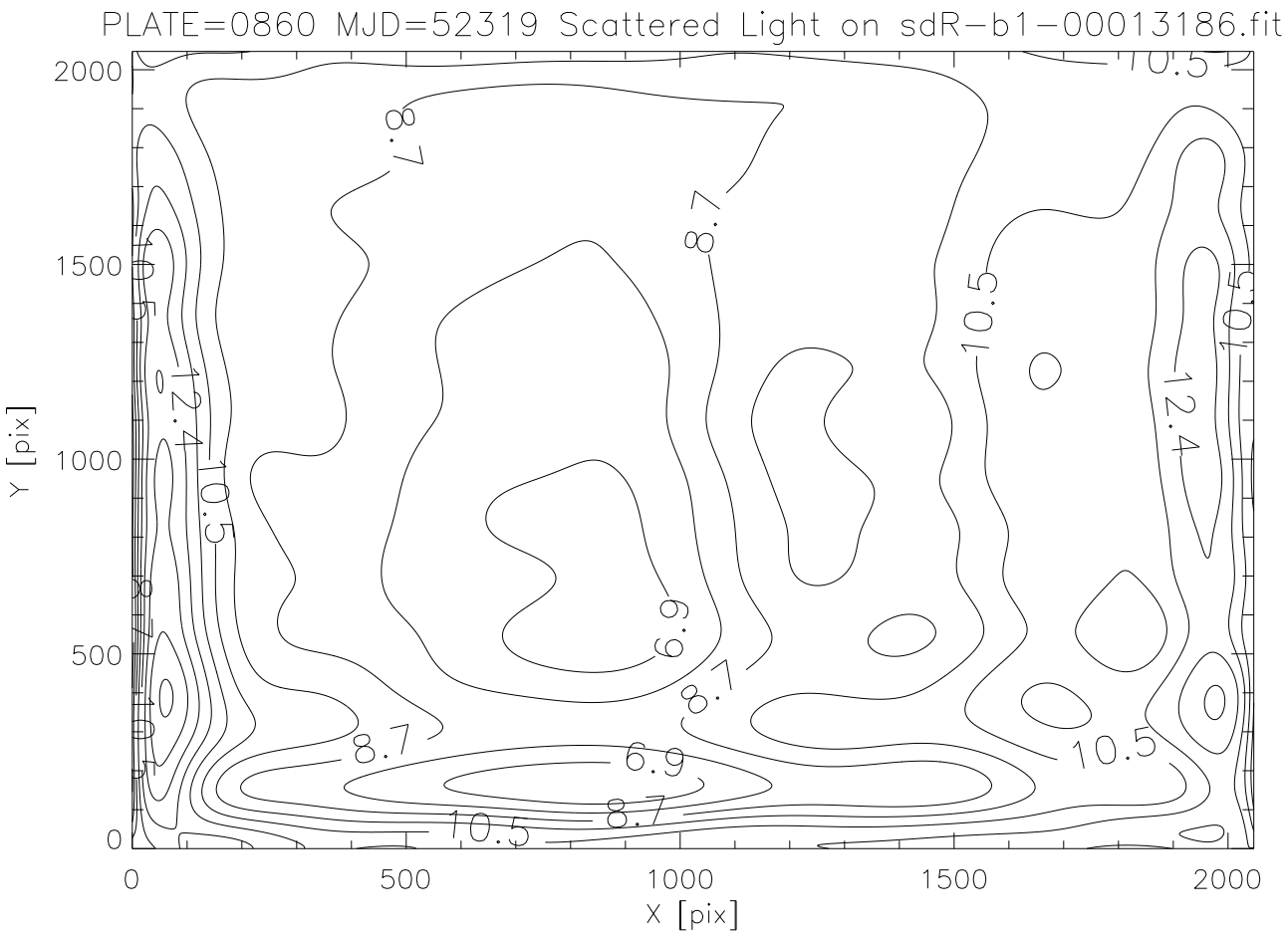

PLATE=0860 MJD=52319 sdR-b1-00013183.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.92 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

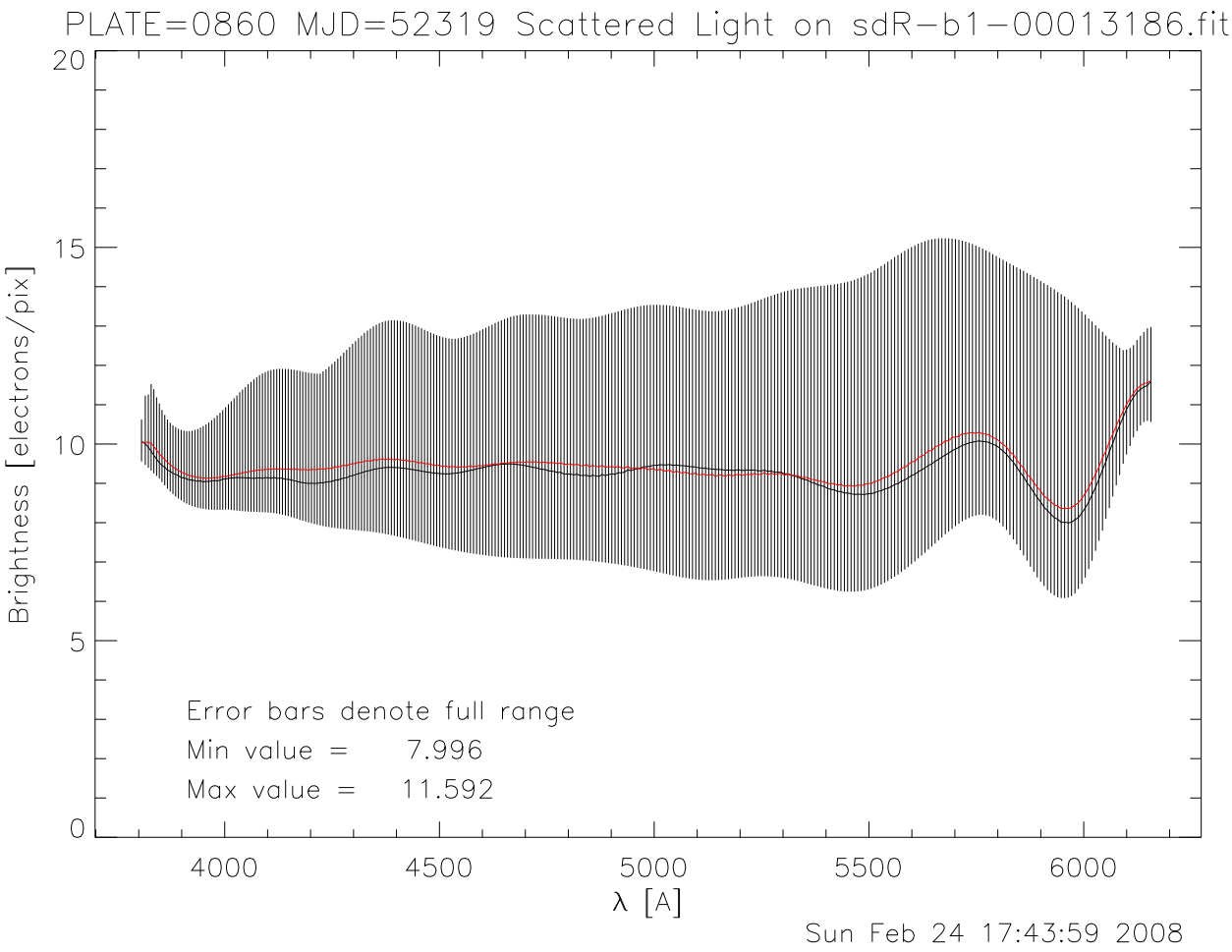

PLATE=0860 MJD=52319 sdR-b1-00013183.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 0.49 %
Flux (5578.9)/Airmass
Fiber number
Focal Distance [mm]
Airmass

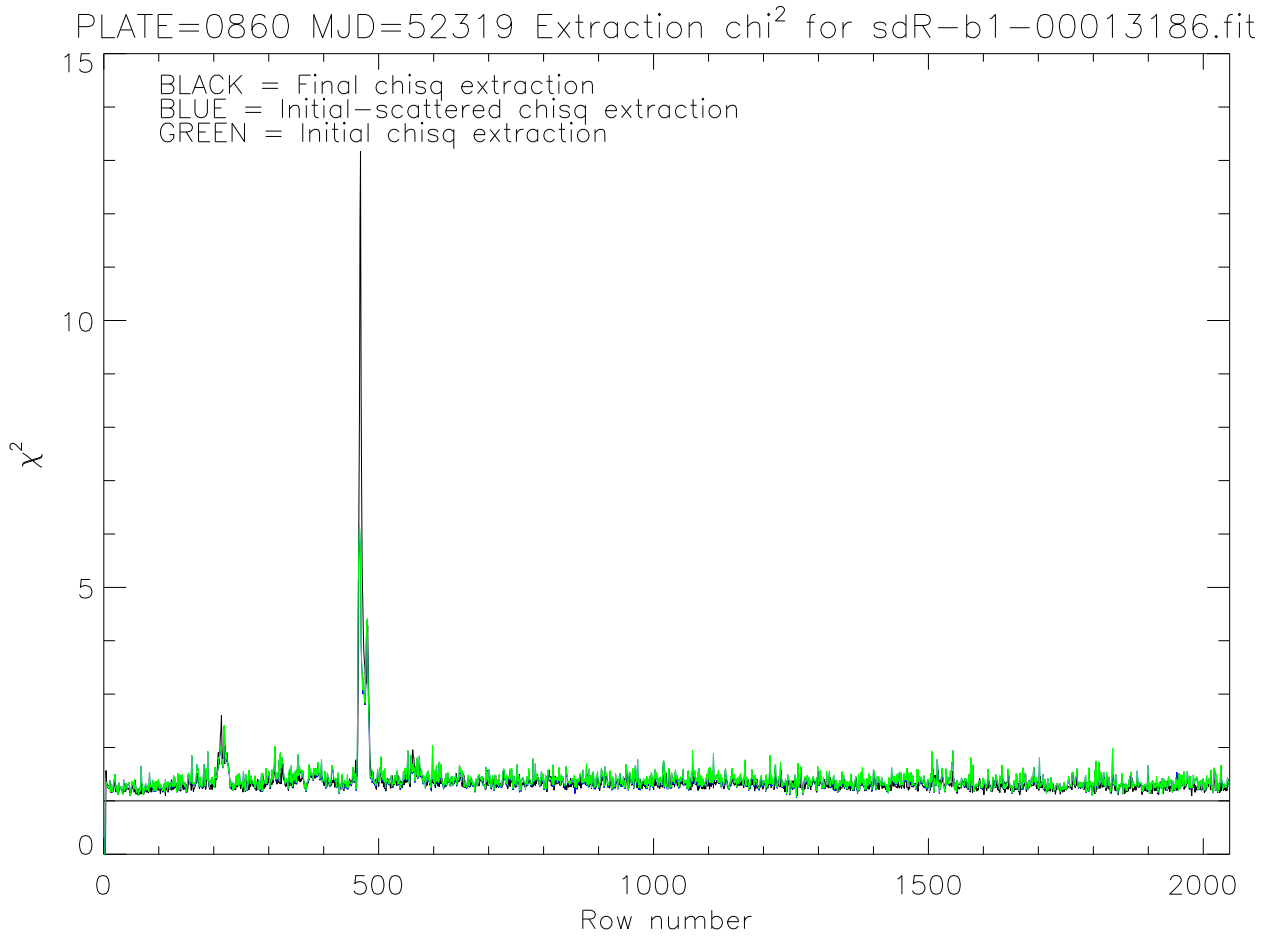

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:39:42 2008

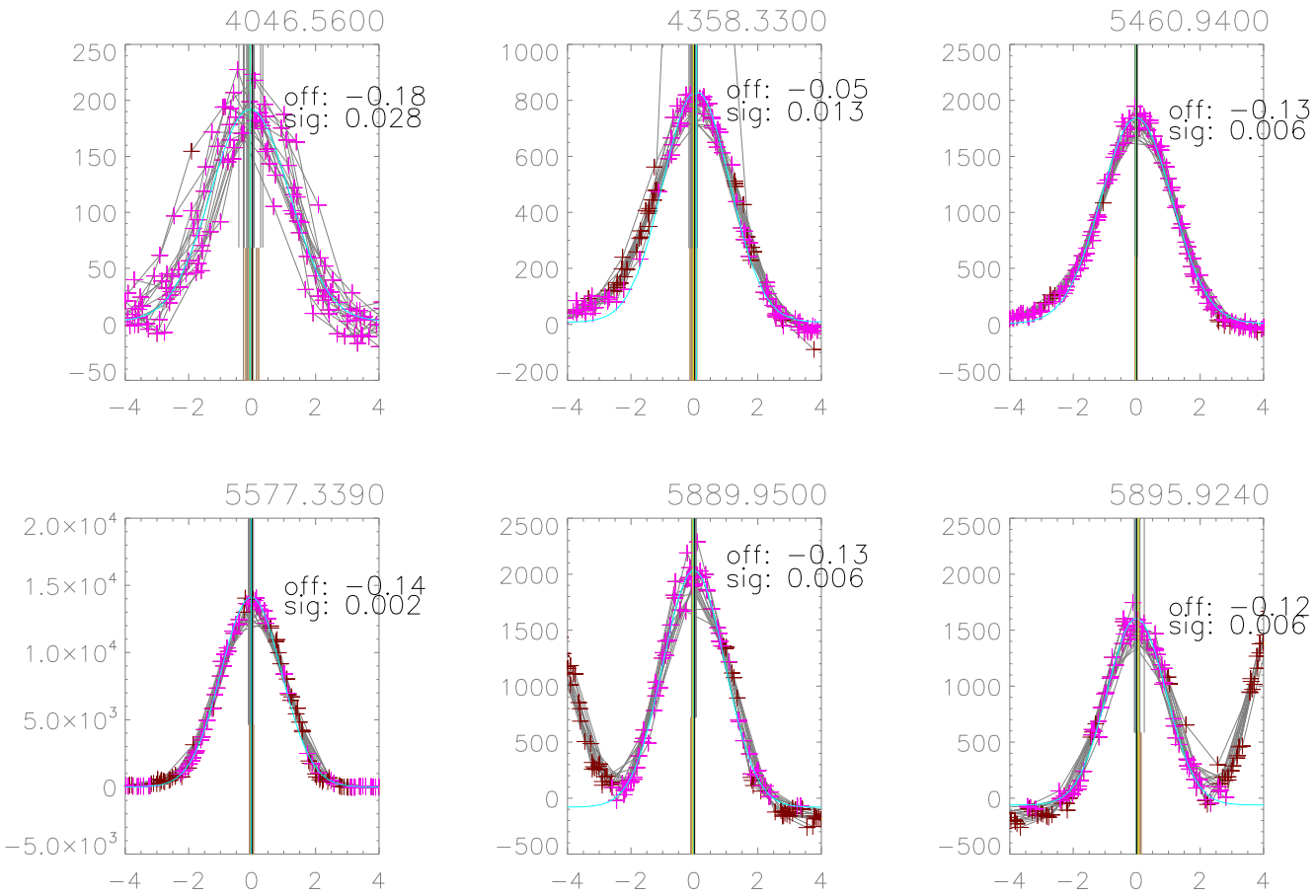

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013186.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
14.1
17.7

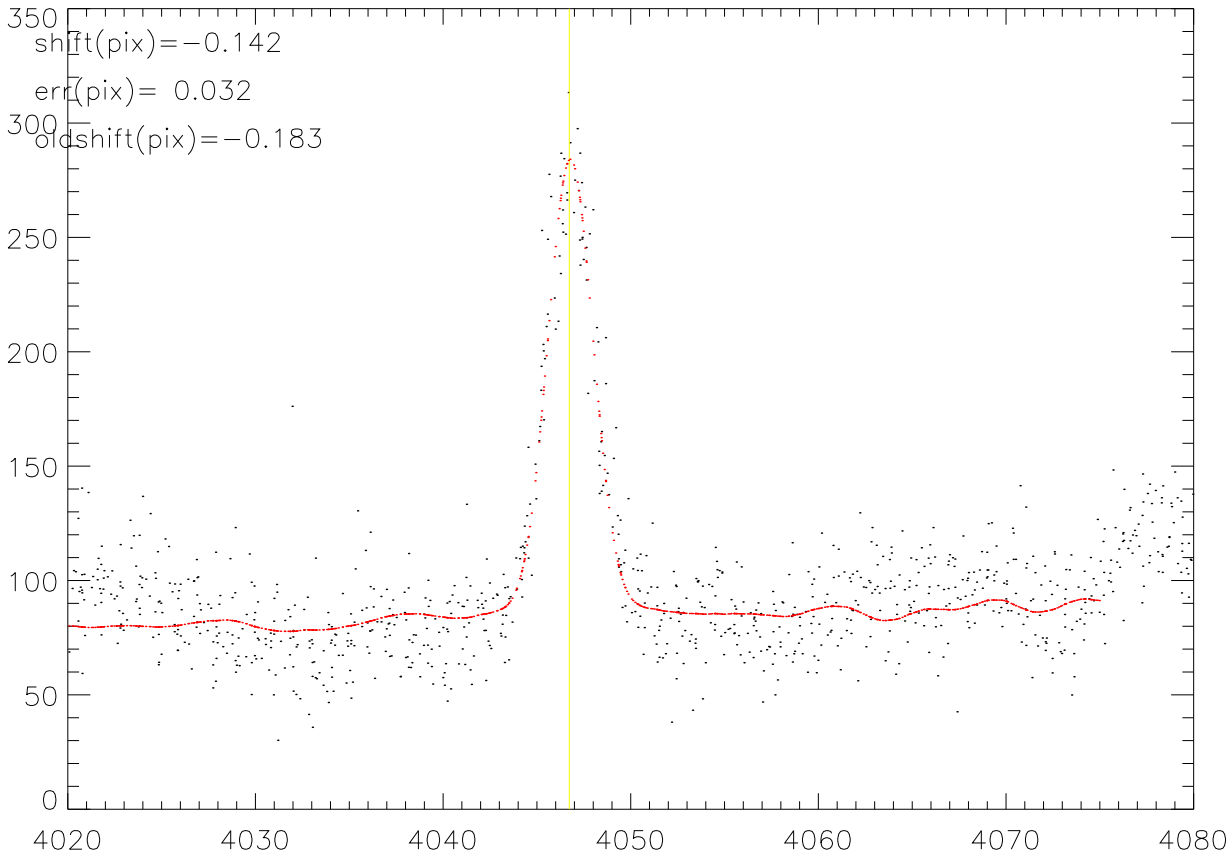

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013186.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.044
Max value = 17.448
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:40:44 2008

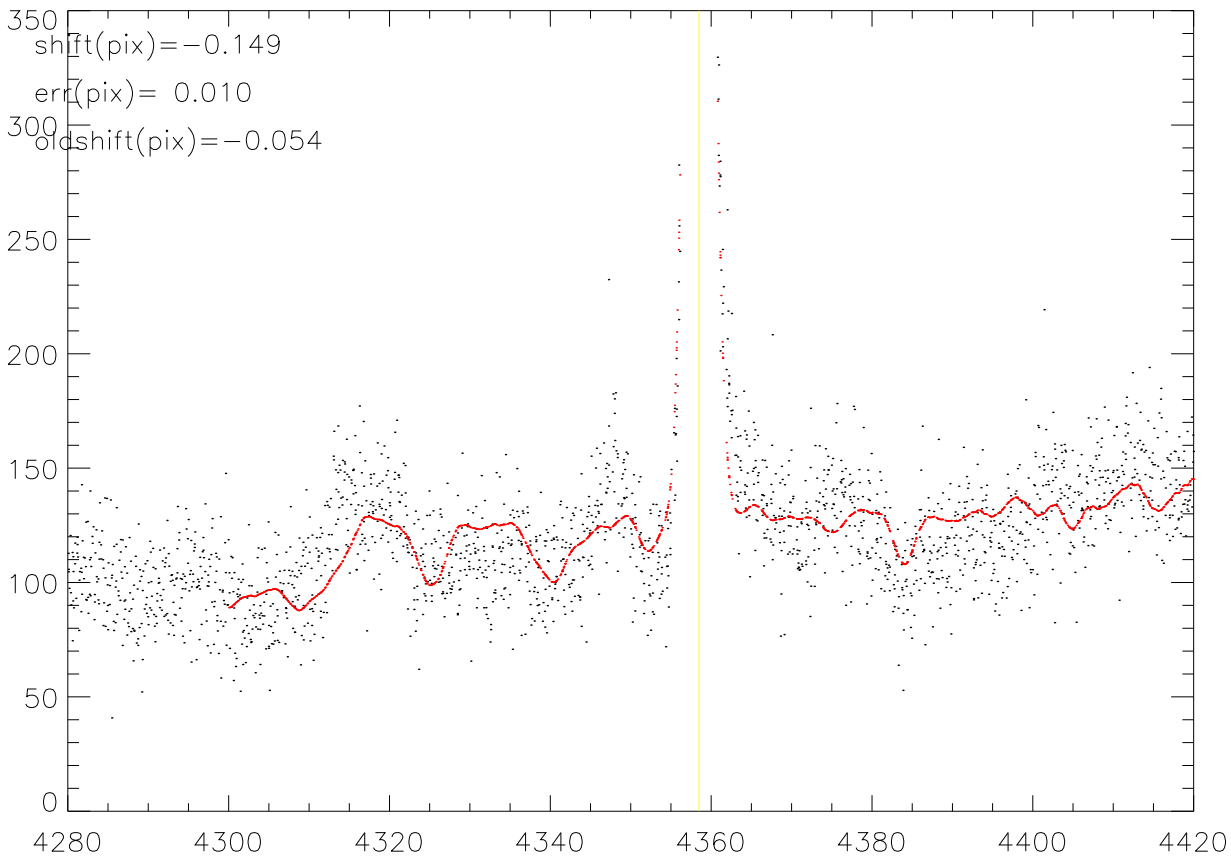

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013186.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.9
8.7
10.5
12.4

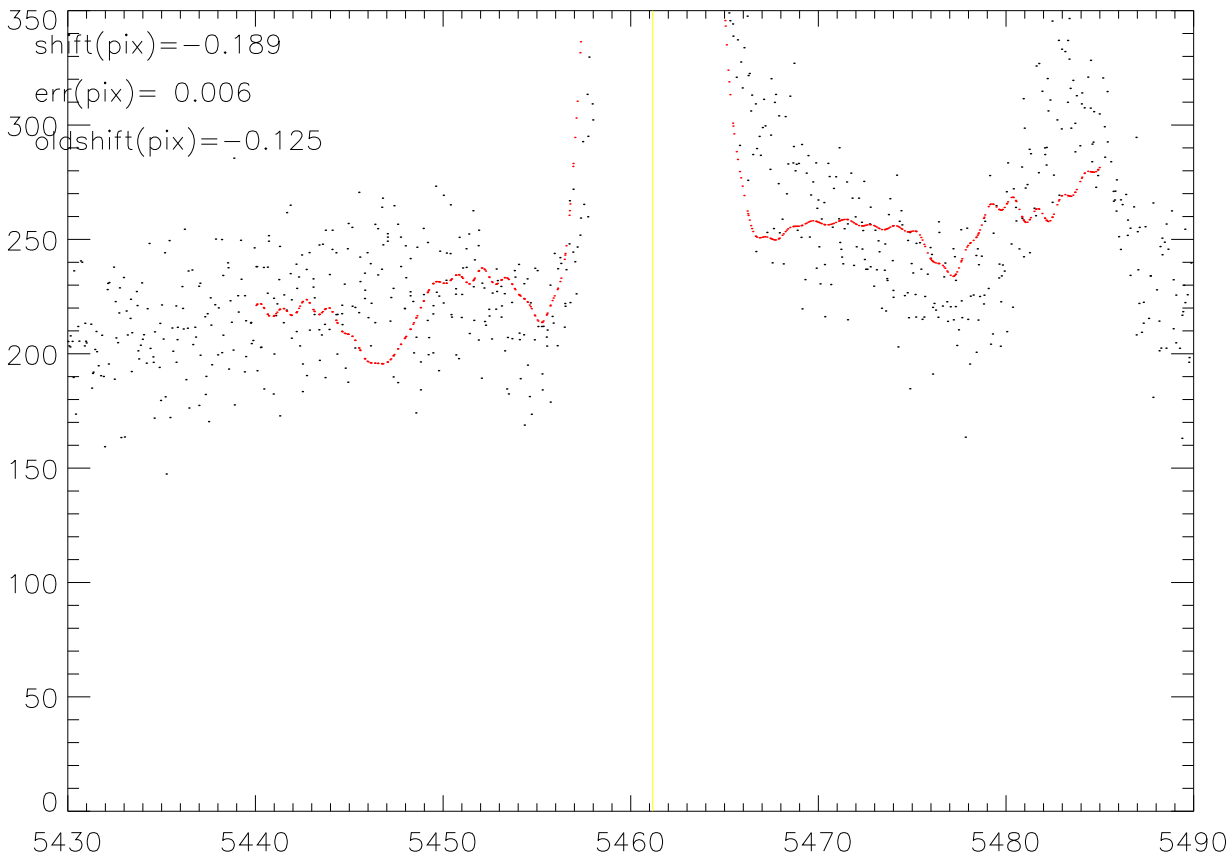

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013186.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 7.996
Max value = 11.592
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:43:59 2008

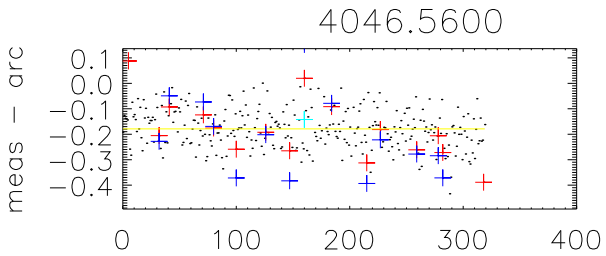

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013186.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

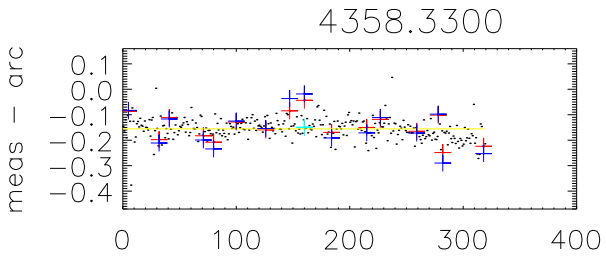

4046.5600
off: −0.18
sig: 0.028
4358.3300
off: −0.05
sig: 0.013
5460.9400
off: −0.13
sig: 0.006
5577.3390
off: −0.14
sig: 0.002
5889.9500
off: −0.13
sig: 0.006
5895.9240
off: −0.12
sig: 0.006

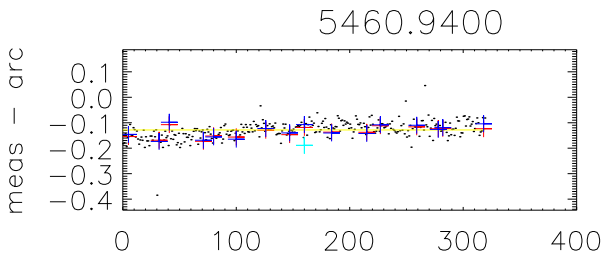

shift(pix)=−0.142
err(pix)= 0.032
oldshift(pix)=−0.183
350
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

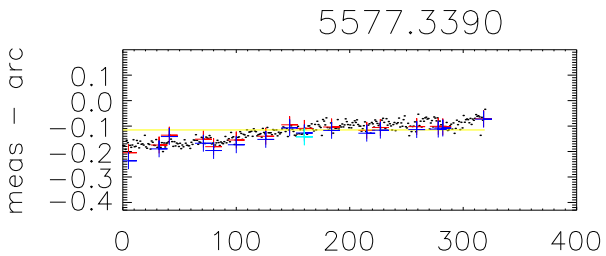

shift(pix)=−0.149
err(pix)= 0.010
oldshift(pix)=−0.054
350
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

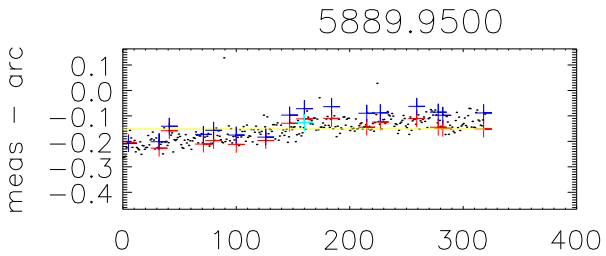

shift(pix)=−0.189
err(pix)= 0.006
oldshift(pix)=−0.125
350
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

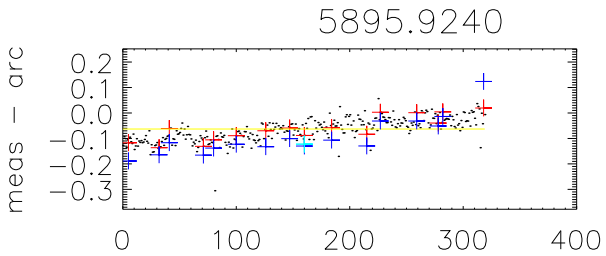

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

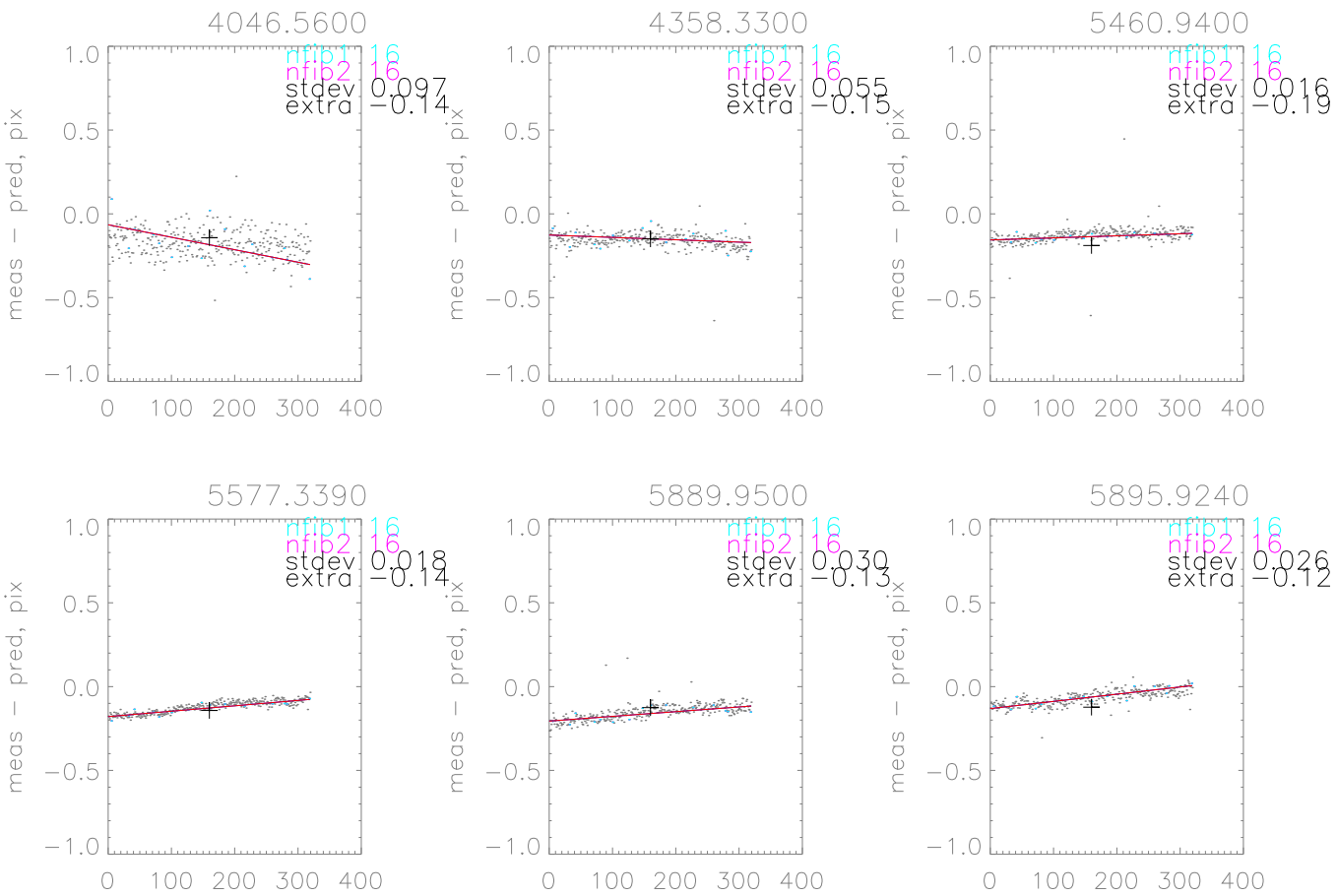

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

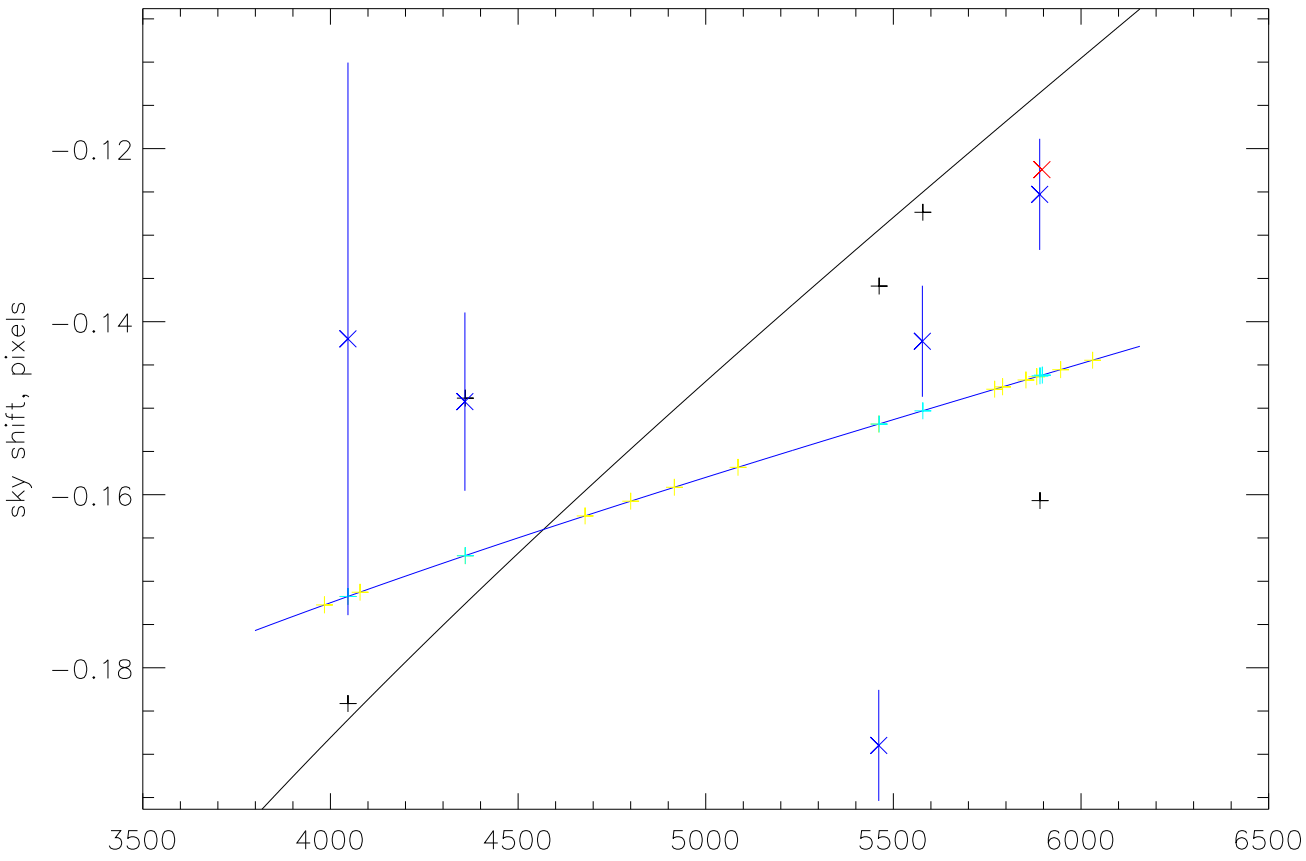

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

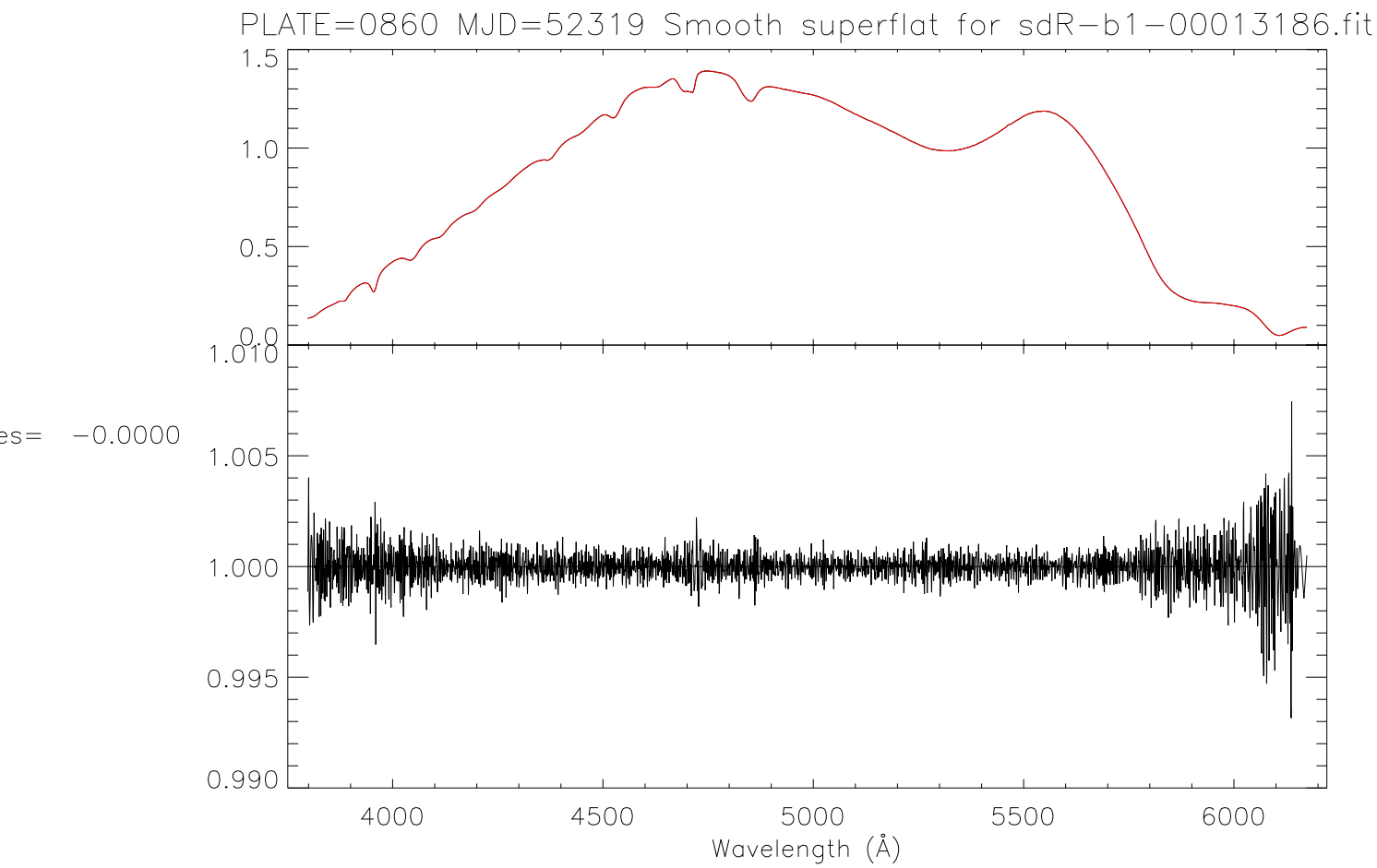

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

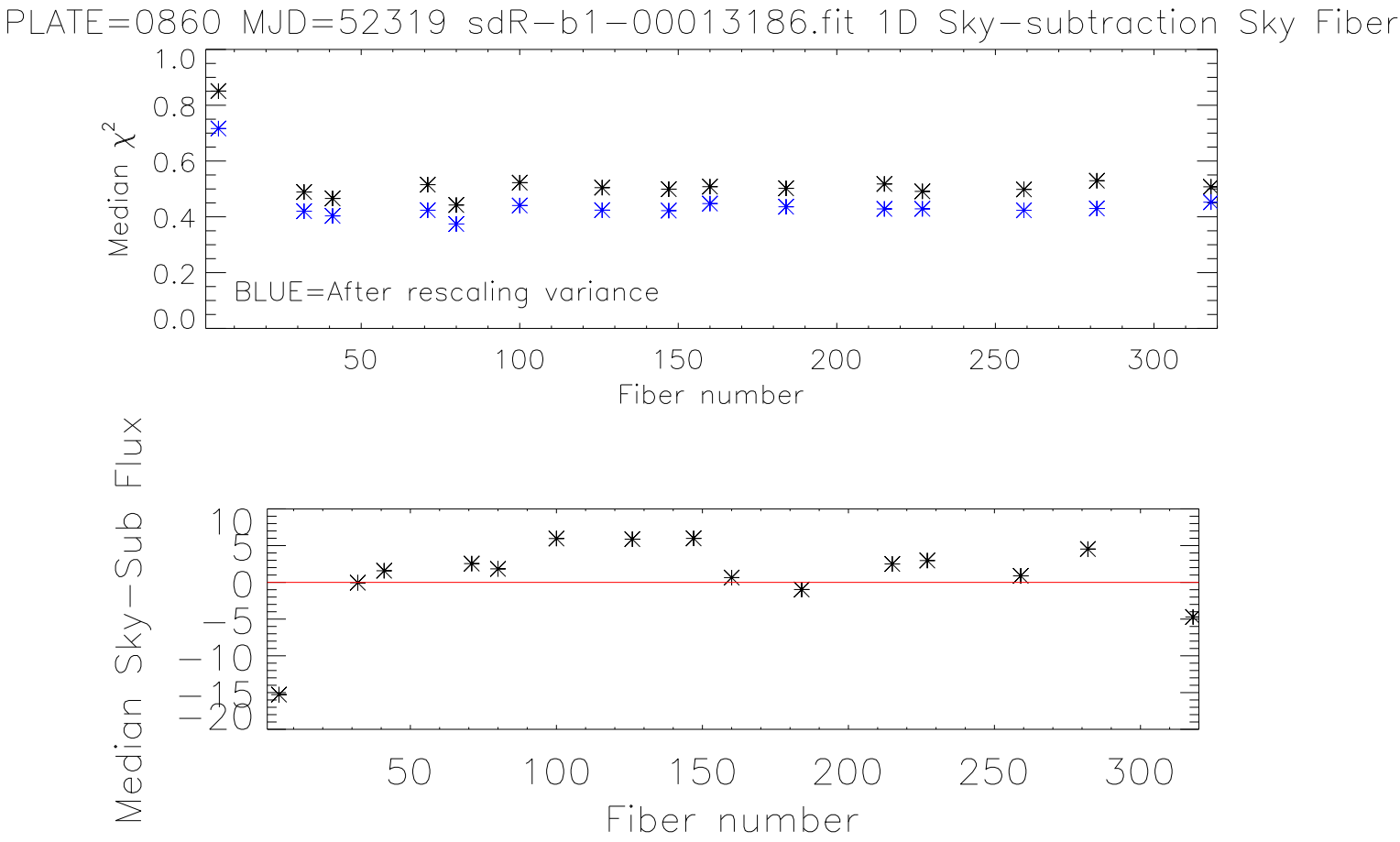

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

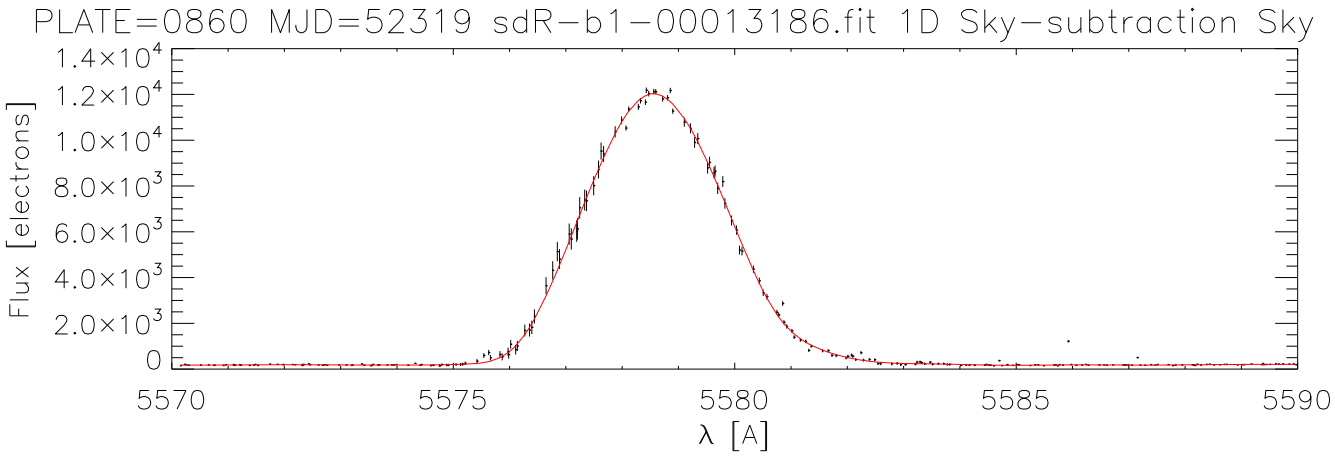

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

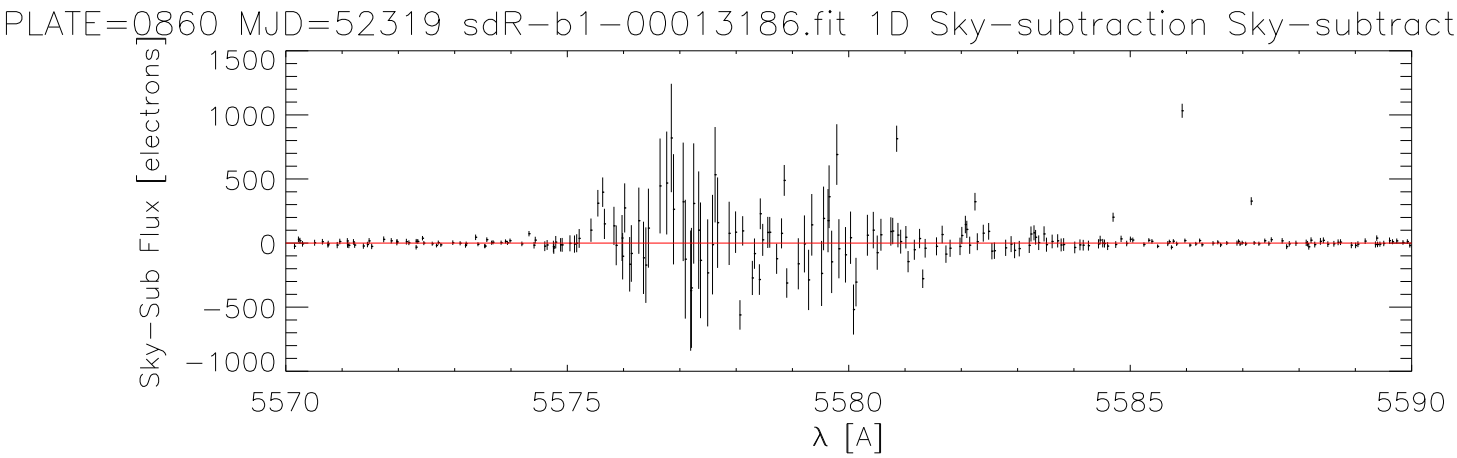

4046.5600
nfib1 16
nfib2 16
stdev 0.097
extra −0.14
4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra −0.15
5460.9400
nfib1 16
nfib2 16
stdev 0.016
extra −0.19
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

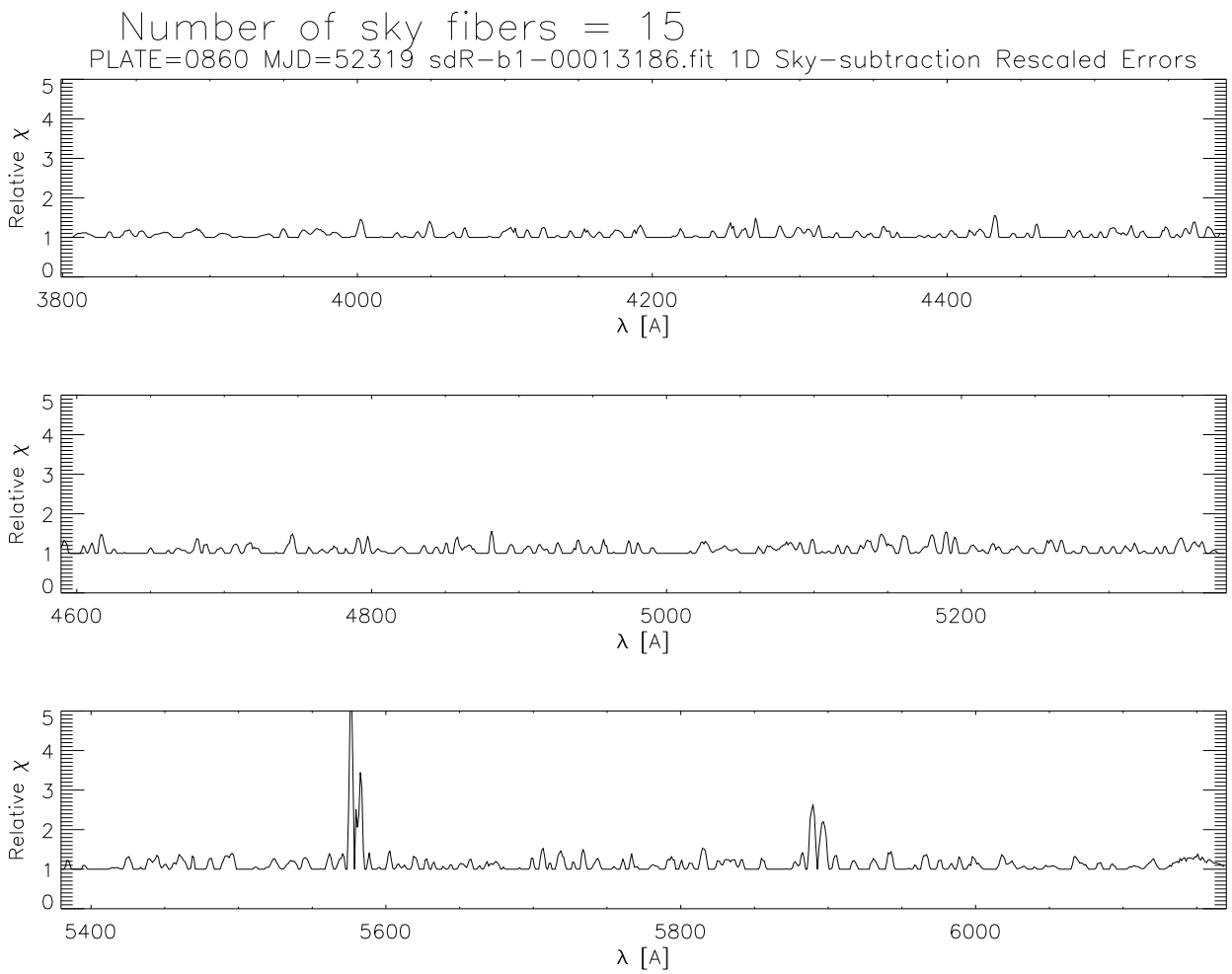

sky shift, pixels
−0.12
−0.14
−0.16
−0.18
3500
4000
4500
5000
5500
6000
6500

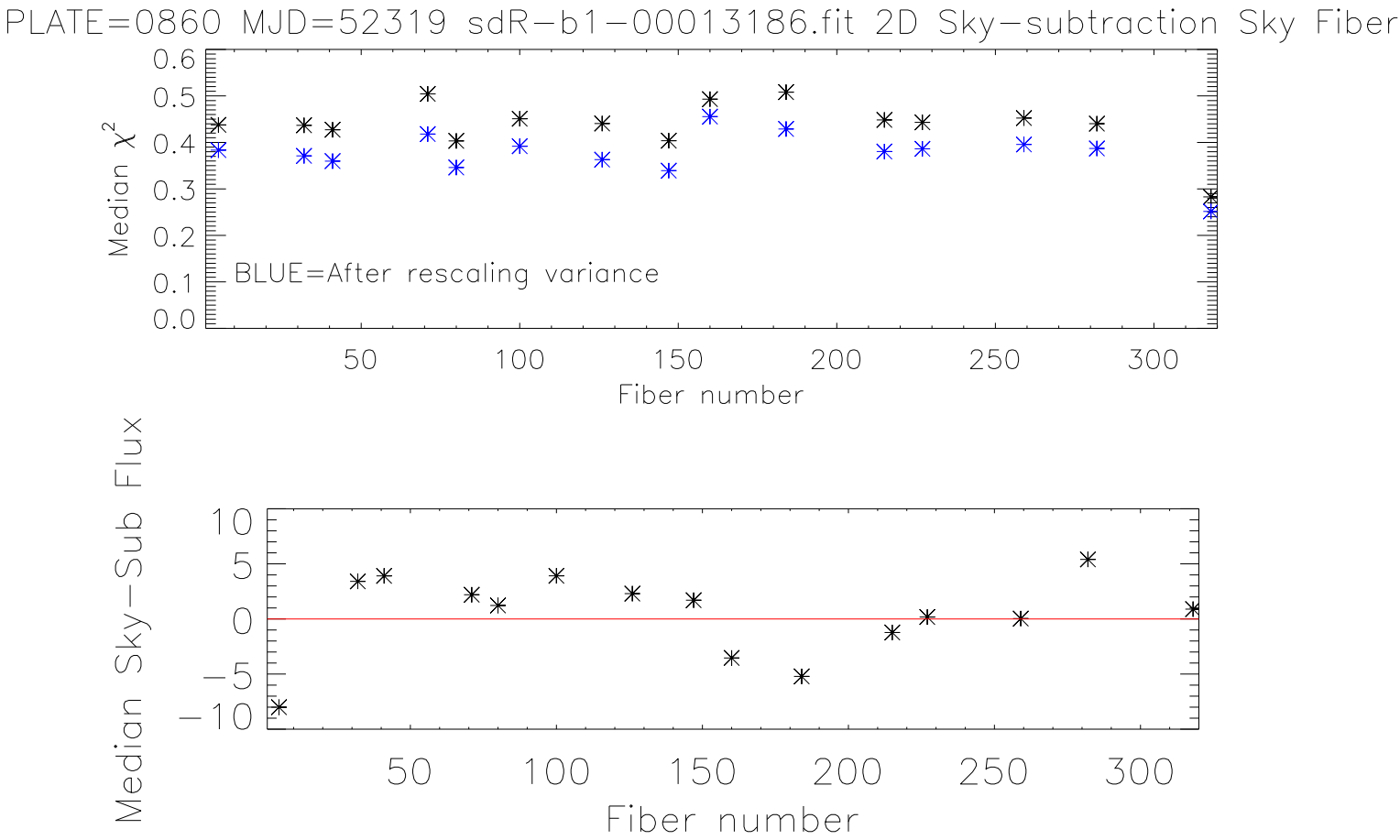

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013186.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

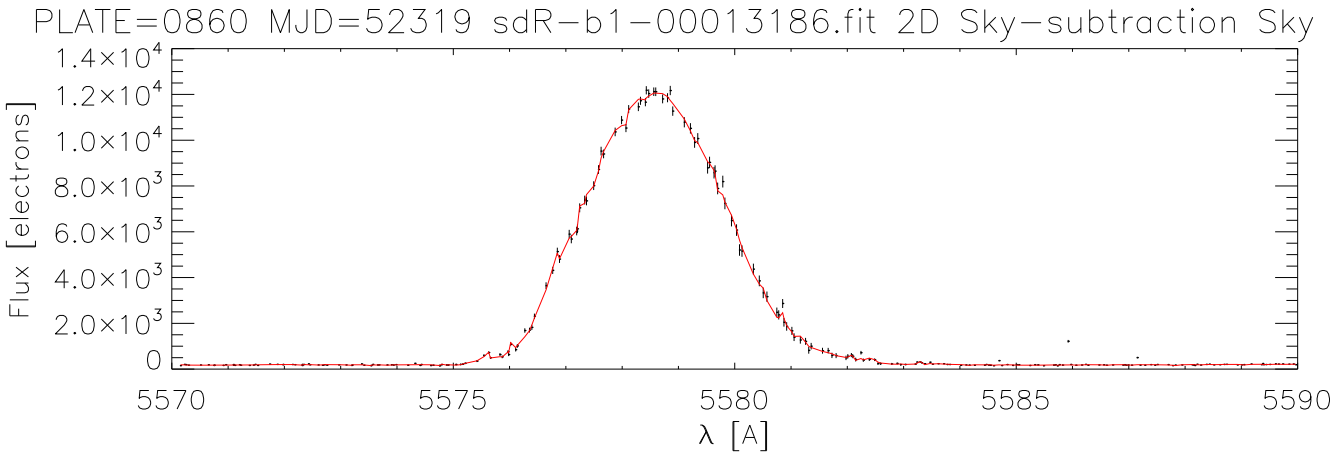

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

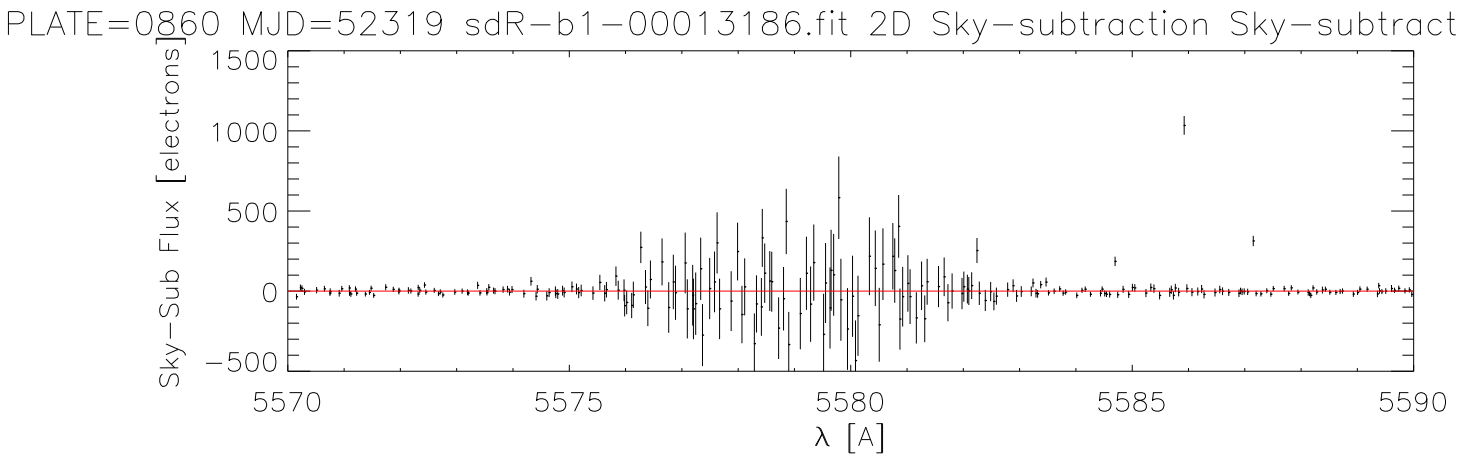

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

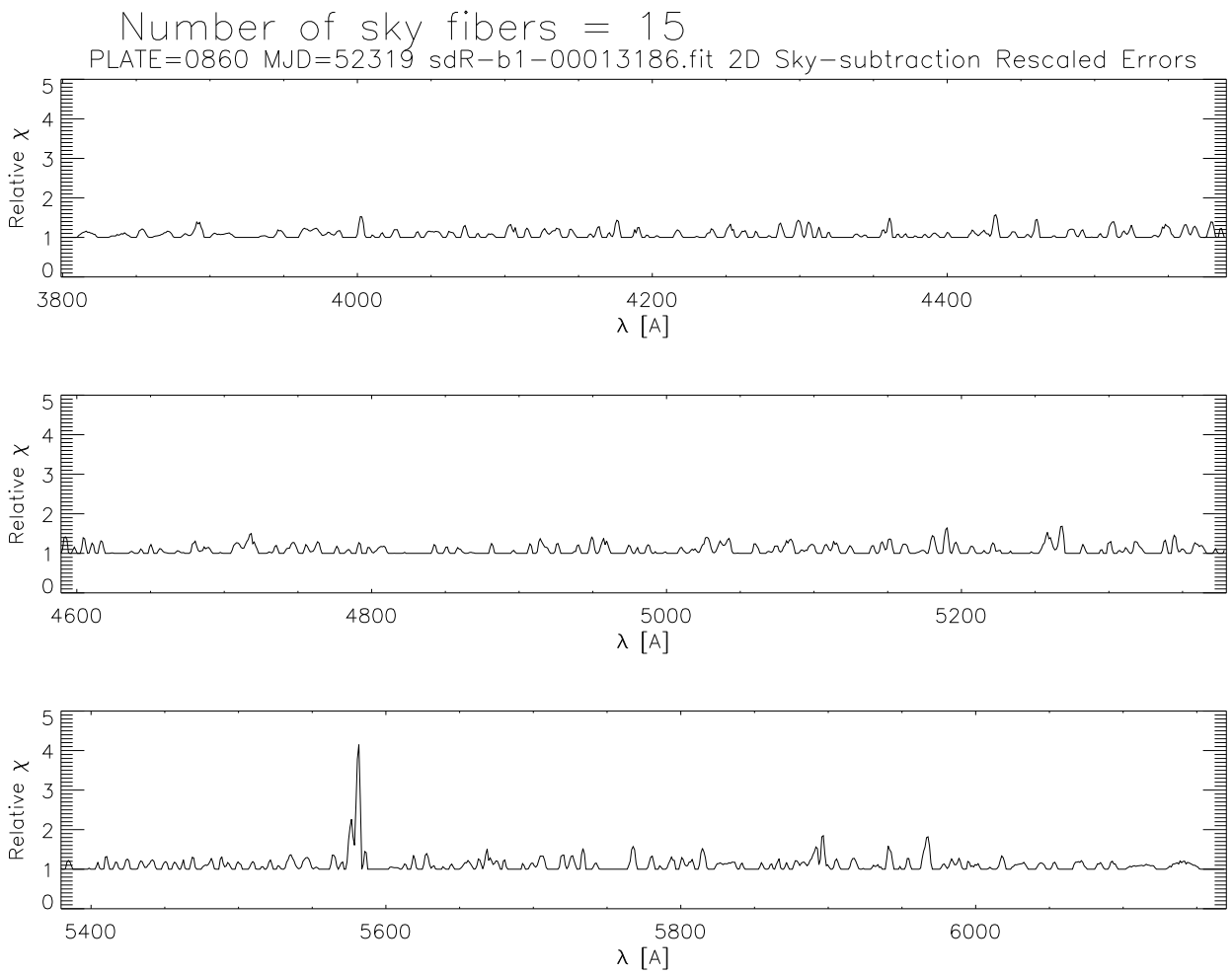

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

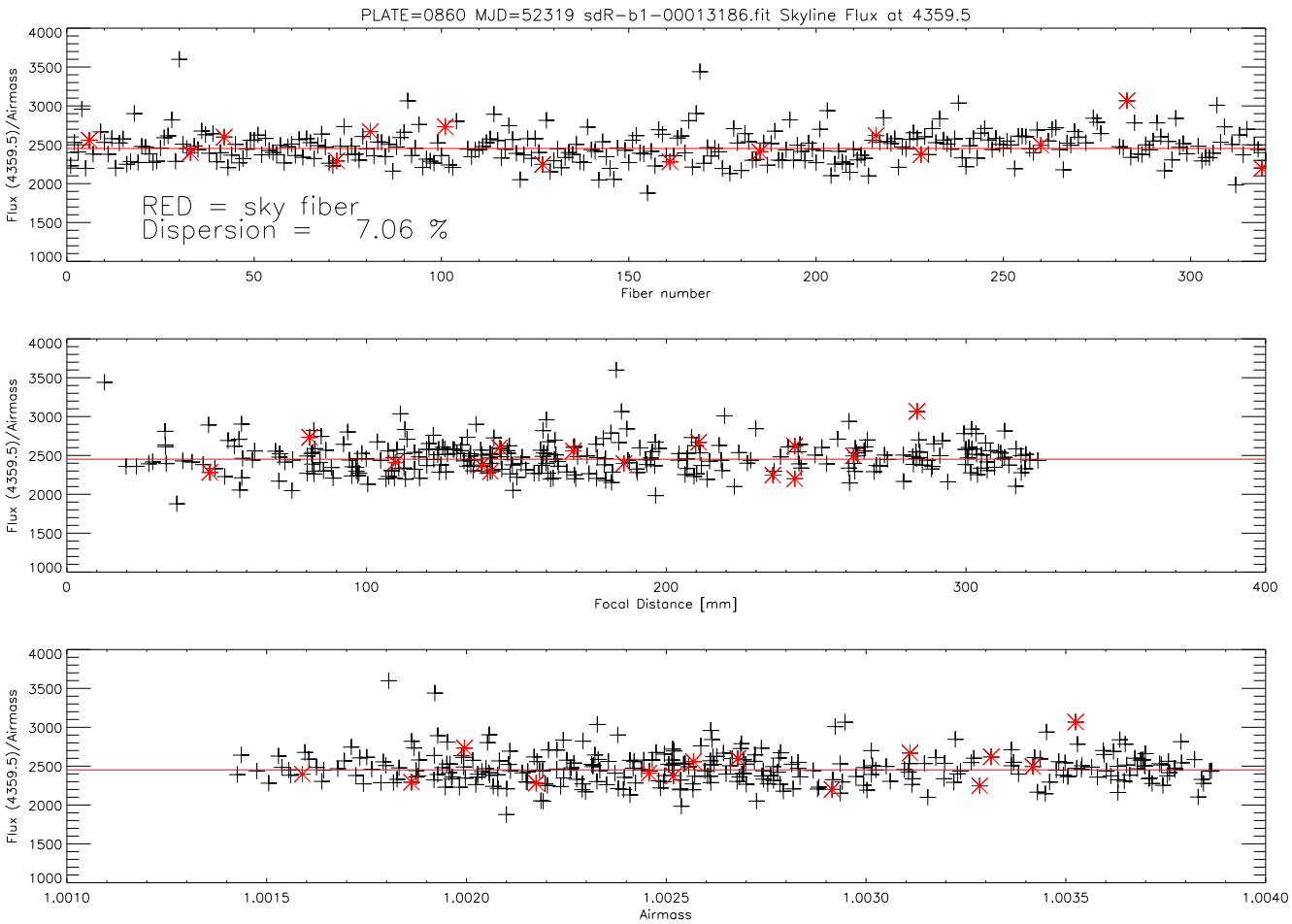

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013186.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

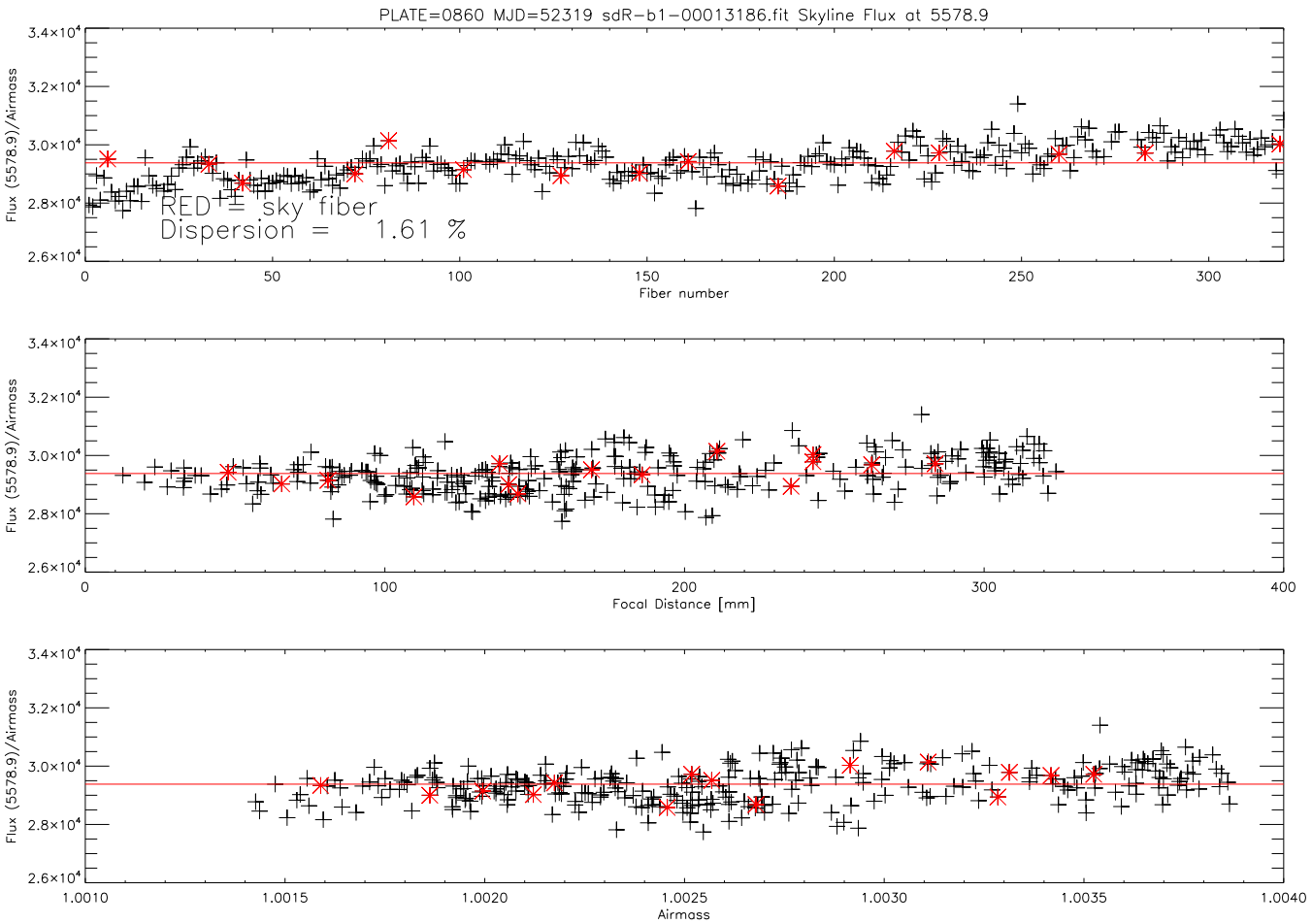

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

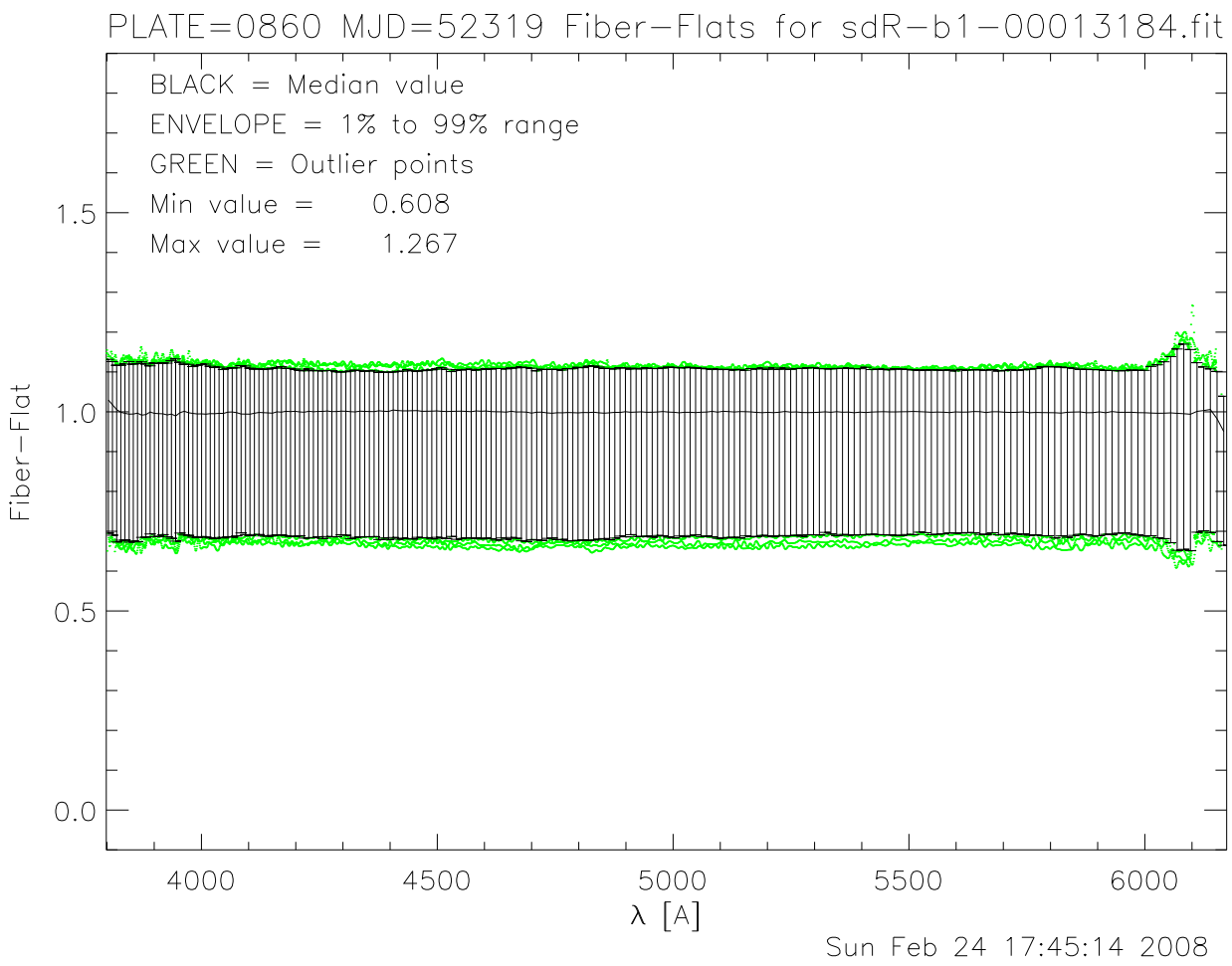

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

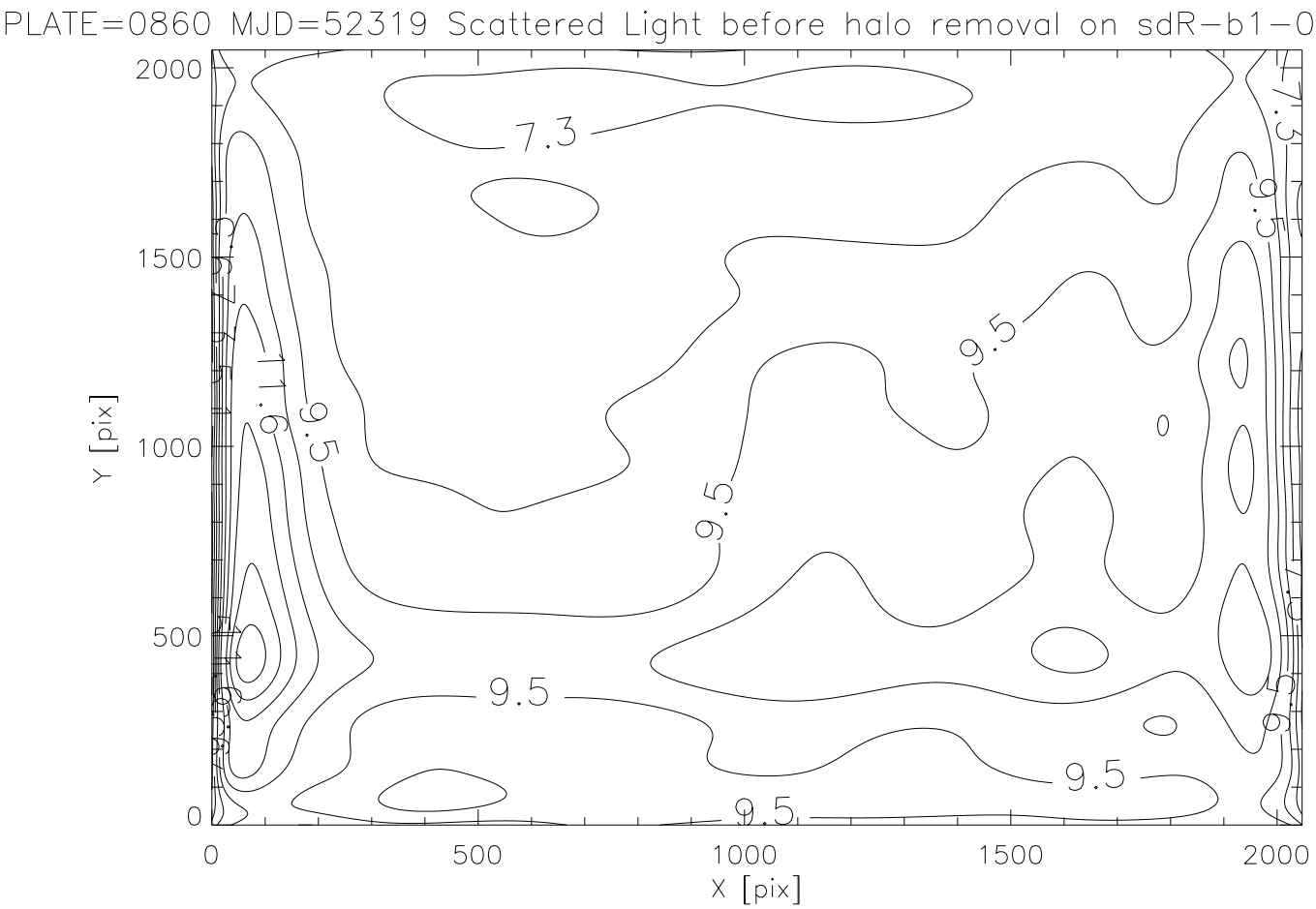

PLATE=0860 MJD=52319 sdR-b1-00013186.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

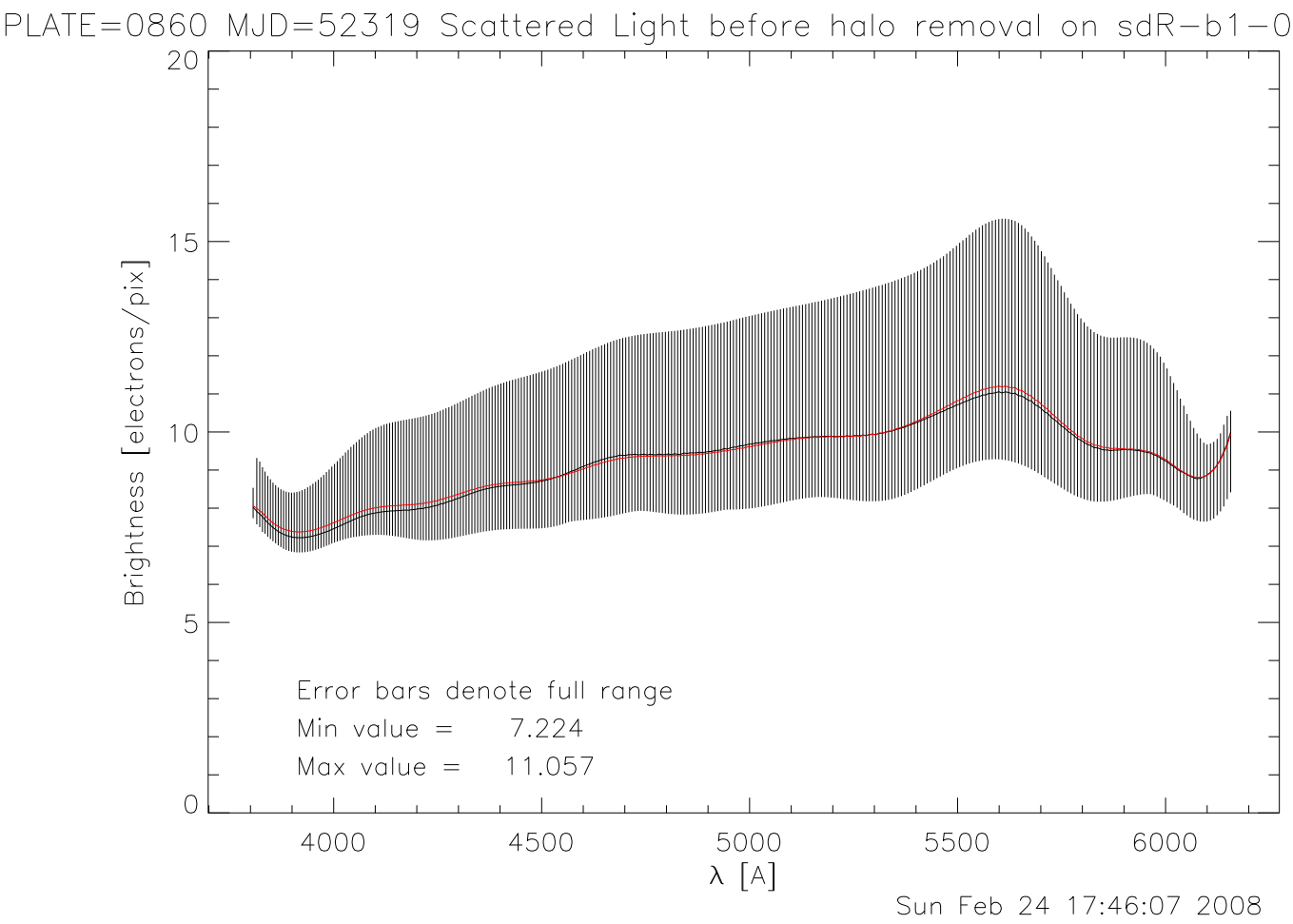

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013186.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

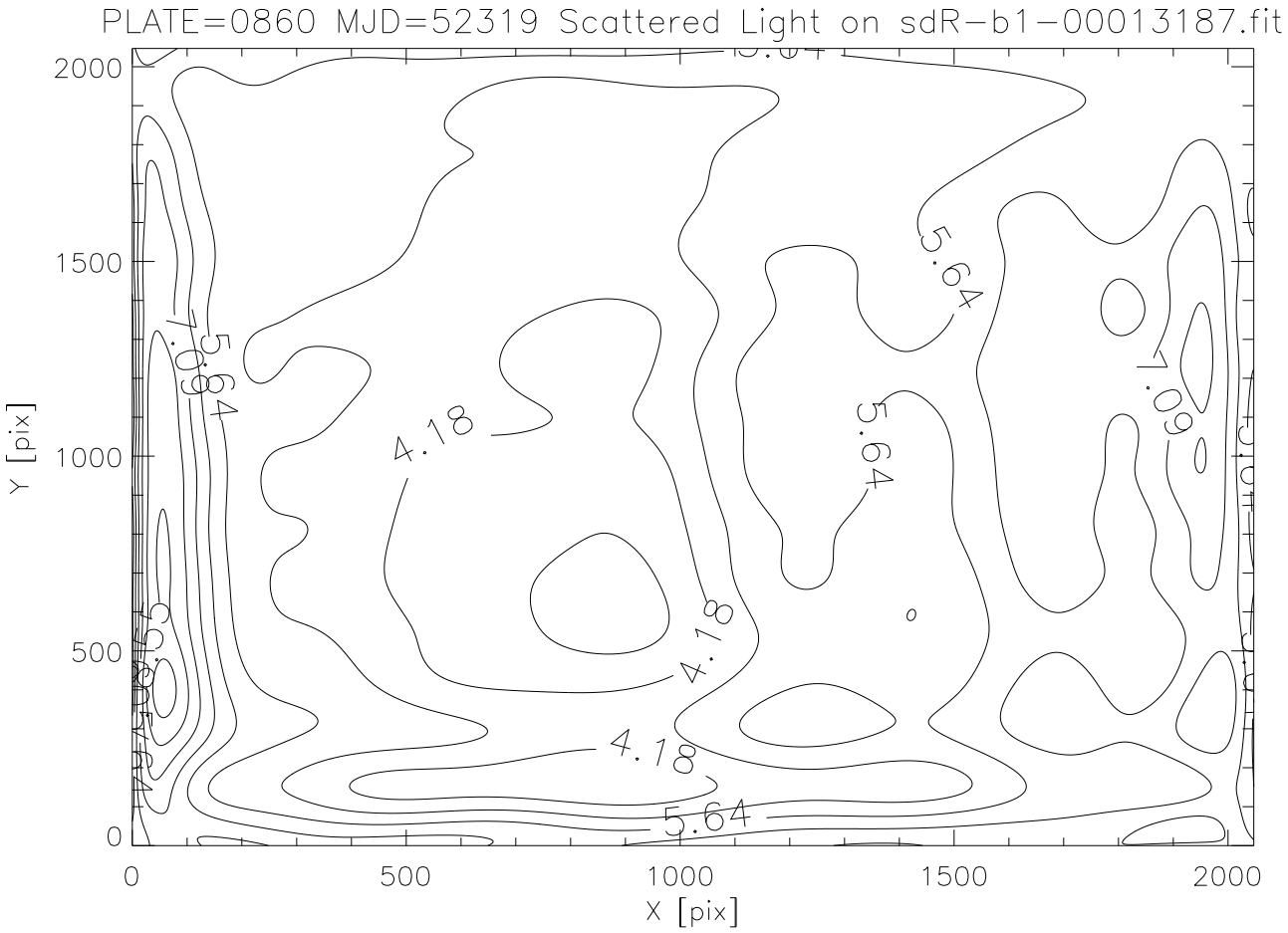

PLATE=0860 MJD=52319 sdR-b1-00013186.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.06 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

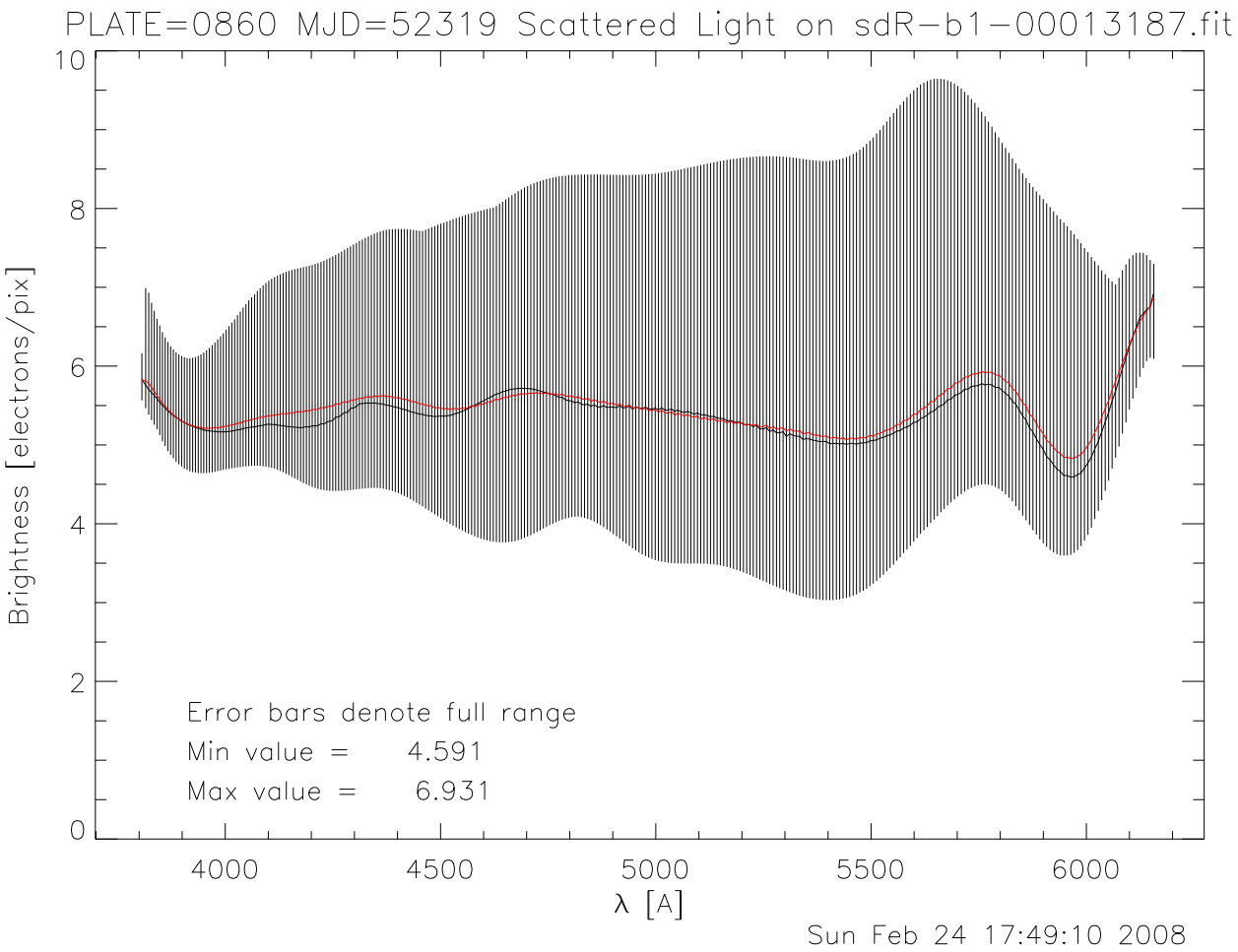

PLATE=0860 MJD=52319 sdR-b1-00013186.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.61 %
Focal Distance [mm]
Airmass

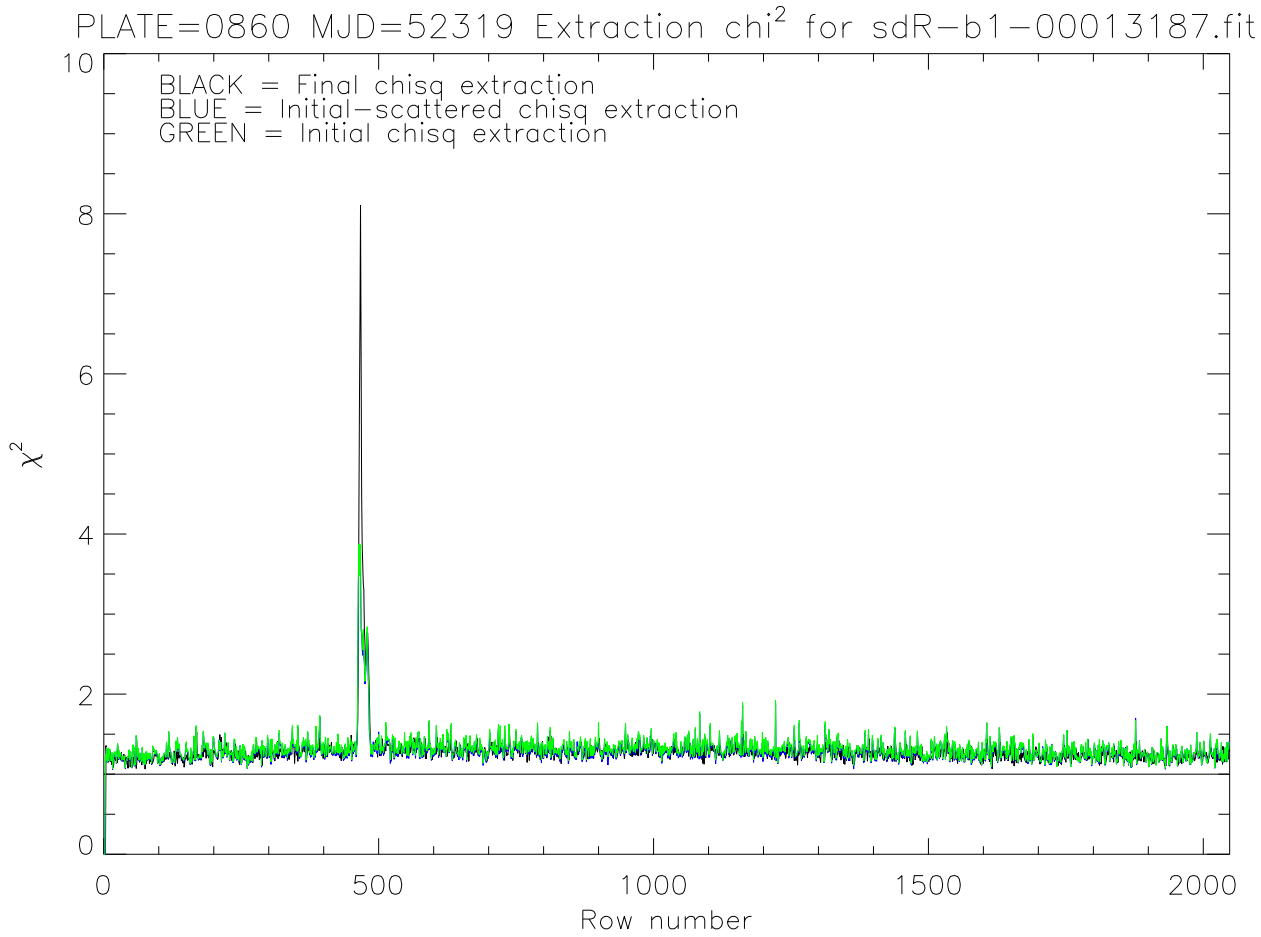

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:45:14 2008

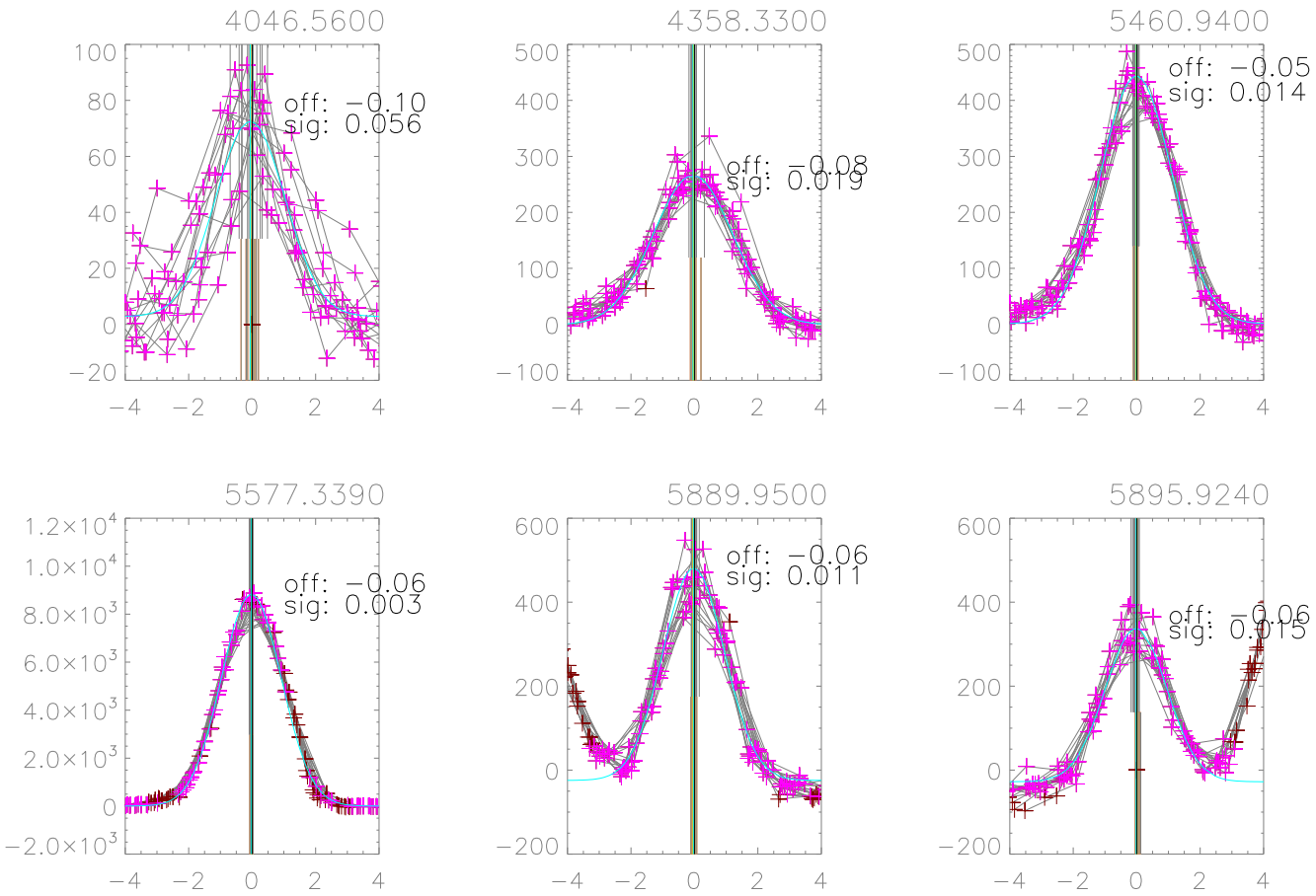

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013187.f
7.3
9.5
9.5
9.5
9.5
9.5
9.5
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

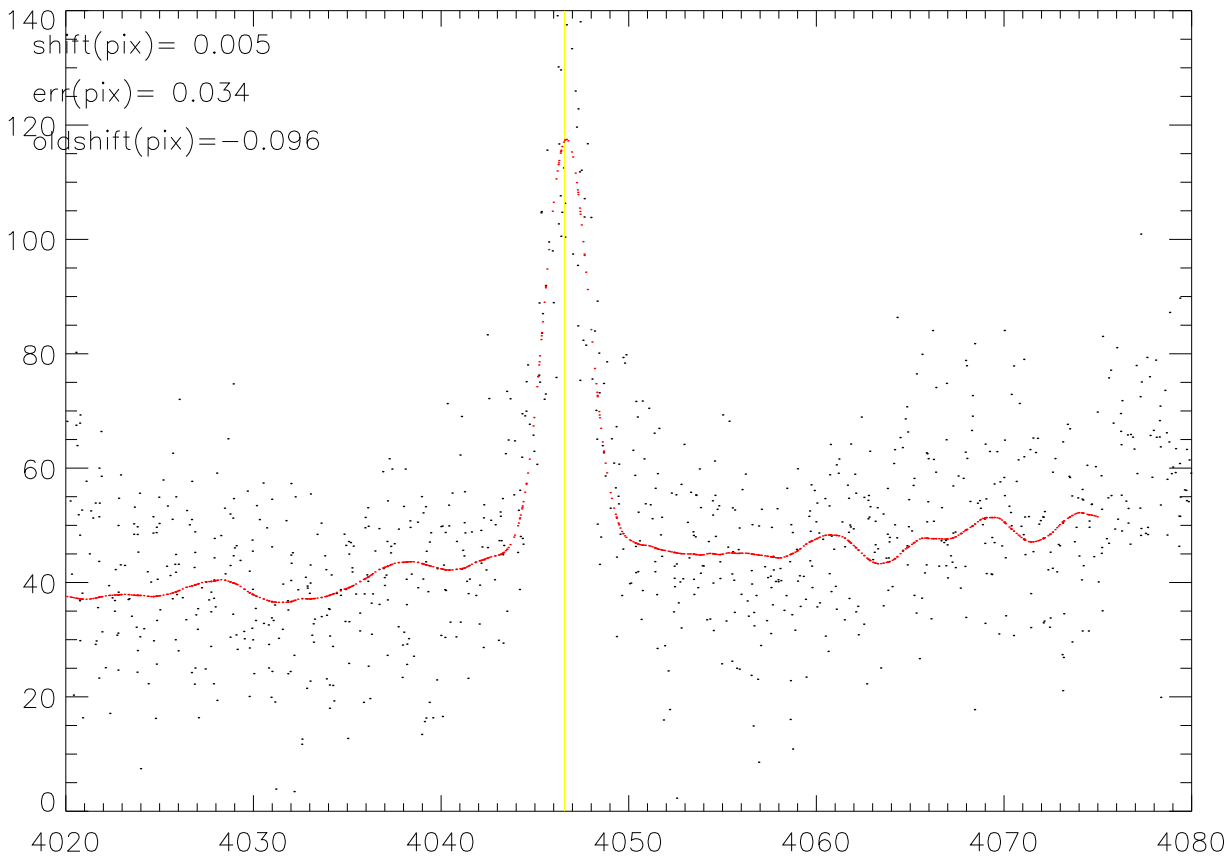

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013187.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 7.224
Max value = 11.057
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:46:07 2008

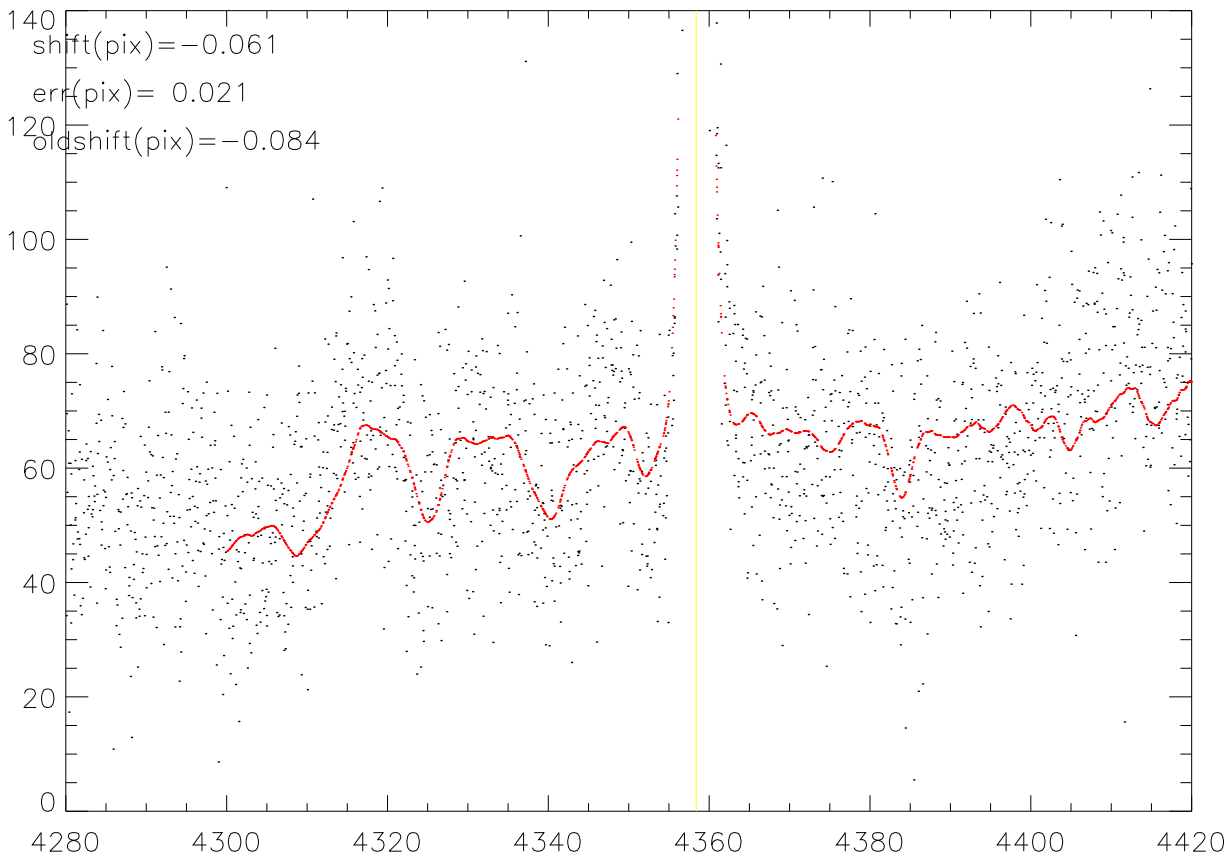

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013187.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.64
4.18
1.09

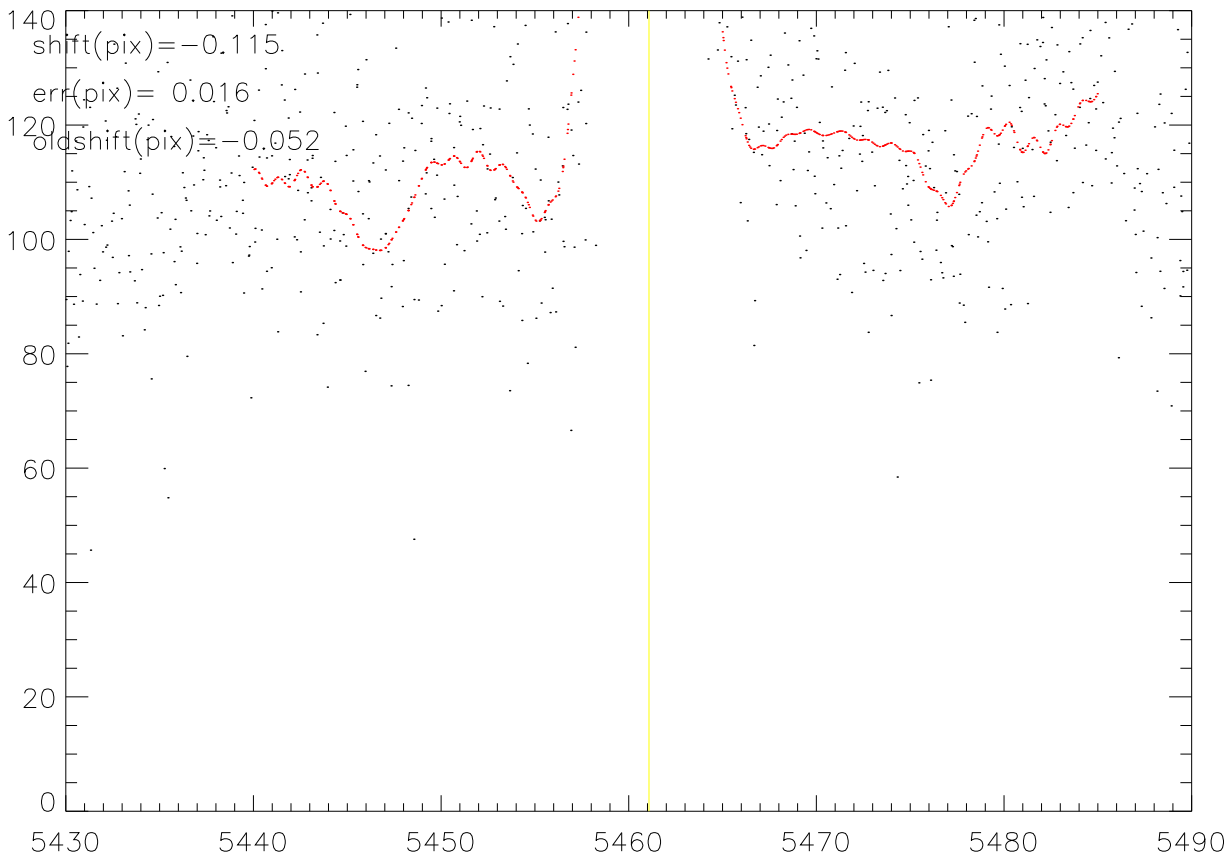

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013187.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 4.591
Max value = 6.931
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:49:10 2008

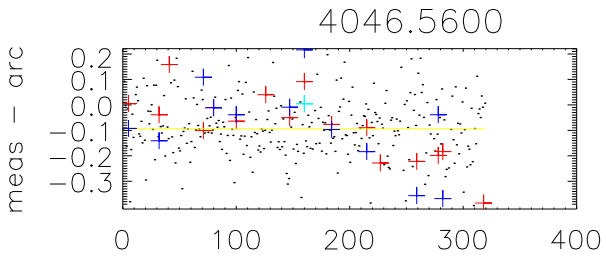

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013187.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

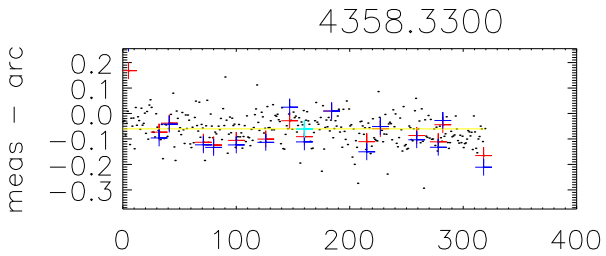

4046.5600
off: −0.10
sig: 0.056
4358.3300
off: −0.08
sig: 0.019
5460.9400
off: −0.05
sig: 0.014
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: −0.06
sig: 0.011
5895.9240
off: −0.06
sig: 0.015

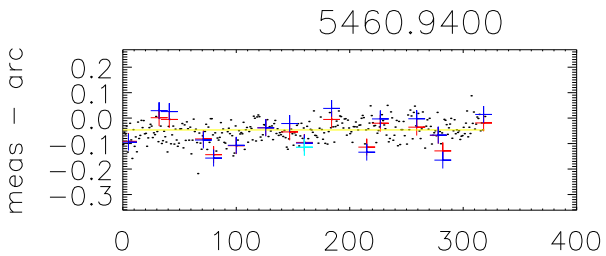

shift(pix)= 0.005
err(pix)= 0.034
oldshift(pix)=−0.096
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

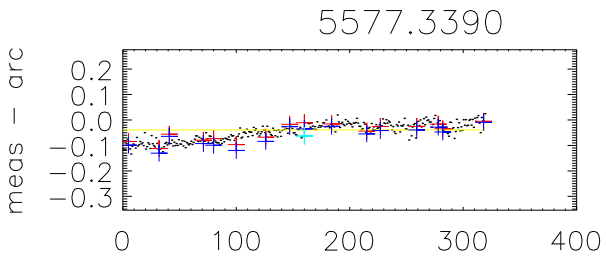

shift(pix)=−0.061
err(pix)= 0.021
oldshift(pix)=−0.084
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

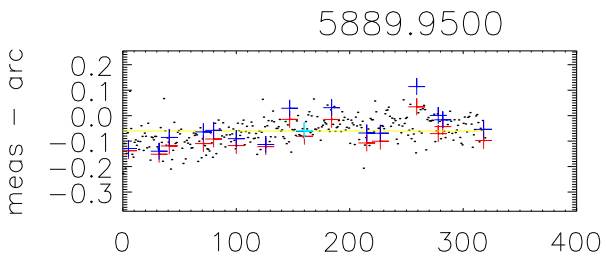

shift(pix)=−0.115
err(pix)= 0.016
oldshift(pix)=−0.052
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

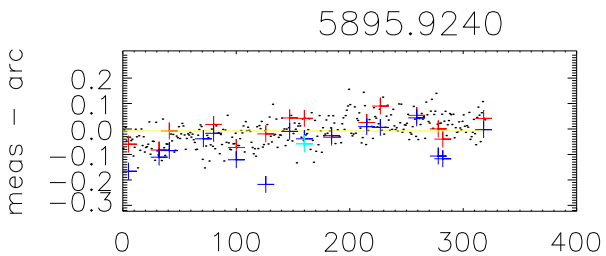

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

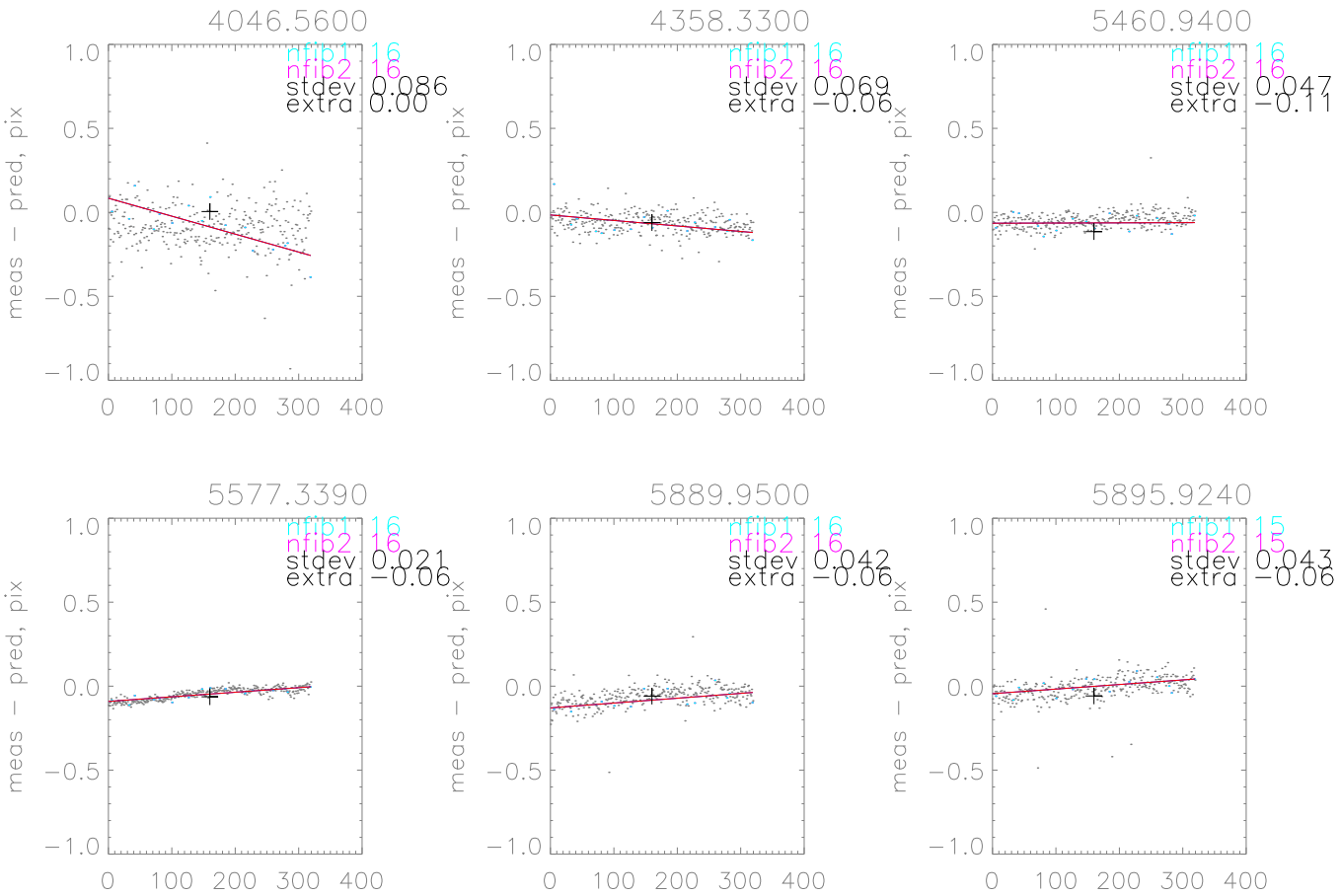

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

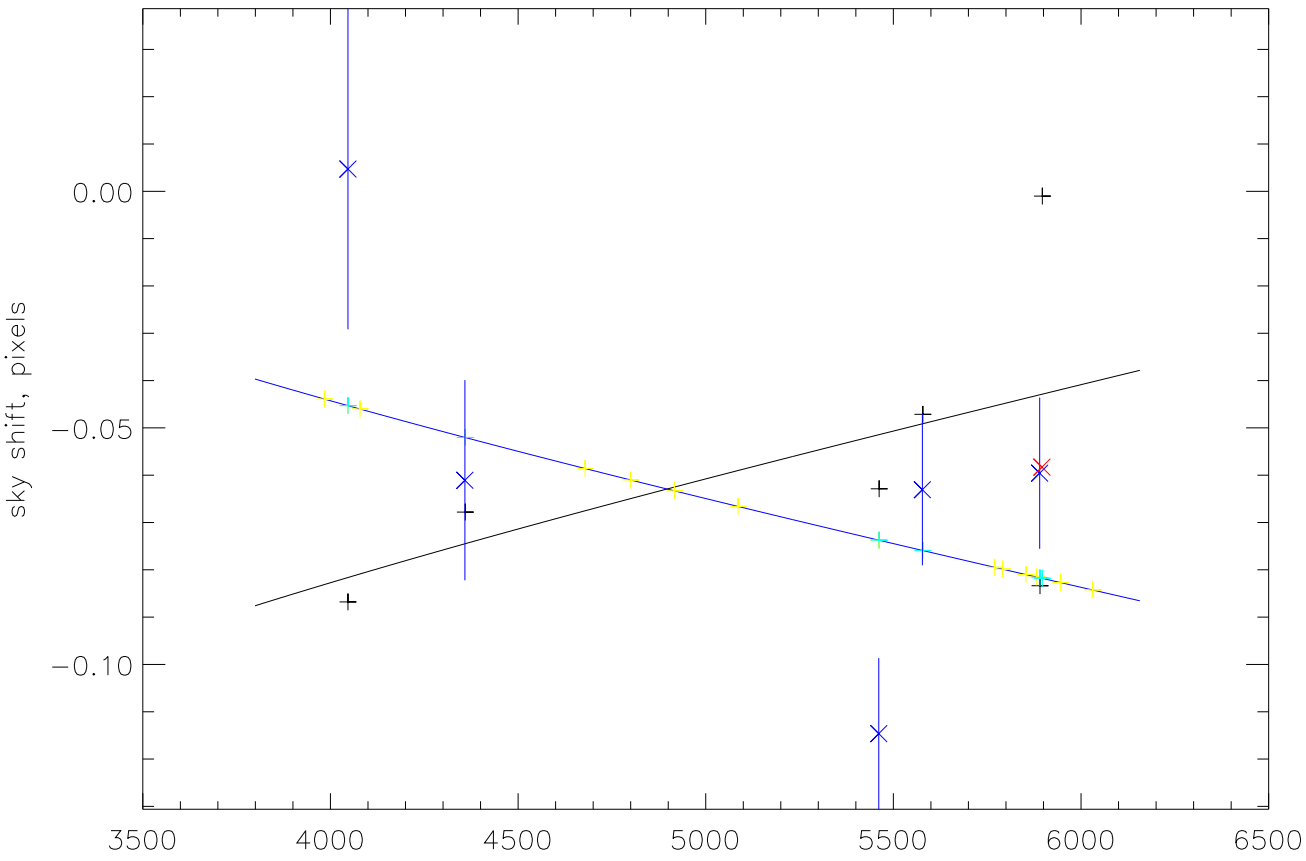

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

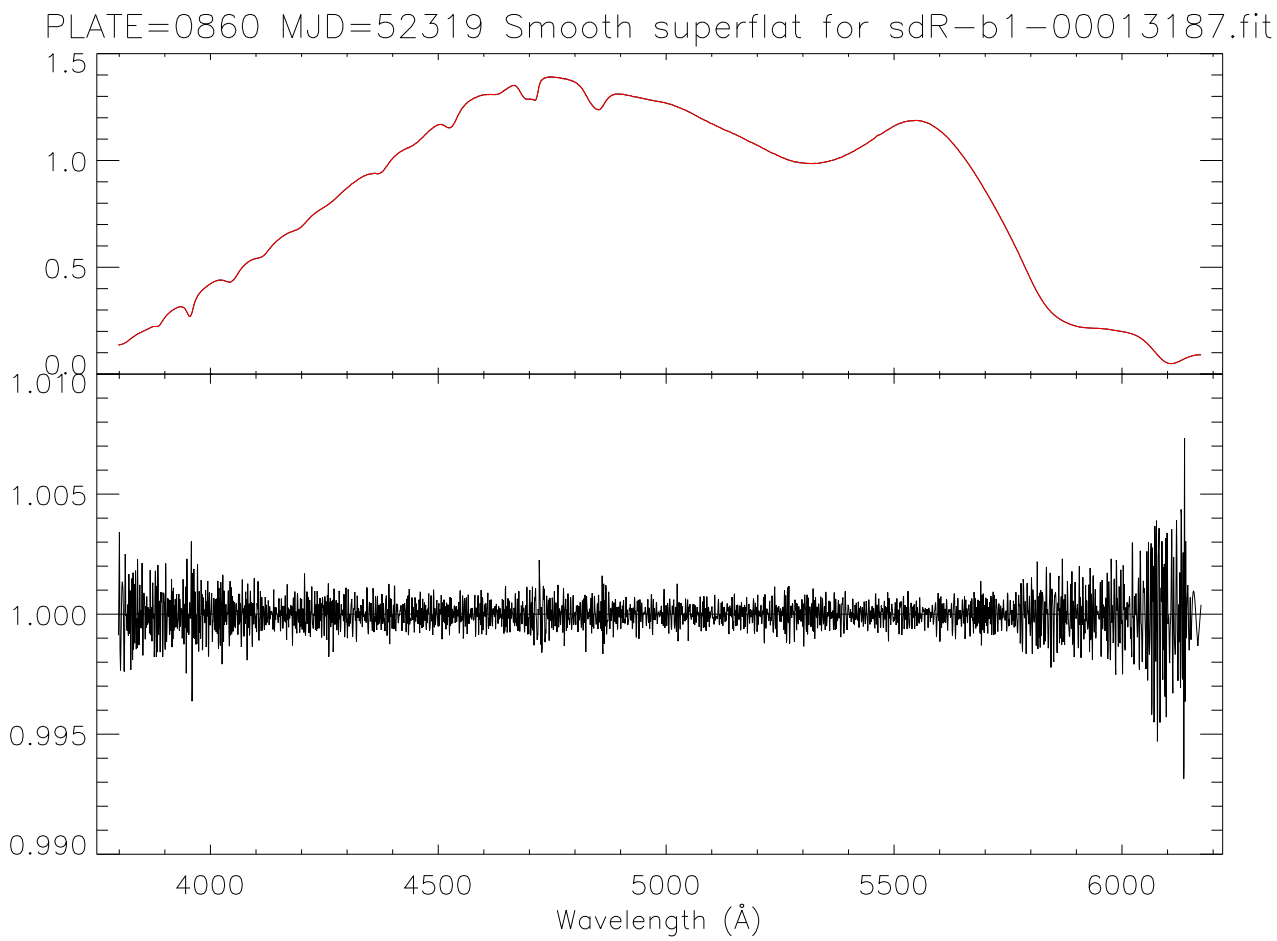

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

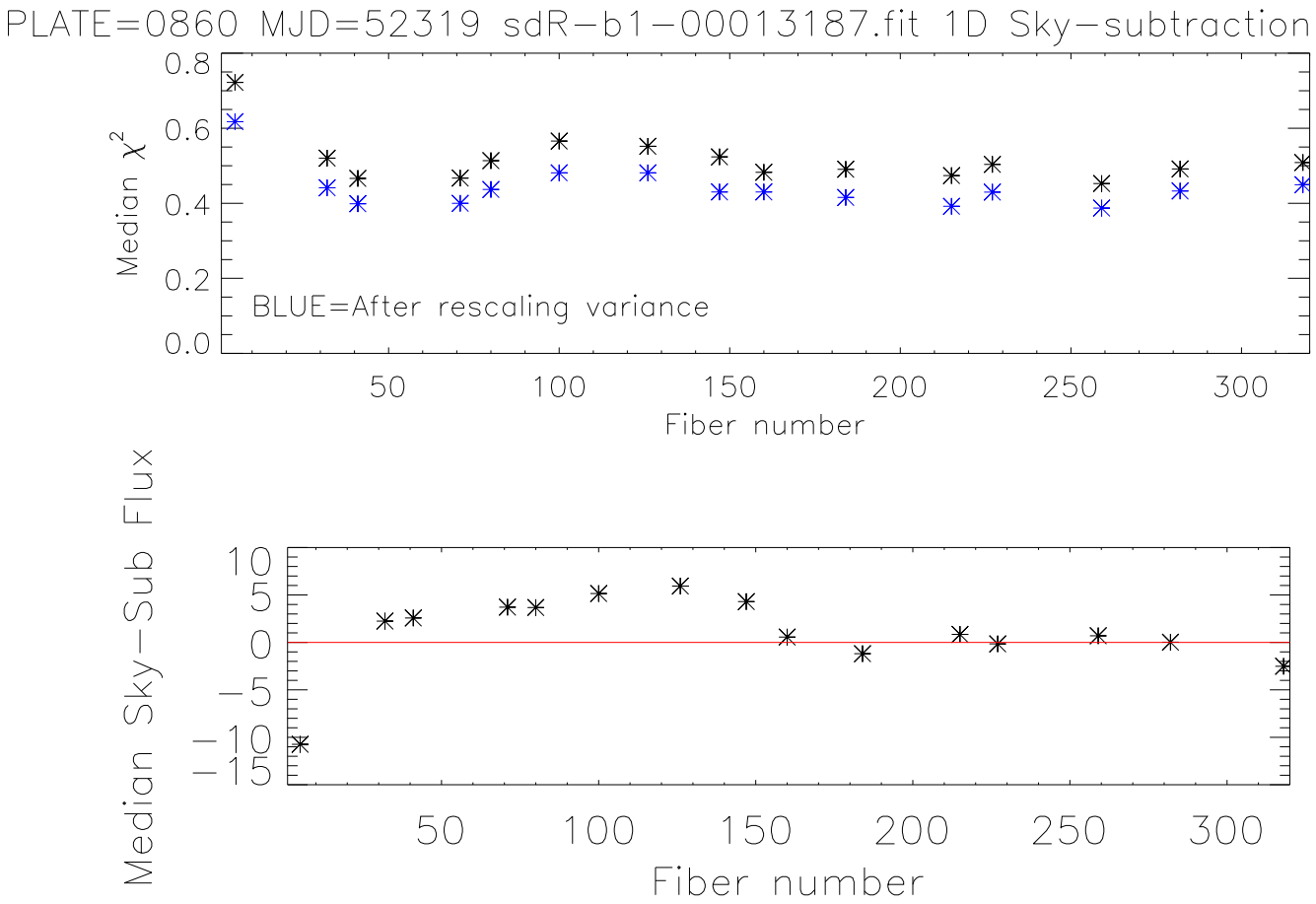

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

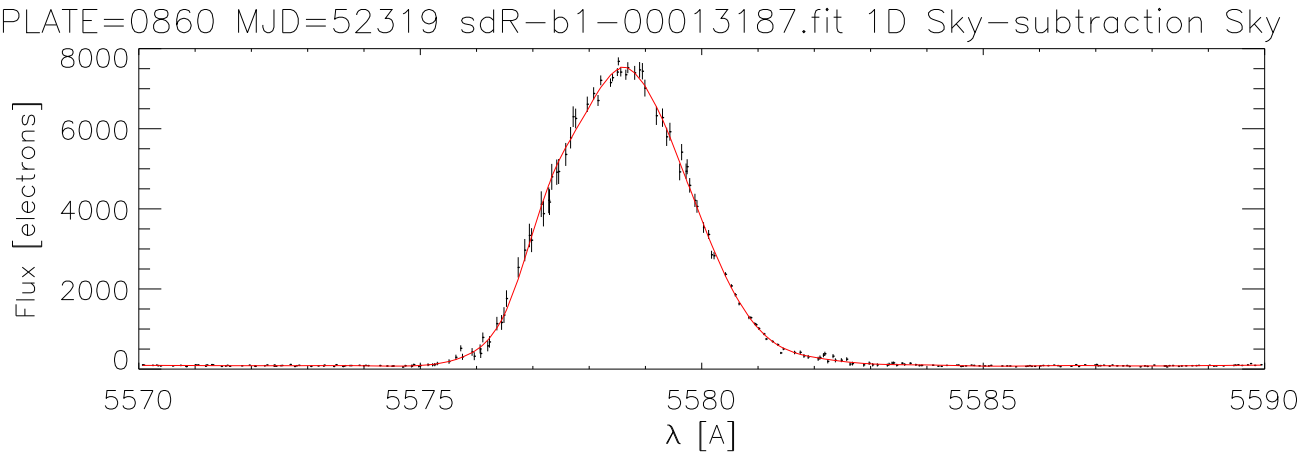

4046.5600
nfib1 16
nfib2 16
stdev 0.086
extra 0.00
4358.3300
nfib1 16
nfib2 16
stdev 0.069
extra −0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.047
extra −0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.042
extra −0.06
5895.9240
nfib1 15
nfib2 15
stdev 0.043
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

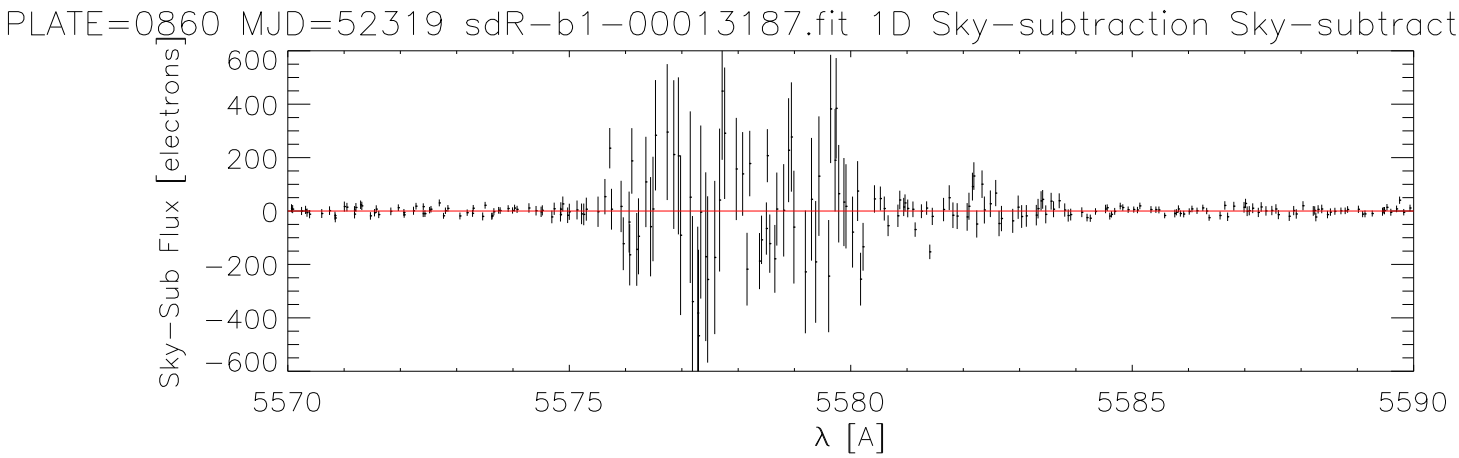

sky shift, pixels
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

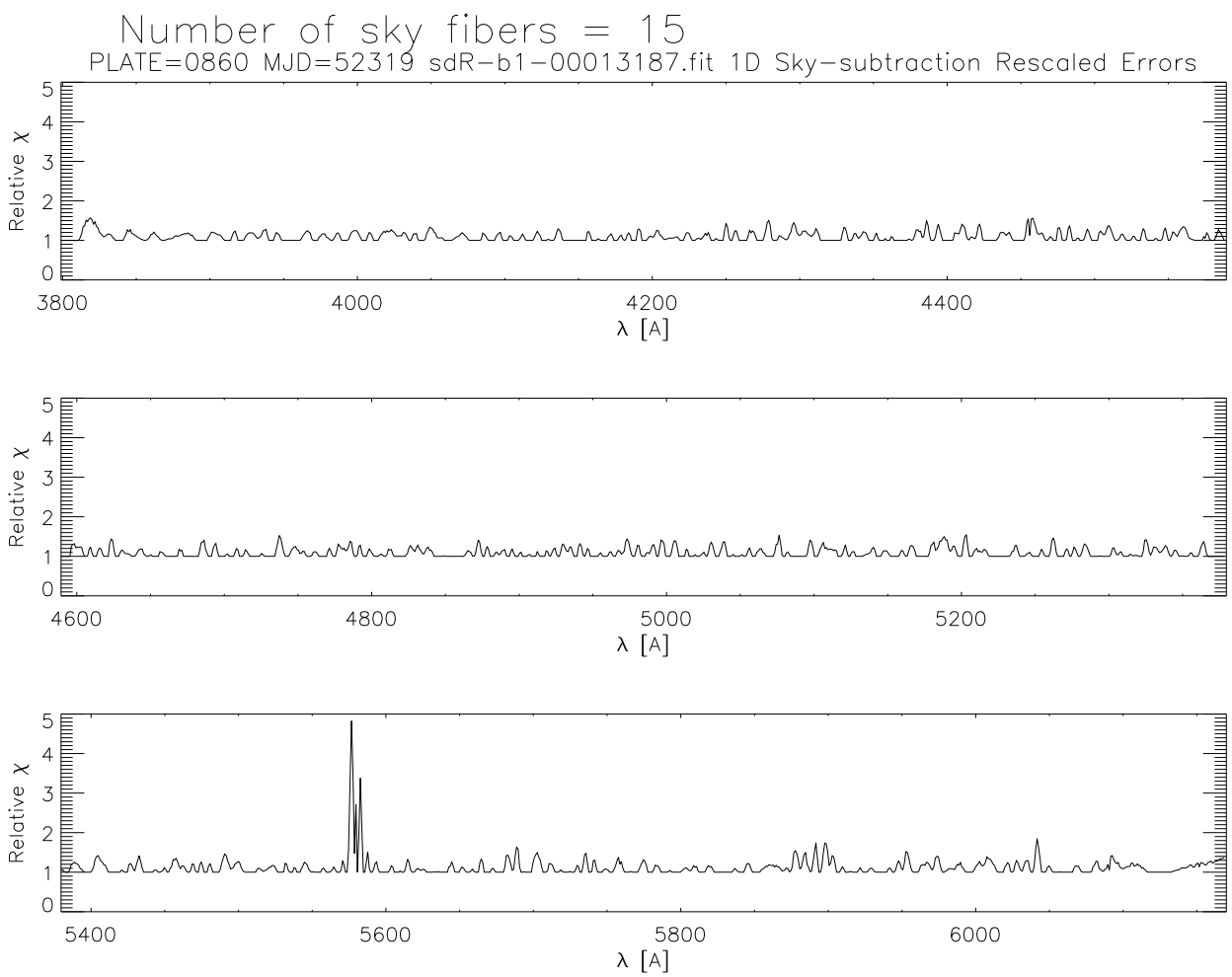
es= 0.0000

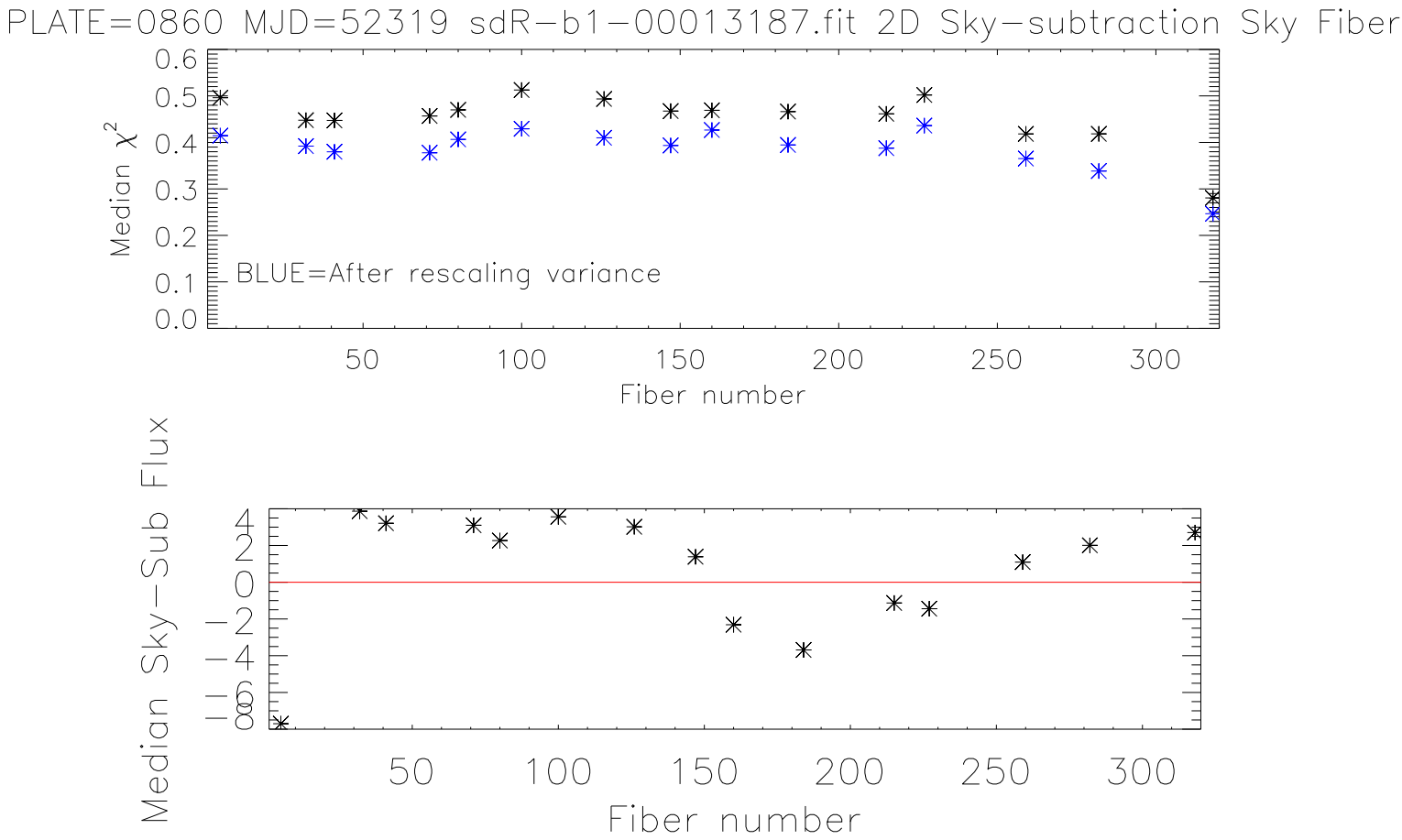

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013187.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

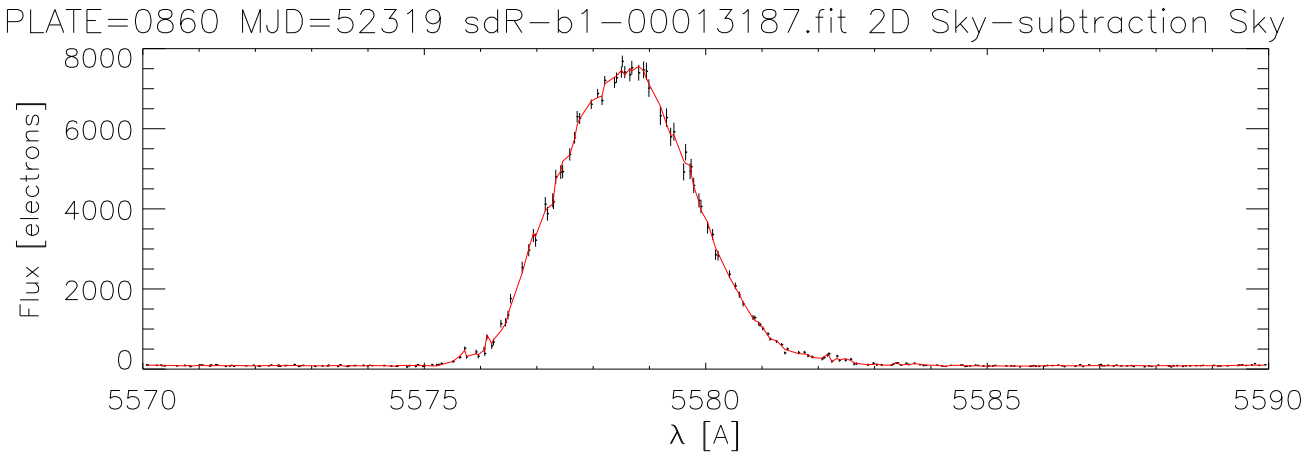

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

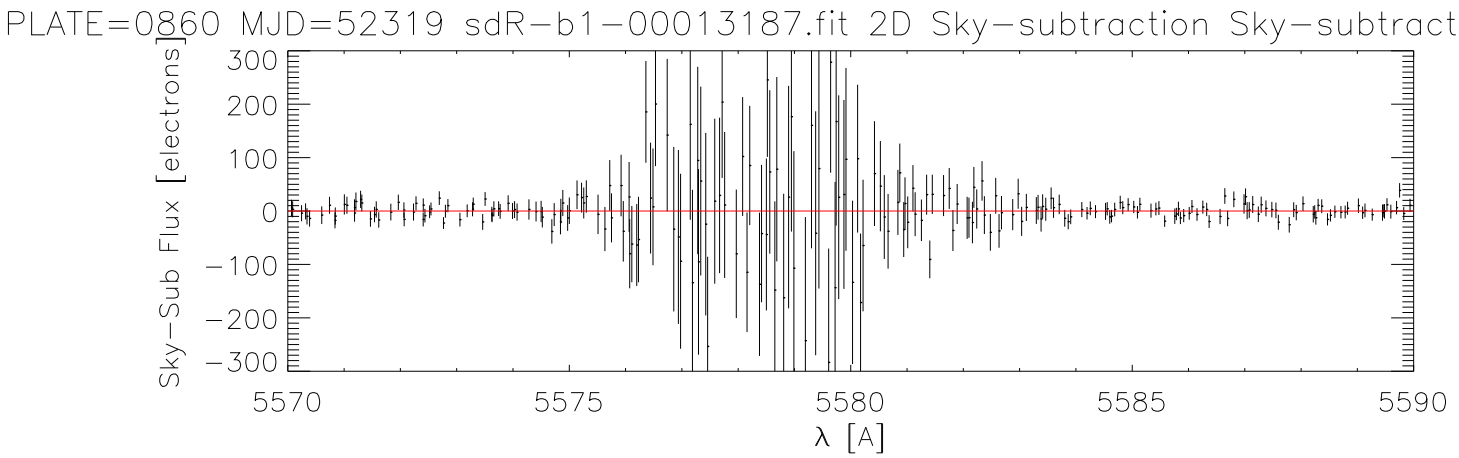

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

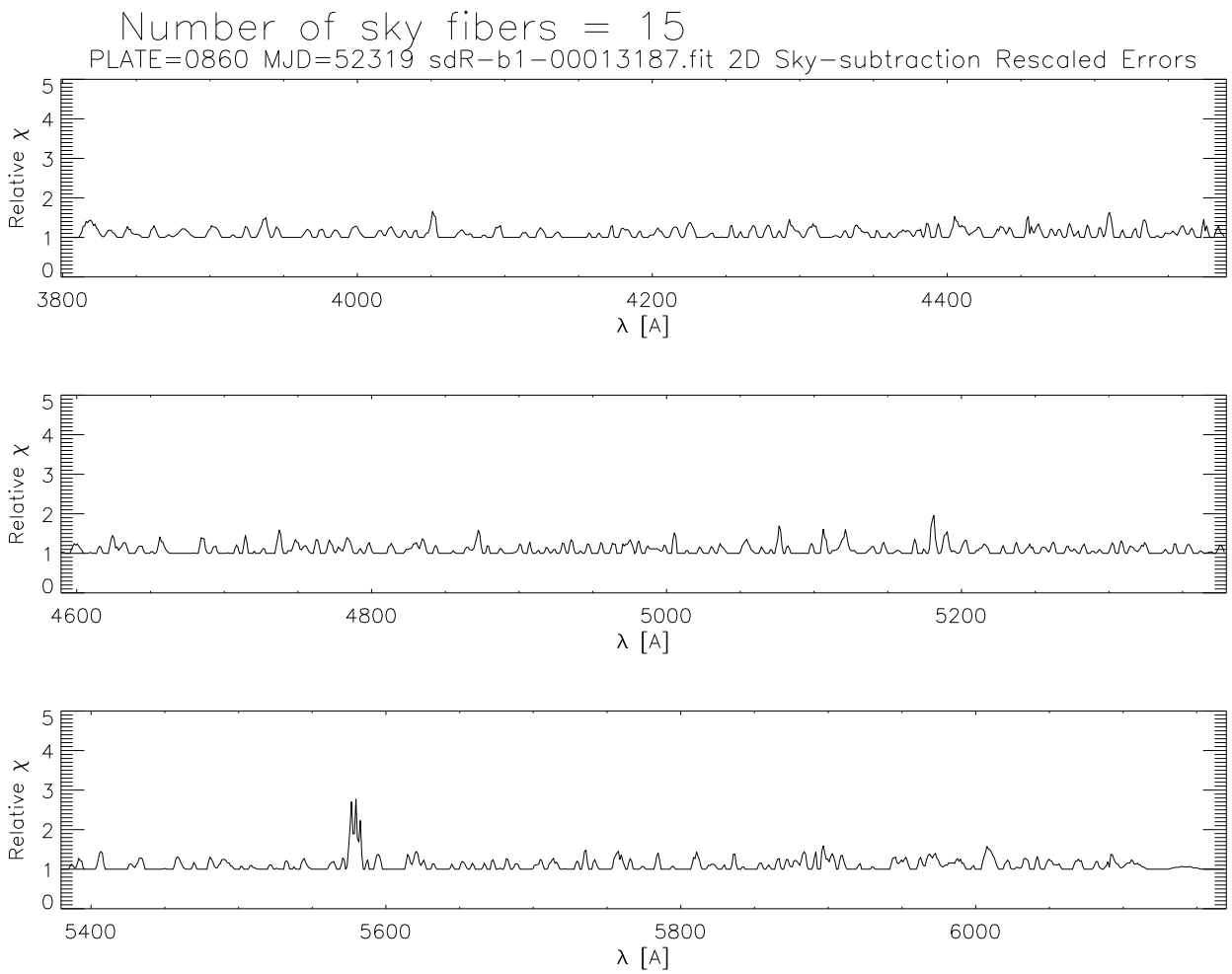

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

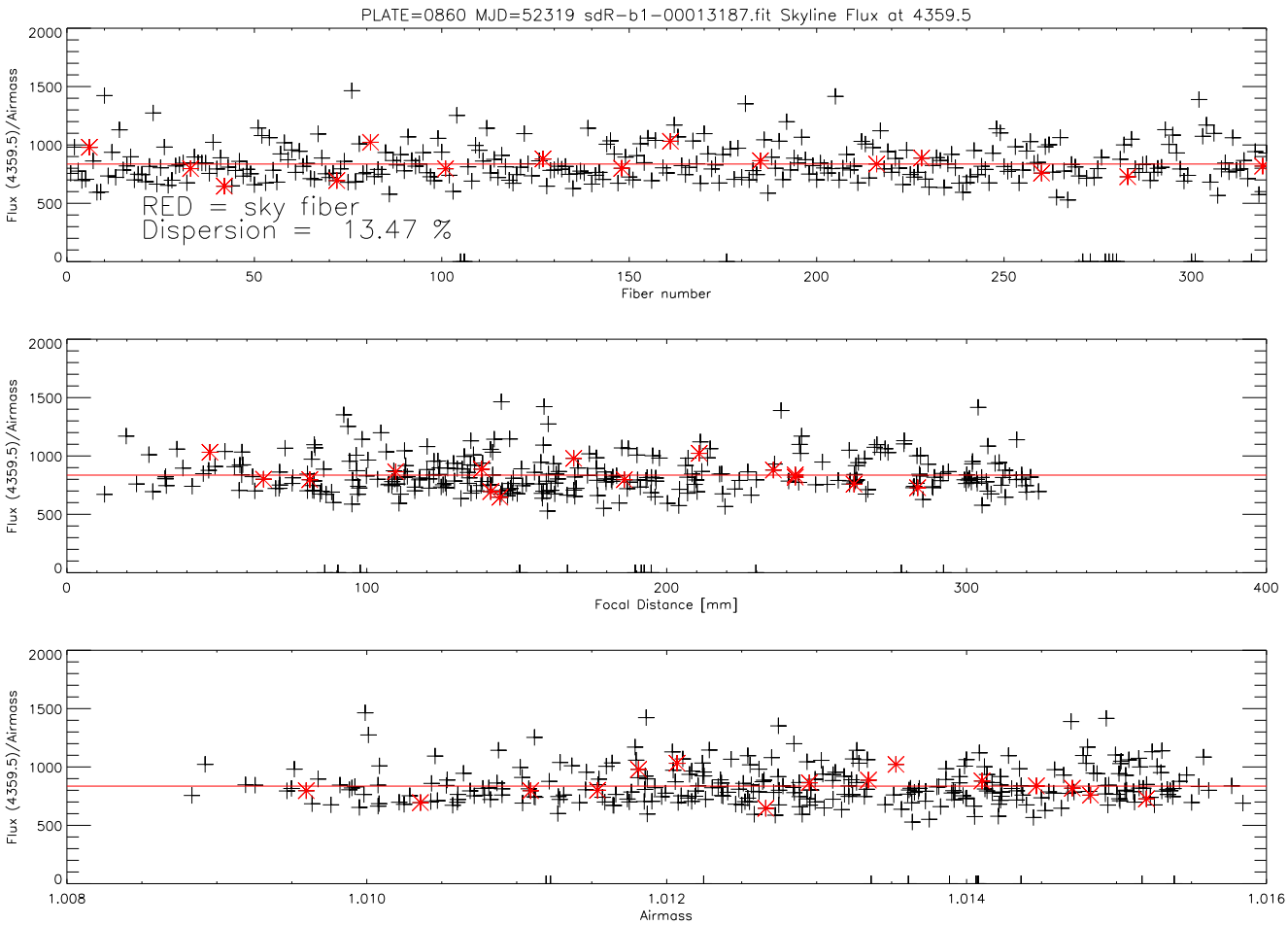

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013187.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

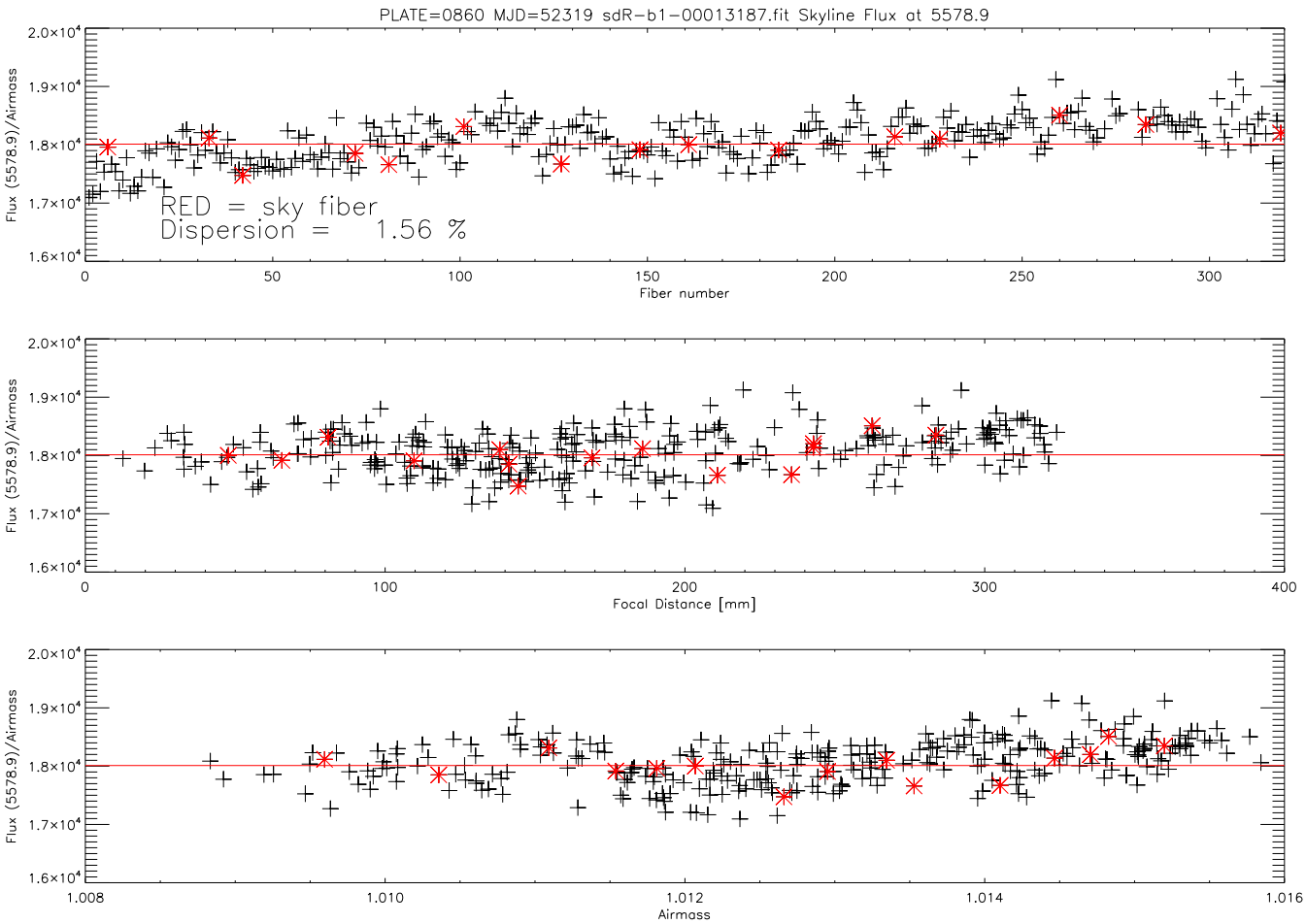

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1.6
-1.4
-1.2
-1.0
-0.8
50
100
150
200
250
300
Fiber number

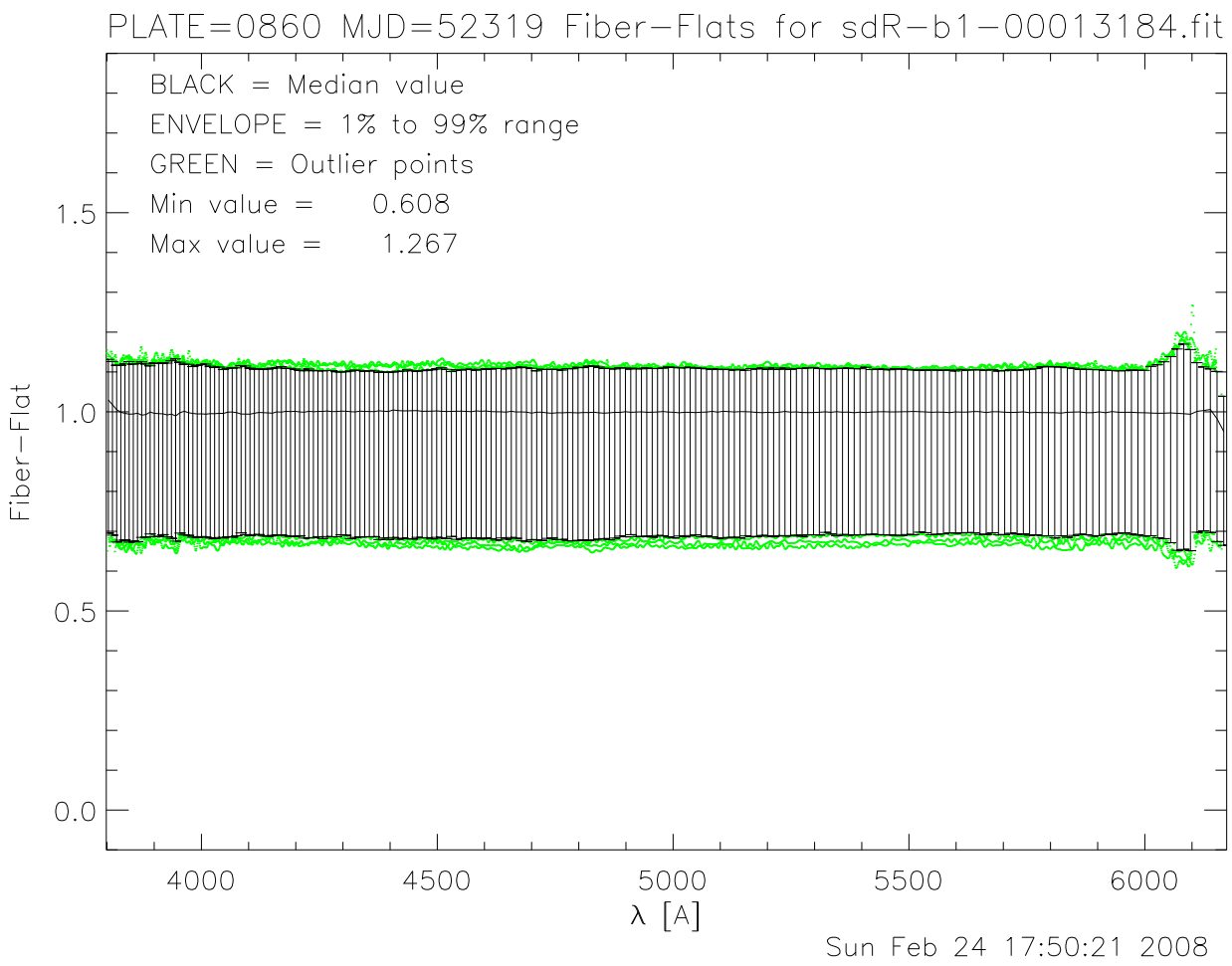

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

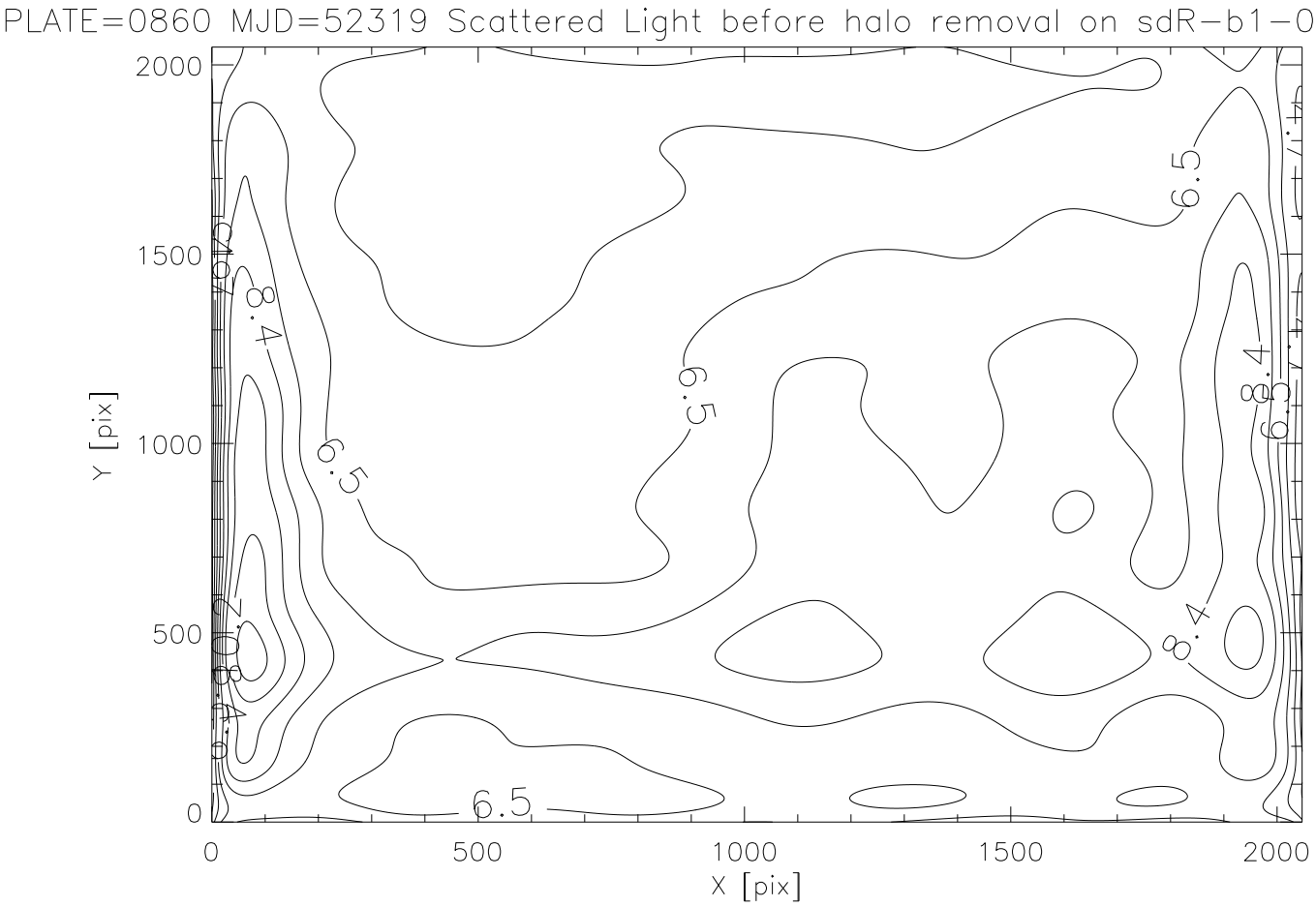

PLATE=0860 MJD=52319 sdR-b1-00013187.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

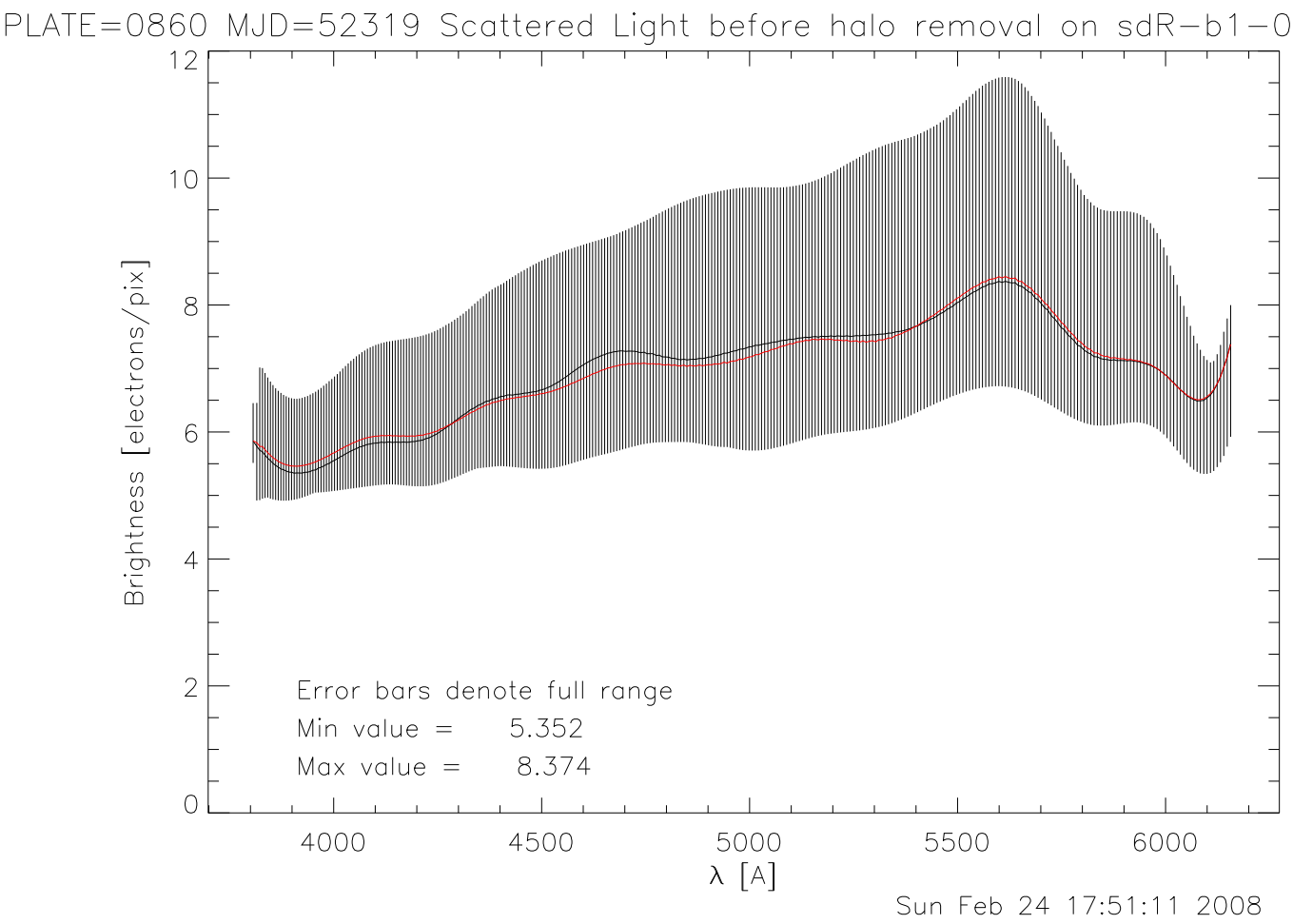

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013187.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

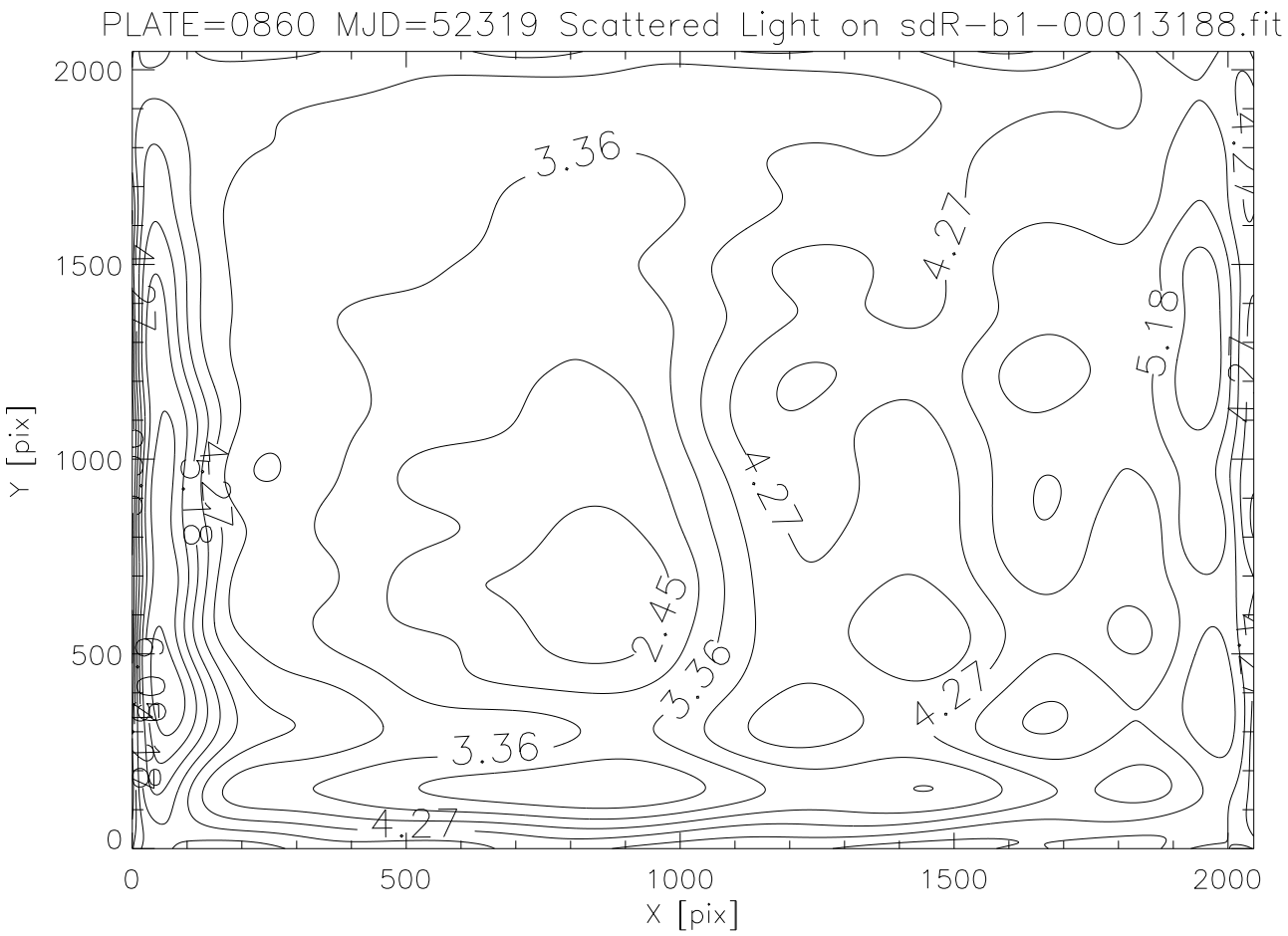

PLATE=0860 MJD=52319 sdR-b1-00013187.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.47 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

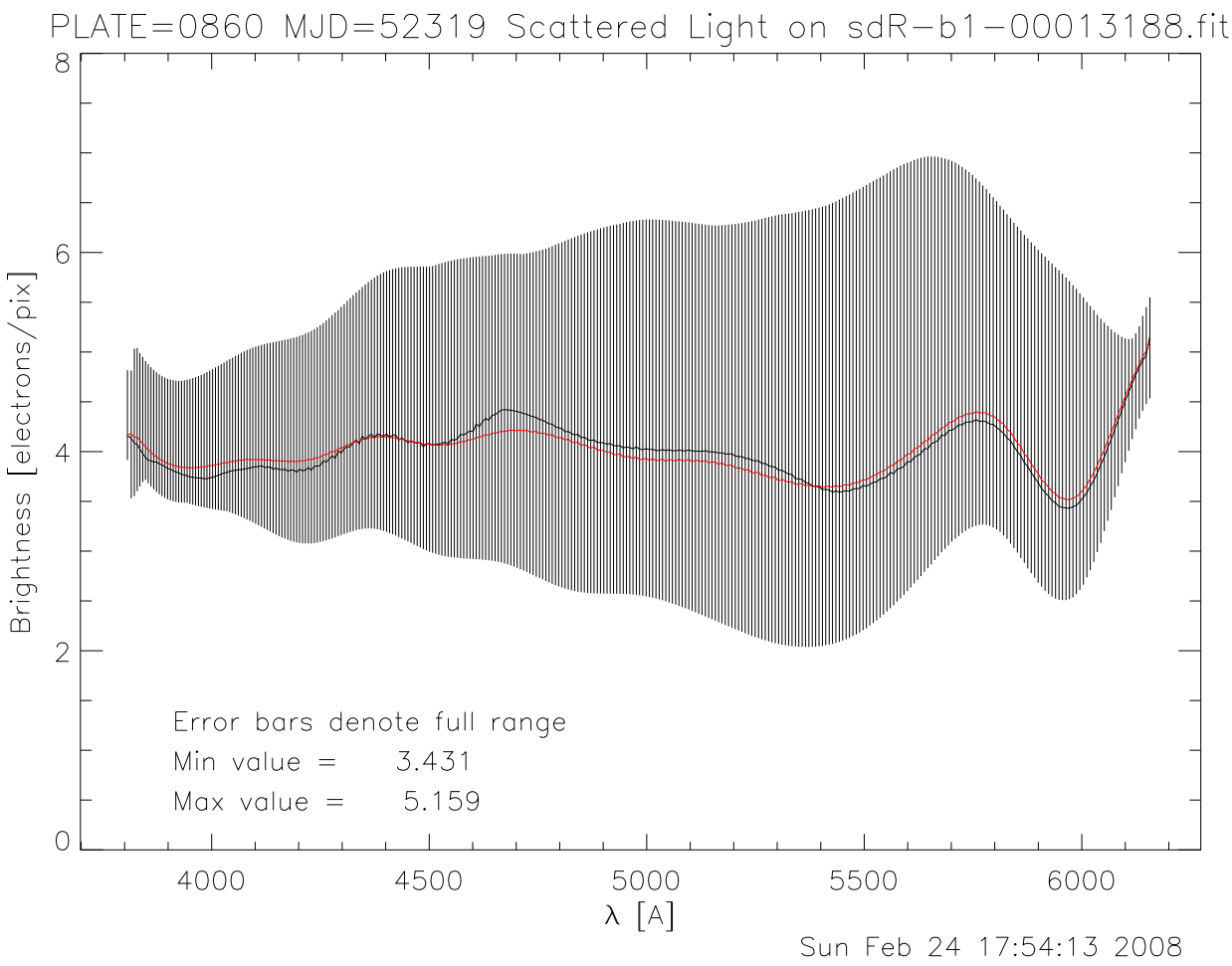

PLATE=0860 MJD=52319 sdR-b1-00013187.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
RED = sky fiber
Dispersion = 1.56 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.008
1.010
1.012
1.014
1.016
Airmass

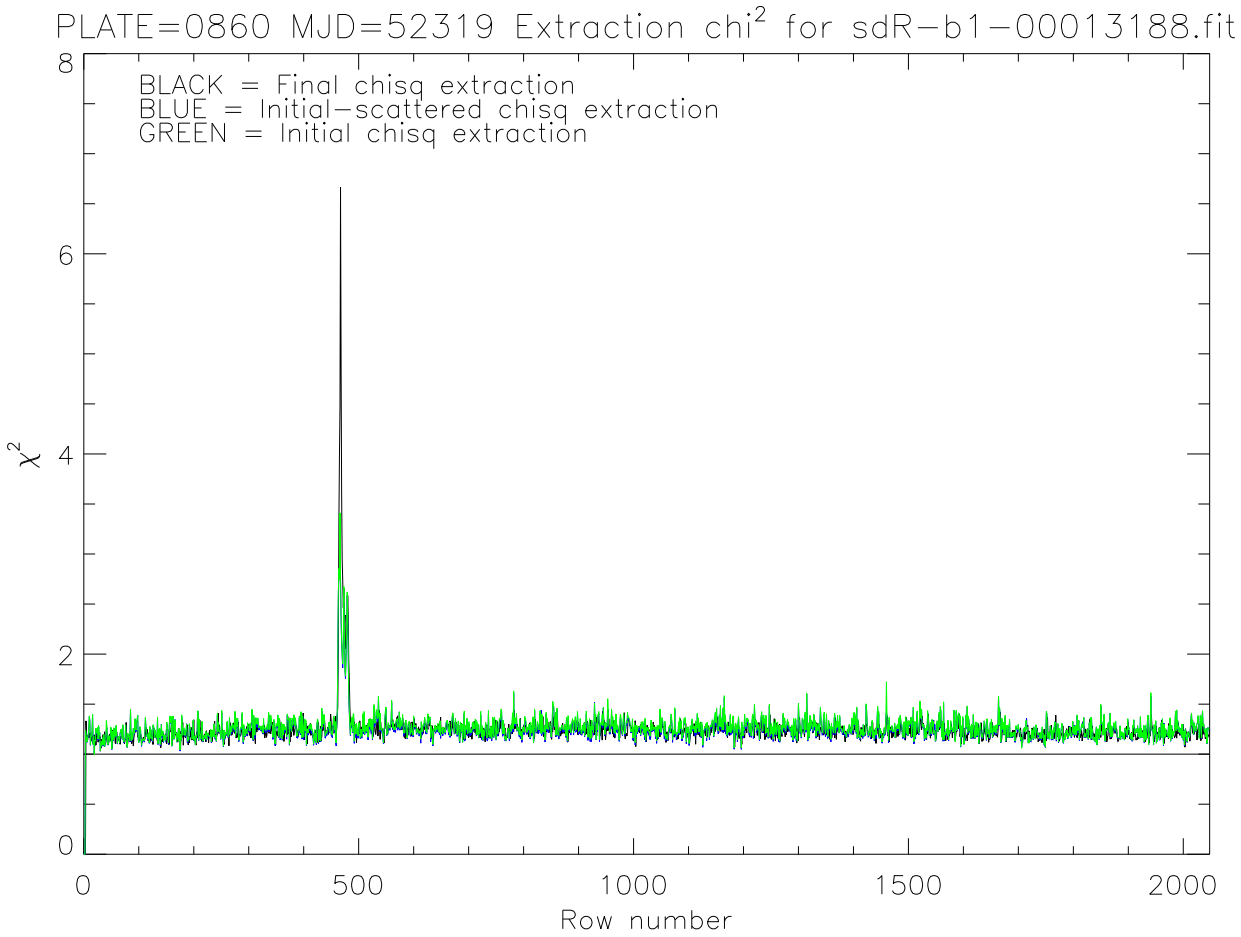

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:50:21 2008

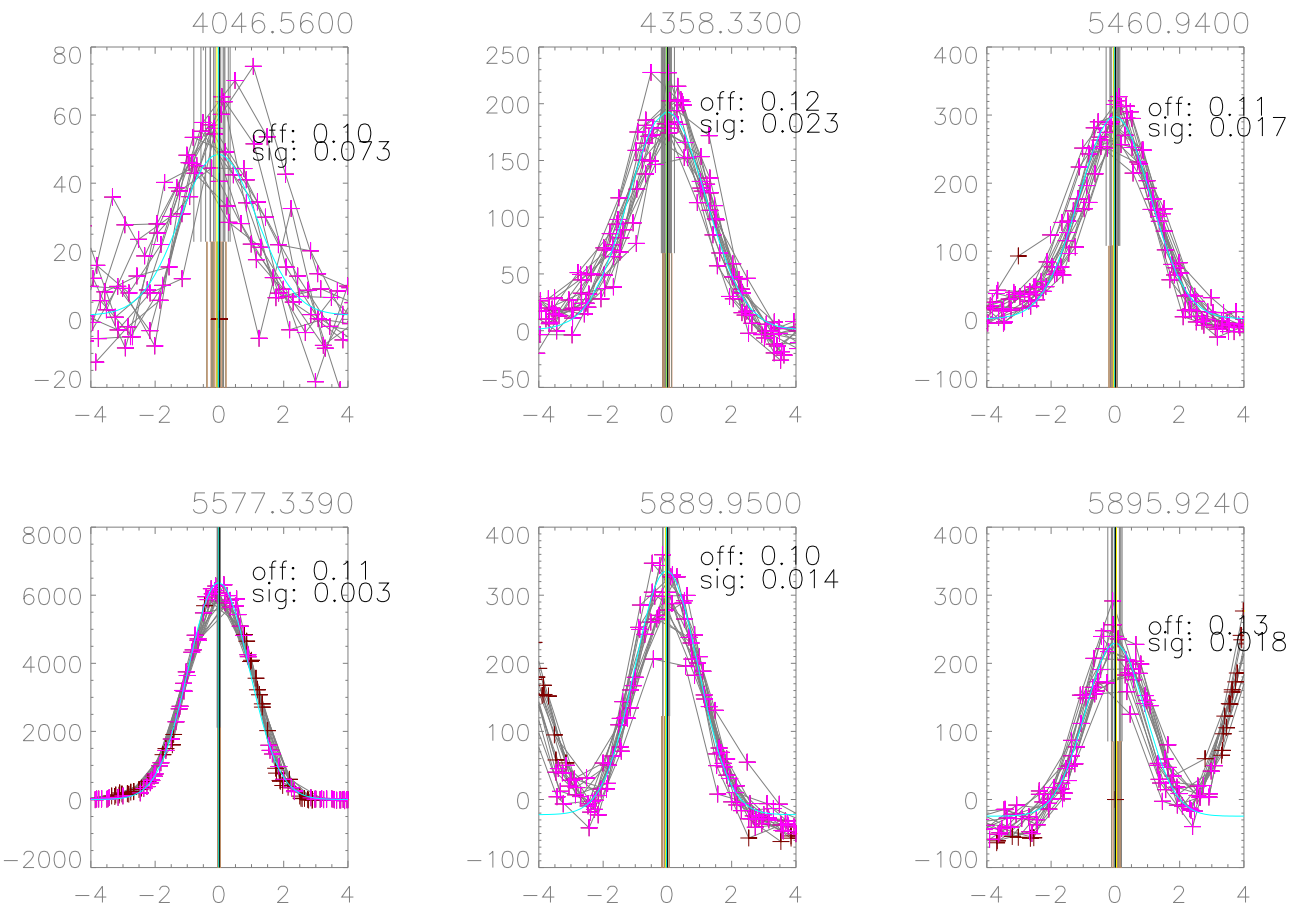

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013188.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.5
8.4
6.5
6.5
8.4
8.4
6.5
6.5
8.4
6.5

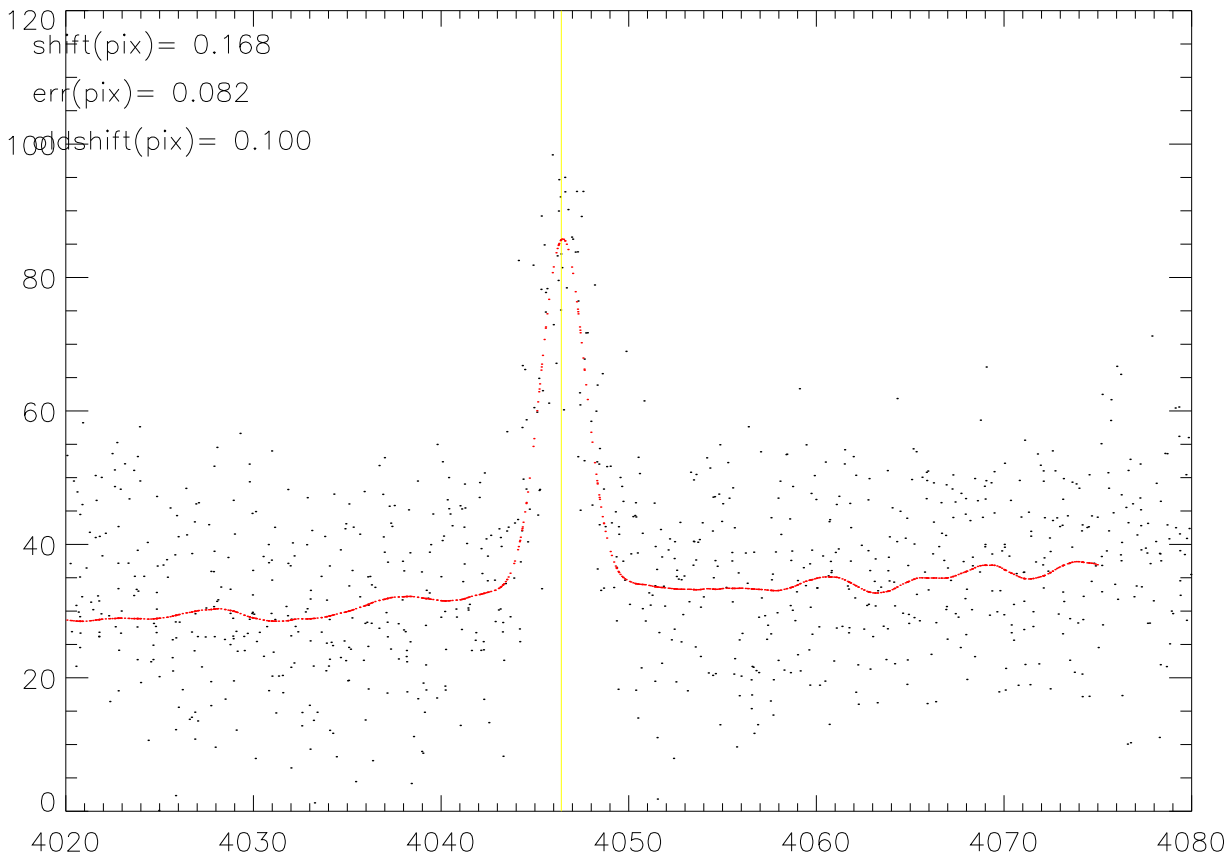

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013188.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.352
Max value = 8.374
Sun Feb 24 17:51:11 2008

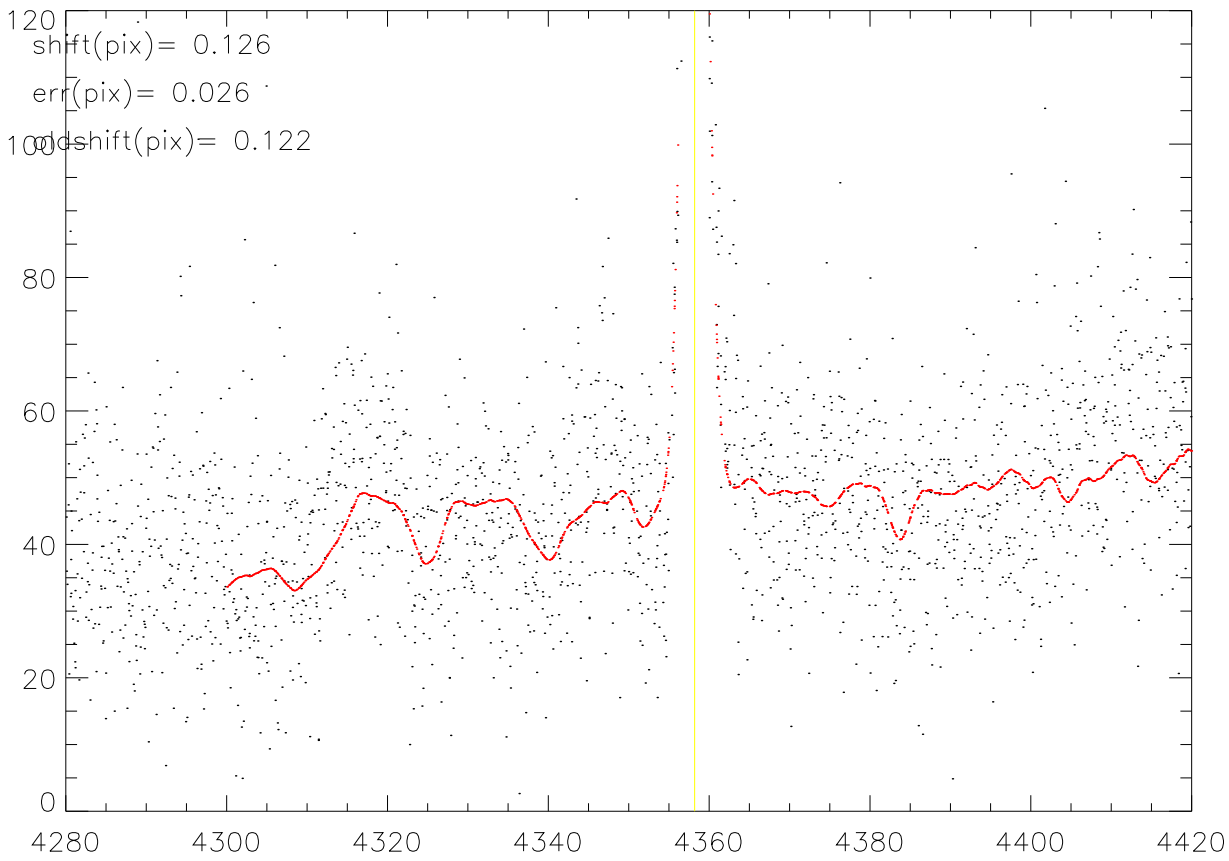

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013188.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18
2.45
0

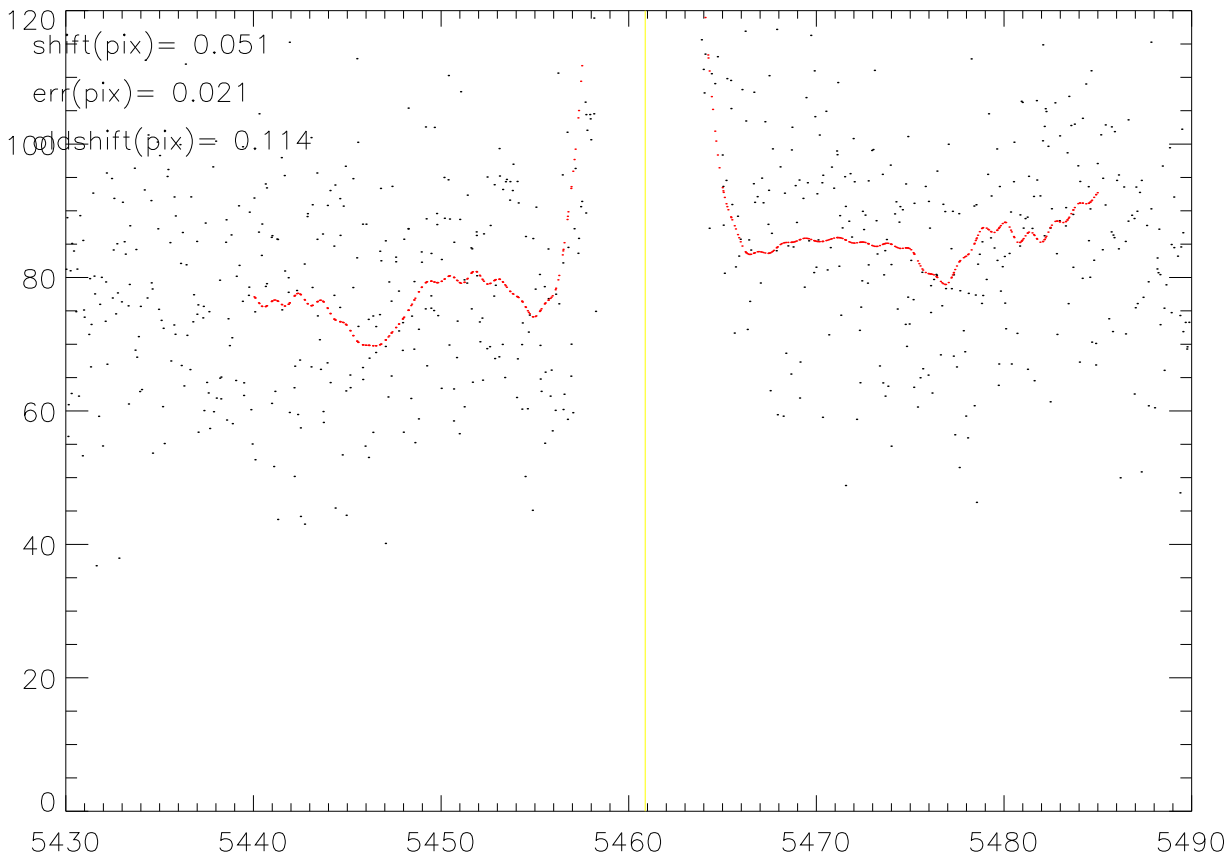

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013188.fit
Brightness [electrons/pix]
8
6
4
2
0
Error bars denote full range
Min value = 3.431
Max value = 5.159
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:54:13 2008

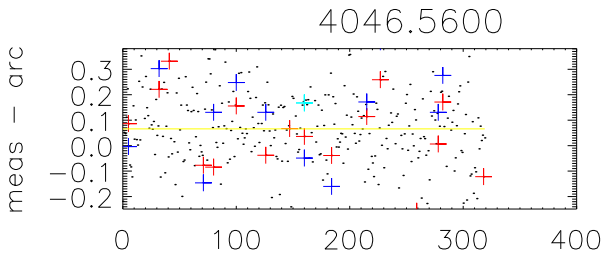

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013188.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

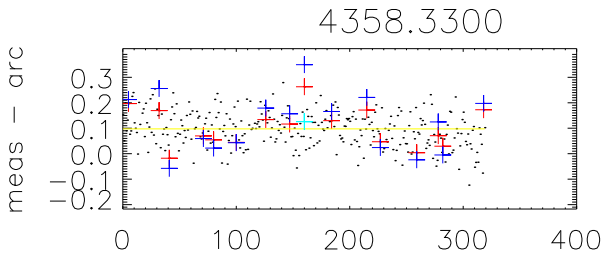

4046.5600
off: 0.10
sig: 0.073
4358.3300
off: 0.12
sig: 0.023
5460.9400
off: 0.11
sig: 0.017
5577.3390
off: 0.11
sig: 0.003
5889.9500
off: 0.10
sig: 0.014
5895.9240
off: 0.13
sig: 0.018

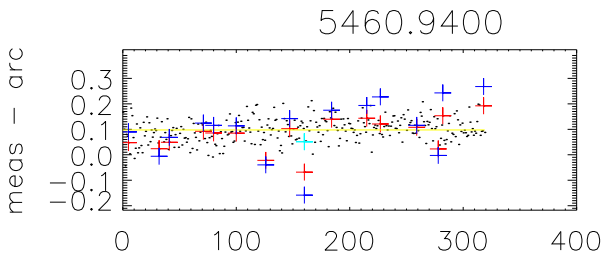

shift(pix)= 0.168
err(pix)= 0.082
oldshift(pix)= 0.100
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

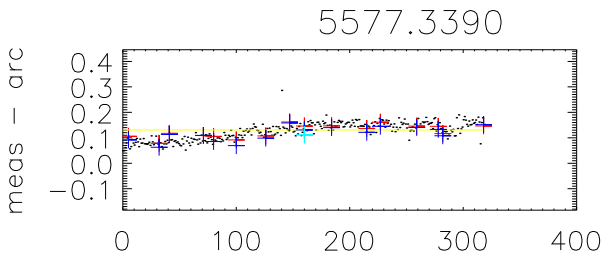

shift(pix)= 0.126
err(pix)= 0.026
oldshift(pix)= 0.122
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

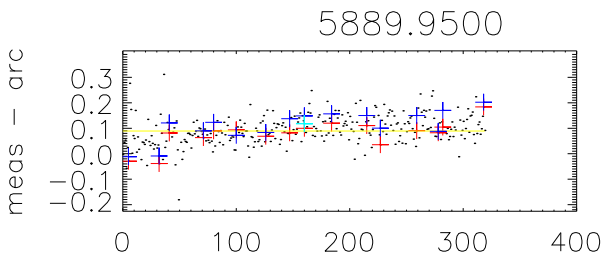

shift(pix)= 0.051
err(pix)= 0.021
oldshift(pix)= 0.114
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

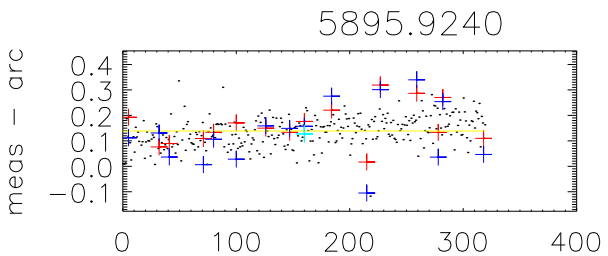

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

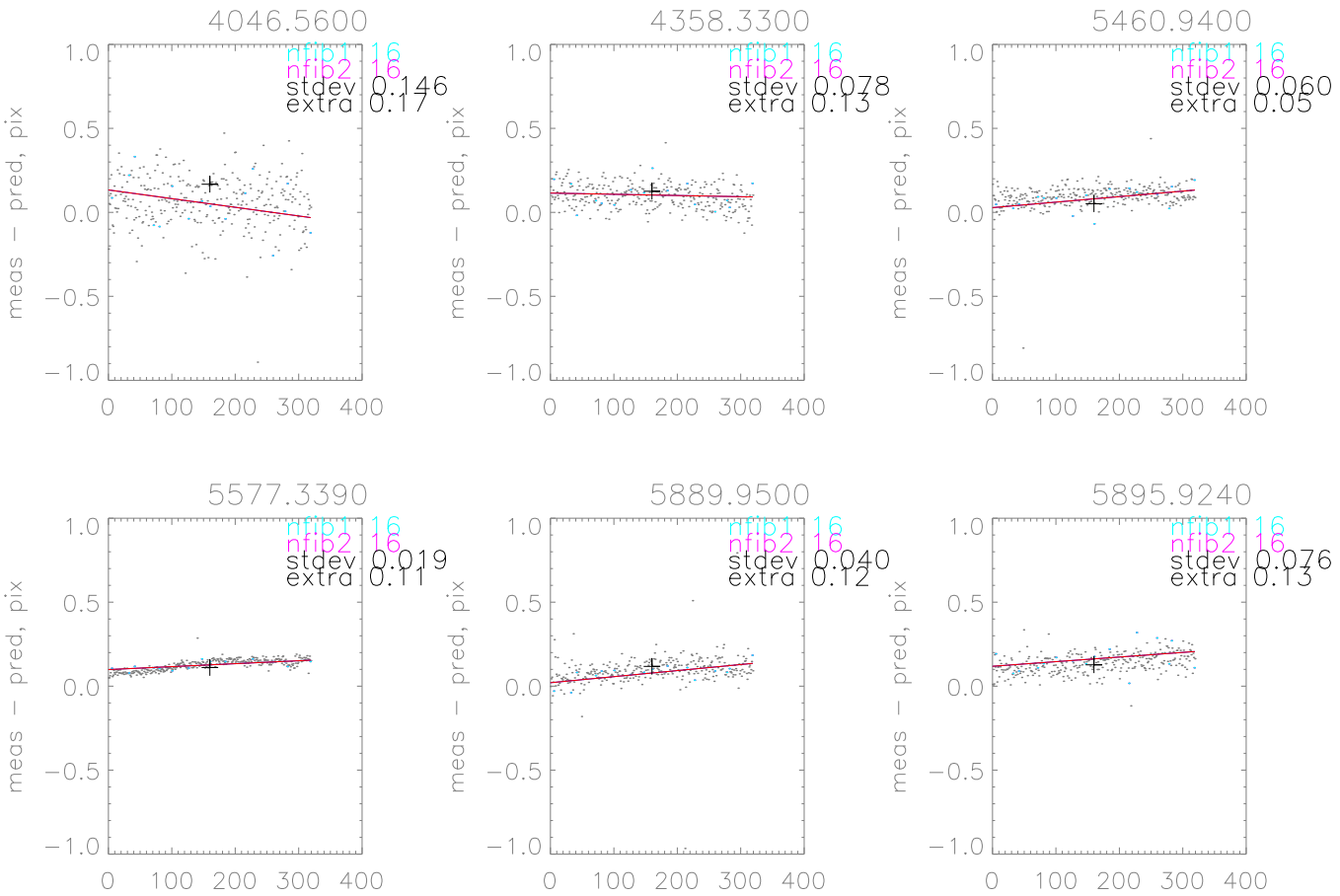

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

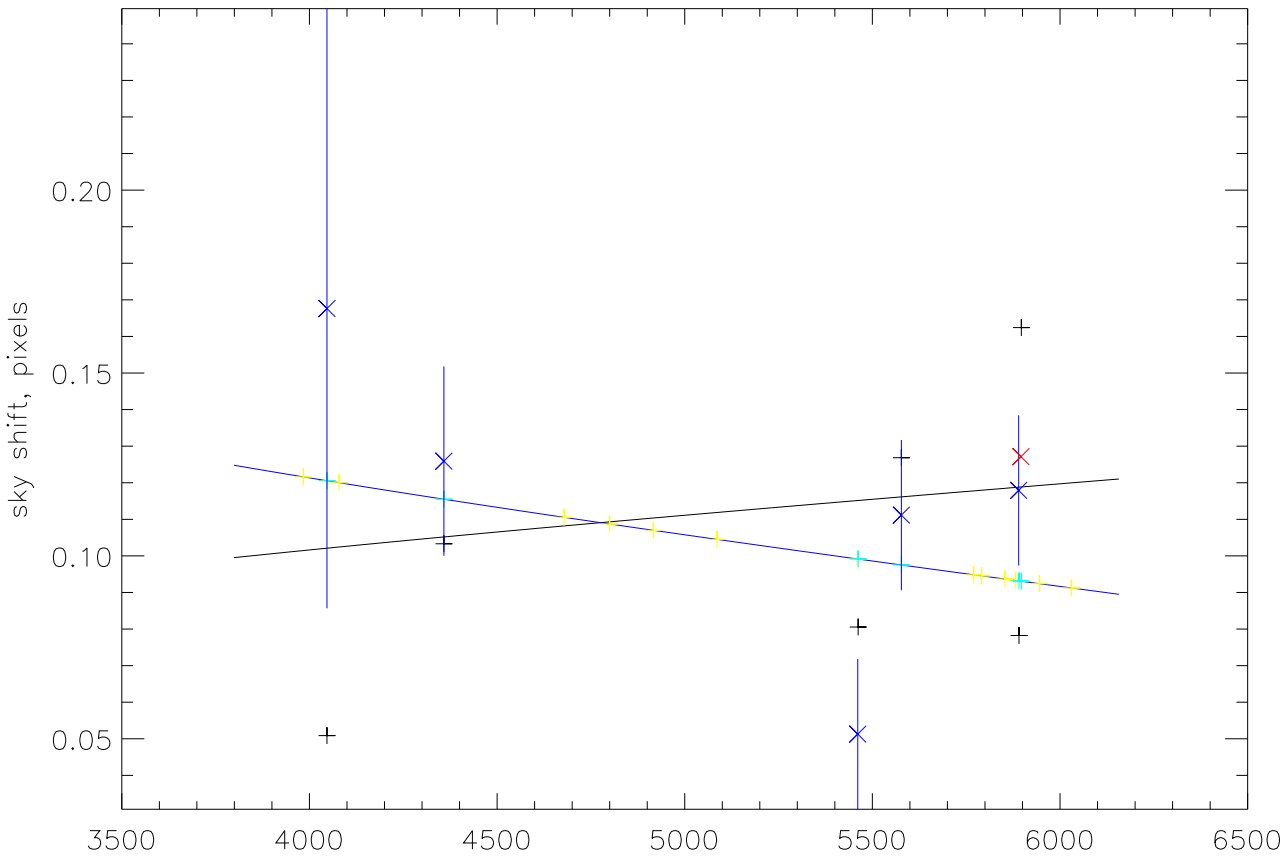

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

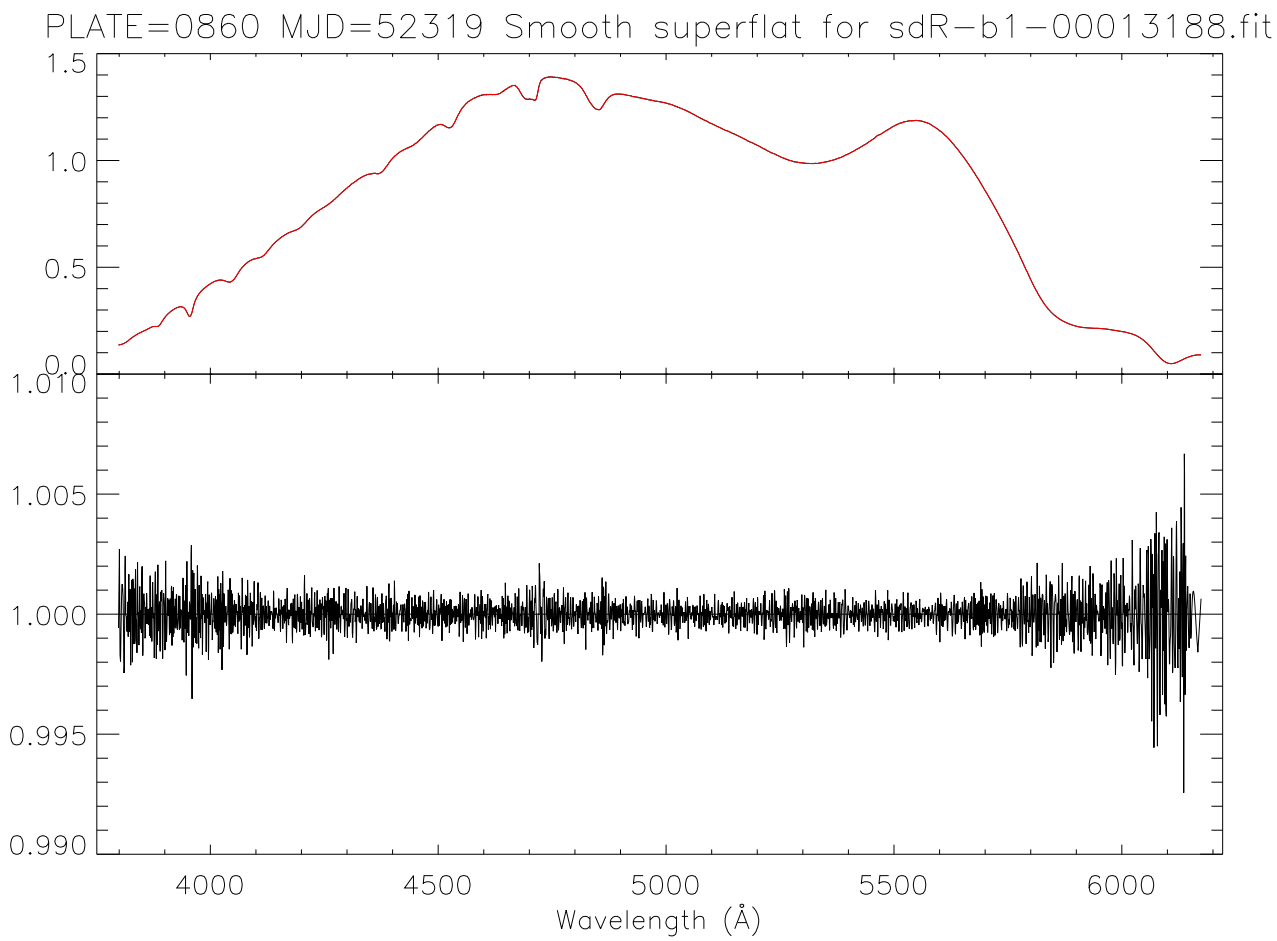

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

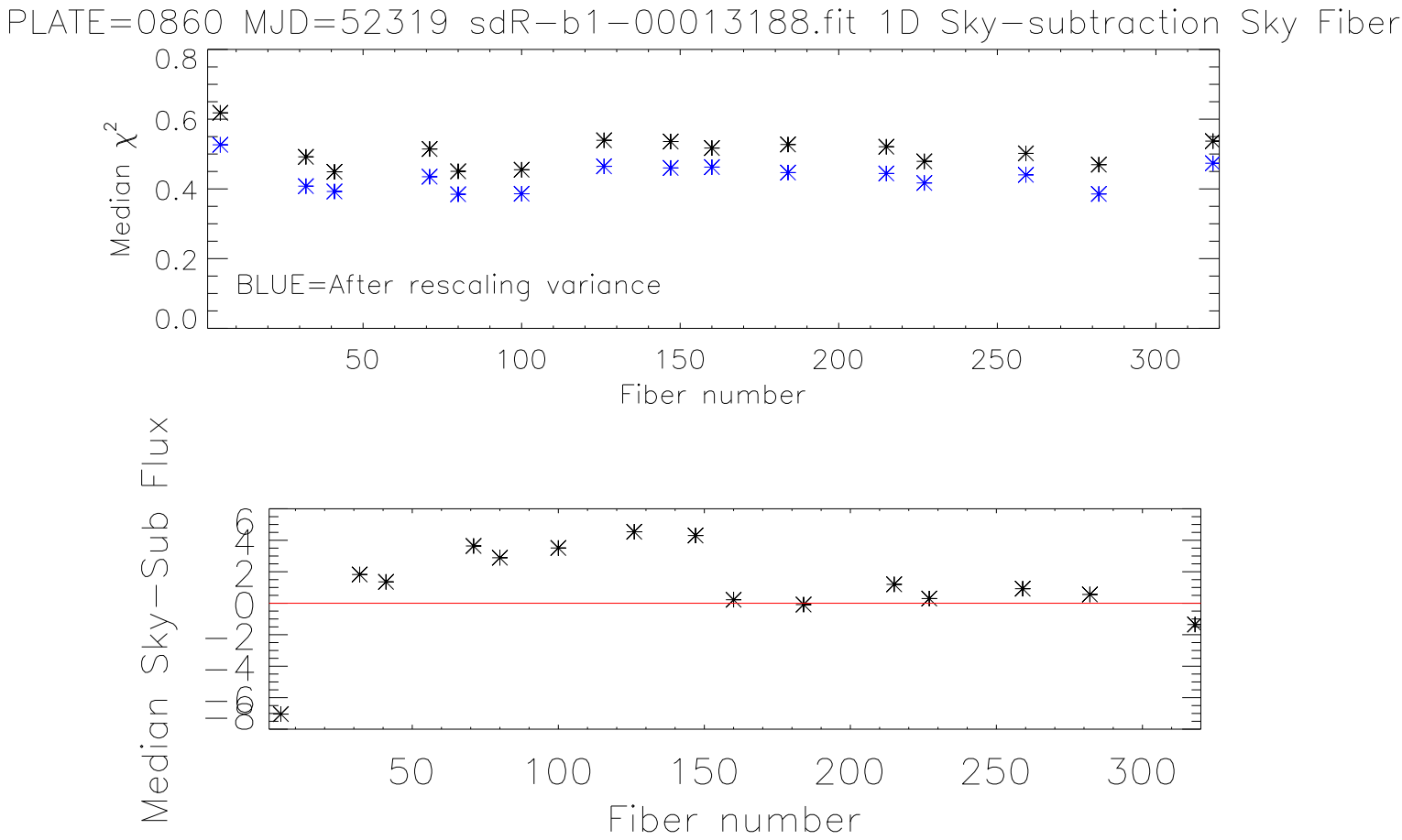

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

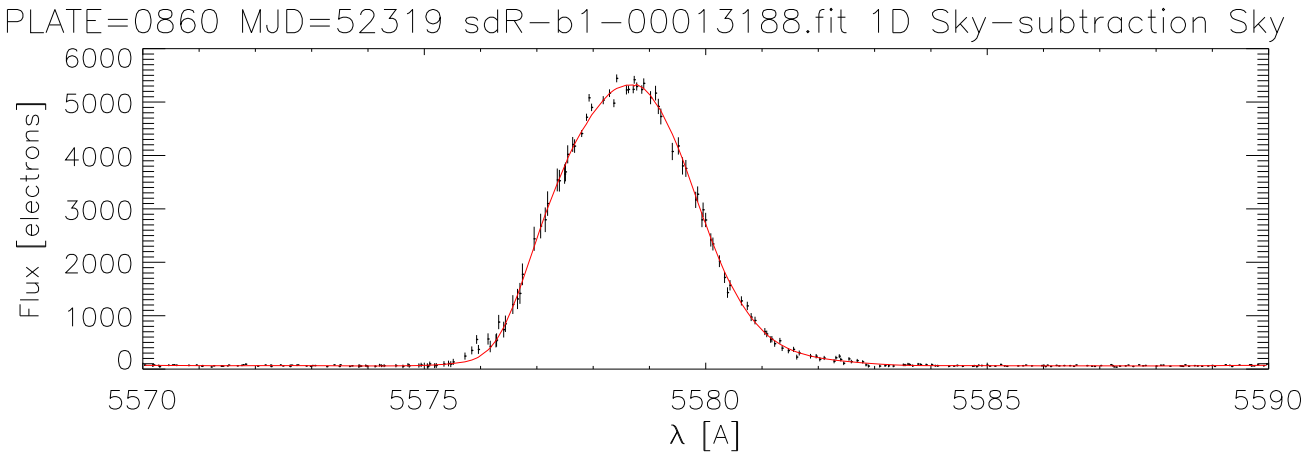

4046.5600
nfib1 16
nfib2 16
stdev 0.146
extra 0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra 0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.060
extra 0.05
5577.3390
nfib1 16
nfib2 16
stdev 0.019
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.040
extra 0.12
5895.9240
nfib1 16
nfib2 16
stdev 0.076
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

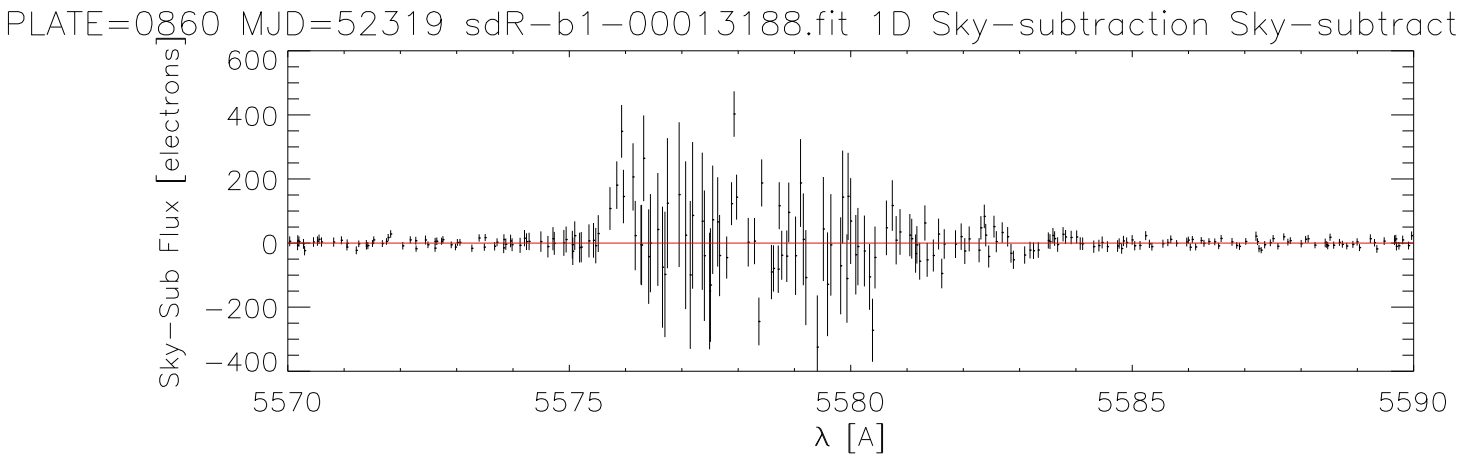

sky shift, pixels
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500

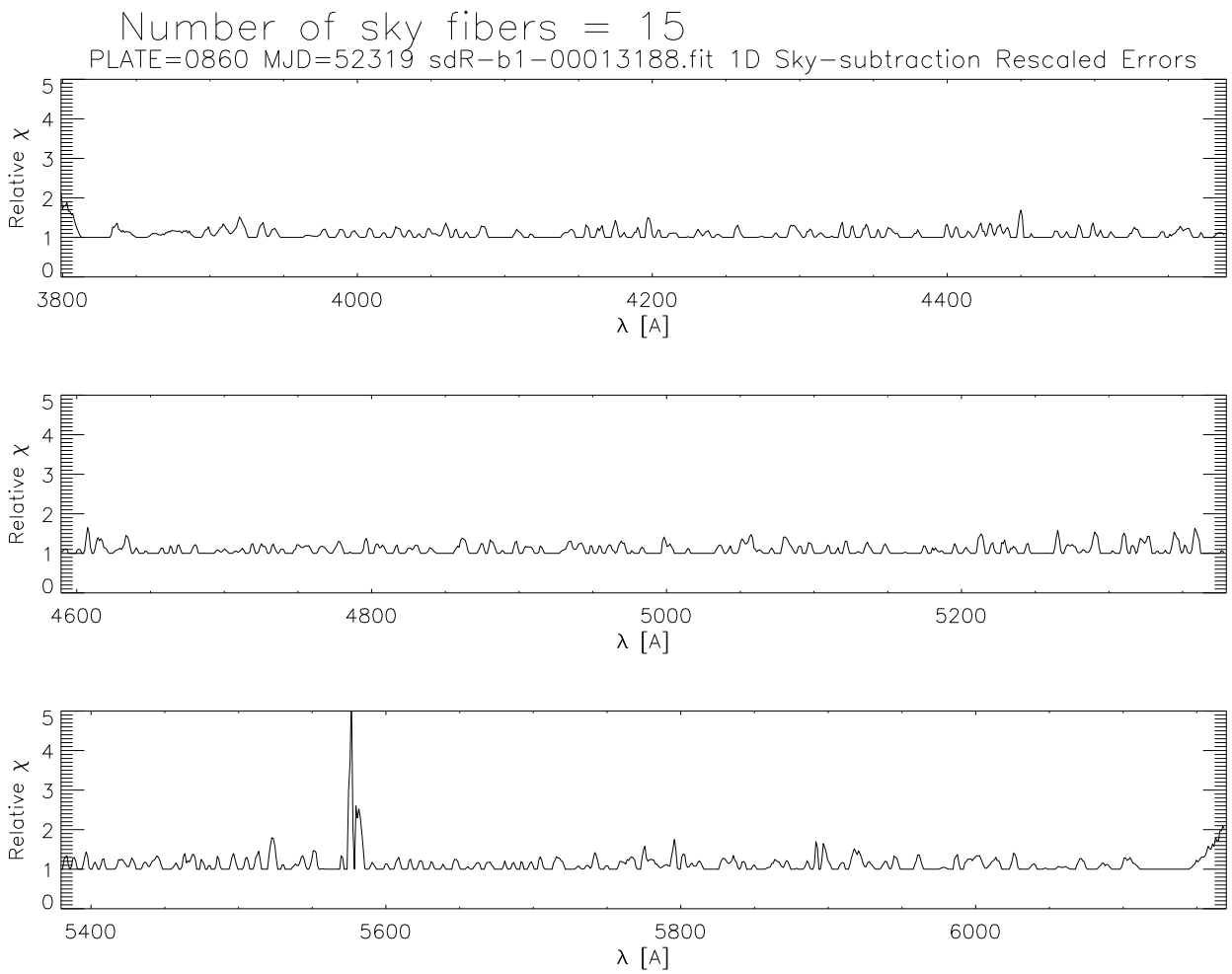
es= 0.0000

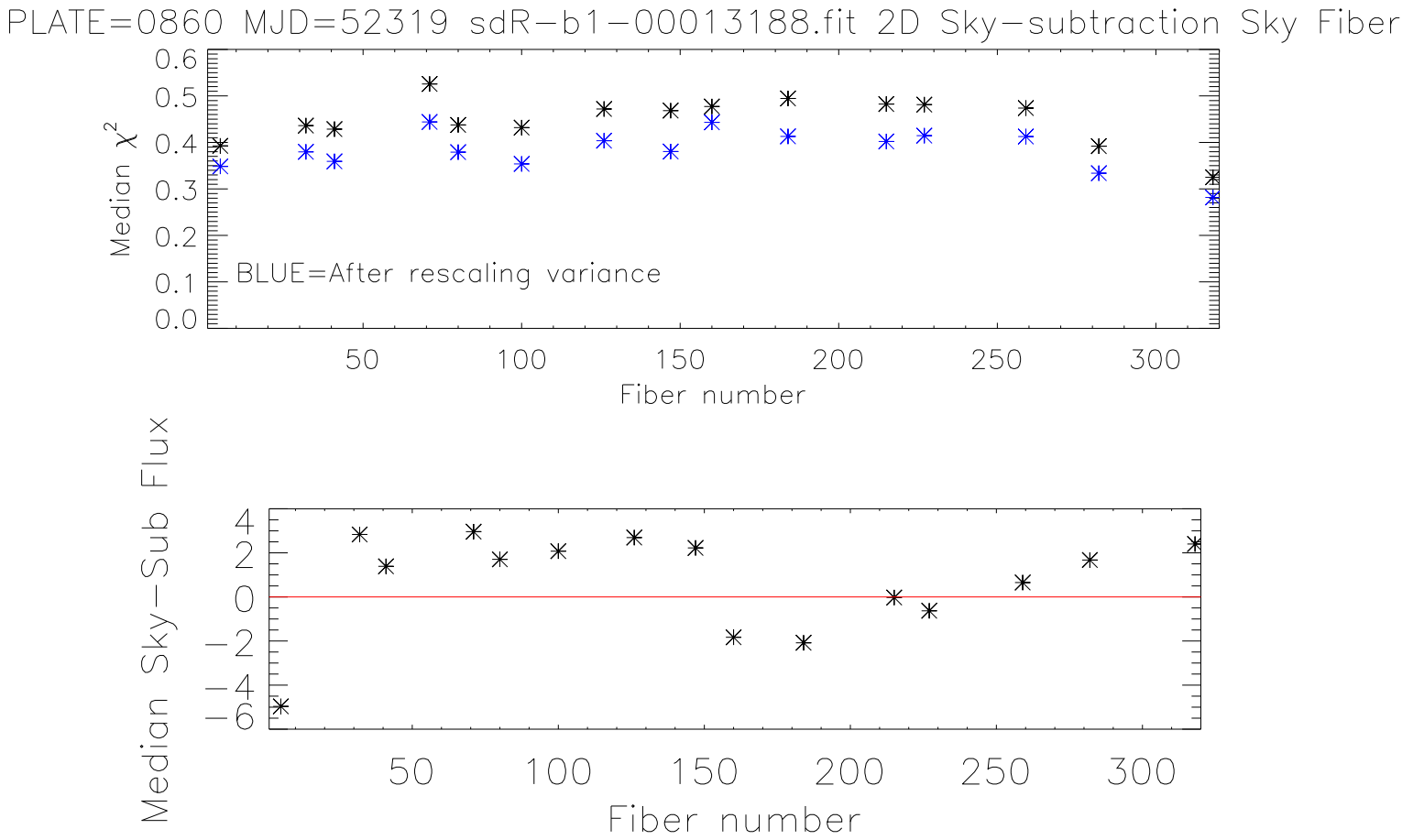

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013188.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

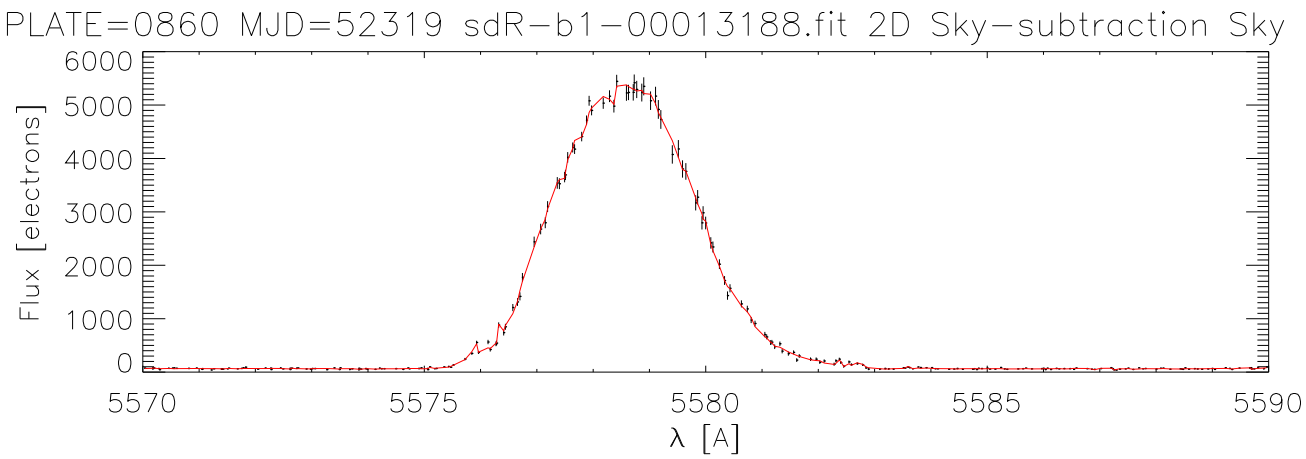

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.6
-0.4
-0.2
0.0
0.2
0.4
0.6
50
100
150
200
250
300
Fiber number

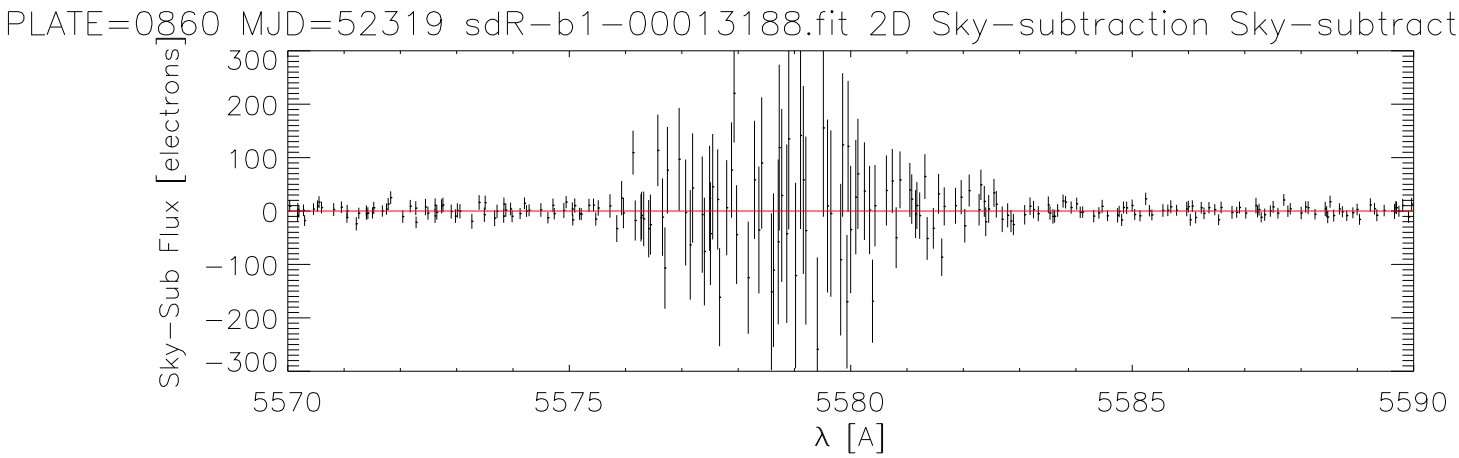

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

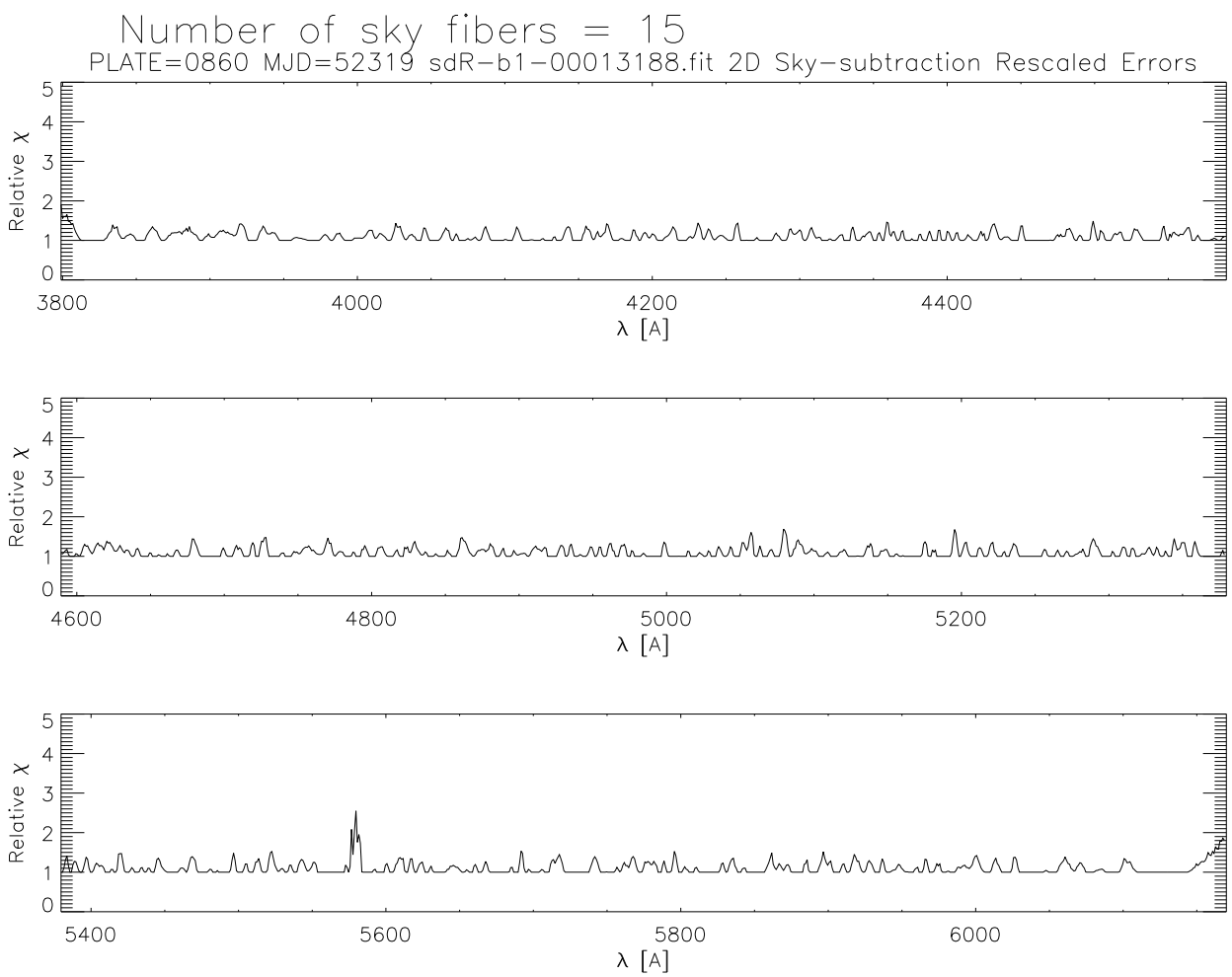

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

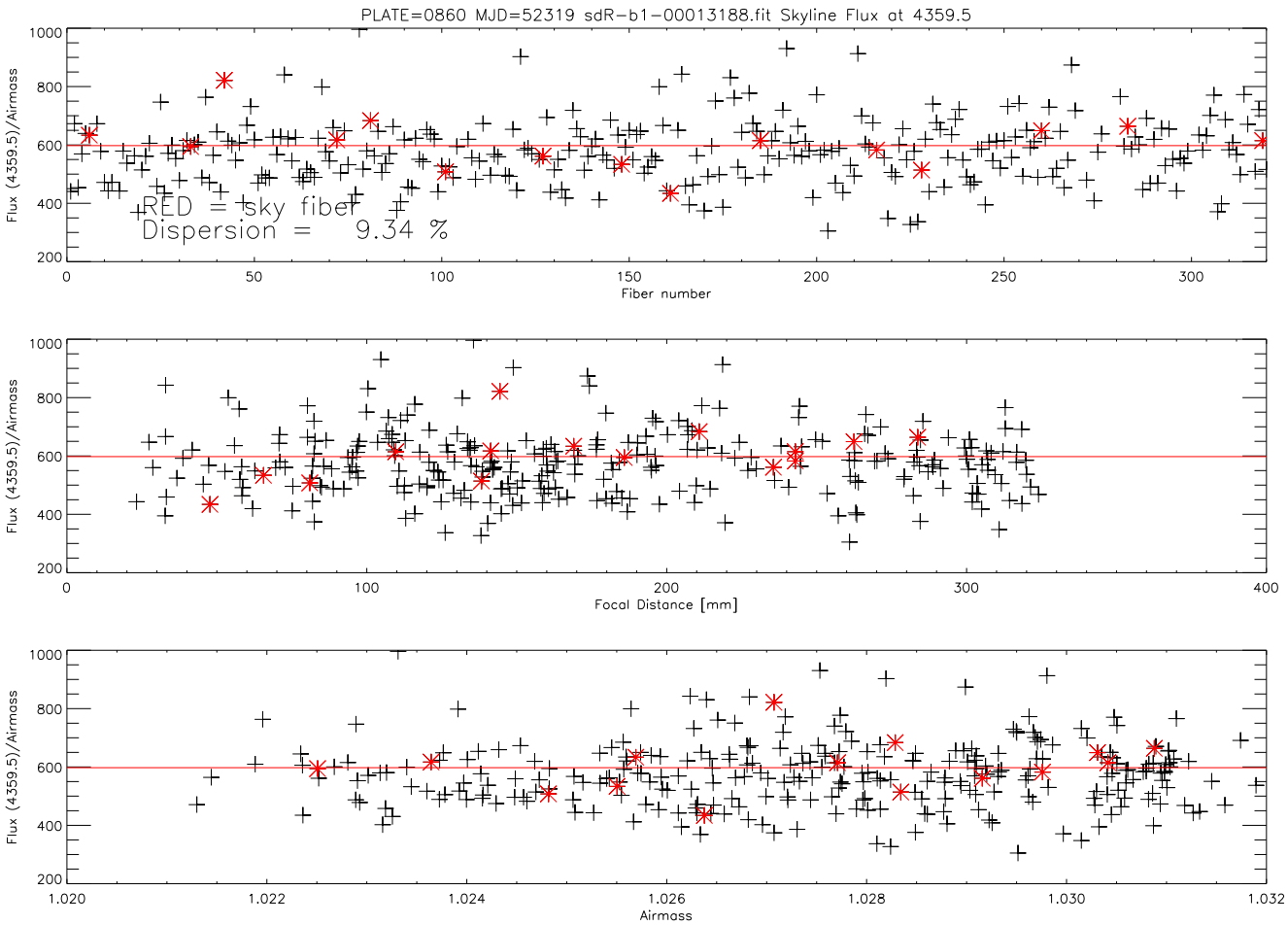

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013188.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

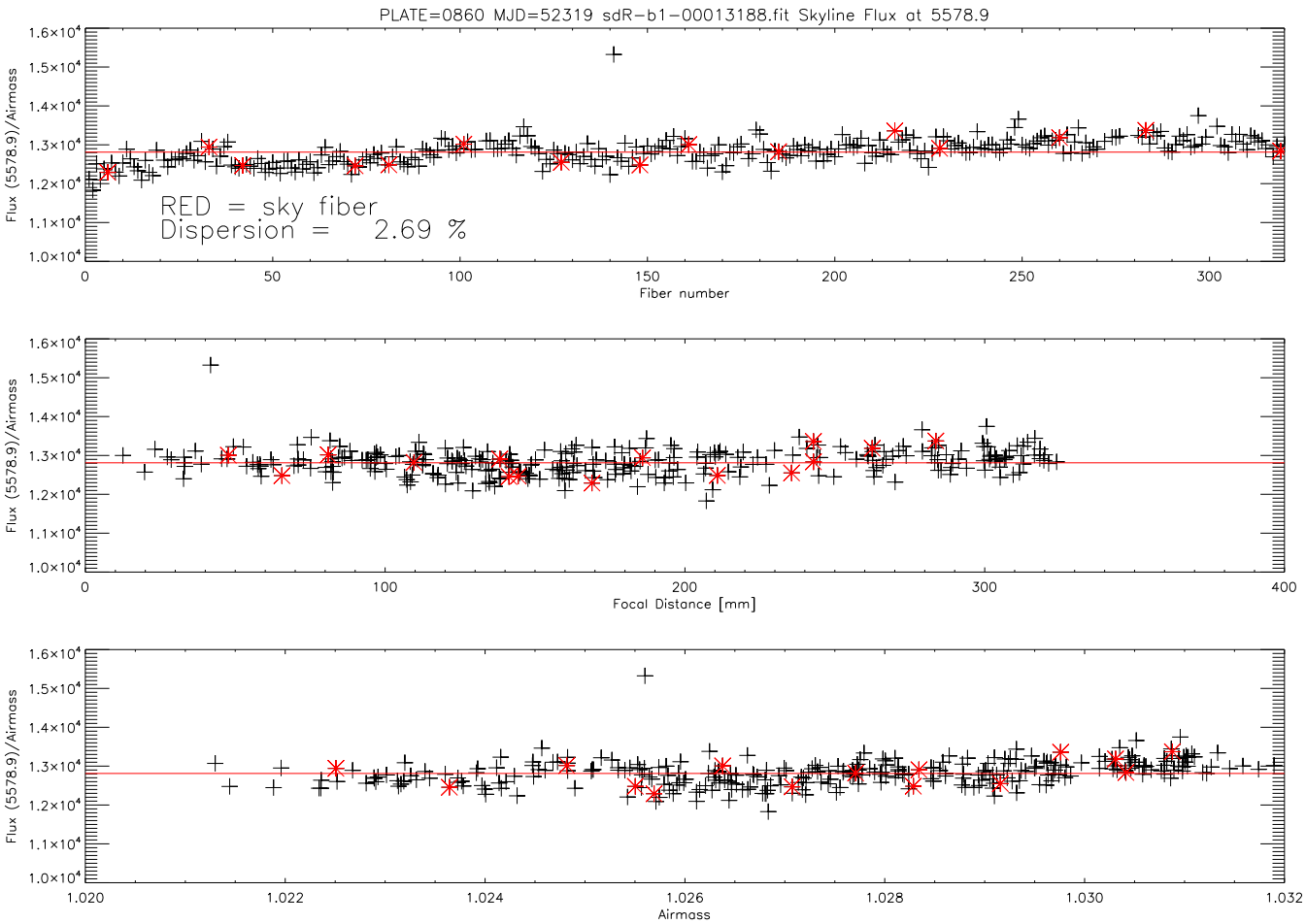

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

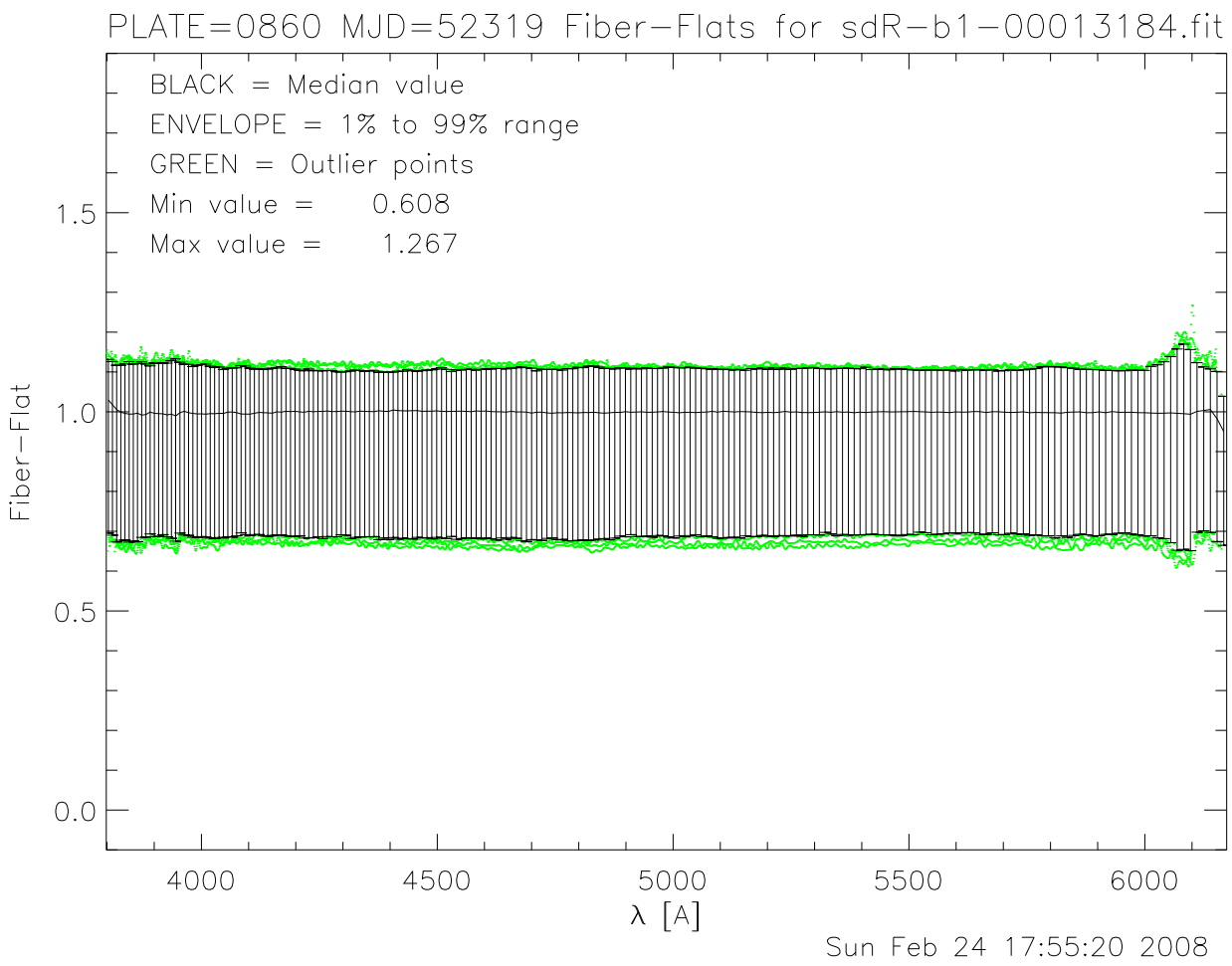

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

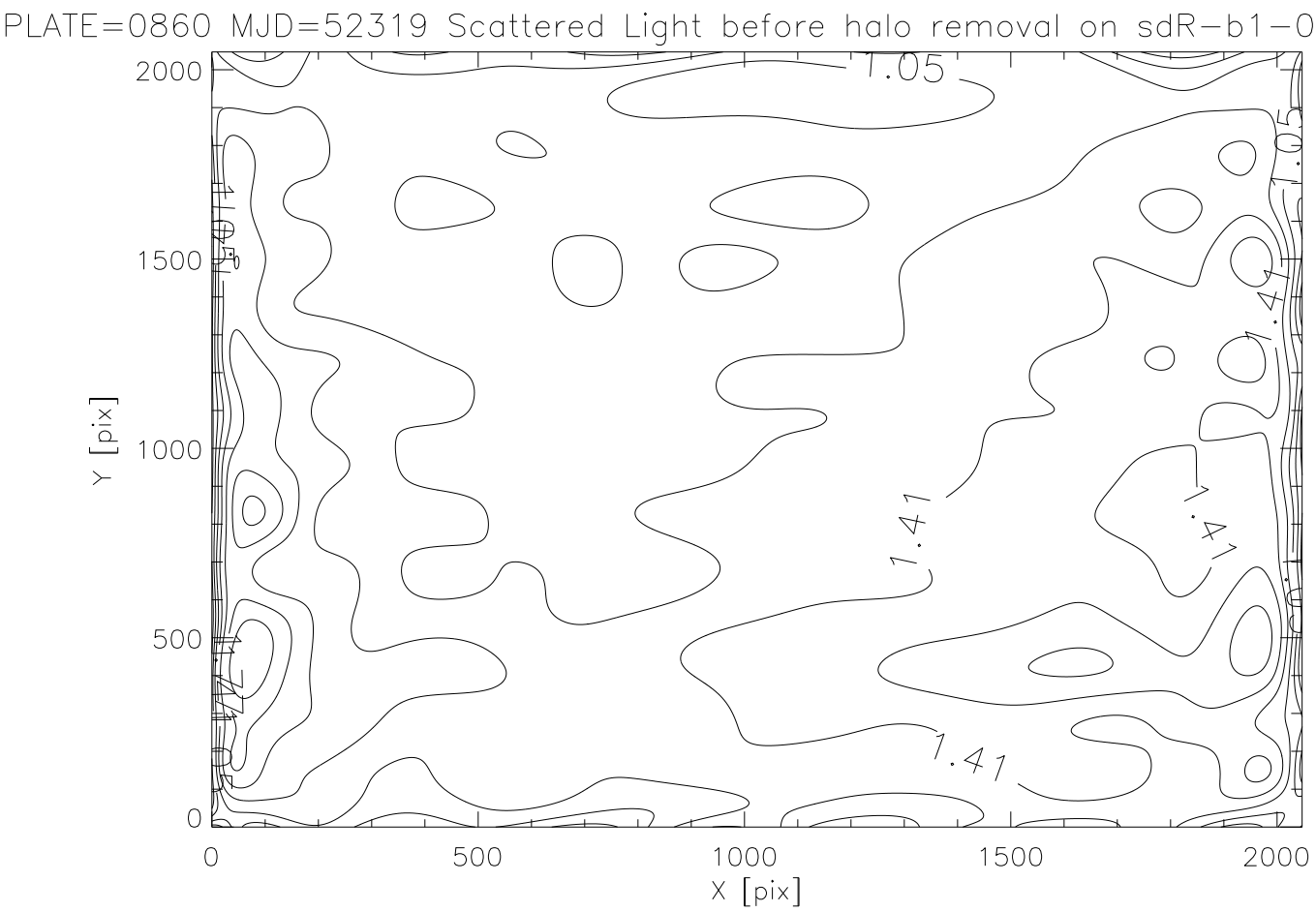

PLATE=0860 MJD=52319 sdR-b1-00013188.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

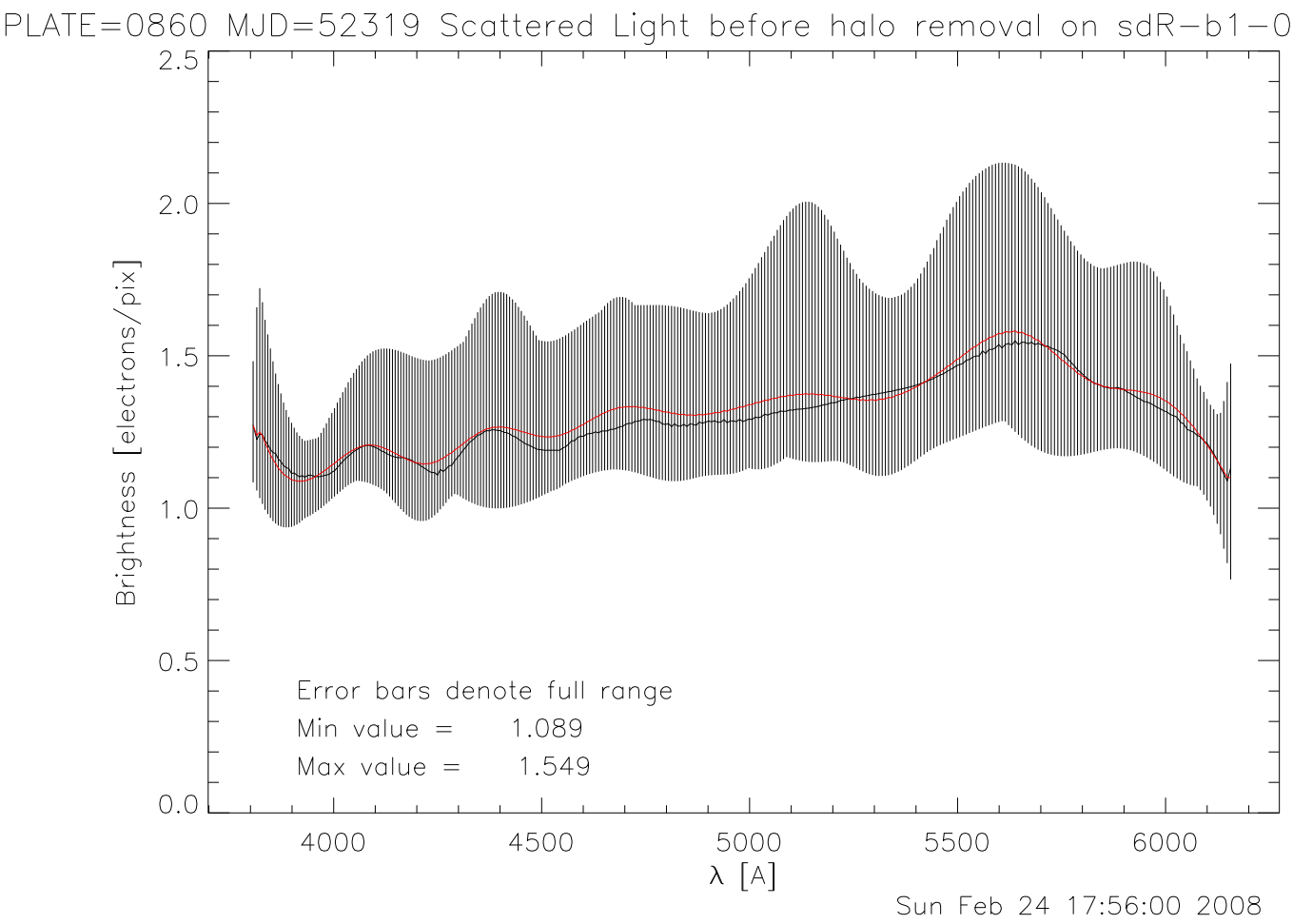

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013188.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

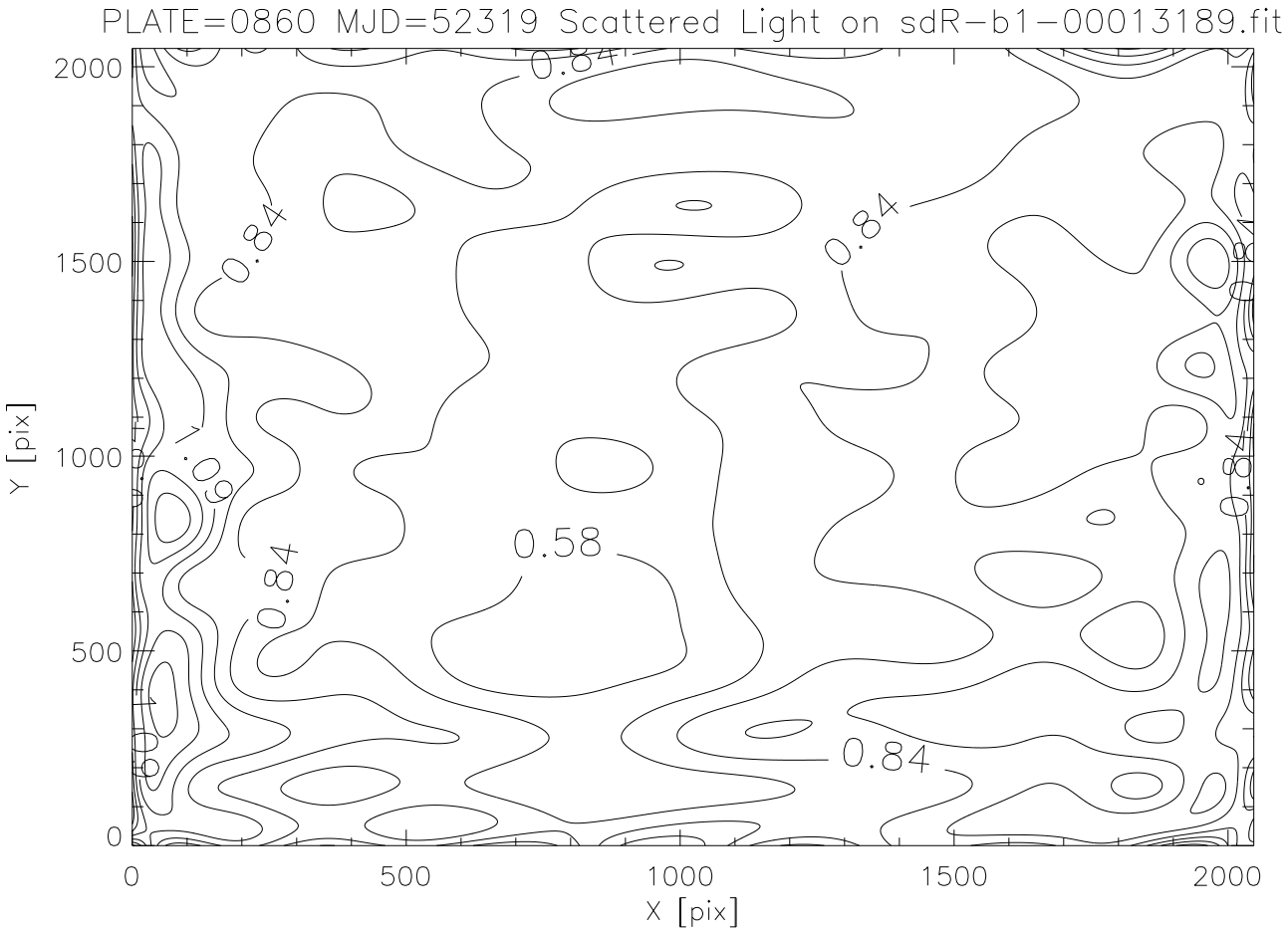

PLATE=0860 MJD=52319 sdR-b1-00013188.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 9.34 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

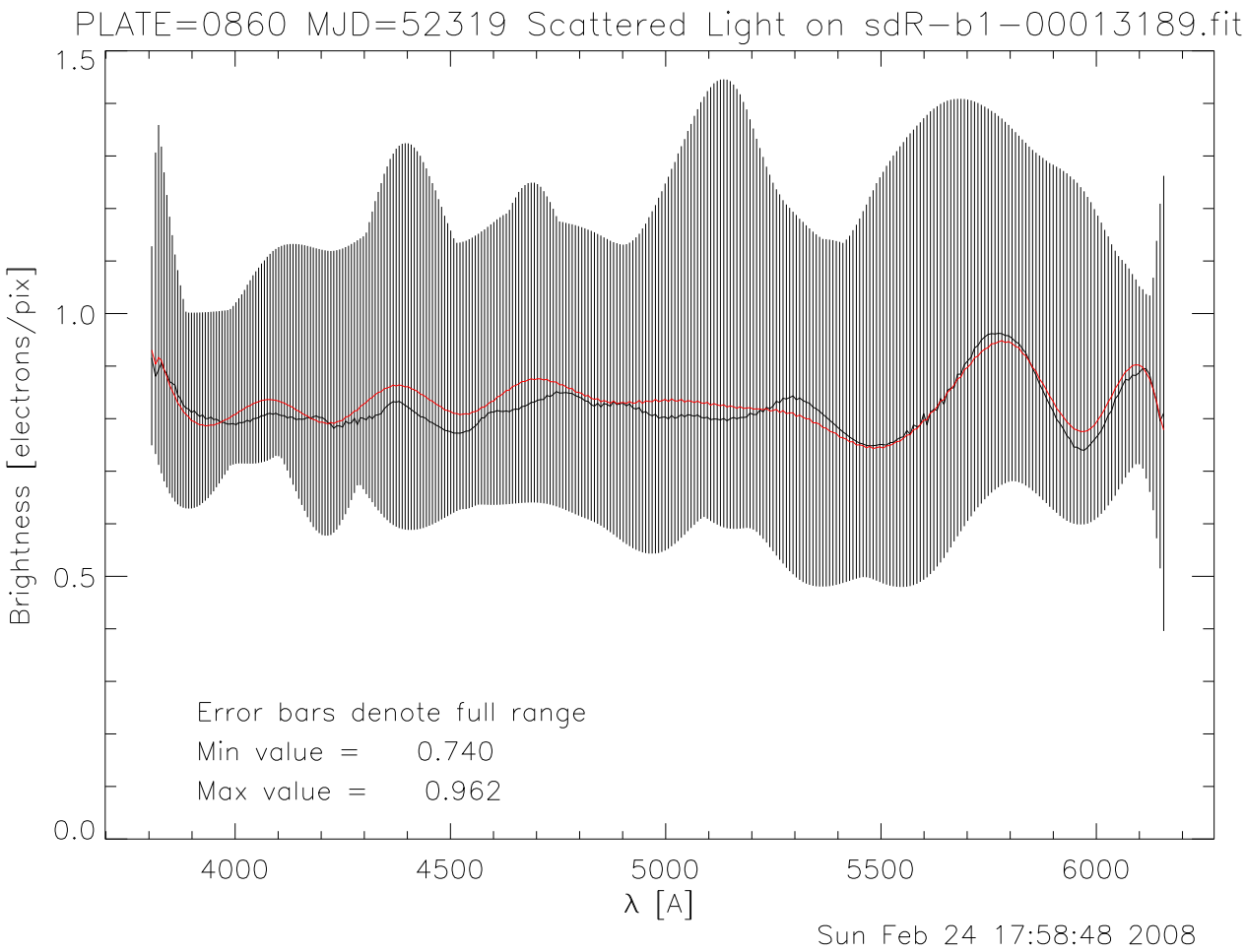

PLATE=0860 MJD=52319 sdR-b1-00013188.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.69 %
Fiber number
Focal Distance [mm]
Airmass

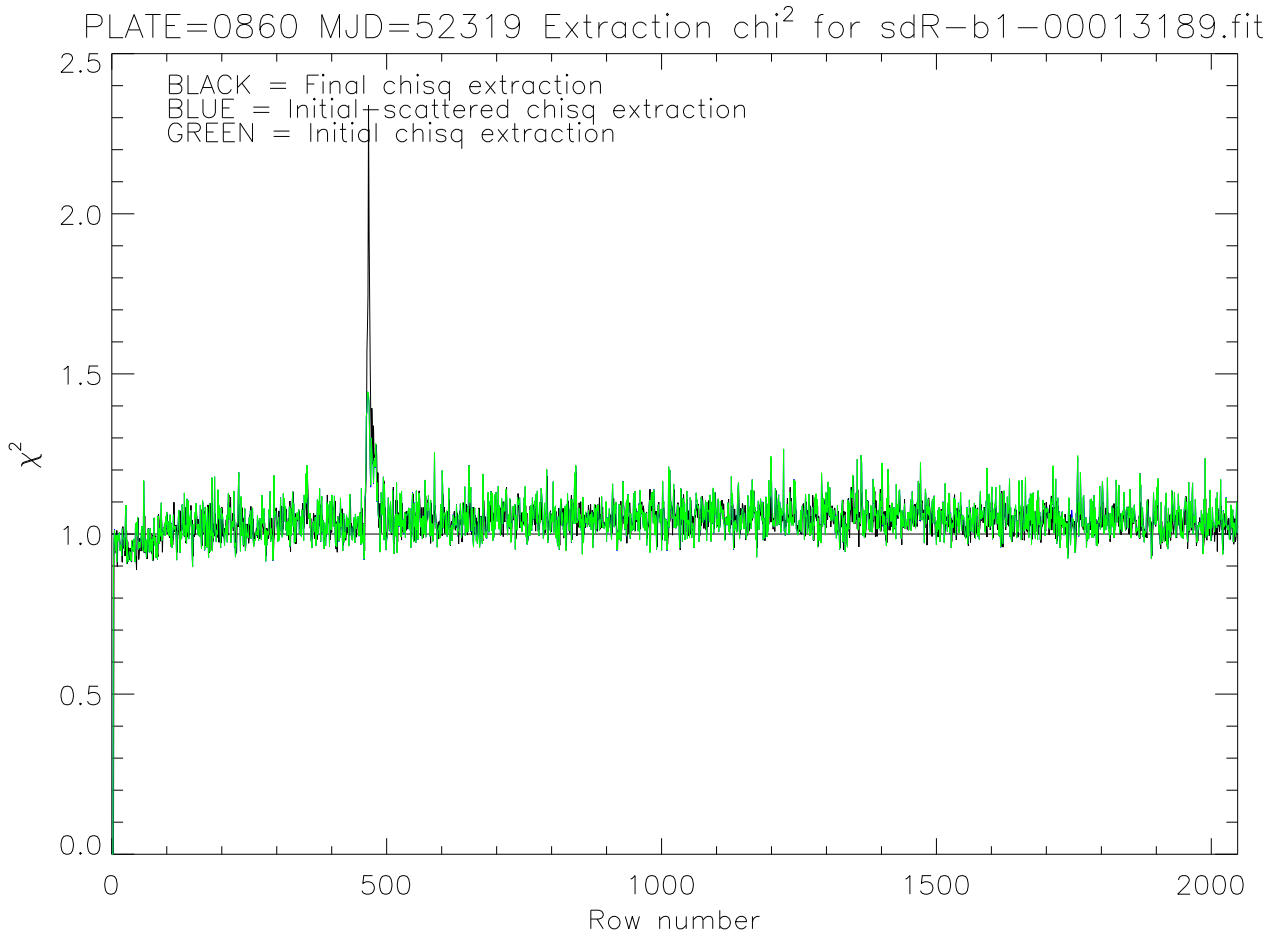

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.608
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:55:20 2008

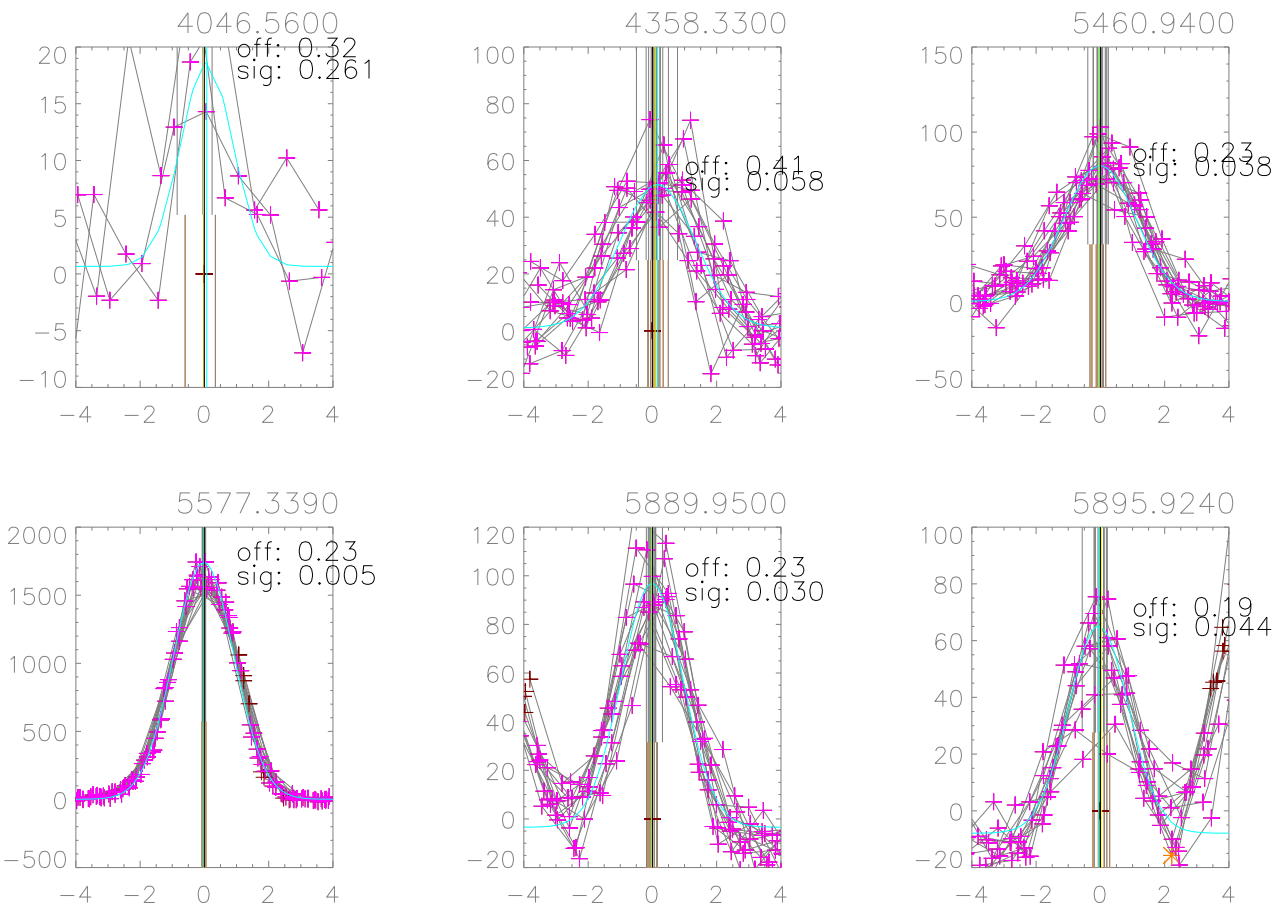

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b1−00013189.f
1.05
1.41
Y [pix]
X [pix]
0
500
1000
1500
2000

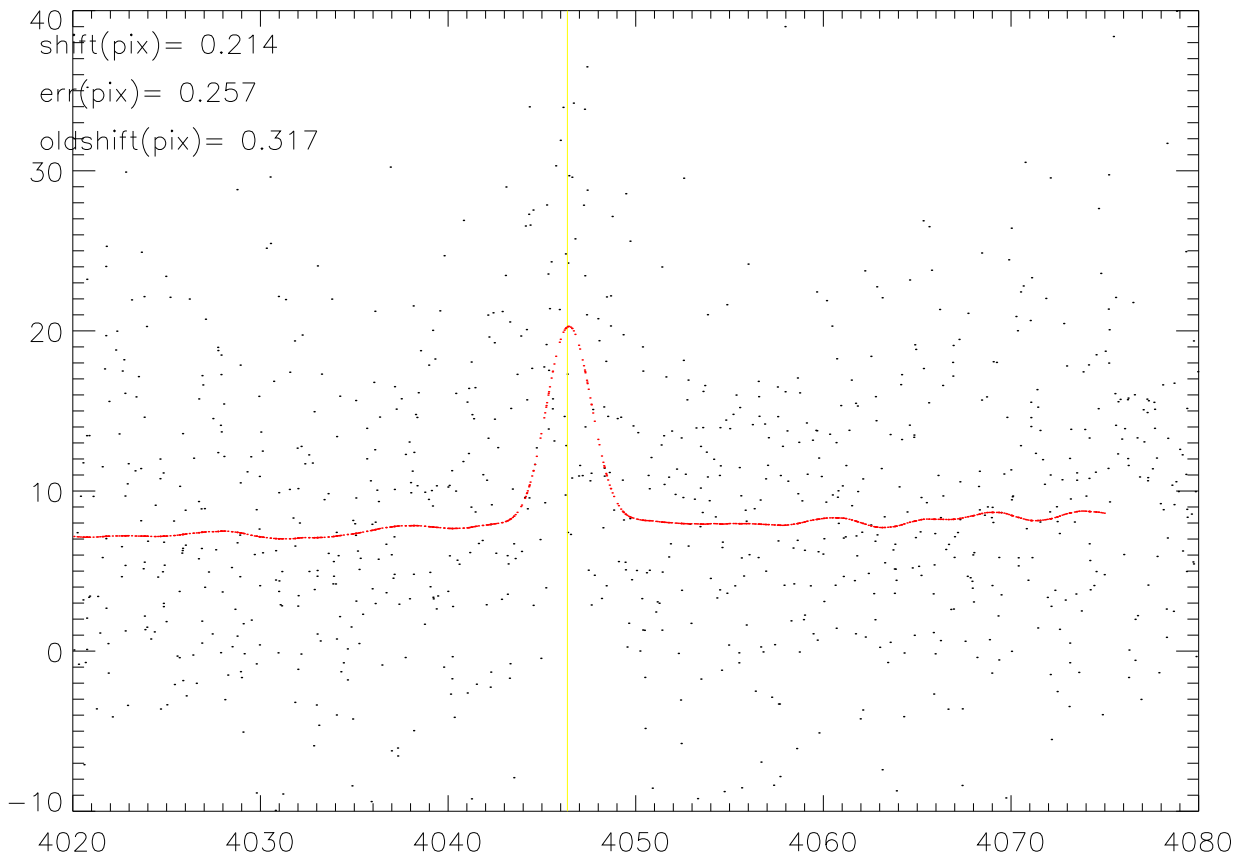

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b1-00013189.f
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.089
Max value = 1.549
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:56:00 2008

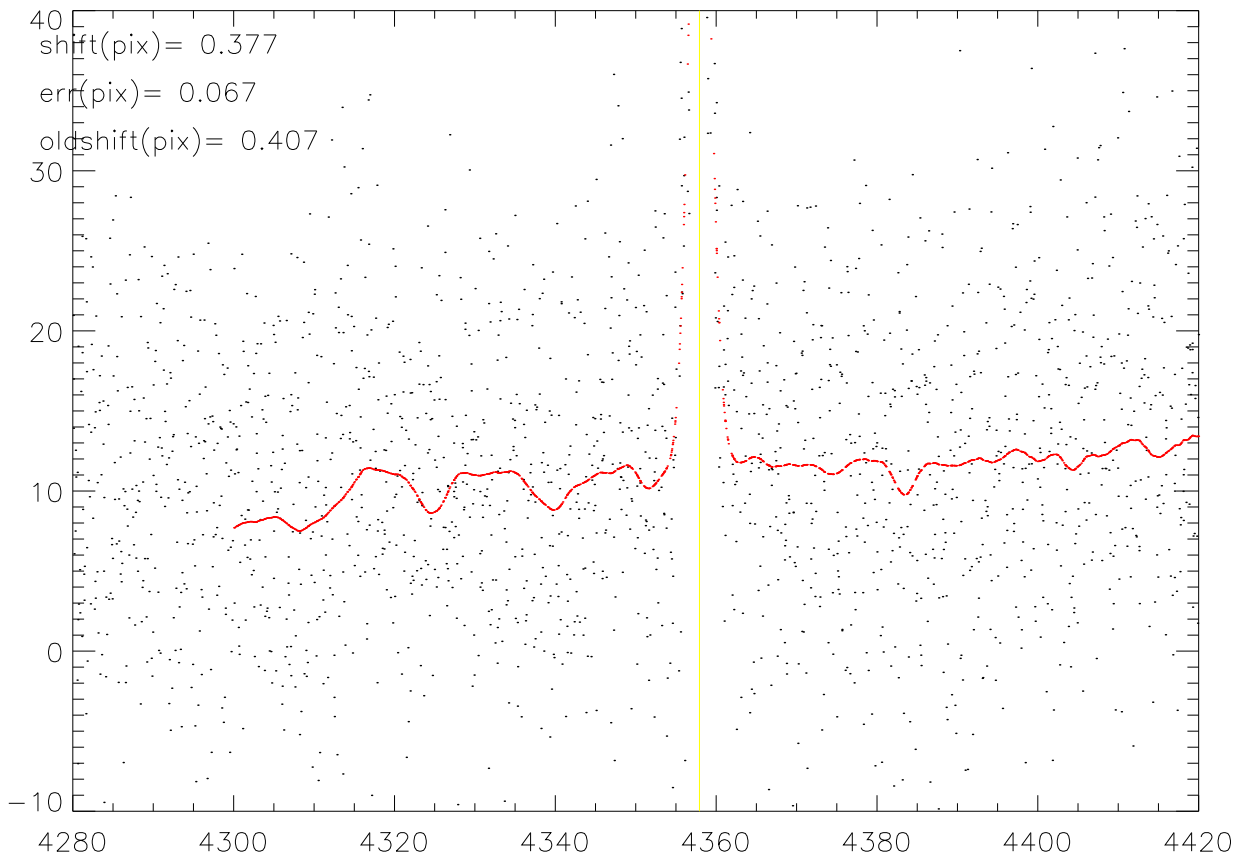

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013189.fit
0.84
0.84
0.84
0.84
0.84
0.58
0.84
0.84
0.84
0.84
0.84

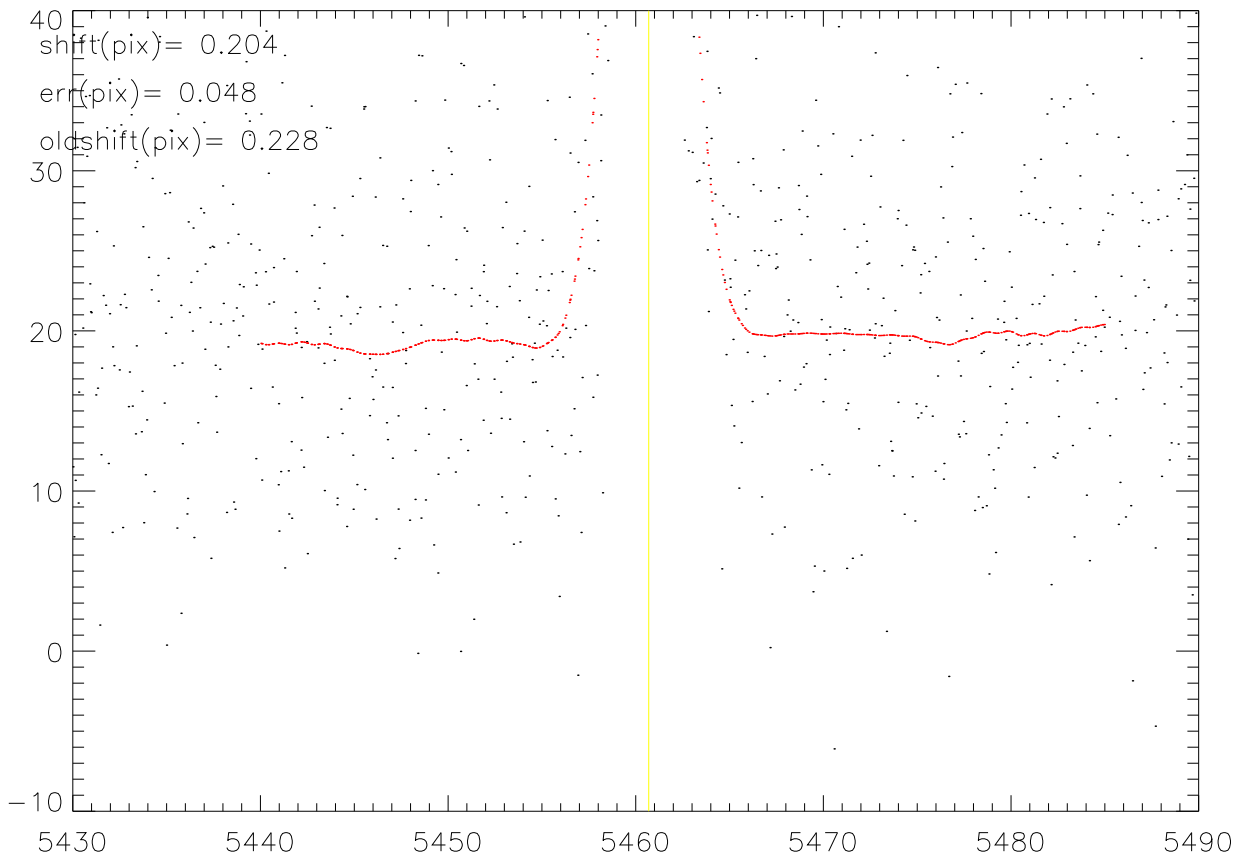

PLATE=0860 MJD=52319 Scattered Light on sdR-b1-00013189.fit
Brightness [electrons/pix]
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.740
Max value = 0.962
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 17:58:48 2008

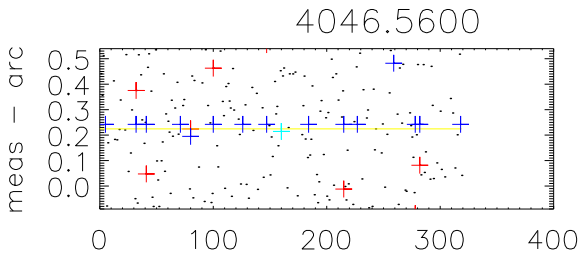

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b1-00013189.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

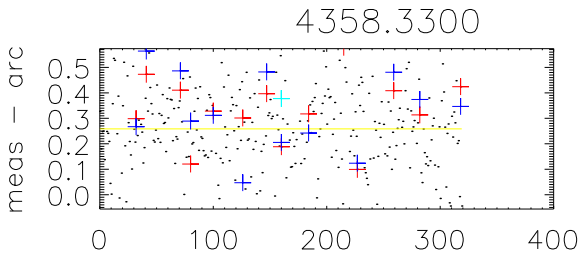

4046.5600
off: 0.32
sig: 0.261
4358.3300
off: 0.41
sig: 0.058
5460.9400
off: 0.23
sig: 0.038
5577.3390
off: 0.23
sig: 0.005
5889.9500
off: 0.23
sig: 0.030
5895.9240
off: 0.19
sig: 0.044

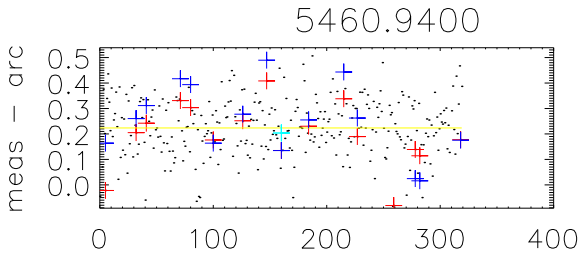

shift(pix)= 0.214
err(pix)= 0.257
oldshift(pix)= 0.317
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

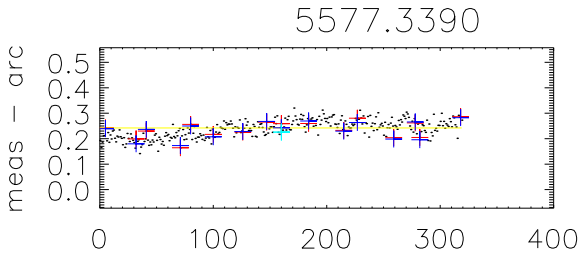

shift(pix)= 0.377
err(pix)= 0.067
oldshift(pix)= 0.407
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

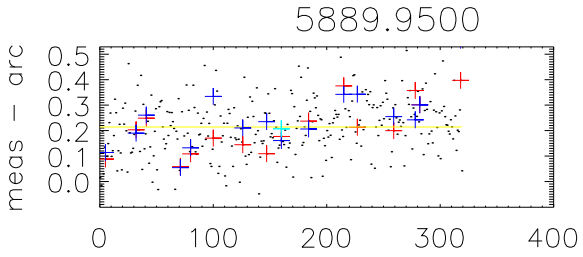

shift(pix)= 0.204
err(pix)= 0.048
oldshift(pix)= 0.228
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

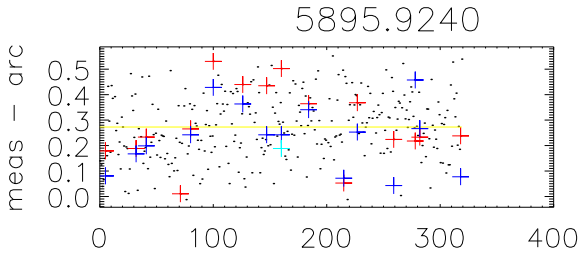

4046.5600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

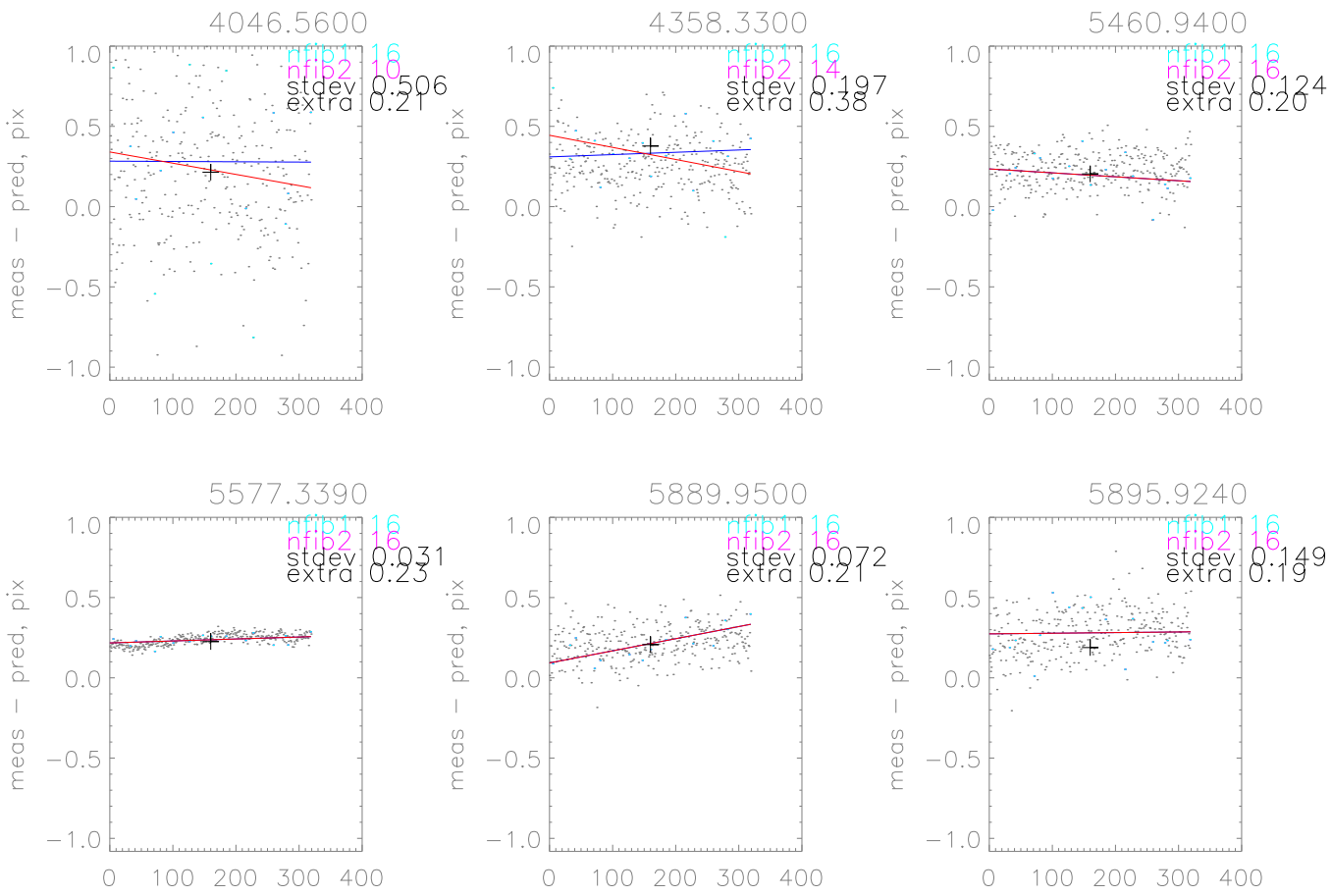

4358.3300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

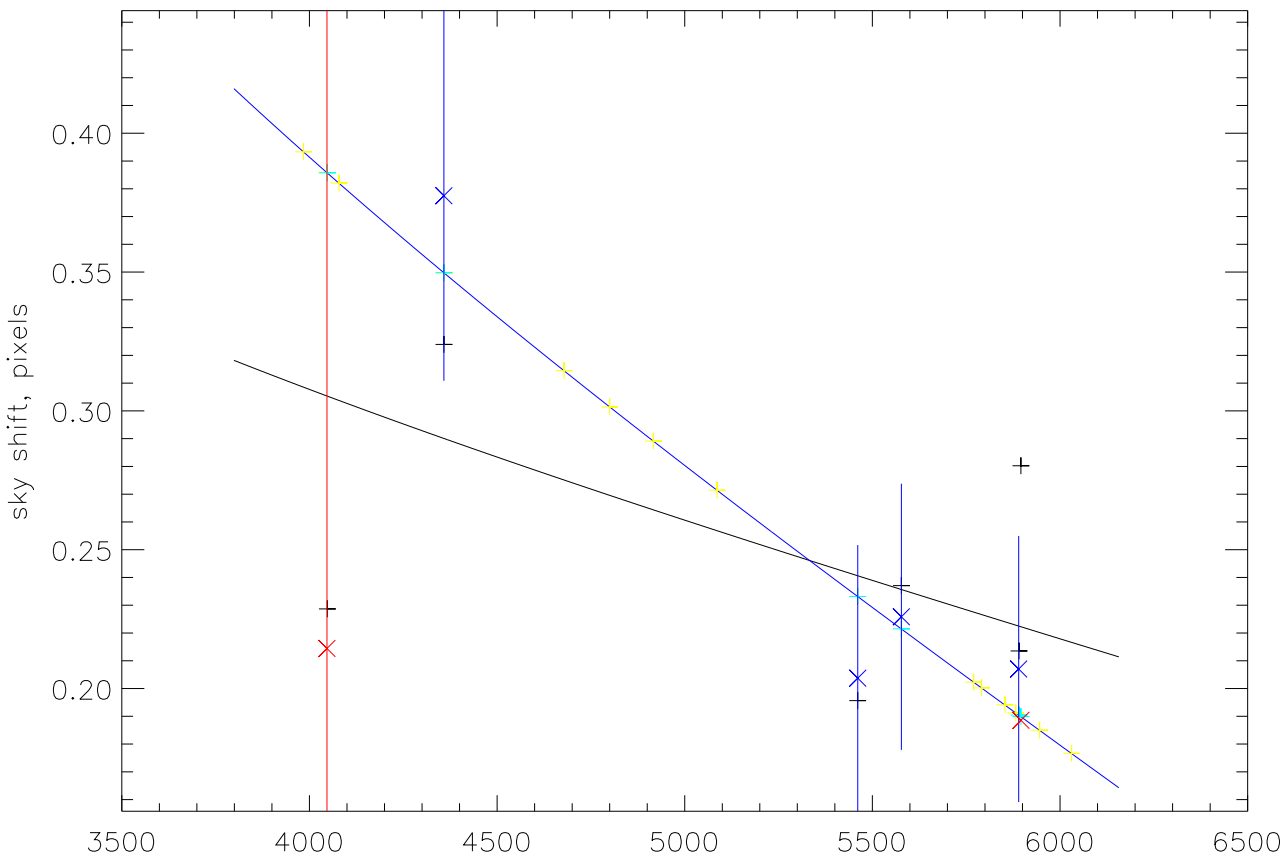

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

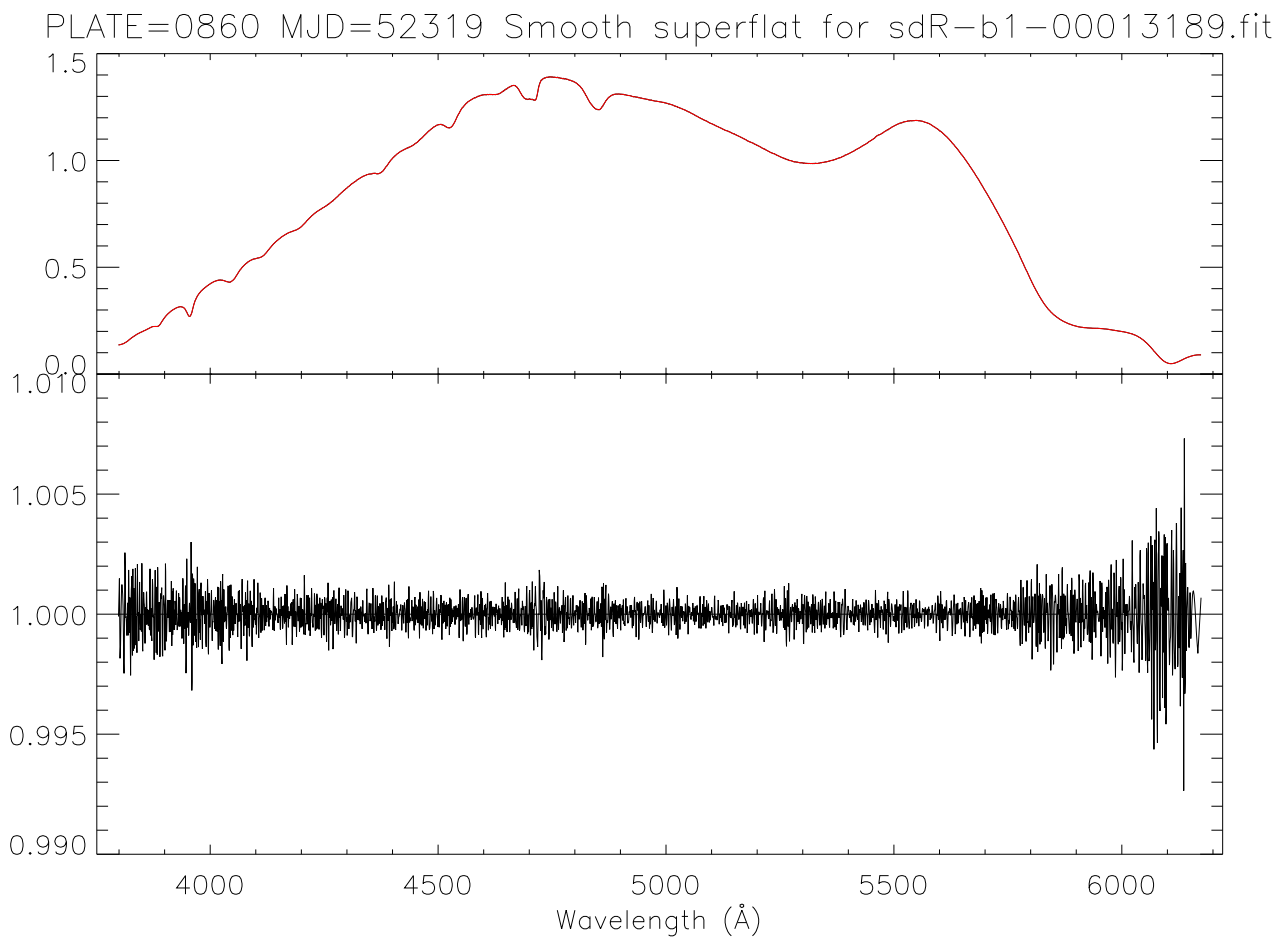

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

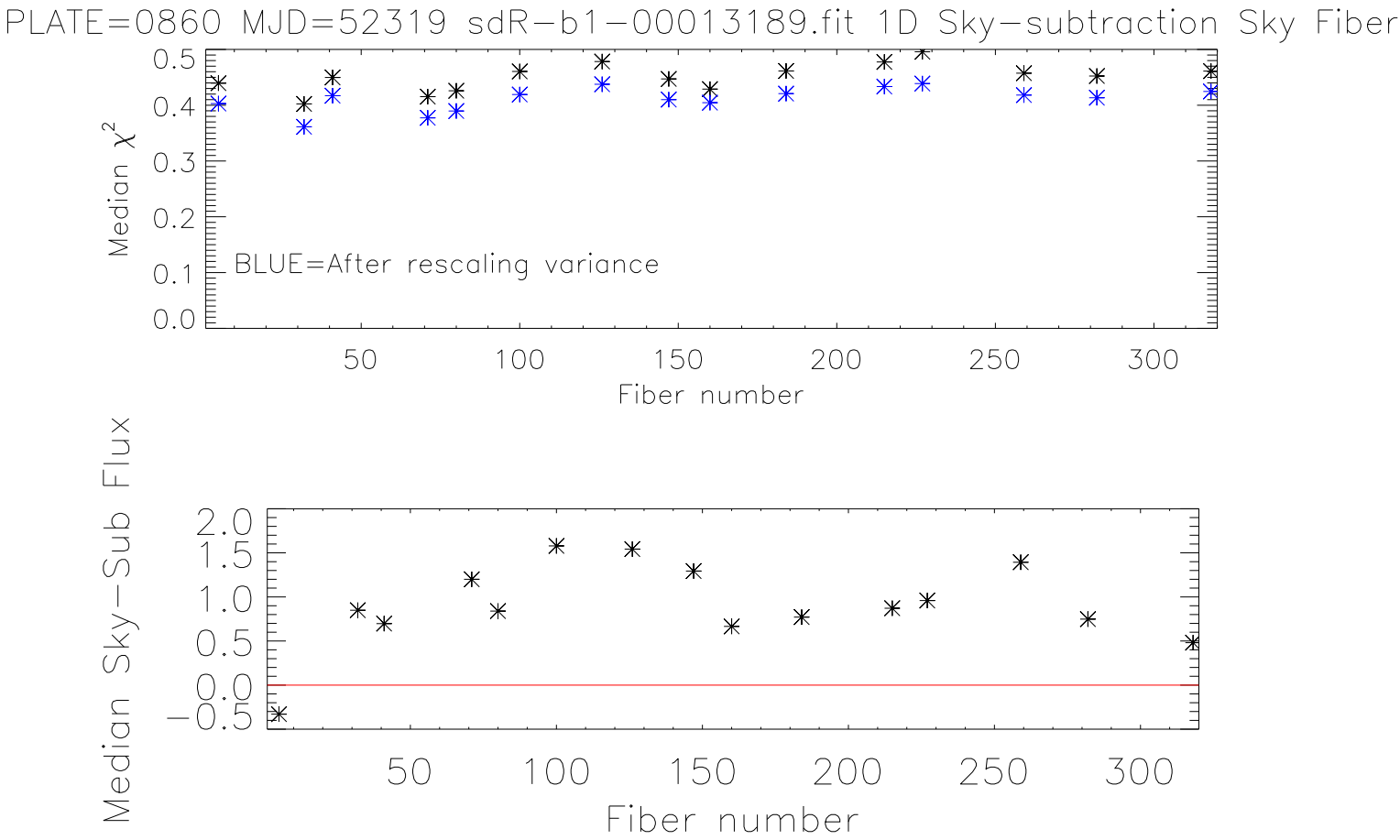

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

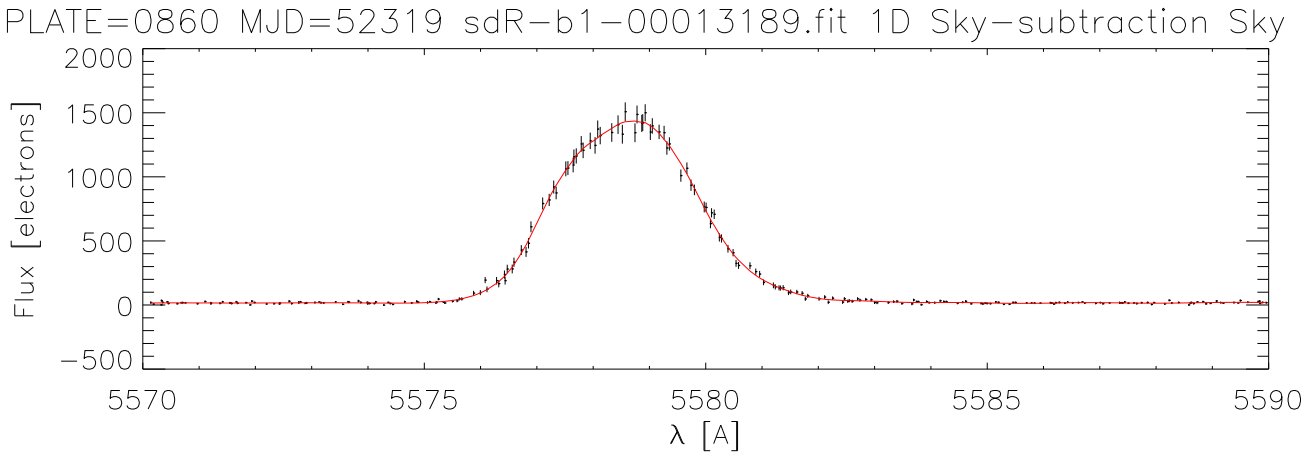

4046.5600
nfib1 16
nfib2 10
stdev 0.506
extra 0.21
4358.3300
nfib1 16
nfib2 14
stdev 0.197
extra 0.38
5460.9400
nfib1 16
nfib2 16
stdev 0.124
extra 0.20
5577.3390
nfib1 16
nfib2 16
stdev 0.031
extra 0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.072
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.149
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

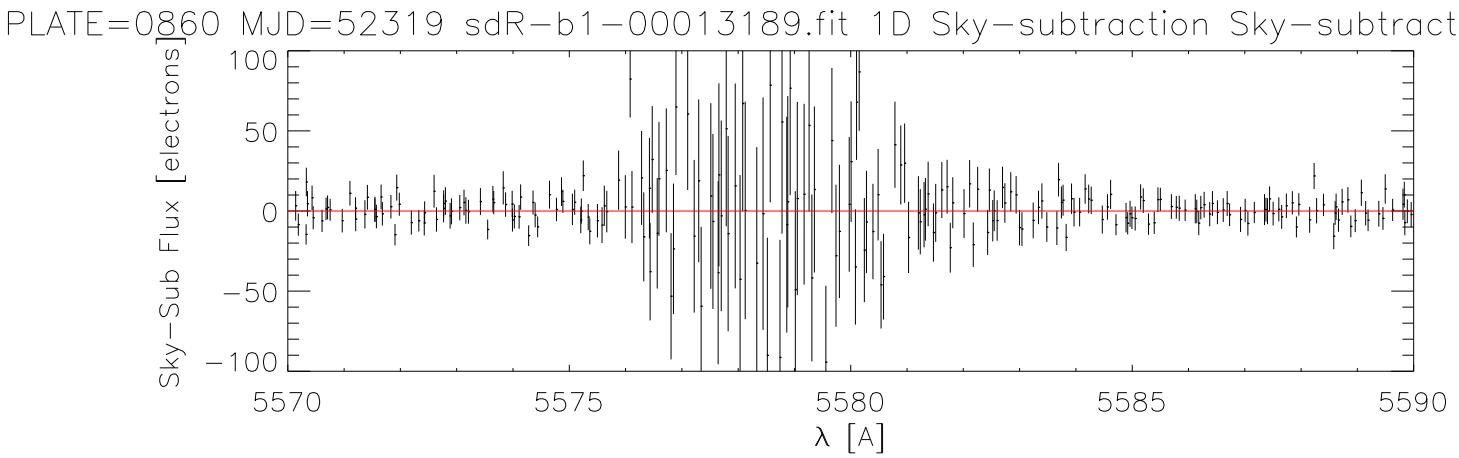

sky shift, pixels
0.40
0.35
0.30
0.25
0.20
3500
4000
4500
5000
5500
6000
6500

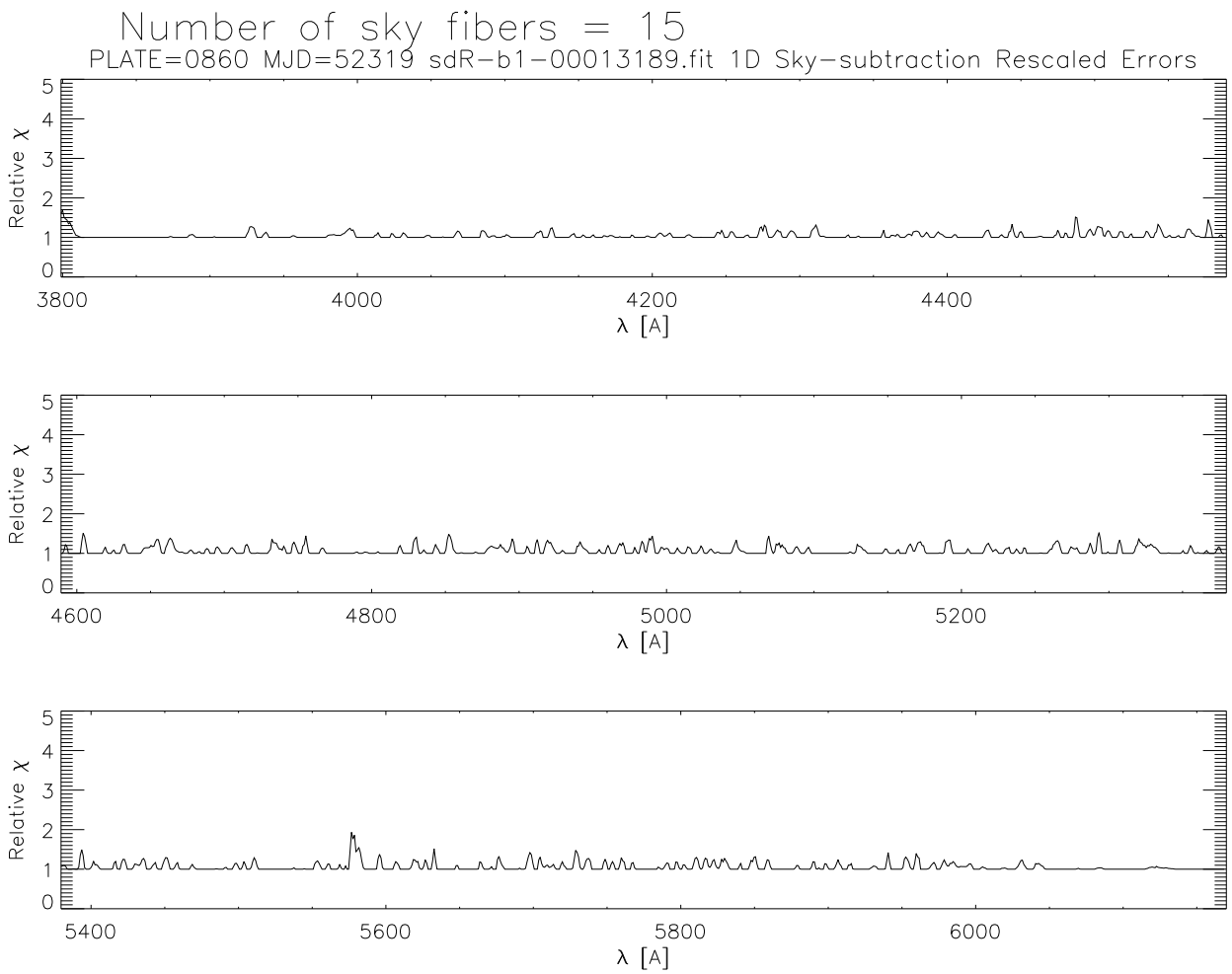
es= 0.0000

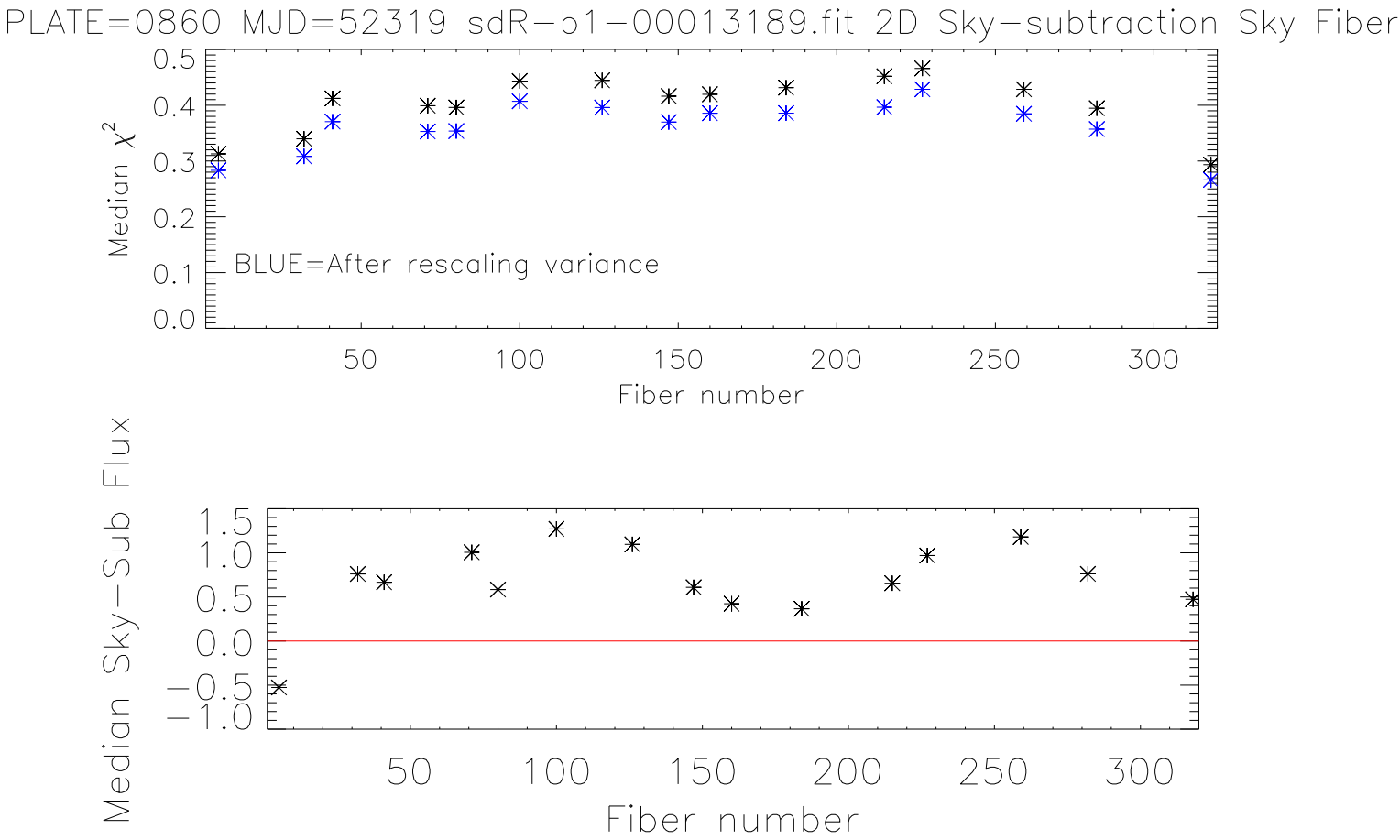

PLATE=0860 MJD=52319 Smooth superflat for sdR-b1-00013189.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

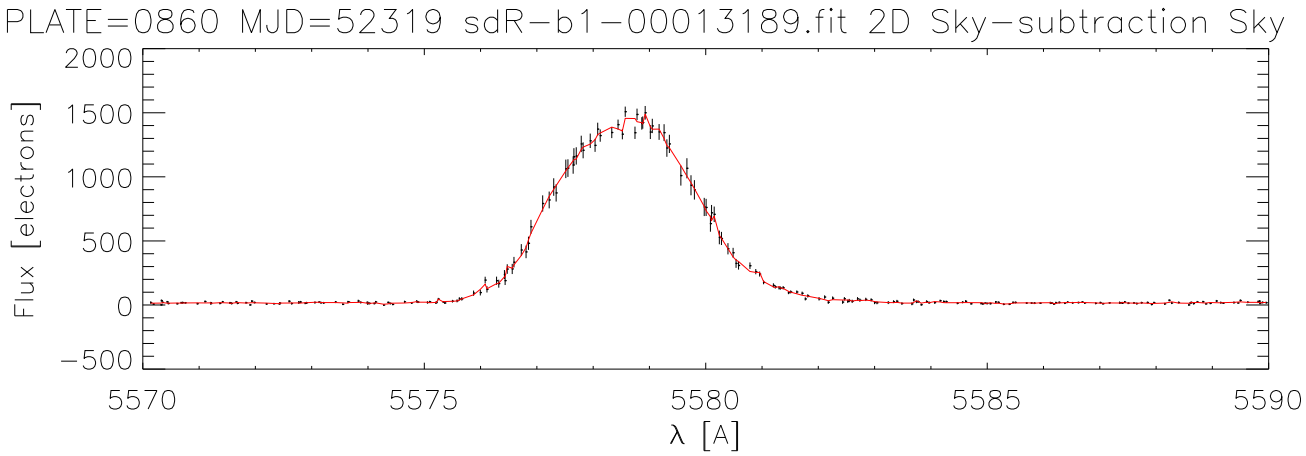

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

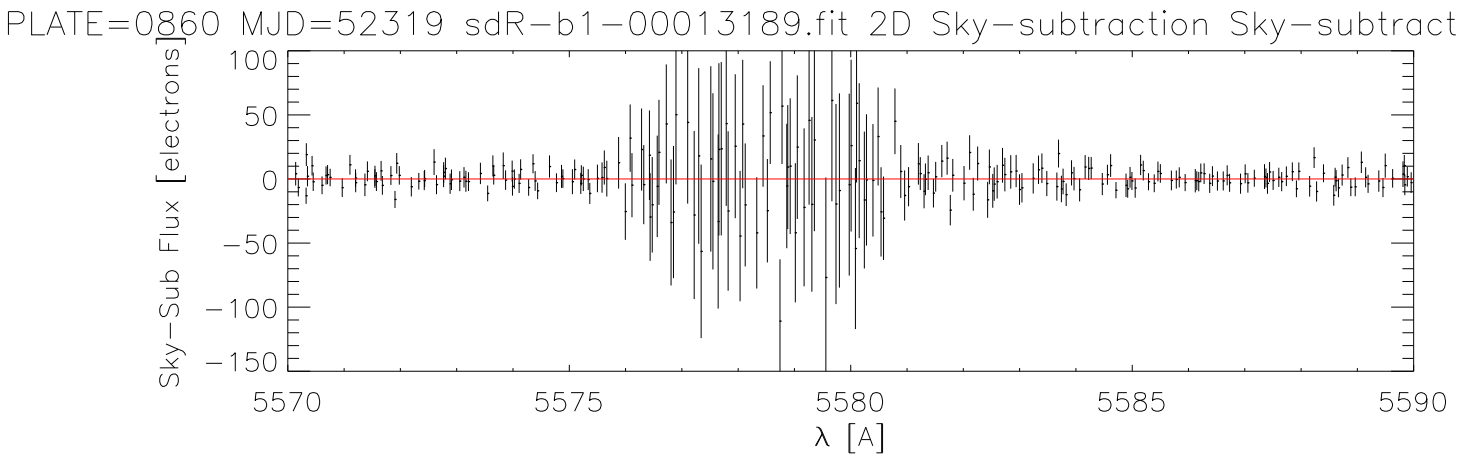

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

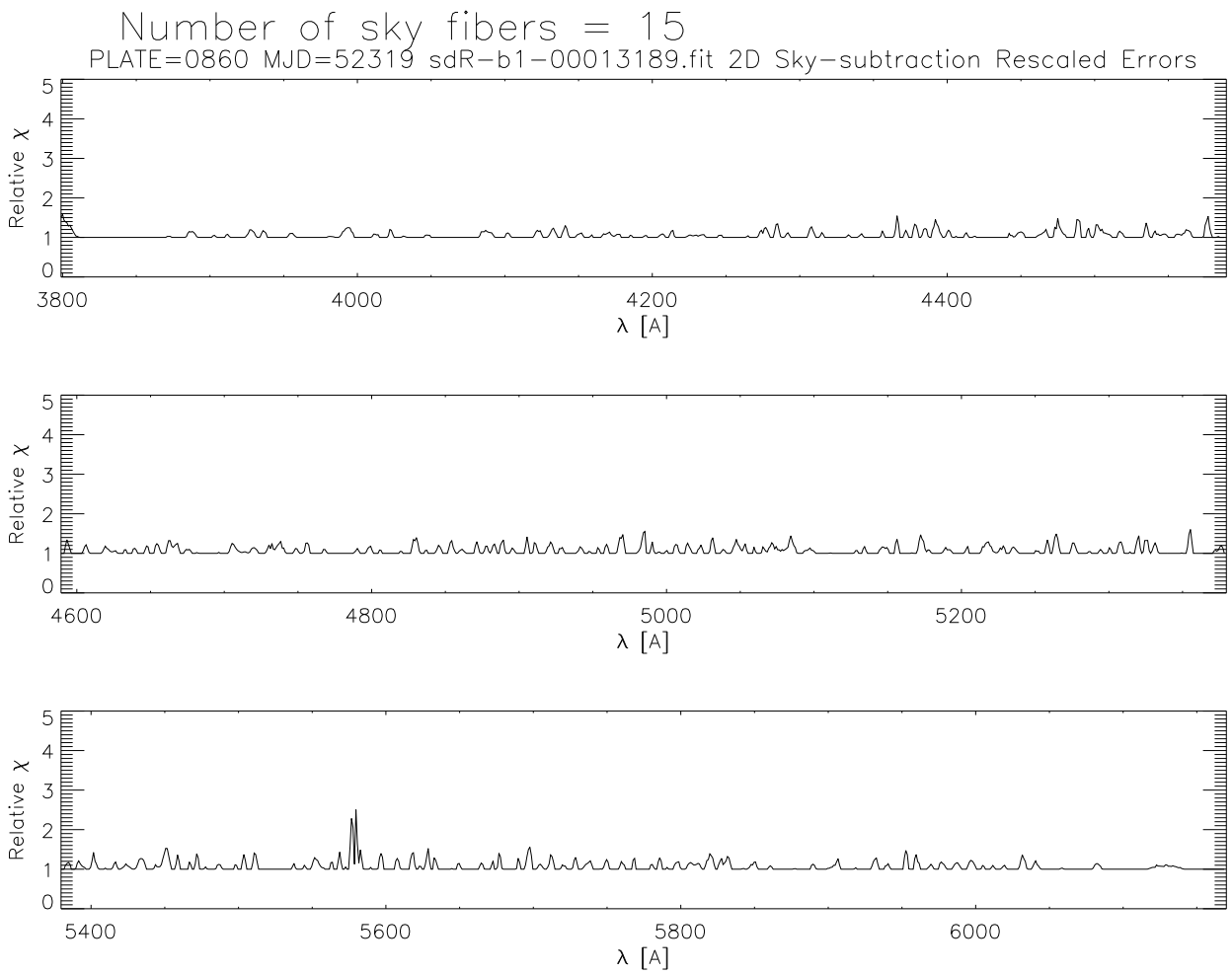

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

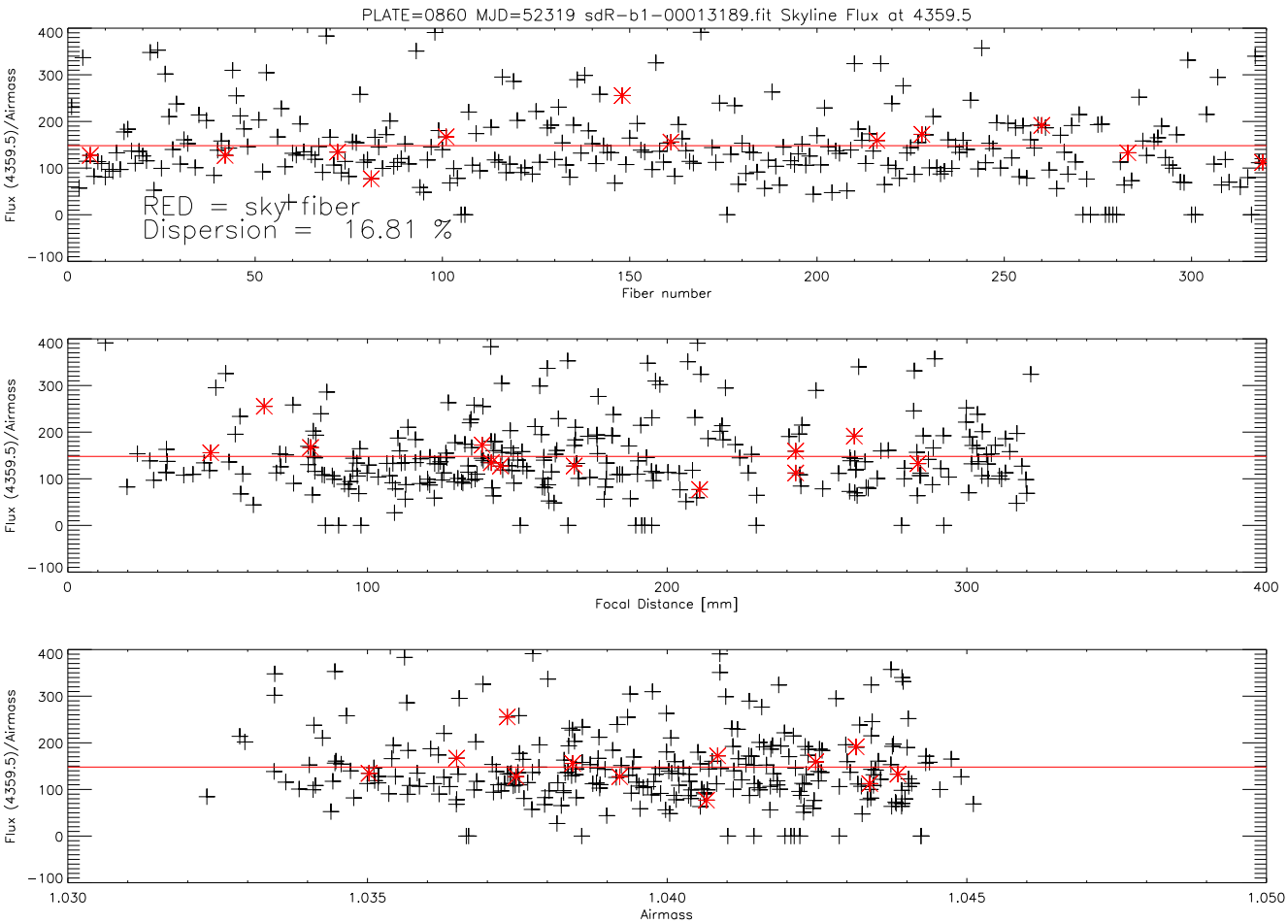

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013189.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

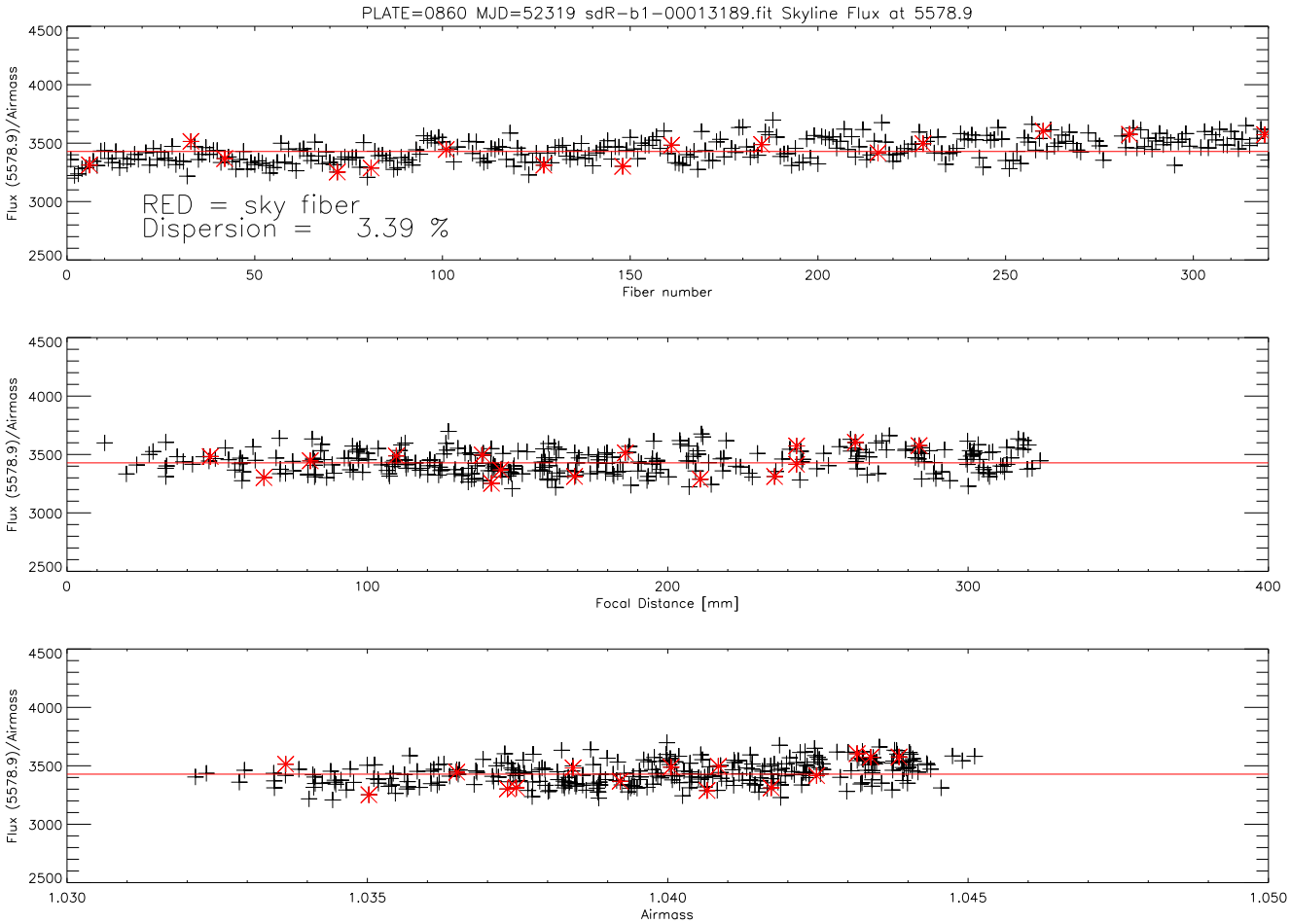

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

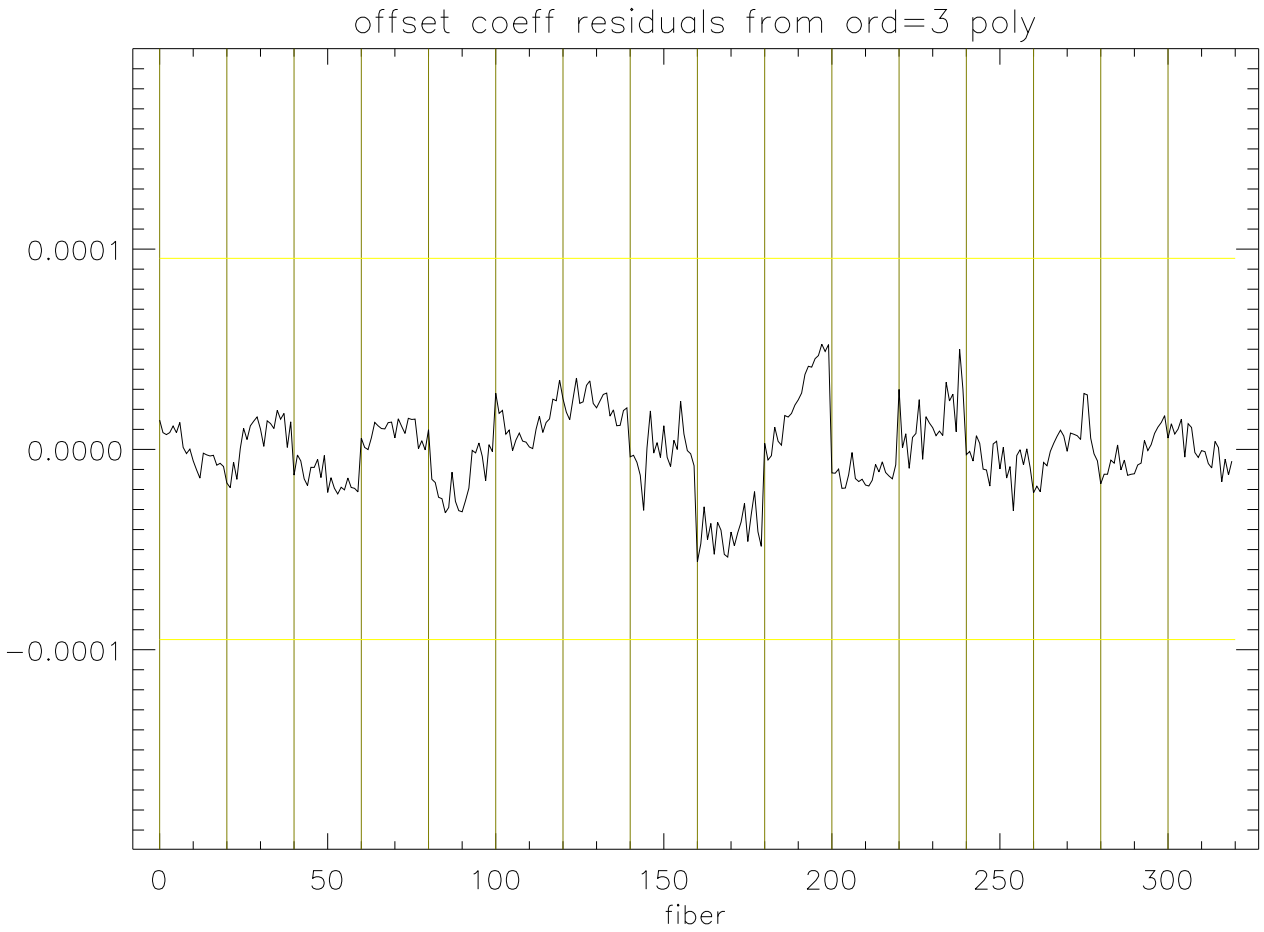

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

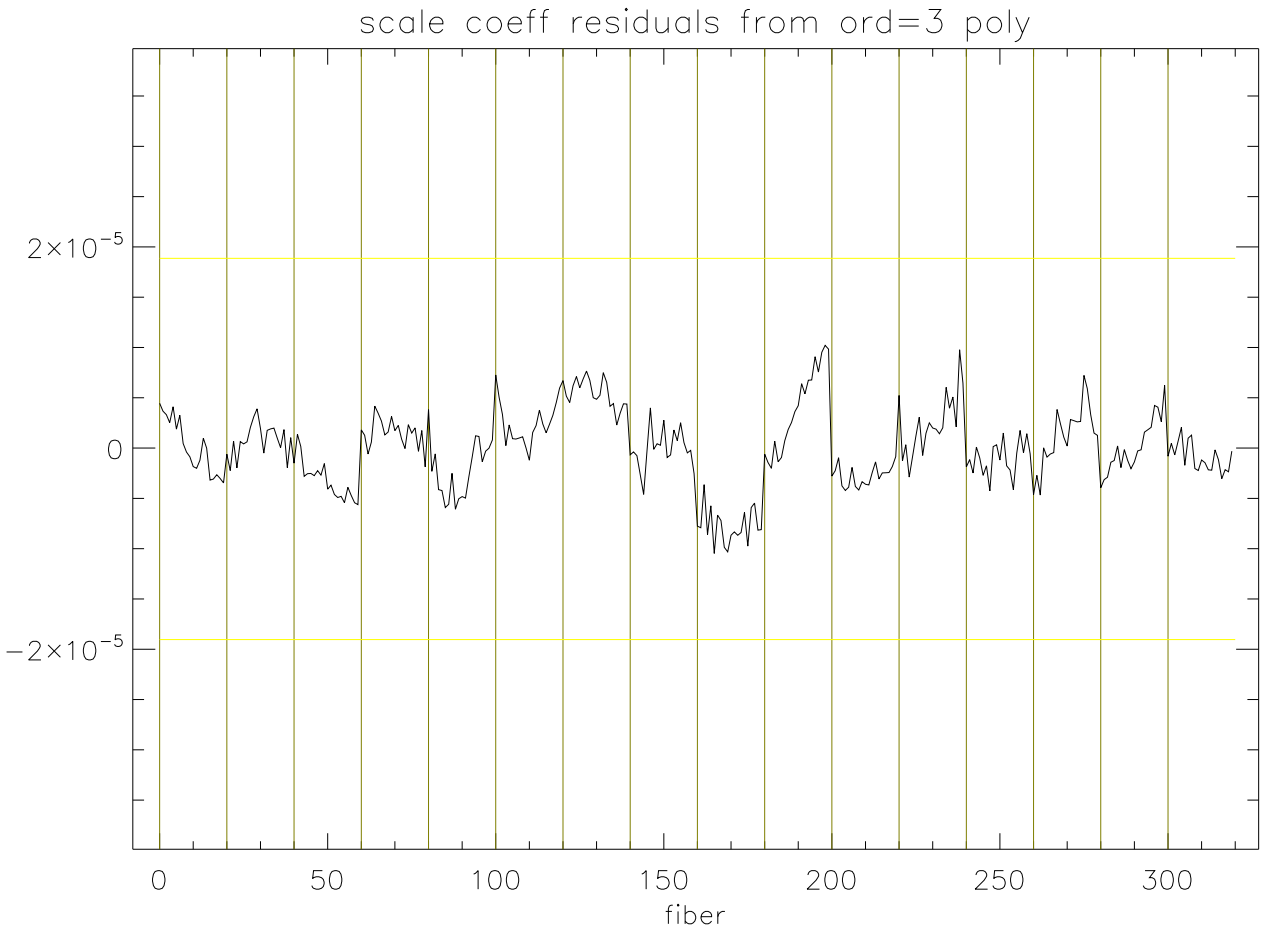

PLATE=0860 MJD=52319 sdR-b1-00013189.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

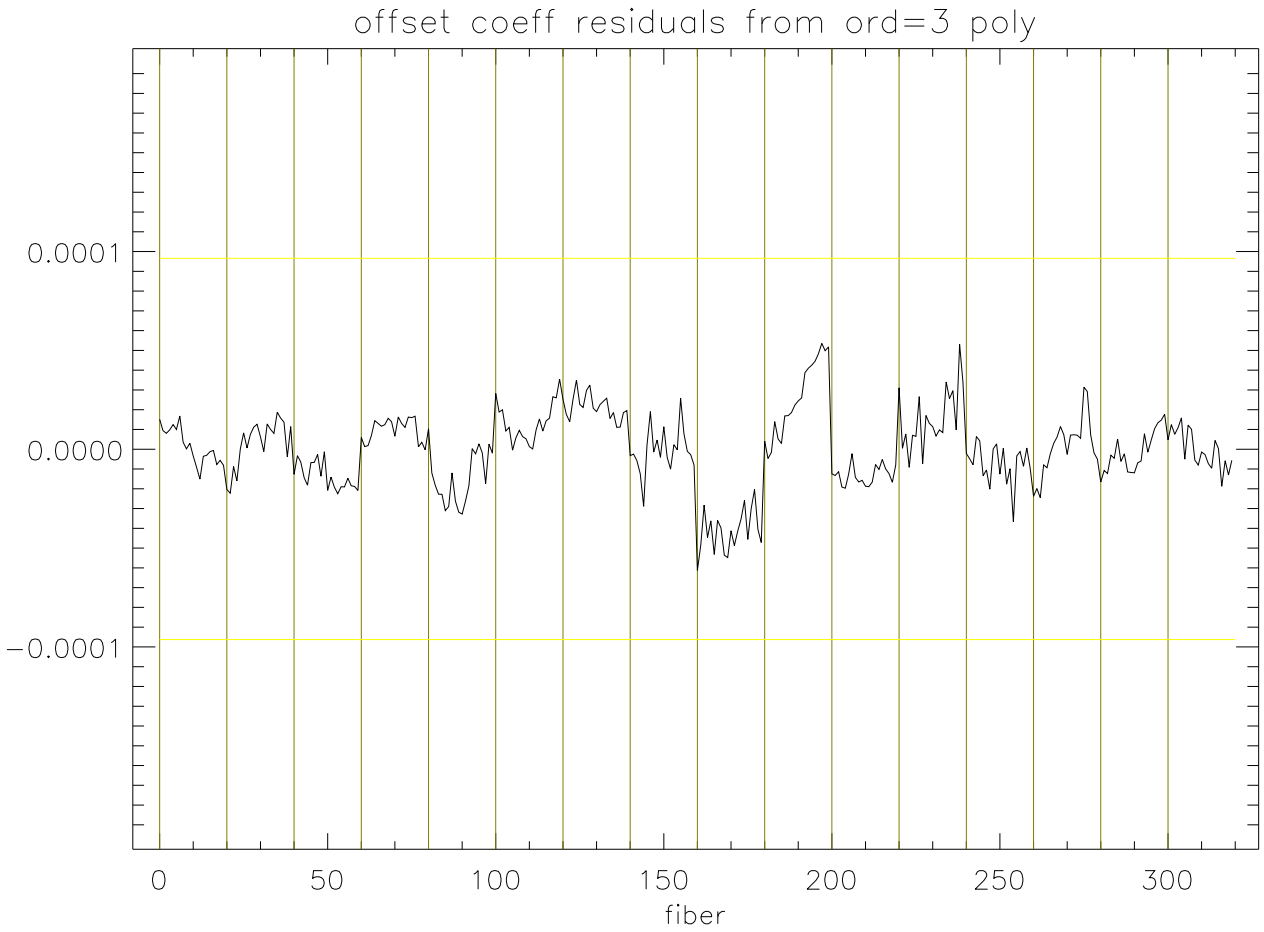

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b1-00013189.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

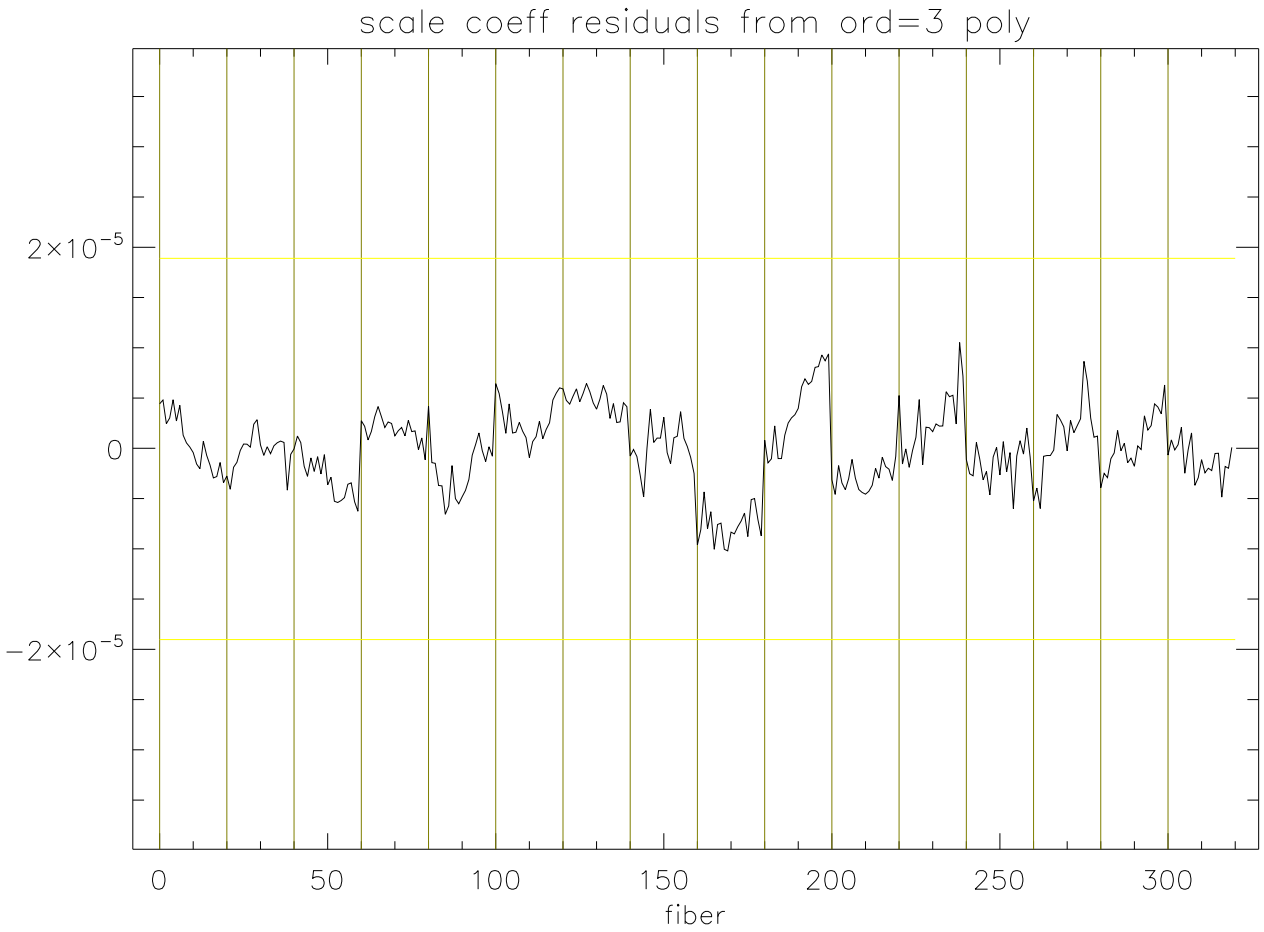

PLATE=0860 MJD=52319 sdR-b1-00013189.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.81 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

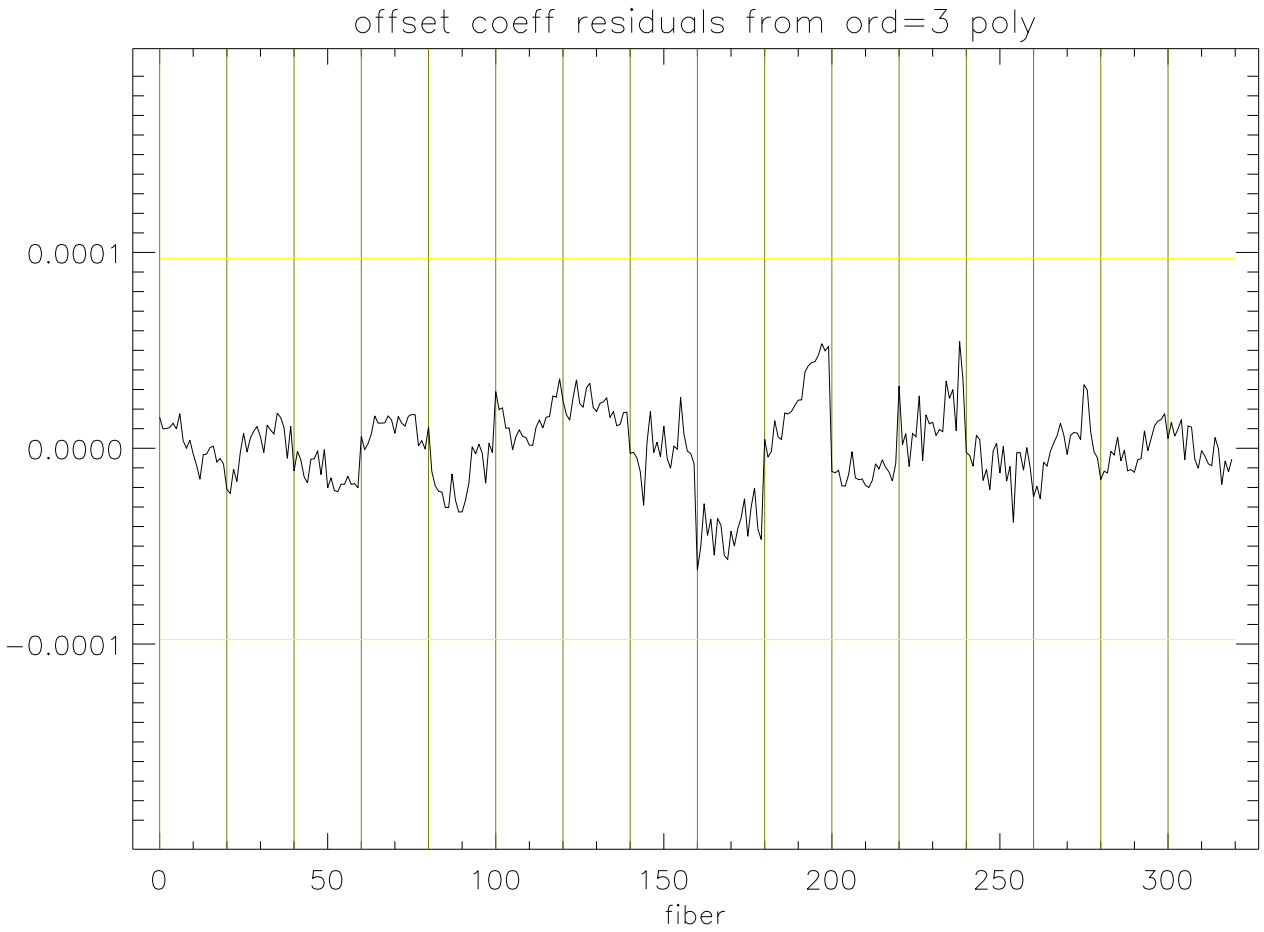

PLATE=0860 MJD=52319 sdR-b1-00013189.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.39 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

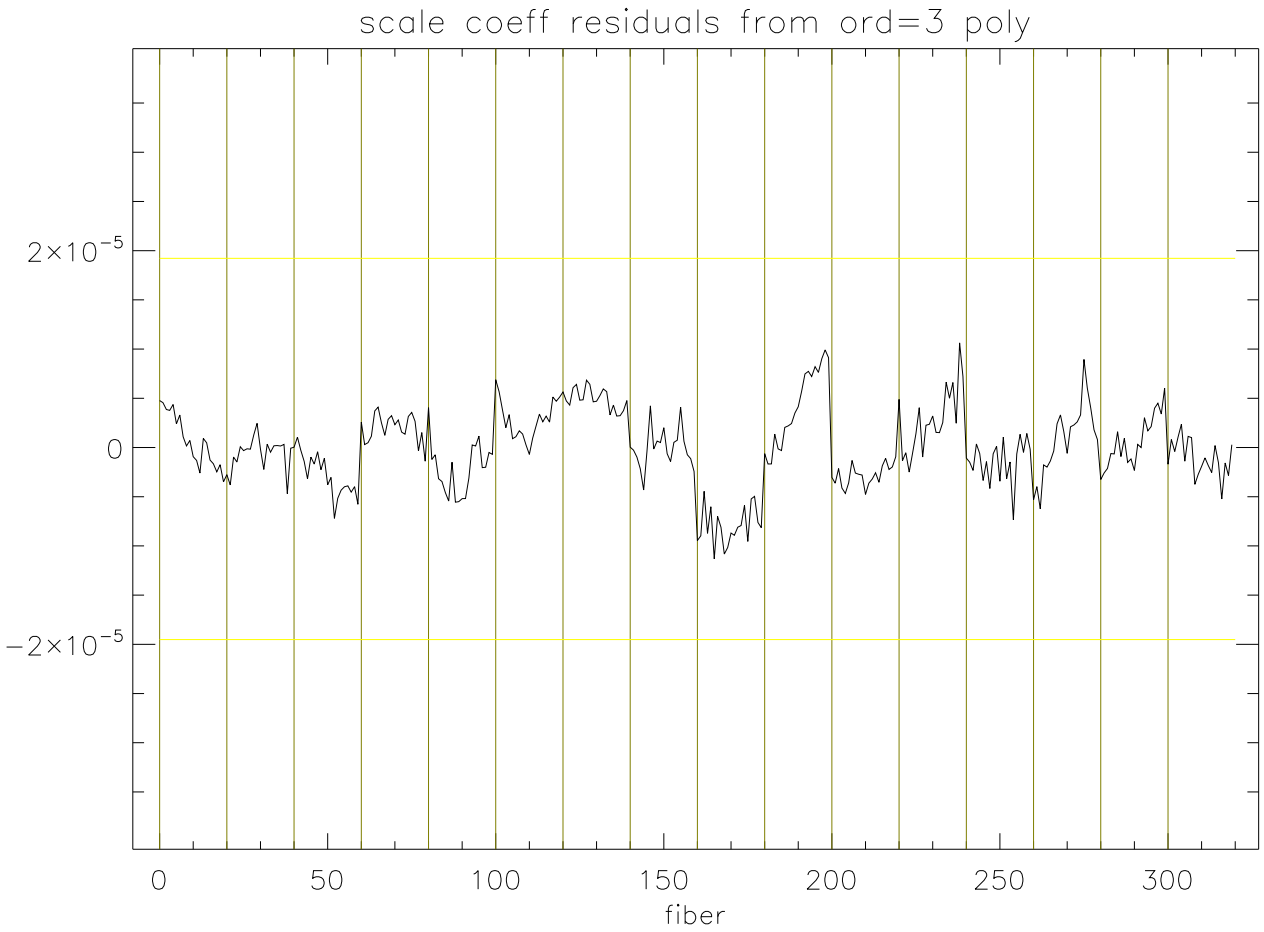

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

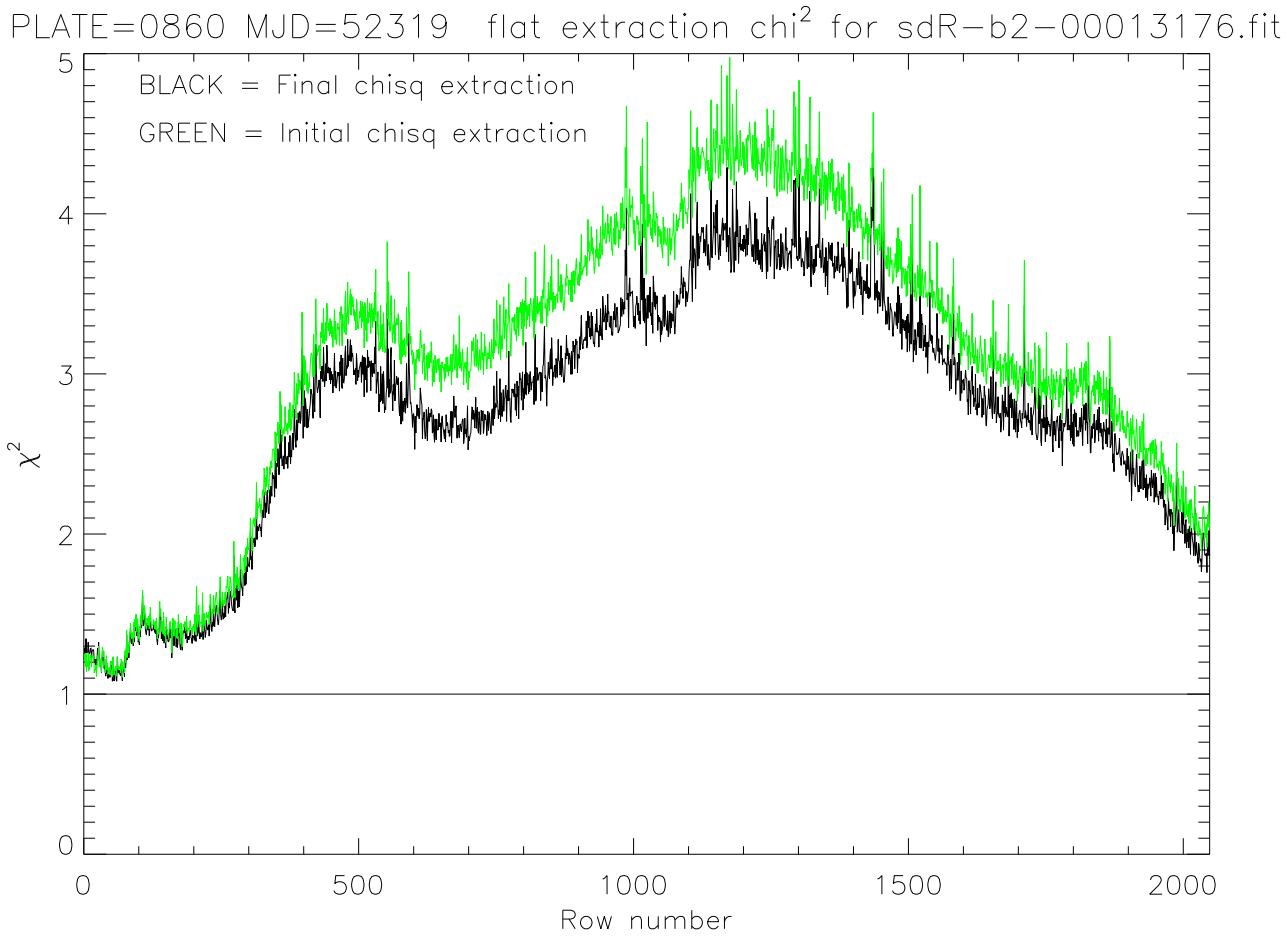

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

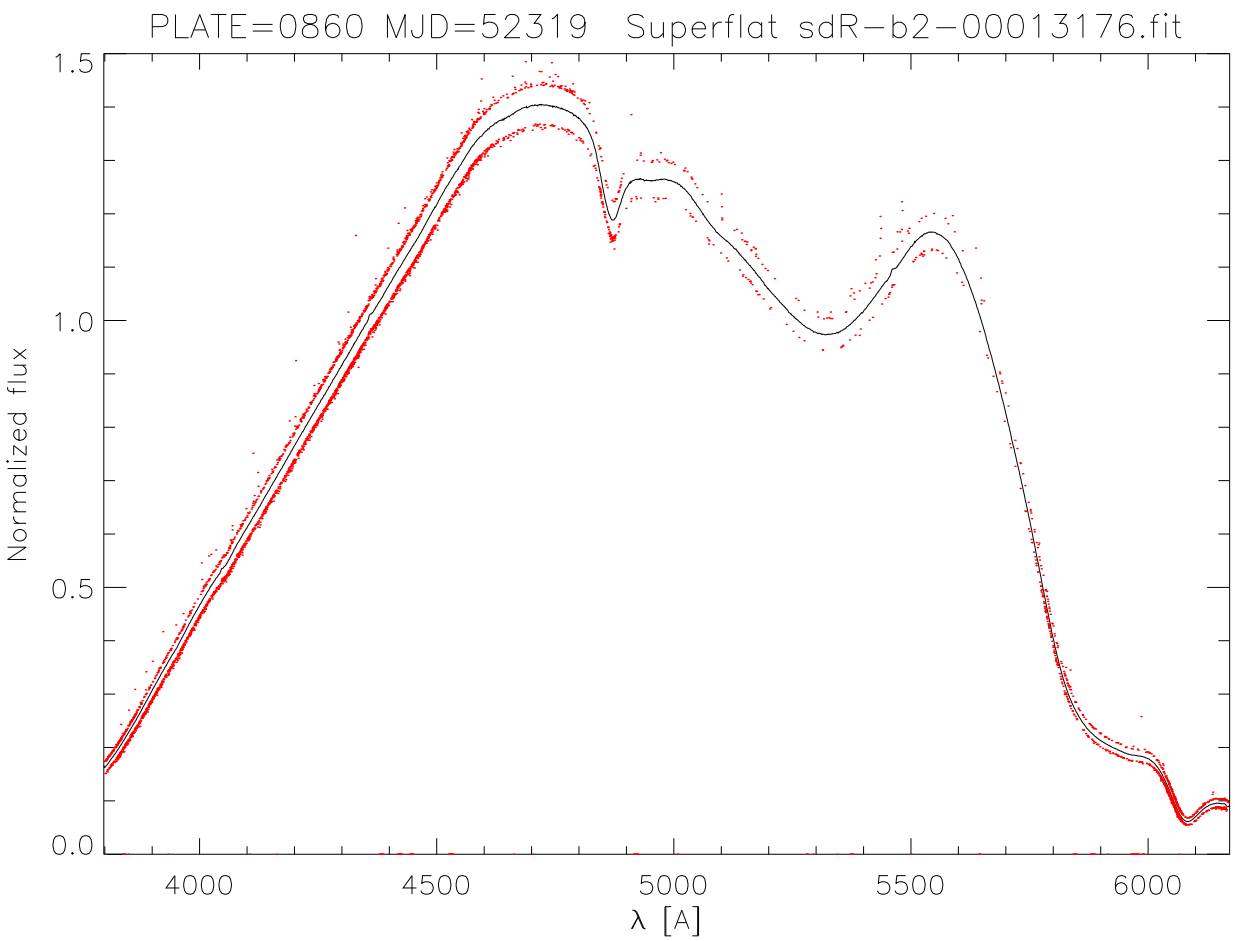

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

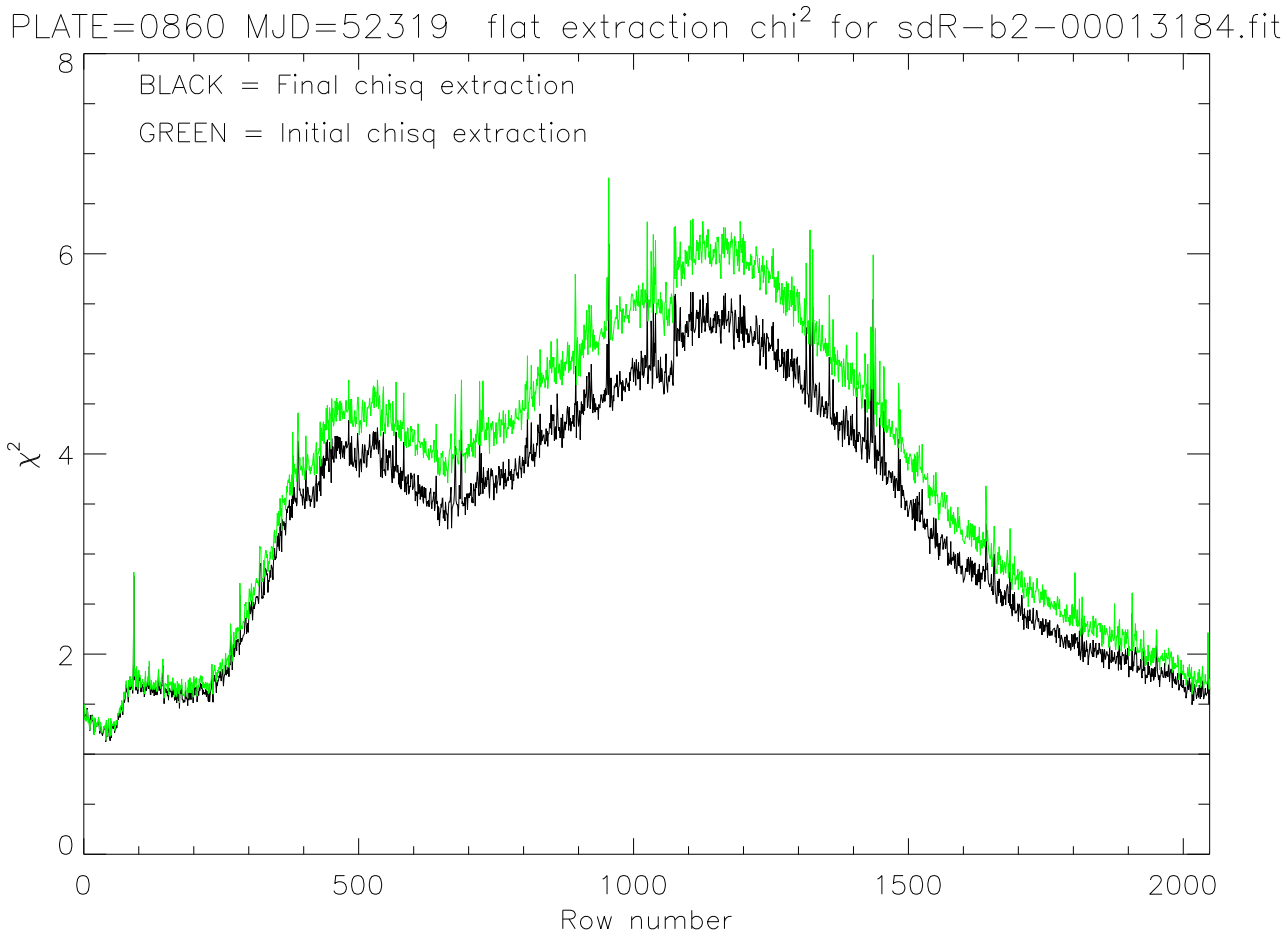

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

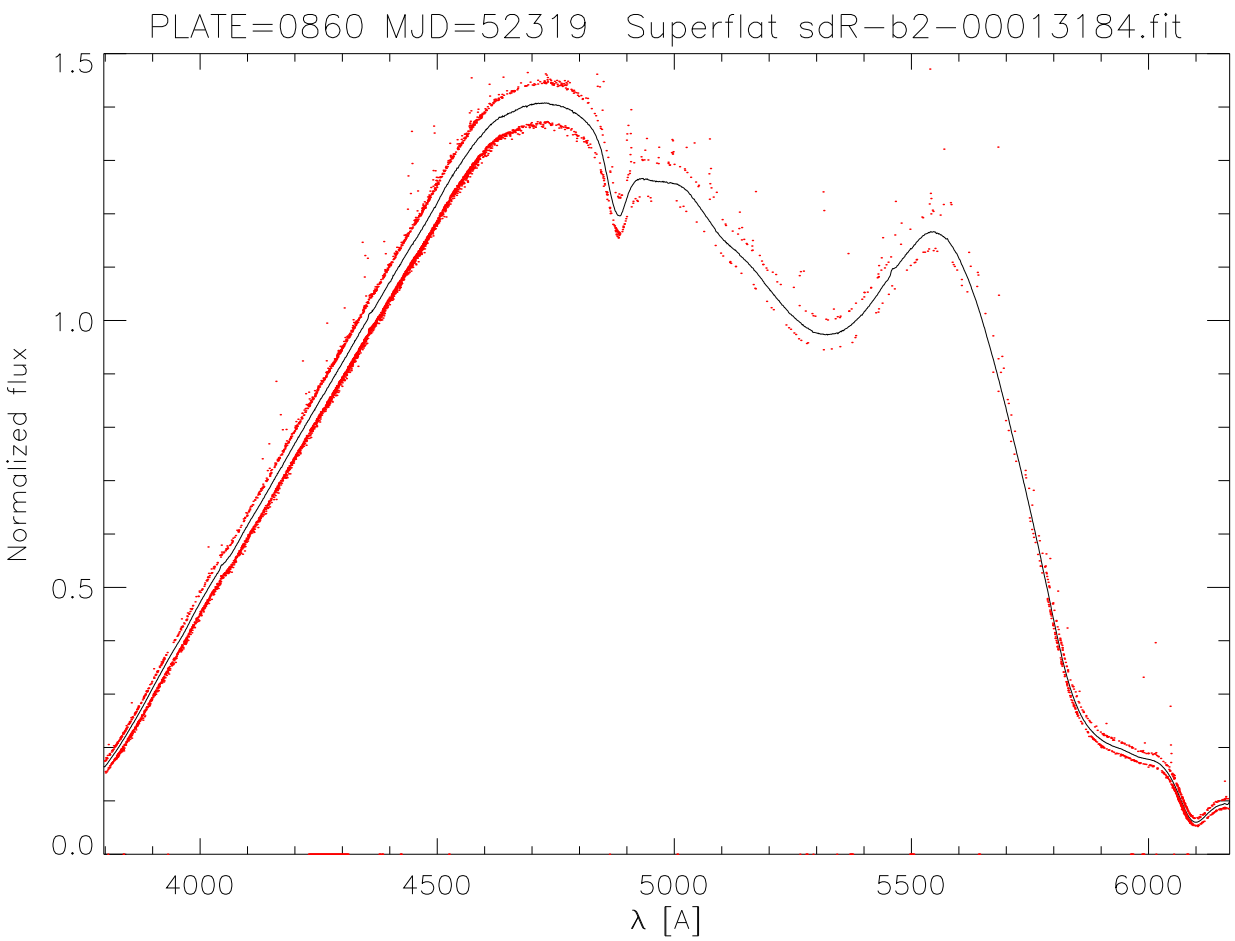

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

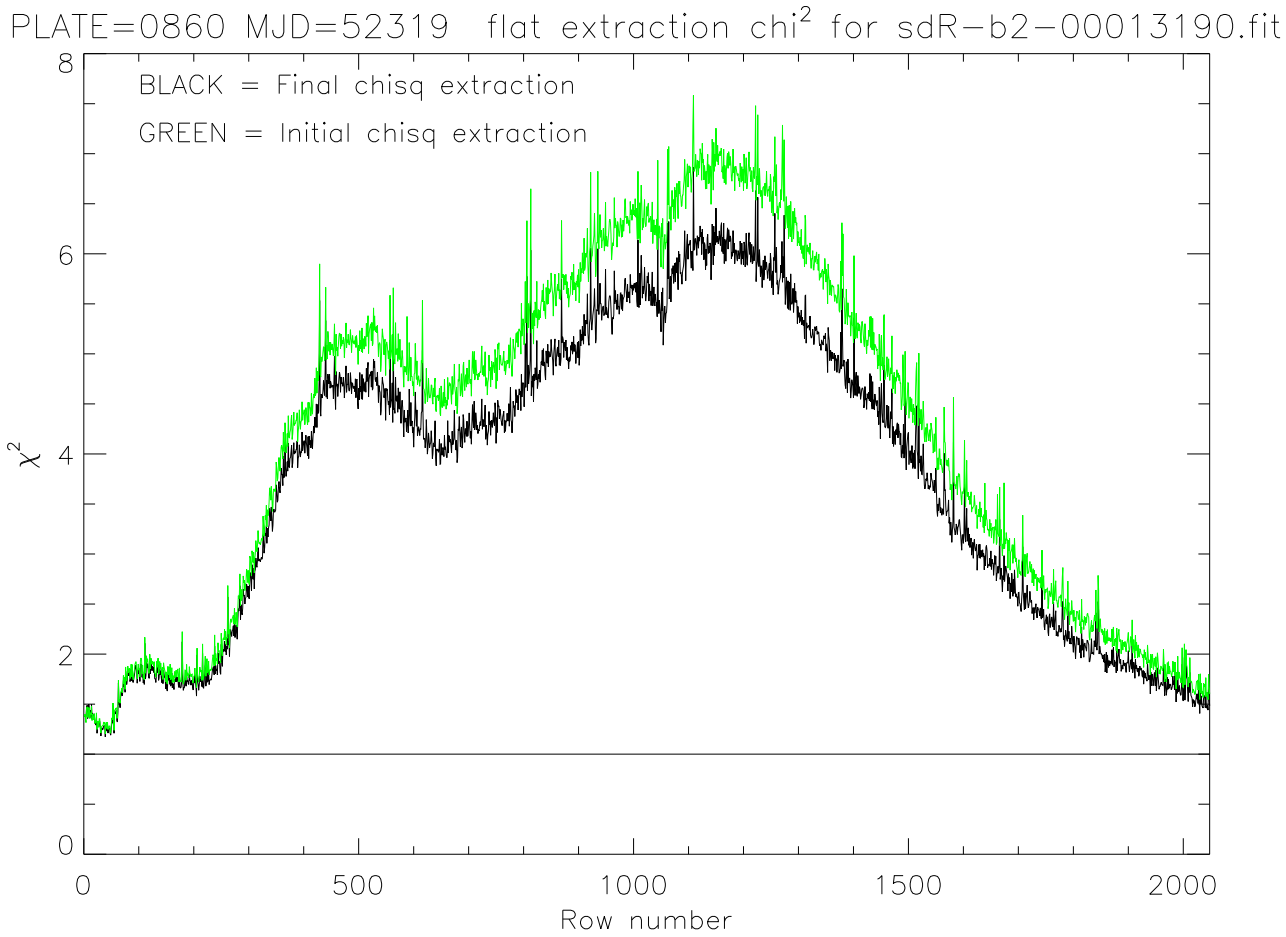

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

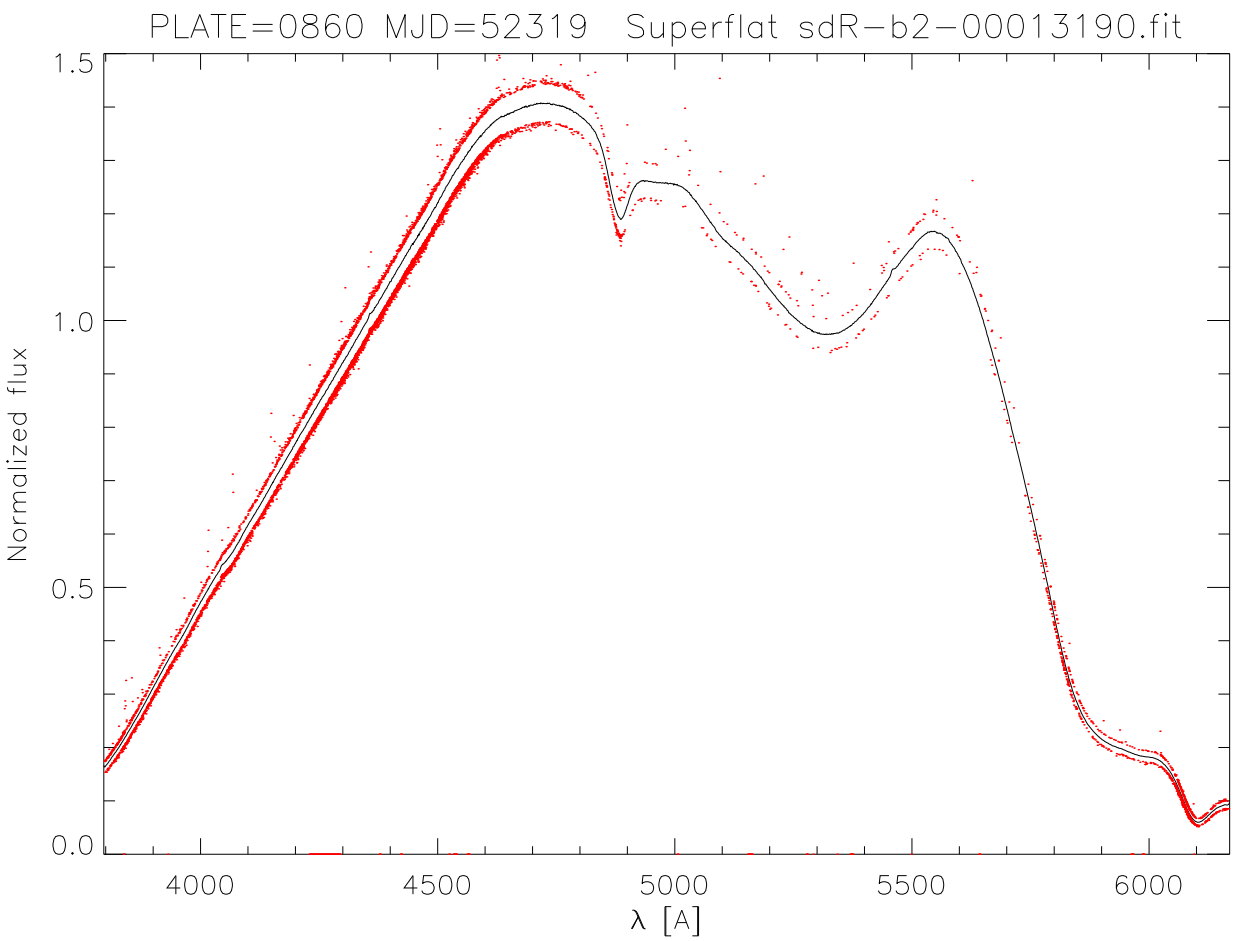

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b2−00013176.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

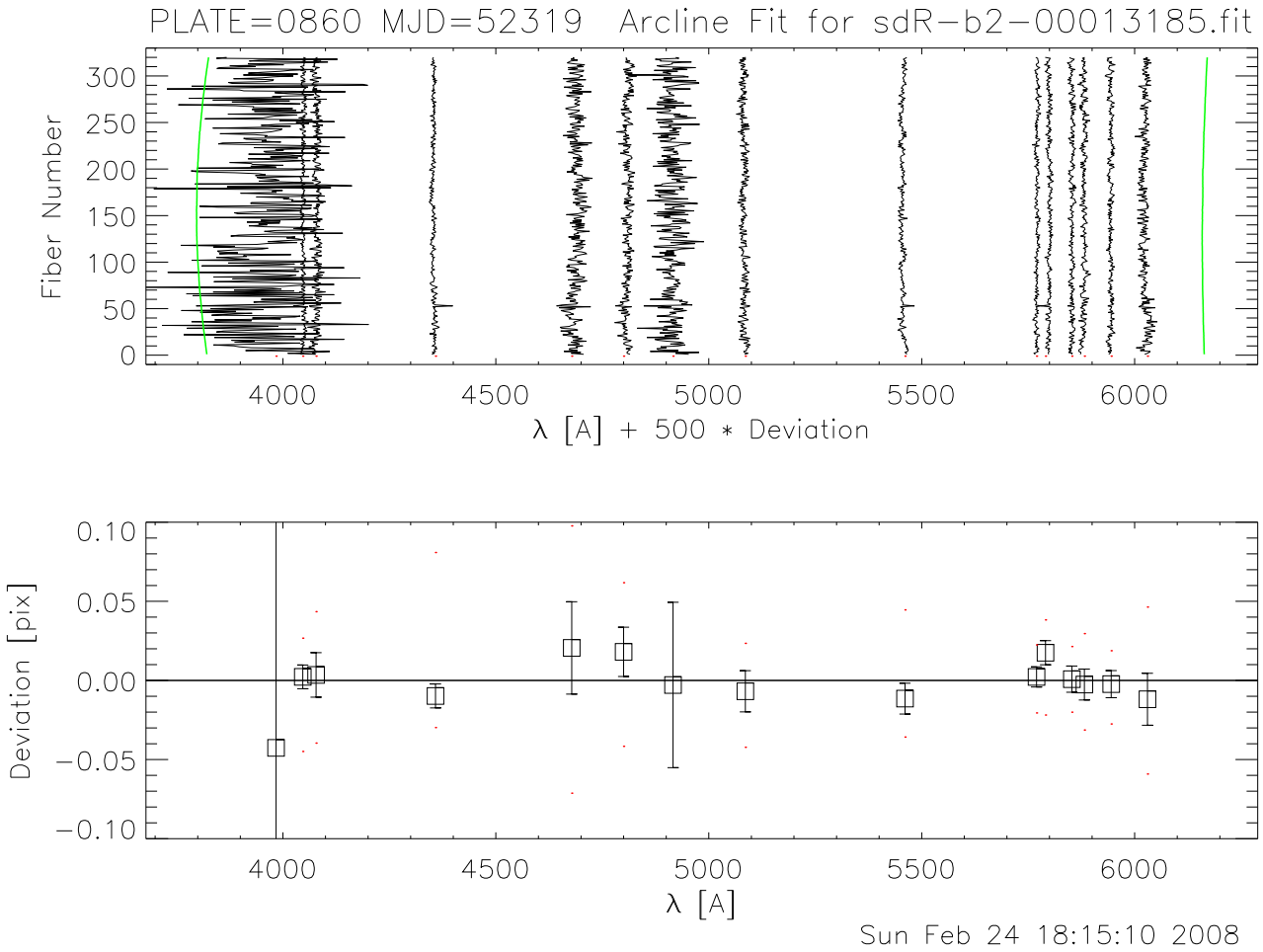

PLATE=0860 MJD=52319 Superflat sdR-b2-00013176.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

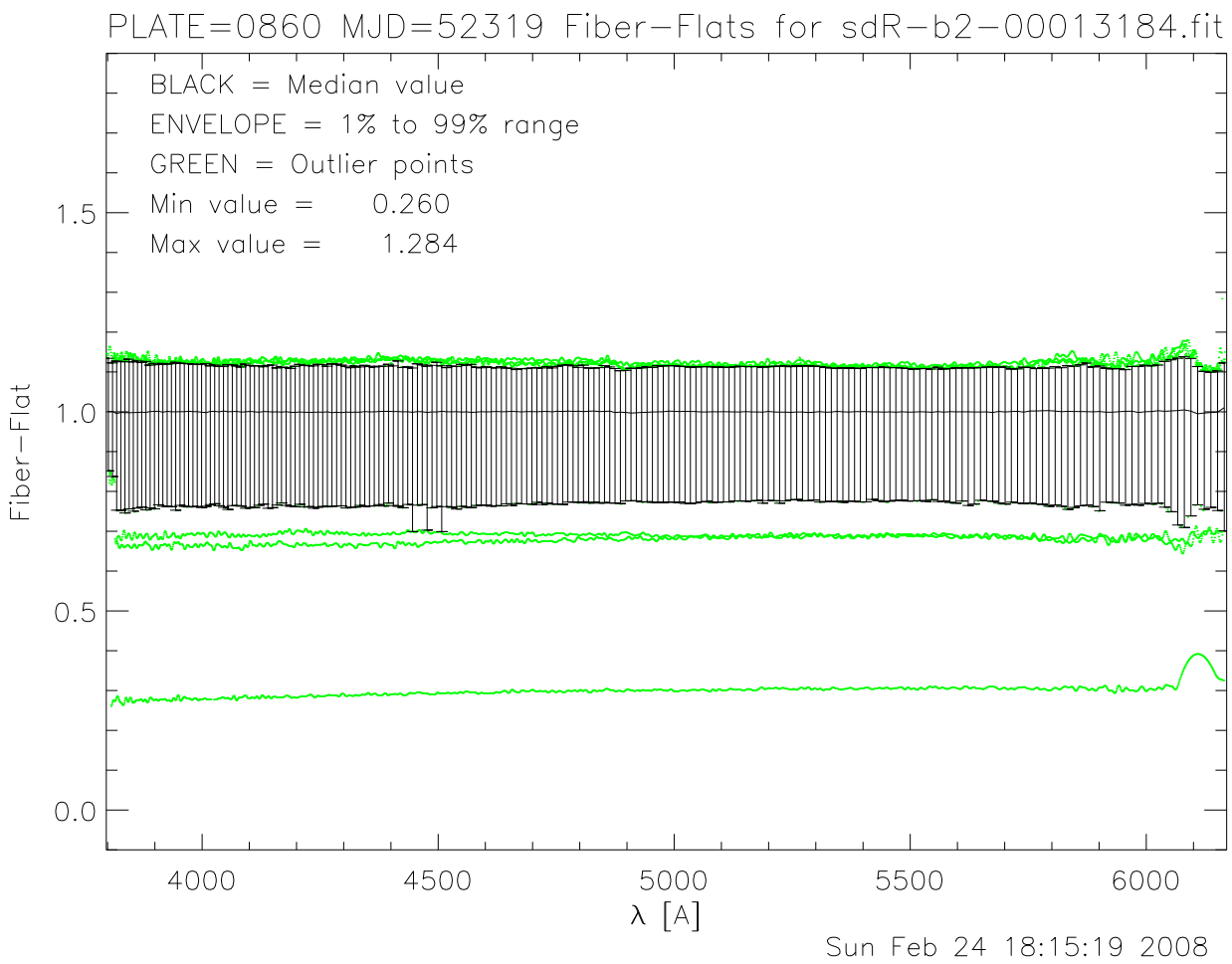

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b2−00013184.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

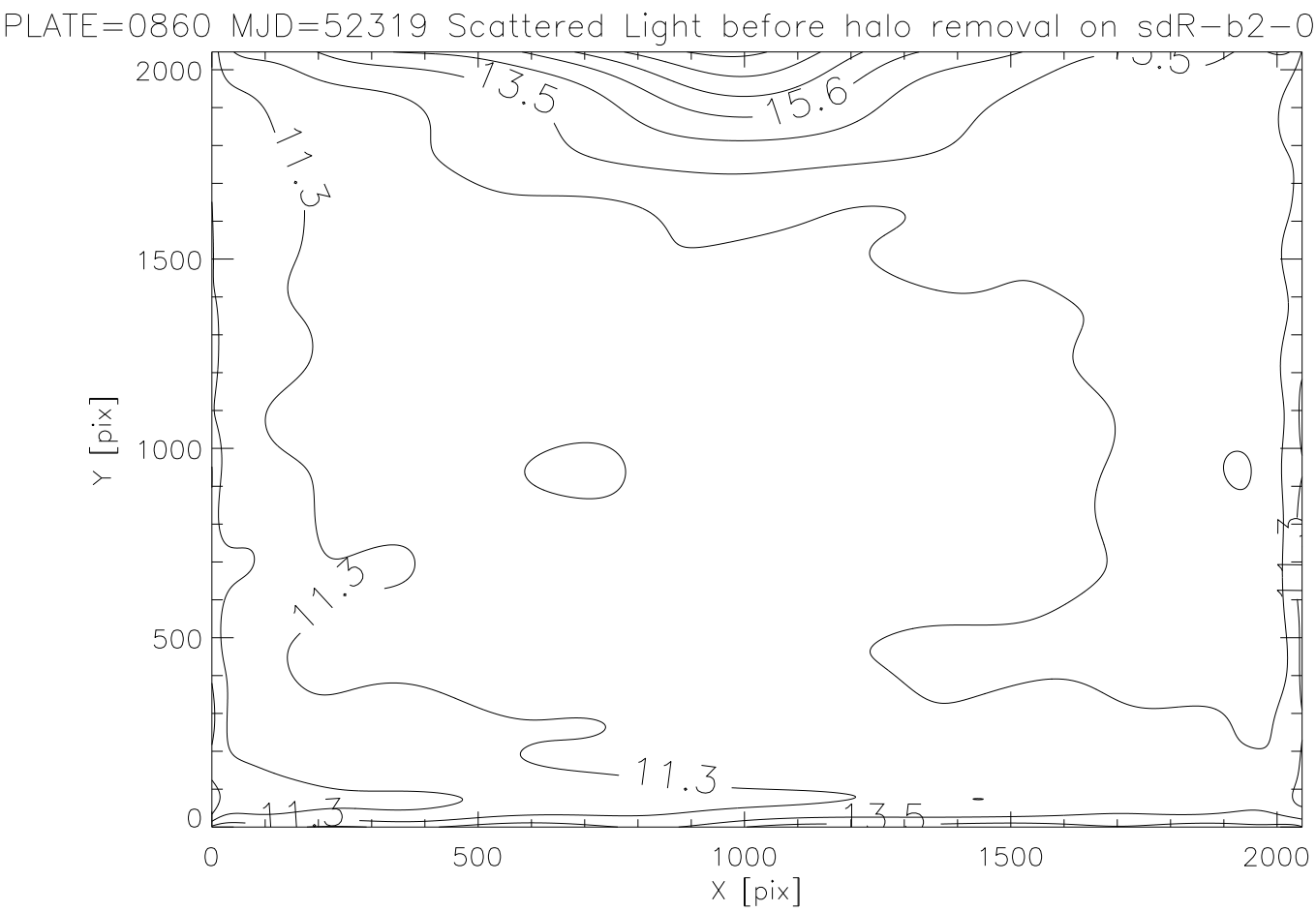

PLATE=0860 MJD=52319 Superflat sdR-b2-00013184.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

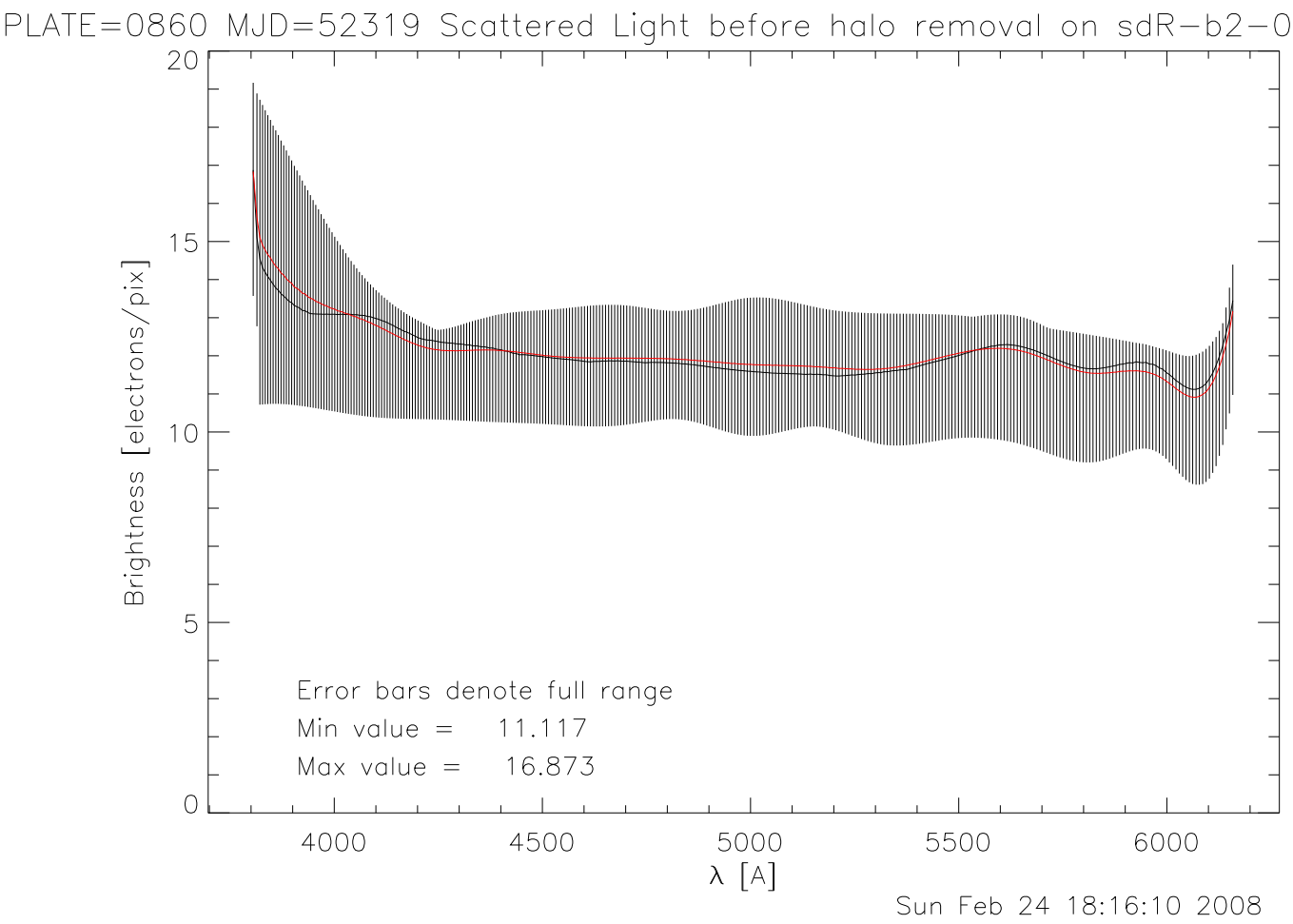

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−b2−00013190.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

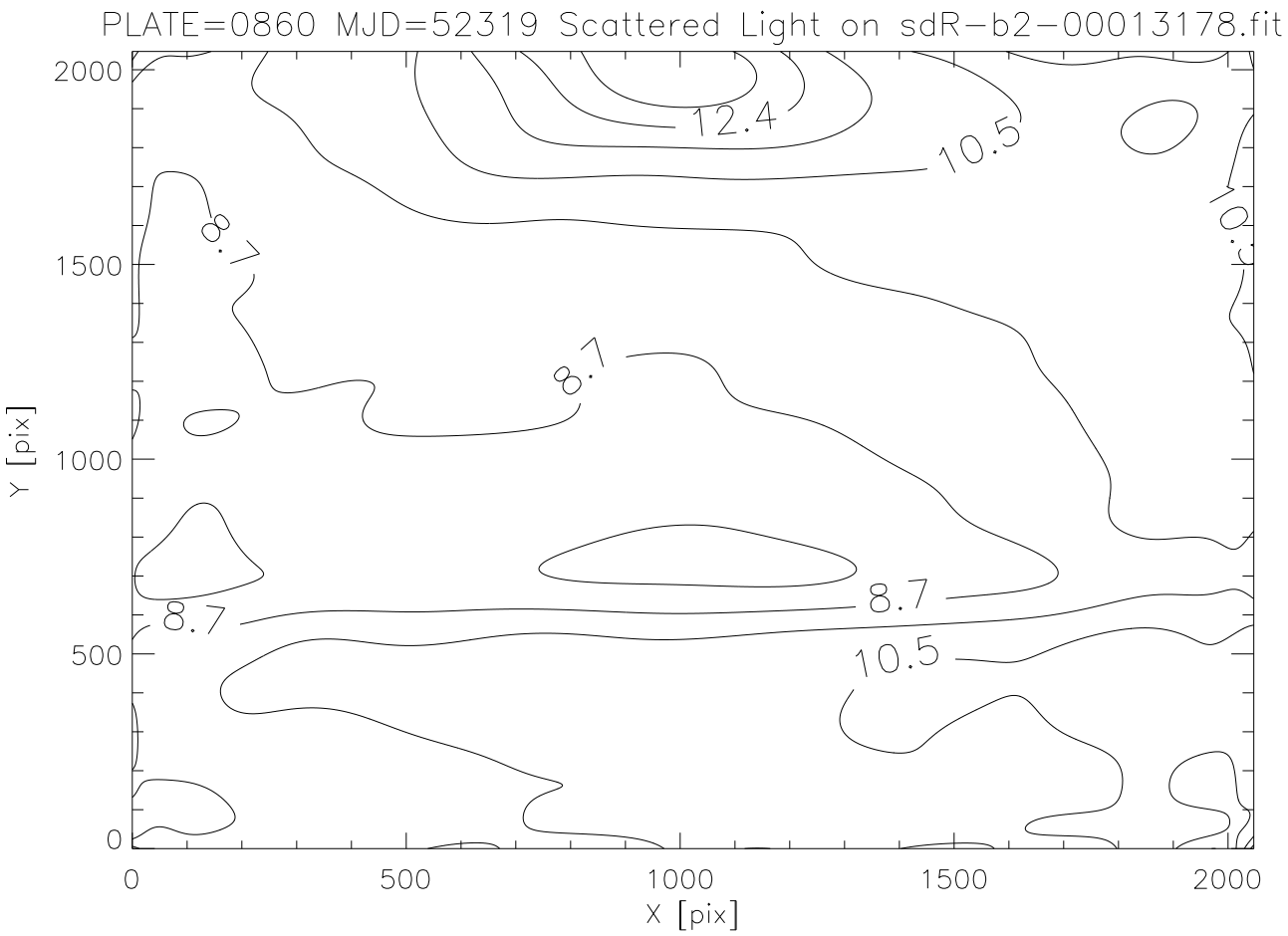

PLATE=0860 MJD=52319 Superflat sdR-b2-00013190.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

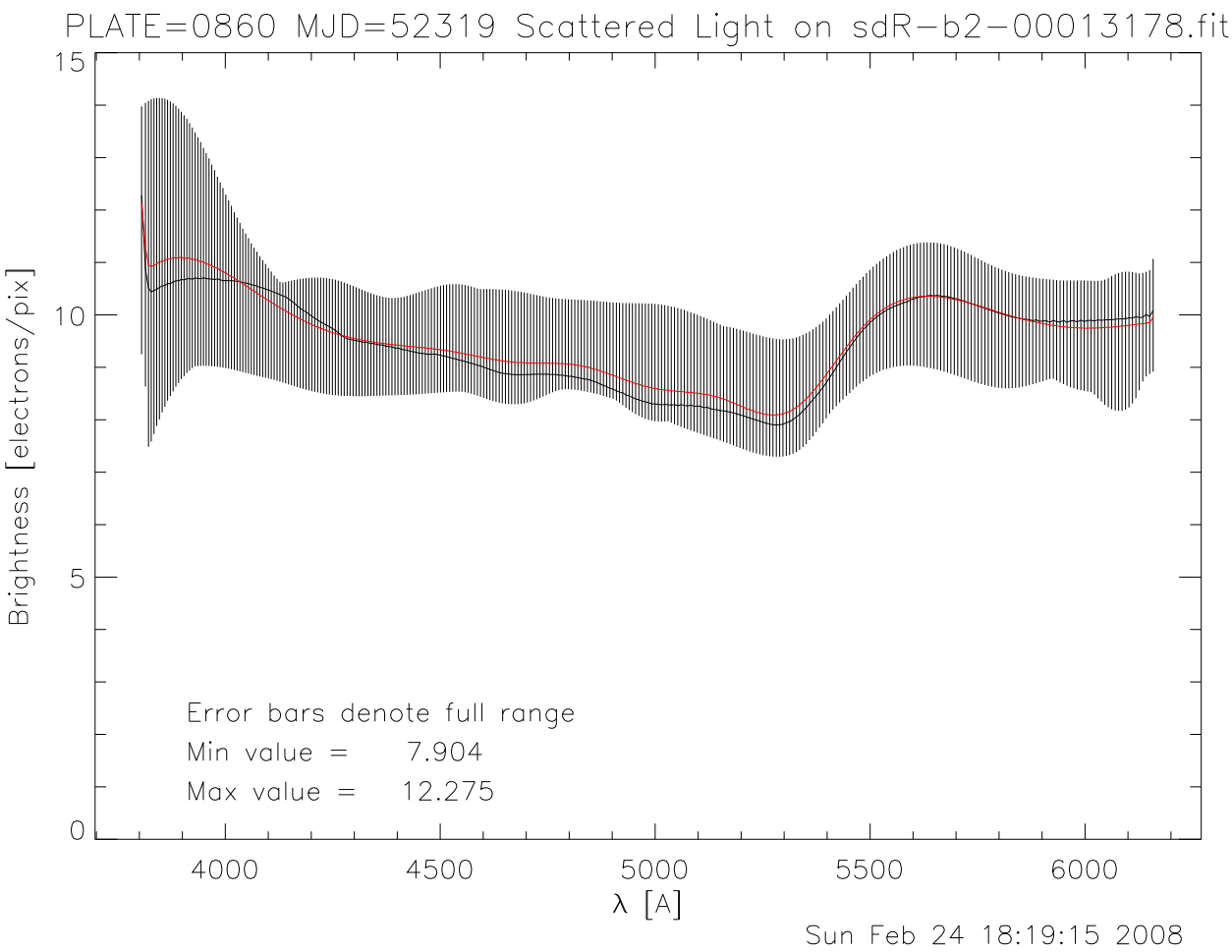

PLATE=0860 MJD=52319 Arcline Fit for sdR-b2-00013185.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:15:10 2008

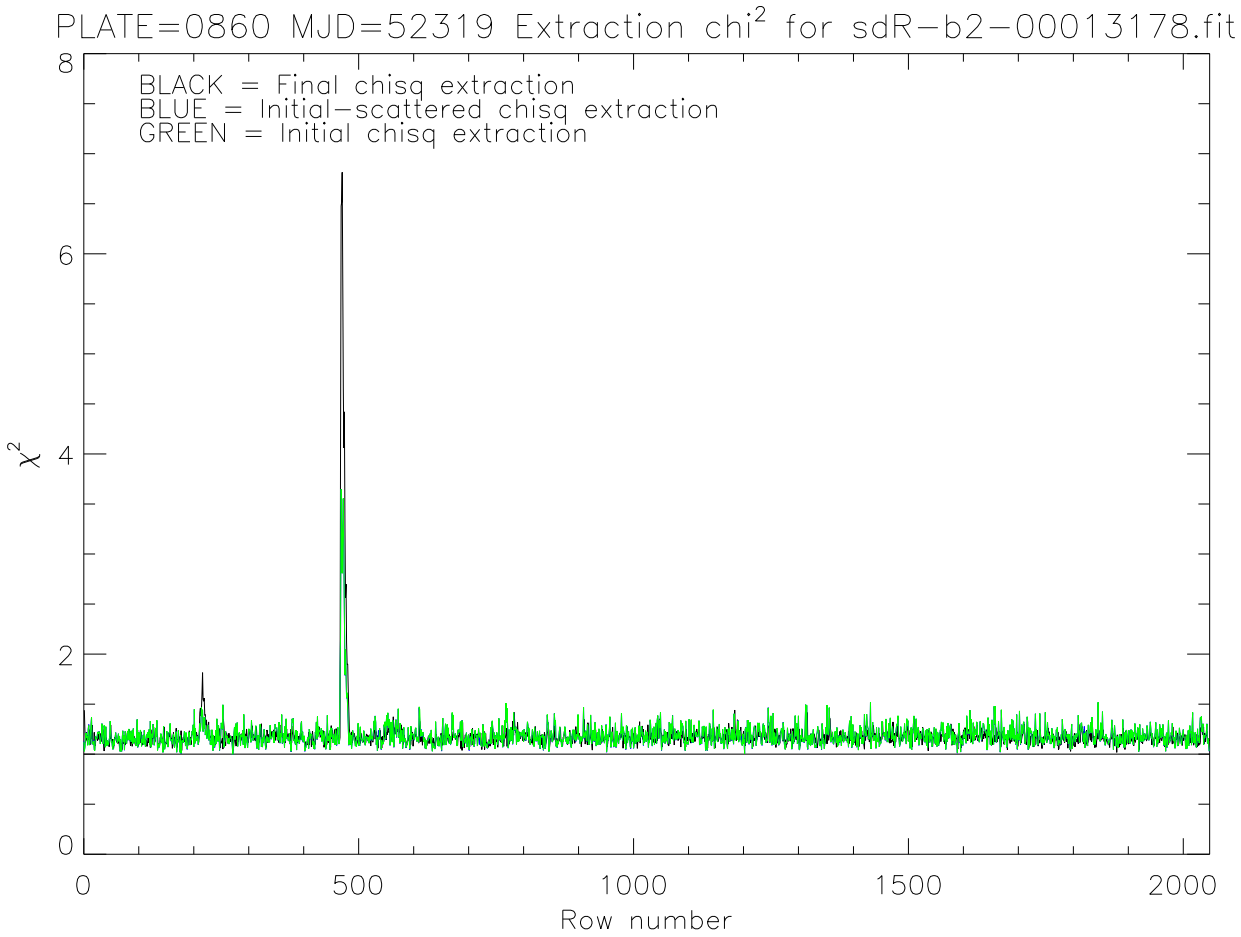

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:15:19 2008

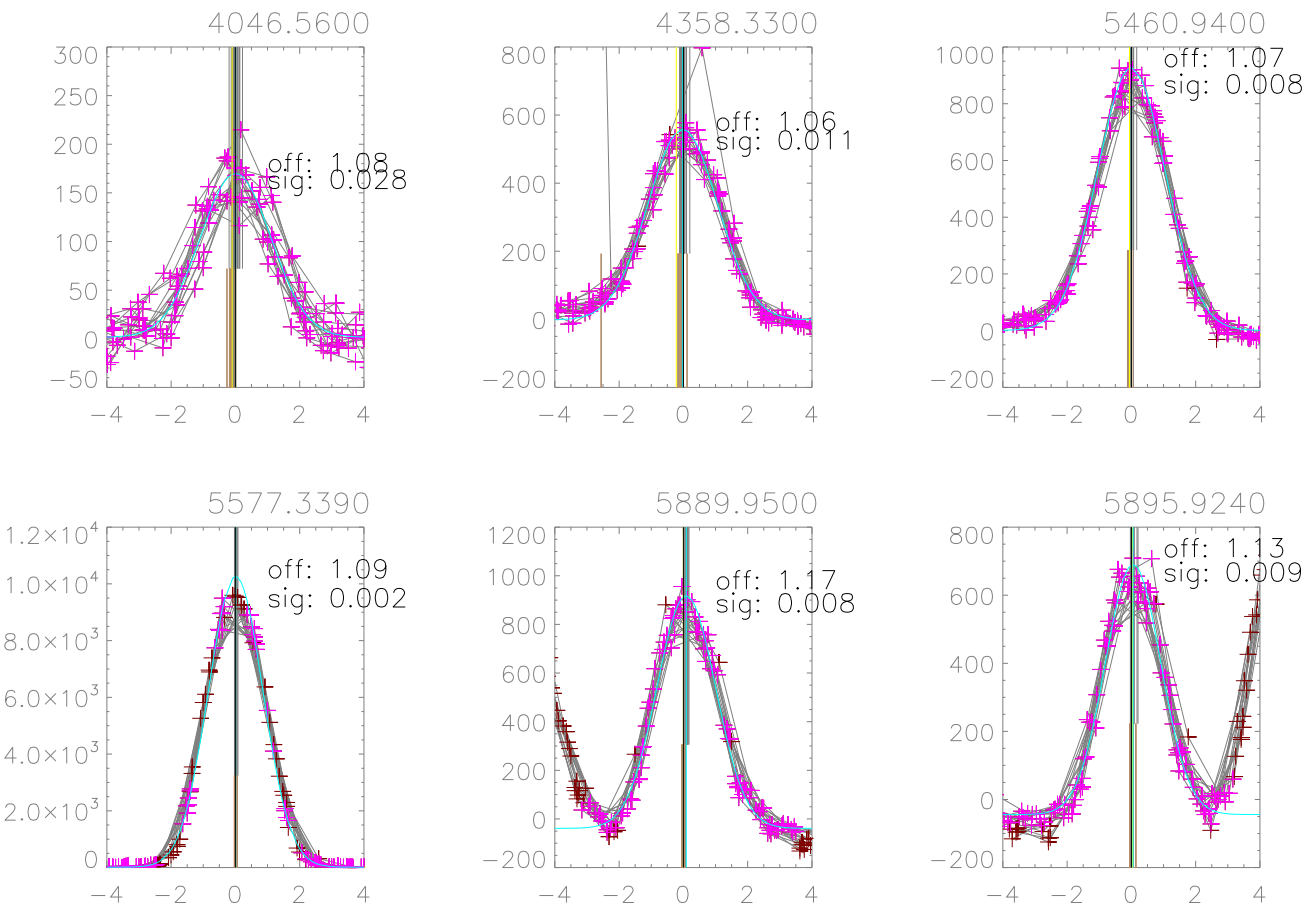

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013178.f
13.5
15.6
11.3
11.3
11.3
11.3
13.5
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

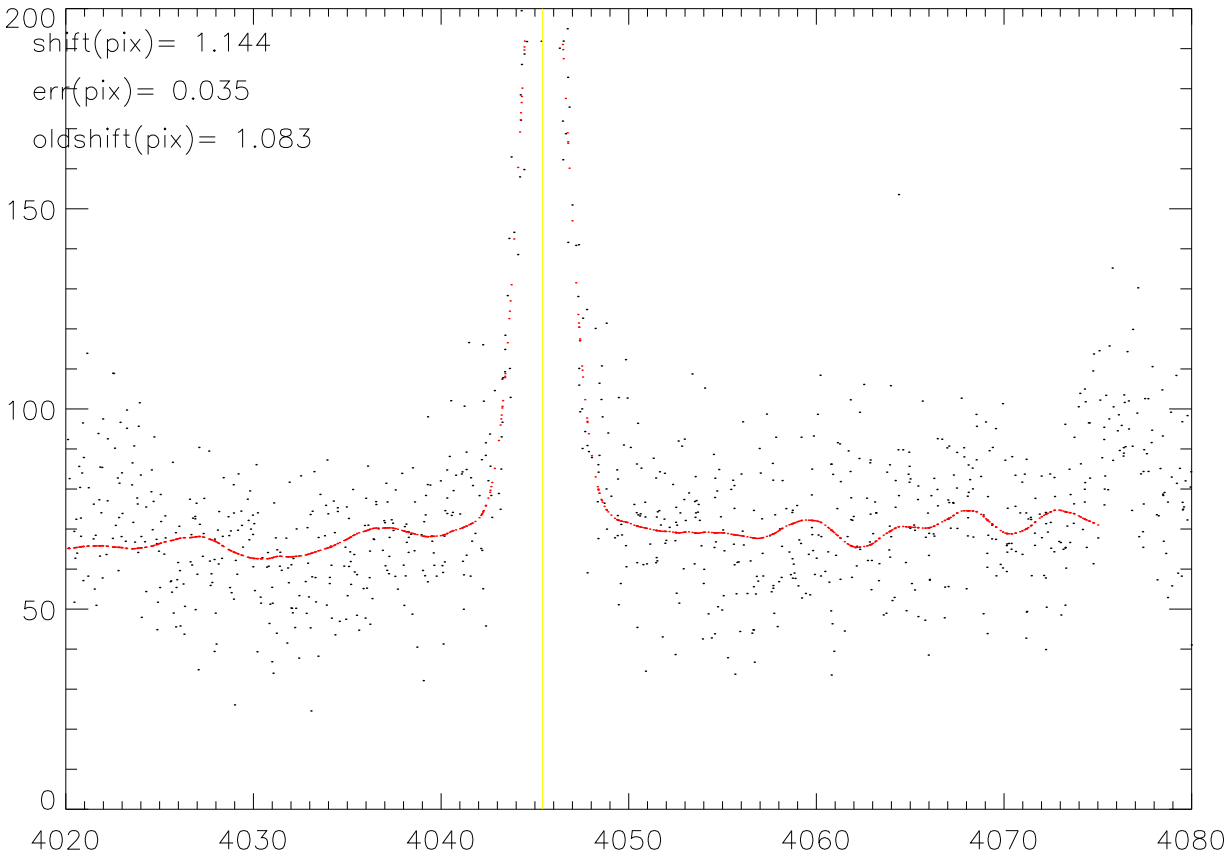

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013178.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.117
Max value = 16.873
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:16:10 2008

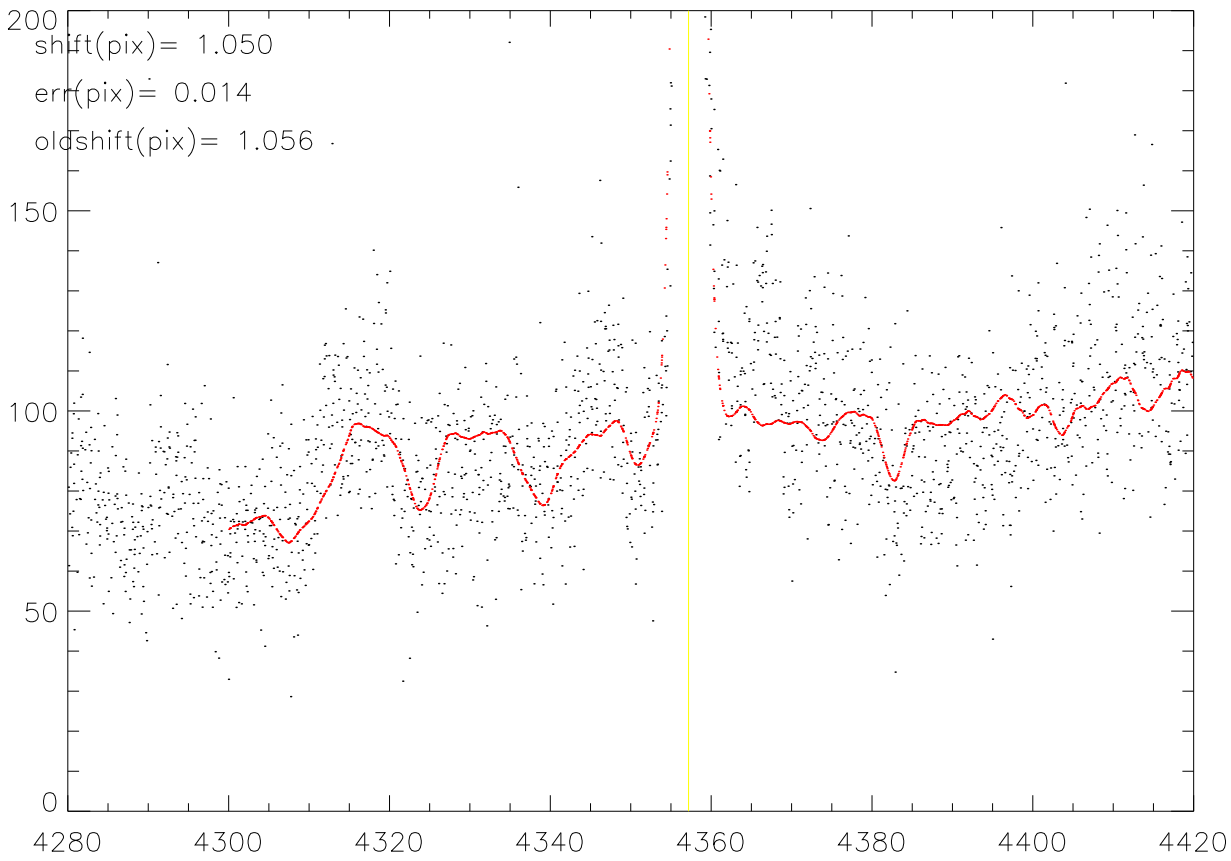

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013178.fit
12.4
10.5
8.7
8.7
8.7
8.7
10.5
Y [pix]
X [pix]
0
500
1000
1500
2000

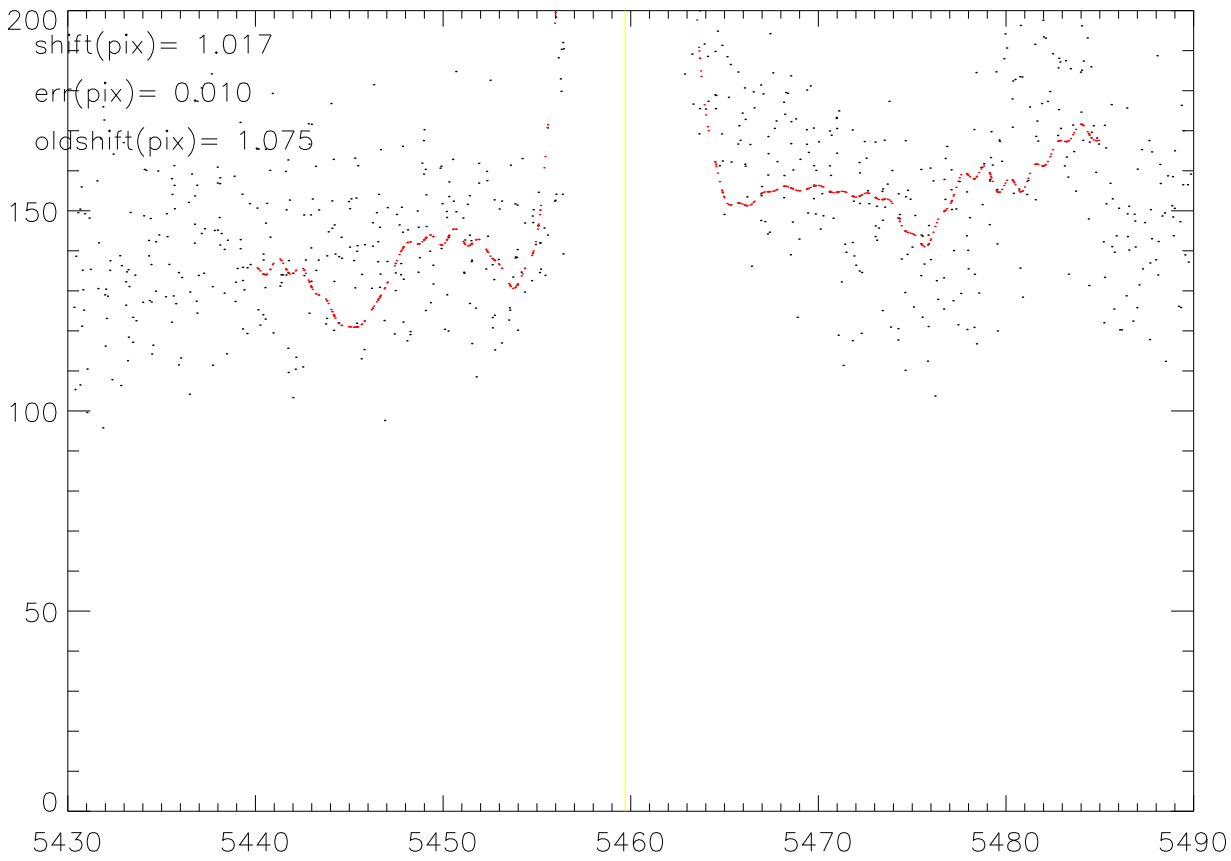

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013178.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.904
Max value = 12.275
Sun Feb 24 18:19:15 2008

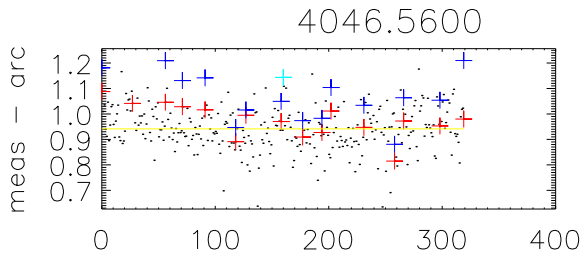

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013178.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

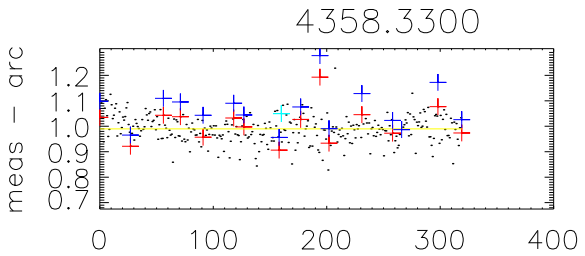

4046.5600
off: 1.08
sig: 0.028
4358.3300
off: 1.06
sig: 0.011
5460.9400
off: 1.07
sig: 0.008
5577.3390
off: 1.09
sig: 0.002
5889.9500
off: 1.17
sig: 0.008
5895.9240
off: 1.13
sig: 0.009

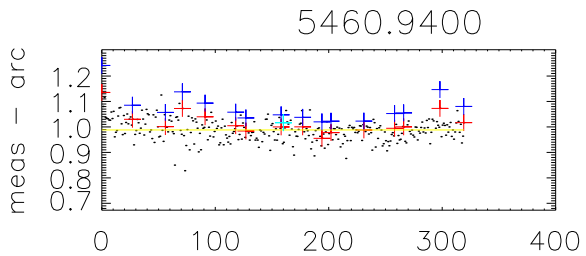

shift(pix)= 1.144
err(pix)= 0.035
oldshift(pix)= 1.083
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

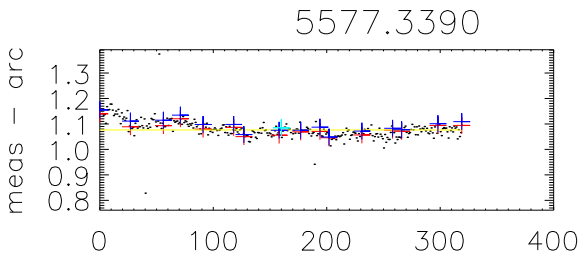

shift(pix)= 1.050
err(pix)= 0.014
oldshift(pix)= 1.056
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

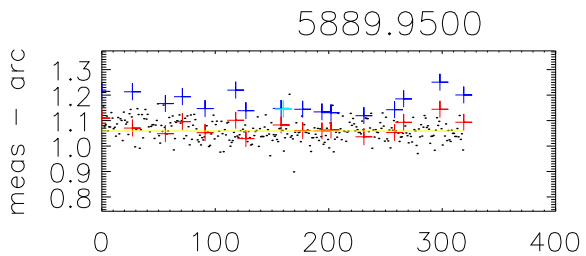

shift(pix)= 1.017
err(pix)= 0.010
oldshift(pix)= 1.075
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

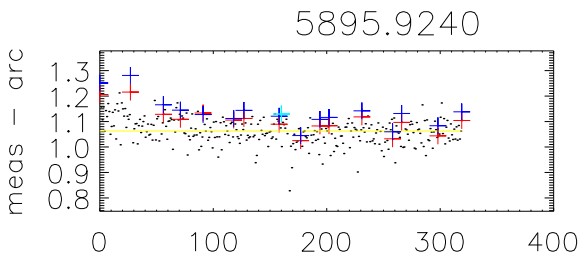

4046.5600
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

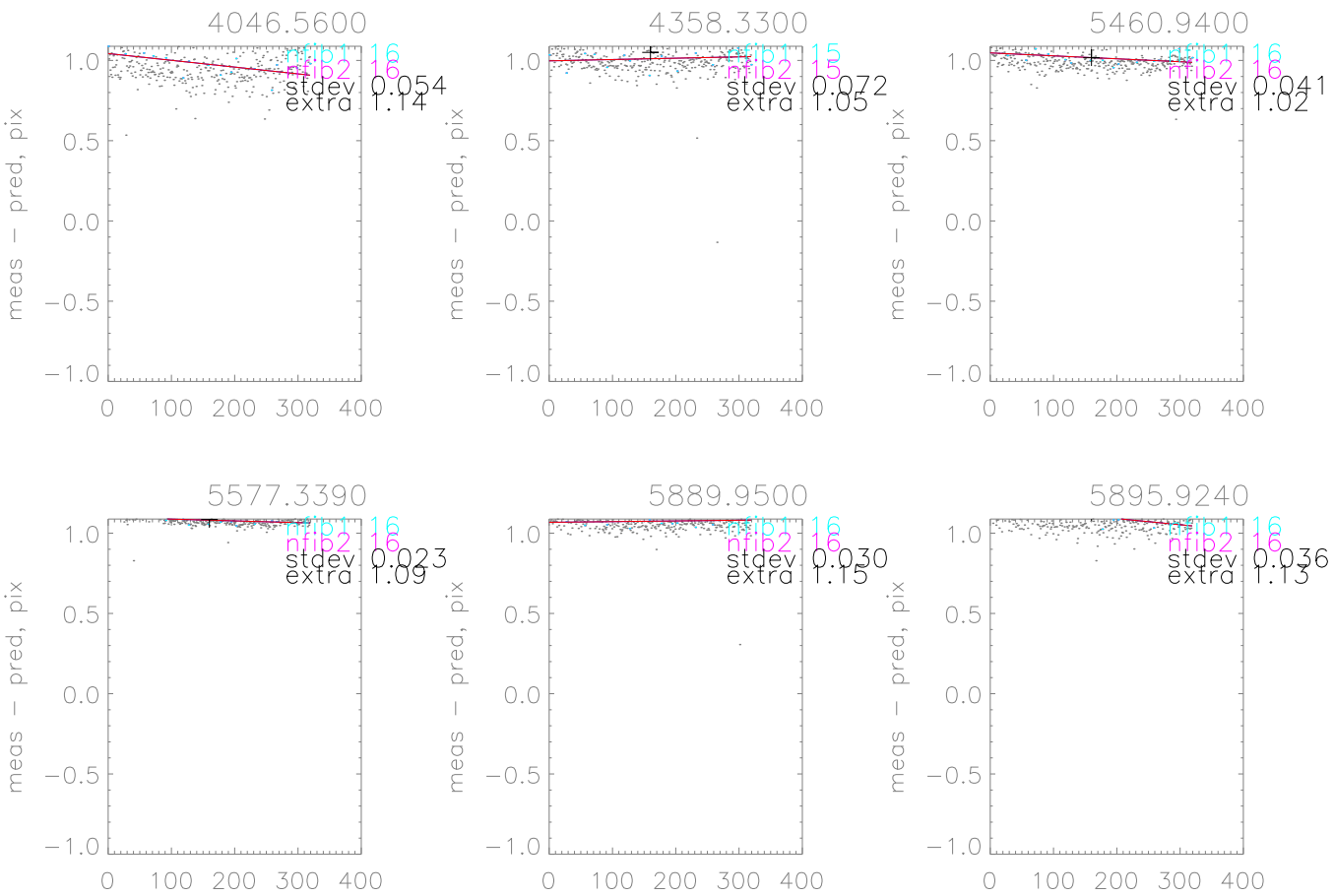

4358.3300
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

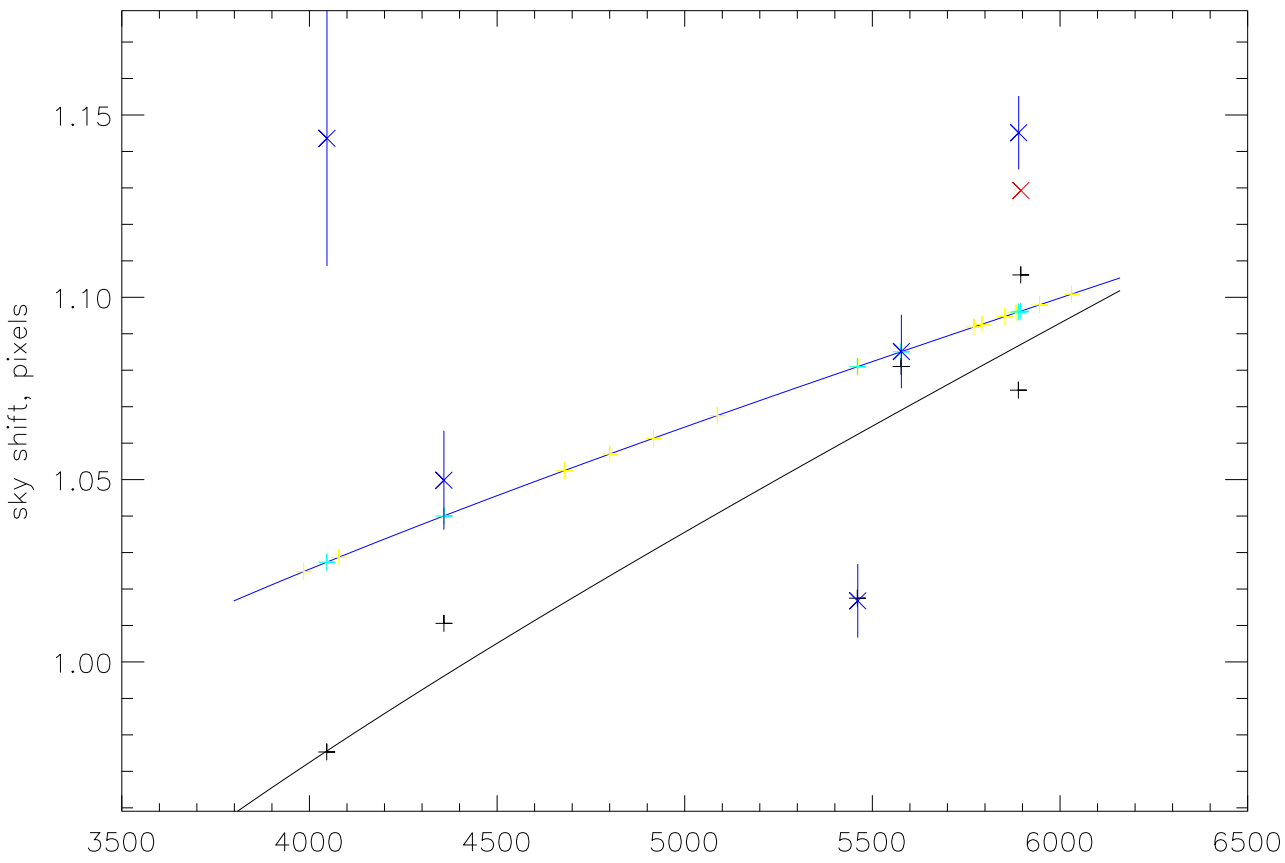

5460.9400
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

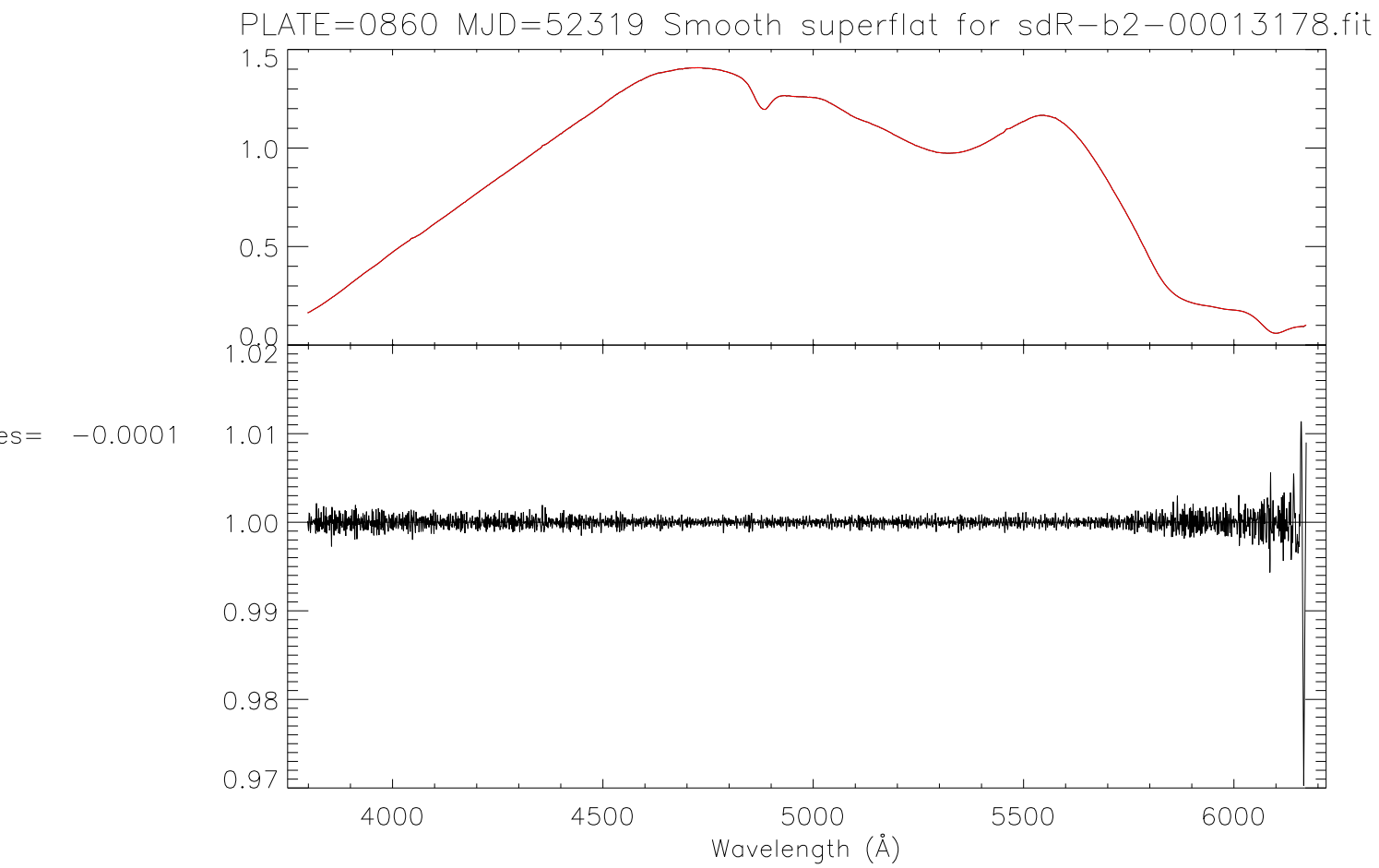

5577.3390
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400


5889.9500
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

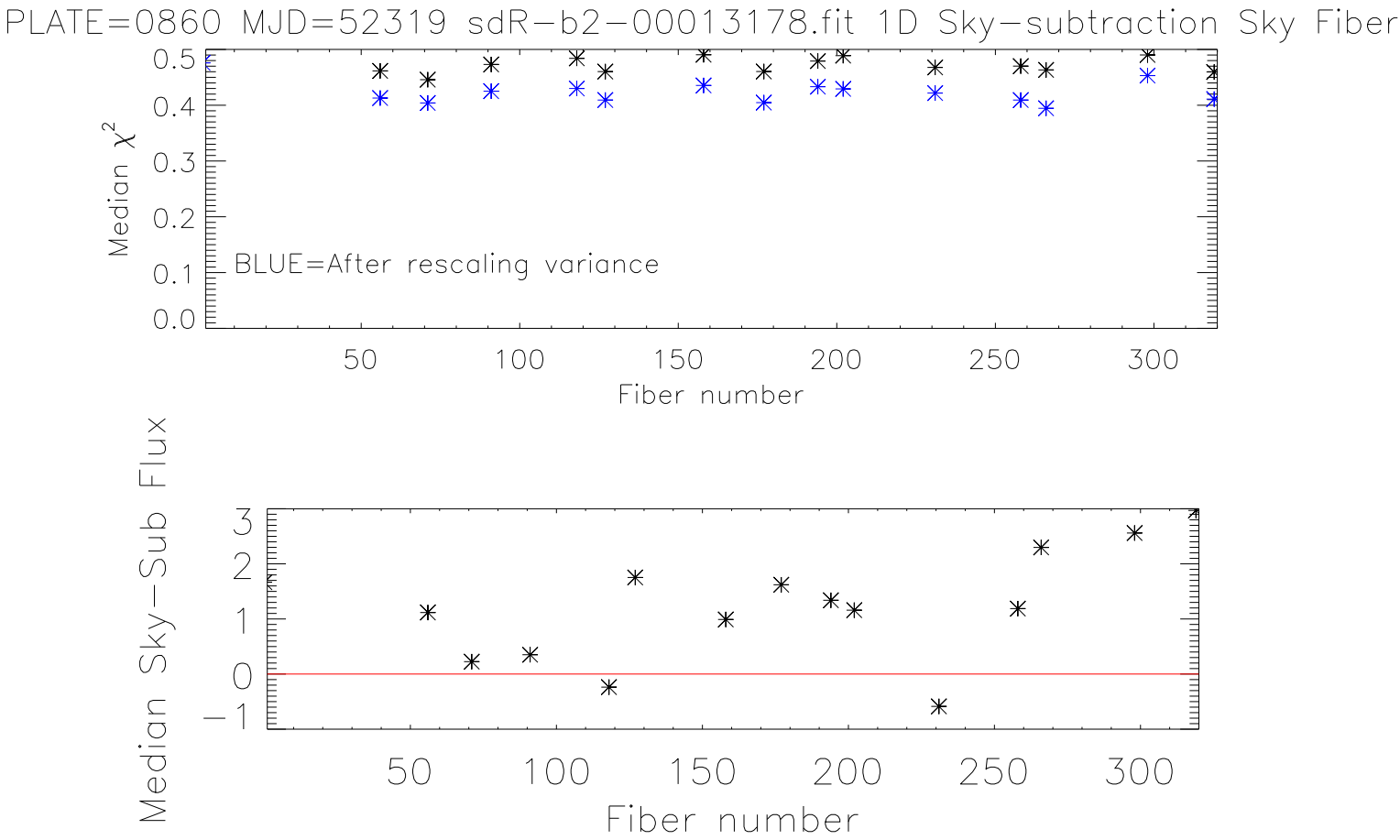

5895.9240
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

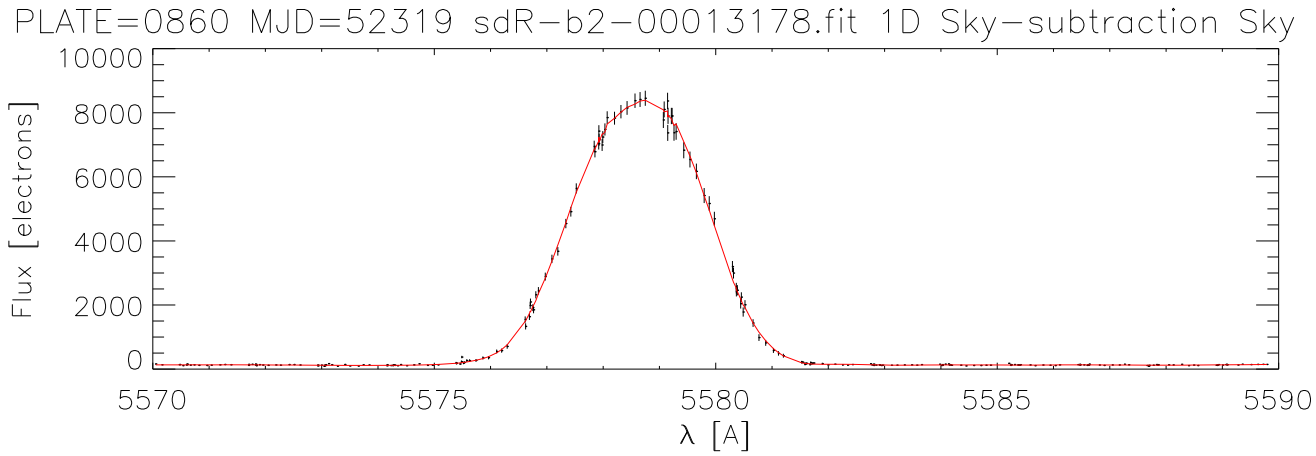

4046.5600
nfib1 16
nfib2 16
stdev 0.054
extra 1.14
4358.3300
nfib1 15
nfib2 15
stdev 0.072
extra 1.05
5460.9400
nfib1 16
nfib2 16
stdev 0.041
extra 1.02
5577.3390
nfib1 16
nfib2 16
stdev 0.023
extra 1.09
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 1.15
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra 1.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

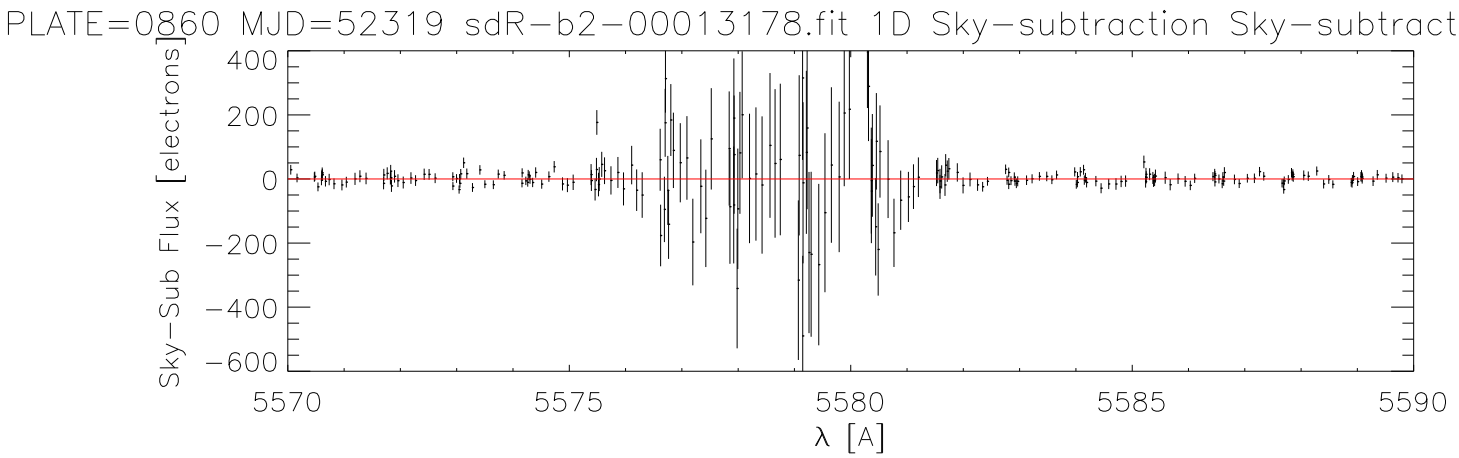

sky shift, pixels
1.15
1.10
1.05
1.00
3500
4000
4500
5000
5500
6000
6500

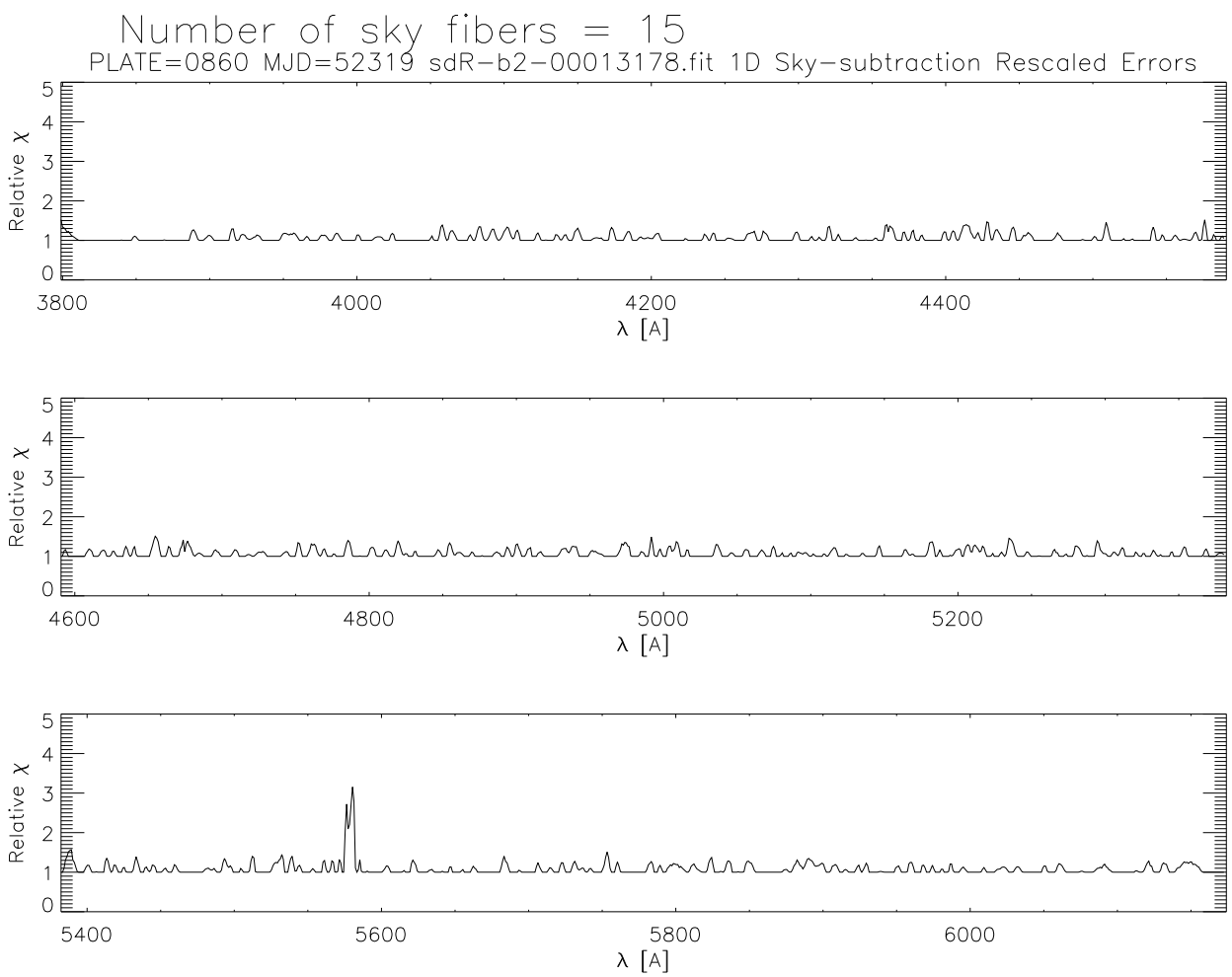

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013178.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

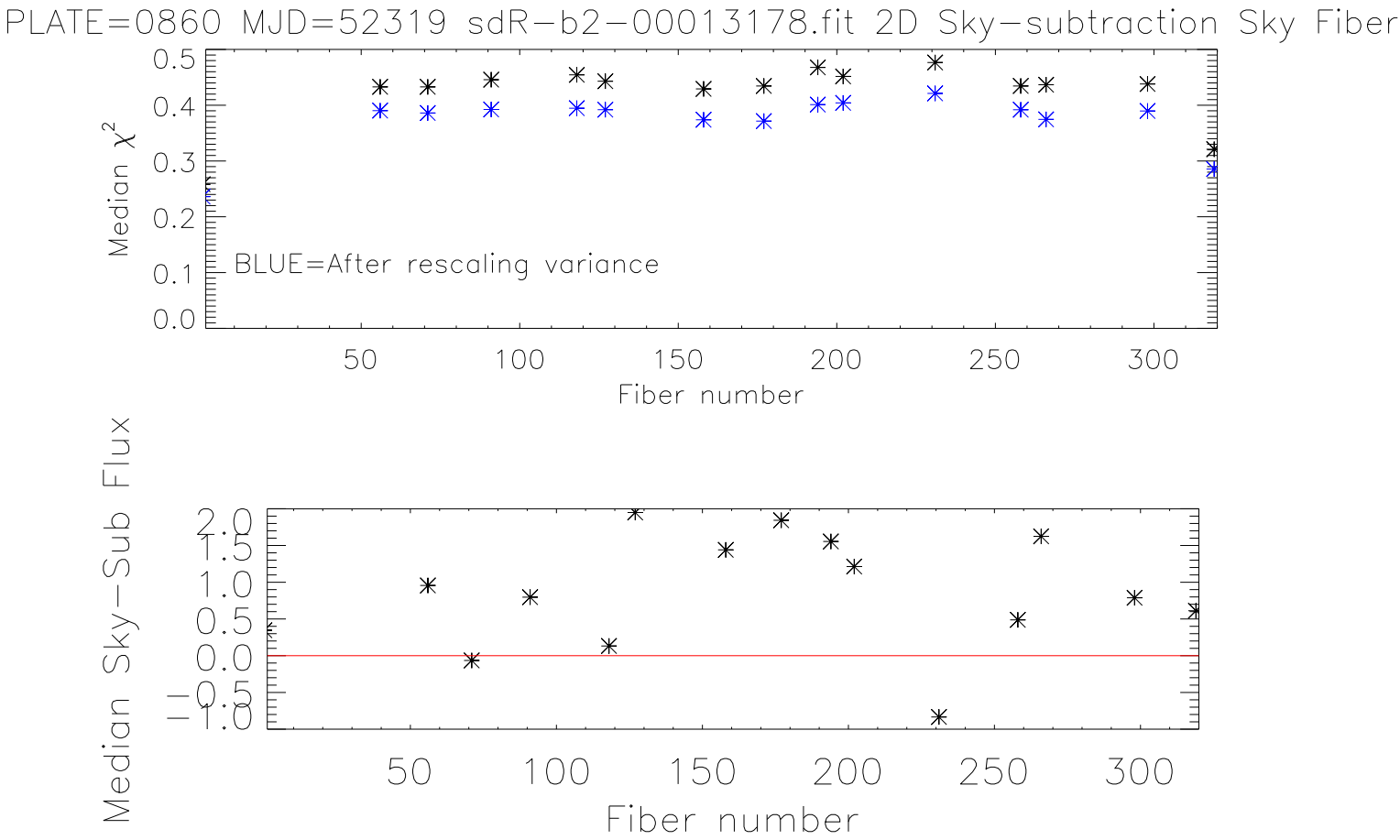
es= −0.0001

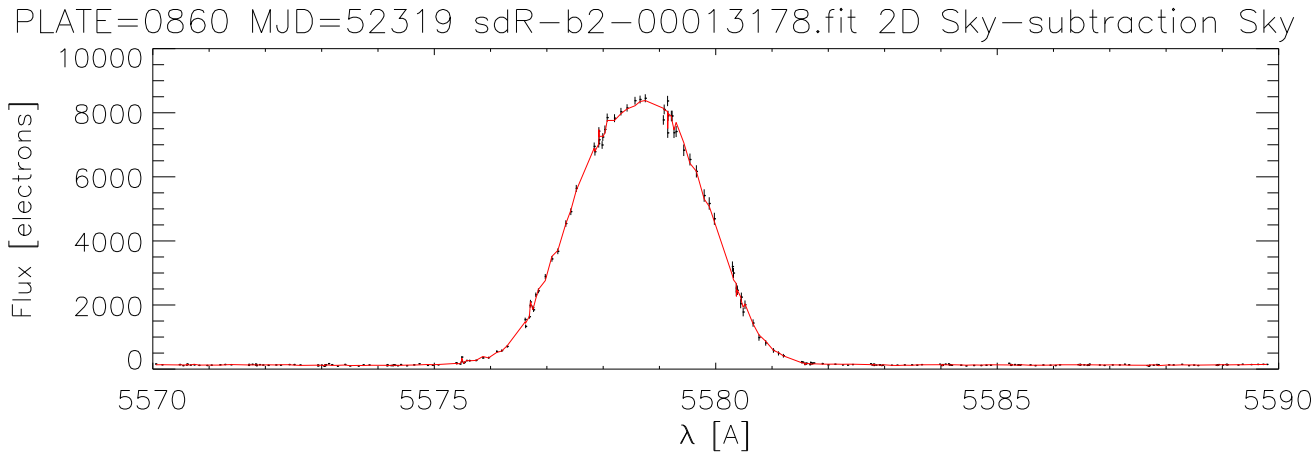

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

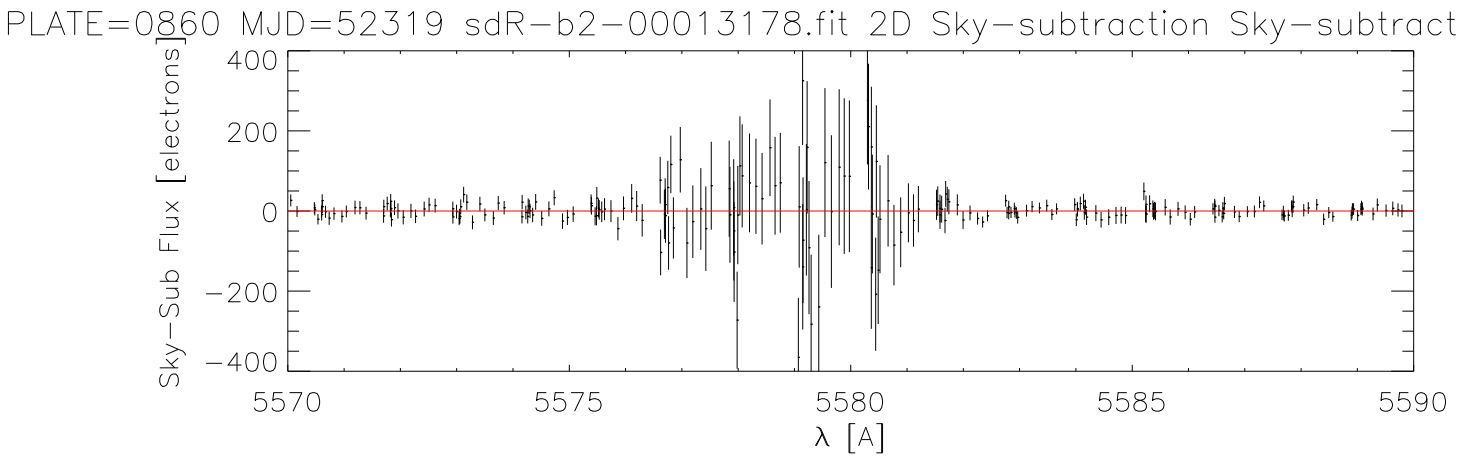

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

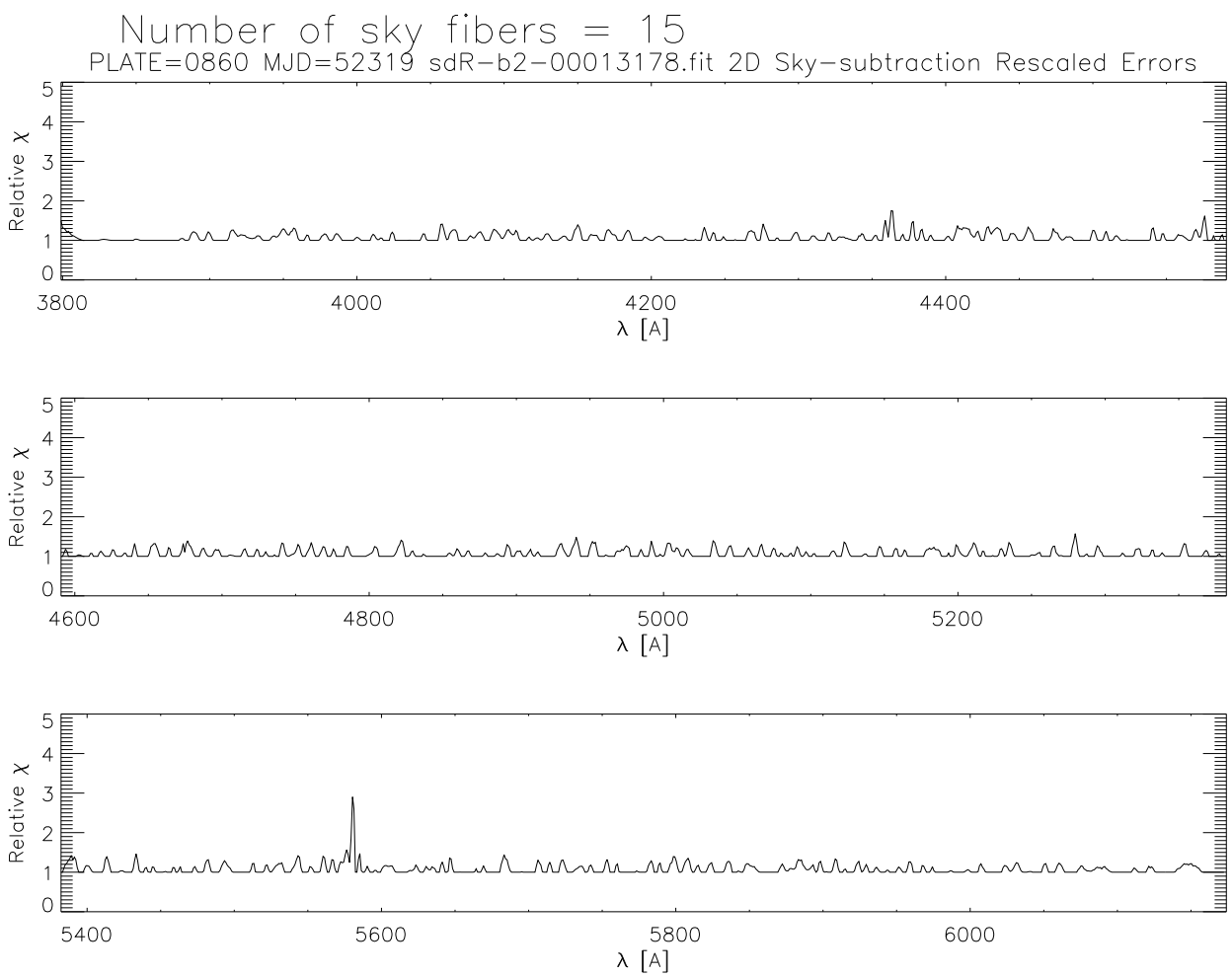

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

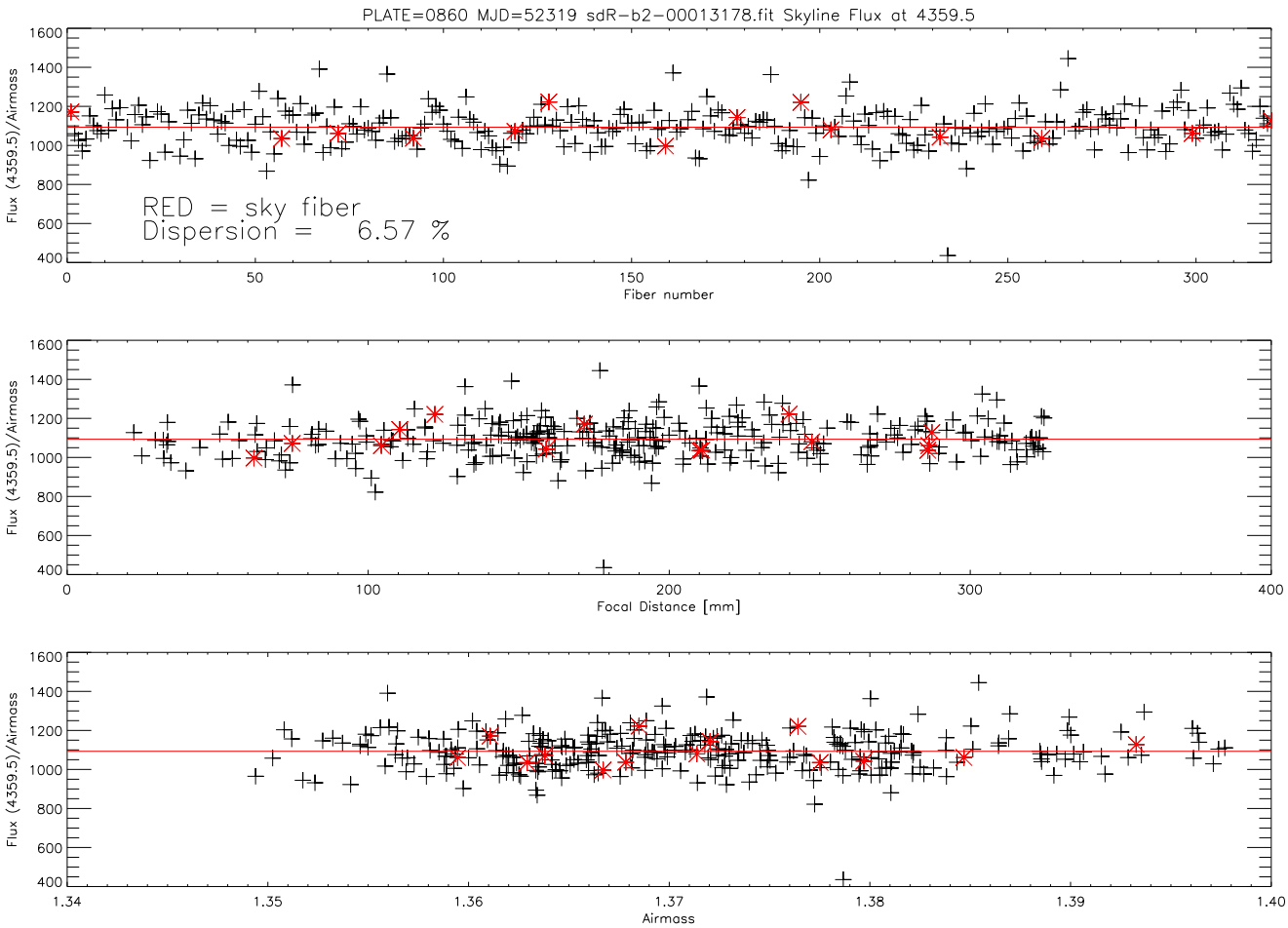

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013178.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

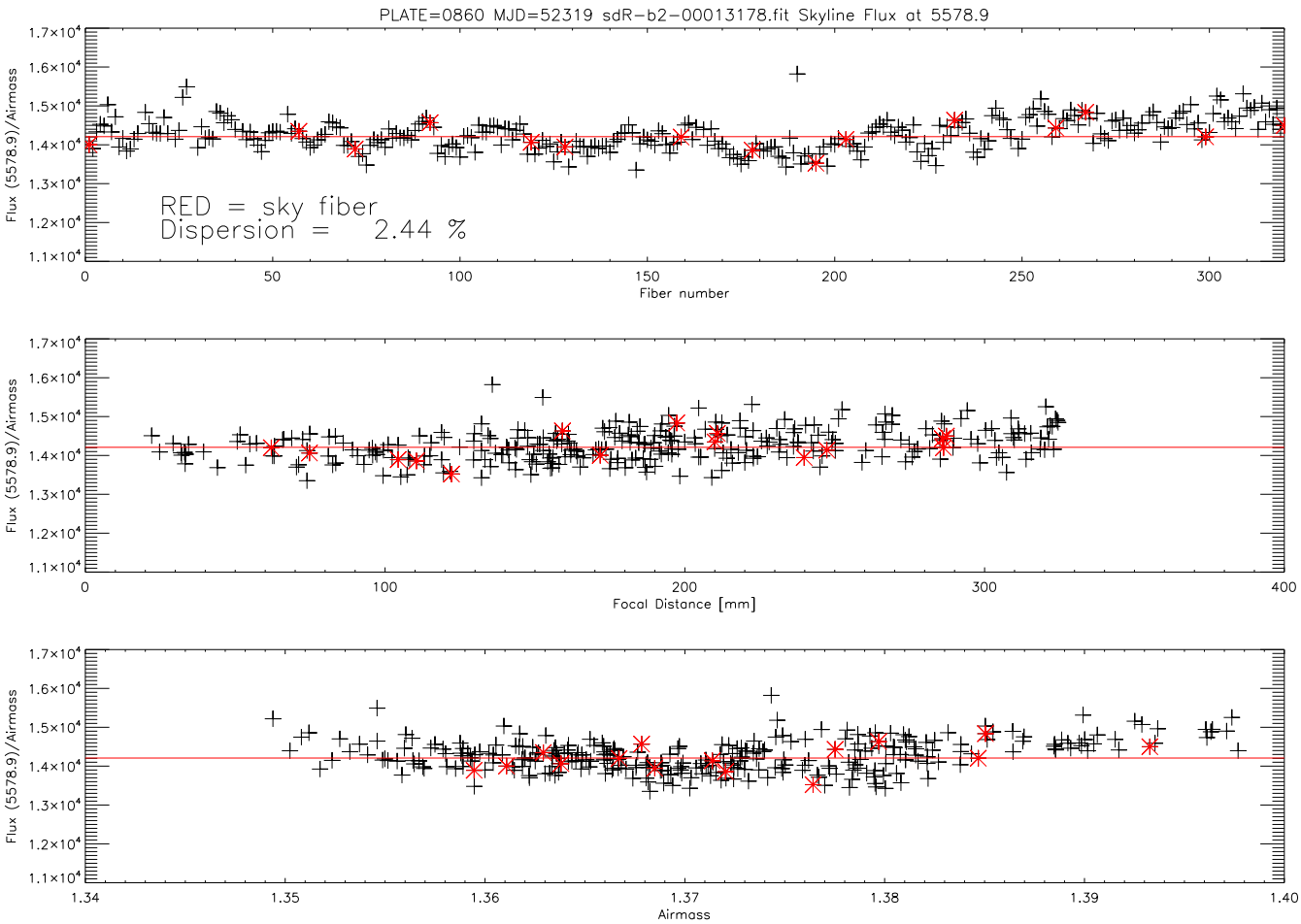

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

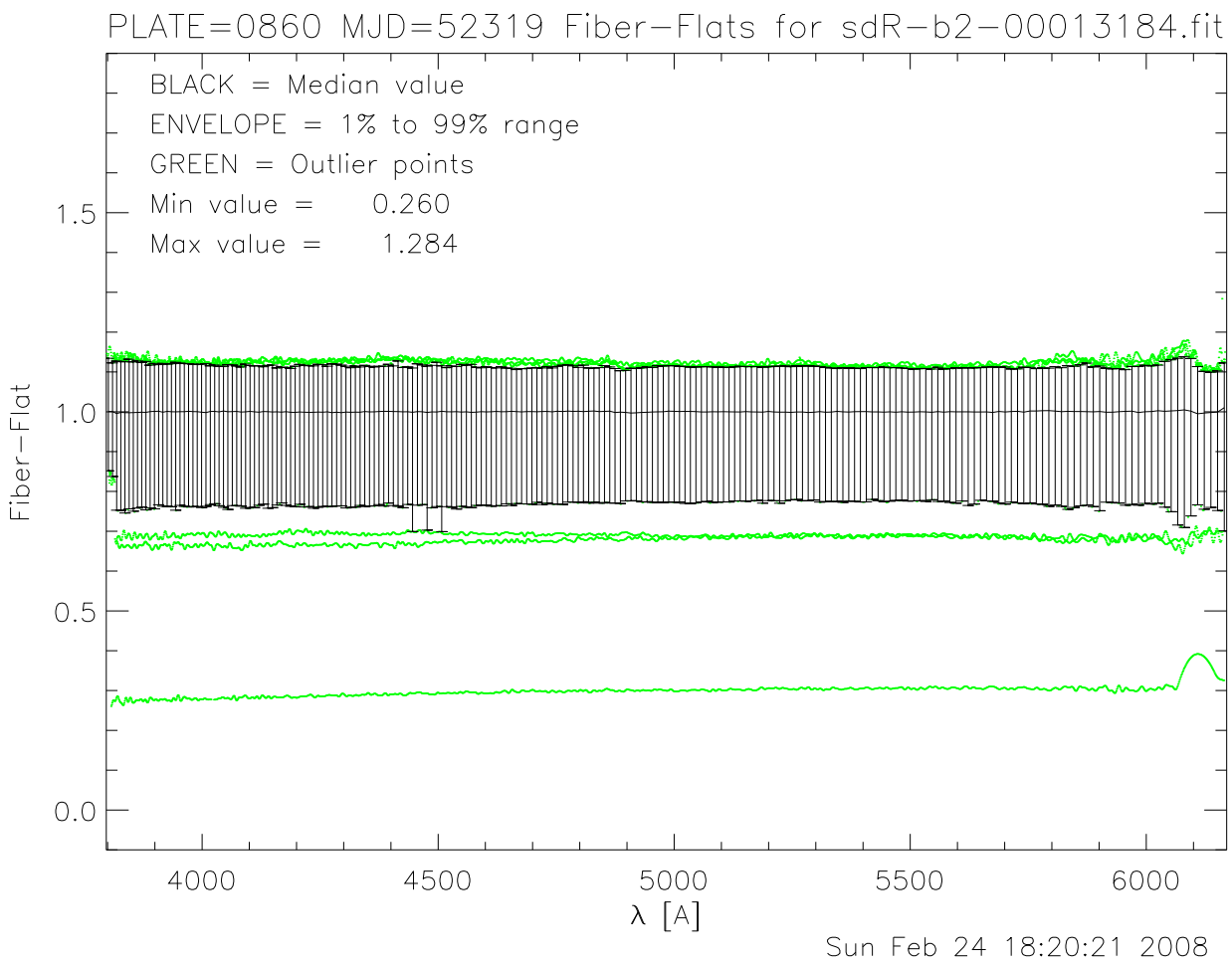

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

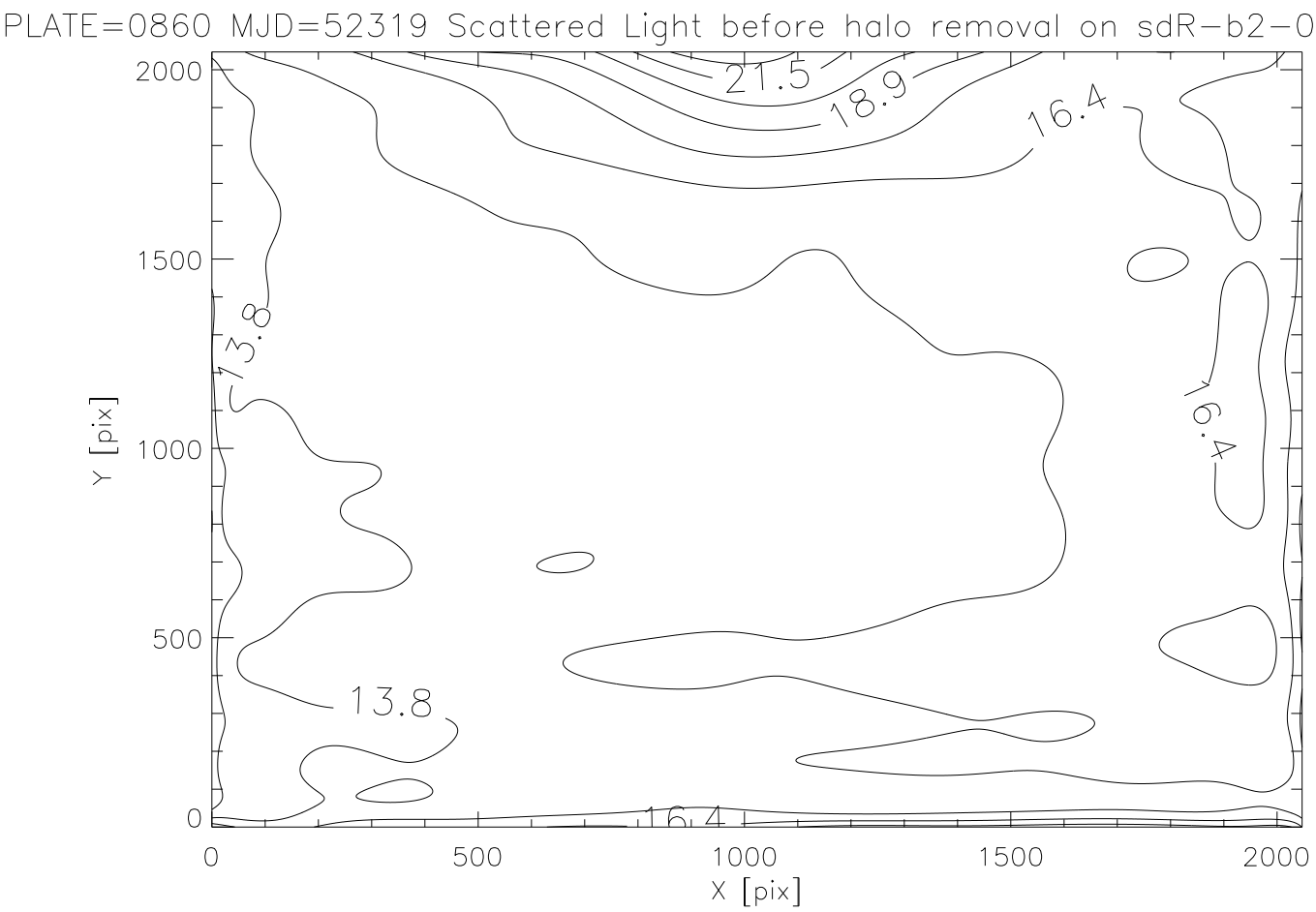

PLATE=0860 MJD=52319 sdR-b2-00013178.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

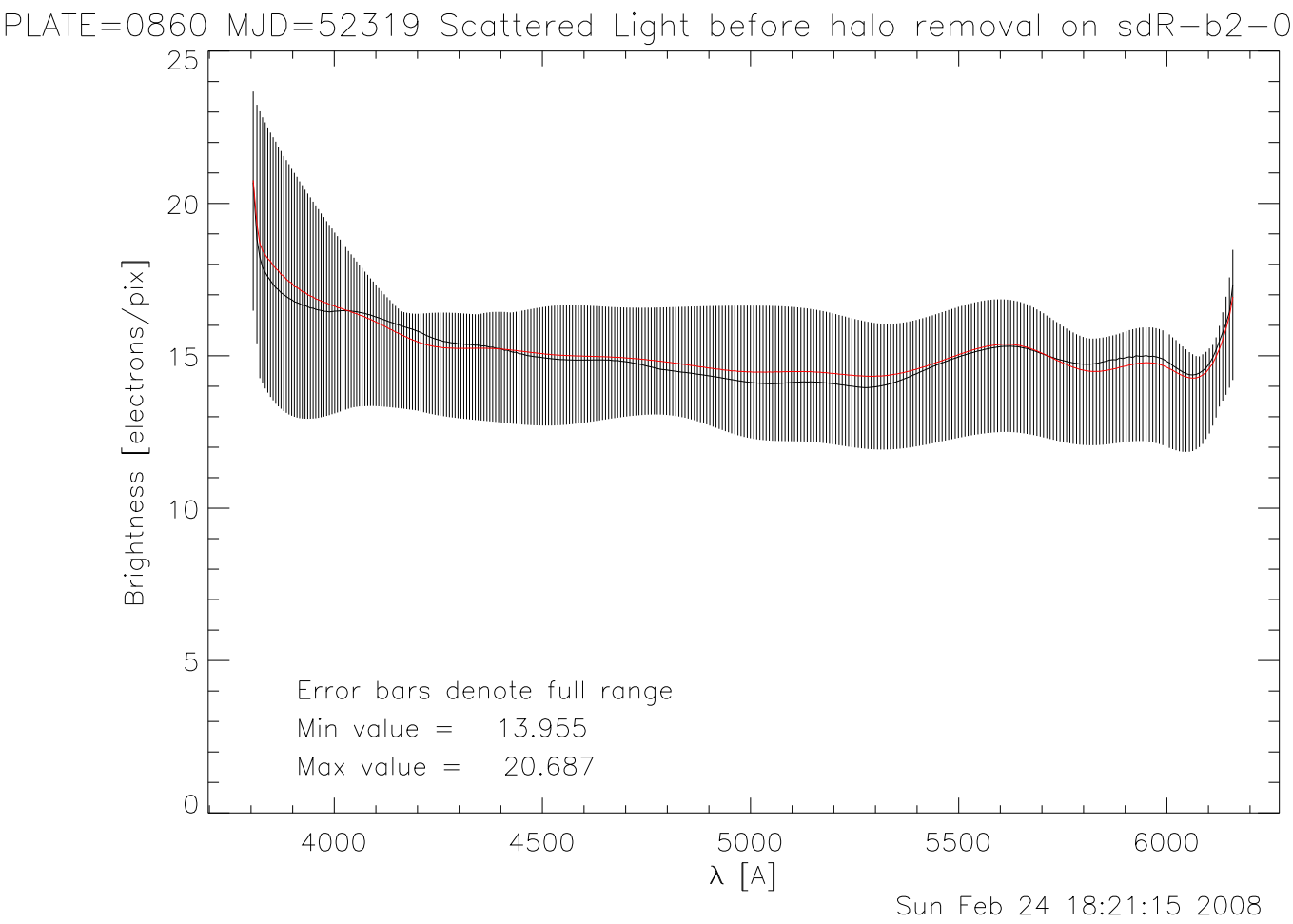

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013178.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

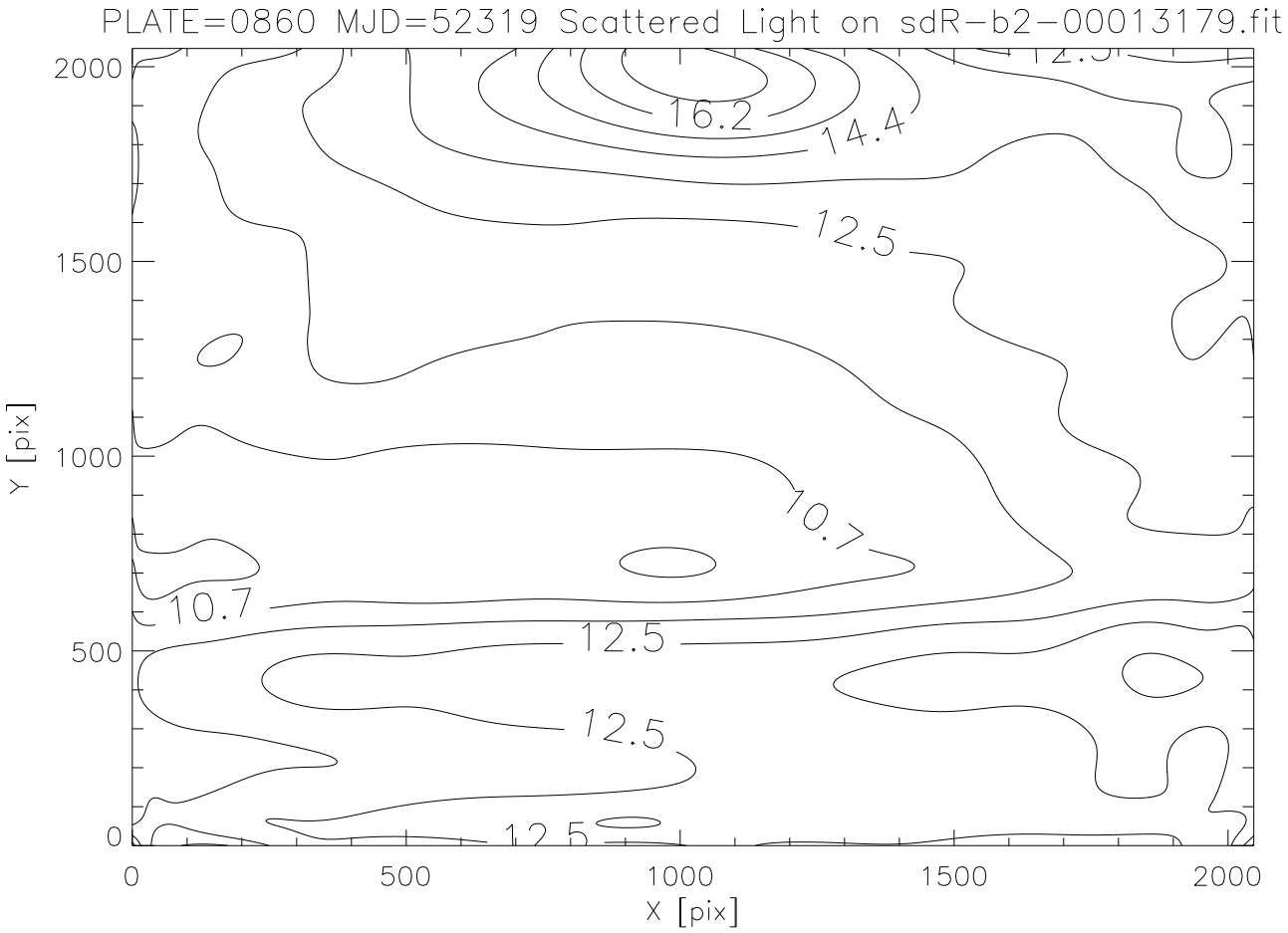

PLATE=0860 MJD=52319 sdR-b2-00013178.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.57 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

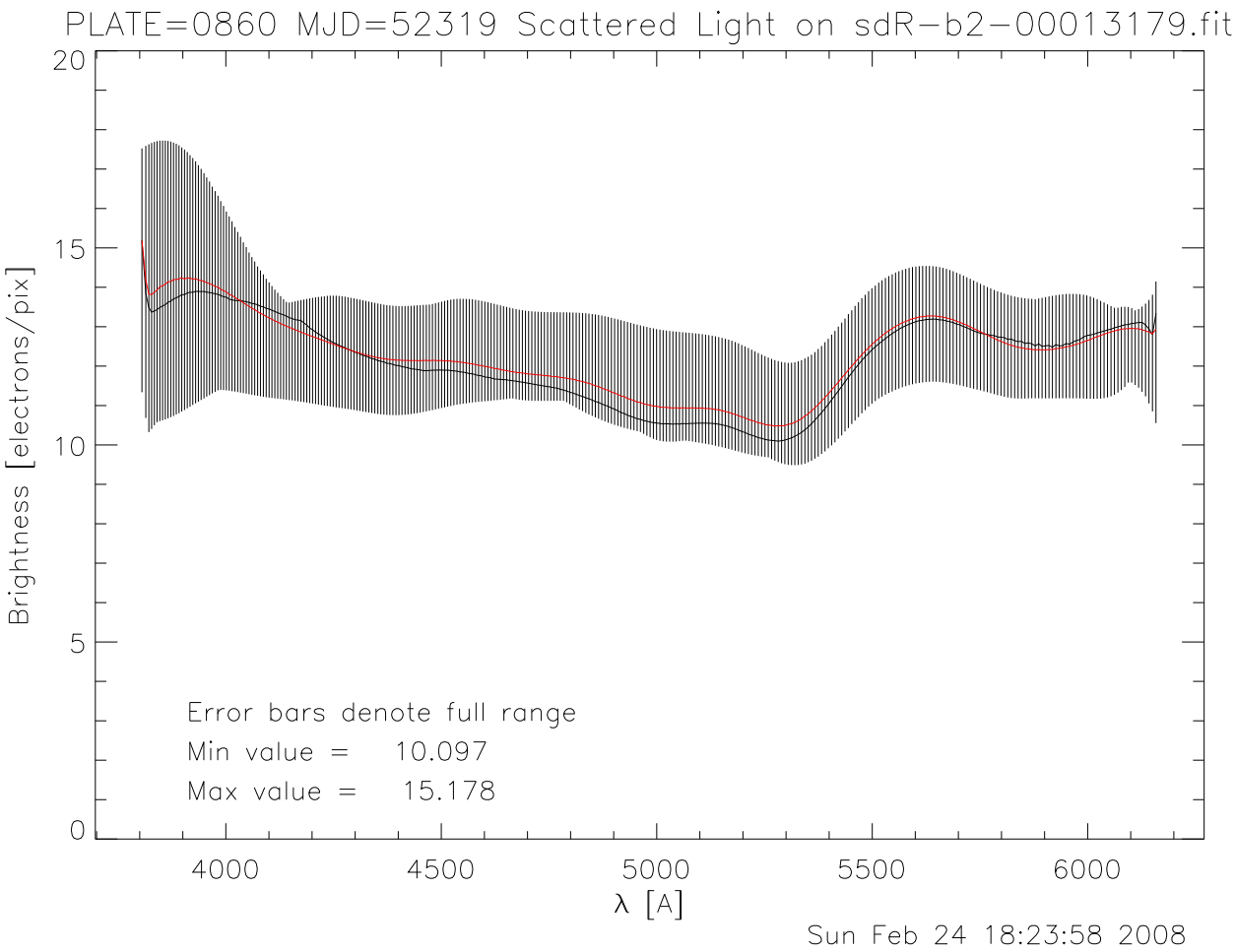

PLATE=0860 MJD=52319 sdR-b2-00013178.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.1×10^4
RED = sky fiber
Dispersion = 2.44 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.34
1.35
1.36
1.37
1.38
1.39
1.40
Airmass

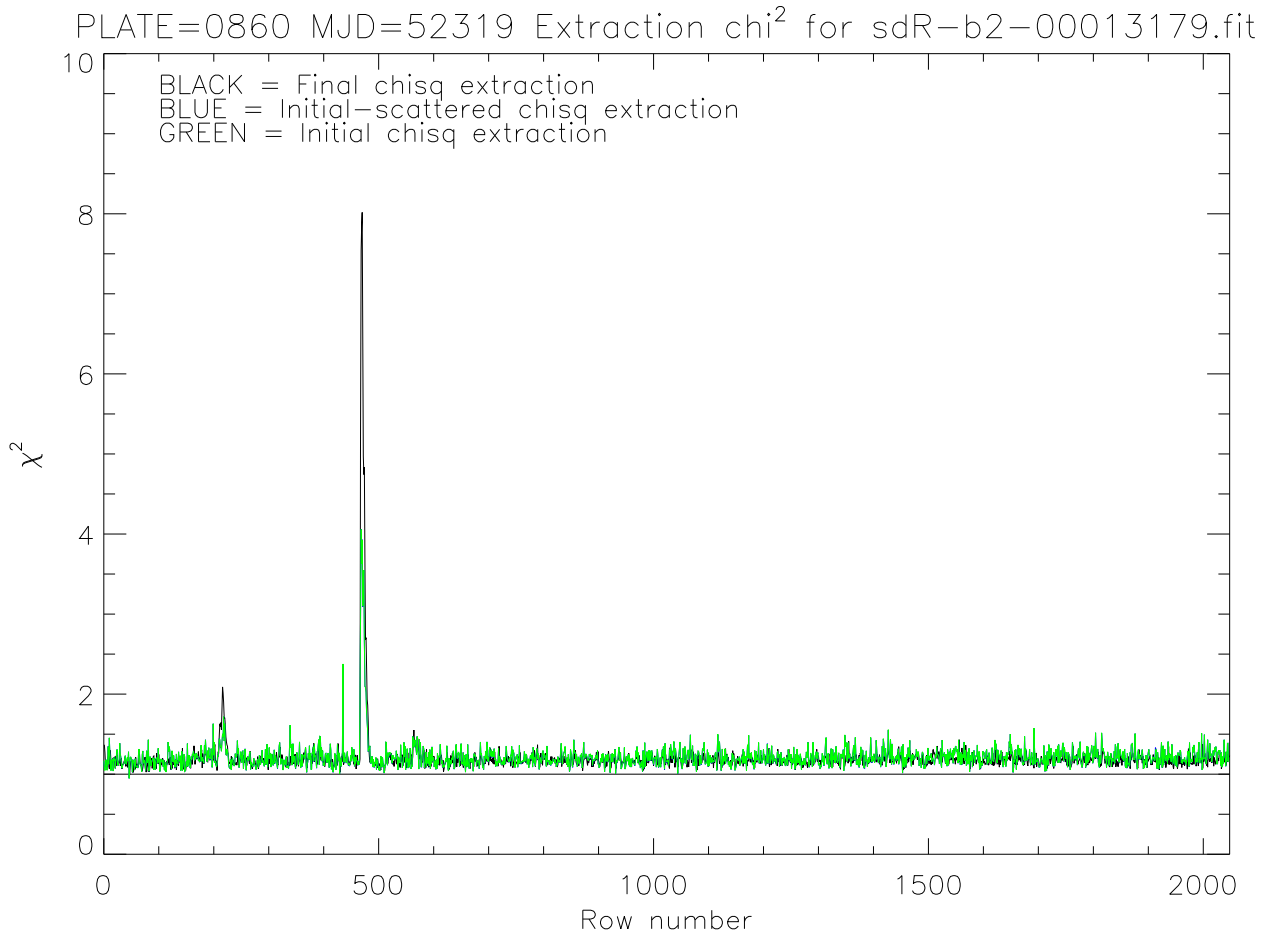

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:20:21 2008

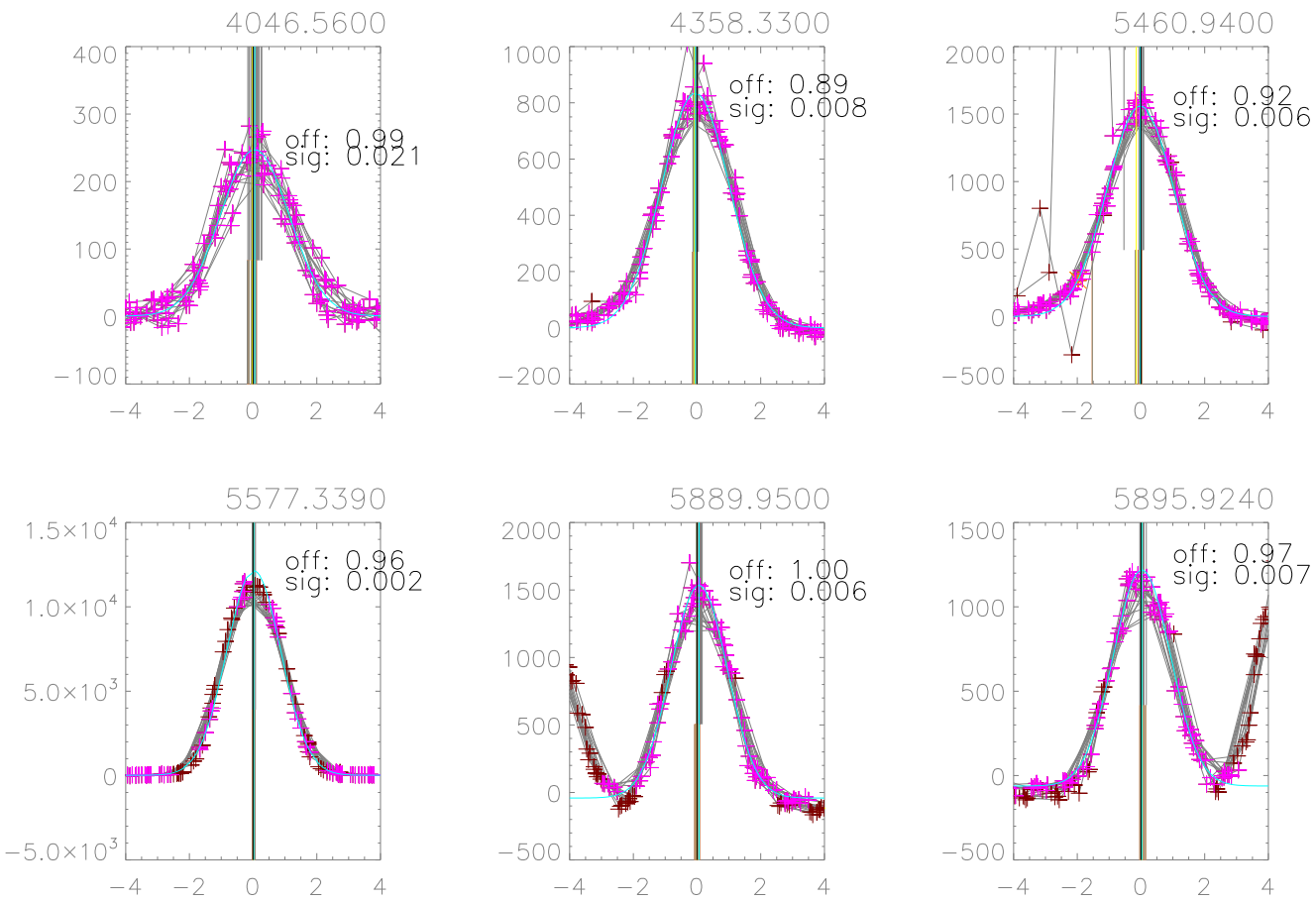

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013179.f
21.5
18.9
16.4
13.8
13.8
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

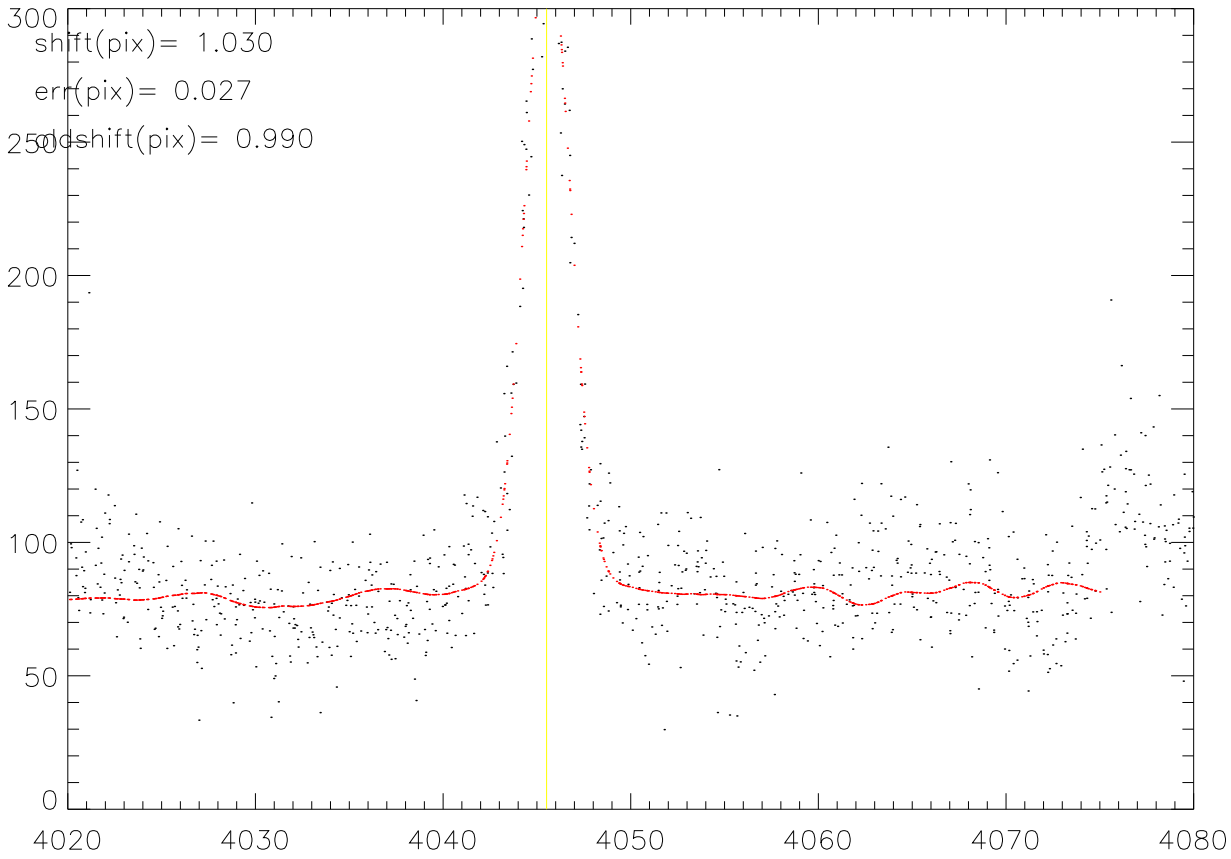

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013179.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 13.955
Max value = 20.687
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:21:15 2008

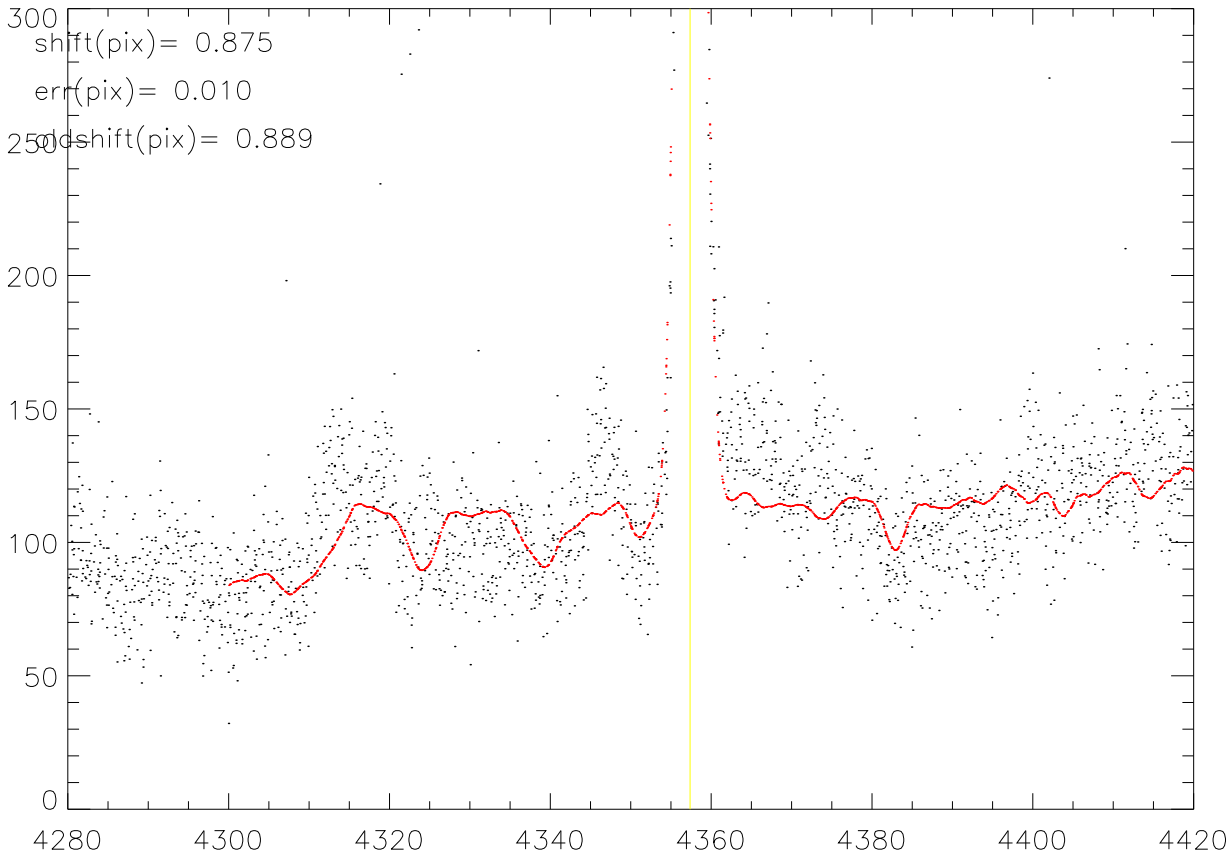

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013179.fit
16.2
14.4
12.5
10.7
10.7
12.5
12.5
12.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

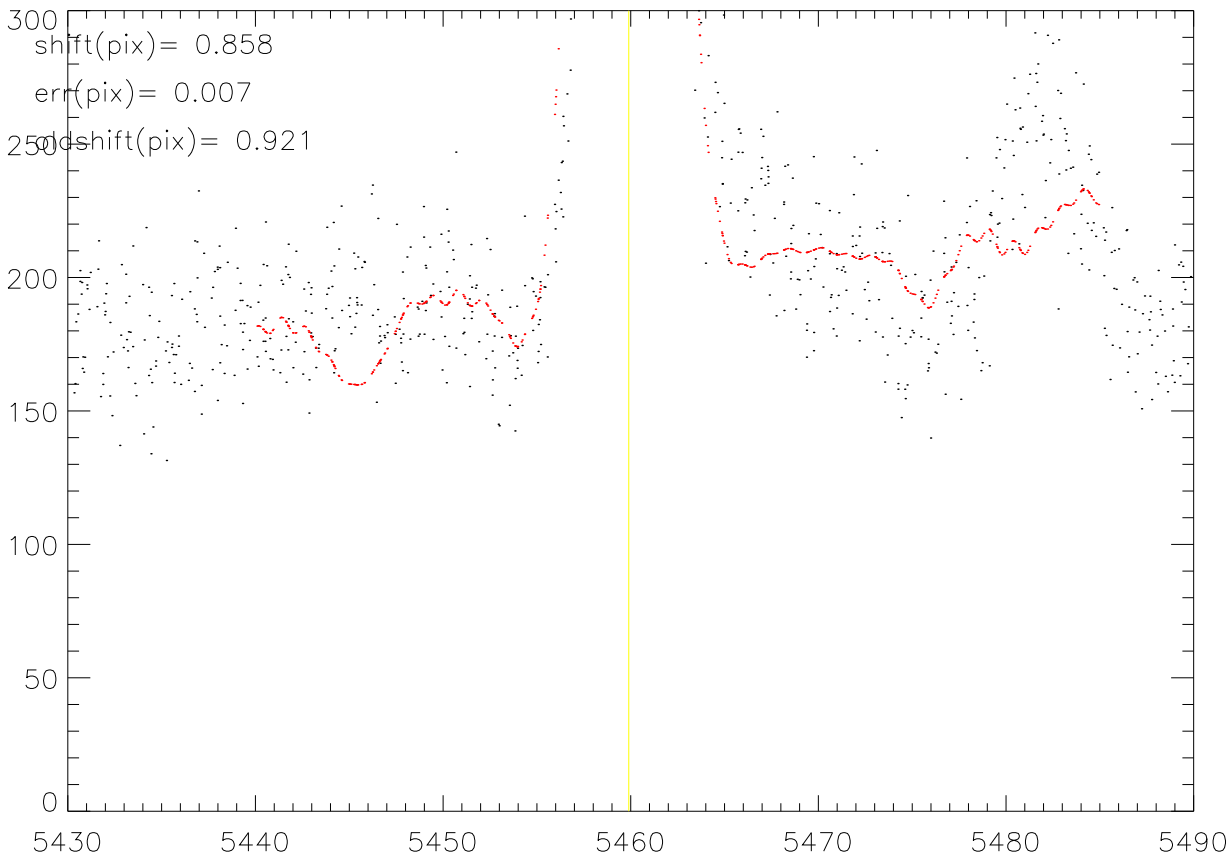

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013179.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.097
Max value = 15.178
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:23:58 2008

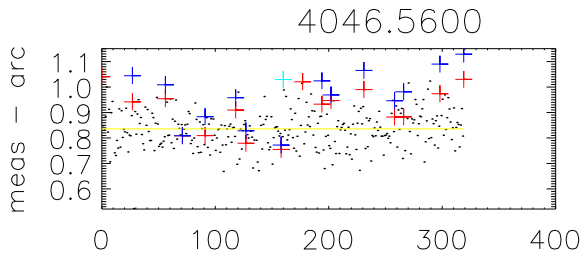

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013179.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

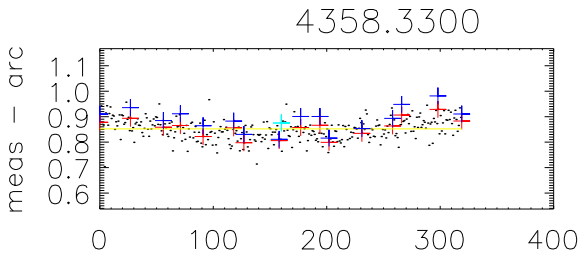

4046.5600
off: 0.99
sig: 0.021
4358.3300
off: 0.89
sig: 0.008
5460.9400
off: 0.92
sig: 0.006
5577.3390
off: 0.96
sig: 0.002
5889.9500
off: 1.00
sig: 0.006
5895.9240
off: 0.97
sig: 0.007

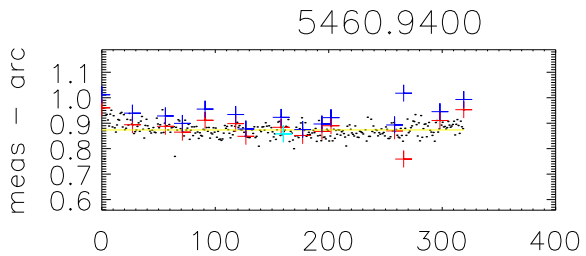

shift(pix)= 1.030
err(pix)= 0.027
oldshift(pix)= 0.990
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

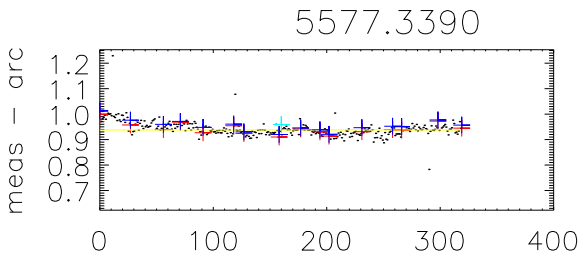

shift(pix)= 0.875
err(pix)= 0.010
oldshift(pix)= 0.889
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

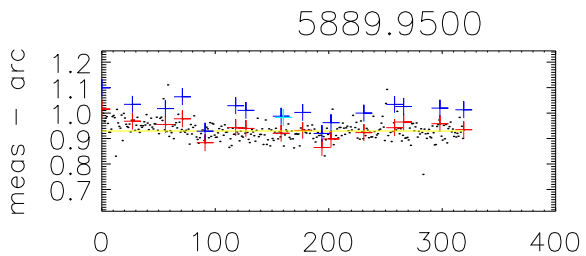

shift(pix)= 0.858
err(pix)= 0.007
oldshift(pix)= 0.921
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

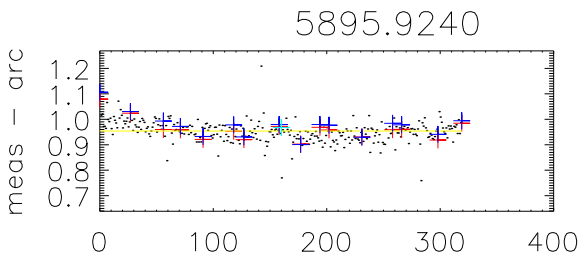

4046.5600
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

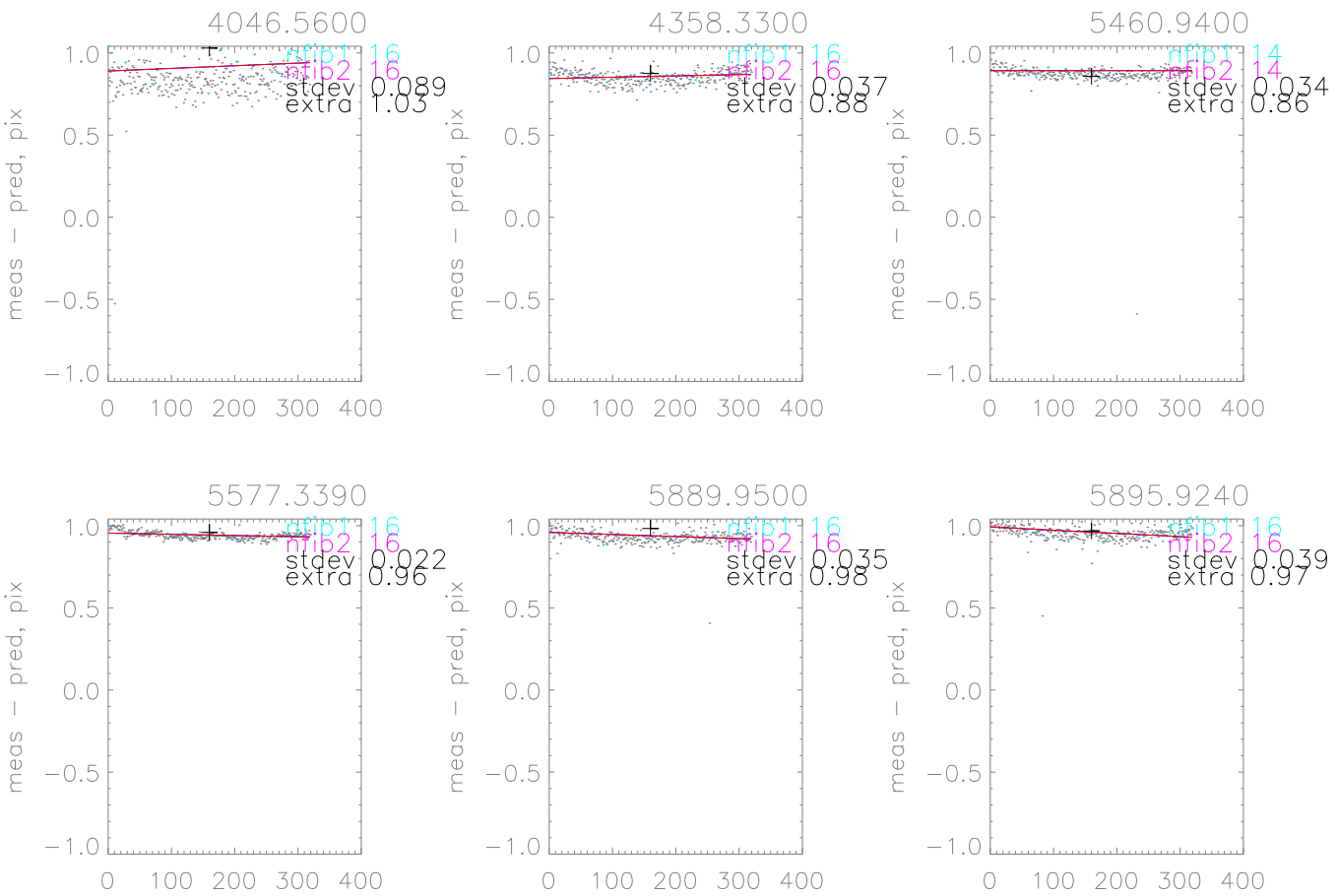

4358.3300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

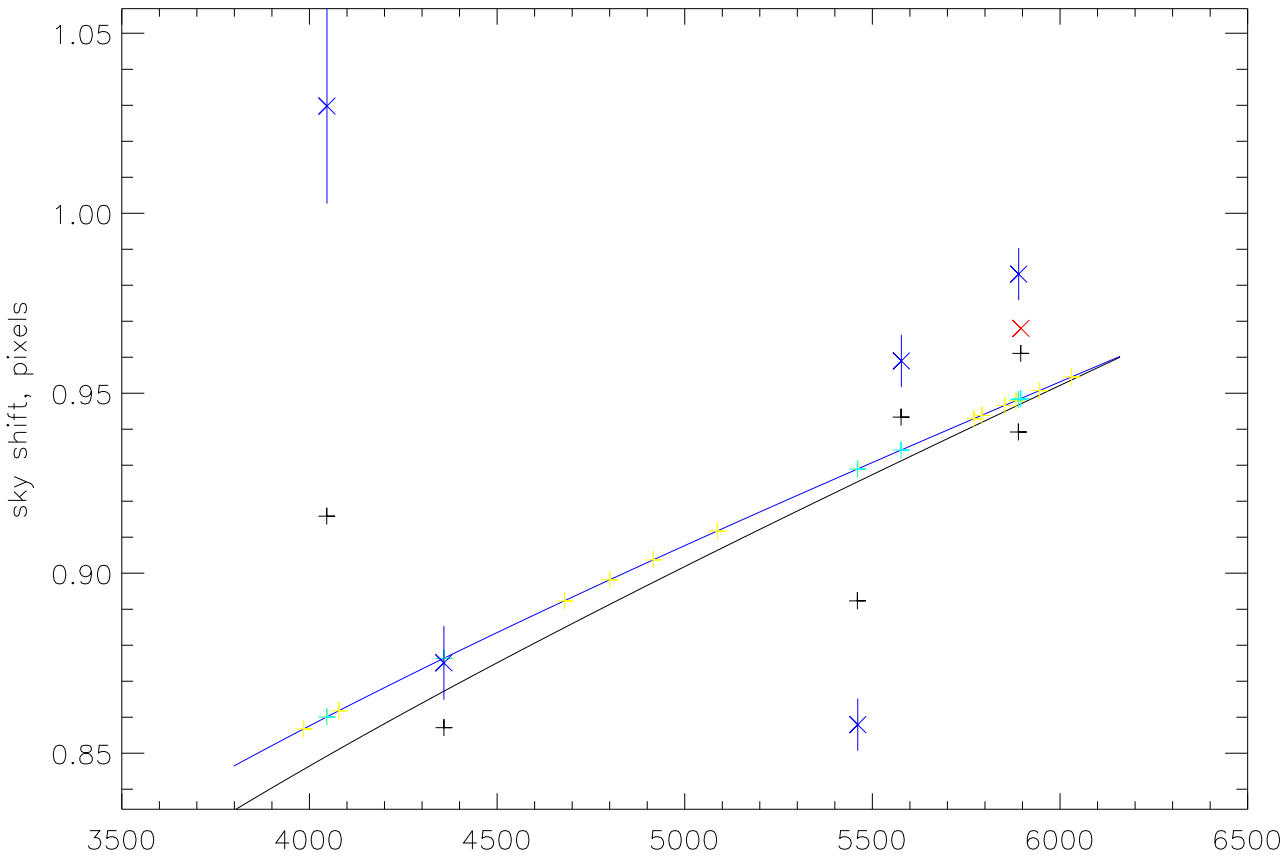

5460.9400
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

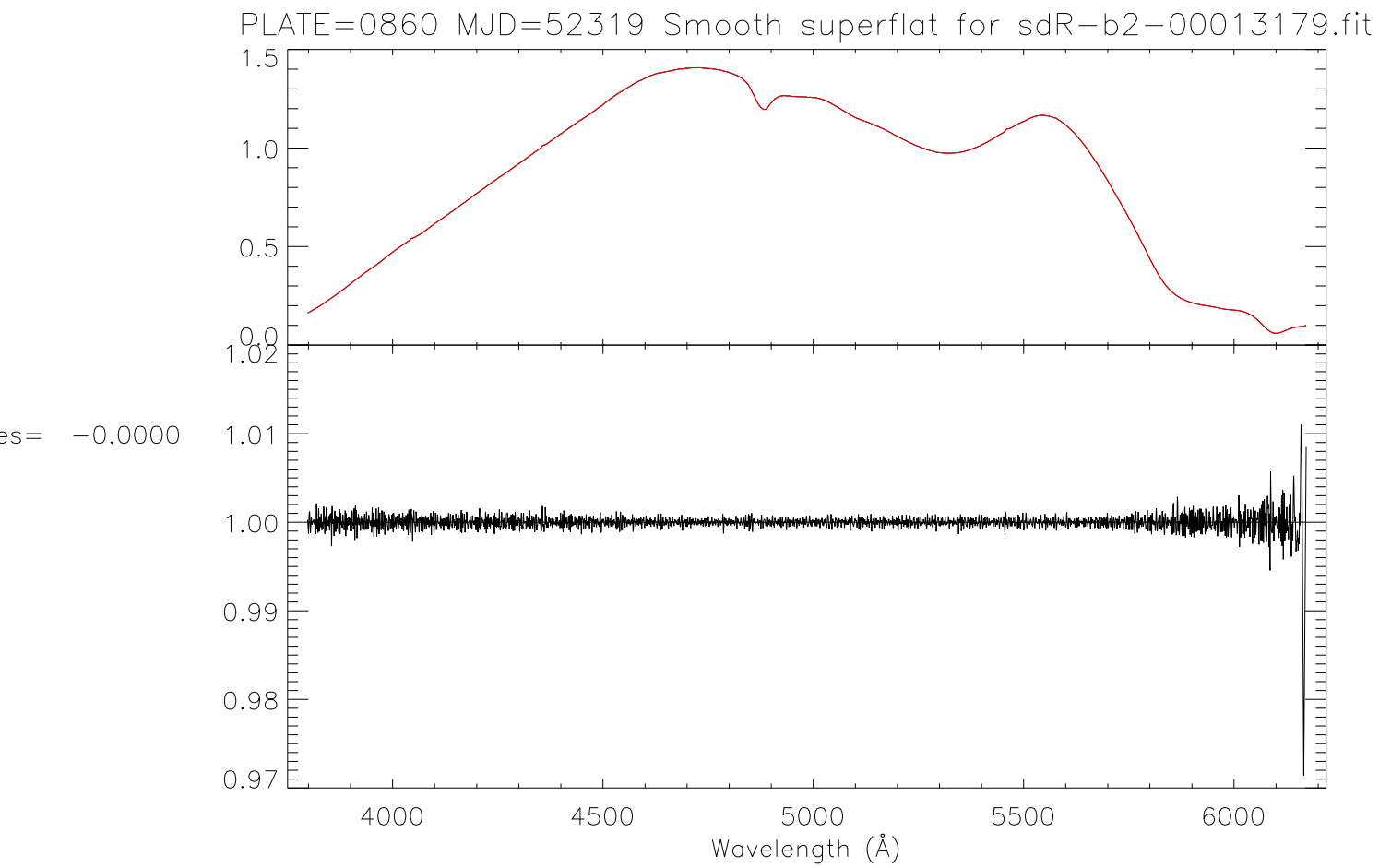

5577.3390
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400


5889.9500
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

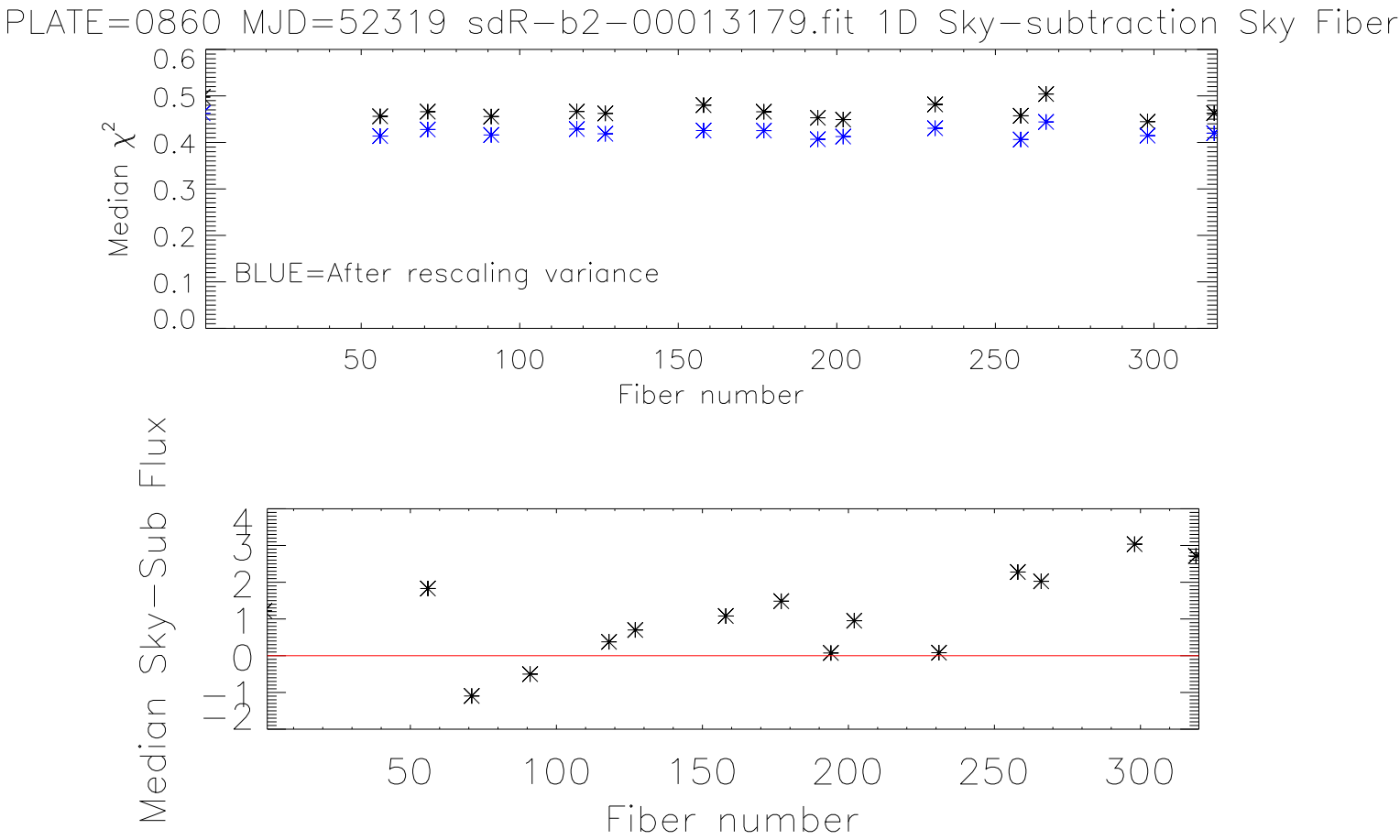

5895.9240
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

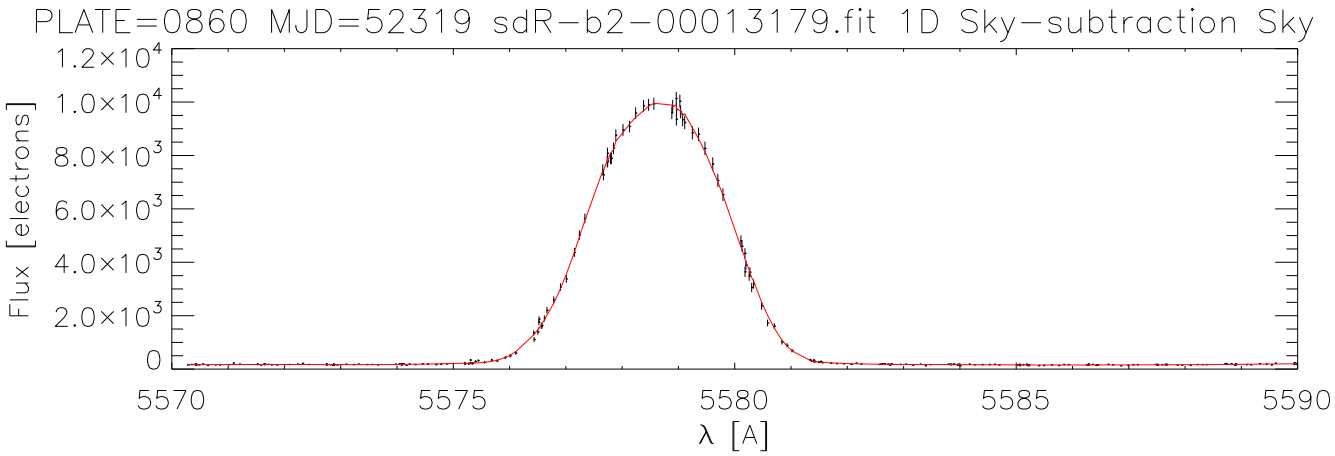

4046.5600
nfib1 16
nfib2 16
stdev 0.089
extra 1.03
4358.3300
nfib1 16
nfib2 16
stdev 0.037
extra 0.88
5460.9400
nfib1 14
nfib2 14
stdev 0.034
extra 0.86
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra 0.96
5889.9500
nfib1 16
nfib2 16
stdev 0.035
extra 0.98
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.97
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

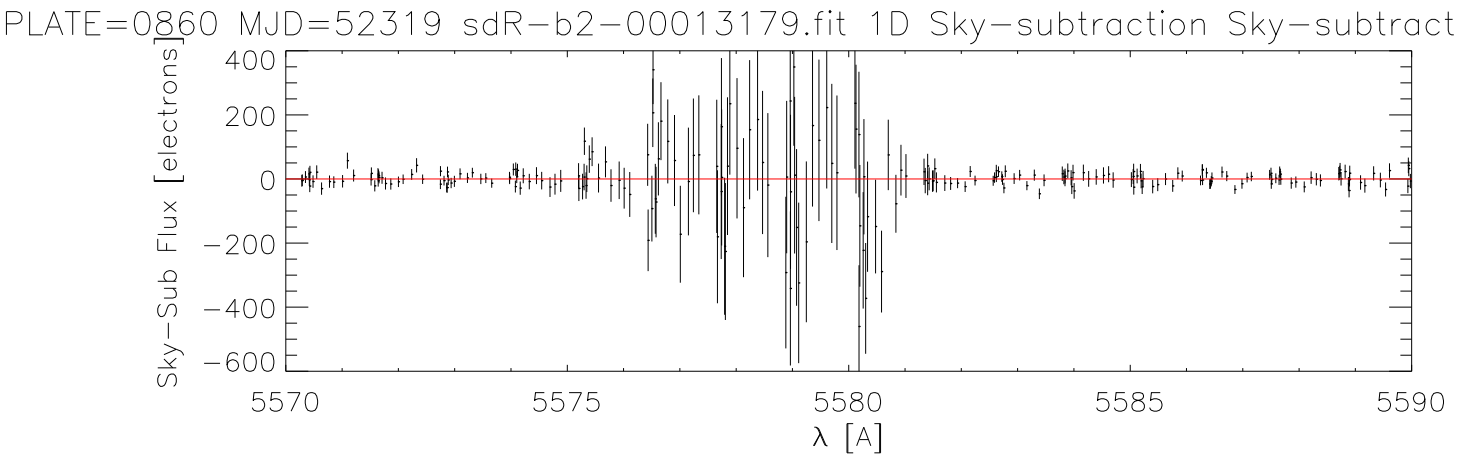

sky shift, pixels
1.05
1.00
0.95
0.90
0.85
3500
4000
4500
5000
5500
6000
6500

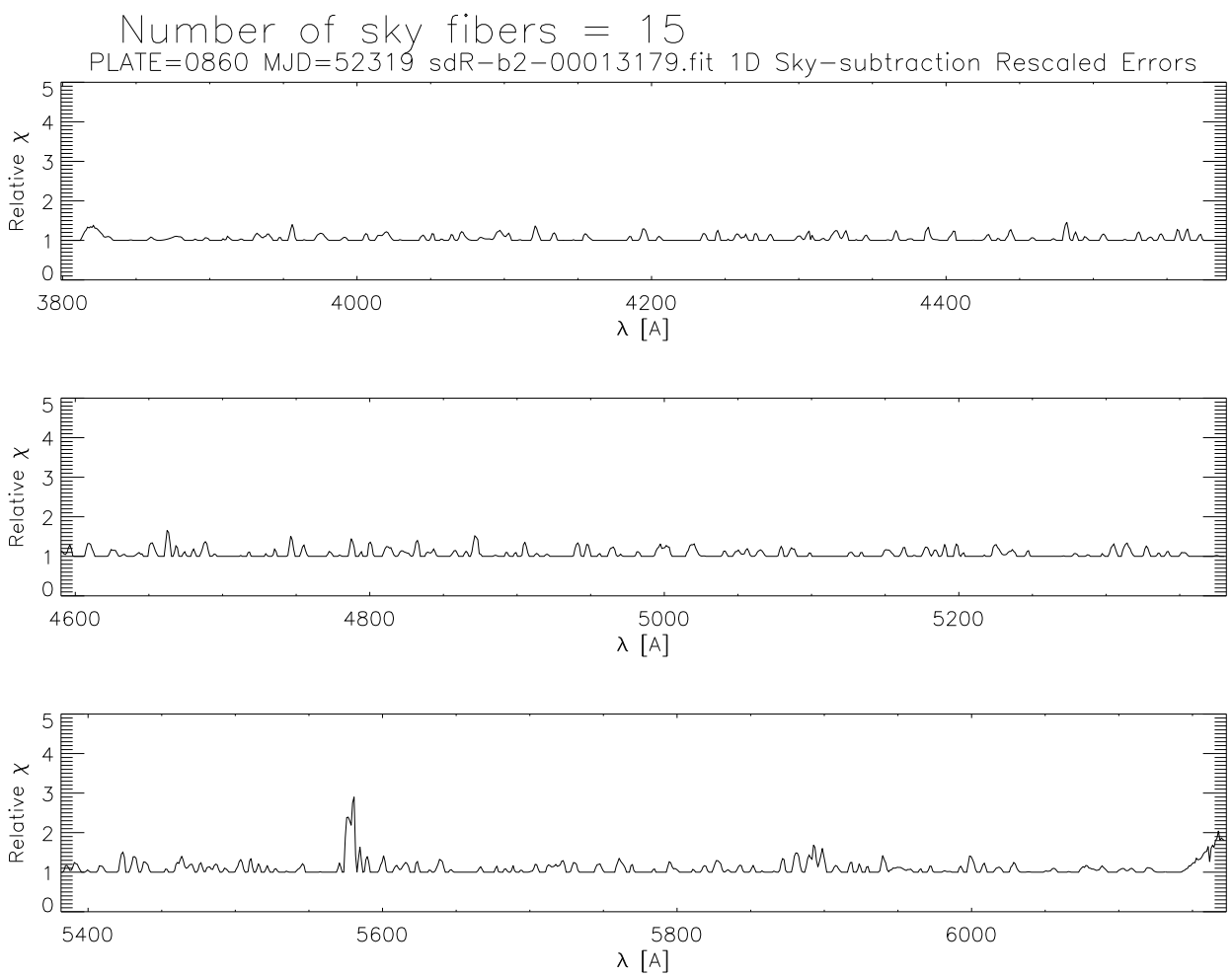

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013179.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

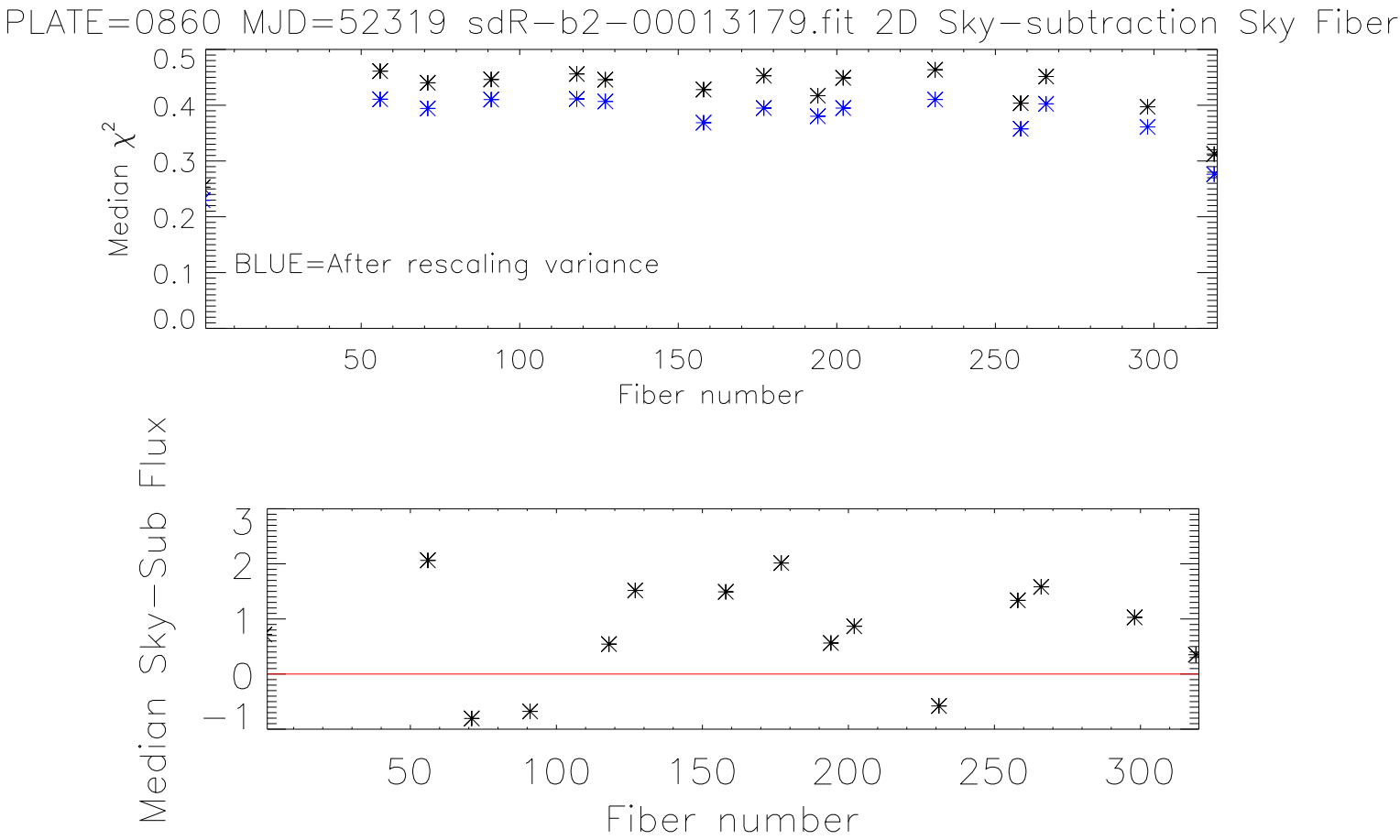
es= −0.0000

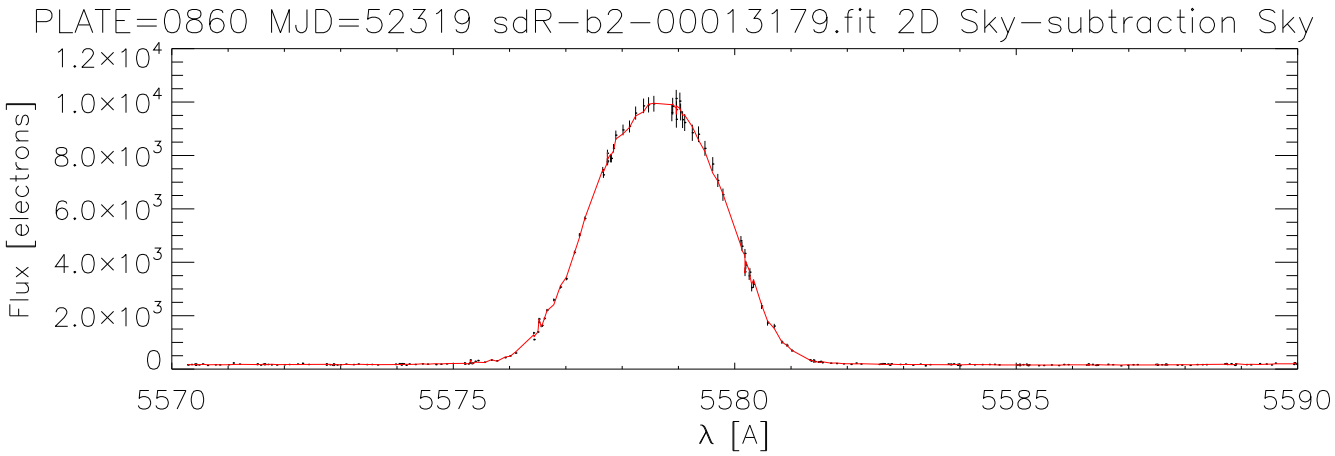

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

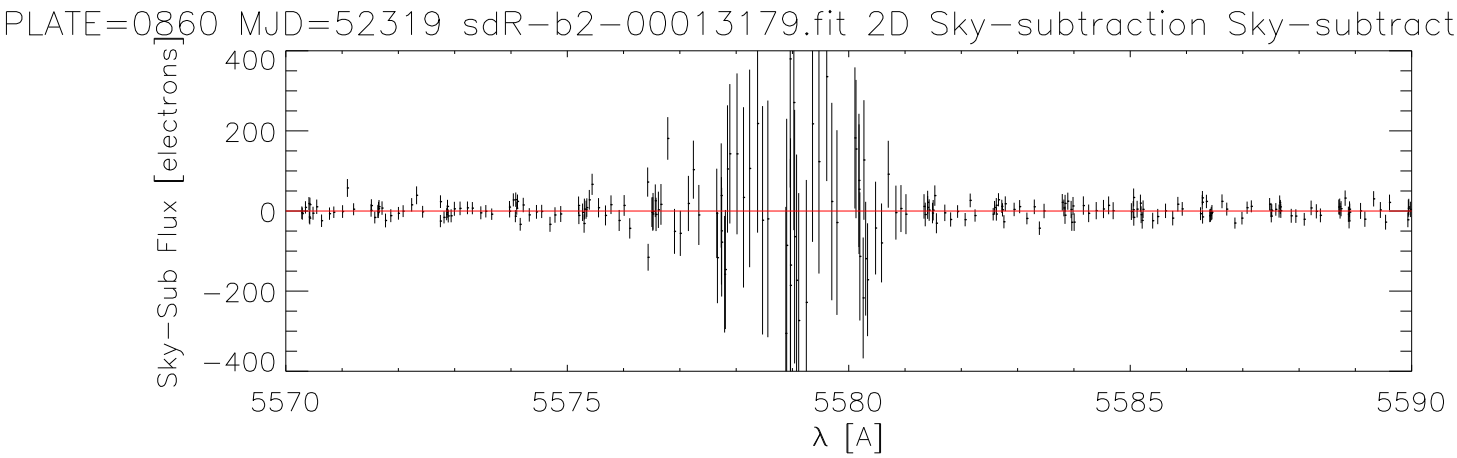

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

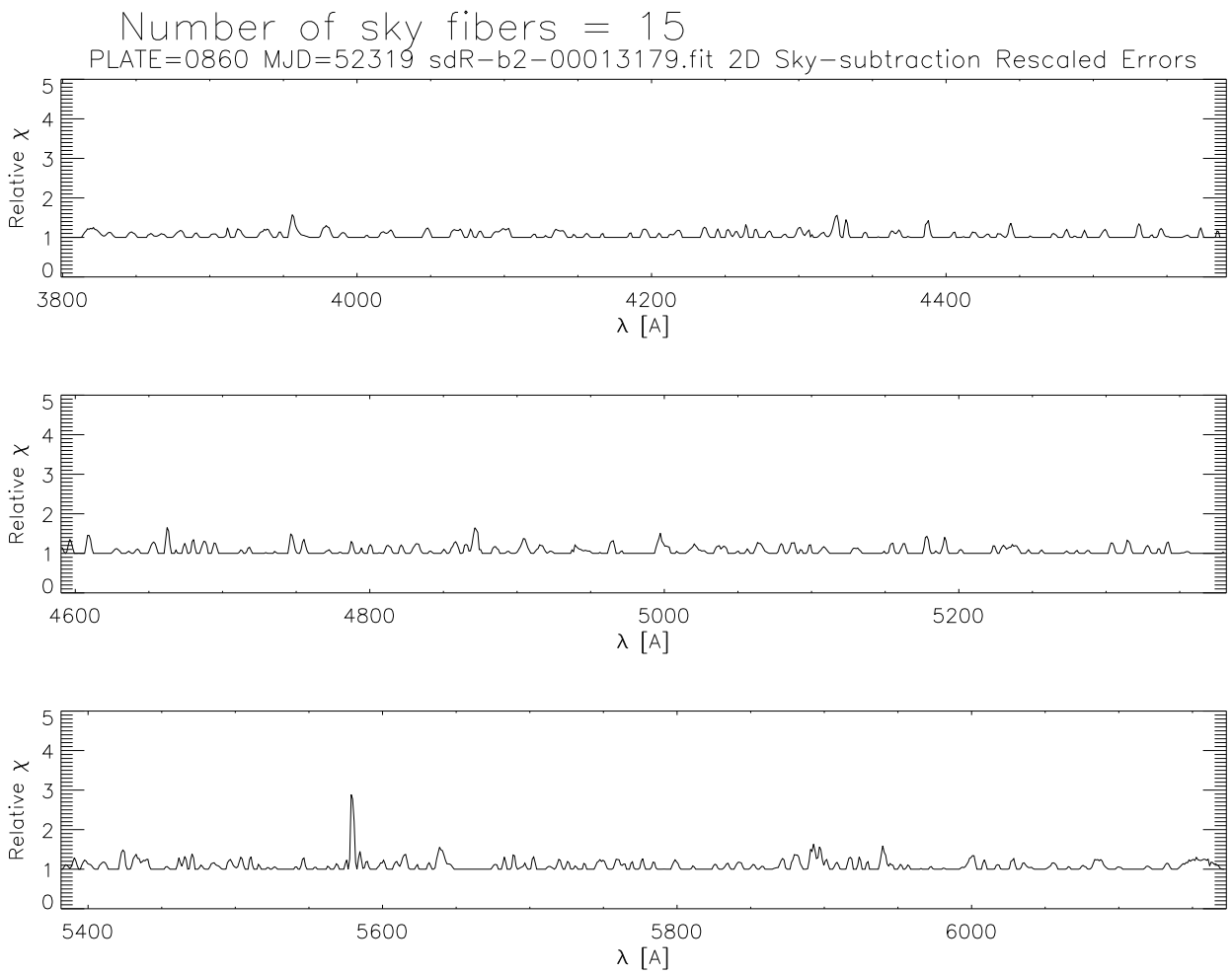

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

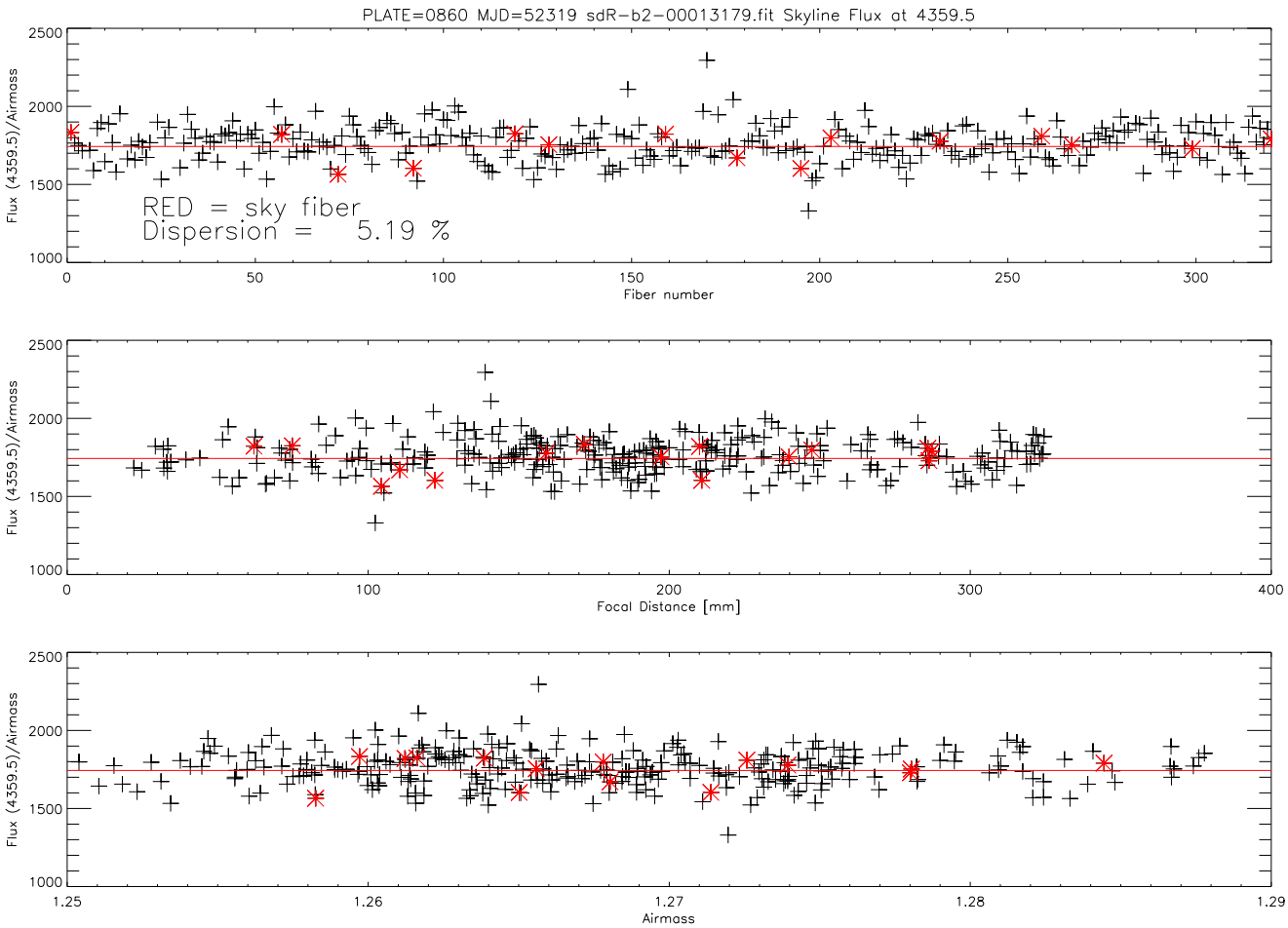

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013179.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

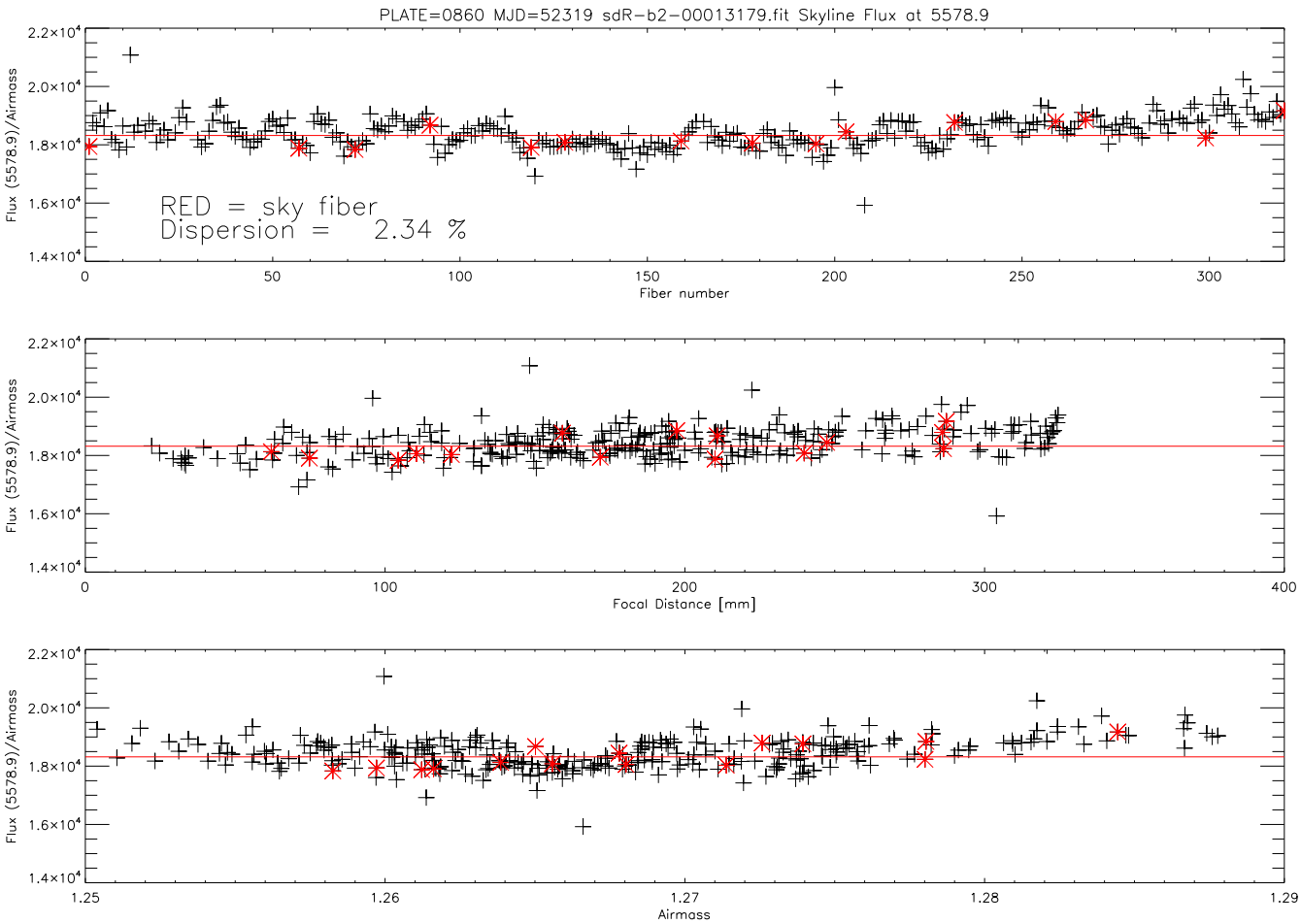

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

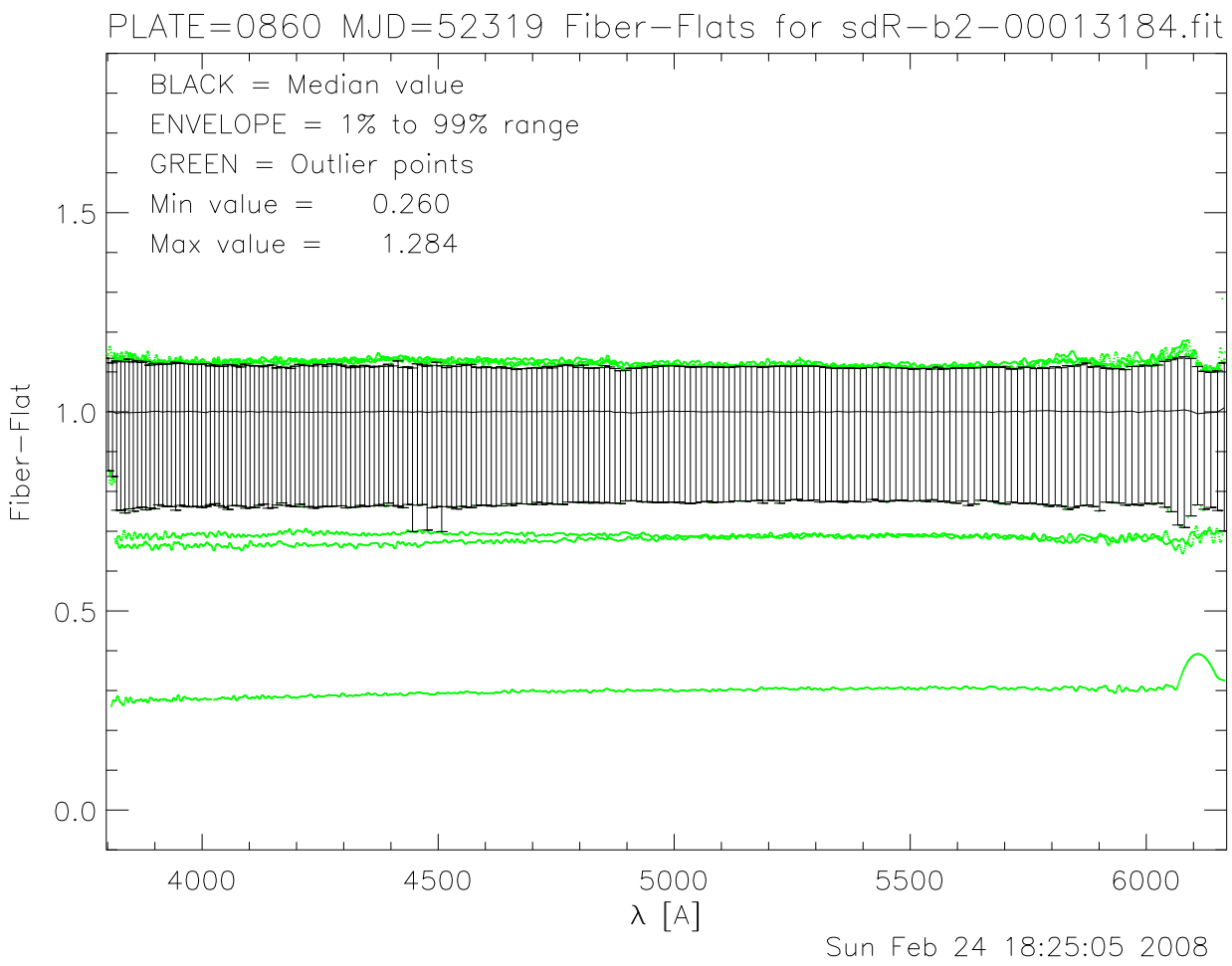

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

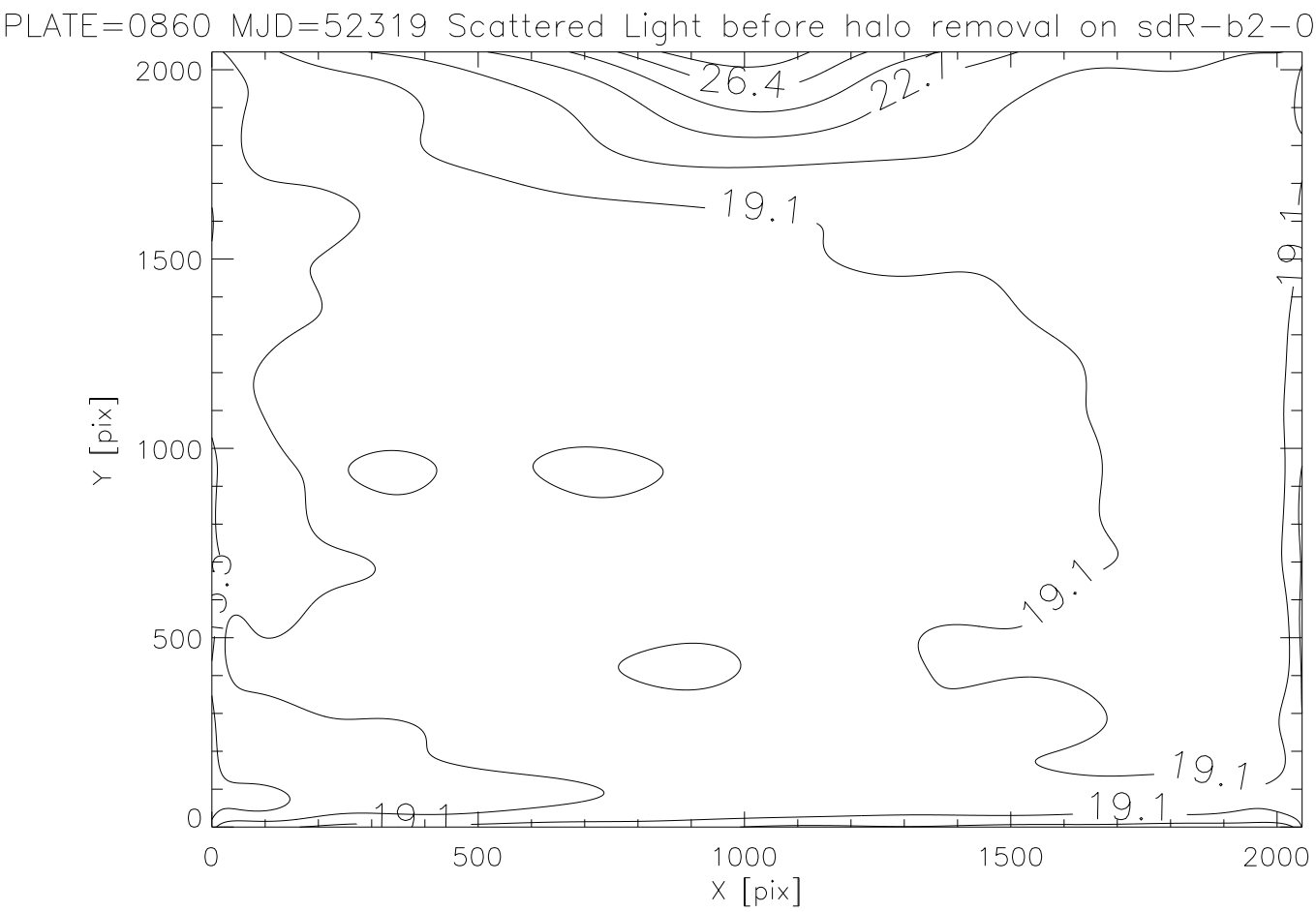

PLATE=0860 MJD=52319 sdR-b2-00013179.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

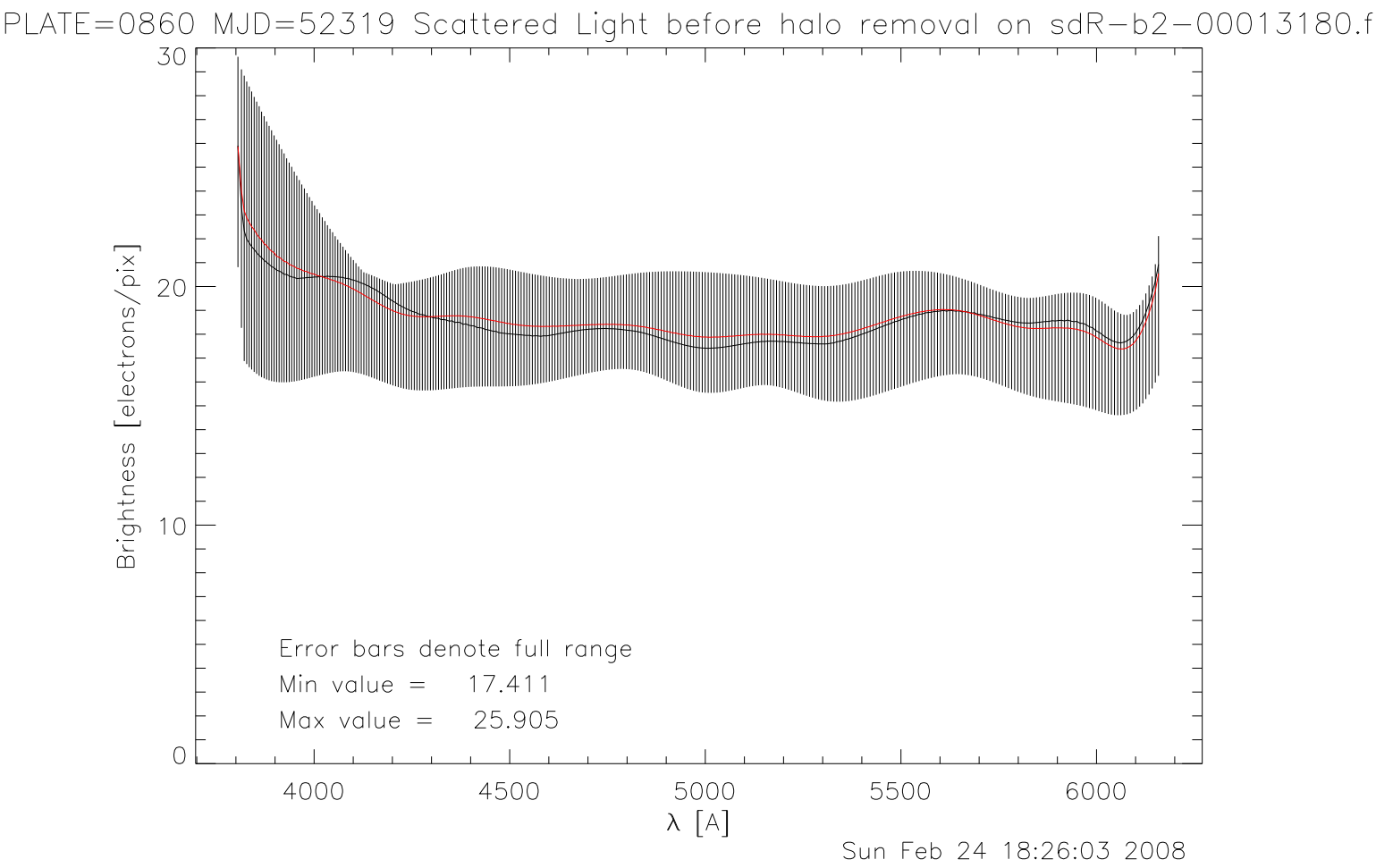

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013179.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

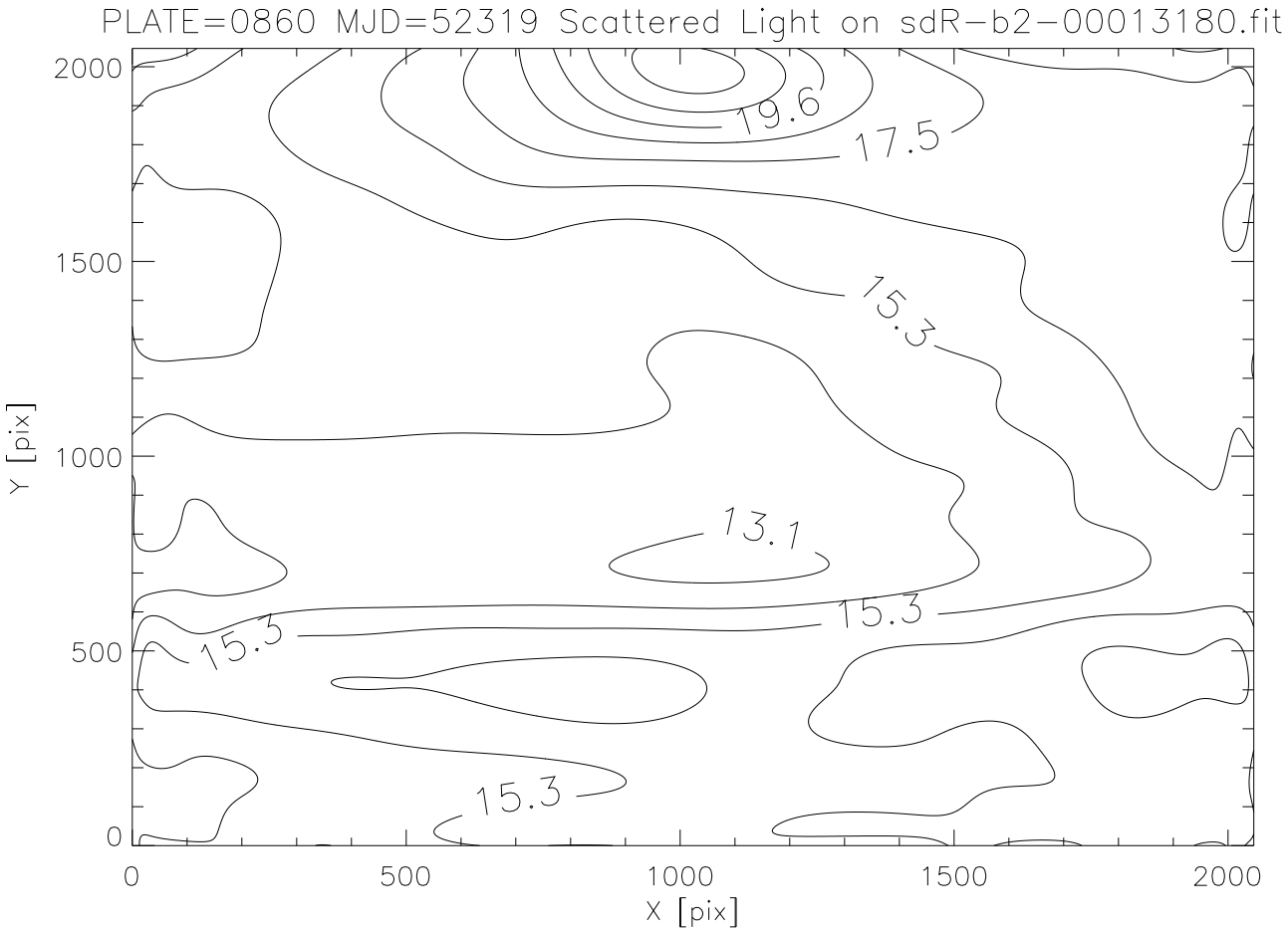

PLATE=0860 MJD=52319 sdR-b2-00013179.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.19 %
Fiber number
Focal Distance [mm]
Airmass

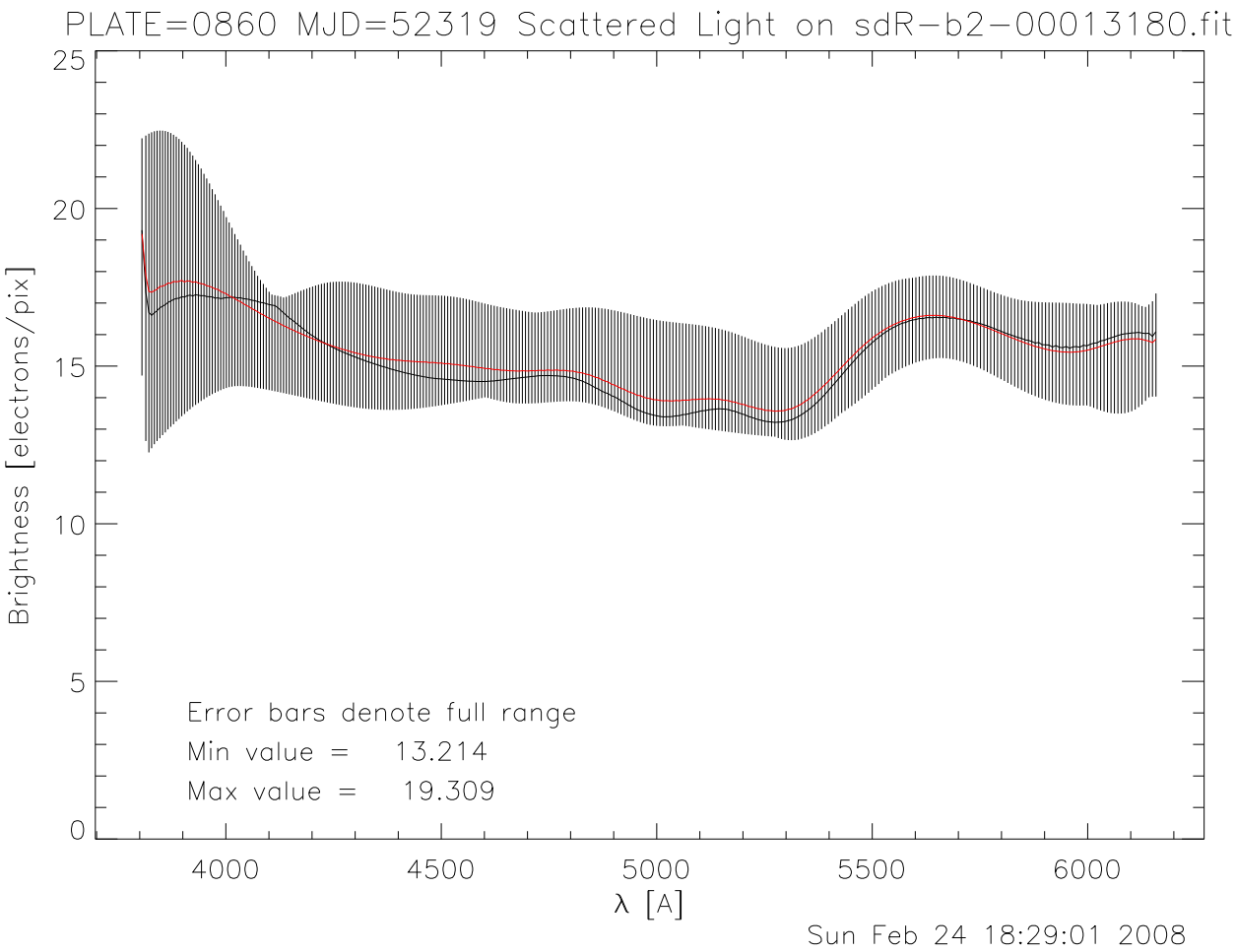

PLATE=0860 MJD=52319 sdR-b2-00013179.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.34 %
Fiber number
Focal Distance [mm]
Airmass

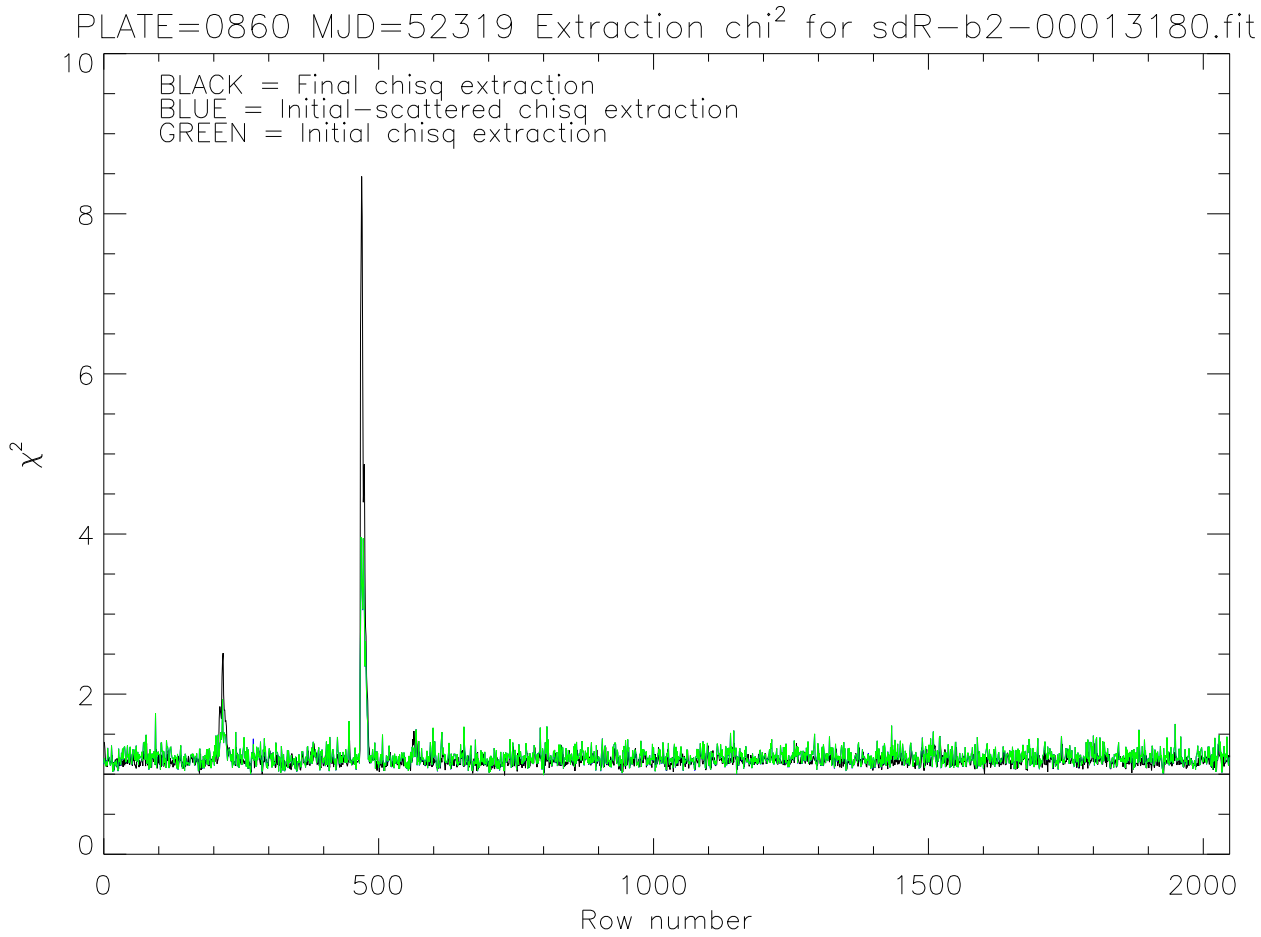

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:25:05 2008

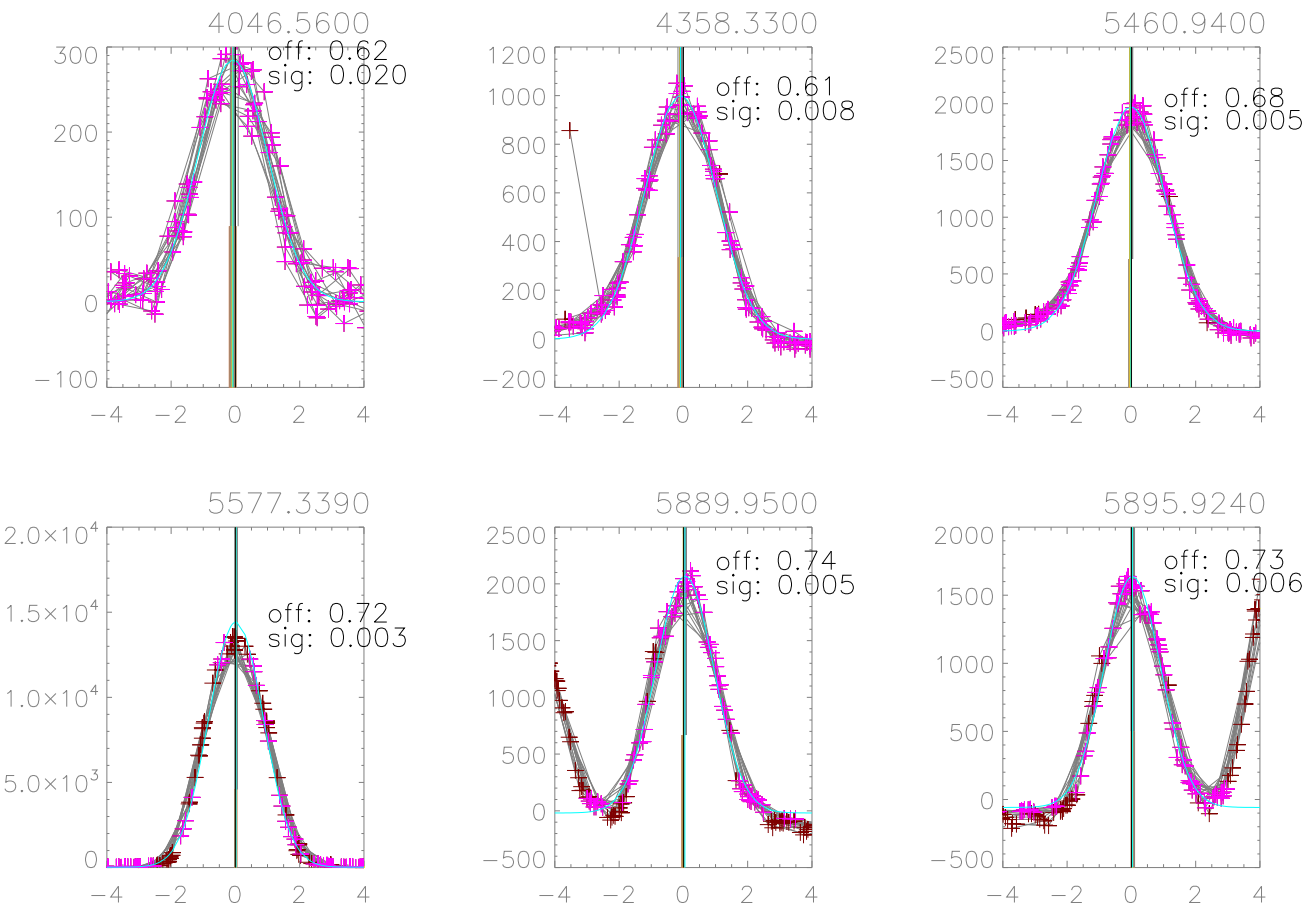

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013180.f
26.4
22.1
19.1
19.1
19.1
19.1
19.1
19.1
Y [pix]
X [pix]
0
500
1000
1500
2000

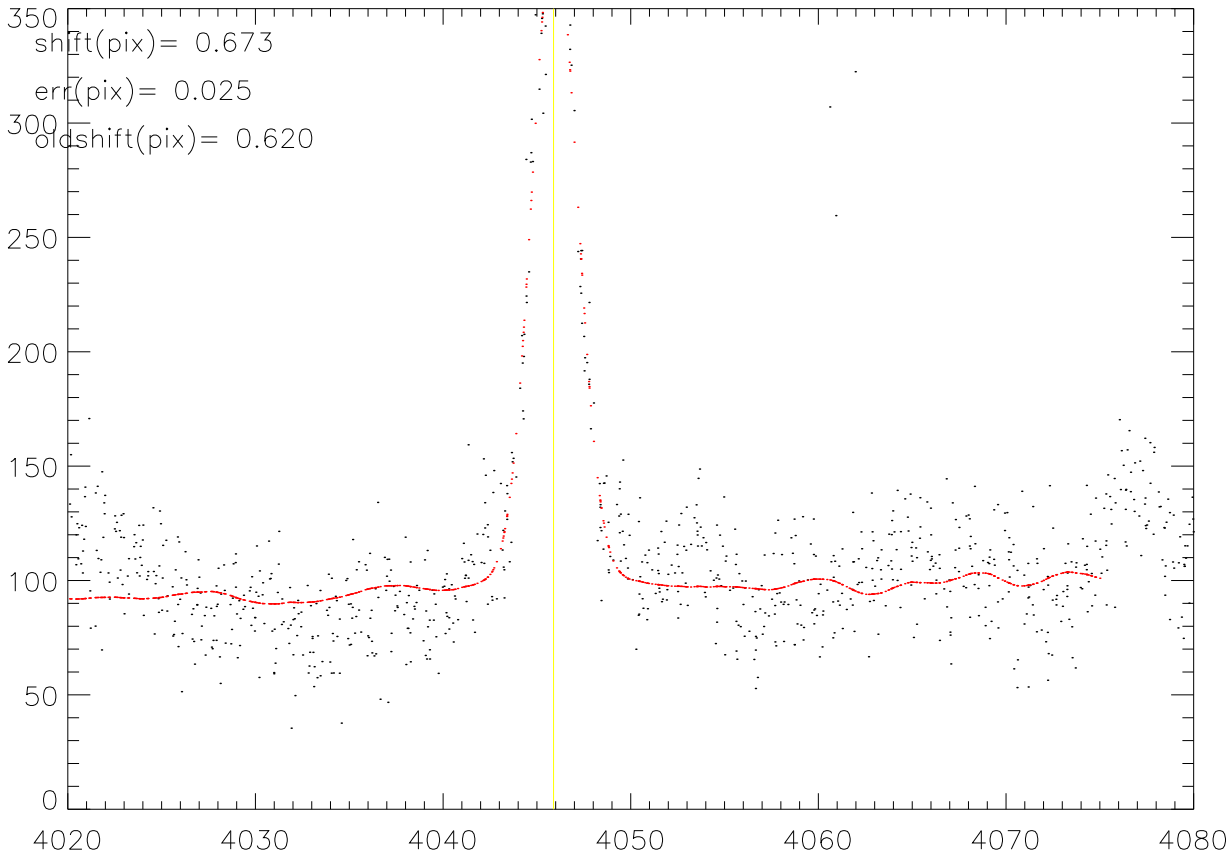

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013180.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 17.411
Max value = 25.905
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:26:03 2008

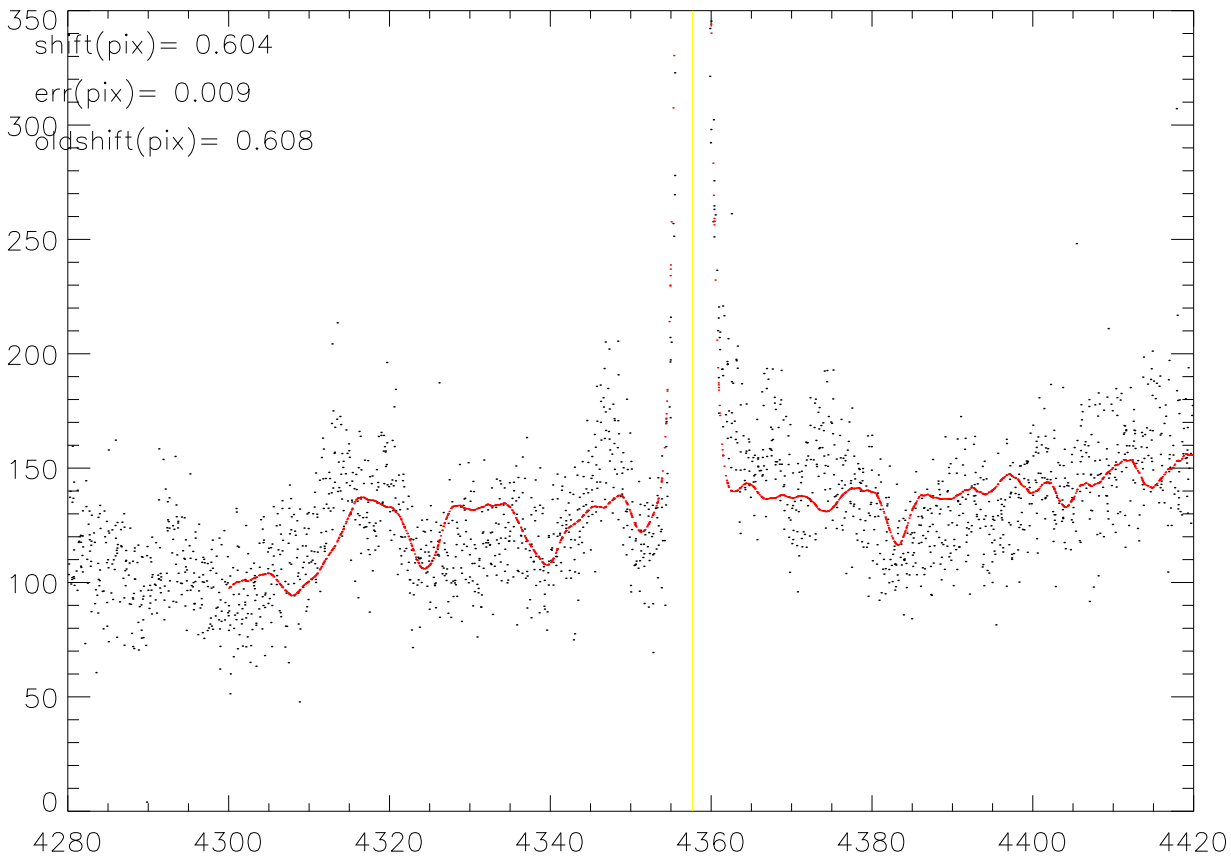

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013180.fit
19.6
17.5
15.3
13.1
15.3
15.3
15.3
Y [pix]
X [pix]
0
500
1000
1500
2000

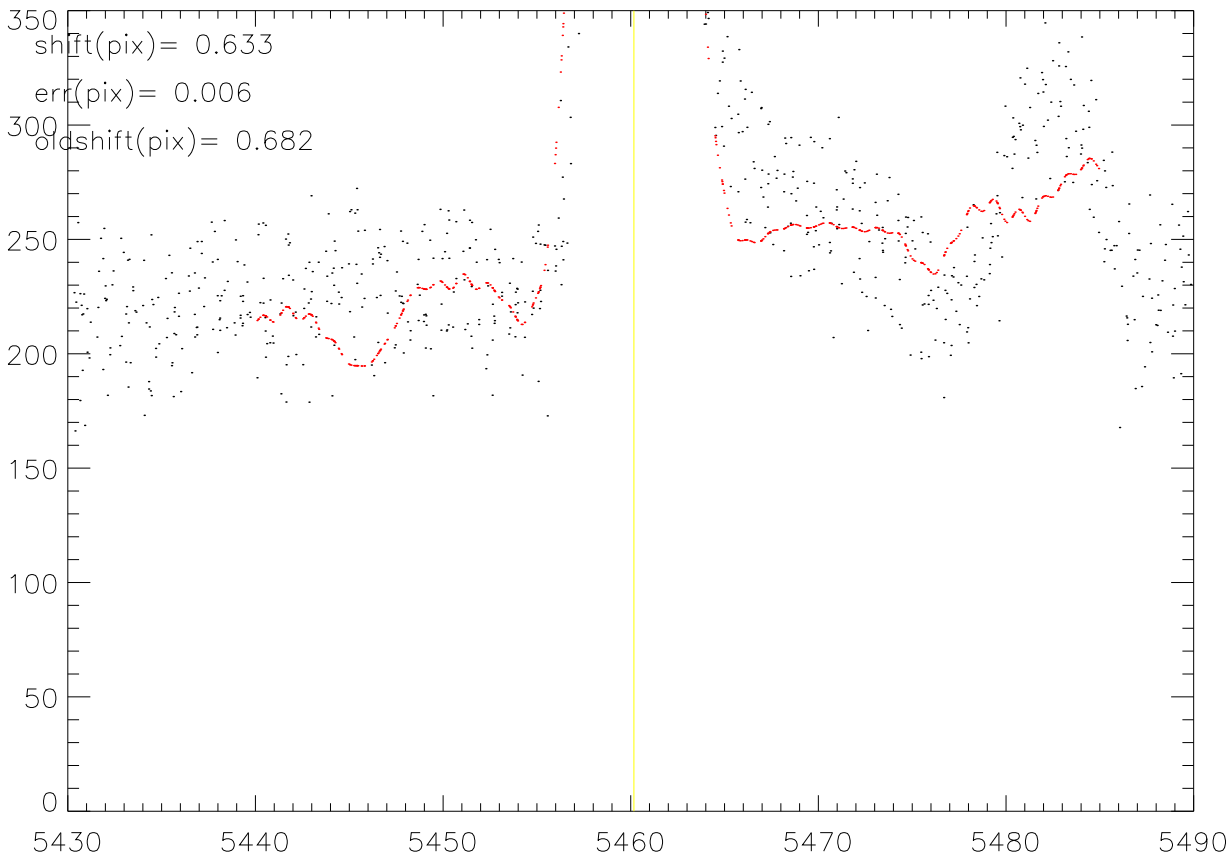

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013180.fit
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 13.214
Max value = 19.309
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:29:01 2008

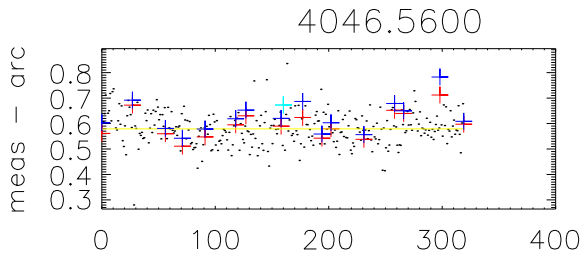

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013180.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

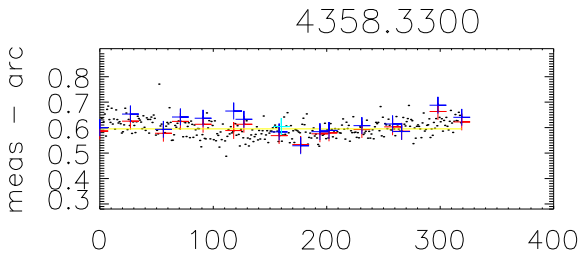

4046.5600
off: 0.62
sig: 0.020
4358.3300
off: 0.61
sig: 0.008
5460.9400
off: 0.68
sig: 0.005
5577.3390
off: 0.72
sig: 0.003
5889.9500
off: 0.74
sig: 0.005
5895.9240
off: 0.73
sig: 0.006

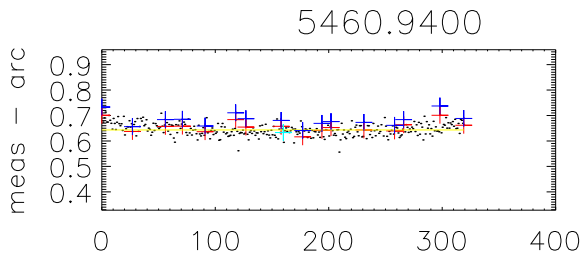

shift(pix)= 0.673
err(pix)= 0.025
oldshift(pix)= 0.620
350
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

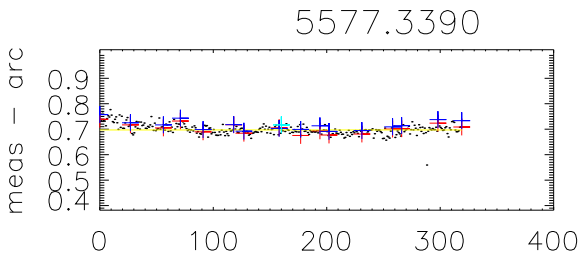

shift(pix)= 0.604
err(pix)= 0.009
oldshift(pix)= 0.608
350
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

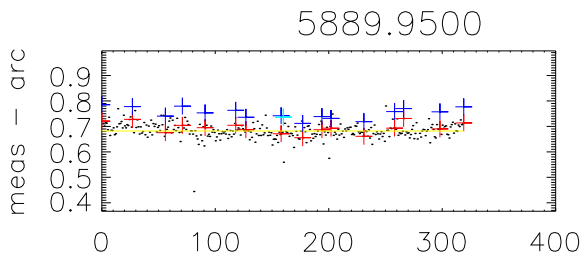

shift(pix)= 0.633
err(pix)= 0.006
oldshift(pix)= 0.682
350
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

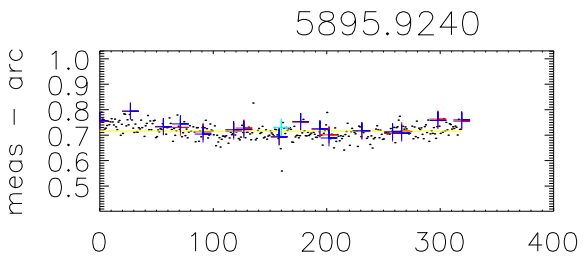

4046.5600
meas − arc
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400

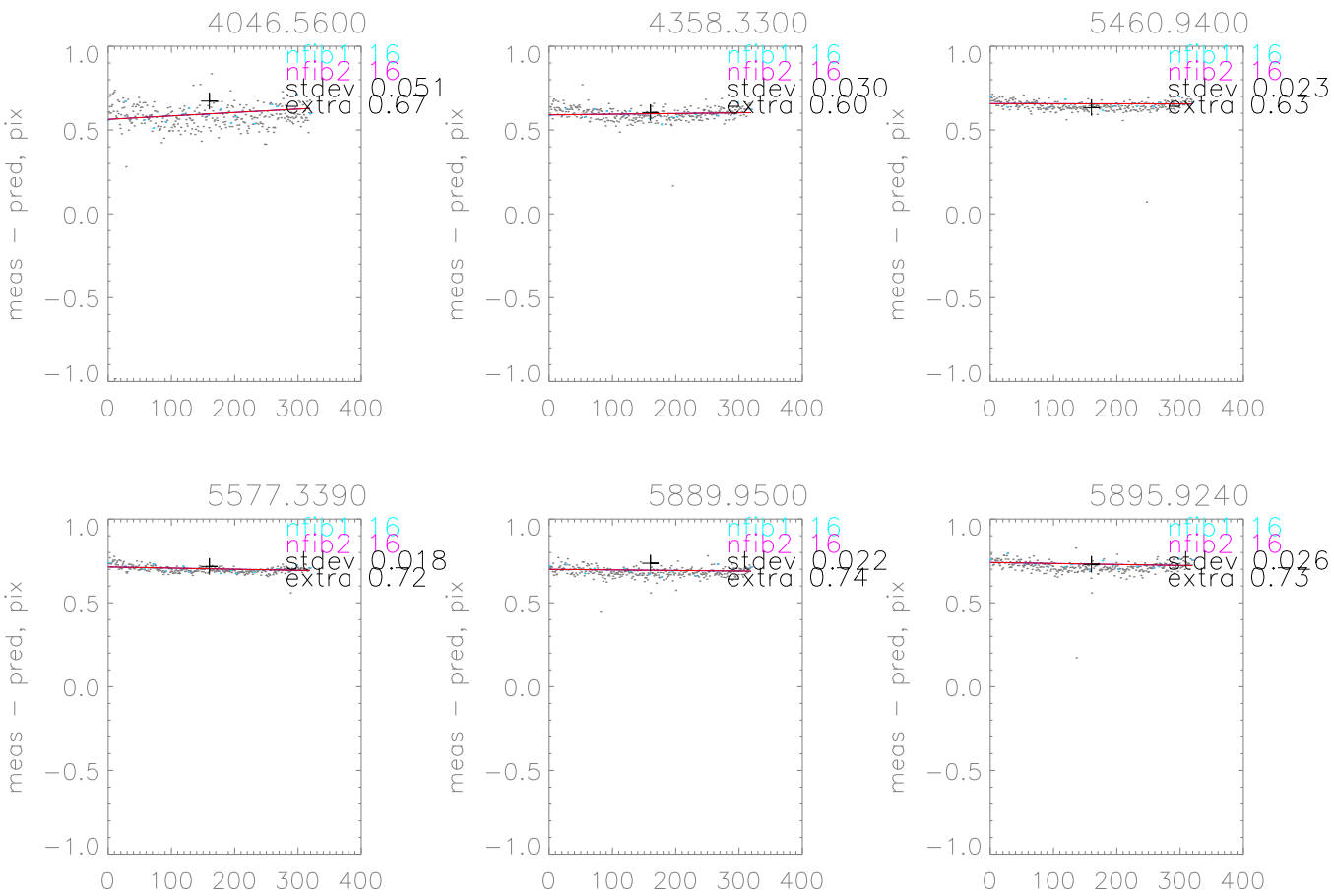

4358.3300
meas − arc
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400

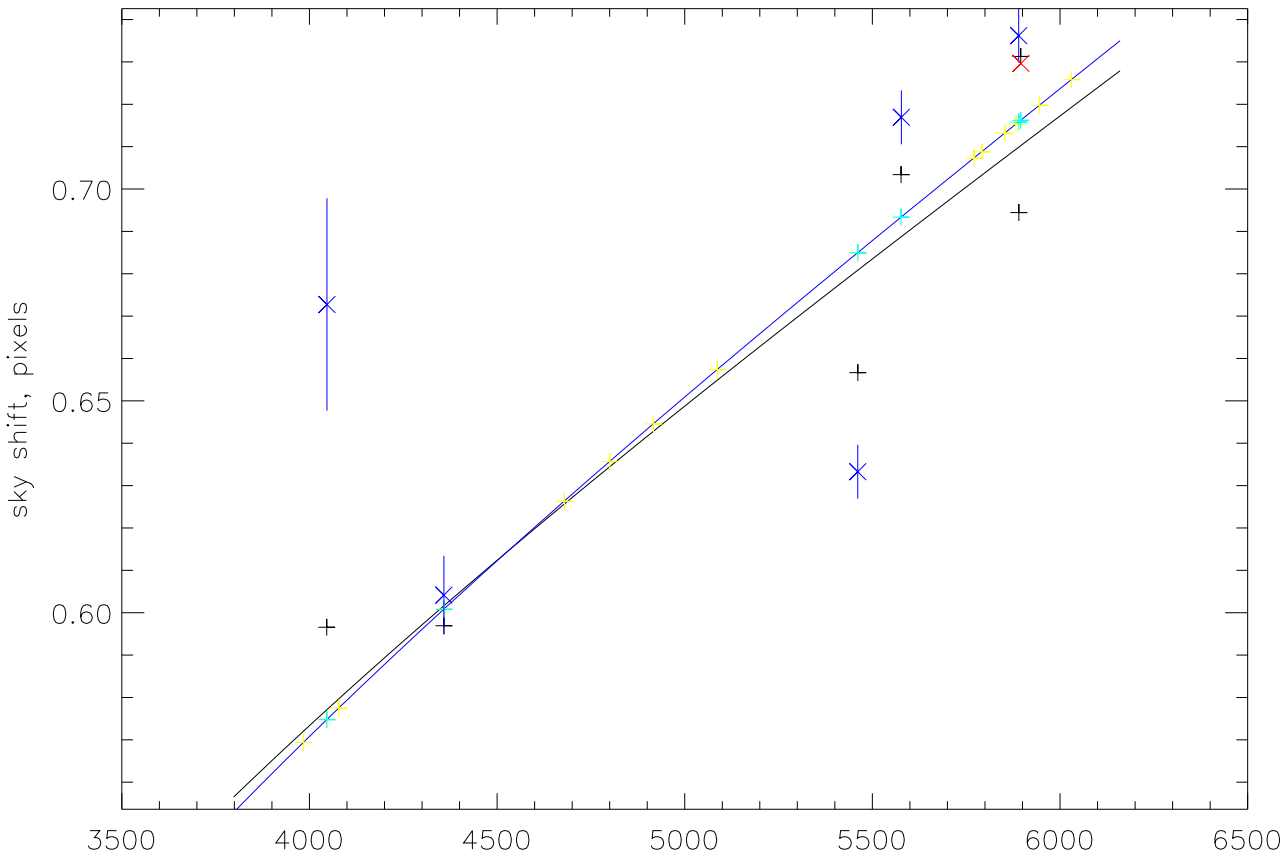

5460.9400
meas − arc
0.4
0.5
0.6
0.7
0.8
0.9
0
100
200
300
400

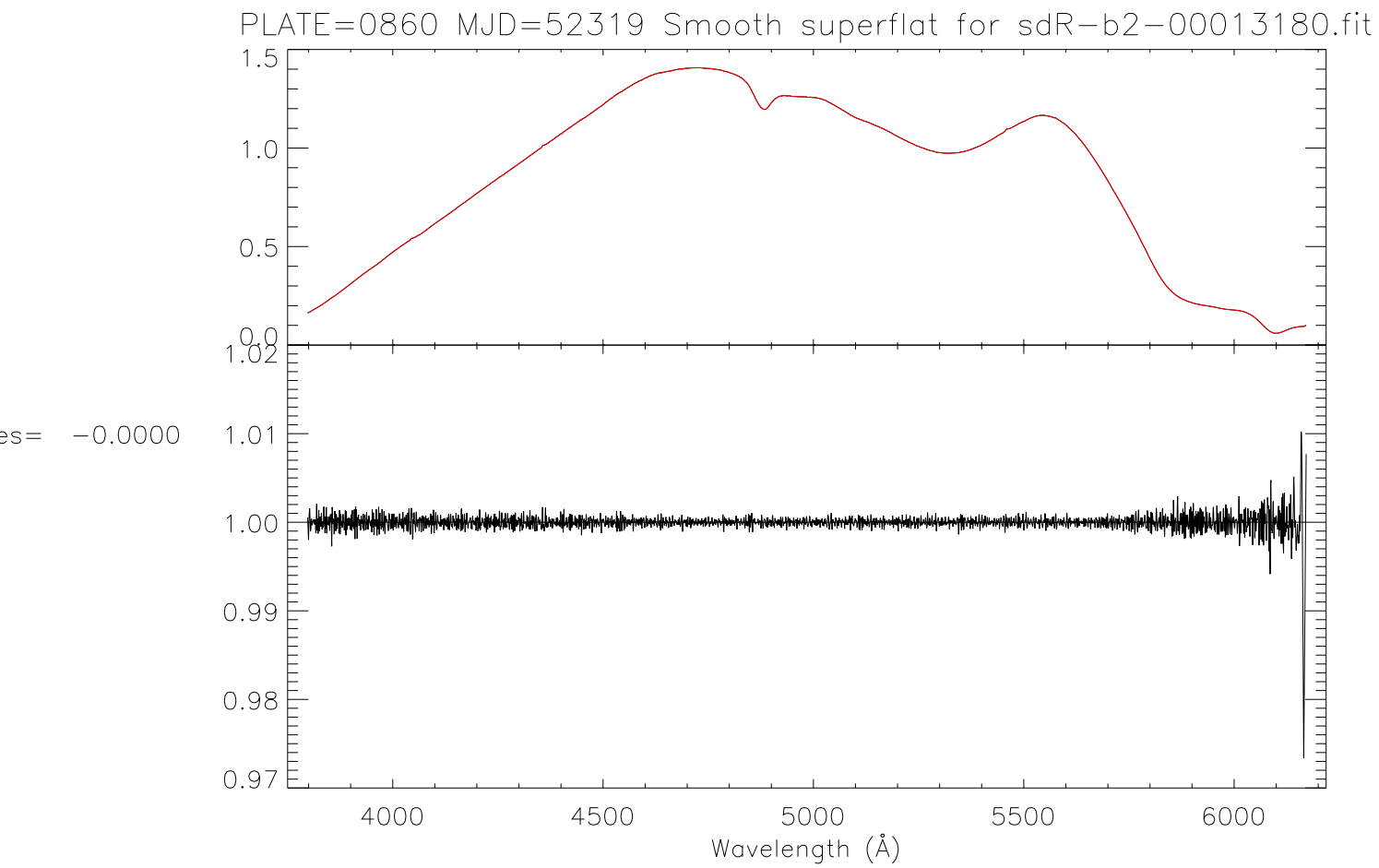

5577.3390
meas − arc
0.4
0.5
0.6
0.7
0.8
0.9
0
100
200
300
400


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

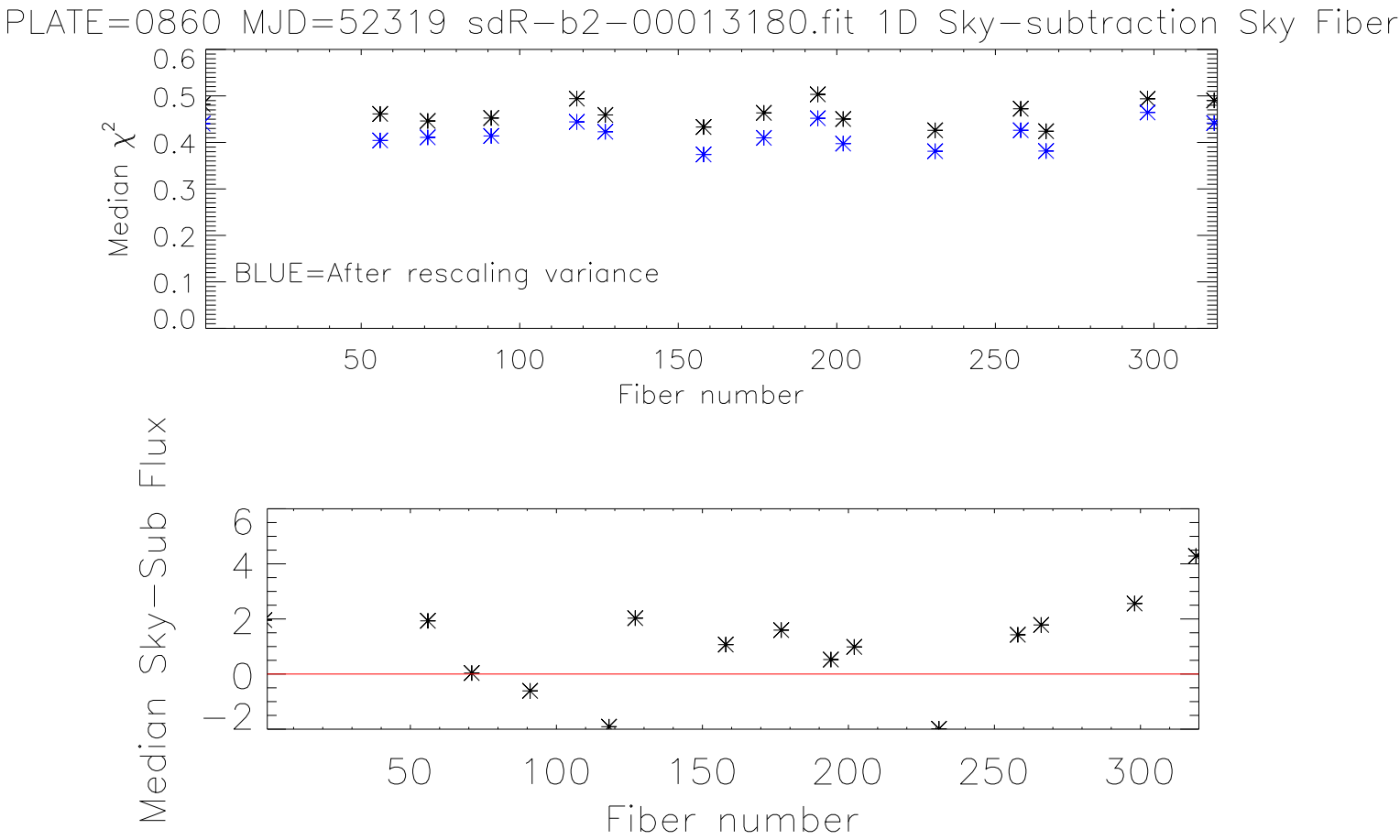

5895.9240
meas − arc
0.5
0.6
0.7
0.8
0.9
1.0
0
100
200
300
400

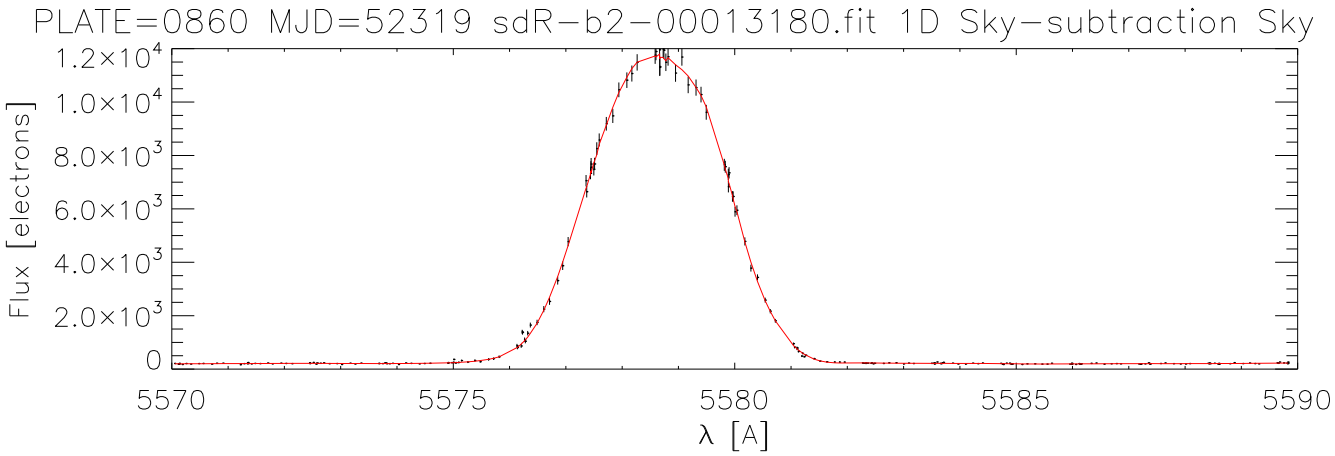

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
nfib1 16
nfib2 16
stdev 0.051
extra 0.67
stdev 0.030
extra 0.60
stdev 0.023
extra 0.63
stdev 0.018
extra 0.72
stdev 0.022
extra 0.74
stdev 0.026
extra 0.73
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

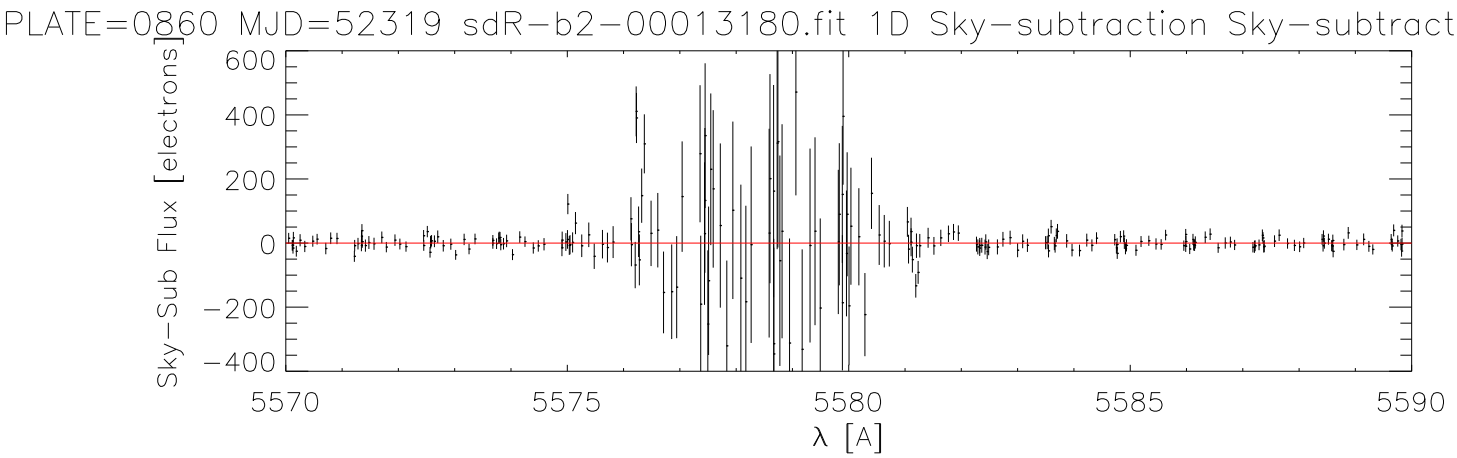

sky shift, pixels
0.70
0.65
0.60
3500
4000
4500
5000
5500
6000
6500

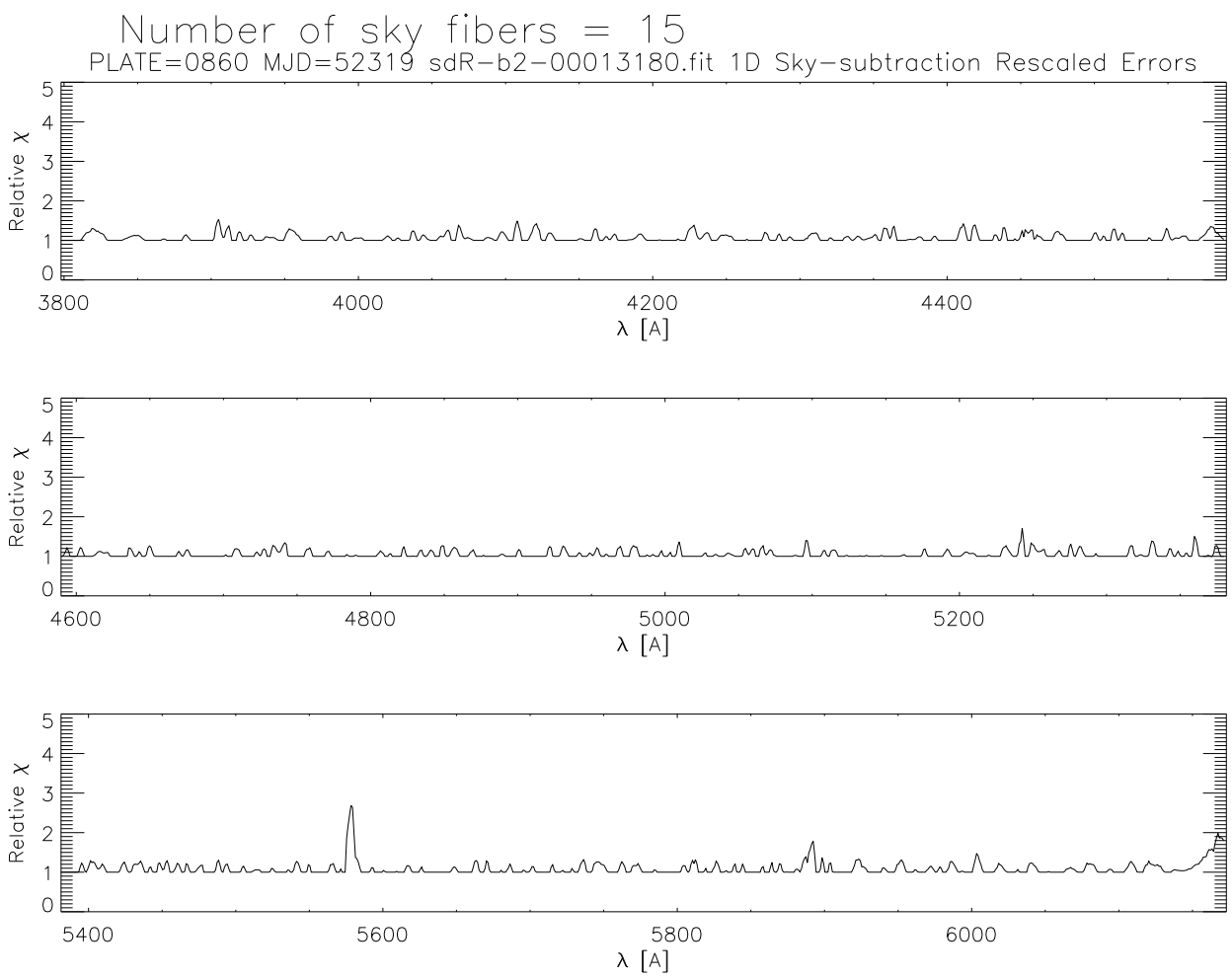

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013180.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

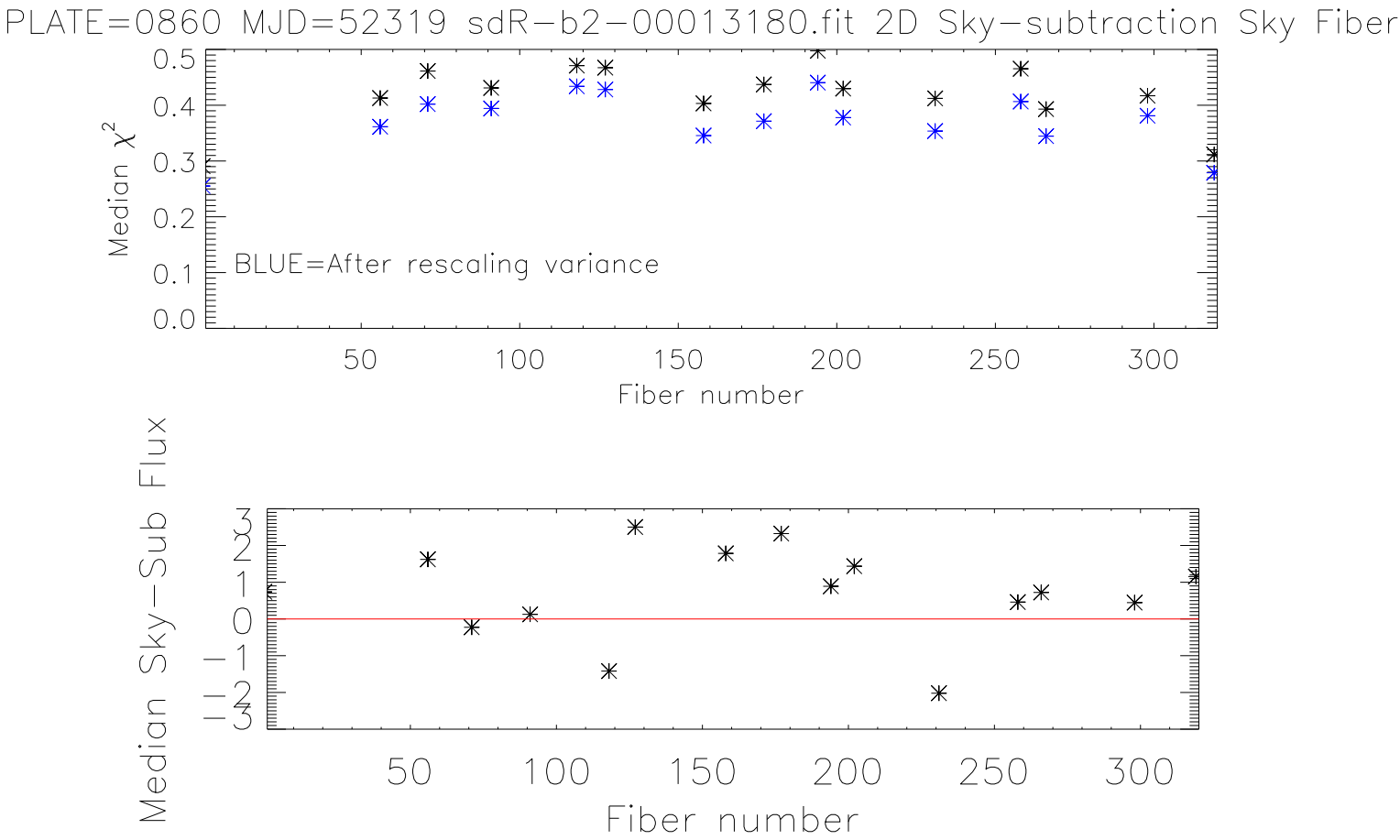
es= −0.0000

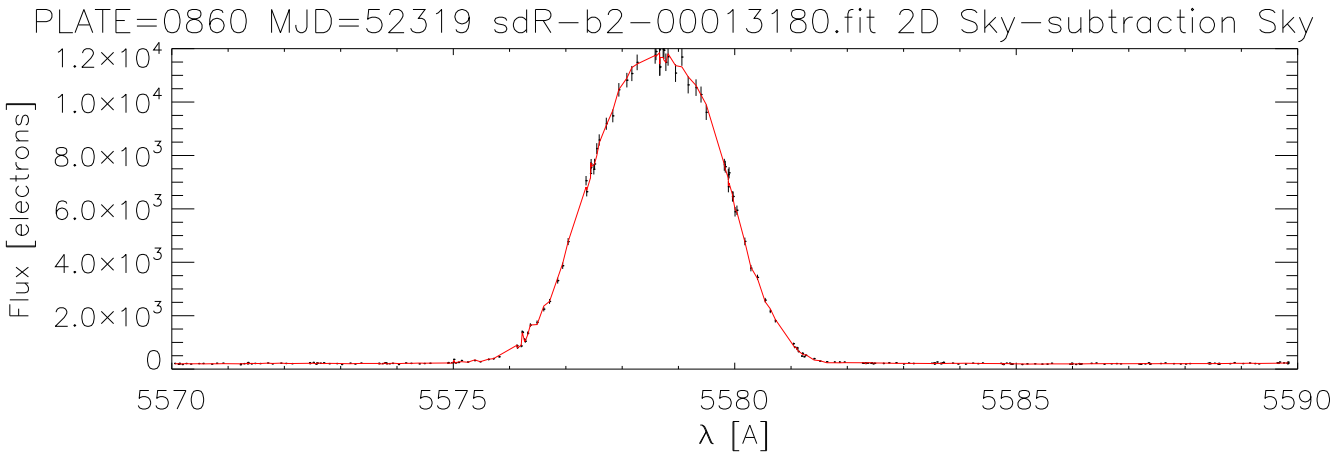

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

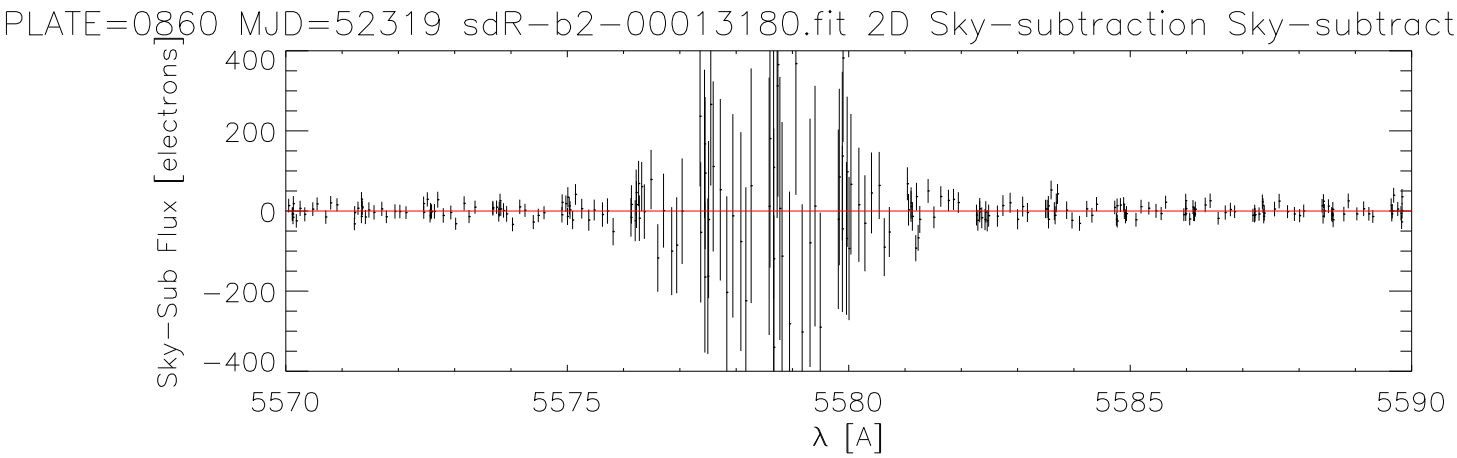

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

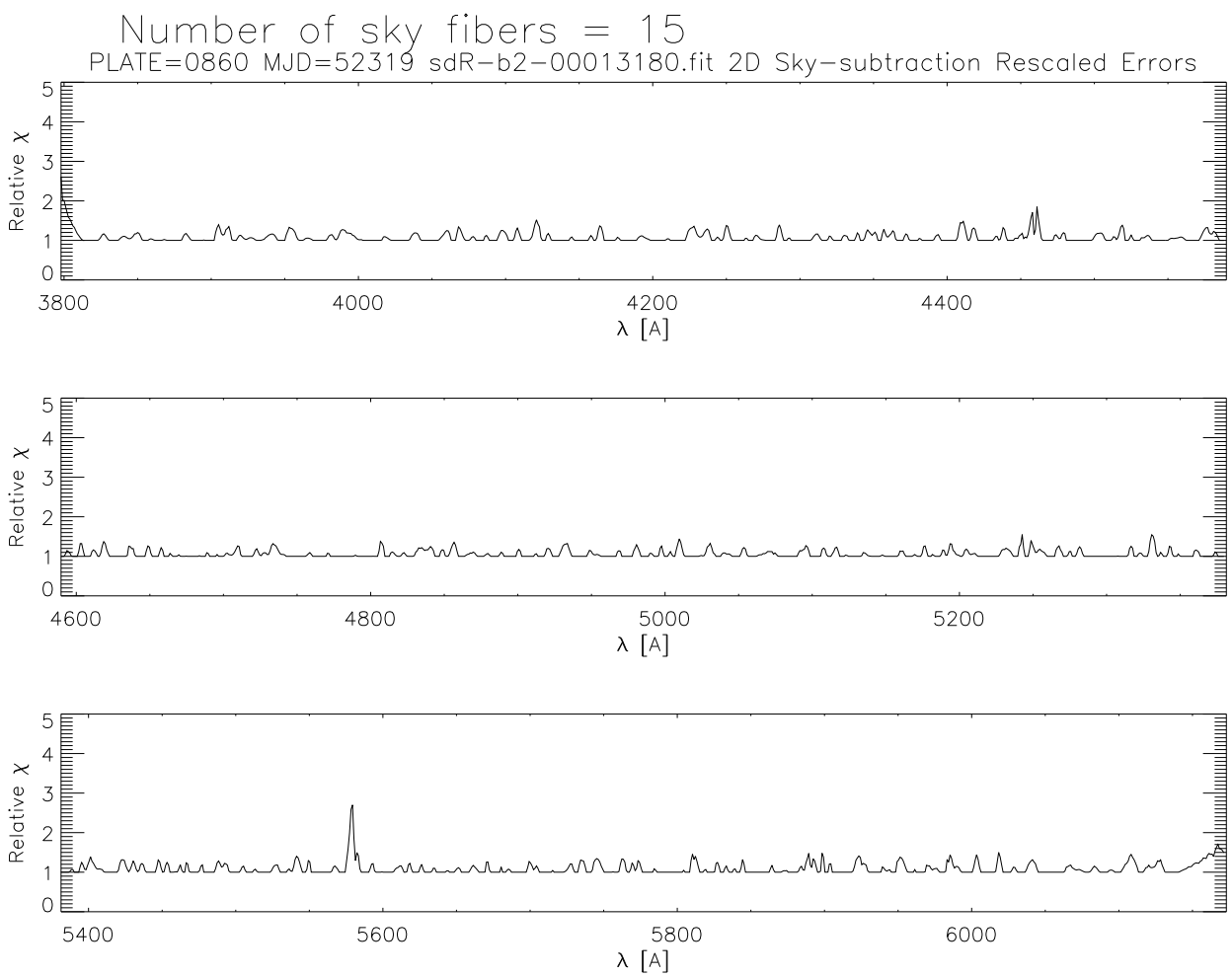

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

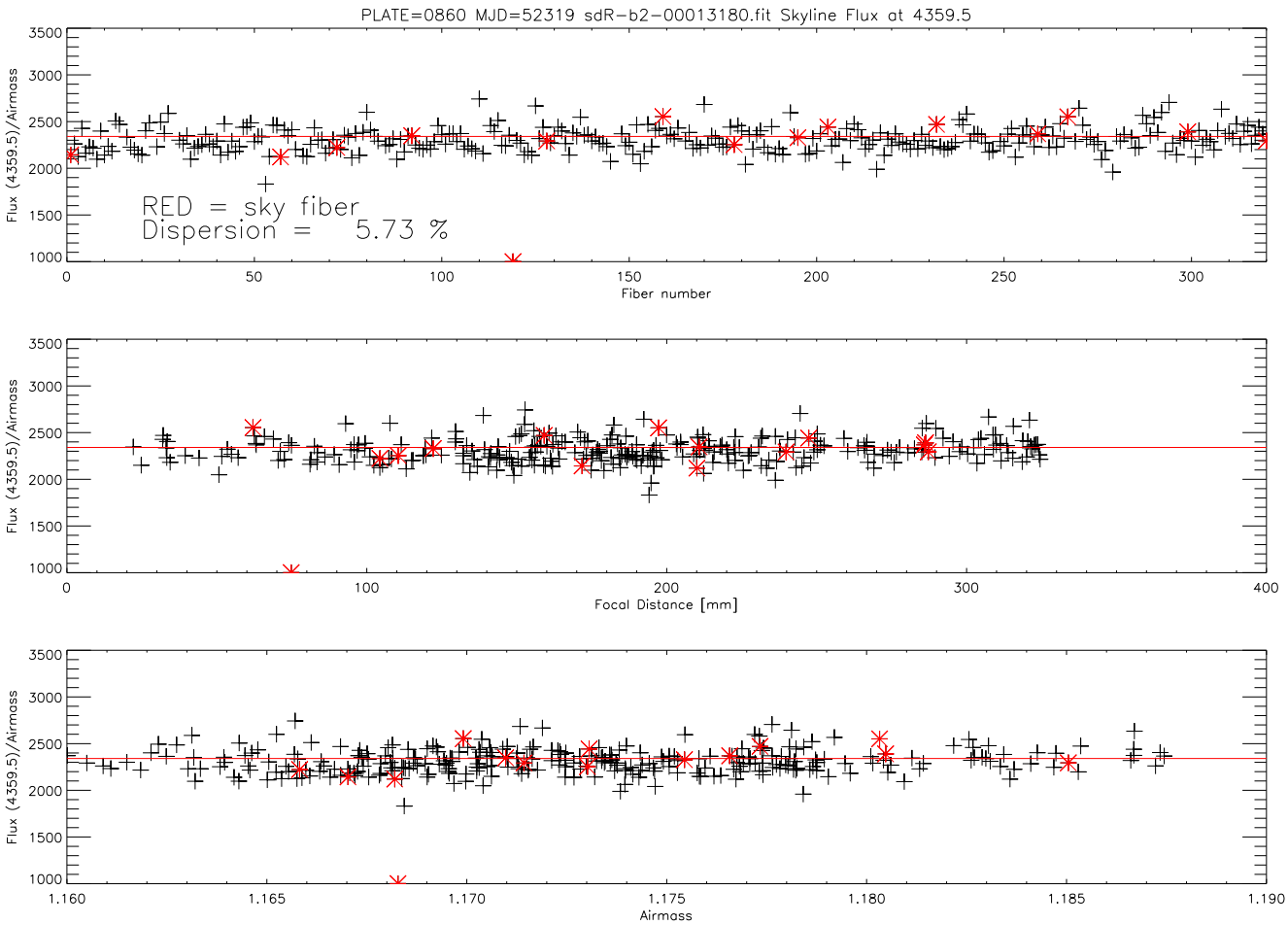

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013180.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

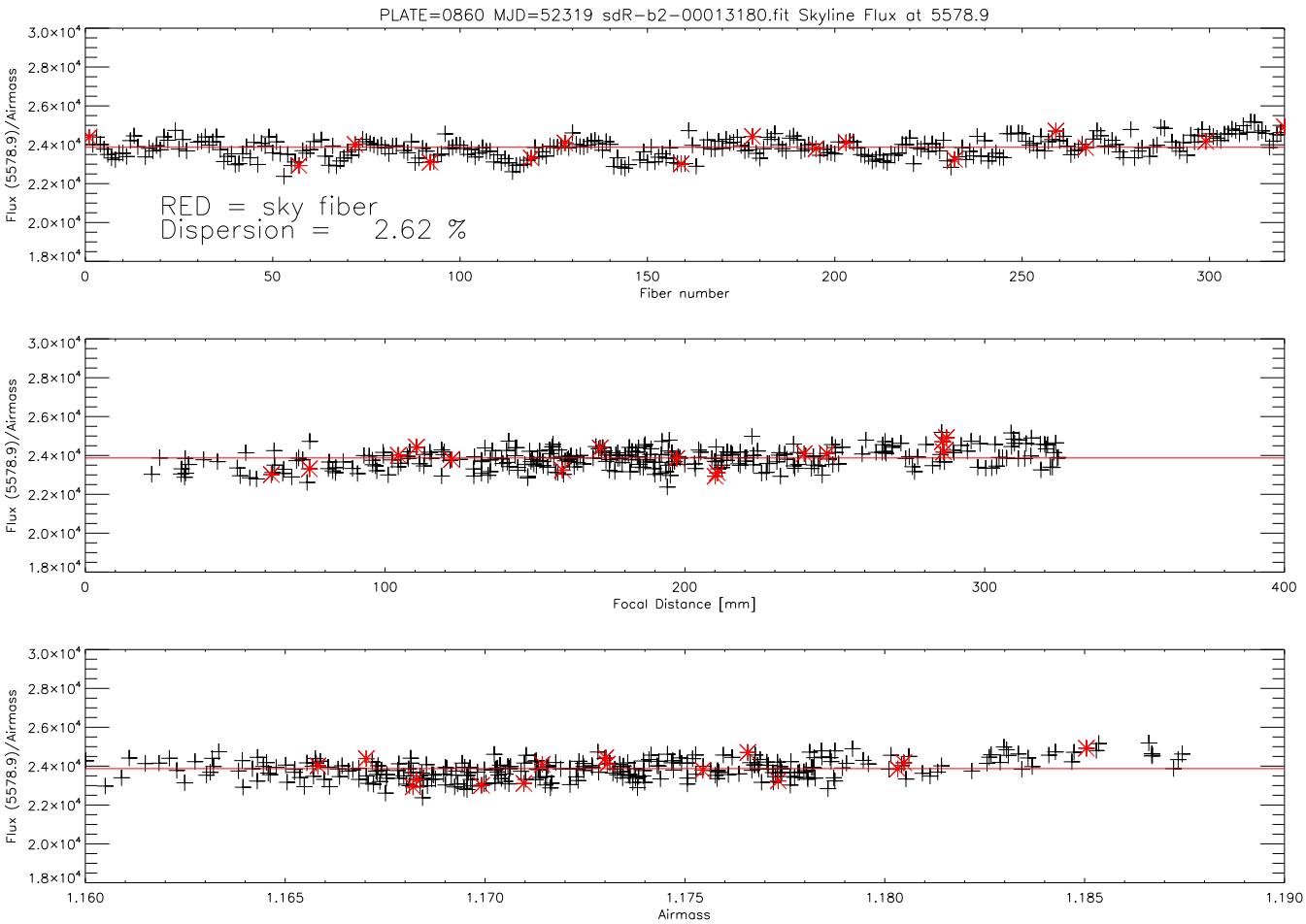

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

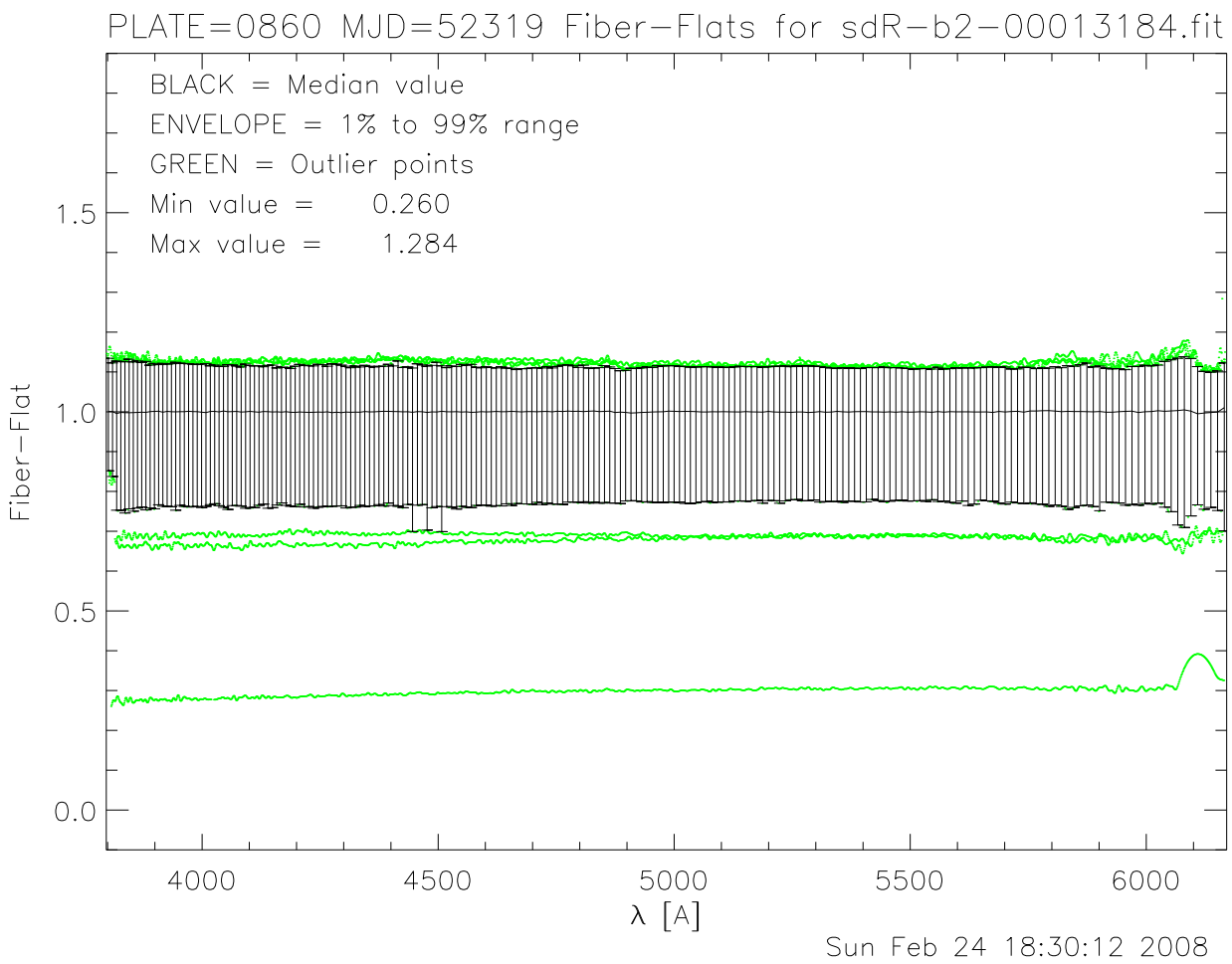

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

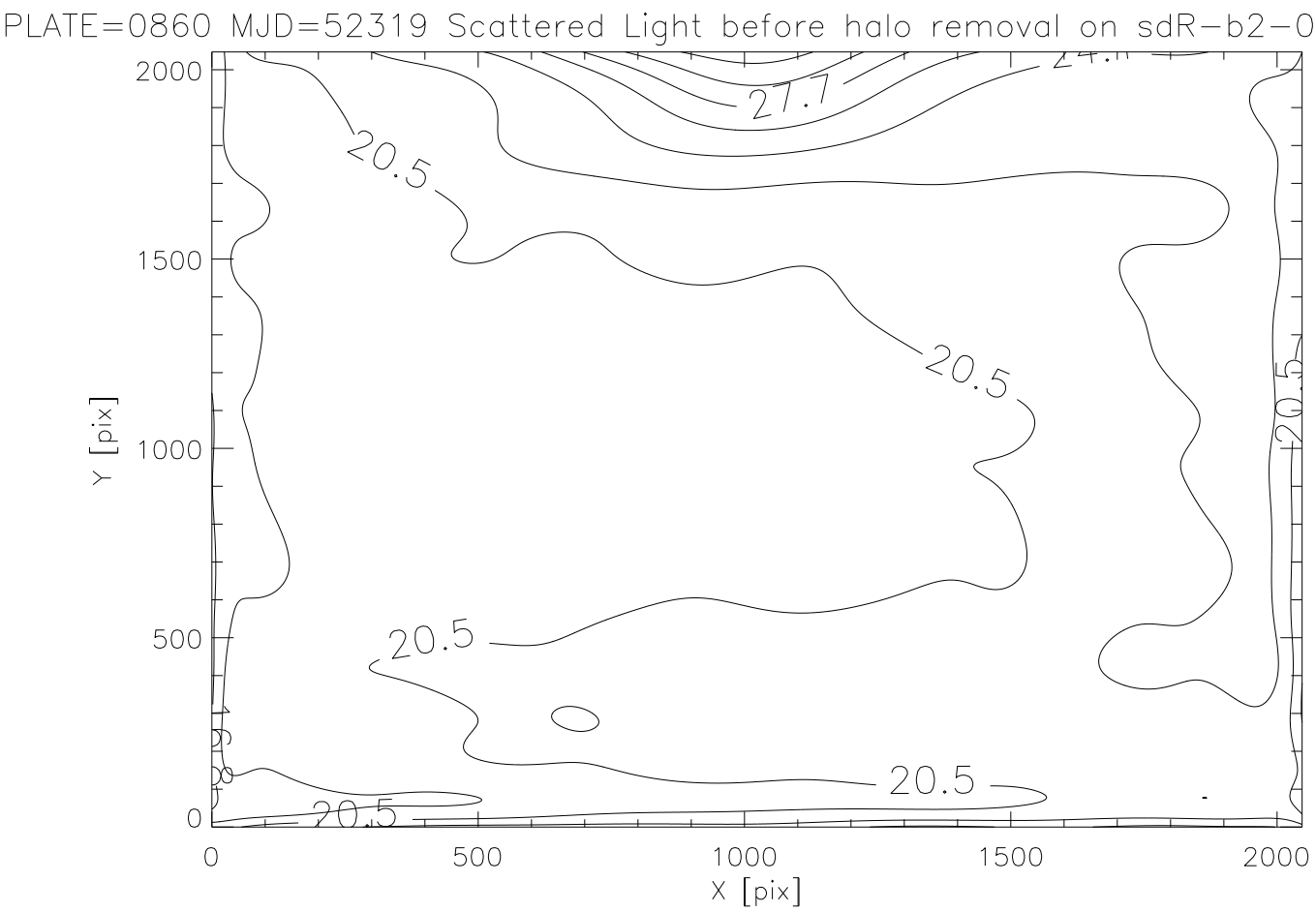

PLATE=0860 MJD=52319 sdR-b2-00013180.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

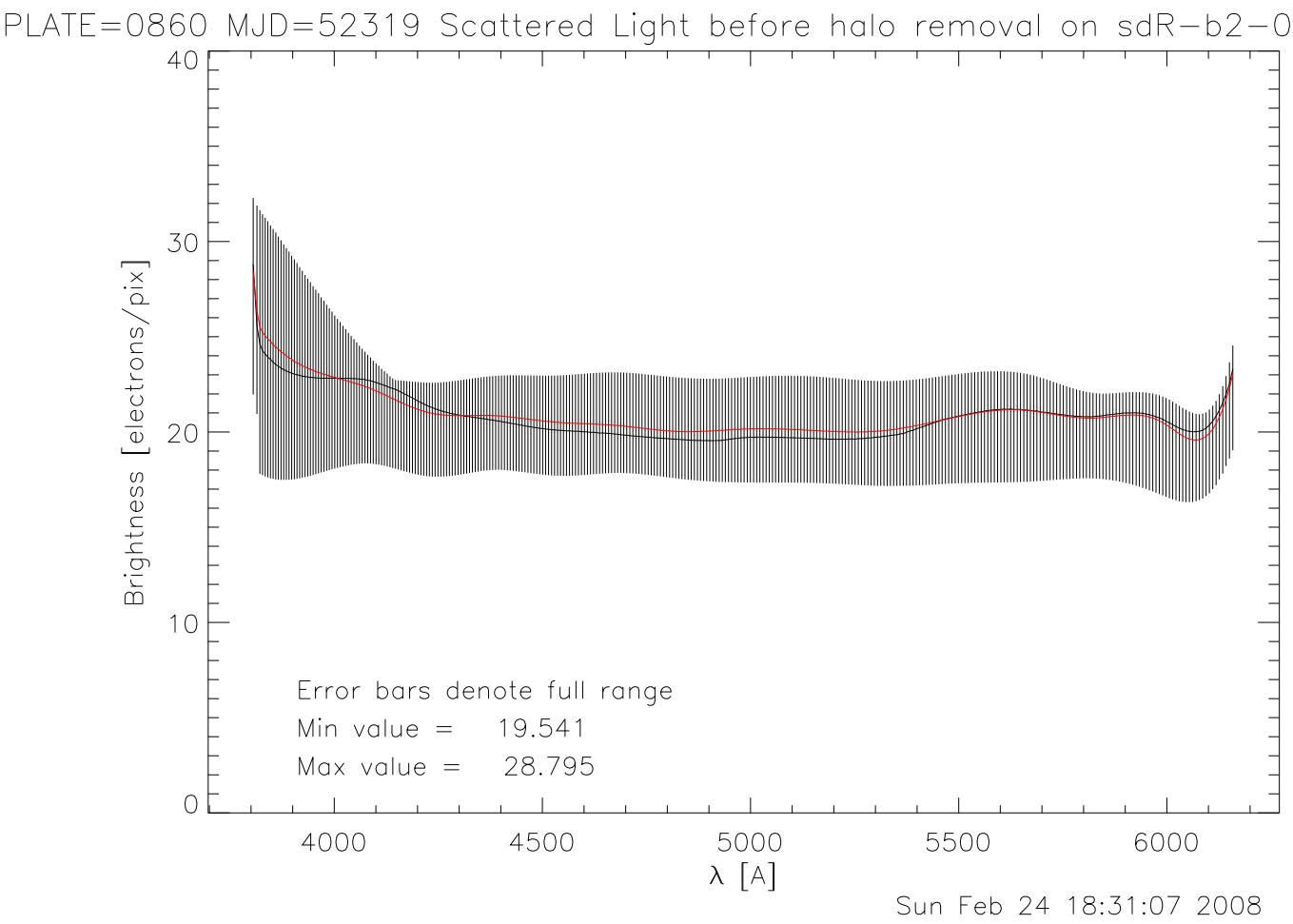

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013180.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

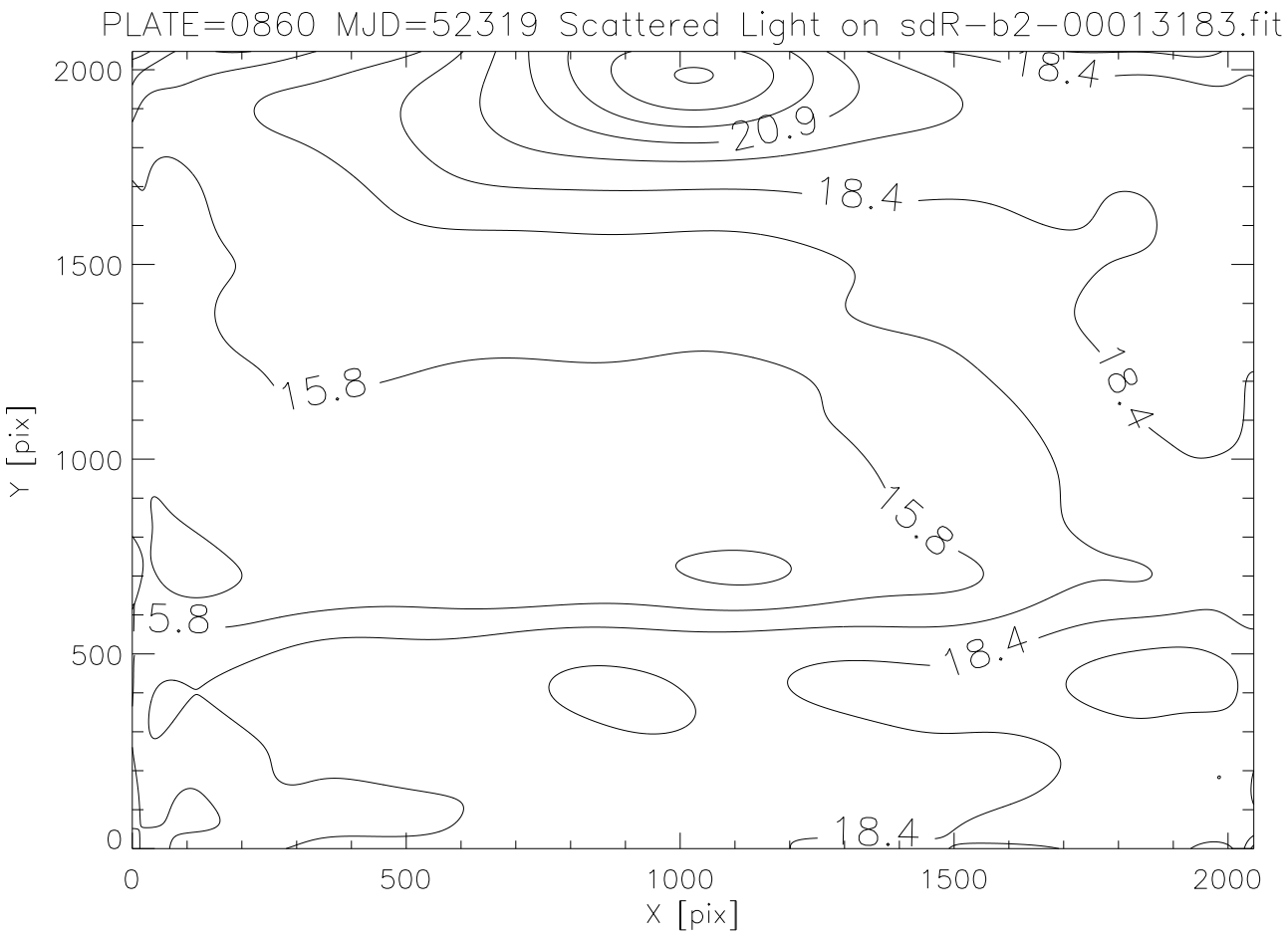

PLATE=0860 MJD=52319 sdR-b2-00013180.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.73 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

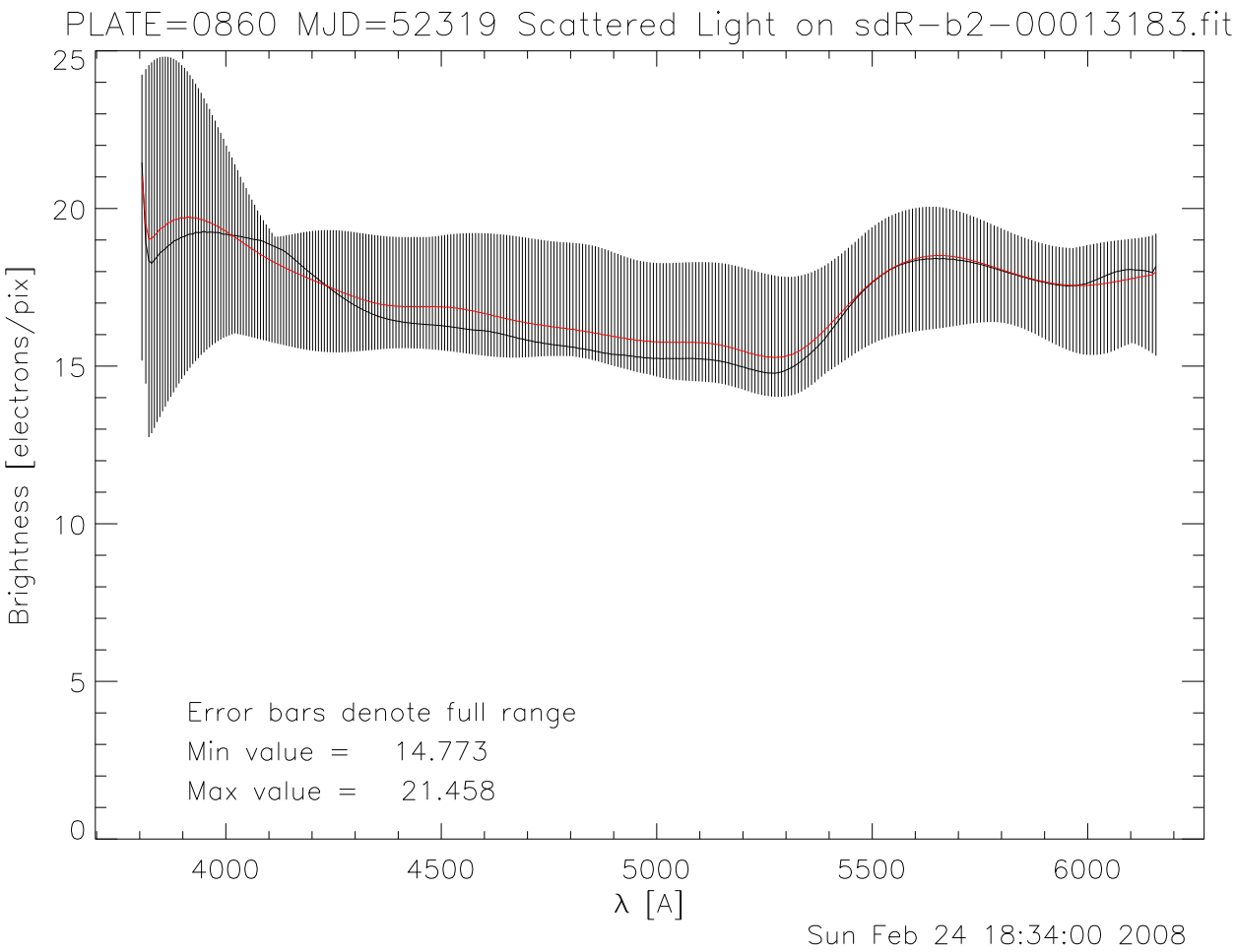

PLATE=0860 MJD=52319 sdR-b2-00013180.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.62 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

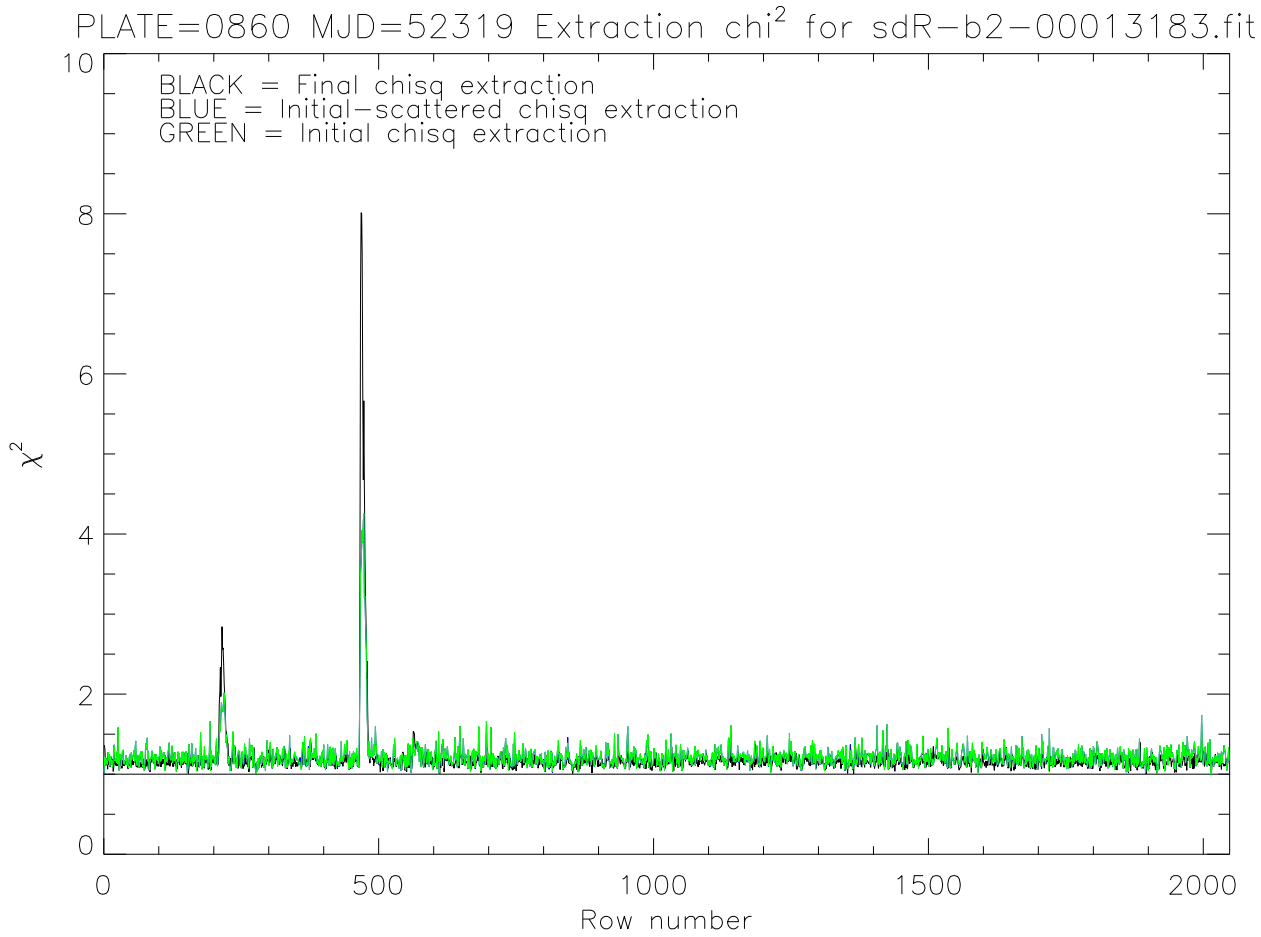

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:30:12 2008

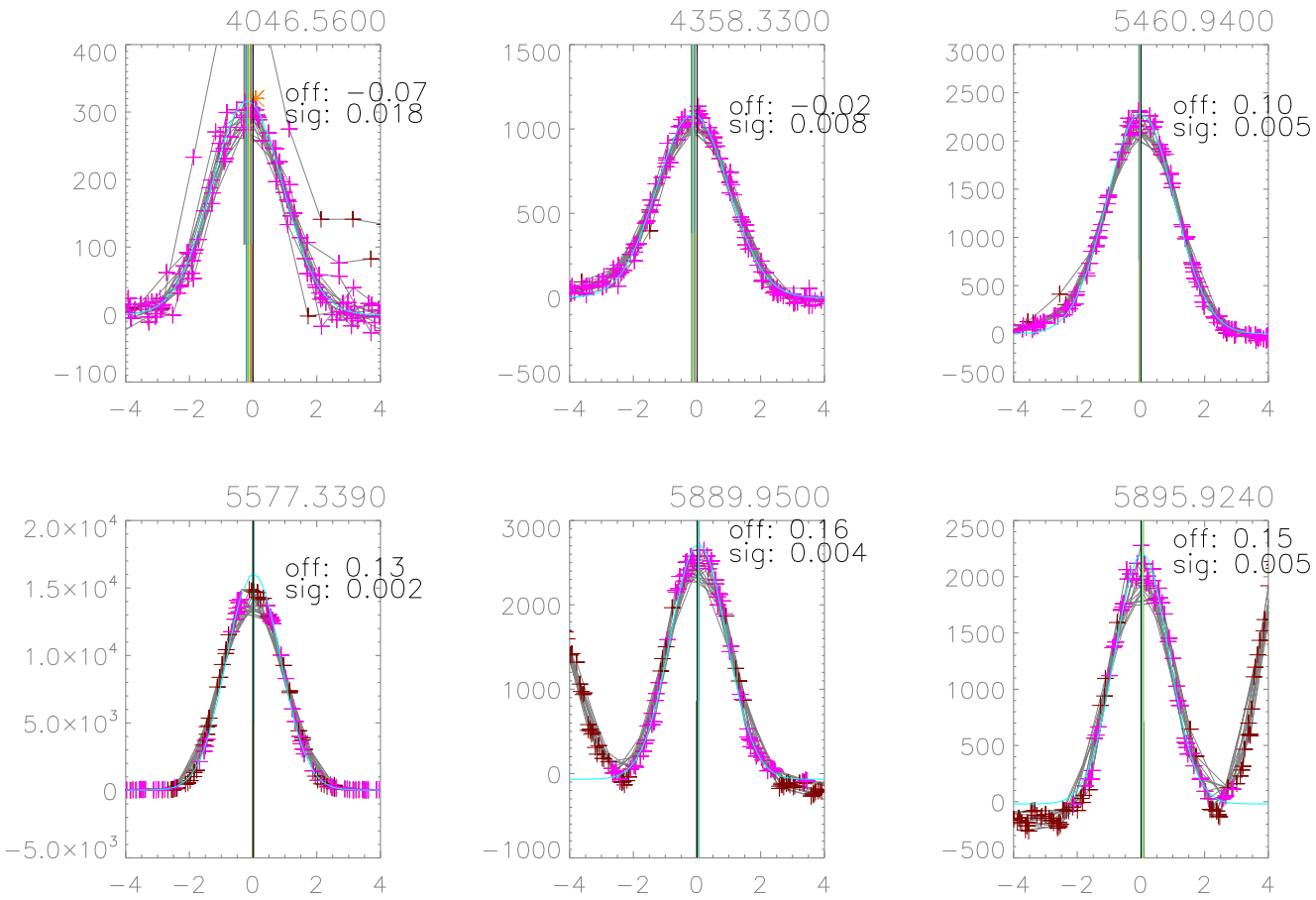

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b2−00013183.f
27.7
20.5
20.5
20.5
20.5
20.5
Y [pix]
X [pix]
0
500
1000
1500
2000

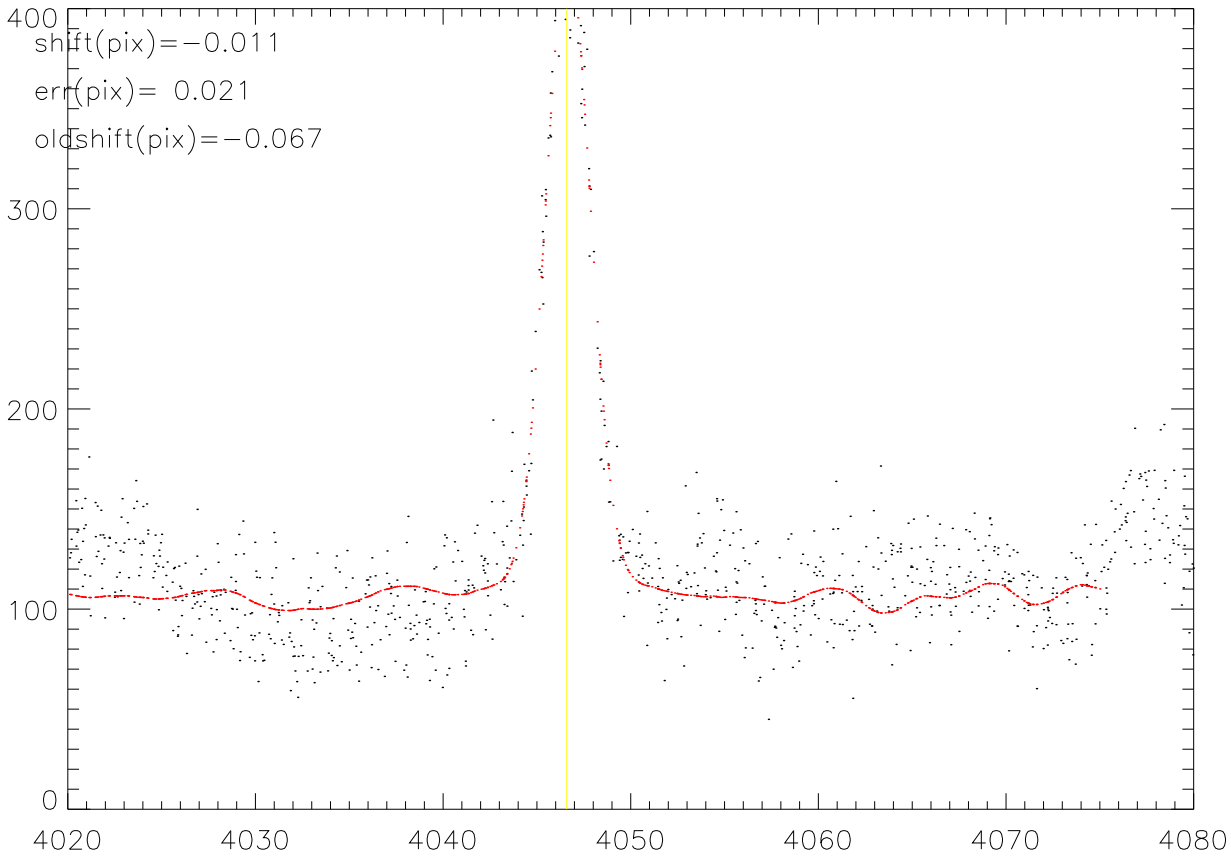

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013183.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 19.541
Max value = 28.795
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:31:07 2008

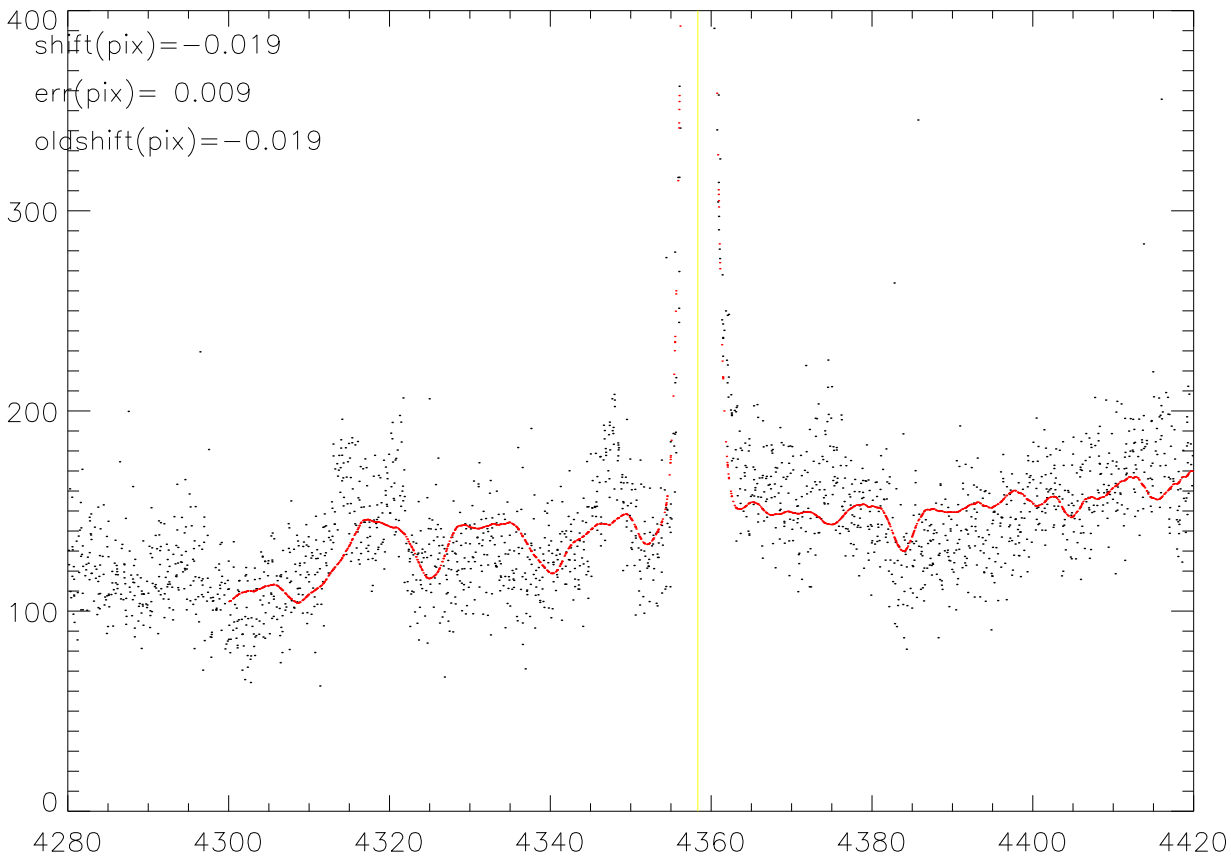

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013183.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.4
20.9
18.4
15.8
18.4
15.8
5.8
18.4
18.4

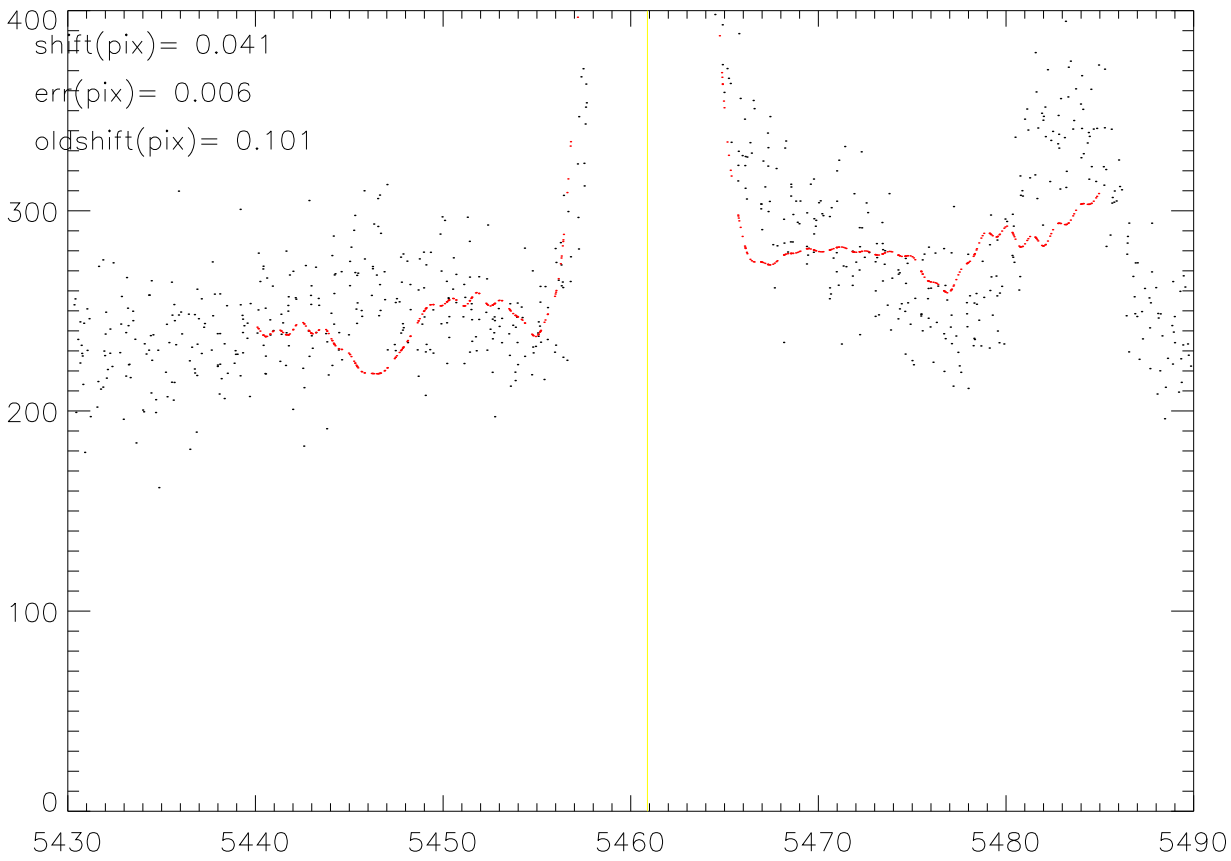

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013183.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 14.773
Max value = 21.458
Sun Feb 24 18:34:00 2008

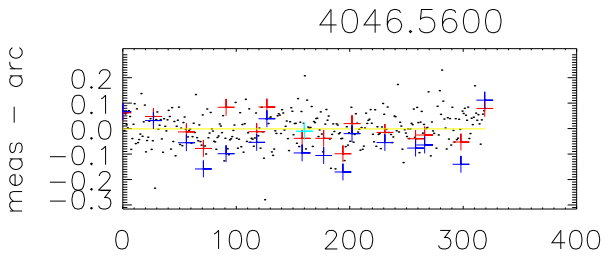

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

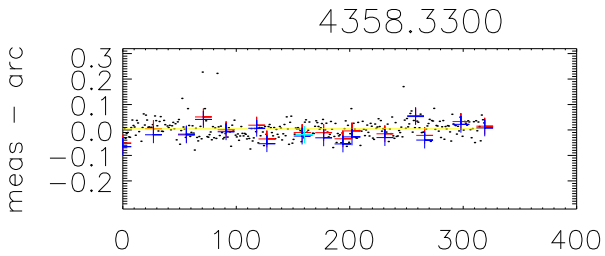

4046.5600
off: −0.07
sig: 0.018
4358.3300
off: −0.02
sig: 0.008
5460.9400
off: 0.10
sig: 0.005
5577.3390
off: 0.13
sig: 0.002
5889.9500
off: 0.16
sig: 0.004
5895.9240
off: 0.15
sig: 0.005

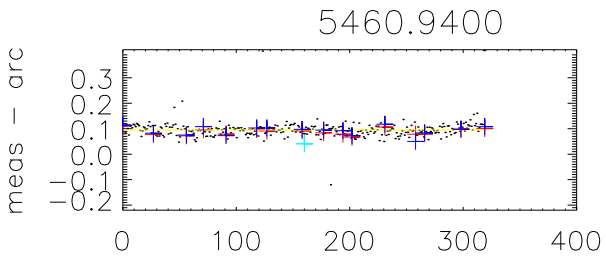

shift(pix)=−0.011
err(pix)= 0.021
oldshift(pix)=−0.067
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

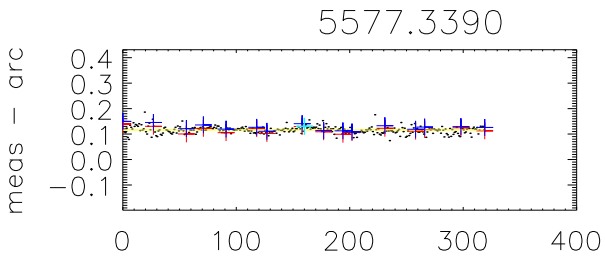

shift(pix)=−0.019
err(pix)= 0.009
oldshift(pix)=−0.019
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

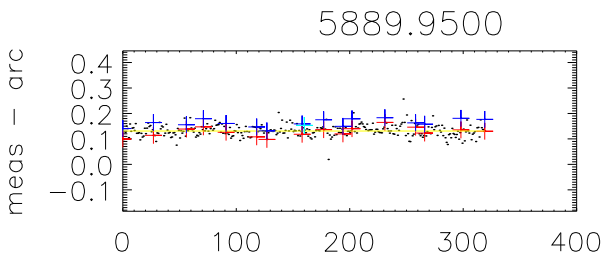

shift(pix)= 0.041
err(pix)= 0.006
oldshift(pix)= 0.101
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

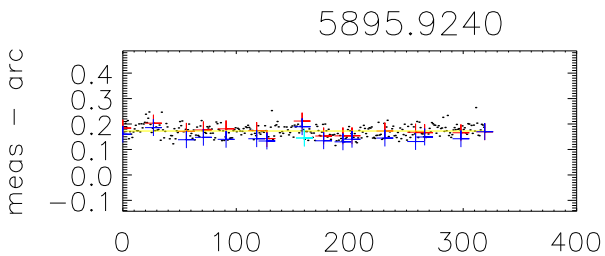

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

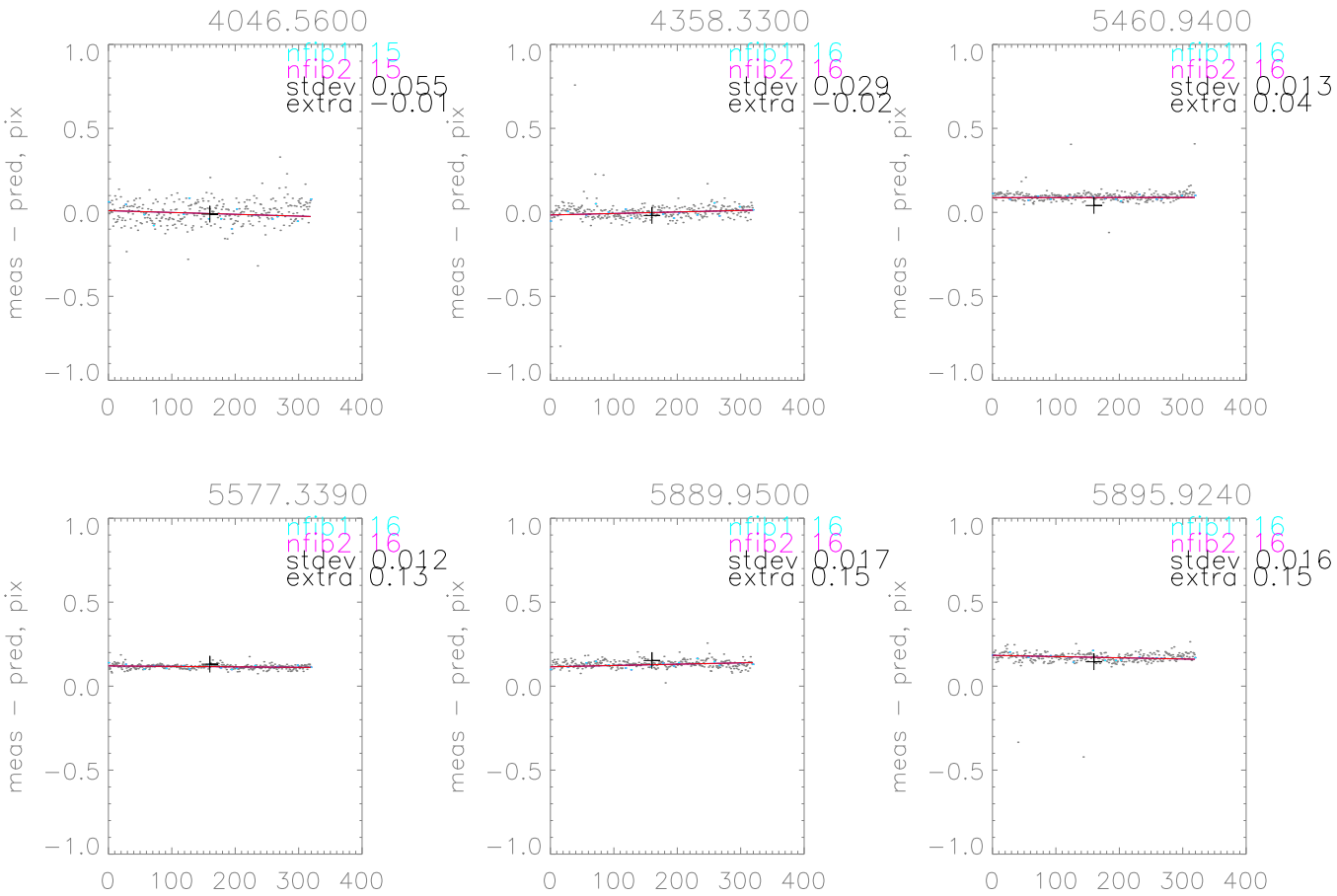

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

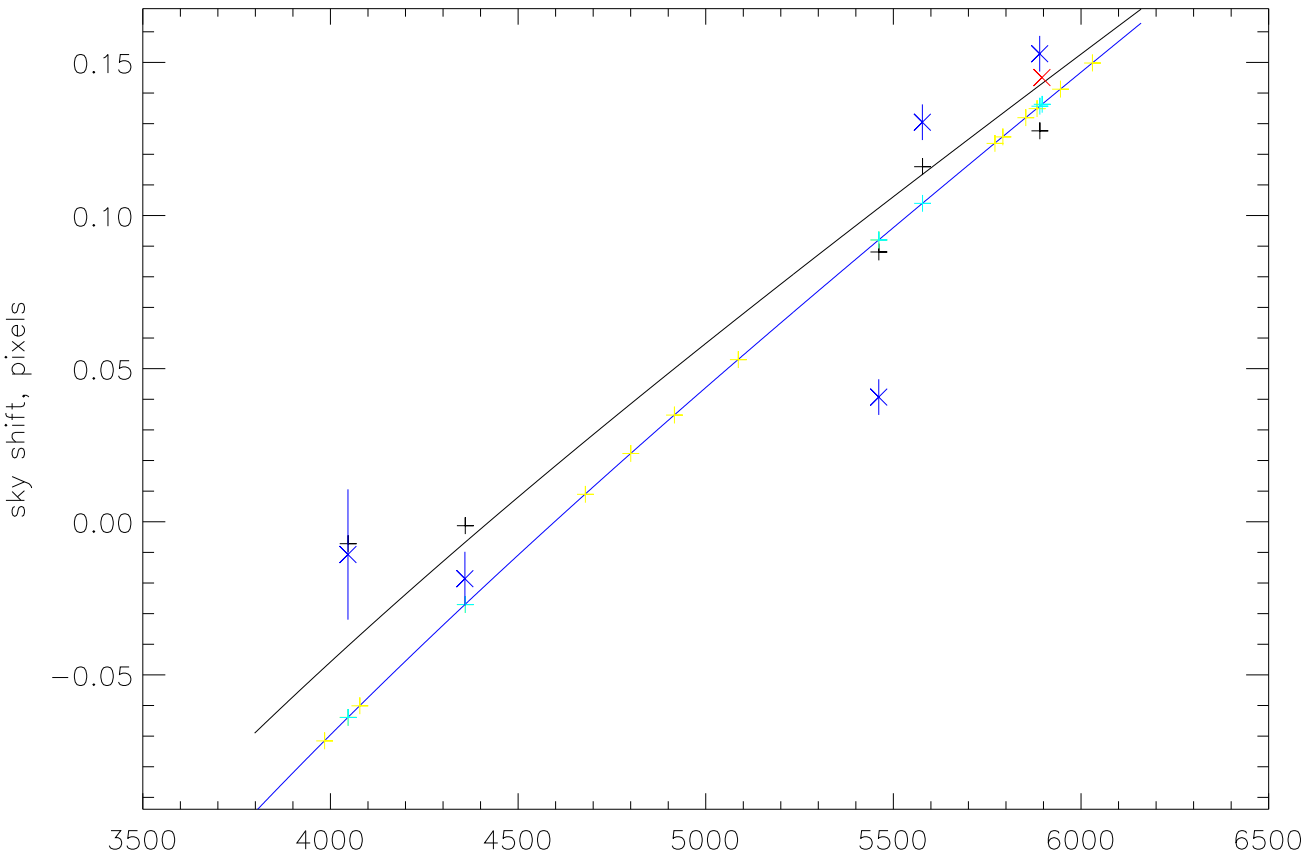

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

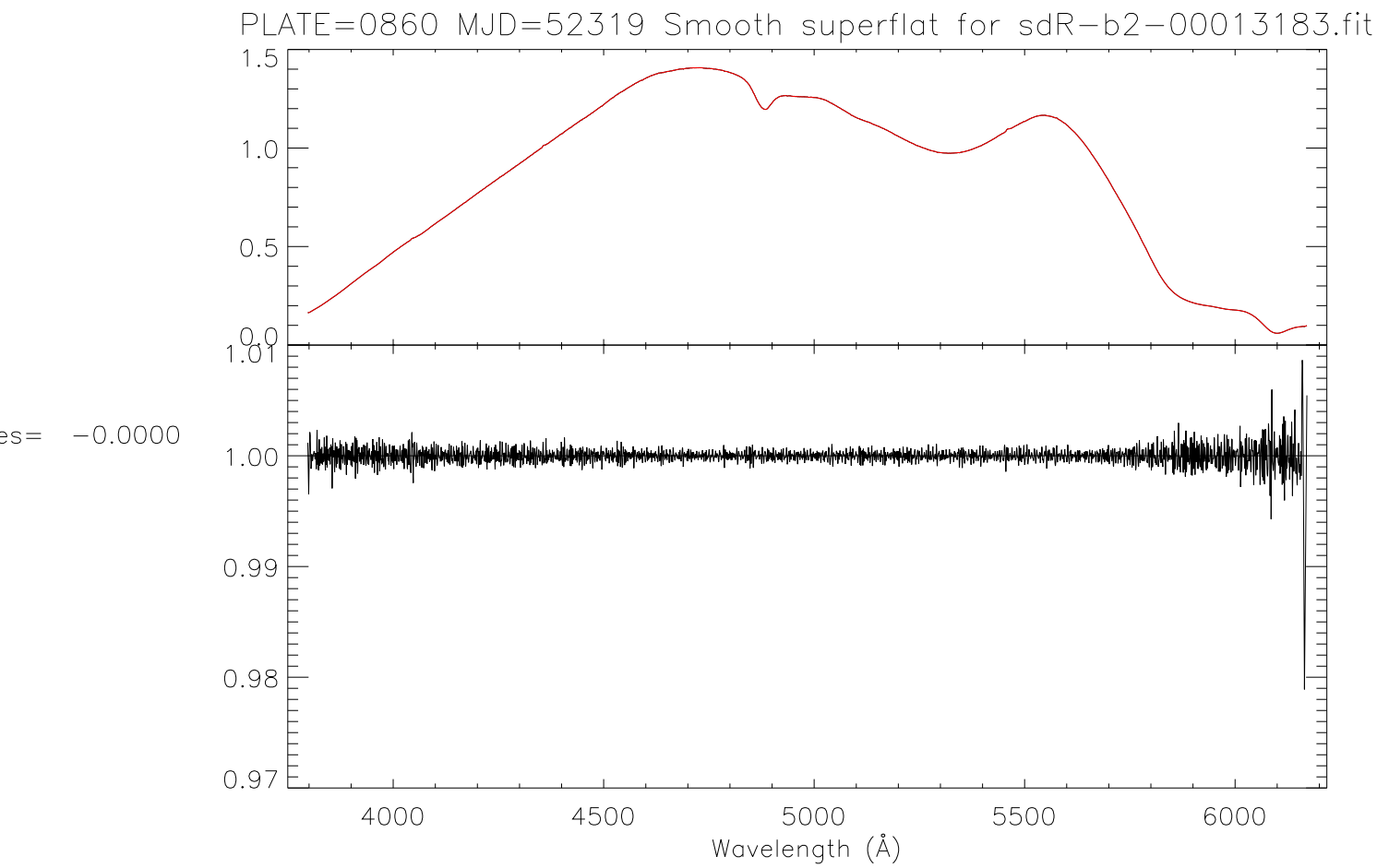

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

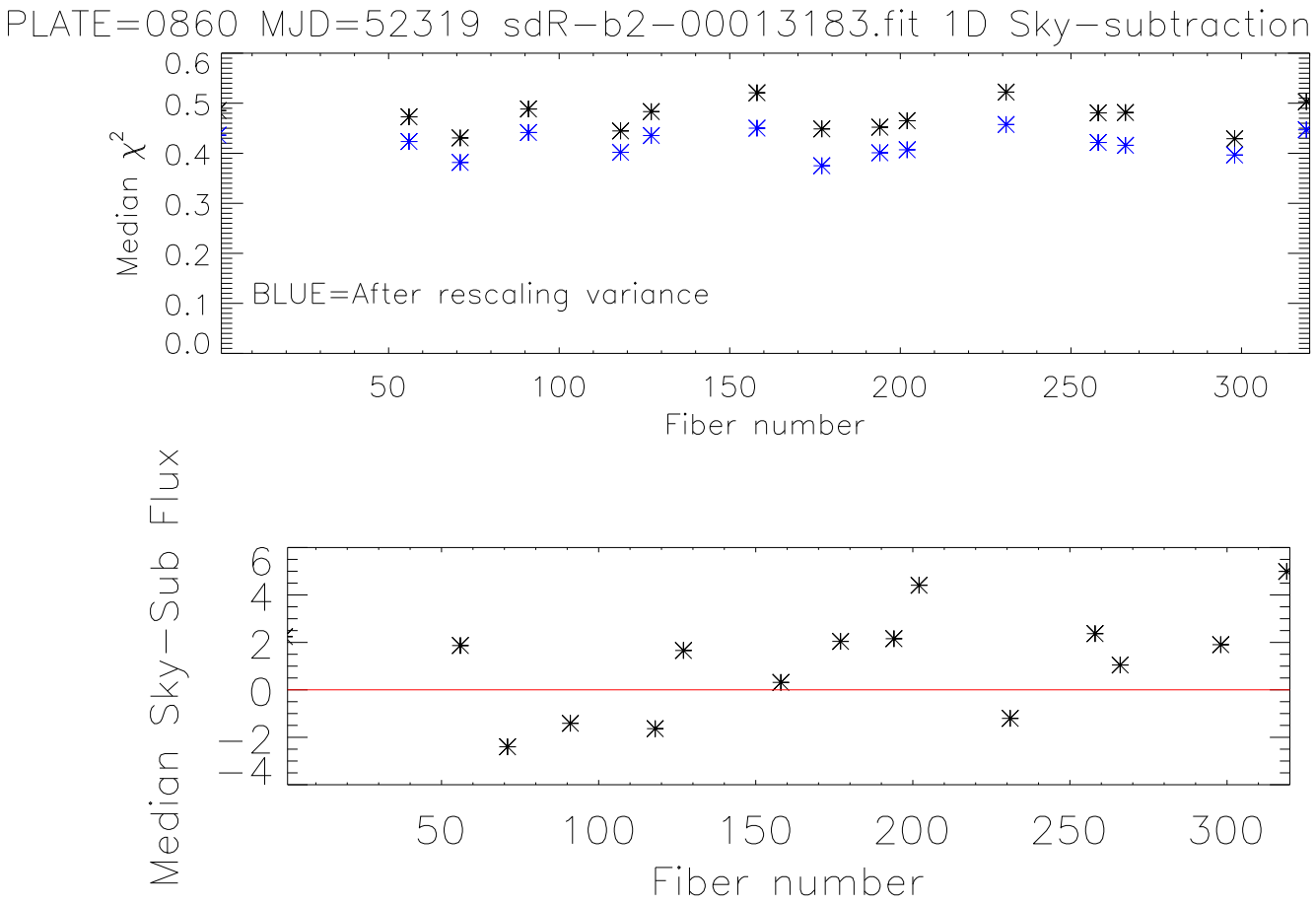

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

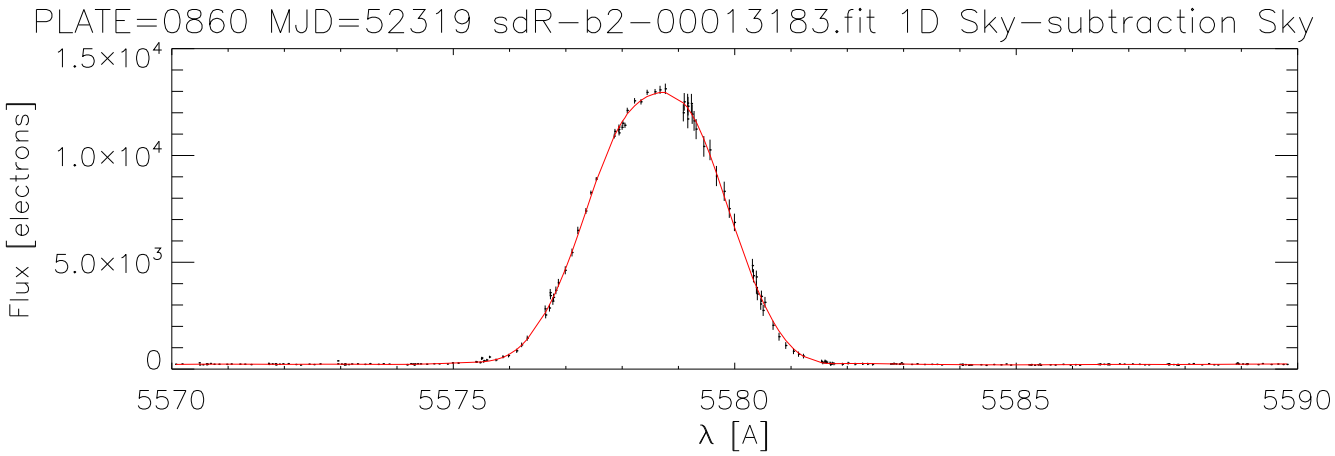

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

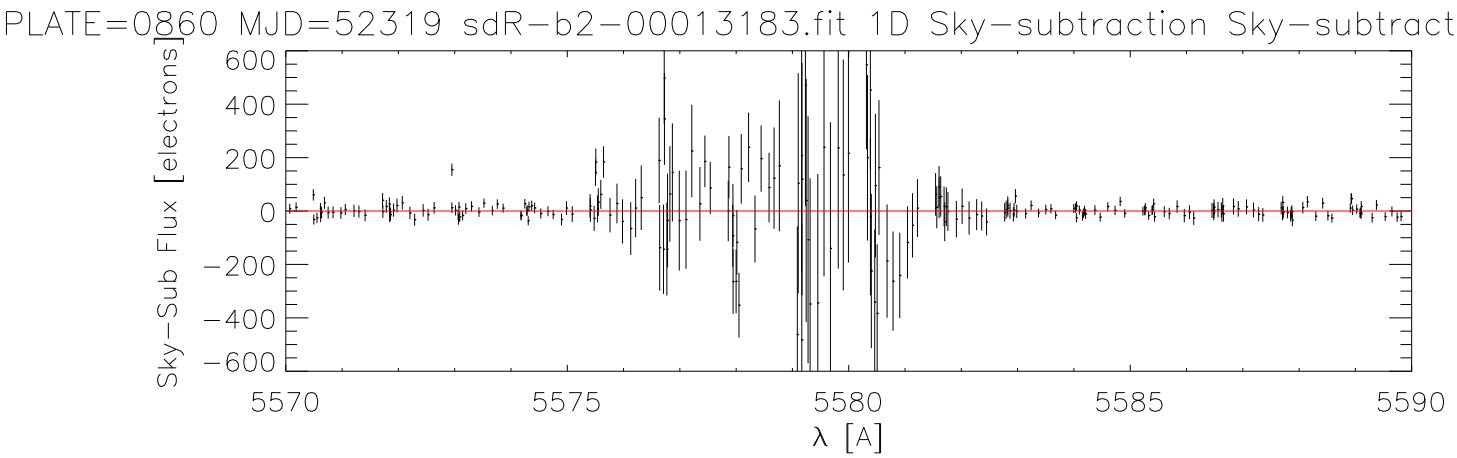

4046.5600
nfib1 15
nfib2 15
stdev 0.055
extra −0.01
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra −0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.013
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.017
extra 0.15
5895.9240
nfib1 16
nfib2 16
stdev 0.016
extra 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

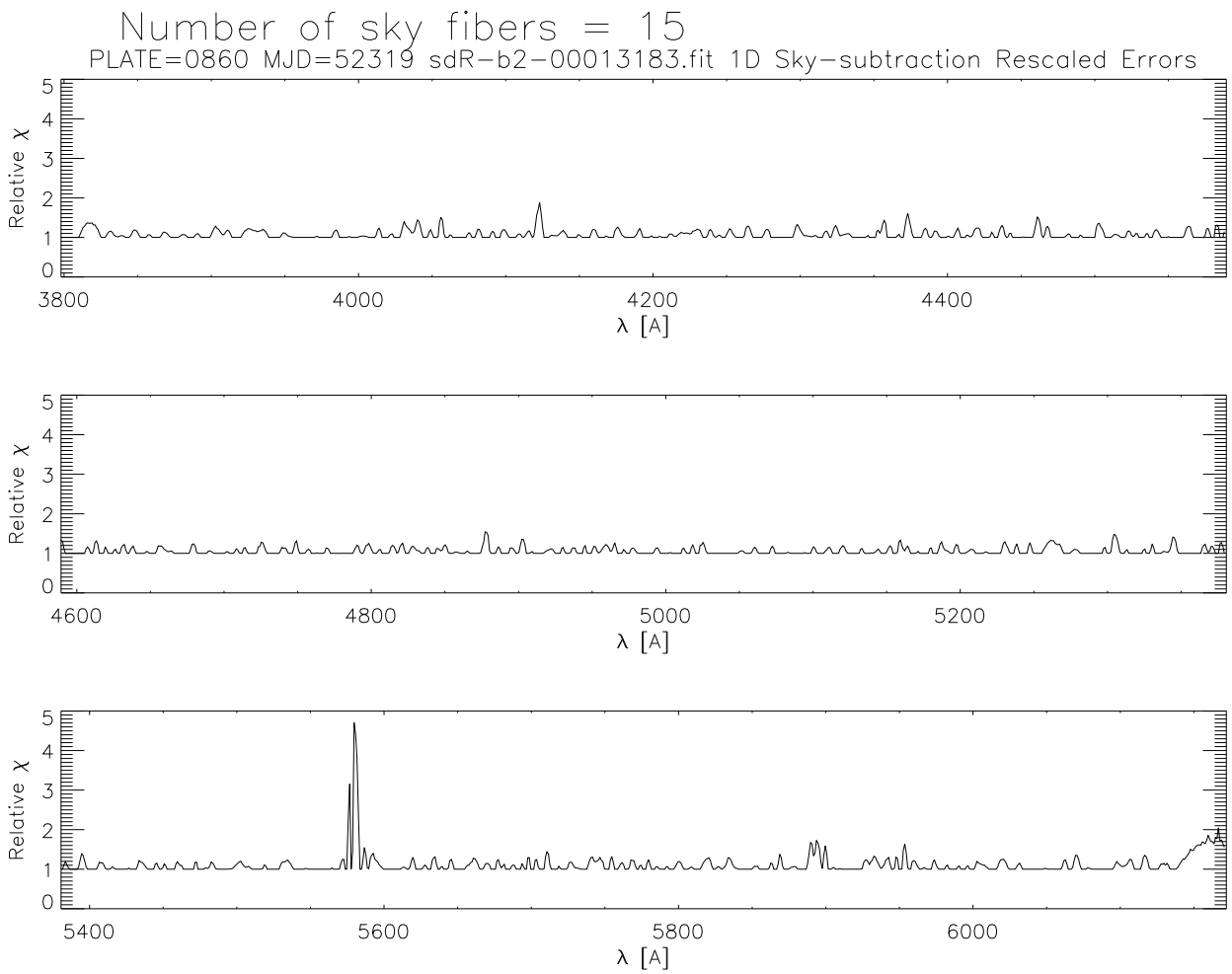

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

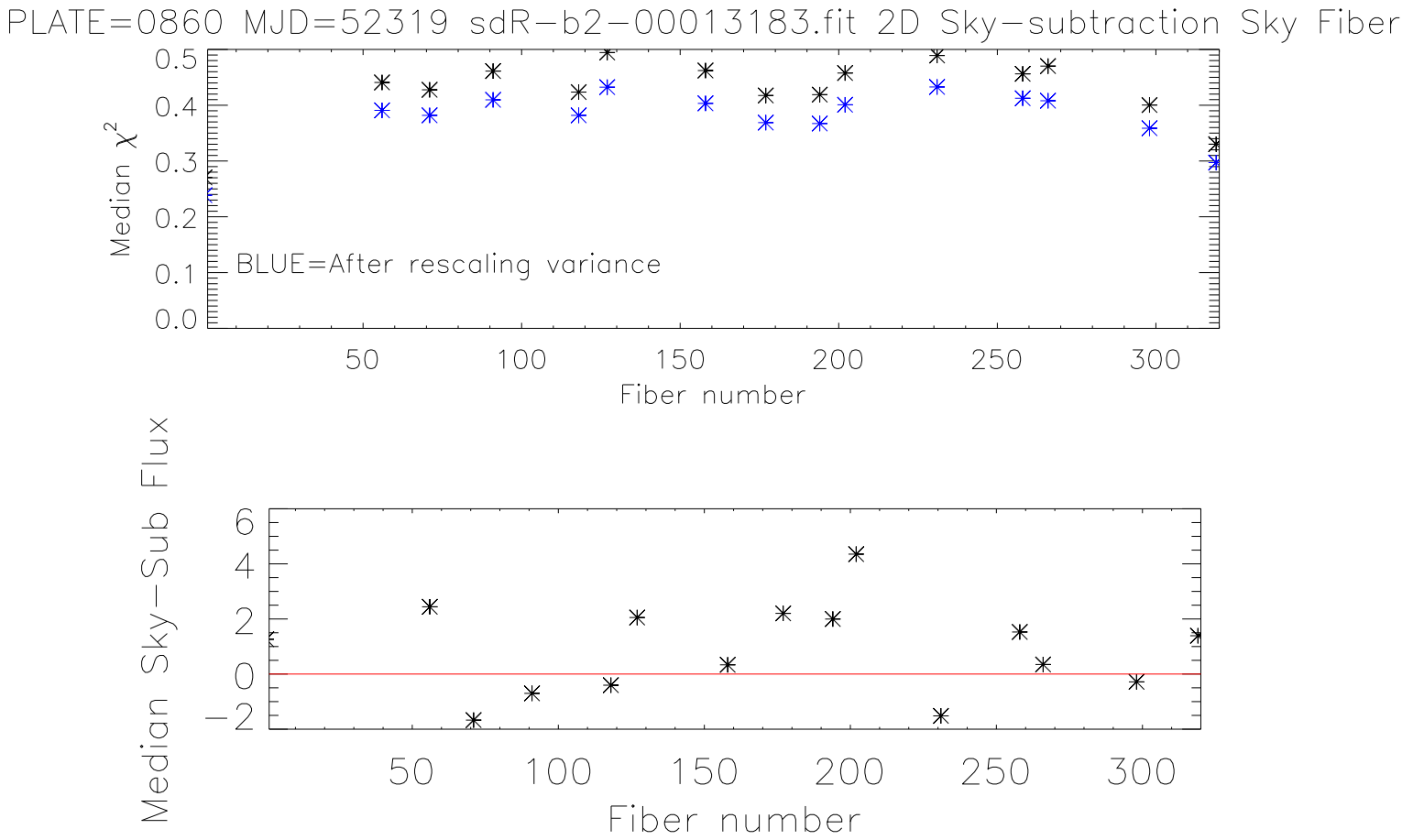

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013183.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
0.97
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

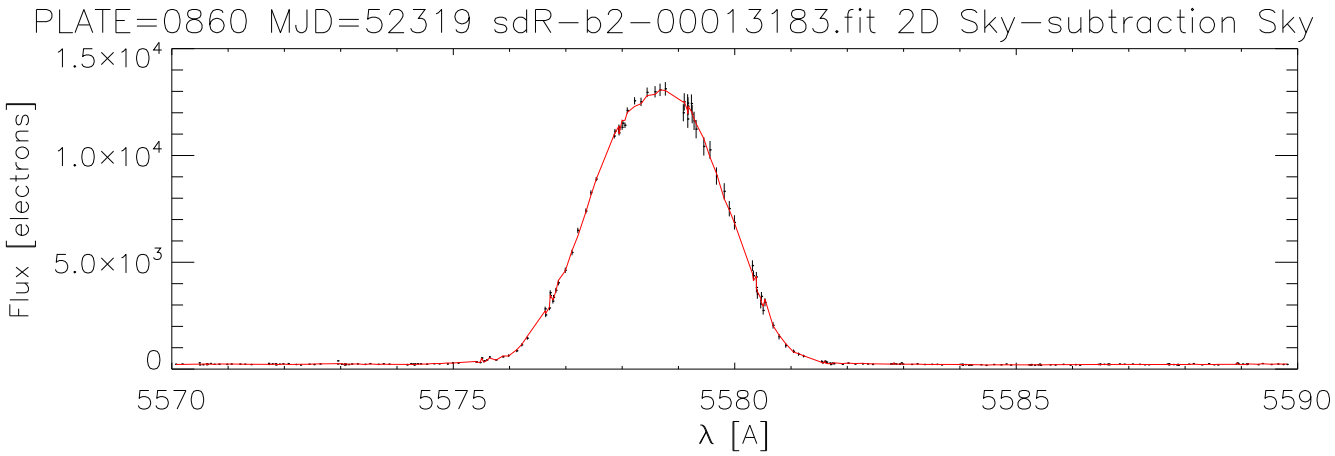

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

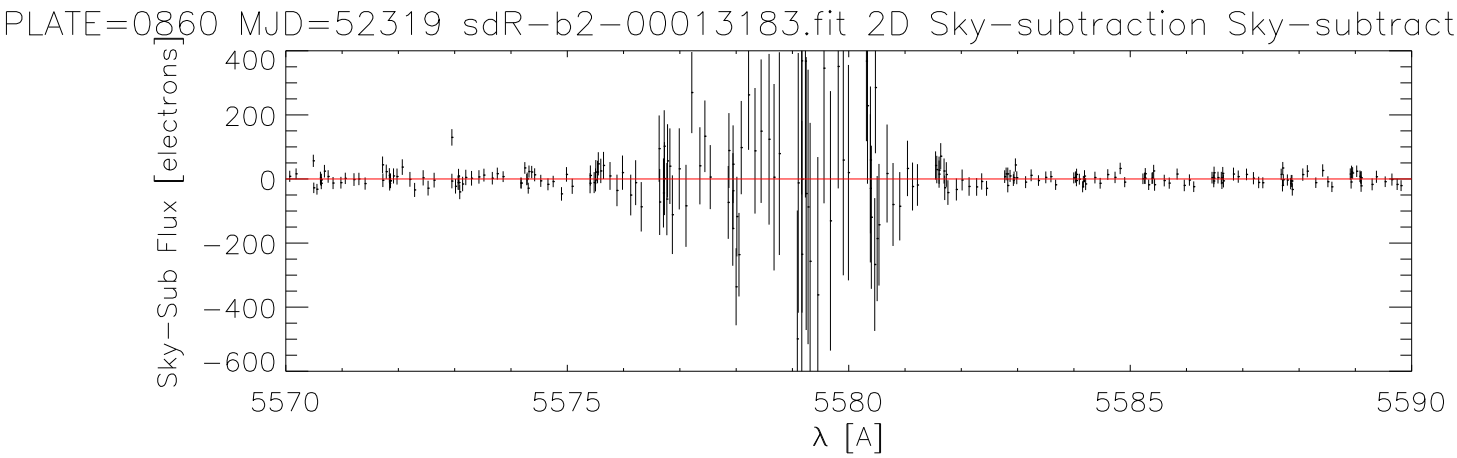

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

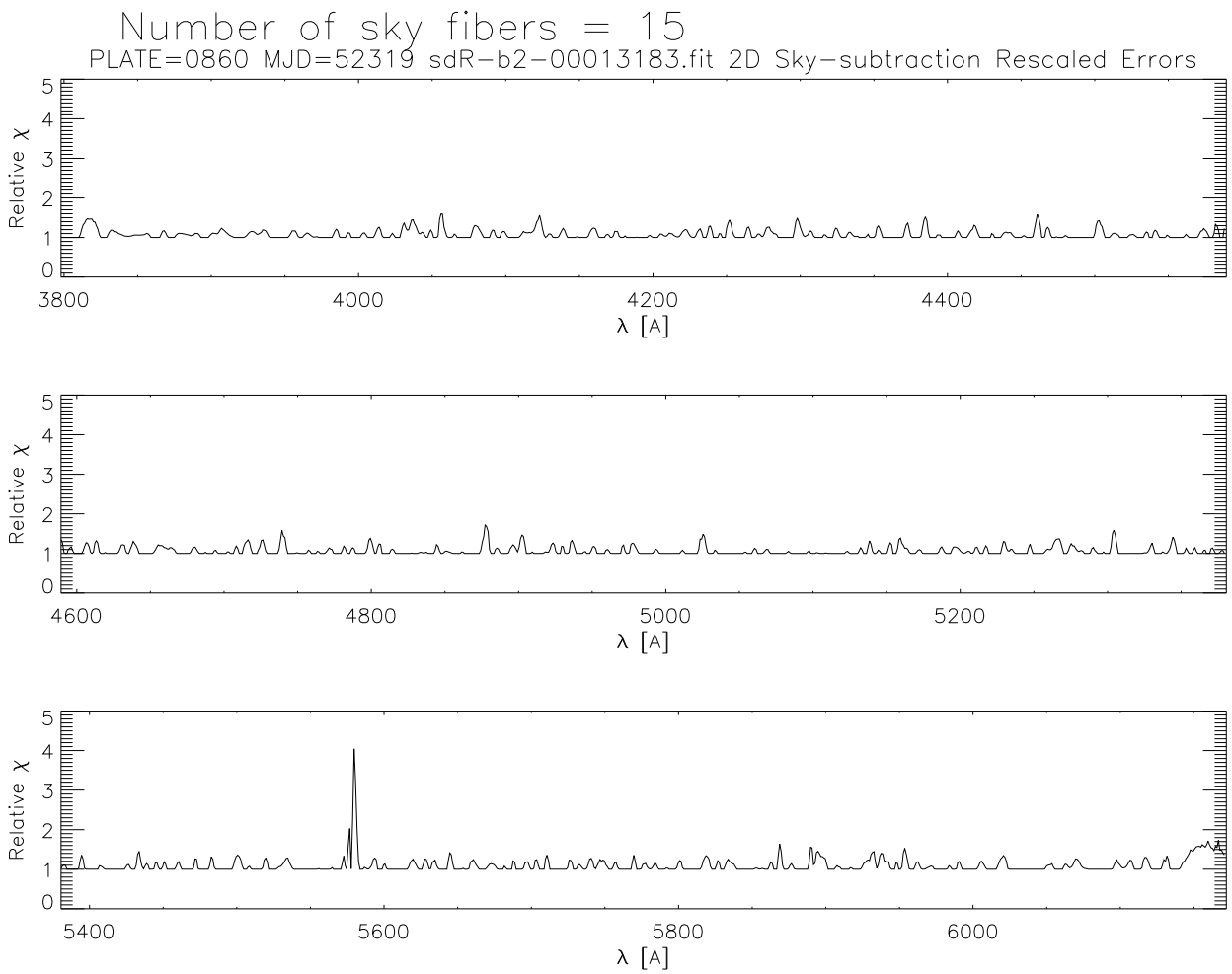

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

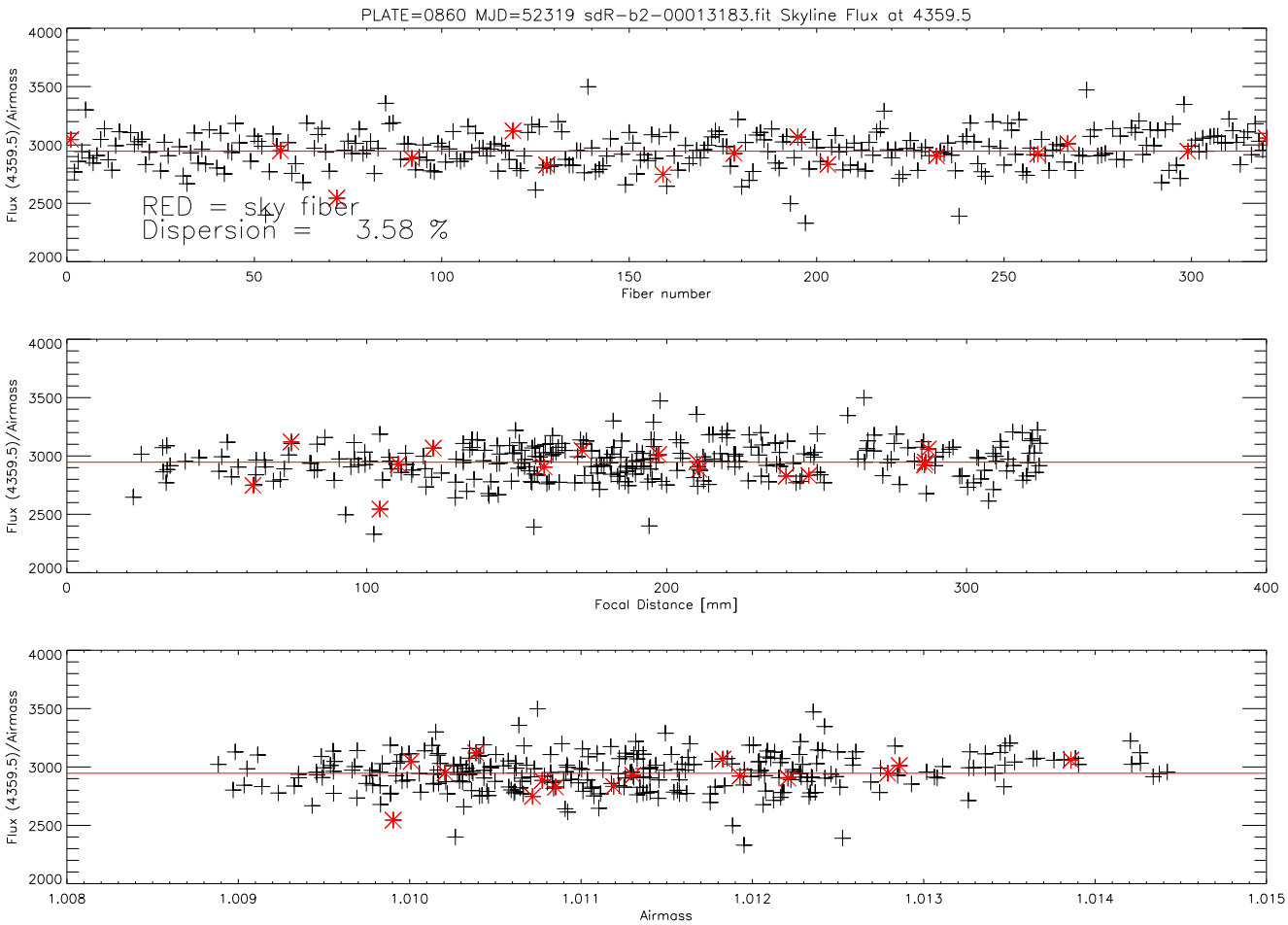

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

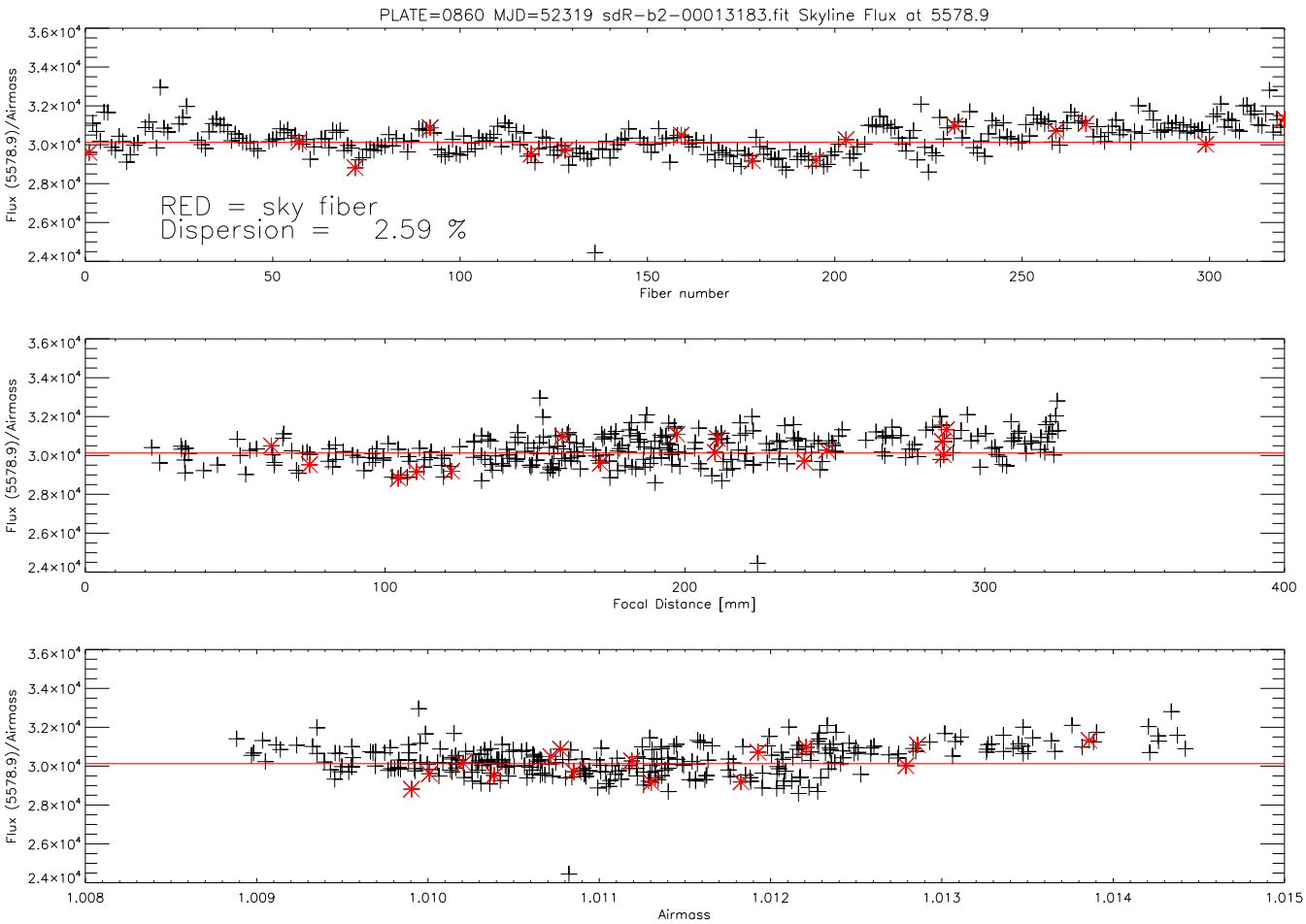

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

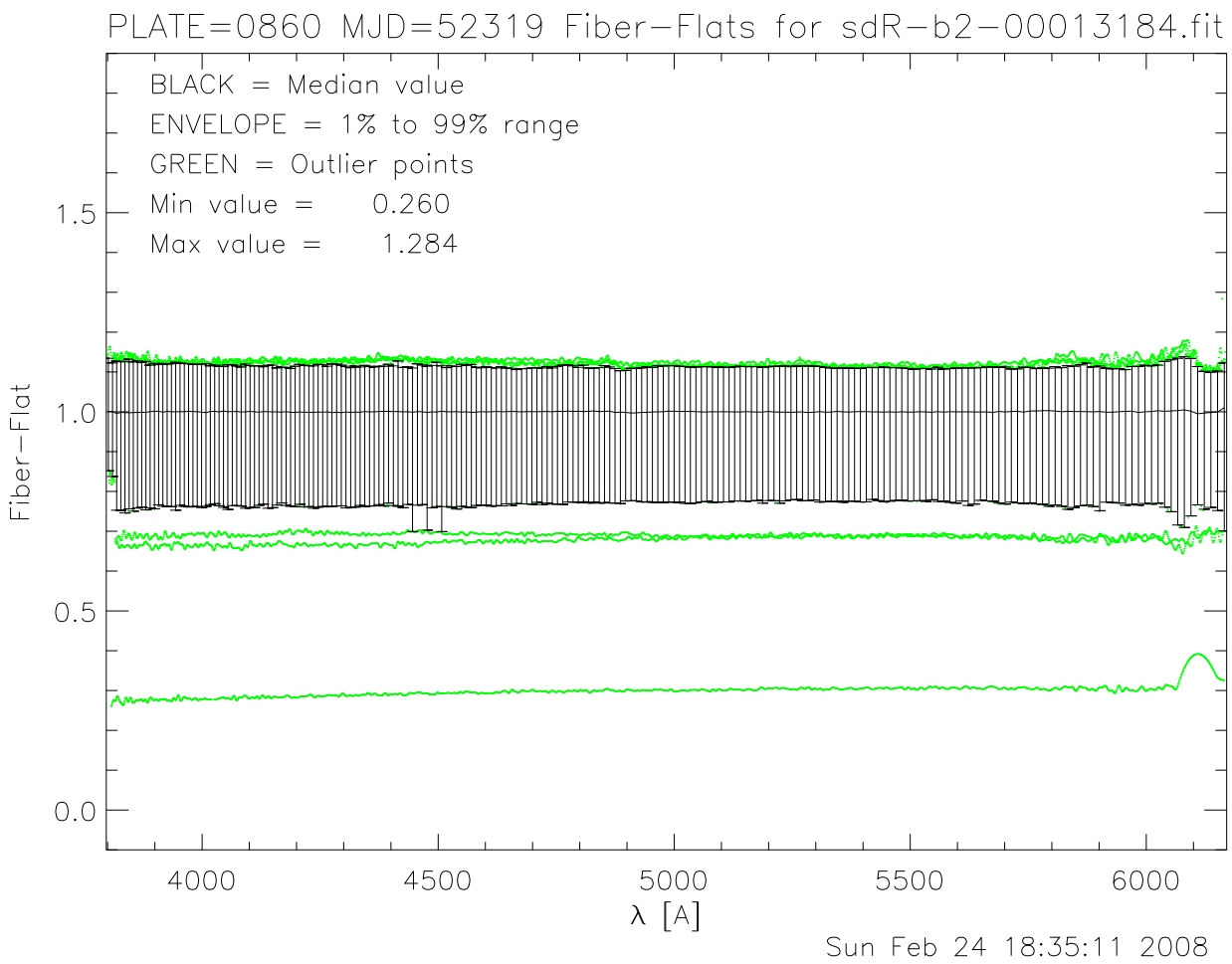

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

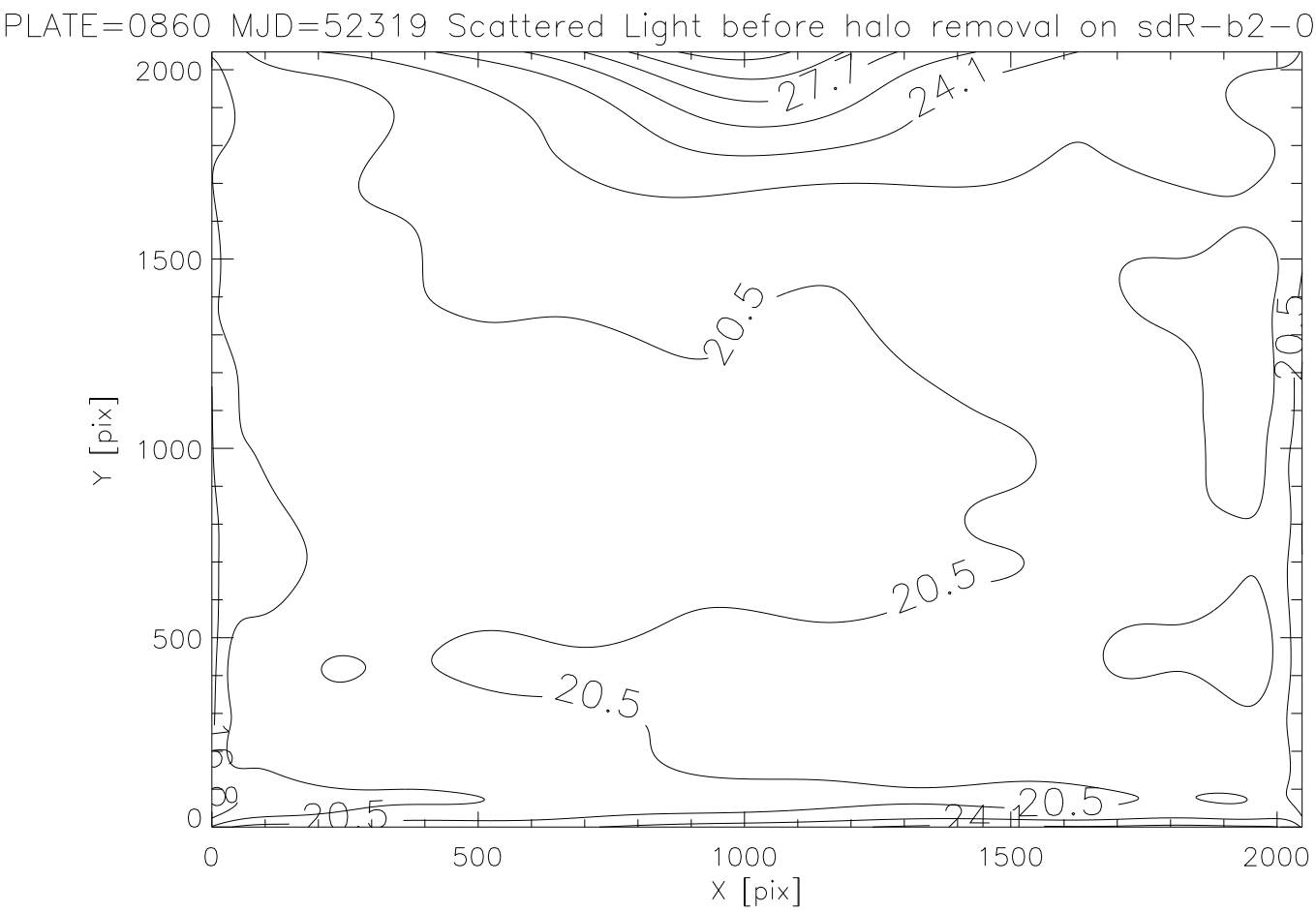

PLATE=0860 MJD=52319 sdR-b2-00013183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

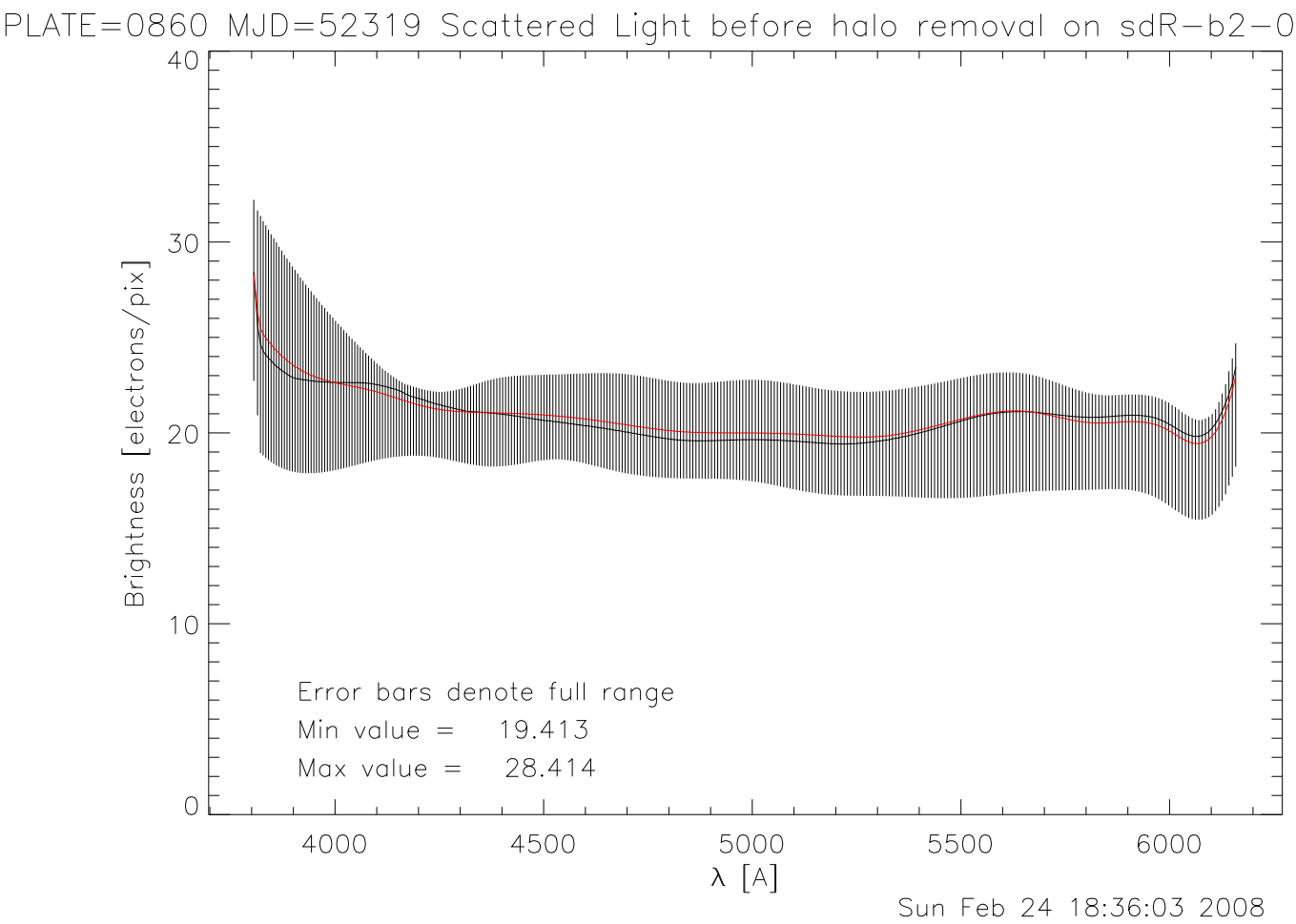

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-b2-00013183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

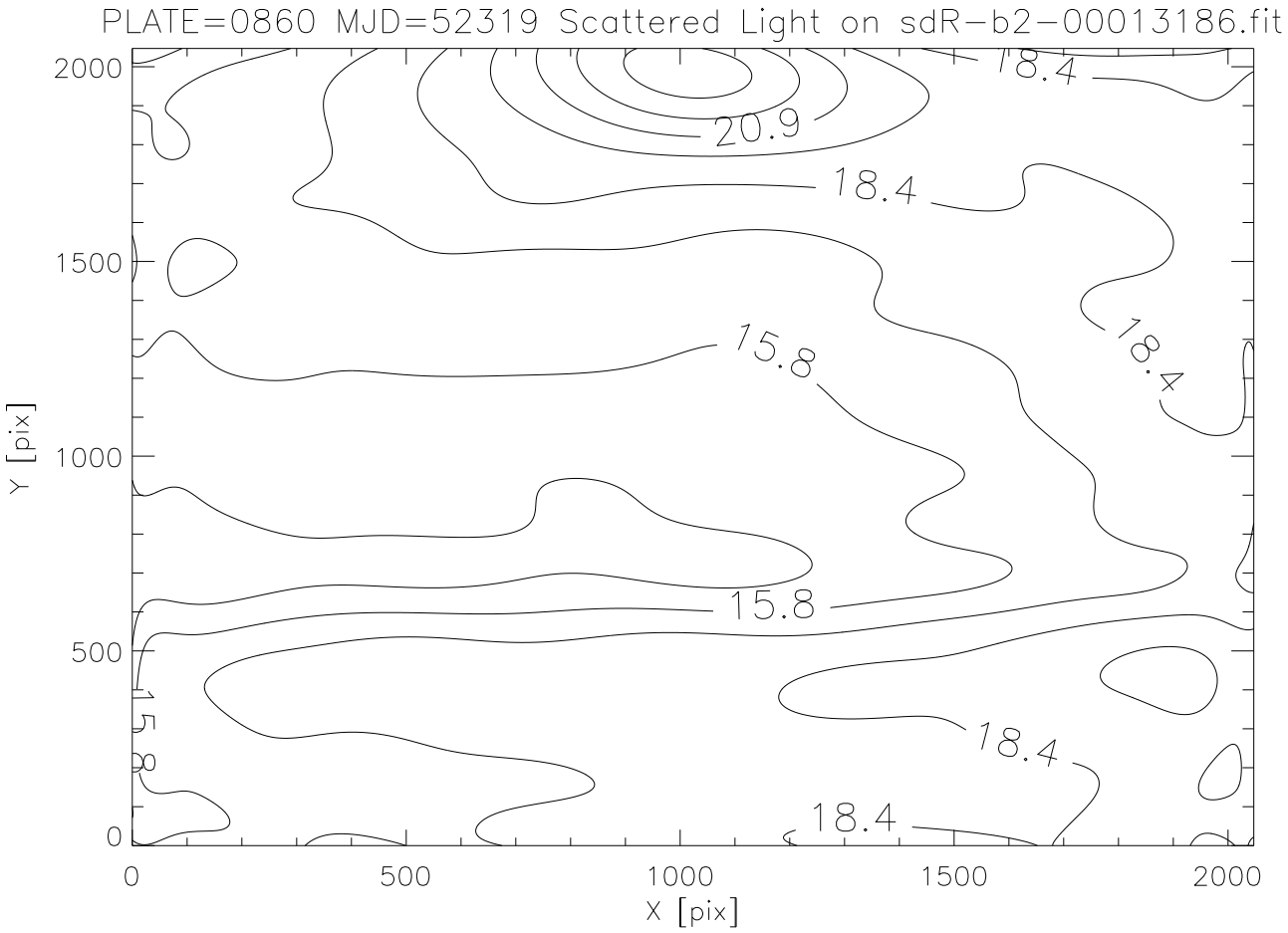

PLATE=0860 MJD=52319 sdR-b2-00013183.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 3.58 %
Fiber number
Focal Distance [mm]
Airmass

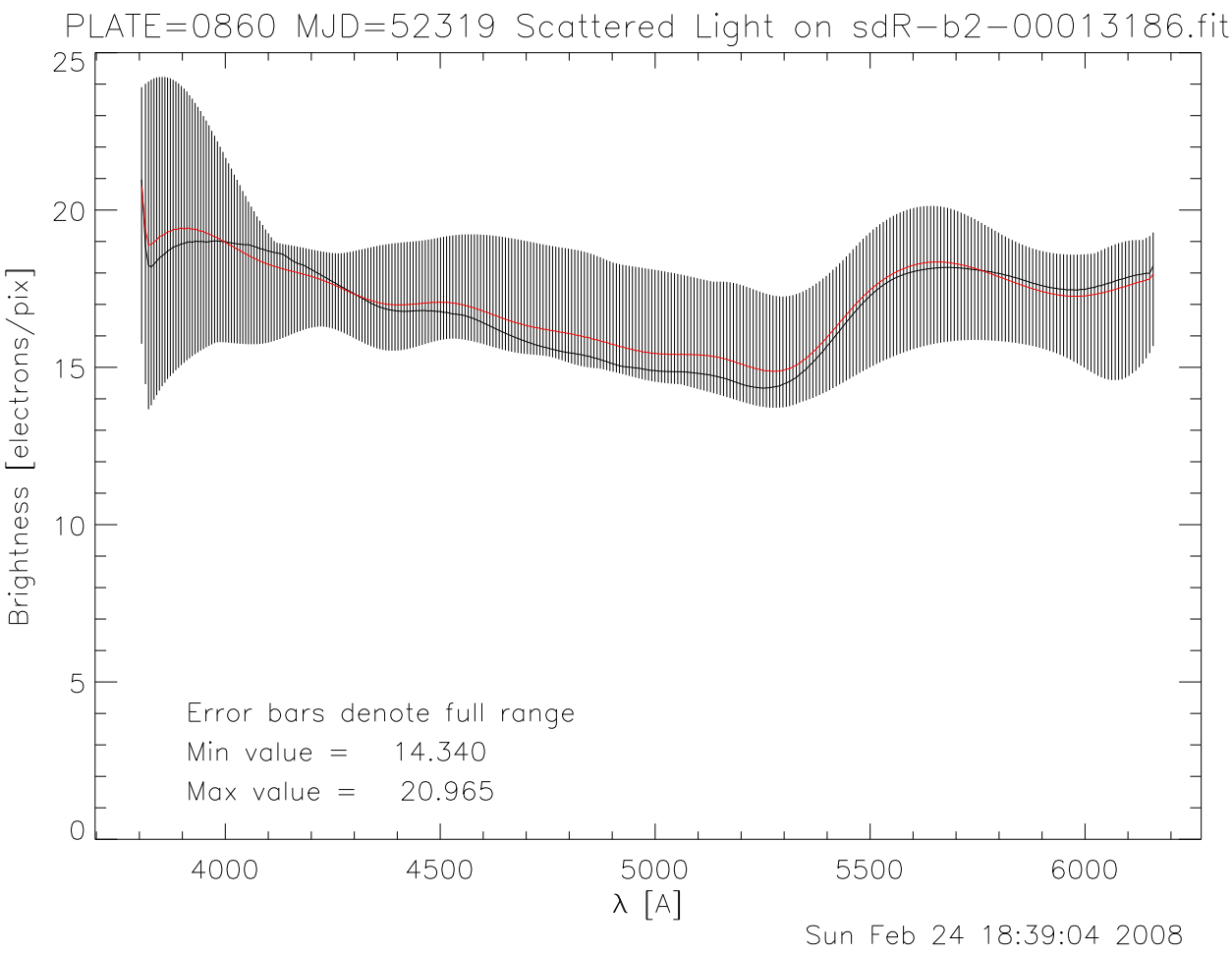

PLATE=0860 MJD=52319 sdR-b2-00013183.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.59 %
Fiber number
Focal Distance [mm]
Airmass

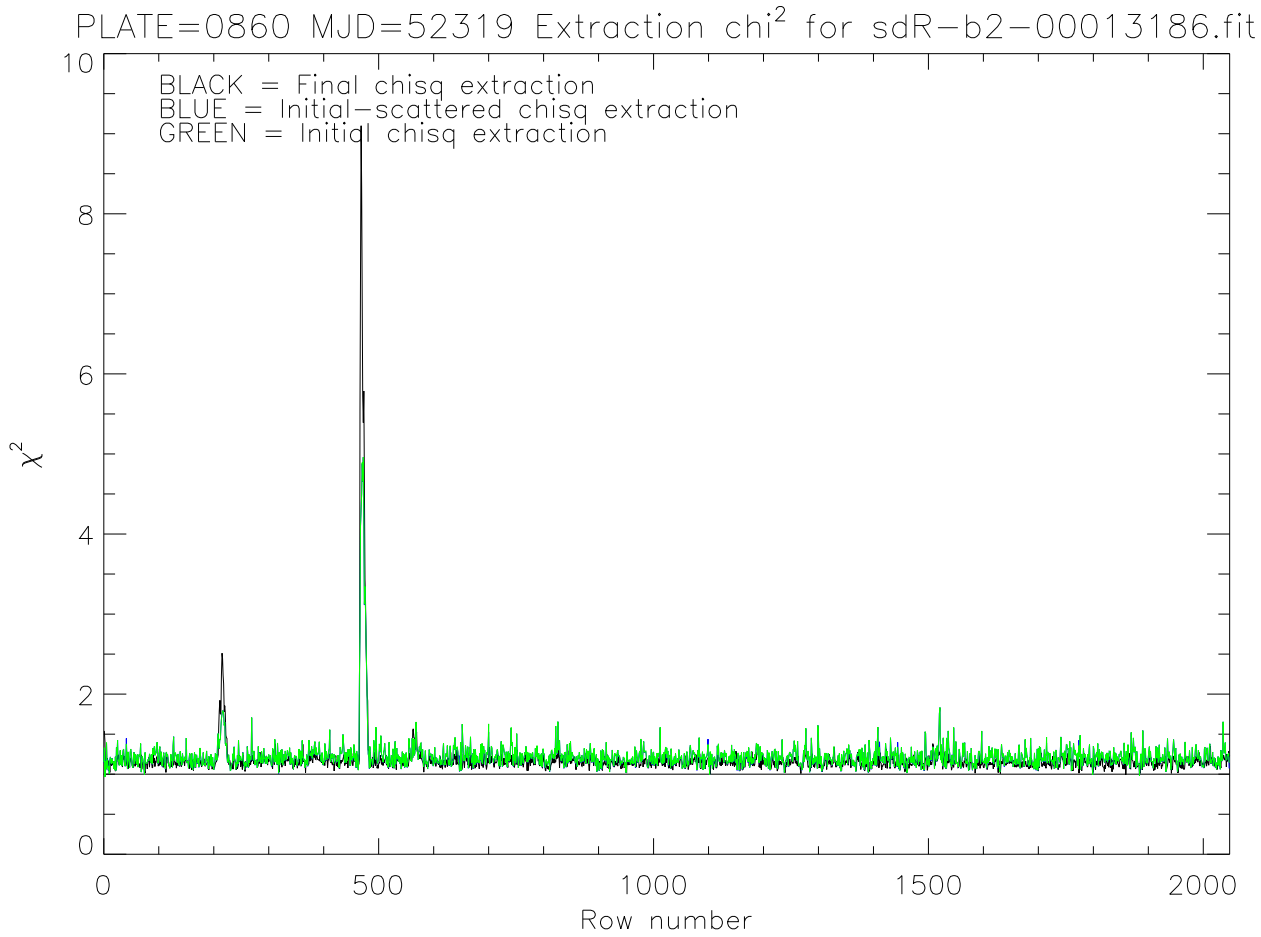

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:35:11 2008

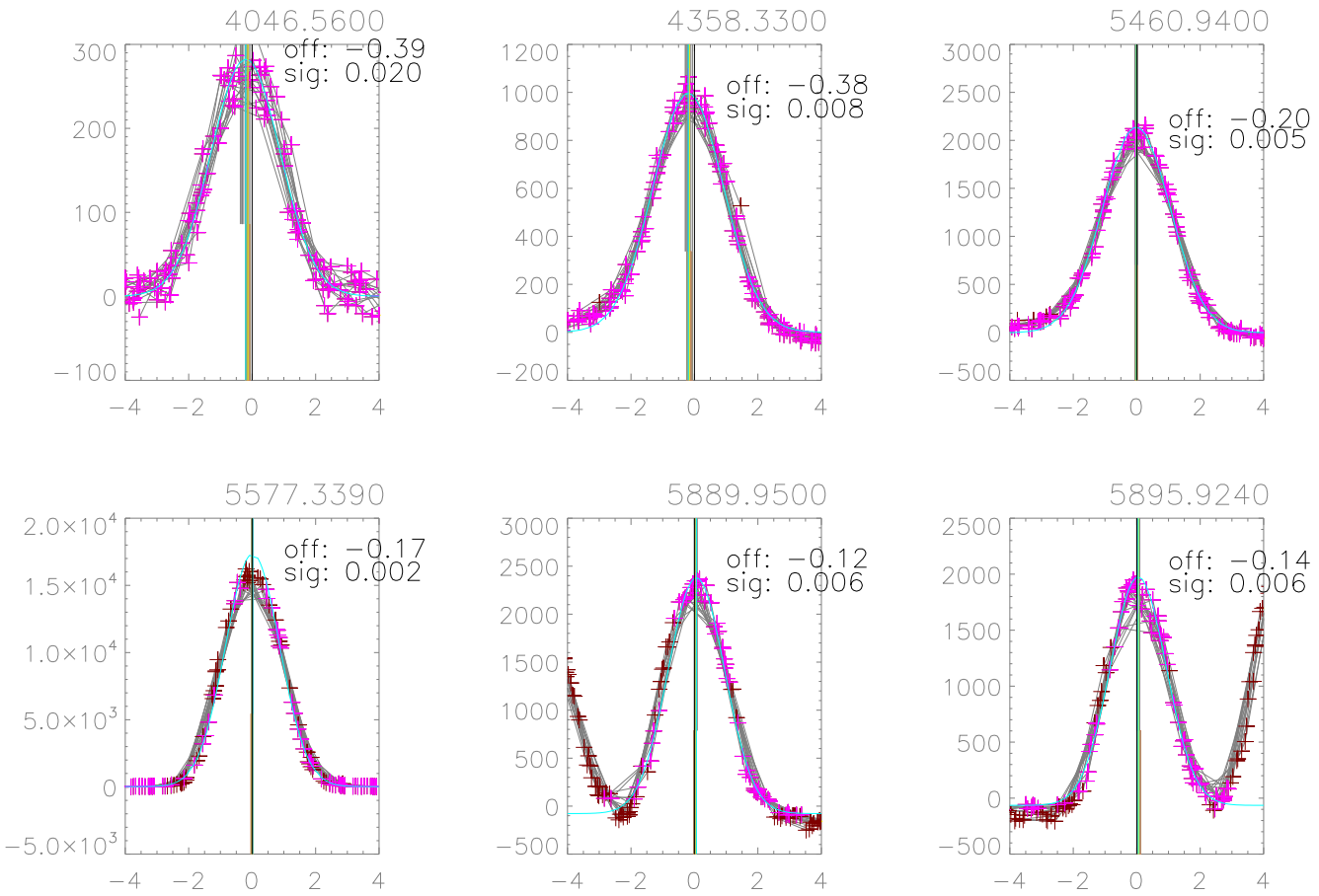

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b2−00013186.f
27.1
24.1
20.5
20.5
20.5
20.5
24
20.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

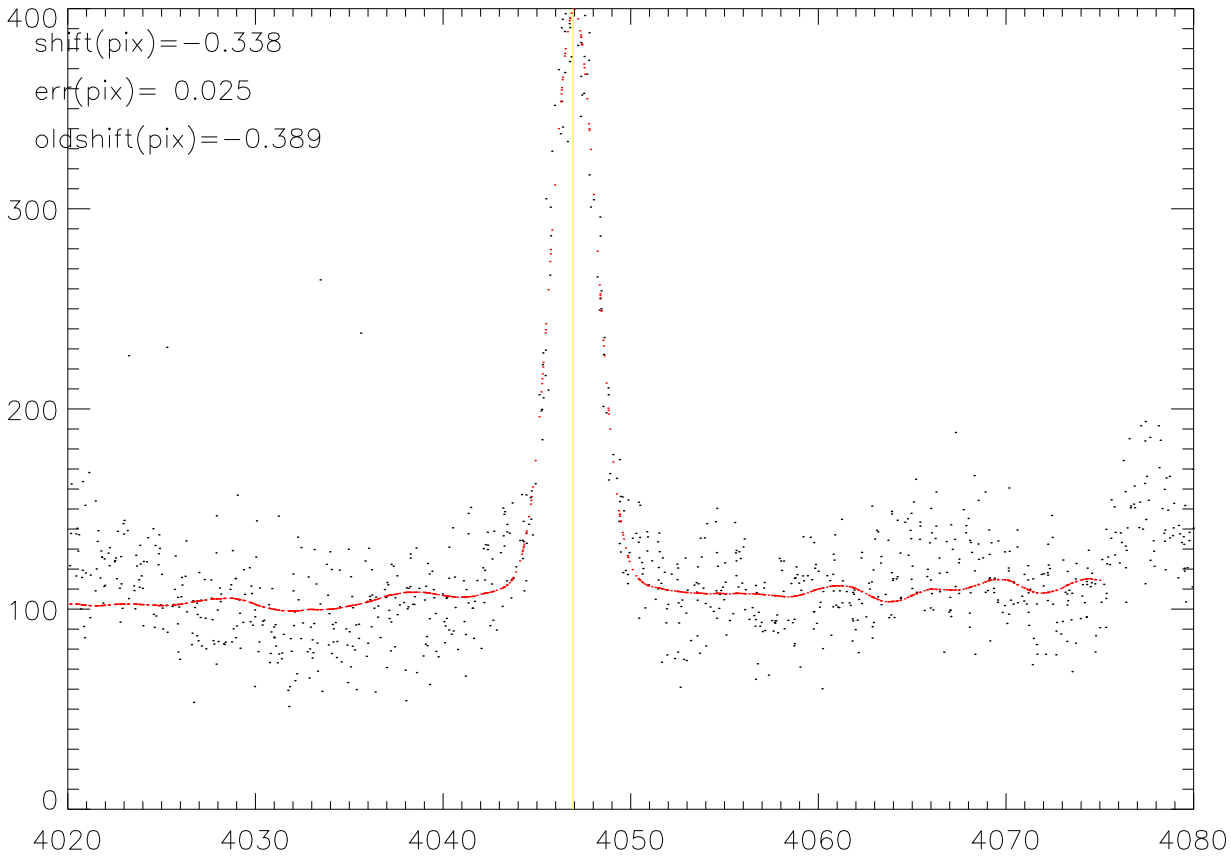

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013186.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 19.413
Max value = 28.414
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:36:03 2008

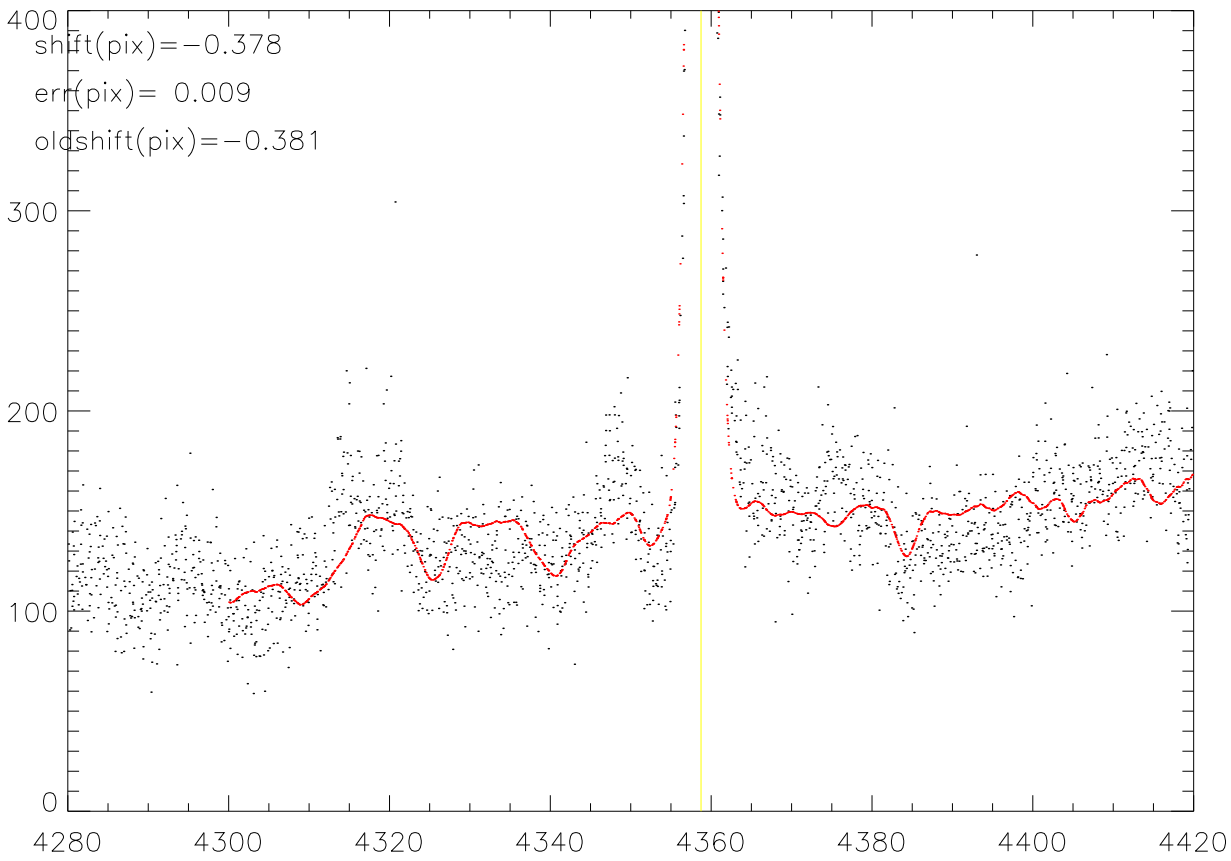

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013186.fit
18.4
20.9
18.4
18.4
15.8
15.8
18.4
18.4
15.8
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

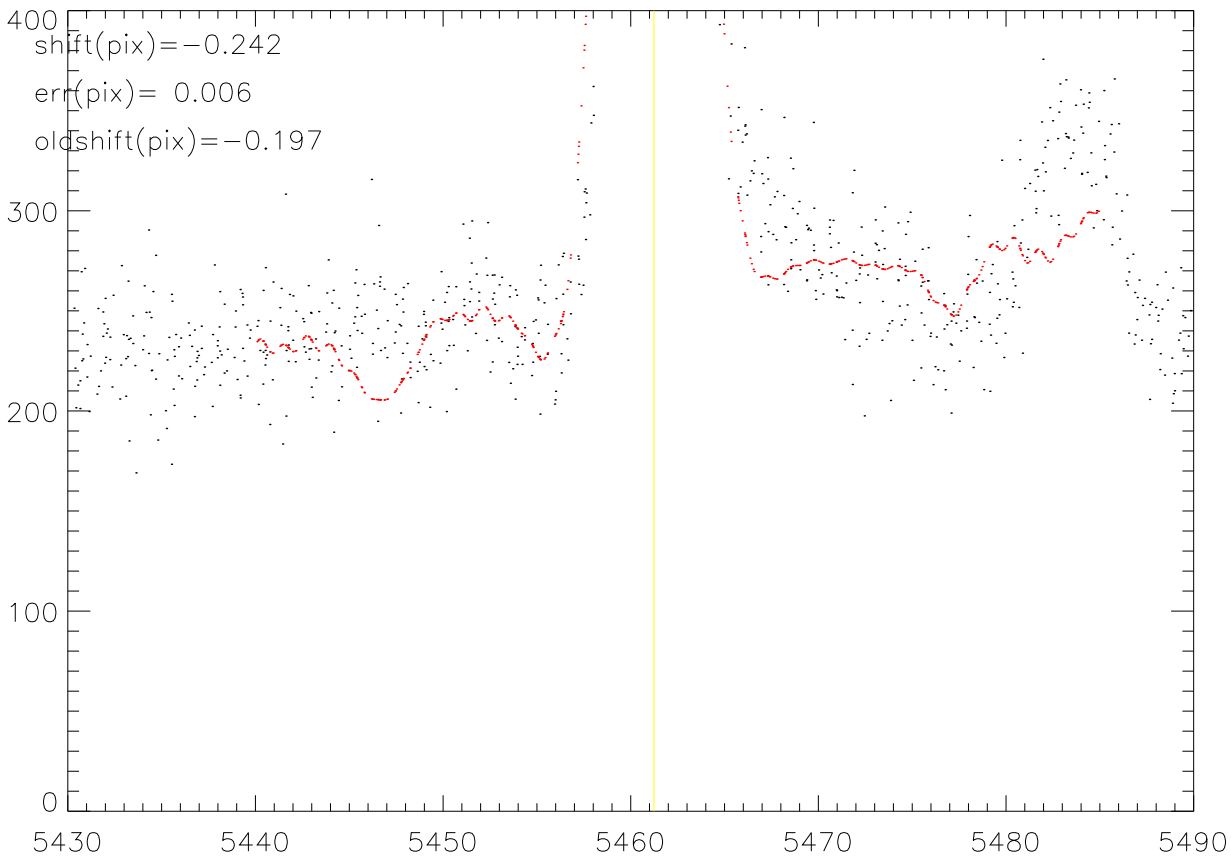

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013186.fit
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 14.340
Max value = 20.965
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:39:04 2008

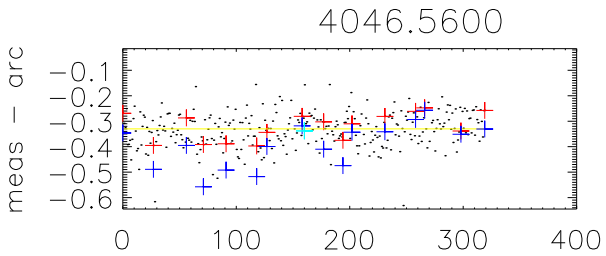

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013186.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

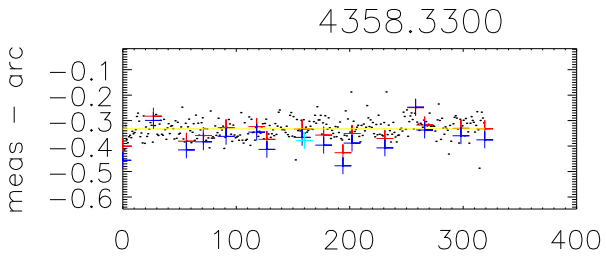

4046.5600
off: −0.39
sig: 0.020
4358.3300
off: −0.38
sig: 0.008
5460.9400
off: −0.20
sig: 0.005
5577.3390
off: −0.17
sig: 0.002
5889.9500
off: −0.12
sig: 0.006
5895.9240
off: −0.14
sig: 0.006

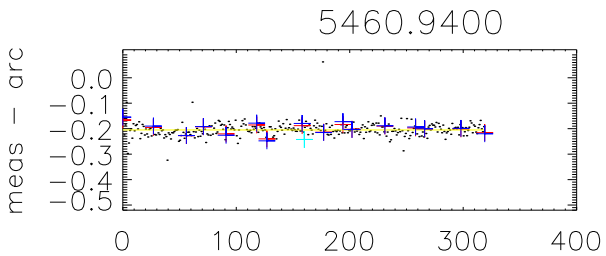

shift(pix)=−0.338
err(pix)= 0.025
oldshift(pix)=−0.389
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

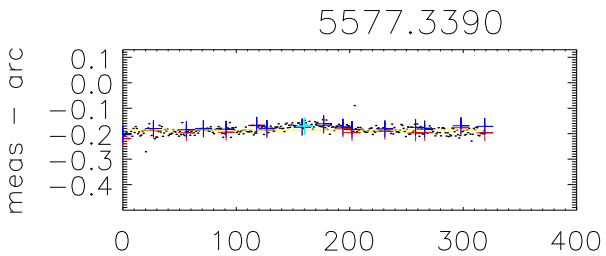

shift(pix)=−0.378
err(pix)= 0.009
oldshift(pix)=−0.381
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

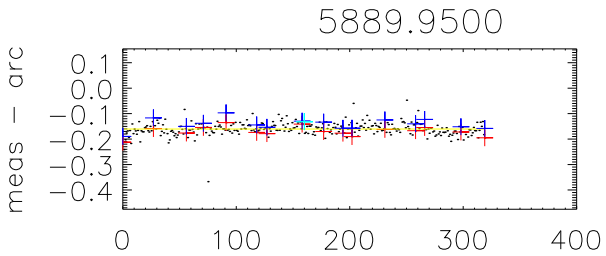

shift(pix)=−0.242
err(pix)= 0.006
oldshift(pix)=−0.197
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

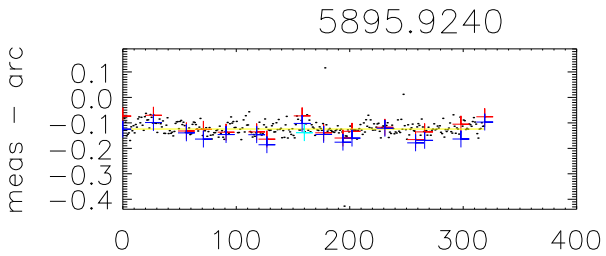

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

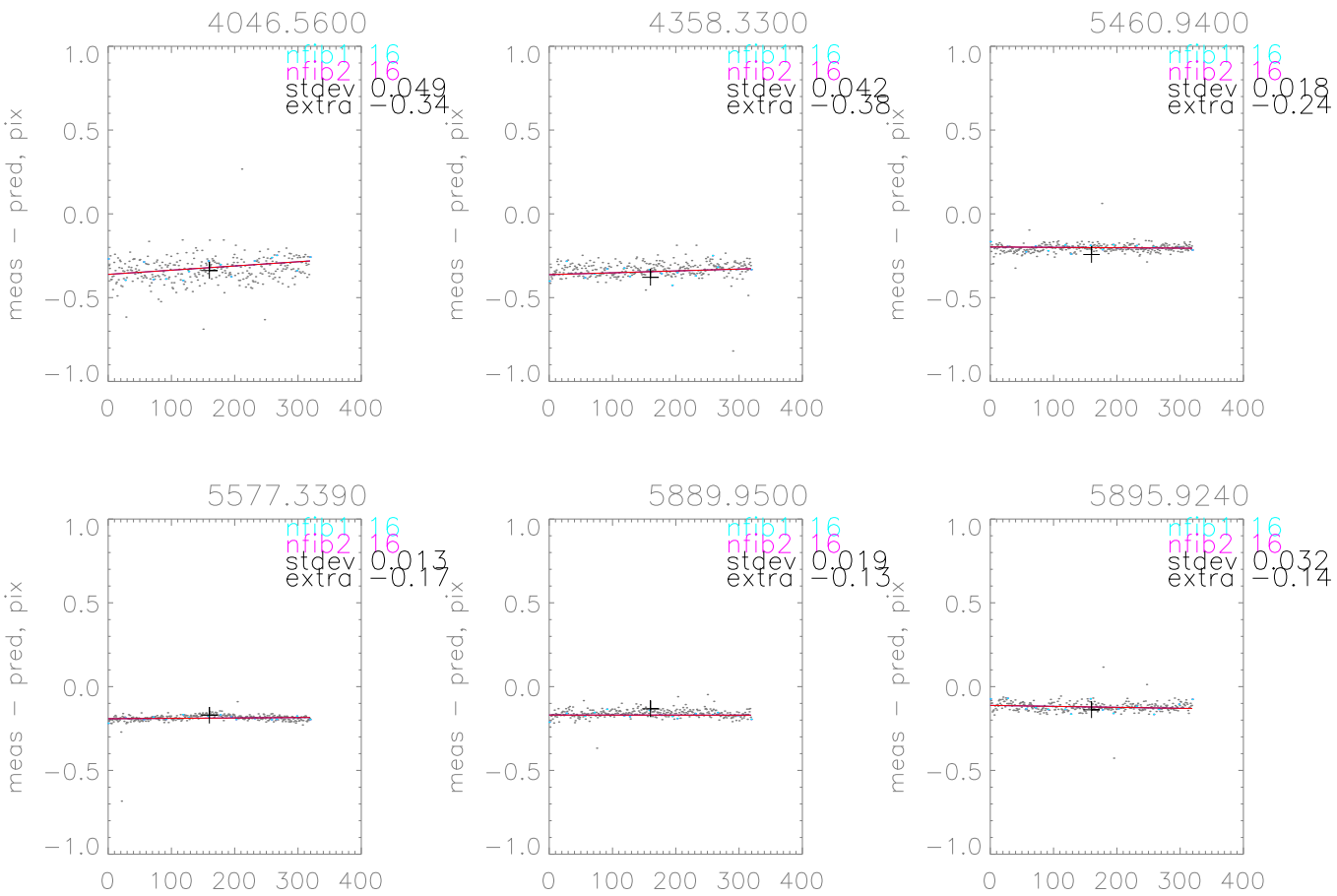

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

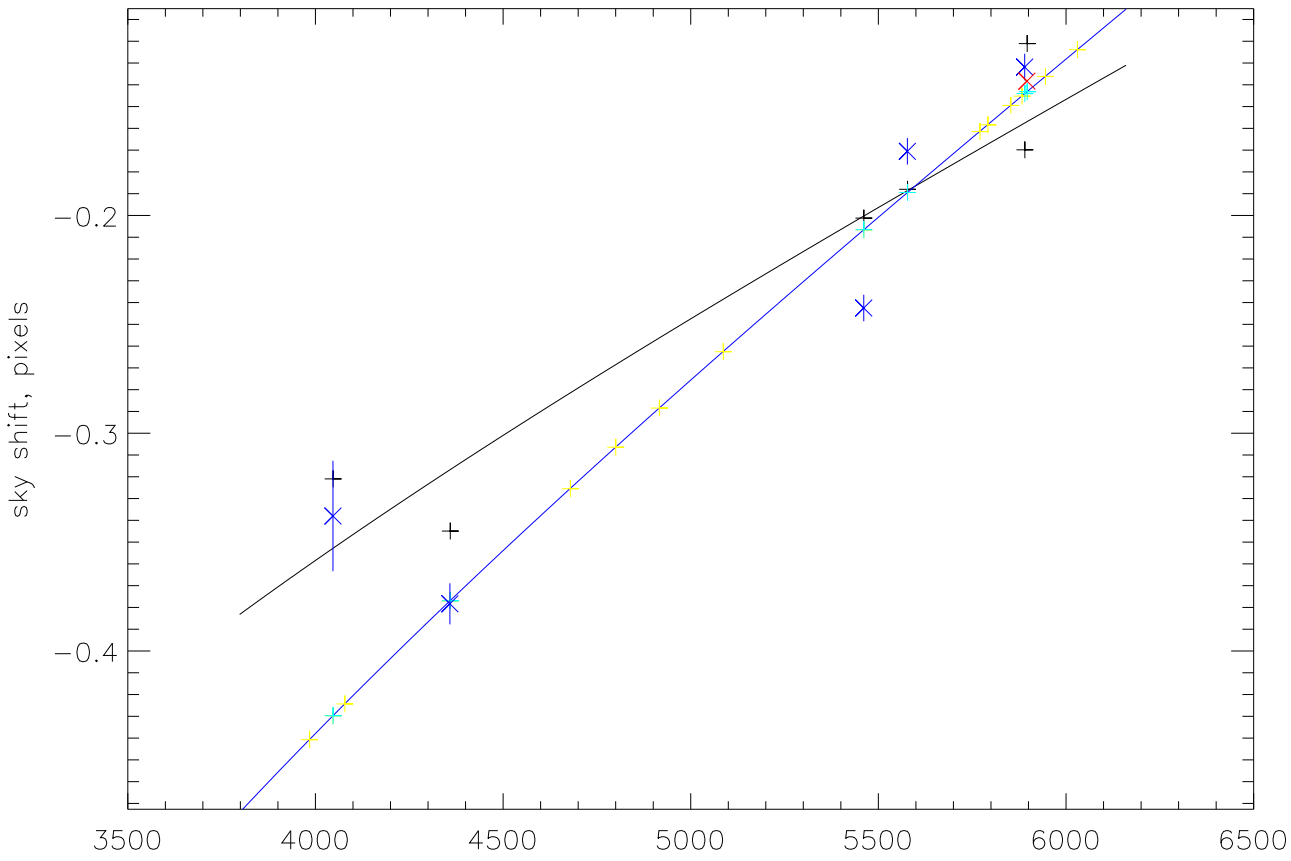

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

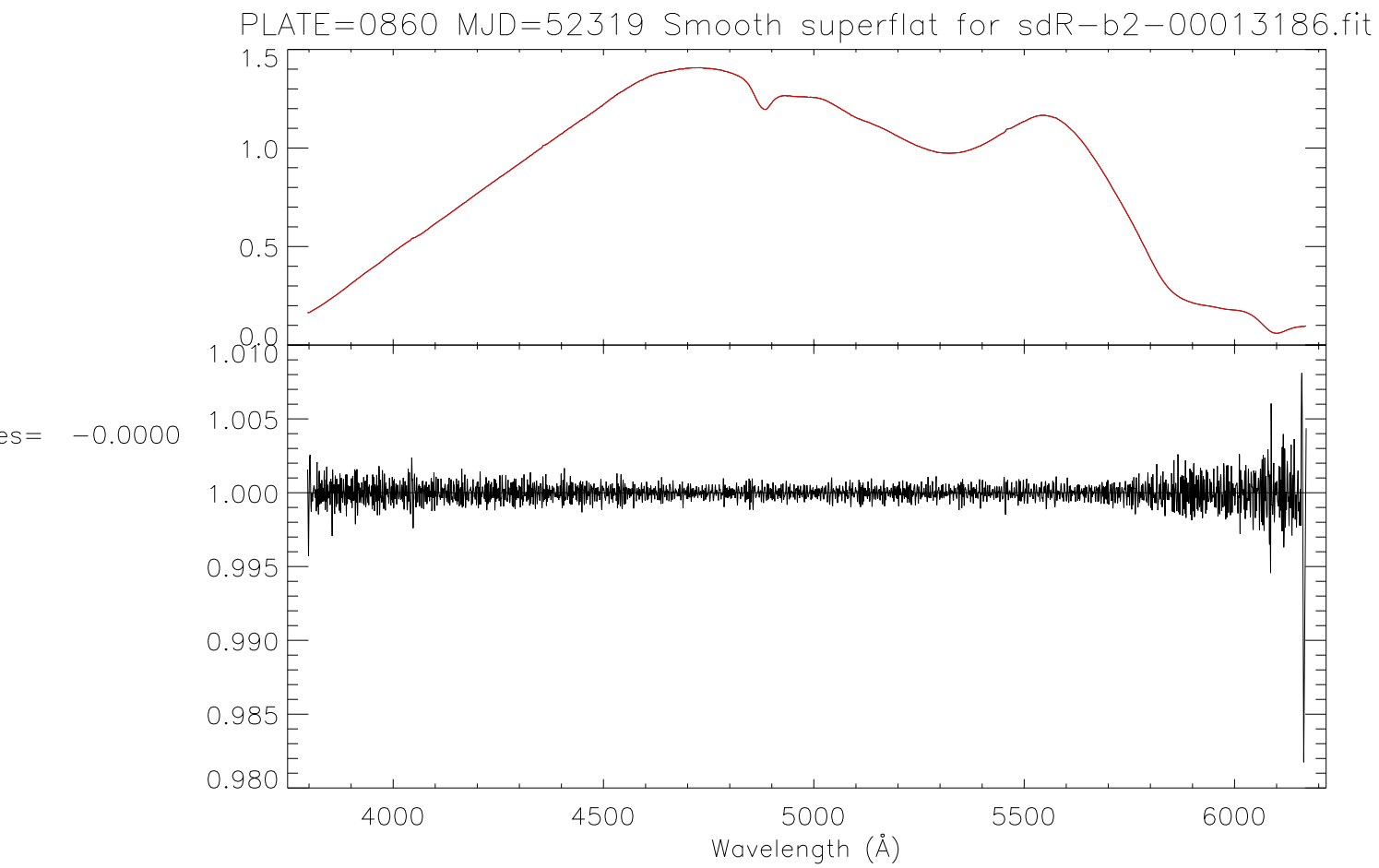

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

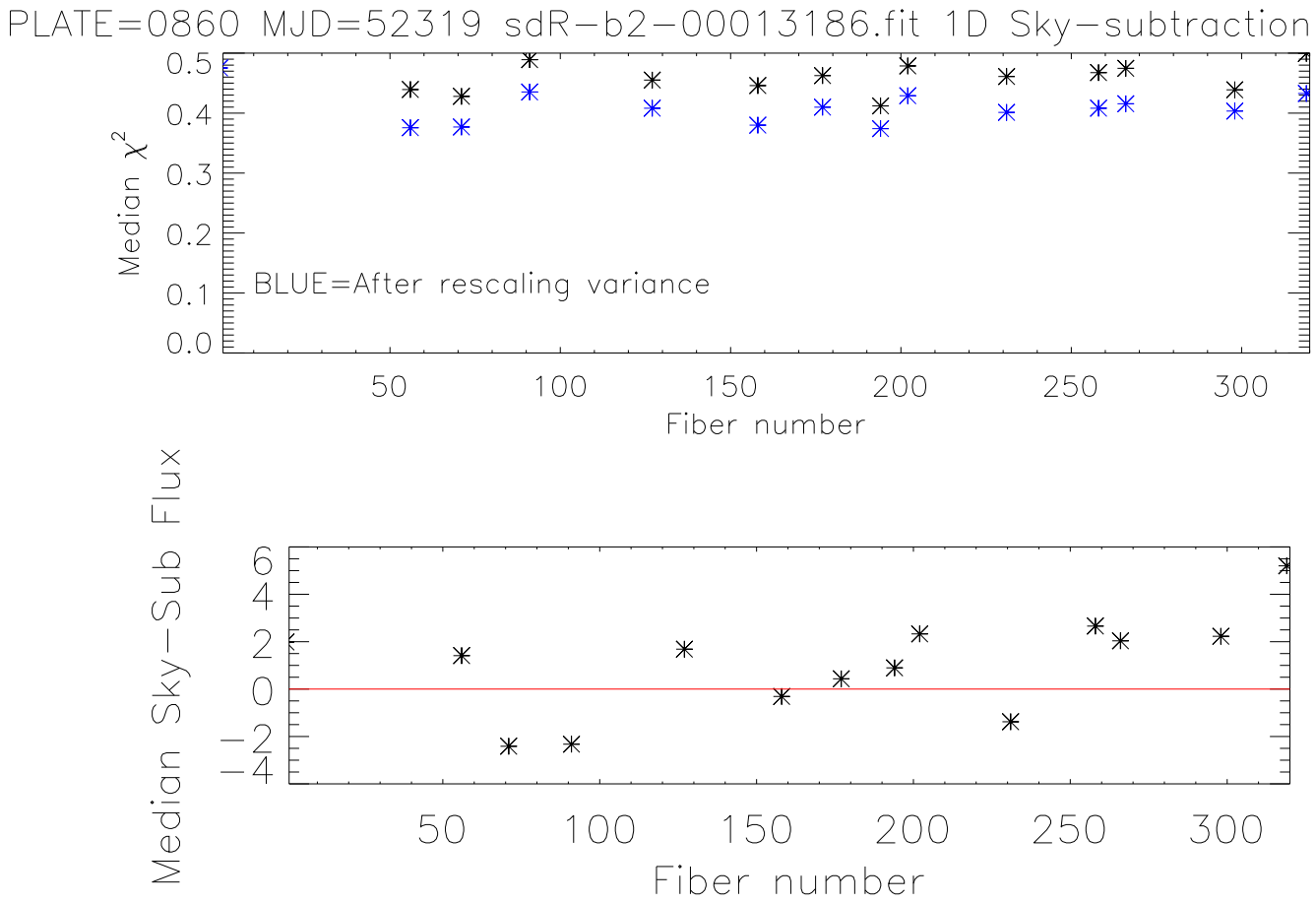

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

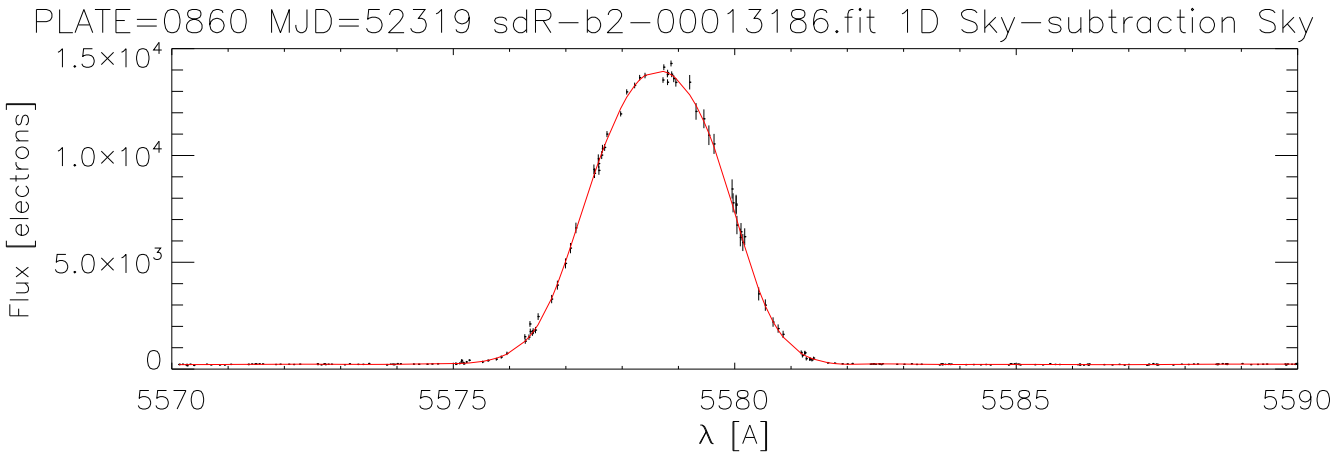

4046.5600
nfib1 16
nfib2 16
stdev 0.049
extra −0.34
4358.3300
nfib1 16
nfib2 16
stdev 0.042
extra −0.38
5460.9400
nfib1 16
nfib2 16
stdev 0.018
extra −0.24
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.17
5889.9500
nfib1 16
nfib2 16
stdev 0.019
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

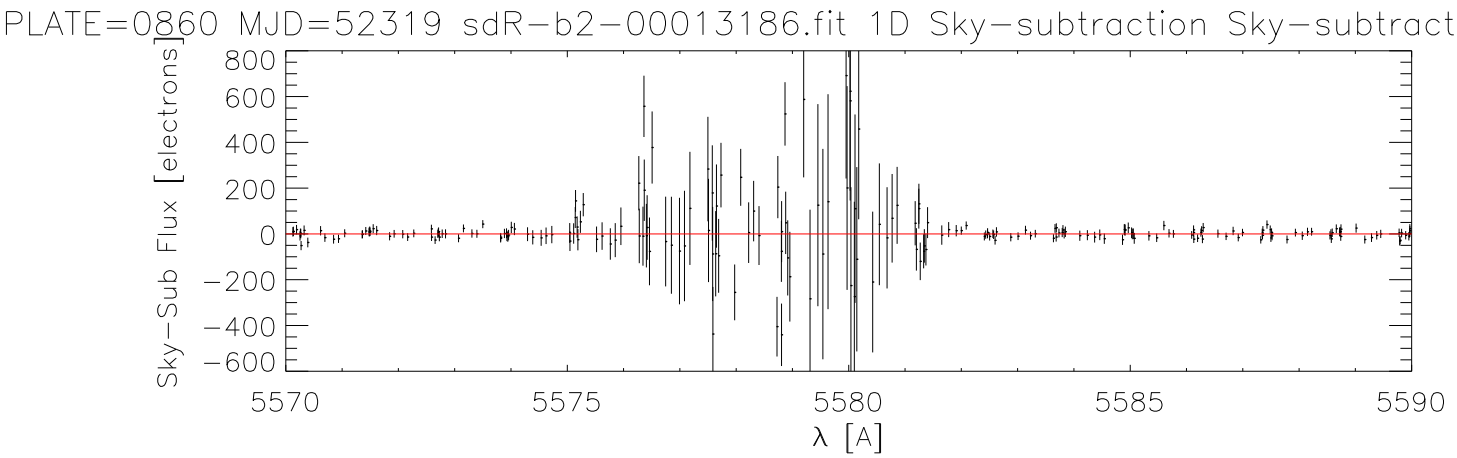

sky shift, pixels
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

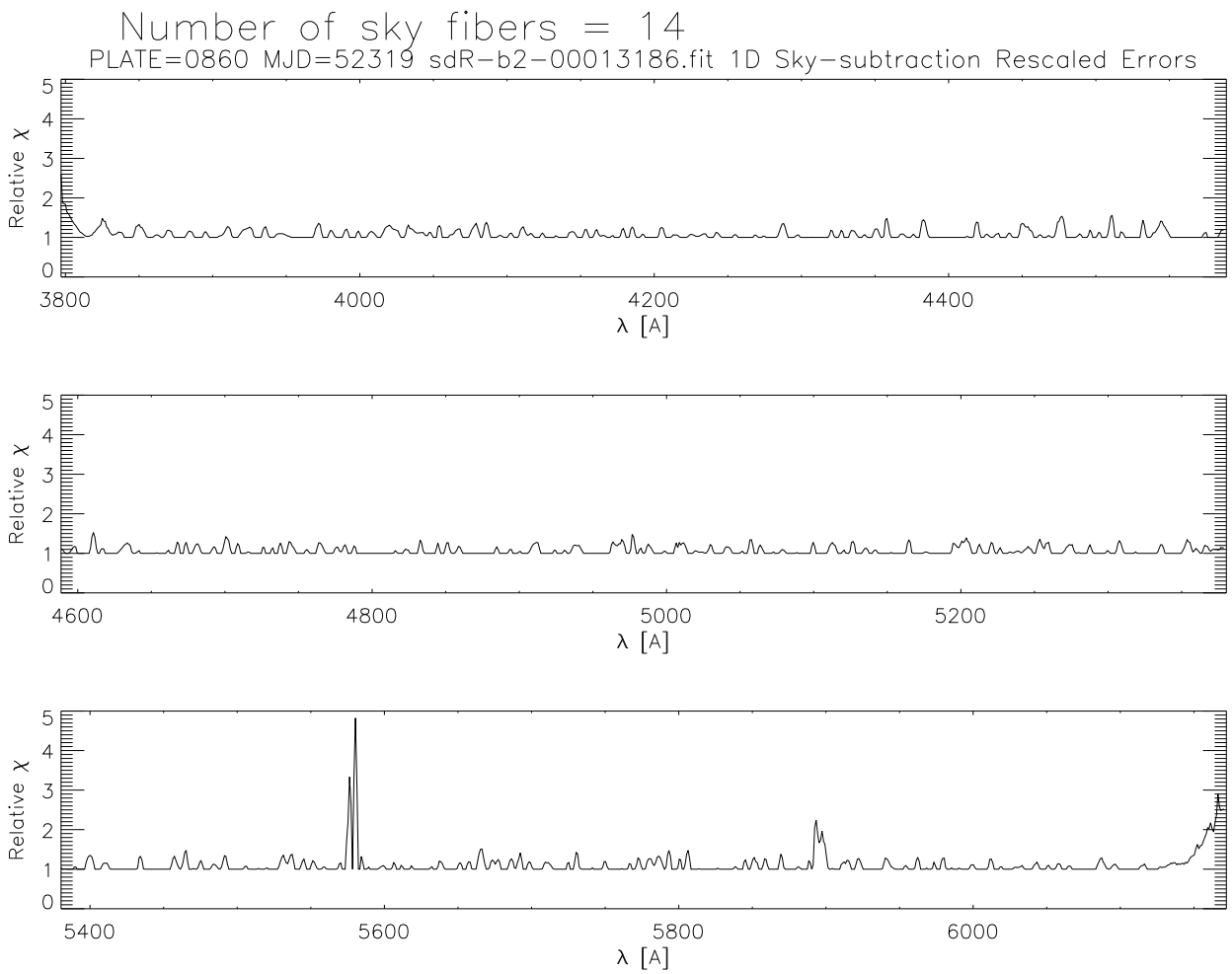

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013186.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

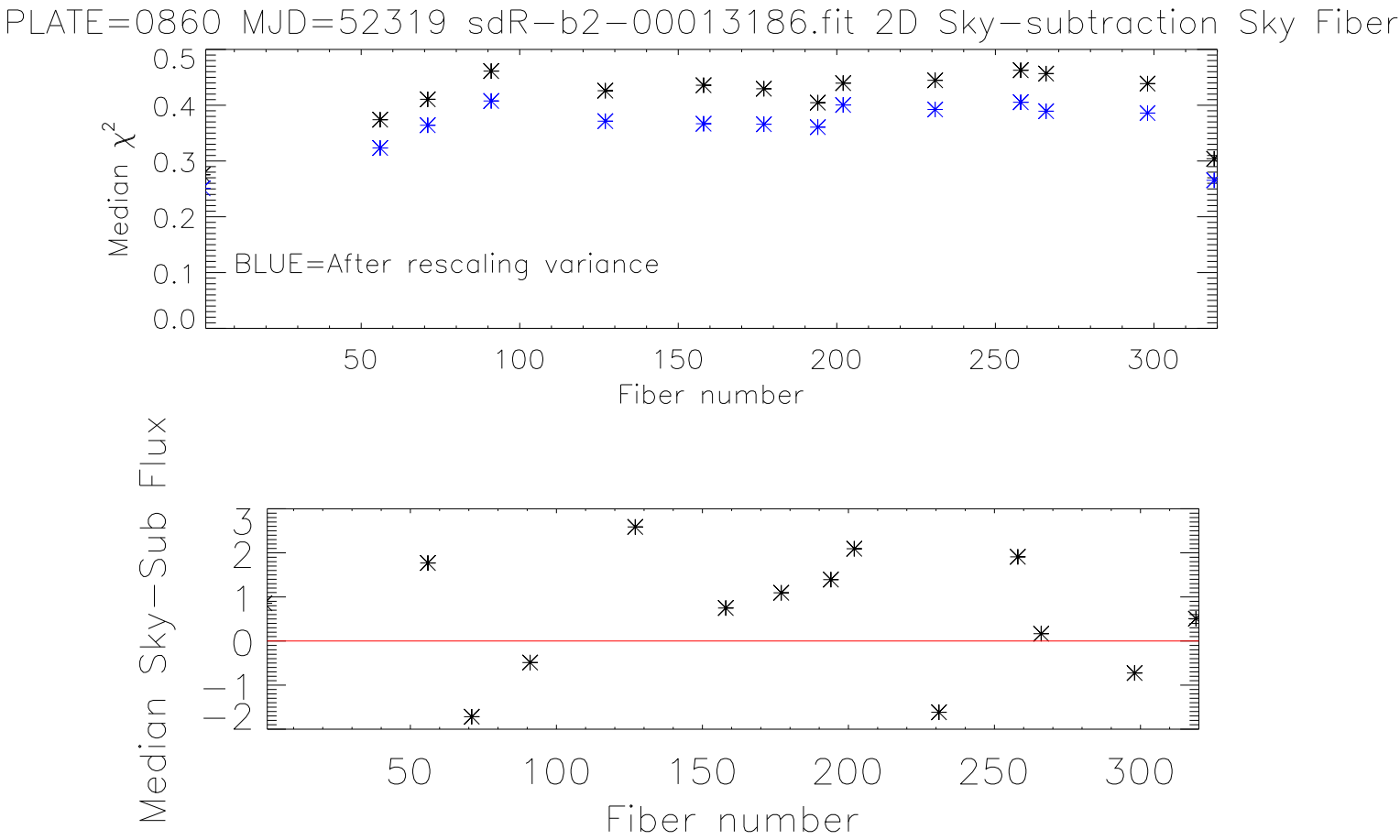
es= −0.0000

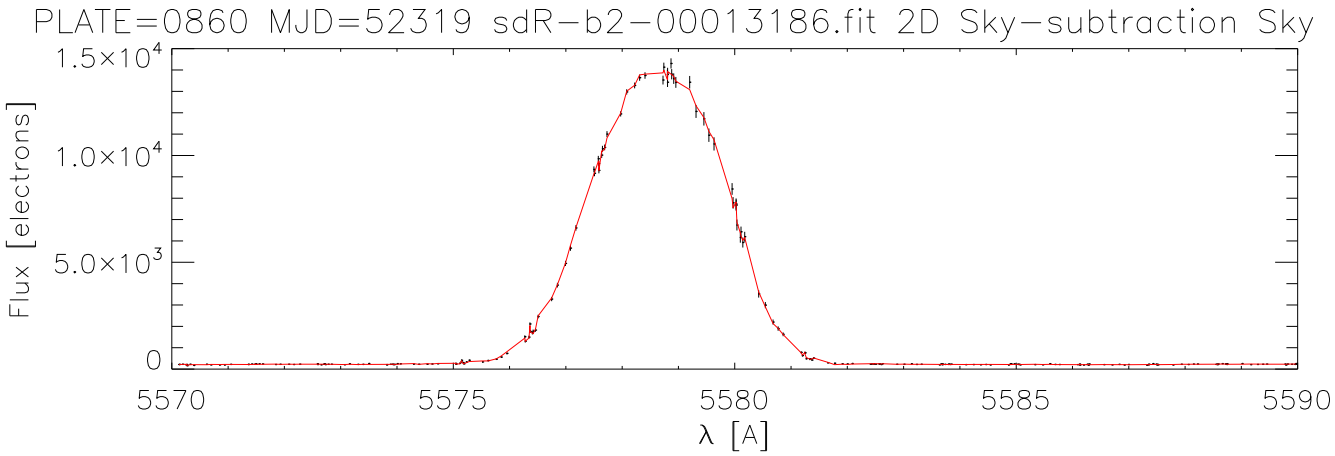

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

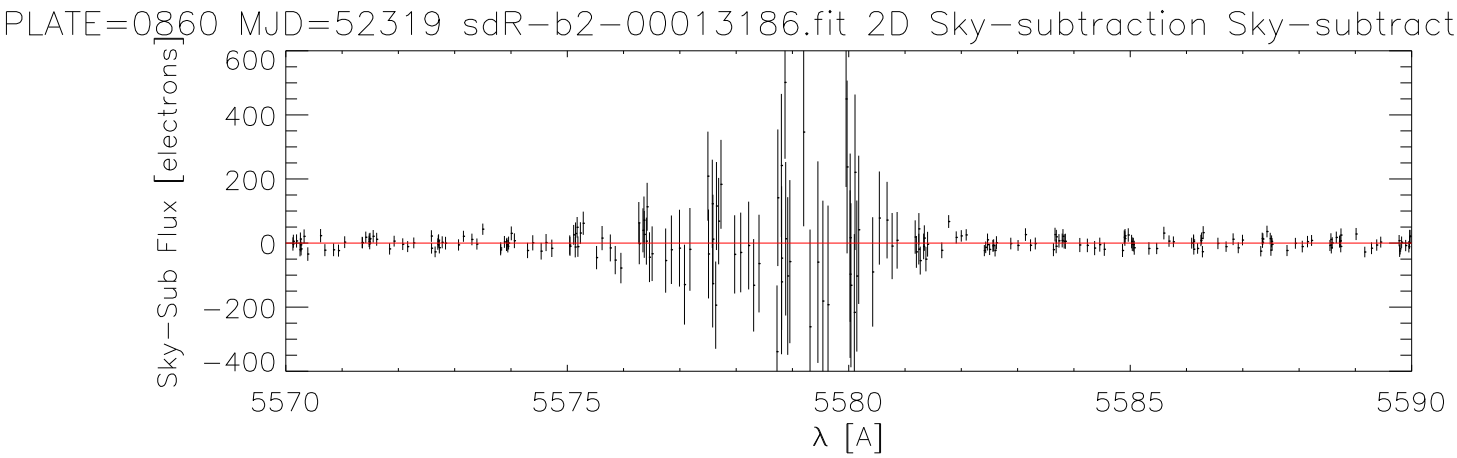

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

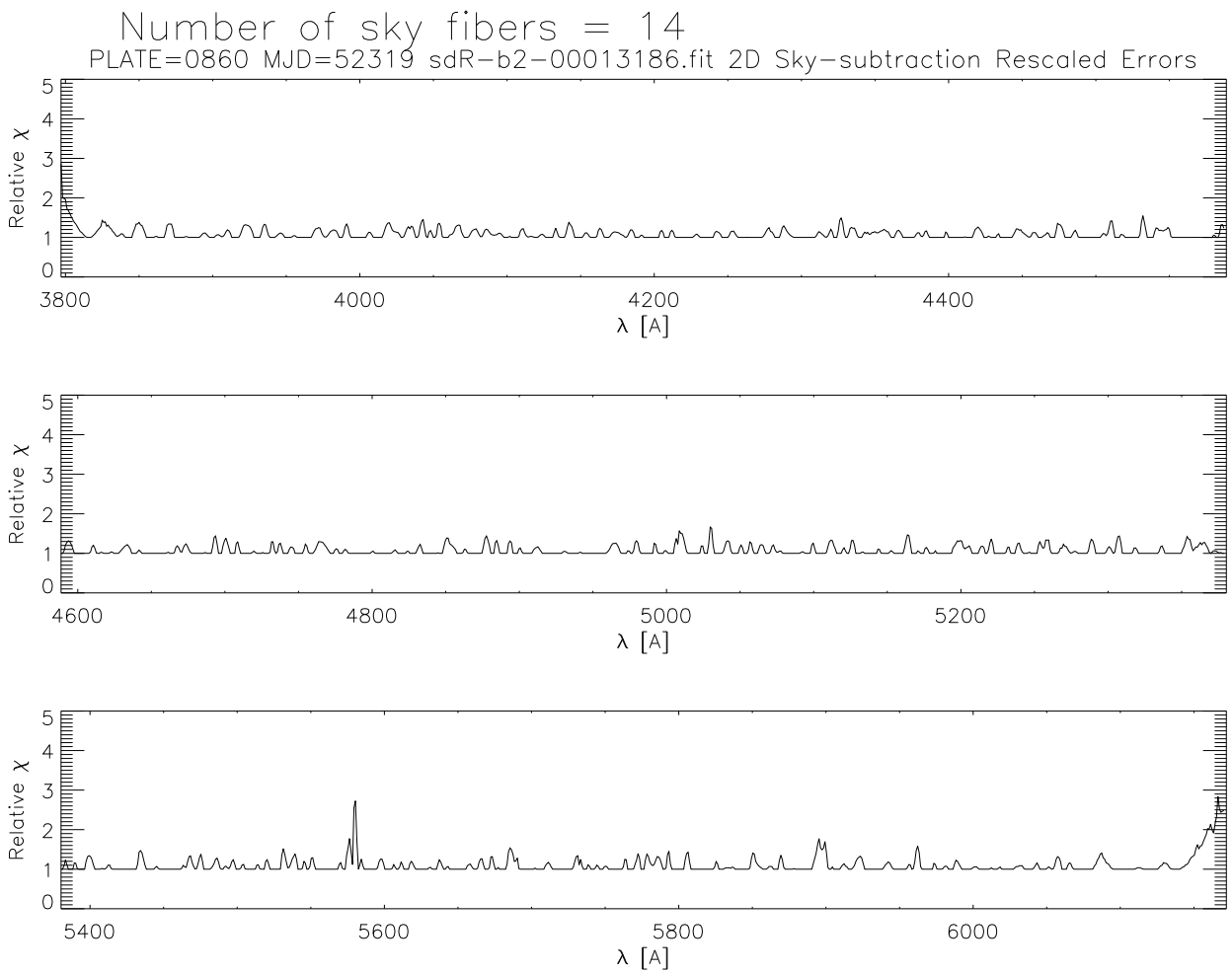

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

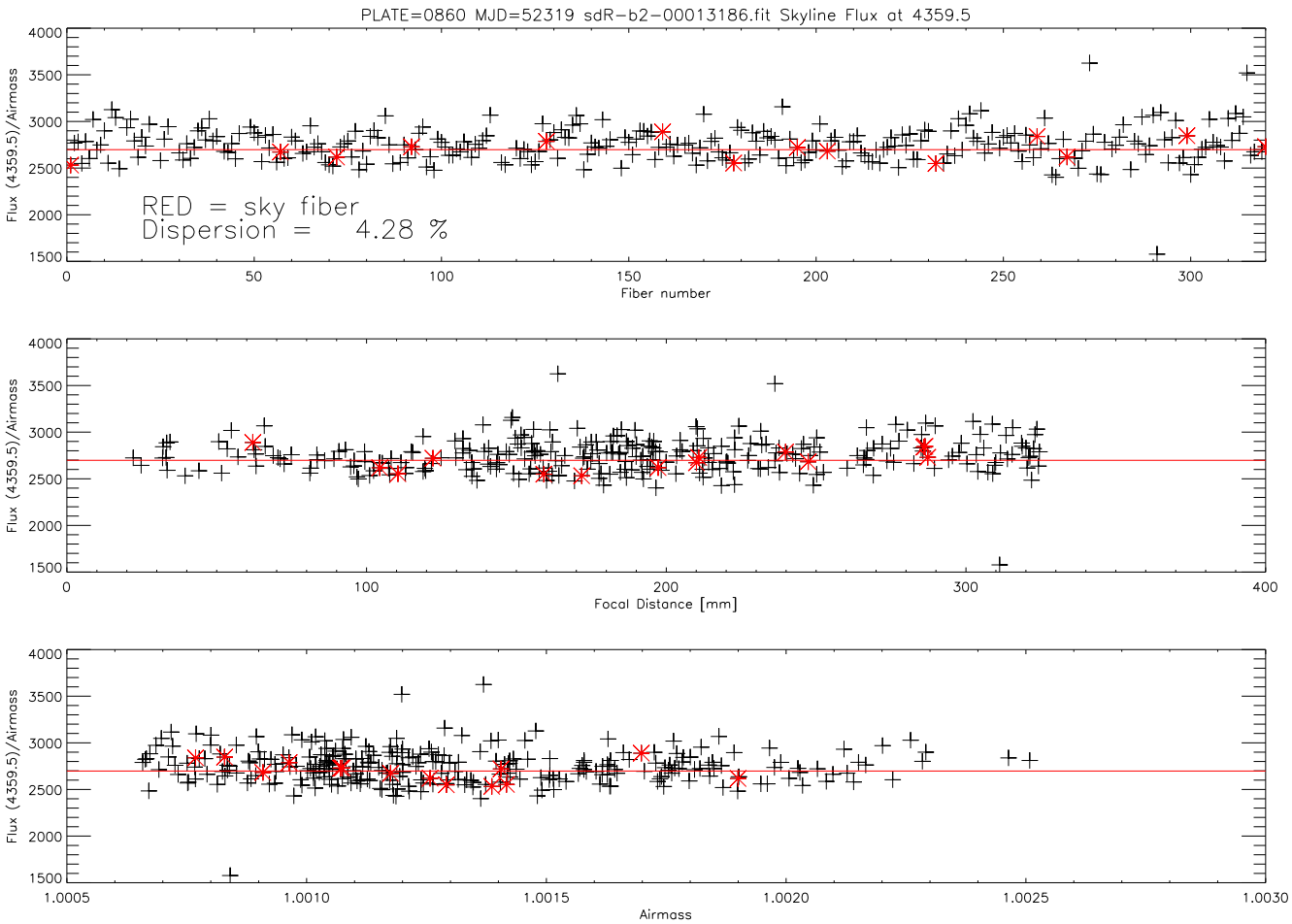

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013186.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

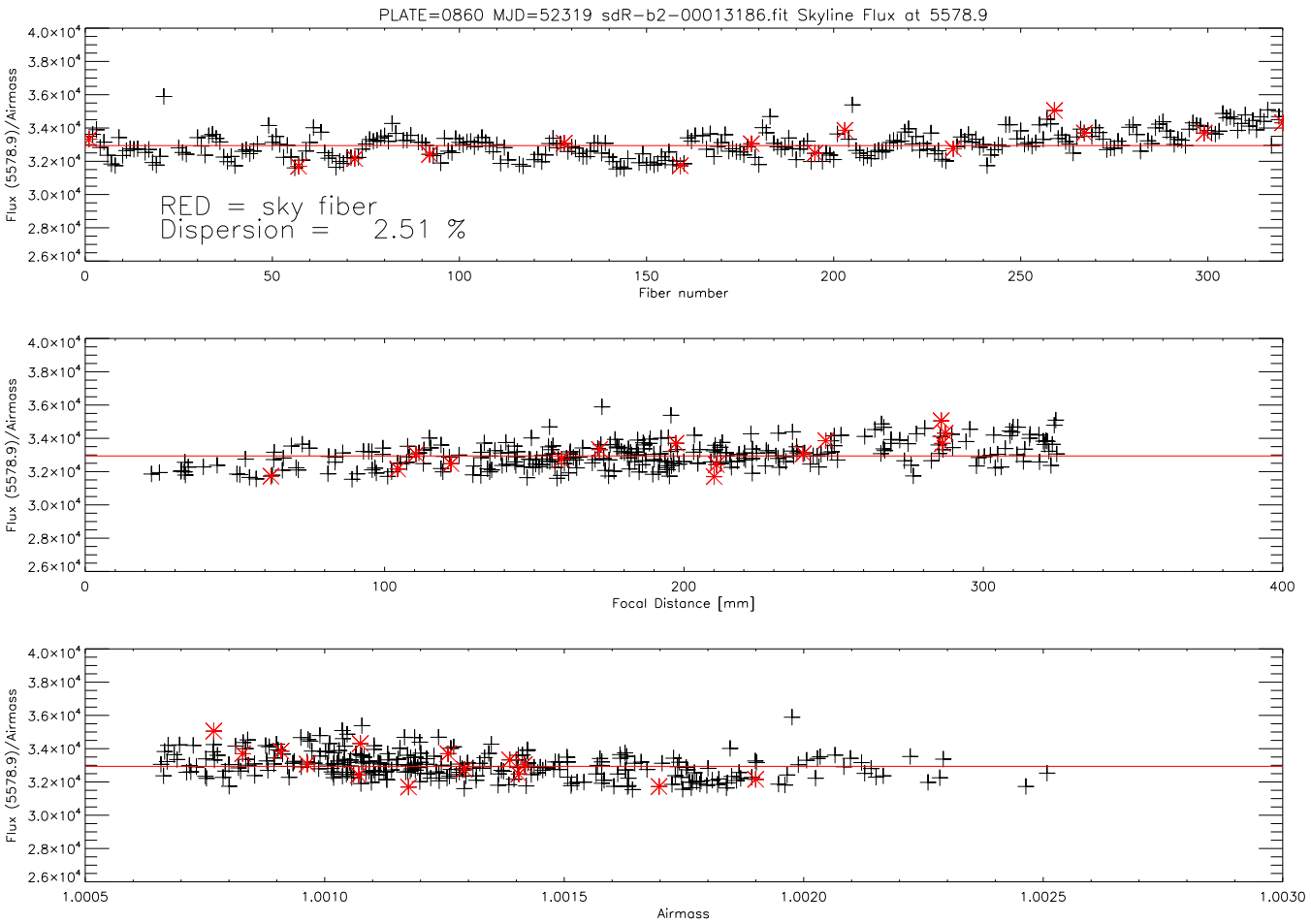

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

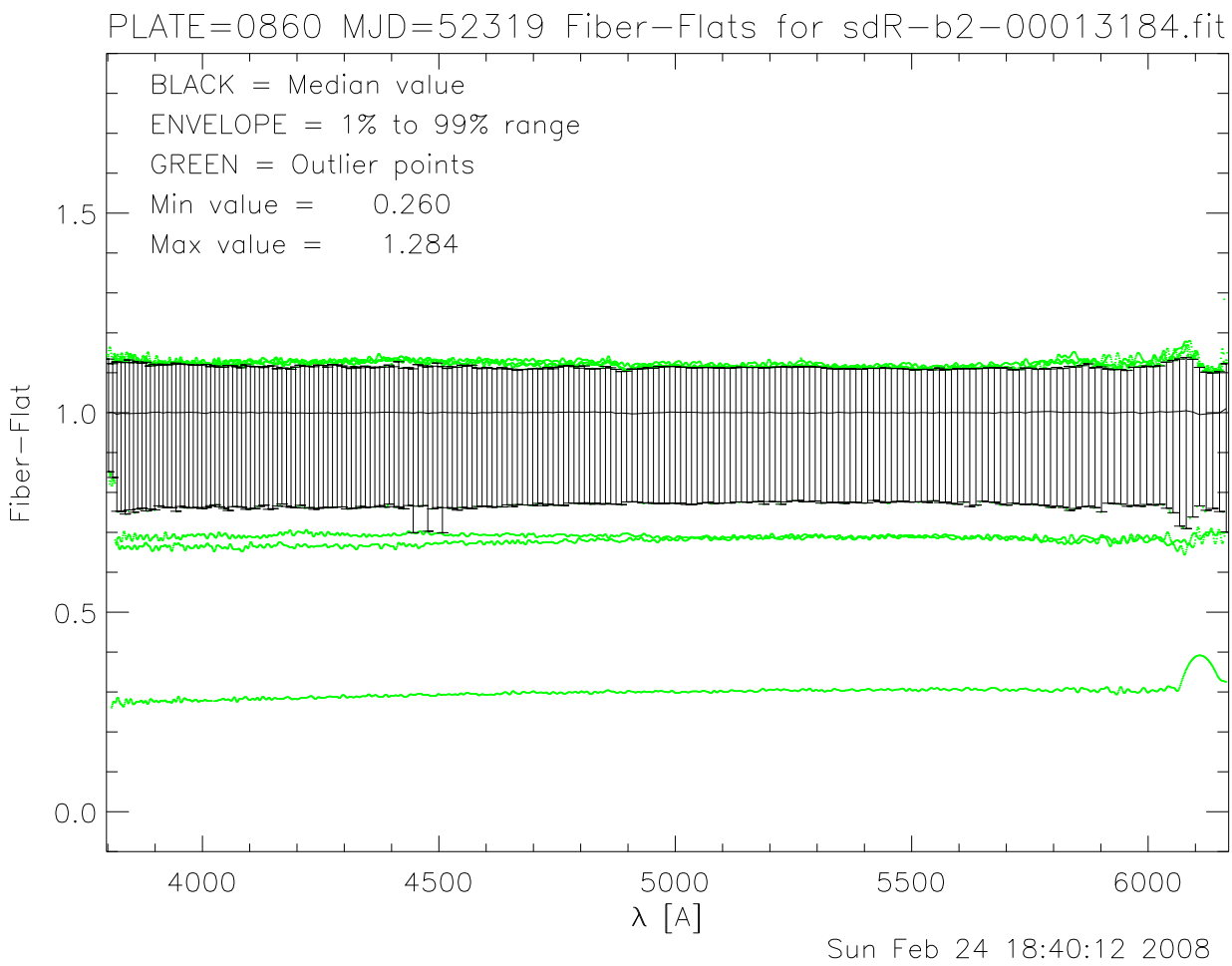

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

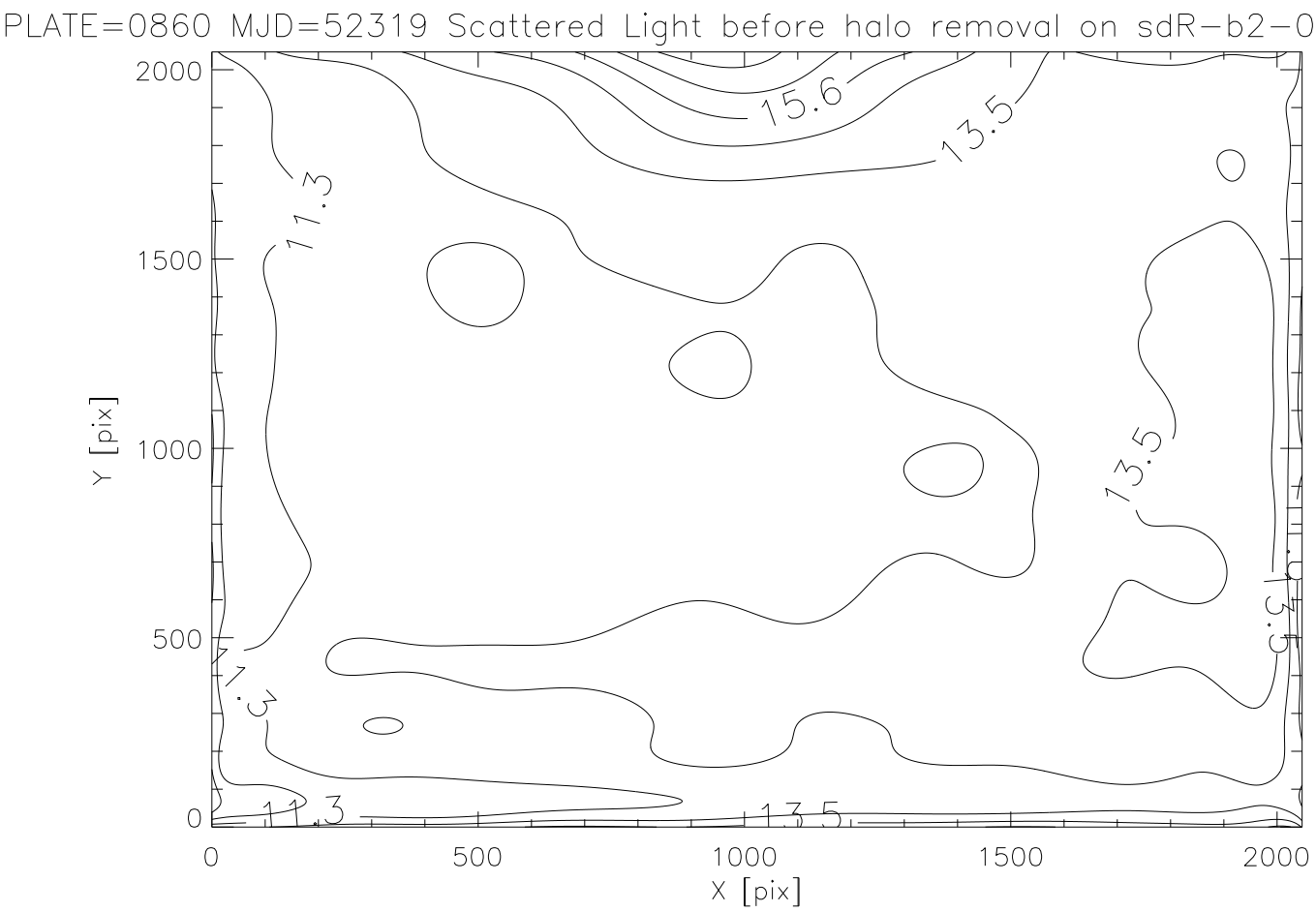

PLATE=0860 MJD=52319 sdR-b2-00013186.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

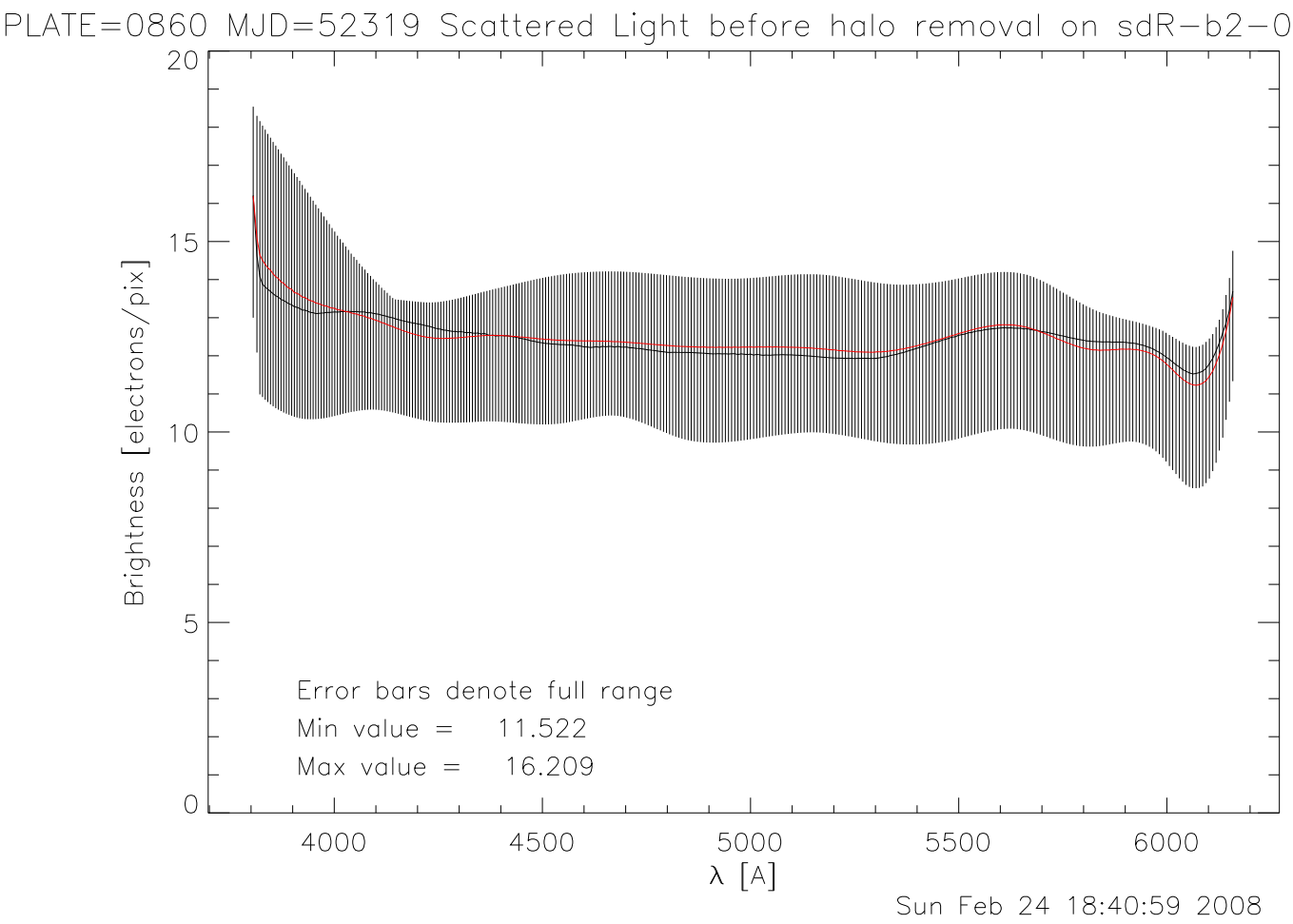

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013186.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

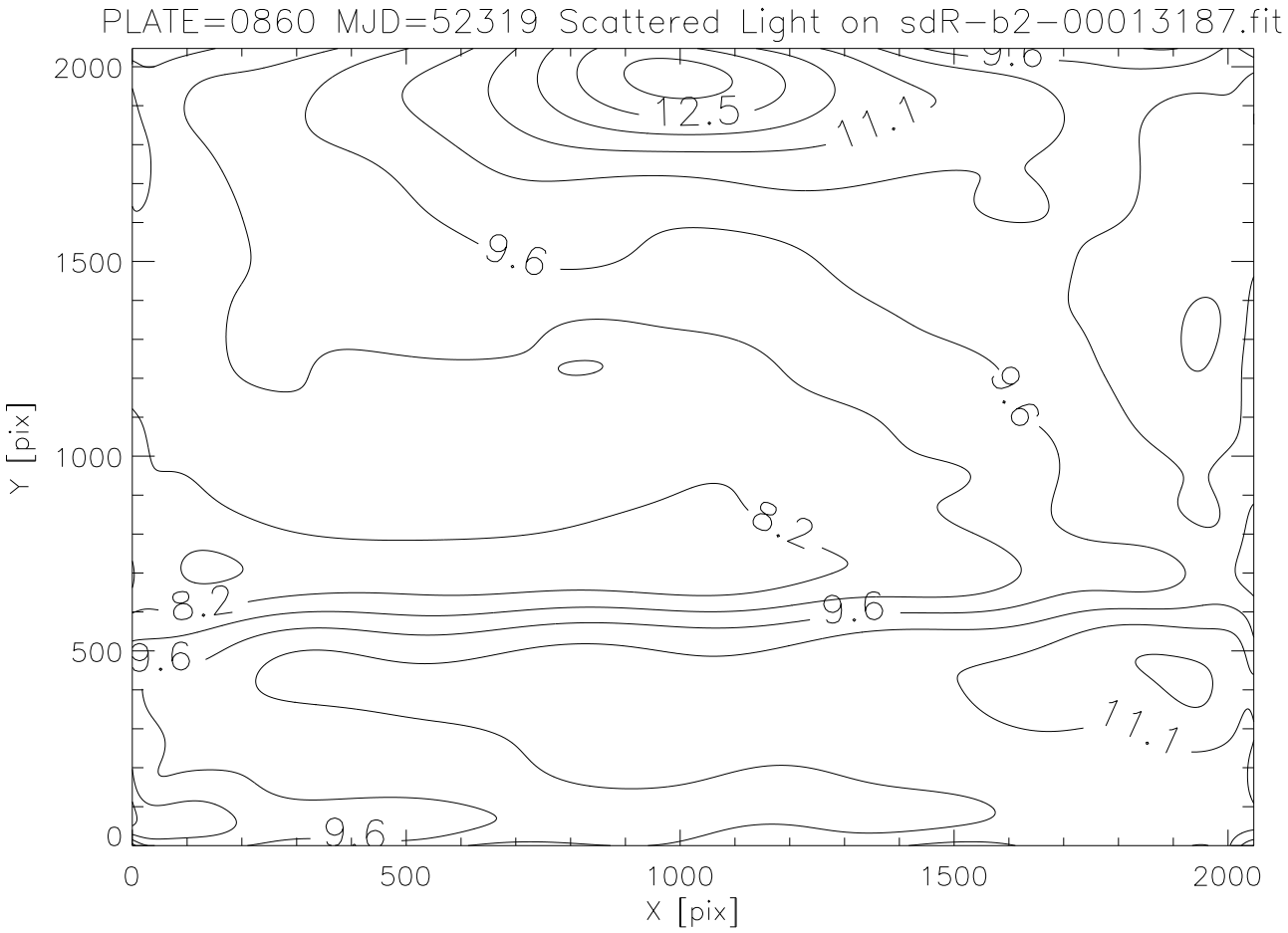

PLATE=0860 MJD=52319 sdR-b2-00013186.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 4.28 %
Fiber number
Focal Distance [mm]
Airmass

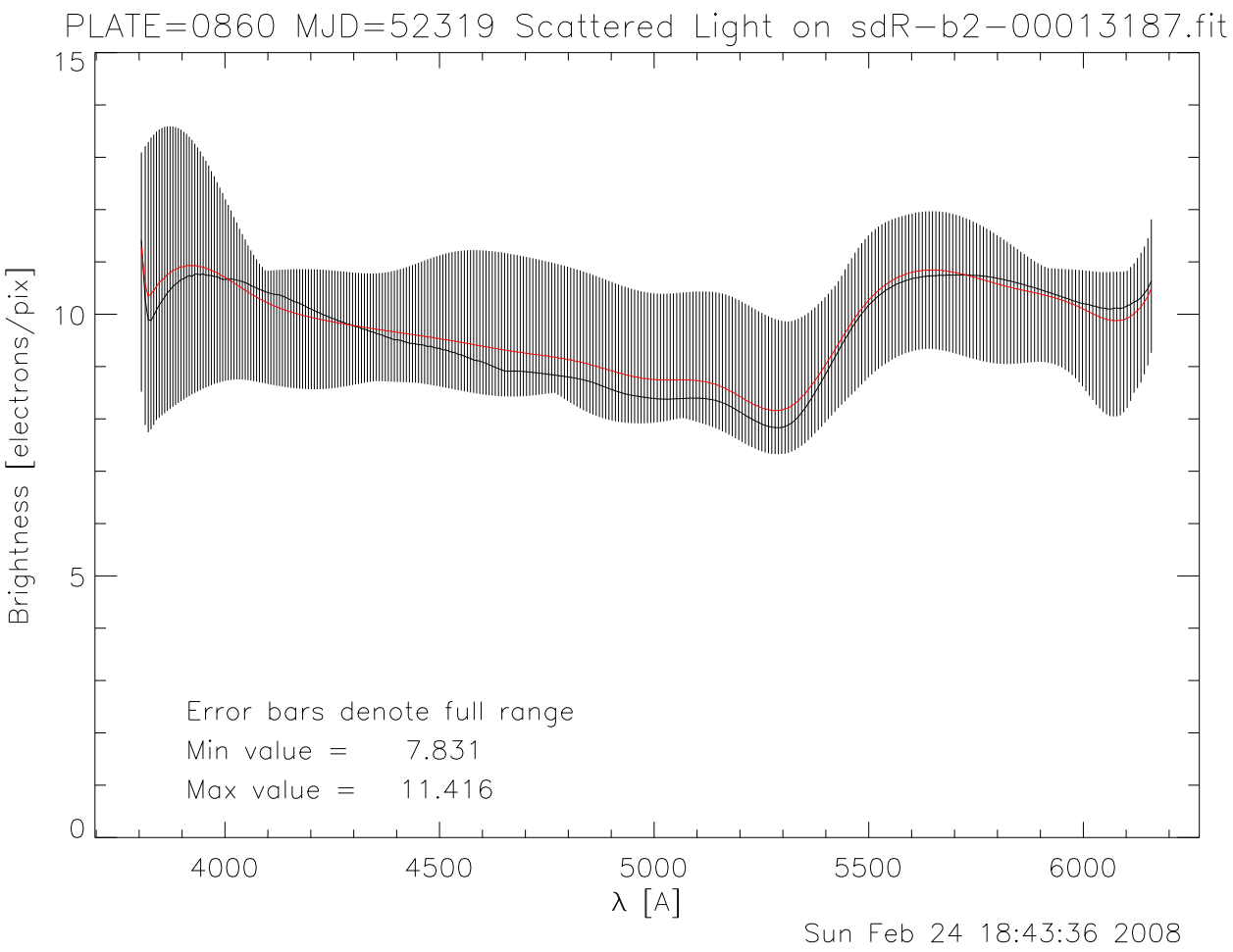

PLATE=0860 MJD=52319 sdR-b2-00013186.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.51 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

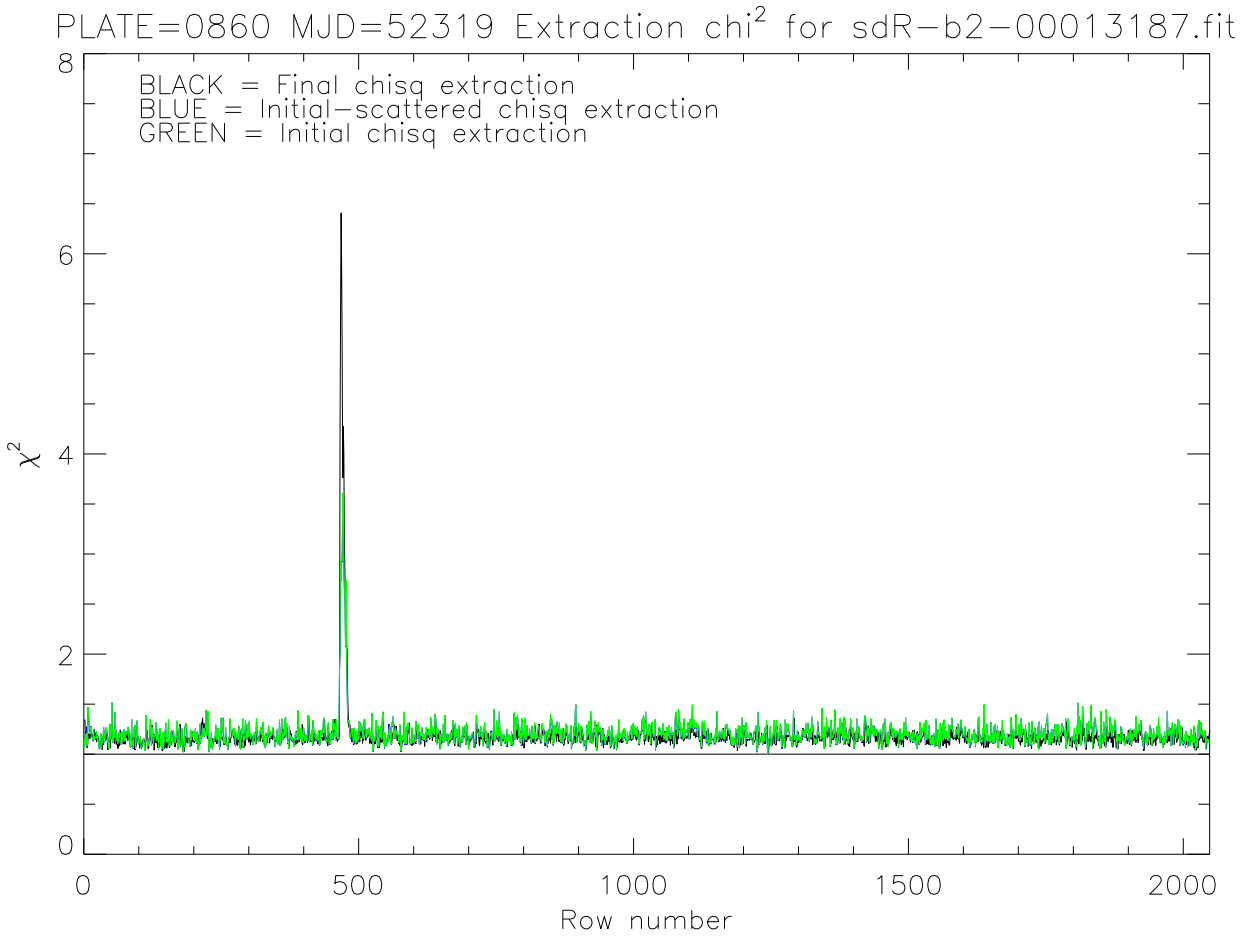

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:40:12 2008

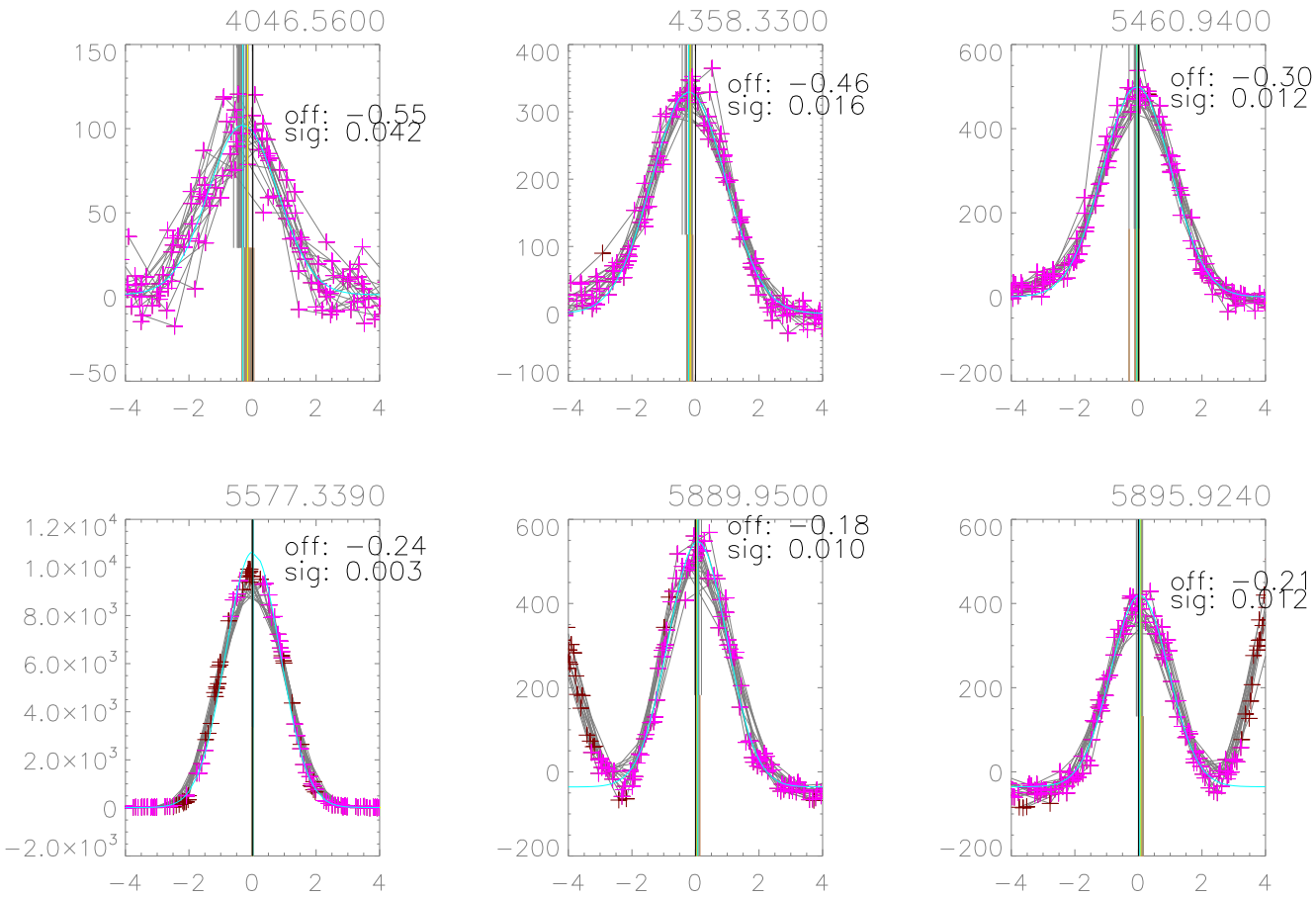

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013187.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
15.6
13.5
11.3
13.5
11.3
11.3
13.5
13.5

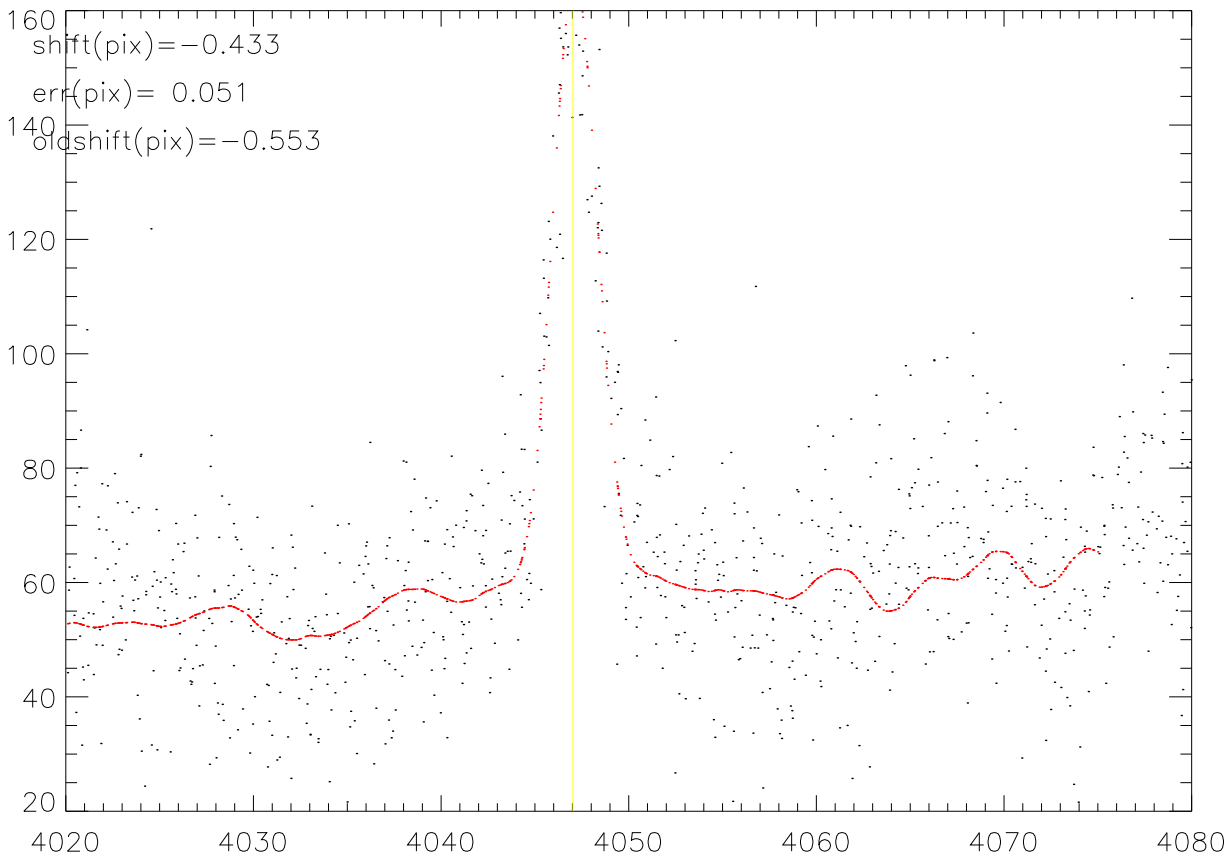

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013187.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.522
Max value = 16.209
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:40:59 2008

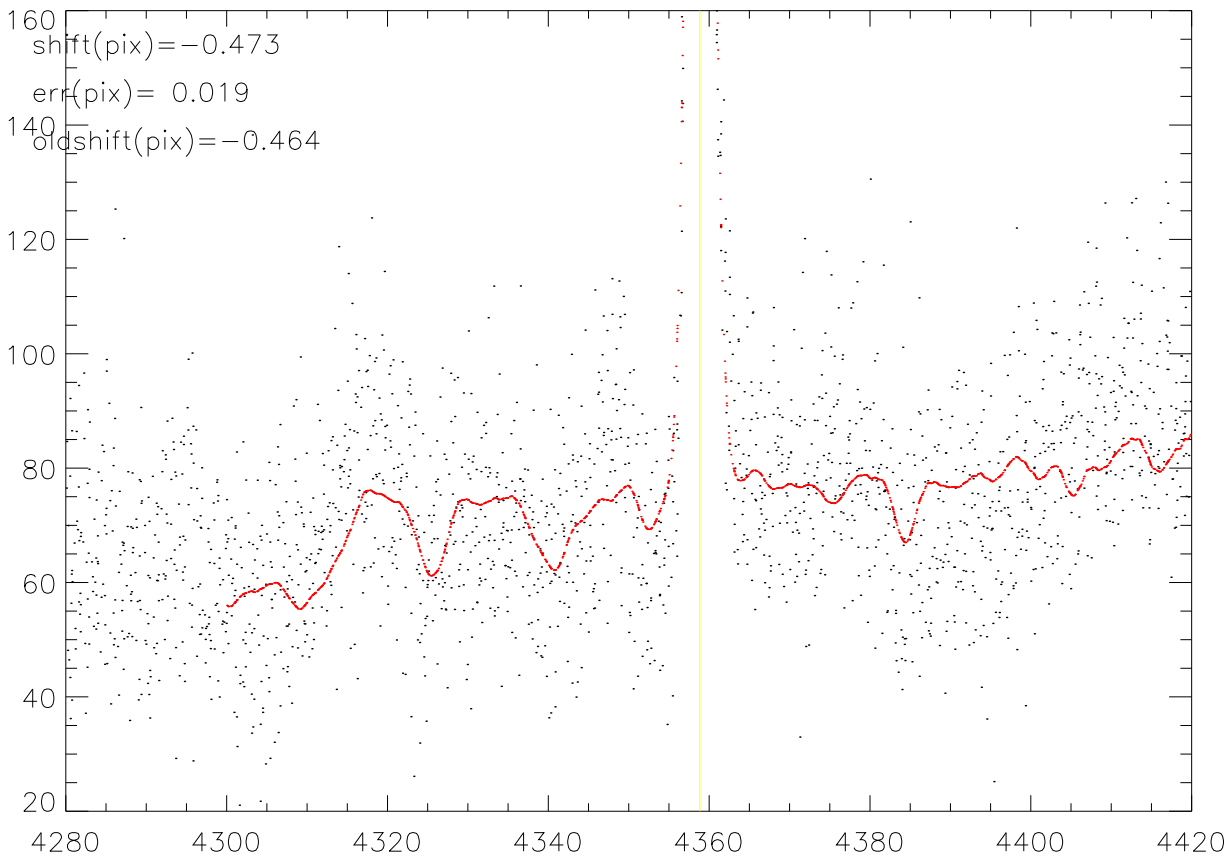

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013187.fit
12.5
11.1
9.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

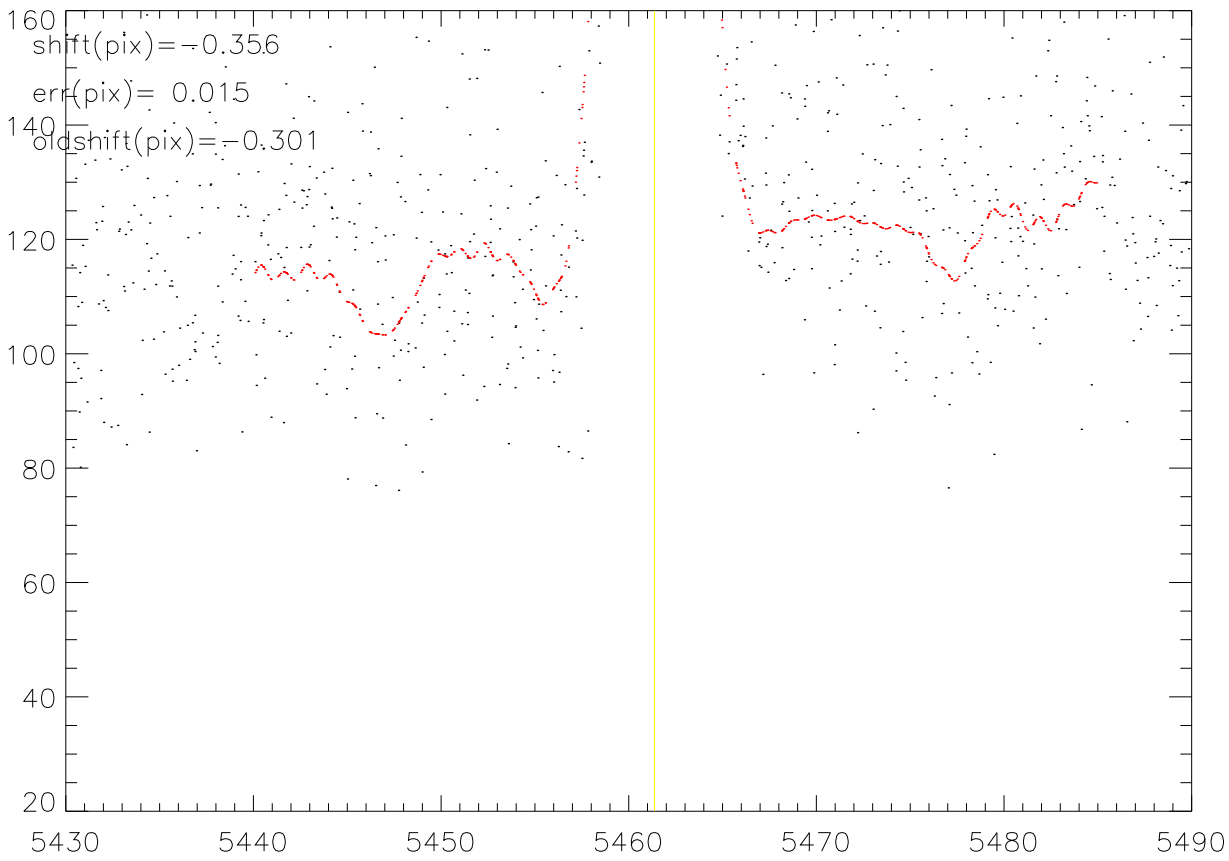

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013187.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.831
Max value = 11.416
Sun Feb 24 18:43:36 2008

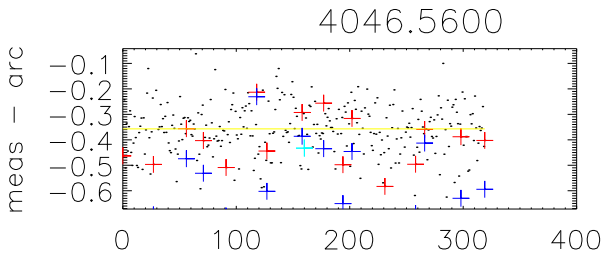

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013187.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

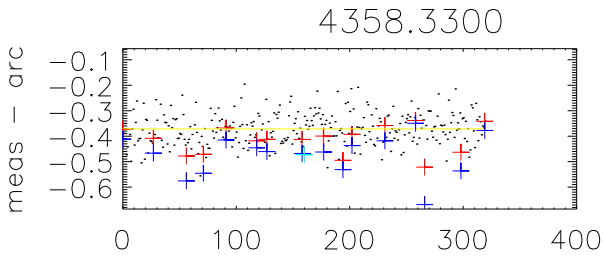

4046.5600
off: −0.55
sig: 0.042
4358.3300
off: −0.46
sig: 0.016
5460.9400
off: −0.30
sig: 0.012
5577.3390
off: −0.24
sig: 0.003
5889.9500
off: −0.18
sig: 0.010
5895.9240
off: −0.21
sig: 0.012

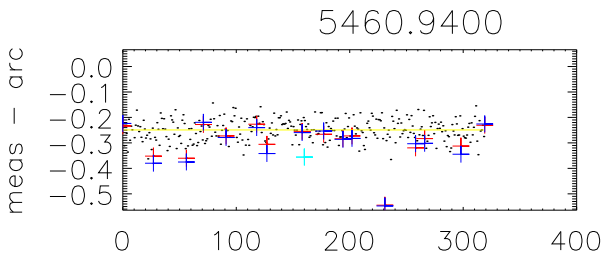

shift(pix)=−0.433
err(pix)= 0.051
oldshift(pix)=−0.553
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

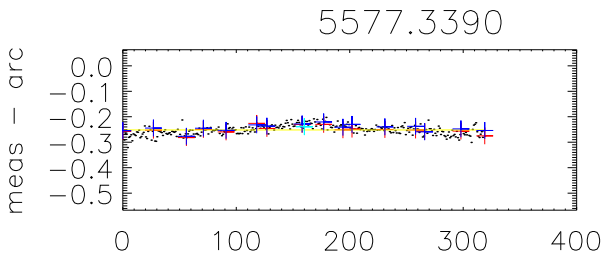

shift(pix)=−0.473
err(pix)= 0.019
oldshift(pix)=−0.464
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

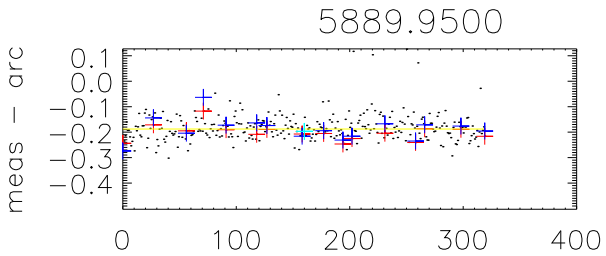

shift(pix)=-0.356
err(pix)= 0.015
oldshift(pix)=-0.301
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

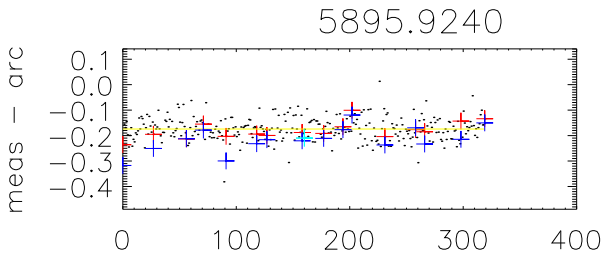

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

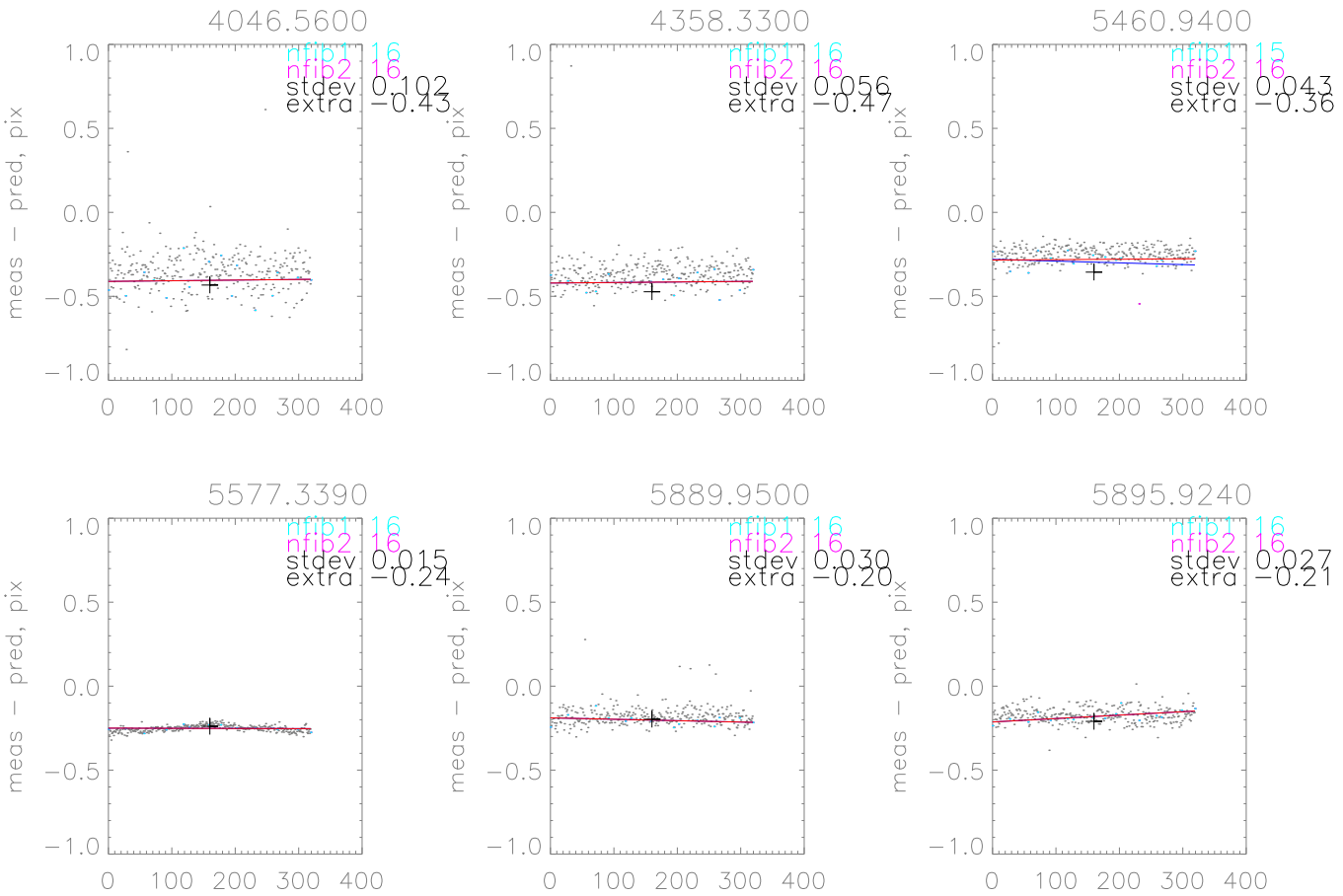

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

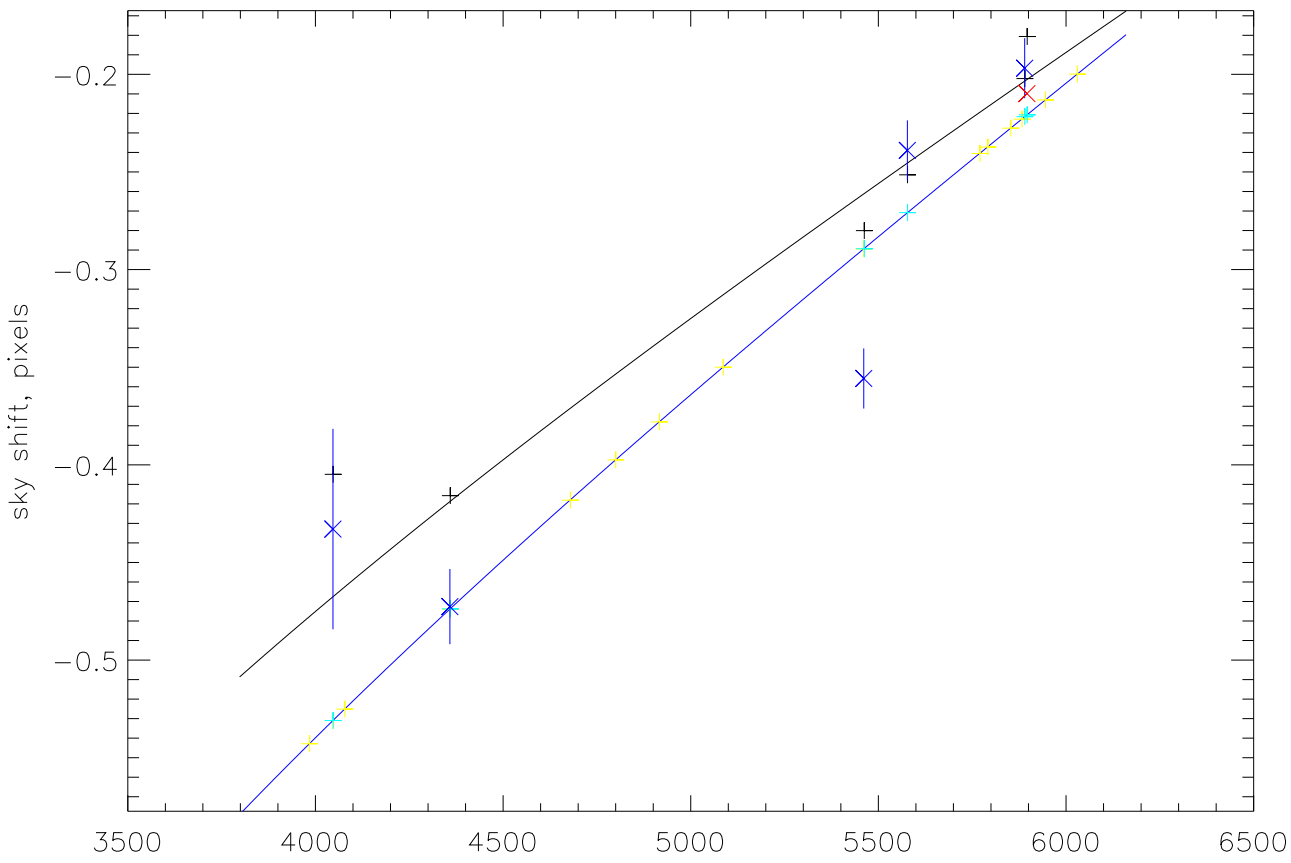

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

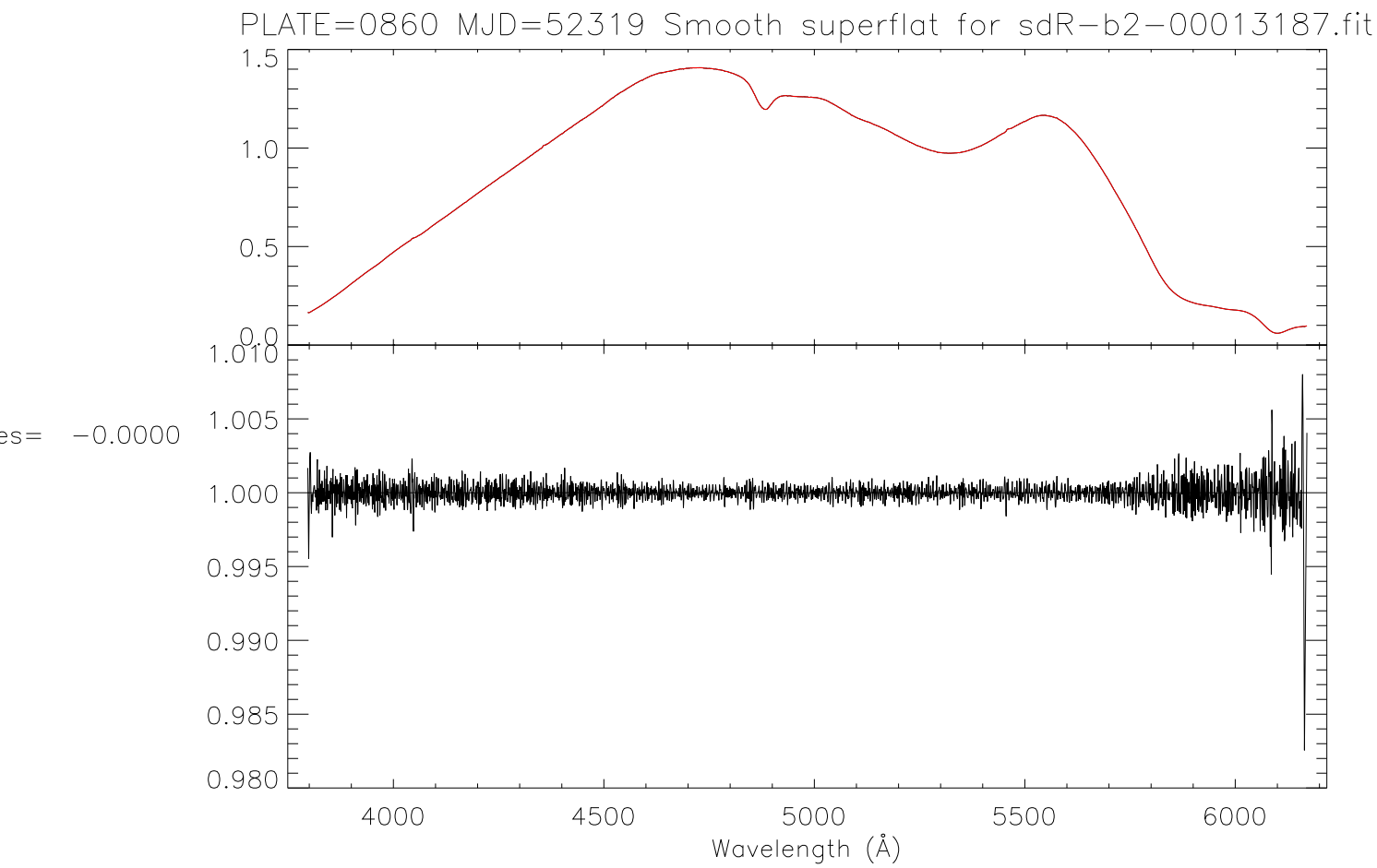

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

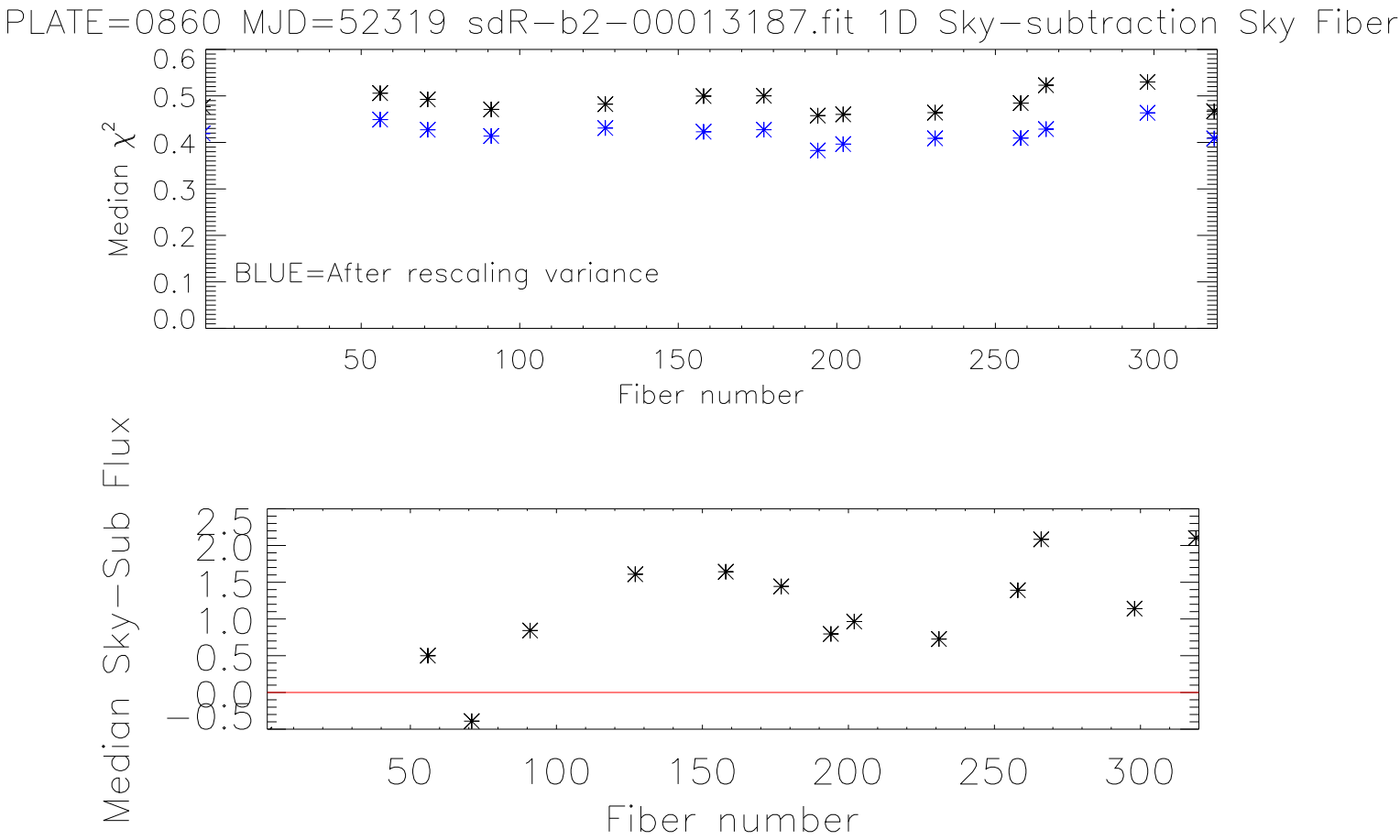

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

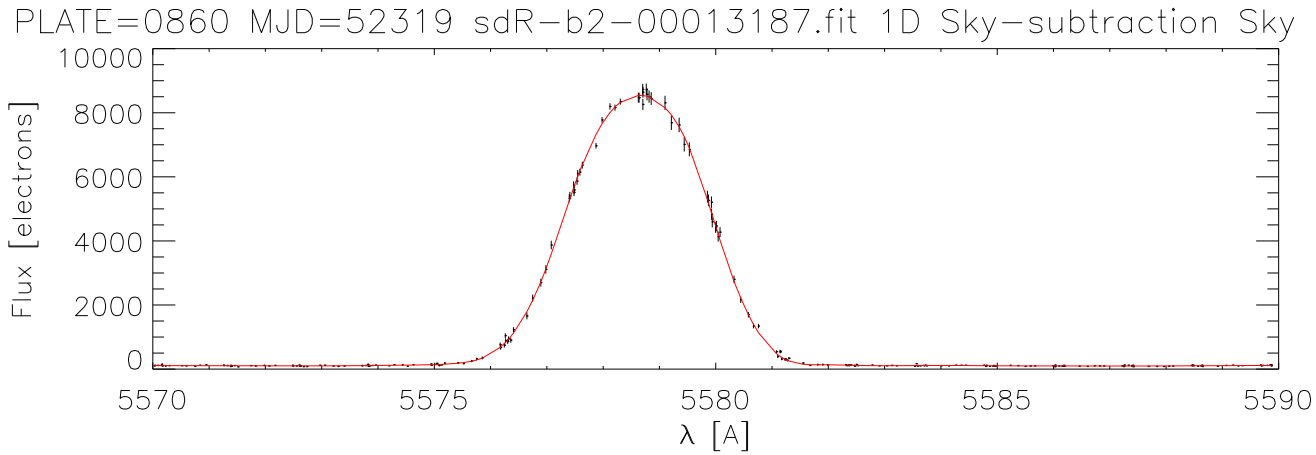

4046.5600
nfib1 16
nfib2 16
stdev 0.102
extra −0.43
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.47
5460.9400
nfib1 15
nfib2 16
stdev 0.043
extra −0.36
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.24
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra −0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra −0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

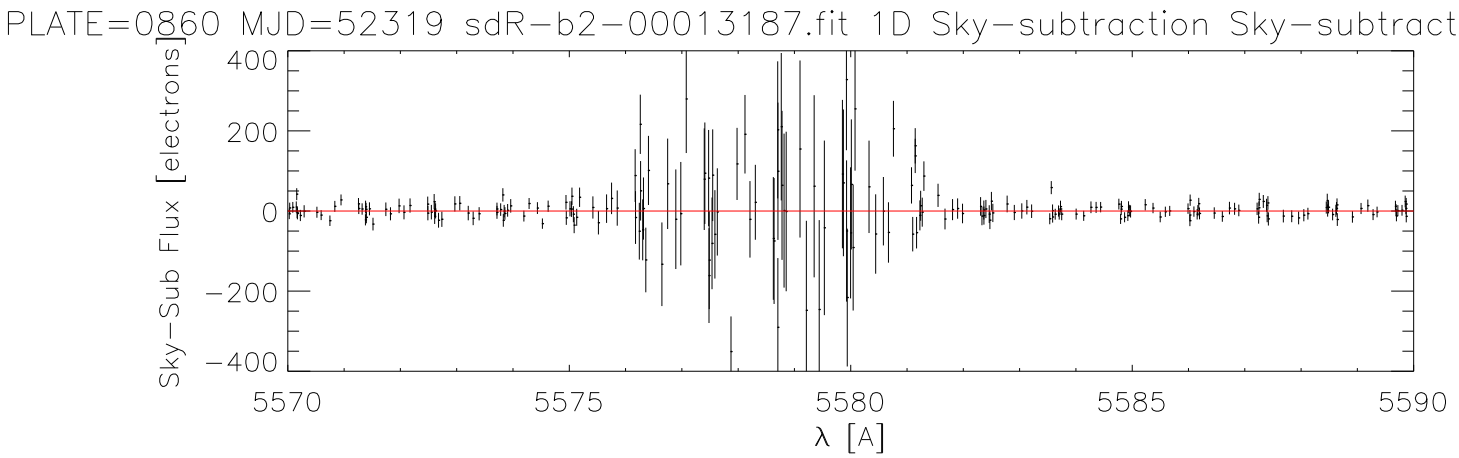

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

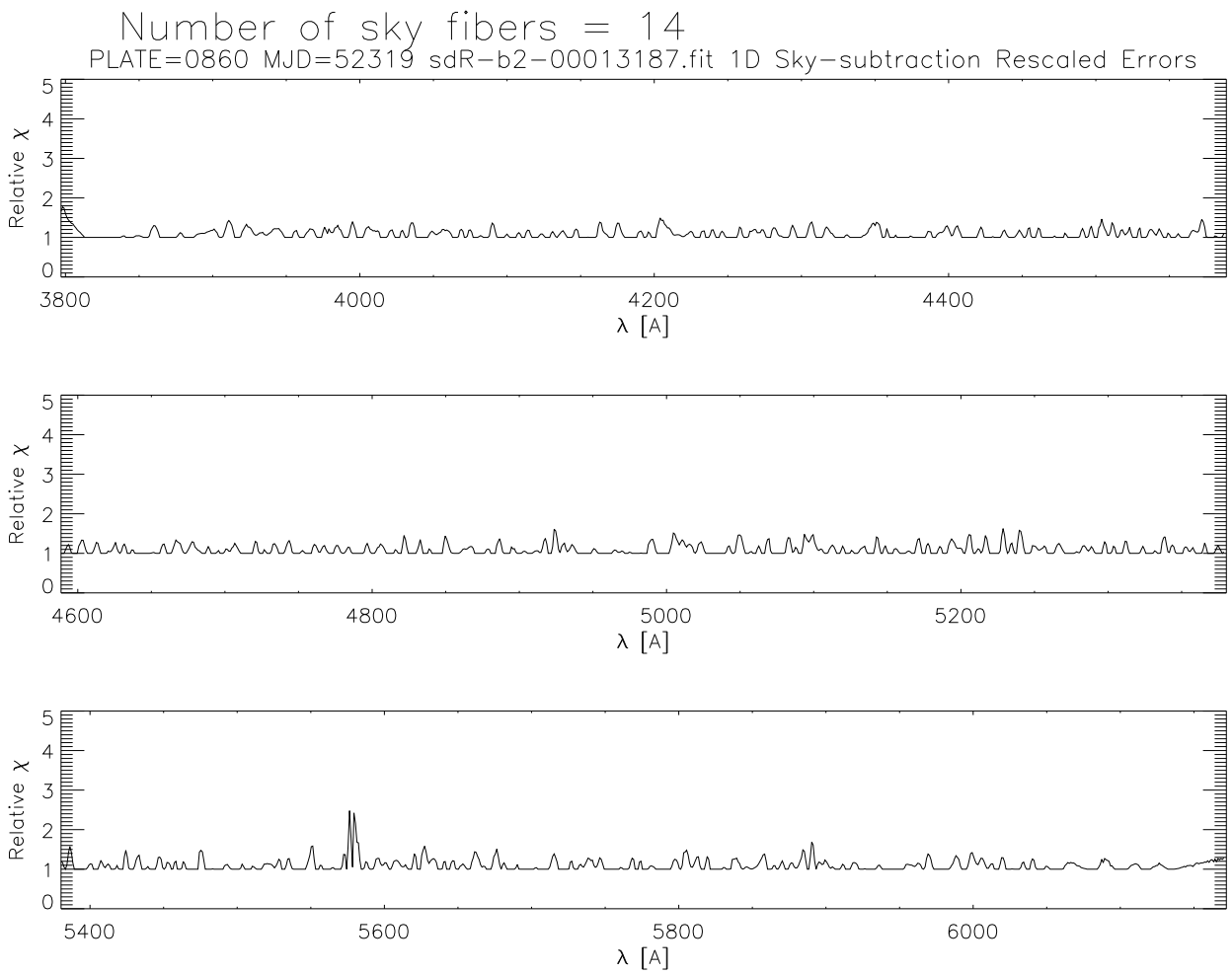

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013187.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

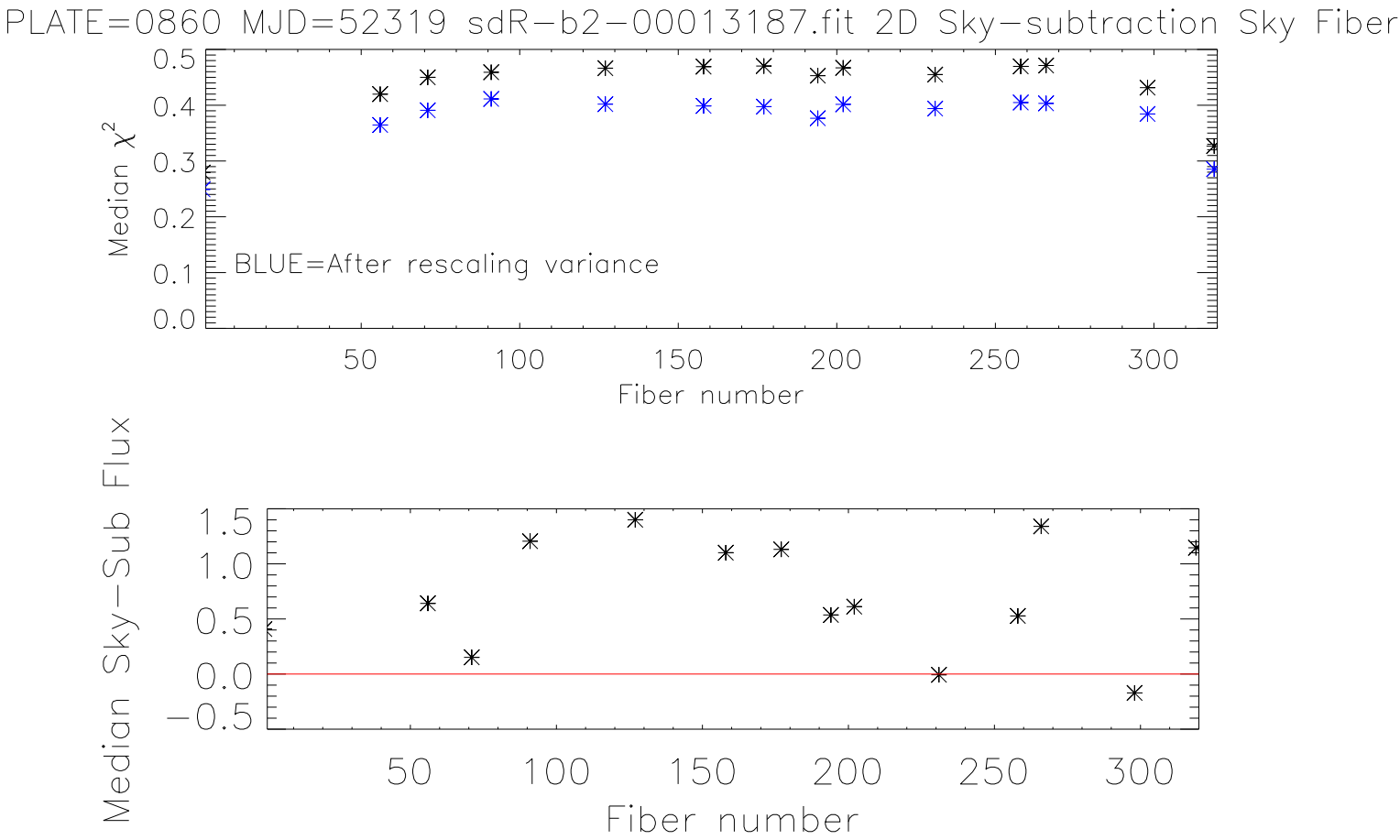
es= −0.0000

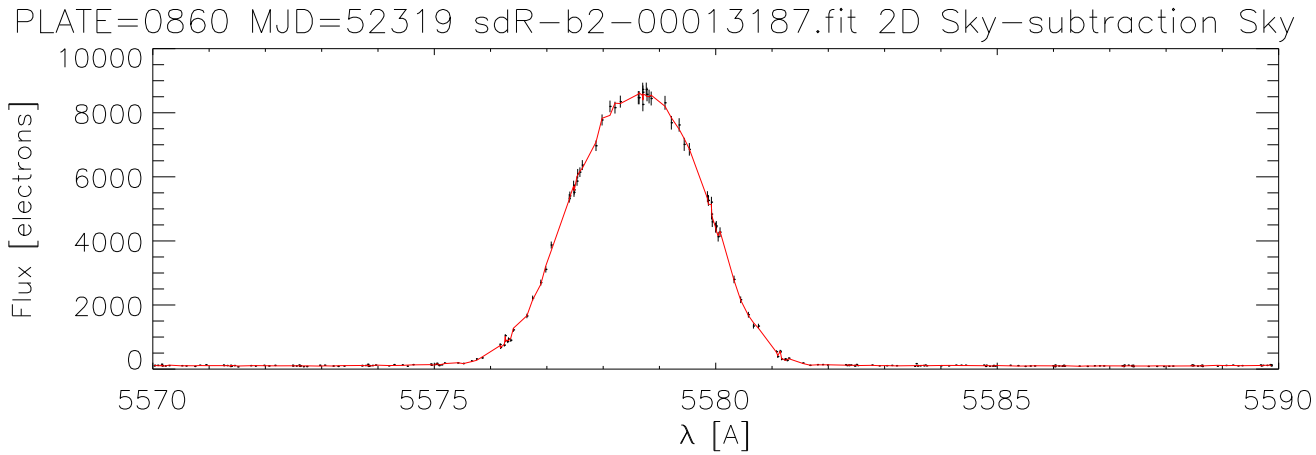

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

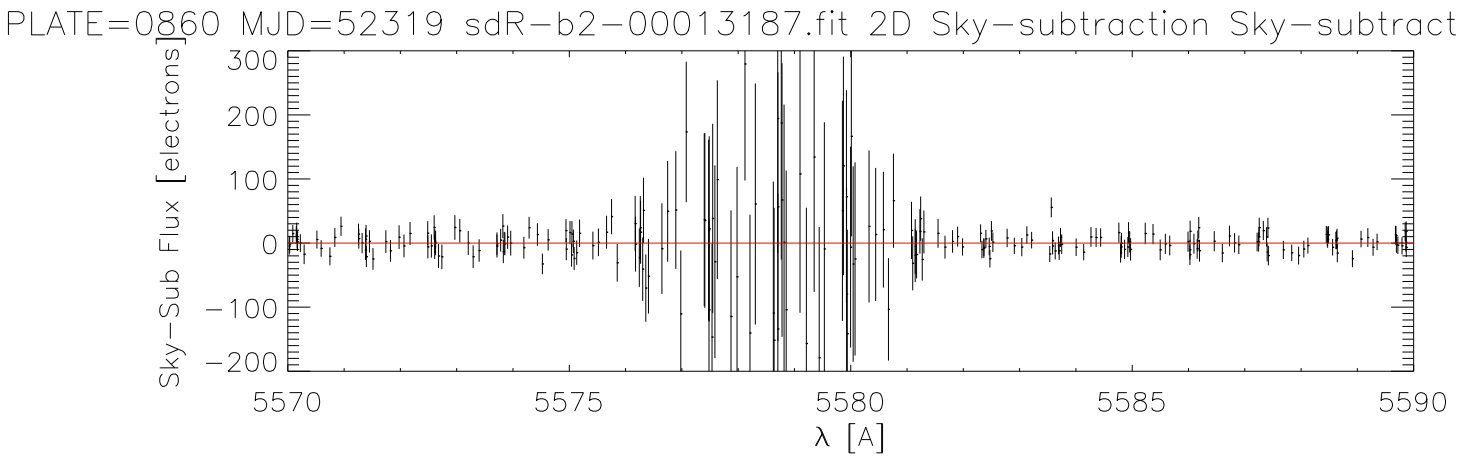

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

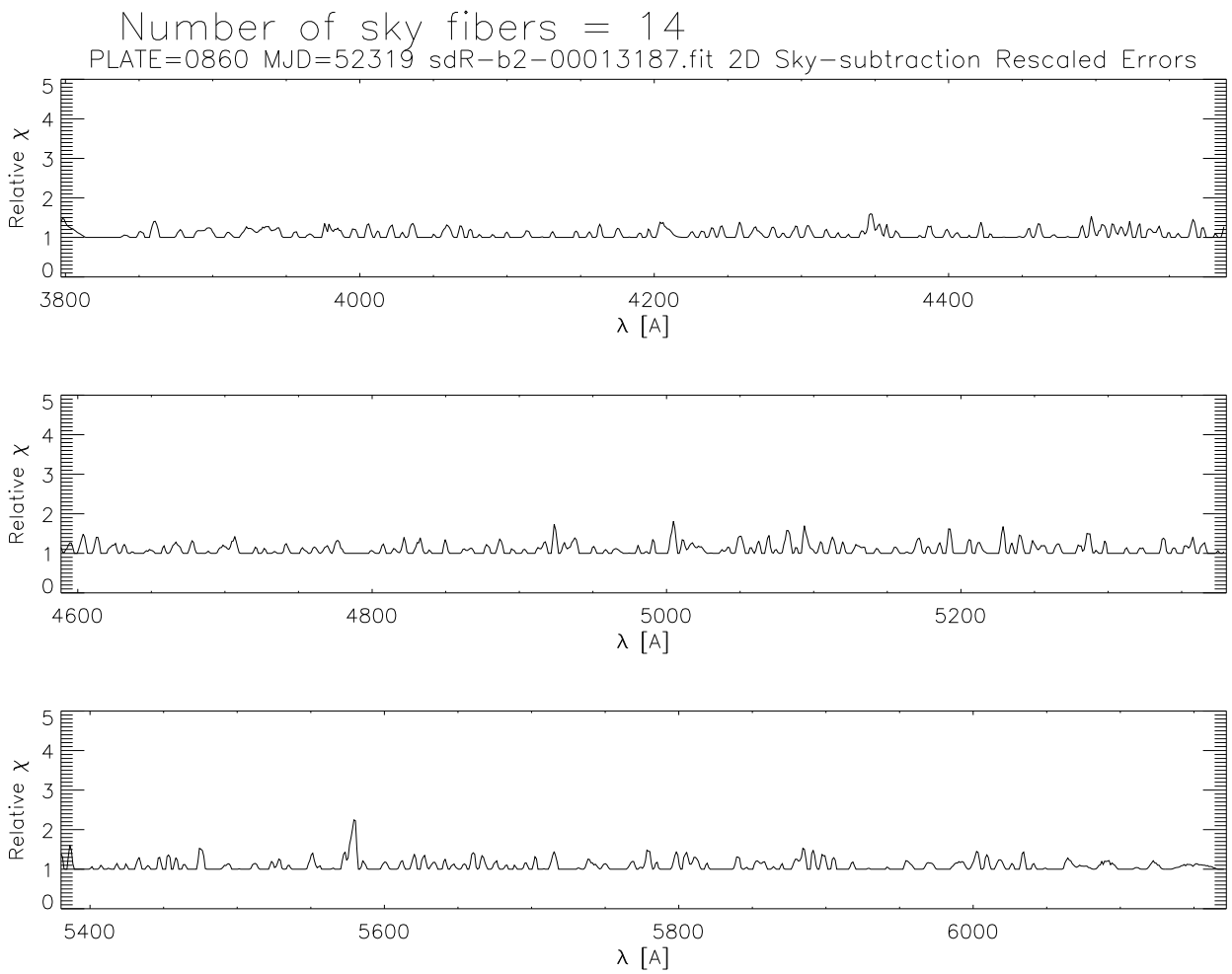

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

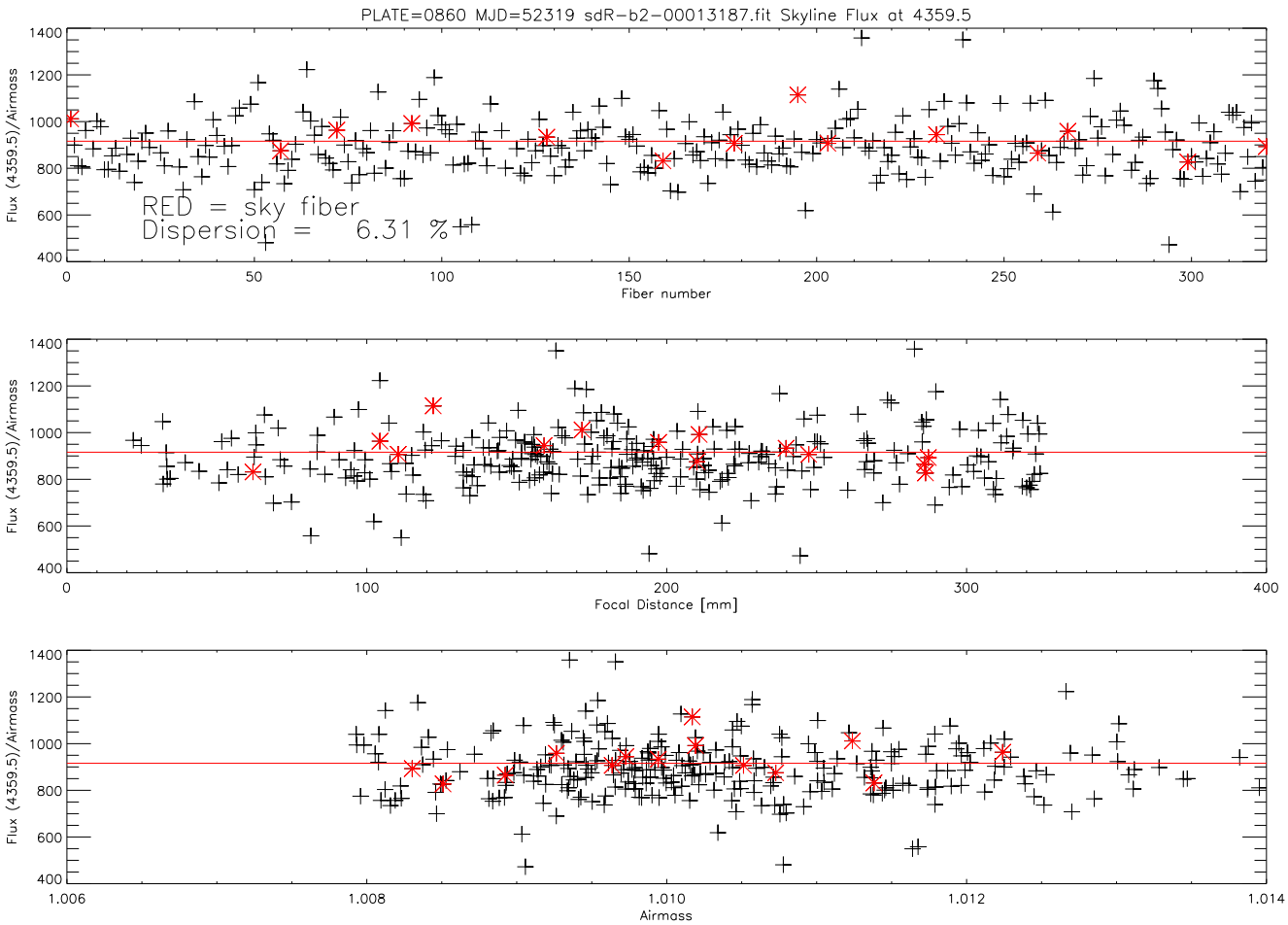

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013187.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

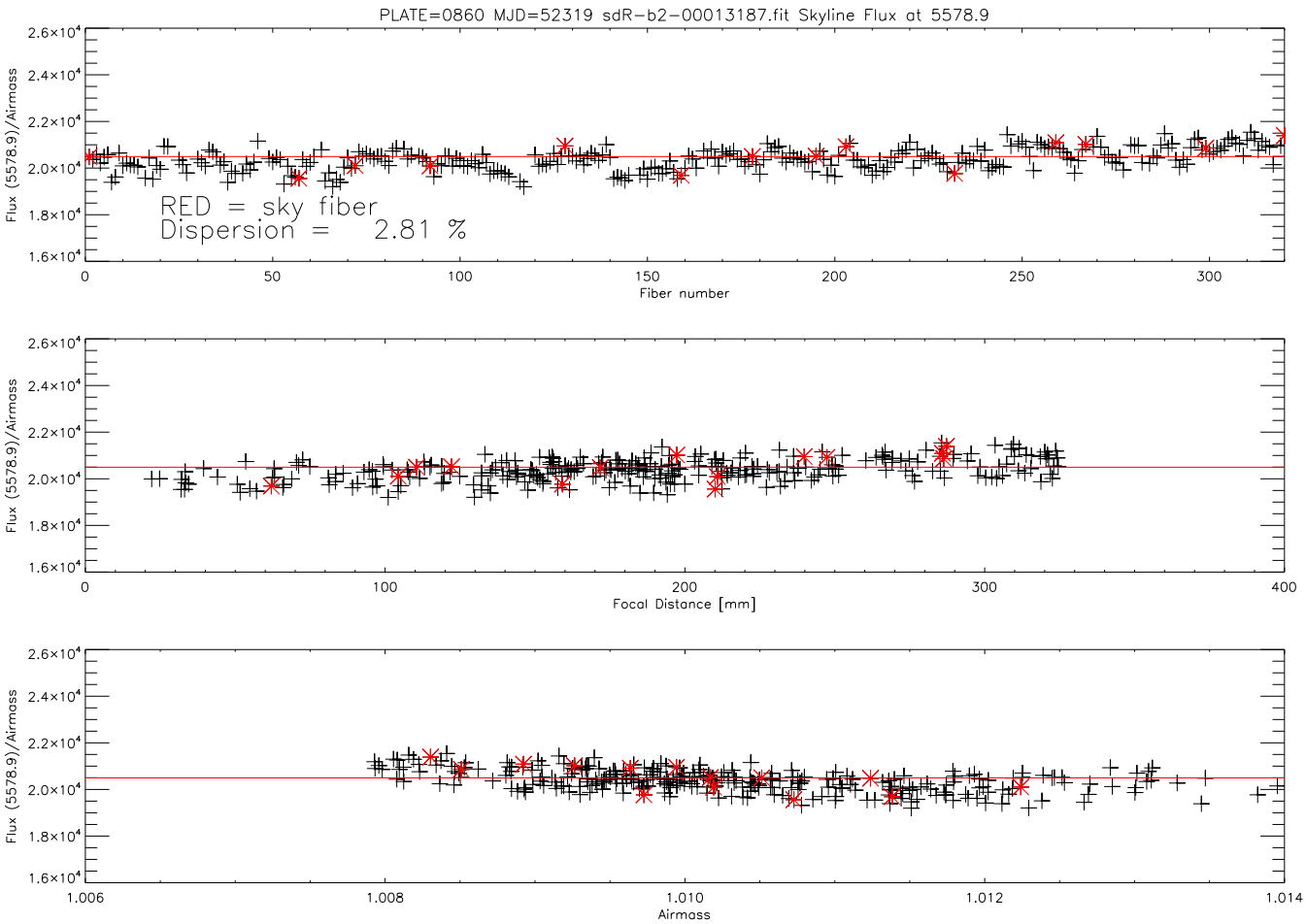

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

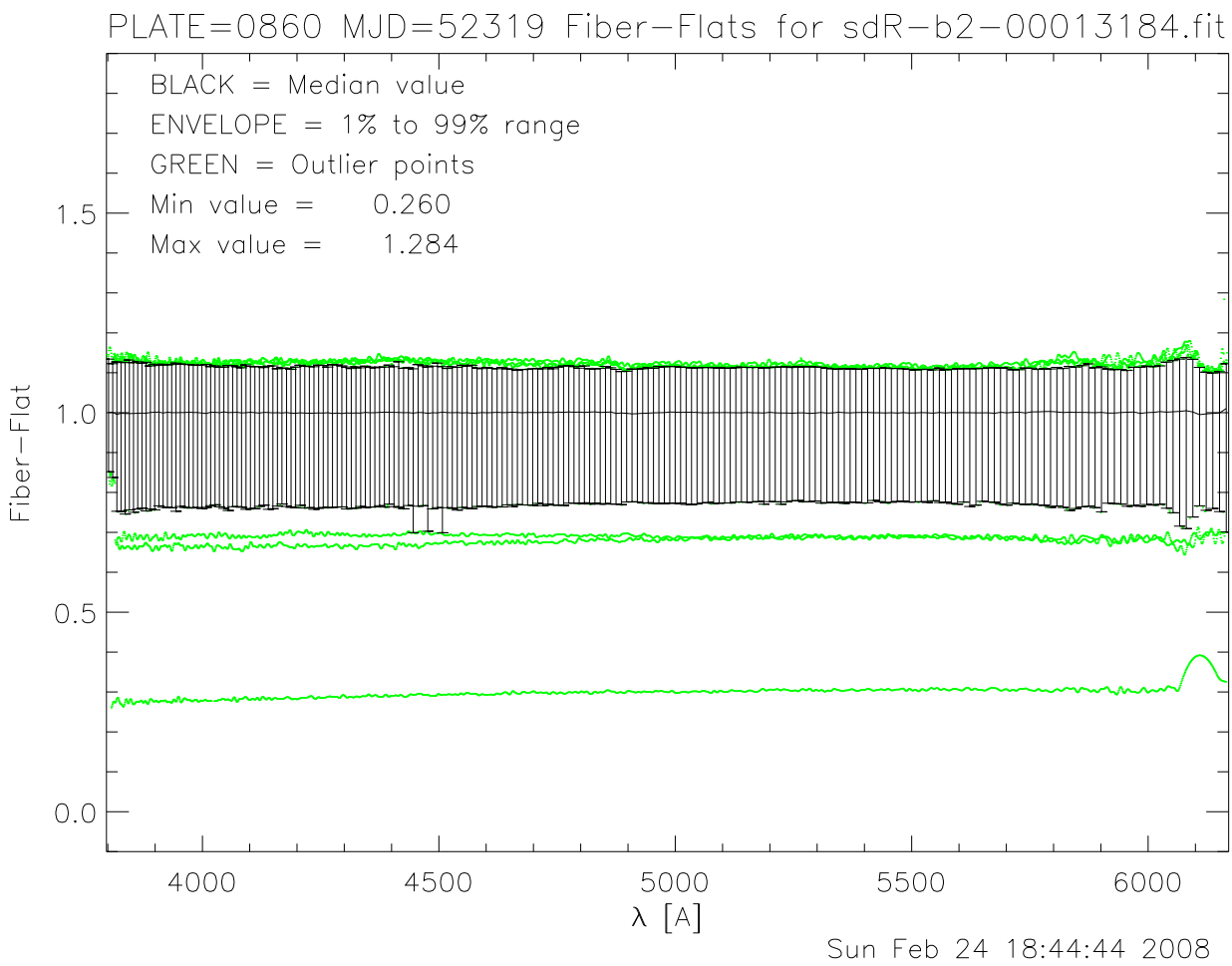

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

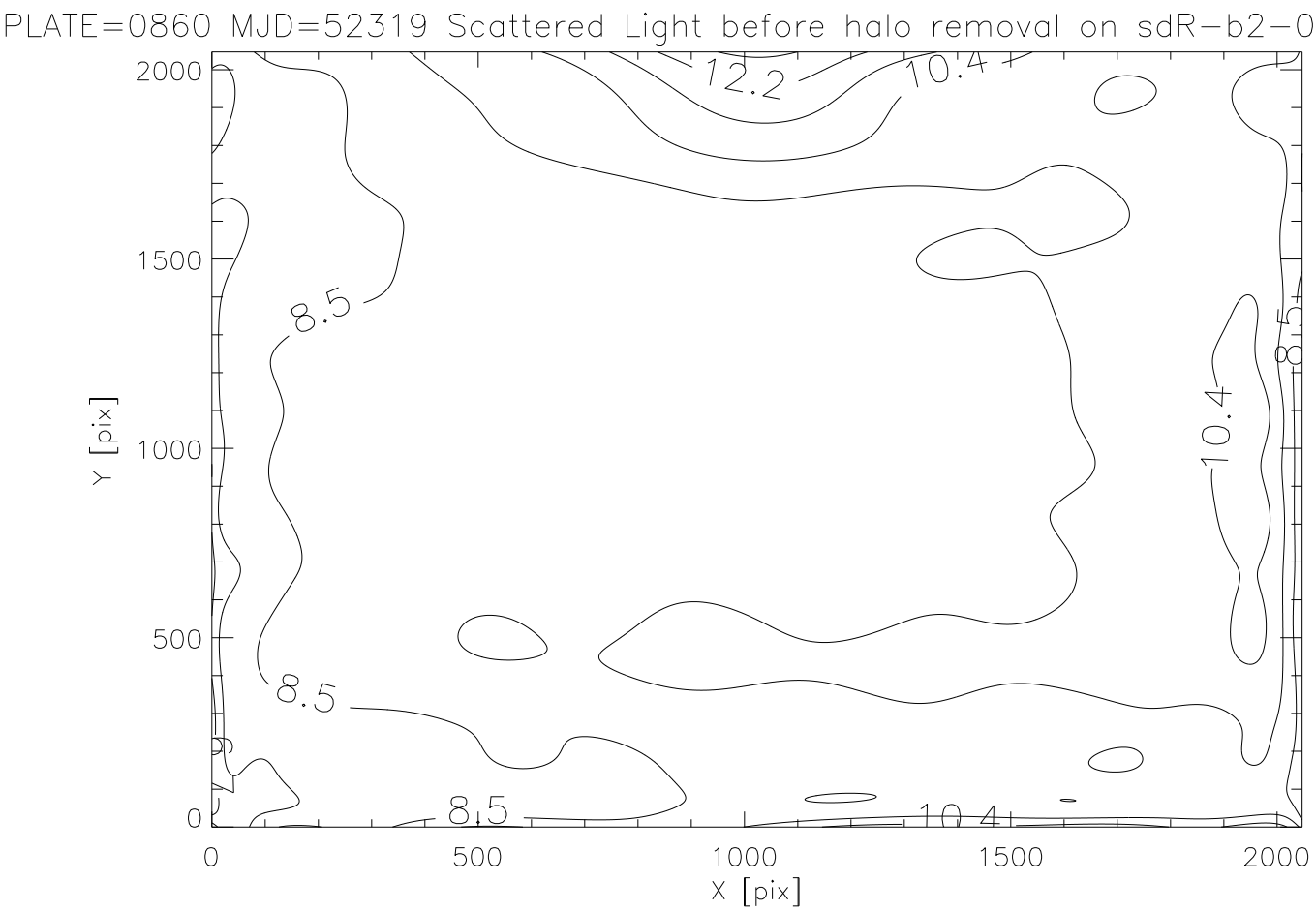

PLATE=0860 MJD=52319 sdR-b2-00013187.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

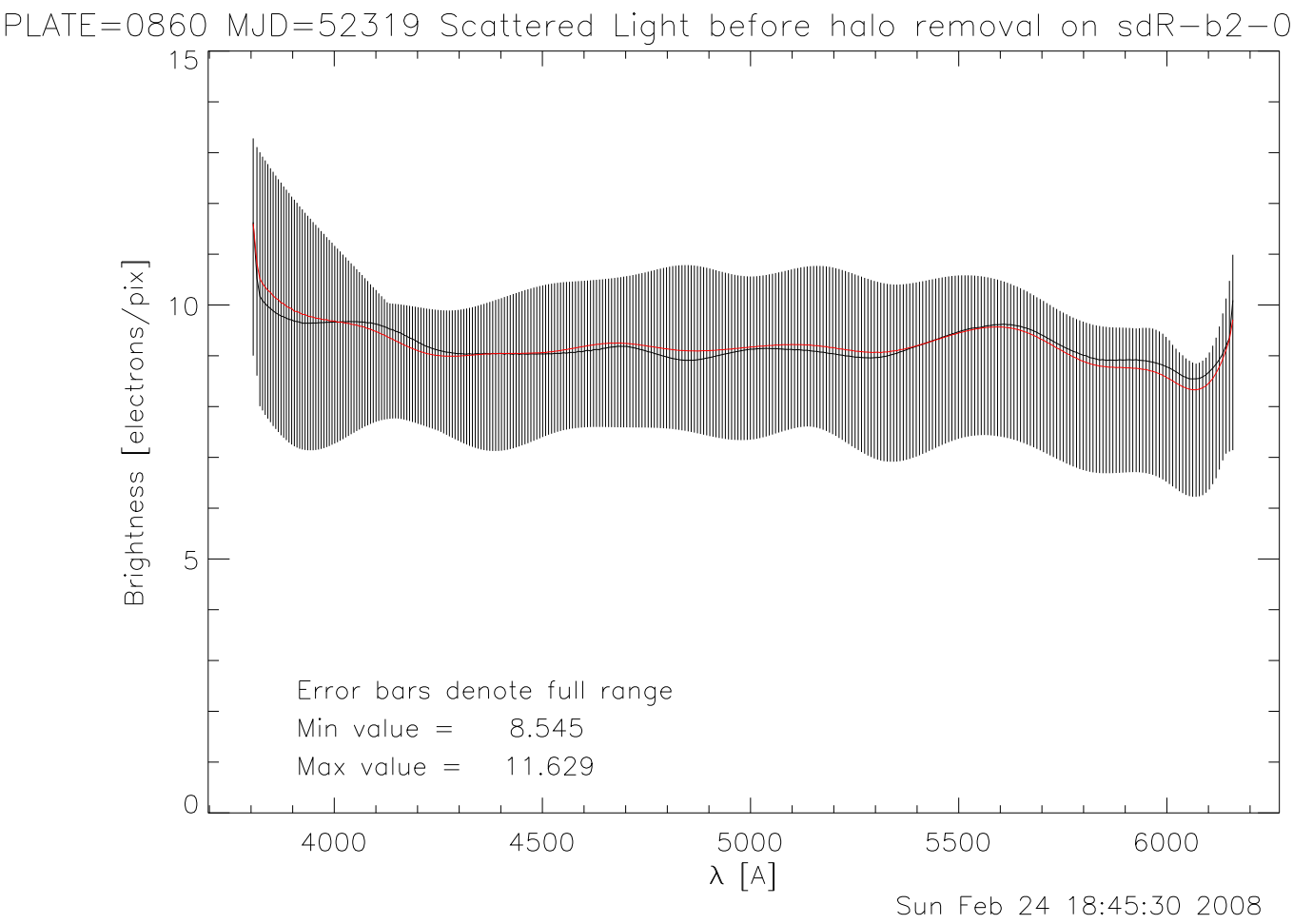

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013187.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

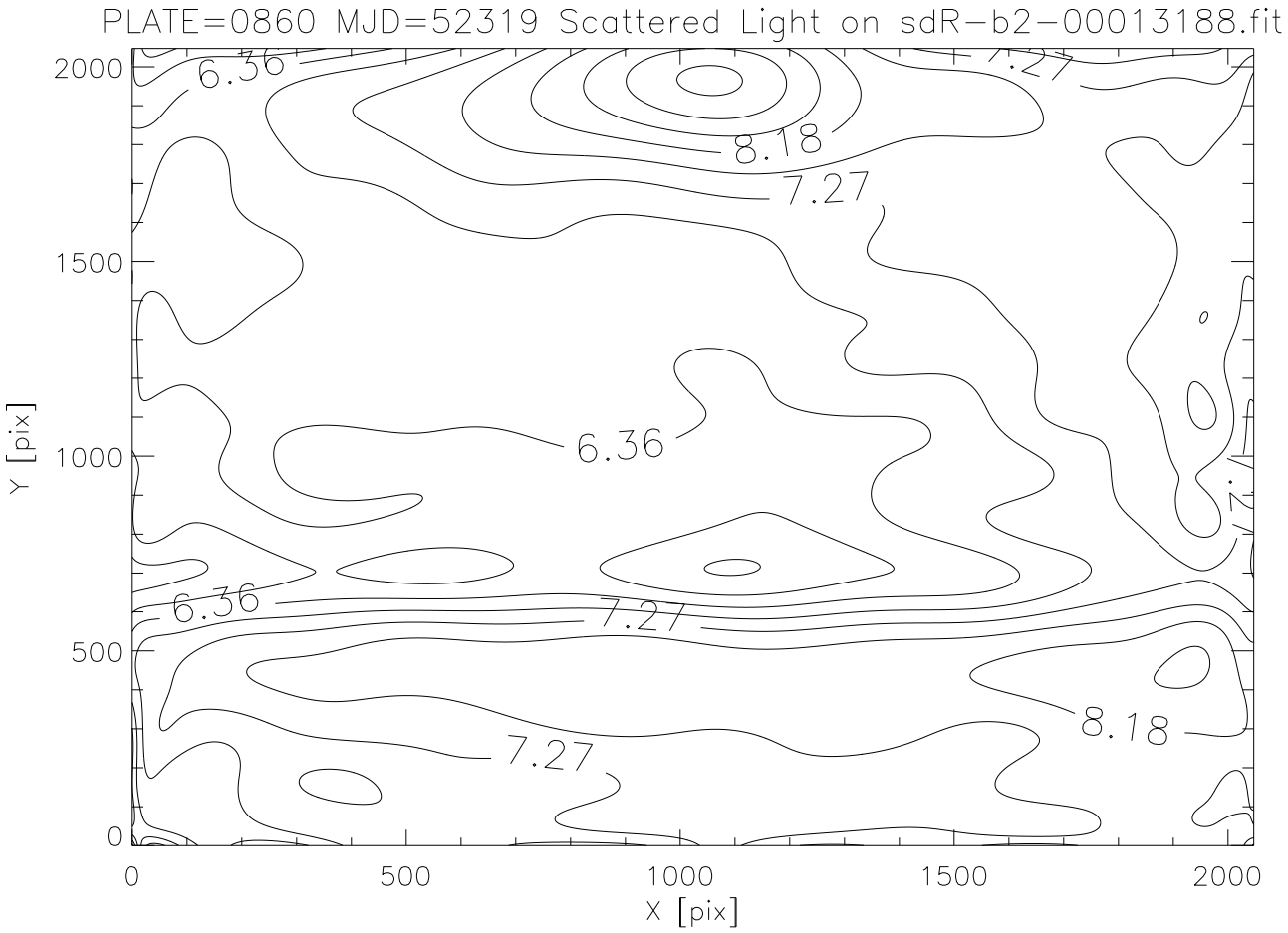

PLATE=0860 MJD=52319 sdR-b2-00013187.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.31 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

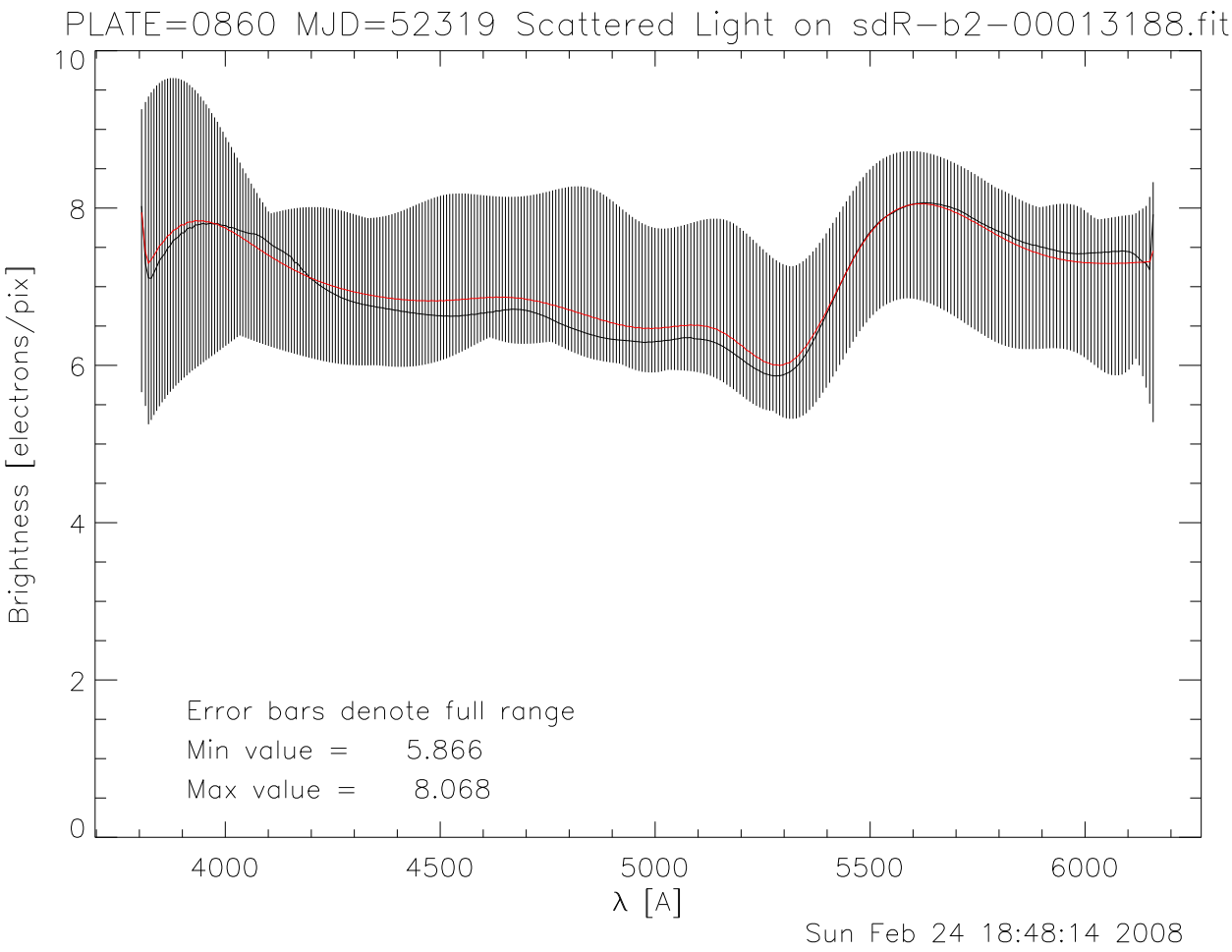

PLATE=0860 MJD=52319 sdR-b2-00013187.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.81 %
Fiber number
Focal Distance [mm]
Airmass

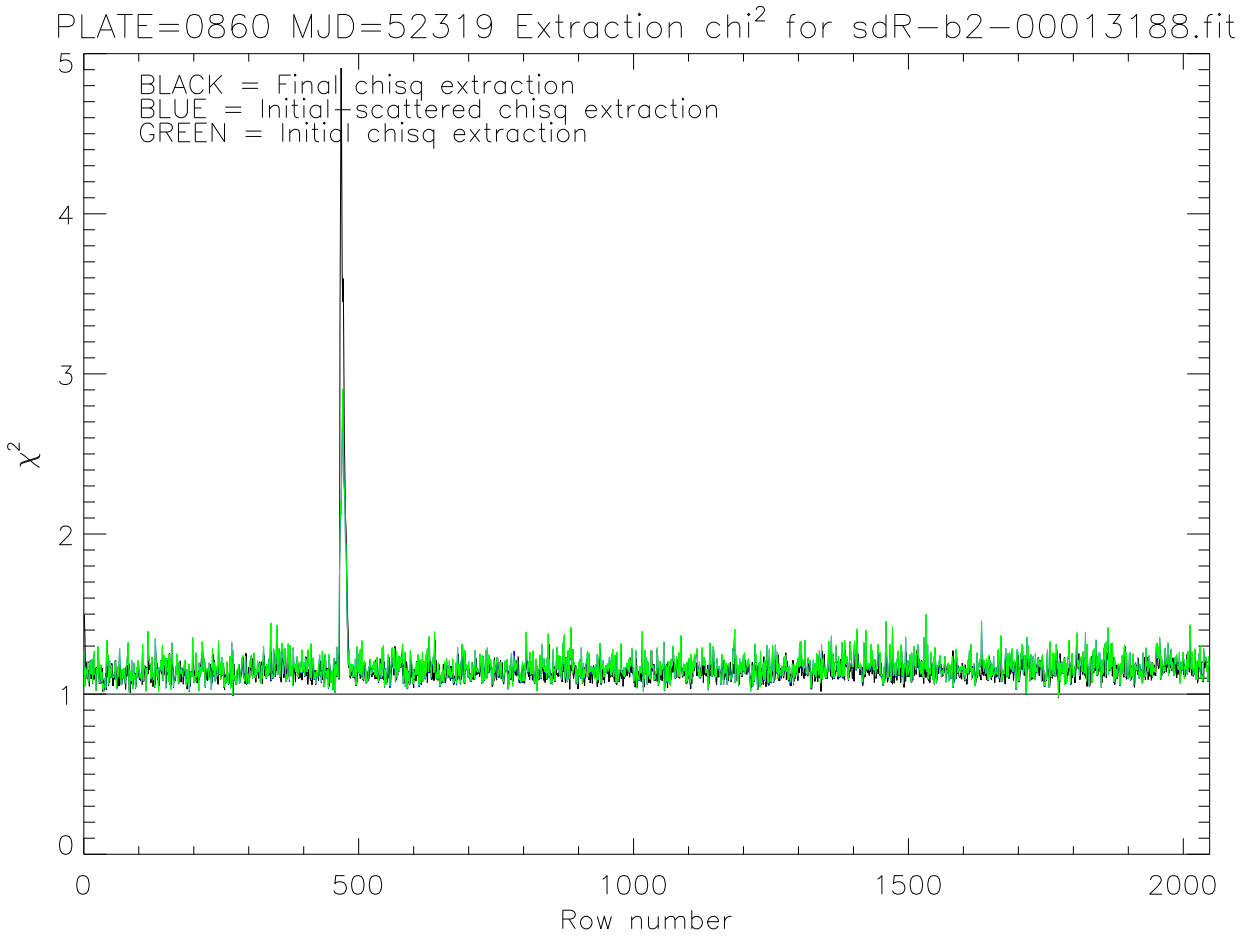

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:44:44 2008

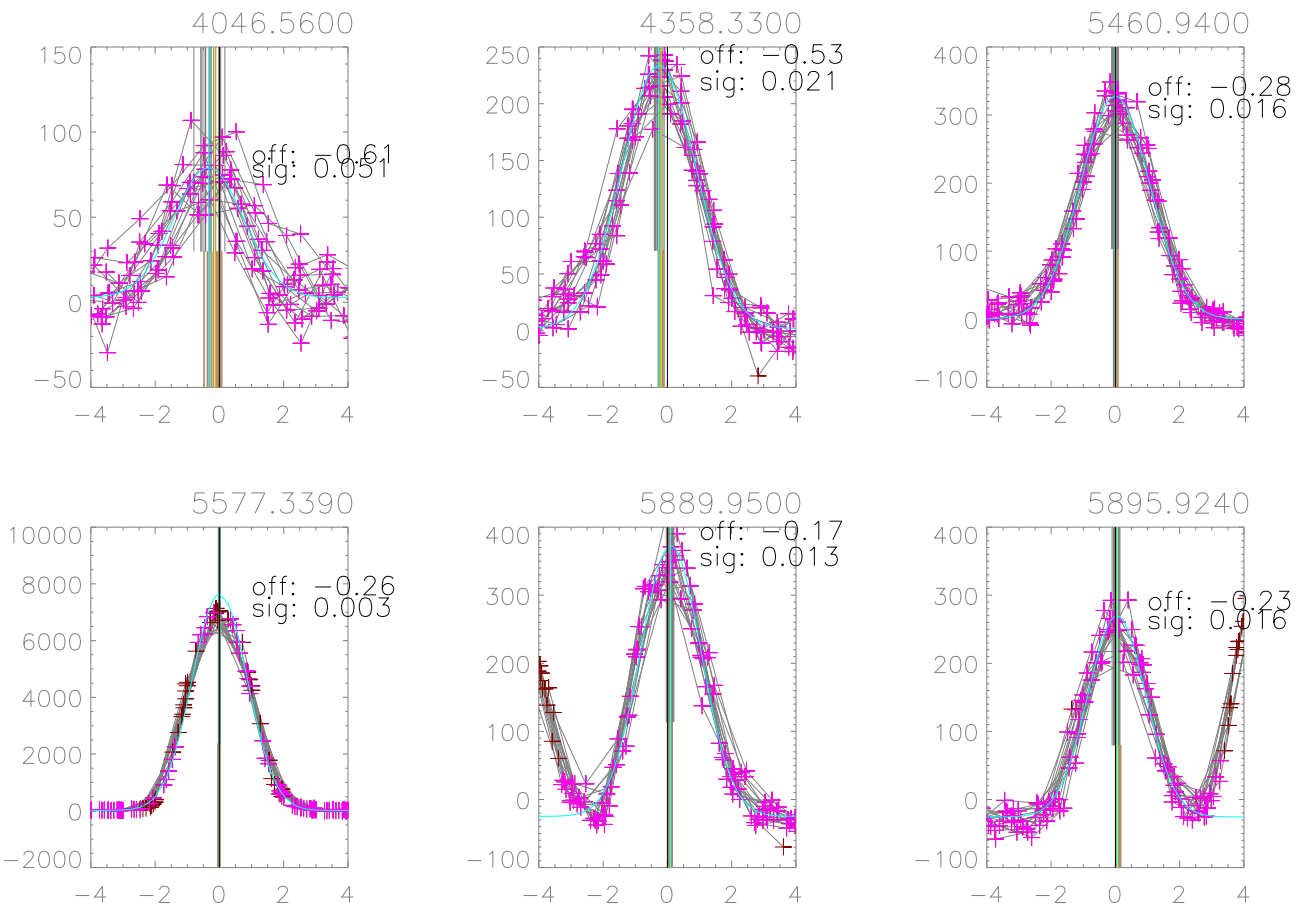

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013188.f
12.2
10.4
8.5
8.5
10.4
8.5
8.5
10.4
Y [pix]
X [pix]
0
500
1000
1500
2000

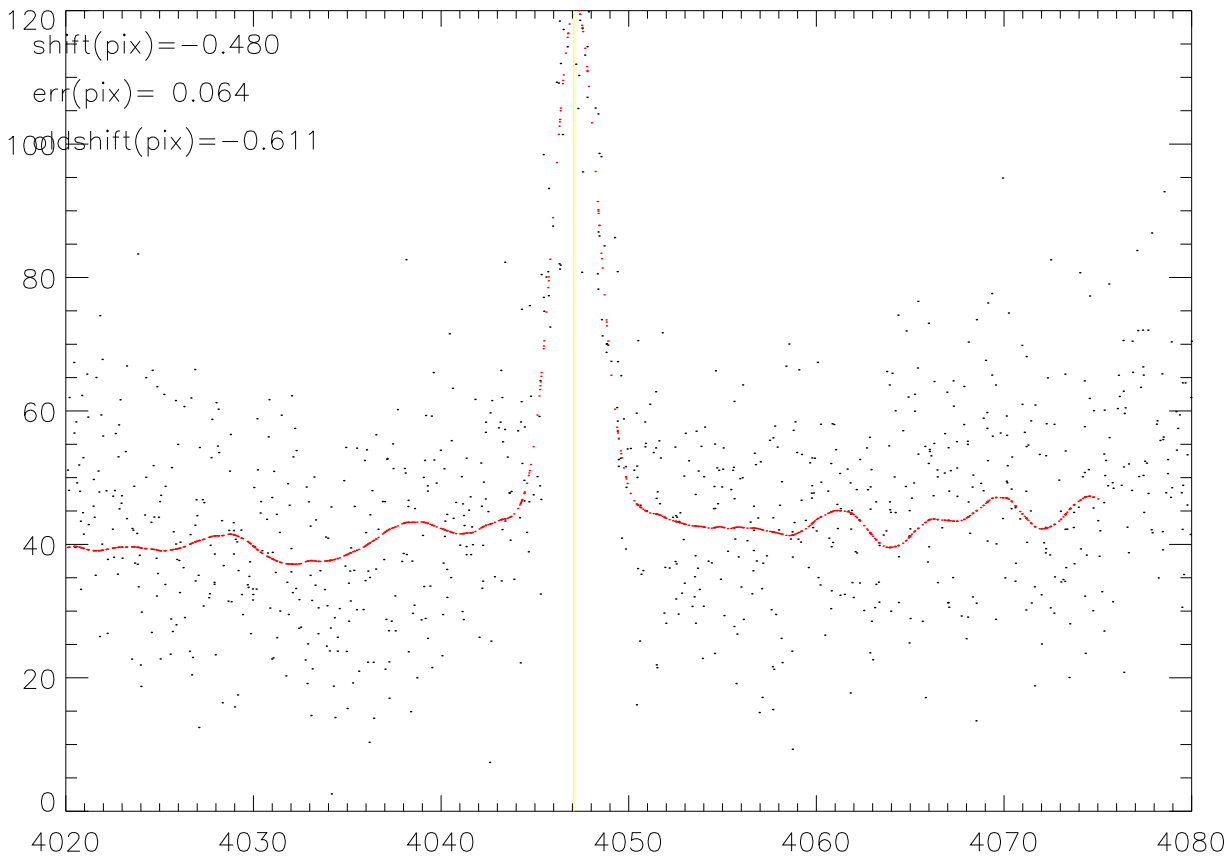

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013188.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.545
Max value = 11.629
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:45:30 2008

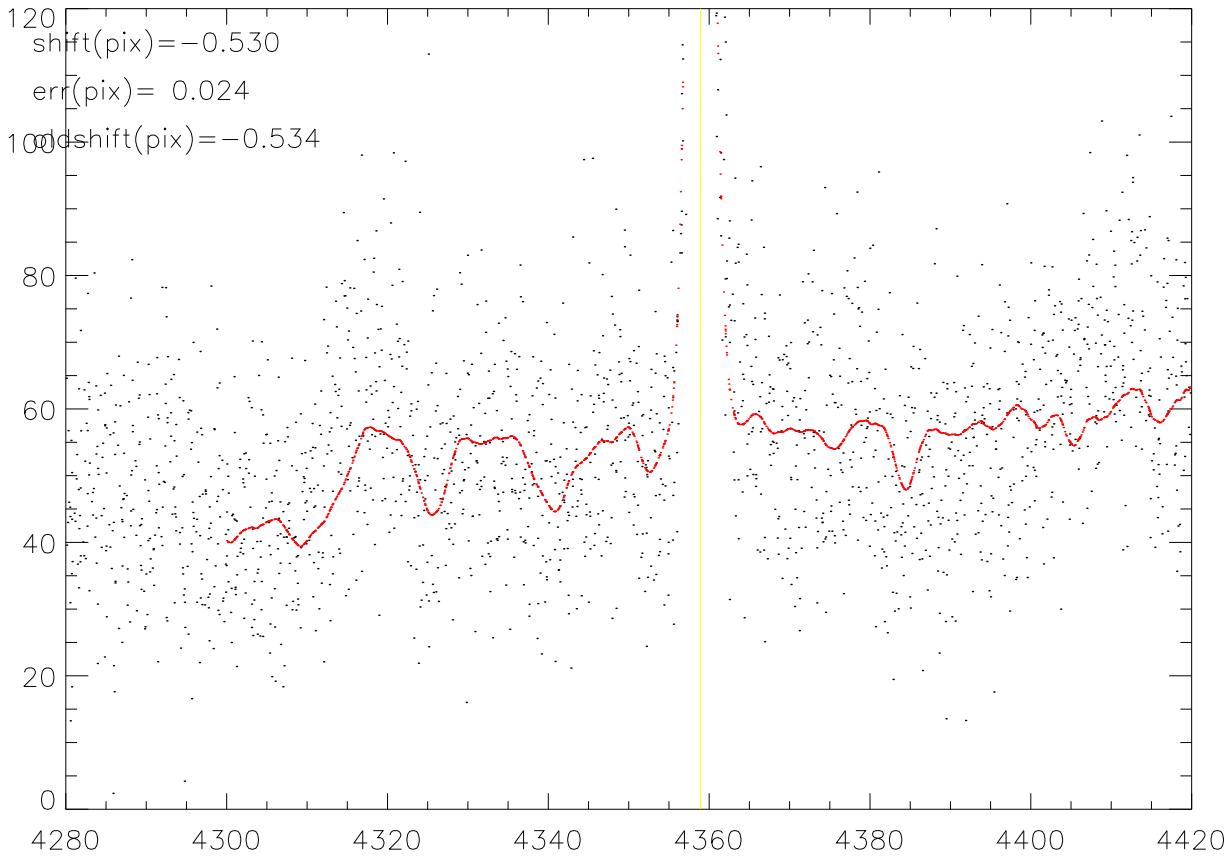

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013188.fit
6.36
8.18
7.27
6.36
6.36
7.27
8.18
7.27
Y [pix]
X [pix]
0
500
1000
1500
2000

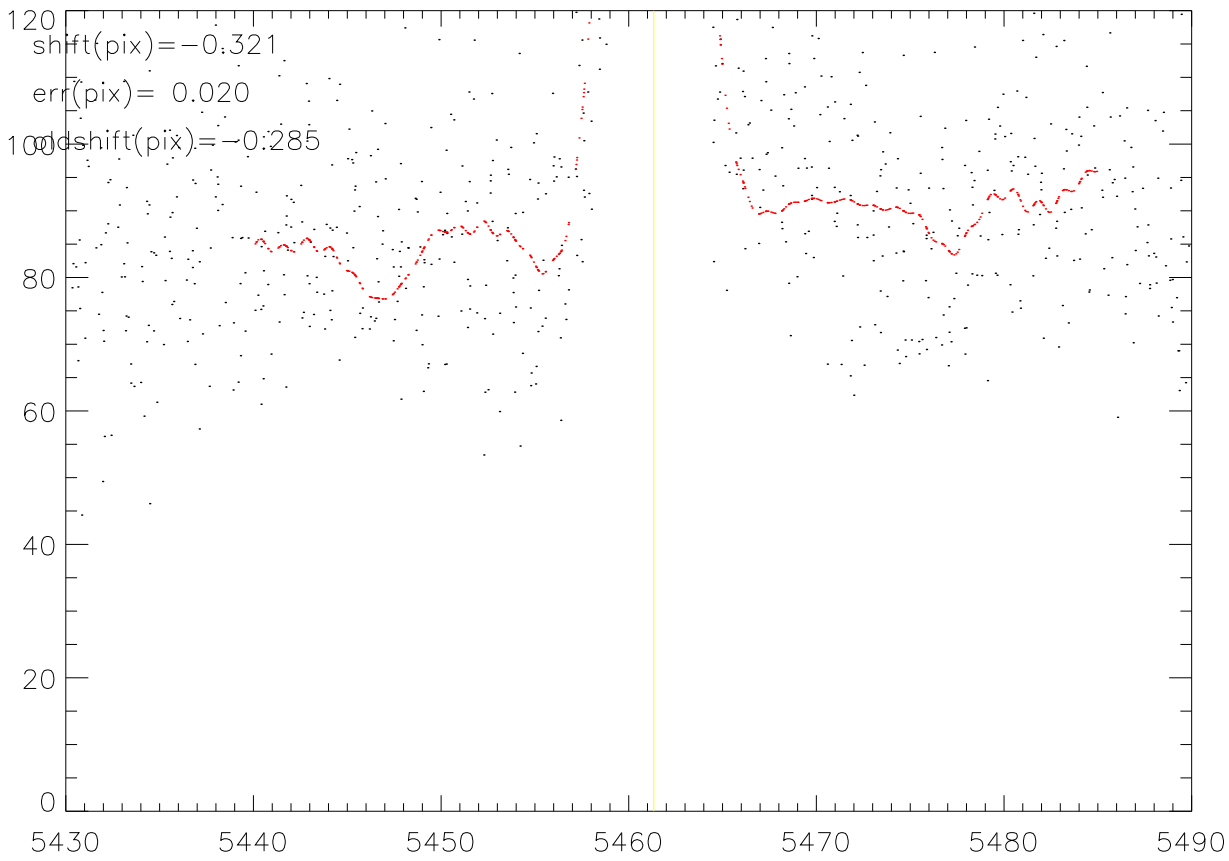

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013188.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.866
Max value = 8.068
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:48:14 2008

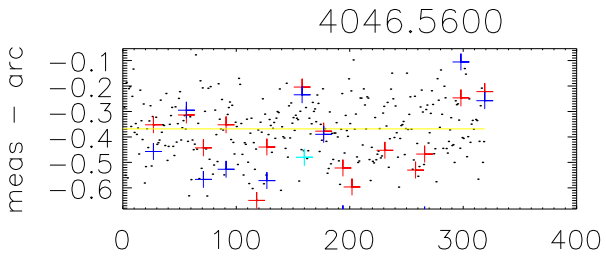

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013188.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

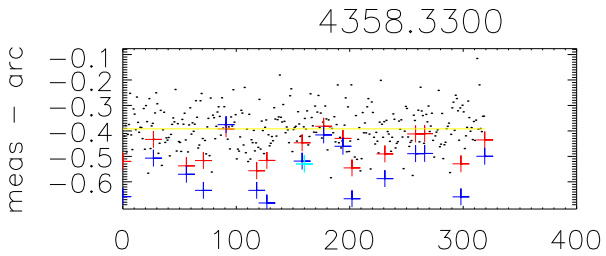

4046.5600
off: −0.61
sig: 0.051
4358.3300
off: −0.53
sig: 0.021
5460.9400
off: −0.28
sig: 0.016
5577.3390
off: −0.26
sig: 0.003
5889.9500
off: −0.17
sig: 0.013
5895.9240
off: −0.23
sig: 0.016

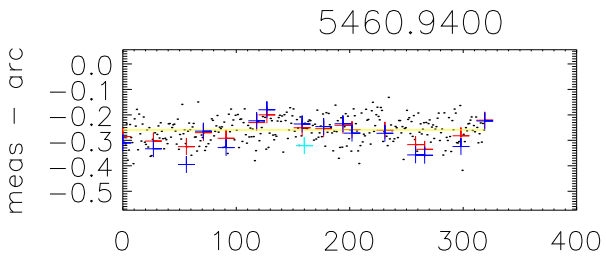

shift(pix)=−0.480
err(pix)= 0.064
oldshift(pix)=−0.611
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

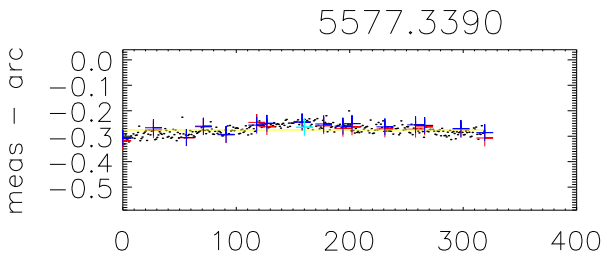

shift(pix)=−0.530
err(pix)= 0.024
oldshift(pix)=−0.534
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

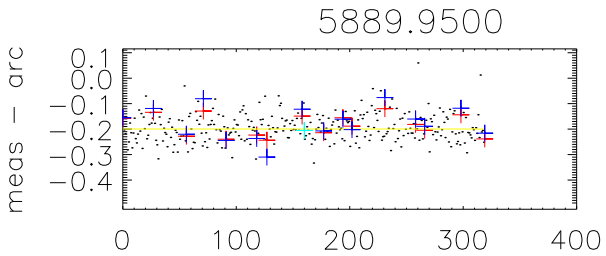

shift(pix)=−0.321
err(pix)= 0.020
oldshift(pix)=−0.285
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

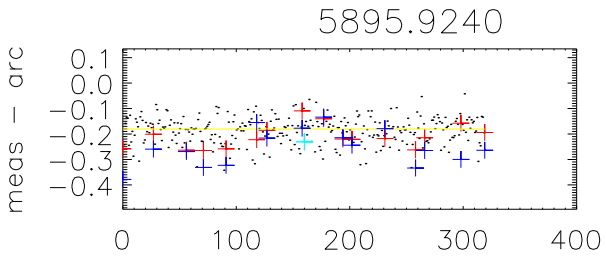

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

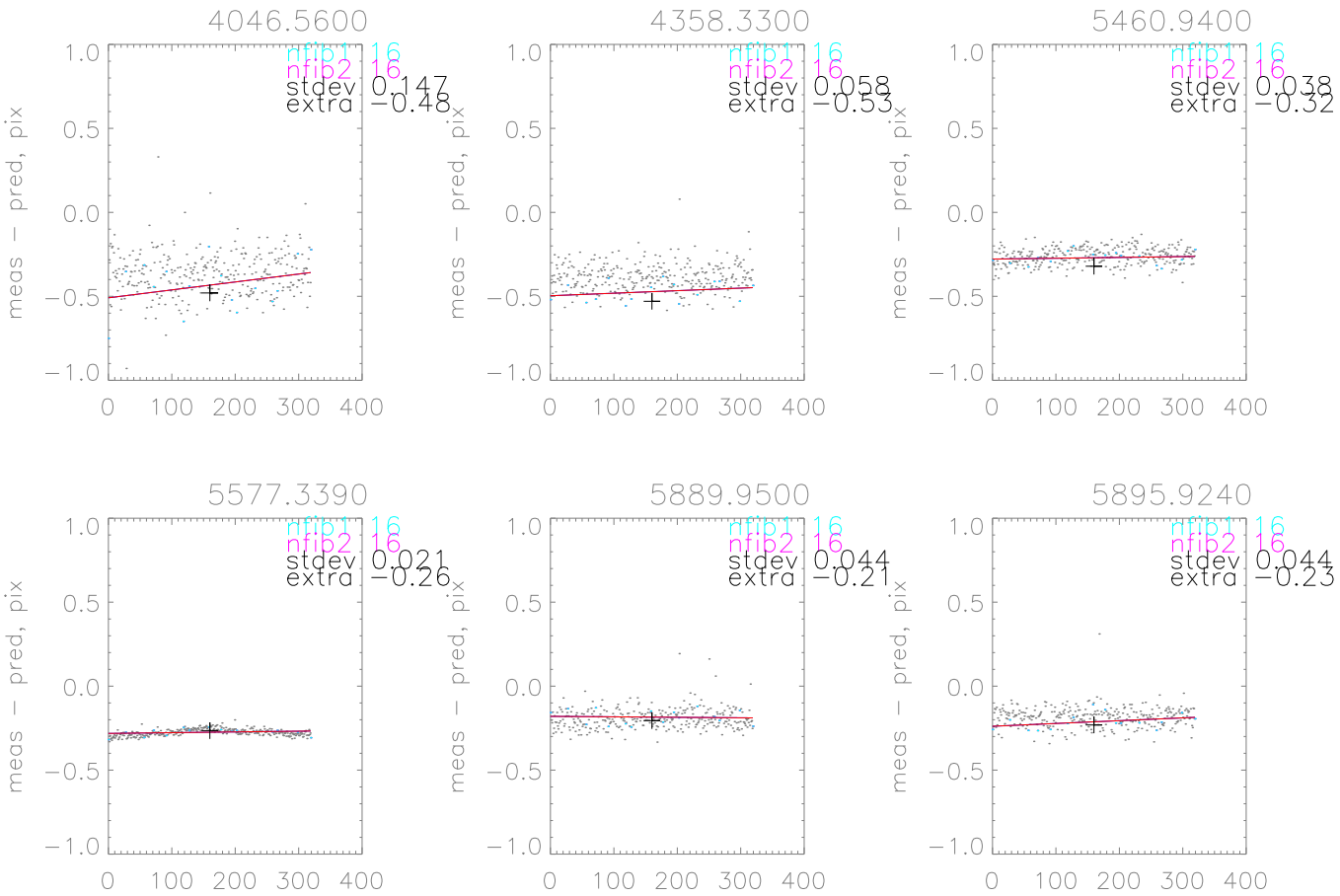

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

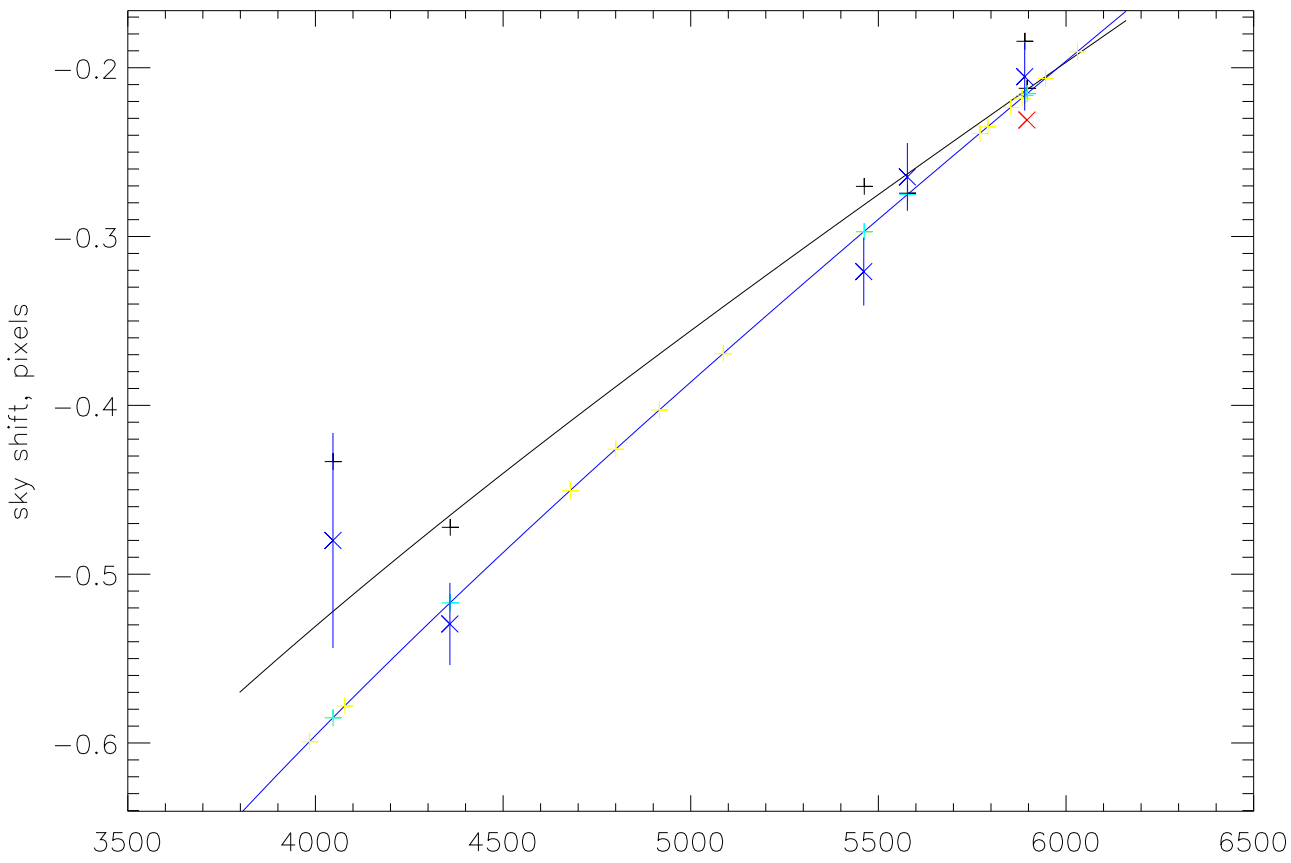

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

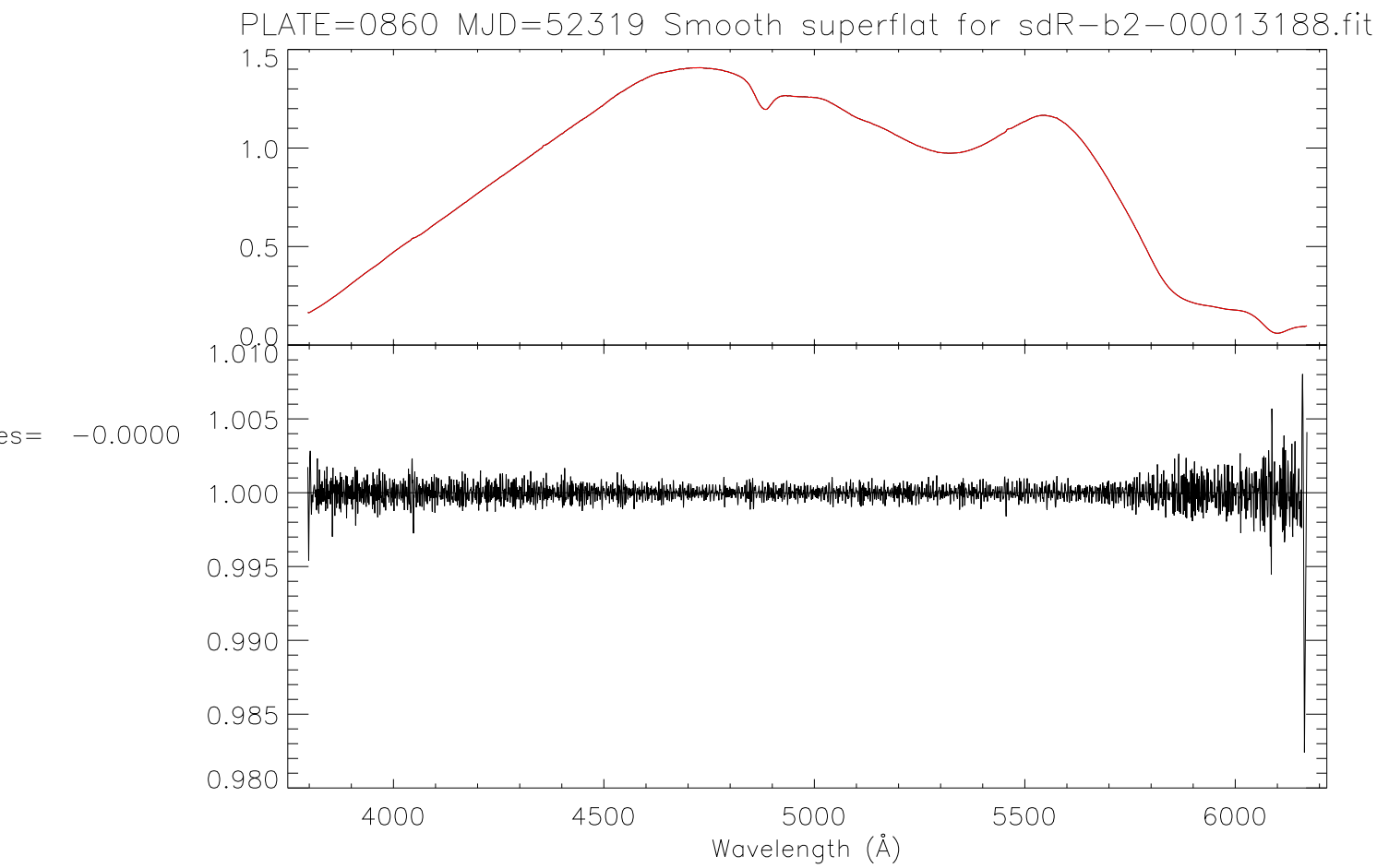

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

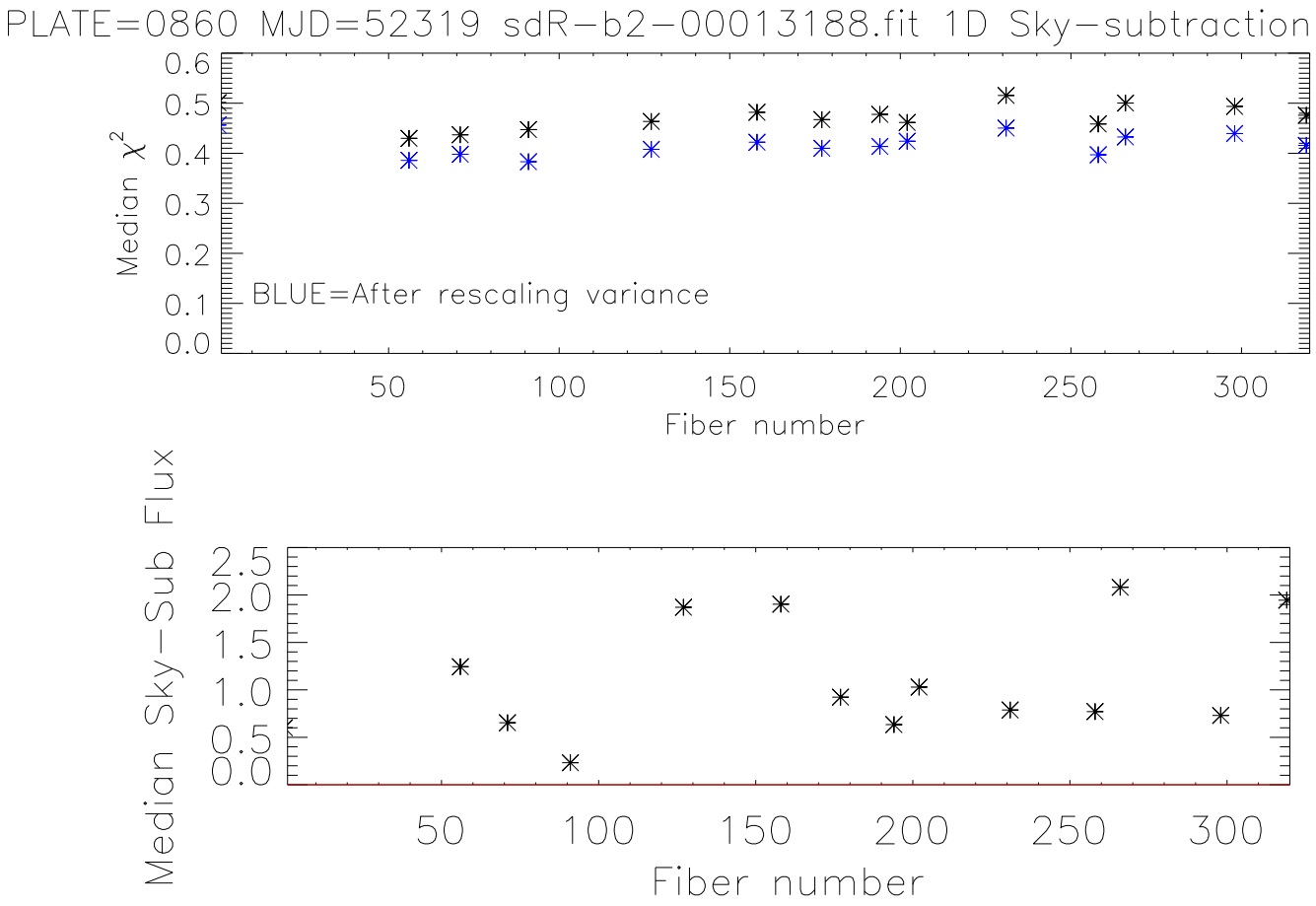

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

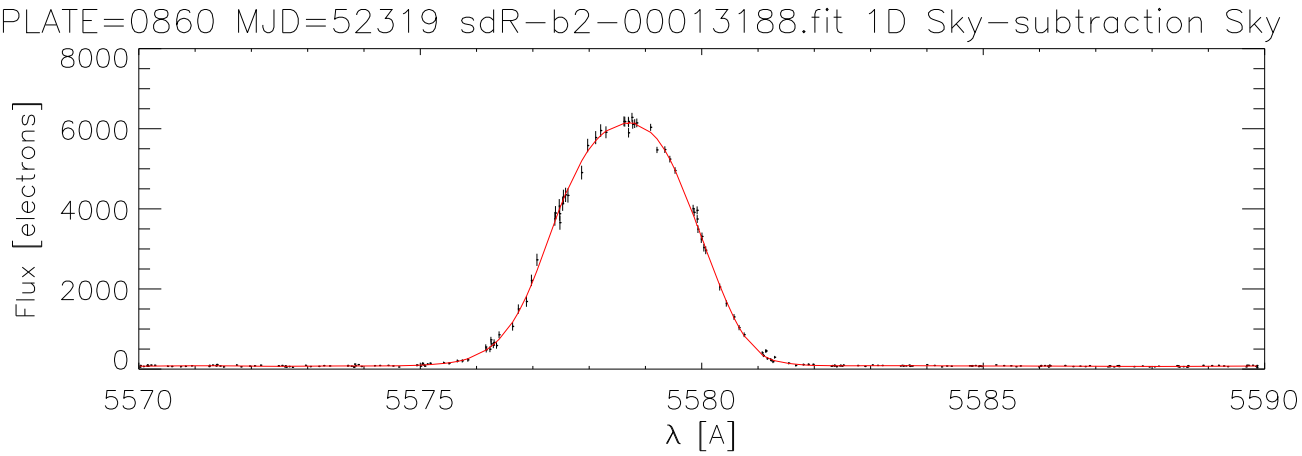

4046.5600
nfib1 16
nfib2 16
stdev 0.147
extra −0.48
4358.3300
nfib1 16
nfib2 16
stdev 0.058
extra −0.53
5460.9400
nfib1 16
nfib2 16
stdev 0.038
extra −0.32
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.044
extra −0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

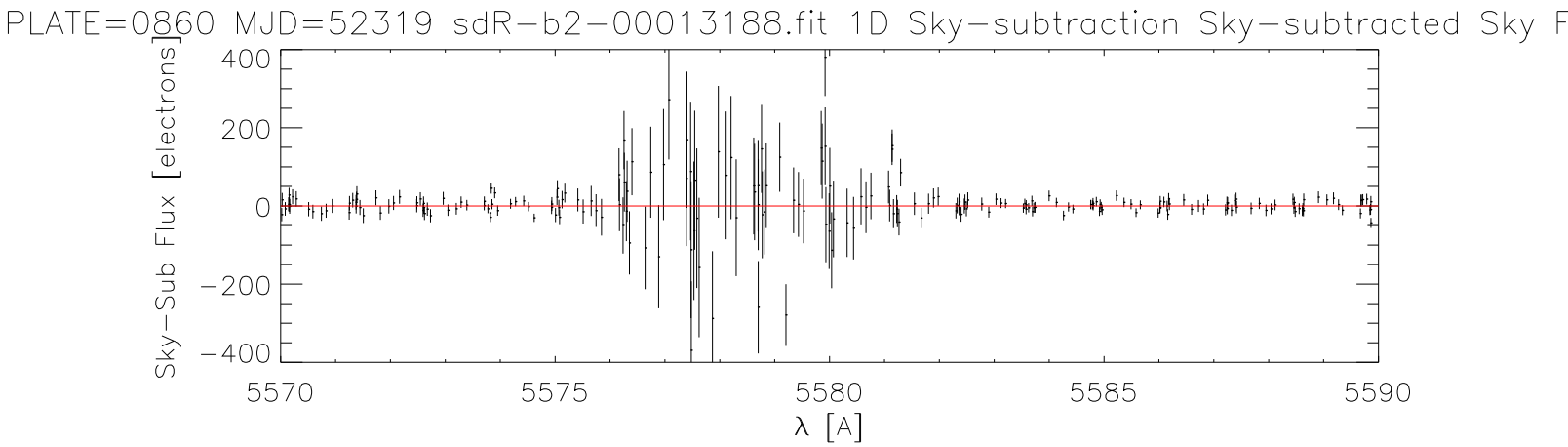

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

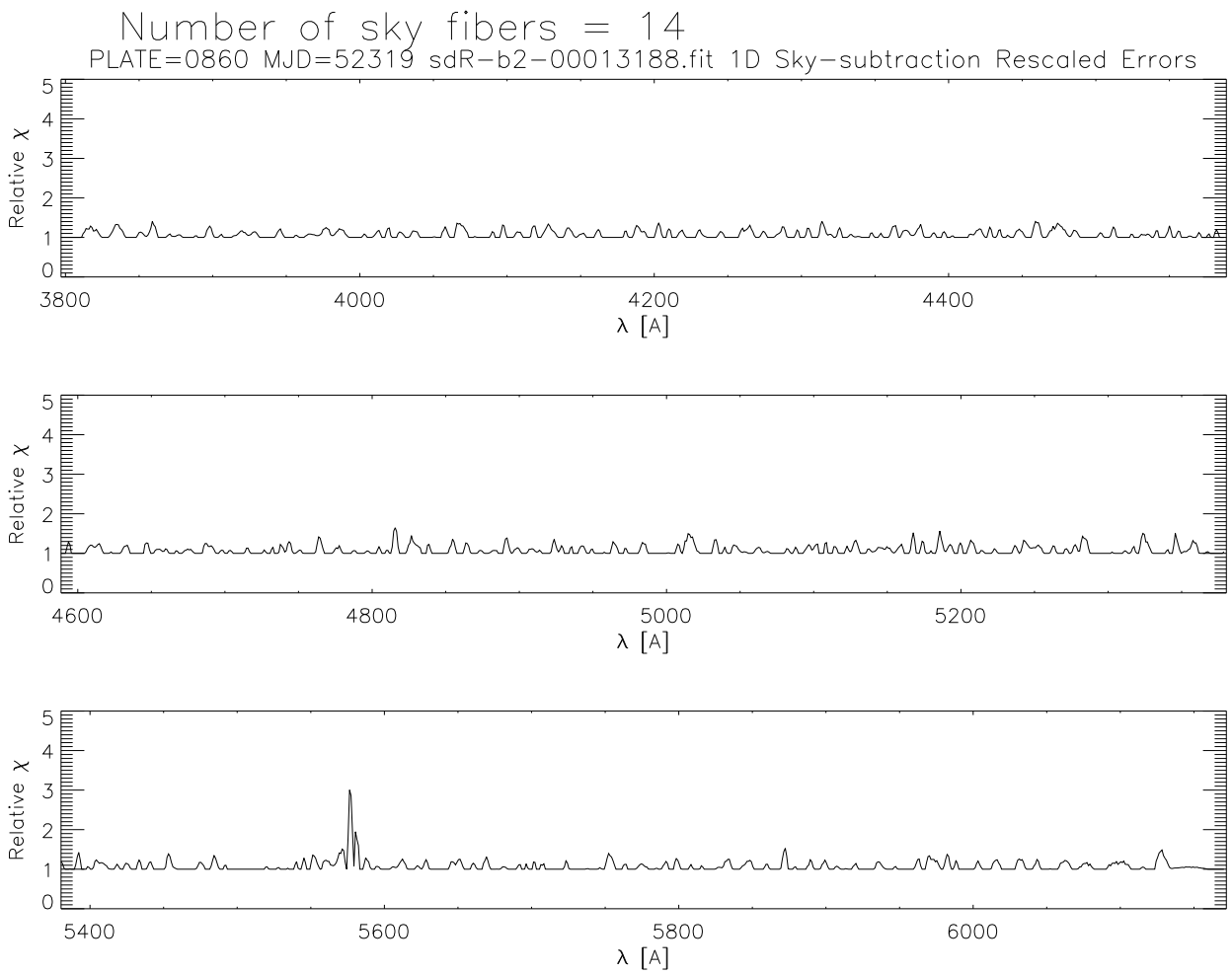

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013188.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

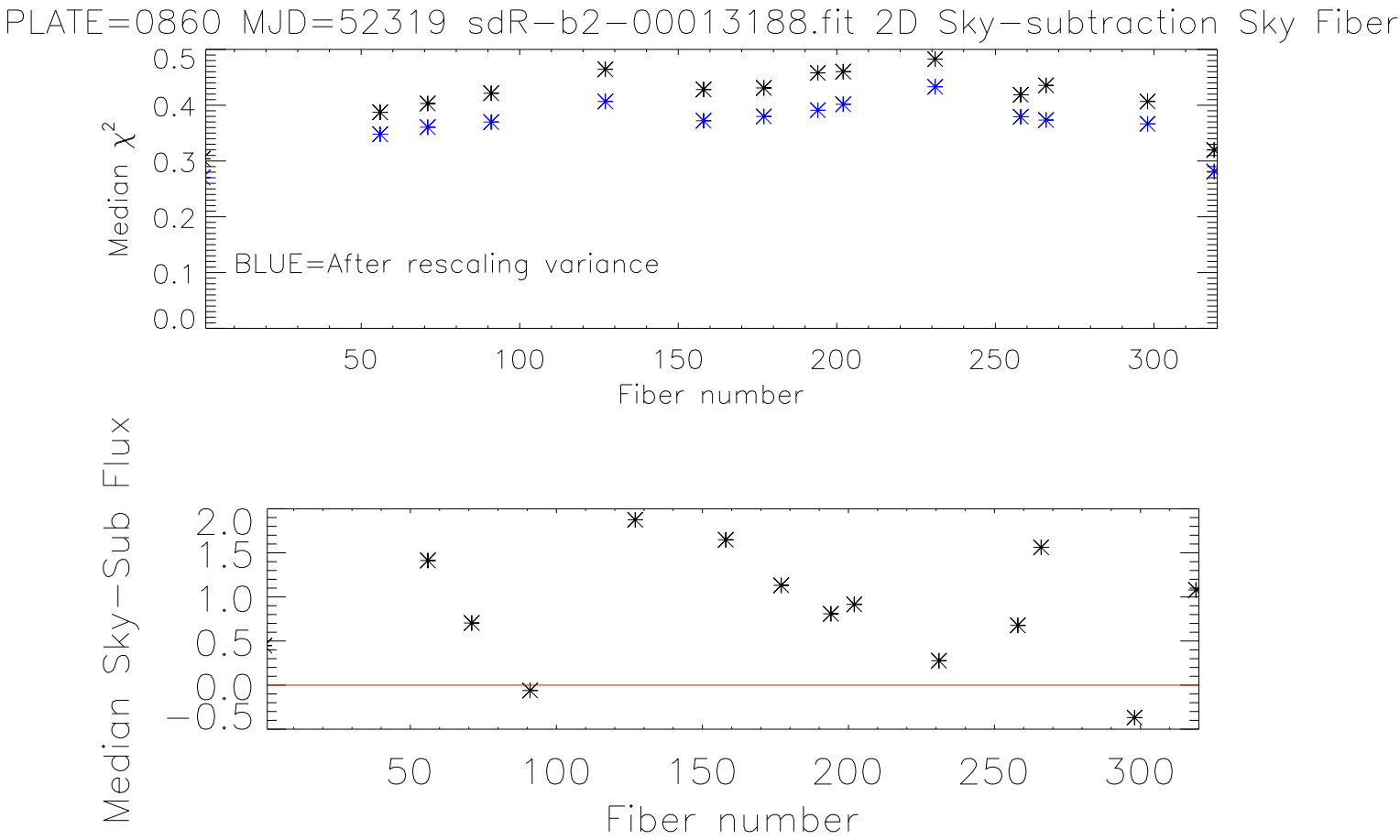
es= −0.0000

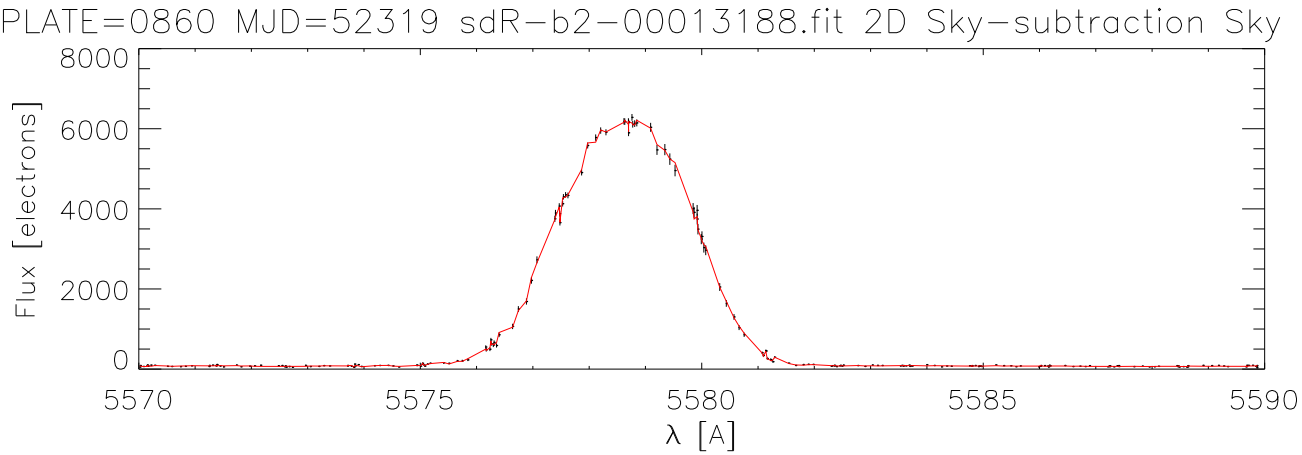

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

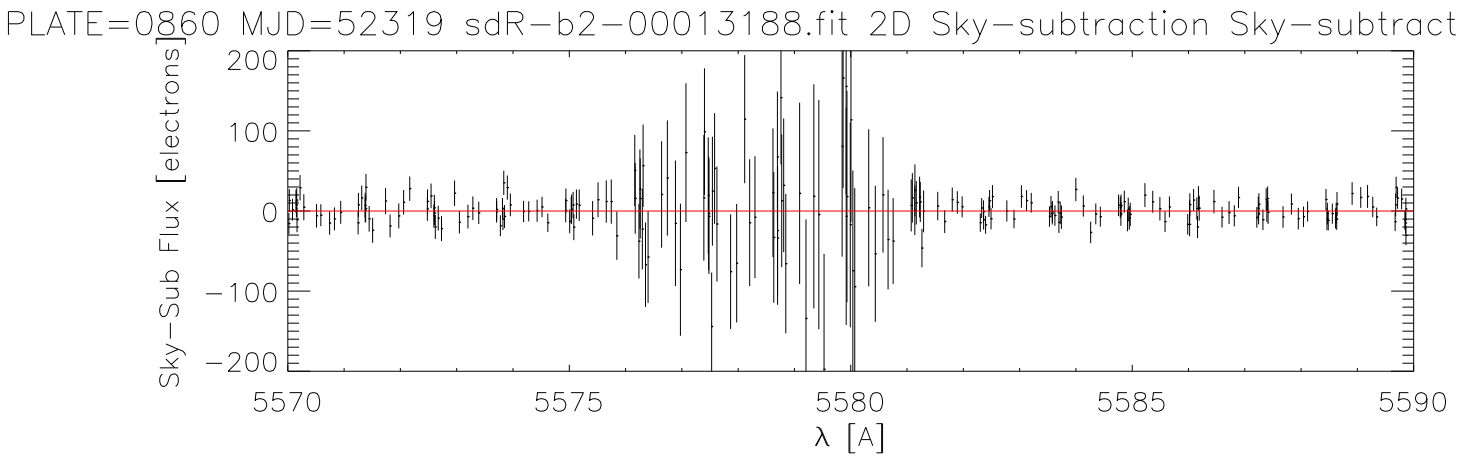

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

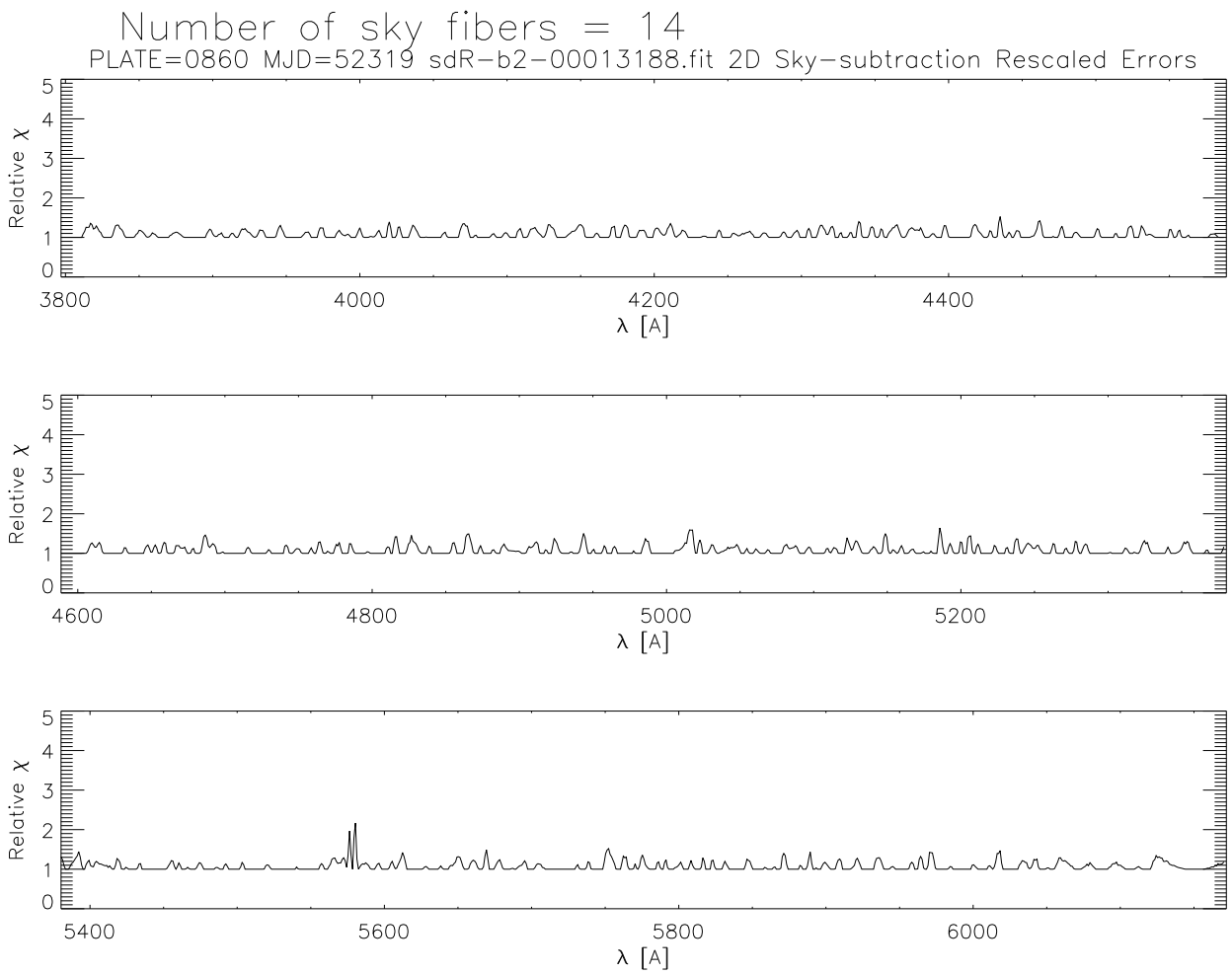

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

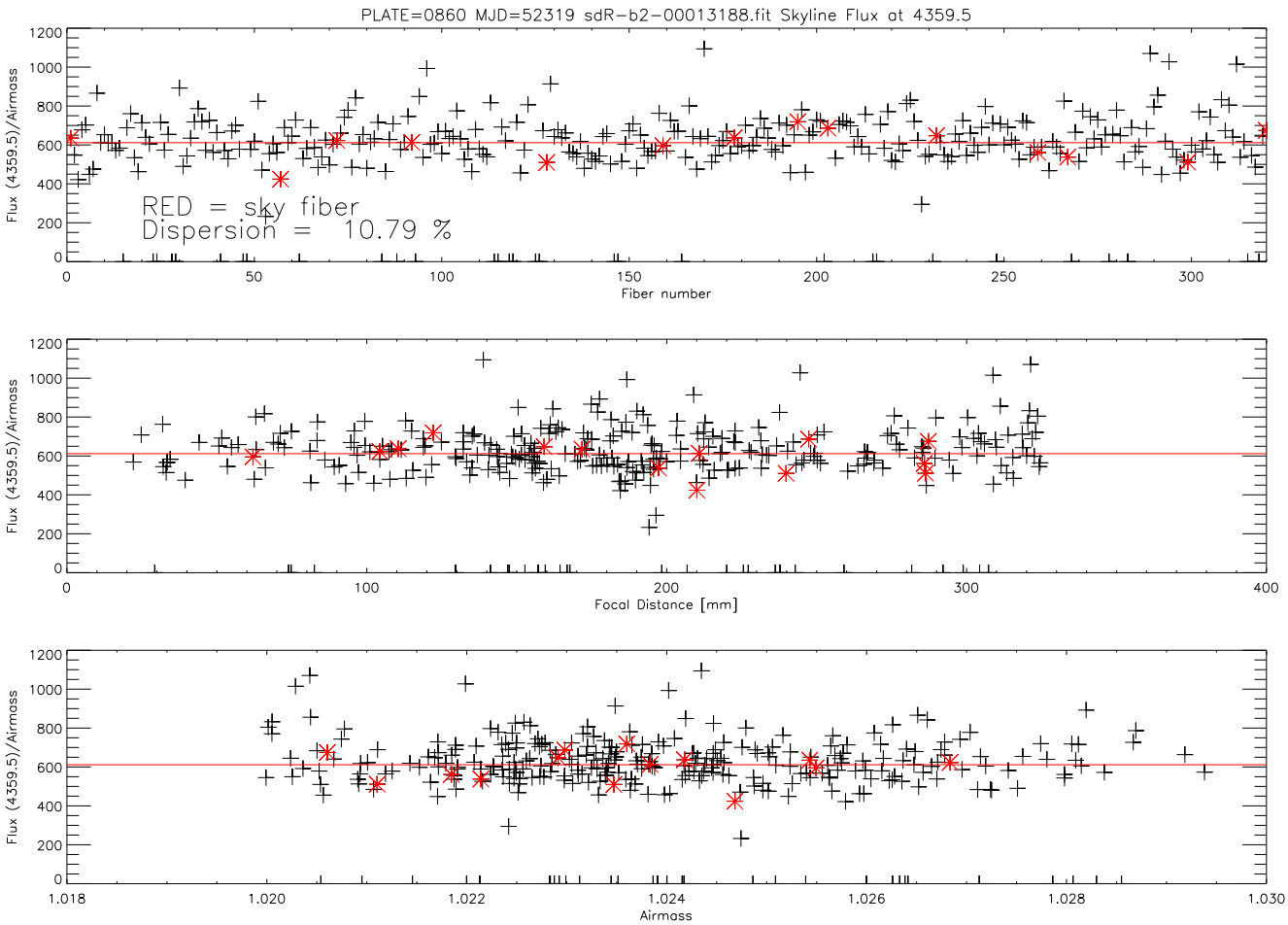

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013188.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

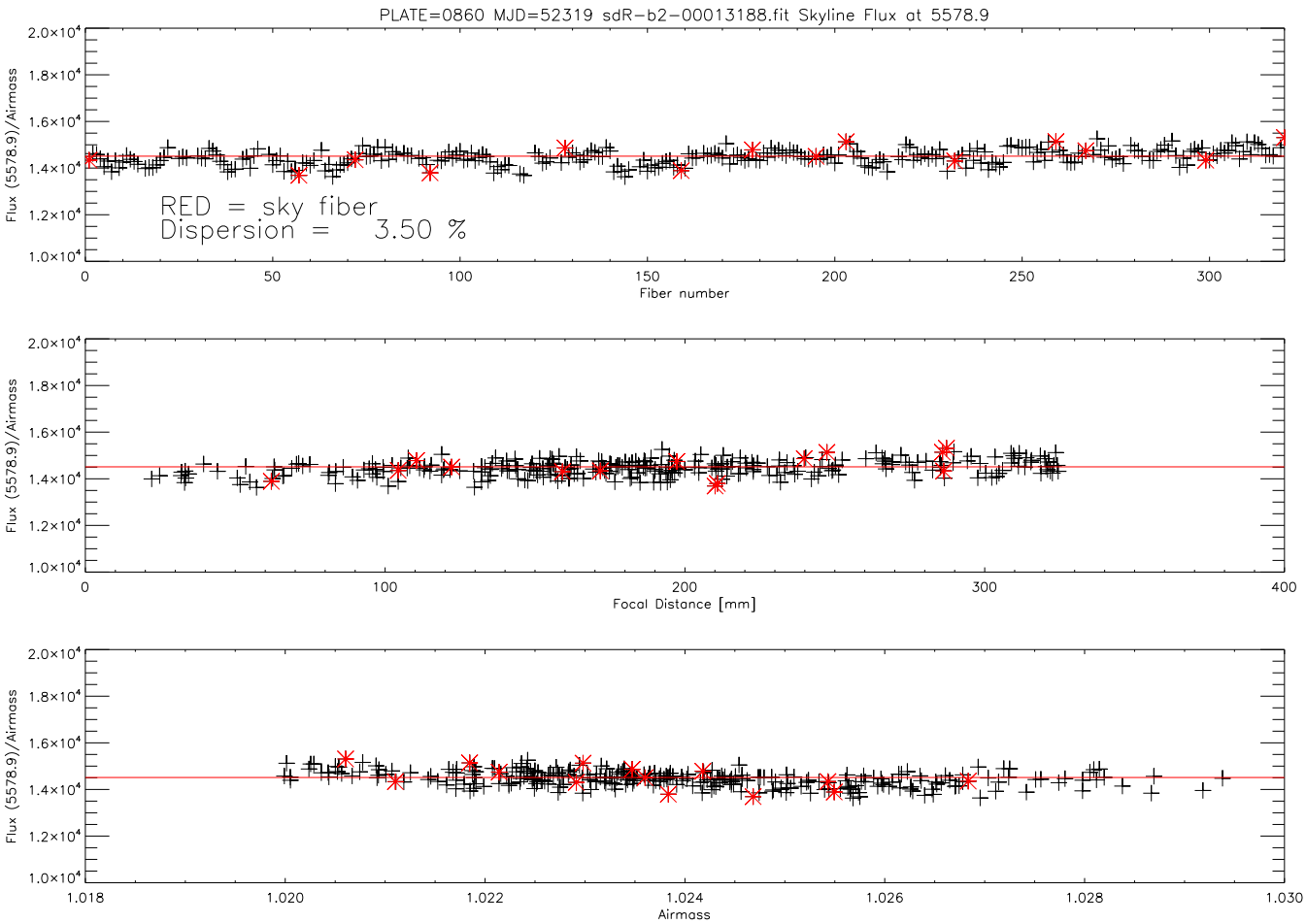

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

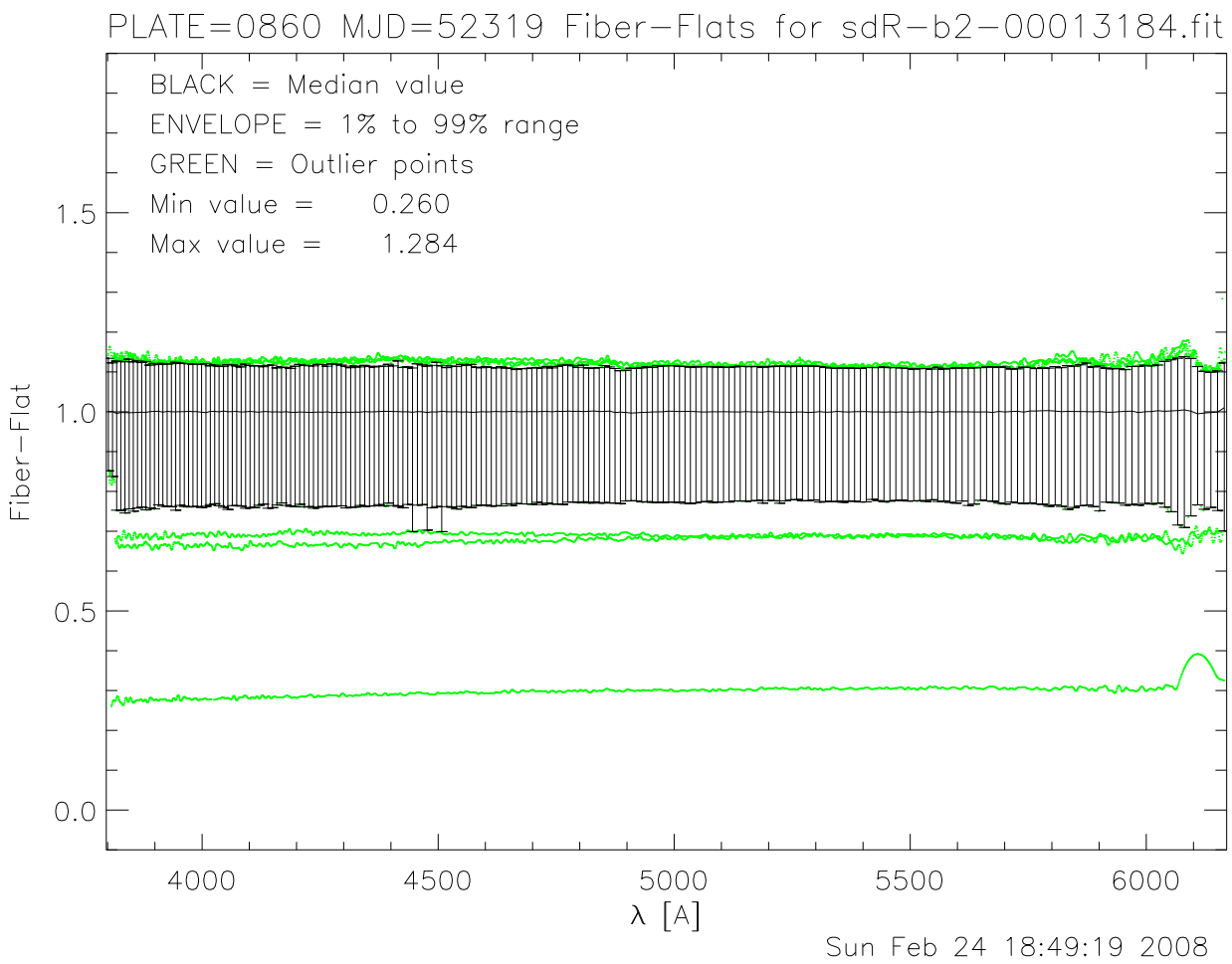

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

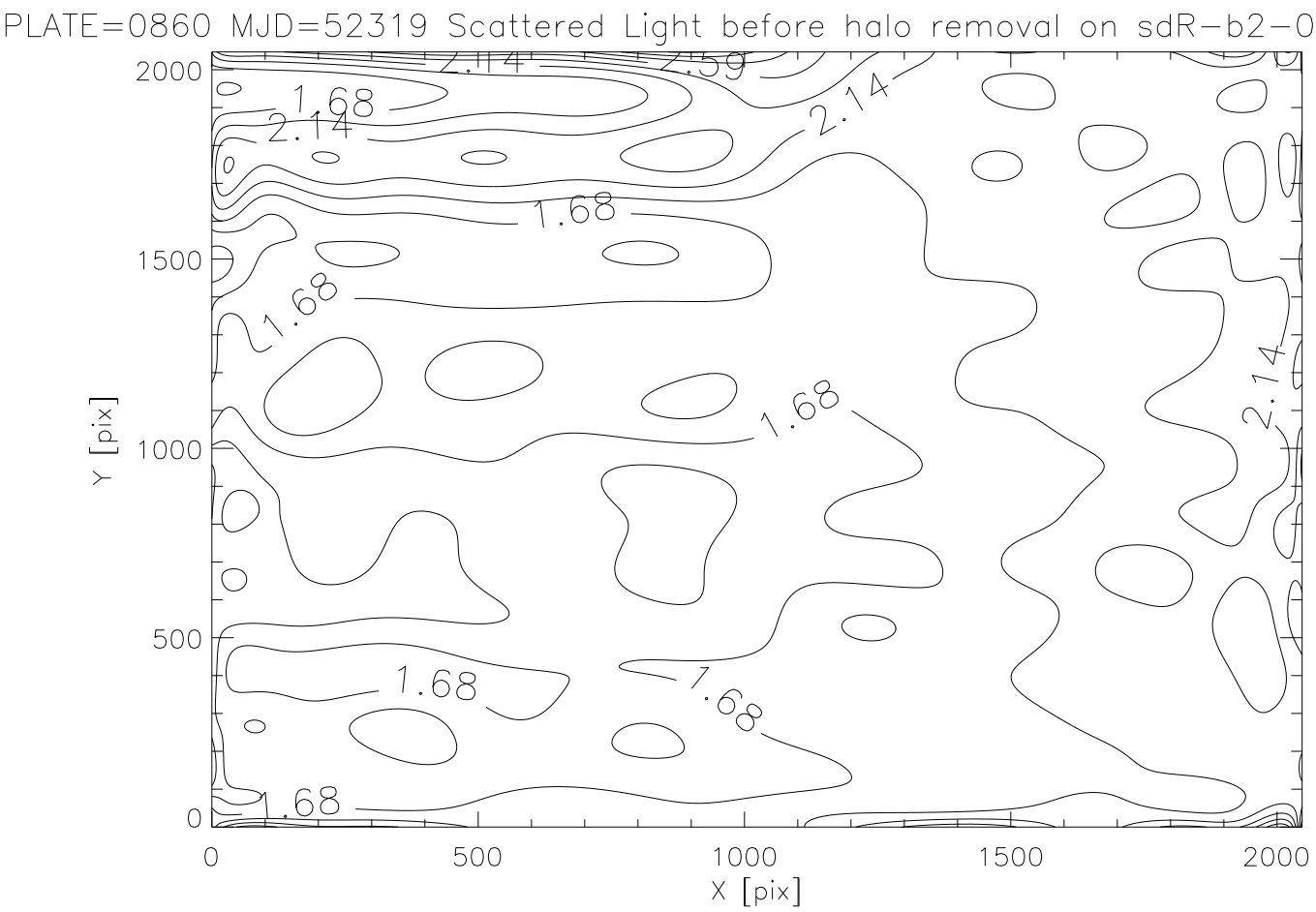

PLATE=0860 MJD=52319 sdR-b2-00013188.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

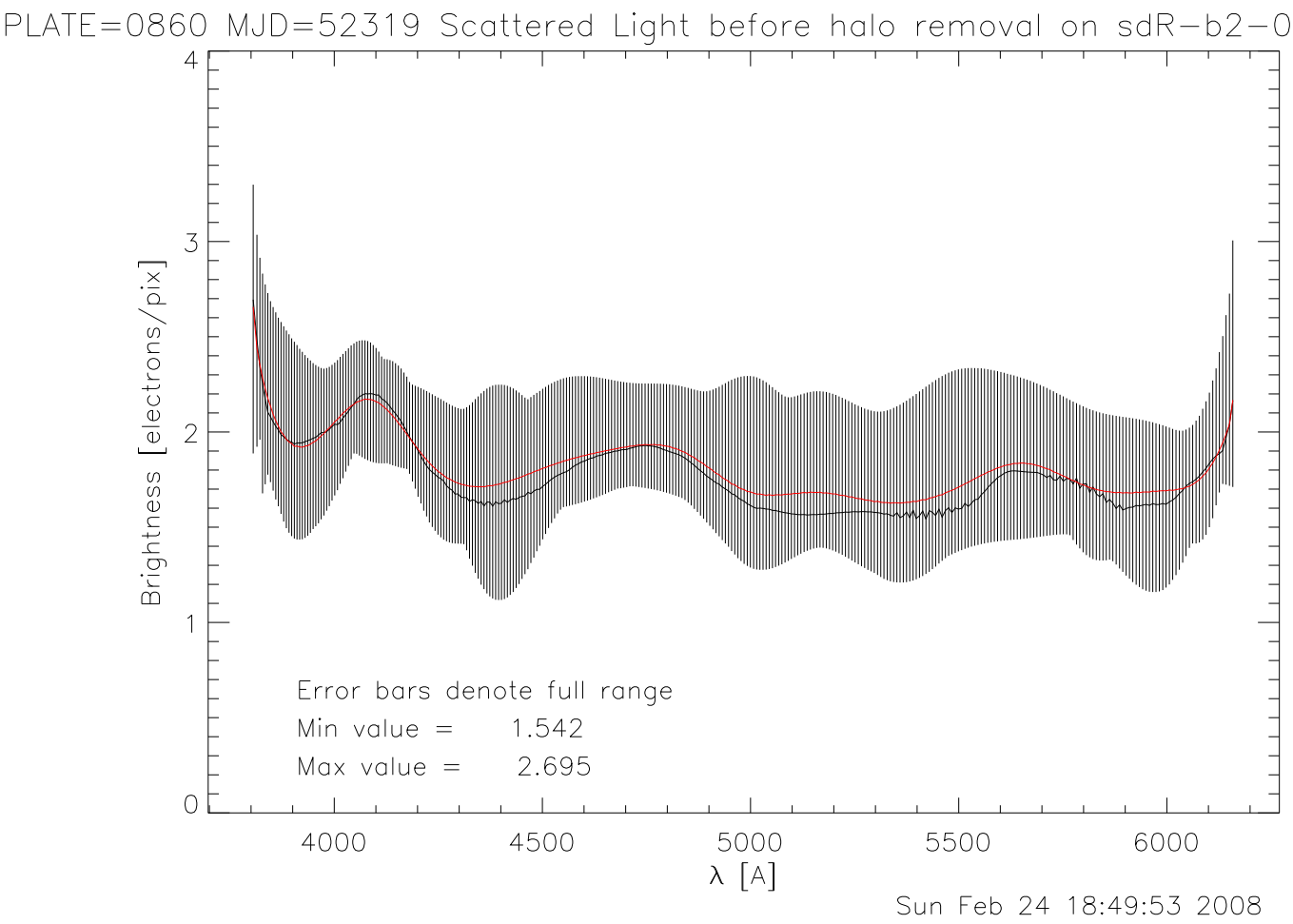

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013188.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

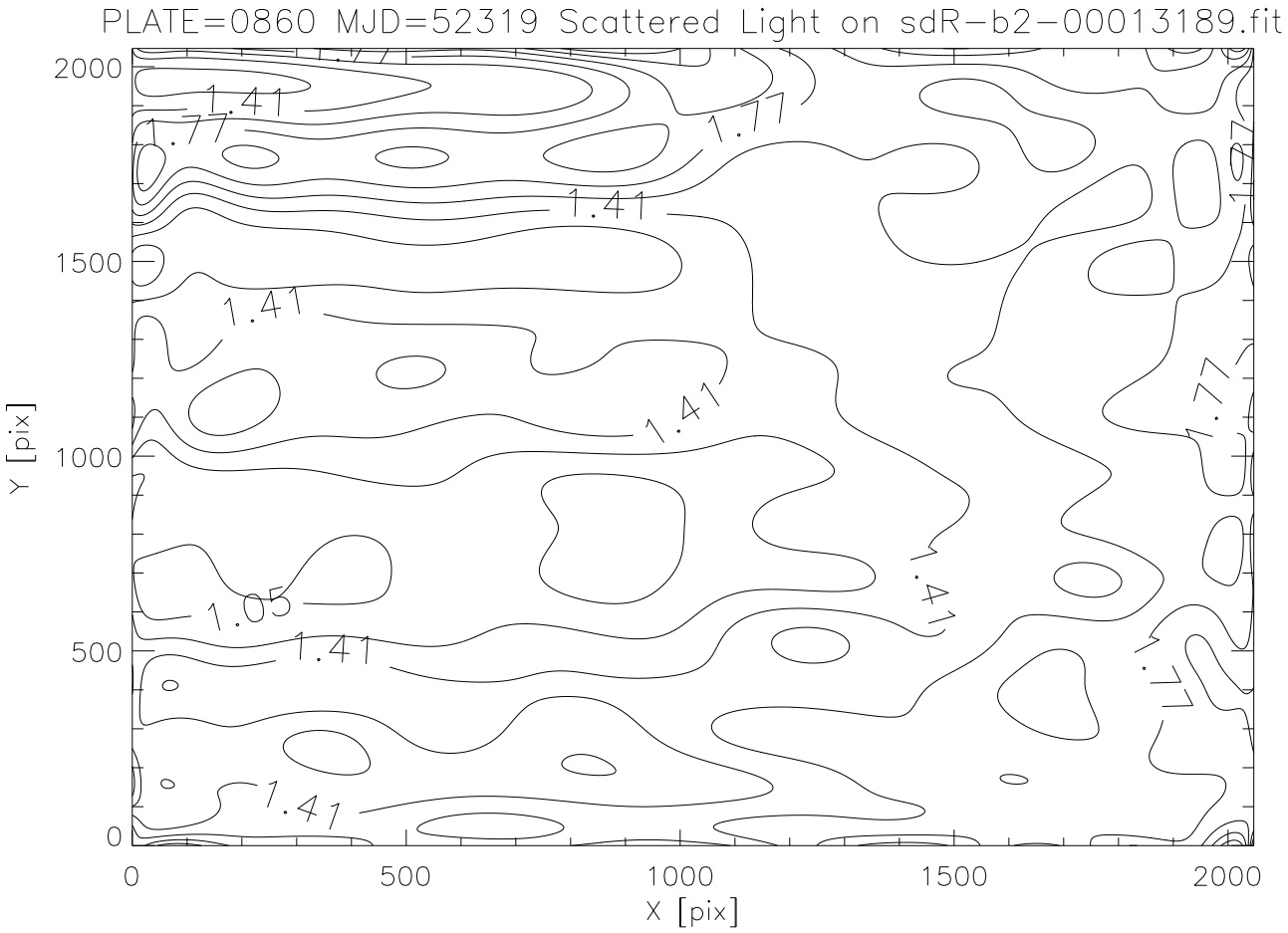

PLATE=0860 MJD=52319 sdR-b2-00013188.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.79 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

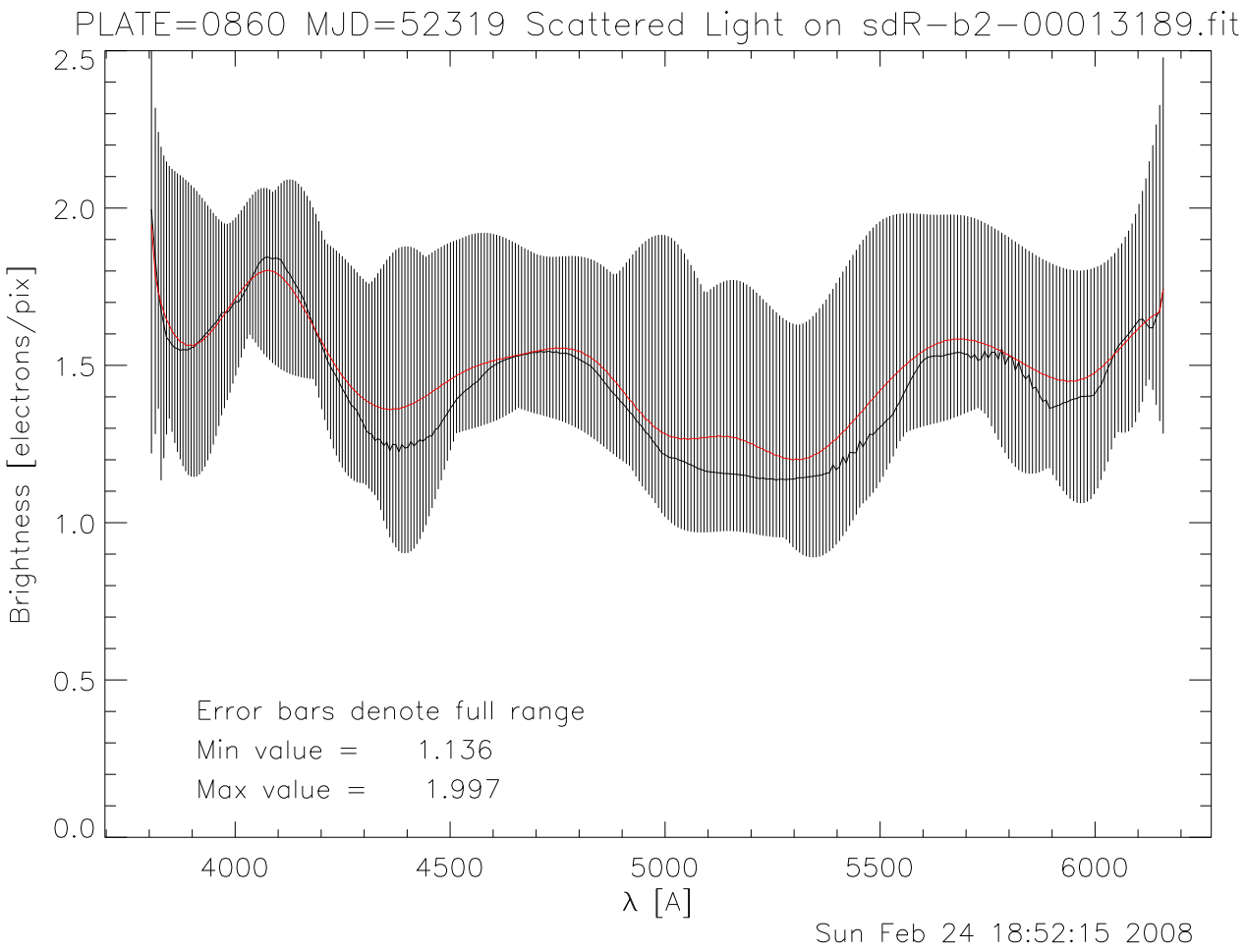

PLATE=0860 MJD=52319 sdR-b2-00013188.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.50 %
Fiber number
Focal Distance [mm]
Airmass

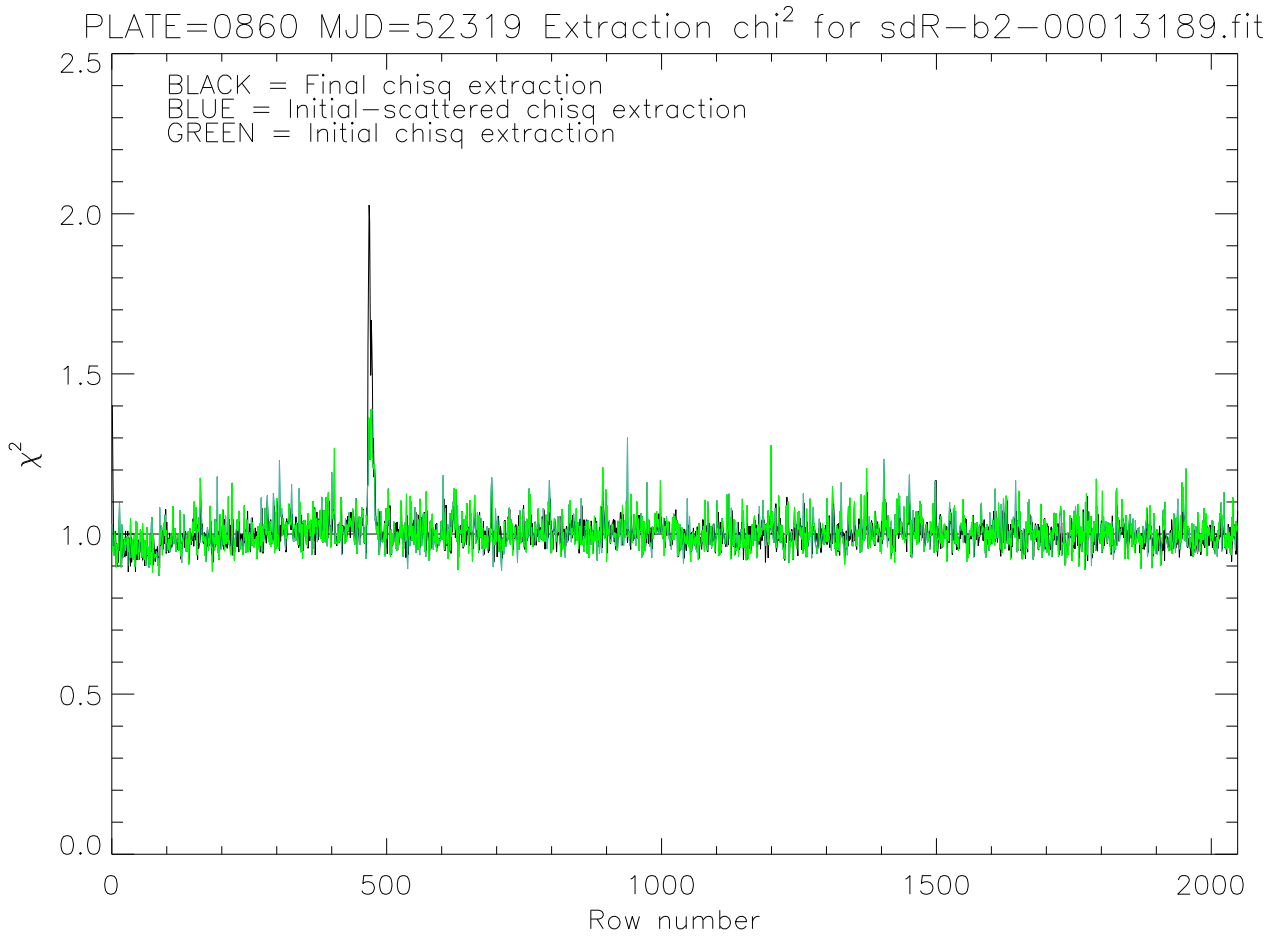

PLATE=0860 MJD=52319 Fiber-Flats for sdR-b2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:49:19 2008

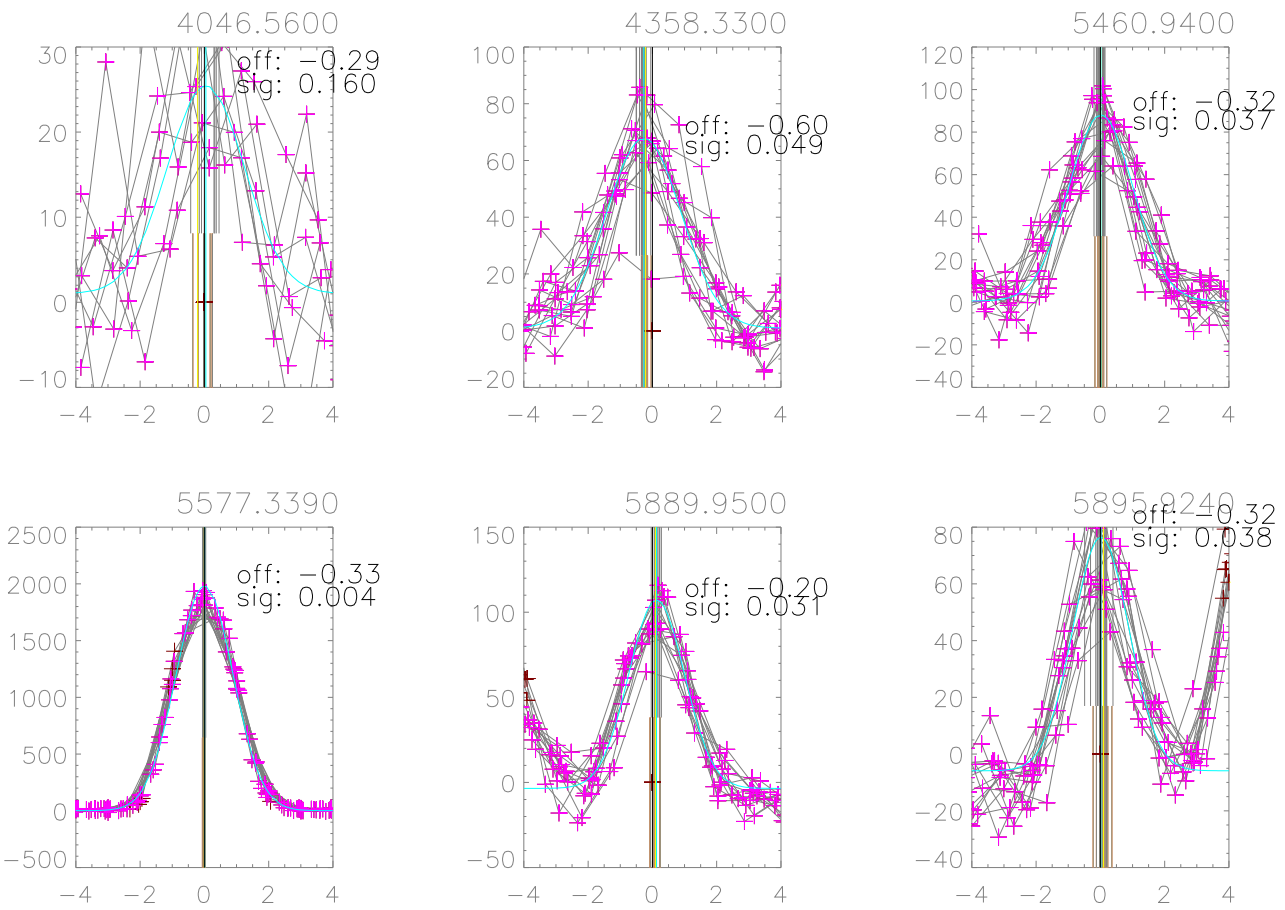

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−b2−00013189.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.68
2.14
2.14
1.68
1.68
2.14
1.68
1.68
1.68

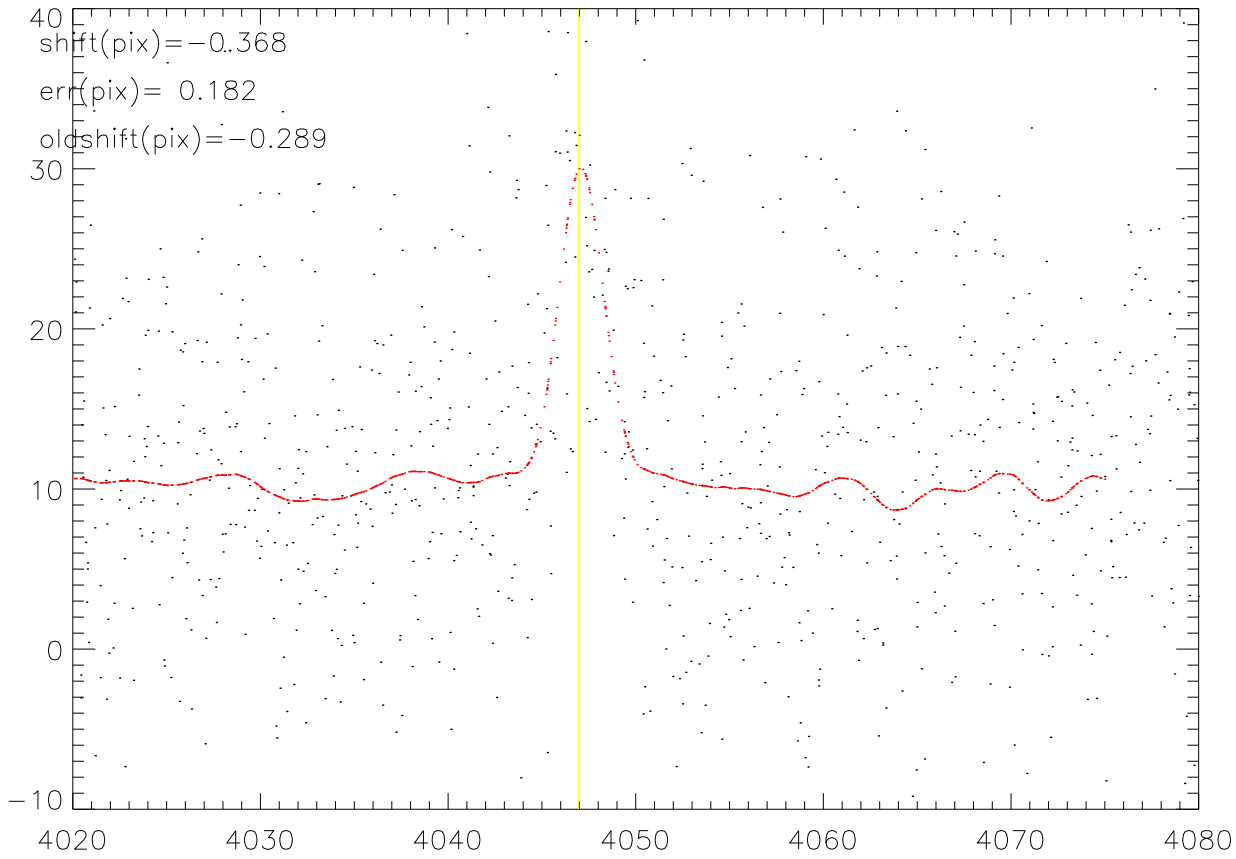

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-b2-00013189.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.542
Max value = 2.695
Sun Feb 24 18:49:53 2008

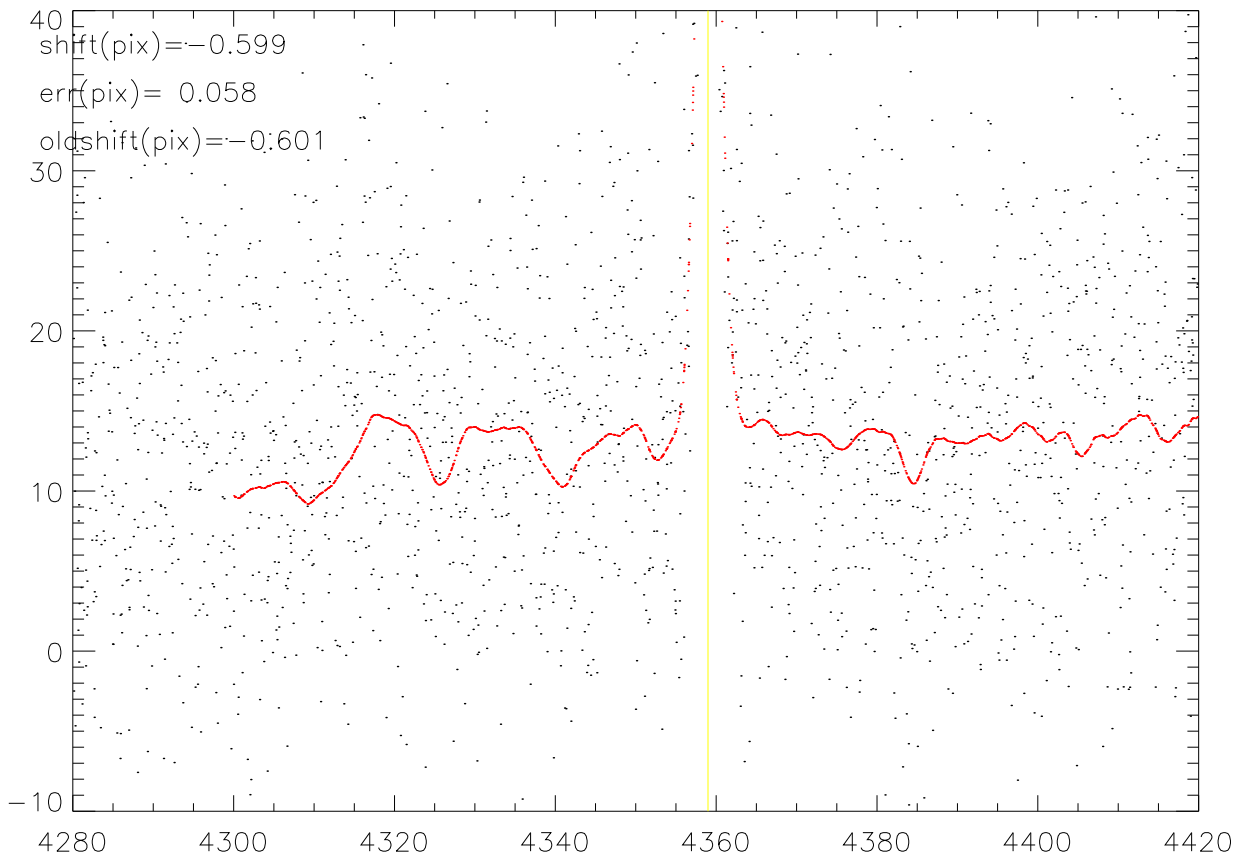

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013189.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
1.41
1.77
1.05

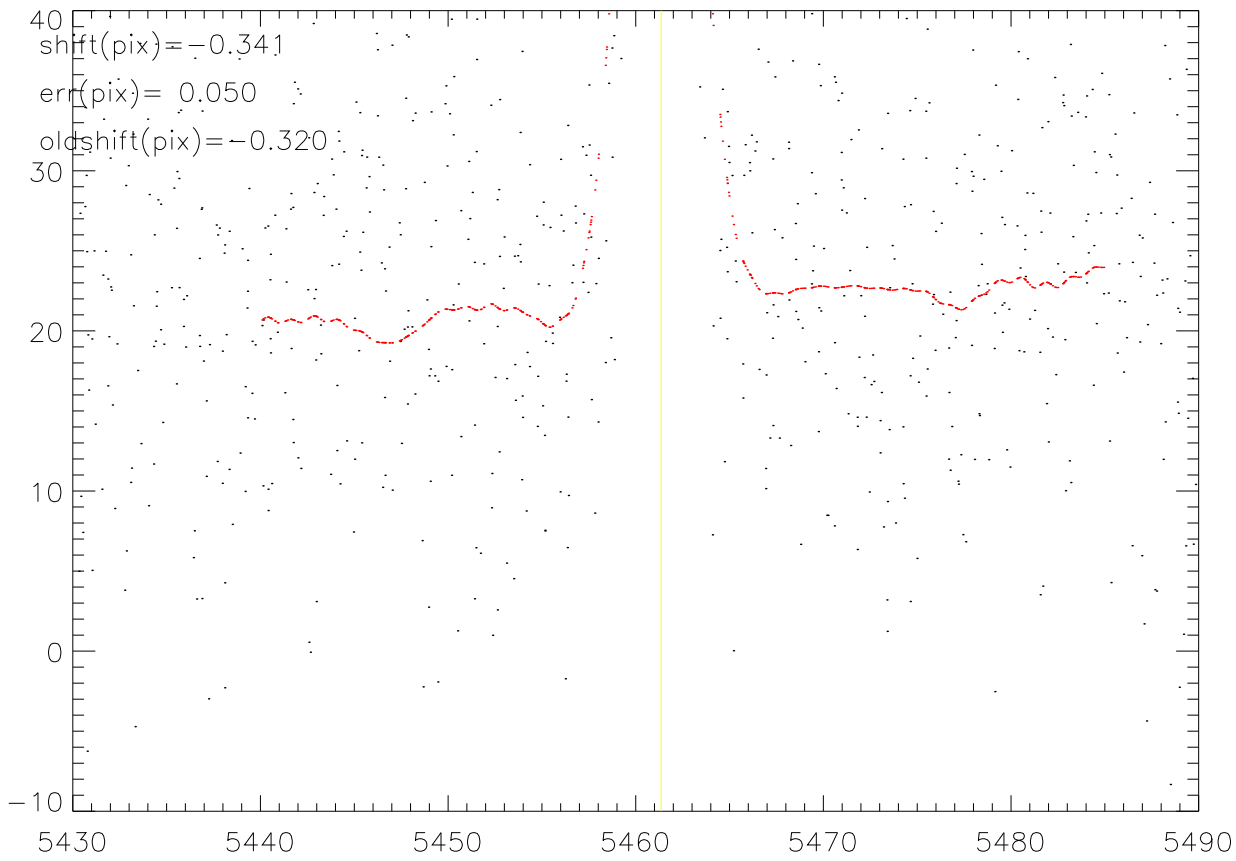

PLATE=0860 MJD=52319 Scattered Light on sdR-b2-00013189.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.136
Max value = 1.997
4000
4500
5000
5500
6000
λ [A]
Sun Feb 24 18:52:15 2008

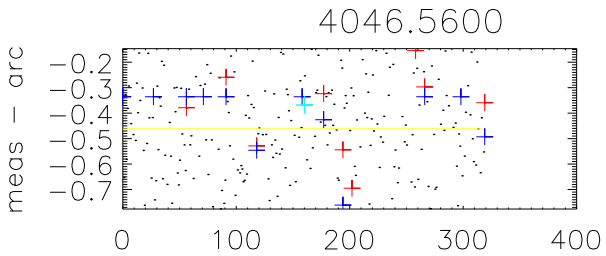

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-b2-00013189.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

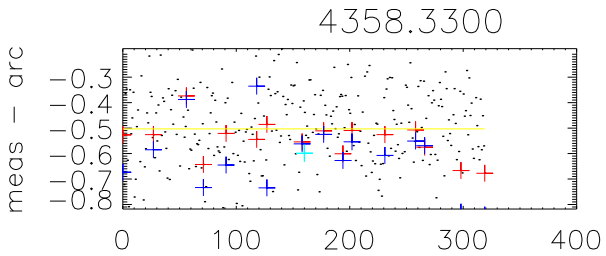

4046.5600
off: −0.29
sig: 0.160
4358.3300
off: −0.60
sig: 0.049
5460.9400
off: −0.32
sig: 0.037
5577.3390
off: −0.33
sig: 0.004
5889.9500
off: −0.20
sig: 0.031
5895.9240
off: −0.32
sig: 0.038

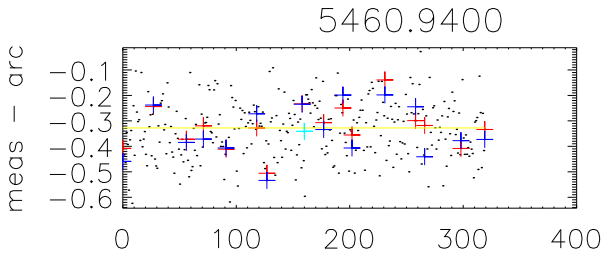

shift(pix)=−0.368
err(pix)= 0.182
oldshift(pix)=−0.289
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

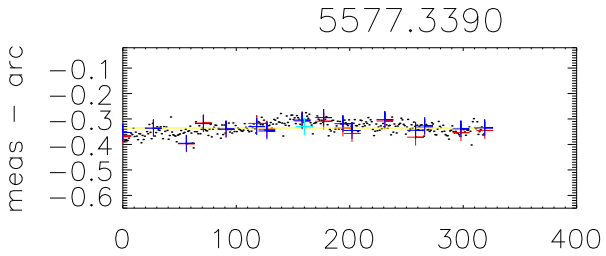

shift(pix)=−0.599
err(pix)= 0.058
oldshift(pix)=−0.601
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

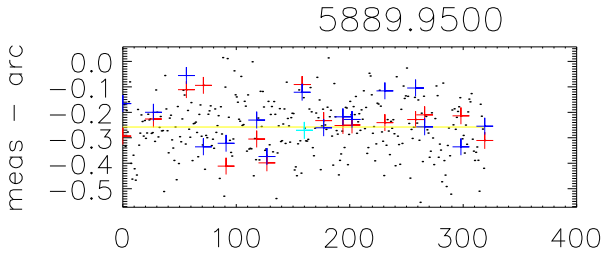

shift(pix)=−0.341
err(pix)= 0.050
oldshift(pix)=−0.320
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

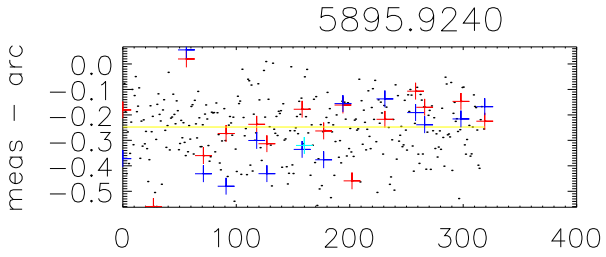

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

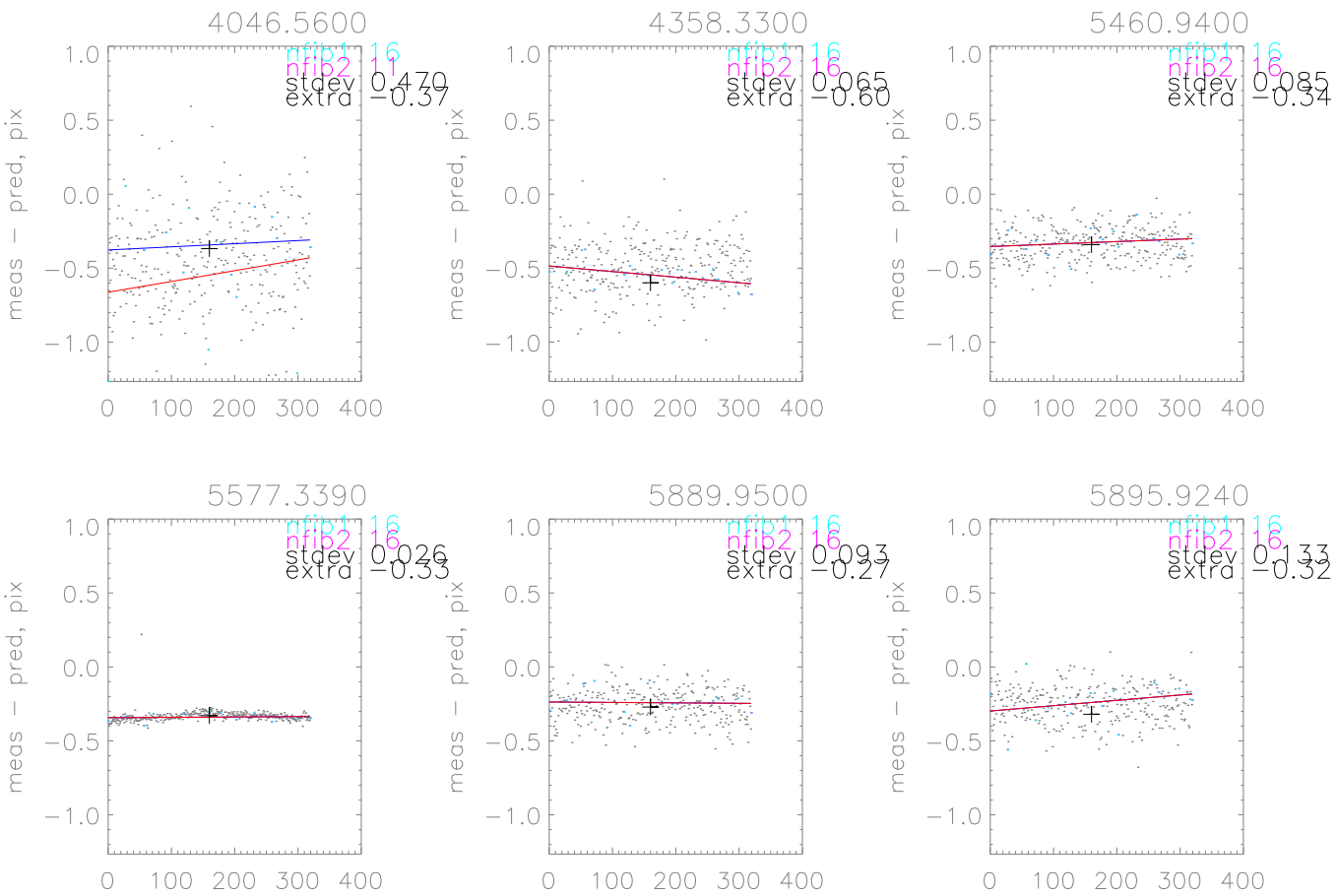

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

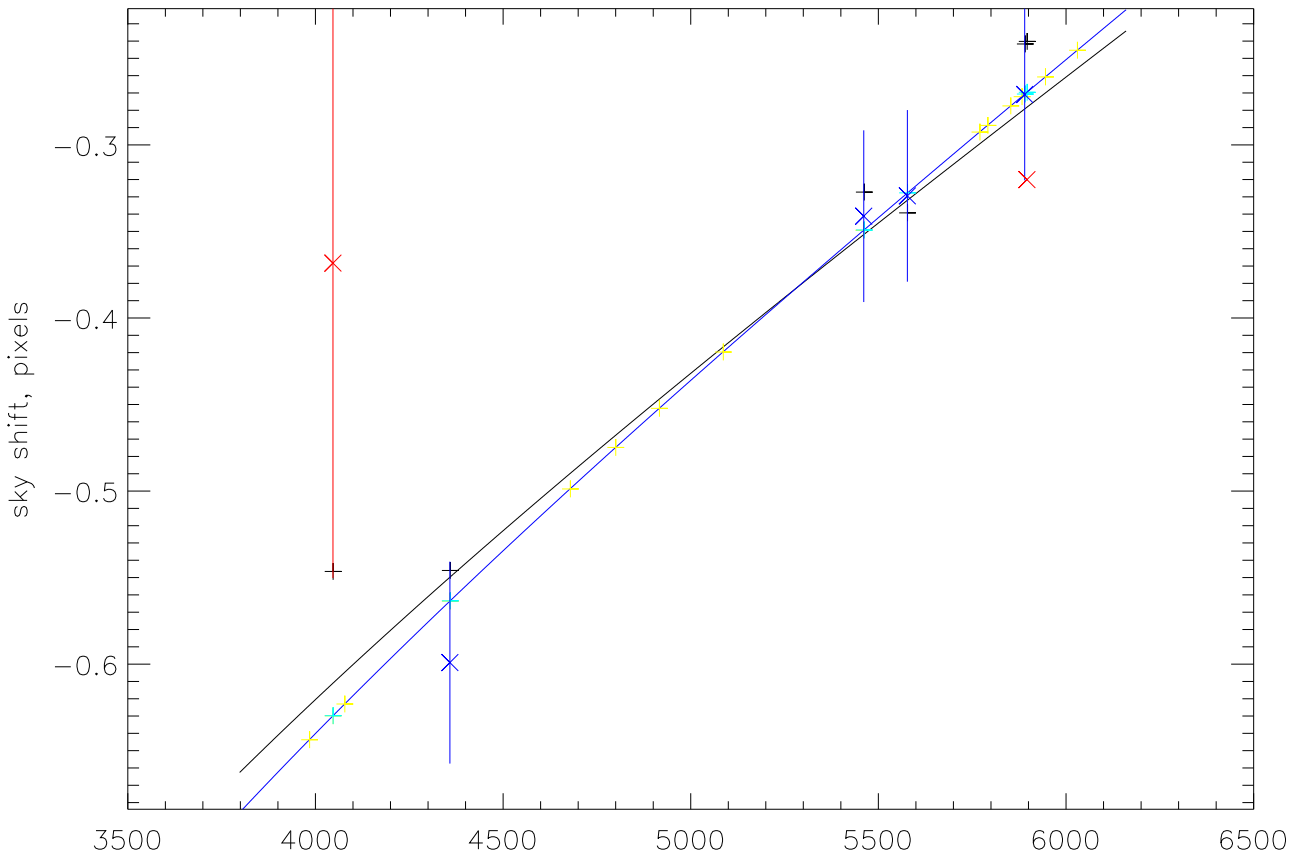

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

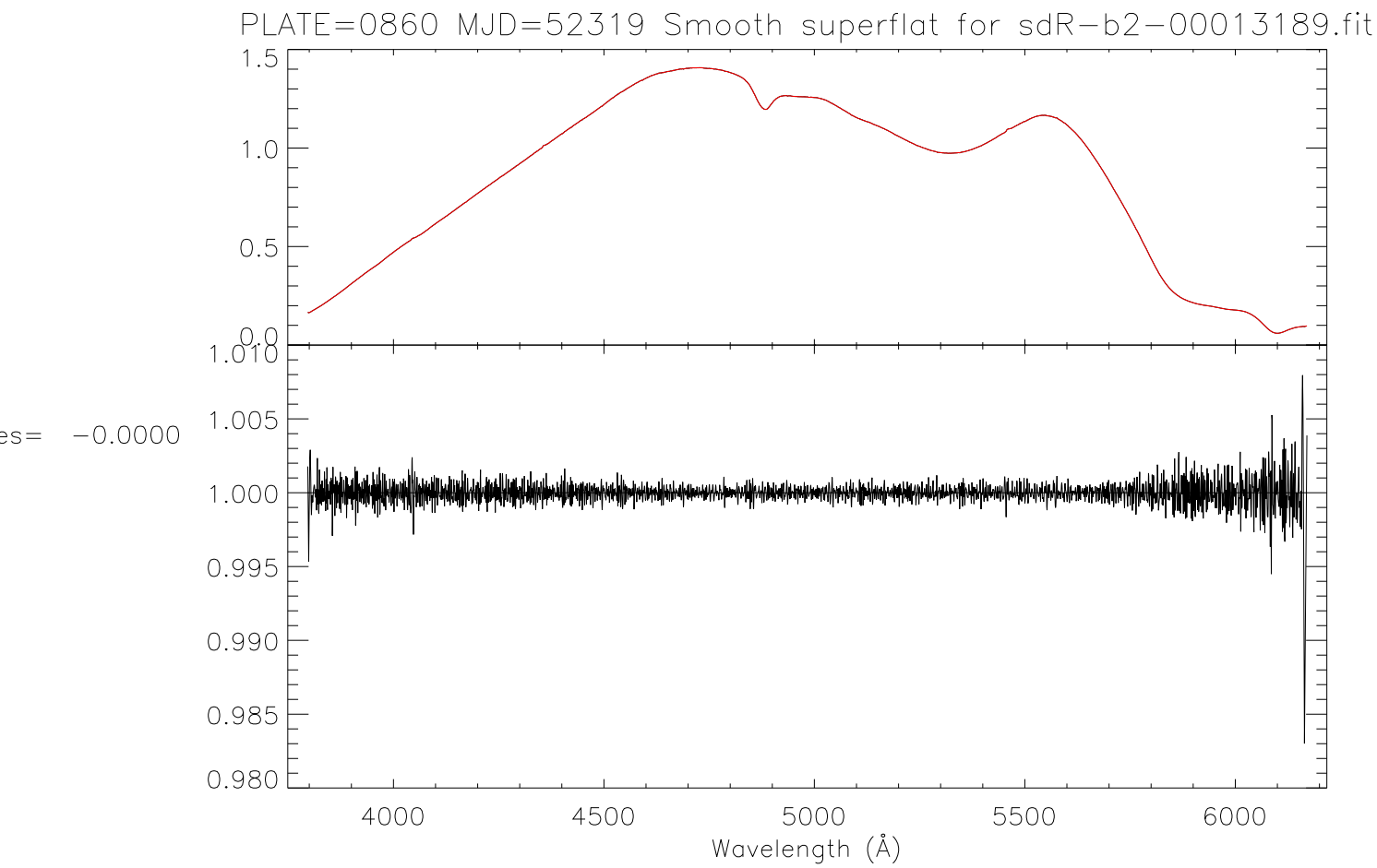

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

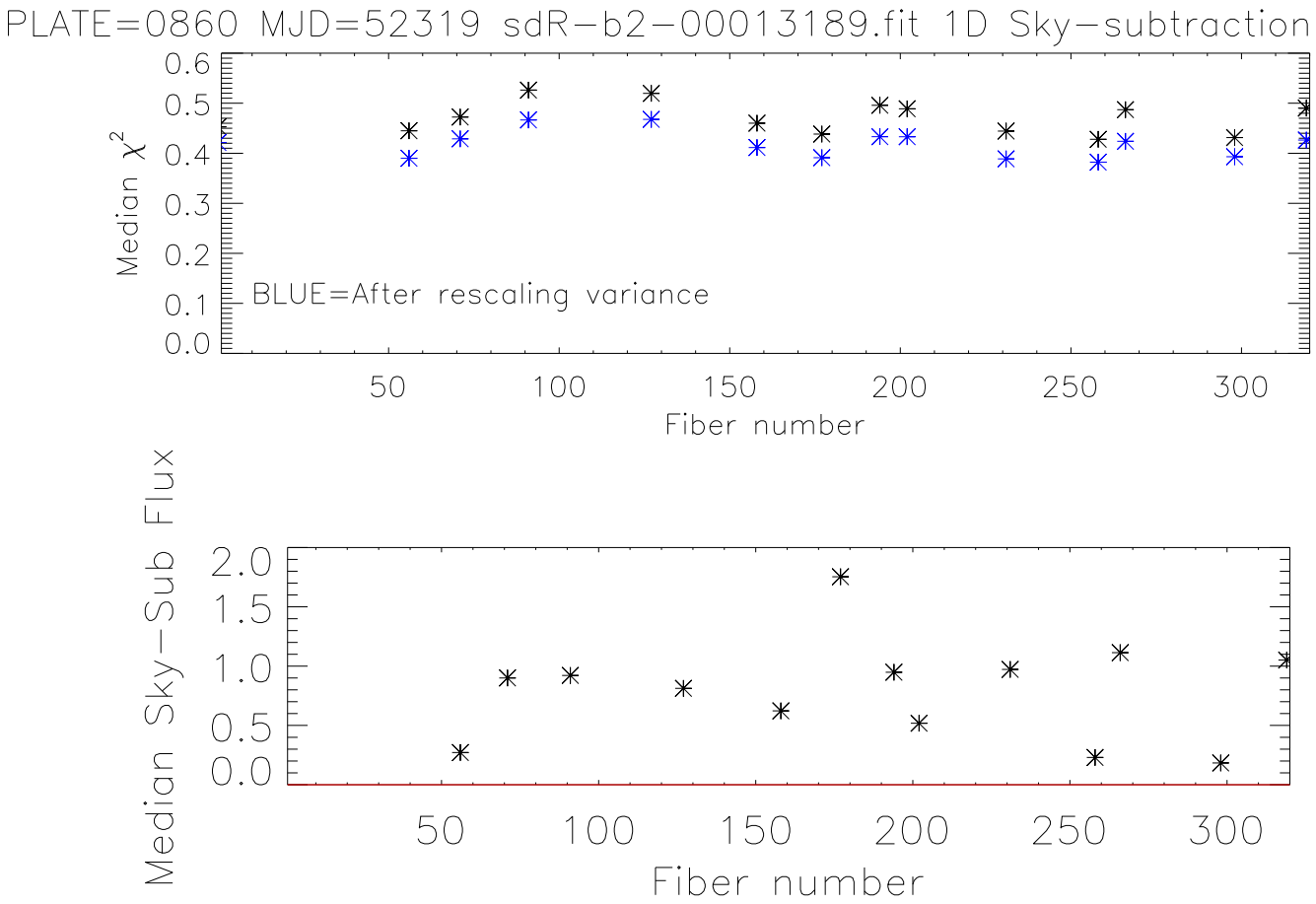

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

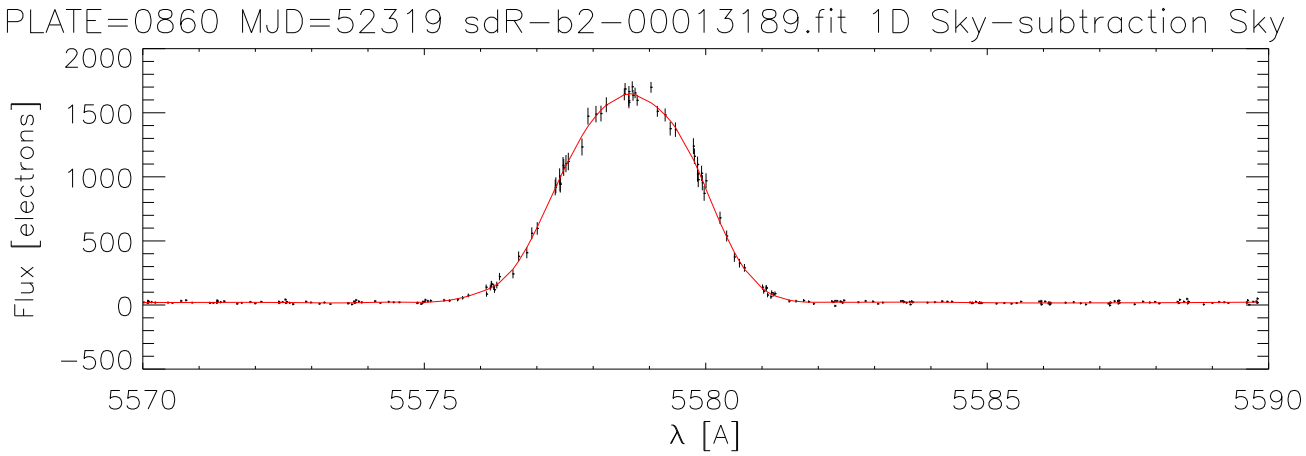

4046.5600
nfib1 16
nfib2 11
stdev 0.470
extra −0.37
4358.3300
nfib1 16
nfib2 16
stdev 0.065
extra −0.60
5460.9400
nfib1 16
nfib2 16
stdev 0.085
extra −0.34
5577.3390
nfib1 16
nfib2 16
stdev 0.026
extra −0.33
5889.9500
nfib1 16
nfib2 16
stdev 0.093
extra −0.27
5895.9240
nfib1 16
nfib2 16
stdev 0.133
extra −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

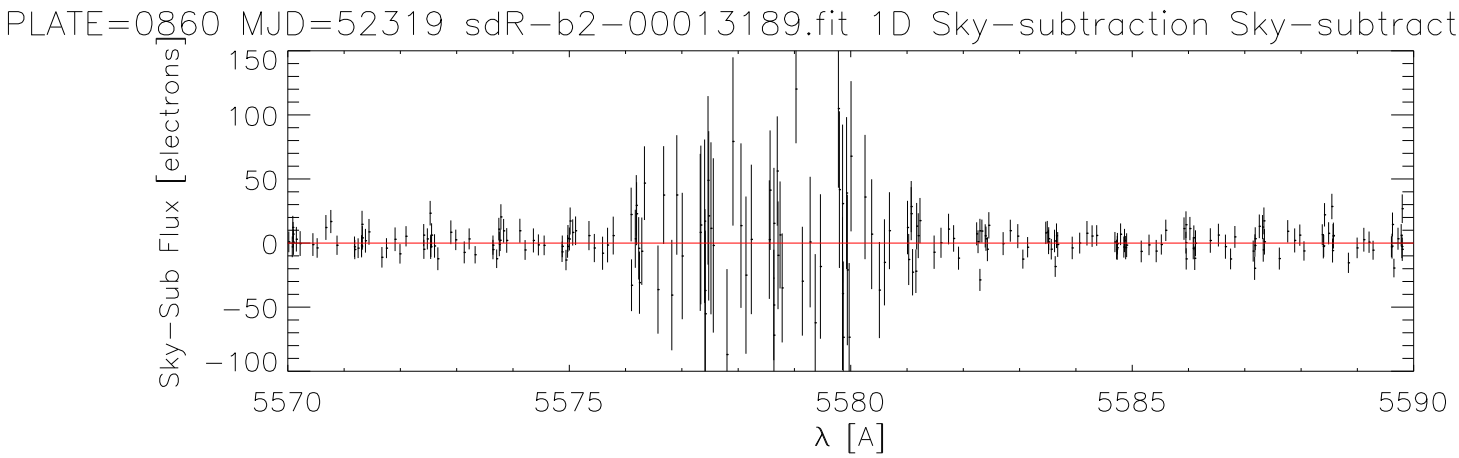

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500

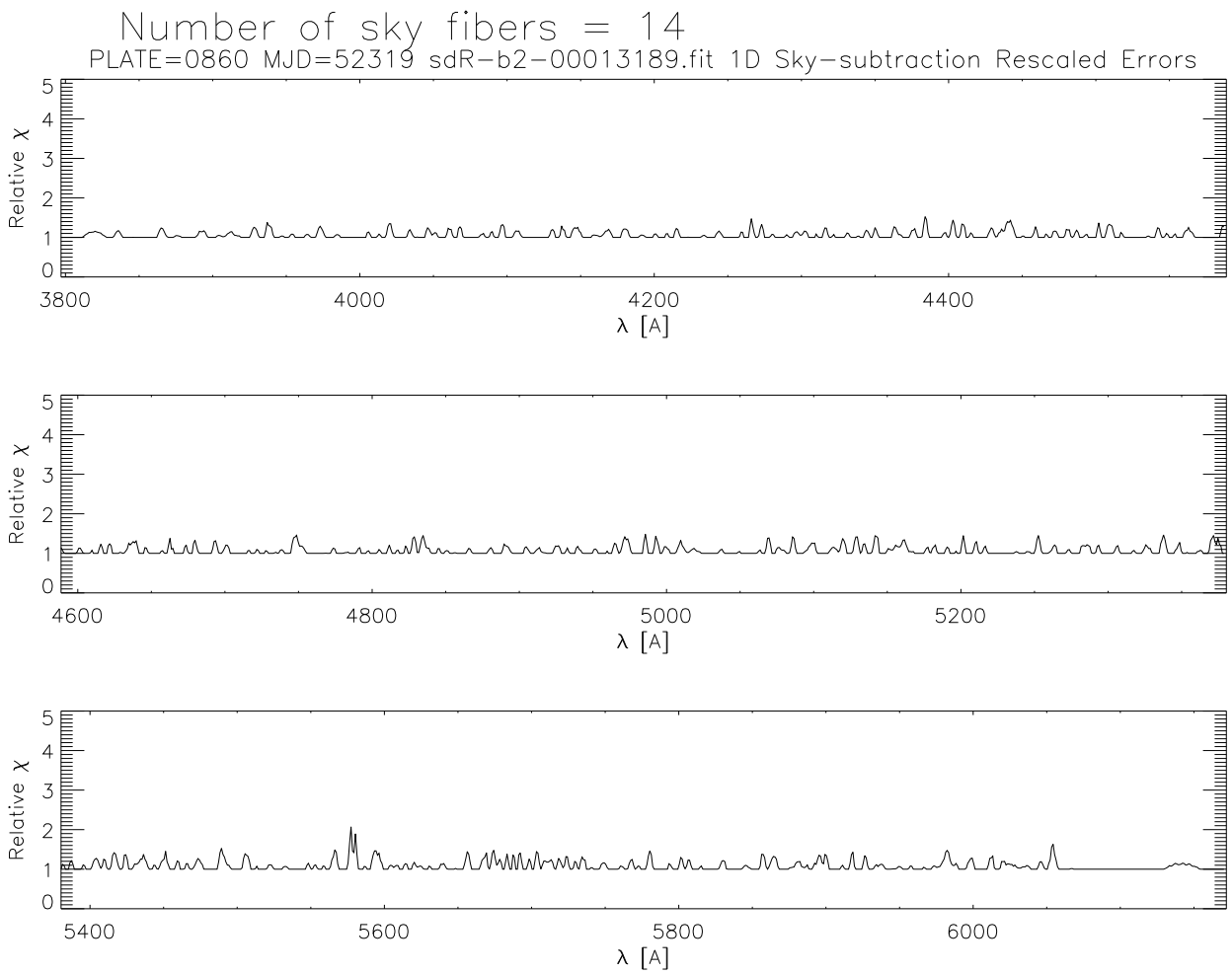

PLATE=0860 MJD=52319 Smooth superflat for sdR-b2-00013189.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

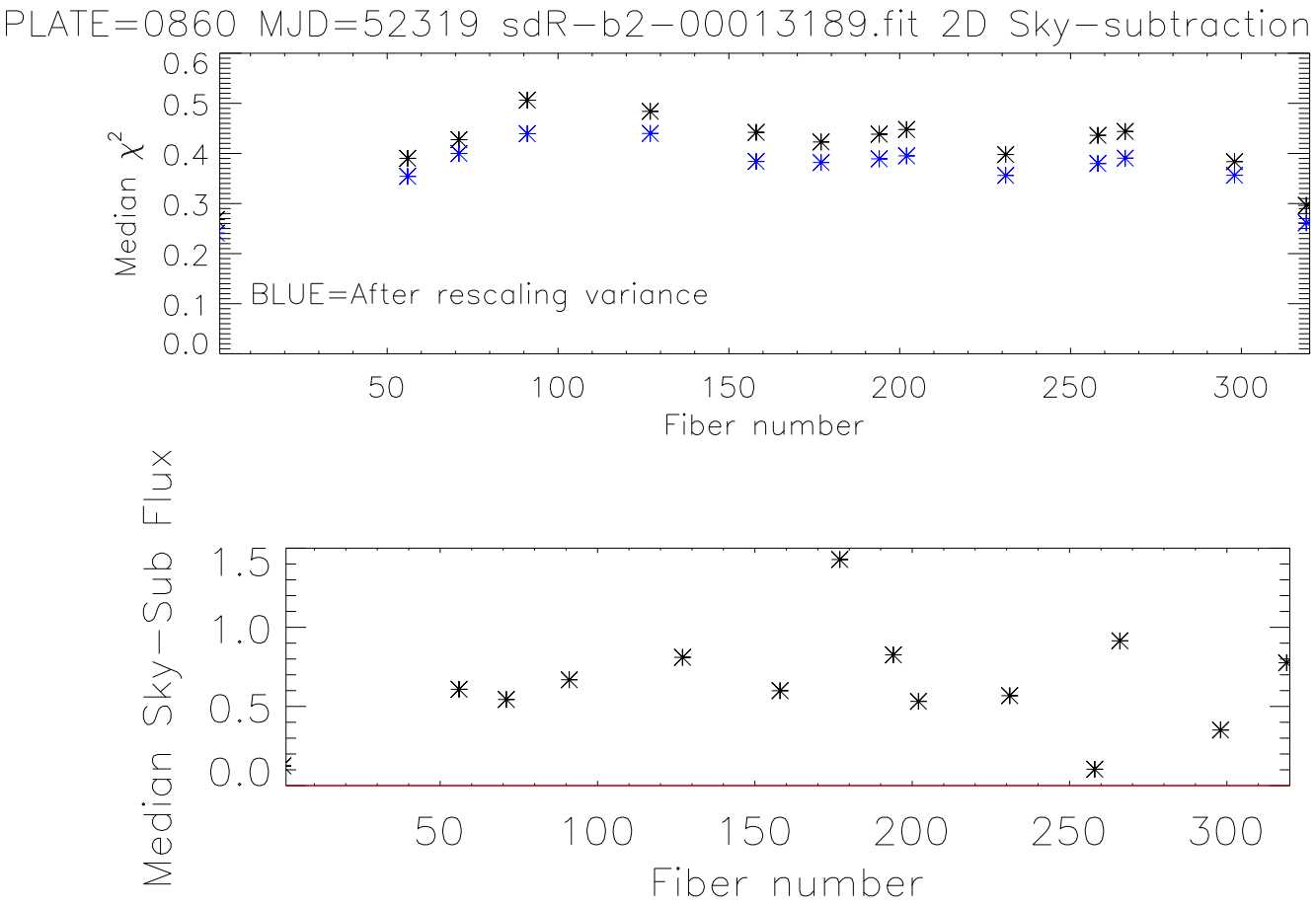
es= −0.0000

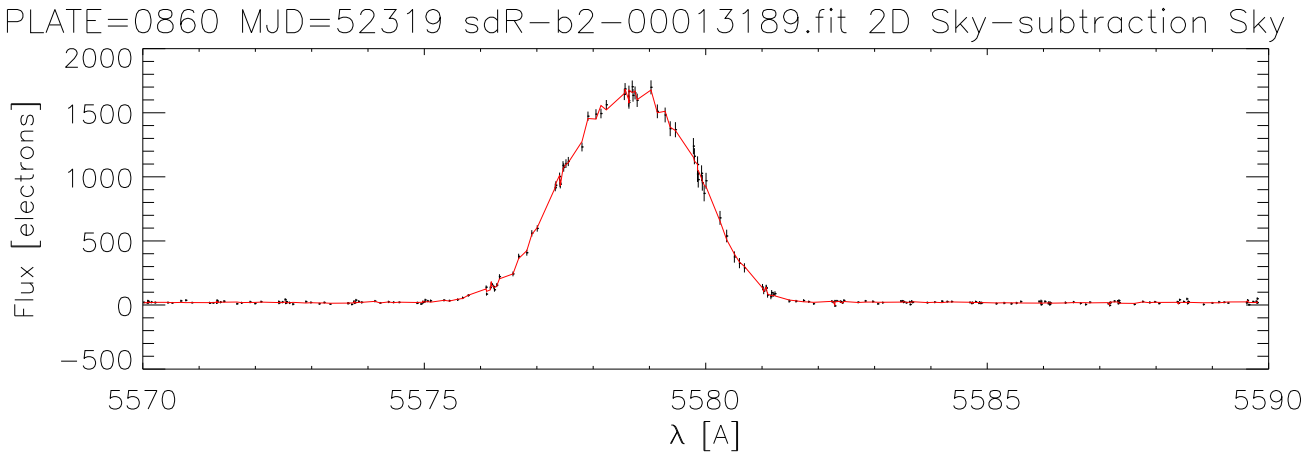

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

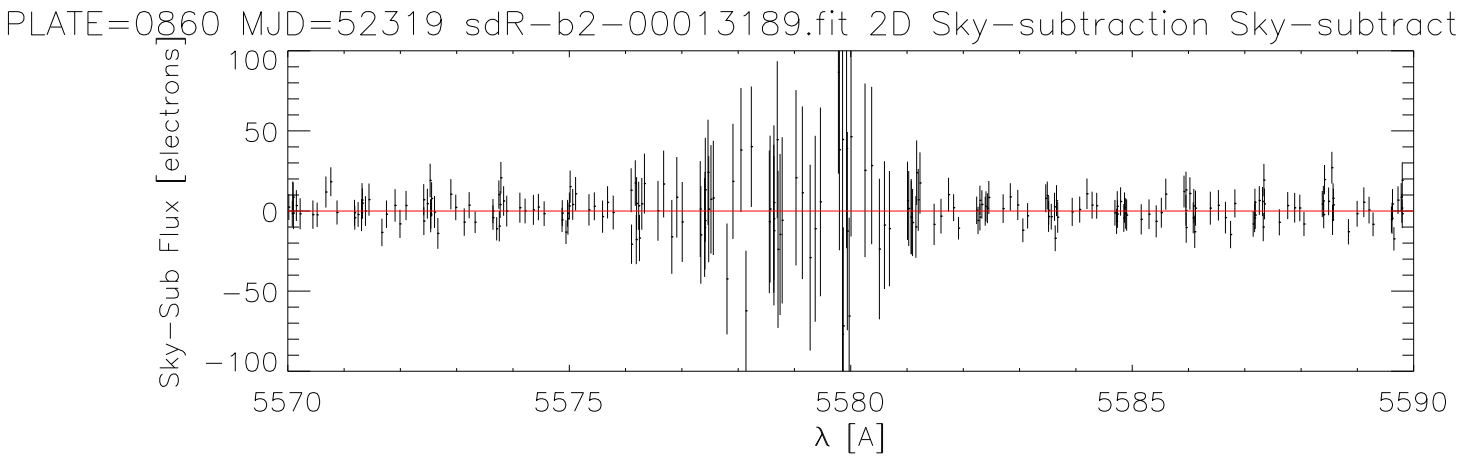

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

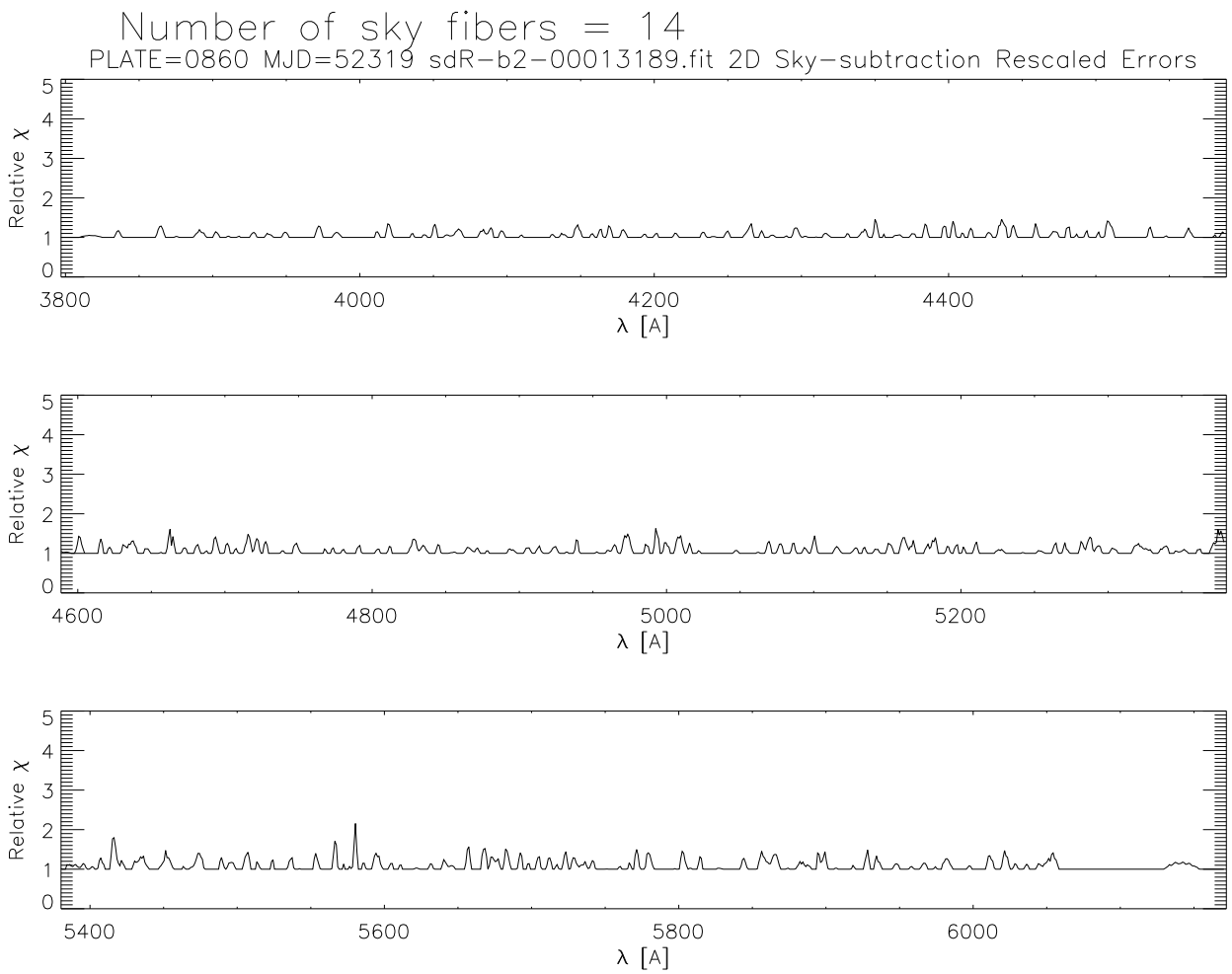

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

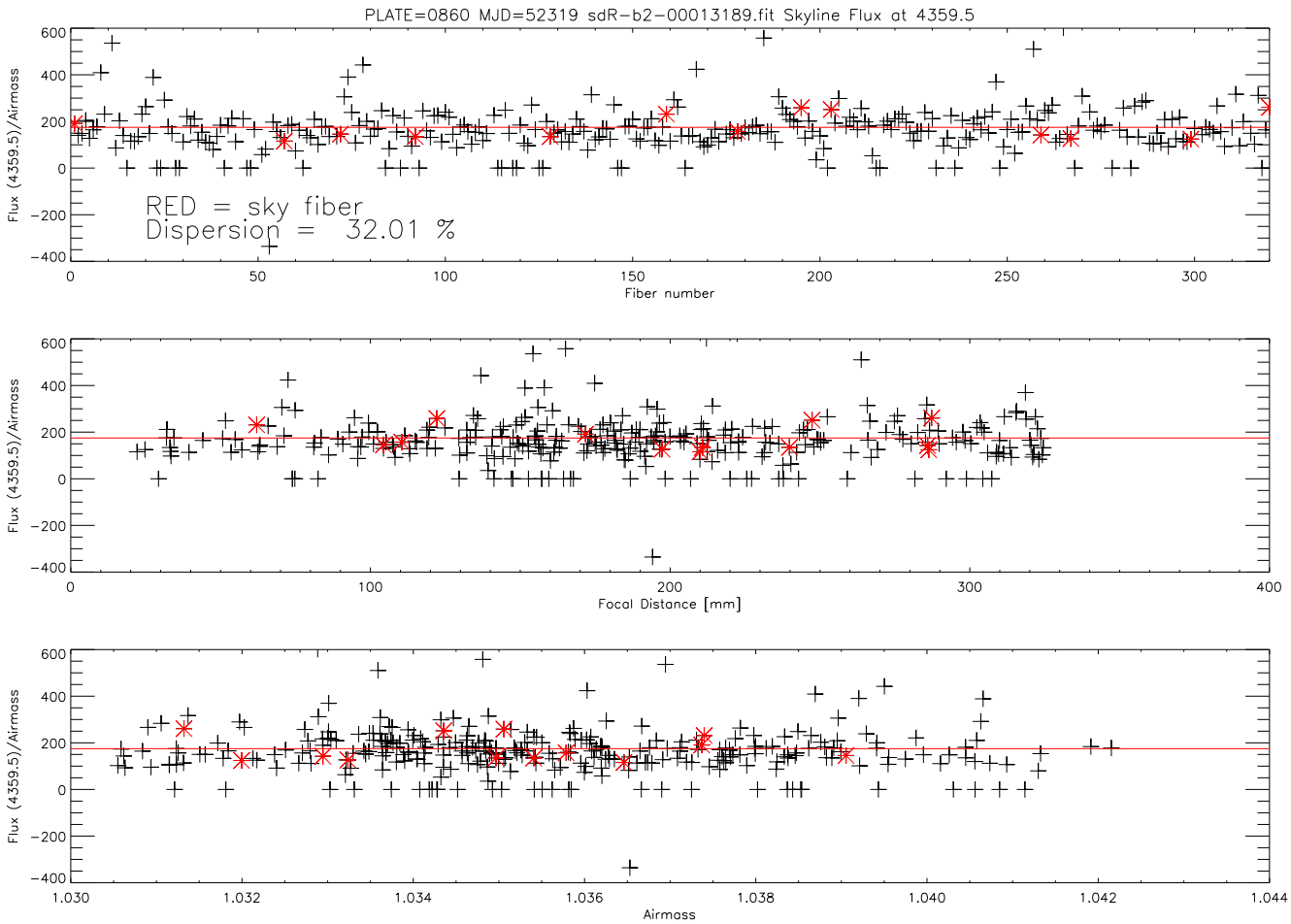

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013189.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

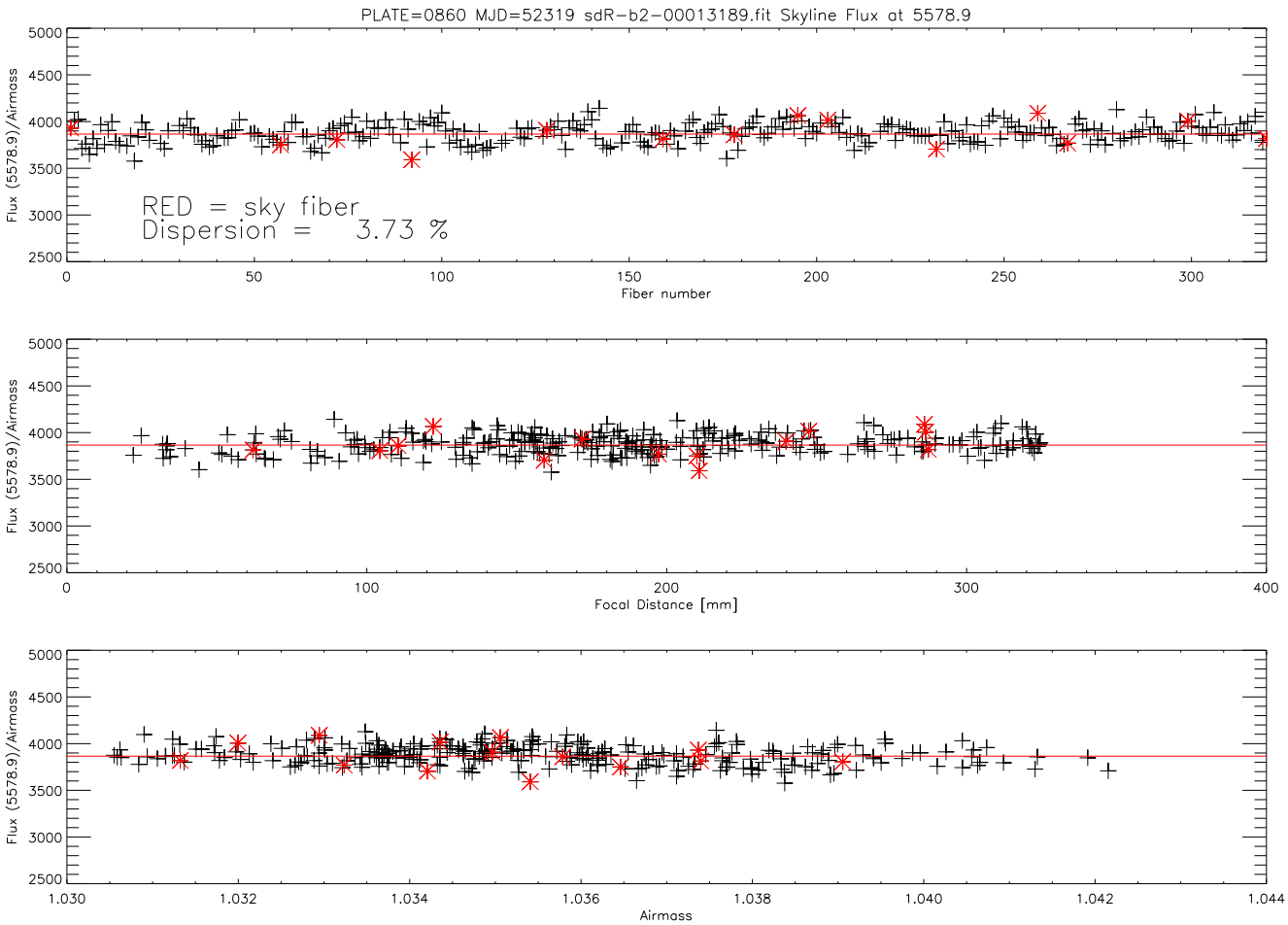

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

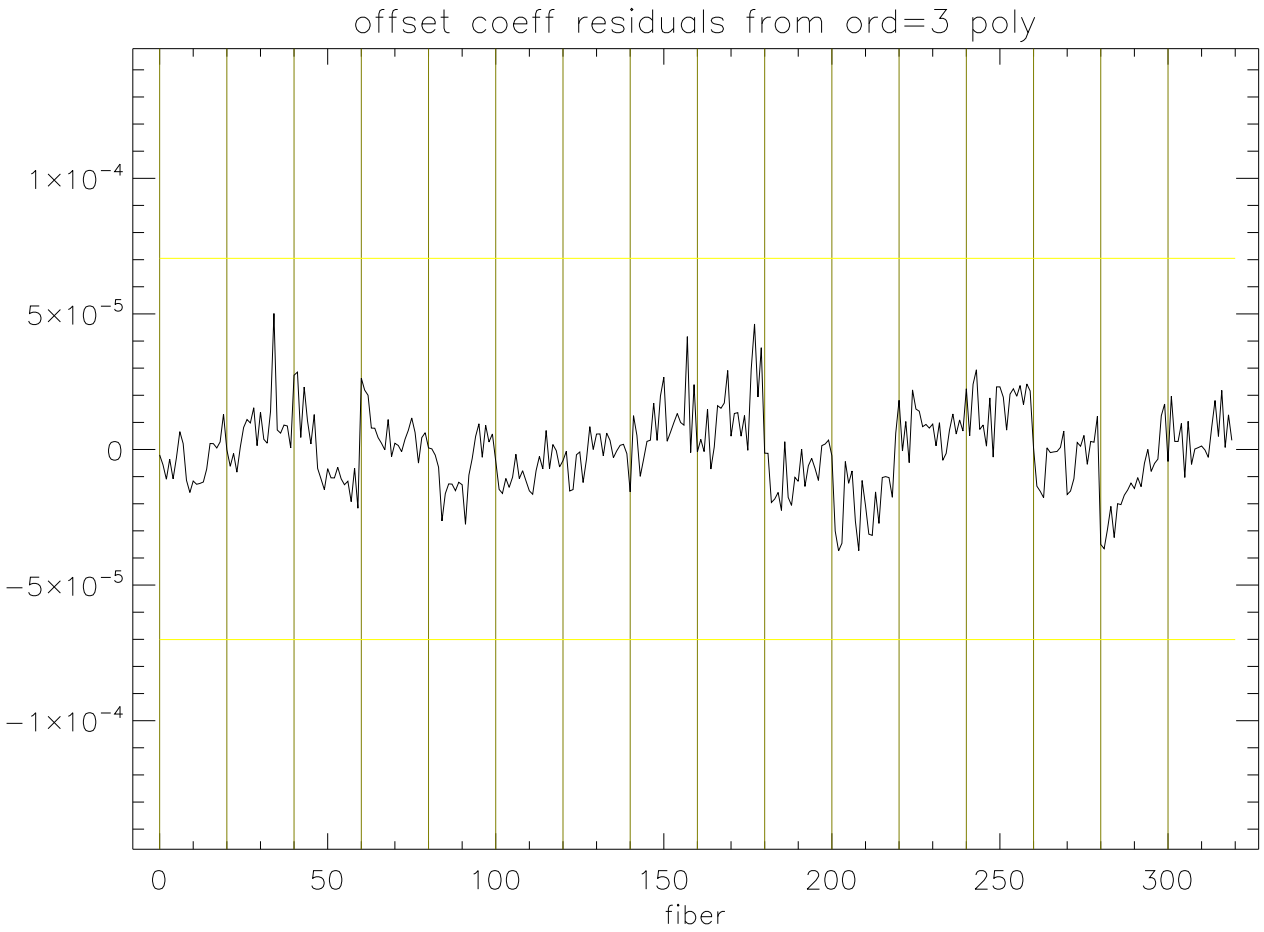

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

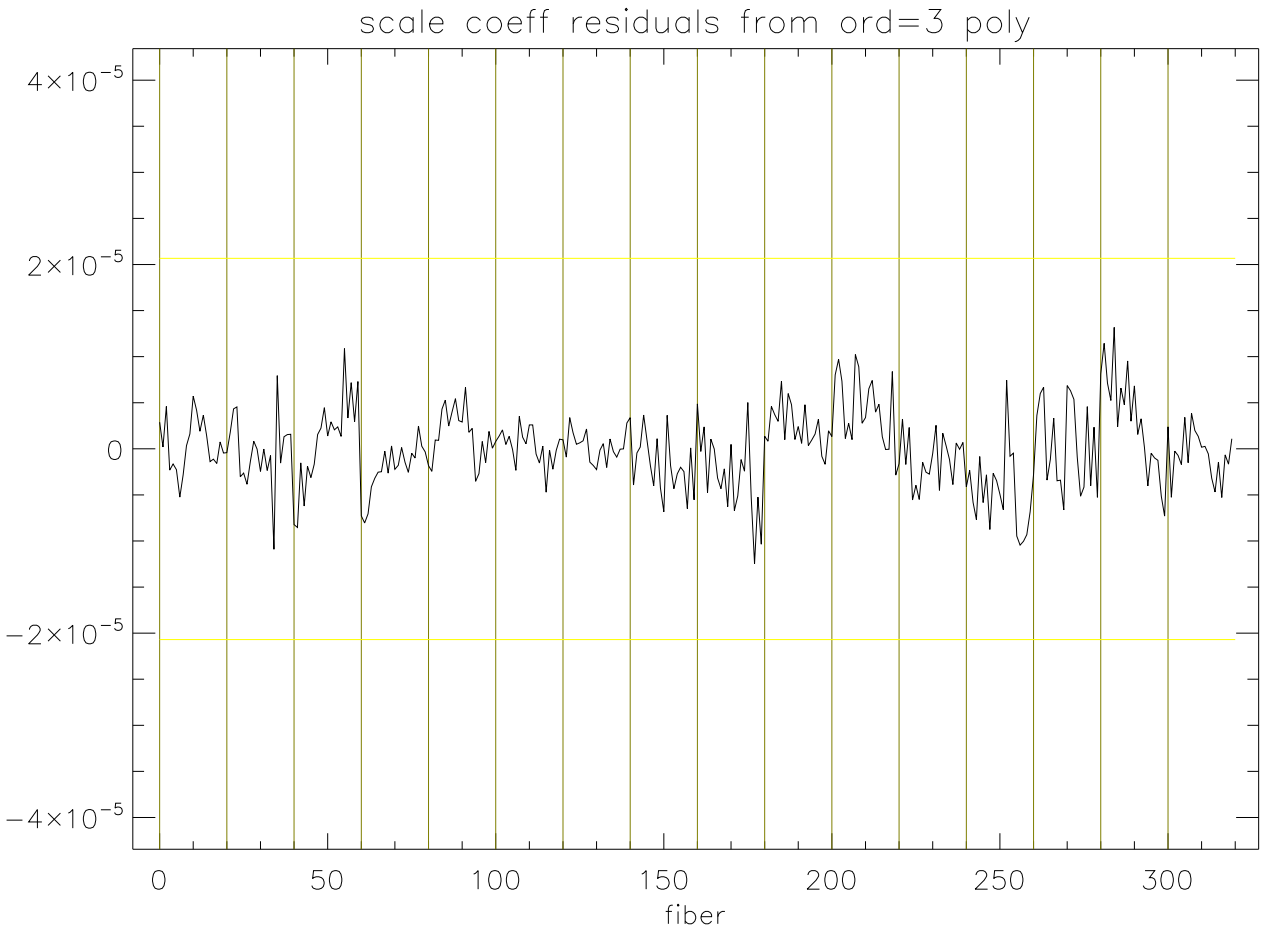

PLATE=0860 MJD=52319 sdR-b2-00013189.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

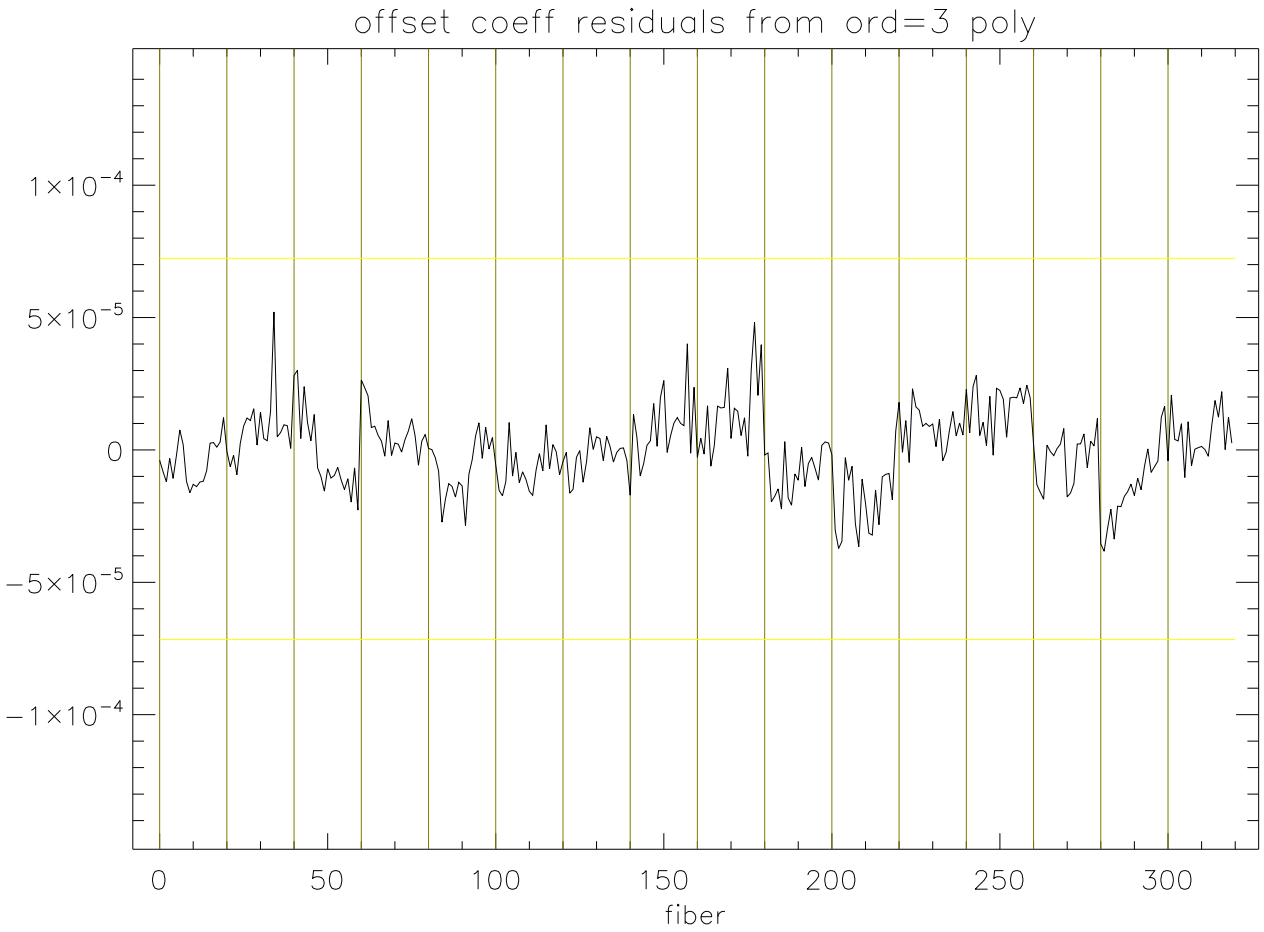

Number of sky fibers = 14
PLATE=0860 MJD=52319 sdR-b2-00013189.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

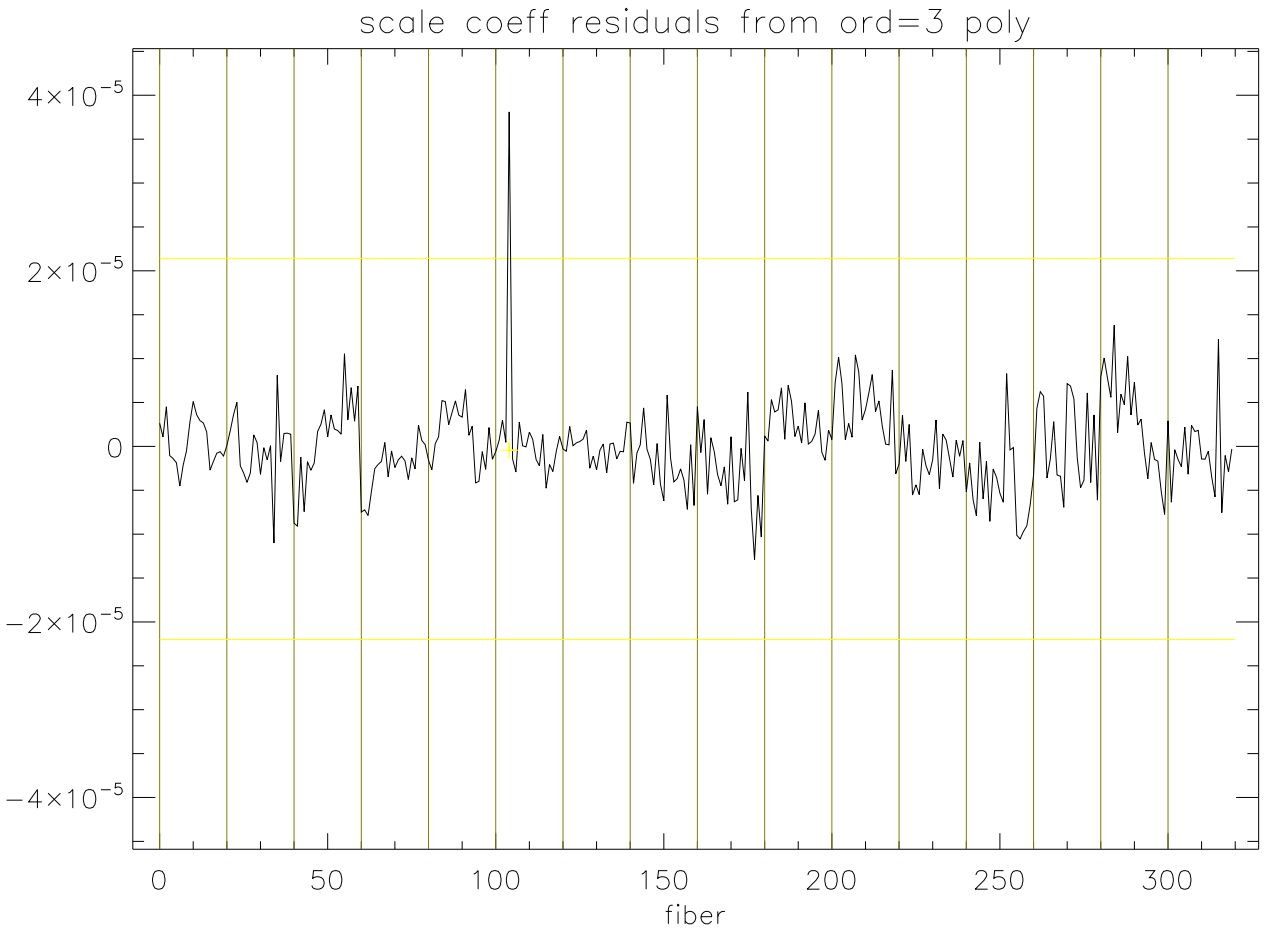

PLATE=0860 MJD=52319 sdR-b2-00013189.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 32.01 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

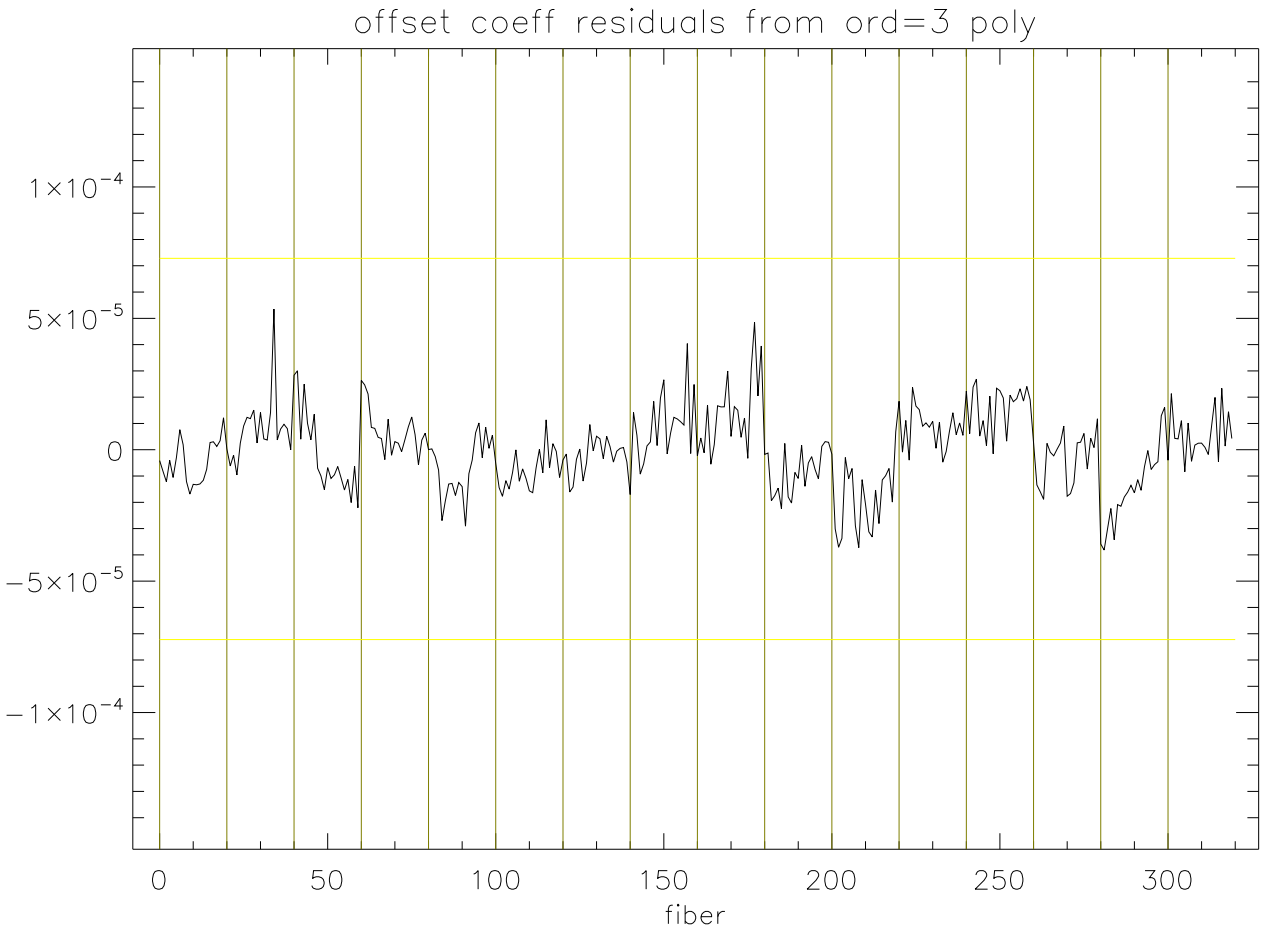

PLATE=0860 MJD=52319 sdR-b2-00013189.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.73 %
Fiber number
Focal Distance [mm]
Airmass

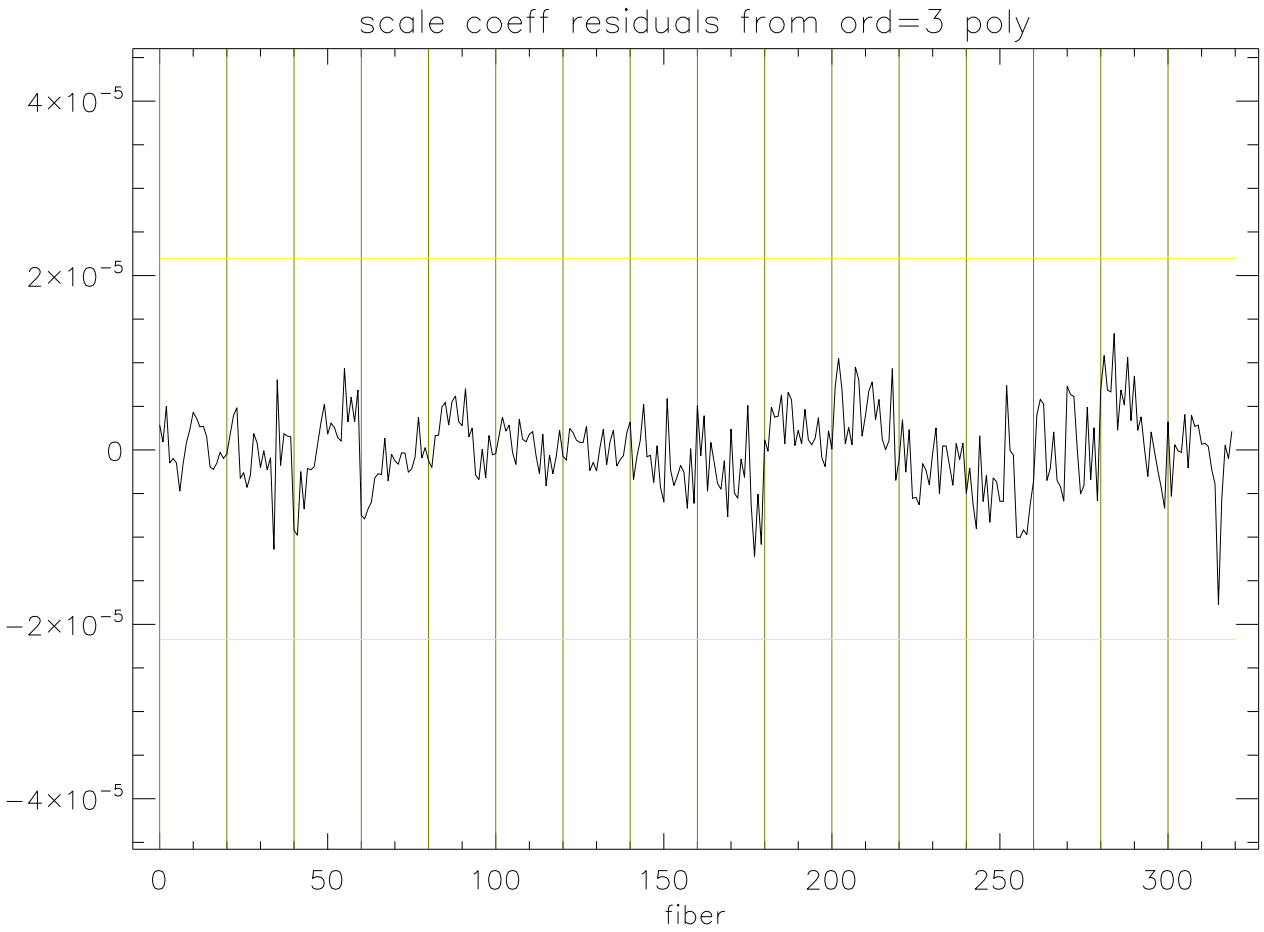

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

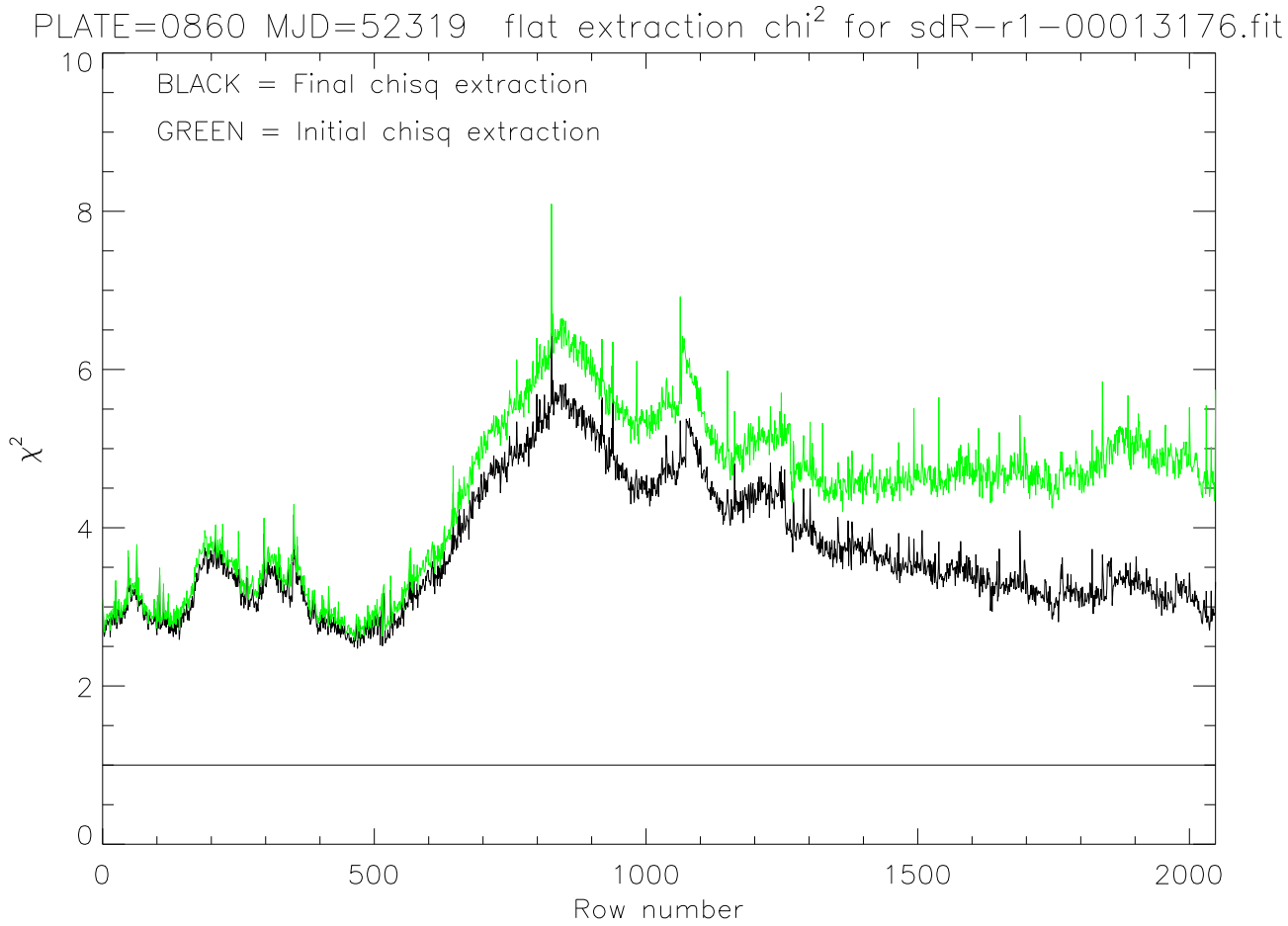

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

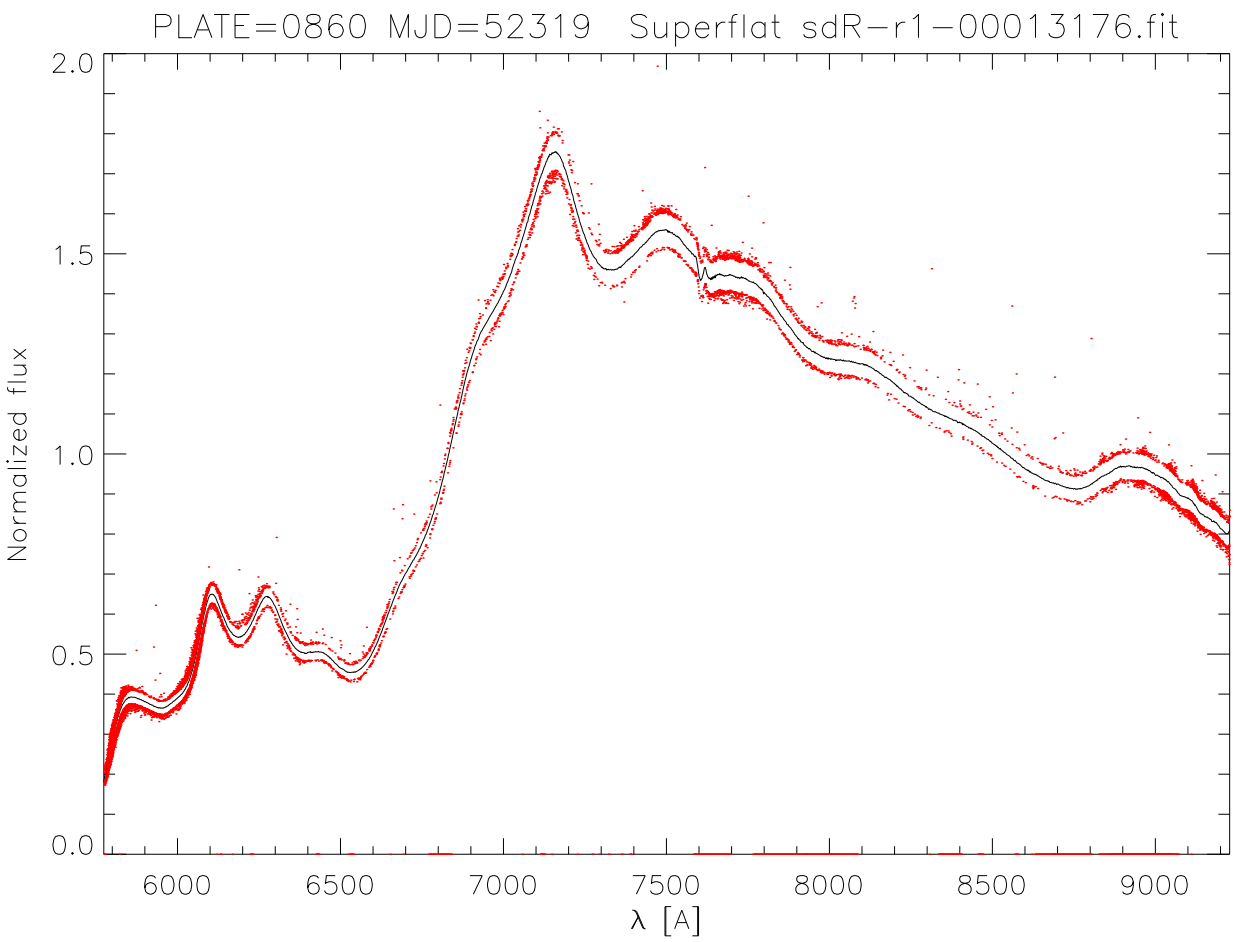

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

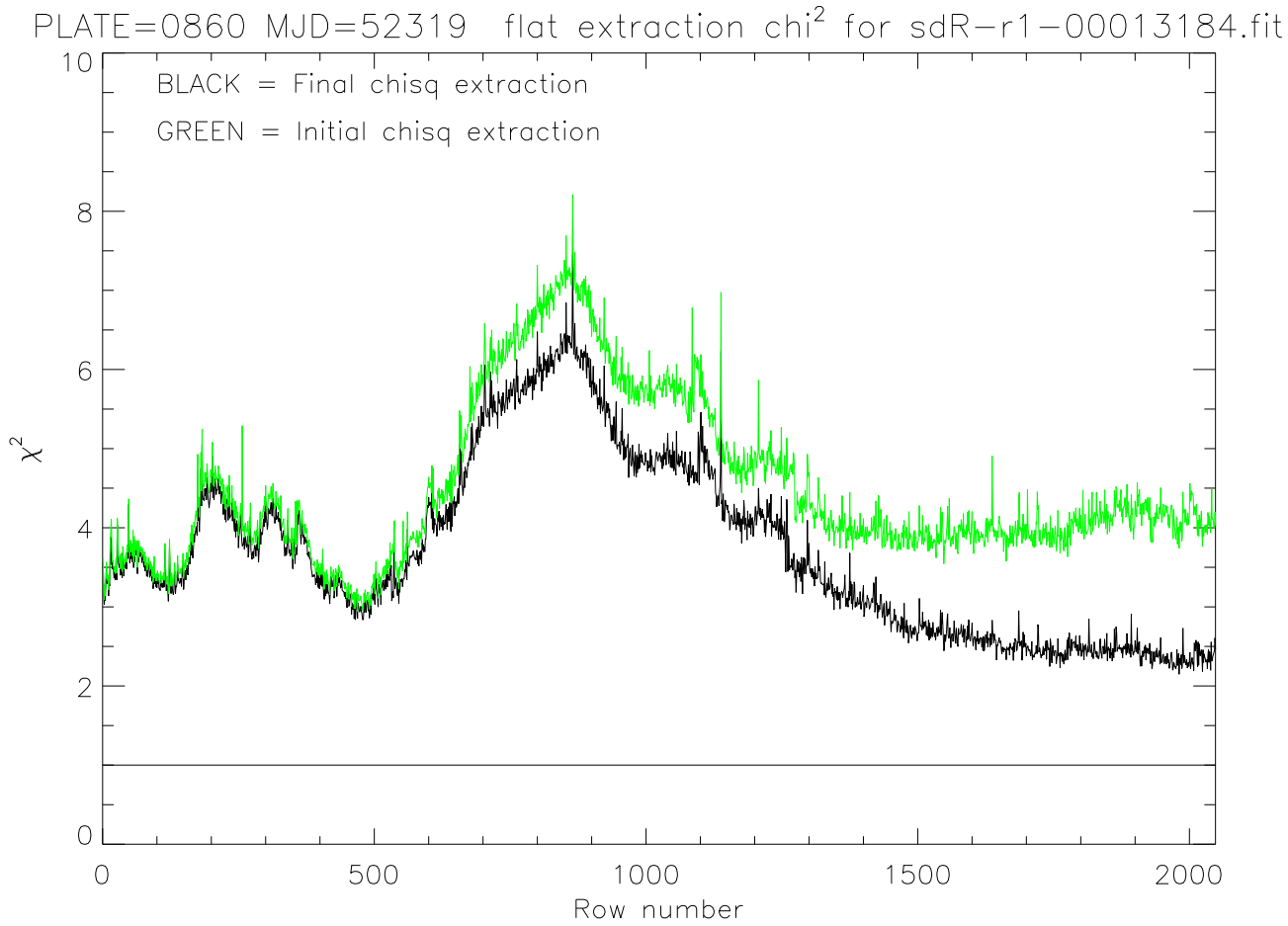

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

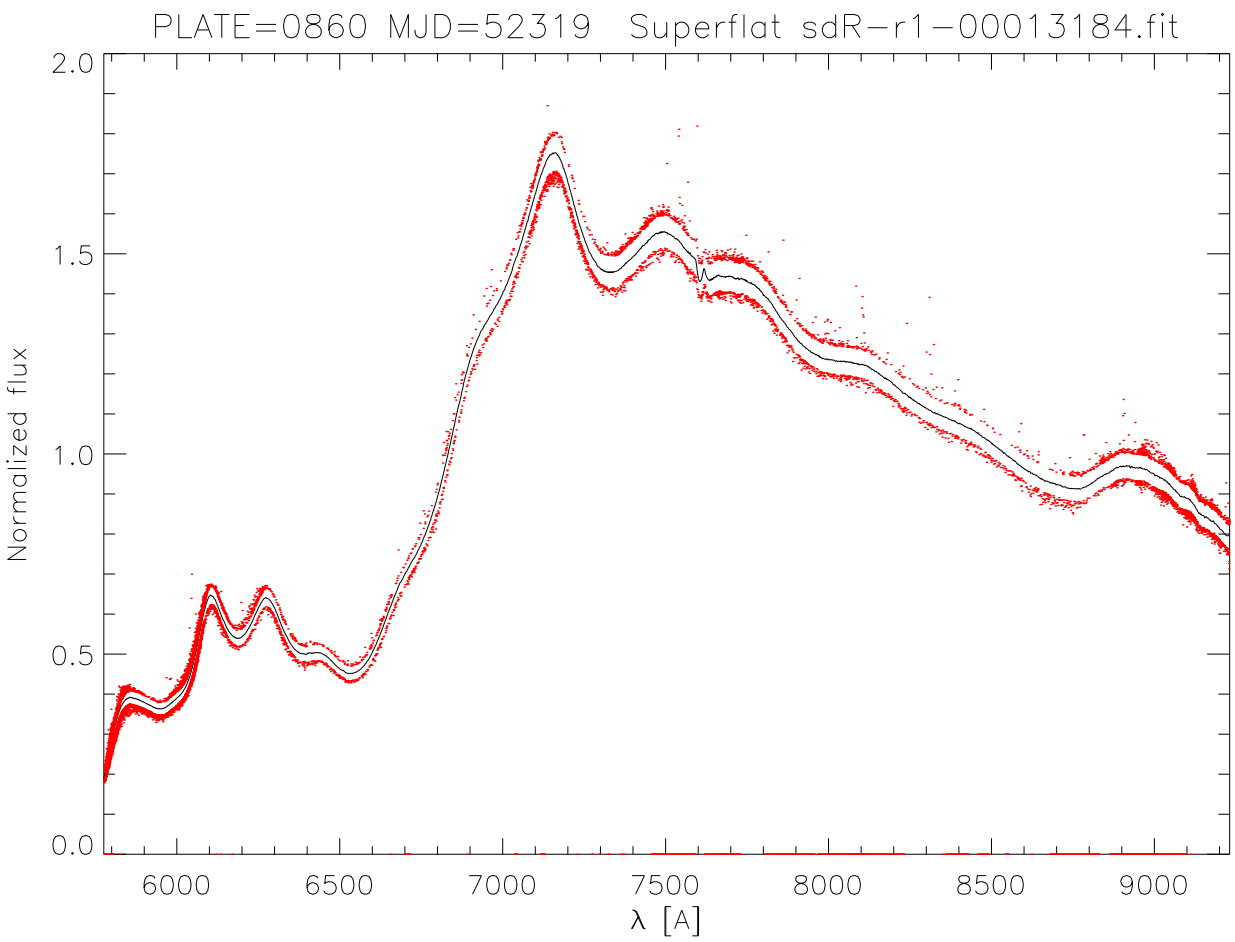

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

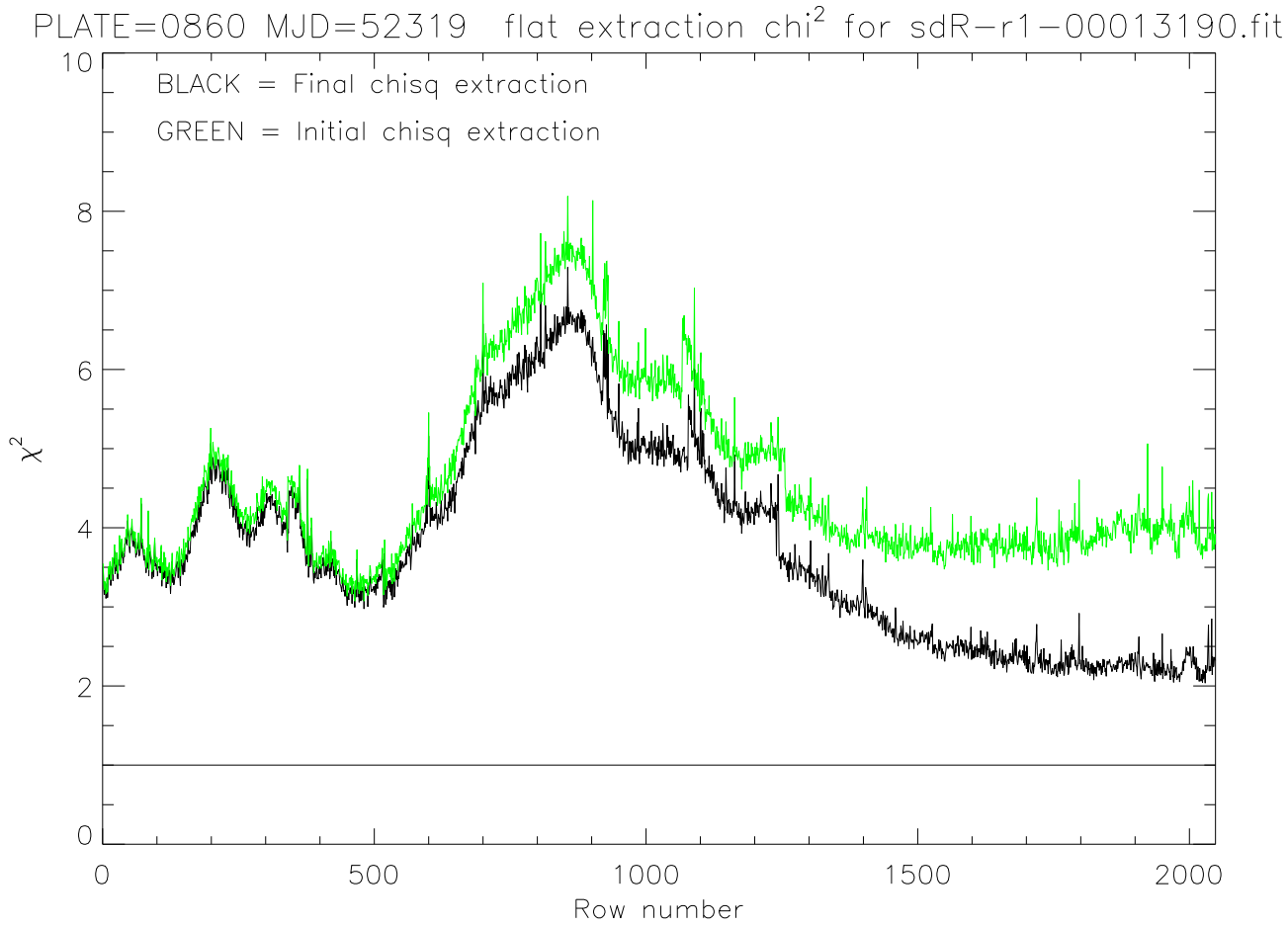

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

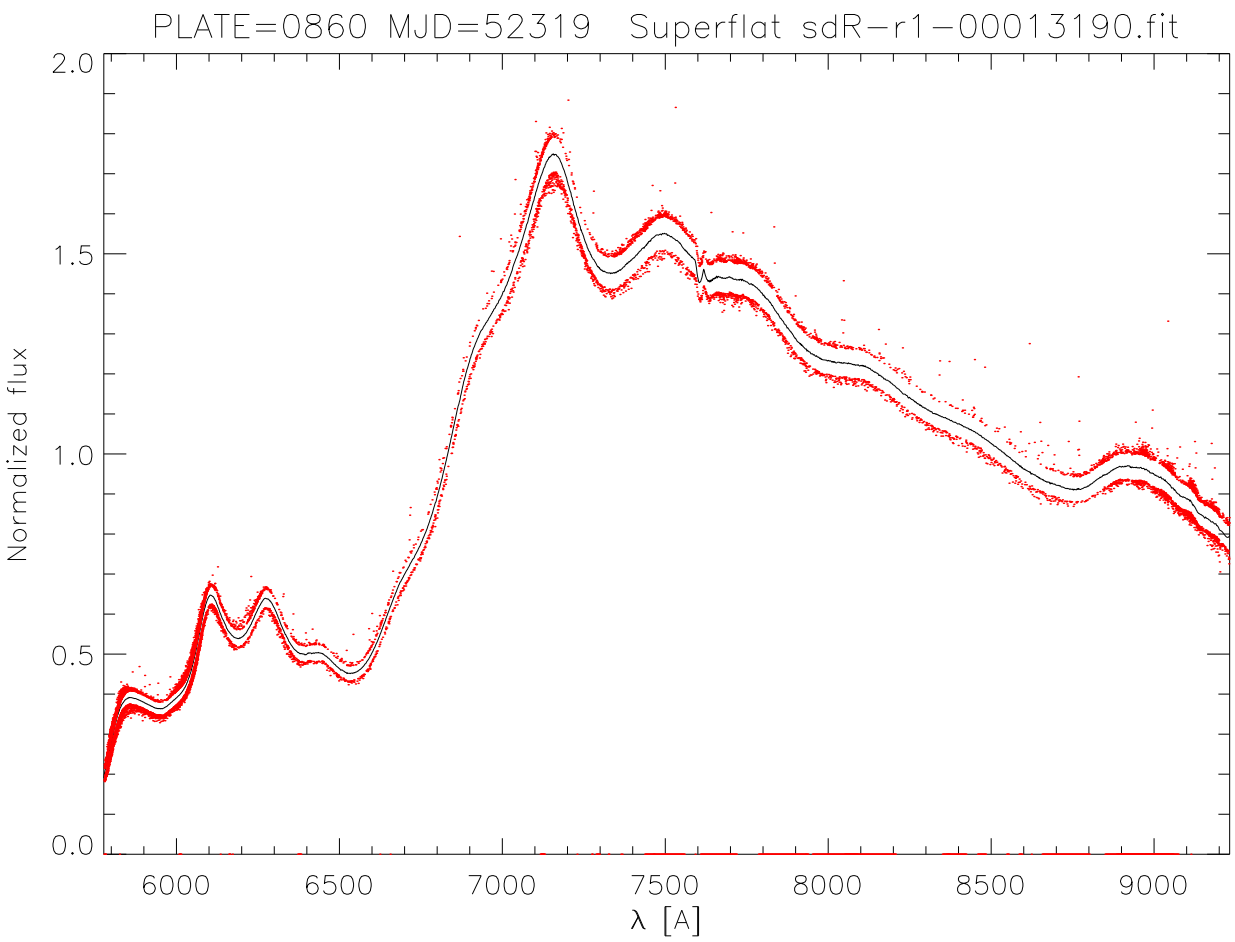

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r1−00013176.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

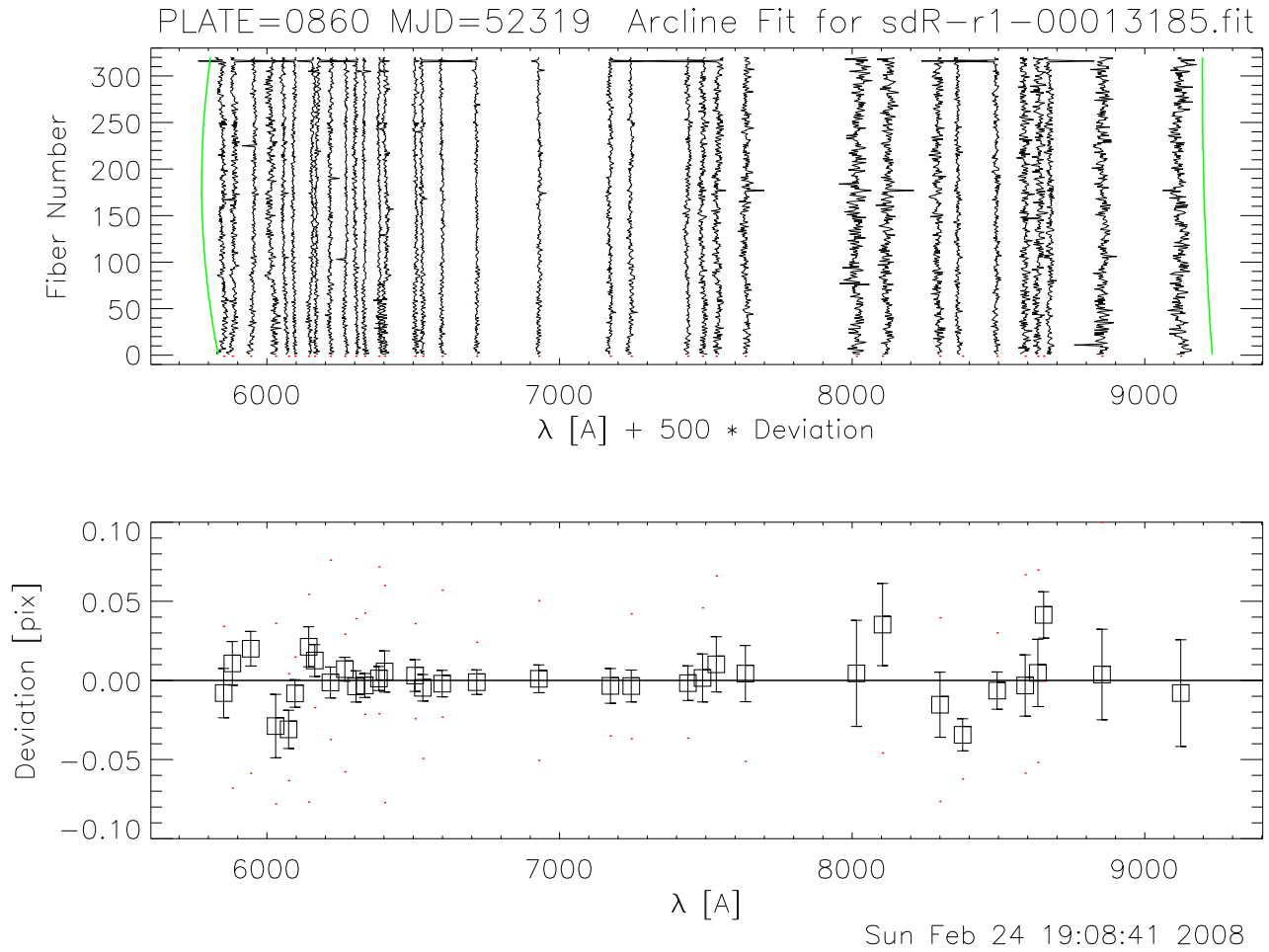

PLATE=0860 MJD=52319 Superflat sdR-r1-00013176.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

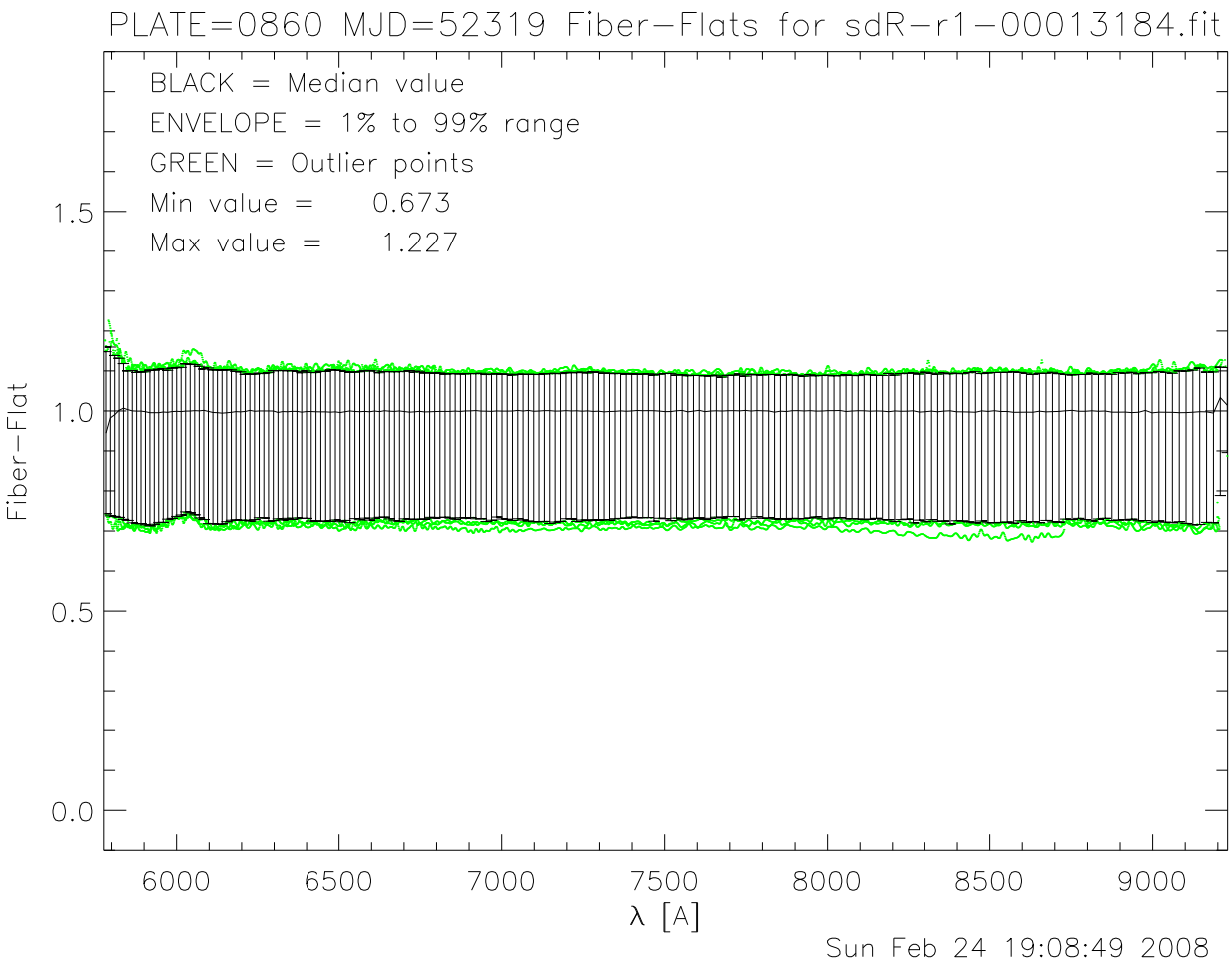

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r1−00013184.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

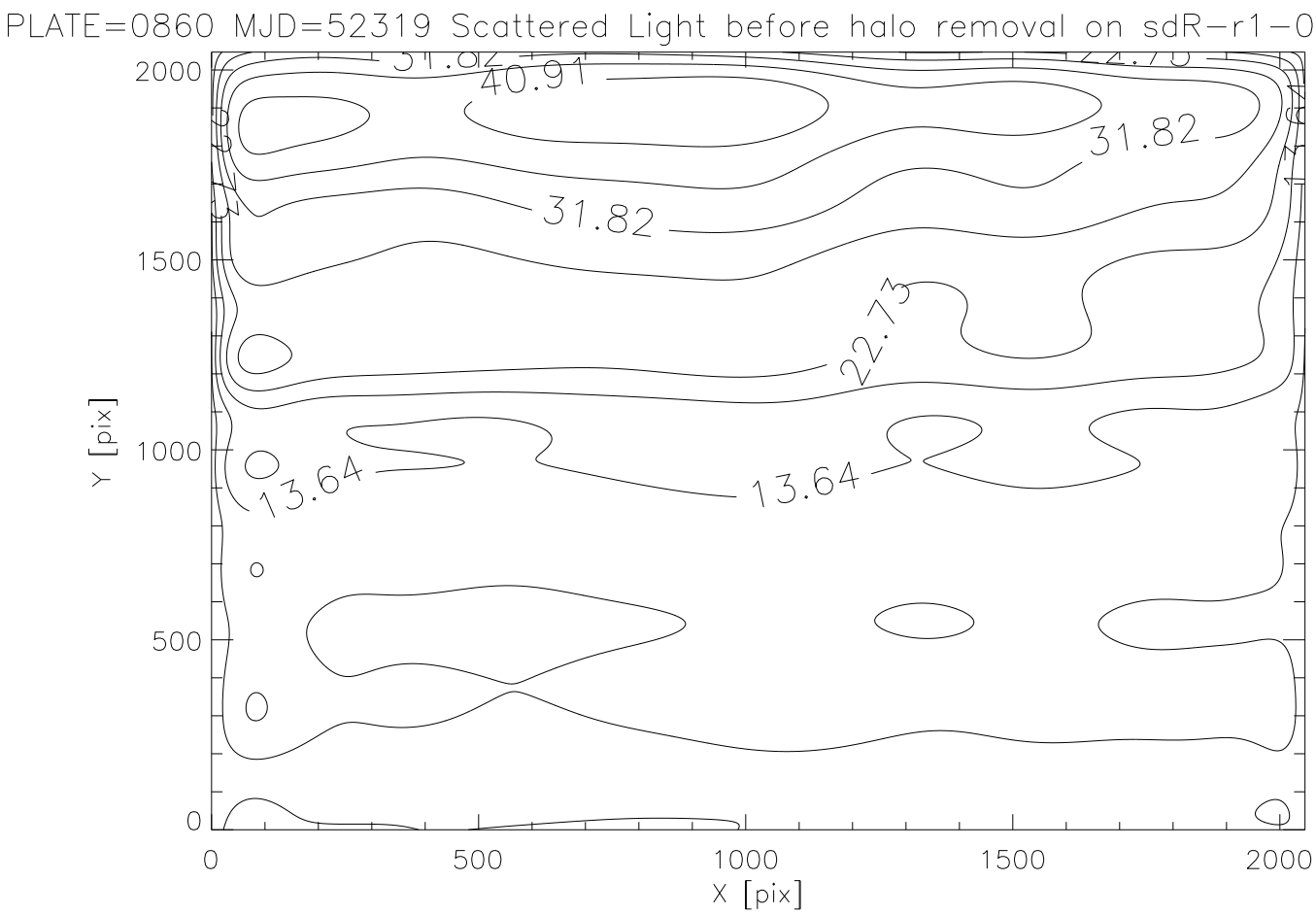

PLATE=0860 MJD=52319 Superflat sdR-r1-00013184.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

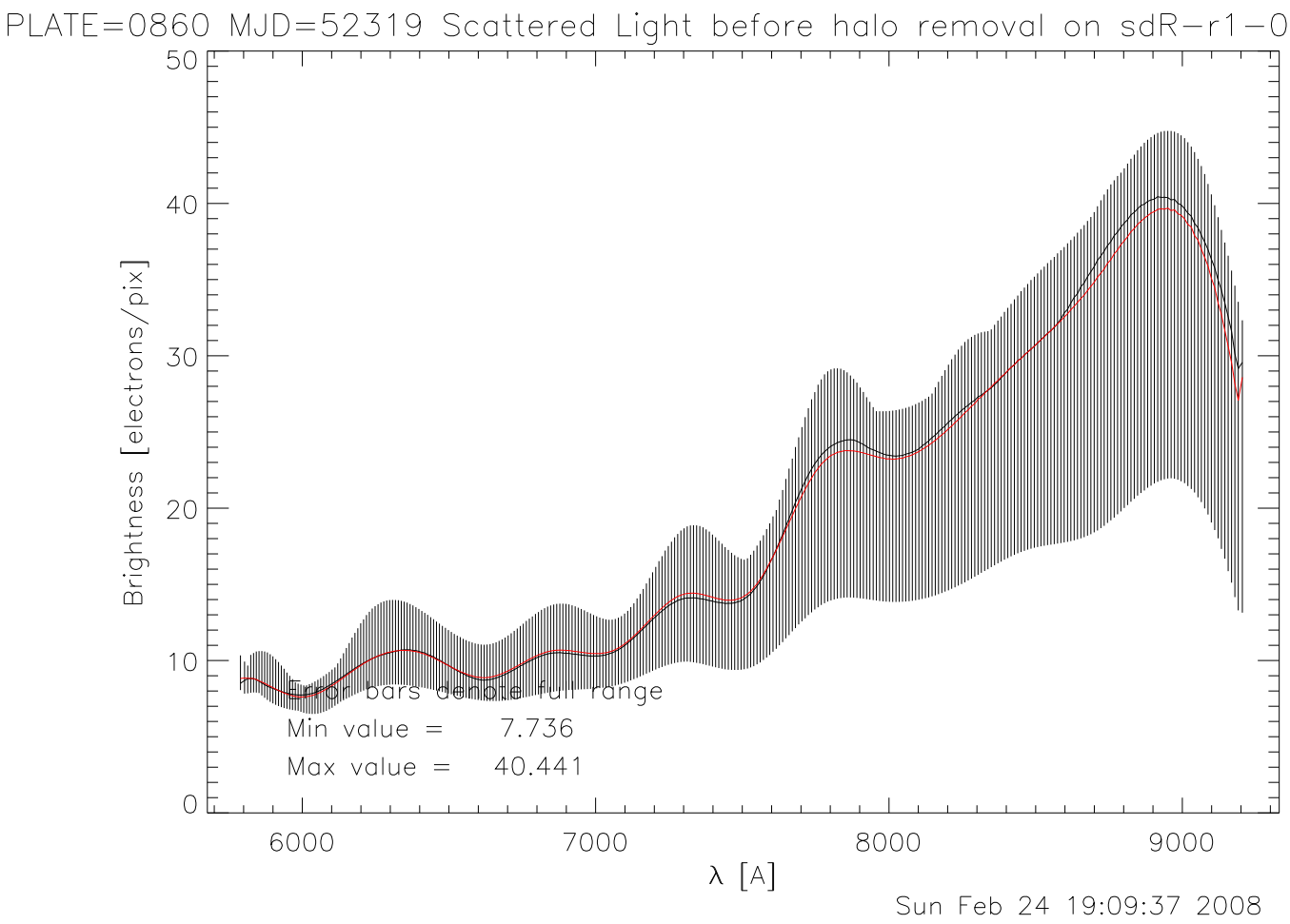

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r1−00013190.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

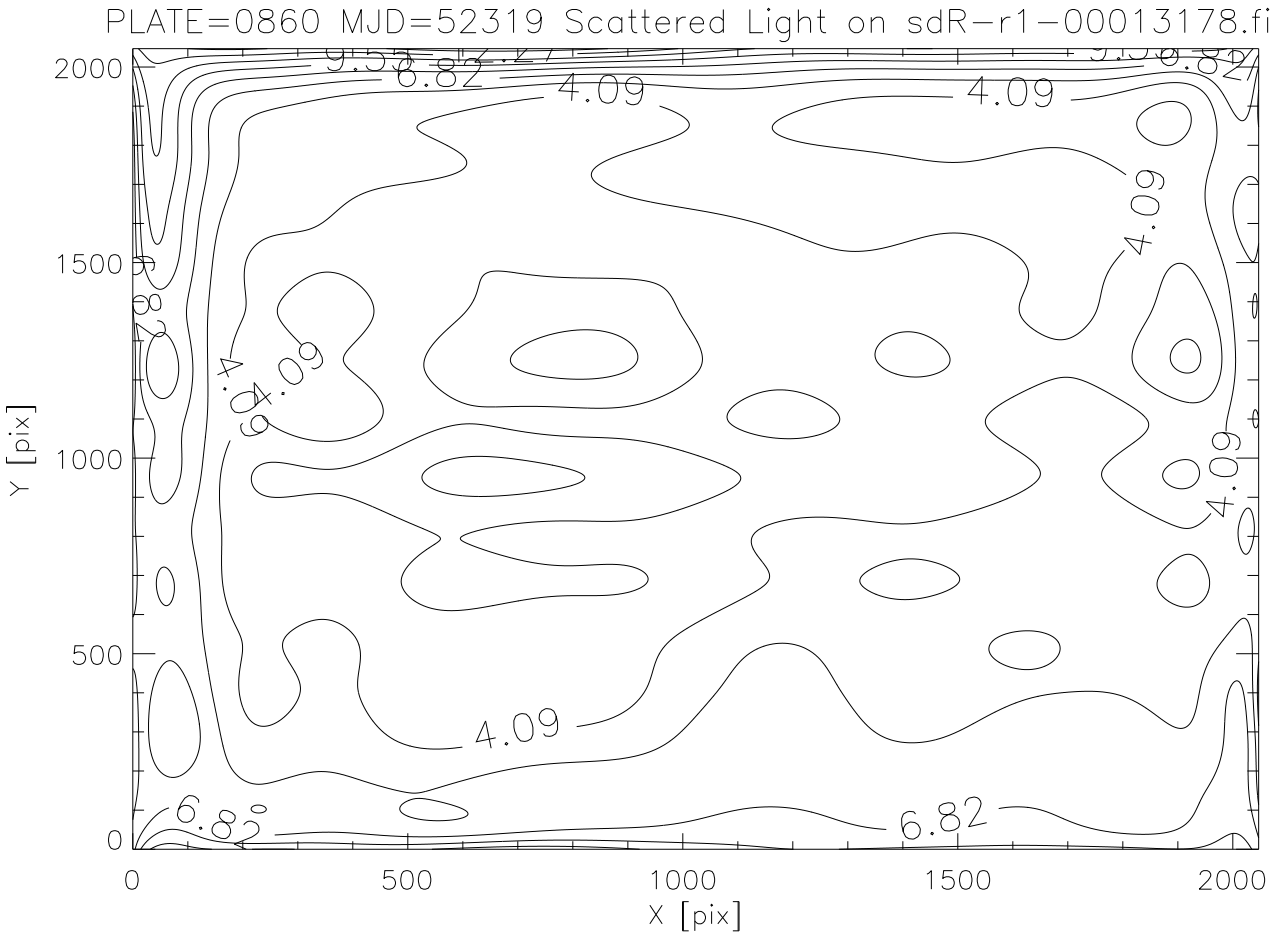

PLATE=0860 MJD=52319 Superflat sdR-r1-00013190.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

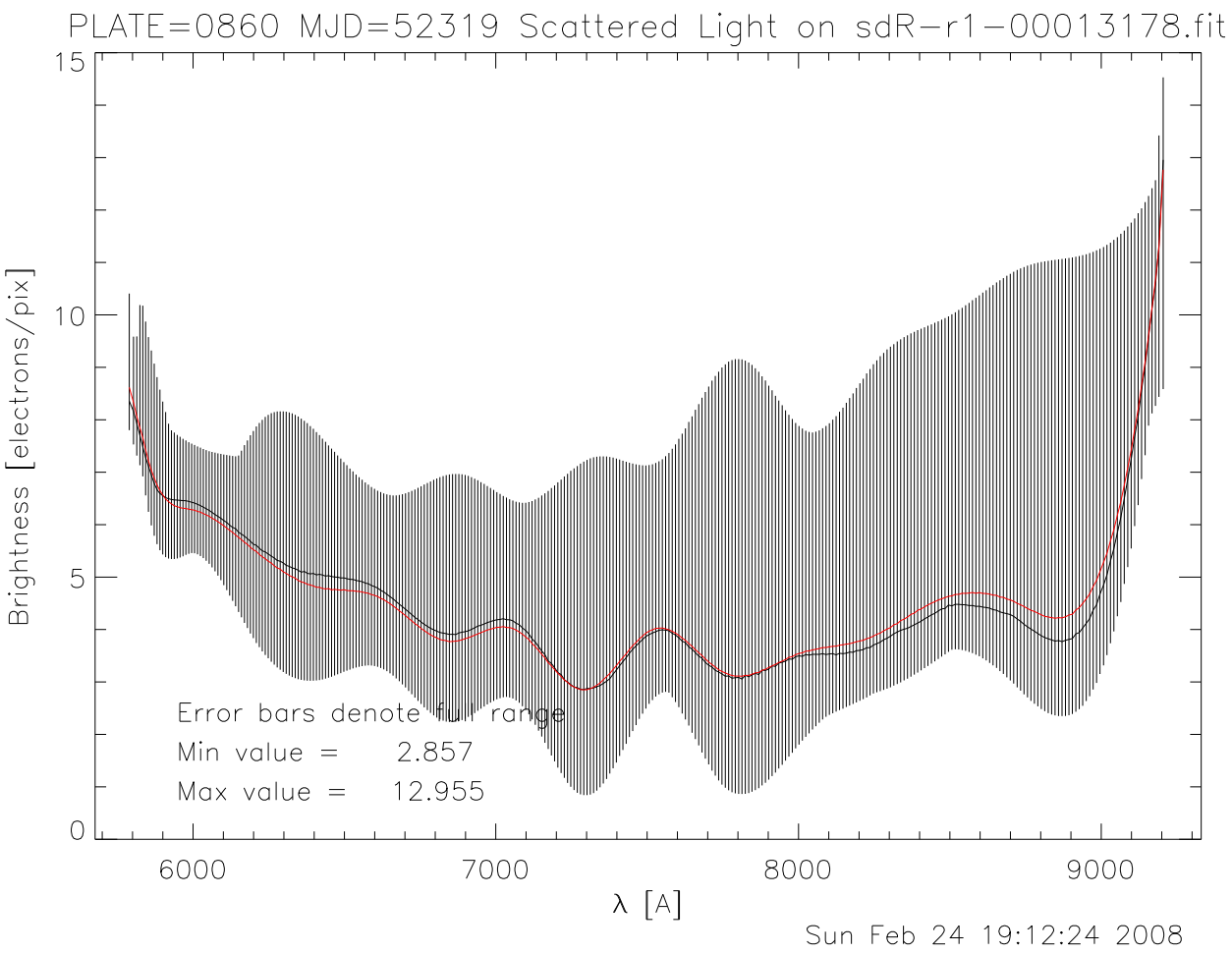

PLATE=0860 MJD=52319 Arcline Fit for sdR-r1-00013185.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sun Feb 24 19:08:41 2008

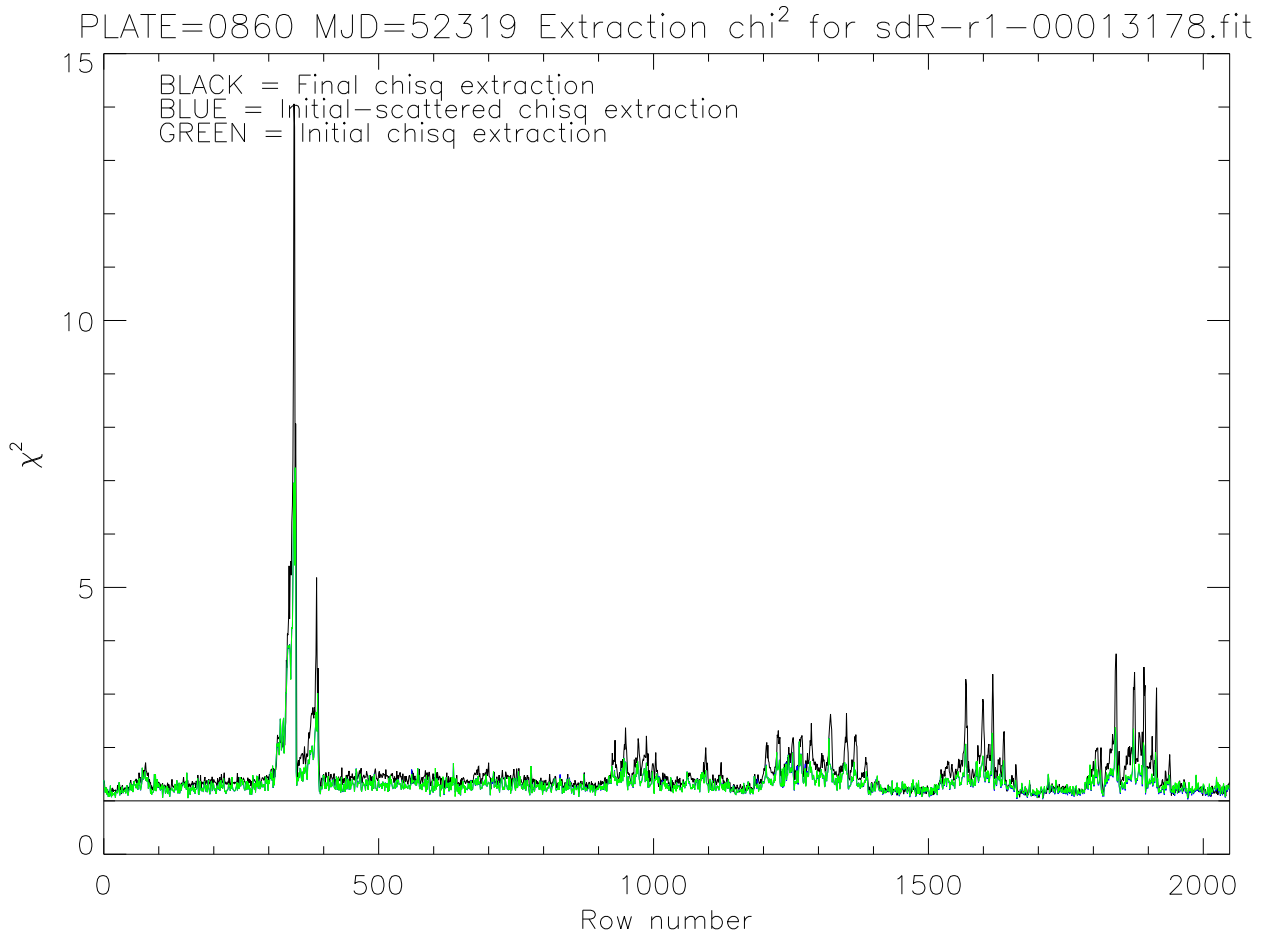

PLATE=0860 MJD=52319 Fiber-Flats for sdR-r1-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:08:49 2008

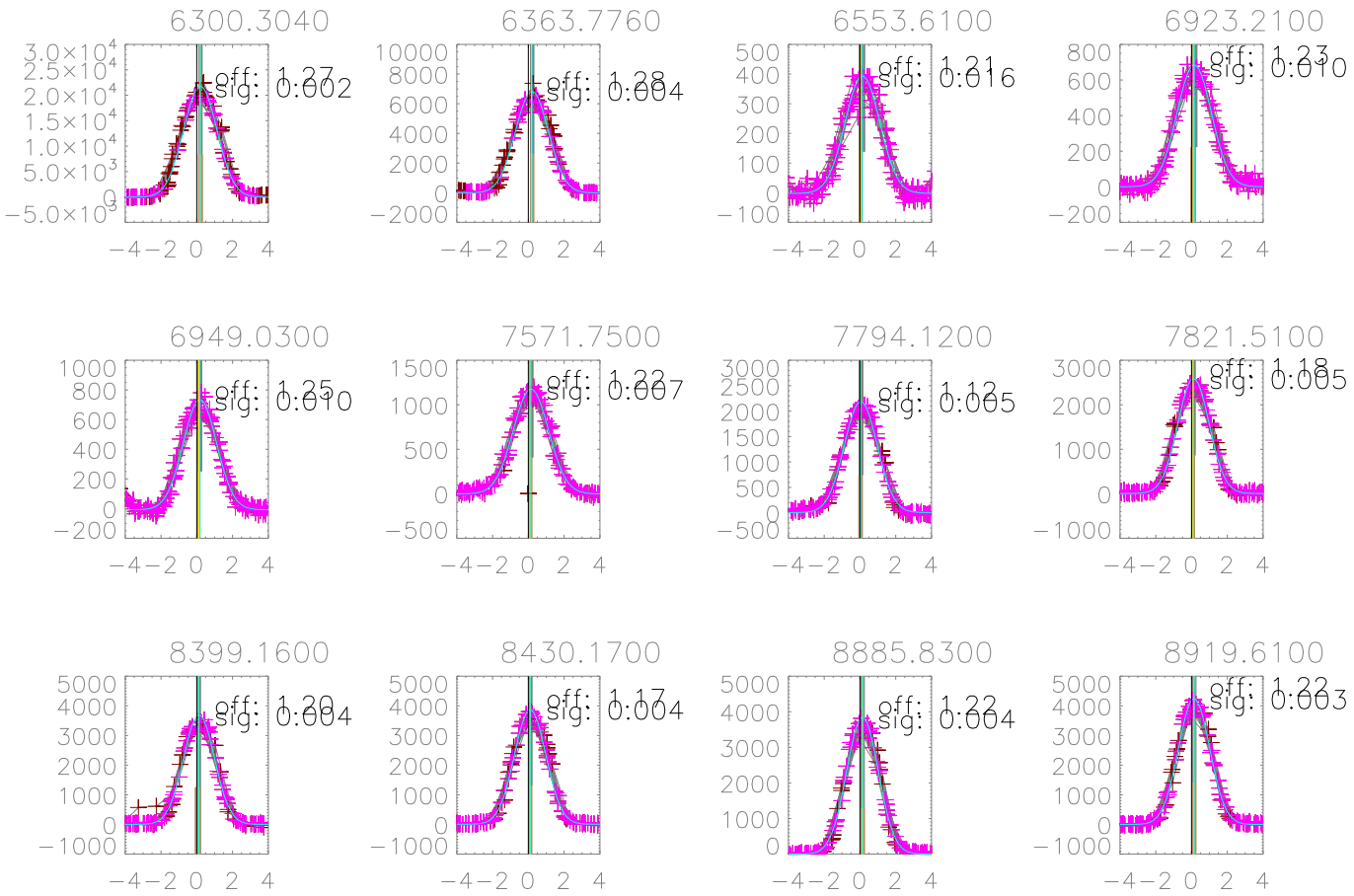

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013178.fi
40.91
31.82
31.82
13.64
13.64
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

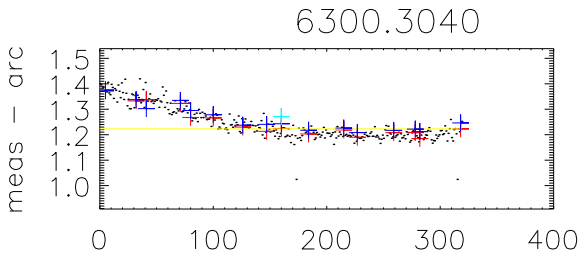

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013178.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.736
Max value = 40.441
Sun Feb 24 19:09:37 2008

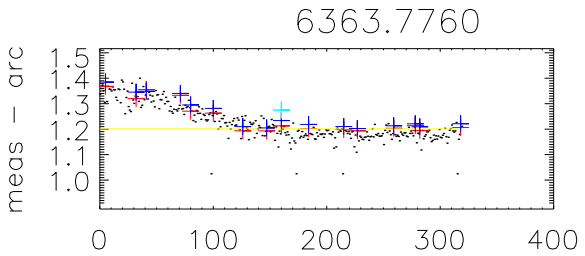

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013178.fit
9.53
6.82
4.09
0
Y [pix]
X [pix]
0
500
1000
1500
2000

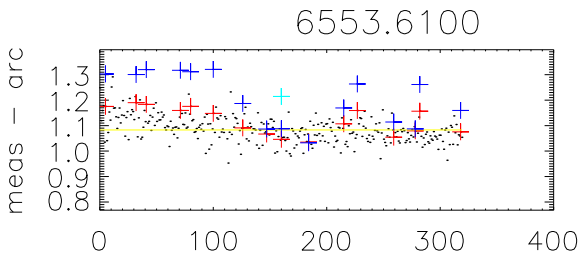

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013178.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.857
Max value = 12.955
Sun Feb 24 19:12:24 2008

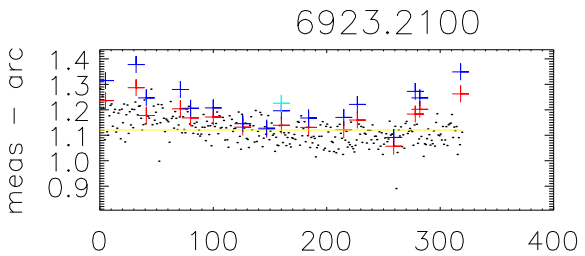

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r1−00013178.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

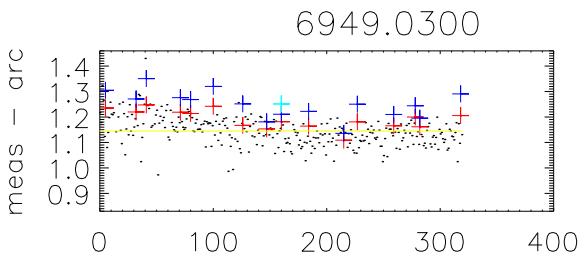

6300.3040
off: 1.27
sig: 0.002
6363.7760
off: 1.28
sig: 0.004
6553.6100
off: 1.21
sig: 0.016
6923.2100
off: 1.23
sig: 0.010
6949.0300
off: 1.25
sig: 0.010
7571.7500
off: 1.22
sig: 0.007
7794.1200
off: 1.12
sig: 0.005
7821.5100
off: 1.18
sig: 0.005
8399.1600
off: 1.20
sig: 0.004
8430.1700
off: 1.17
sig: 0.004
8885.8300
off: 1.22
sig: 0.004
8919.6100
off: 1.22
sig: 0.003

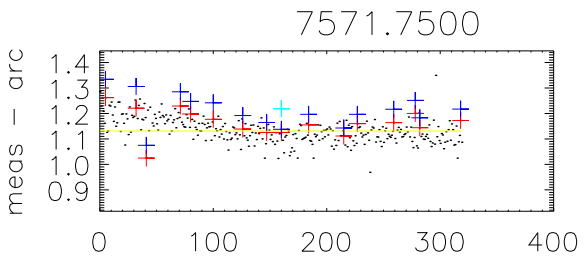

6300.3040
meas − arc
1.5
1.4
1.3
1.2
1.1
1.0
0
100
200
300
400

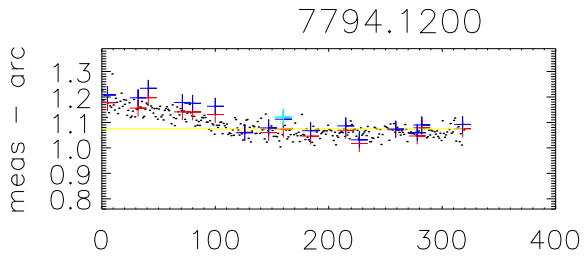

6363.7760
meas − arc
1.5
1.4
1.3
1.2
1.1
1.0
0
100
200
300
400

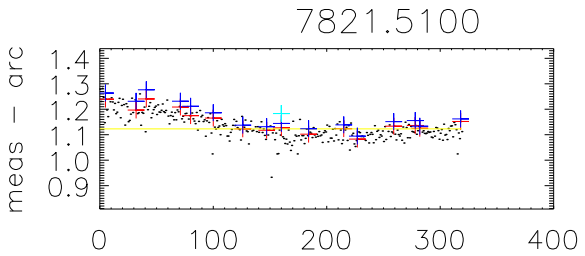

6553.6100
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

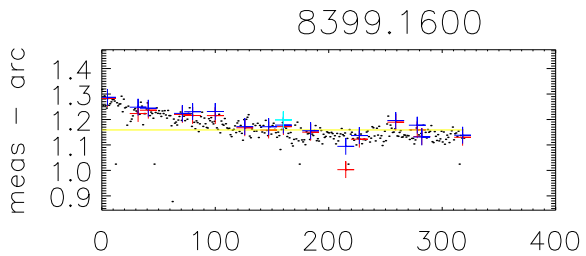

6923.2100
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

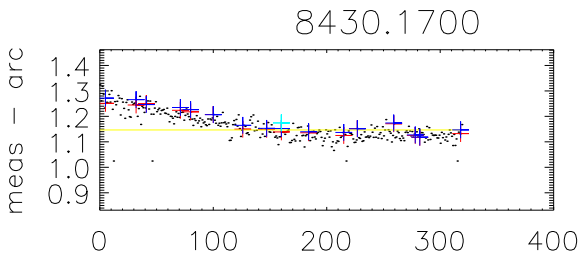

6949.0300
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

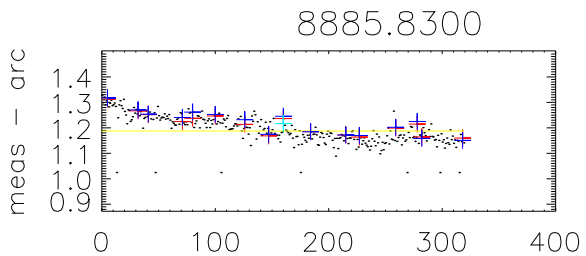

7571.7500
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

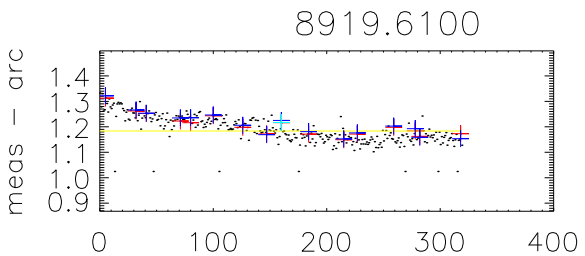

7794.1200
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

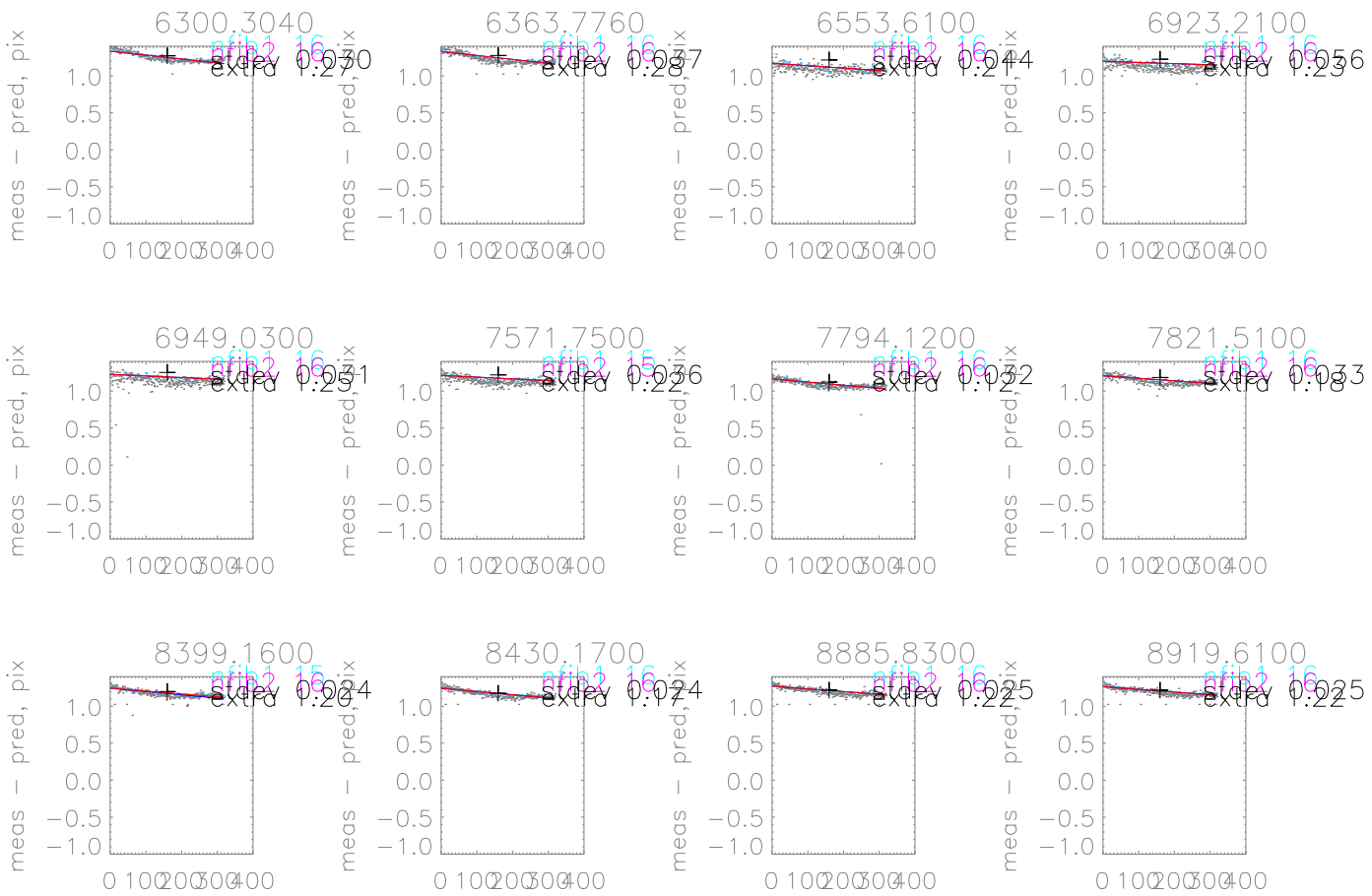

7821.5100
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

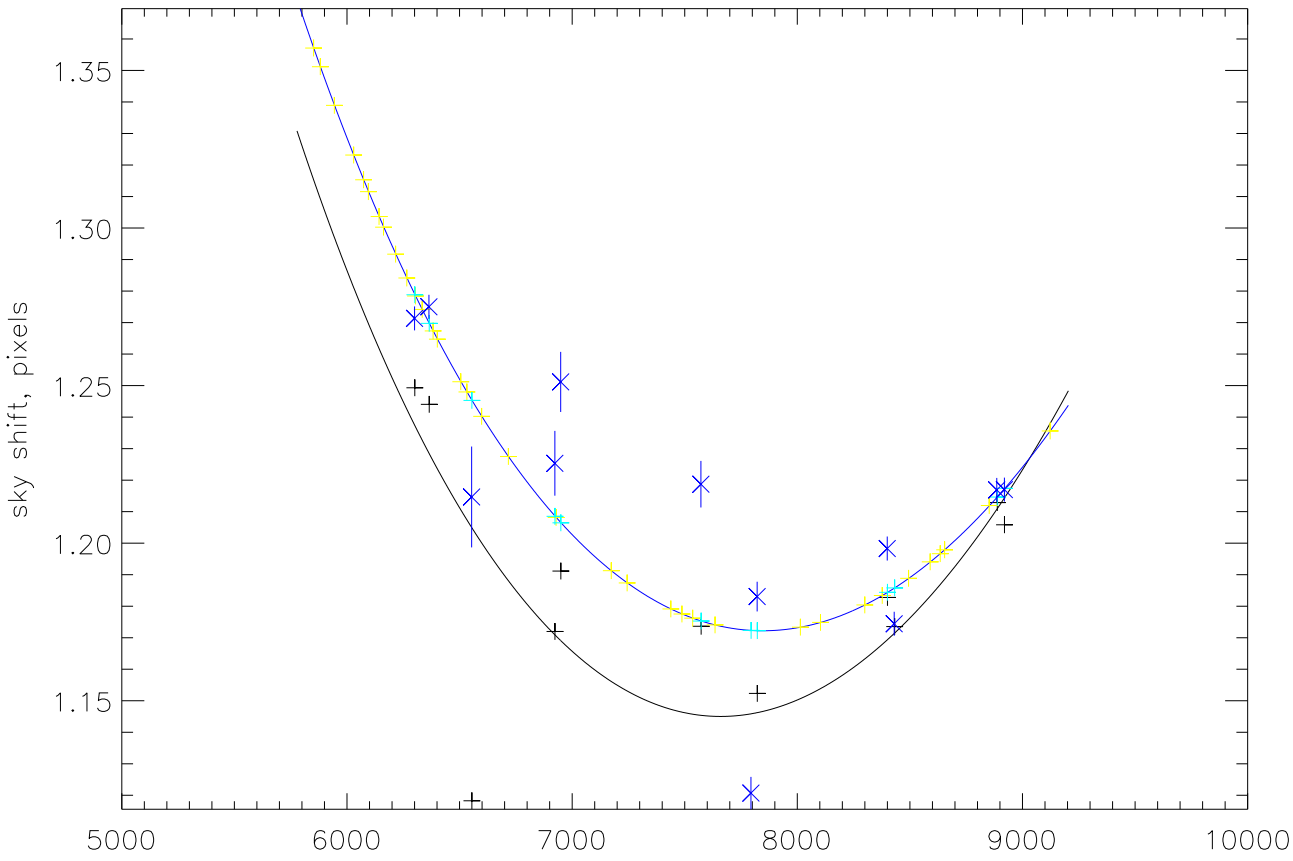

8399.1600
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

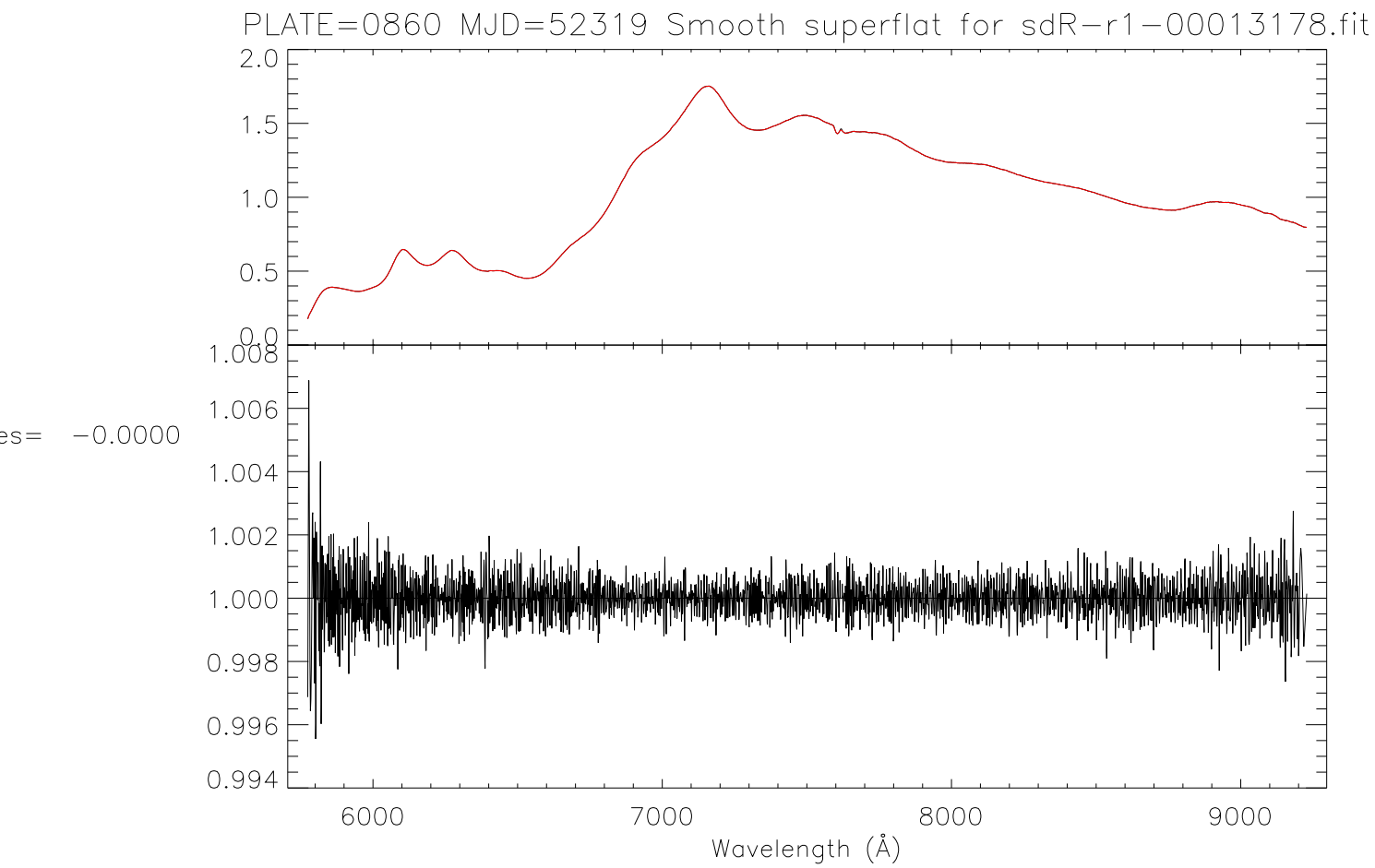

8430.1700
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400


8885.8300
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

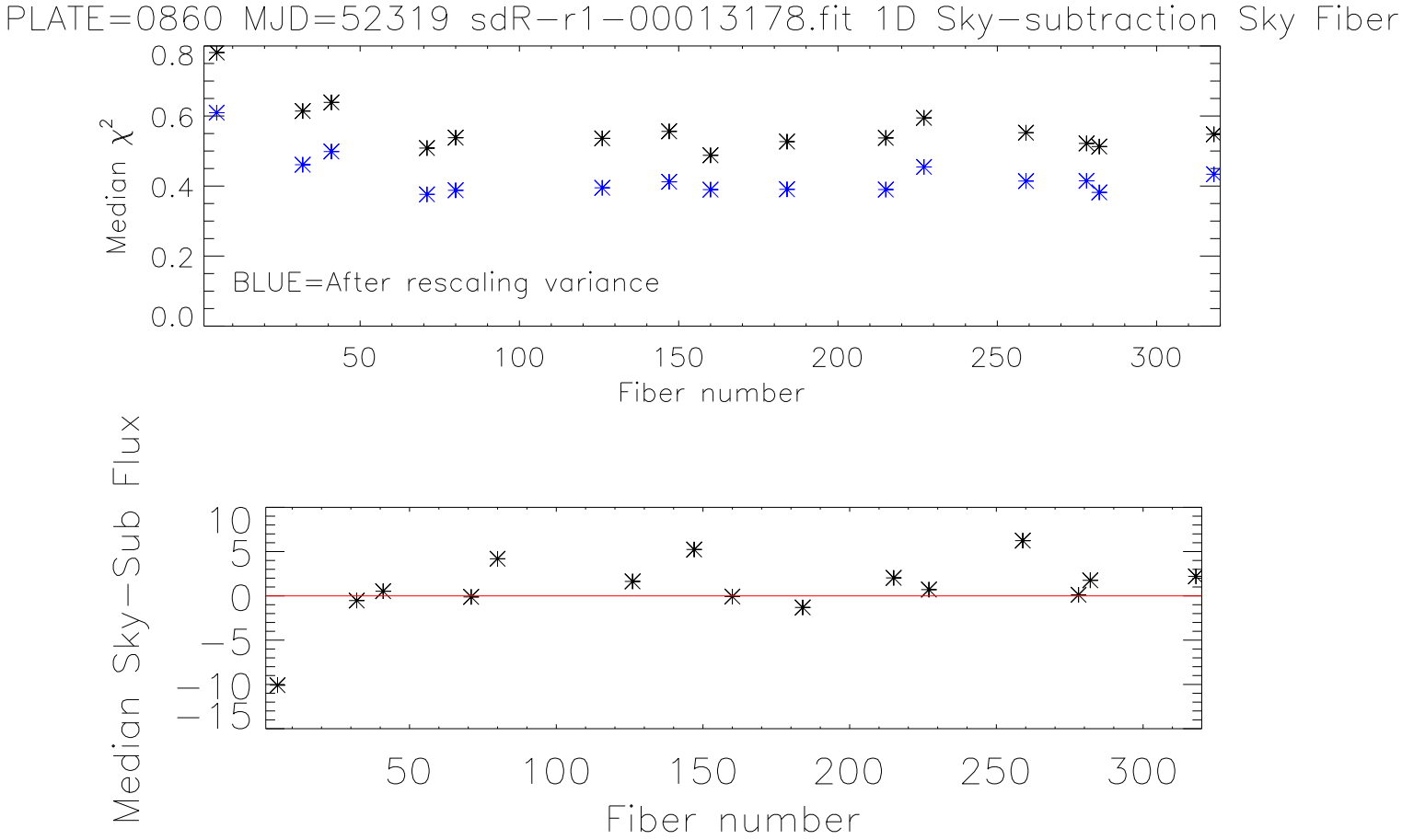

8919.6100
meas − arc
1.4
1.3
1.2
1.1
1.0
0.9
0
100
200
300
400

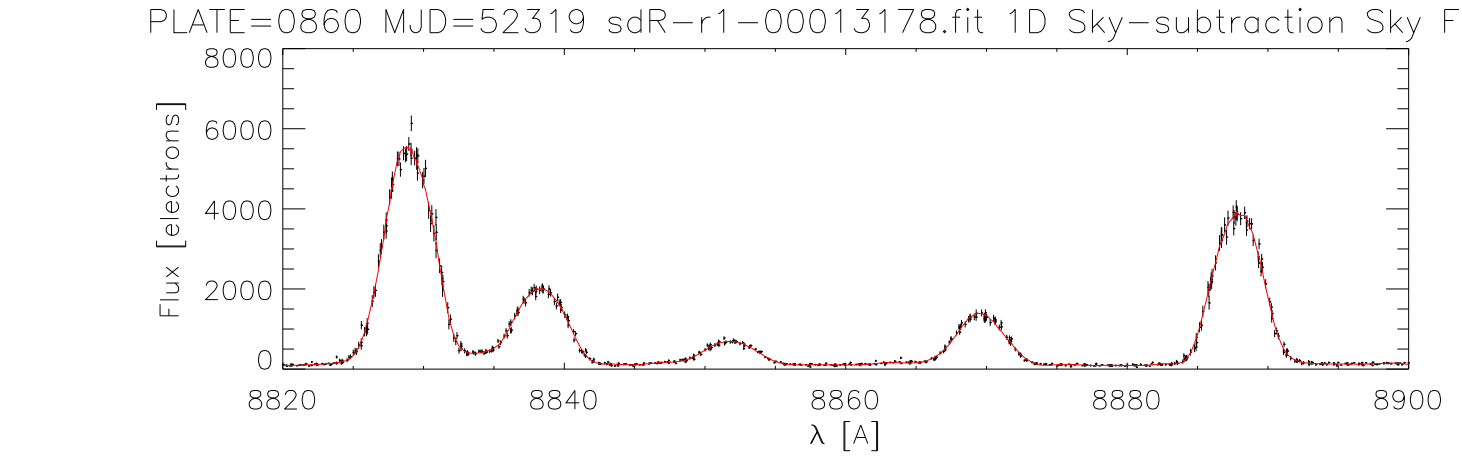

6300.3040
stdev 0.030
extra 1.27
6363.7760
stdev 0.037
extra 1.28
6553.6100
stdev 0.044
extra 1.21
6923.2100
stdev 0.056
extra 1.23
6949.0300
stdev 0.051
extra 1.25
7571.7500
stdev 0.036
extra 1.22
7794.1200
stdev 0.032
extra 1.12
7821.5100
stdev 0.033
extra 1.18
8399.1600
stdev 0.024
extra 1.20
8430.1700
stdev 0.024
extra 1.17
8885.8300
stdev 0.025
extra 1.22
8919.6100
stdev 0.025
extra 1.22
meas − pred, pix

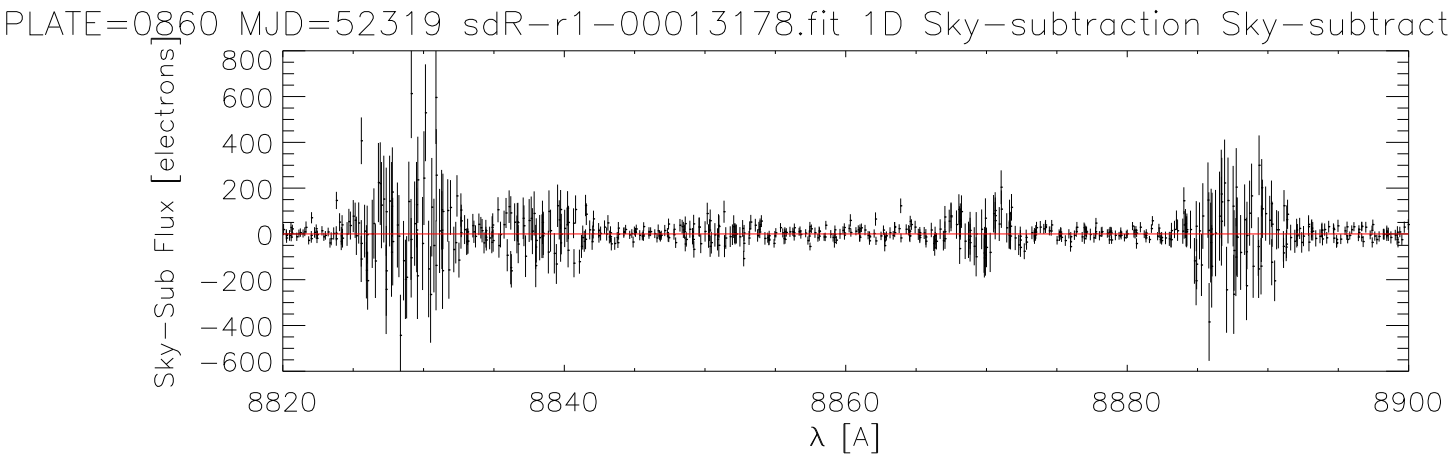

sky shift, pixels
1.35
1.30
1.25
1.20
1.15
5000
6000
7000
8000
9000
10000

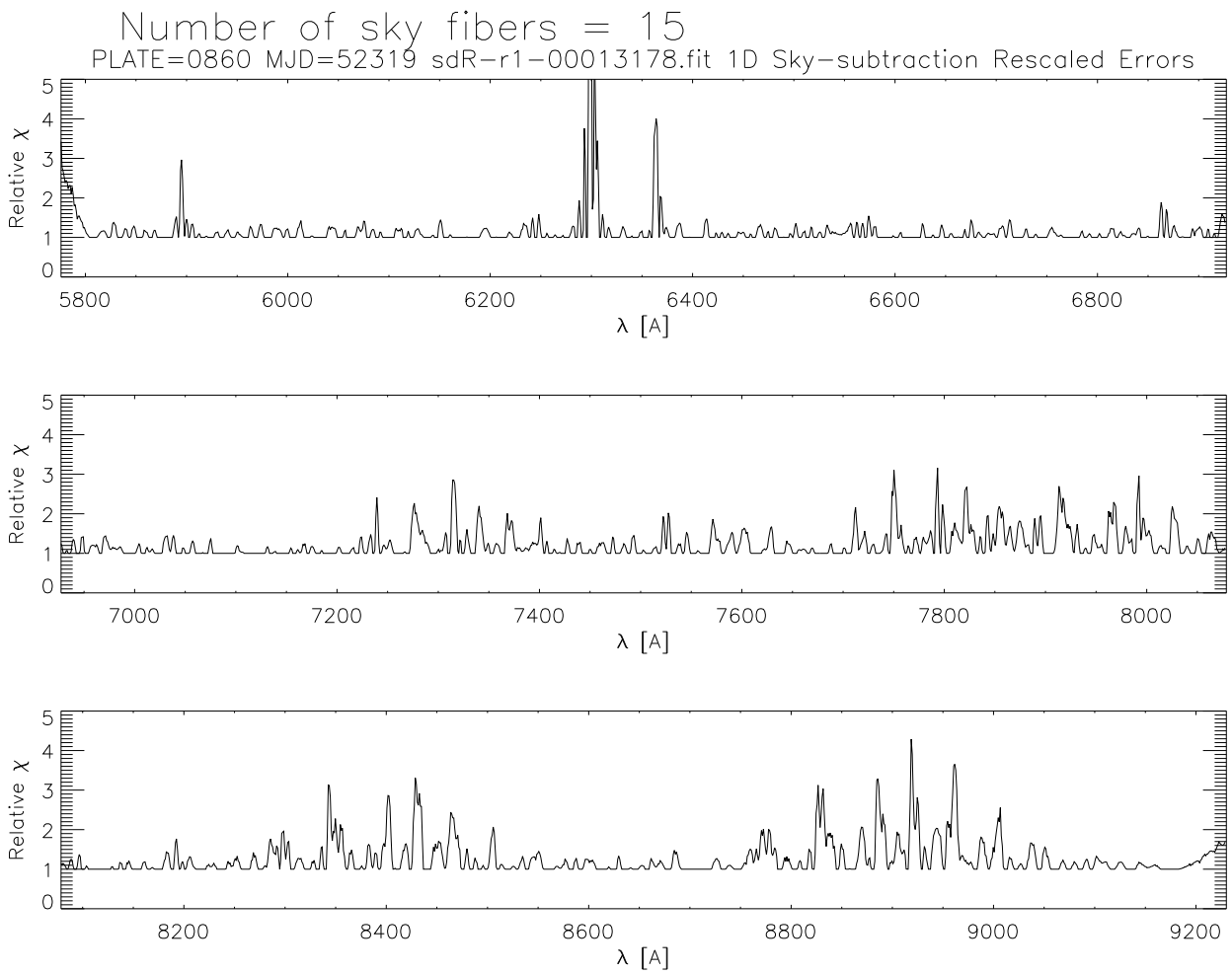

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013178.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

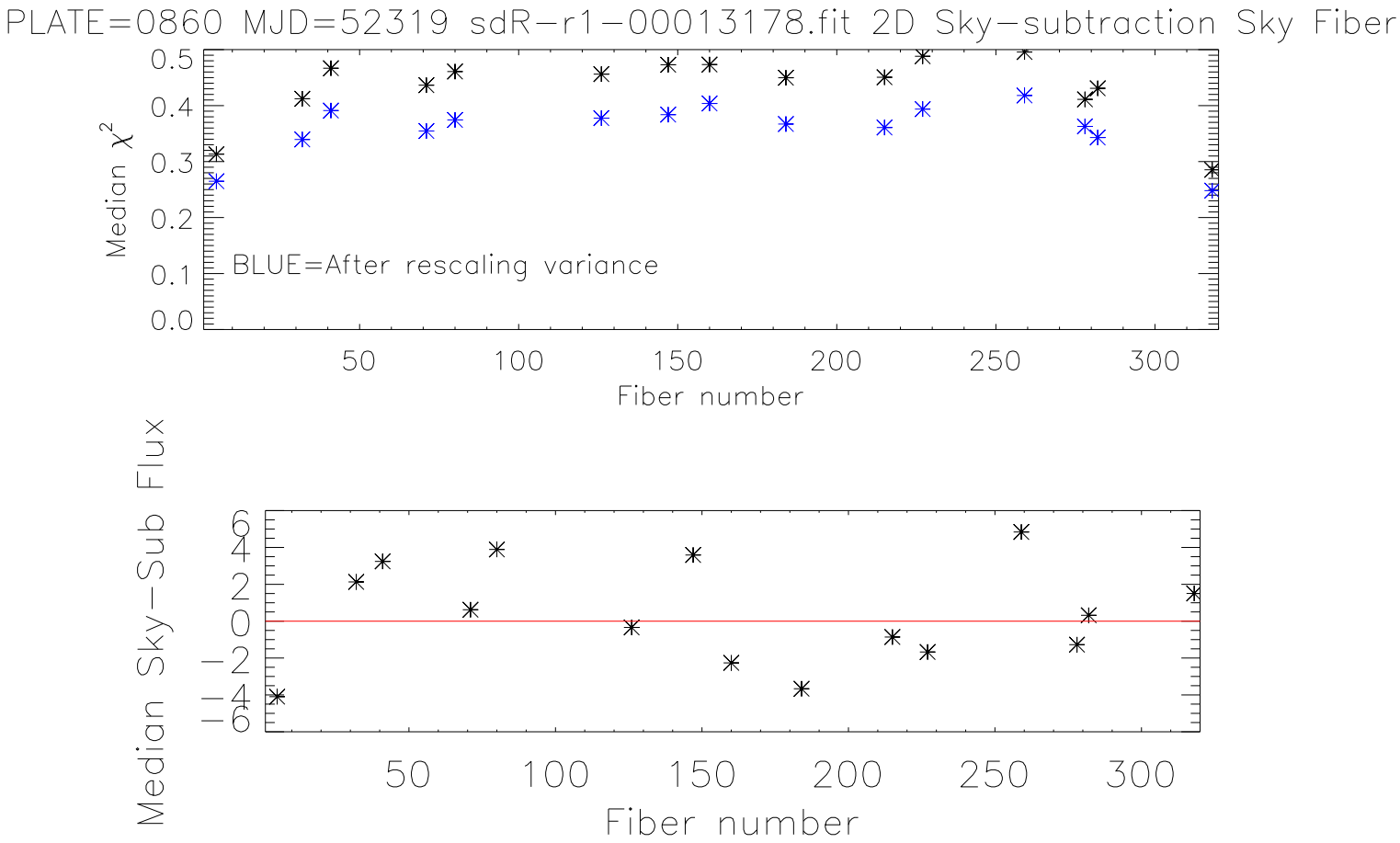
es= −0.0000

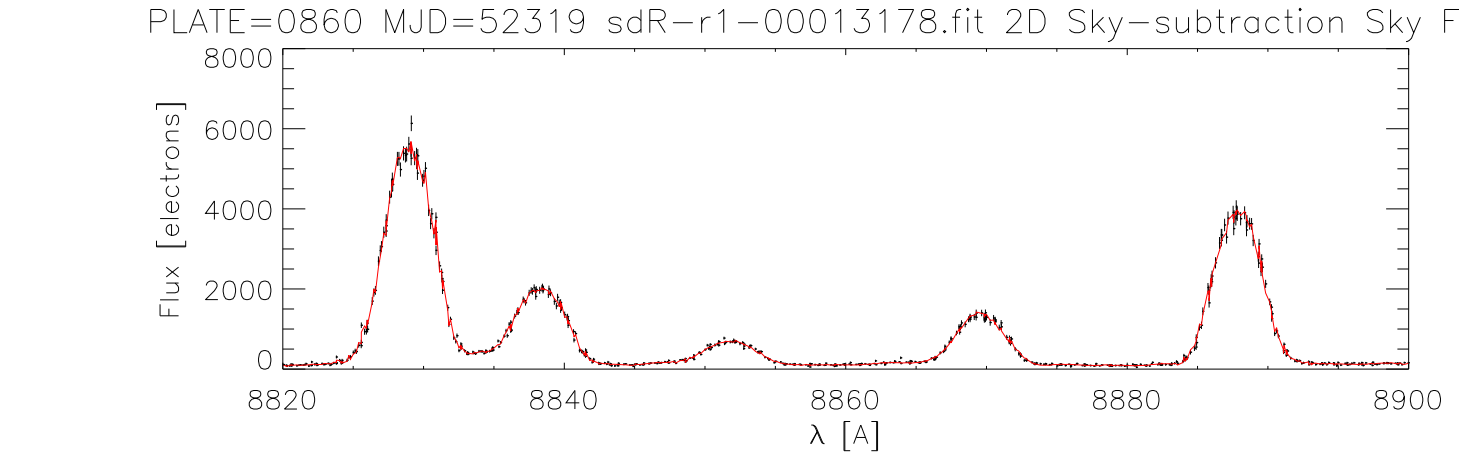

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

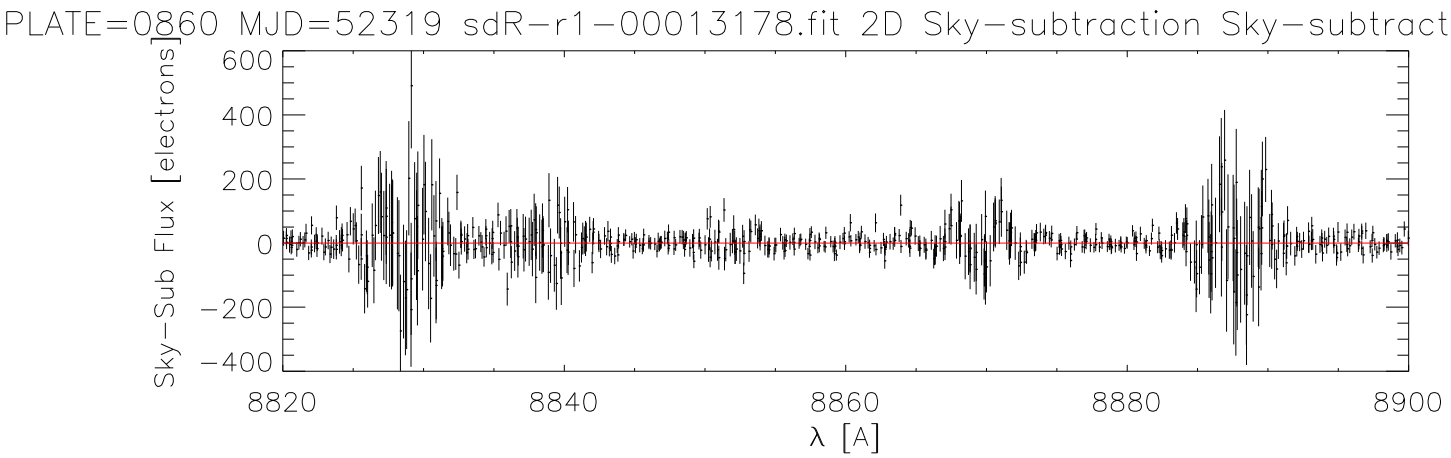

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

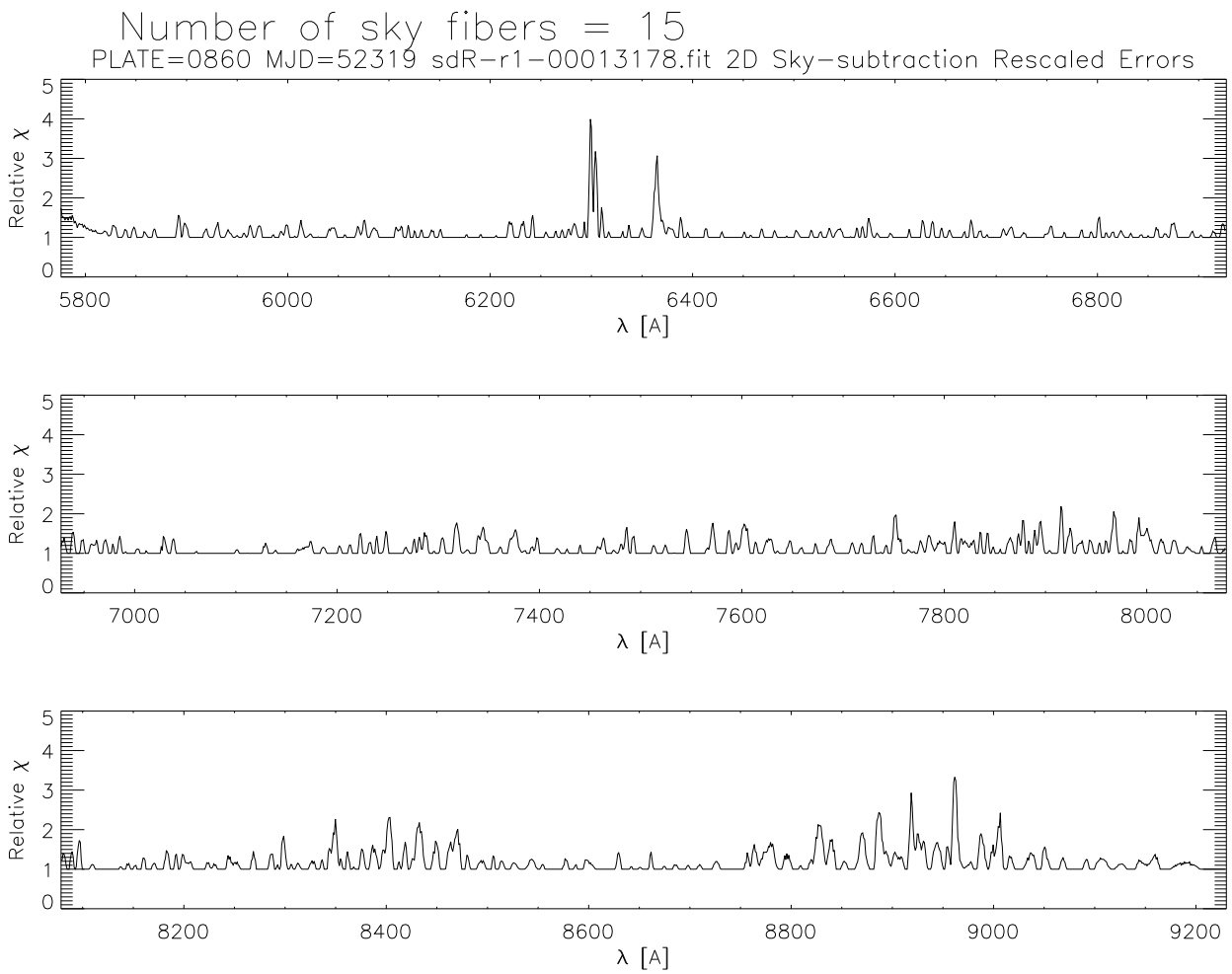

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

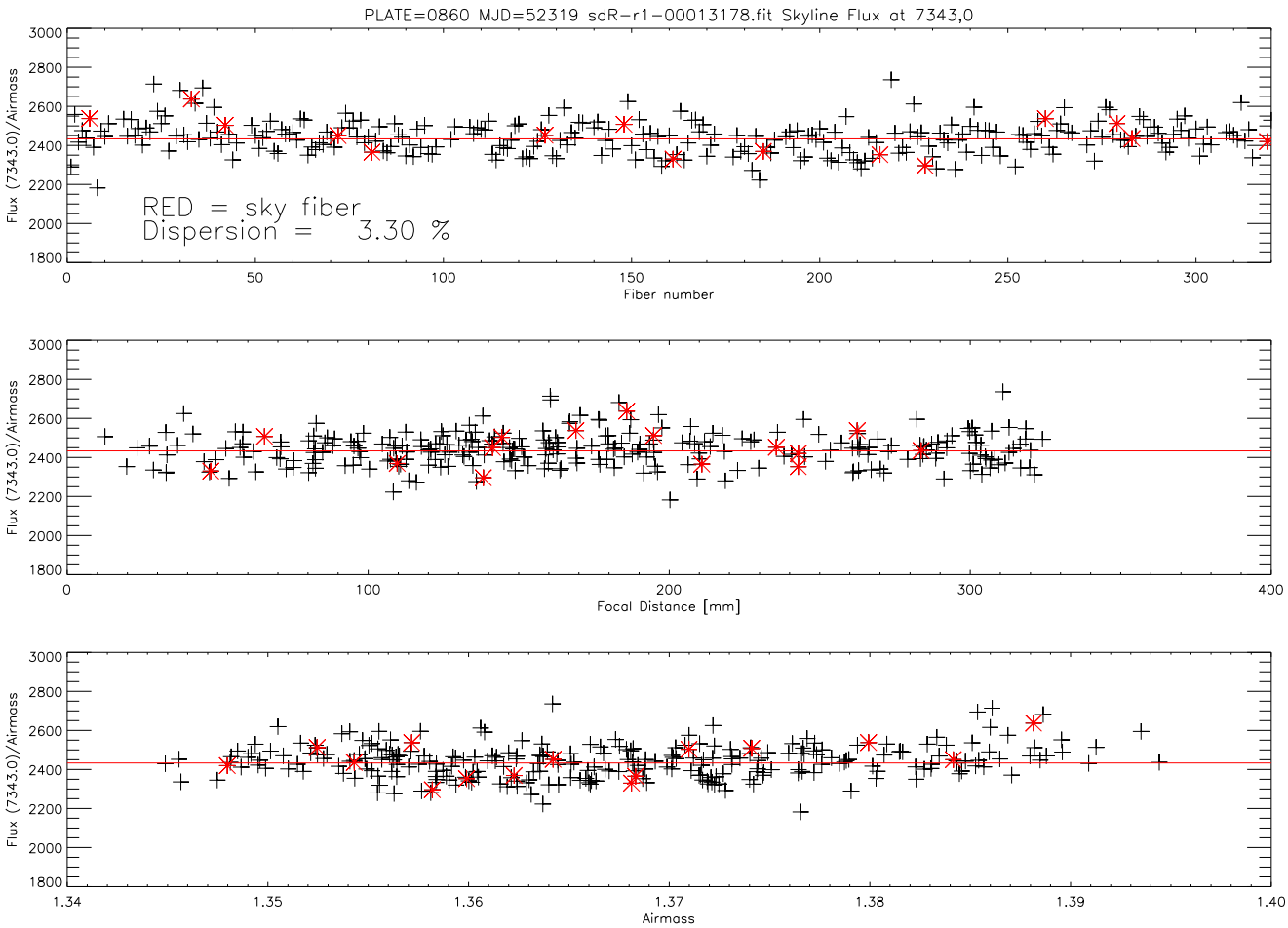

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013178.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

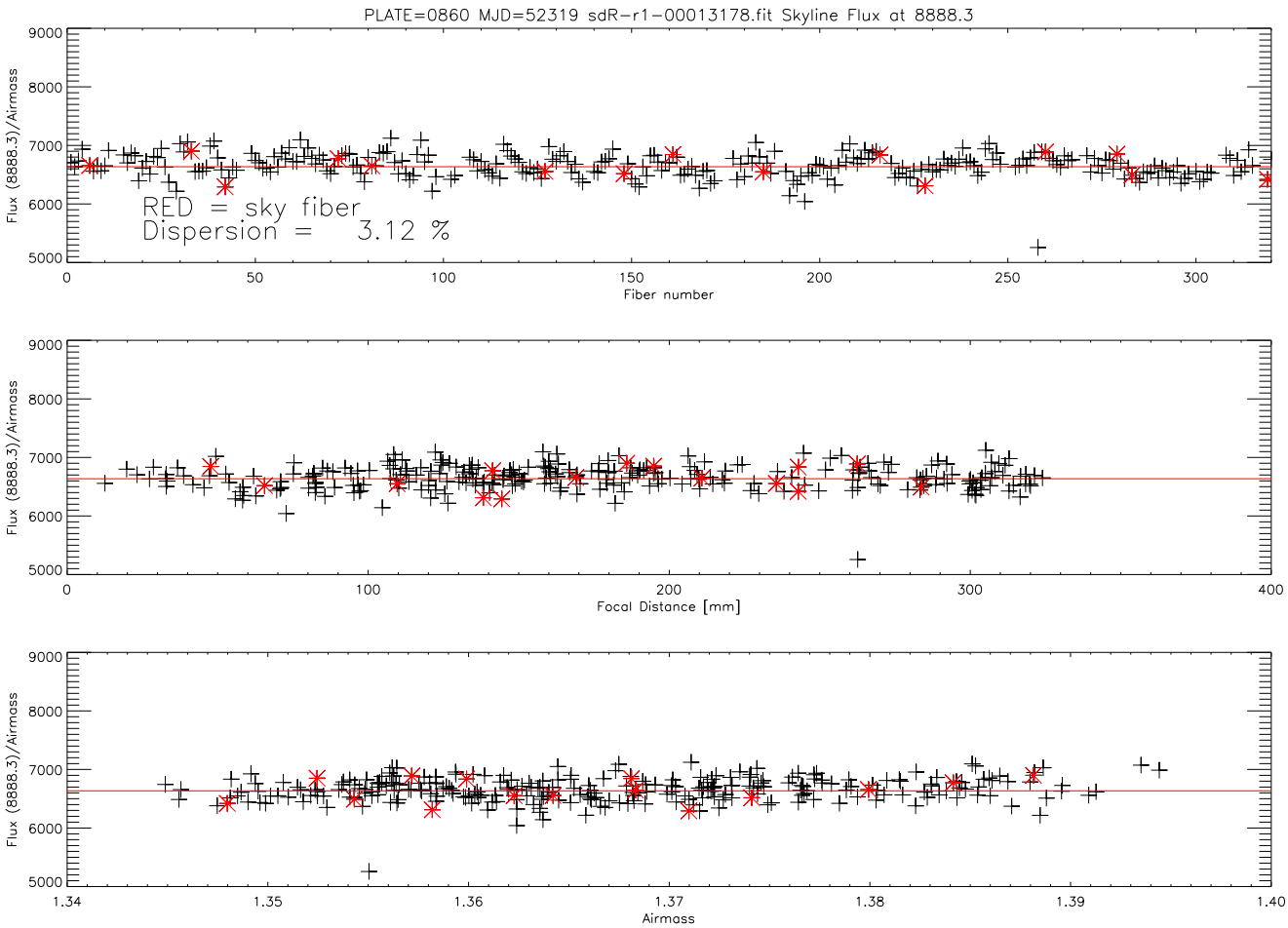

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

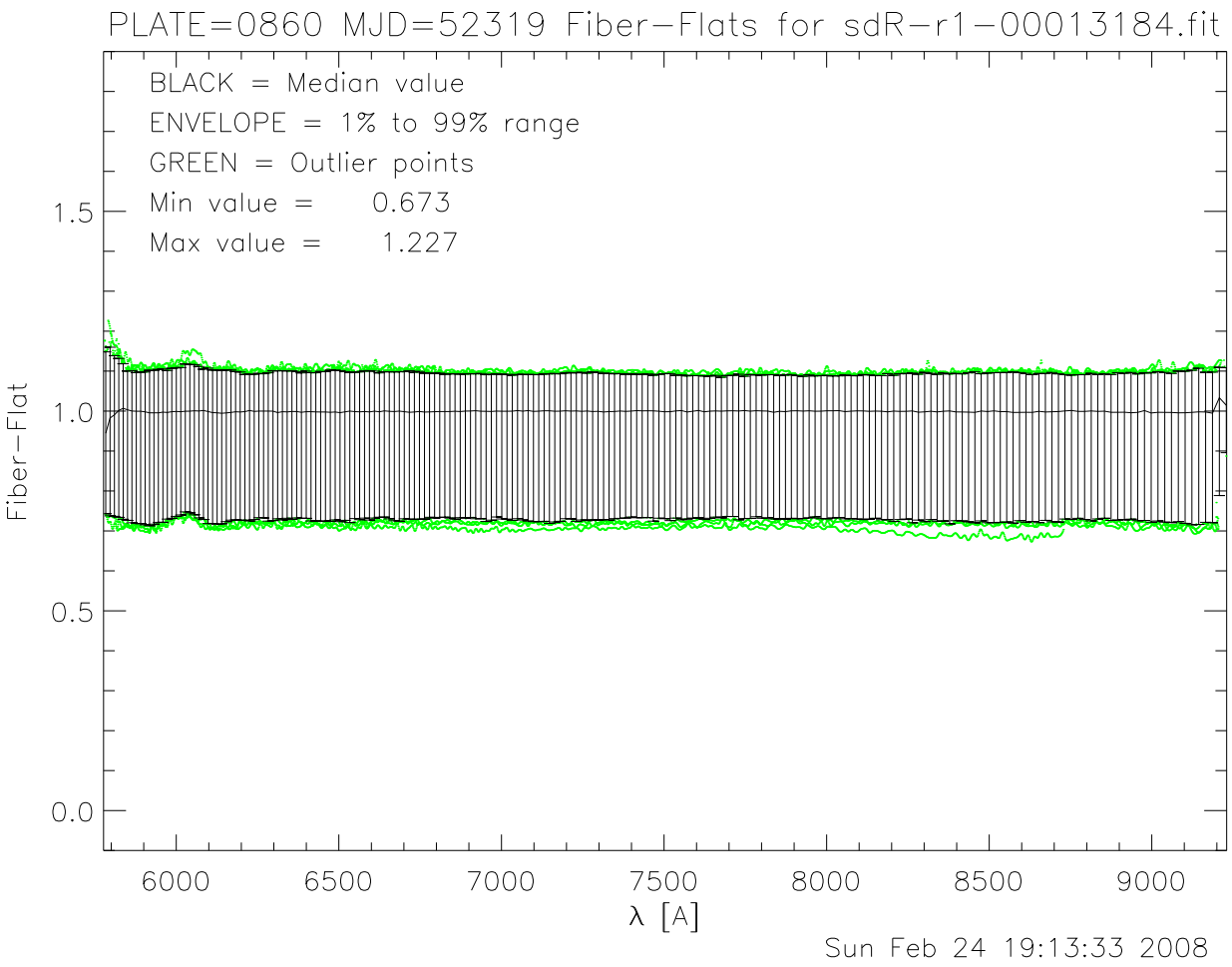

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

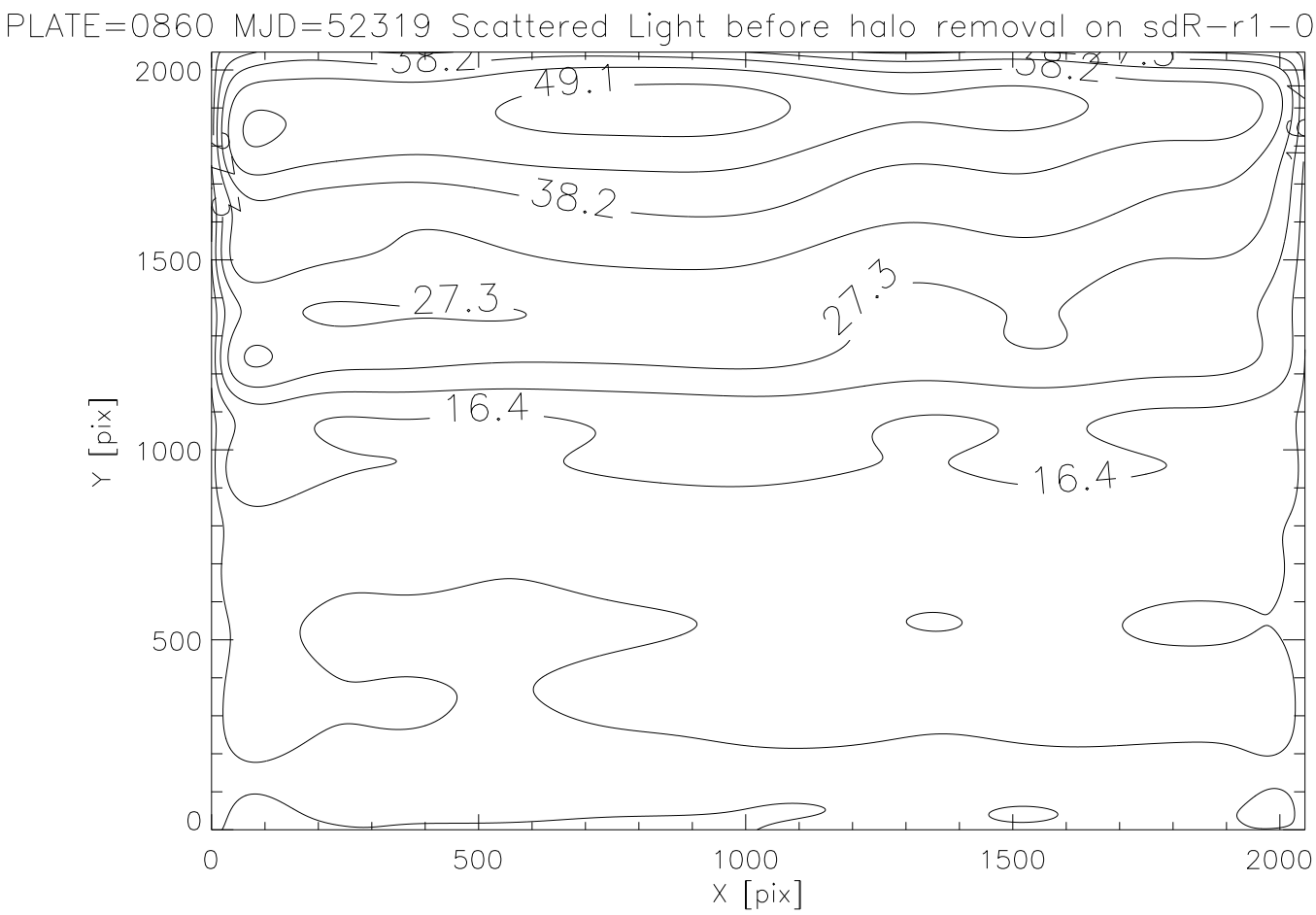

PLATE=0860 MJD=52319 sdR-r1-00013178.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

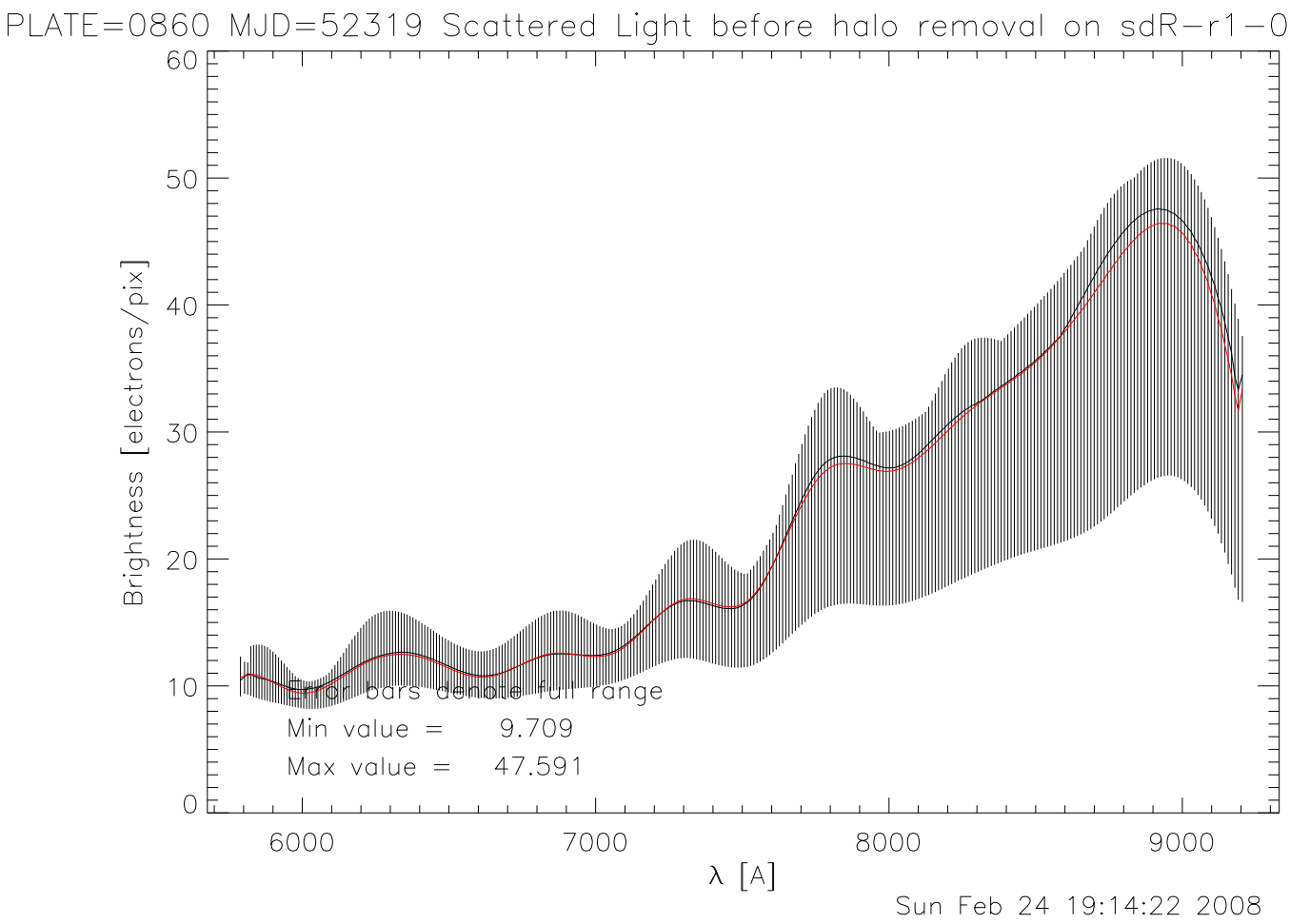

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013178.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

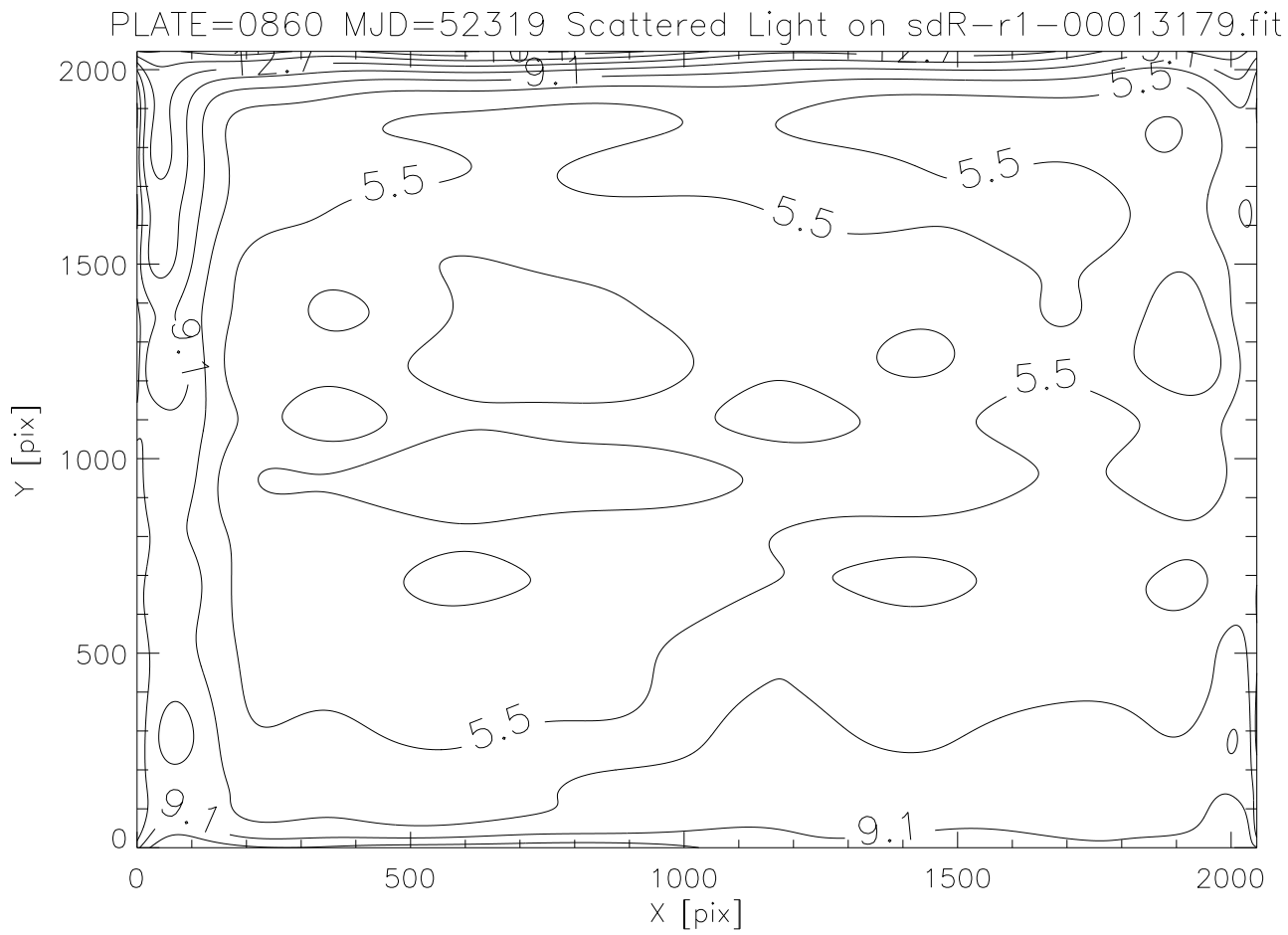

PLATE=0860 MJD=52319 sdR-r1-00013178.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.30 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

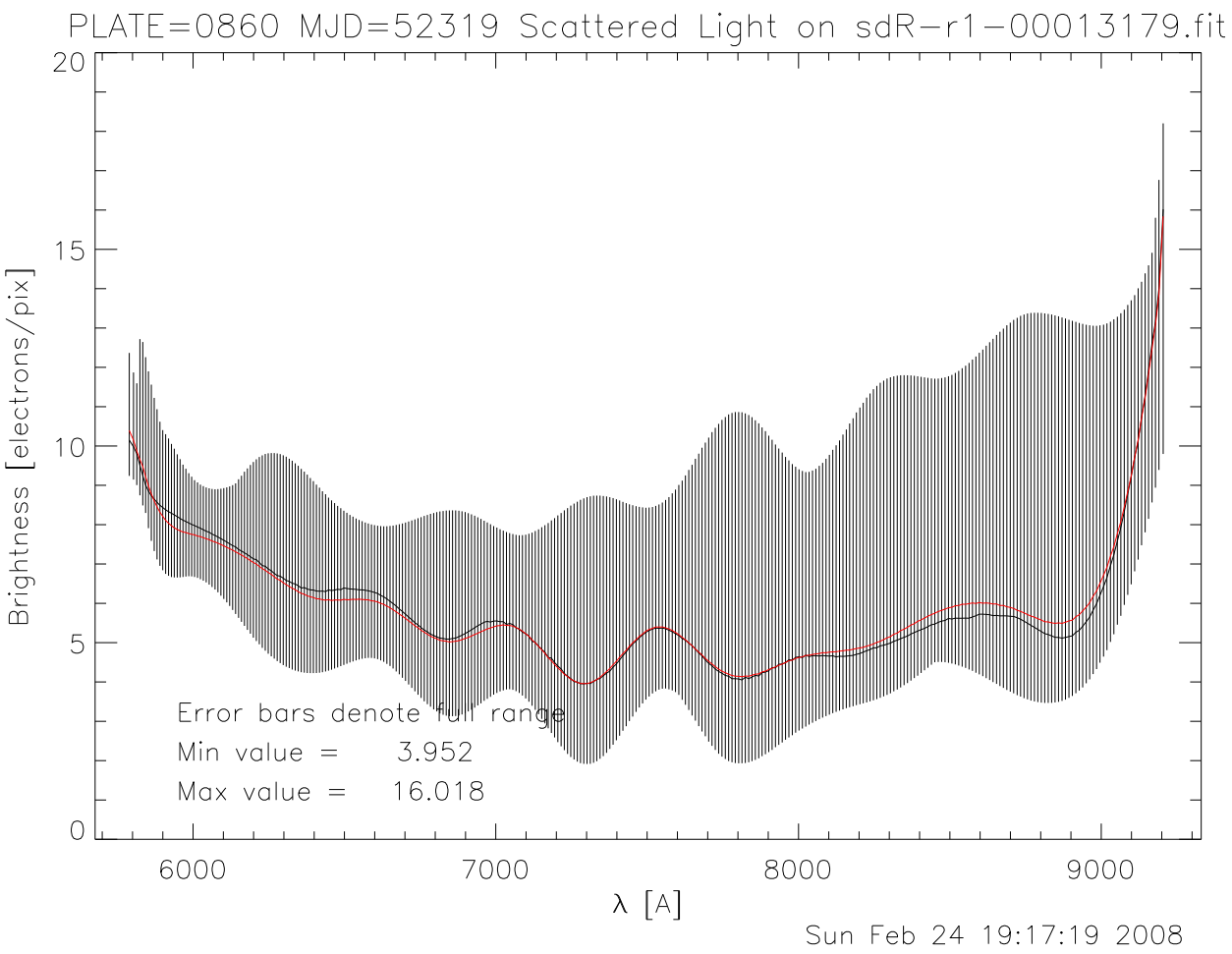

PLATE=0860 MJD=52319 sdR-r1-00013178.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.12 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

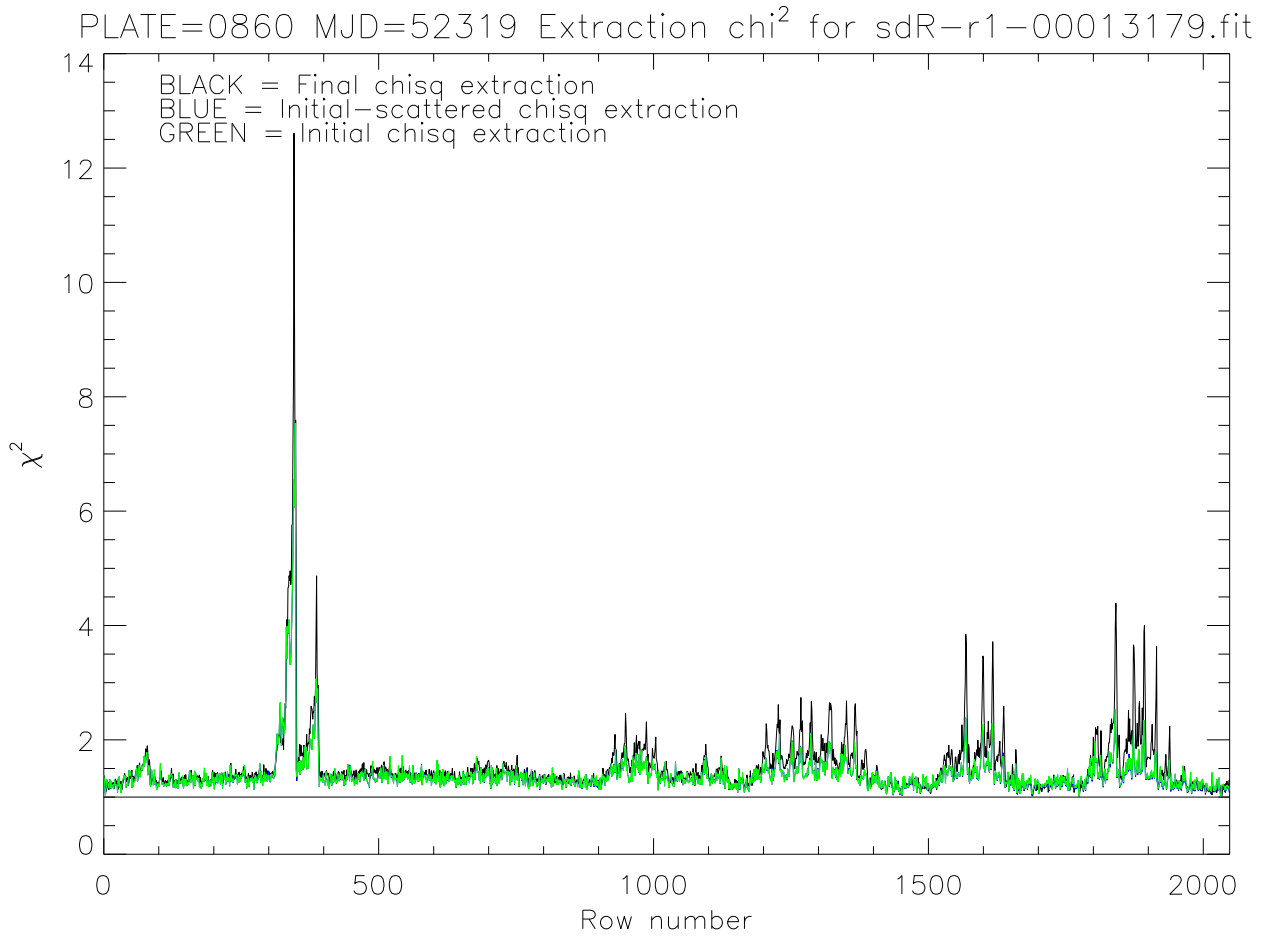

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:13:33 2008

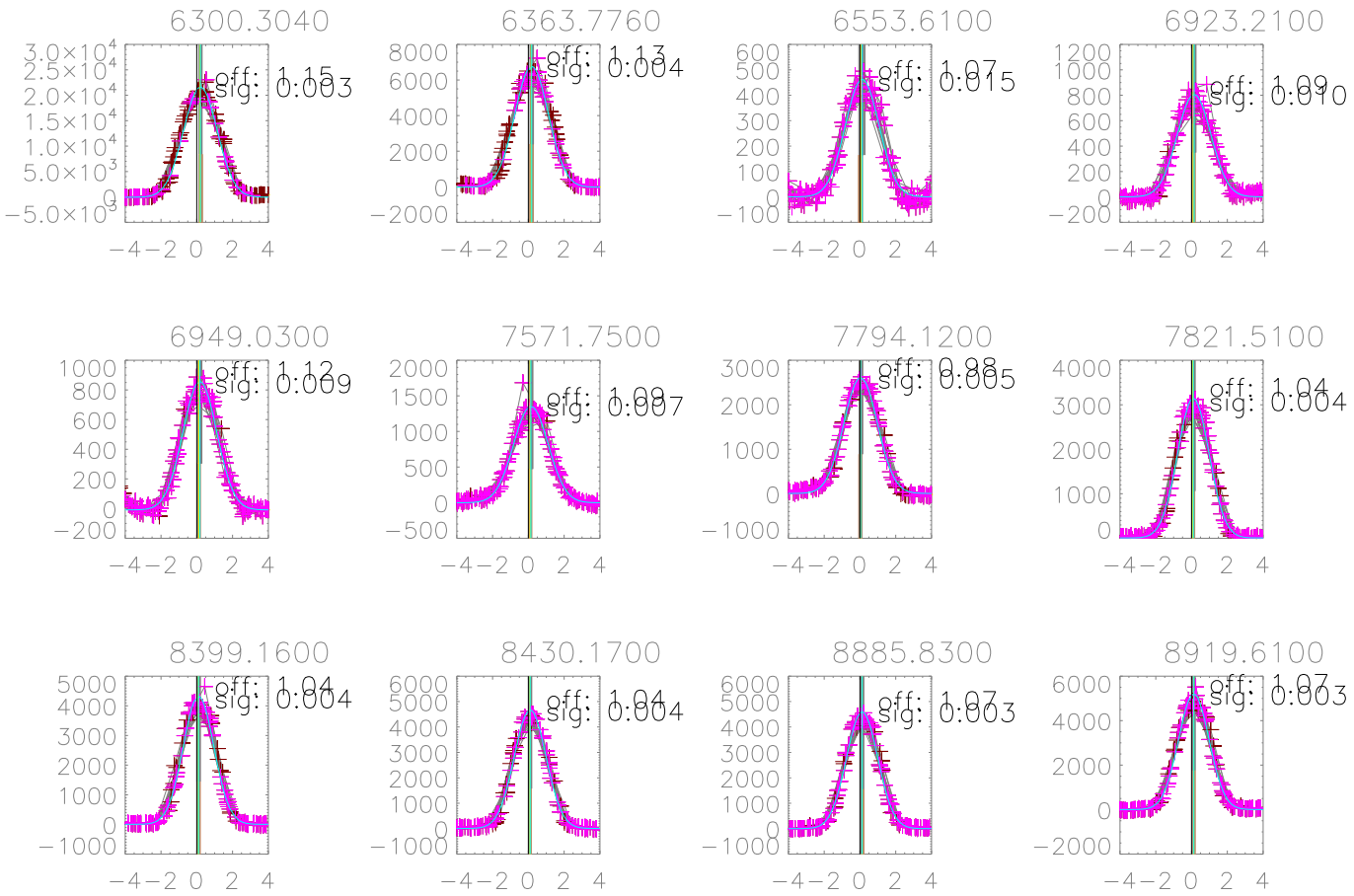

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−r1−00013179.fi
49.1
38.2
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

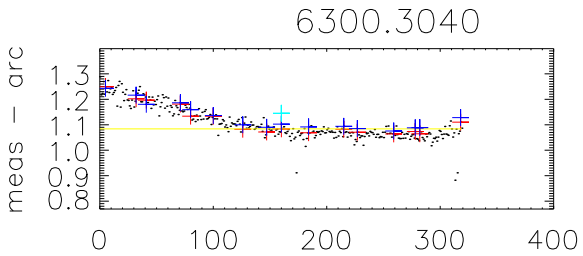

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013179.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.709
Max value = 47.591
Sun Feb 24 19:14:22 2008

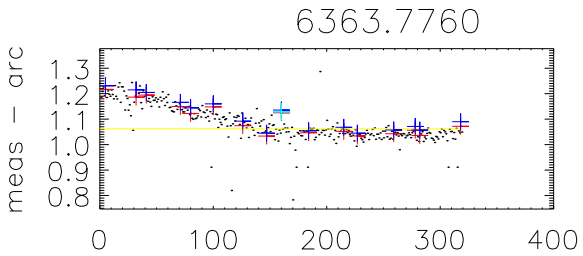

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013179.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1
5.5
0

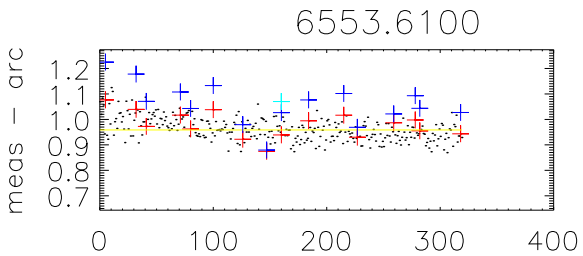

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013179.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 3.952
Max value = 16.018
Sun Feb 24 19:17:19 2008

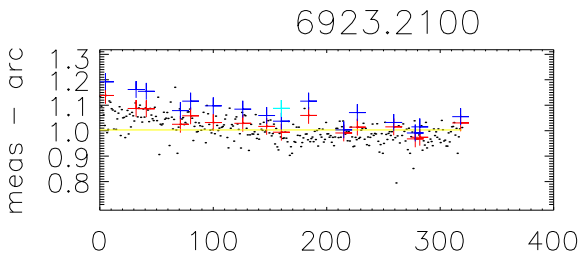

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r1−00013179.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

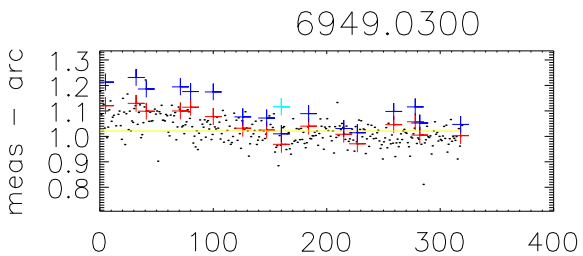

6300.3040
off: 1.15
sig: 0.003
6363.7760
off: 1.13
sig: 0.004
6553.6100
off: 1.07
sig: 0.015
6923.2100
off: 1.09
sig: 0.010
6949.0300
off: 1.12
sig: 0.009
7571.7500
off: 1.08
sig: 0.007
7794.1200
off: 0.88
sig: 0.005
7821.5100
off: 1.04
sig: 0.004
8399.1600
off: 1.04
sig: 0.004
8430.1700
off: 1.04
sig: 0.004
8885.8300
off: 1.07
sig: 0.003
8919.6100
off: 1.07
sig: 0.003

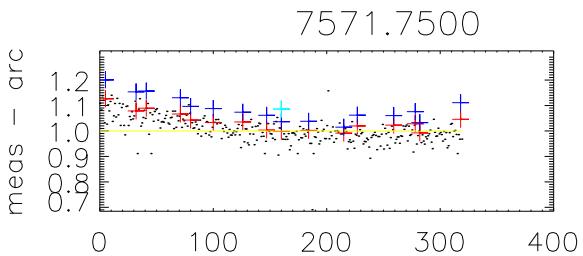

6300.3040
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

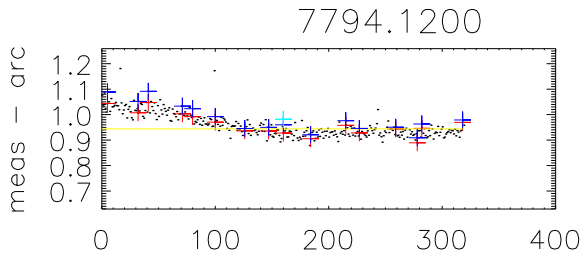

6363.7760
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

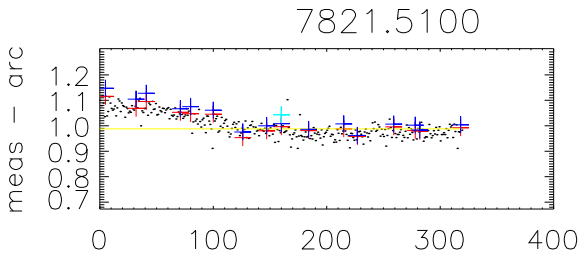

6553.6100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

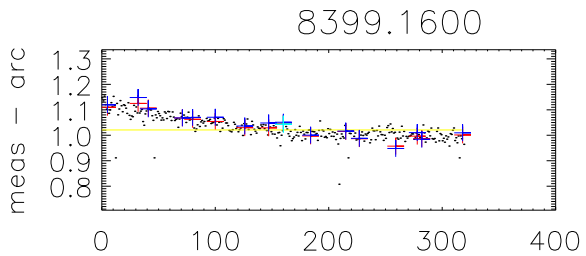

6923.2100
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

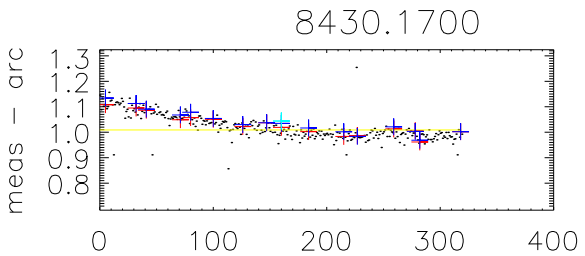

6949.0300
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

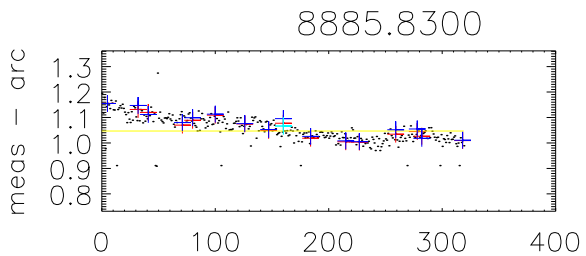

7571.7500
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

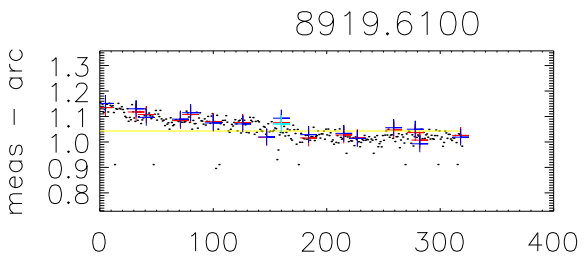

7794.1200
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

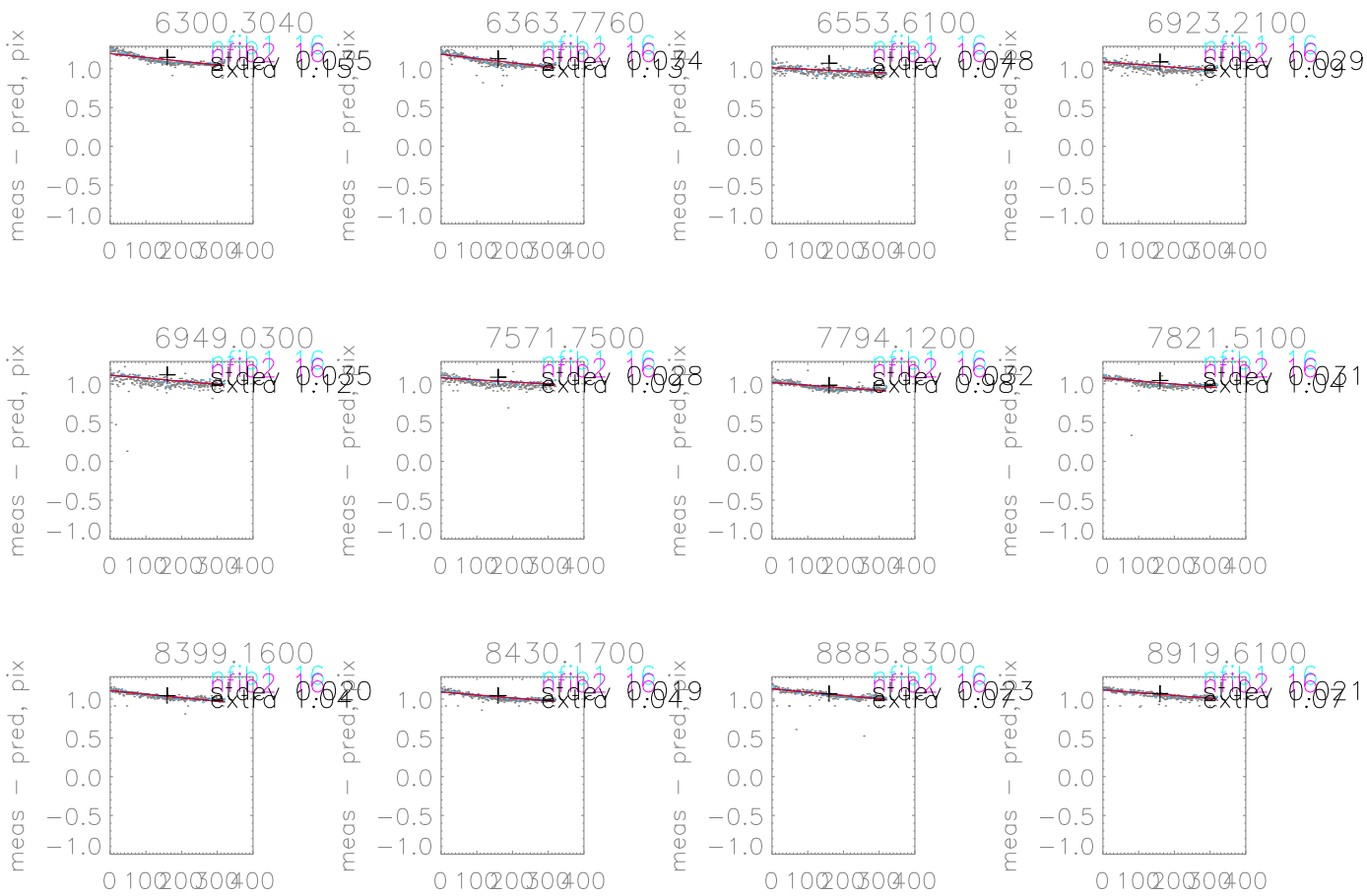

7821.5100
meas − arc
1.2
1.1
1.0
0.9
0.8
0.7
0
100
200
300
400

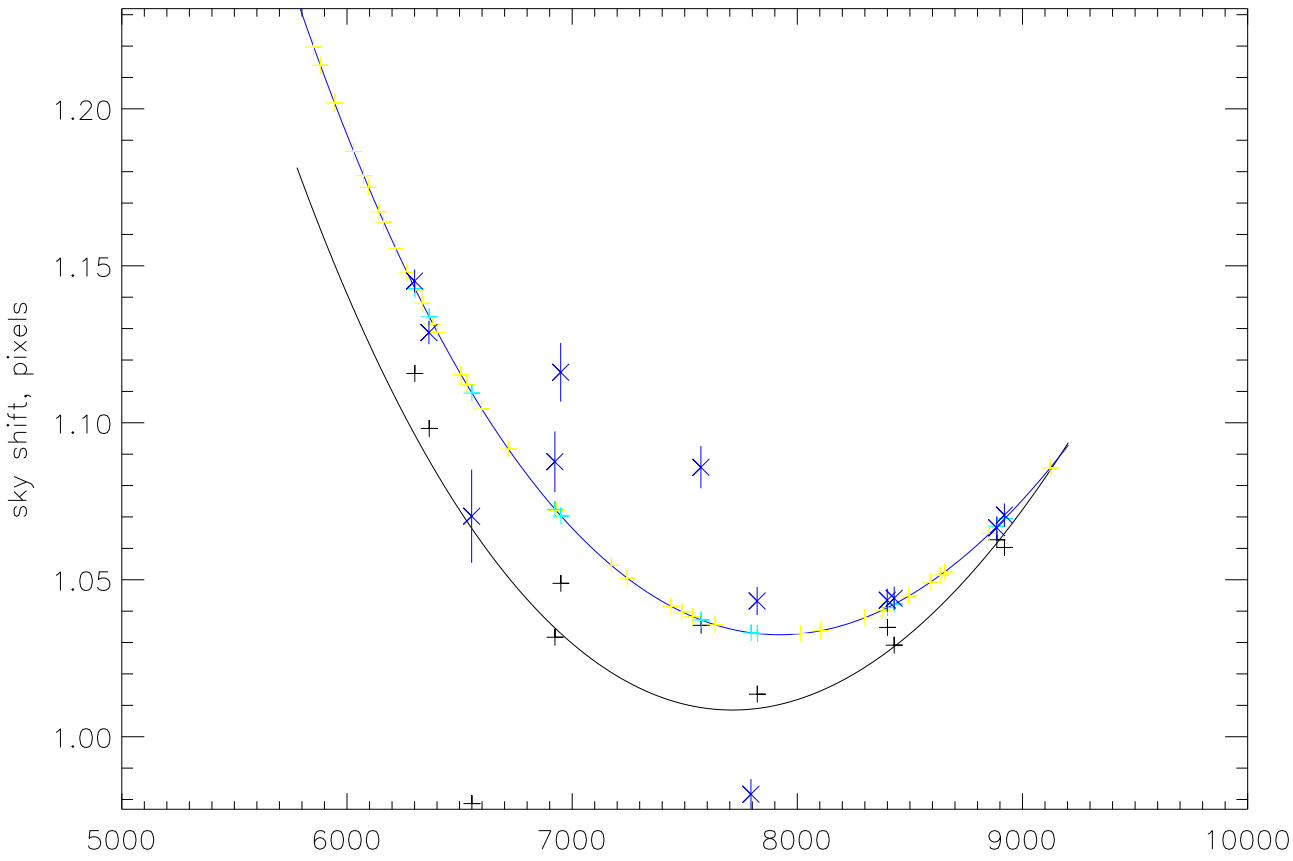

8399.1600
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

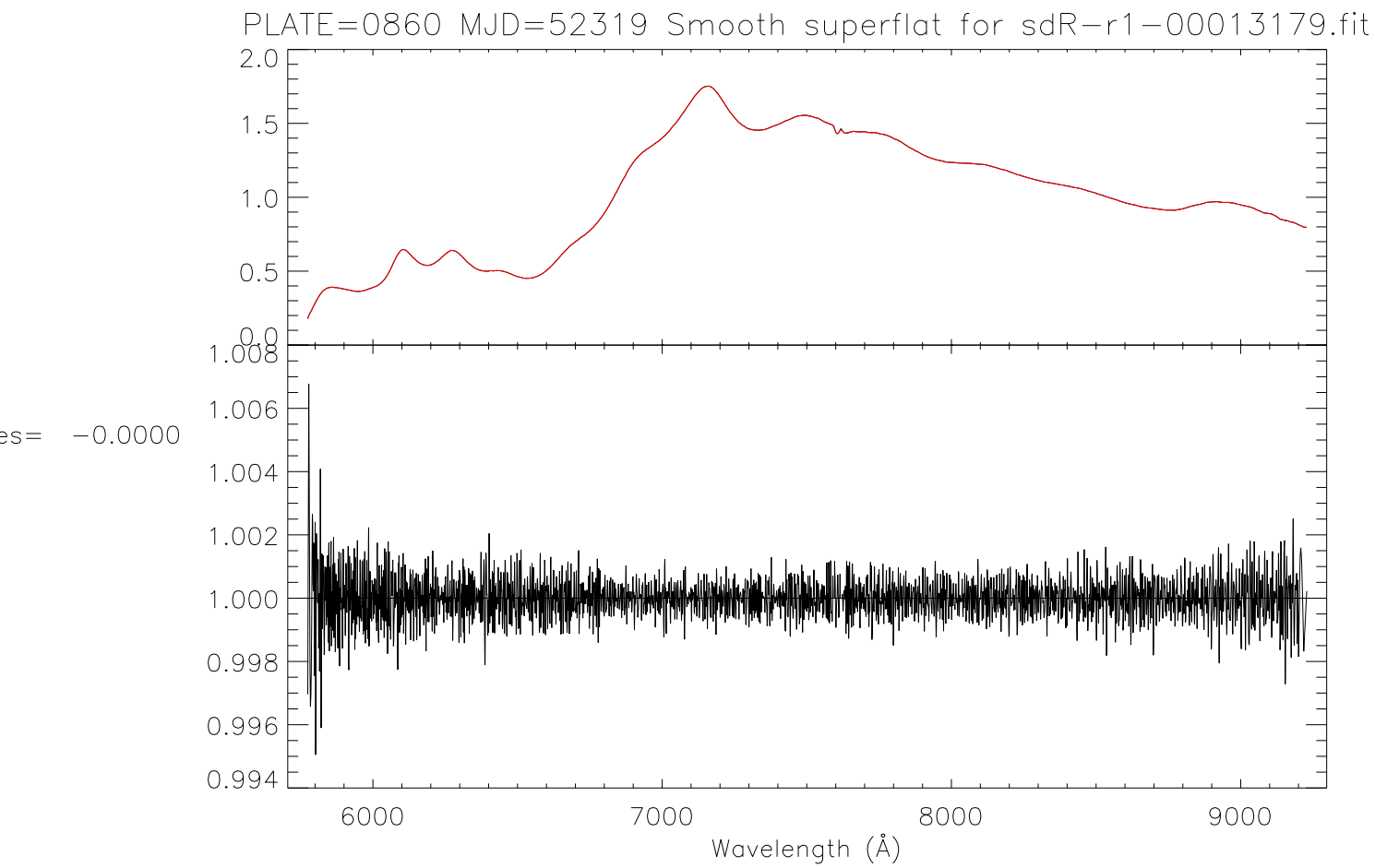

8430.1700
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400


8885.8300
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

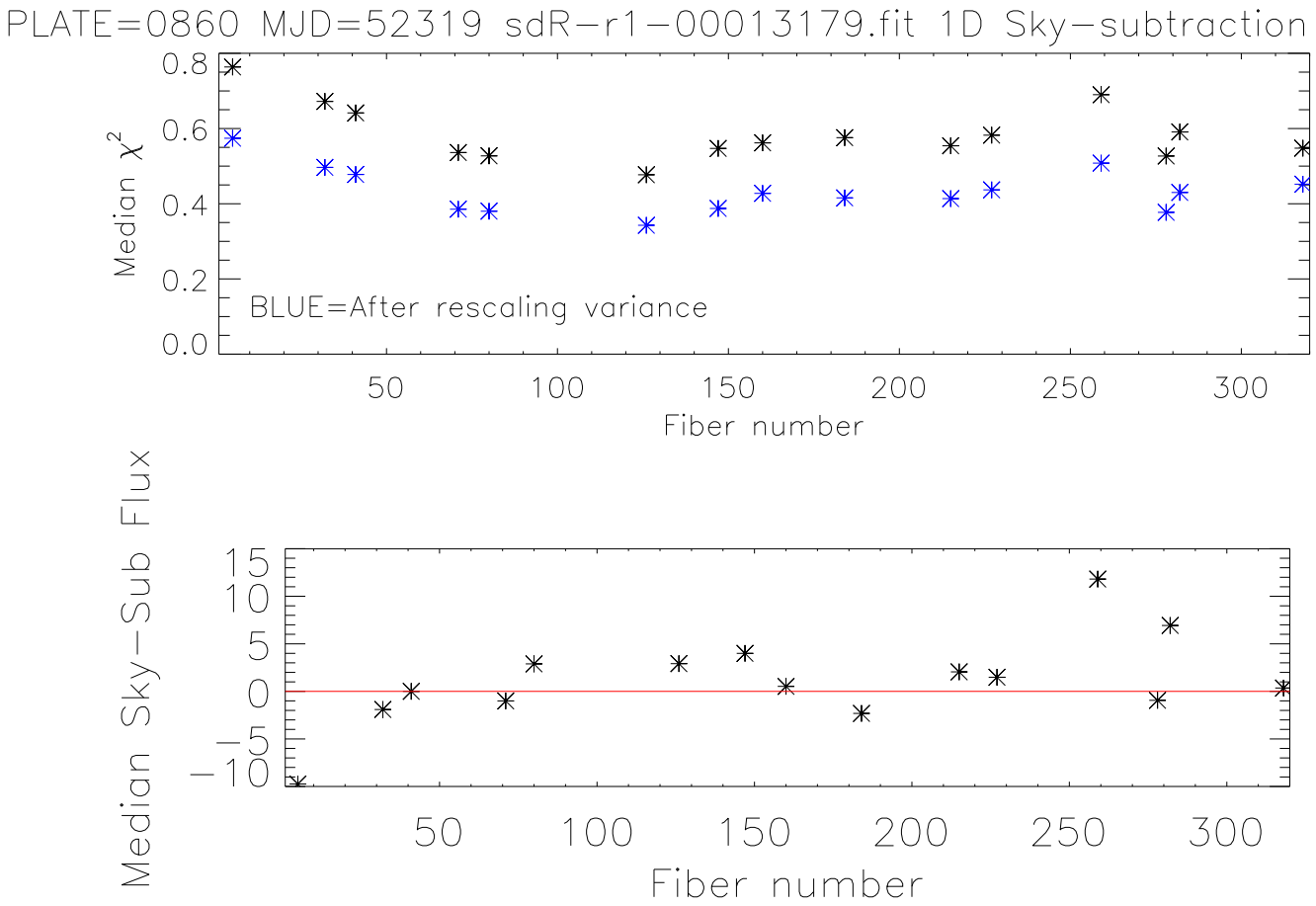

8919.6100
meas − arc
1.3
1.2
1.1
1.0
0.9
0.8
0
100
200
300
400

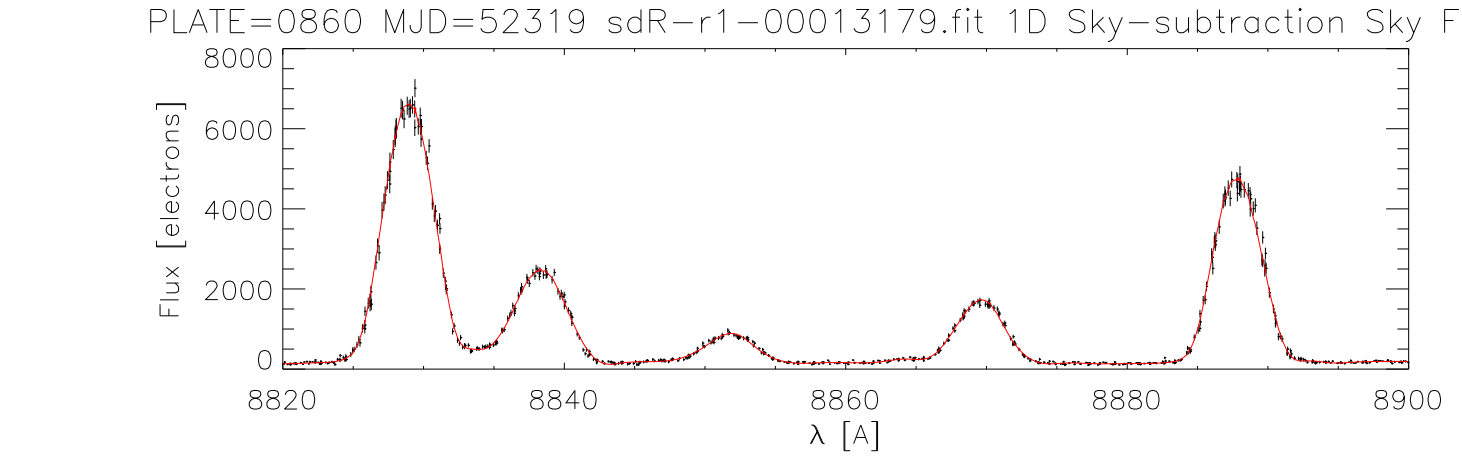

6300.3040
stdev 0.035
extra 1.15
6363.7760
stdev 0.034
extra 1.13
6553.6100
stdev 0.048
extra 1.07
6923.2100
stdev 0.029
extra 1.09
6949.0300
stdev 0.035
extra 1.12
7571.7500
stdev 0.028
extra 1.09
7794.1200
stdev 0.032
extra 0.98
7821.5100
stdev 0.031
extra 1.04
8399.1600
stdev 0.020
extra 1.04
8430.1700
stdev 0.019
extra 1.04
8885.8300
stdev 0.023
extra 1.07
8919.6100
stdev 0.021
extra 1.07
meas − pred, pix
afhp2_16

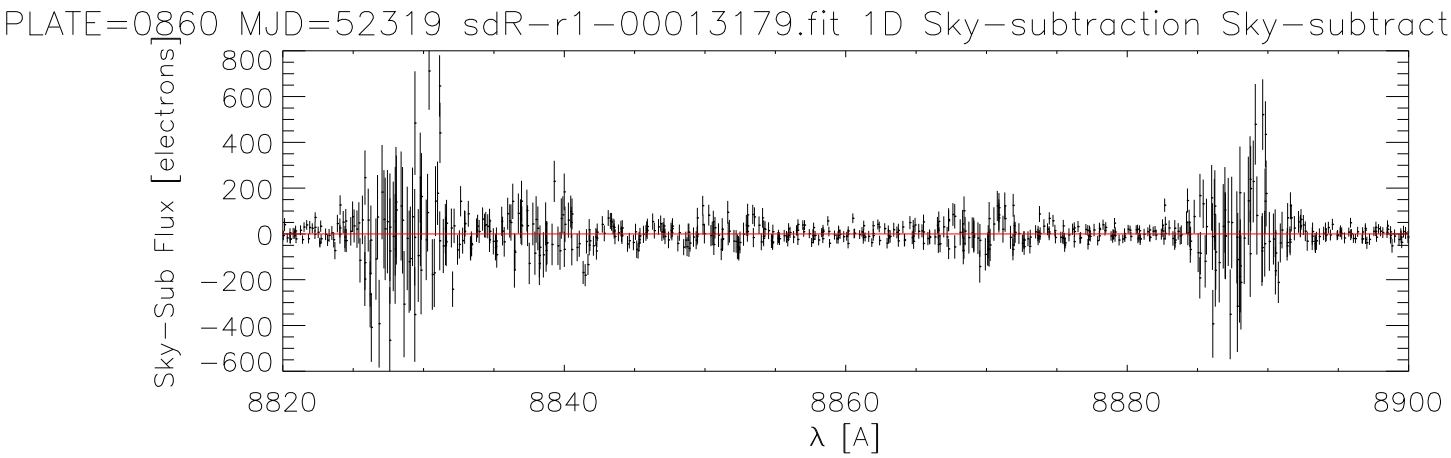

sky shift, pixels
1.20
1.15
1.10
1.05
1.00
5000
6000
7000
8000
9000
10000

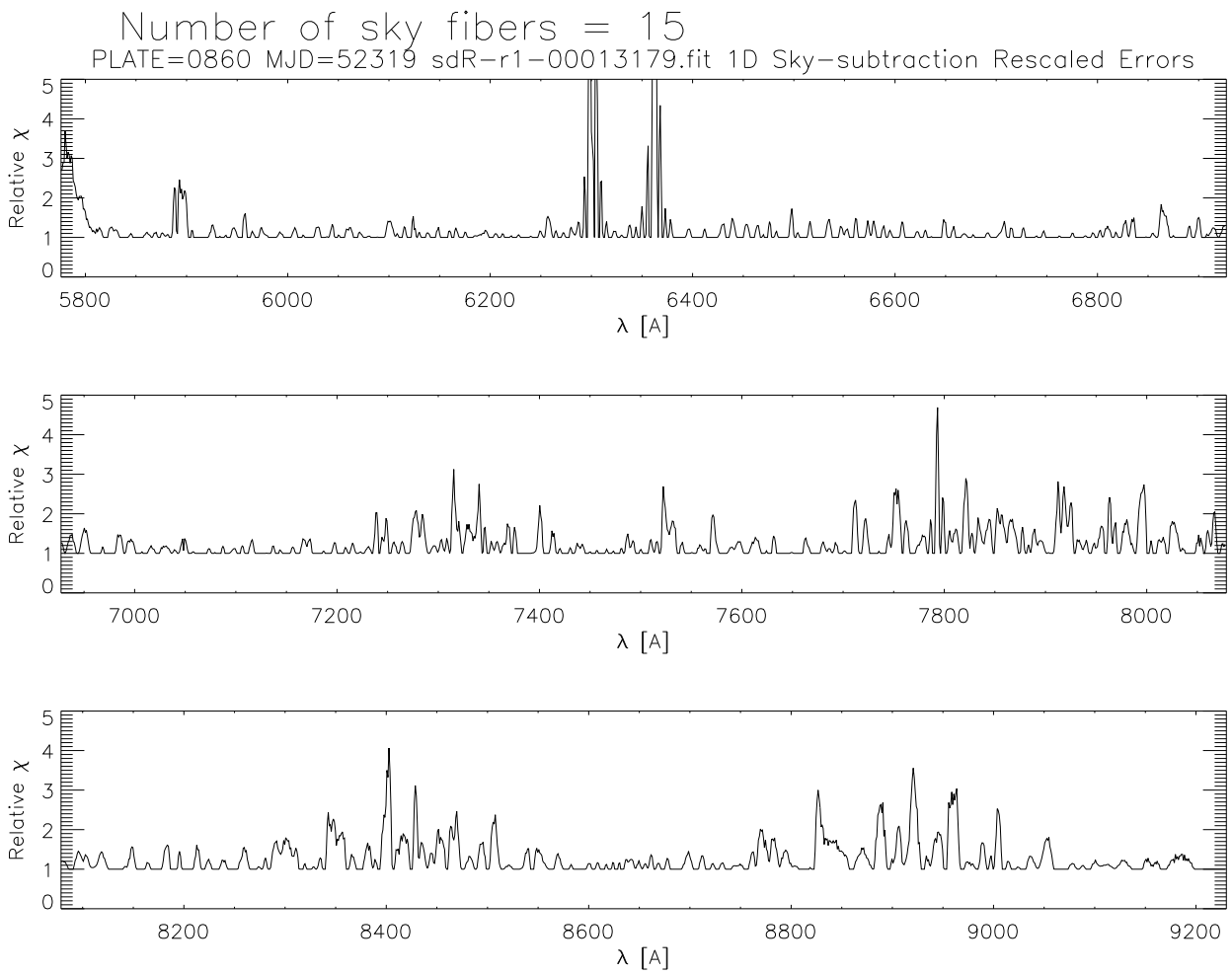

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013179.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

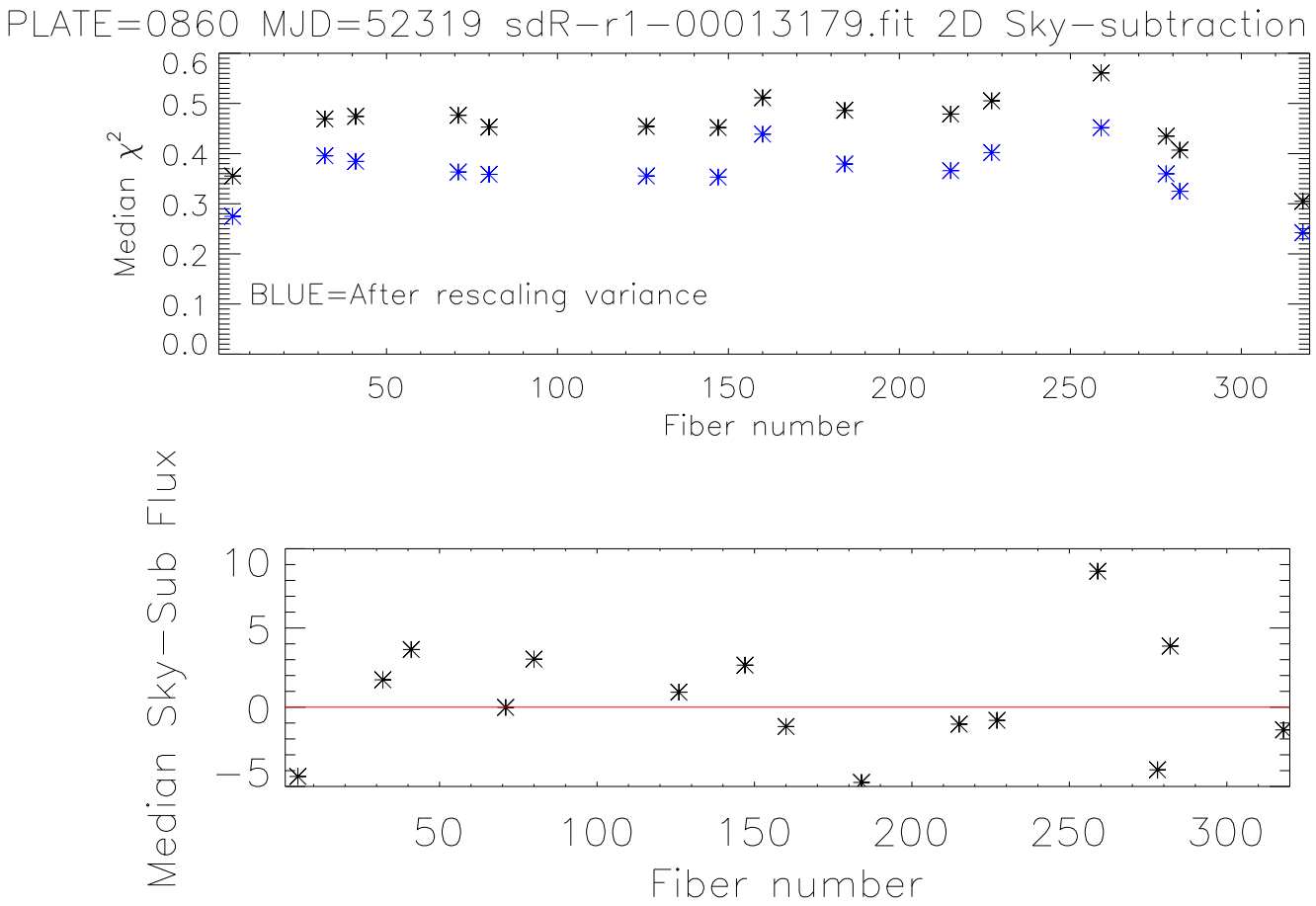
es= −0.0000

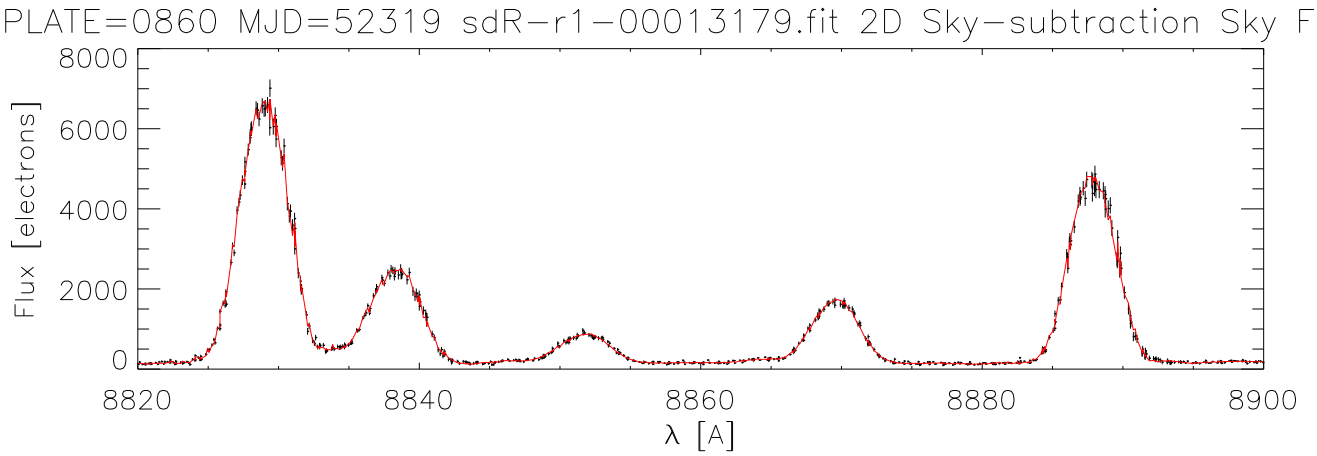

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

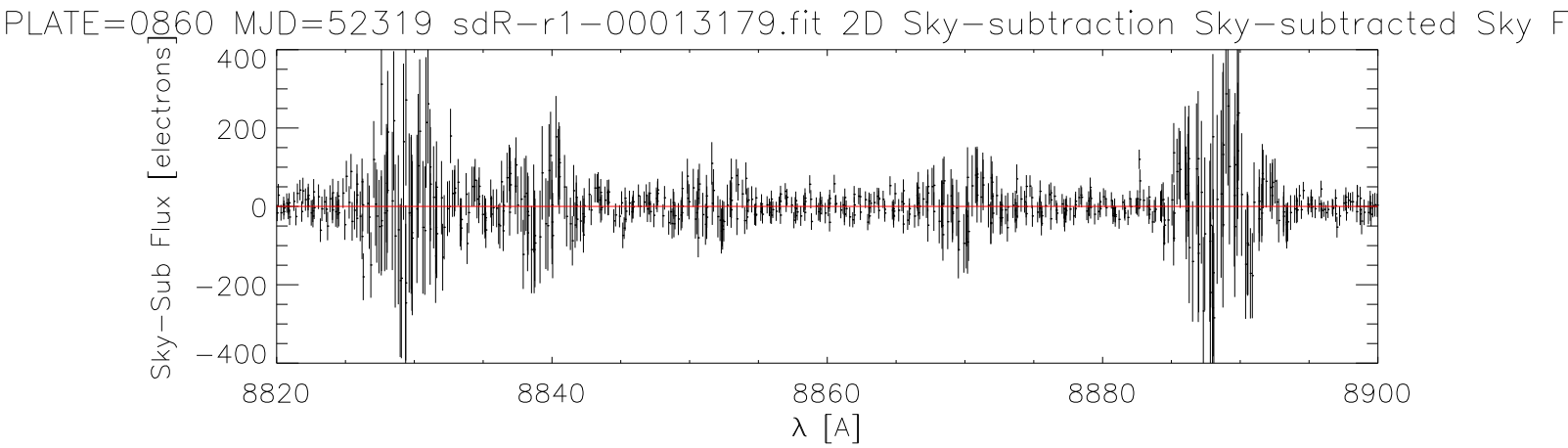

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

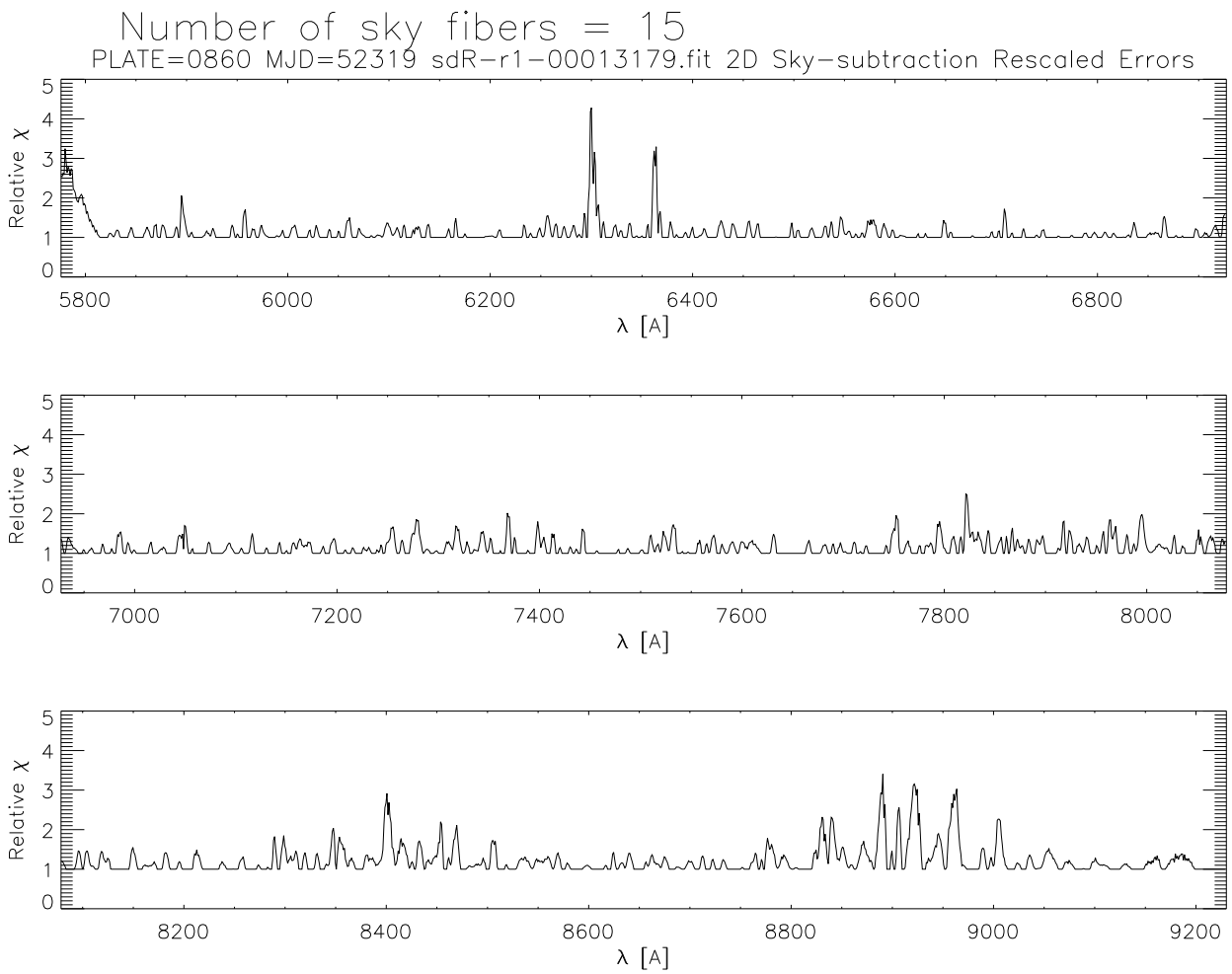

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

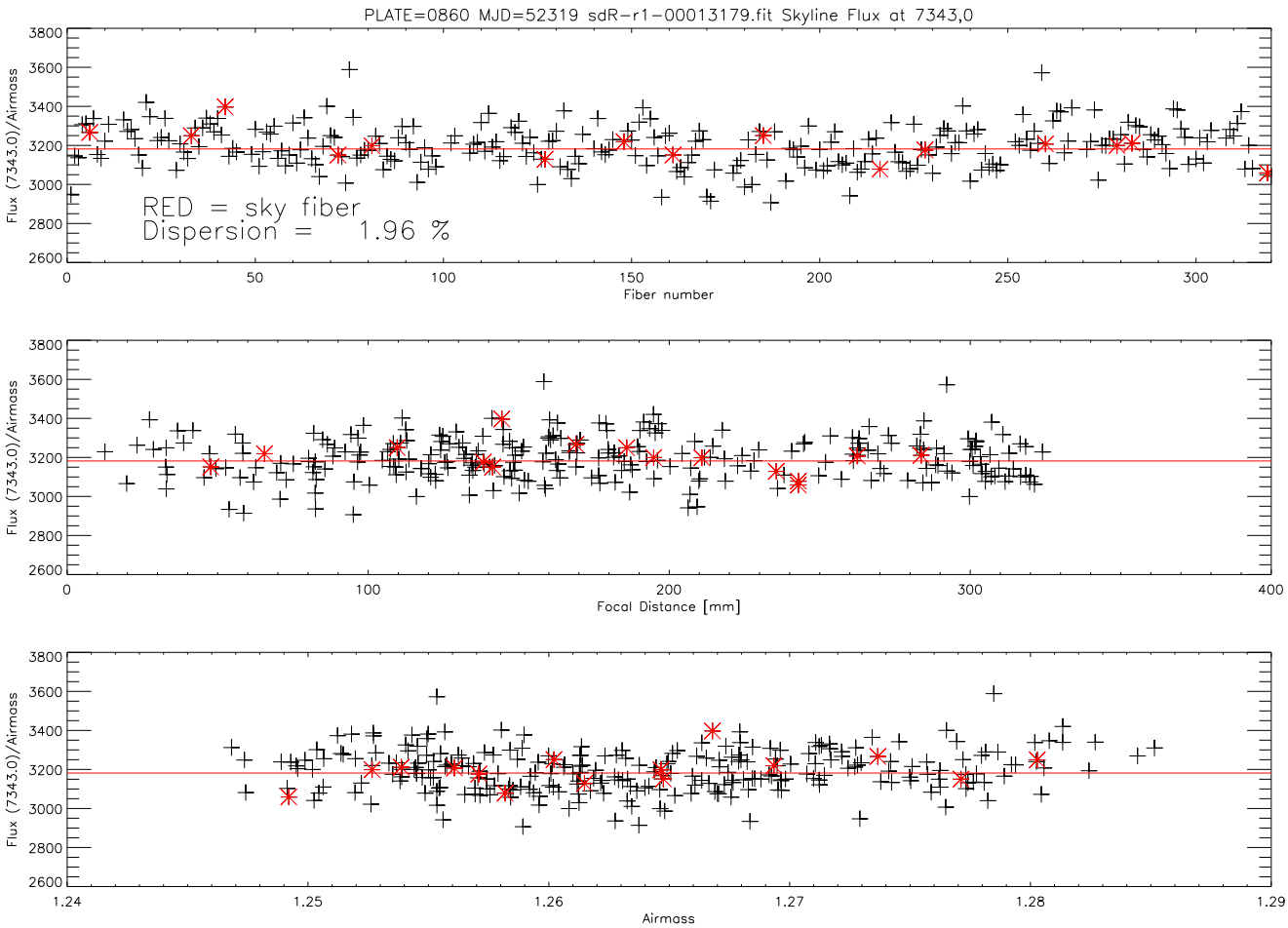

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013179.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

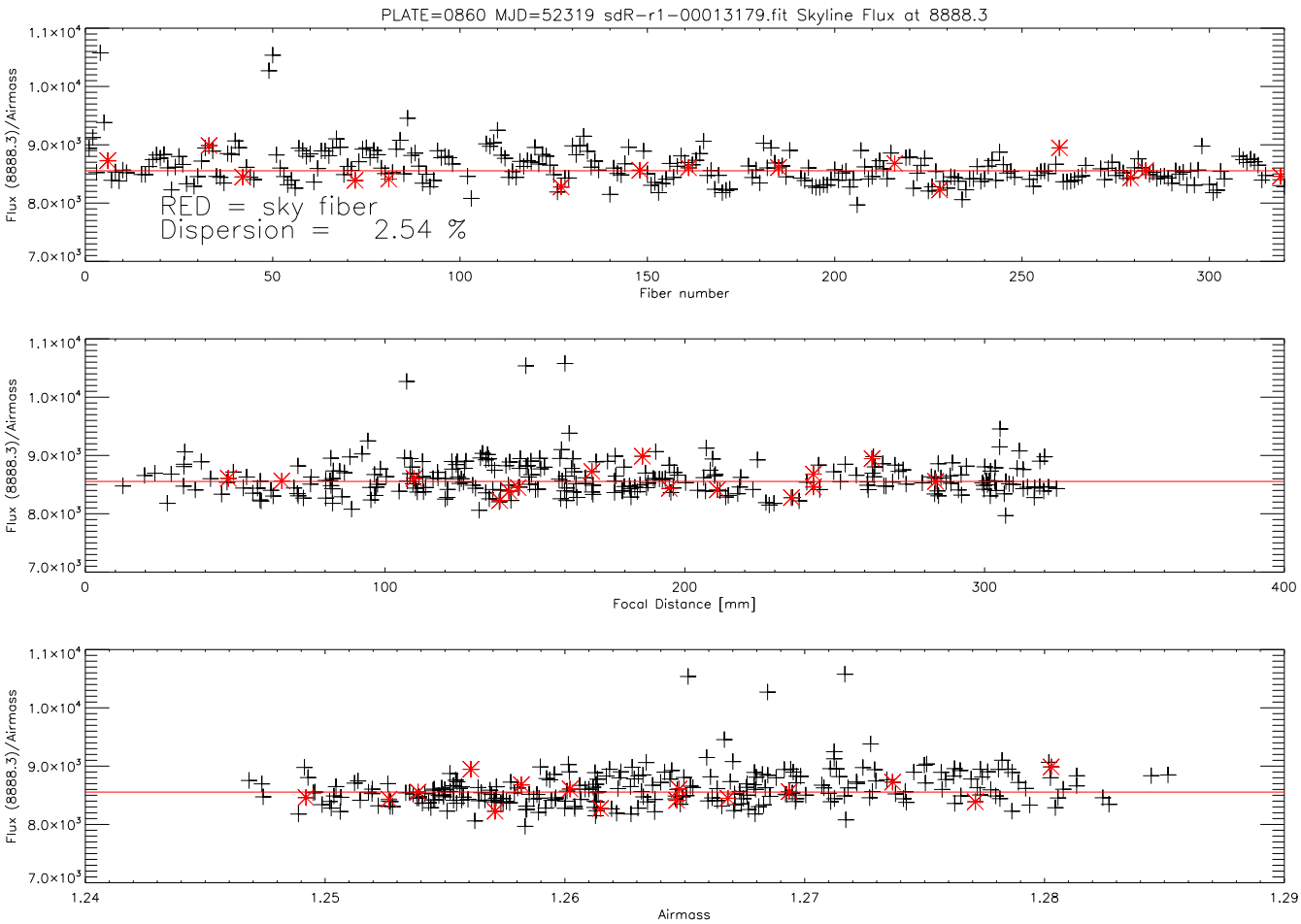

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

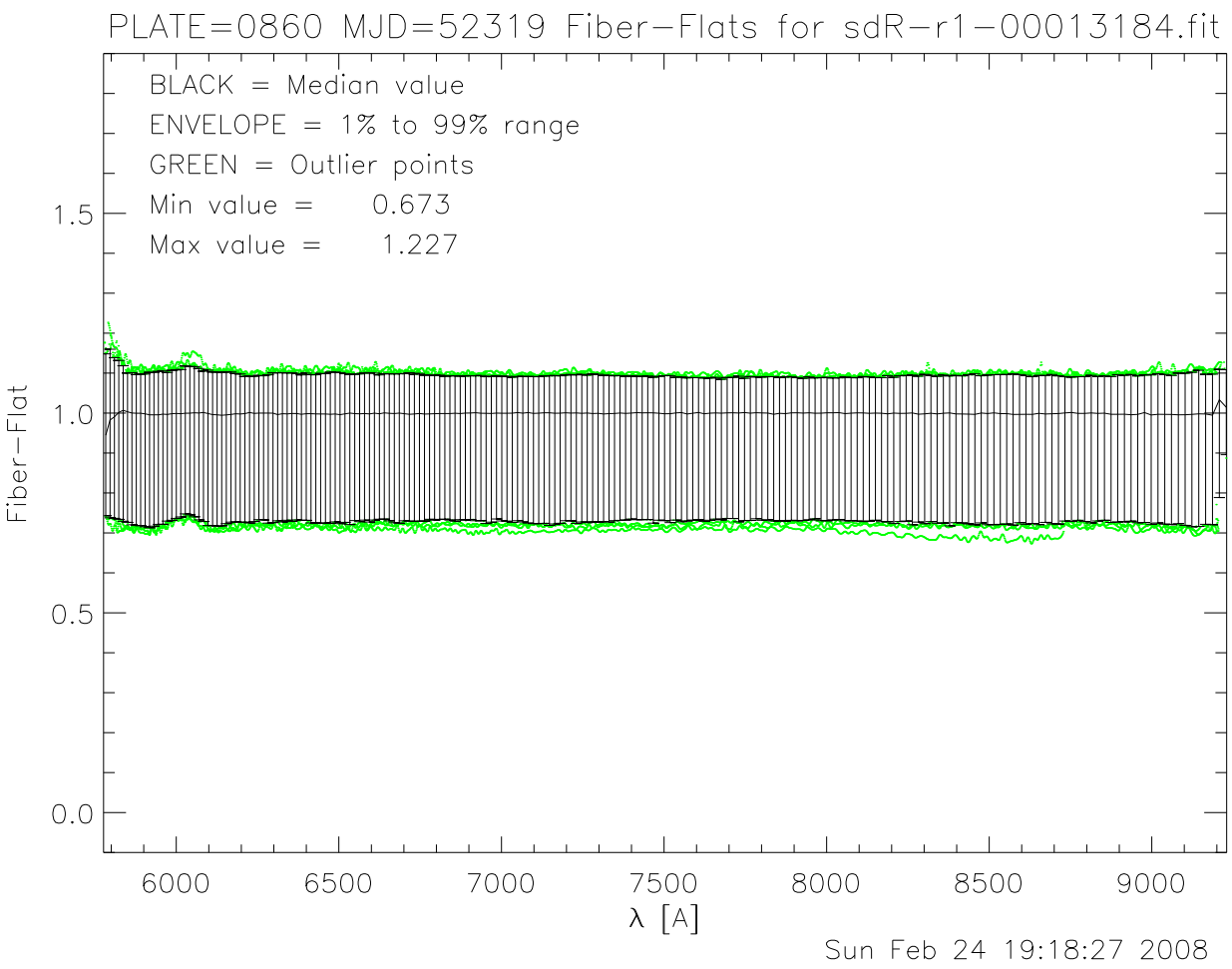

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

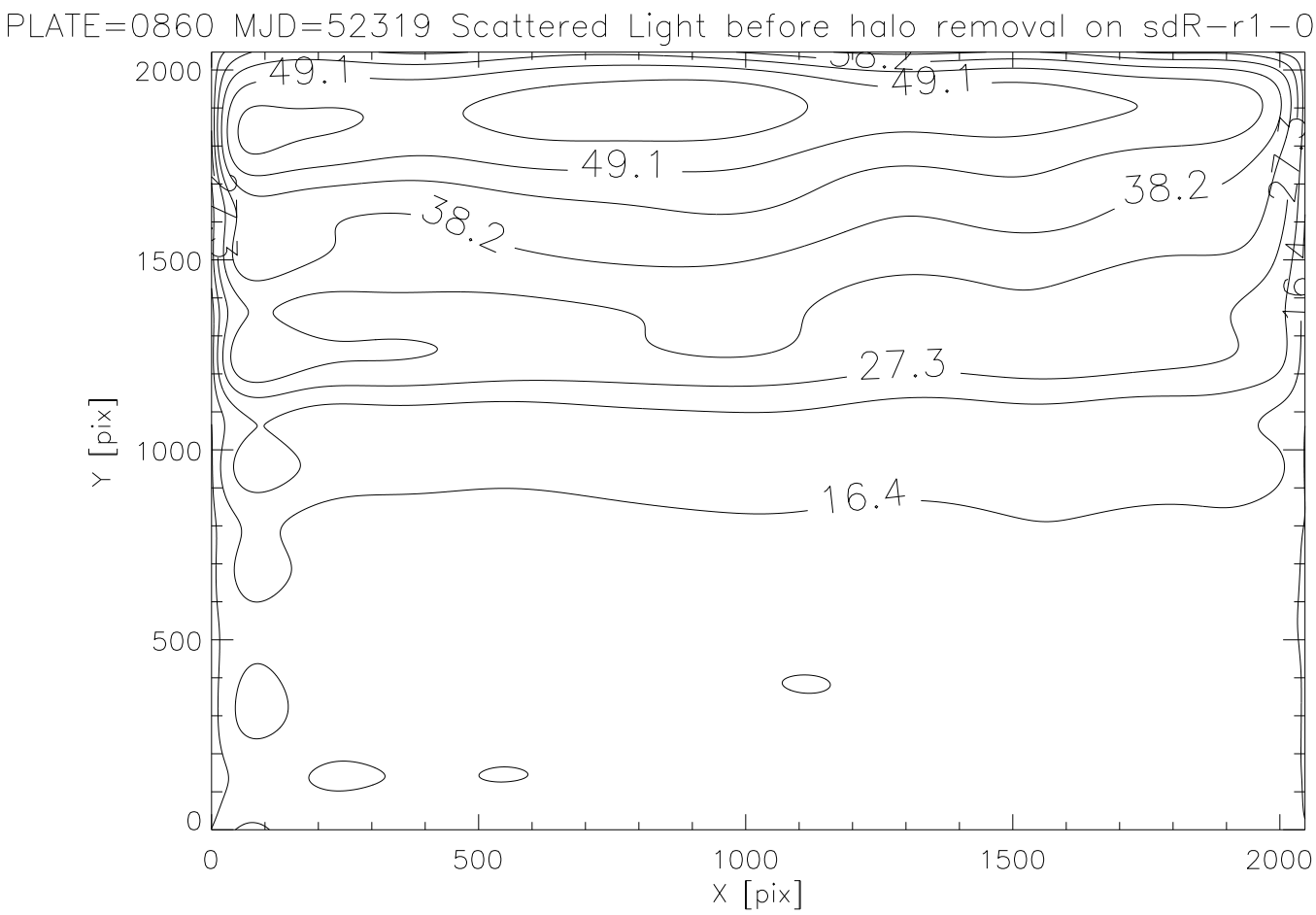

PLATE=0860 MJD=52319 sdR-r1-00013179.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

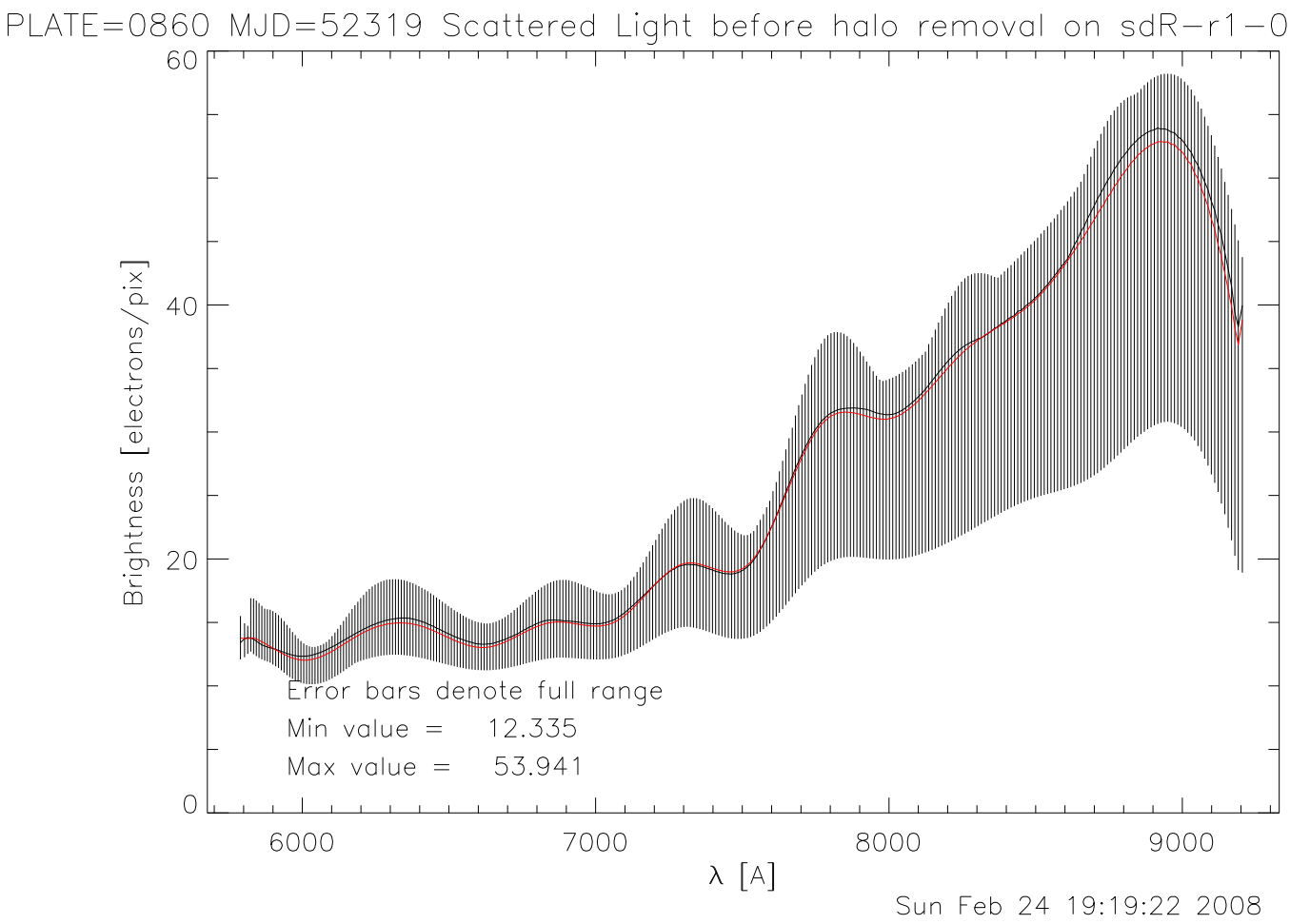

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013179.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

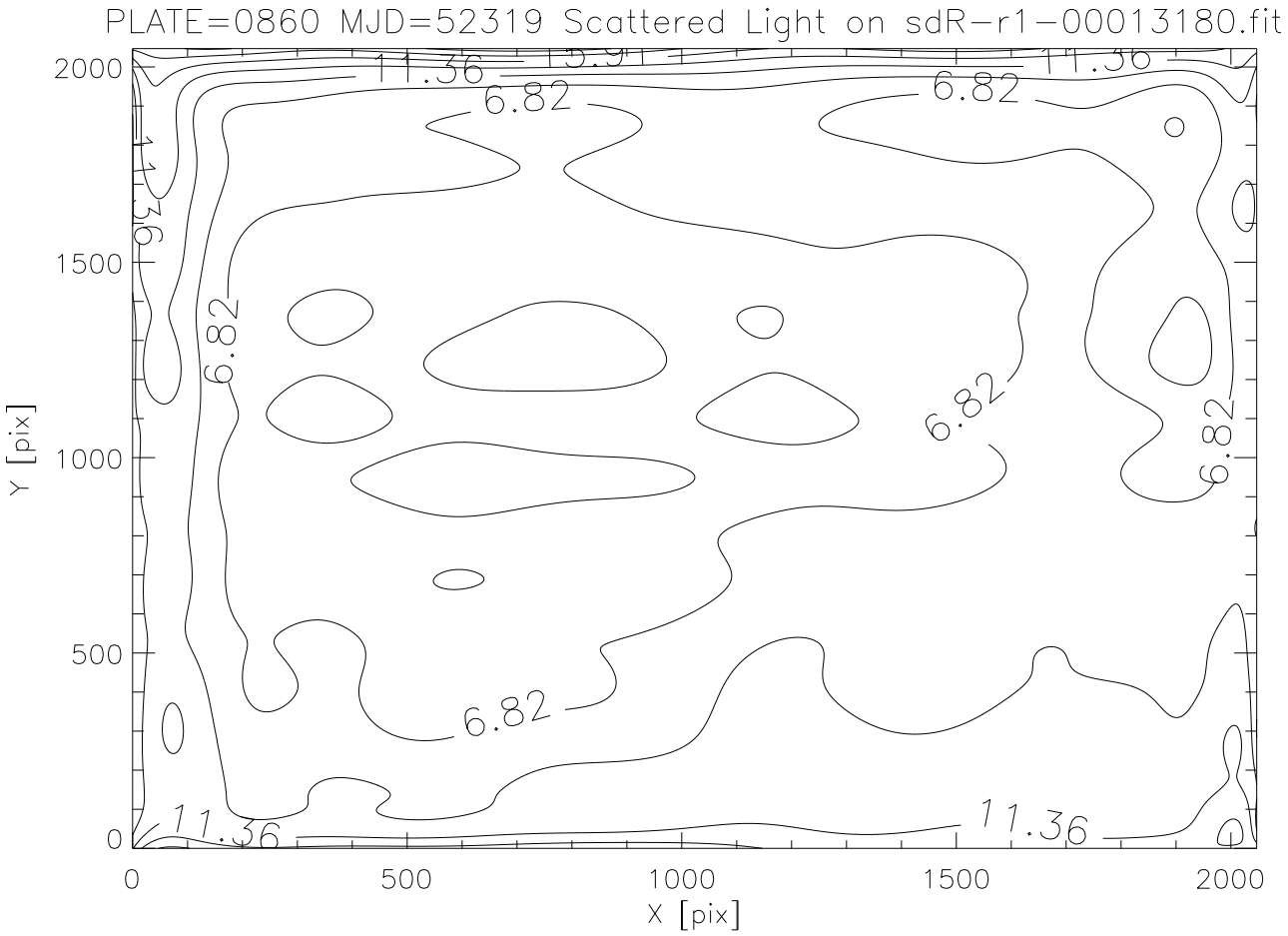

PLATE=0860 MJD=52319 sdR-r1-00013179.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

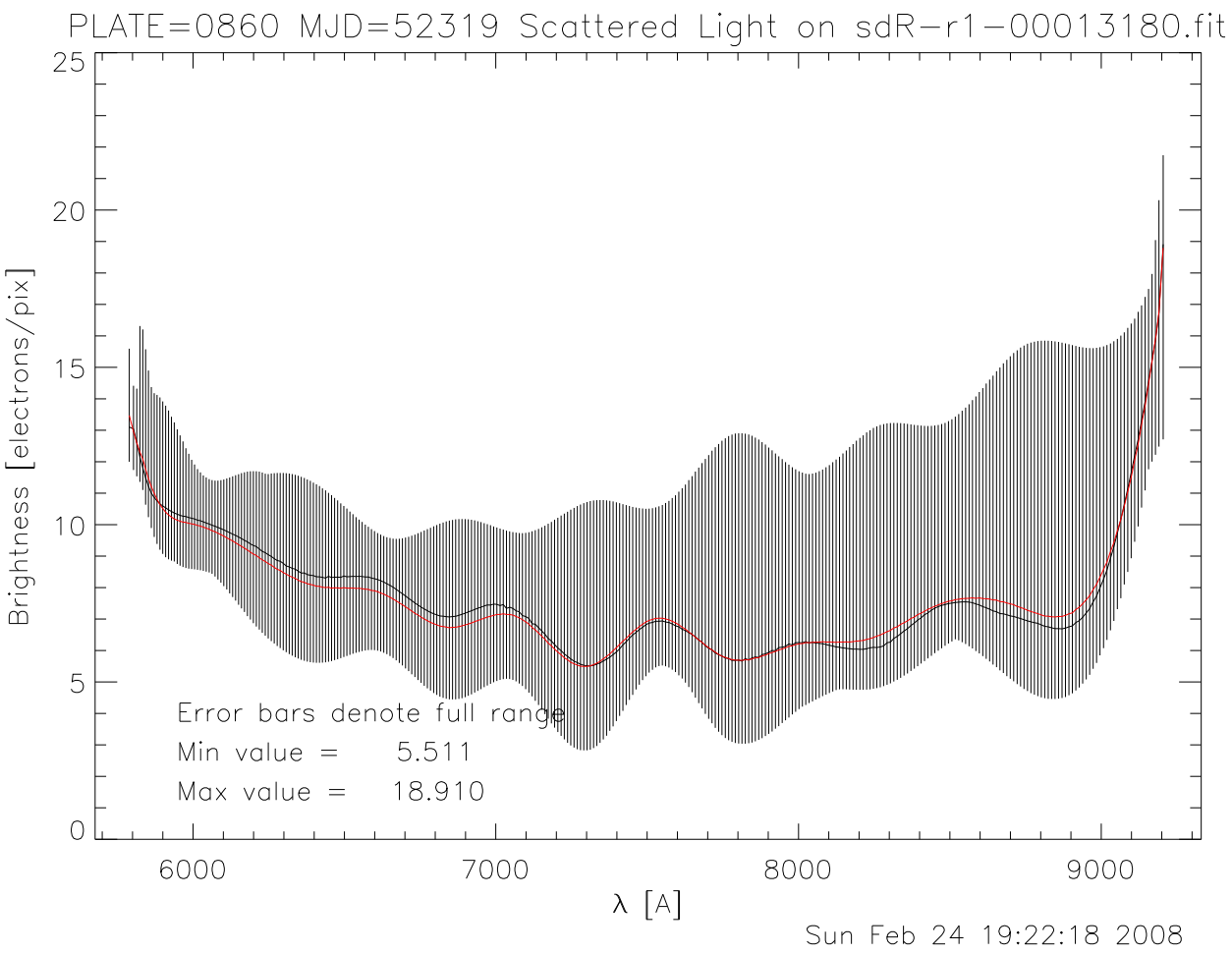

PLATE=0860 MJD=52319 sdR-r1-00013179.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.54 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

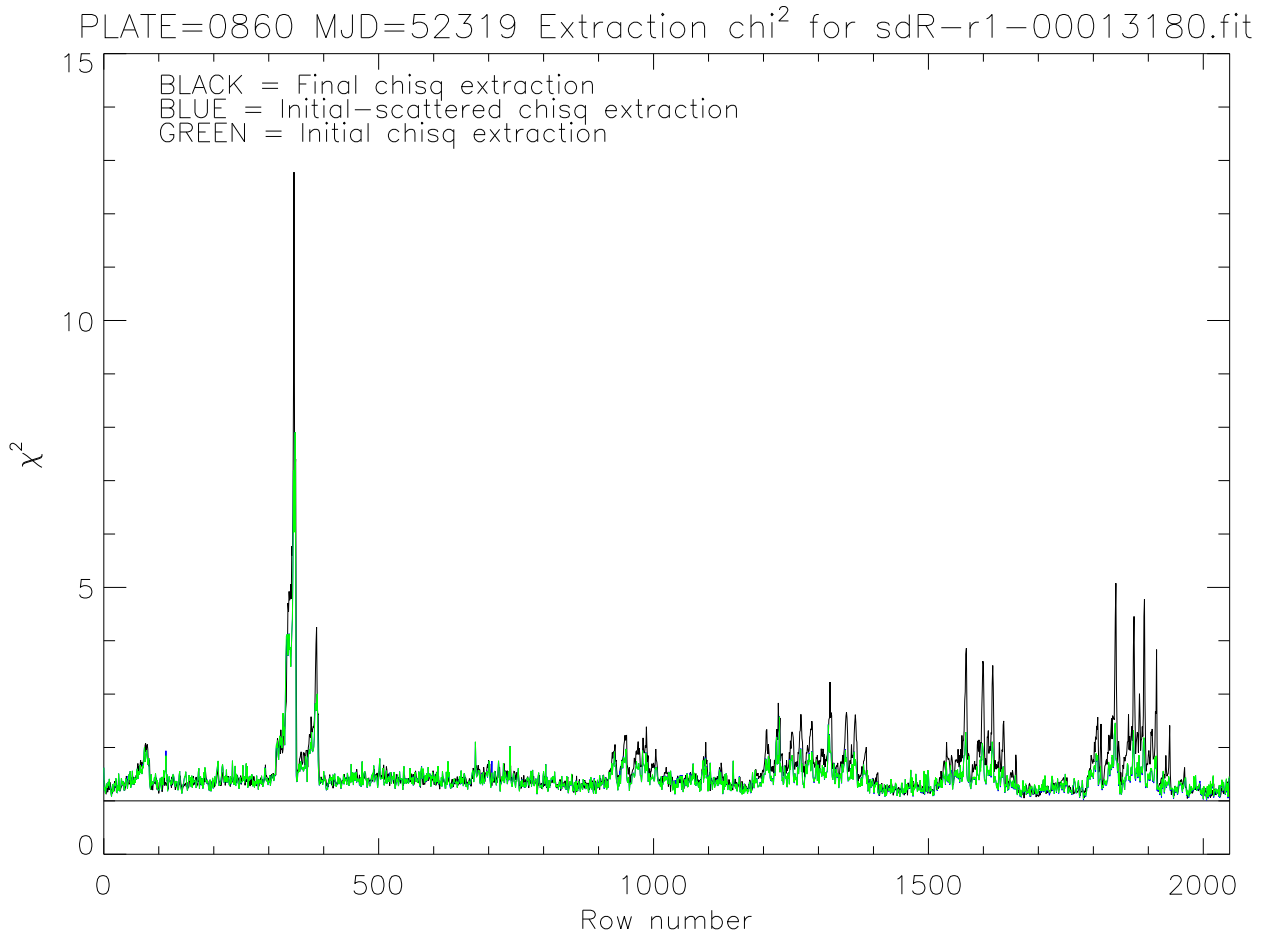

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:18:27 2008

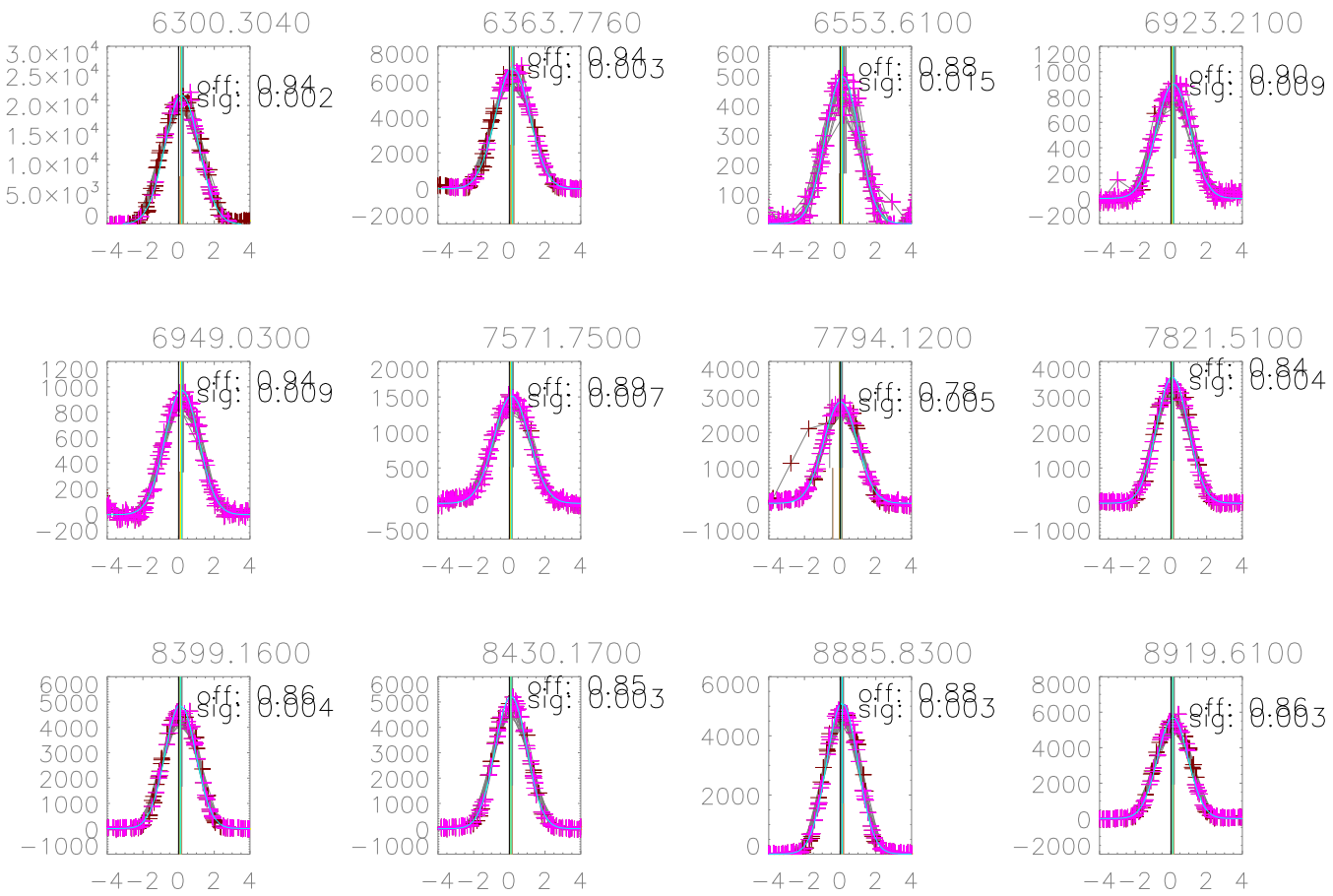

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013180.fi
49.1
49.1
49.1
38.2
38.2
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

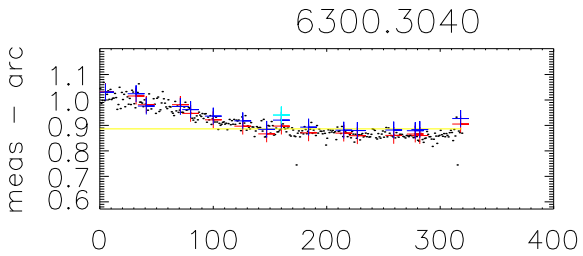

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013180.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.335
Max value = 53.941
Sun Feb 24 19:19:22 2008

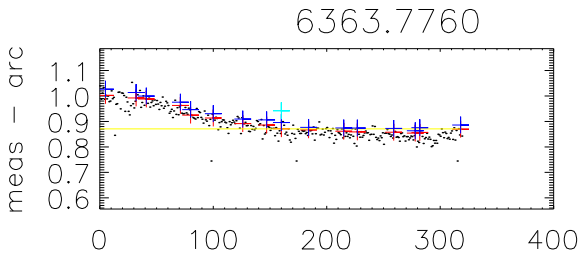

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013180.fit
11.36
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

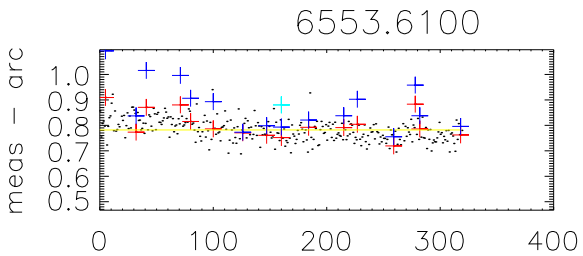

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013180.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.511
Max value = 18.910
Sun Feb 24 19:22:18 2008

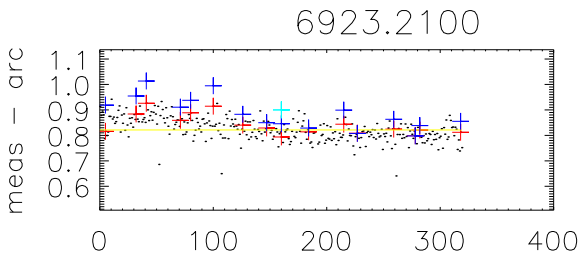

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r1−00013180.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

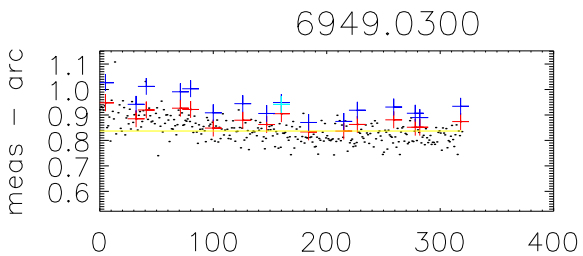

6300.3040
off: 0.94
sig: 0.002
6363.7760
off: 0.94
sig: 0.003
6553.6100
off: 0.88
sig: 0.015
6923.2100
off: 0.90
sig: 0.009
6949.0300
off: 0.94
sig: 0.009
7571.7500
off: 0.89
sig: 0.007
7794.1200
off: 0.78
sig: 0.005
7821.5100
off: 0.84
sig: 0.004
8399.1600
off: 0.86
sig: 0.004
8430.1700
off: 0.85
sig: 0.003
8885.8300
off: 0.88
sig: 0.003
8919.6100
off: 0.86
sig: 0.003

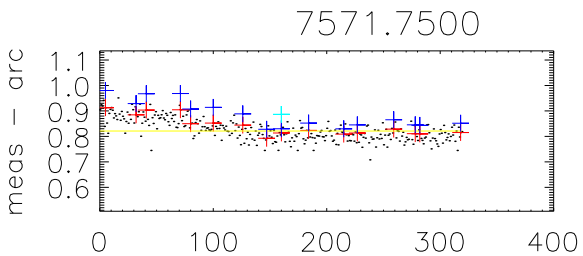

6300.3040
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

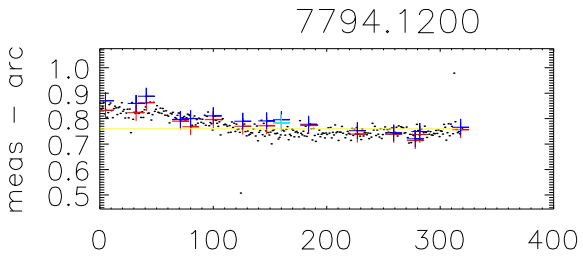

6363.7760
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

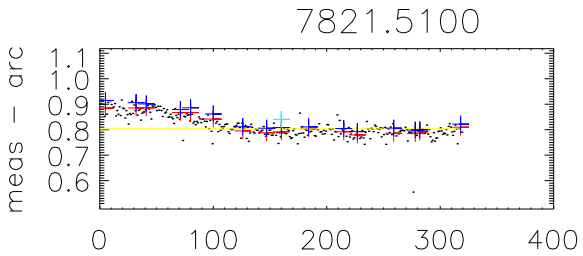

6553.6100
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

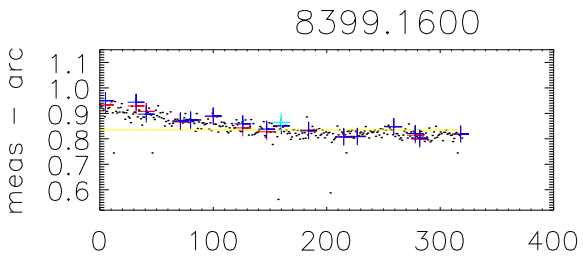

6923.2100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

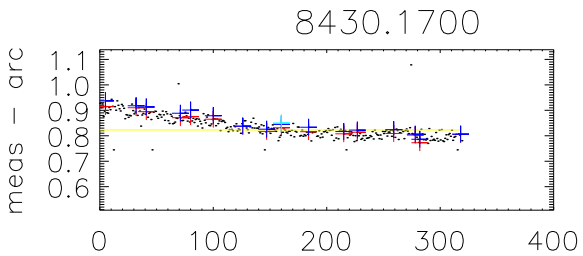

6949.0300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

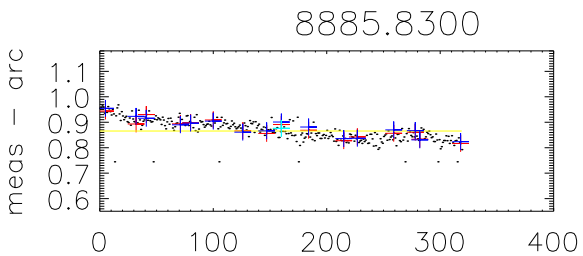

7571.7500
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

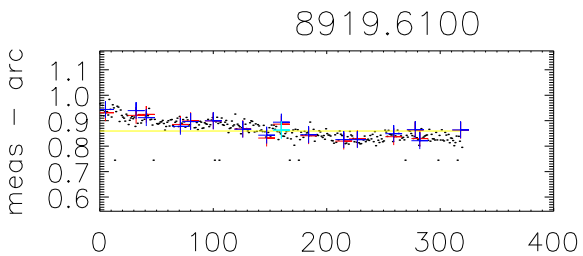

7794.1200
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

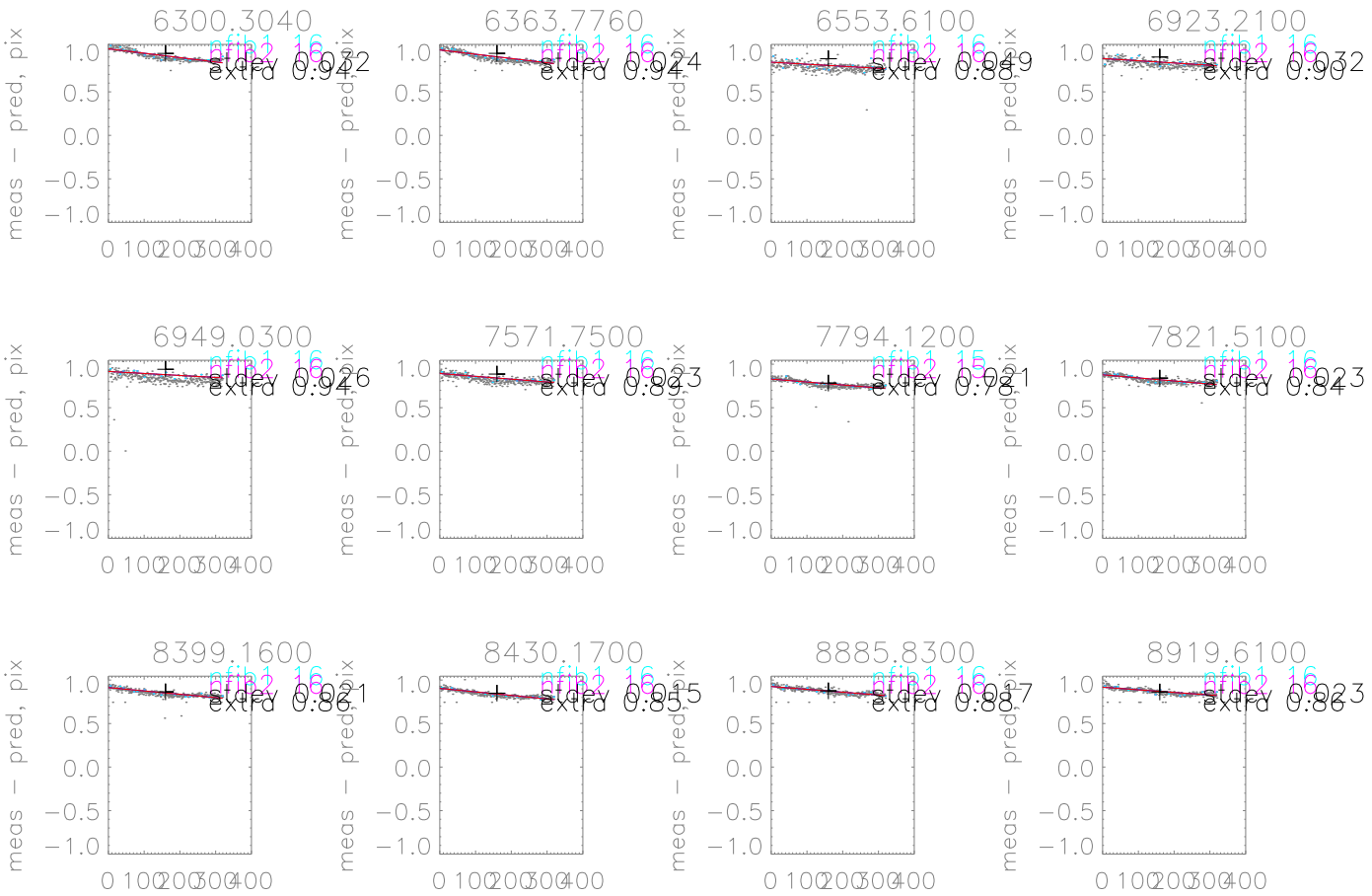

7821.5100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

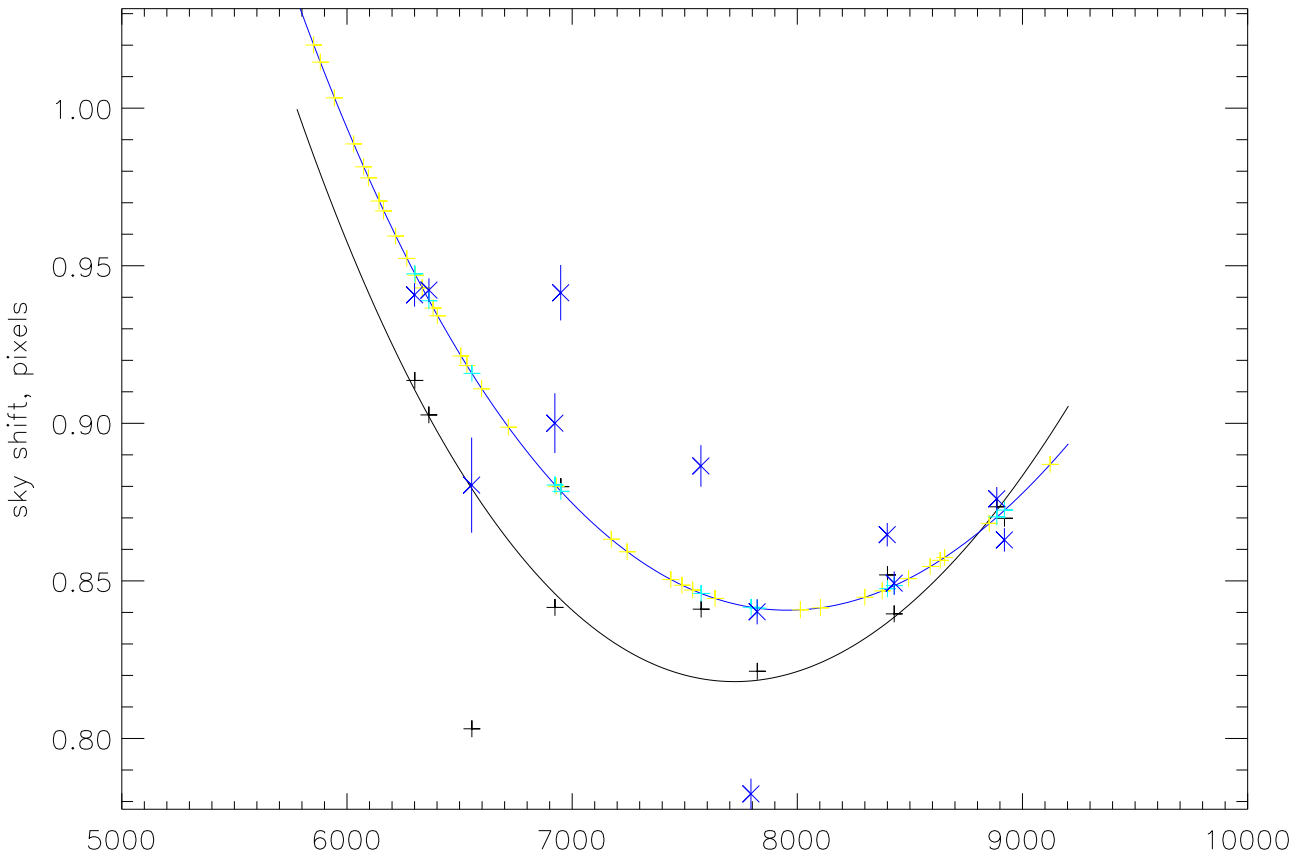

8399.1600
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

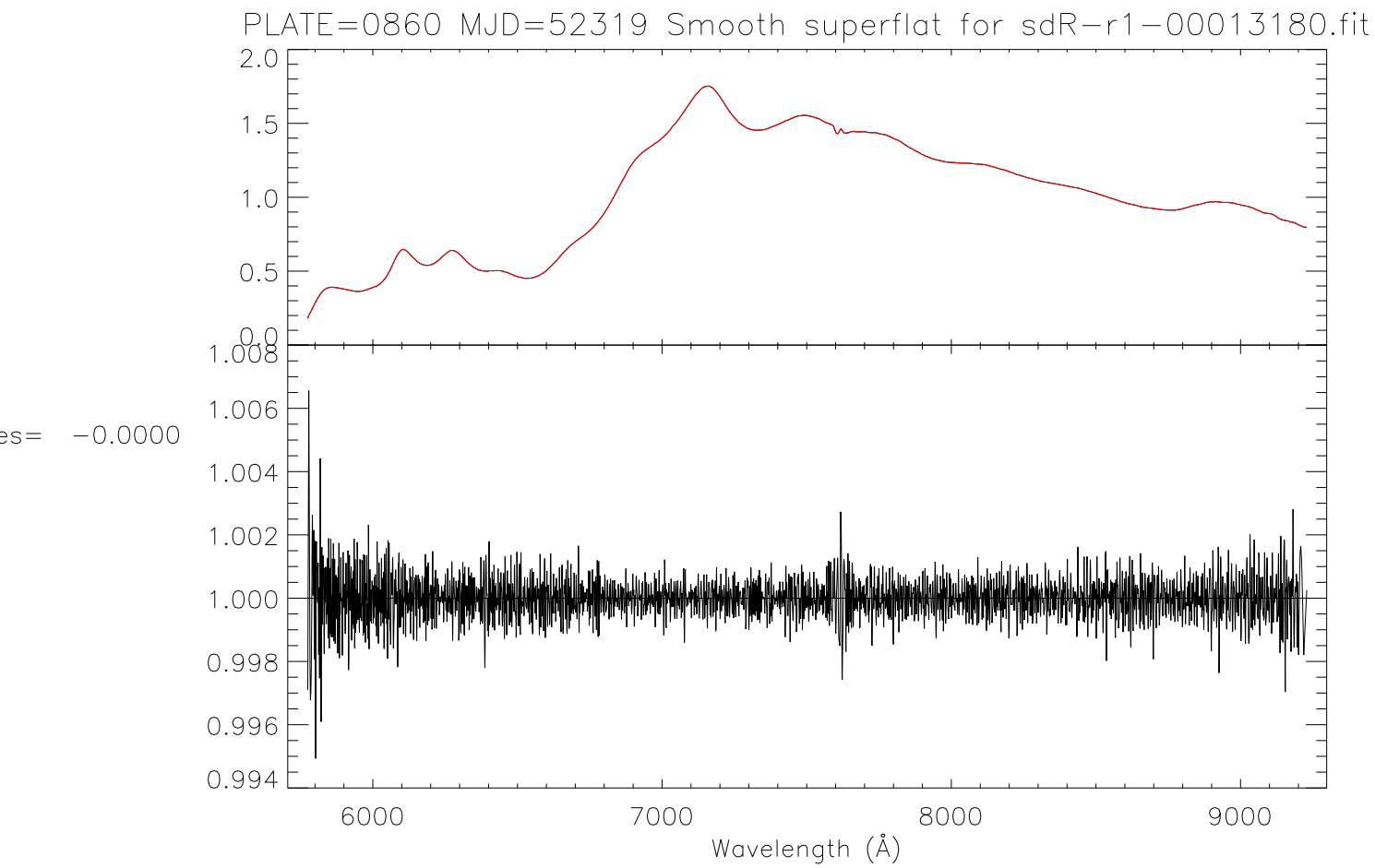

8430.1700
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400


8885.8300
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

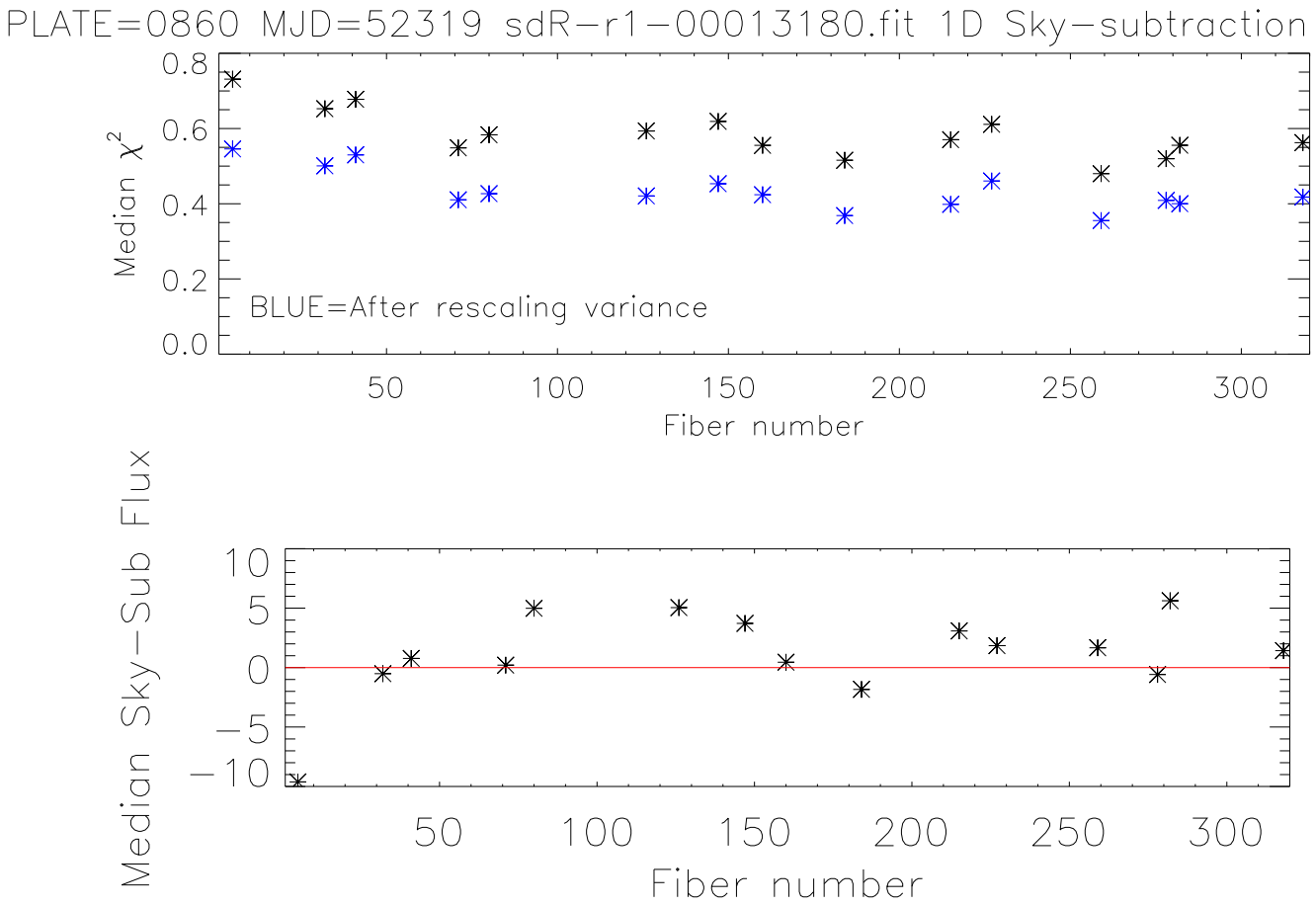

8919.6100
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

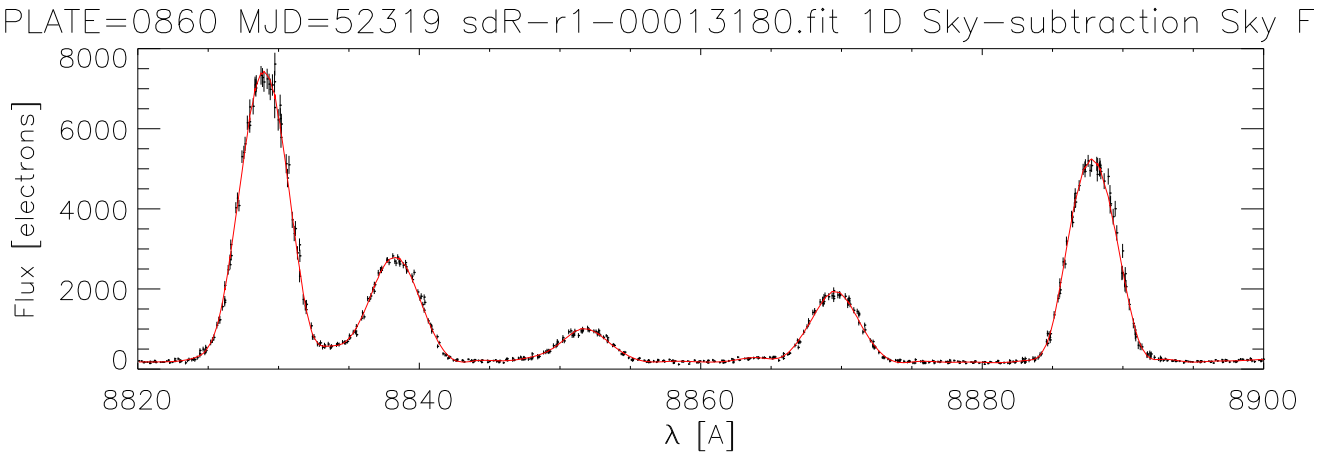

6300.3040
stdev 0.032
extra 0.94
6363.7760
stdev 0.024
extra 0.94
6553.6100
stdev 0.049
extra 0.88
6923.2100
stdev 0.032
extra 0.90
6949.0300
stdev 0.026
extra 0.94
7571.7500
stdev 0.023
extra 0.89
7794.1200
stdev 0.021
extra 0.78
7821.5100
stdev 0.023
extra 0.84
8399.1600
stdev 0.021
extra 0.86
8430.1700
stdev 0.015
extra 0.85
8885.8300
stdev 0.017
extra 0.88
8919.6100
stdev 0.023
extra 0.86
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

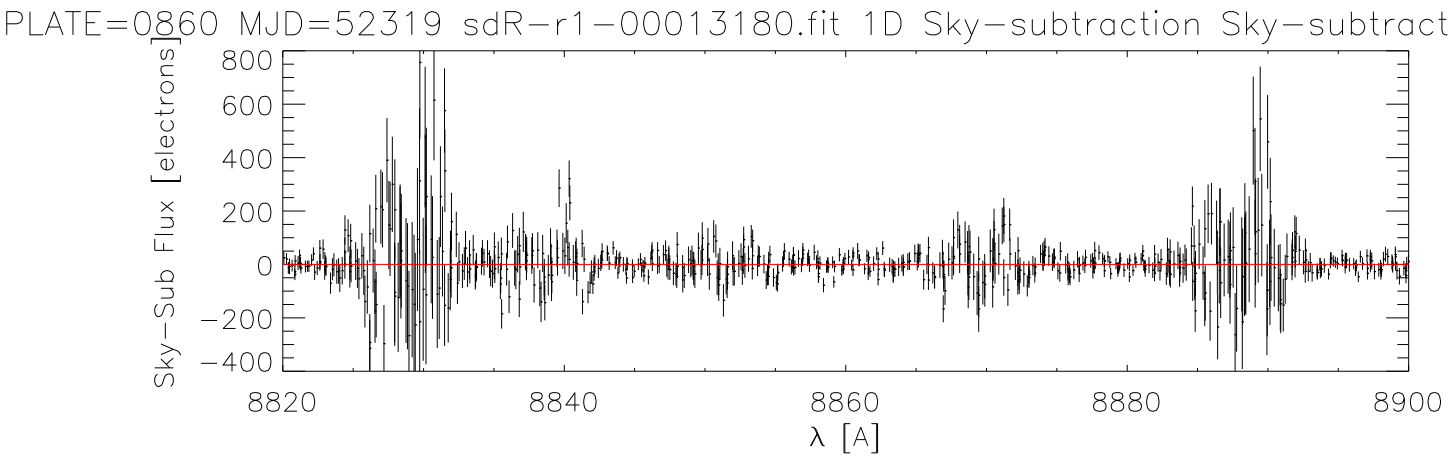

sky shift, pixels
1.00
0.95
0.90
0.85
0.80
5000
6000
7000
8000
9000
10000

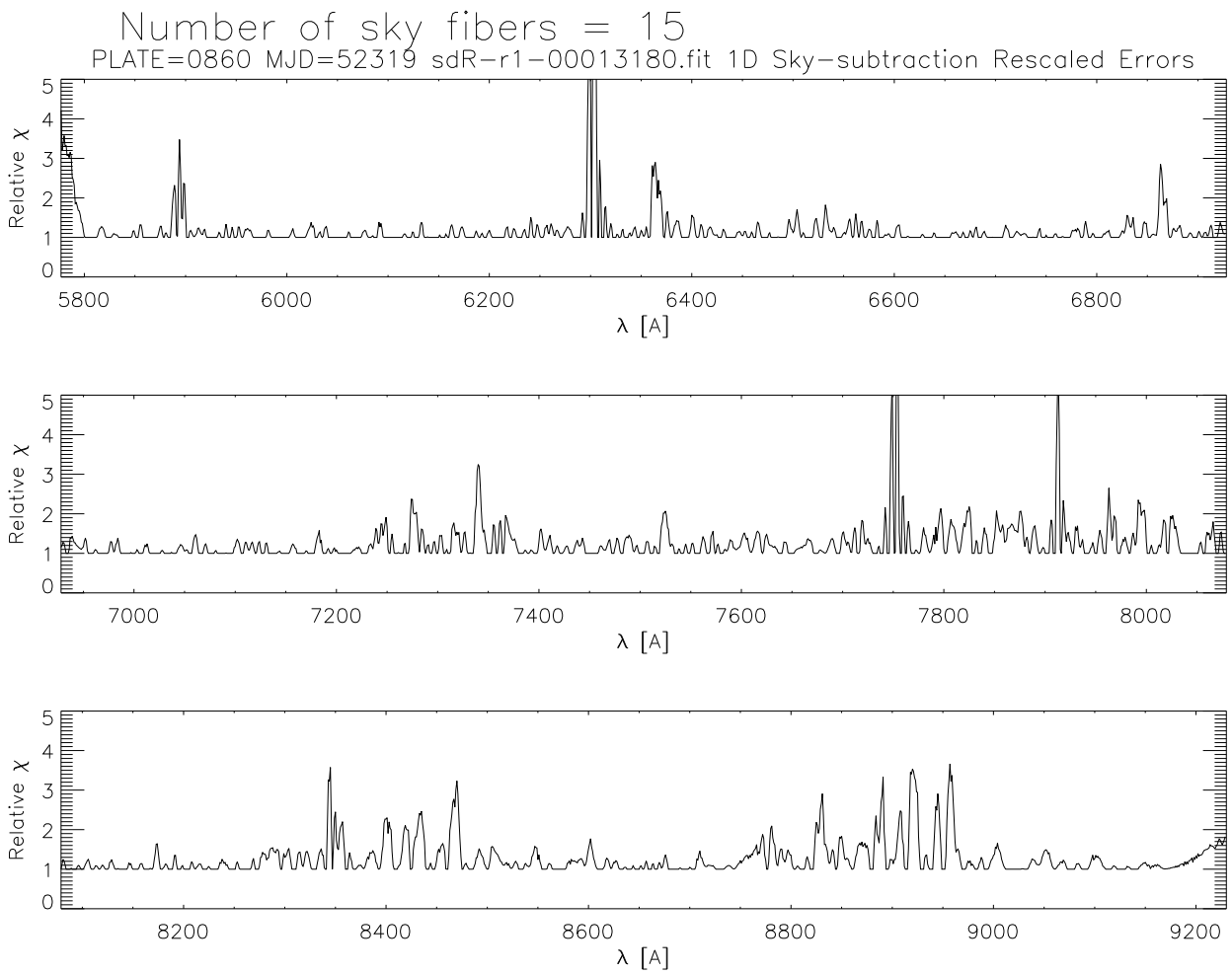

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013180.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

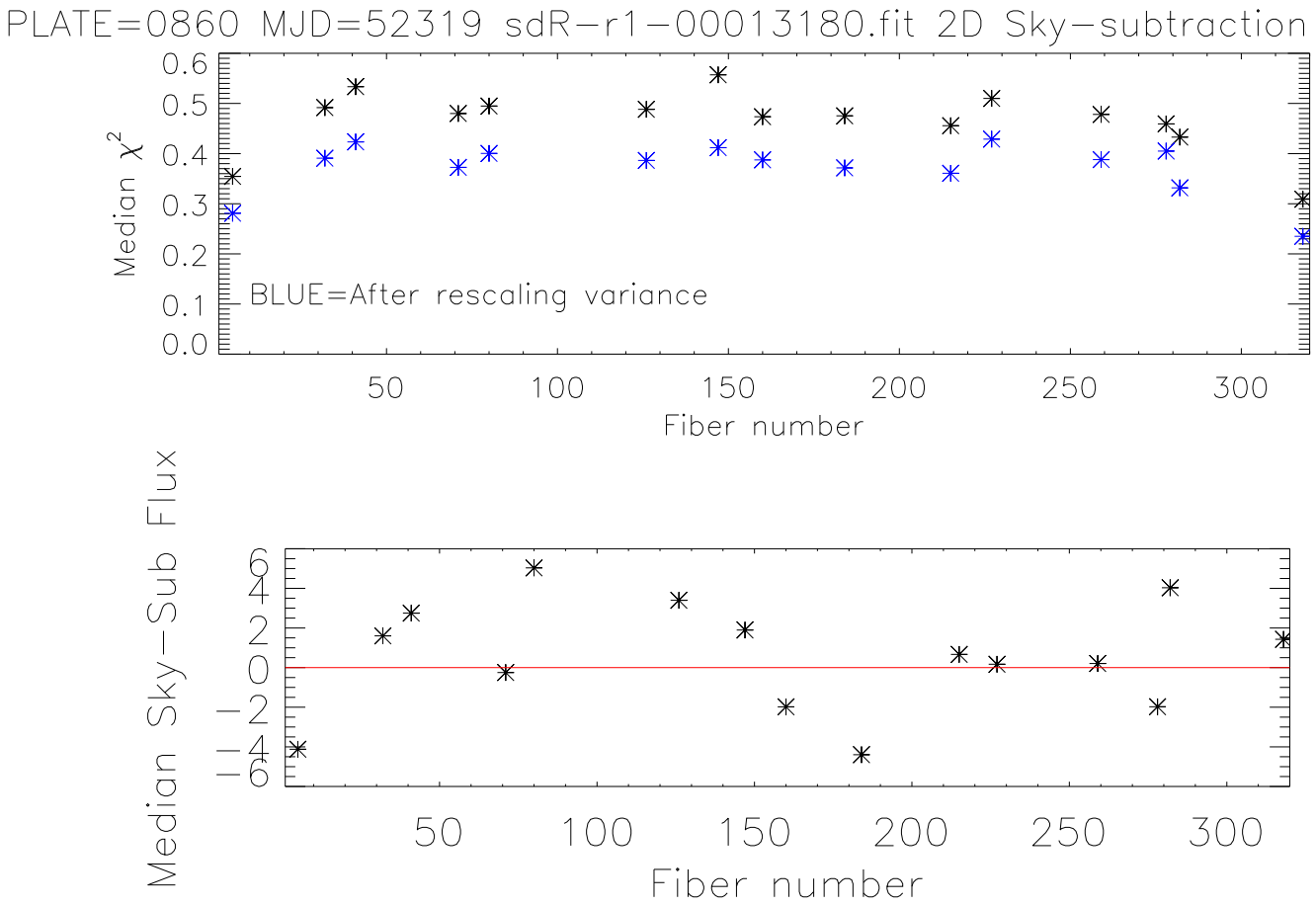
es= −0.0000

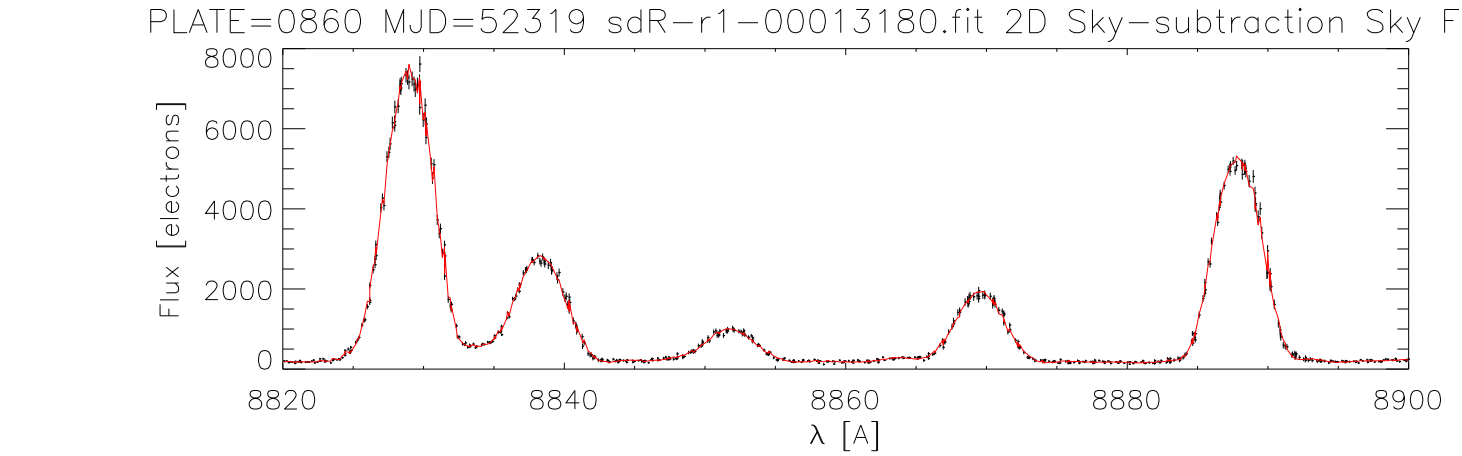

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

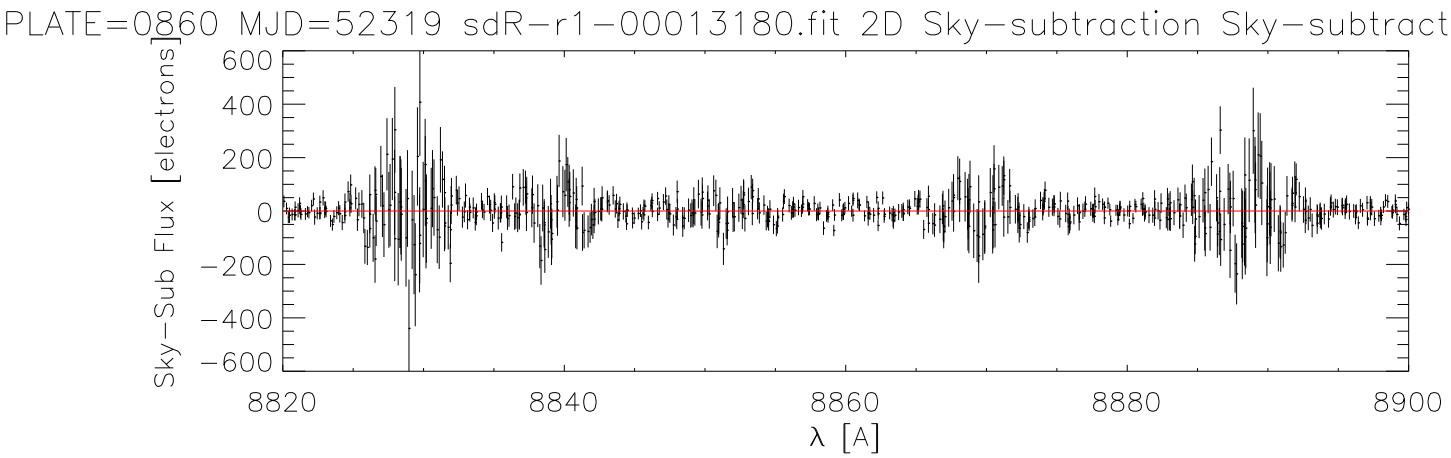

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

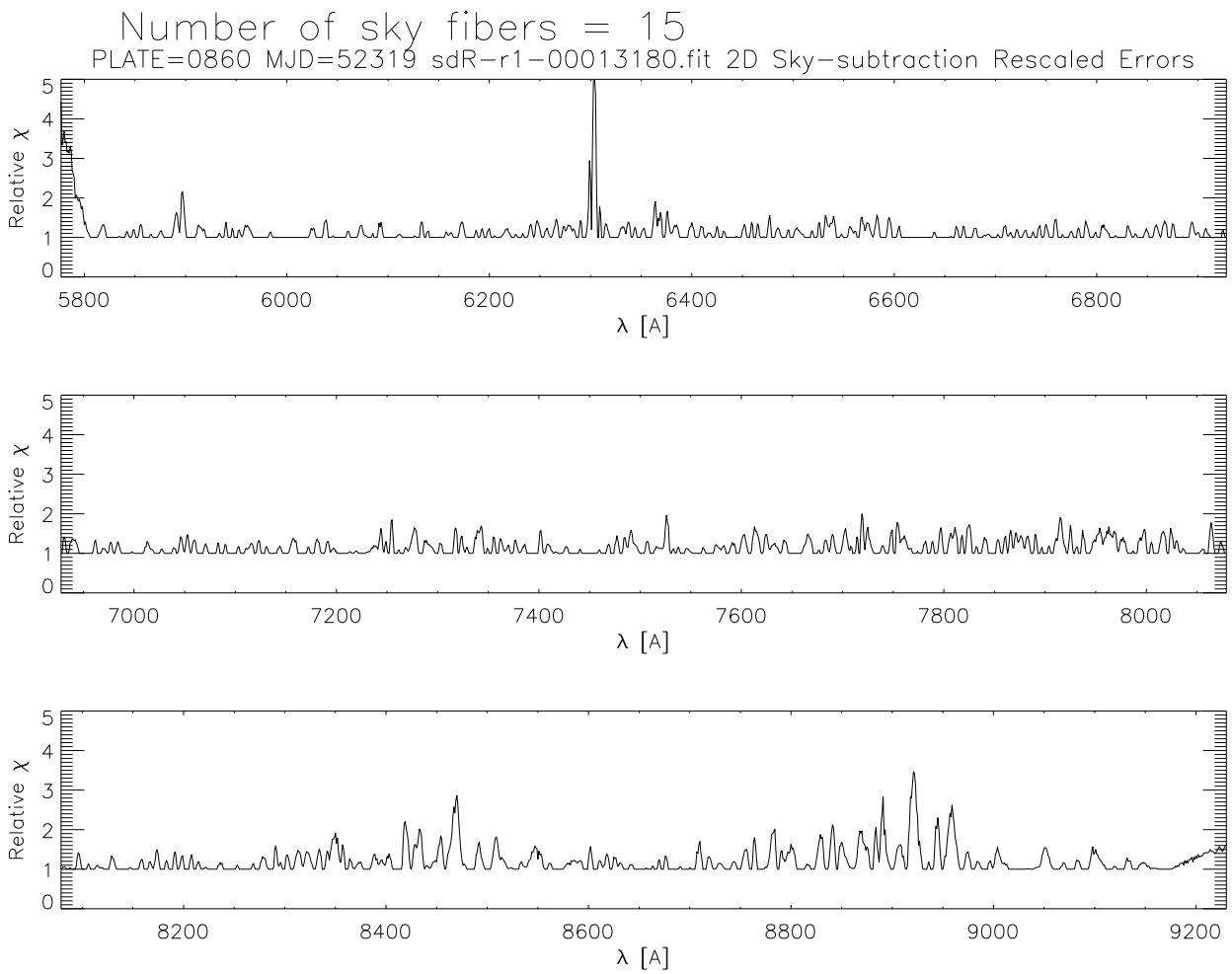

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

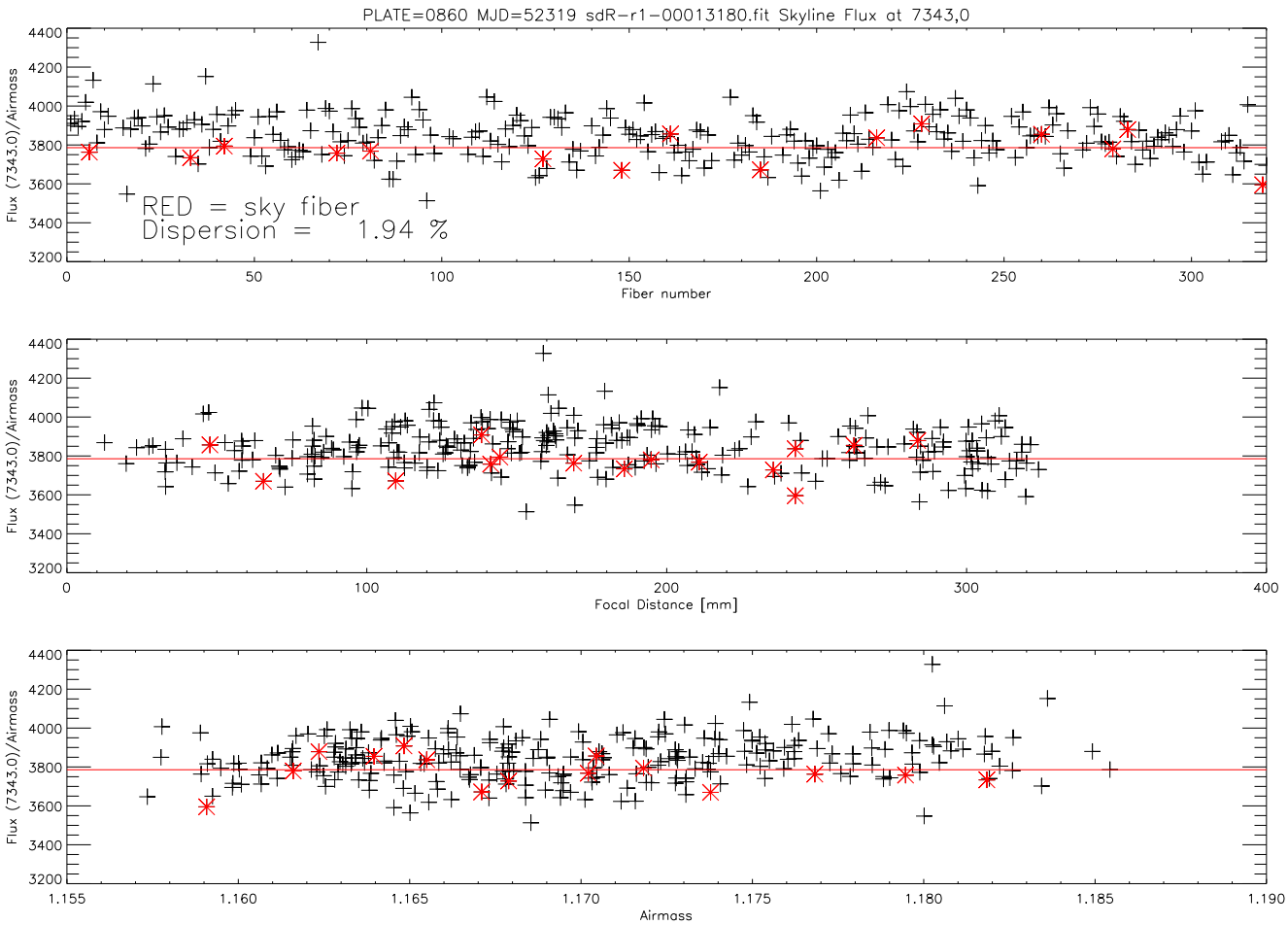

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013180.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

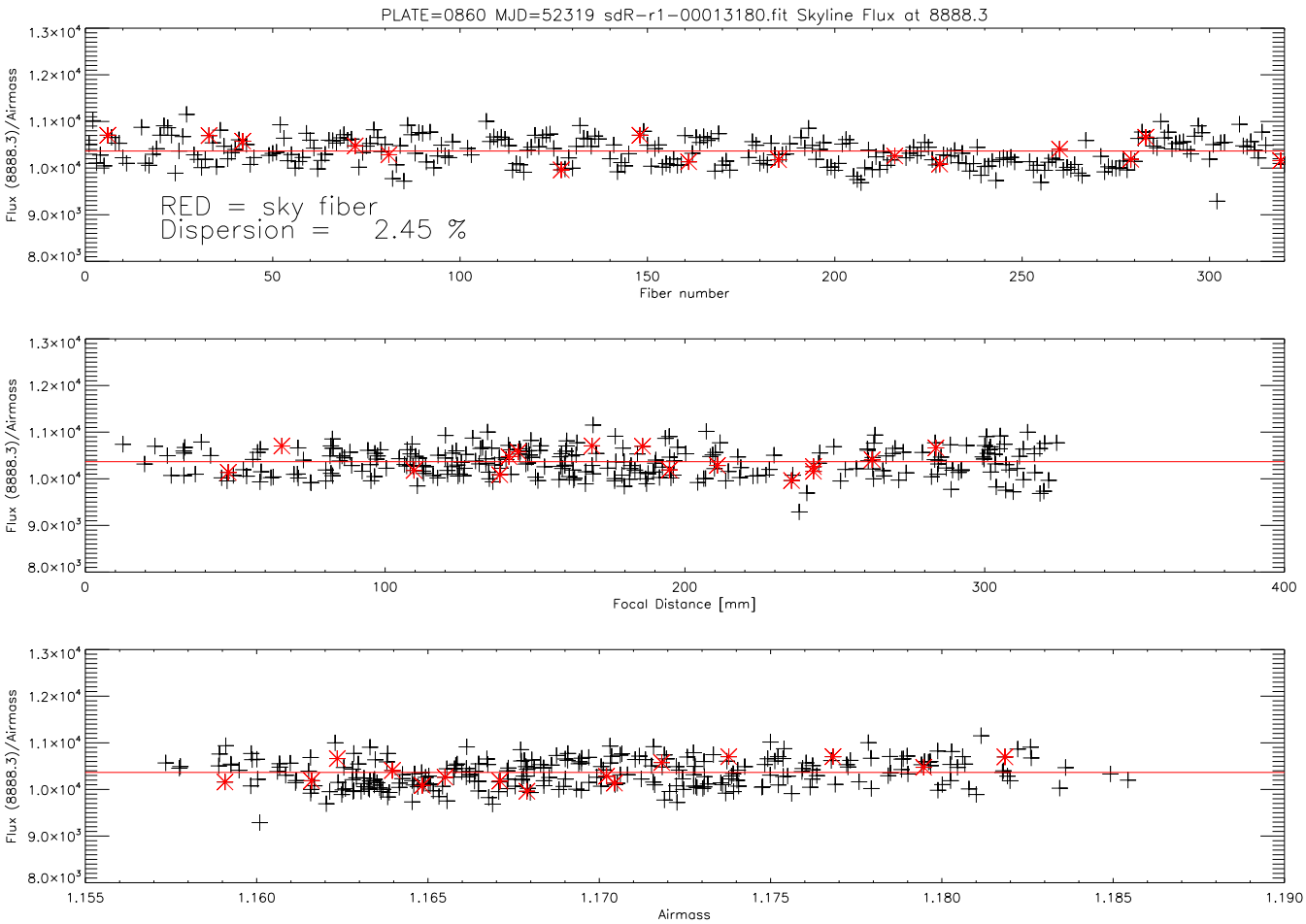

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

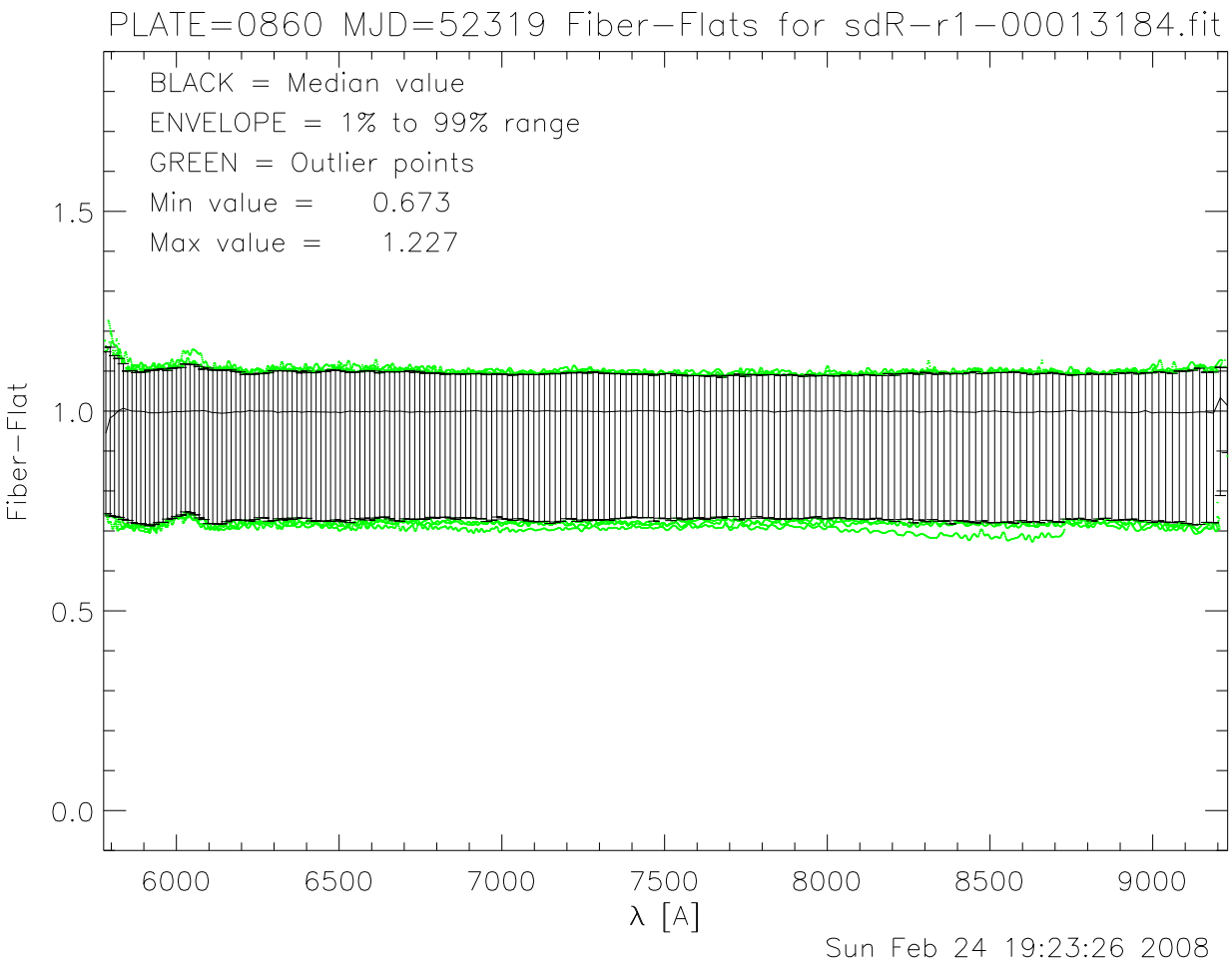

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

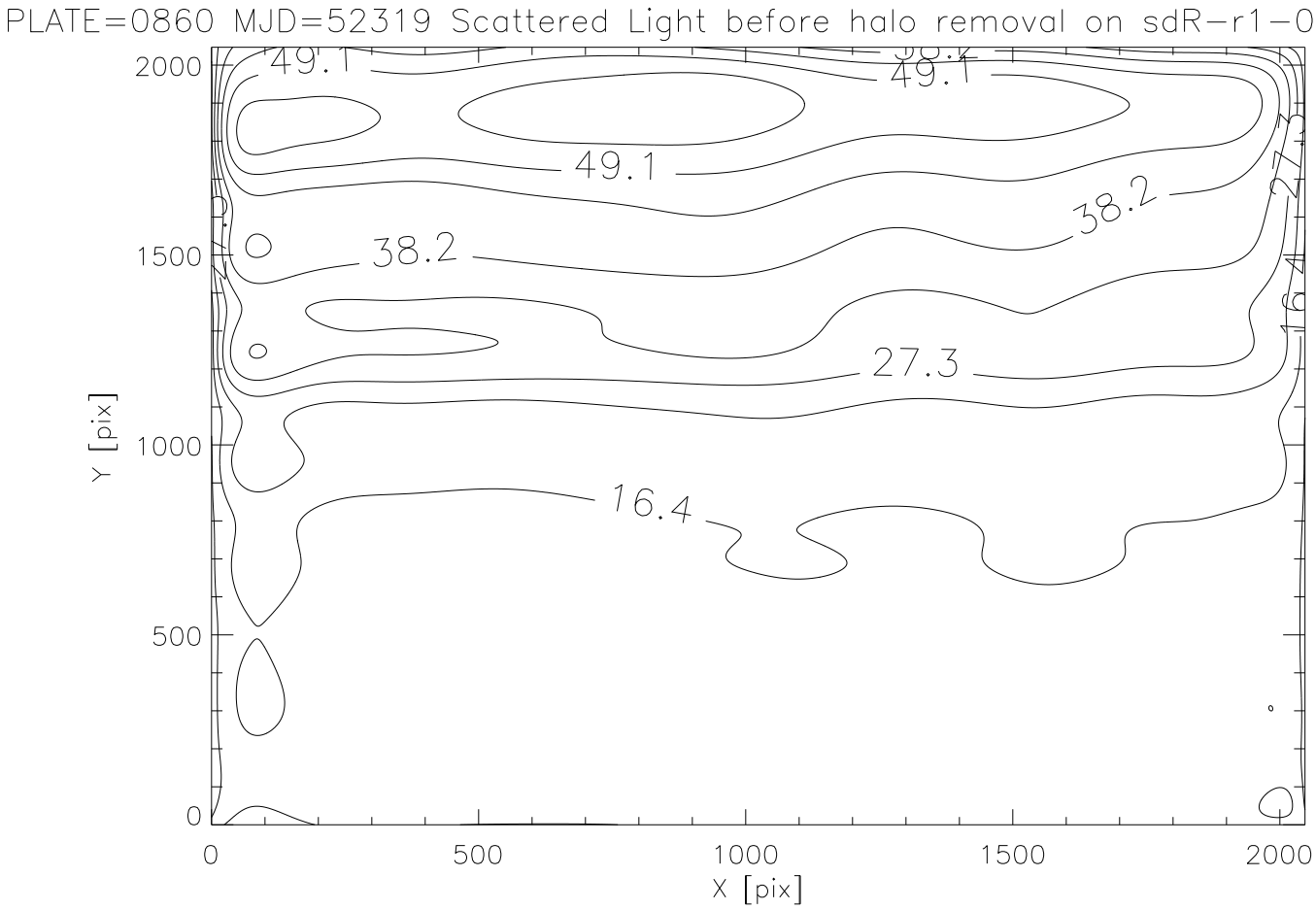

PLATE=0860 MJD=52319 sdR-r1-00013180.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

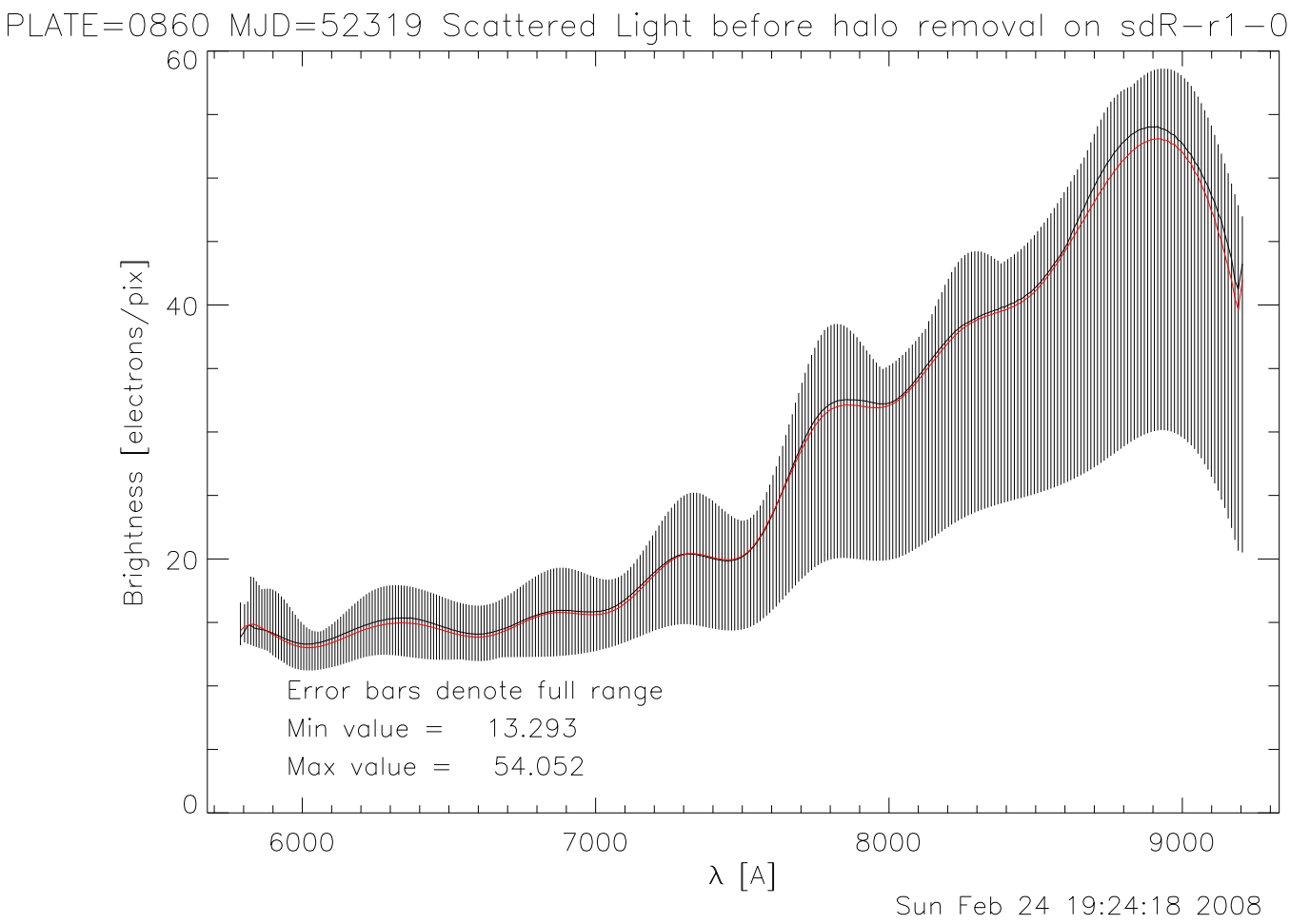

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013180.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

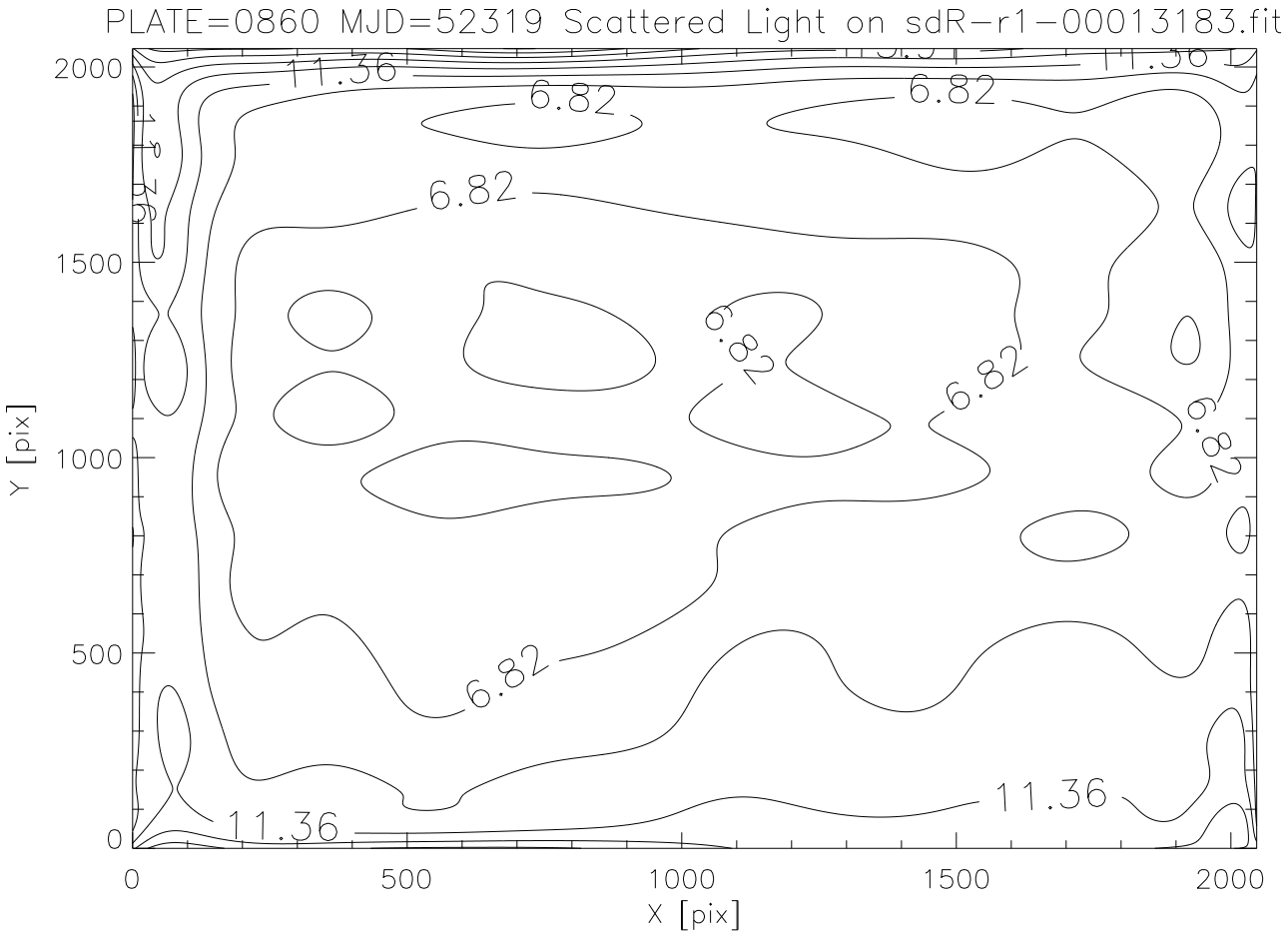

PLATE=0860 MJD=52319 sdR-r1-00013180.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.94 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

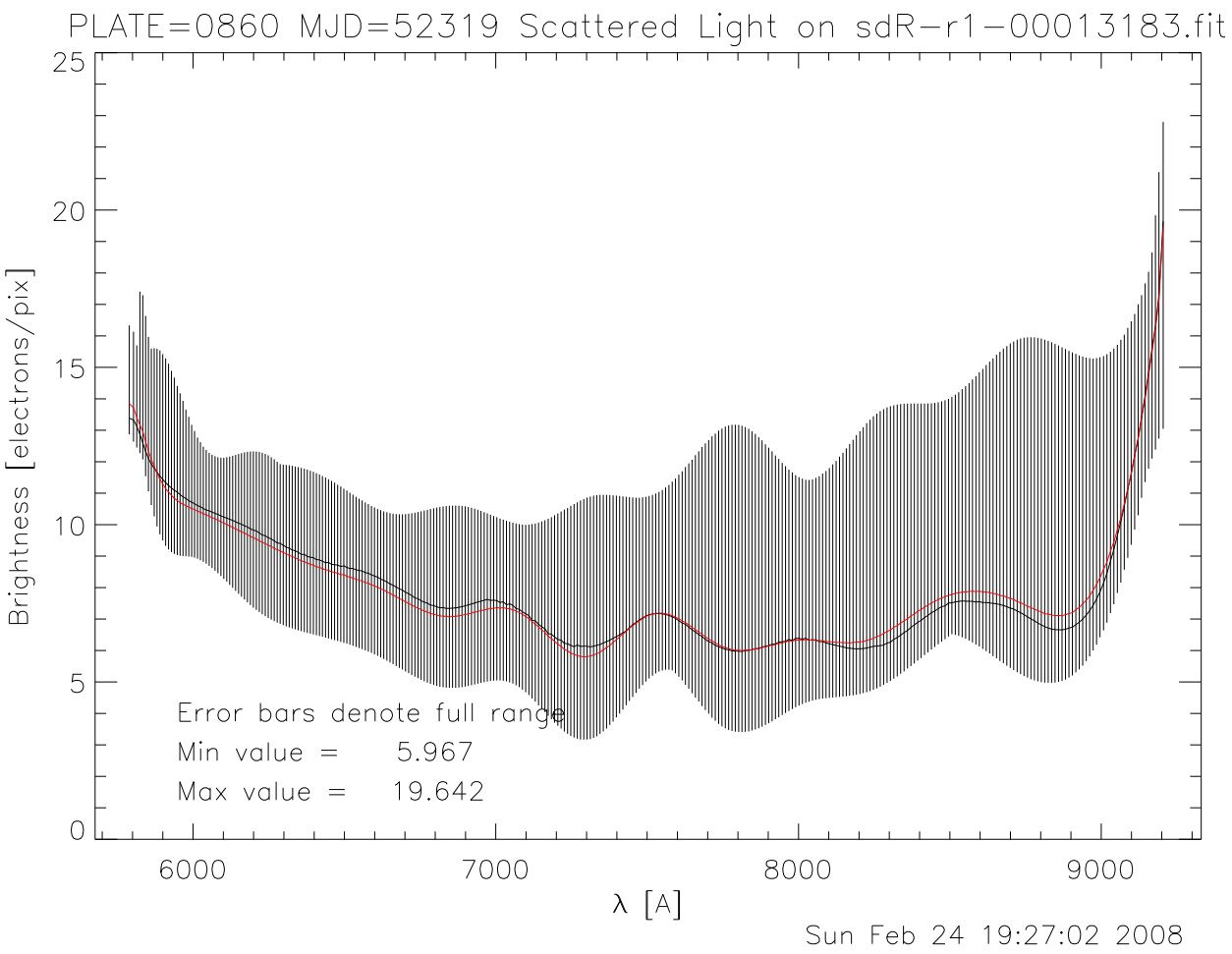

PLATE=0860 MJD=52319 sdR-r1-00013180.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.45 %
Fiber number
Focal Distance [mm]
Airmass

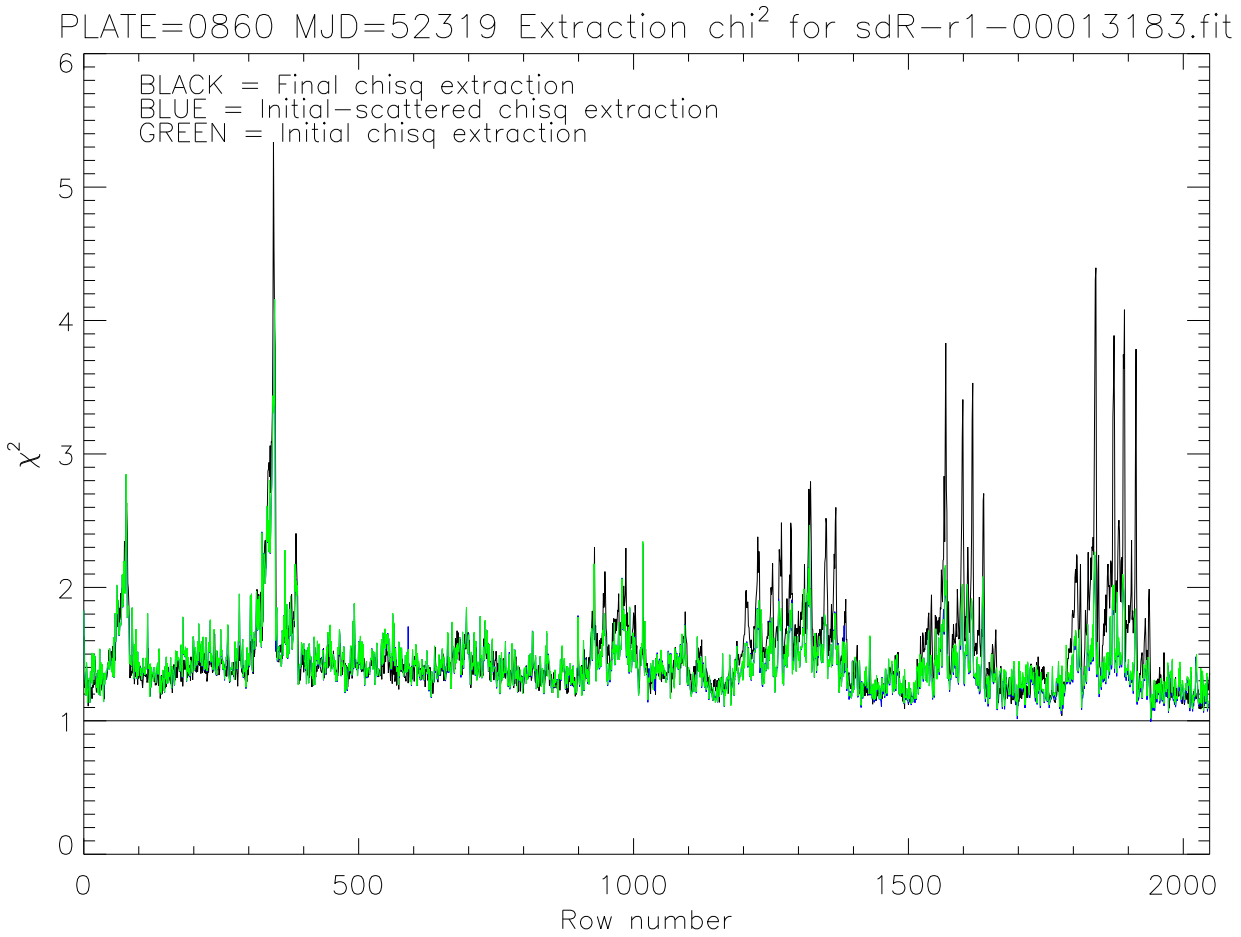

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:23:26 2008

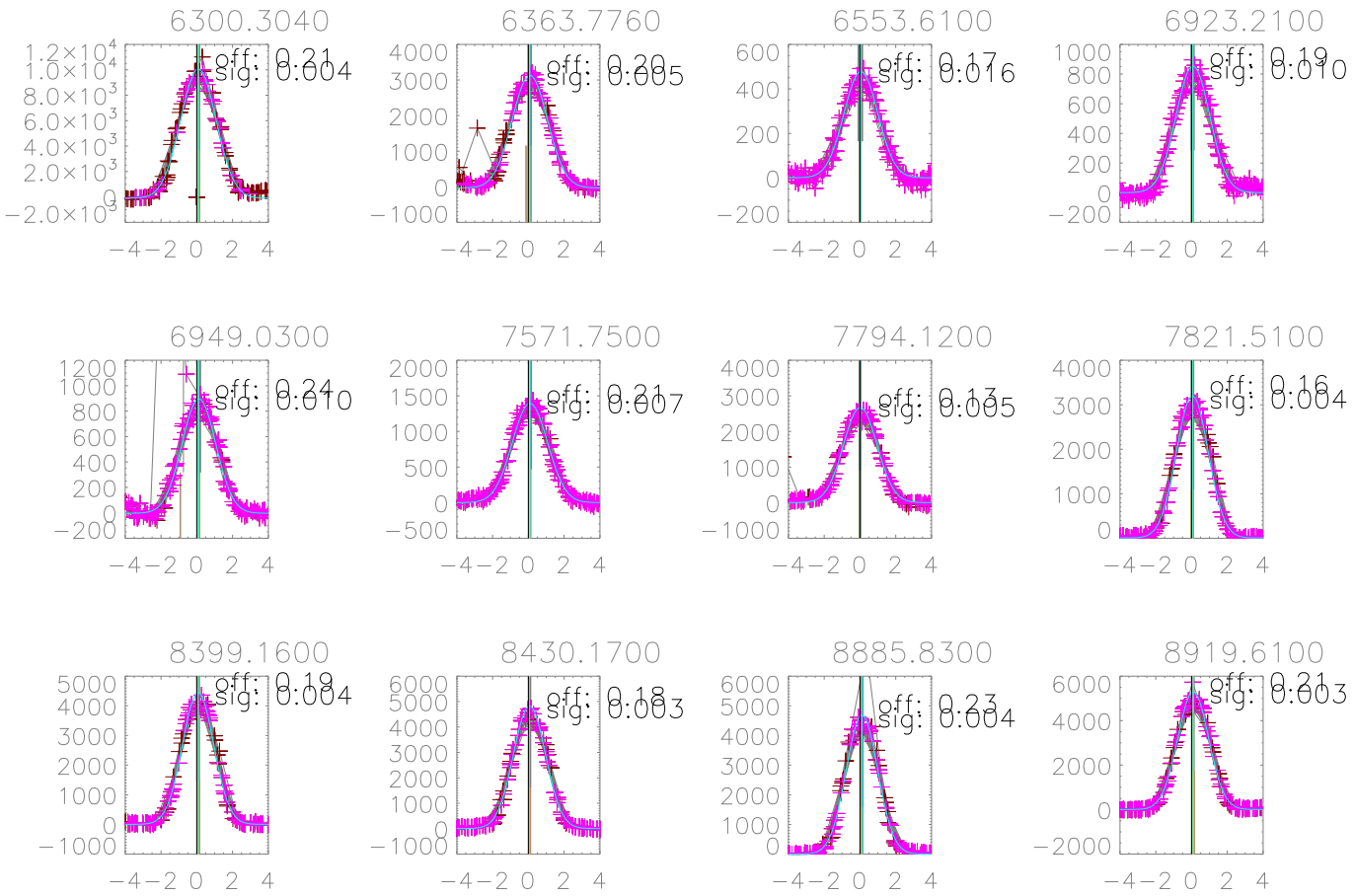

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013183.fi
49.1
49.1
49.1
38.2
38.2
27.3
16.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

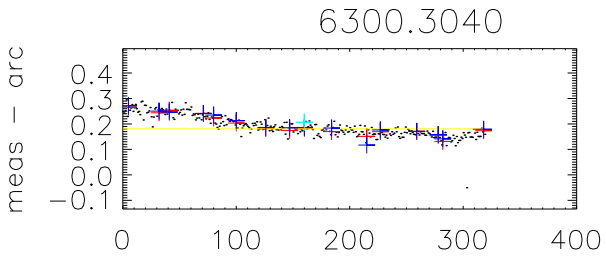

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013183.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 13.293
Max value = 54.052
Sun Feb 24 19:24:18 2008

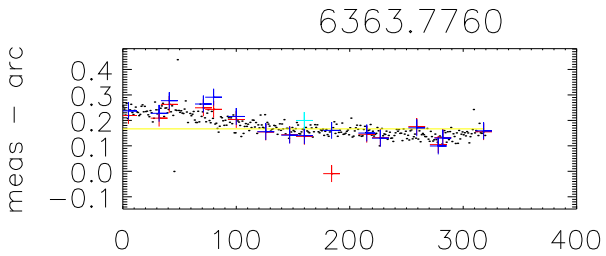

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013183.fit
11.36
6.82
6.82
6.82
6.82
6.82
6.82
11.36
11.36
11.36
Y [pix]
X [pix]
0
500
1000
1500
2000

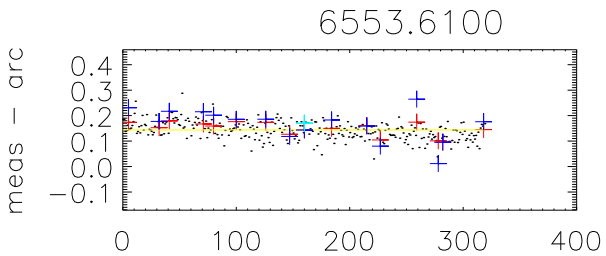

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013183.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.967
Max value = 19.642
Sun Feb 24 19:27:02 2008

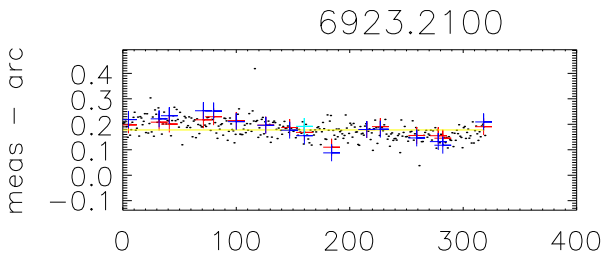

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r1−00013183.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

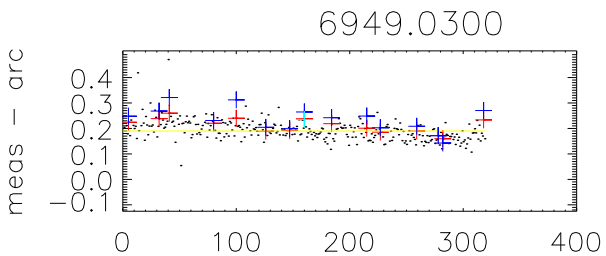

6300.3040
off: 0.21
sig: 0.004
6363.7760
off: 0.20
sig: 0.005
6553.6100
off: 0.17
sig: 0.016
6923.2100
off: 0.19
sig: 0.010
6949.0300
off: 0.24
sig: 0.010
7571.7500
off: 0.21
sig: 0.007
7794.1200
off: 0.13
sig: 0.005
7821.5100
off: 0.16
sig: 0.004
8399.1600
off: 0.19
sig: 0.004
8430.1700
off: 0.18
sig: 0.003
8885.8300
off: 0.23
sig: 0.004
8919.6100
off: 0.21
sig: 0.003

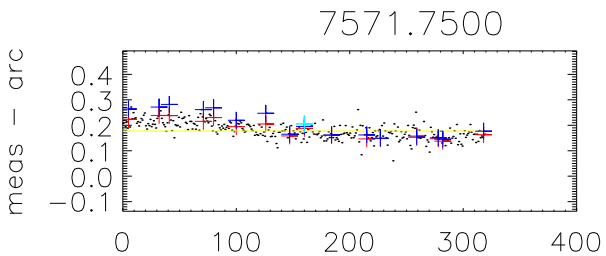

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

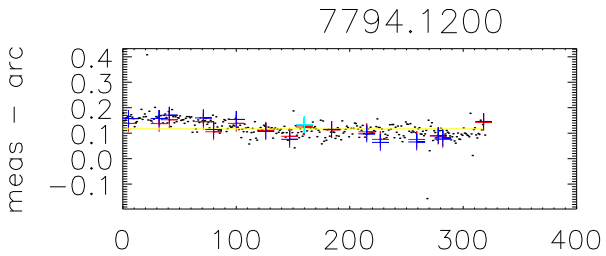

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

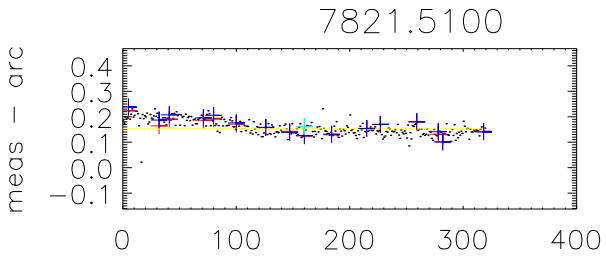

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

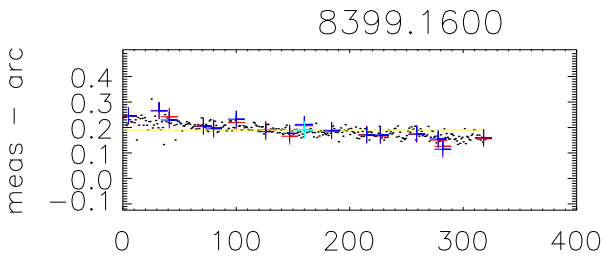

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

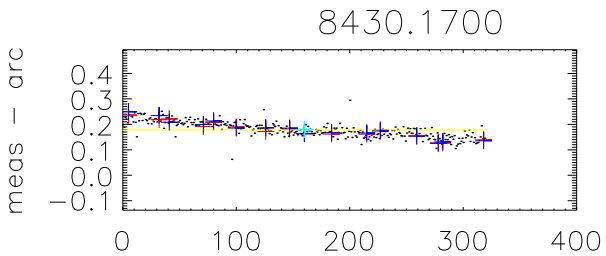

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

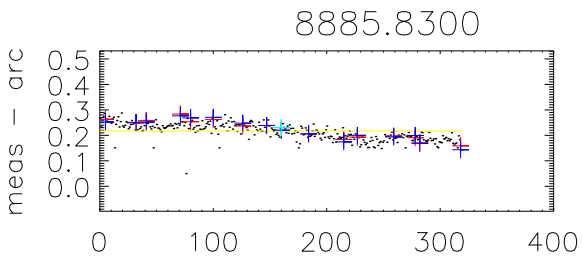

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

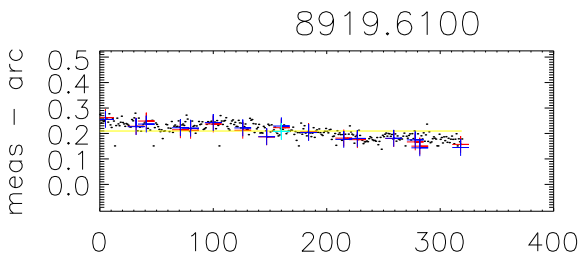

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

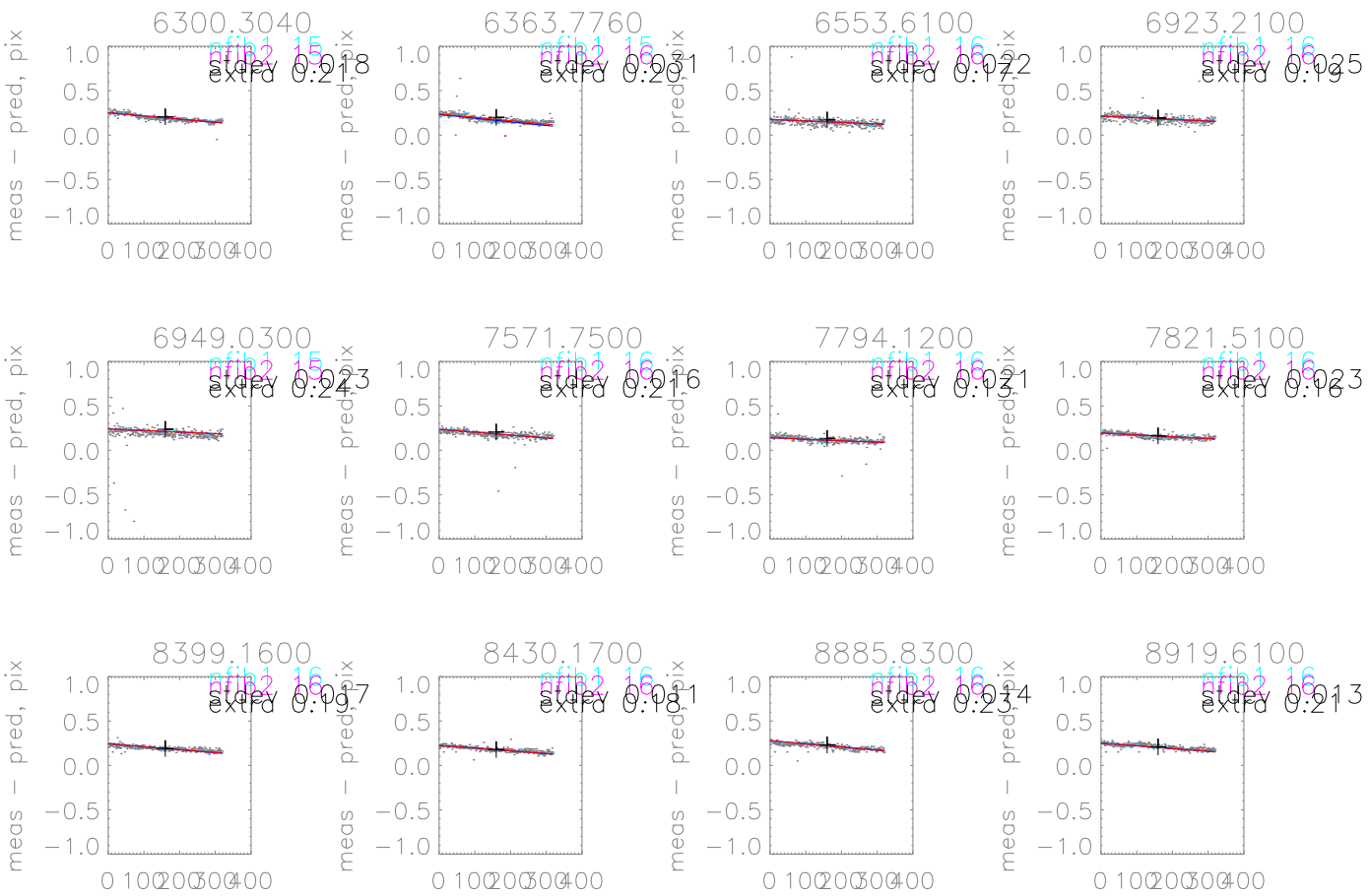

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

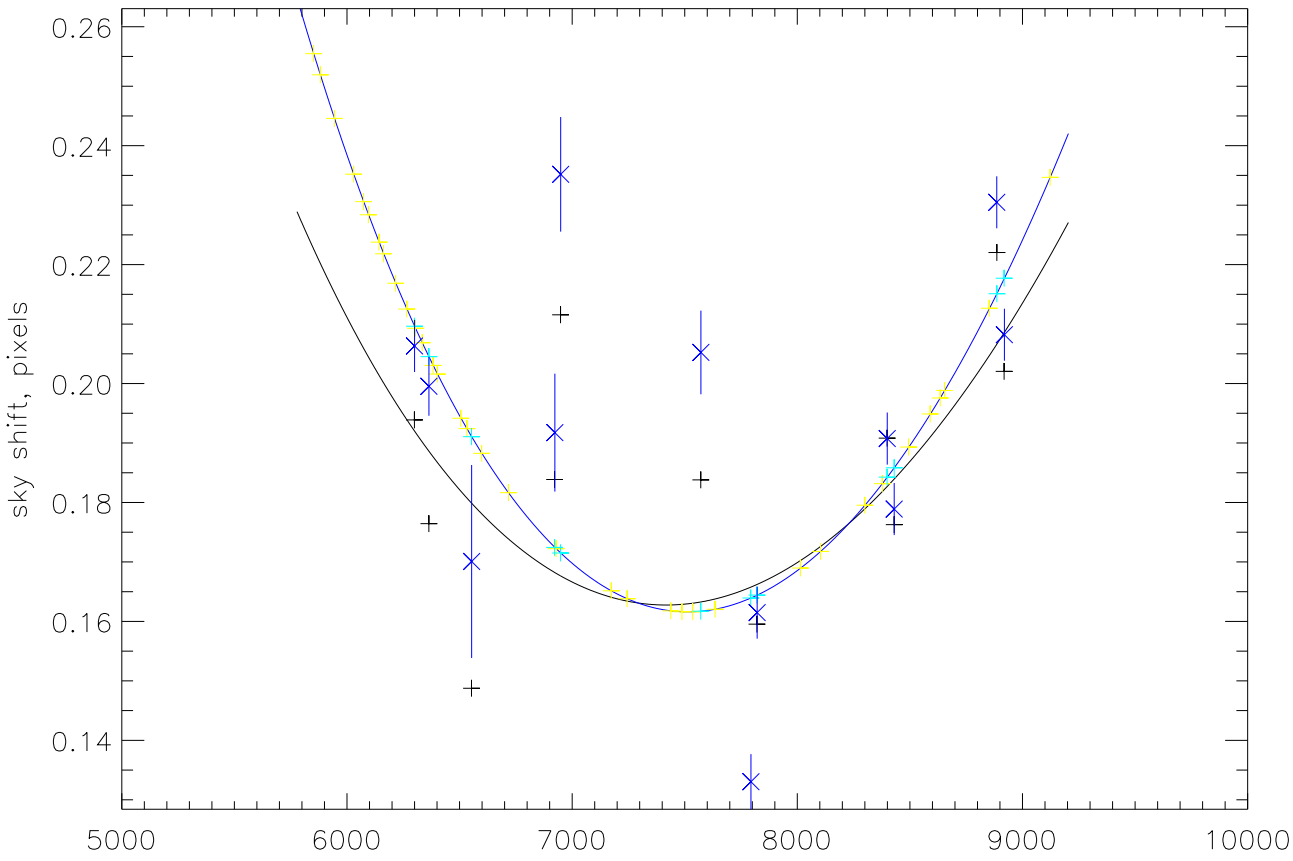

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

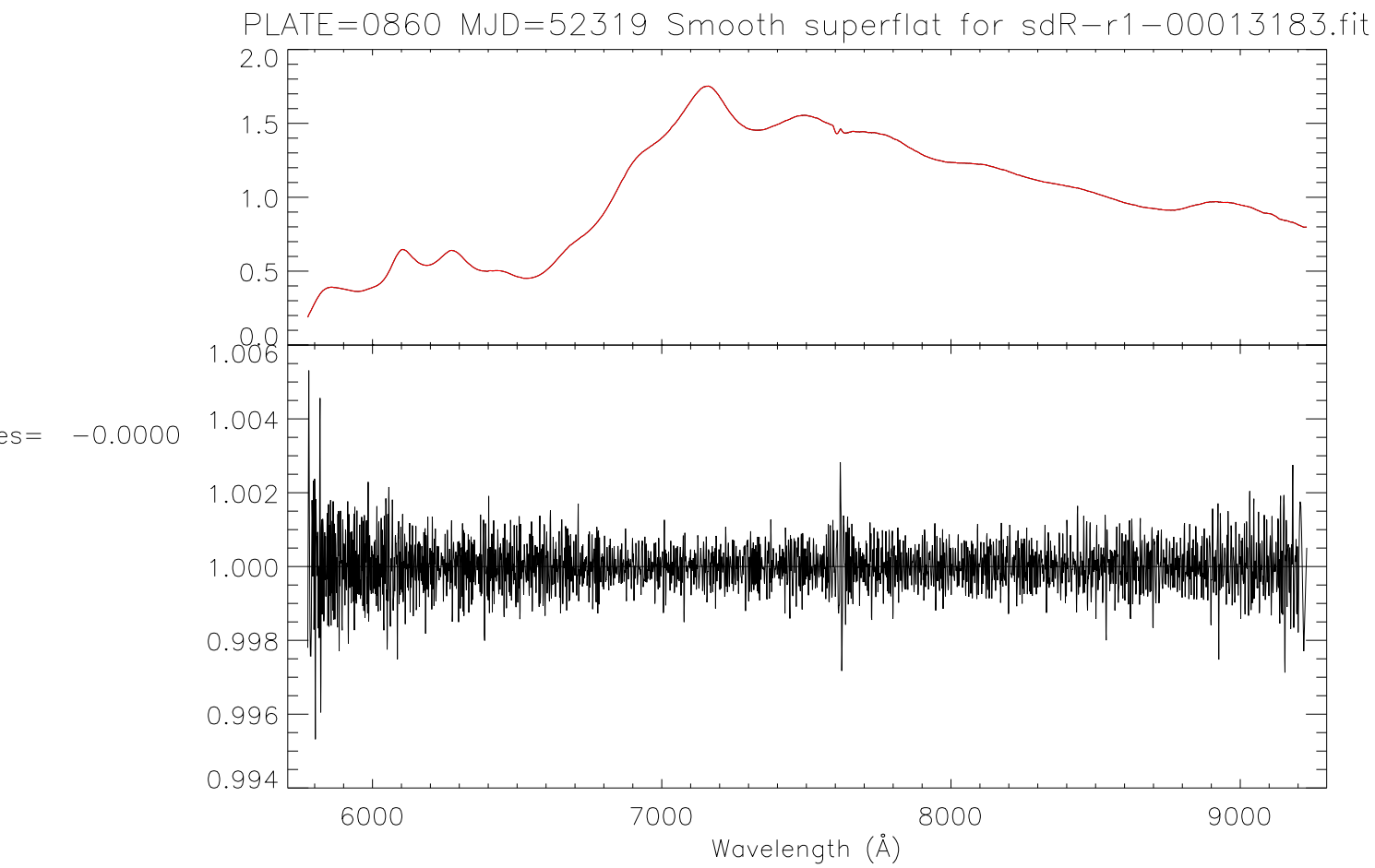

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

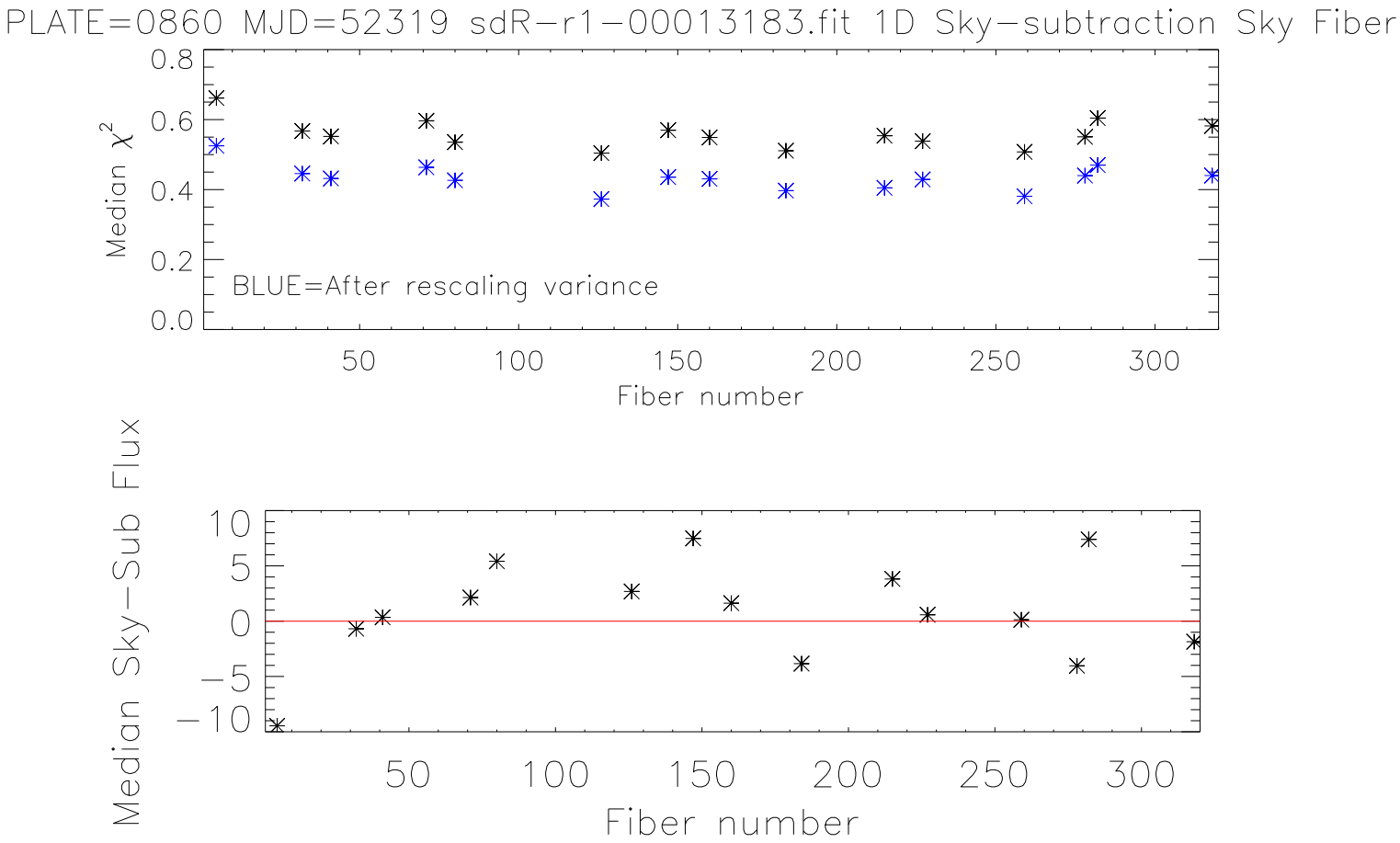

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

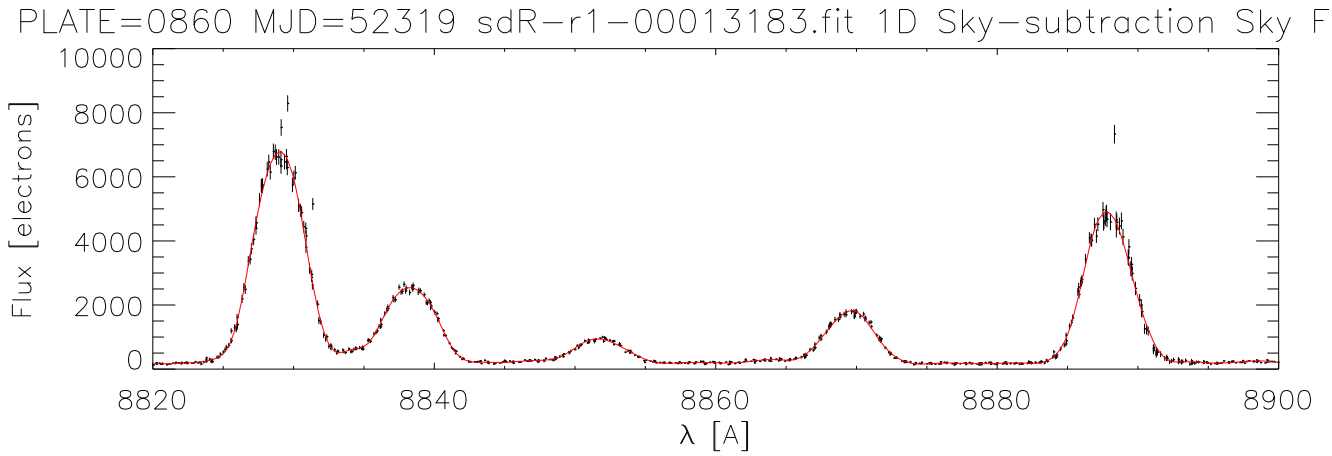

6300.3040
stdev 0.018
extra 0.21
6363.7760
stdev 0.031
extra 0.20
6553.6100
stdev 0.022
extra 0.17
6923.2100
stdev 0.025
extra 0.19
6949.0300
stdev 0.023
extra 0.24
7571.7500
stdev 0.016
extra 0.21
7794.1200
stdev 0.021
extra 0.13
7821.5100
stdev 0.023
extra 0.16
8399.1600
stdev 0.017
extra 0.19
8430.1700
stdev 0.041
extra 0.18
8885.8300
stdev 0.034
extra 0.23
8919.6100
stdev 0.013
extra 0.21
meas − pred, pix
mfib1 15
mfib2 16

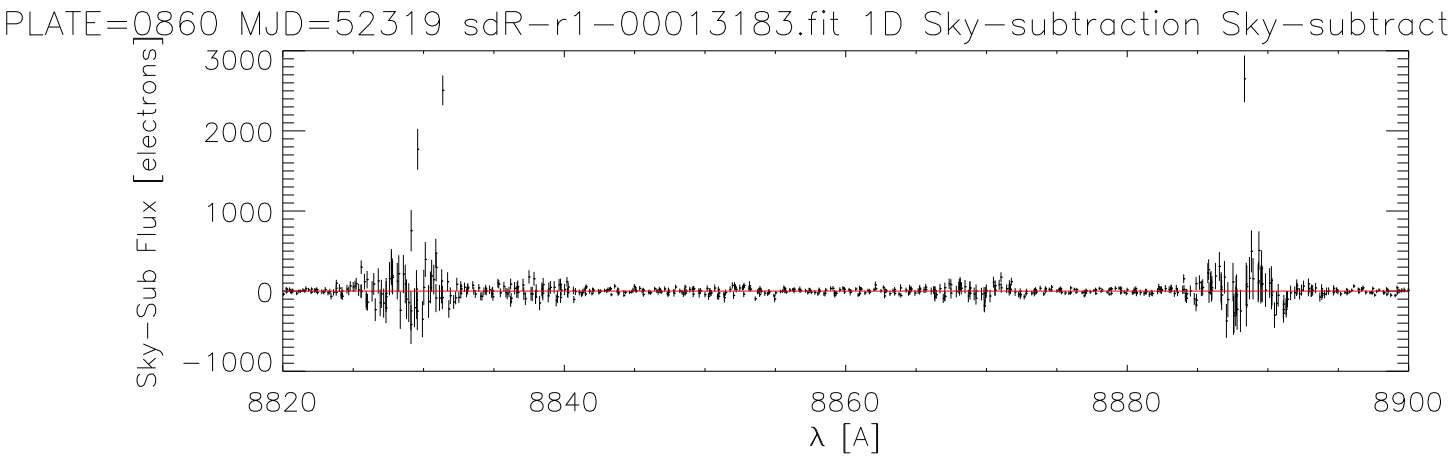

sky shift, pixels
0.26
0.24
0.22
0.20
0.18
0.16
0.14
5000
6000
7000
8000
9000
10000

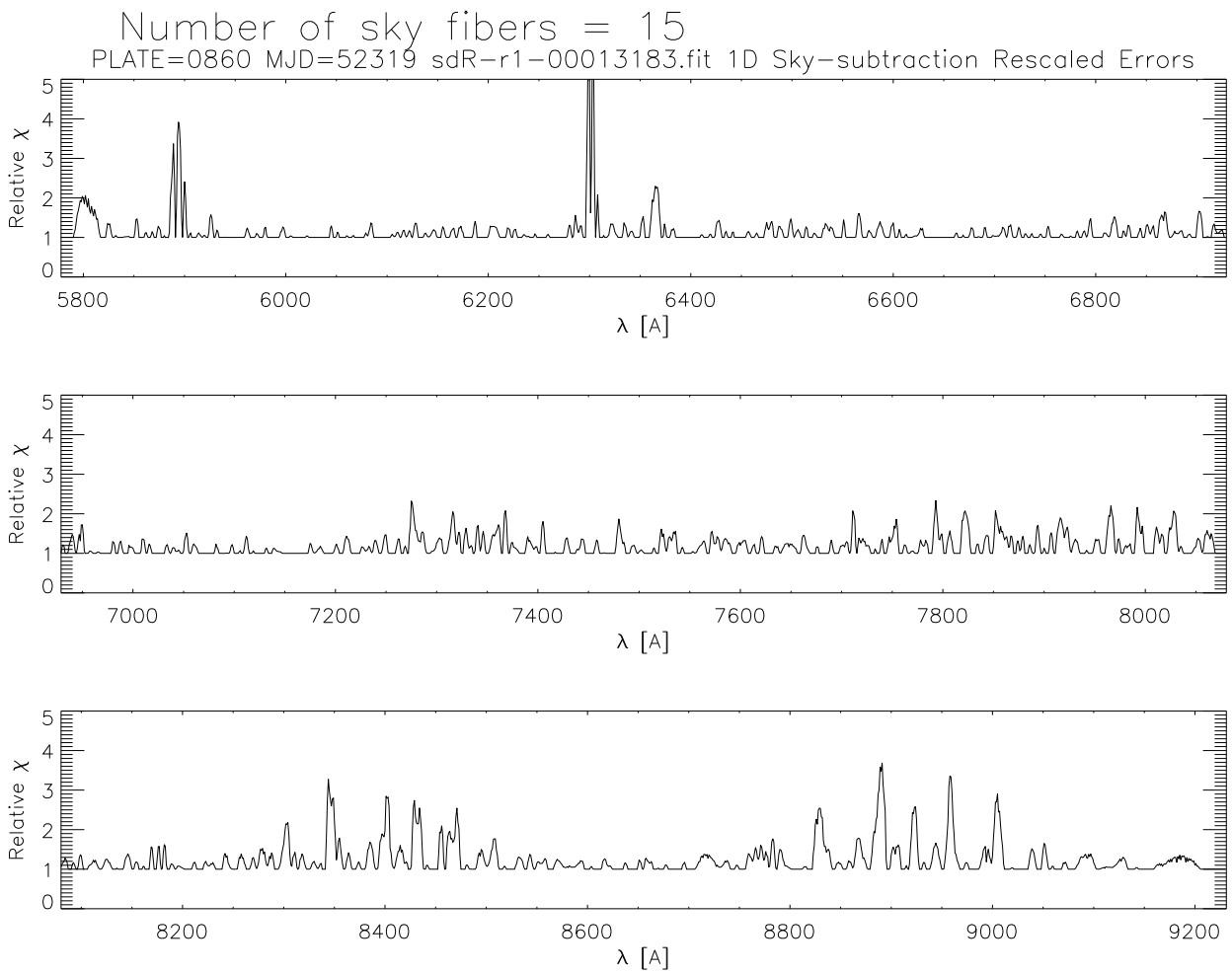

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013183.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

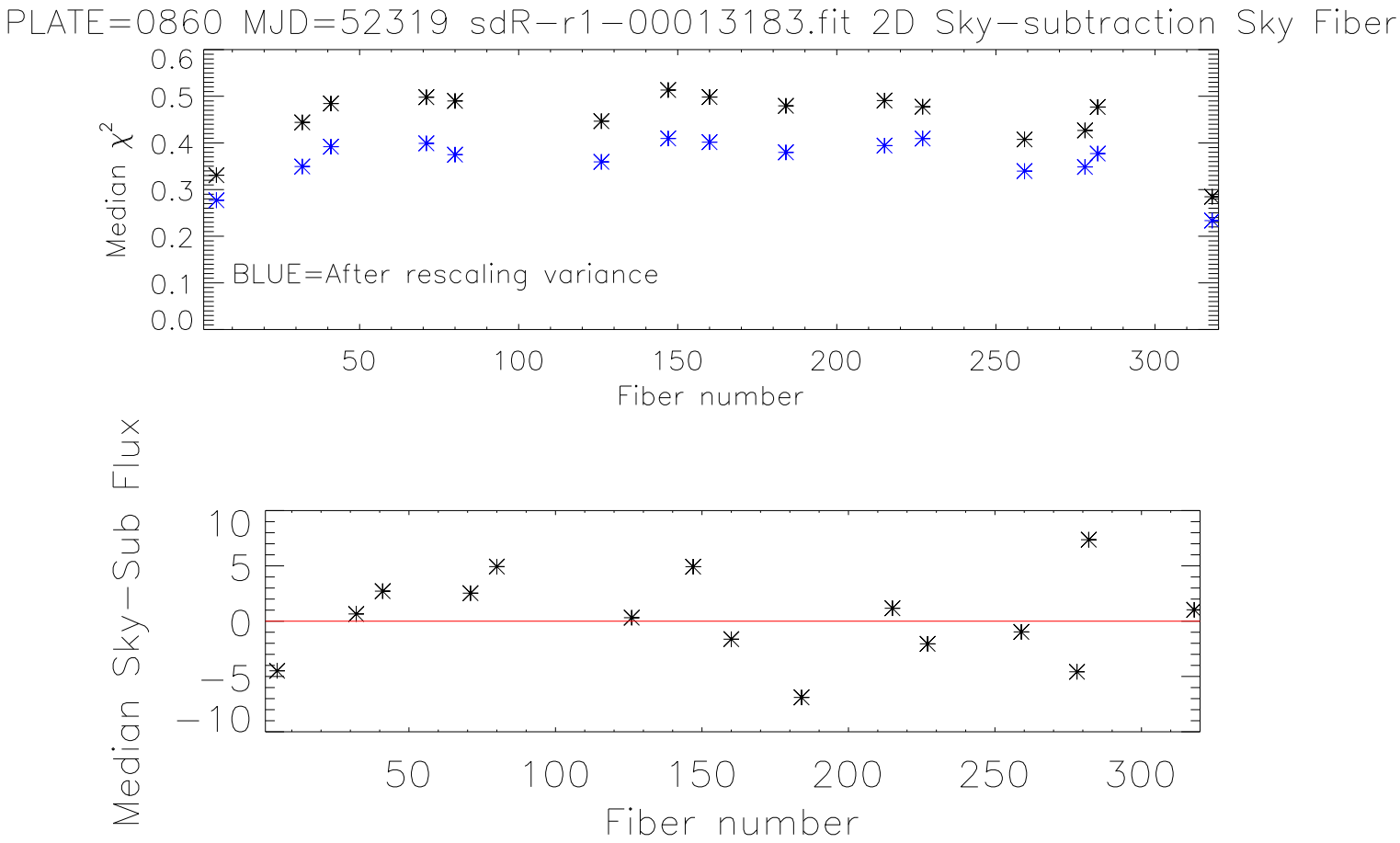
es= −0.0000

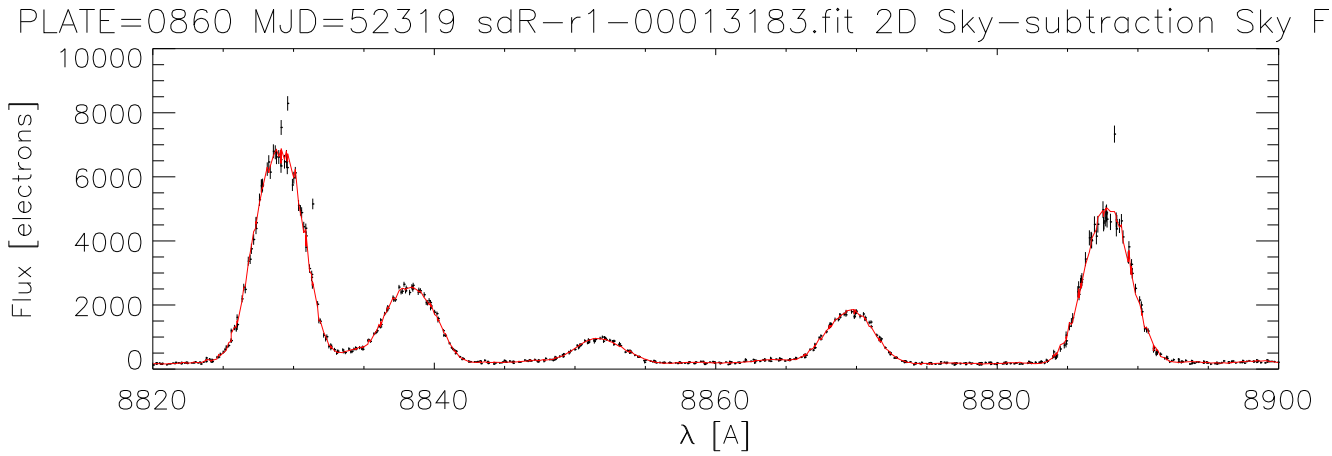

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

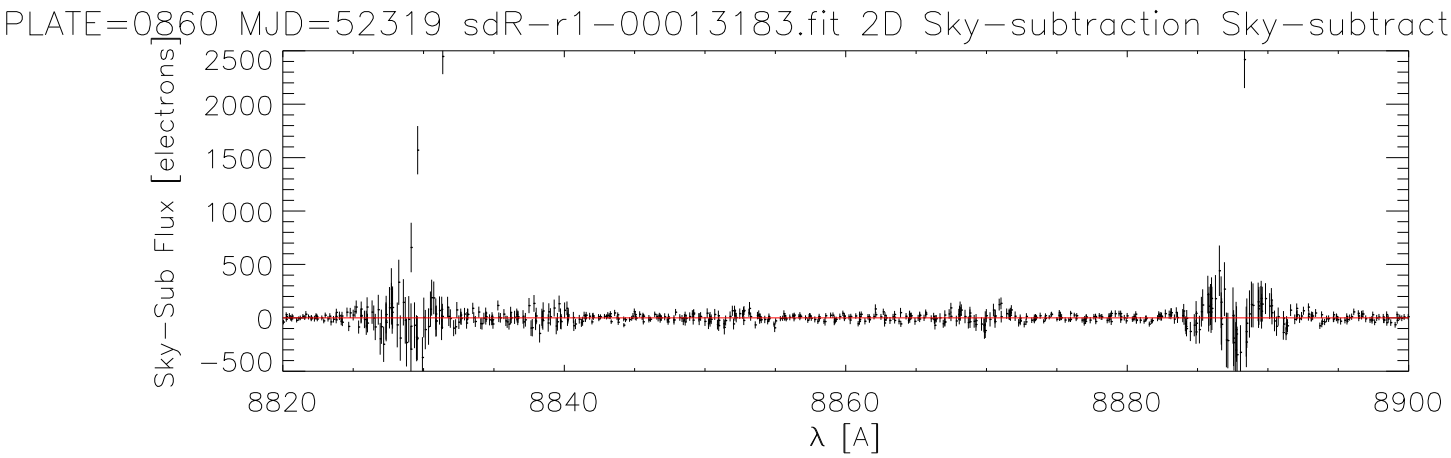

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

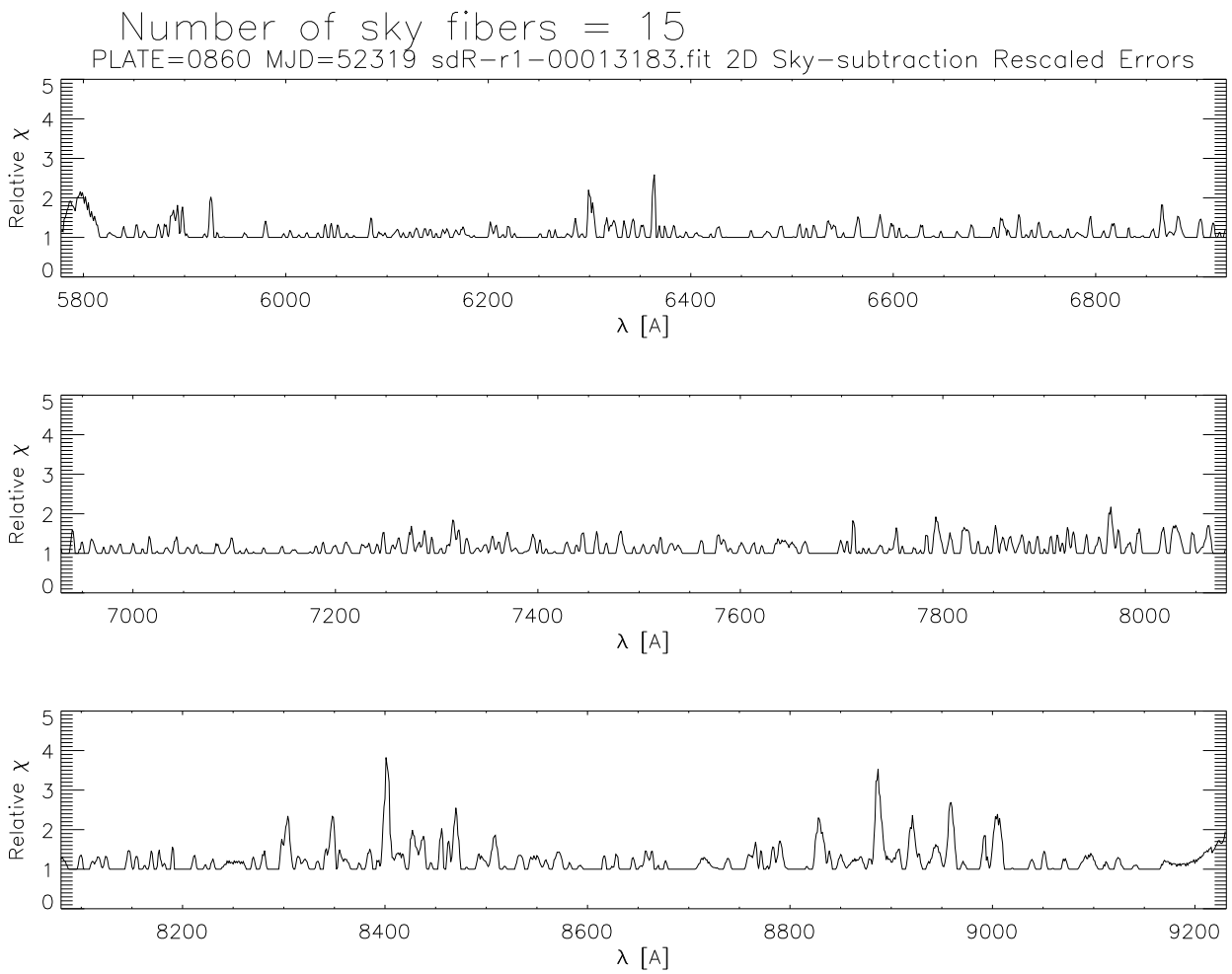

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

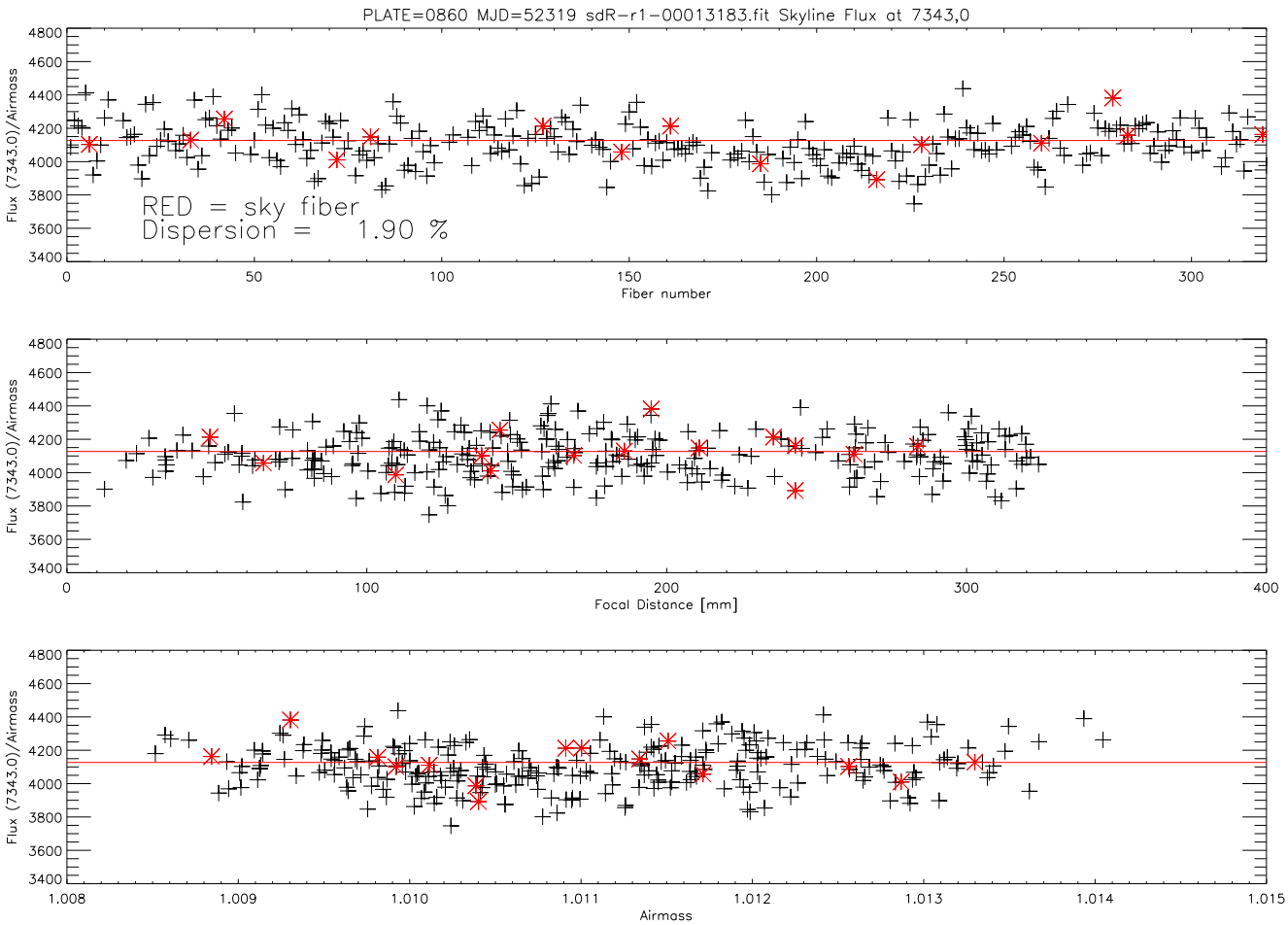

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

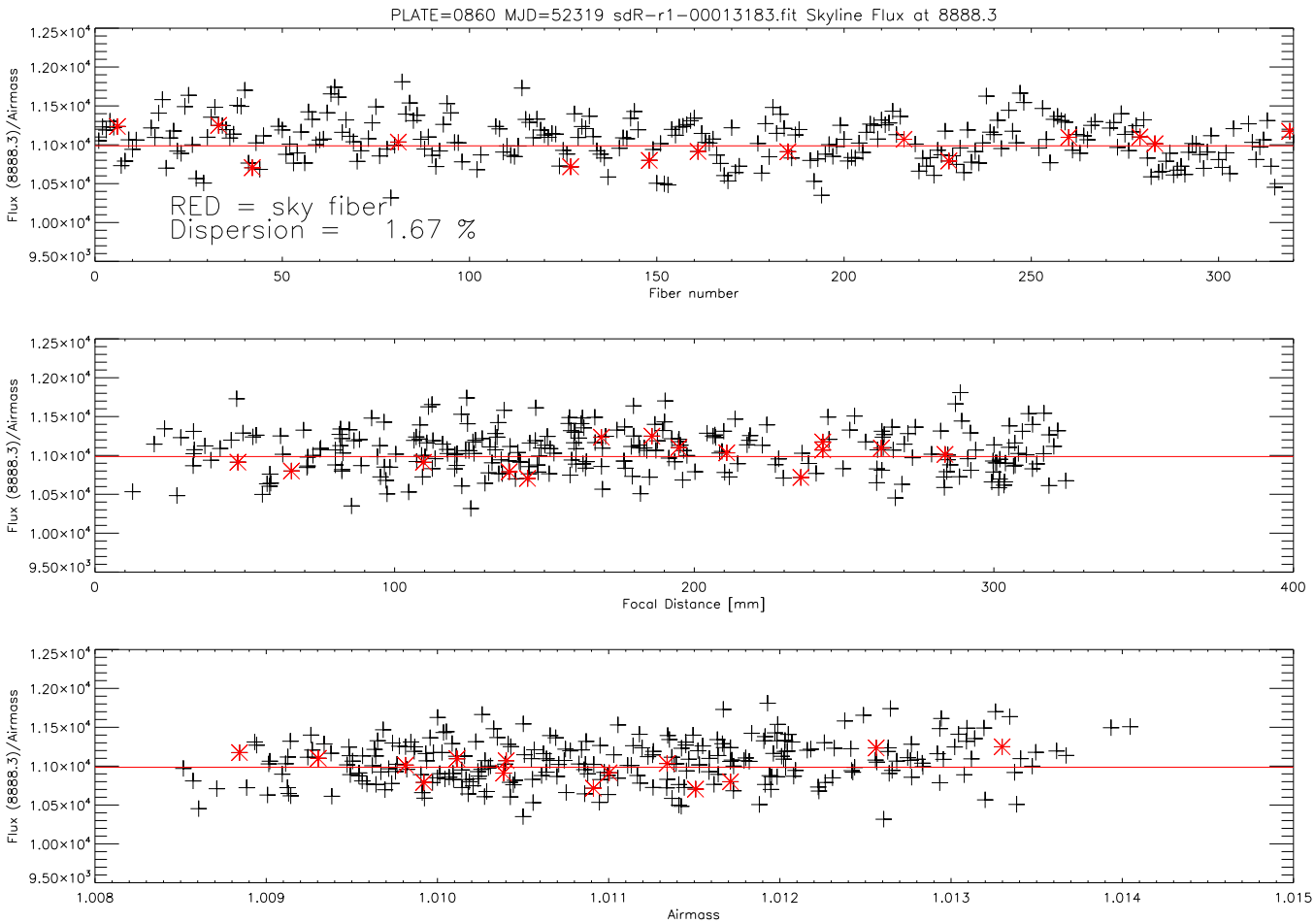

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

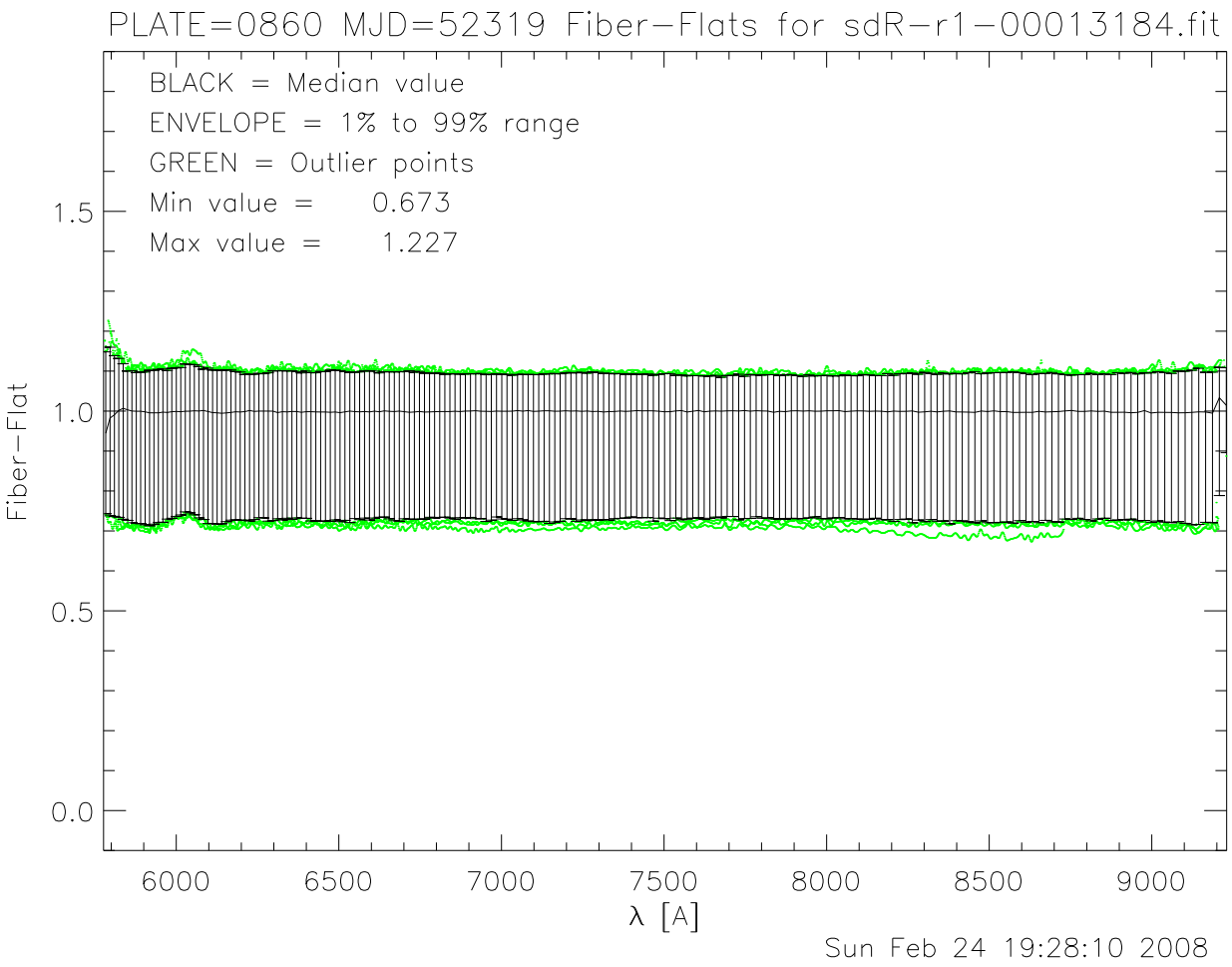

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

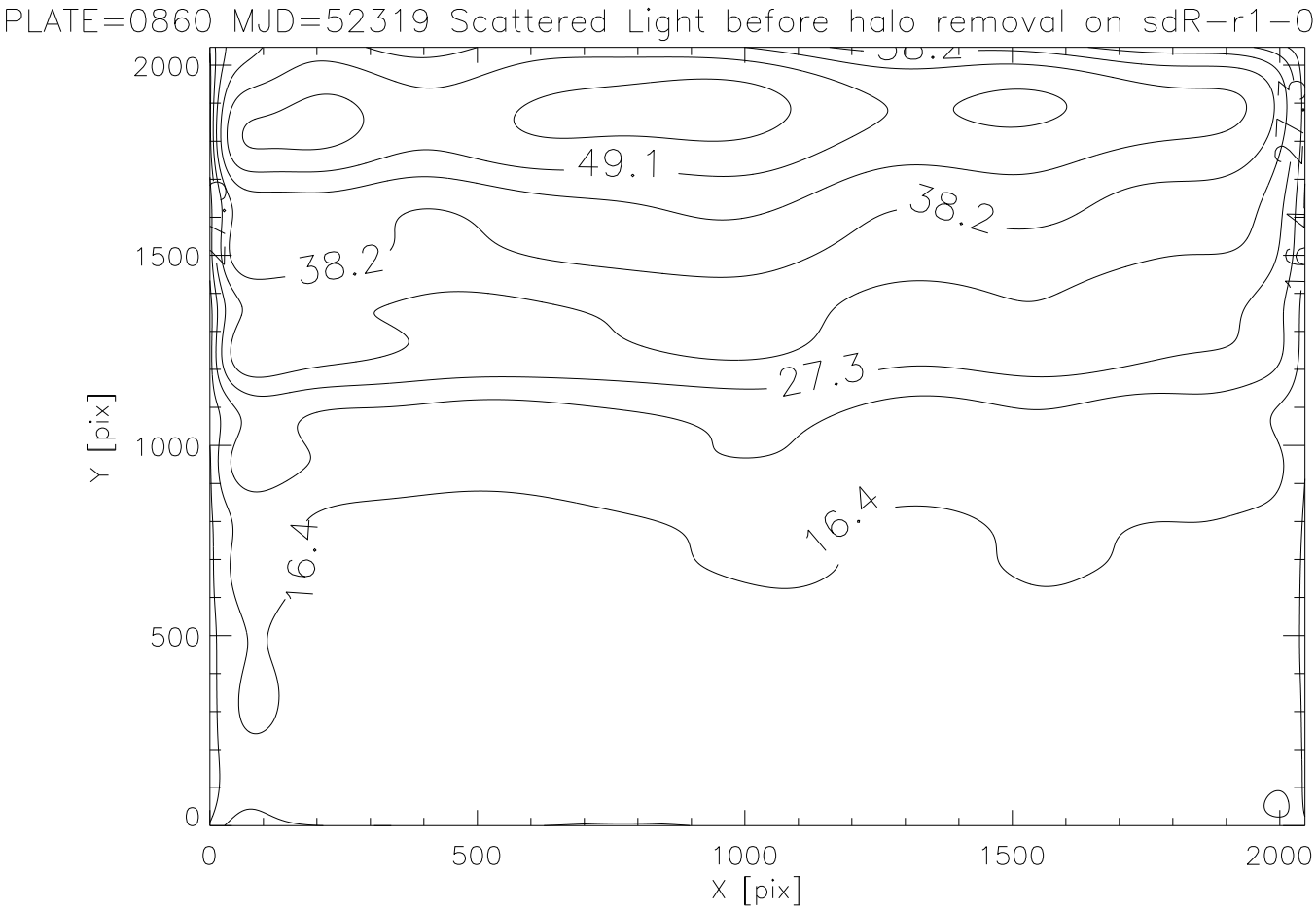

PLATE=0860 MJD=52319 sdR-r1-00013183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

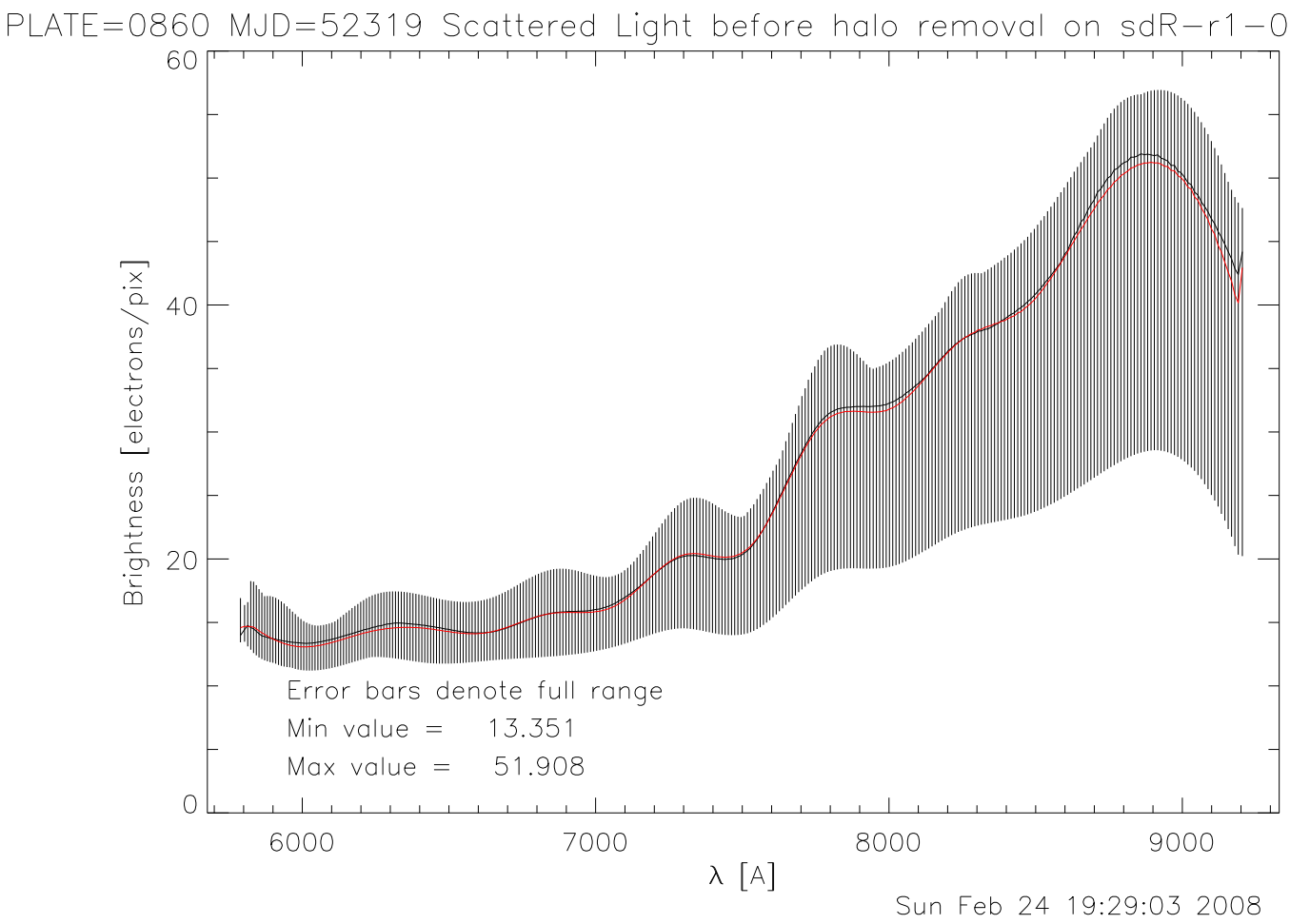

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

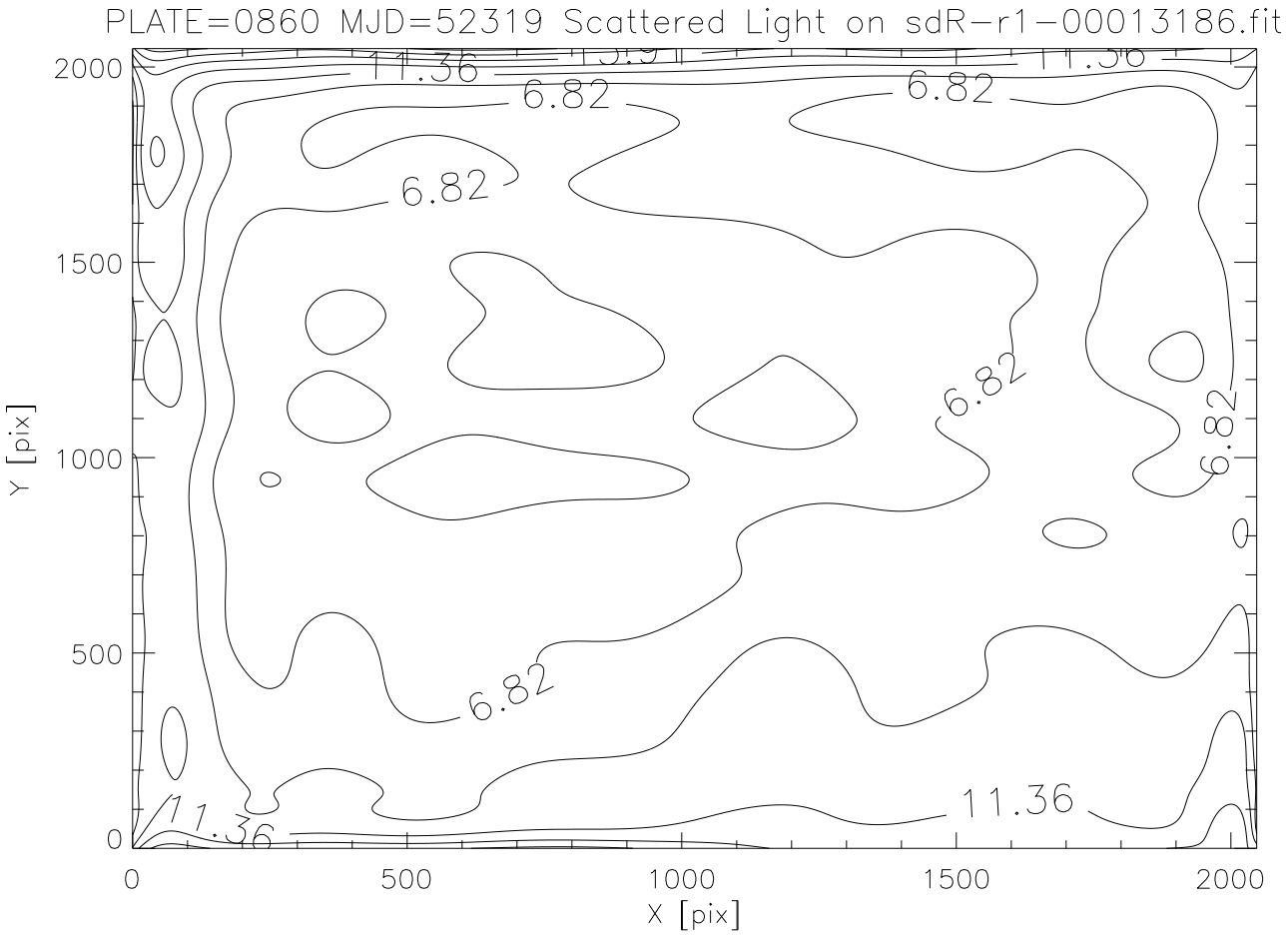

PLATE=0860 MJD=52319 sdR-r1-00013183.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.90 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

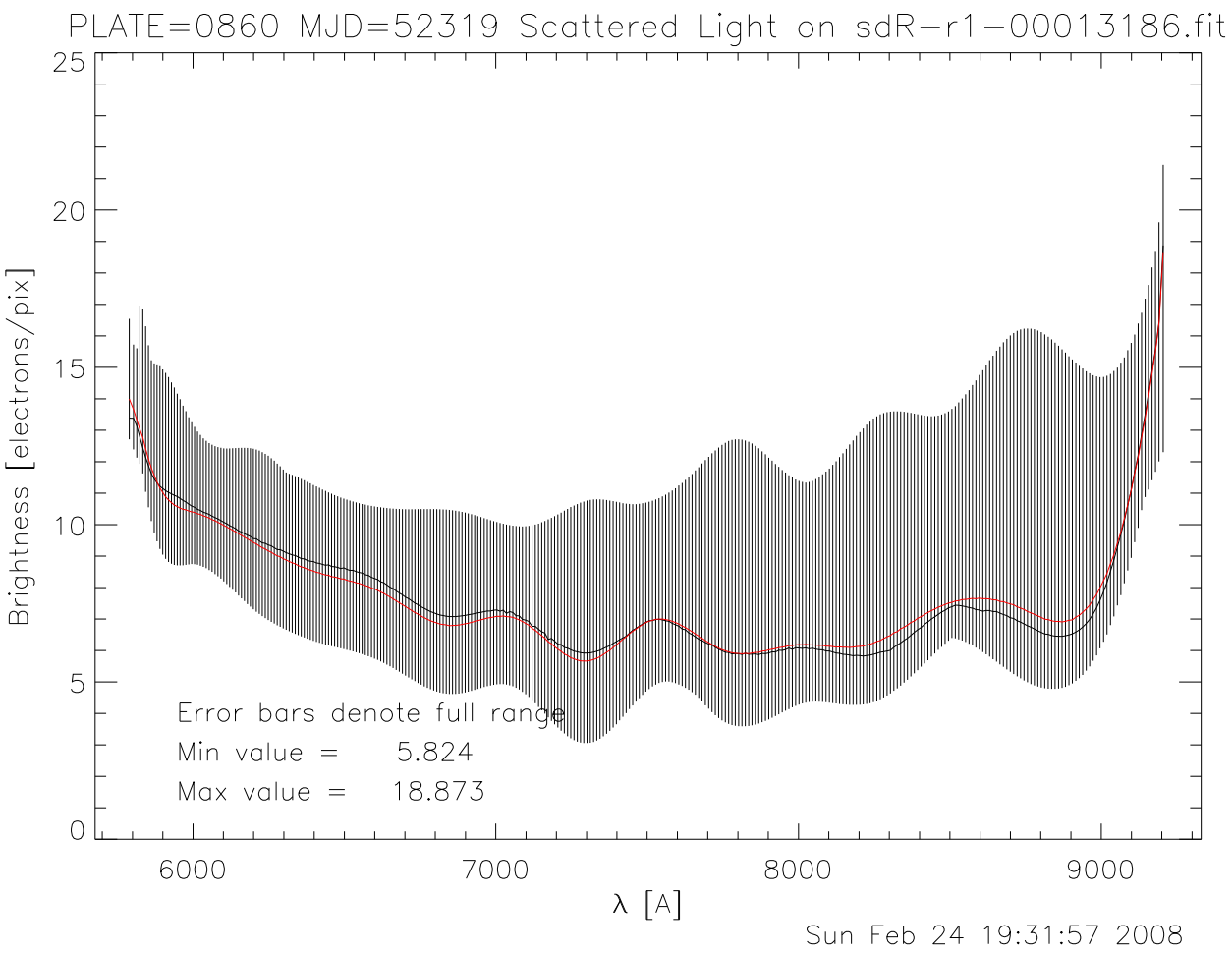

PLATE=0860 MJD=52319 sdR-r1-00013183.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.67 %
Fiber number
Focal Distance [mm]
Airmass

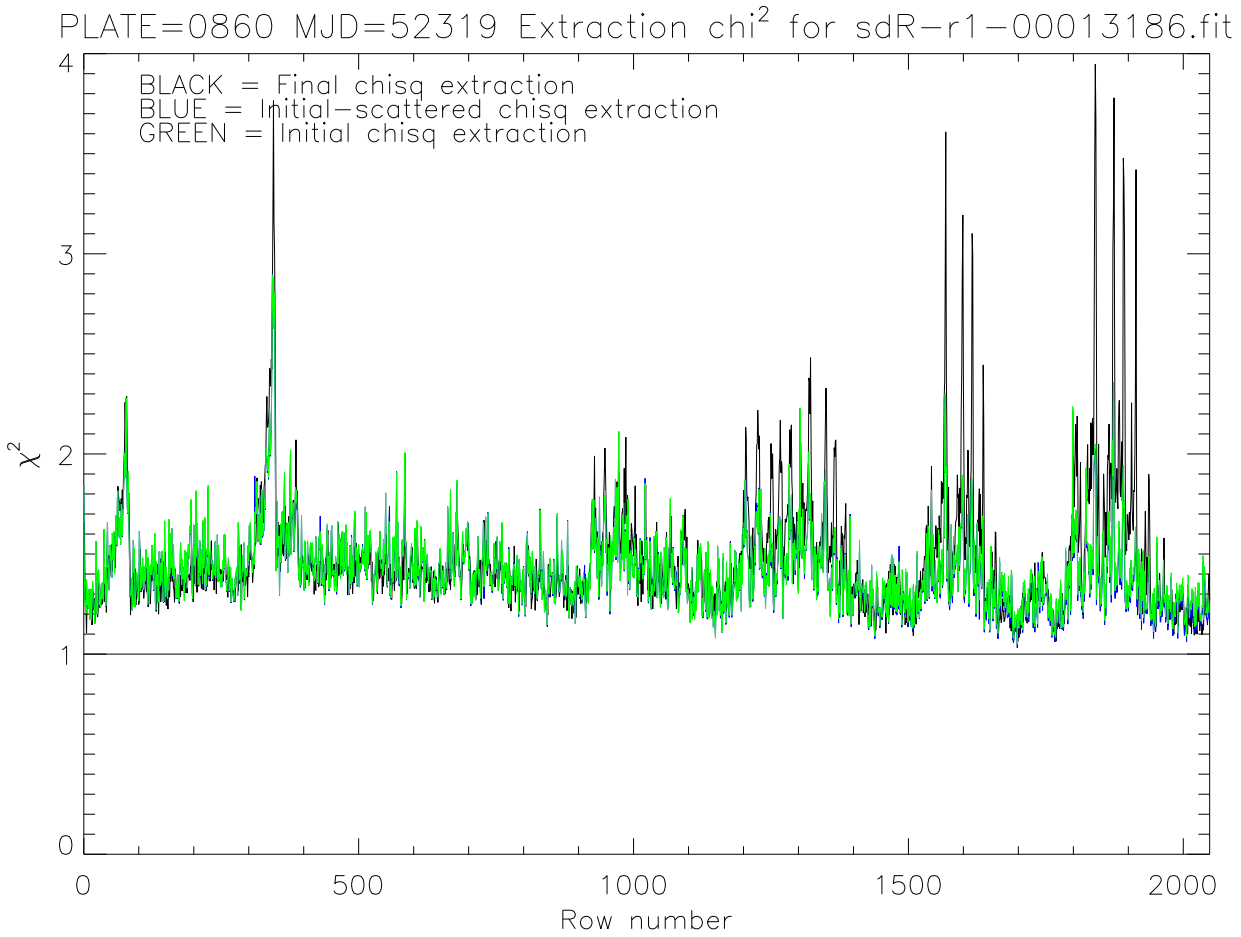

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:28:10 2008

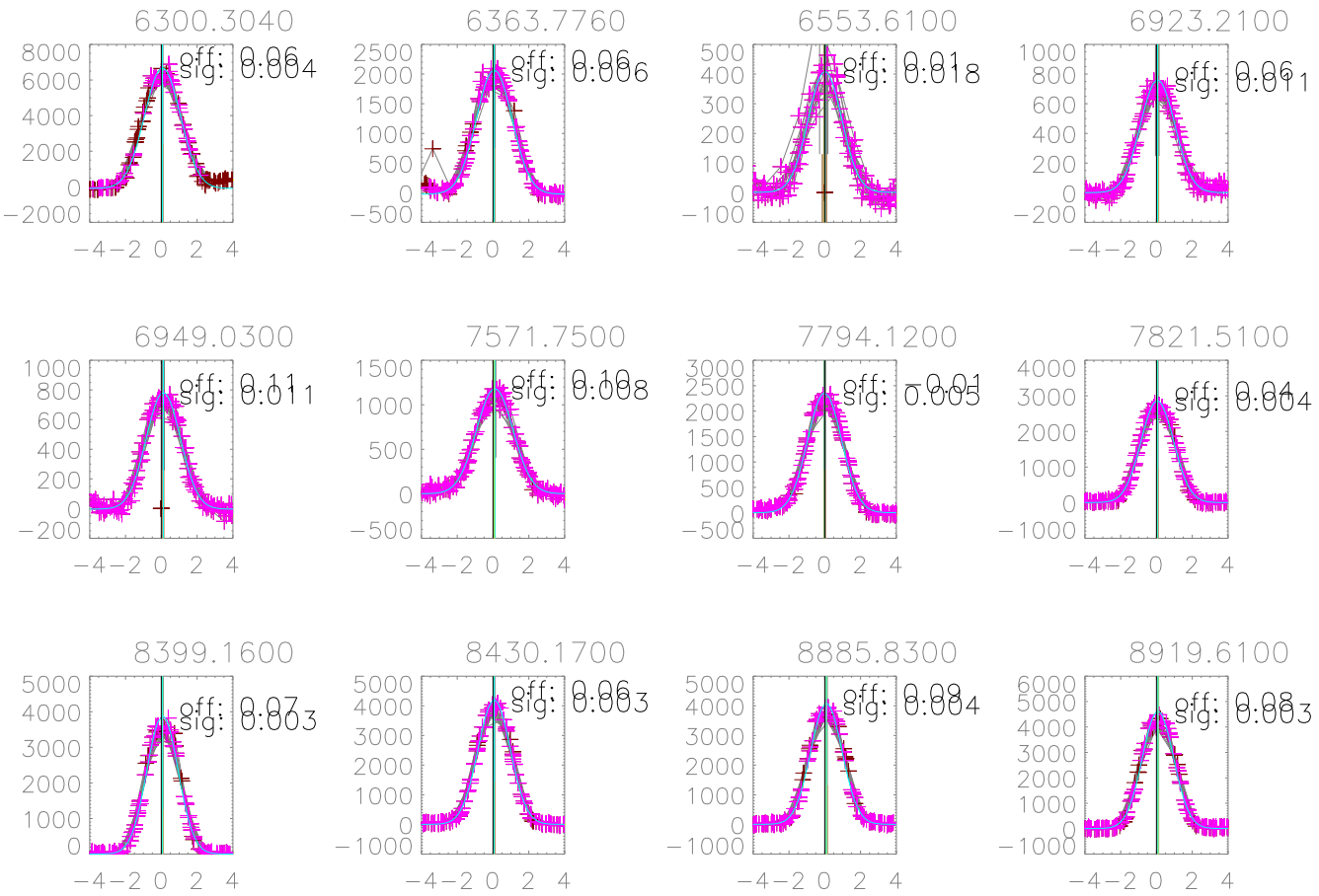

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013186.fi
49.1
38.2
38.2
27.3
16.4
16.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

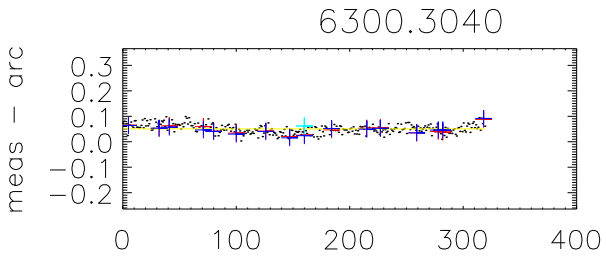

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013186.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 13.351
Max value = 51.908
Sun Feb 24 19:29:03 2008

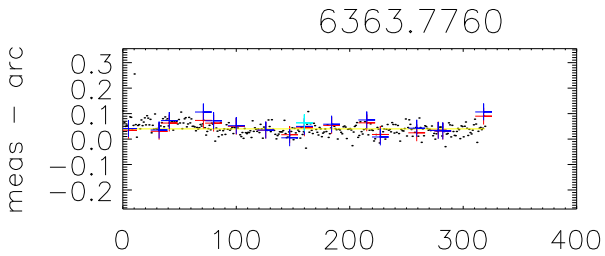

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013186.fit
11.36
6.82
6.82
6.82
6.82
6.82
0
0
0
11.36
11.36
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

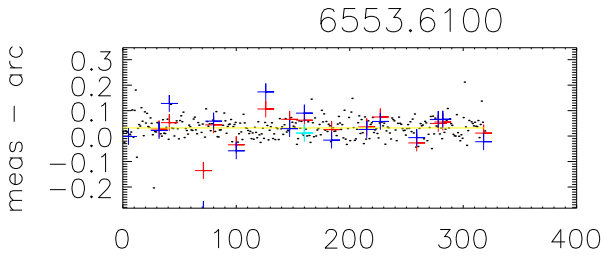

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013186.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.824
Max value = 18.873
Sun Feb 24 19:31:57 2008

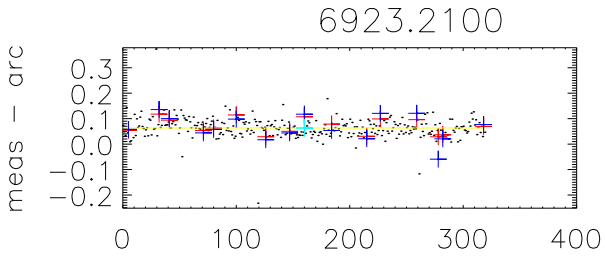

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r1−00013186.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

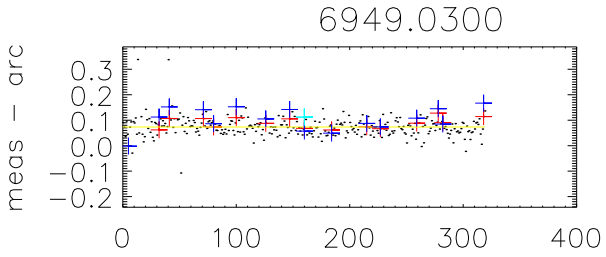

6300.3040
off: 0.06
sig: 0.004
6363.7760
off: 0.06
sig: 0.006
6553.6100
off: 0.01
sig: 0.018
6923.2100
off: 0.06
sig: 0.011
6949.0300
off: 0.11
sig: 0.011
7571.7500
off: 0.10
sig: 0.008
7794.1200
off: -0.01
sig: 0.005
7821.5100
off: 0.04
sig: 0.004
8399.1600
off: 0.07
sig: 0.003
8430.1700
off: 0.06
sig: 0.003
8885.8300
off: 0.08
sig: 0.004
8919.6100
off: 0.08
sig: 0.003

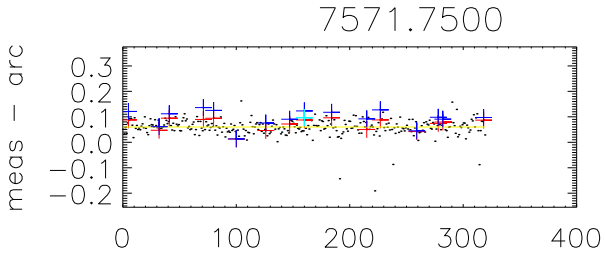

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

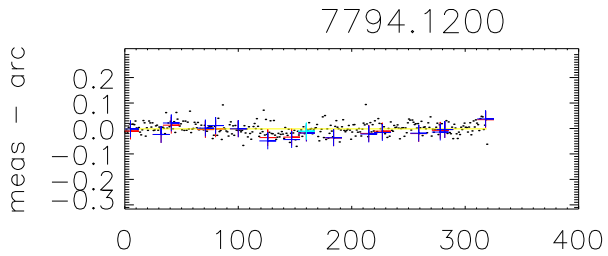

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

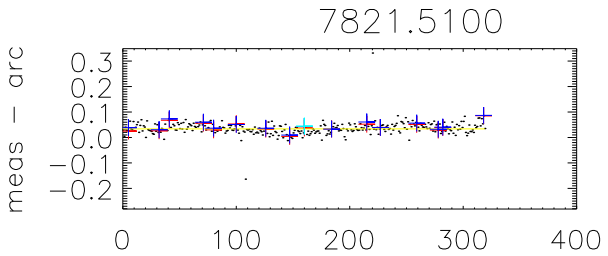

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

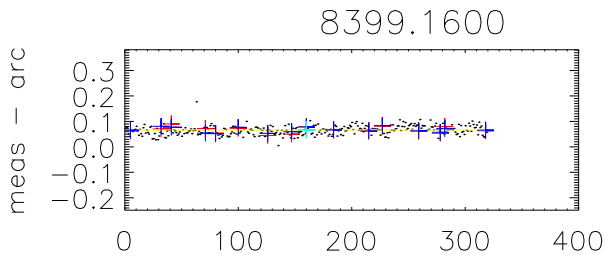

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

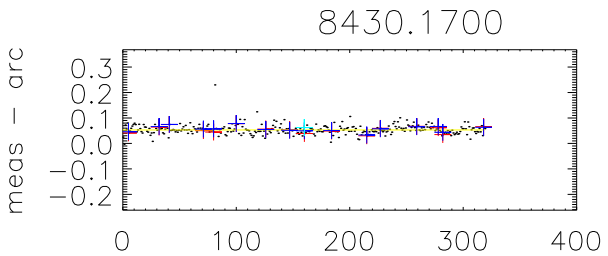

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

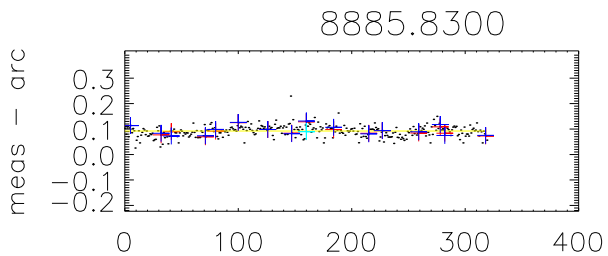

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

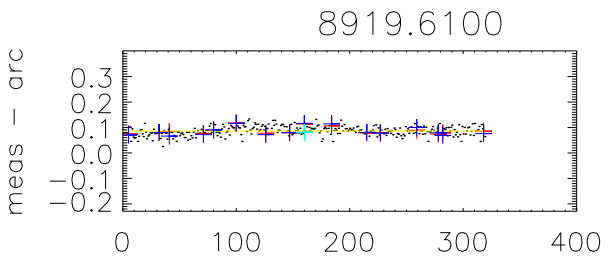

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

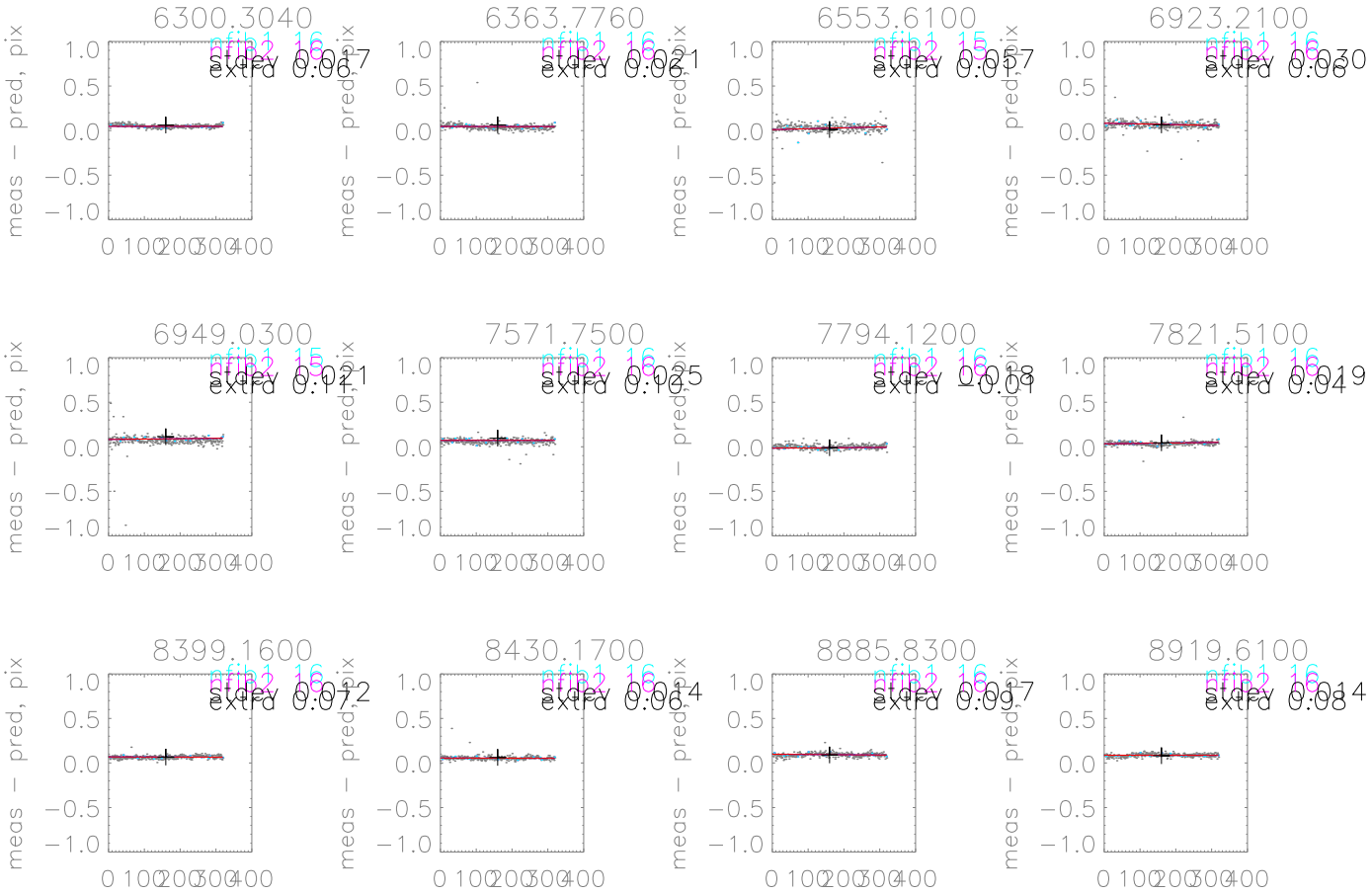

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

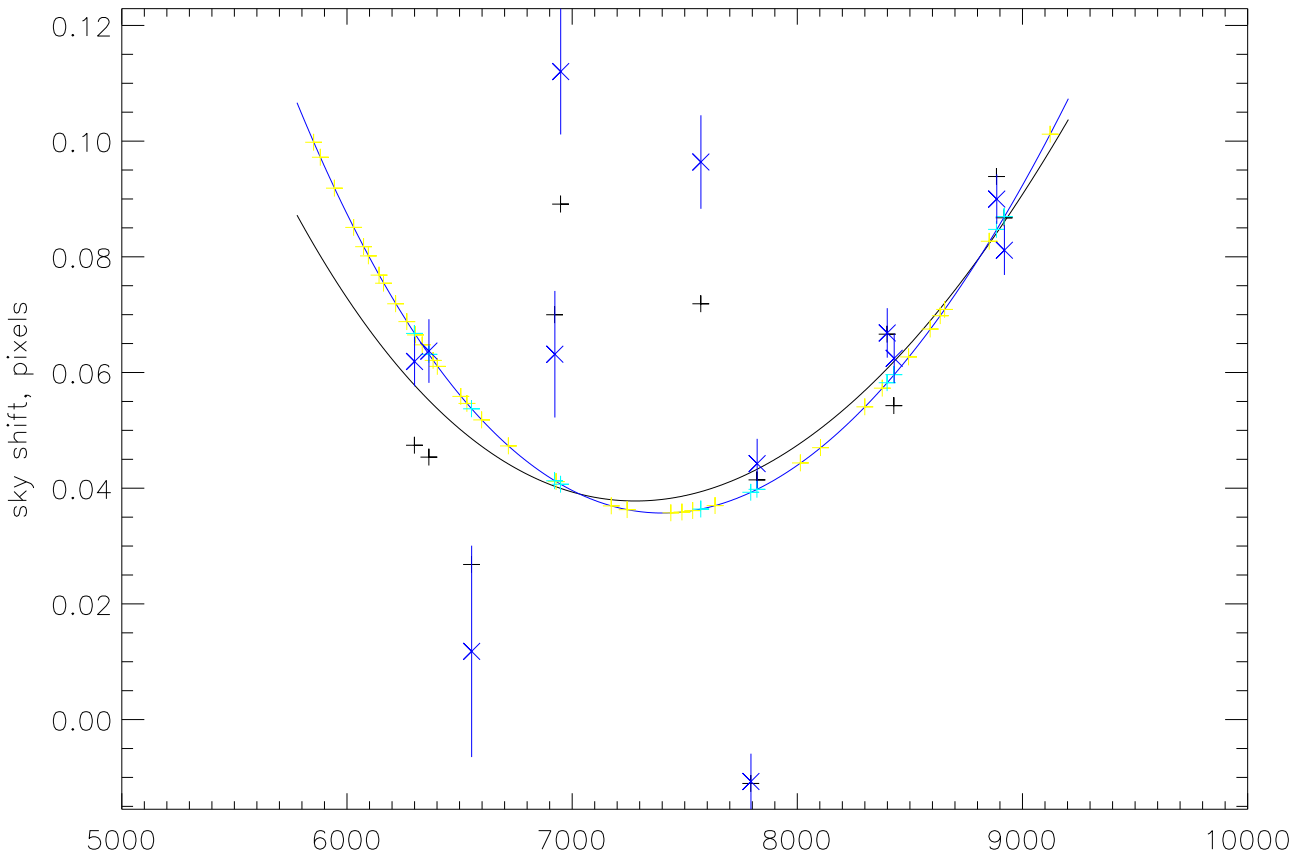

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

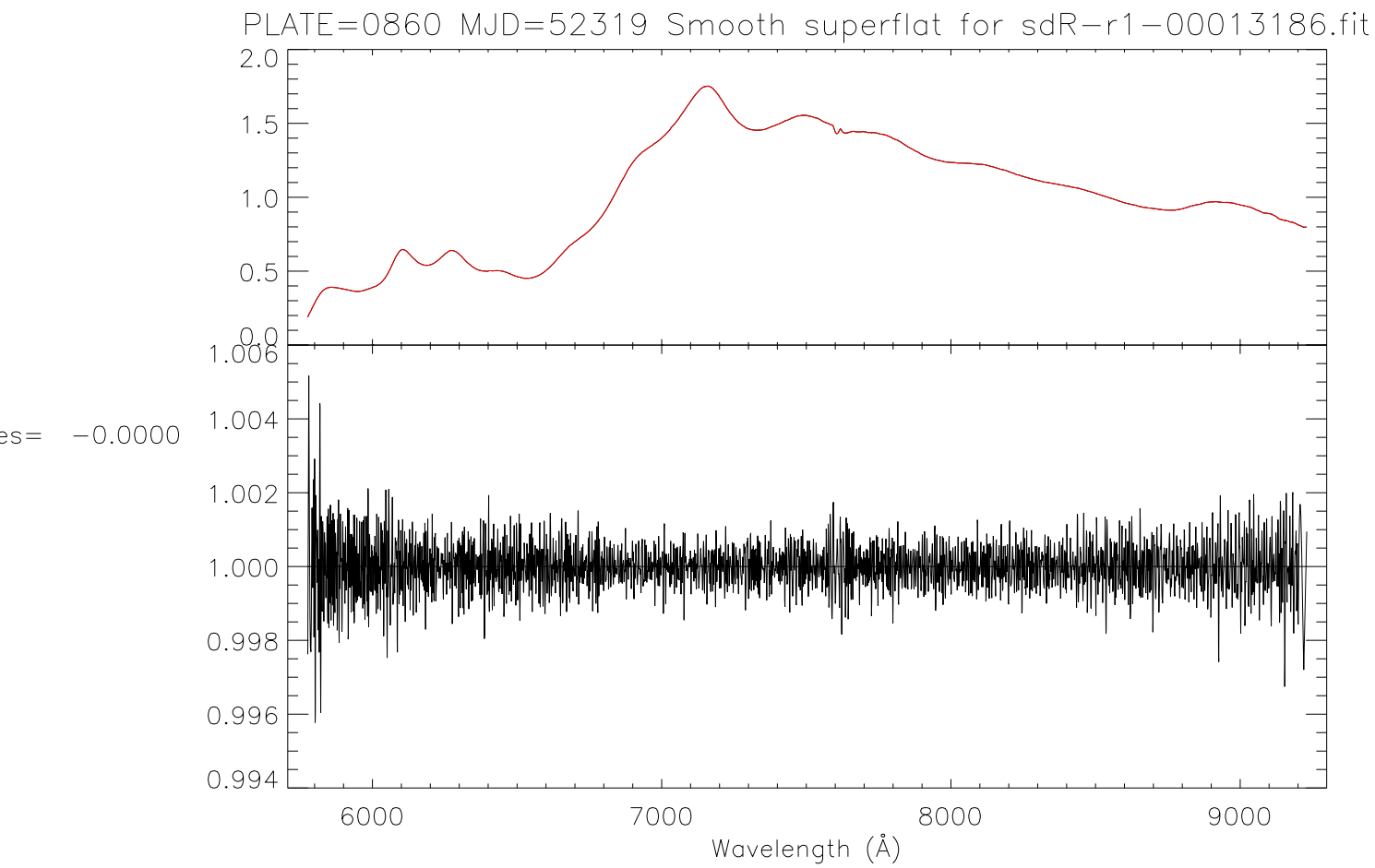

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

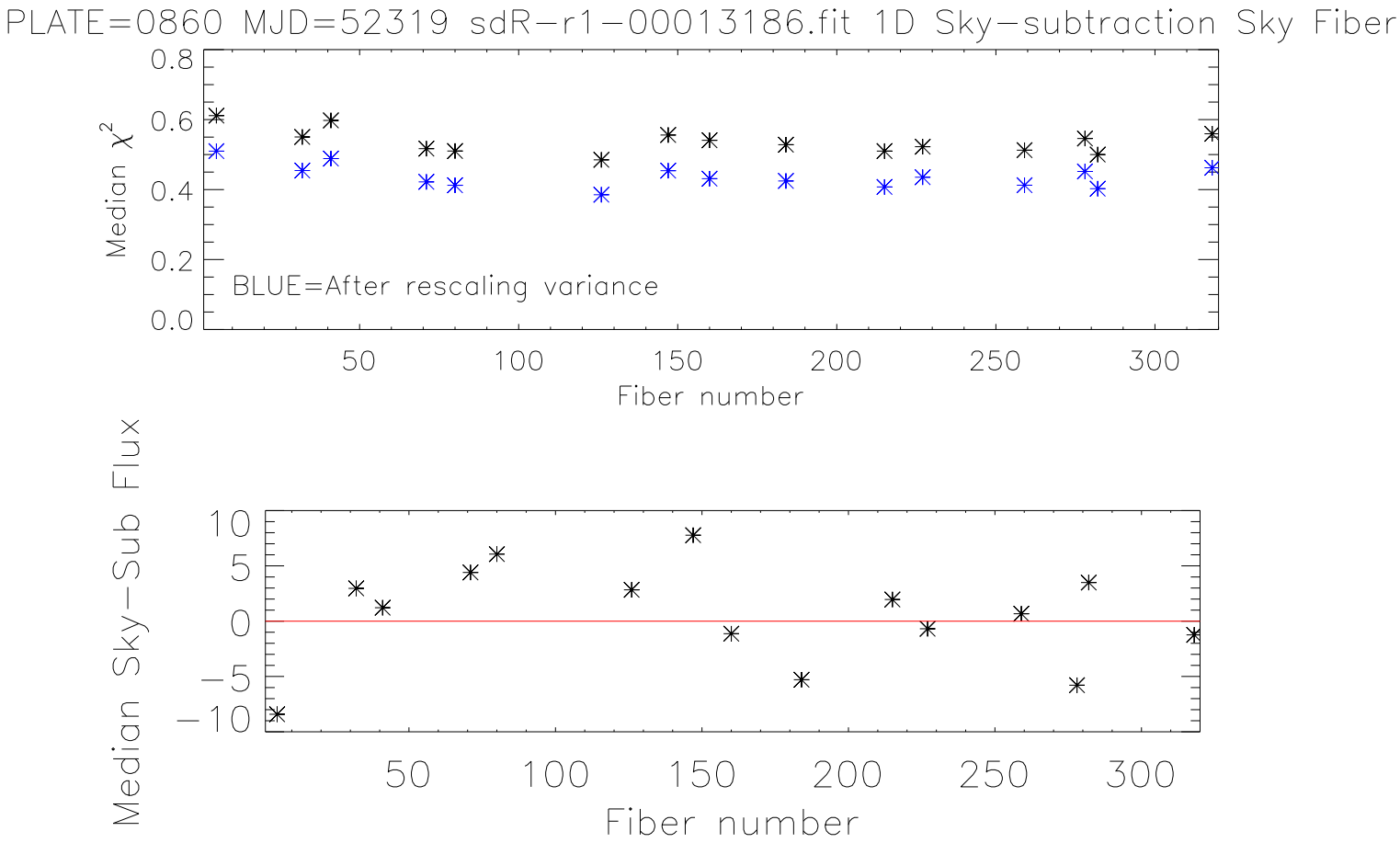

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

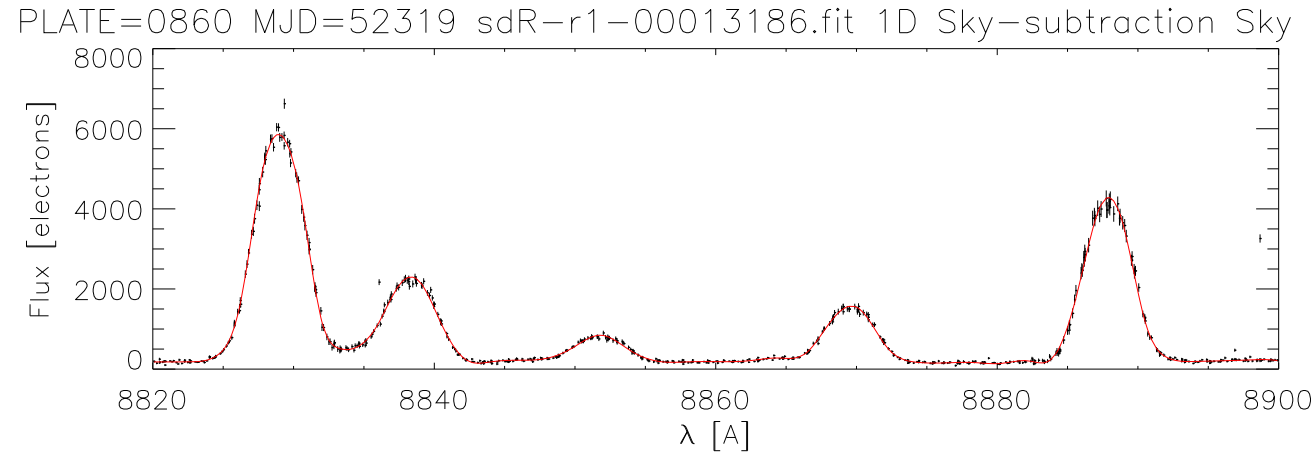

6300.3040
stdev 0.017
extra 0.006
6363.7760
stdev 0.021
extra 0.006
6553.6100
stdev 0.017
extra 0.001
6923.2100
stdev 0.030
extra 0.006
6949.0300
stdev 0.021
extra 0.011
7571.7500
stdev 0.025
extra 0.016
7794.1200
stdev 0.018
extra −0.001
7821.5100
stdev 0.019
extra 0.004
8399.1600
stdev 0.072
extra 0.007
8430.1700
stdev 0.014
extra 0.006
8885.8300
stdev 0.017
extra 0.009
8919.6100
stdev 0.014
extra 0.008
meas − pred, pix
mfhs1 15
mfhs2 16

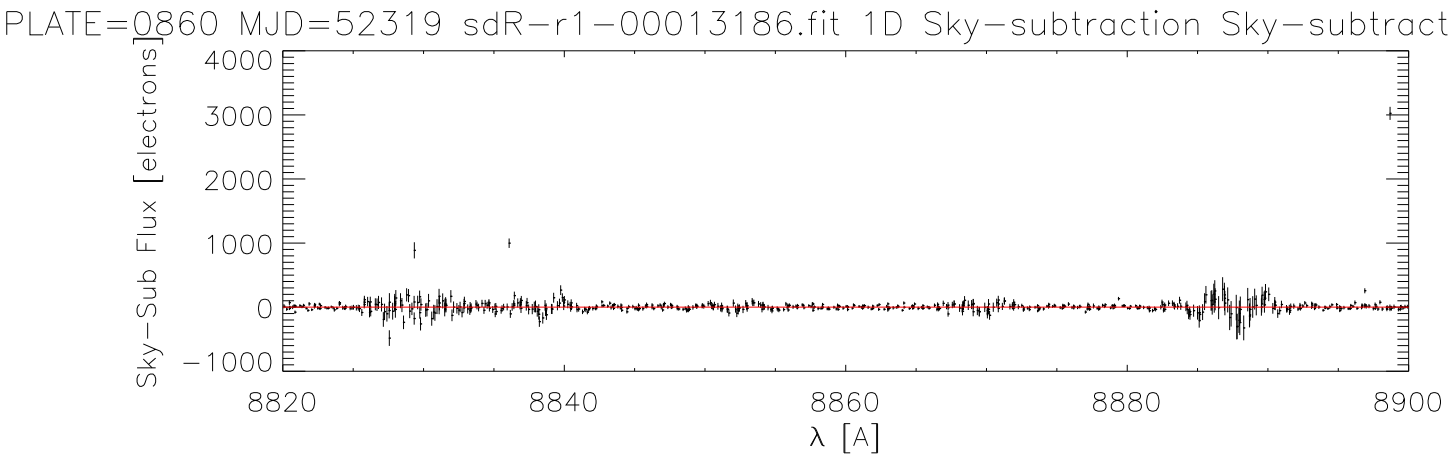

0.12
0.10
0.08
0.06
0.04
0.02
0.00
sky shift, pixels
5000
6000
7000
8000
9000
10000

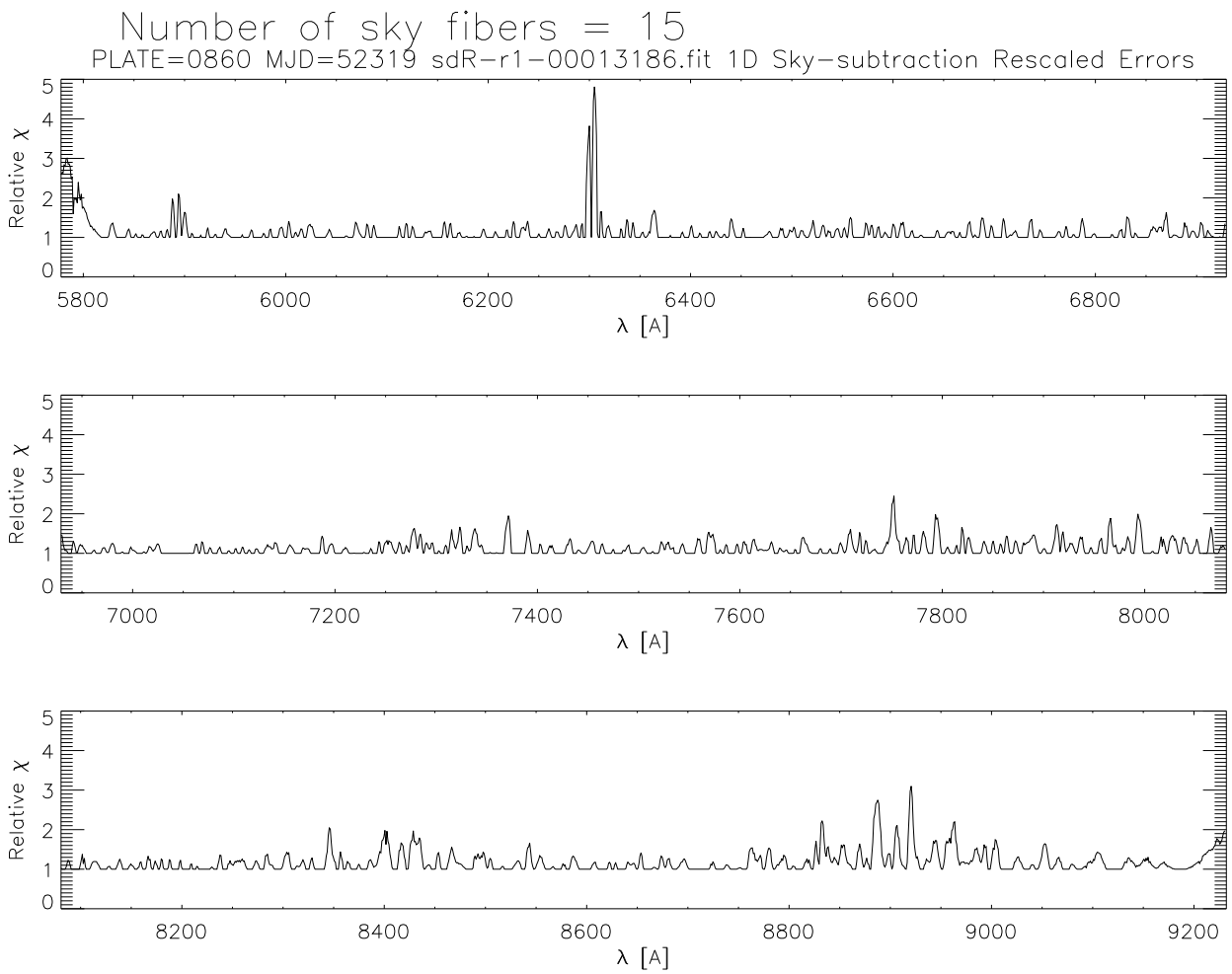

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013186.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

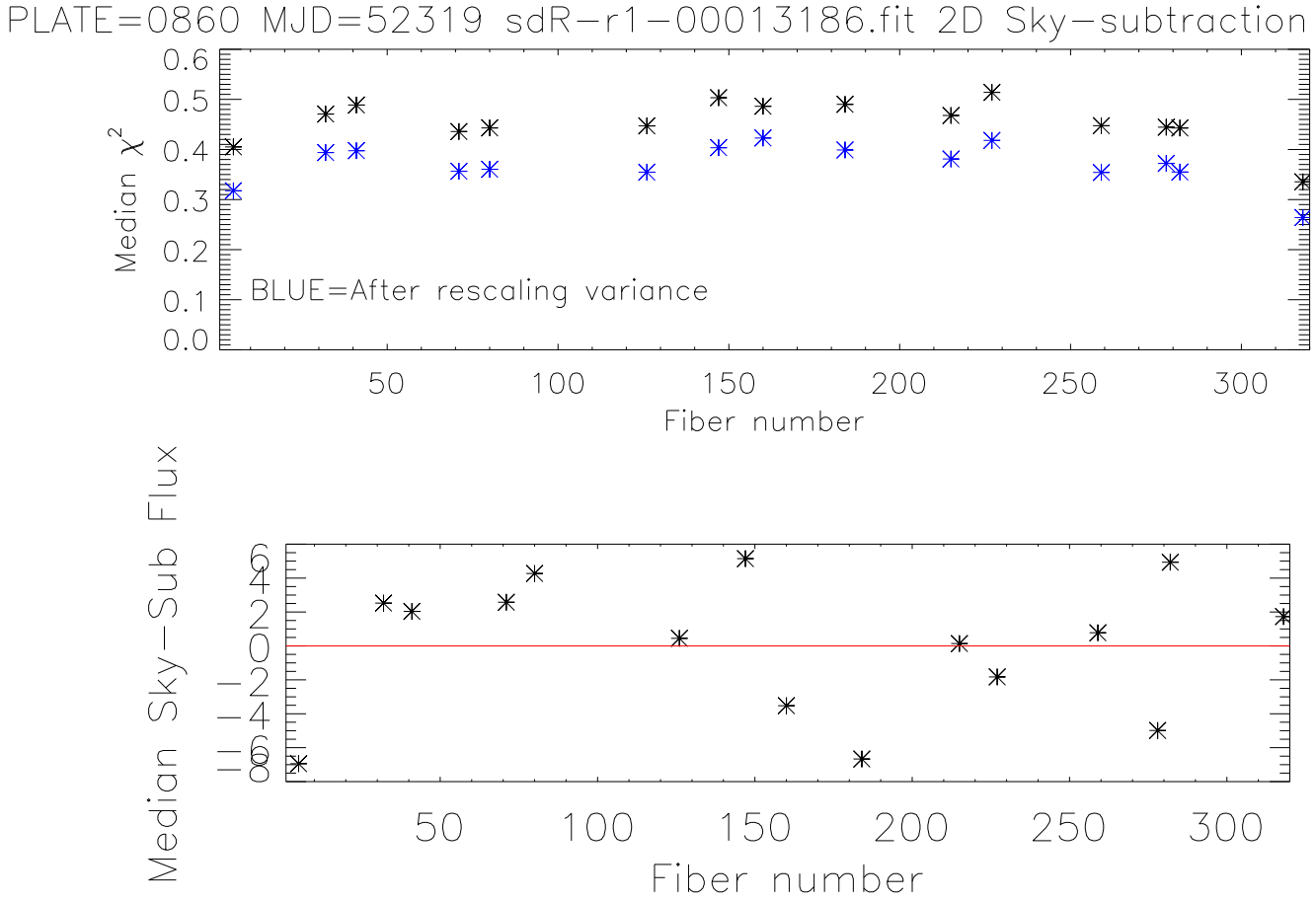
es= −0.0000

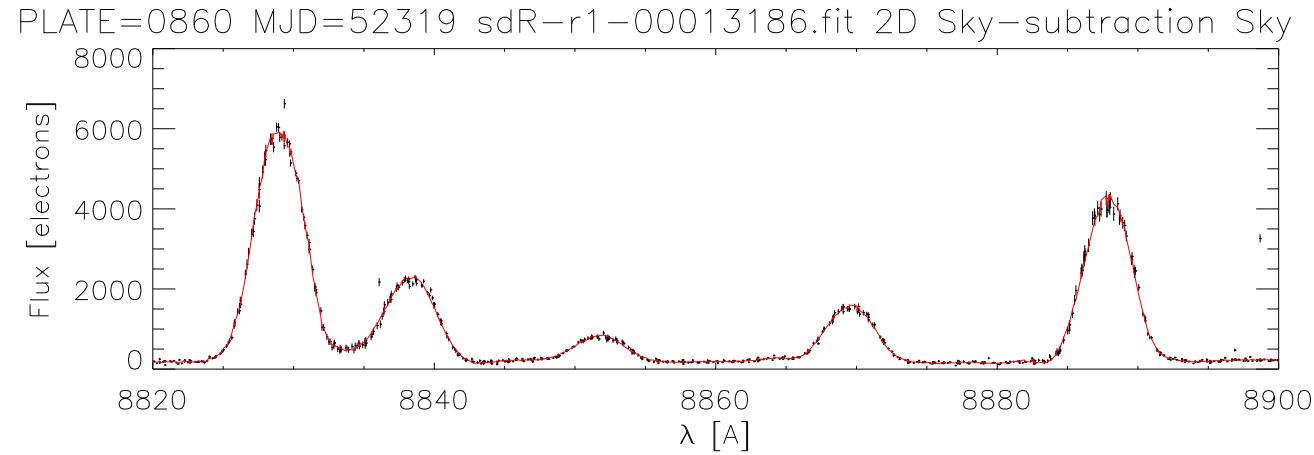

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

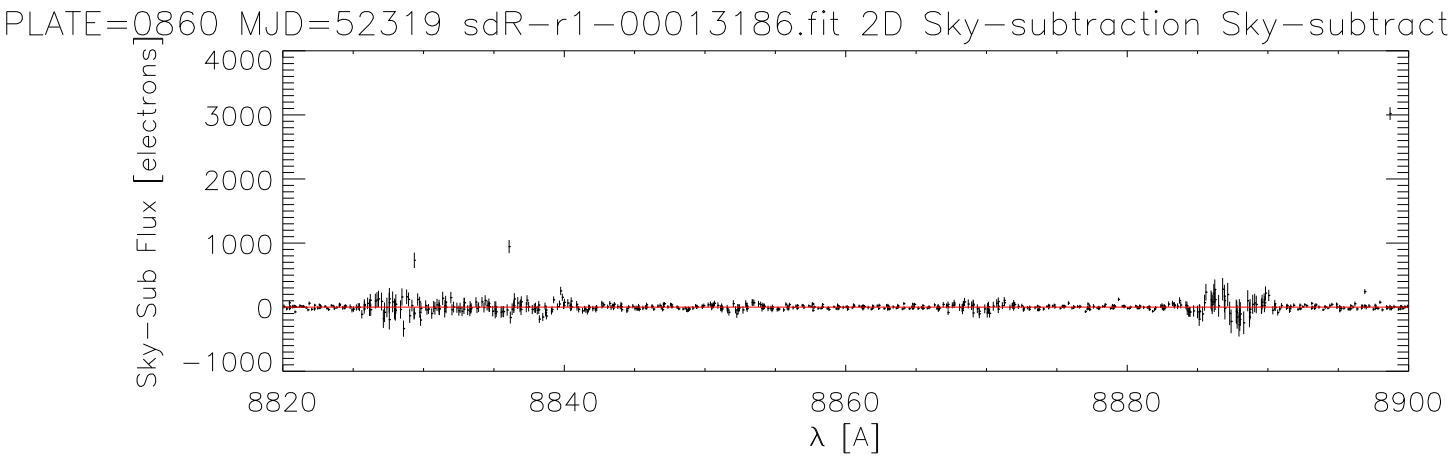

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

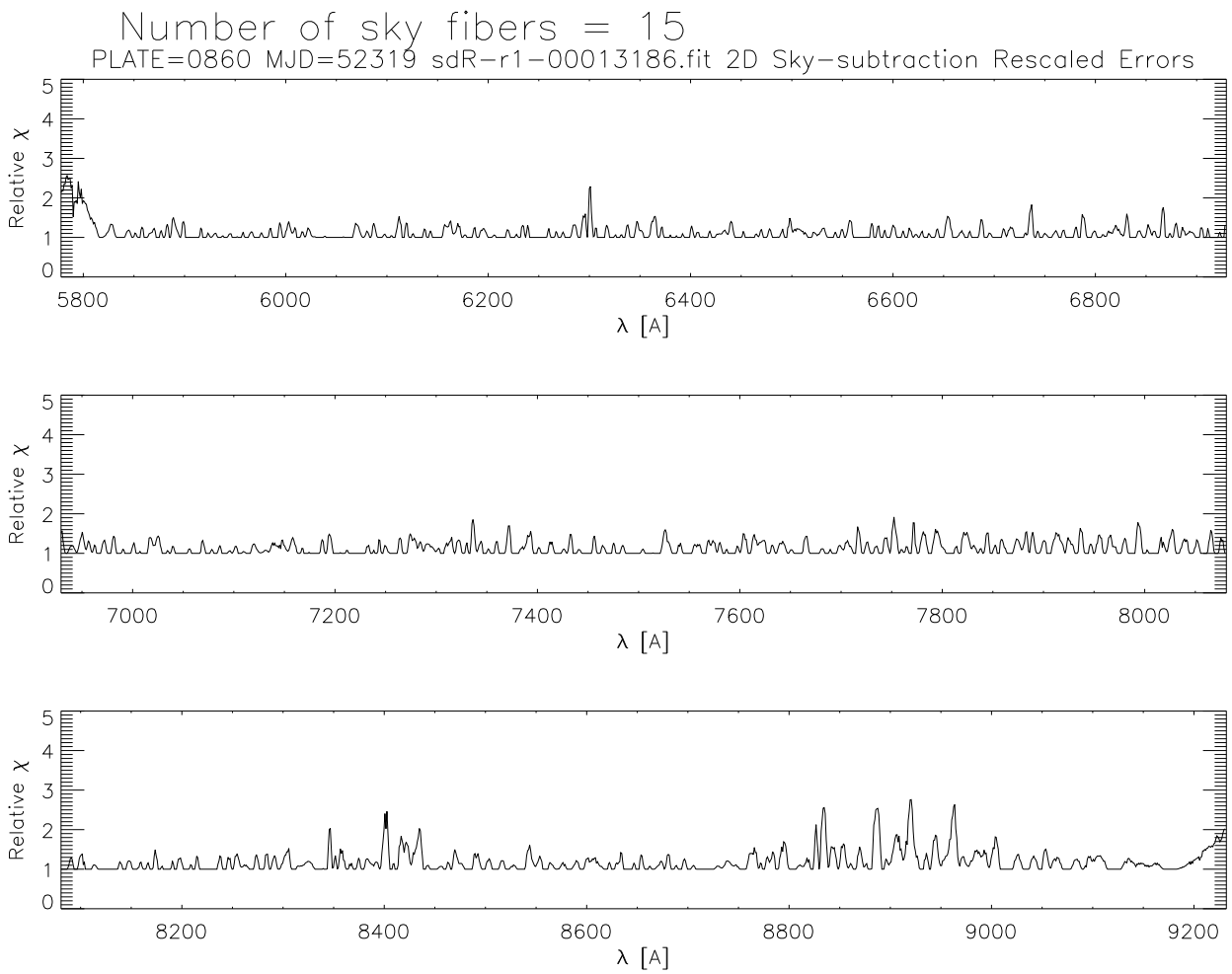

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

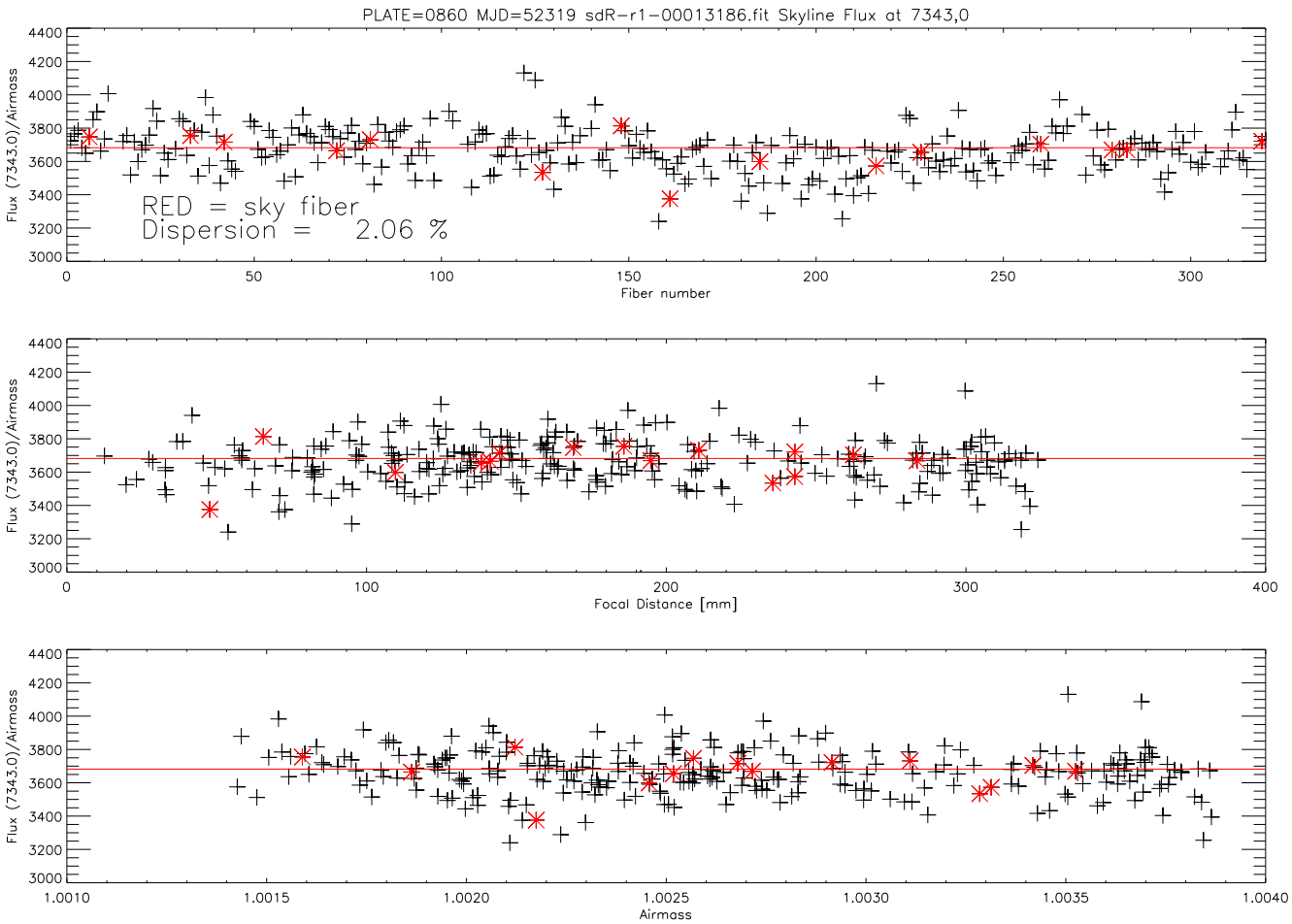

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013186.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

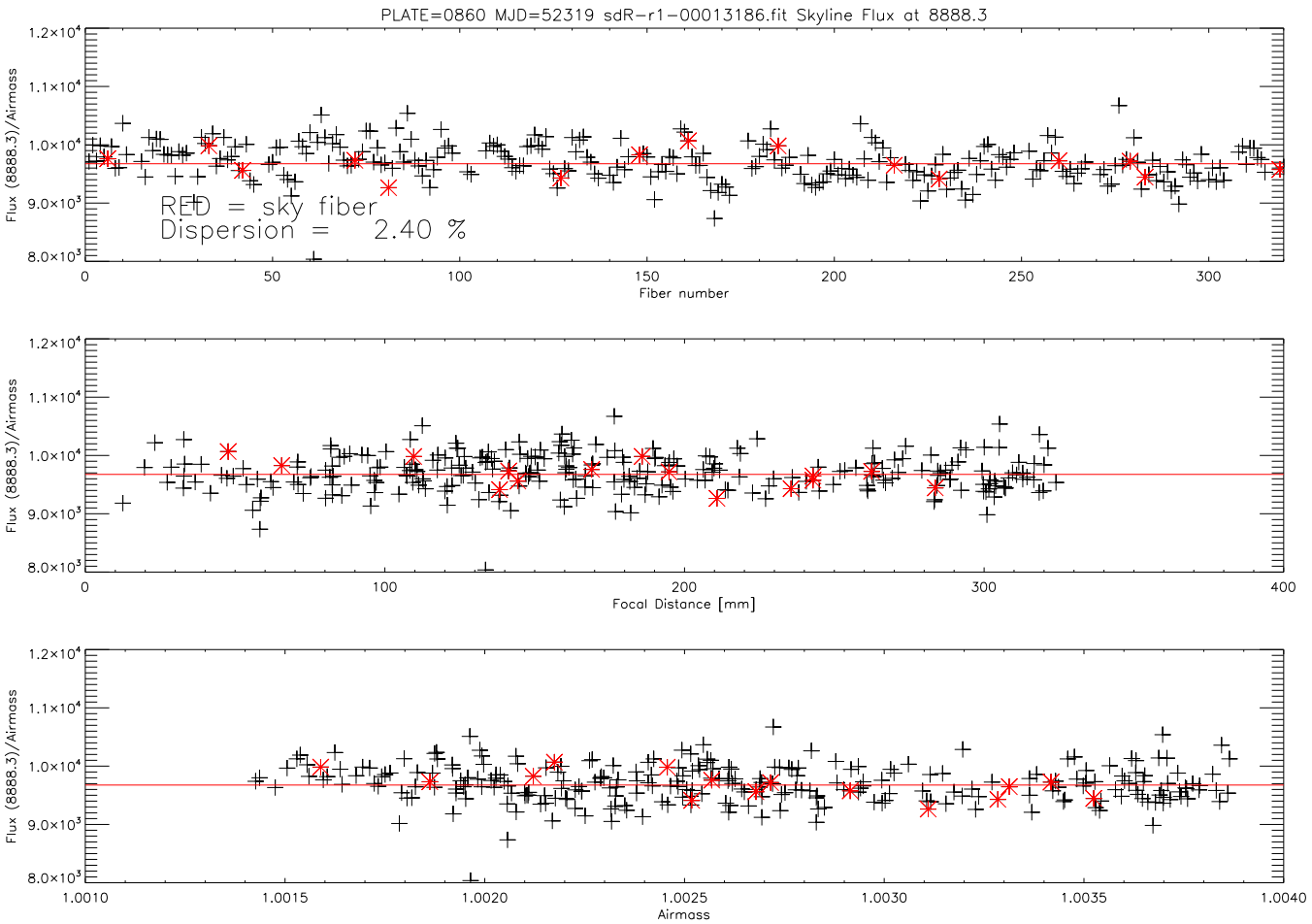

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-10
-9
-8
-7
-6
50
100
150
200
250
300
Fiber number

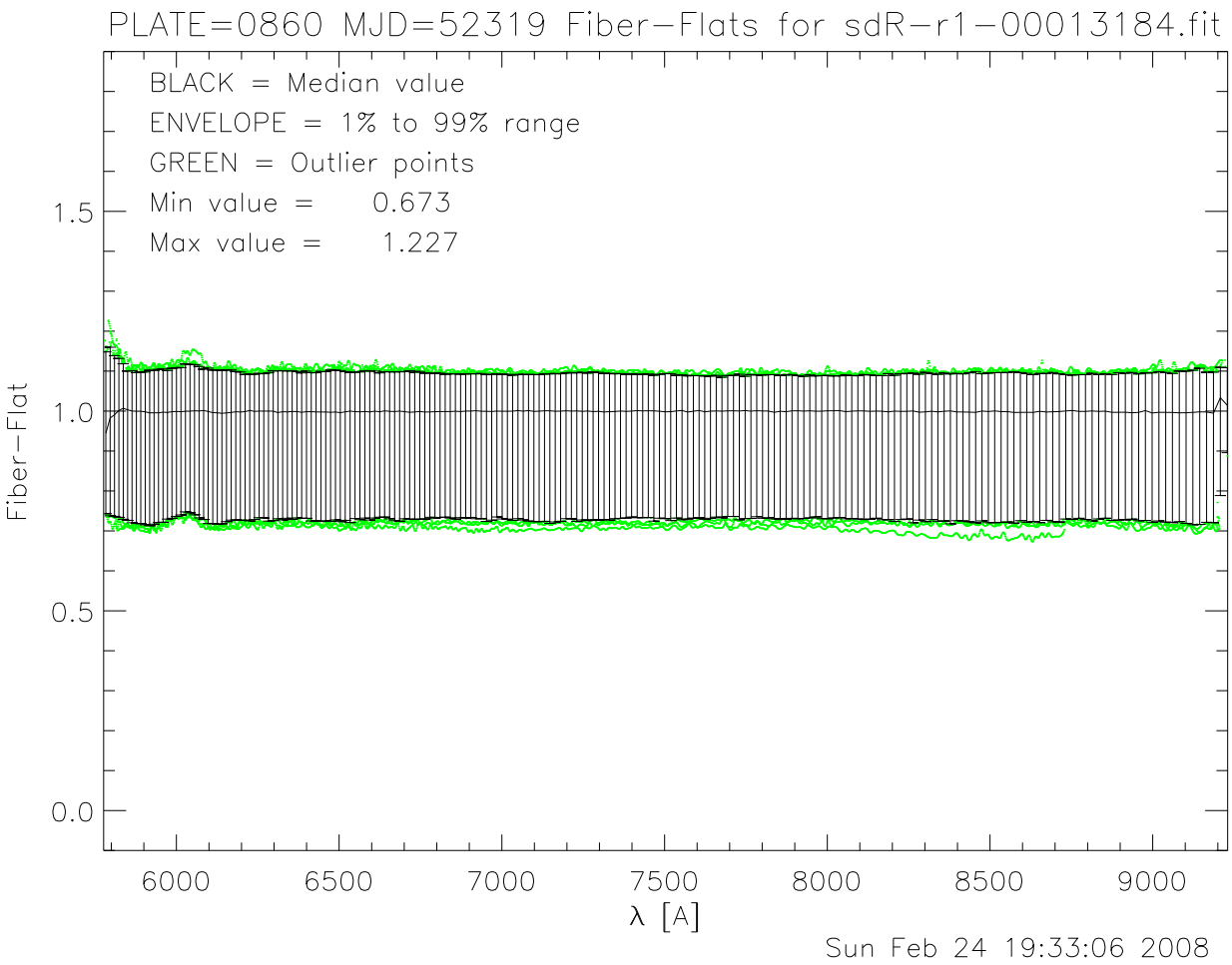

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

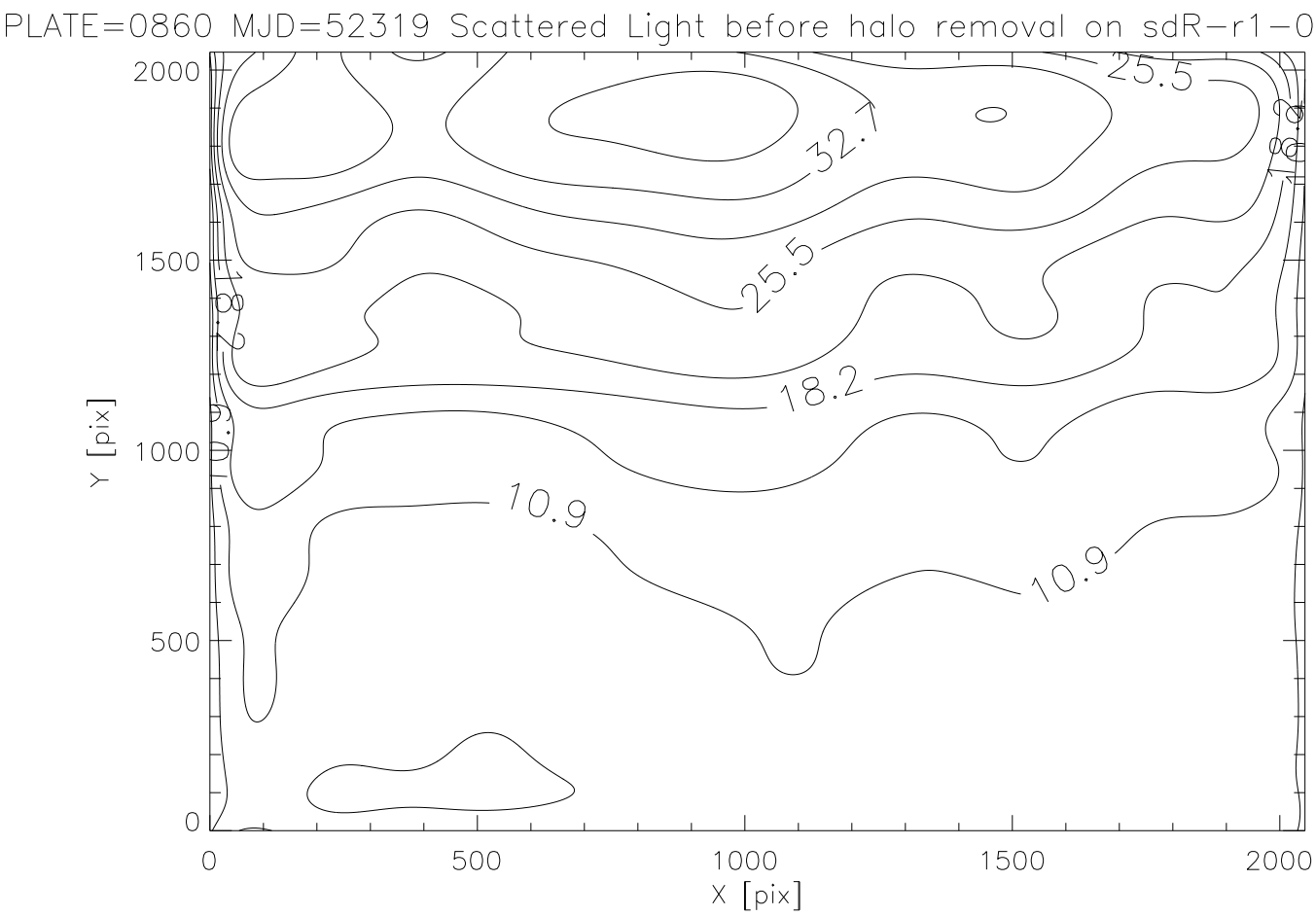

PLATE=0860 MJD=52319 sdR-r1-00013186.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

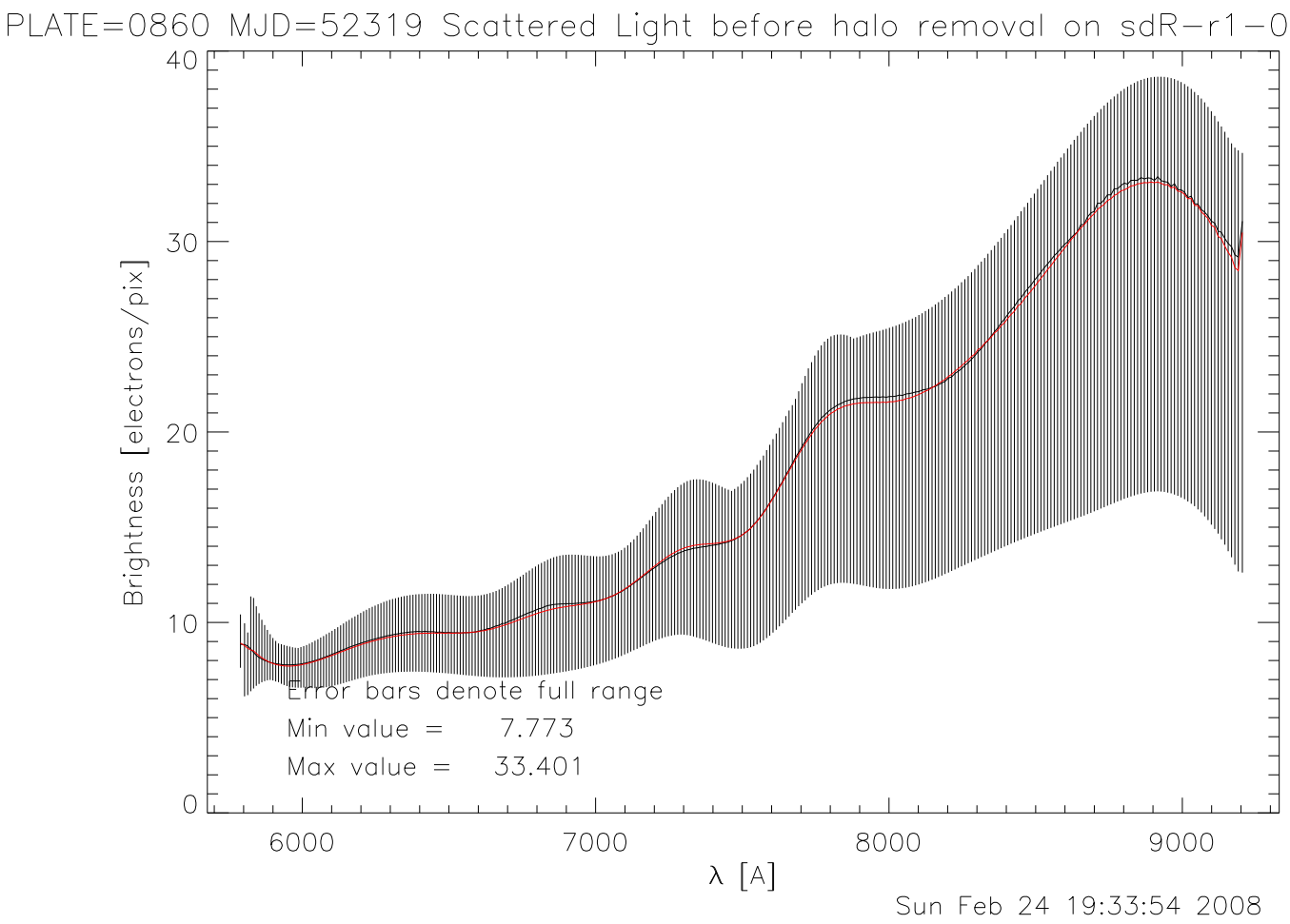

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013186.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

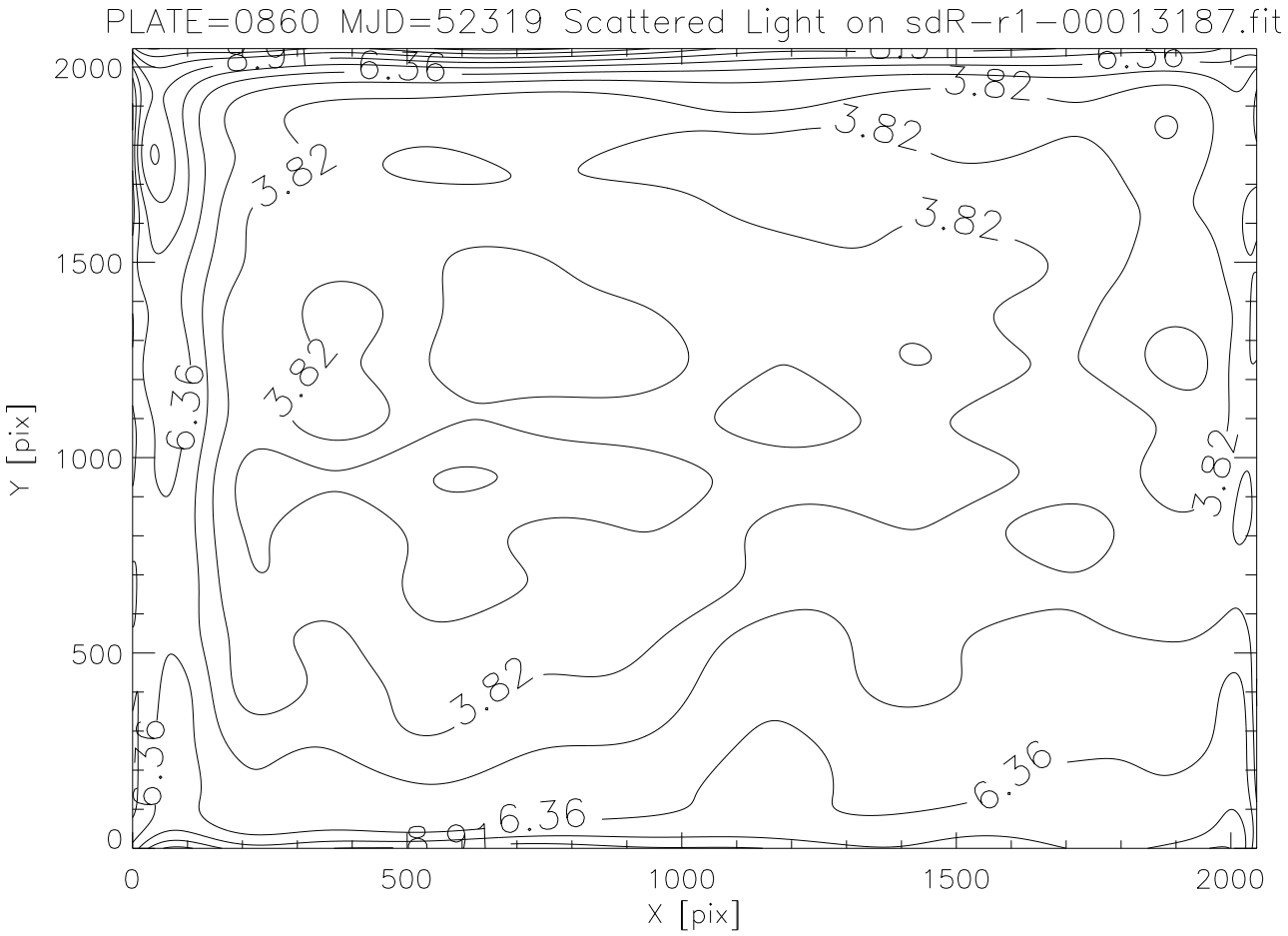

PLATE=0860 MJD=52319 sdR-r1-00013186.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

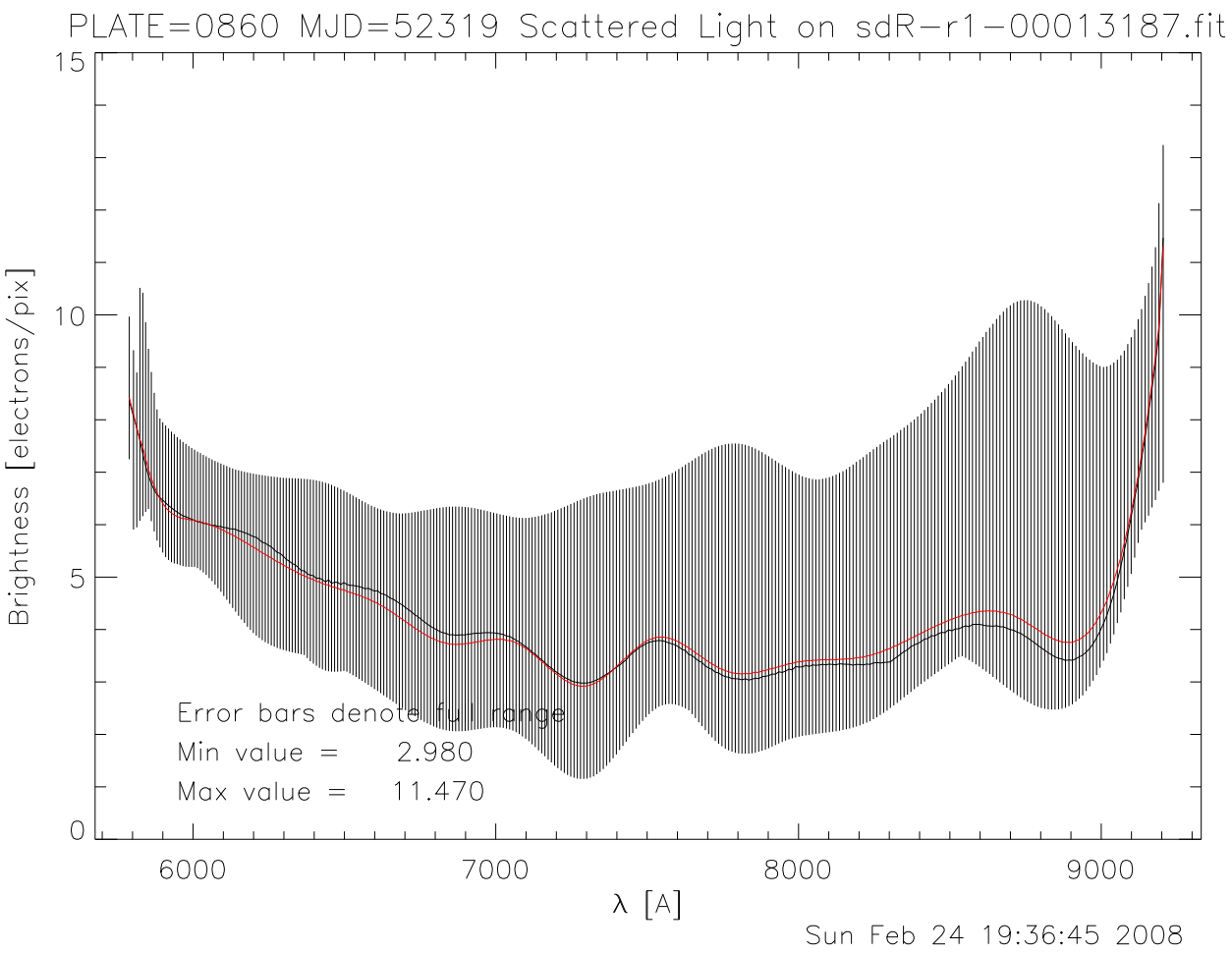

PLATE=0860 MJD=52319 sdR-r1-00013186.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.40 %
Fiber number
Focal Distance [mm]
Airmass

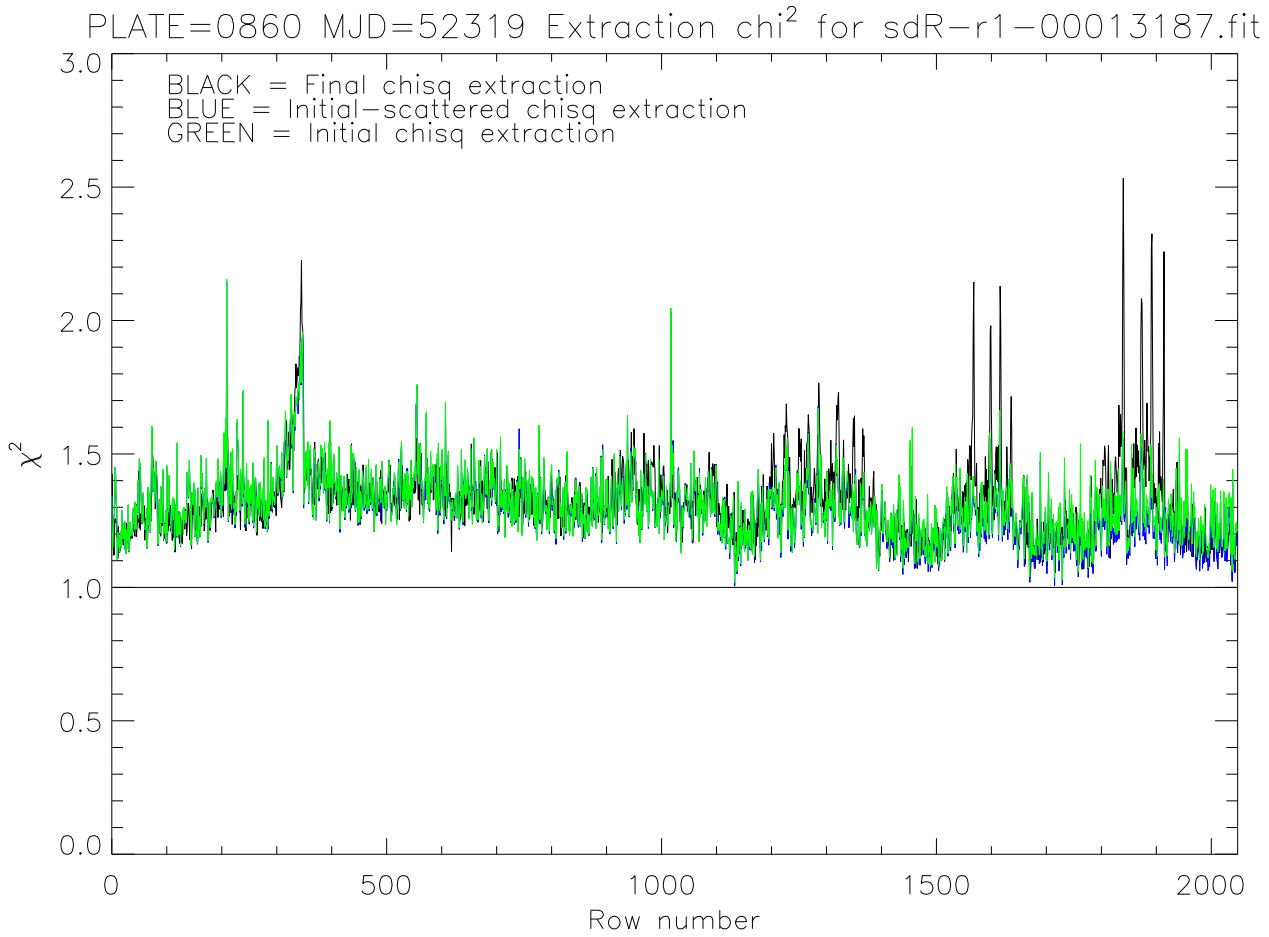

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:33:06 2008

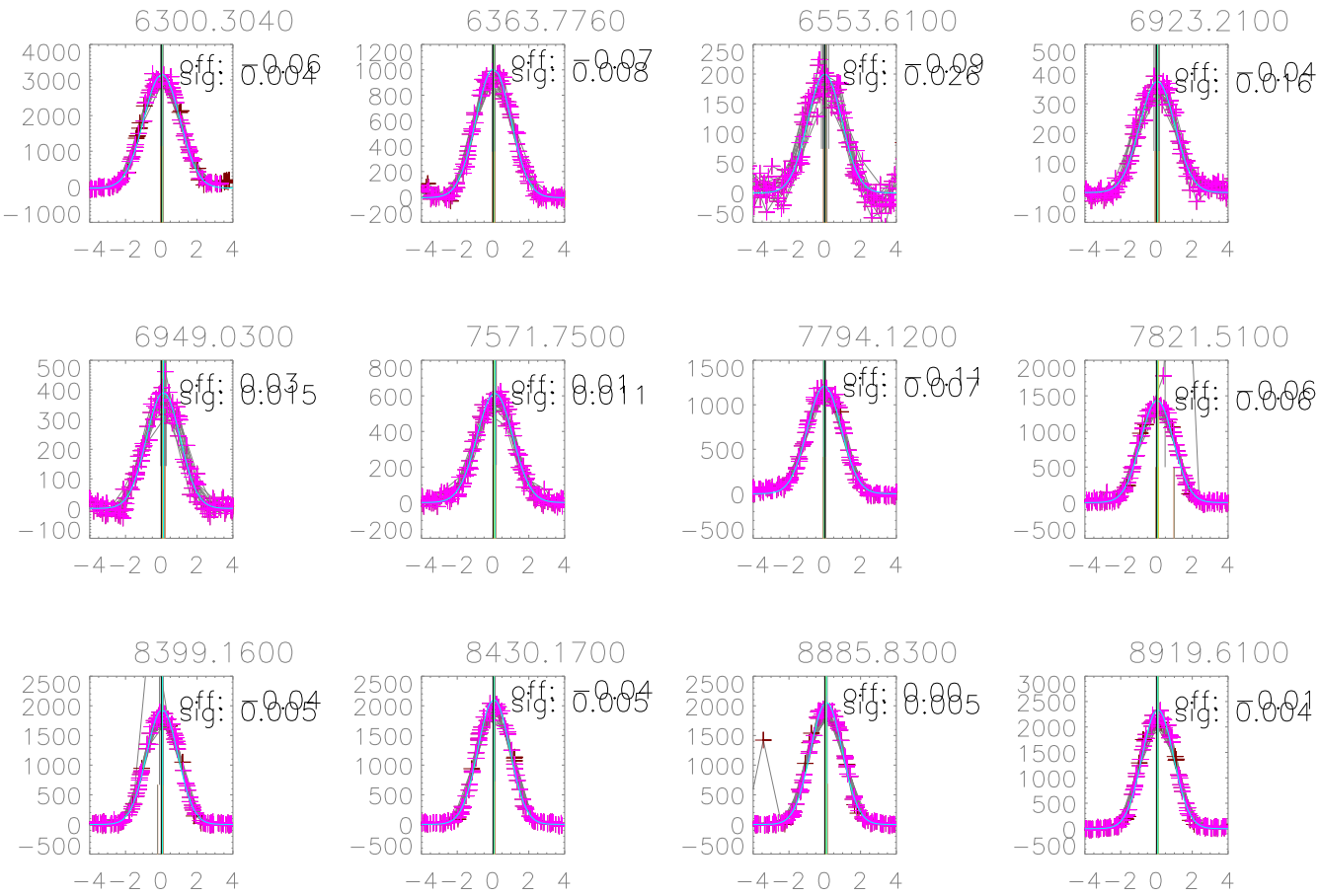

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013187.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
25.5
32.1
25.5
18.2
10.9
10.9

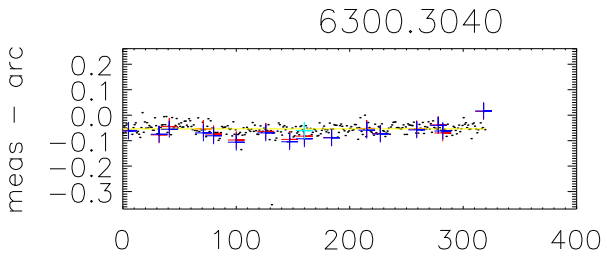

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013187.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.773
Max value = 33.401
Sun Feb 24 19:33:54 2008

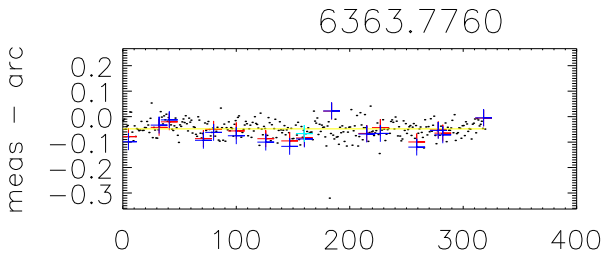

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013187.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.91
6.36
3.82

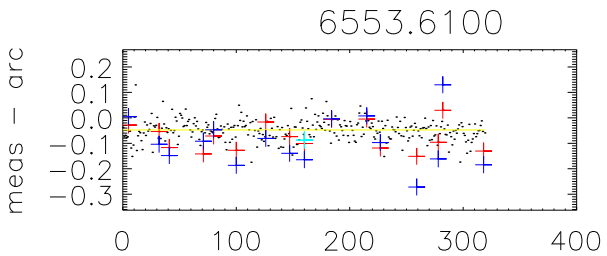

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013187.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.980
Max value = 11.470
Sun Feb 24 19:36:45 2008

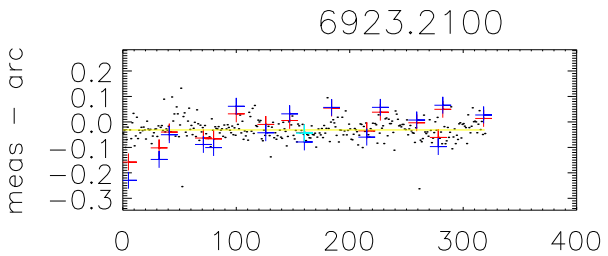

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r1-00013187.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

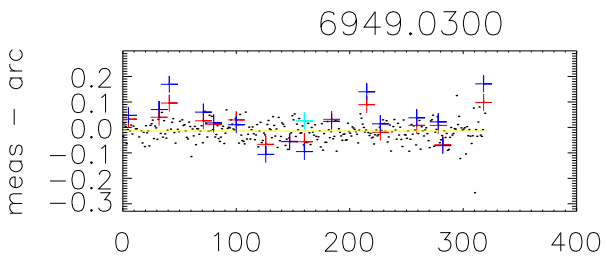

6300.3040
off: −0.06
sig: 0.004
6363.7760
off: −0.07
sig: 0.008
6553.6100
off: −0.09
sig: 0.026
6923.2100
off: −0.04
sig: 0.016
6949.0300
off: 0.03
sig: 0.015
7571.7500
off: 0.01
sig: 0.011
7794.1200
off: −0.11
sig: 0.007
7821.5100
off: −0.06
sig: 0.008
8399.1600
off: −0.04
sig: 0.005
8430.1700
off: −0.04
sig: 0.005
8885.8300
off: 0.00
sig: 0.005
8919.6100
off: −0.01
sig: 0.004

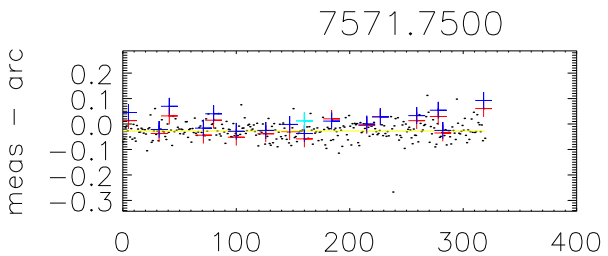

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

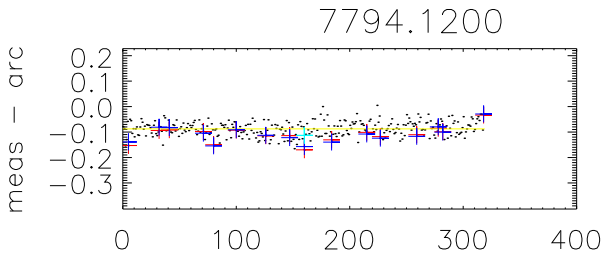

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

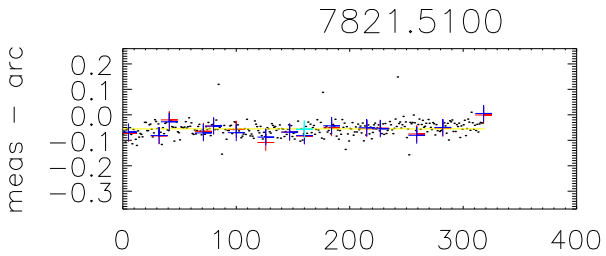

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

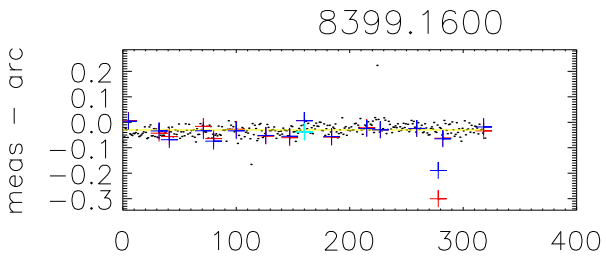

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

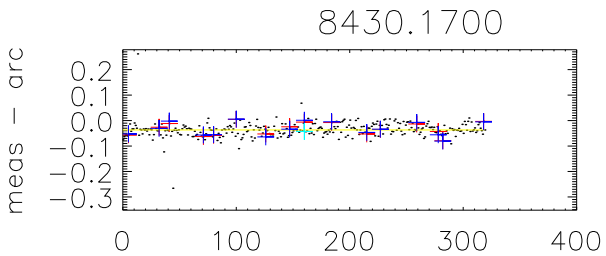

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

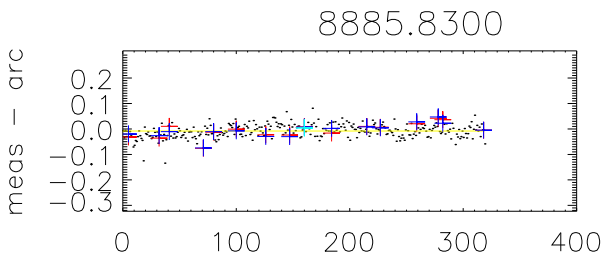

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

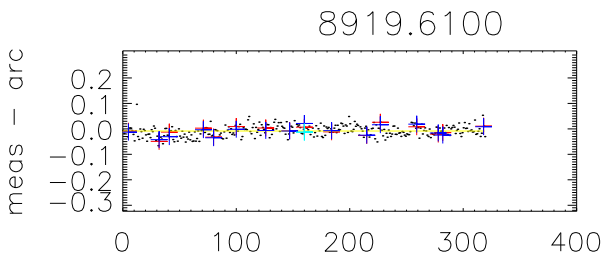

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

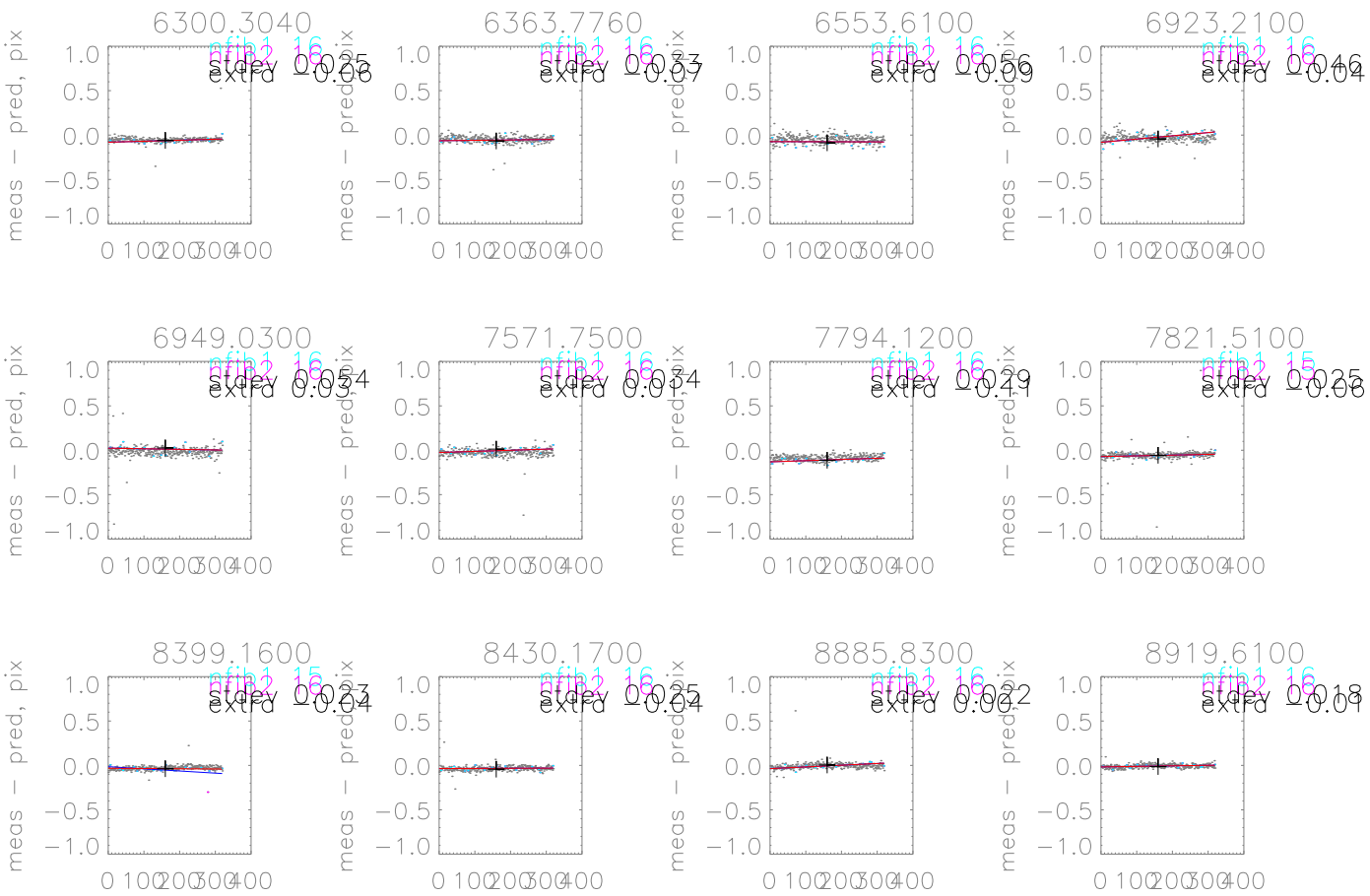

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

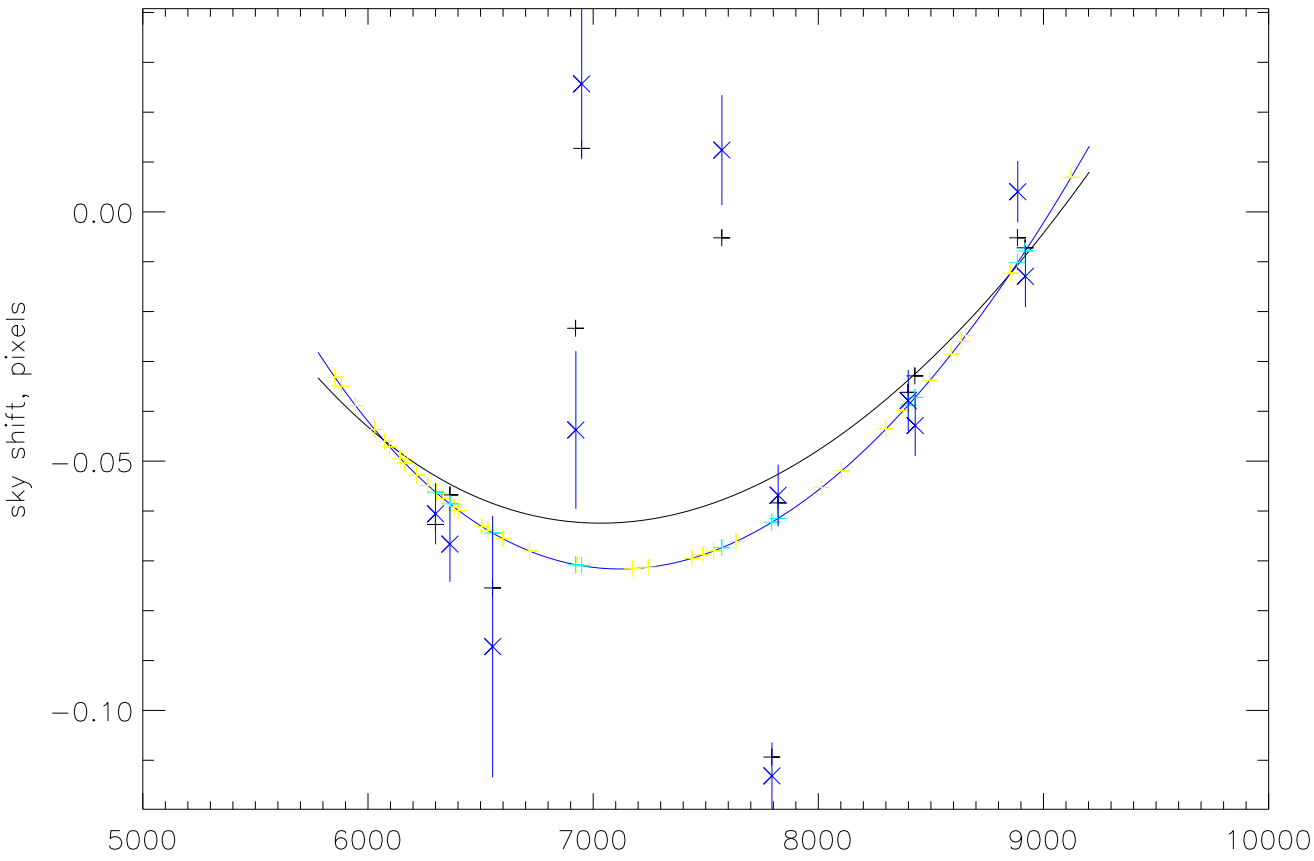

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

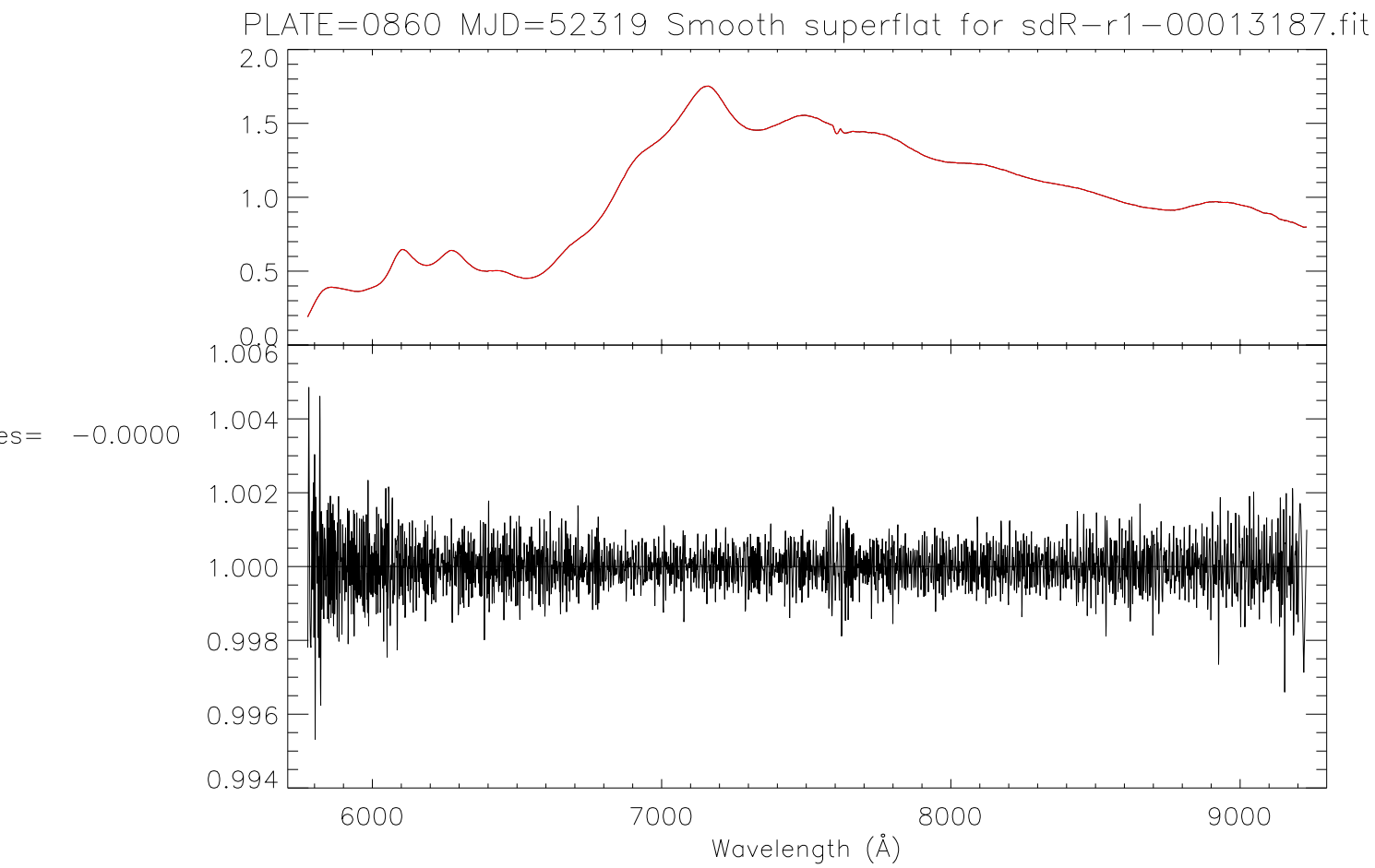

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

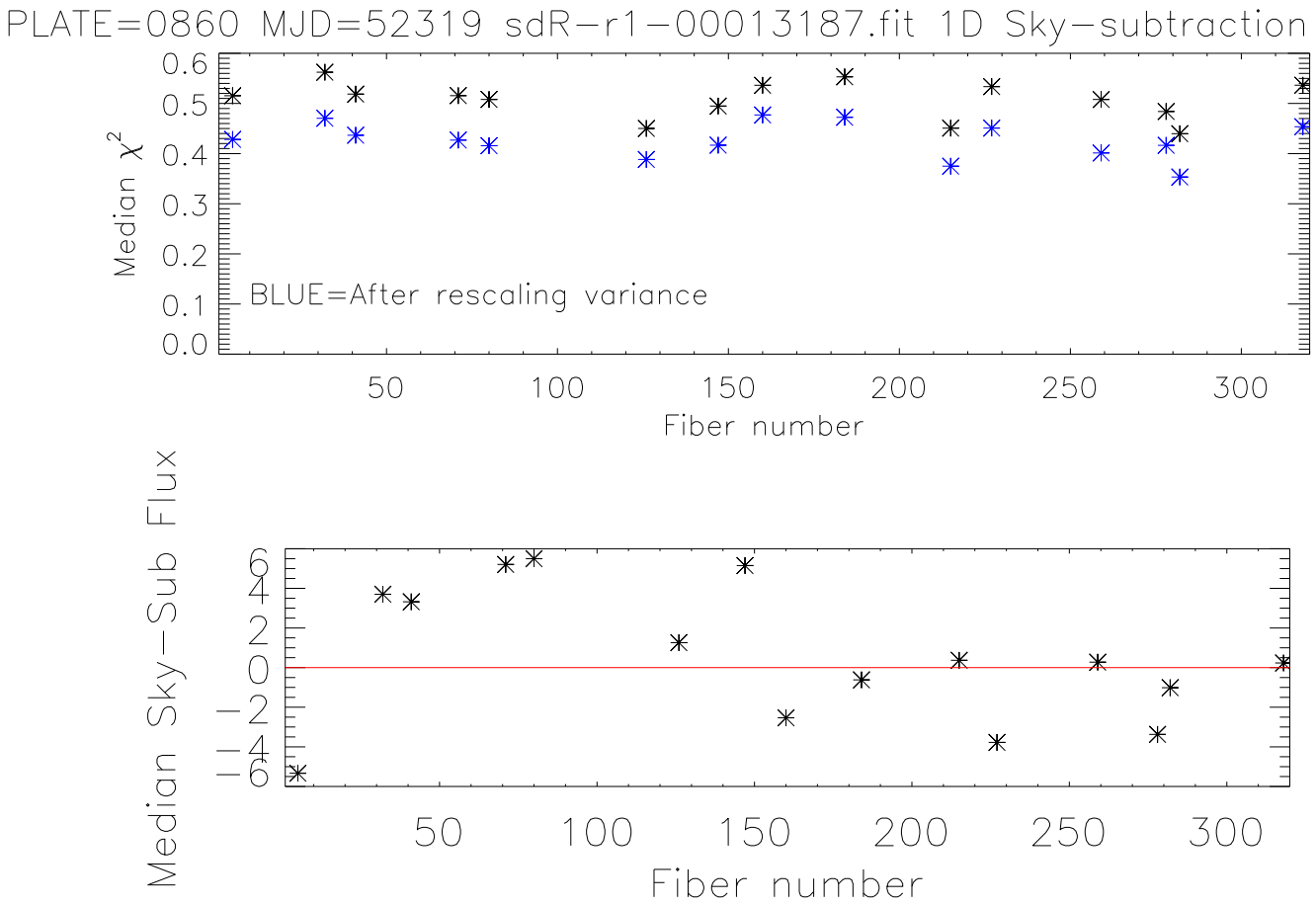

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

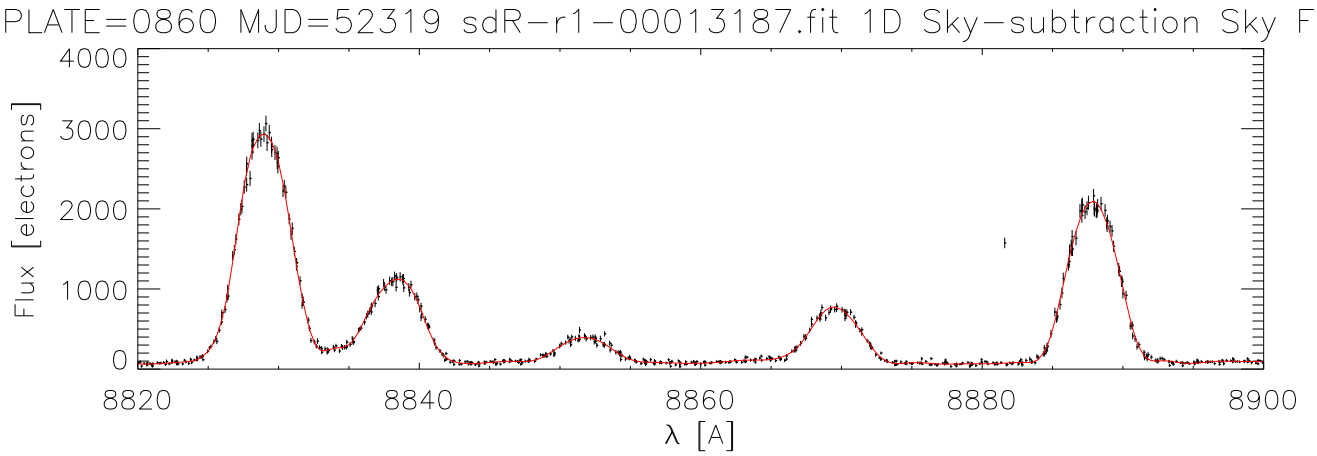

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

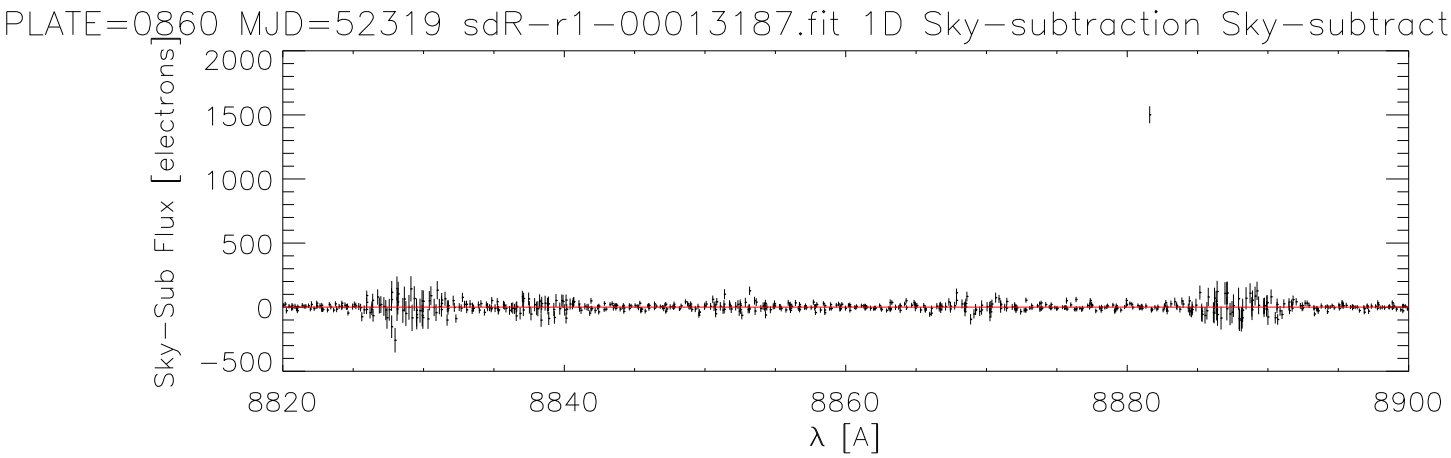

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfh32 16
stdev 0.025
extrd 0.08
stdev 0.033
extrd 0.07
stdev 0.056
extrd 0.09
stdev 0.046
extrd 0.04
stdev 0.054
extrd 0.03
stdev 0.034
extrd 0.01
stdev 0.029
extrd 0.01
stdev 0.025
extrd 0.08
stdev 0.023
extrd 0.04
stdev 0.025
extrd 0.04
stdev 0.032
extrd 0.04
stdev 0.018
extrd 0.01

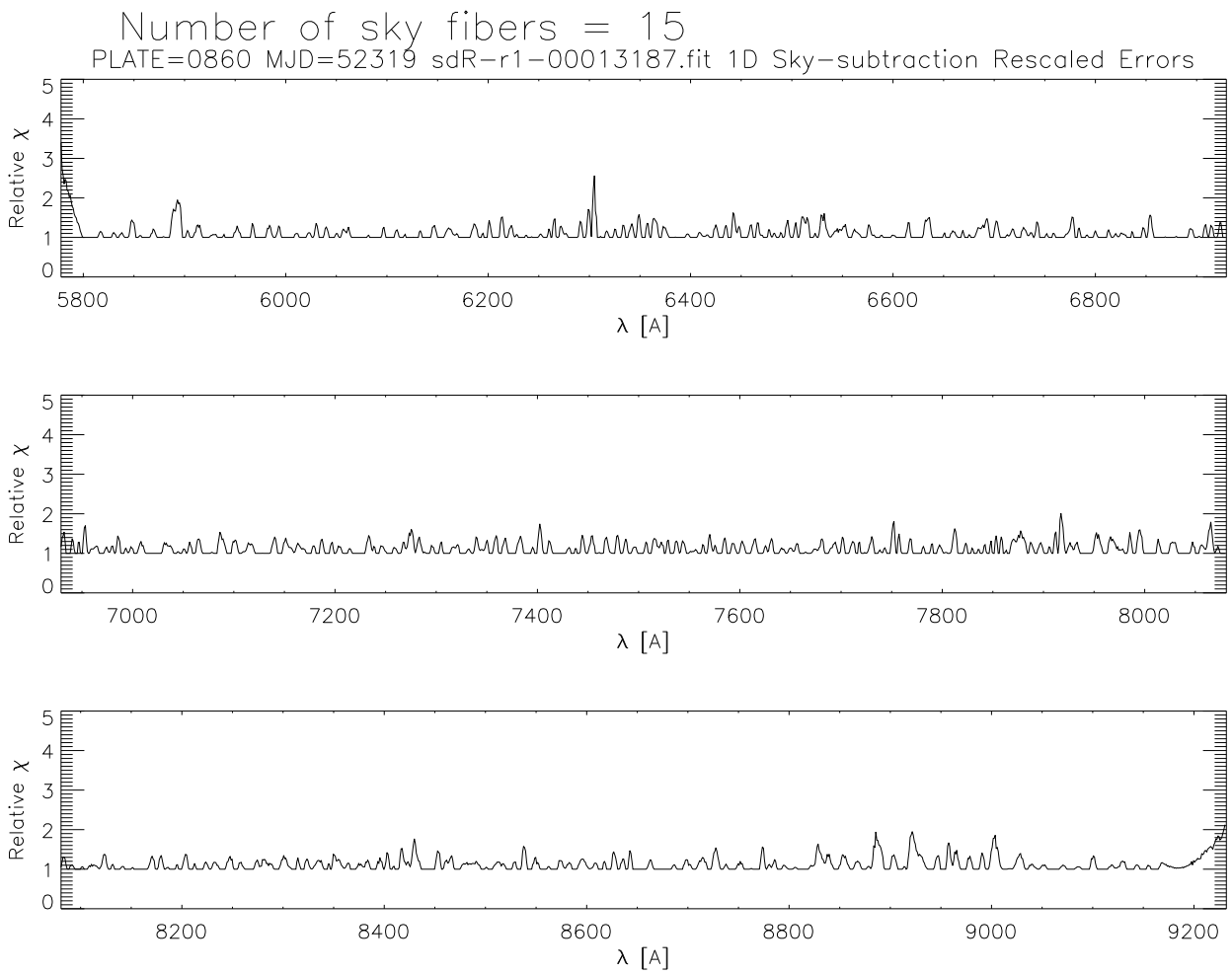

sky shift, pixels
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

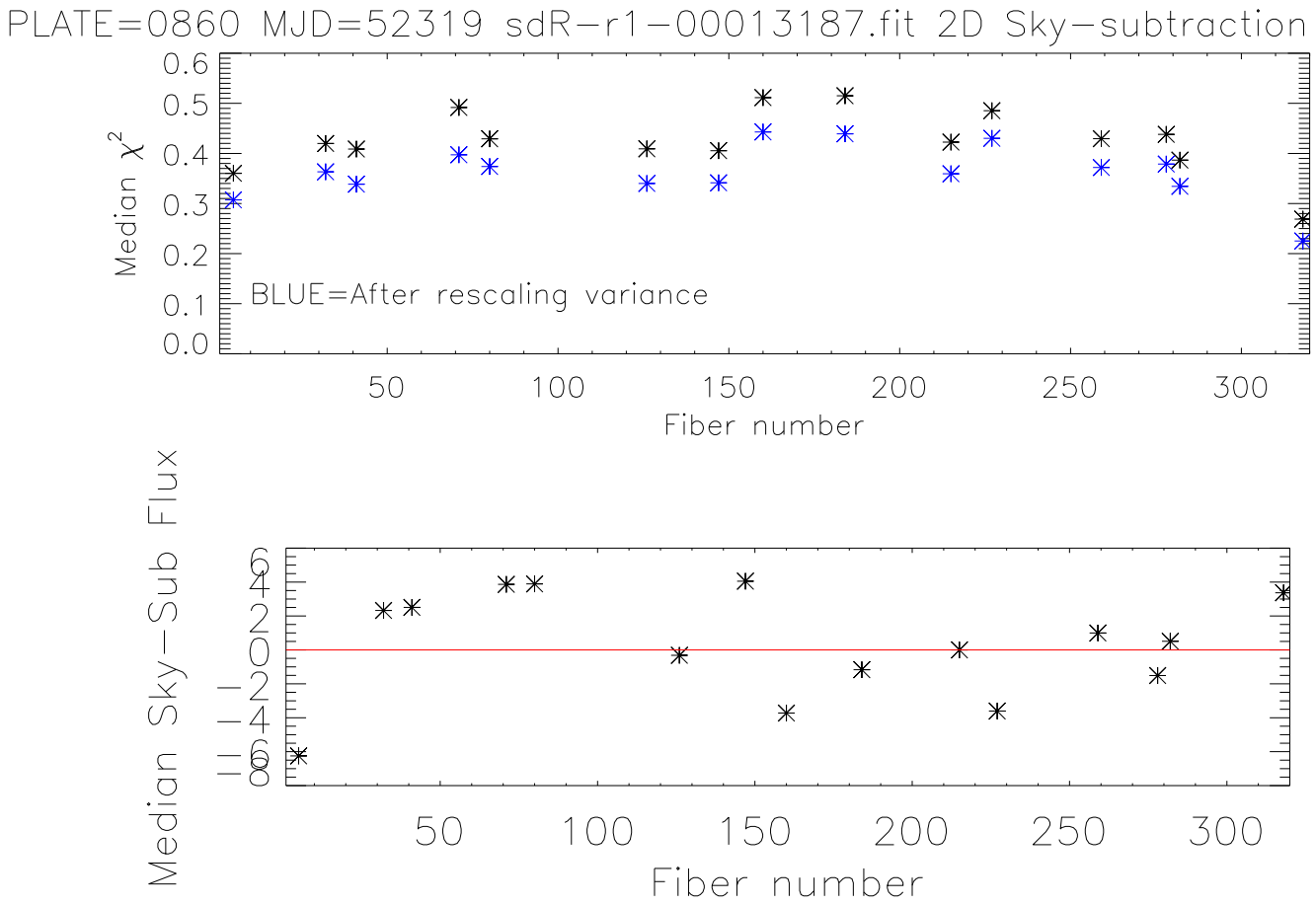

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013187.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

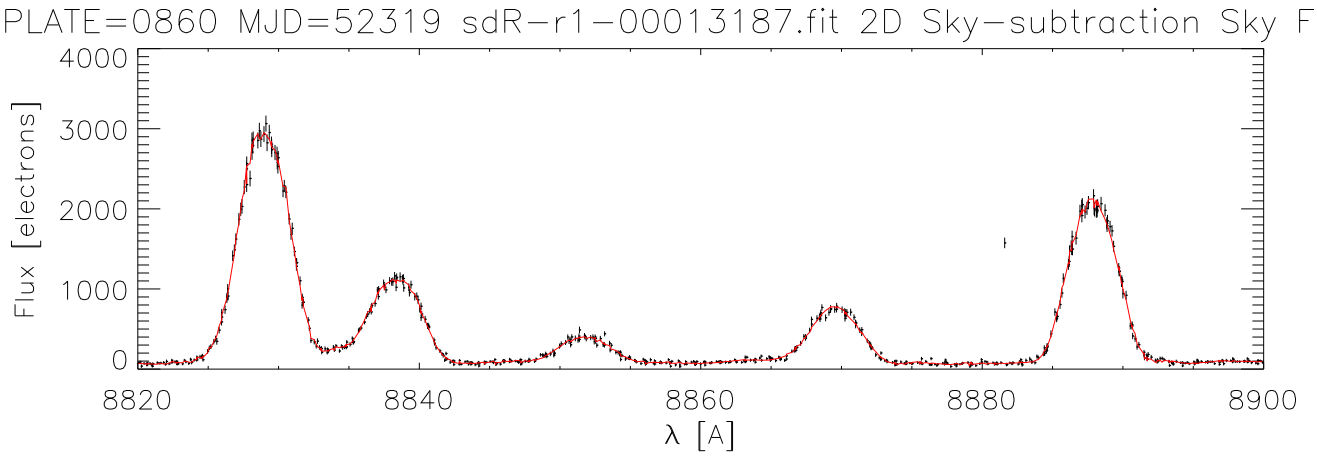

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

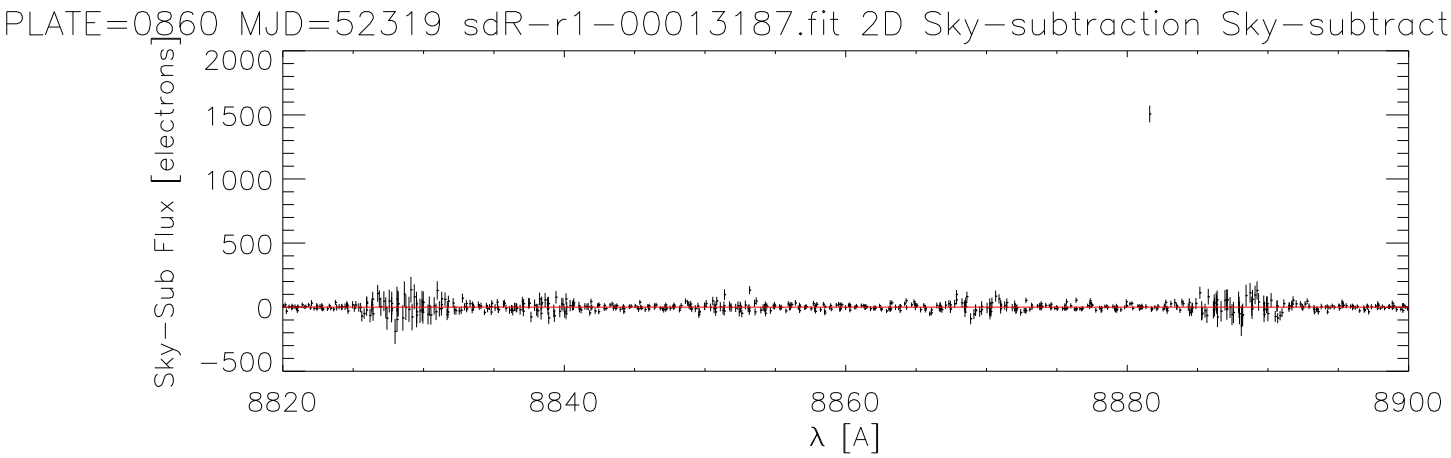

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

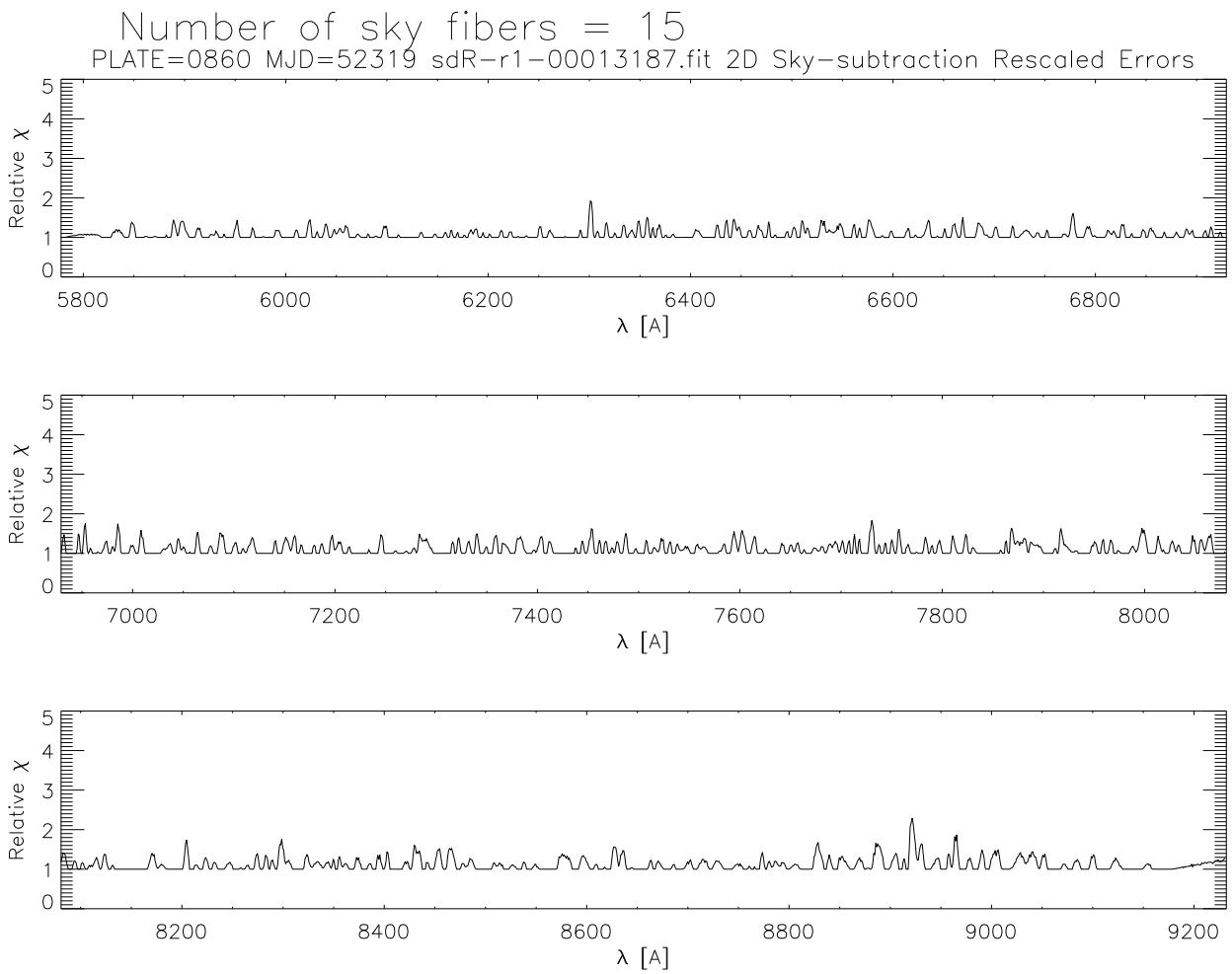

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

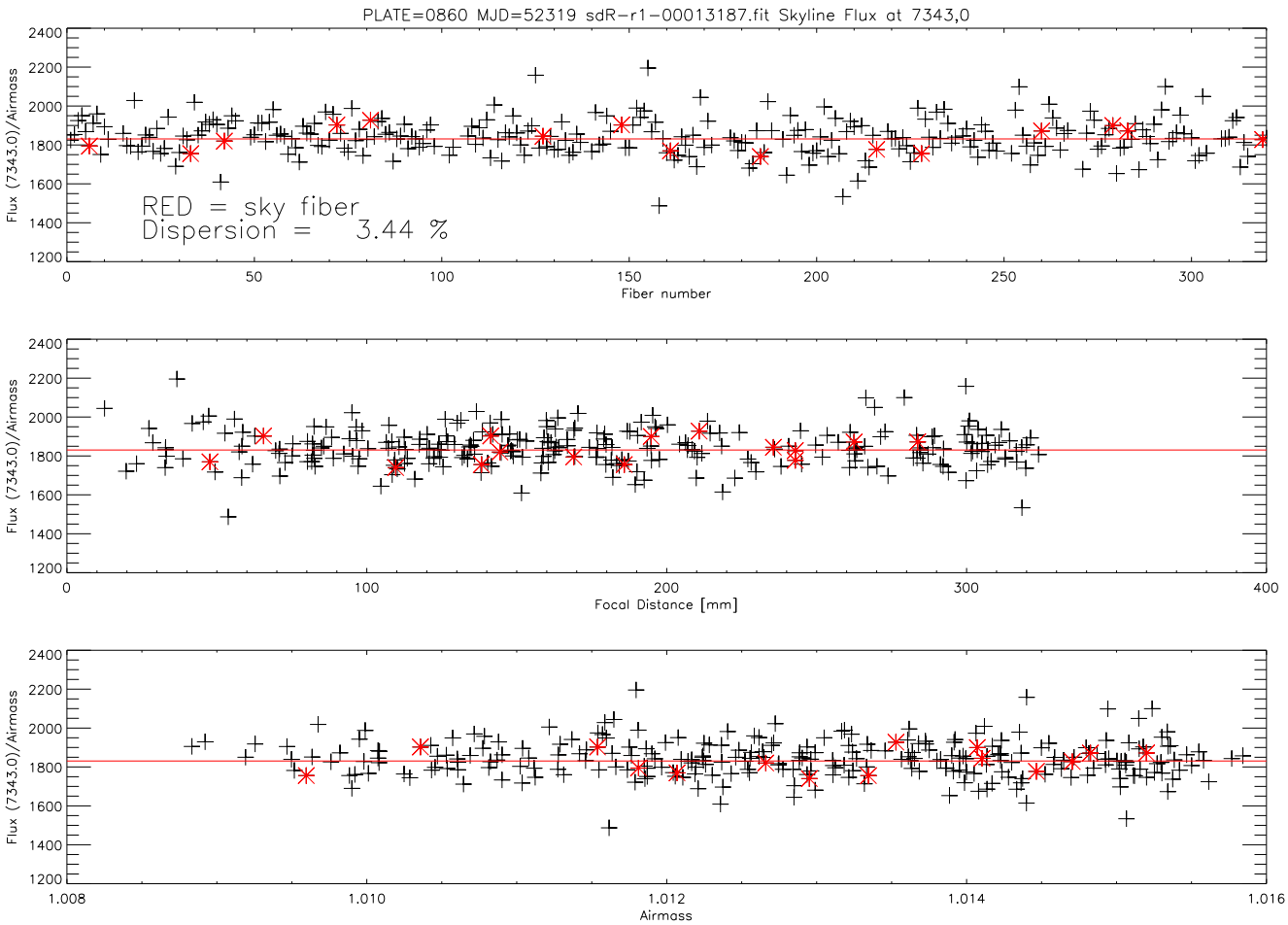

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013187.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

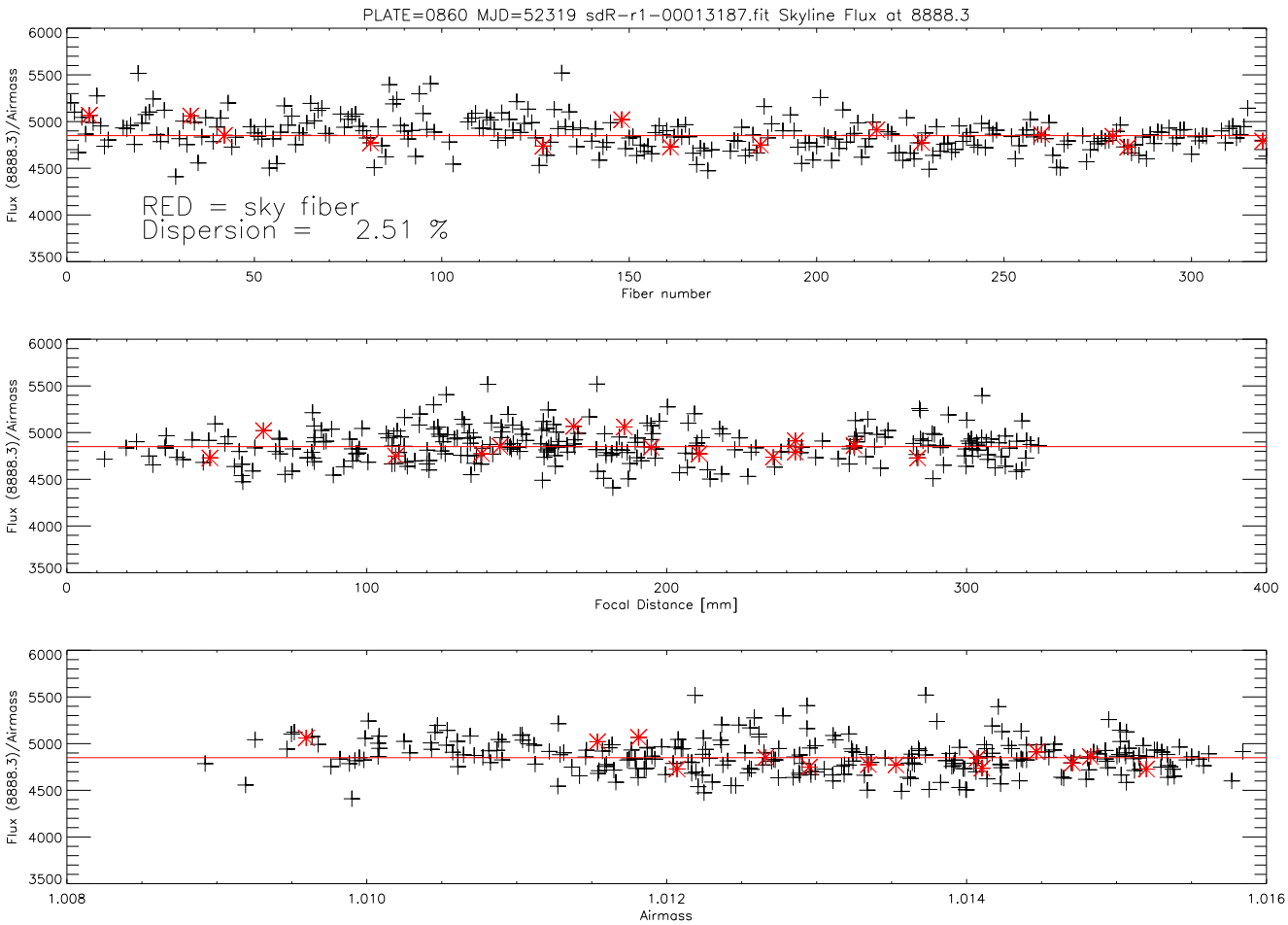

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

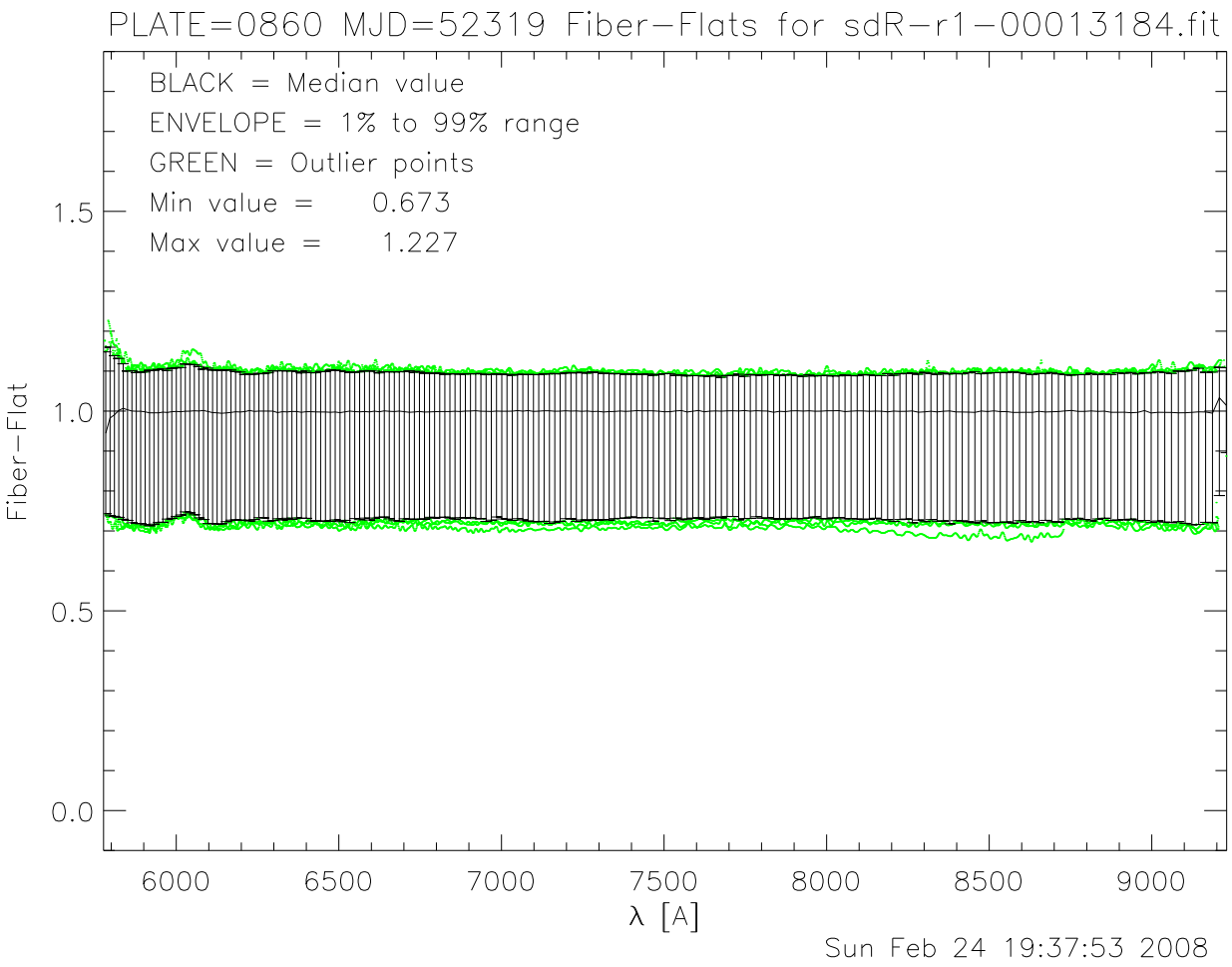

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

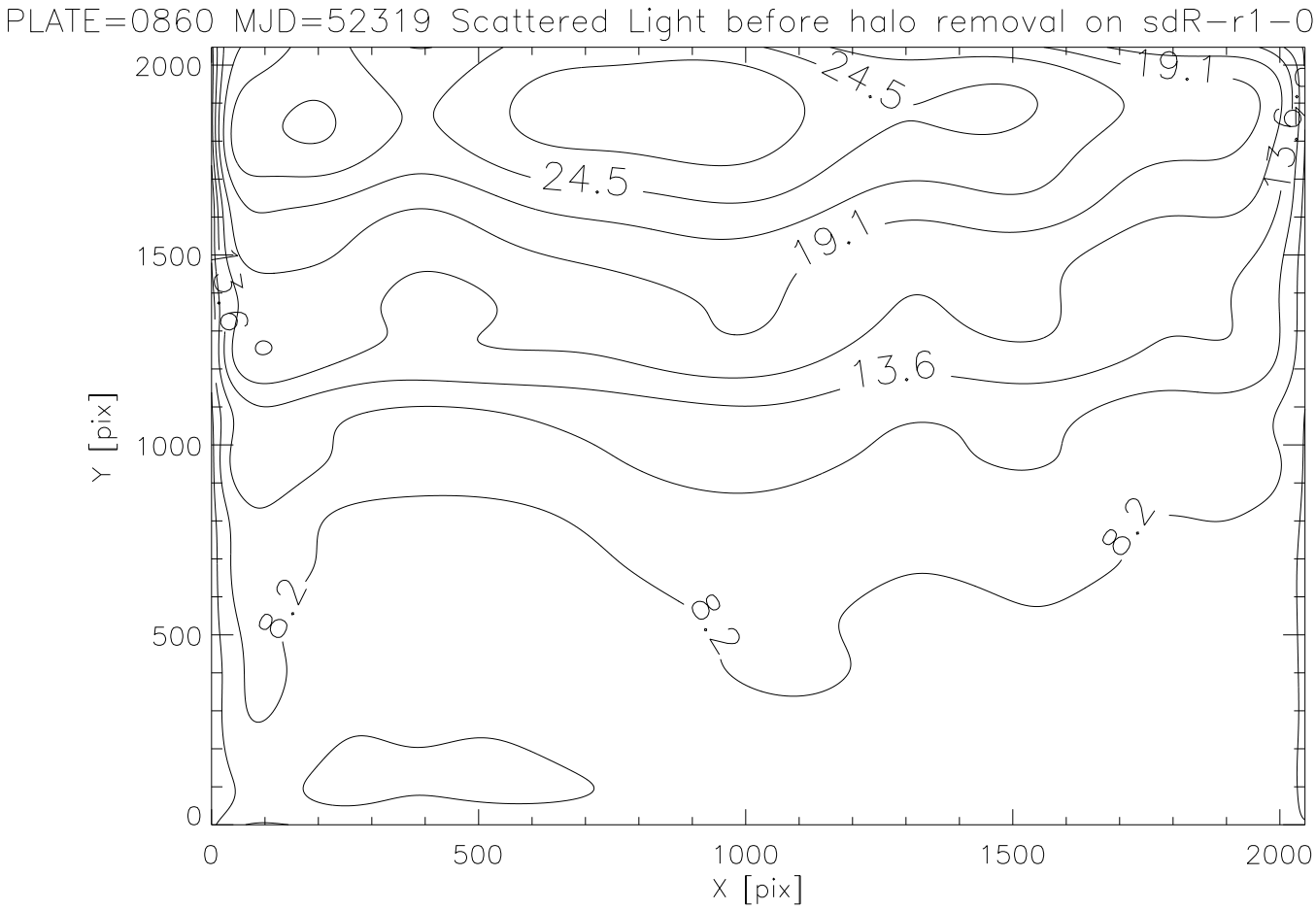

PLATE=0860 MJD=52319 sdR-r1-00013187.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

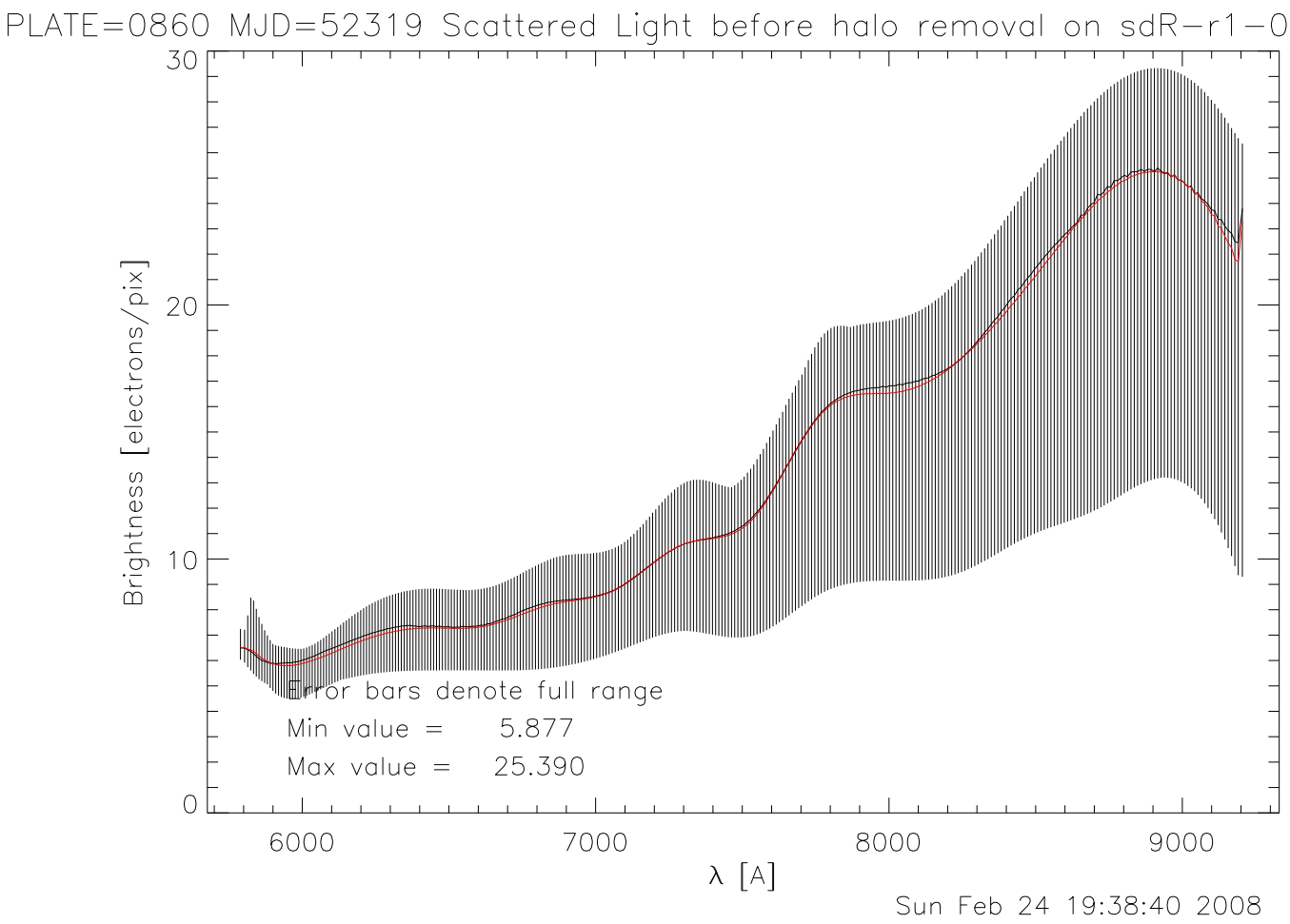

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013187.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

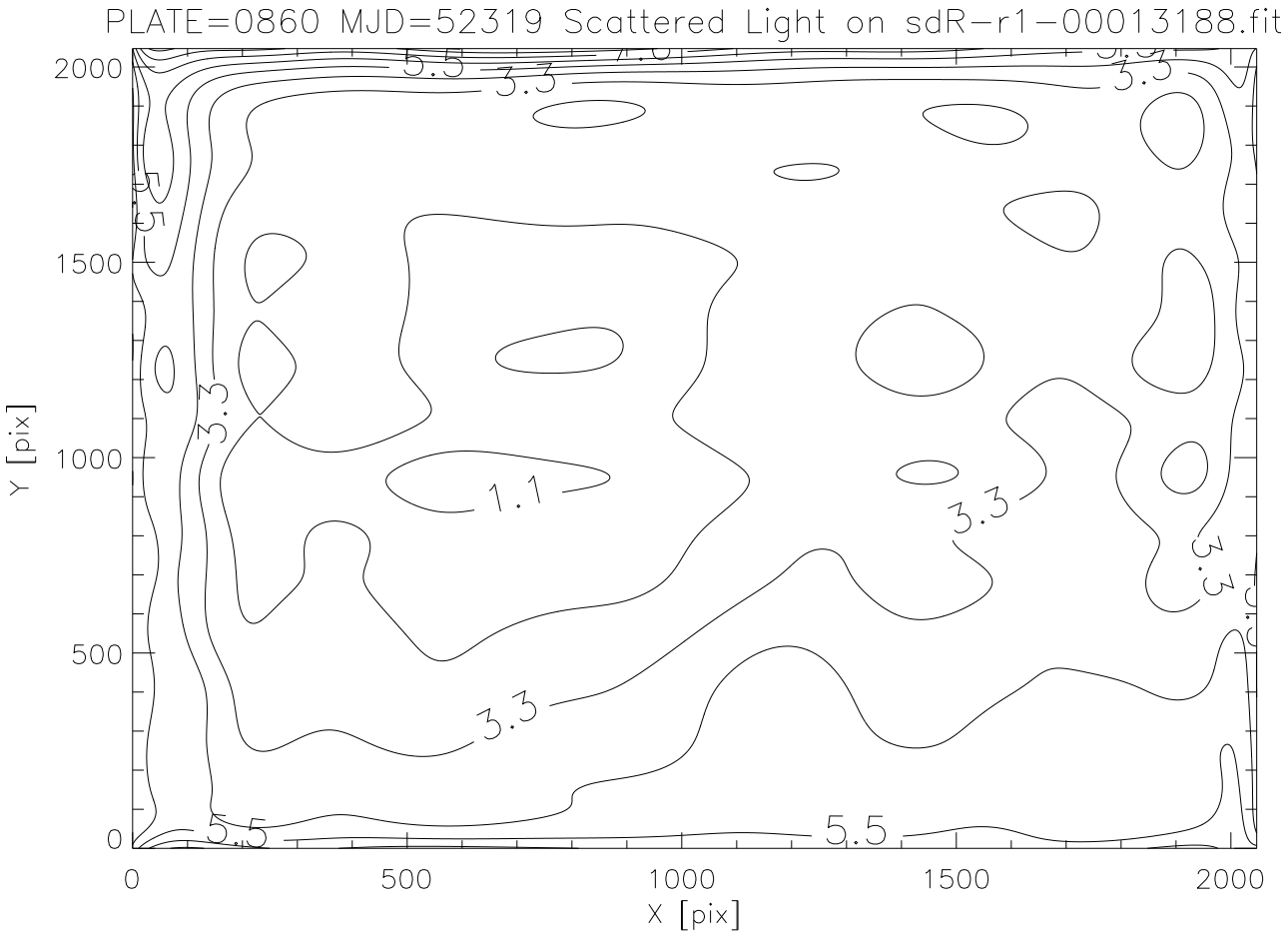

PLATE=0860 MJD=52319 sdR-r1-00013187.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.44 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

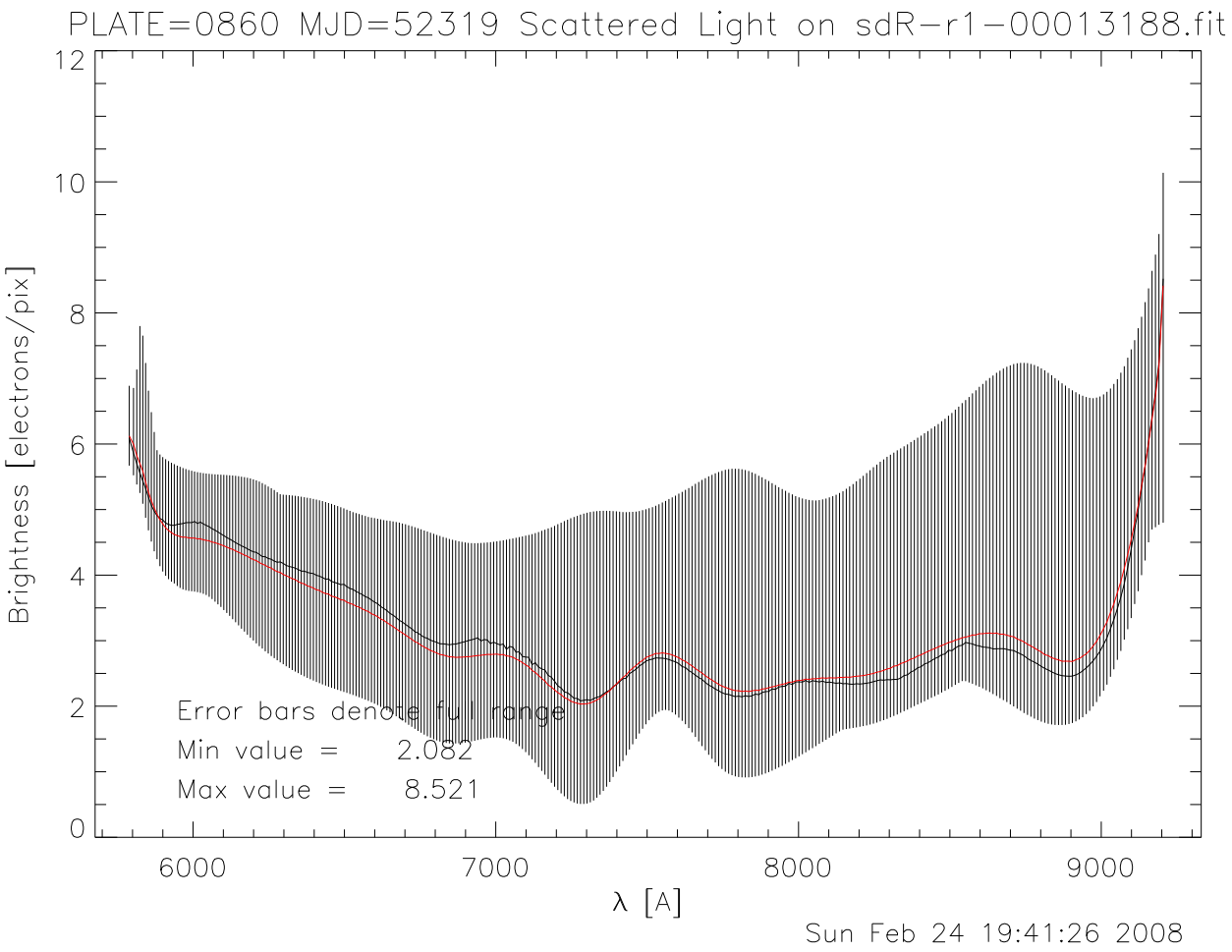

PLATE=0860 MJD=52319 sdR-r1-00013187.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.51 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

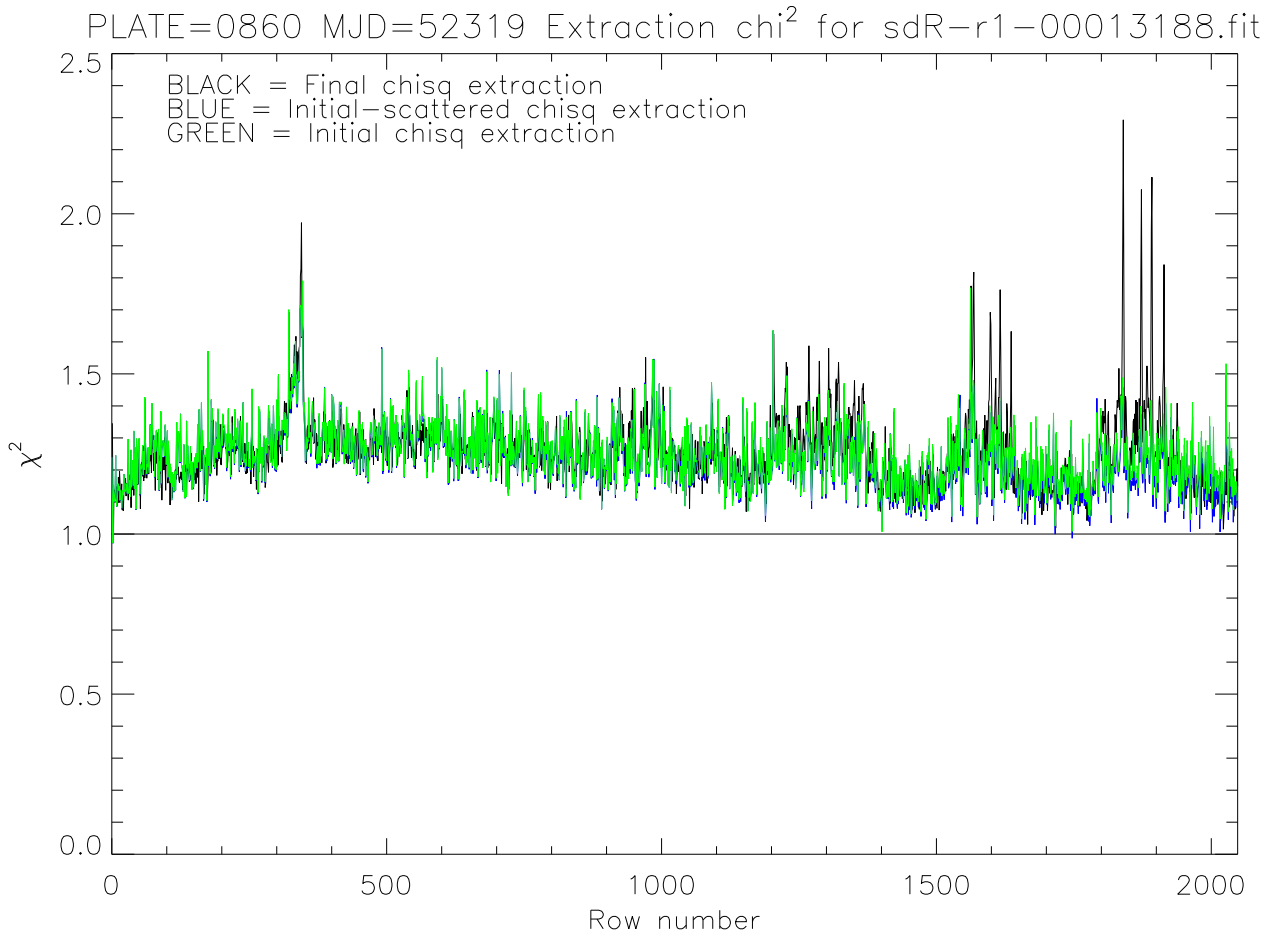

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:37:53 2008

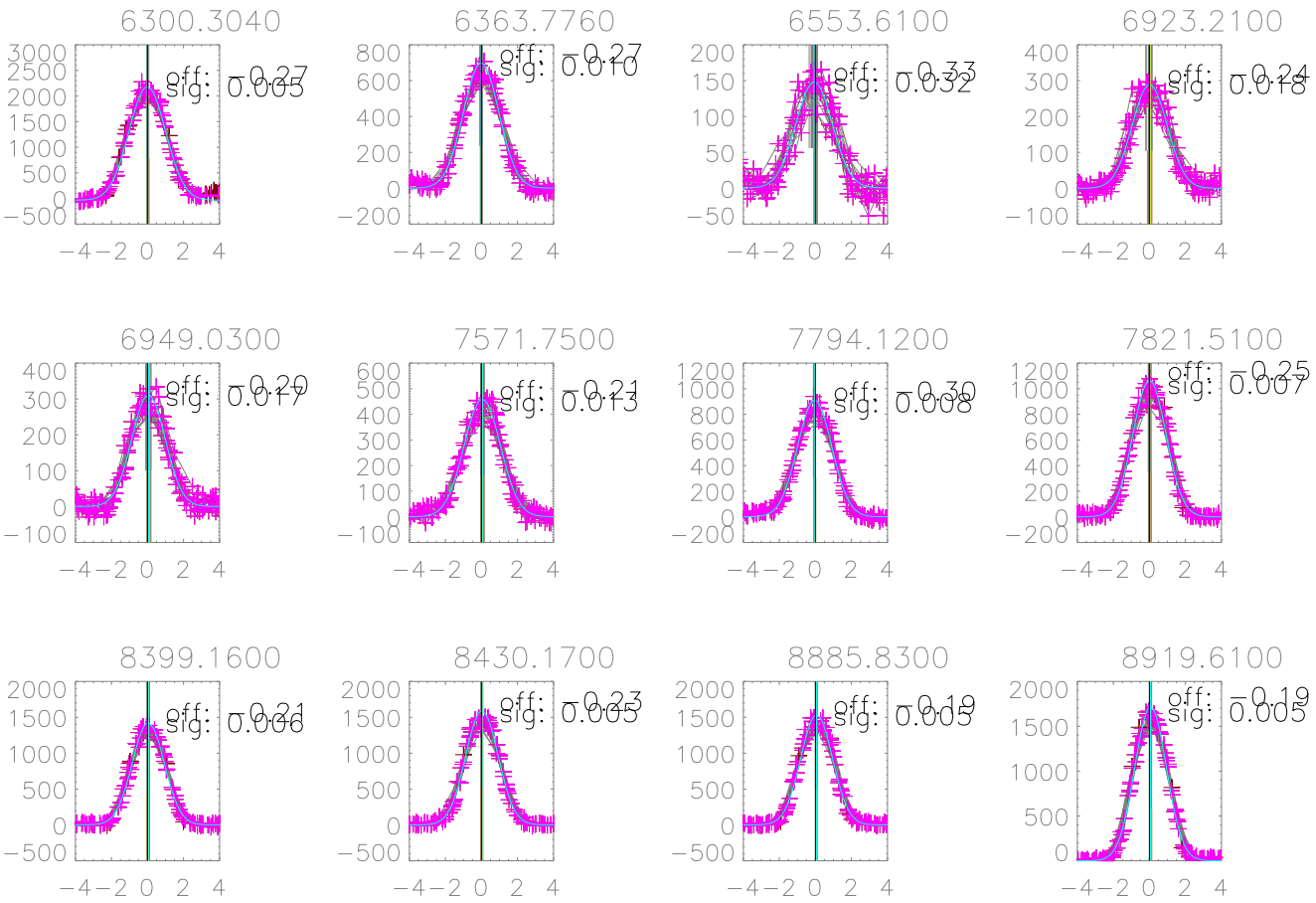

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013188.fi
24.5
19.1
13.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

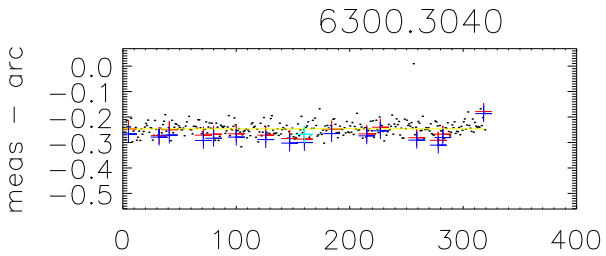

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013188.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.877
Max value = 25.390
Sun Feb 24 19:38:40 2008

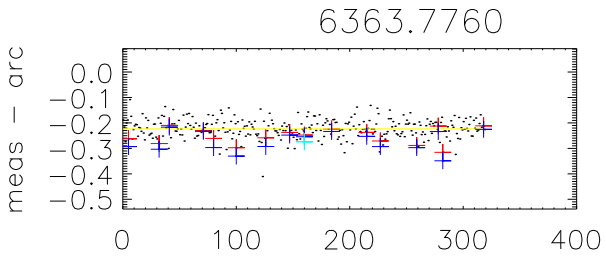

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013188.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3
1.1

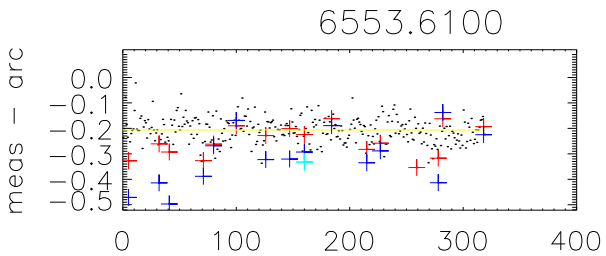

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013188.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.082
Max value = 8.521
Sun Feb 24 19:41:26 2008

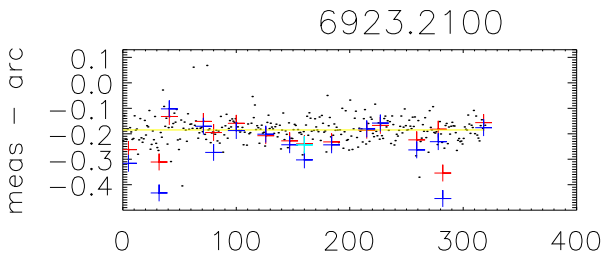

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r1-00013188.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

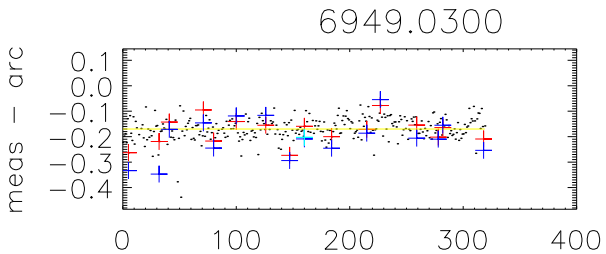

6300.3040
off: −0.27
sig: 0.065
6363.7760
off: −0.27
sig: 0.010
6553.6100
off: −0.33
sig: 0.032
6923.2100
off: −0.24
sig: 0.018
6949.0300
off: −0.29
sig: 0.017
7571.7500
off: −0.21
sig: 0.013
7794.1200
off: −0.30
sig: 0.008
7821.5100
off: −0.25
sig: 0.007
8399.1600
off: −0.21
sig: 0.006
8430.1700
off: −0.23
sig: 0.005
8885.8300
off: −0.19
sig: 0.005
8919.6100
off: −0.19
sig: 0.005

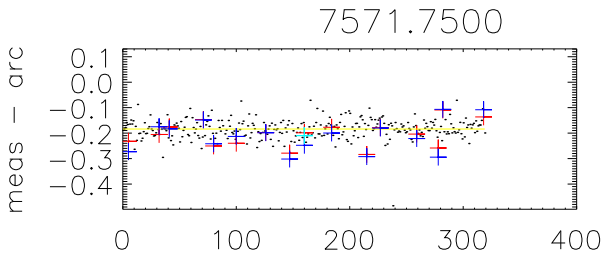

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

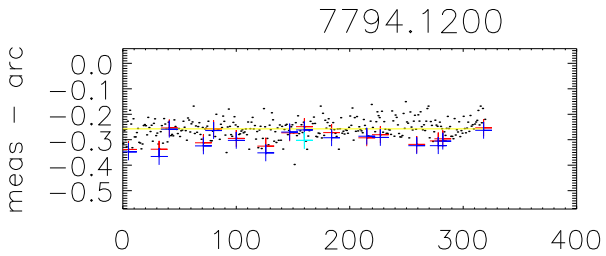

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

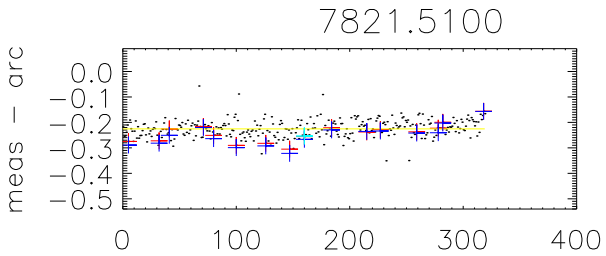

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

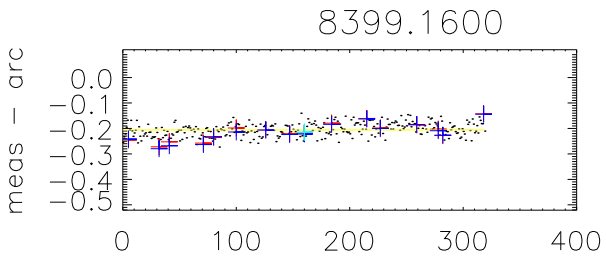

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

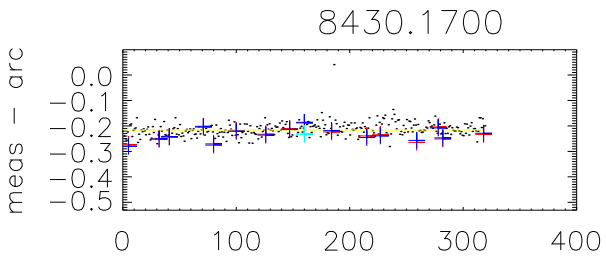

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

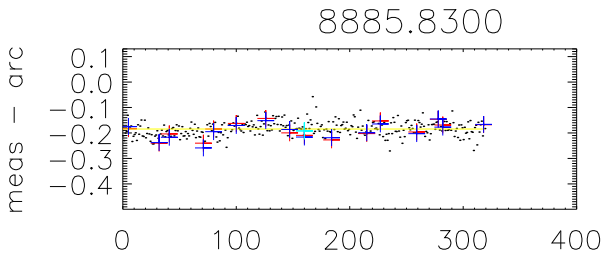

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

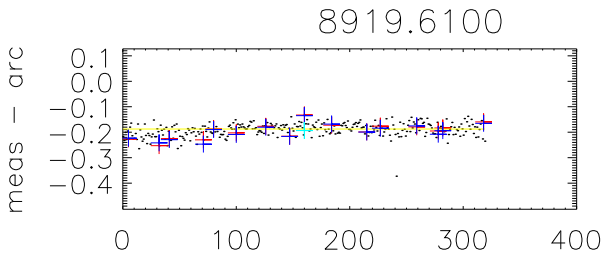

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

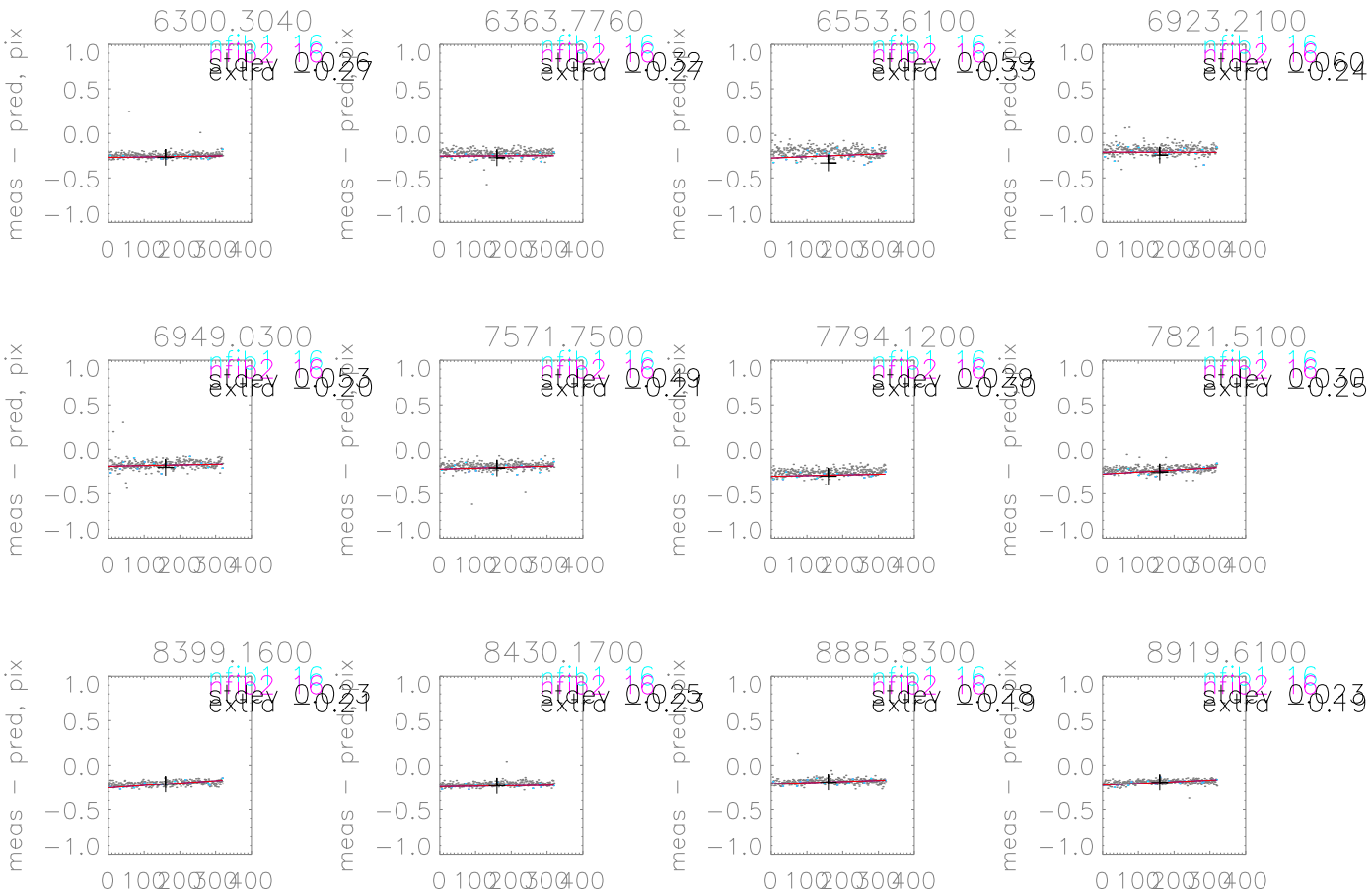

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

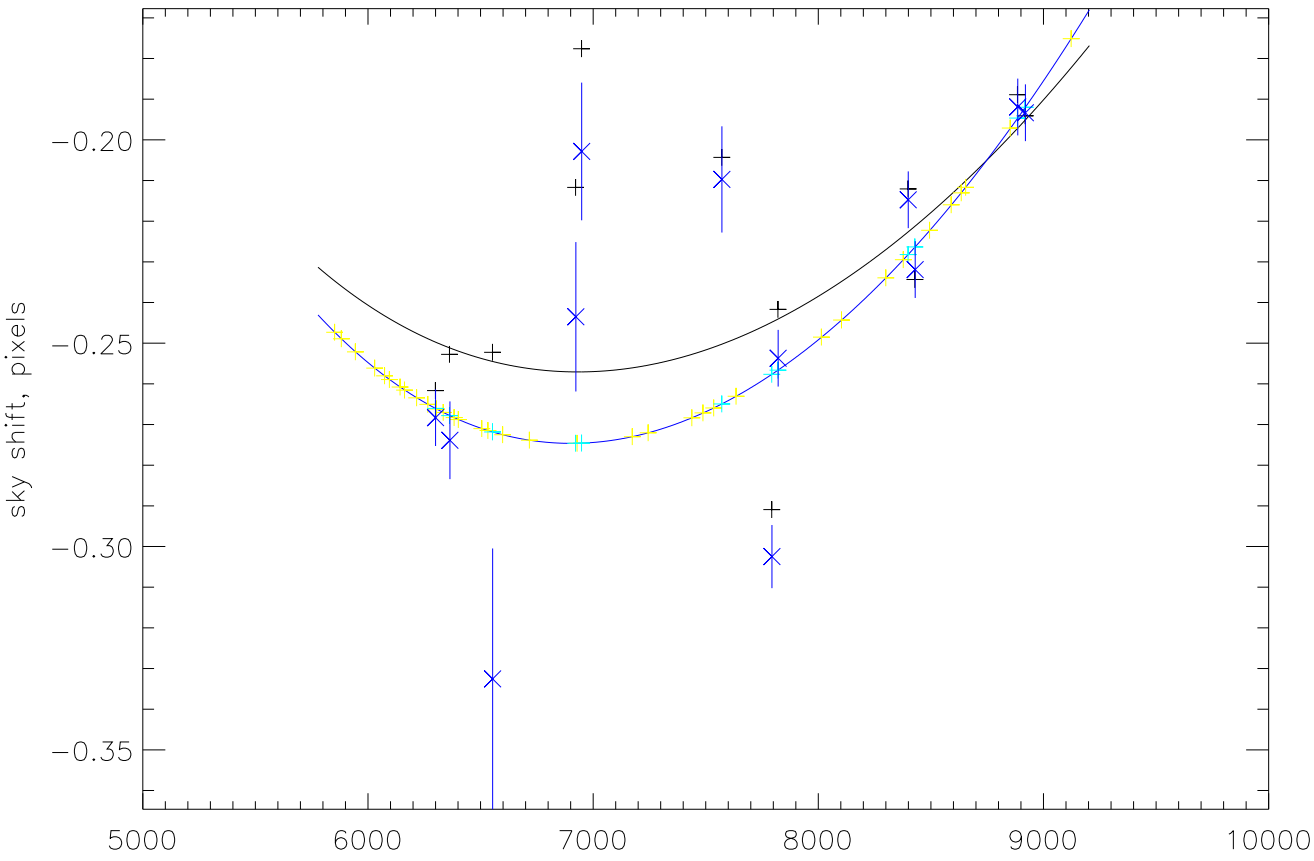

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

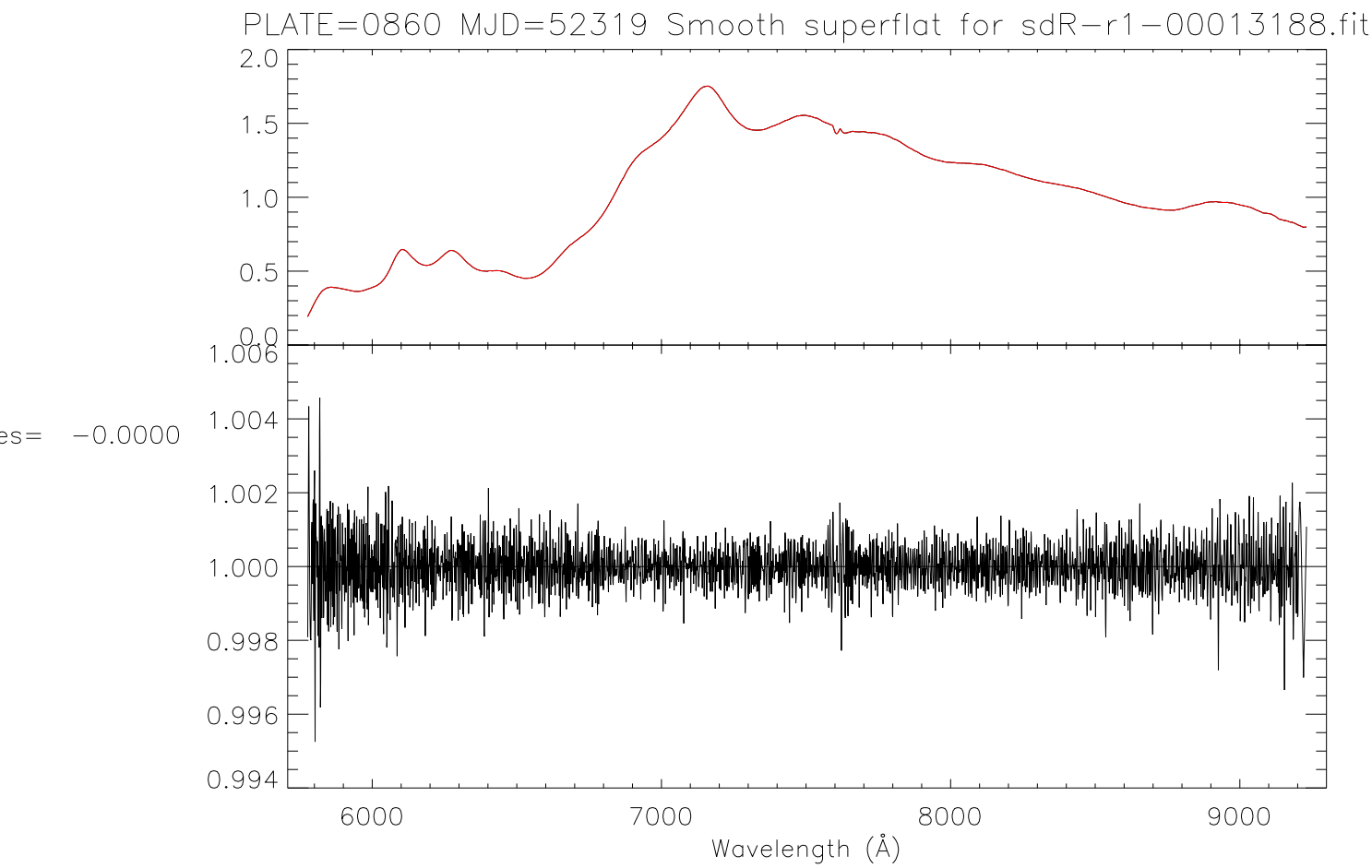

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

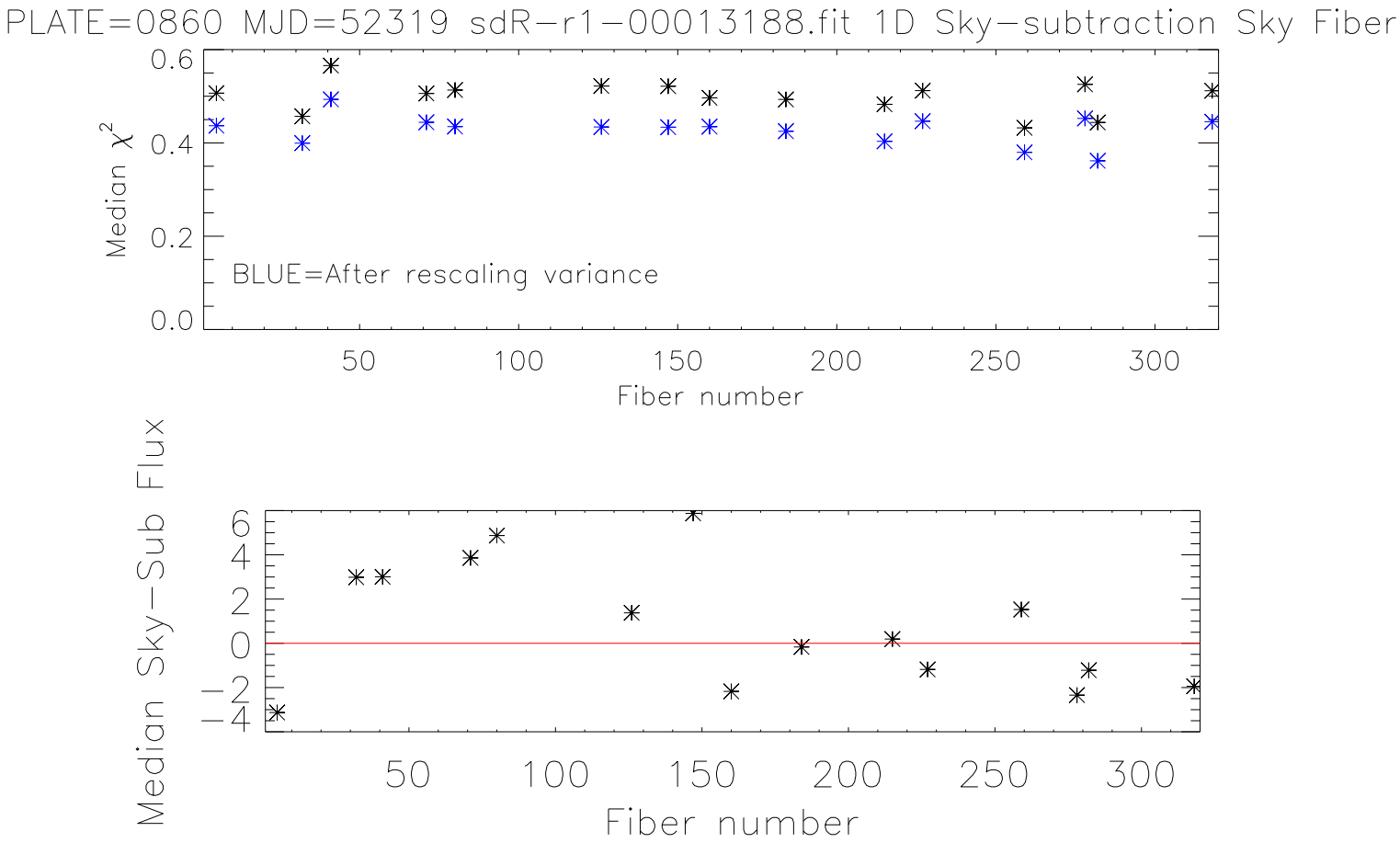

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

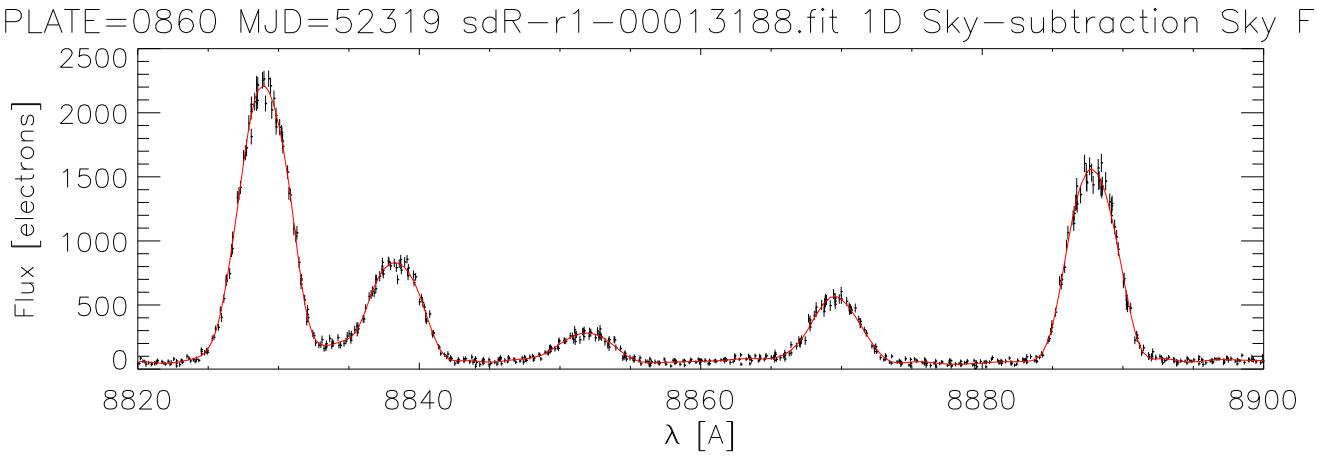

6300.3040
stdev 0.026
extrd 0.27
6363.7760
stdev 0.032
extrd 0.27
6553.6100
stdev 0.059
extrd 0.33
6923.2100
stdev 0.060
extrd 0.24
6949.0300
stdev 0.053
extrd 0.20
7571.7500
stdev 0.049
extrd 0.21
7794.1200
stdev 0.029
extrd 0.30
7821.5100
stdev 0.030
extrd 0.25
8399.1600
stdev 0.023
extrd 0.21
8430.1700
stdev 0.025
extrd 0.23
8885.8300
stdev 0.028
extrd 0.49
8919.6100
stdev 0.023
extrd 0.49
meas − pred, pix
mfhd2 16

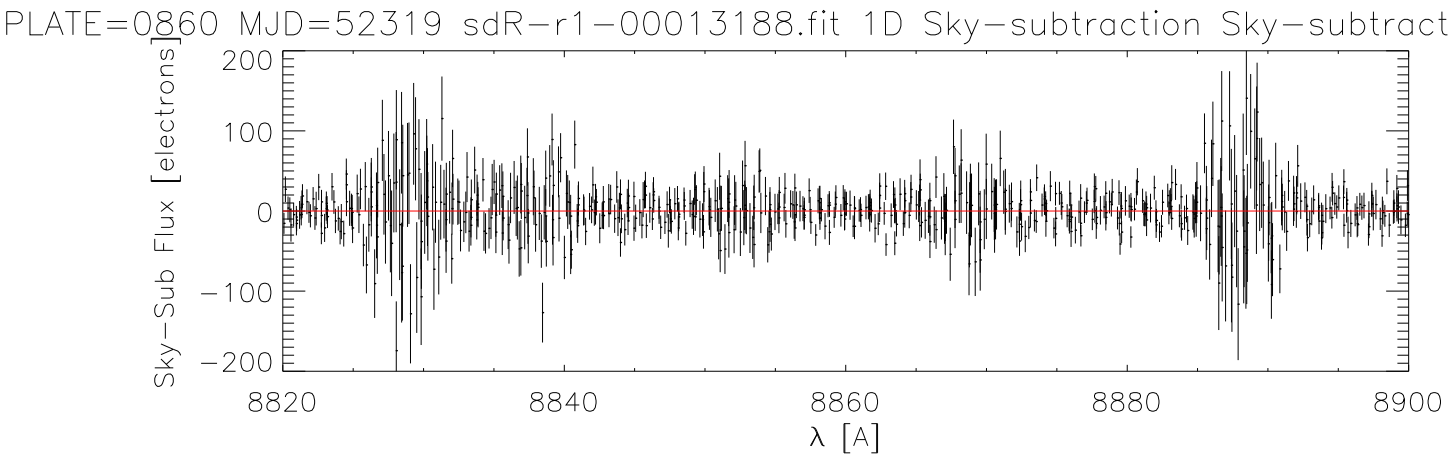

sky shift, pixels
−0.20
−0.25
−0.30
−0.35
5000
6000
7000
8000
9000
10000

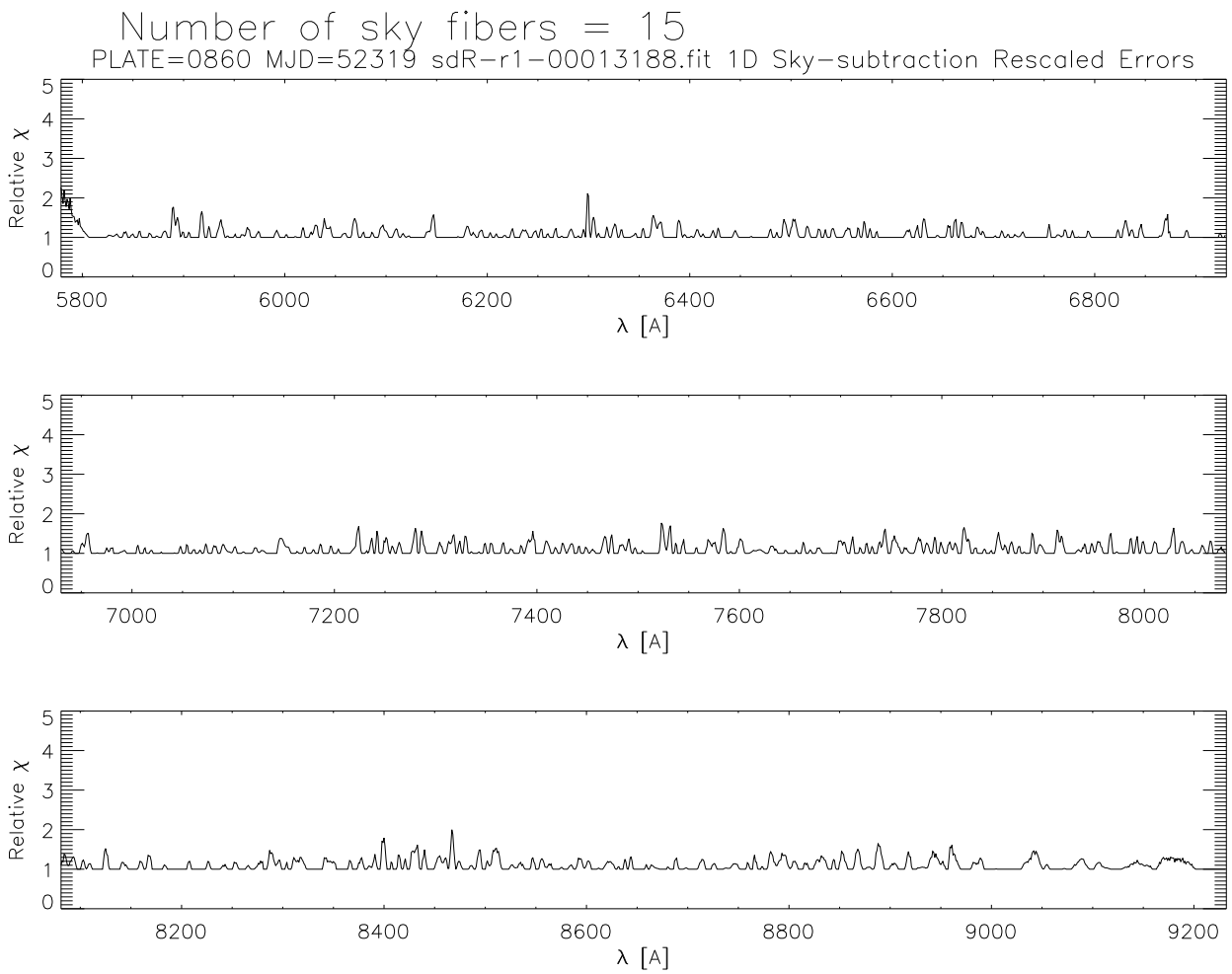

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013188.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

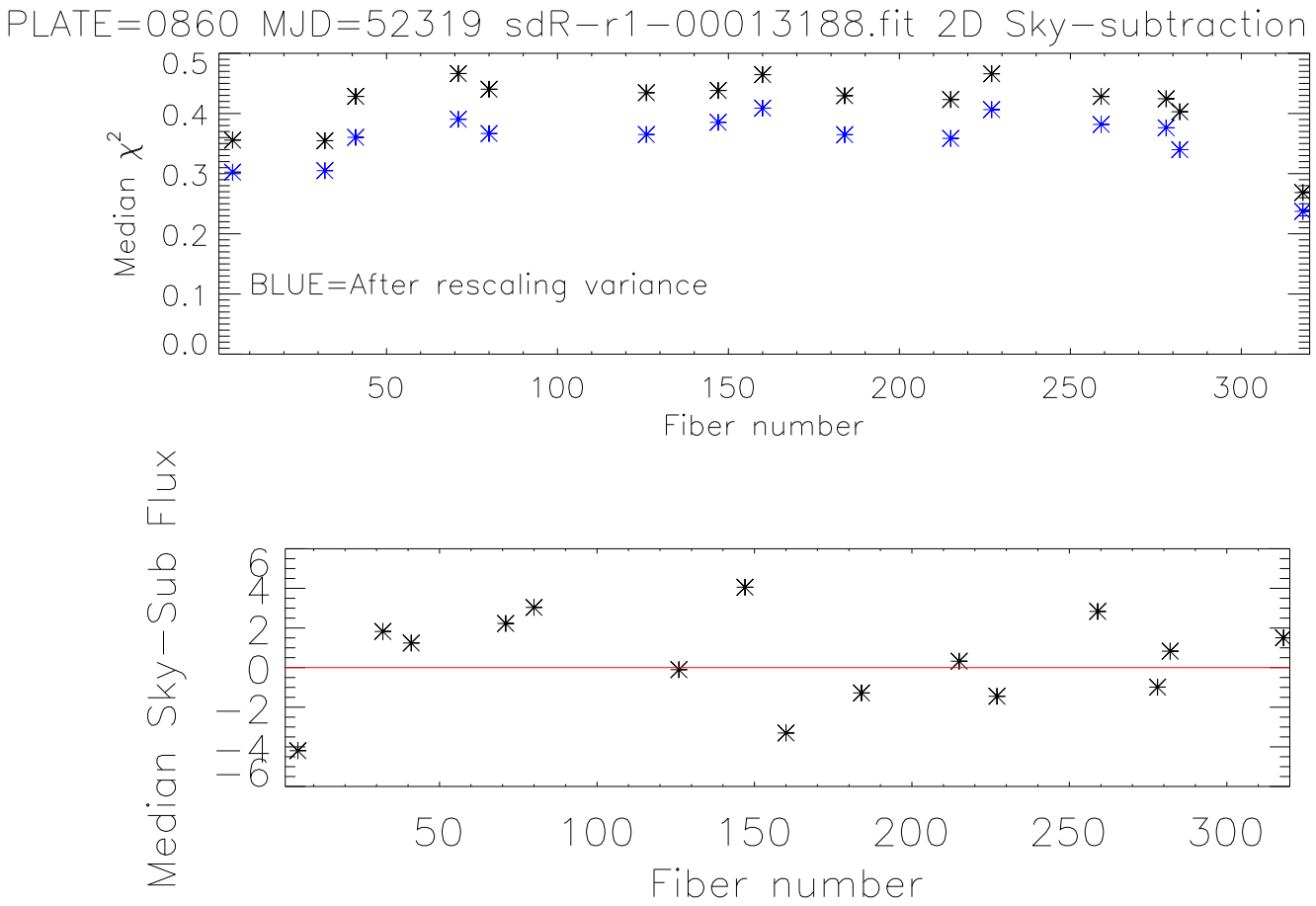
es= −0.0000

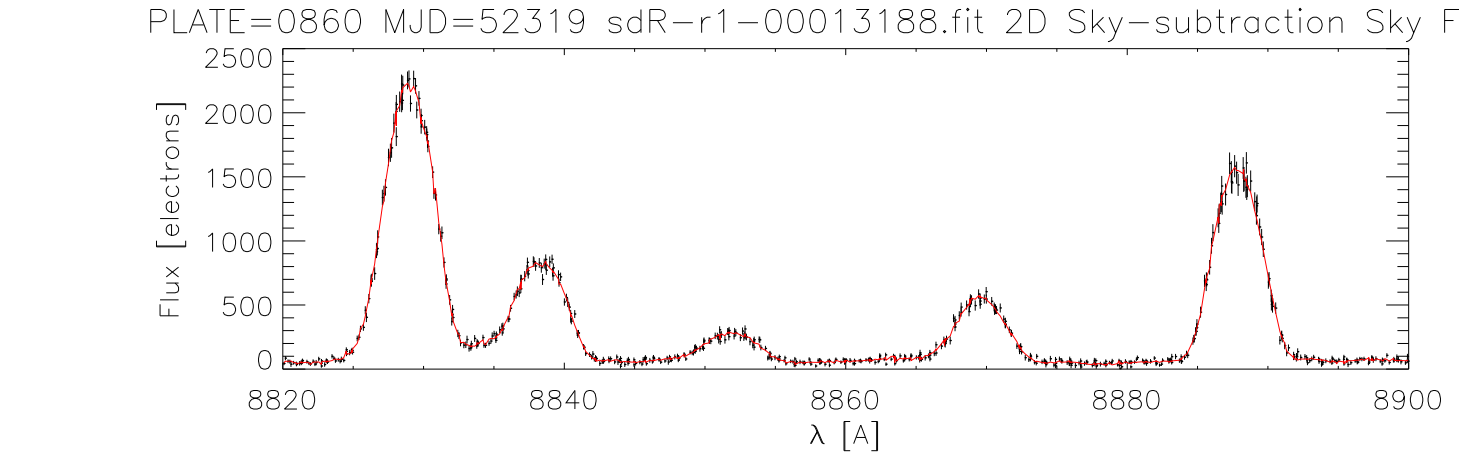

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

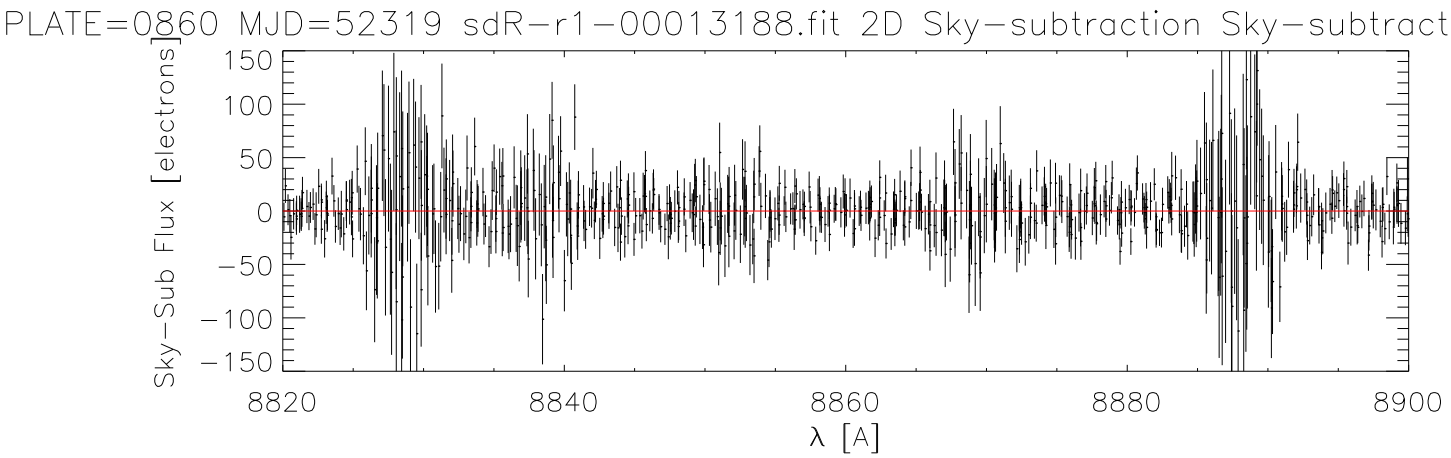

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

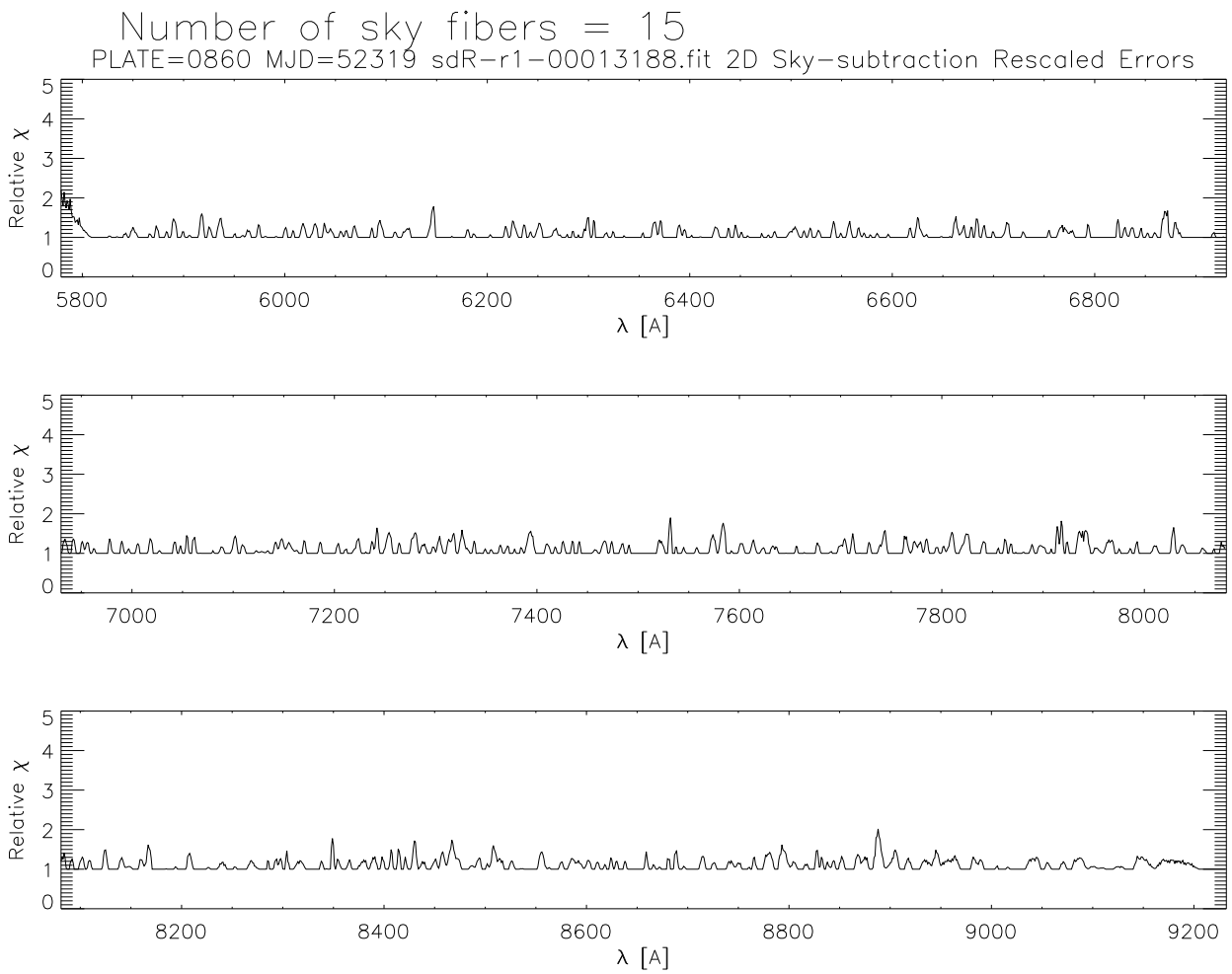

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

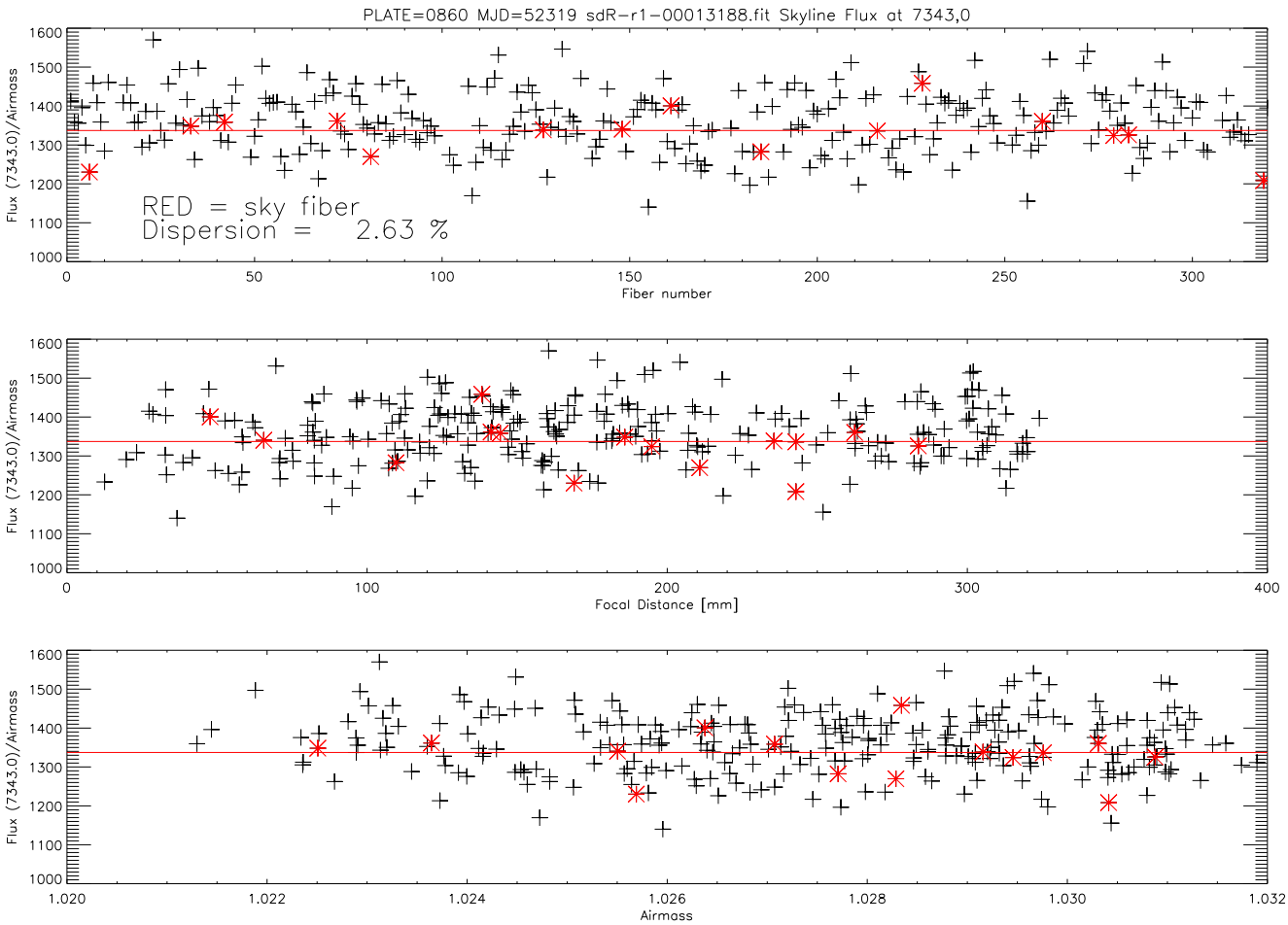

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013188.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

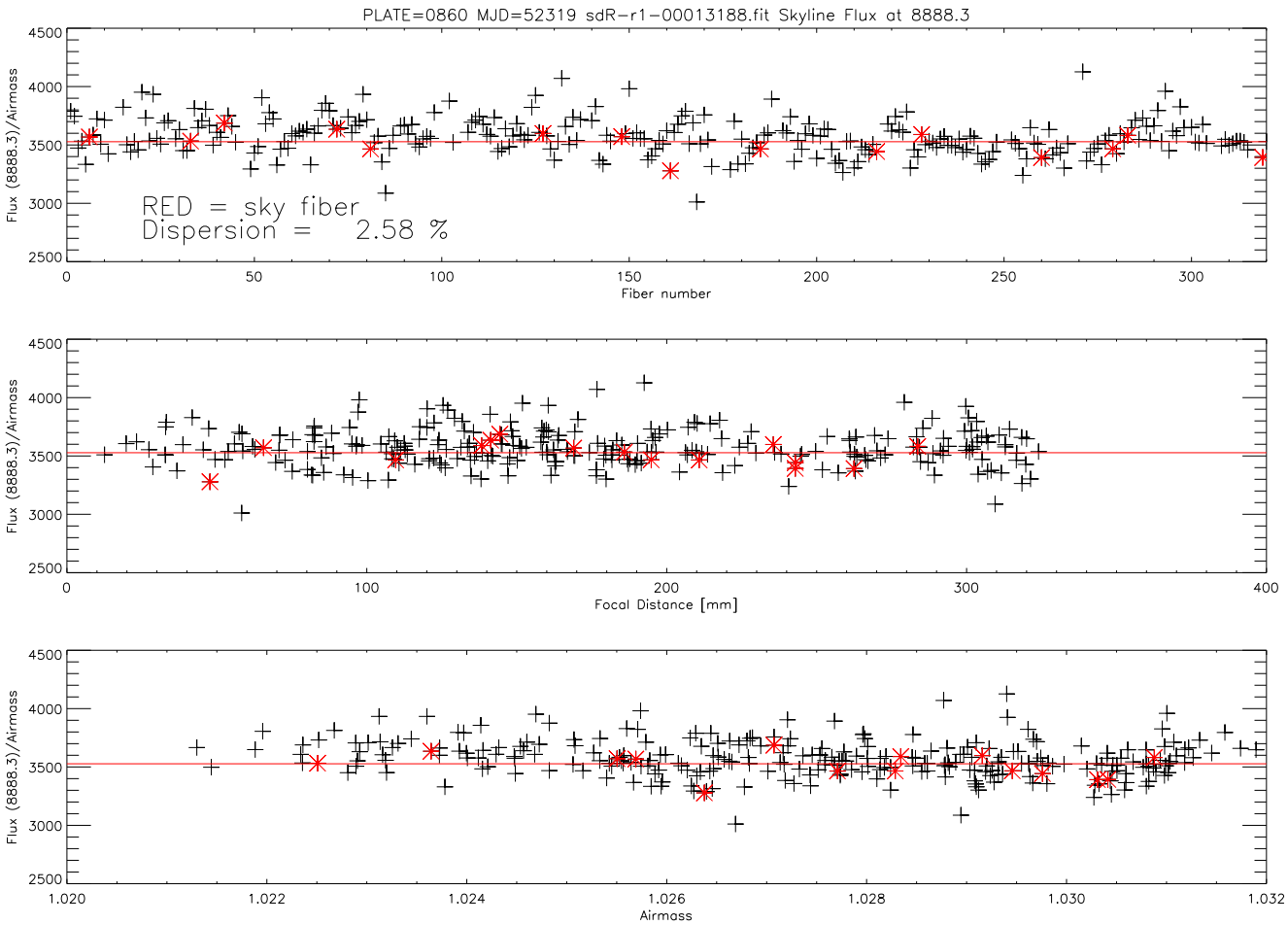

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

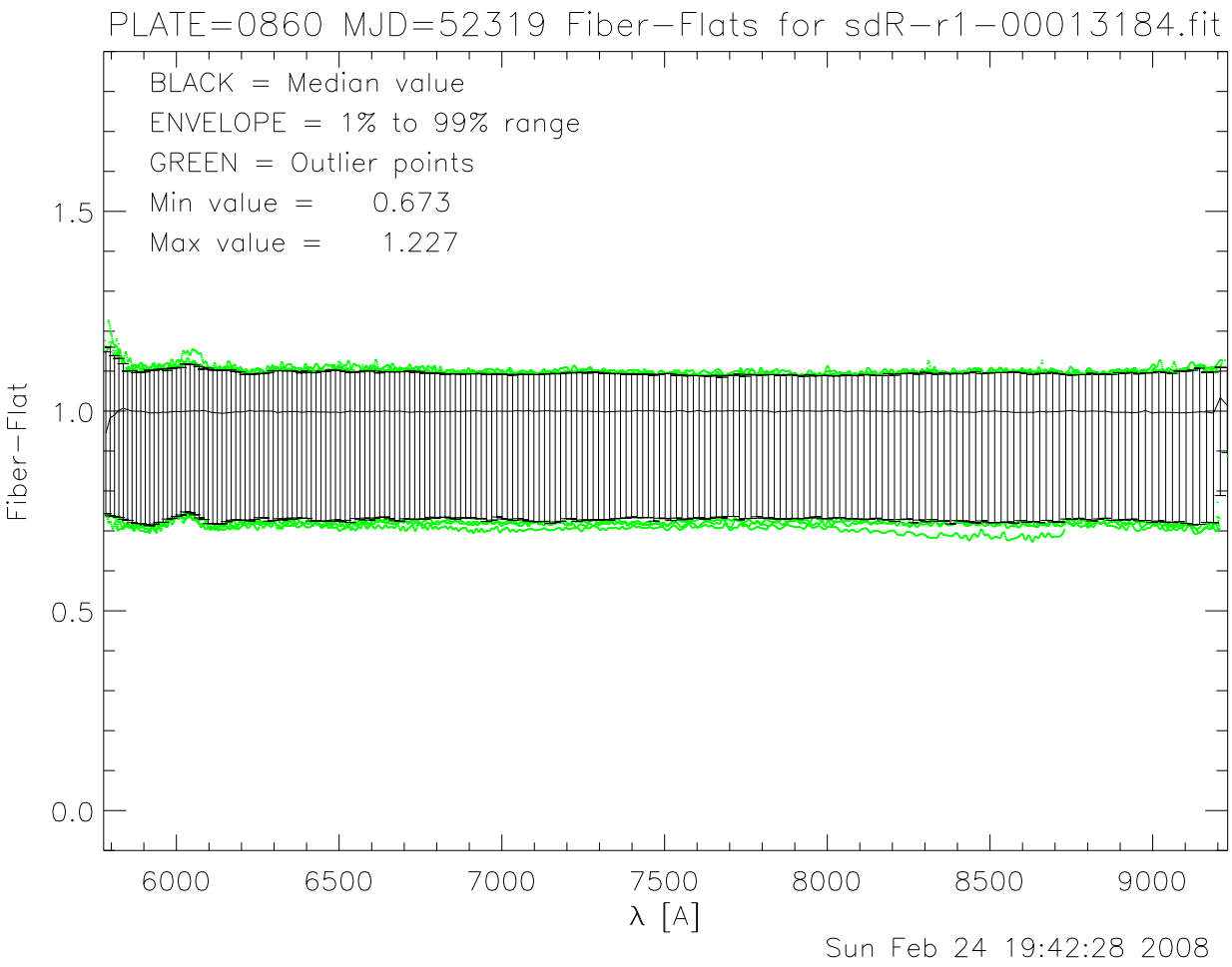

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

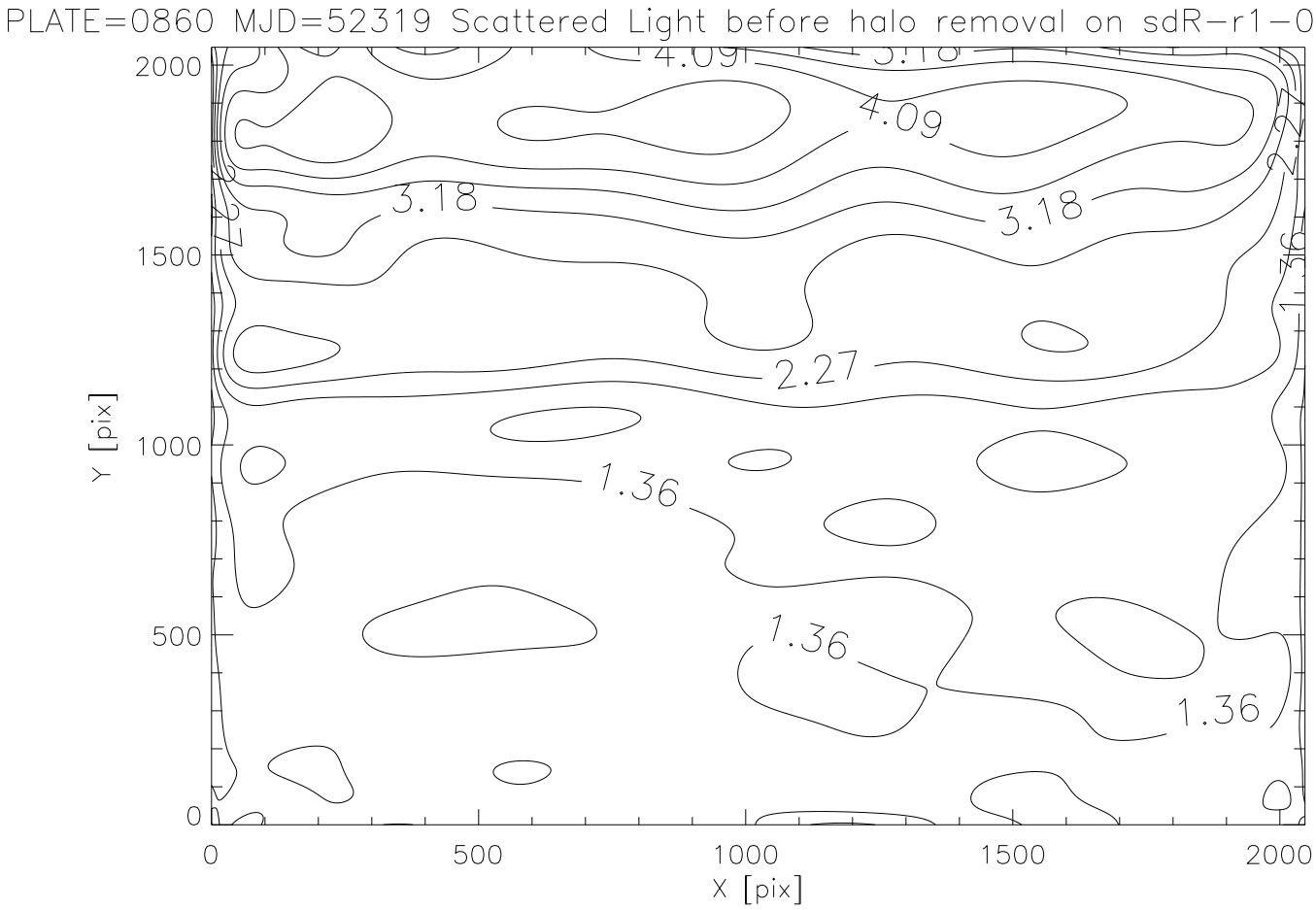

PLATE=0860 MJD=52319 sdR-r1-00013188.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

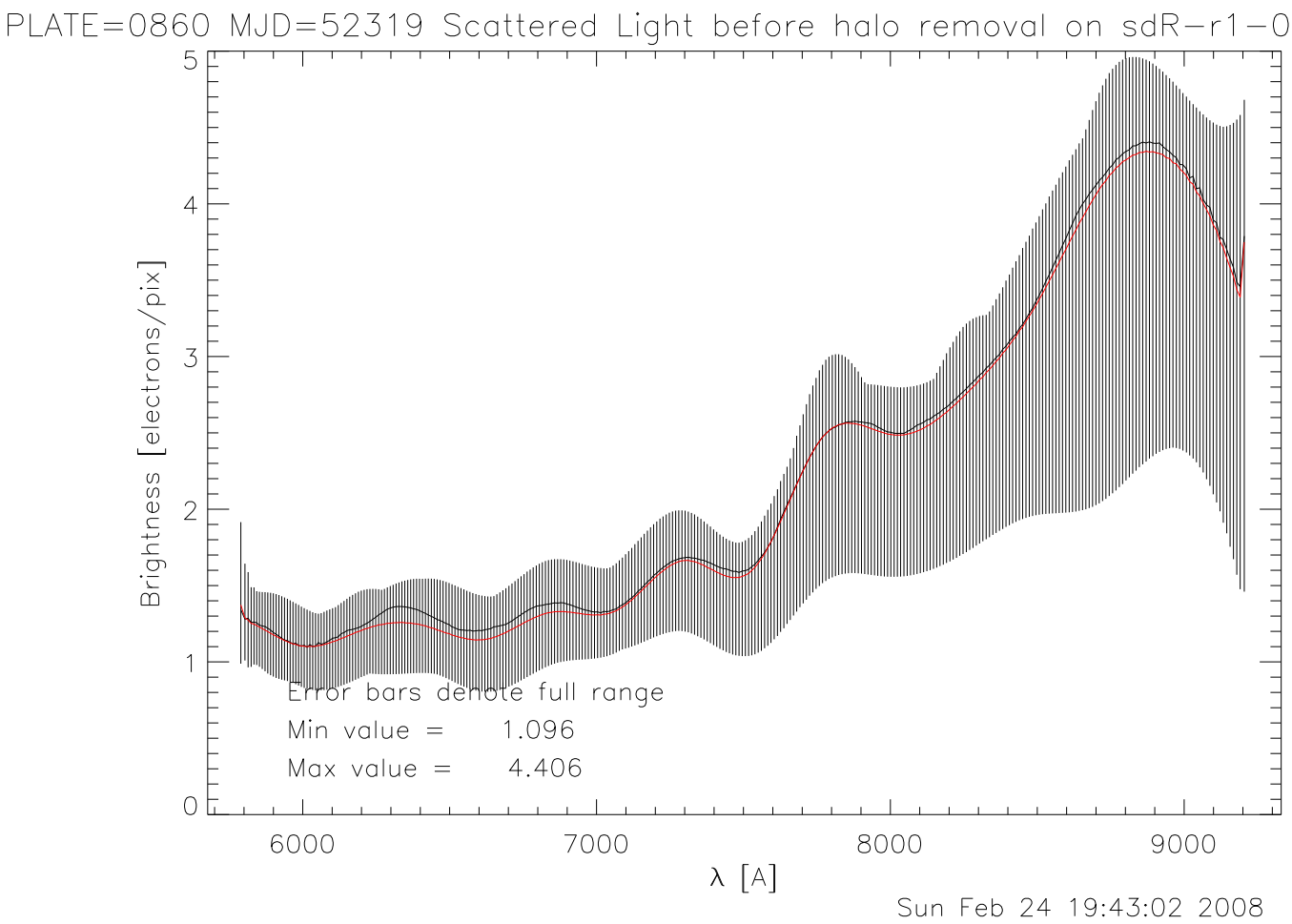

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013188.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

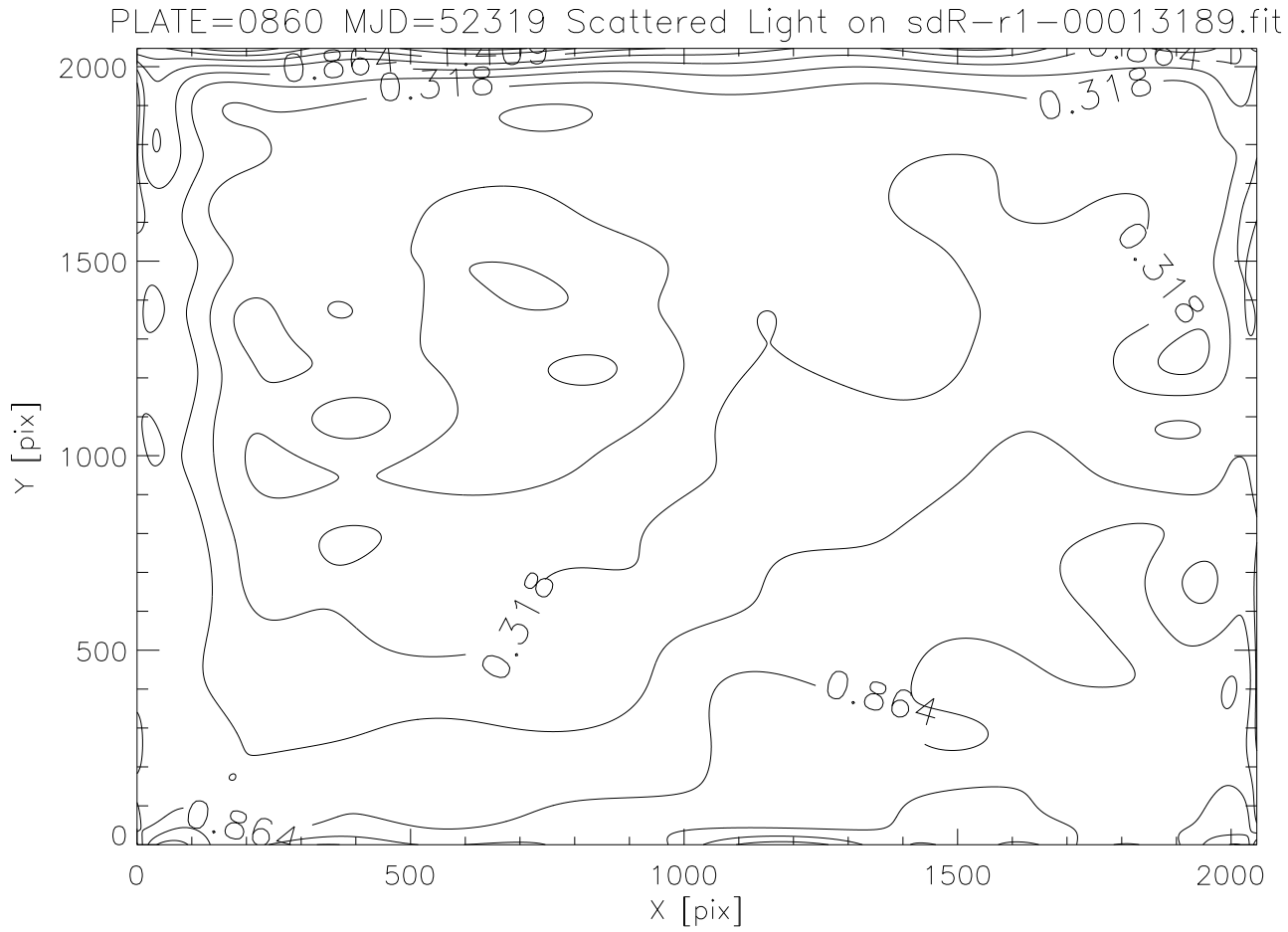

PLATE=0860 MJD=52319 sdR-r1-00013188.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.63 %
Fiber number
Focal Distance [mm]
Airmass

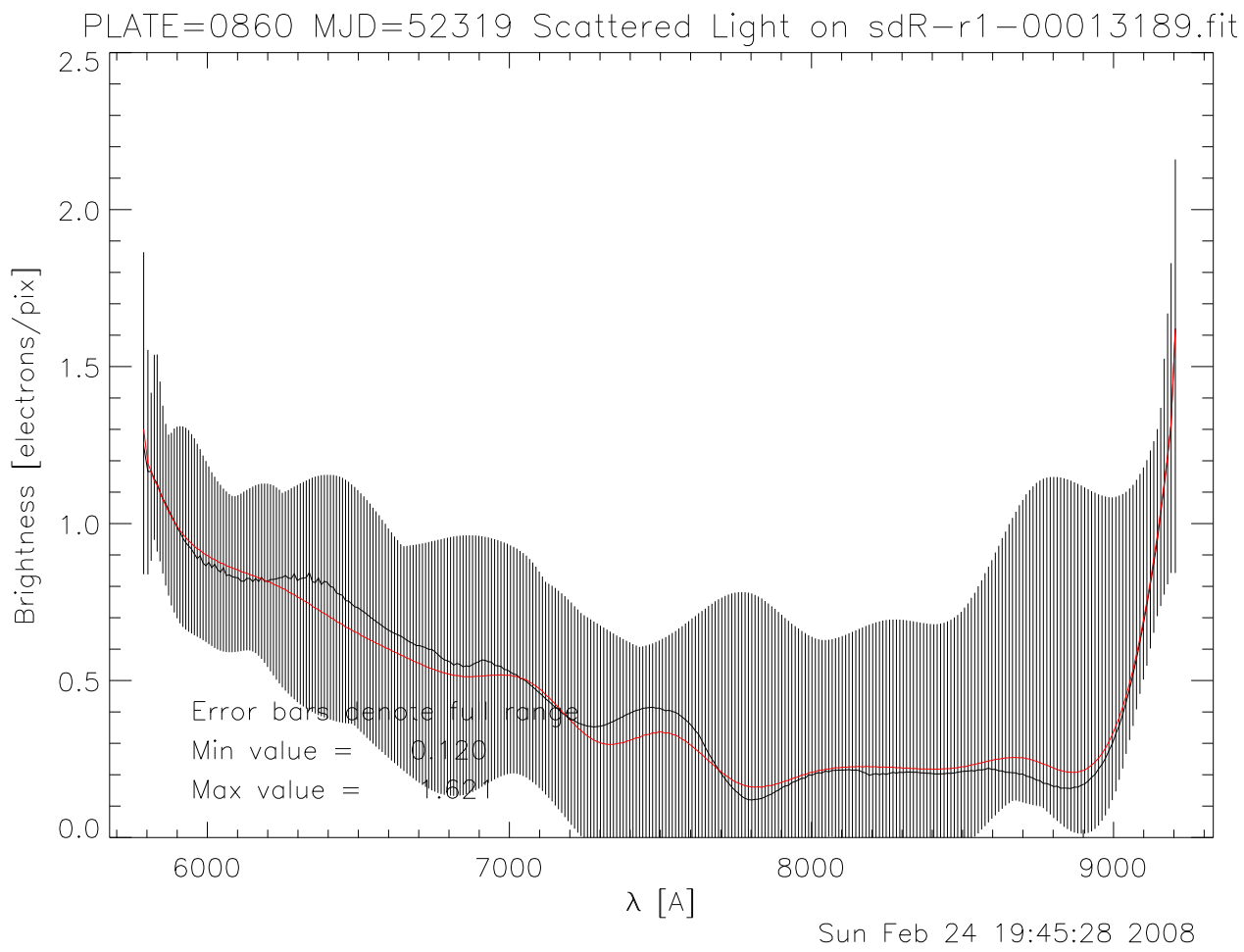

PLATE=0860 MJD=52319 sdR-r1-00013188.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.58 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

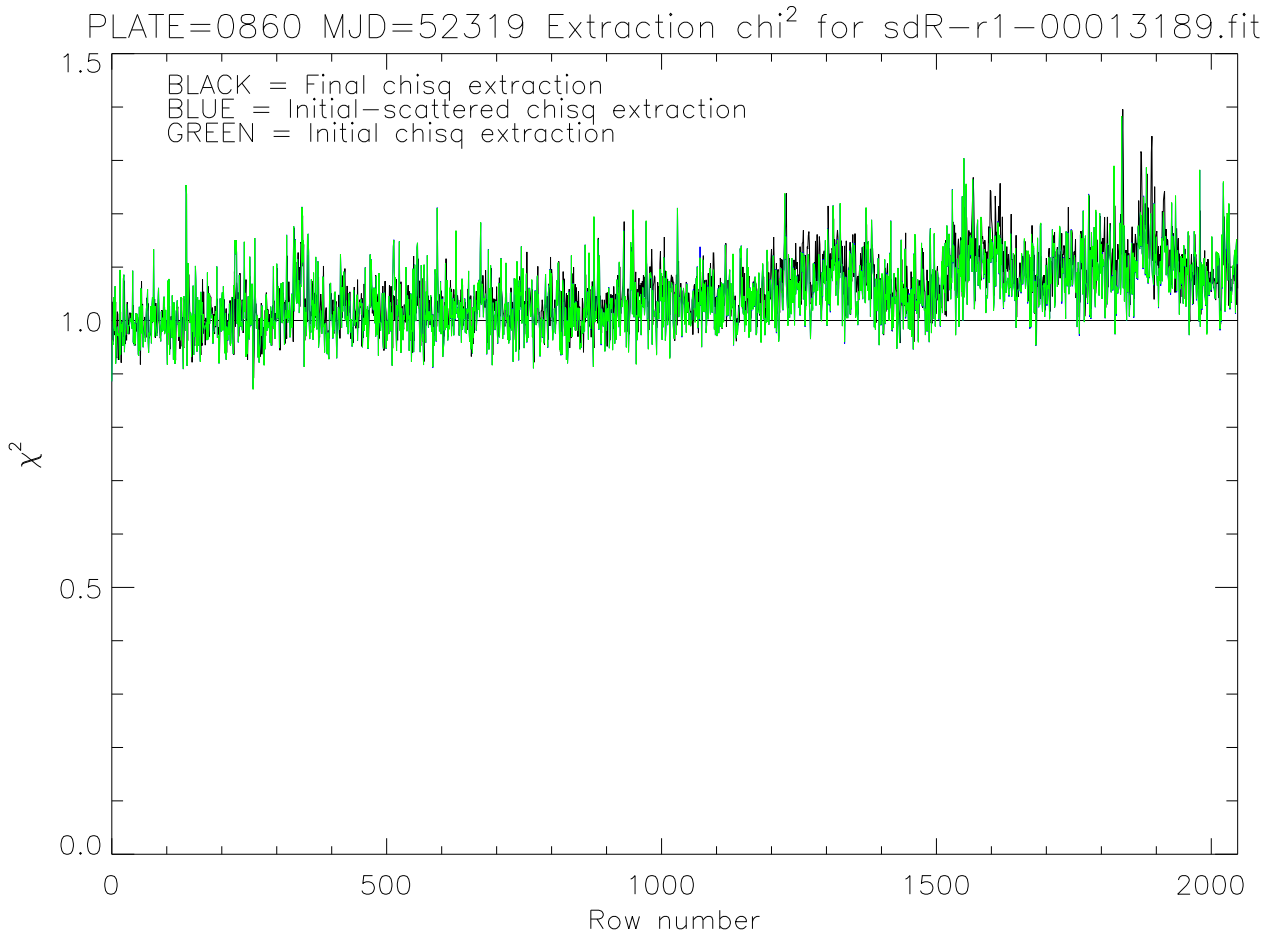

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r1−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.673
Max value = 1.227
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 19:42:28 2008

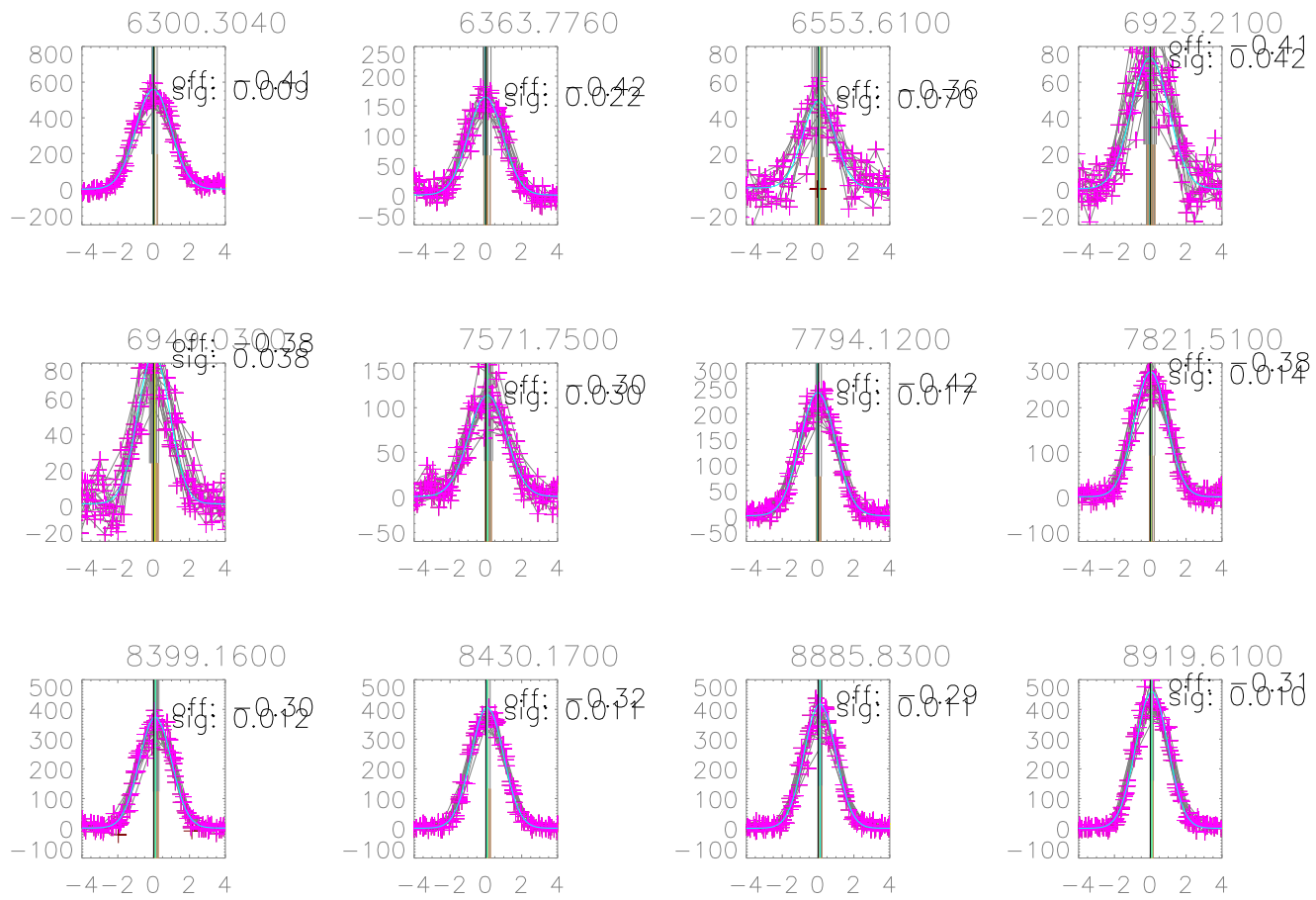

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013189.fi
4.09
3.18
2.27
1.36
Y [pix]
X [pix]
0
500
1000
1500
2000

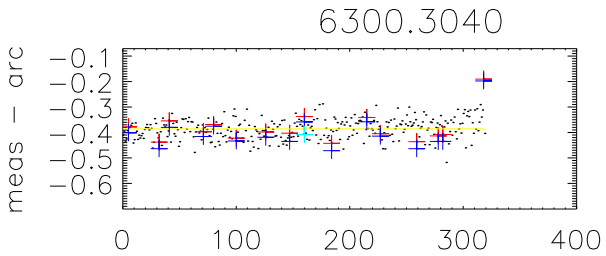

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r1-00013189.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.096
Max value = 4.406
Sun Feb 24 19:43:02 2008

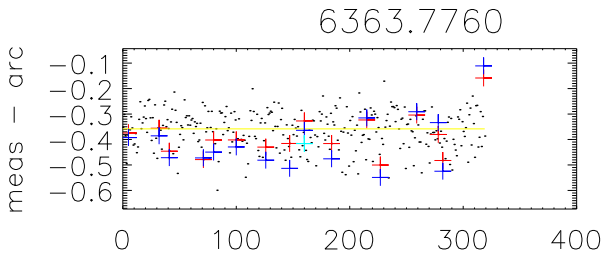

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013189.fit
0.864
0.318
0.318
0.318
0.318
0.864
0.864
0
0
0
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

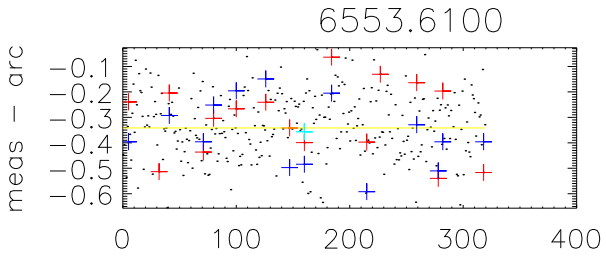

PLATE=0860 MJD=52319 Scattered Light on sdR-r1-00013189.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.120
Max value = 1.621
6000
7000
8000
9000
λ [A]
Sun Feb 24 19:45:28 2008

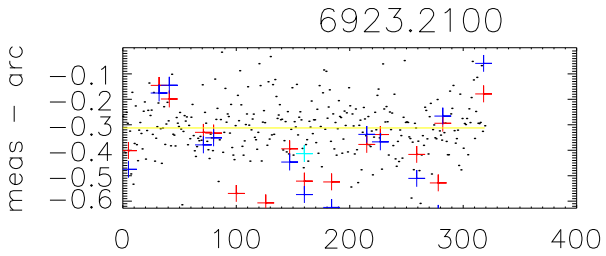

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r1-00013189.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
1.5
1.0
0.5
0.0
χ^2
0
500
1000
1500
2000
Row number

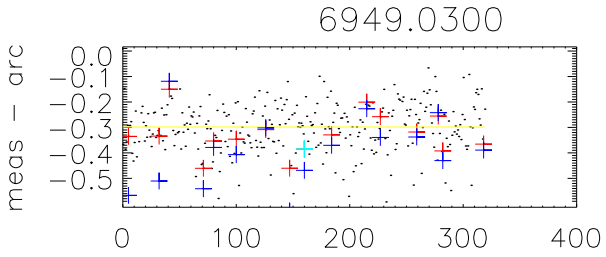

6300.3040
off: −0.41
sig: 0.009
6363.7760
off: −0.42
sig: 0.022
6553.6100
off: −0.36
sig: 0.070
6923.2100
off: −0.41
sig: 0.042
6948.0300
off: −0.38
sig: 0.038
7571.7500
off: −0.30
sig: 0.030
7794.1200
off: −0.42
sig: 0.017
7821.5100
off: −0.38
sig: 0.014
8399.1600
off: −0.30
sig: 0.012
8430.1700
off: −0.32
sig: 0.011
8885.8300
off: −0.29
sig: 0.011
8919.6100
off: −0.31
sig: 0.010

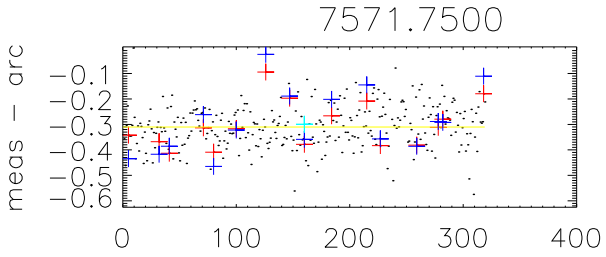

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

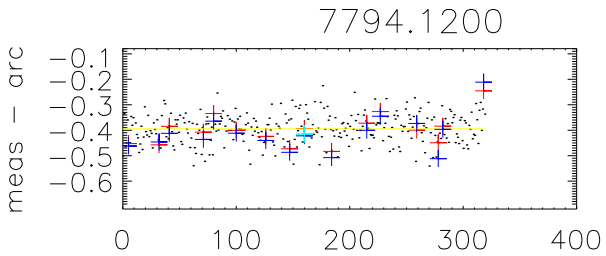

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

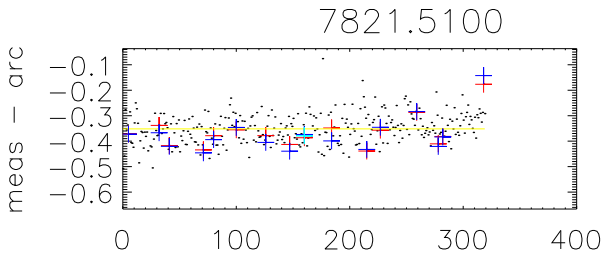

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

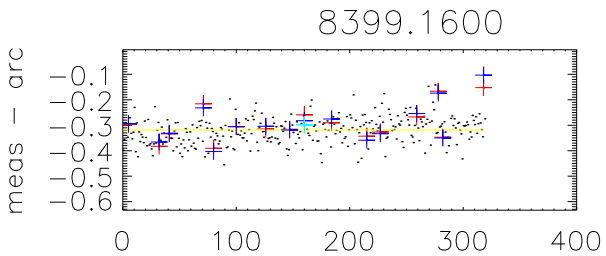

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

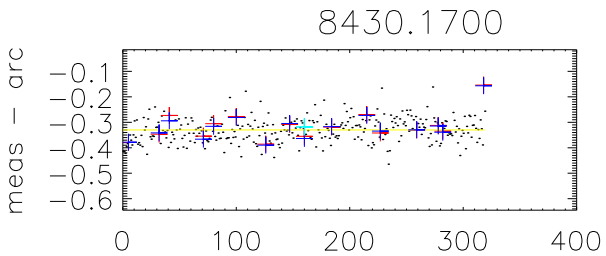

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

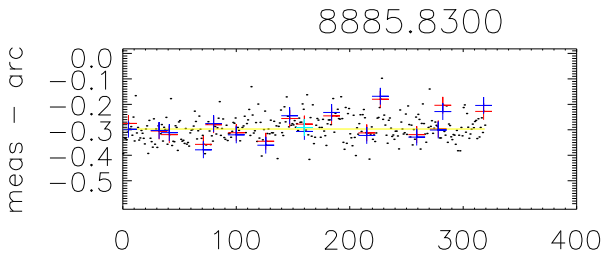

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

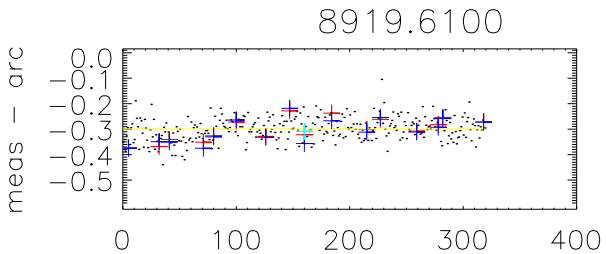

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

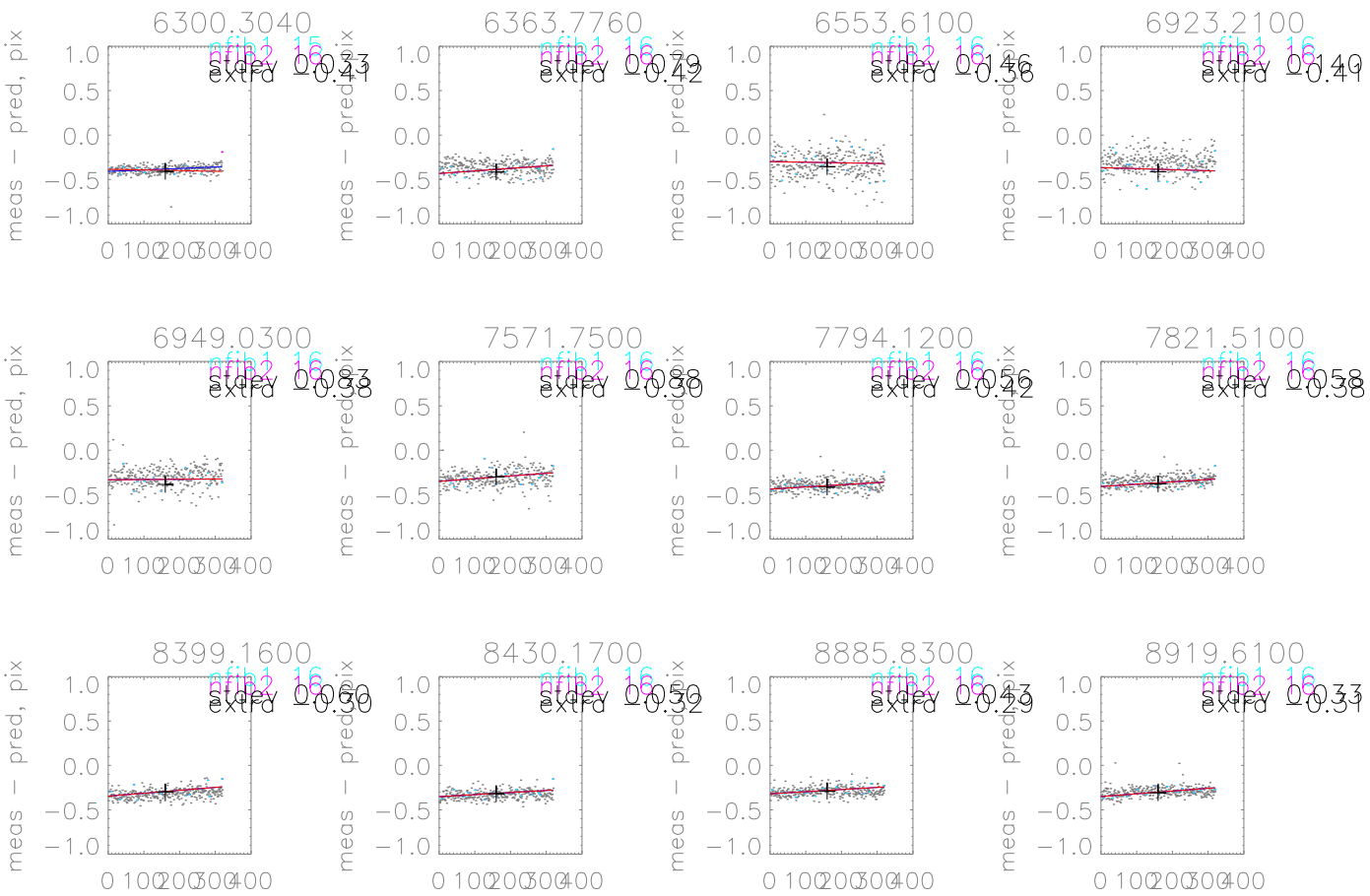

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

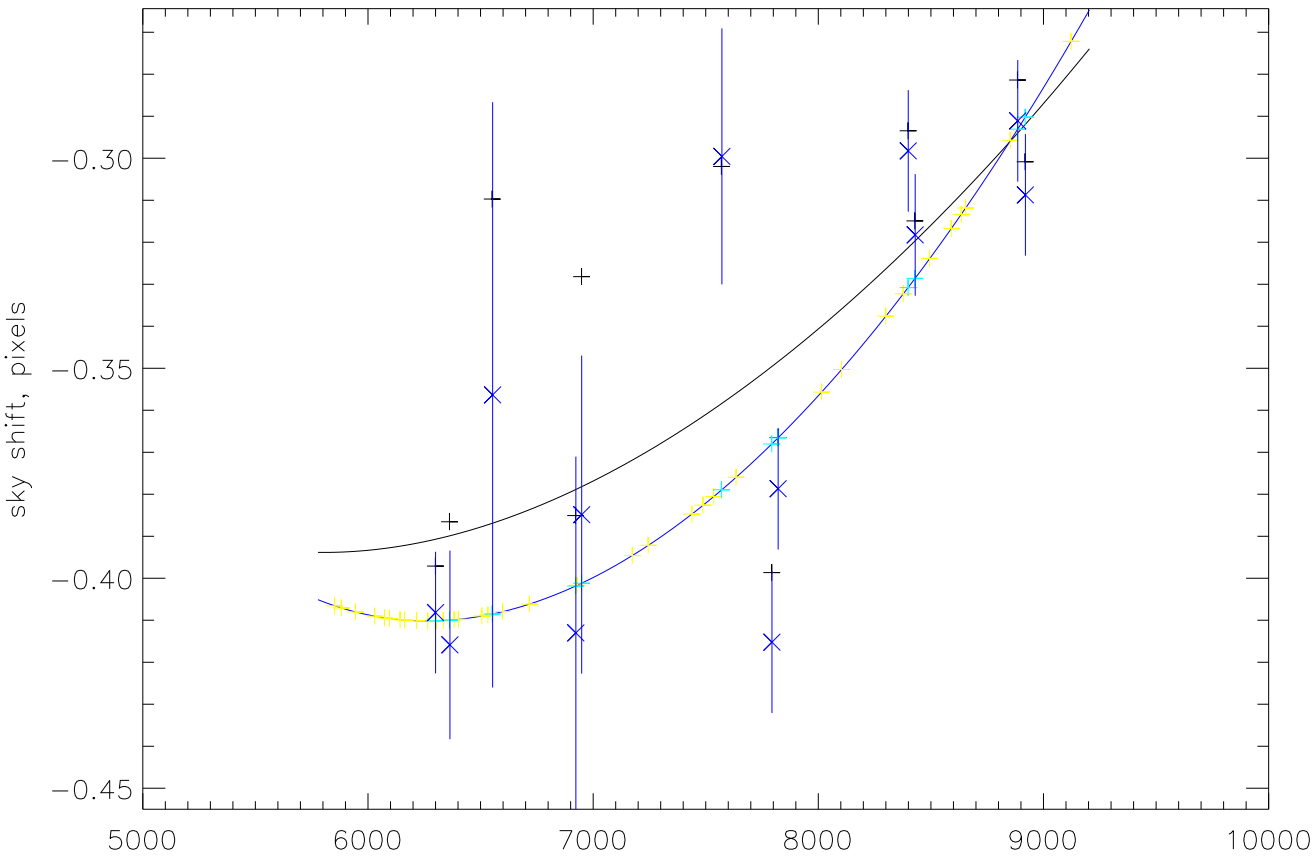

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

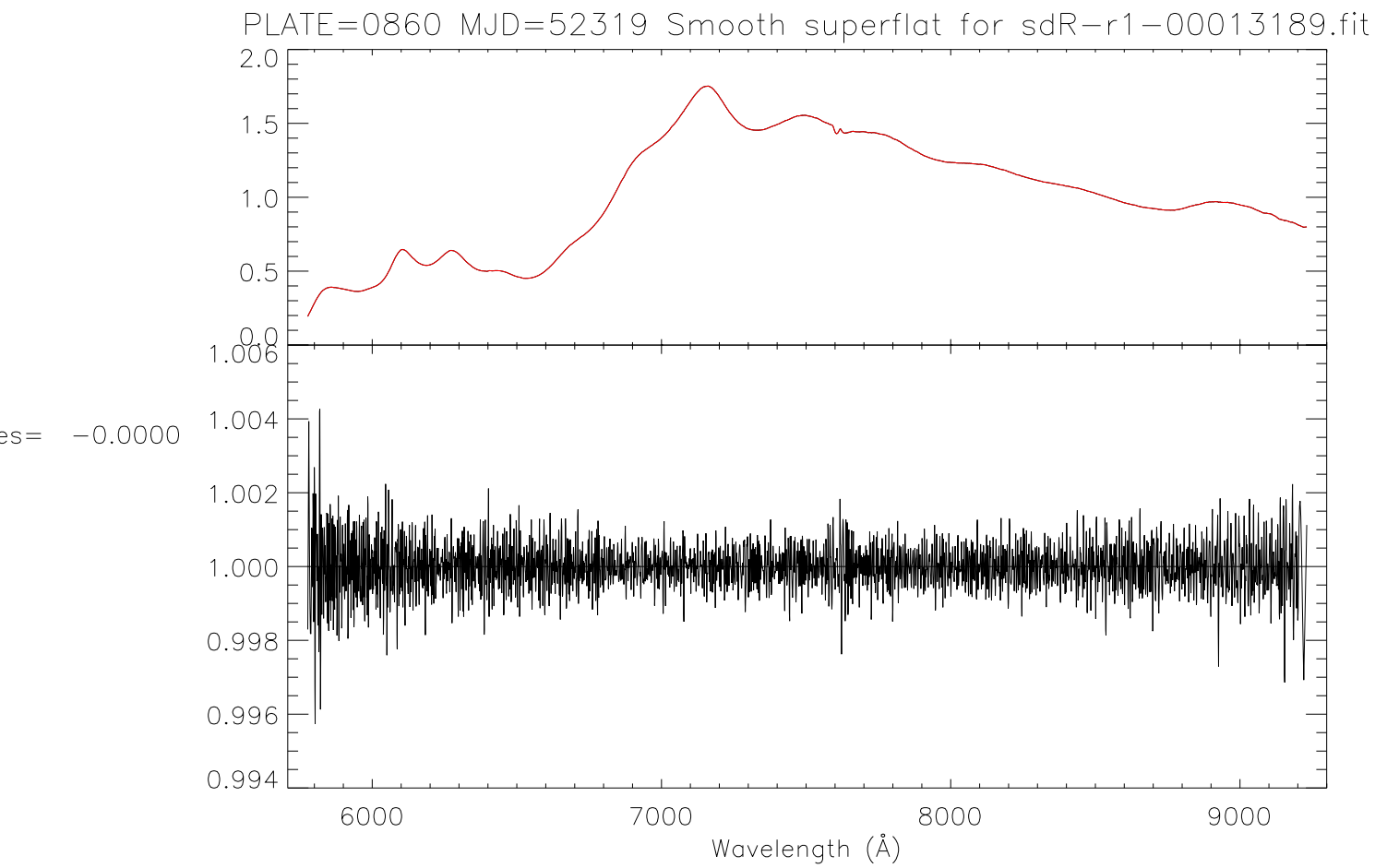

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

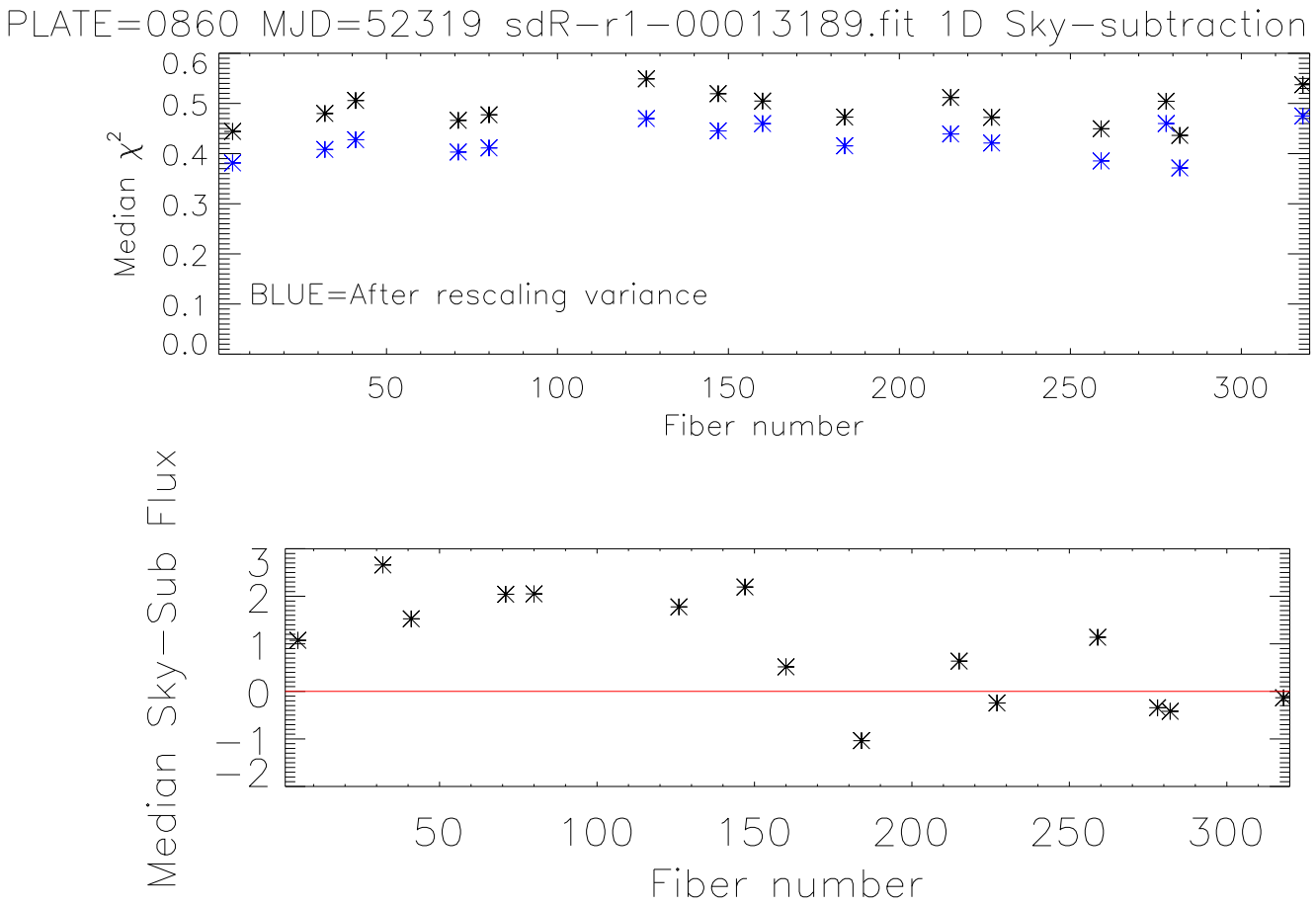

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

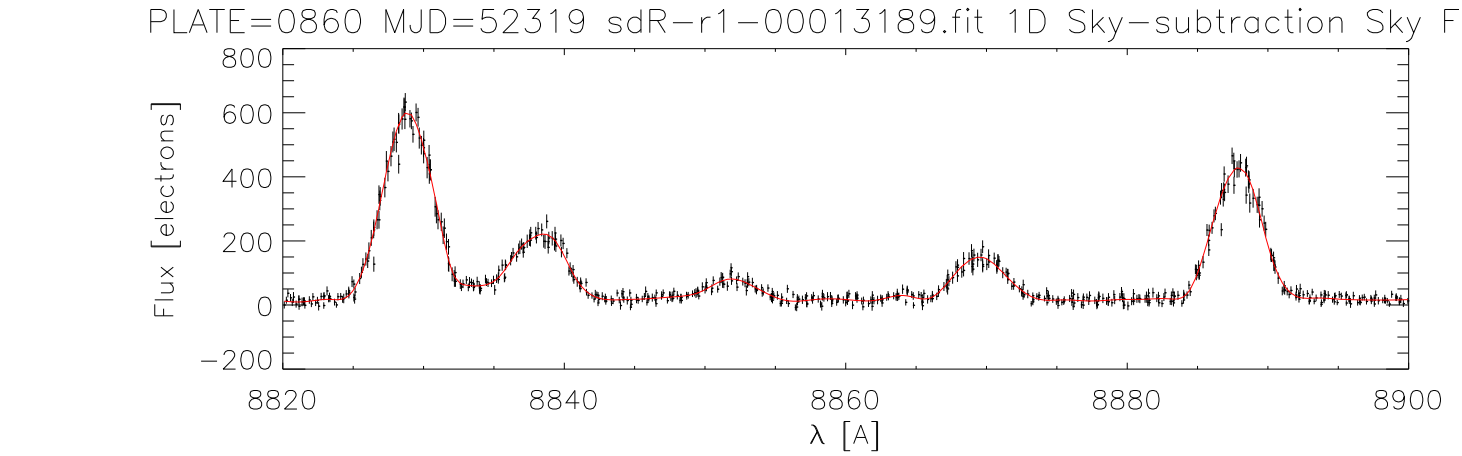

6300.3040
stdev 0.33
extra 0.41
6363.7760
stdev 0.29
extra 0.42
6553.6100
stdev 0.46
extra 0.36
6923.2100
stdev 0.40
extra 0.41
6949.0300
stdev 0.33
extra 0.38
7571.7500
stdev 0.38
extra 0.30
7794.1200
stdev 0.56
extra 0.42
7821.5100
stdev 0.58
extra 0.38
8399.1600
stdev 0.60
extra 0.30
8430.1700
stdev 0.50
extra 0.32
8885.8300
stdev 0.43
extra 0.29
8919.6100
stdev 0.33
extra 0.31
meas − pred, pix
mfib1 16
mfib2 16

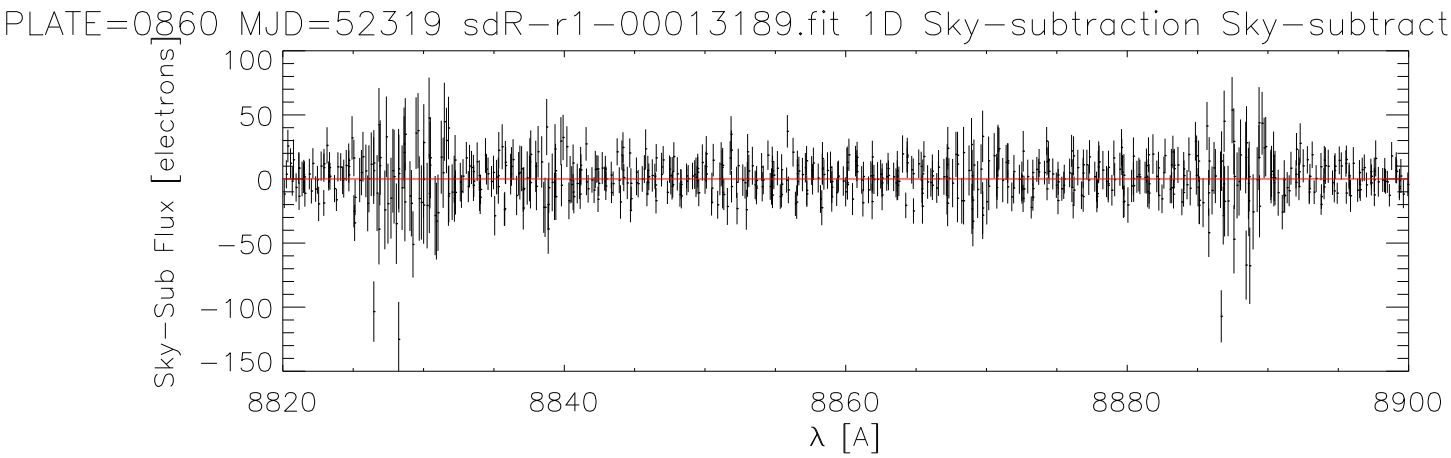

sky shift, pixels
−0.30
−0.35
−0.40
−0.45
5000
6000
7000
8000
9000
10000

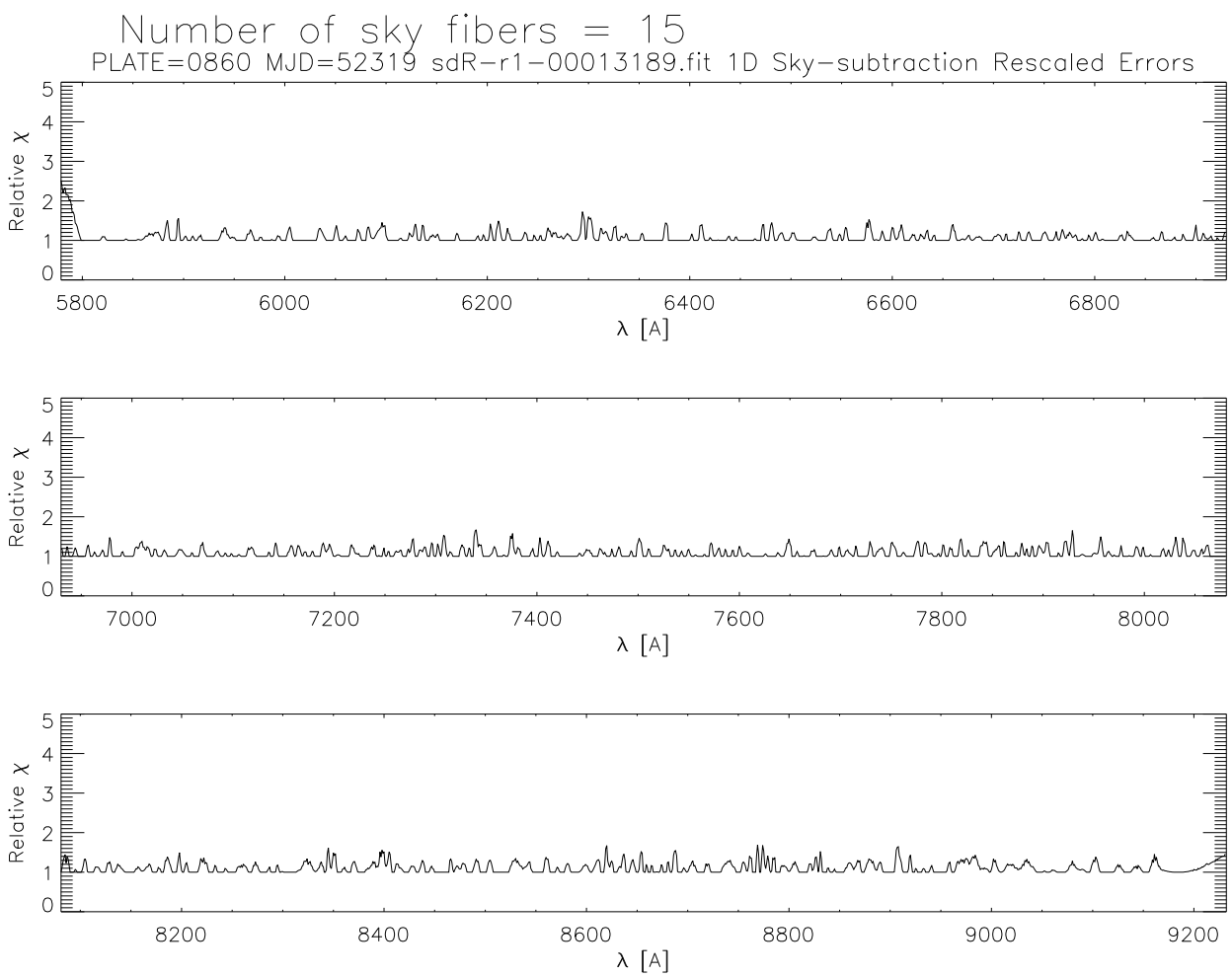

PLATE=0860 MJD=52319 Smooth superflat for sdR-r1-00013189.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

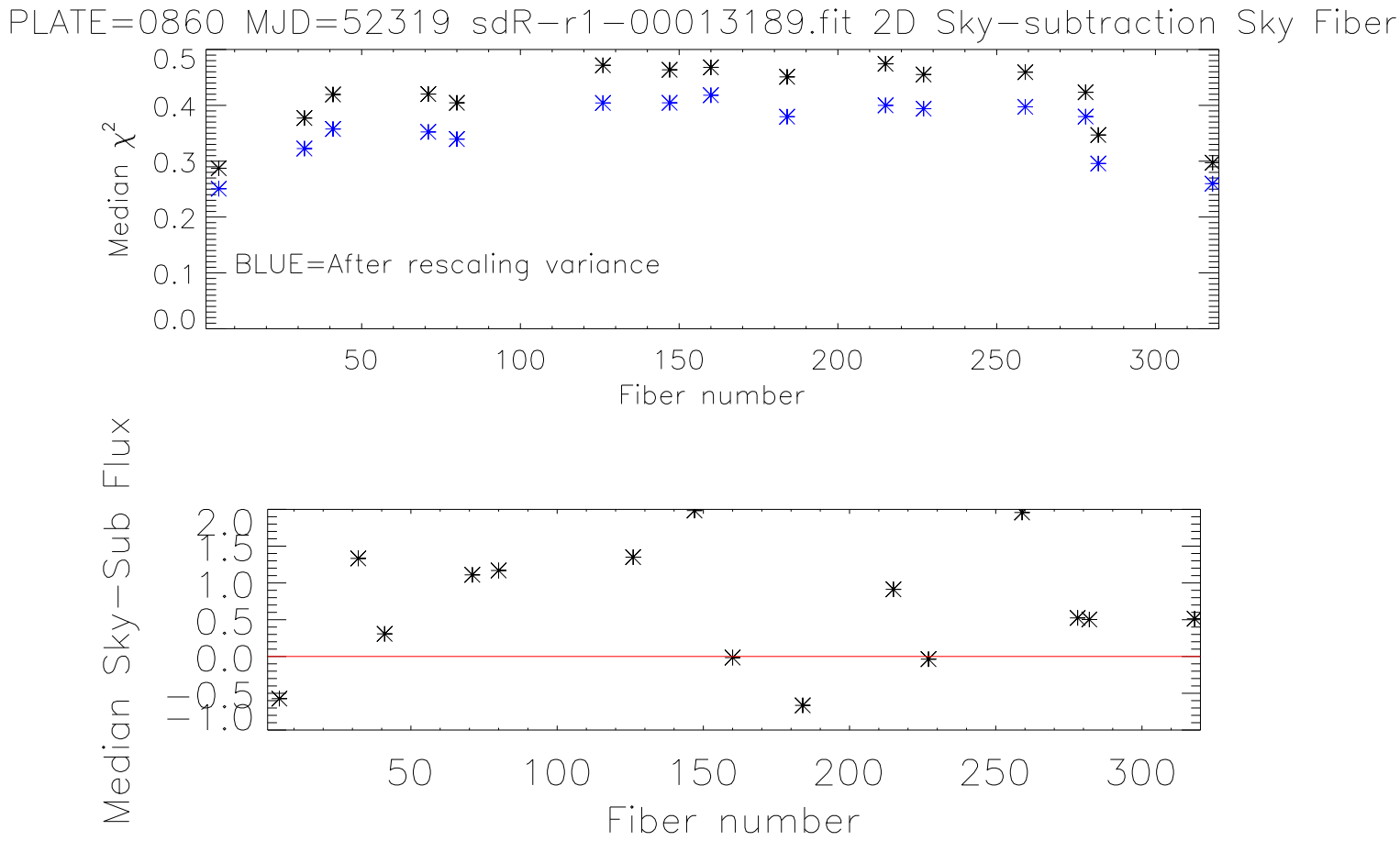
es= −0.0000

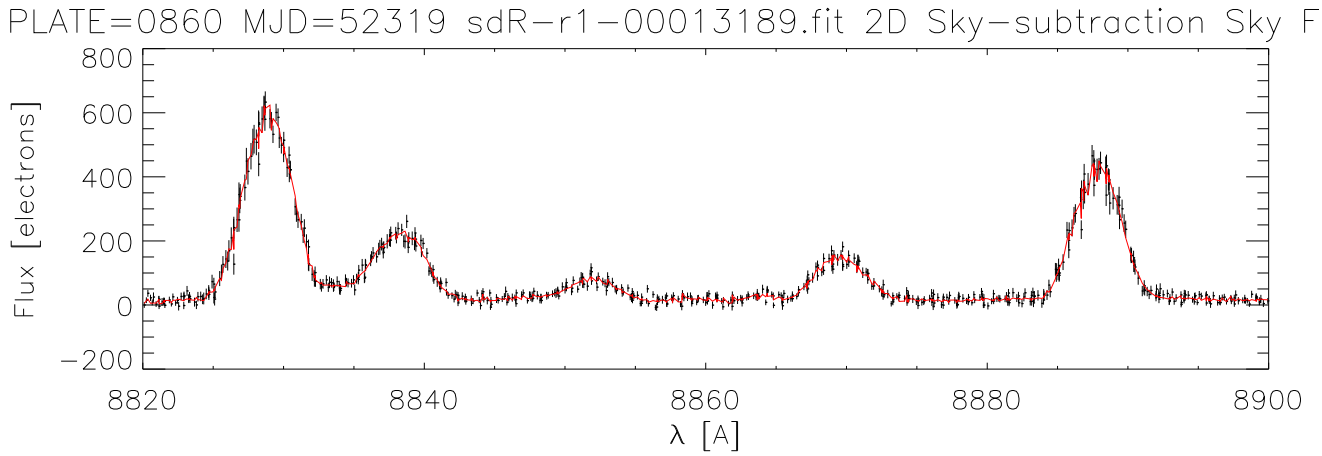

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

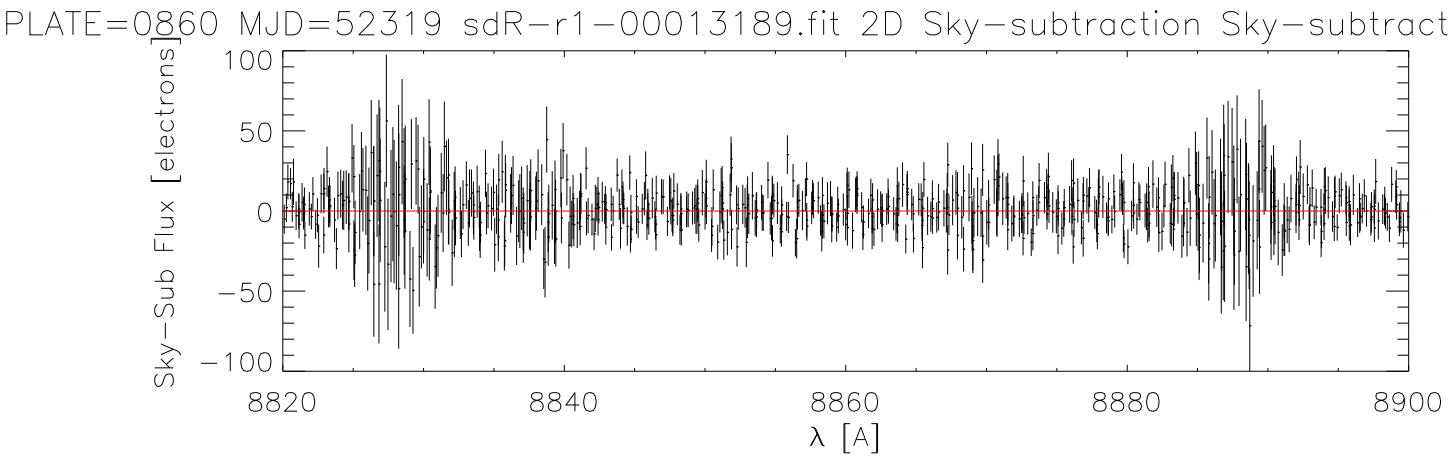

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

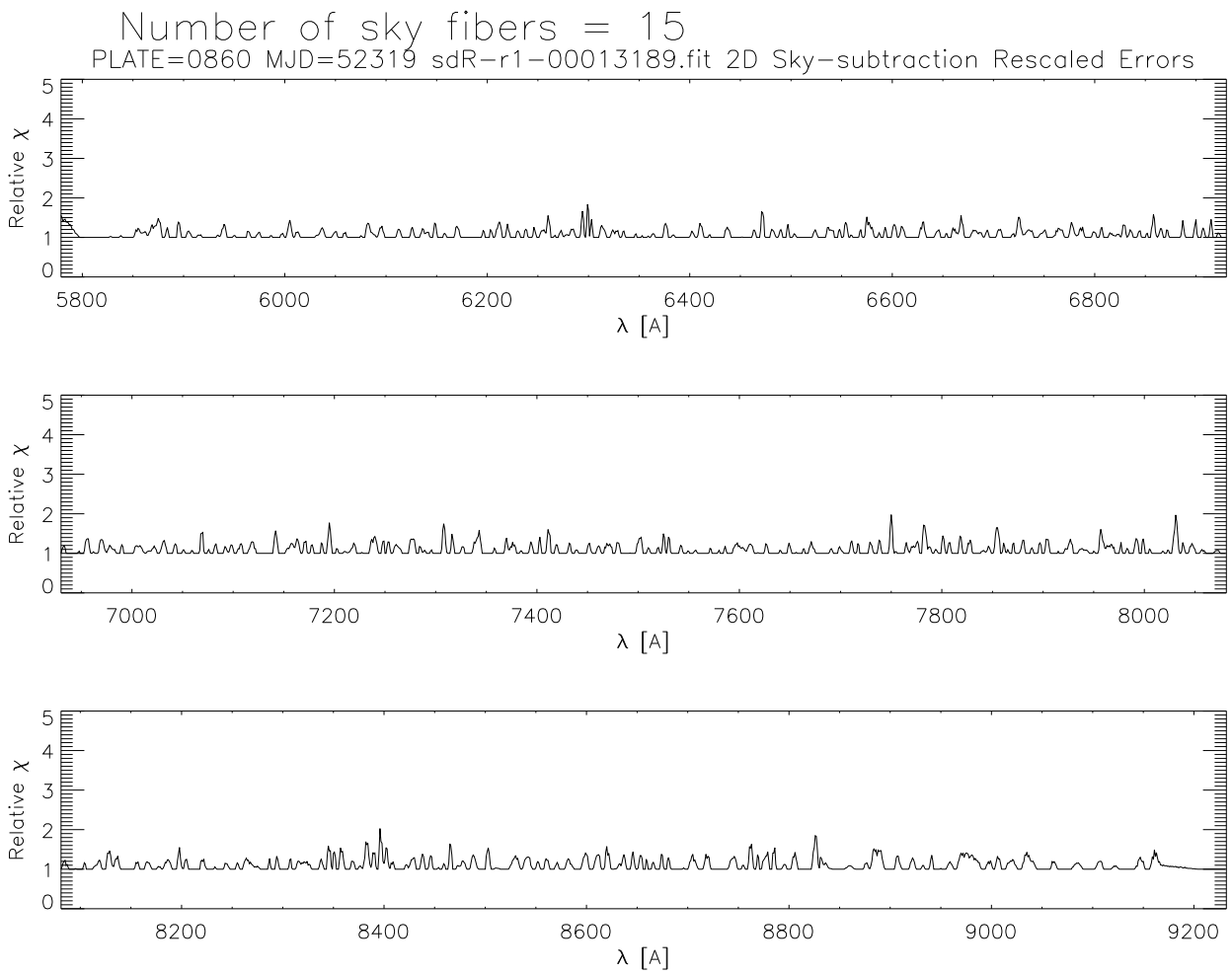

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

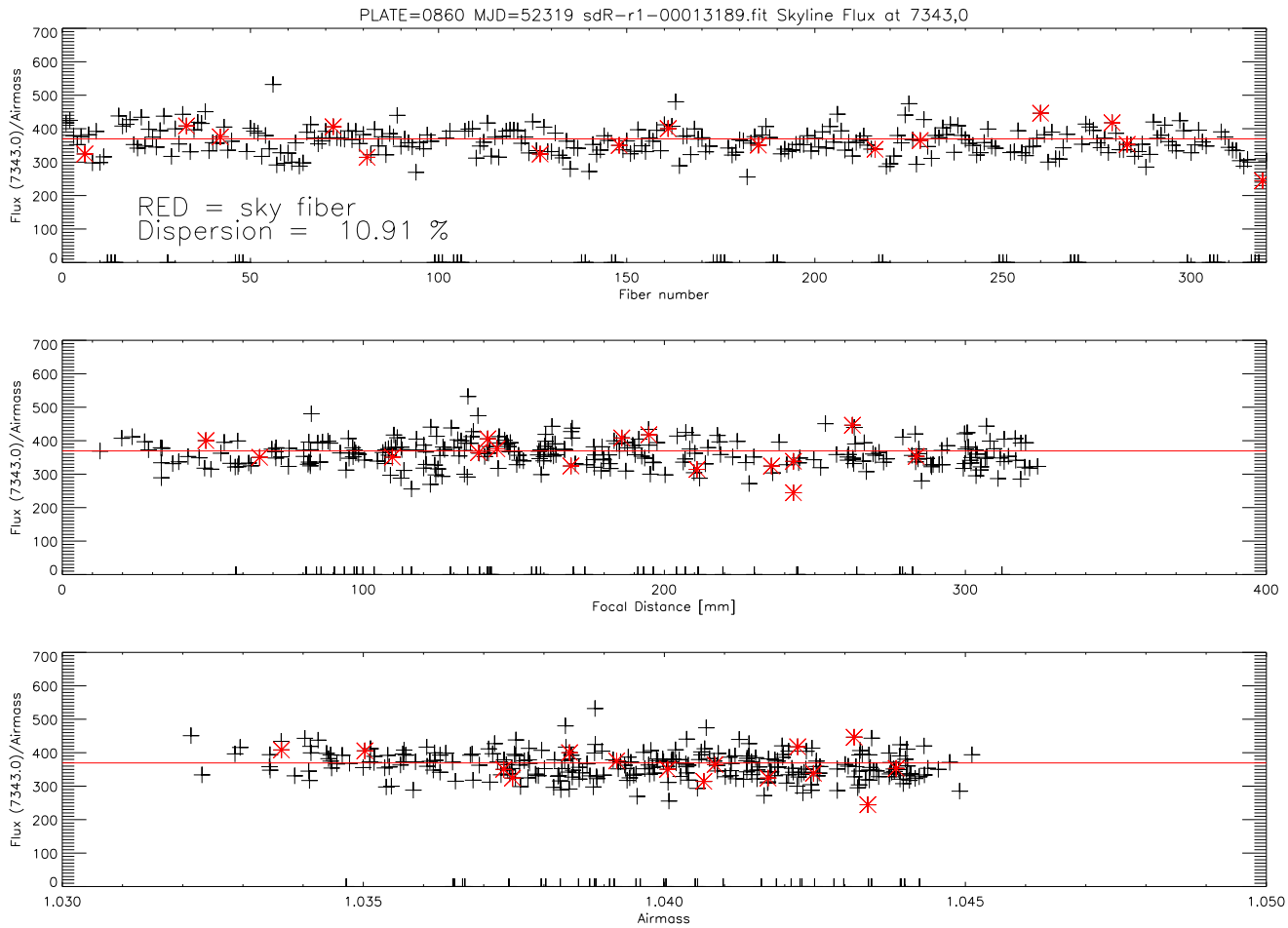

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013189.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

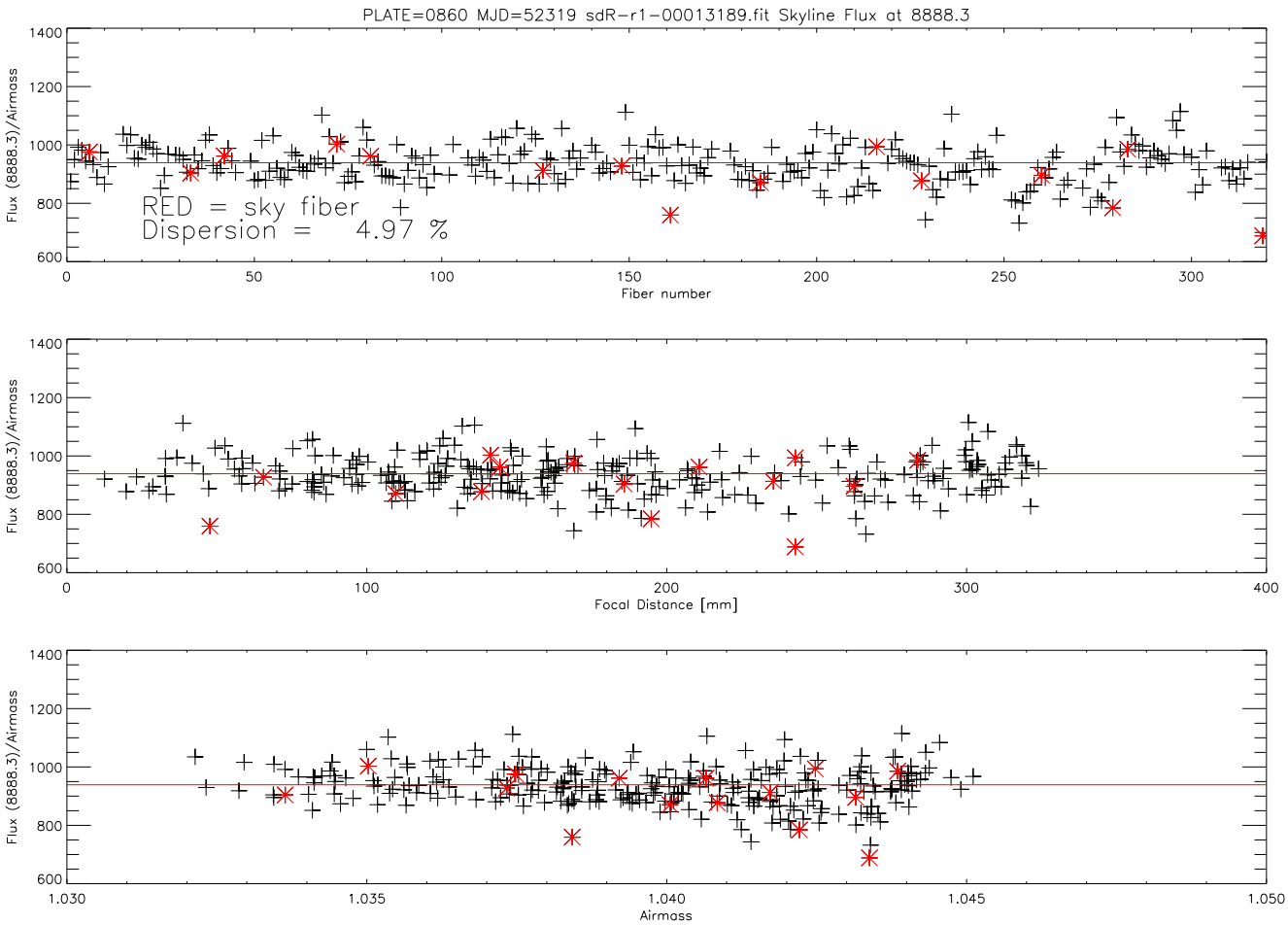

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

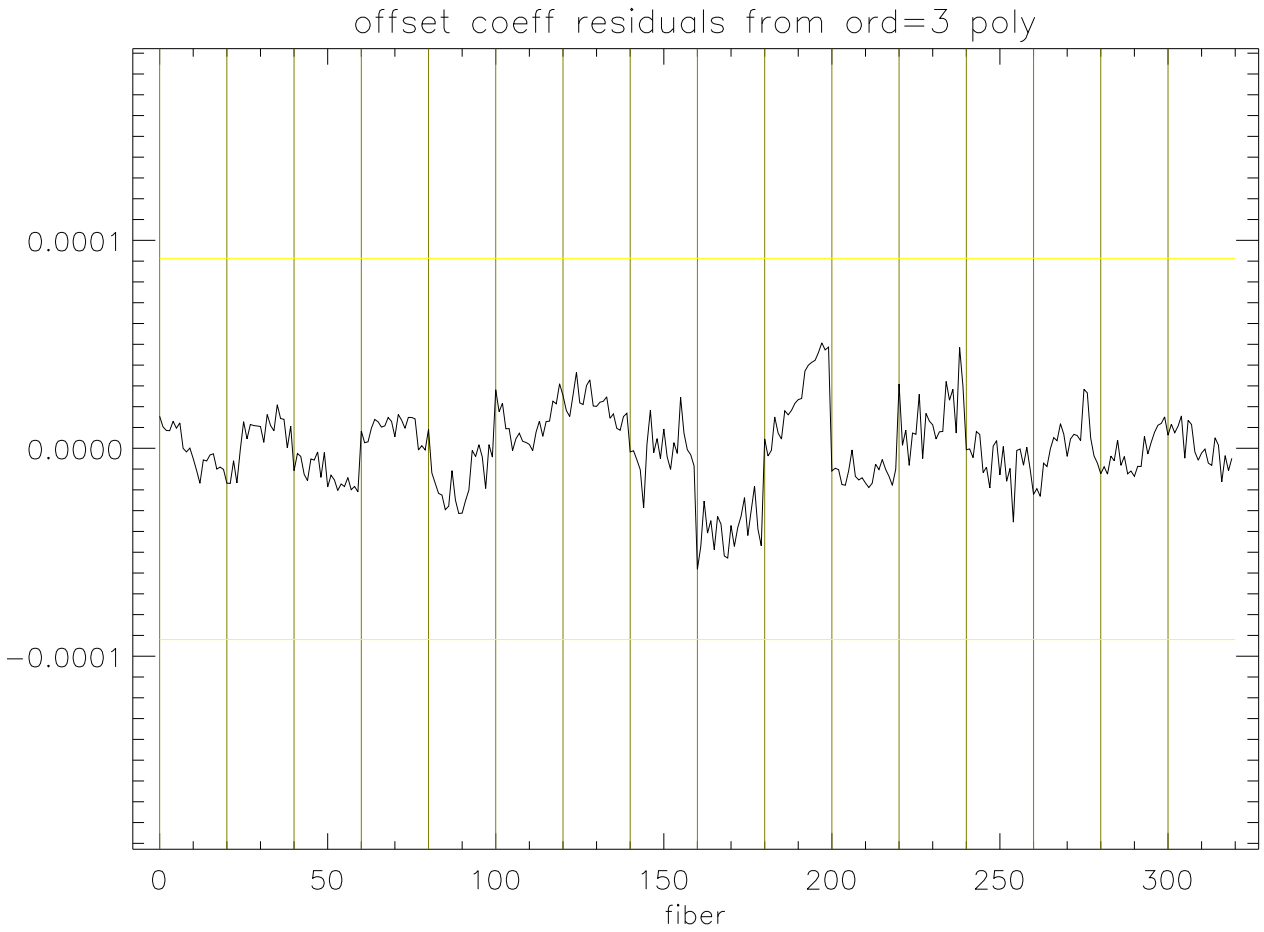

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

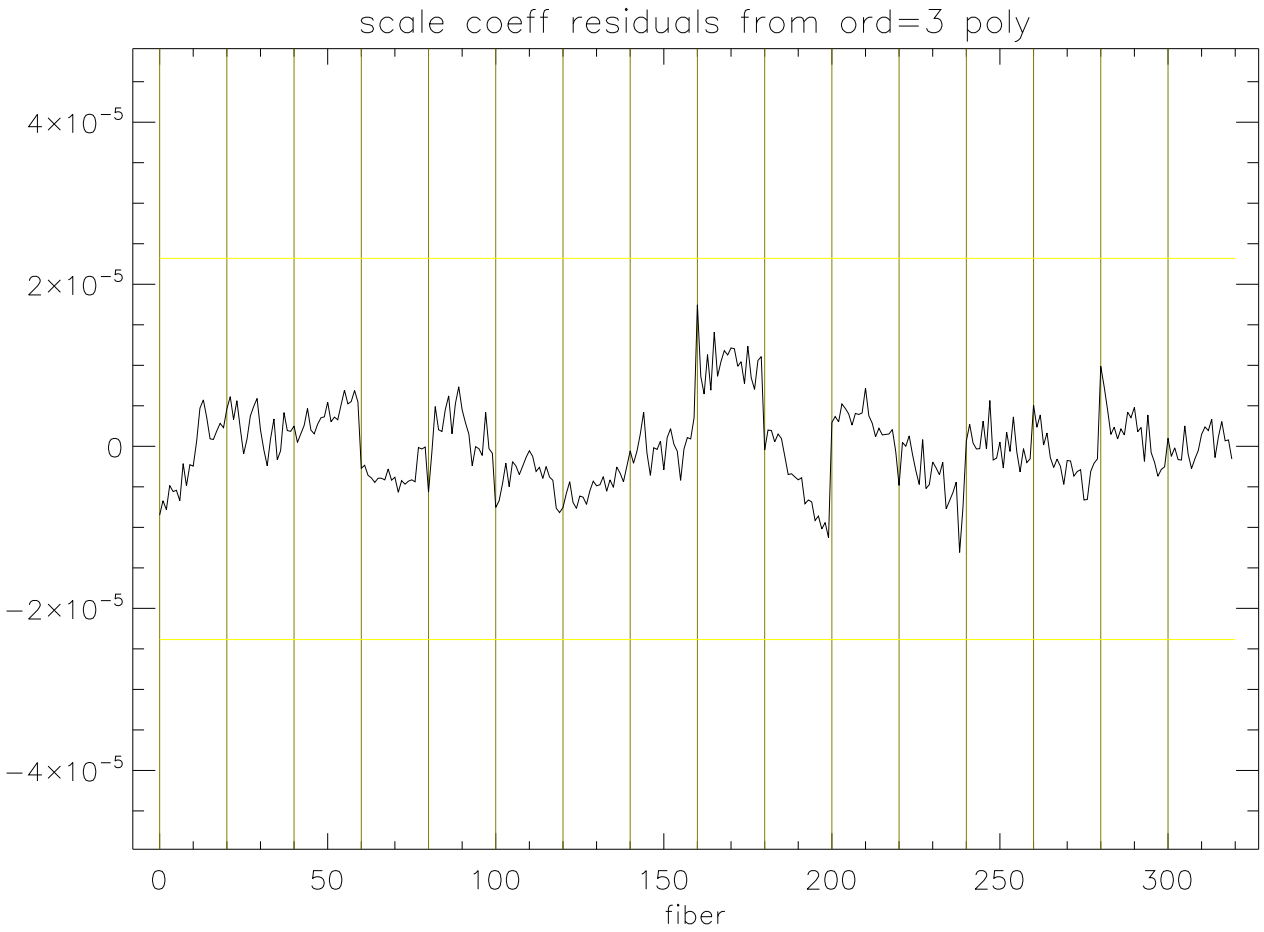

PLATE=0860 MJD=52319 sdR-r1-00013189.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

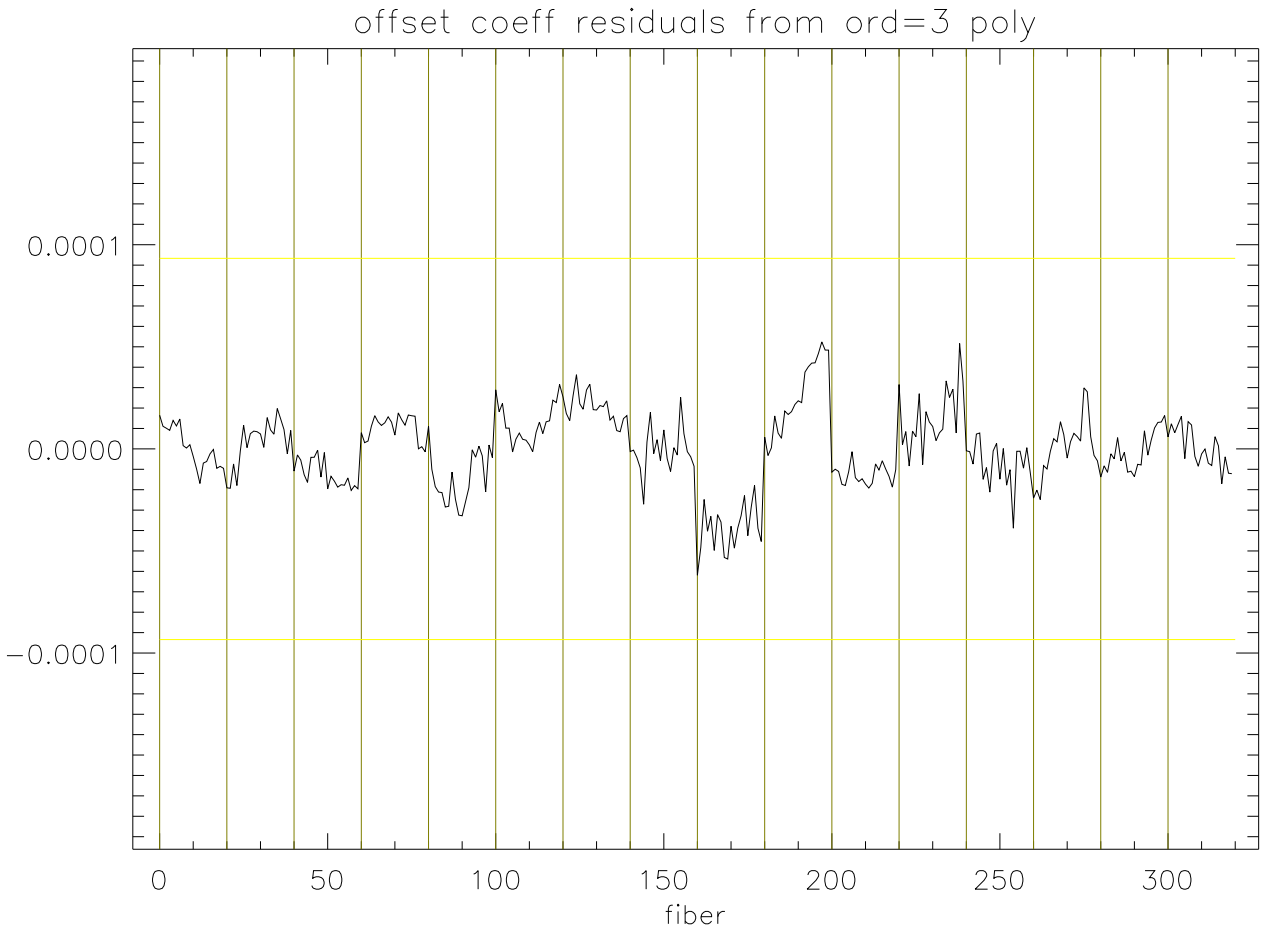

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r1-00013189.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

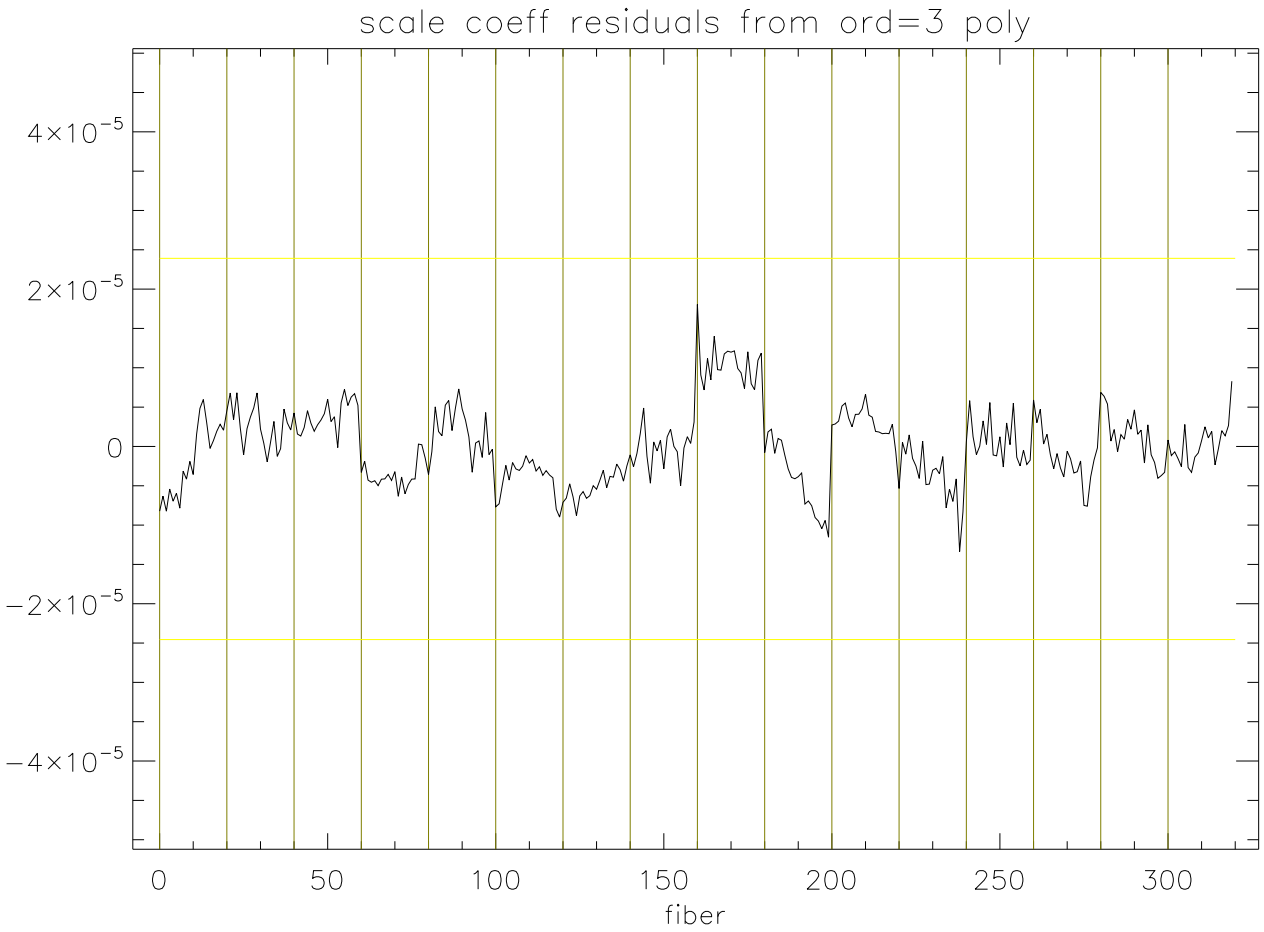

PLATE=0860 MJD=52319 sdR-r1-00013189.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 10.91 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

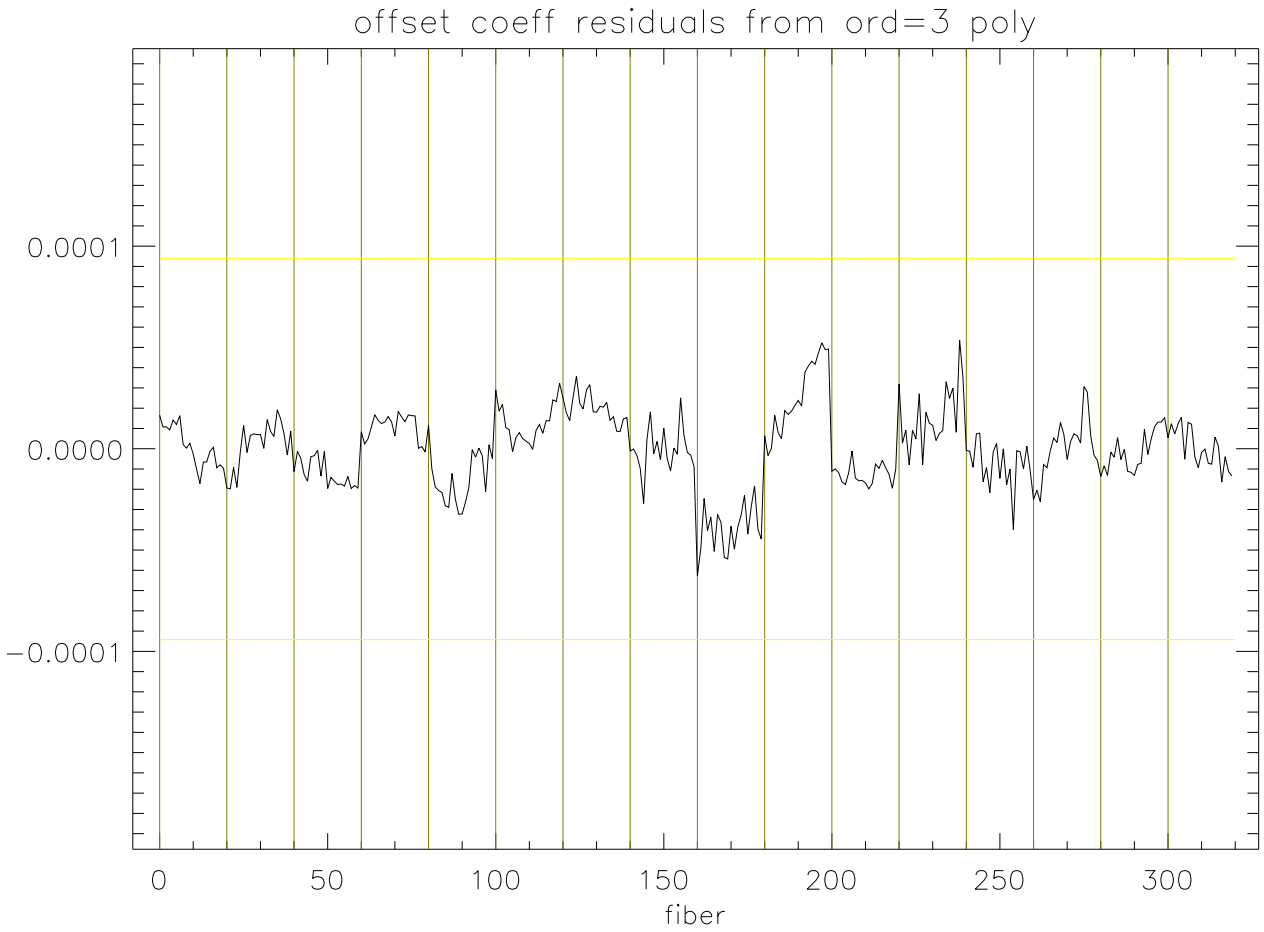

PLATE=0860 MJD=52319 sdR-r1-00013189.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber +
Dispersion = 4.97 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

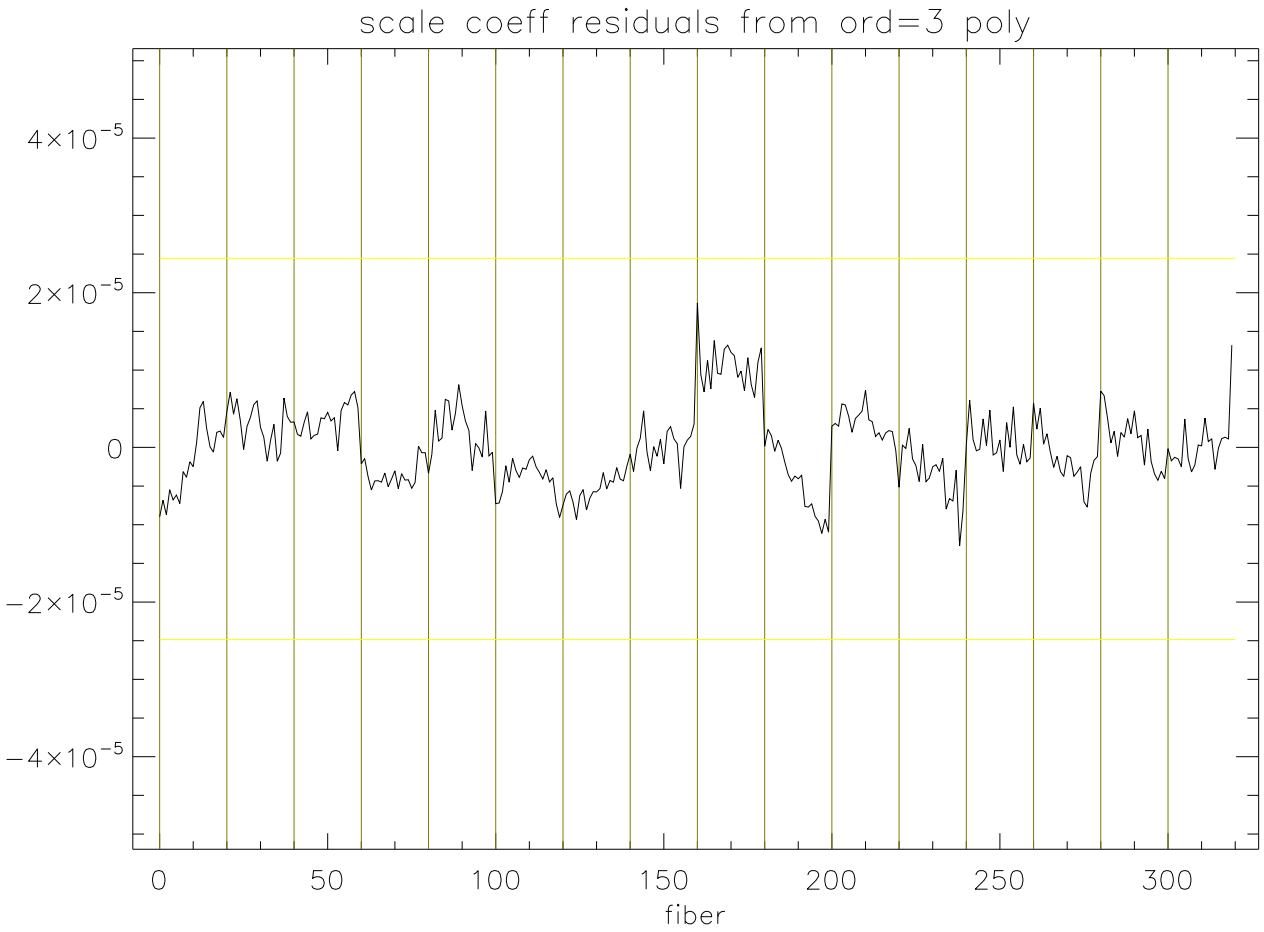

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

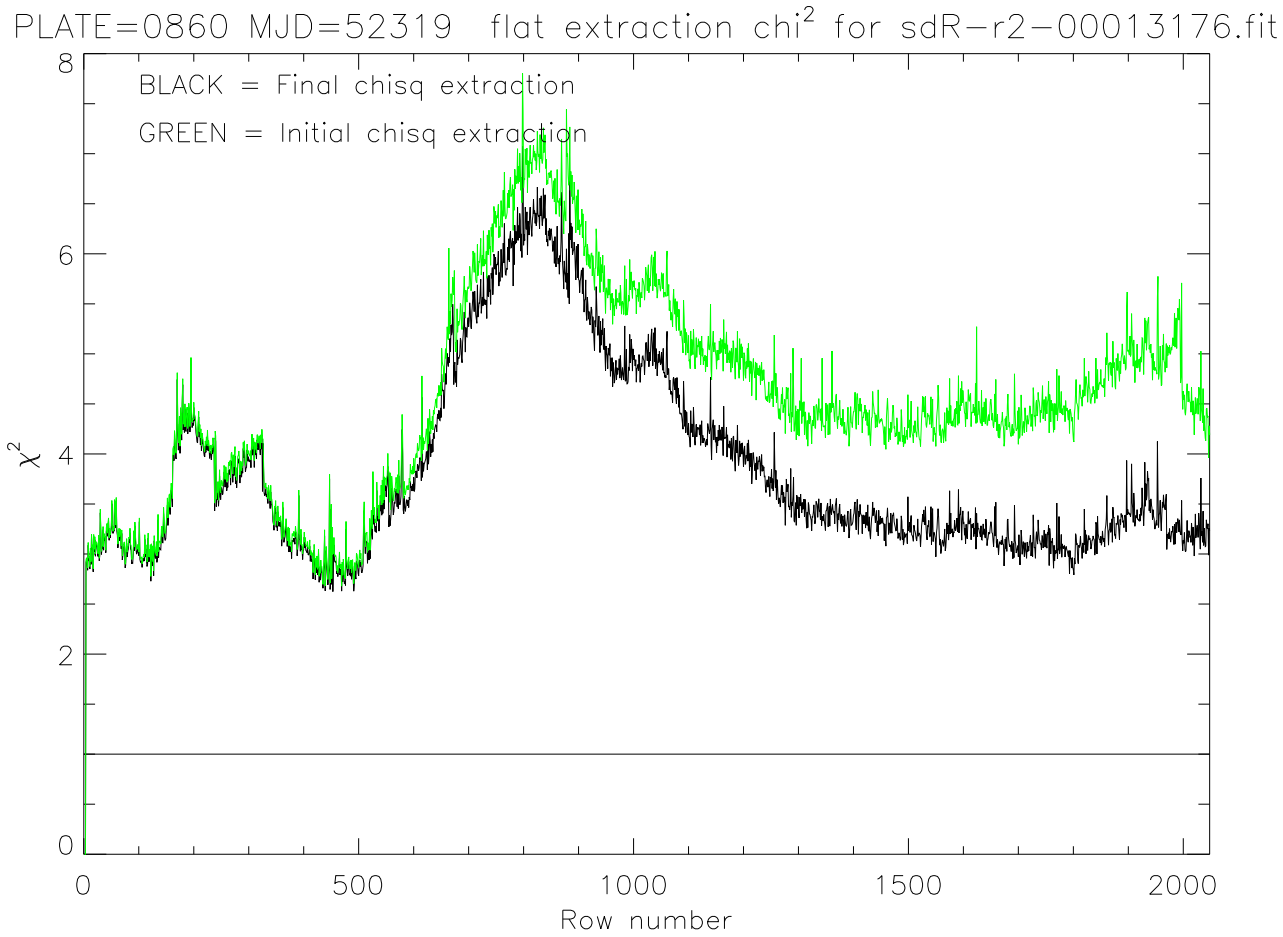

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

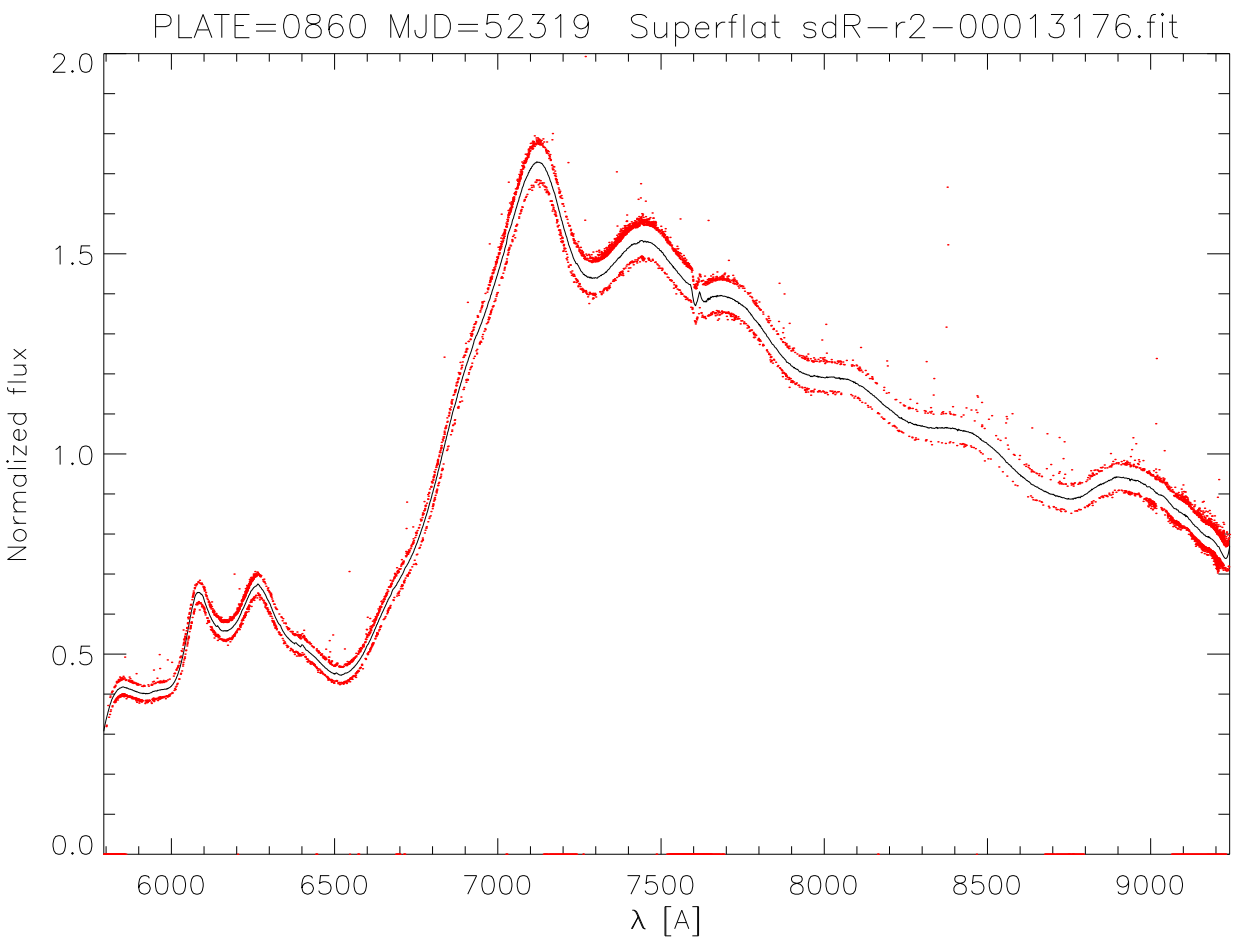

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

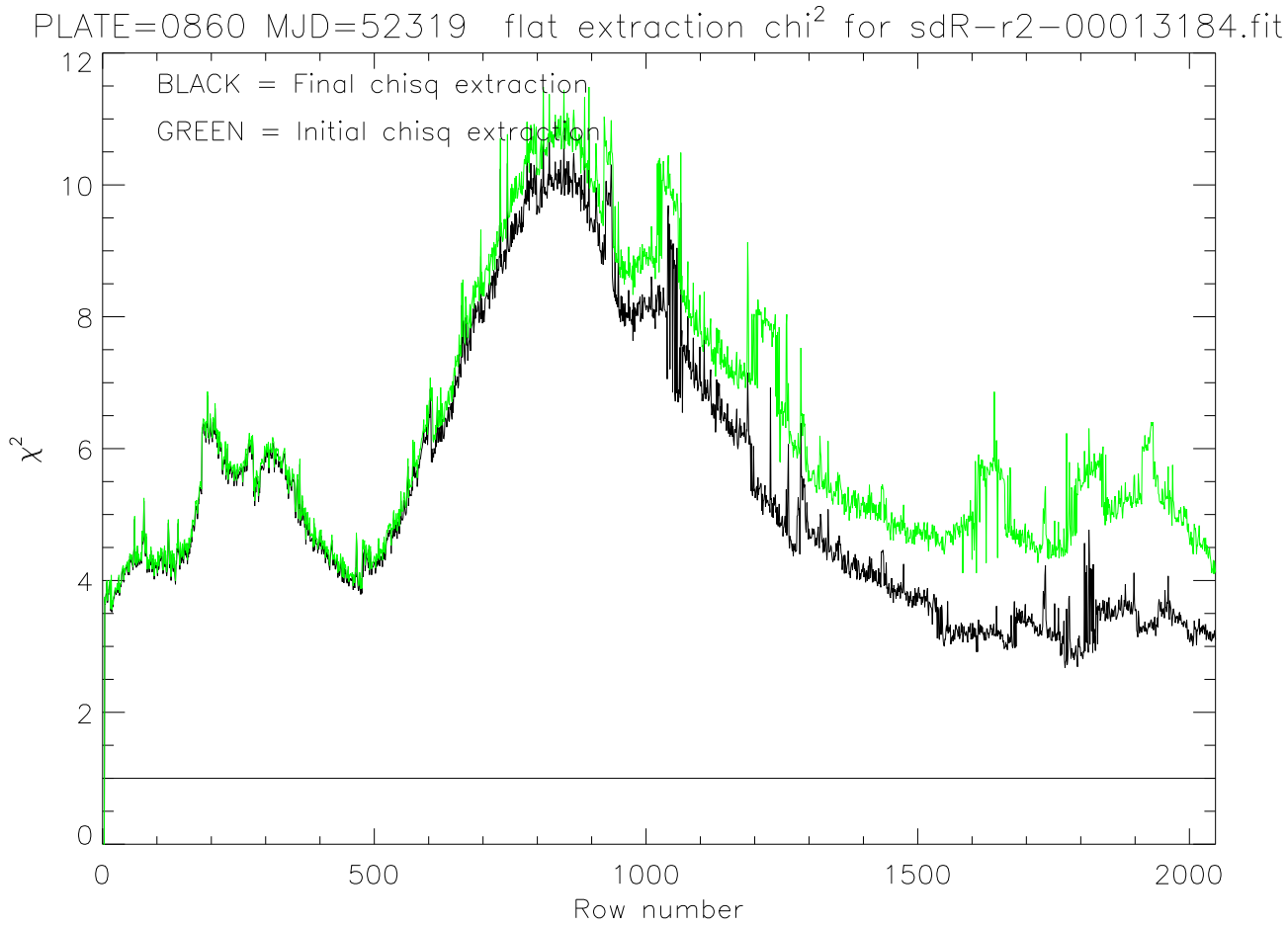

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

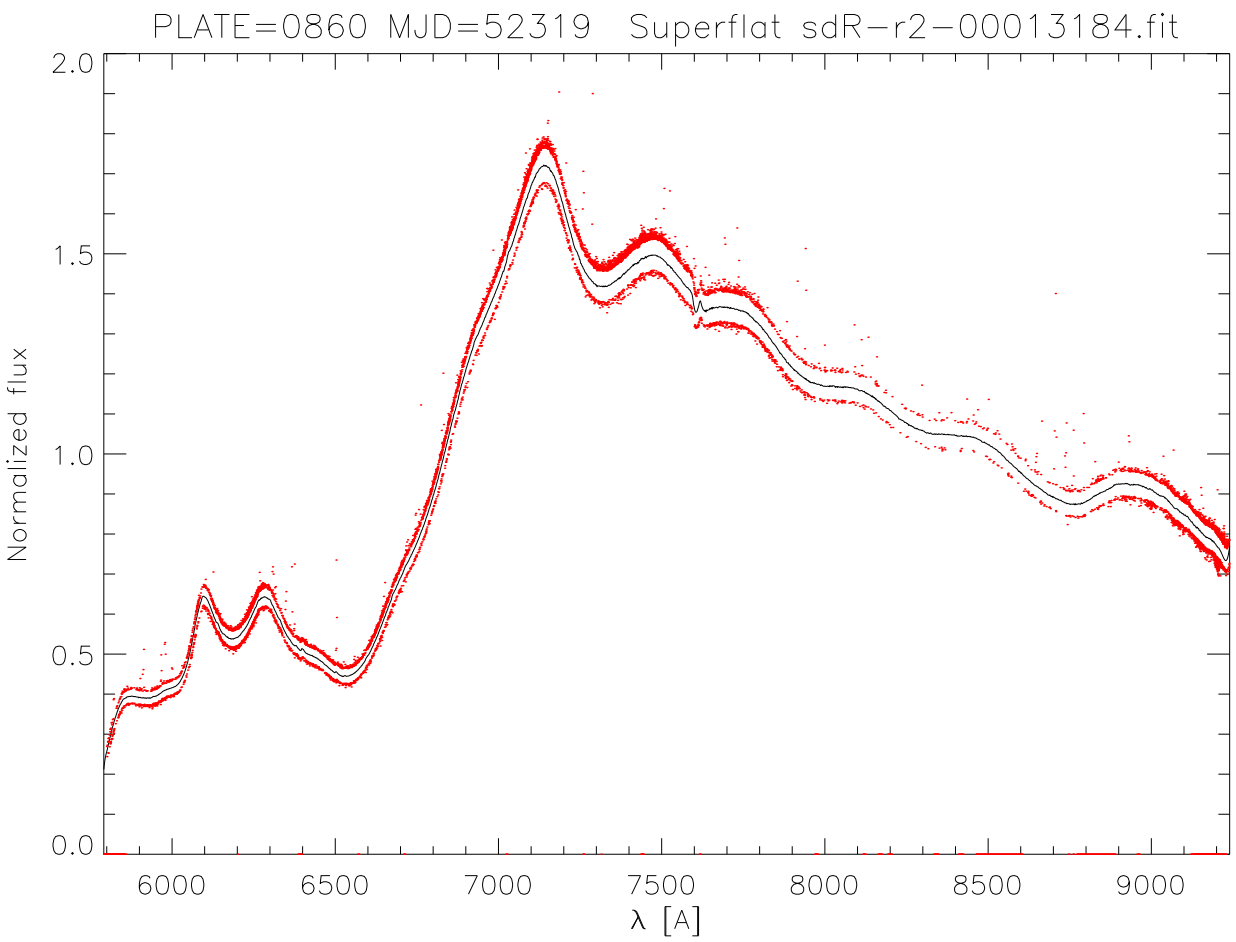

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

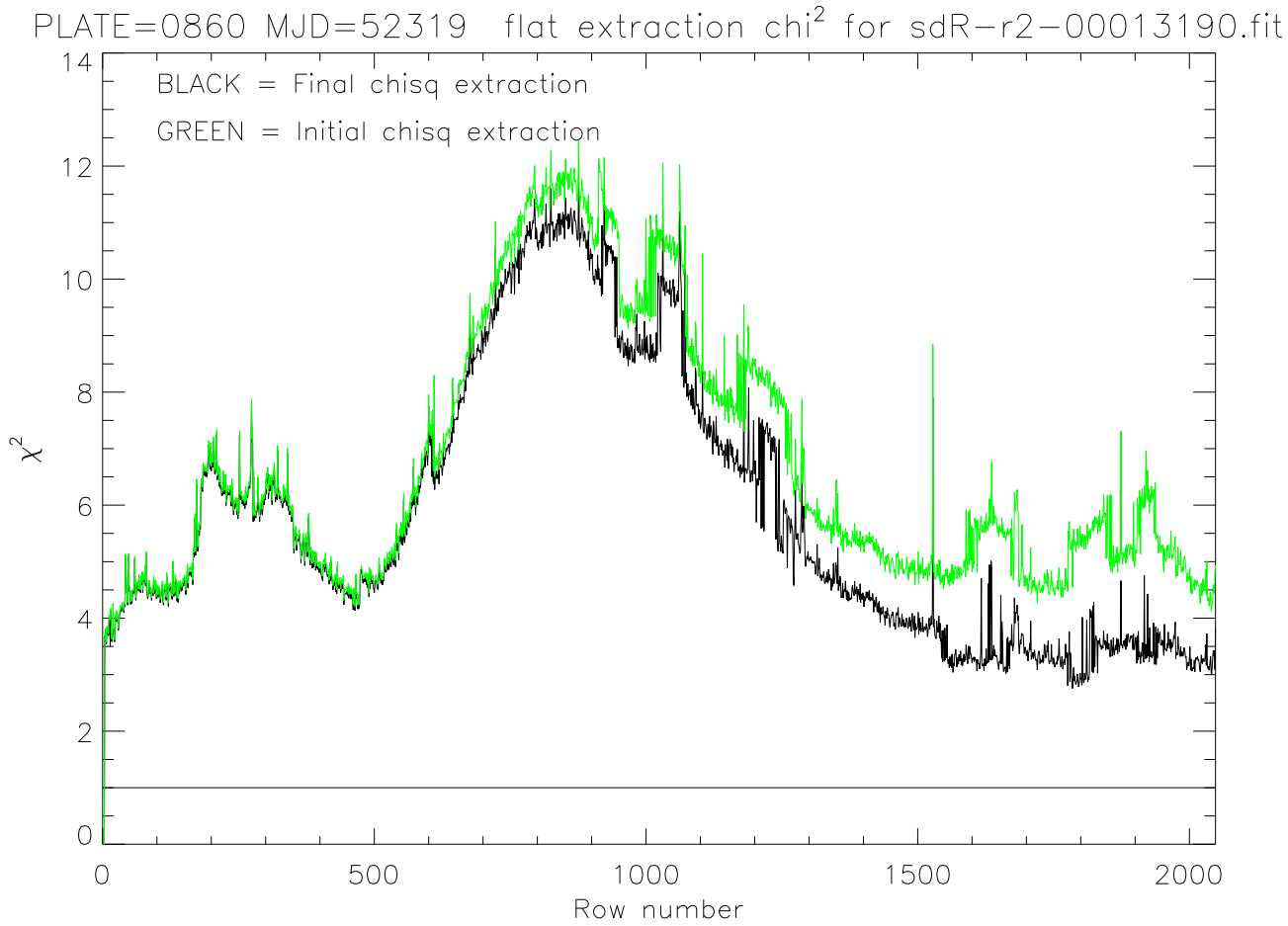

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

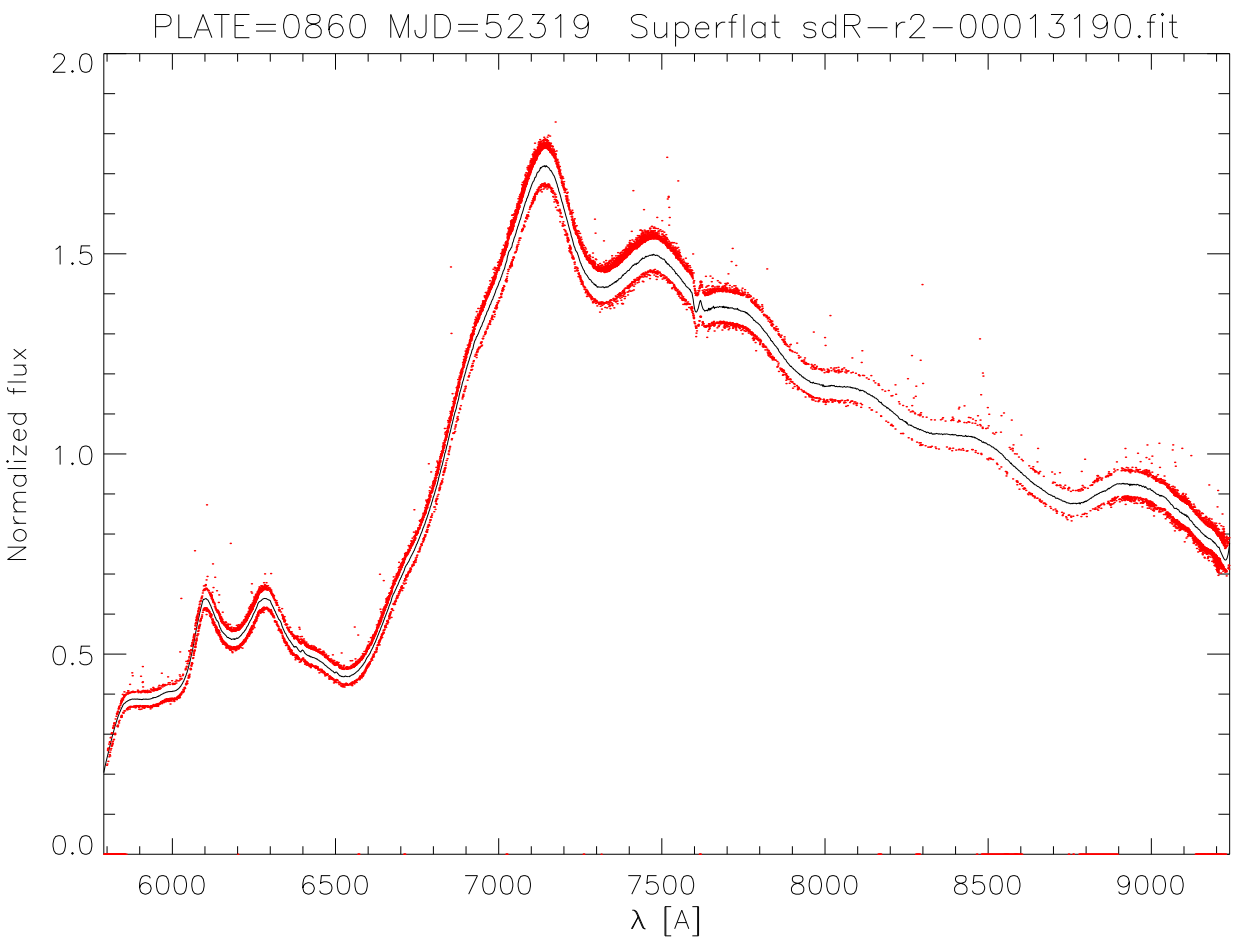

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r2−00013176.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

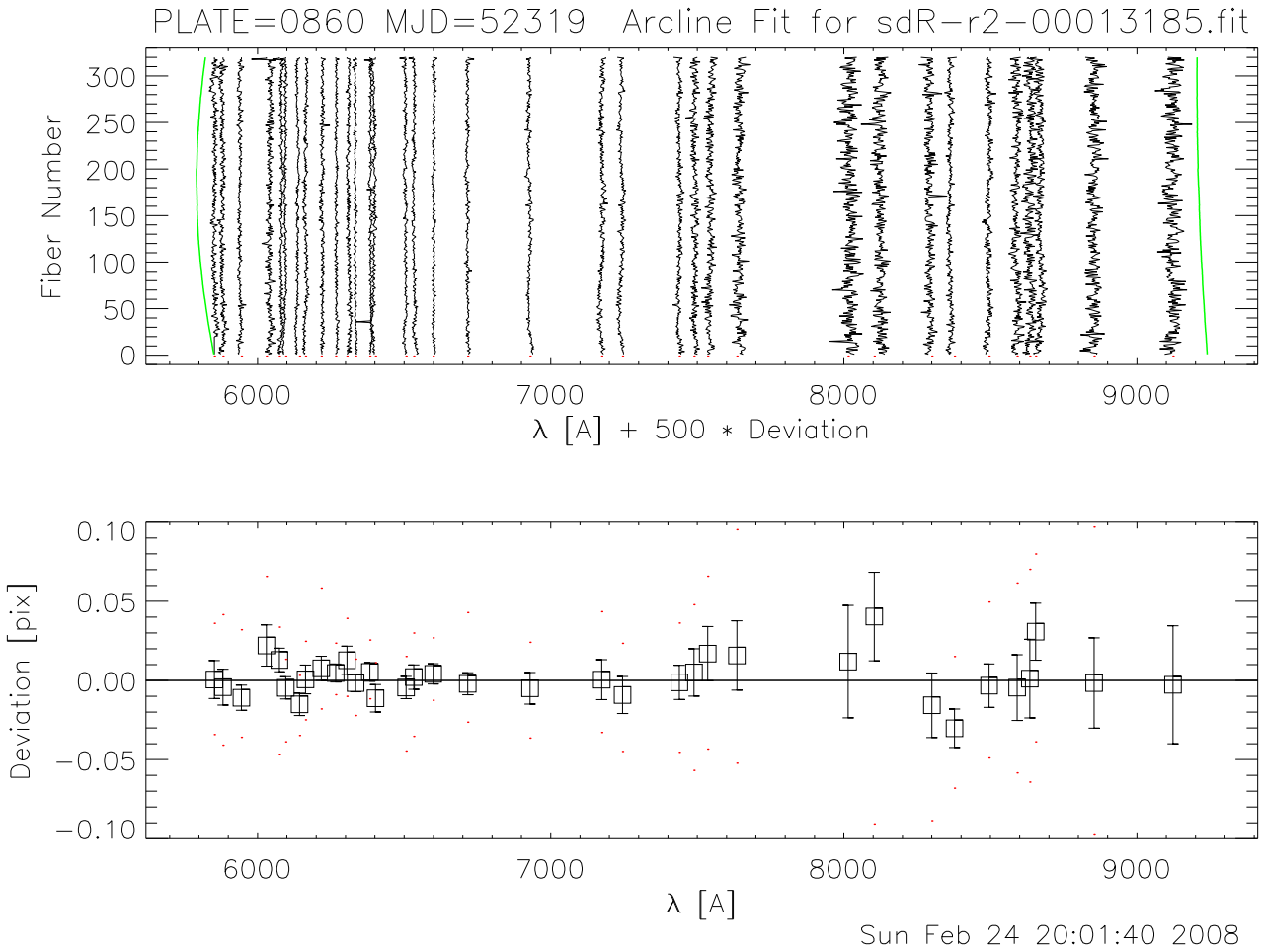

PLATE=0860 MJD=52319 Superflat sdR-r2-00013176.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

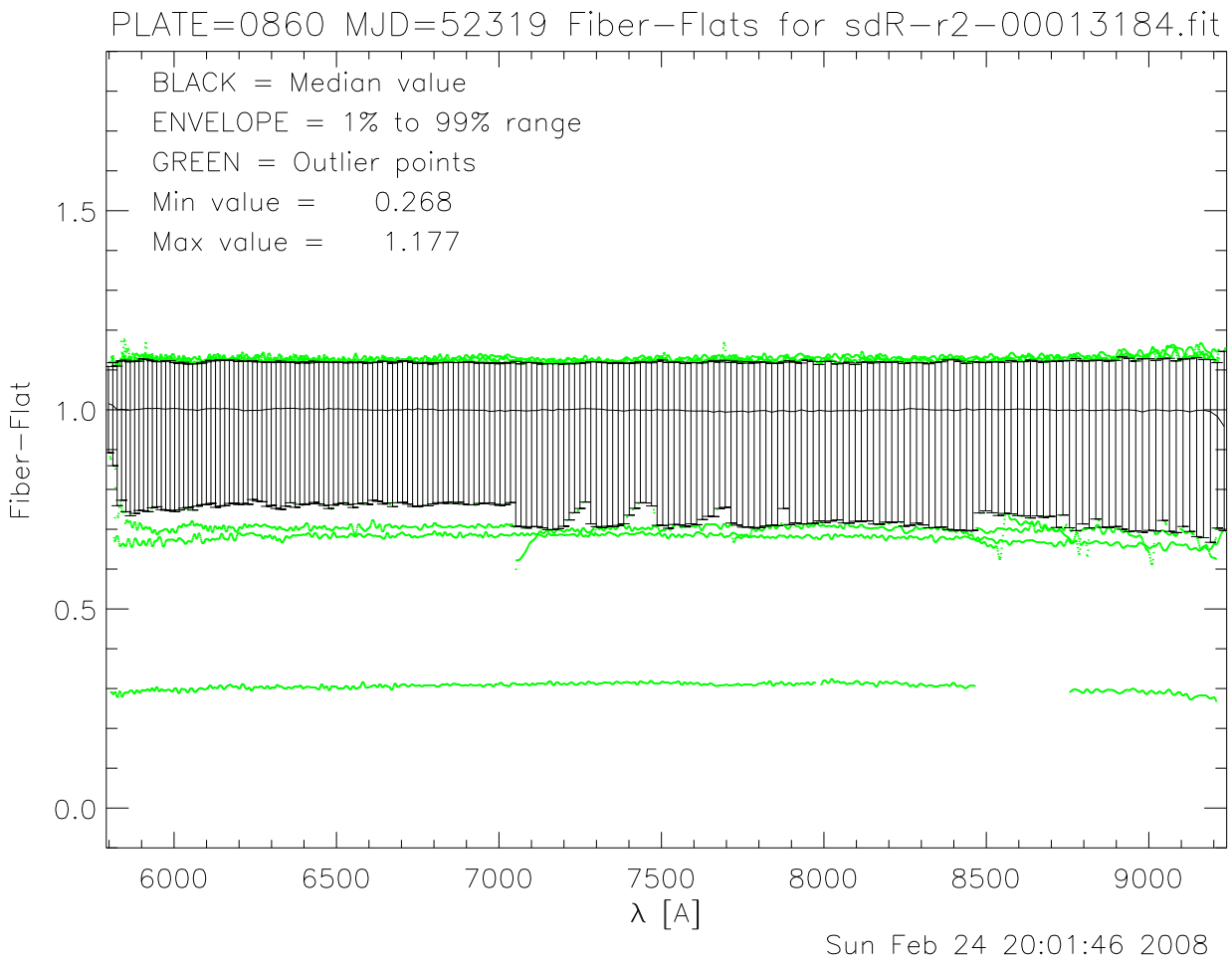

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r2−00013184.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

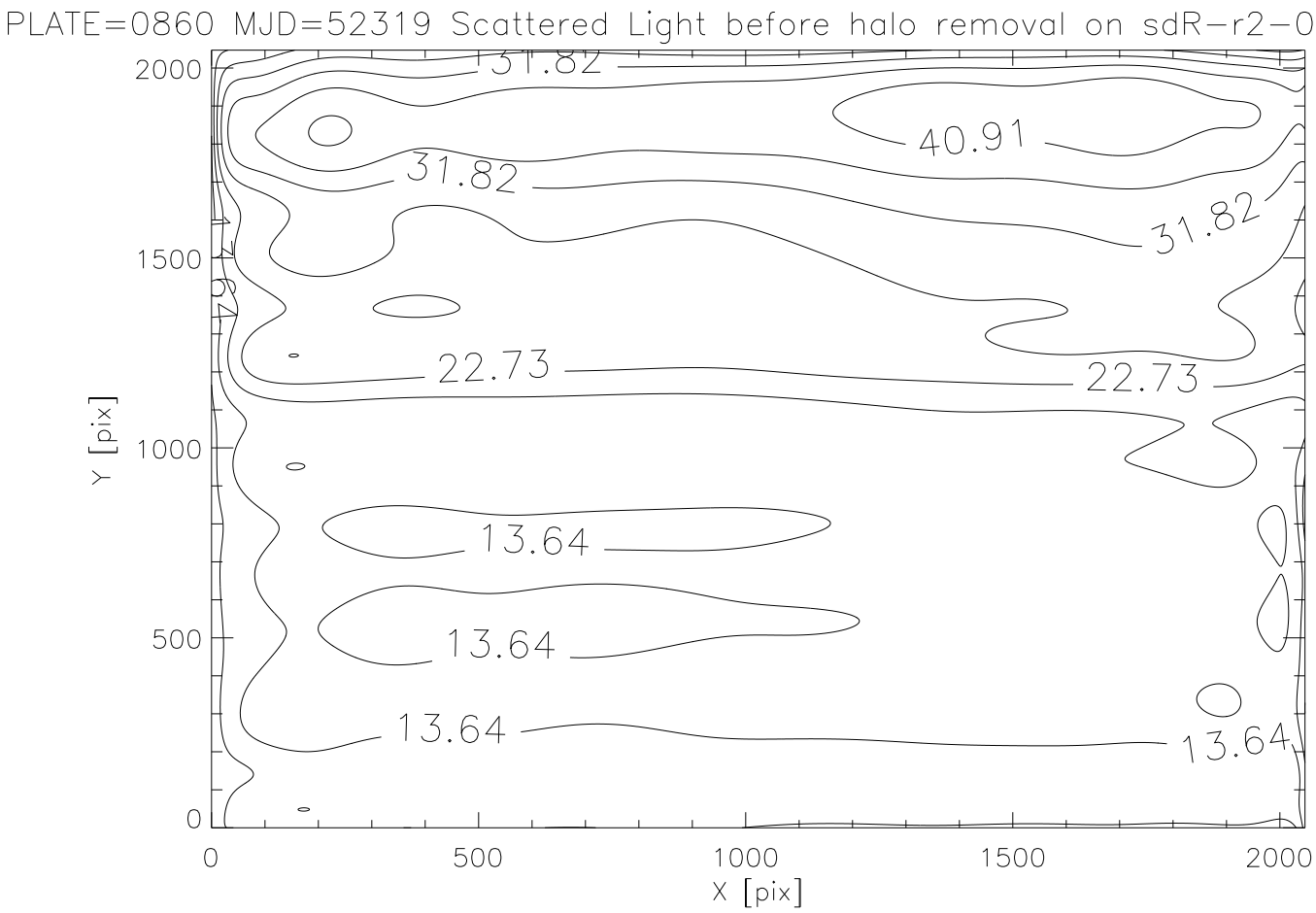

PLATE=0860 MJD=52319 Superflat sdR-r2-00013184.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

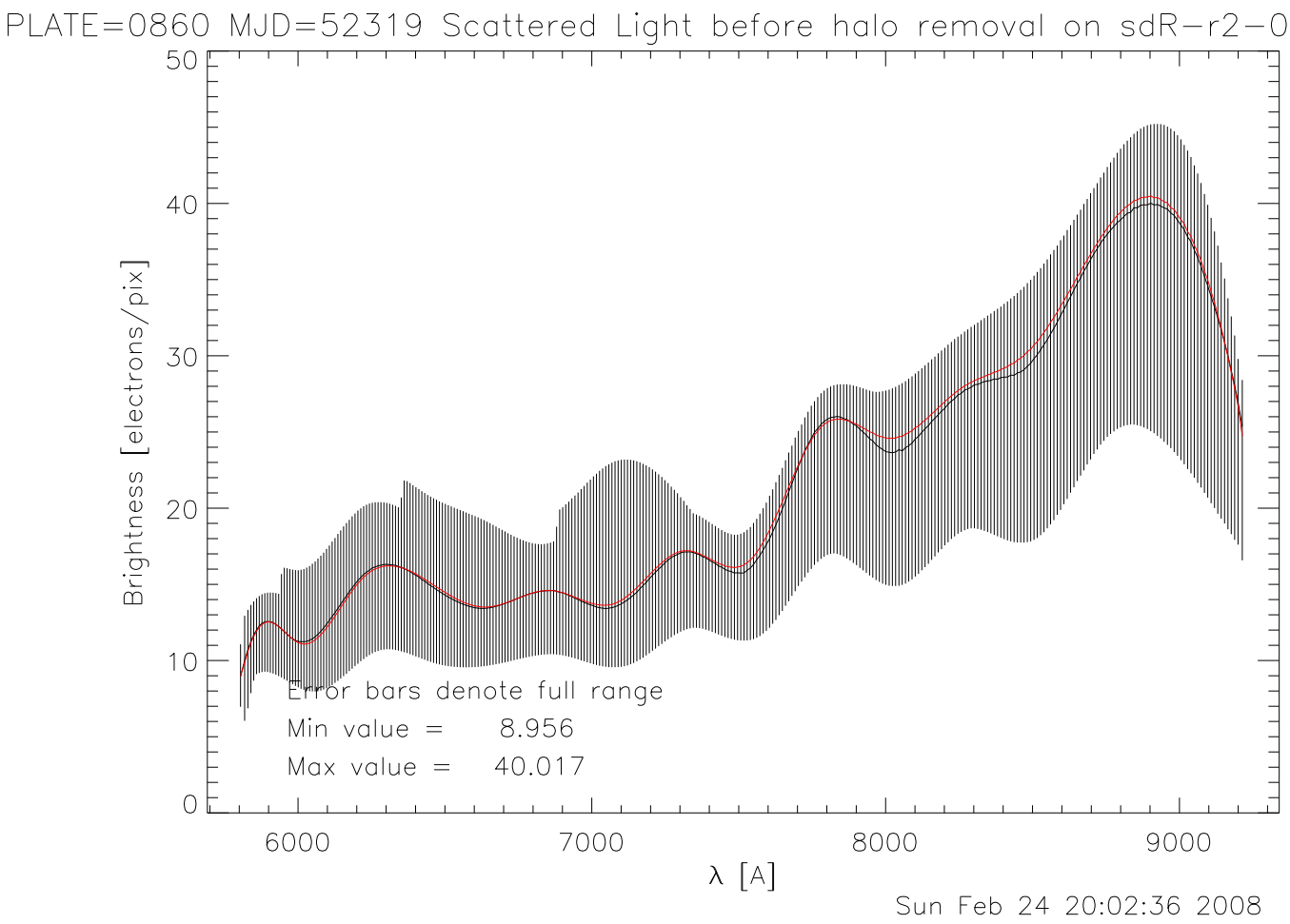

PLATE=0860 MJD=52319 flat extraction chi^2 for sdR−r2−00013190.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

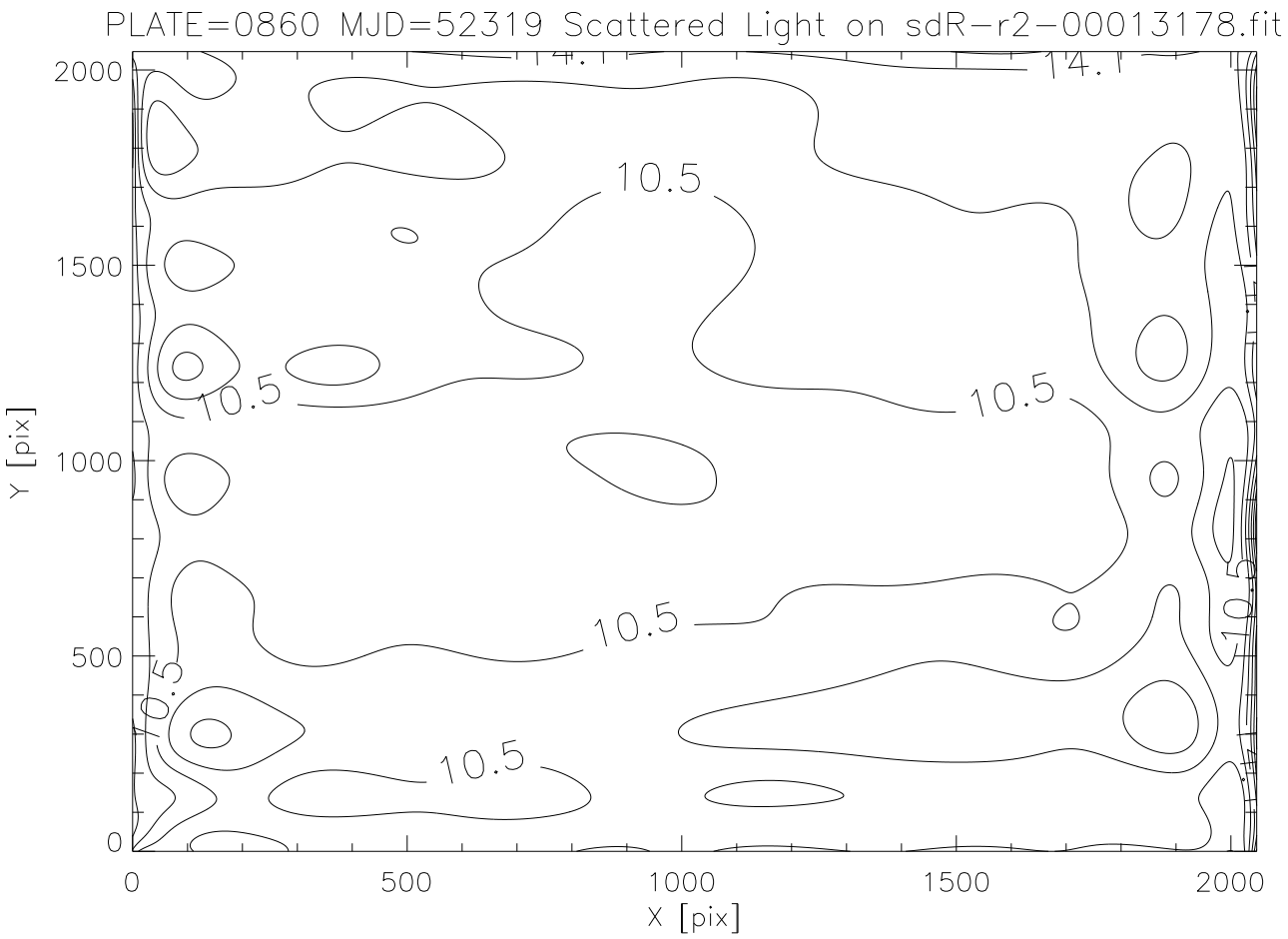

PLATE=0860 MJD=52319 Superflat sdR-r2-00013190.fit
Normalized flux
λ [A]
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000

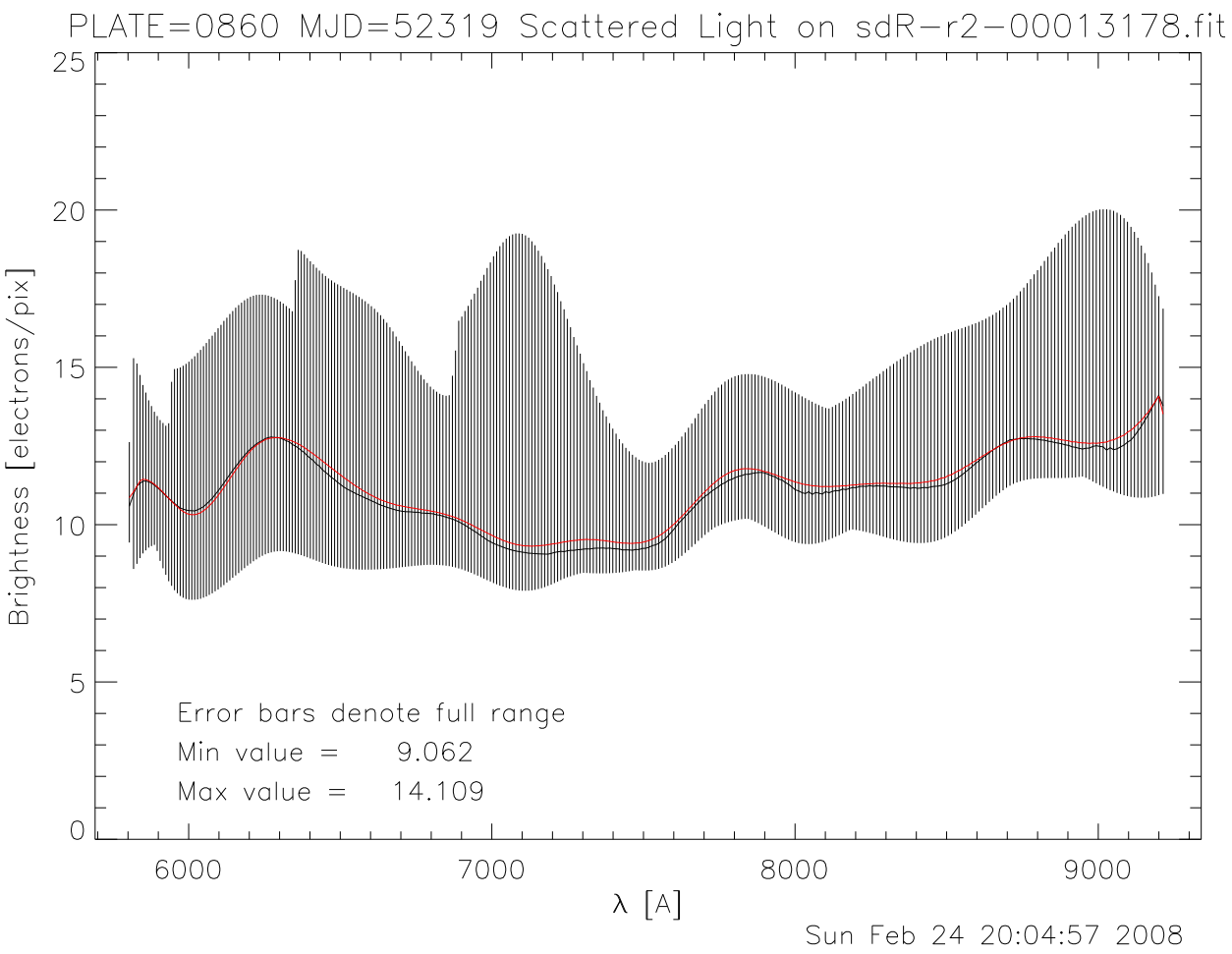

PLATE=0860 MJD=52319 Arcline Fit for sdR-r2-00013185.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sun Feb 24 20:01:40 2008

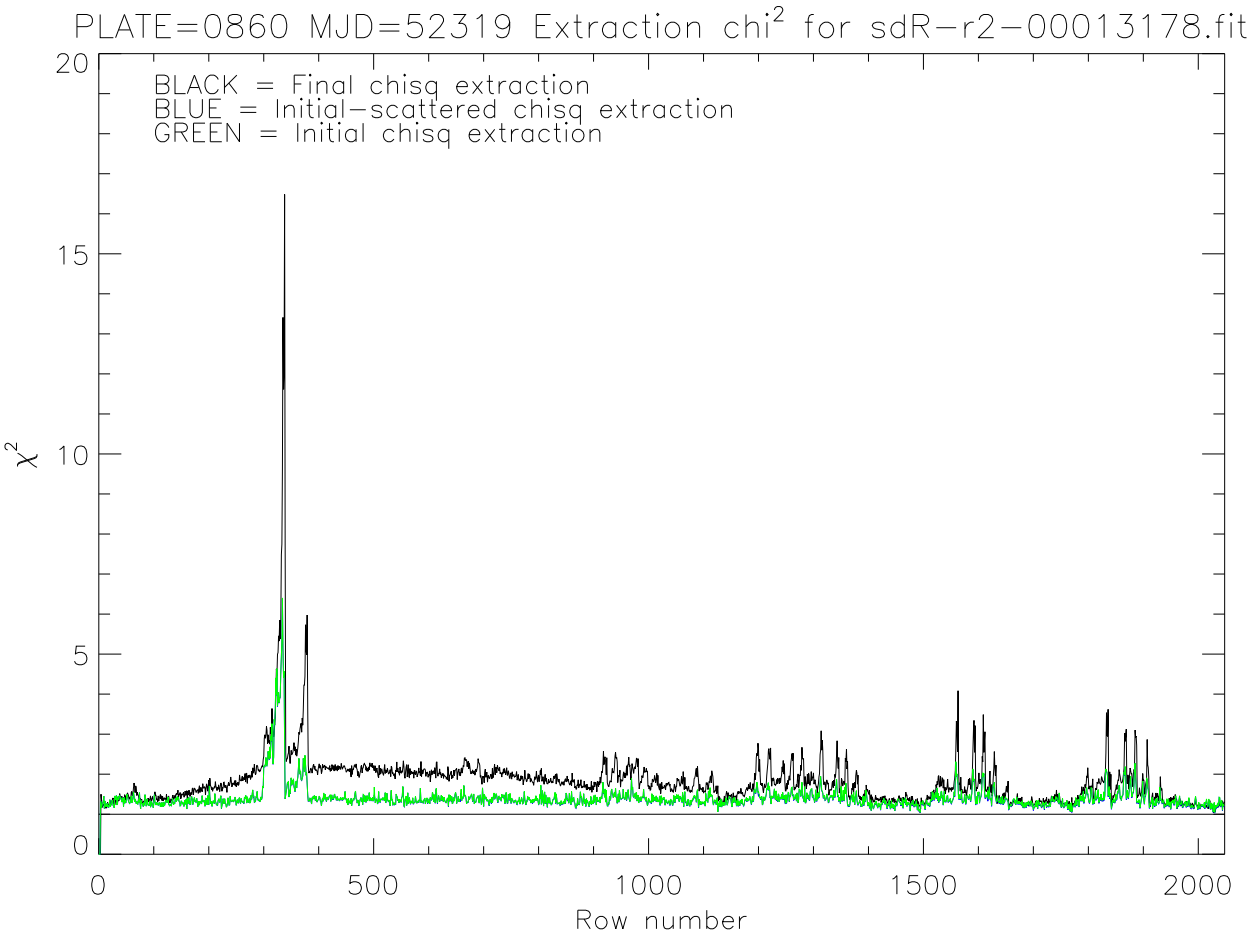

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:01:46 2008

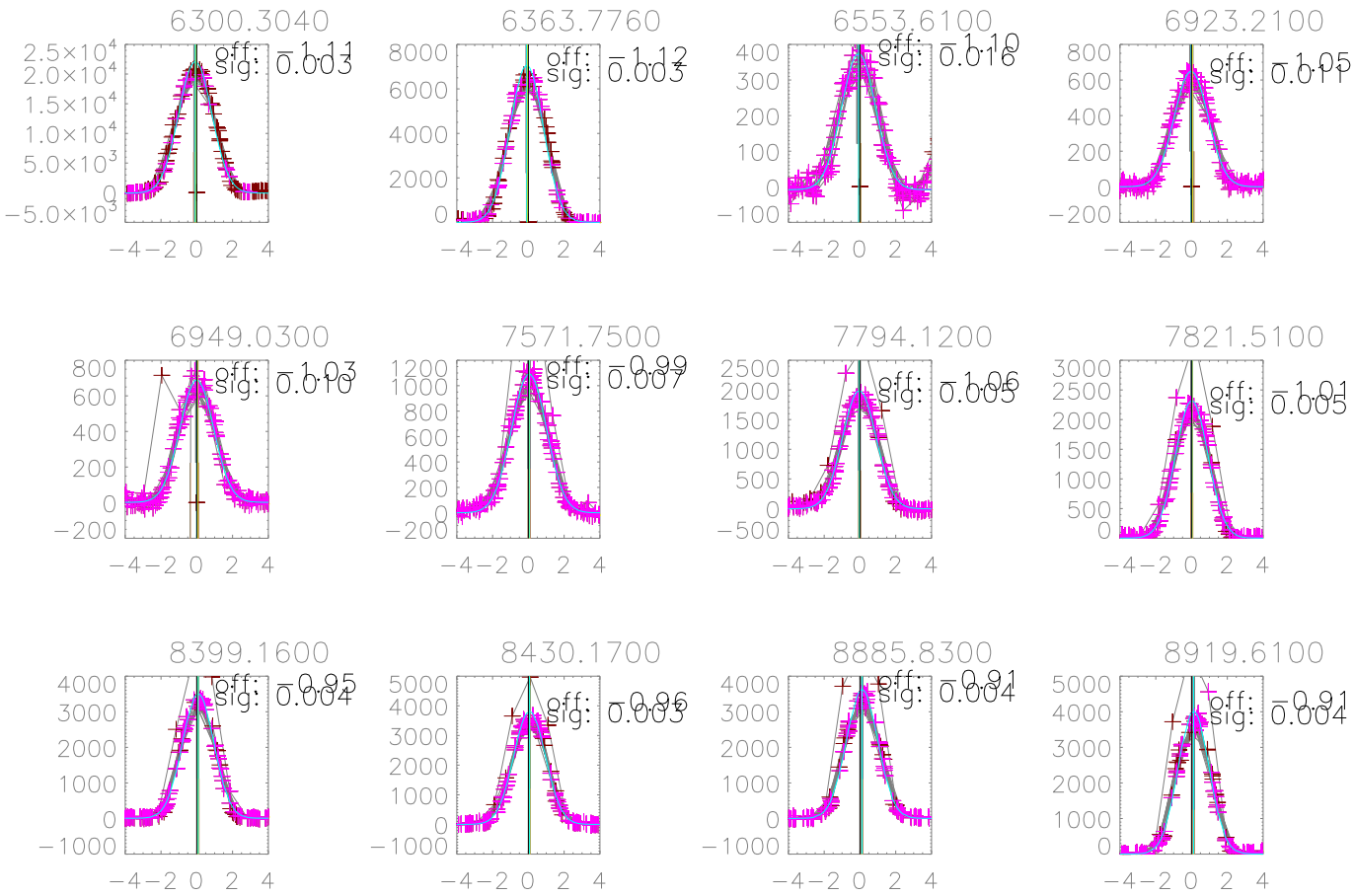

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013178.fi
31.82
40.91
31.82
31.82
22.73
22.73
13.64
13.64
13.64
13.64
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

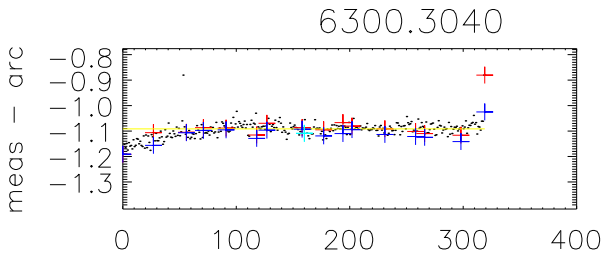

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013178.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.956
Max value = 40.017
Sun Feb 24 20:02:36 2008

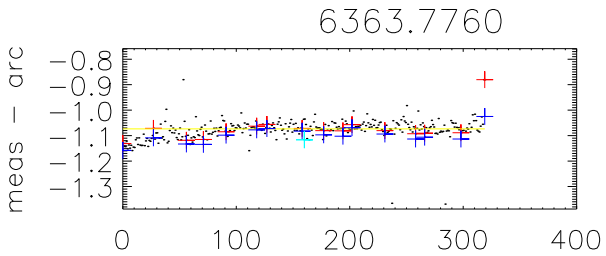

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013178.fit
14.1
10.5
10.5
10.5
10.5
10.5
10.5
10.5
Y [pix]
X [pix]
0
500
1000
1500
2000

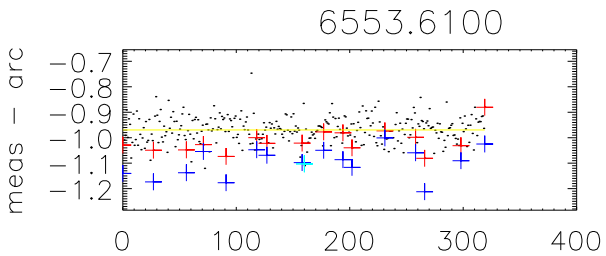

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013178.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.062
Max value = 14.109
Sun Feb 24 20:04:57 2008

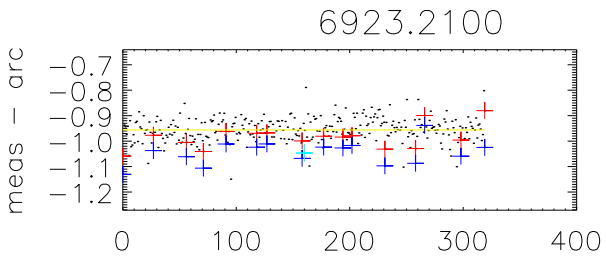

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r2−00013178.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

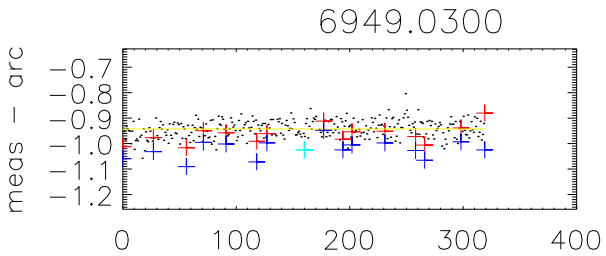

6300.3040
off: 1.11
sig: 0.003
6363.7760
off: 1.12
sig: 0.003
6553.6100
off: 1.10
sig: 0.016
6923.2100
off: 1.05
sig: 0.011
6949.0300
off: 1.03
sig: 0.010
7571.7500
off: 0.99
sig: 0.007
7794.1200
off: 1.06
sig: 0.005
7821.5100
off: 1.01
sig: 0.005
8399.1600
off: 0.95
sig: 0.004
8430.1700
off: 0.96
sig: 0.003
8885.8300
off: 0.91
sig: 0.004
8919.6100
off: 0.91
sig: 0.004

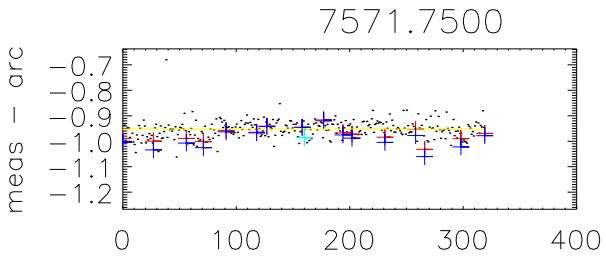

6300.3040
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

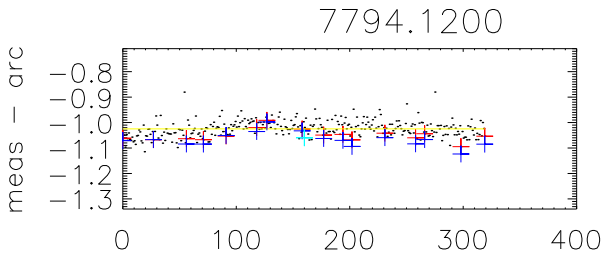

6363.7760
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

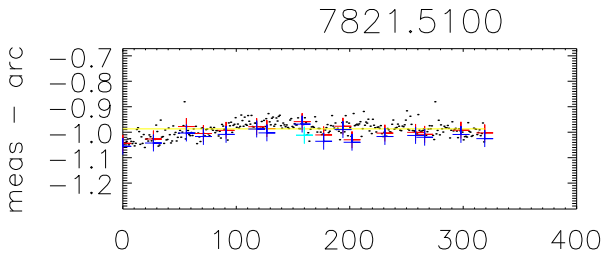

6553.6100
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

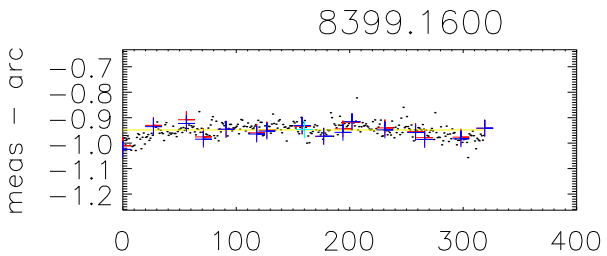

6923.2100
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

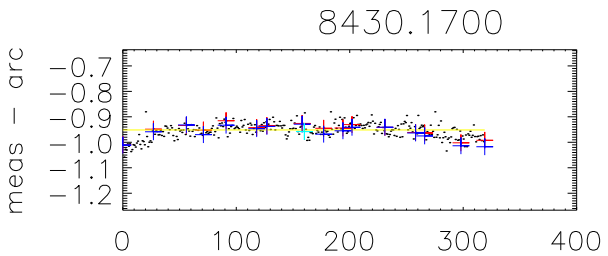

6949.0300
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

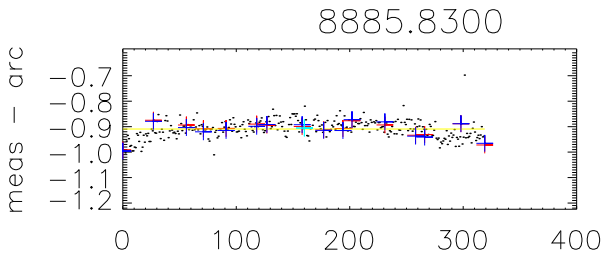

7571.7500
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

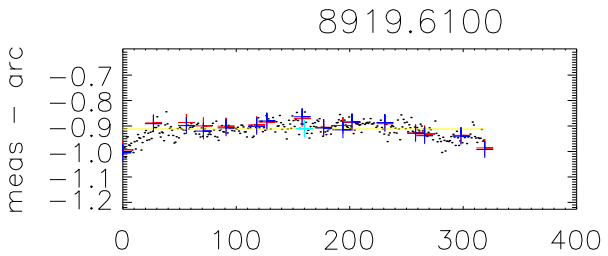

7794.1200
meas − arc
−0.8
−0.9
−1.0
−1.1
−1.2
−1.3
0
100
200
300
400

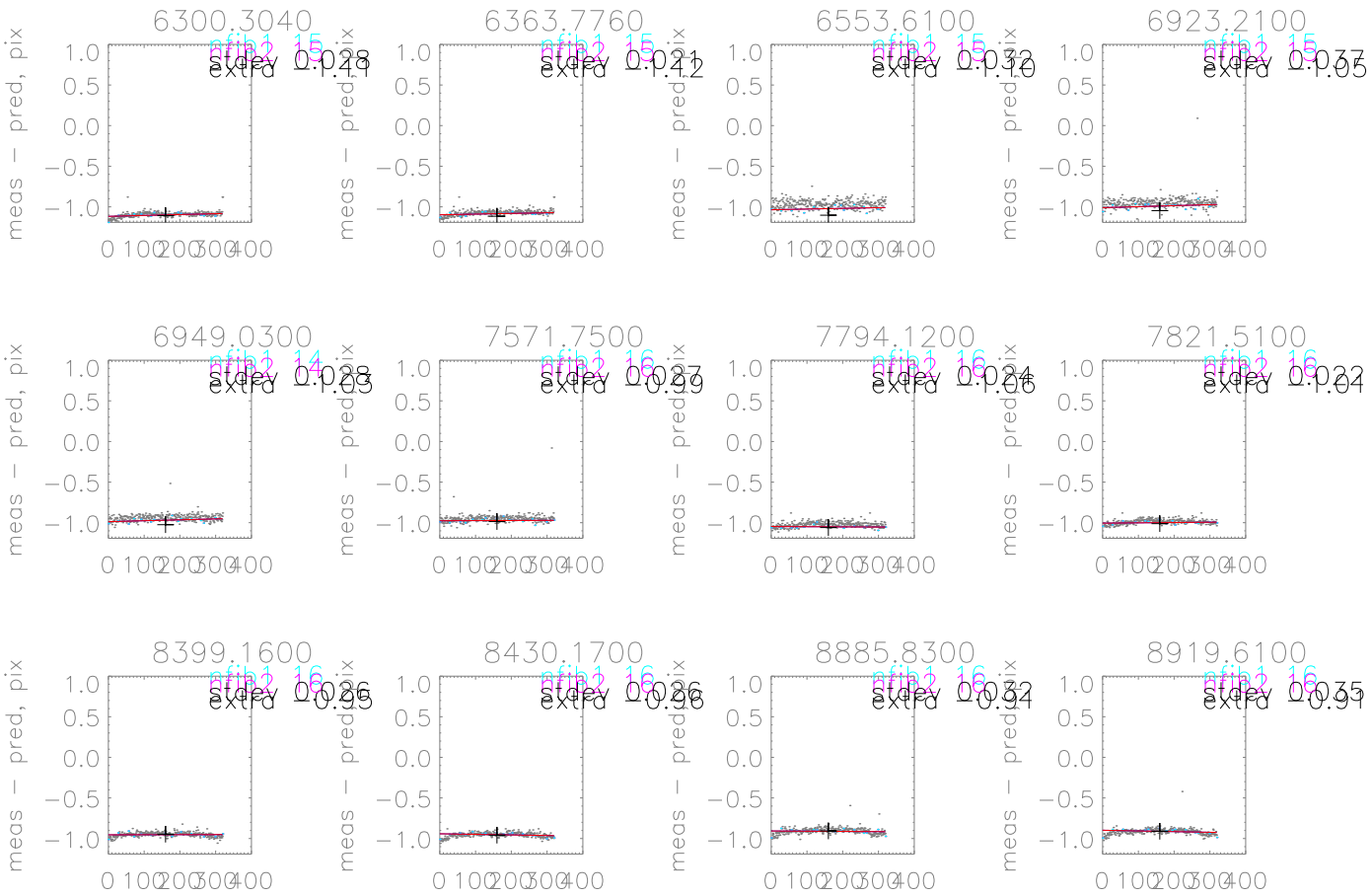

7821.5100
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

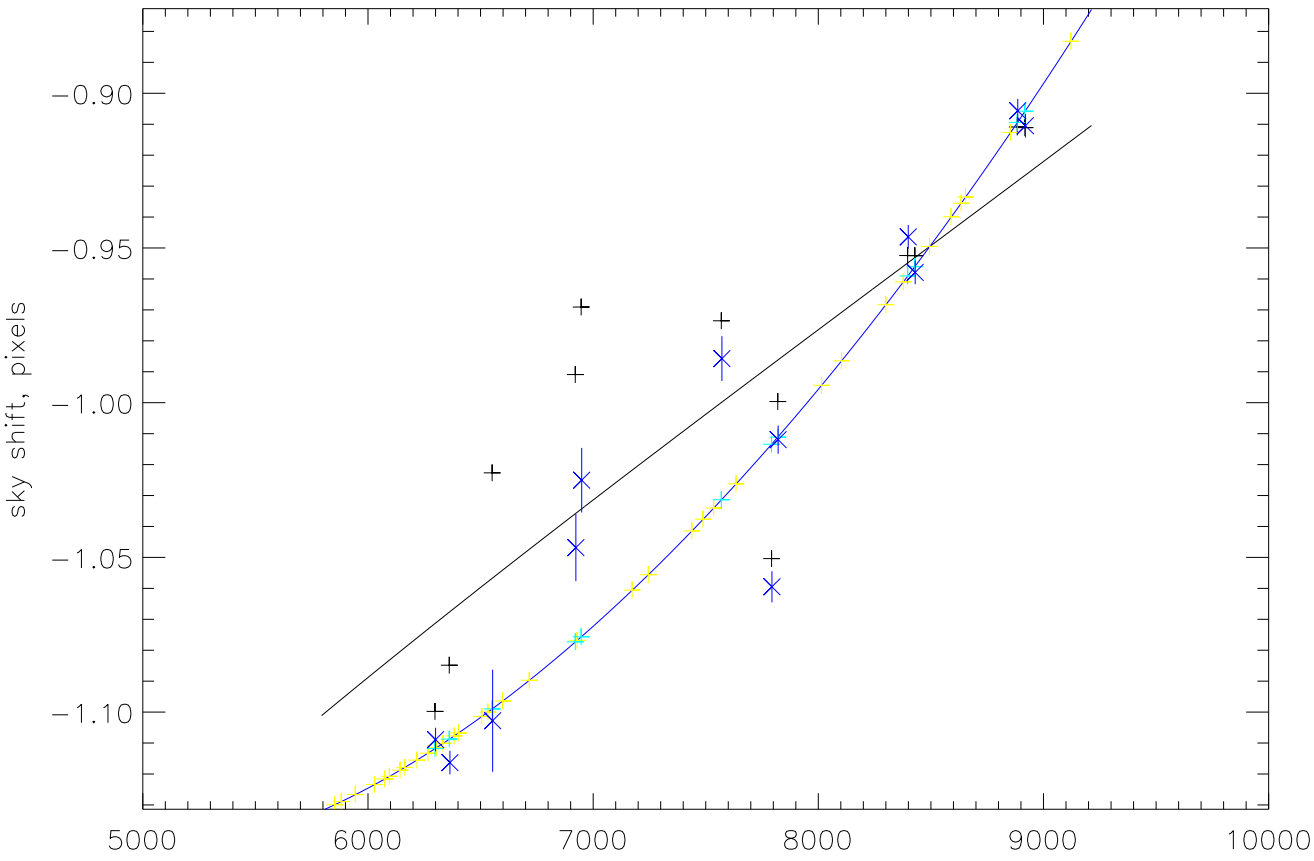

8399.1600
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

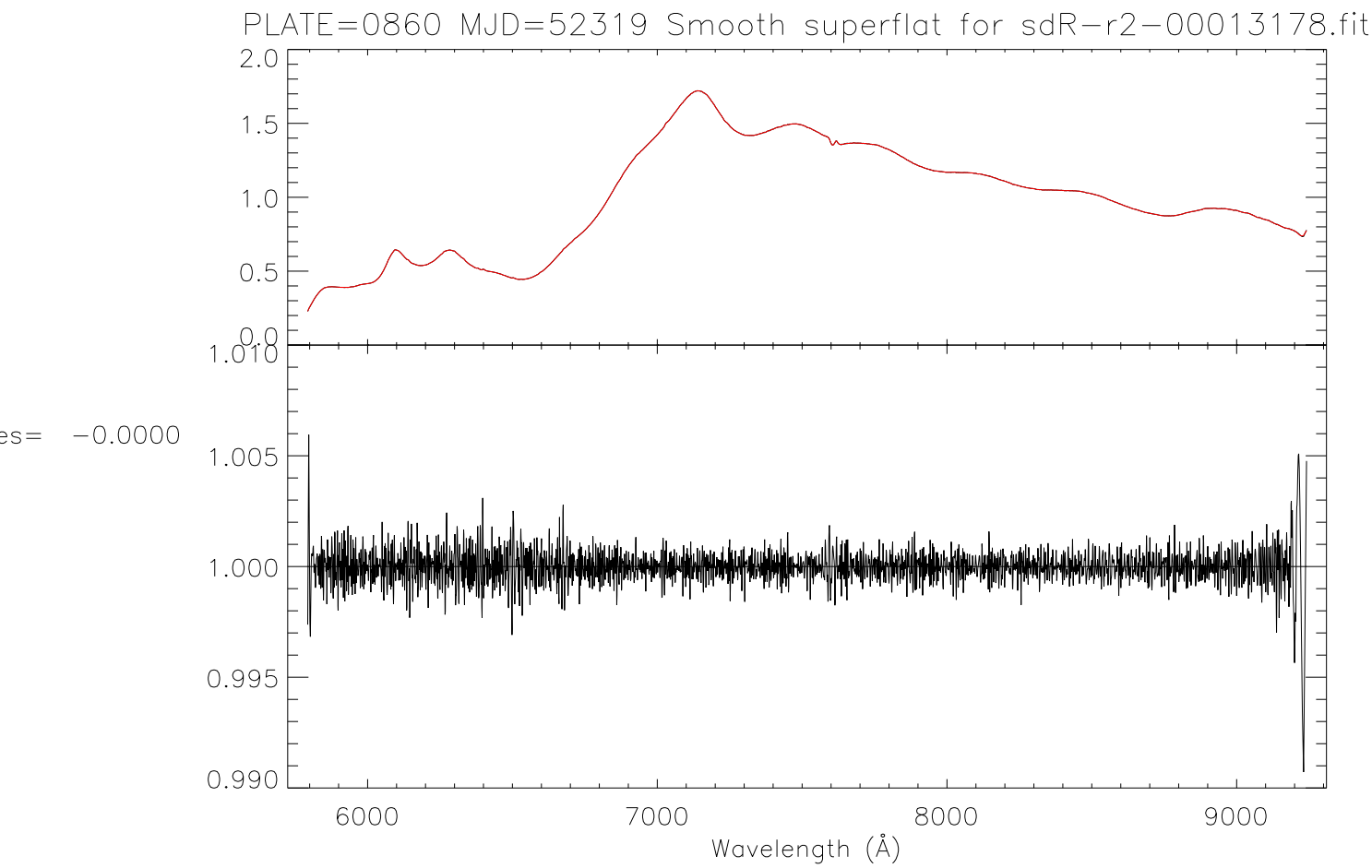

8430.1700
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400


8885.8300
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

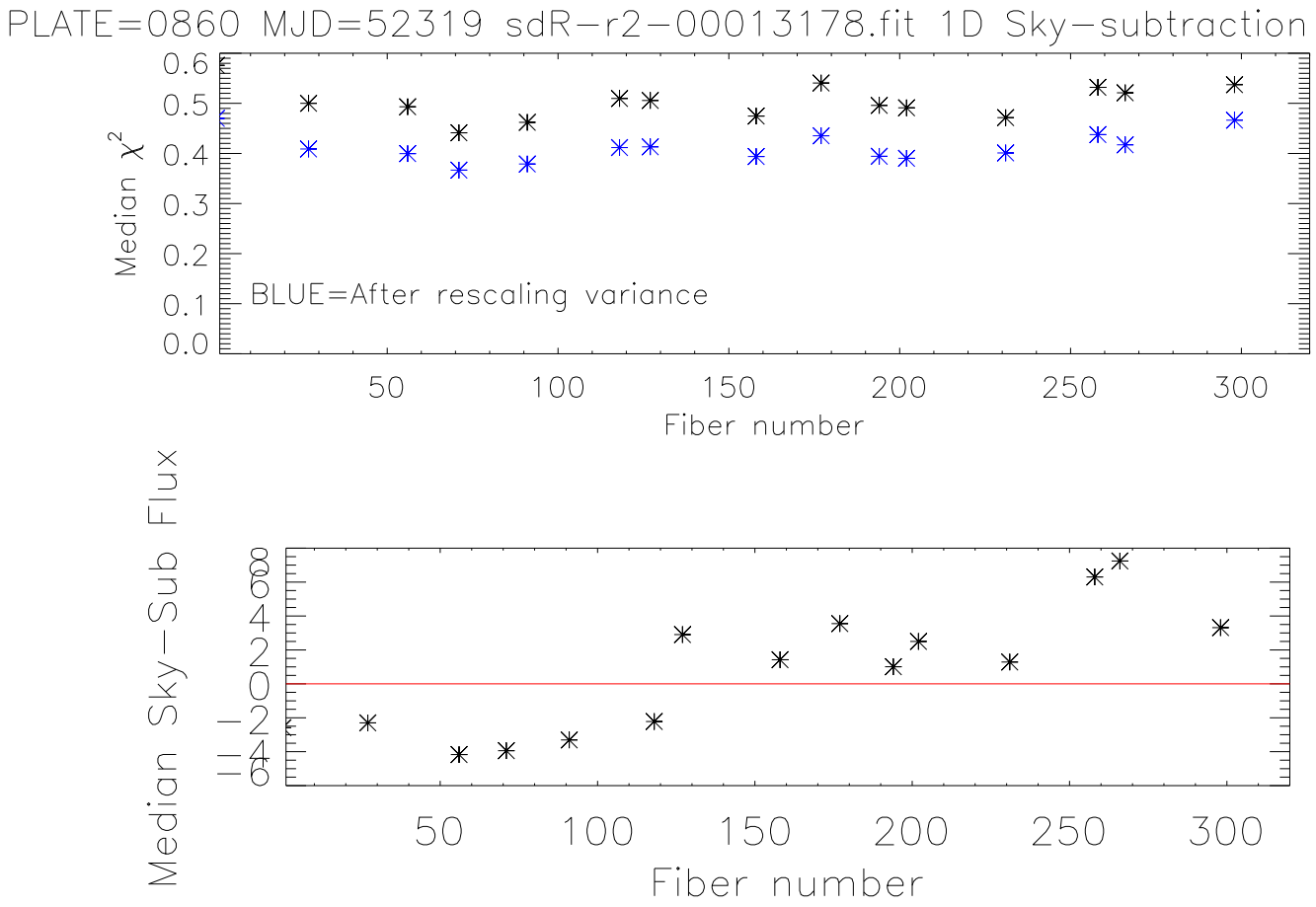

8919.6100
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

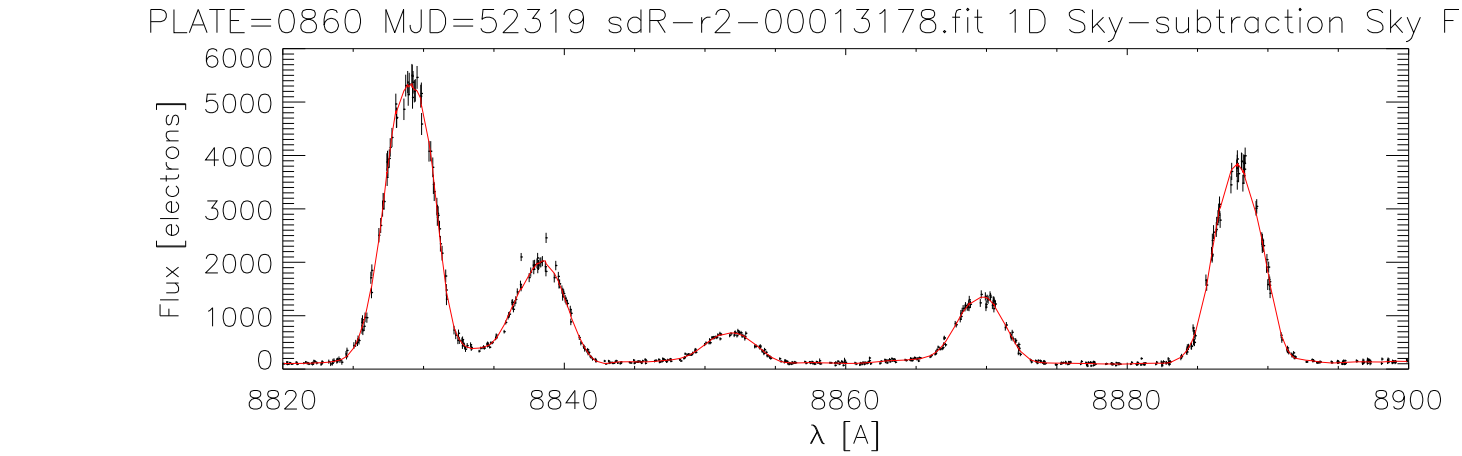

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib2 15
stdev 0.028
extra 0.041
stdev 0.021
extra 0.042
stdev 0.032
extra 0.010
stdev 0.037
extra 0.005
mfib2 14
stdev 0.028
extra 0.003
mfib2 16
stdev 0.027
extra 0.009
stdev 0.024
extra 0.006
stdev 0.022
extra 0.004
stdev 0.026
extra 0.005
stdev 0.026
extra 0.006
stdev 0.032
extra 0.011
stdev 0.035
extra 0.011

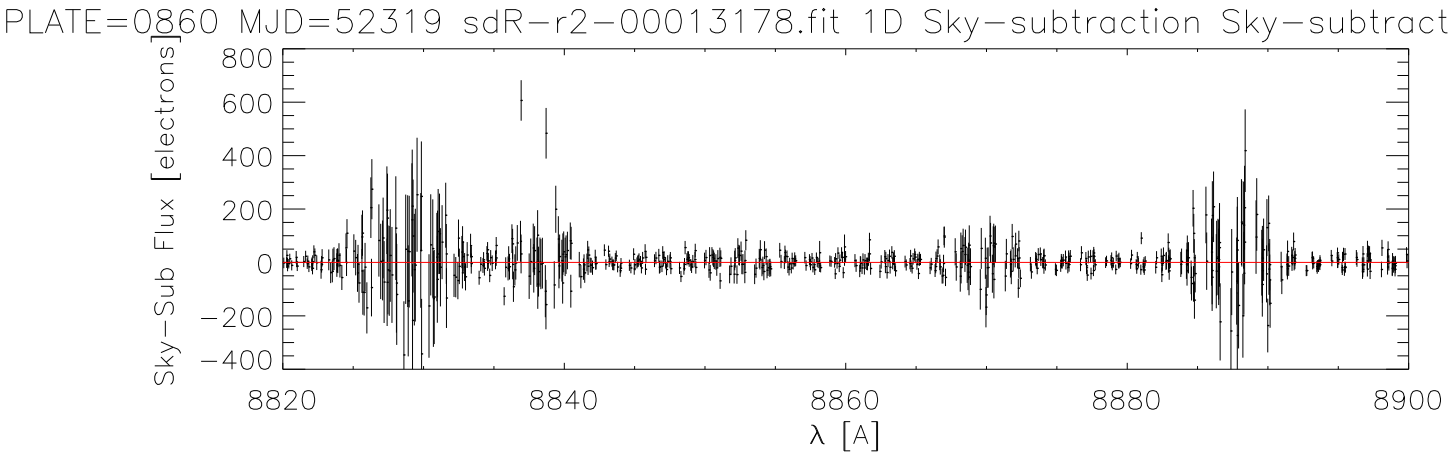

sky shift, pixels
−0.90
−0.95
−1.00
−1.05
−1.10
5000
6000
7000
8000
9000
10000

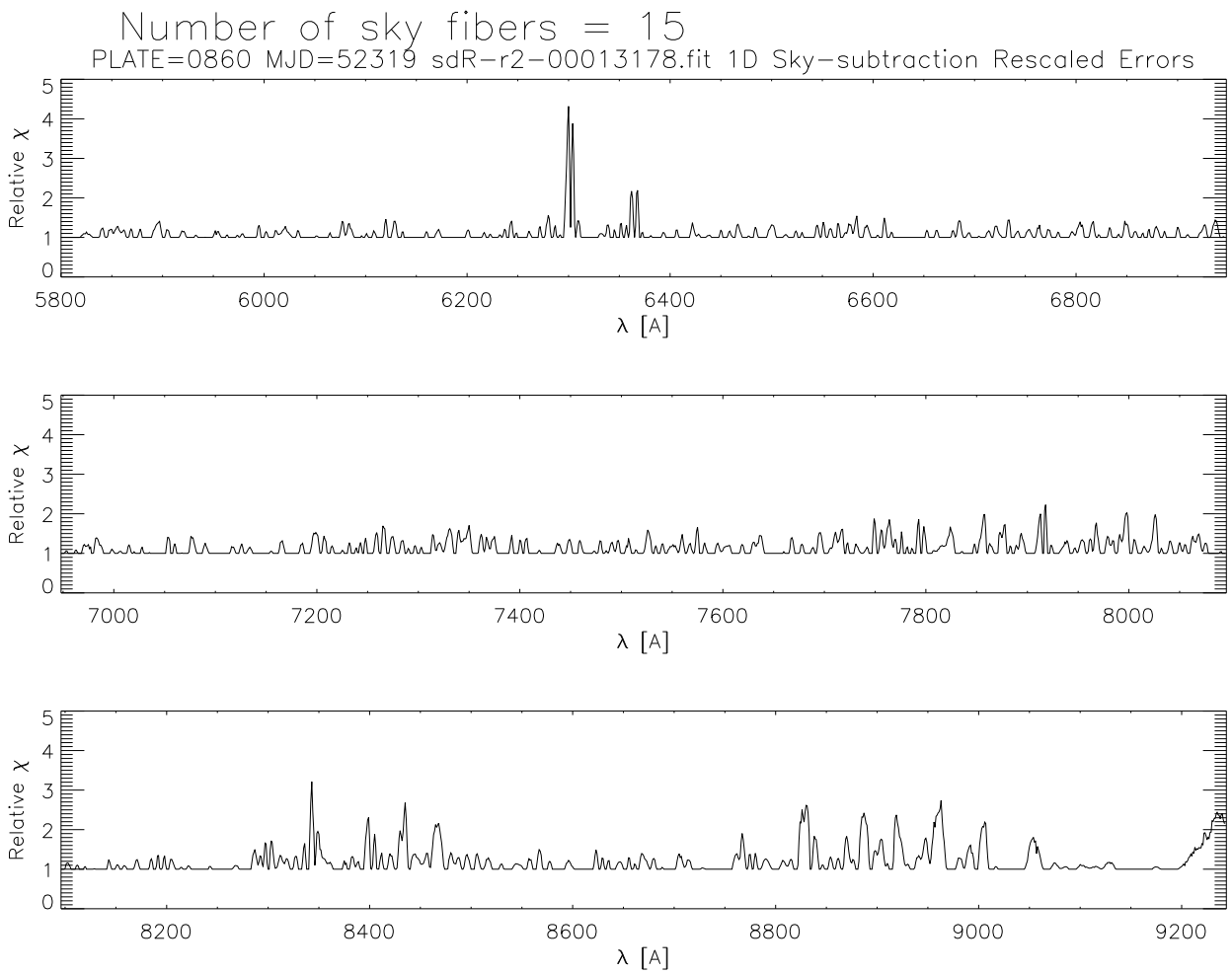

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013178.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

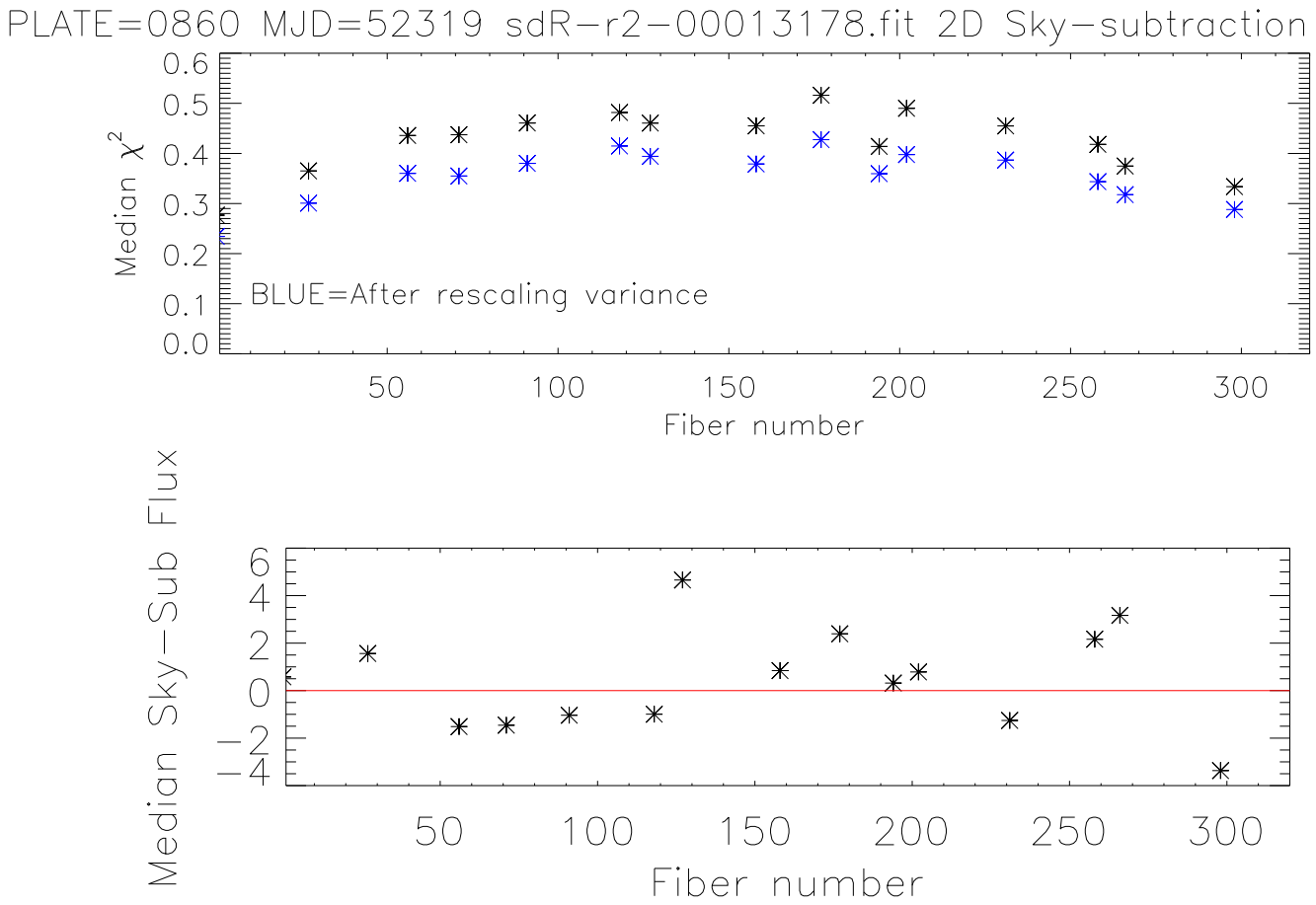
es= −0.0000

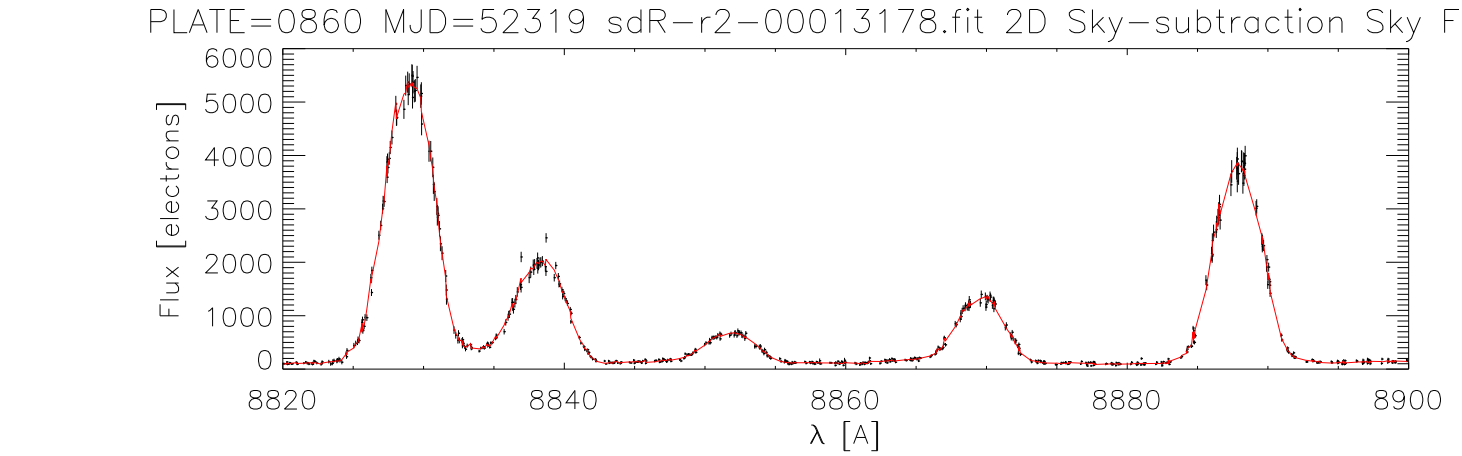

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-10
-9
-8
-7
-6
50
100
150
200
250
300
Fiber number

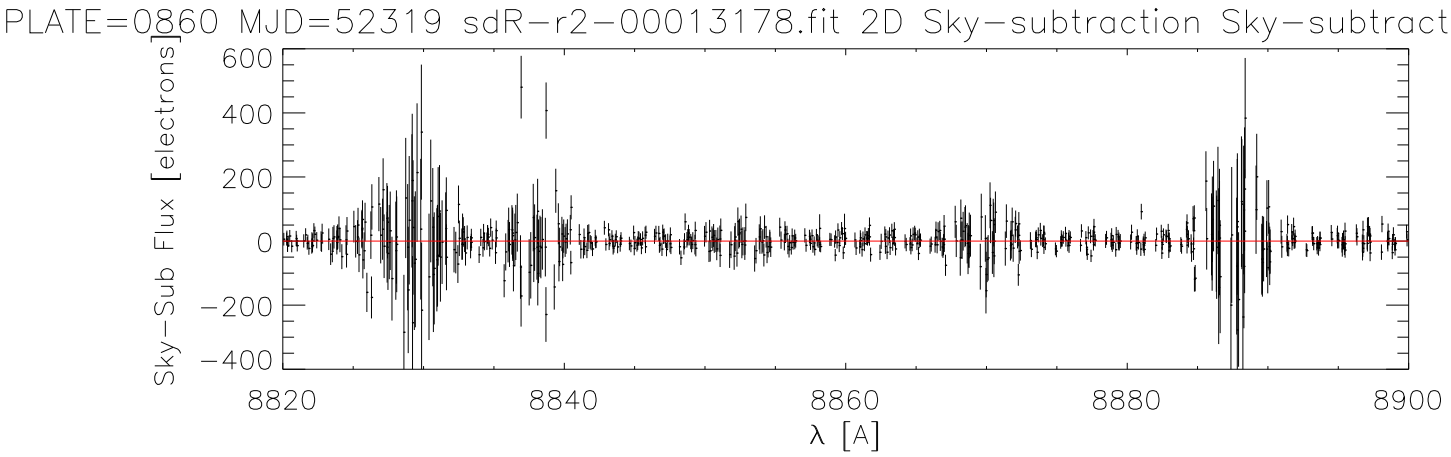

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

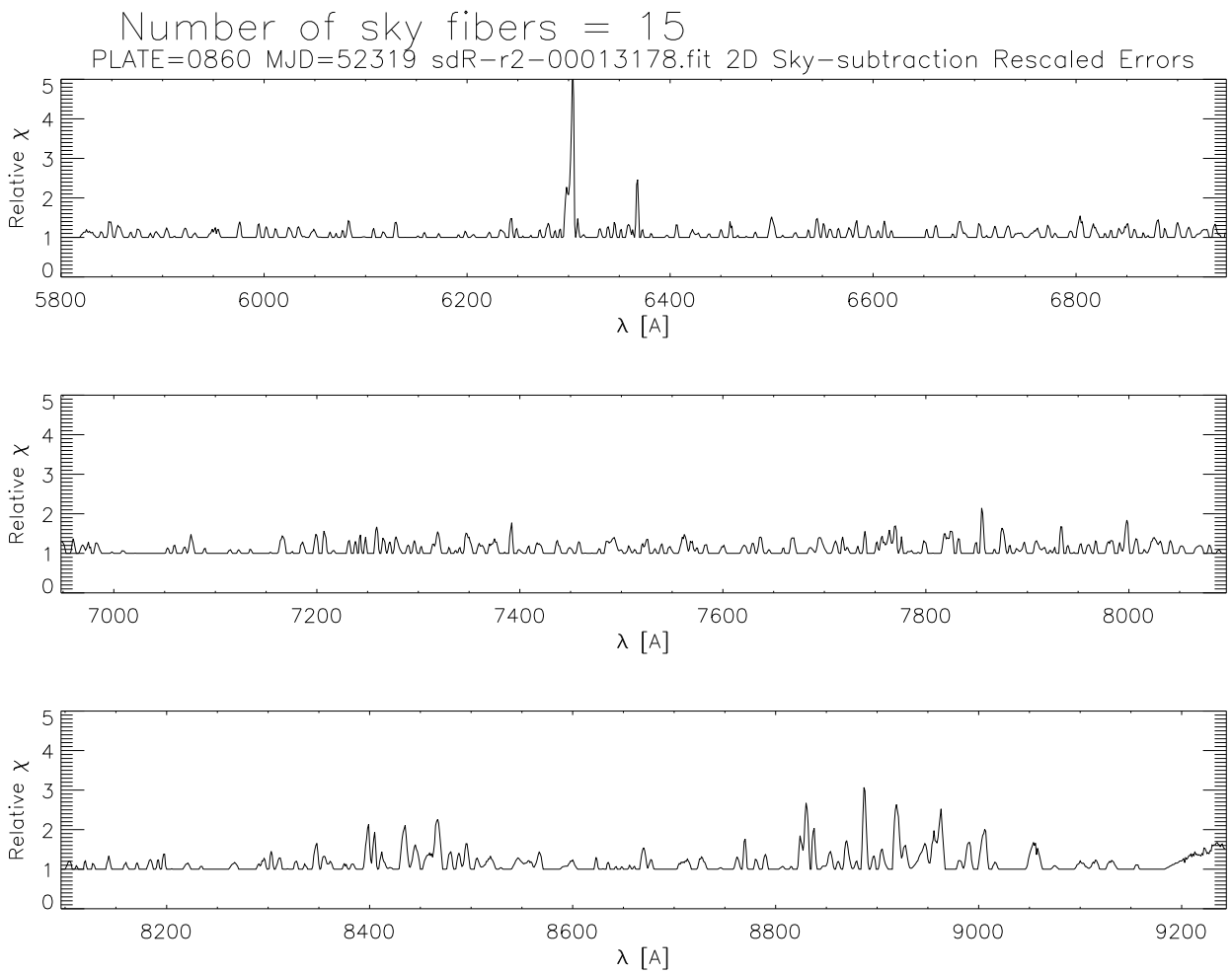

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

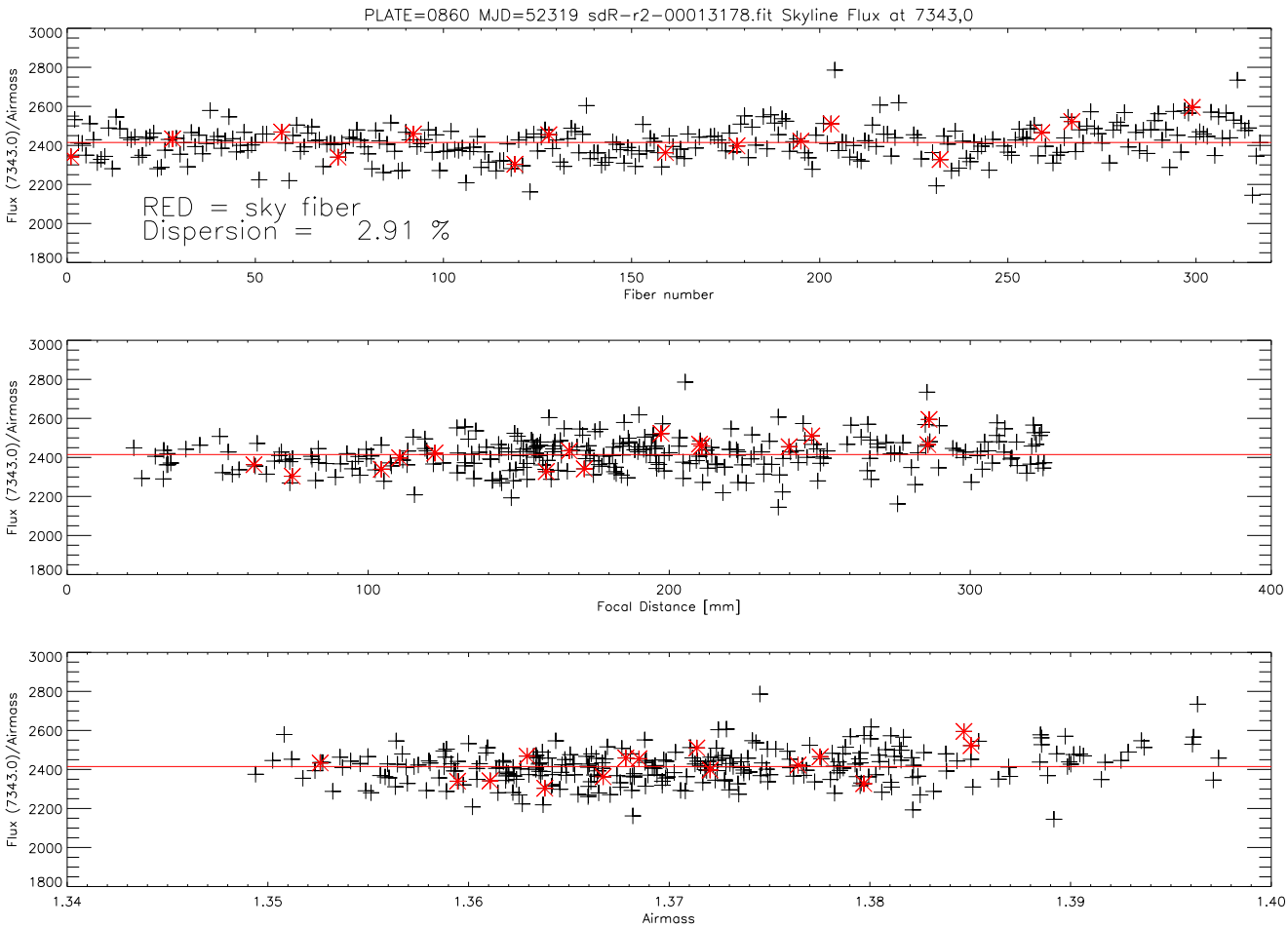

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013178.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

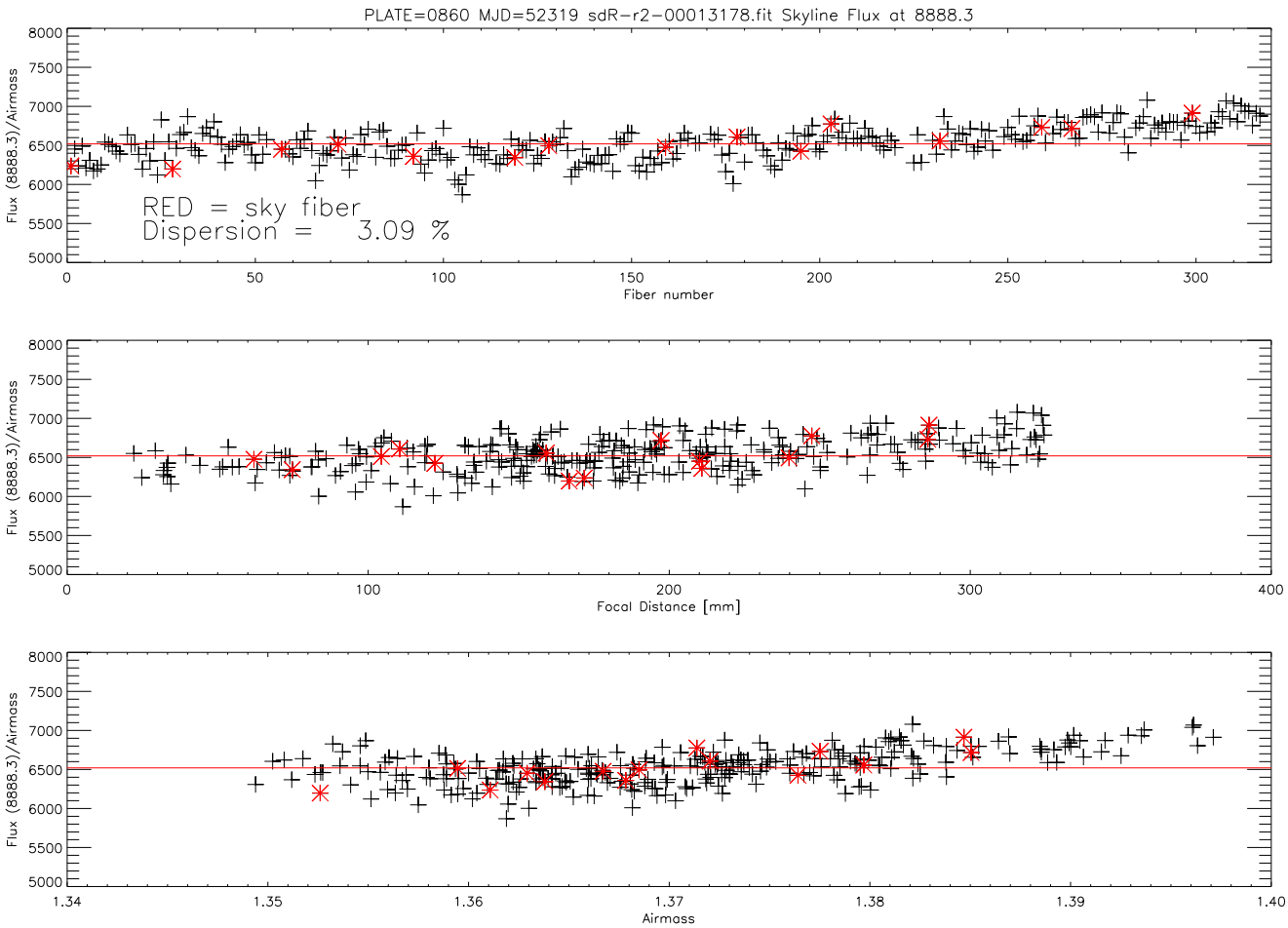

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

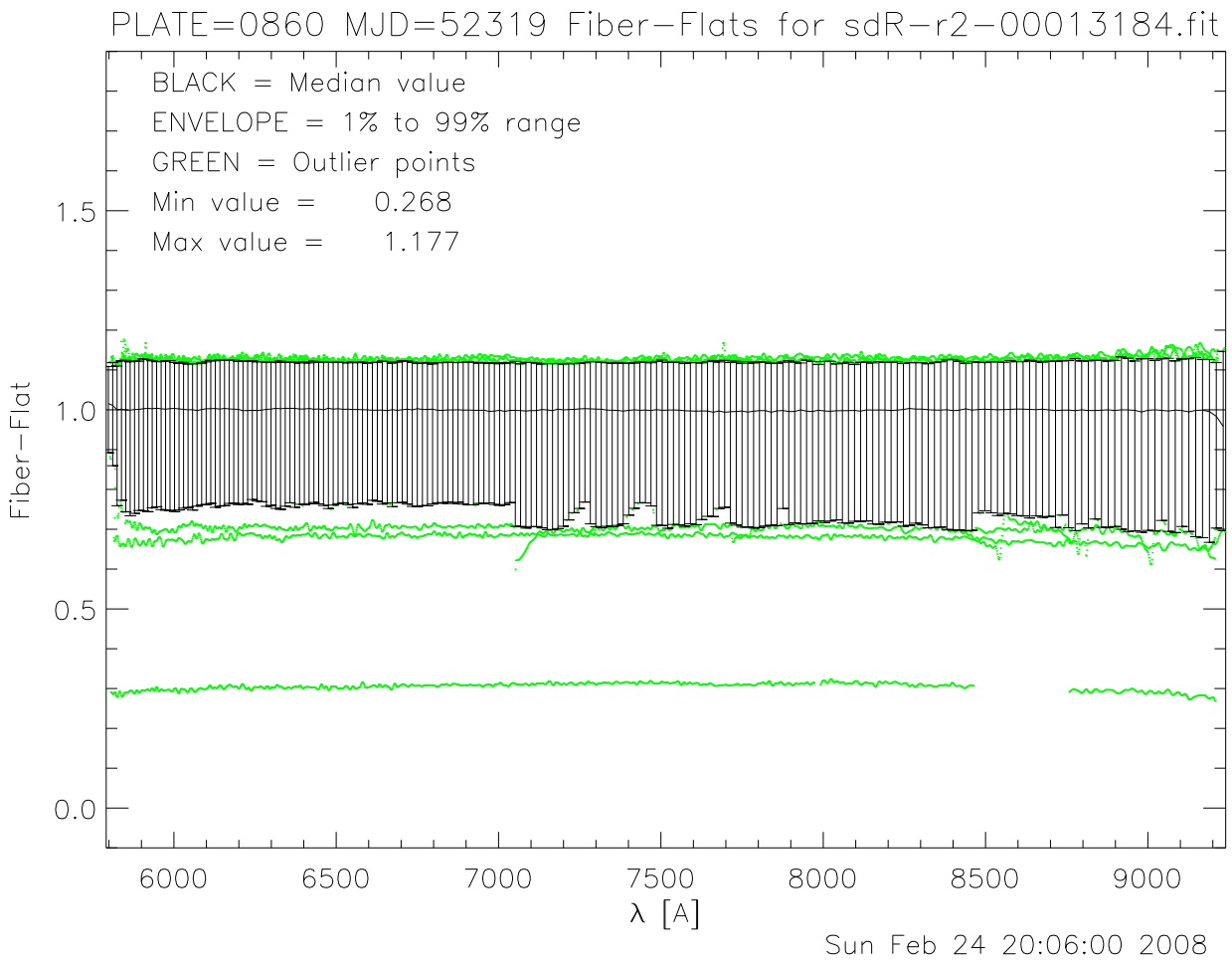

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

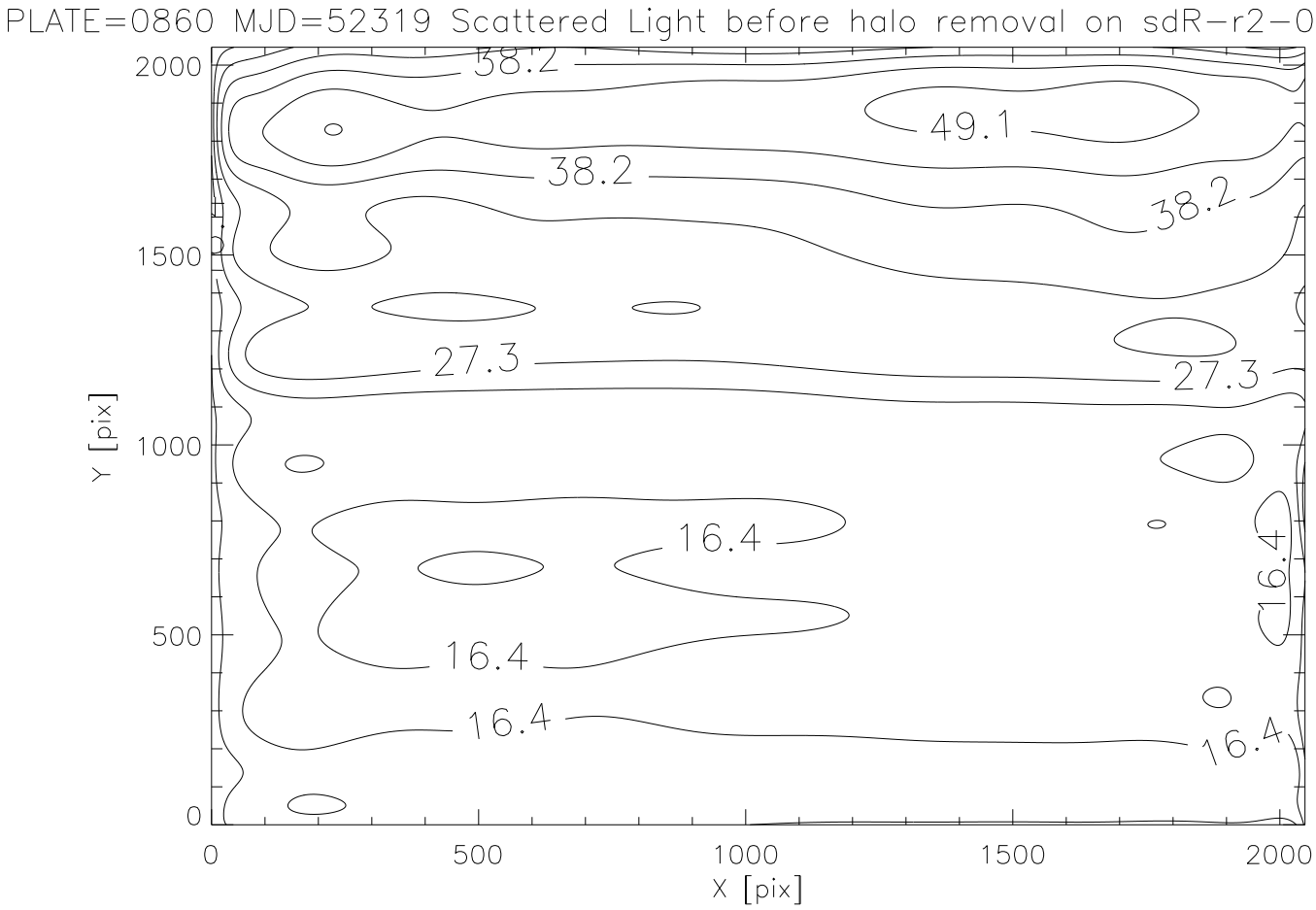

PLATE=0860 MJD=52319 sdR-r2-00013178.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

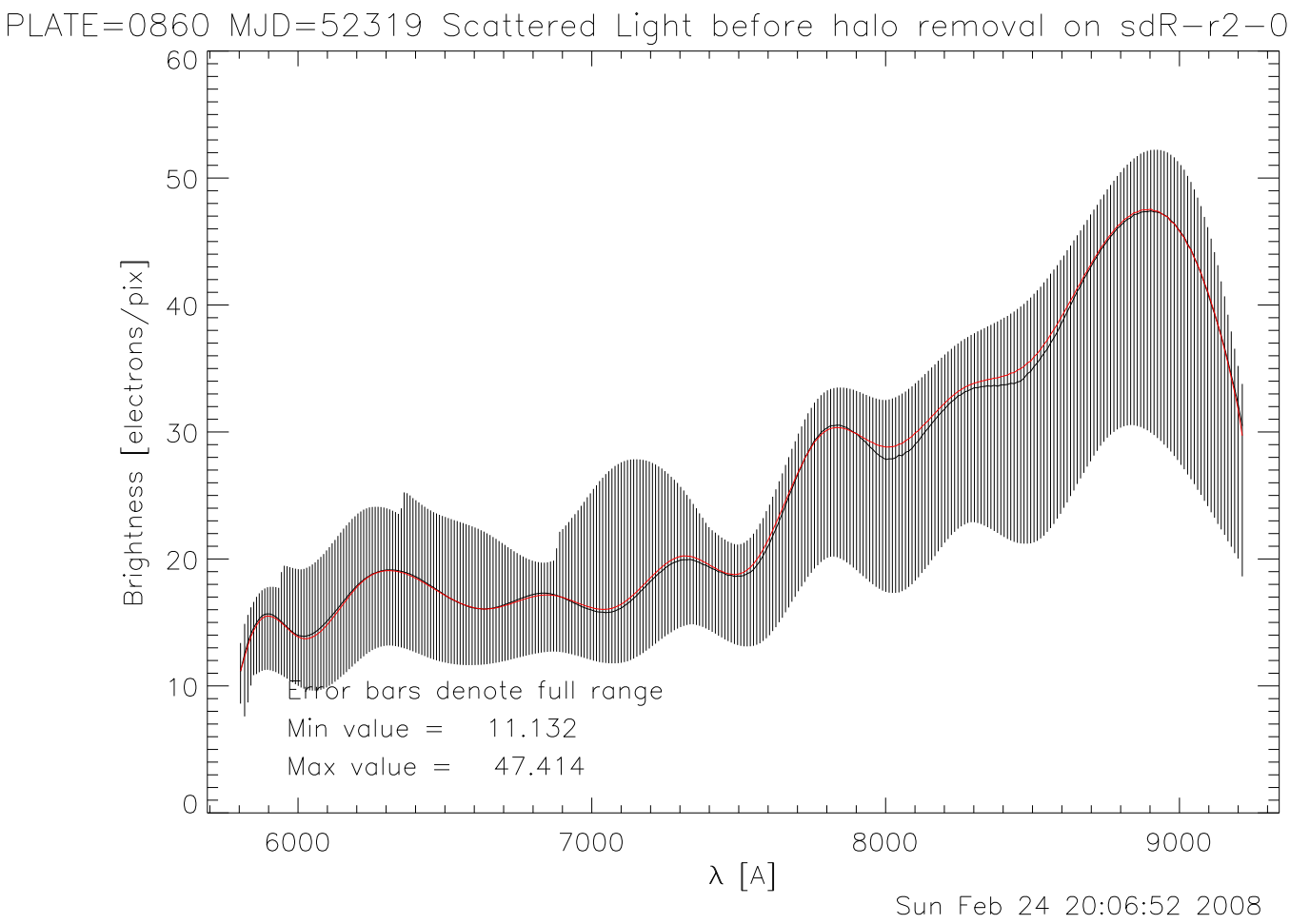

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013178.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

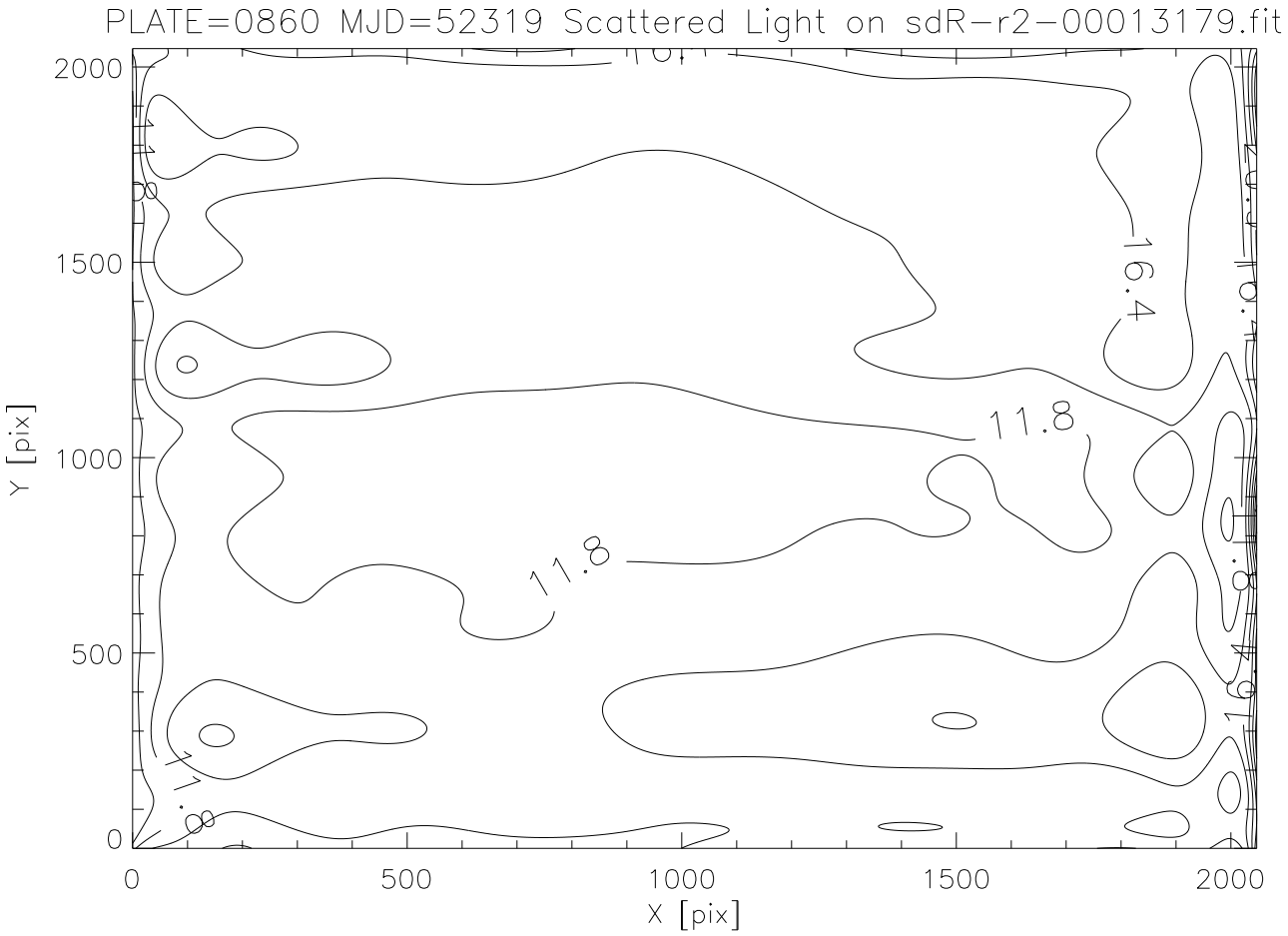

PLATE=0860 MJD=52319 sdR-r2-00013178.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.91 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

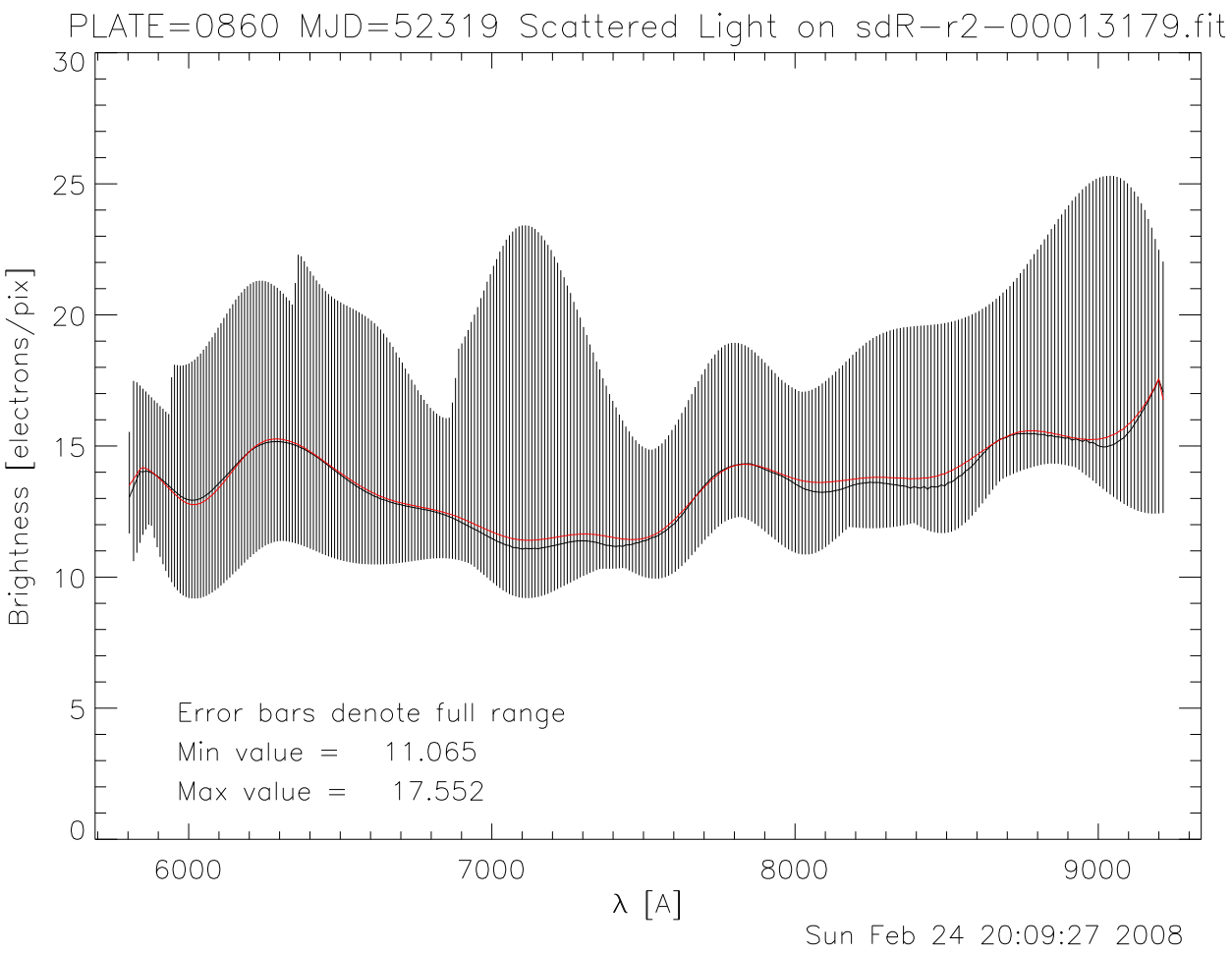

PLATE=0860 MJD=52319 sdR-r2-00013178.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.09 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

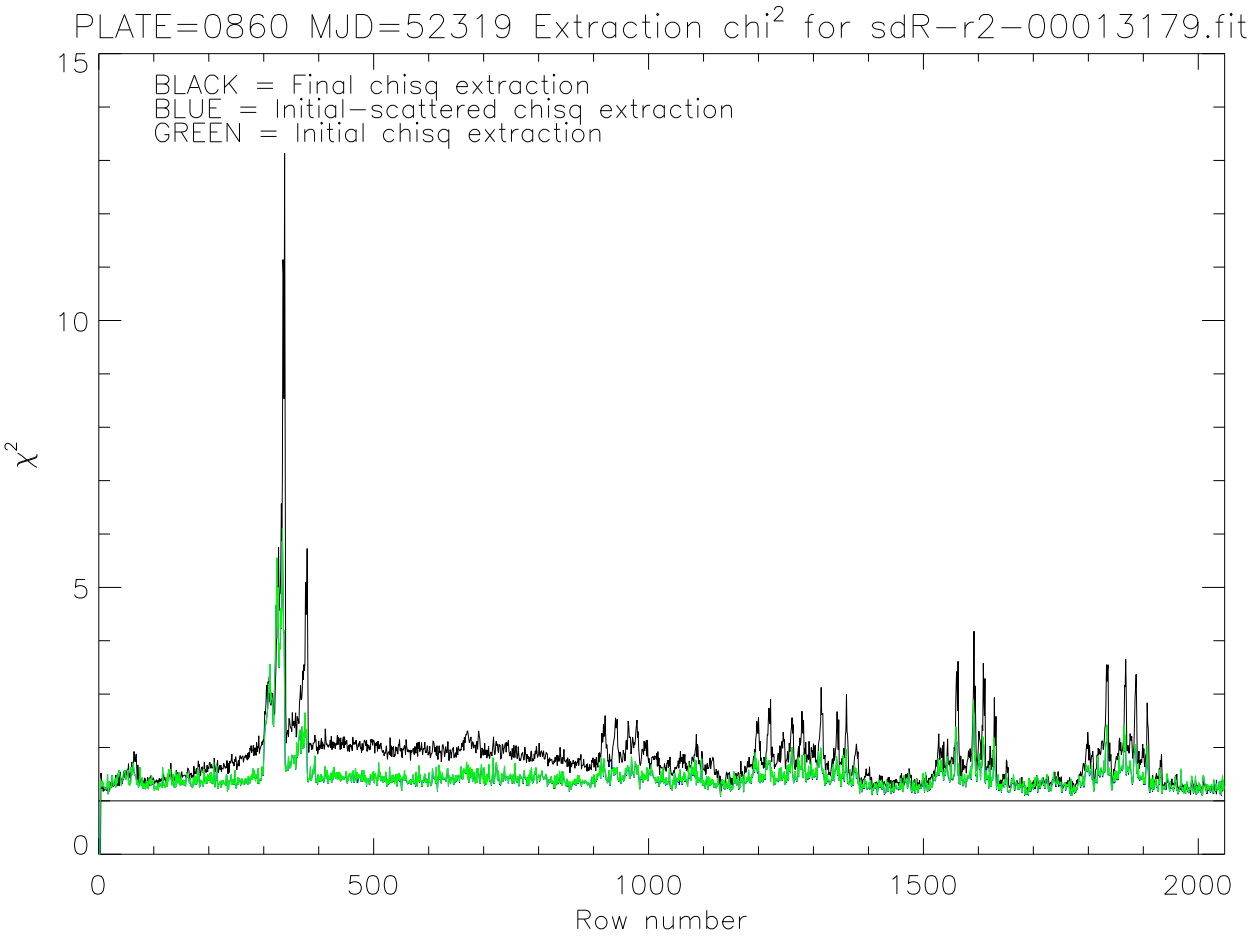

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:06:00 2008

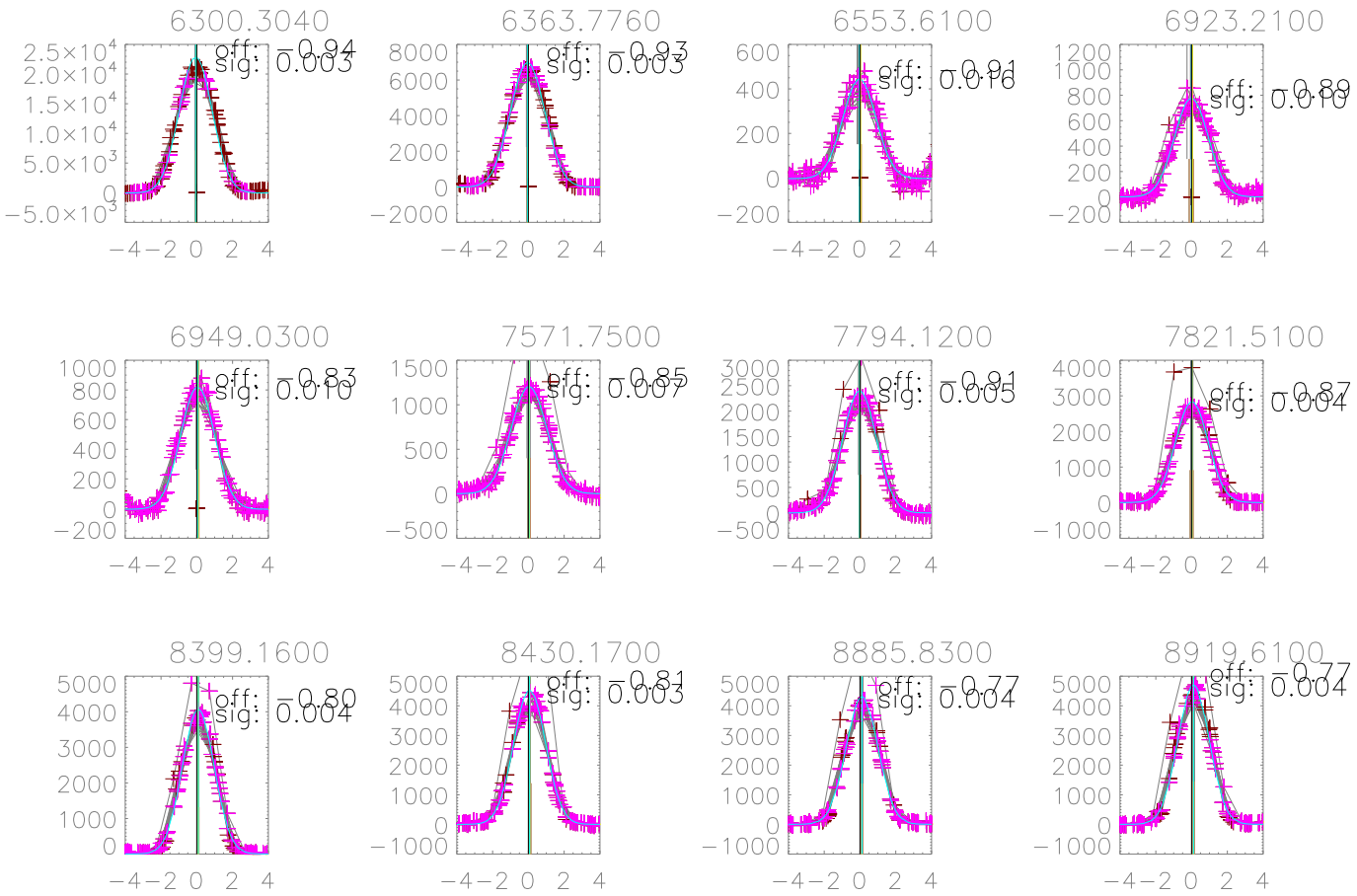

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013179.fi
38.2
49.1
38.2
38.2
27.3
27.3
16.4
16.4
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

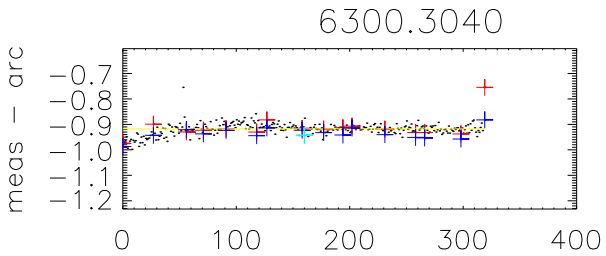

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013179.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.132
Max value = 47.414
Sun Feb 24 20:06:52 2008

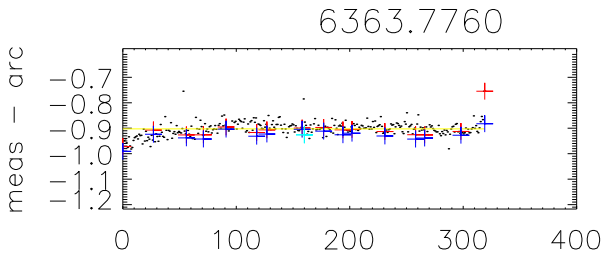

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013179.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
11.8
11.8
16.4
16.4
11.8

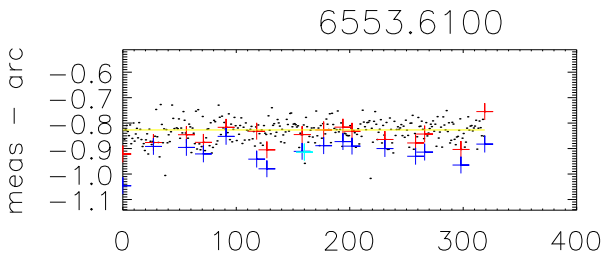

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013179.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.065
Max value = 17.552
Sun Feb 24 20:09:27 2008

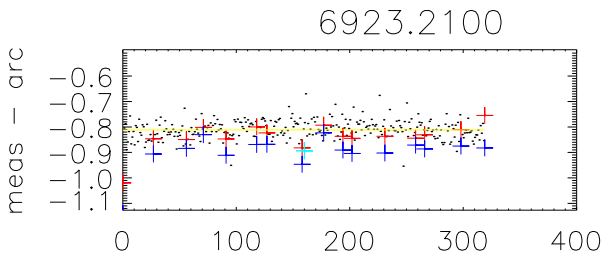

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r2−00013179.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

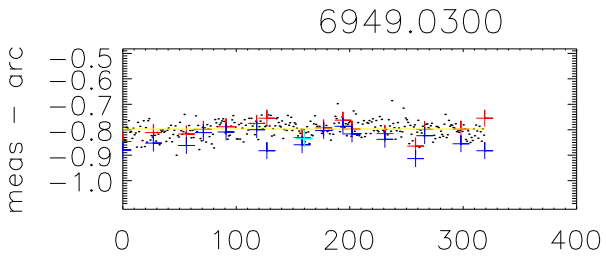

6300.3040
off: −0.94
sig: 0.003
6363.7760
off: −0.93
sig: 0.003
6553.6100
off: −0.91
sig: 0.016
6923.2100
off: −0.89
sig: 0.010
6949.0300
off: −0.83
sig: 0.010
7571.7500
off: −0.85
sig: 0.007
7794.1200
off: −0.91
sig: 0.005
7821.5100
off: −0.87
sig: 0.004
8399.1600
off: −0.80
sig: 0.004
8430.1700
off: −0.81
sig: 0.003
8885.8300
off: −0.77
sig: 0.004
8919.6100
off: −0.77
sig: 0.004

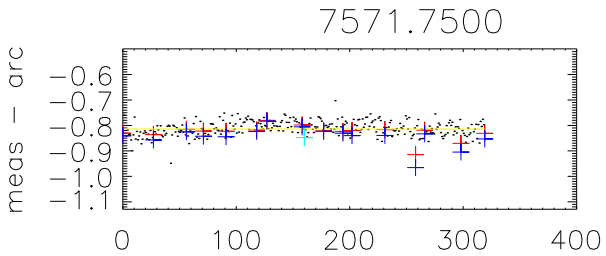

6300.3040
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

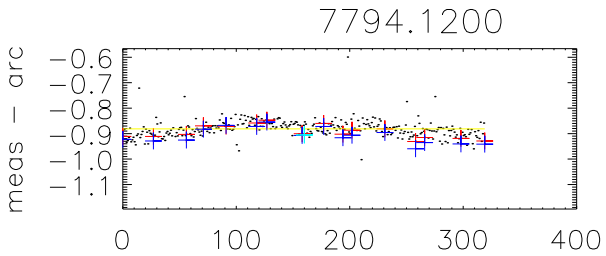

6363.7760
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

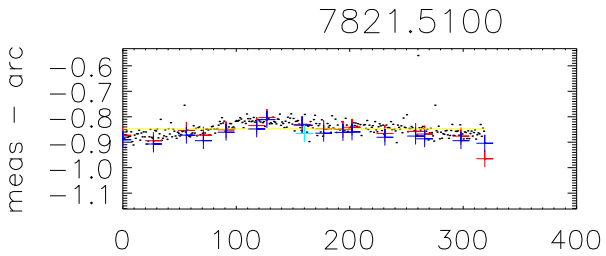

6553.6100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

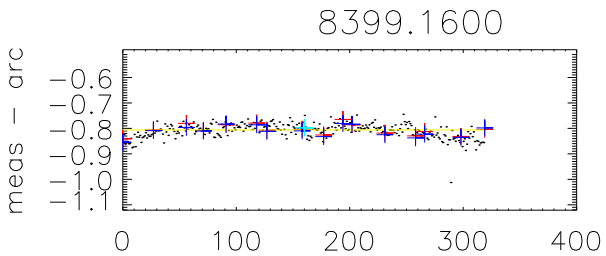

6923.2100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

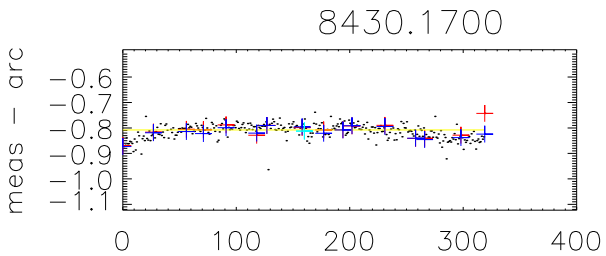

6949.0300
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

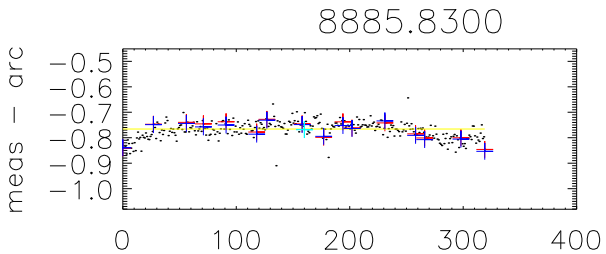

7571.7500
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

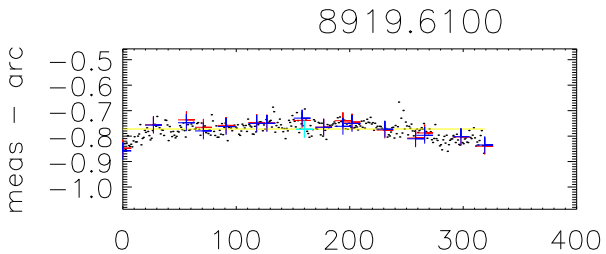

7794.1200
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

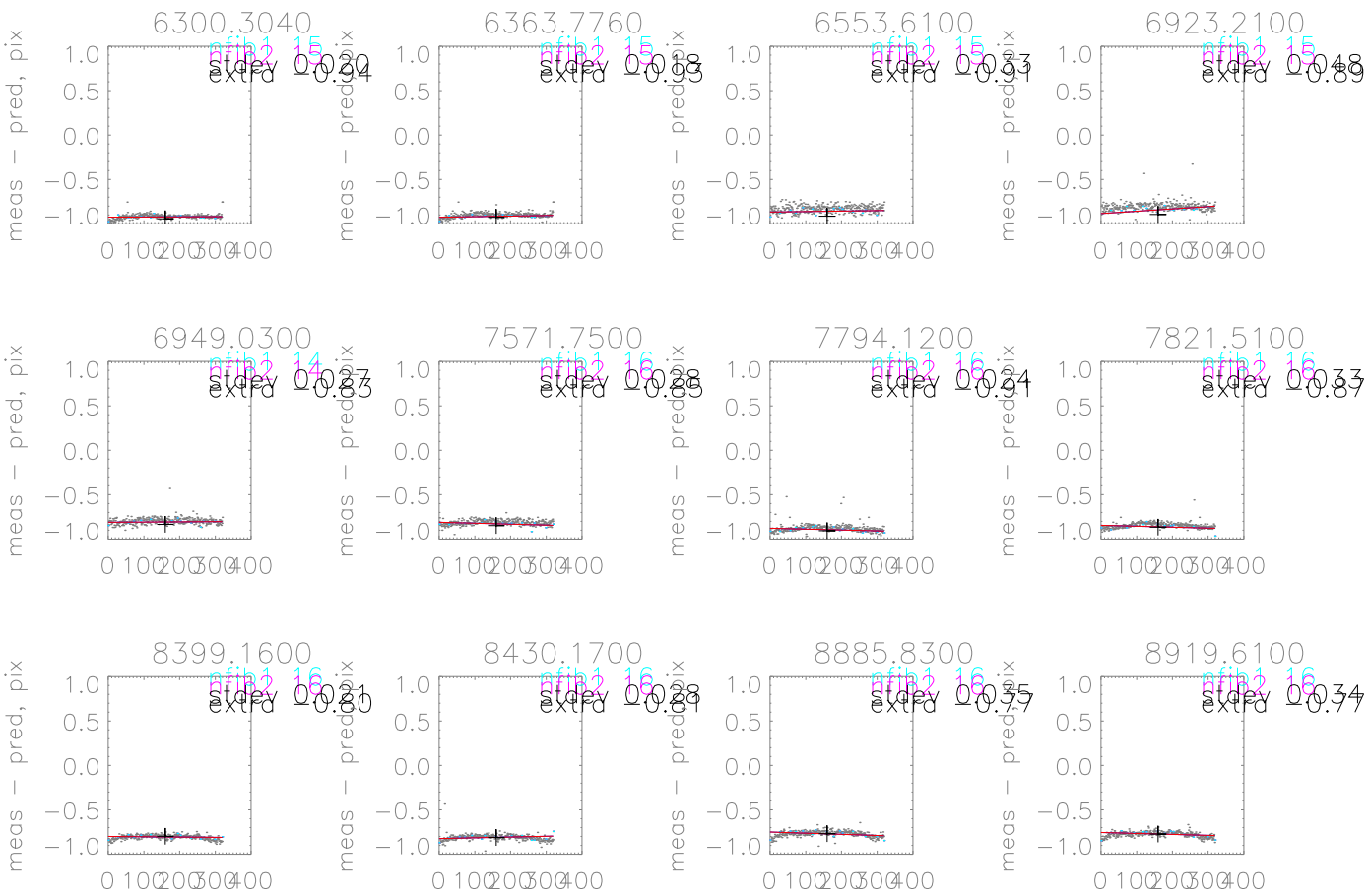

7821.5100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

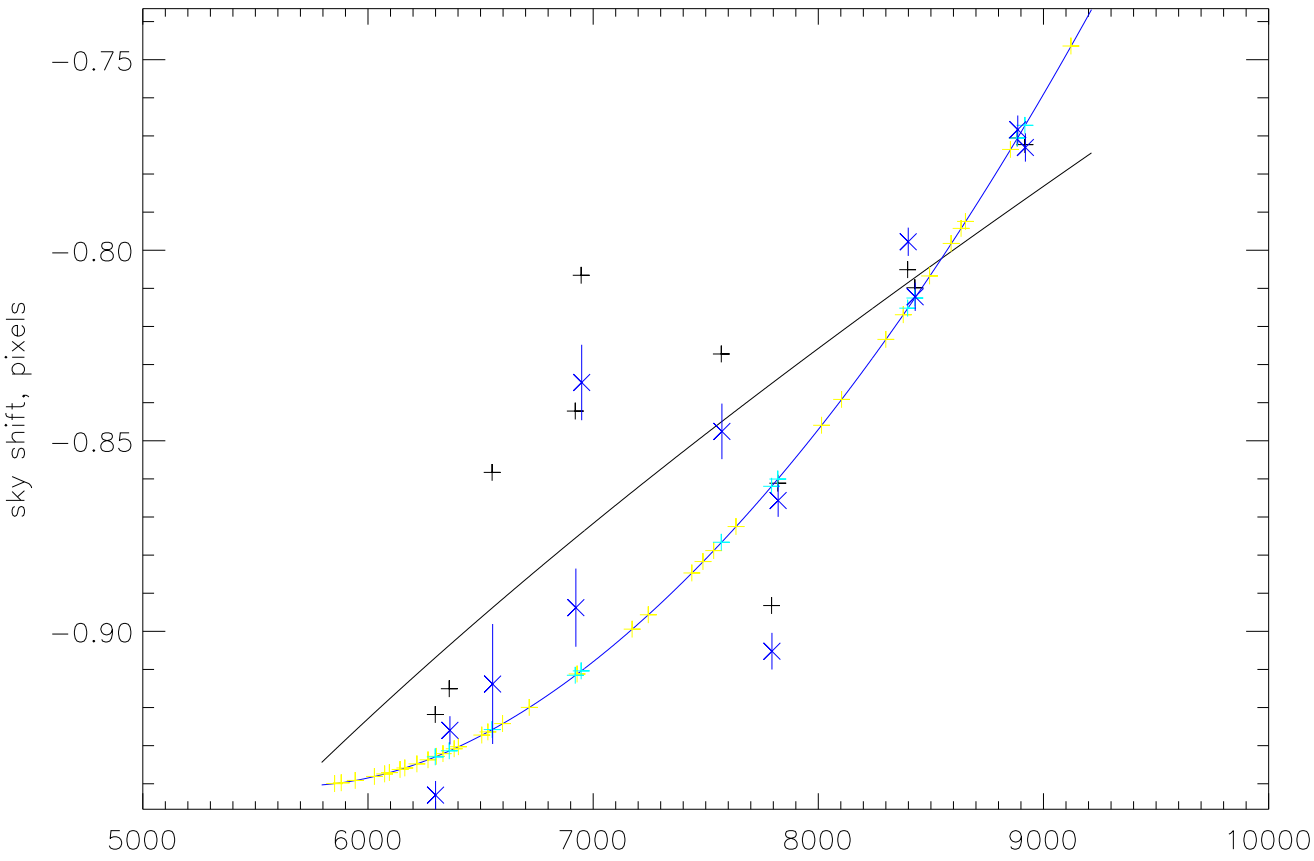

8399.1600
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

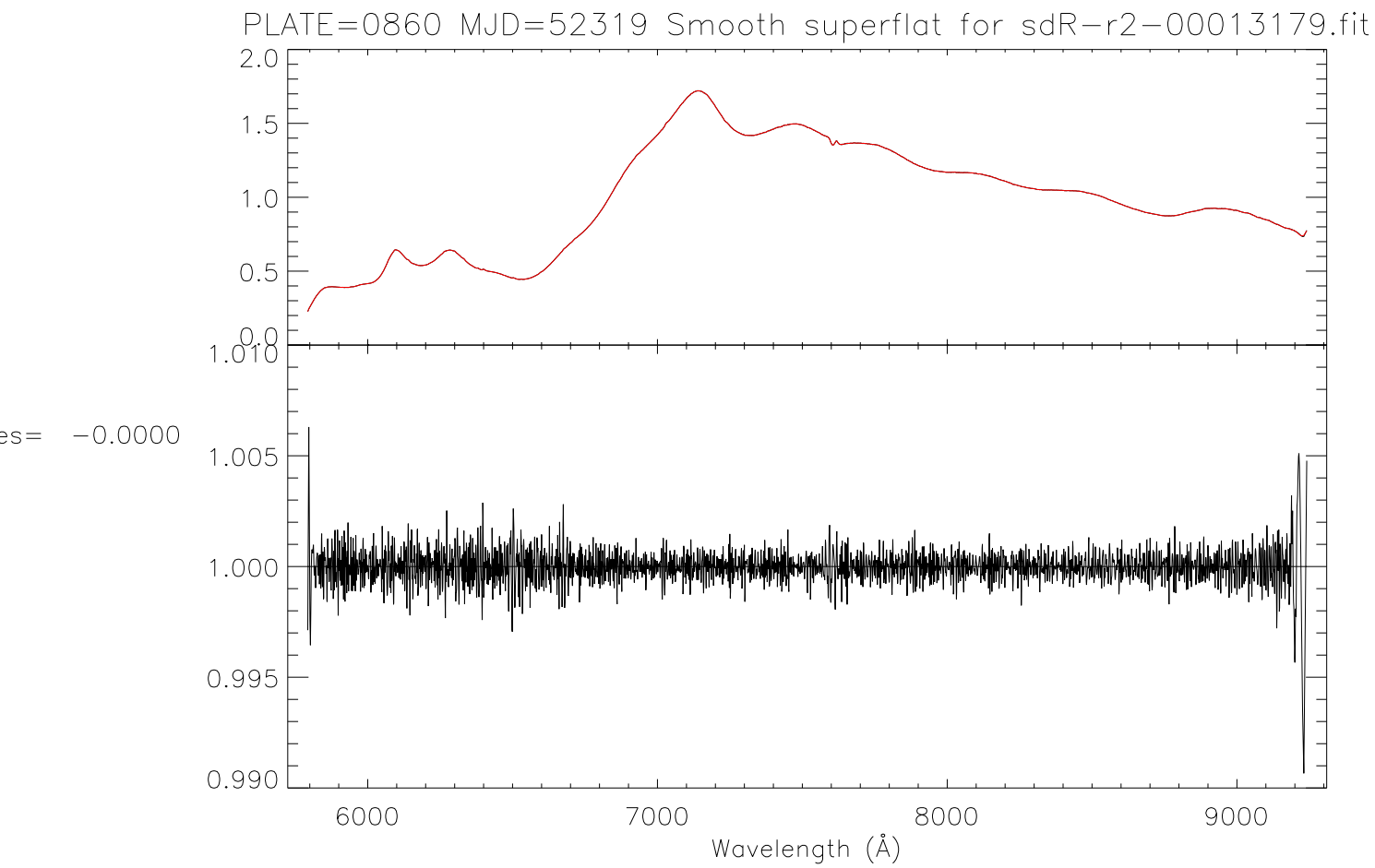

8430.1700
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400


8885.8300
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

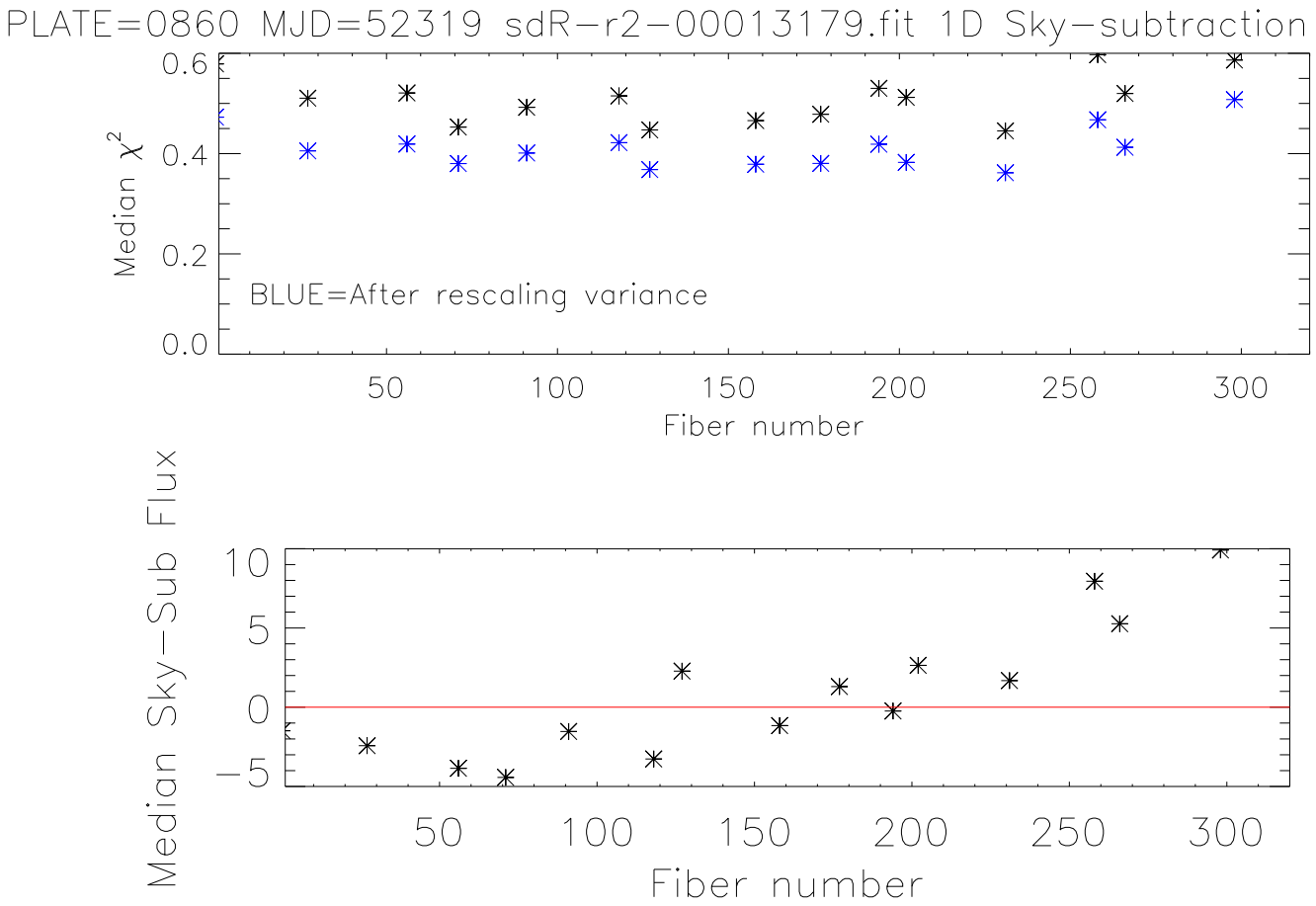

8919.6100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

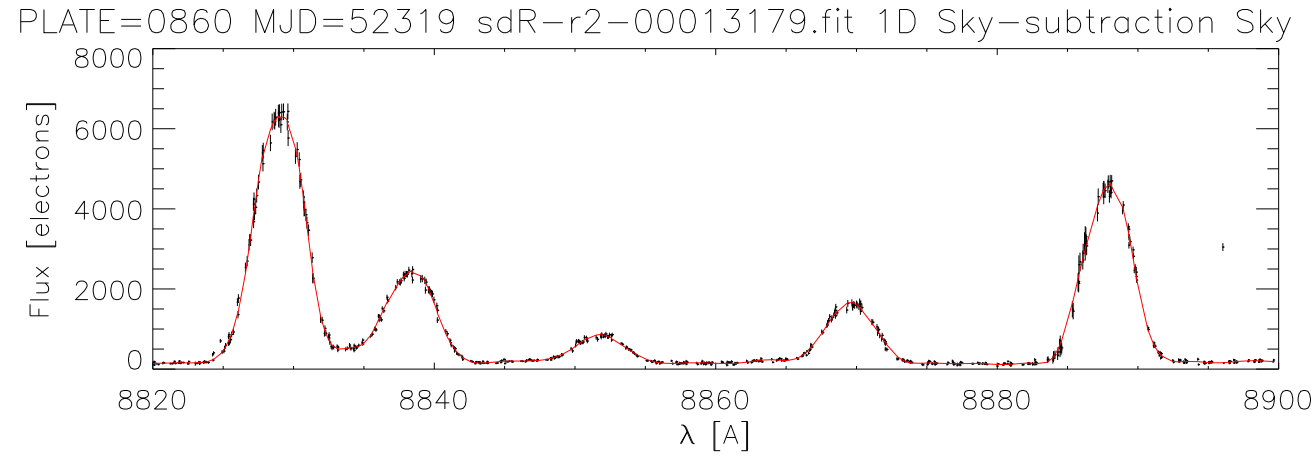

6300.3040
mfib1 15
mfib2 15
stdev 0.020
extrd 0.94
6363.7760
mfib1 15
mfib2 15
stdev 0.018
extrd 0.93
6553.6100
mfib1 15
mfib2 15
stdev 0.033
extrd 0.91
6923.2100
mfib1 15
mfib2 15
stdev 0.048
extrd 0.89
6949.0300
mfib1 14
mfib2 16
stdev 0.027
extrd 0.83
7571.7500
mfib1 16
mfib2 16
stdev 0.028
extrd 0.86
7794.1200
mfib1 16
mfib2 16
stdev 0.024
extrd 0.91
7821.5100
mfib1 16
mfib2 16
stdev 0.033
extrd 0.87
8399.1600
mfib1 16
mfib2 16
stdev 0.021
extrd 0.80
8430.1700
mfib1 16
mfib2 16
stdev 0.028
extrd 0.81
8885.8300
mfib1 16
mfib2 16
stdev 0.035
extrd 0.77
8919.6100
mfib1 16
mfib2 16
stdev 0.034
extrd 0.77
meas − pred, pix
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

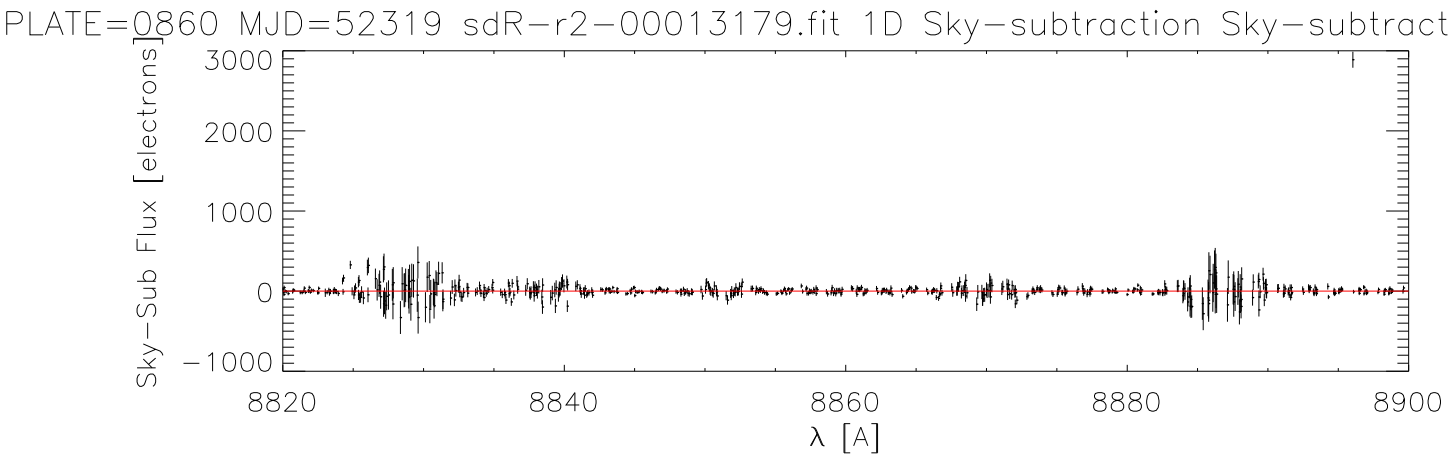

−0.75
−0.80
−0.85
−0.90
sky shift, pixels
5000
6000
7000
8000
9000
10000

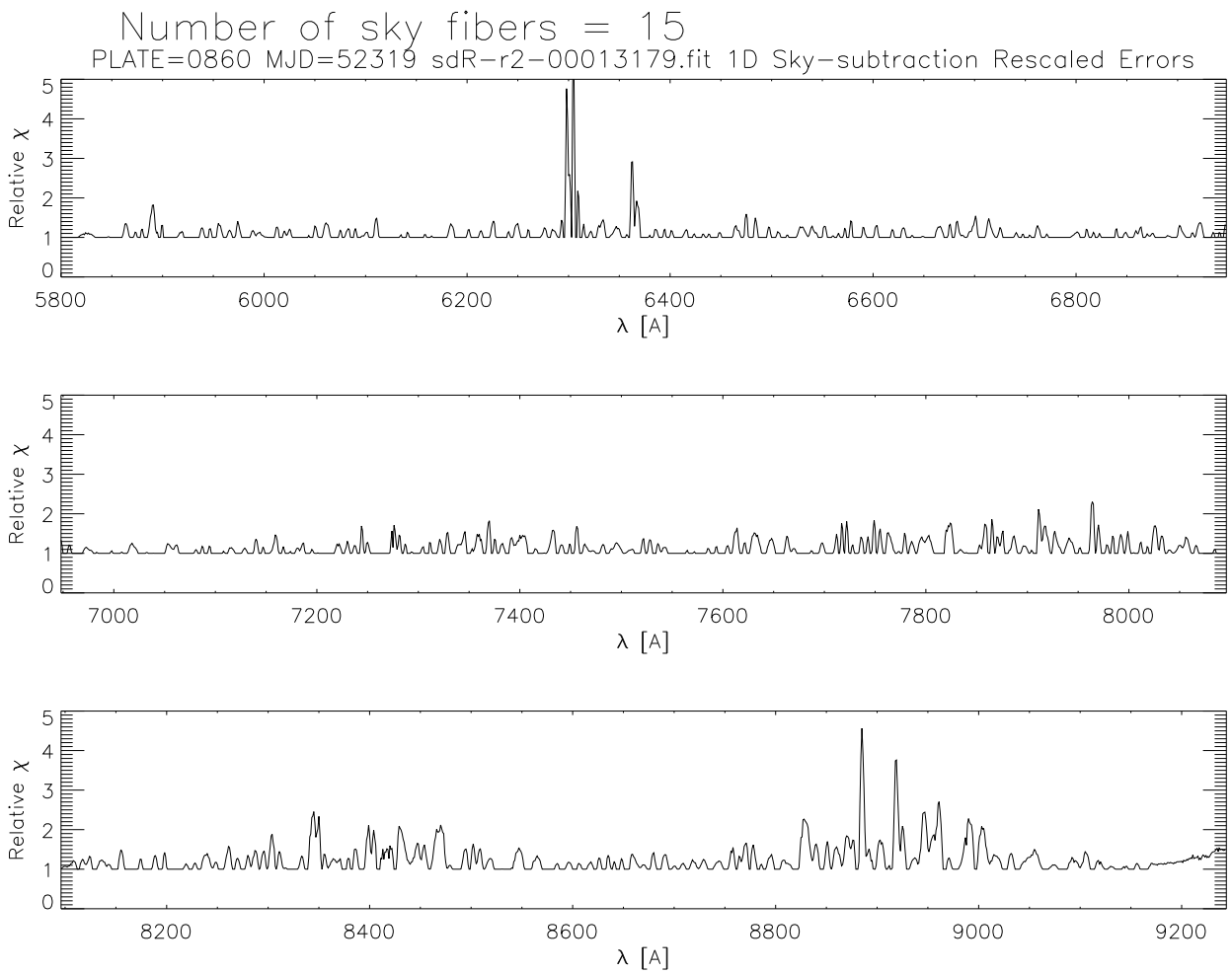

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013179.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

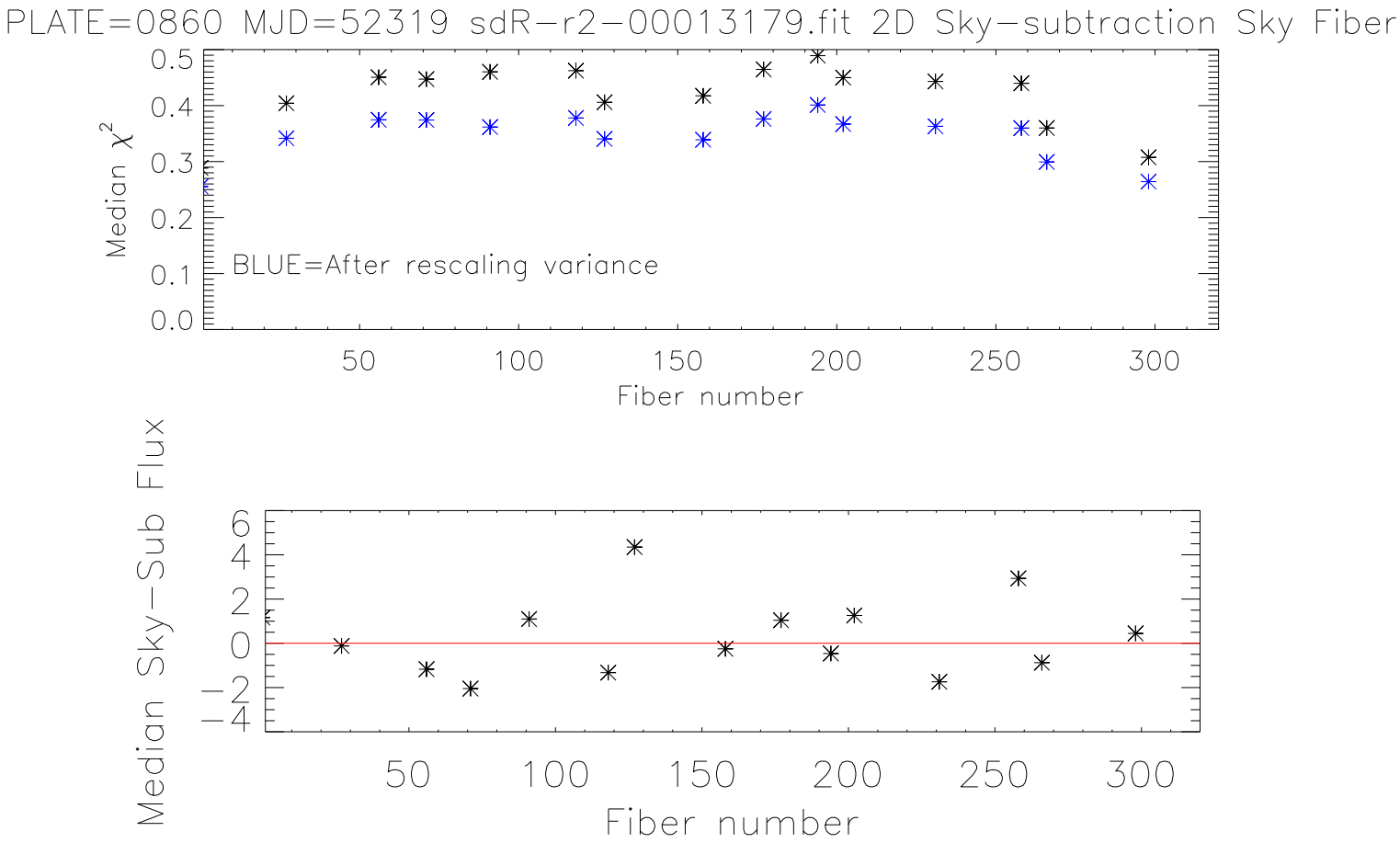
es= −0.0000

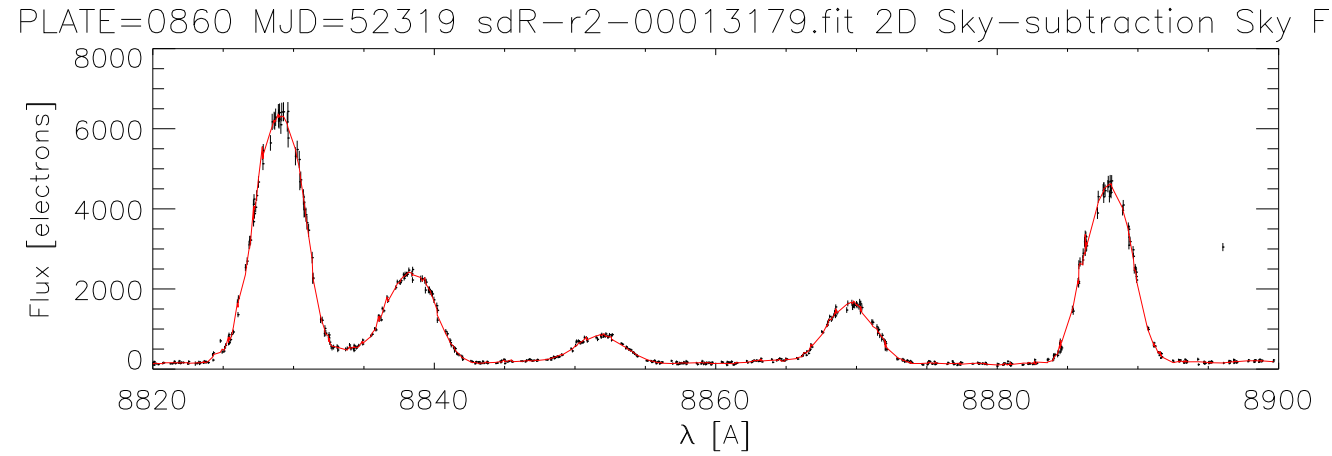

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

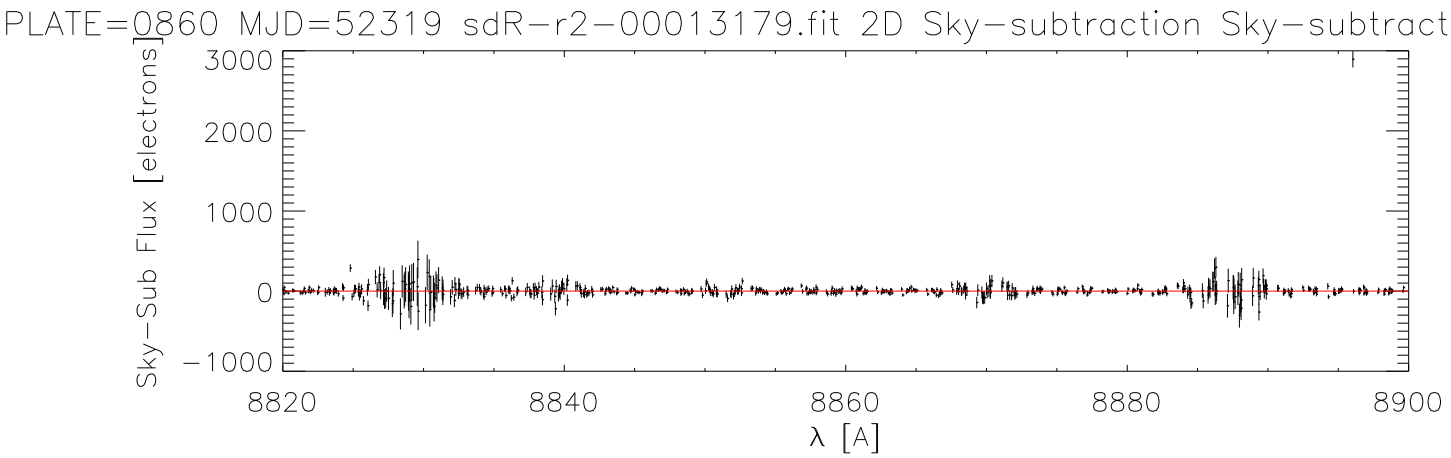

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

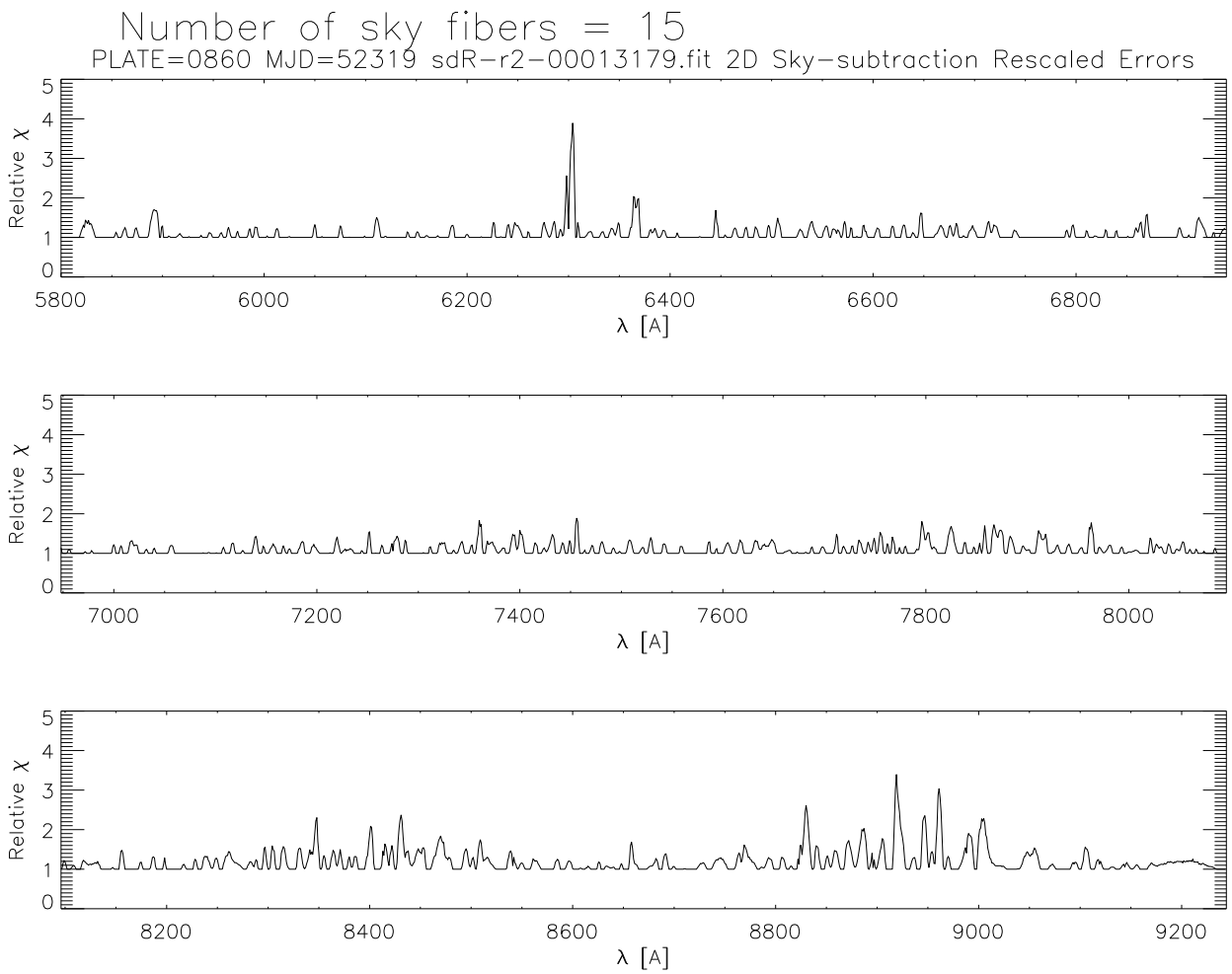

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

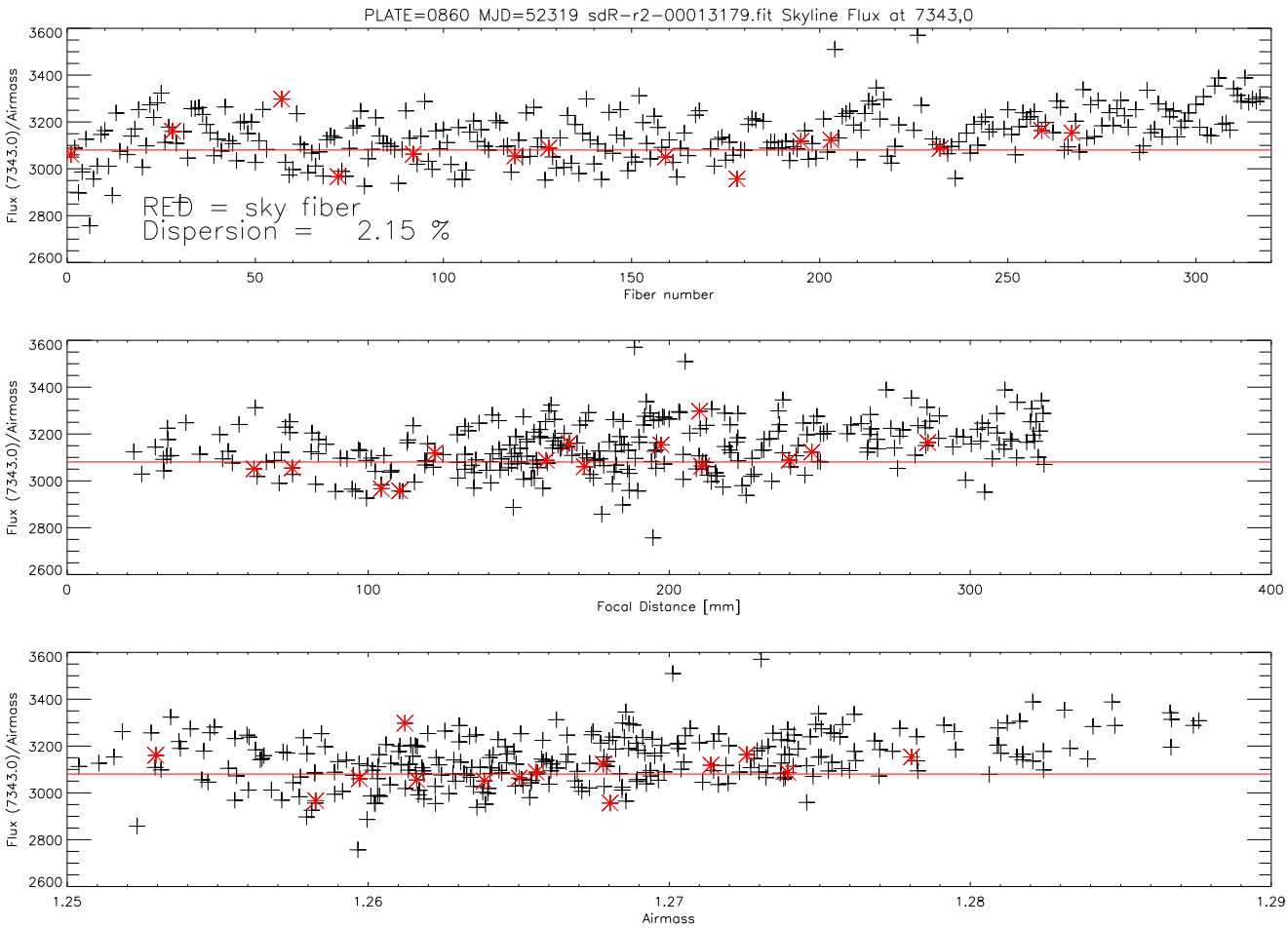

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013179.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

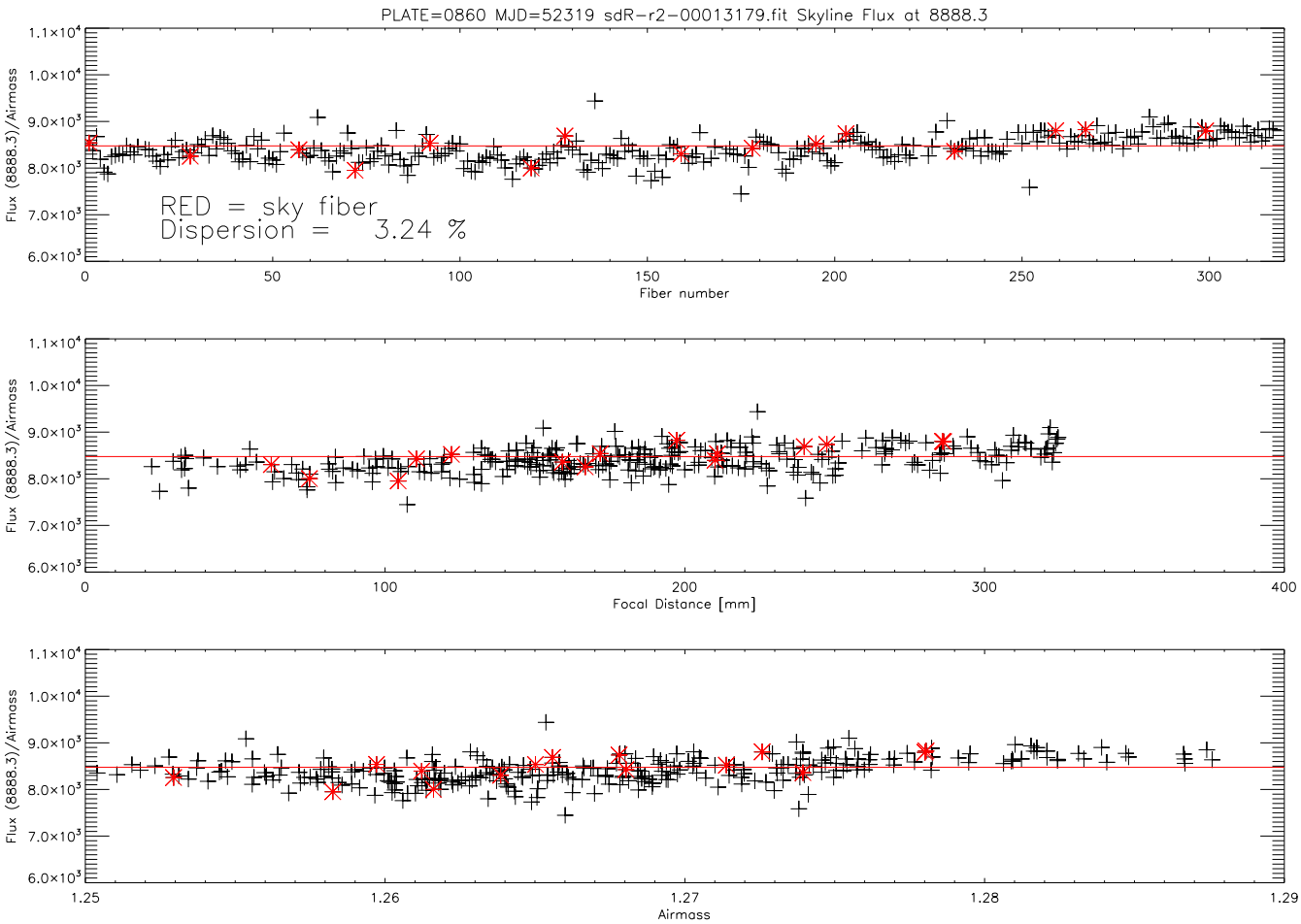

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

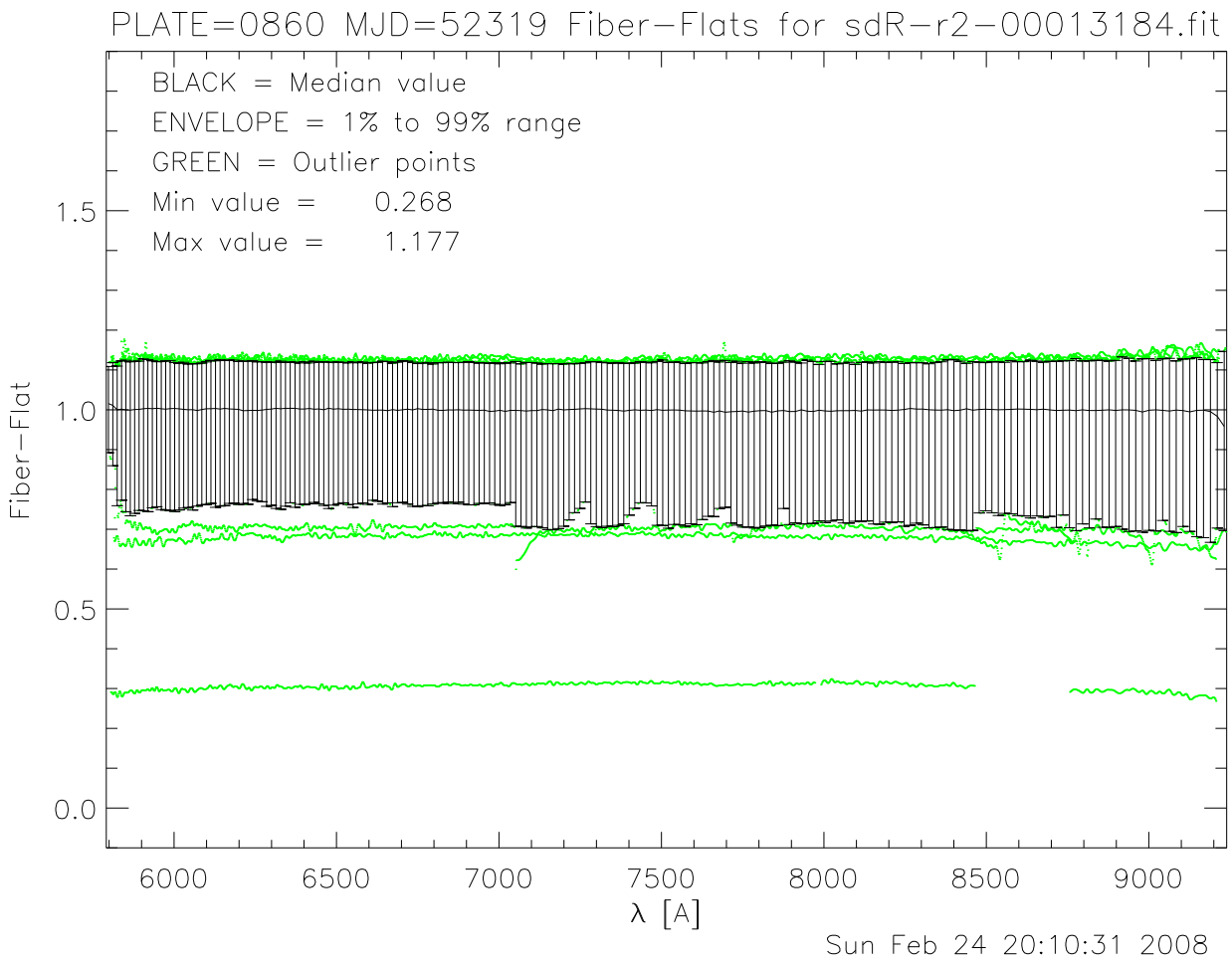

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

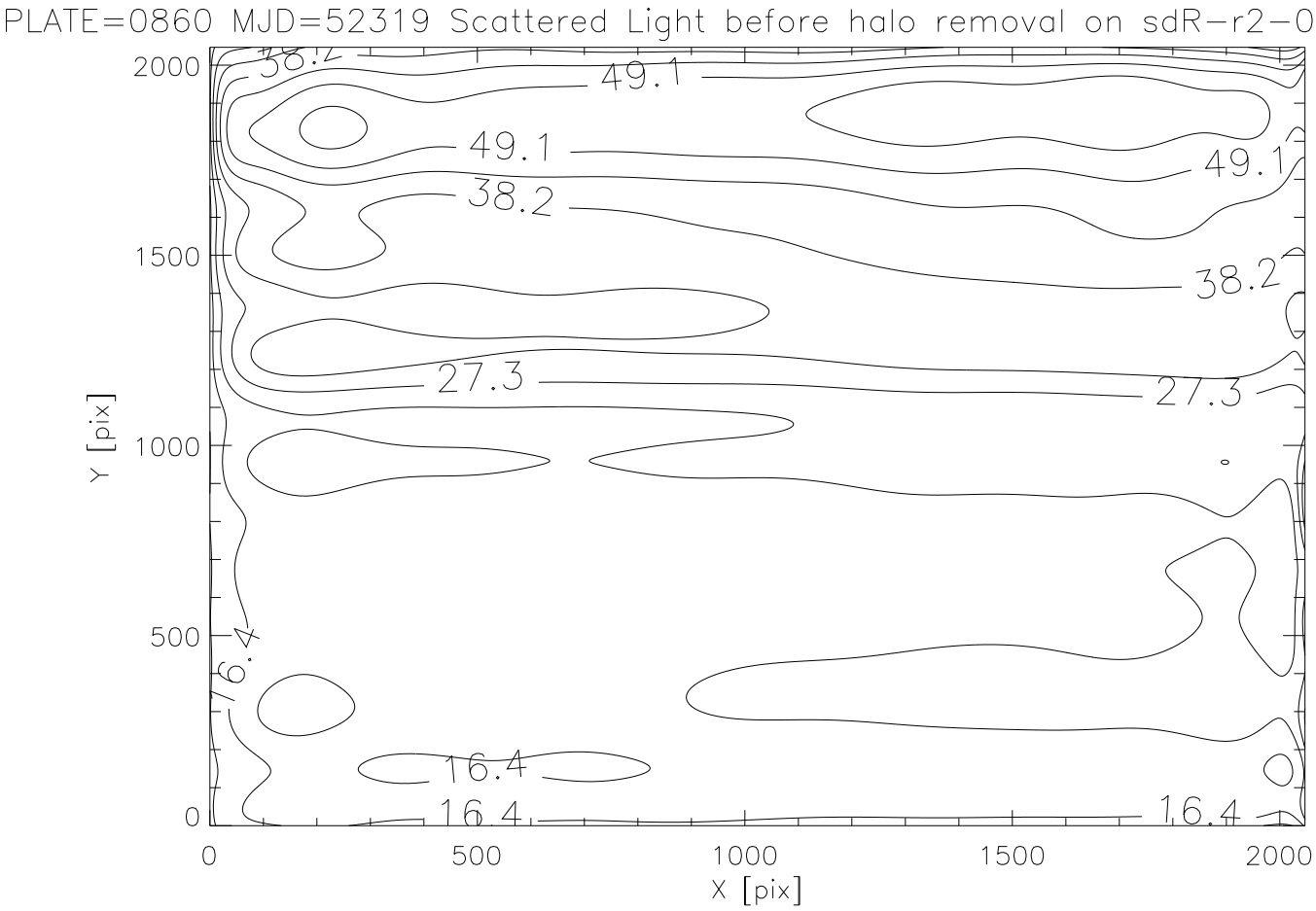

PLATE=0860 MJD=52319 sdR-r2-00013179.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

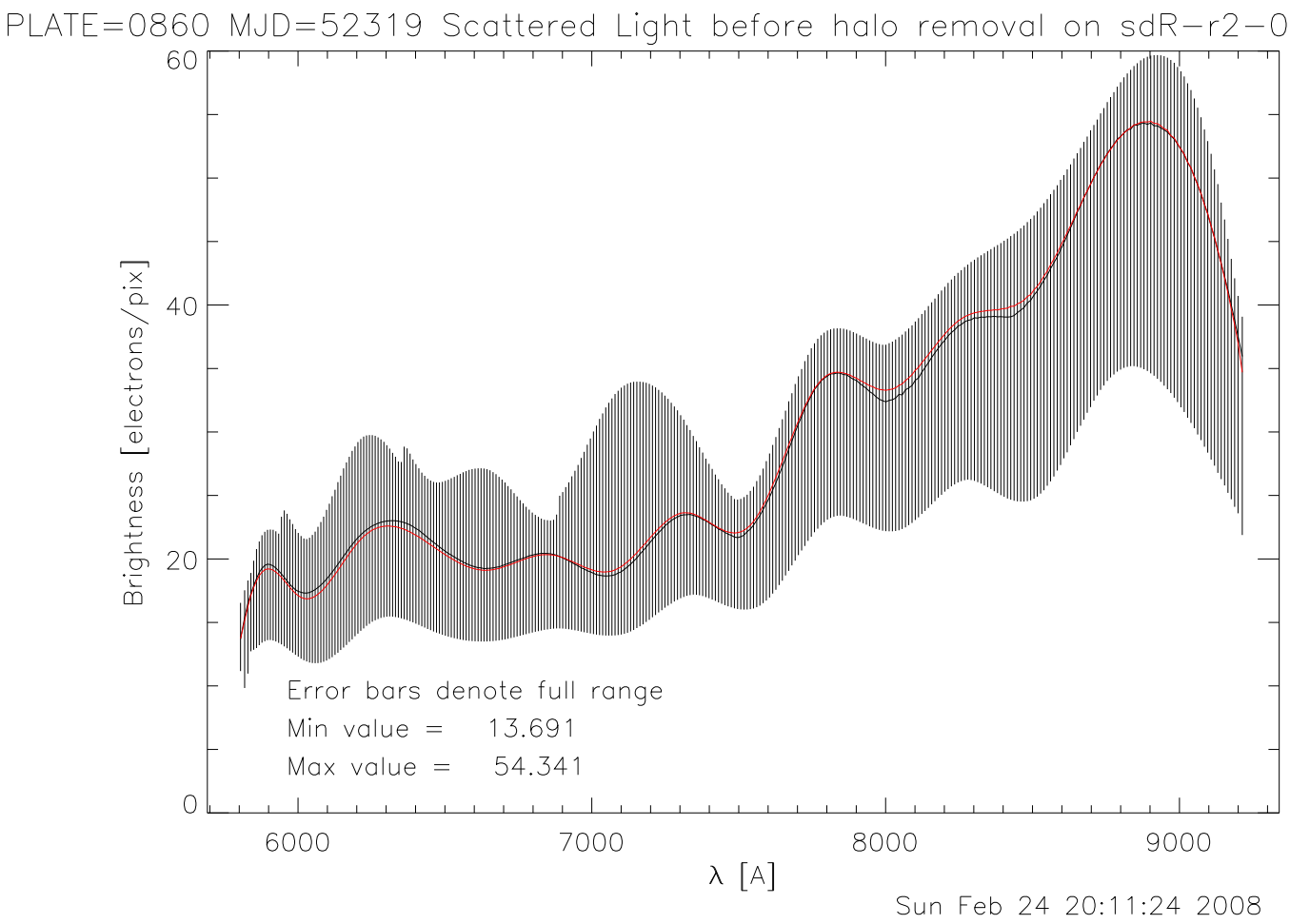

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013179.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

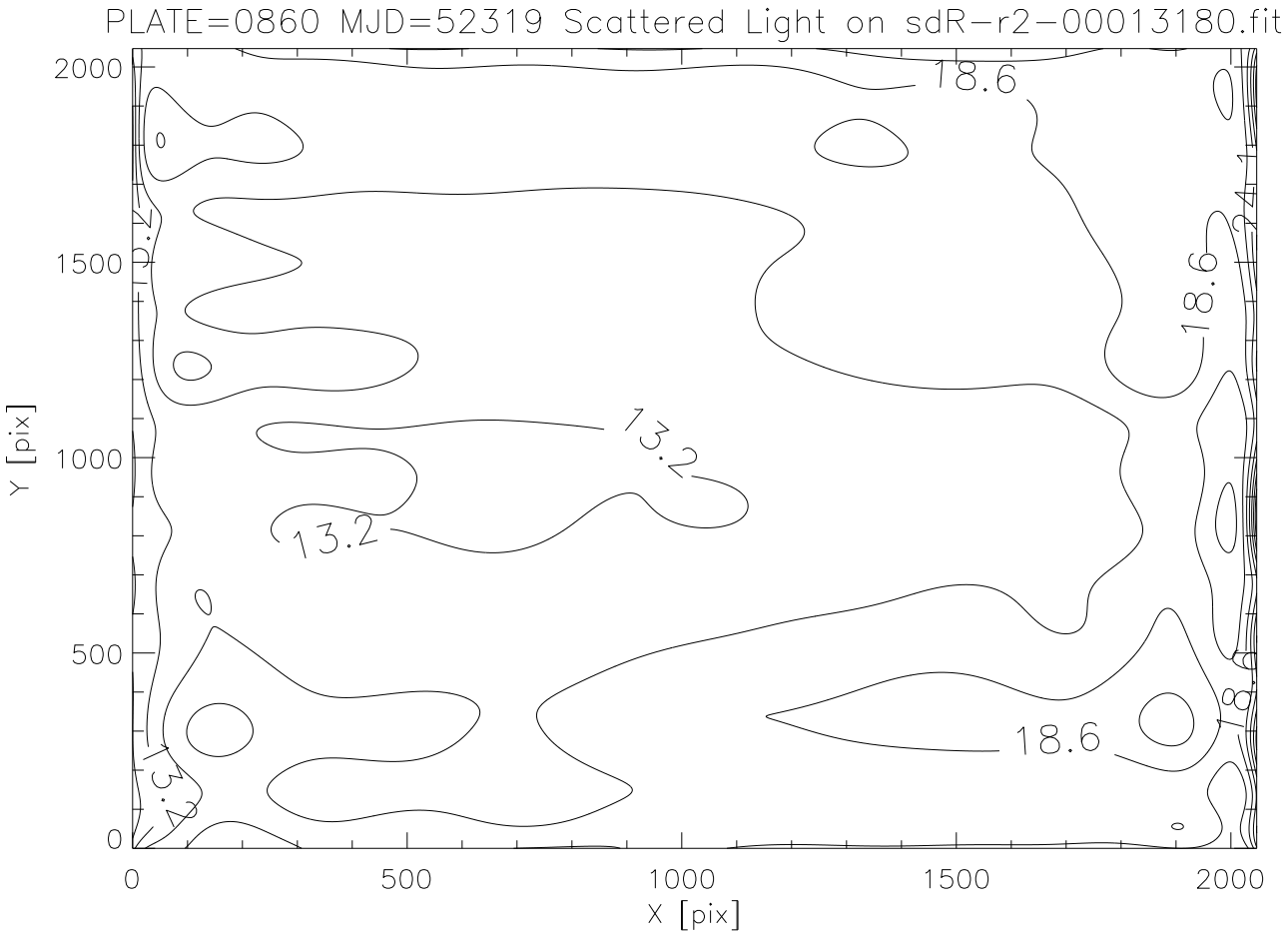

PLATE=0860 MJD=52319 sdR-r2-00013179.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.15 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

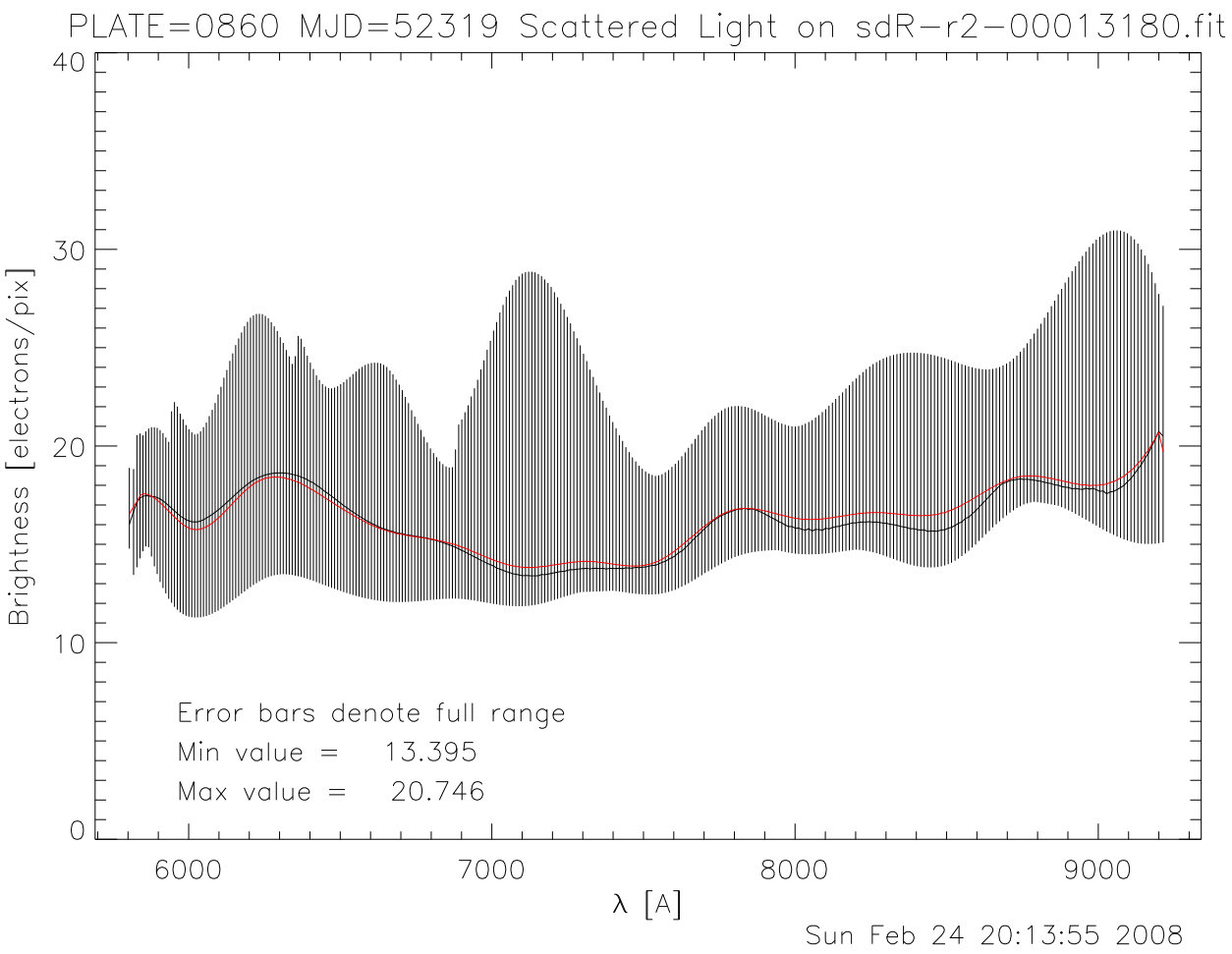

PLATE=0860 MJD=52319 sdR-r2-00013179.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.24 %
Fiber number
Focal Distance [mm]
Airmass

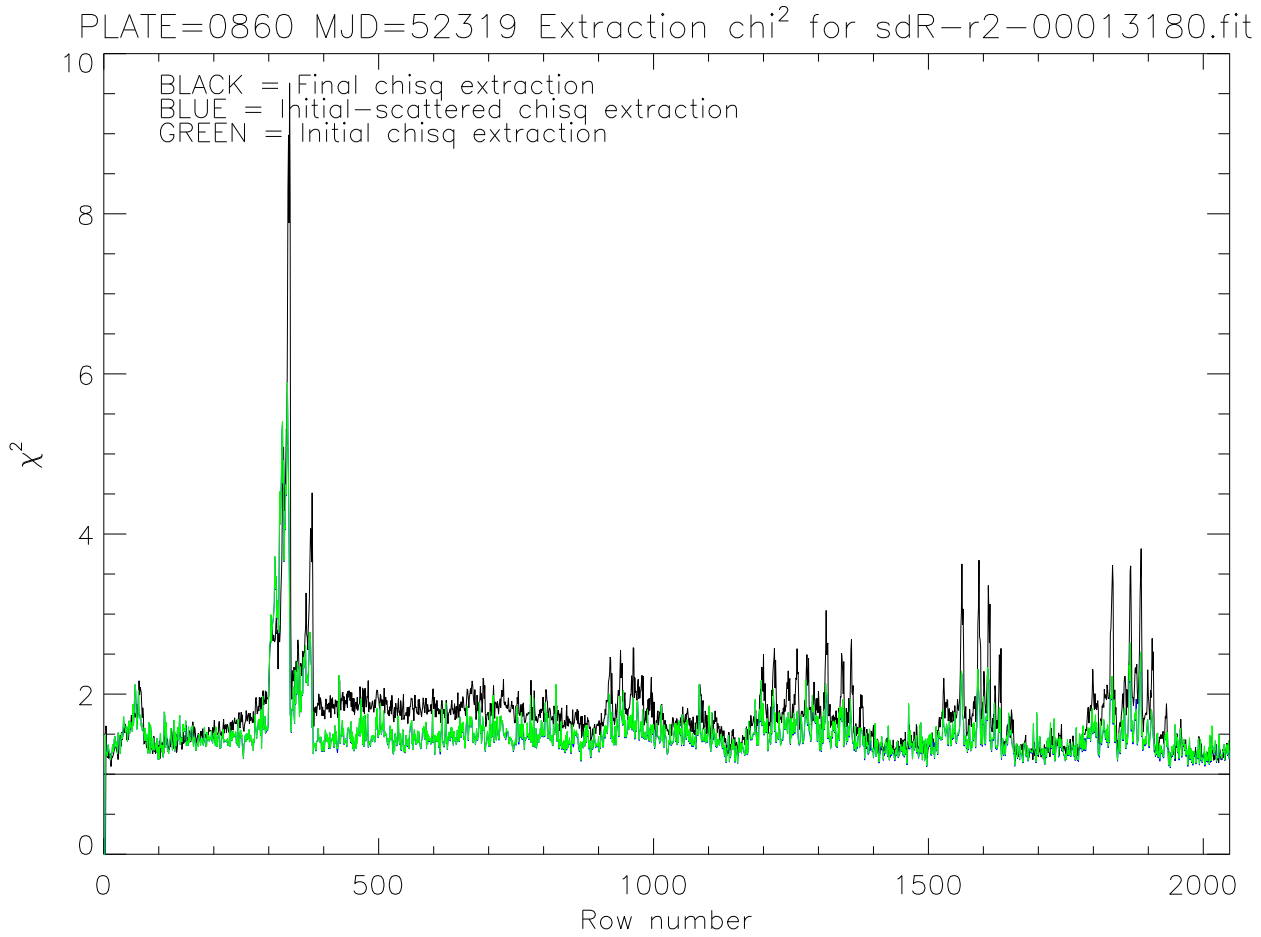

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:10:31 2008

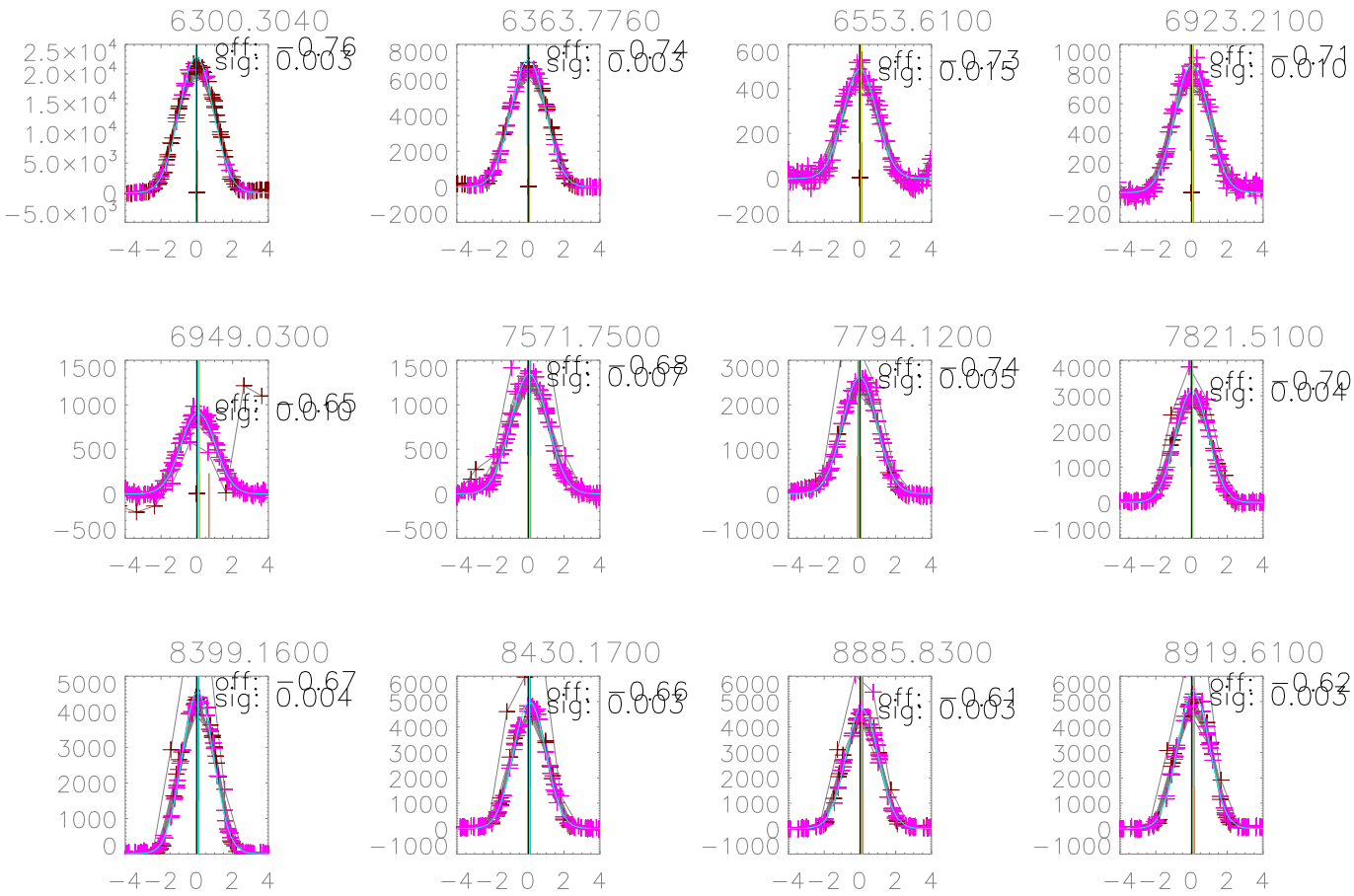

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013180.fi
38.2
49.1
49.1
49.1
38.2
38.2
27.3
27.3
16.4
16.4
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

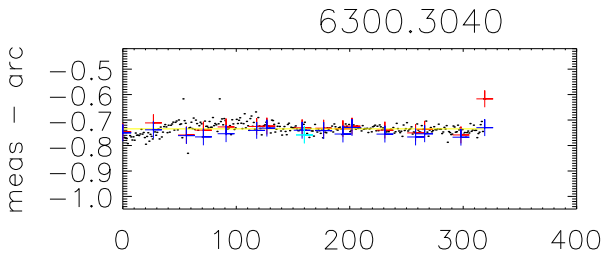

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013180.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 13.691
Max value = 54.341
Sun Feb 24 20:11:24 2008

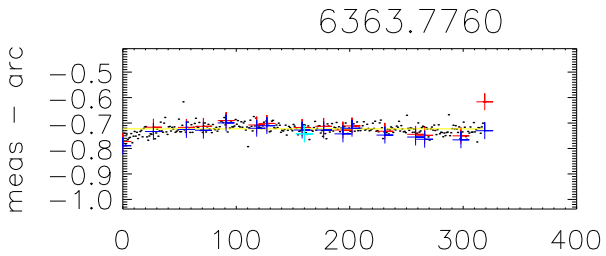

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013180.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.6
13.2
18.6
13.2
18.6
18.6
13.2
18.6

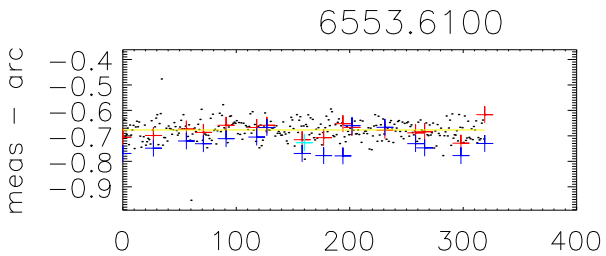

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013180.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 13.395
Max value = 20.746
Sun Feb 24 20:13:55 2008

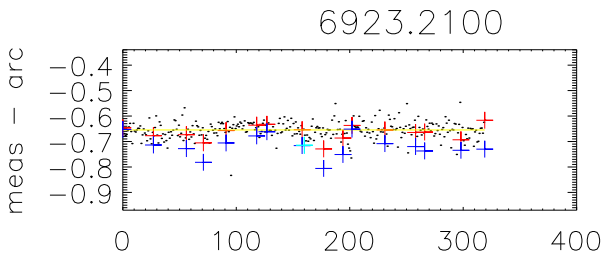

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r2-00013180.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

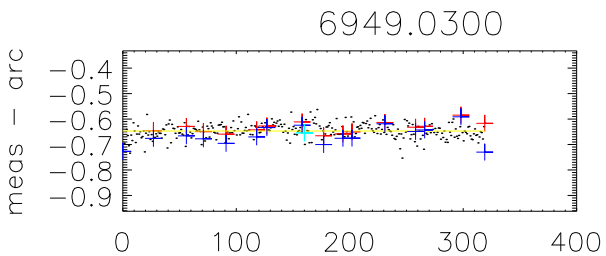

6300.3040
off: −0.76
sig: 0.003
6363.7760
off: −0.74
sig: 0.003
6553.6100
off: −0.73
sig: 0.015
6923.2100
off: −0.71
sig: 0.010
6949.0300
off: −0.65
sig: 0.010
7571.7500
off: −0.68
sig: 0.007
7794.1200
off: −0.74
sig: 0.005
7821.5100
off: −0.70
sig: 0.004
8399.1600
off: −0.67
sig: 0.004
8430.1700
off: −0.66
sig: 0.003
8885.8300
off: −0.61
sig: 0.003
8919.6100
off: −0.62
sig: 0.003

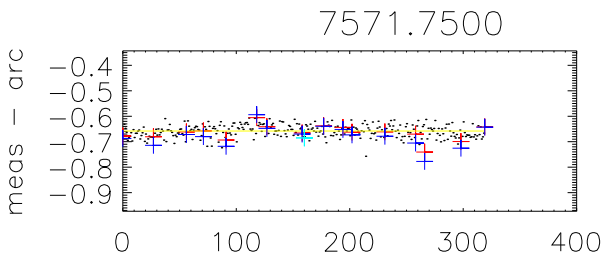

6300.3040
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

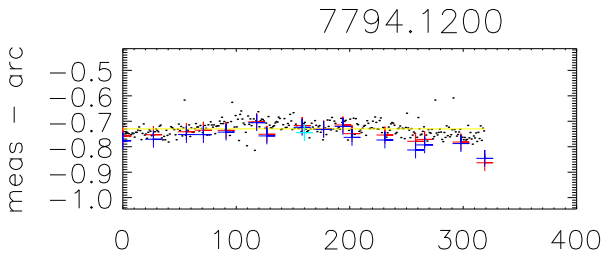

6363.7760
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

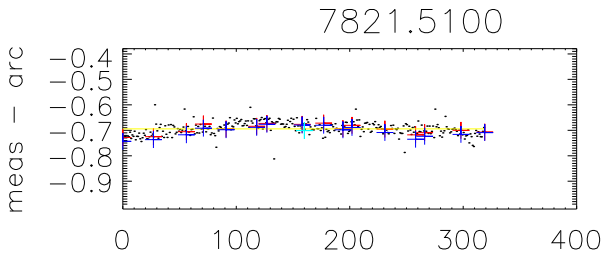

6553.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

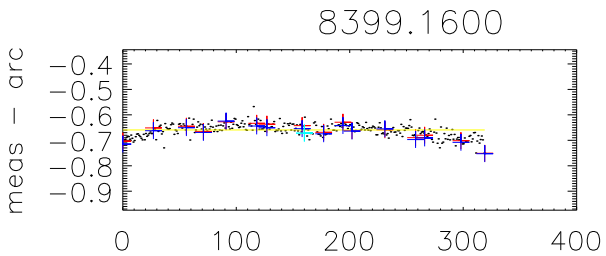

6923.2100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

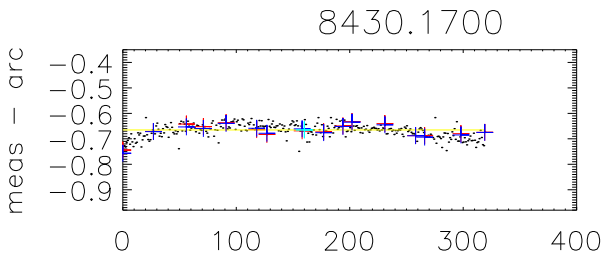

6949.0300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

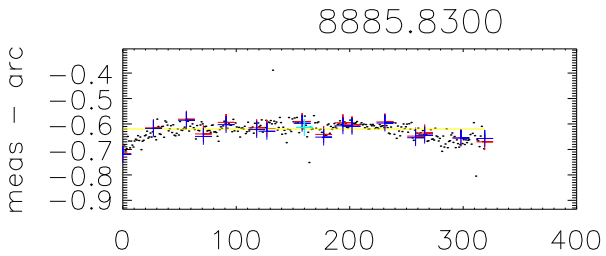

7571.7500
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

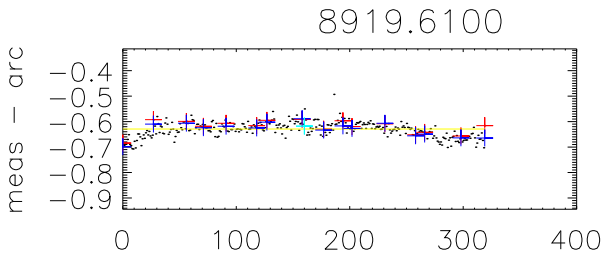

7794.1200
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

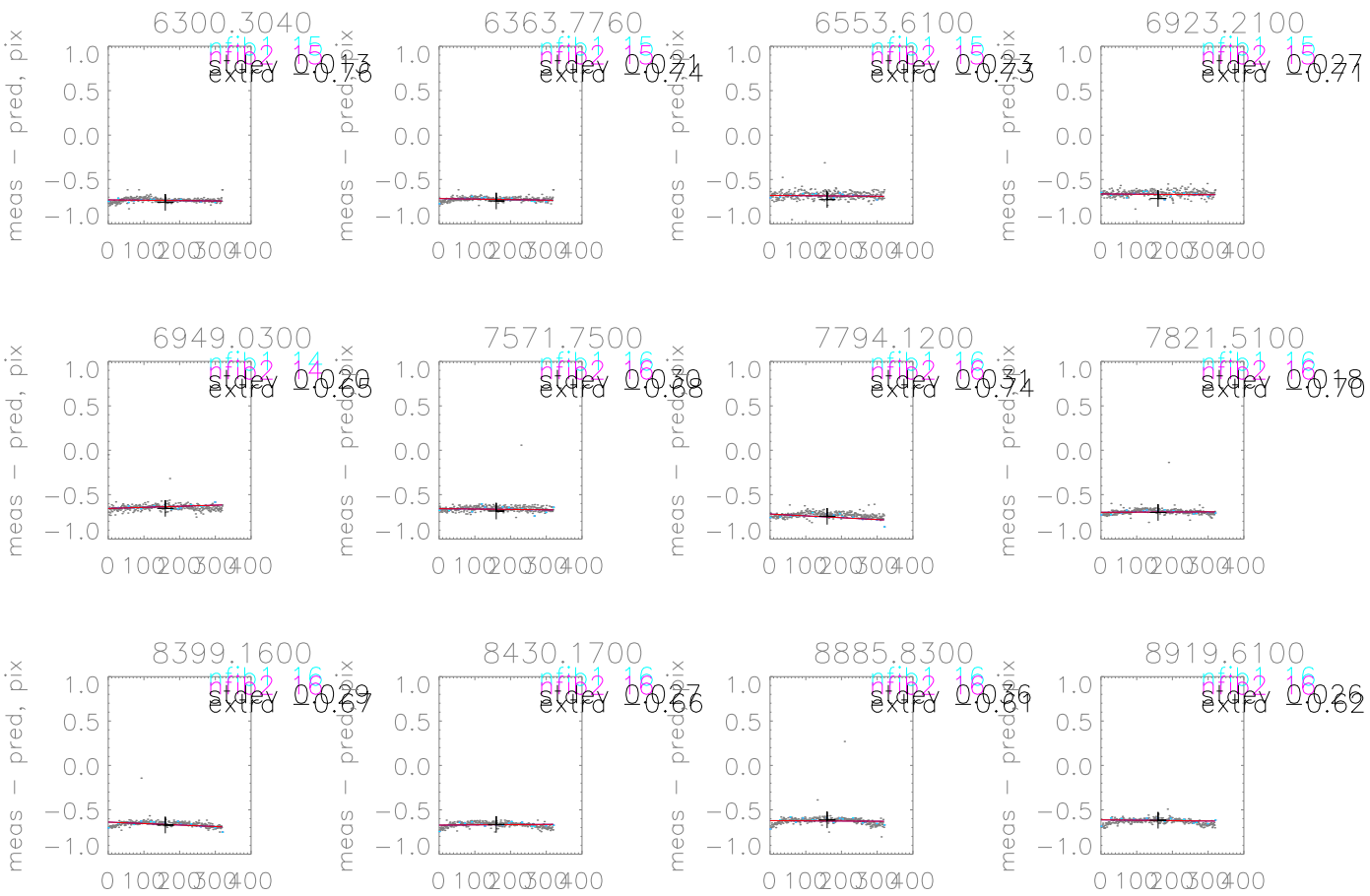

7821.5100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

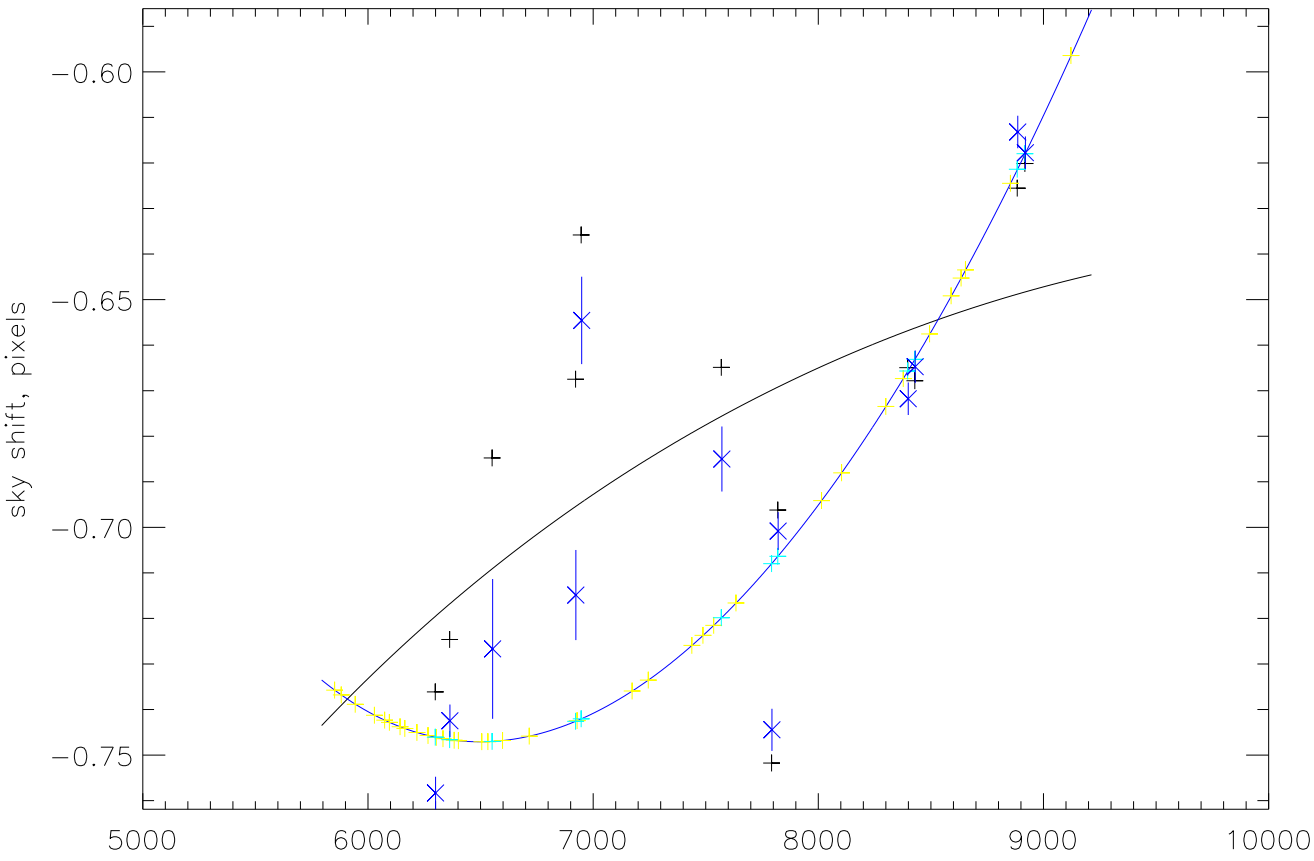

8399.1600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

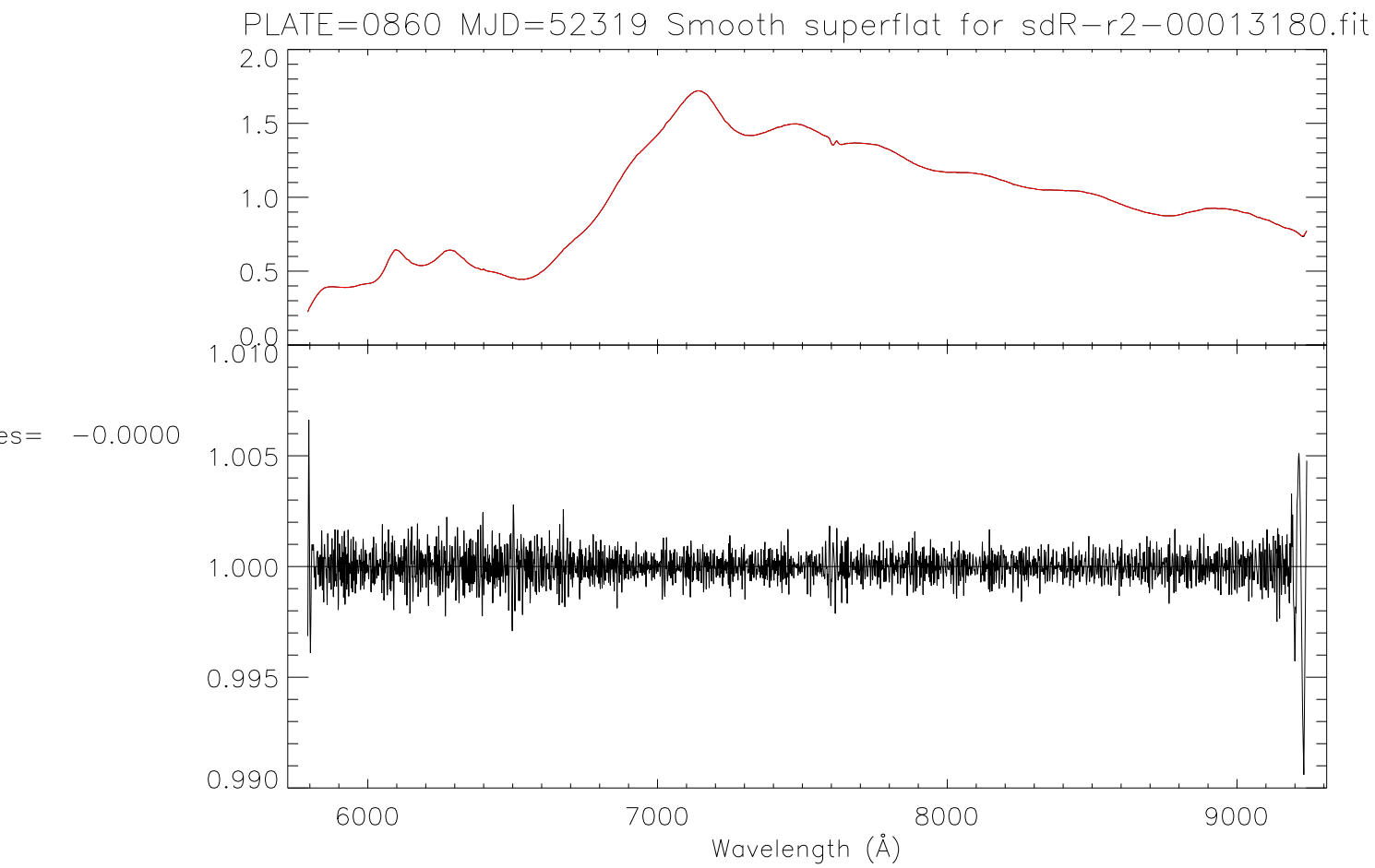

8430.1700
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

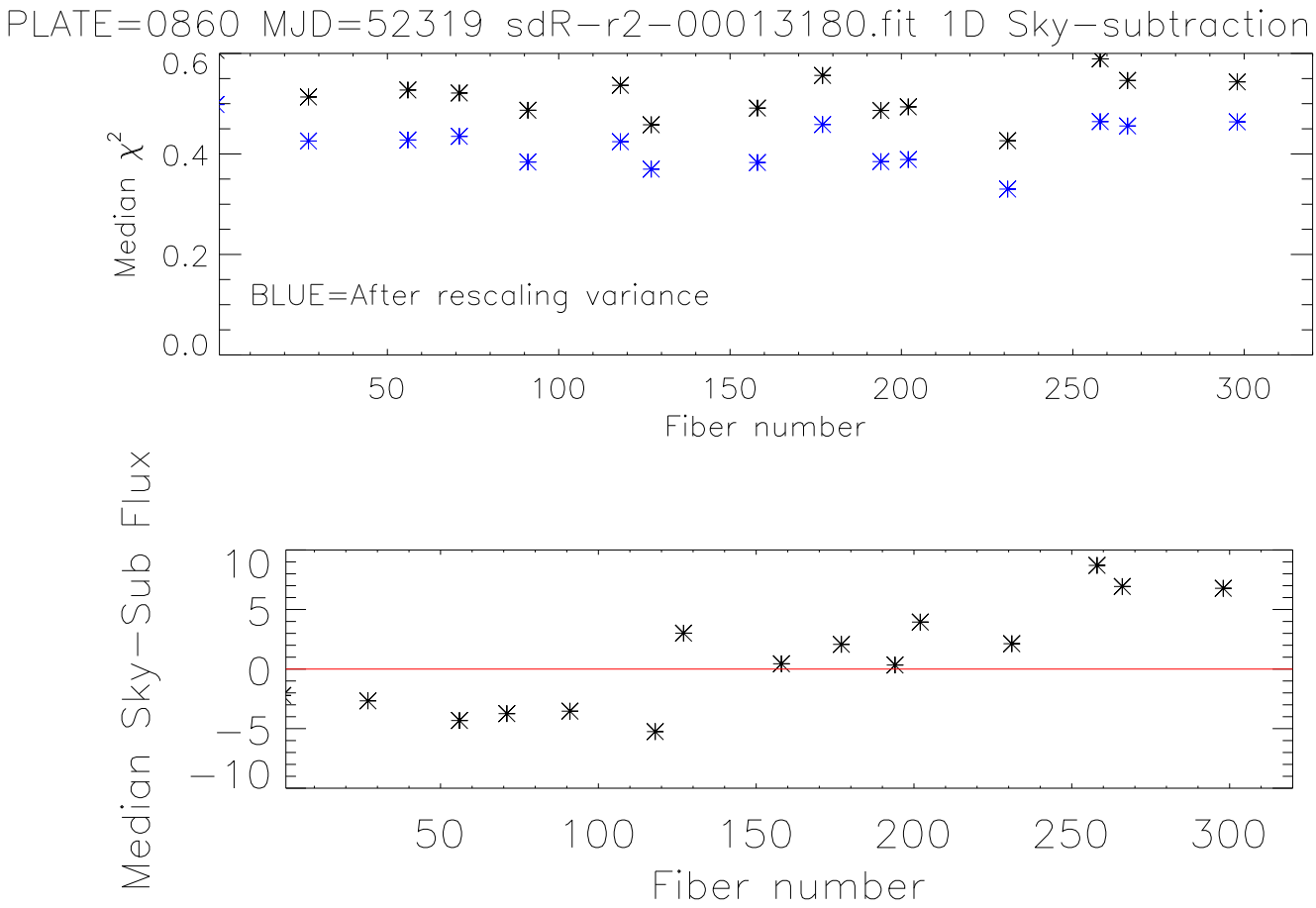

8885.8300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

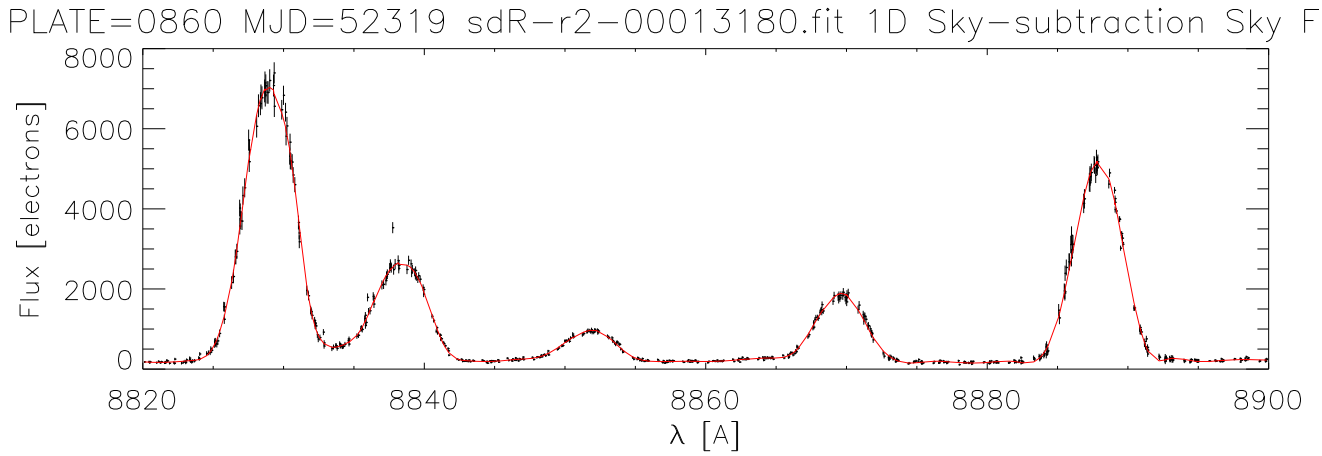

8919.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

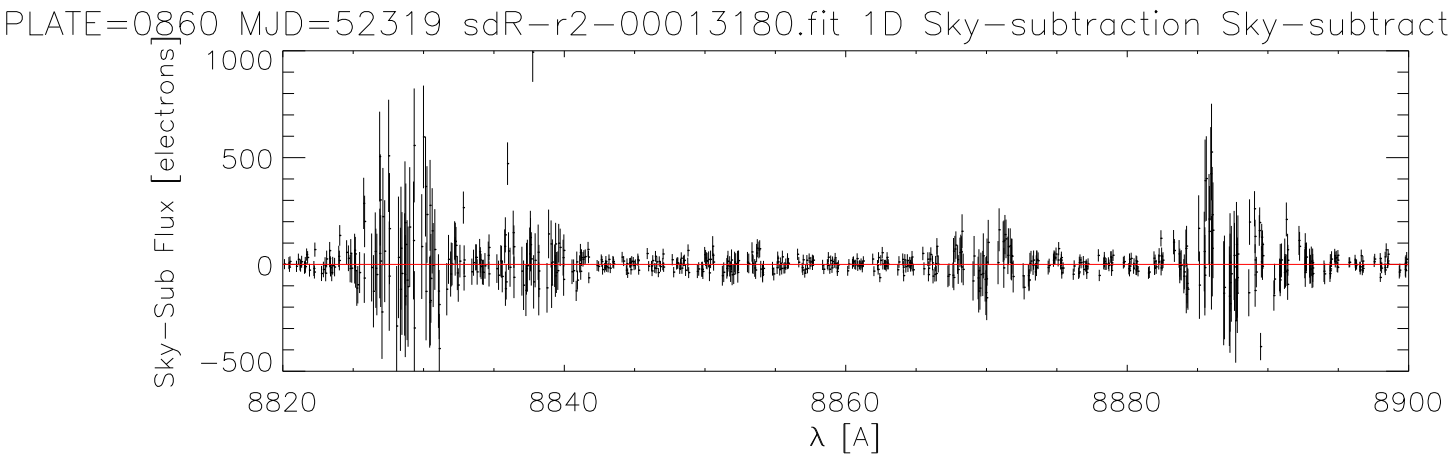

6300.3040
mfib1 15
mfib2 15
stdev 0.73
extra 0.76
6363.7760
mfib1 15
mfib2 15
stdev 0.71
extra 0.74
6553.6100
mfib1 15
mfib2 15
stdev 0.73
extra 0.73
6923.2100
mfib1 15
mfib2 15
stdev 0.67
extra 0.71
6949.0300
mfib1 14
mfib2 15
stdev 0.70
extra 0.69
7571.7500
mfib1 16
mfib2 16
stdev 0.70
extra 0.68
7794.1200
mfib1 16
mfib2 16
stdev 0.71
extra 0.74
7821.5100
mfib1 16
mfib2 16
stdev 0.68
extra 0.70
8399.1600
mfib1 16
mfib2 16
stdev 0.69
extra 0.67
8430.1700
mfib1 16
mfib2 16
stdev 0.67
extra 0.66
8885.8300
mfib1 16
mfib2 16
stdev 0.66
extra 0.64
8919.6100
mfib1 16
mfib2 16
stdev 0.66
extra 0.62
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

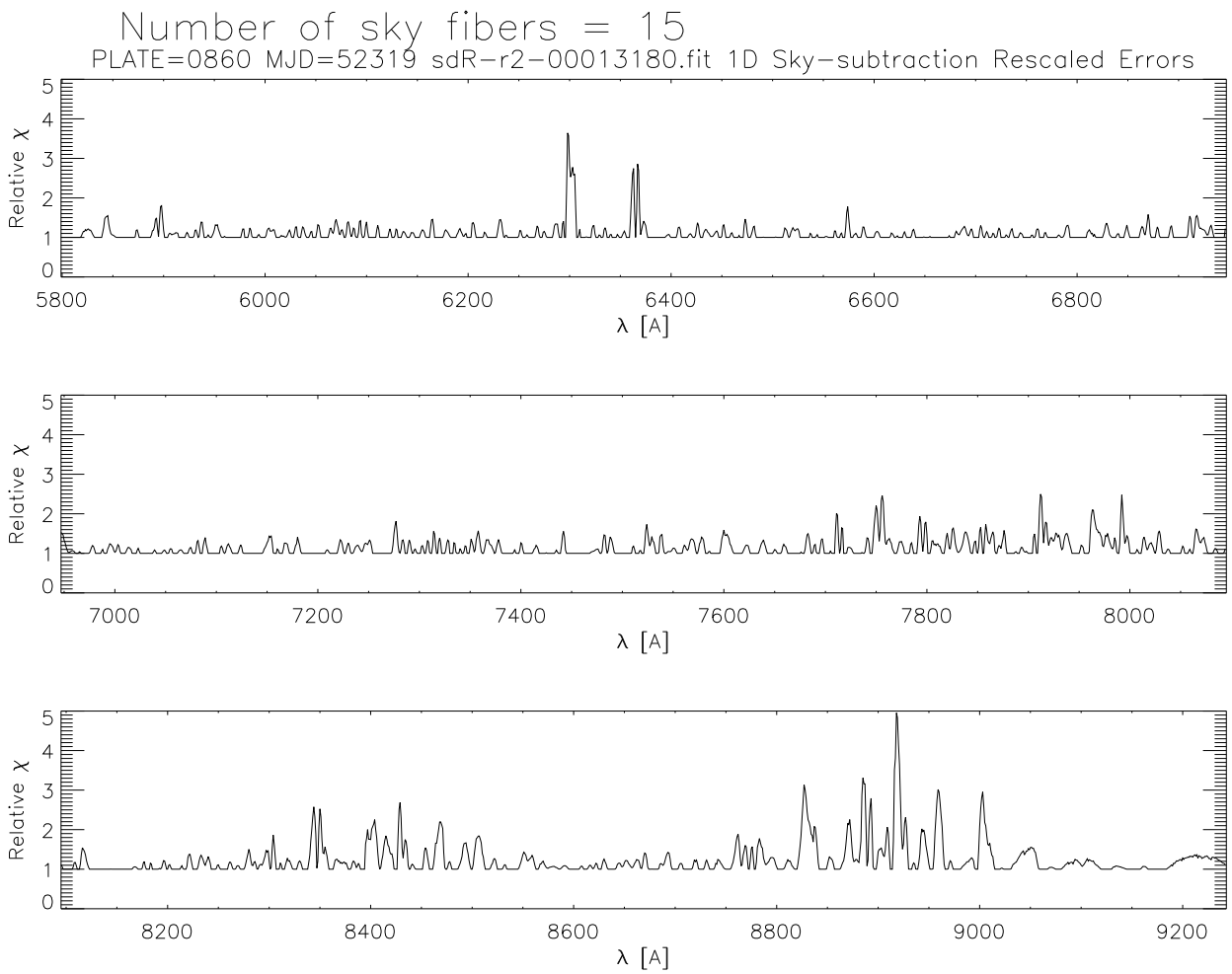

−0.60
−0.65
−0.70
−0.75
sky shift, pixels
5000
6000
7000
8000
9000
10000

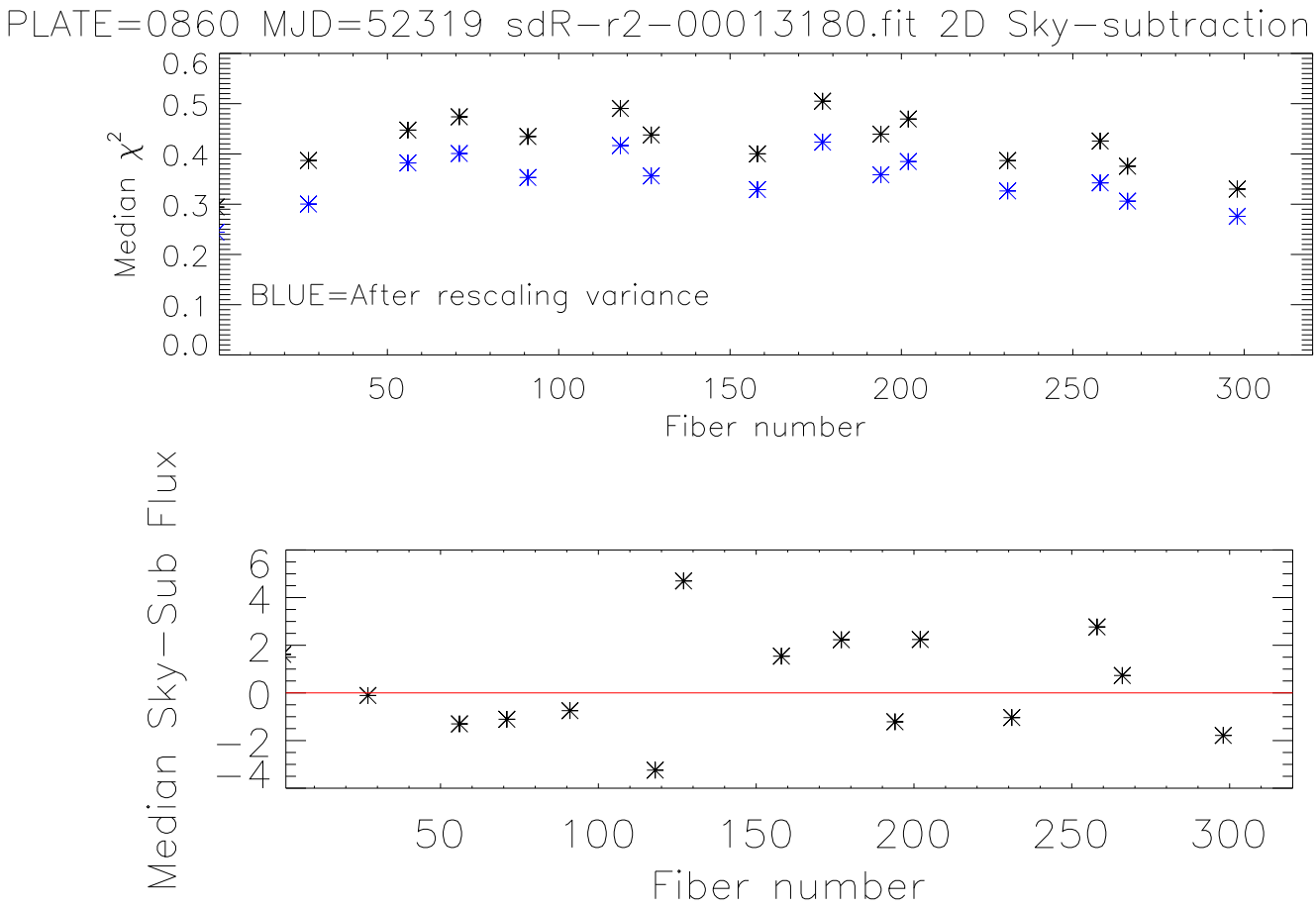

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013180.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

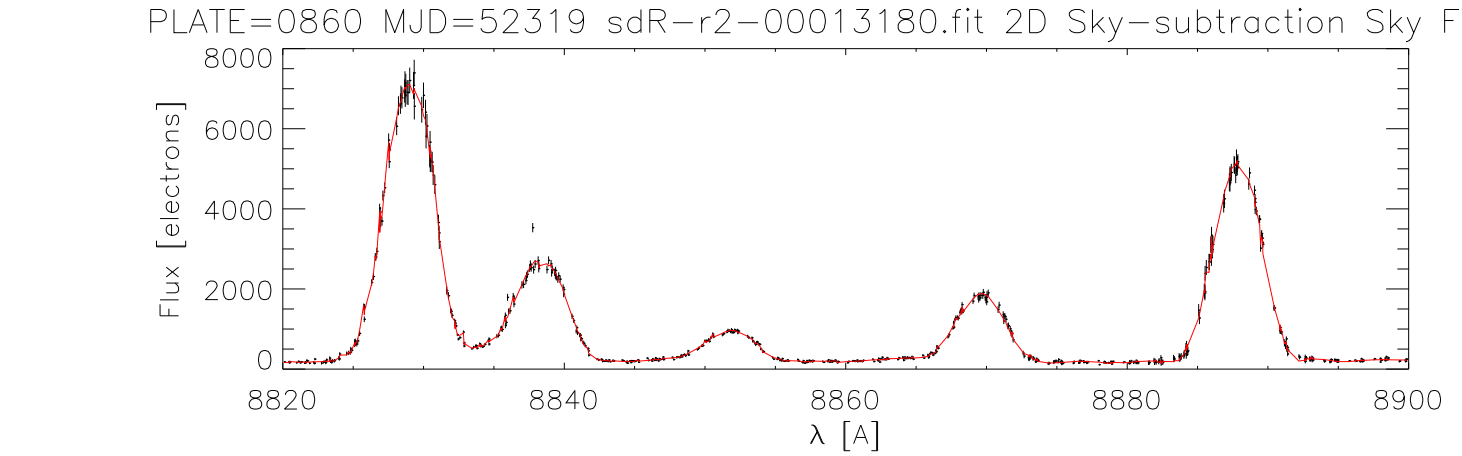

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

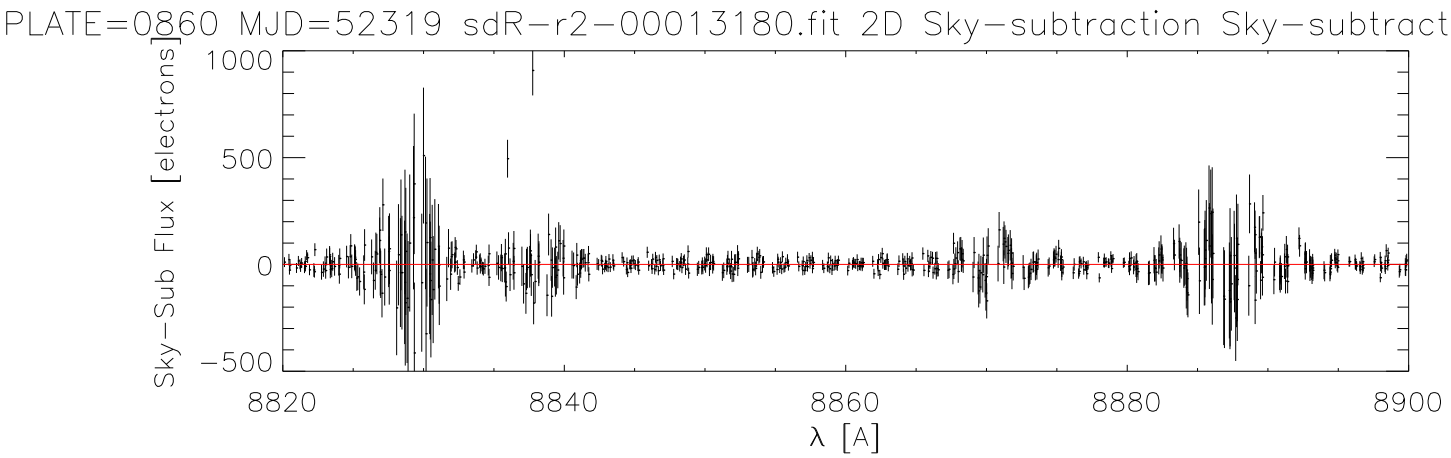

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

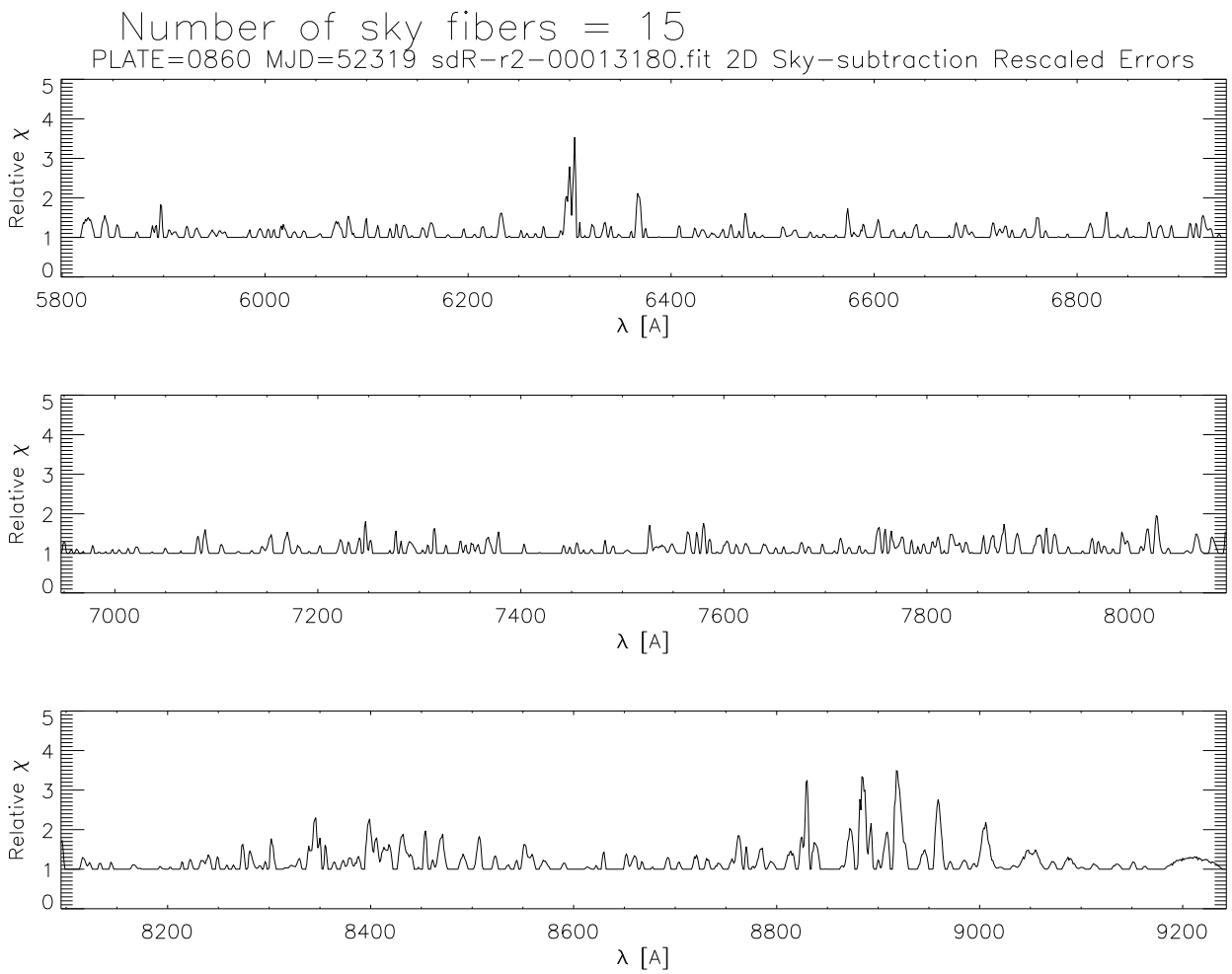

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

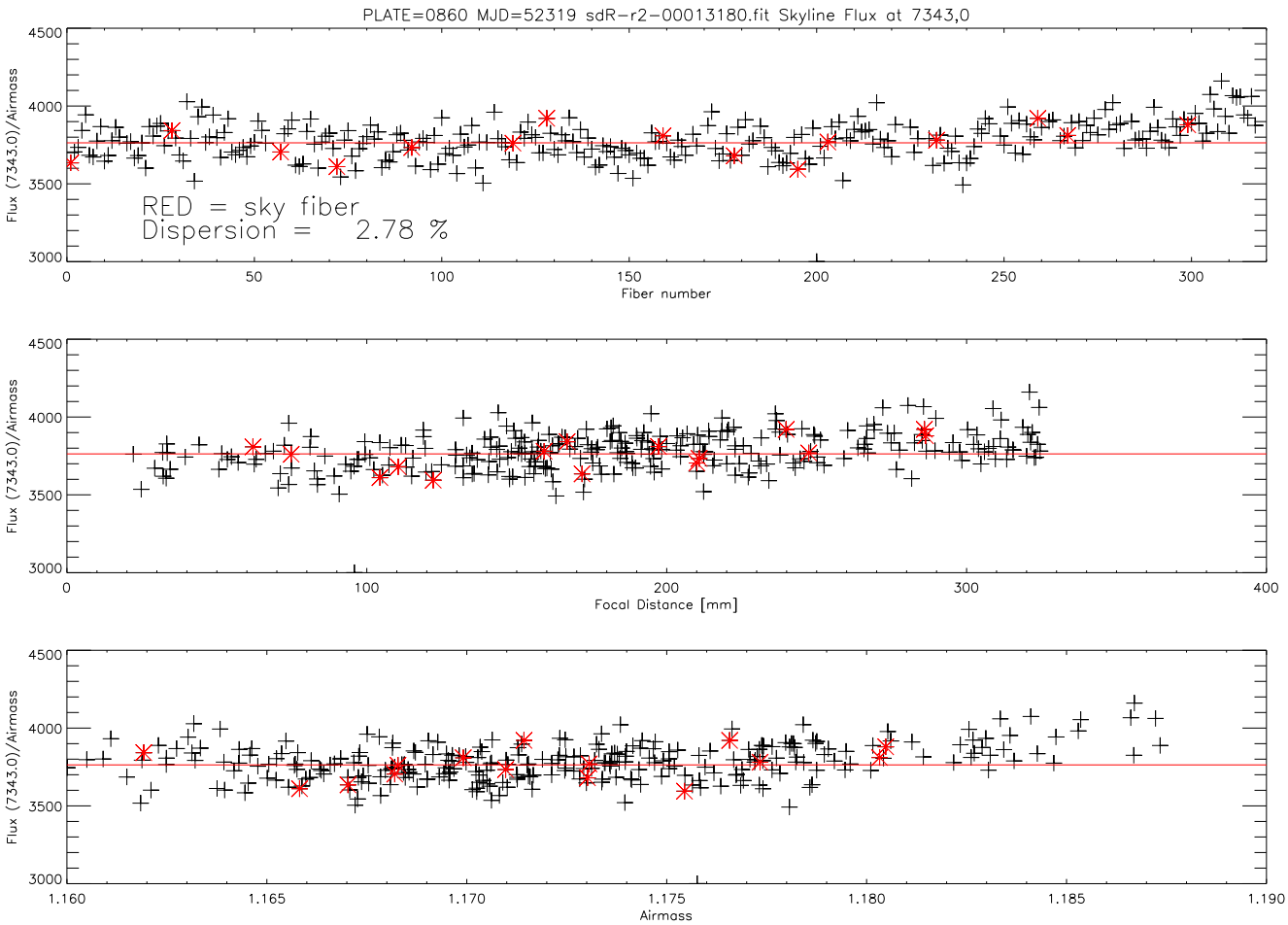

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013180.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

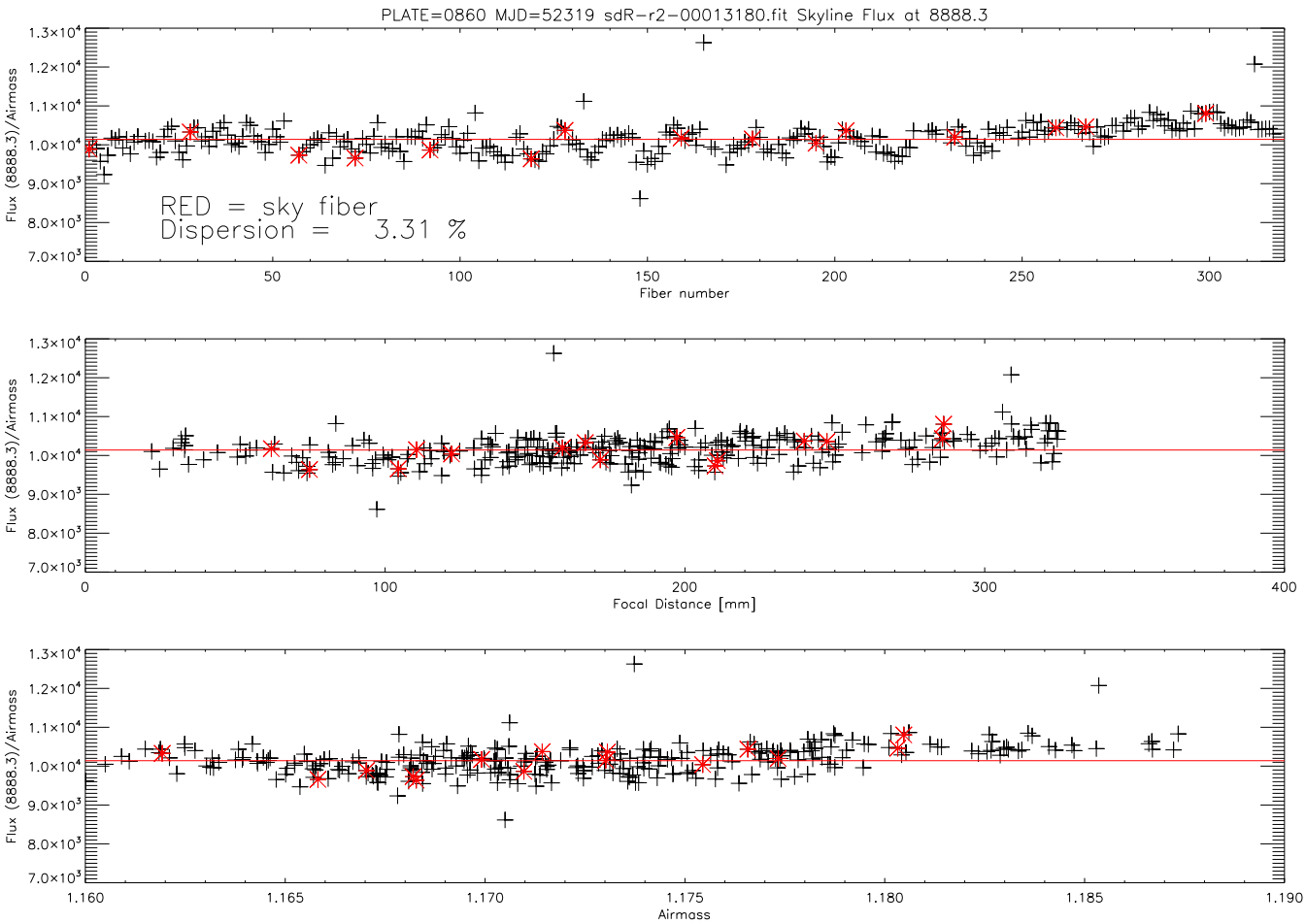

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

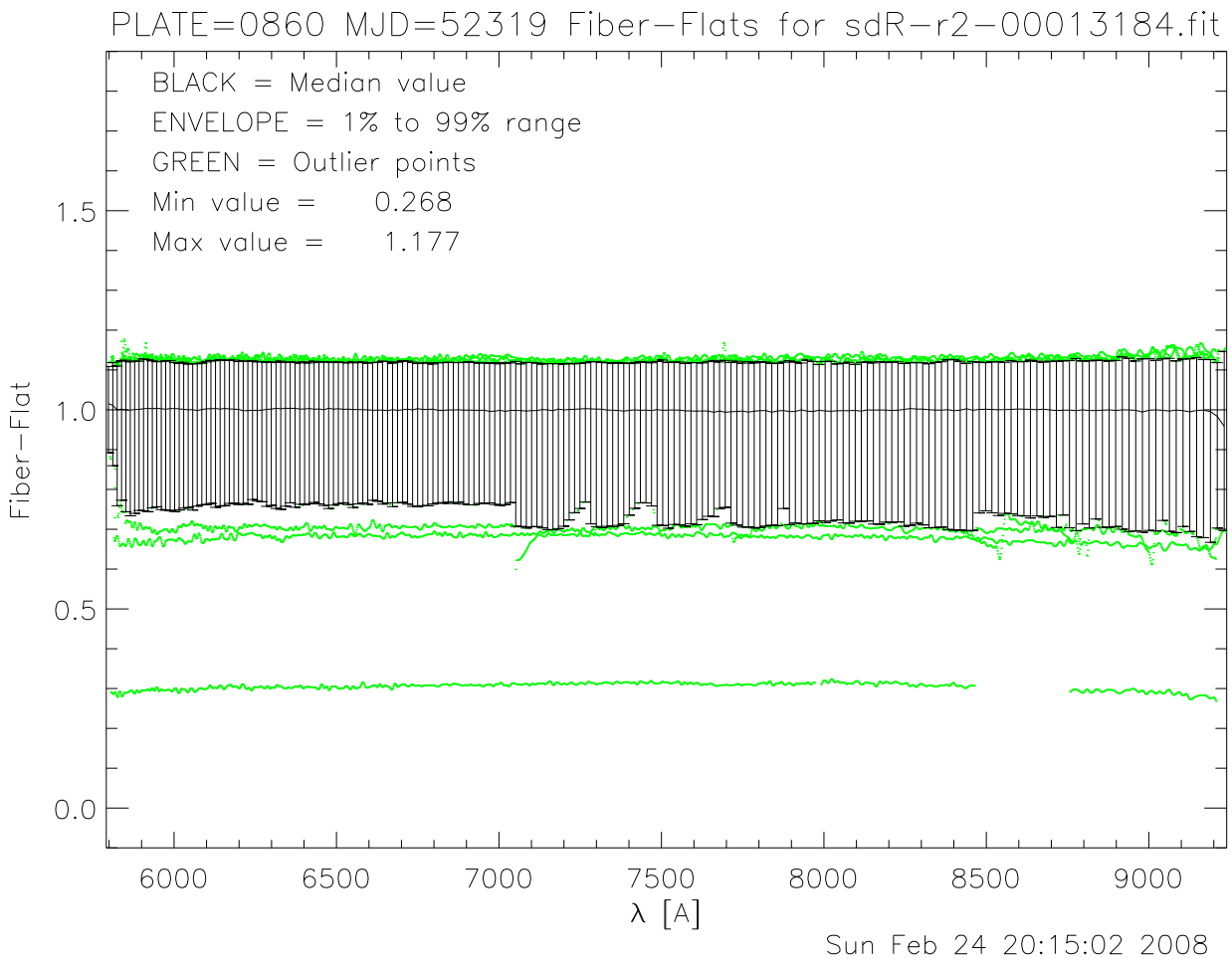

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

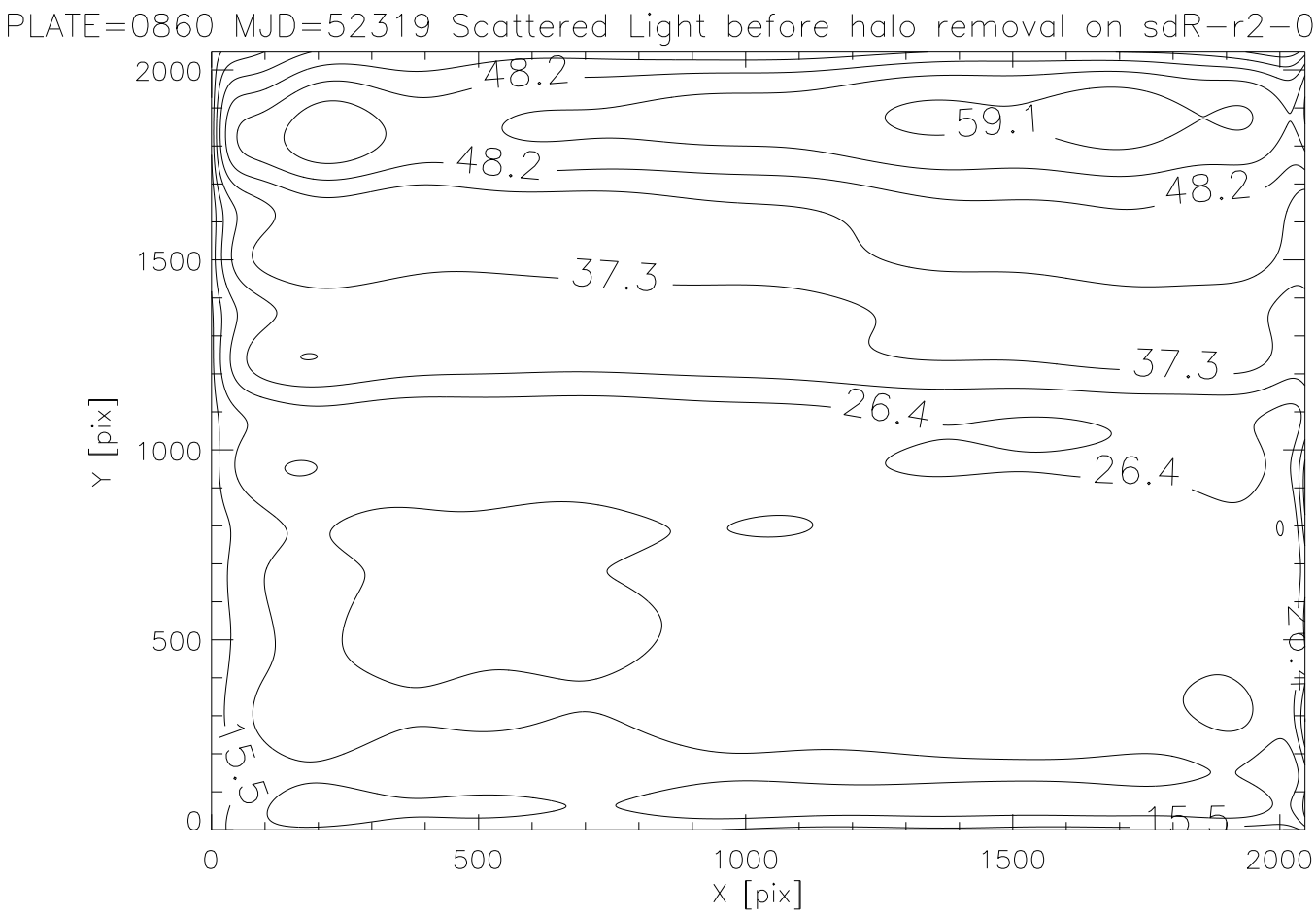

PLATE=0860 MJD=52319 sdR-r2-00013180.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

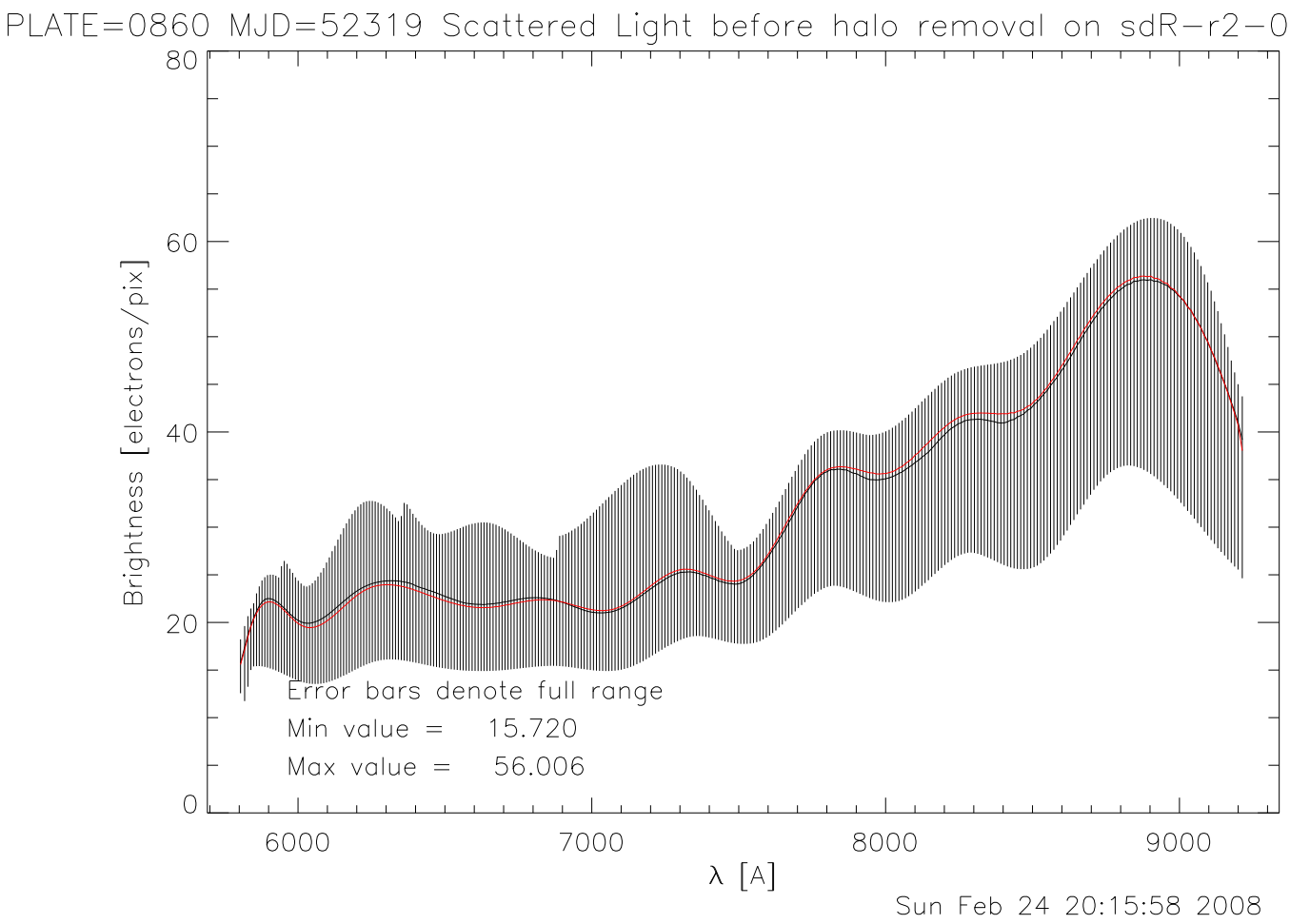

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013180.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

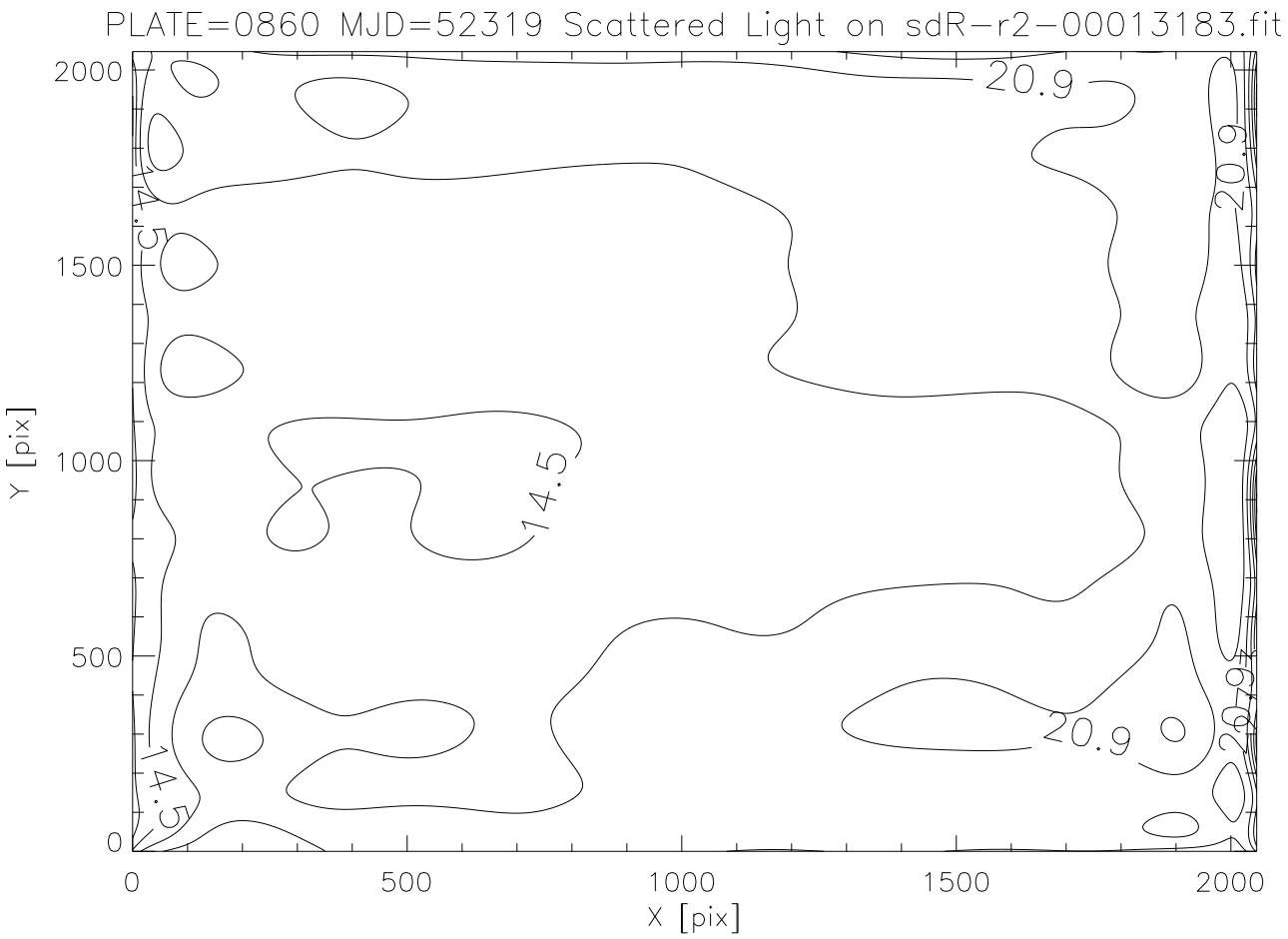

PLATE=0860 MJD=52319 sdR-r2-00013180.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.78 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

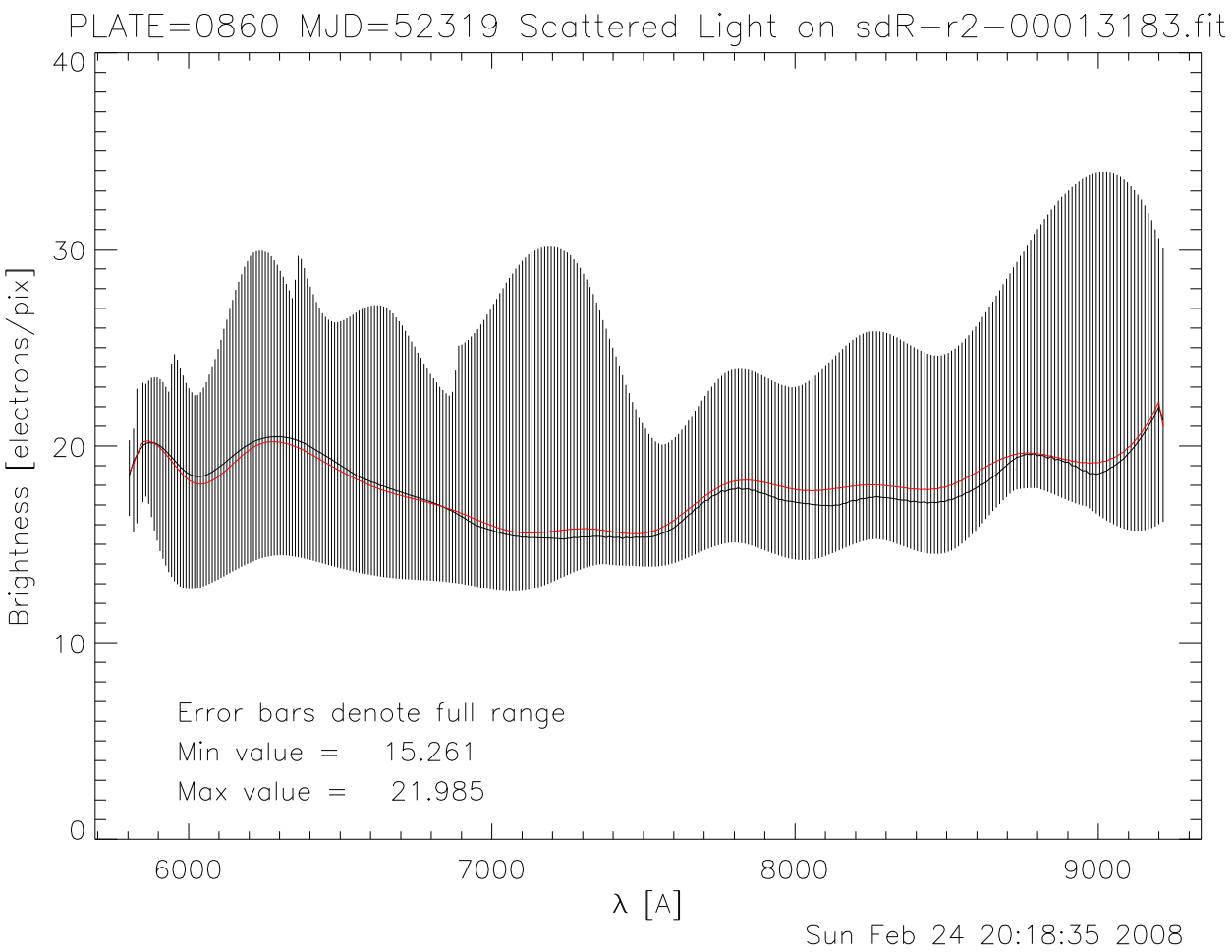

PLATE=0860 MJD=52319 sdR-r2-00013180.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.31 %
Fiber number
Focal Distance [mm]
Airmass

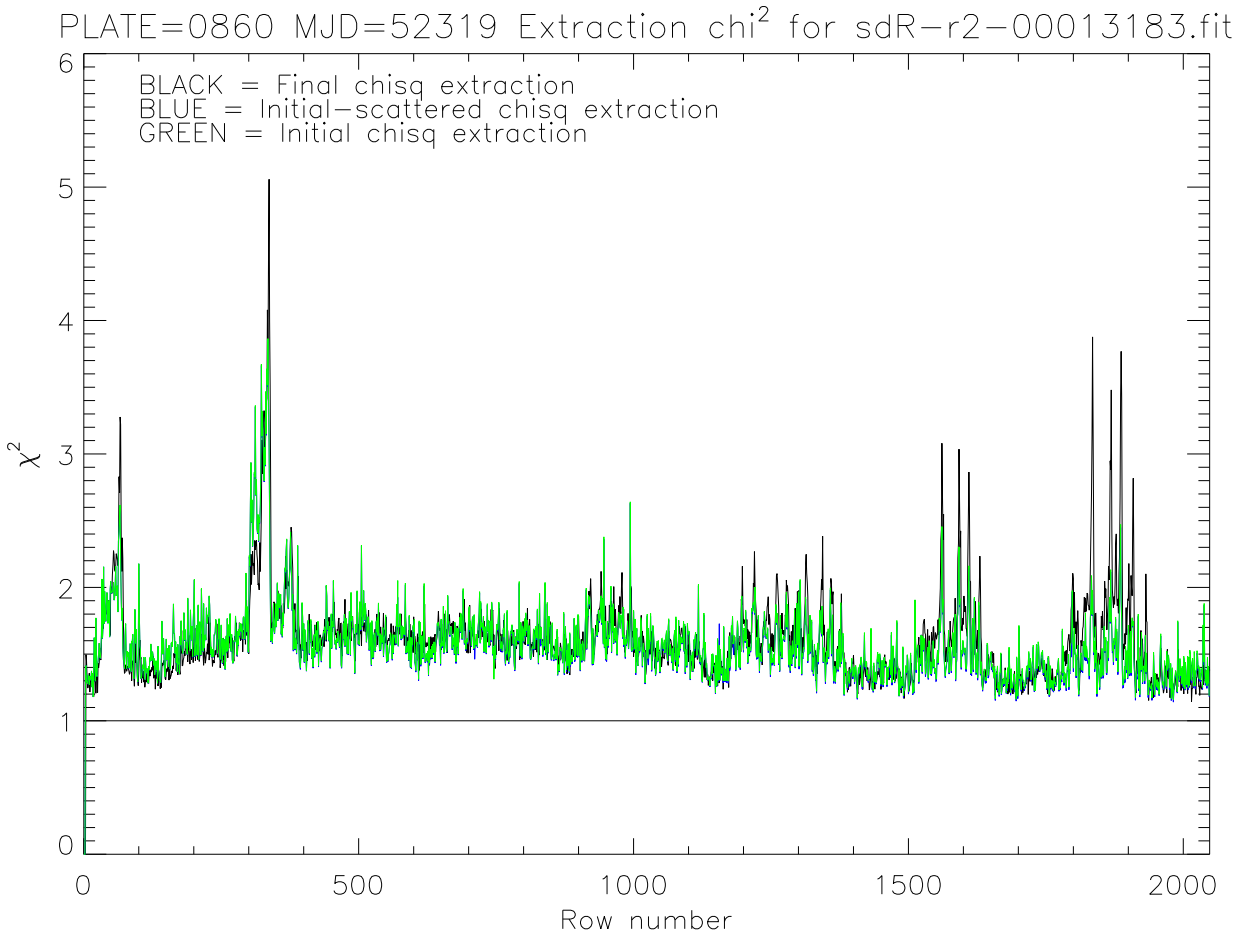

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:15:02 2008

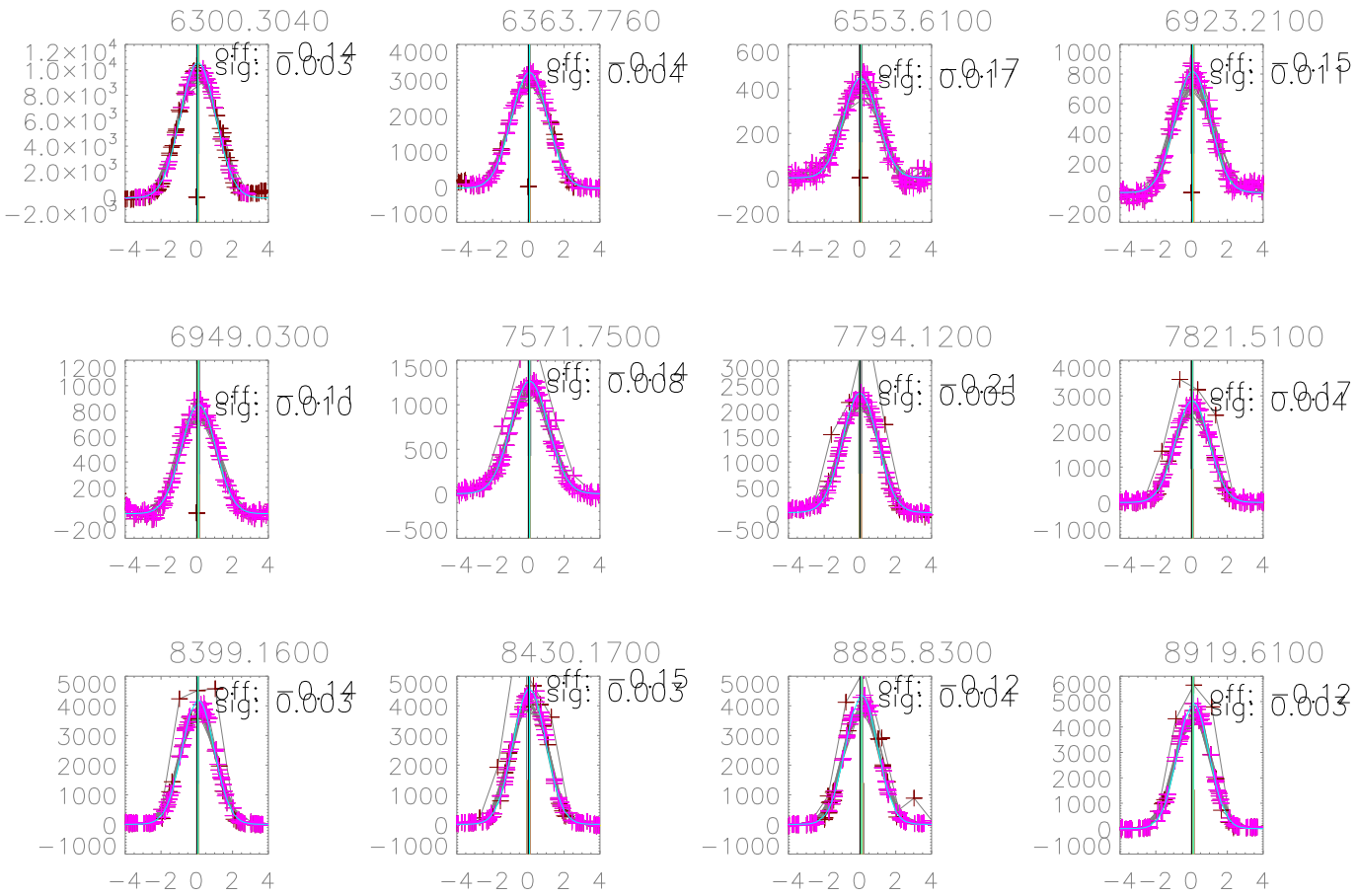

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013183.fi
48.2
59.1
48.2
48.2
37.3
37.3
26.4
26.4
15.5
15.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
+Zp.4

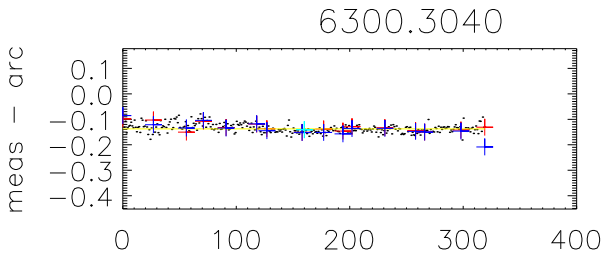

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013183.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 15.720
Max value = 56.006
Sun Feb 24 20:15:58 2008

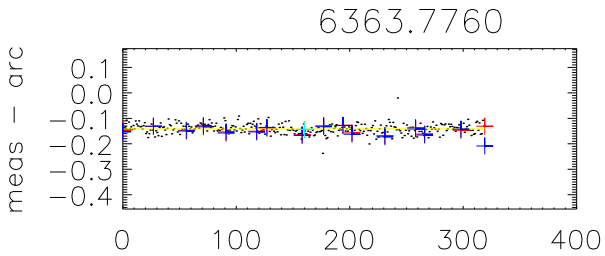

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013183.fit
20.9
14.5
14.5
20.9
20.9
14.5
14.5
20.9
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

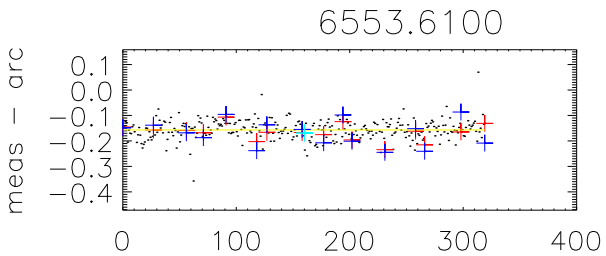

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013183.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 15.261
Max value = 21.985
Sun Feb 24 20:18:35 2008

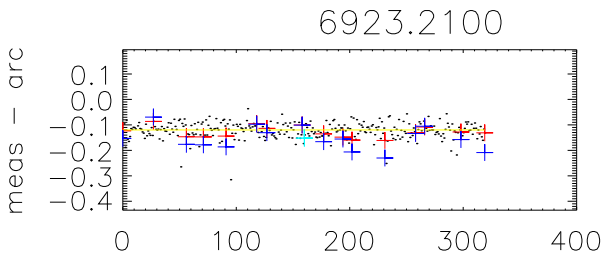

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r2-00013183.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

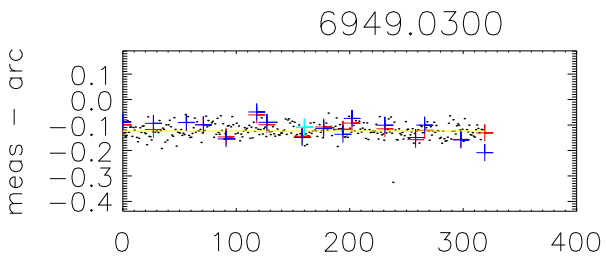

6300.3040
off: −0.14
sig: 0.003
6363.7760
off: −0.14
sig: 0.004
6553.6100
off: −0.17
sig: 0.017
6923.2100
off: −0.15
sig: 0.011
6949.0300
off: −0.11
sig: 0.010
7571.7500
off: −0.14
sig: 0.008
7794.1200
off: −0.21
sig: 0.005
7821.5100
off: −0.17
sig: 0.004
8399.1600
off: −0.14
sig: 0.003
8430.1700
off: −0.15
sig: 0.003
8885.8300
off: −0.12
sig: 0.004
8919.6100
off: −0.12
sig: 0.003

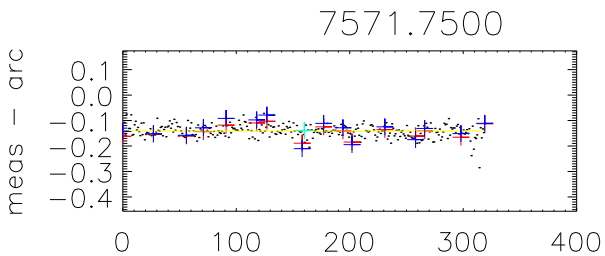

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

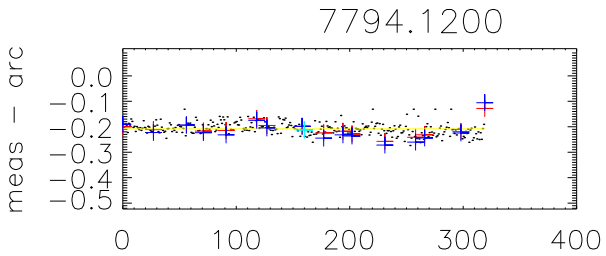

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

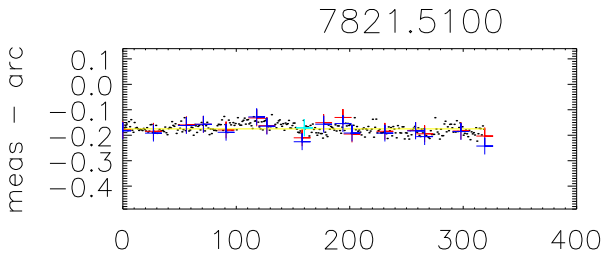

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

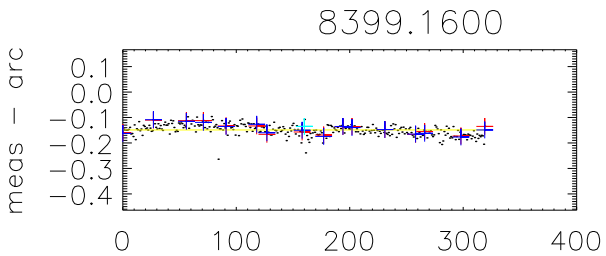

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

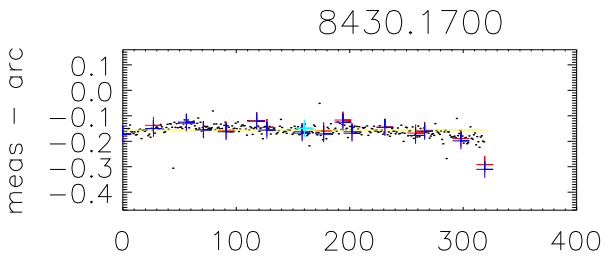

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

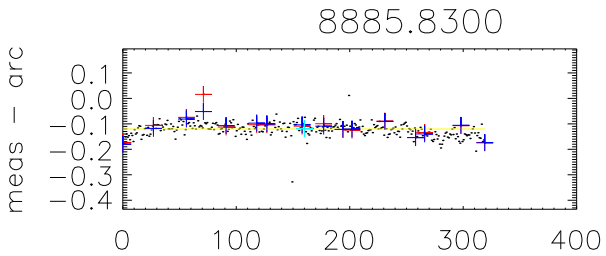

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

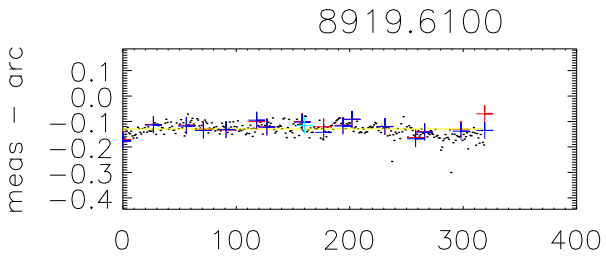

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

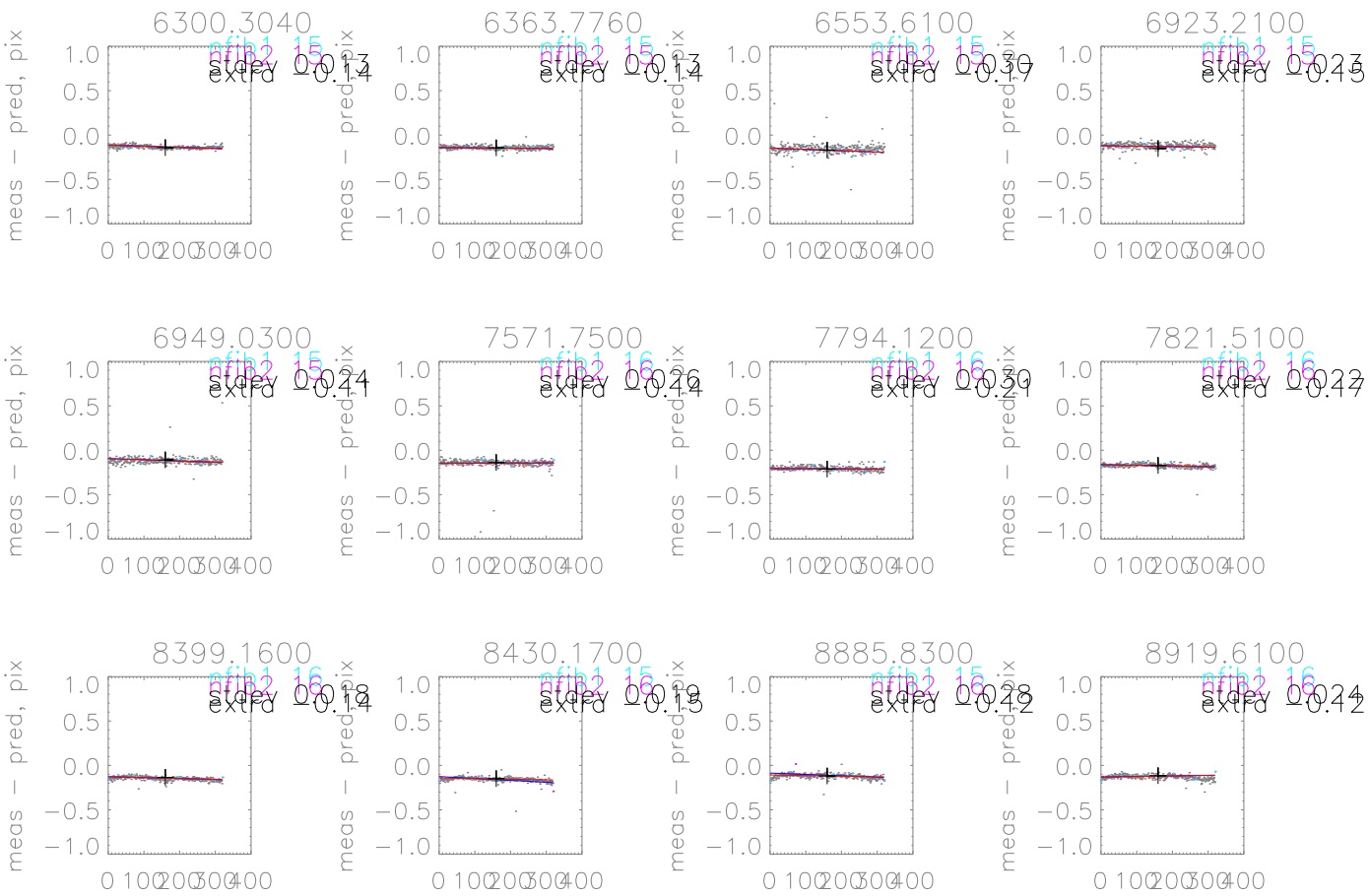

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

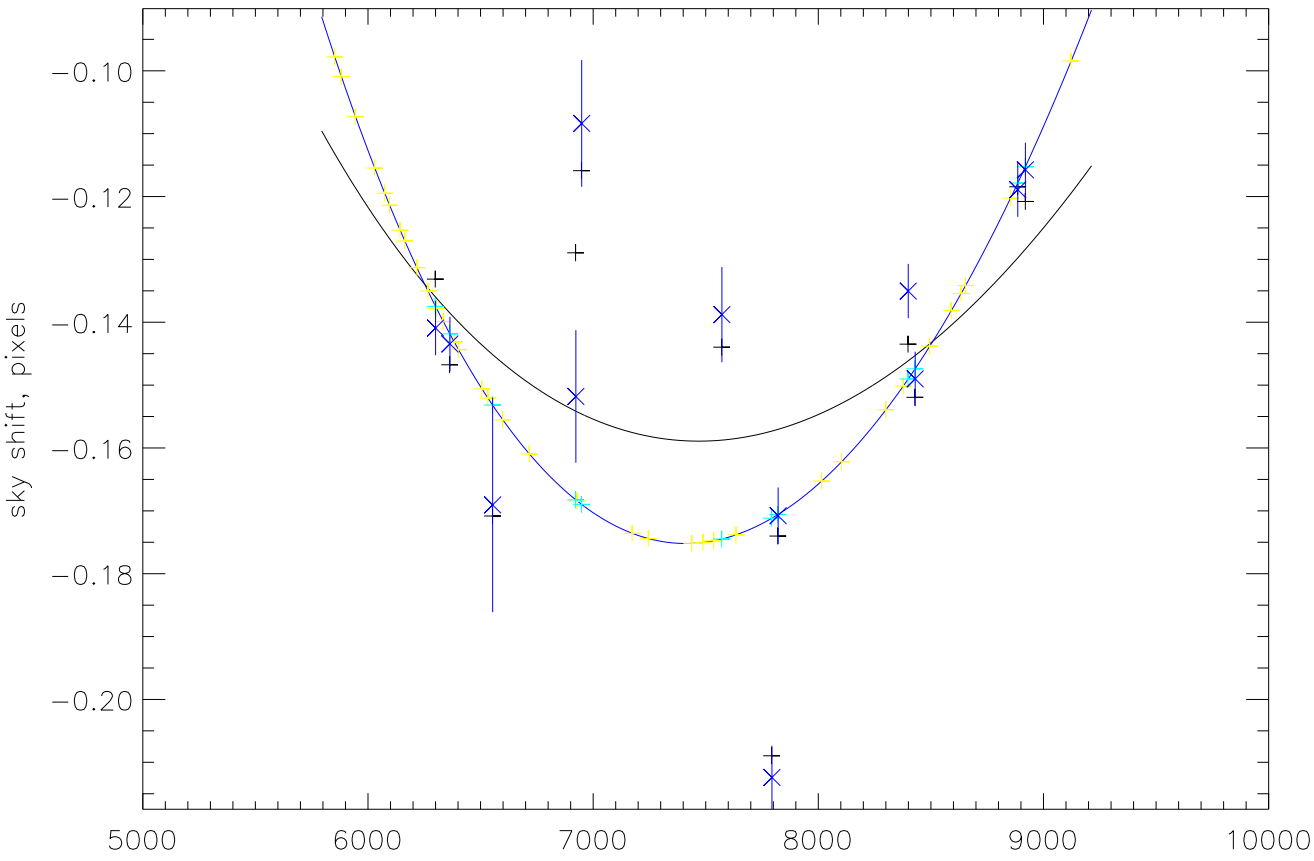

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

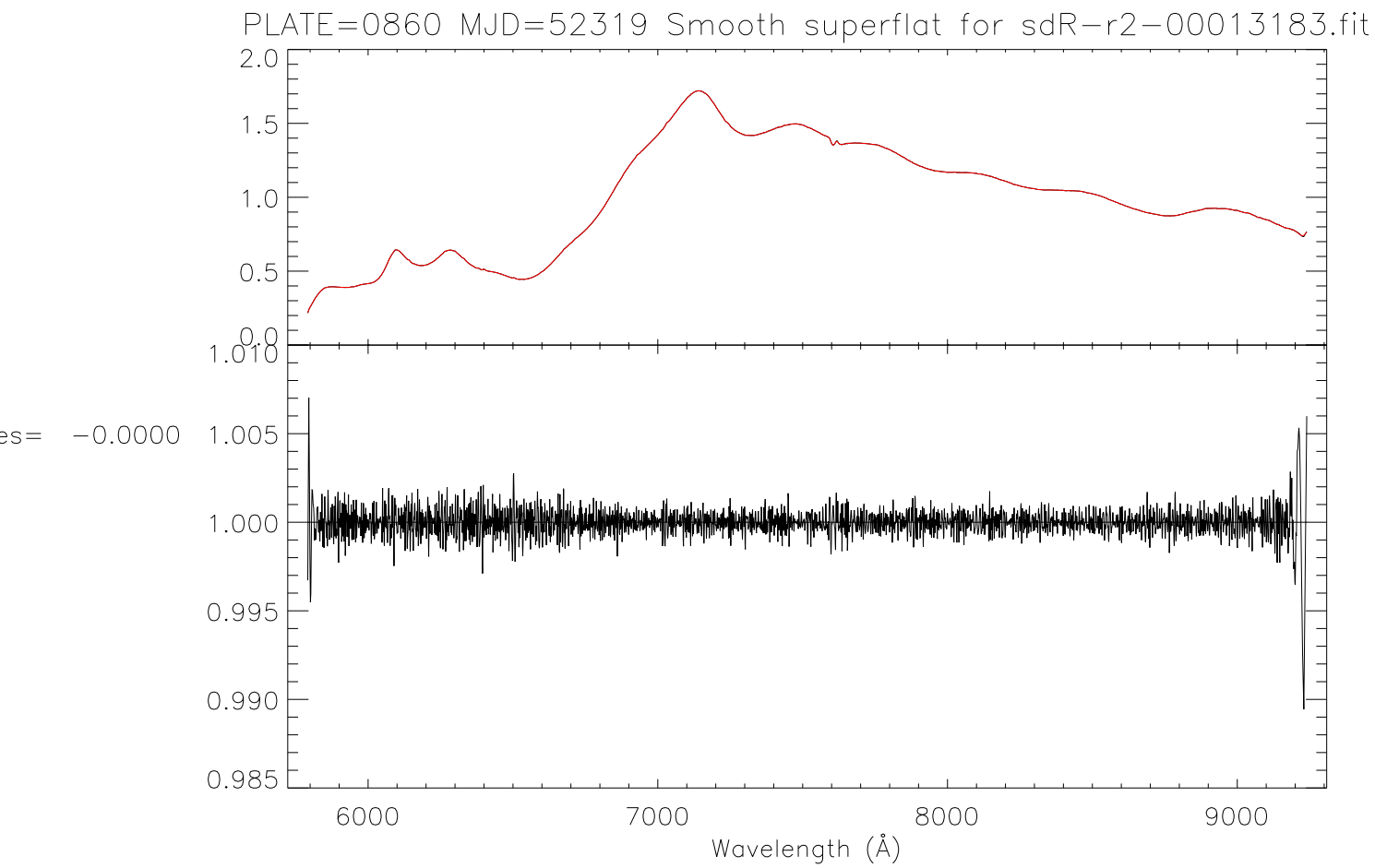

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

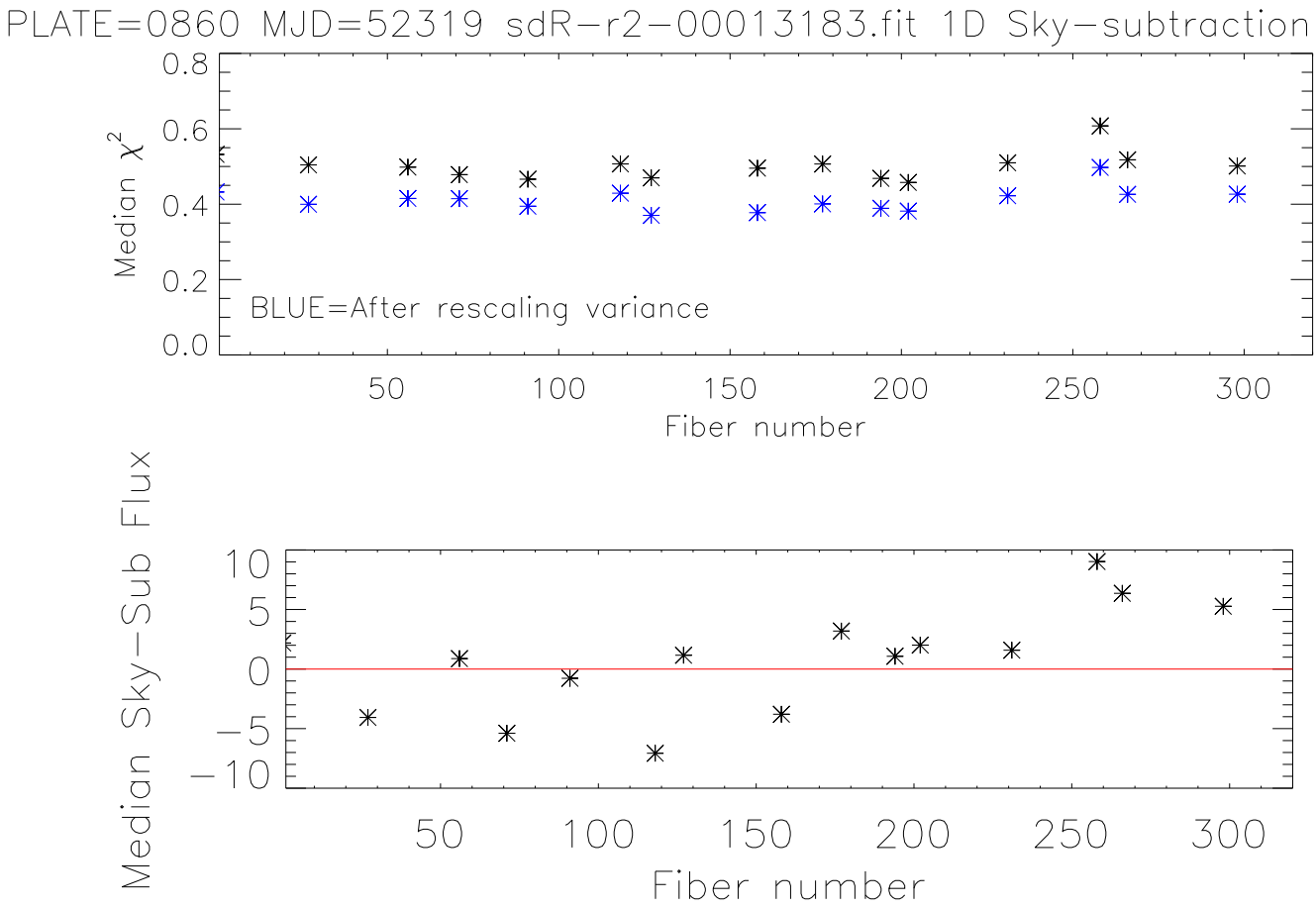

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

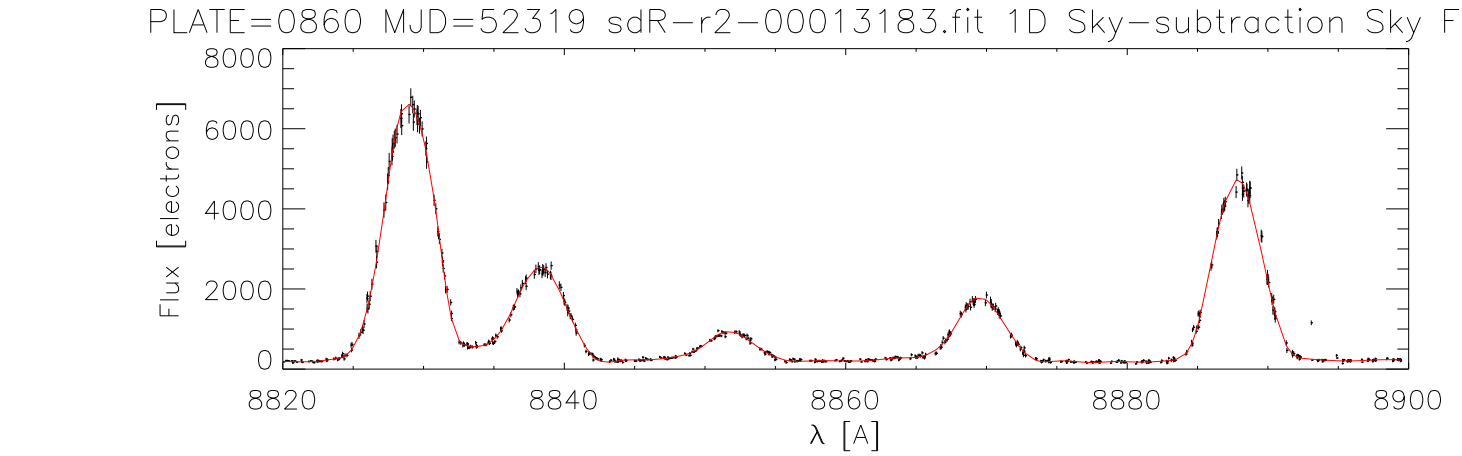

6300.3040
stdev 0.013
extra 0.14
6363.7760
stdev 0.013
extra 0.14
6553.6100
stdev 0.030
extra 0.17
6923.2100
stdev 0.023
extra 0.45
6949.0300
stdev 0.024
extra 0.41
7571.7500
stdev 0.026
extra 0.44
7794.1200
stdev 0.030
extra 0.21
7821.5100
stdev 0.022
extra 0.47
8399.1600
stdev 0.018
extra 0.14
8430.1700
stdev 0.019
extra 0.15
8885.8300
stdev 0.028
extra 0.42
8919.6100
stdev 0.024
extra 0.42
meas − pred, pix

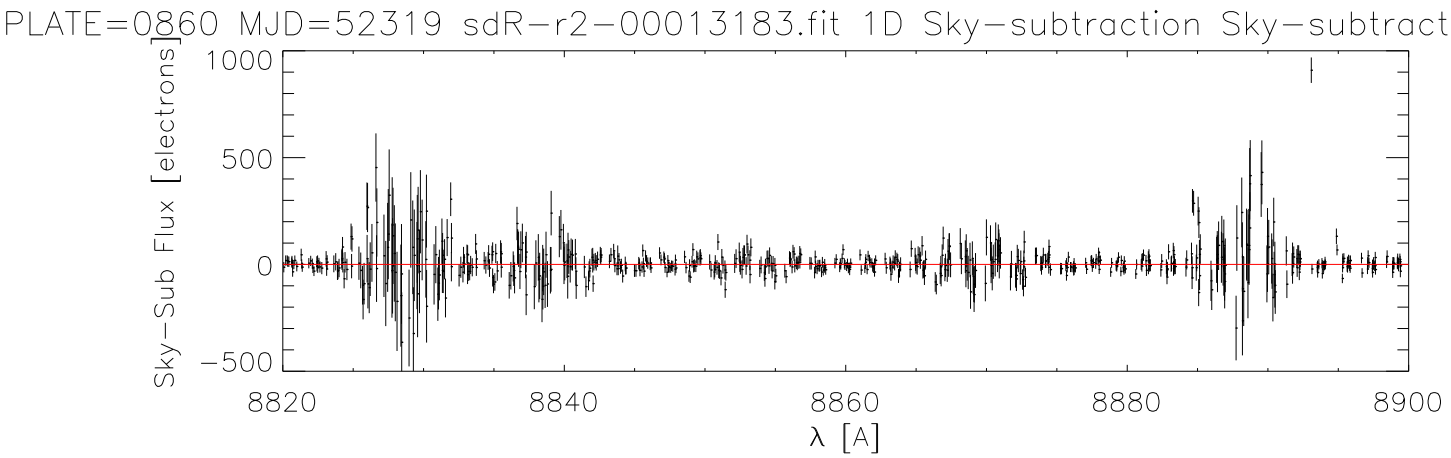

sky shift, pixels
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
5000
6000
7000
8000
9000
10000

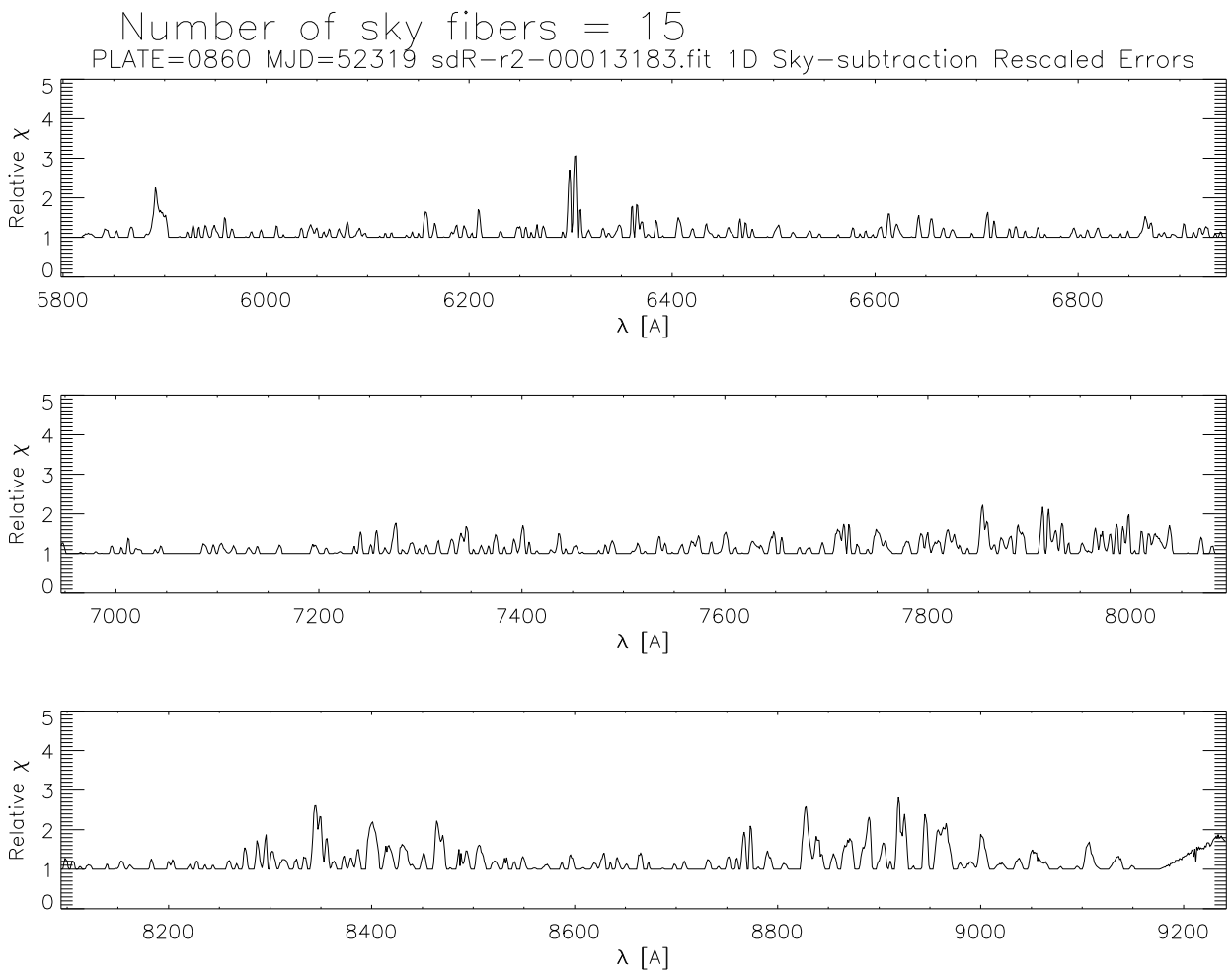

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013183.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

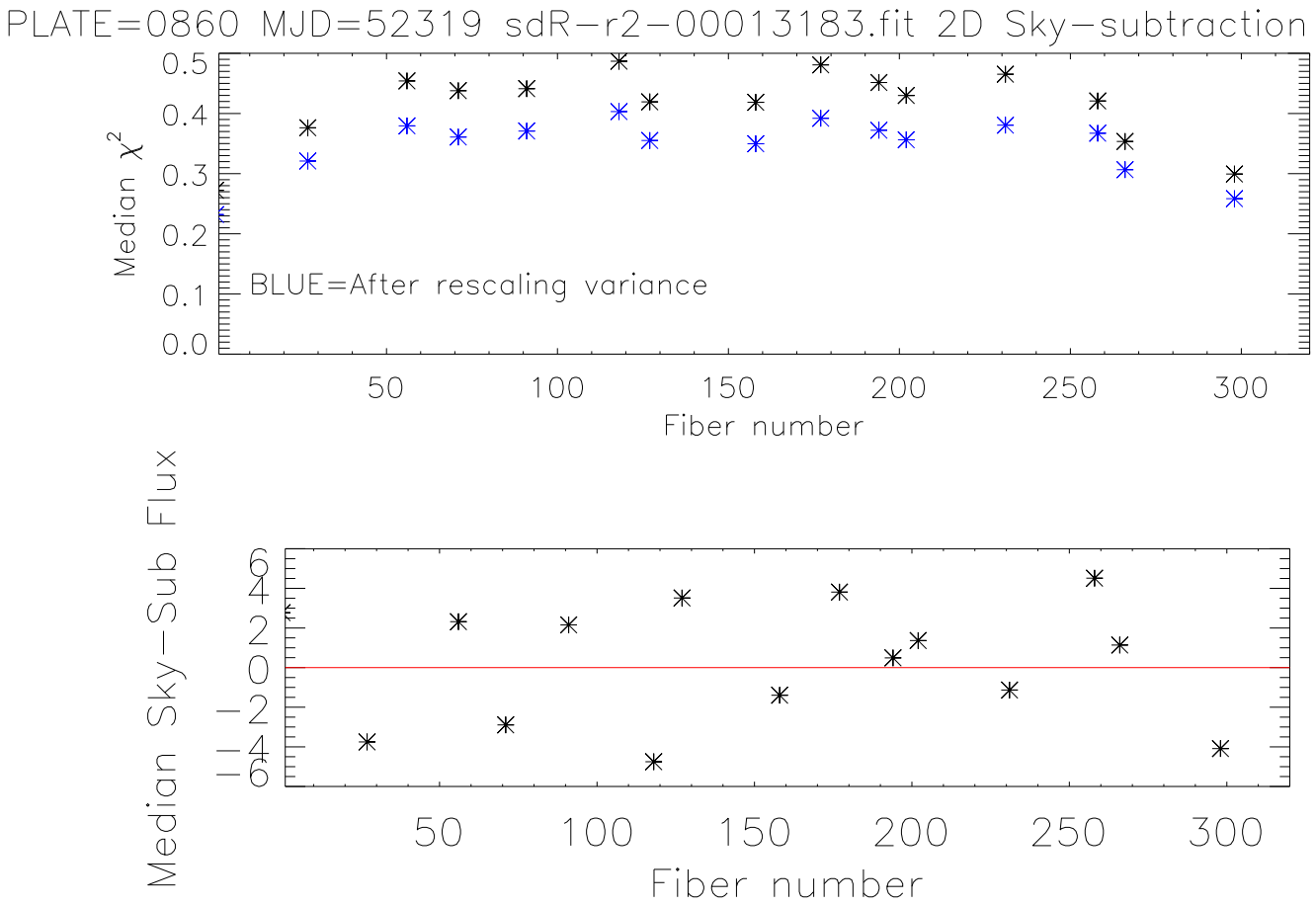

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

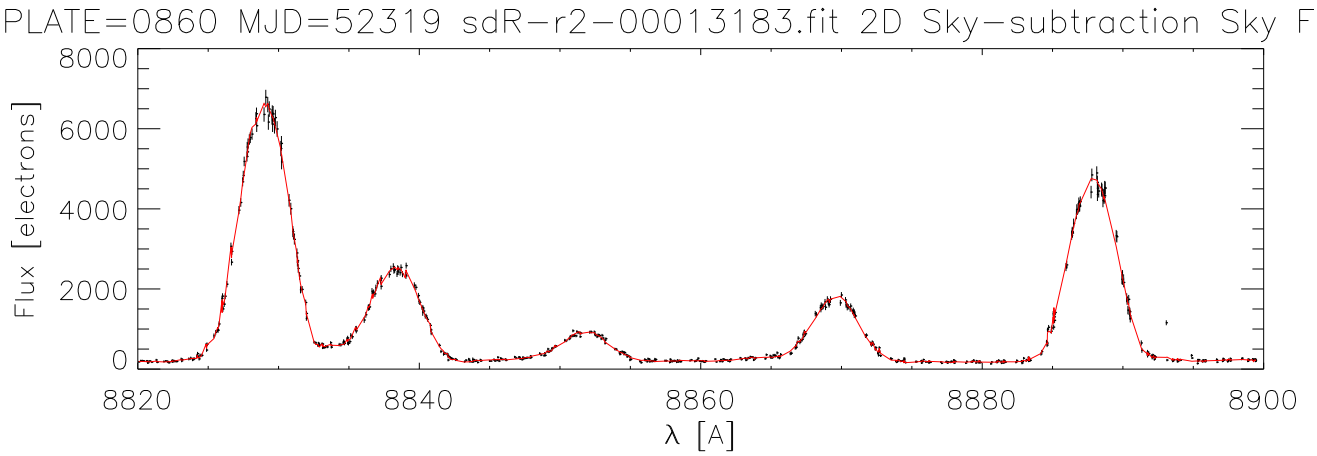
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

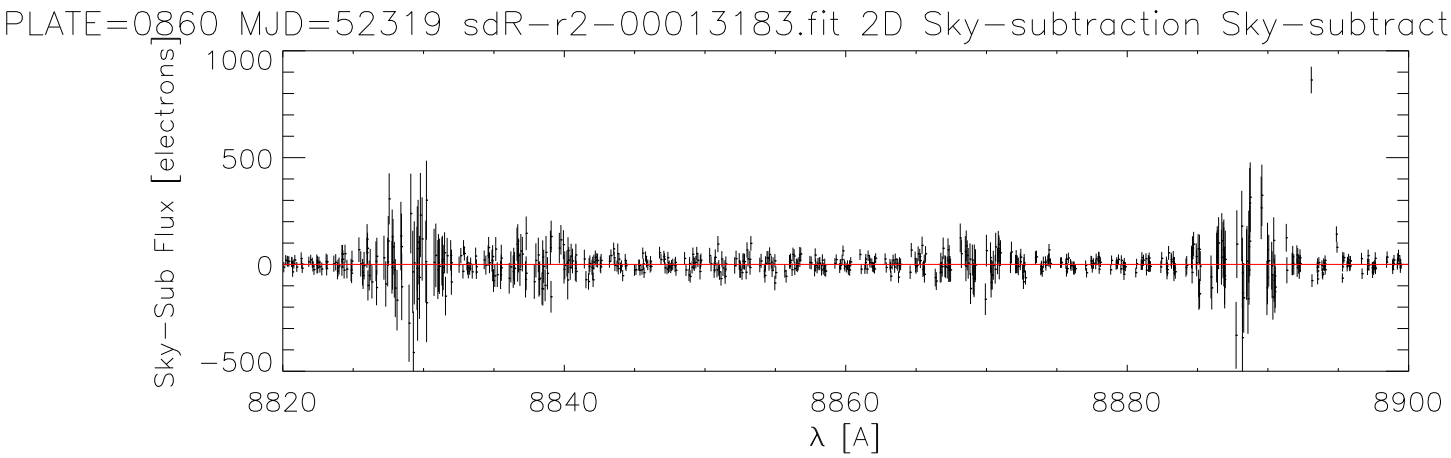

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

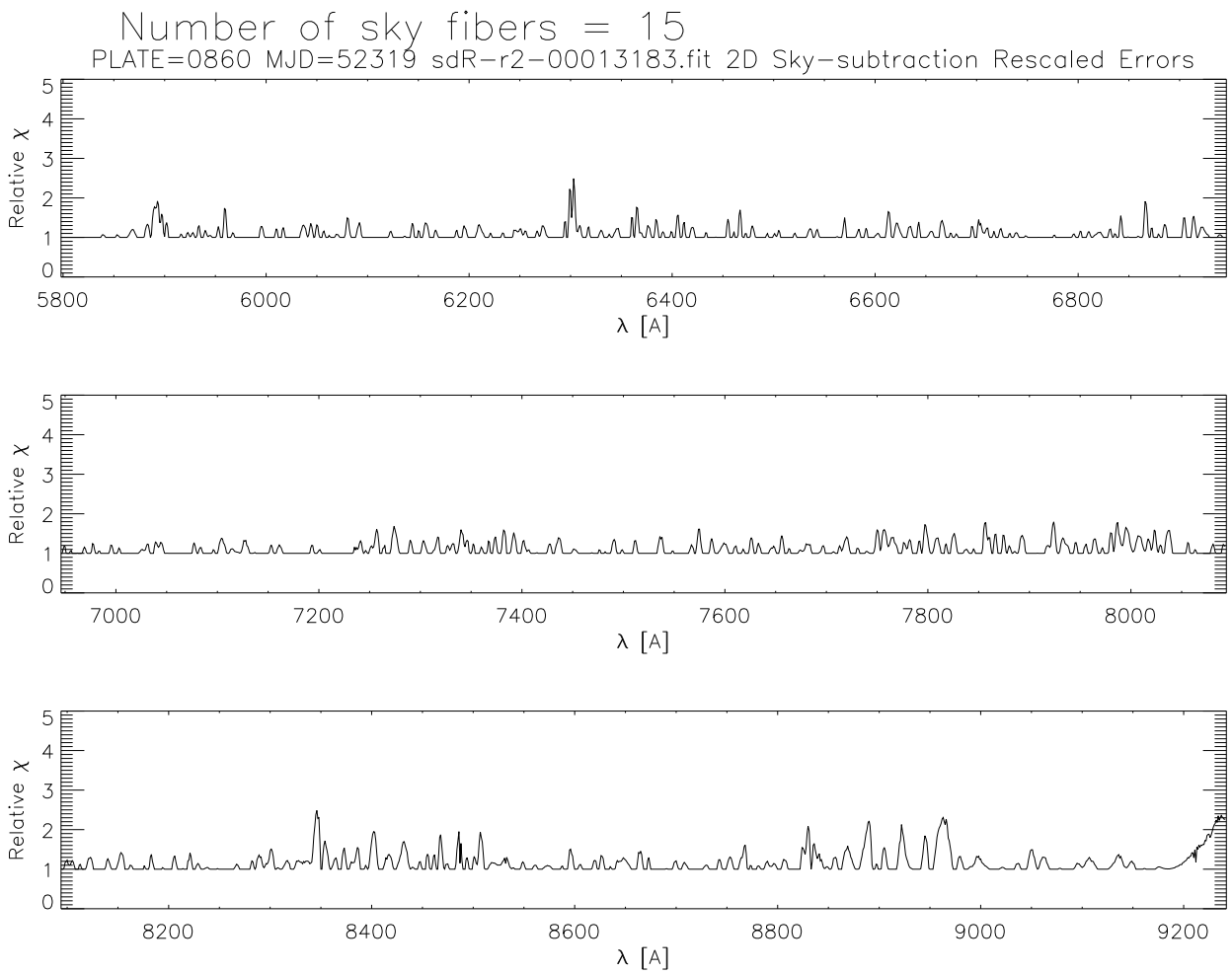

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

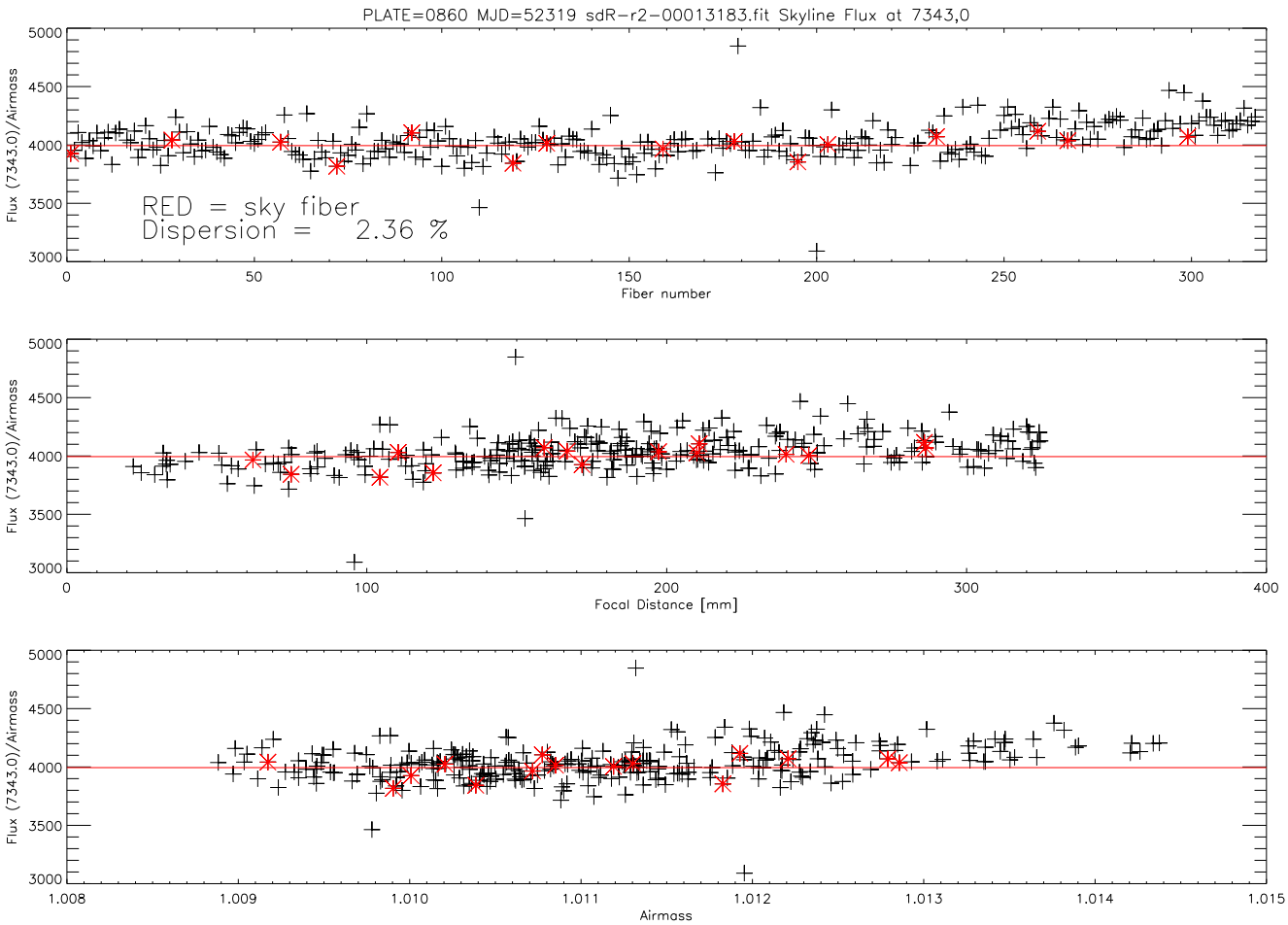

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013183.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

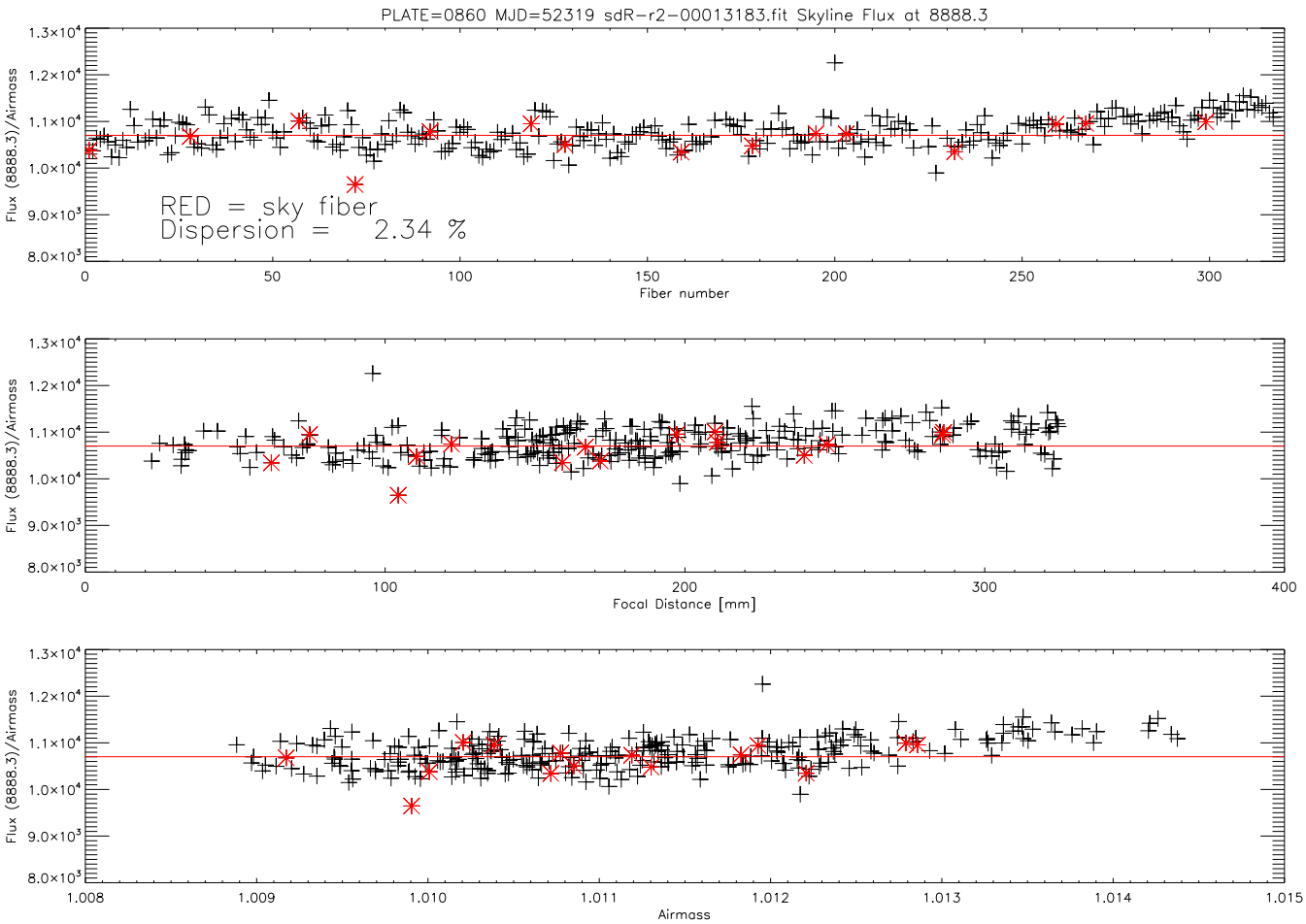

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

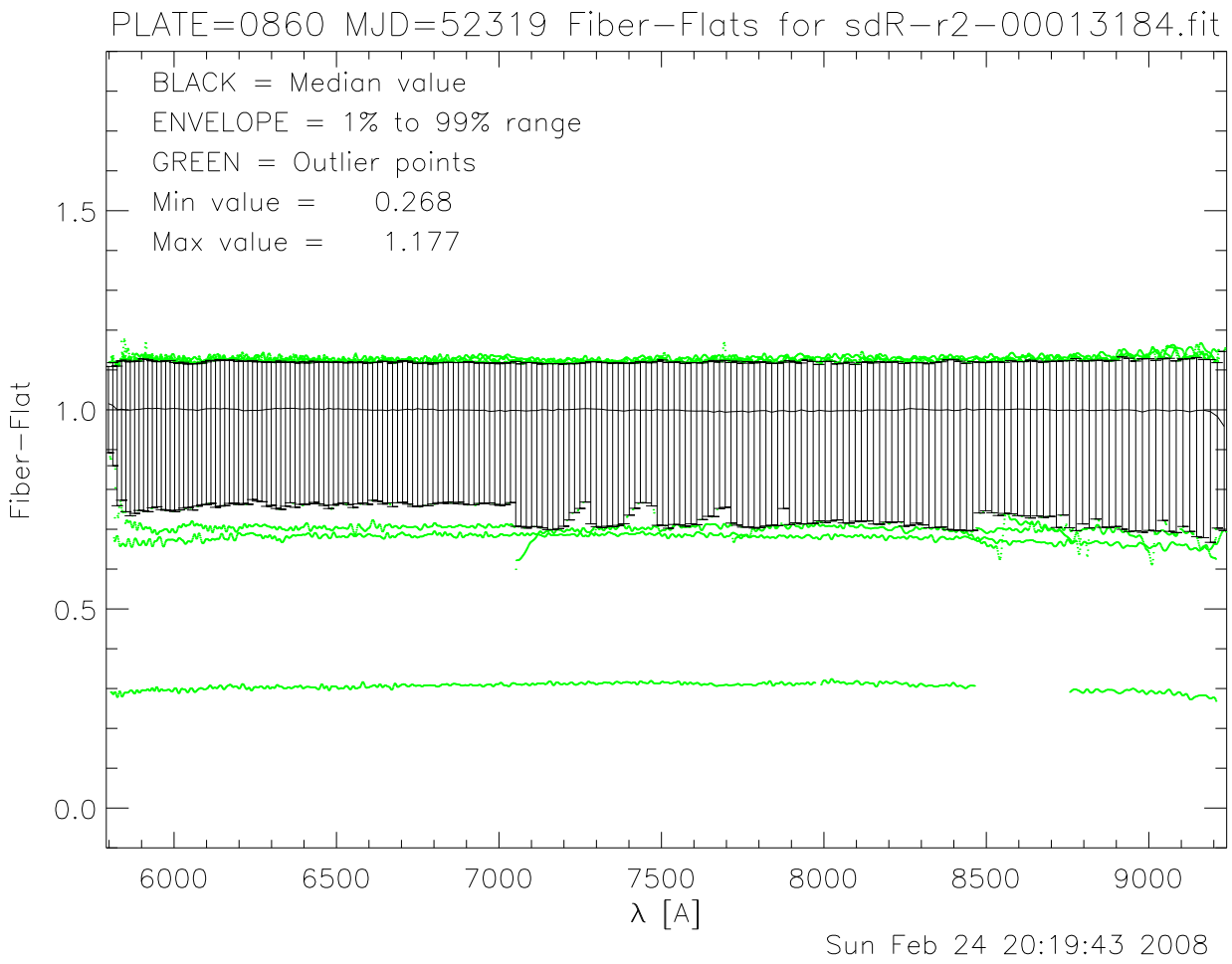

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

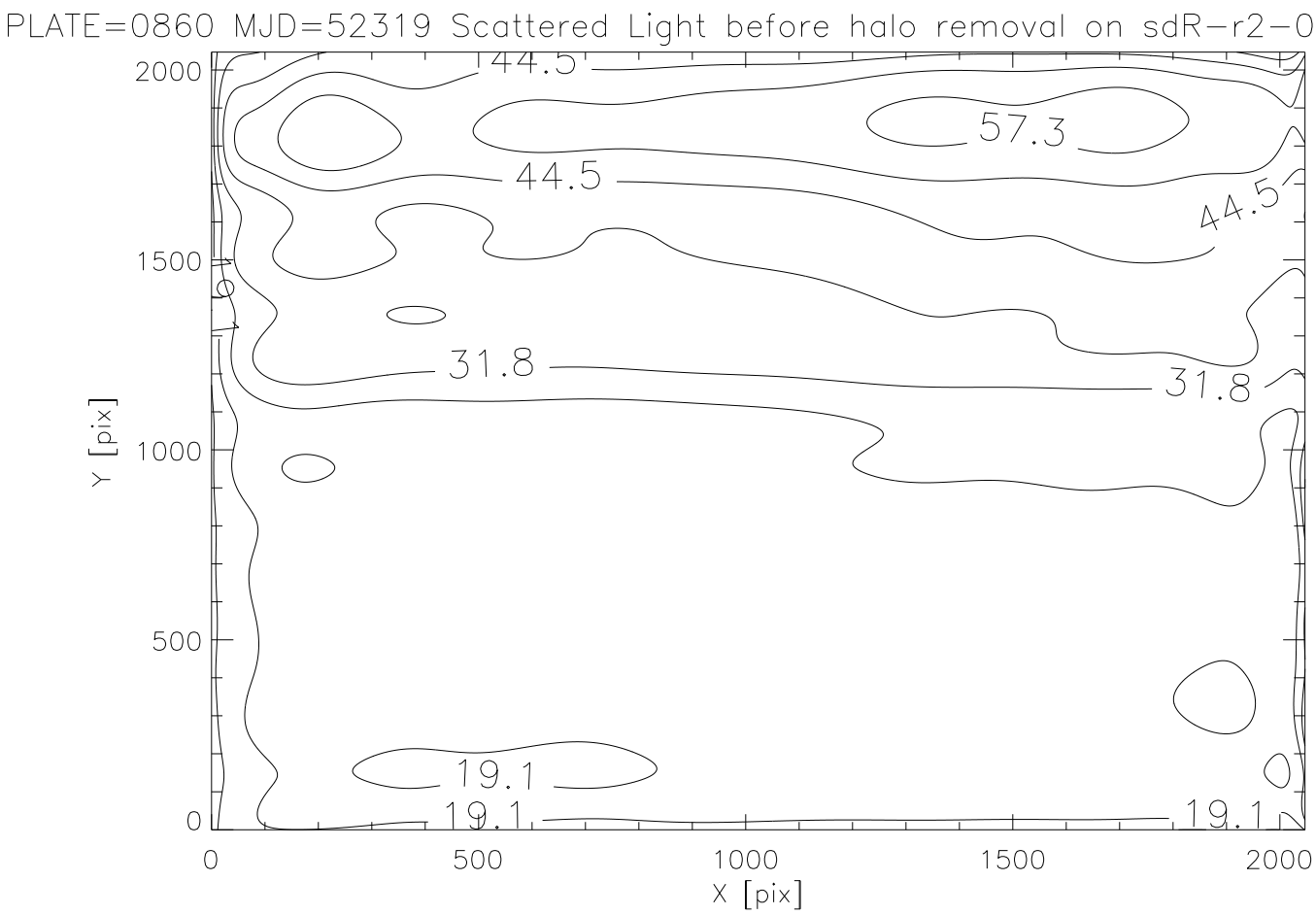

PLATE=0860 MJD=52319 sdR-r2-00013183.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

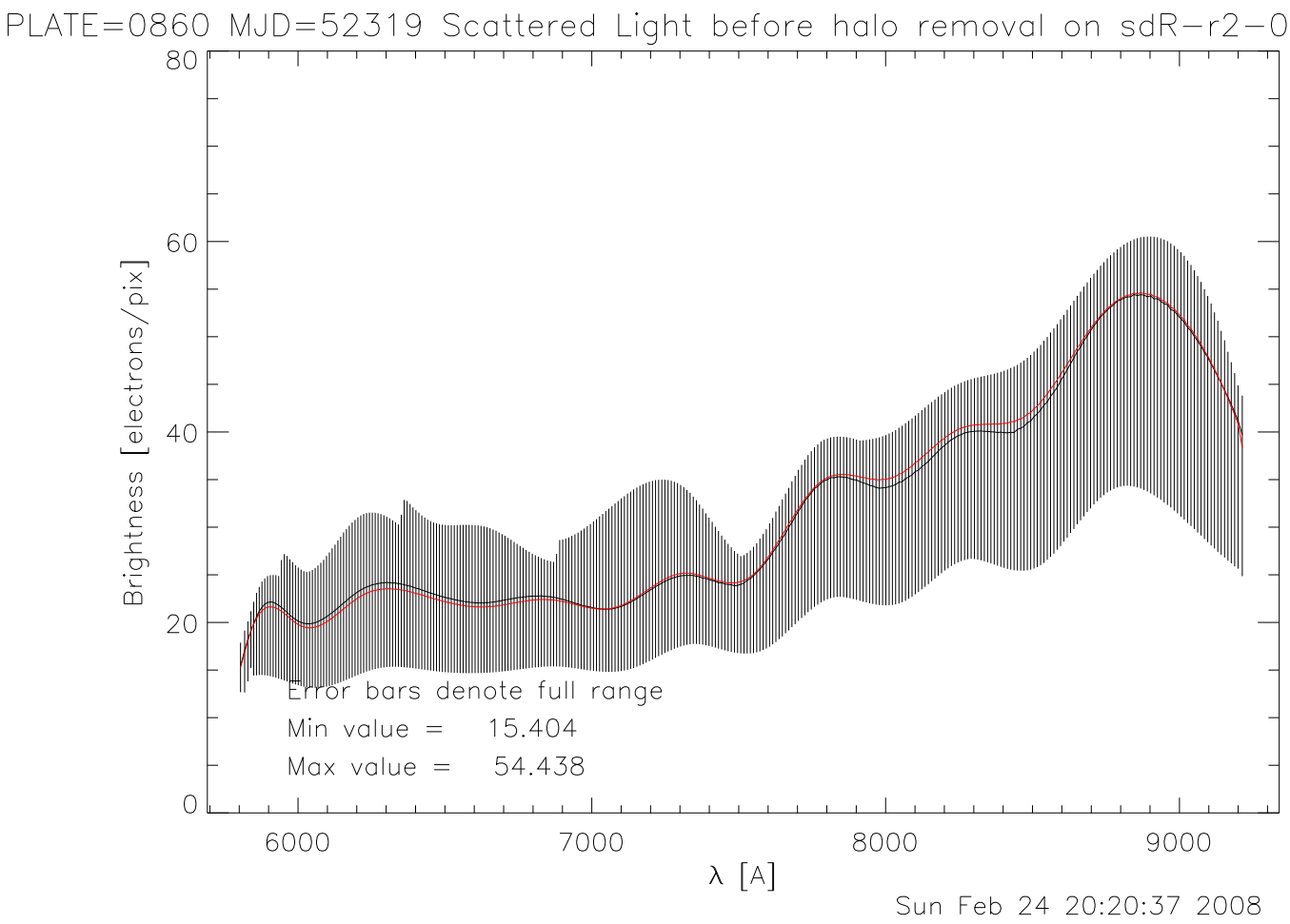

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013183.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

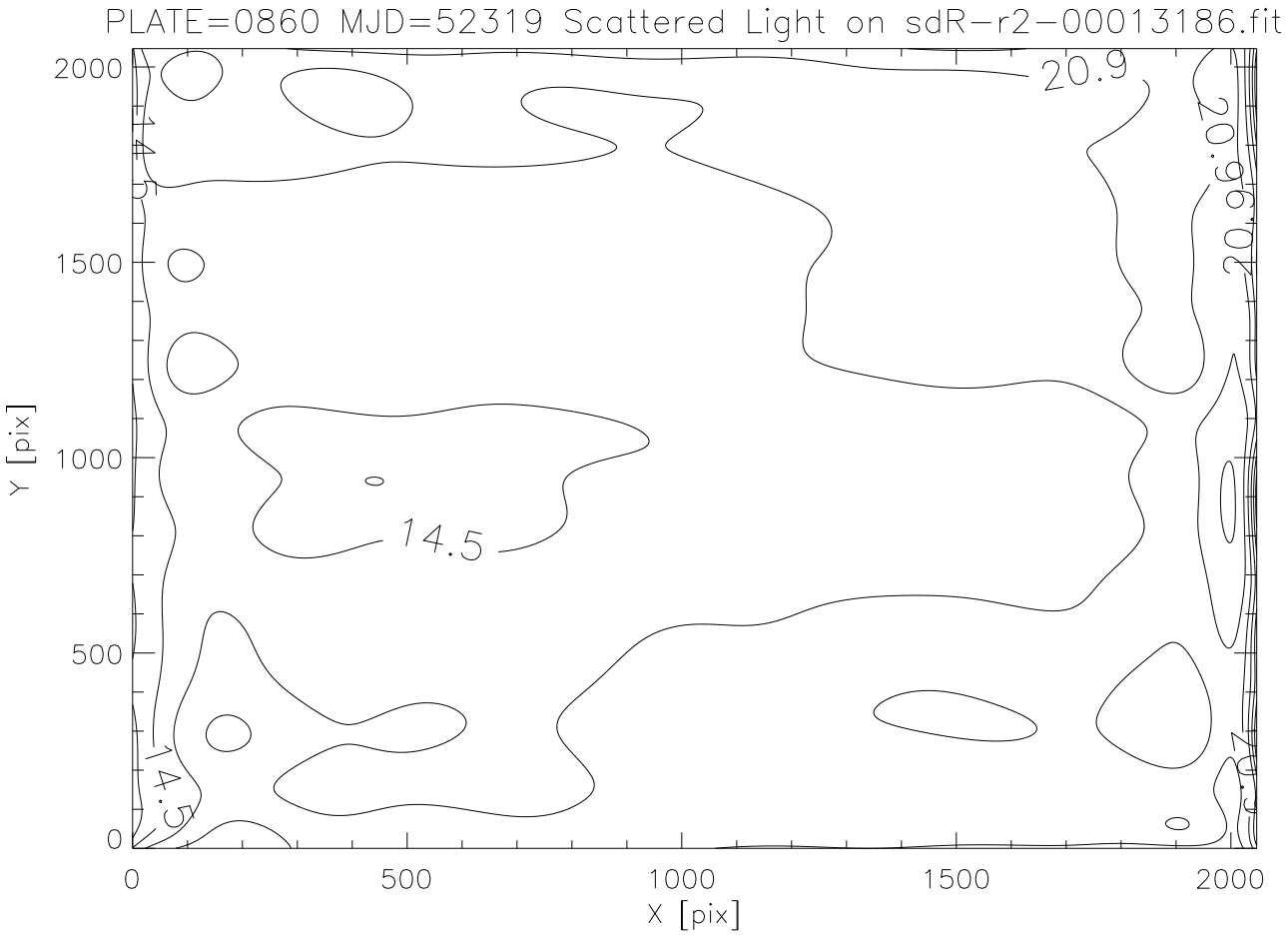

PLATE=0860 MJD=52319 sdR-r2-00013183.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.36 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

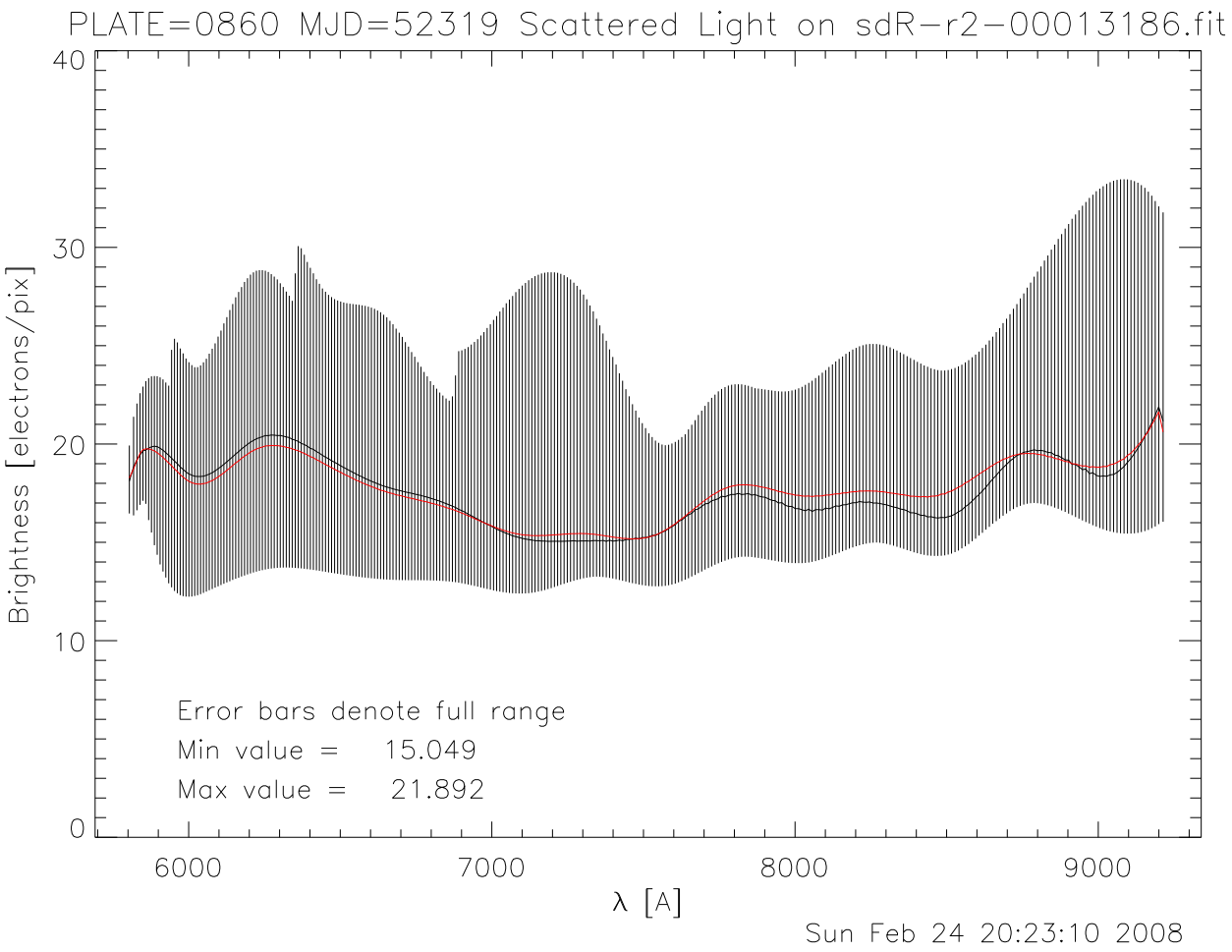

PLATE=0860 MJD=52319 sdR-r2-00013183.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.34 %
Fiber number
Focal Distance [mm]
Airmass

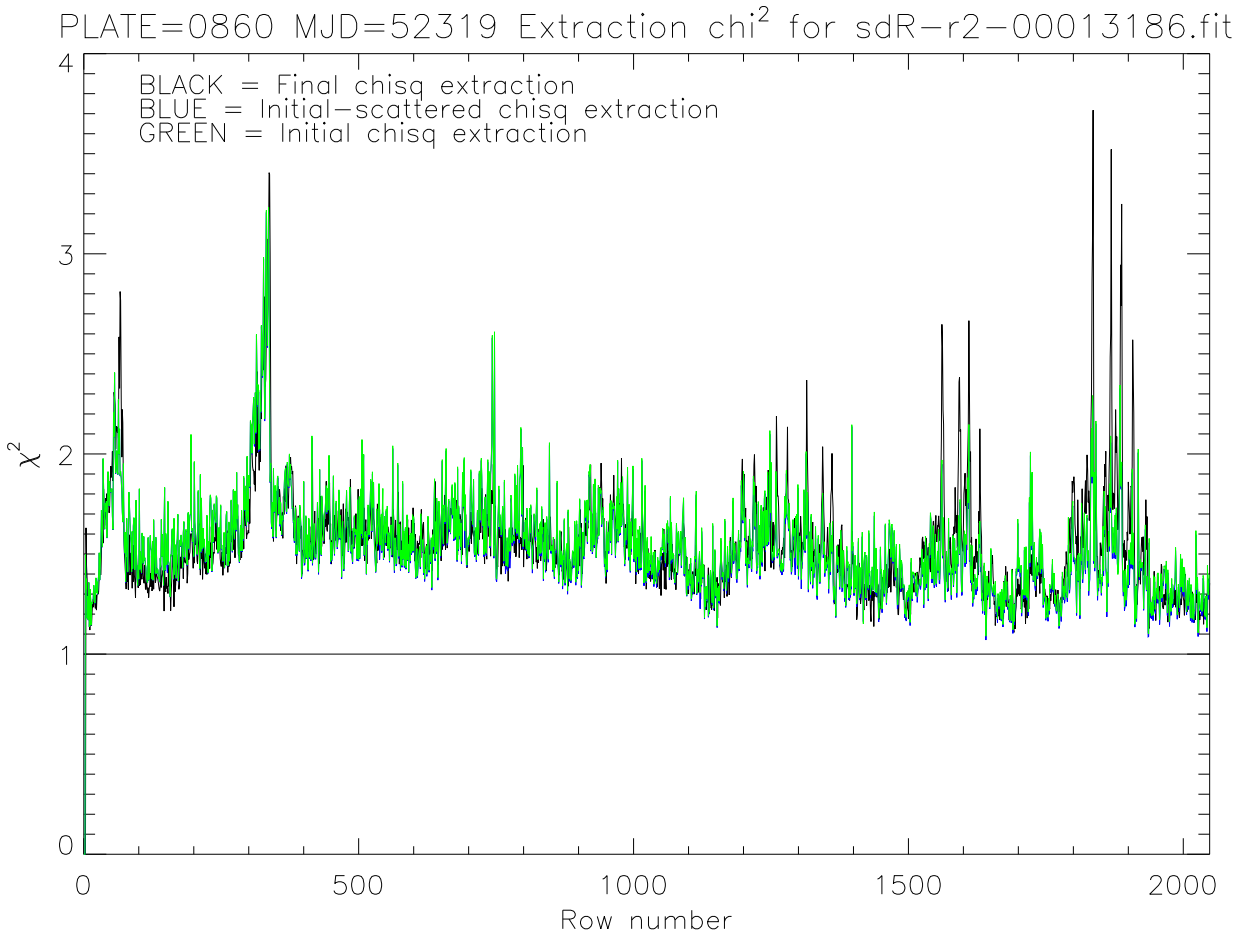

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:19:43 2008

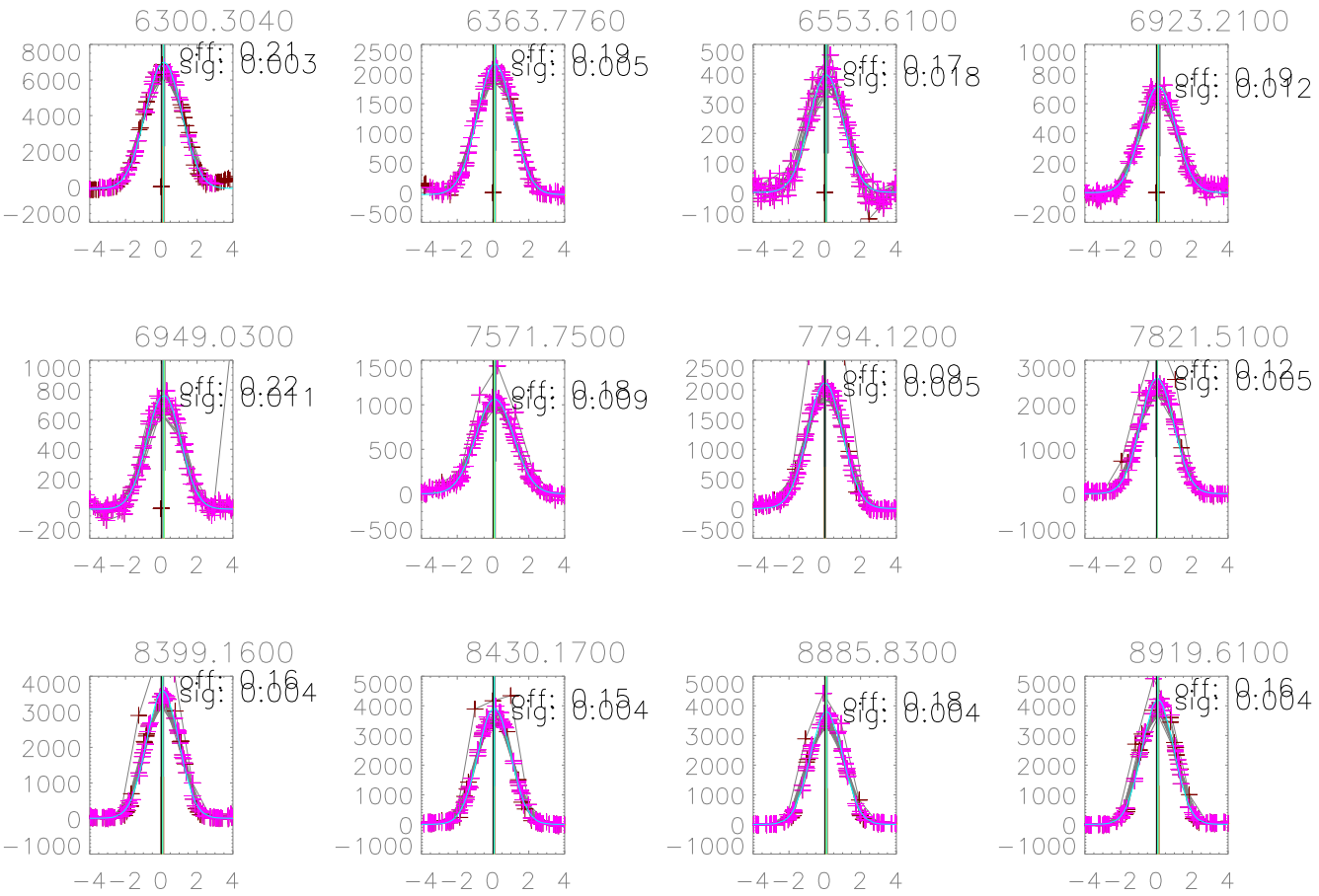

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013186.fi
44.5
57.3
44.5
44.5
31.8
31.8
19.1
19.1
19.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

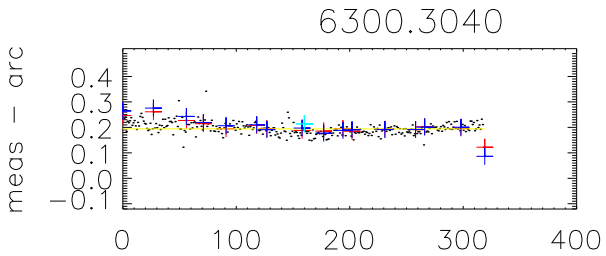

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013186.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 15.404
Max value = 54.438
Sun Feb 24 20:20:37 2008

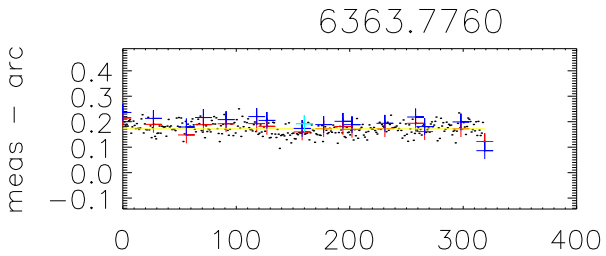

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013186.fit
20.9
14.5
0
Y [pix]
X [pix]
0
500
1000
1500
2000

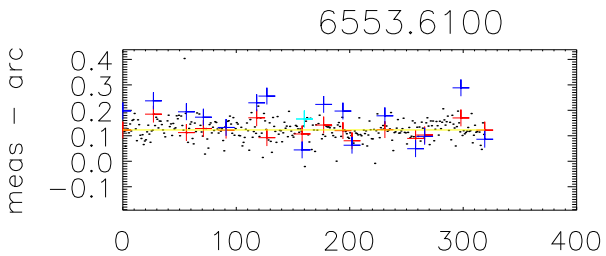

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013186.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 15.049
Max value = 21.892
Sun Feb 24 20:23:10 2008

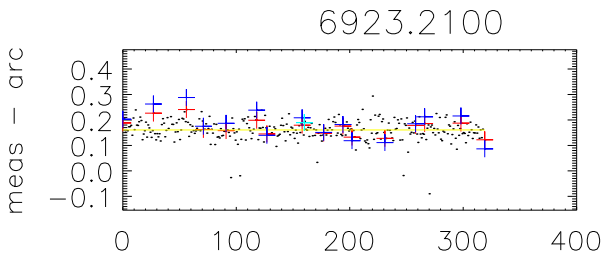

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r2−00013186.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

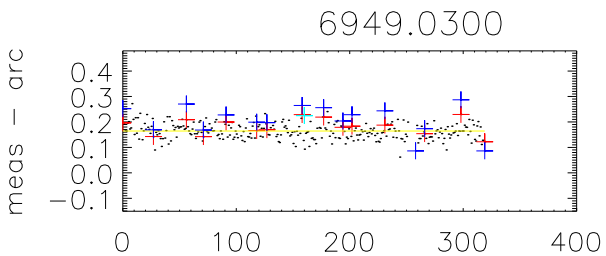

6300.3040
off: 0.21
sig: 0.003
6363.7760
off: 0.19
sig: 0.005
6553.6100
off: 0.17
sig: 0.018
6923.2100
off: 0.19
sig: 0.012
6949.0300
off: 0.22
sig: 0.011
7571.7500
off: 0.18
sig: 0.009
7794.1200
off: 0.09
sig: 0.005
7821.5100
off: 0.12
sig: 0.005
8399.1600
off: 0.16
sig: 0.004
8430.1700
off: 0.15
sig: 0.004
8885.8300
off: 0.18
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

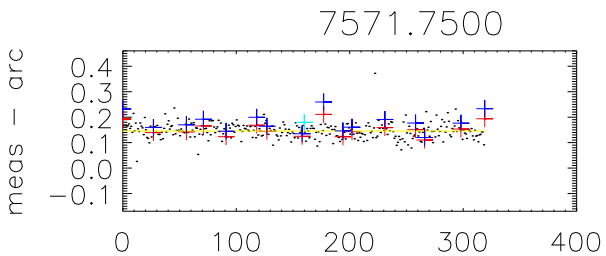

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

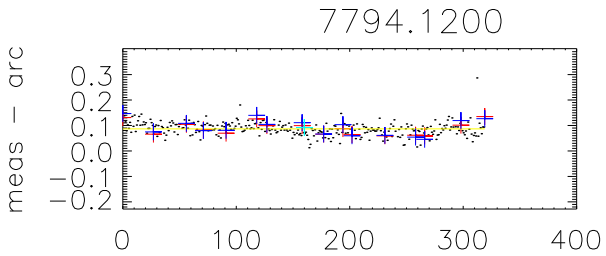

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

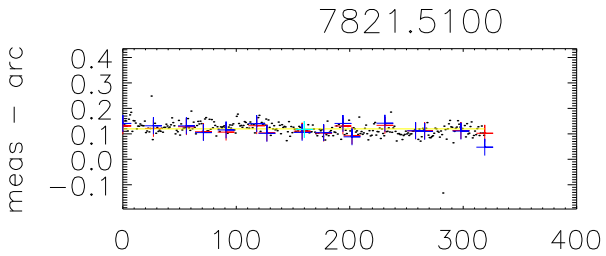

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

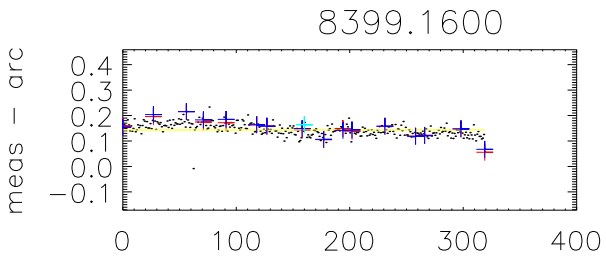

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

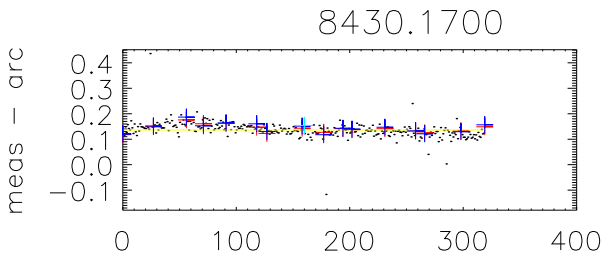

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

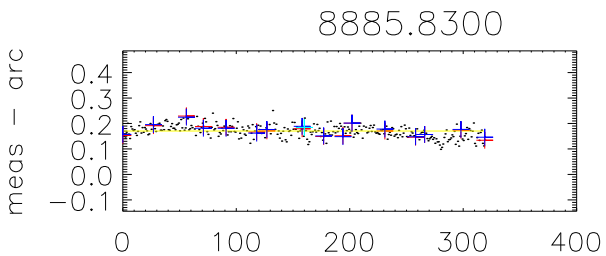

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

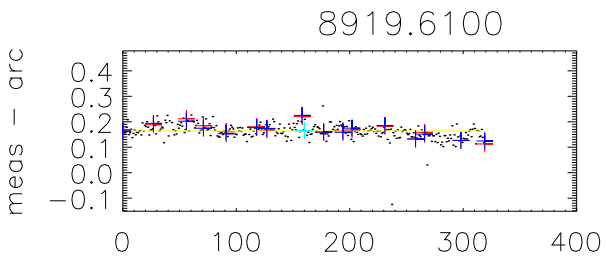

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

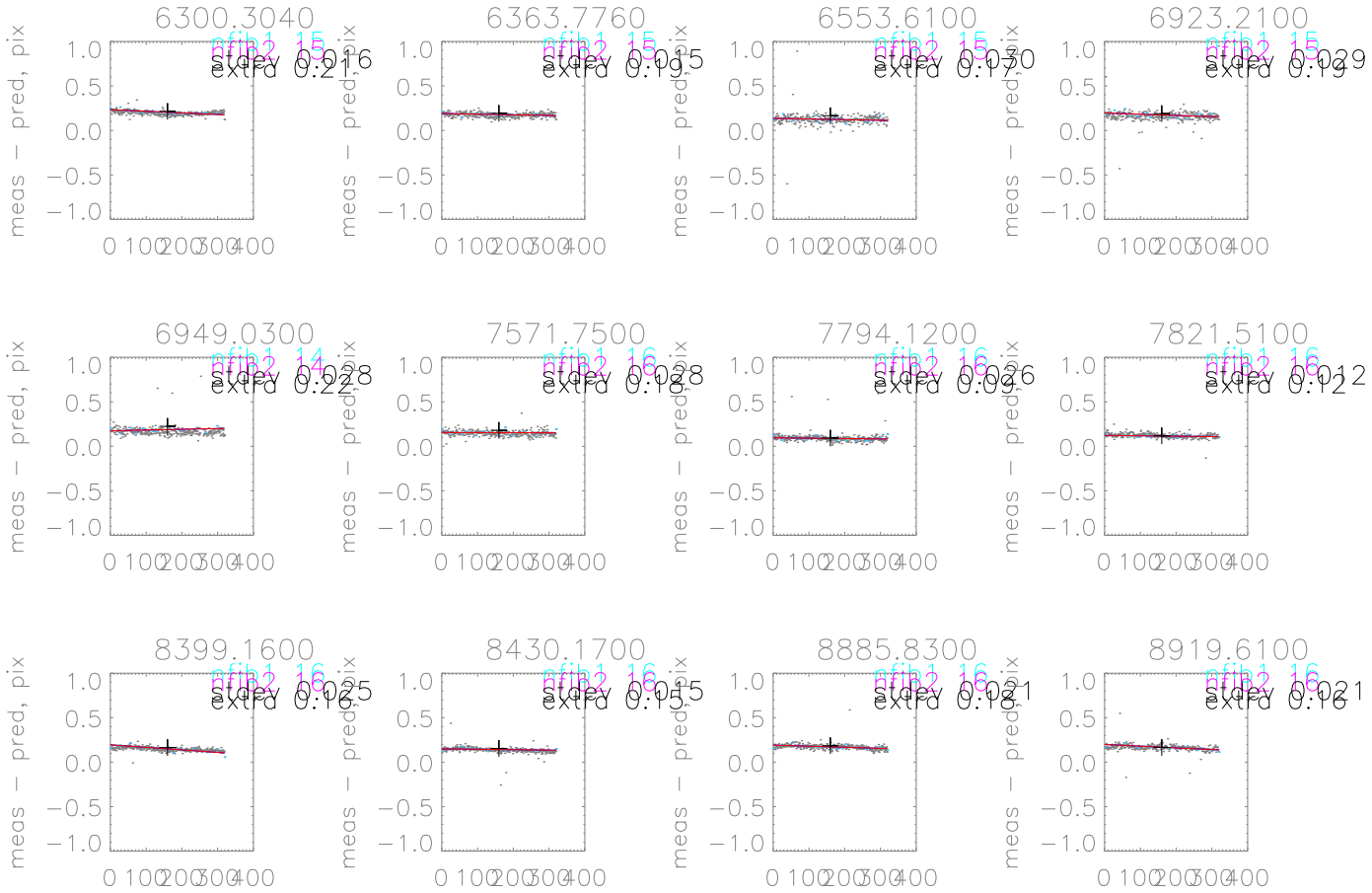

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

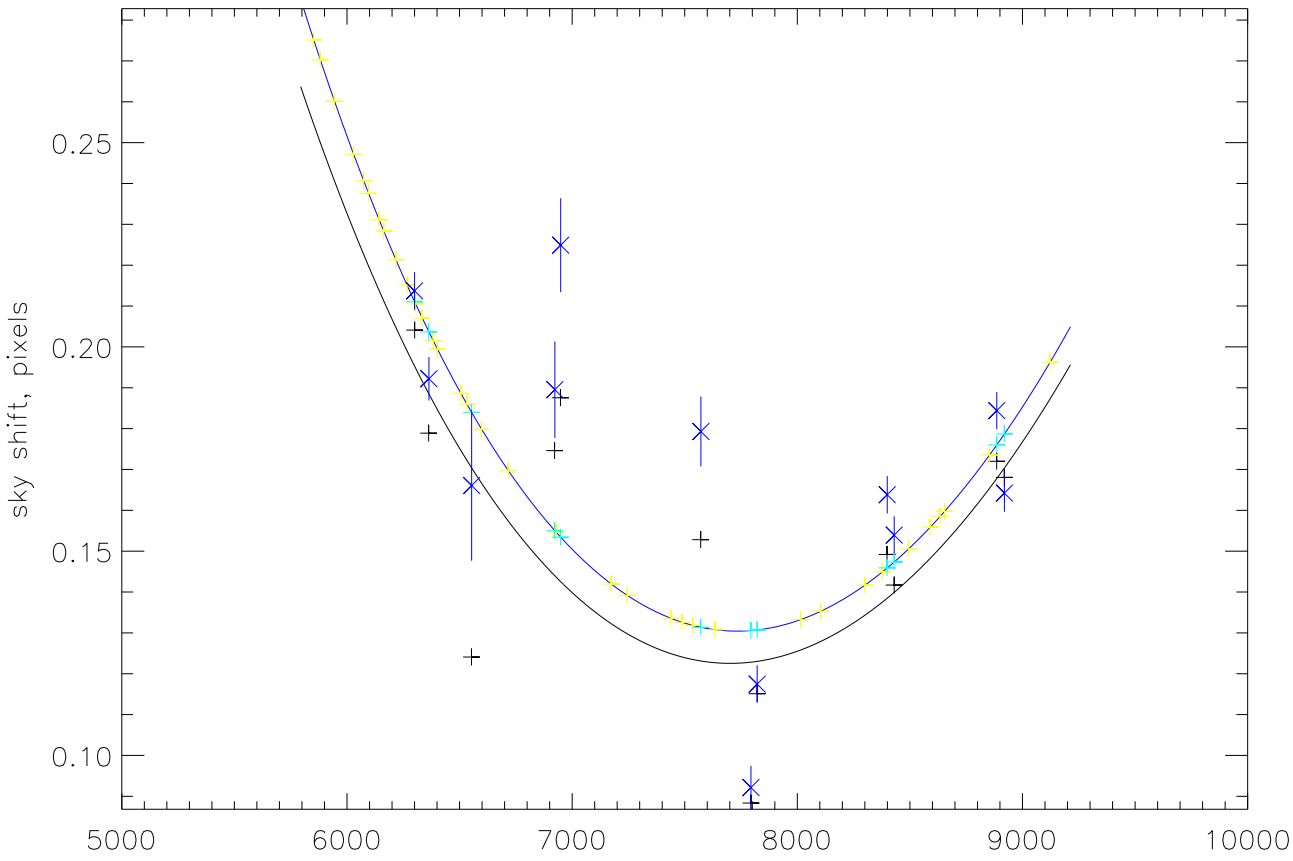

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

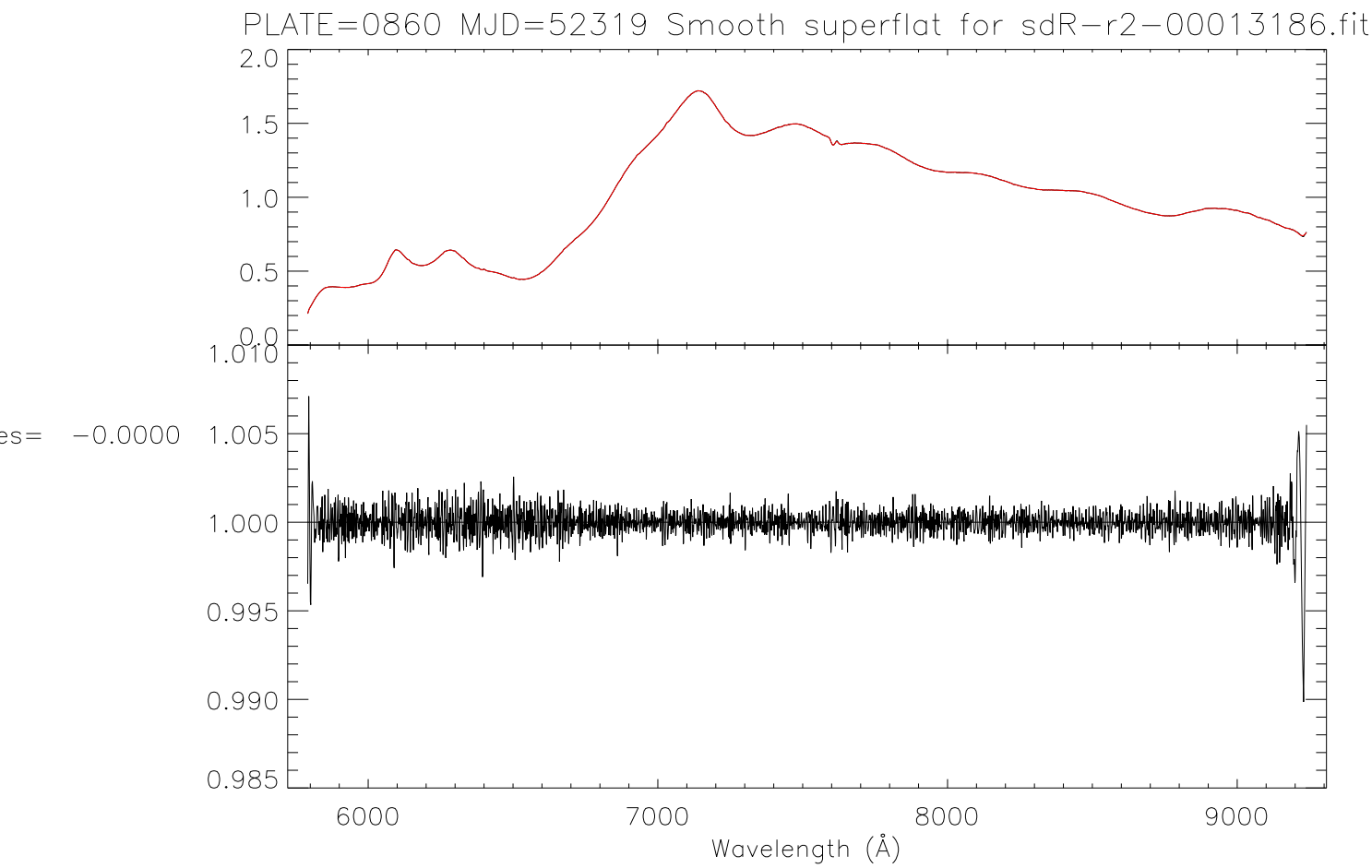

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

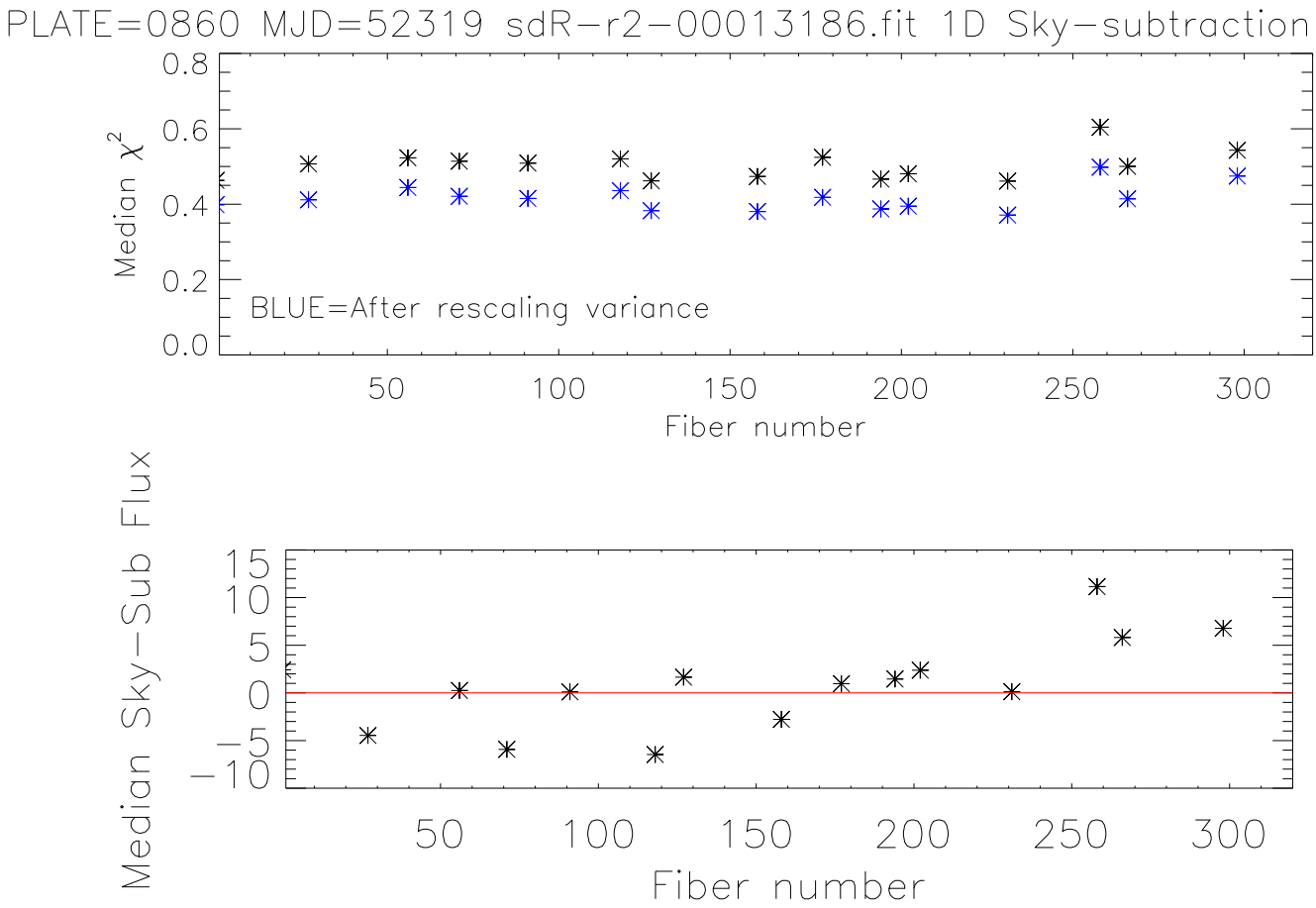

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

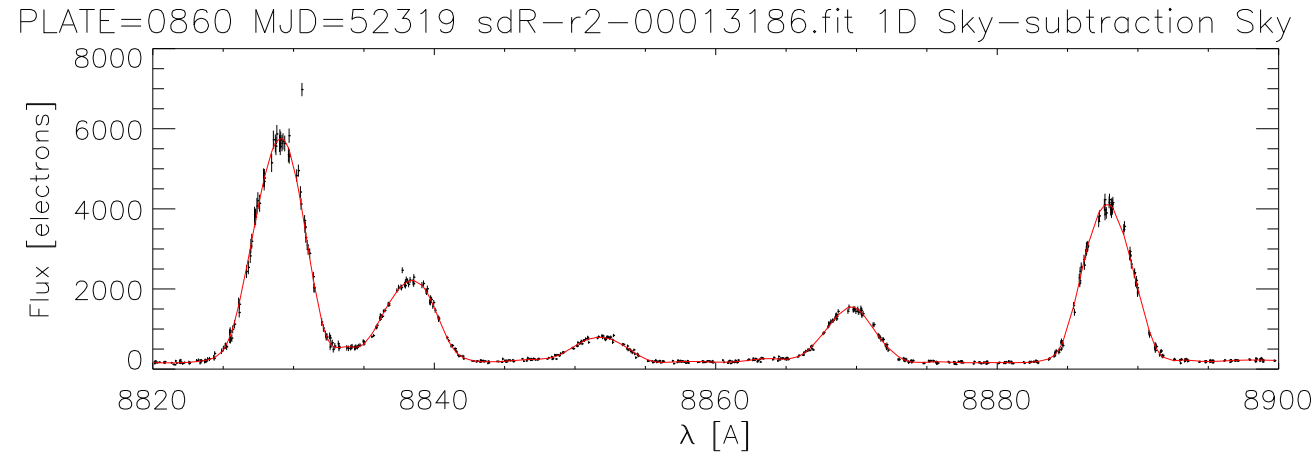

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

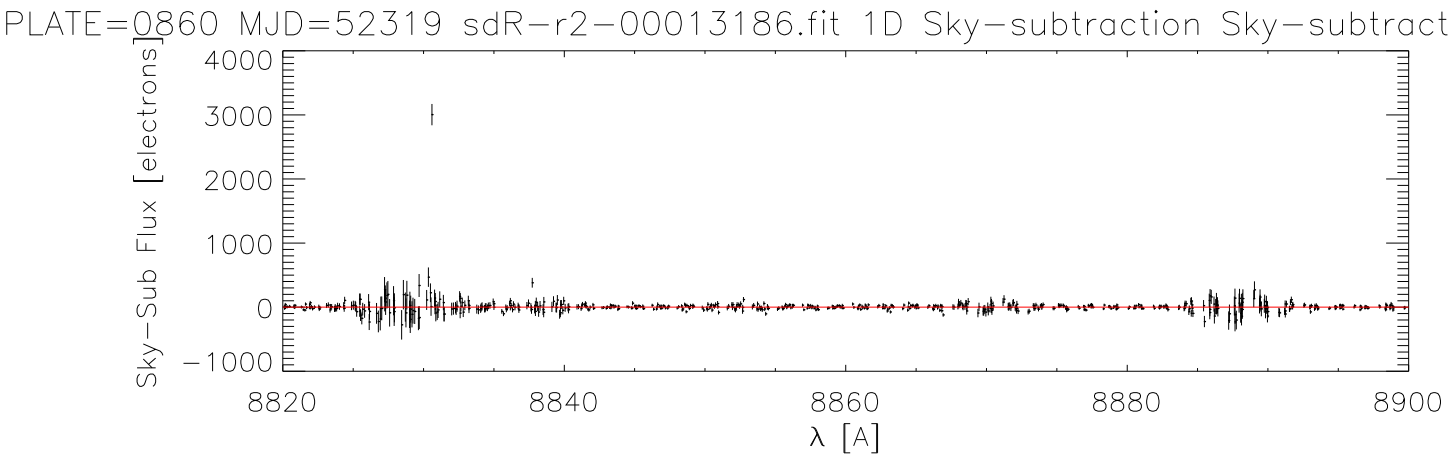

6300.3040
mfhi1 15
stdev 0.016
extra 0.21
6363.7760
mfhi1 15
stdev 0.015
extra 0.19
6553.6100
mfhi1 15
stdev 0.030
extra 0.17
6923.2100
mfhi1 15
stdev 0.029
extra 0.19
6949.0300
mfhi1 14
stdev 0.028
extra 0.22
7571.7500
mfhi1 16
stdev 0.028
extra 0.18
7794.1200
mfhi1 16
stdev 0.026
extra 0.09
7821.5100
mfhi1 16
stdev 0.012
extra 0.12
8399.1600
mfhi1 16
stdev 0.025
extra 0.16
8430.1700
mfhi1 16
stdev 0.015
extra 0.15
8885.8300
mfhi1 16
stdev 0.021
extra 0.18
8919.6100
mfhi1 16
stdev 0.021
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

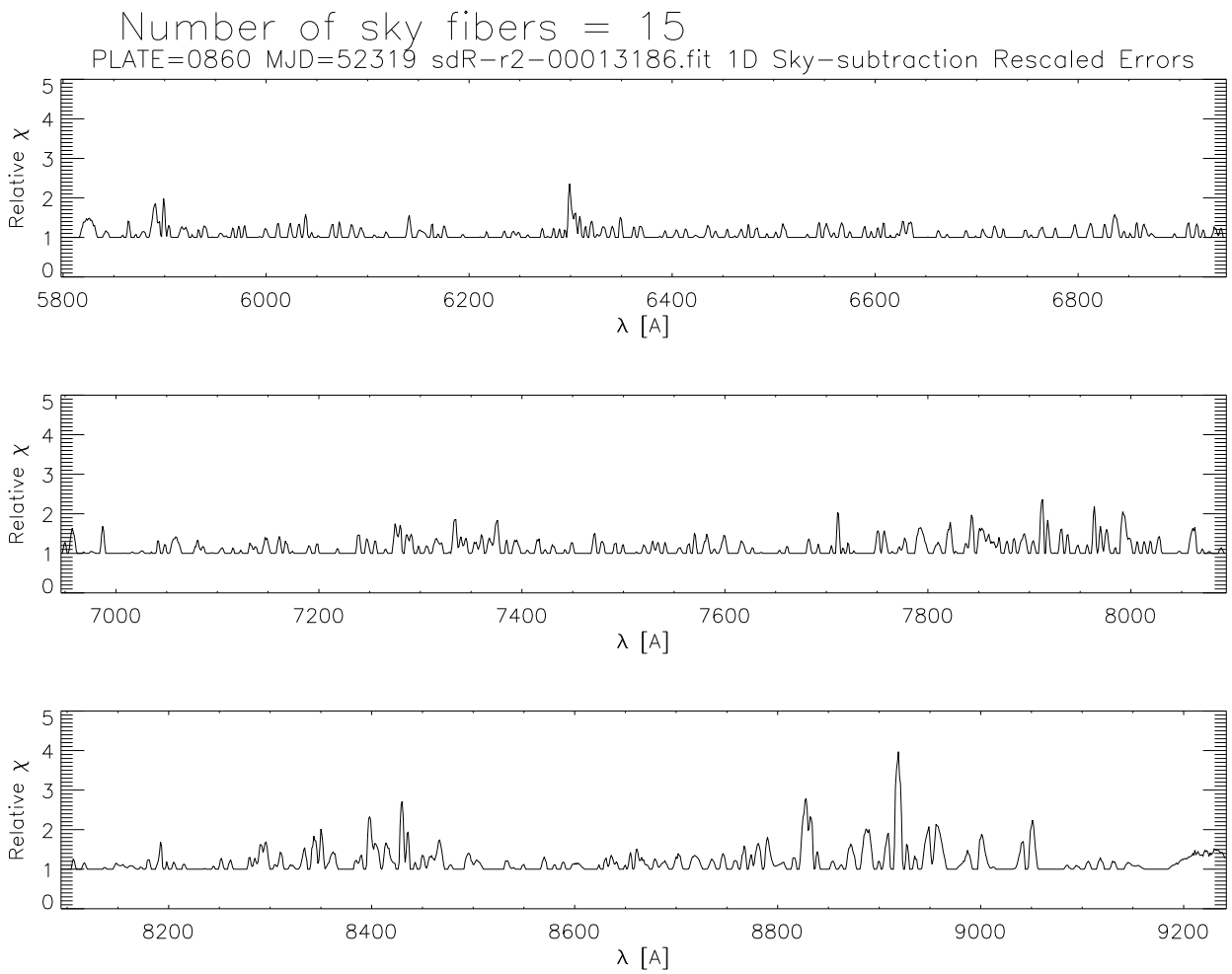

sky shift, pixels
0.25
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

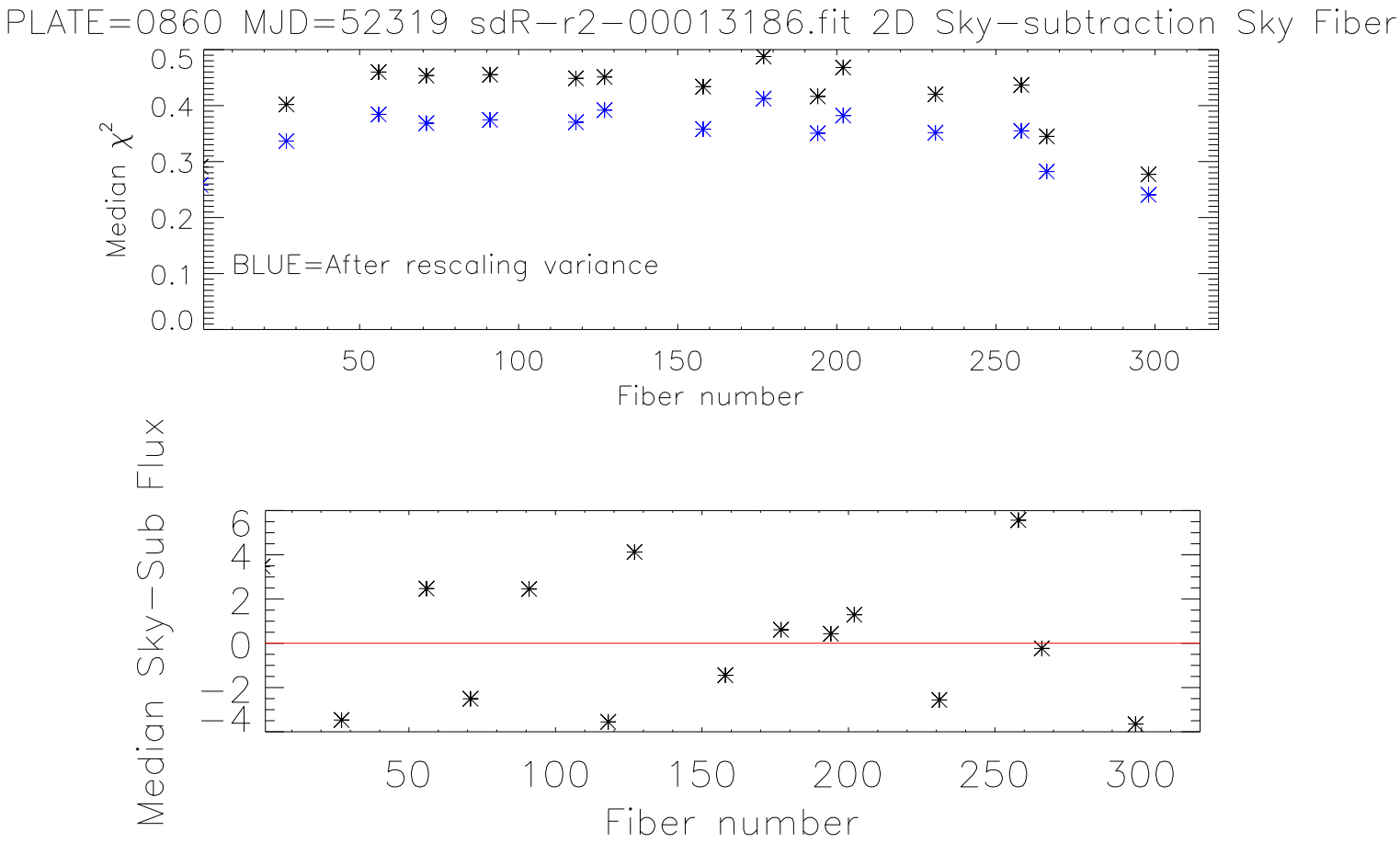

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013186.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

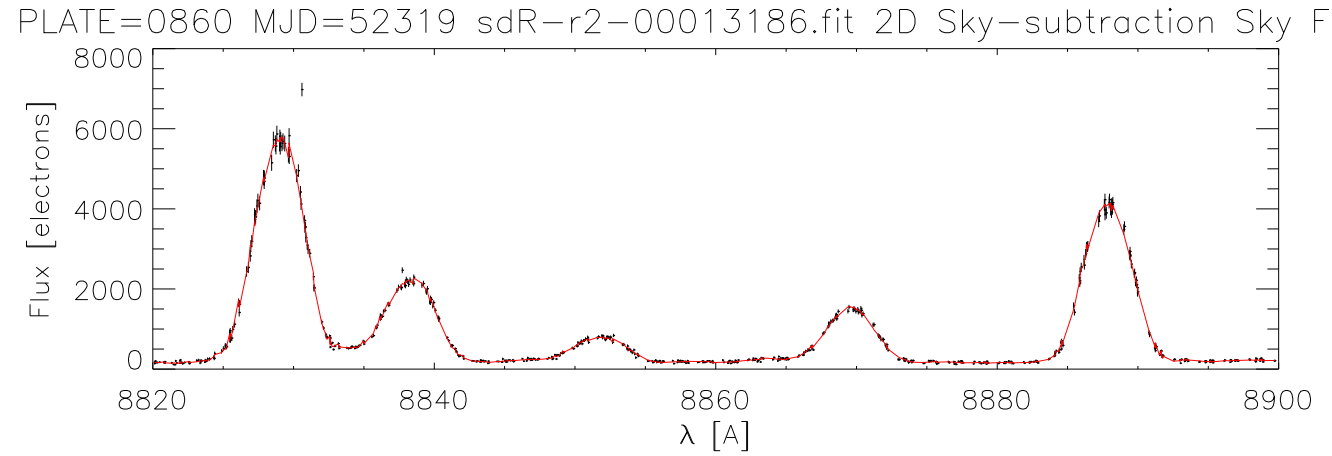

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
50
100
150
200
250
300
Fiber number

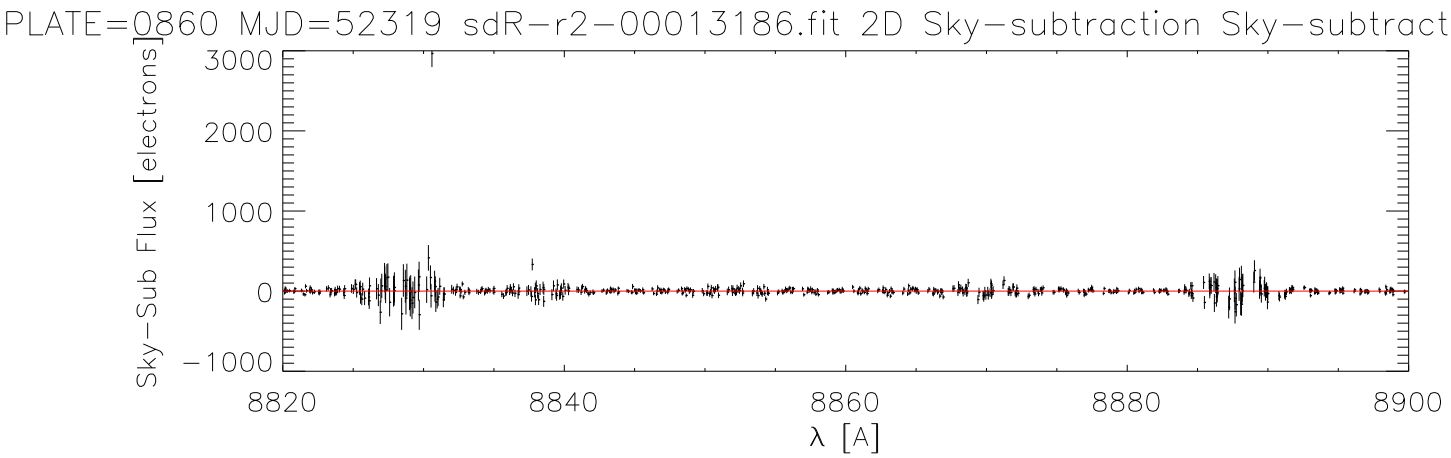

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

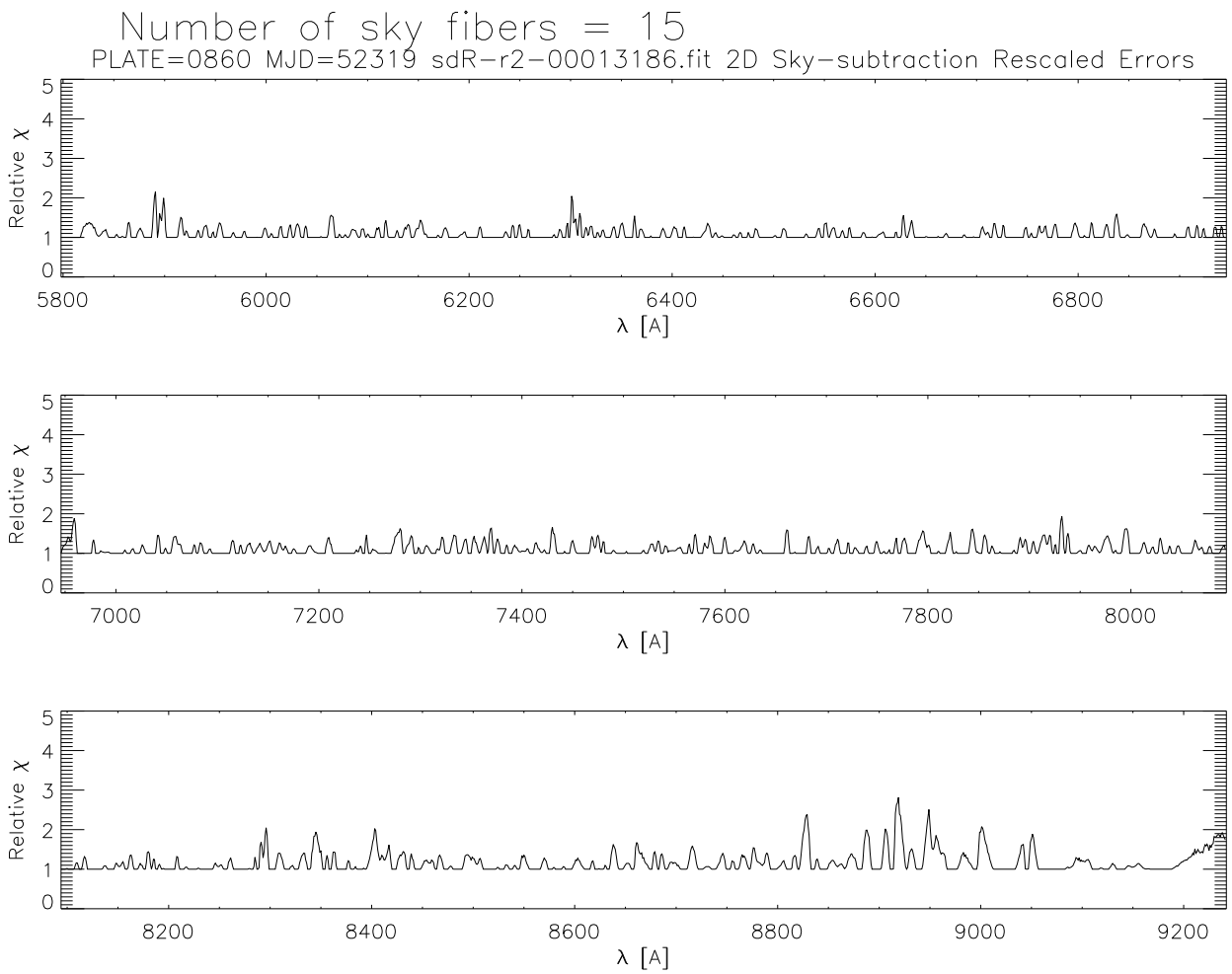

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

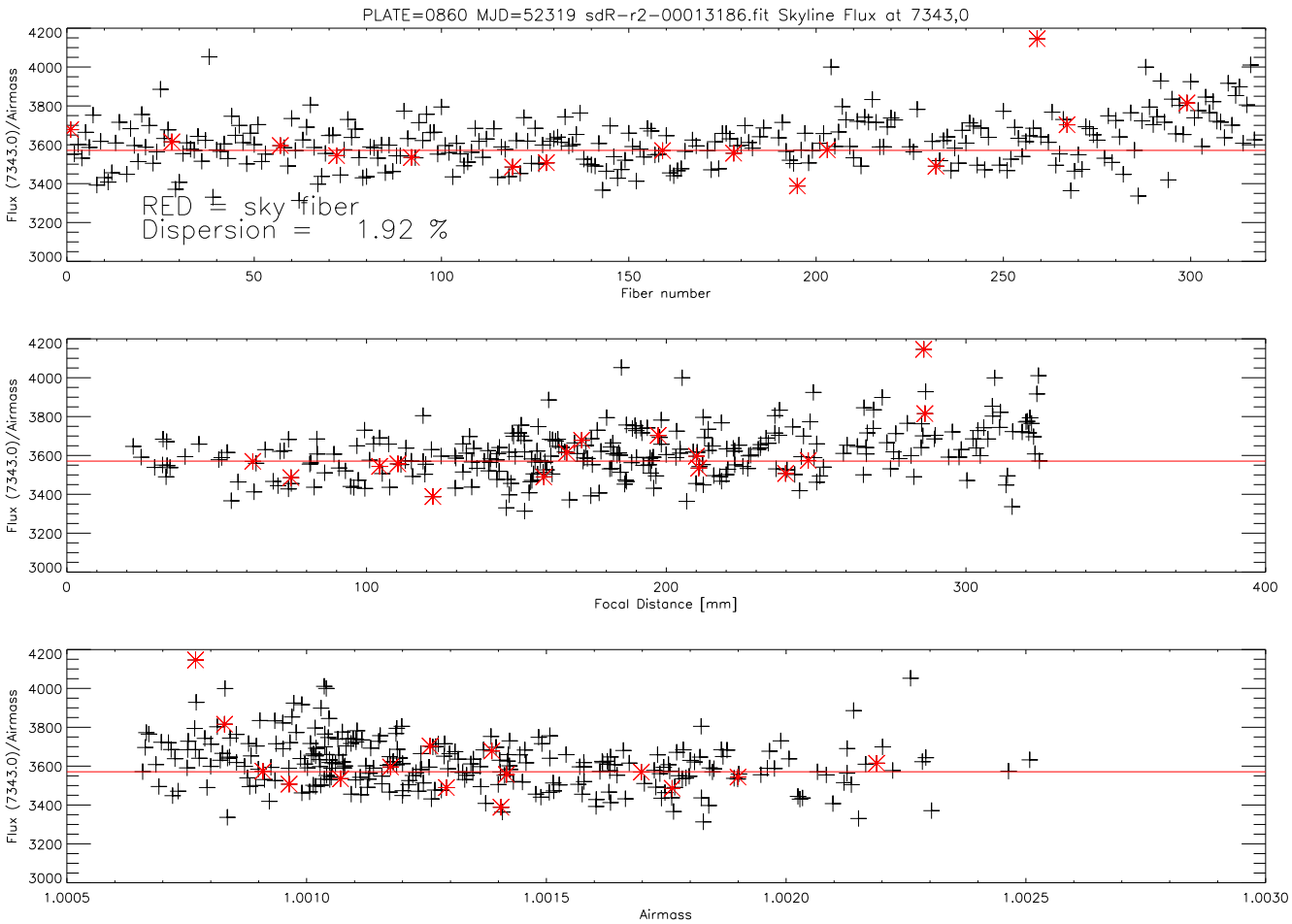

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013186.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

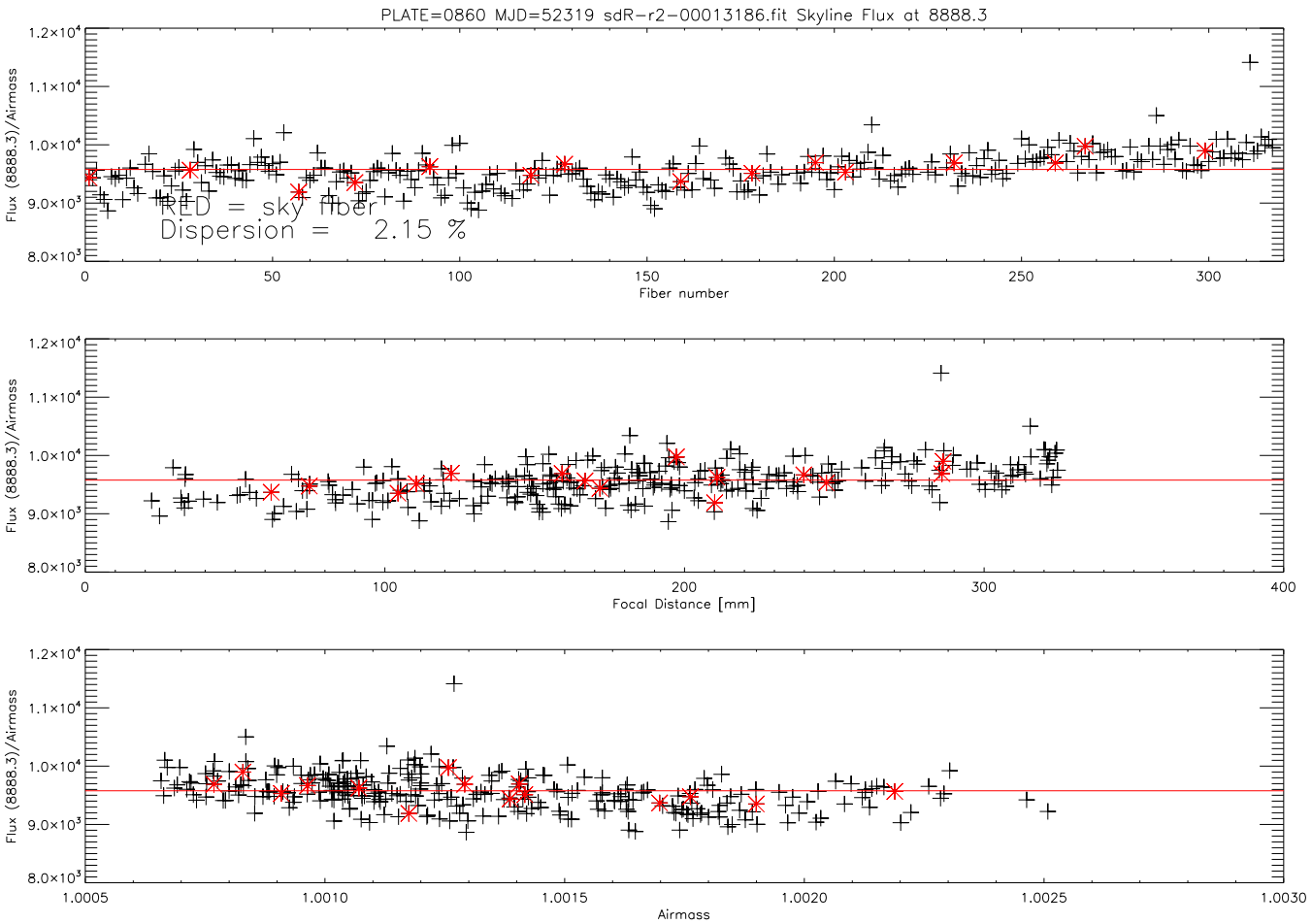

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

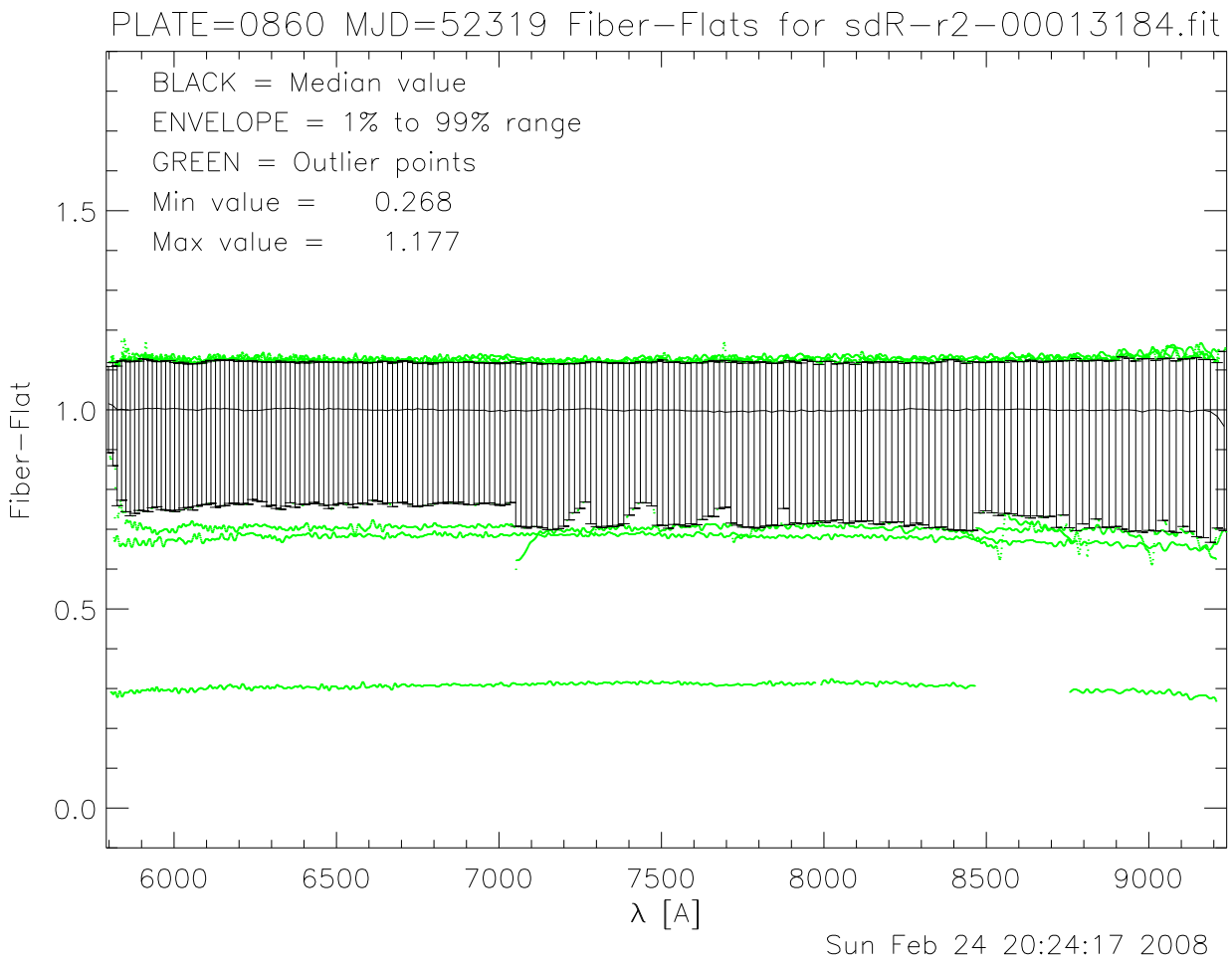

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

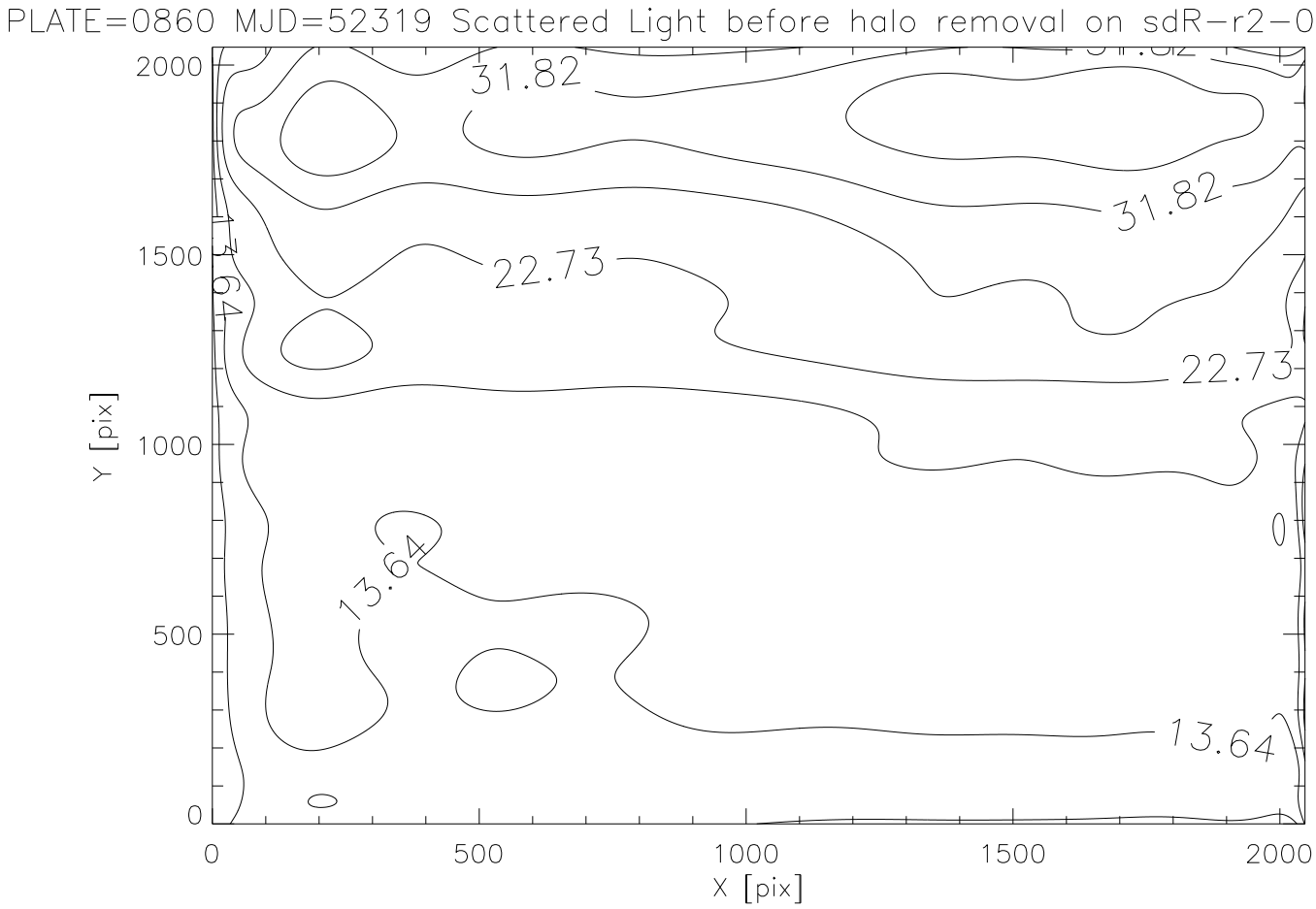

PLATE=0860 MJD=52319 sdR-r2-00013186.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

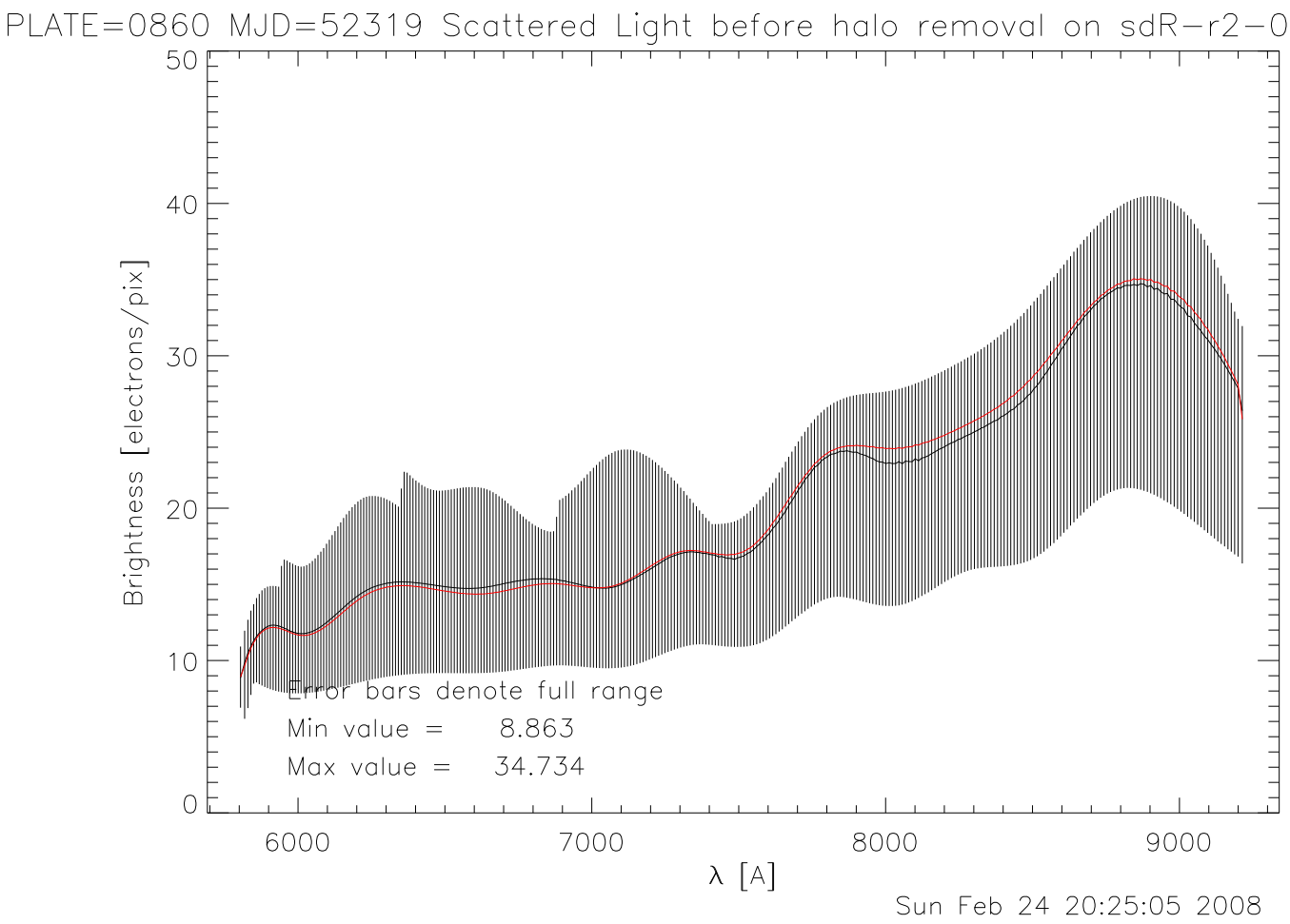

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013186.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

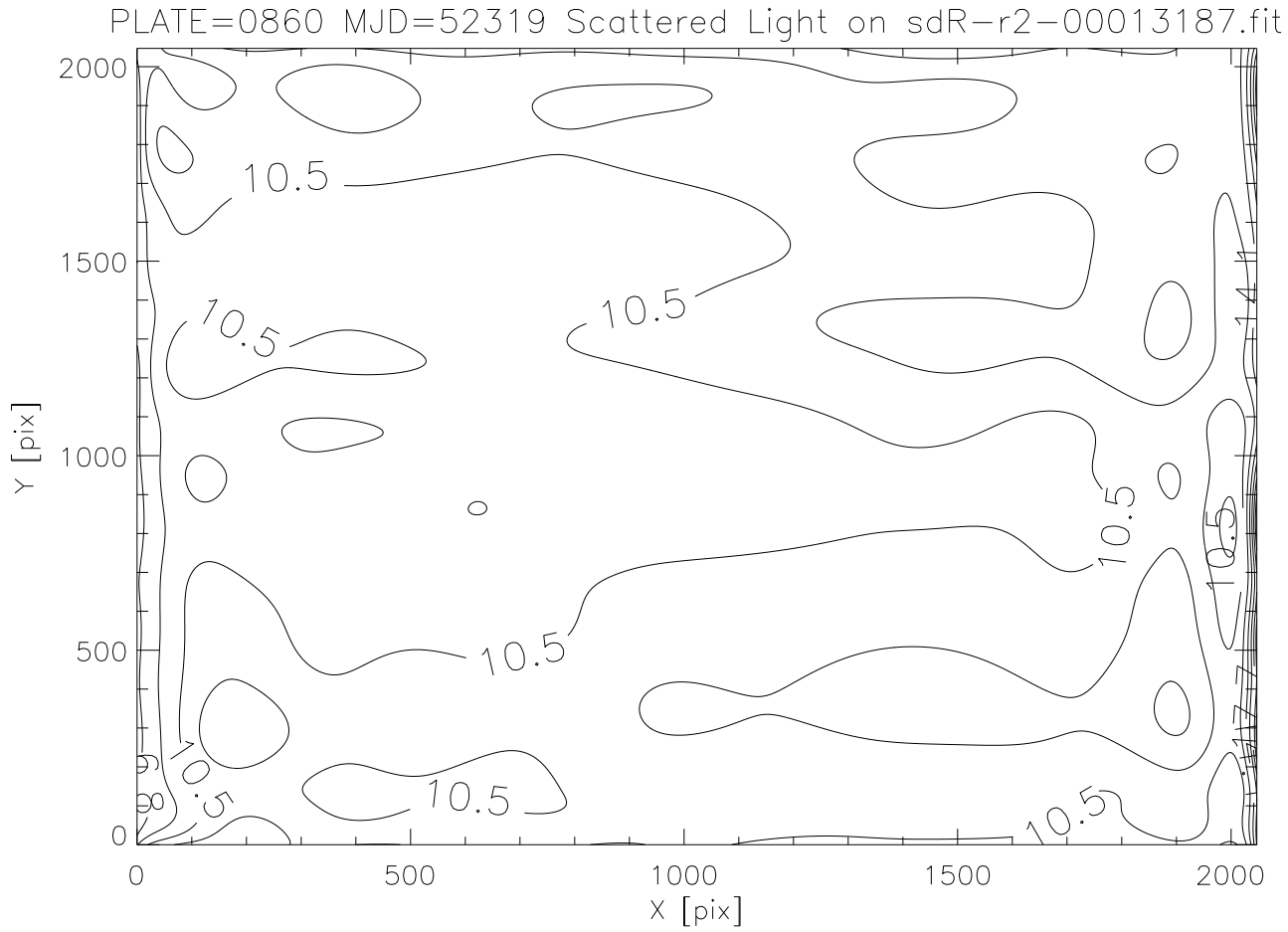

PLATE=0860 MJD=52319 sdR-r2-00013186.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.92 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

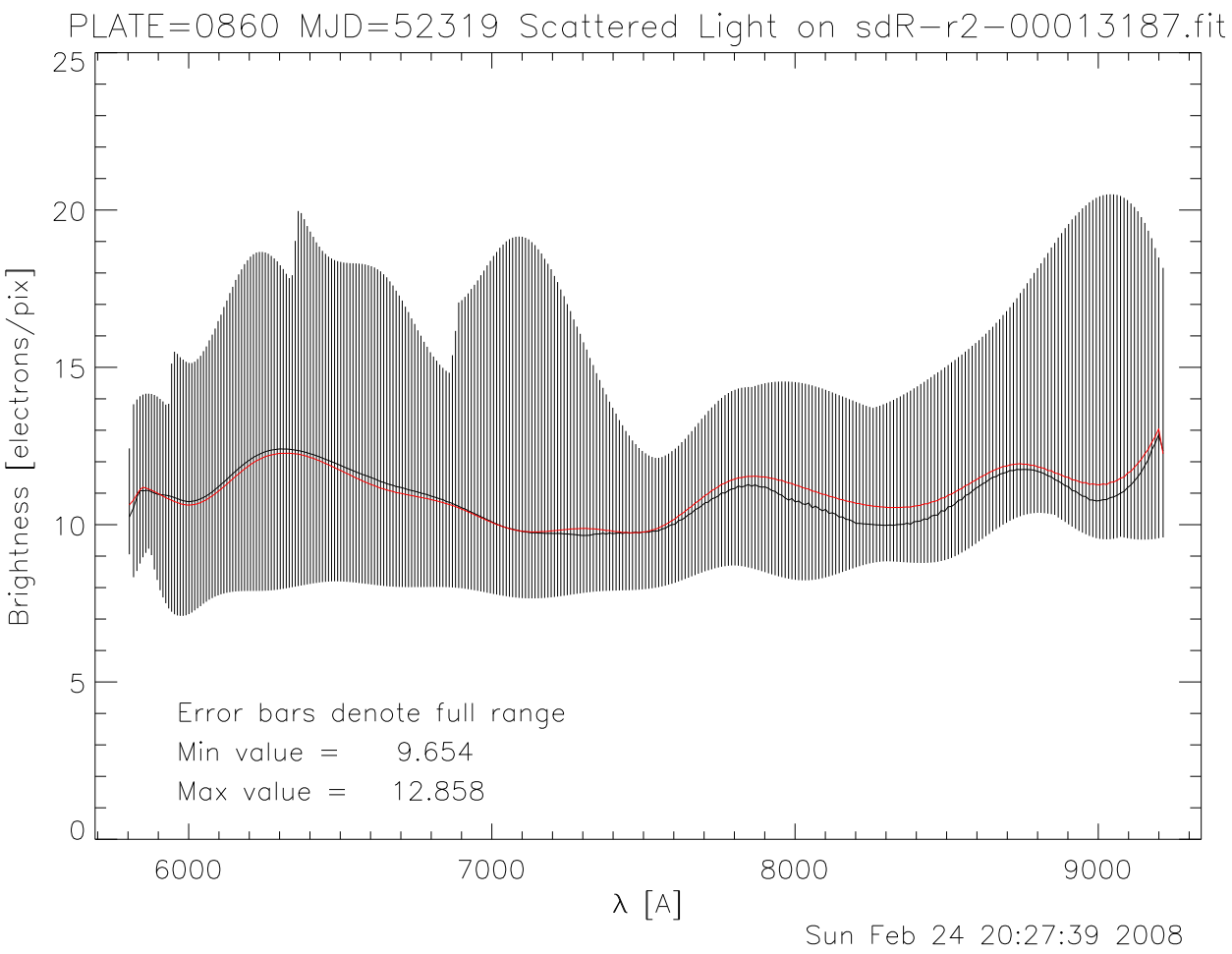

PLATE=0860 MJD=52319 sdR-r2-00013186.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.15 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

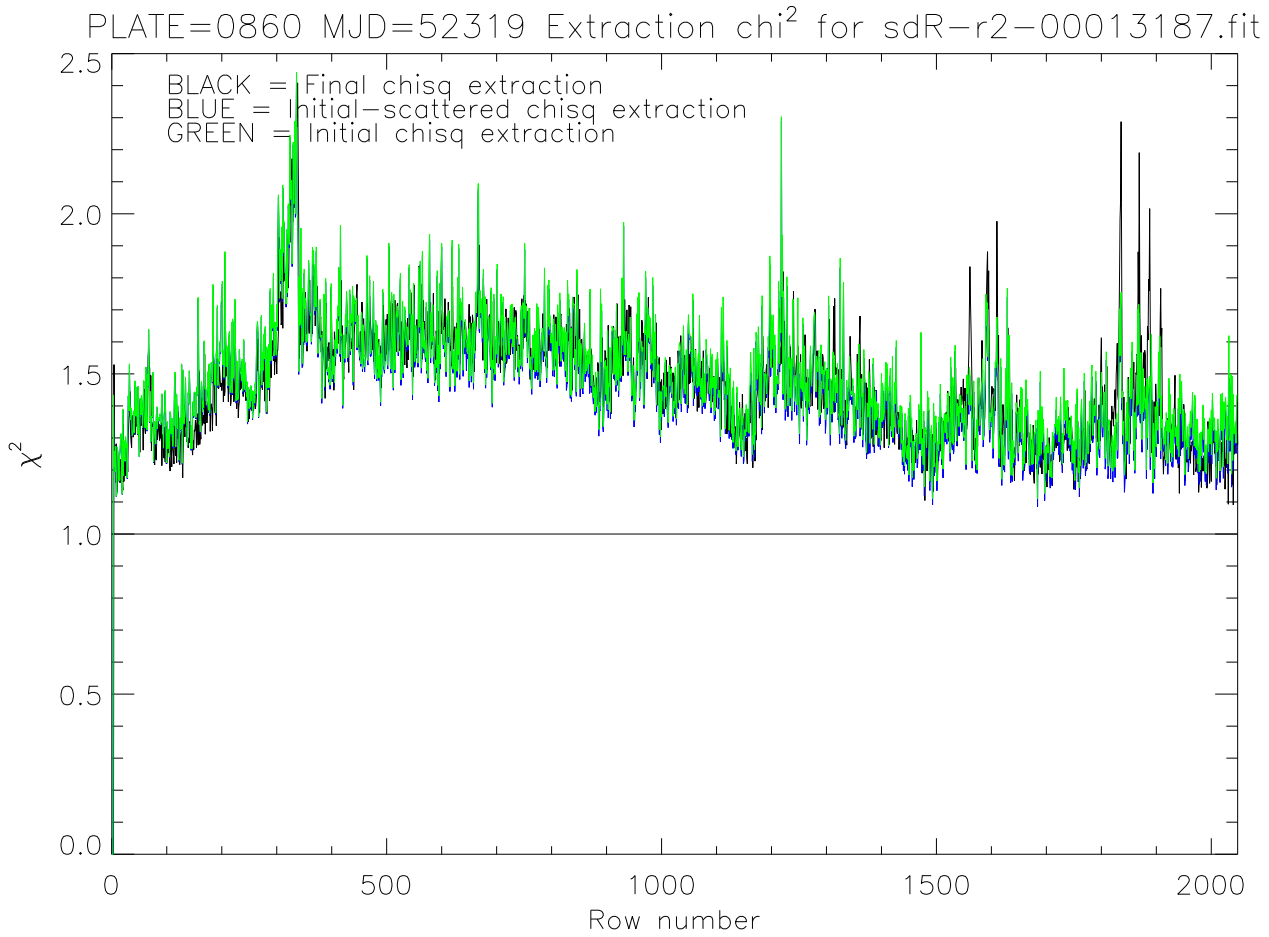

PLATE=0860 MJD=52319 Fiber−Flats for sdR−r2−00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:24:17 2008

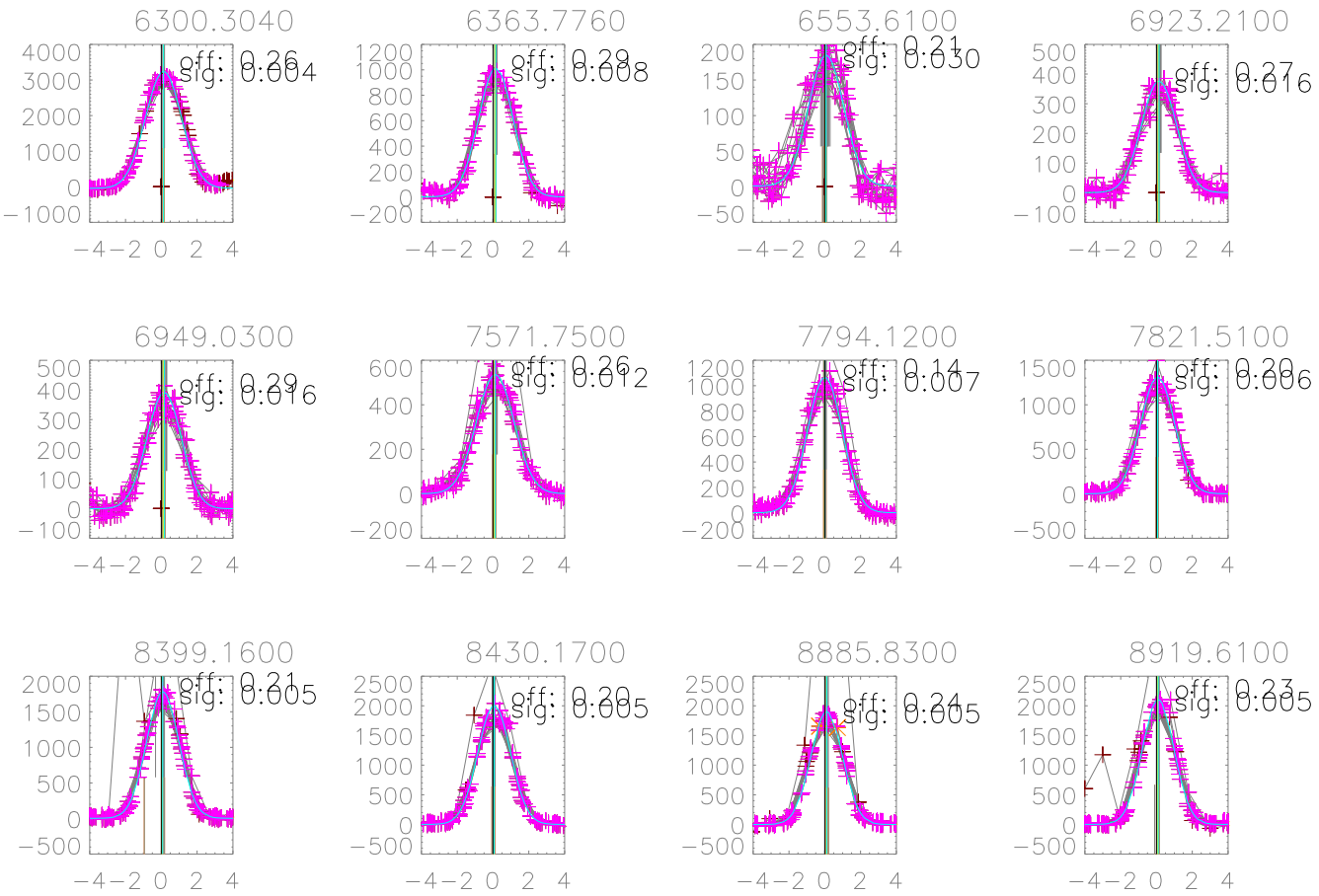

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013187.fi
31.82
31.82
22.73
22.73
13.64
13.64
13.64
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

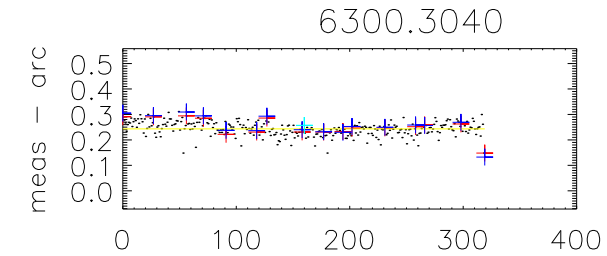

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013187.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.863
Max value = 34.734
Sun Feb 24 20:25:05 2008

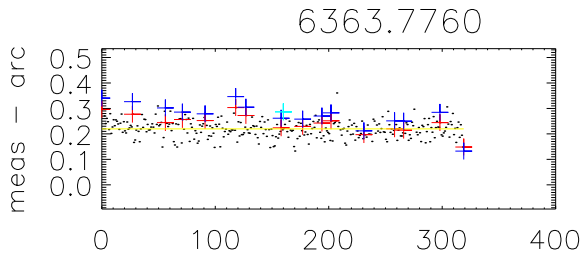

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013187.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
10.5
10.5
10.5
10.5
10.5
10.5
0
0
0

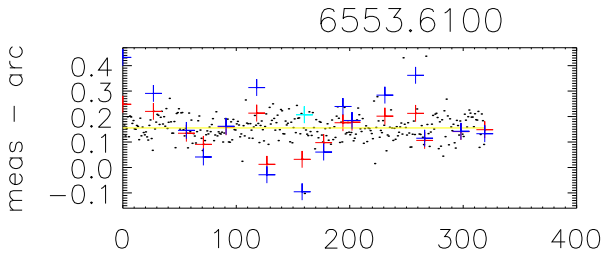

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013187.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.654
Max value = 12.858
Sun Feb 24 20:27:39 2008

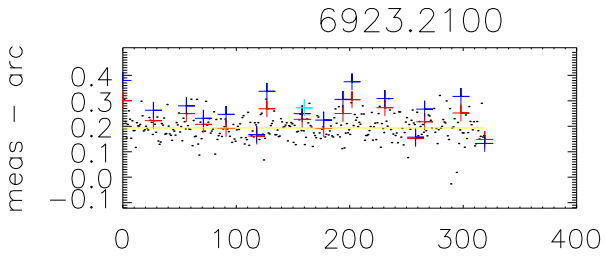

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r2−00013187.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

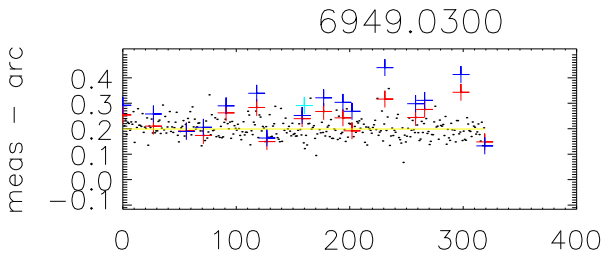

6300.3040
off: 0.26
sig: 0.004
6363.7760
off: 0.29
sig: 0.008
6553.6100
off: 0.21
sig: 0.030
6923.2100
off: 0.27
sig: 0.016
6949.0300
off: 0.29
sig: 0.016
7571.7500
off: 0.26
sig: 0.012
7794.1200
off: 0.14
sig: 0.007
7821.5100
off: 0.20
sig: 0.006
8399.1600
off: 0.21
sig: 0.005
8430.1700
off: 0.20
sig: 0.005
8885.8300
off: 0.24
sig: 0.005
8919.6100
off: 0.23
sig: 0.005

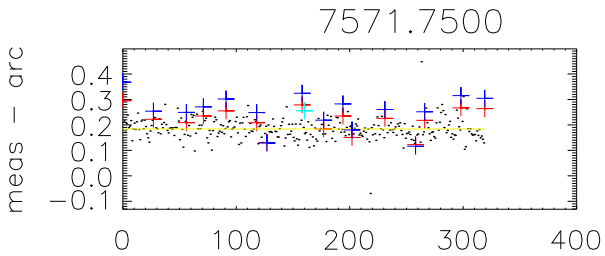

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

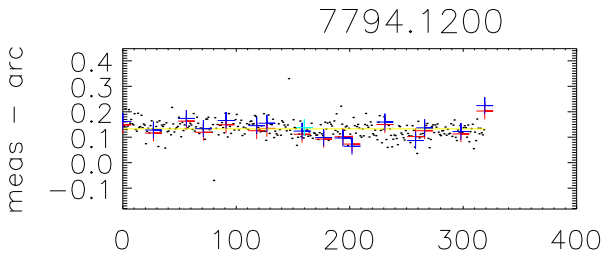

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

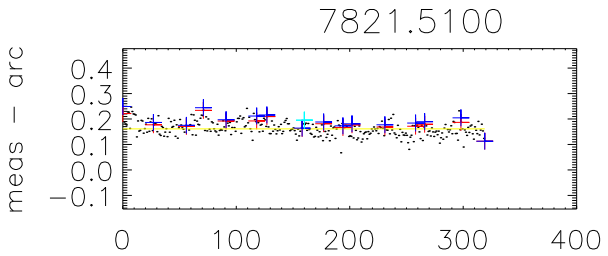

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

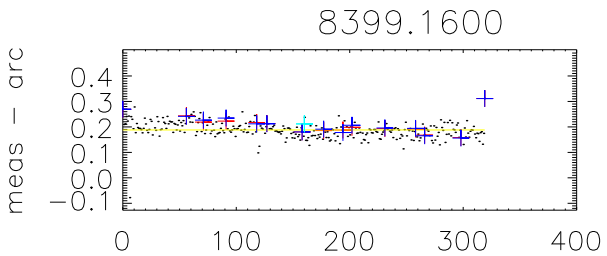

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

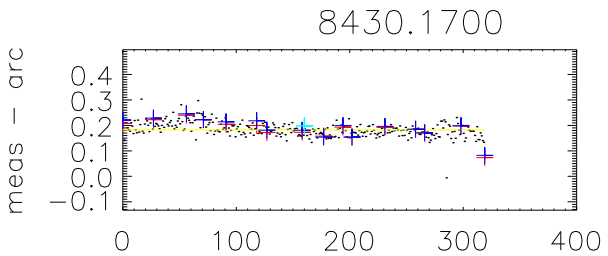

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

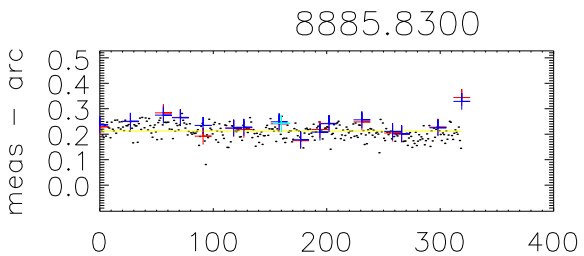

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

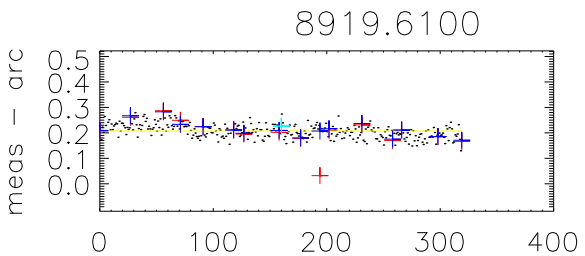

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

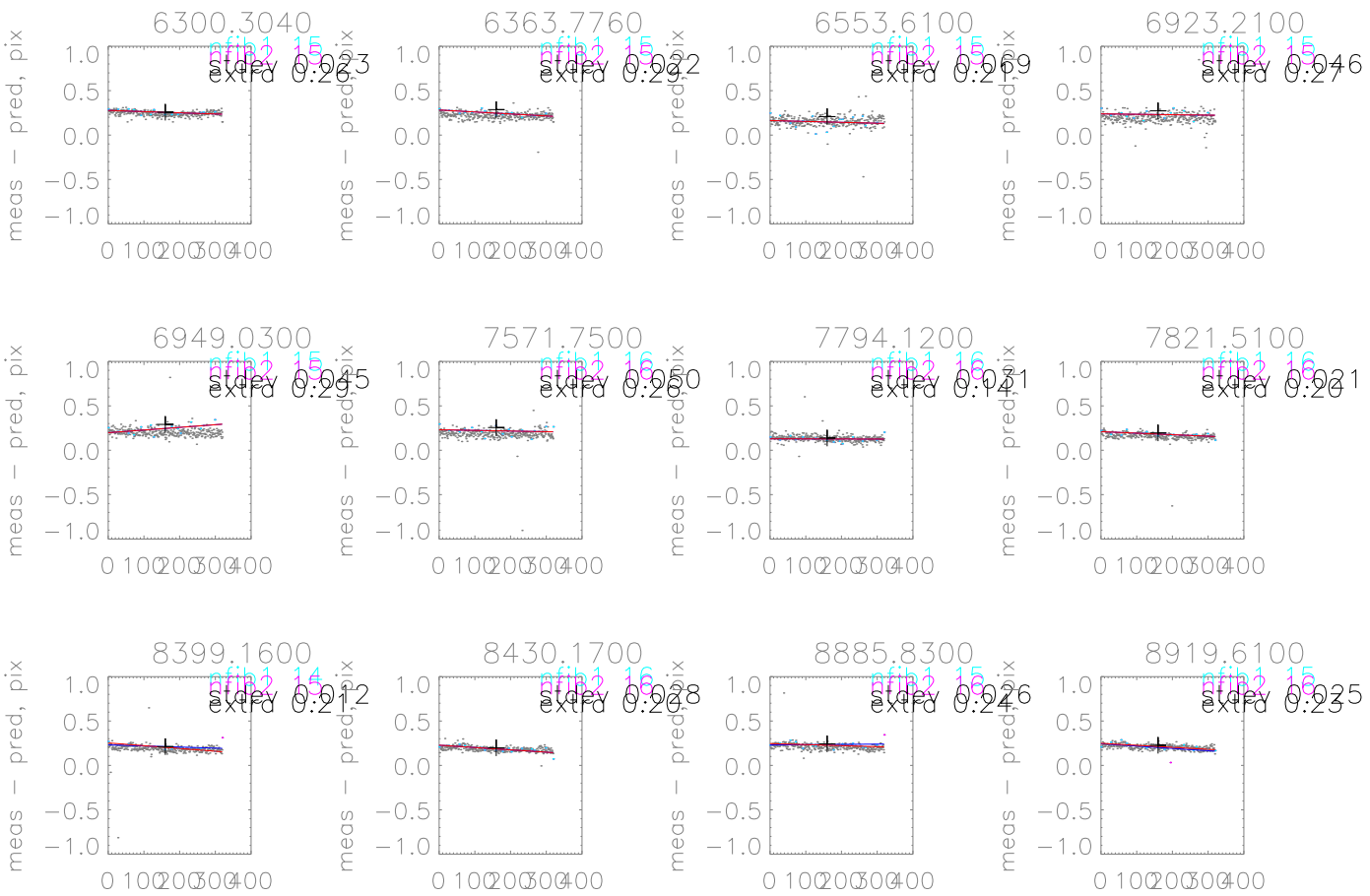

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

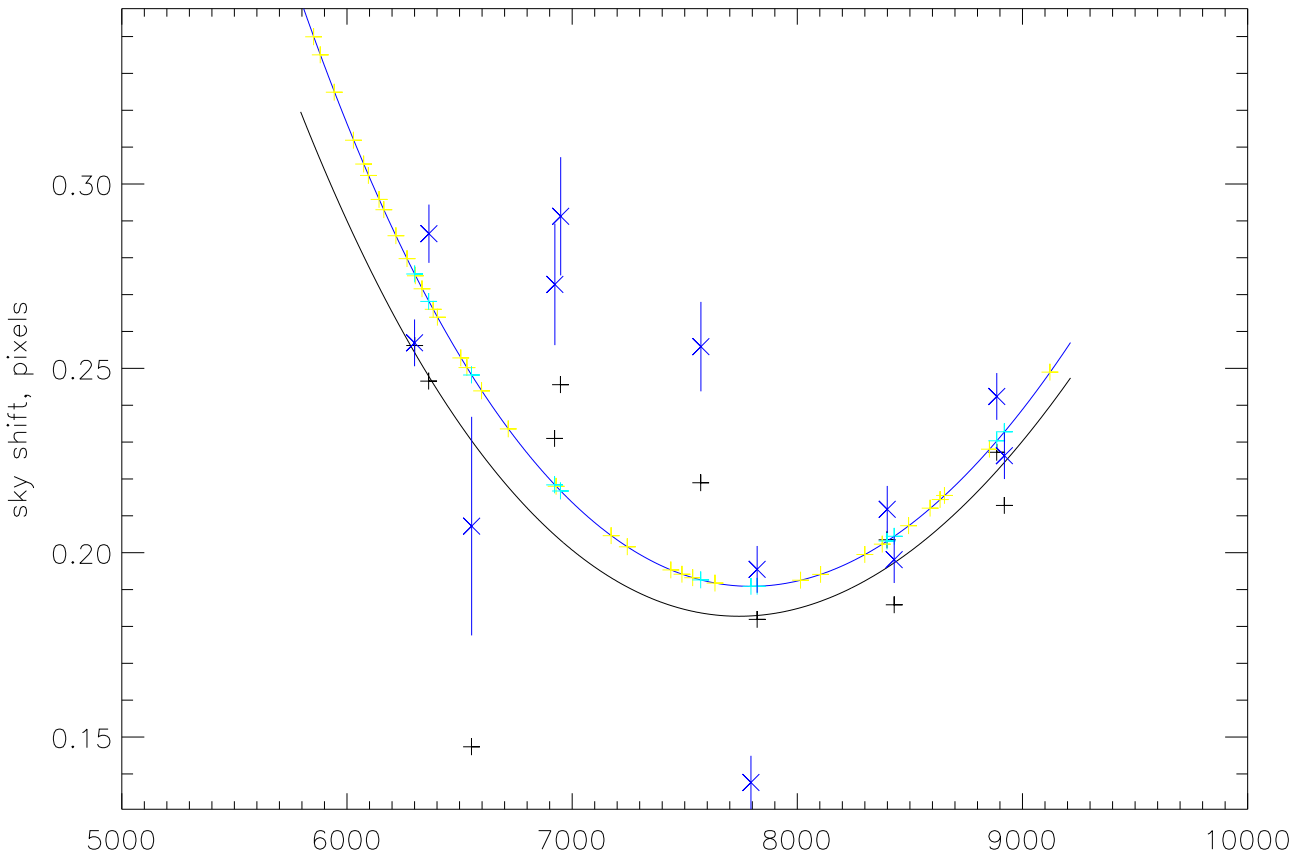

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

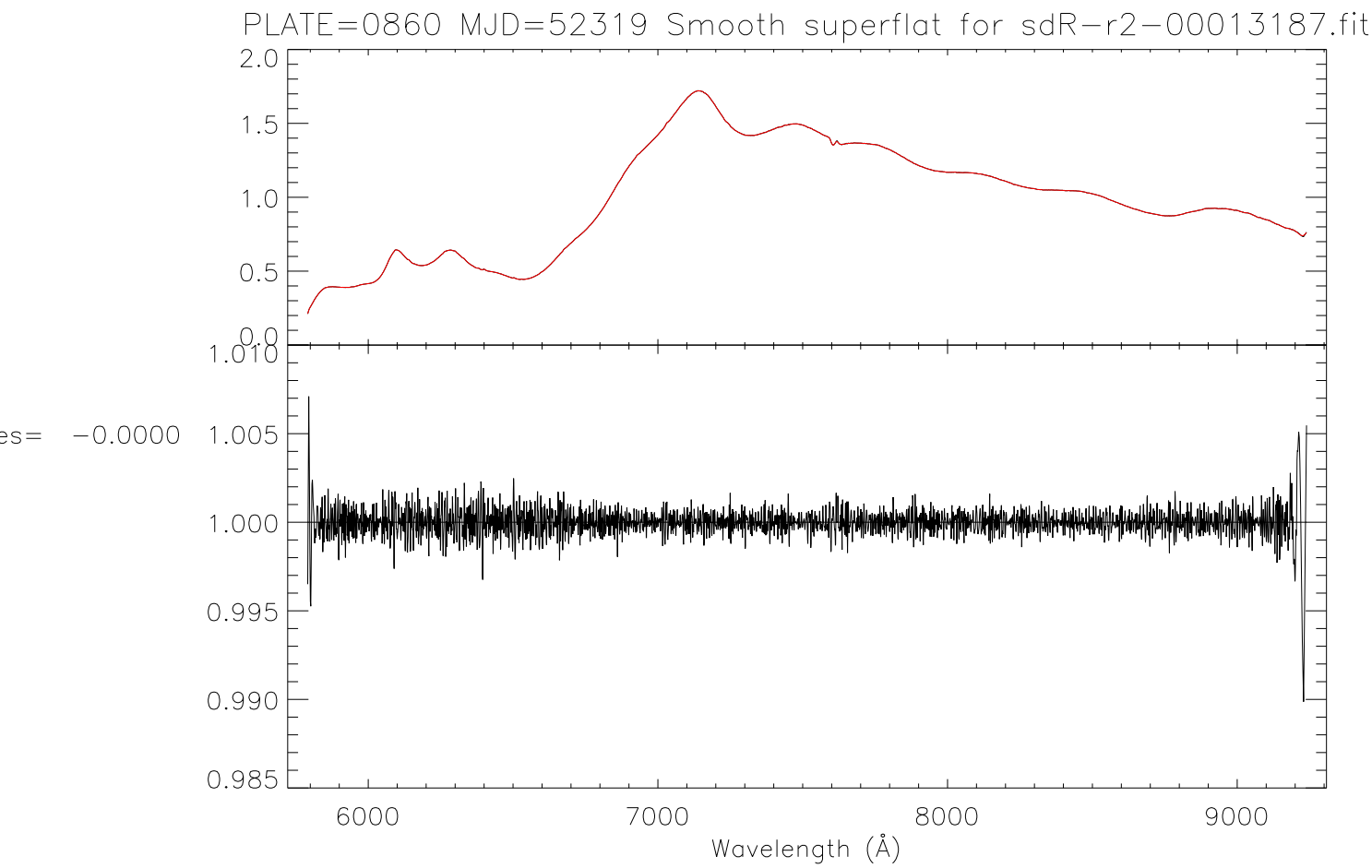

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

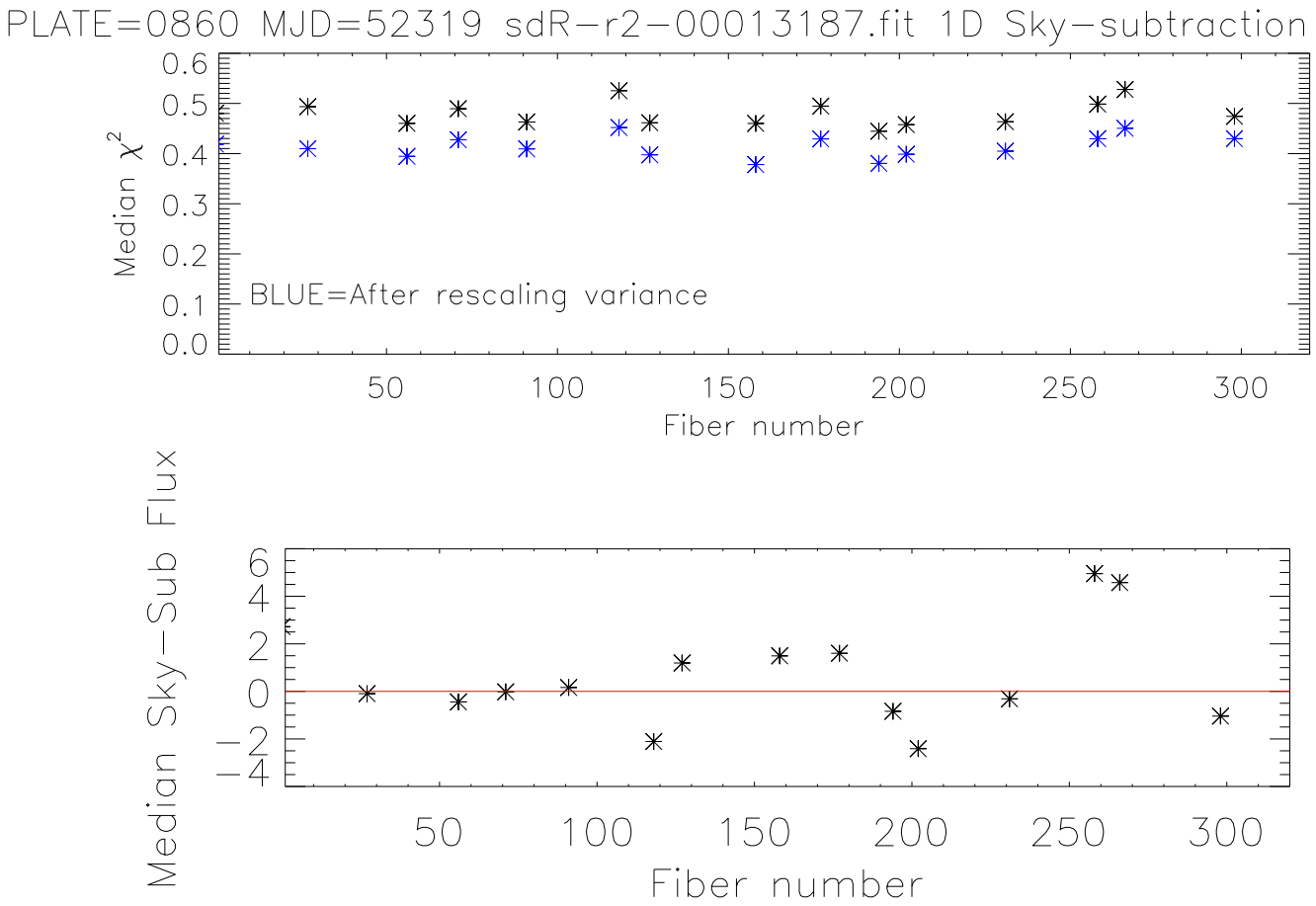

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

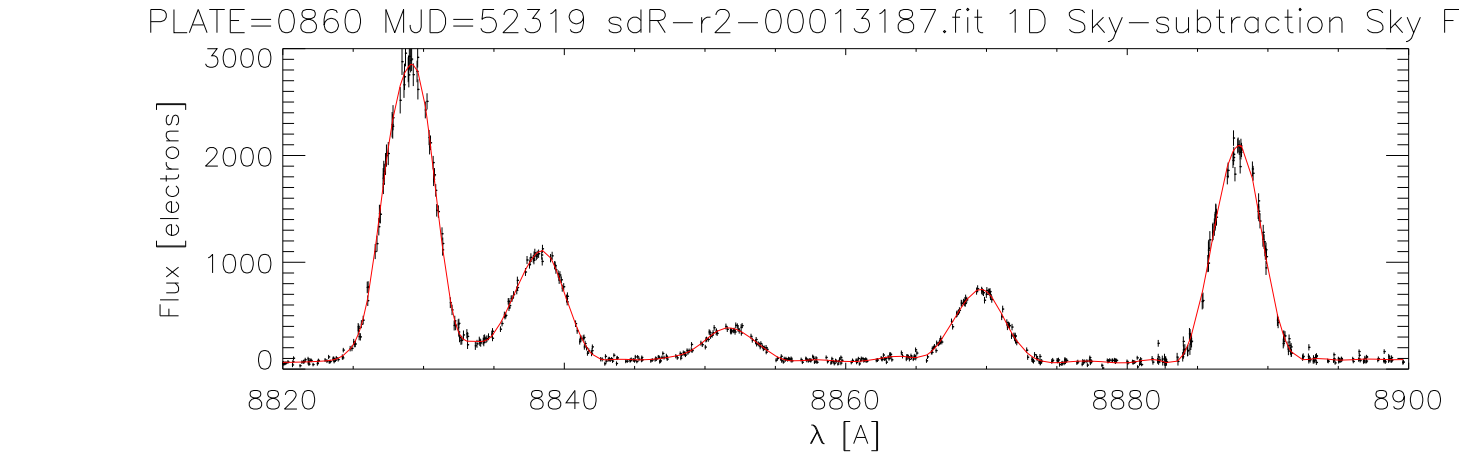

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

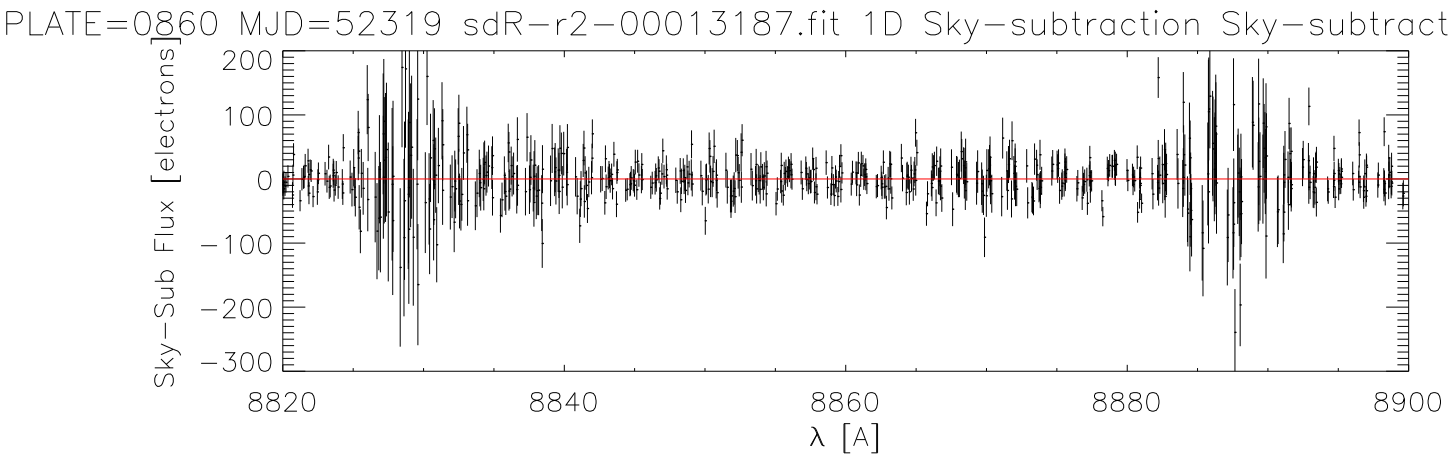

6300.3040
mfh32 15
stdev 0.023
extra 0.26
6363.7760
mfh32 15
stdev 0.022
extra 0.24
6553.6100
mfh32 15
stdev 0.019
extra 0.21
6923.2100
mfh32 15
stdev 0.046
extra 0.27
6949.0300
mfh32 15
stdev 0.045
extra 0.29
7571.7500
mfh32 16
stdev 0.050
extra 0.26
7794.1200
mfh32 16
stdev 0.031
extra 0.14
7821.5100
mfh32 16
stdev 0.031
extra 0.20
8399.1600
mfh32 14
stdev 0.012
extra 0.21
8430.1700
mfh32 16
stdev 0.028
extra 0.24
8885.8300
mfh32 15
stdev 0.026
extra 0.24
8919.6100
mfh32 15
stdev 0.025
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

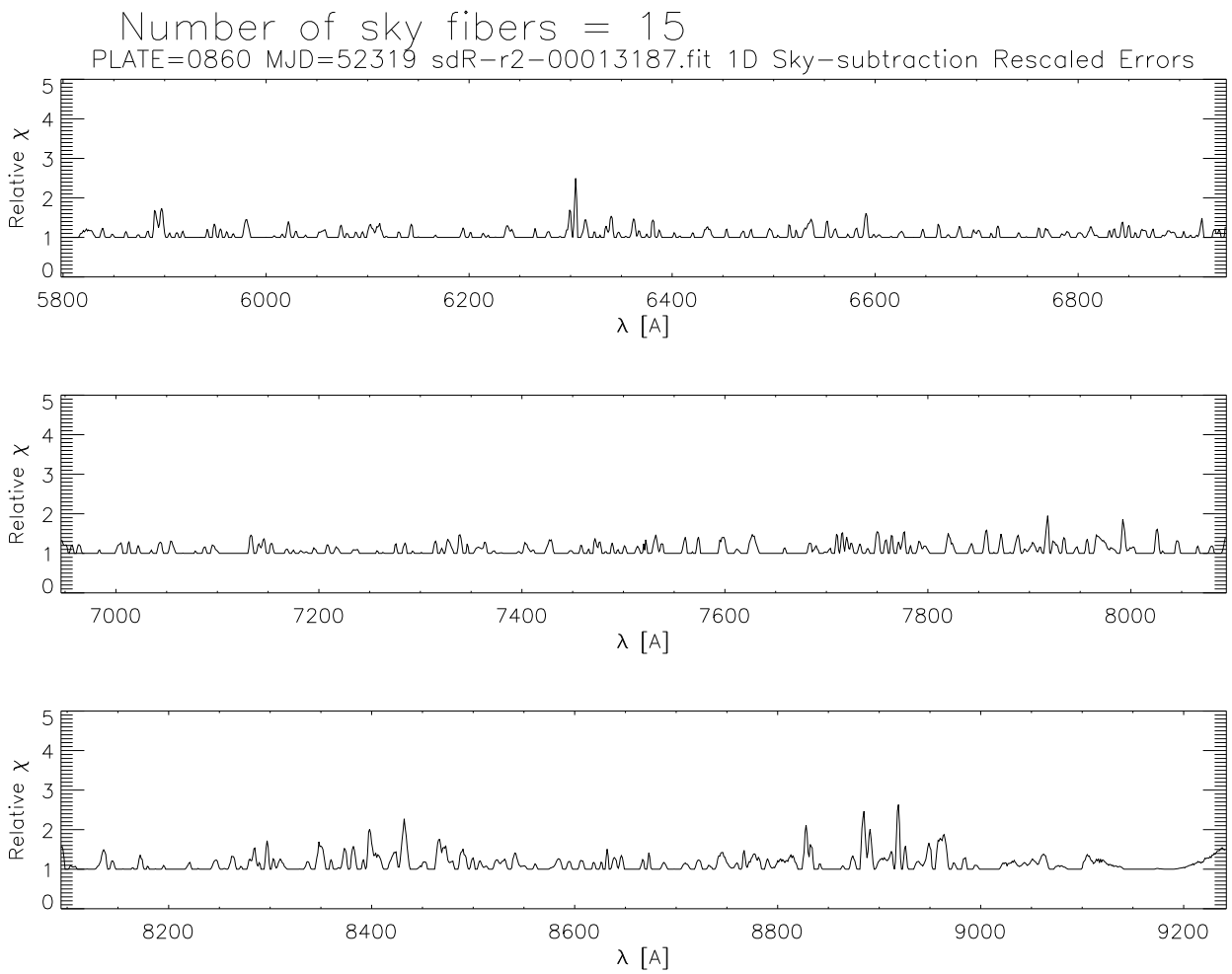

sky shift, pixels
0.30
0.25
0.20
0.15
5000
6000
7000
8000
9000
10000

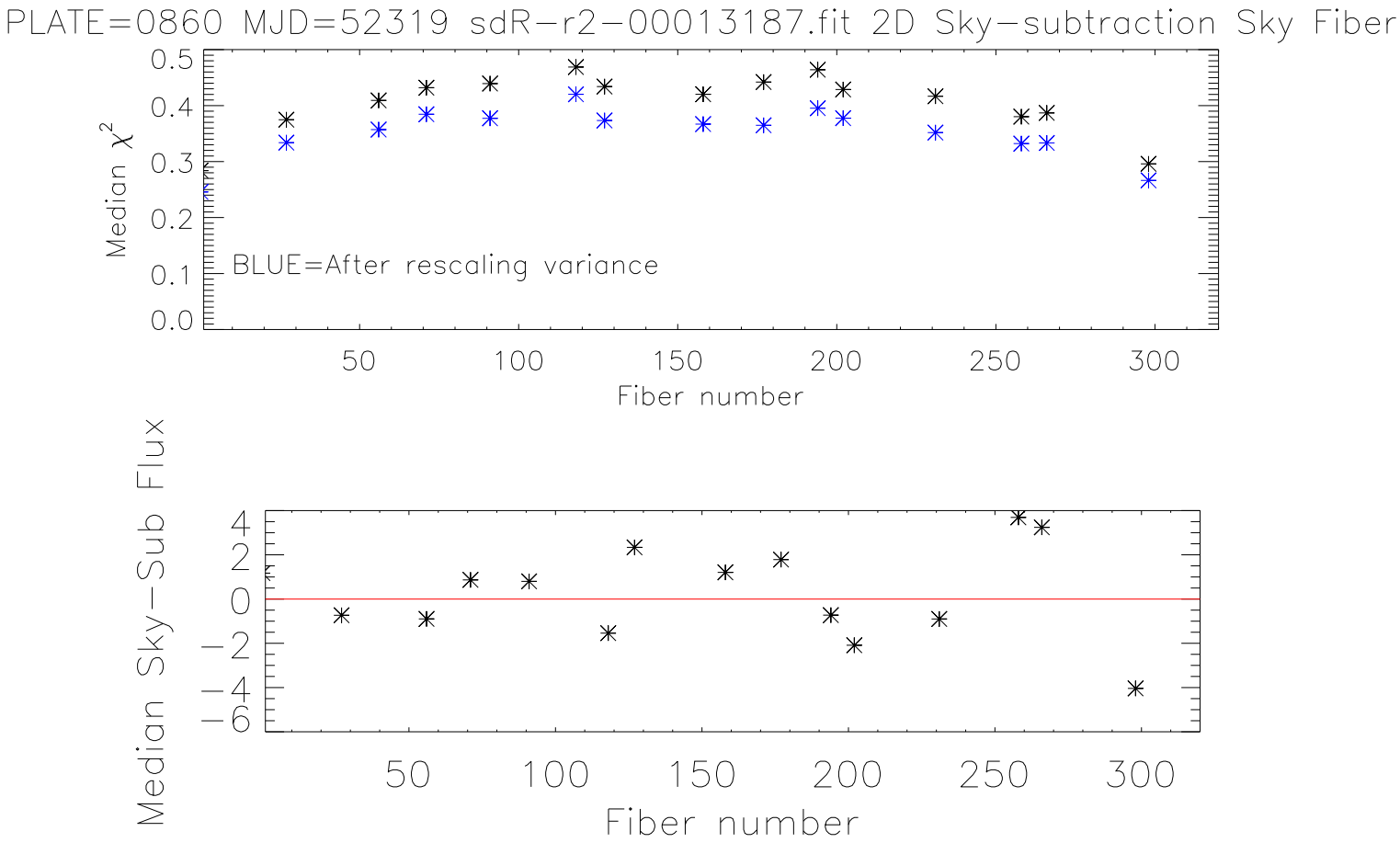

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013187.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

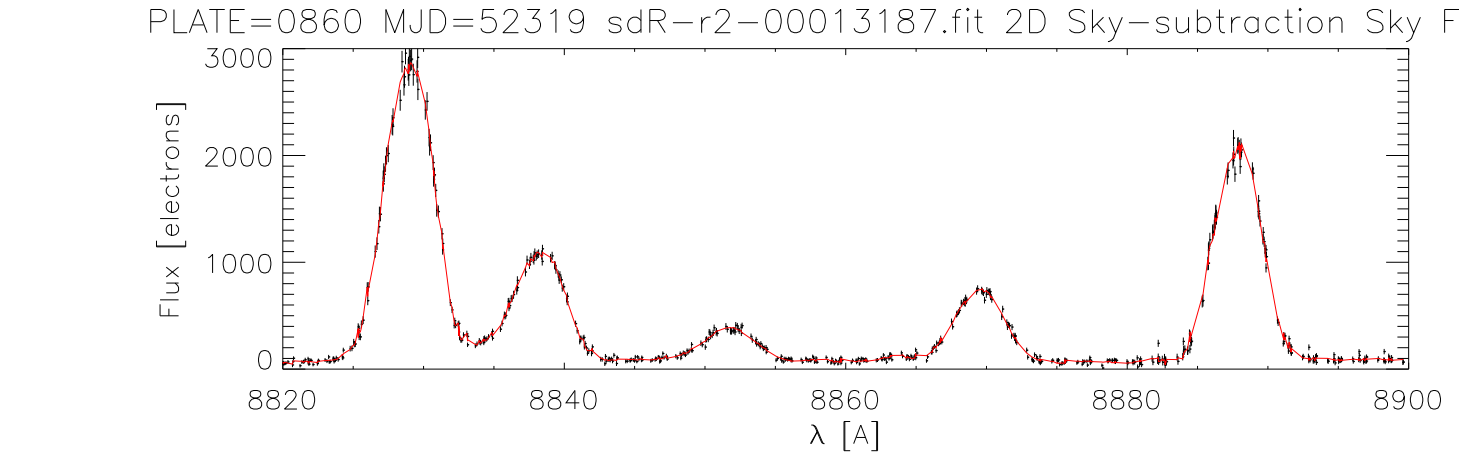

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

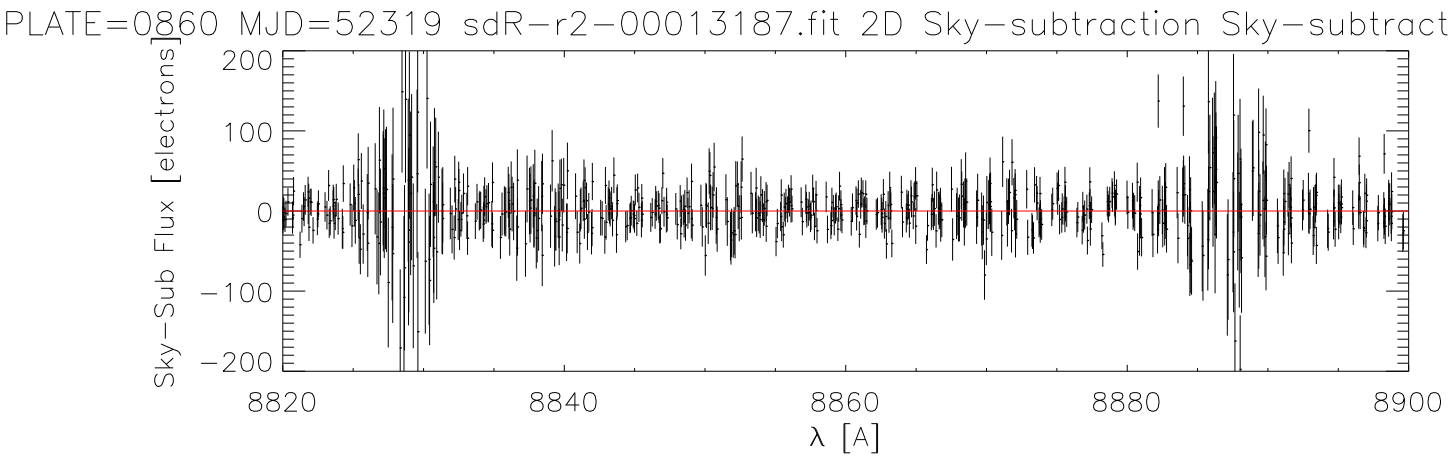

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

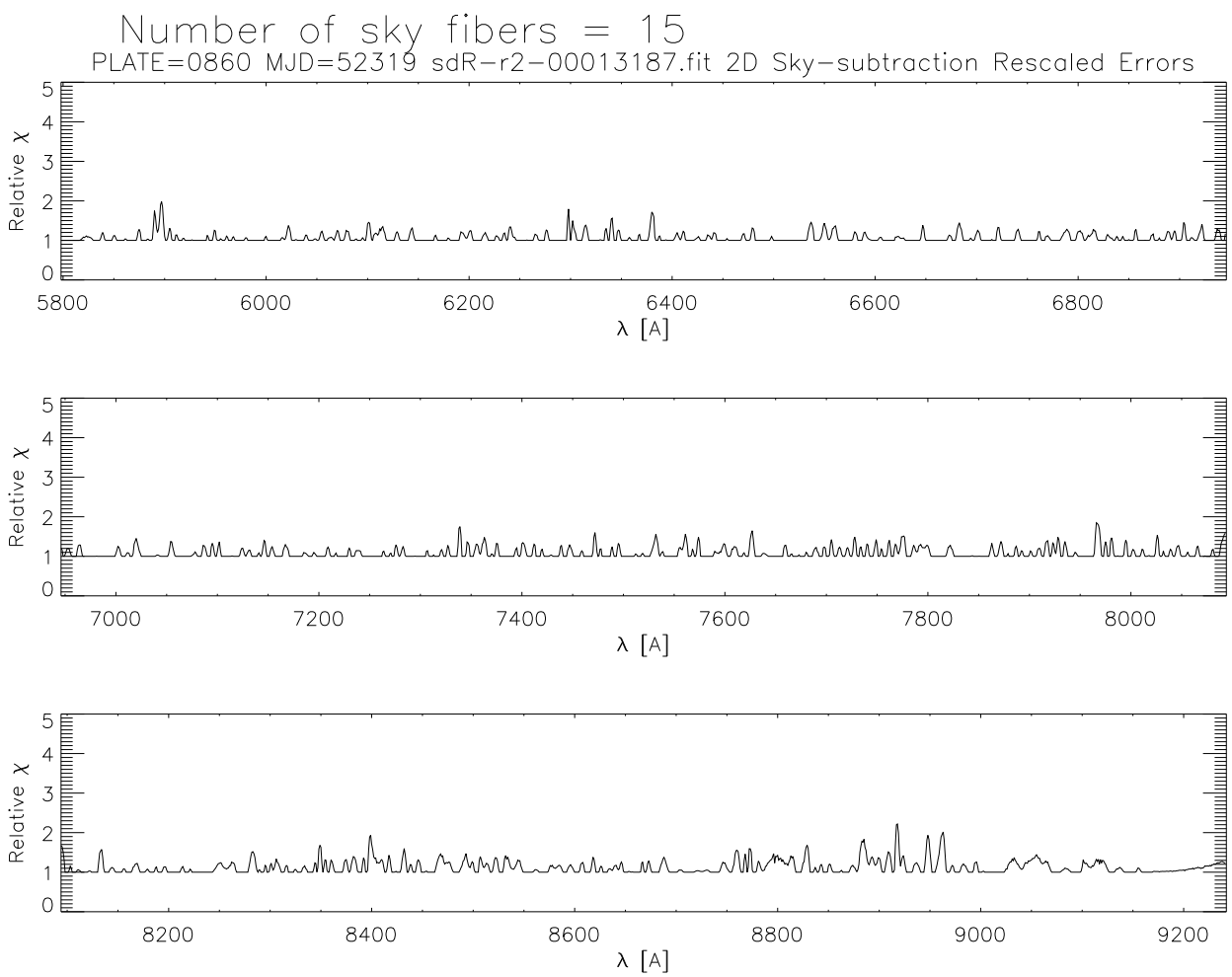

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

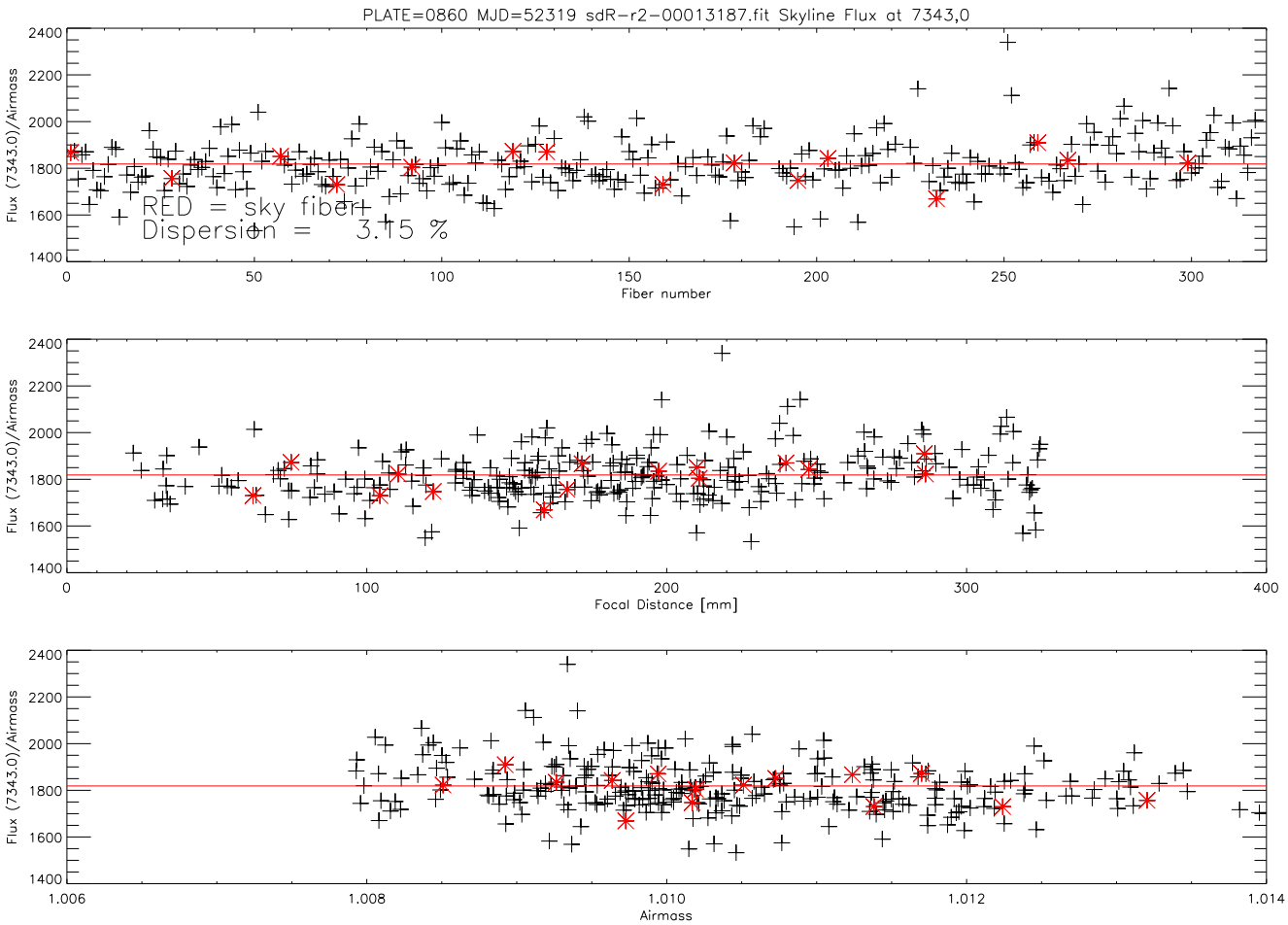

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013187.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

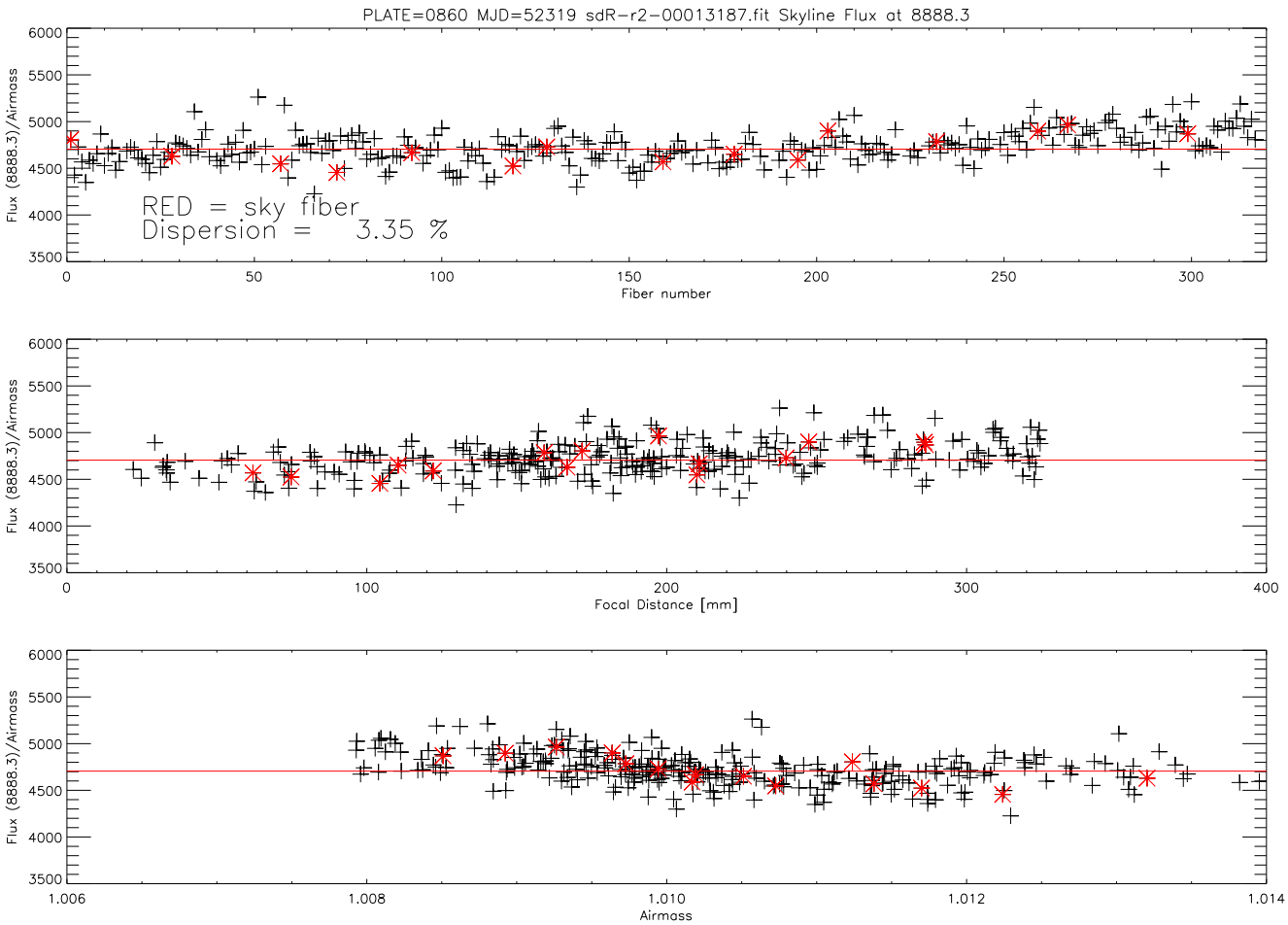

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

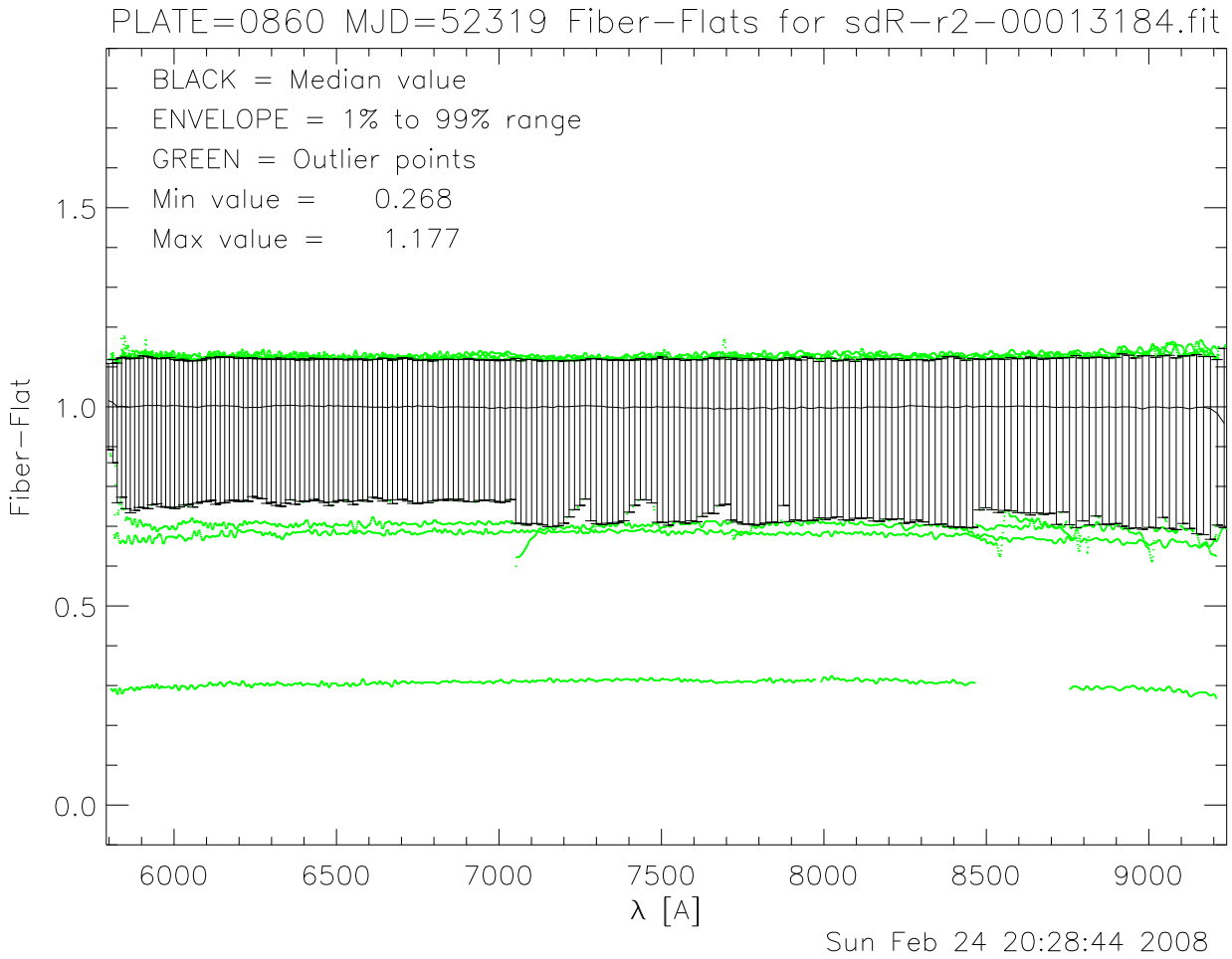

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

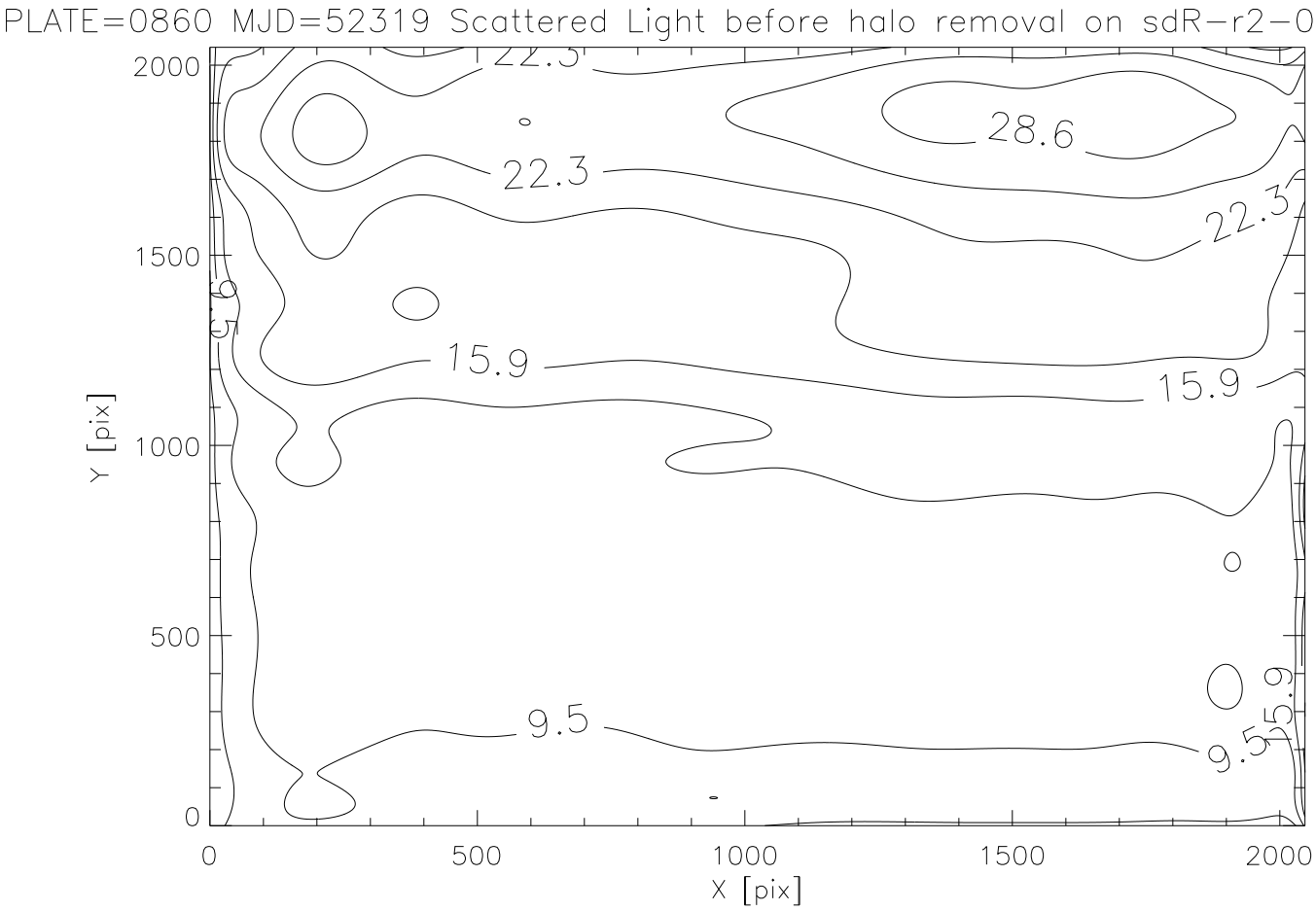

PLATE=0860 MJD=52319 sdR-r2-00013187.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

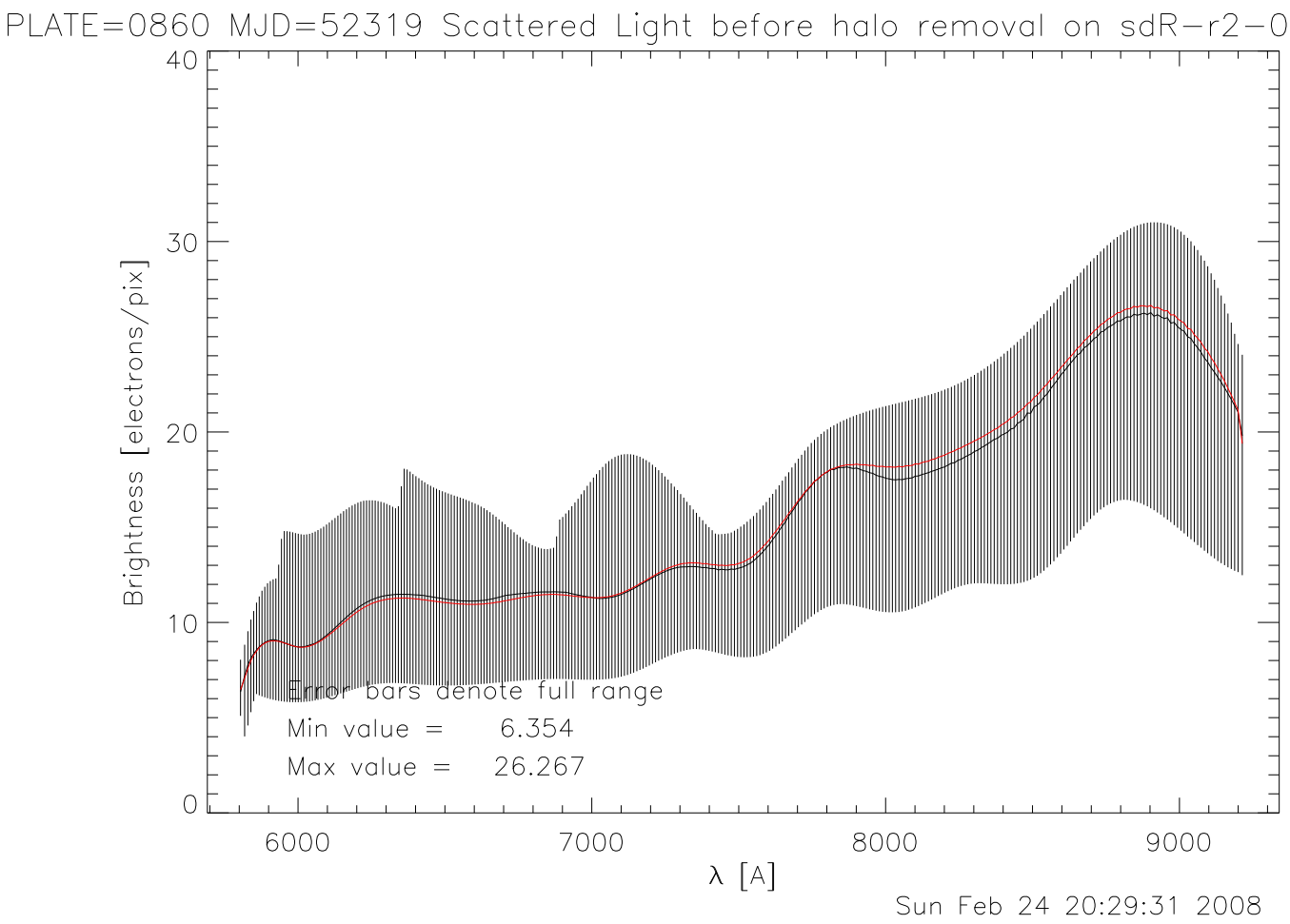

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013187.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

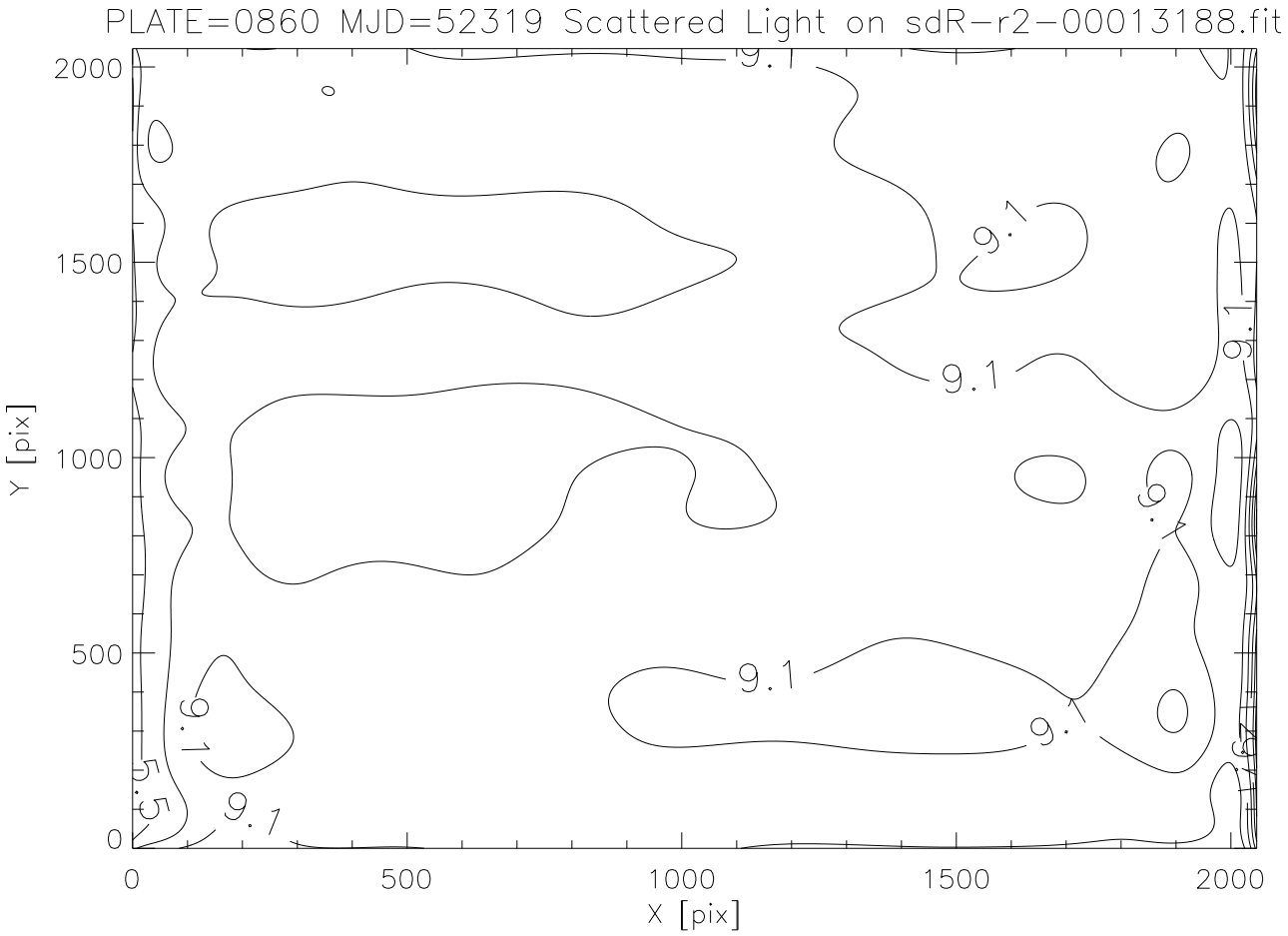

PLATE=0860 MJD=52319 sdR-r2-00013187.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.15 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

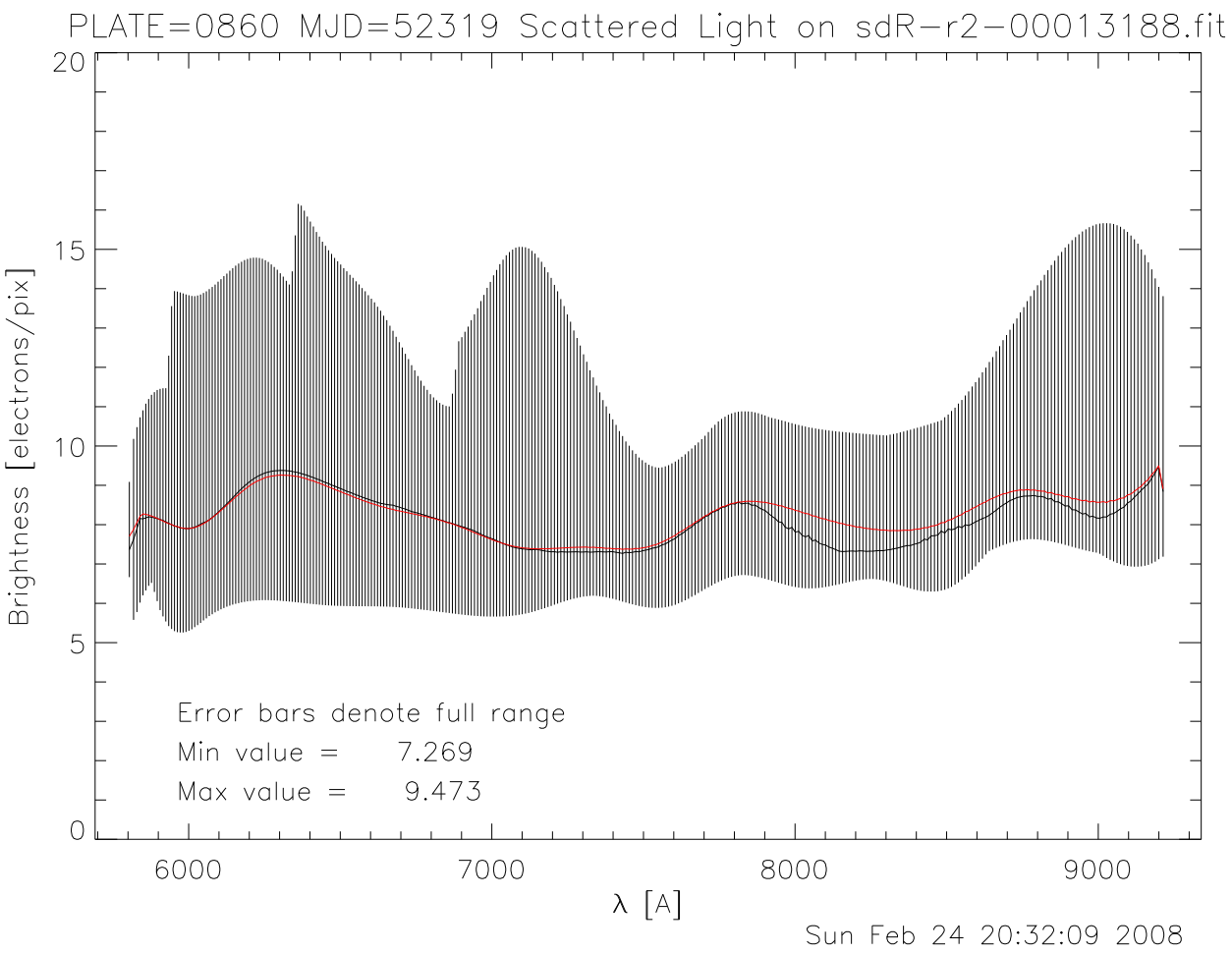

PLATE=0860 MJD=52319 sdR-r2-00013187.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.35 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

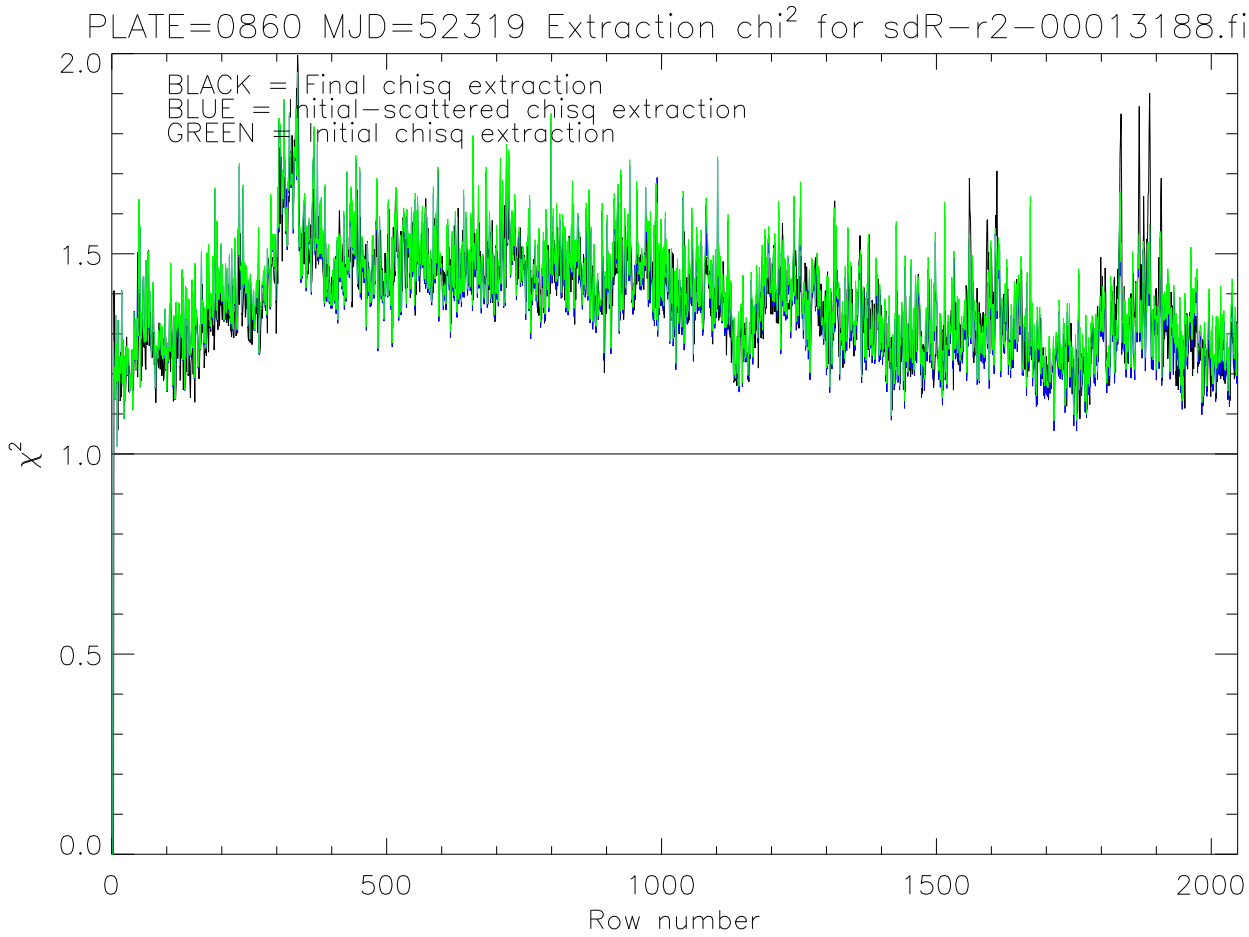

PLATE=0860 MJD=52319 Fiber-Flats for sdR-r2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:28:44 2008

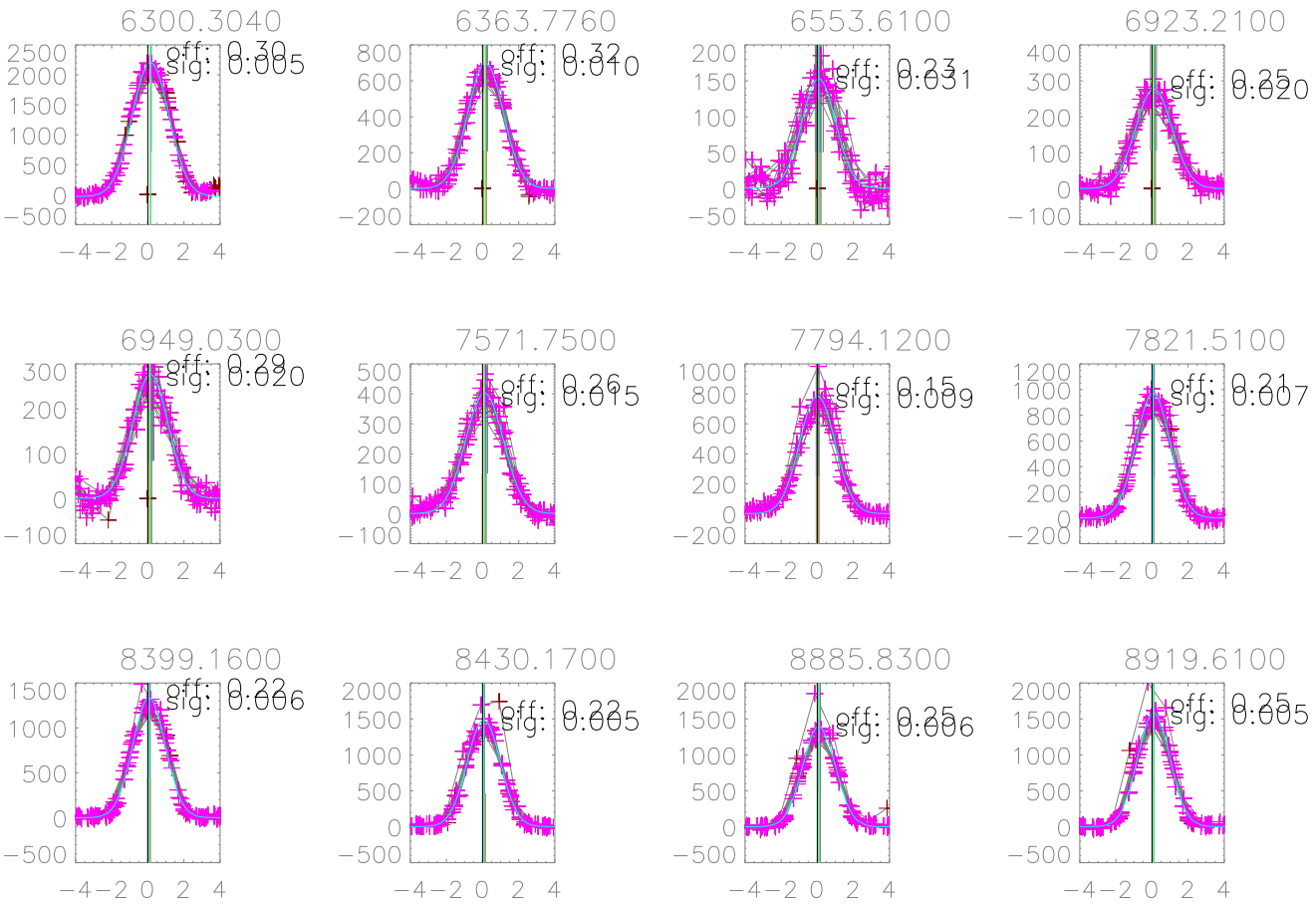

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013188.fi
22.3
28.6
22.3
22.3
15.9
15.9
15.9
9.5
9.5
9.5
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

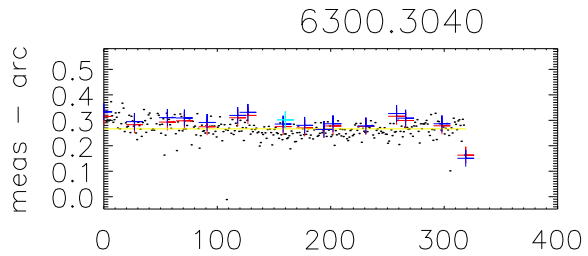

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013188.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.354
Max value = 26.267
Sun Feb 24 20:29:31 2008

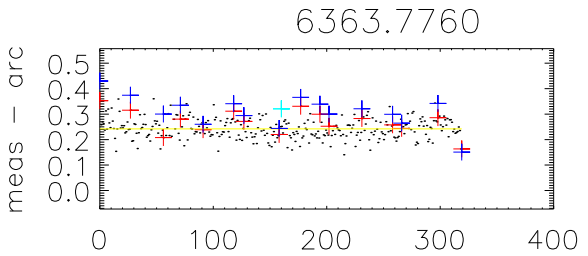

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013188.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5

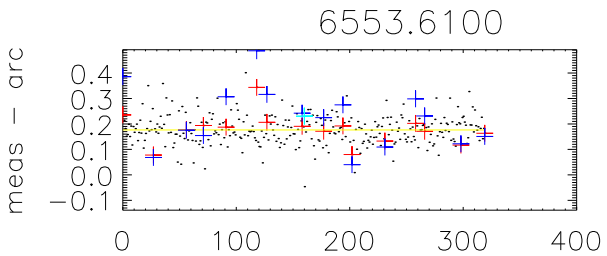

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013188.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.269
Max value = 9.473
Sun Feb 24 20:32:09 2008

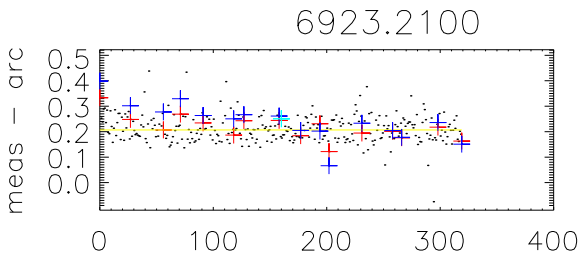

PLATE=0860 MJD=52319 Extraction chi^2 for sdR−r2−00013188.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

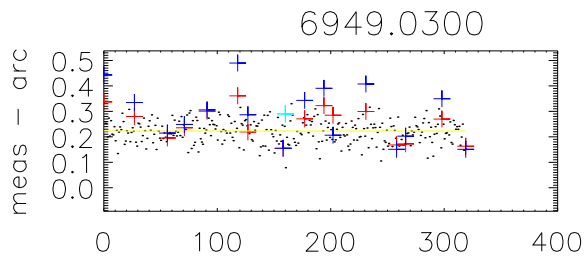

6300.3040
off: 0.30
sig: 0.005
6363.7760
off: 0.32
sig: 0.010
6553.6100
off: 0.23
sig: 0.031
6923.2100
off: 0.25
sig: 0.020
6949.0300
off: 0.29
sig: 0.020
7571.7500
off: 0.26
sig: 0.015
7794.1200
off: 0.15
sig: 0.009
7821.5100
off: 0.21
sig: 0.007
8399.1600
off: 0.22
sig: 0.006
8430.1700
off: 0.22
sig: 0.005
8885.8300
off: 0.25
sig: 0.006
8919.6100
off: 0.25
sig: 0.005

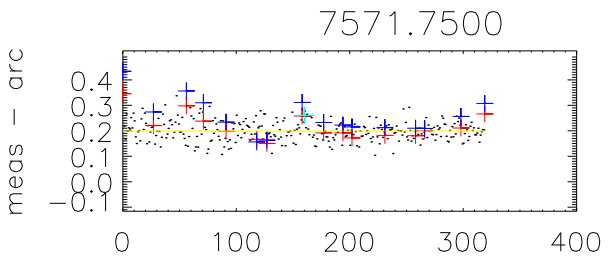

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

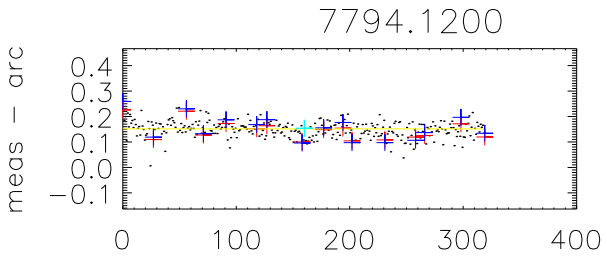

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

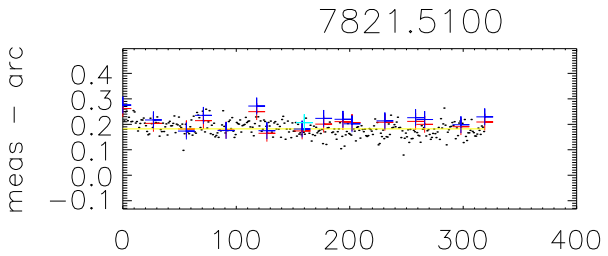

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

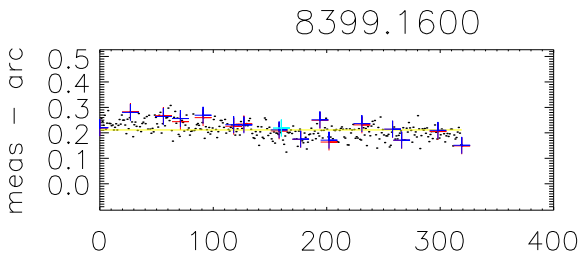

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

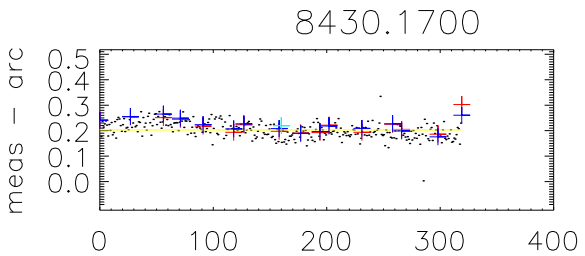

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

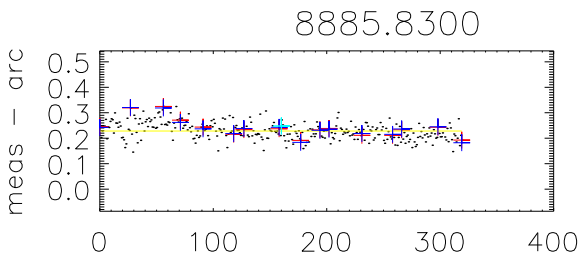

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

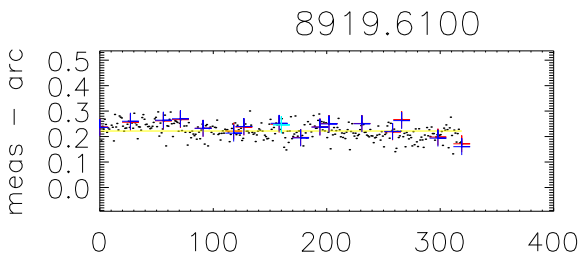

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

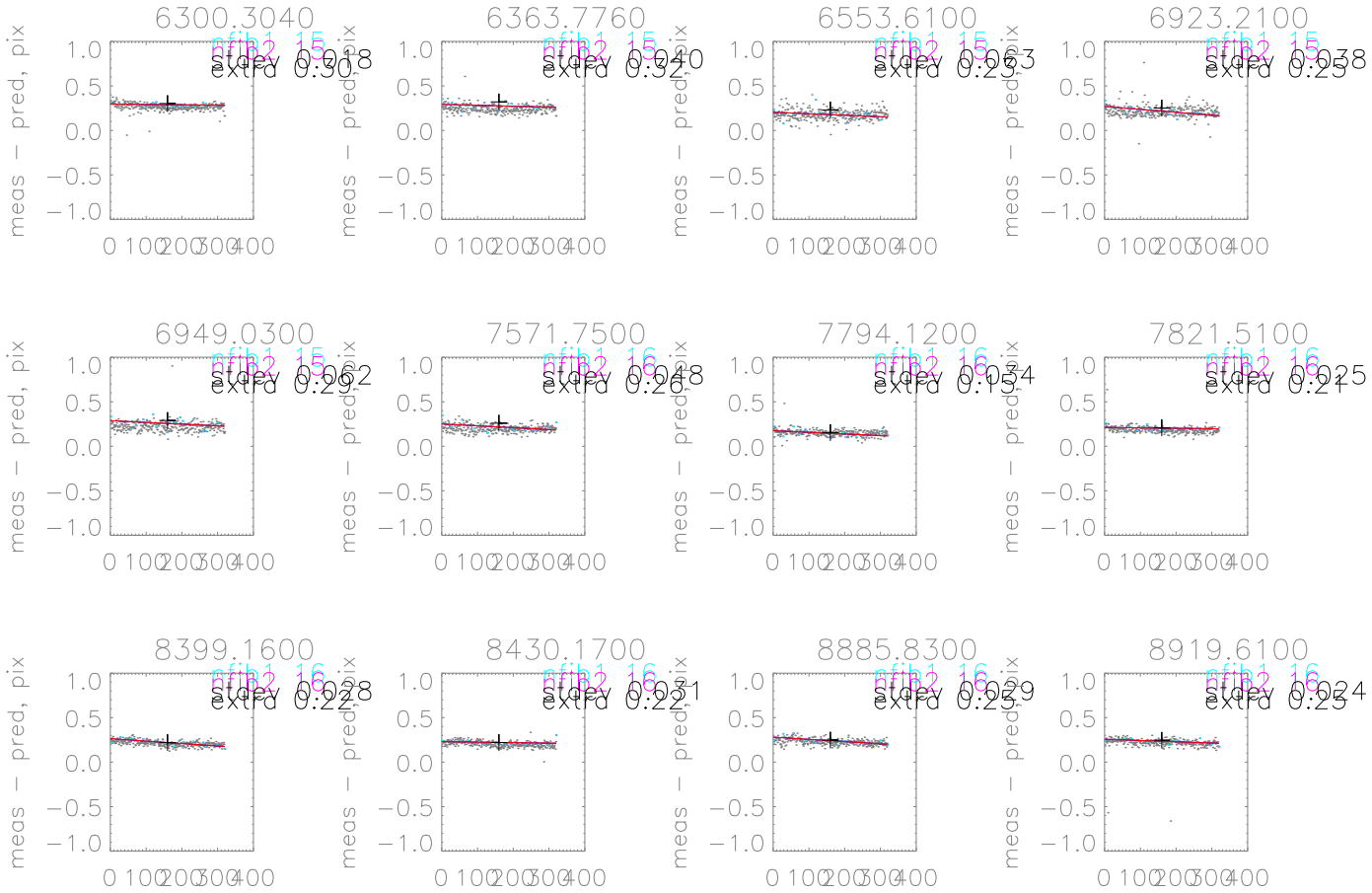

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

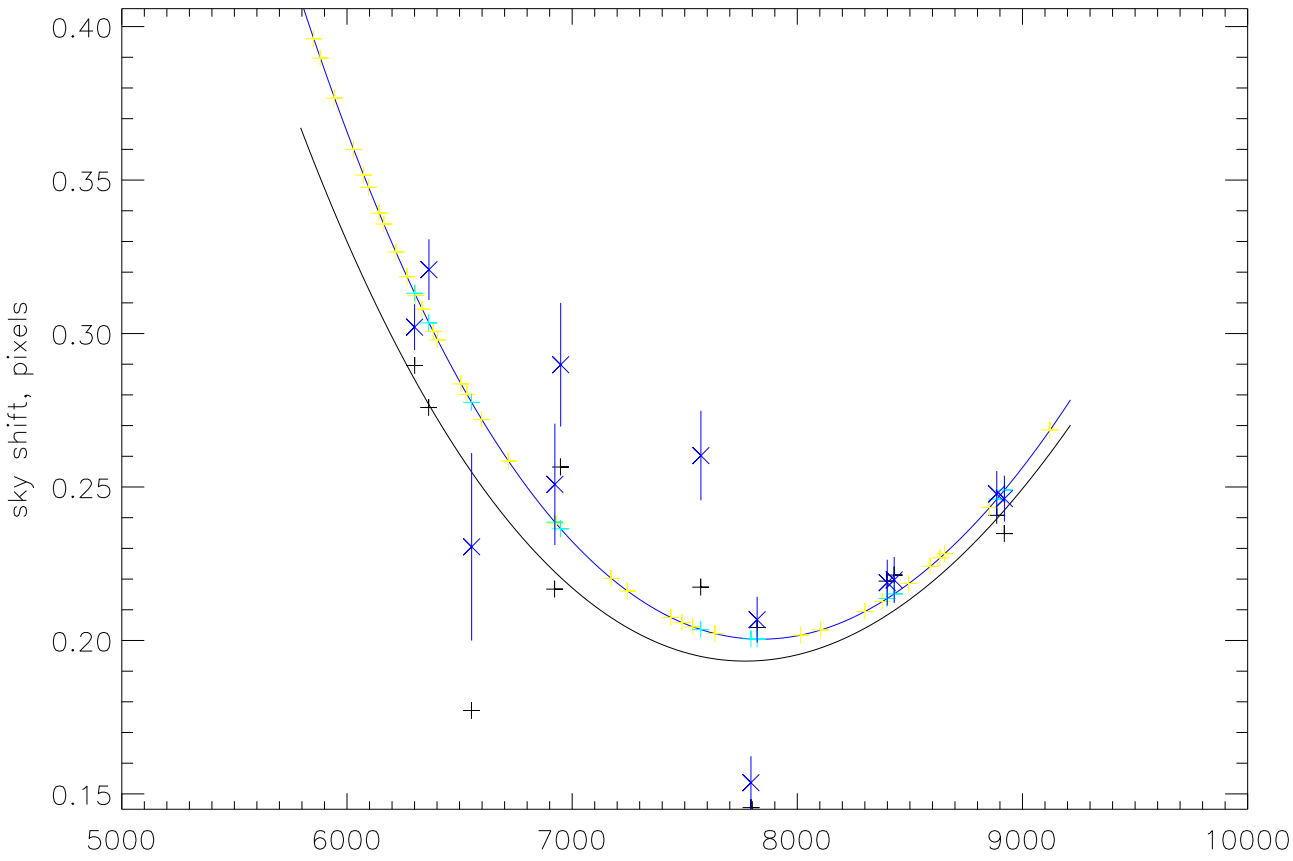

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

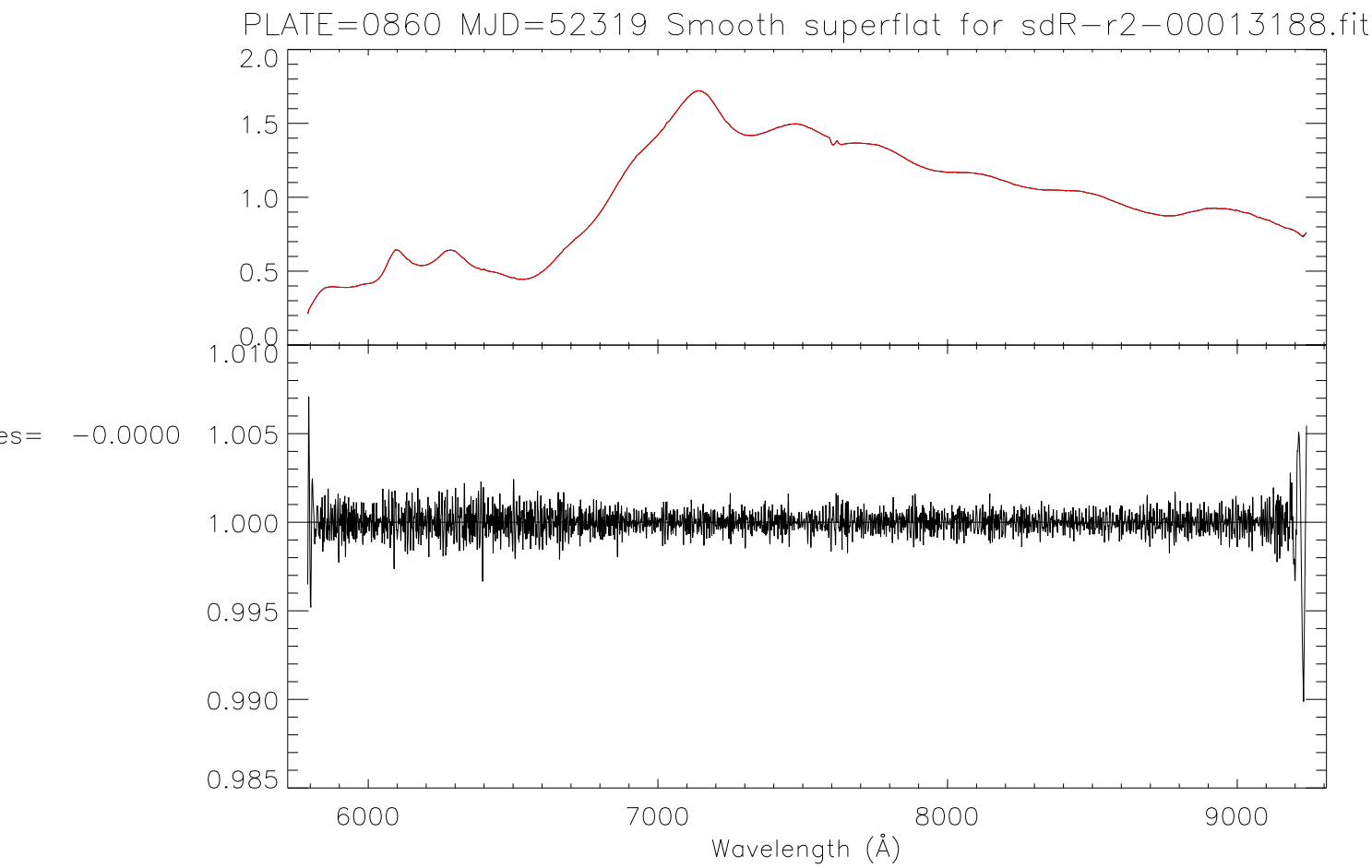

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

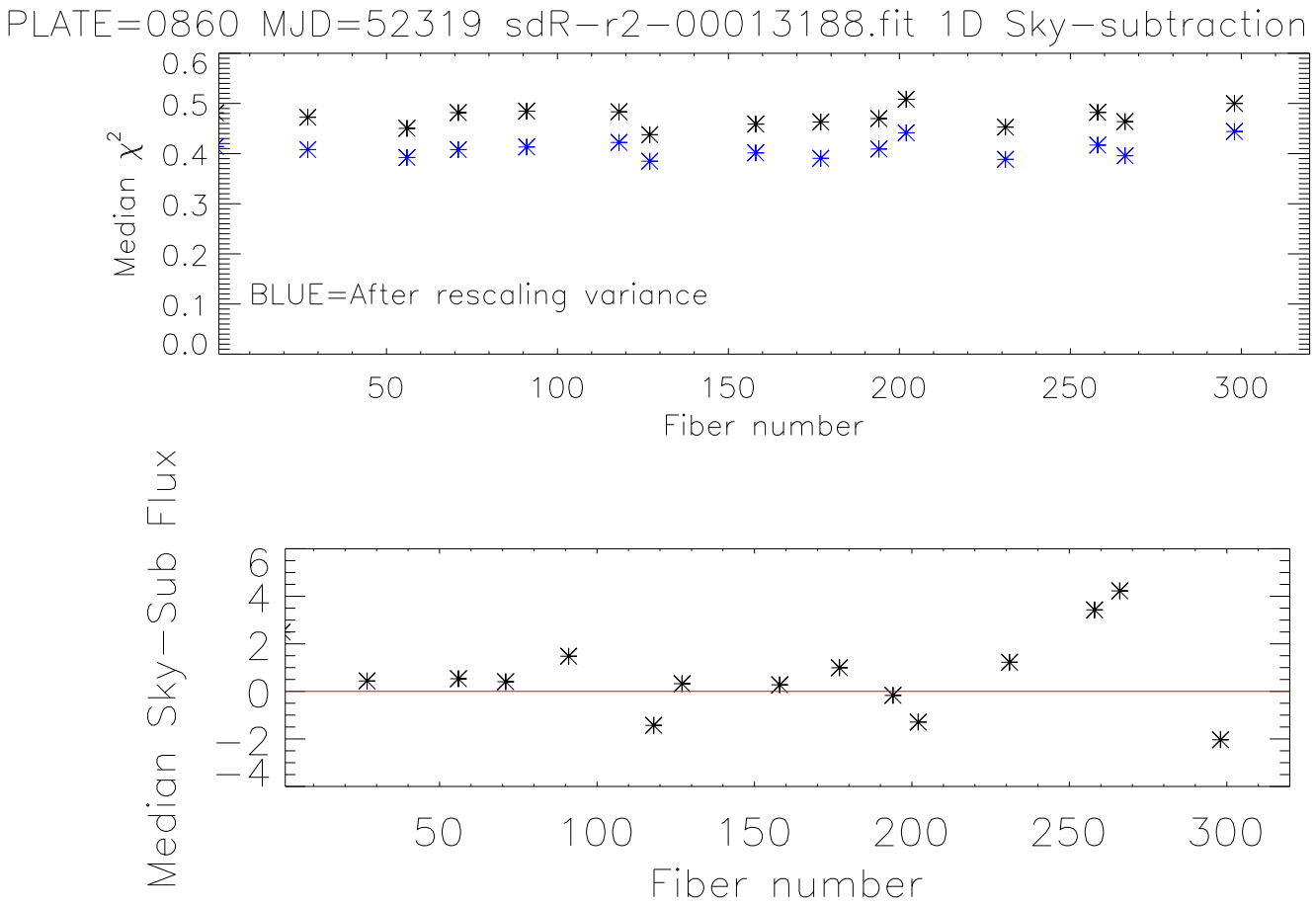

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

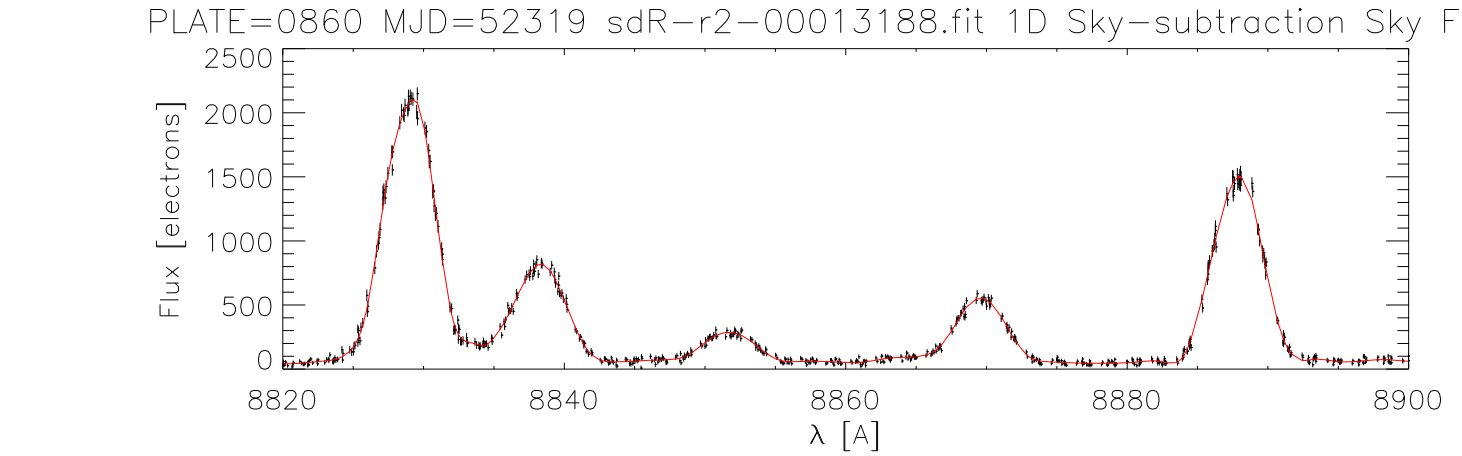

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

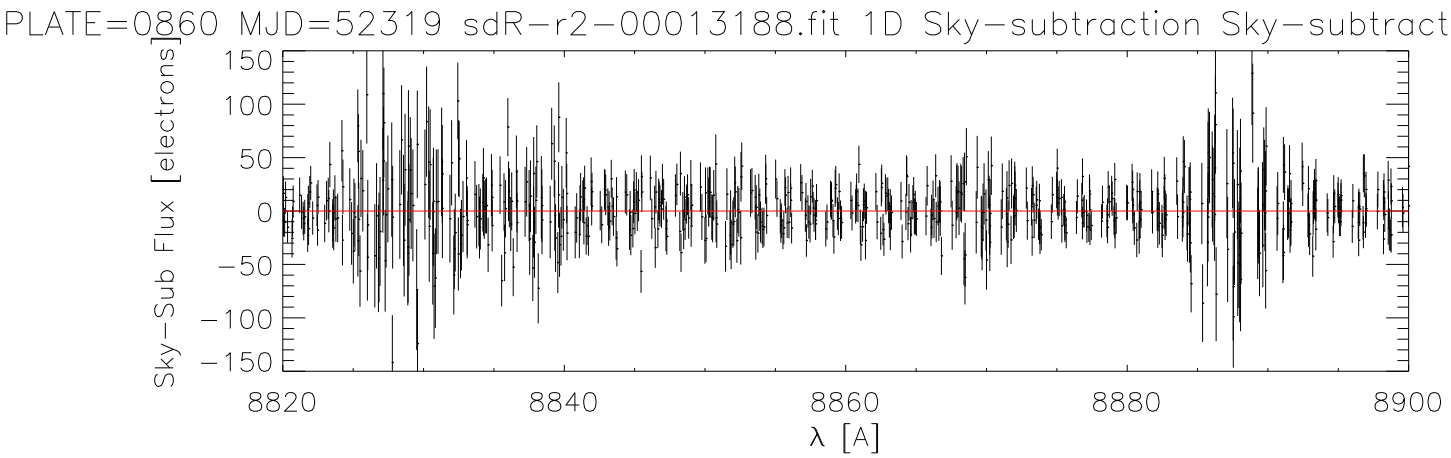

6300.3040
mfhd1 15
mfhd2 15
stdev 0.018
extra 0.30
6363.7760
mfhd1 15
mfhd2 15
stdev 0.040
extra 0.32
6553.6100
mfhd1 15
mfhd2 15
stdev 0.063
extra 0.25
6923.2100
mfhd1 15
mfhd2 15
stdev 0.038
extra 0.25
6949.0300
mfhd1 15
mfhd2 15
stdev 0.062
extra 0.29
7571.7500
mfhd1 16
mfhd2 16
stdev 0.048
extra 0.26
7794.1200
mfhd1 16
mfhd2 16
stdev 0.034
extra 0.15
7821.5100
mfhd1 16
mfhd2 16
stdev 0.025
extra 0.21
8399.1600
mfhd1 16
mfhd2 16
stdev 0.028
extra 0.22
8430.1700
mfhd1 16
mfhd2 16
stdev 0.031
extra 0.22
8885.8300
mfhd1 16
mfhd2 16
stdev 0.029
extra 0.23
8919.6100
mfhd1 16
mfhd2 16
stdev 0.024
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

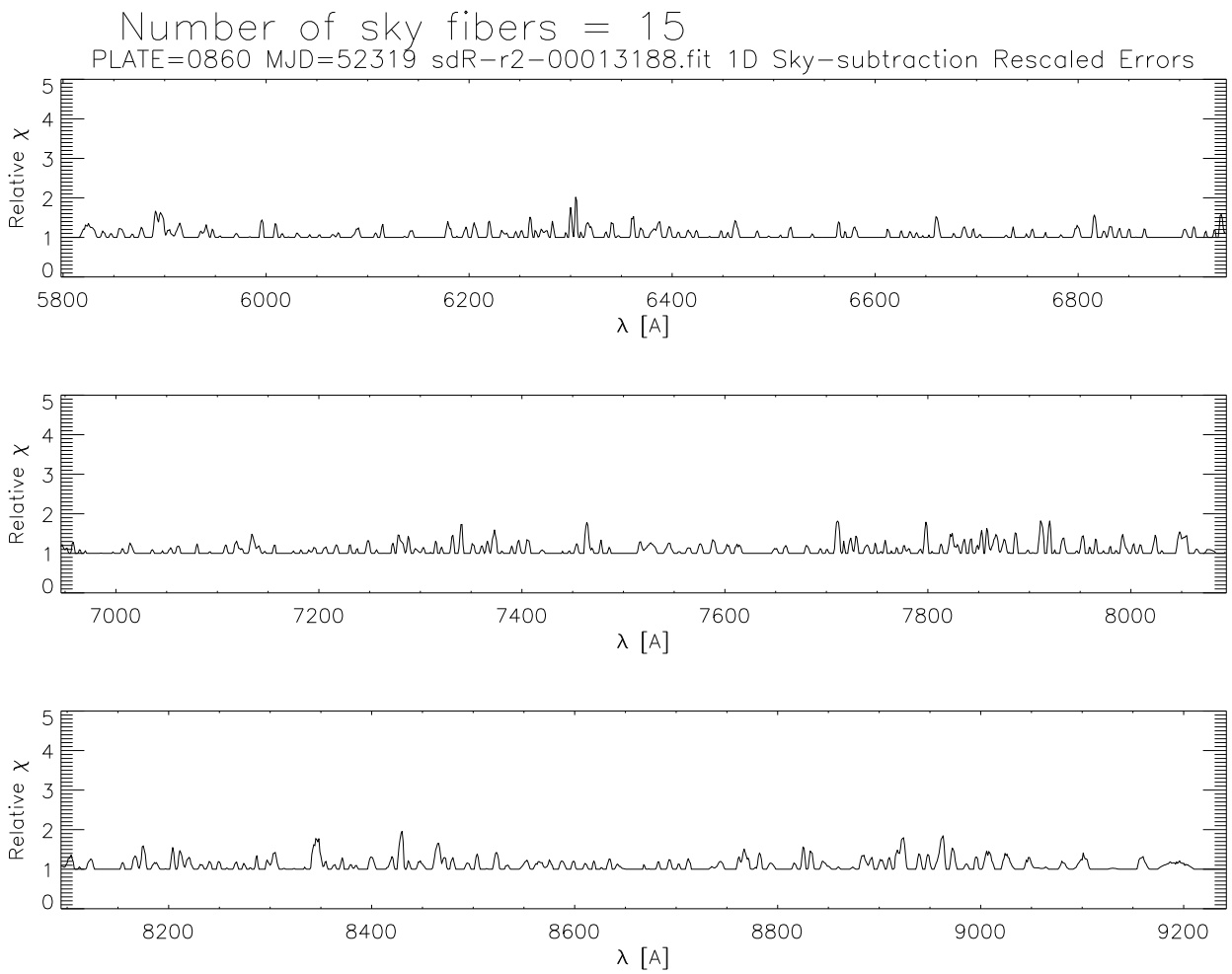

0.40
0.35
0.30
0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

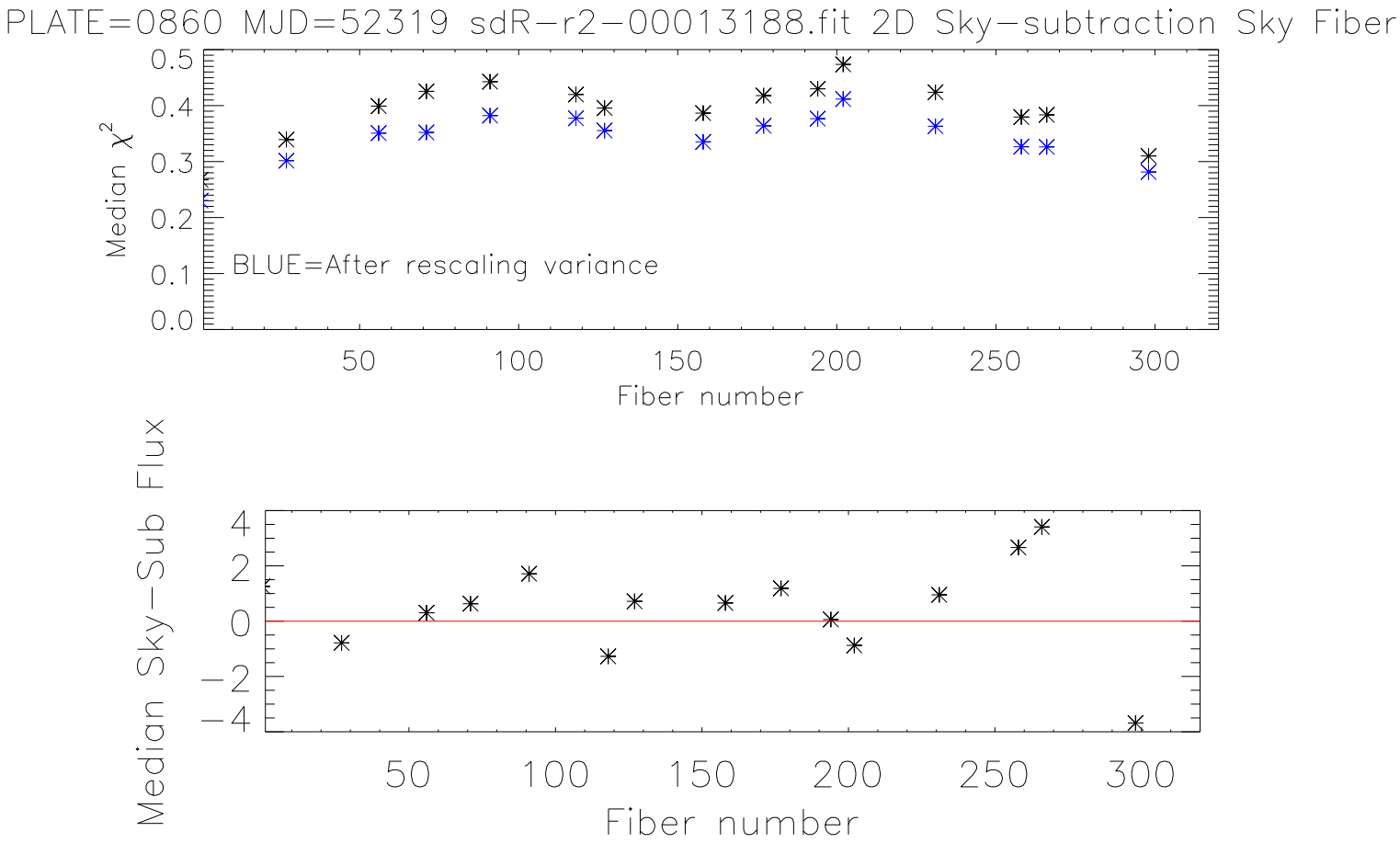

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013188.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

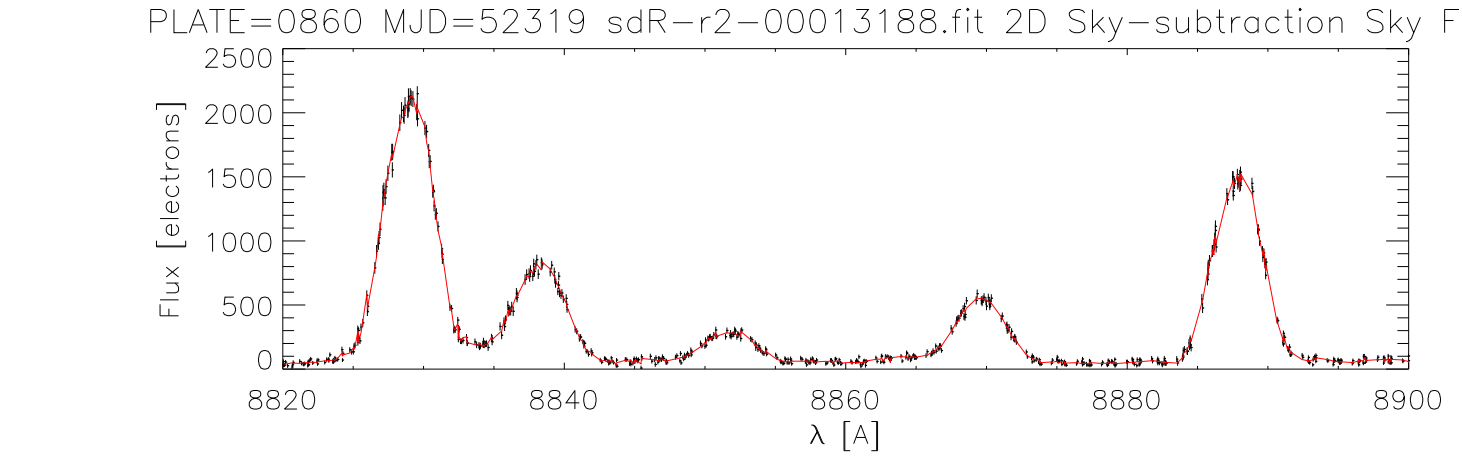

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

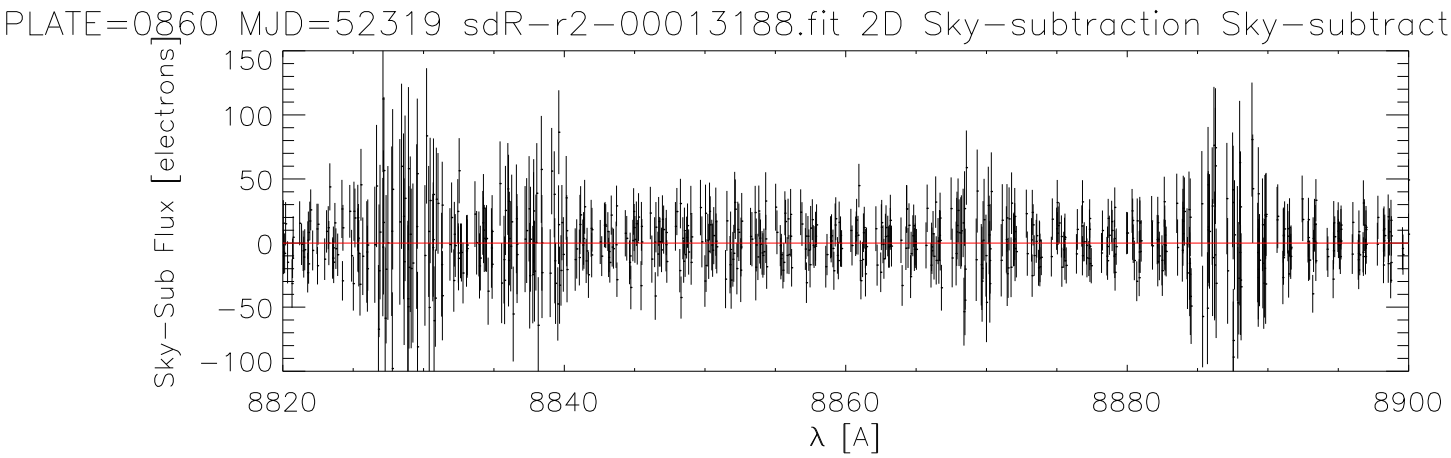

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

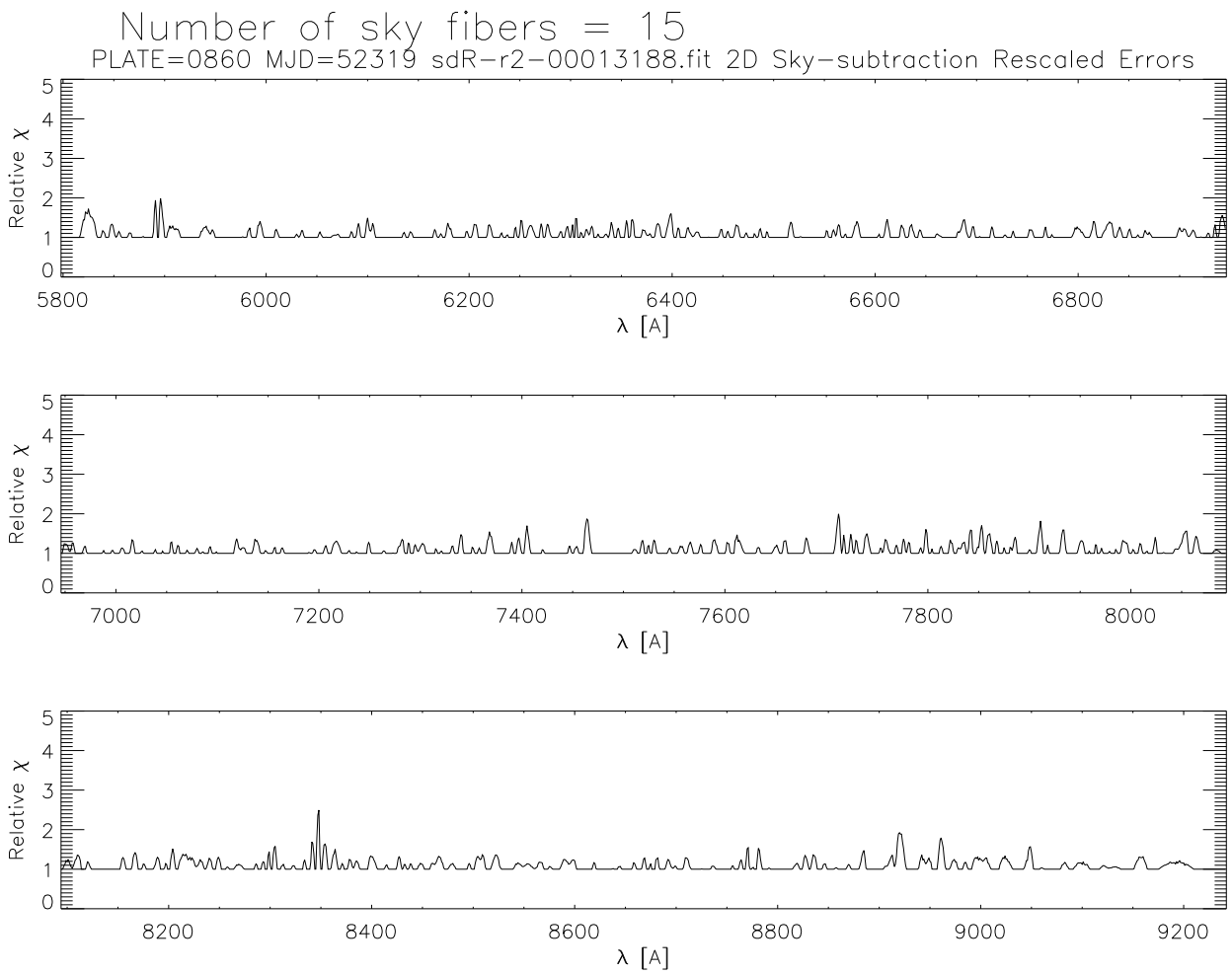

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

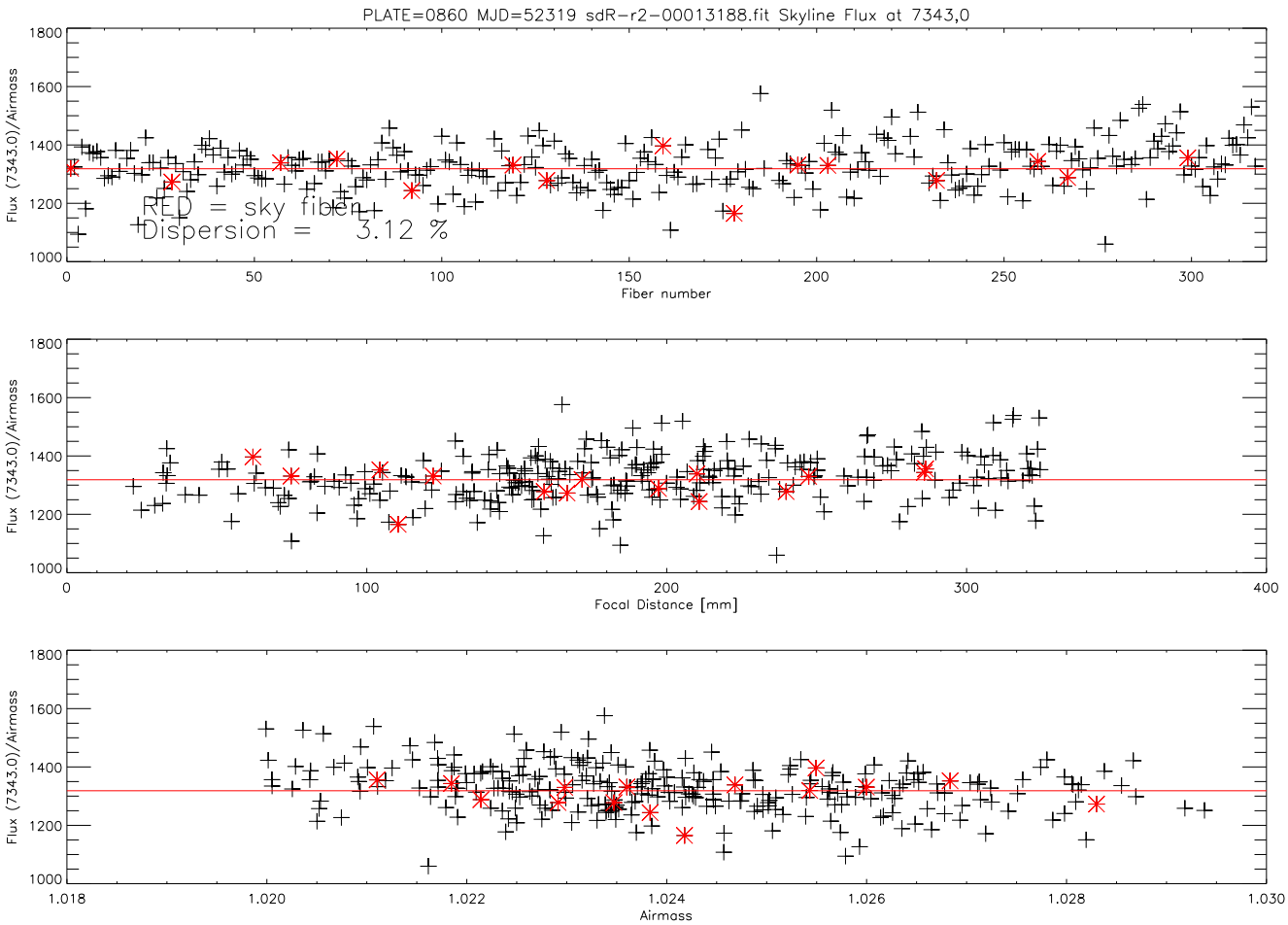

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013188.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

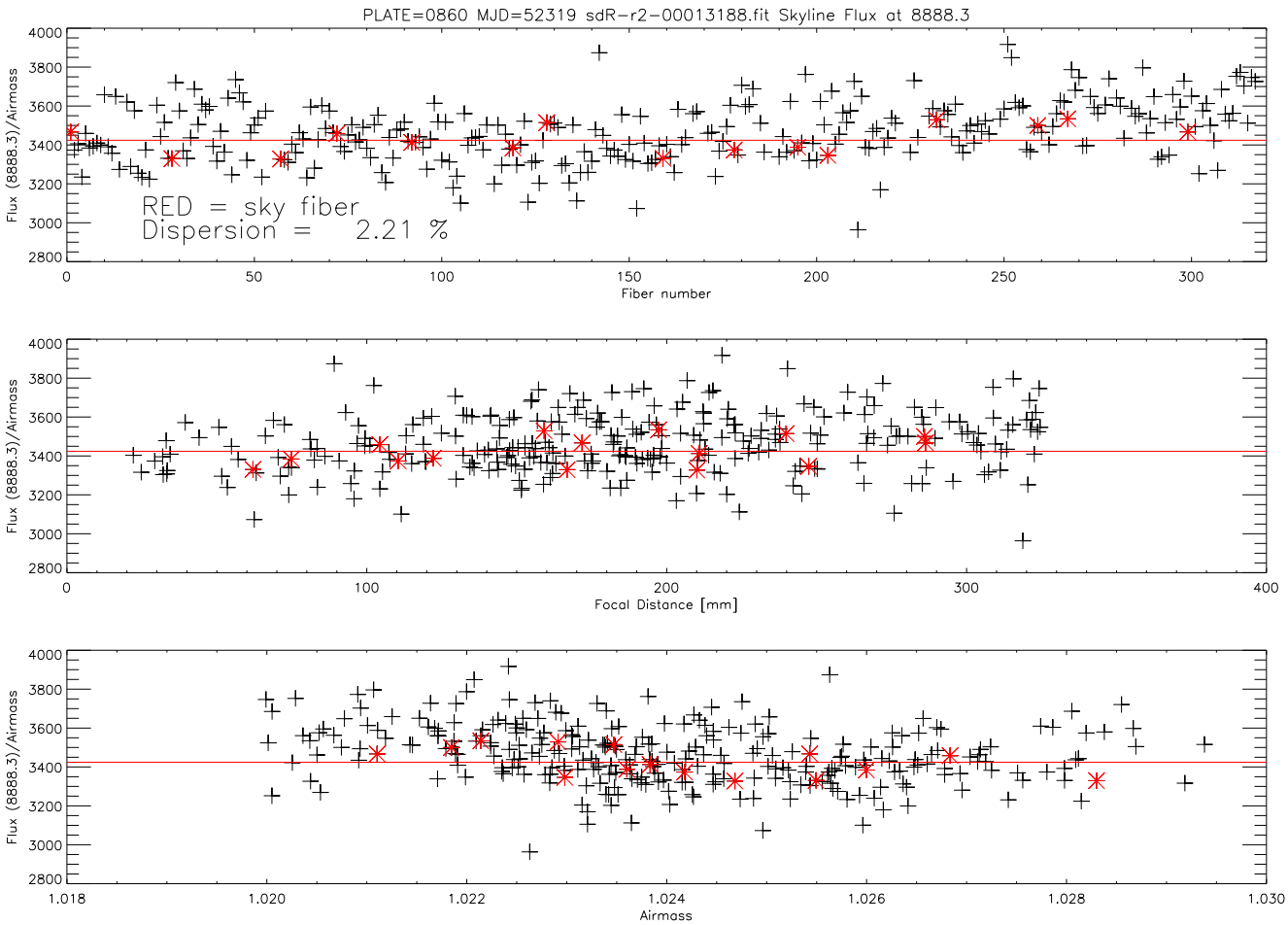

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

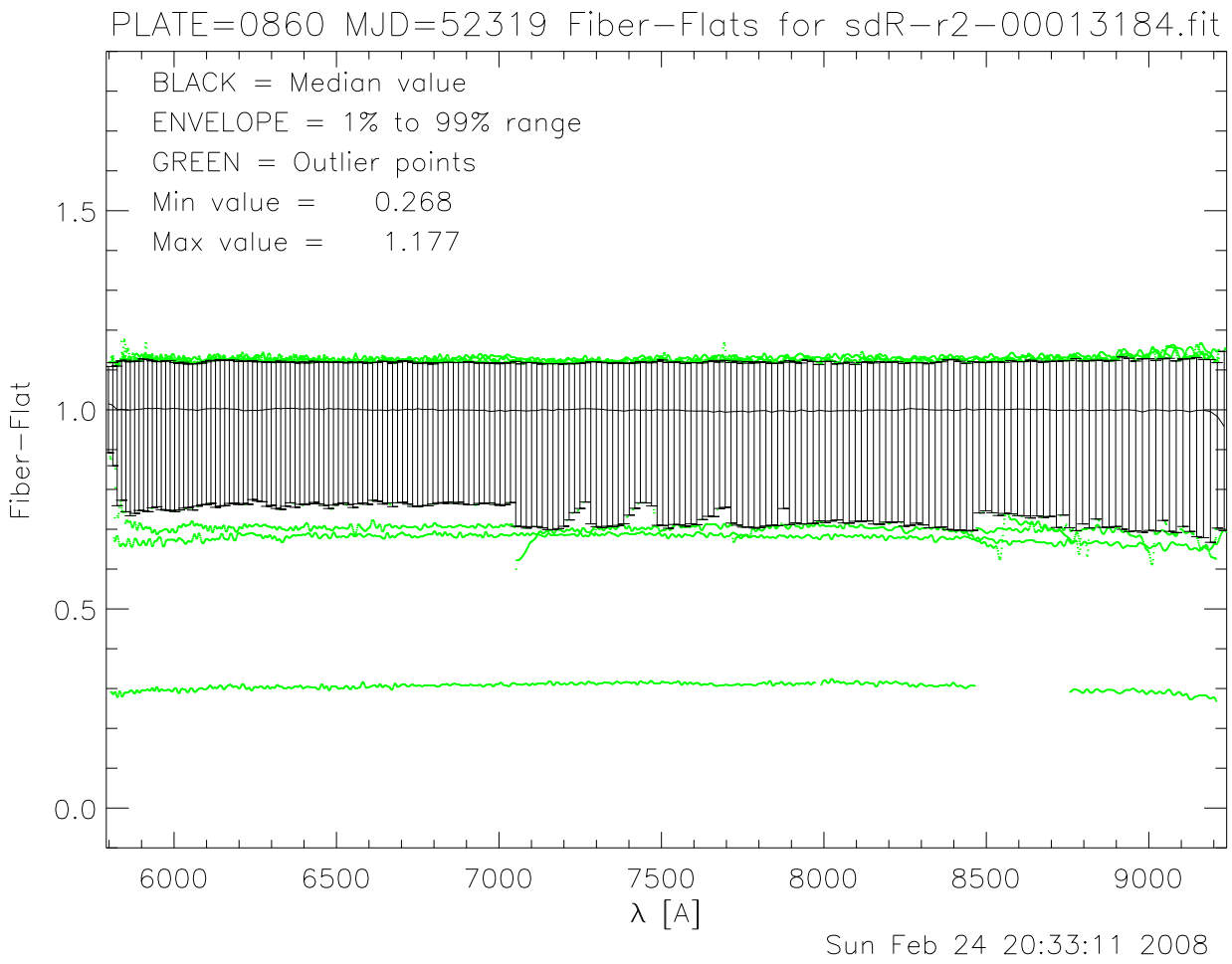

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

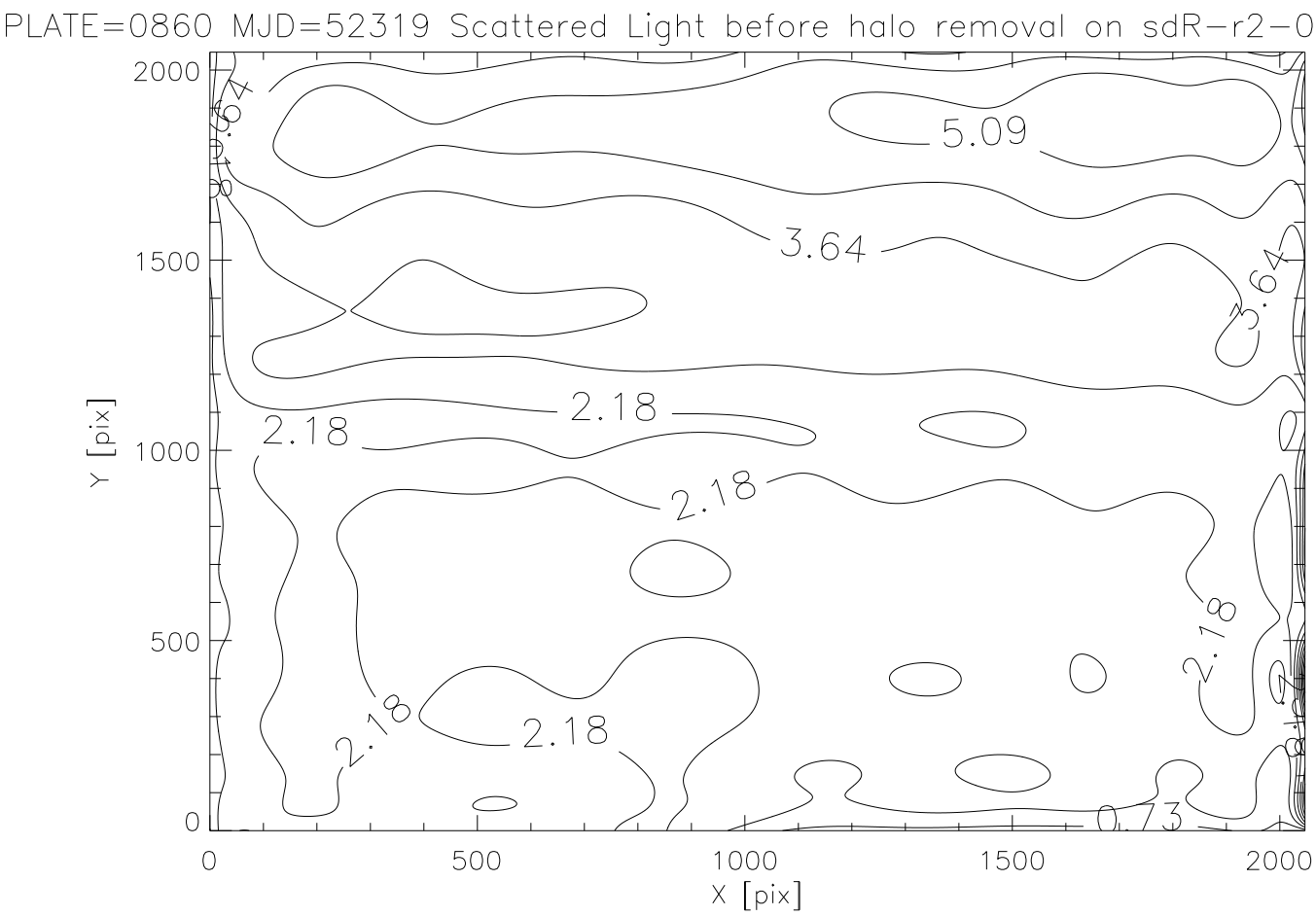

PLATE=0860 MJD=52319 sdR-r2-00013188.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

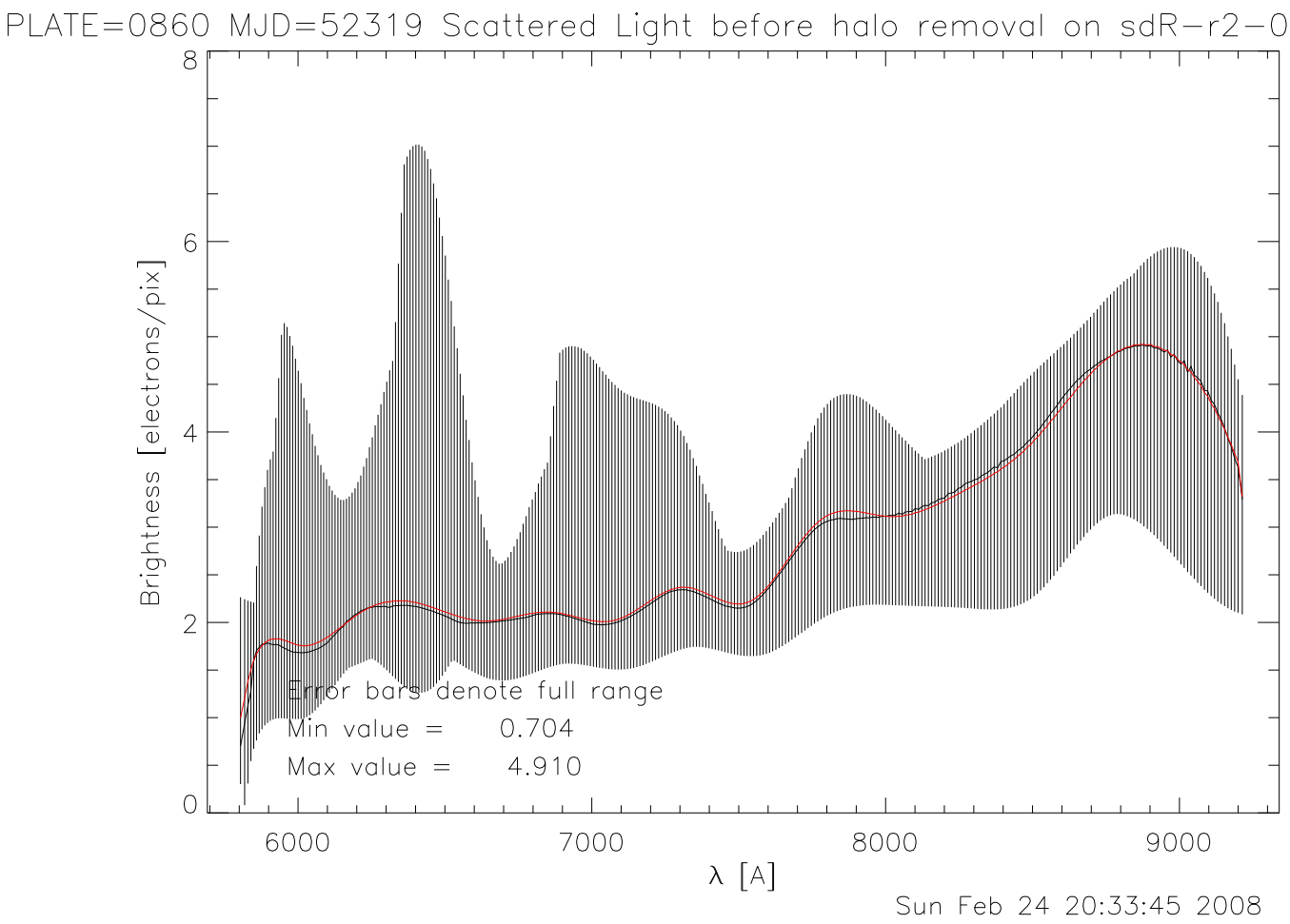

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013188.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

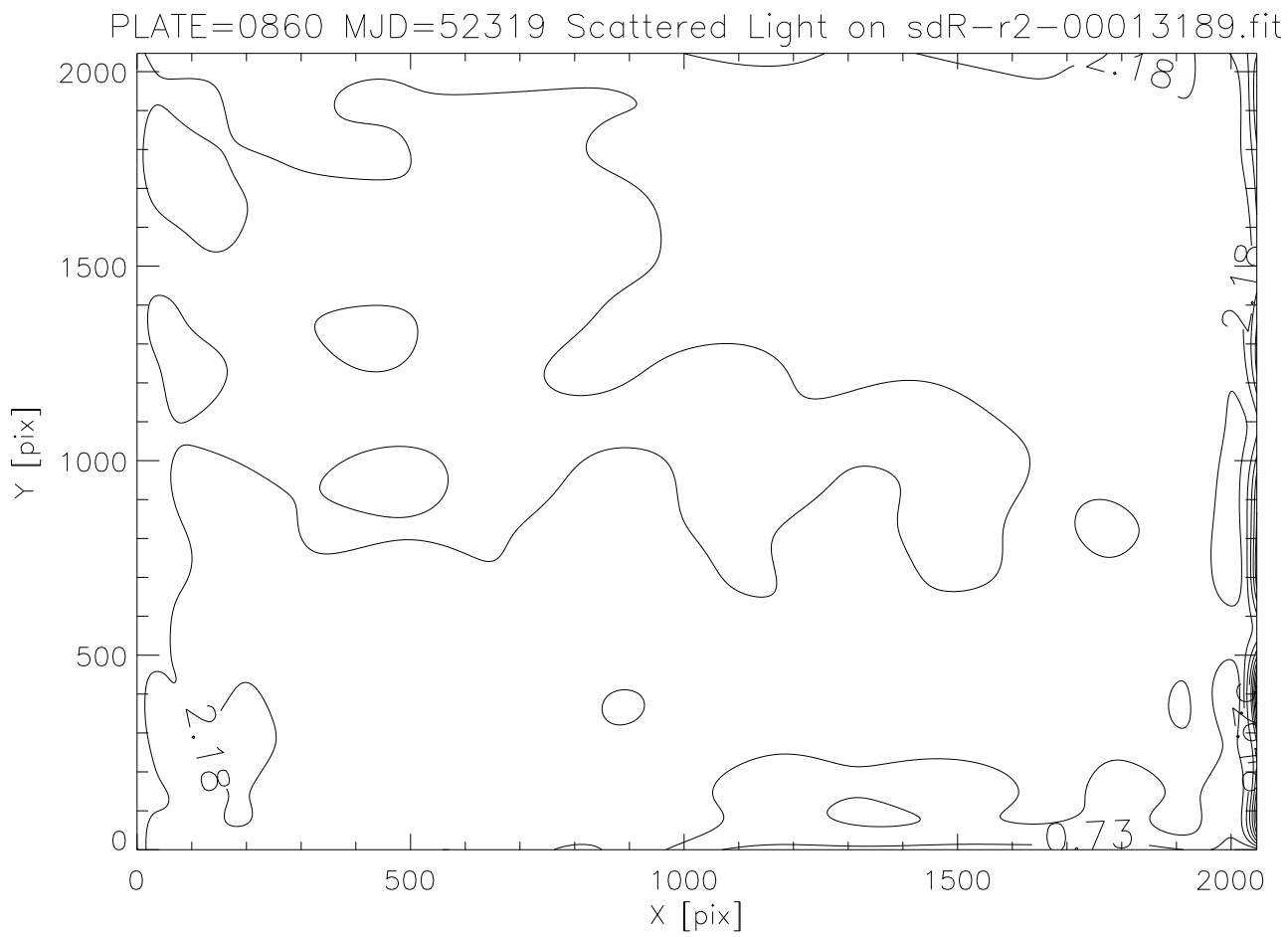

PLATE=0860 MJD=52319 sdR-r2-00013188.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.12 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

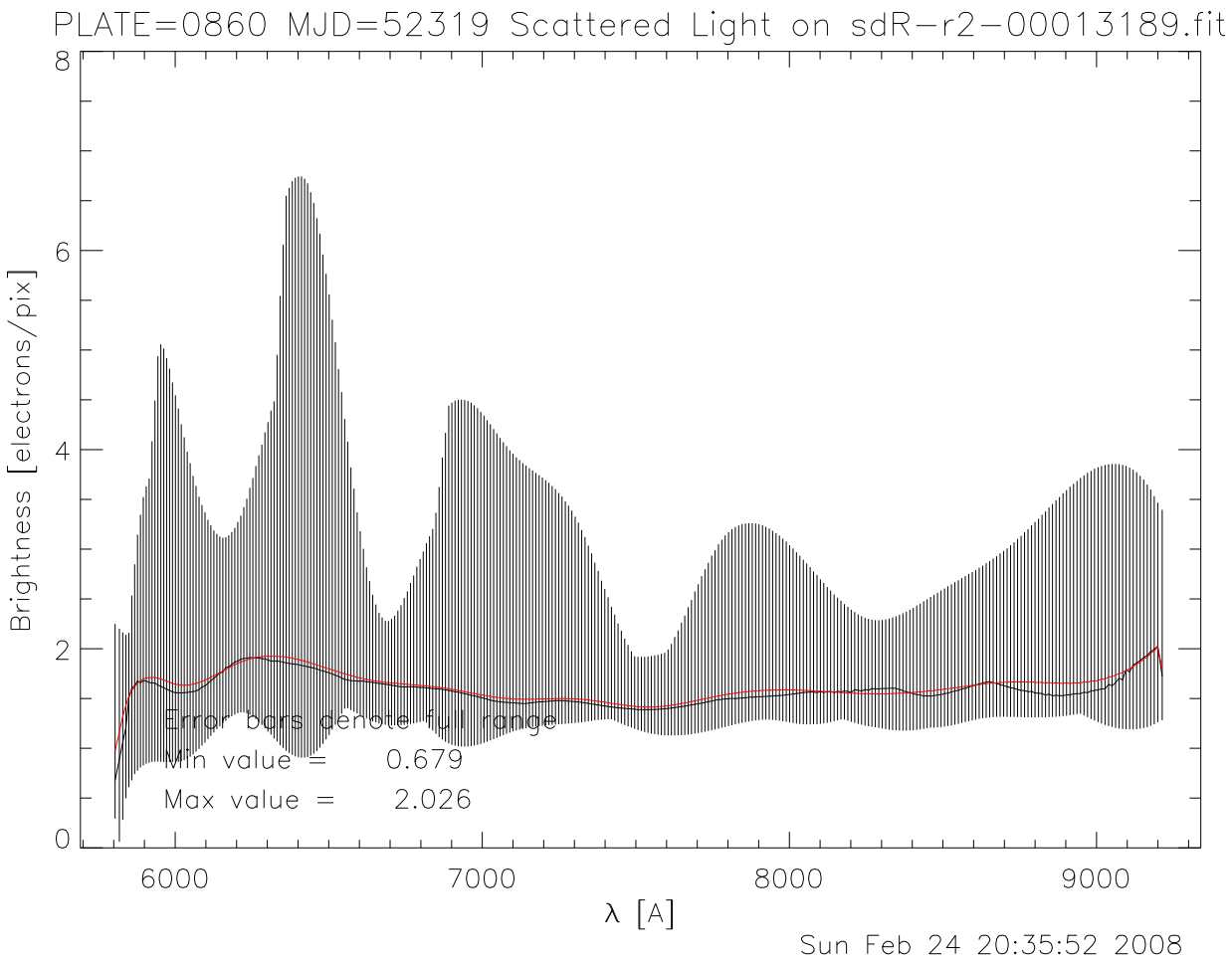

PLATE=0860 MJD=52319 sdR-r2-00013188.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

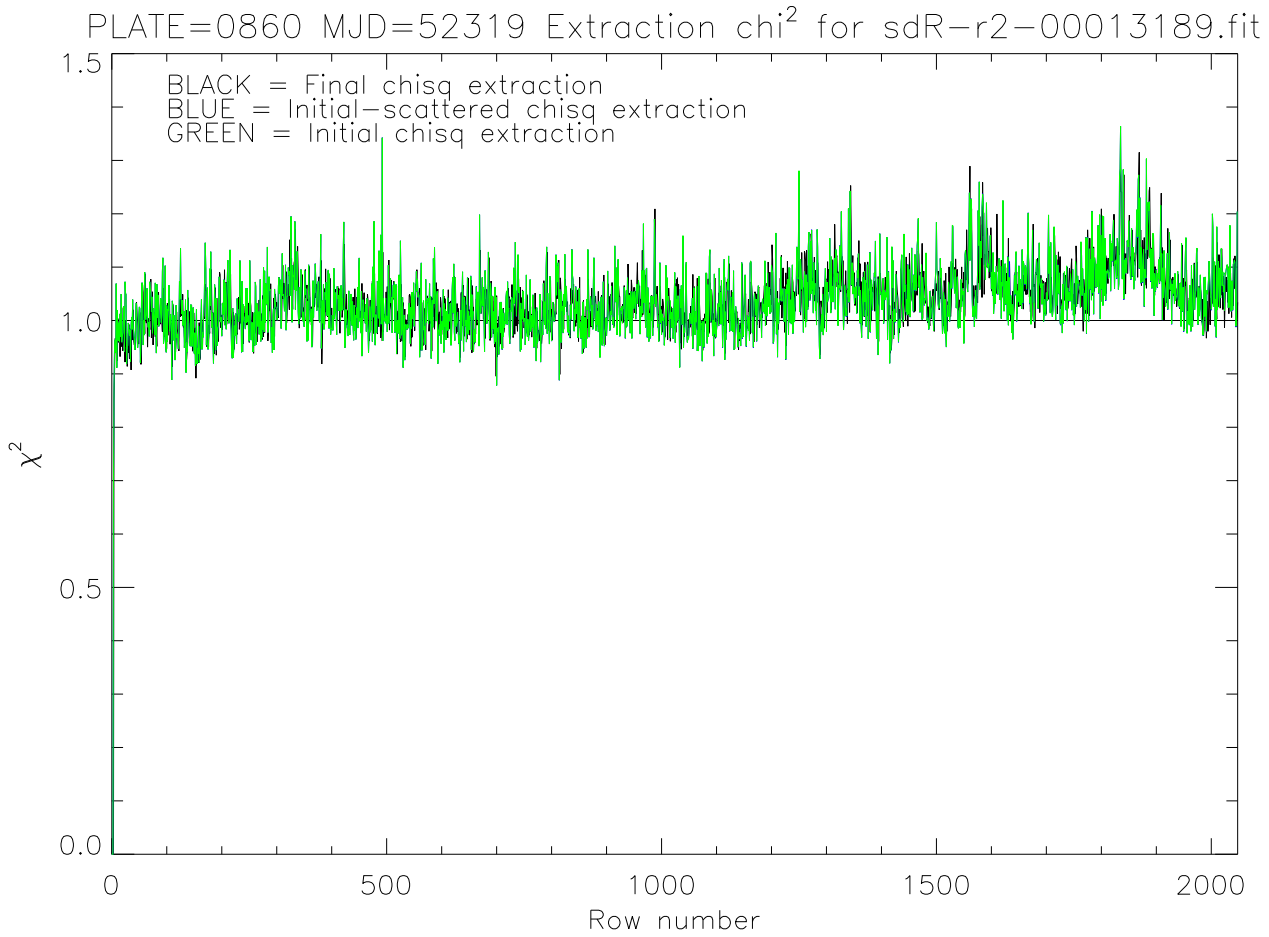

PLATE=0860 MJD=52319 Fiber-Flats for sdR-r2-00013184.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.268
Max value = 1.177
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 20:33:11 2008

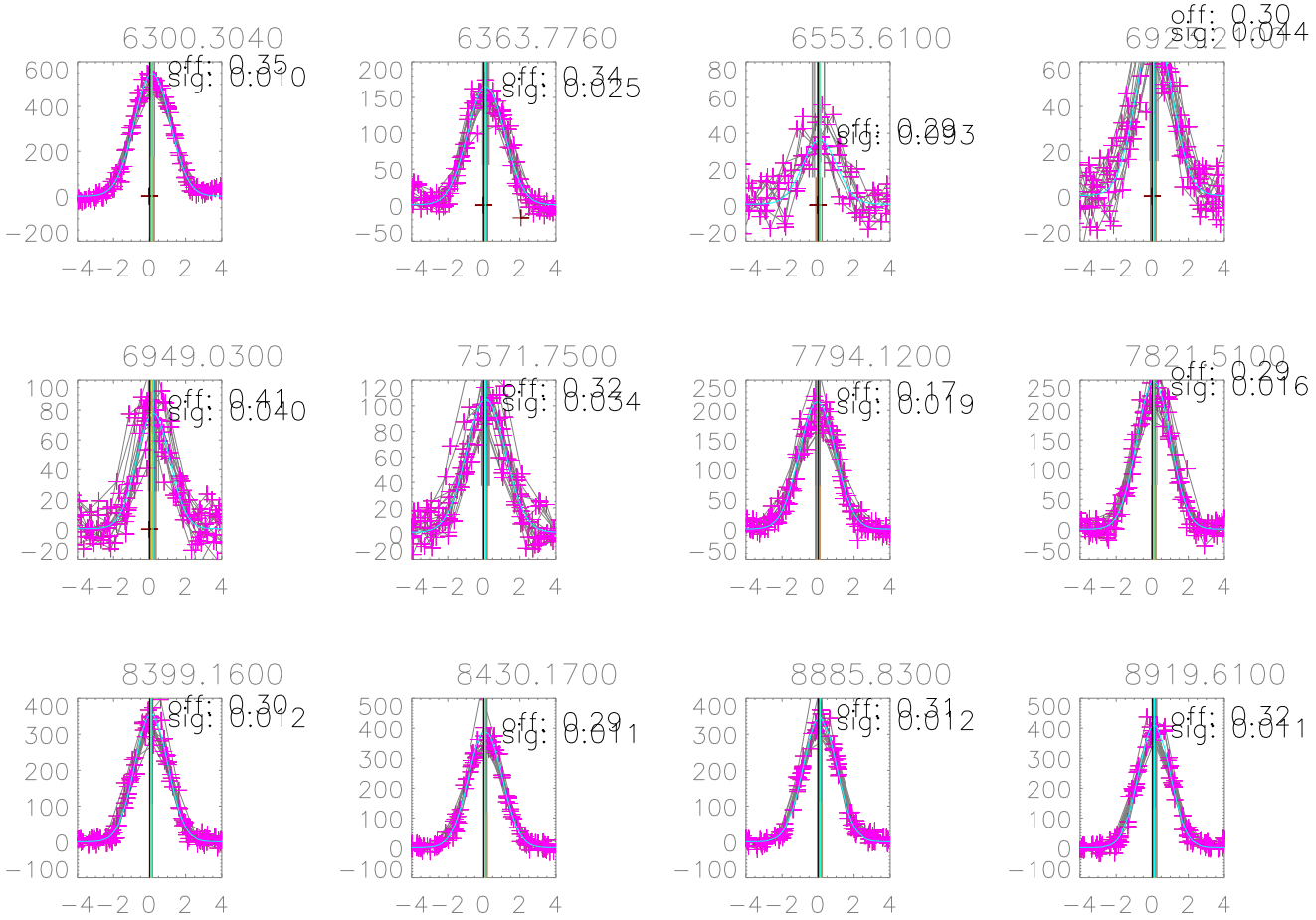

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR-r2-00013189.fi
5.09
3.64
3.64
3.64
2.18
2.18
2.18
2.18
2.18
2.18
0.73
Y [pix]
X [pix]
0
500
1000
1500
2000

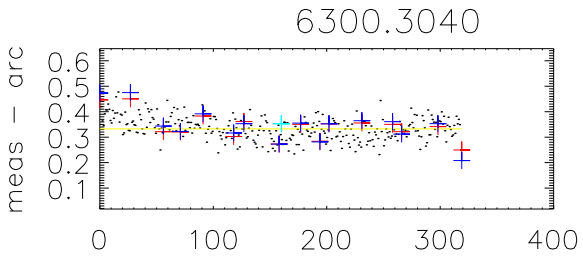

PLATE=0860 MJD=52319 Scattered Light before halo removal on sdR−r2−00013189.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.704
Max value = 4.910
Sun Feb 24 20:33:45 2008

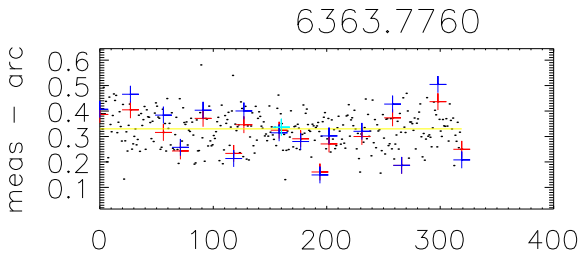

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013189.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.18
2.18
2.18
2.18
0.73

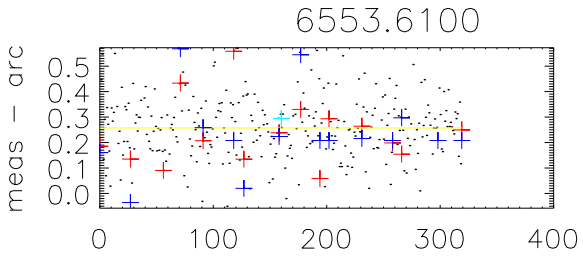

PLATE=0860 MJD=52319 Scattered Light on sdR-r2-00013189.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.679
Max value = 2.026
Sun Feb 24 20:35:52 2008

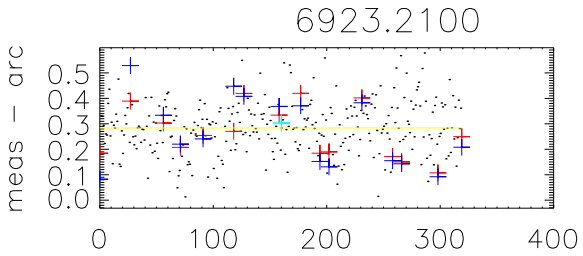

PLATE=0860 MJD=52319 Extraction chi^2 for sdR-r2-00013189.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

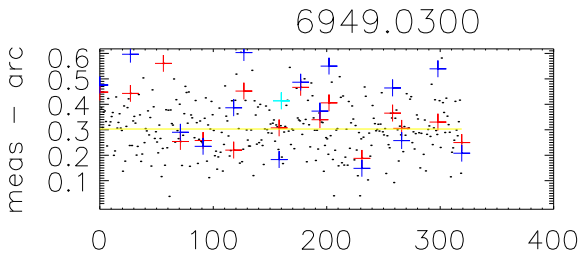

6300.3040
off: 0.35
sig: 0.010
6363.7760
off: 0.34
sig: 0.025
6553.6100
off: 0.29
sig: 0.093
6925.2100
off: 0.30
sig: 0.044
6949.0300
off: 0.41
sig: 0.040
7571.7500
off: 0.32
sig: 0.034
7794.1200
off: 0.17
sig: 0.019
7821.5100
off: 0.29
sig: 0.016
8399.1600
off: 0.30
sig: 0.012
8430.1700
off: 0.29
sig: 0.011
8885.8300
off: 0.31
sig: 0.012
8919.6100
off: 0.32
sig: 0.011

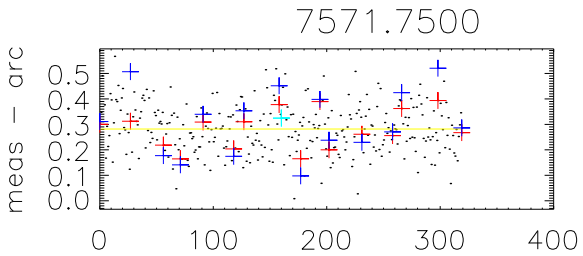

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

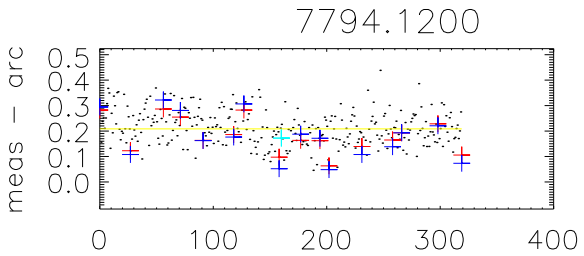

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

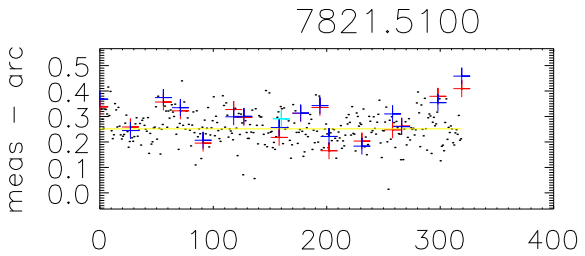

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

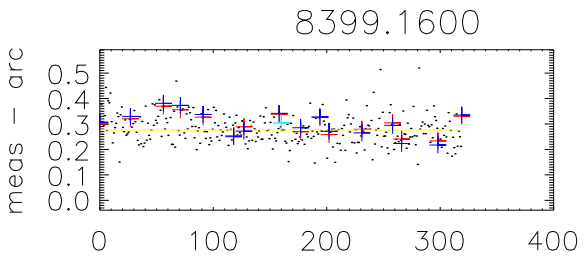

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

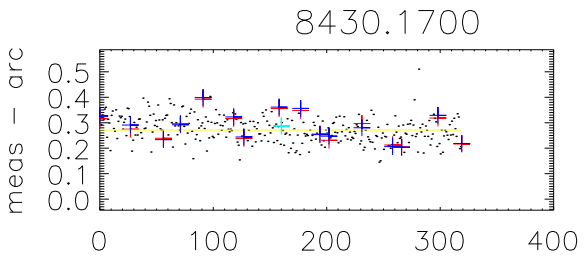

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

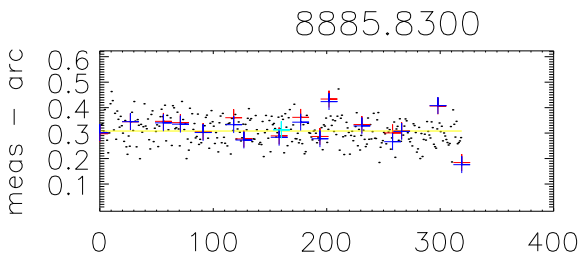

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

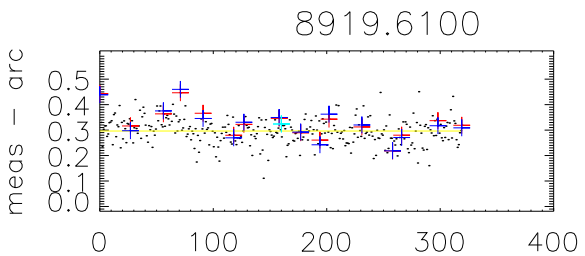

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

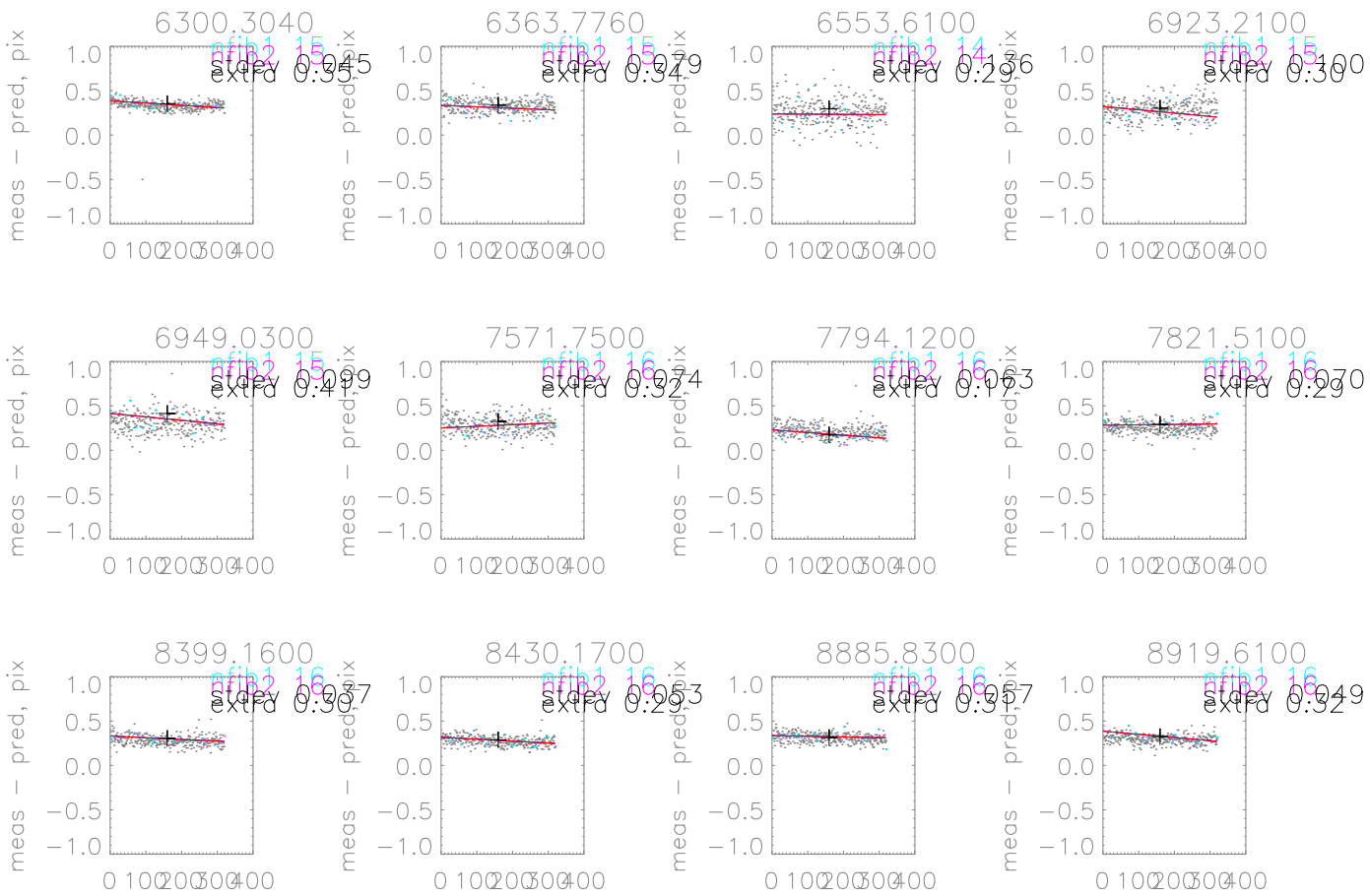

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

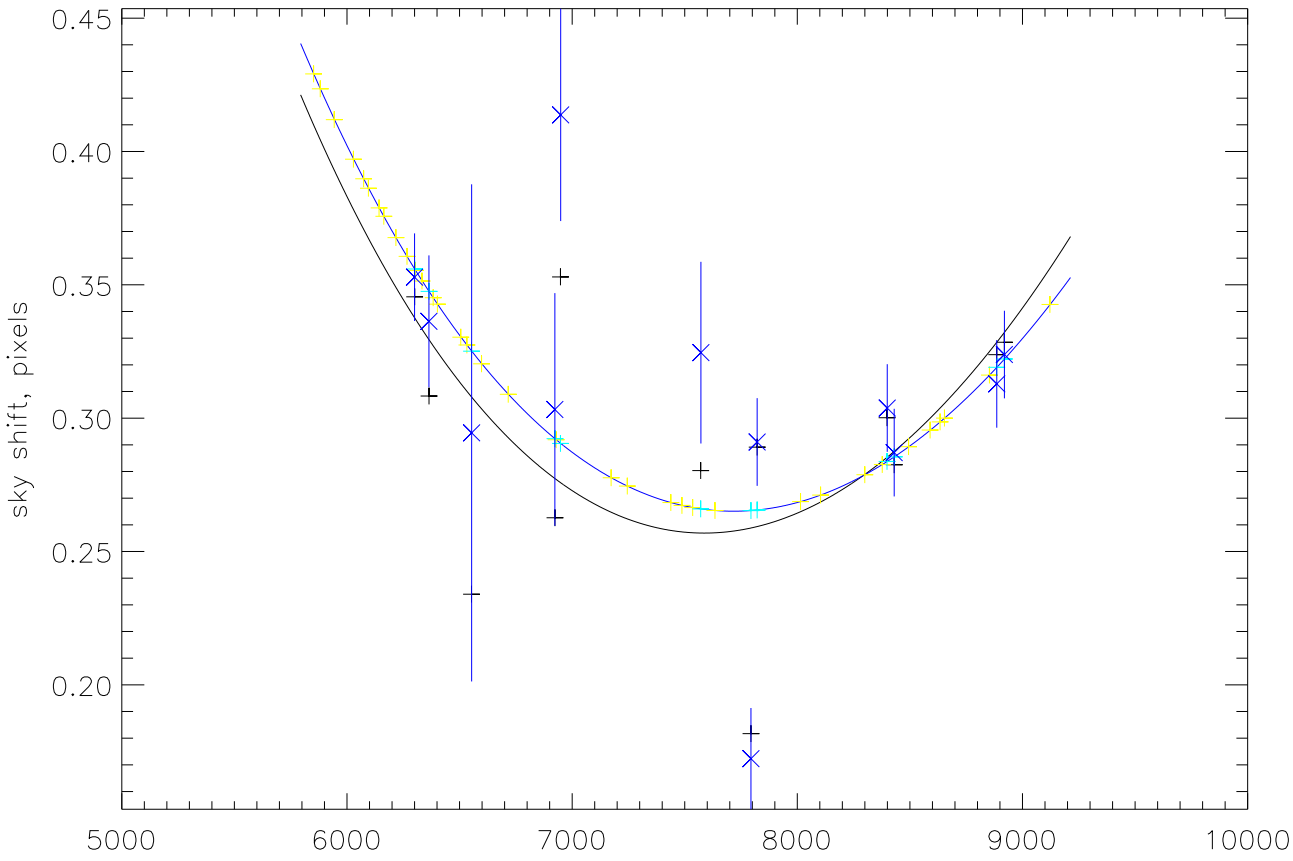

8399.1600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

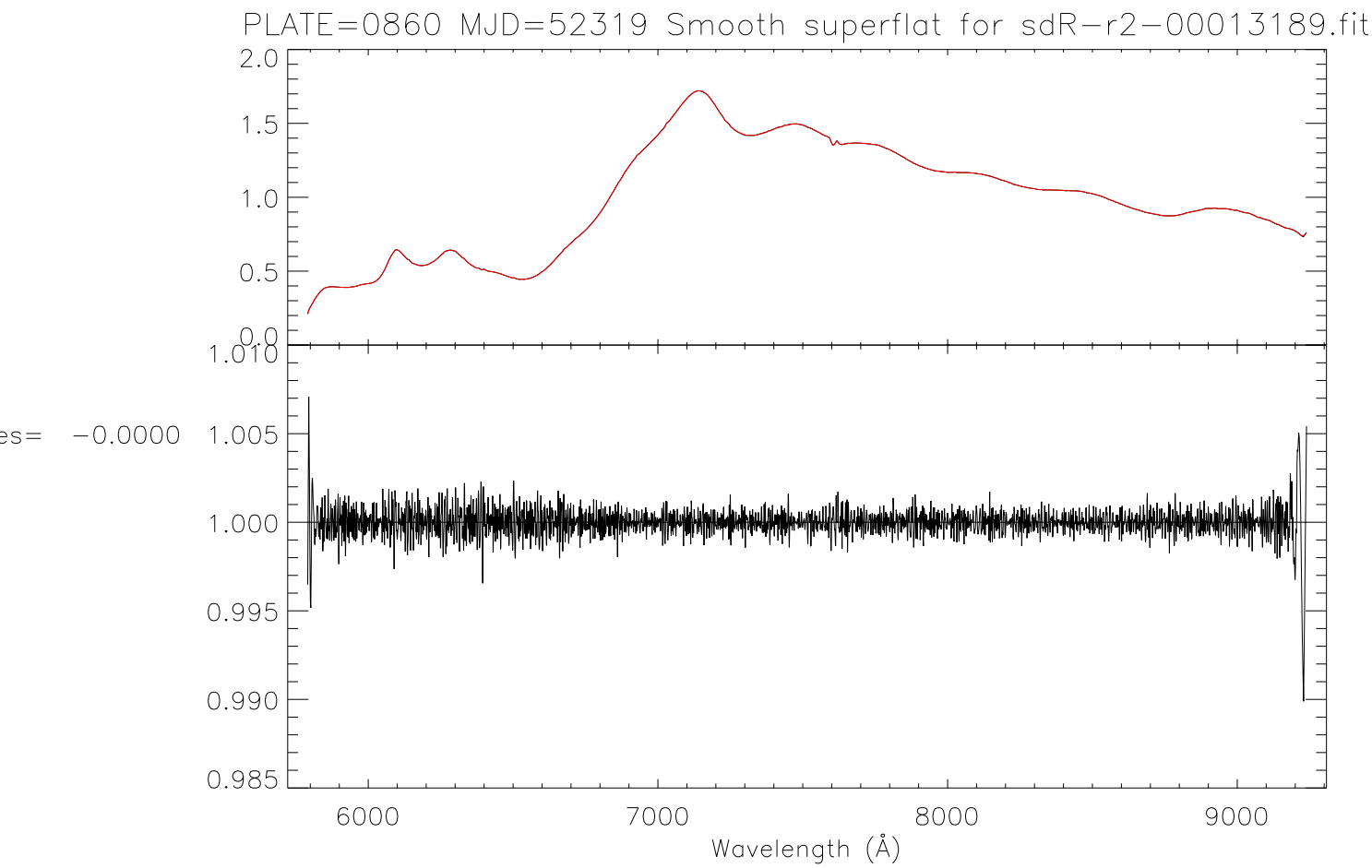

8430.1700
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

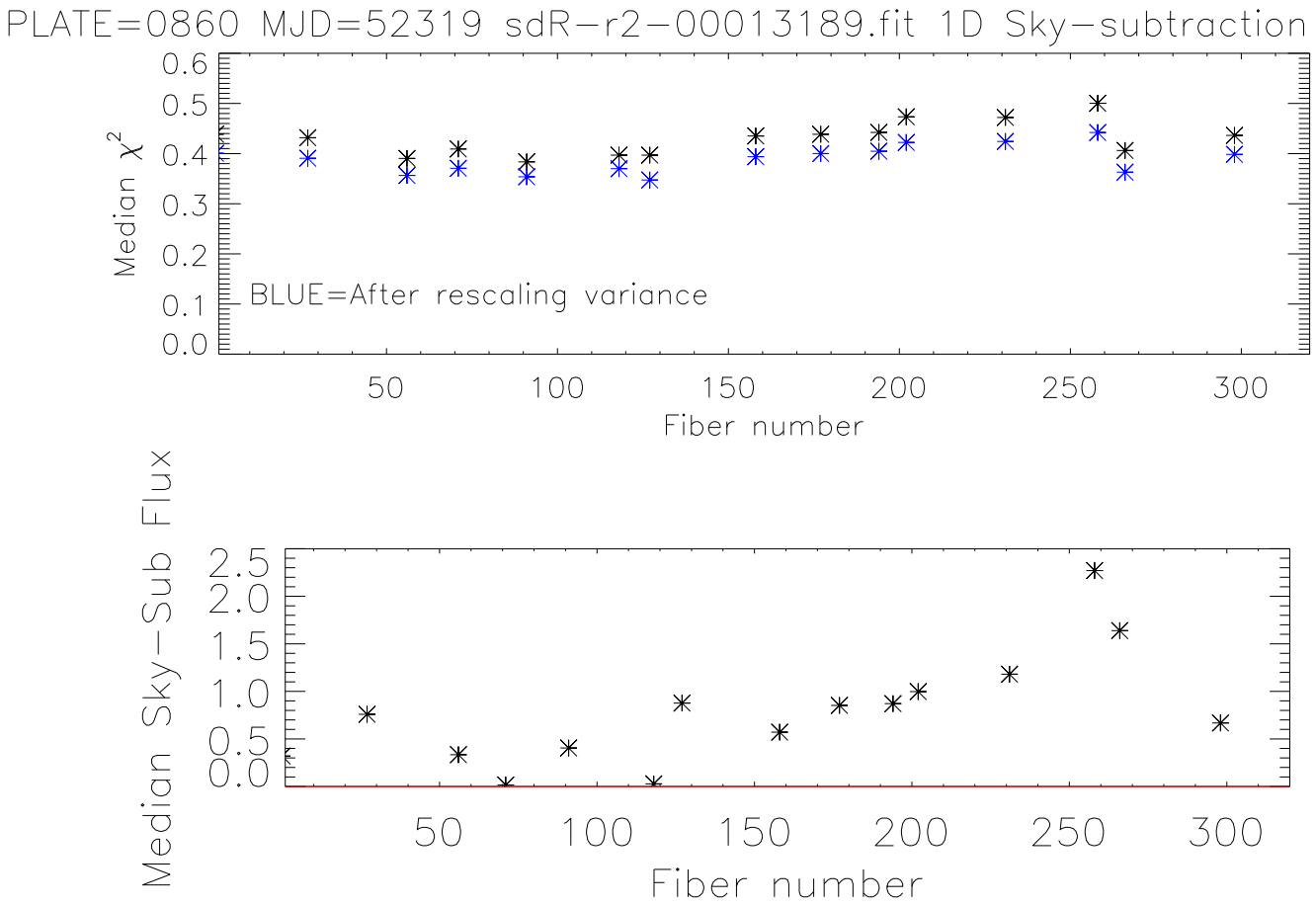

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

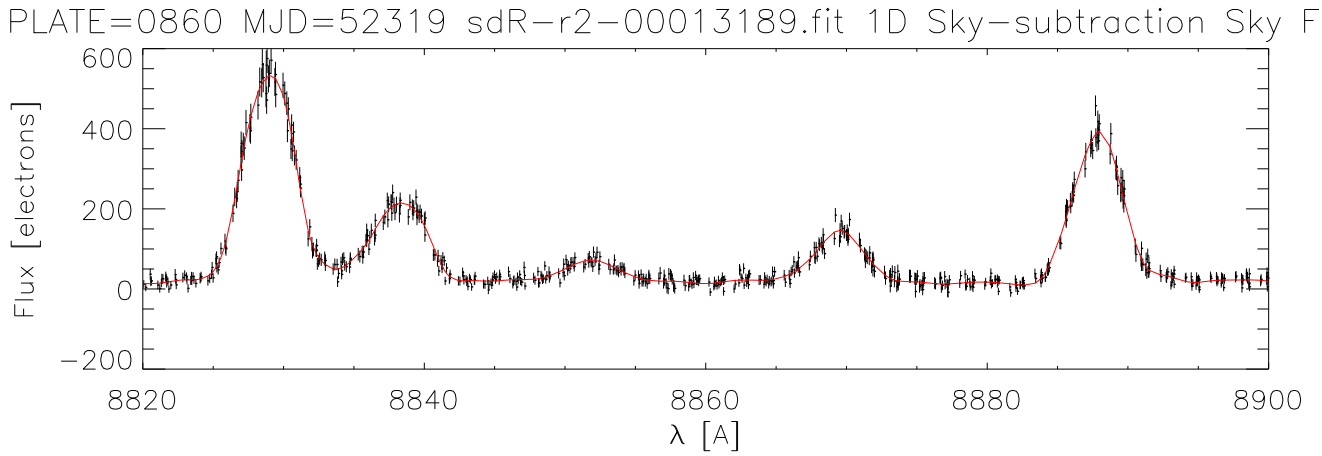

8919.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

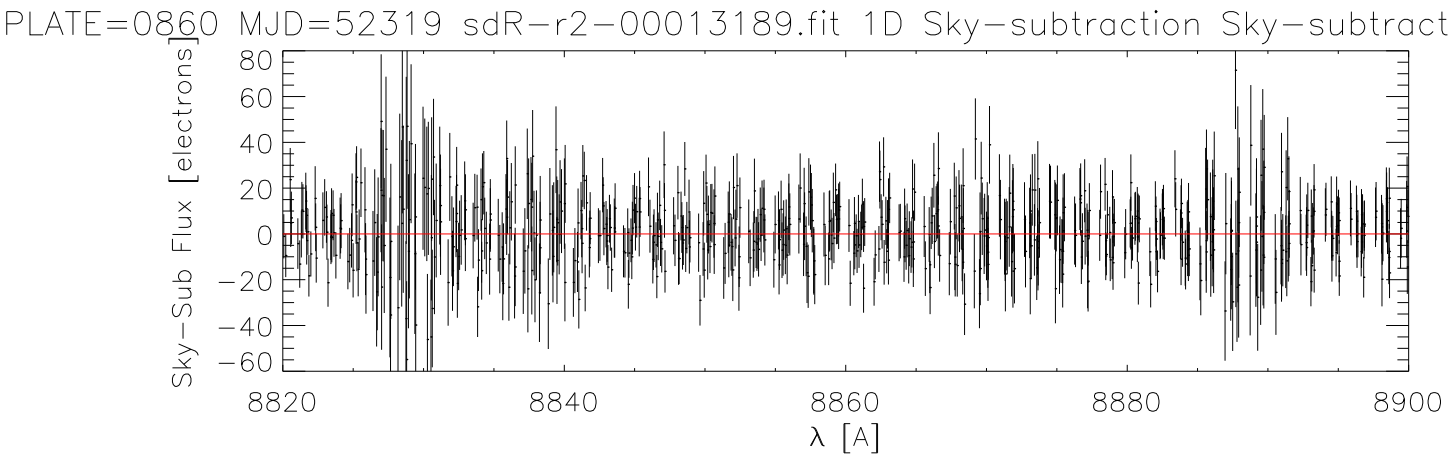

6300.3040
mfib1 15
mfib2 15
stdev 0.045
extra 0.35
6363.7760
mfib1 15
mfib2 15
stdev 0.079
extra 0.34
6553.6100
mfib1 14
mfib2 15
stdev 0.136
extra 0.29
6923.2100
mfib1 15
mfib2 15
stdev 0.100
extra 0.30
6949.0300
mfib1 15
mfib2 15
stdev 0.099
extra 0.41
7571.7500
mfib1 16
mfib2 16
stdev 0.074
extra 0.32
7794.1200
mfib1 16
mfib2 16
stdev 0.063
extra 0.17
7821.5100
mfib1 16
mfib2 16
stdev 0.070
extra 0.29
8399.1600
mfib1 16
mfib2 16
stdev 0.037
extra 0.30
8430.1700
mfib1 16
mfib2 16
stdev 0.053
extra 0.29
8885.8300
mfib1 16
mfib2 16
stdev 0.057
extra 0.31
8919.6100
mfib1 16
mfib2 16
stdev 0.049
extra 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

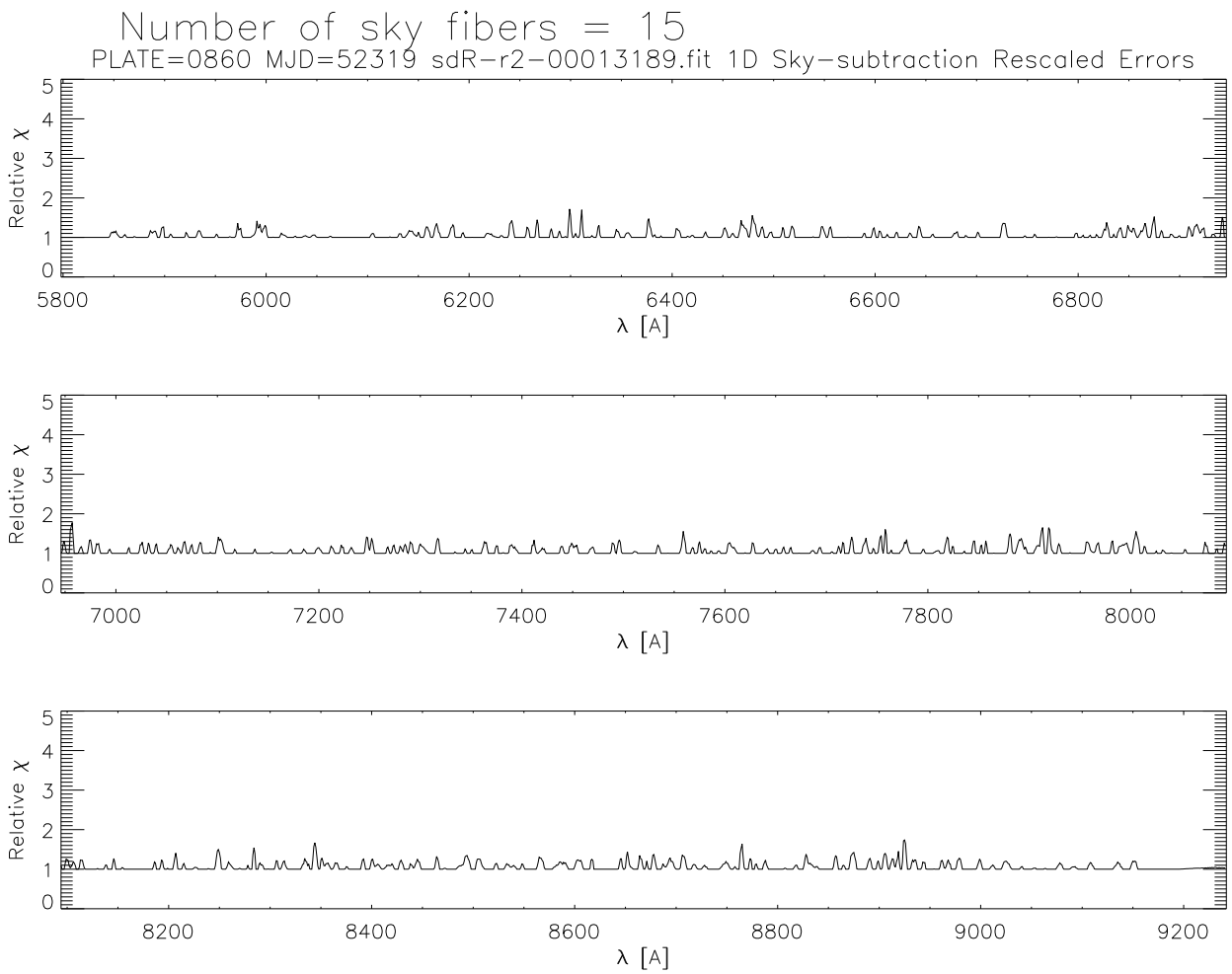

0.45
0.40
0.35
0.30
0.25
0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

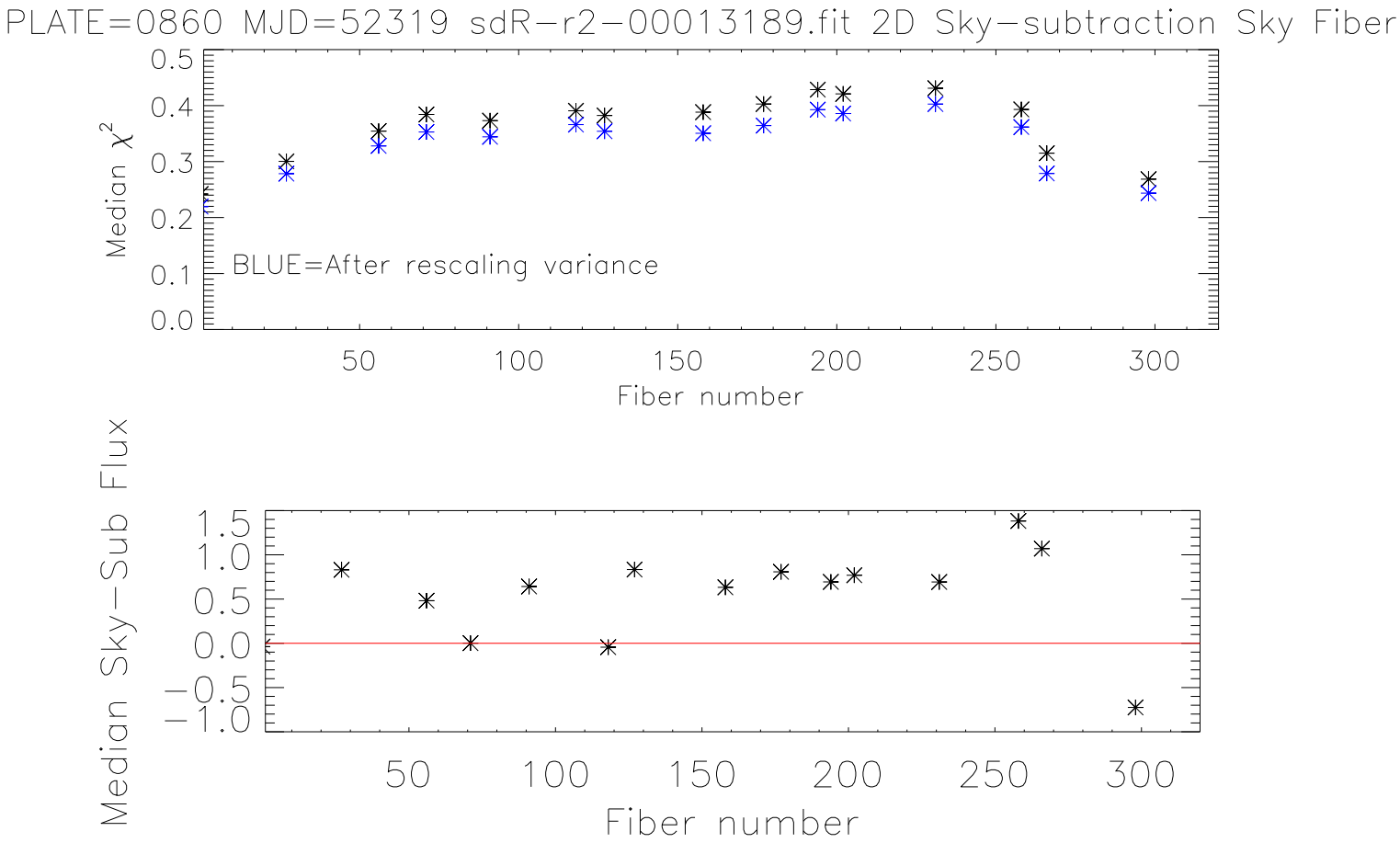

PLATE=0860 MJD=52319 Smooth superflat for sdR-r2-00013189.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

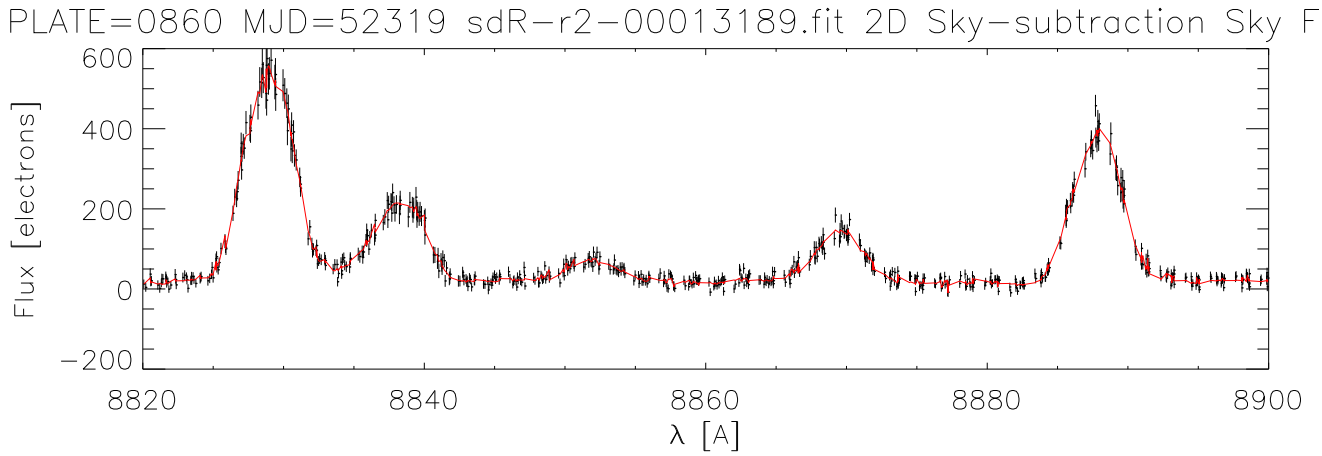

PLATE=0860 MJD=52319 sdR-r2-00013189.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

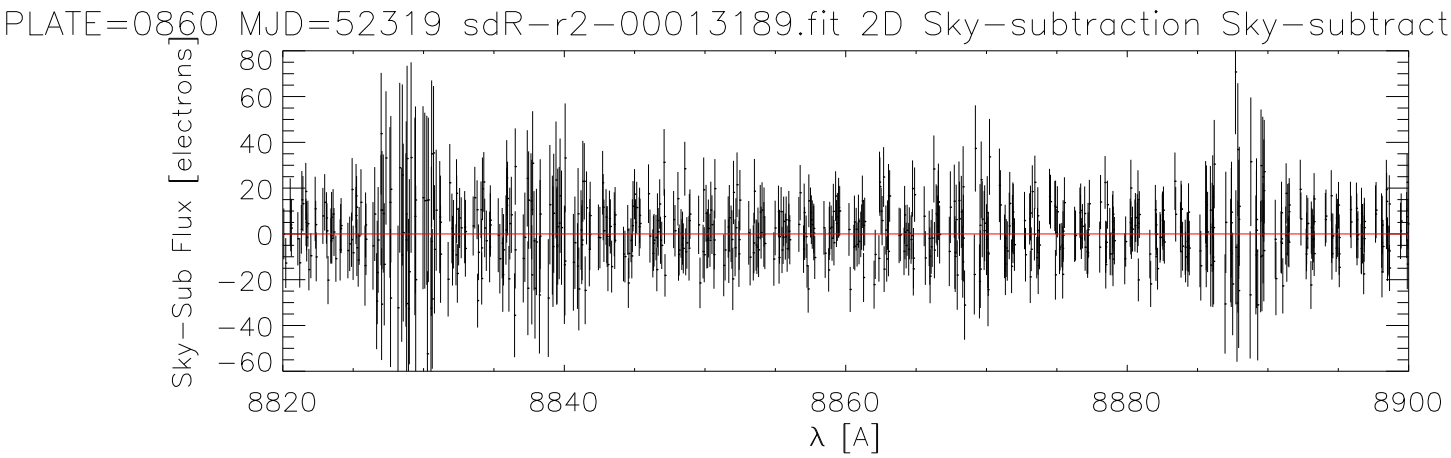

PLATE=0860 MJD=52319 sdR-r2-00013189.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

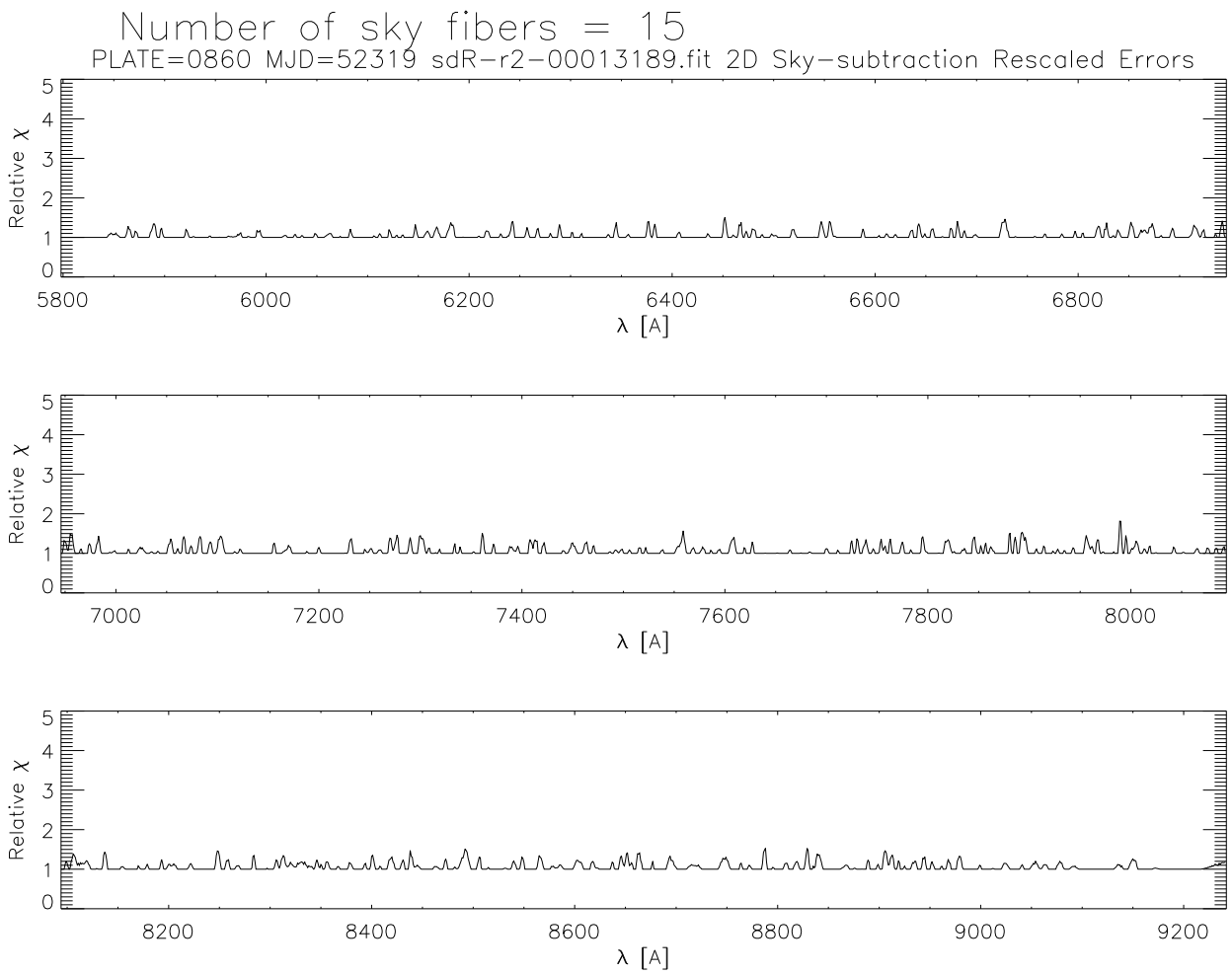

PLATE=0860 MJD=52319 sdR-r2-00013189.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
80
60
40
20
0
-20
-40
-60
8820
8840
8860
8880
8900
λ [A]

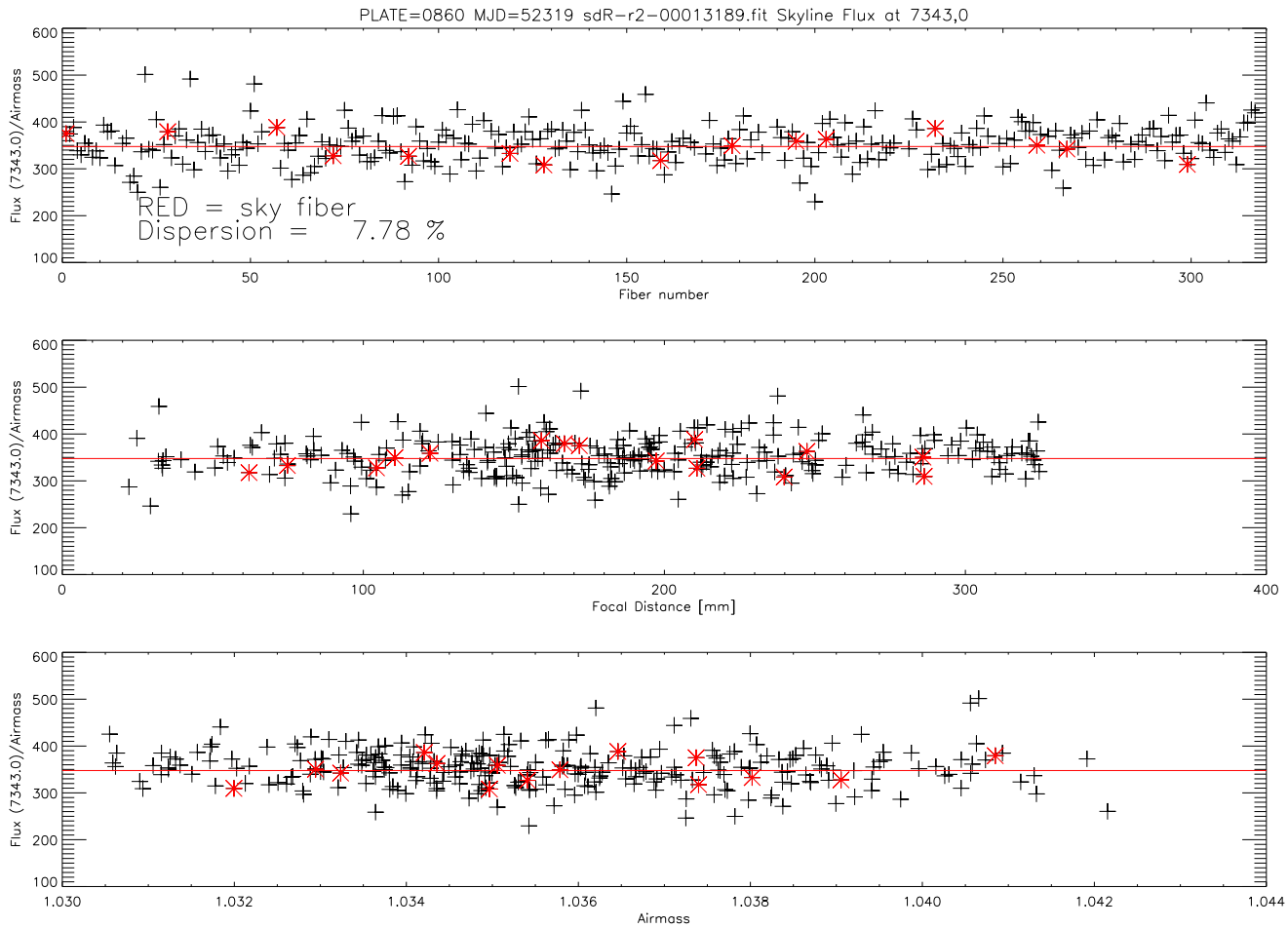

Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013189.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

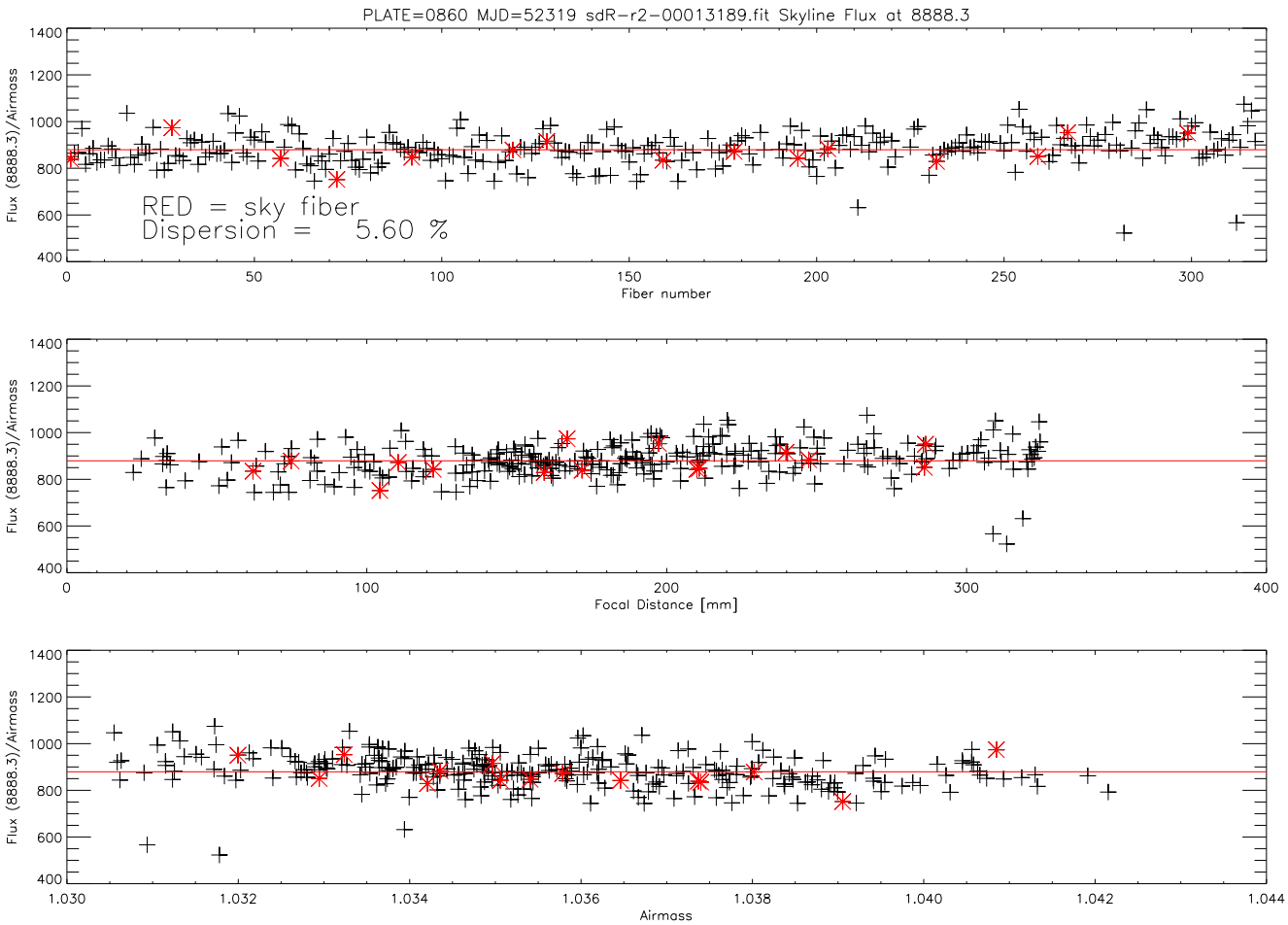

PLATE=0860 MJD=52319 sdR-r2-00013189.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0860 MJD=52319 sdR-r2-00013189.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]


PLATE=0860 MJD=52319 sdR-r2-00013189.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
80
60
40
20
0
-20
-40
-60
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=0860 MJD=52319 sdR-r2-00013189.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=0860 MJD=52319 sdR-r2-00013189.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 7.78 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0860 MJD=52319 sdR-r2-00013189.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 5.60 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass