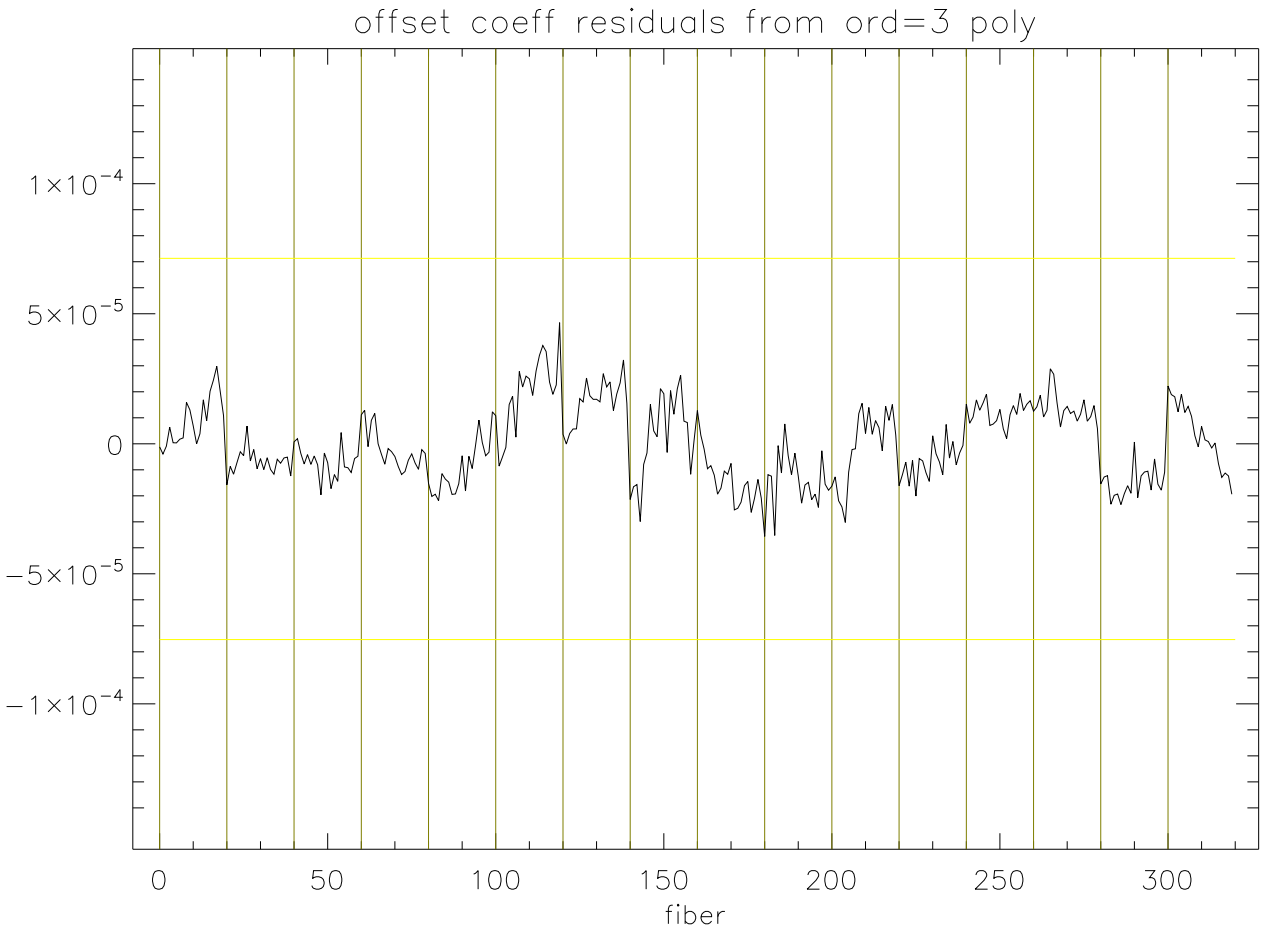
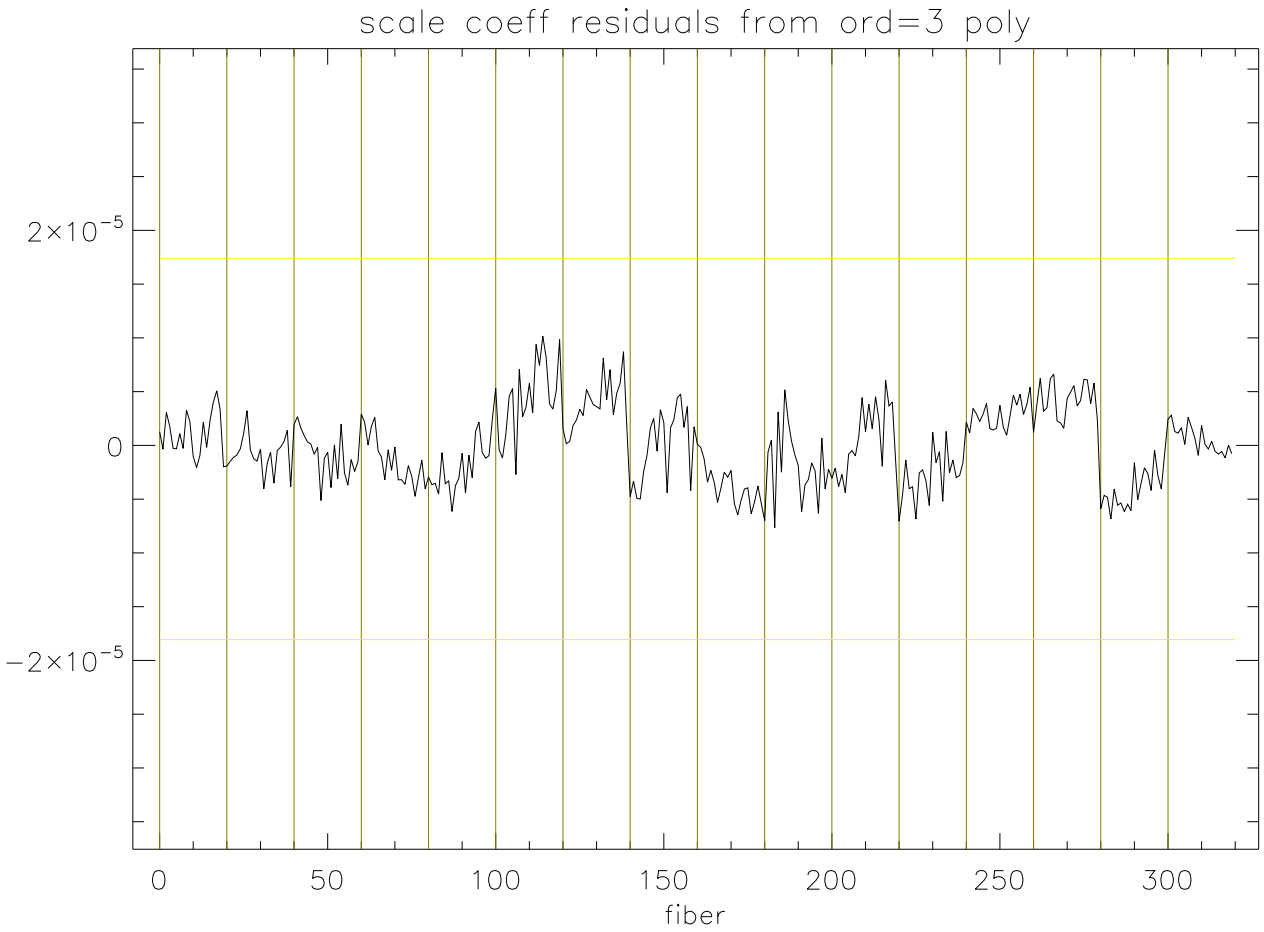
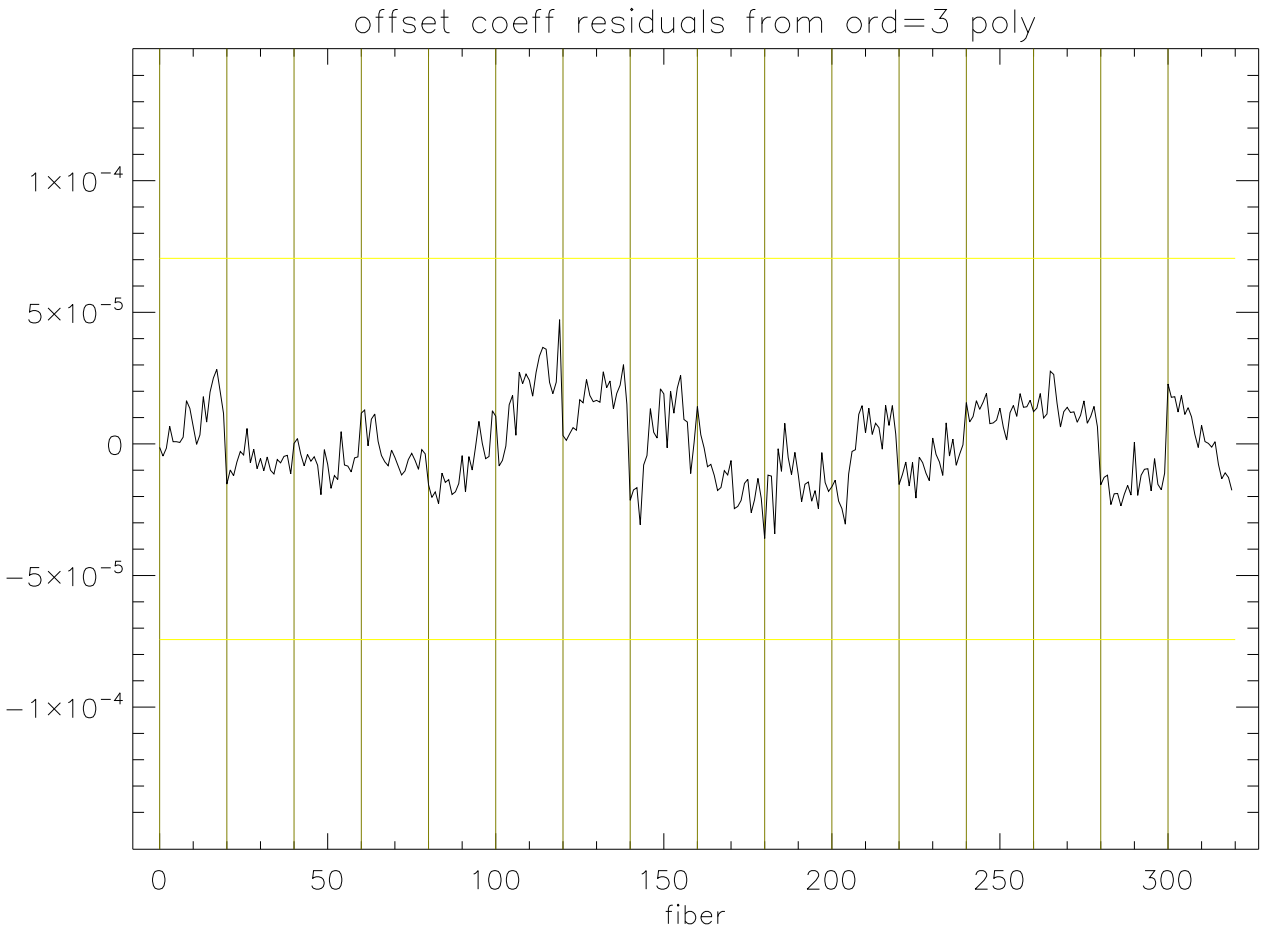
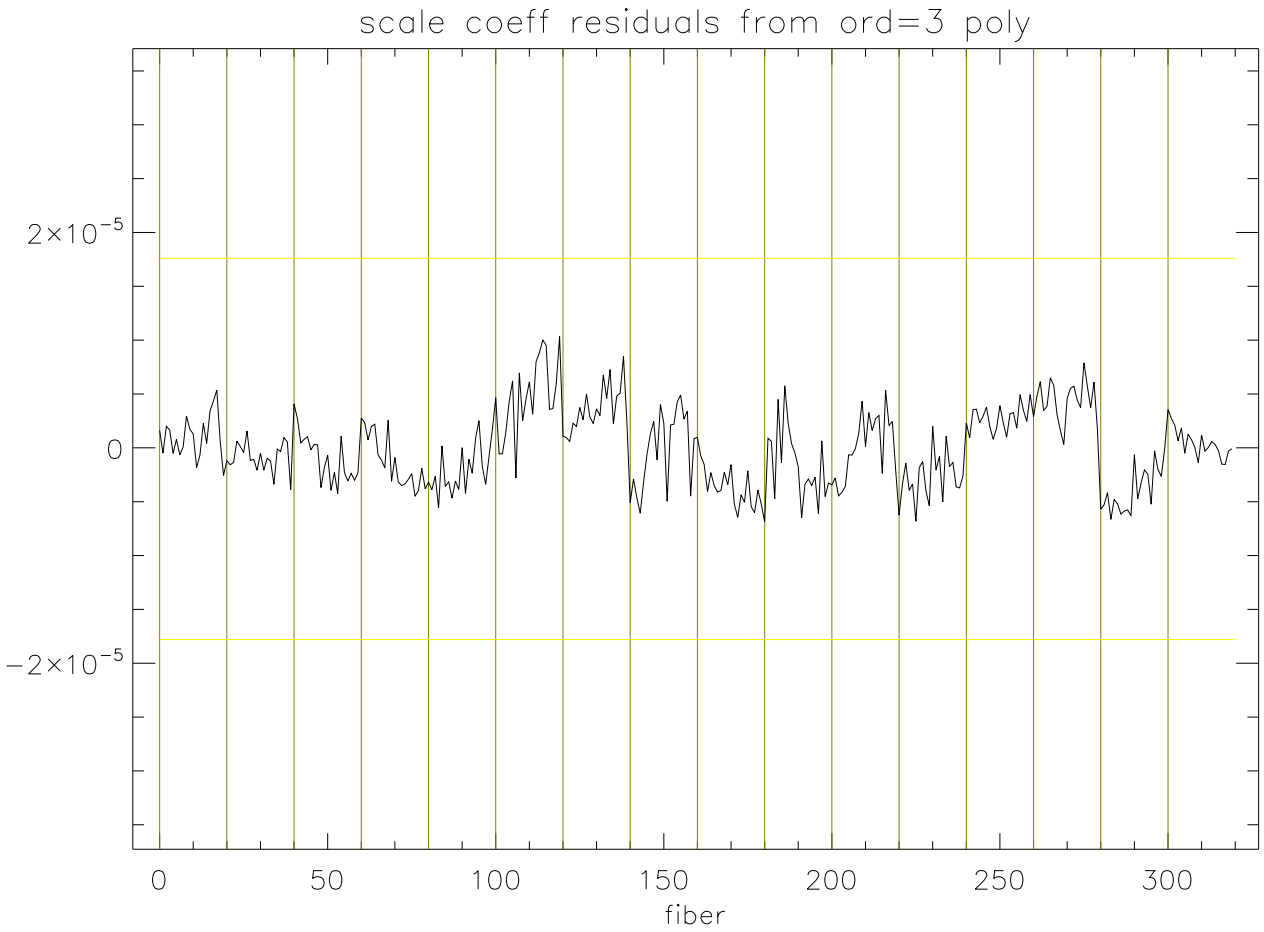
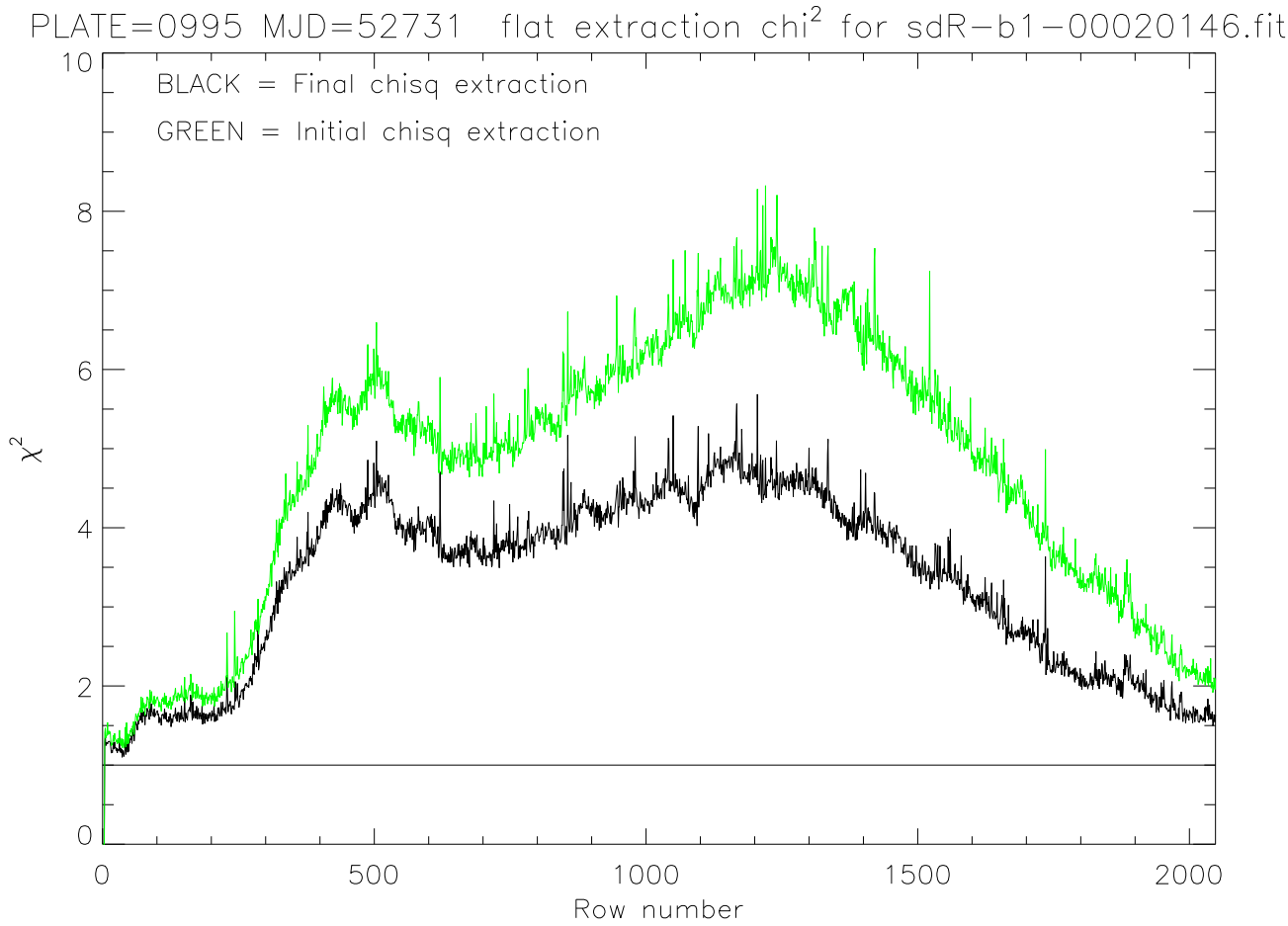
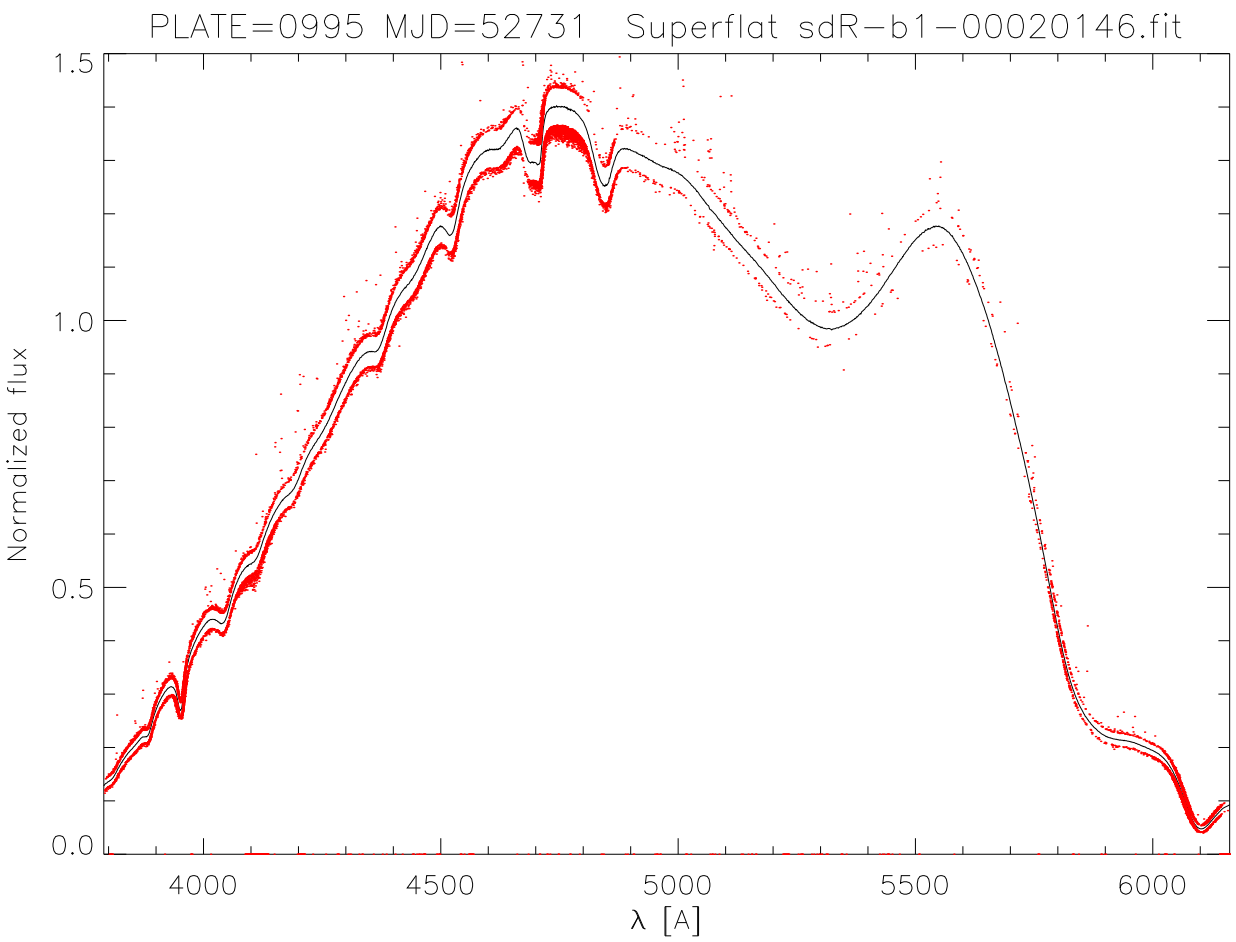

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

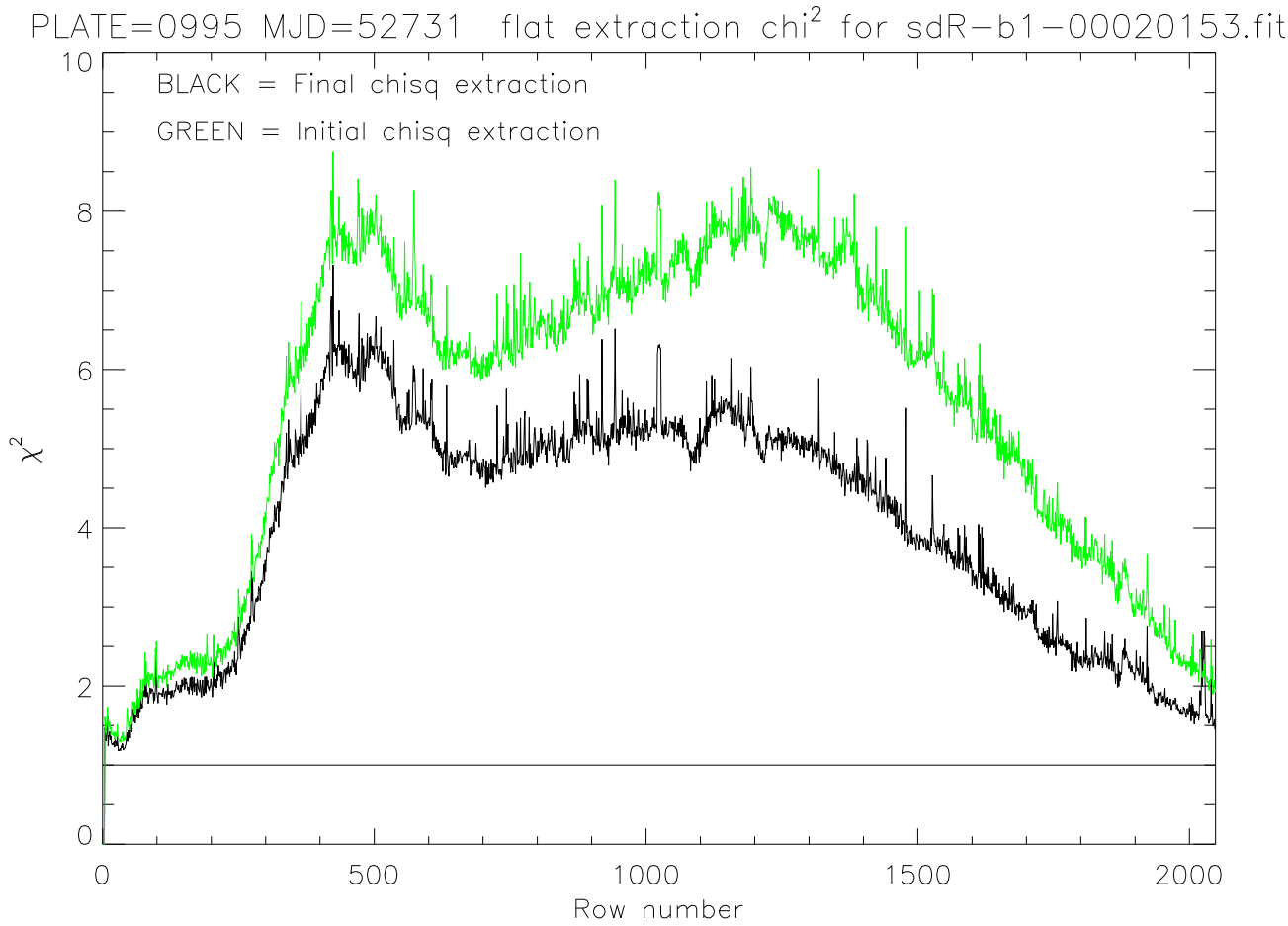

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

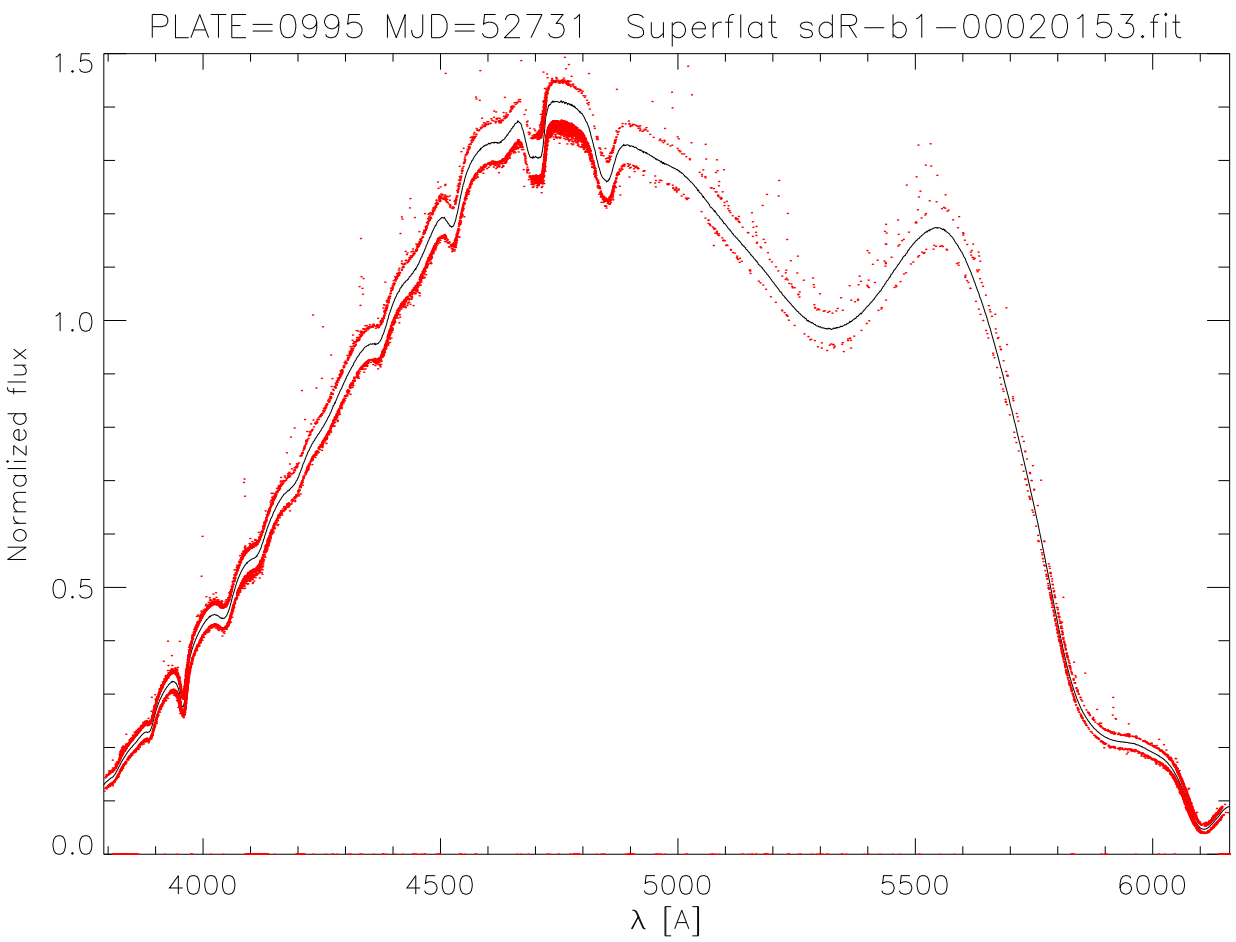

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

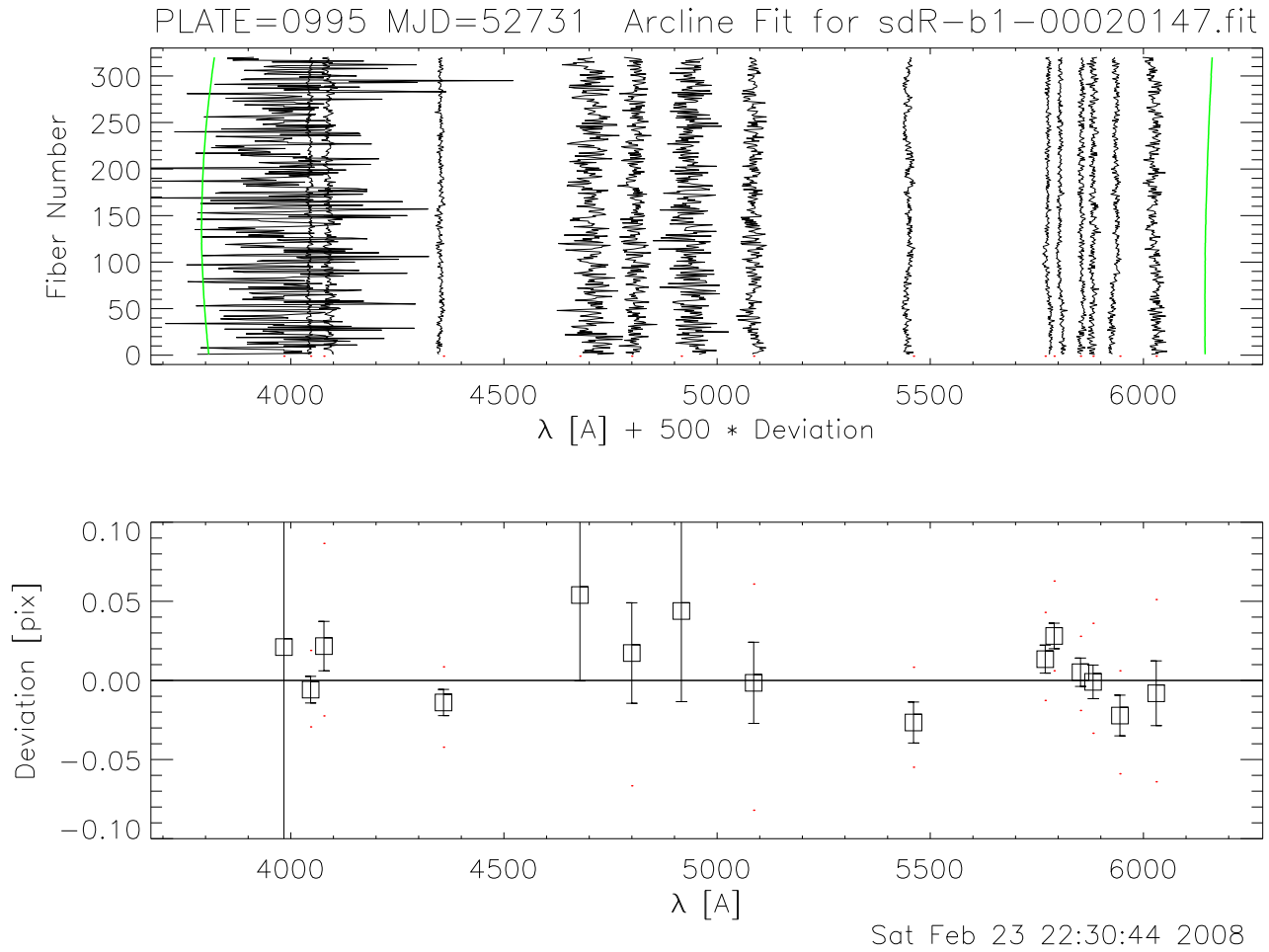

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

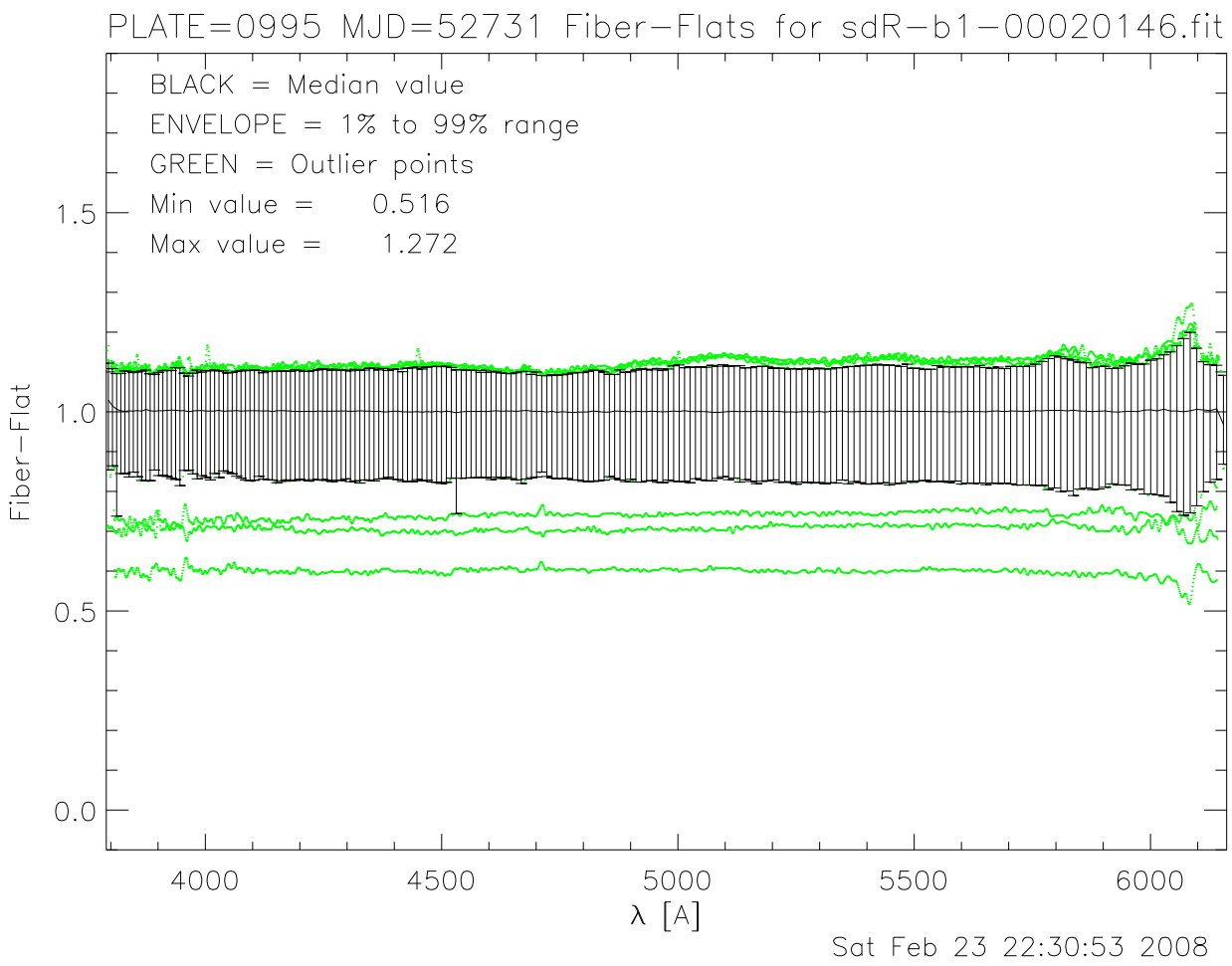

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−b1−00020146.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

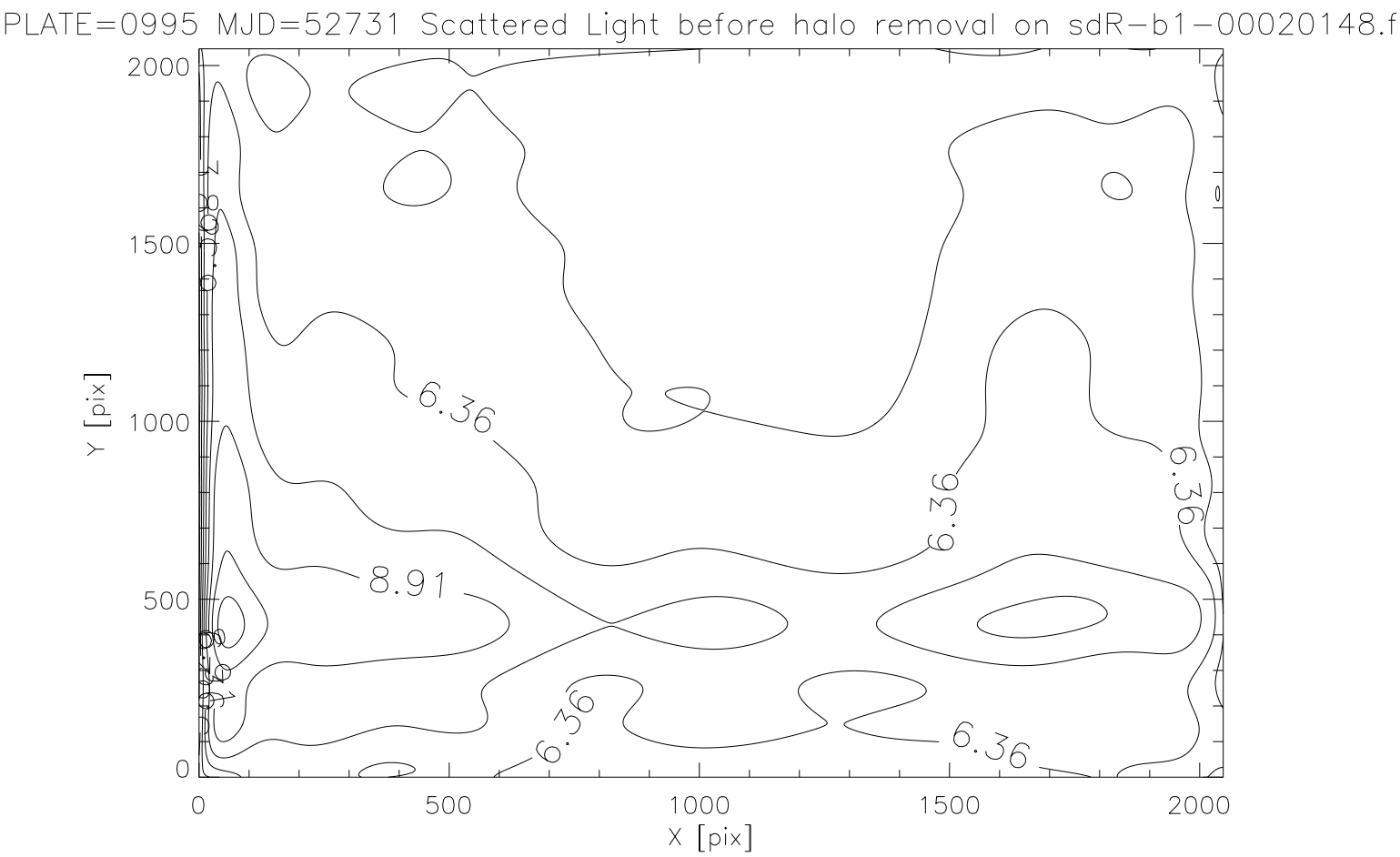

PLATE=0995 MJD=52731 Superflat sdR-b1-00020146.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

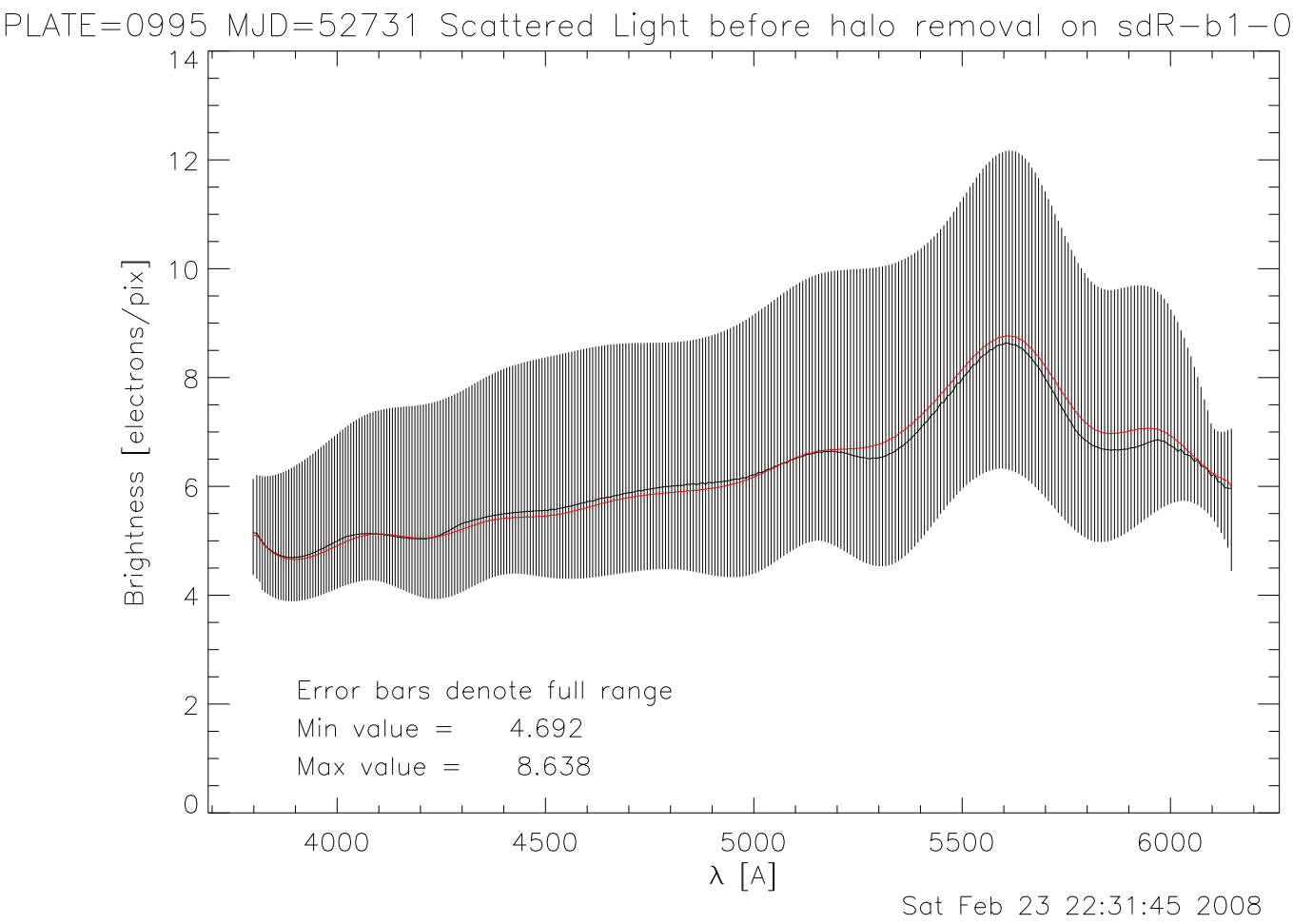

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−b1−00020153.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

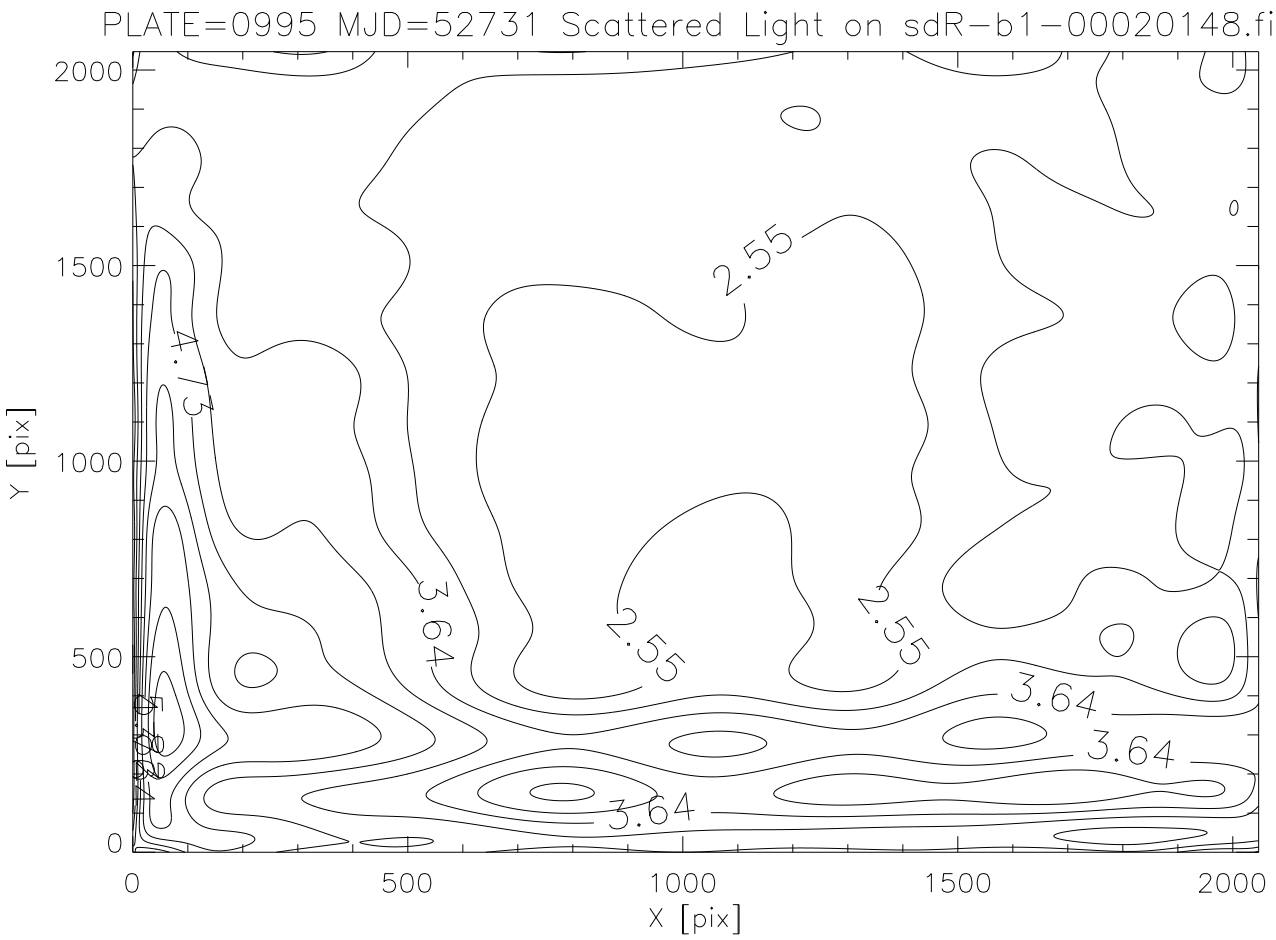

PLATE=0995 MJD=52731 Superflat sdR-b1-00020153.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

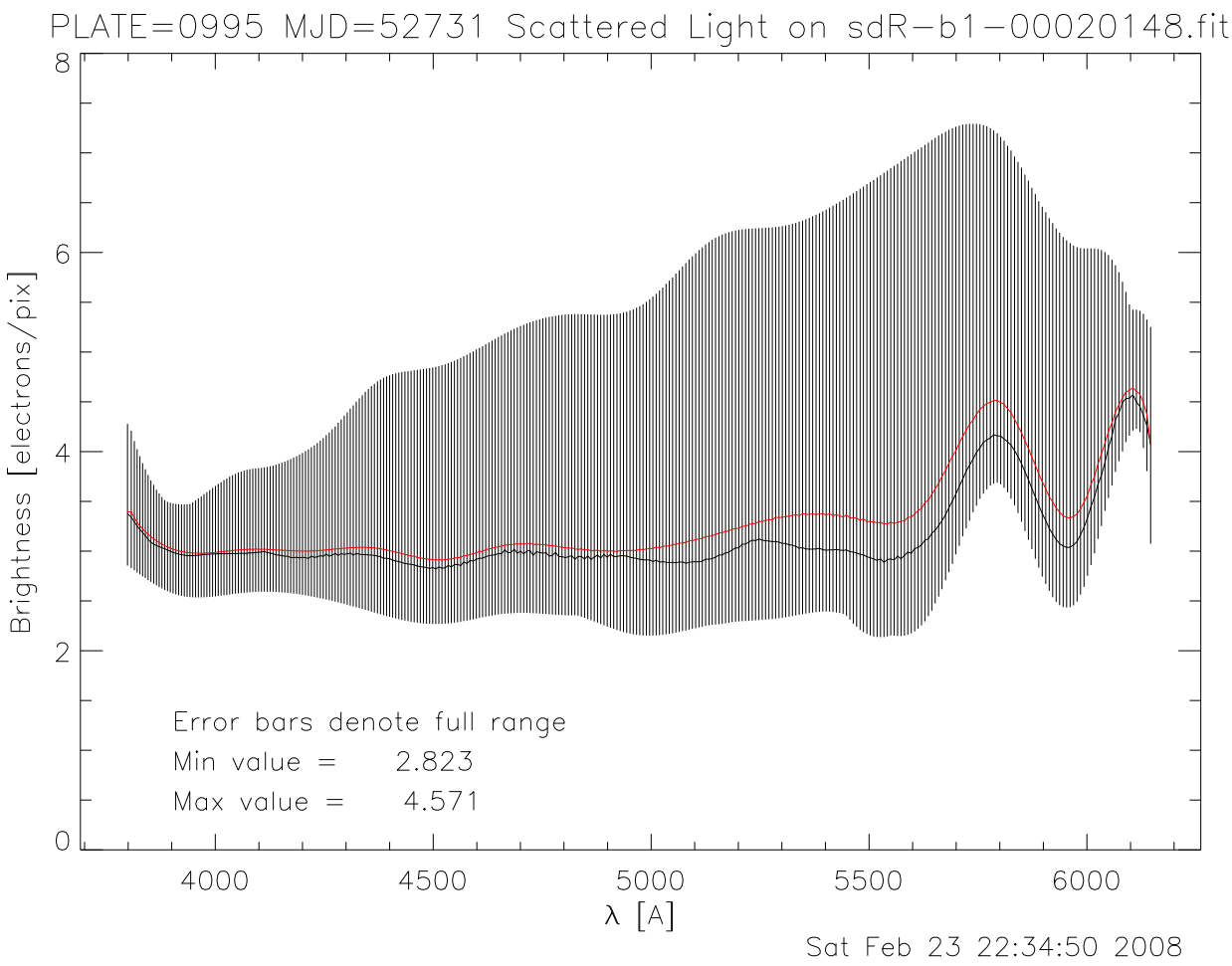

PLATE=0995 MJD=52731 Arcline Fit for sdR-b1-00020147.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:30:44 2008

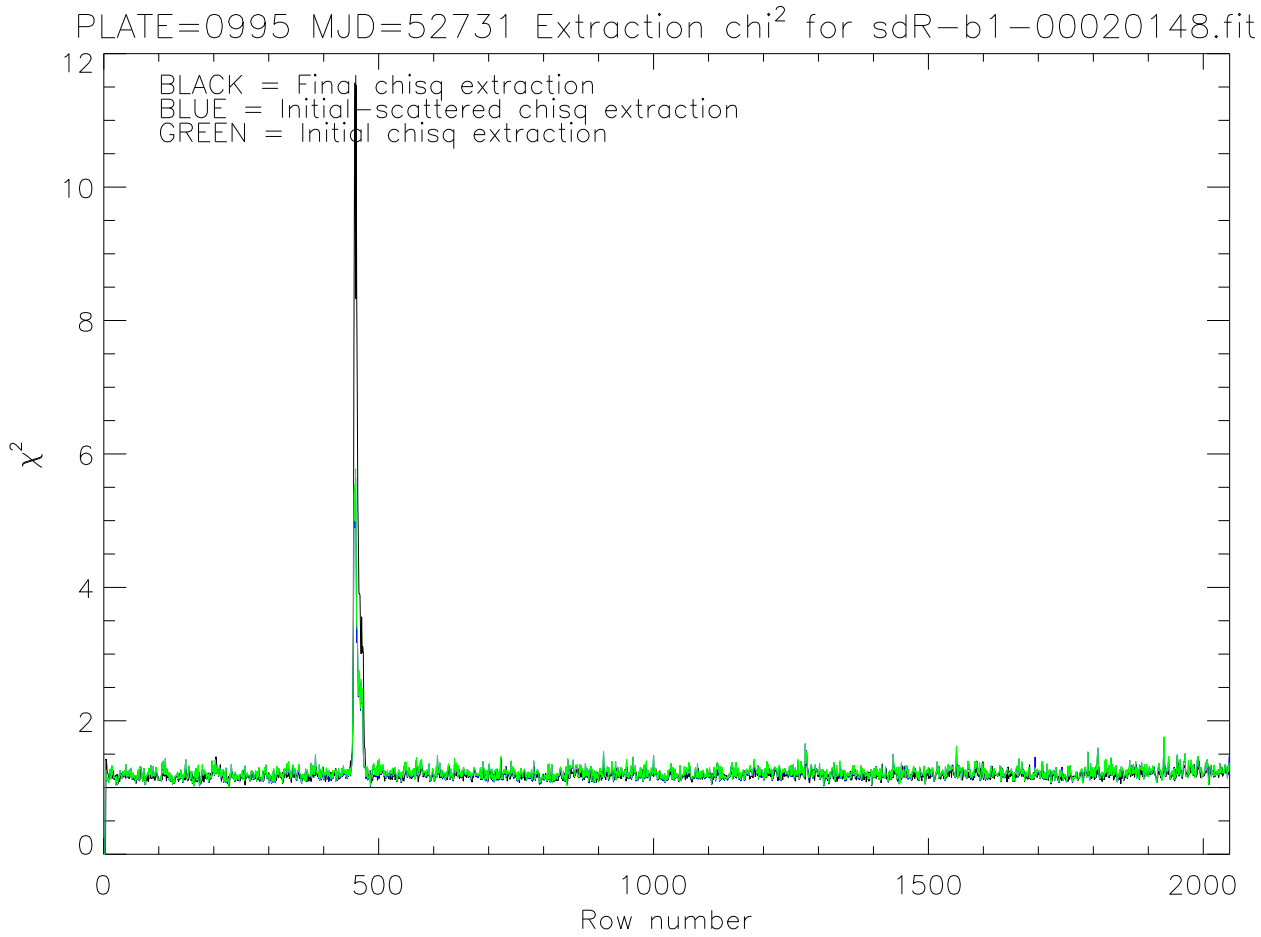

PLATE=0995 MJD=52731 Fiber−Flats for sdR−b1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.516
Max value = 1.272
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:30:53 2008

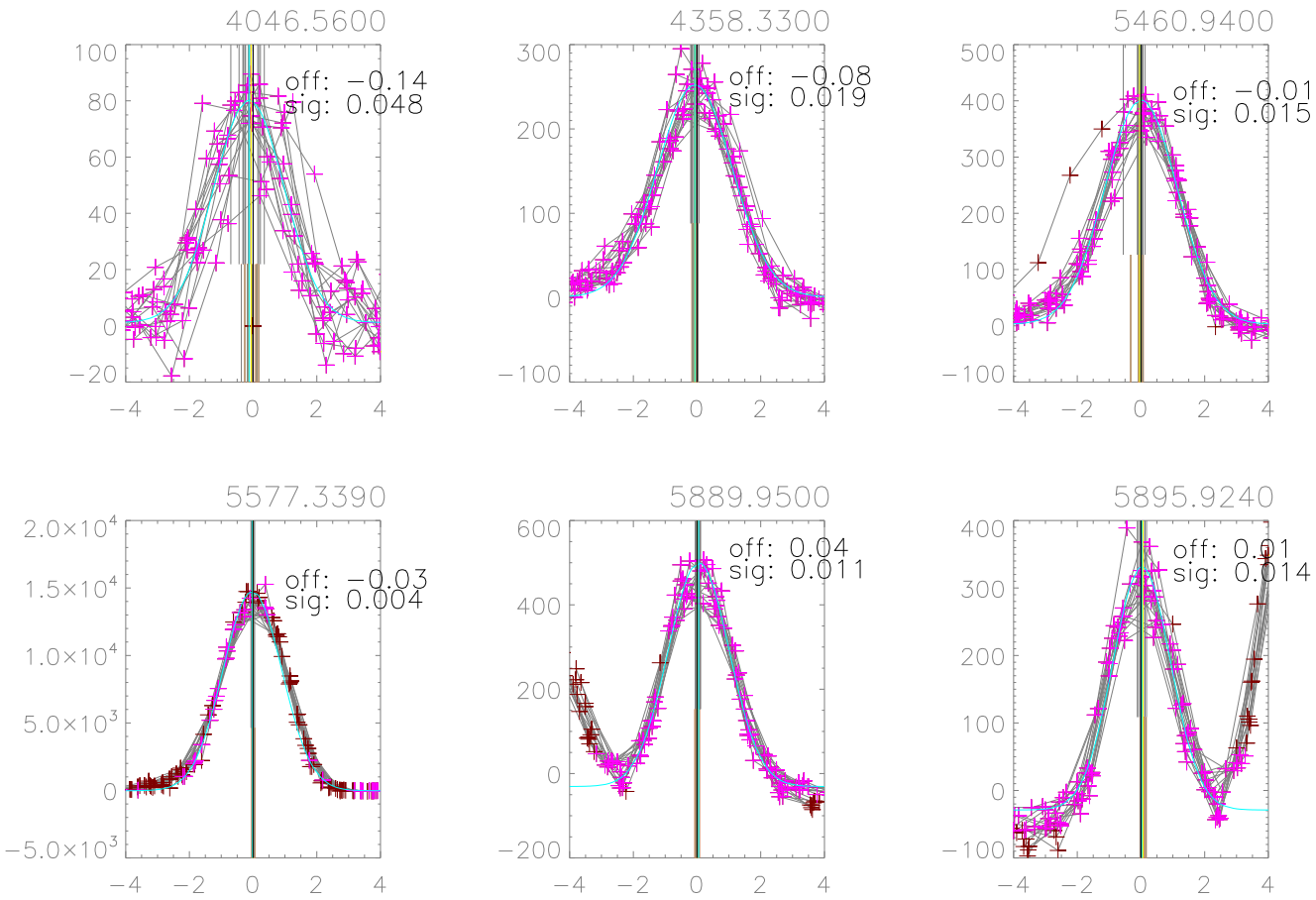

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b1−00020148.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.36
8.91
6.36
6.36
6.36

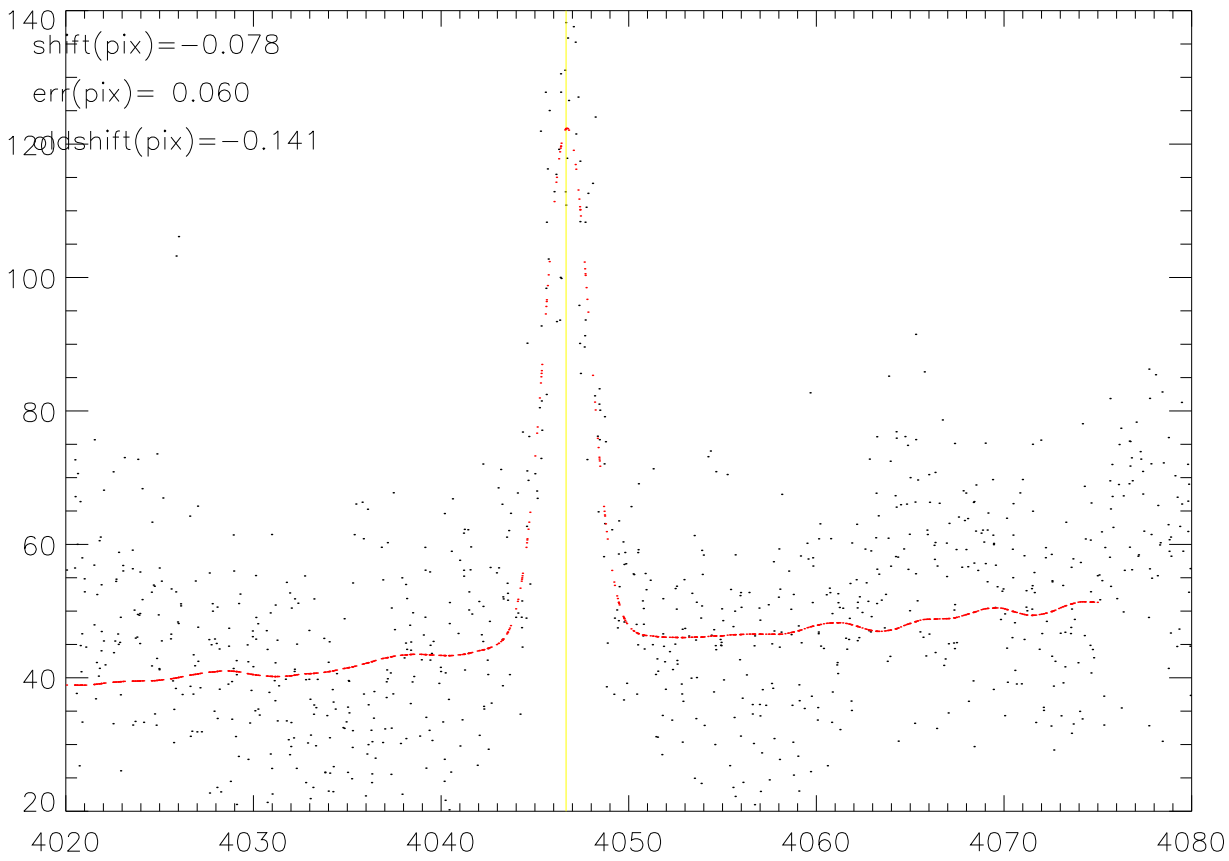

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b1−00020148.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.692
Max value = 8.638
Sat Feb 23 22:31:45 2008

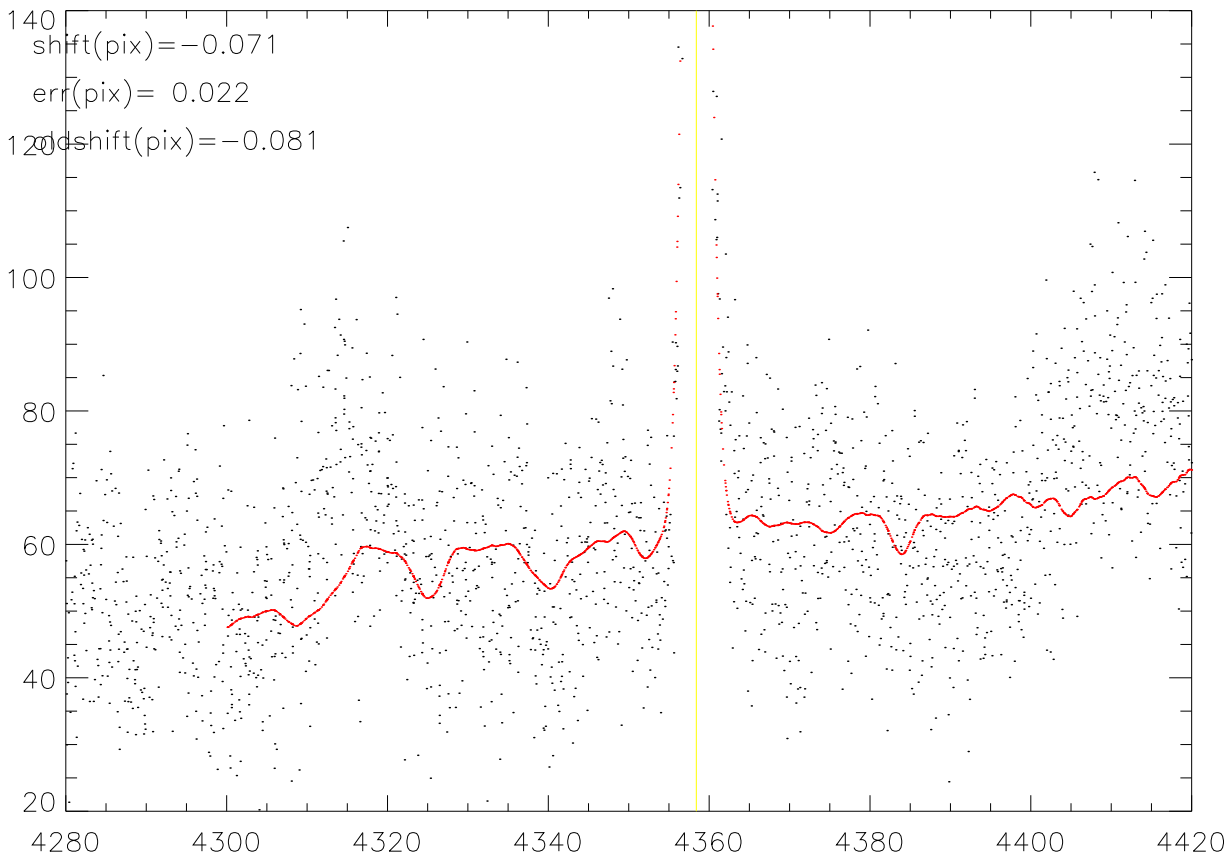

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020148.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
2.55
3.64
4.73
0

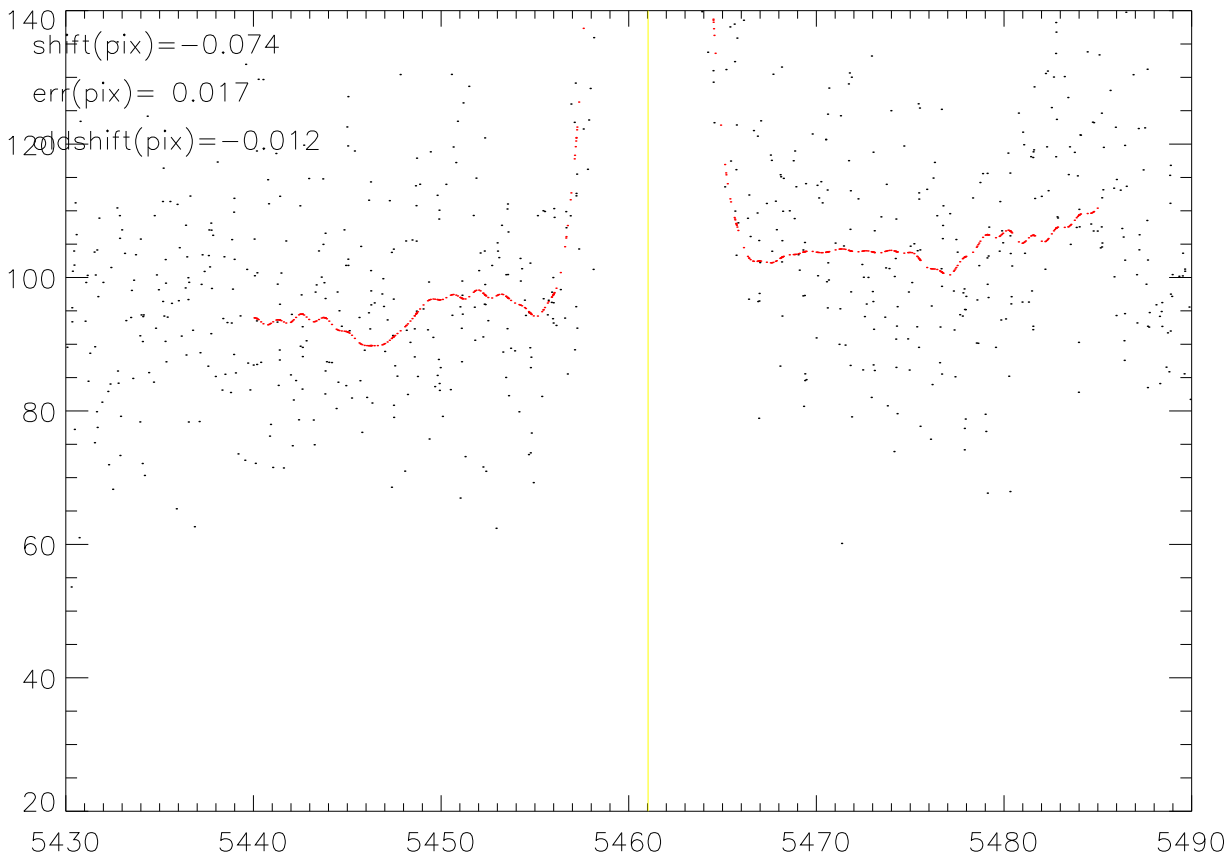

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020148.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.823
Max value = 4.571
Sat Feb 23 22:34:50 2008

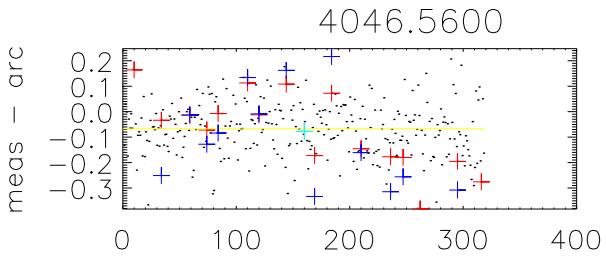

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b1-00020148.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

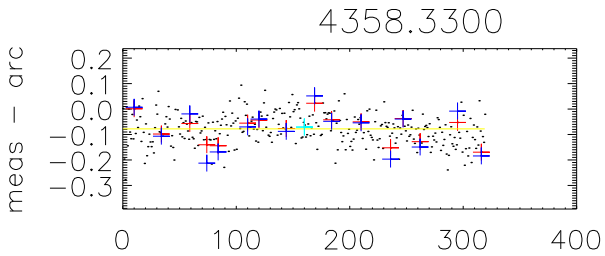

4046.5600
off: −0.14
sig: 0.048
4358.3300
off: −0.08
sig: 0.019
5460.9400
off: −0.01
sig: 0.015
5577.3390
off: −0.03
sig: 0.004
5889.9500
off: 0.04
sig: 0.011
5895.9240
off: 0.01
sig: 0.014

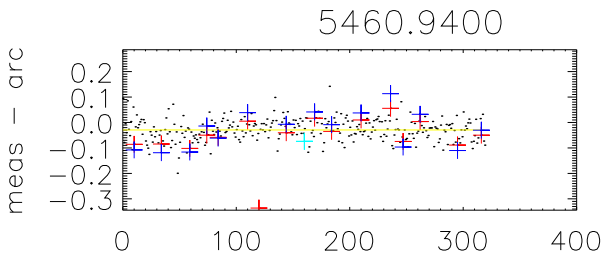

shift(pix)=−0.078
err(pix)= 0.060
oldshift(pix)=−0.141
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

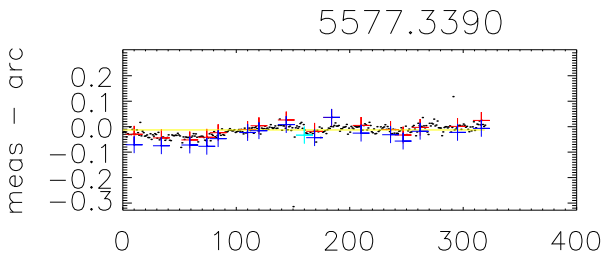

shift(pix)=−0.071
err(pix)= 0.022
oldshift(pix)=−0.081
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

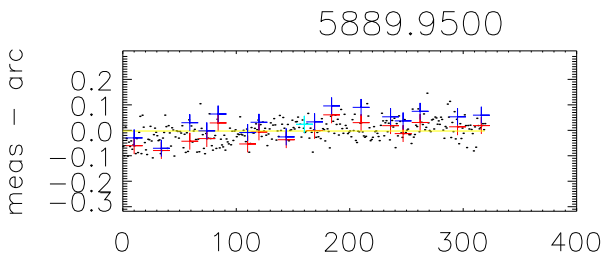

shift(pix)=−0.074
err(pix)= 0.017
oldshift(pix)=−0.012
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

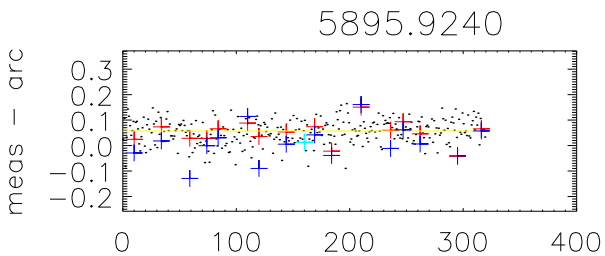

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

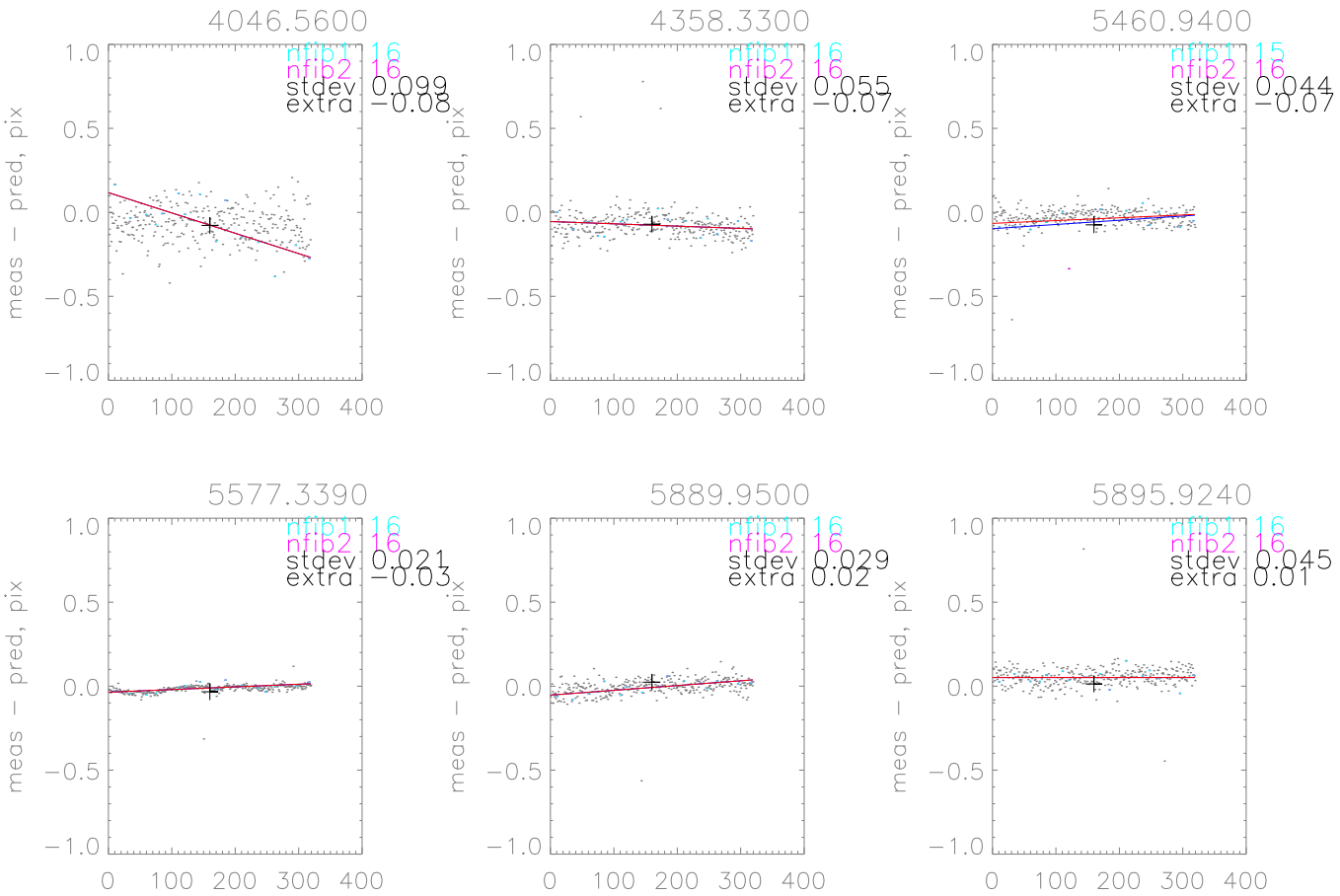

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

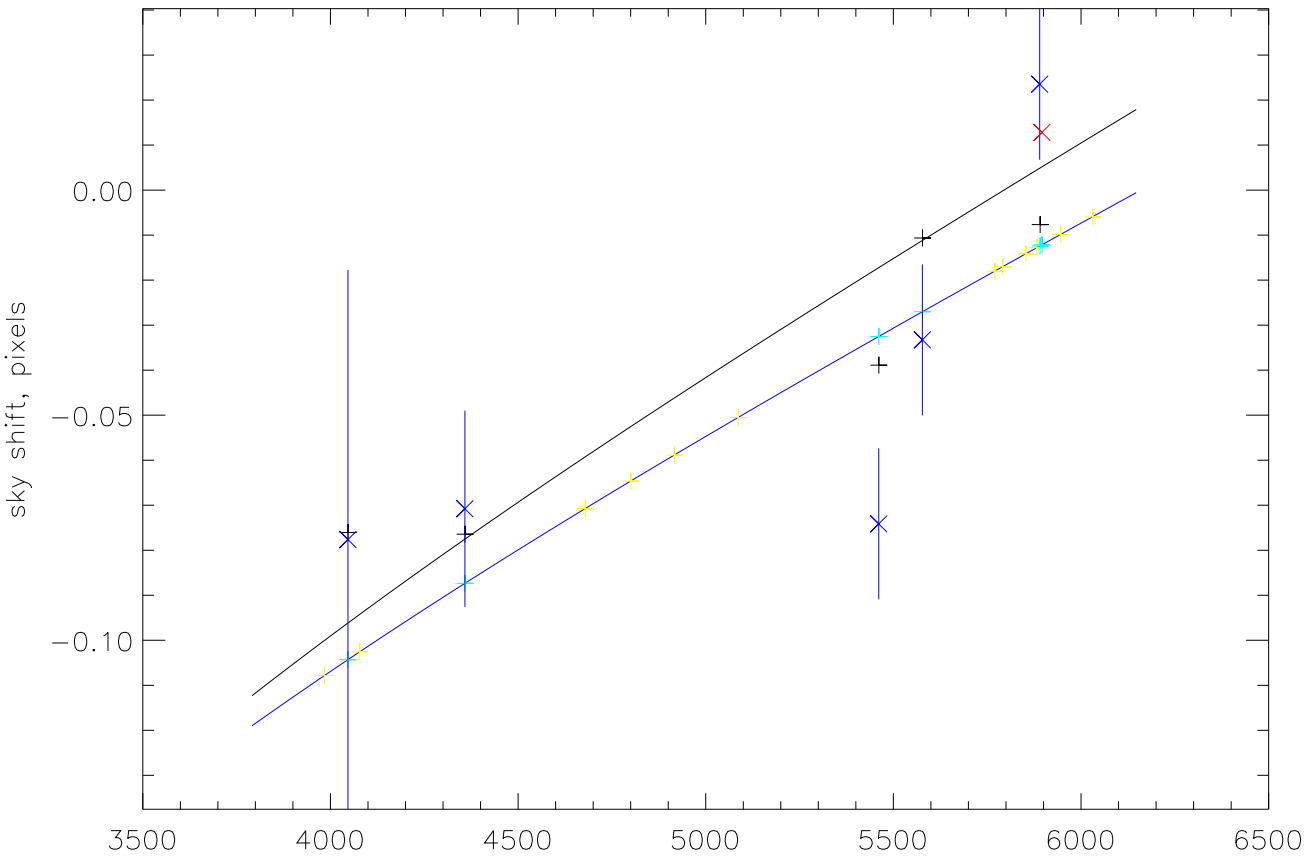

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

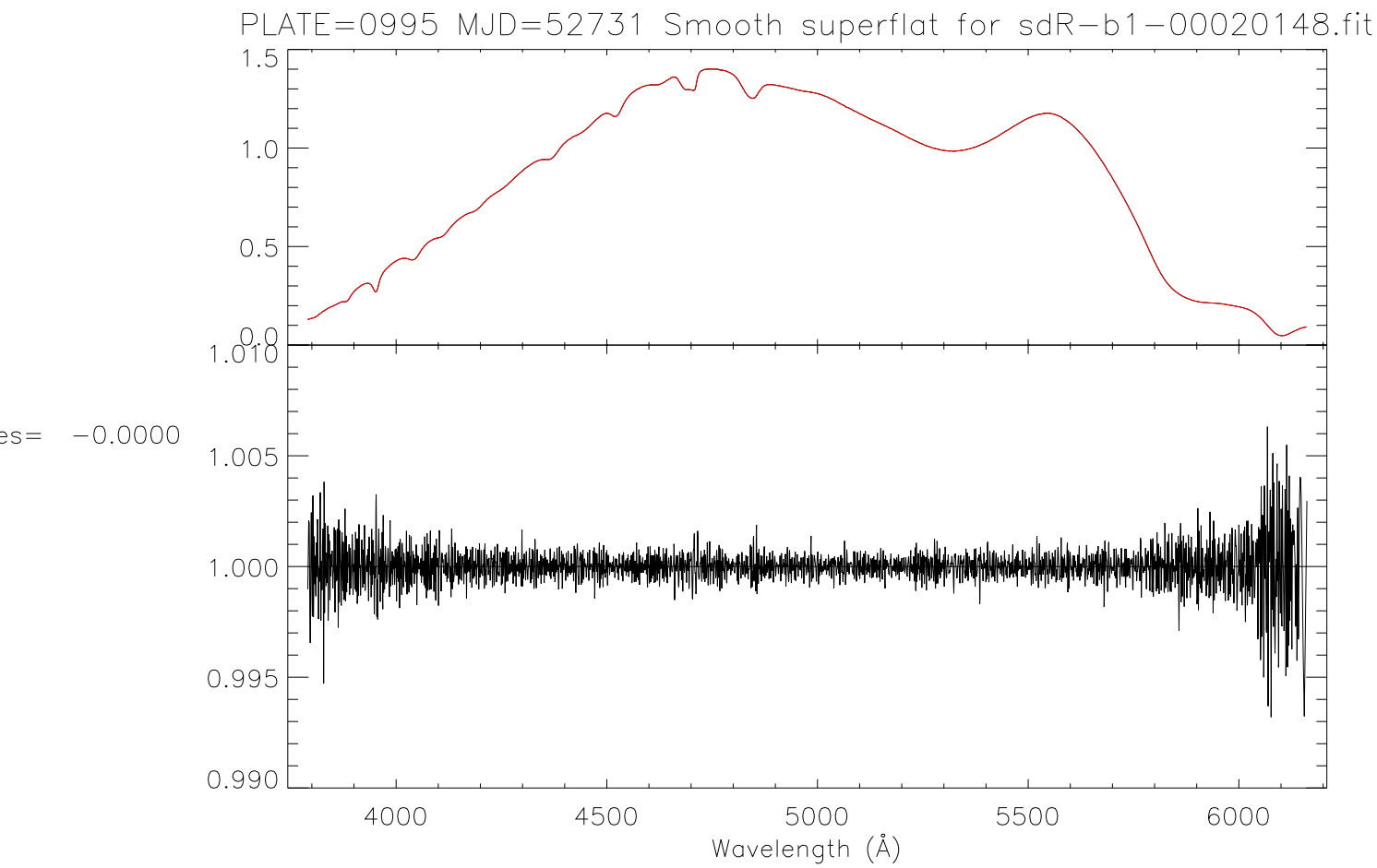

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

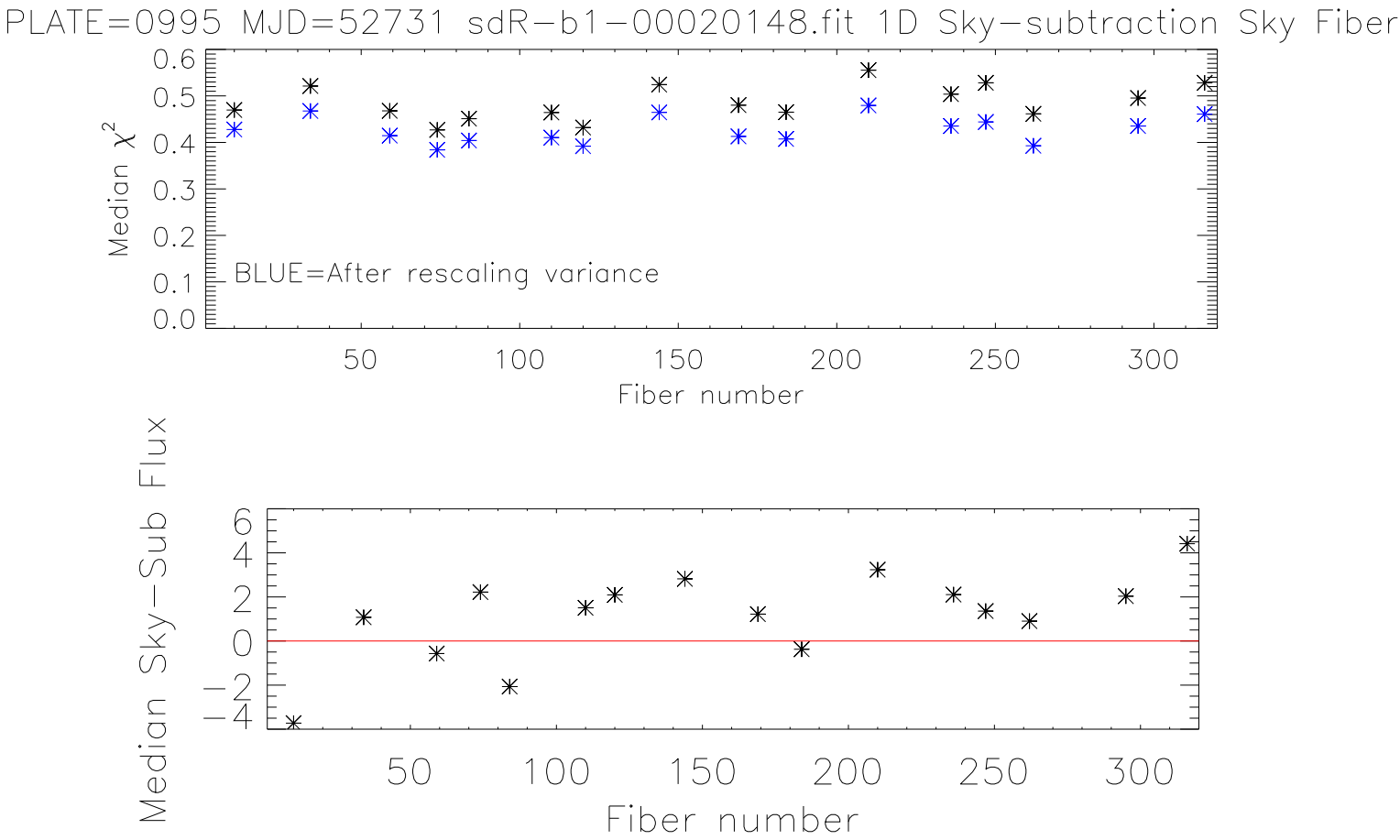

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

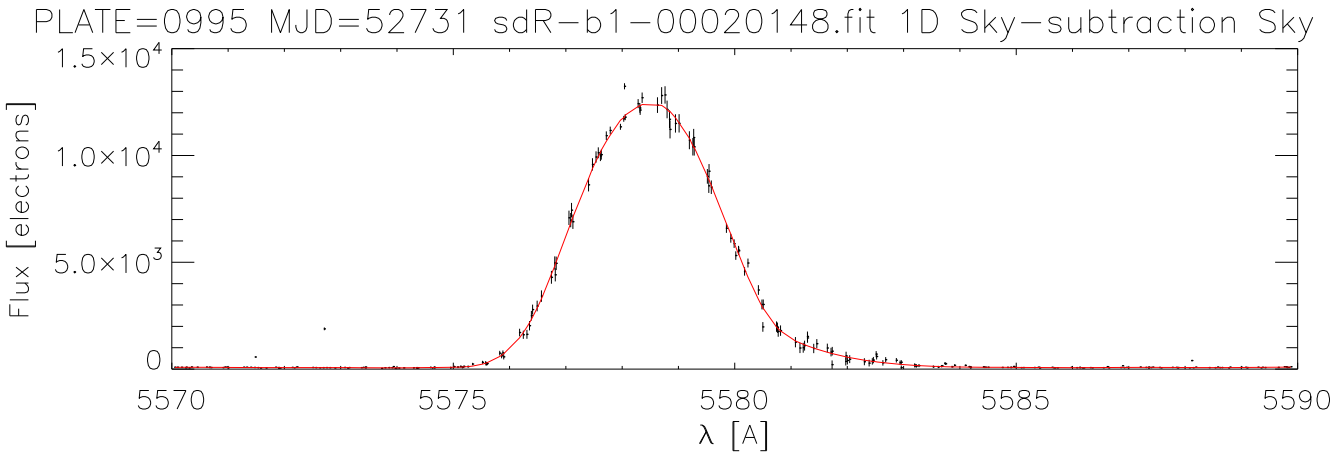

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

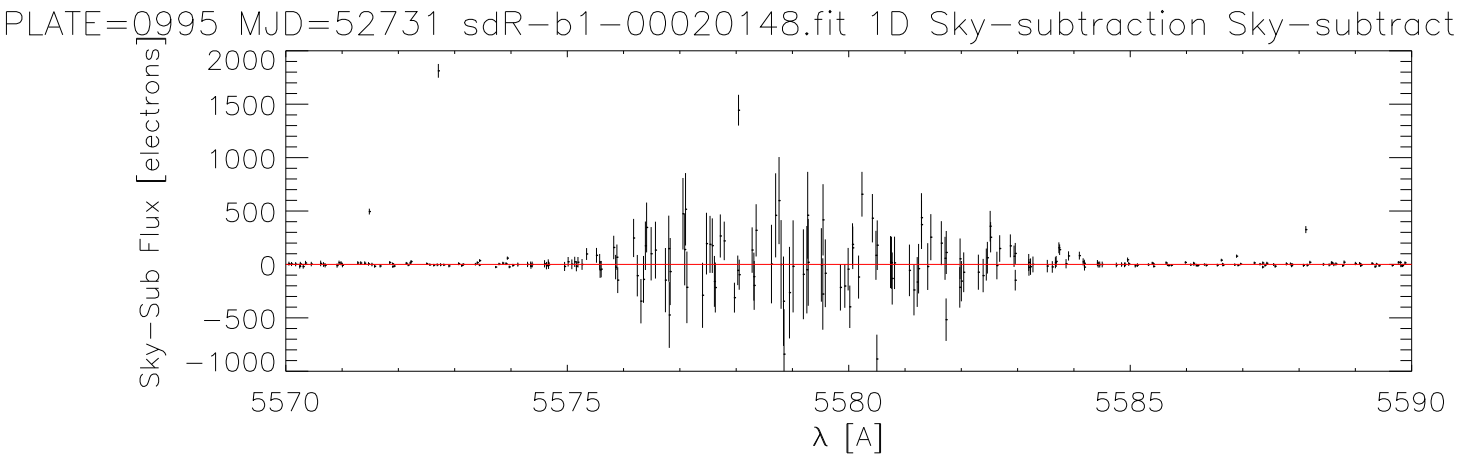

4046.5600
nfib1 16
nfib2 16
stdev 0.099
extra −0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra −0.07
5460.9400
nfib1 15
nfib2 16
stdev 0.044
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.03
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.045
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

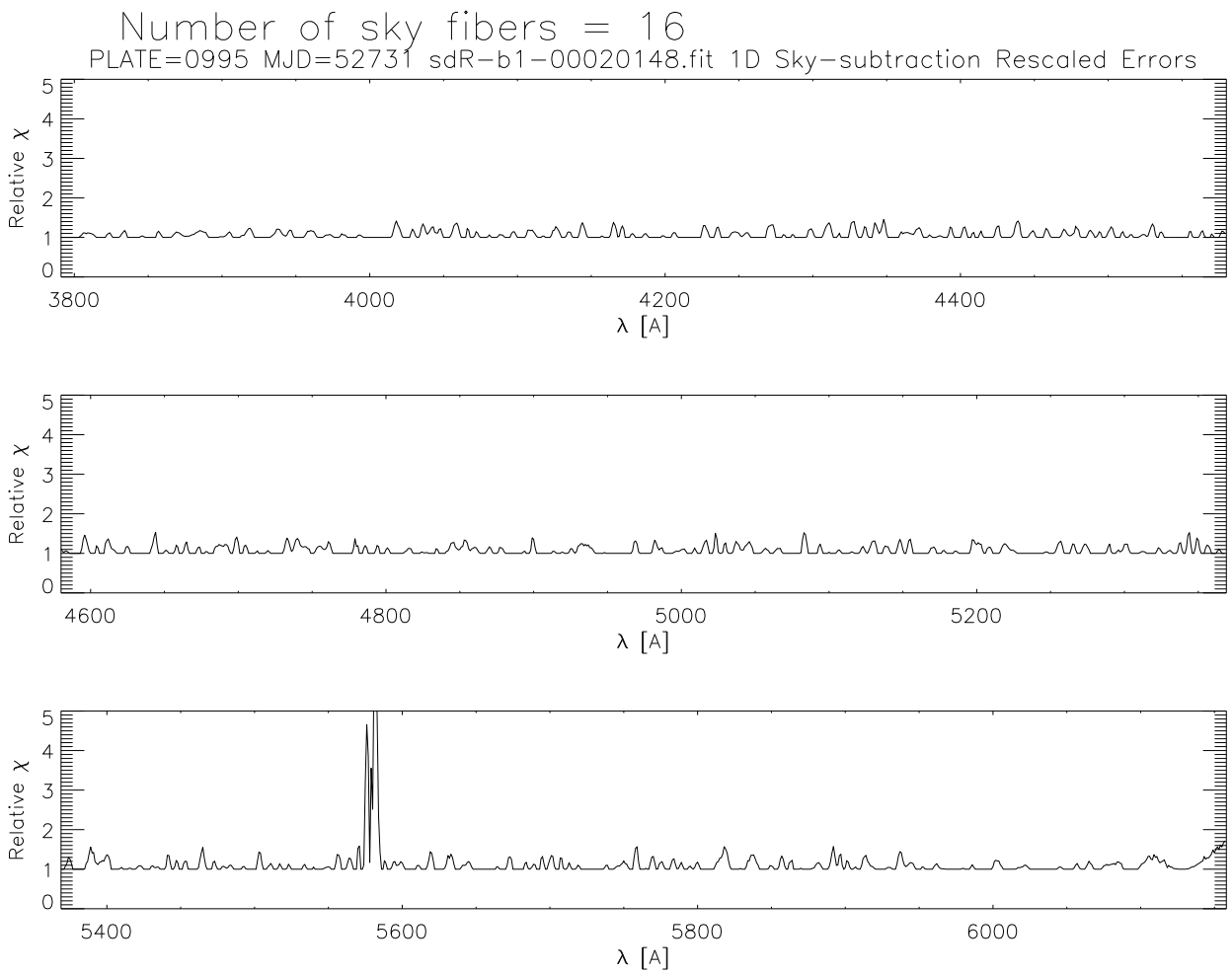

0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

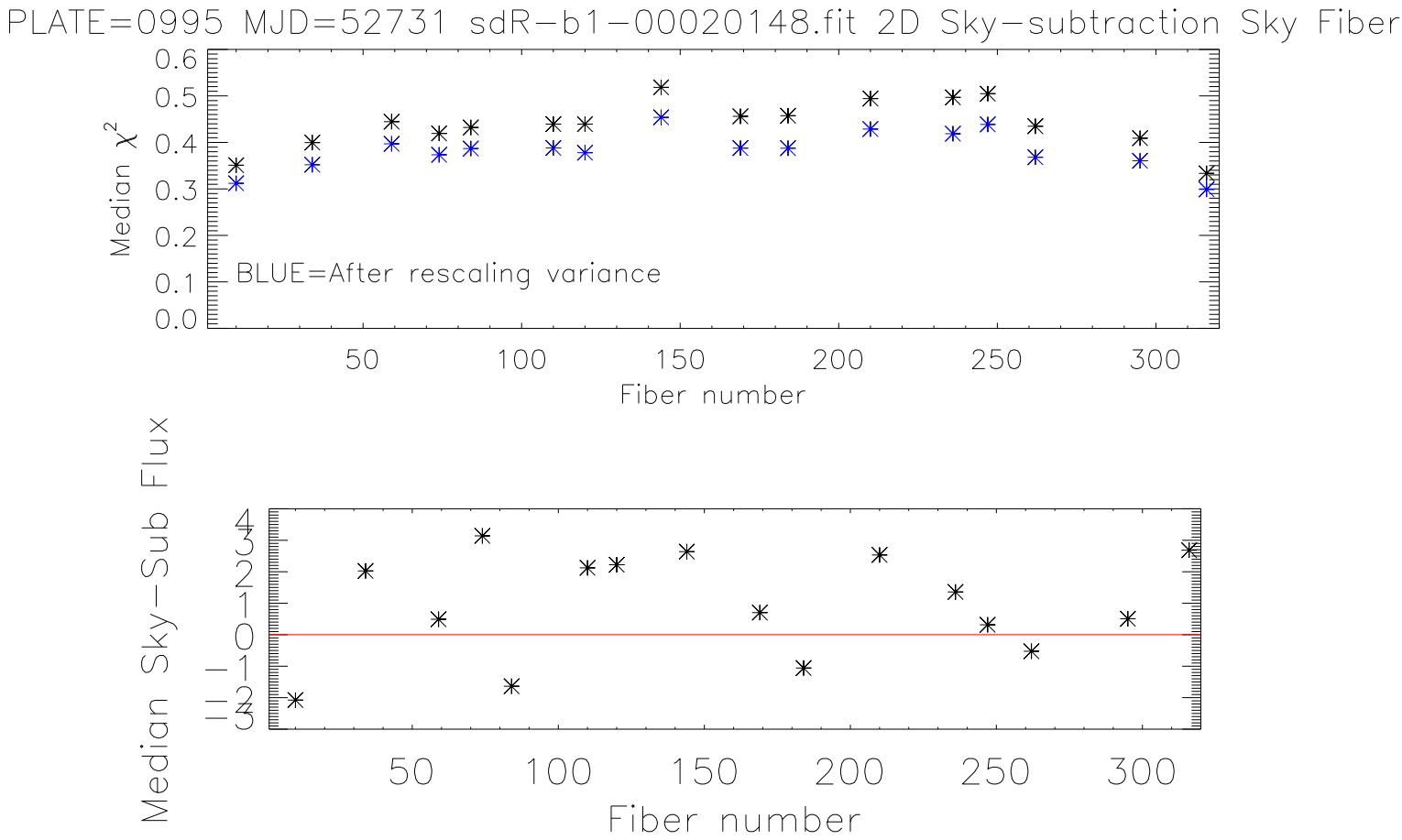

PLATE=0995 MJD=52731 Smooth superflat for sdR-b1-00020148.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

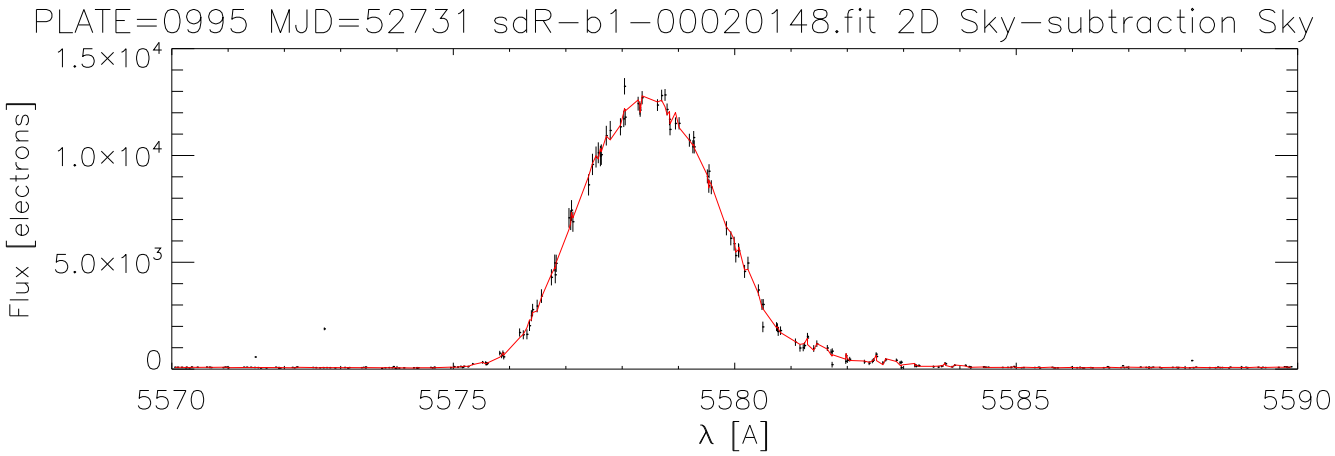

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

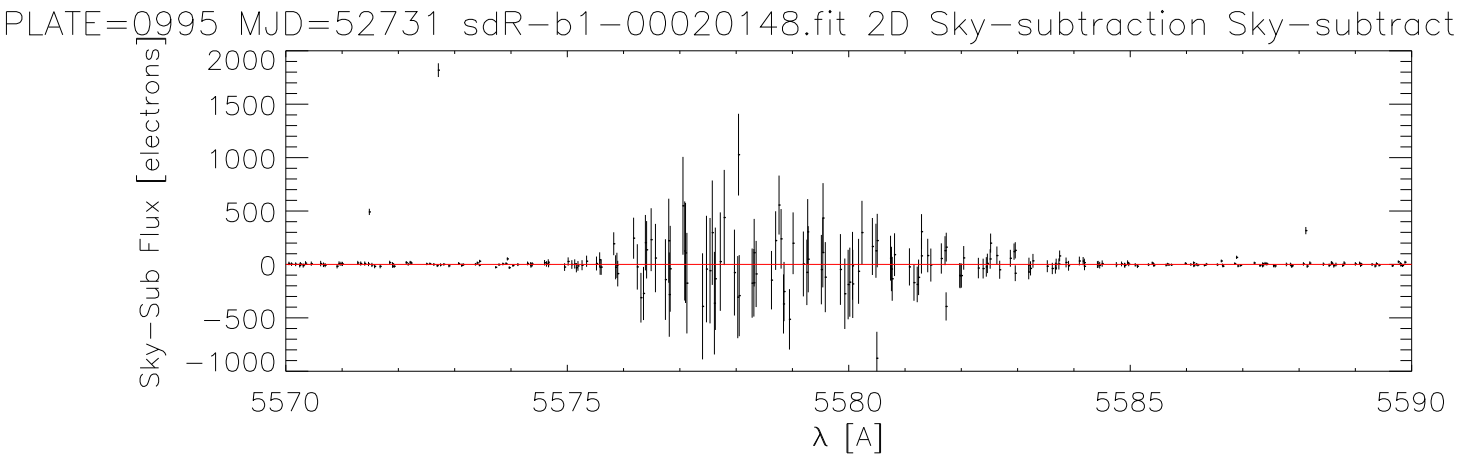

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

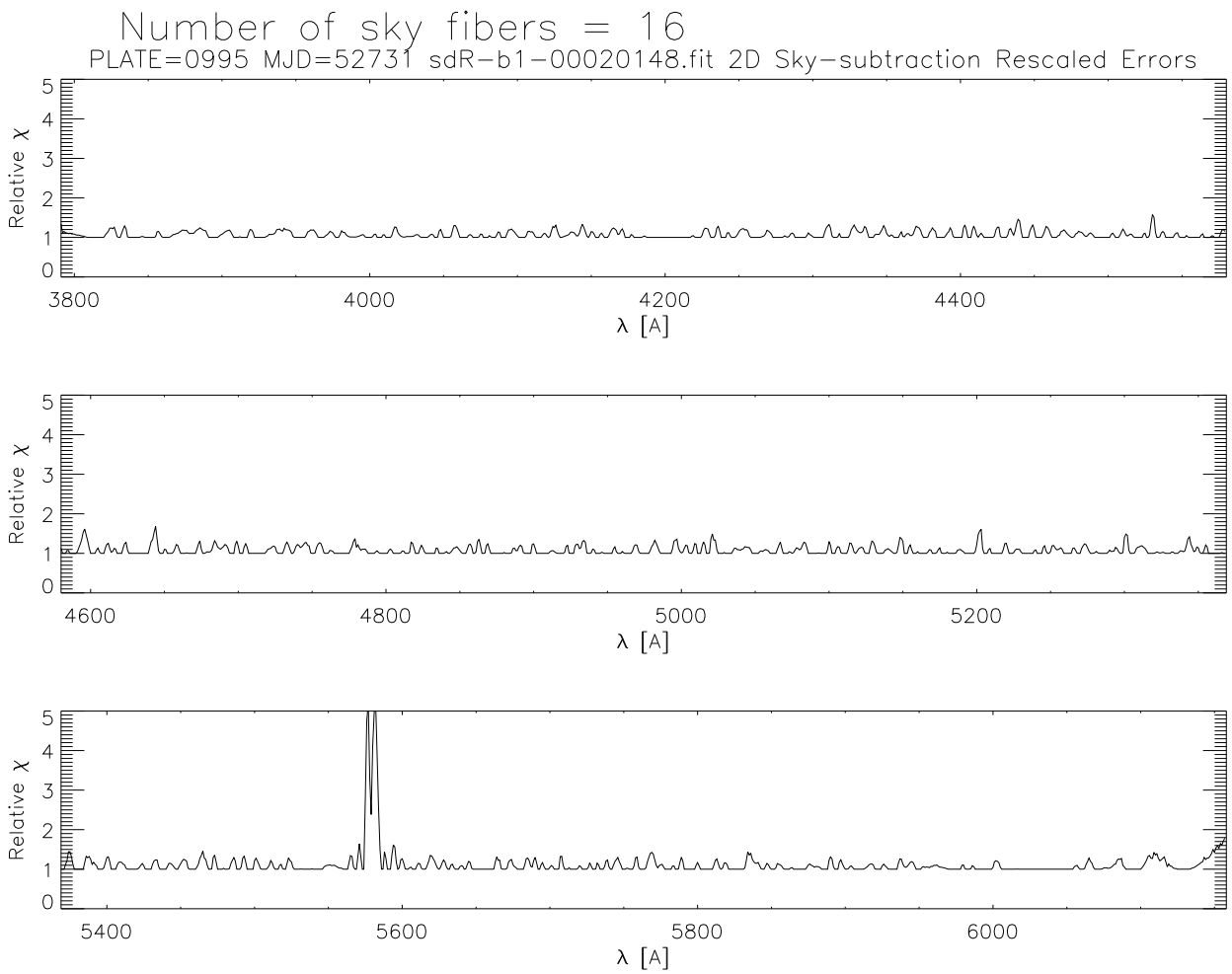

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

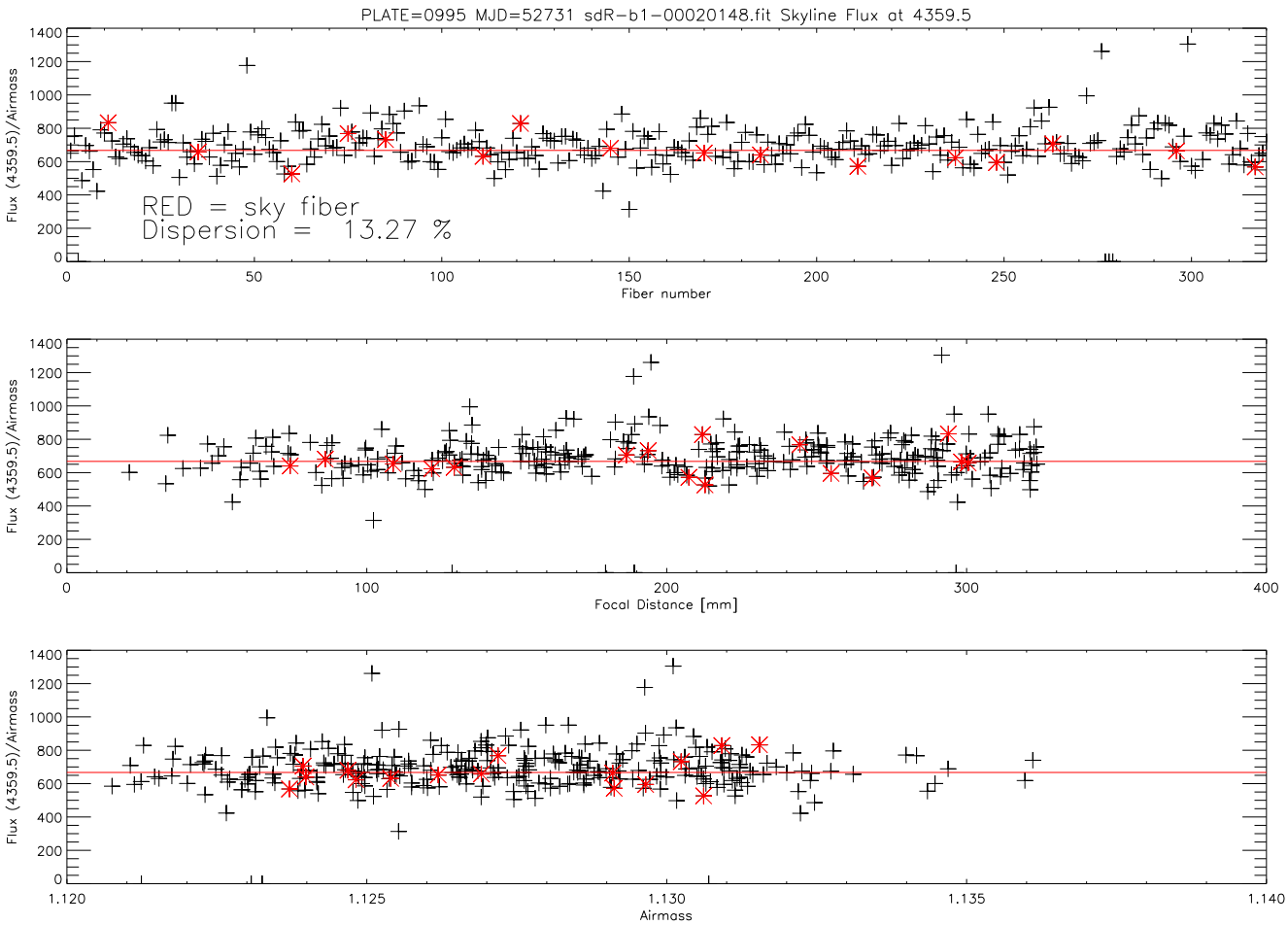

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020148.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

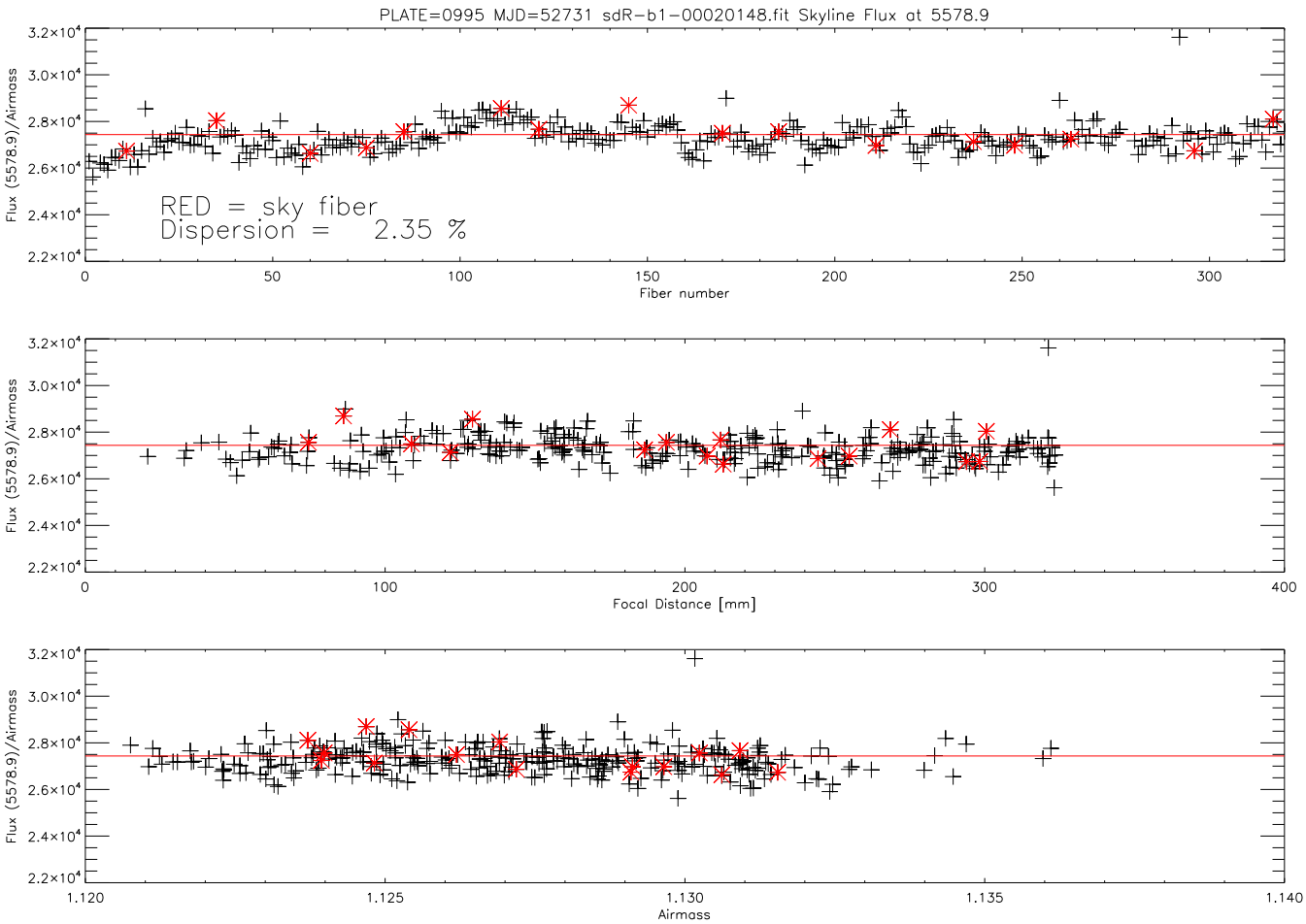

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

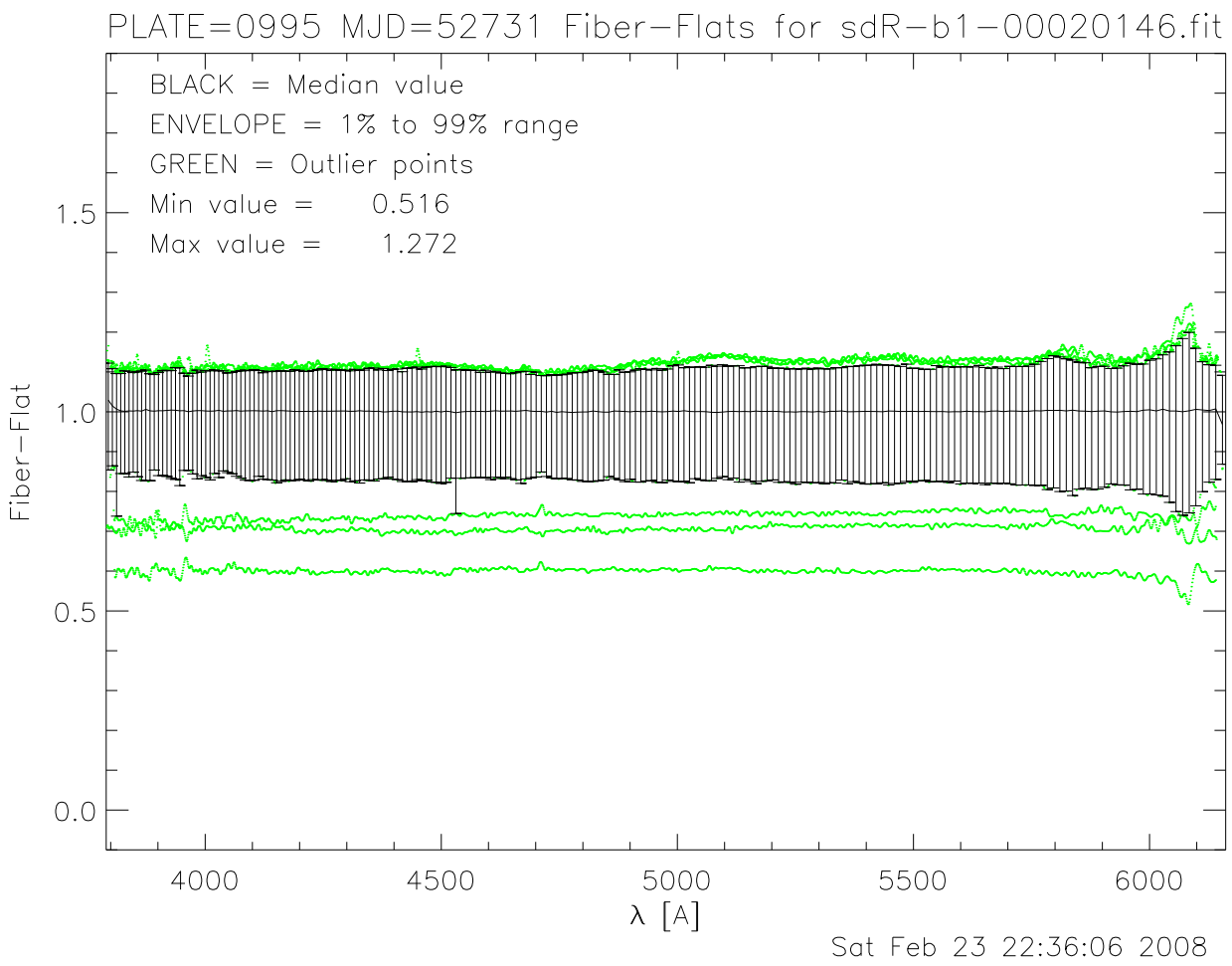

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

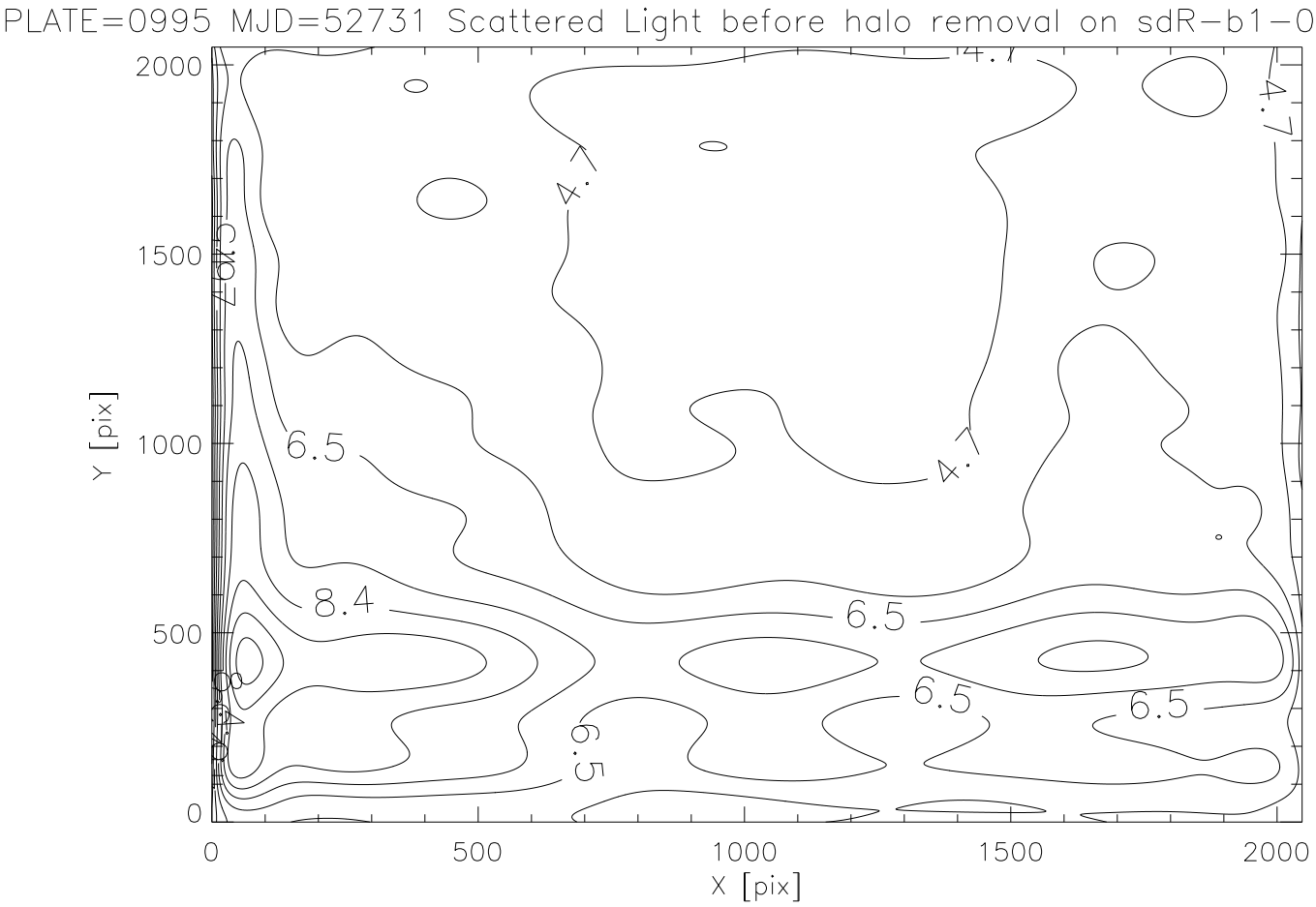

PLATE=0995 MJD=52731 sdR-b1-00020148.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

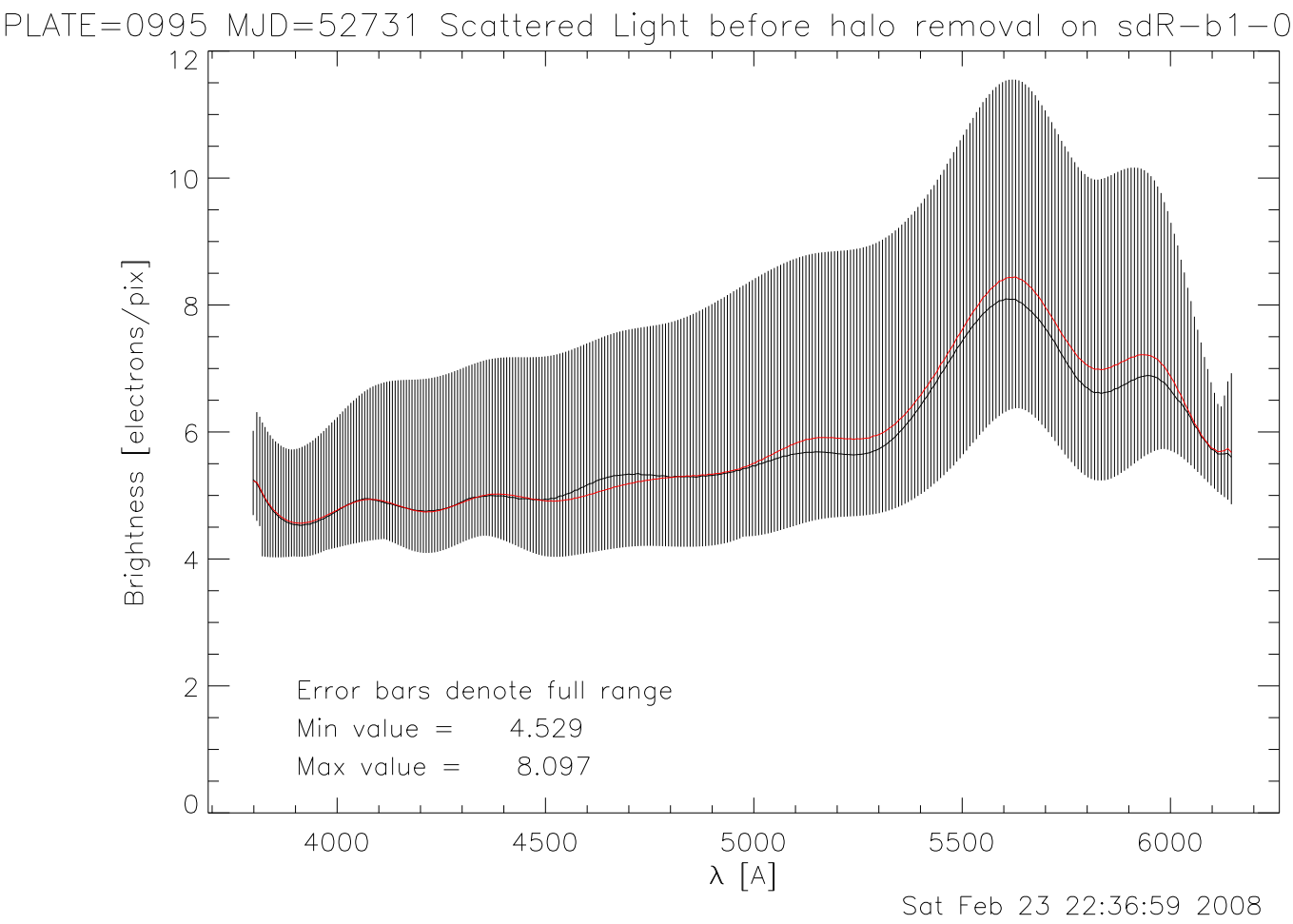

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020148.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

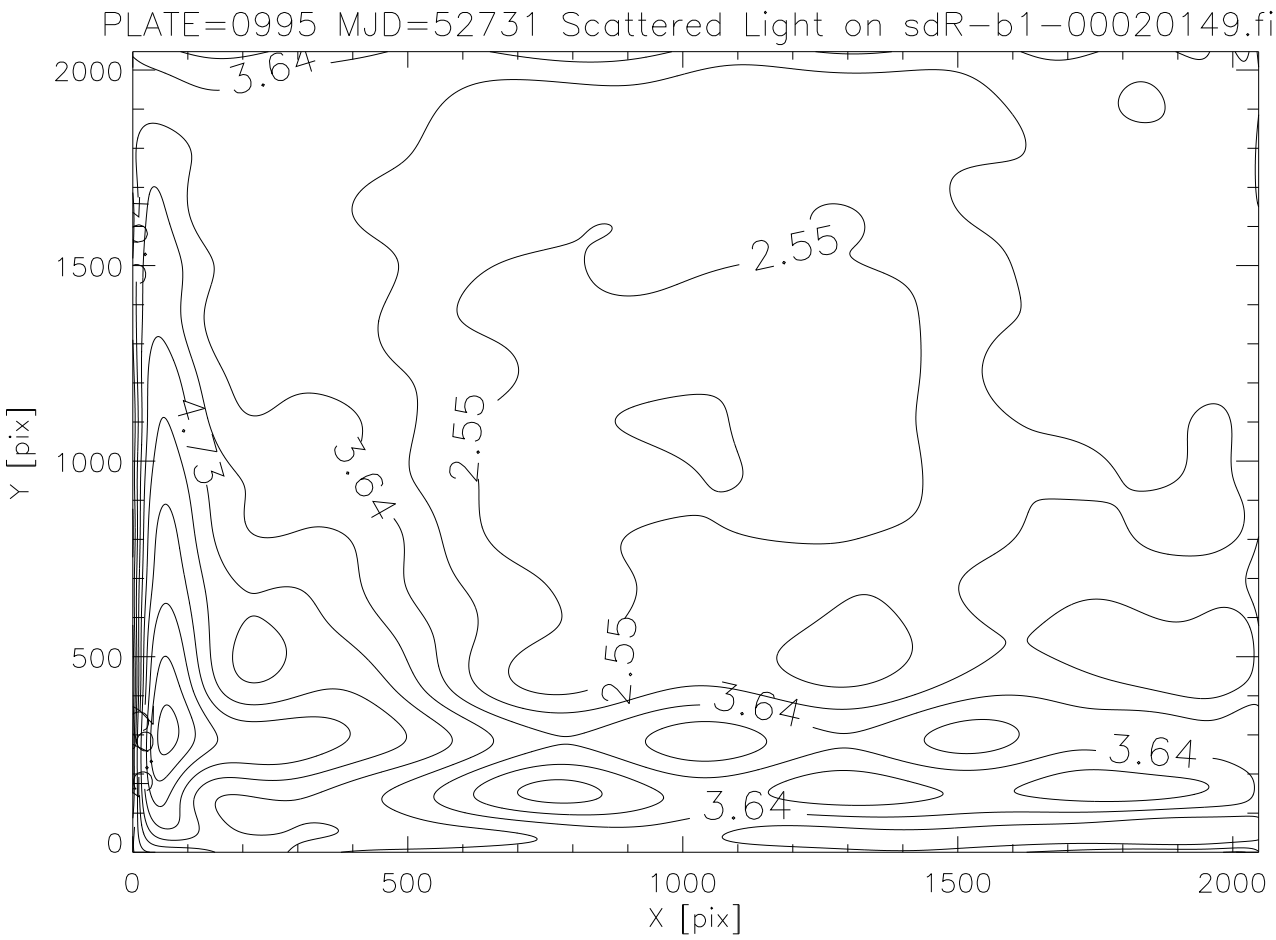

PLATE=0995 MJD=52731 sdR-b1-00020148.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.27 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

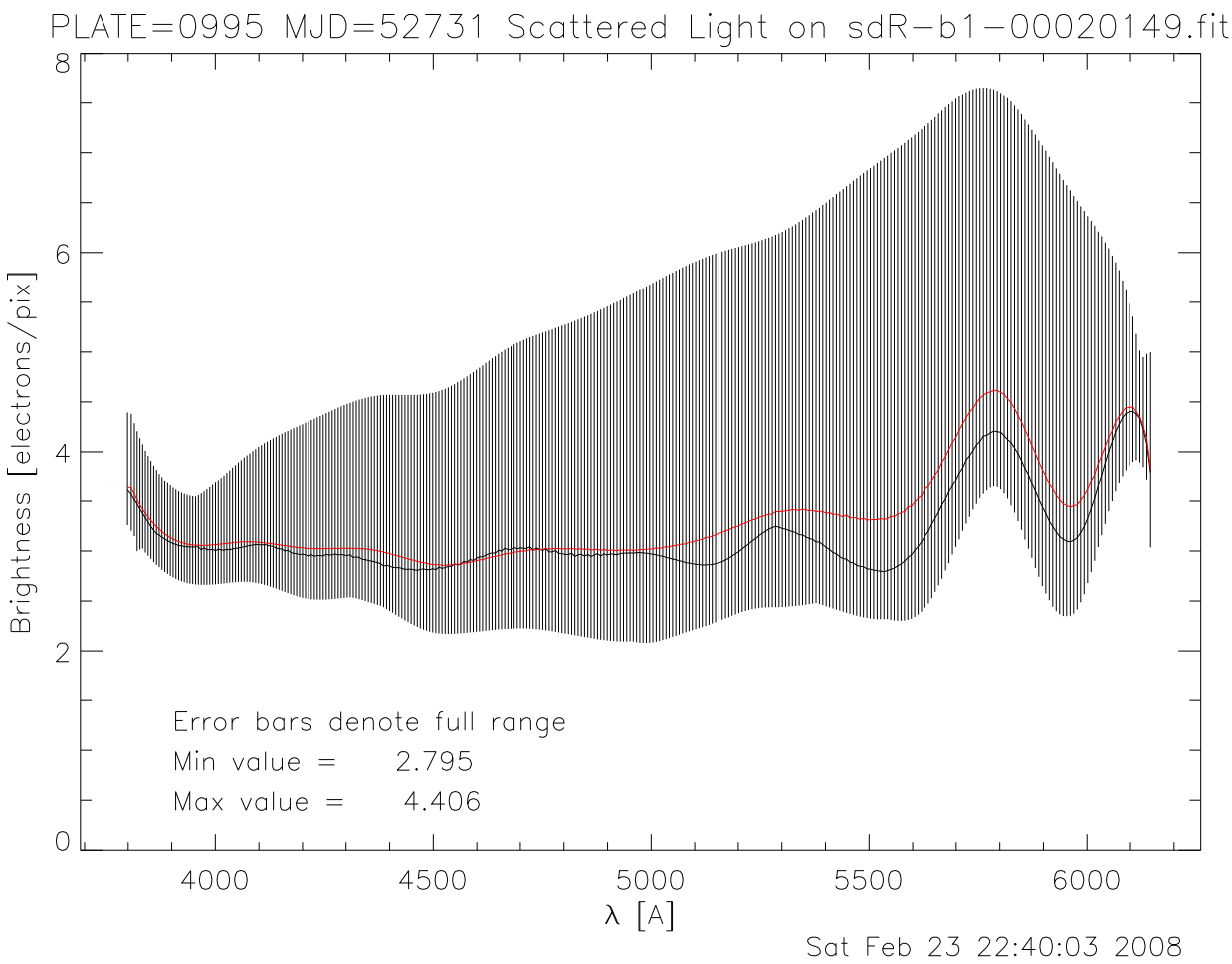

PLATE=0995 MJD=52731 sdR-b1-00020148.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.35 %
Fiber number
Focal Distance [mm]
Airmass

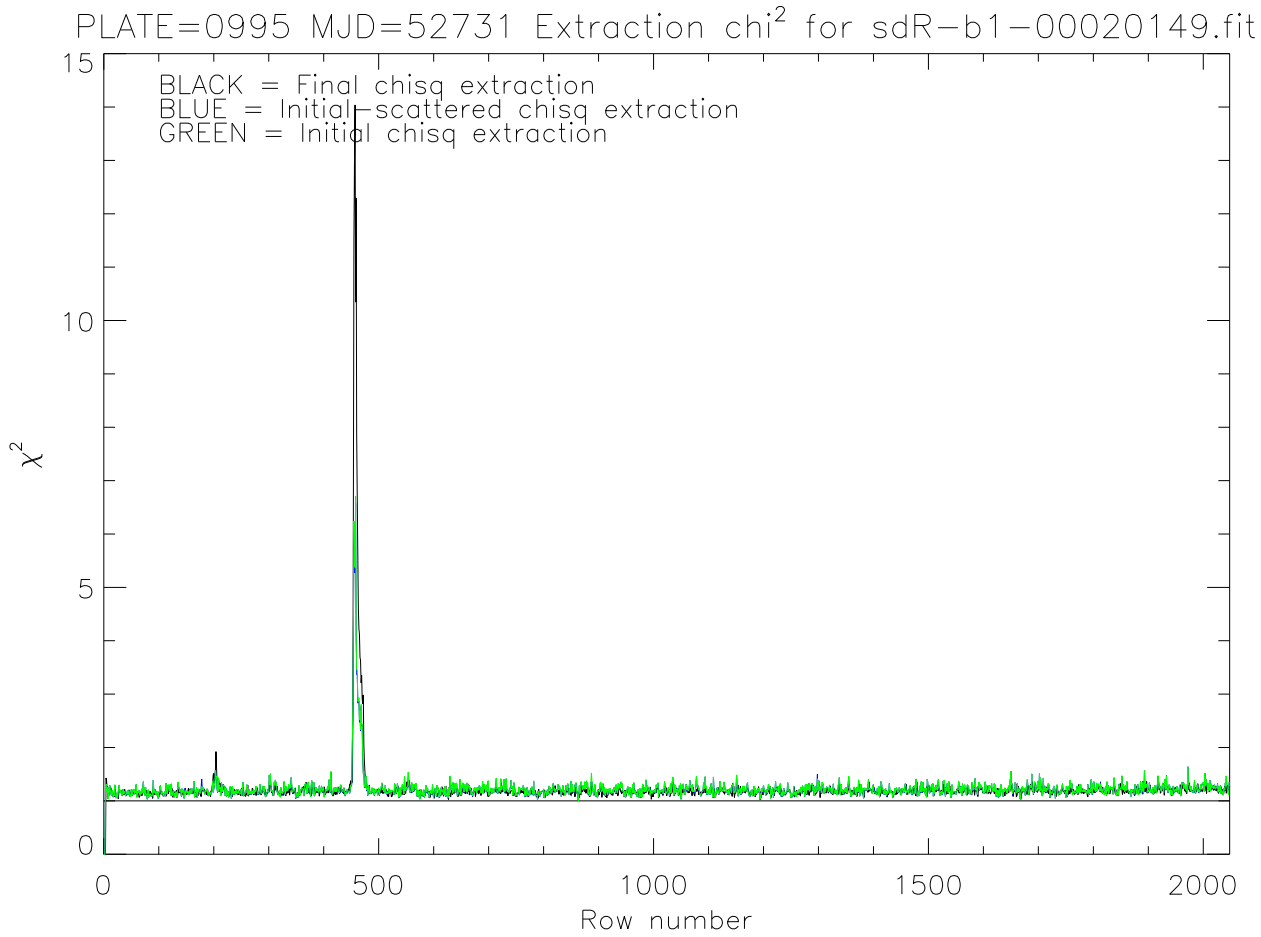

PLATE=0995 MJD=52731 Fiber−Flats for sdR−b1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.516
Max value = 1.272
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:36:06 2008

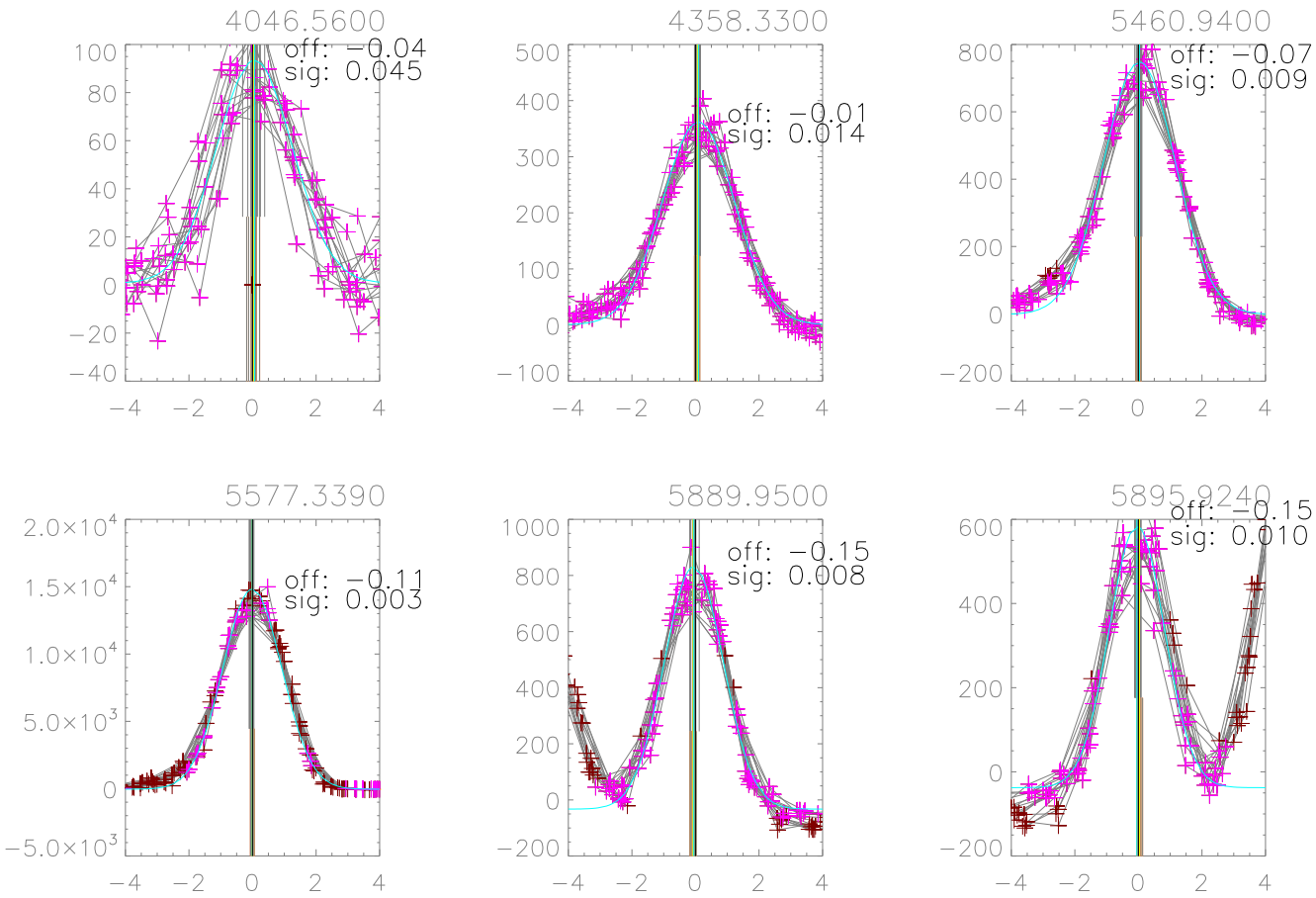

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b1−00020149.f
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
6.5
8.4
5.9

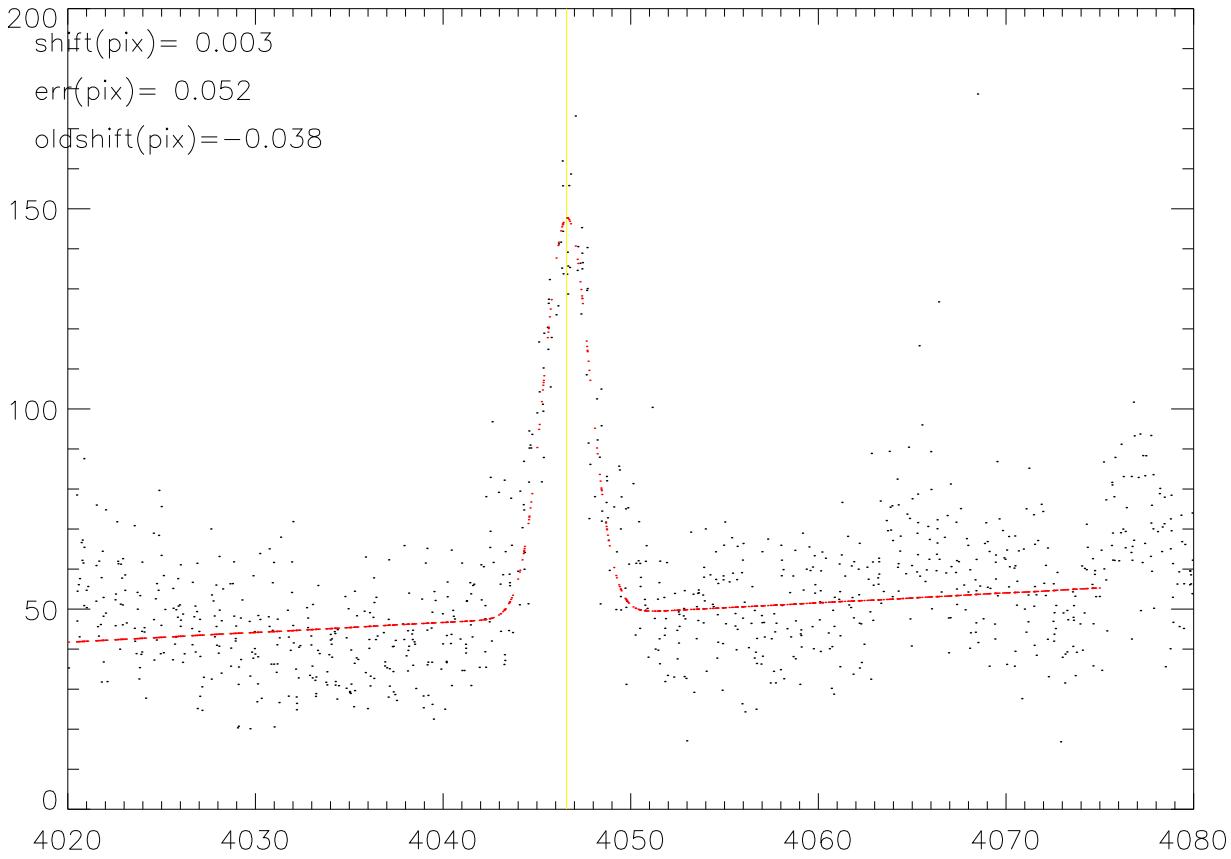

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b1-00020149.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.529
Max value = 8.097
Sat Feb 23 22:36:59 2008

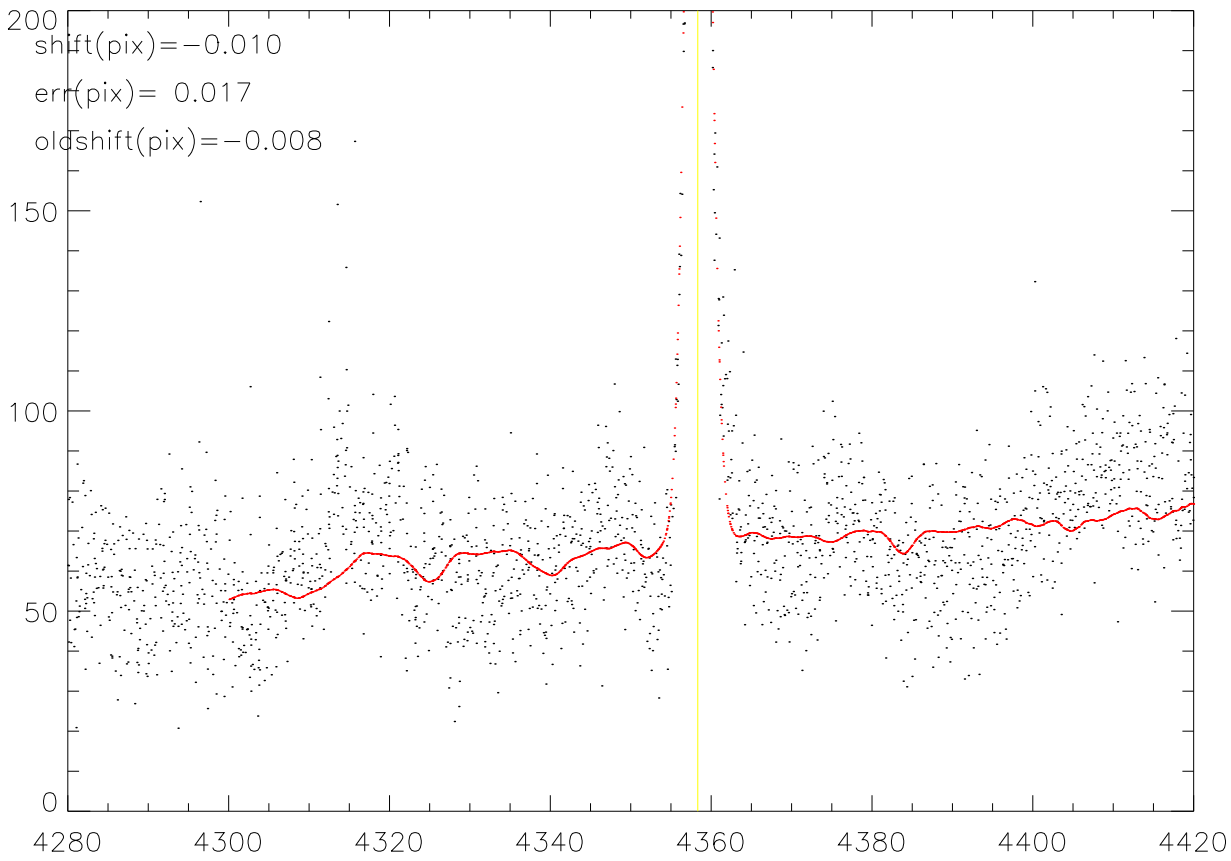

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020149.fit
3.64
2.55
4.73
Y [pix]
X [pix]
0
500
1000
1500
2000

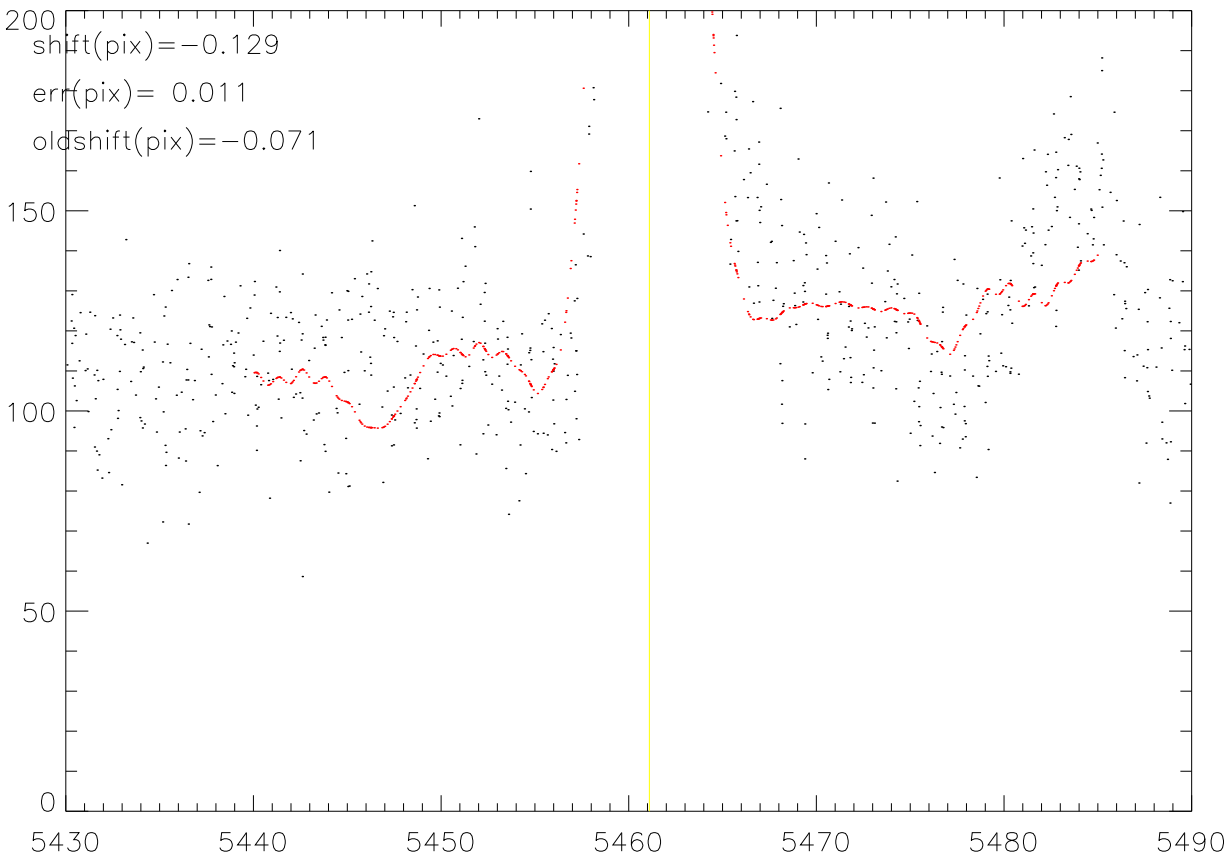

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020149.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.795
Max value = 4.406
Sat Feb 23 22:40:03 2008

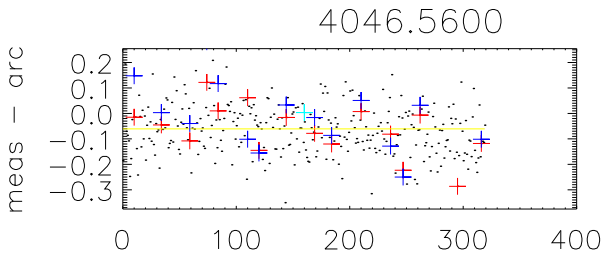

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b1-00020149.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

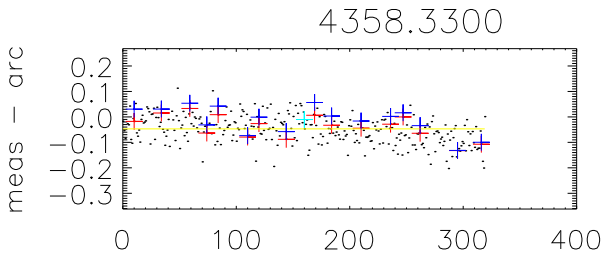

4046.5600
off: −0.04
sig: 0.045
4358.3300
off: −0.01
sig: 0.014
5460.9400
off: −0.07
sig: 0.009
5577.3390
off: −0.11
sig: 0.003
5889.9500
off: −0.15
sig: 0.008
5895.9240
off: −0.15
sig: 0.010

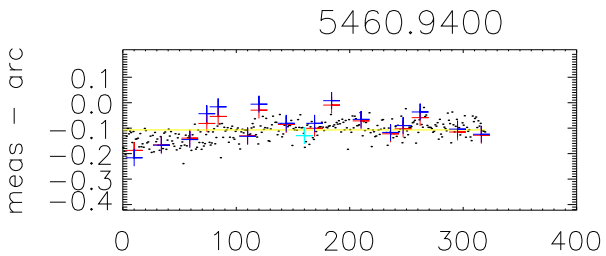

shift(pix)= 0.003
err(pix)= 0.052
oldshift(pix)=−0.038
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

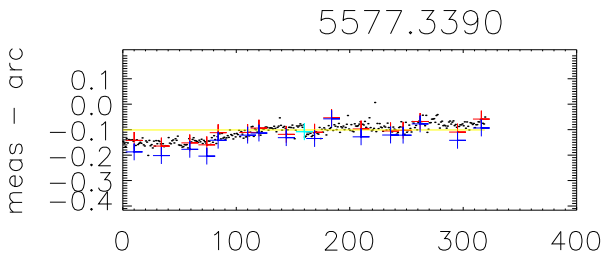

shift(pix)=−0.010
err(pix)= 0.017
oldshift(pix)=−0.008
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

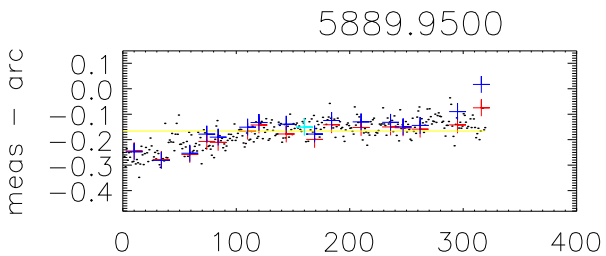

shift(pix)=−0.129
err(pix)= 0.011
oldshift(pix)=−0.071
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

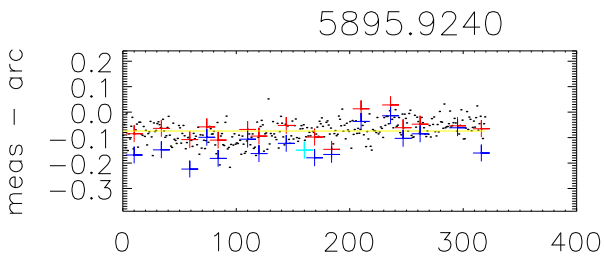

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

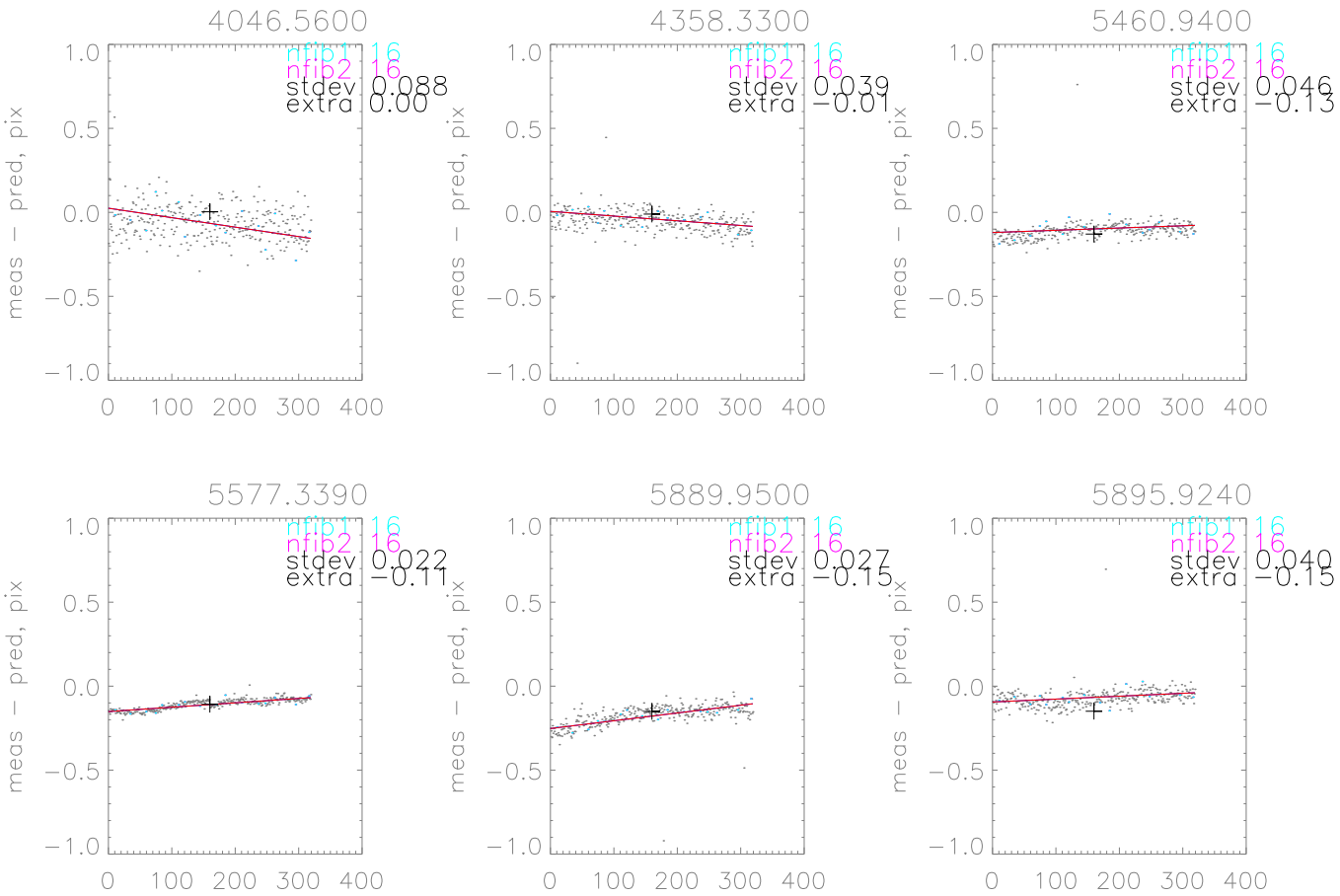

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

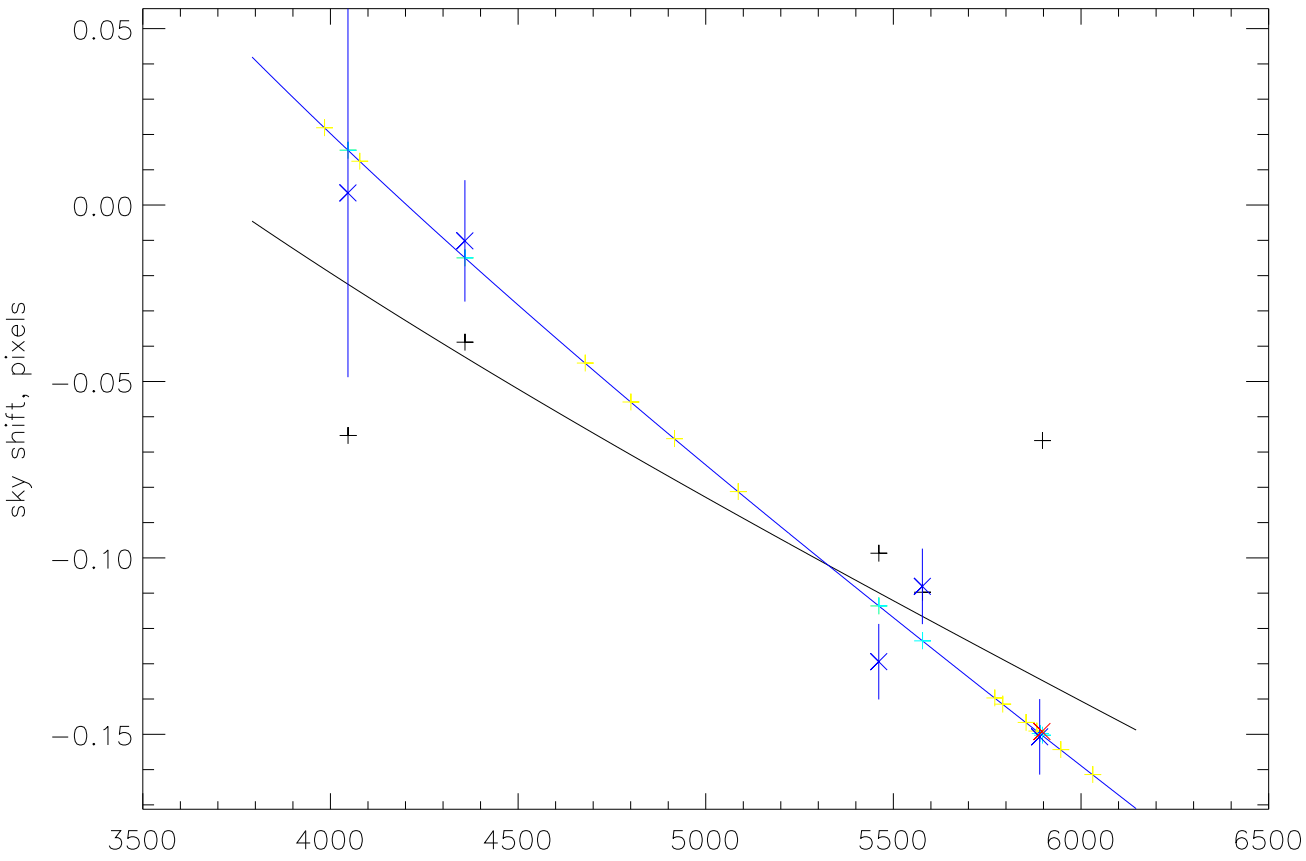

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

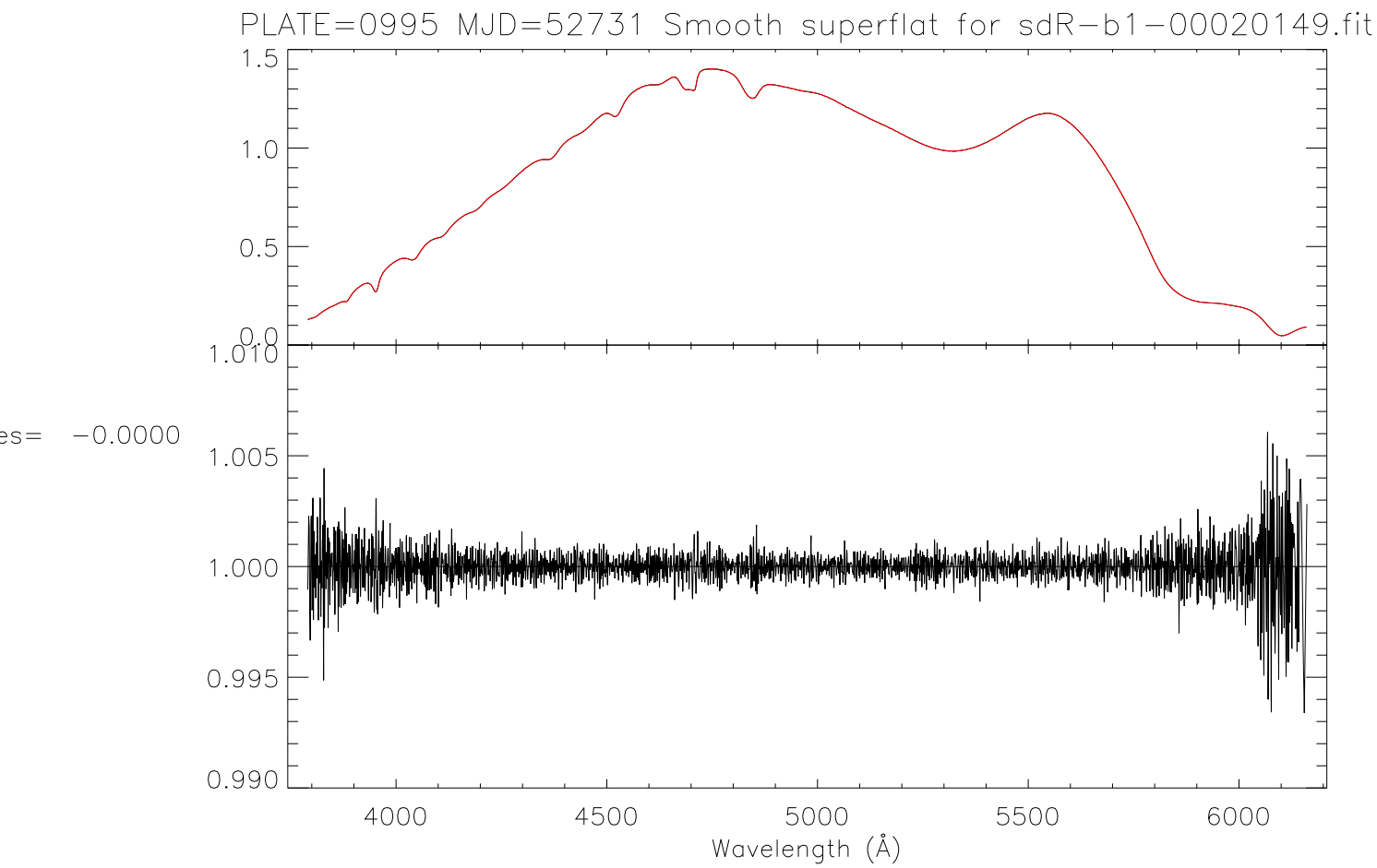

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

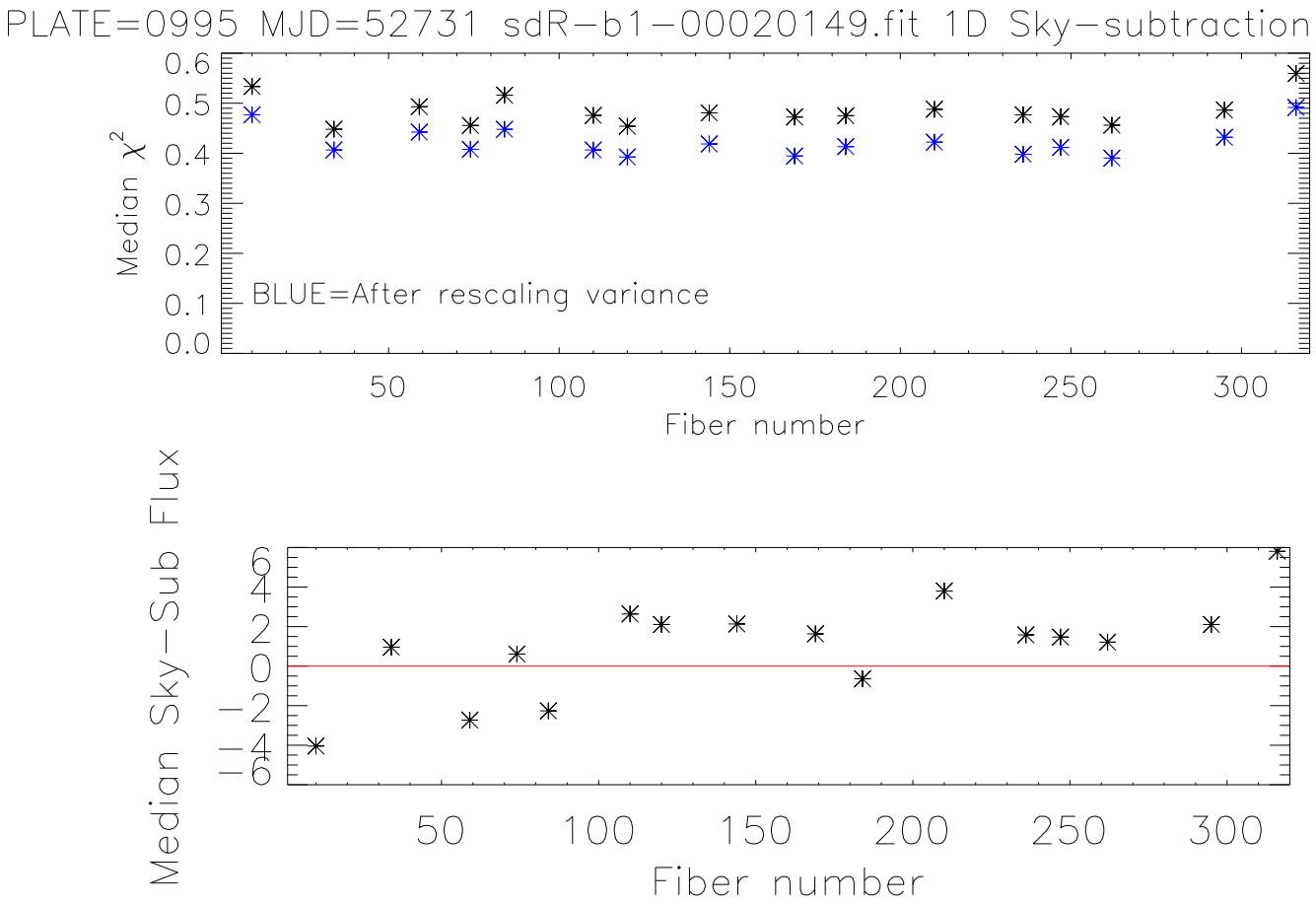

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

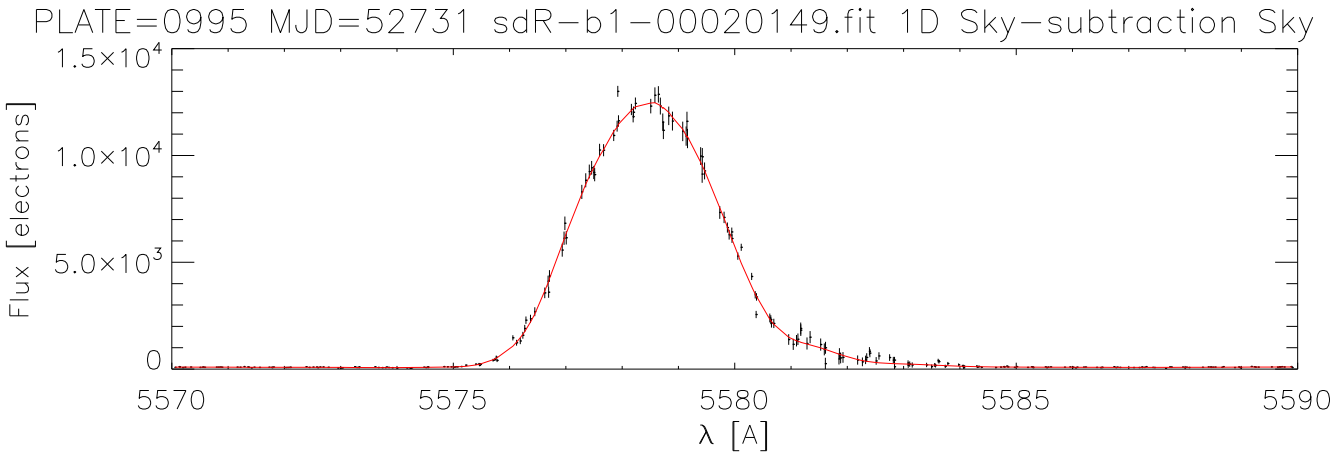

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

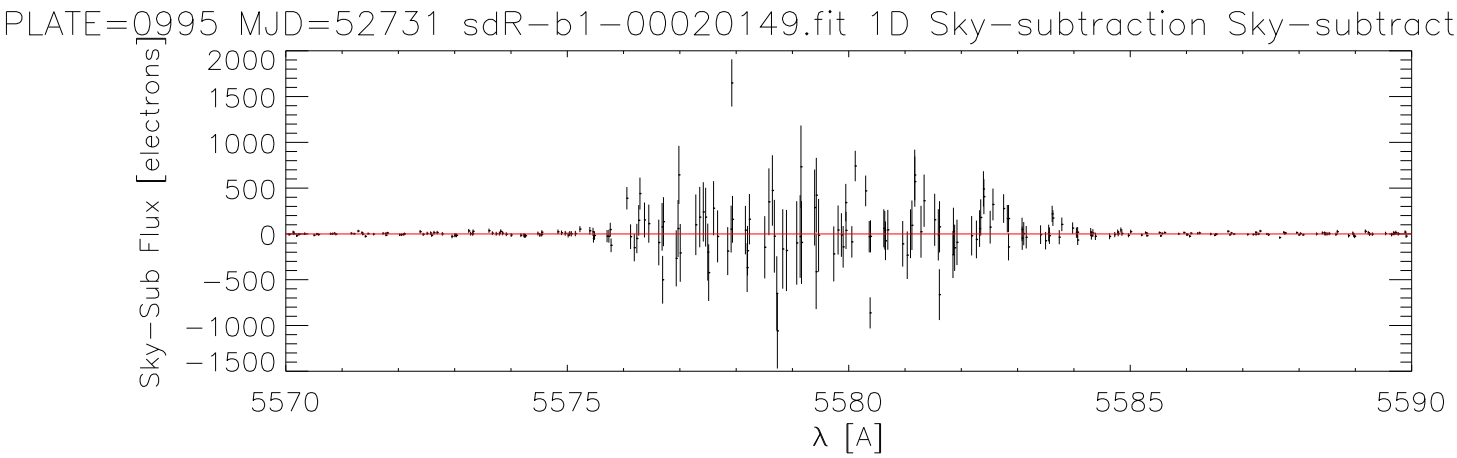

4046.5600
nfib1 16
nfib2 16
stdev 0.088
extra 0.00
4358.3300
nfib1 16
nfib2 16
stdev 0.039
extra −0.01
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra −0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.027
extra −0.15
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra −0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

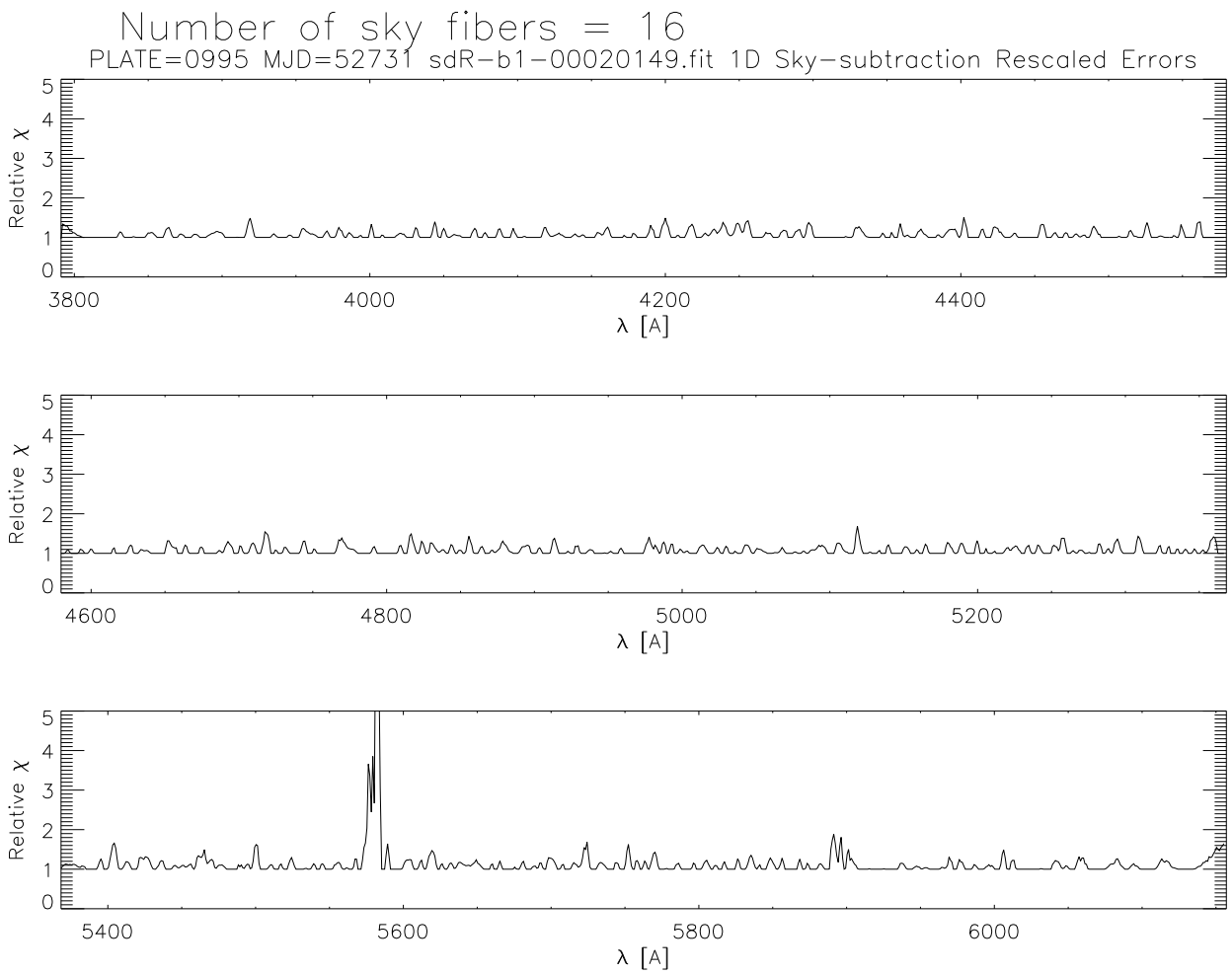

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

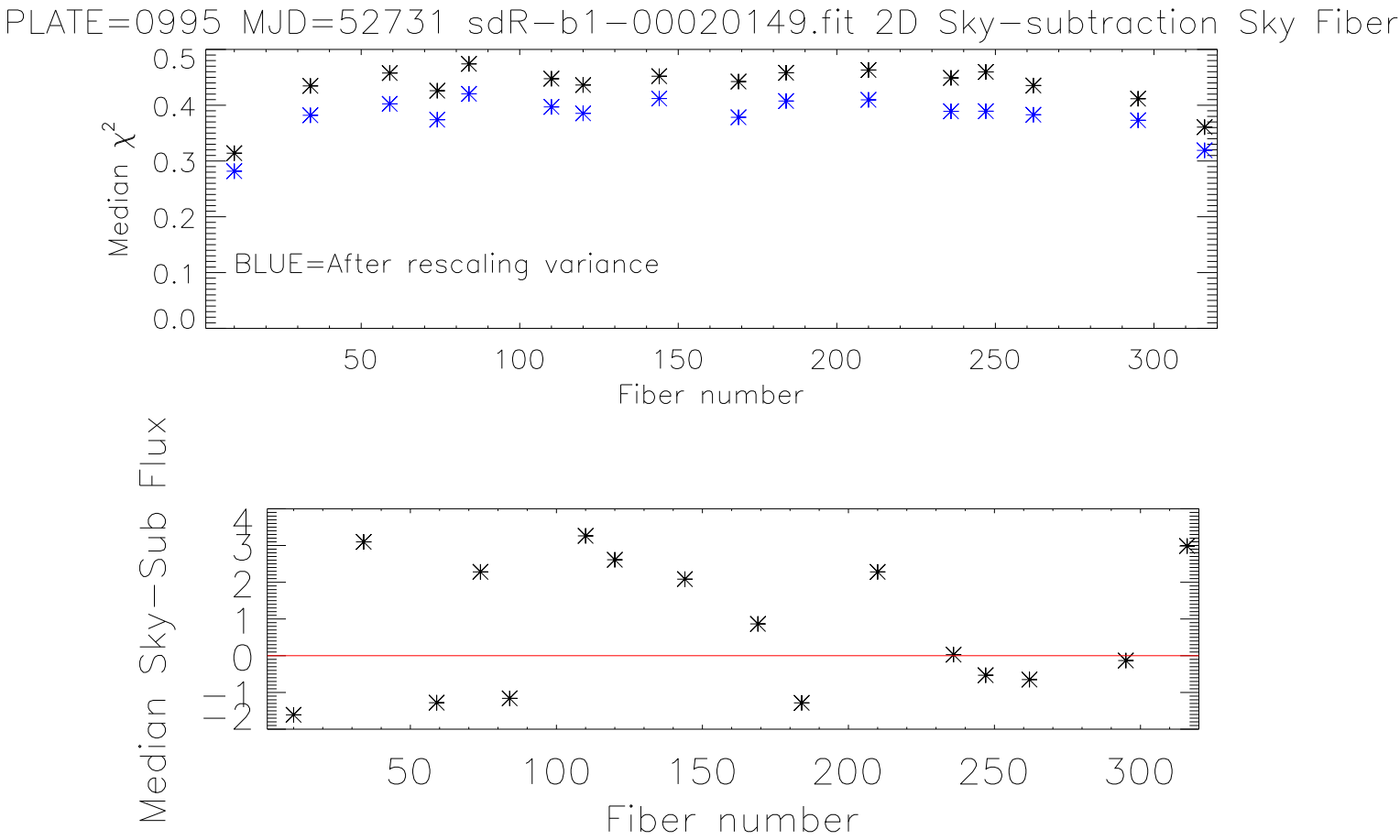

PLATE=0995 MJD=52731 Smooth superflat for sdR-b1-00020149.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

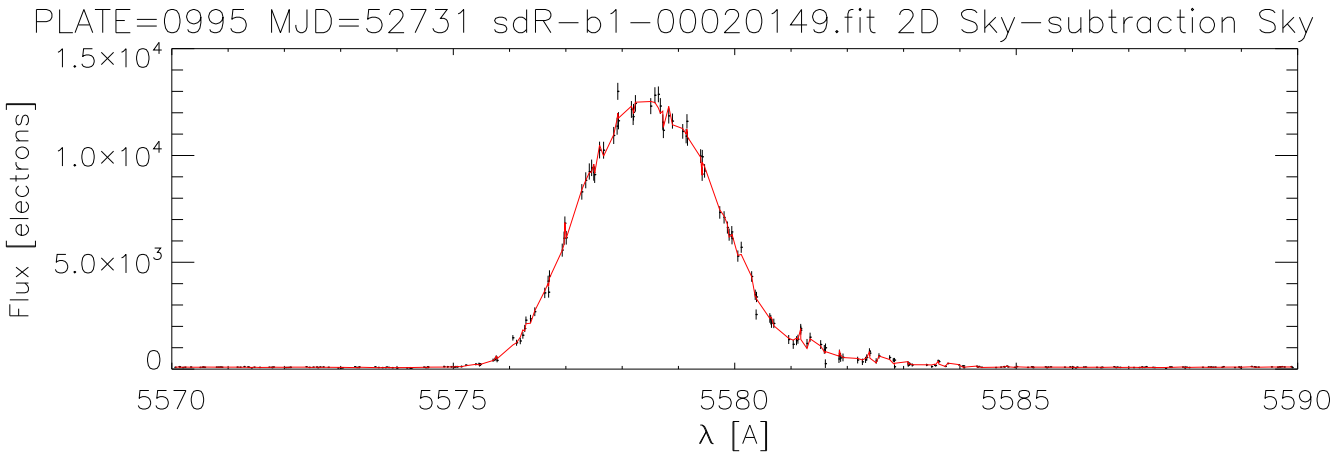

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

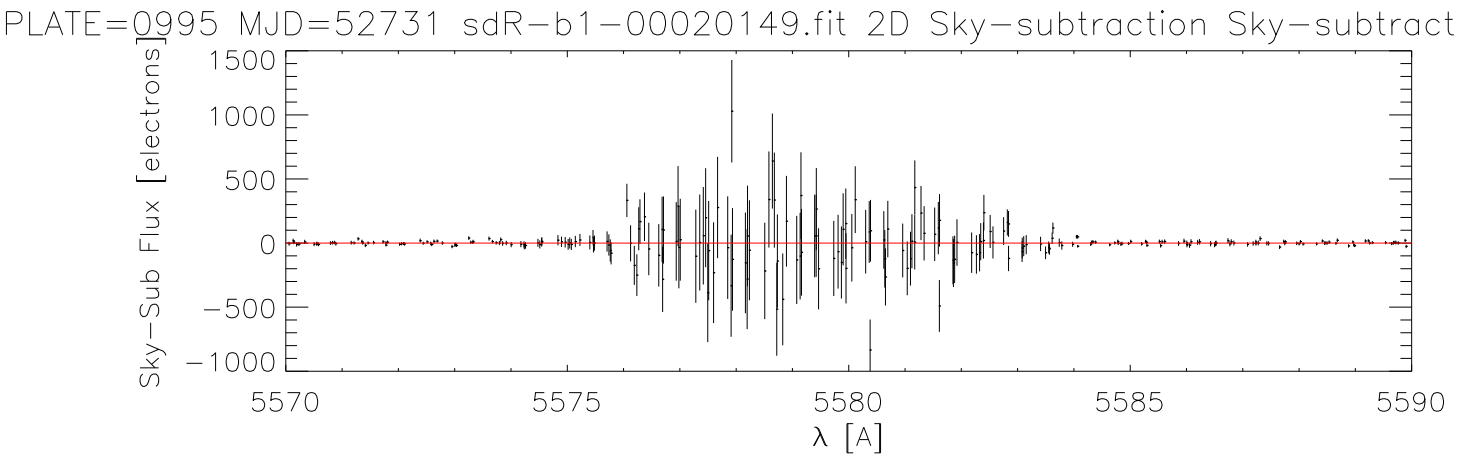

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

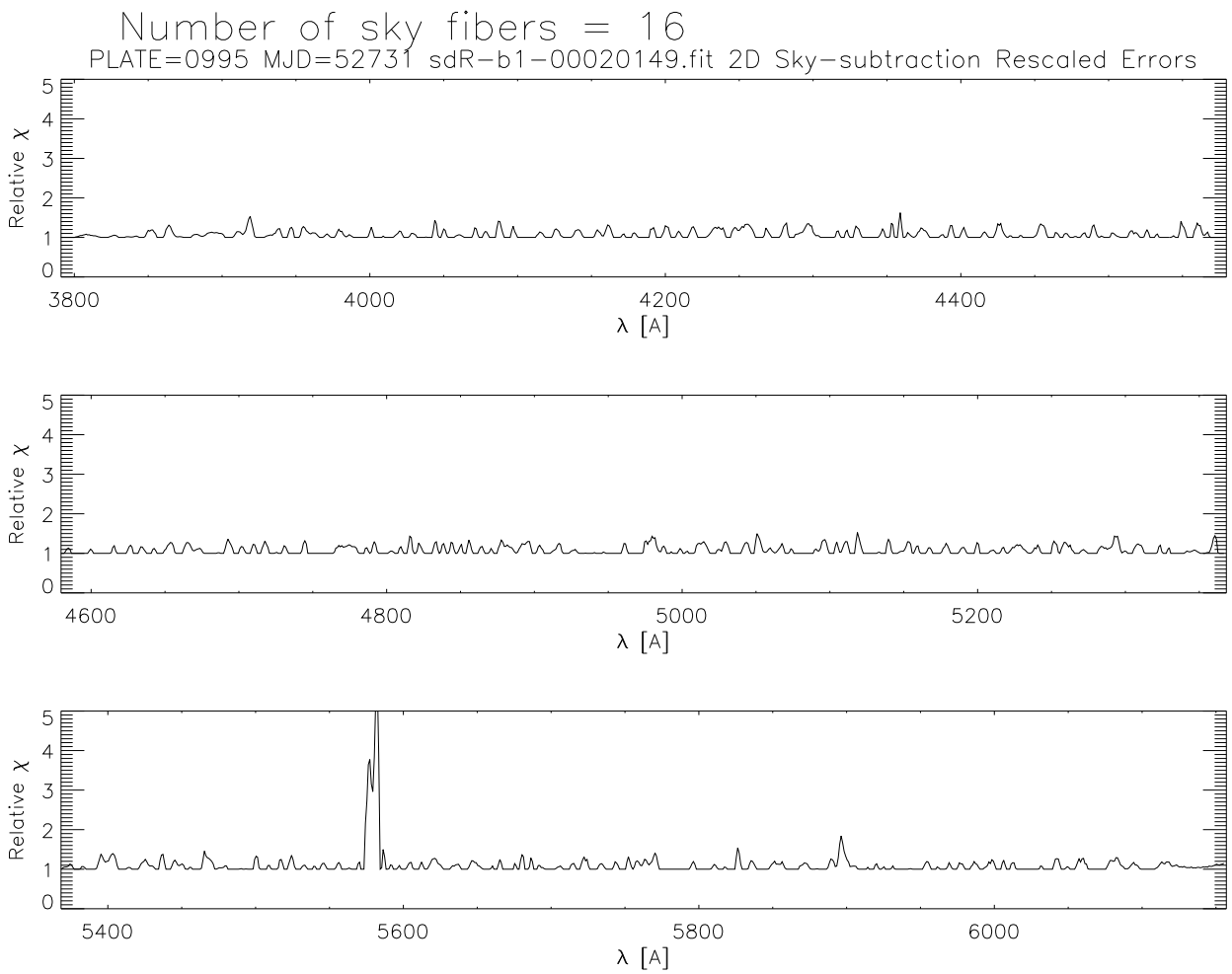

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

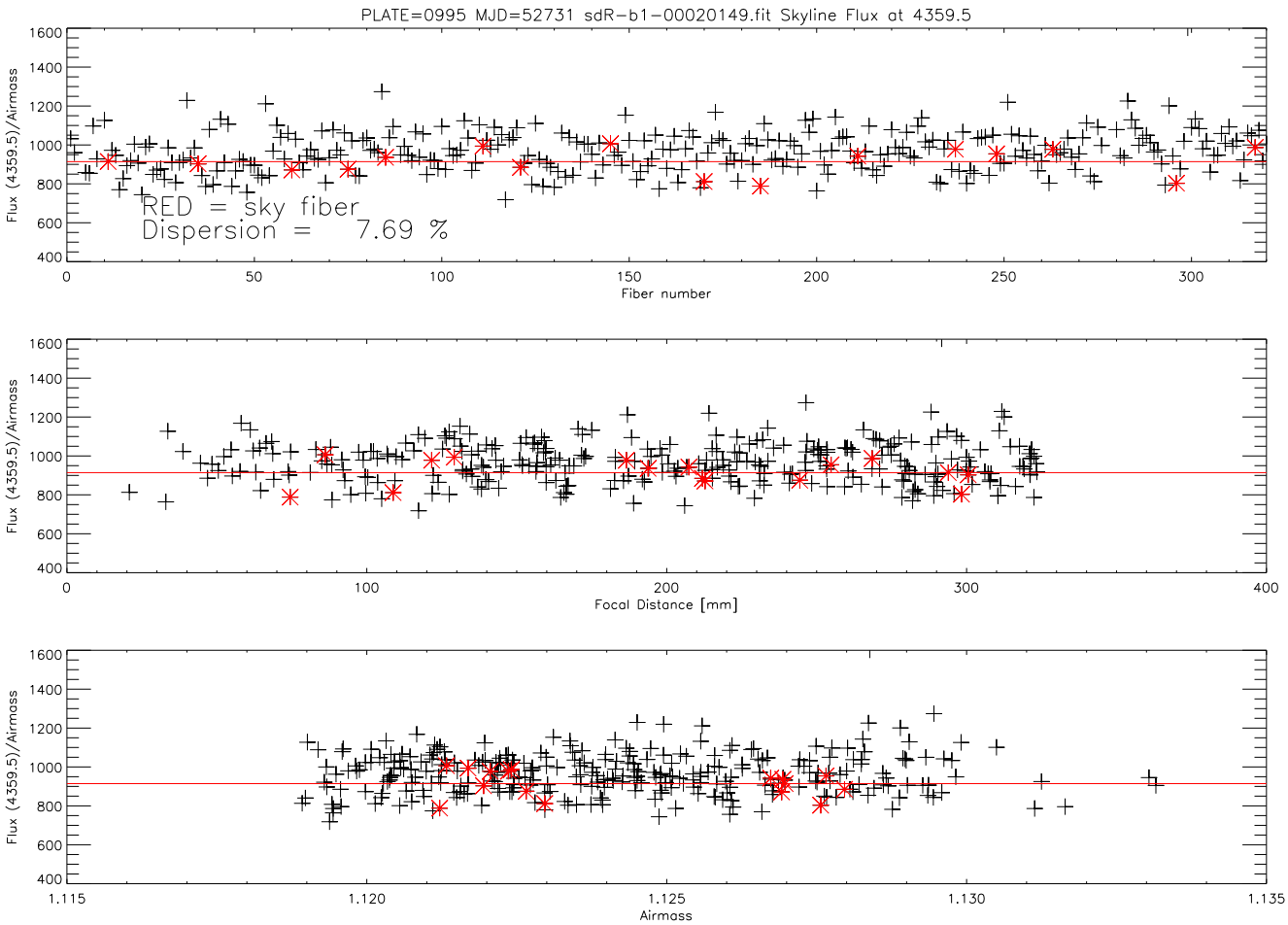

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020149.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

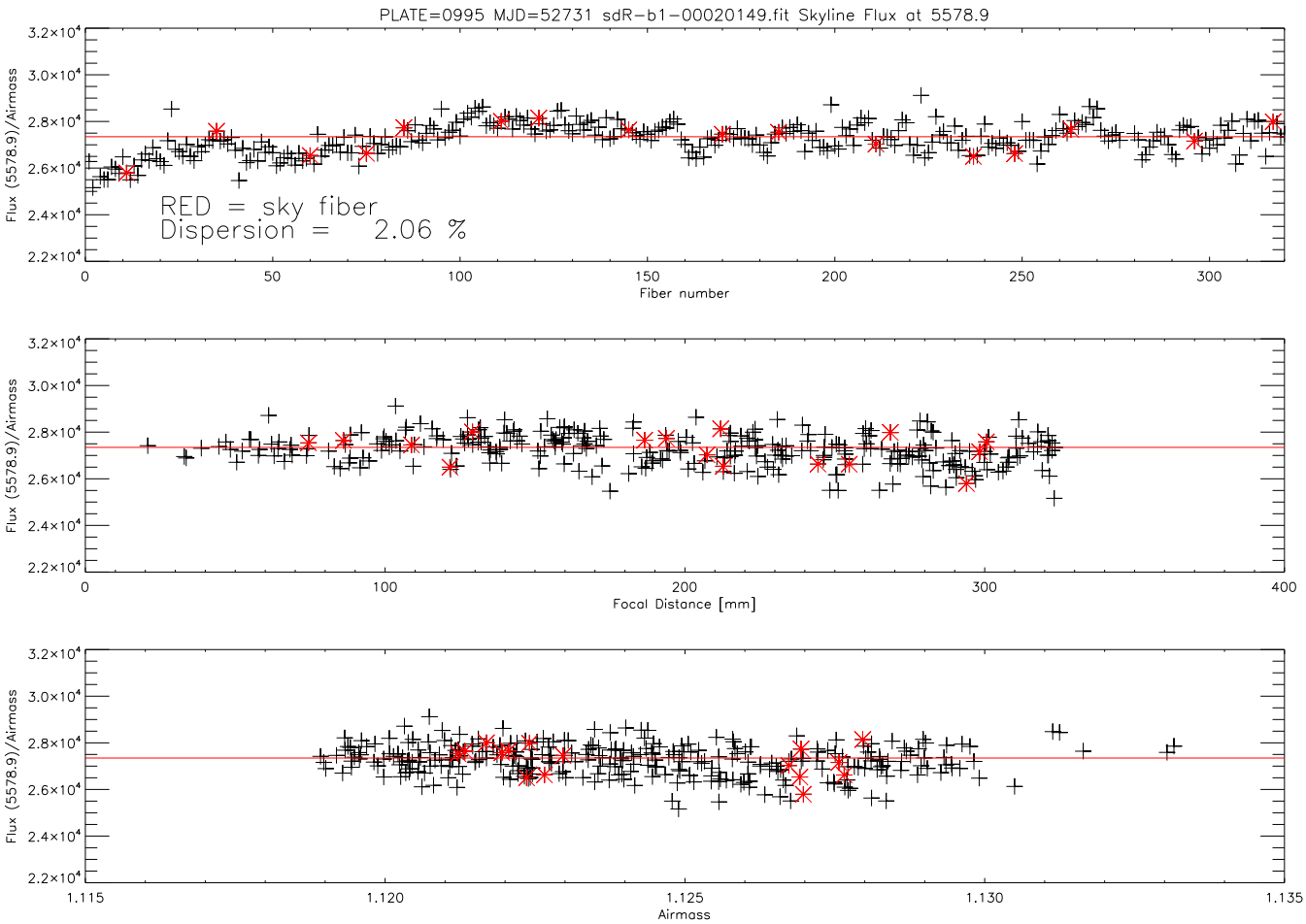

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

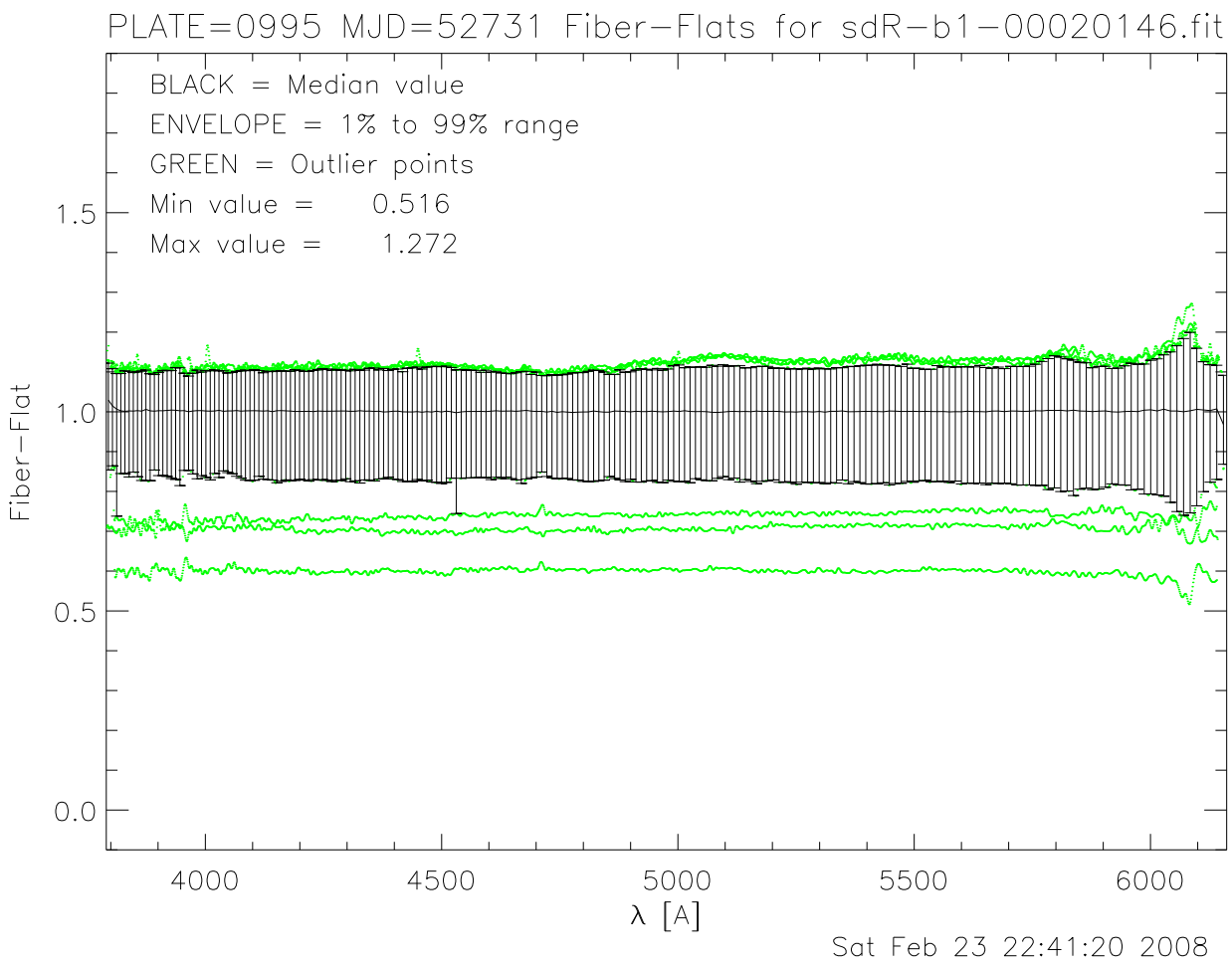

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

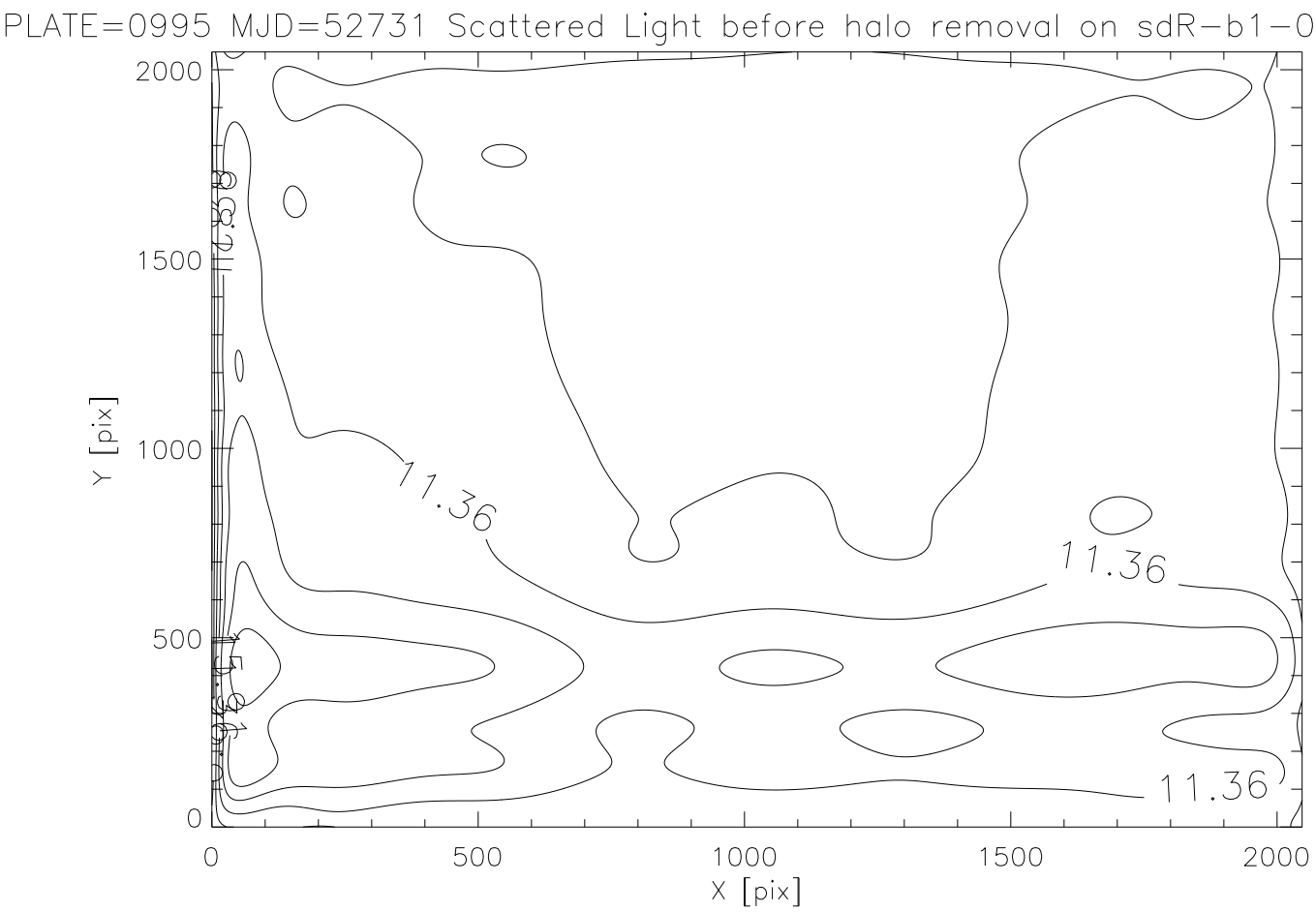

PLATE=0995 MJD=52731 sdR-b1-00020149.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

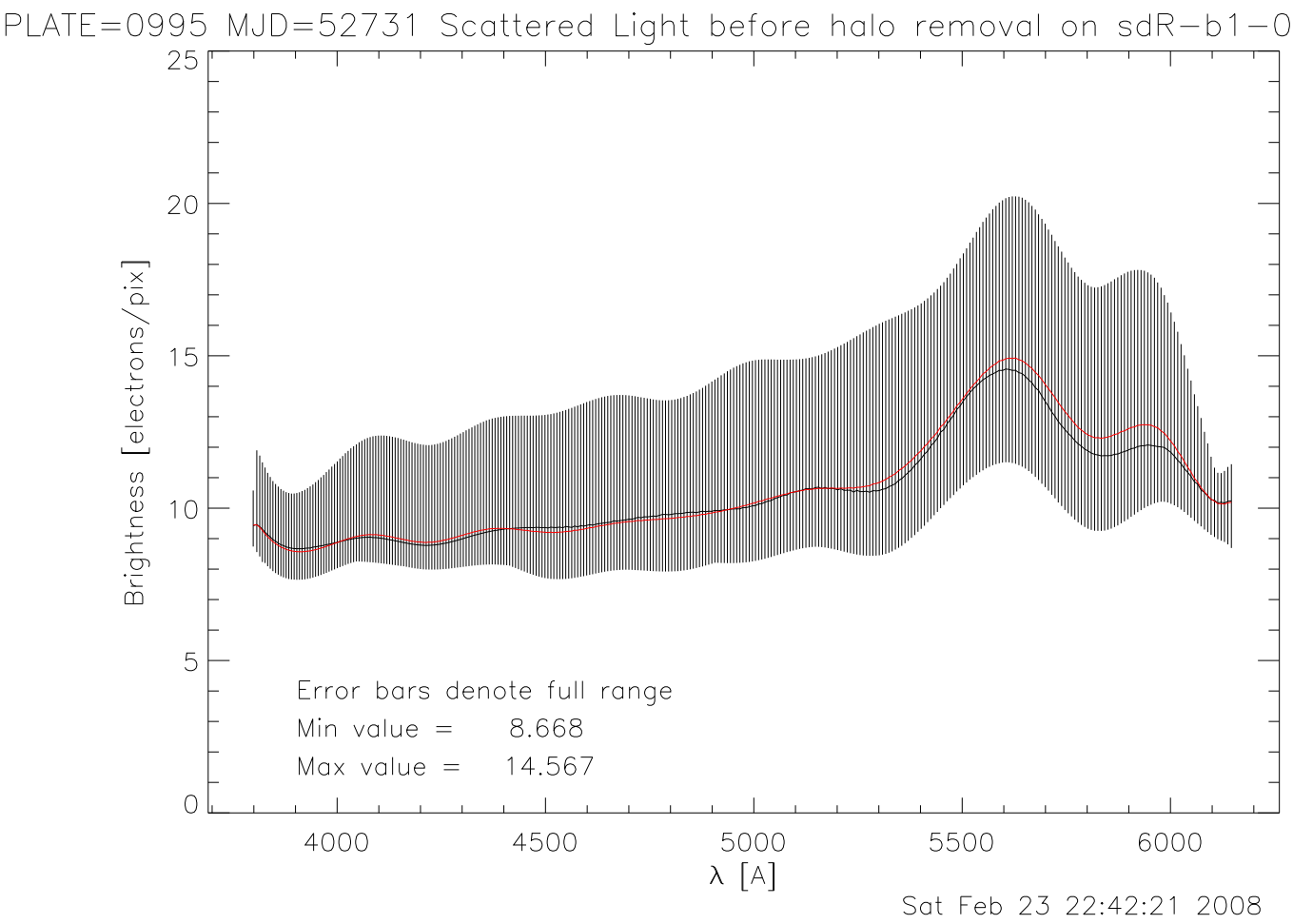

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020149.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

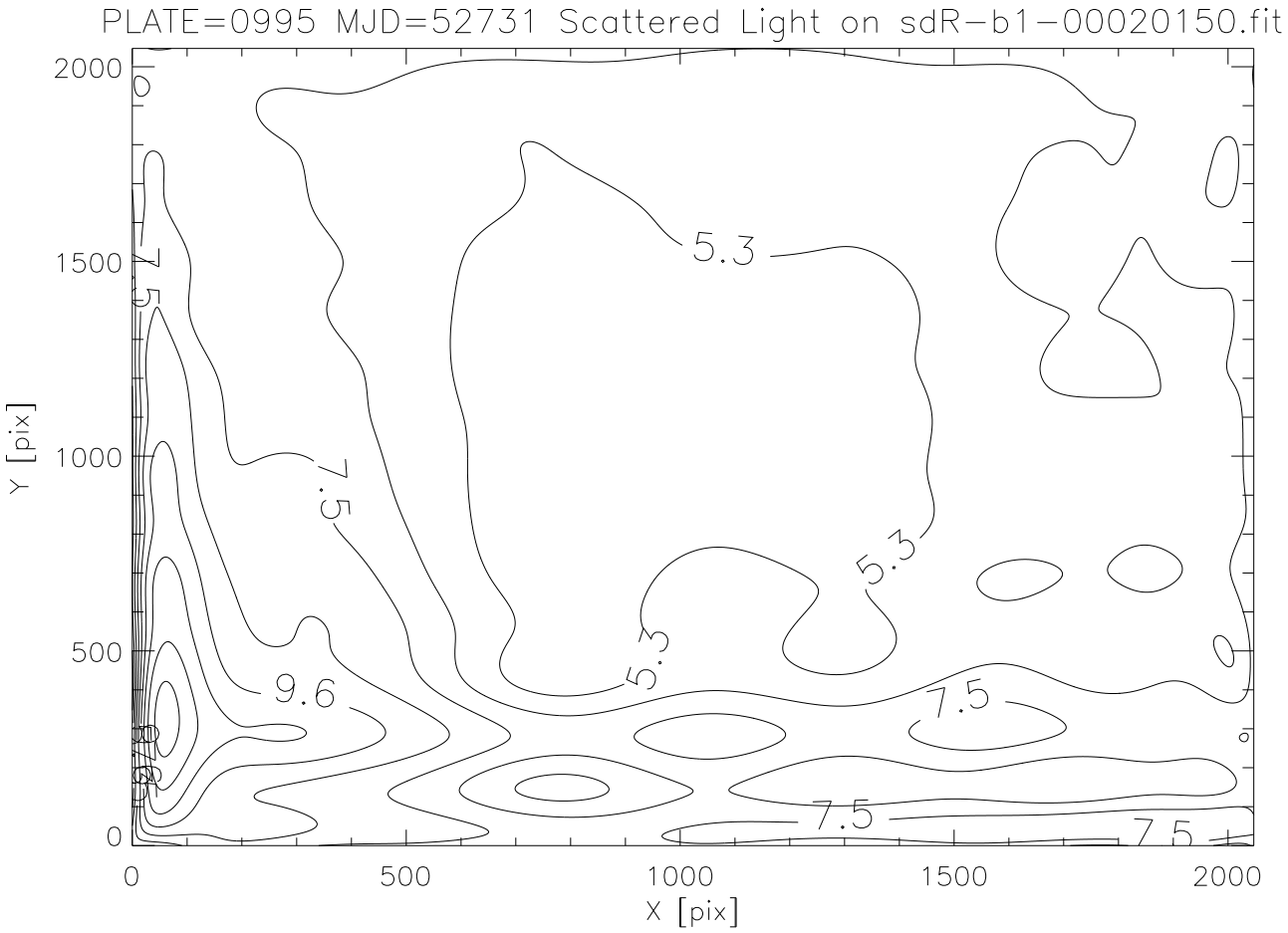

PLATE=0995 MJD=52731 sdR-b1-00020149.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.69 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

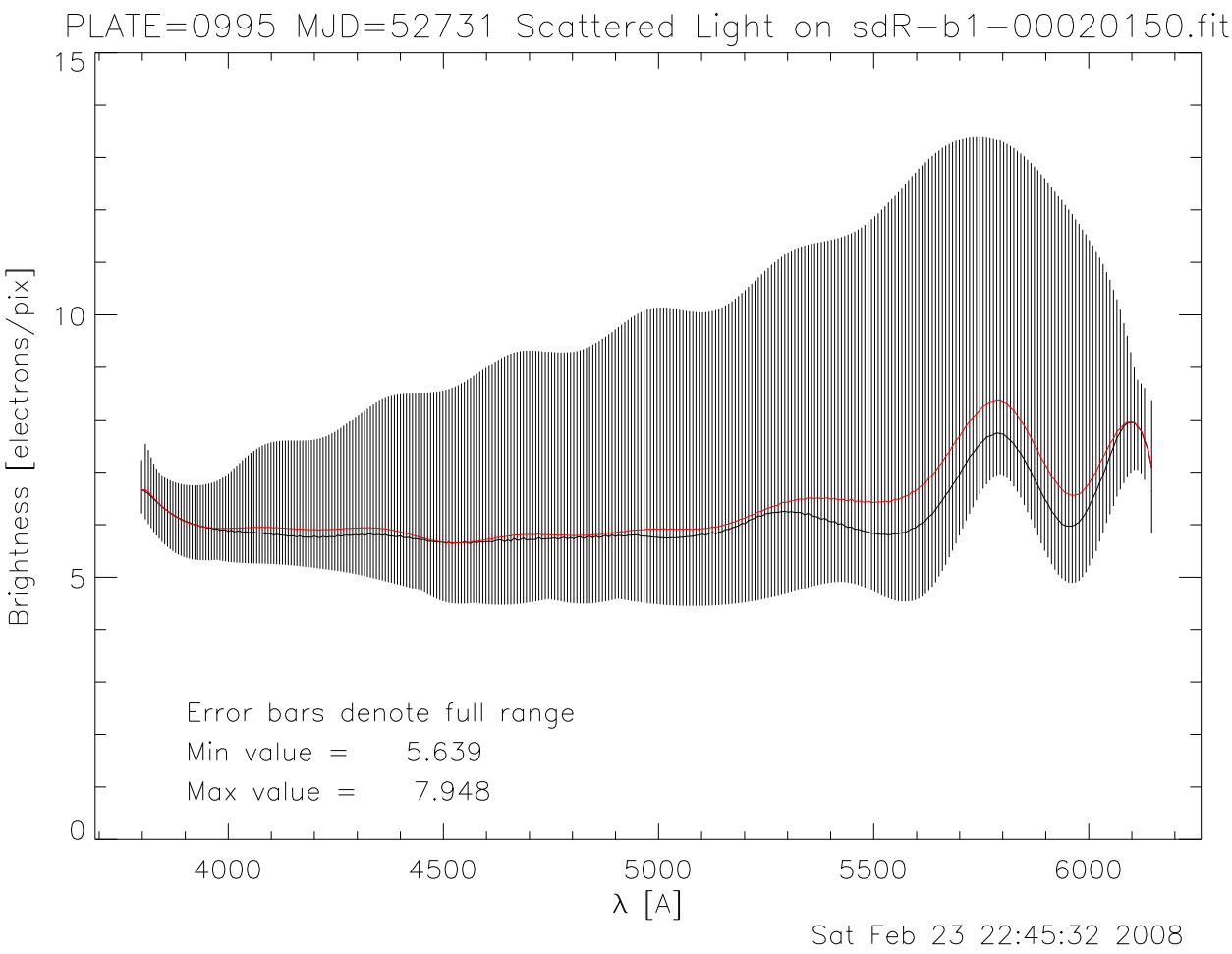

PLATE=0995 MJD=52731 sdR-b1-00020149.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

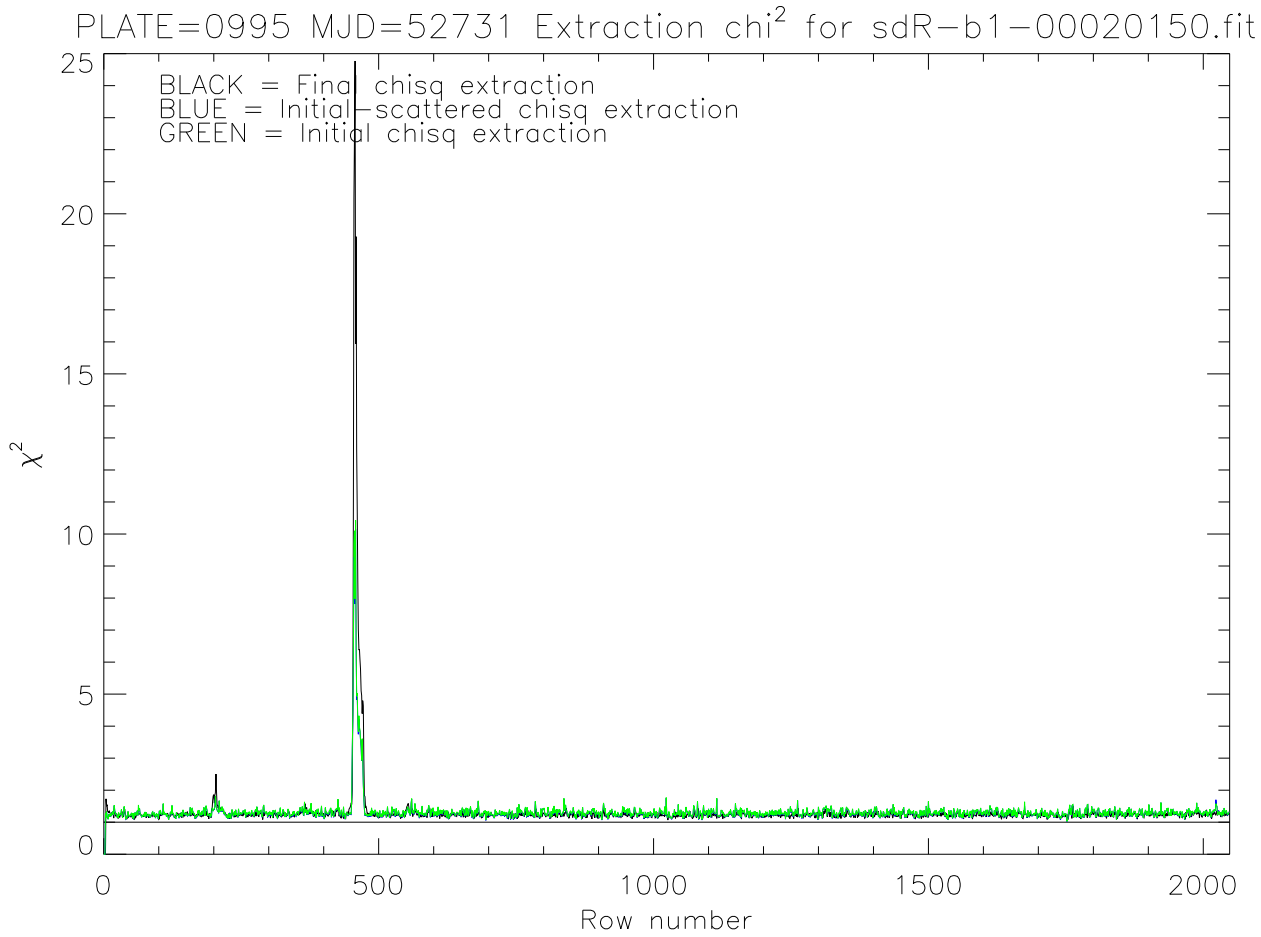

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b1-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.516
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:41:20 2008

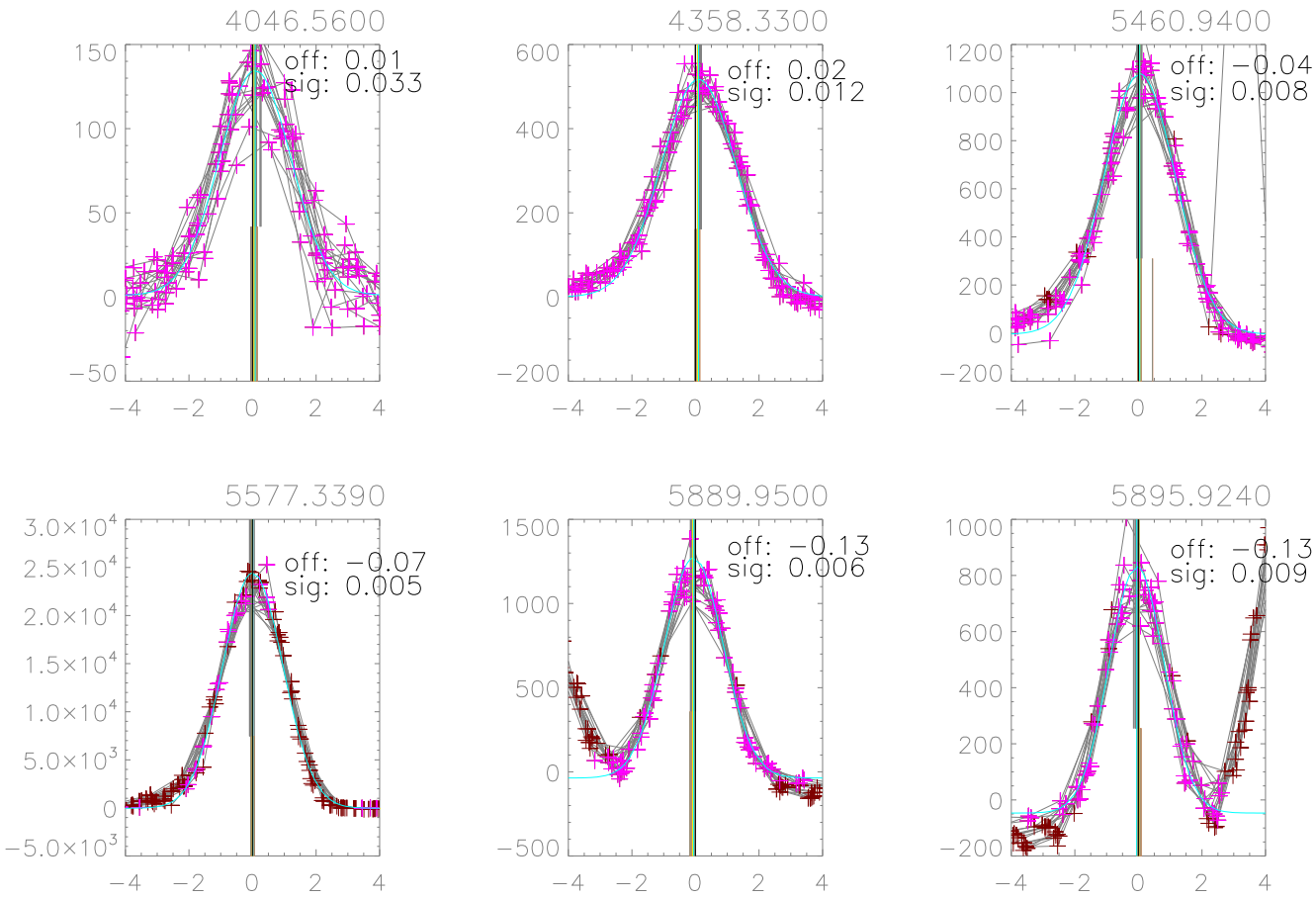

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b1−00020150.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.36
11.36
11.36

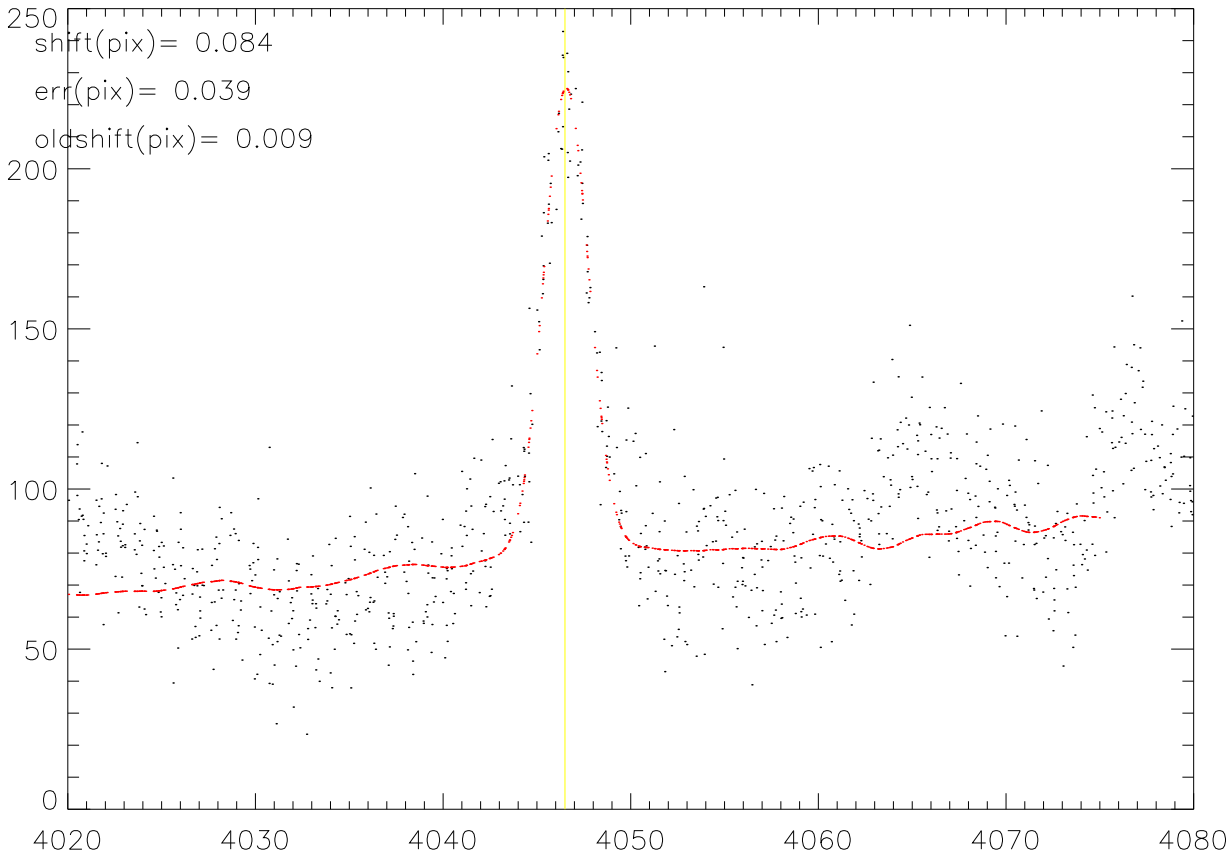

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b1−00020150.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.668
Max value = 14.567
Sat Feb 23 22:42:21 2008

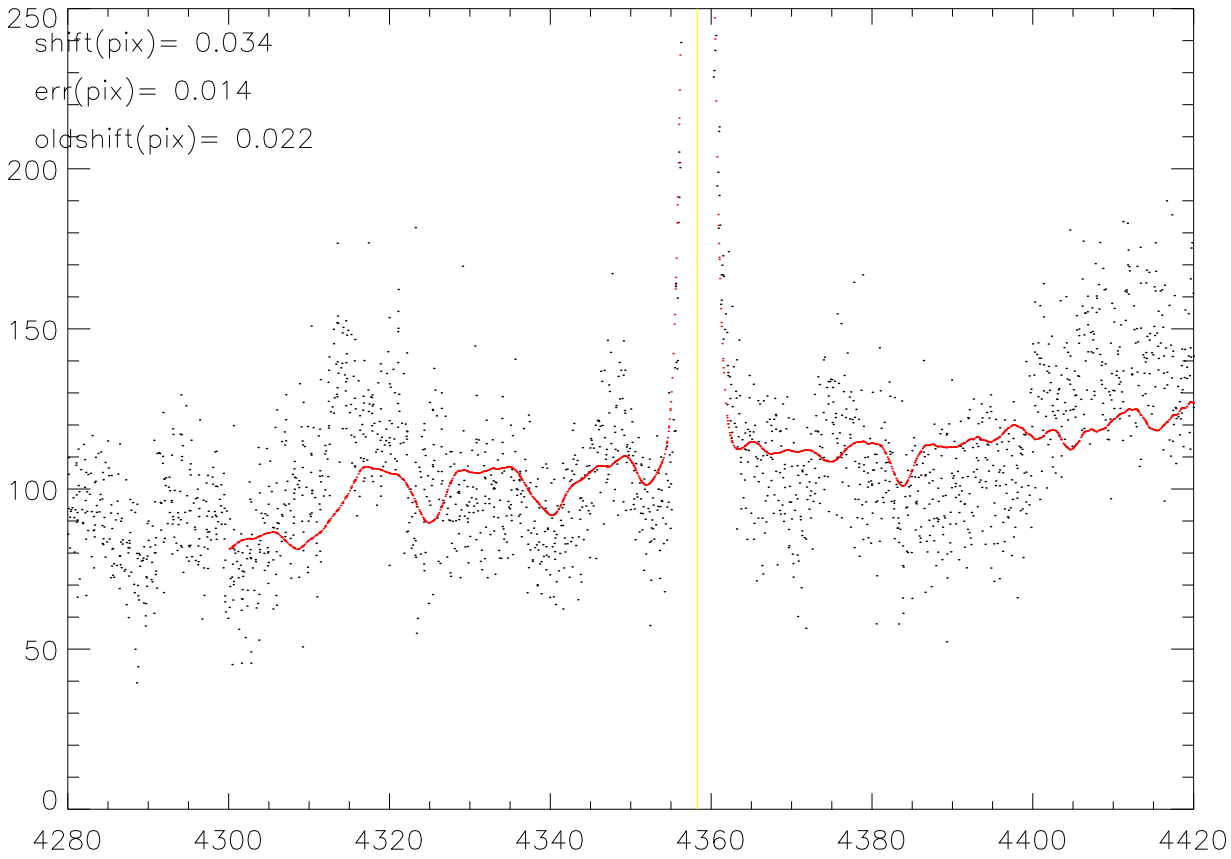

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020150.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
9.6

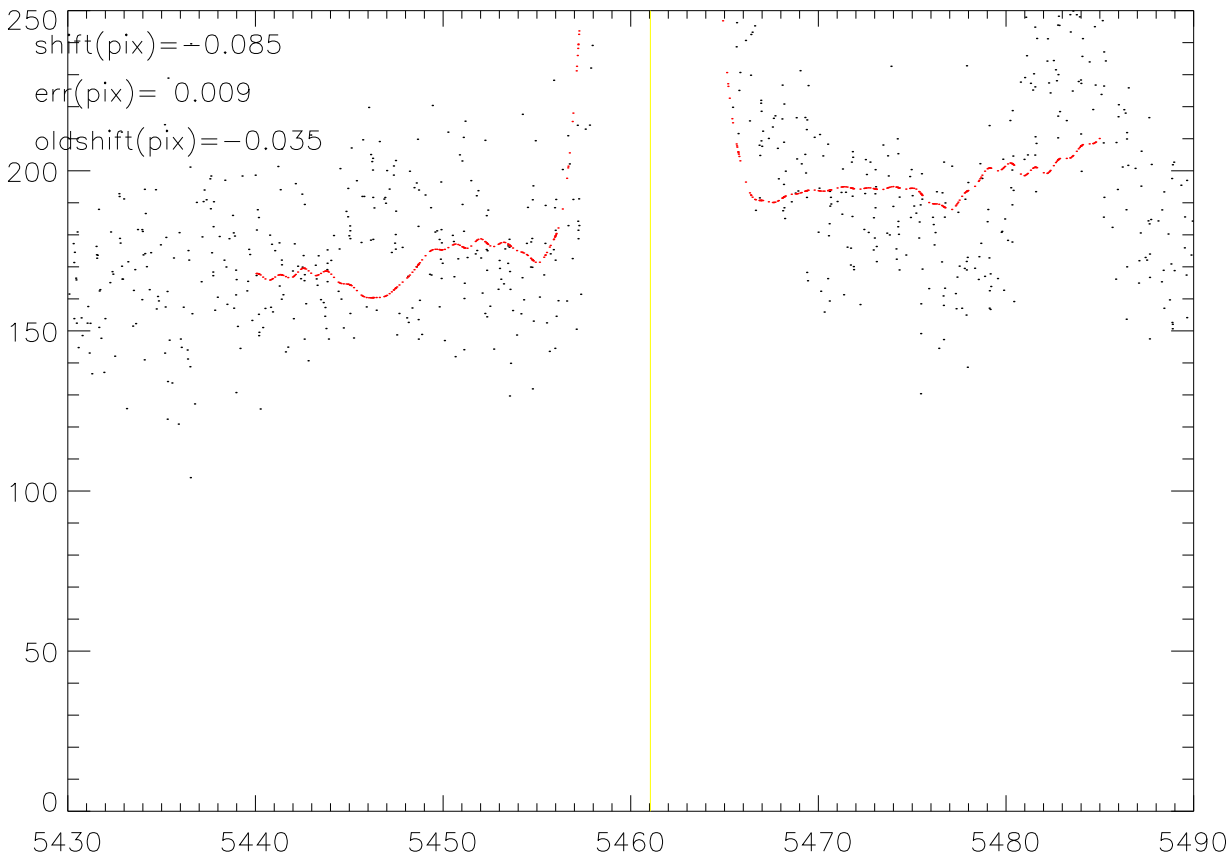

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020150.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 5.639
Max value = 7.948
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:45:32 2008

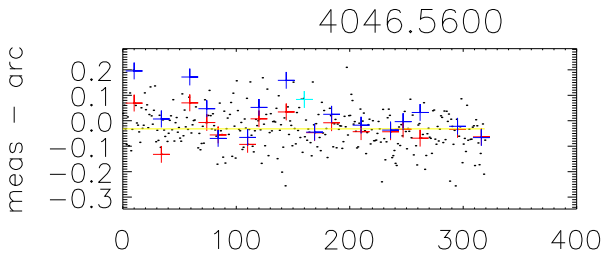

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b1-00020150.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
25
20
15
10
5
0
0
500
1000
1500
2000
Row number

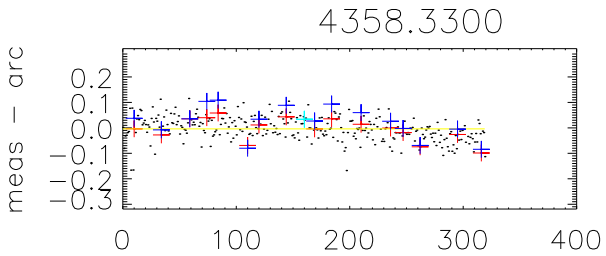

4046.5600
off: 0.01
sig: 0.033
4358.3300
off: 0.02
sig: 0.012
5460.9400
off: −0.04
sig: 0.008
5577.3390
off: −0.07
sig: 0.005
5889.9500
off: −0.13
sig: 0.006
5895.9240
off: −0.13
sig: 0.009

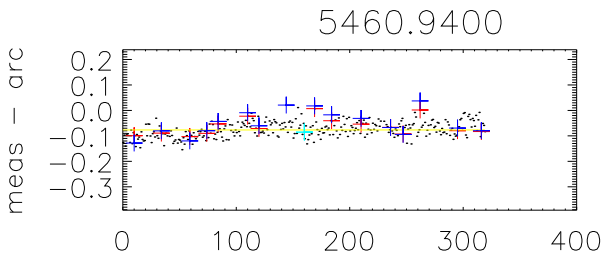

shift(pix)= 0.084
err(pix)= 0.039
oldshift(pix)= 0.009
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

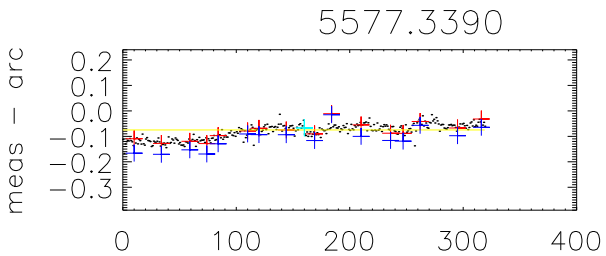

shift(pix)= 0.034
err(pix)= 0.014
oldshift(pix)= 0.022
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

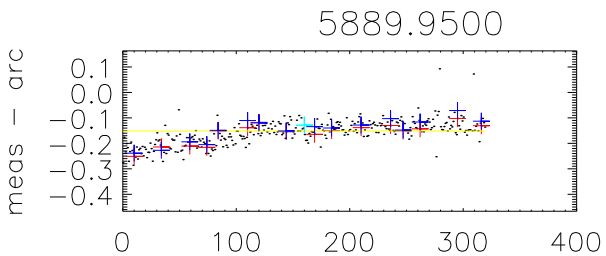

shift(pix)=−0.085
err(pix)= 0.009
oldshift(pix)=−0.035
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

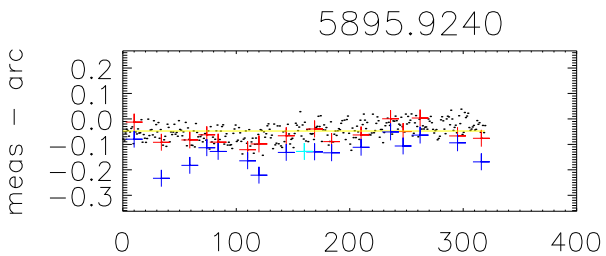

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

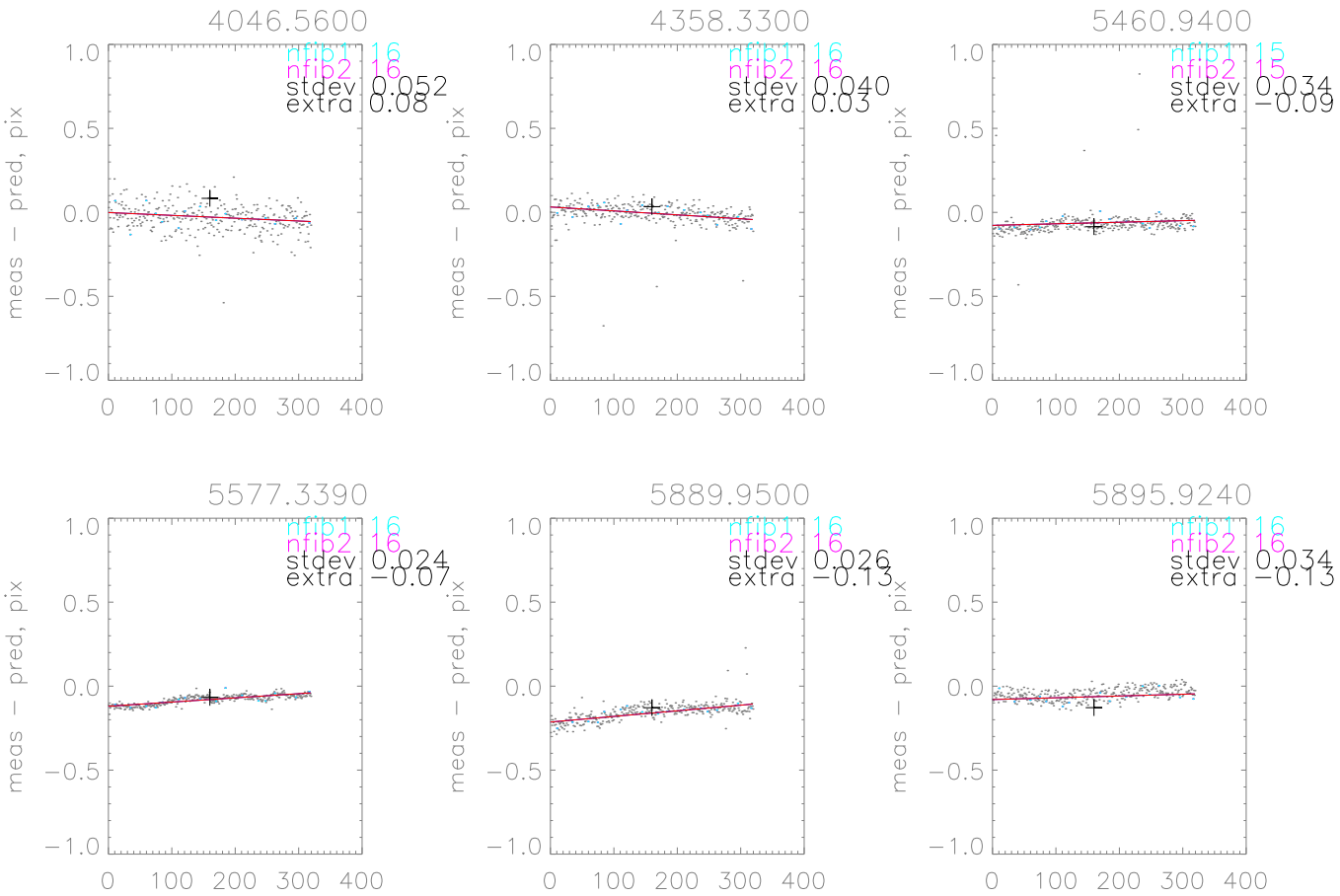

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

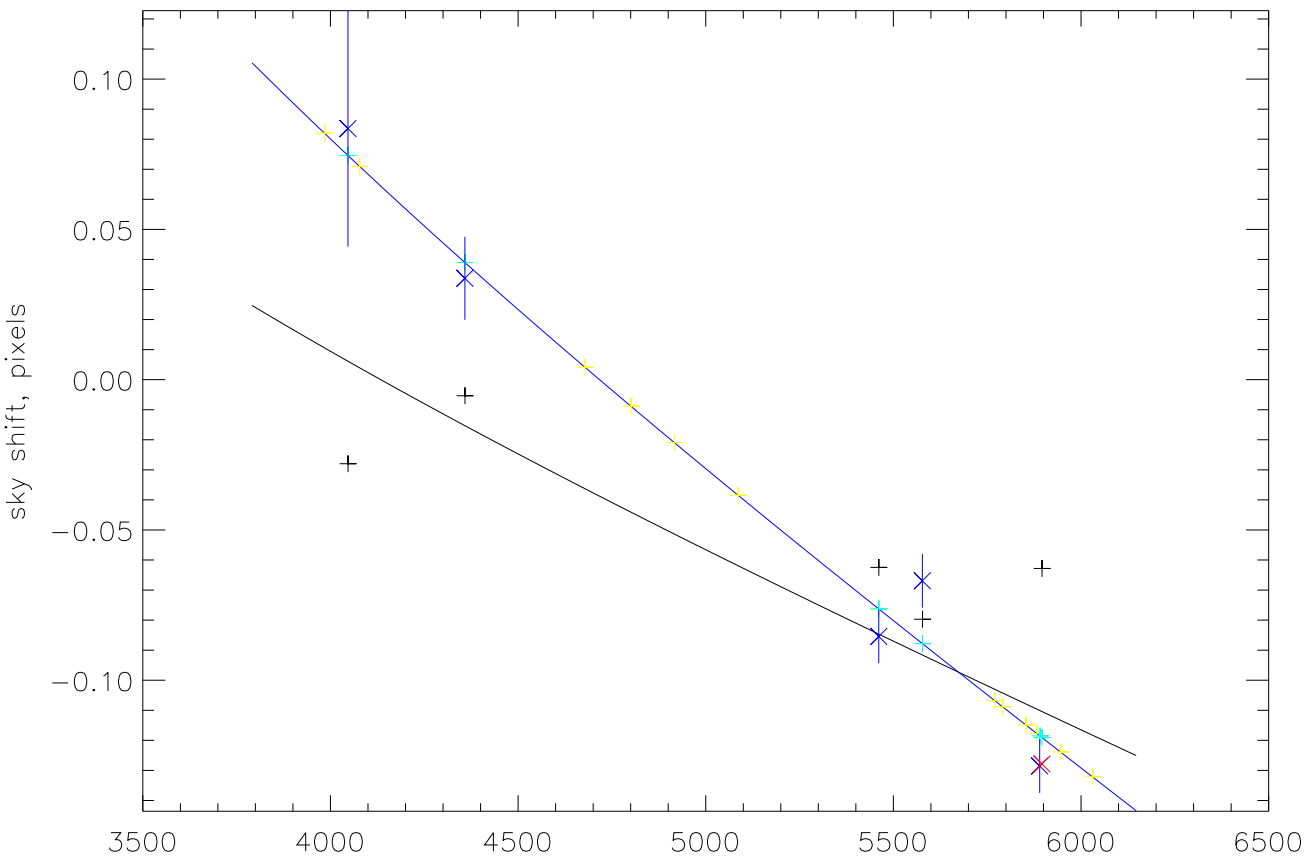

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

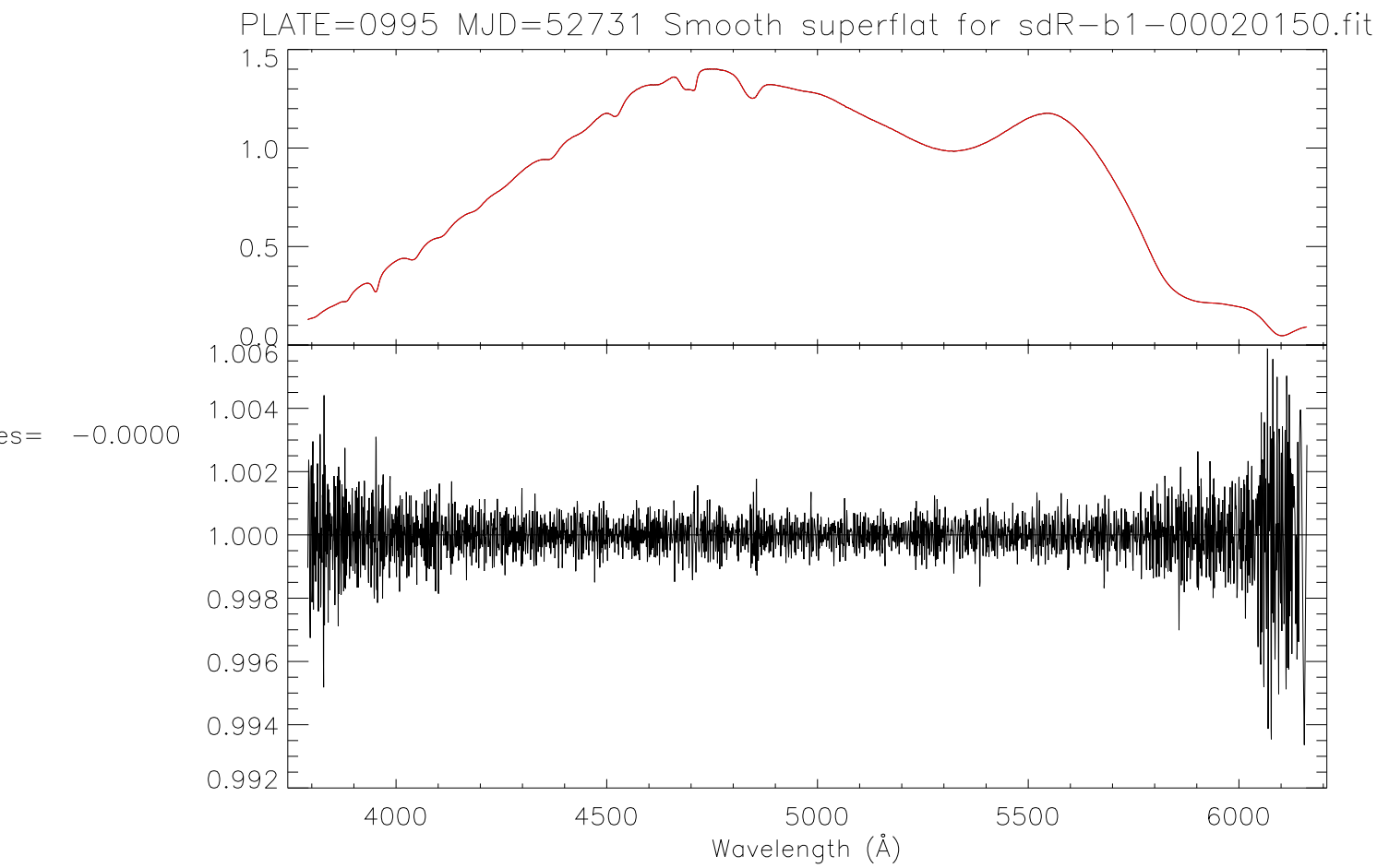

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

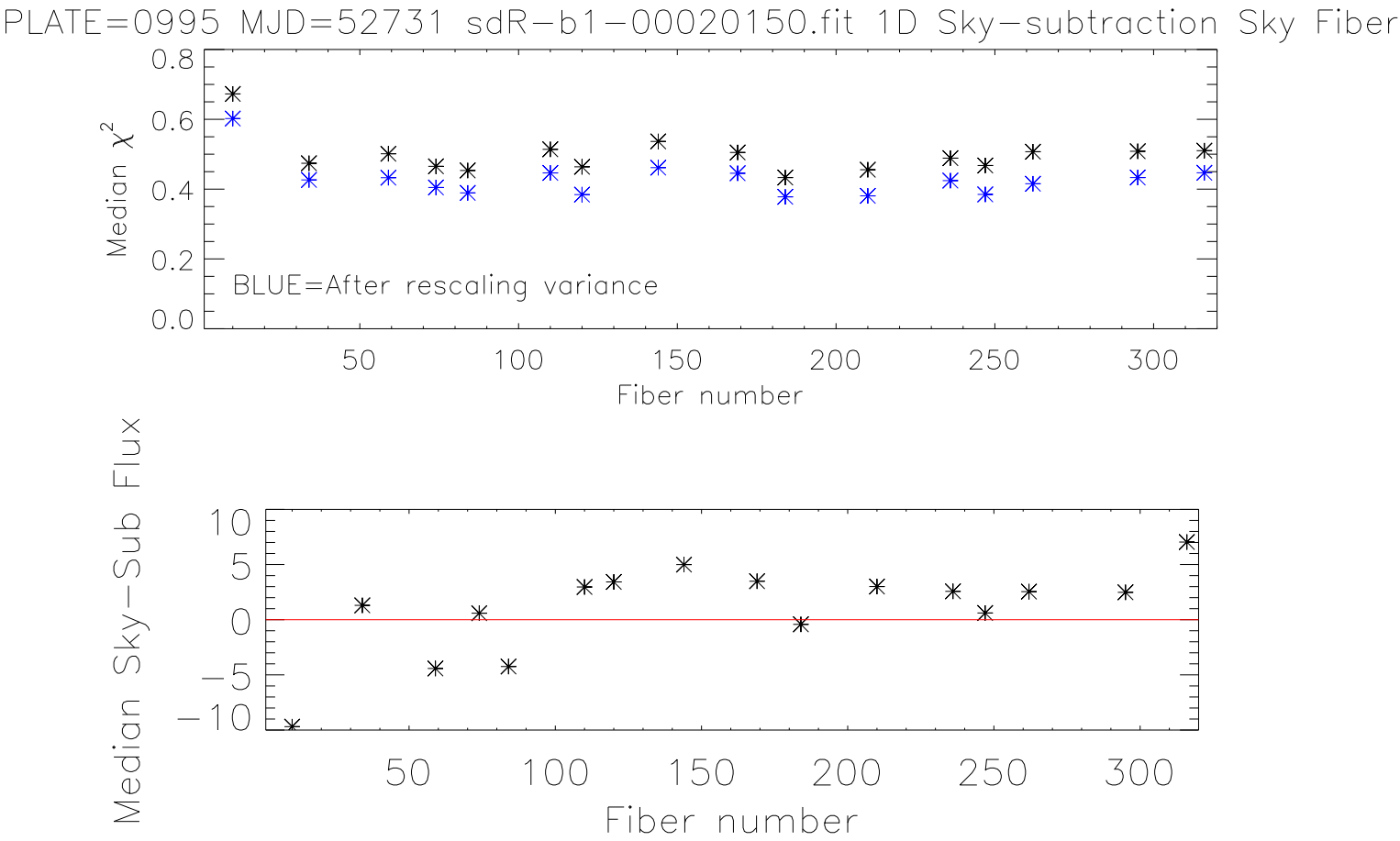

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

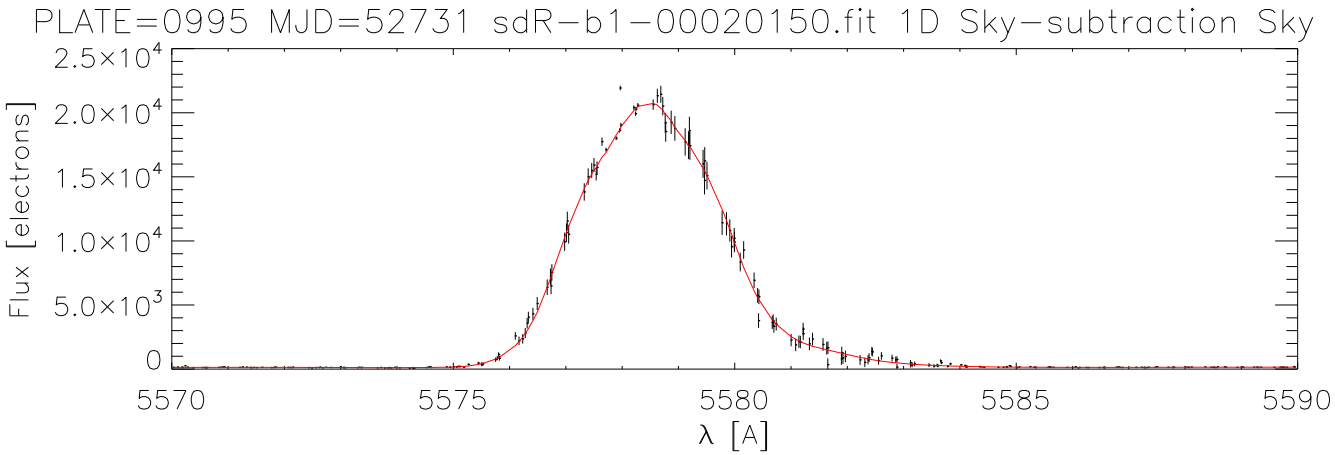

4046.5600
nfib1 16
nfib2 16
stdev 0.052
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extra 0.03
5460.9400
nfib1 15
nfib2 15
stdev 0.034
extra −0.09
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra −0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

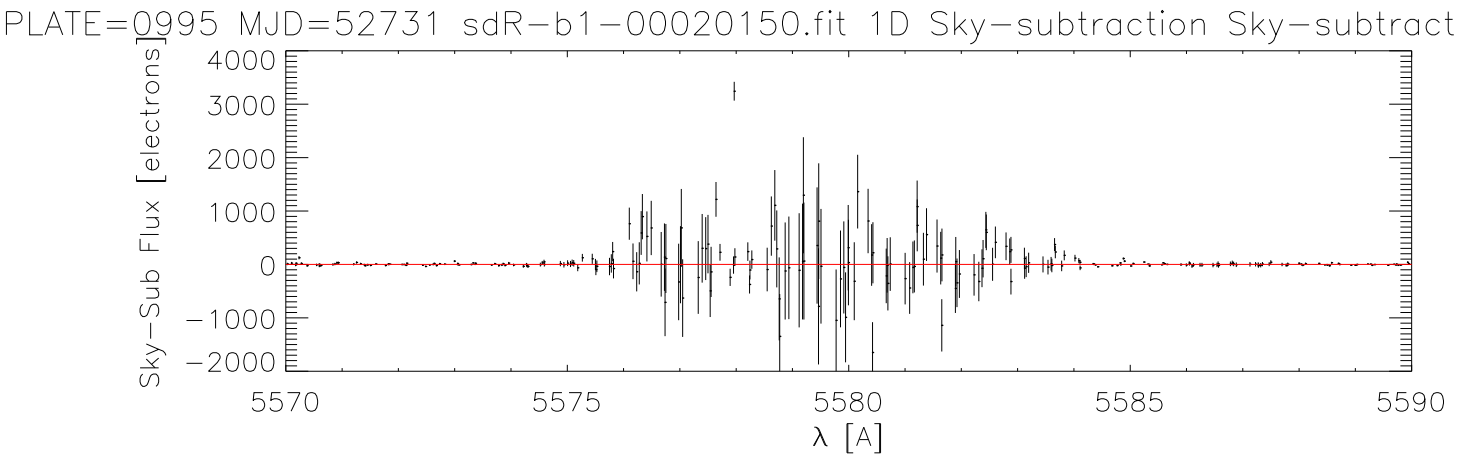

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

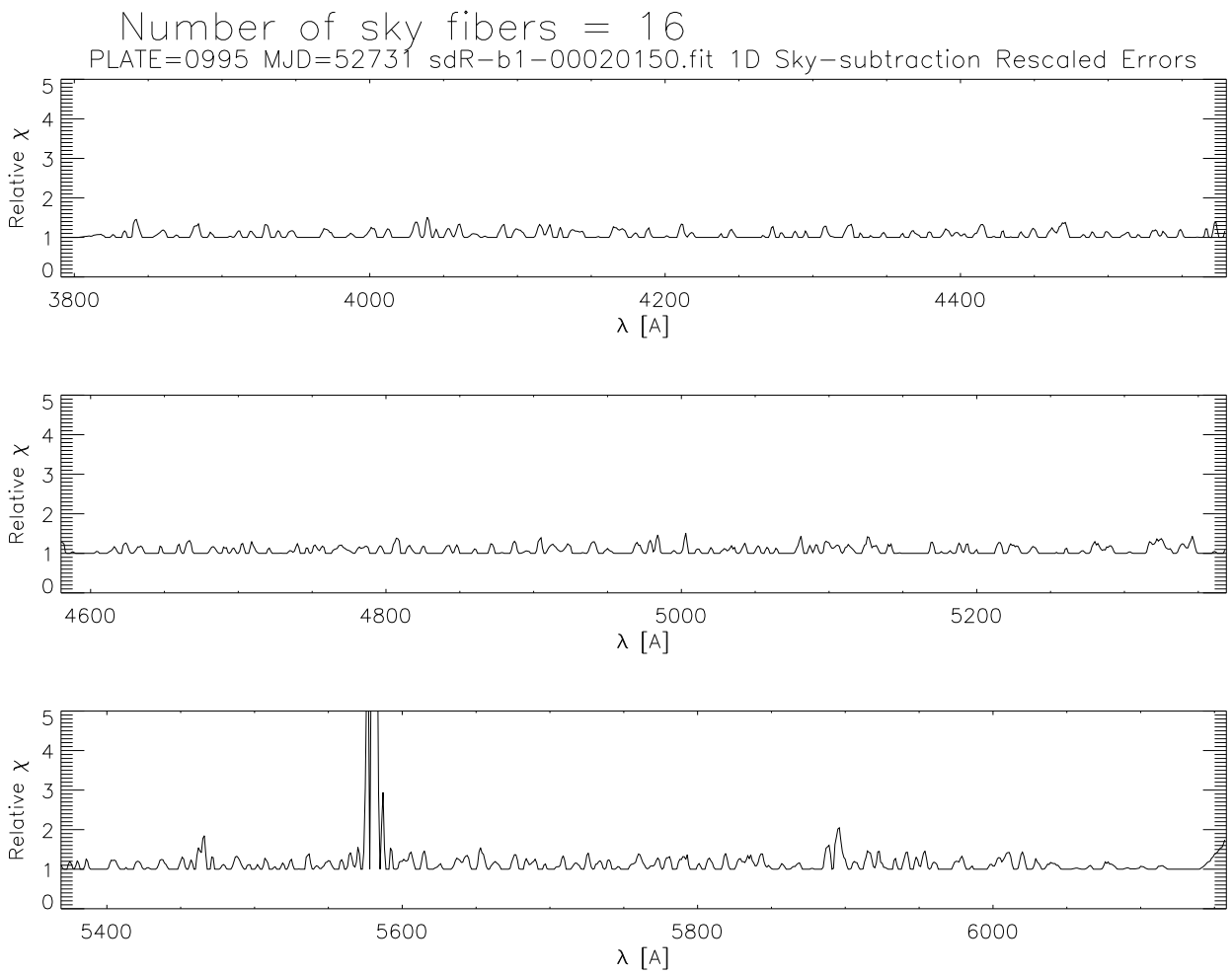

PLATE=0995 MJD=52731 Smooth superflat for sdR-b1-00020150.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

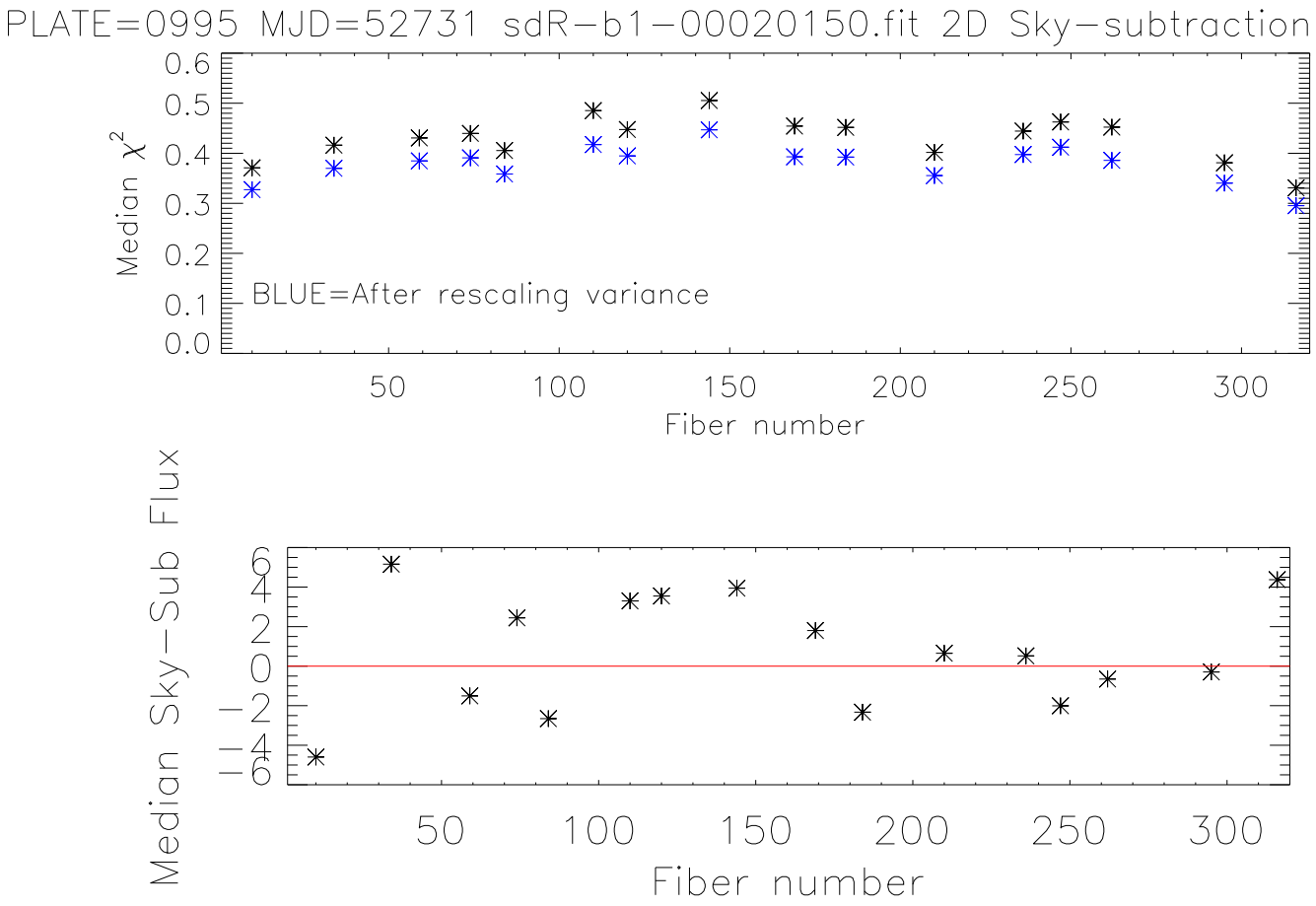
es= −0.0000

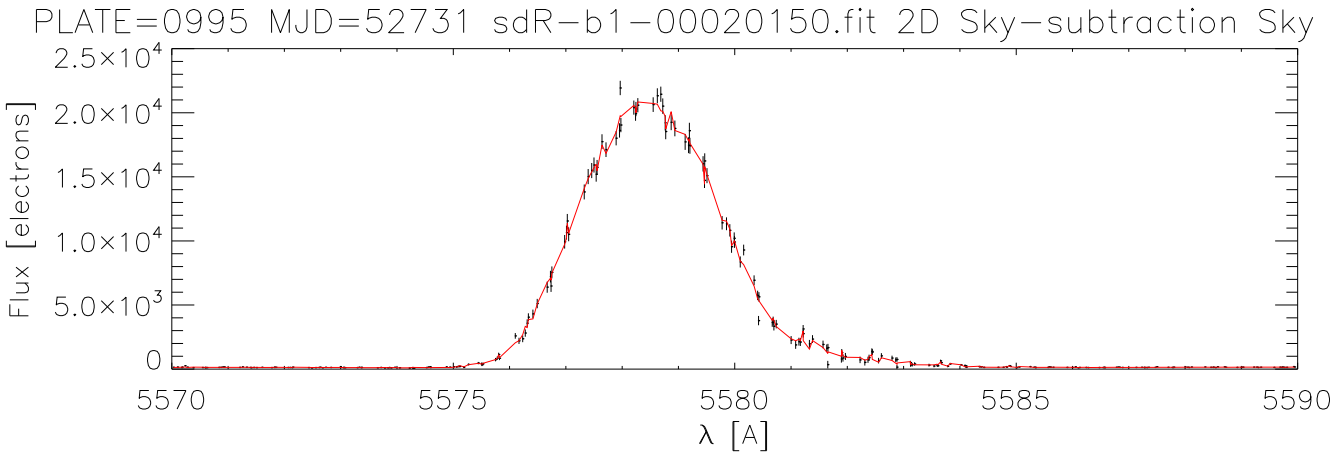

PLATE=0995 MJD=52731 sdR-b1-00020150.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

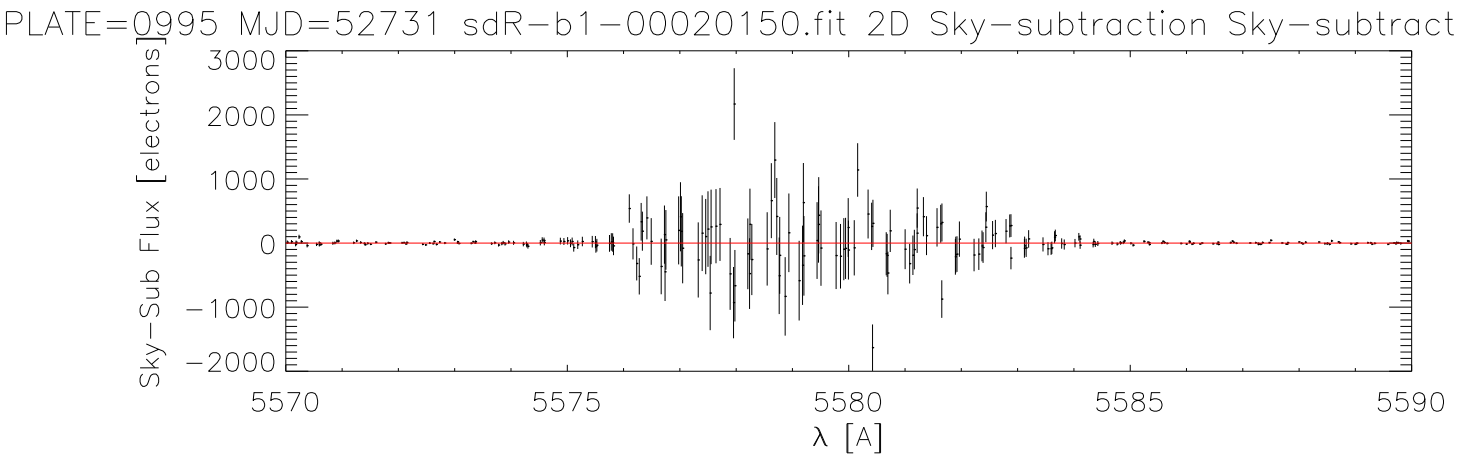

PLATE=0995 MJD=52731 sdR-b1-00020150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

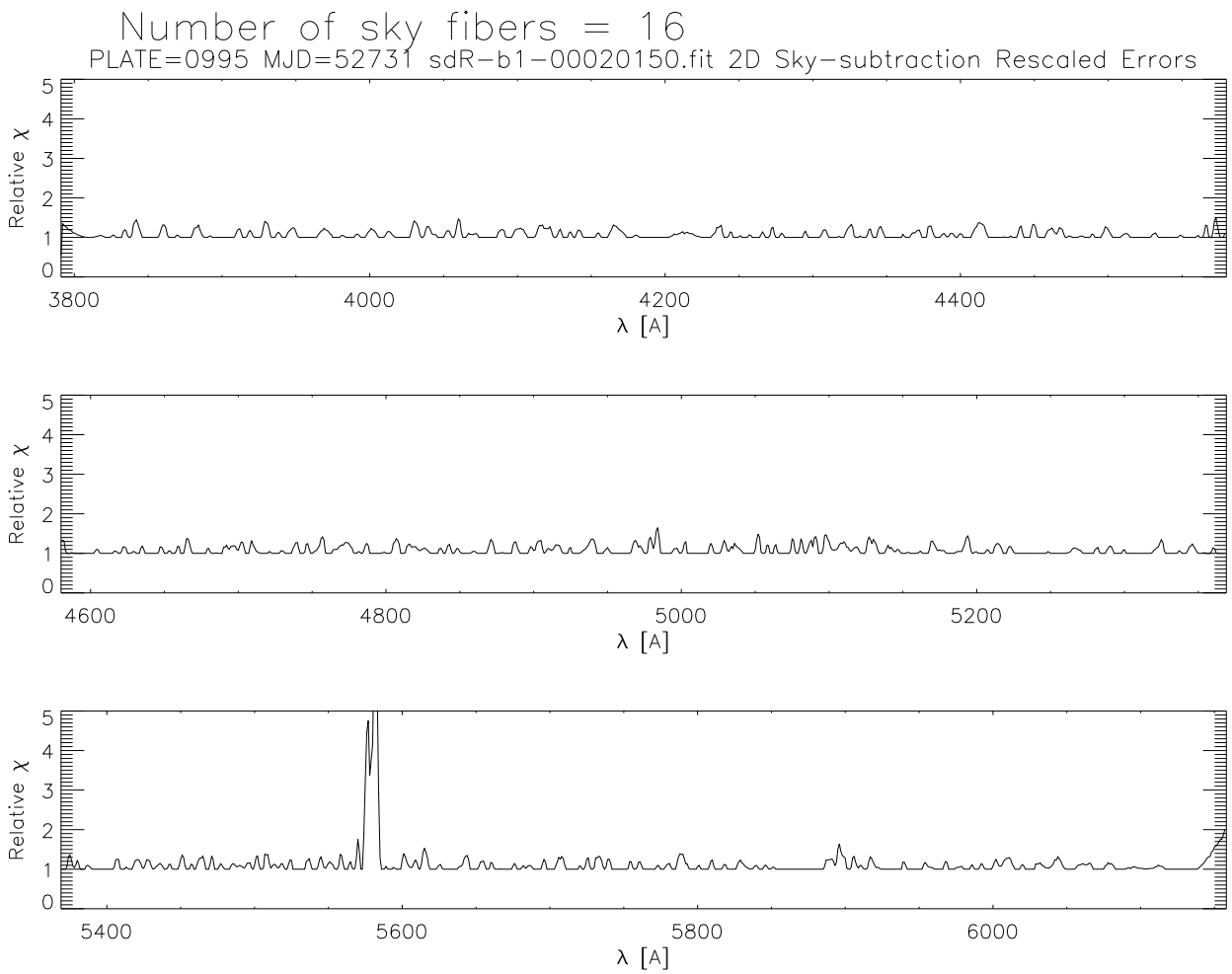

PLATE=0995 MJD=52731 sdR-b1-00020150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

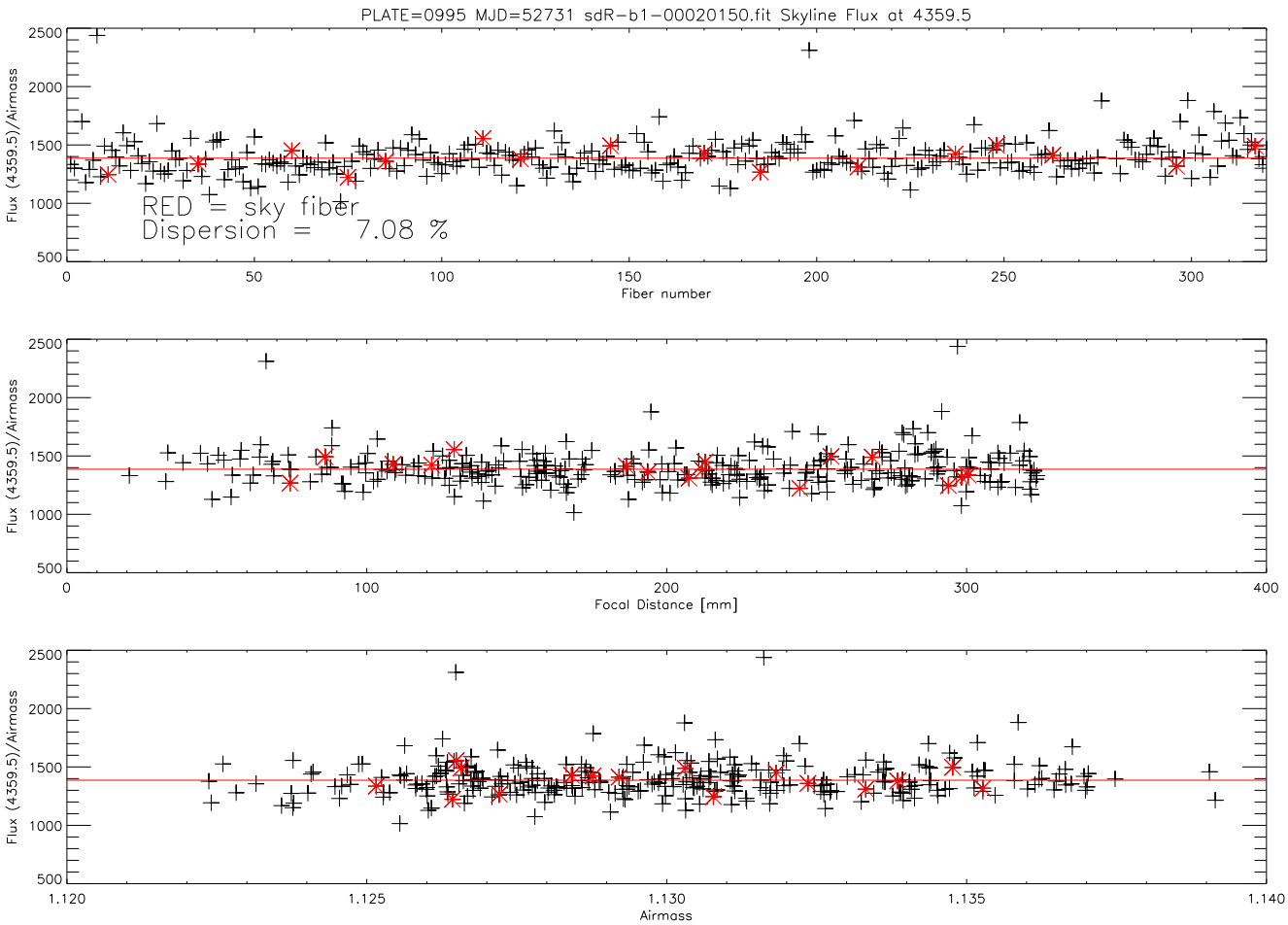

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

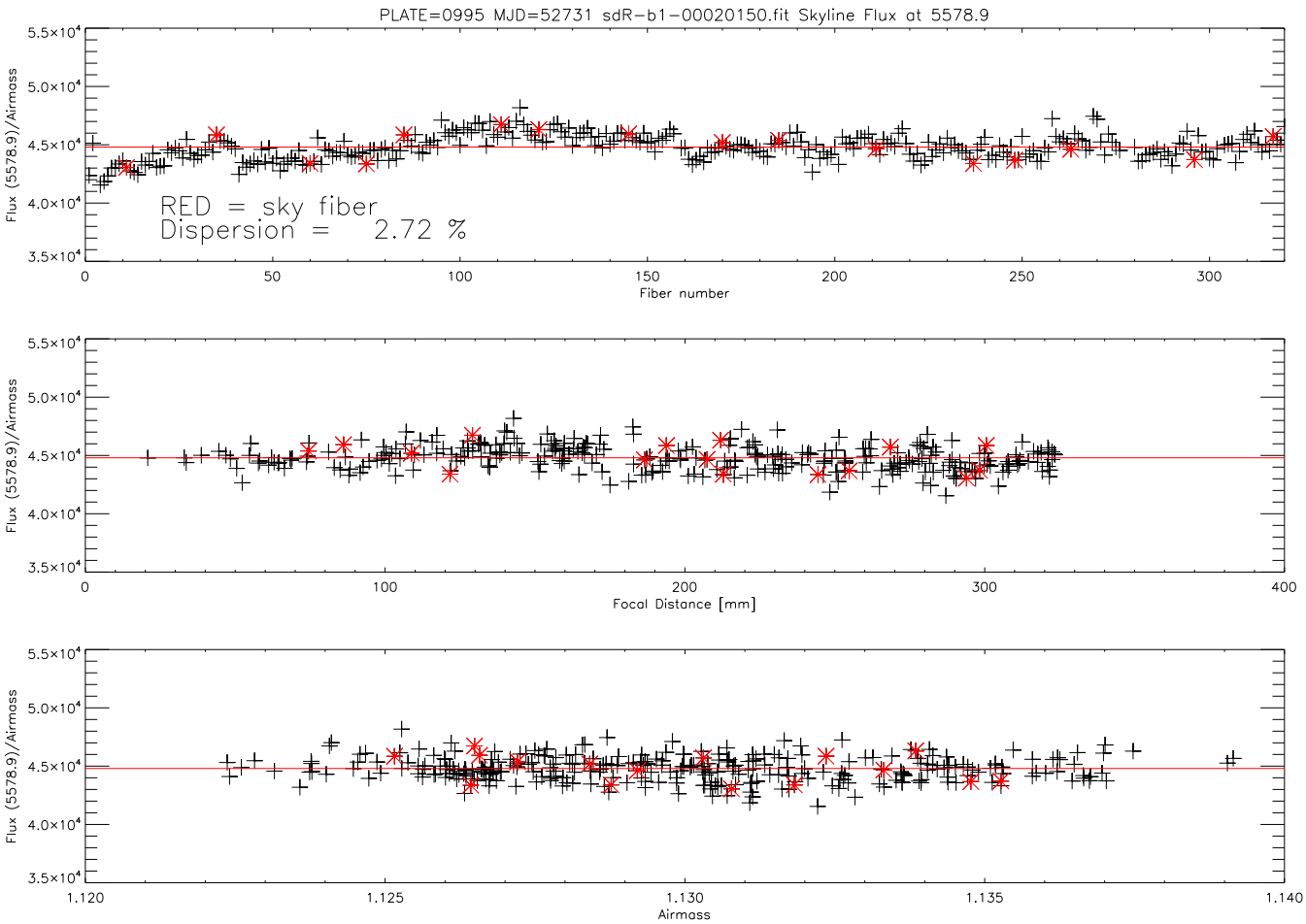

PLATE=0995 MJD=52731 sdR-b1-00020150.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

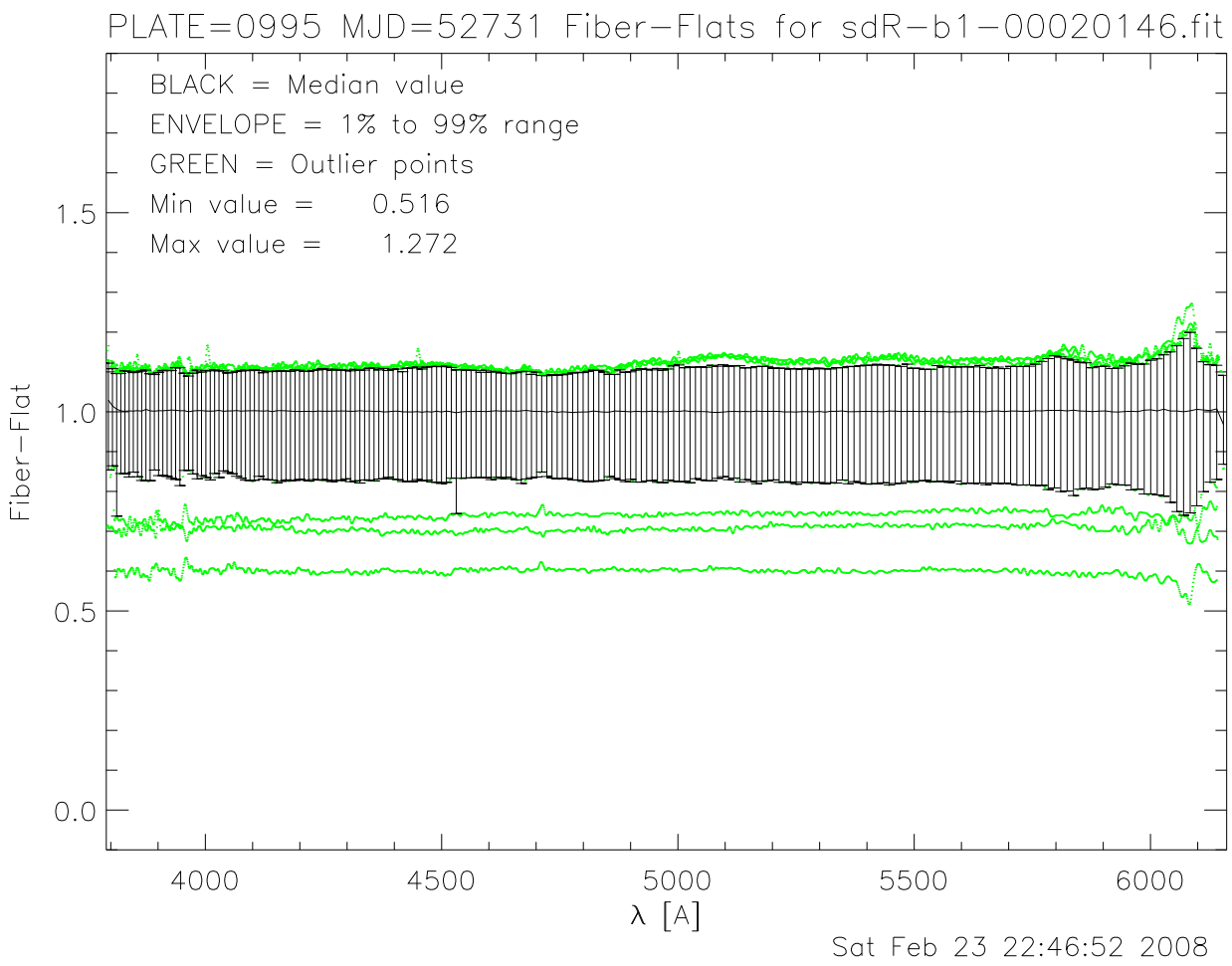

PLATE=0995 MJD=52731 sdR-b1-00020150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0995 MJD=52731 sdR-b1-00020150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020150.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=0995 MJD=52731 sdR-b1-00020150.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.08 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=0995 MJD=52731 sdR-b1-00020150.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.72 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0995 MJD=52731 Fiber-Flats for sdR-b1-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.516
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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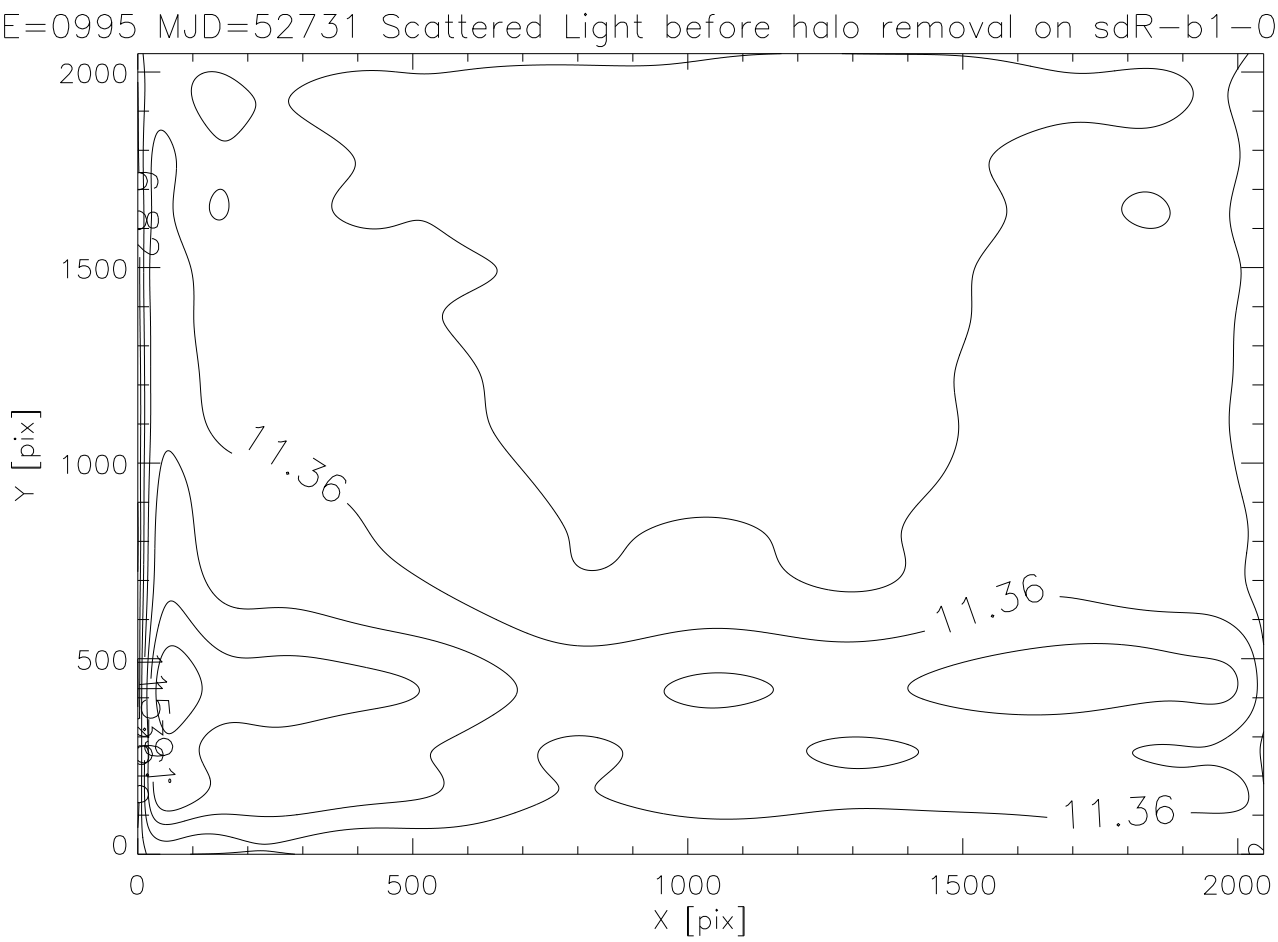
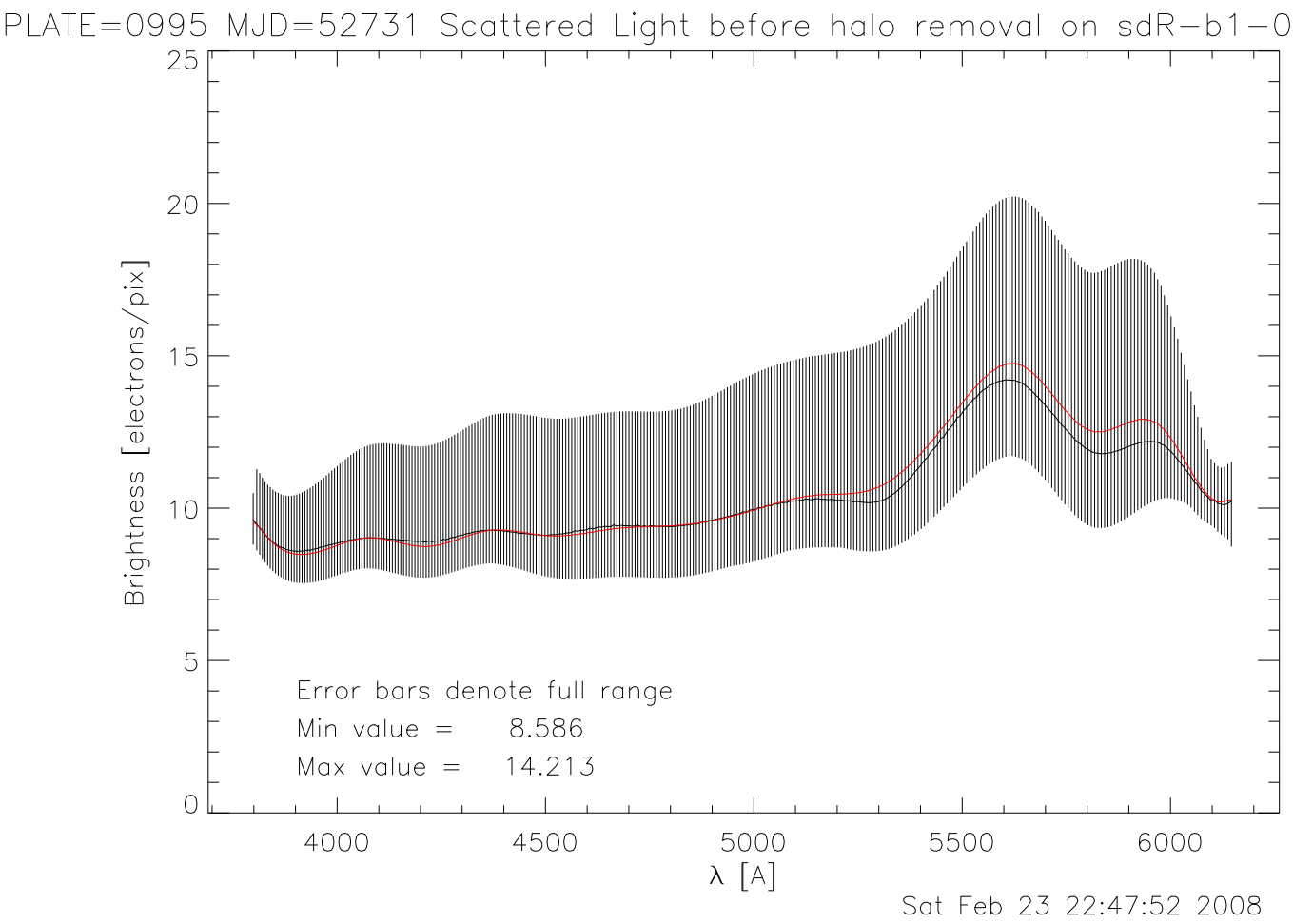
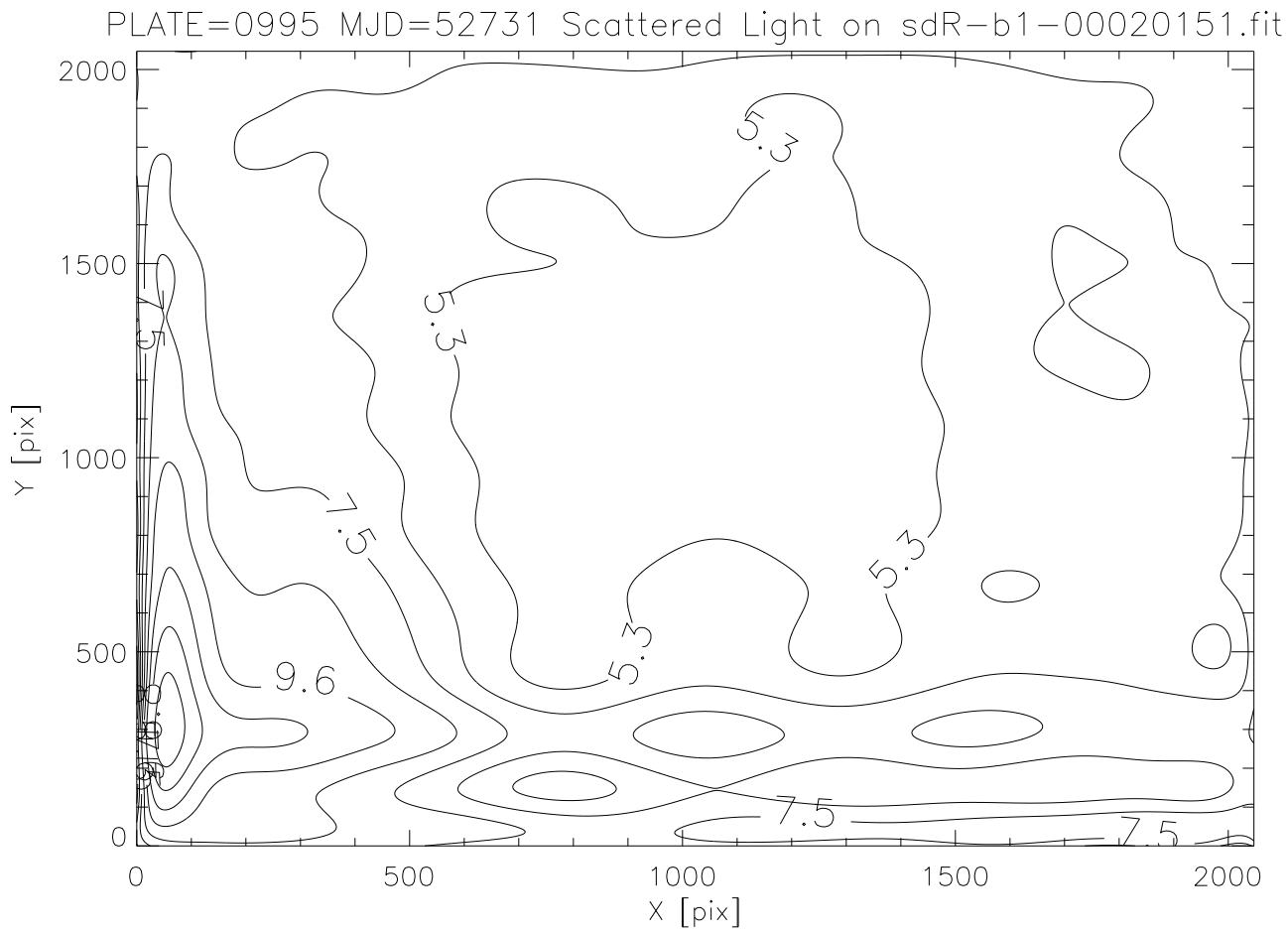
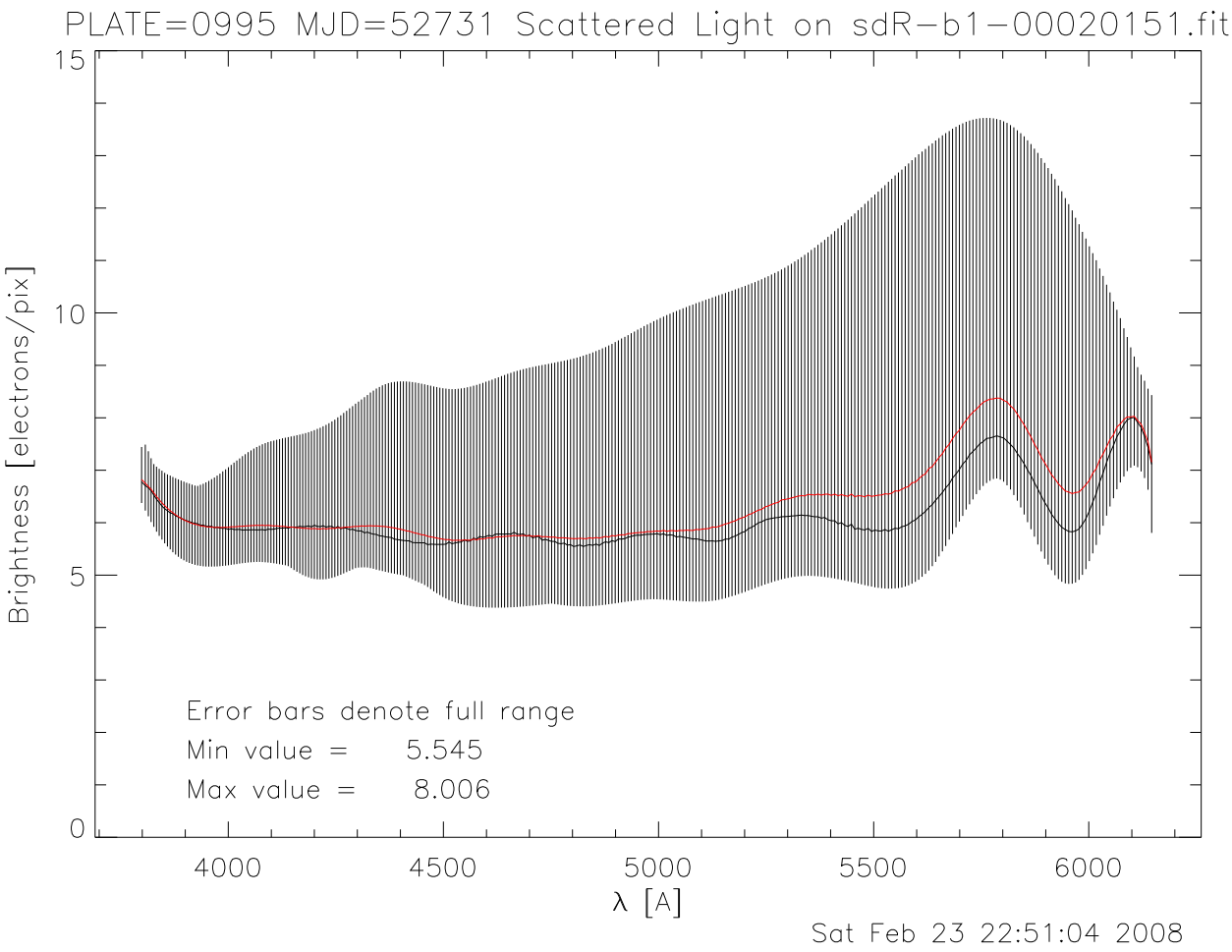
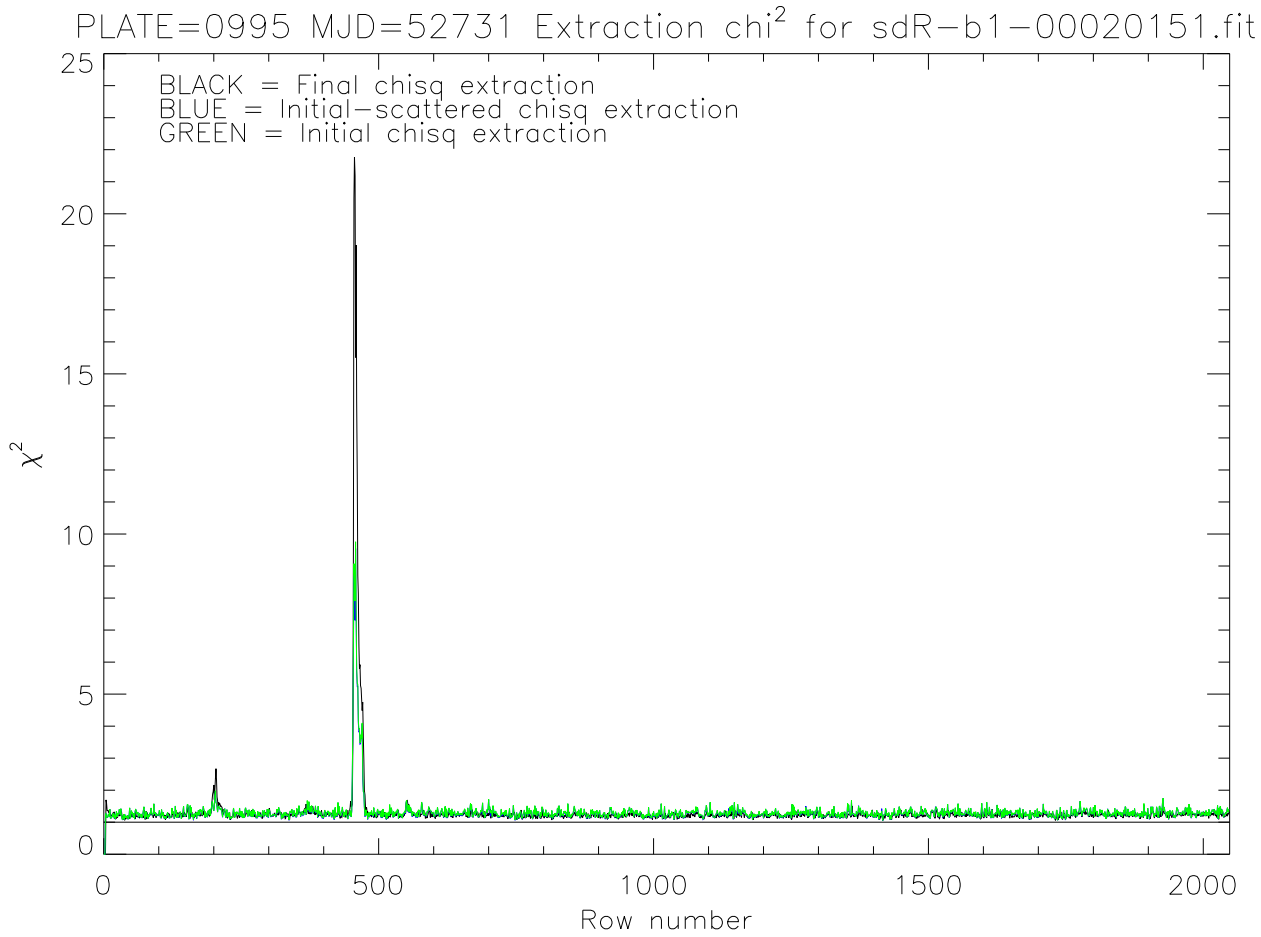
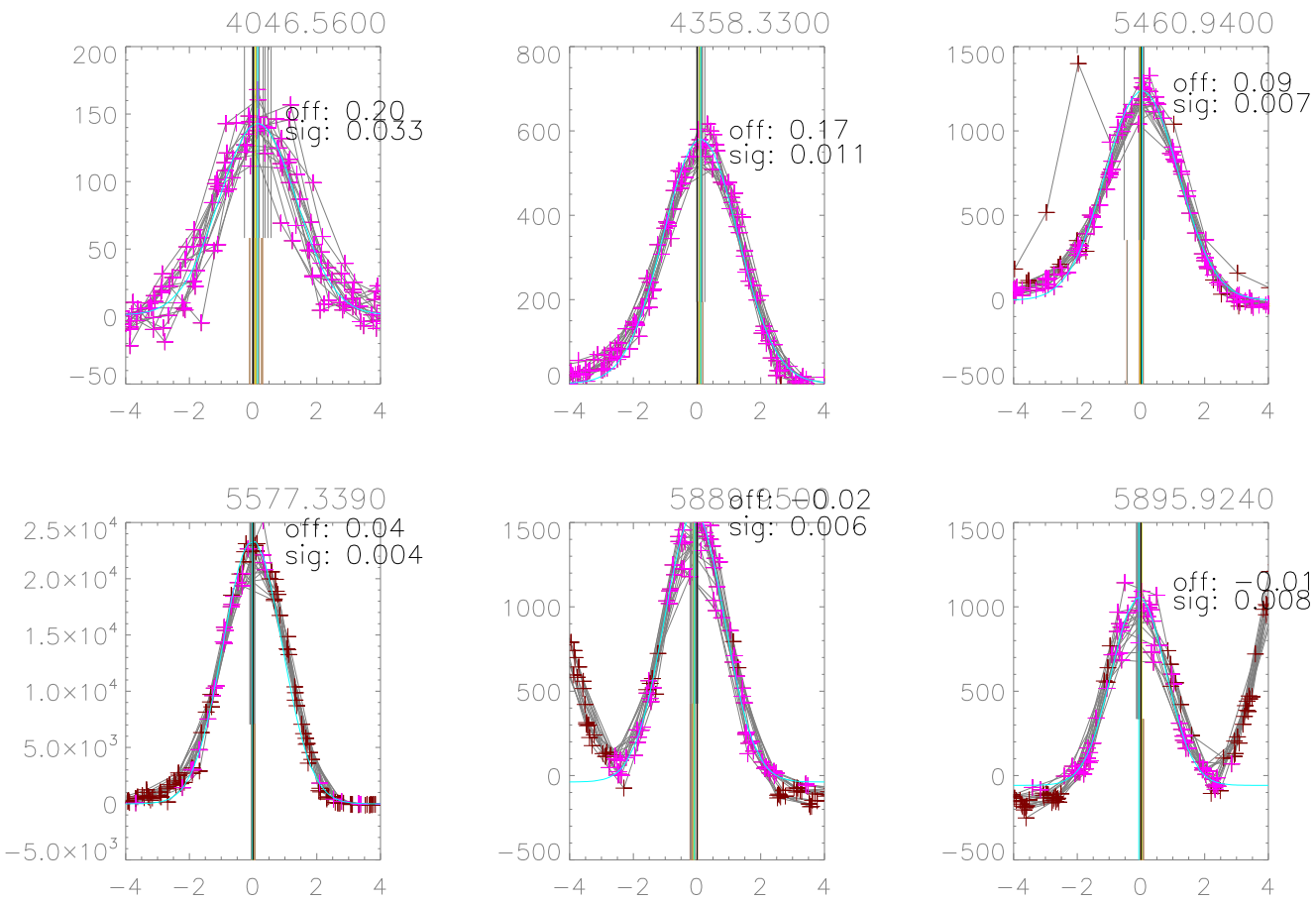

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b1-00020151.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
11.36
11.36
11.36

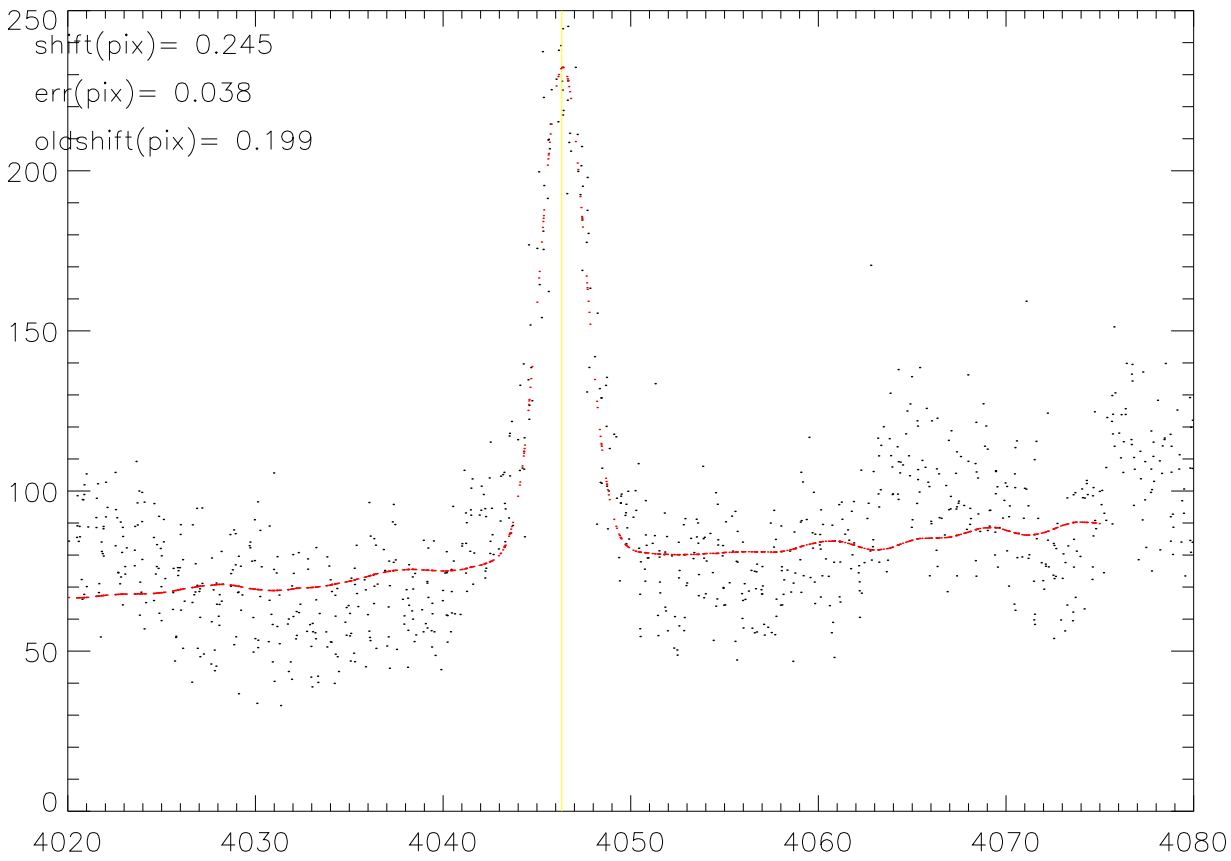

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b1-00020151.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 8.586
Max value = 14.213
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:47:52 2008

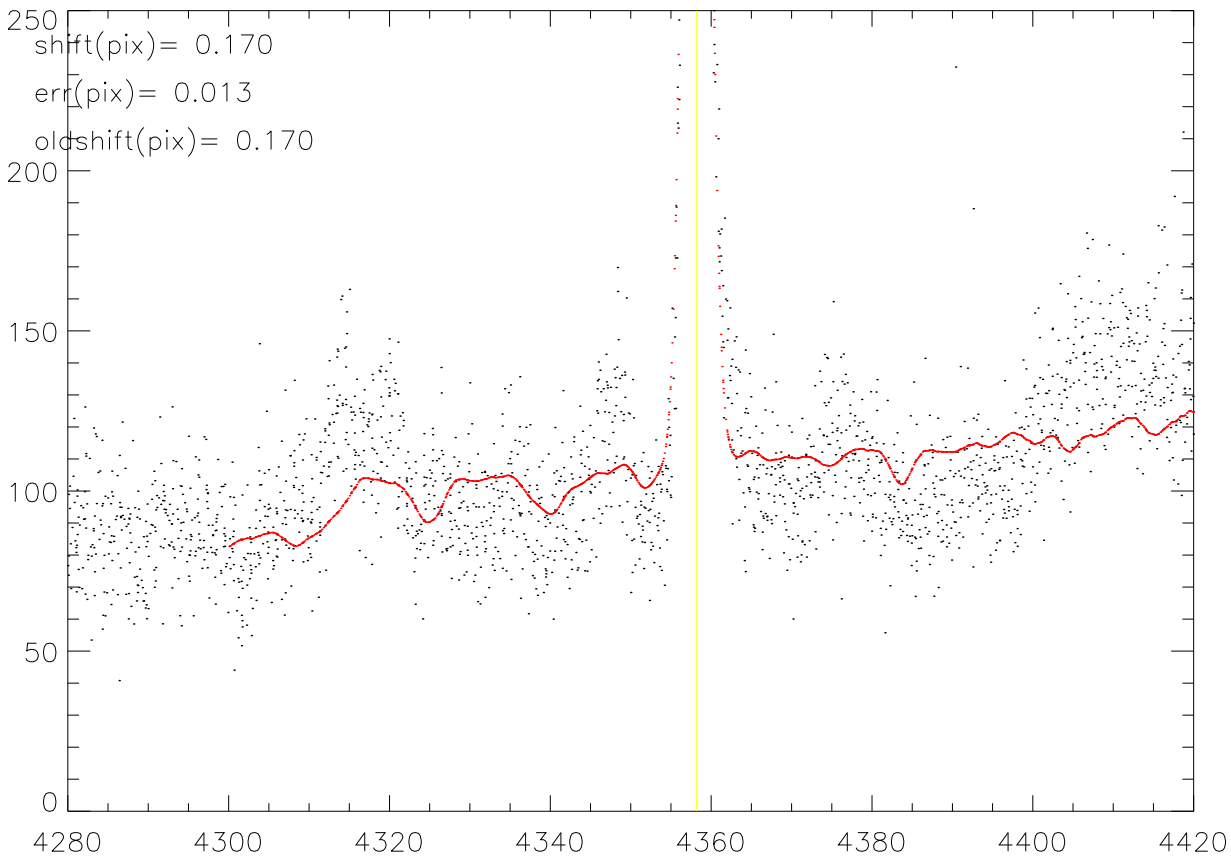

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020151.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.3
5.3
7.5
5.3
5.3
9.6
7.5
7.5

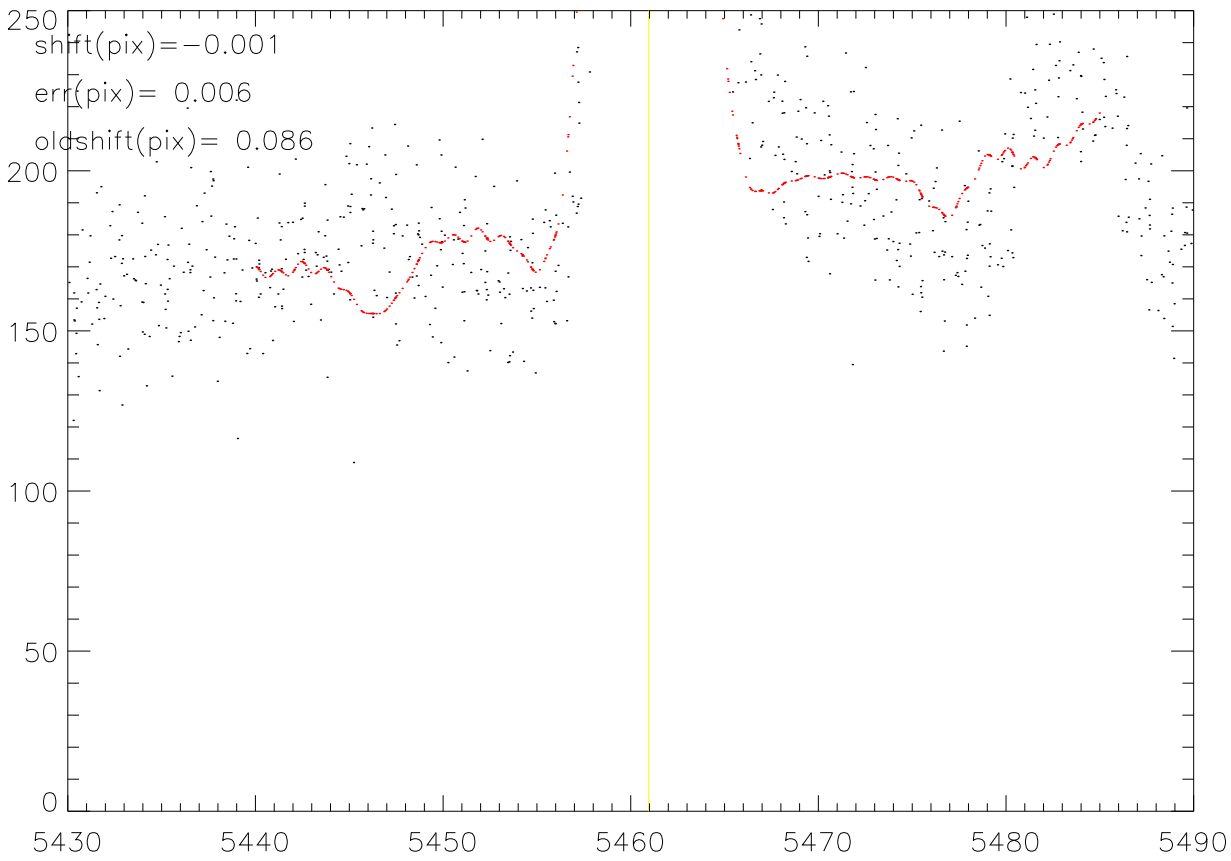

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020151.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 5.545
Max value = 8.006
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:51:04 2008

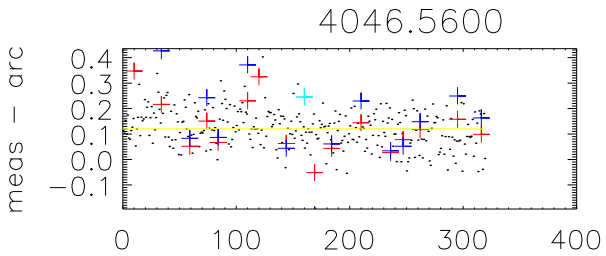

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b1-00020151.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

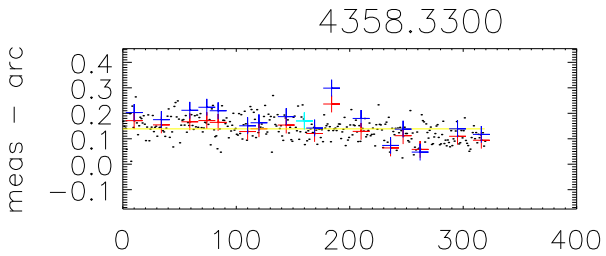

4046.5600
off: 0.20
sig: 0.033
4358.3300
off: 0.17
sig: 0.011
5460.9400
off: 0.09
sig: 0.007
5577.3390
off: 0.04
sig: 0.004
off: −0.02
sig: 0.006
5895.9240
off: −0.01
sig: 0.008

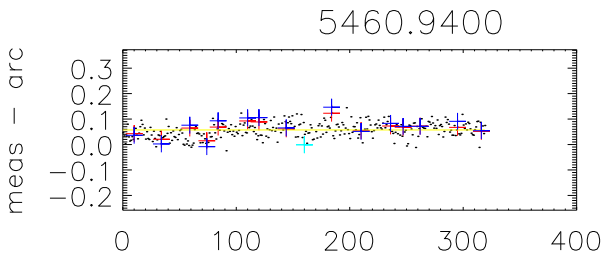

shift(pix)= 0.245
err(pix)= 0.038
oldshift(pix)= 0.199
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

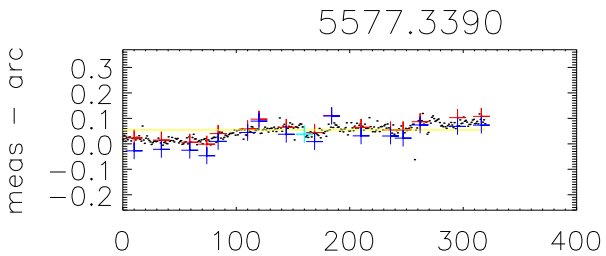

shift(pix)= 0.170
err(pix)= 0.013
oldshift(pix)= 0.170
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

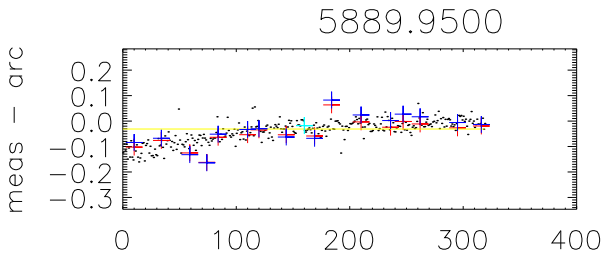

shift(pix)=−0.001
err(pix)= 0.006
oldshift(pix)= 0.086
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

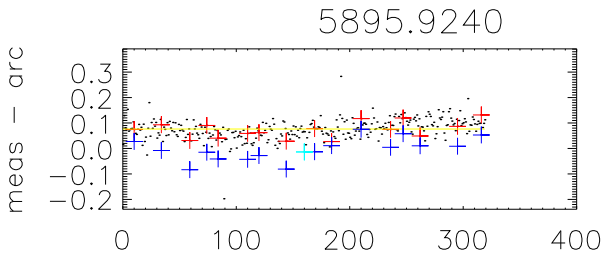

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

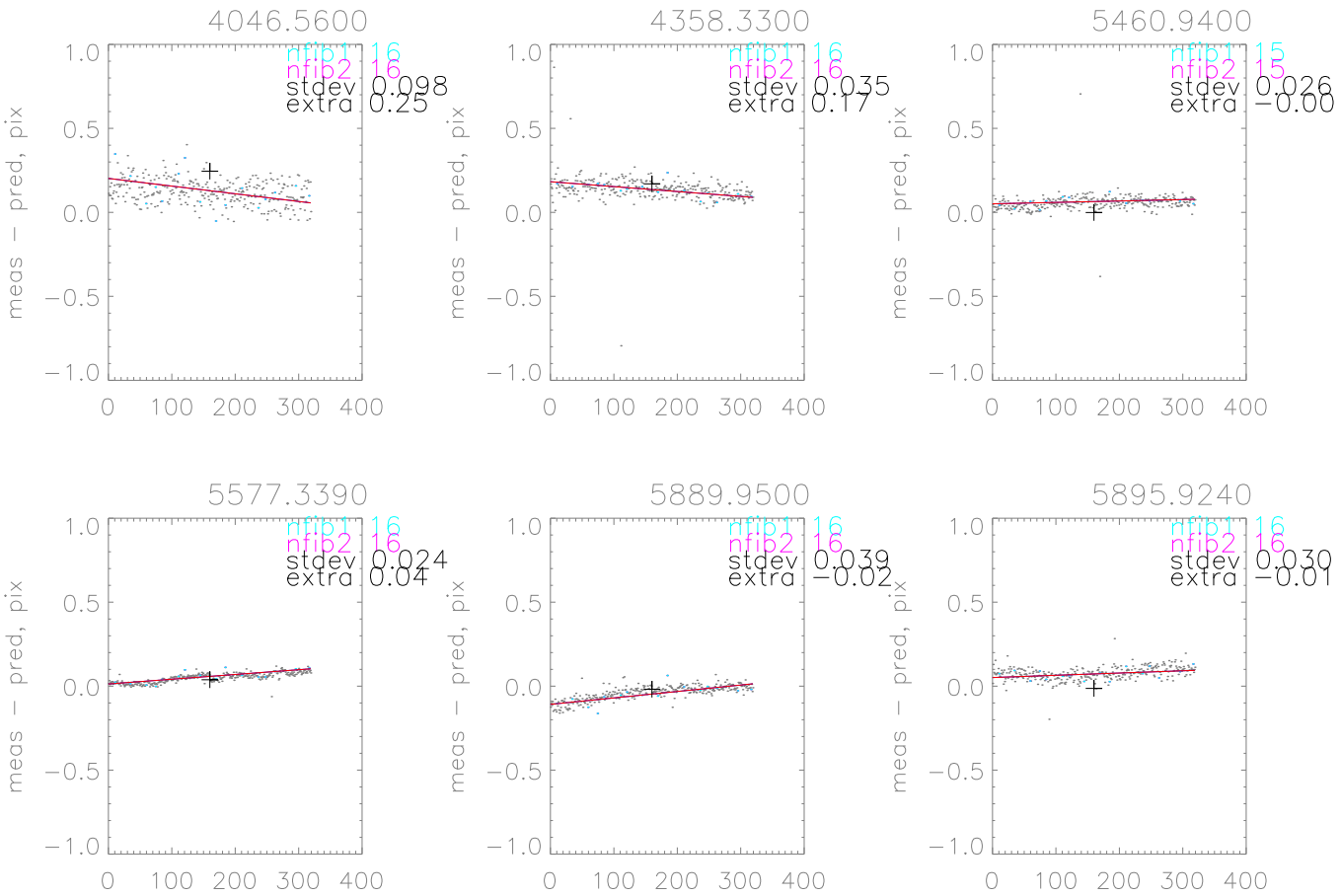

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

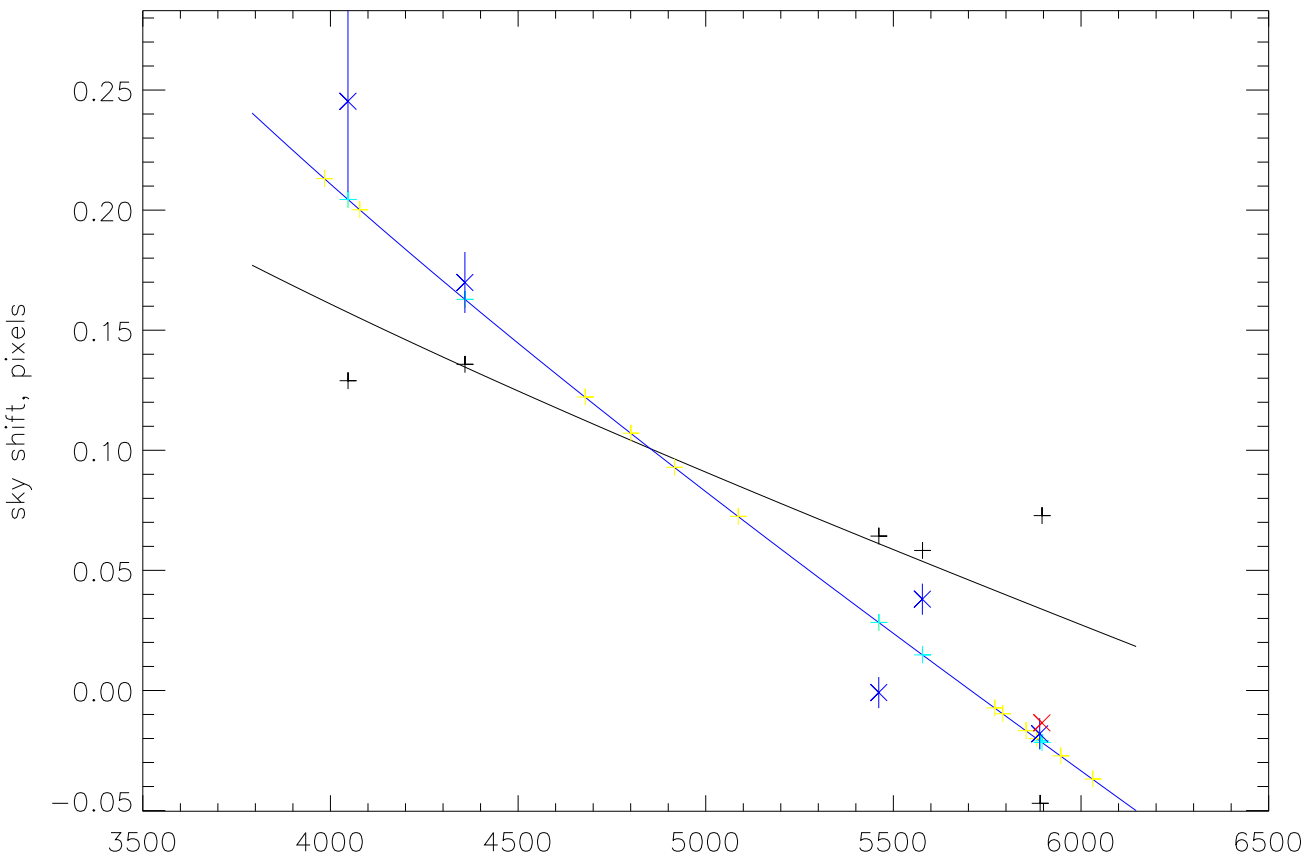

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

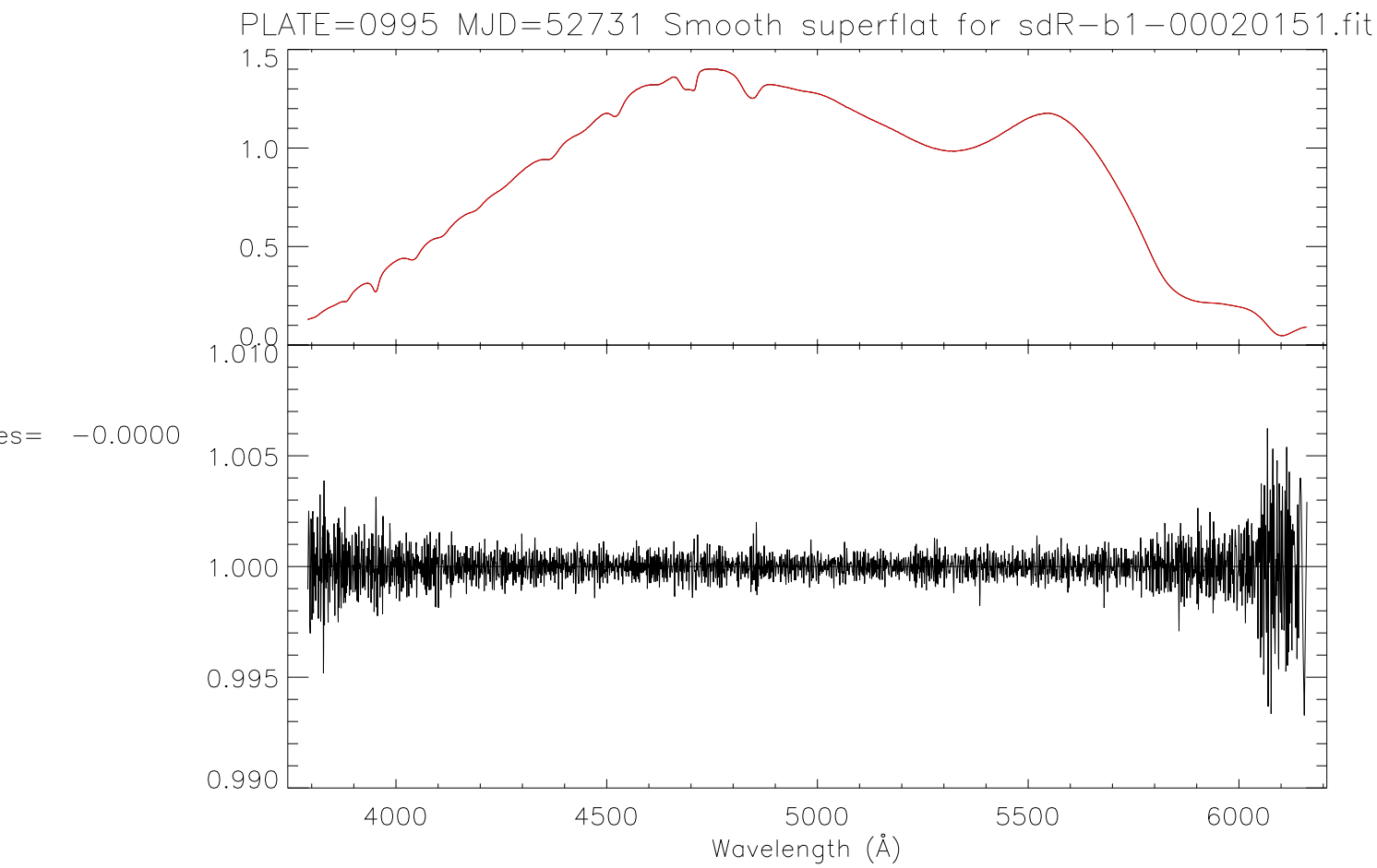

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

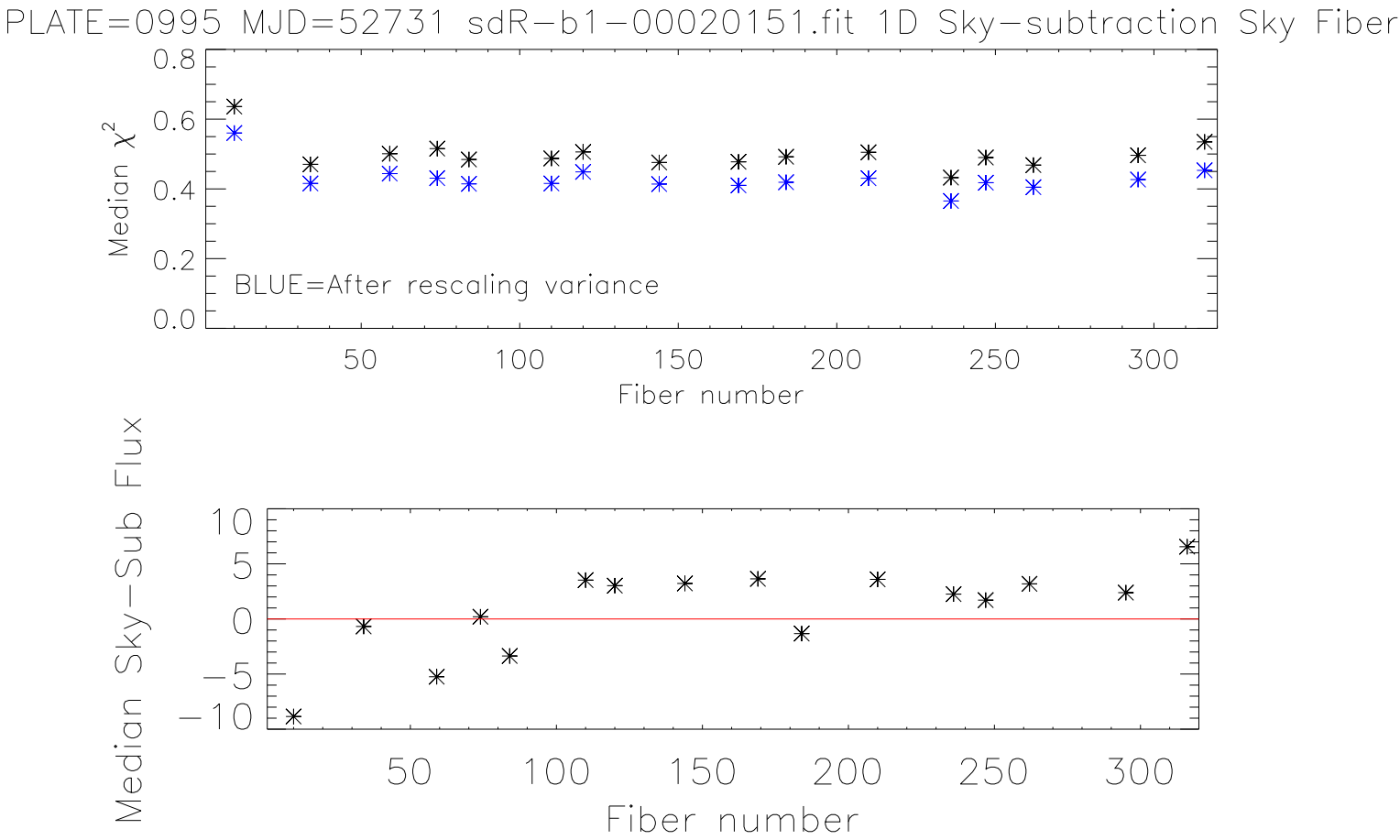

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

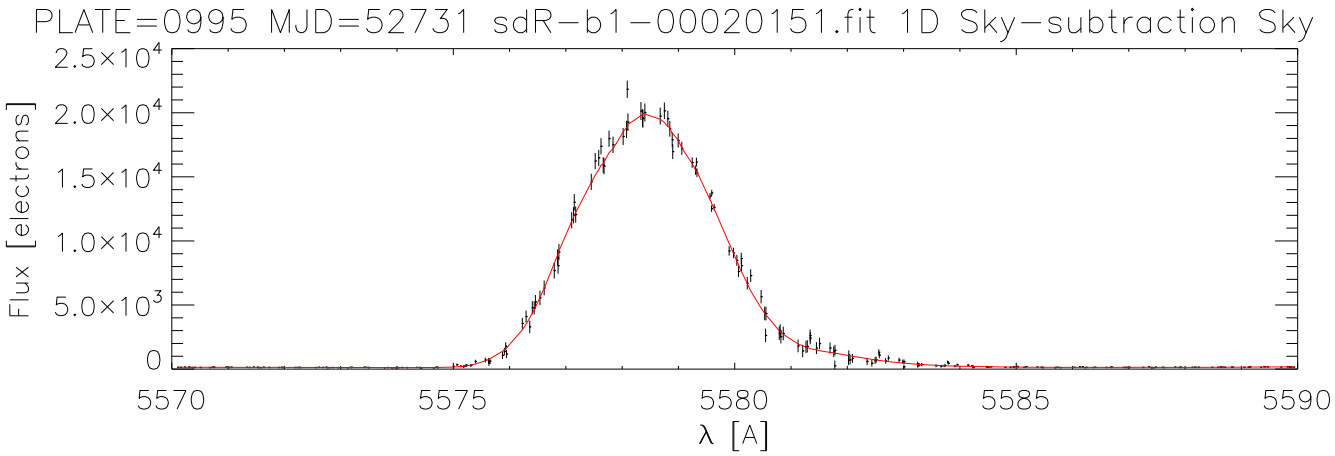

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

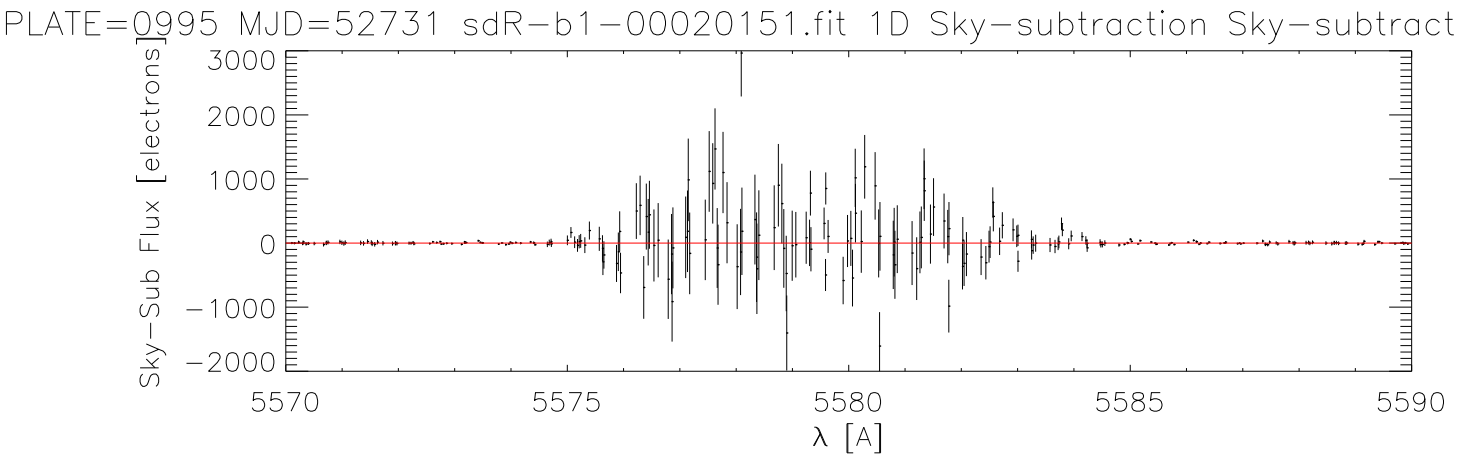

4046.5600
nfib1 16
nfib2 16
stdev 0.098
extra 0.25
4358.3300
nfib1 16
nfib2 16
stdev 0.035
extra 0.17
5460.9400
nfib1 15
nfib2 15
stdev 0.026
extra −0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.039
extra −0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

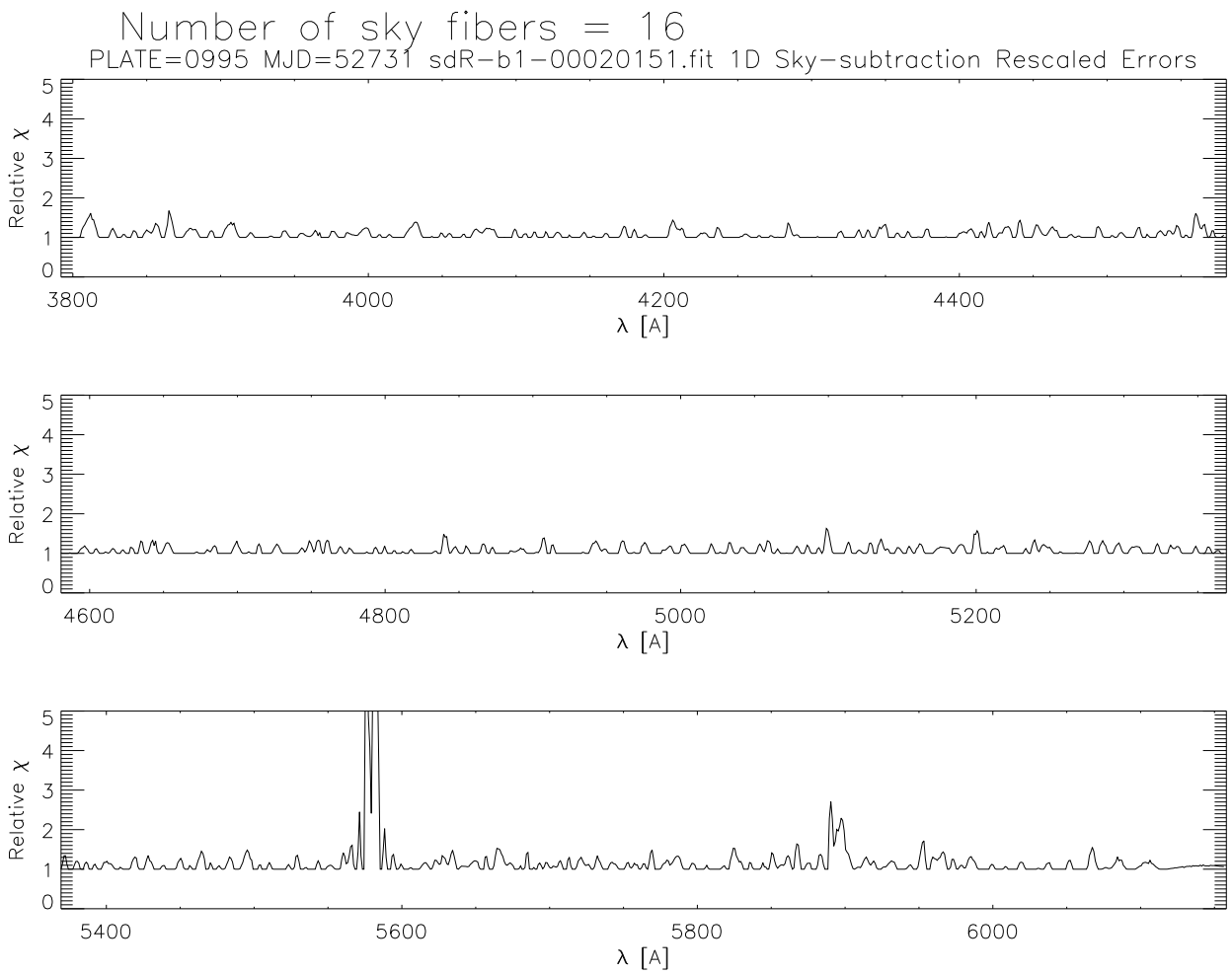

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

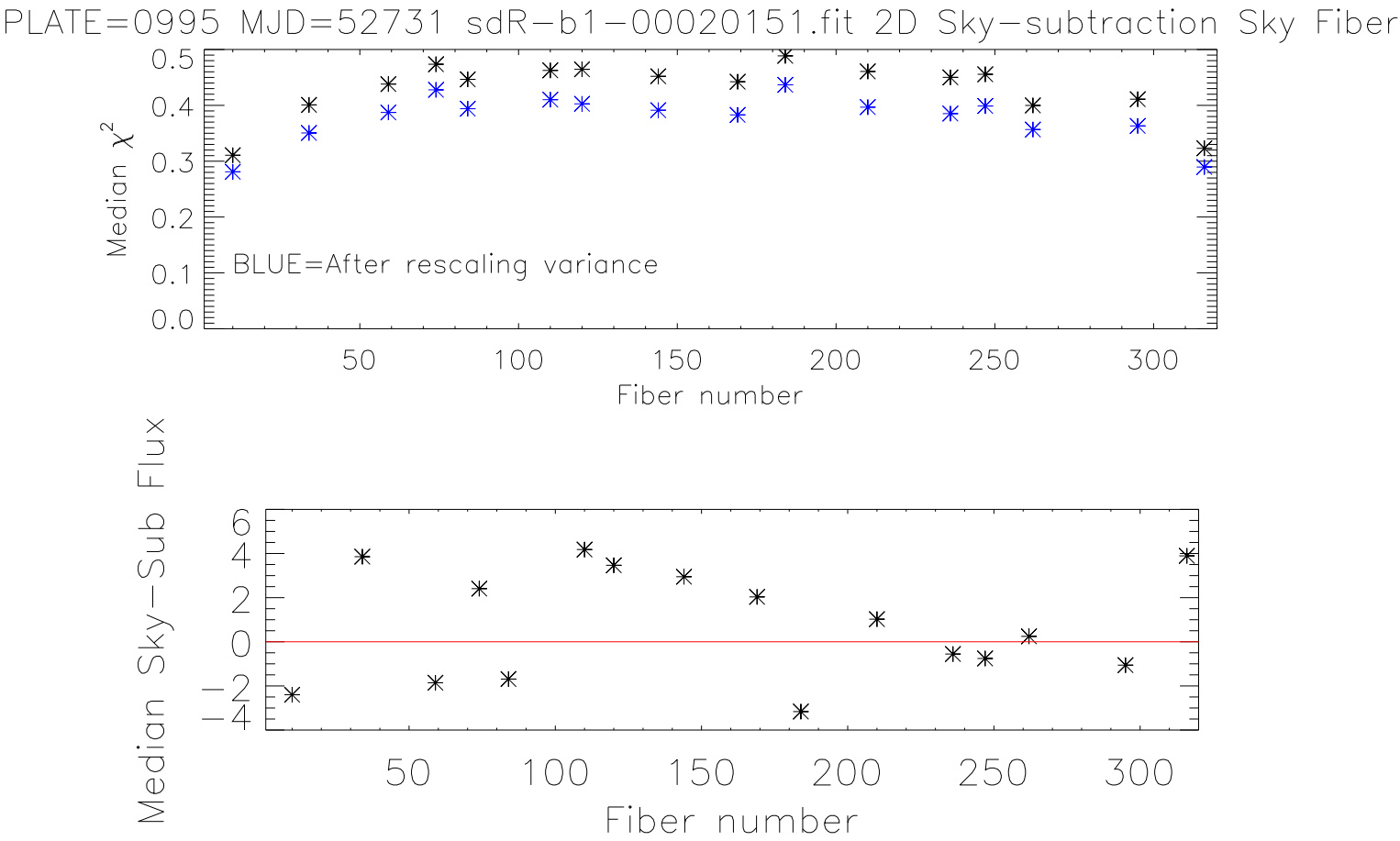

PLATE=0995 MJD=52731 Smooth superflat for sdR-b1-00020151.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

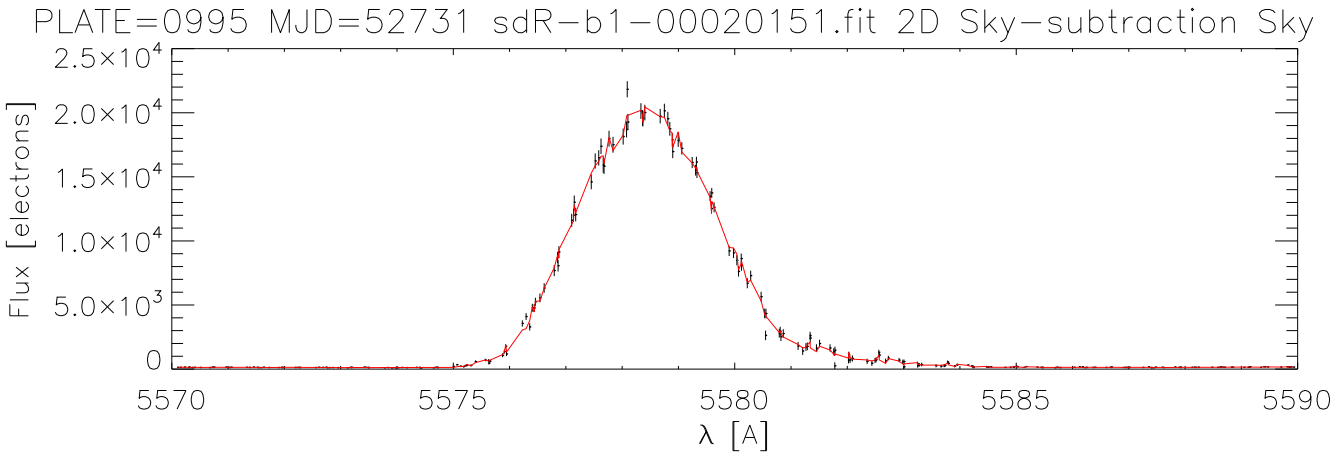

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

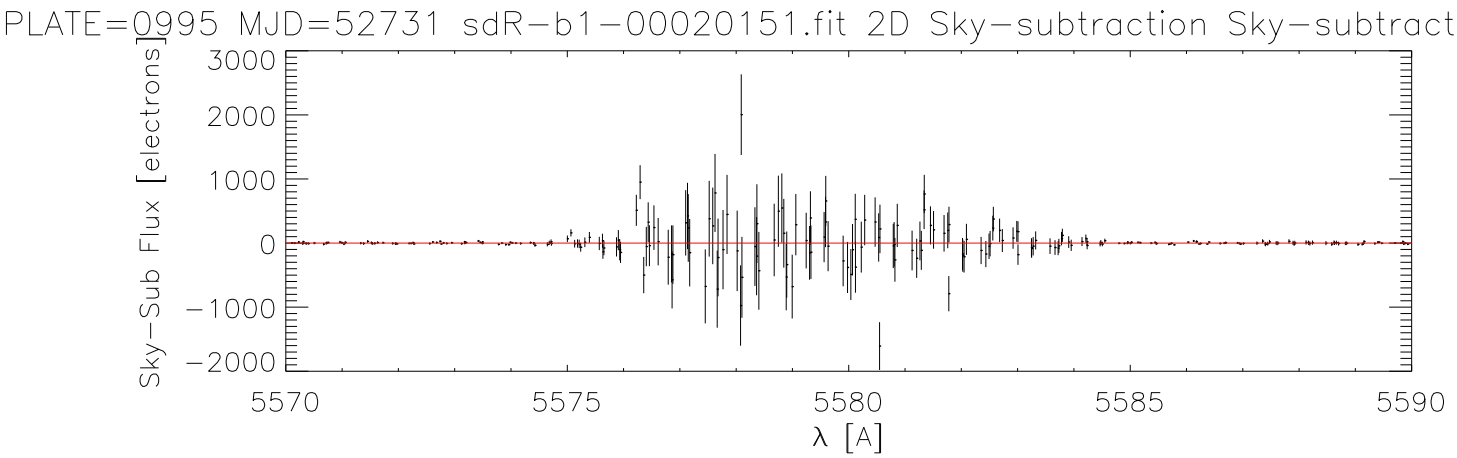

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

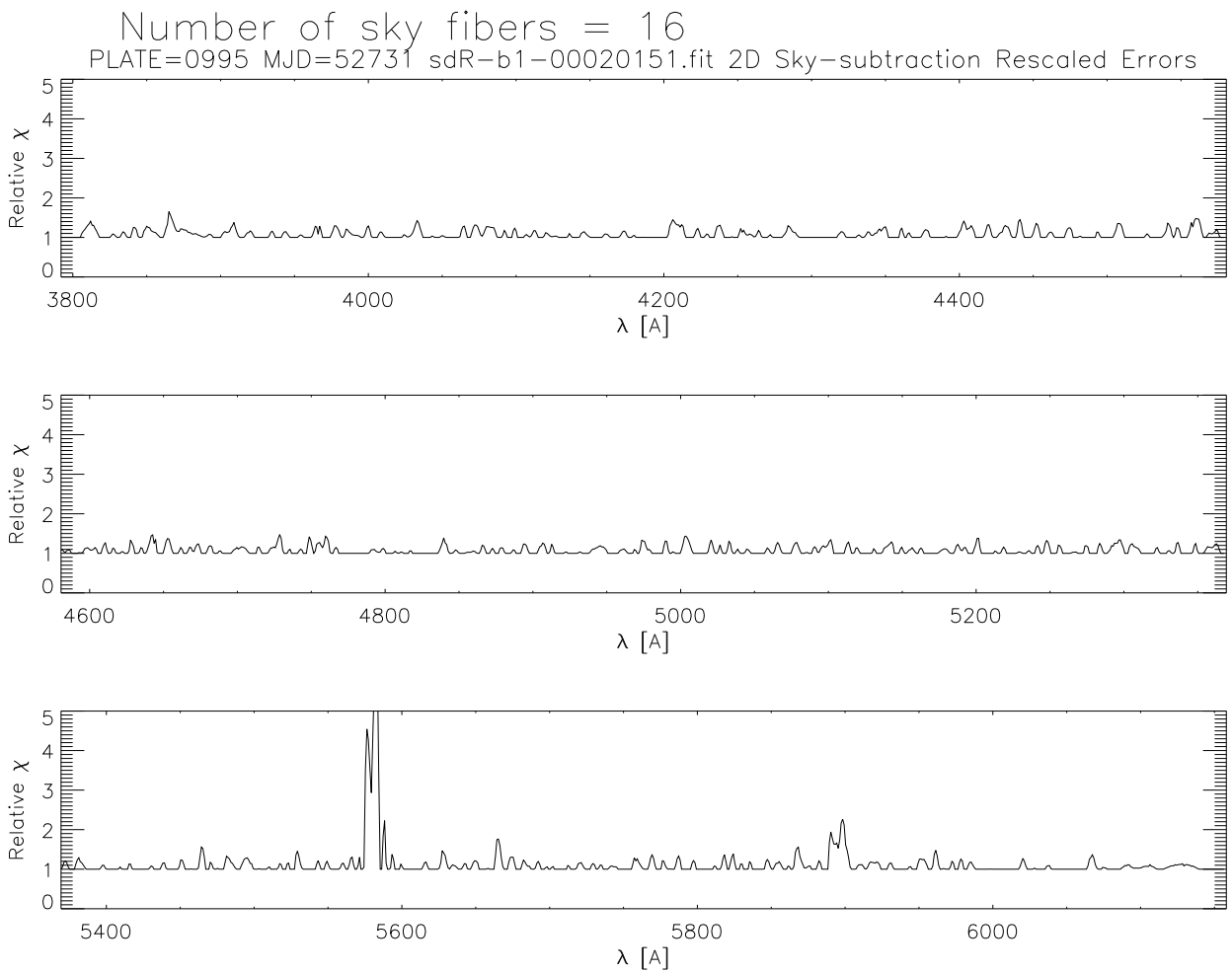

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

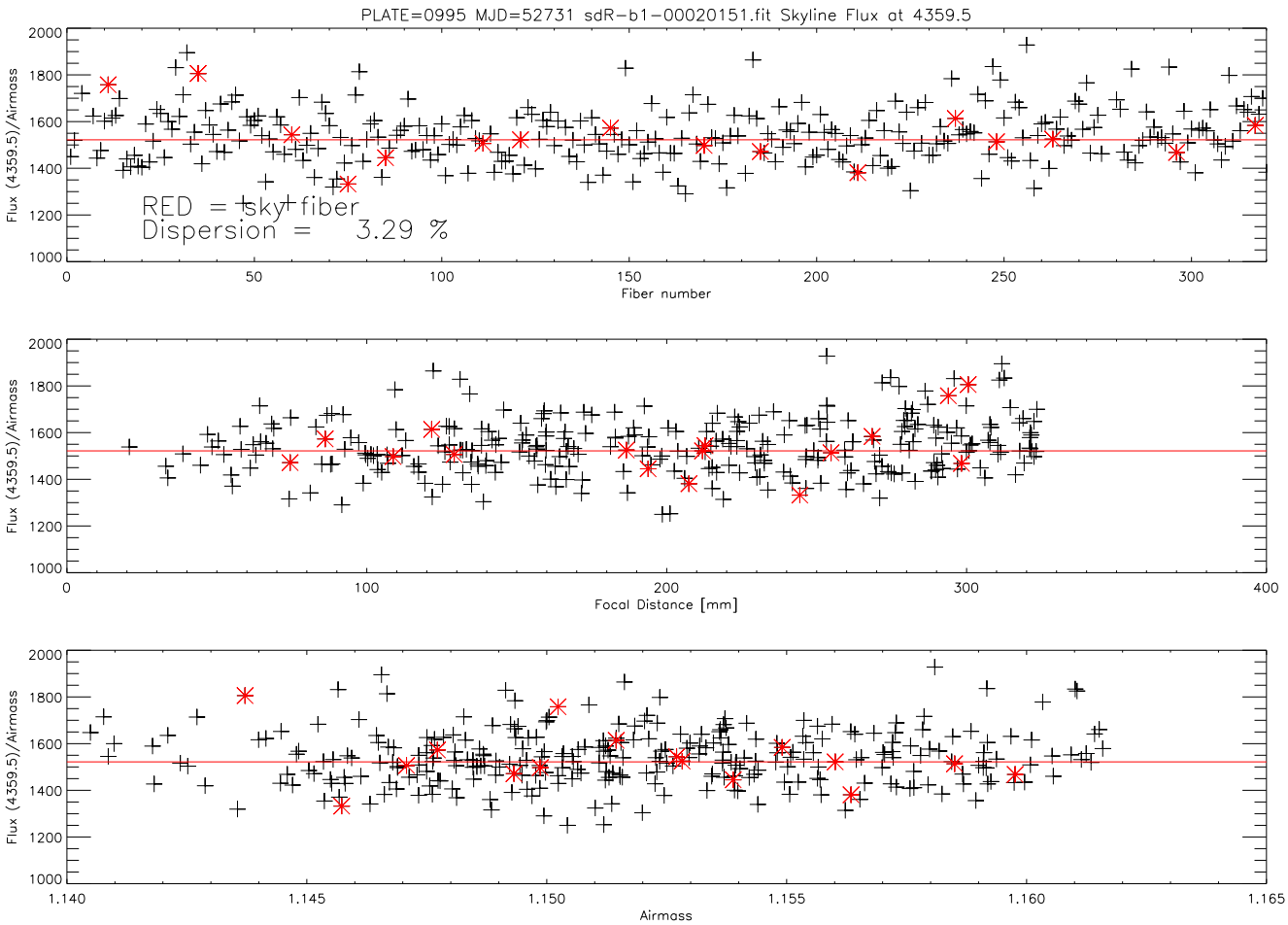

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

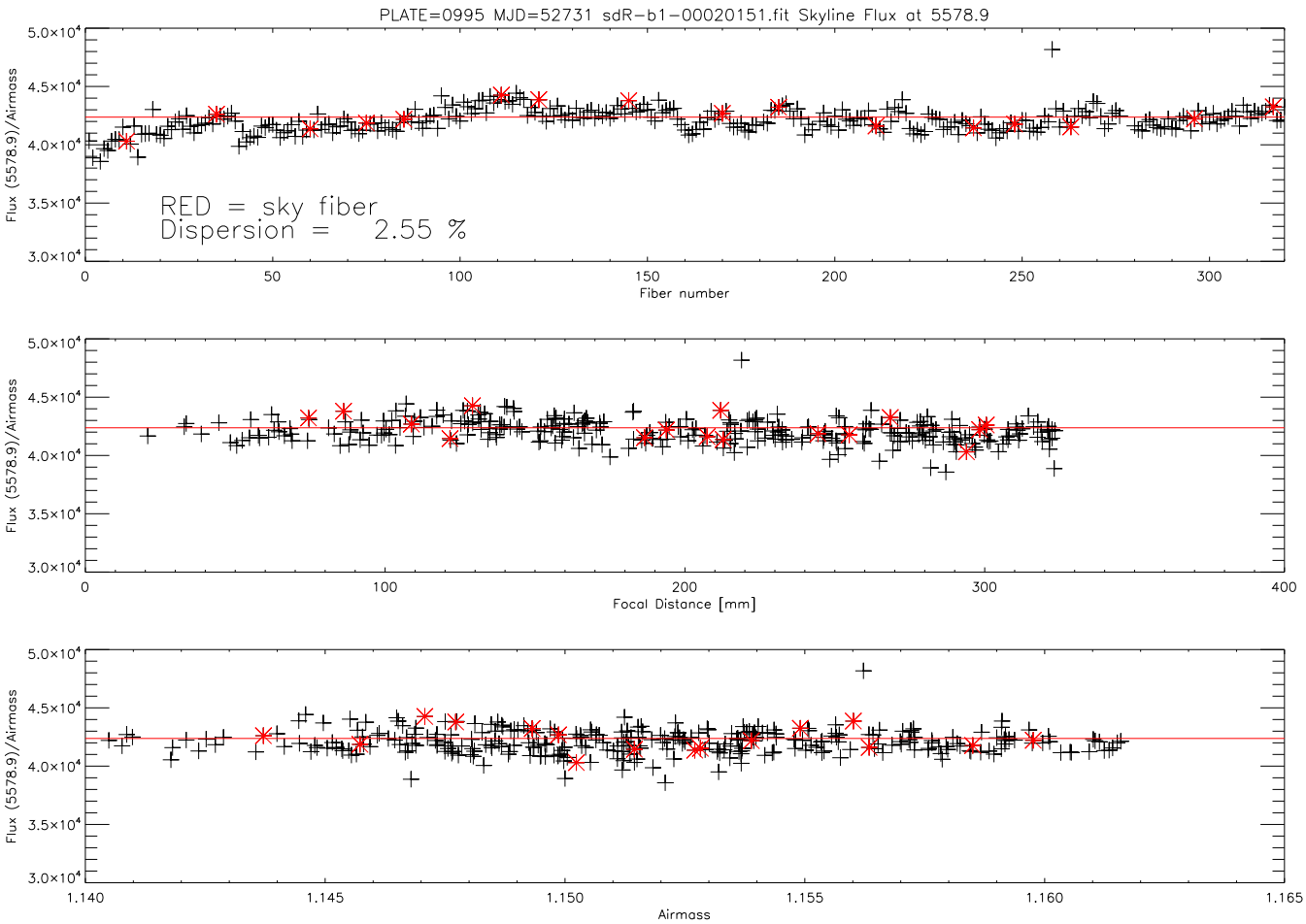

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

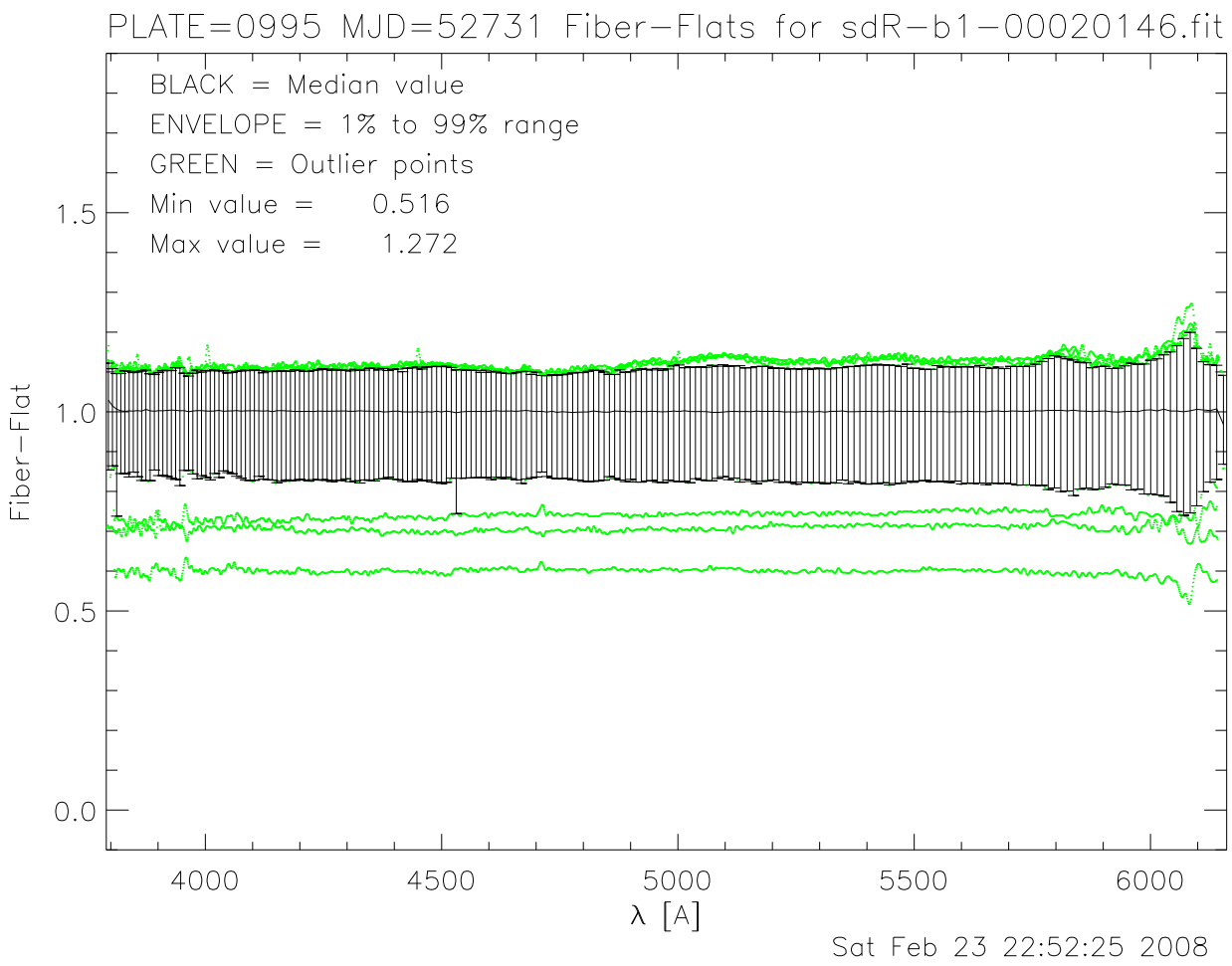

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

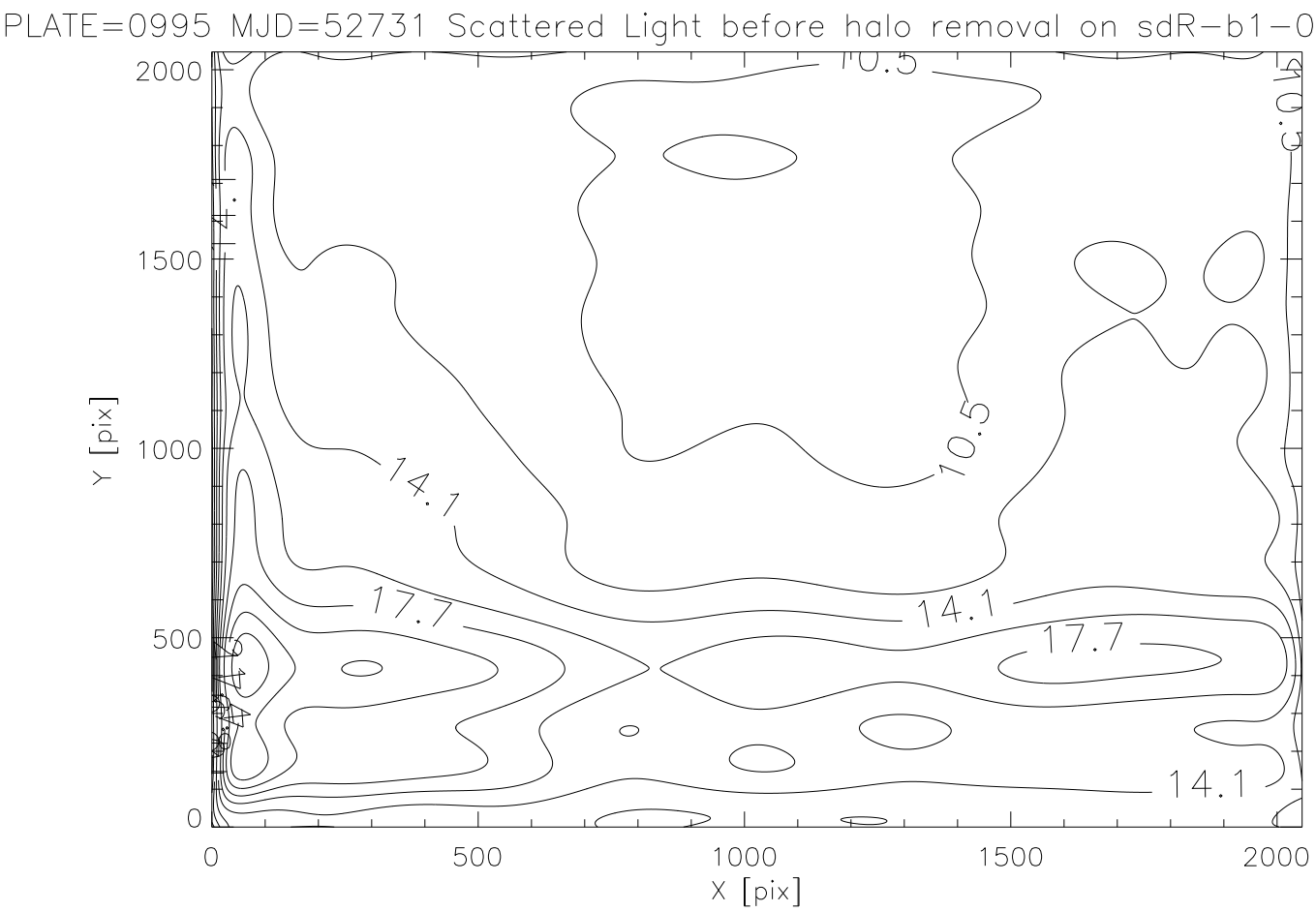

PLATE=0995 MJD=52731 sdR-b1-00020151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

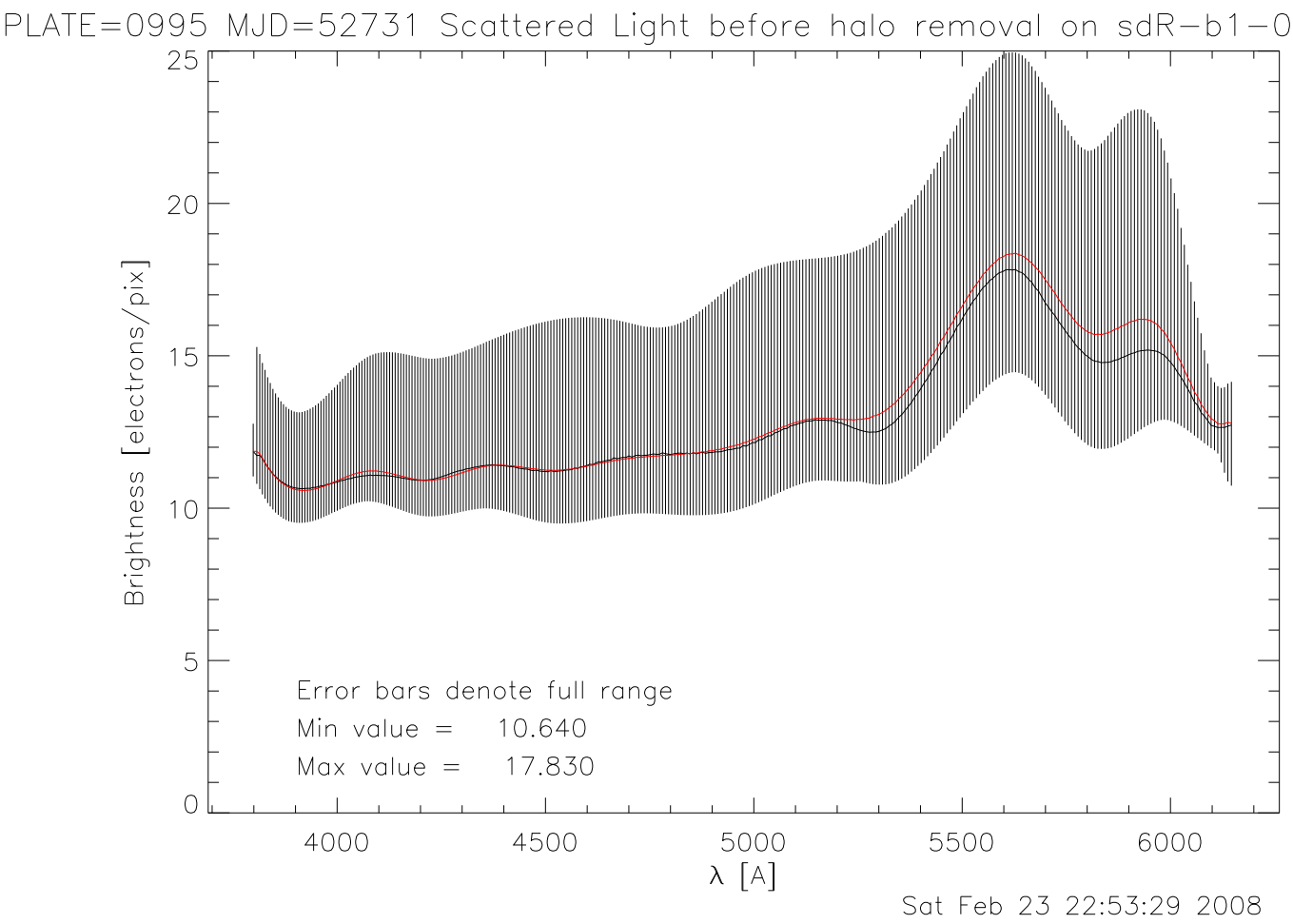

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

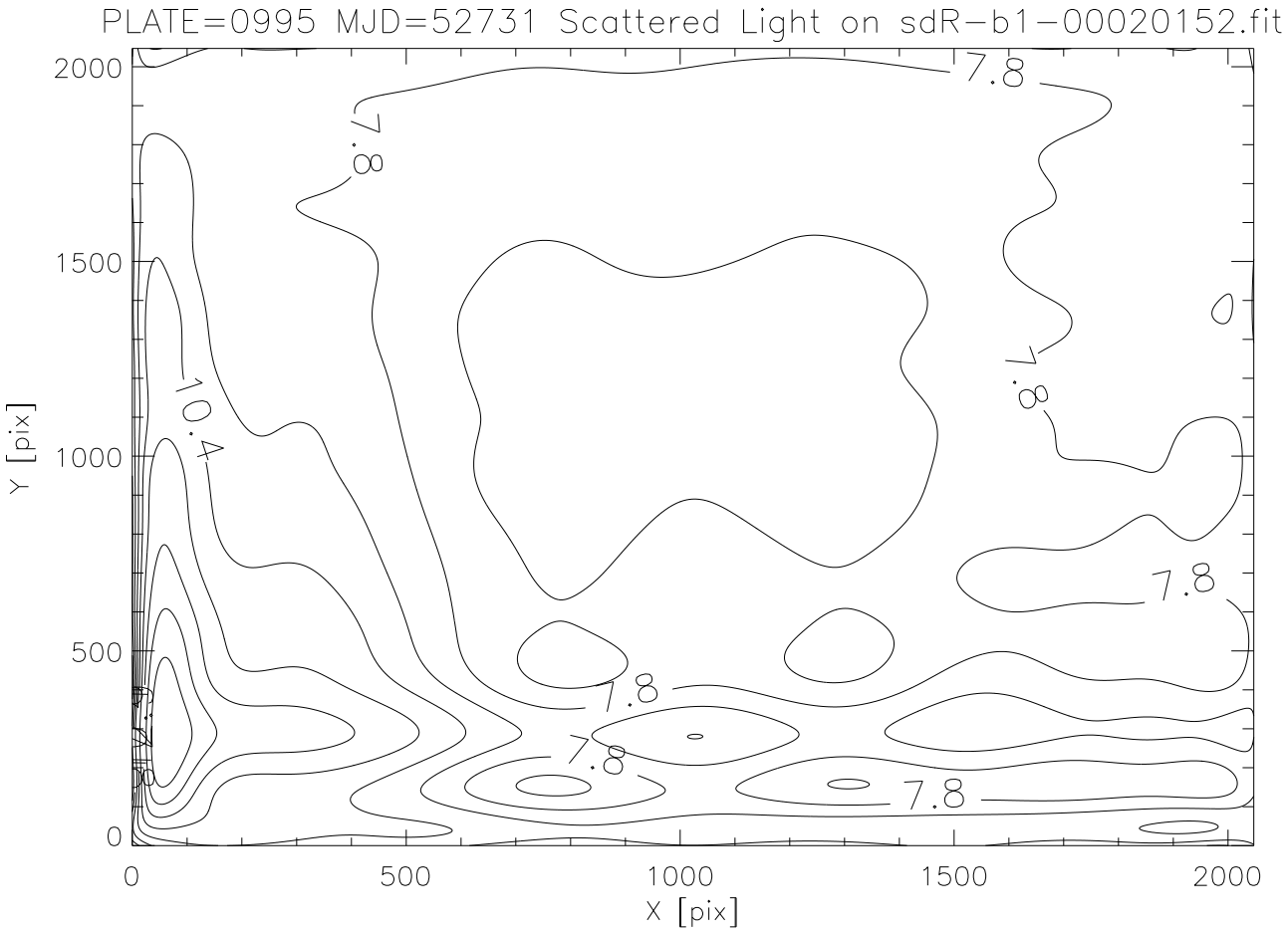

PLATE=0995 MJD=52731 sdR-b1-00020151.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 3.29 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

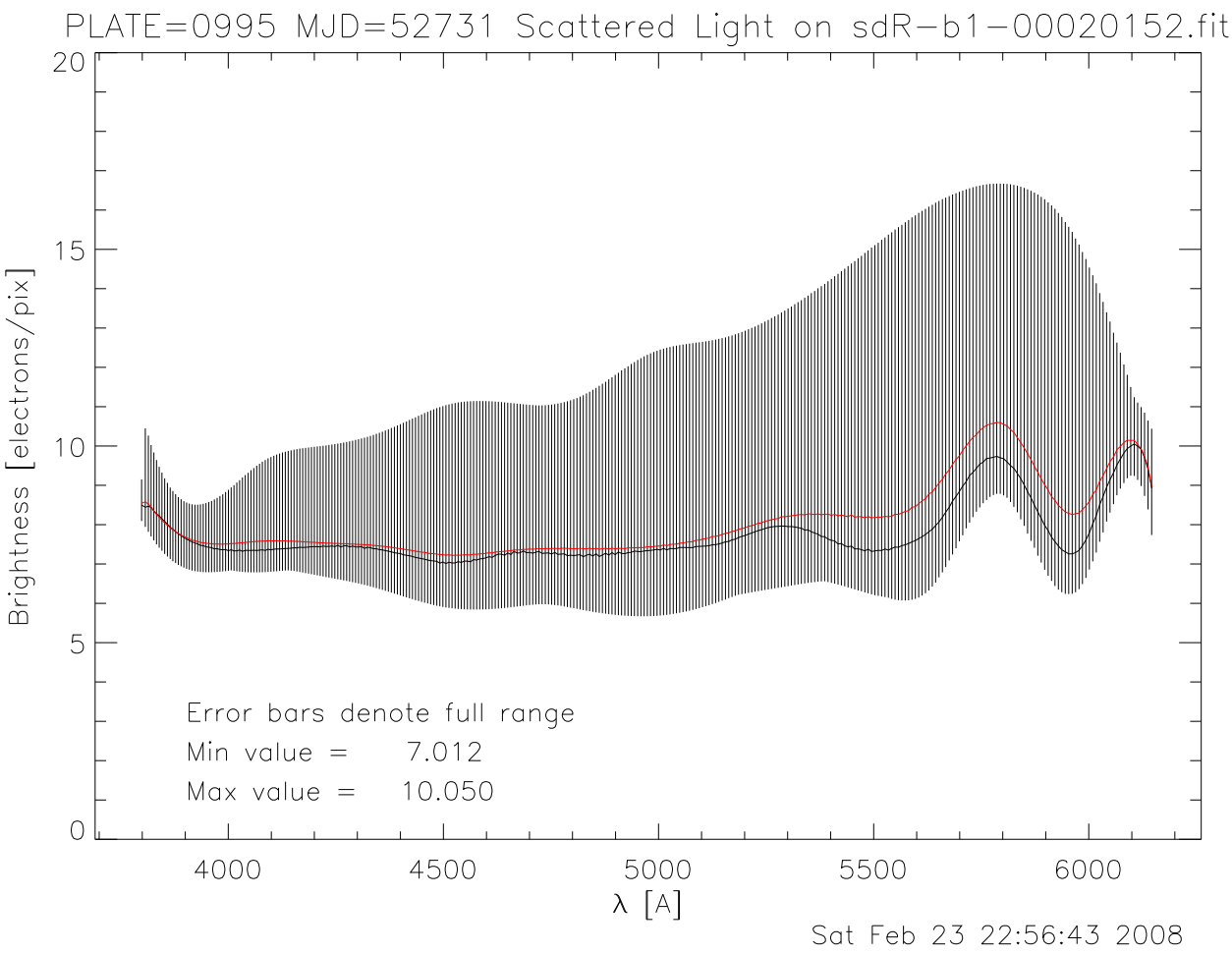

PLATE=0995 MJD=52731 sdR-b1-00020151.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.55 %
Fiber number
Focal Distance [mm]
Airmass

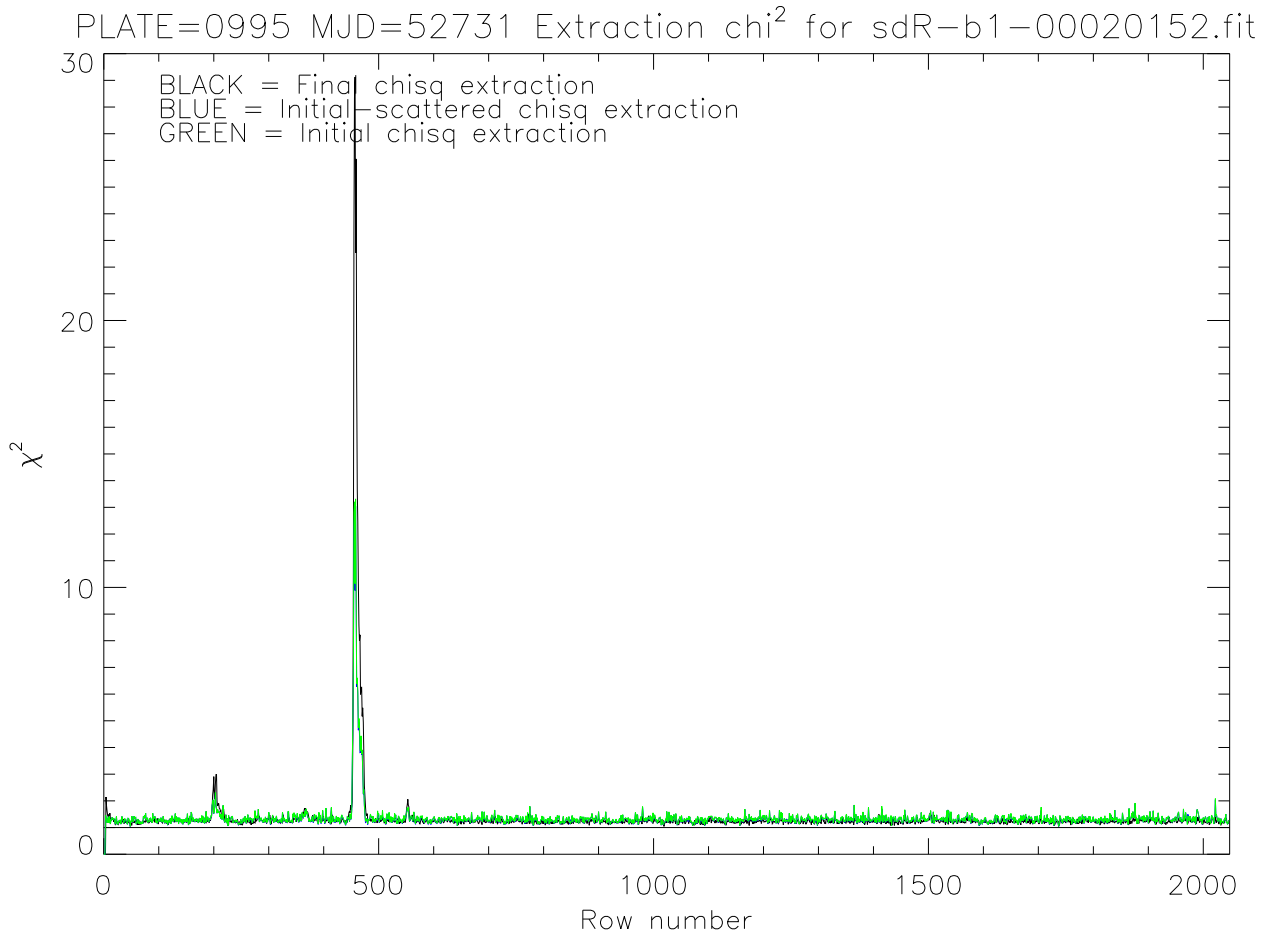

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b1-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.516
Max value = 1.272
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:52:25 2008

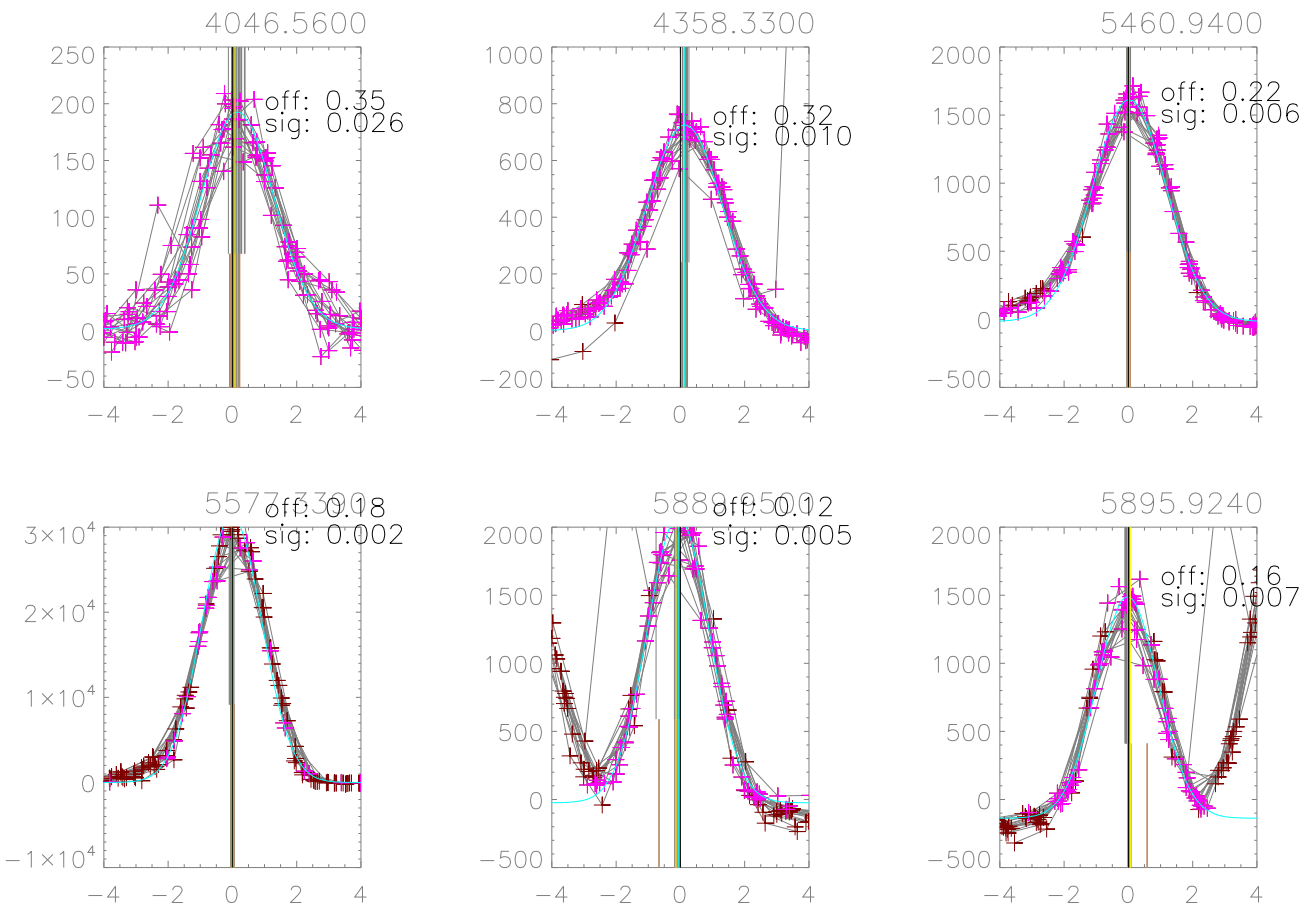

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b1-00020152.f
10.5
14.1
17.7
Y [pix]
X [pix]
0
500
1000
1500
2000

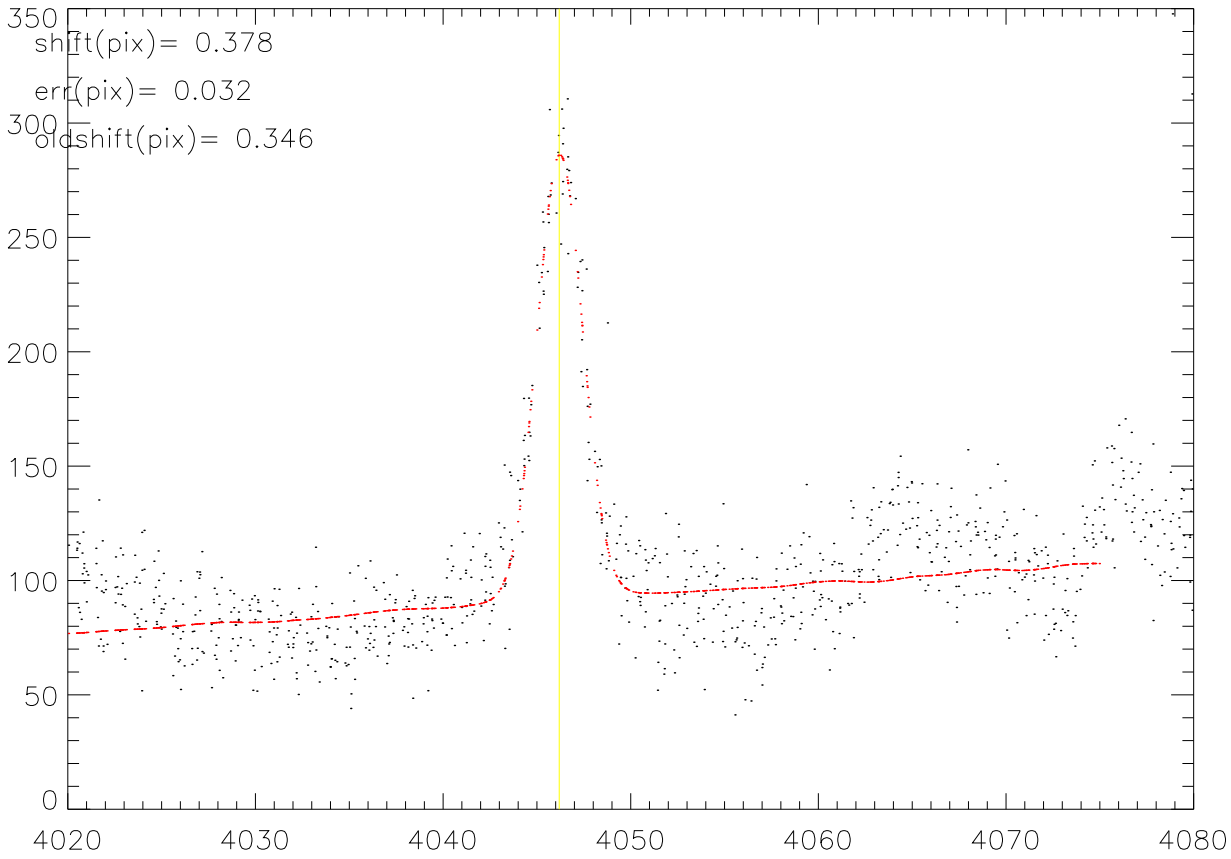

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b1-00020152.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 10.640
Max value = 17.830
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 22:53:29 2008

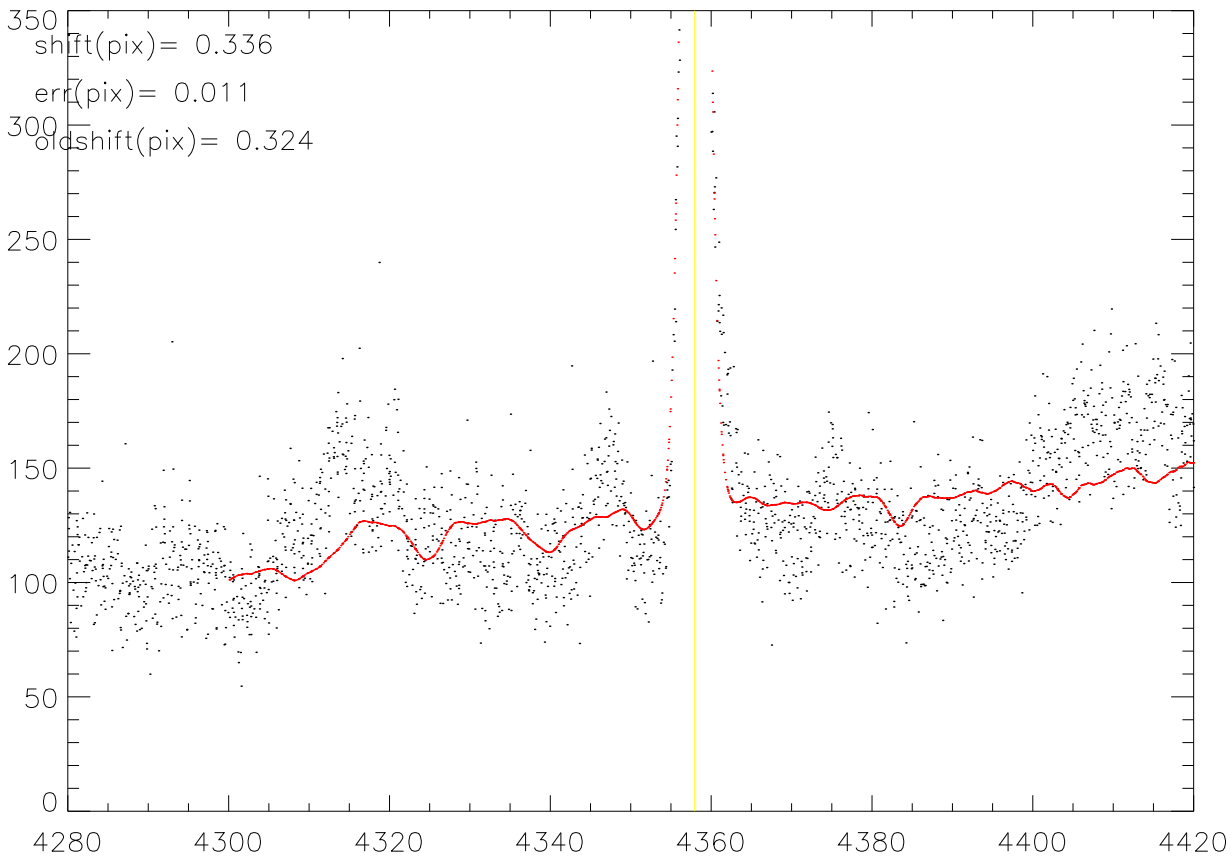

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020152.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.8
10.4

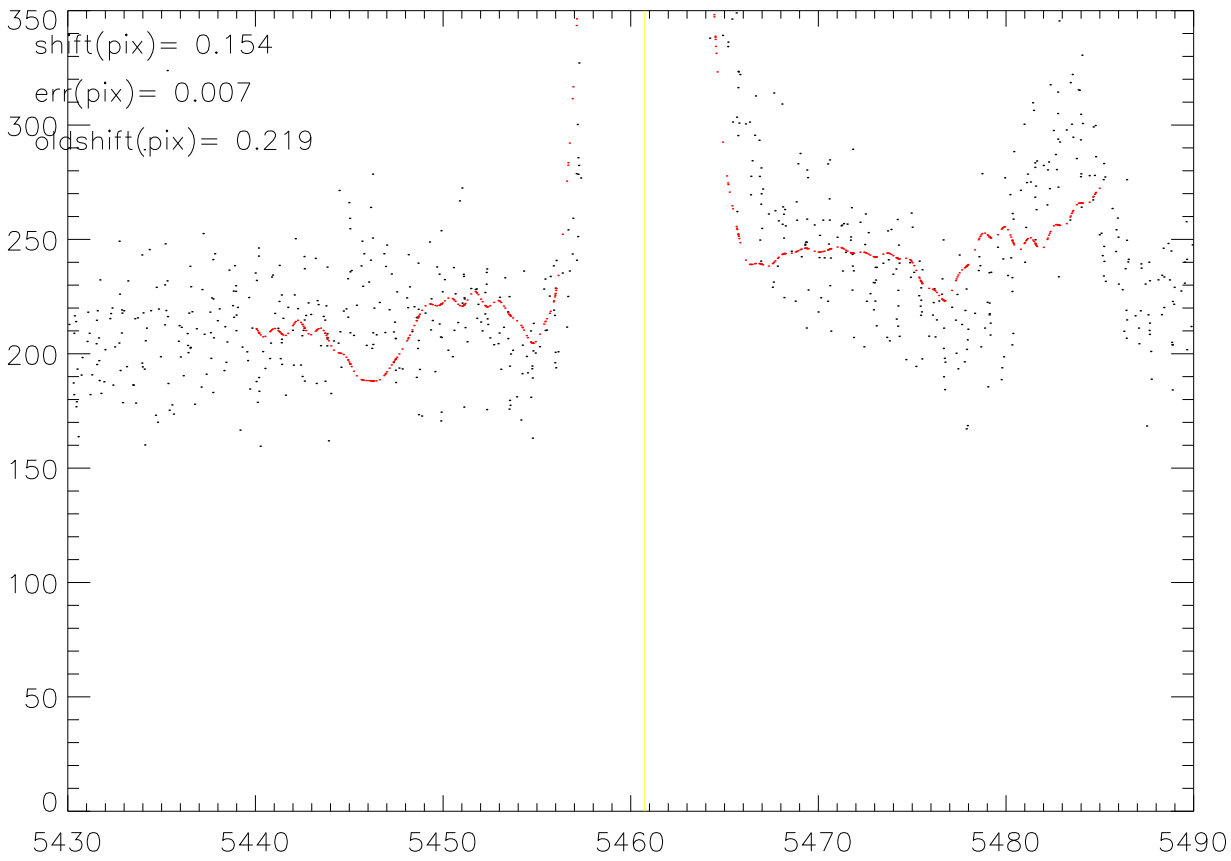

PLATE=0995 MJD=52731 Scattered Light on sdR-b1-00020152.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.012
Max value = 10.050
Sat Feb 23 22:56:43 2008

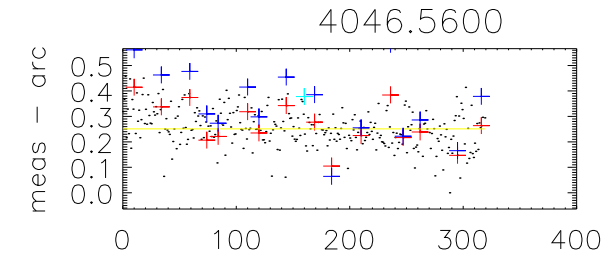

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b1-00020152.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
30
20
10
0
0
500
1000
1500
2000
Row number

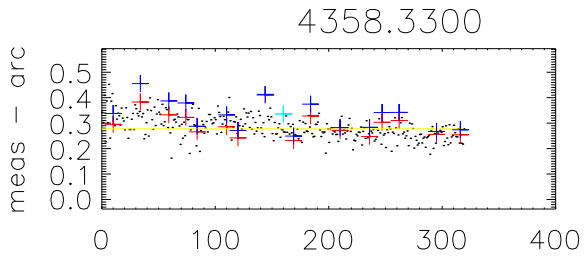

4046.5600
off: 0.35
sig: 0.026
4358.3300
off: 0.32
sig: 0.010
5460.9400
off: 0.22
sig: 0.006
off: 0.18
sig: 0.002
off: 0.12
sig: 0.005
5895.9240
off: 0.16
sig: 0.007

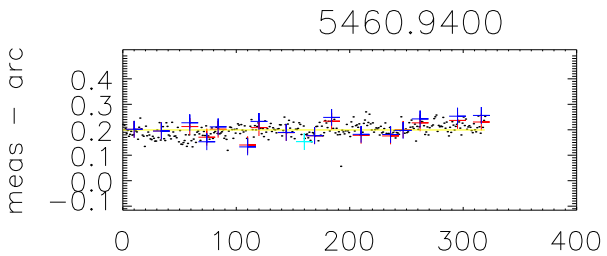

shift(pix)= 0.378
err(pix)= 0.032
oldshift(pix)= 0.346
350
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

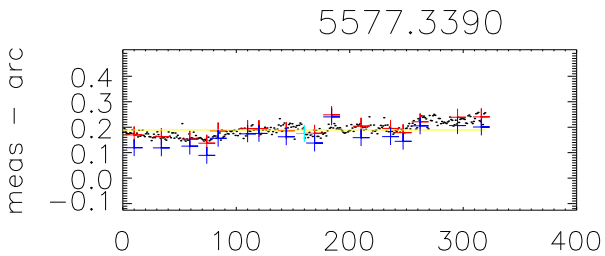

shift(pix)= 0.336
err(pix)= 0.011
oldshift(pix)= 0.324
350
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

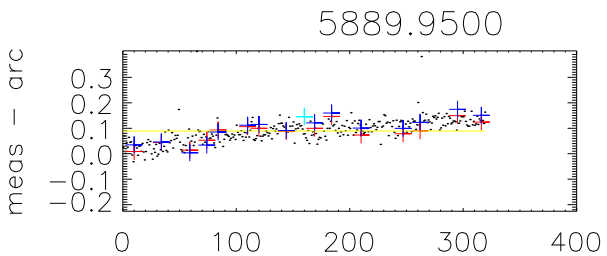

shift(pix)= 0.154
err(pix)= 0.007
oldshift(pix)= 0.219
350
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

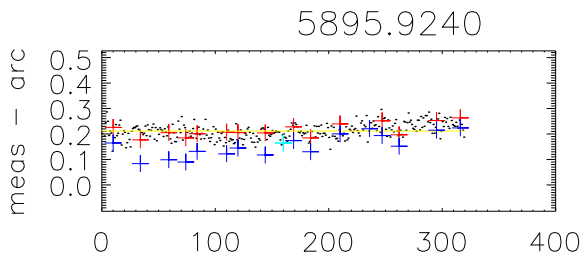

4046.5600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

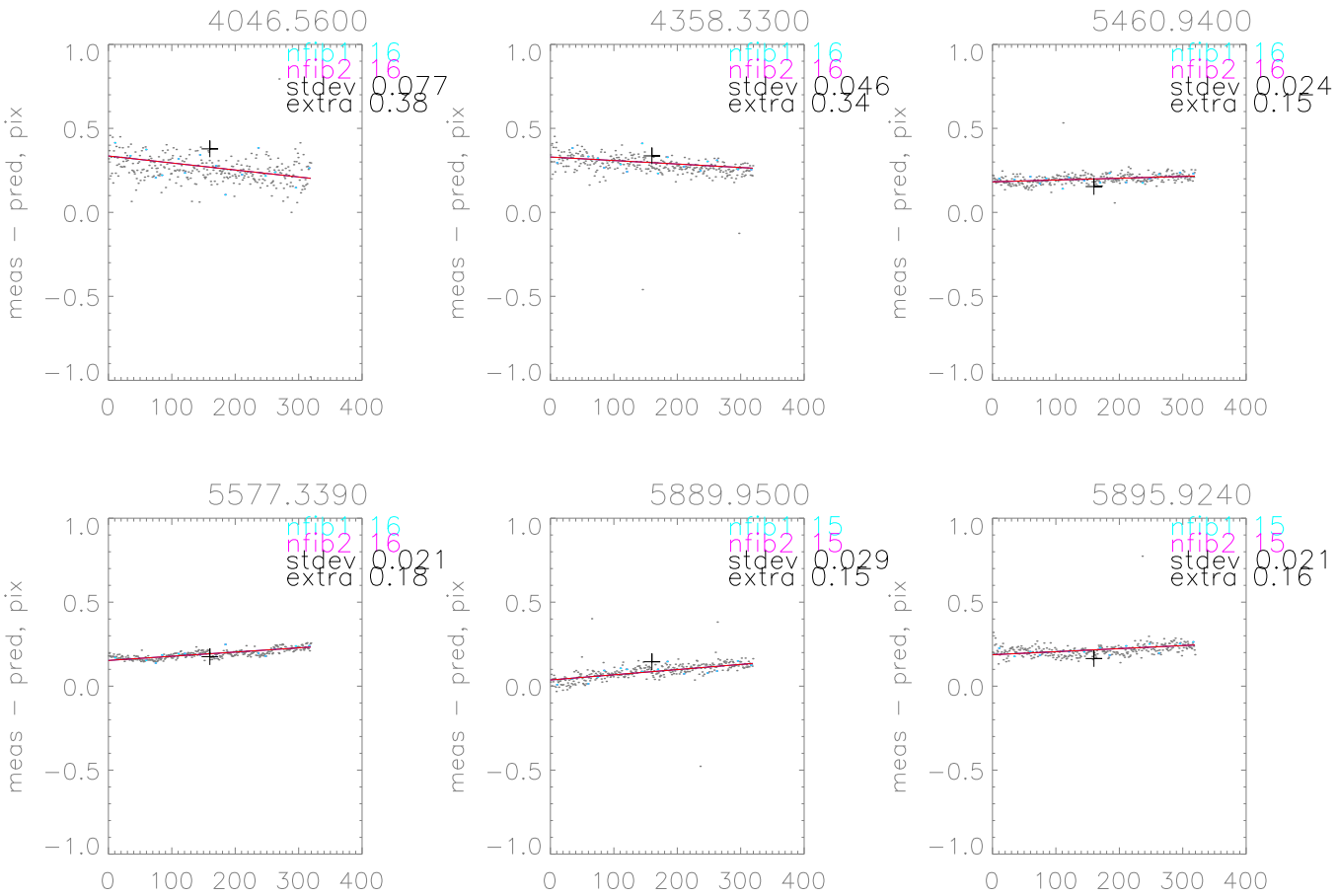

4358.3300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

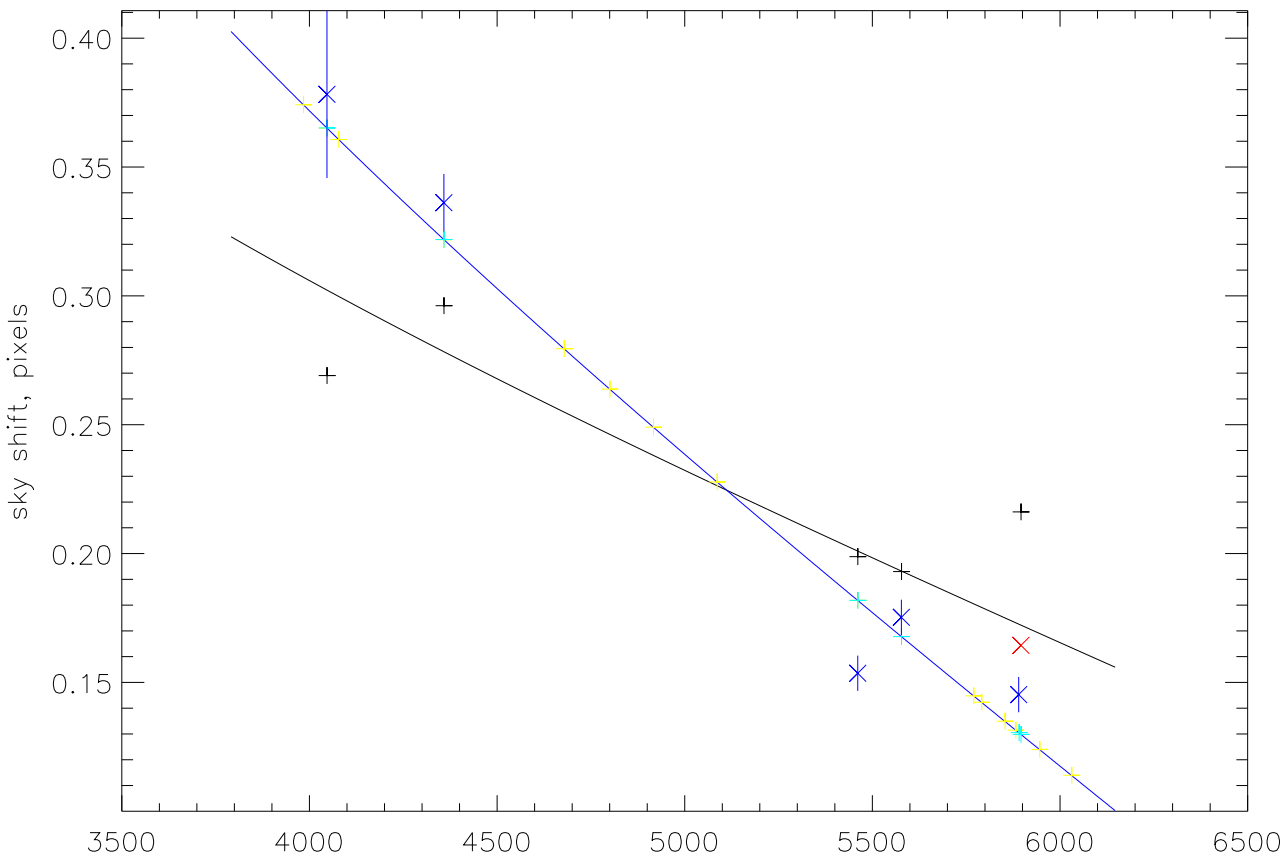

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

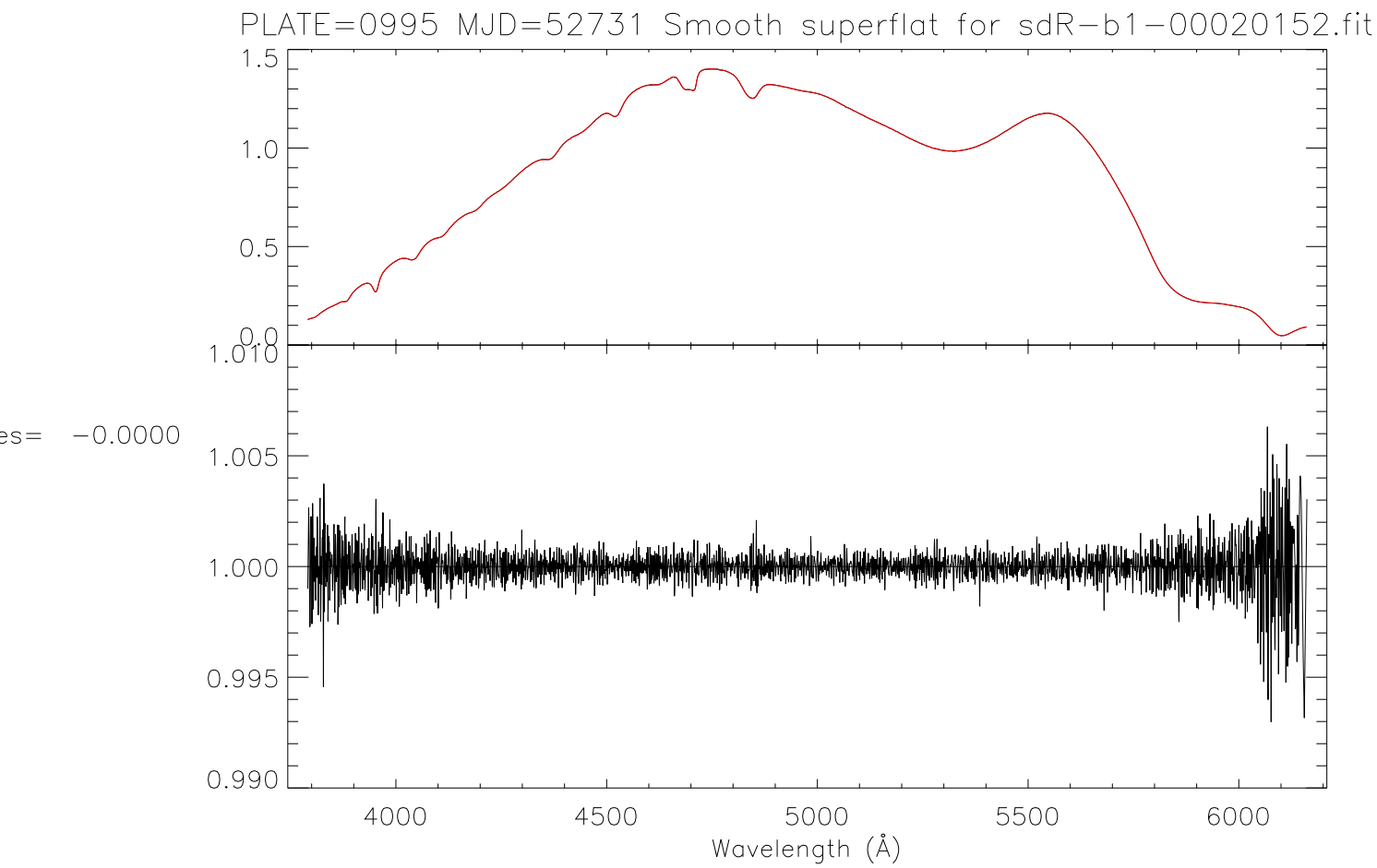

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

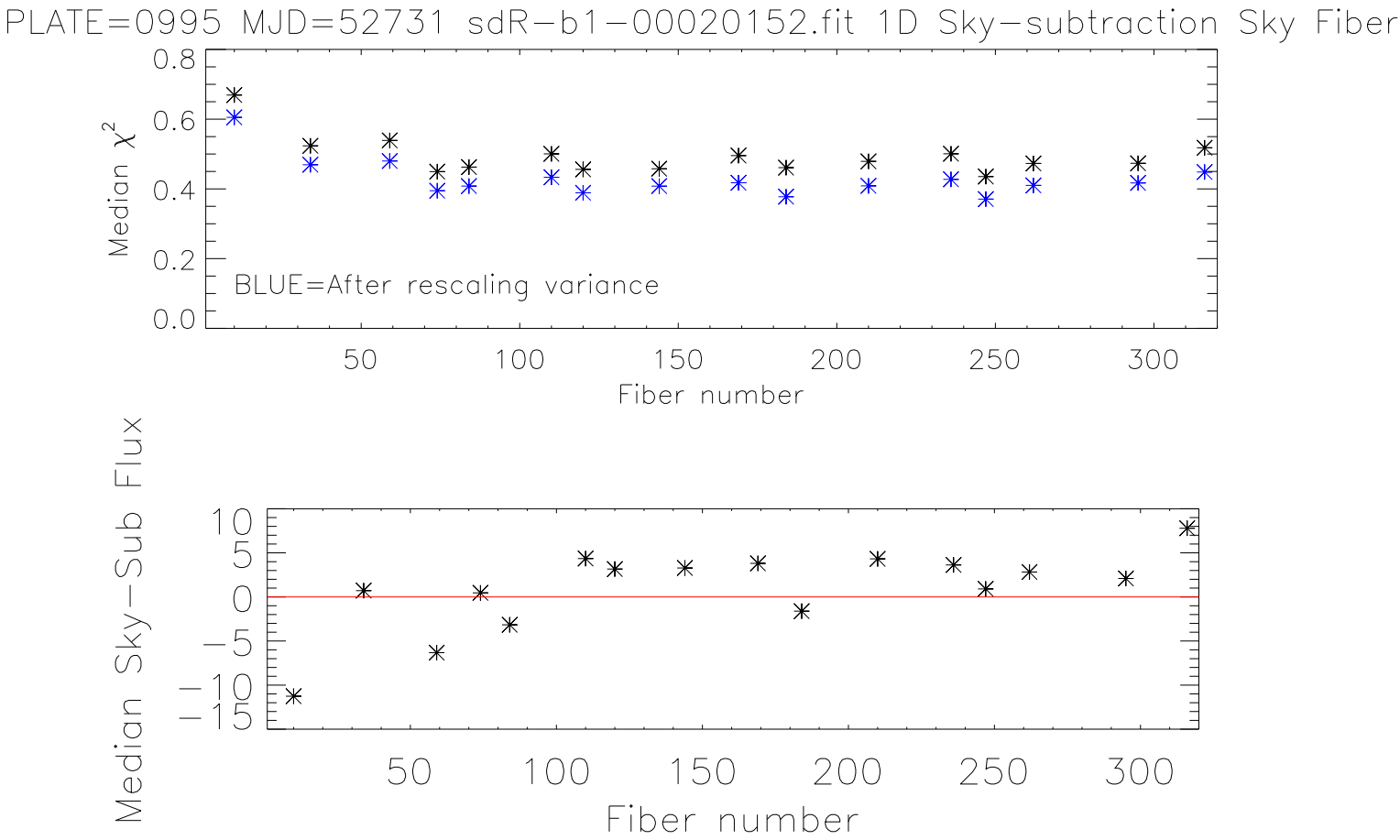

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

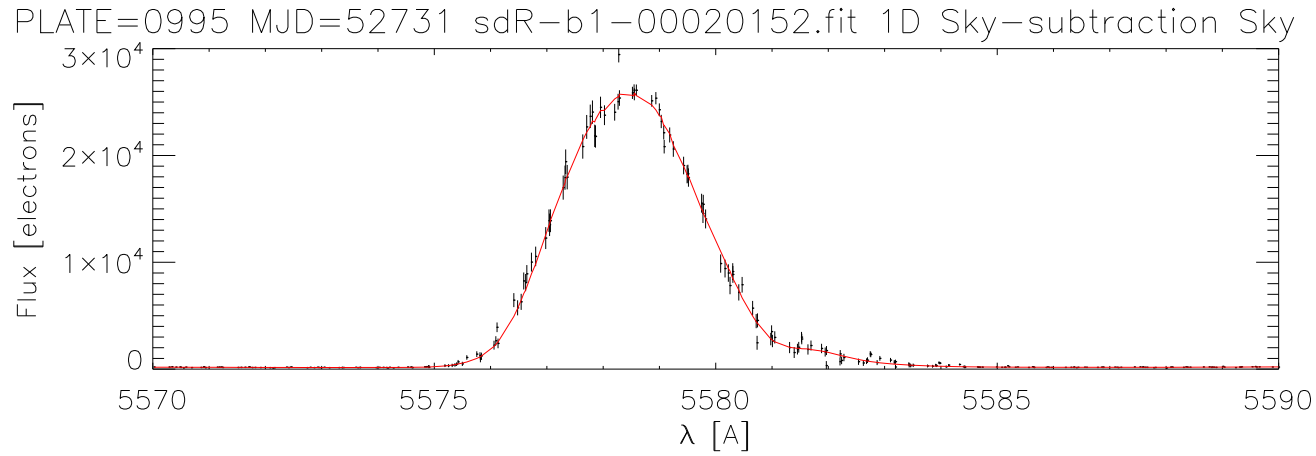

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

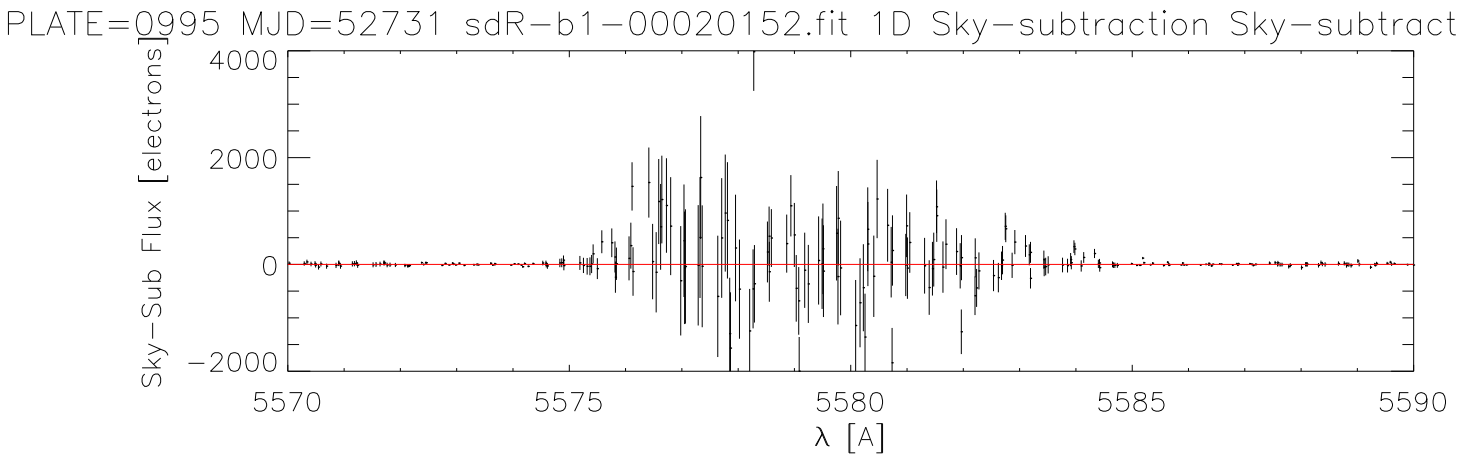

4046.5600
nfib1 16
nfib2 16
stdev 0.077
extra 0.38
4358.3300
nfib1 16
nfib2 16
stdev 0.046
extra 0.34
5460.9400
nfib1 16
nfib2 16
stdev 0.024
extra 0.15
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.18
5889.9500
nfib1 15
nfib2 15
stdev 0.029
extra 0.15
5895.9240
nfib1 15
nfib2 15
stdev 0.021
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

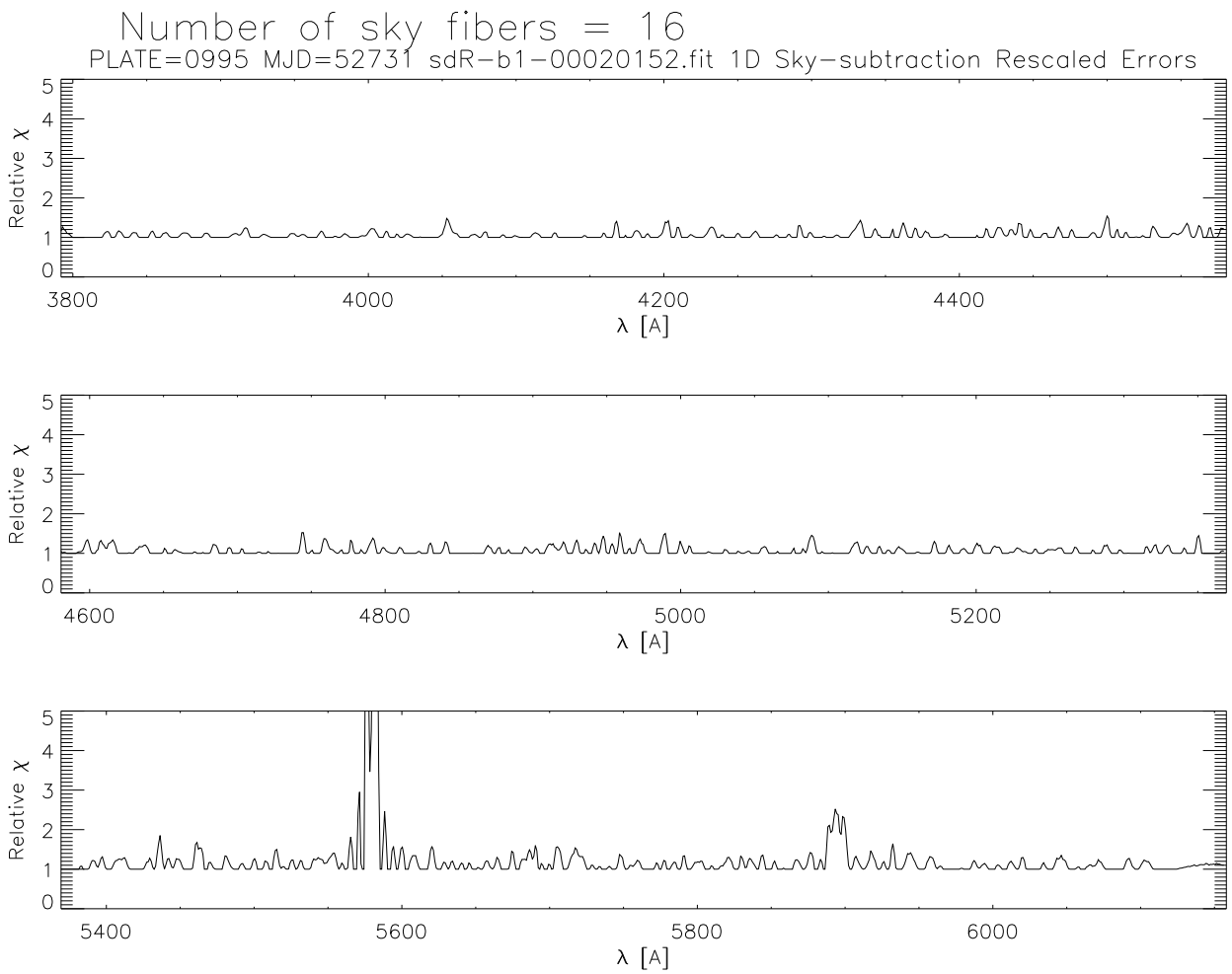

0.40
0.35
0.30
0.25
0.20
0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

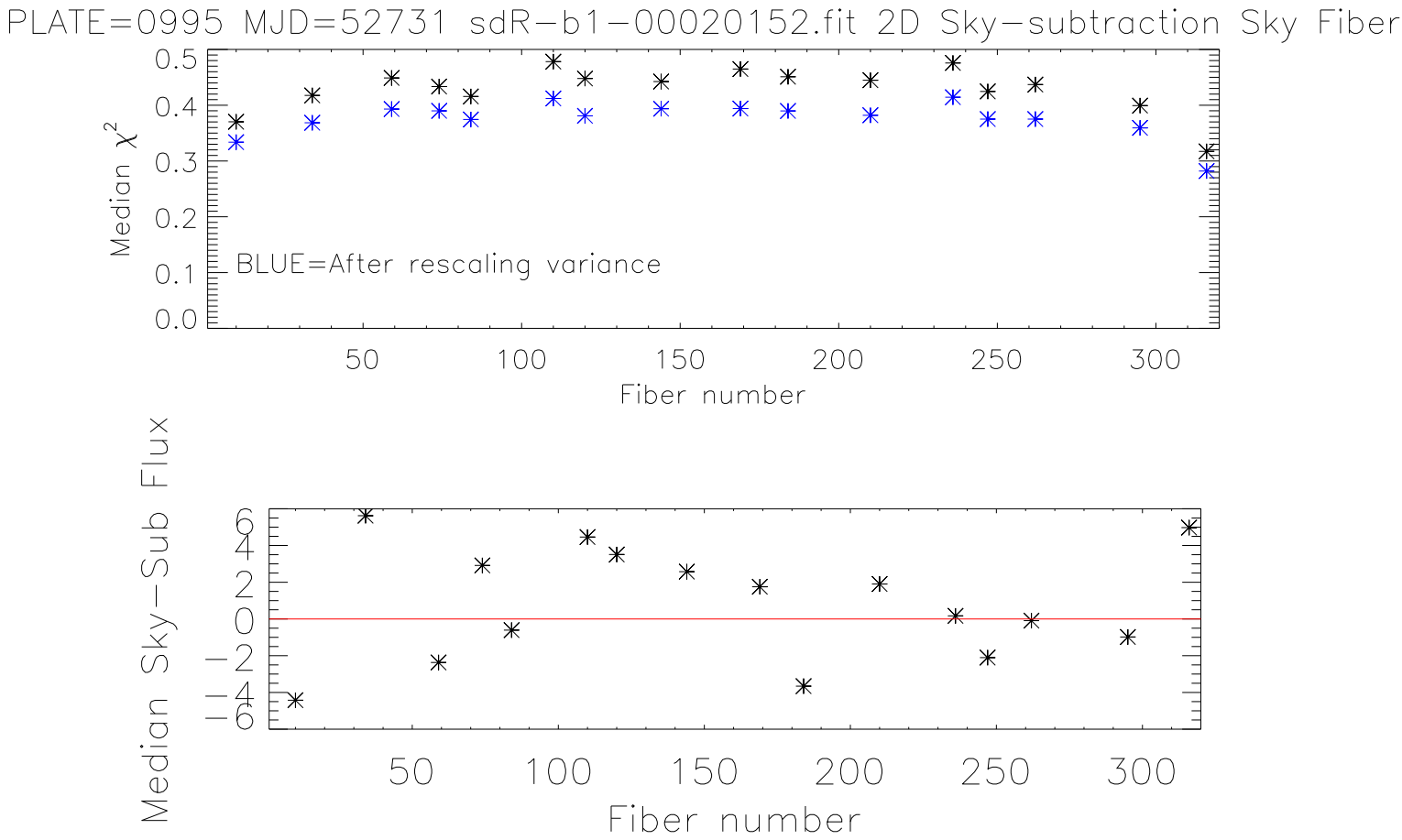

PLATE=0995 MJD=52731 Smooth superflat for sdR-b1-00020152.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

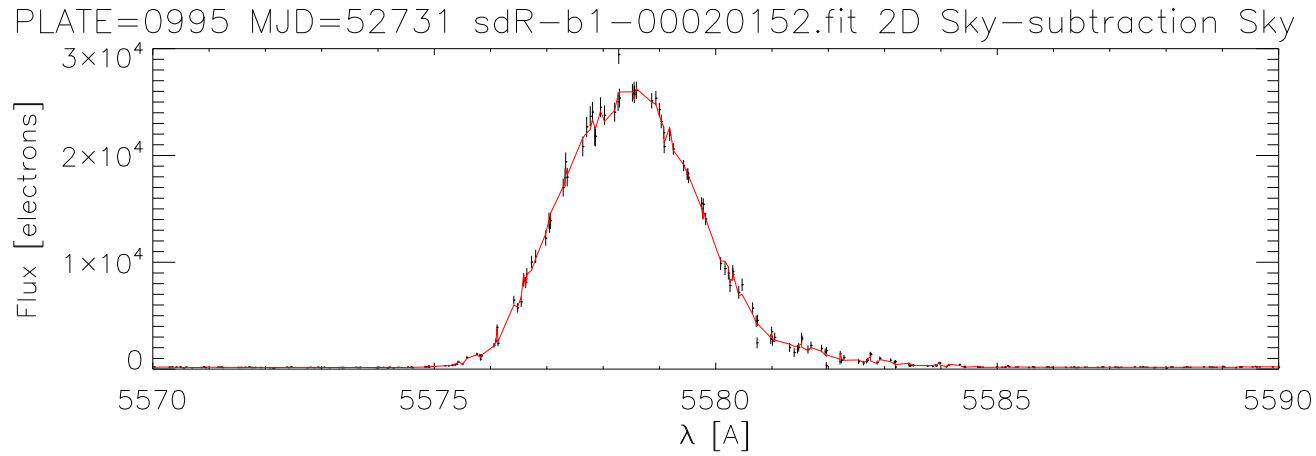

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

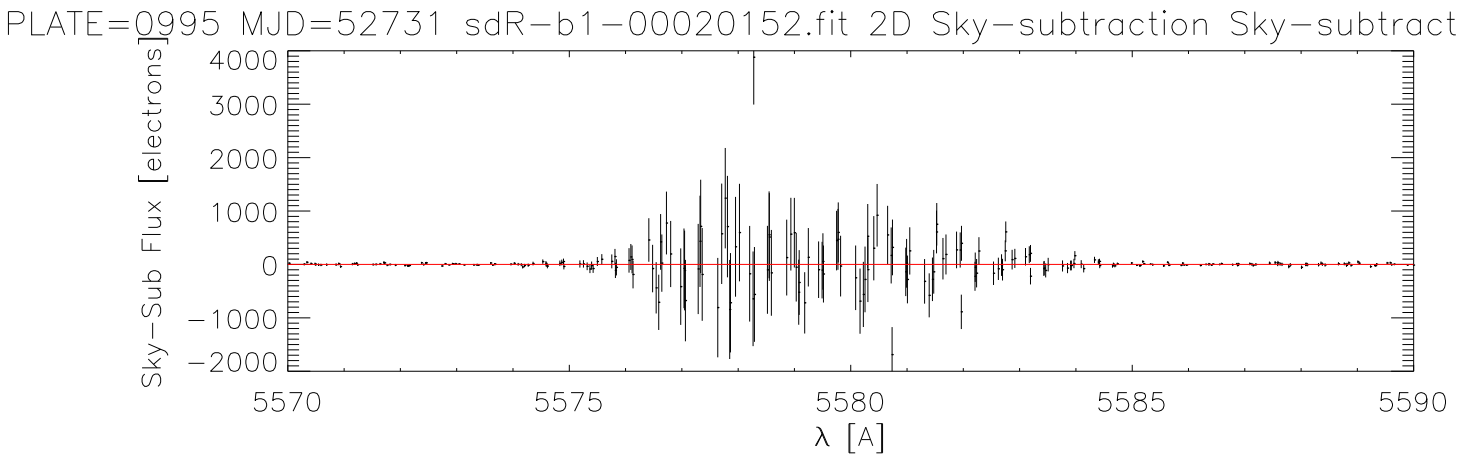

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

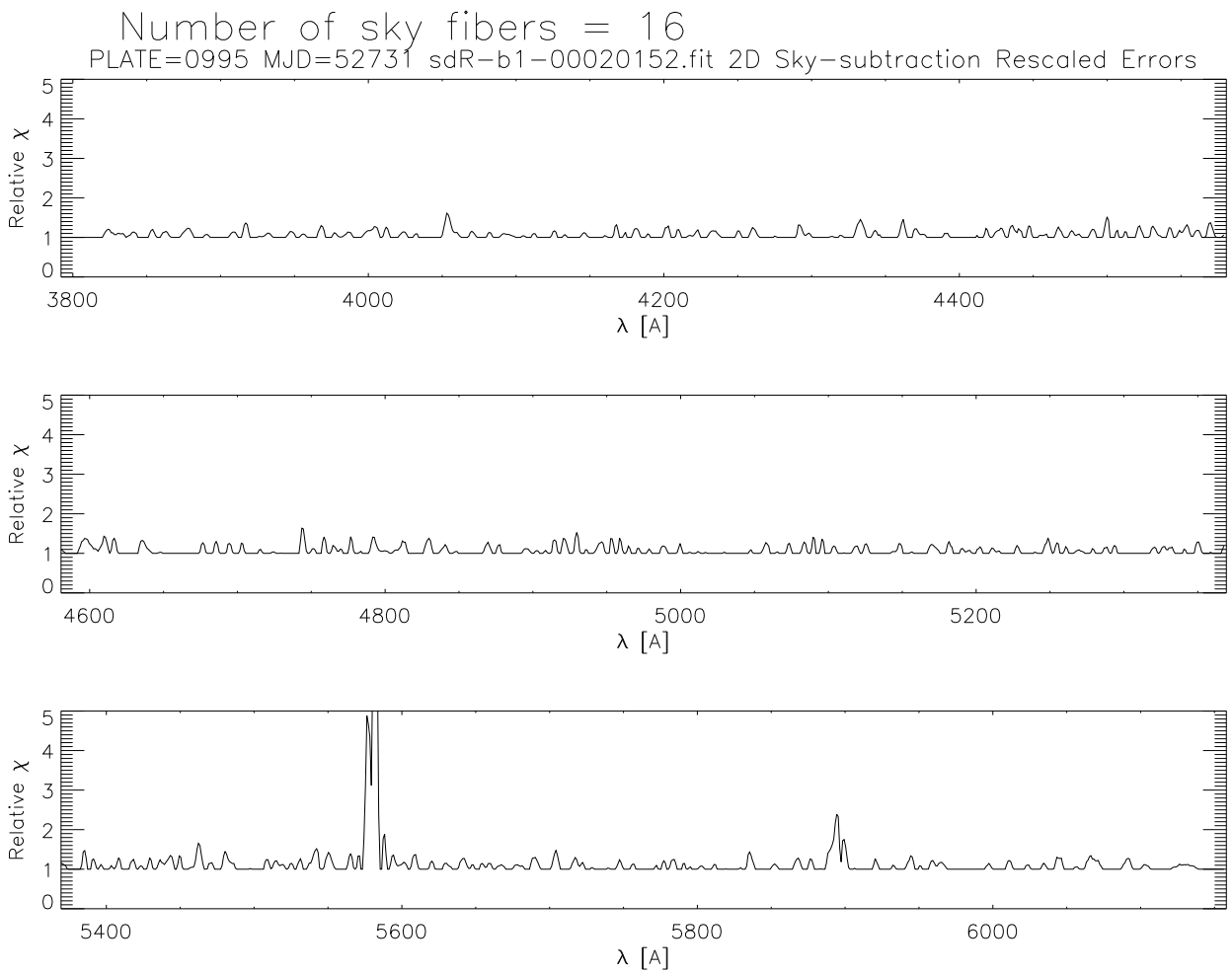

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
2000
0
−2000
5570
5575
5580
5585
5590
λ [A]

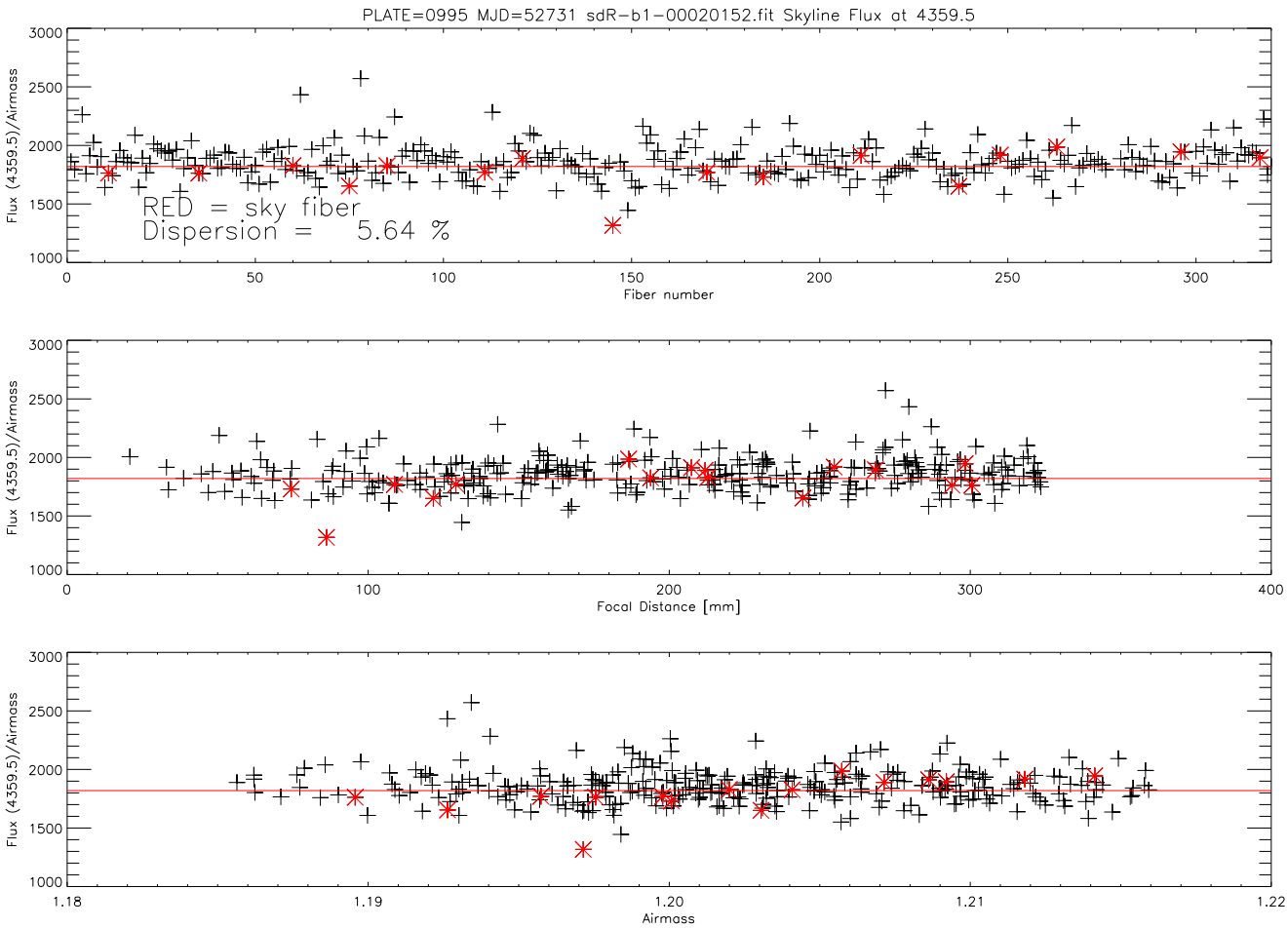

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020152.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

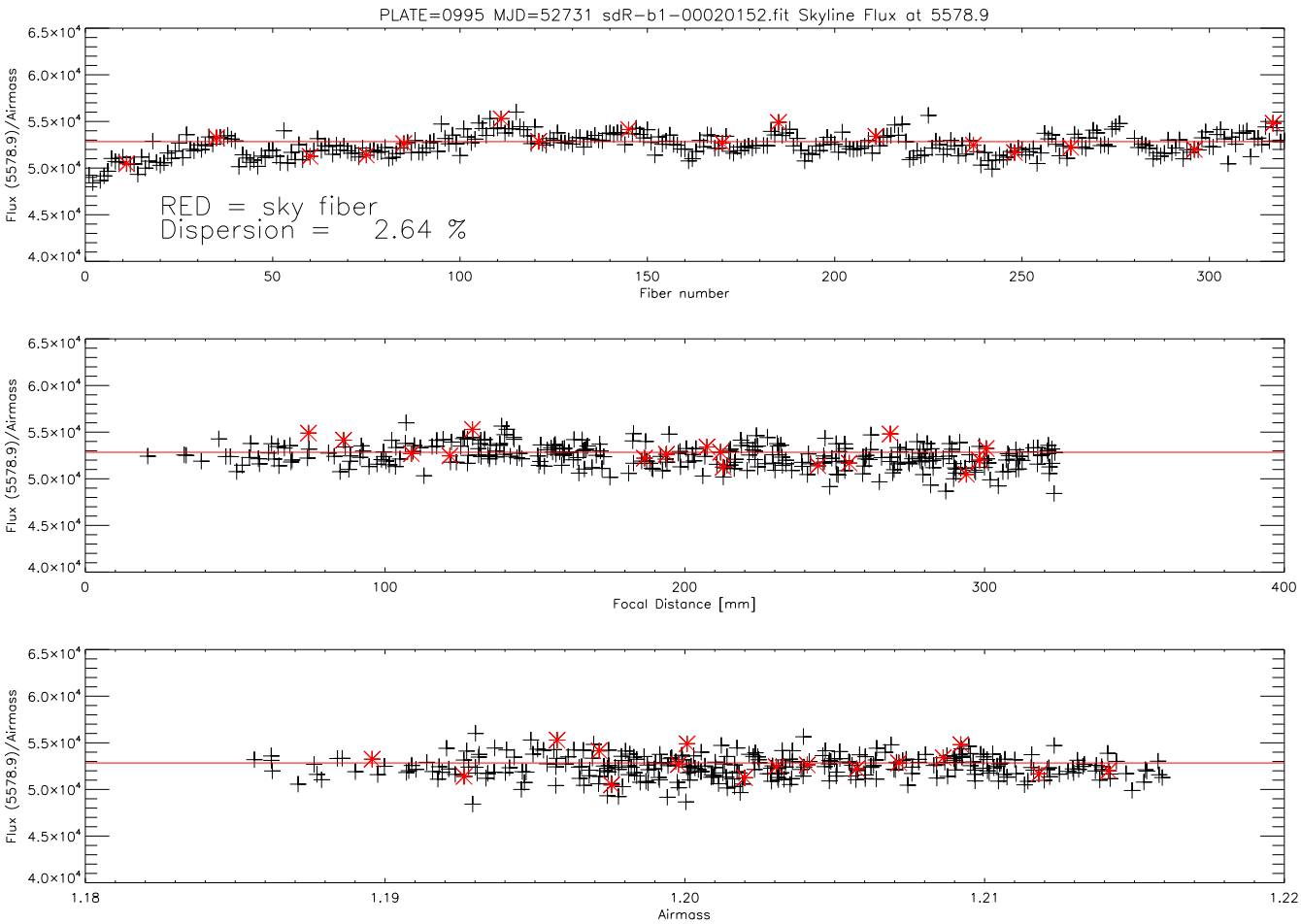

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

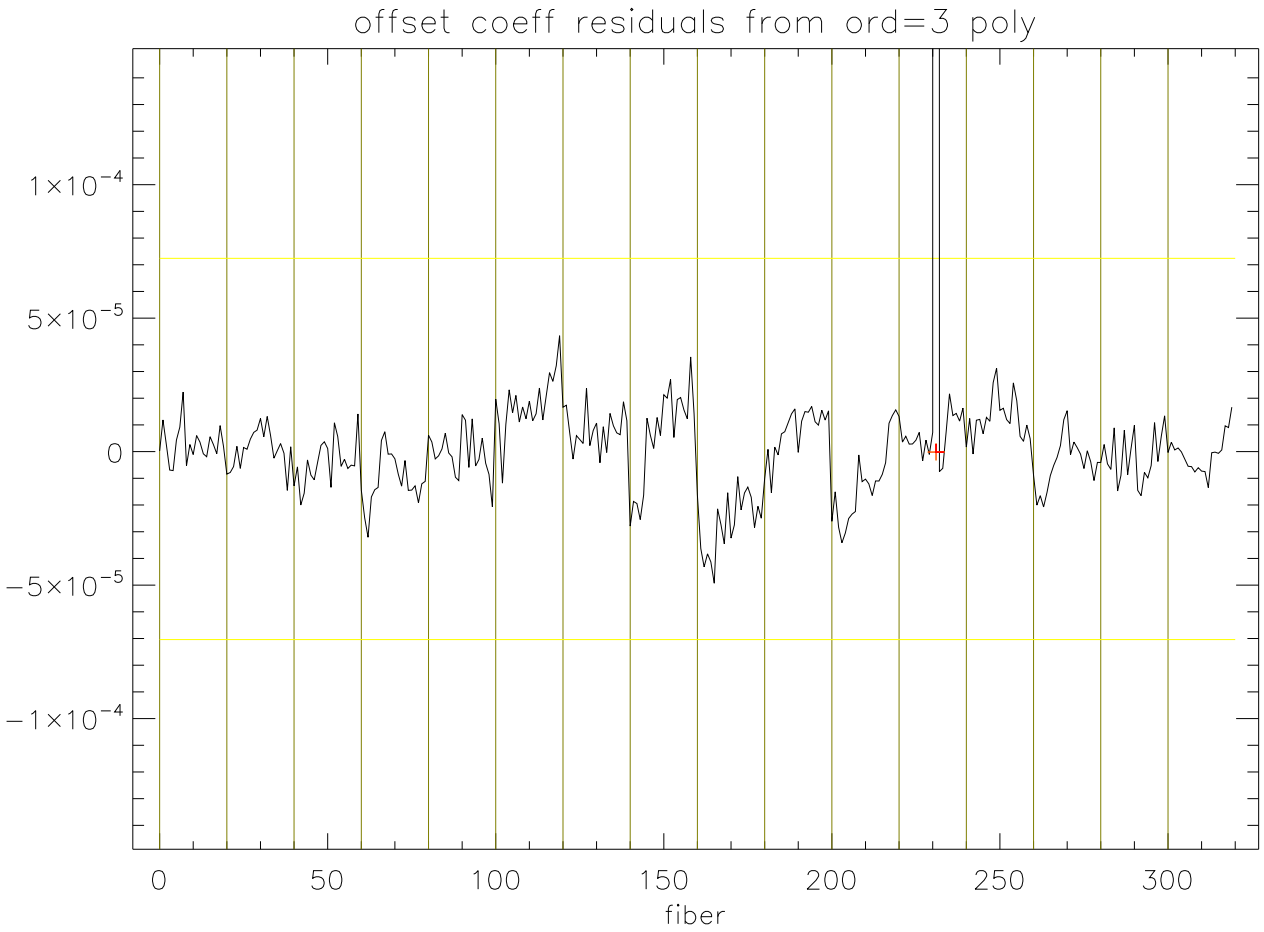

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

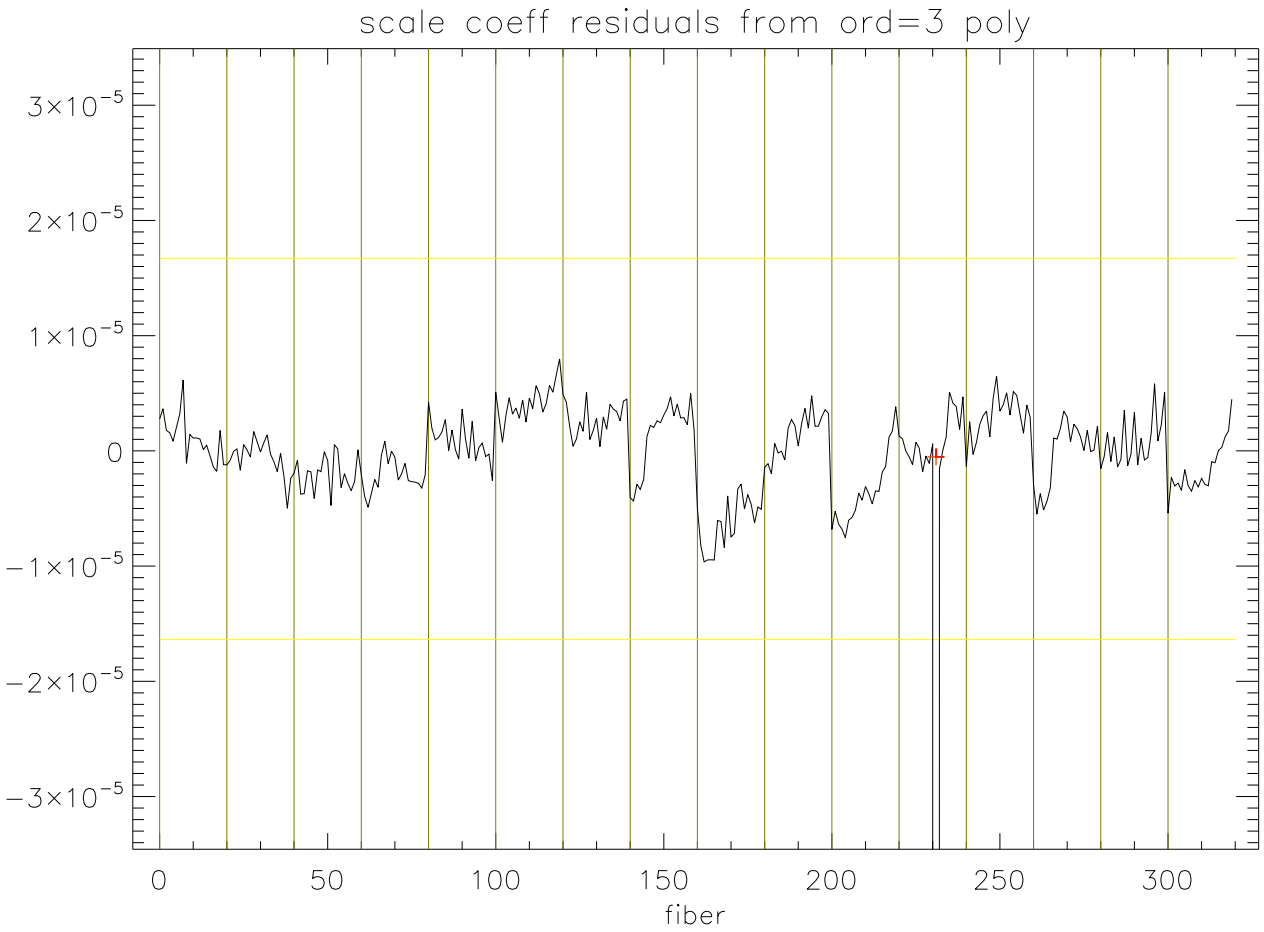

PLATE=0995 MJD=52731 sdR-b1-00020152.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

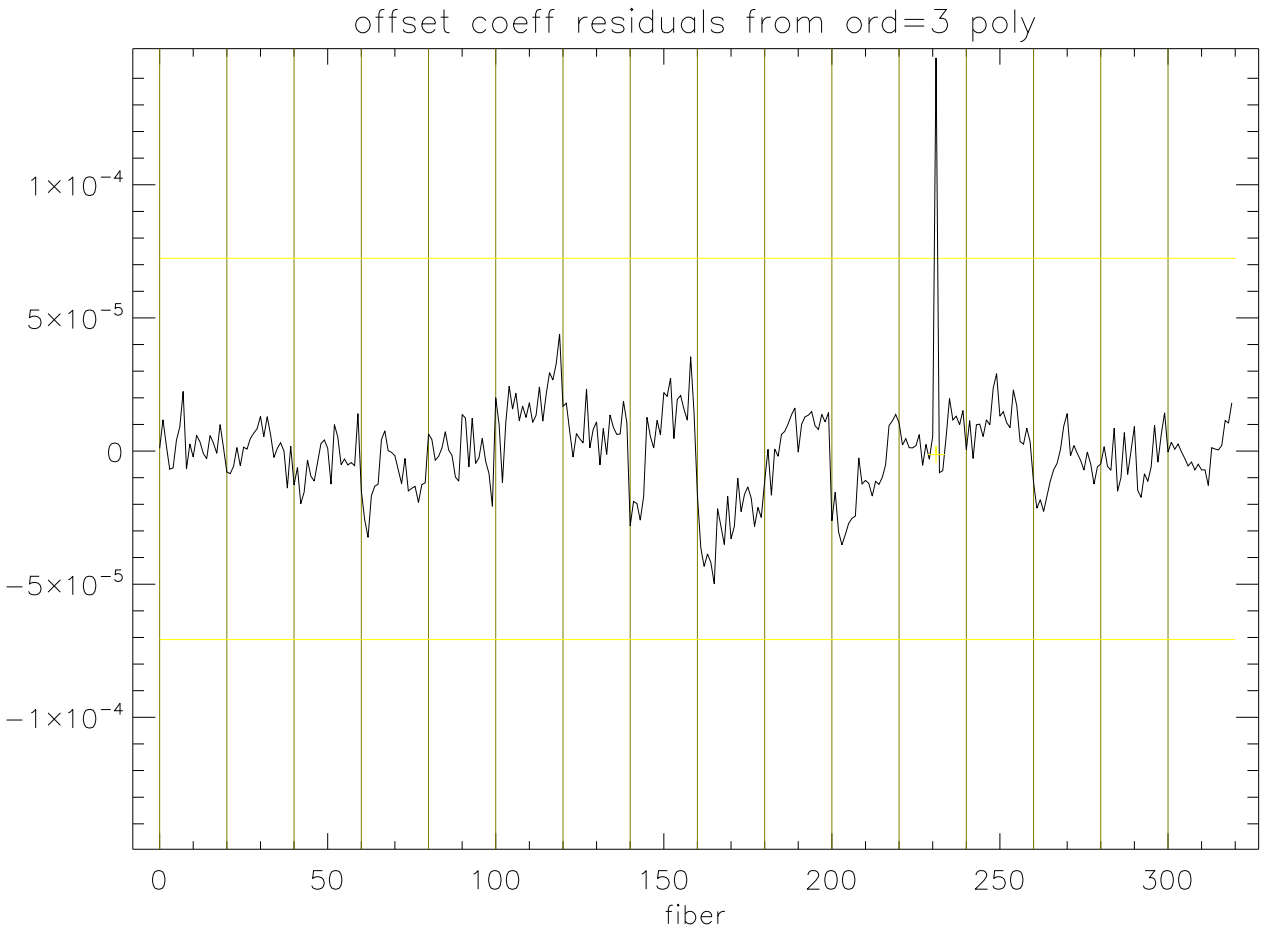

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b1-00020152.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

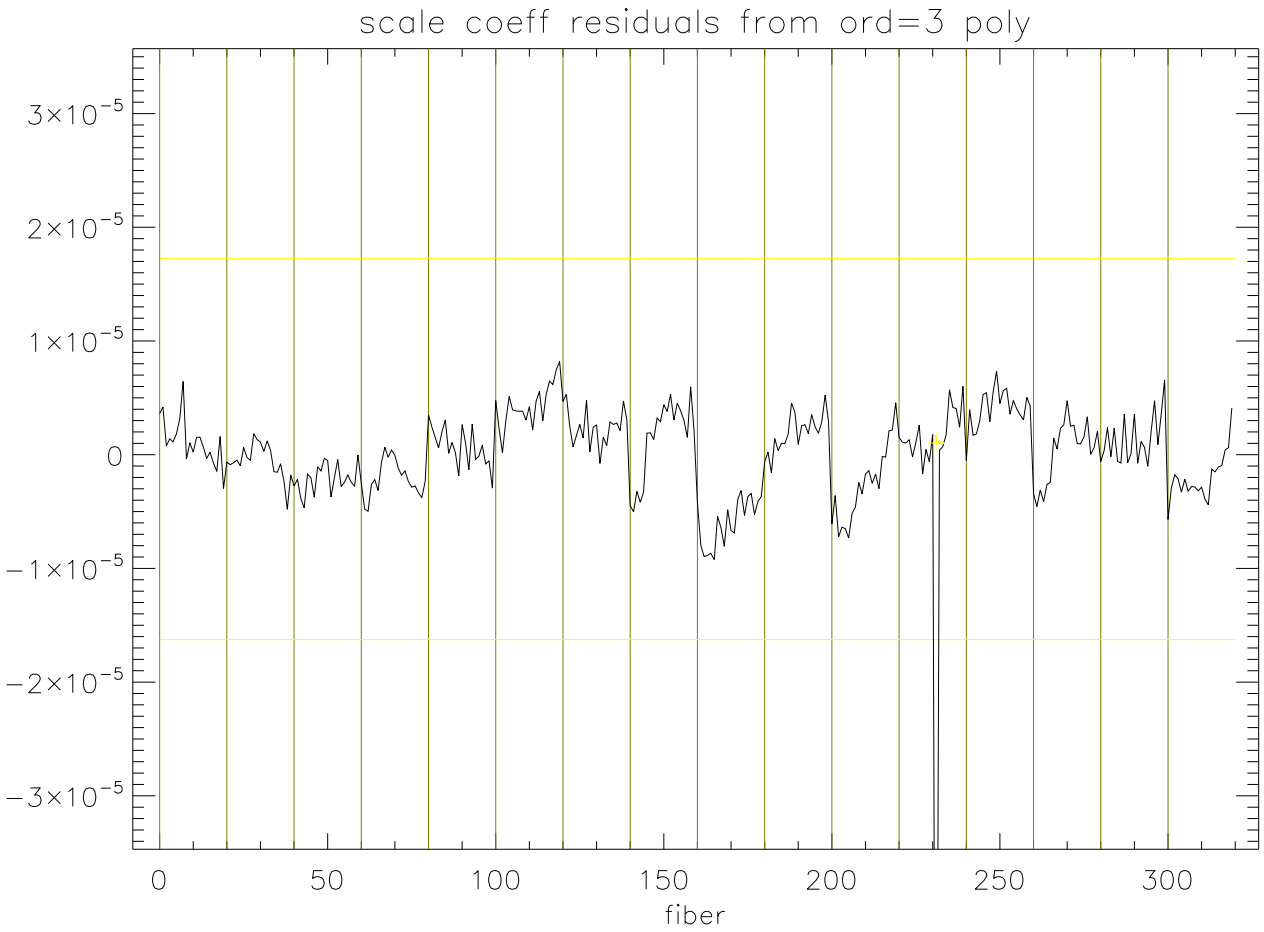

PLATE=0995 MJD=52731 sdR-b1-00020152.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.64 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

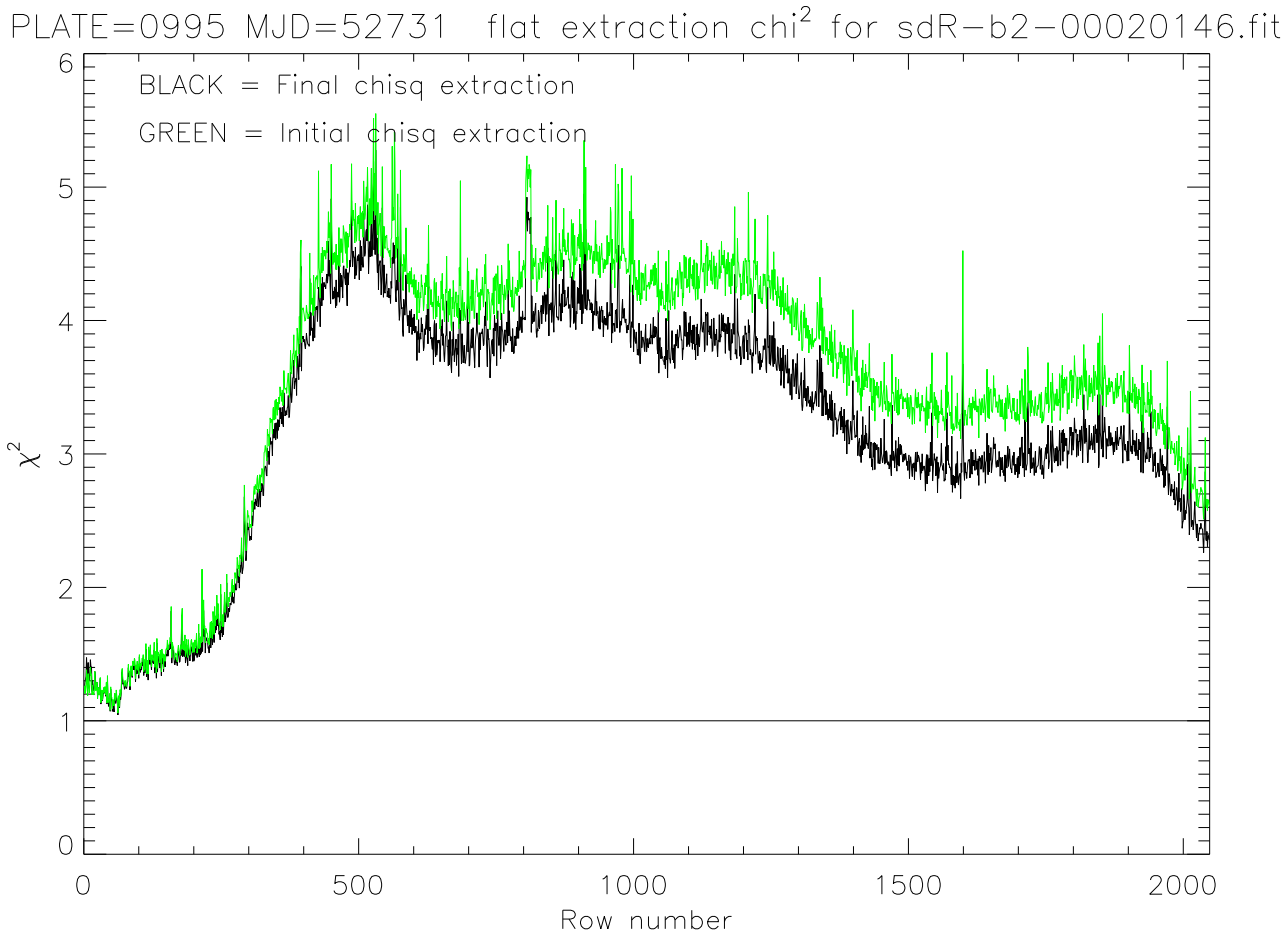

PLATE=0995 MJD=52731 sdR-b1-00020152.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.64 %
Fiber number
Focal Distance [mm]
Airmass

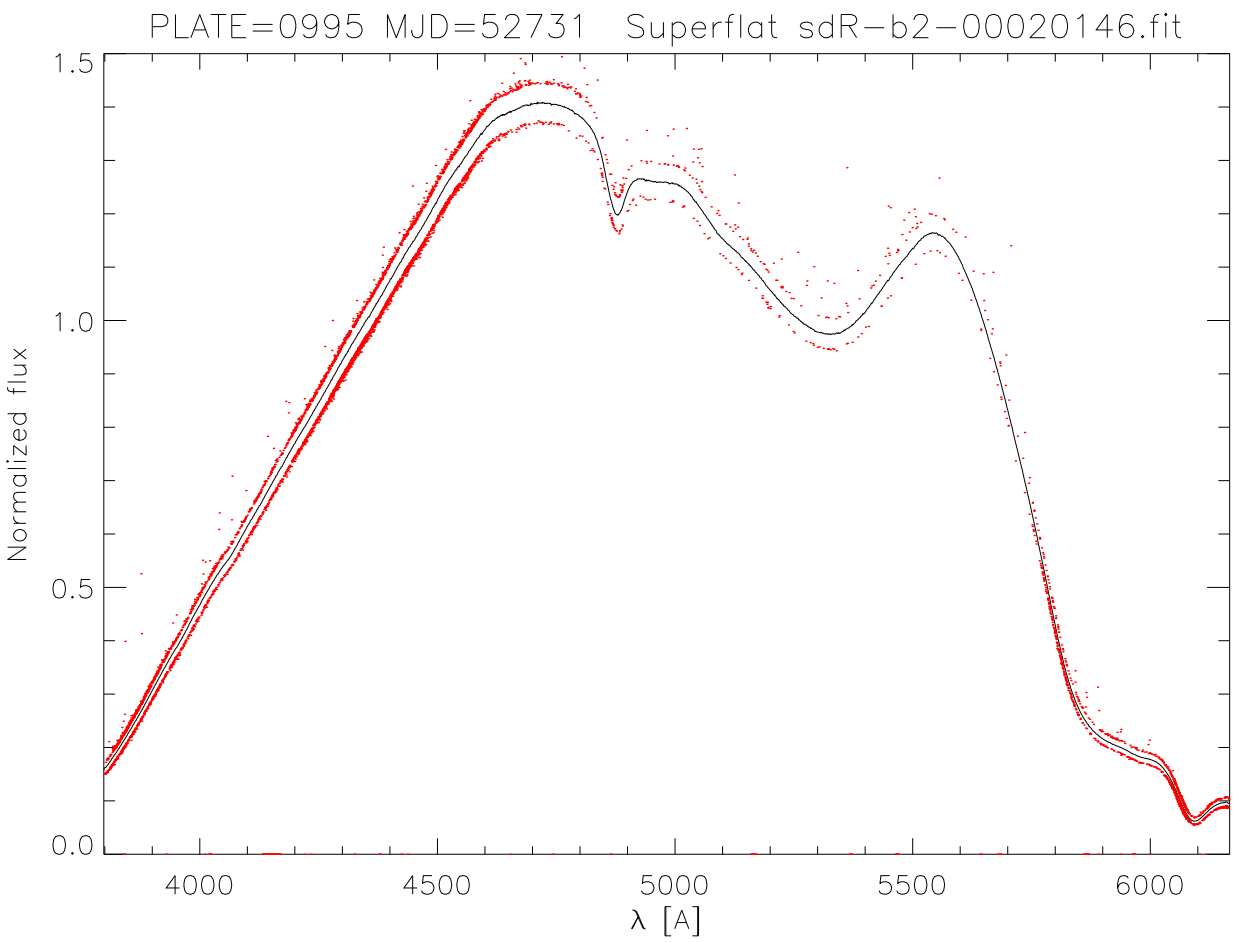

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

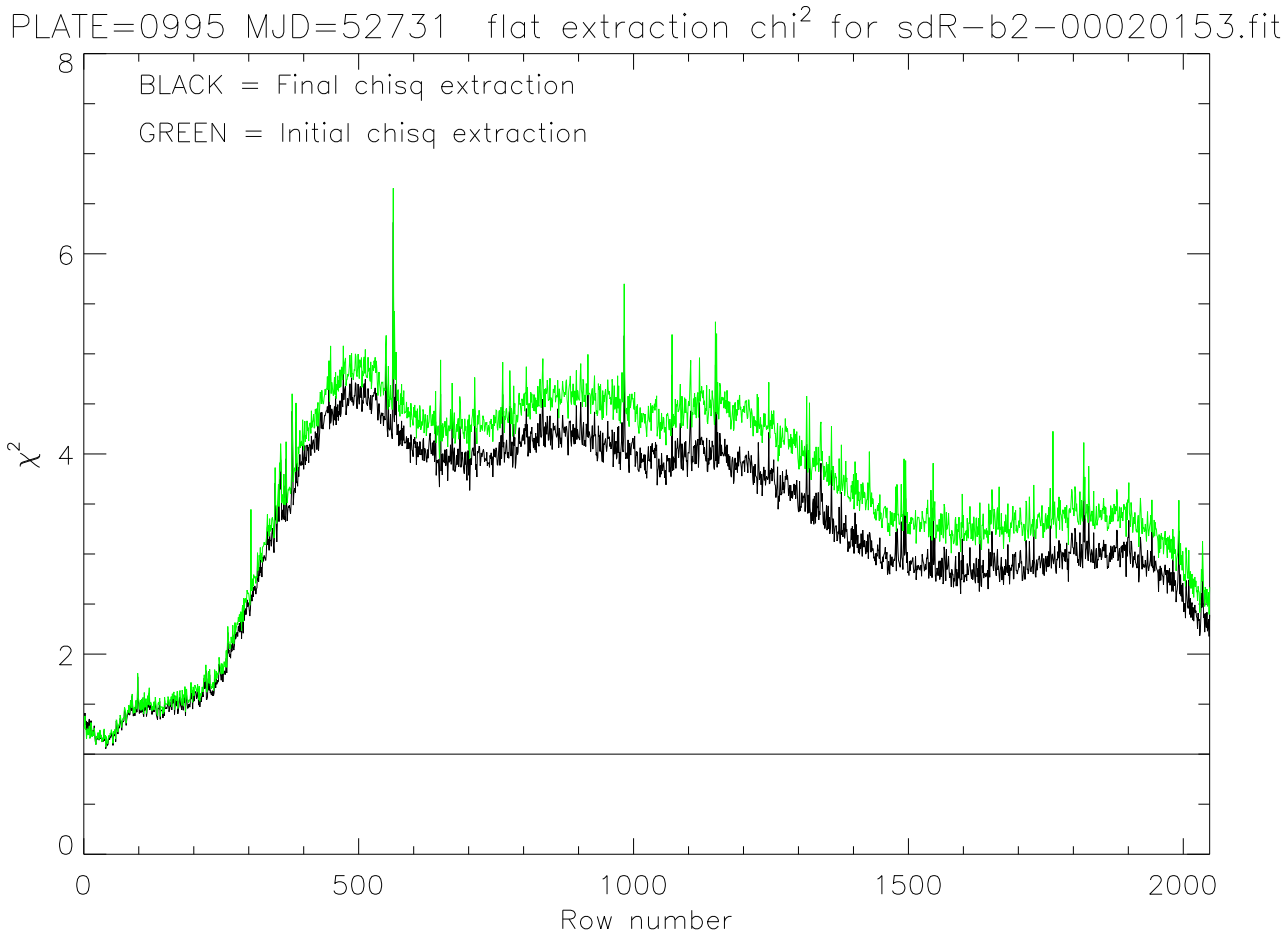

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

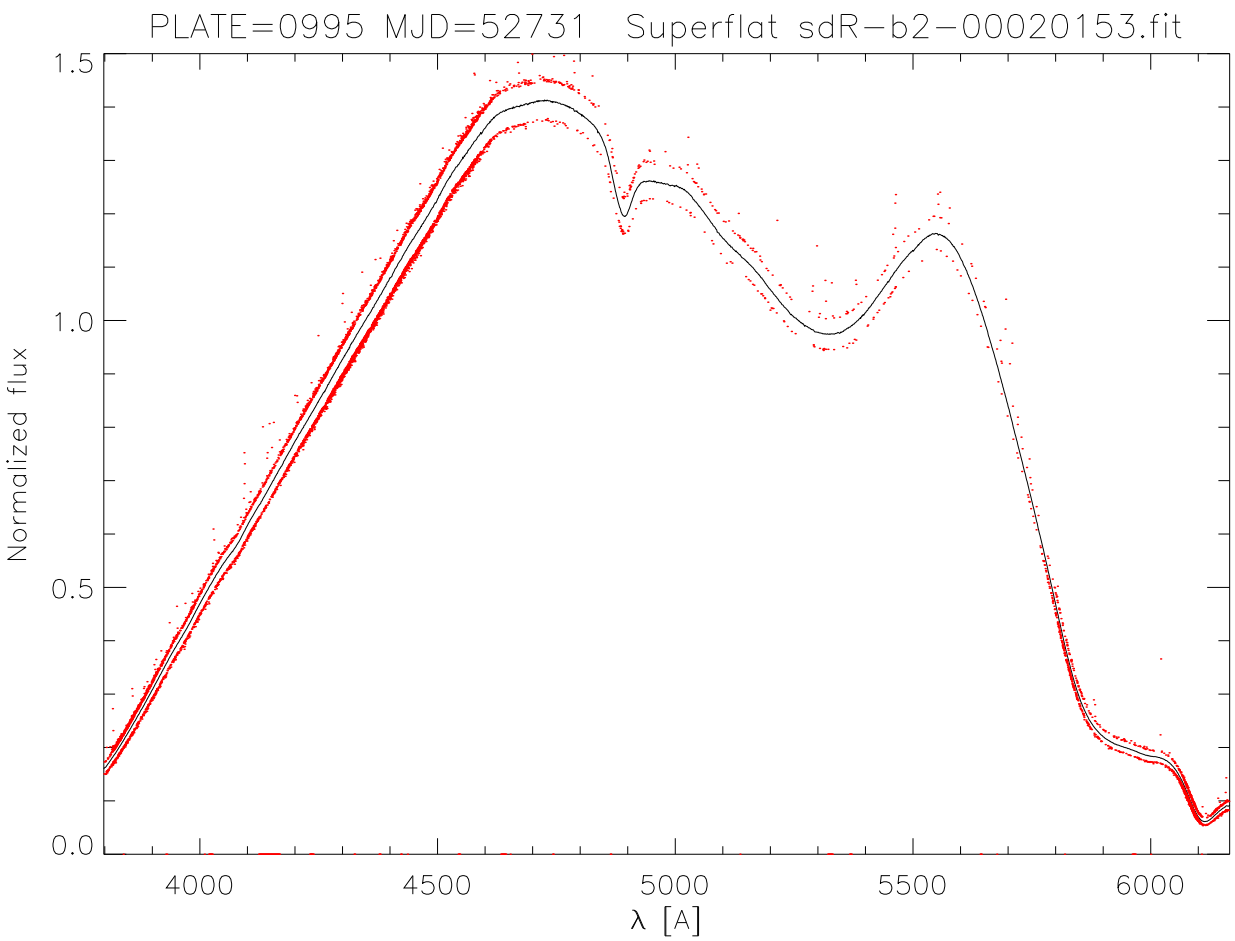

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

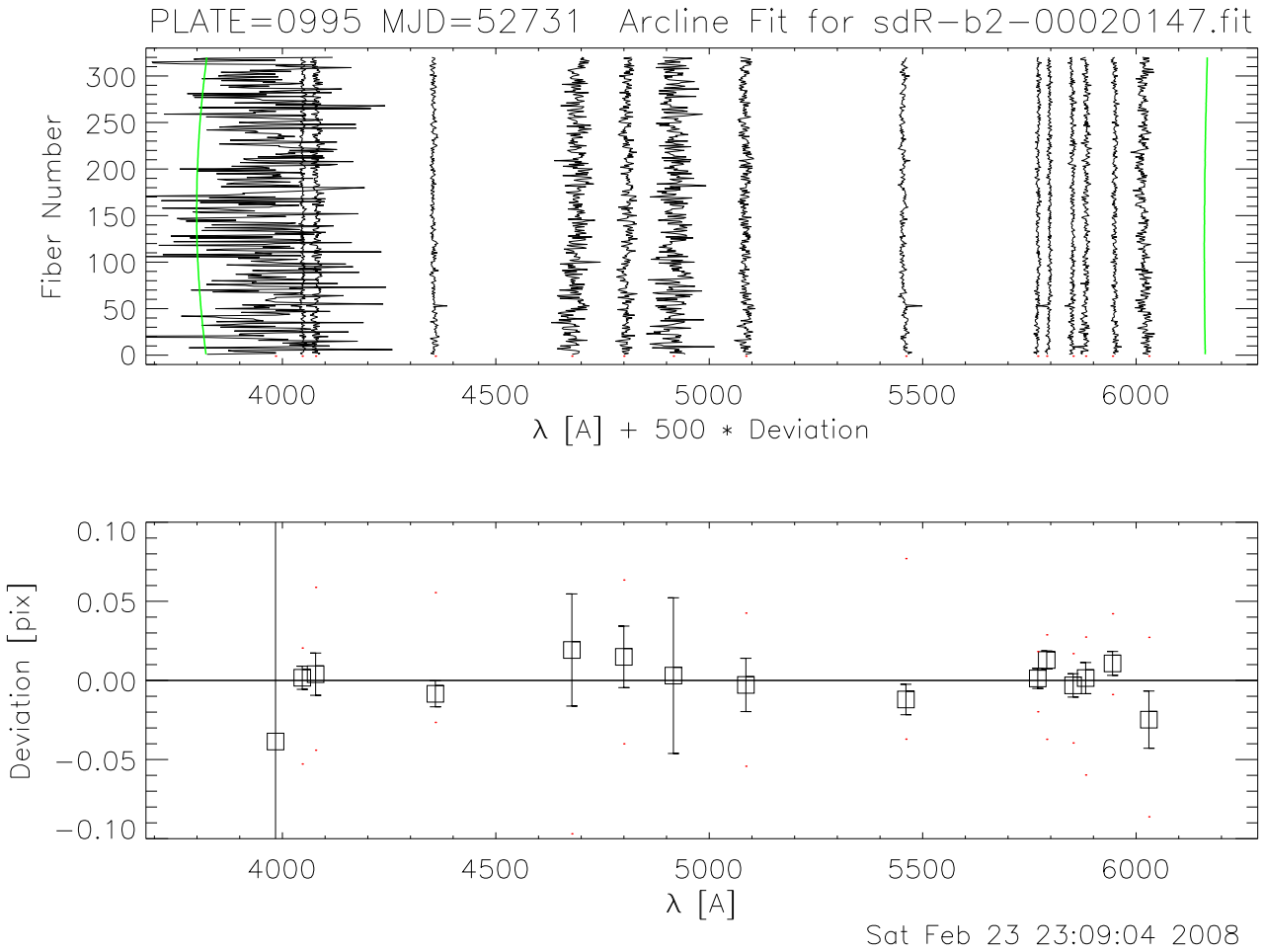

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

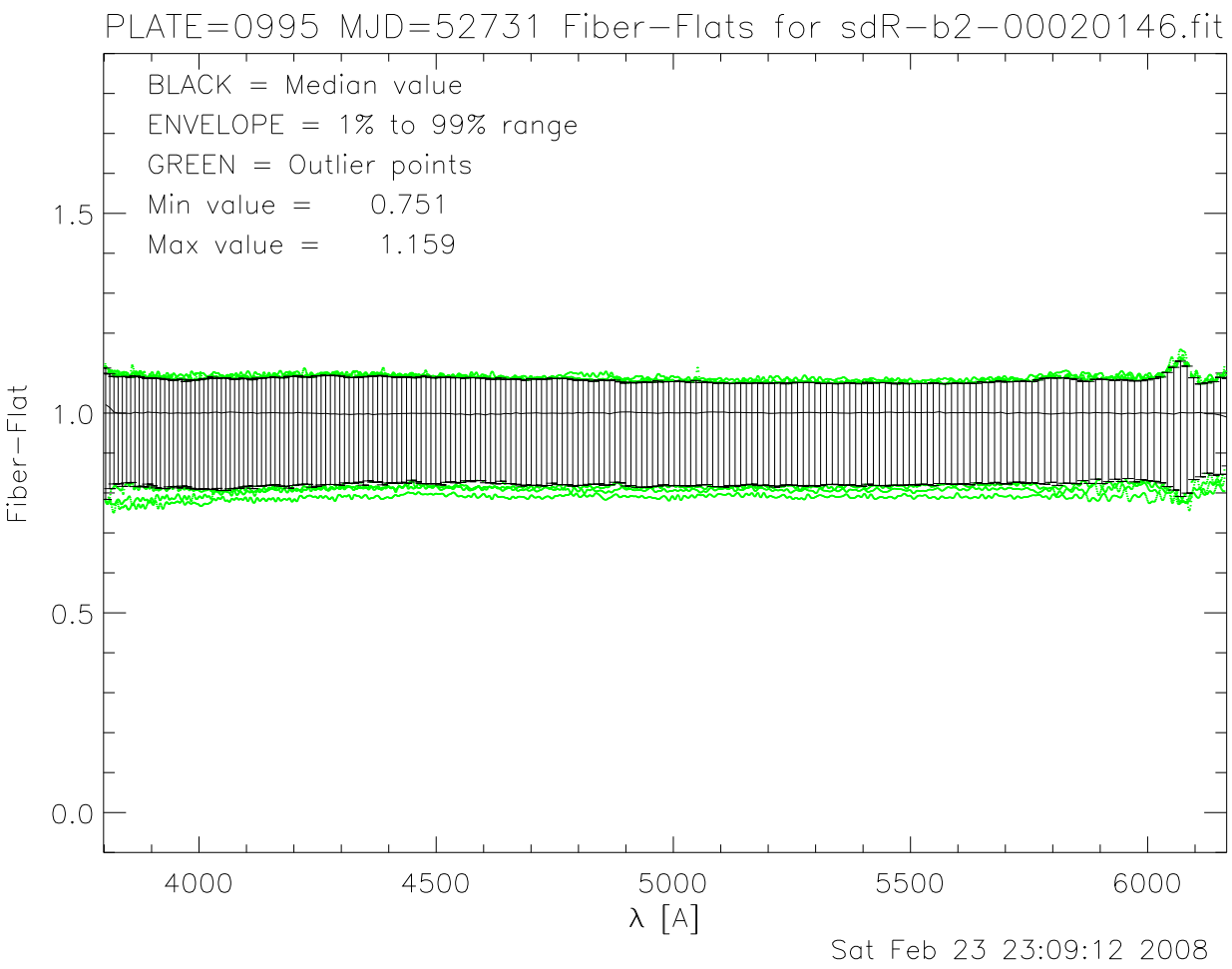

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−b2−00020146.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

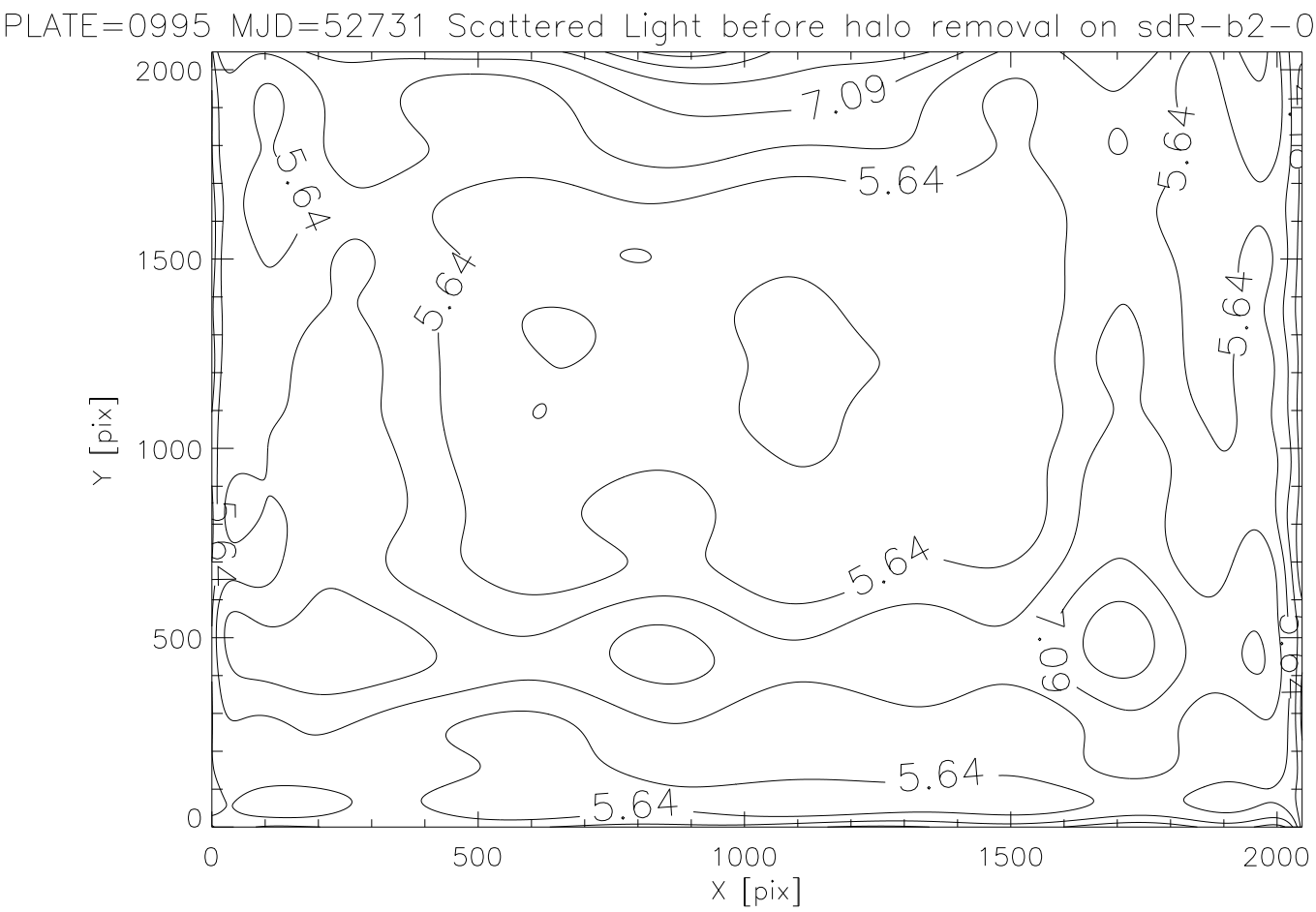

PLATE=0995 MJD=52731 Superflat sdR-b2-00020146.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

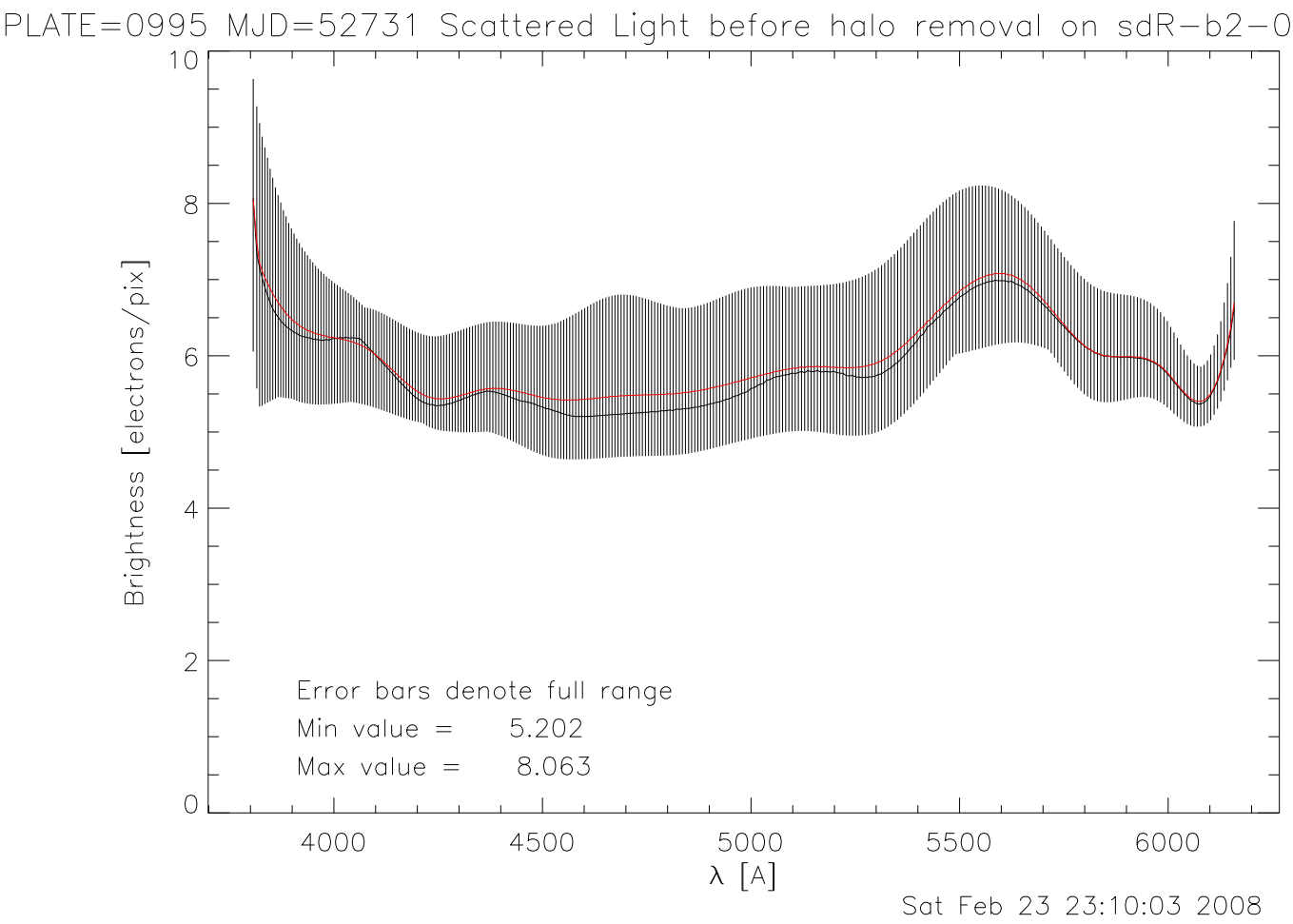

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−b2−00020153.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

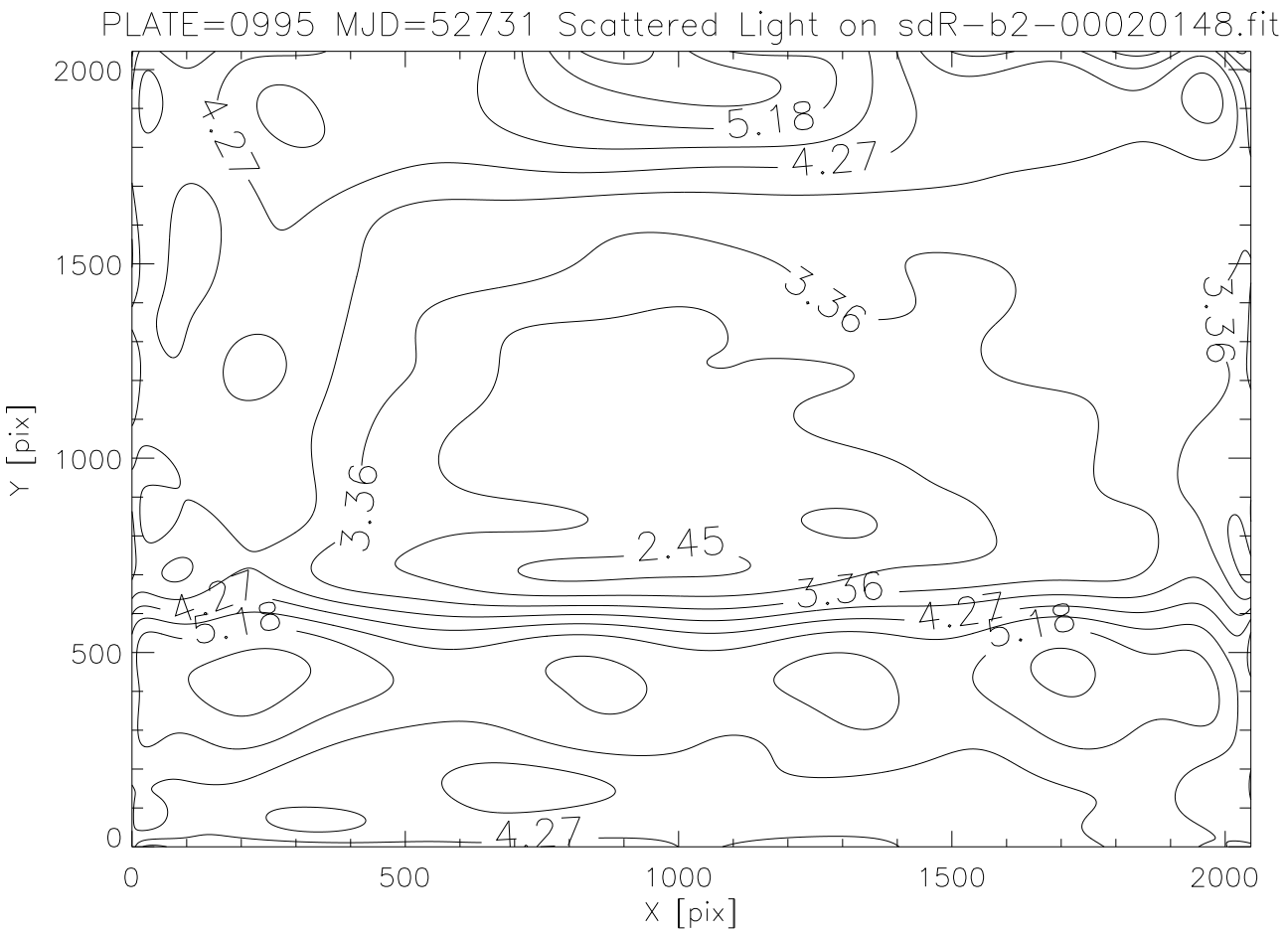

PLATE=0995 MJD=52731 Superflat sdR-b2-00020153.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

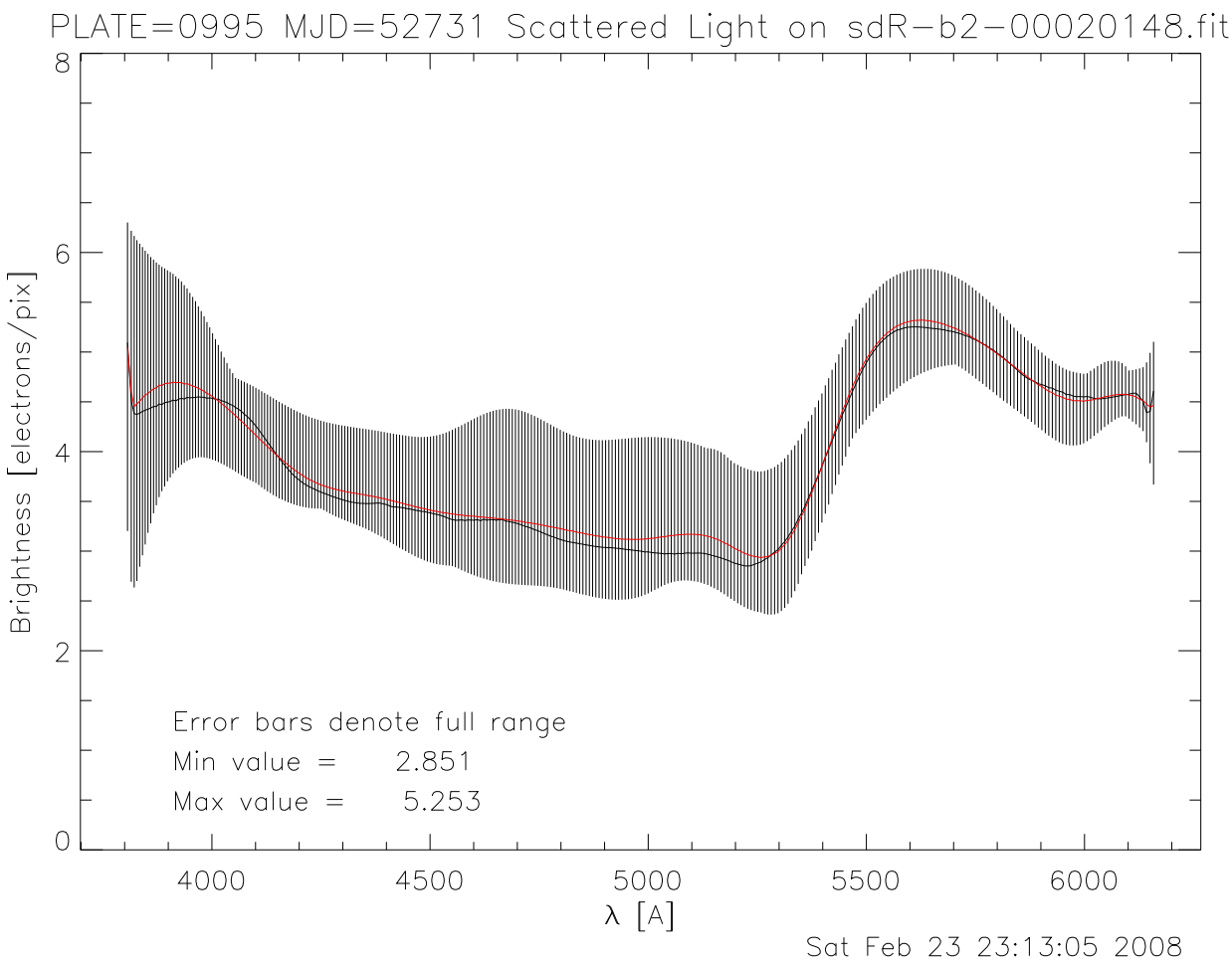

PLATE=0995 MJD=52731 Arcline Fit for sdR-b2-00020147.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:09:04 2008

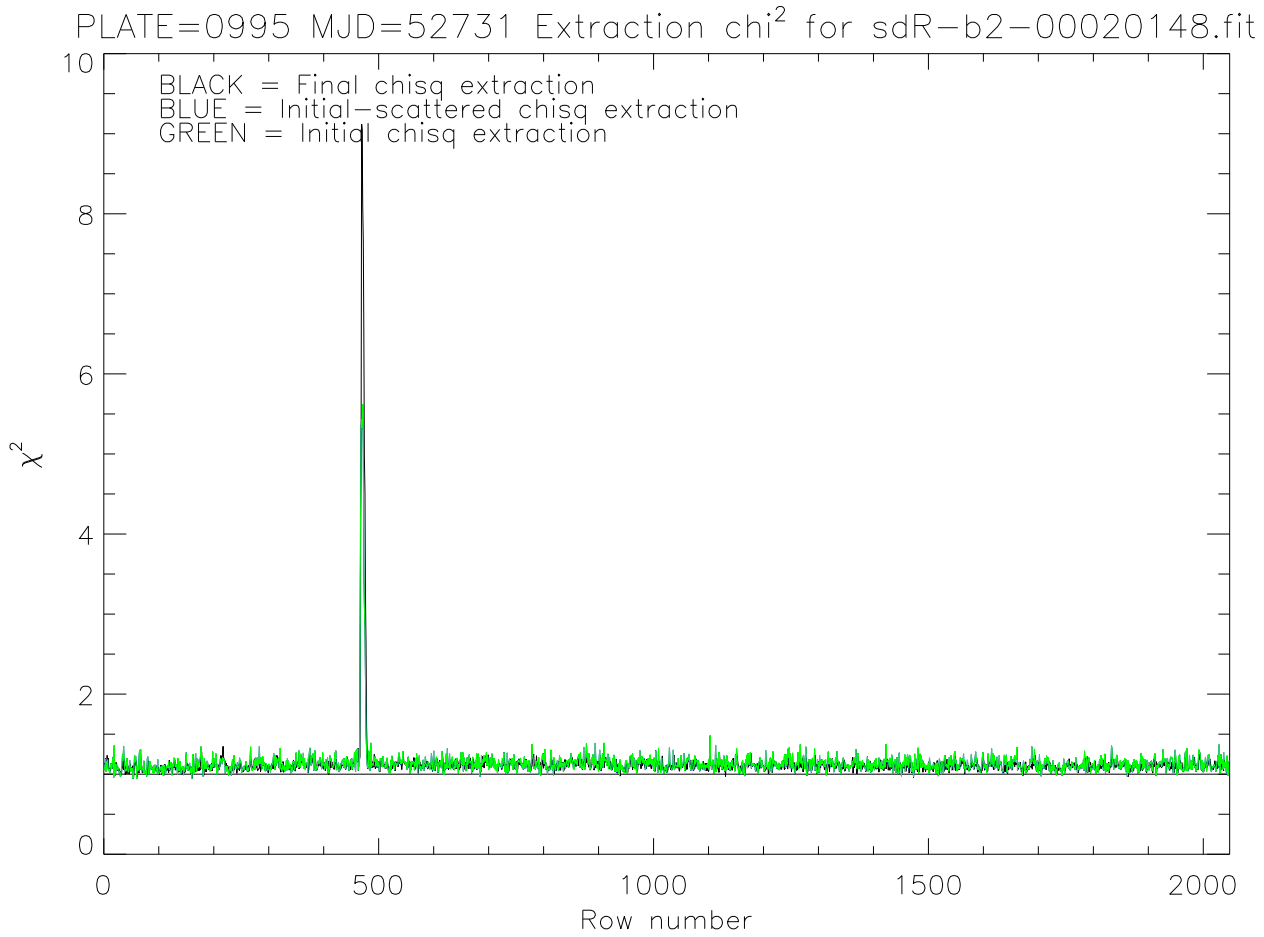

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b2-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.751
Max value = 1.159
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:09:12 2008

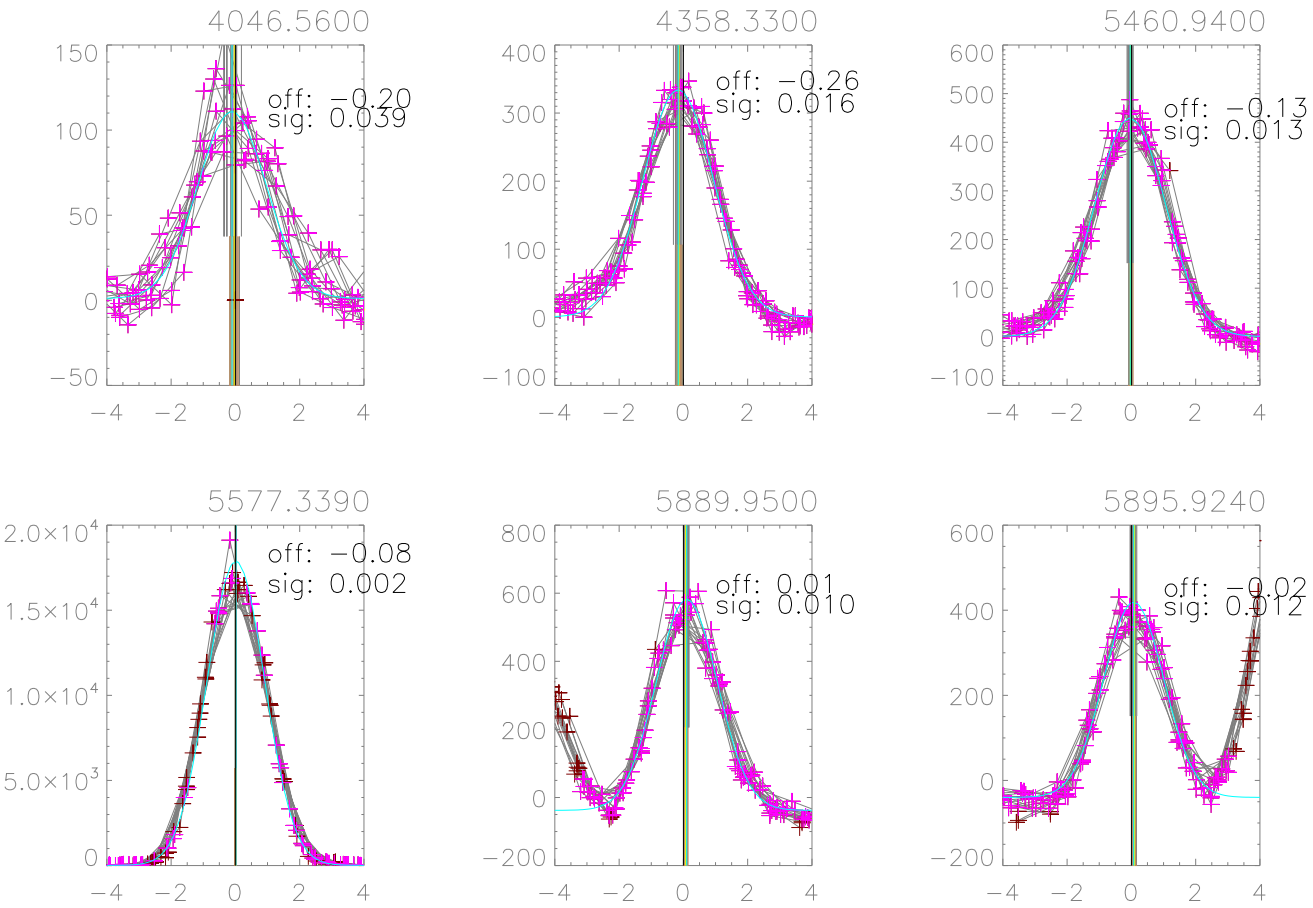

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b2−00020148.f
7.09
5.64
0
Y [pix]
X [pix]
0
500
1000
1500
2000

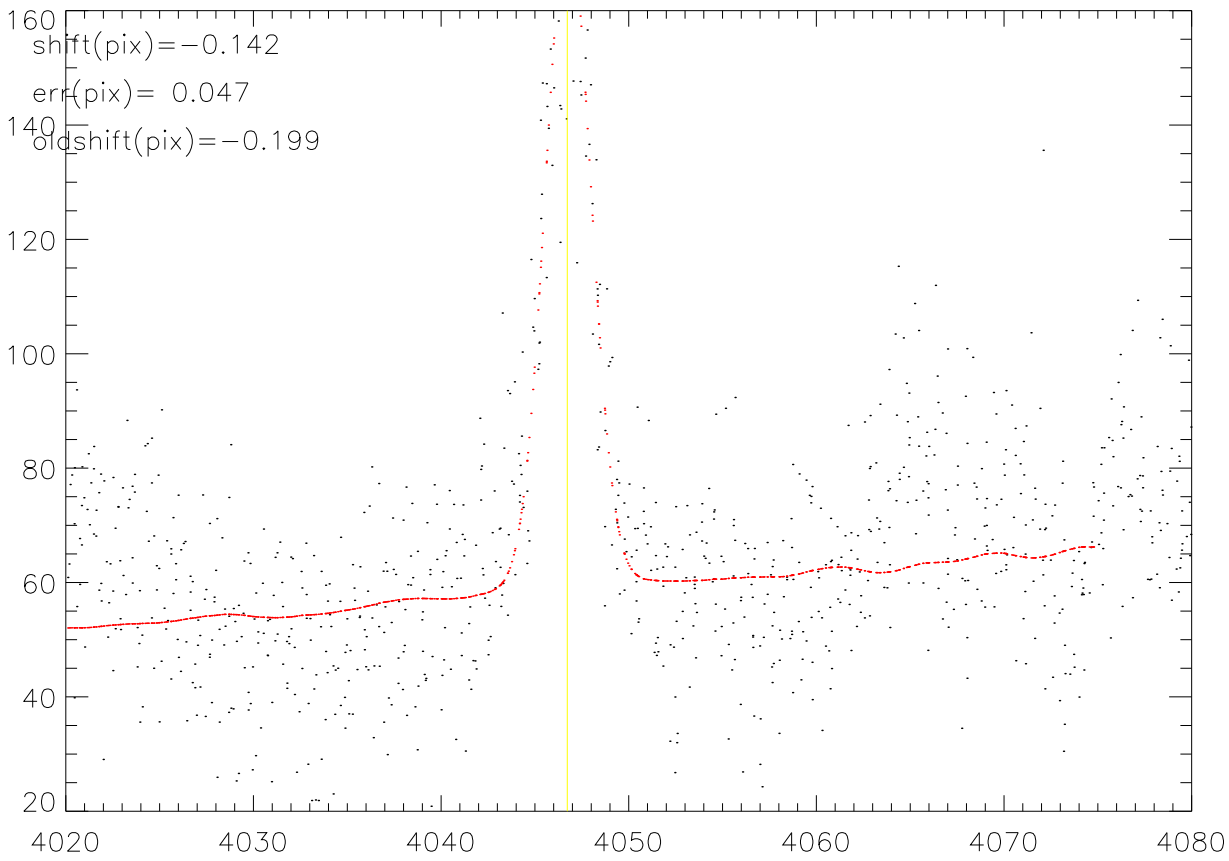

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020148.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.202
Max value = 8.063
Sat Feb 23 23:10:03 2008

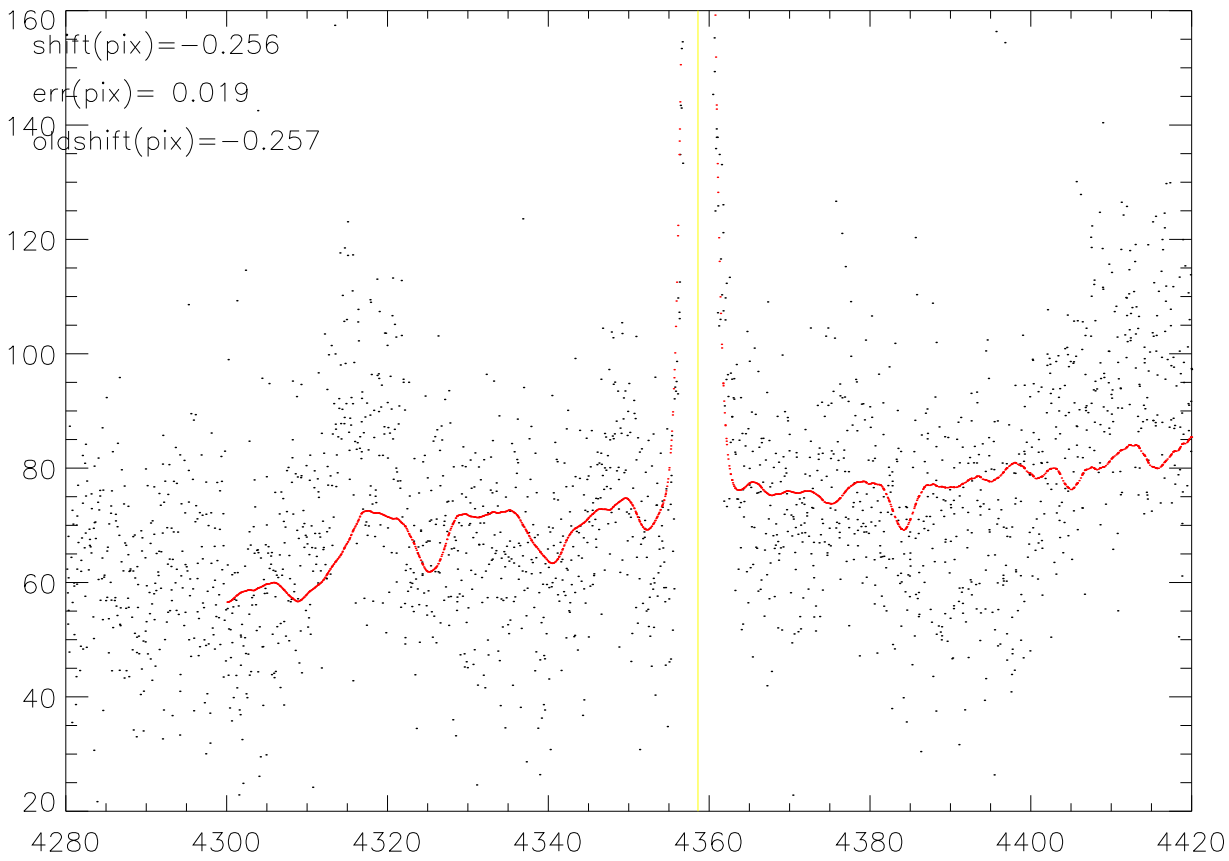

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020148.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.18
4.27
3.36
2.45

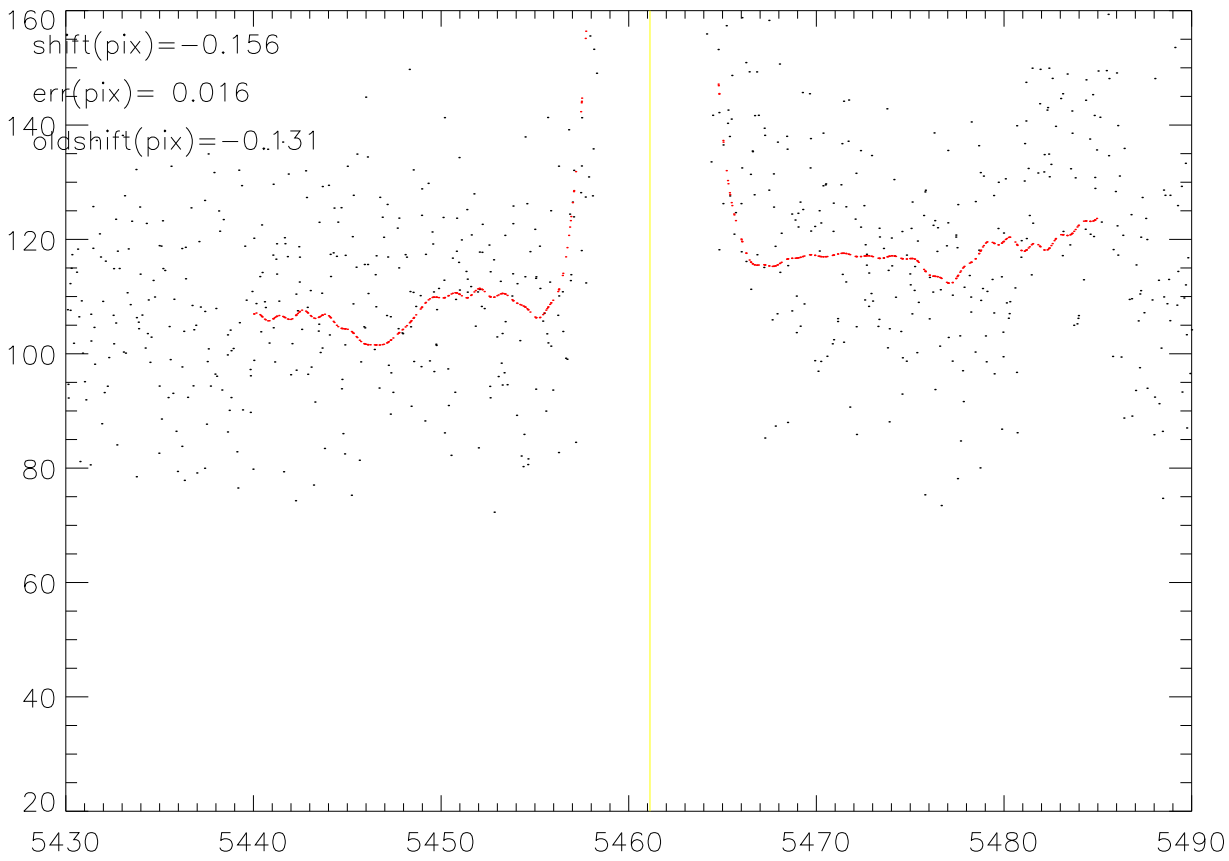

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020148.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.851
Max value = 5.253
Sat Feb 23 23:13:05 2008

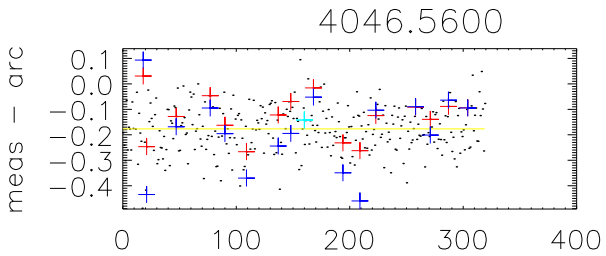

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b2-00020148.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

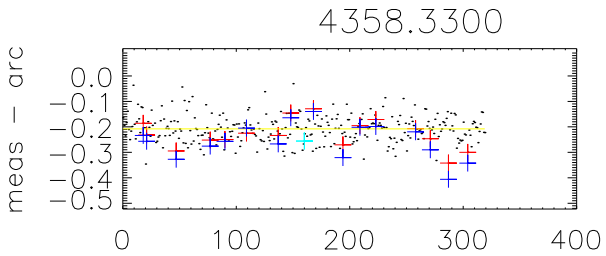

4046.5600
off: −0.20
sig: 0.039
4358.3300
off: −0.26
sig: 0.016
5460.9400
off: −0.13
sig: 0.013
5577.3390
off: −0.08
sig: 0.002
5889.9500
off: 0.01
sig: 0.010
5895.9240
off: −0.02
sig: 0.012

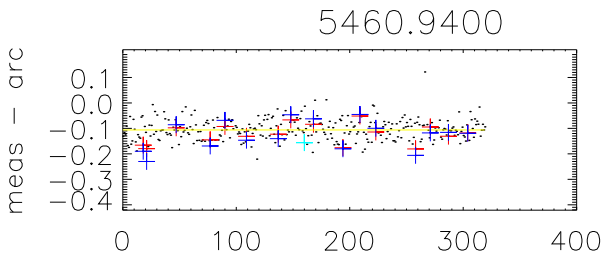

shift(pix)=−0.142
err(pix)= 0.047
oldshift(pix)=−0.199
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

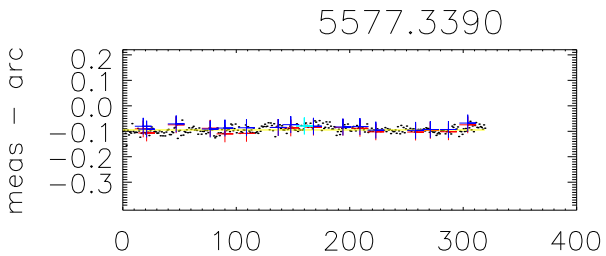

shift(pix)=−0.256
err(pix)= 0.019
oldshift(pix)=−0.257
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

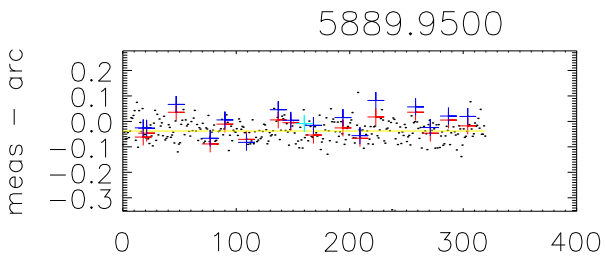

shift(pix)=−0.156
err(pix)= 0.016
oldshift(pix)=−0.131
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

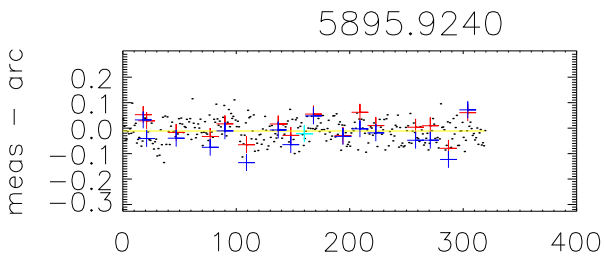

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

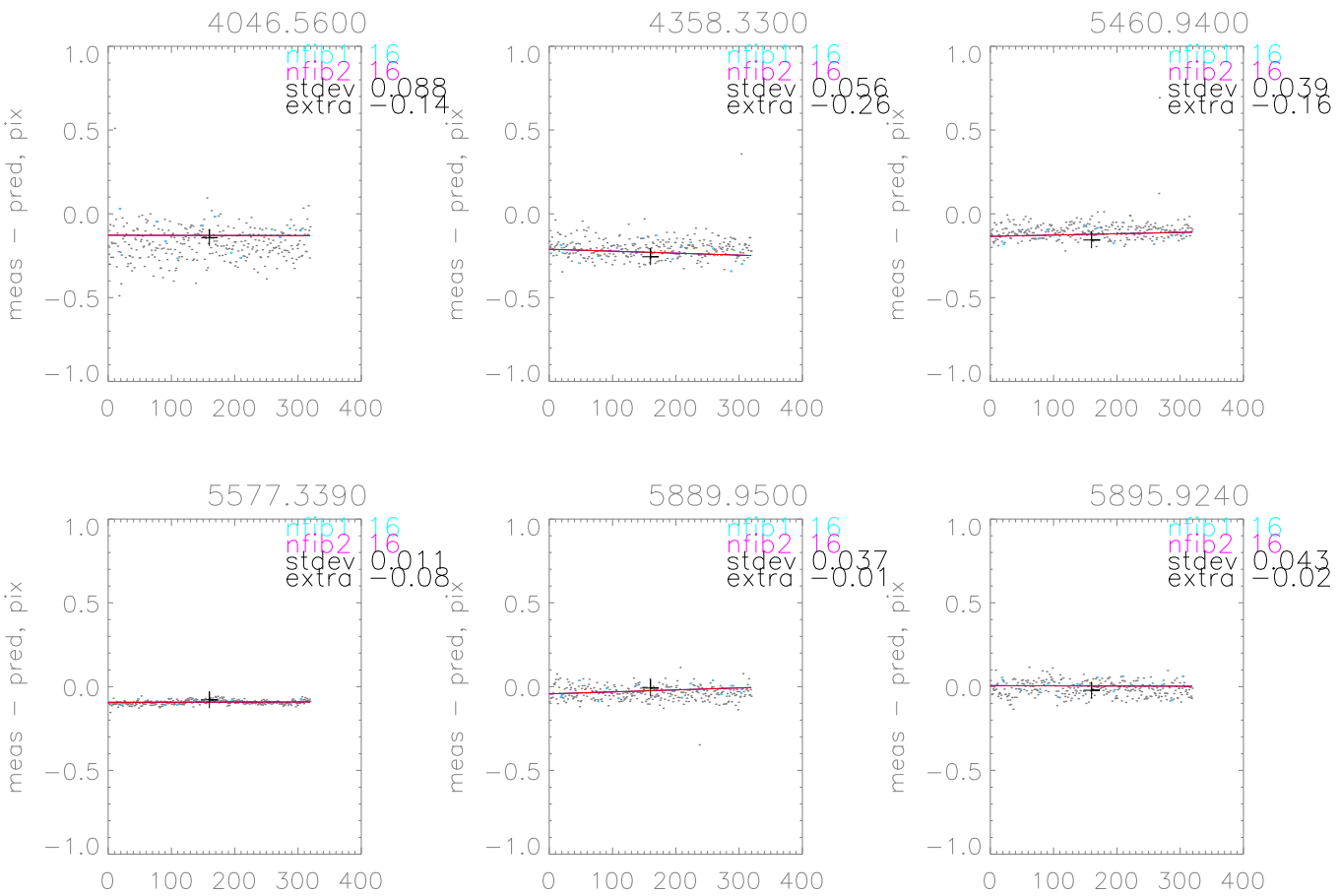

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

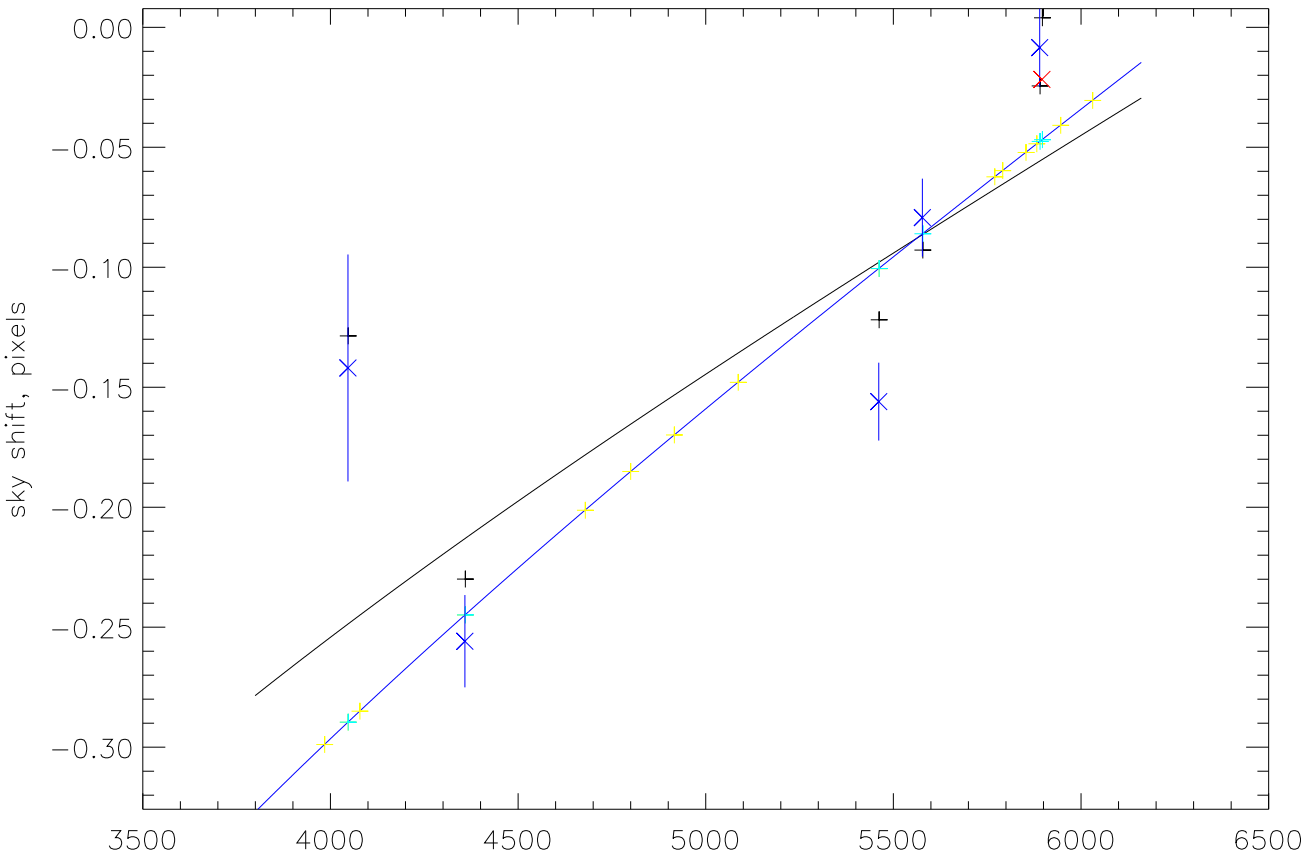

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

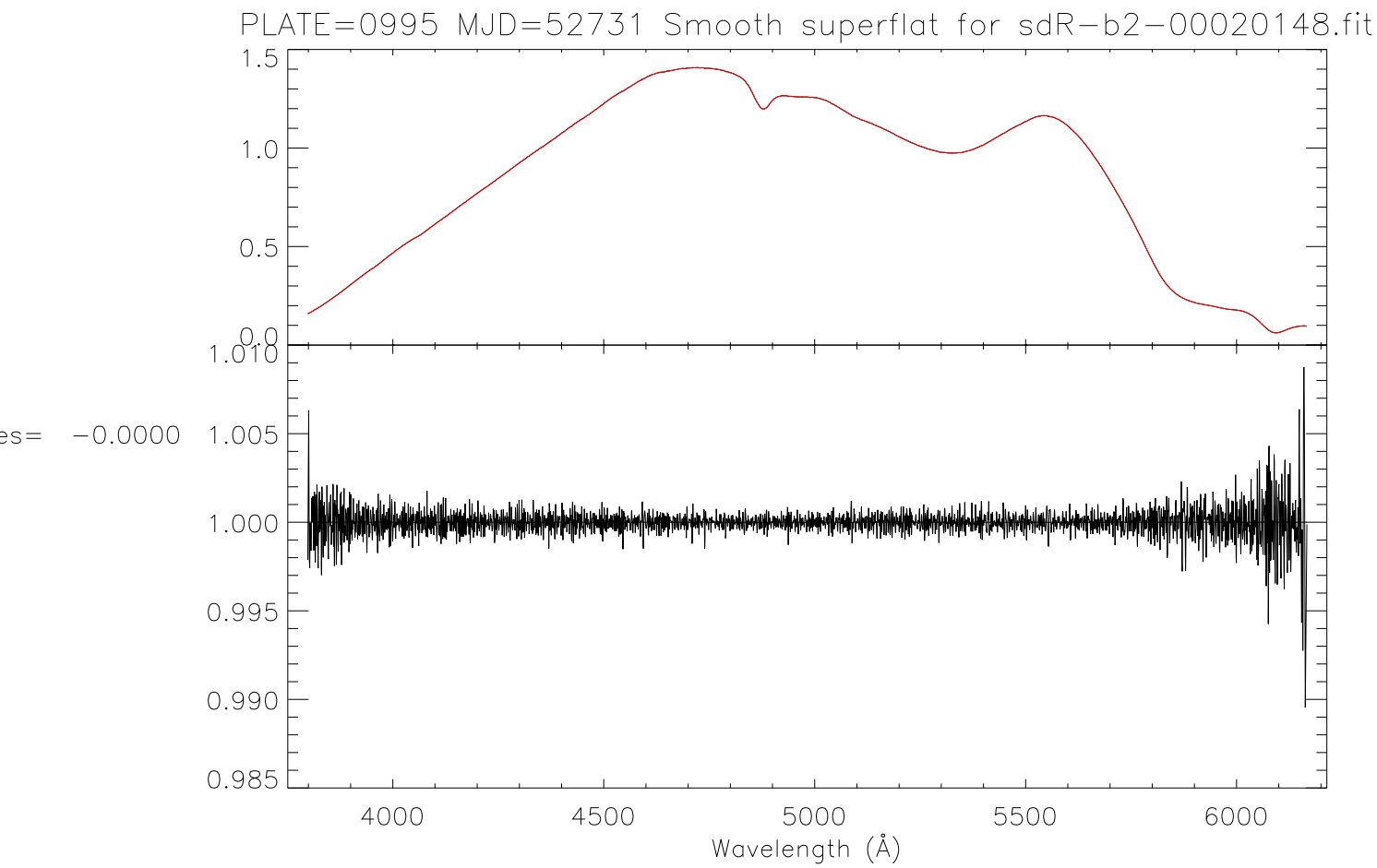

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

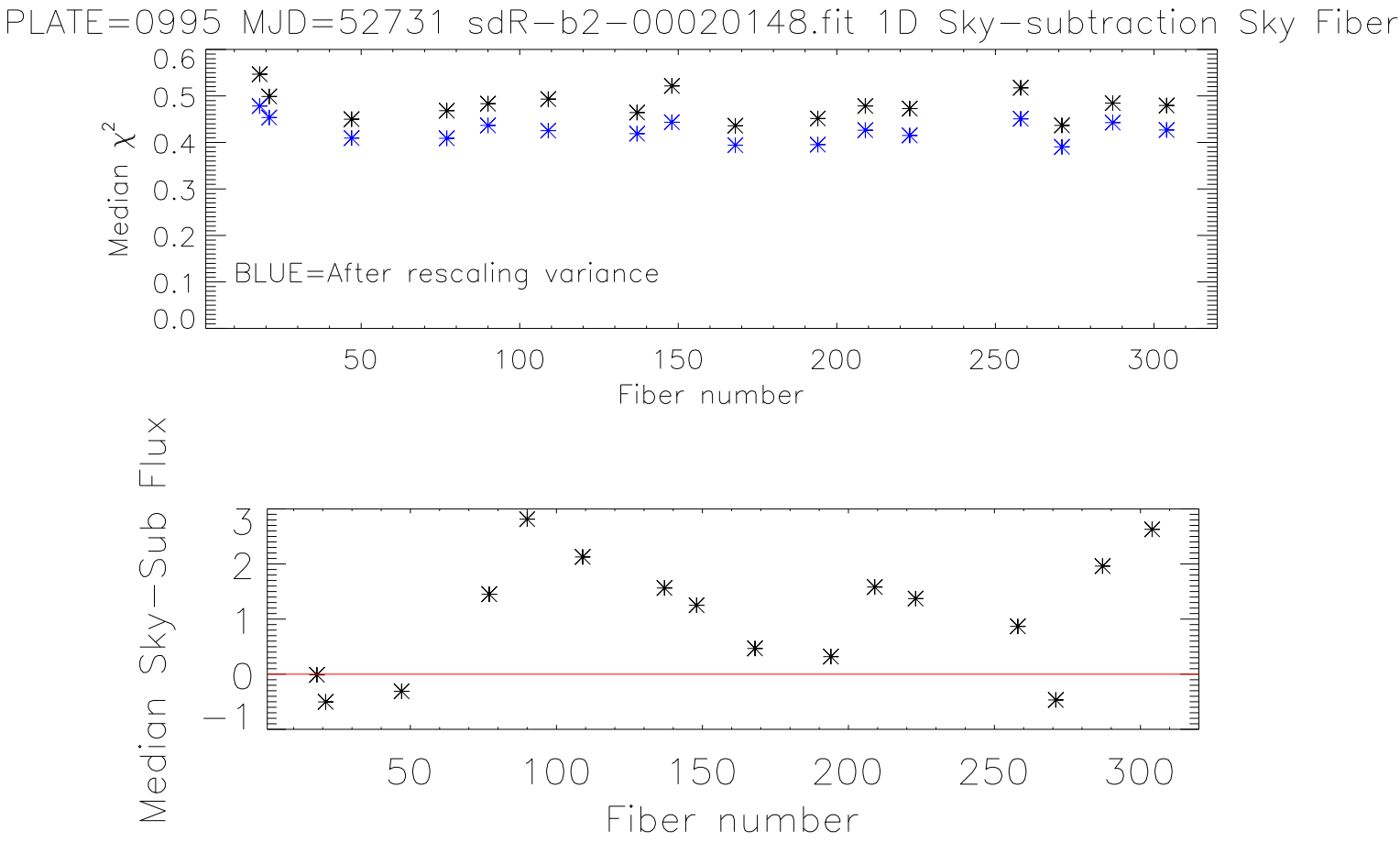

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

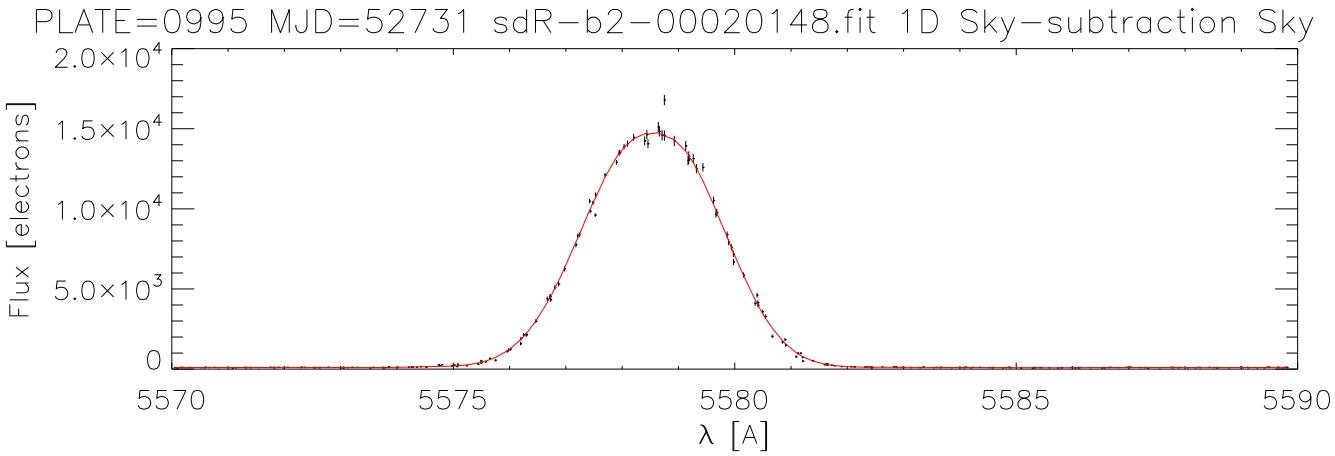

4046.5600
nfib1 16
nfib2 16
stdev 0.088
extra −0.14
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.26
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.16
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra −0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra −0.01
5895.9240
nfib1 16
nfib2 16
stdev 0.043
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

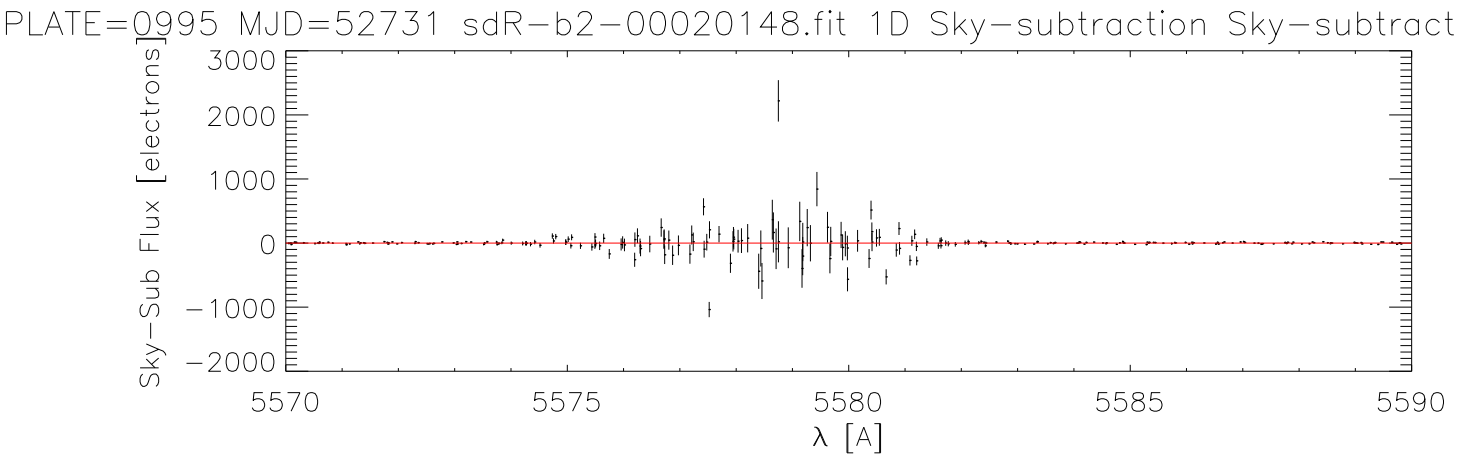

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

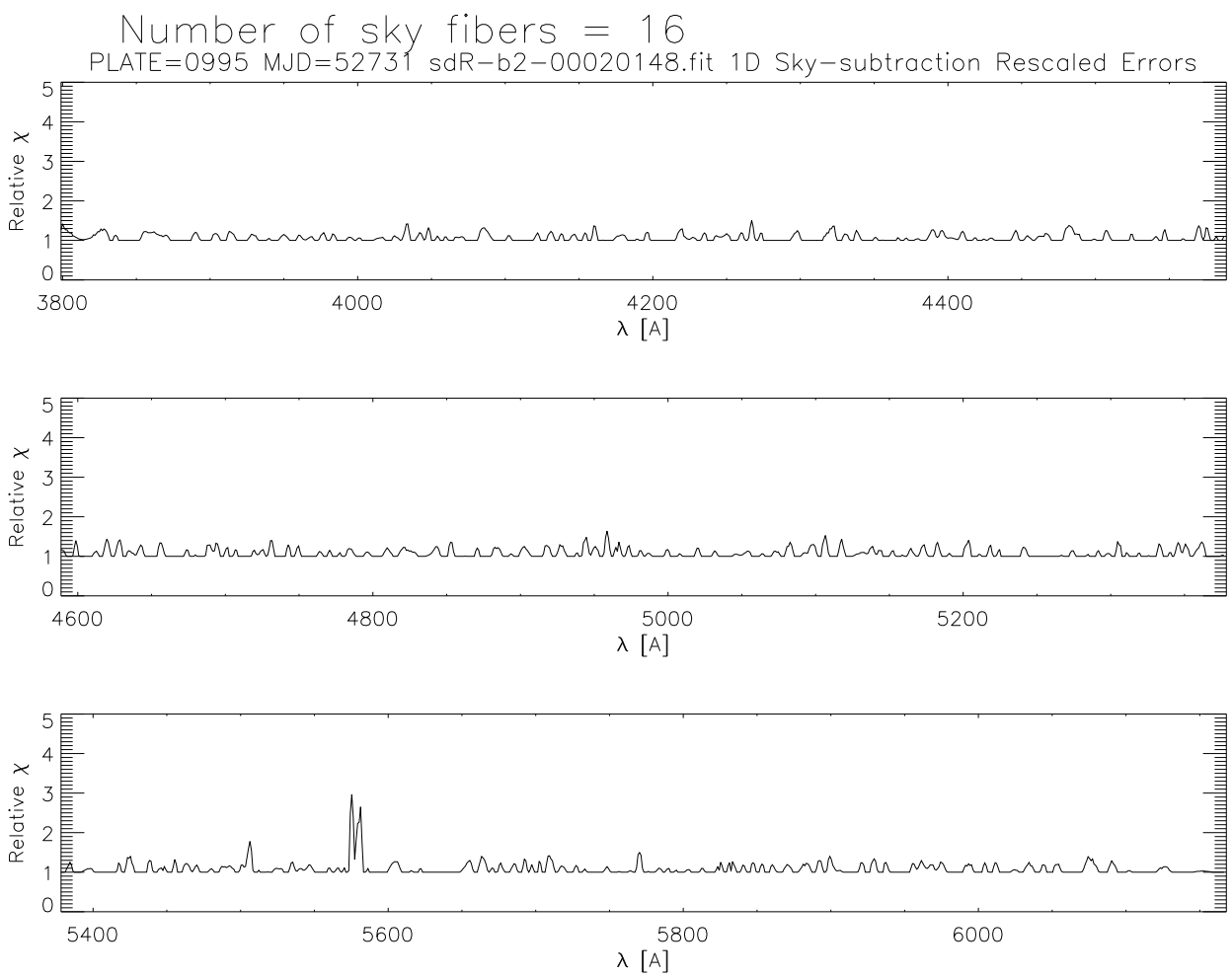

PLATE=0995 MJD=52731 Smooth superflat for sdR-b2-00020148.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

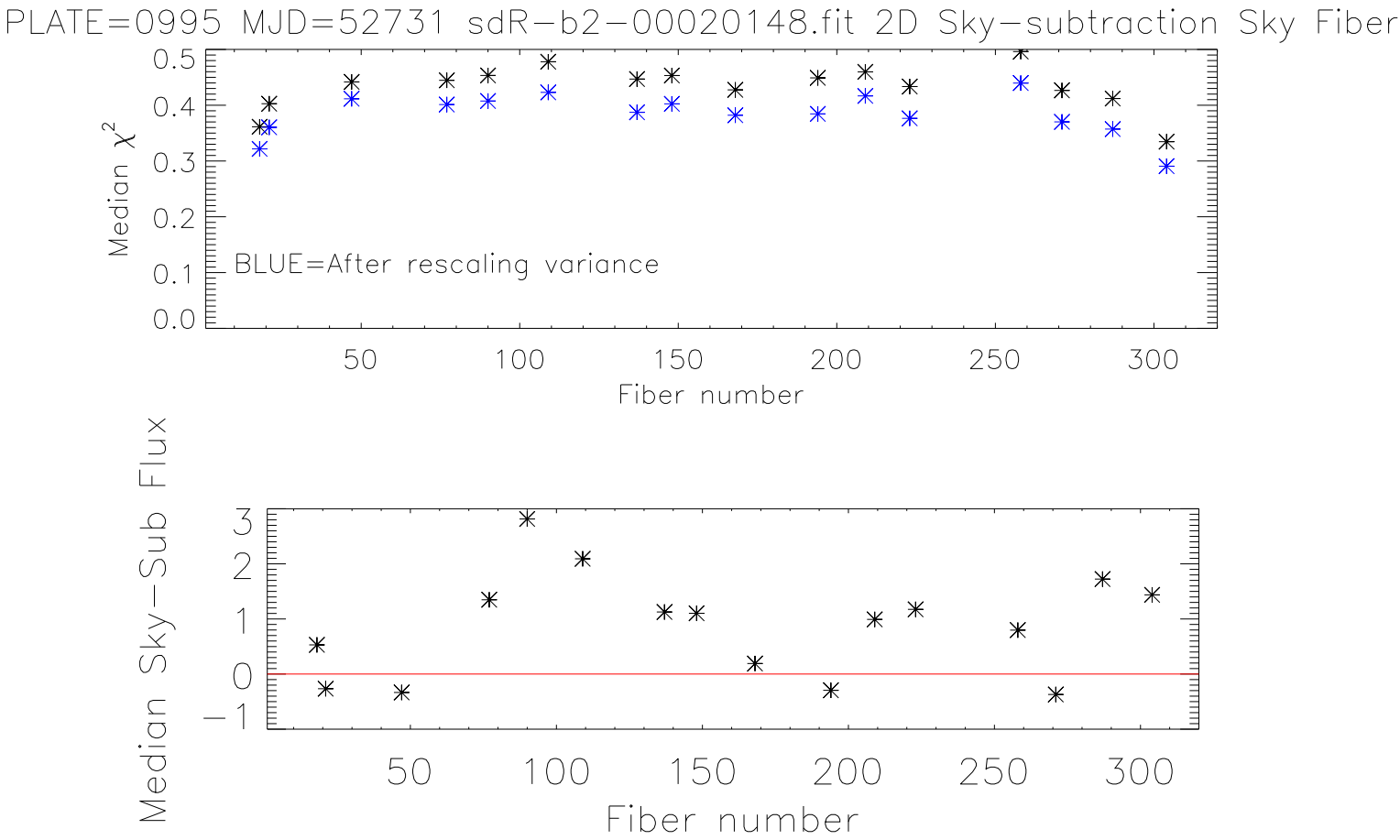
es= −0.0000

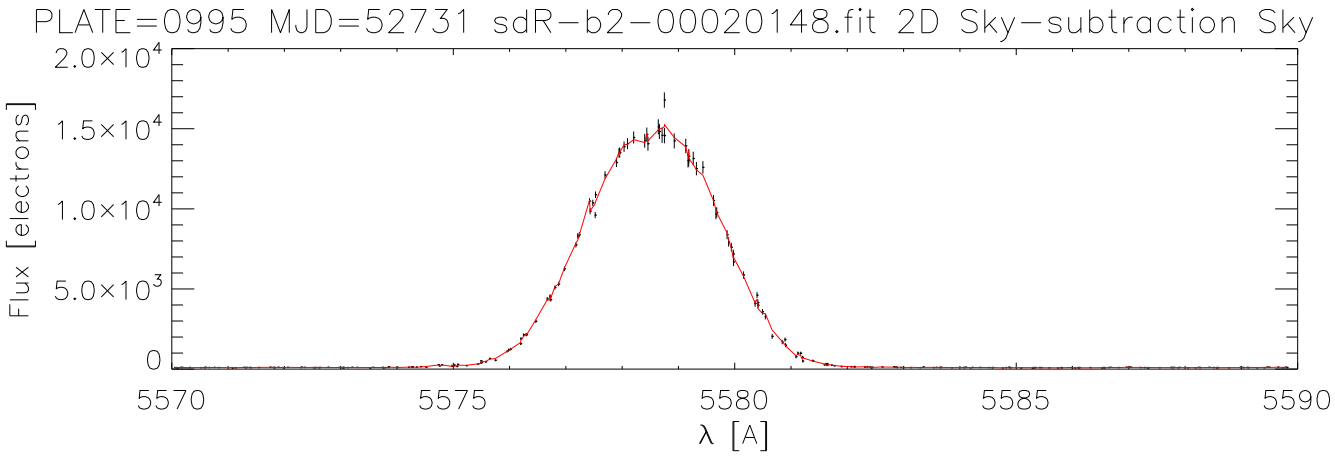

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

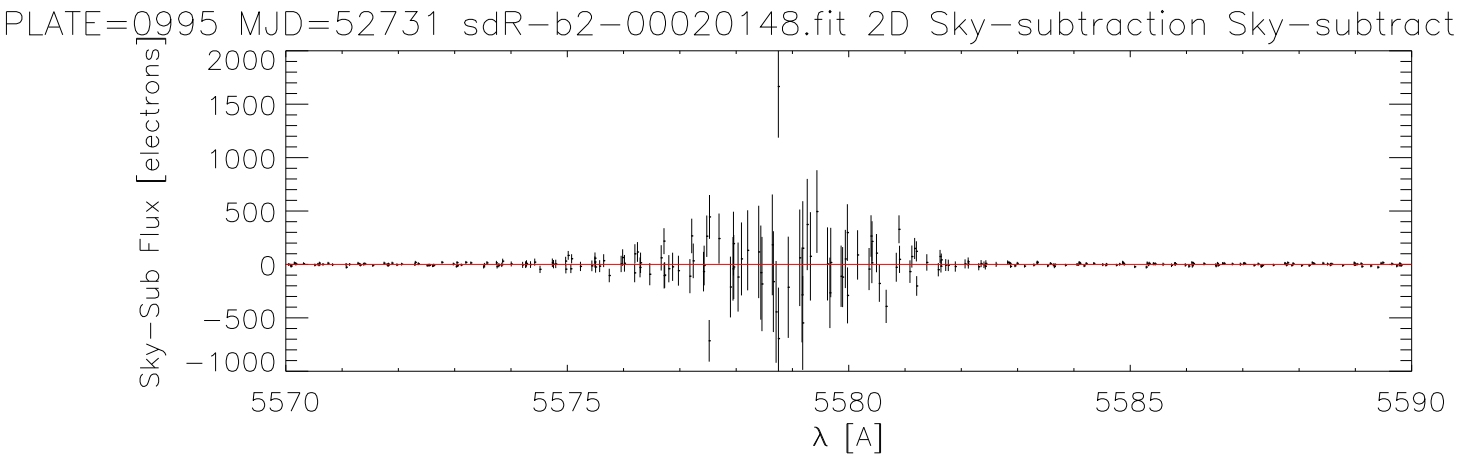

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

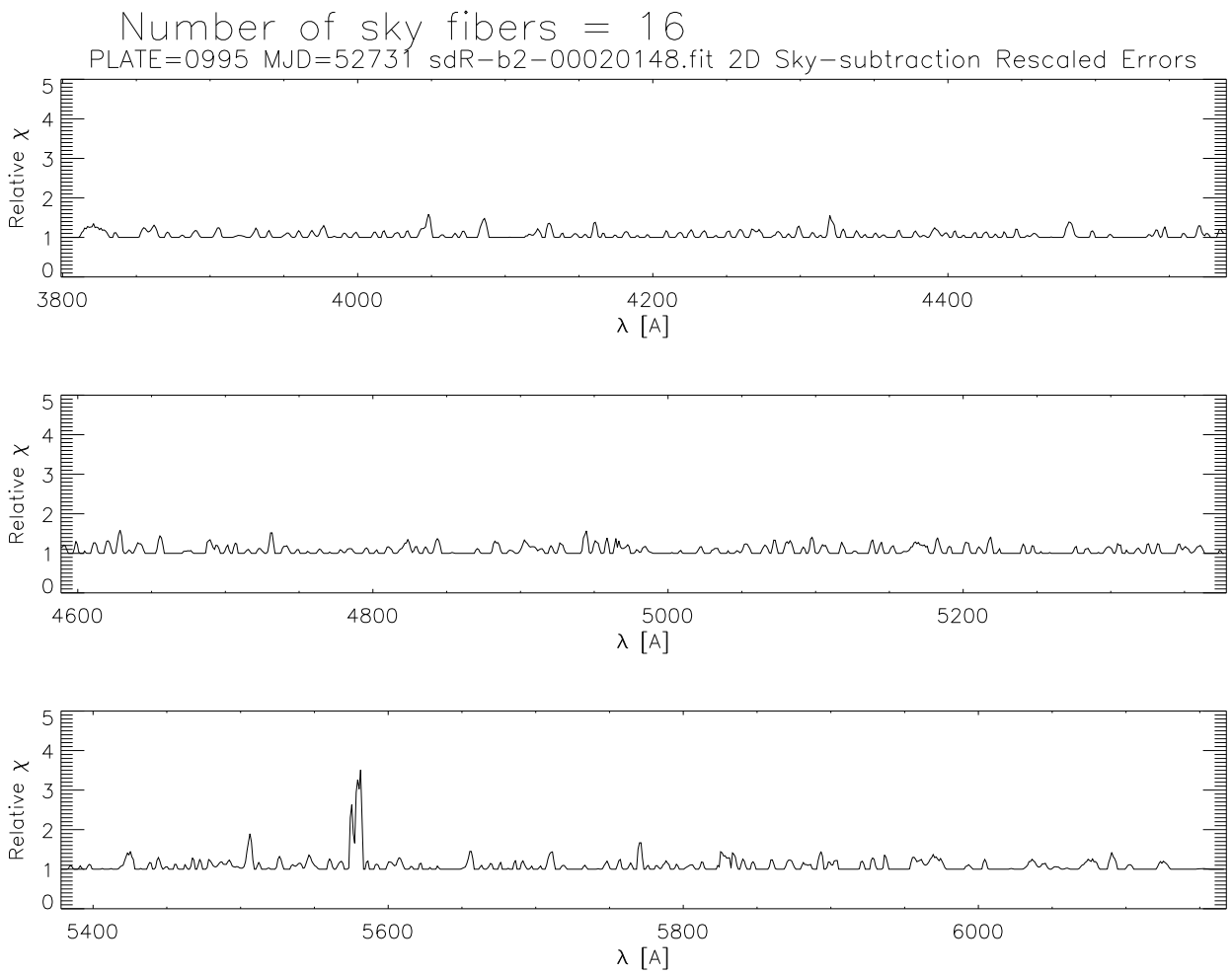

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

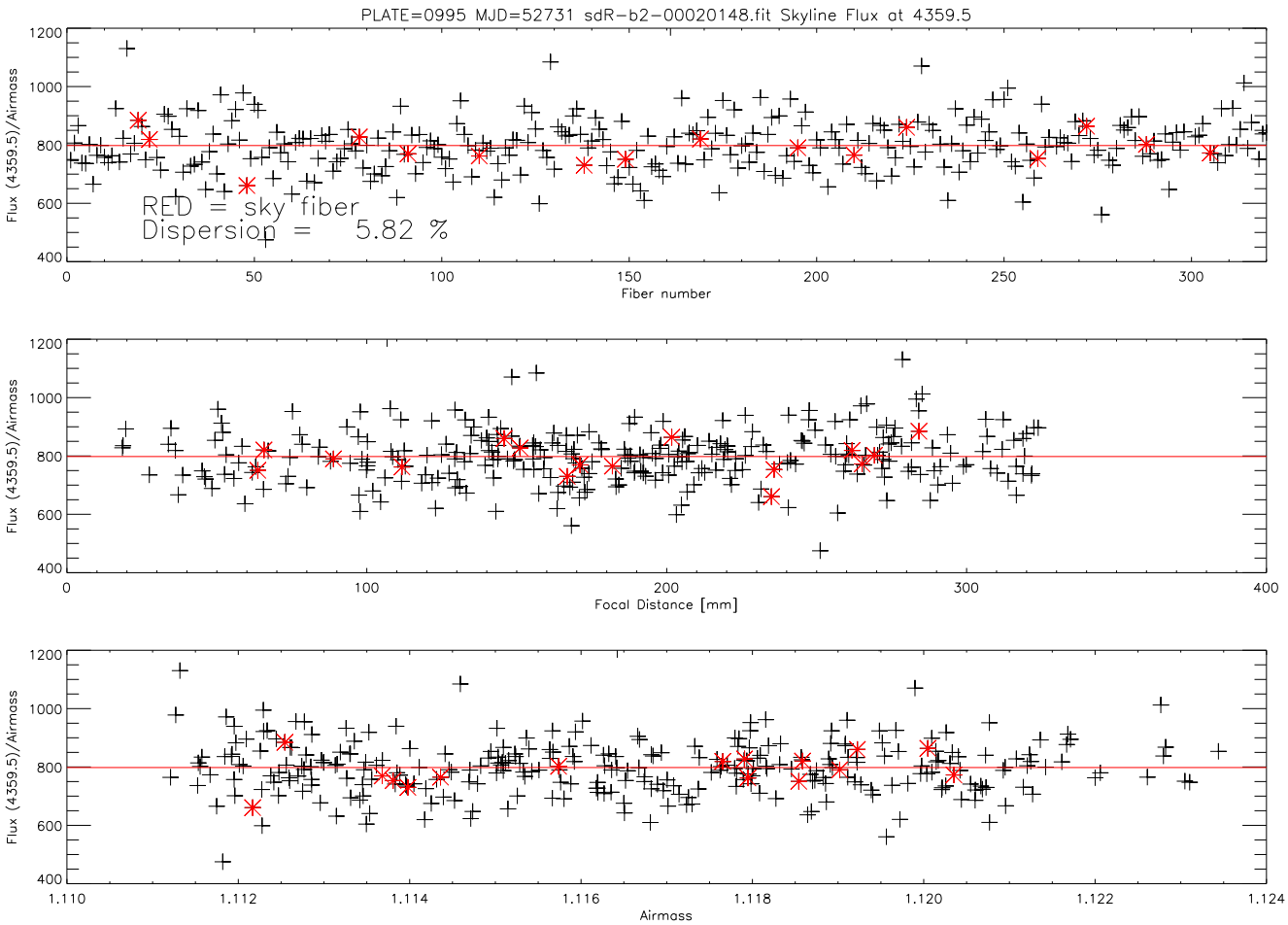

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020148.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

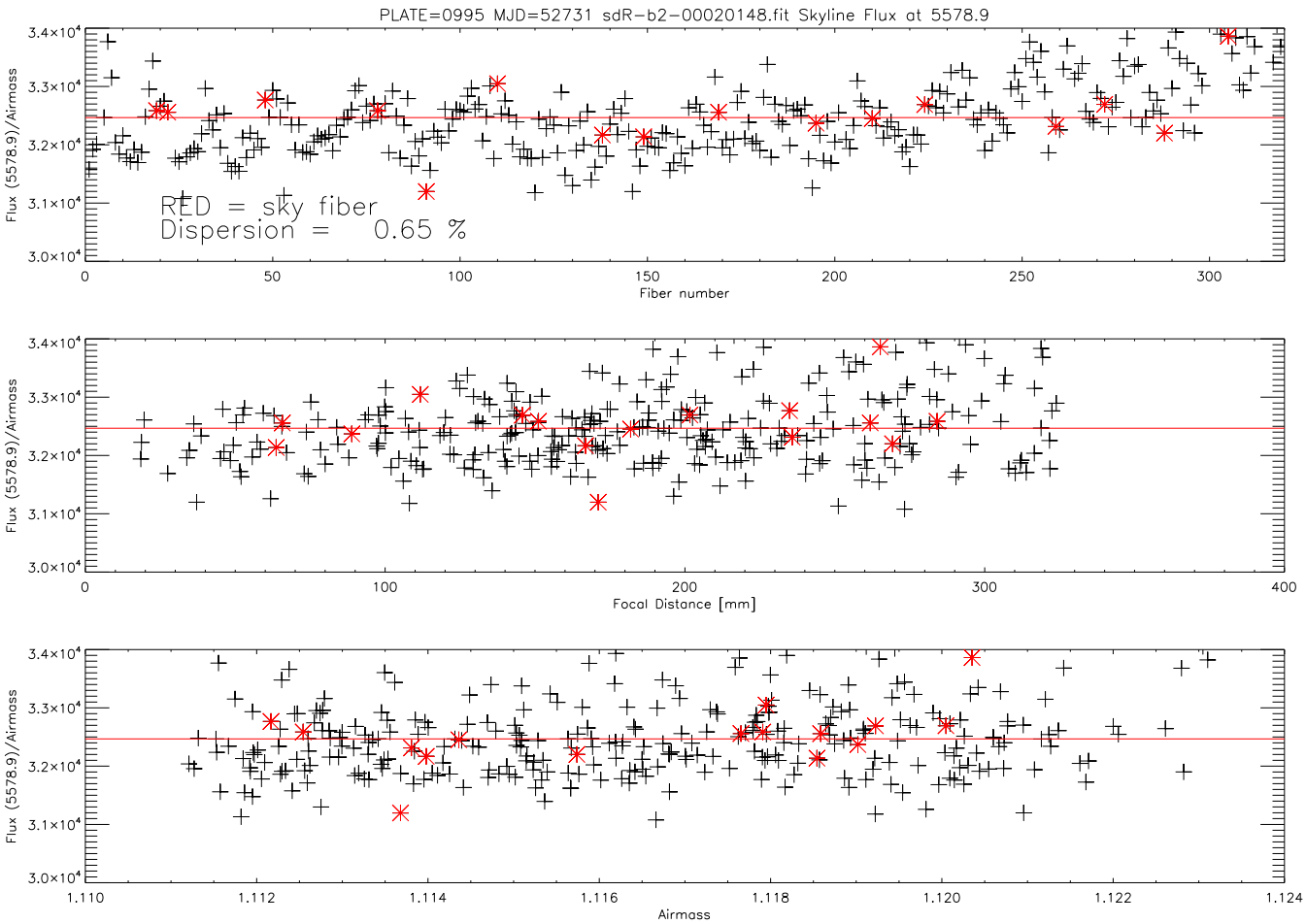

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

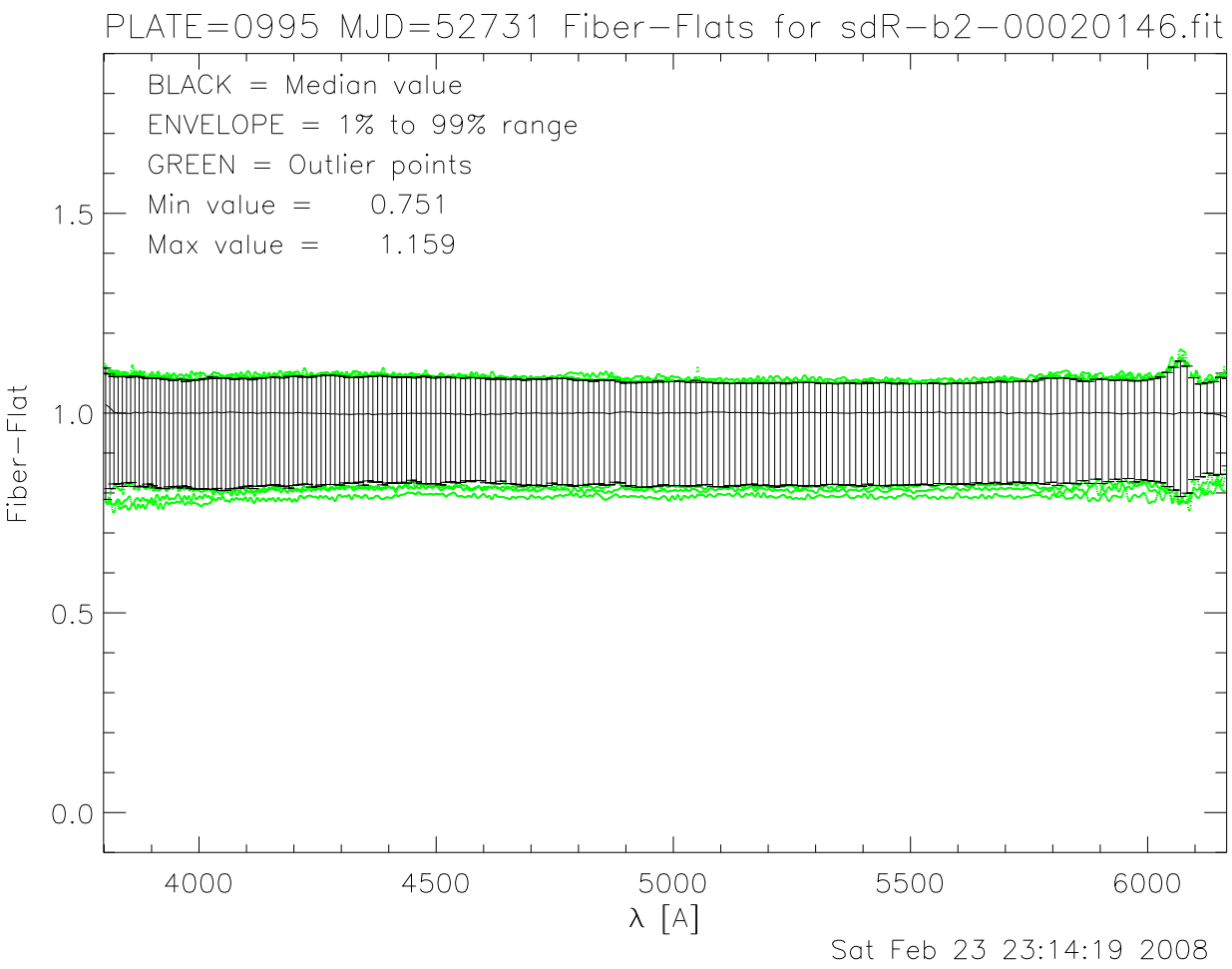

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

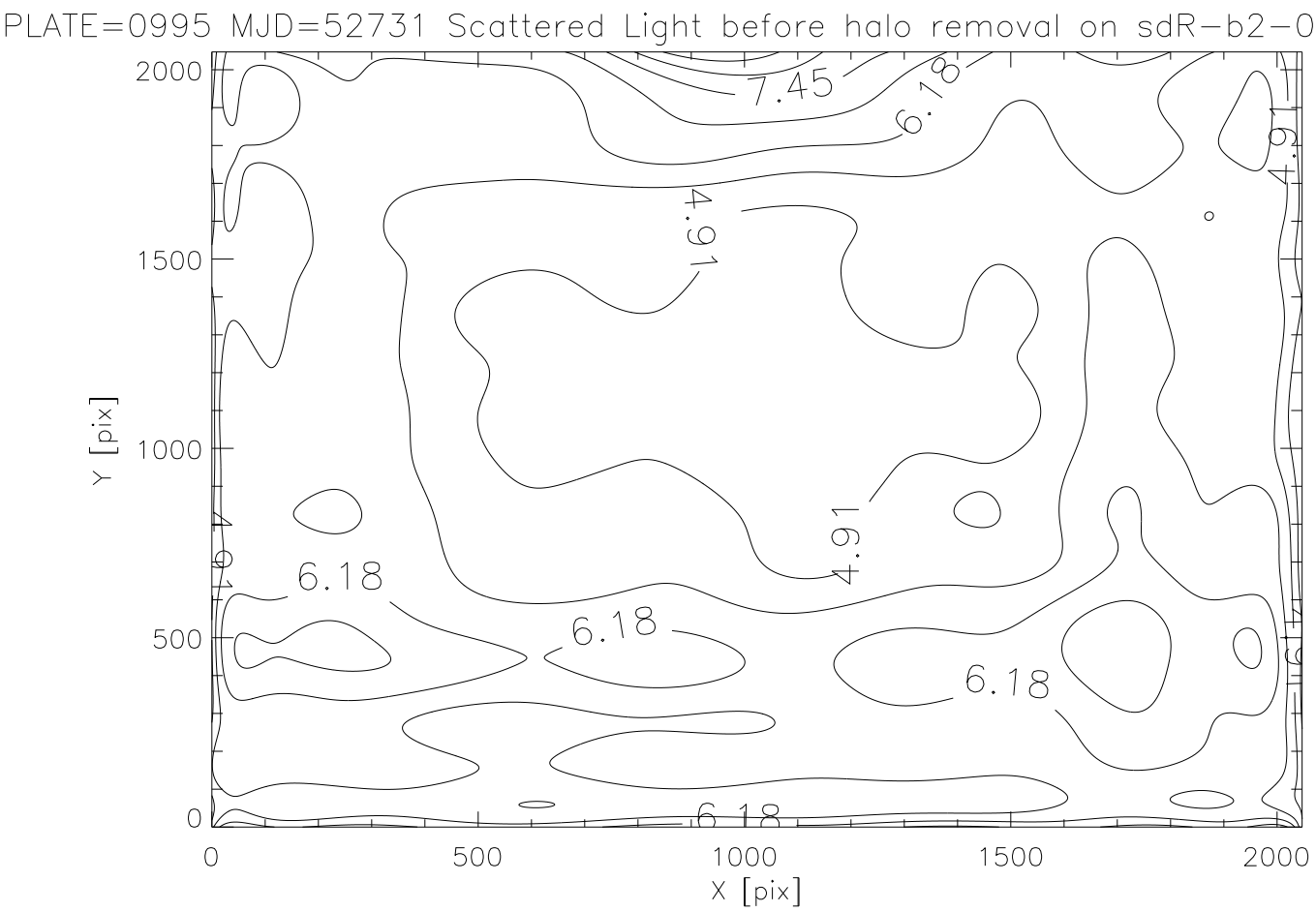

PLATE=0995 MJD=52731 sdR-b2-00020148.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

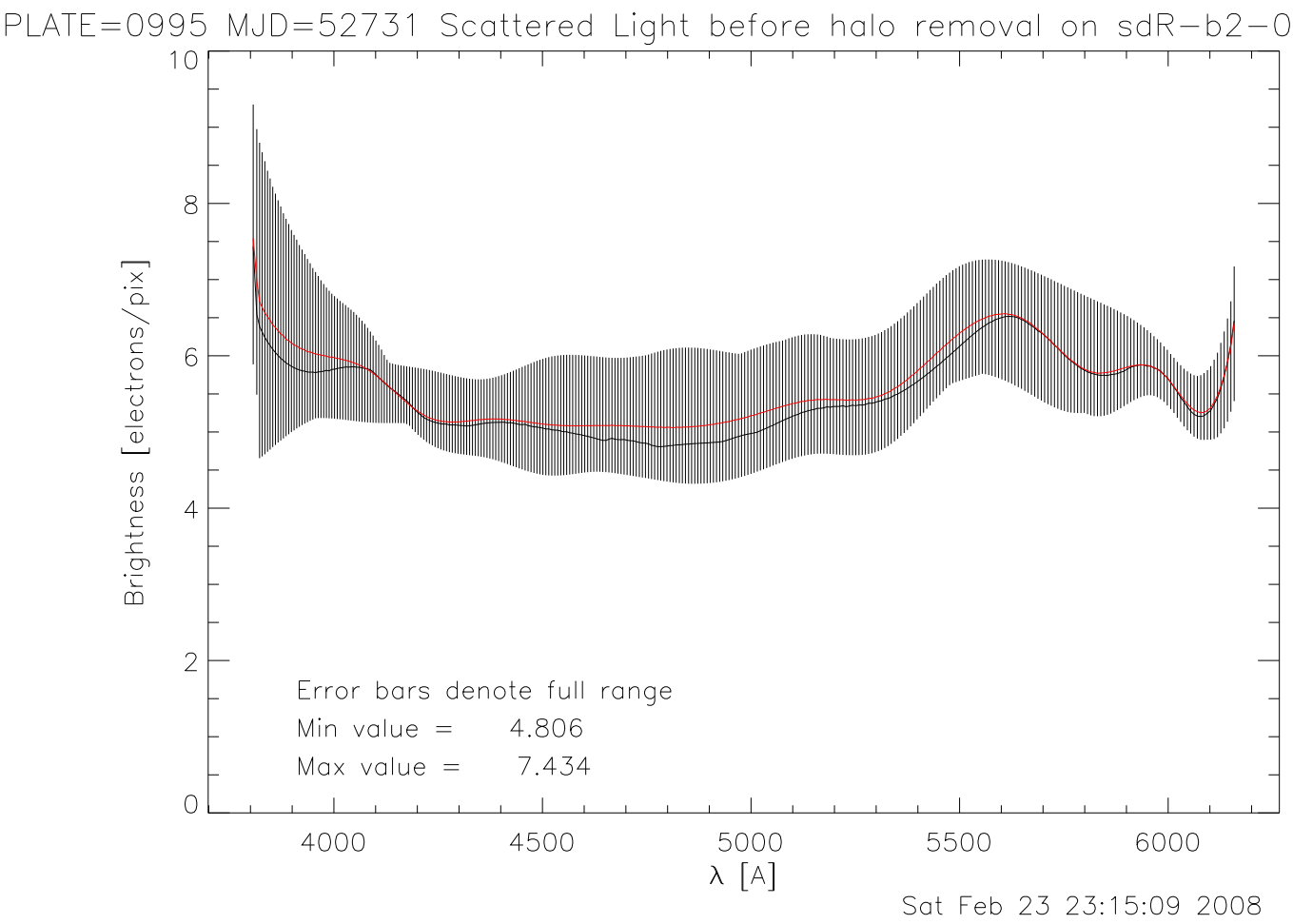

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020148.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

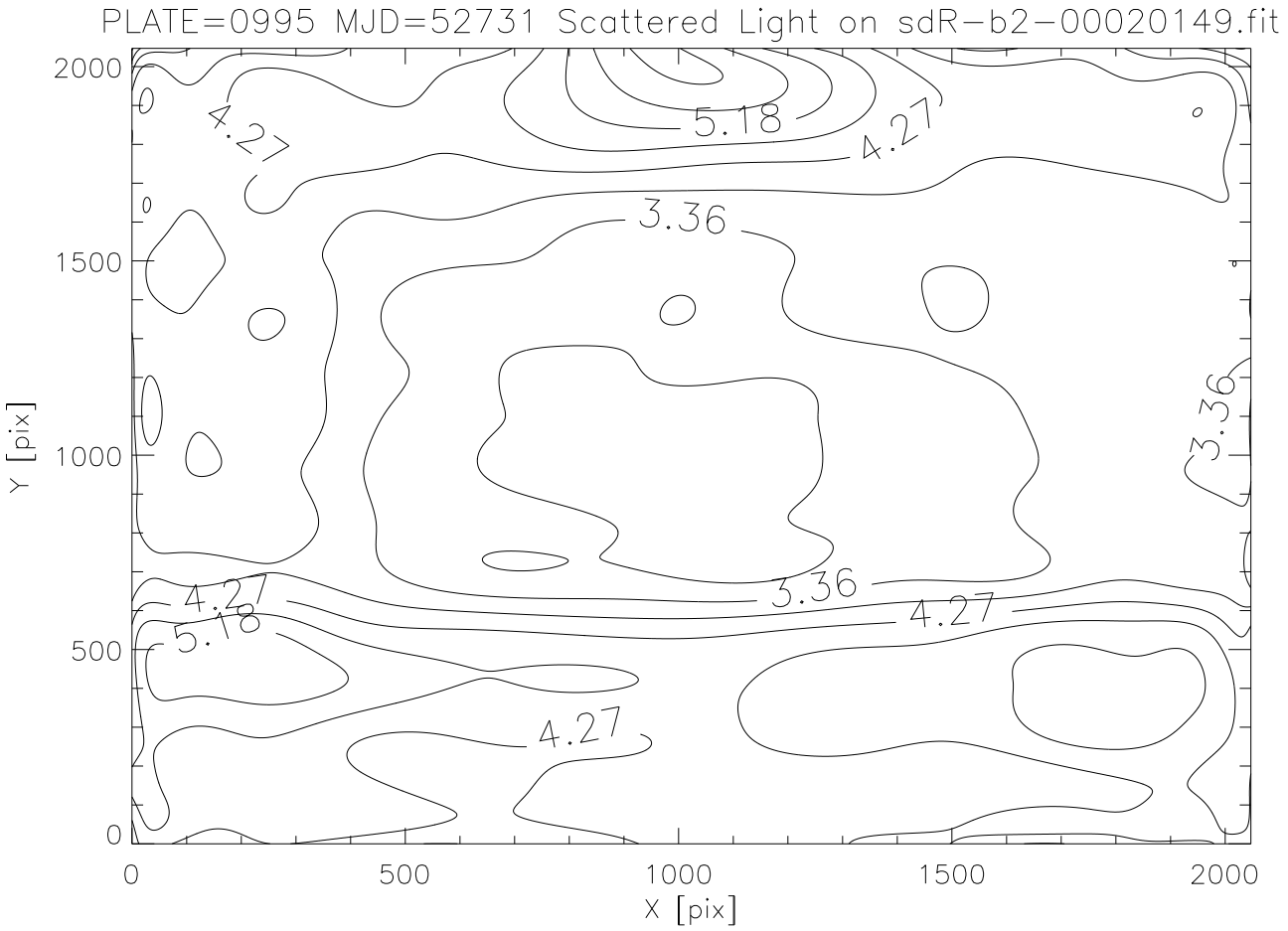

PLATE=0995 MJD=52731 sdR-b2-00020148.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.82 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

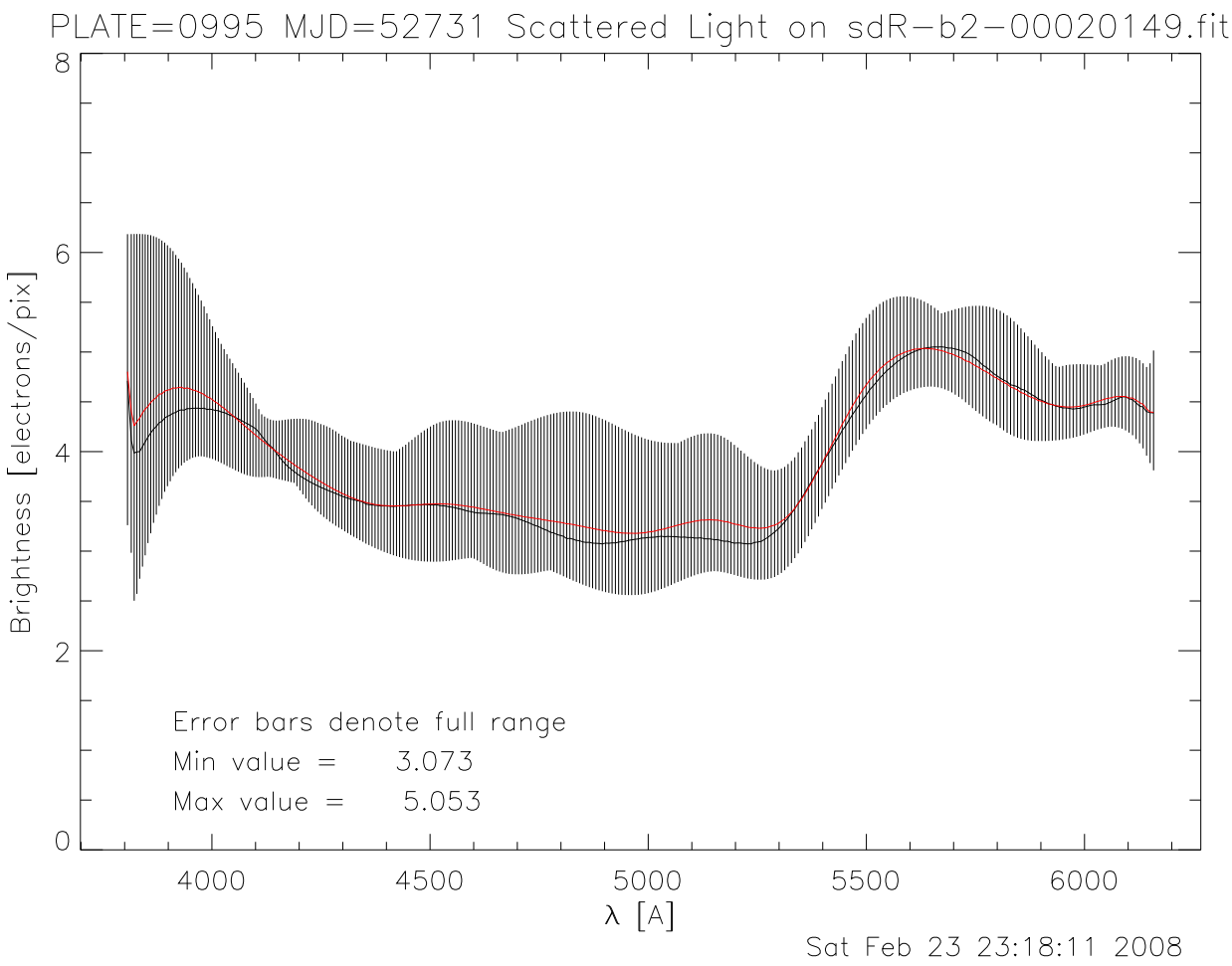

PLATE=0995 MJD=52731 sdR-b2-00020148.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.65 %
Fiber number
Focal Distance [mm]
Airmass

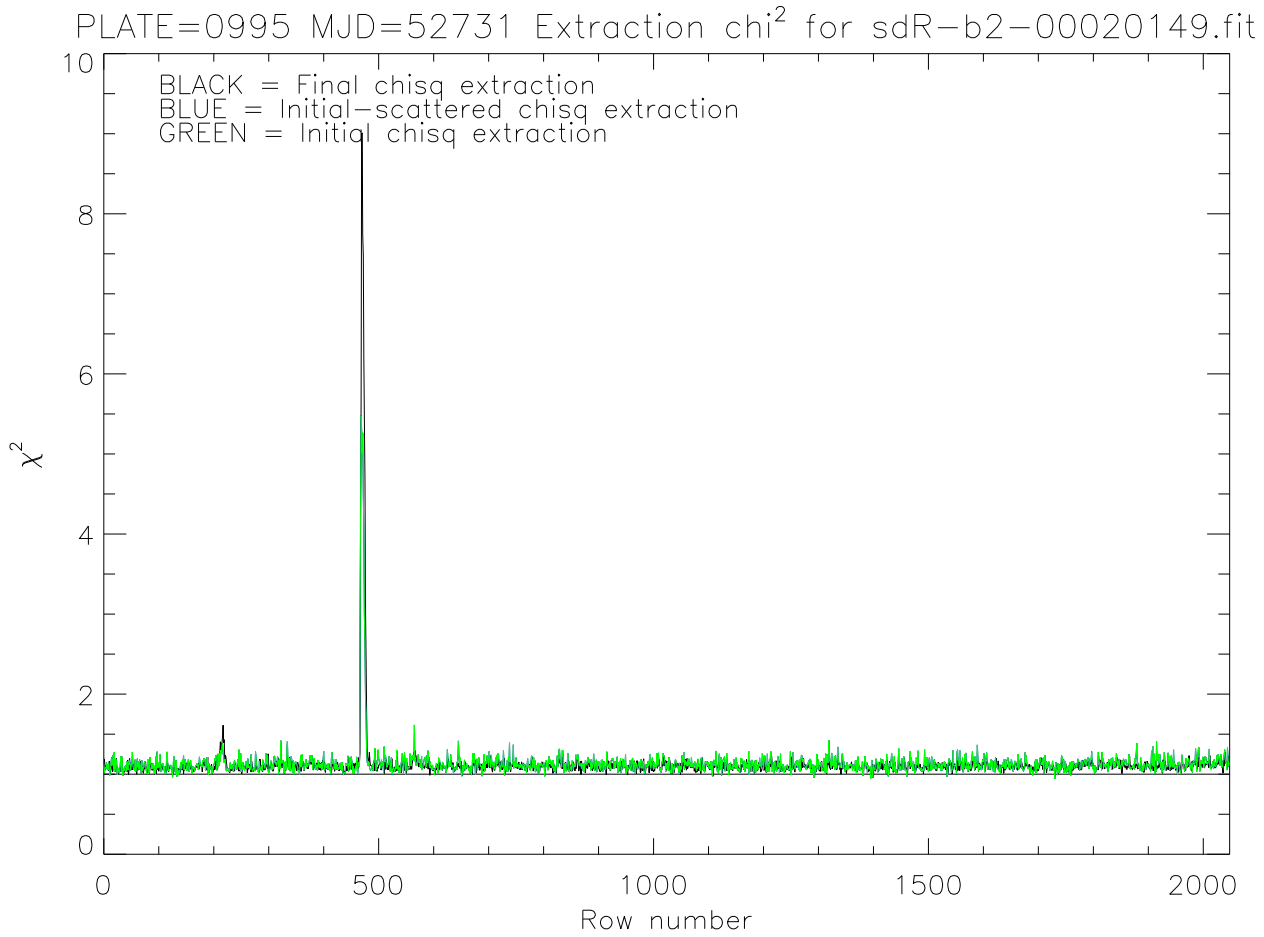

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b2-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.751
Max value = 1.159
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:14:19 2008

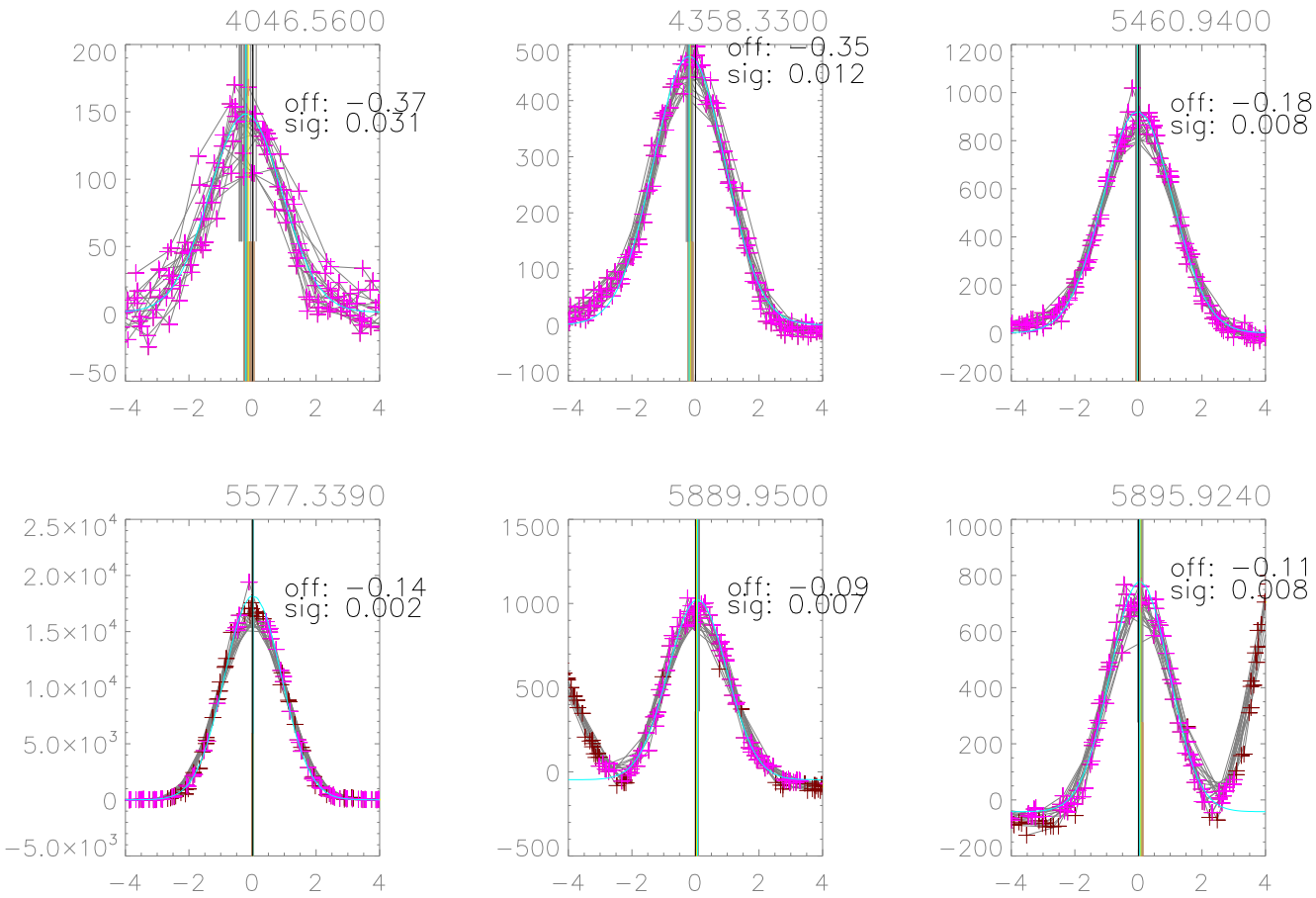

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020149.f
7.45
6.18
4.91
6.18
4.91
6.18
6.18
6.18
4.91
4.91
6.18
6.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

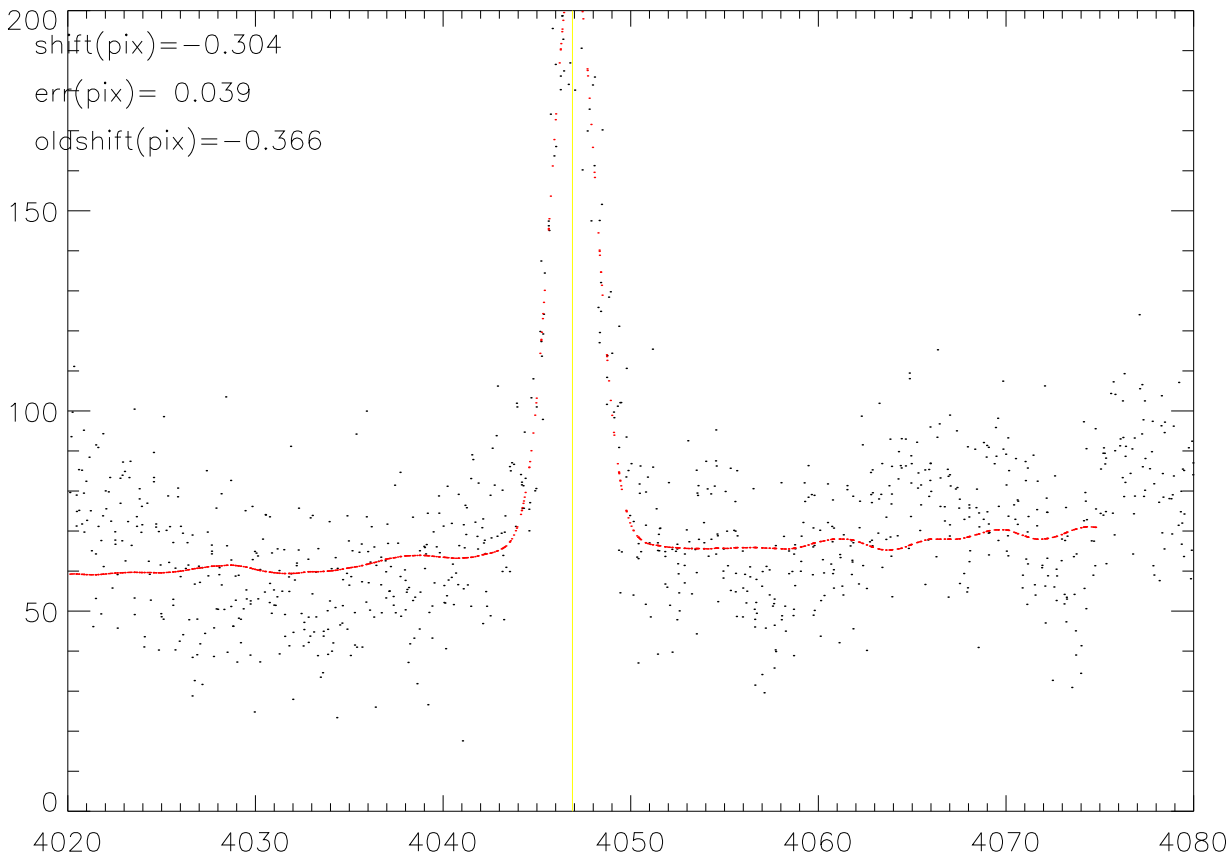

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020149.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.806
Max value = 7.434
Sat Feb 23 23:15:09 2008

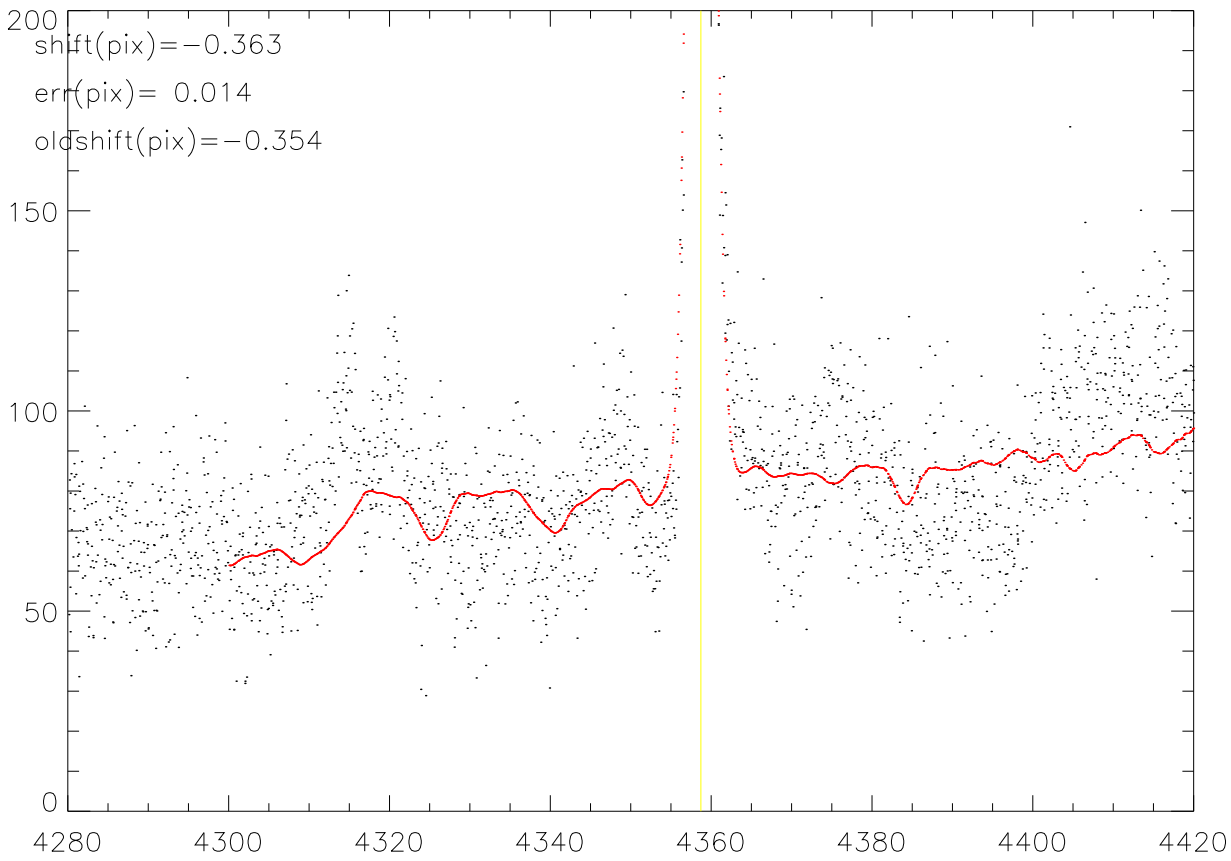

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020149.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.18
4.27
3.36

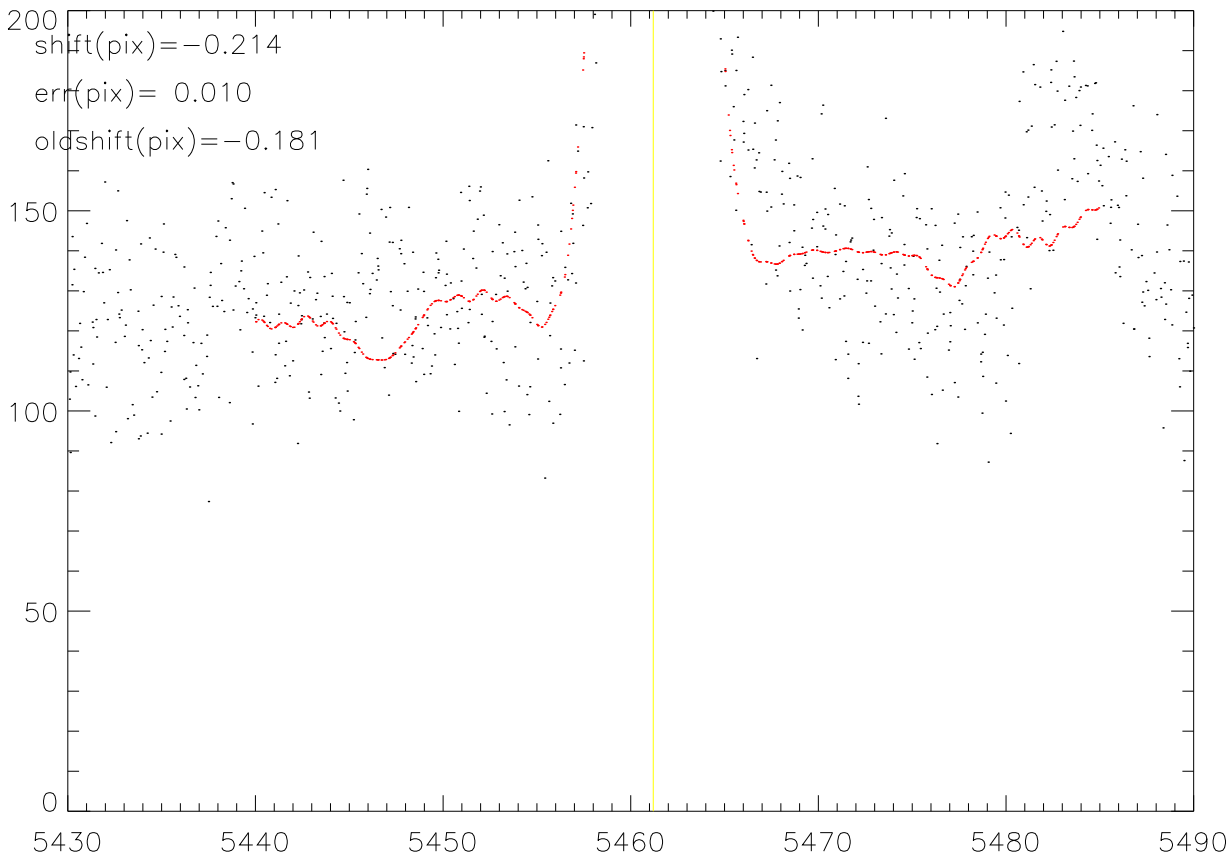

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020149.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.073
Max value = 5.053
Sat Feb 23 23:18:11 2008

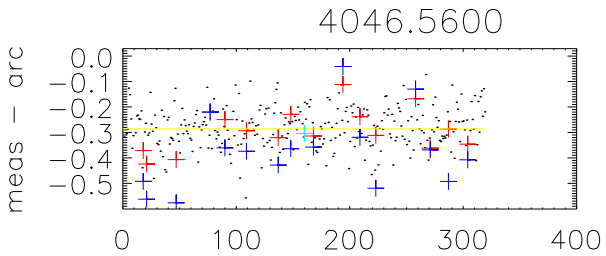

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b2-00020149.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

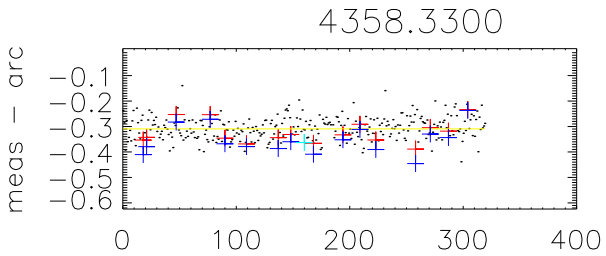

4046.5600
off: −0.37
sig: 0.031
4358.3300
off: −0.35
sig: 0.012
5460.9400
off: −0.18
sig: 0.008
5577.3390
off: −0.14
sig: 0.002
5889.9500
off: −0.09
sig: 0.007
5895.9240
off: −0.11
sig: 0.008

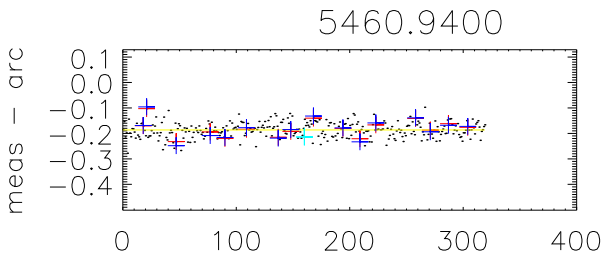

shift(pix)=−0.304
err(pix)= 0.039
oldshift(pix)=−0.366
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

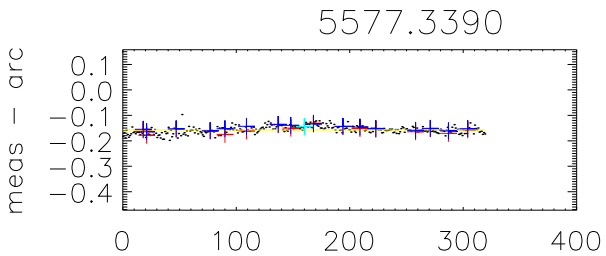

shift(pix)=−0.363
err(pix)= 0.014
oldshift(pix)=−0.354
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

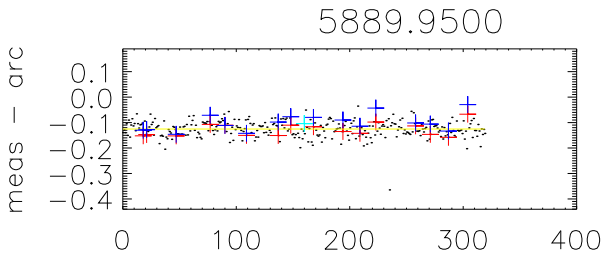

shift(pix)=−0.214
err(pix)= 0.010
oldshift(pix)=−0.181
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

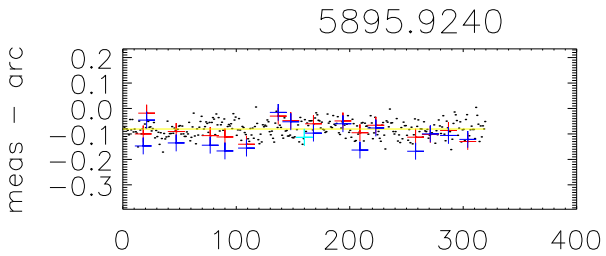

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

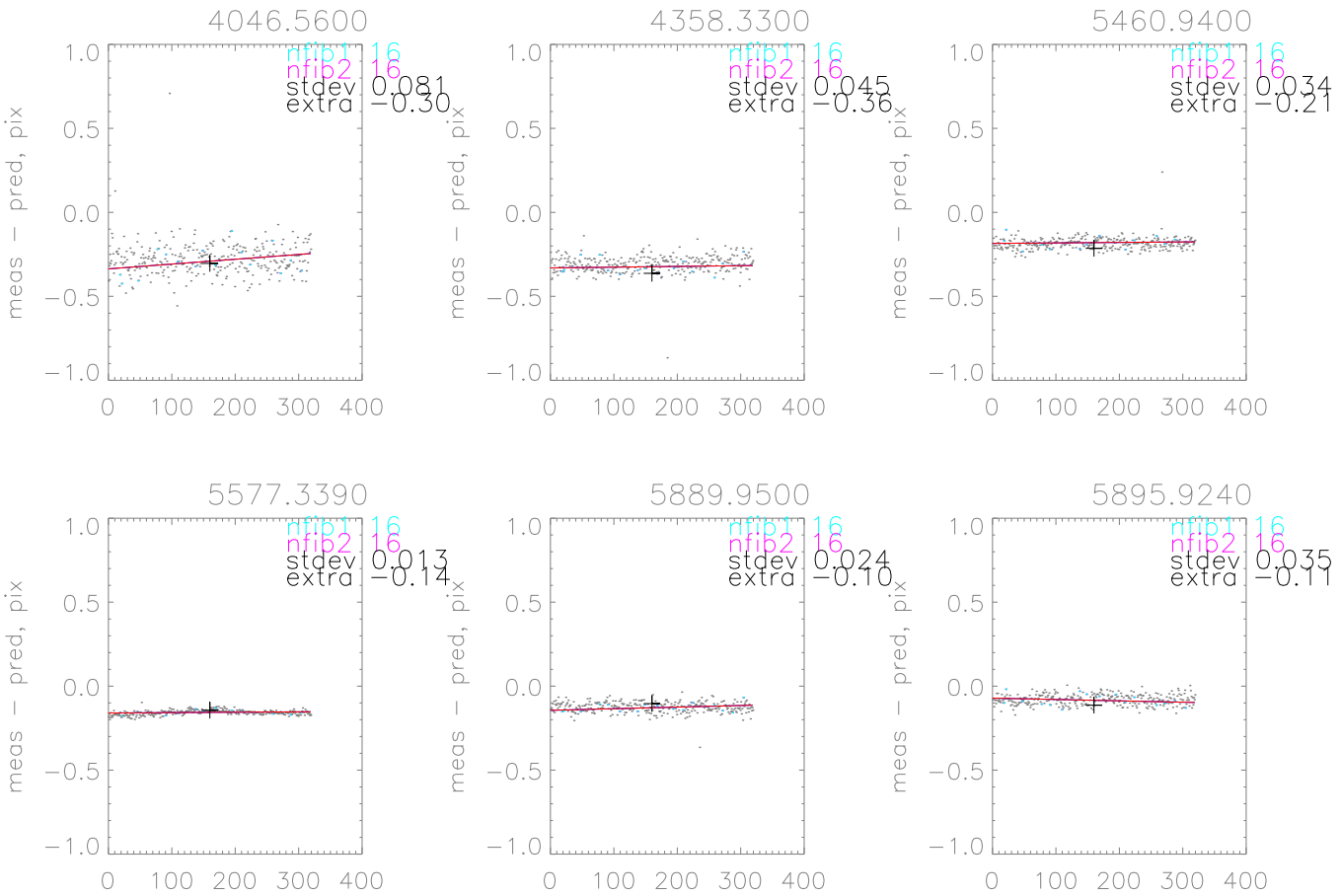

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

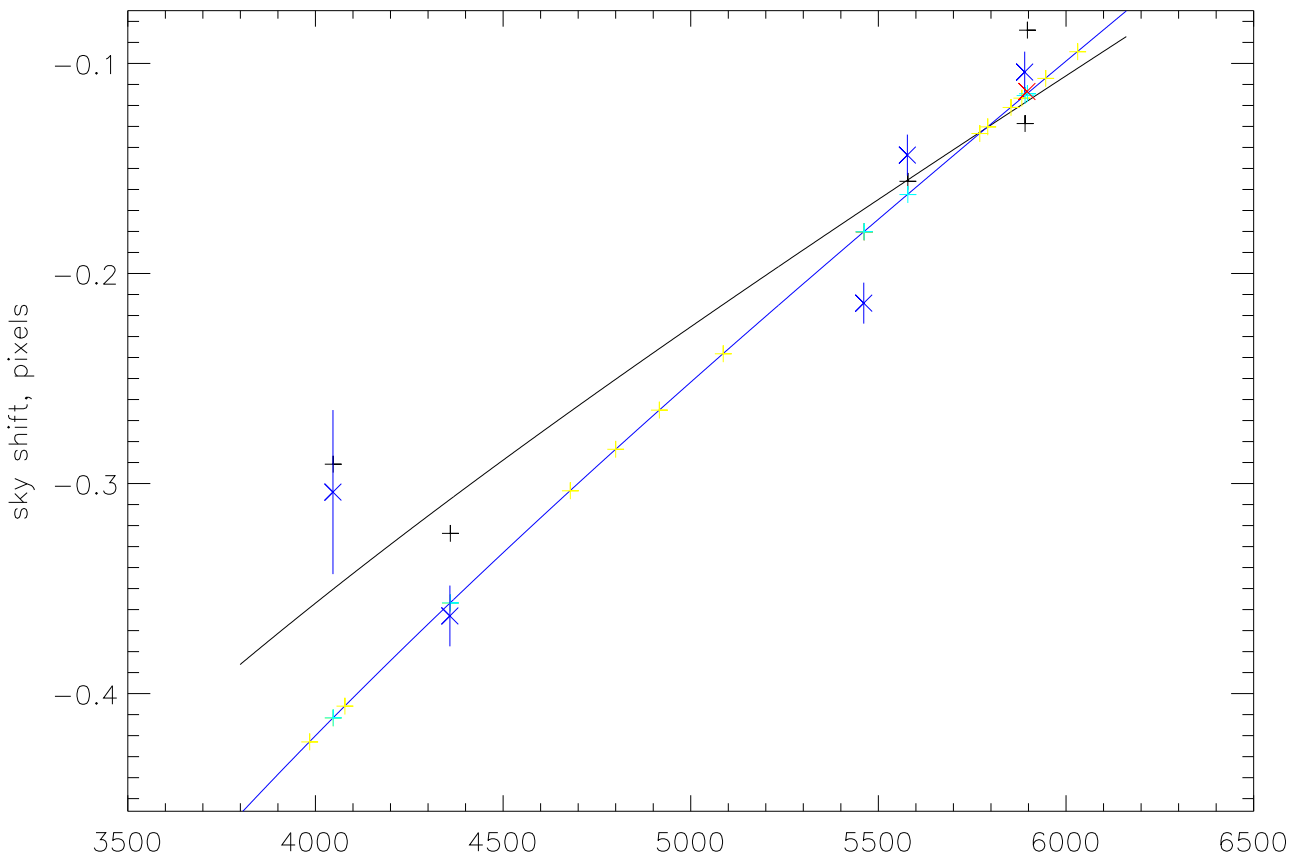

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

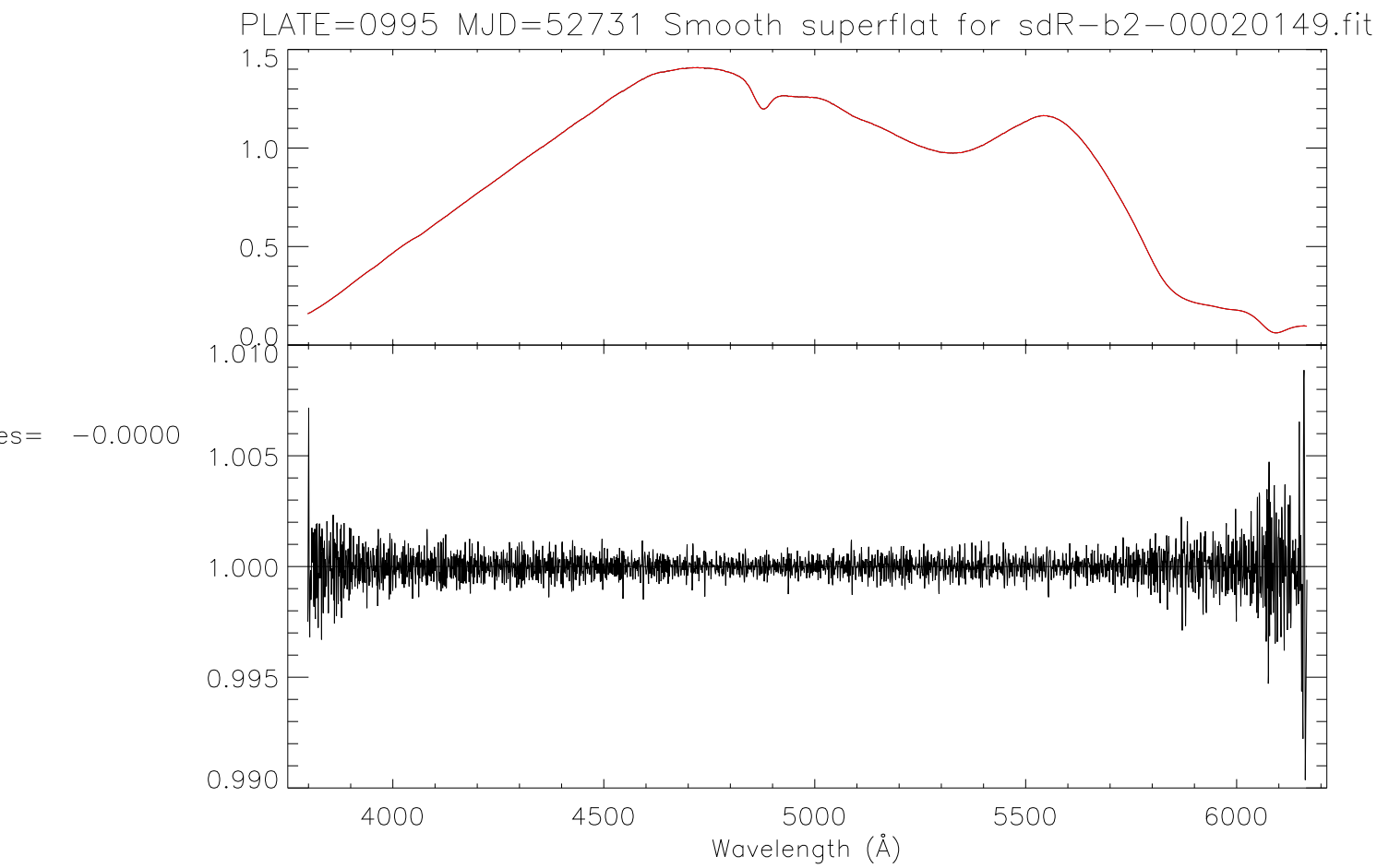

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

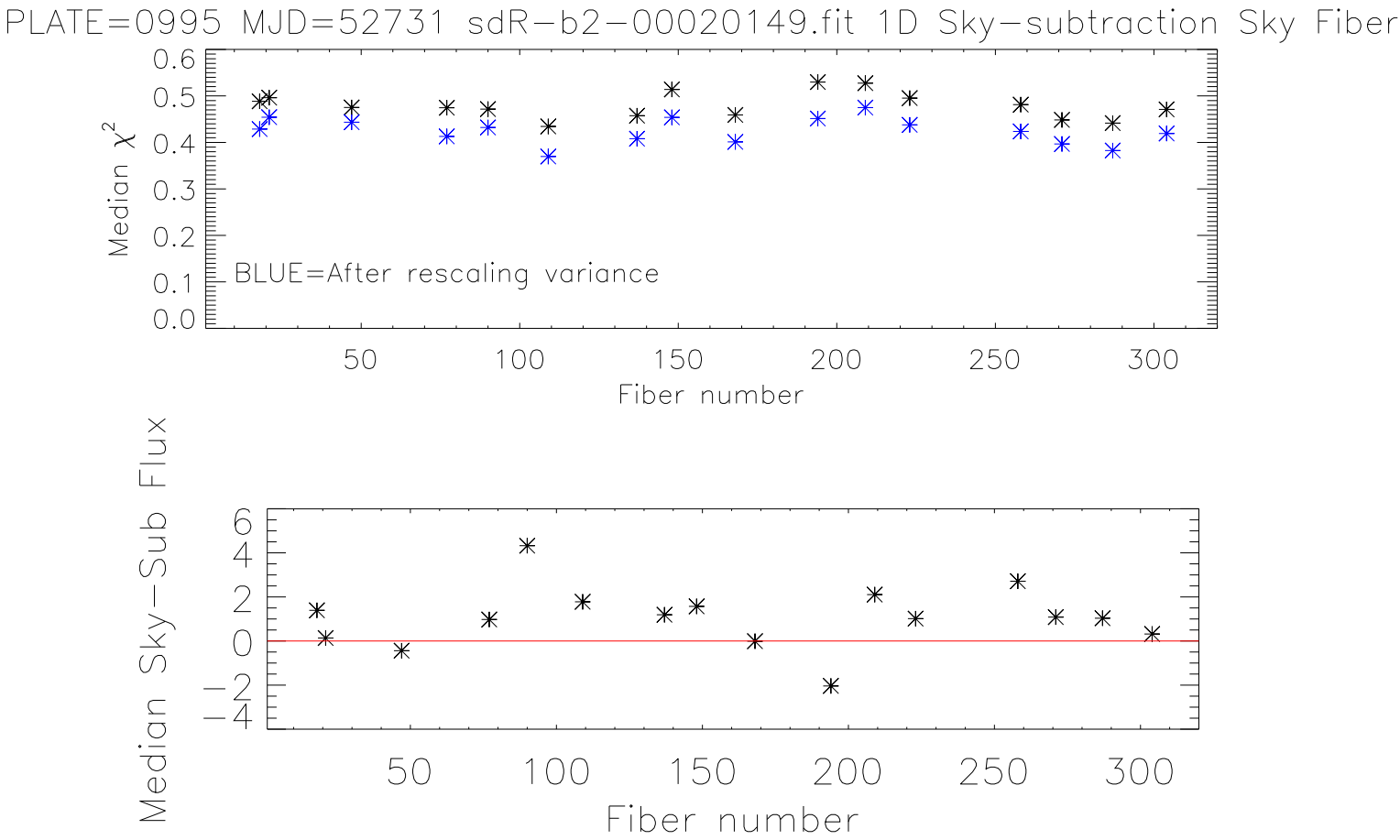

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

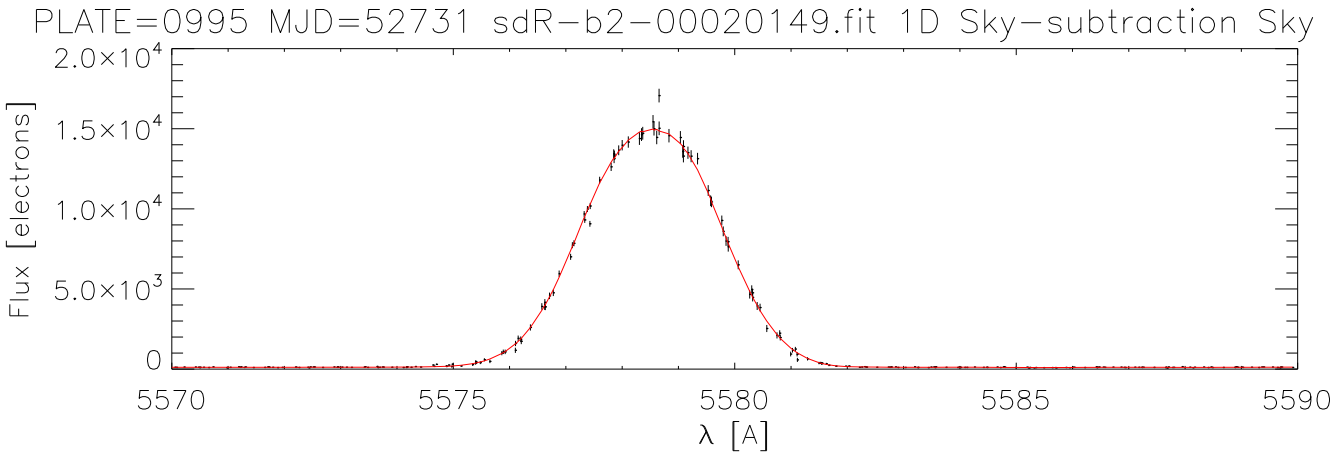

4046.5600
nfib1 16
nfib2 16
stdev 0.081
extra −0.30
4358.3300
nfib1 16
nfib2 16
stdev 0.045
extra −0.36
5460.9400
nfib1 16
nfib2 16
stdev 0.034
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra −0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

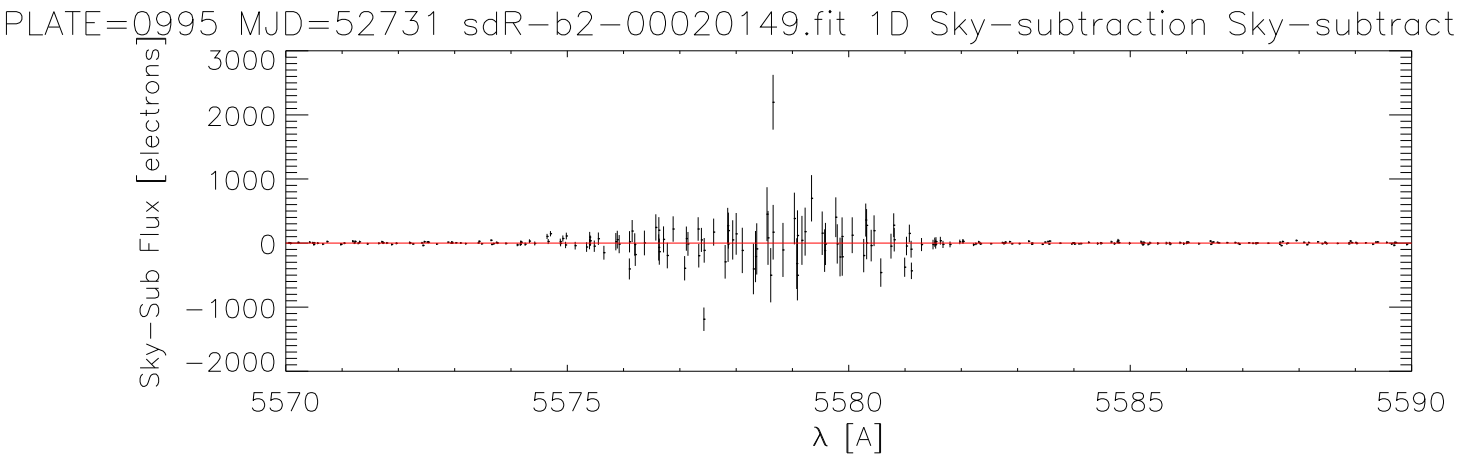

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

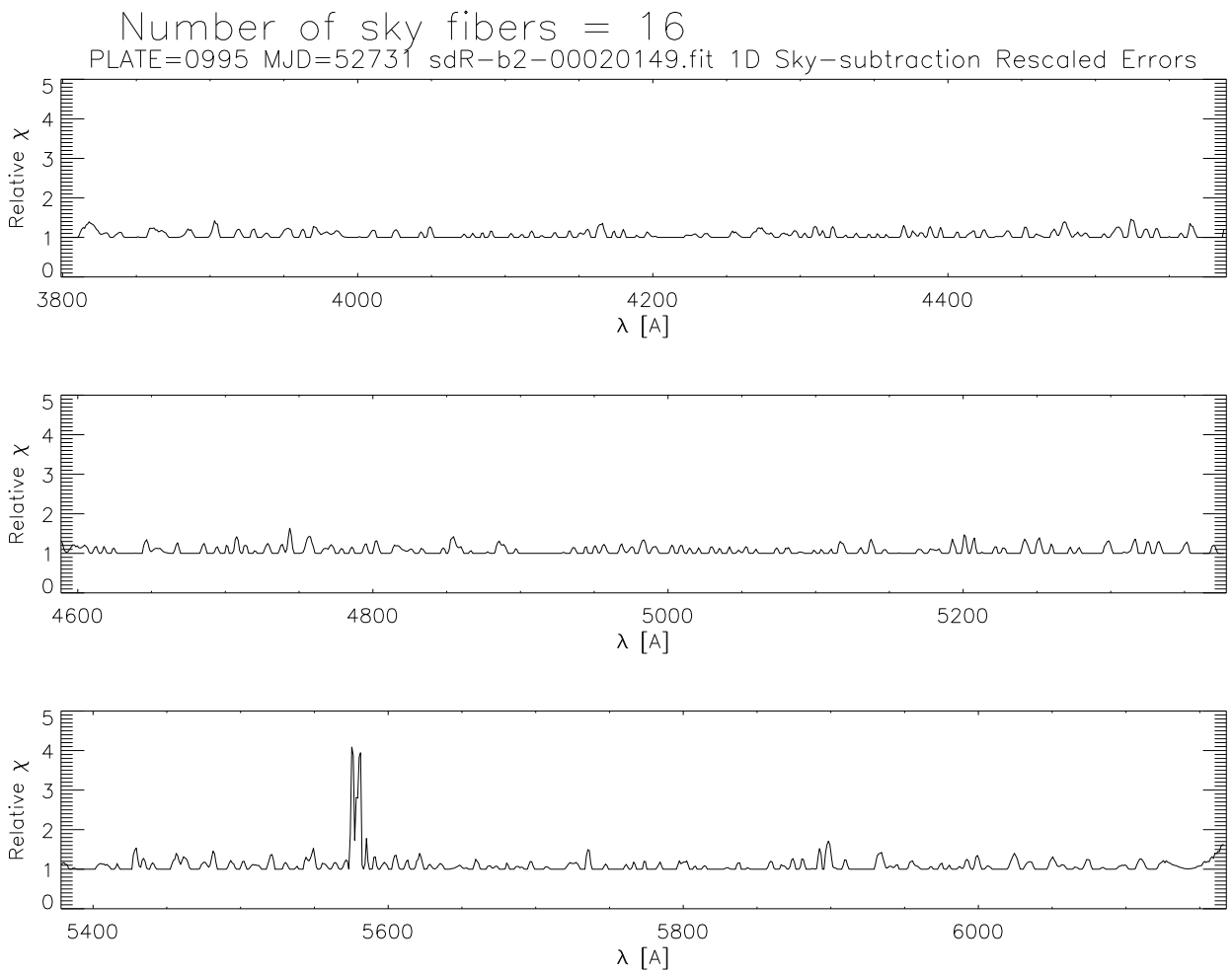

PLATE=0995 MJD=52731 Smooth superflat for sdR-b2-00020149.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

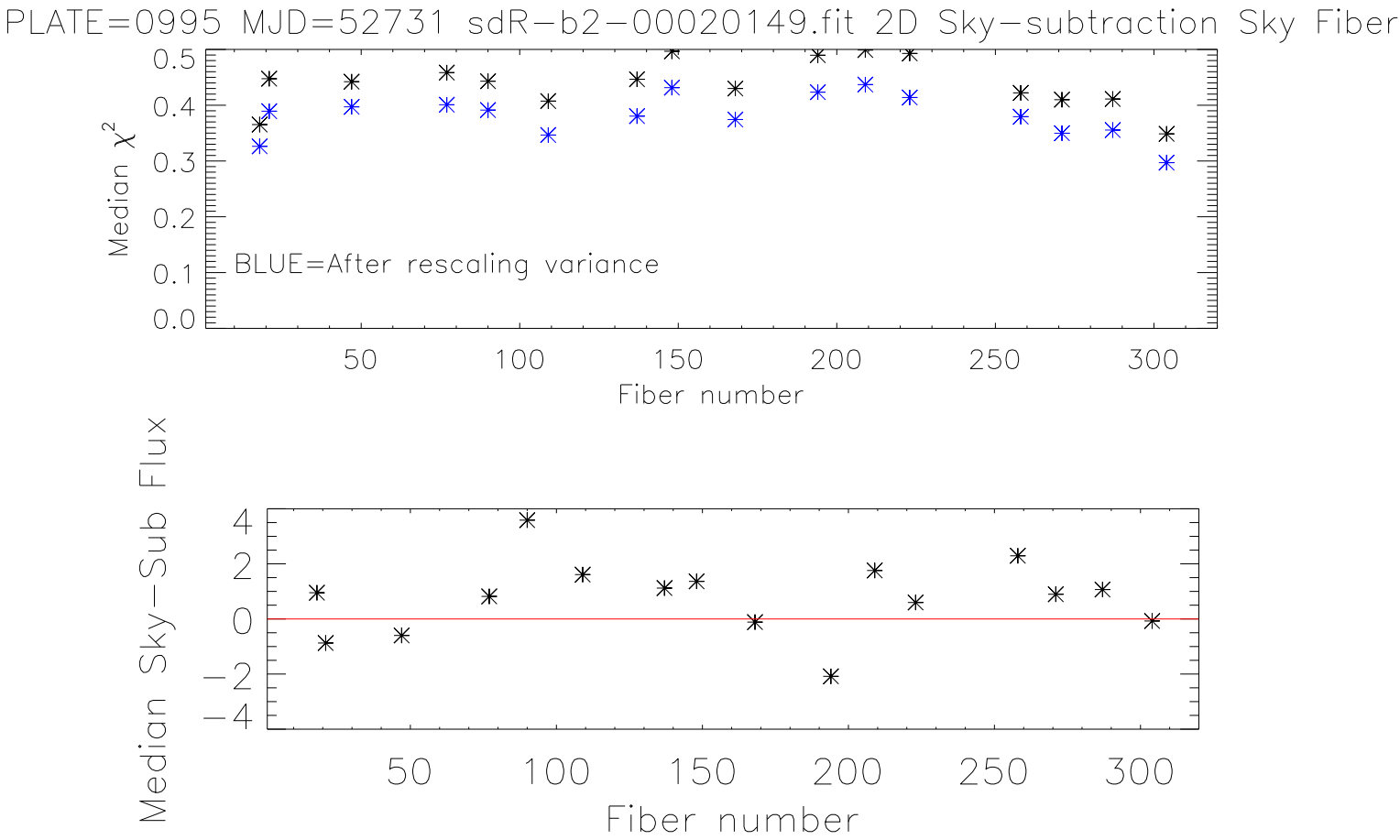
es= −0.0000

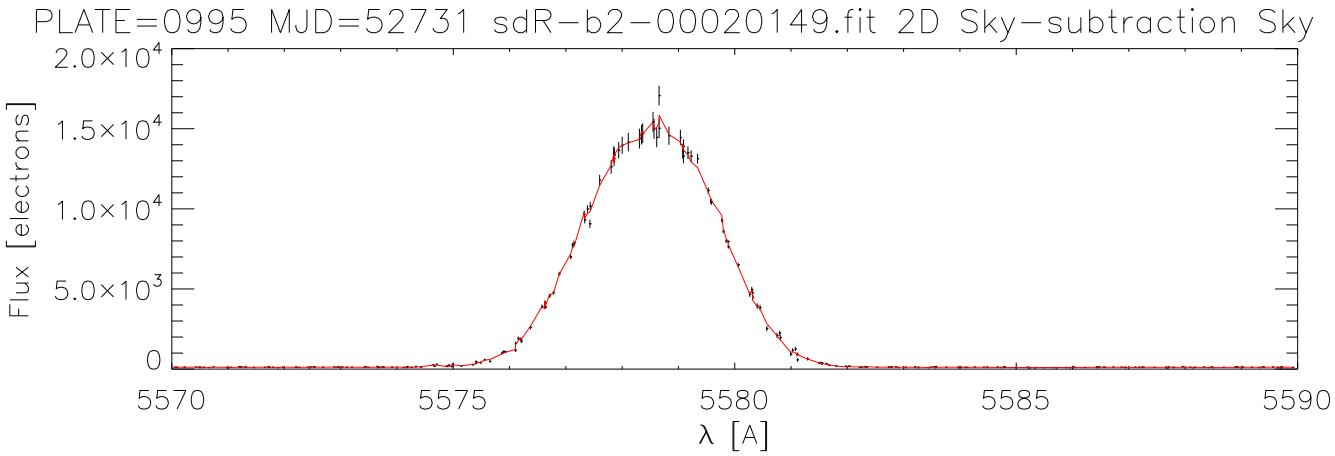

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

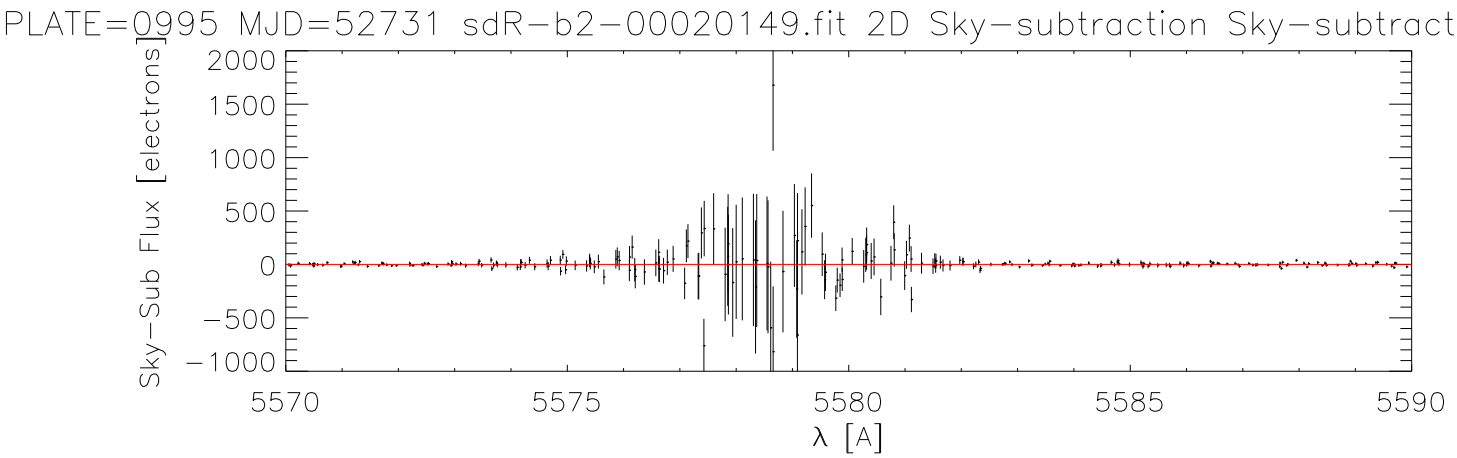

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

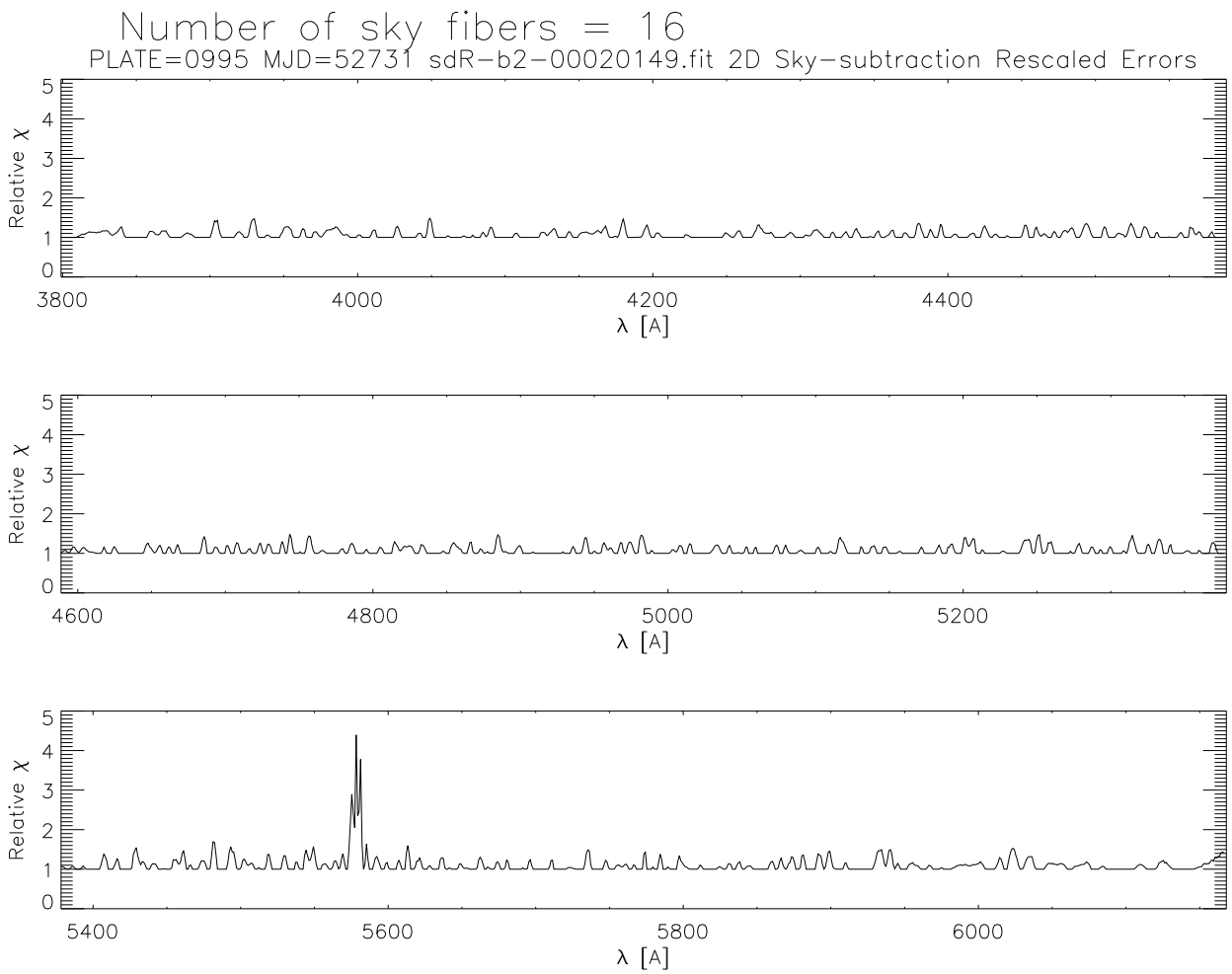

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

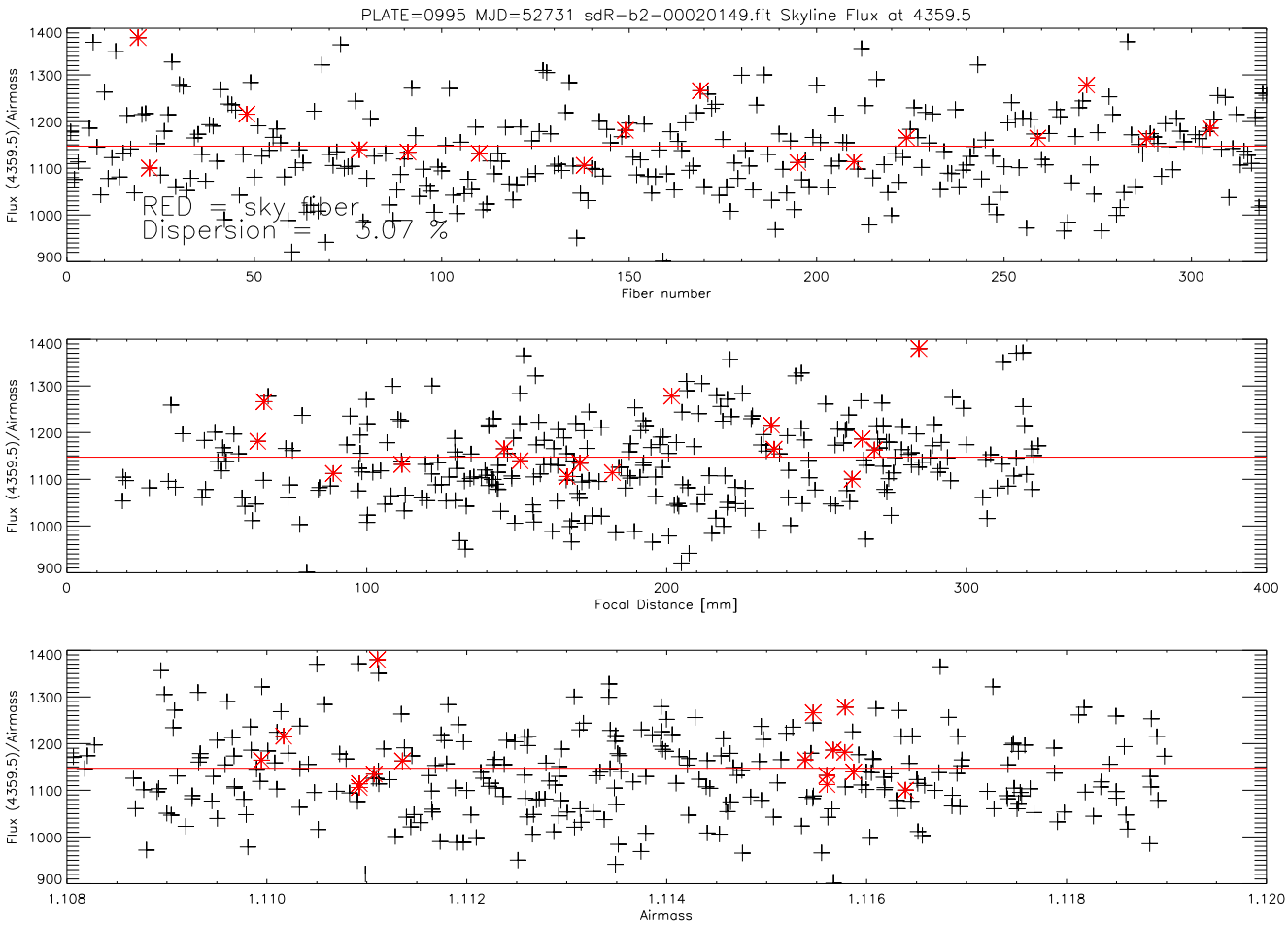

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020149.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

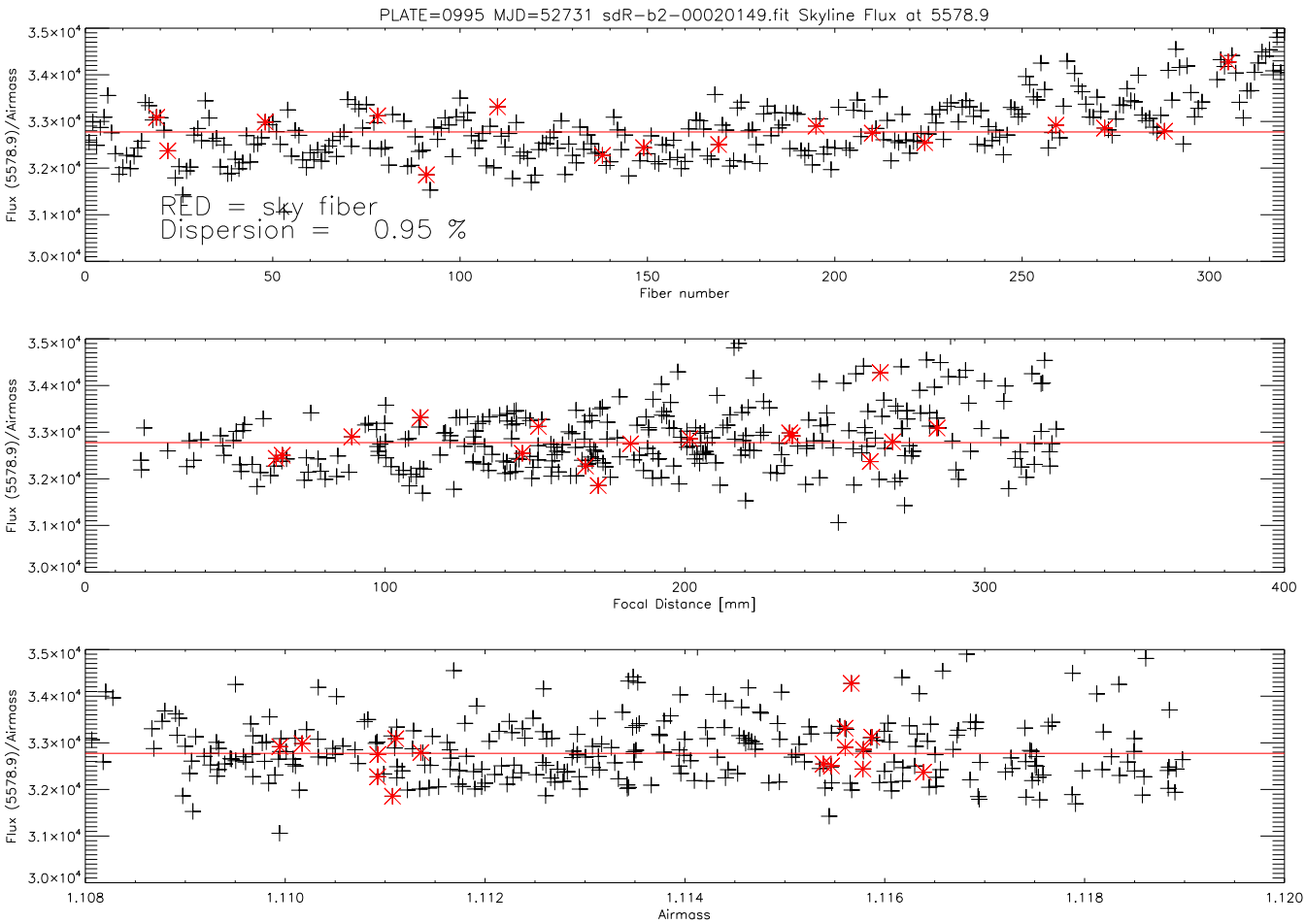

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

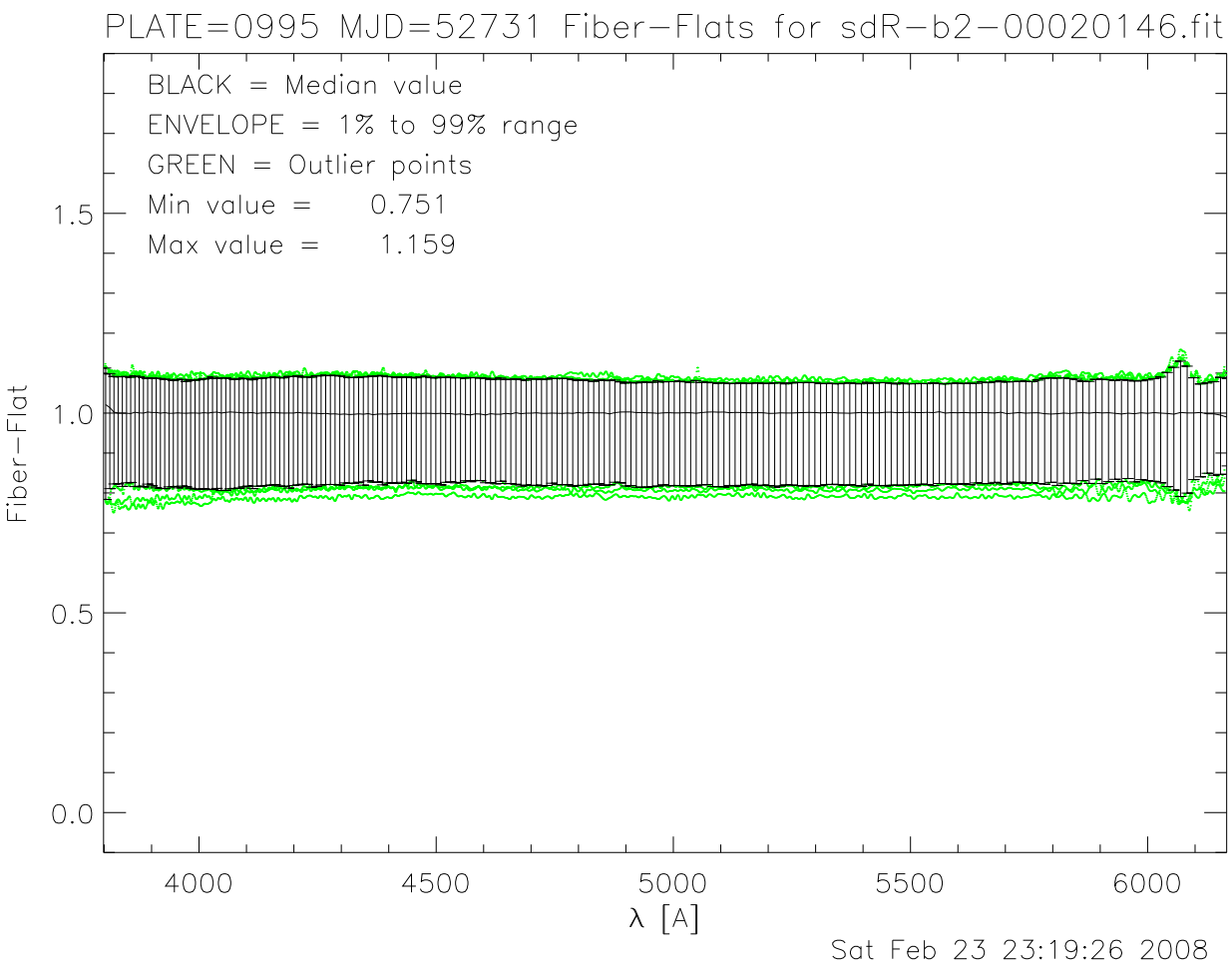

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

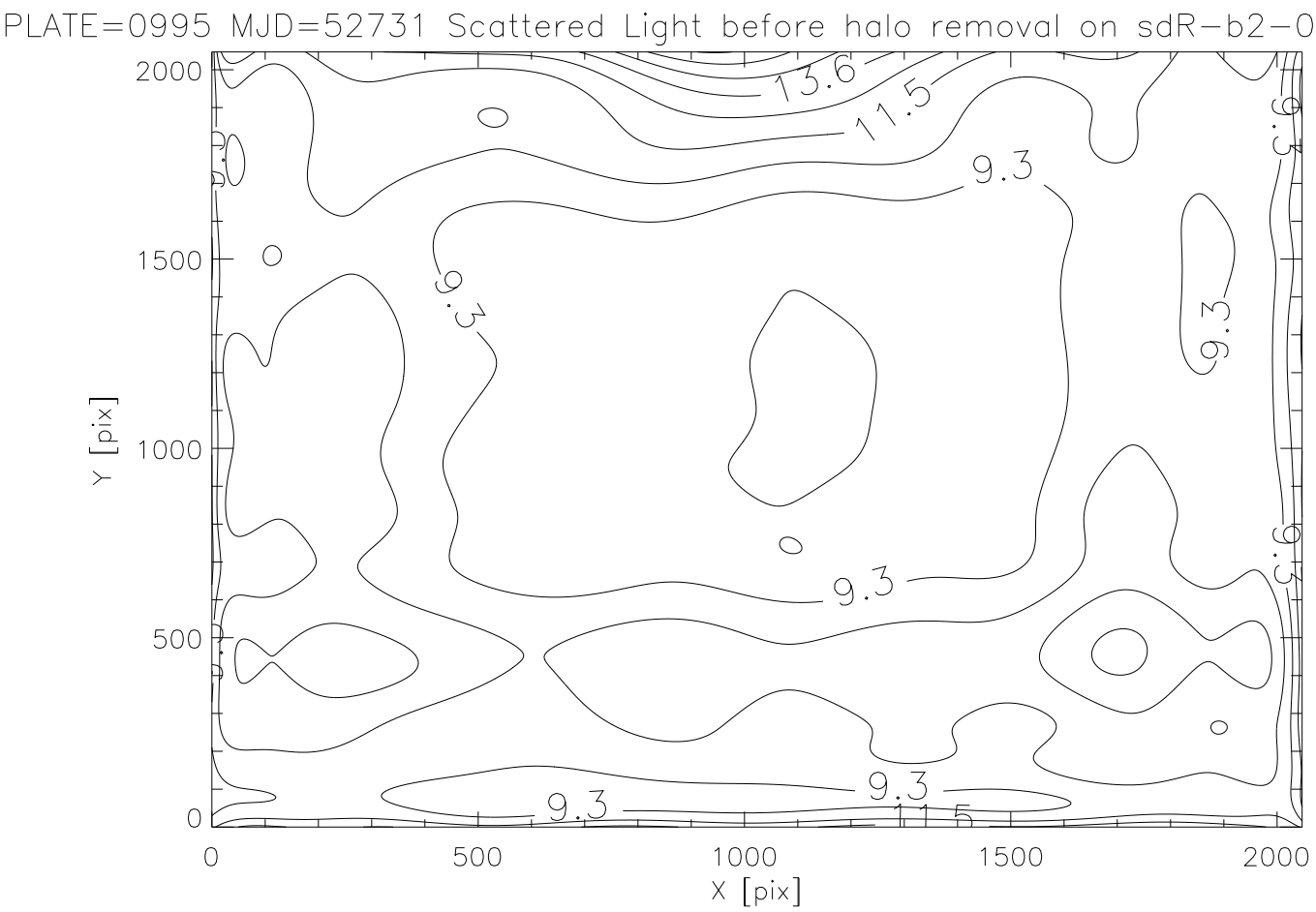

PLATE=0995 MJD=52731 sdR-b2-00020149.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

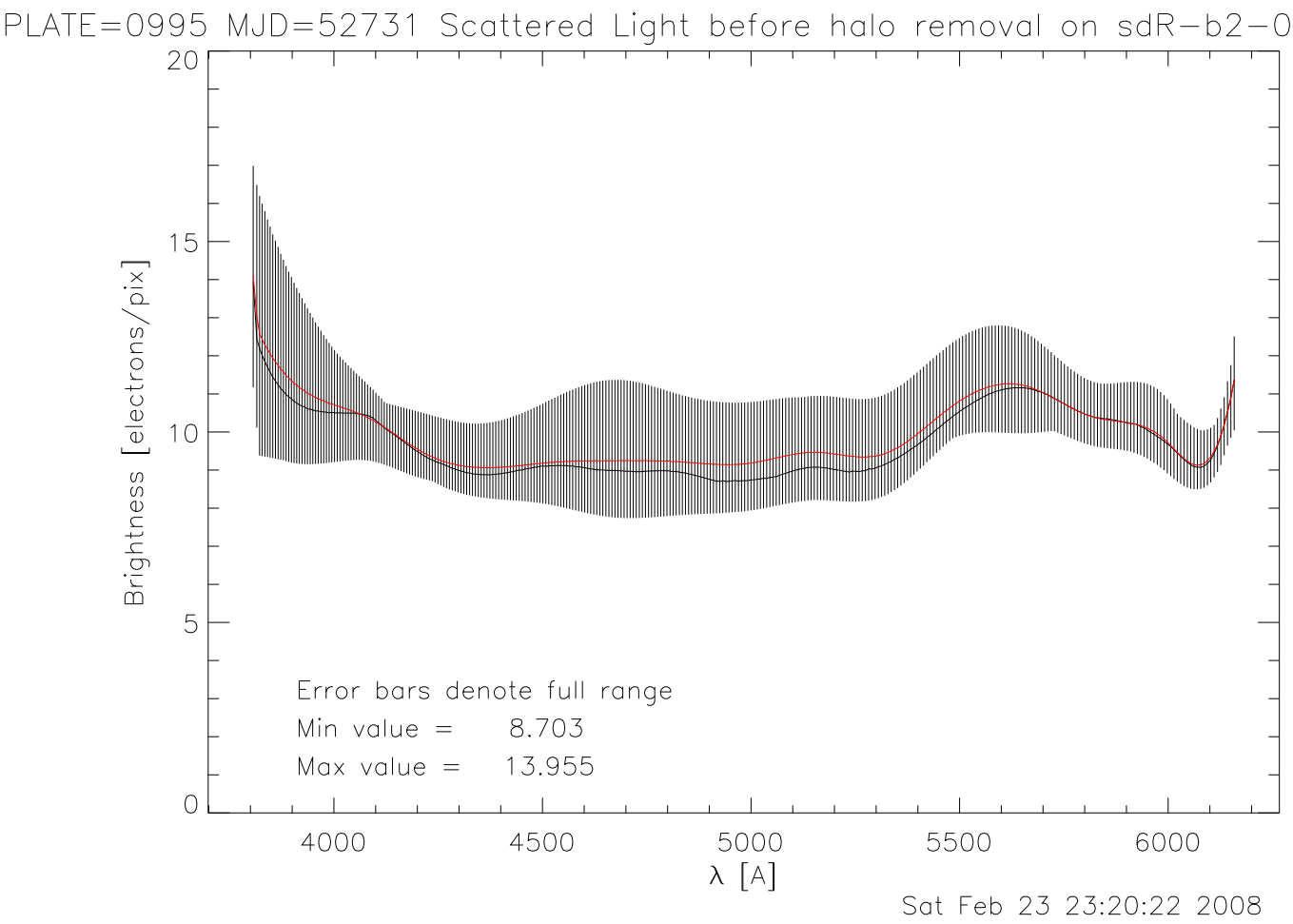

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020149.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

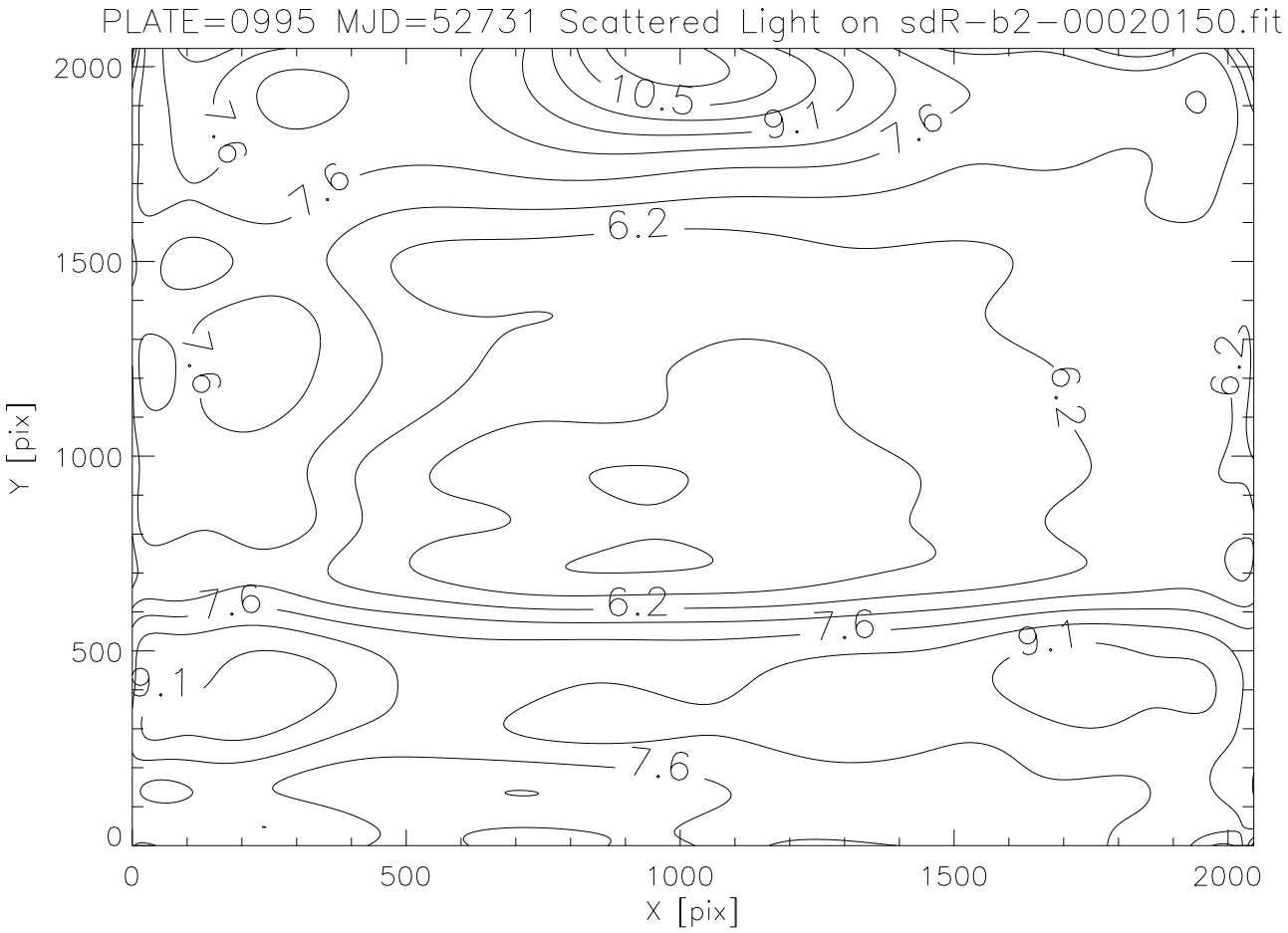

PLATE=0995 MJD=52731 sdR-b2-00020149.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.07 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

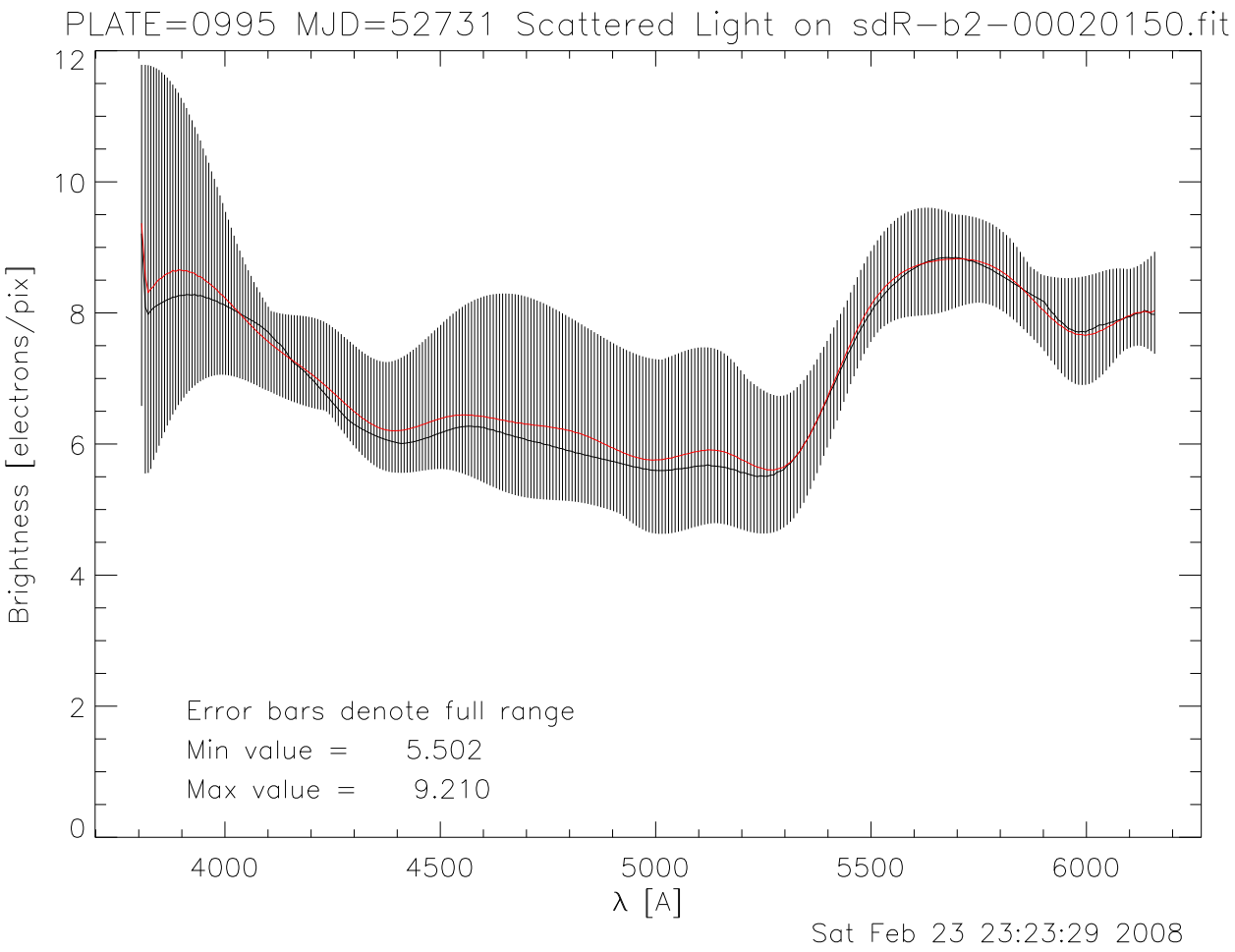

PLATE=0995 MJD=52731 sdR-b2-00020149.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.95 %
Fiber number
Focal Distance [mm]
Airmass

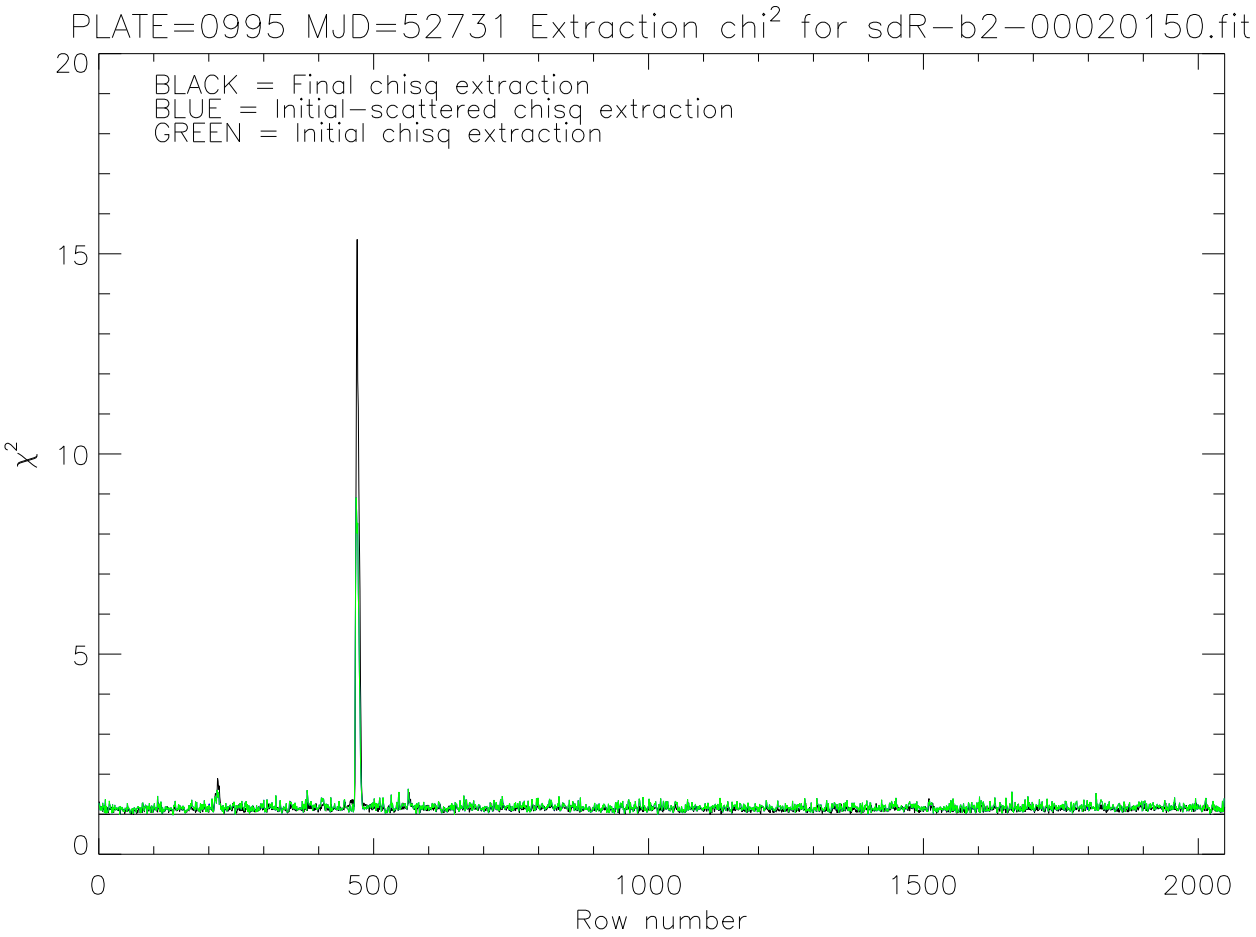

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b2-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.751
Max value = 1.159
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:19:26 2008

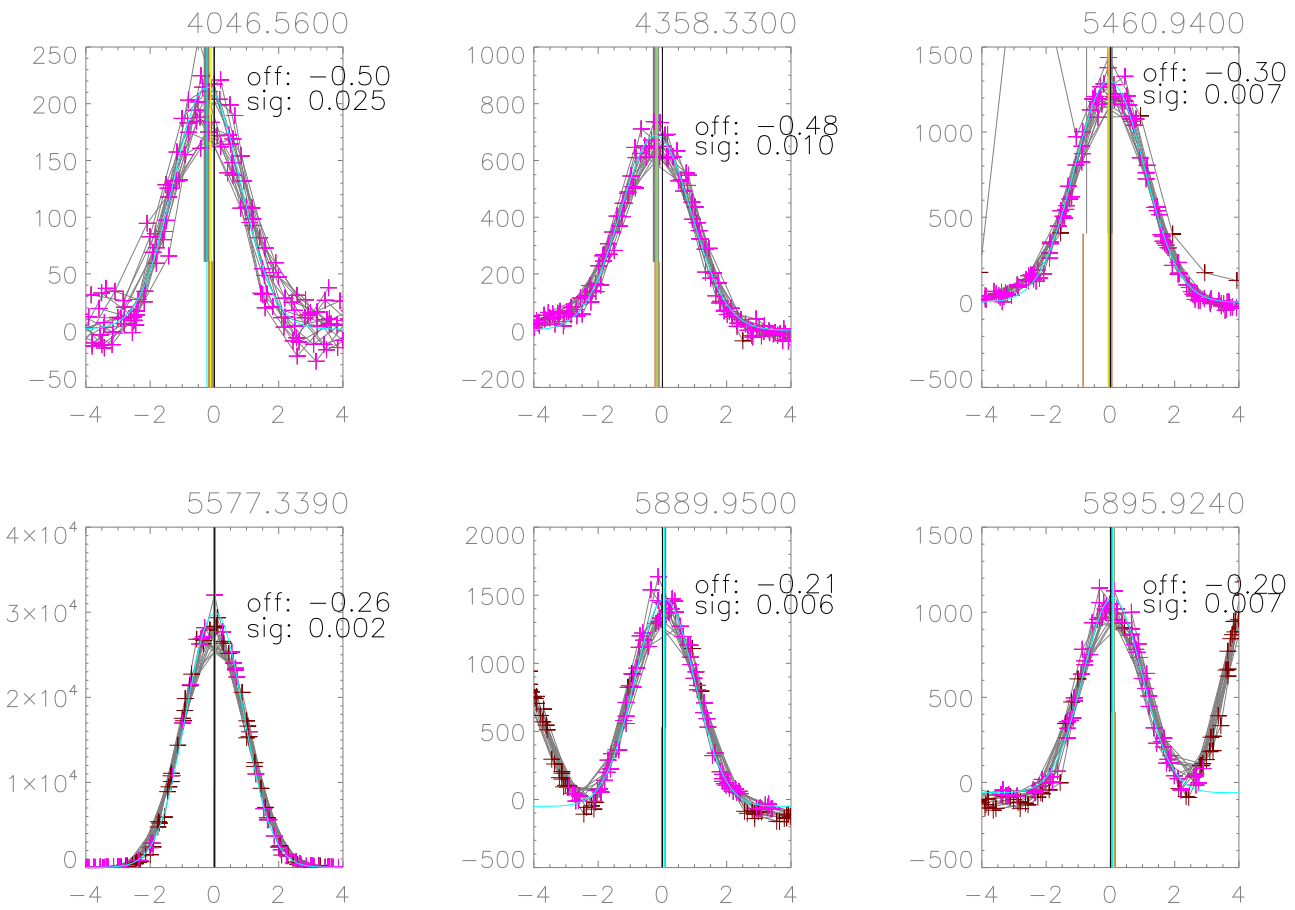

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b2−00020150.f
13.6
11.5
9.3
9.3
9.3

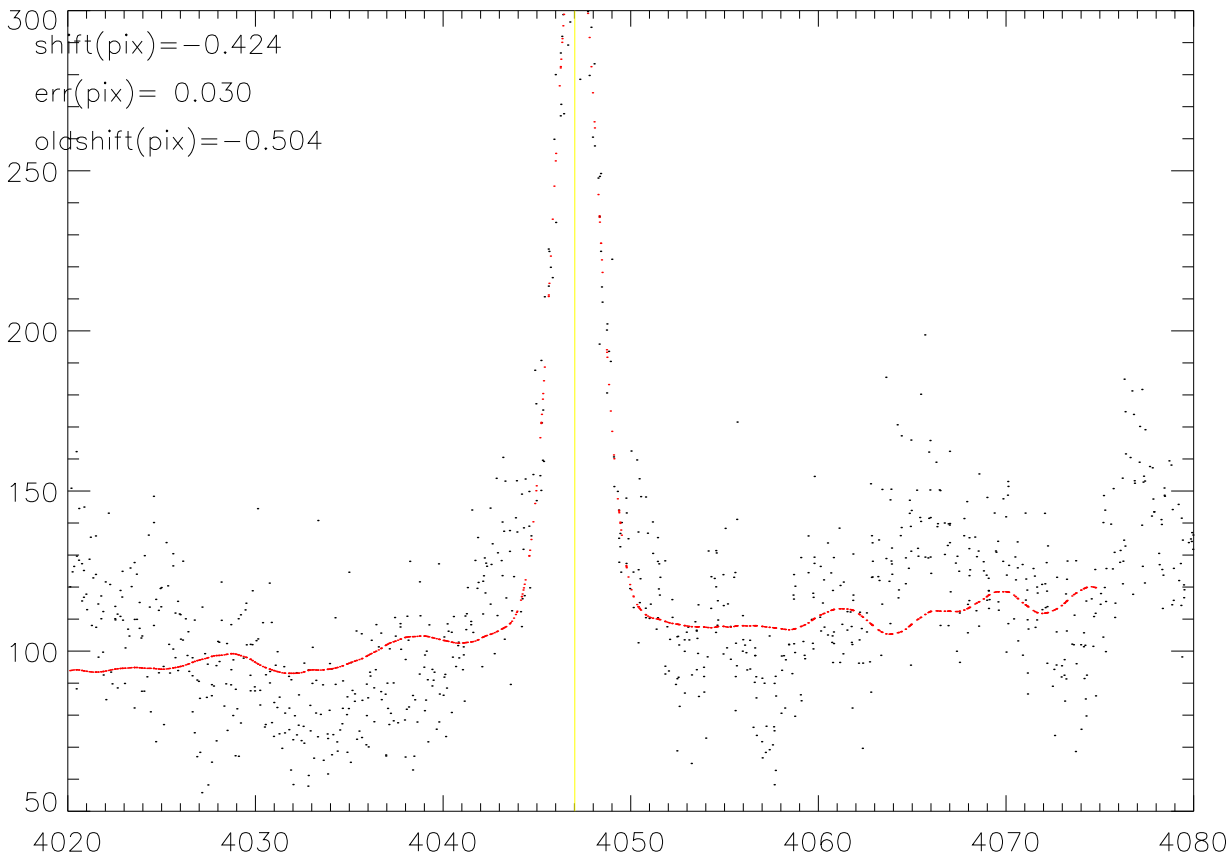

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020150.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.703
Max value = 13.955
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:20:22 2008

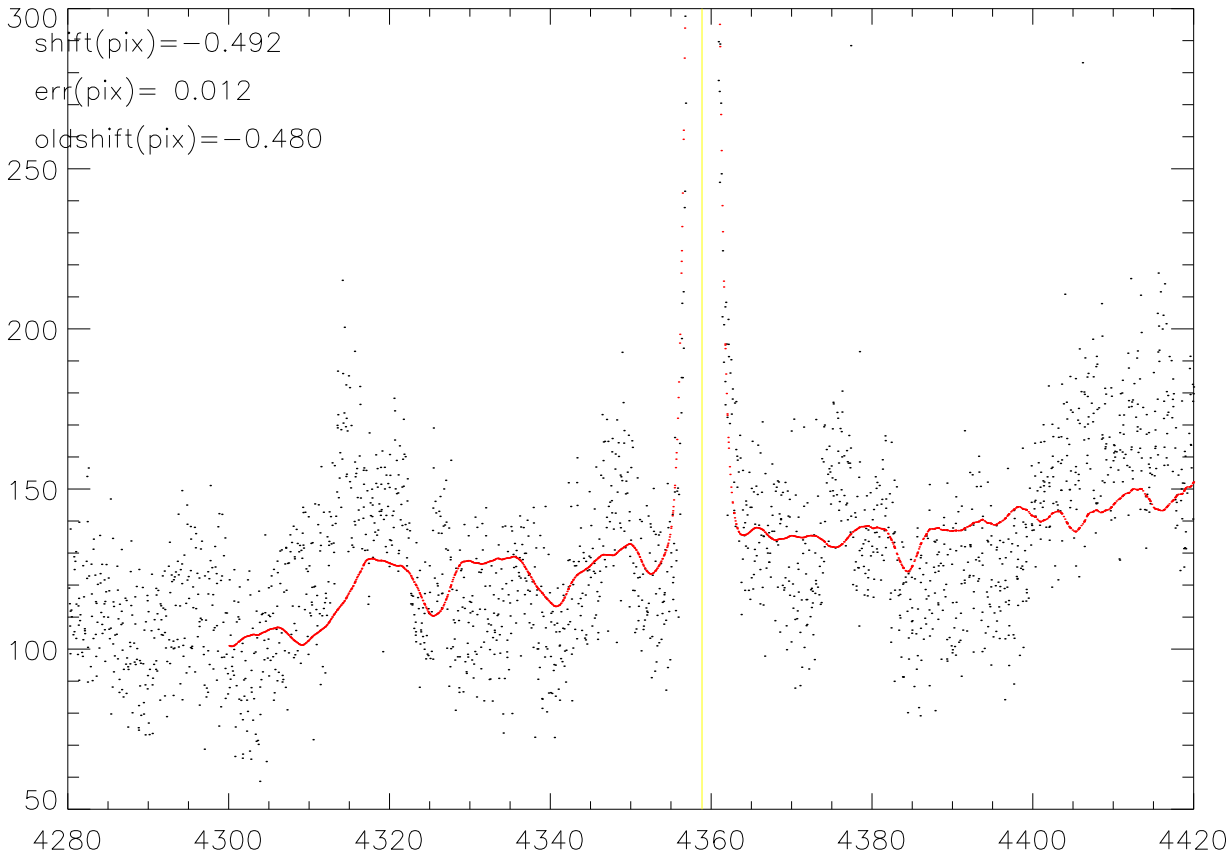

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020150.fit
10.5
9.1
7.6
6.2
Y [pix]
X [pix]
0
500
1000
1500
2000

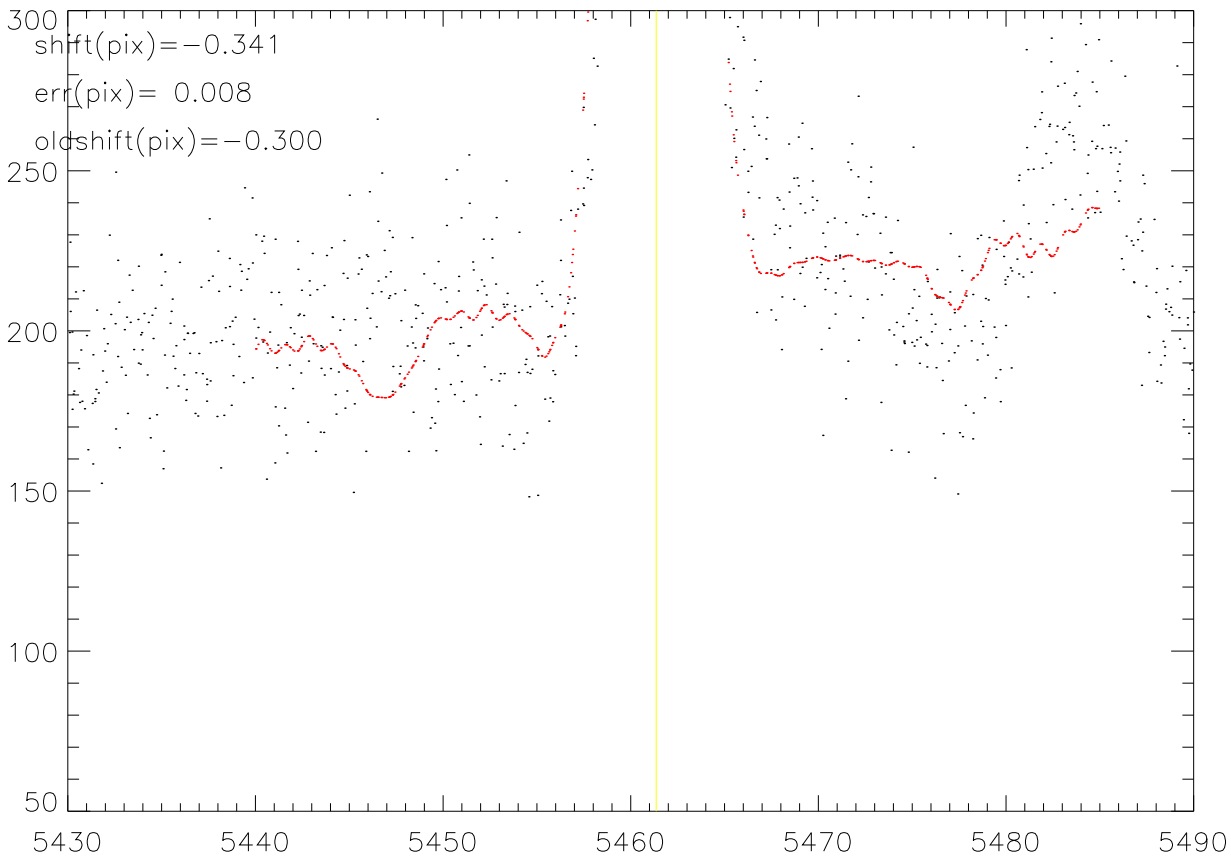

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020150.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.502
Max value = 9.210
Sat Feb 23 23:23:29 2008

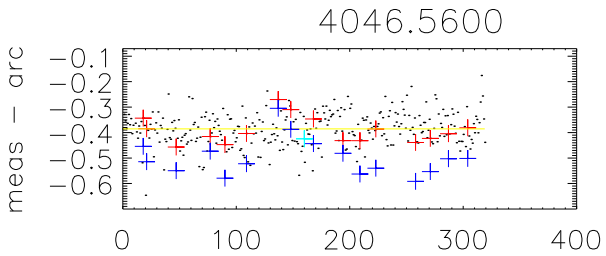

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b2-00020150.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

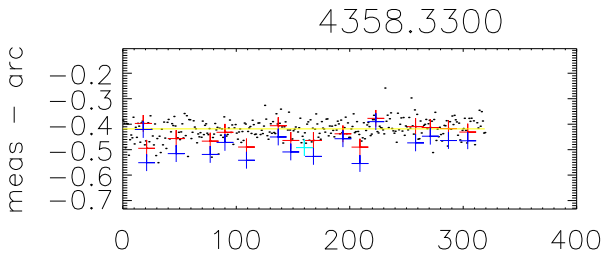

4046.5600
off: −0.50
sig: 0.025
4358.3300
off: −0.48
sig: 0.010
5460.9400
off: −0.30
sig: 0.007
5577.3390
off: −0.26
sig: 0.002
5889.9500
off: −0.21
sig: 0.006
5895.9240
off: −0.20
sig: 0.007

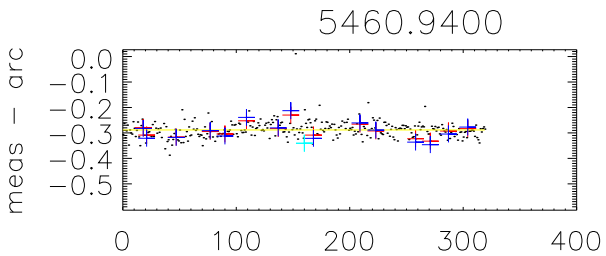

shift(pix)=−0.424
err(pix)= 0.030
oldshift(pix)=−0.504
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

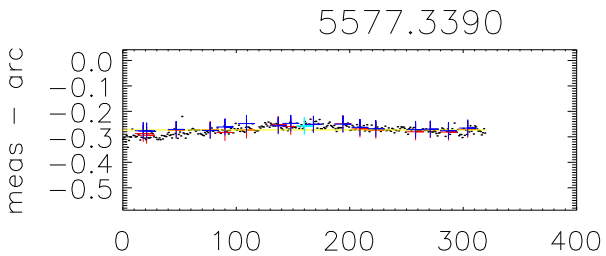

shift(pix)=−0.492
err(pix)= 0.012
oldshift(pix)=−0.480
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

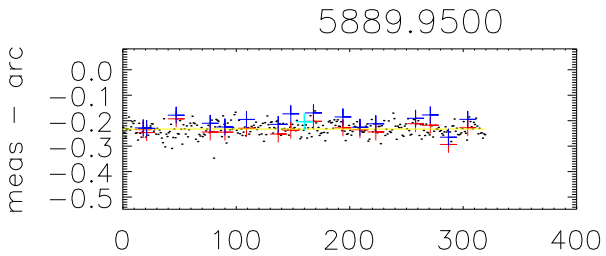

shift(pix)=−0.341
err(pix)= 0.008
oldshift(pix)=−0.300
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

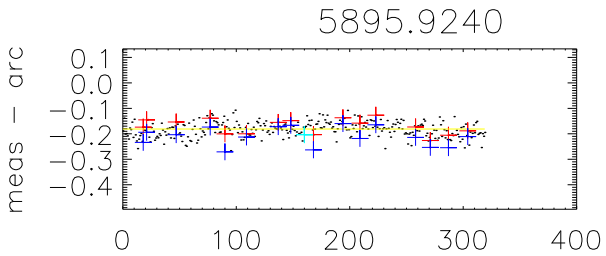

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

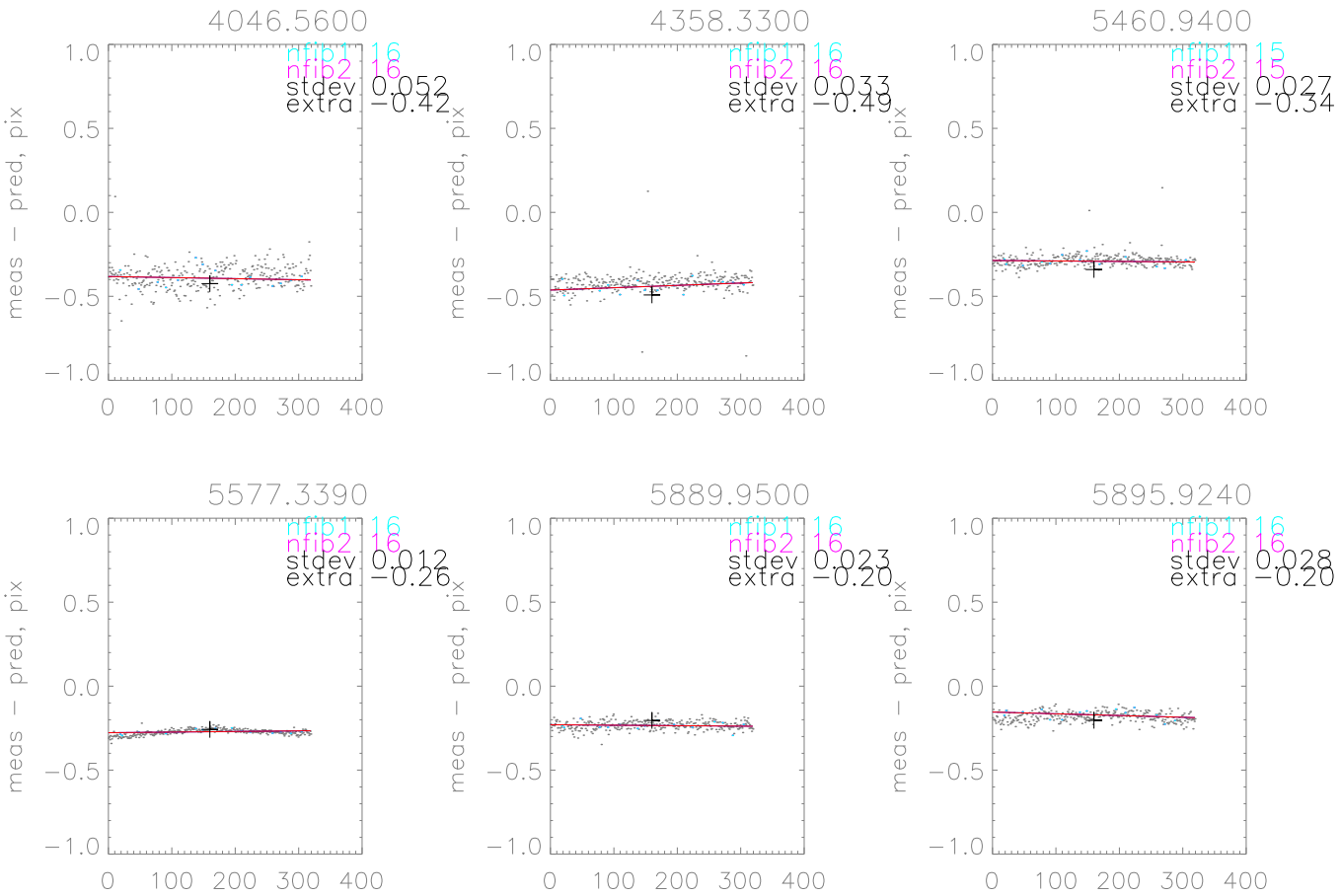

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

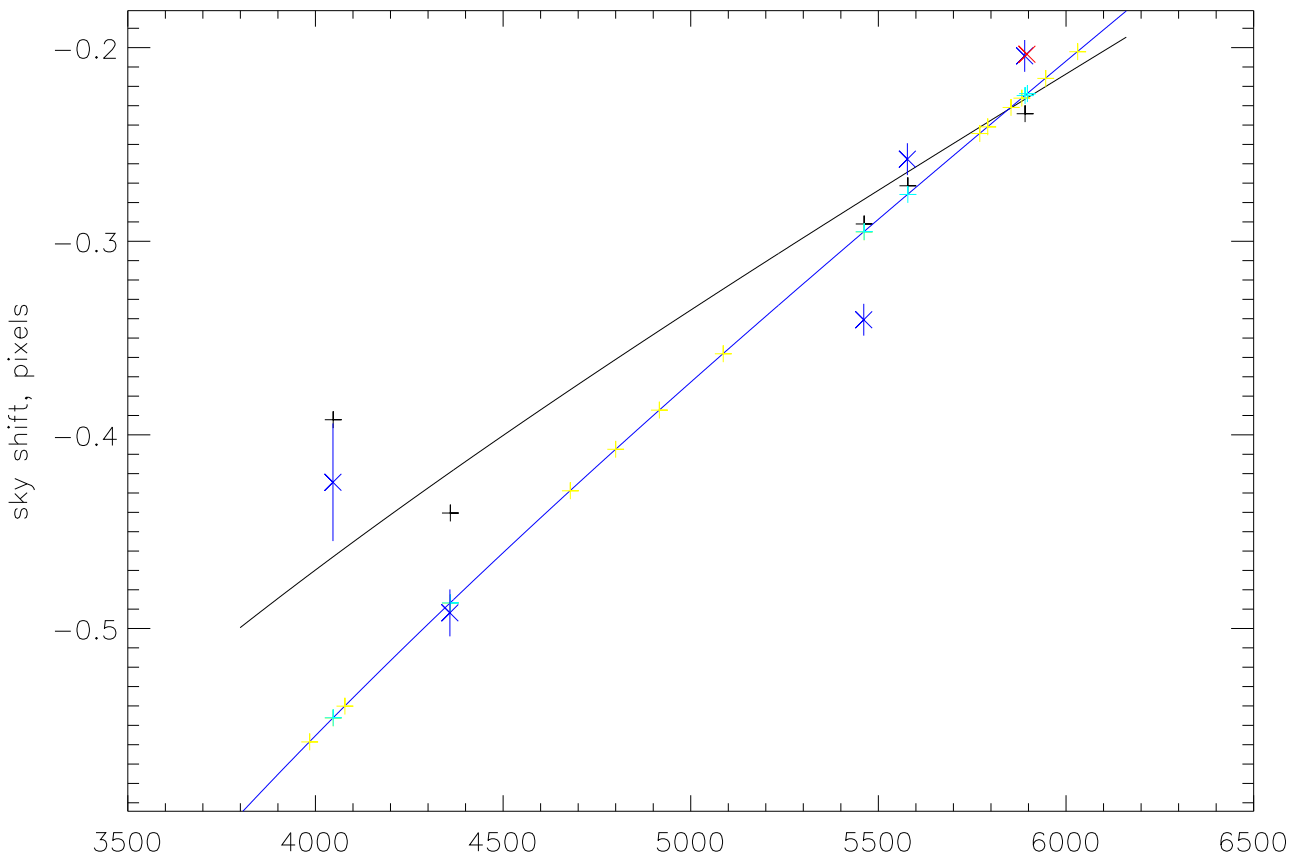

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

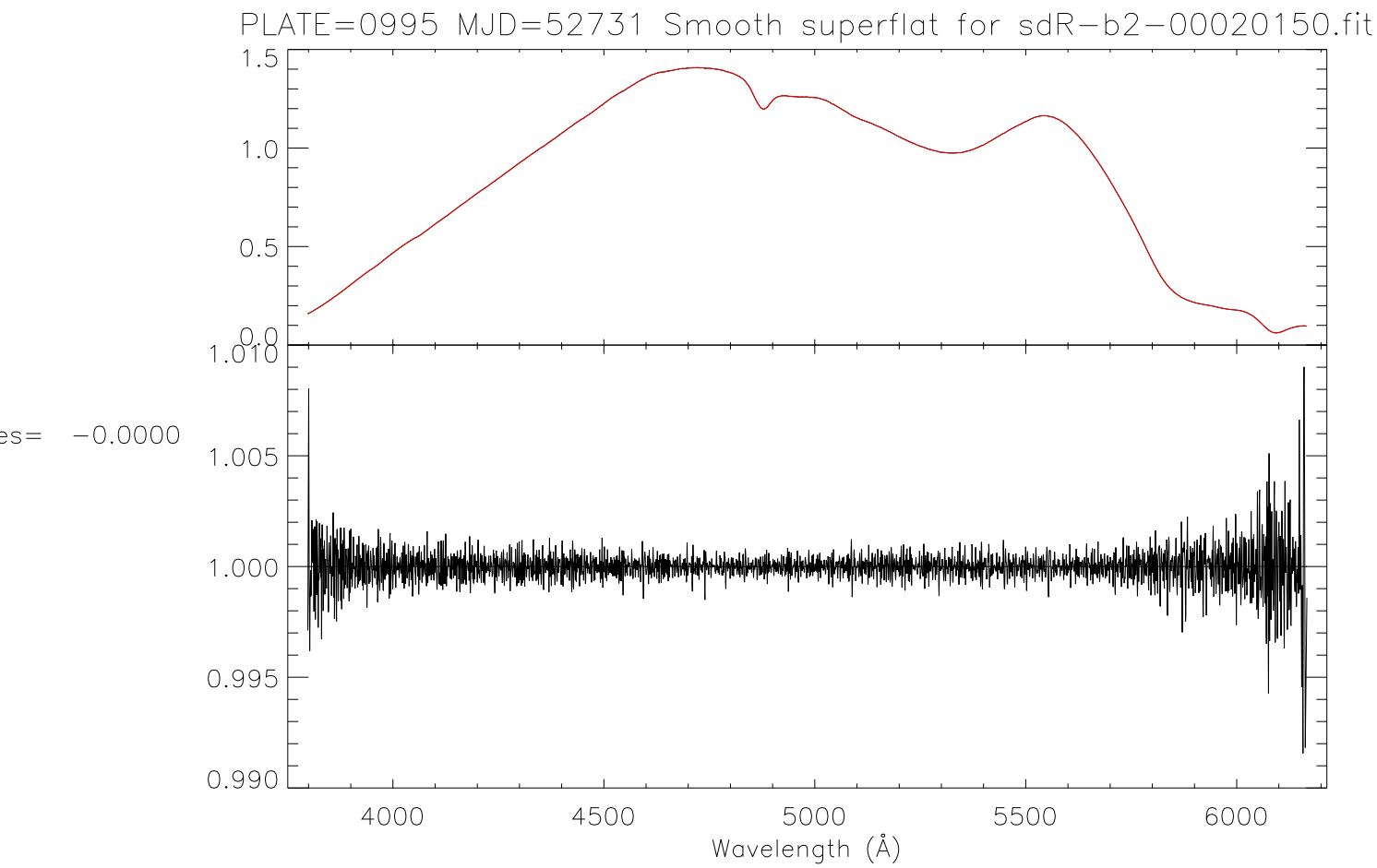

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

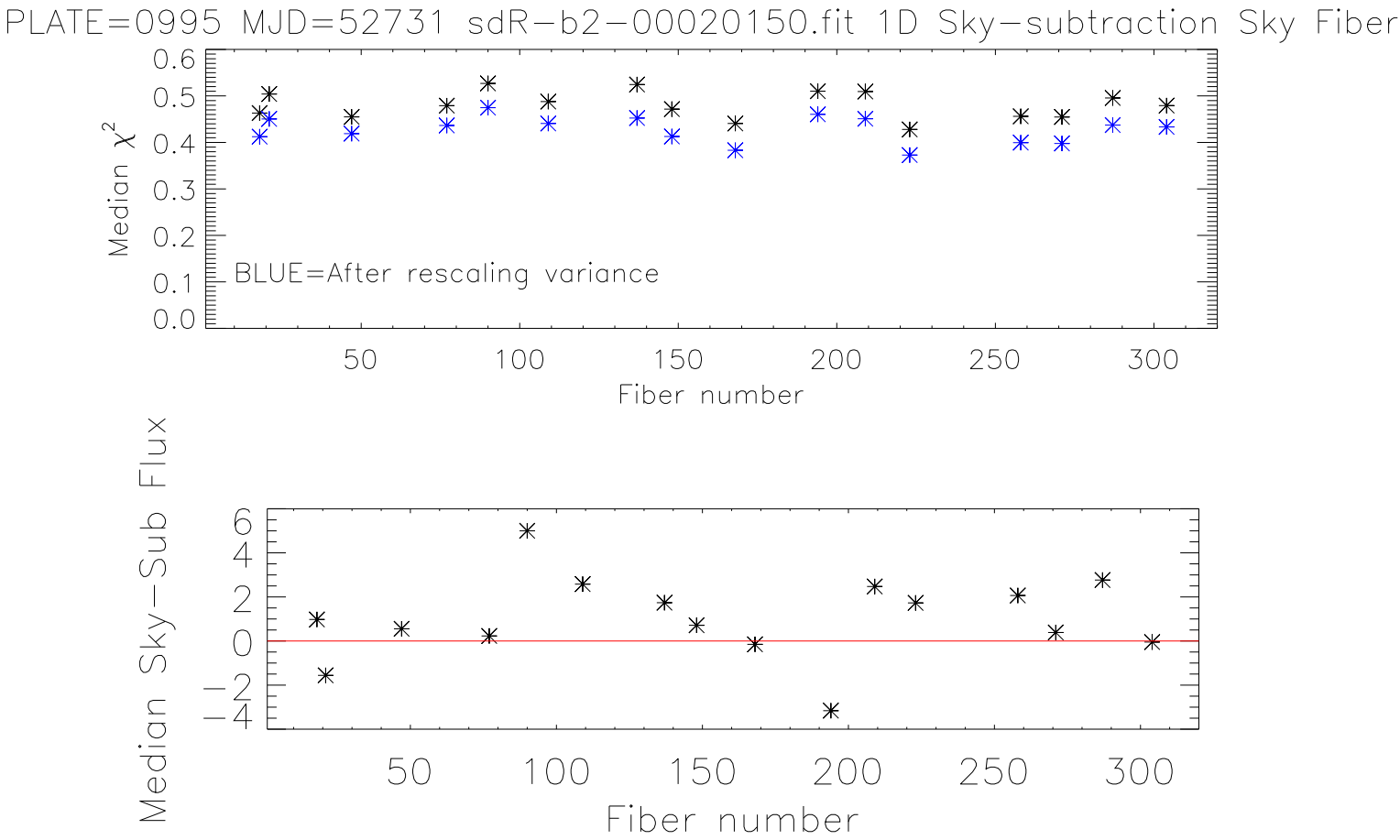

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

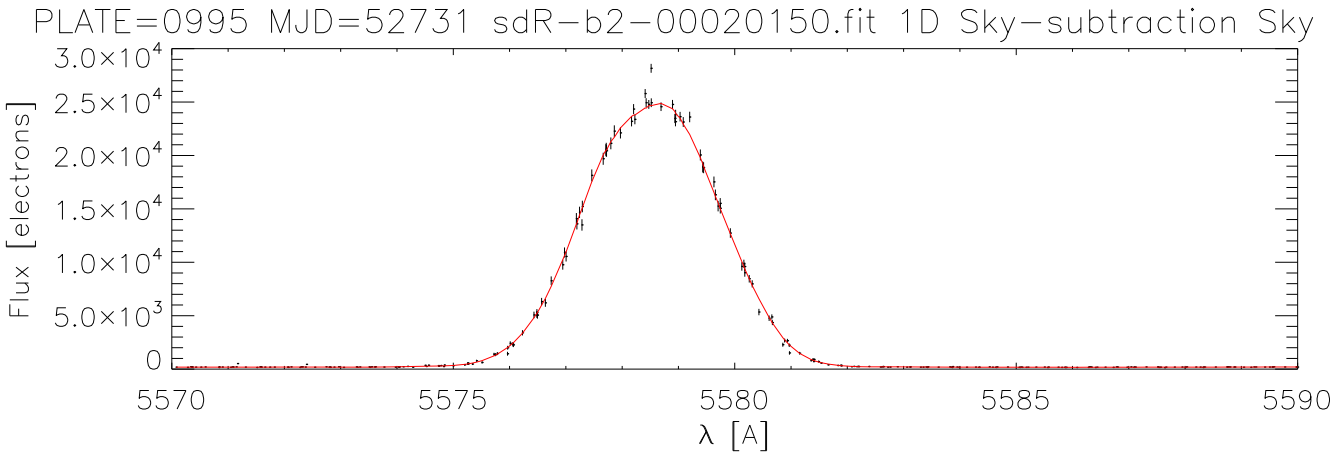

4046.5600
nfib1 16
nfib2 16
stdev 0.052
extra −0.42
4358.3300
nfib1 16
nfib2 16
stdev 0.033
extra −0.49
5460.9400
nfib1 15
nfib2 15
stdev 0.027
extra −0.34
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra −0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.028
extra −0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

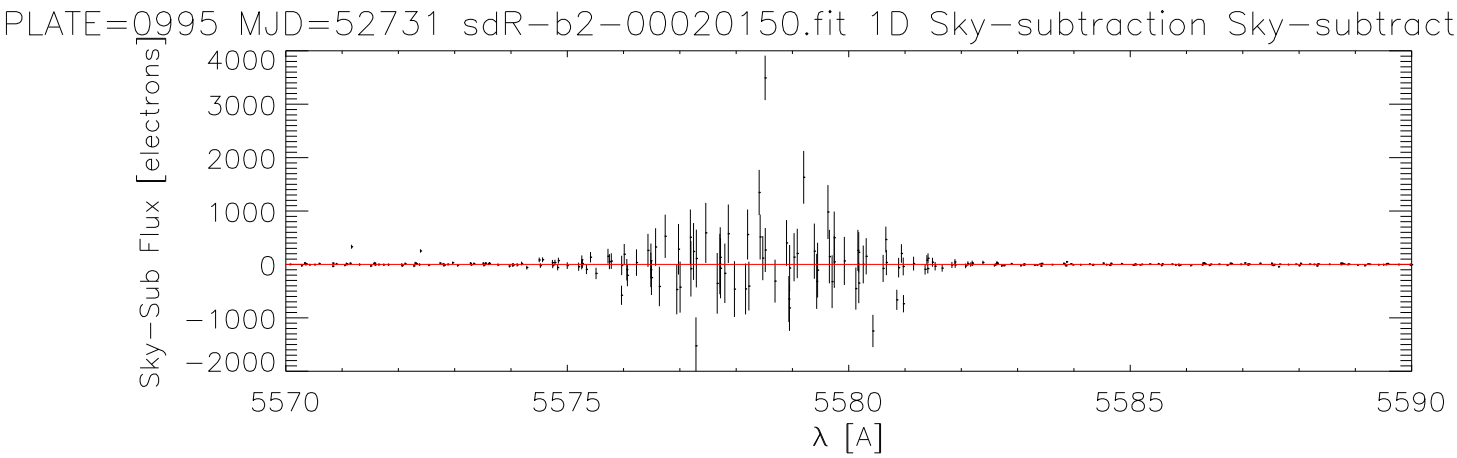

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

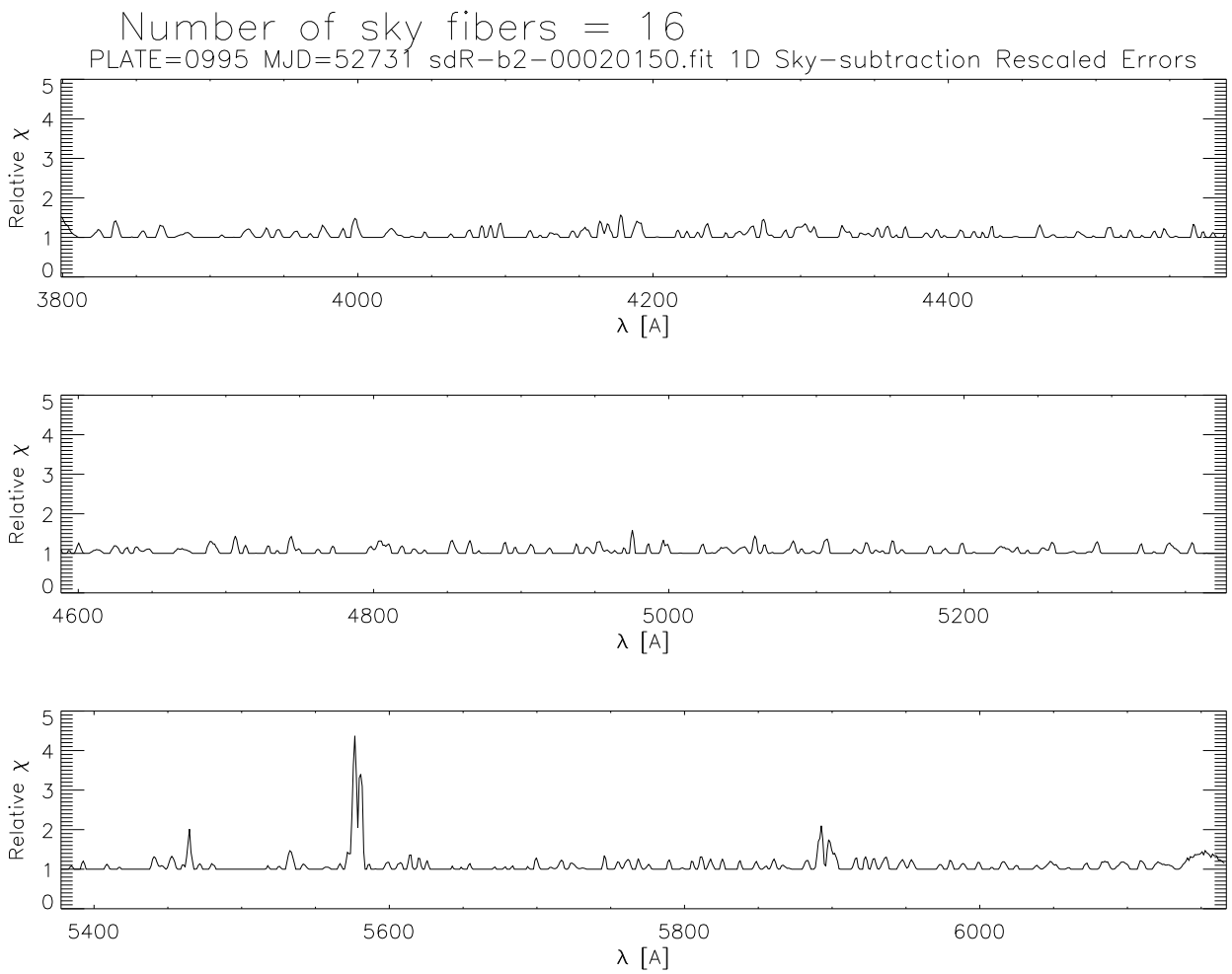

PLATE=0995 MJD=52731 Smooth superflat for sdR-b2-00020150.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

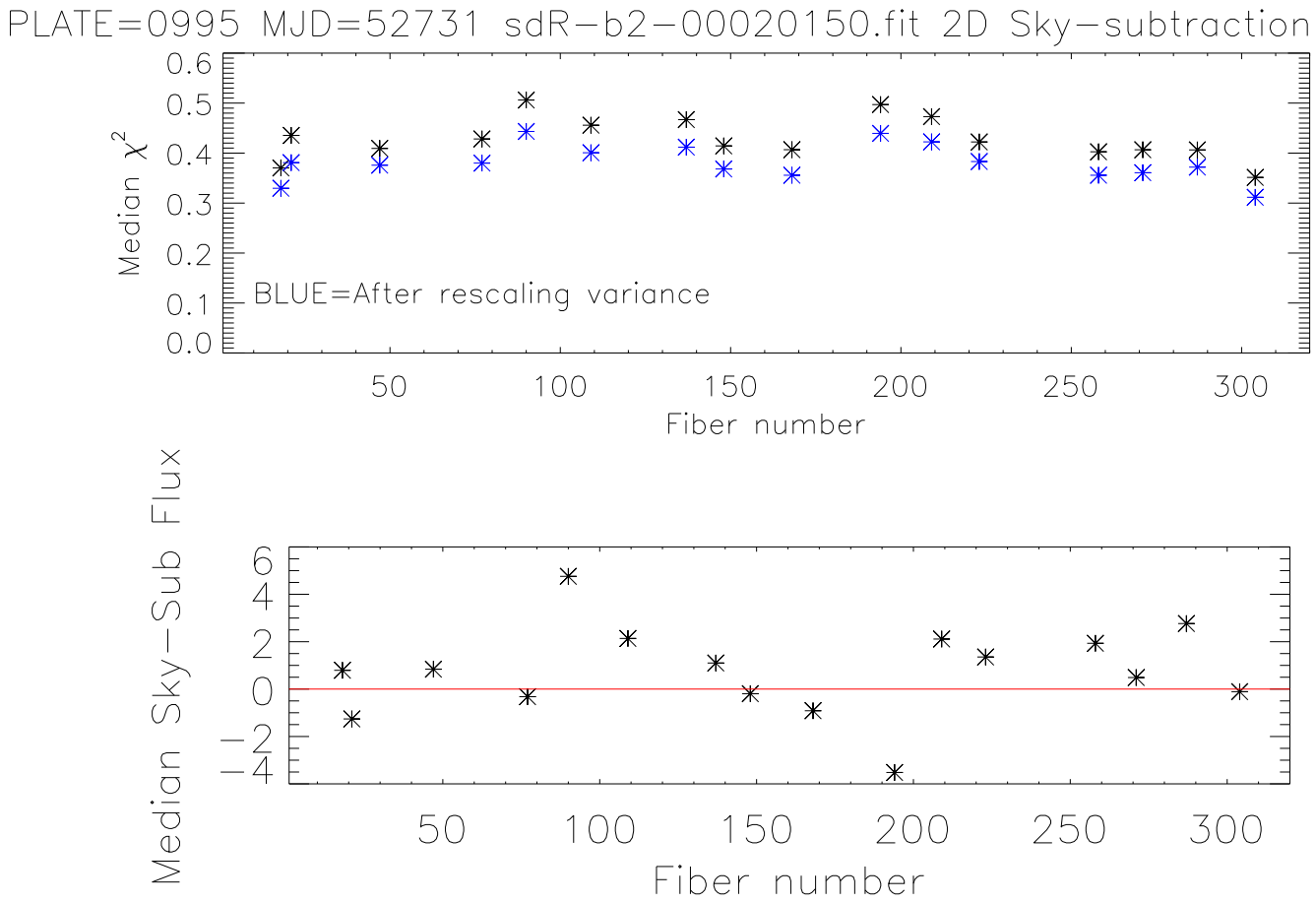
es= −0.0000

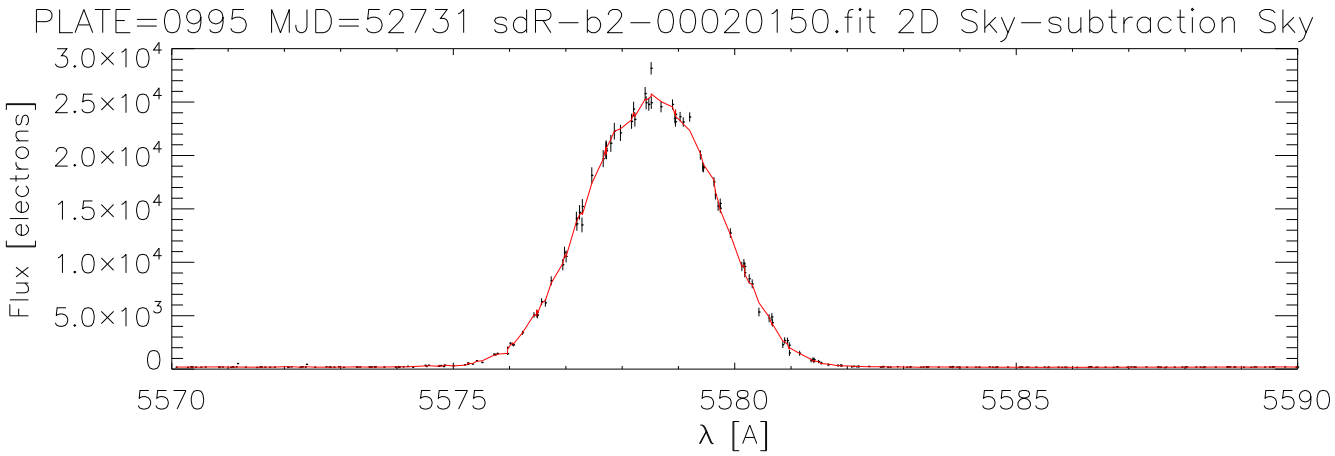

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

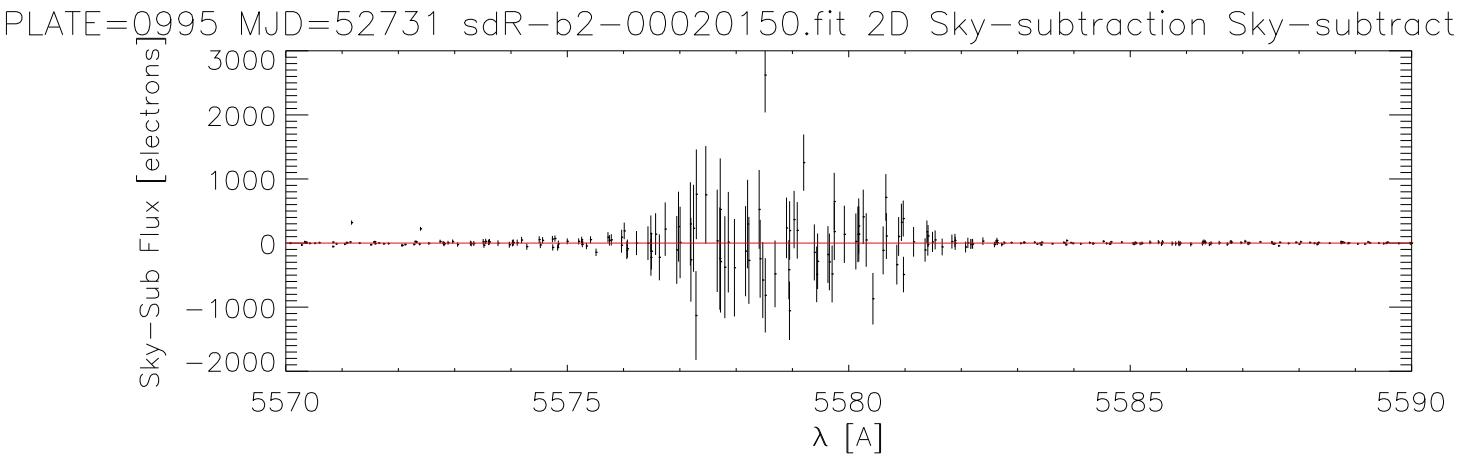

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

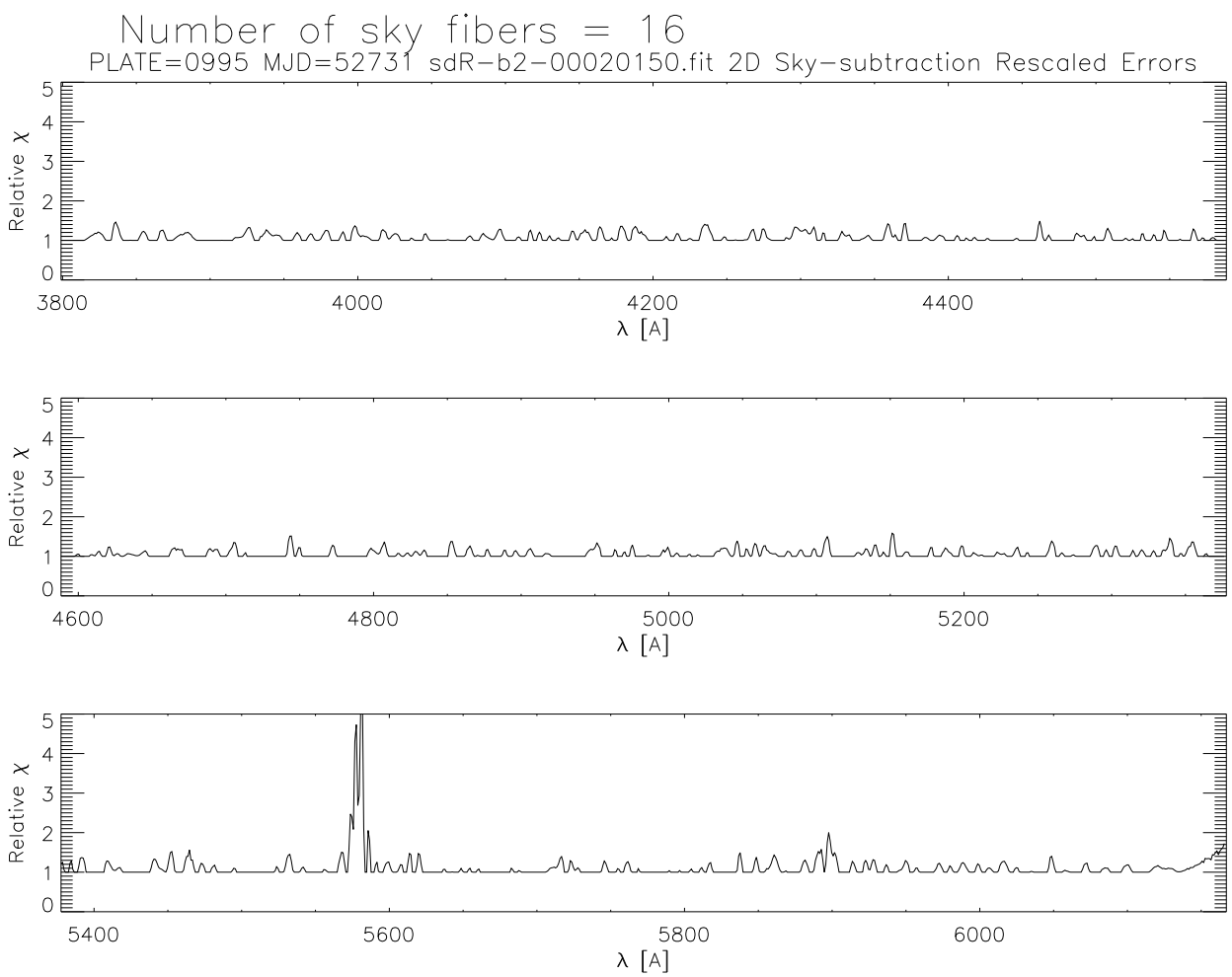

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

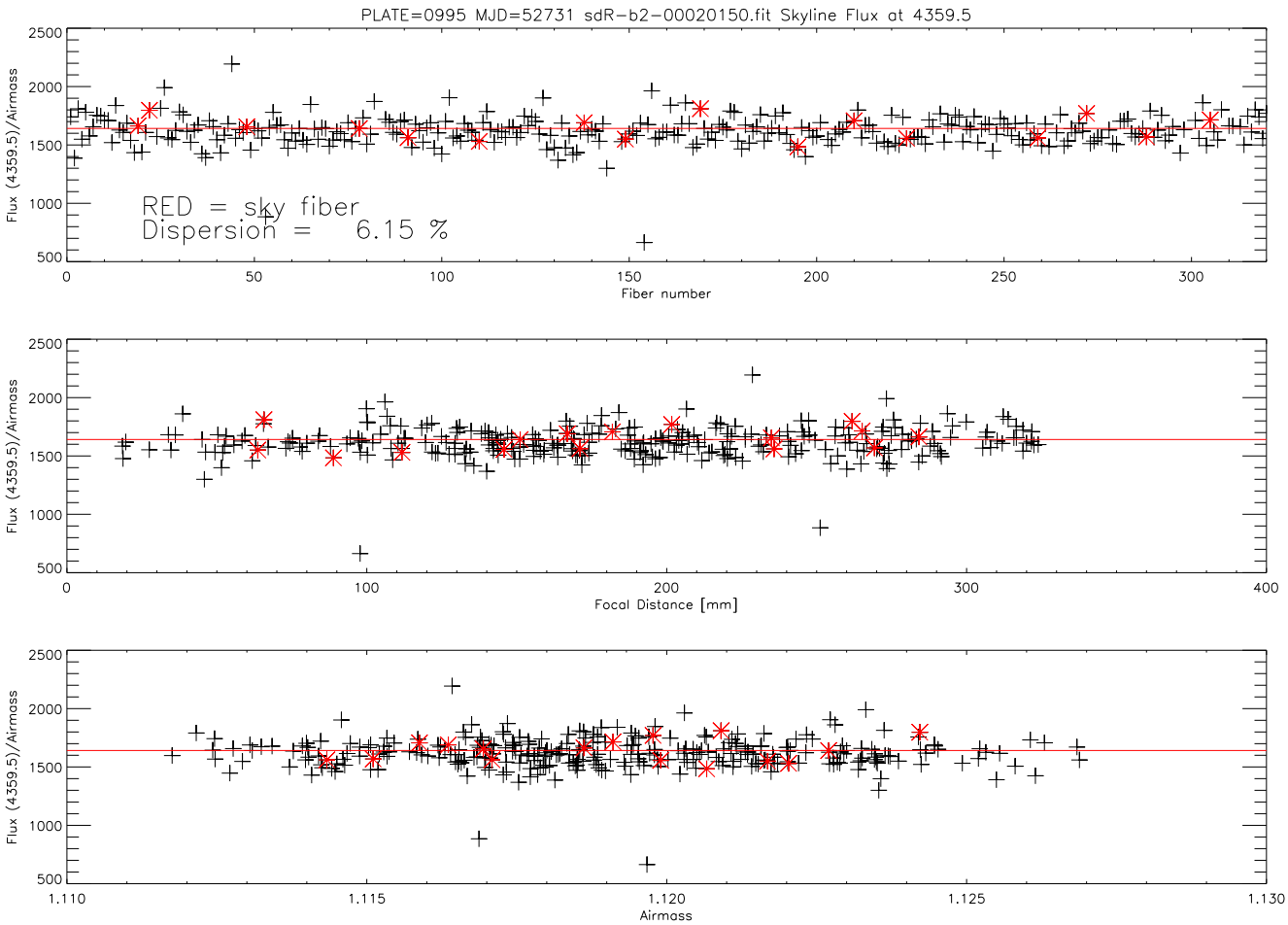

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

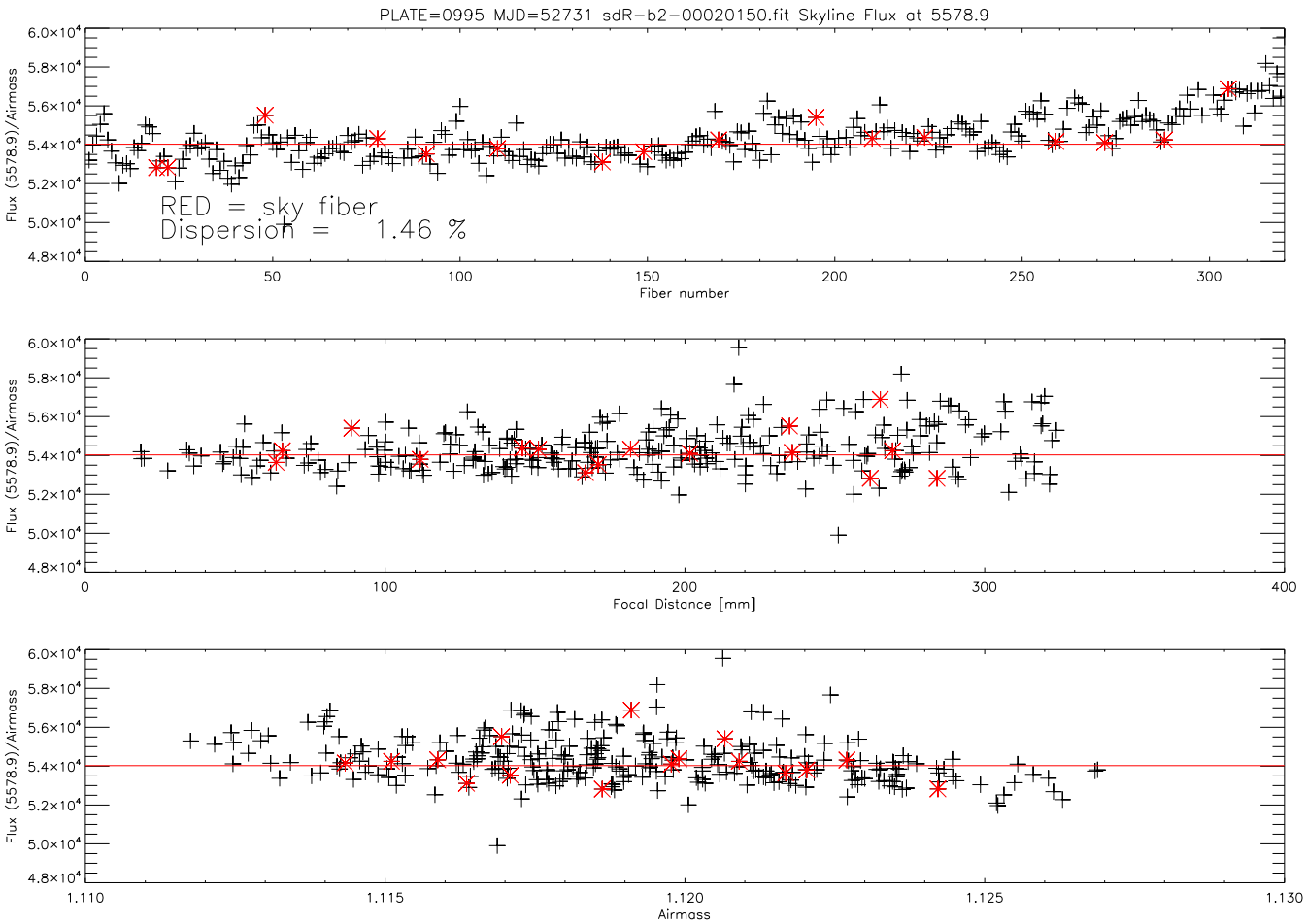

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

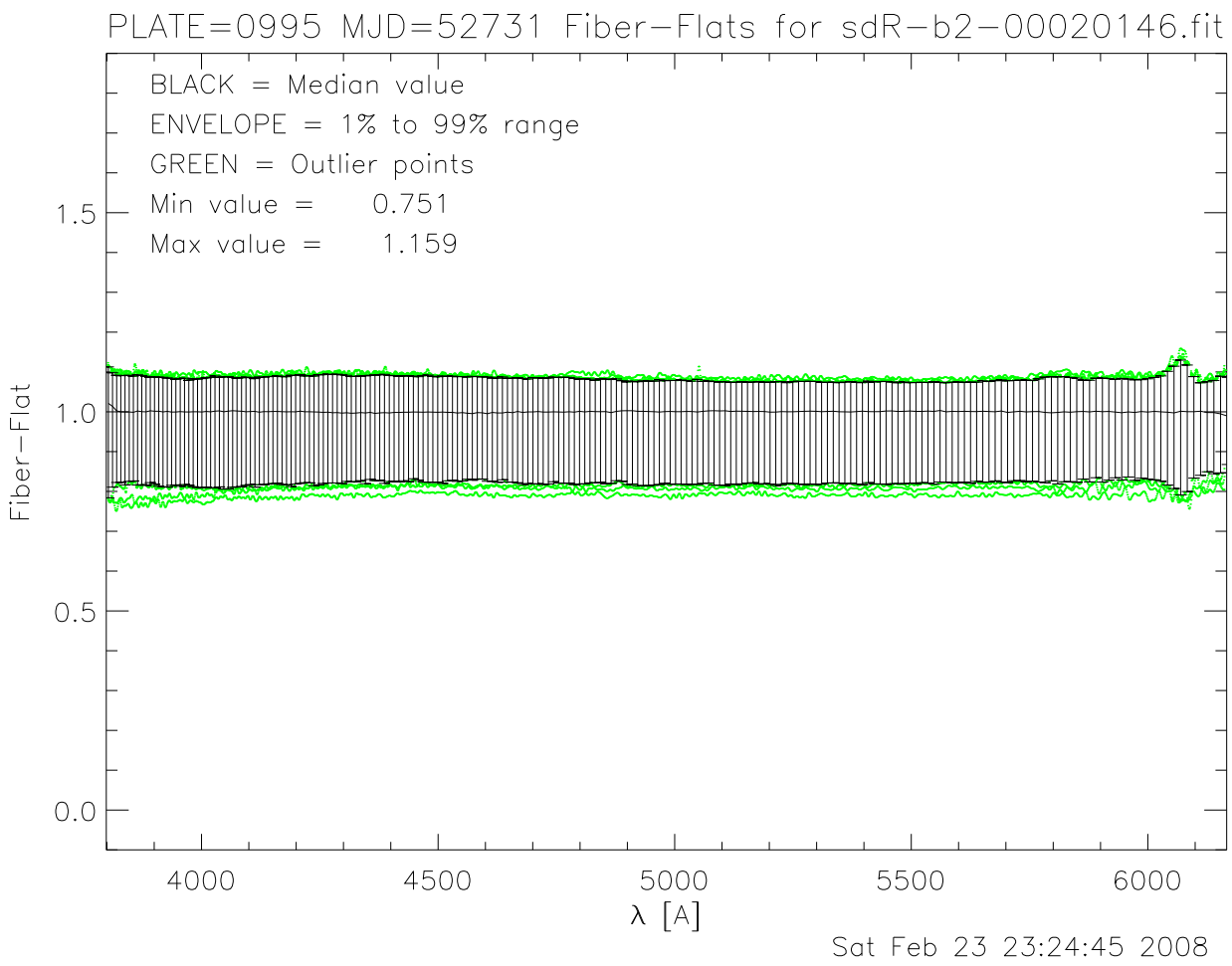

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

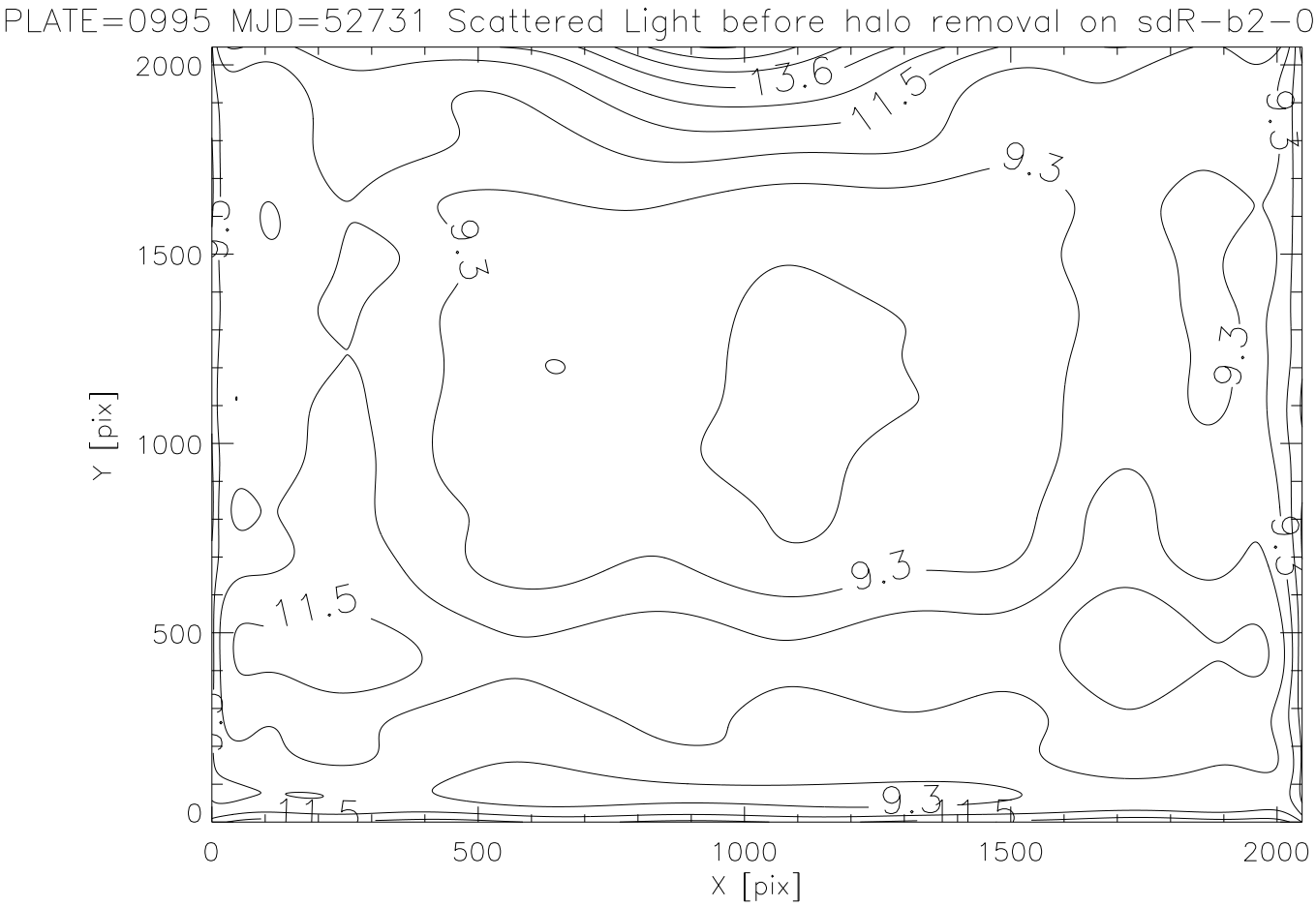

PLATE=0995 MJD=52731 sdR-b2-00020150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

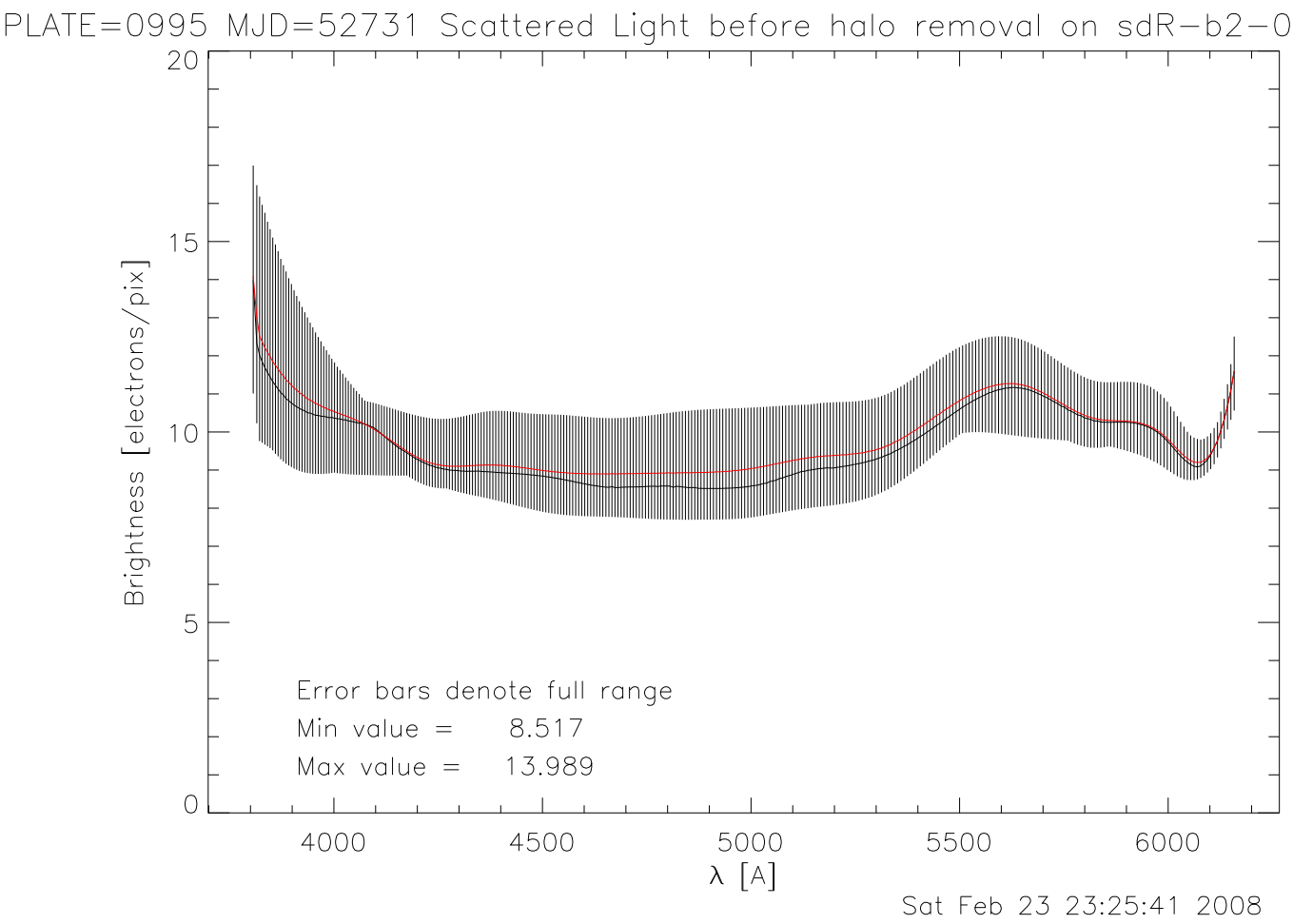

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

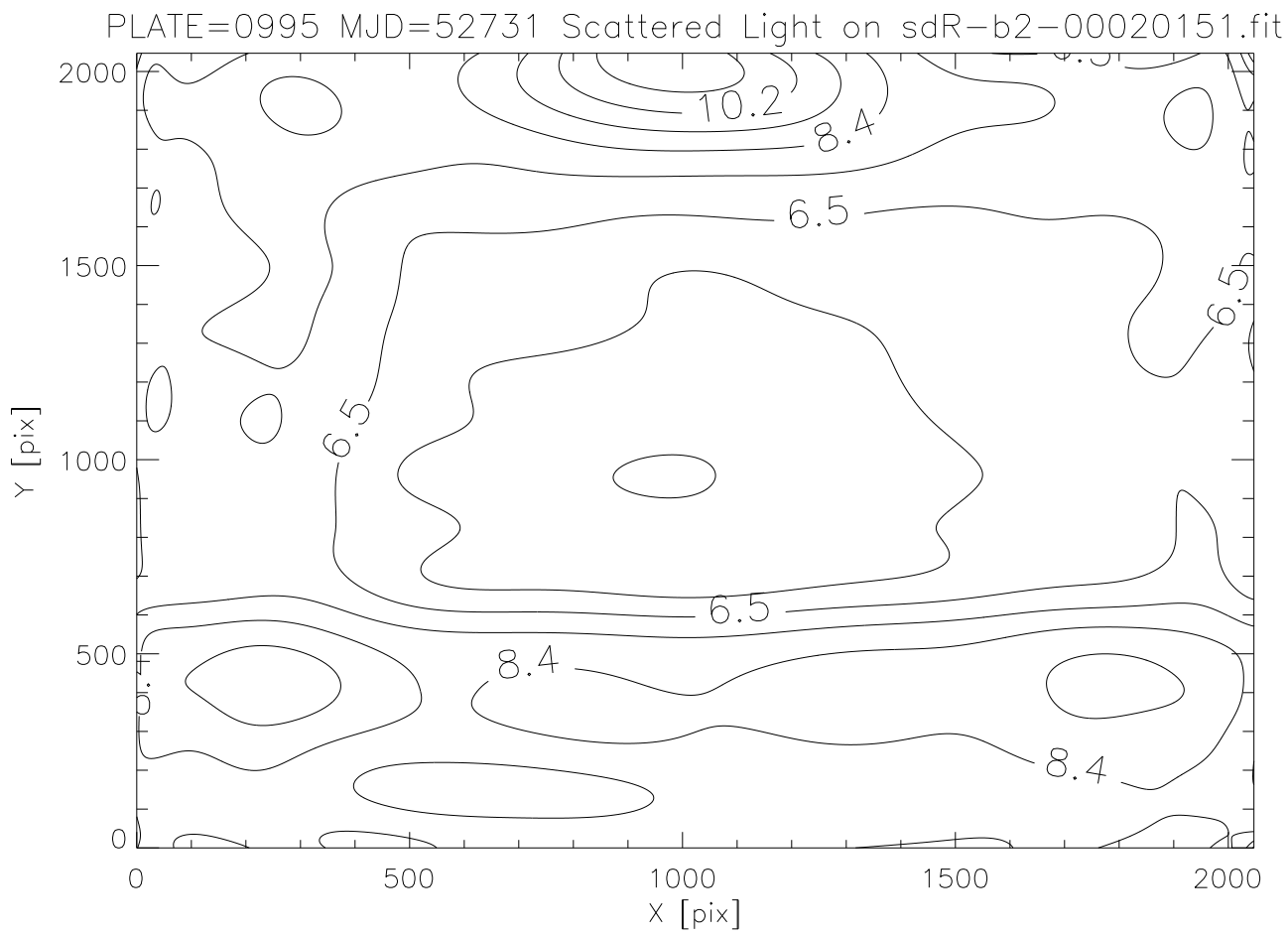

PLATE=0995 MJD=52731 sdR-b2-00020150.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.15 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

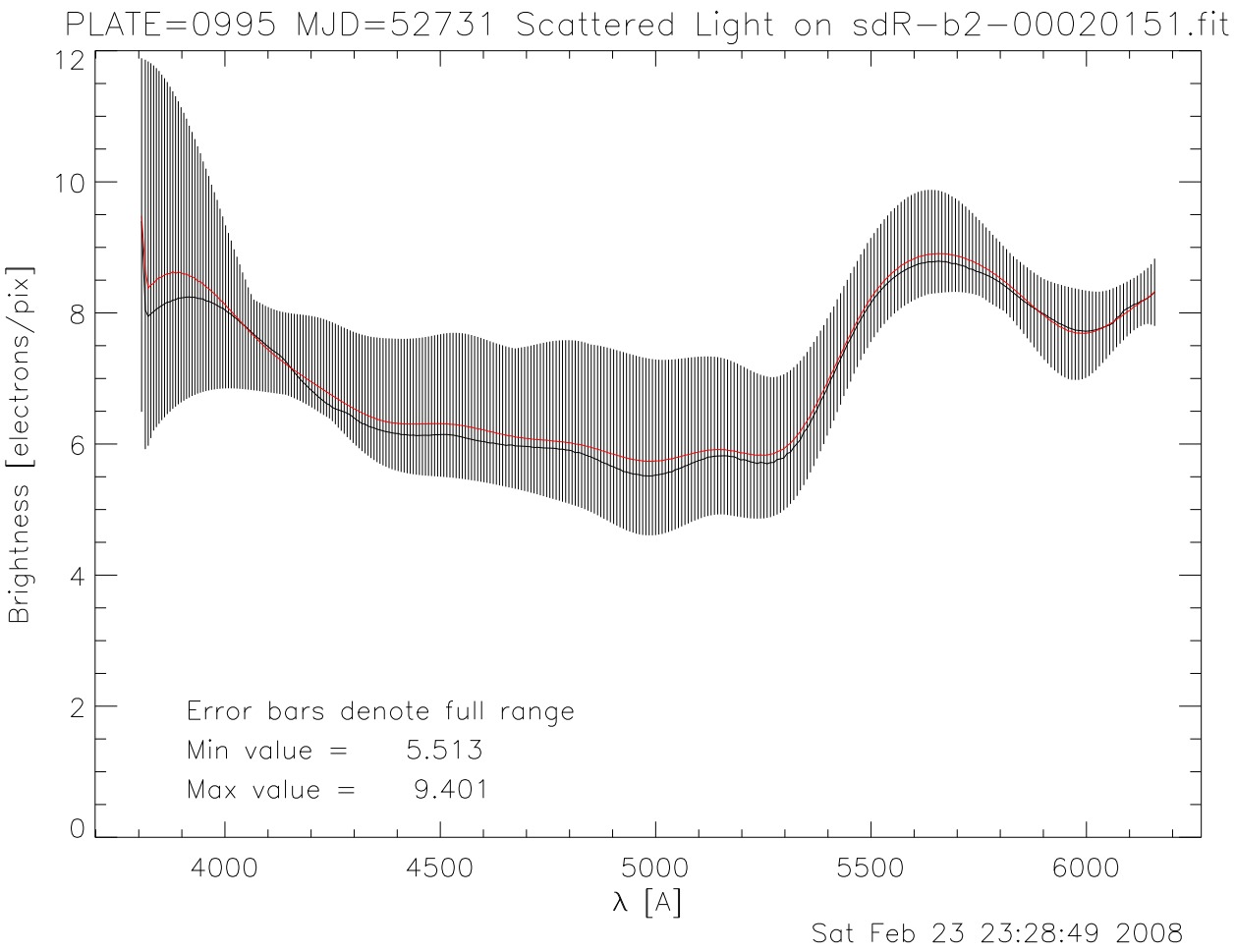

PLATE=0995 MJD=52731 sdR-b2-00020150.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.46 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

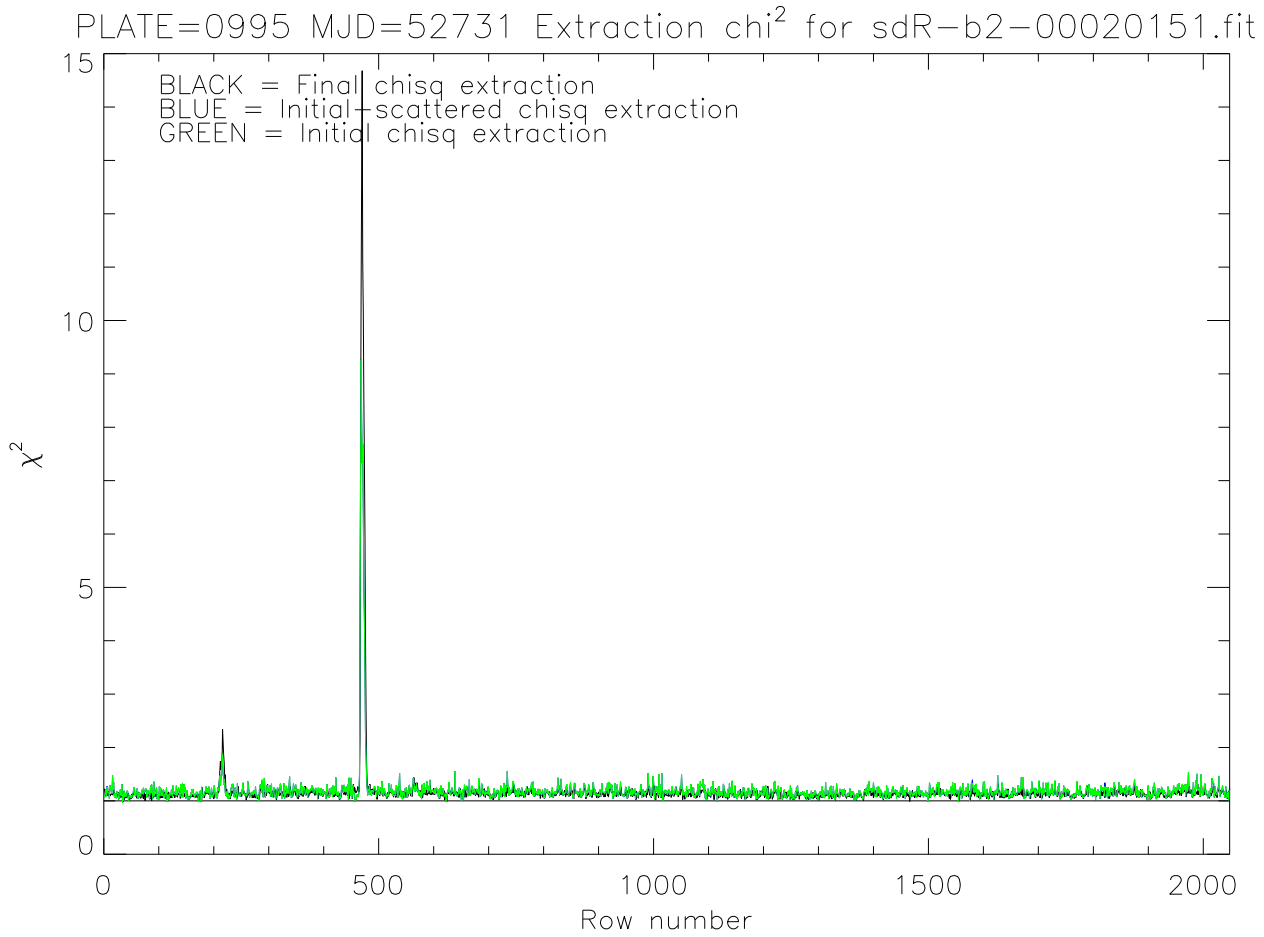

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b2-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.751
Max value = 1.159
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:24:45 2008

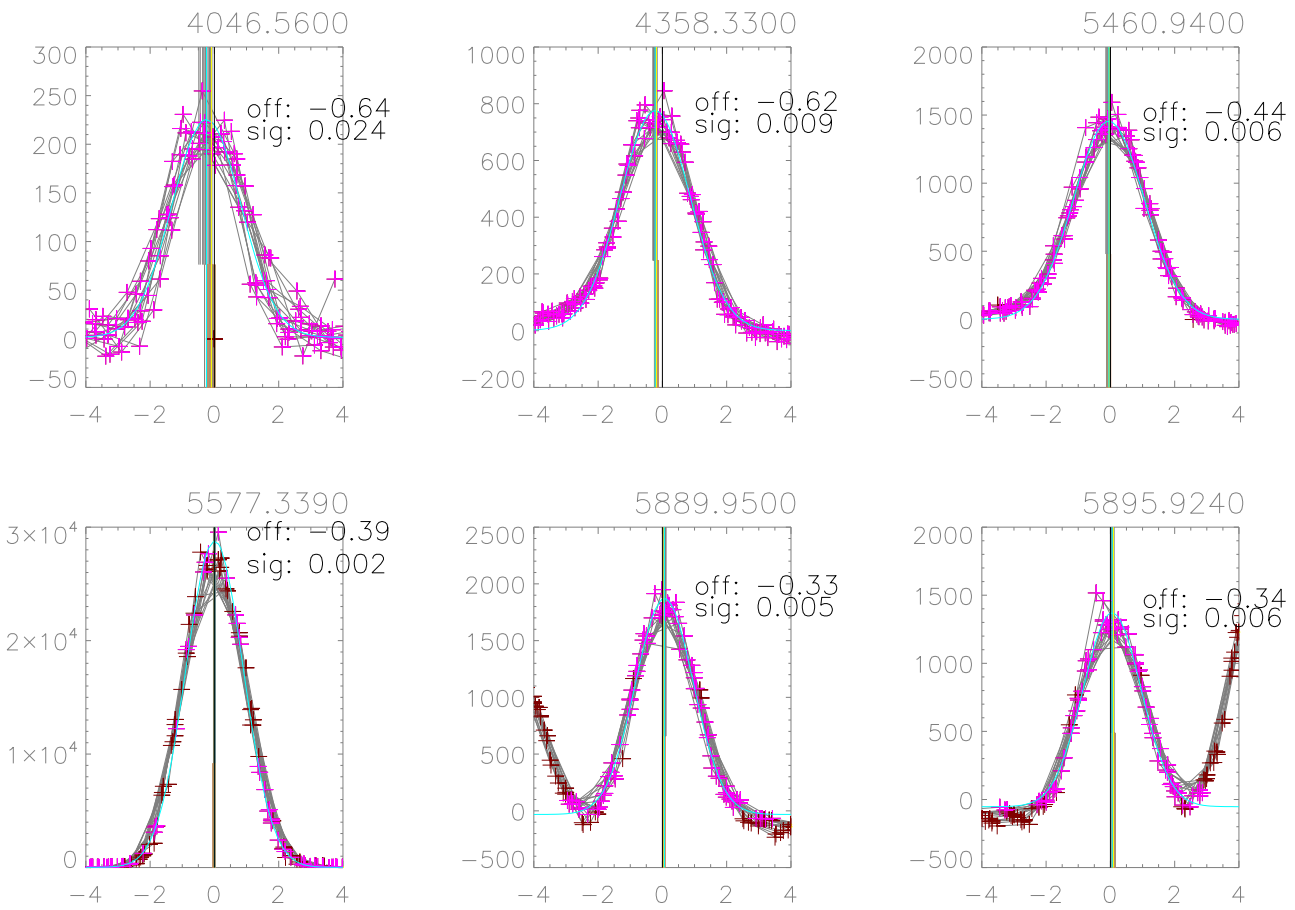

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020151.f
13.6
11.5
9.3
9.3
9.3
9.3
9.3
11.5
9.3
11.5
9.3
11.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

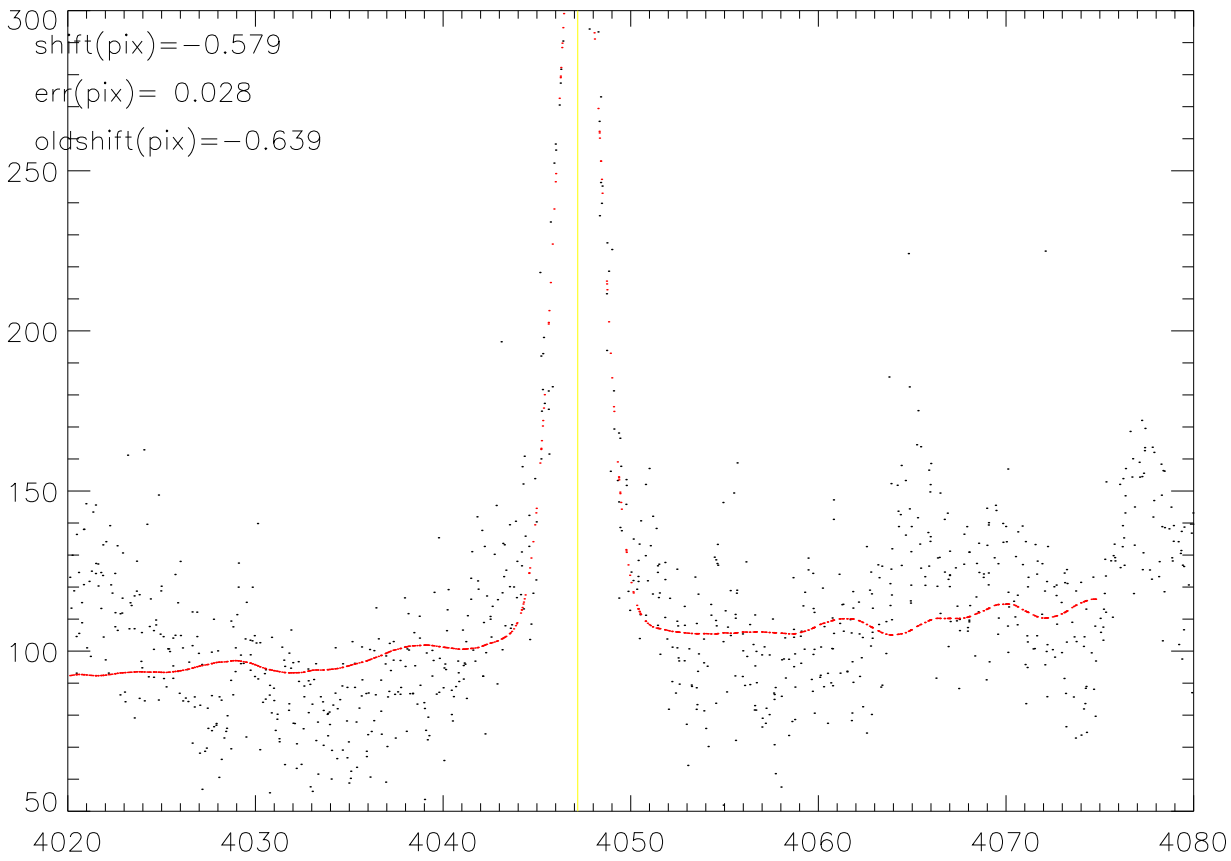

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020151.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.517
Max value = 13.989
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:25:41 2008

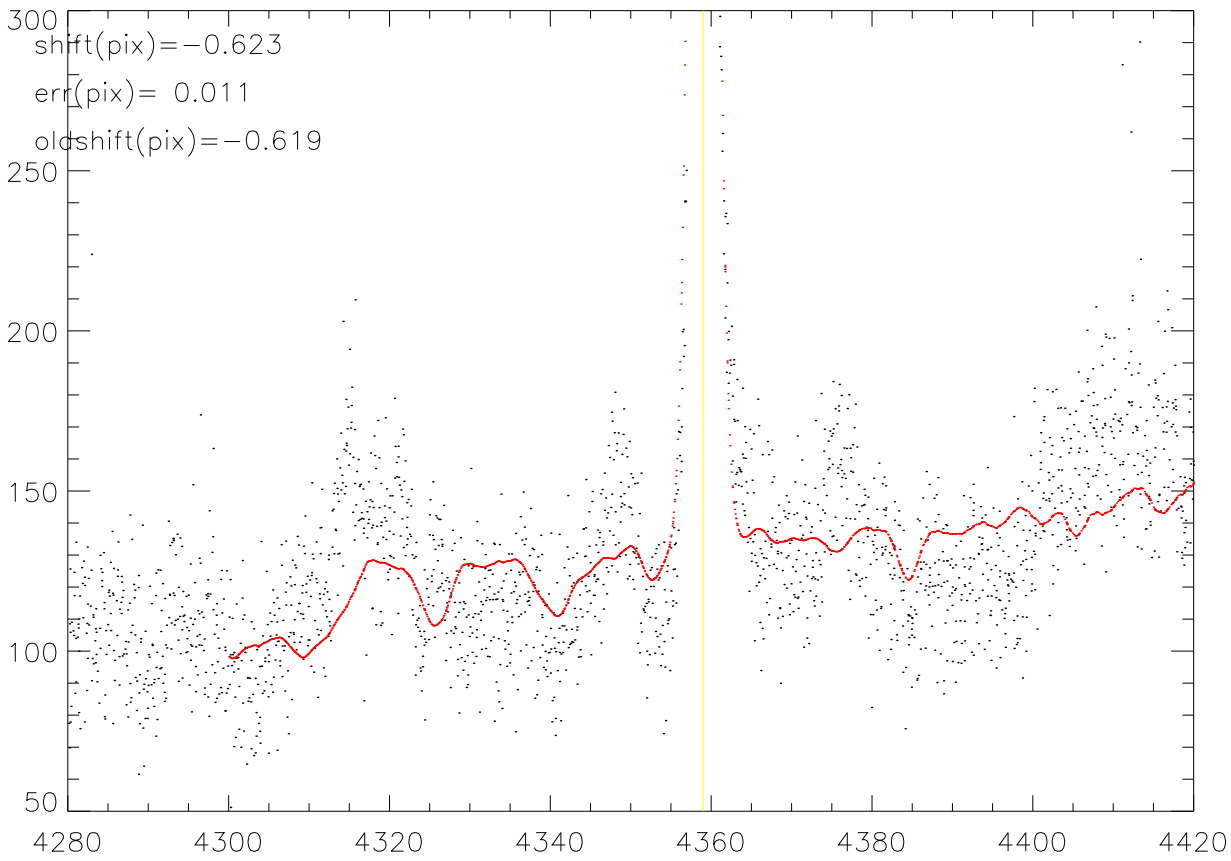

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020151.fit
10.2
8.4
6.5
6.5
6.5
6.5
8.4
8.4
Y [pix]
X [pix]
0
500
1000
1500
2000

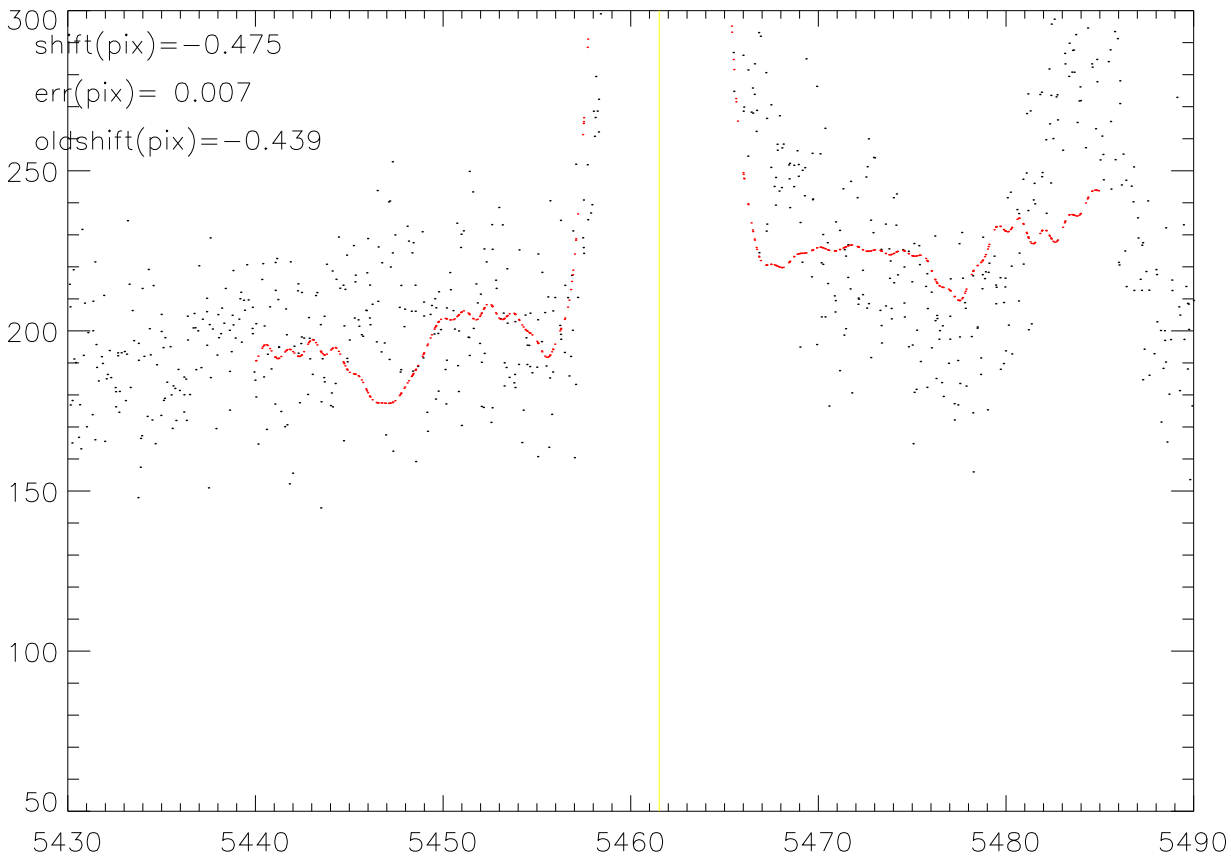

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020151.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.513
Max value = 9.401
Sat Feb 23 23:28:49 2008

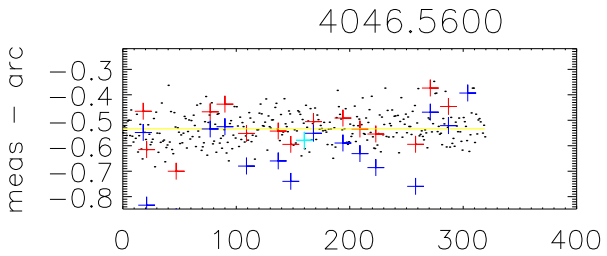

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b2-00020151.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

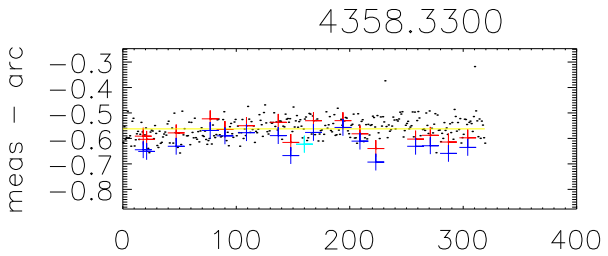

4046.5600
off: −0.64
sig: 0.024
4358.3300
off: −0.62
sig: 0.009
5460.9400
off: −0.44
sig: 0.006
5577.3390
off: −0.39
sig: 0.002
5889.9500
off: −0.33
sig: 0.005
5895.9240
off: −0.34
sig: 0.006

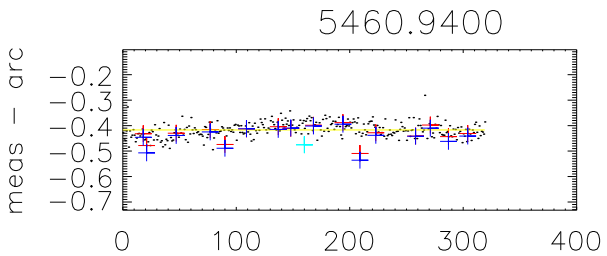

shift(pix)=−0.579
err(pix)= 0.028
oldshift(pix)=−0.639
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

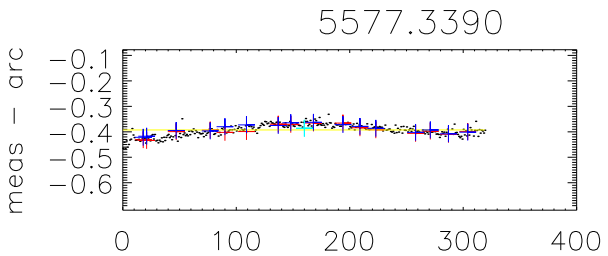

shift(pix)=−0.623
err(pix)= 0.011
oldshift(pix)=−0.619
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

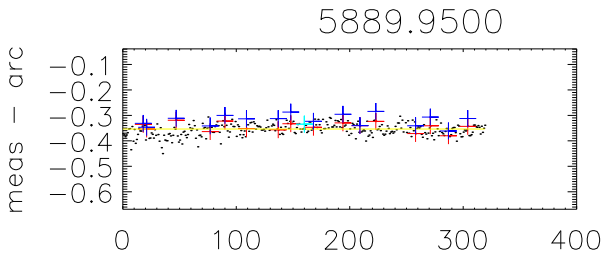

shift(pix)=−0.475
err(pix)= 0.007
oldshift(pix)=−0.439
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

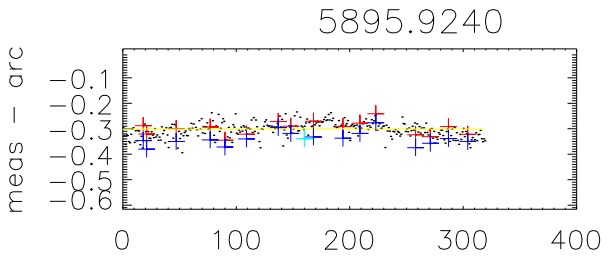

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

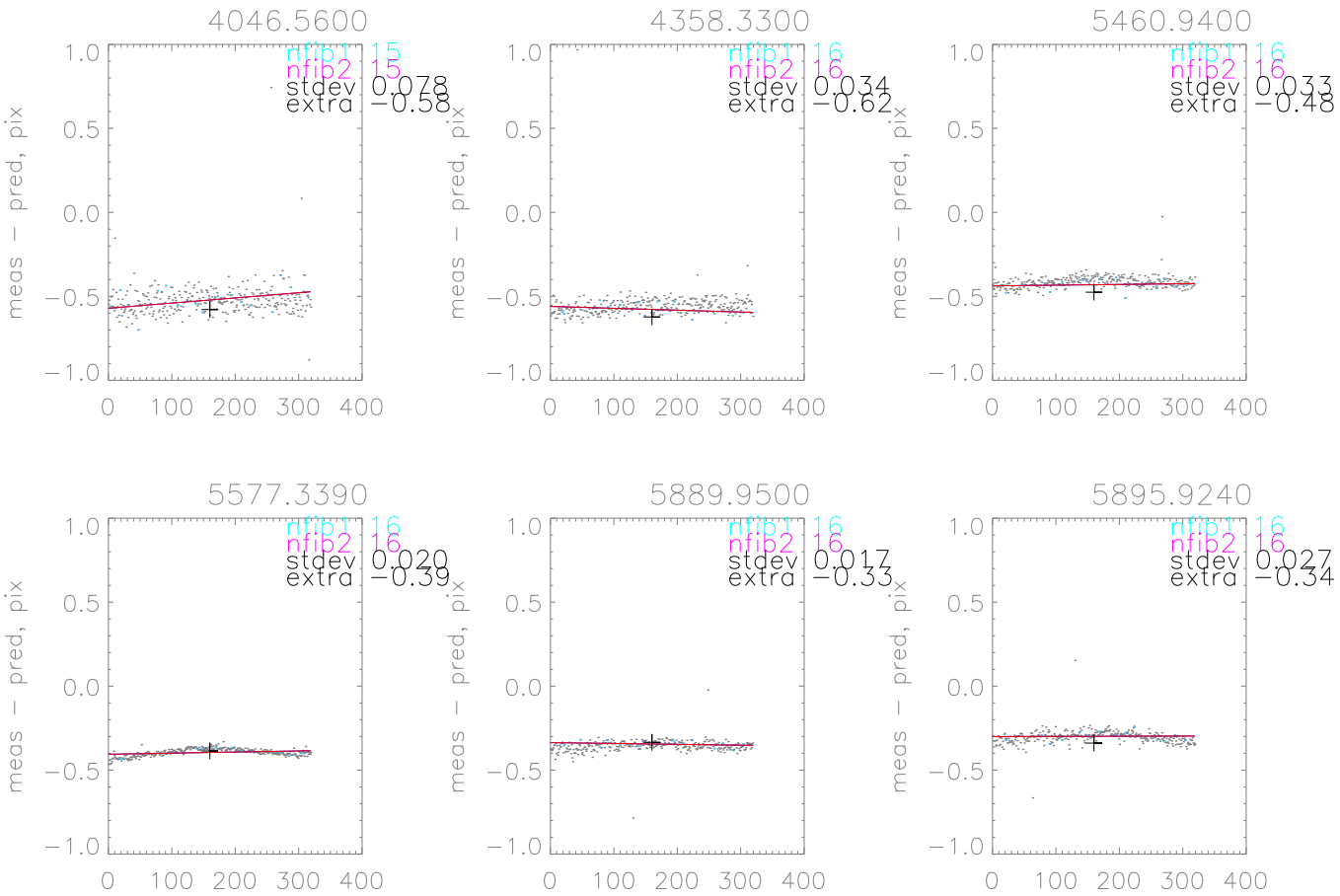

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

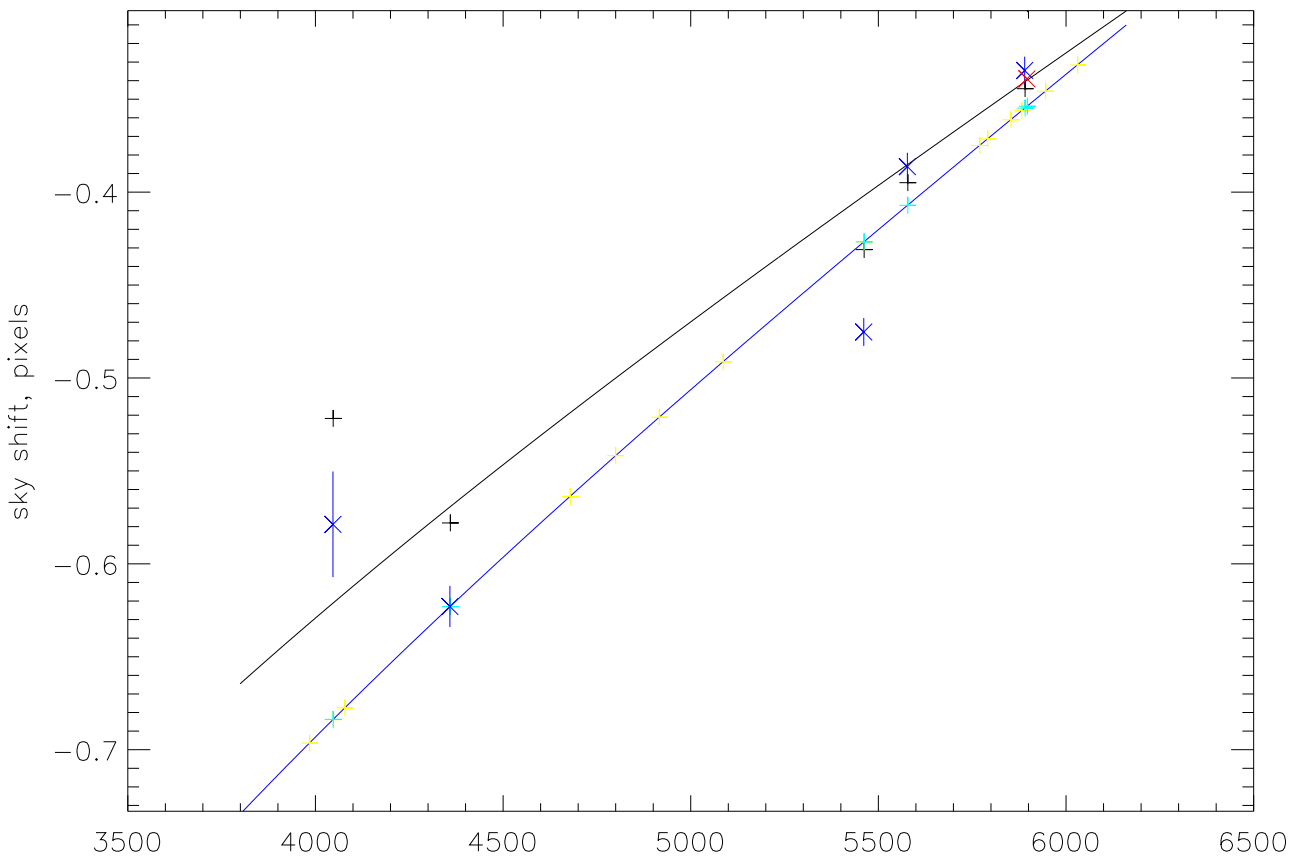

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

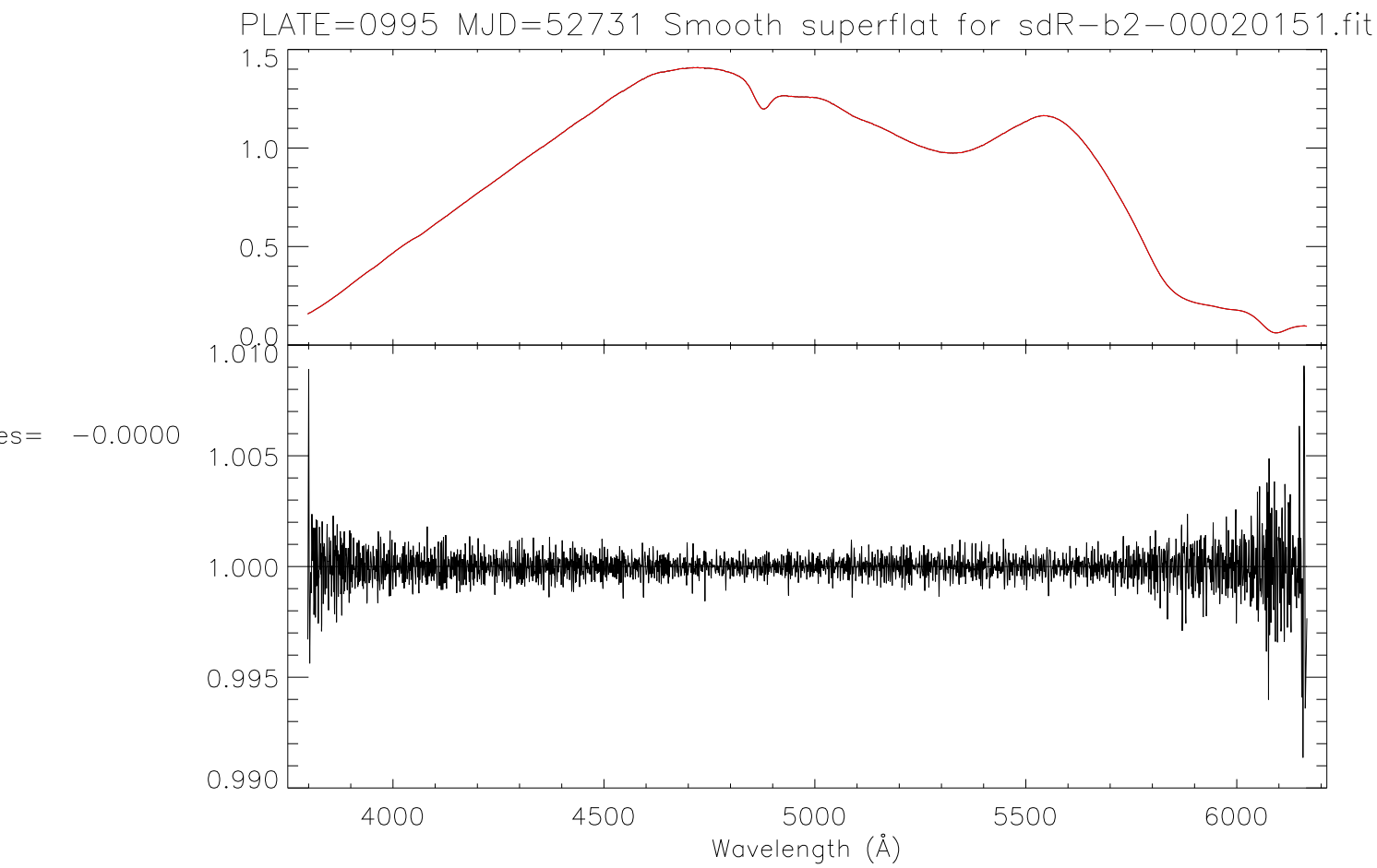

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

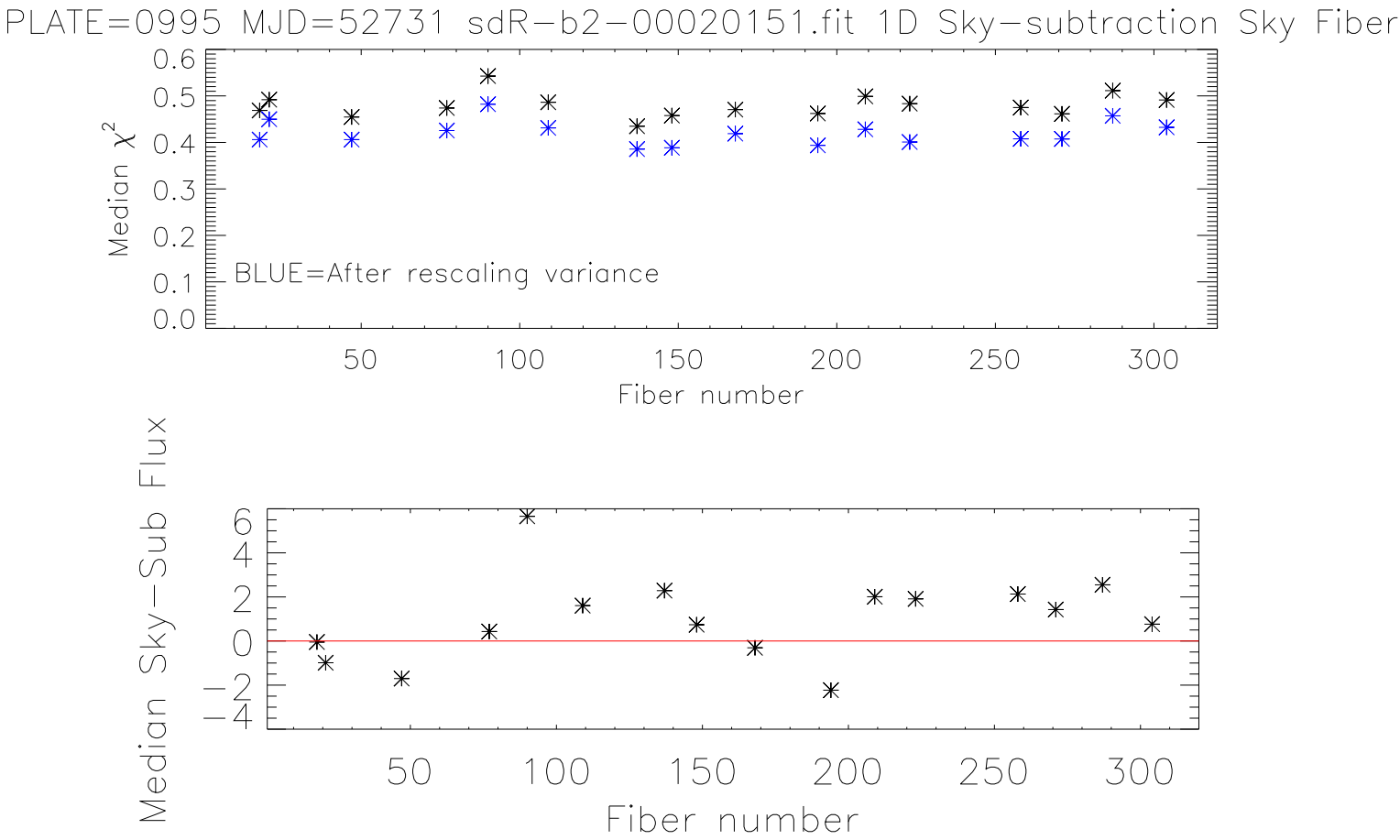

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

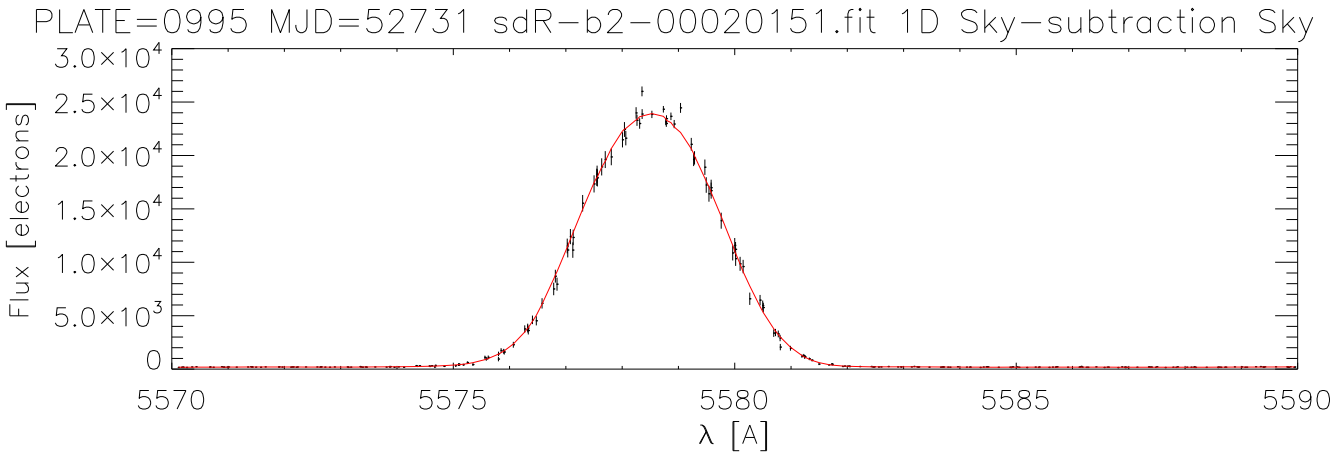

4046.5600
nfib1 15
nfib2 15
stdev 0.078
extra −0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.034
extra −0.62
5460.9400
nfib1 16
nfib2 16
stdev 0.033
extra −0.48
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.39
5889.9500
nfib1 16
nfib2 16
stdev 0.017
extra −0.33
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra −0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

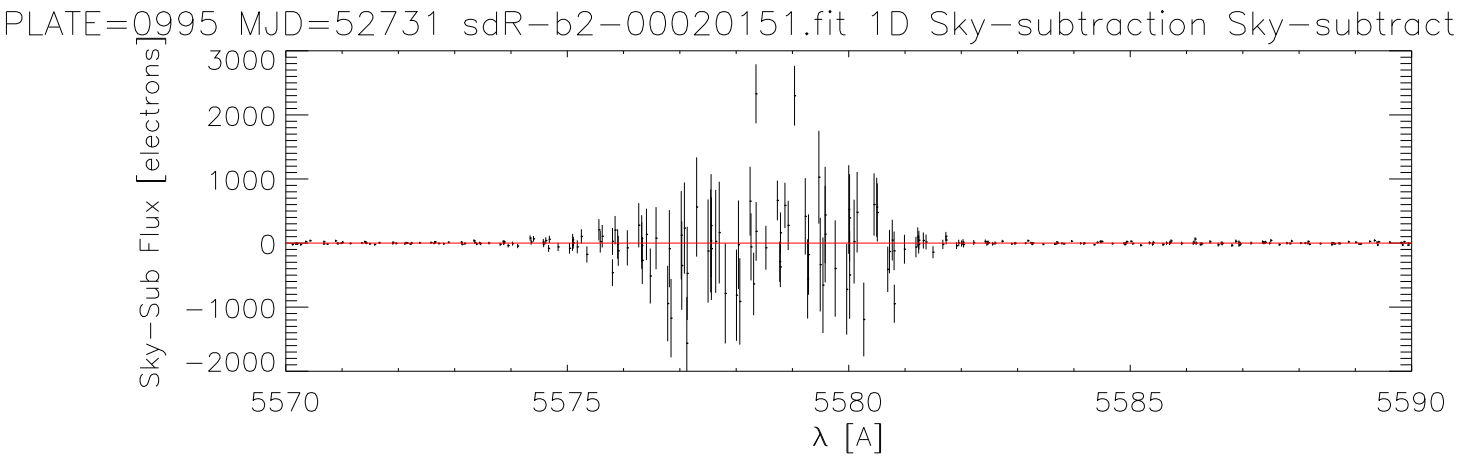

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

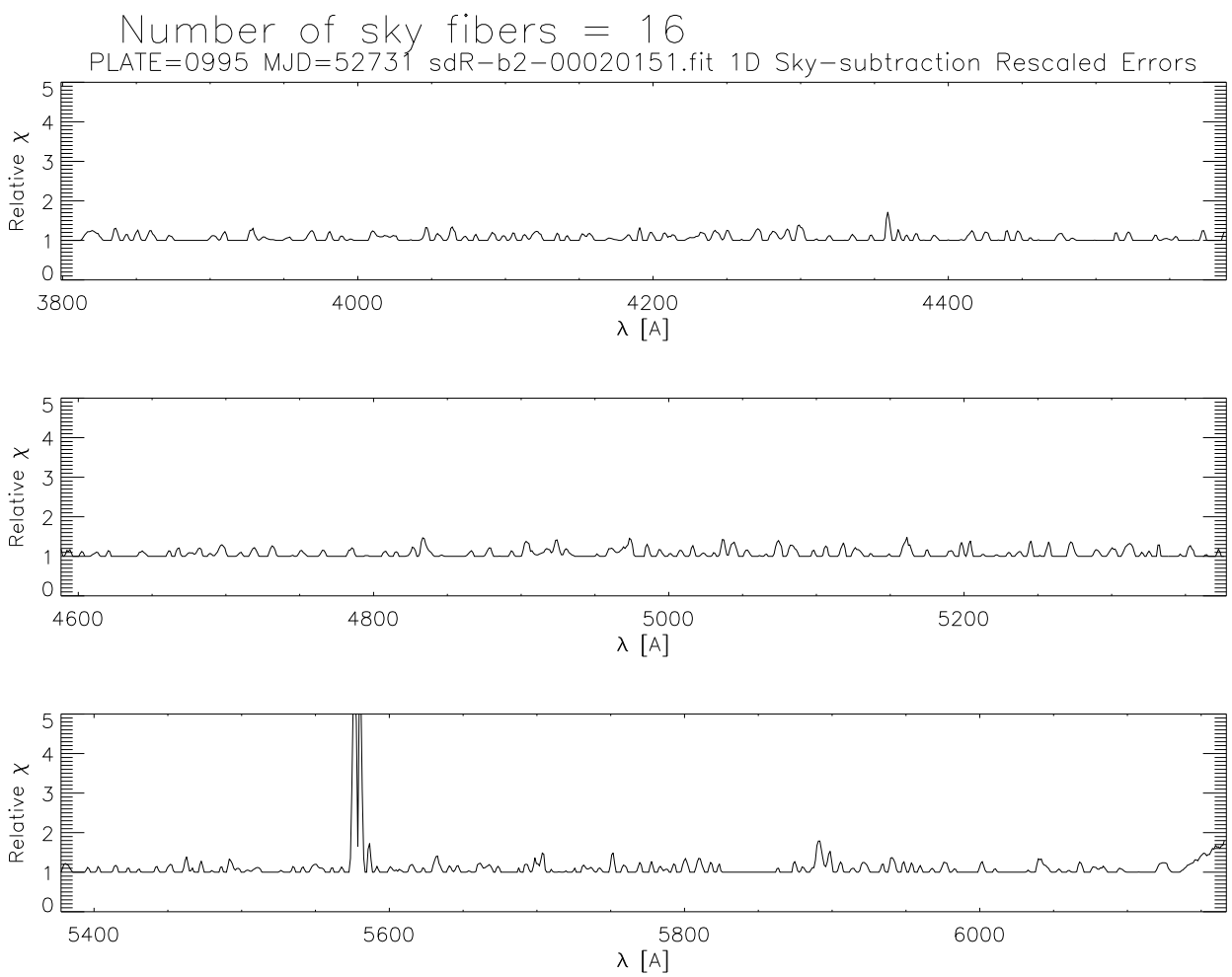

PLATE=0995 MJD=52731 Smooth superflat for sdR-b2-00020151.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

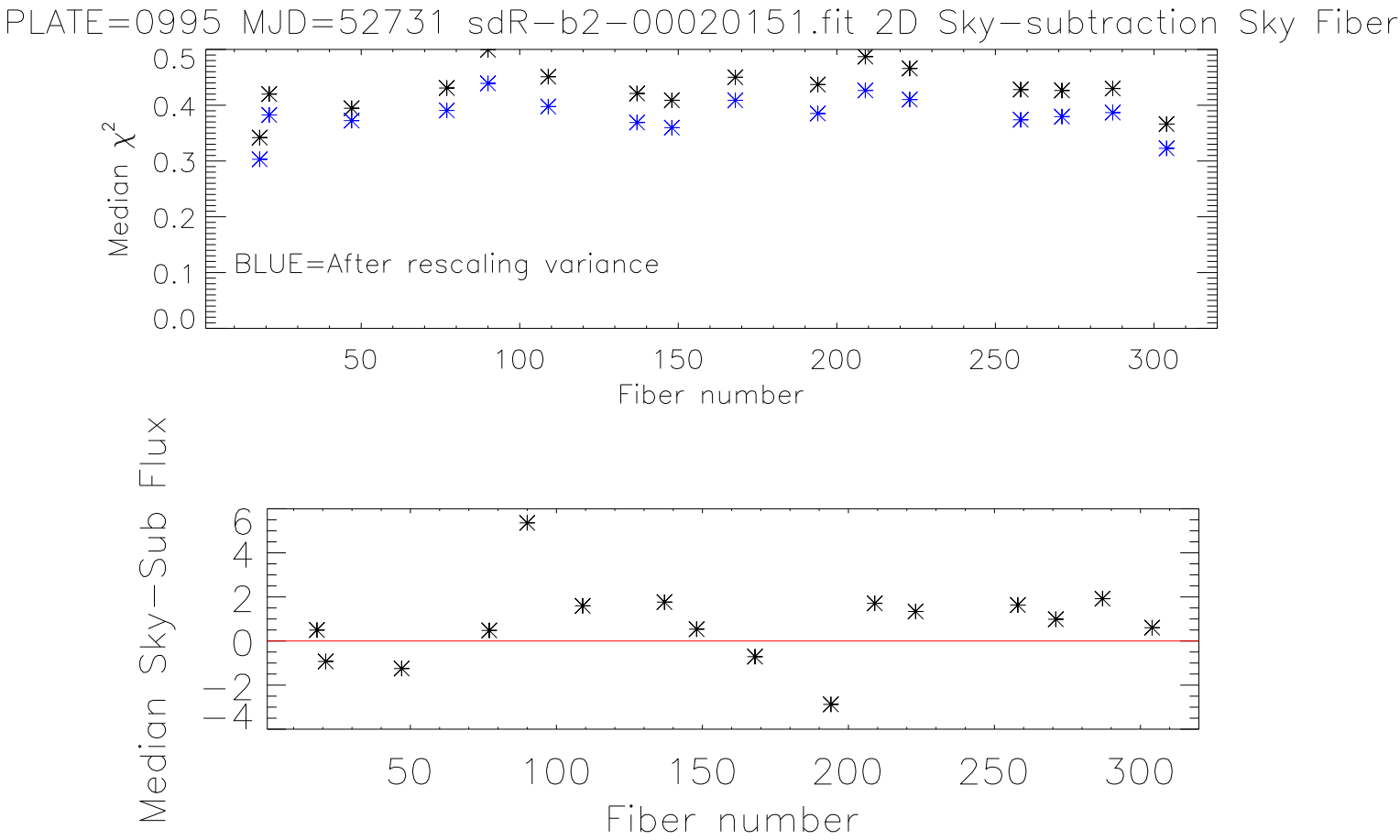
es= −0.0000

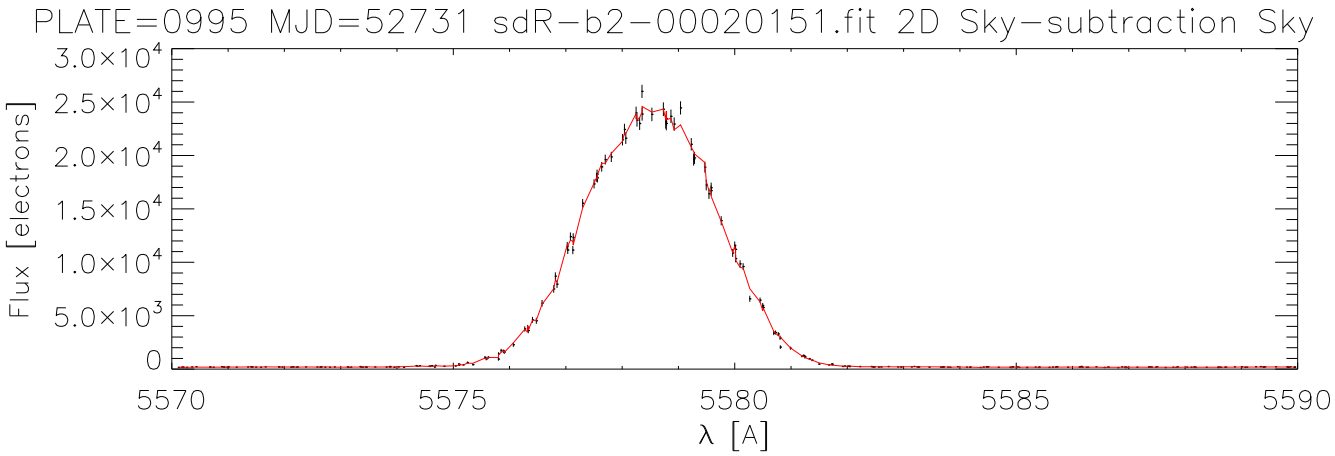

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

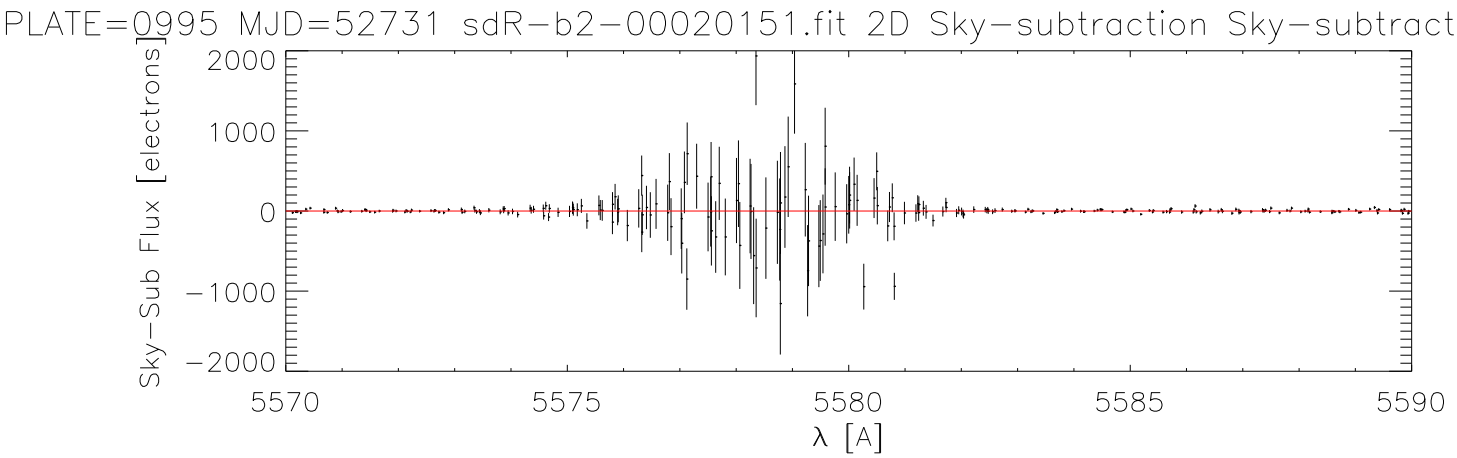

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

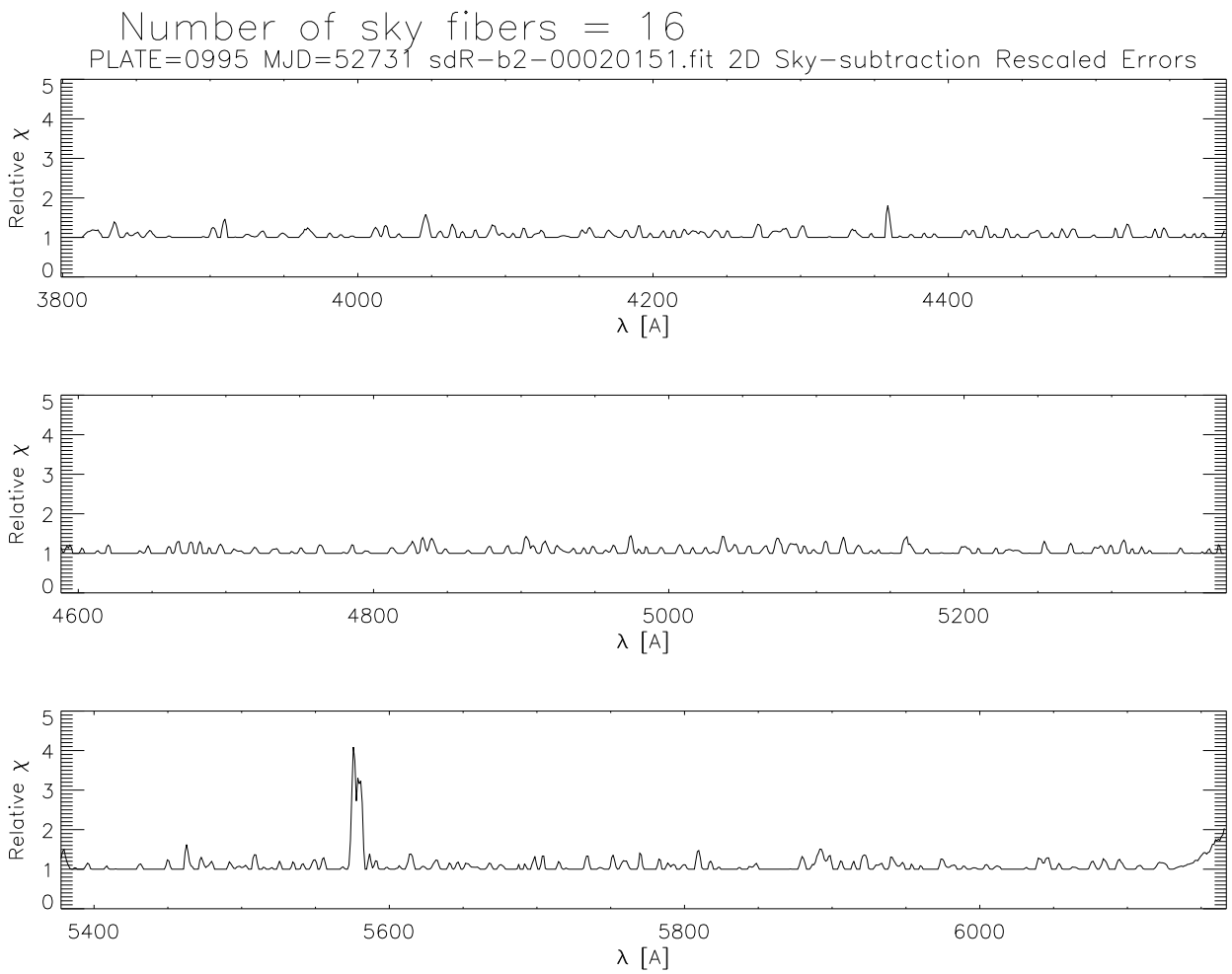

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

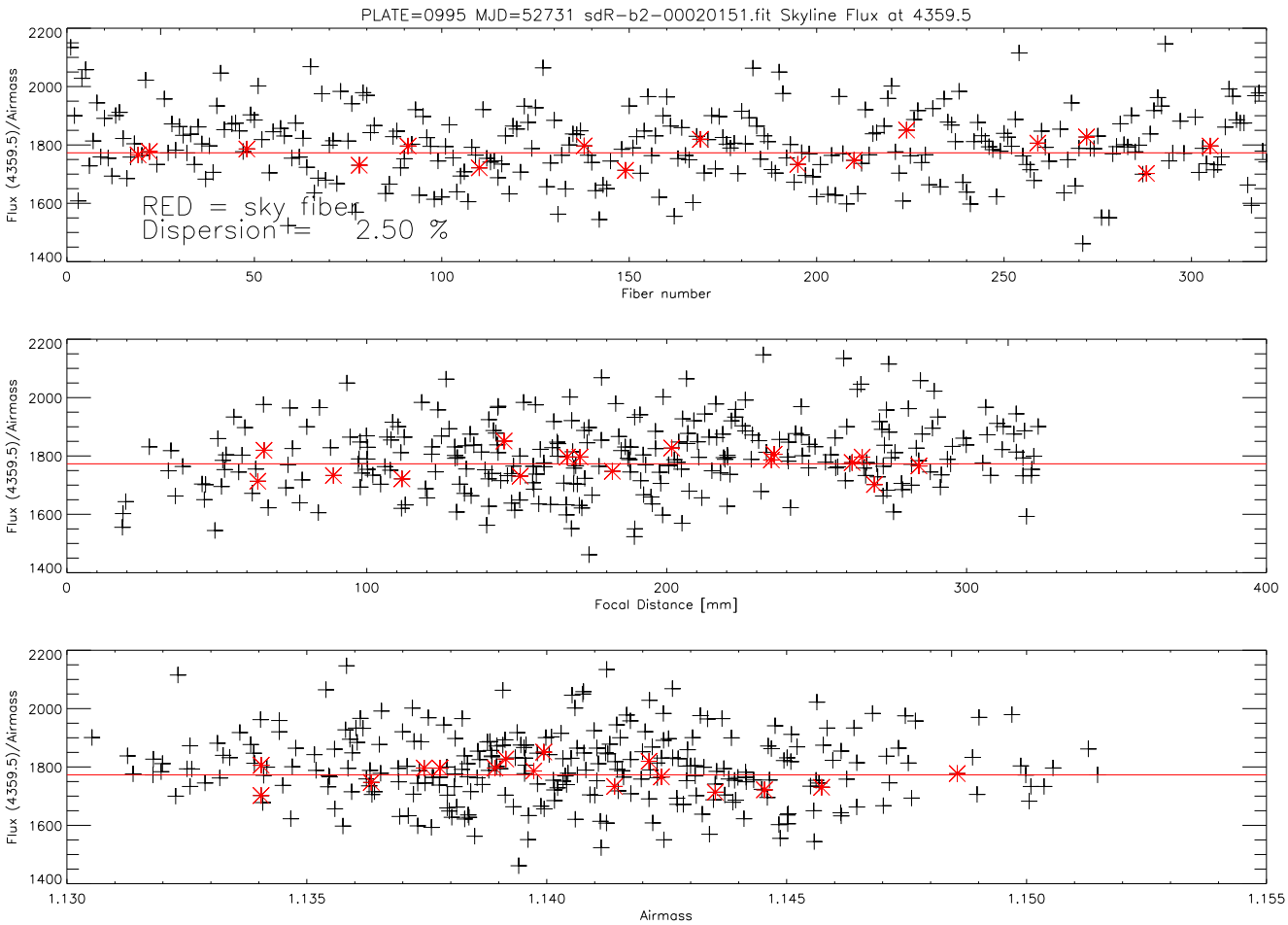

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

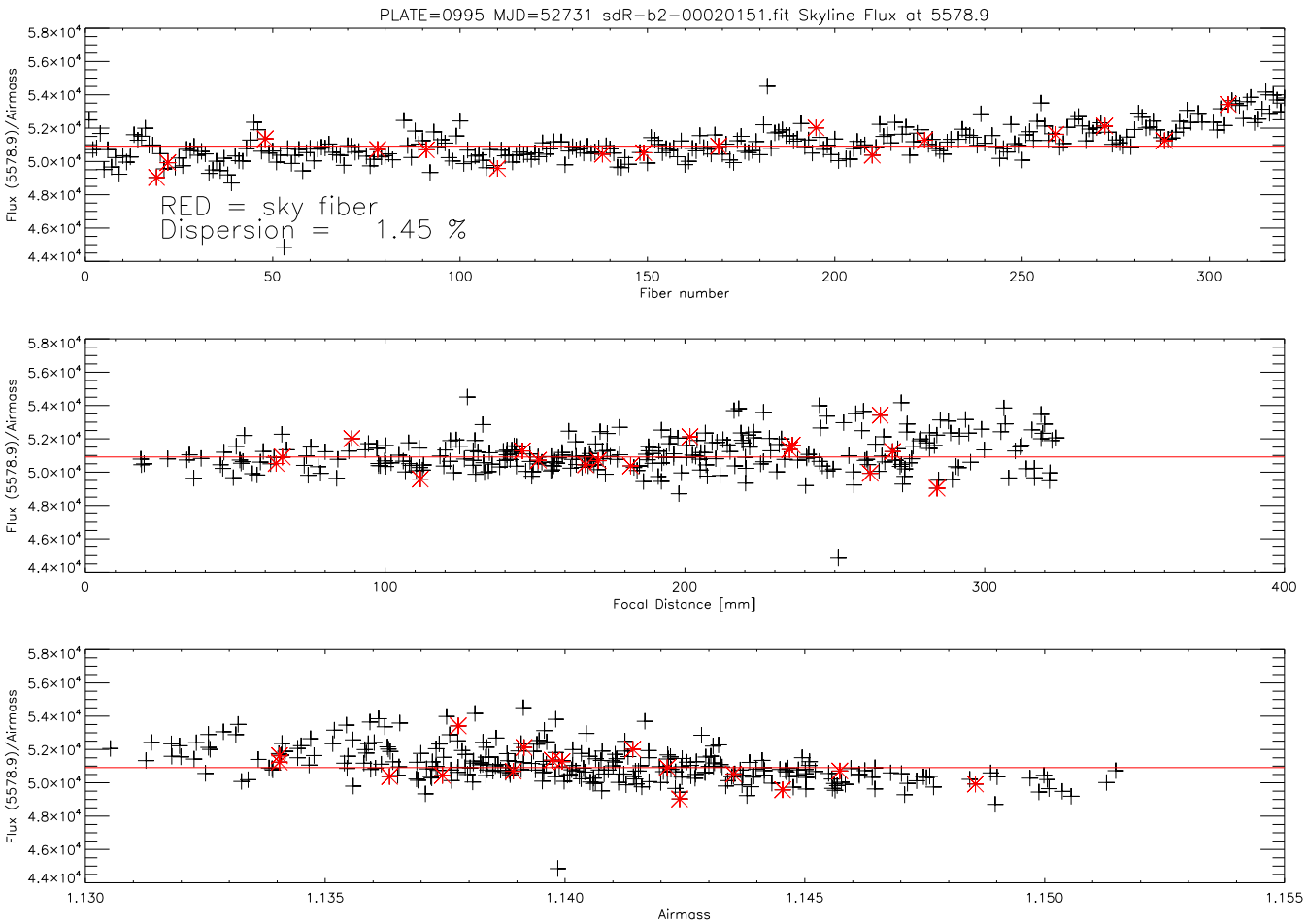

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

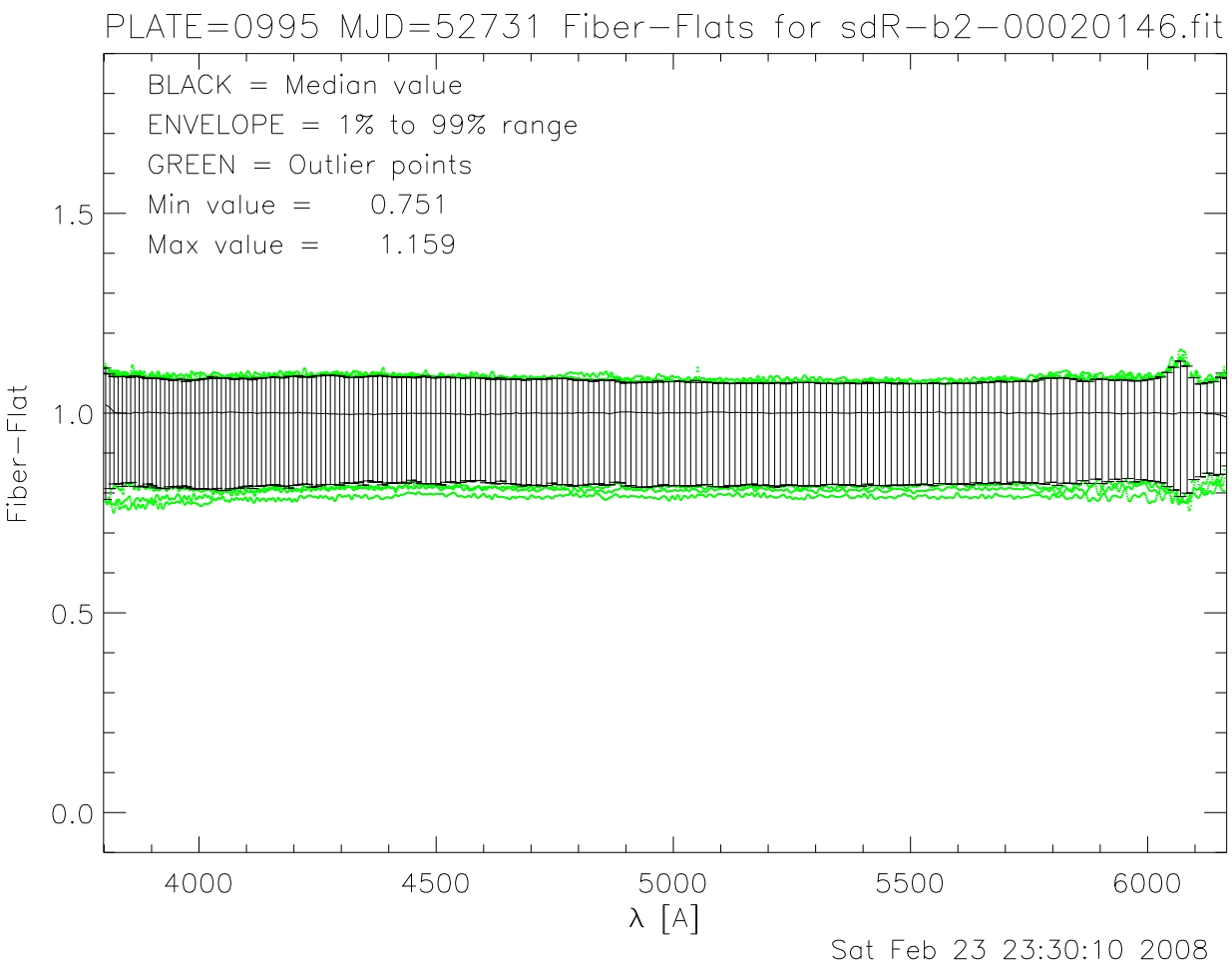

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

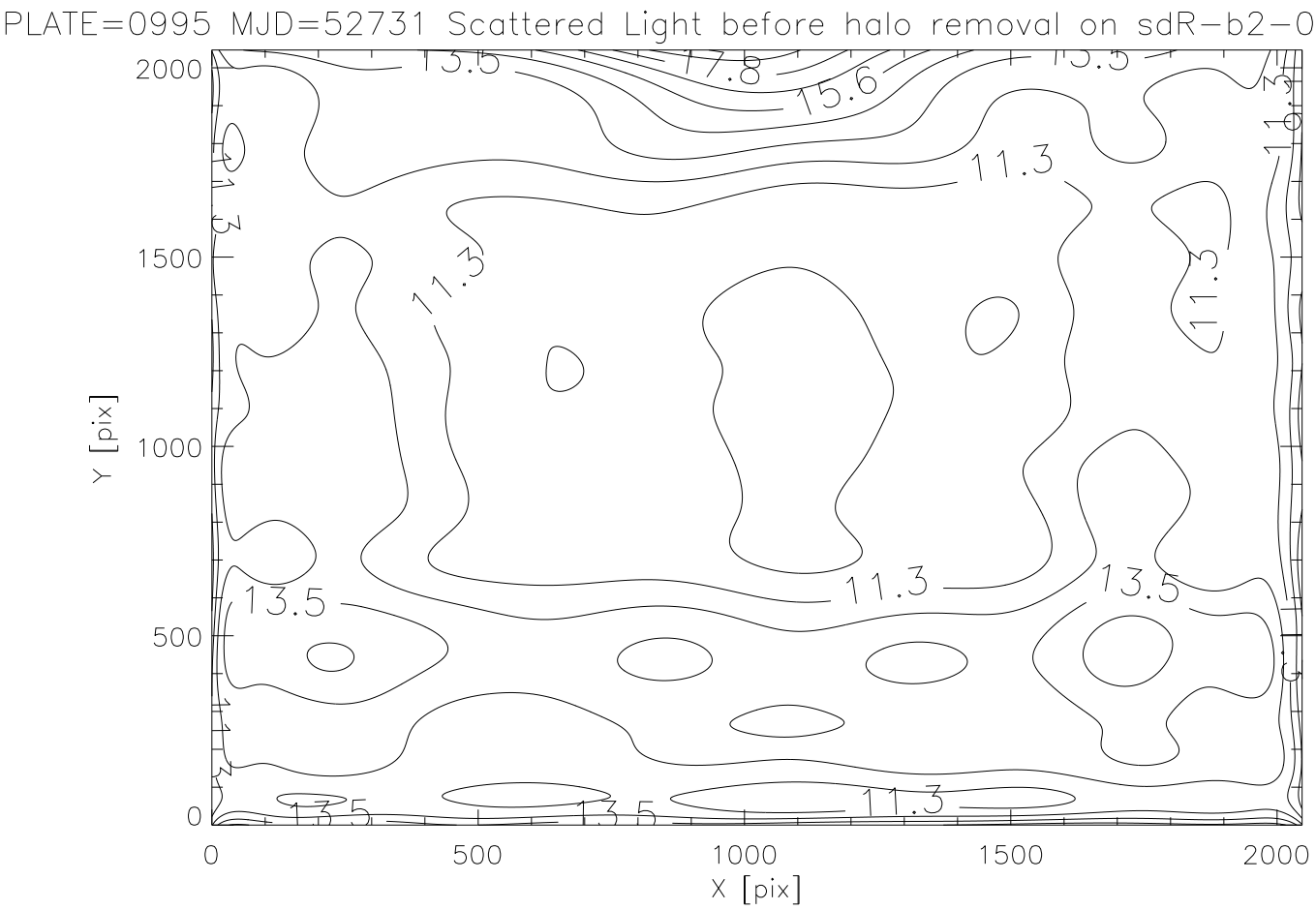

PLATE=0995 MJD=52731 sdR-b2-00020151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

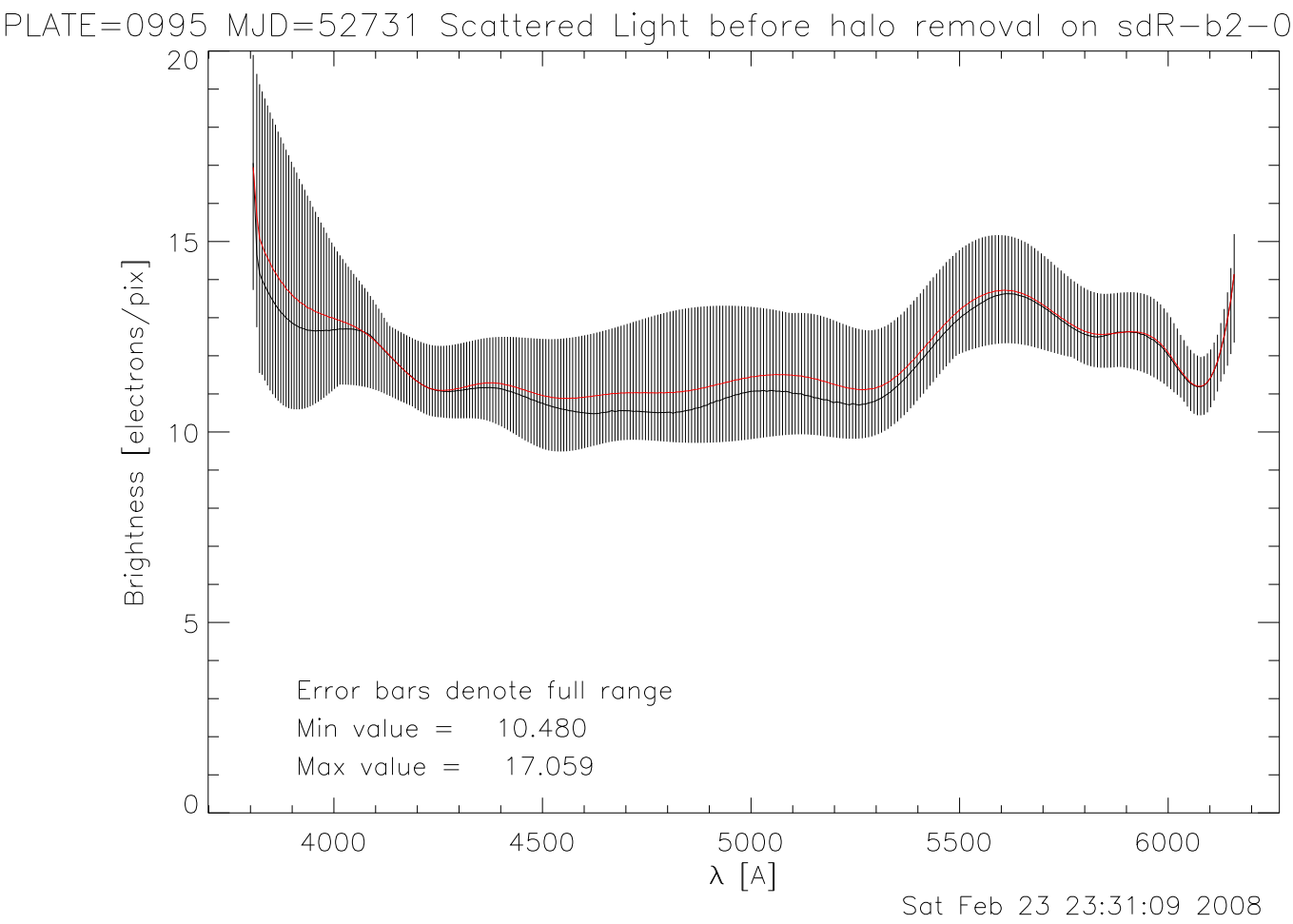

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

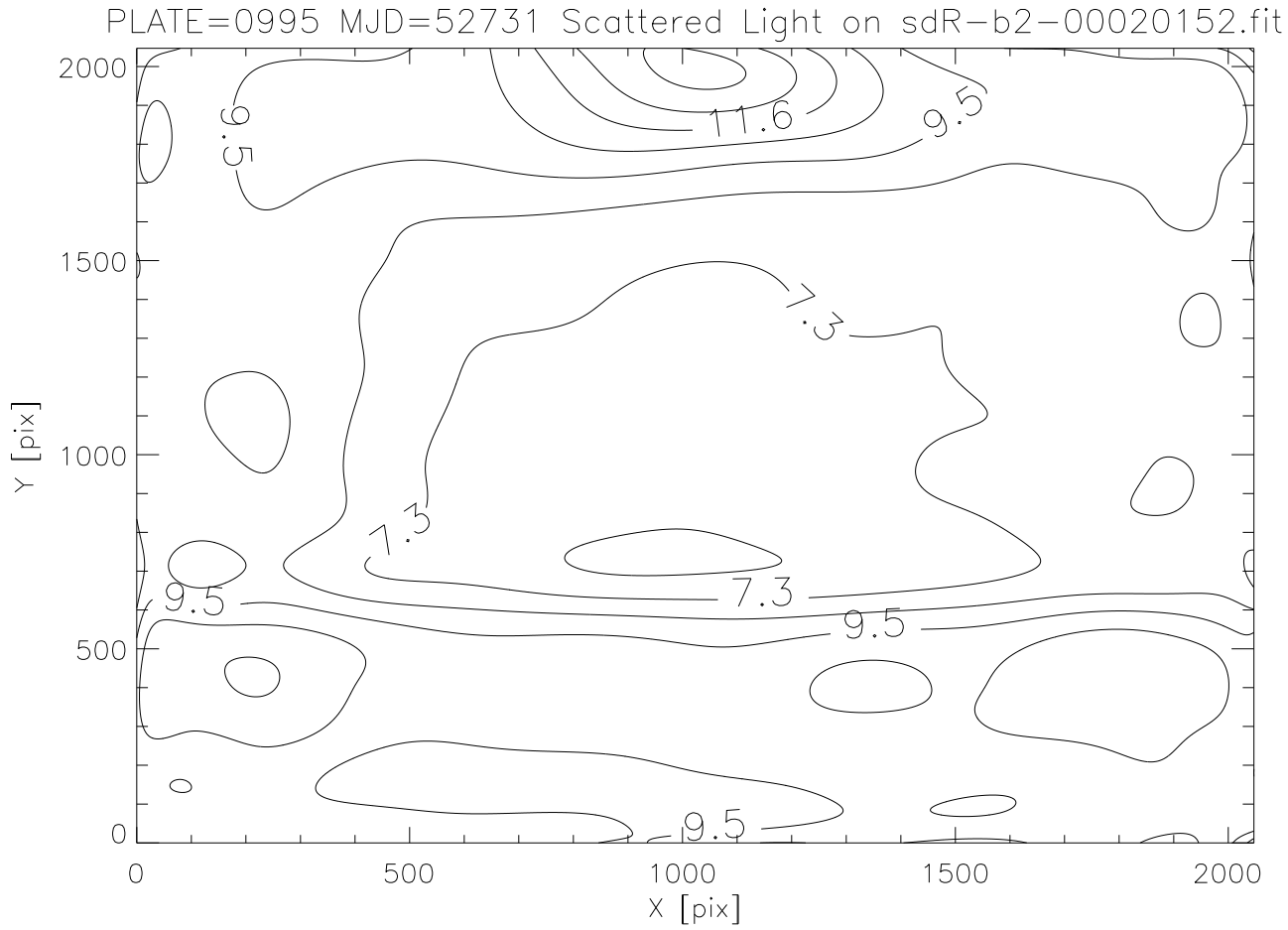

PLATE=0995 MJD=52731 sdR-b2-00020151.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion += 2.50 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

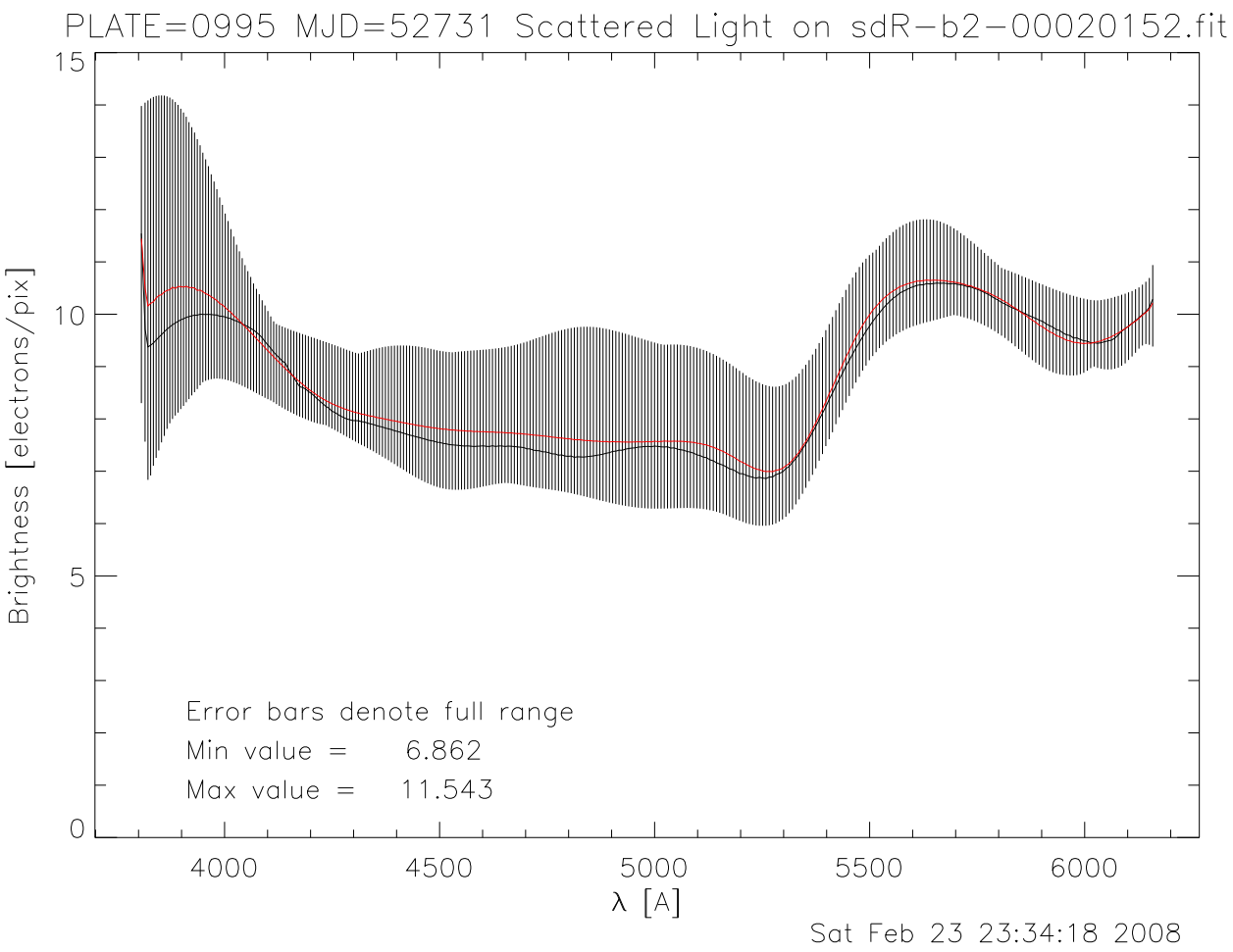

PLATE=0995 MJD=52731 sdR-b2-00020151.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.45 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

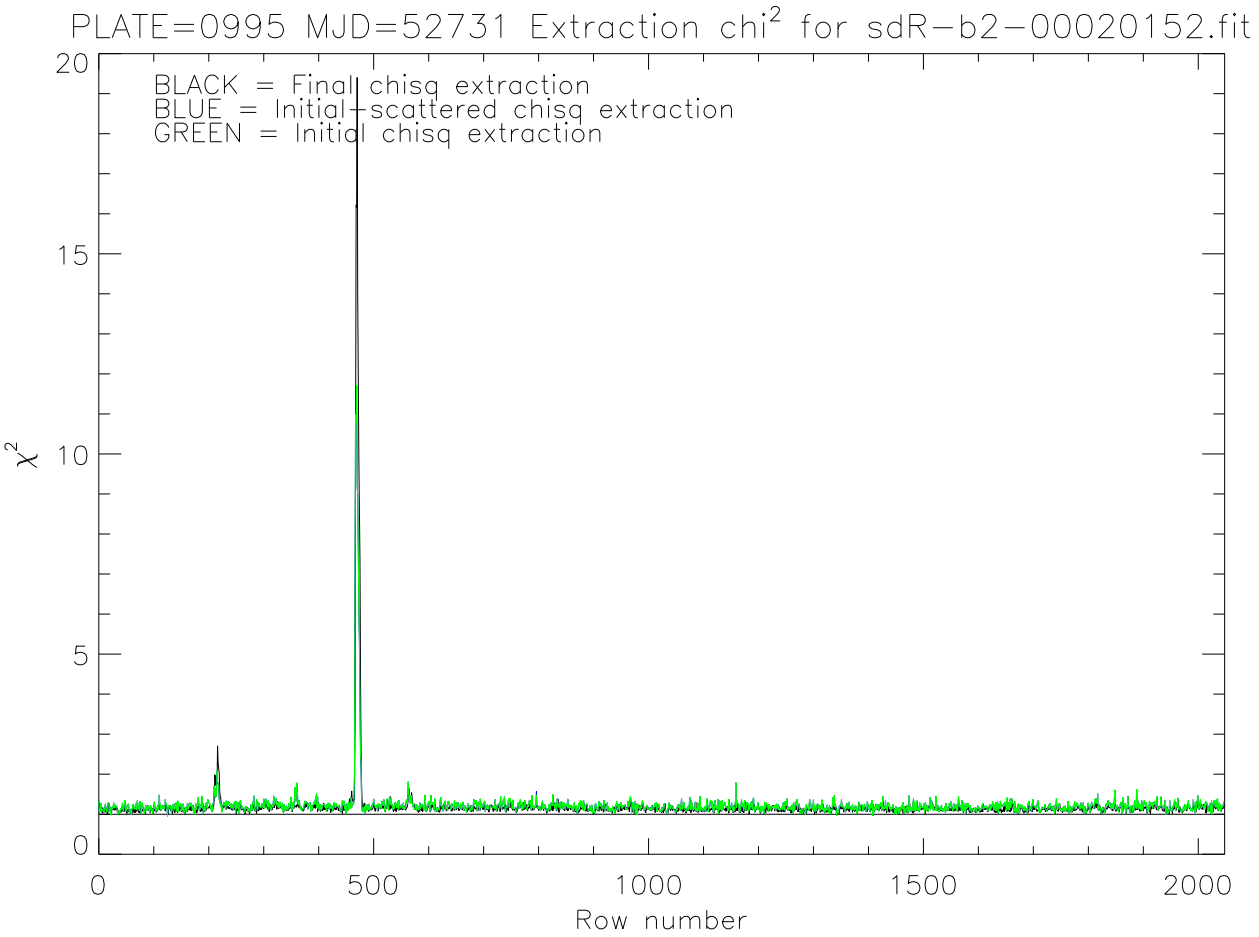

PLATE=0995 MJD=52731 Fiber-Flats for sdR-b2-00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.751
Max value = 1.159
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:30:10 2008

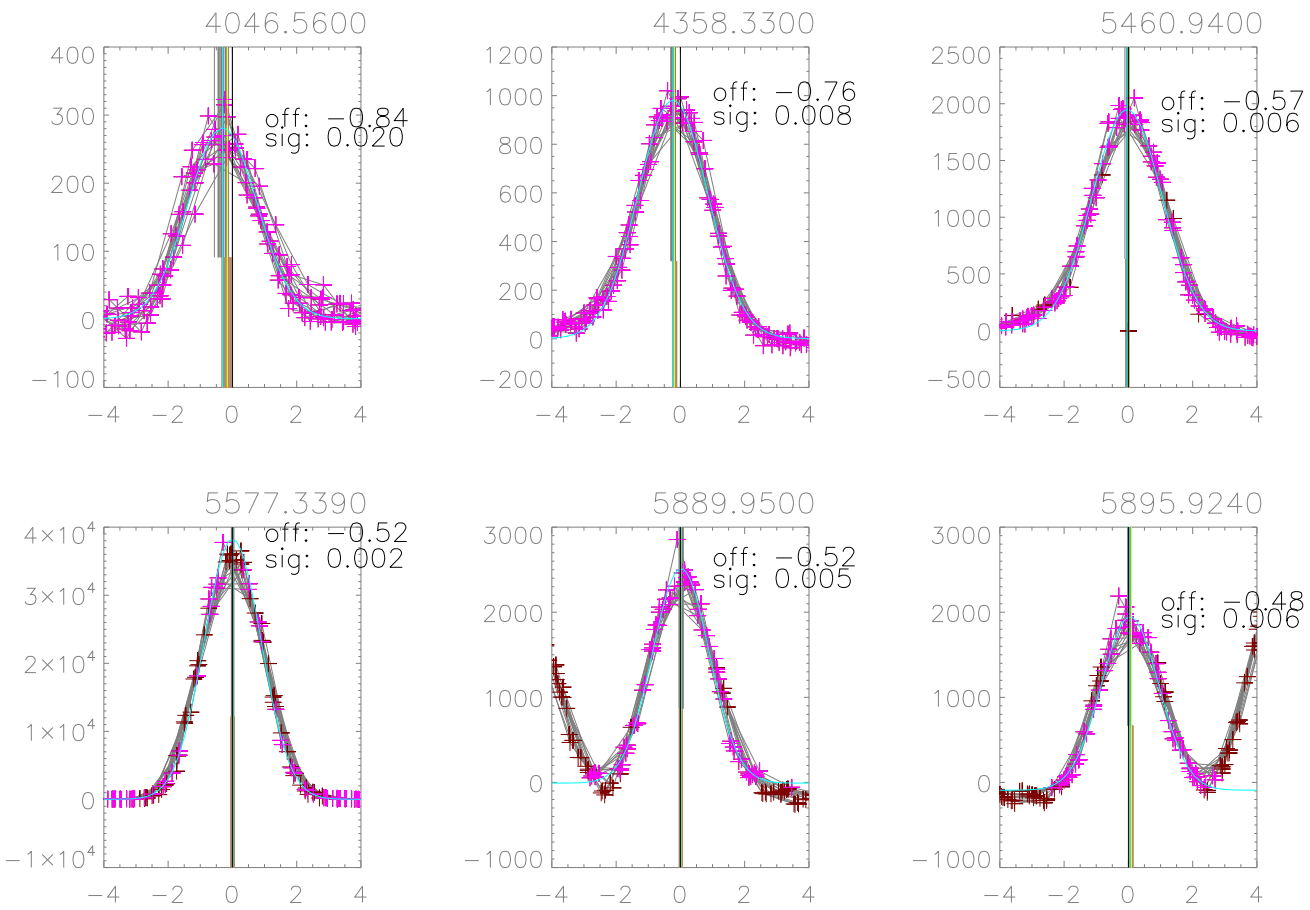

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−b2−00020152.f
13.5
17.8
15.6
13.5
11.3
11.3
11.3
11.3
13.5
11.3
13.5
13.5
13.5
11.3
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

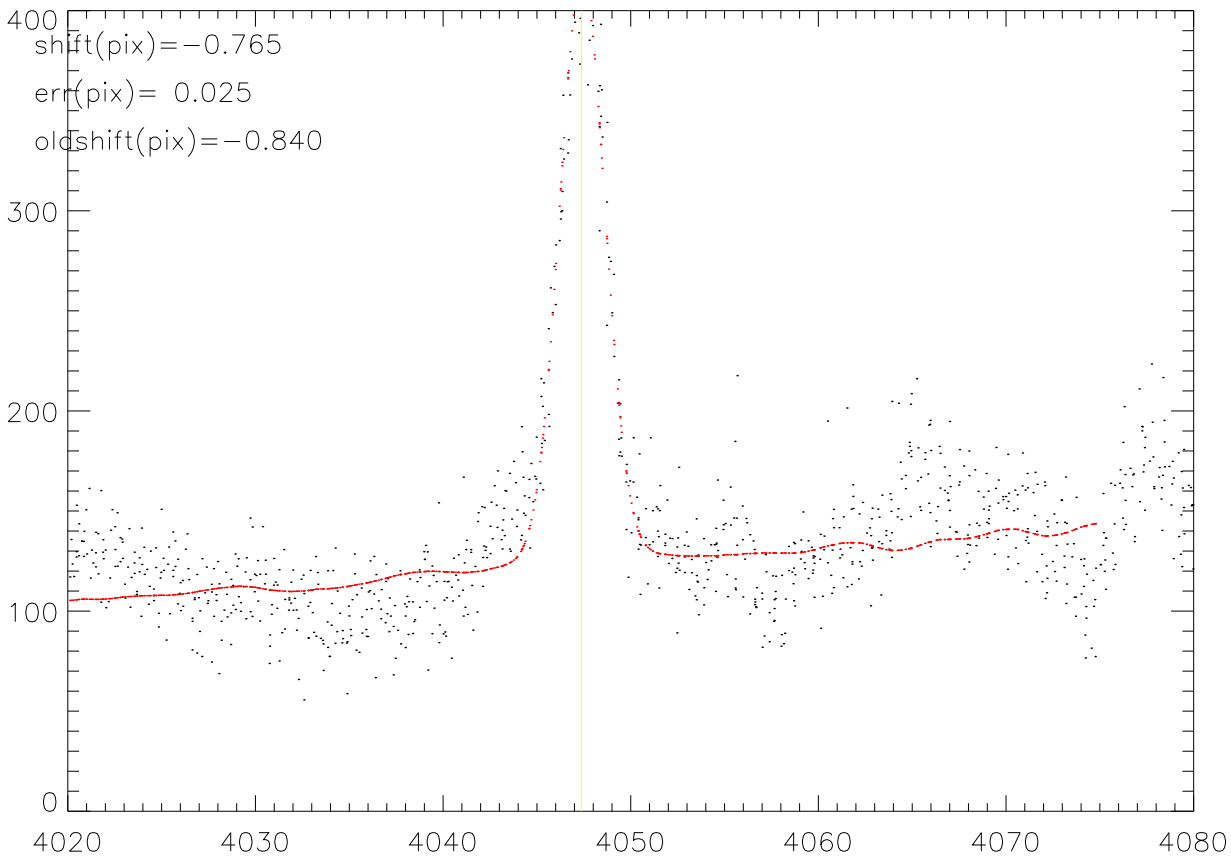

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-b2-00020152.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 10.480
Max value = 17.059
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 23:31:09 2008

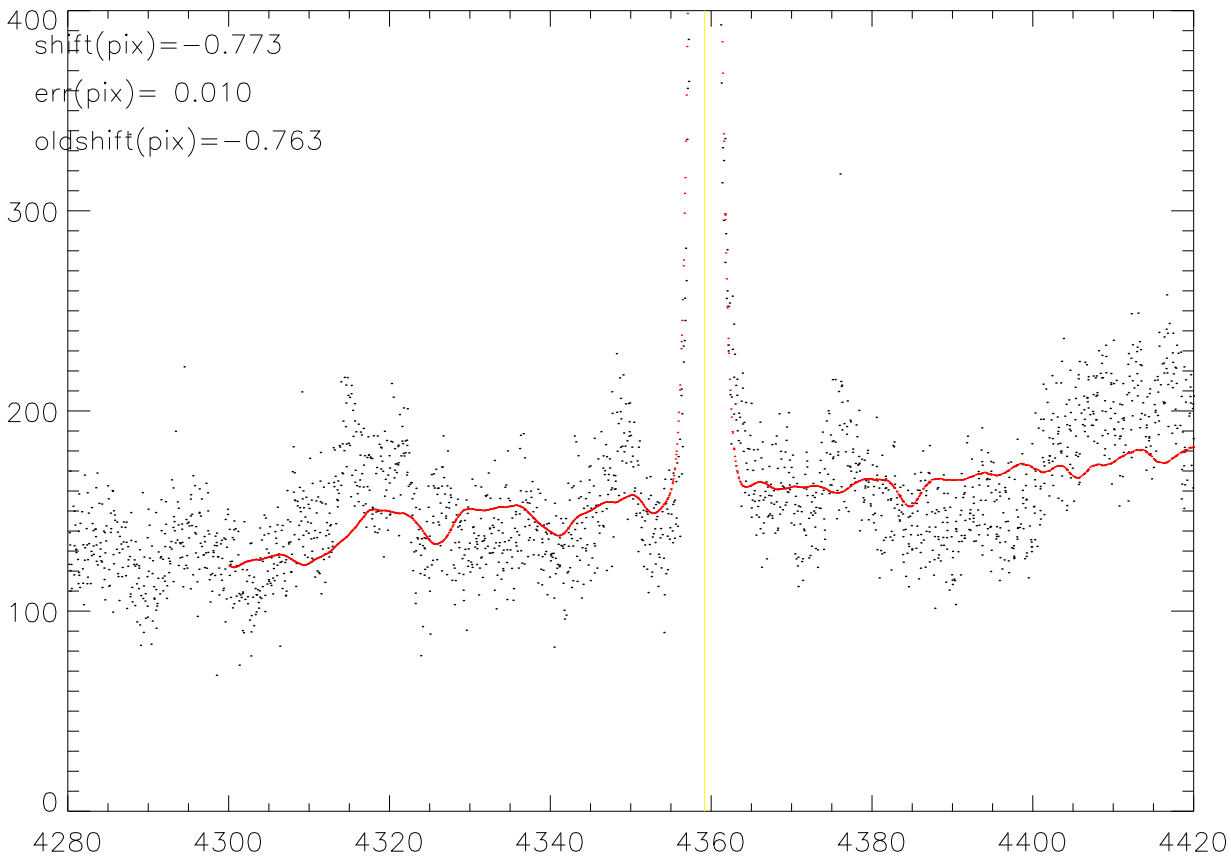

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020152.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.5
11.6
9.5
7.3
7.3
9.5
9.5
0
0

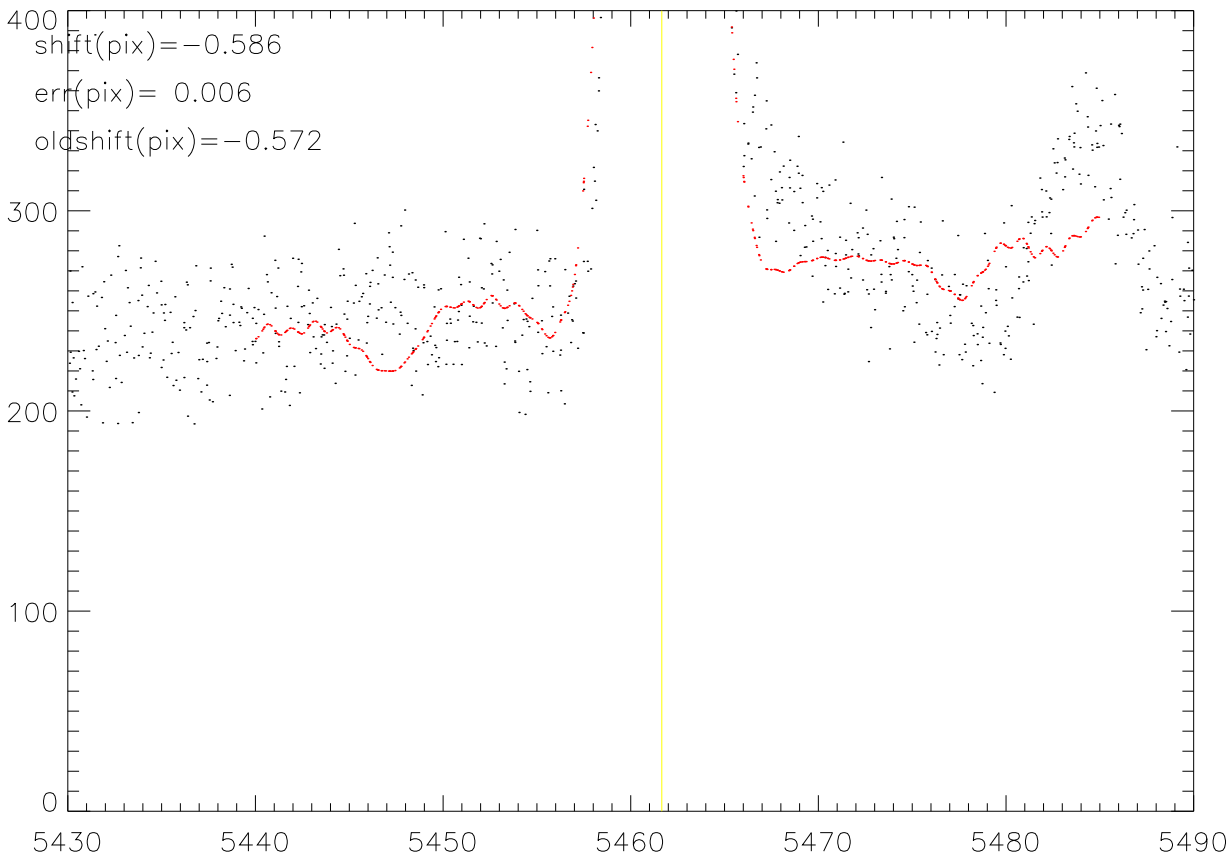

PLATE=0995 MJD=52731 Scattered Light on sdR-b2-00020152.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.862
Max value = 11.543
Sat Feb 23 23:34:18 2008

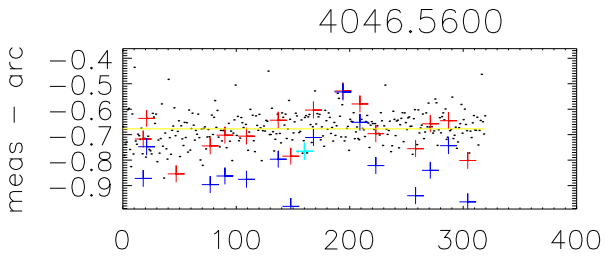

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-b2-00020152.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

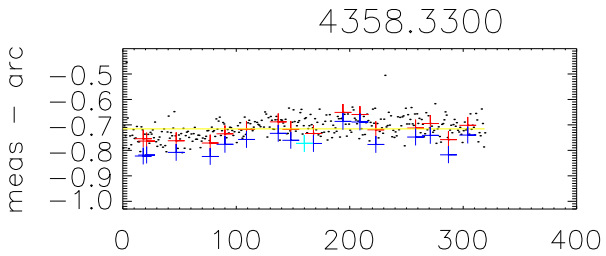

4046.5600
off: −0.84
sig: 0.020
4358.3300
off: −0.76
sig: 0.008
5460.9400
off: −0.57
sig: 0.006
5577.3390
off: −0.52
sig: 0.002
5889.9500
off: −0.52
sig: 0.005
5895.9240
off: −0.48
sig: 0.006

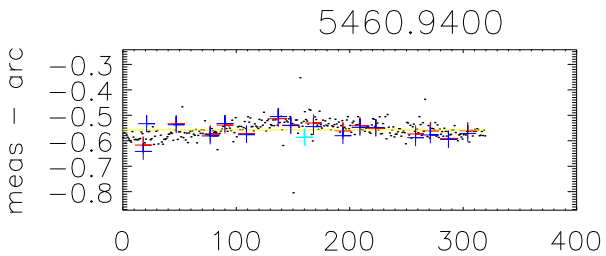

shift(pix)=−0.765
err(pix)= 0.025
oldshift(pix)=−0.840
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

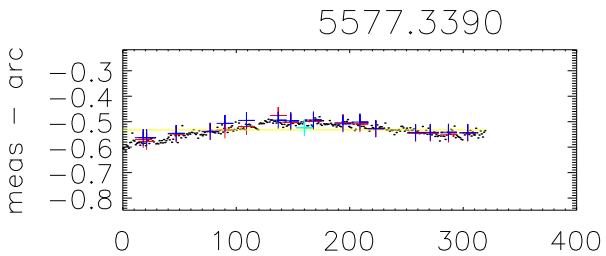

shift(pix)=−0.773
err(pix)= 0.010
oldshift(pix)=−0.763
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

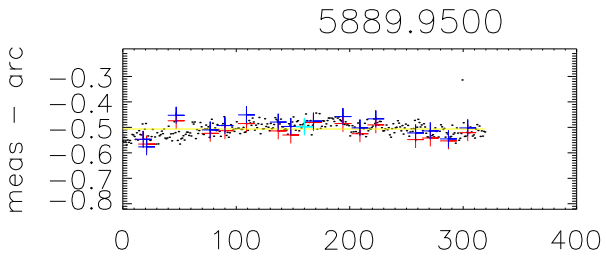

shift(pix)=−0.586
err(pix)= 0.006
oldshift(pix)=−0.572
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

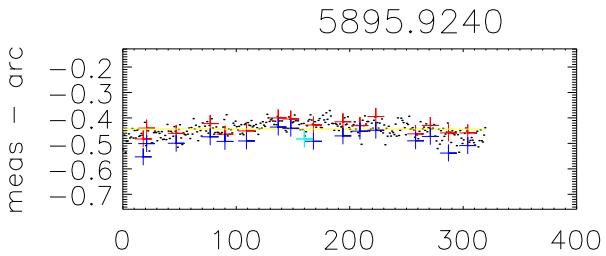

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

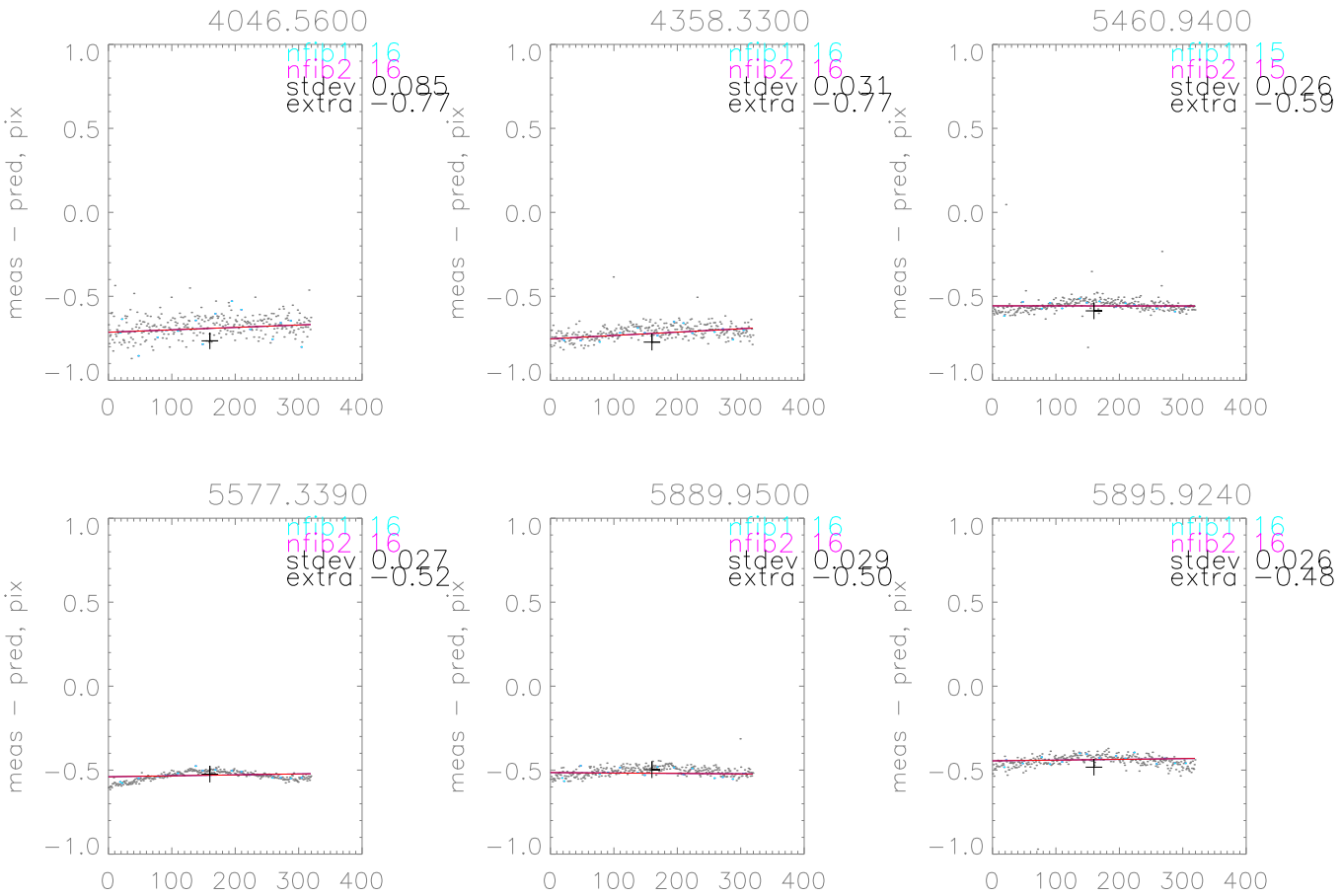

4358.3300
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

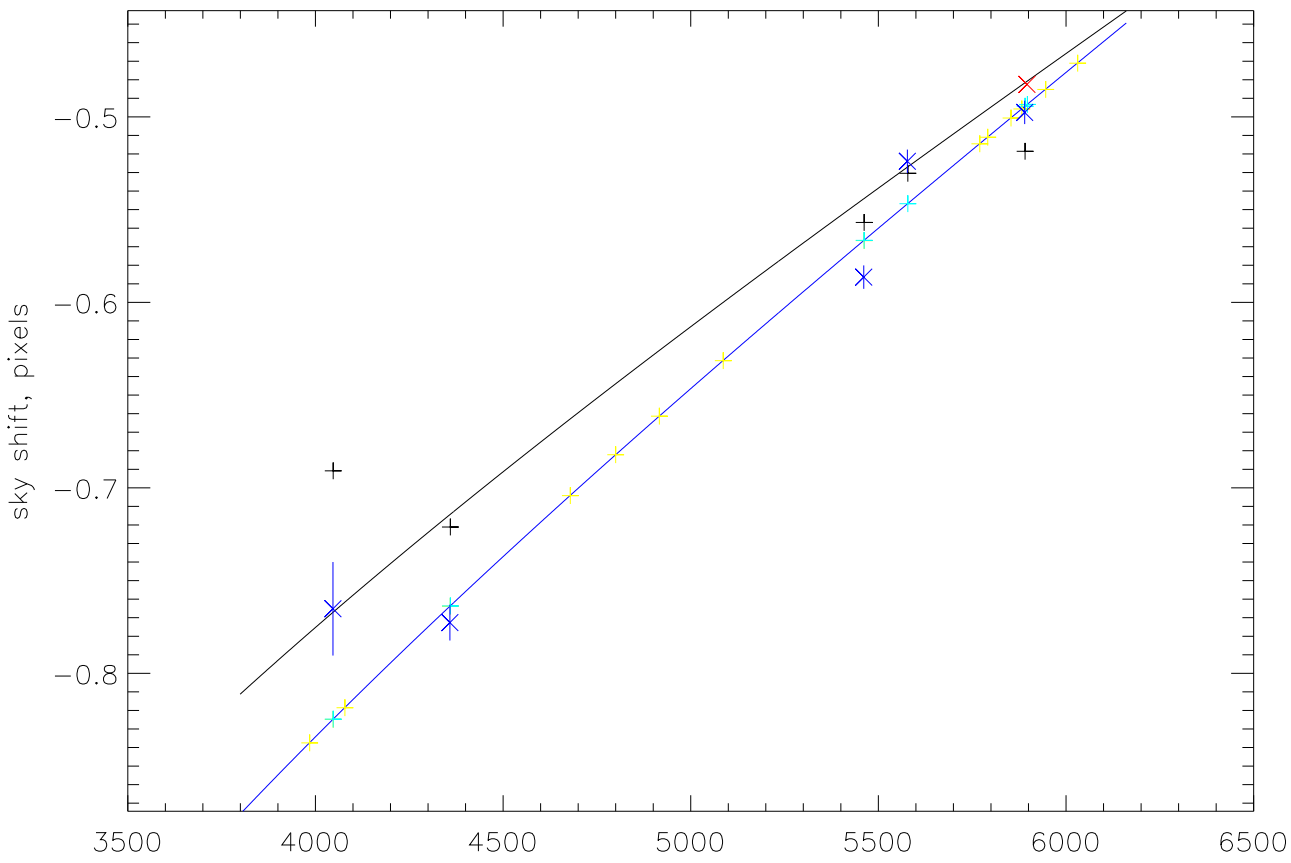

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


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

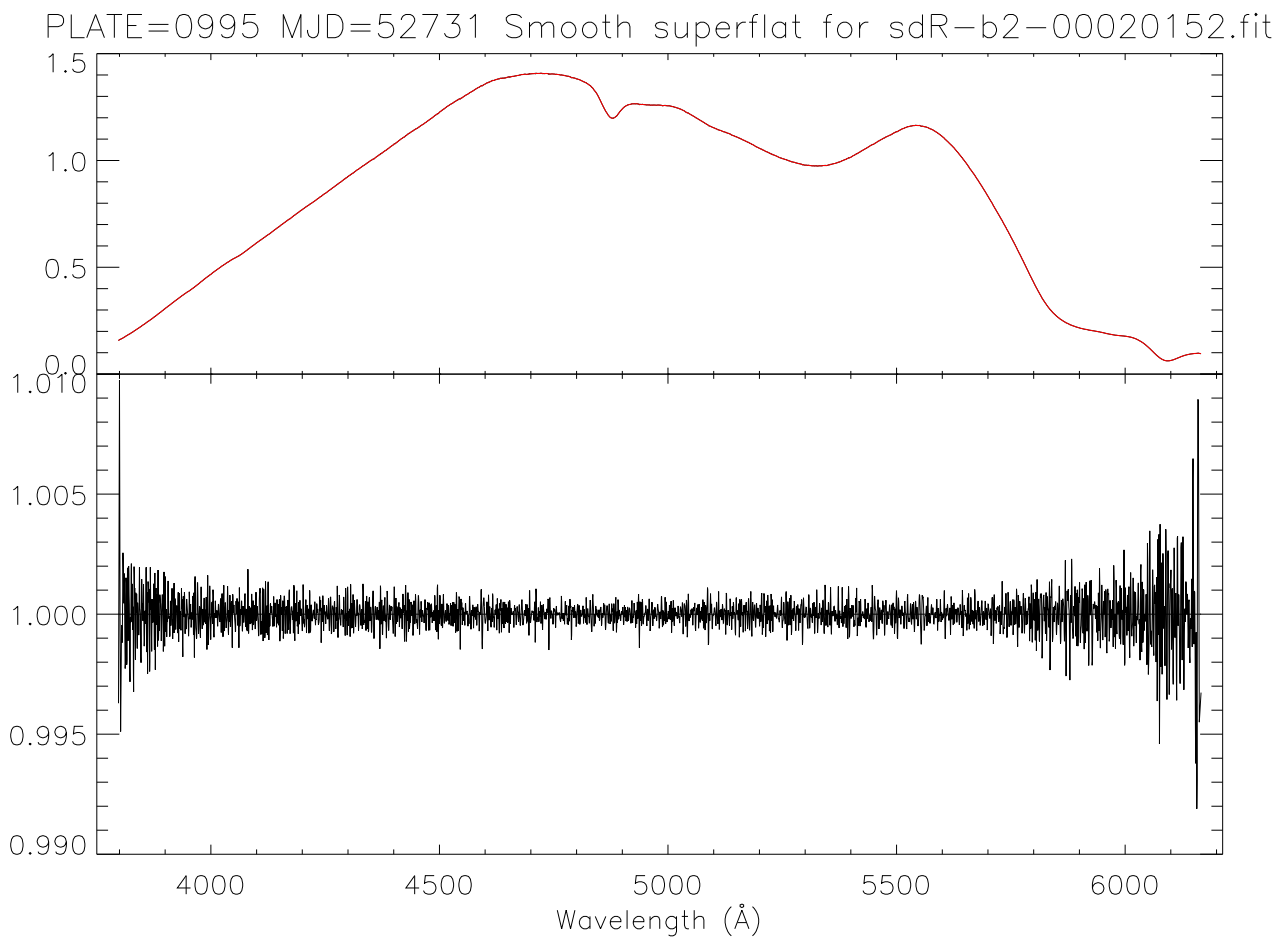

5889.9500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

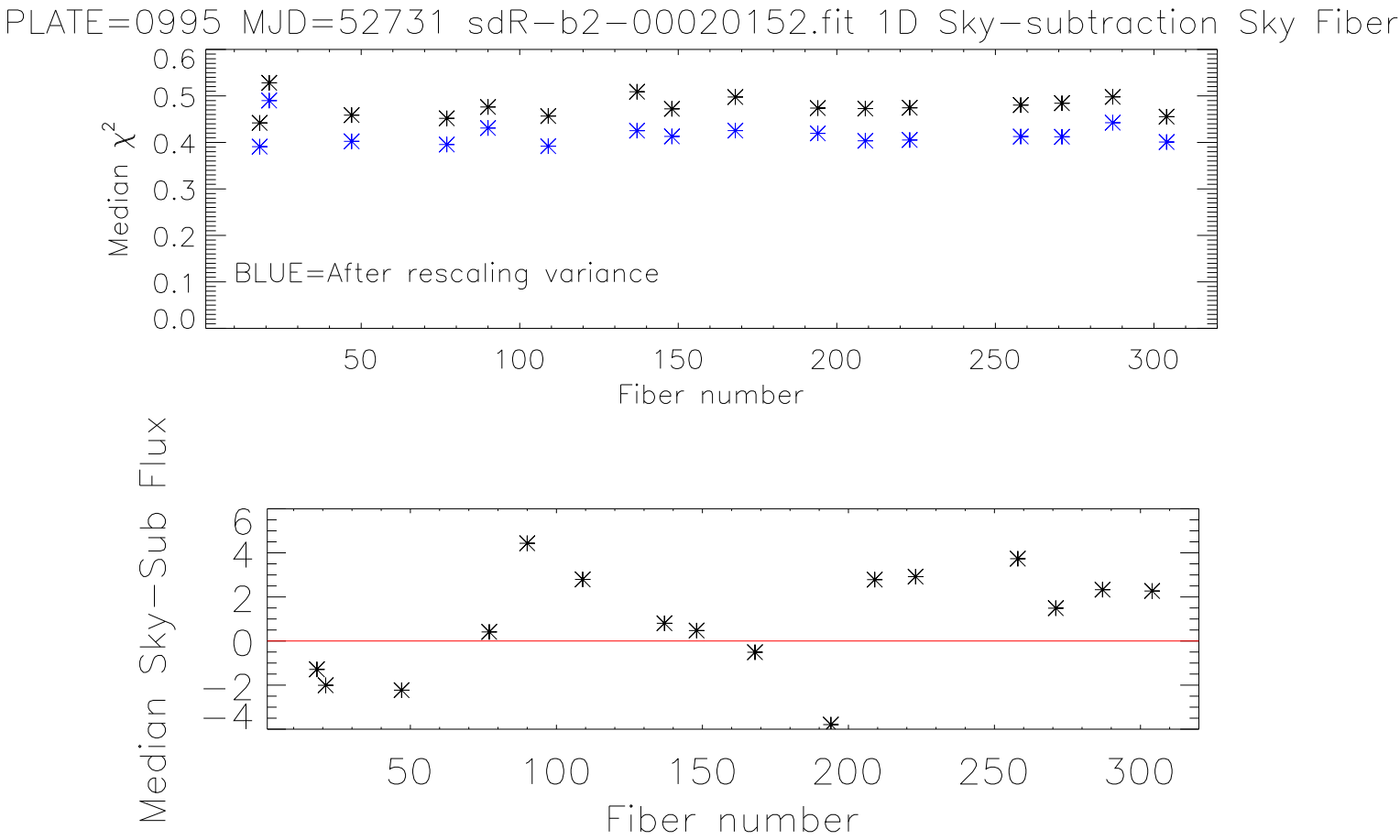

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

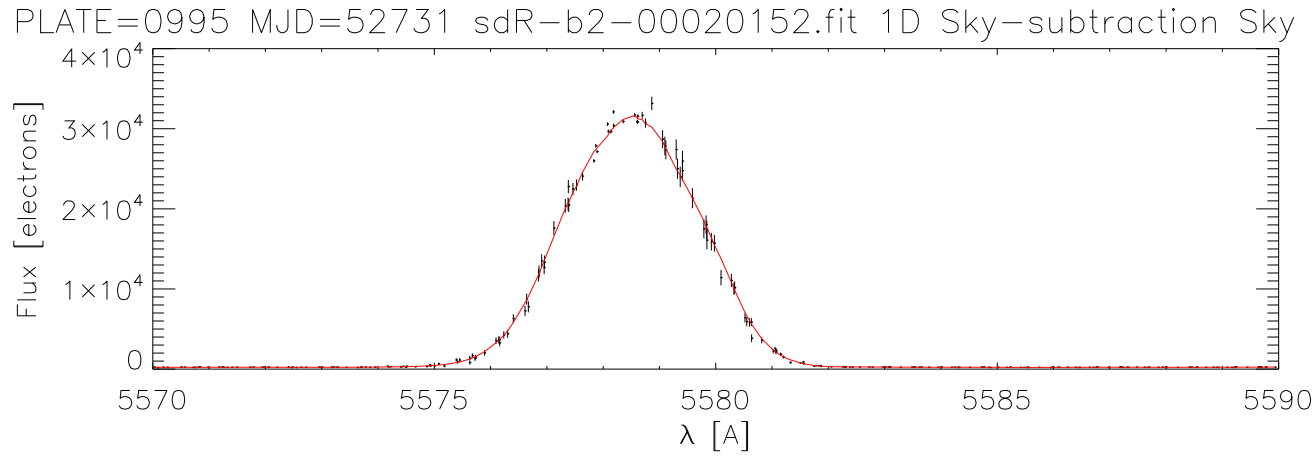

4046.5600
nfib1 16
nfib2 16
stdev 0.085
extra −0.77
4358.3300
nfib1 16
nfib2 16
stdev 0.031
extra −0.77
5460.9400
nfib1 15
nfib2 15
stdev 0.026
extra −0.59
5577.3390
nfib1 16
nfib2 16
stdev 0.027
extra −0.52
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.50
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra −0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

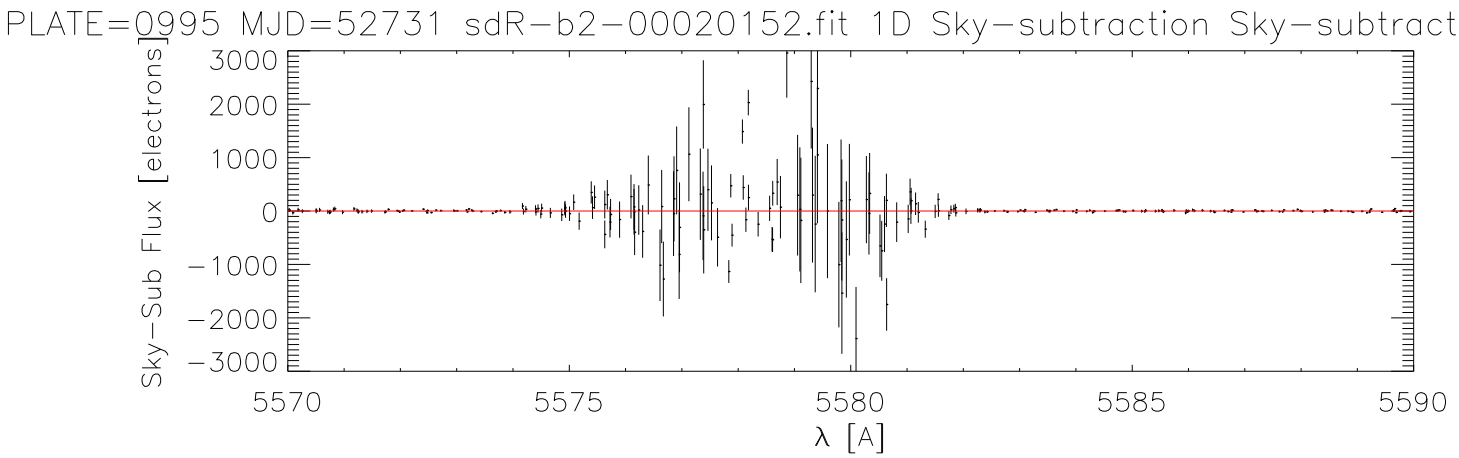

sky shift, pixels
−0.5
−0.6
−0.7
−0.8
3500
4000
4500
5000
5500
6000
6500

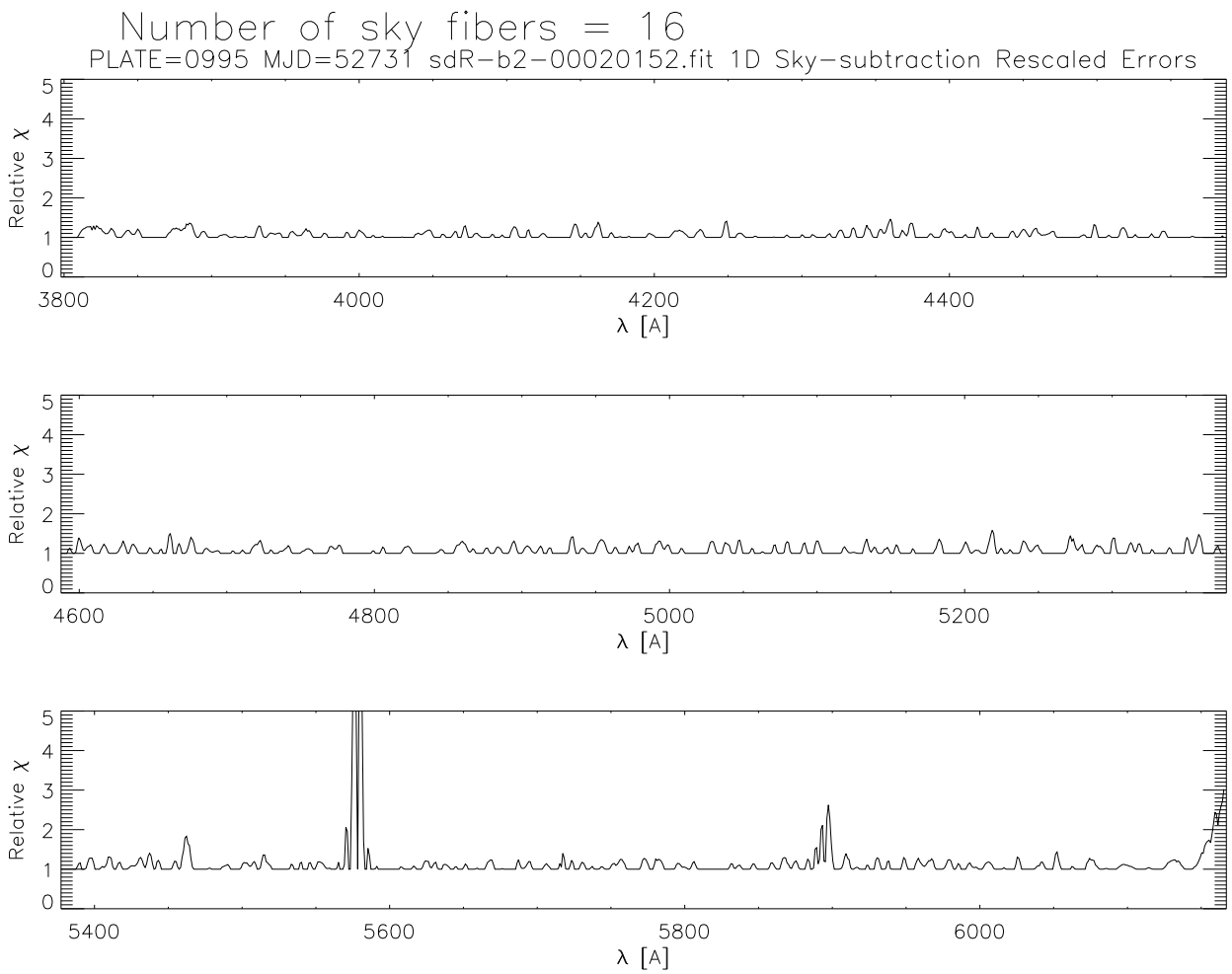
es= −0.0000

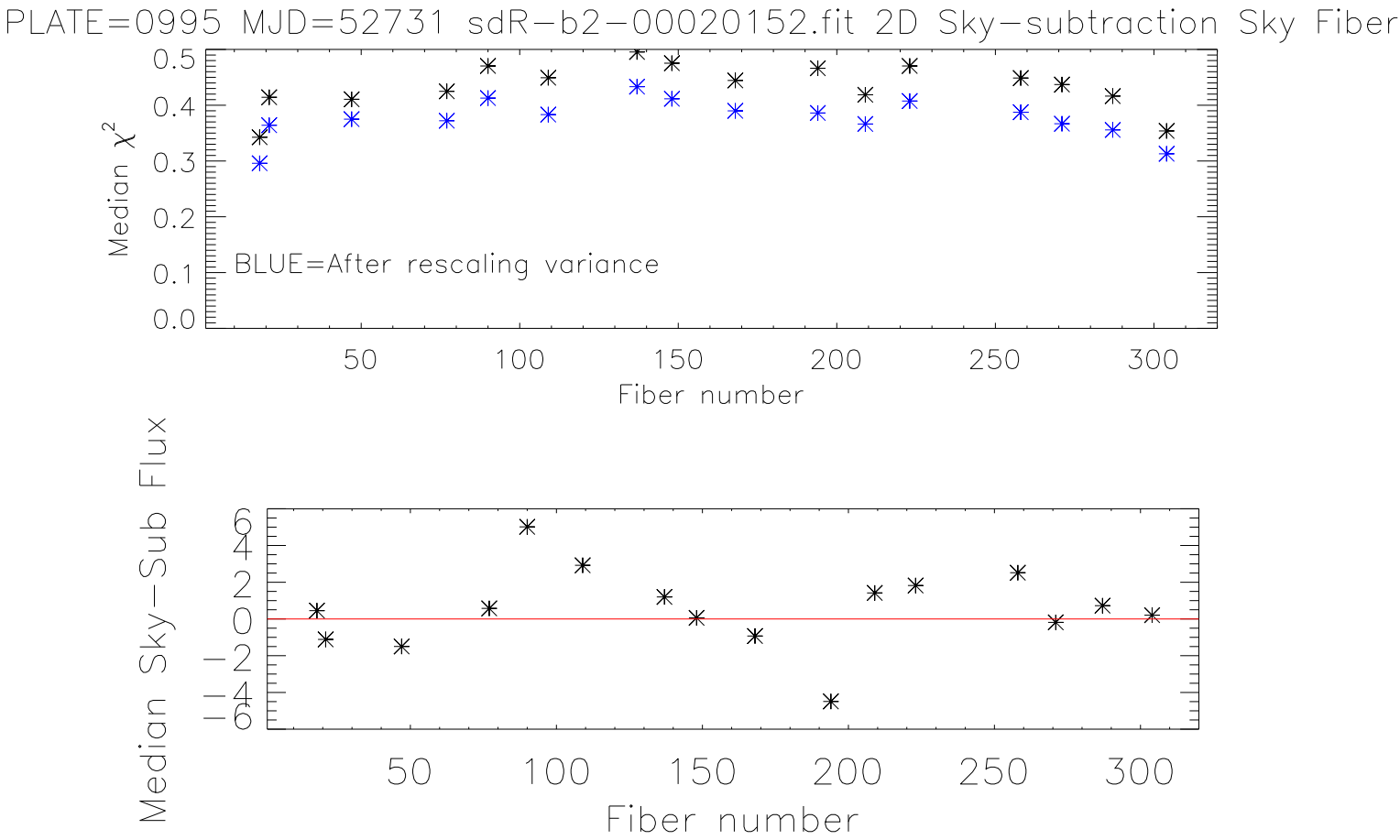

PLATE=0995 MJD=52731 Smooth superflat for sdR−b2−00020152.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

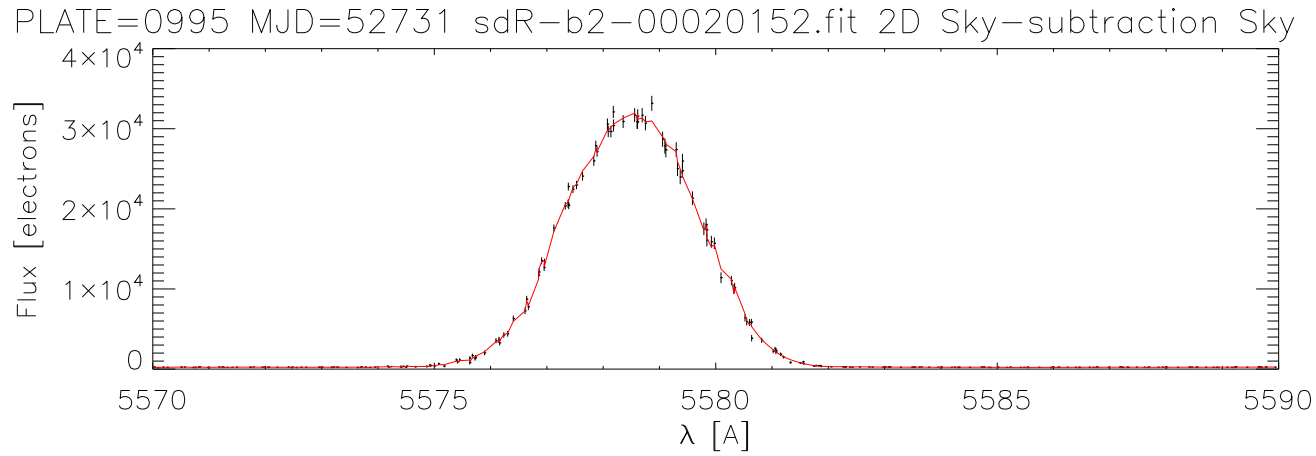

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

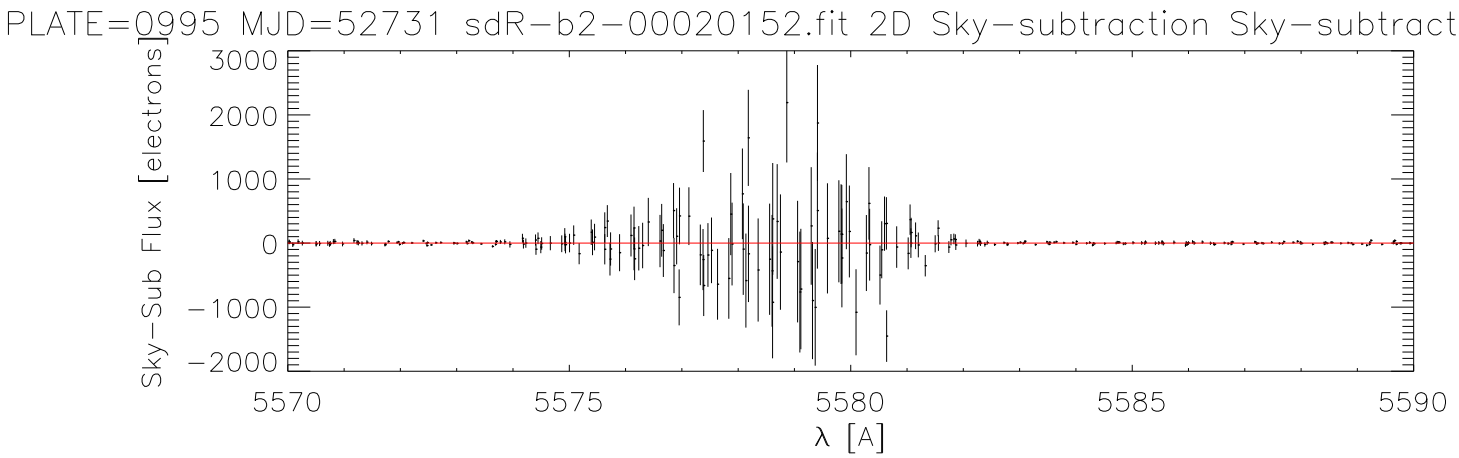

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

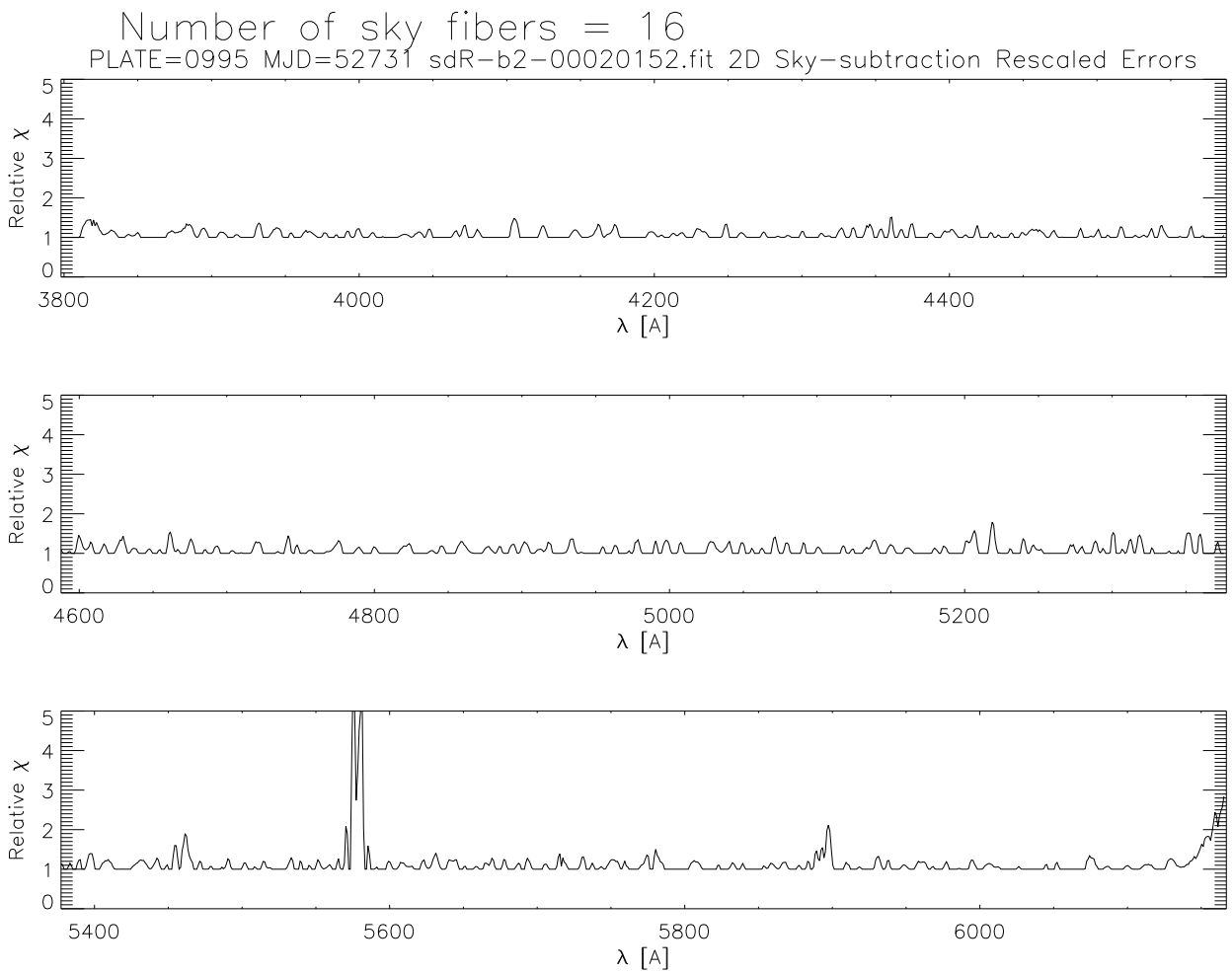

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
−3000
5570
5575
5580
5585
5590
λ [A]

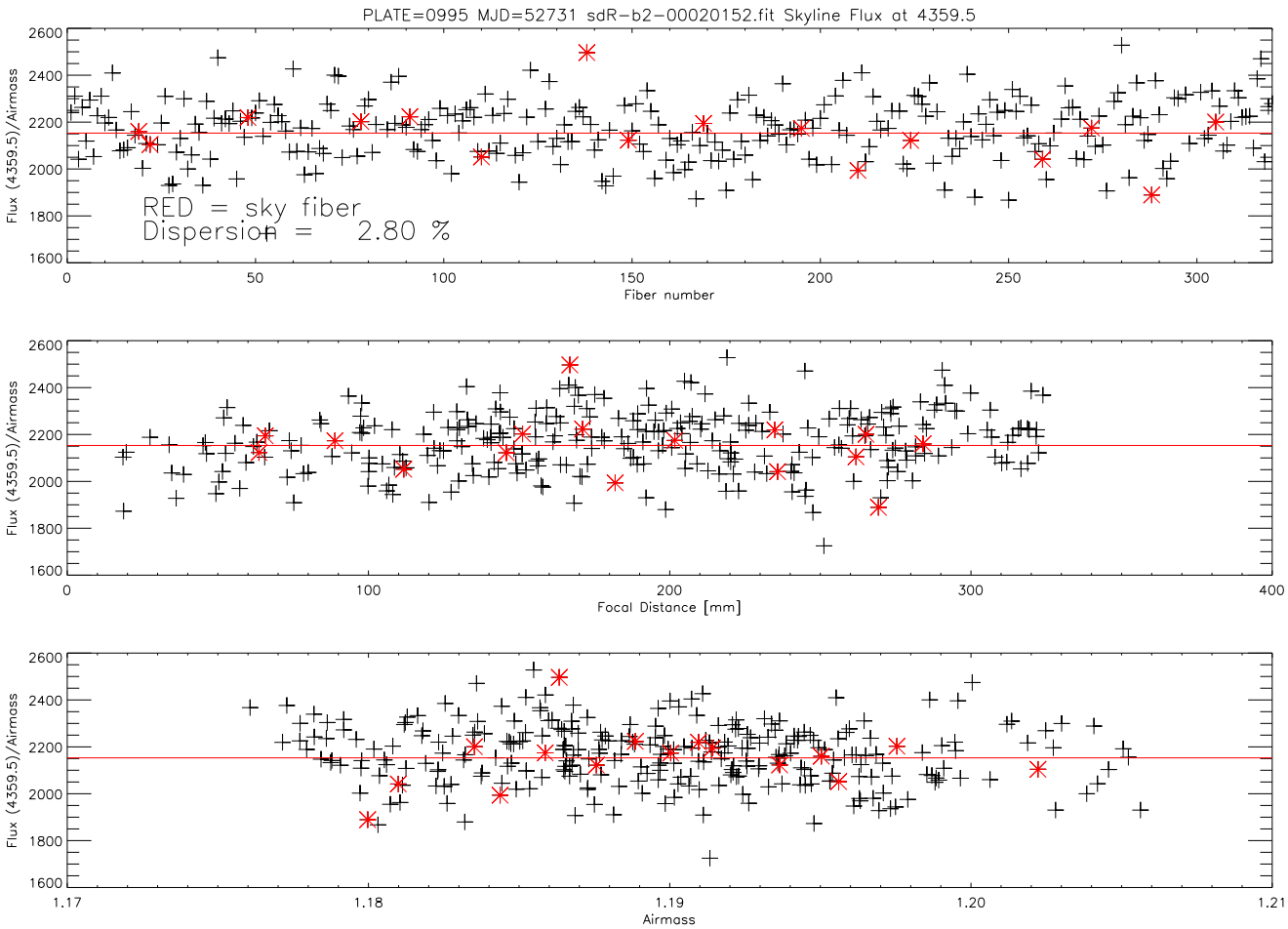

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020152.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

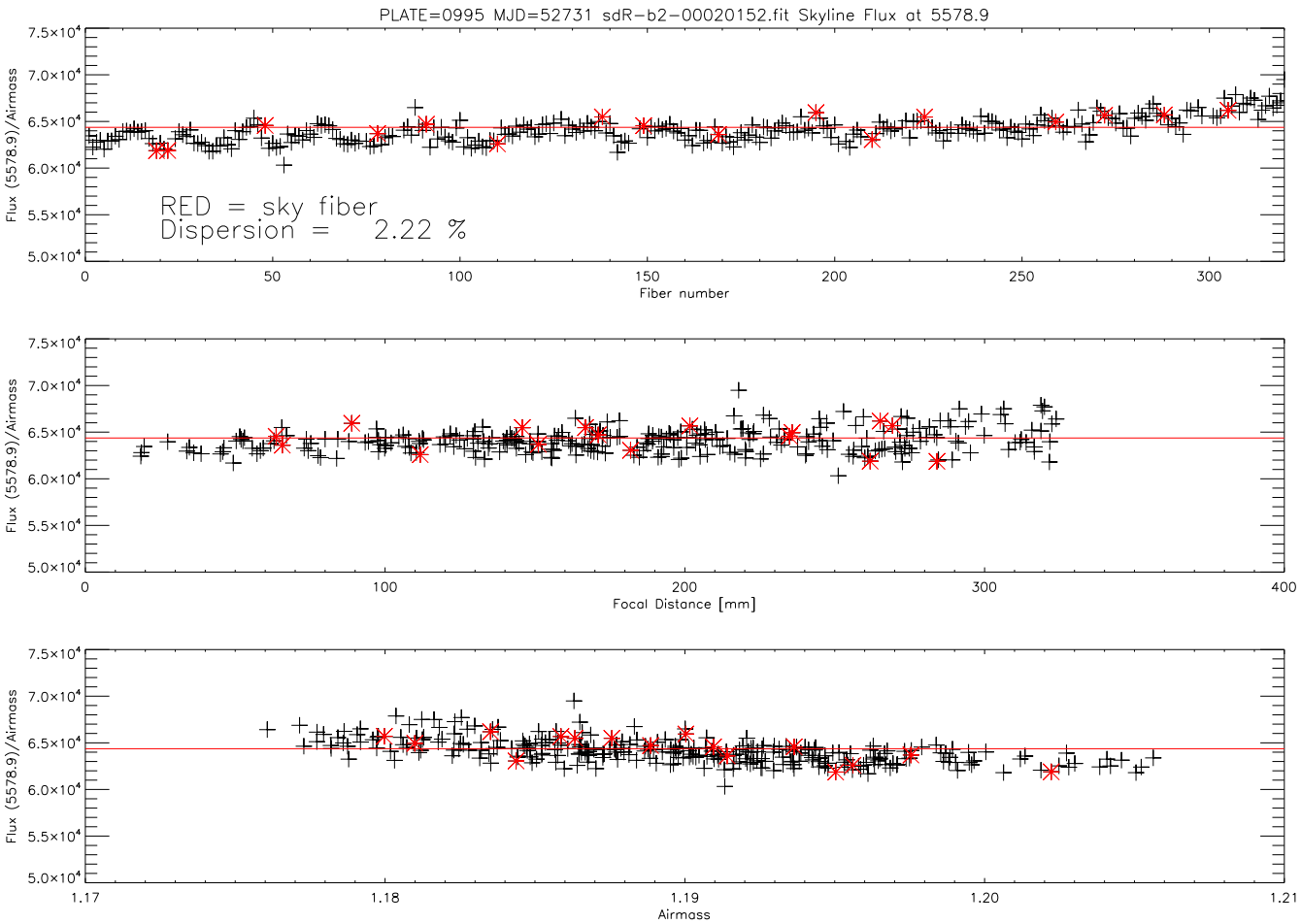

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

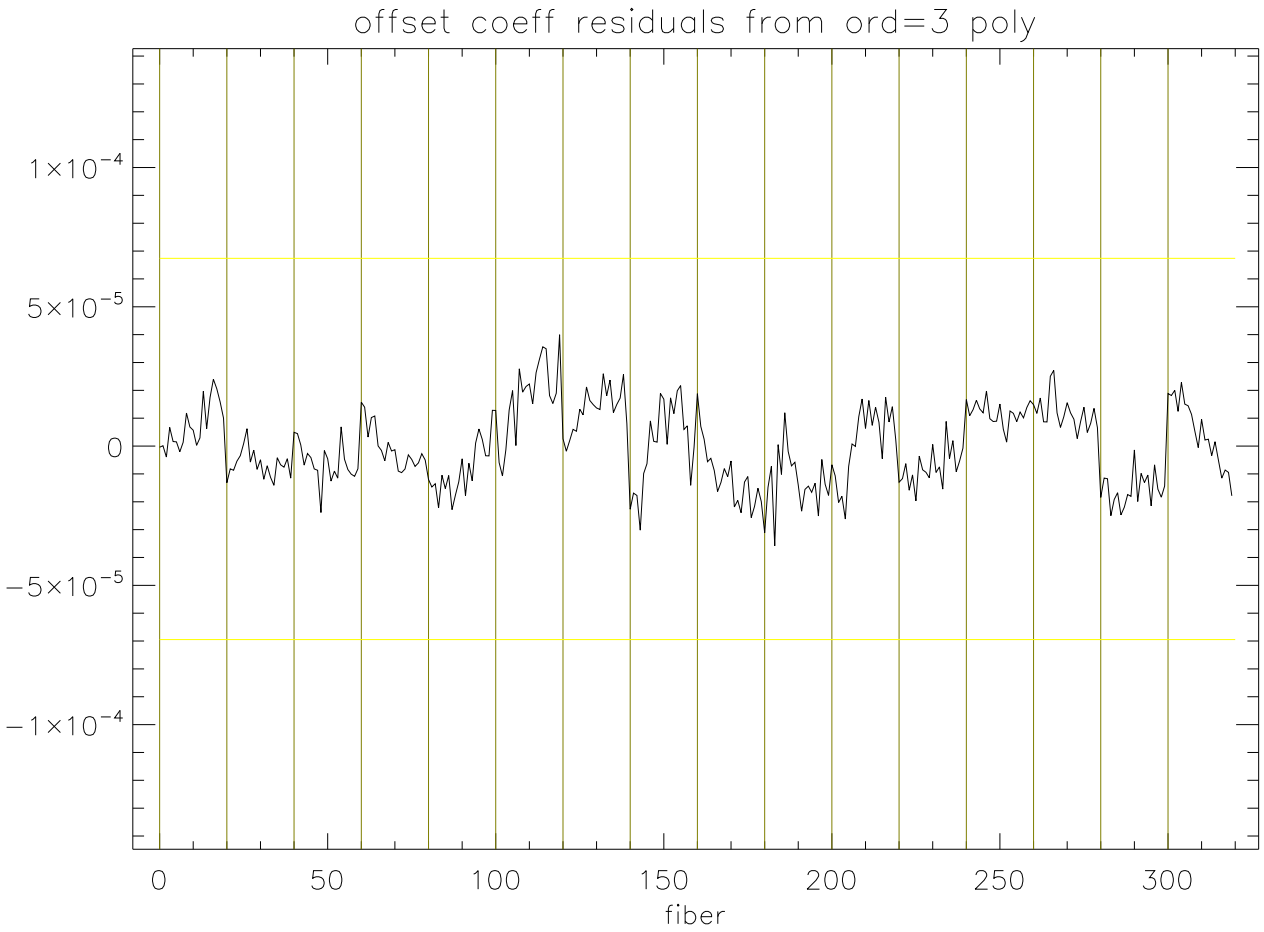

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

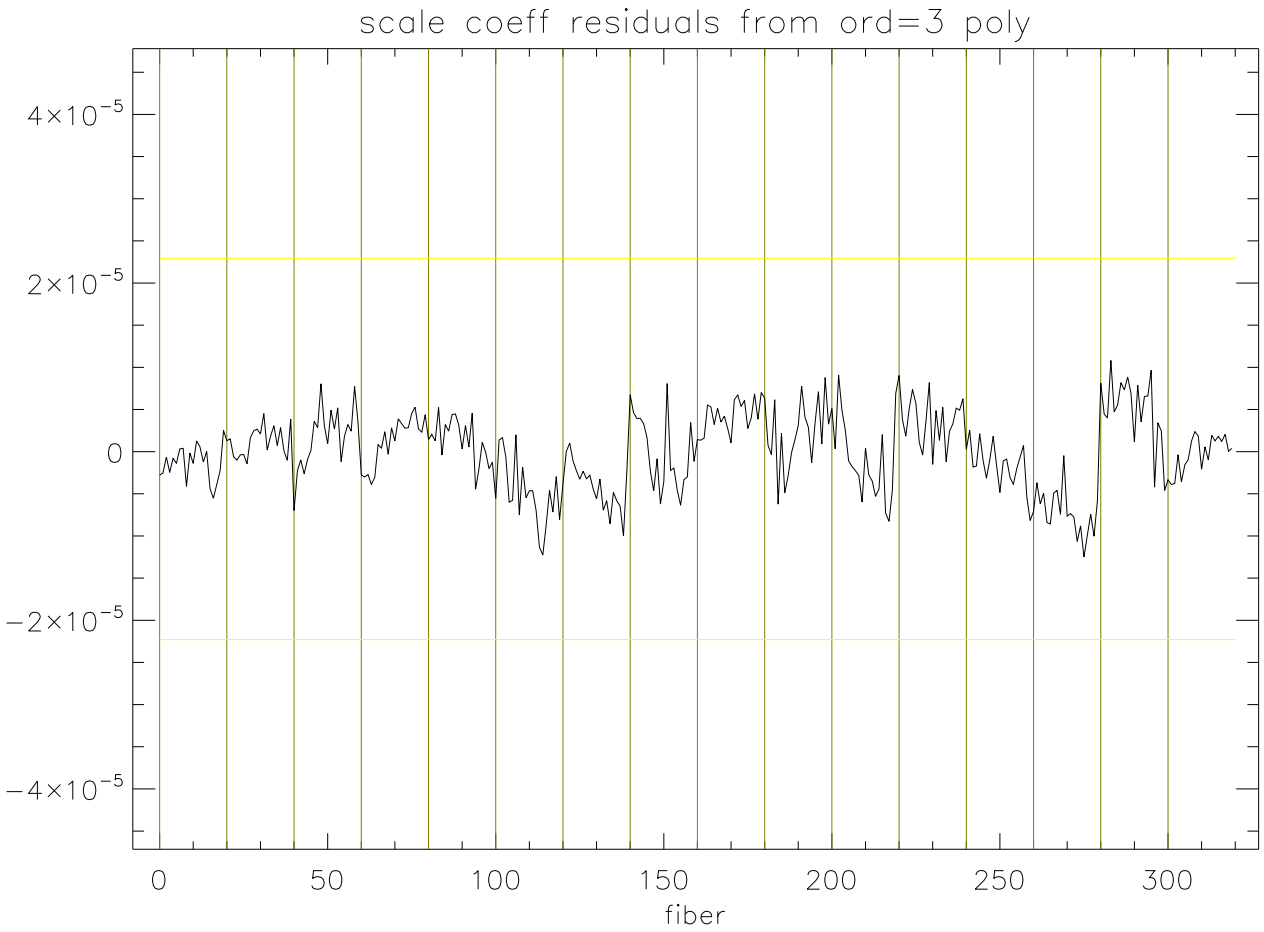

PLATE=0995 MJD=52731 sdR-b2-00020152.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

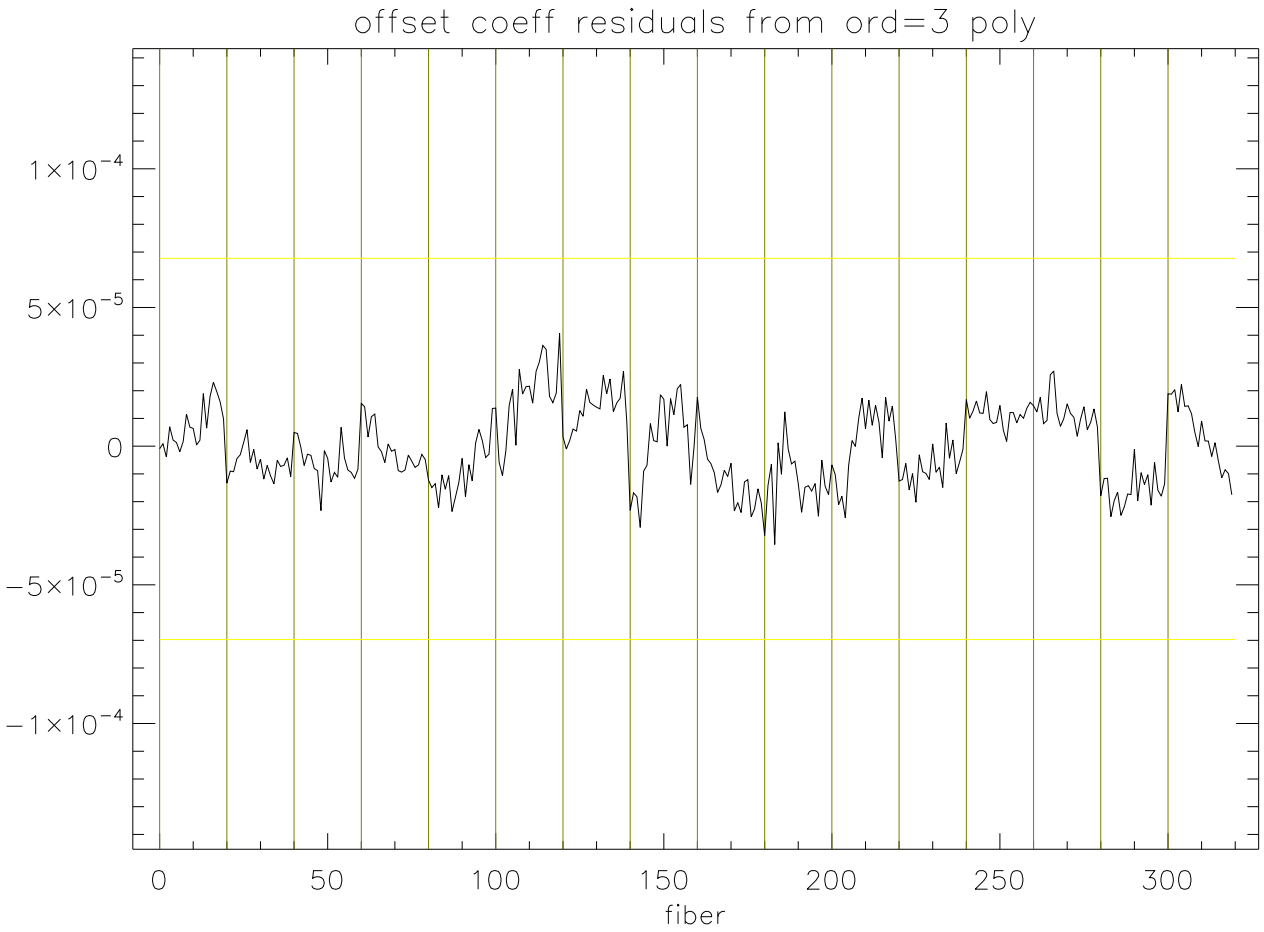

Number of sky fibers = 16
PLATE=0995 MJD=52731 sdR-b2-00020152.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

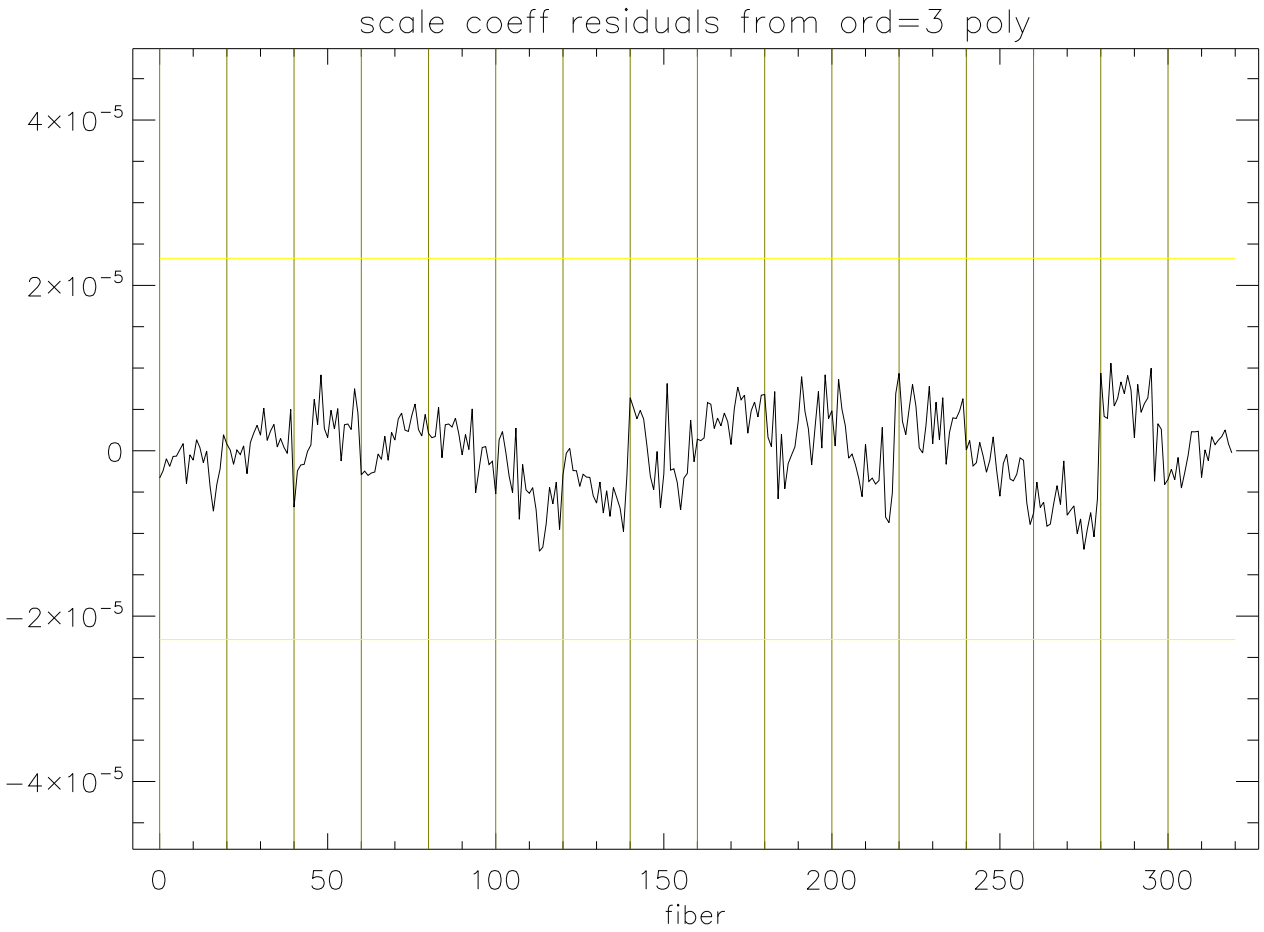

PLATE=0995 MJD=52731 sdR-b2-00020152.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 2.80 %
Fiber number
Focal Distance [mm]
Airmass

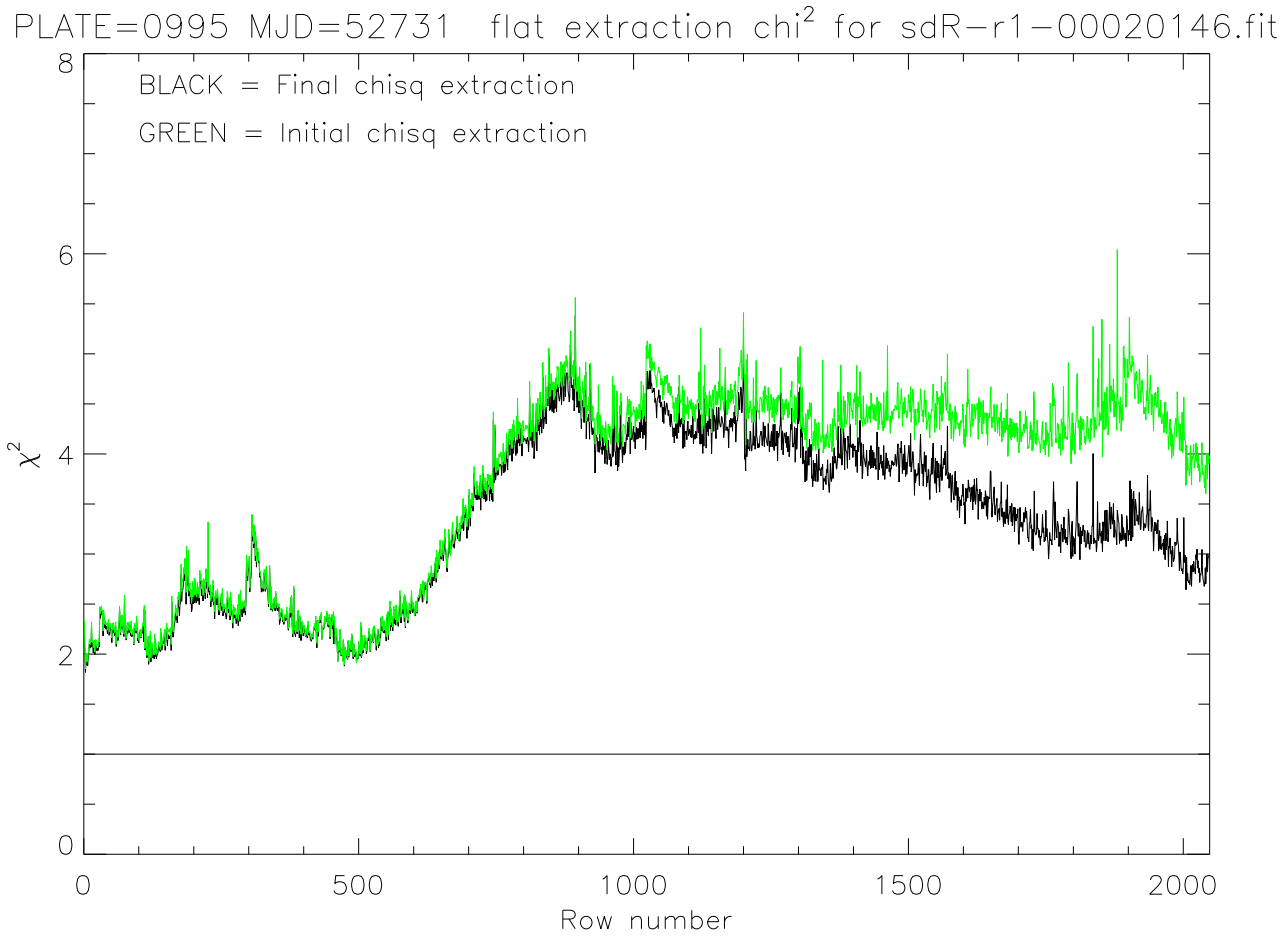

PLATE=0995 MJD=52731 sdR-b2-00020152.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.22 %
Fiber number
Focal Distance [mm]
Airmass

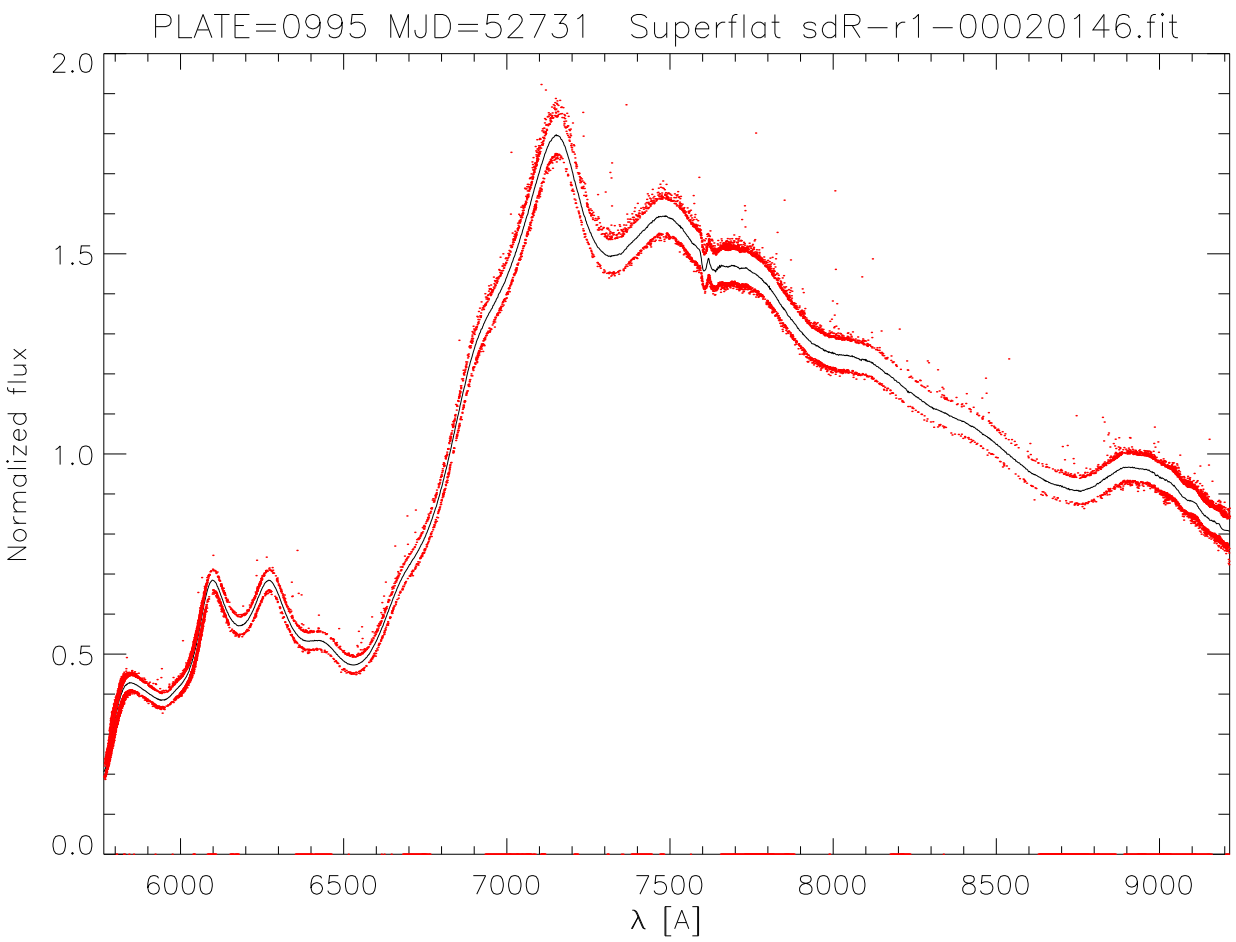

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

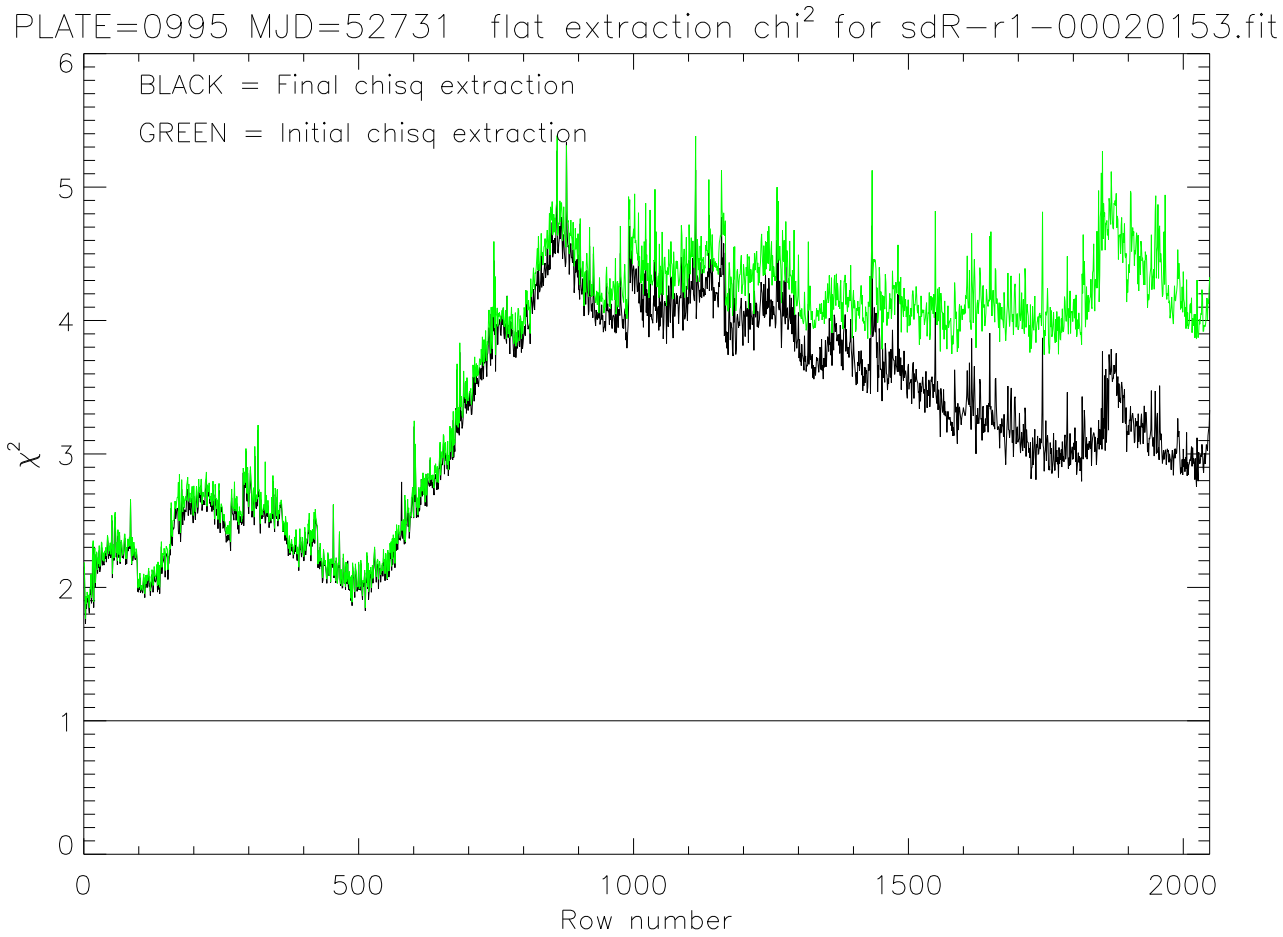

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

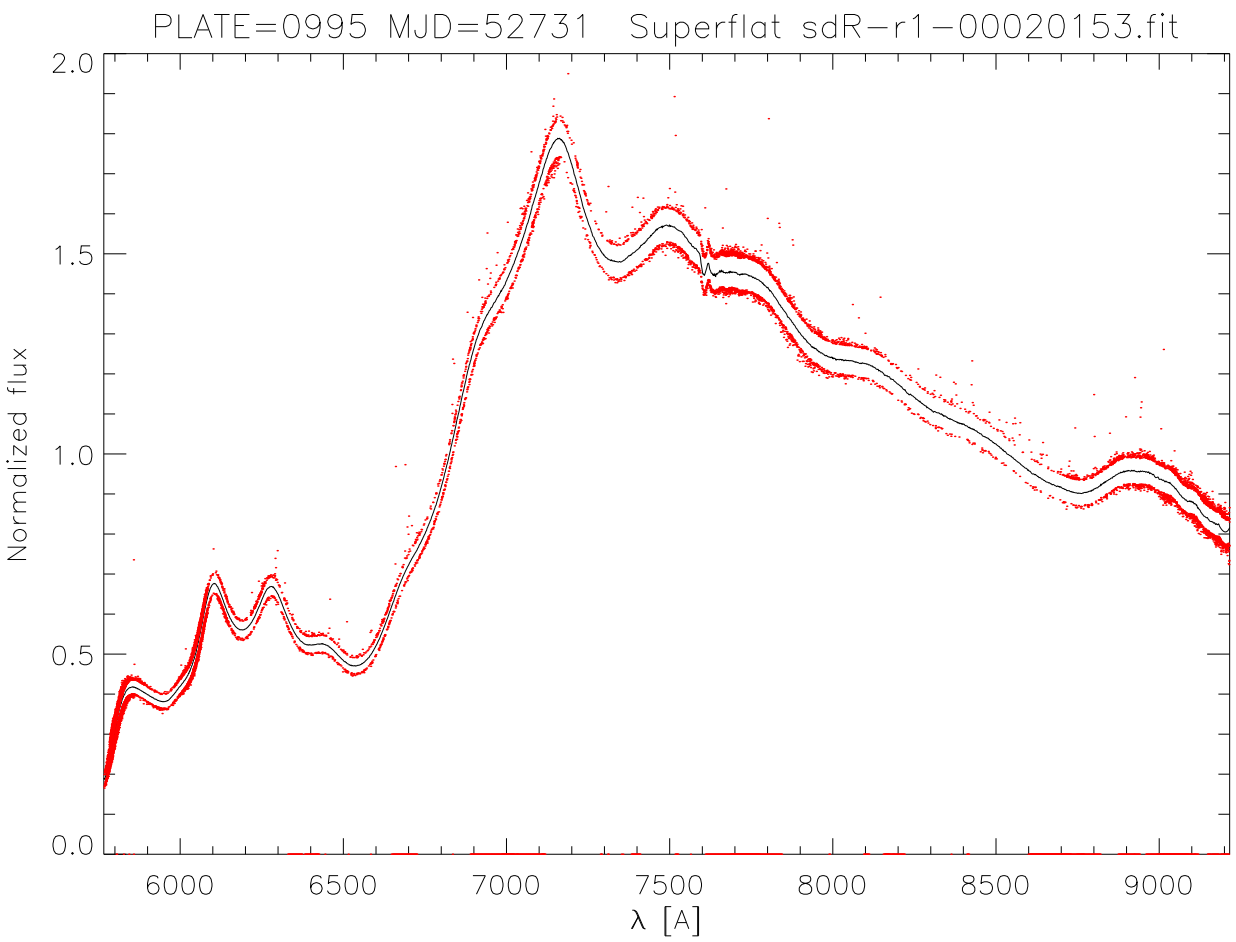

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

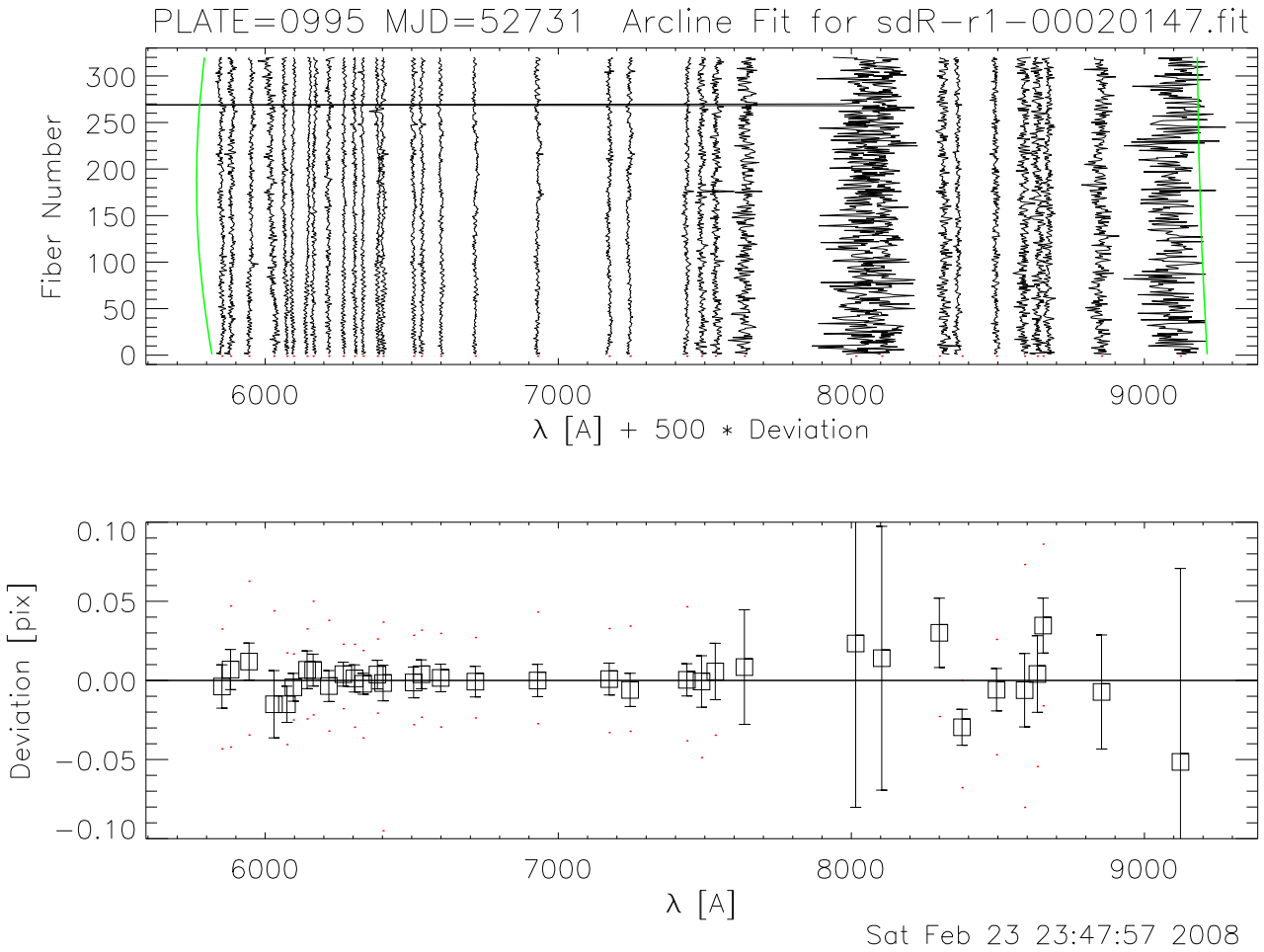

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

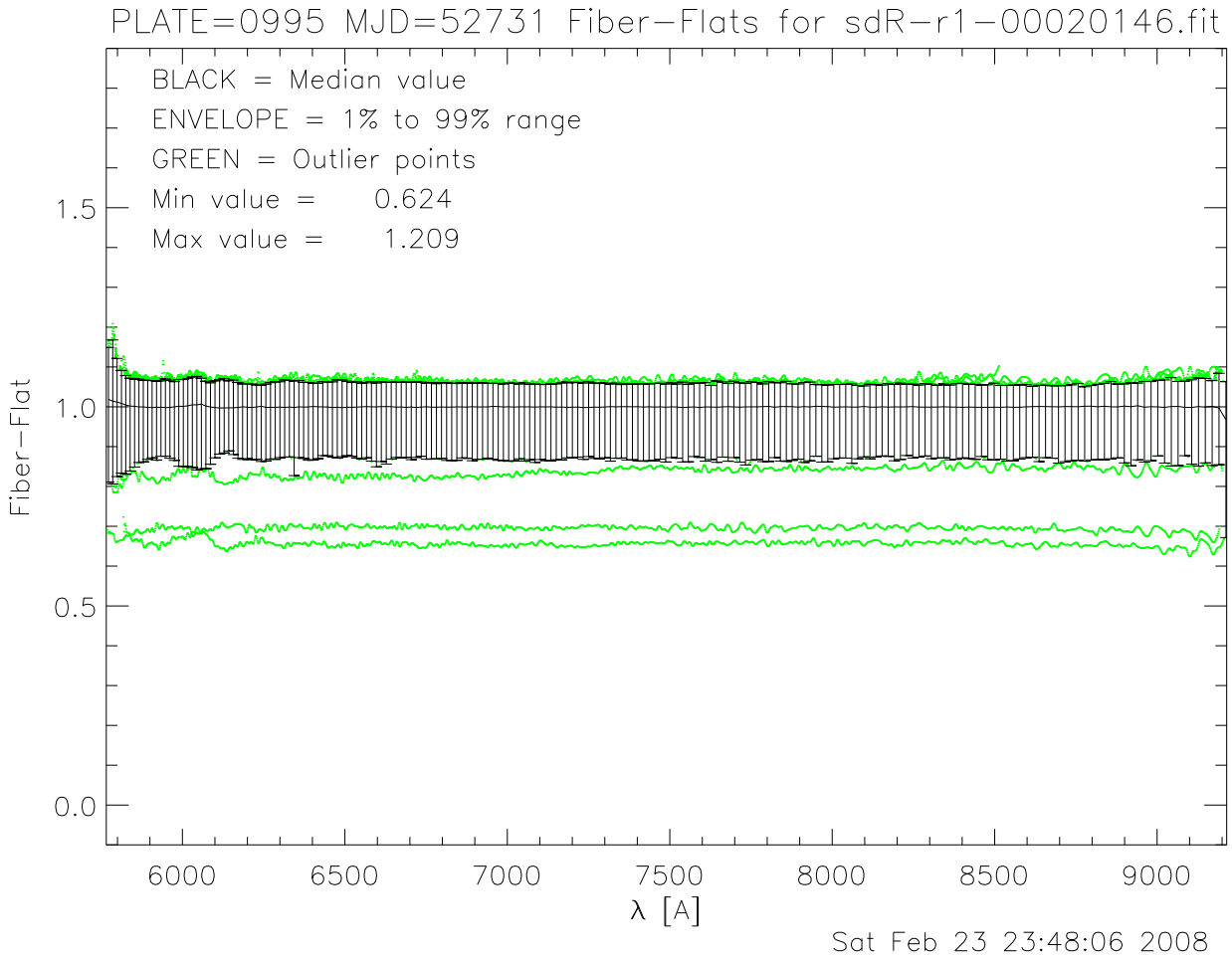

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−r1−00020146.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

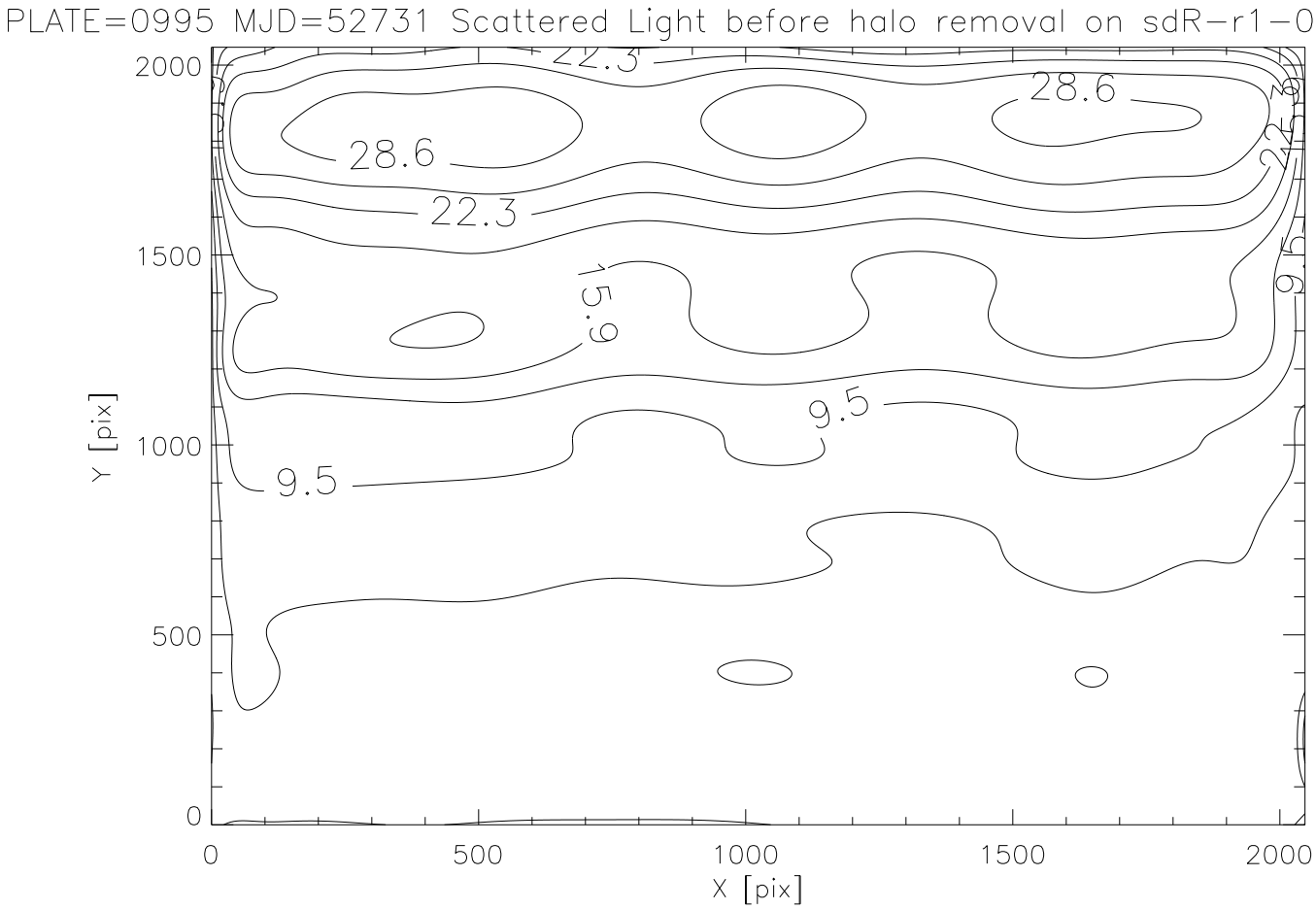

PLATE=0995 MJD=52731 Superflat sdR-r1-00020146.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

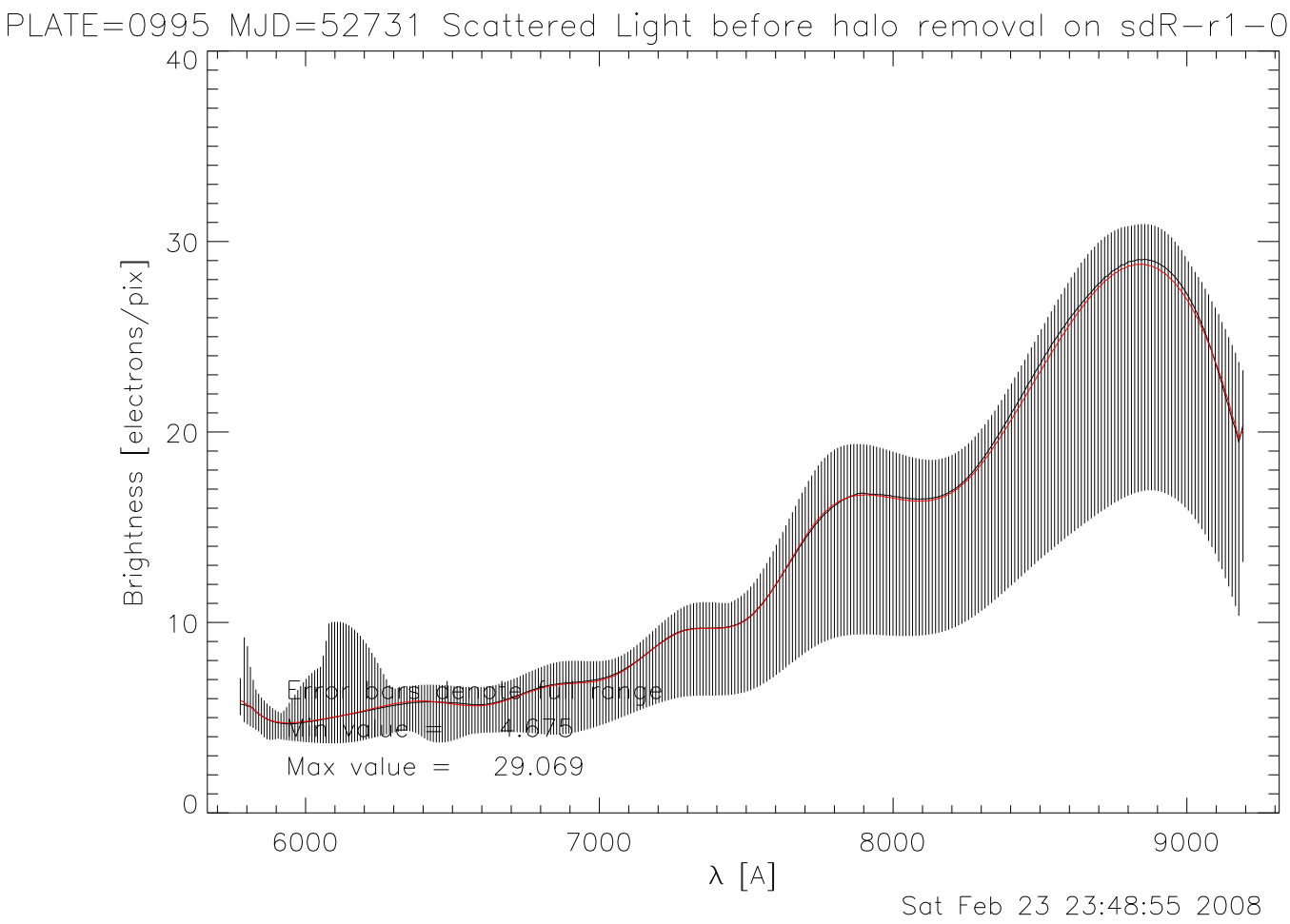

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−r1−00020153.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

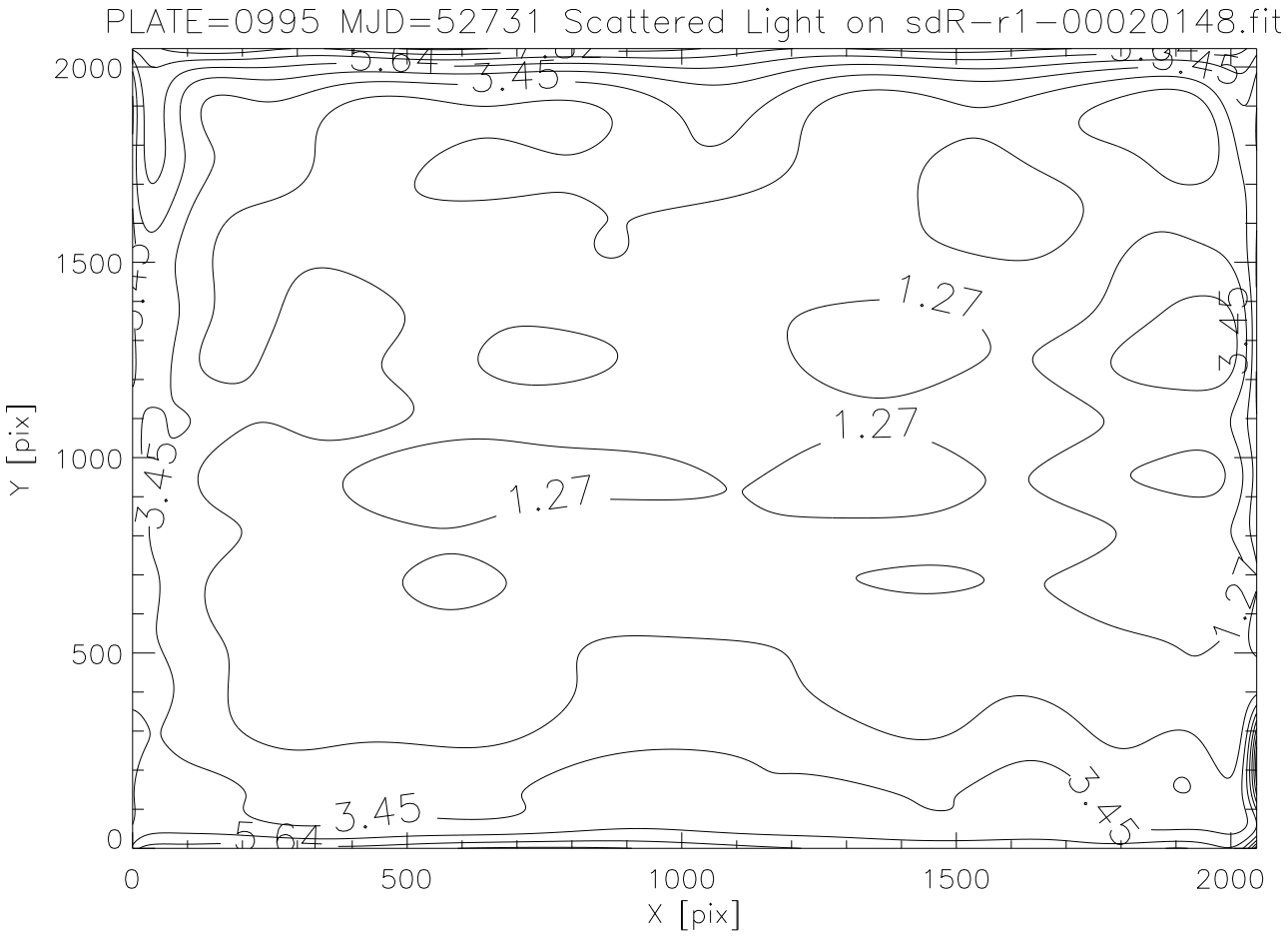

PLATE=0995 MJD=52731 Superflat sdR-r1-00020153.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

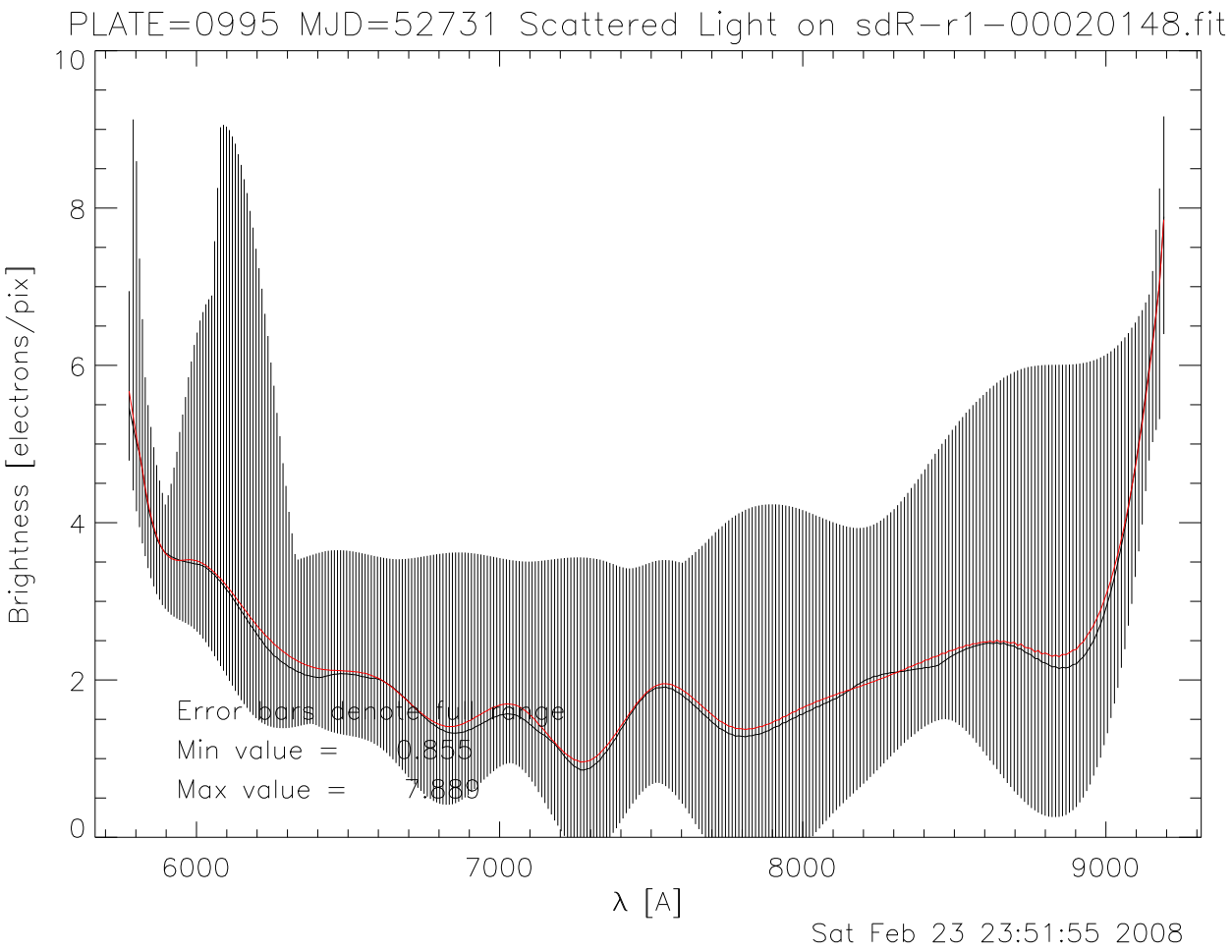

PLATE=0995 MJD=52731 Arcline Fit for sdR-r1-00020147.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 23:47:57 2008

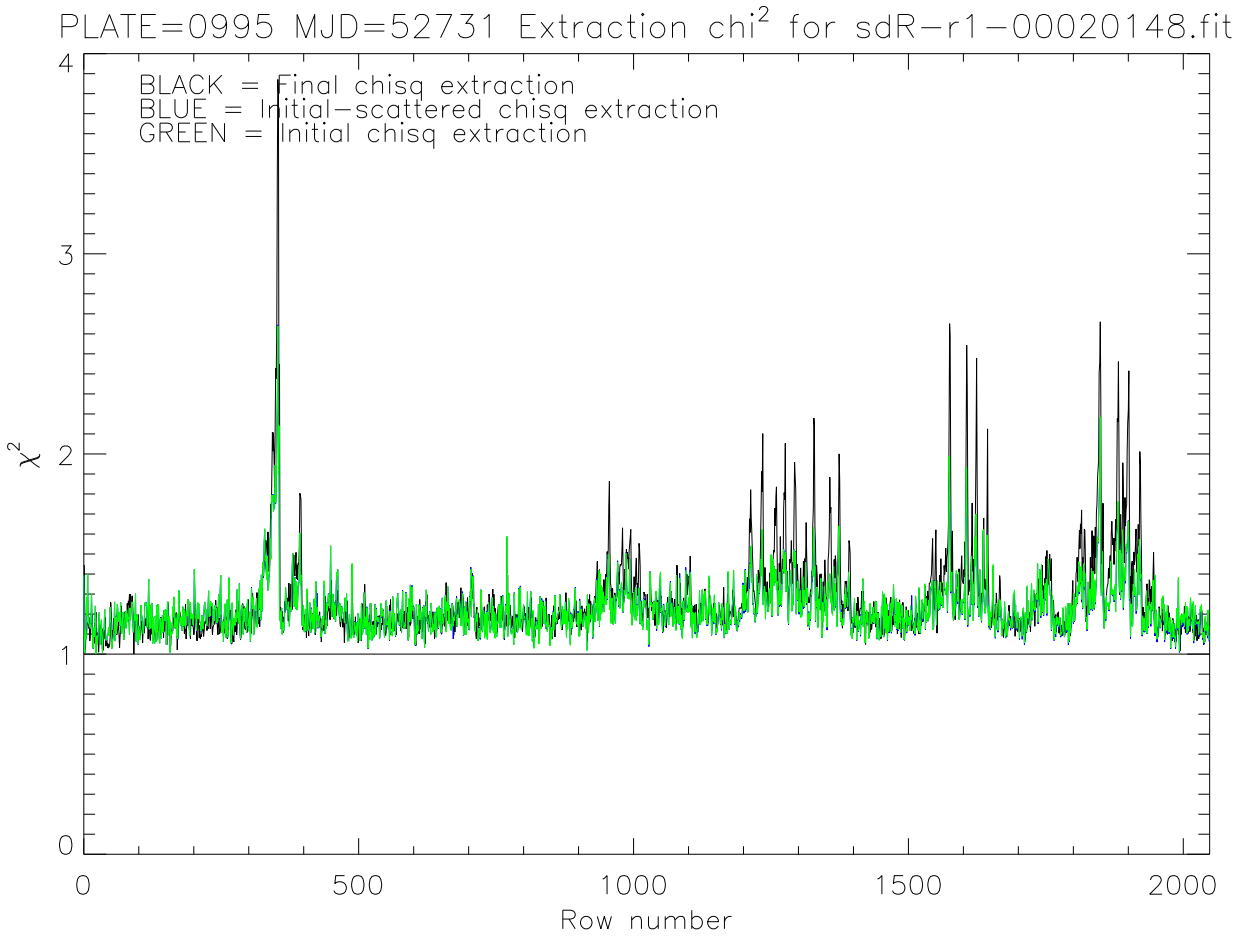

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.624
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 23:48:06 2008

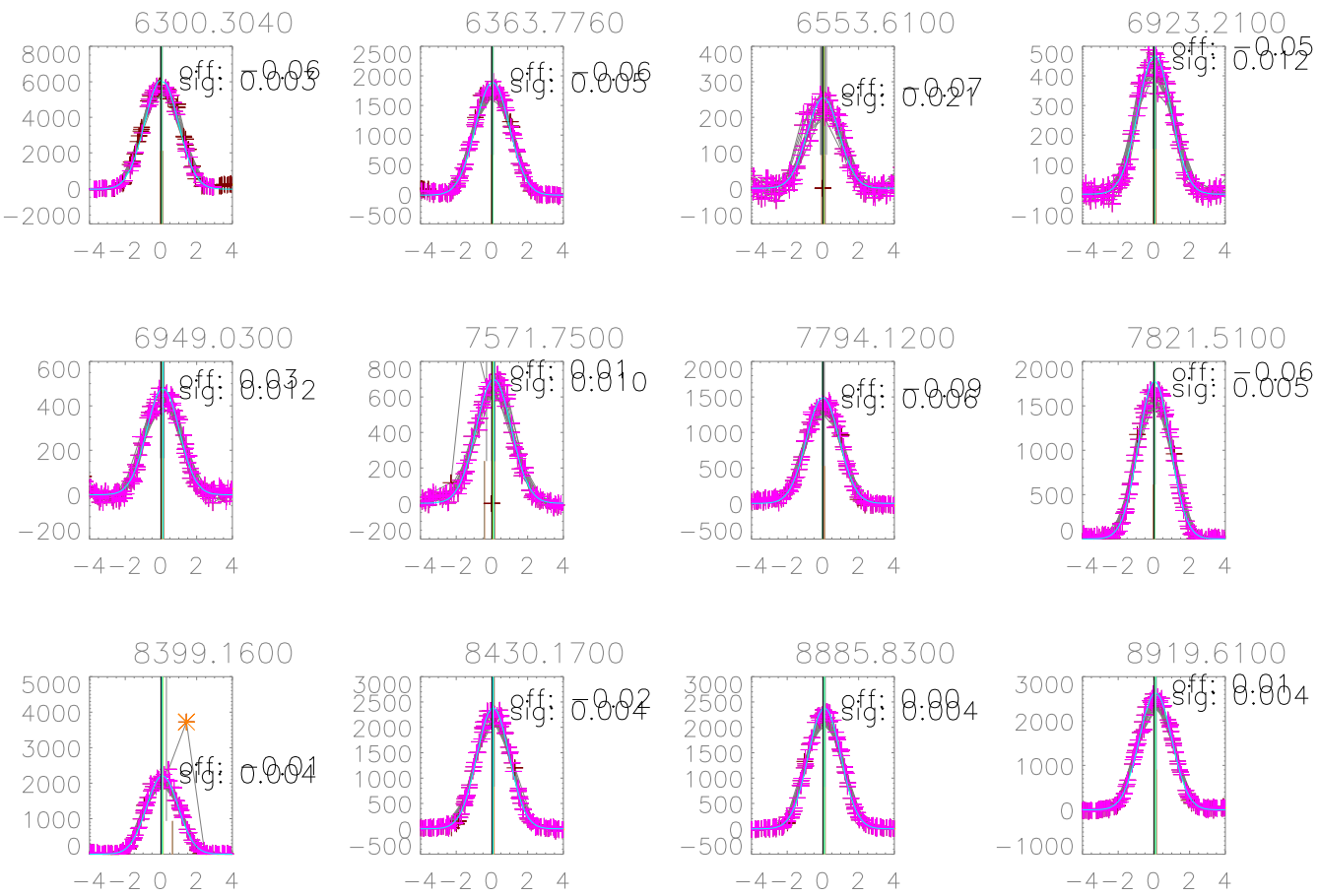

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020148.fi
28.6
22.3
15.9
9.5
Y [pix]
X [pix]
0
500
1000
1500
2000

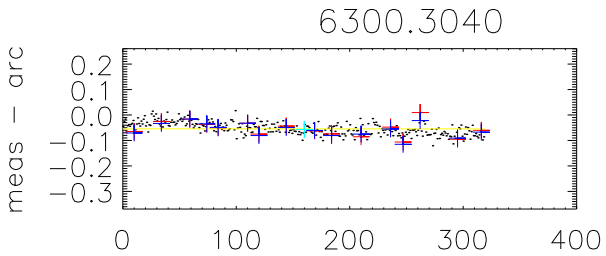

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020148.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.6775
Max value = 29.069
Sat Feb 23 23:48:55 2008

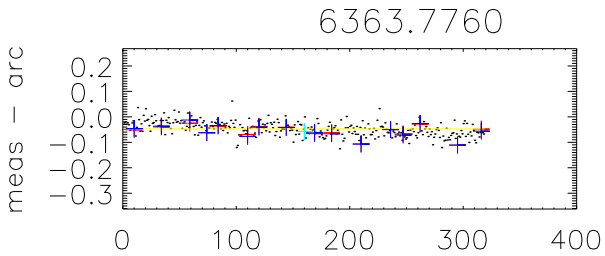

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020148.fit
5.64
3.45
1.27
Y [pix]
X [pix]
0
500
1000
1500
2000

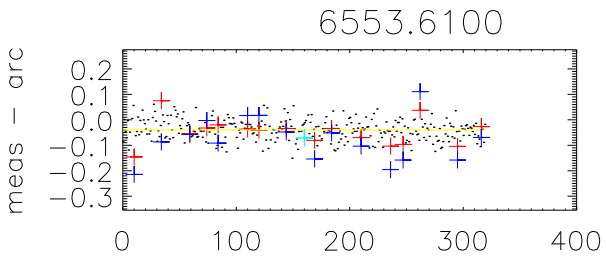

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020148.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.855
Max value = 7.880
Sat Feb 23 23:51:55 2008

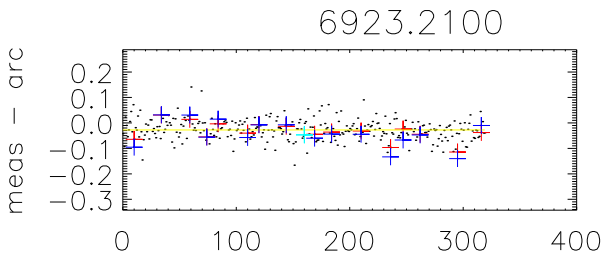

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r1−00020148.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

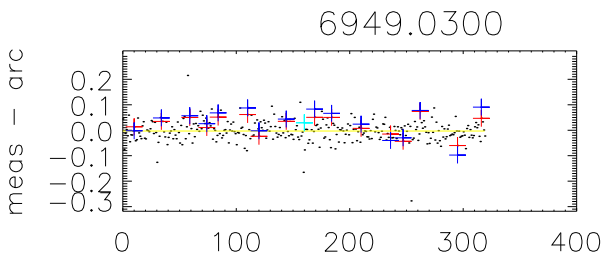

6300.3040
off: −0.06
sig: 0.003
6363.7760
off: −0.06
sig: 0.005
6553.6100
off: −0.07
sig: 0.021
6923.2100
off: −0.05
sig: 0.012
6949.0300
off: 0.03
sig: 0.012
7571.7500
off: 0.01
sig: 0.010
7794.1200
off: −0.09
sig: 0.006
7821.5100
off: −0.06
sig: 0.005
8399.1600
off: −0.01
sig: 0.004
8430.1700
off: −0.02
sig: 0.004
8885.8300
off: 0.00
sig: 0.004
8919.6100
off: 0.01
sig: 0.004

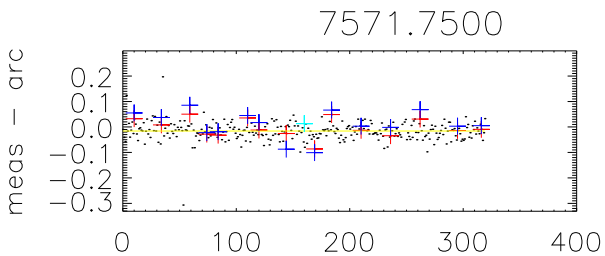

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

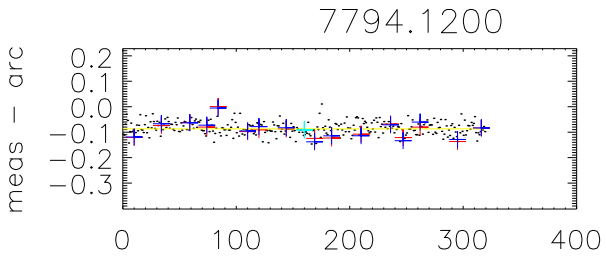

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

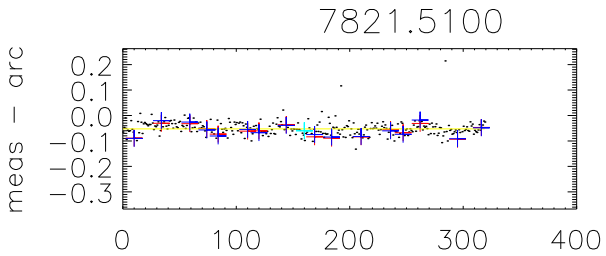

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

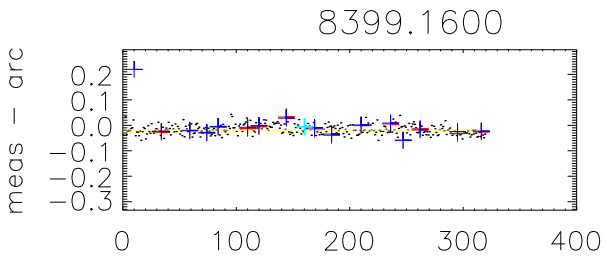

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

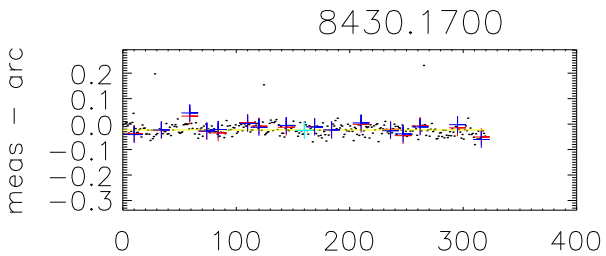

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

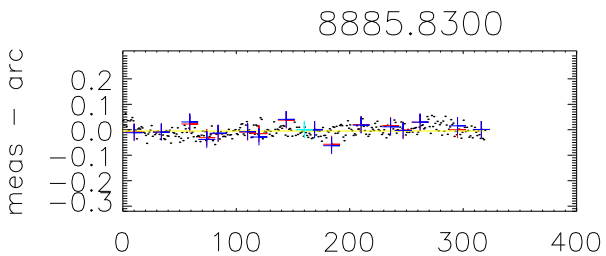

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

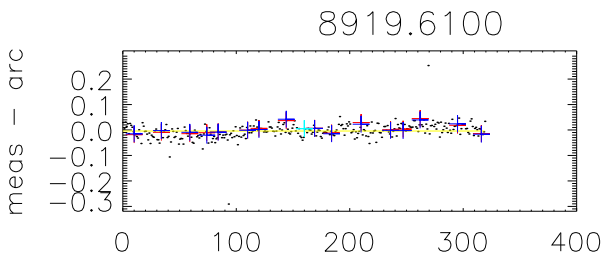

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

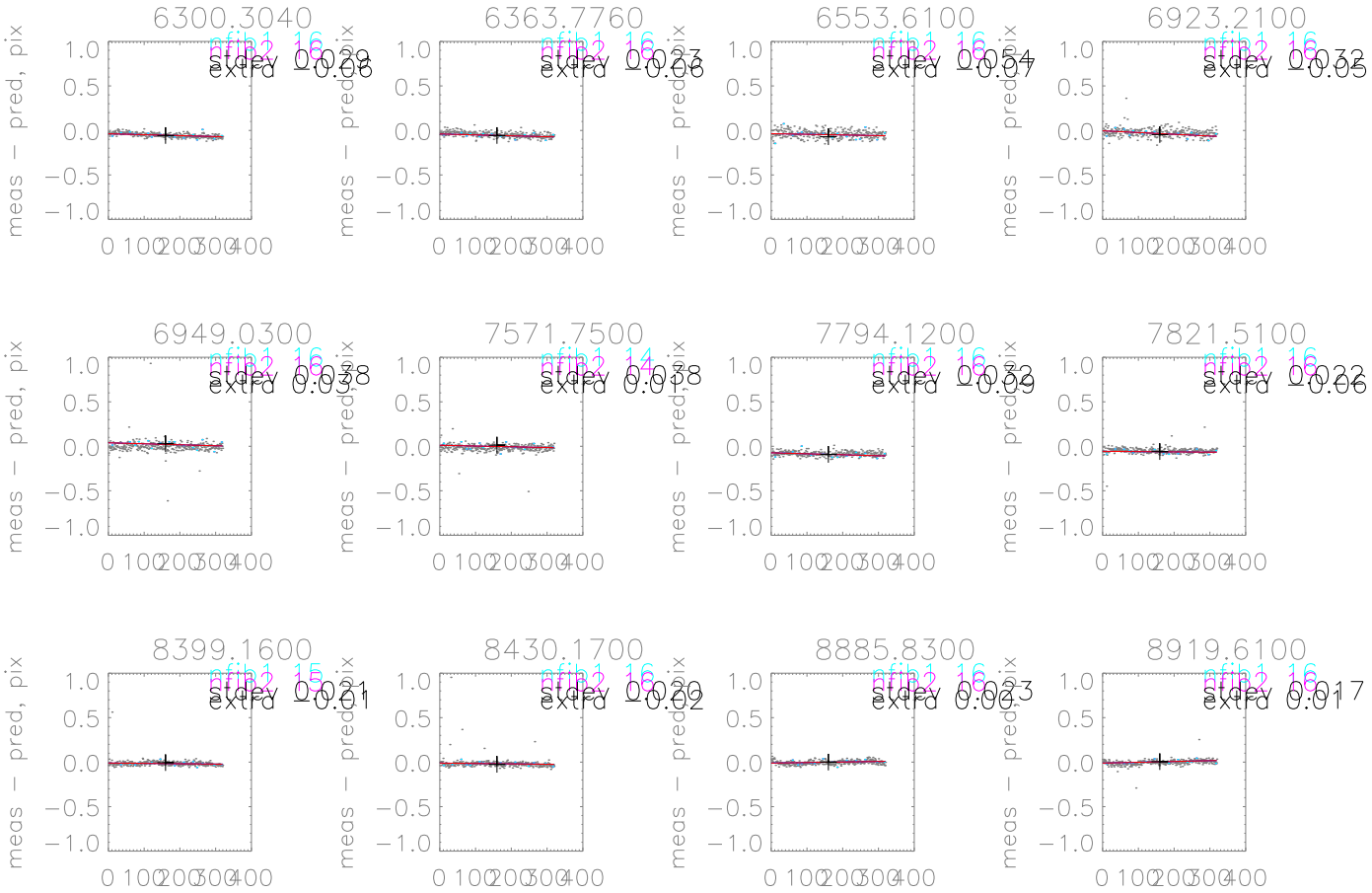

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

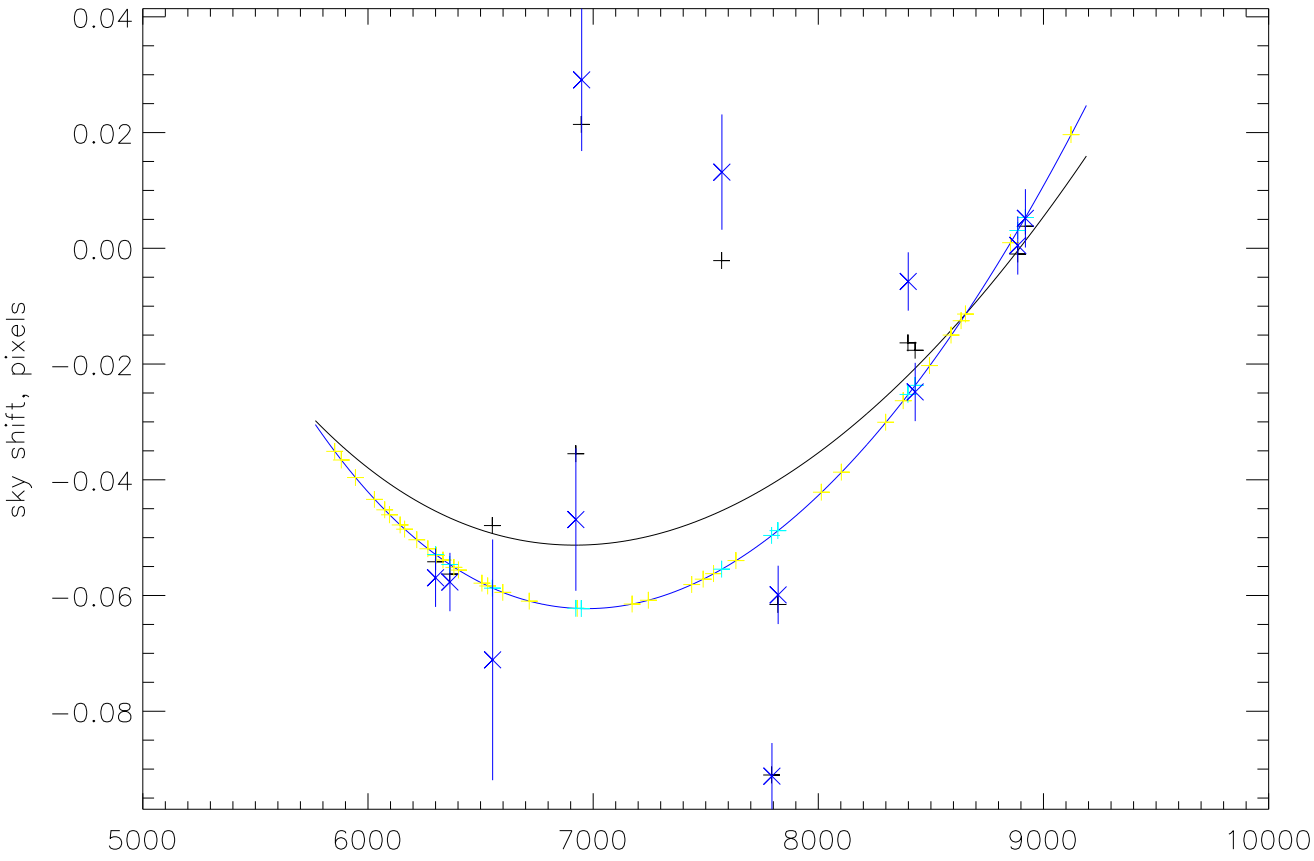

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

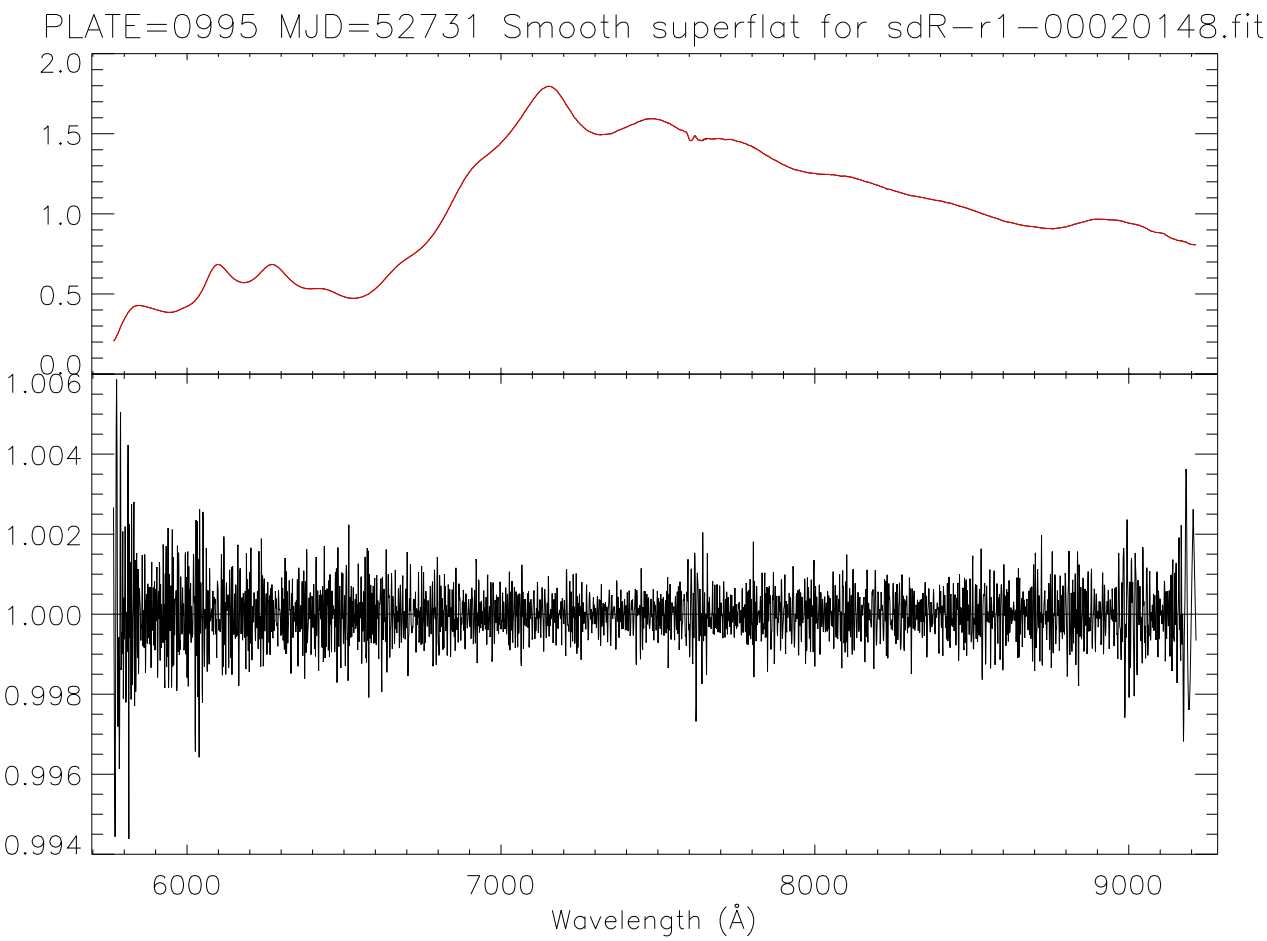

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

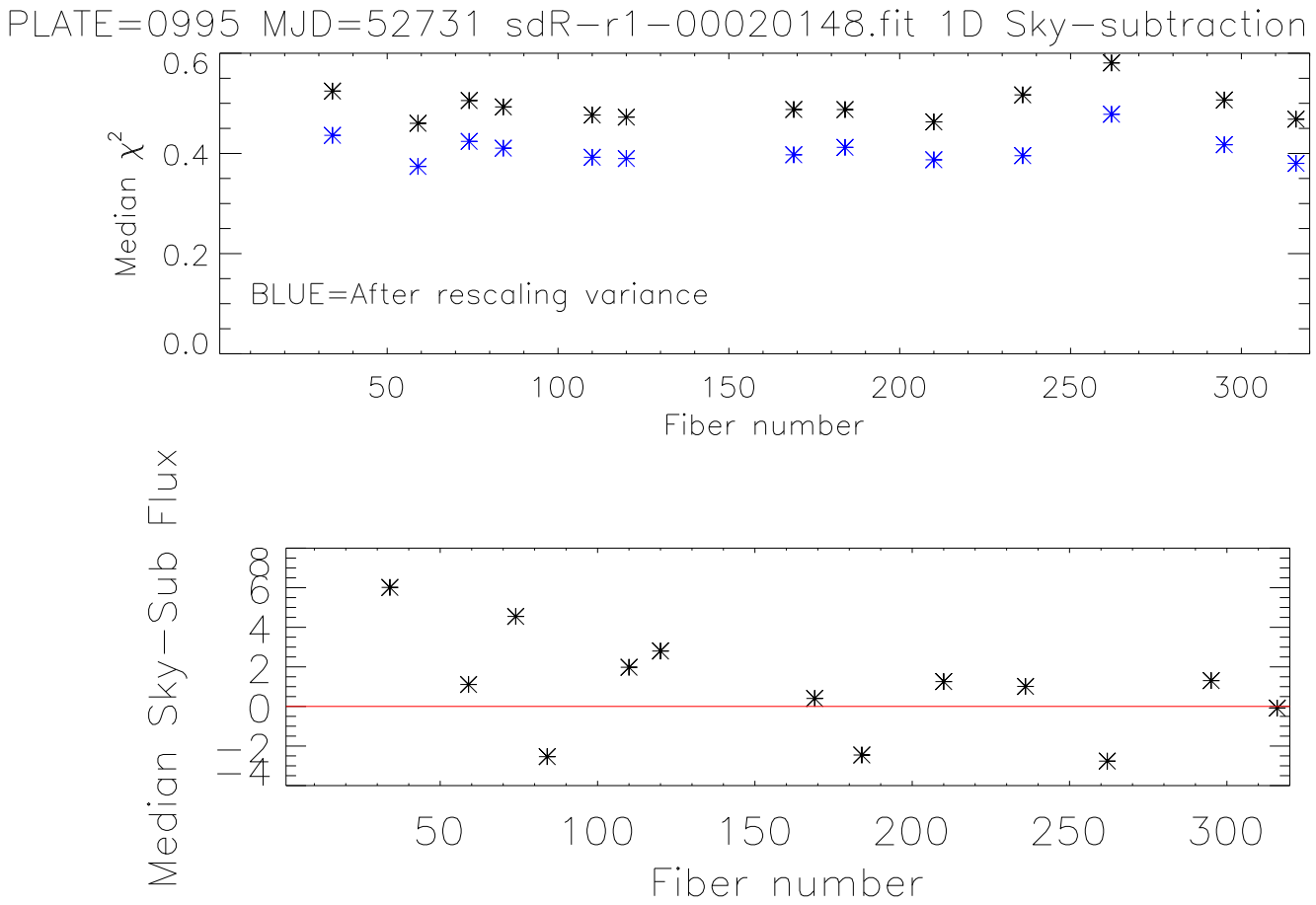

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6300.3040
mfib1 16
mfib2 16
stdev 0.029
extra 0.08
6363.7760
mfib1 16
mfib2 16
stdev 0.023
extra 0.08
6553.6100
mfib1 16
mfib2 16
stdev 0.054
extra 0.07
6923.2100
mfib1 16
mfib2 16
stdev 0.032
extra 0.05
6949.0300
mfib1 16
mfib2 16
stdev 0.038
extra 0.03
7571.7500
mfib1 14
mfib2 16
stdev 0.038
extra 0.01
7794.1200
mfib1 16
mfib2 16
stdev 0.032
extra 0.09
7821.5100
mfib1 16
mfib2 16
stdev 0.022
extra 0.06
8399.1600
mfib1 15
mfib2 16
stdev 0.021
extra 0.01
8430.1700
mfib1 16
mfib2 16
stdev 0.020
extra 0.02
8885.8300
mfib1 16
mfib2 16
stdev 0.023
extra 0.04
8919.6100
mfib1 16
mfib2 16
stdev 0.017
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

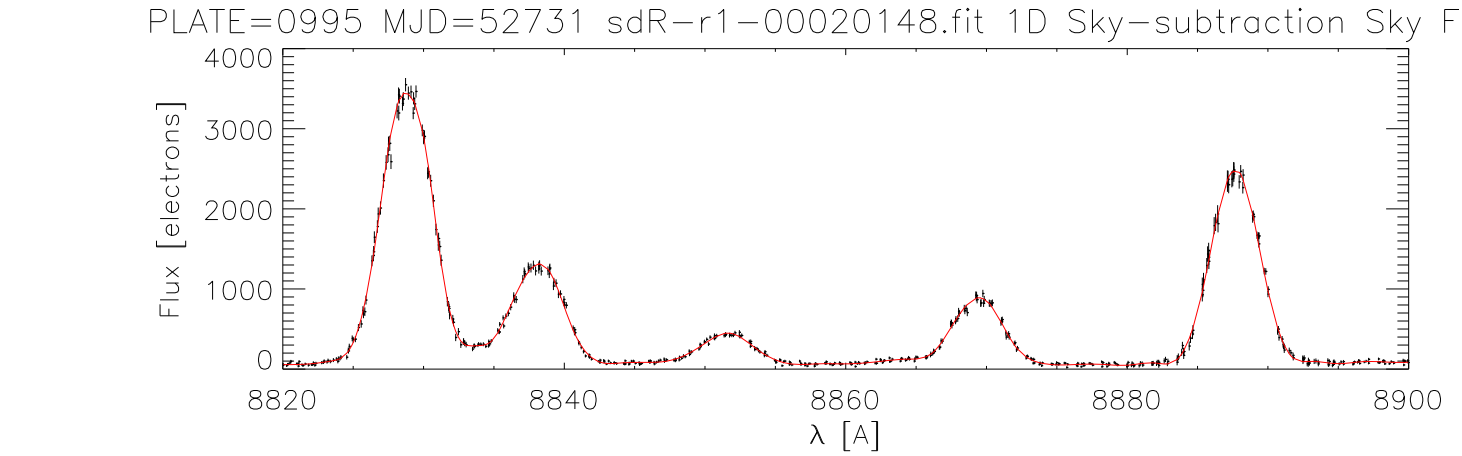

0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
sky shift, pixels
5000
6000
7000
8000
9000
10000

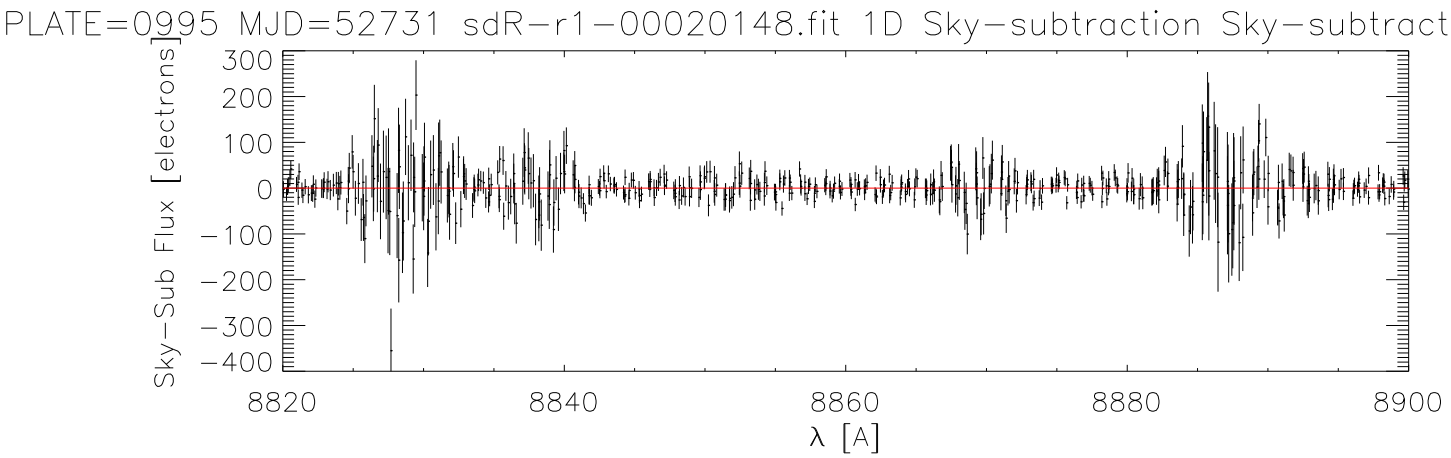
es= −0.0000

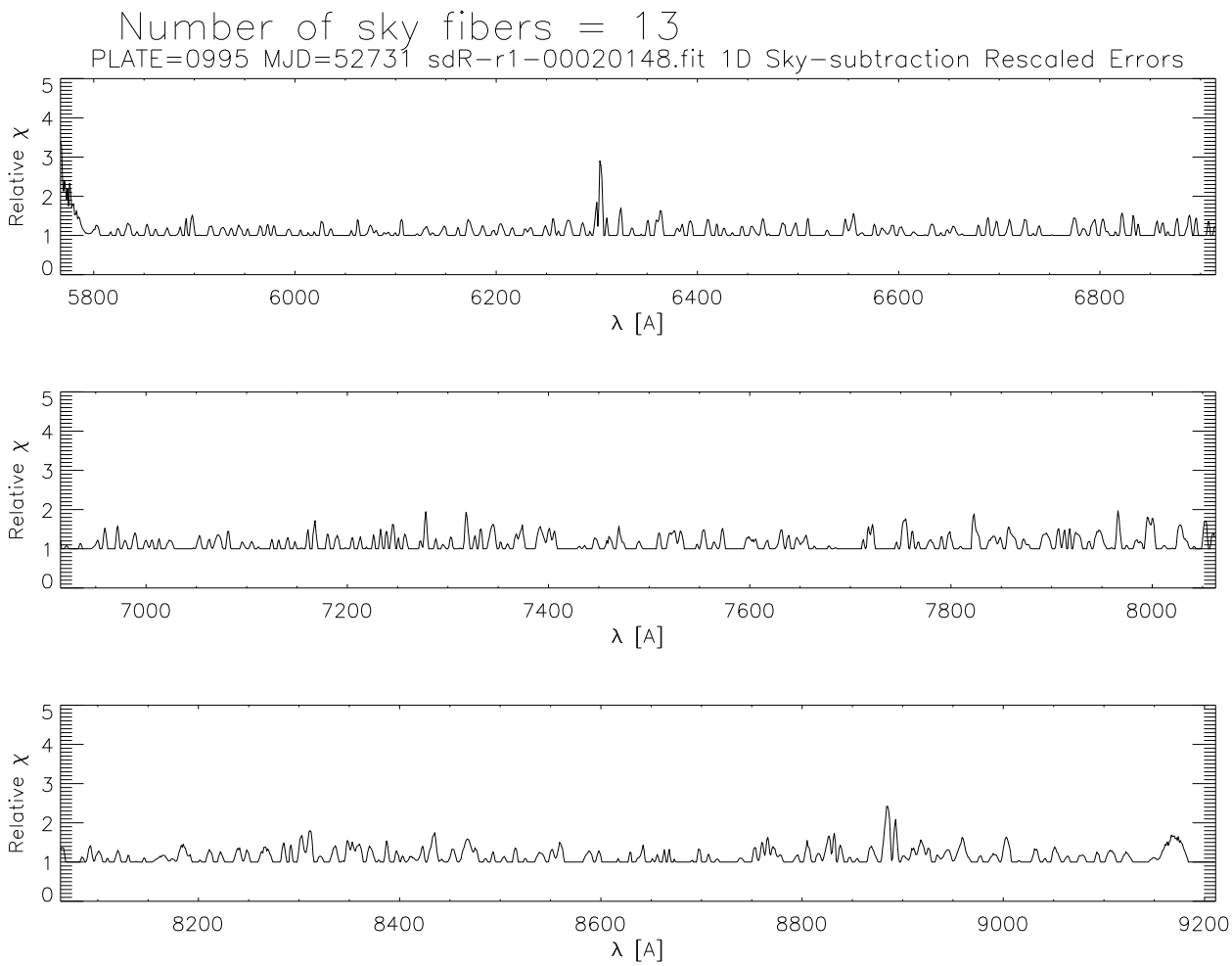

PLATE=0995 MJD=52731 Smooth superflat for sdR−r1−00020148.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

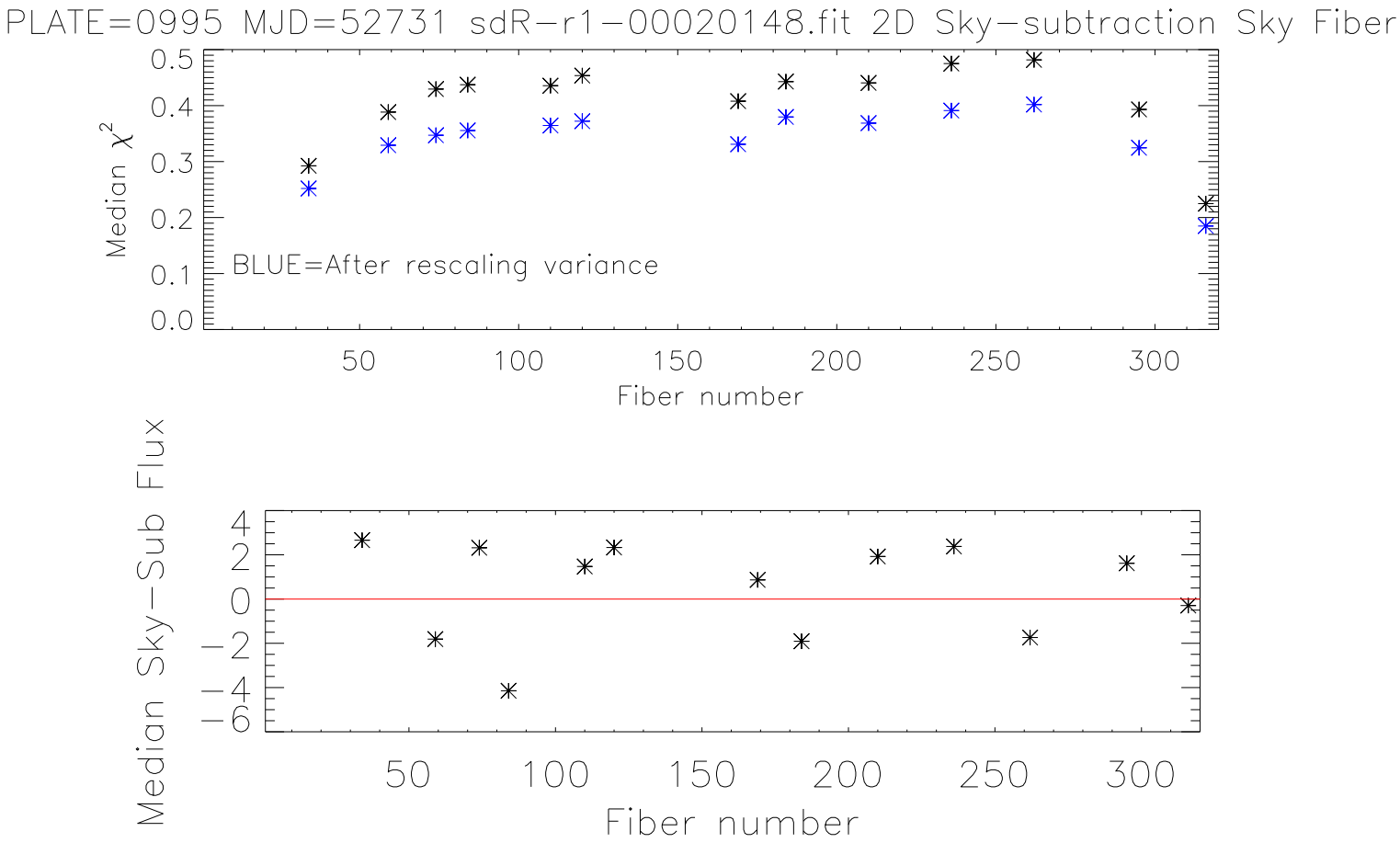

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

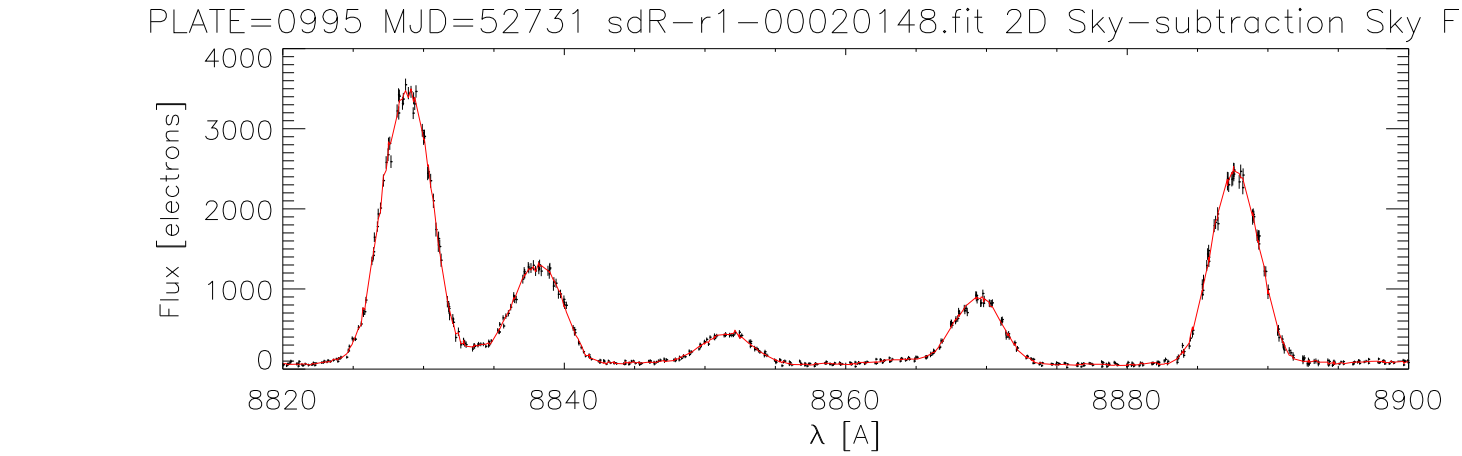
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

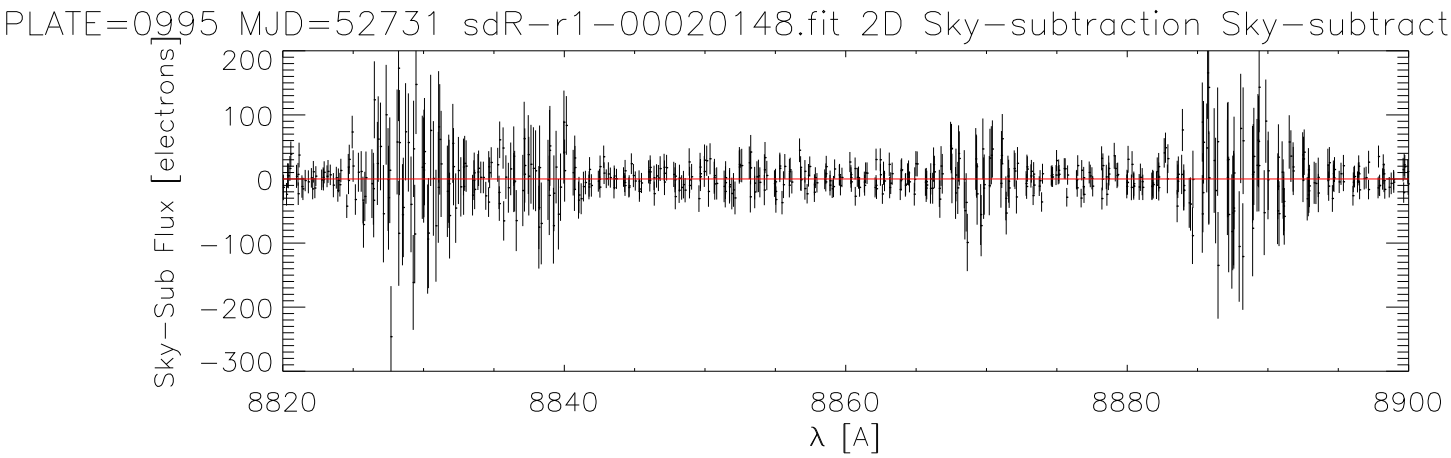

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

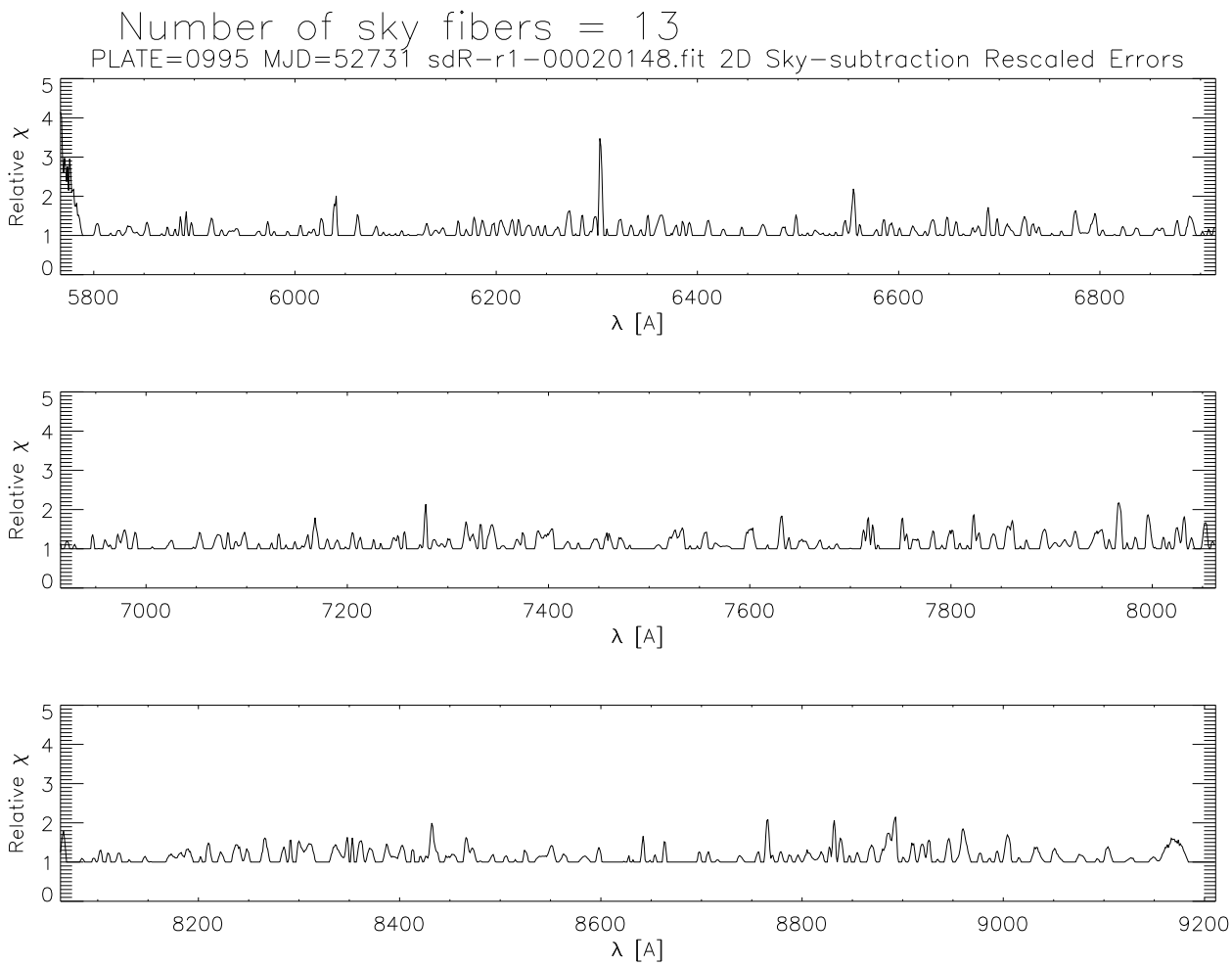

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
8820
8840
8860
8880
8900
λ [A]

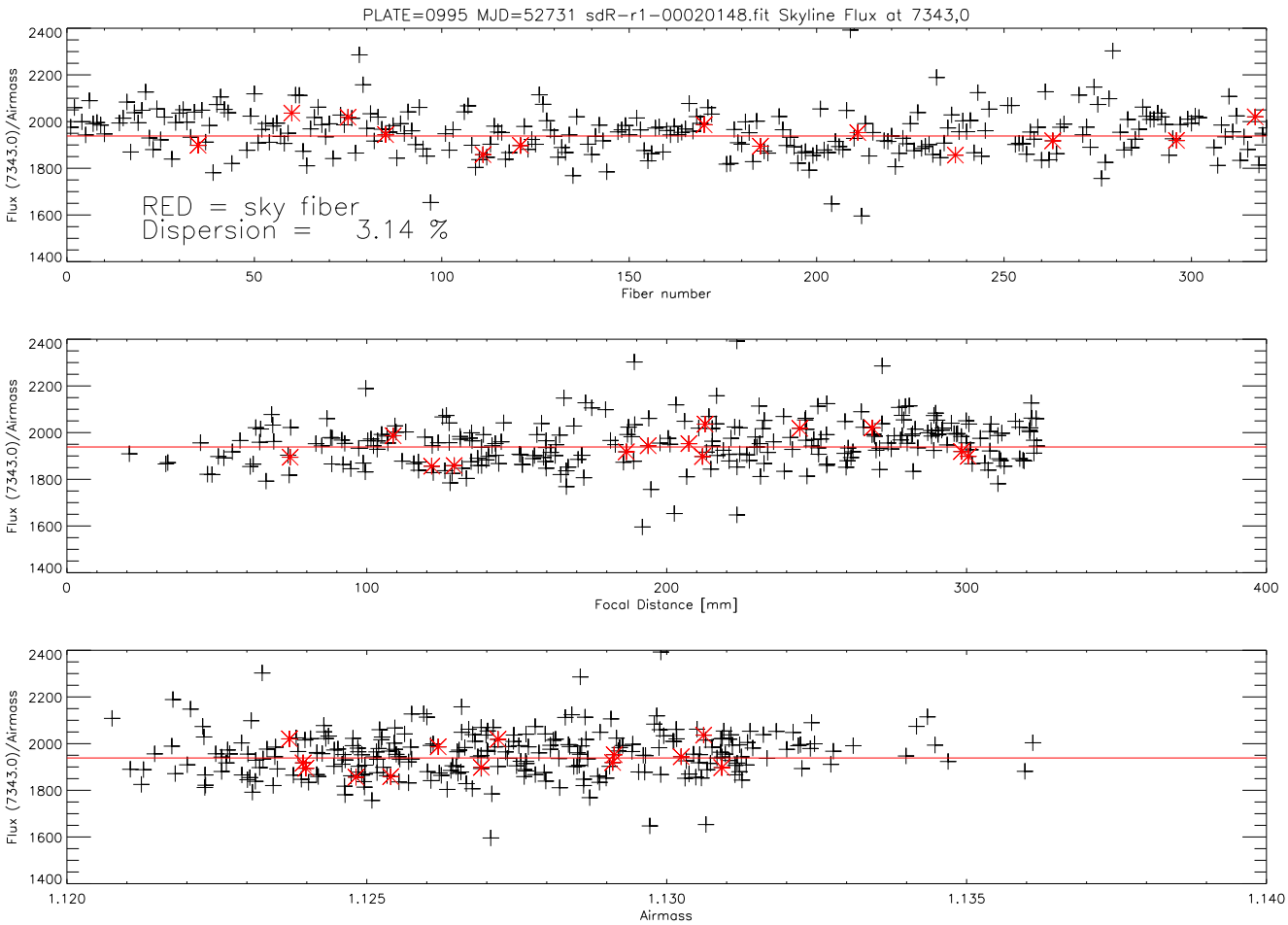

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020148.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

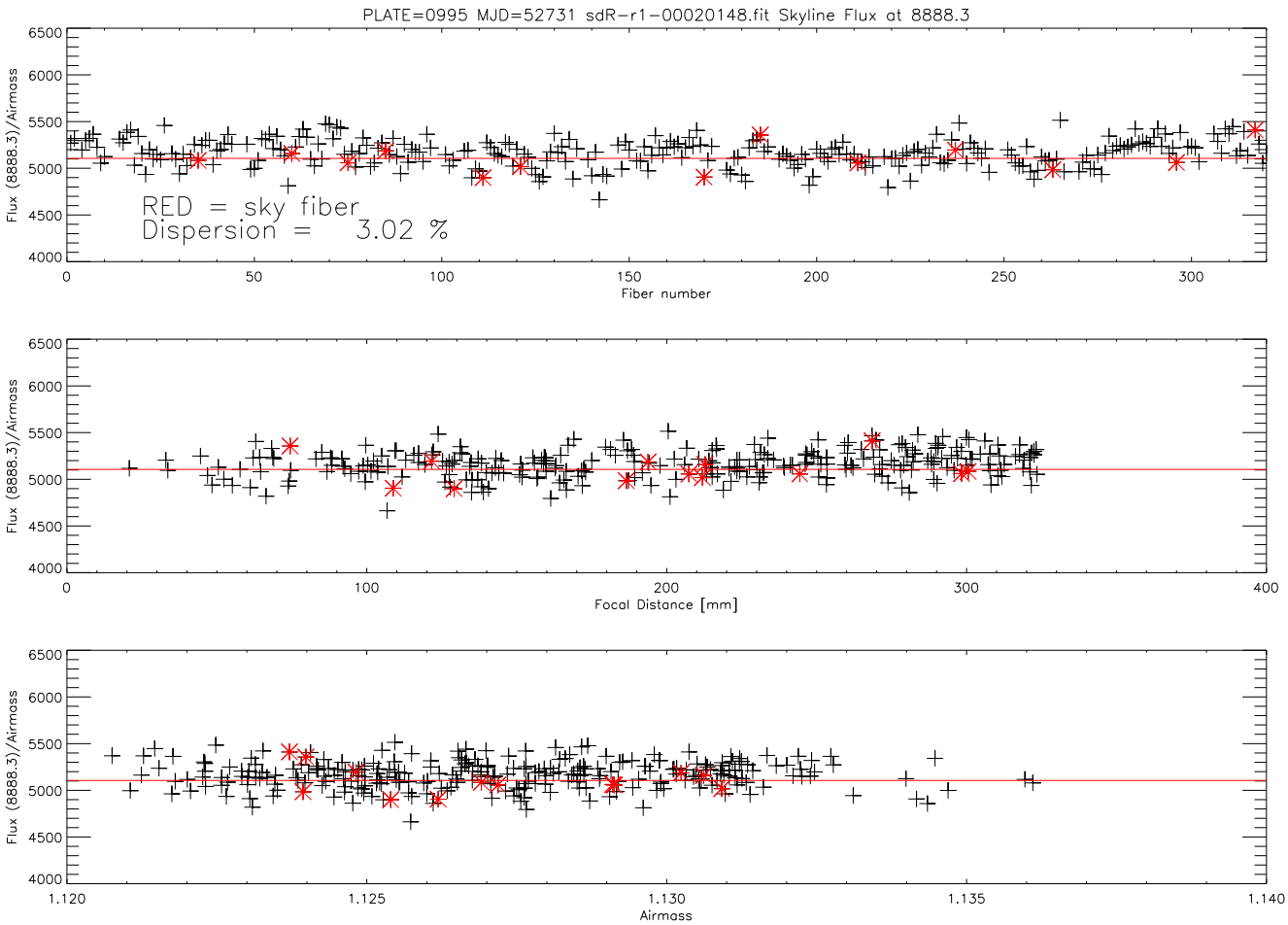

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

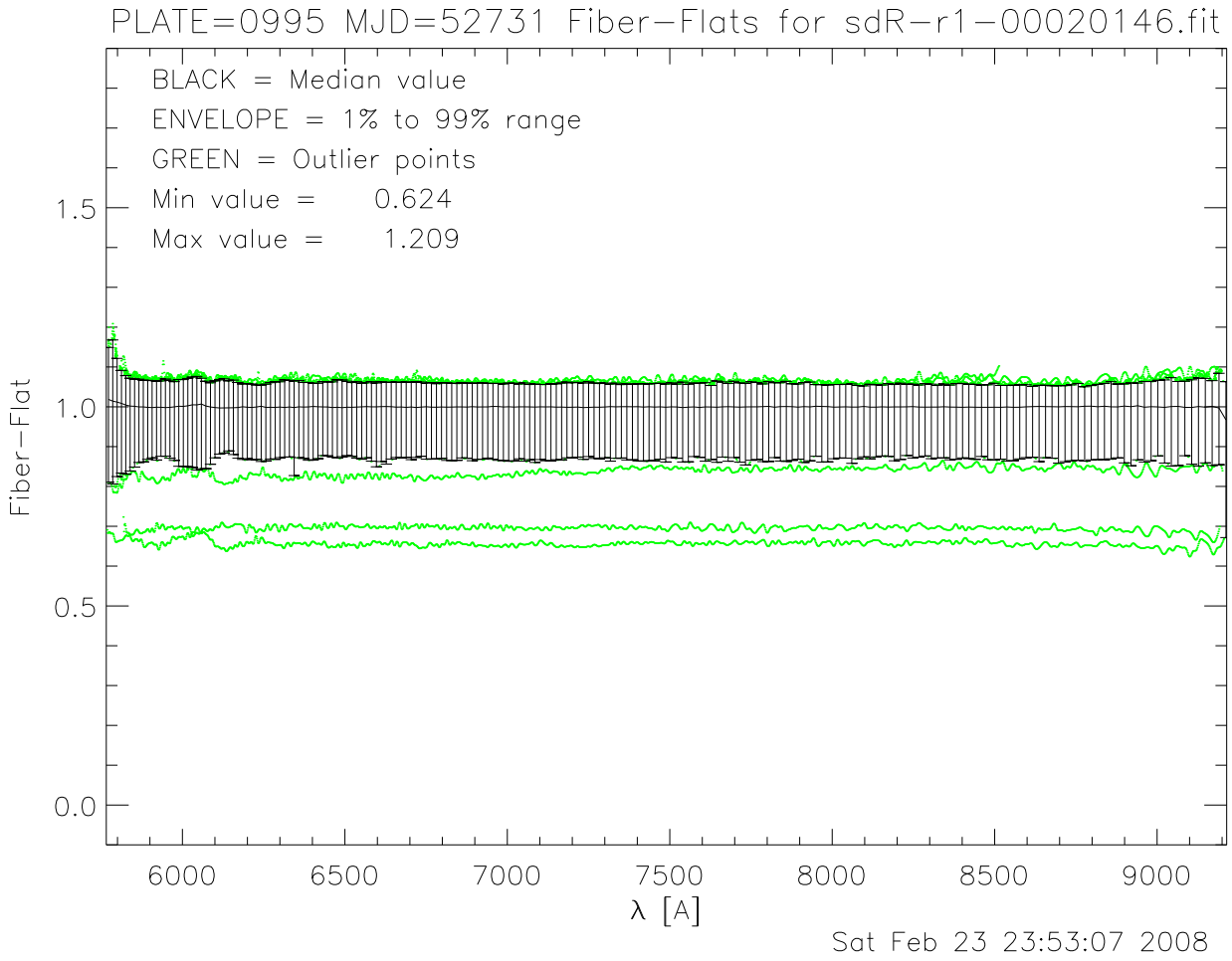

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

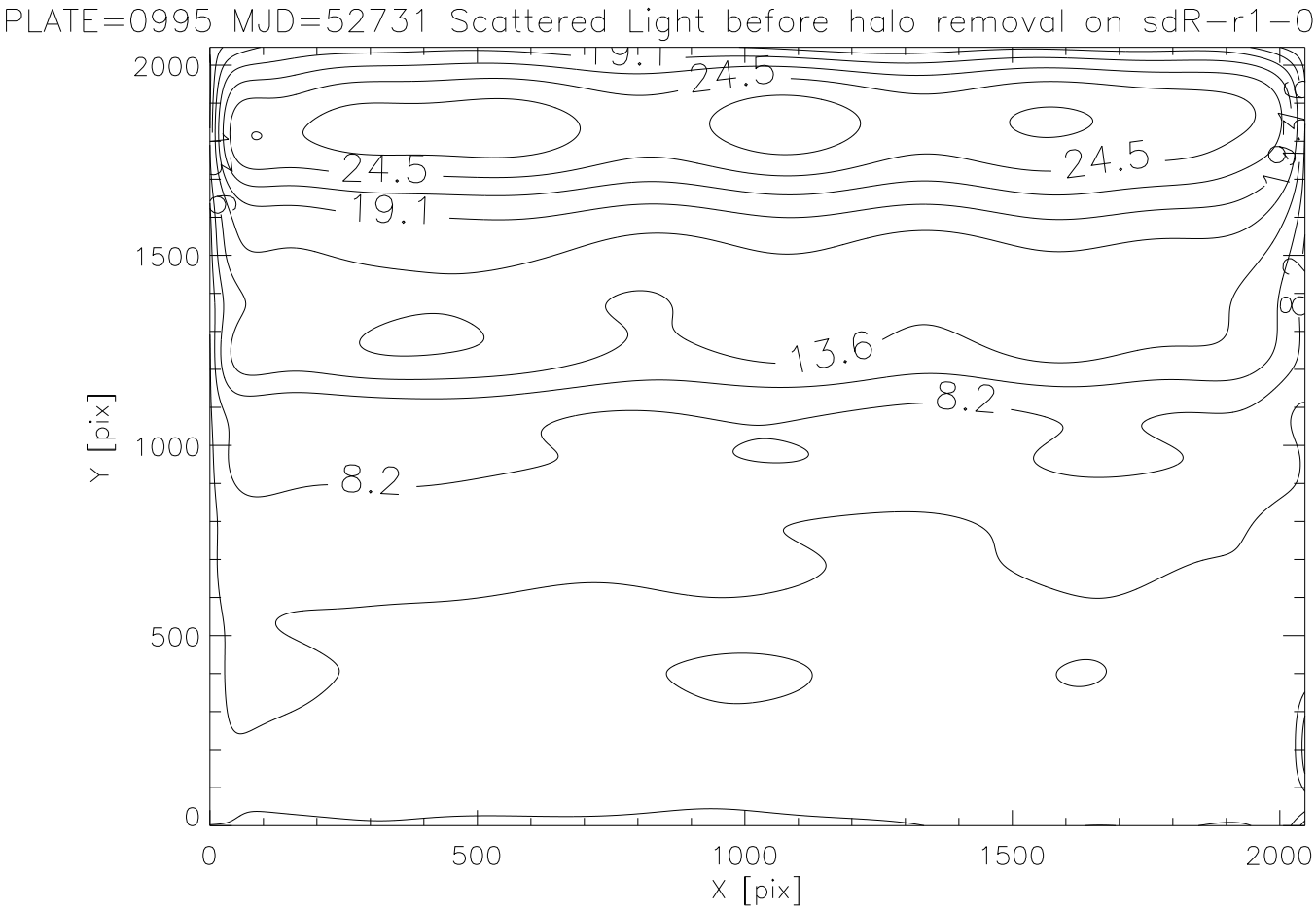

PLATE=0995 MJD=52731 sdR-r1-00020148.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

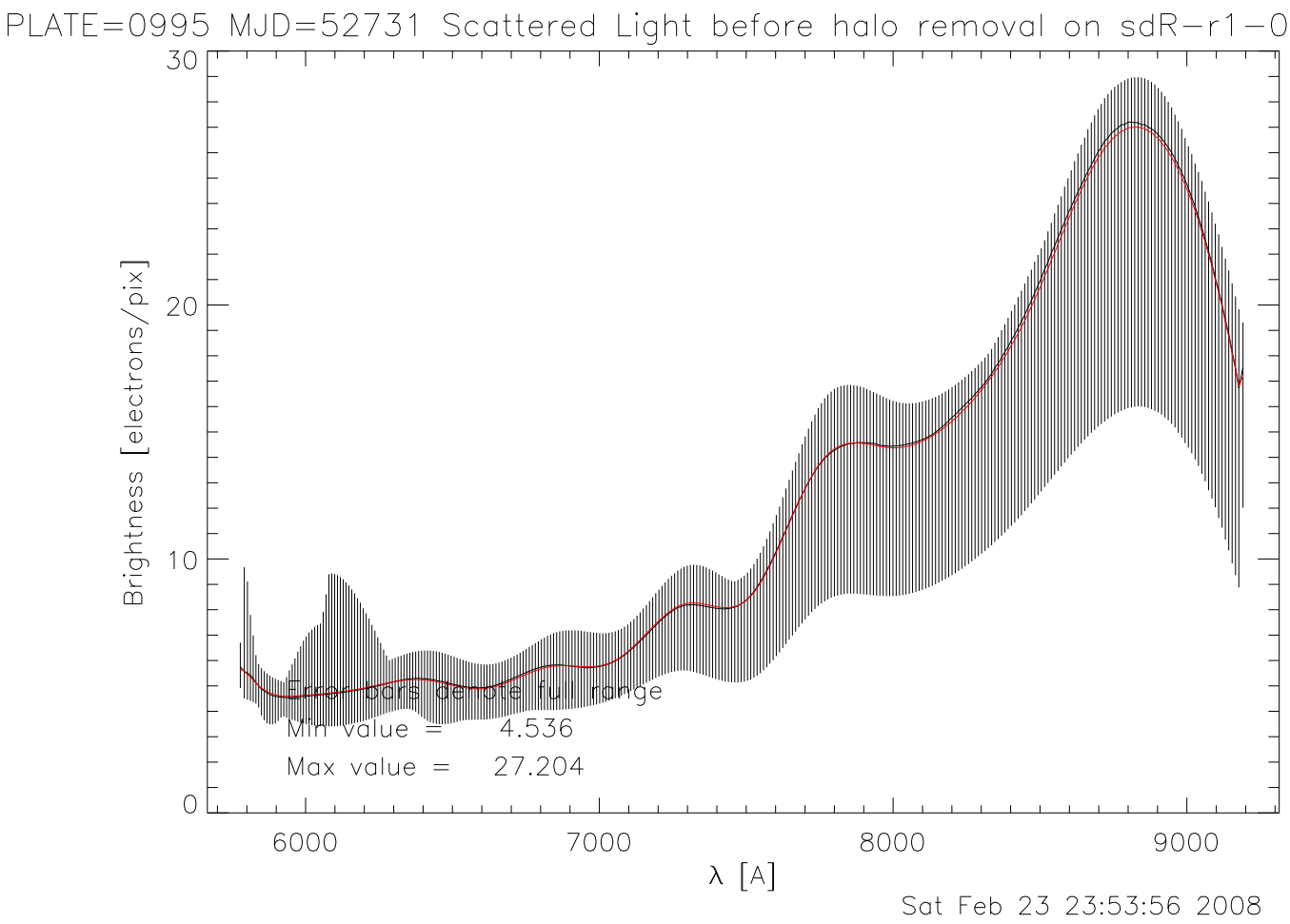

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020148.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

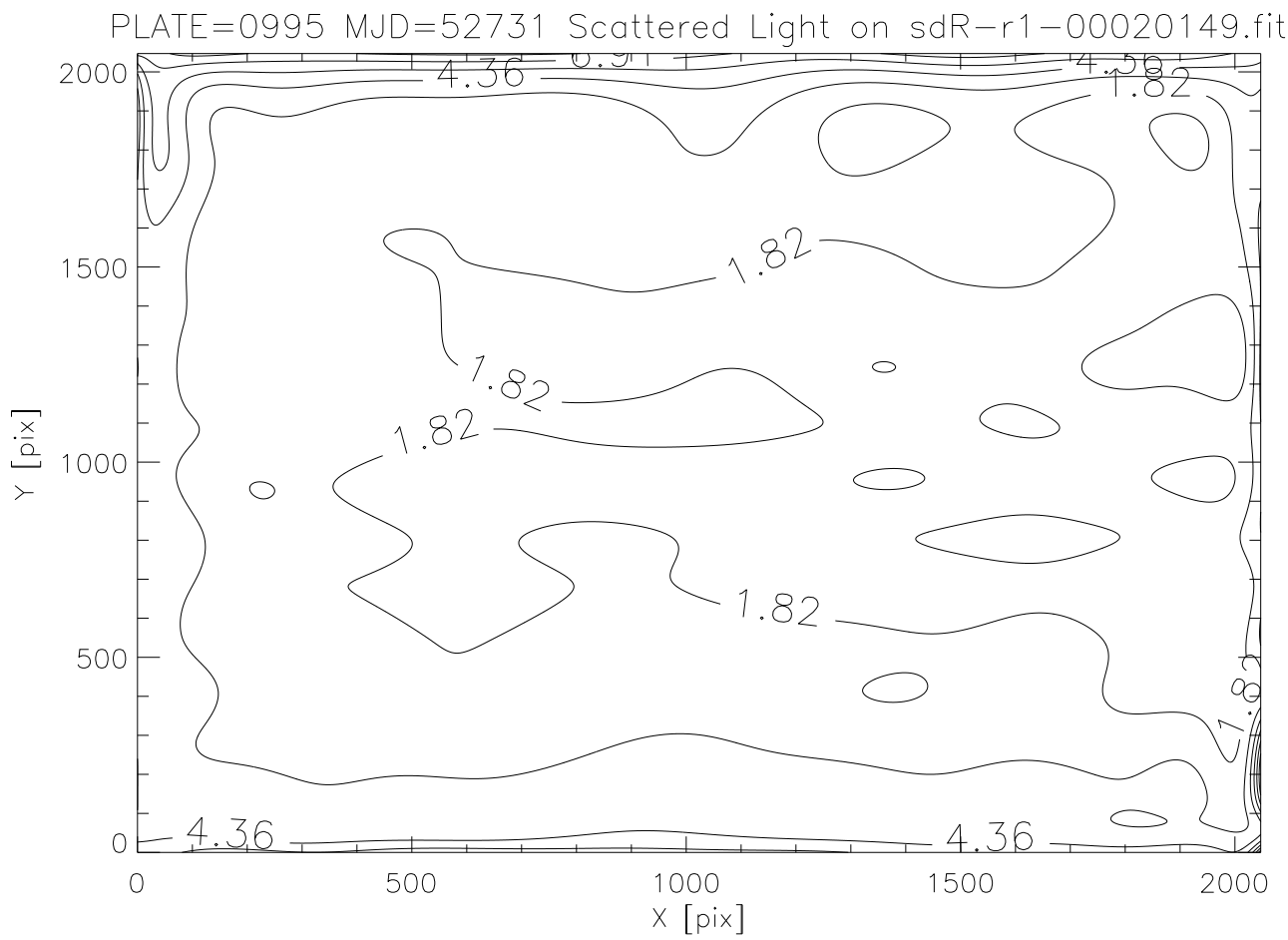

PLATE=0995 MJD=52731 sdR-r1-00020148.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.14 %
Fiber number
Focal Distance [mm]
Airmass

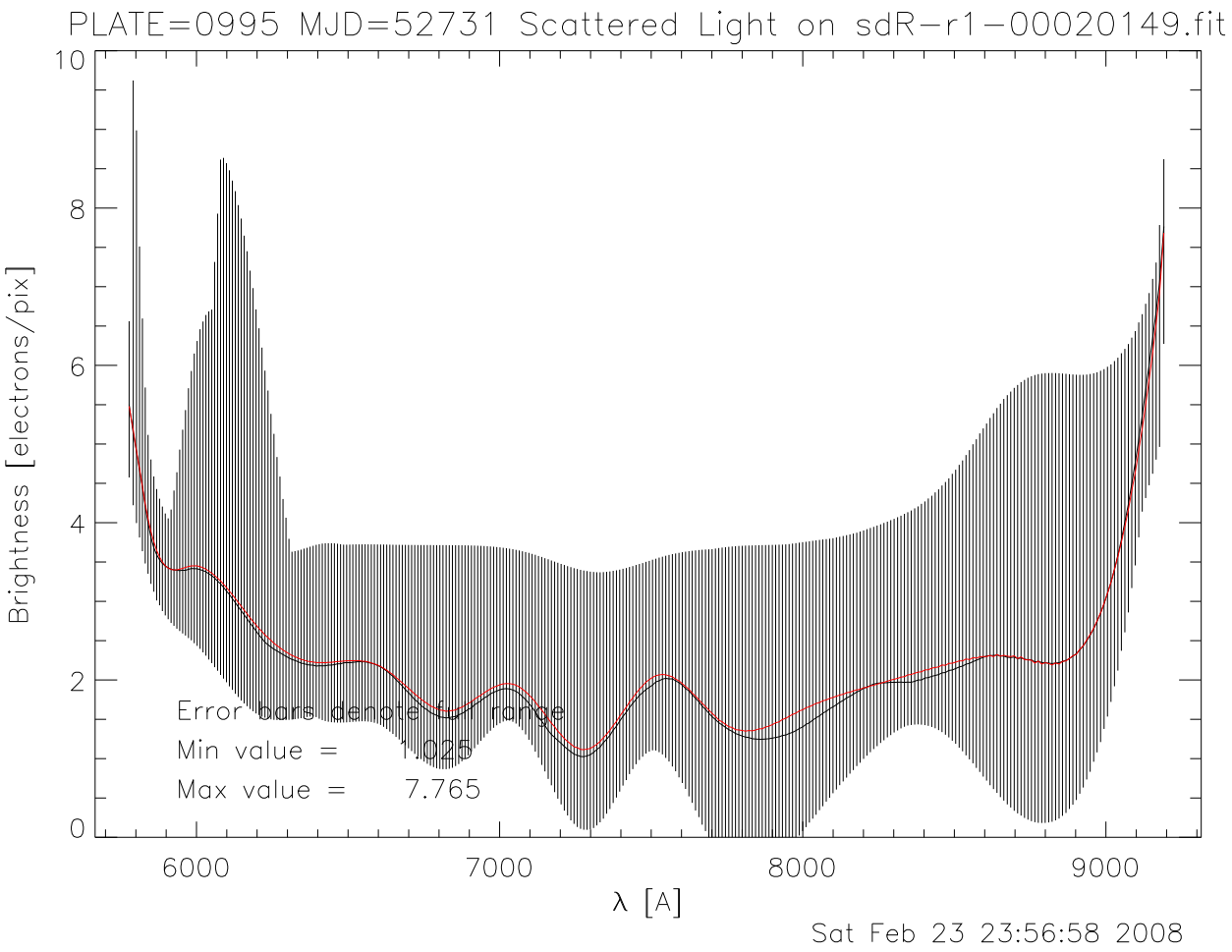

PLATE=0995 MJD=52731 sdR-r1-00020148.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.02 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

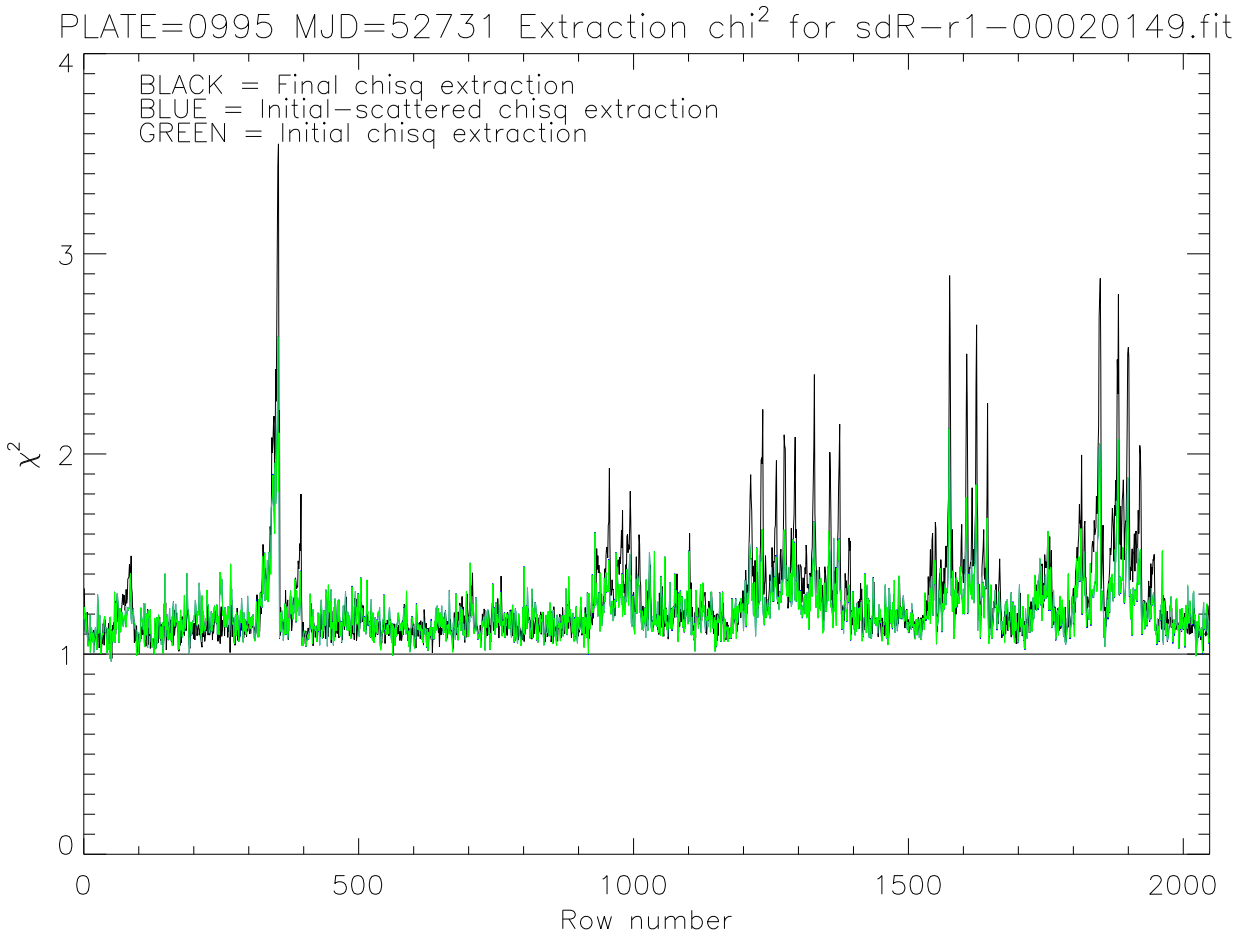

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.624
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 23:53:07 2008

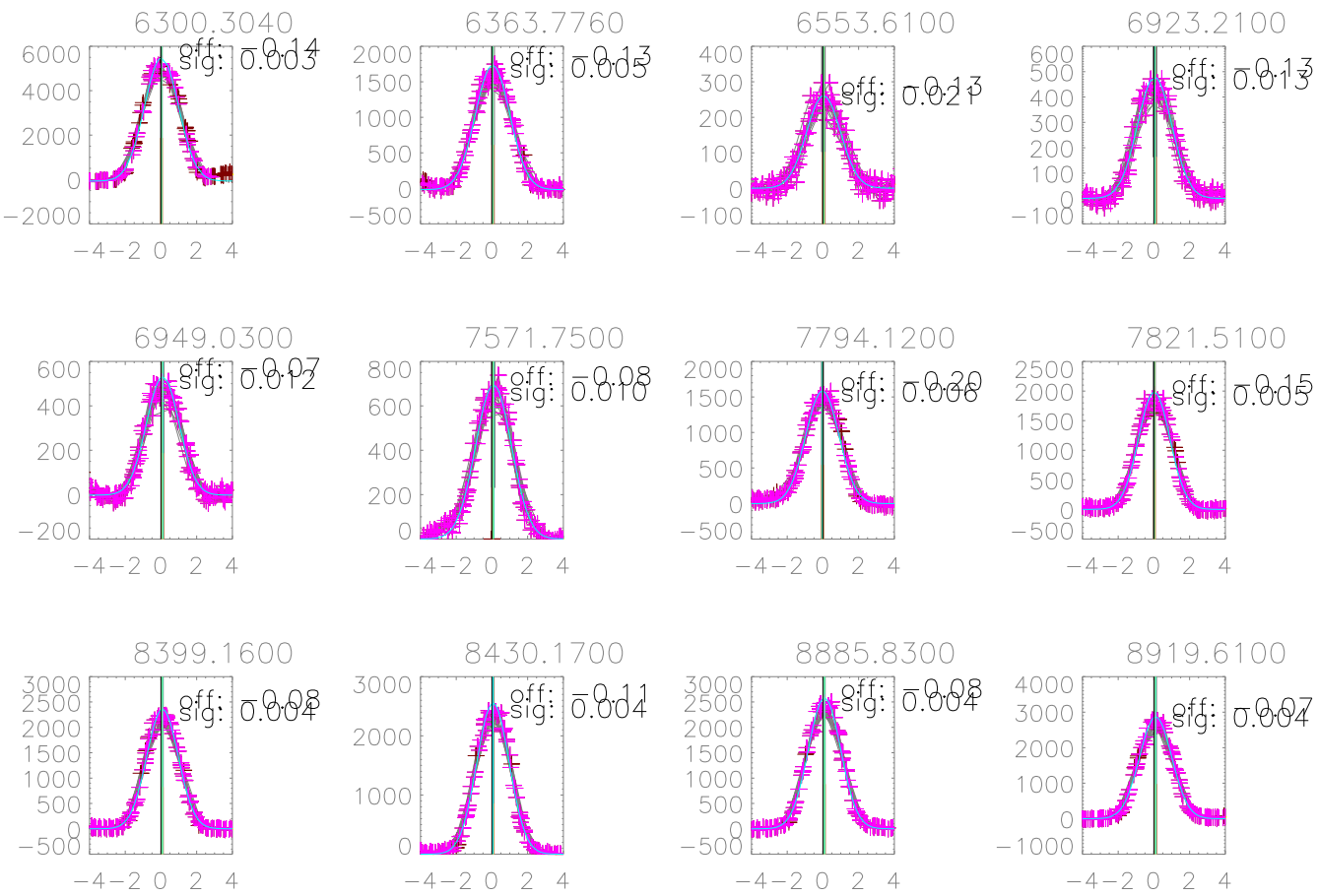

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020149.fi
24.5
24.5
24.5
19.1
19.1
13.6
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

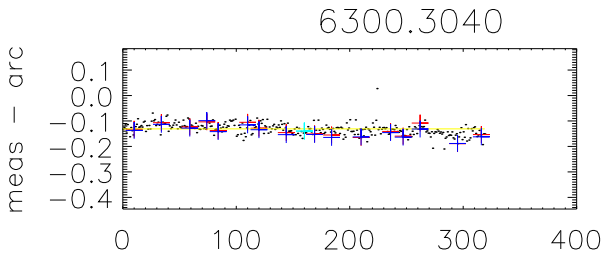

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020149.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.536
Max value = 27.204
Sat Feb 23 23:53:56 2008

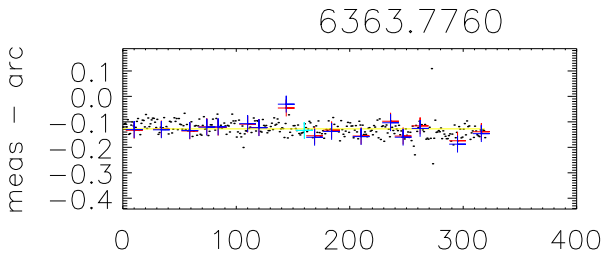

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020149.fit
4.36
1.82
1.82
1.82
1.82
4.36
4.36
Y [pix]
X [pix]
0
500
1000
1500
2000

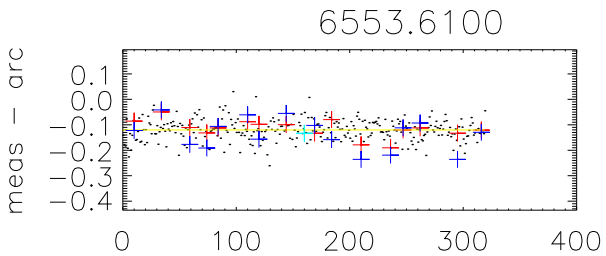

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020149.fit
Brightness [electrons/pix]
λ [A]
Error bars denote 1-σ range
Min value = 1.025
Max value = 7.765
Sat Feb 23 23:56:58 2008

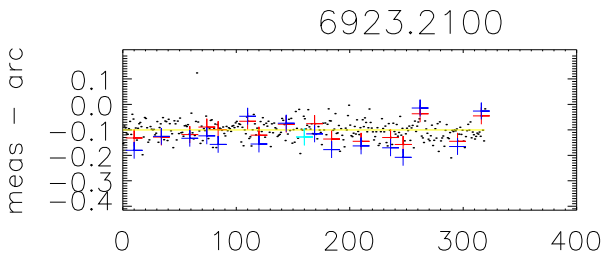

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r1−00020149.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

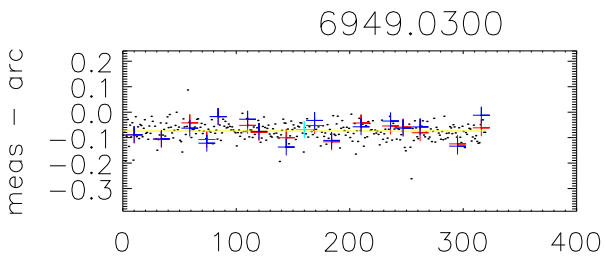

6300.3040
off: −0.14
sig: 0.003
6363.7760
off: −0.13
sig: 0.005
6553.6100
off: −0.13
sig: 0.021
6923.2100
off: −0.13
sig: 0.013
6949.0300
off: −0.07
sig: 0.012
7571.7500
off: −0.08
sig: 0.010
7794.1200
off: −0.20
sig: 0.006
7821.5100
off: −0.15
sig: 0.005
8399.1600
off: −0.08
sig: 0.004
8430.1700
off: −0.11
sig: 0.004
8885.8300
off: −0.08
sig: 0.004
8919.6100
off: −0.07
sig: 0.004

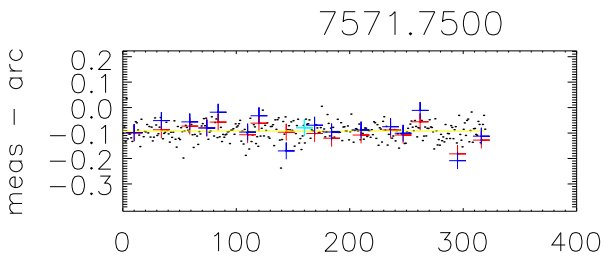

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

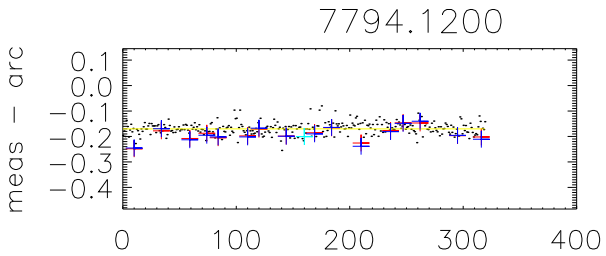

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

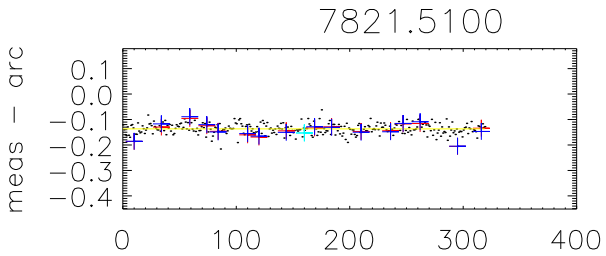

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

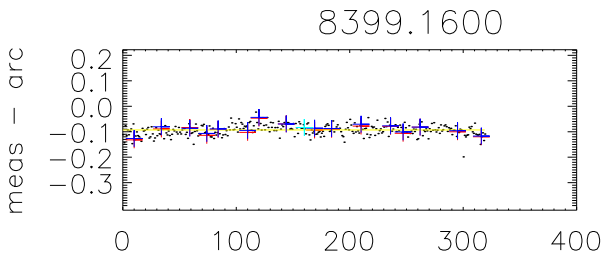

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

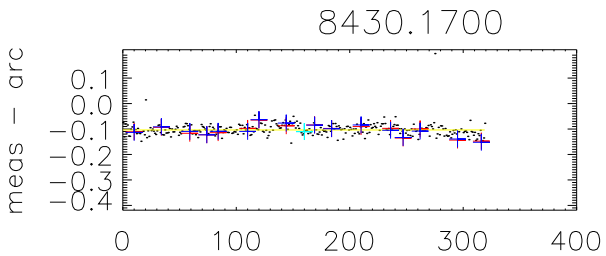

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

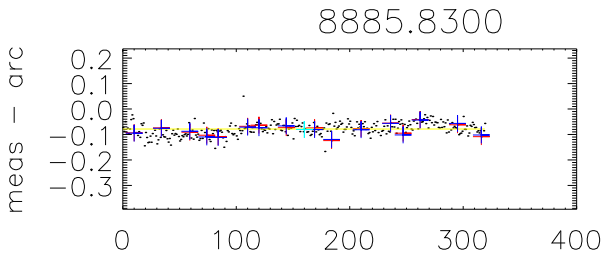

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

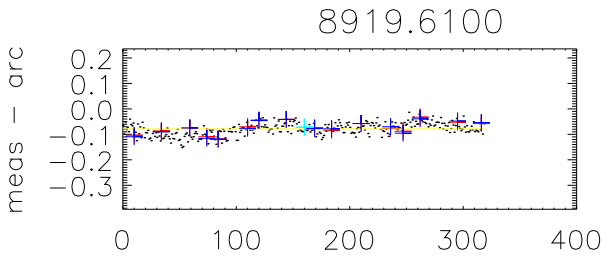

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

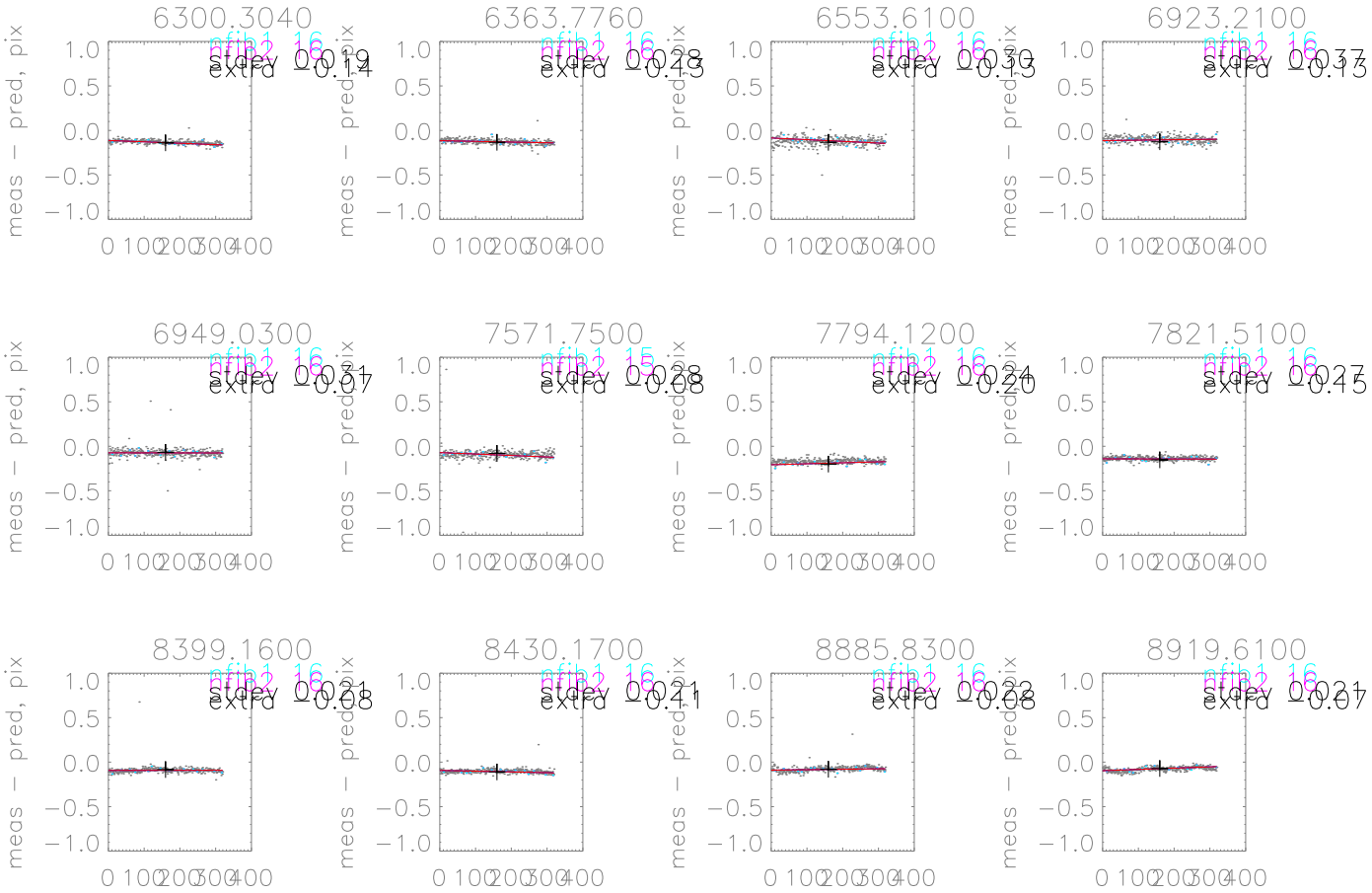

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

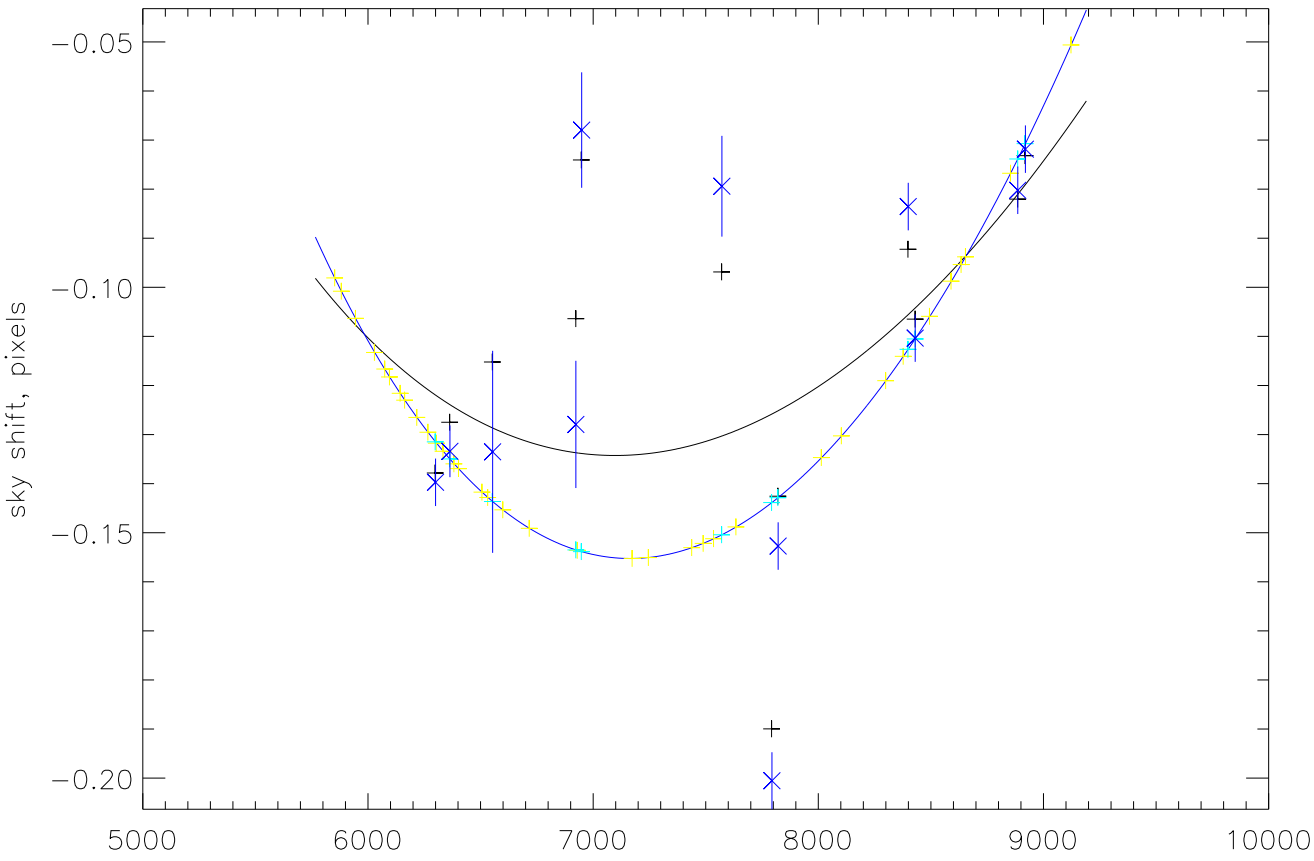

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

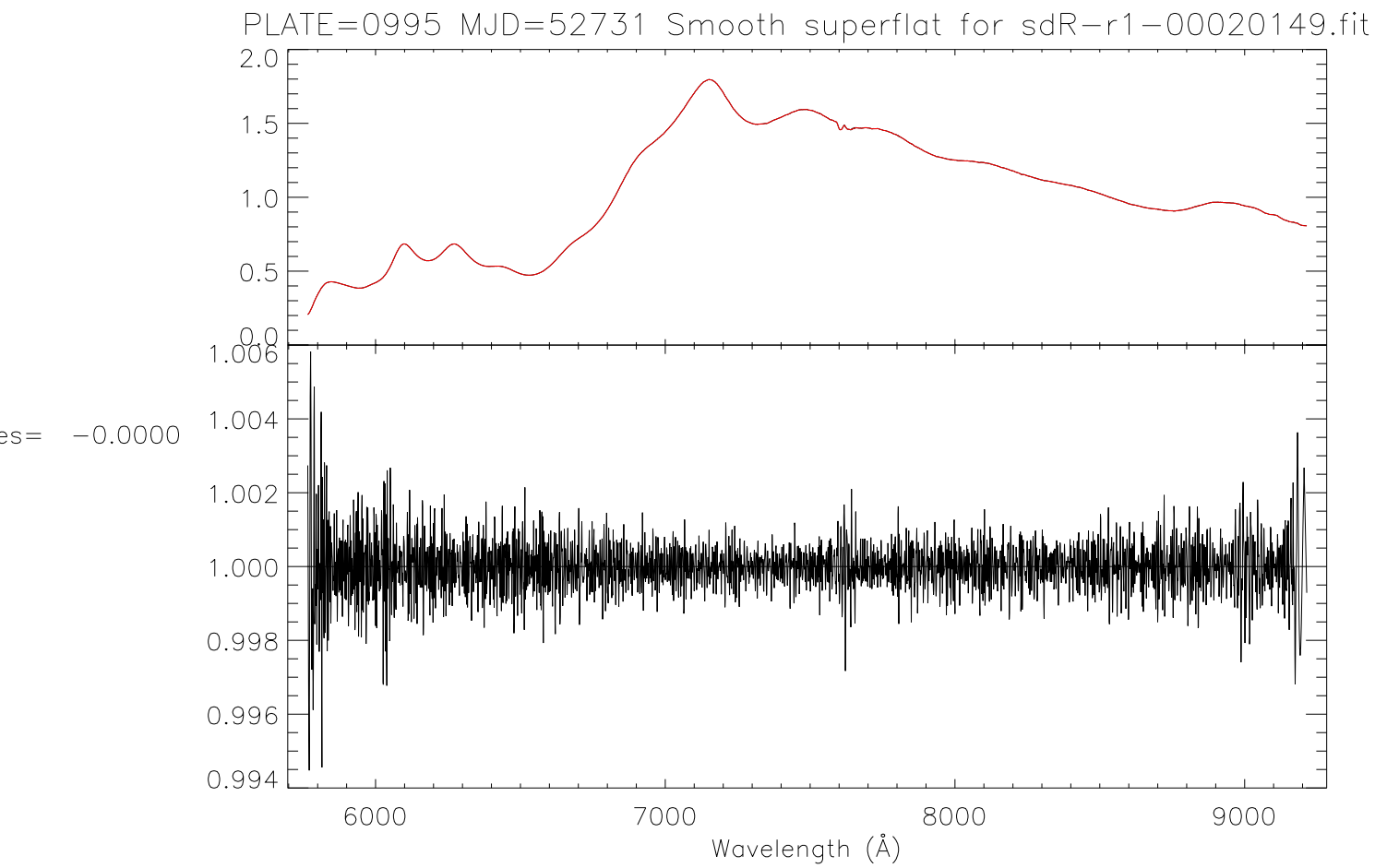

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

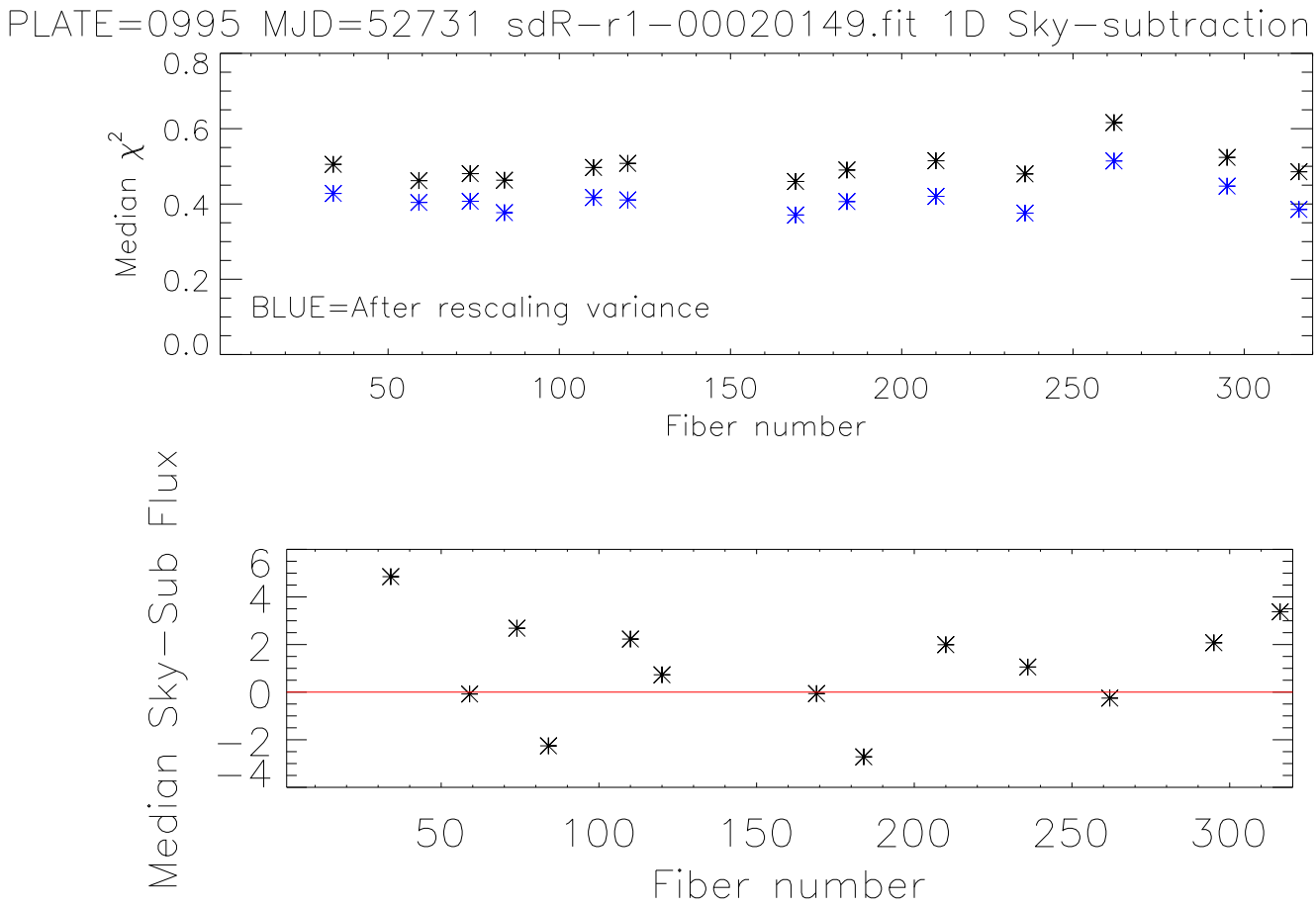

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

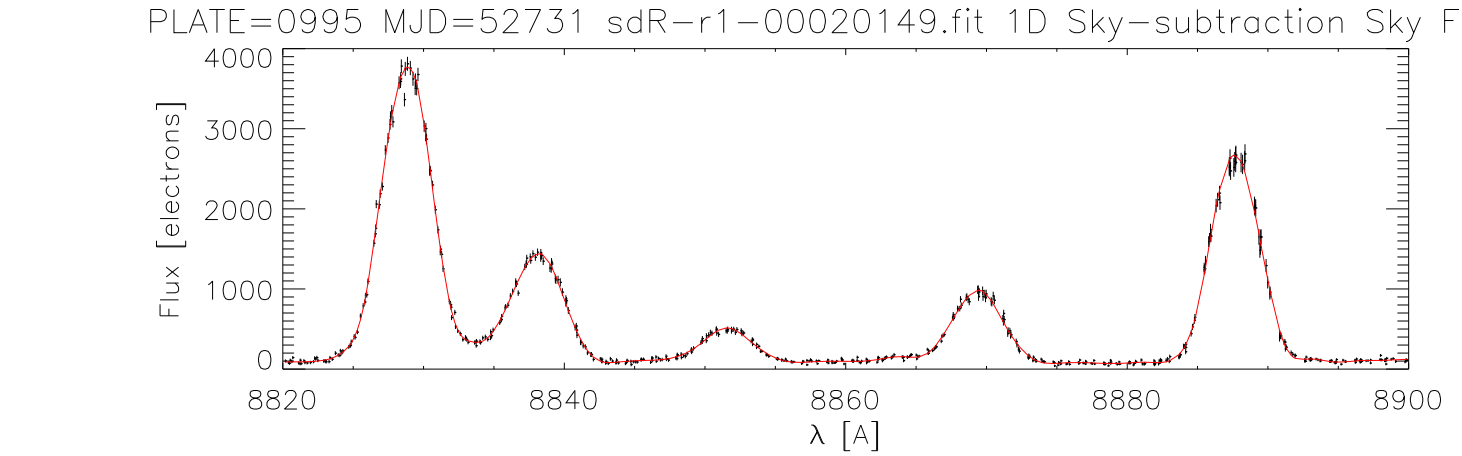

6300.3040
stdev 0.19
extra 0.14
6363.7760
stdev 0.28
extra 0.43
6553.6100
stdev 0.30
extra 0.13
6923.2100
stdev 0.37
extra 0.13
6949.0300
stdev 0.31
extra 0.07
7571.7500
stdev 0.28
extra 0.08
7794.1200
stdev 0.24
extra 0.20
7821.5100
stdev 0.27
extra 0.45
8399.1600
stdev 0.21
extra 0.08
8430.1700
stdev 0.21
extra 0.41
8885.8300
stdev 0.22
extra 0.08
8919.6100
stdev 0.21
extra 0.07
meas − pred, pix
mfib1 16
mfib2 16
mfib1 15
mfib2 15

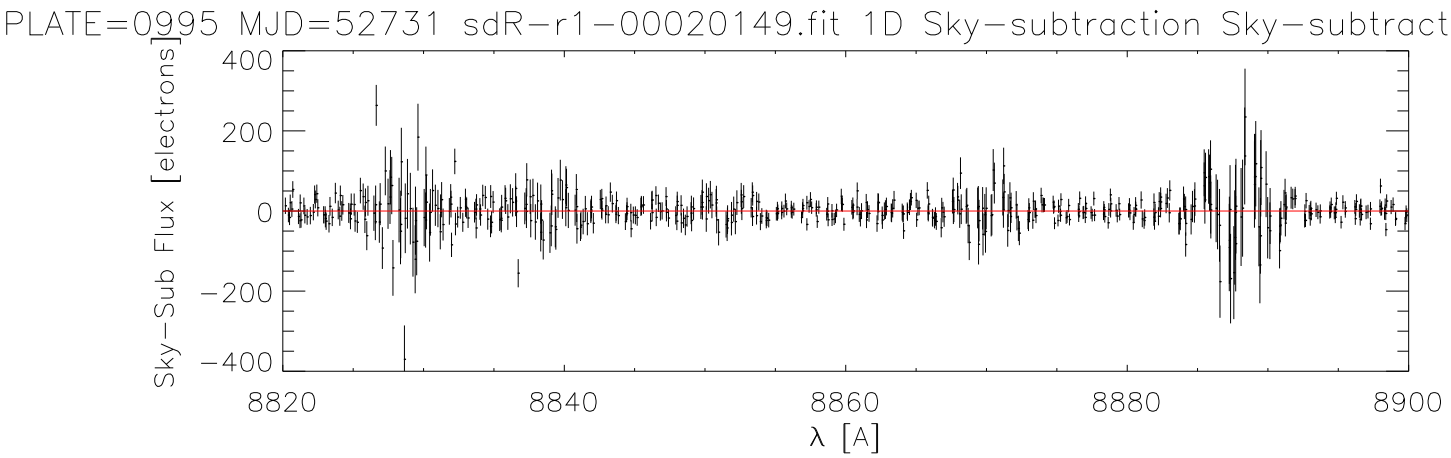

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

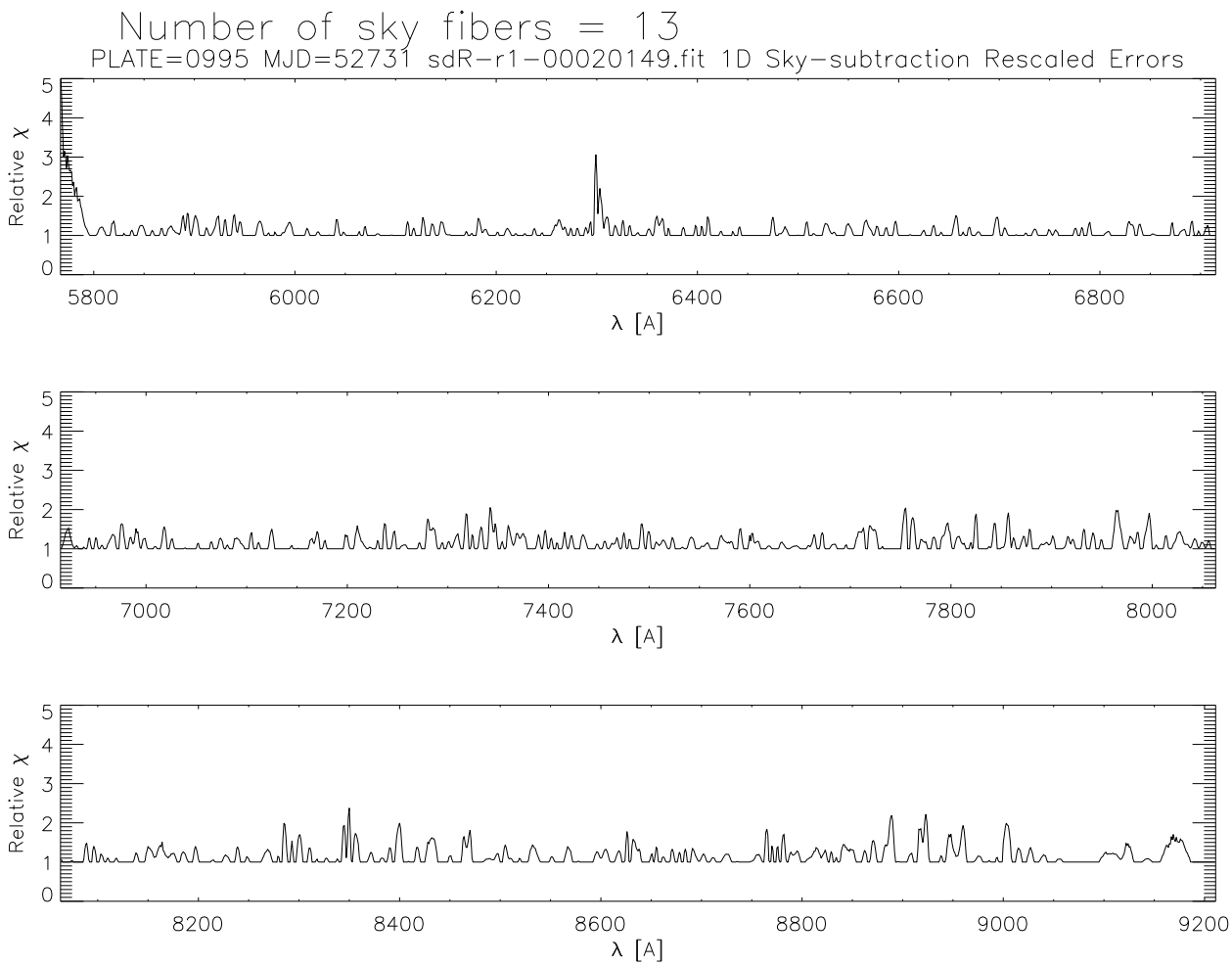

PLATE=0995 MJD=52731 Smooth superflat for sdR-r1-00020149.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

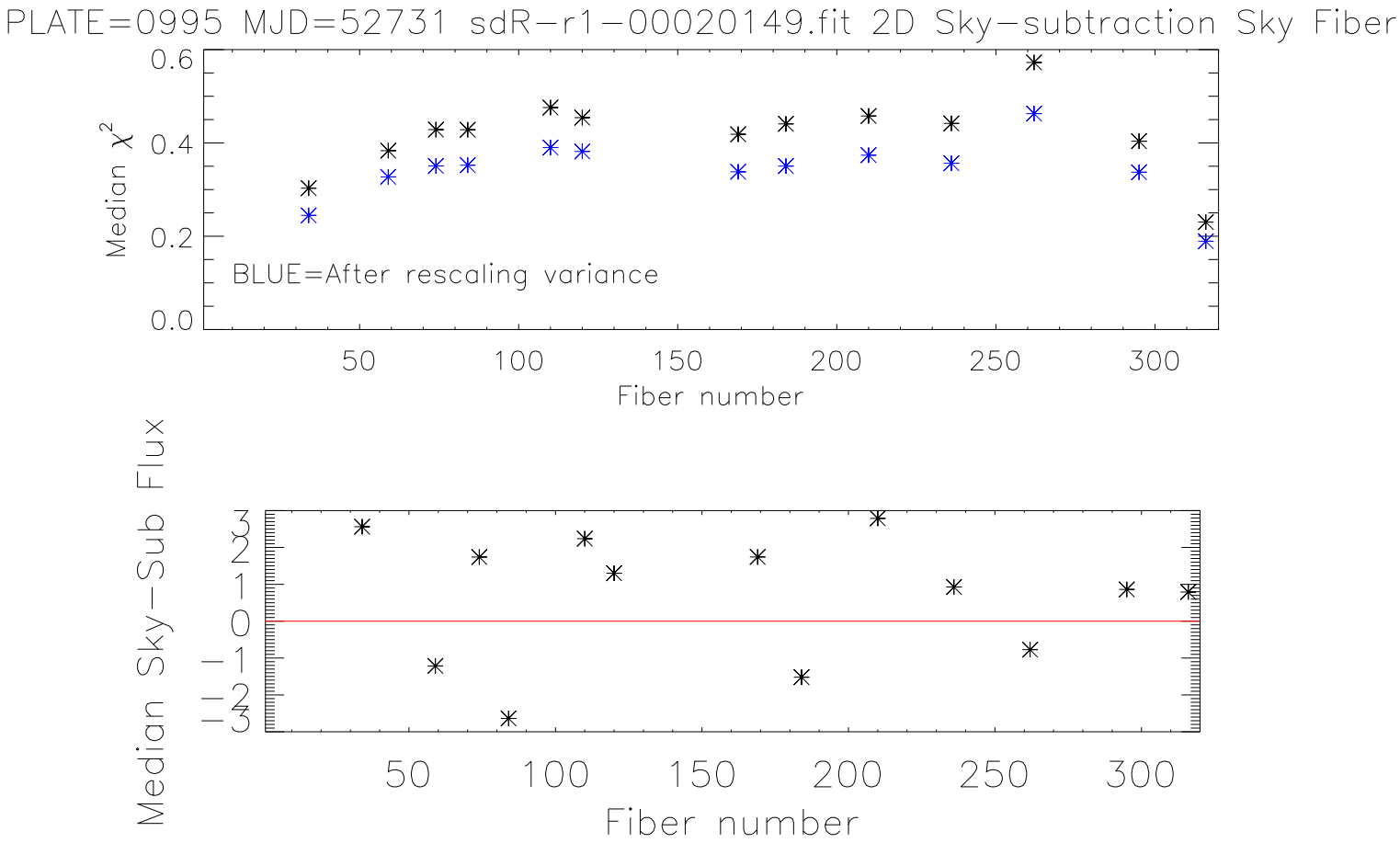
es= −0.0000

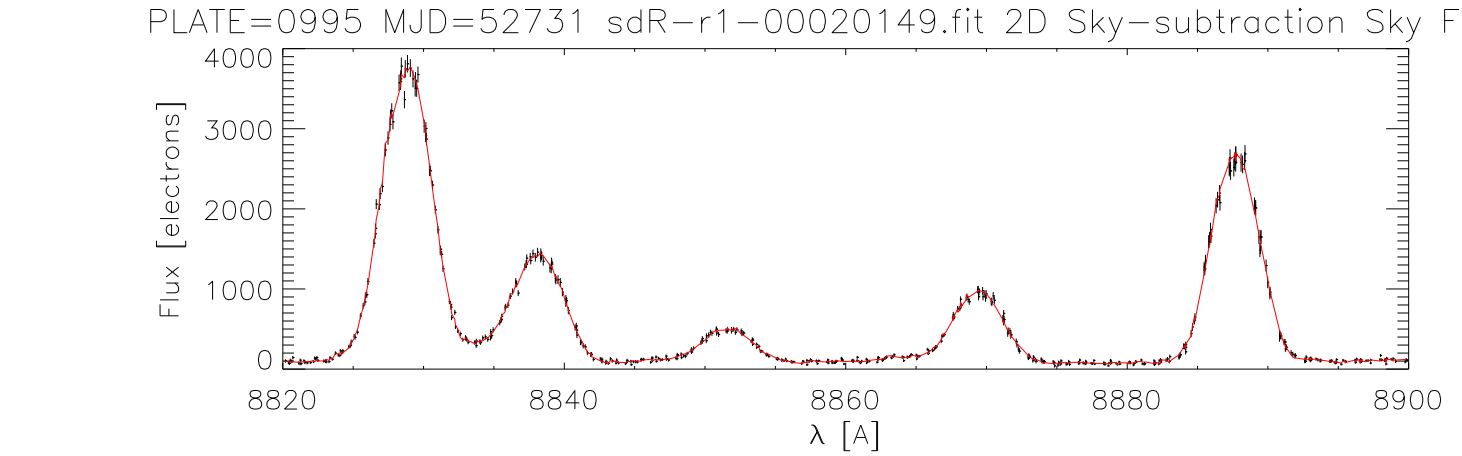

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

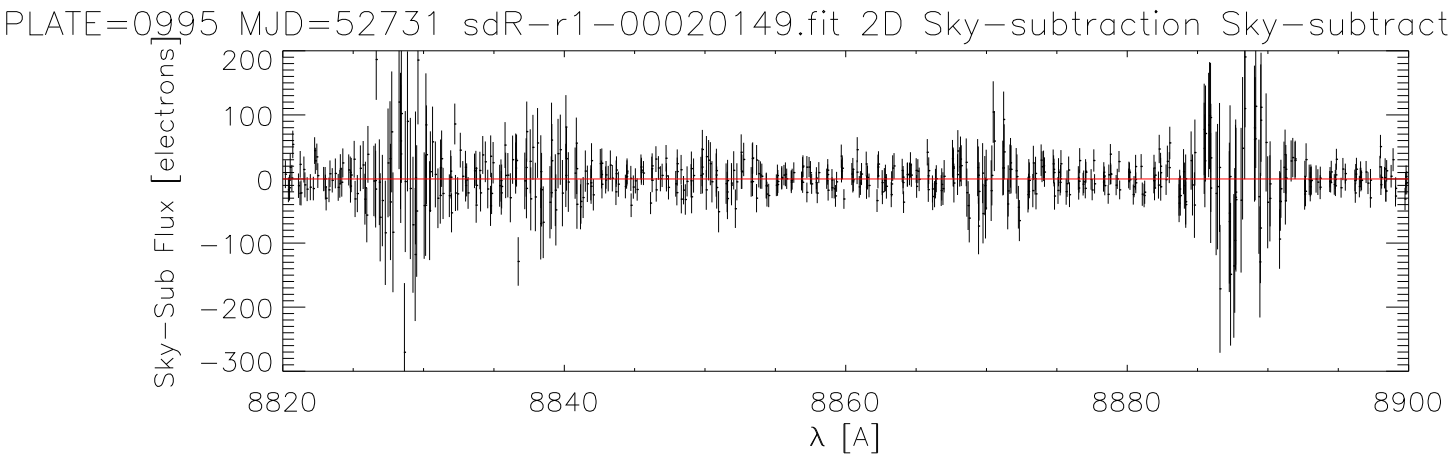

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

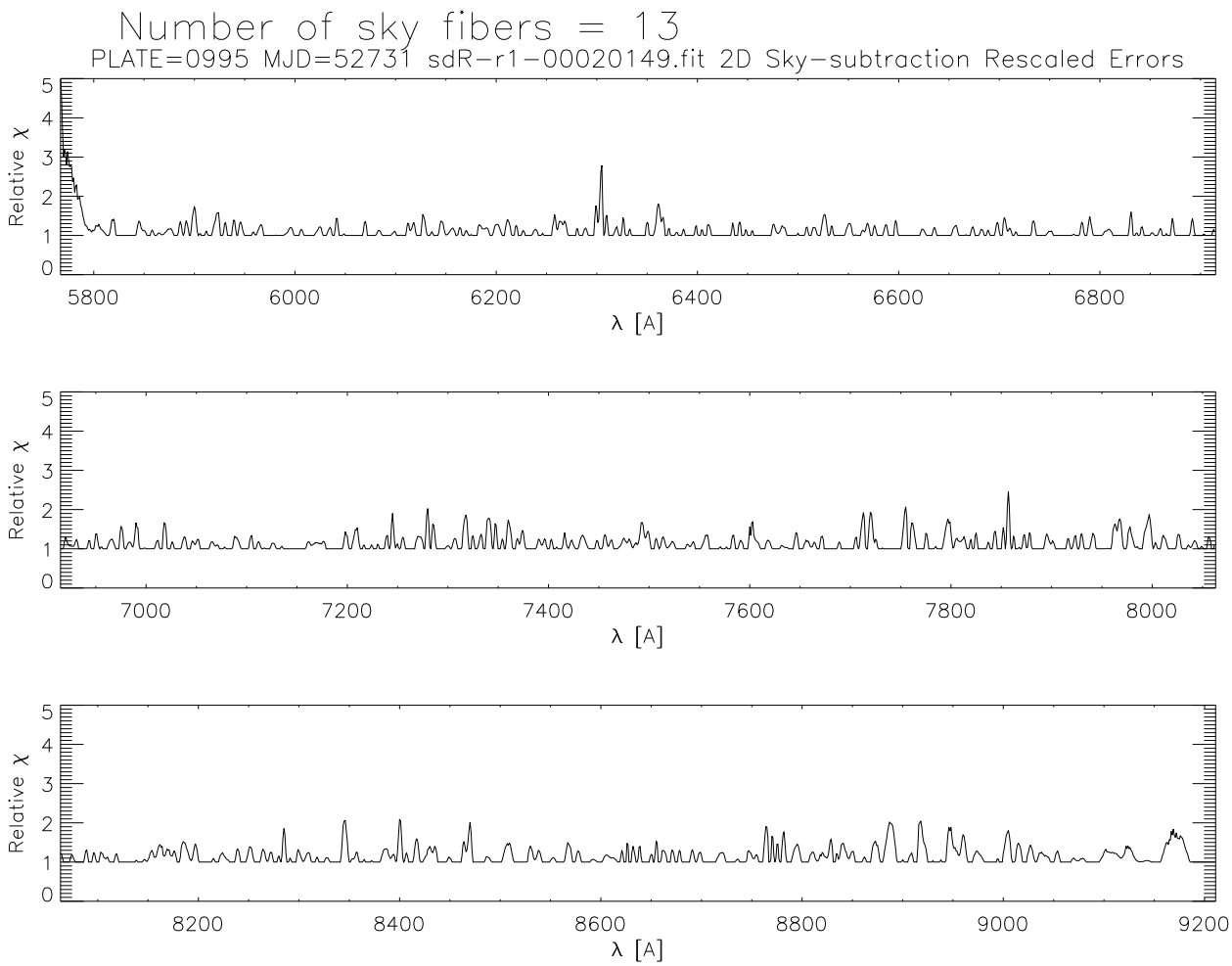

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

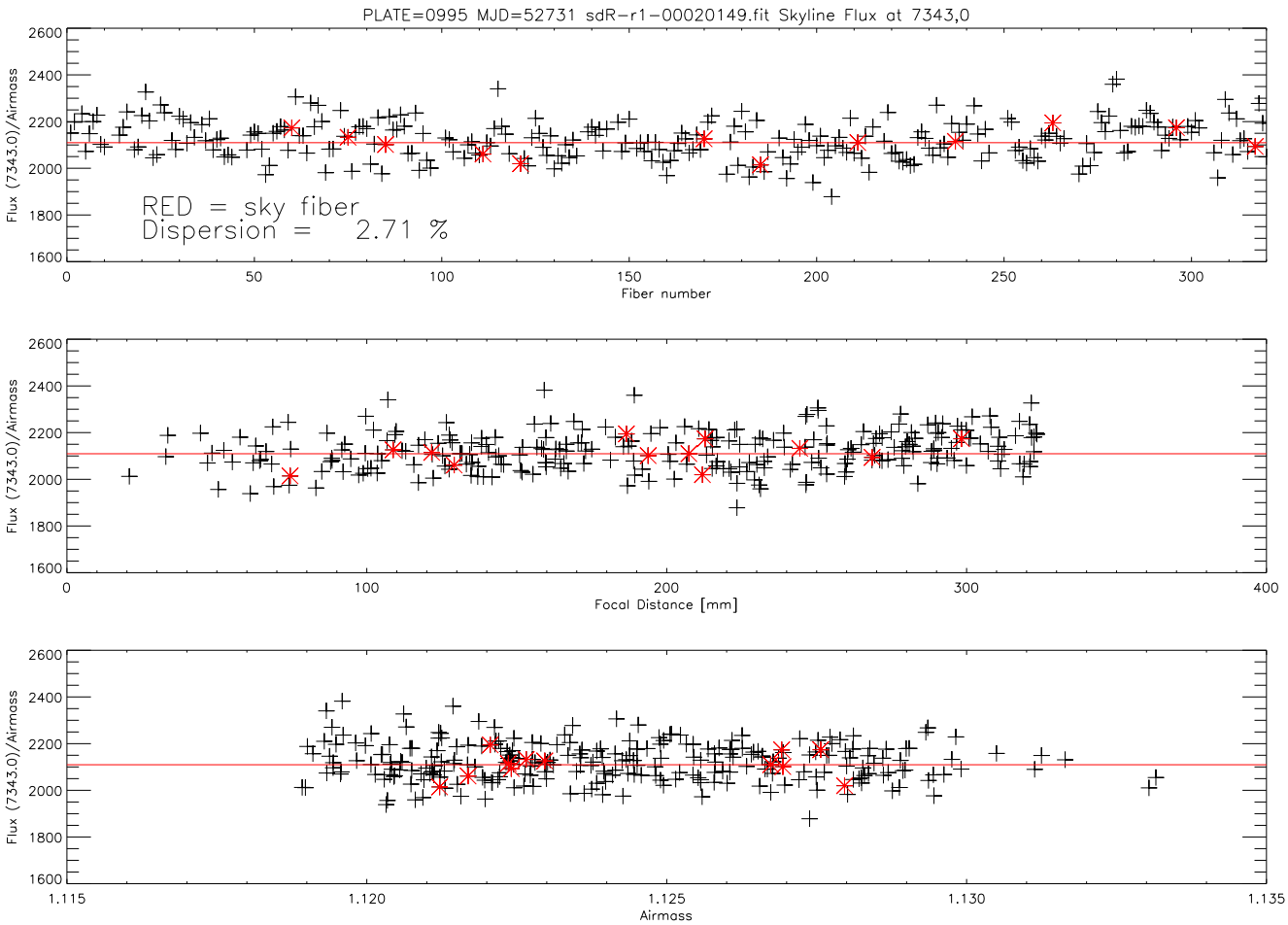

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020149.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

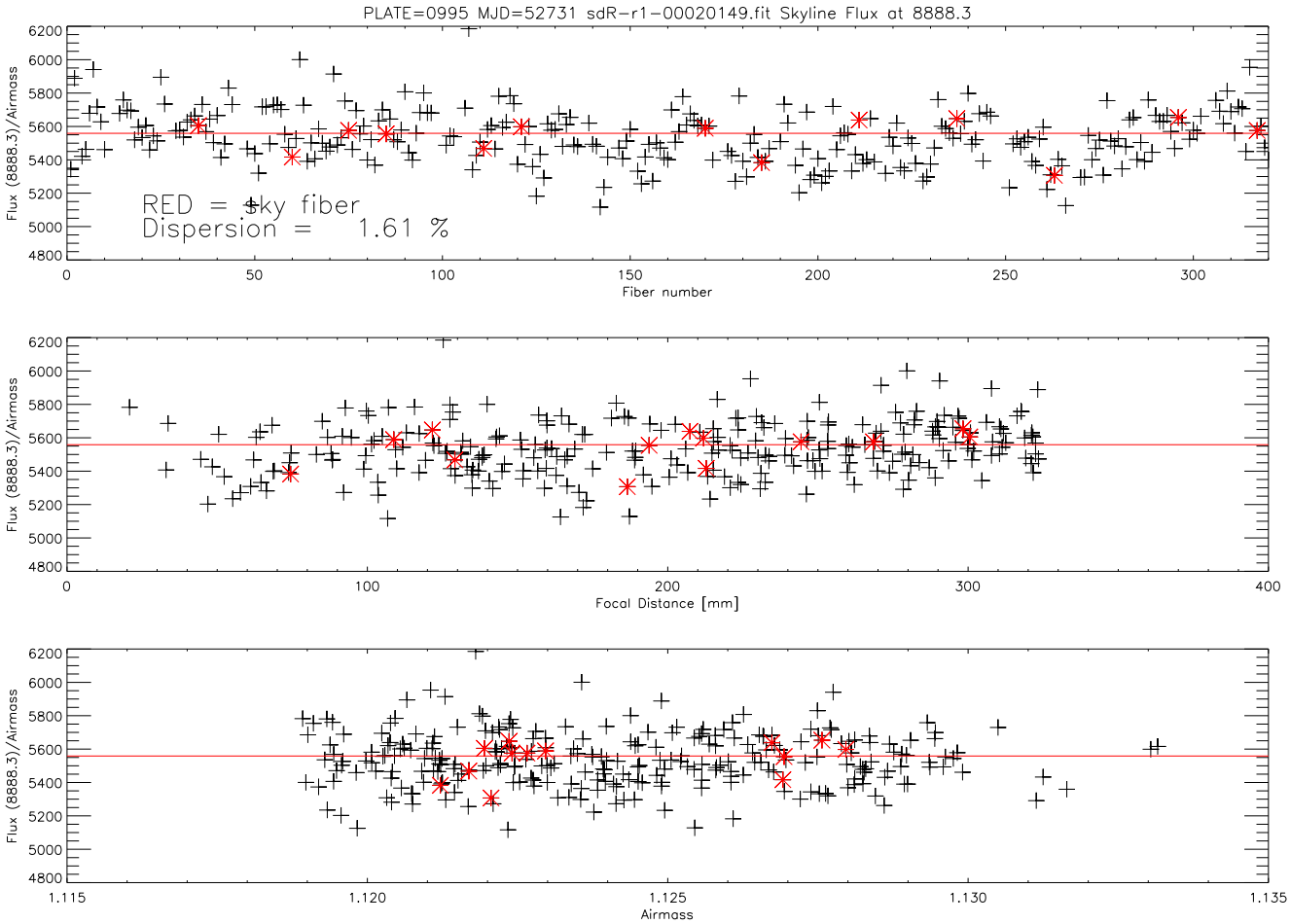

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

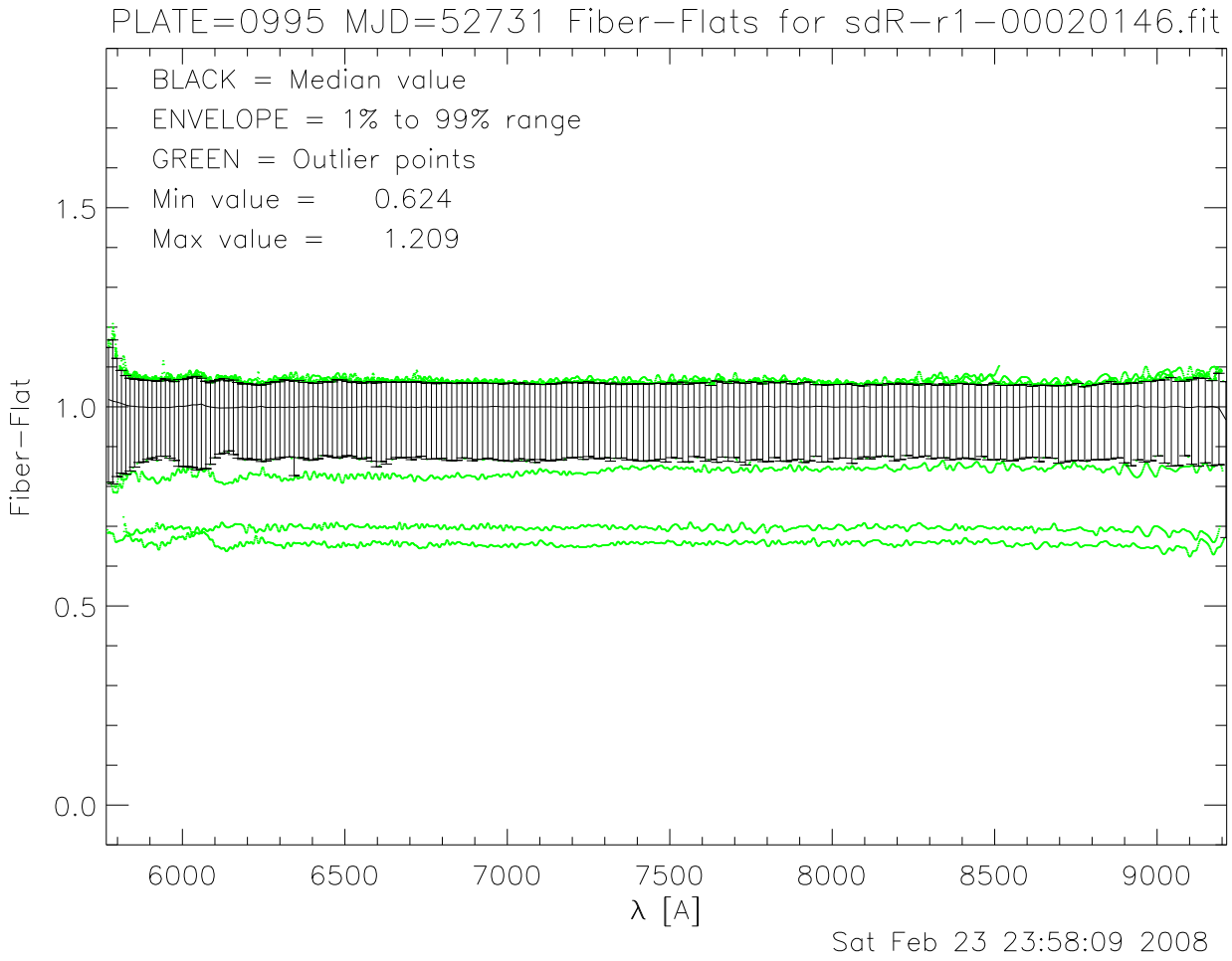

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

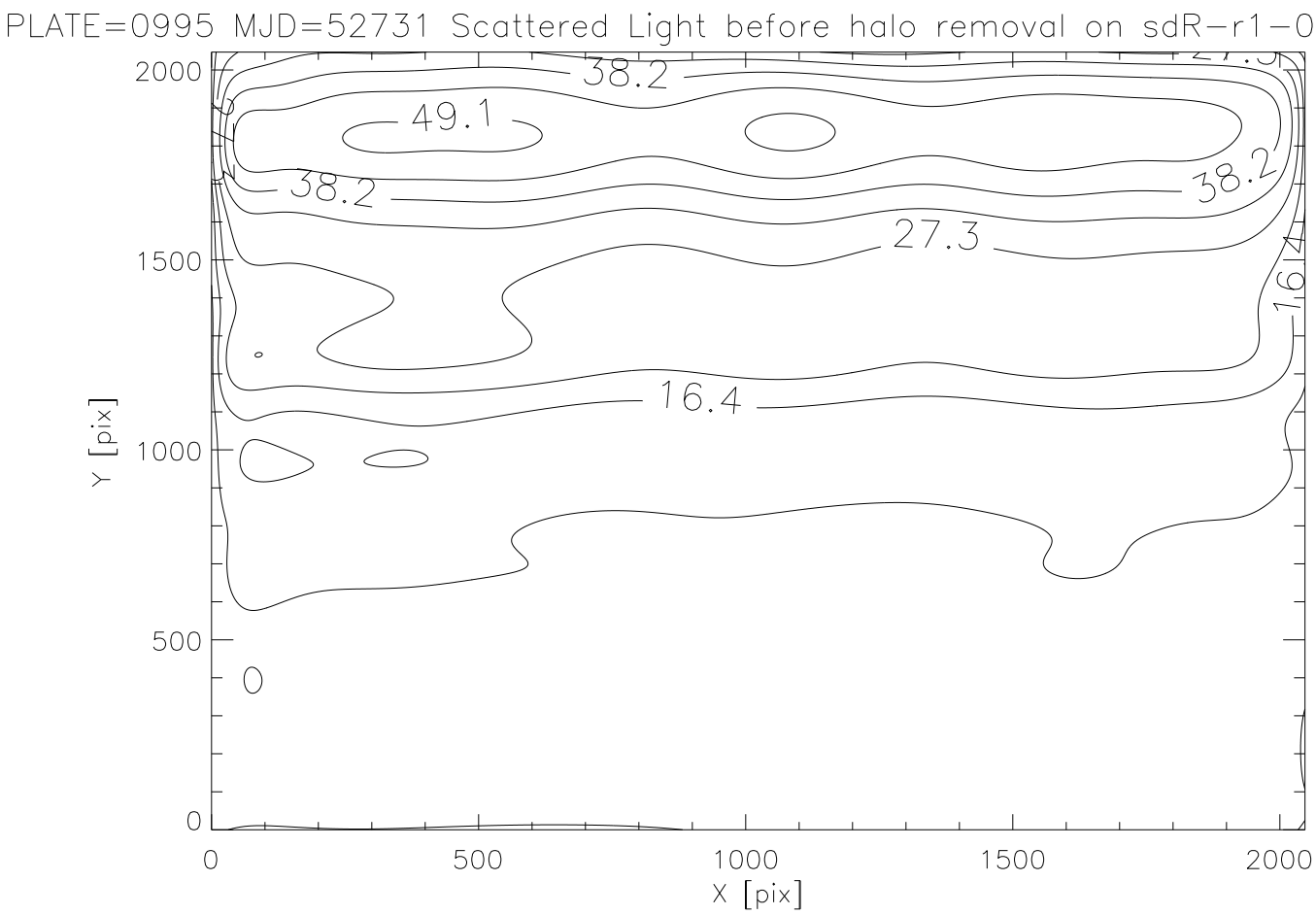

PLATE=0995 MJD=52731 sdR-r1-00020149.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

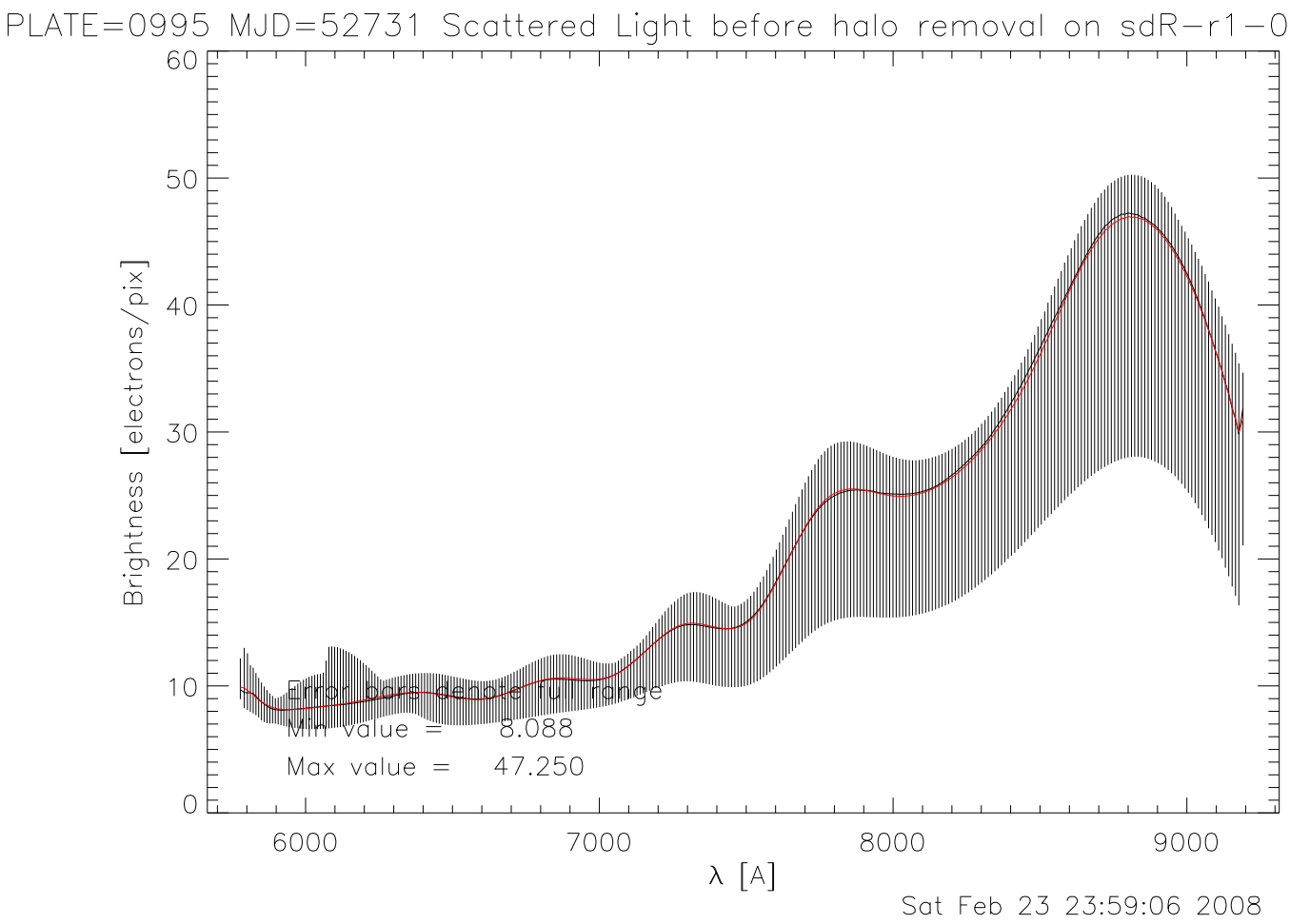

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020149.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

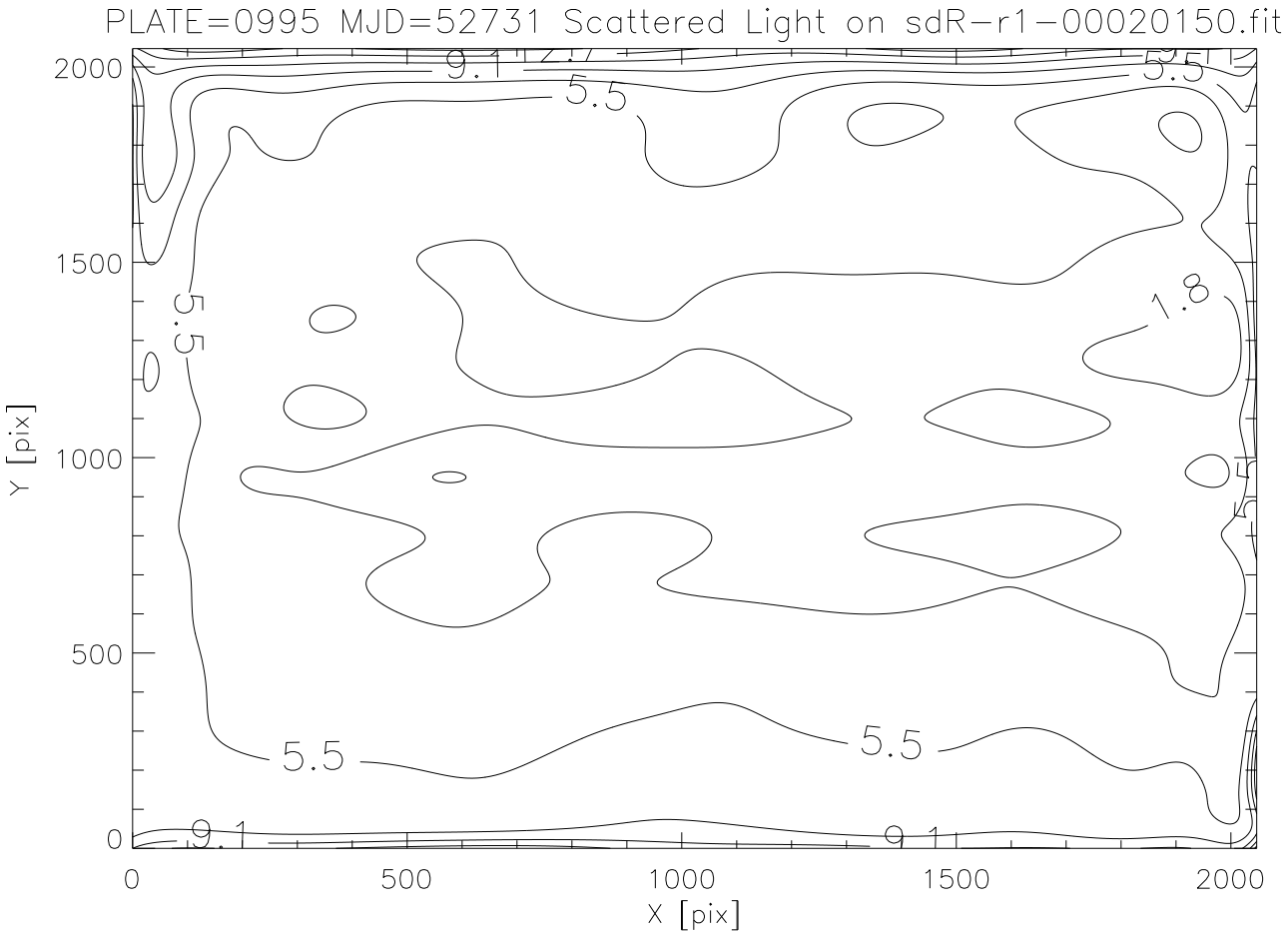

PLATE=0995 MJD=52731 sdR-r1-00020149.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.71 %
Fiber number
Focal Distance [mm]
Airmass

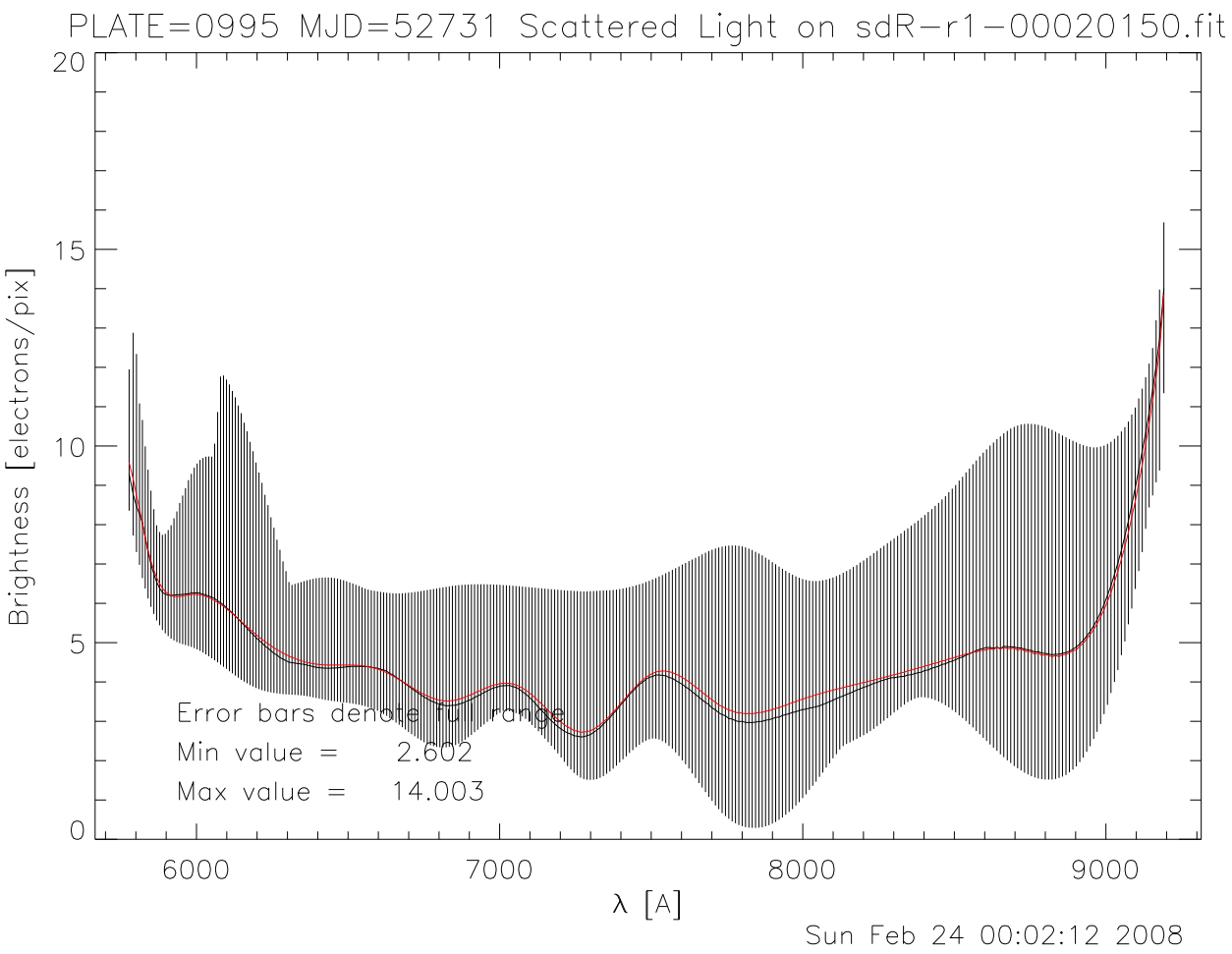

PLATE=0995 MJD=52731 sdR-r1-00020149.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.61 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

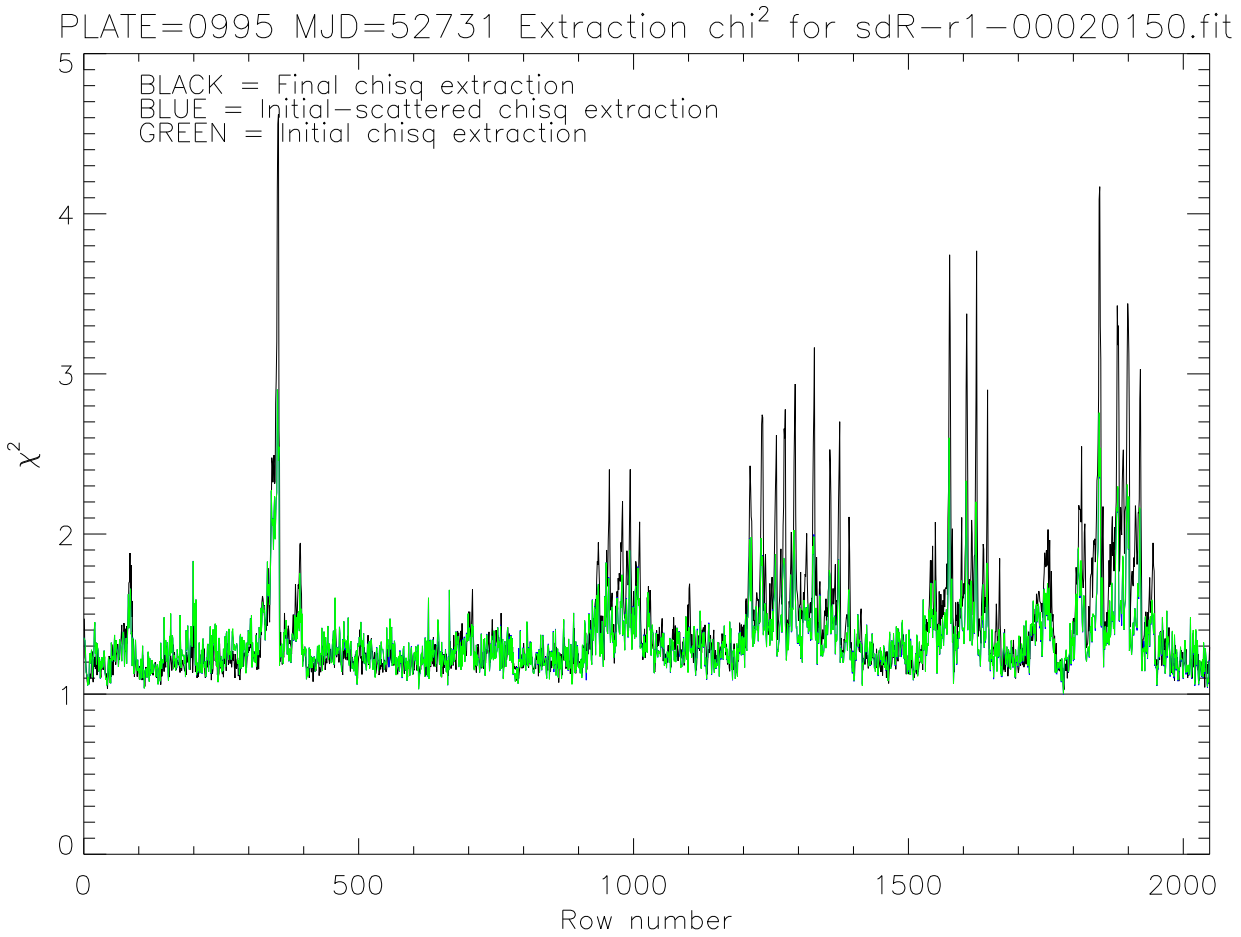

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.624
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 23:58:09 2008

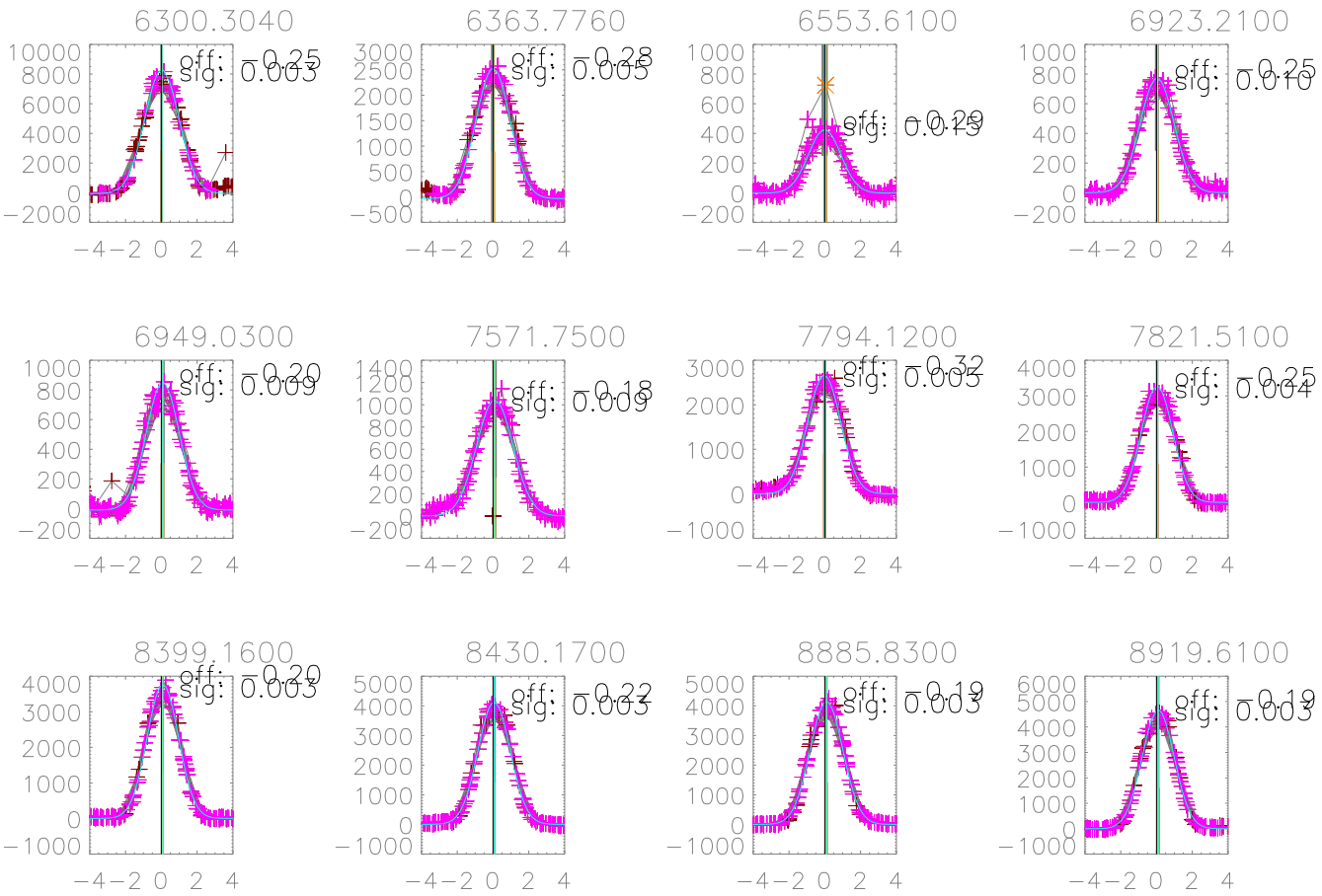

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020150.fi
38.2
49.1
38.2
38.2
27.3
16.4
0
Y [pix]
X [pix]
0
500
1000
1500
2000

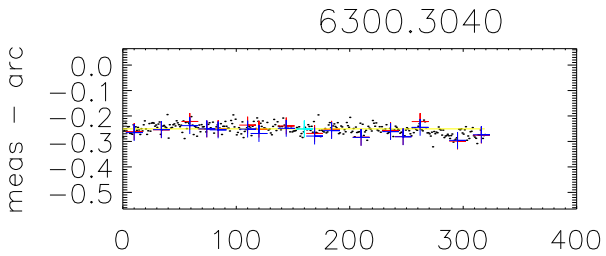

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020150.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.088
Max value = 47.250
Sat Feb 23 23:59:06 2008

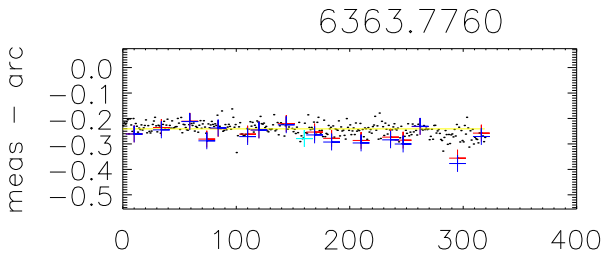

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020150.fit
9.1
5.5
5.5
5.5
1.8
5.5
5.5
5.5
9.1
9.1
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

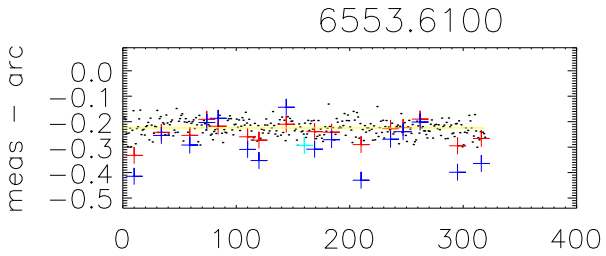

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020150.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.602
Max value = 14.003
Sun Feb 24 00:02:12 2008

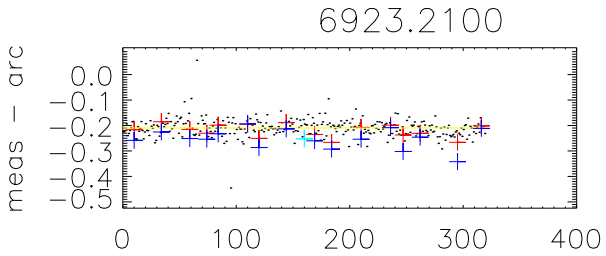

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r1−00020150.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

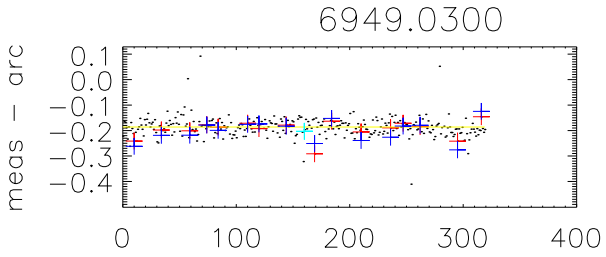

6300.3040
off: −0.25
sig: 0.003
6363.7760
off: −0.28
sig: 0.005
6553.6100
off: −0.29
sig: 0.015
6923.2100
off: −0.25
sig: 0.010
6949.0300
off: −0.20
sig: 0.009
7571.7500
off: −0.18
sig: 0.009
7794.1200
off: −0.32
sig: 0.005
7821.5100
off: −0.25
sig: 0.004
8399.1600
off: −0.20
sig: 0.003
8430.1700
off: −0.22
sig: 0.003
8885.8300
off: −0.19
sig: 0.003
8919.6100
off: −0.19
sig: 0.003

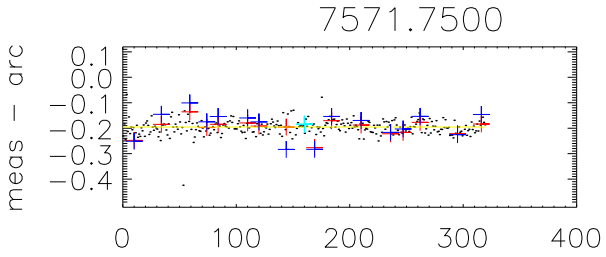

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

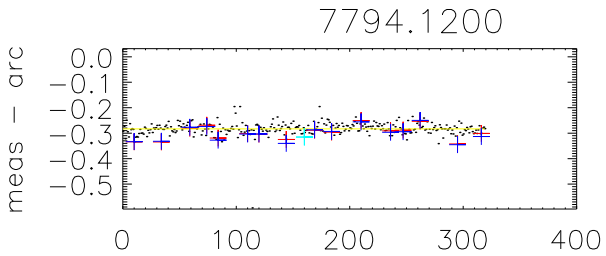

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

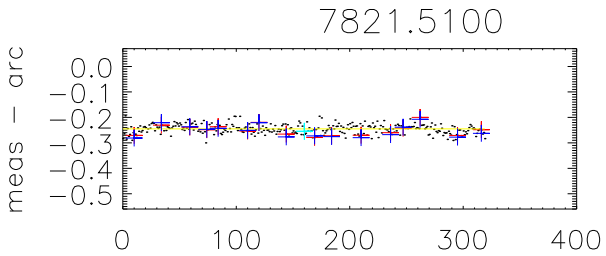

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

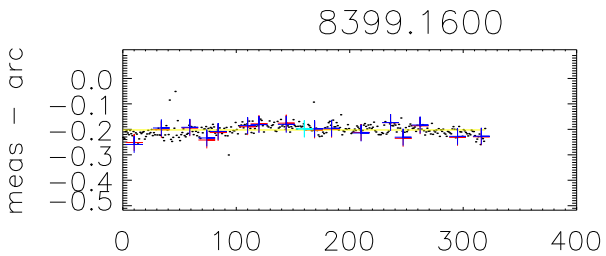

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

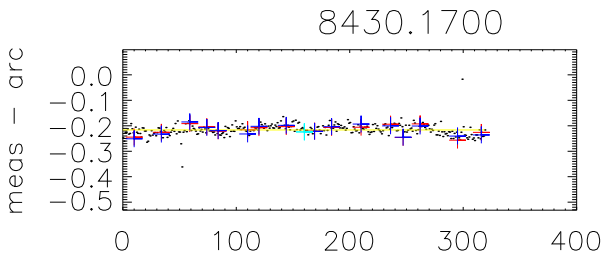

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

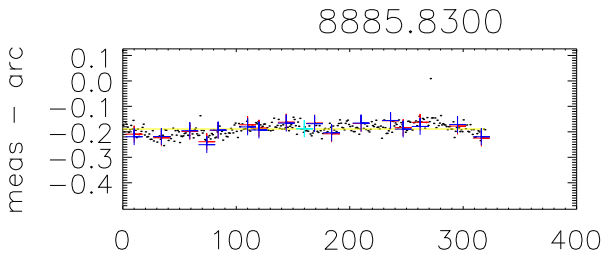

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

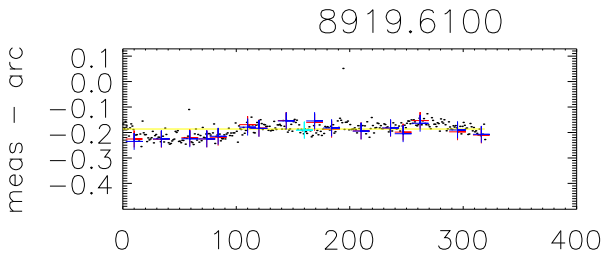

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

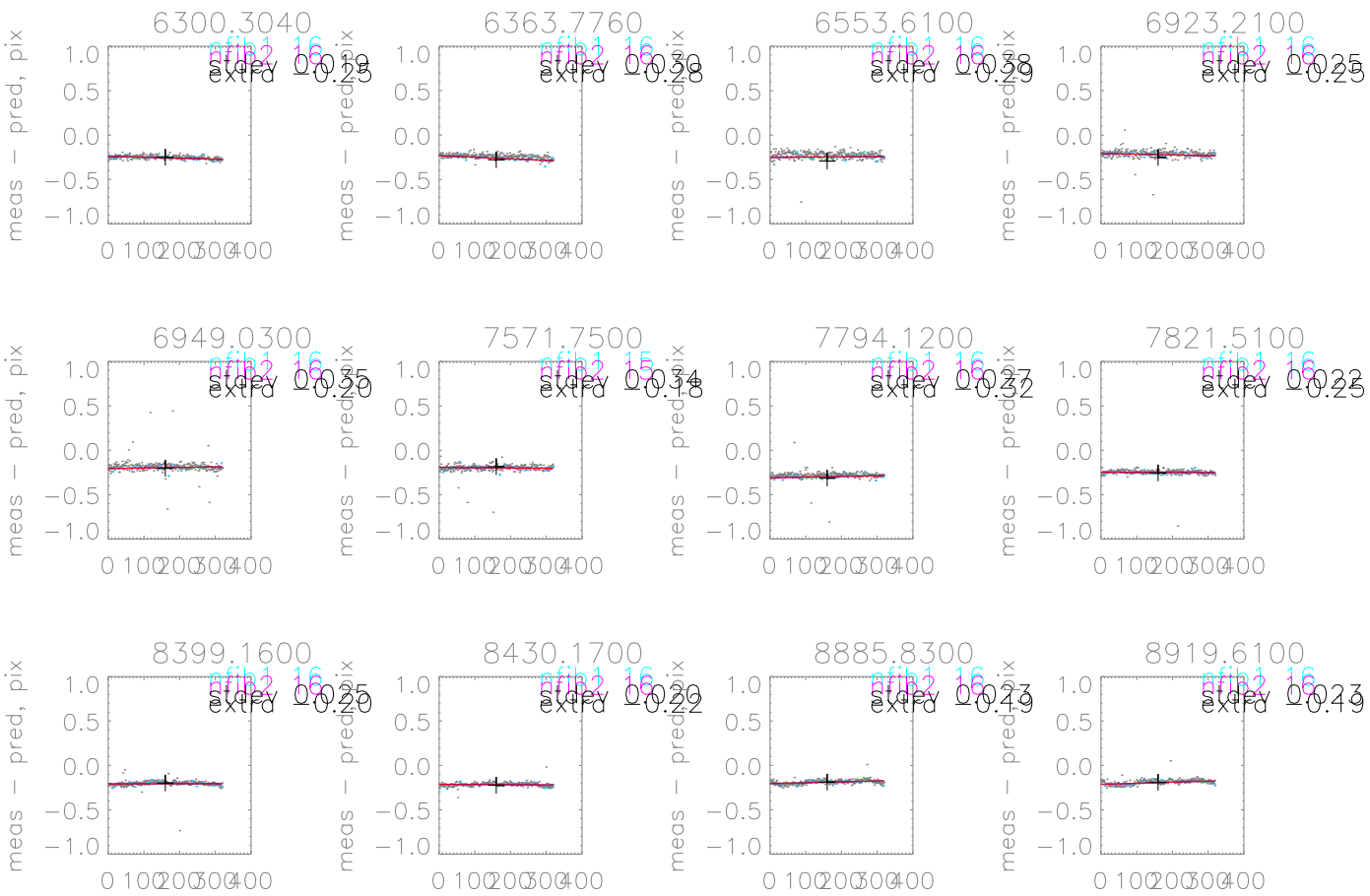

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

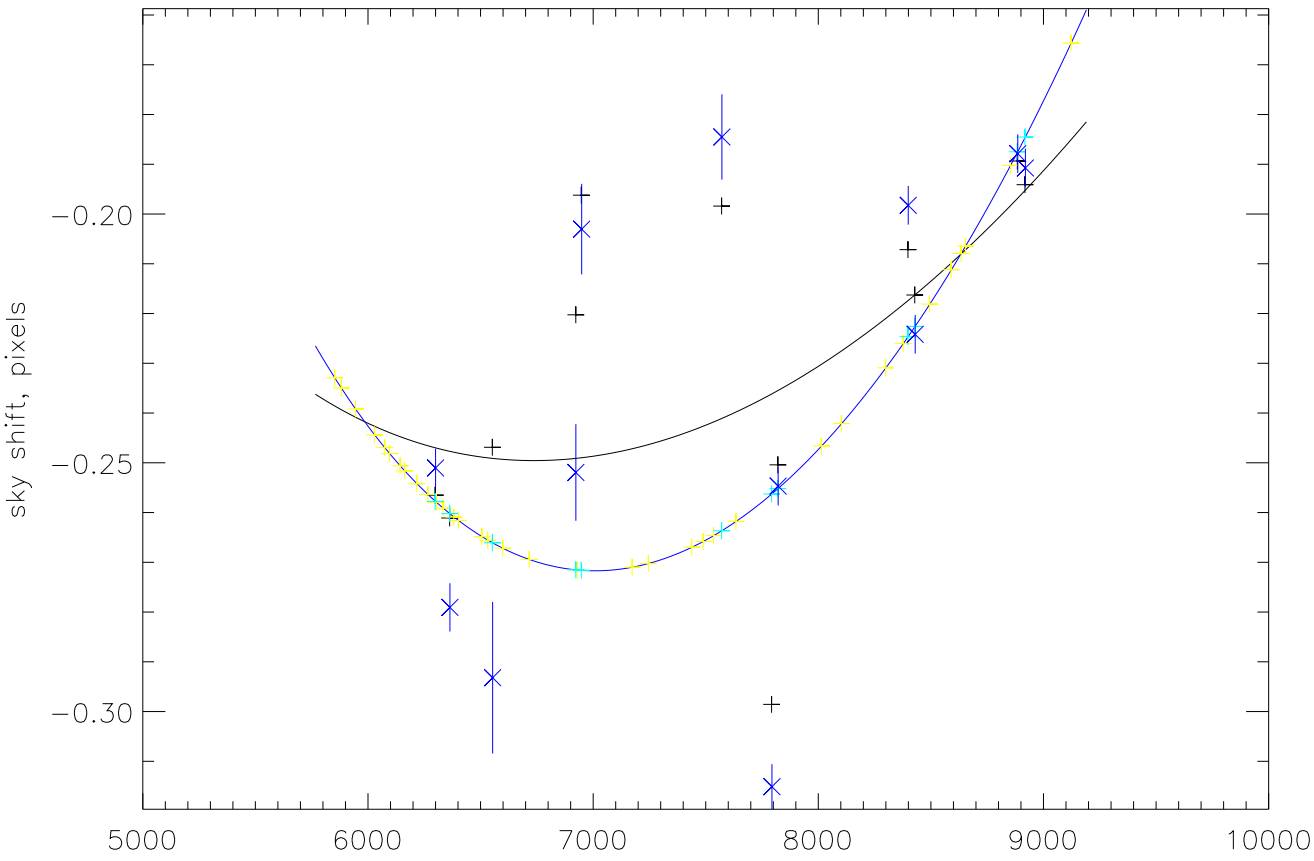

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

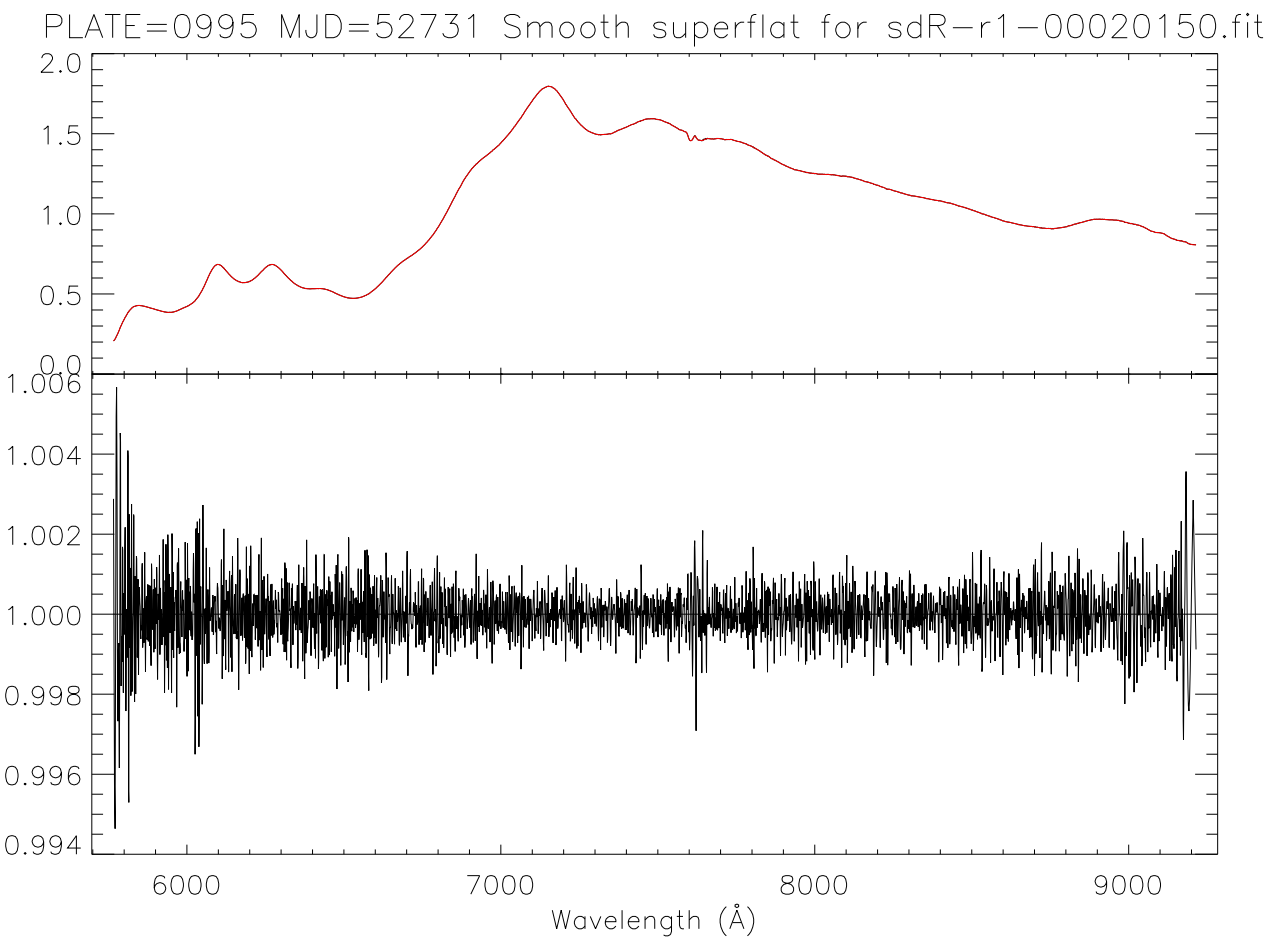

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

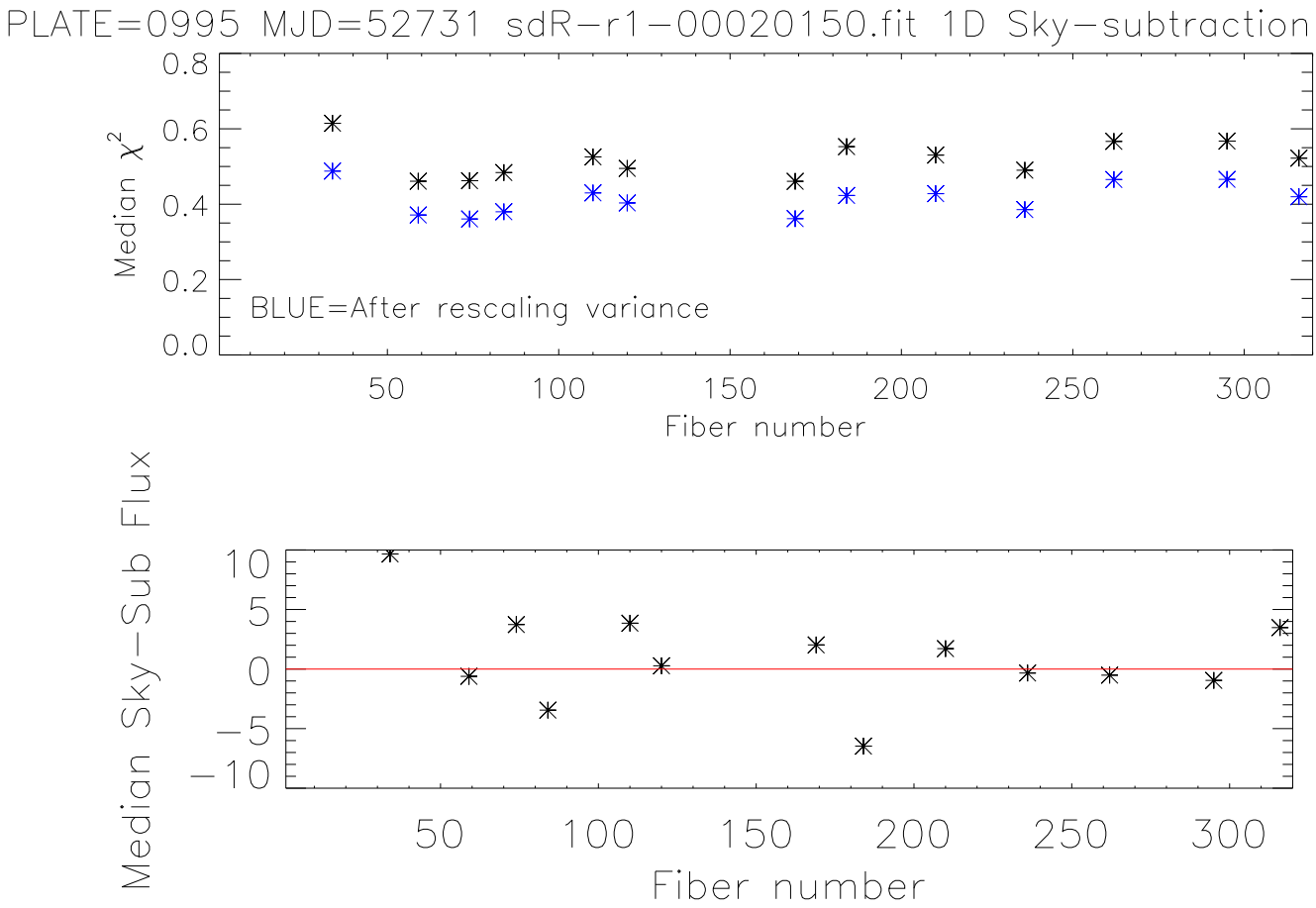

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

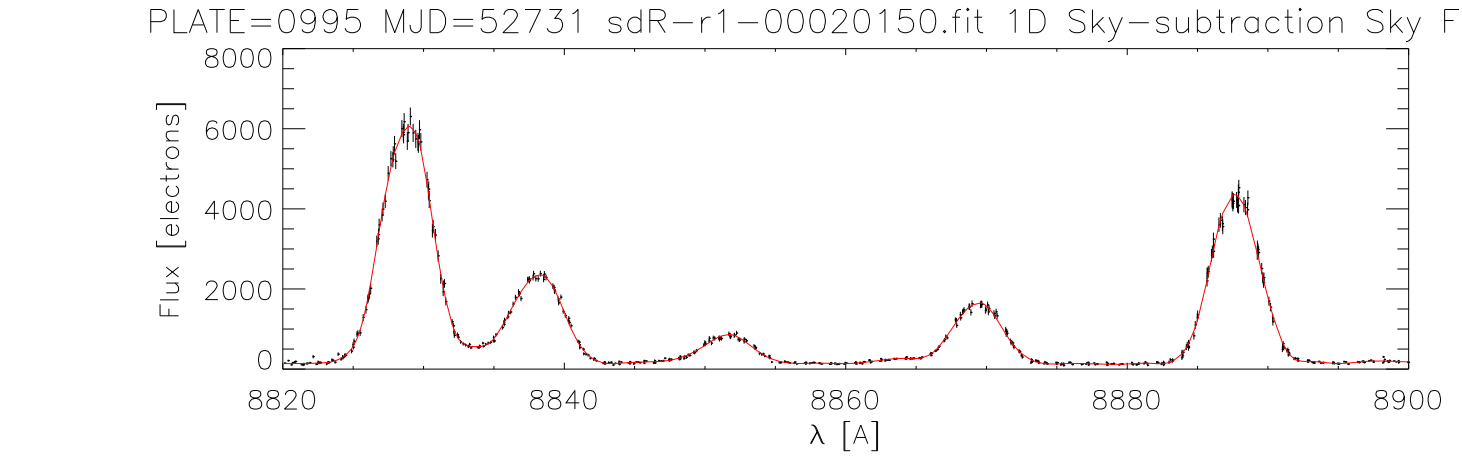

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd2 16
stdev 0.19
extrd 0.25
stdev 0.30
extrd 0.28
stdev 0.38
extrd 0.29
stdev 0.25
extrd 0.25
stdev 0.35
extrd 0.20
stdev 0.34
extrd 0.18
stdev 0.27
extrd 0.32
stdev 0.22
extrd 0.25
stdev 0.25
extrd 0.20
stdev 0.20
extrd 0.22
stdev 0.23
extrd 0.49
stdev 0.23
extrd 0.49

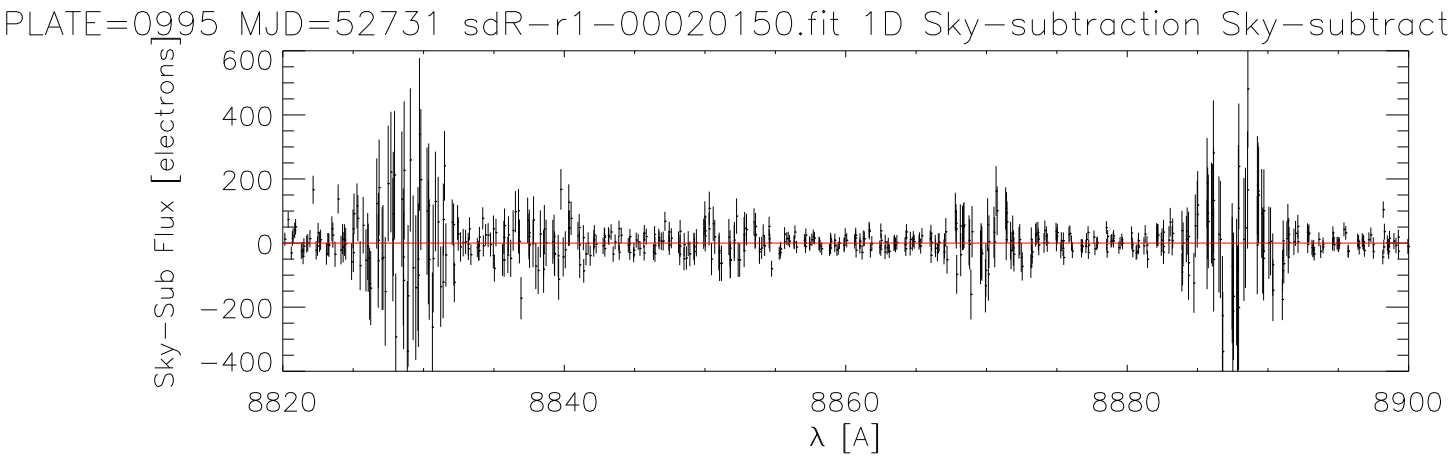

sky shift, pixels
−0.20
−0.25
−0.30
5000
6000
7000
8000
9000
10000

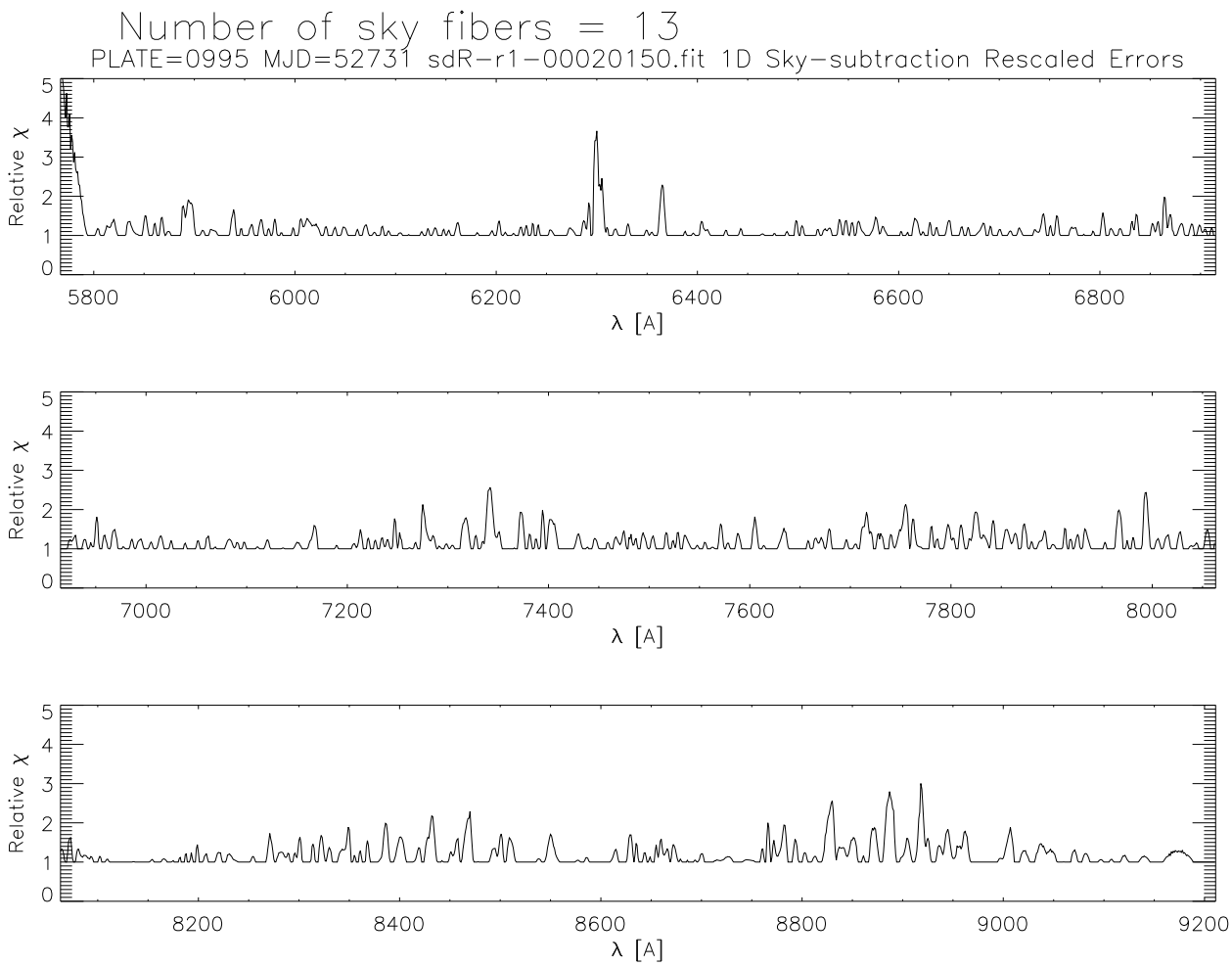
es= −0.0000

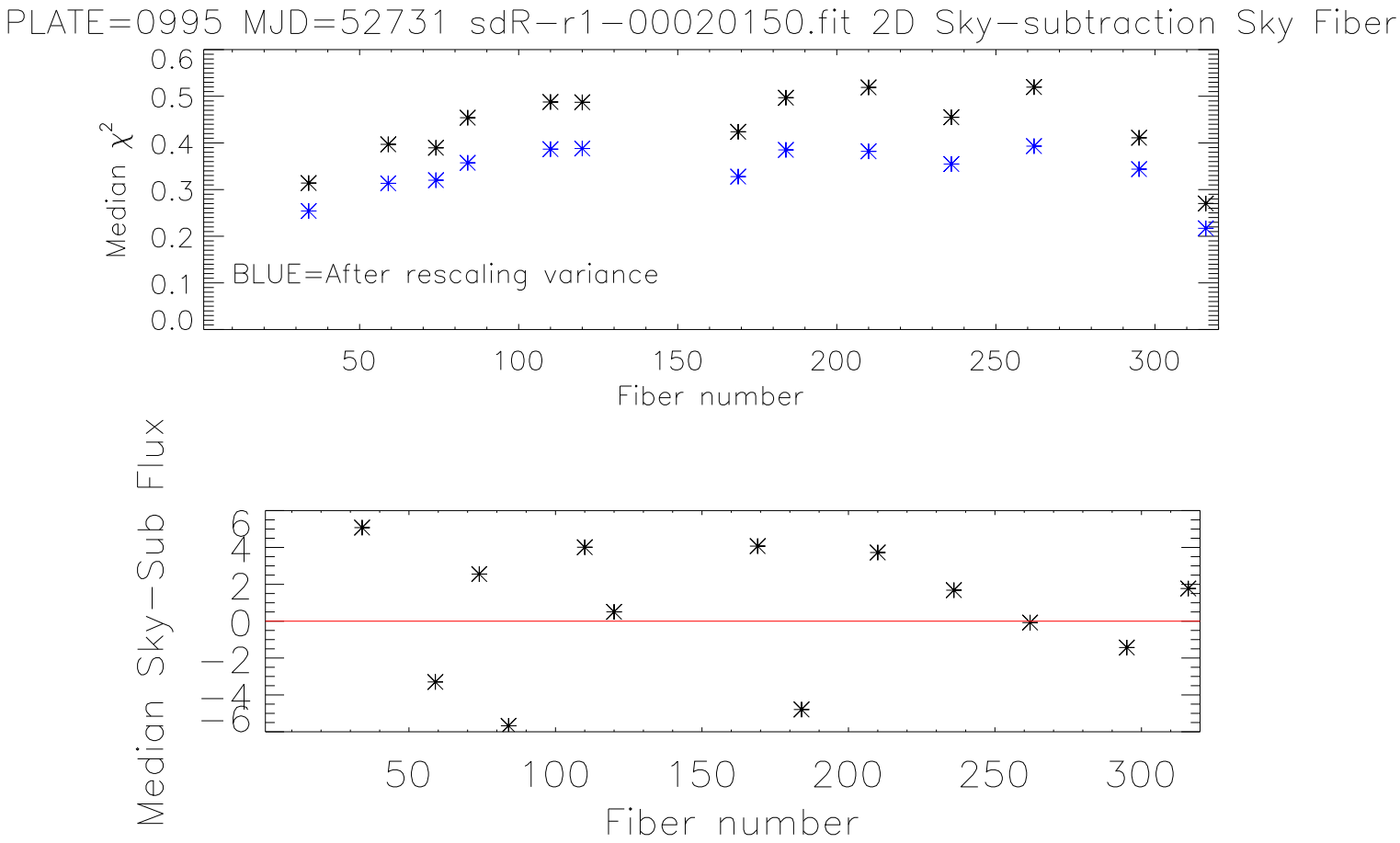

PLATE=0995 MJD=52731 Smooth superflat for sdR−r1−00020150.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

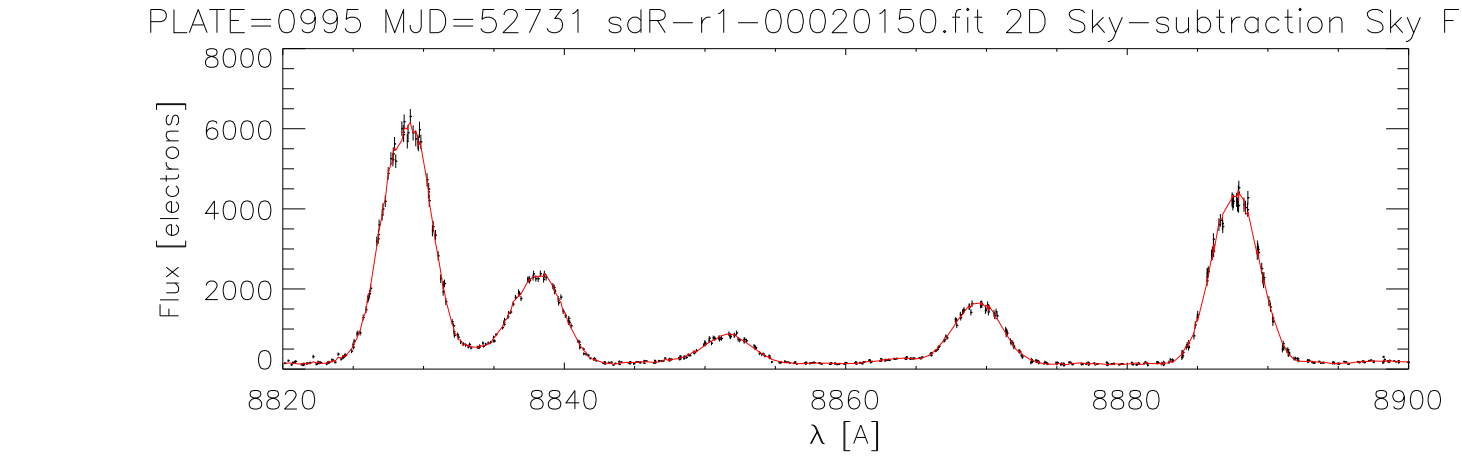

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

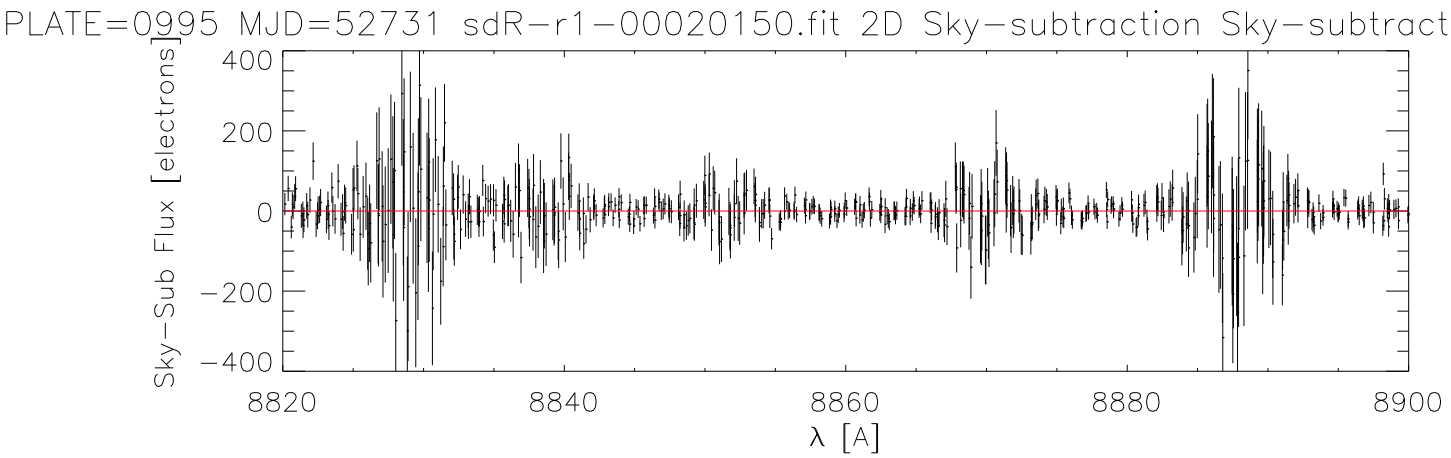

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

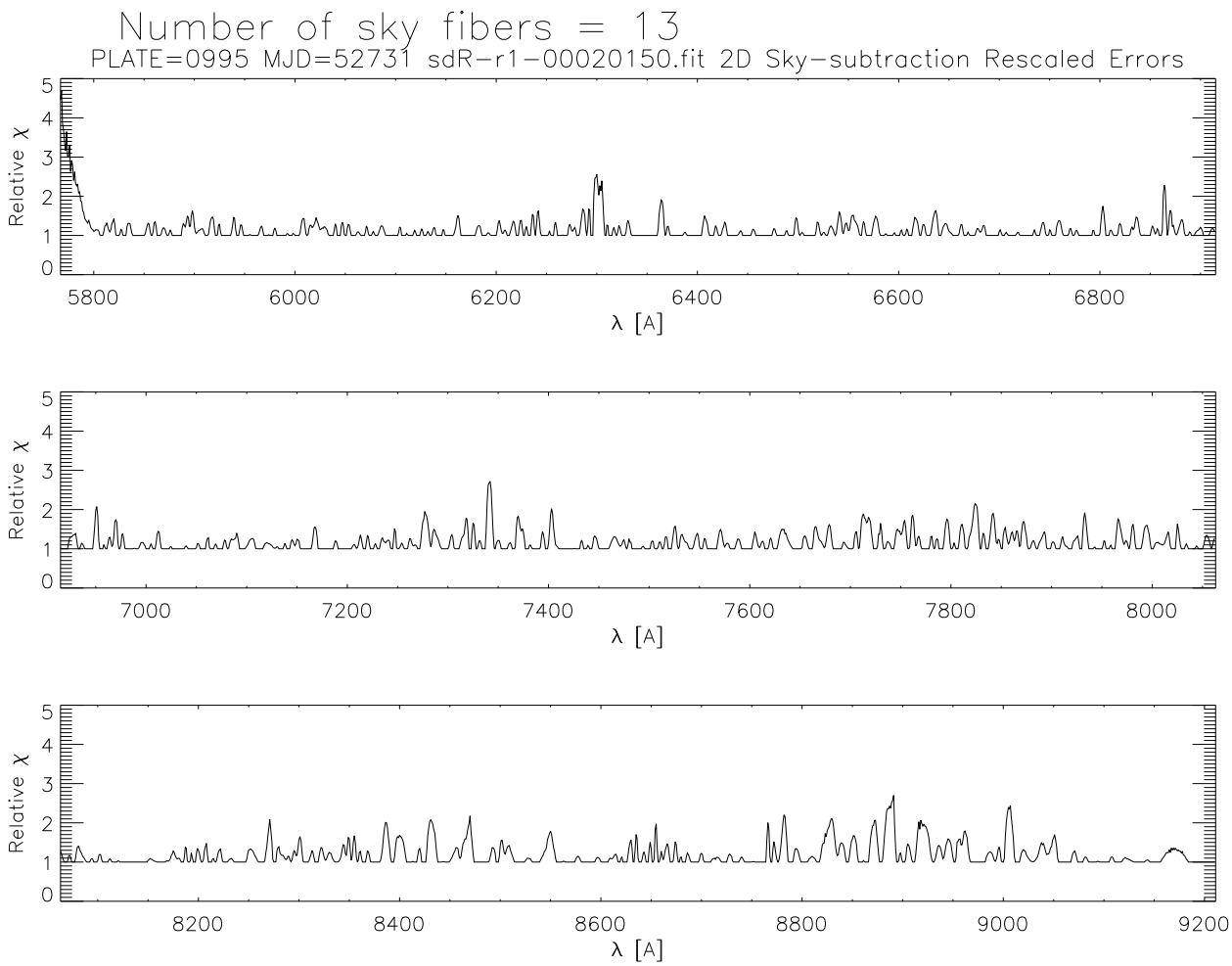

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

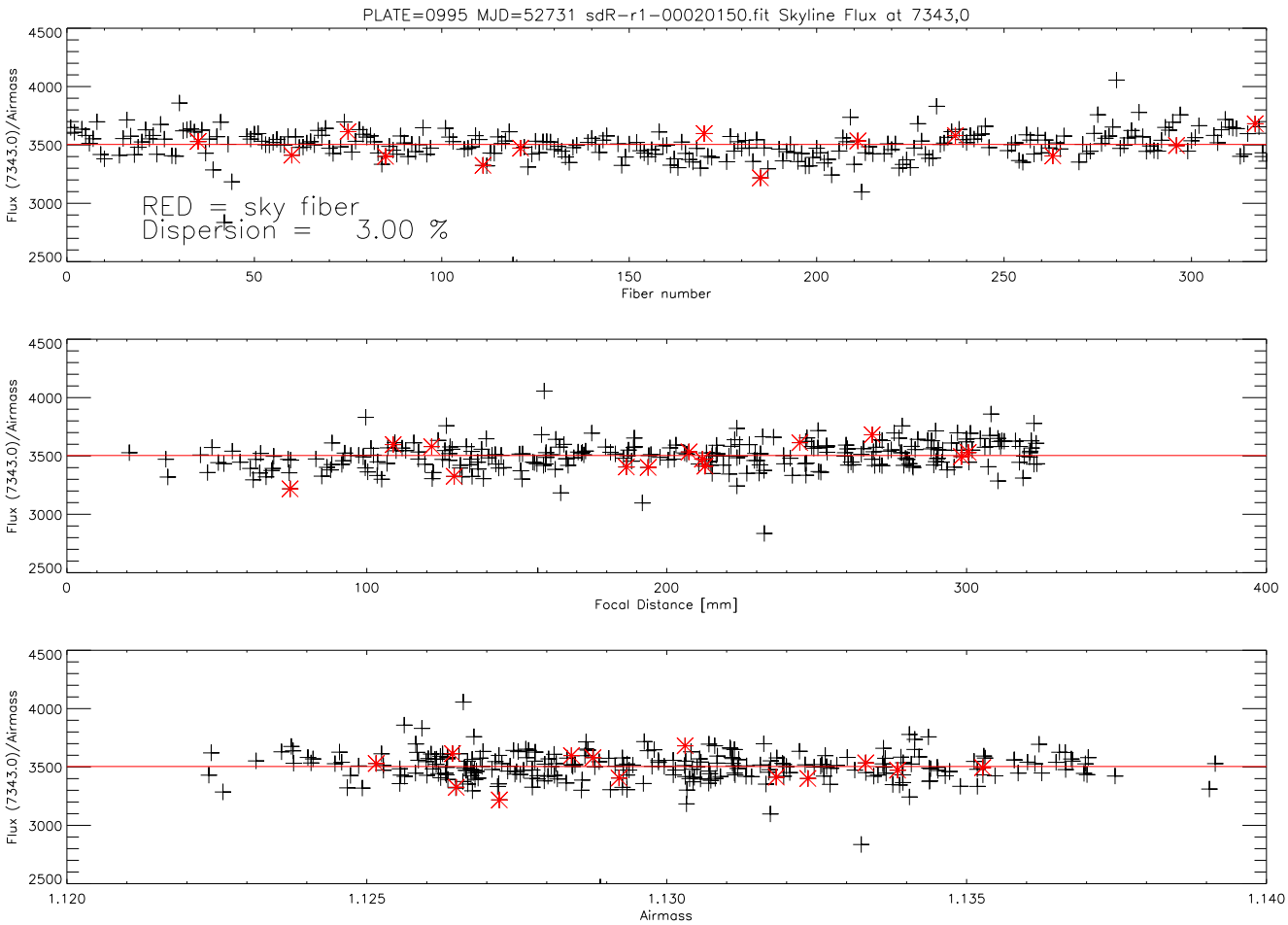

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

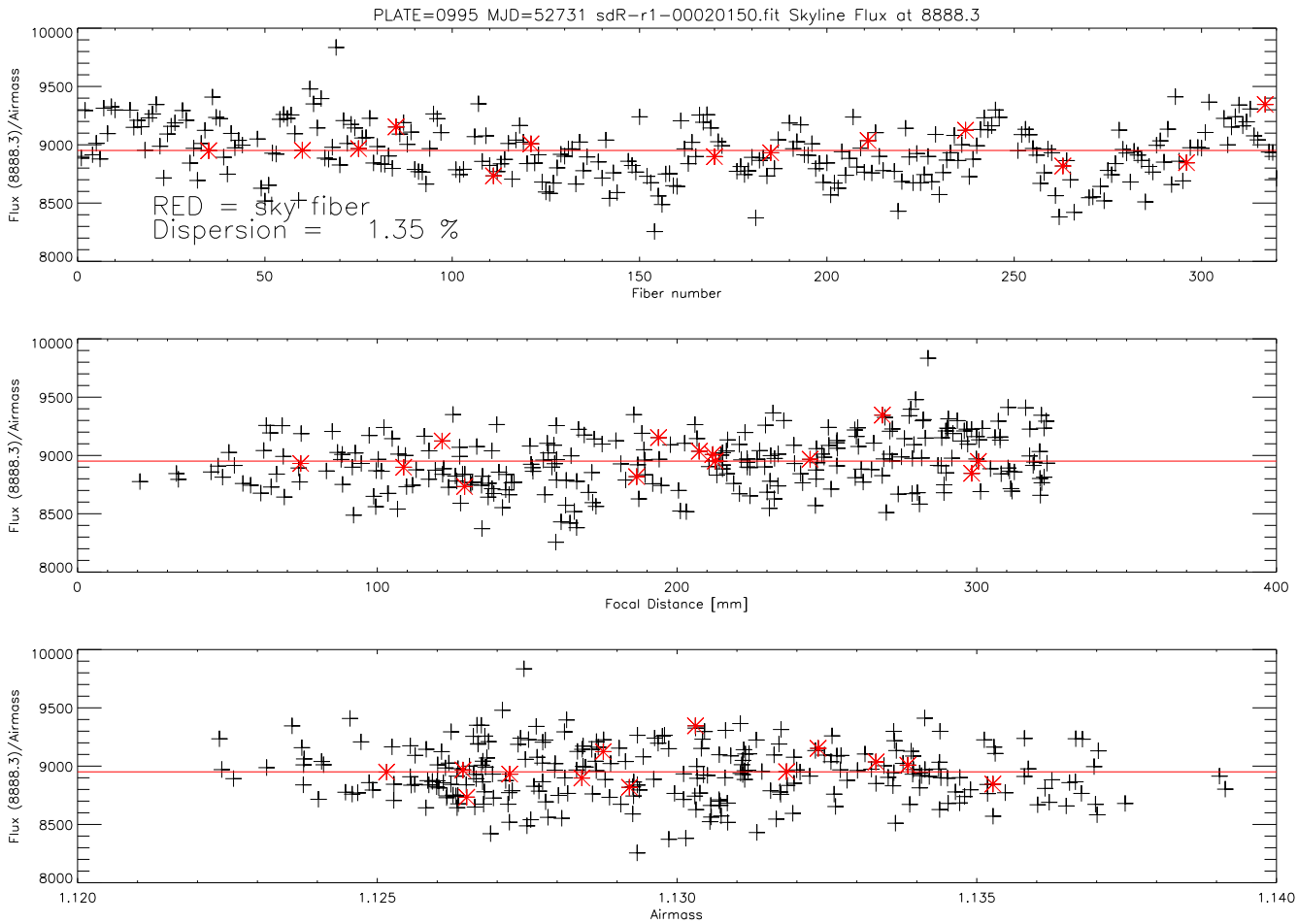

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

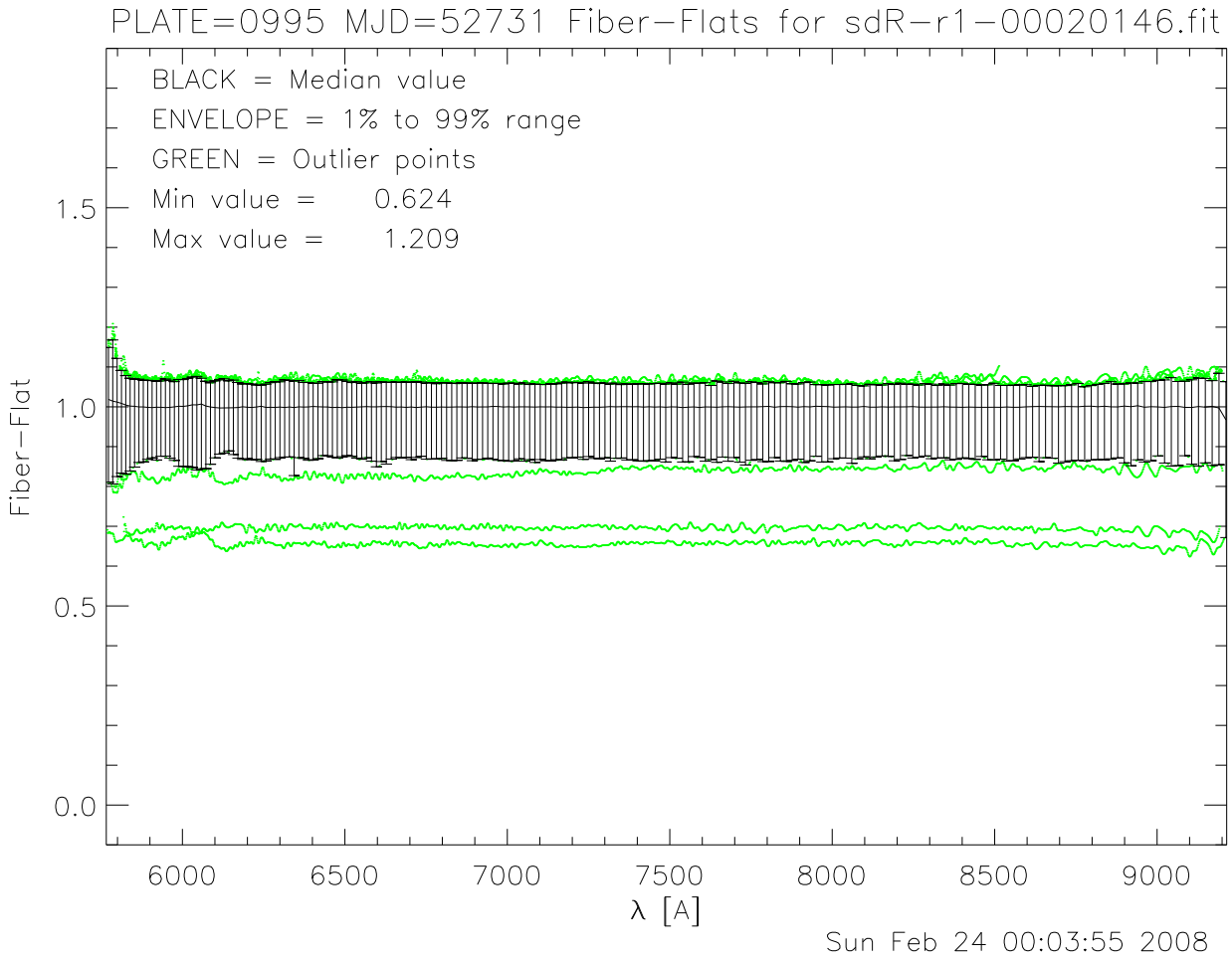

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

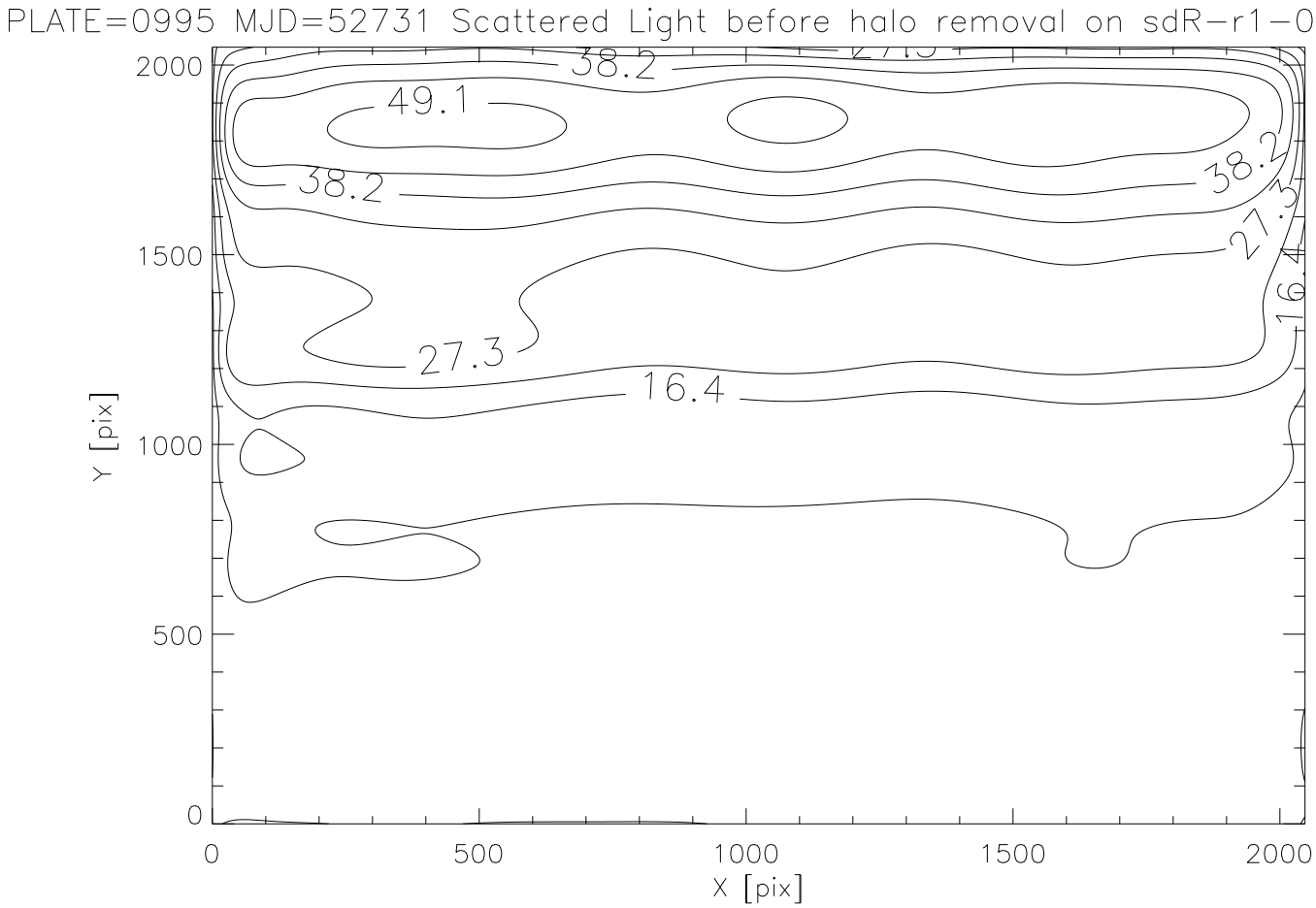

PLATE=0995 MJD=52731 sdR-r1-00020150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

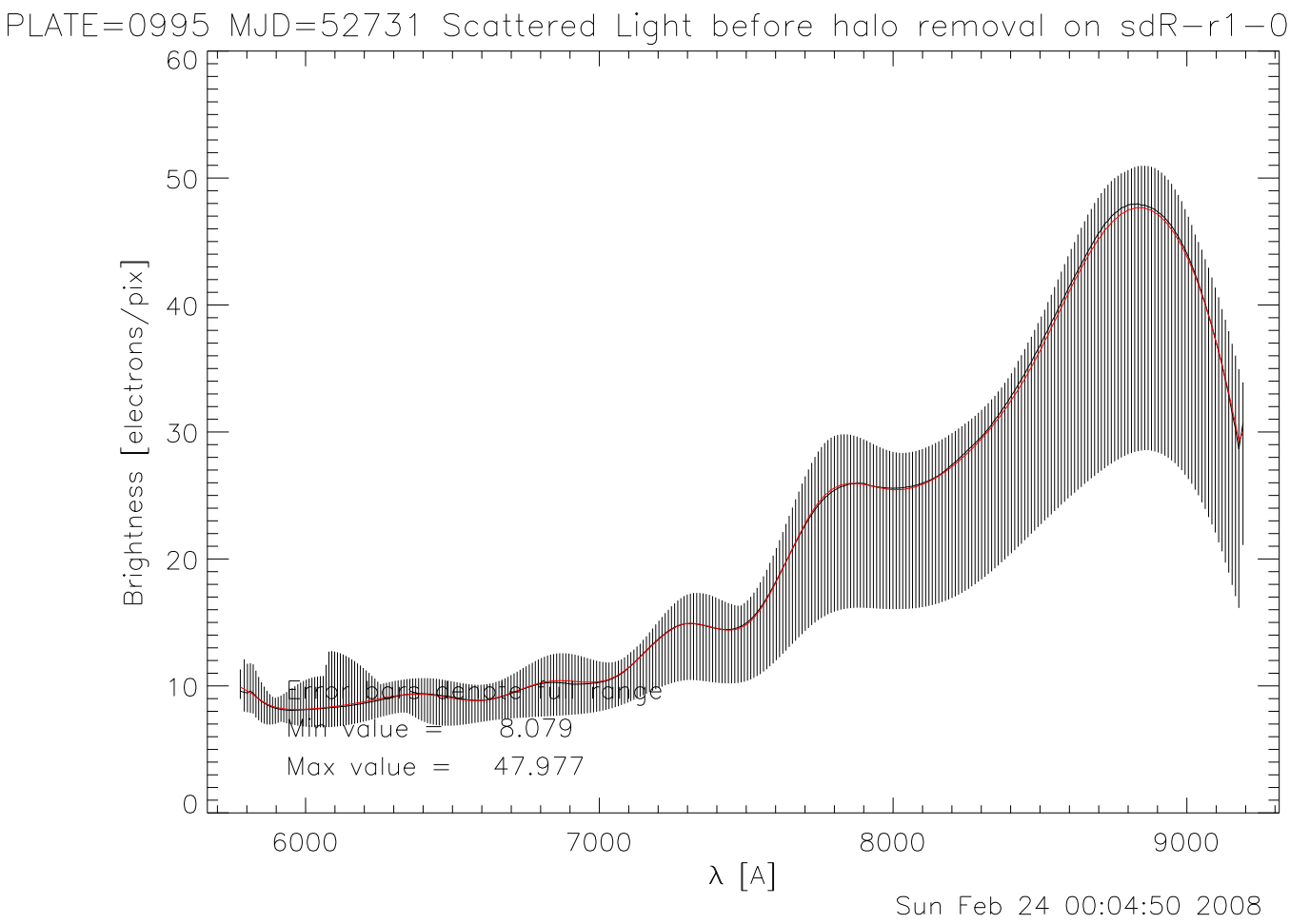

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

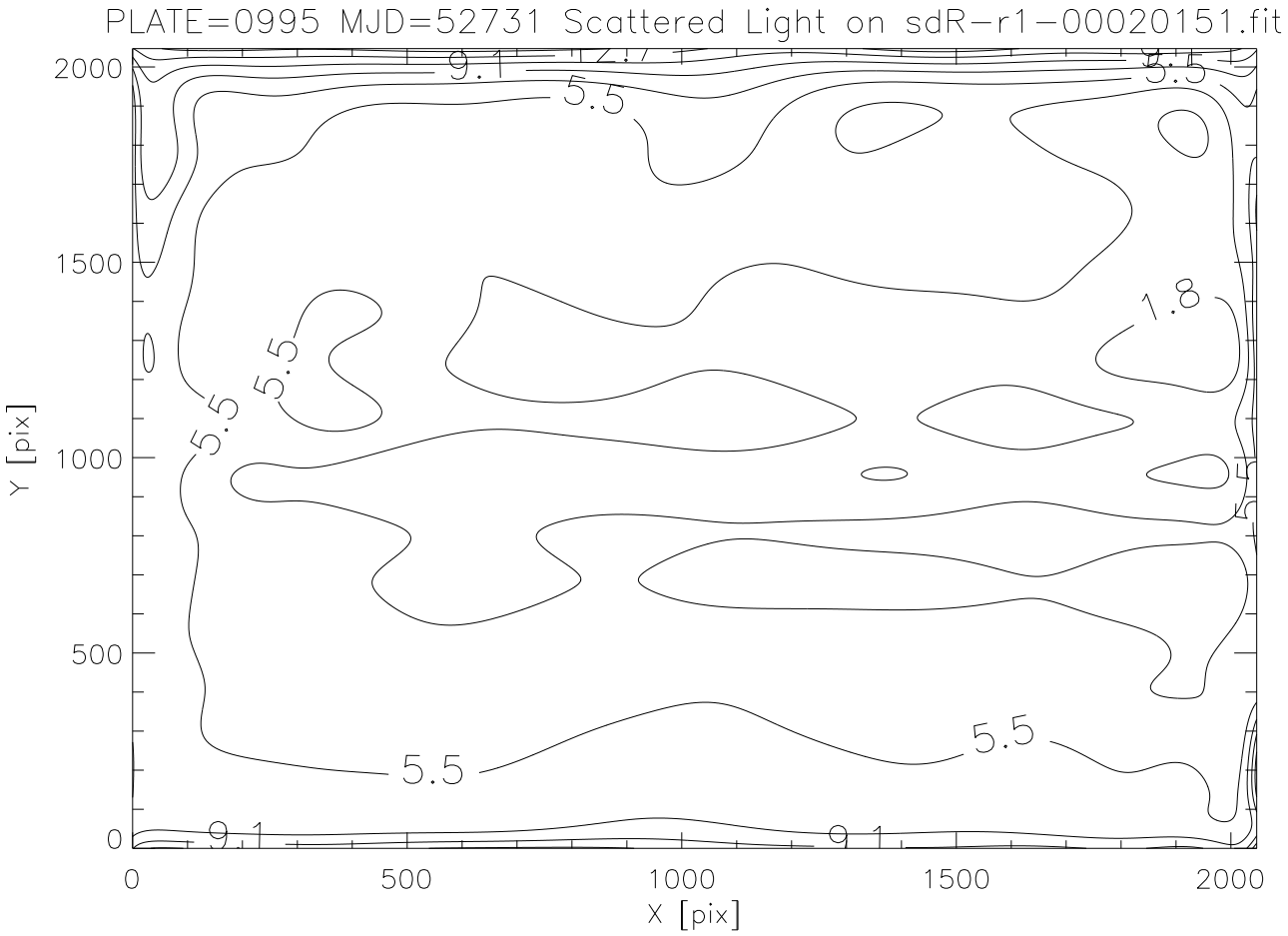

PLATE=0995 MJD=52731 sdR-r1-00020150.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Focal Distance [mm]
Airmass

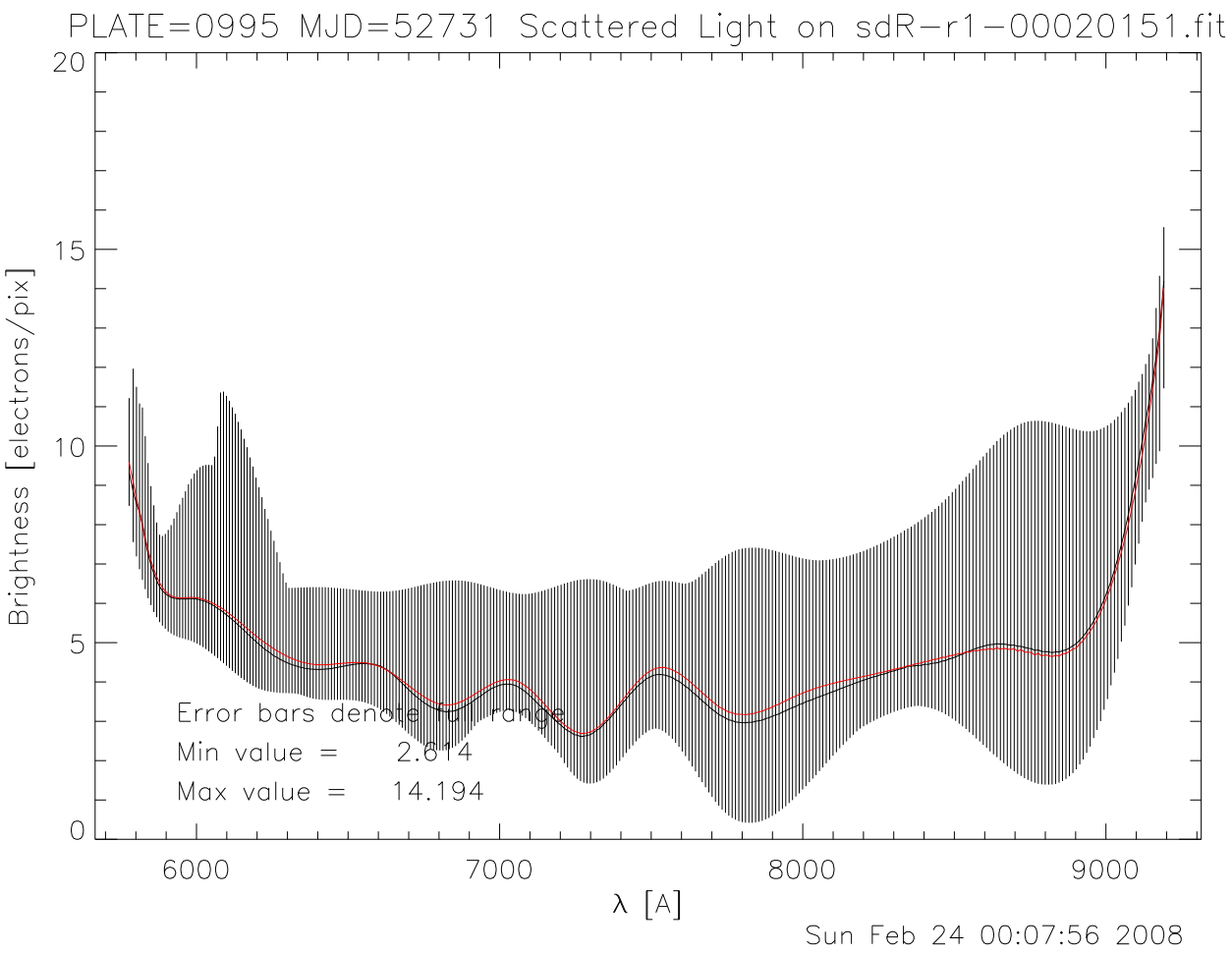

PLATE=0995 MJD=52731 sdR-r1-00020150.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.35 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

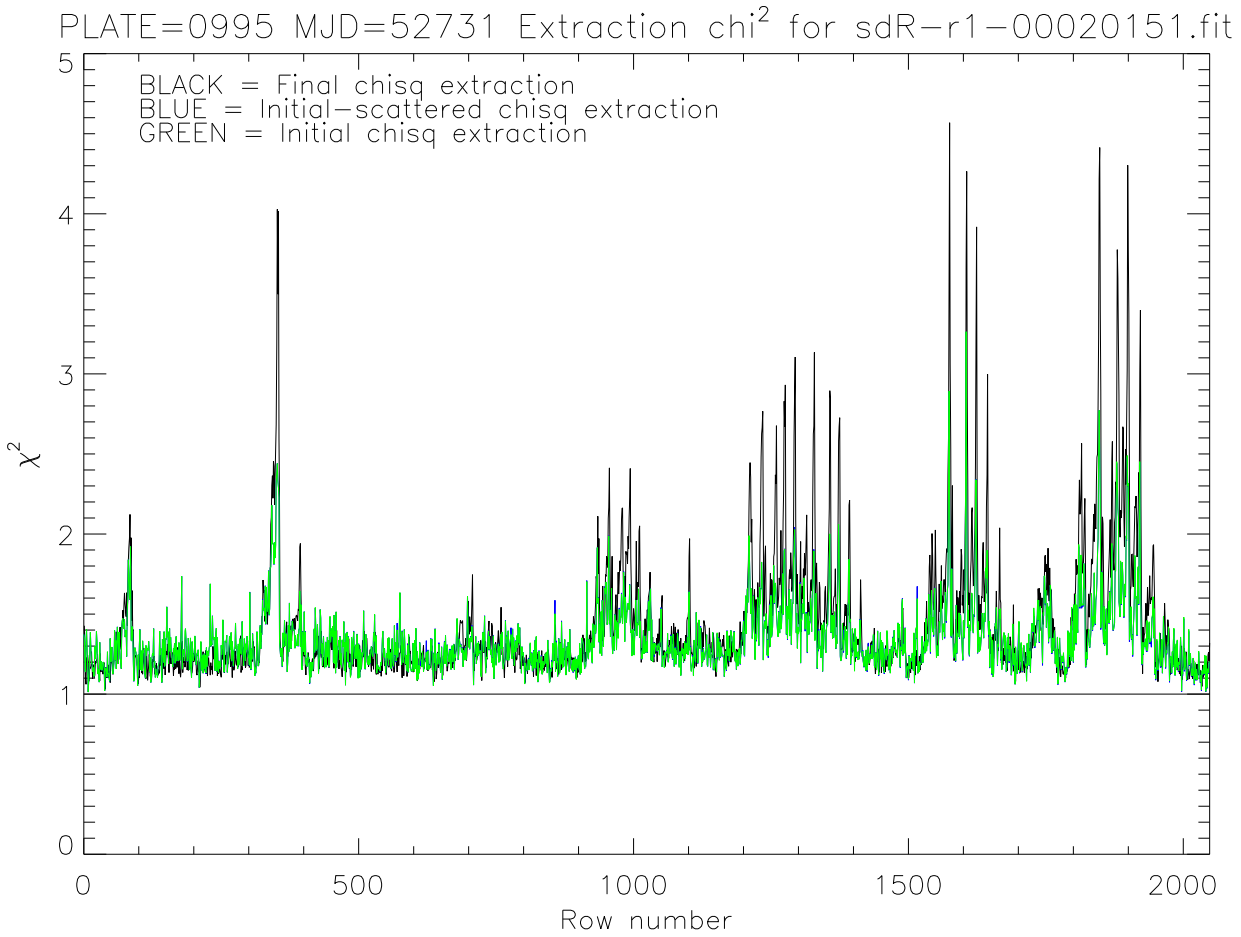

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.624
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:03:55 2008

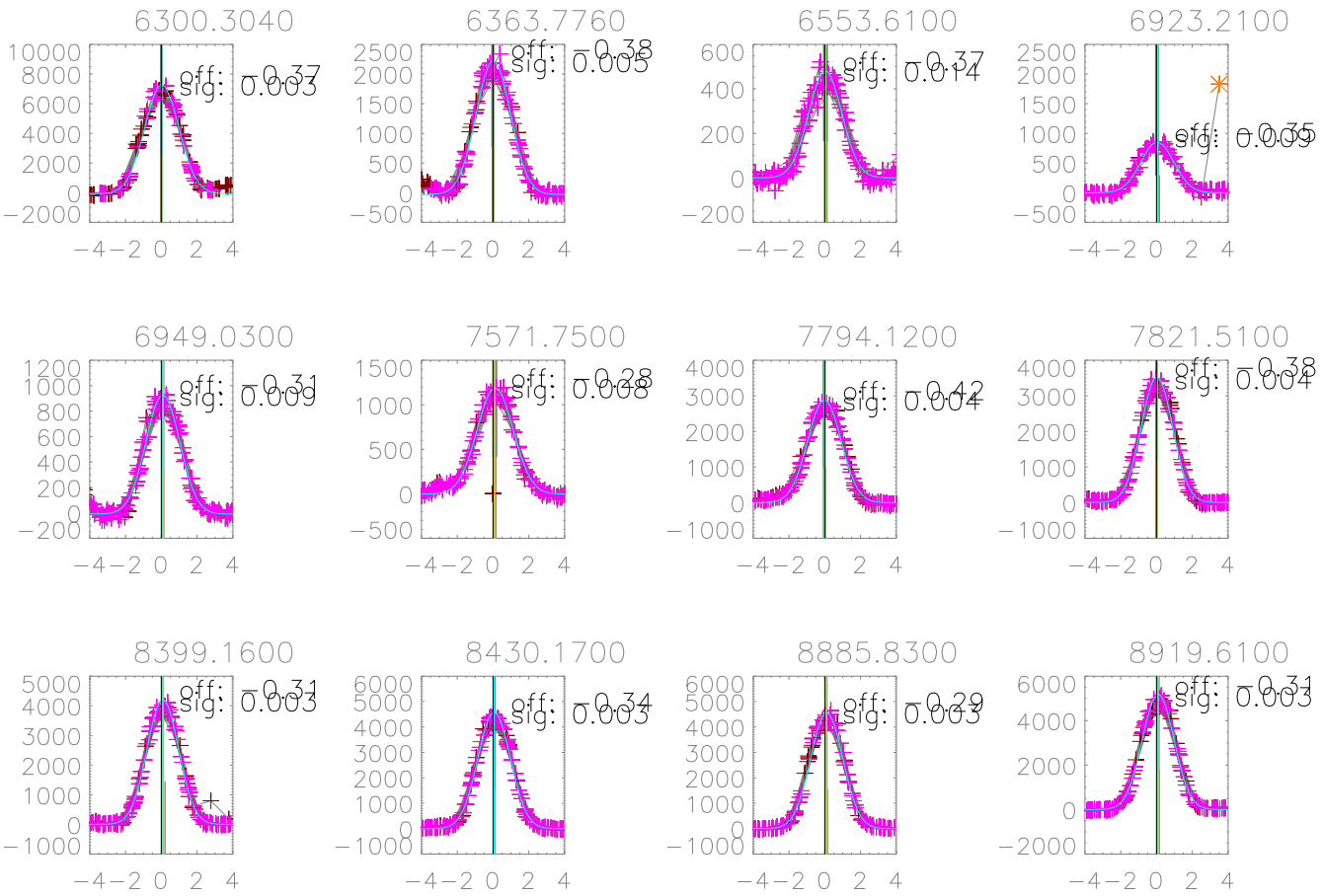

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020151.fi
38.2
49.1
38.2
38.2
27.3
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

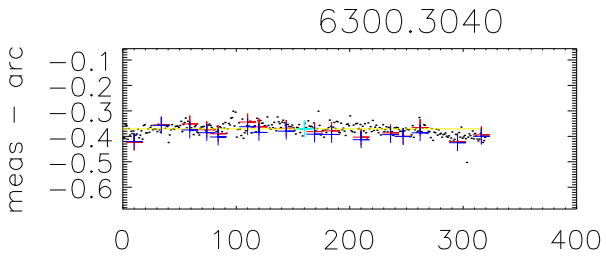

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020151.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.079
Max value = 47.977
Sun Feb 24 00:04:50 2008

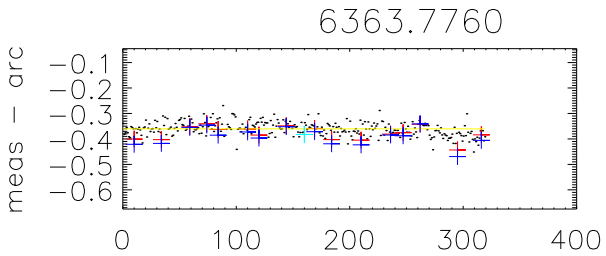

PLATE=0995 MJD=52731 Scattered Light on sdR−r1−00020151.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
5.5
1.8

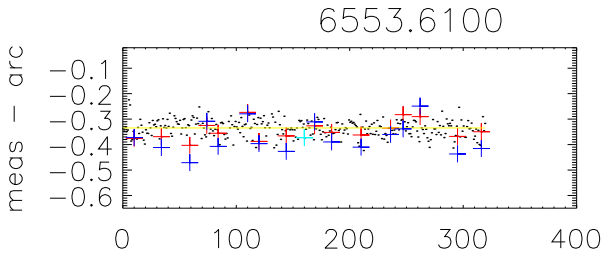

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020151.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.614
Max value = 14.194
Sun Feb 24 00:07:56 2008

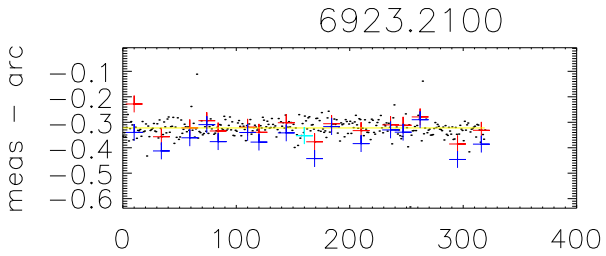

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r1−00020151.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

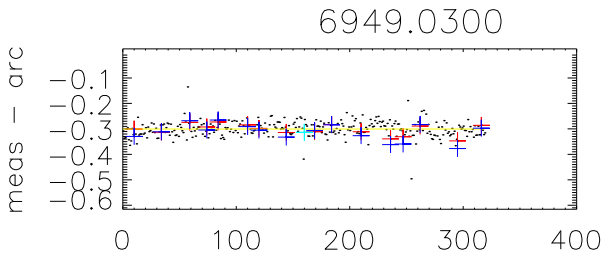

6300.3040
off: −0.37
sig: 0.003
6363.7760
off: −0.38
sig: 0.005
6553.6100
off: −0.37
sig: 0.014
6923.2100
off: −0.35
sig: 0.009
6949.0300
off: −0.31
sig: 0.009
7571.7500
off: −0.28
sig: 0.008
7794.1200
off: −0.42
sig: 0.004
7821.5100
off: −0.38
sig: 0.004
8399.1600
off: −0.31
sig: 0.003
8430.1700
off: −0.34
sig: 0.003
8885.8300
off: −0.29
sig: 0.003
8919.6100
off: −0.31
sig: 0.003

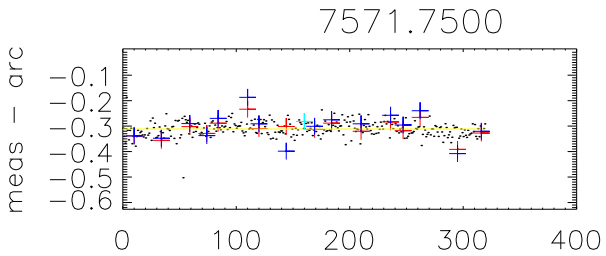

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

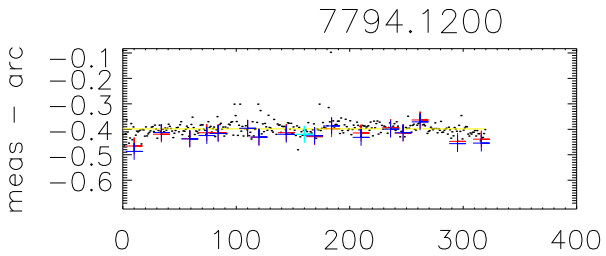

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

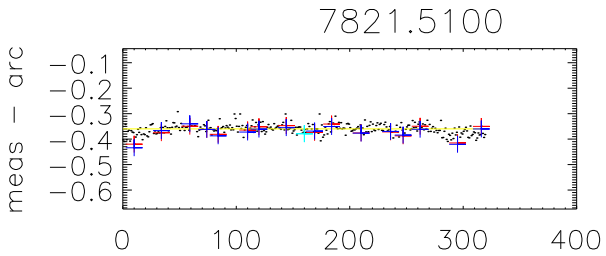

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

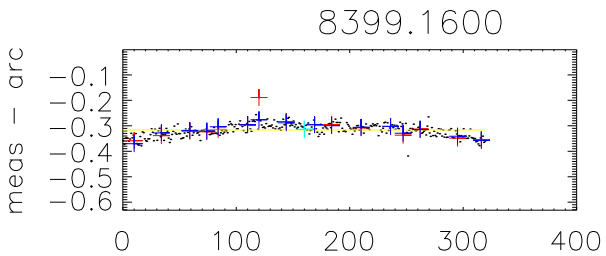

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

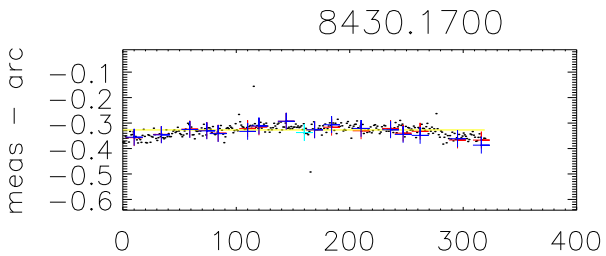

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

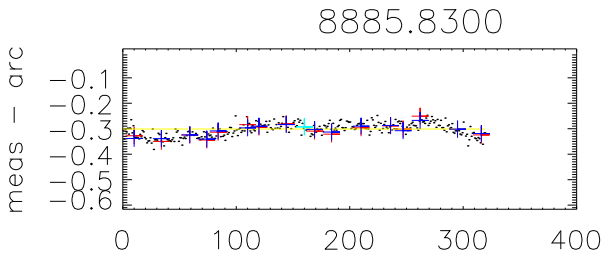

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

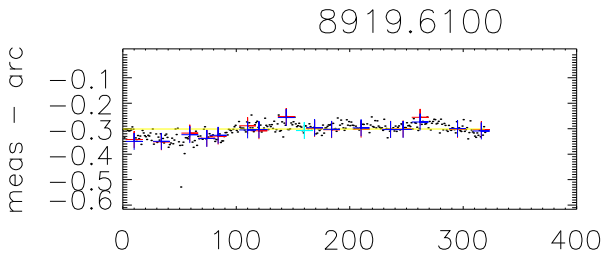

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

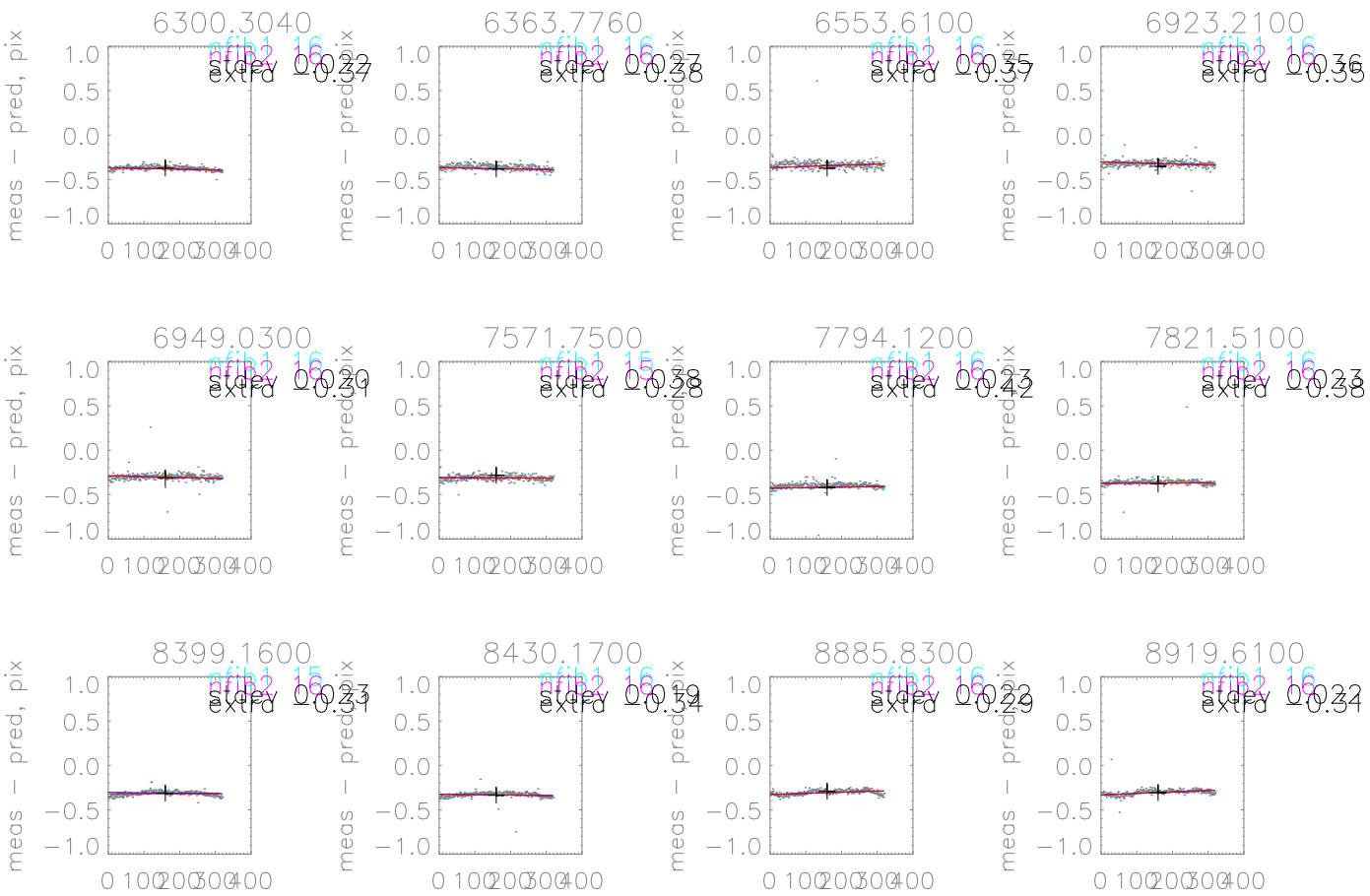

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

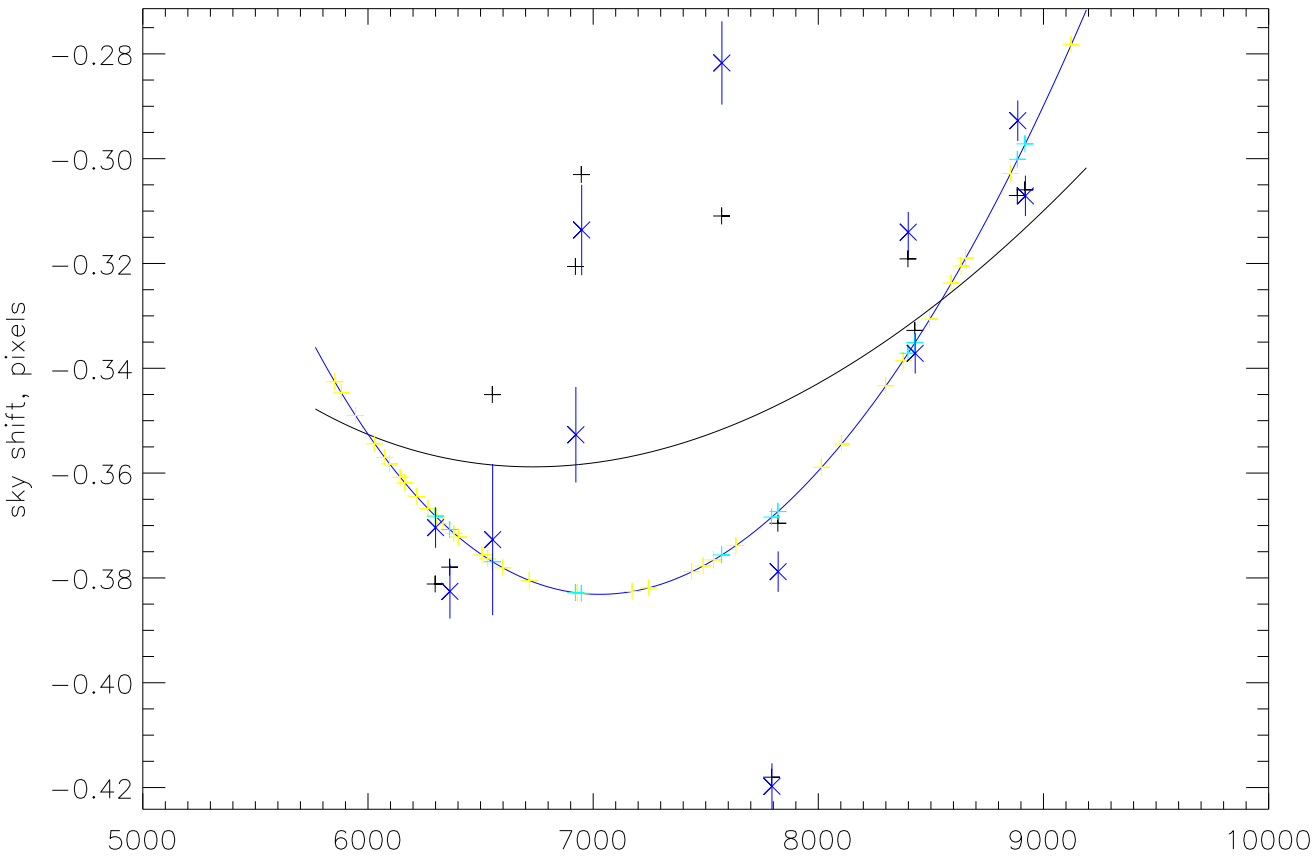

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

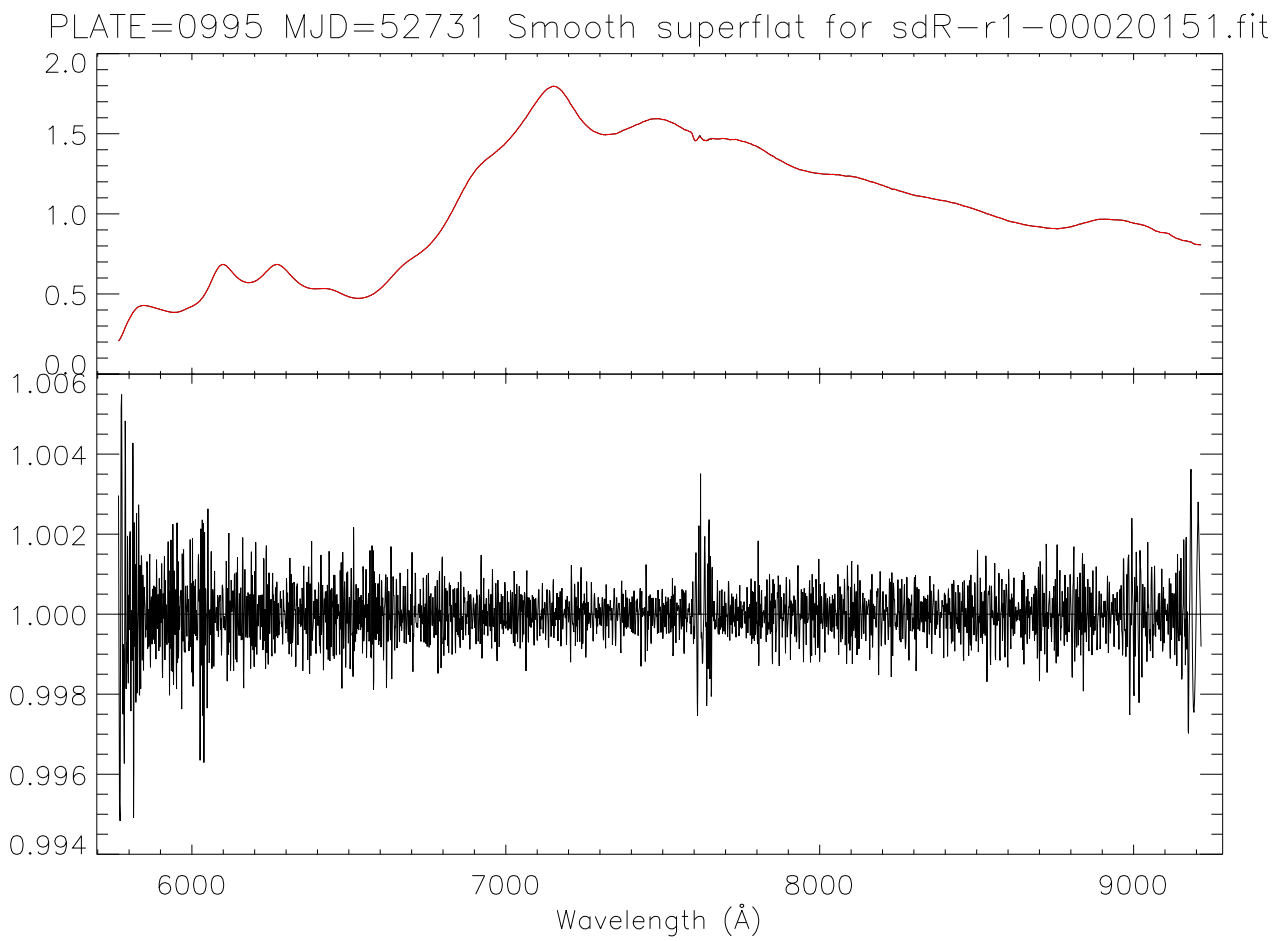

8885.8300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

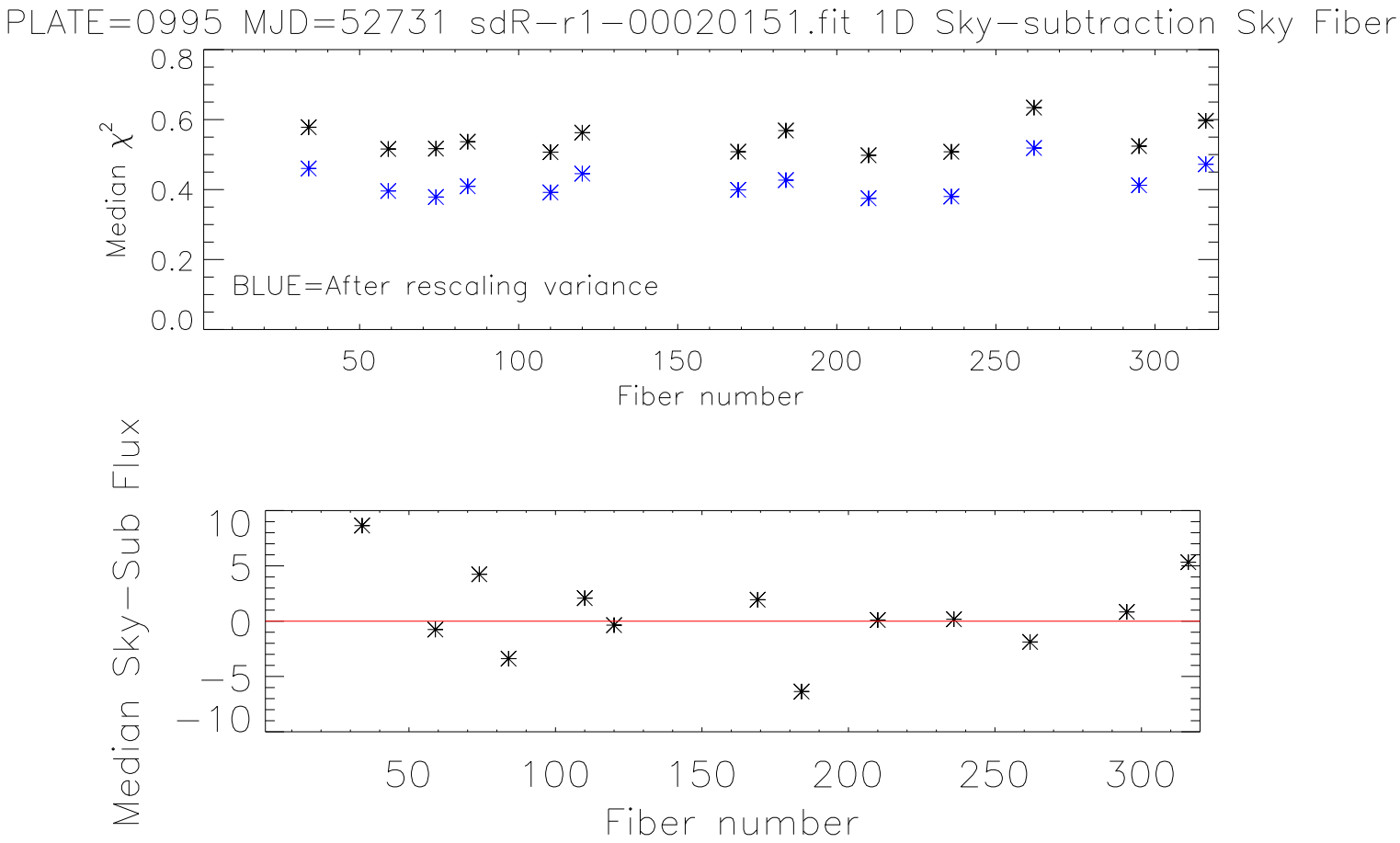

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

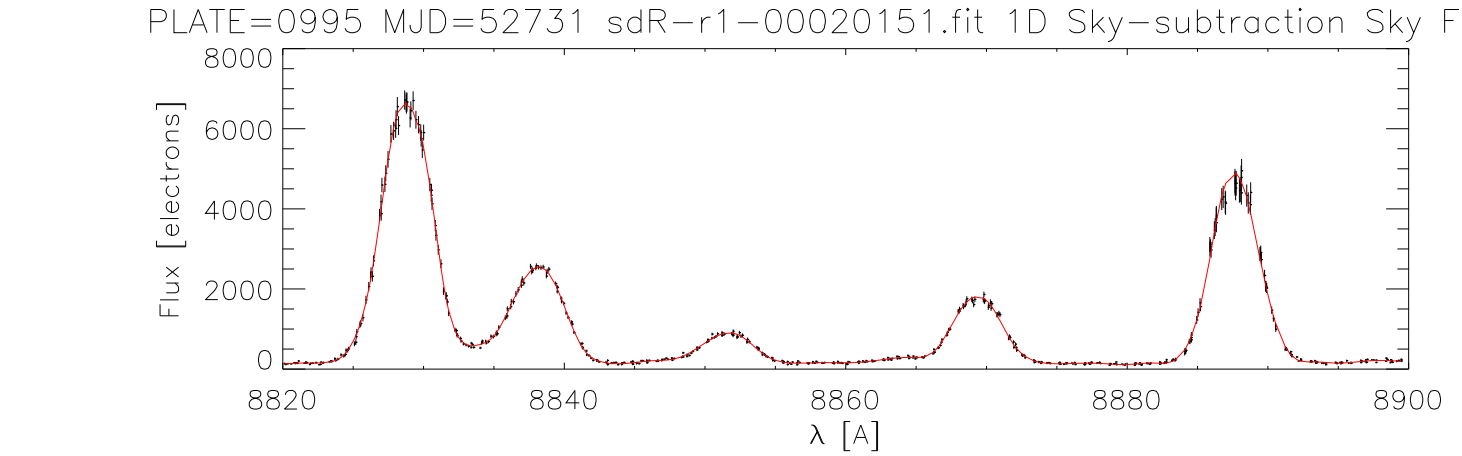

6300.3040
mfib1 16
mfib2 16
stdev 0.22
extrd 0.37
6363.7760
mfib1 16
mfib2 16
stdev 0.27
extrd 0.38
6553.6100
mfib1 16
mfib2 16
stdev 0.35
extrd 0.37
6923.2100
mfib1 16
mfib2 16
stdev 0.36
extrd 0.35
6949.0300
mfib1 16
mfib2 16
stdev 0.20
extrd 0.31
7571.7500
mfib1 15
mfib2 16
stdev 0.38
extrd 0.28
7794.1200
mfib1 16
mfib2 16
stdev 0.23
extrd 0.42
7821.5100
mfib1 16
mfib2 16
stdev 0.23
extrd 0.38
8399.1600
mfib1 15
mfib2 16
stdev 0.23
extrd 0.31
8430.1700
mfib1 16
mfib2 16
stdev 0.19
extrd 0.34
8885.8300
mfib1 16
mfib2 16
stdev 0.22
extrd 0.29
8919.6100
mfib1 16
mfib2 16
stdev 0.22
extrd 0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

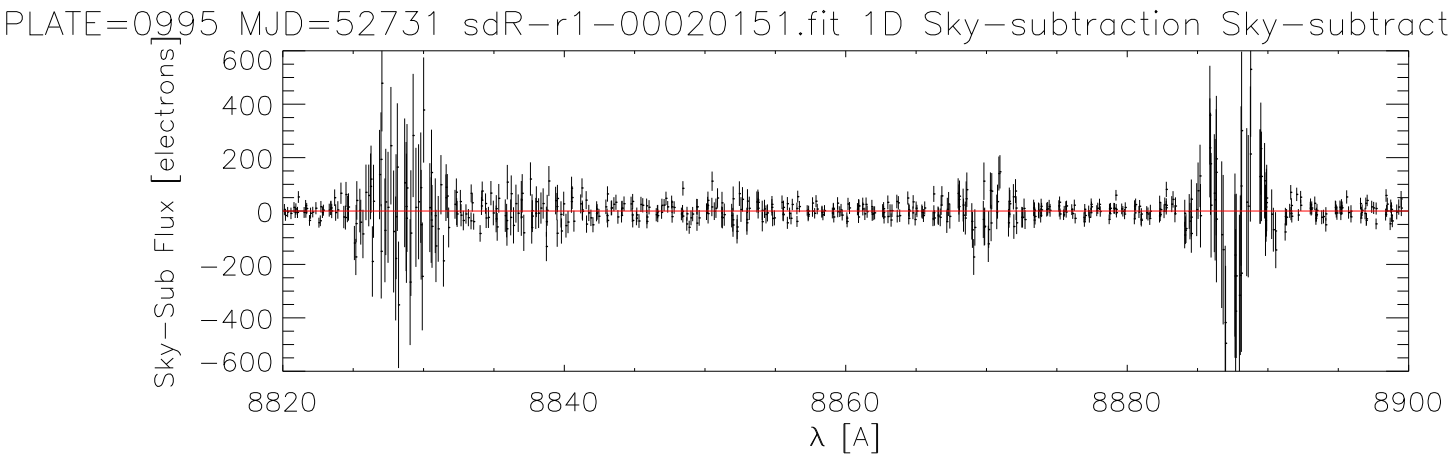

sky shift, pixels
−0.28
−0.30
−0.32
−0.34
−0.36
−0.38
−0.40
−0.42
5000
6000
7000
8000
9000
10000

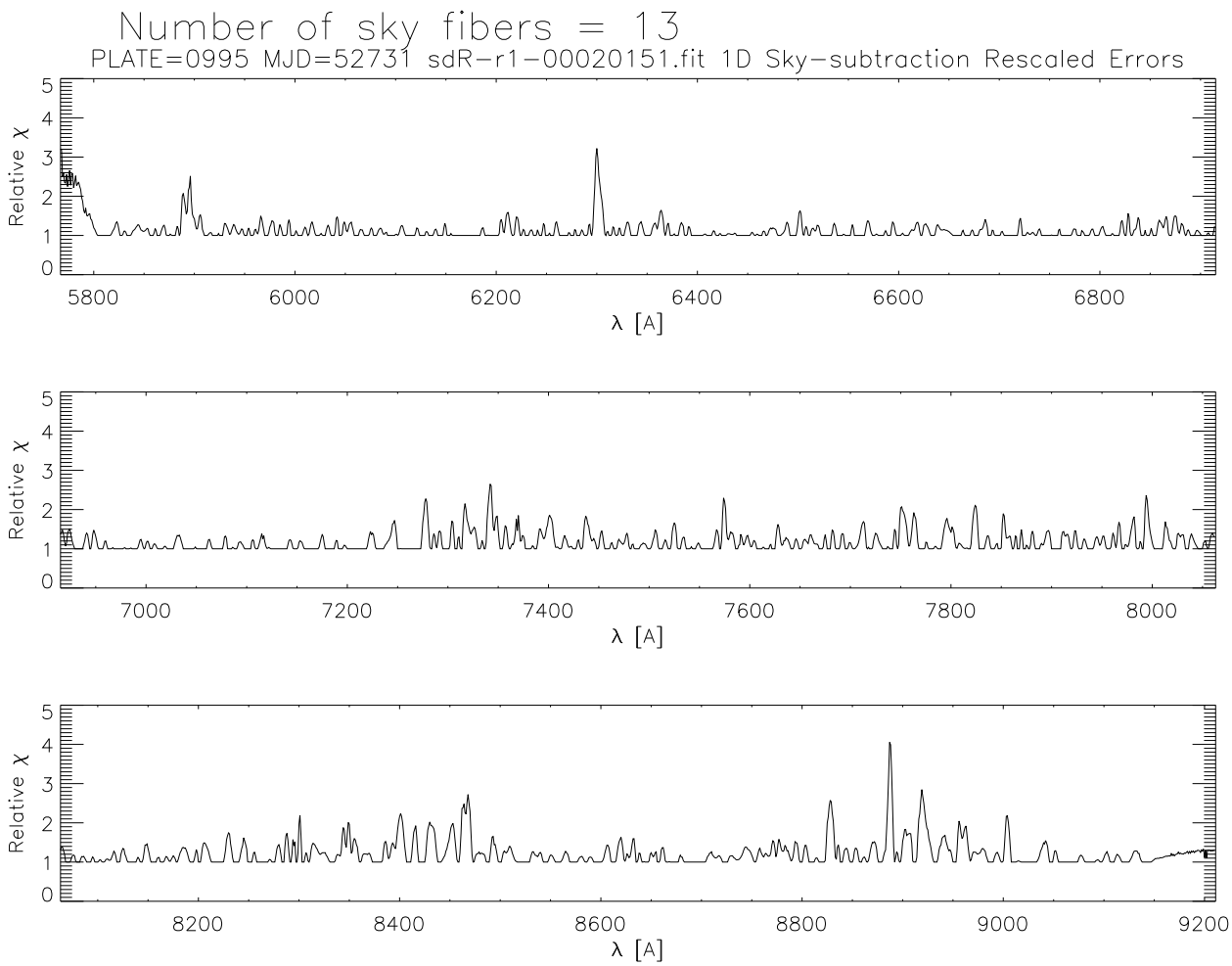
es= 0.0000

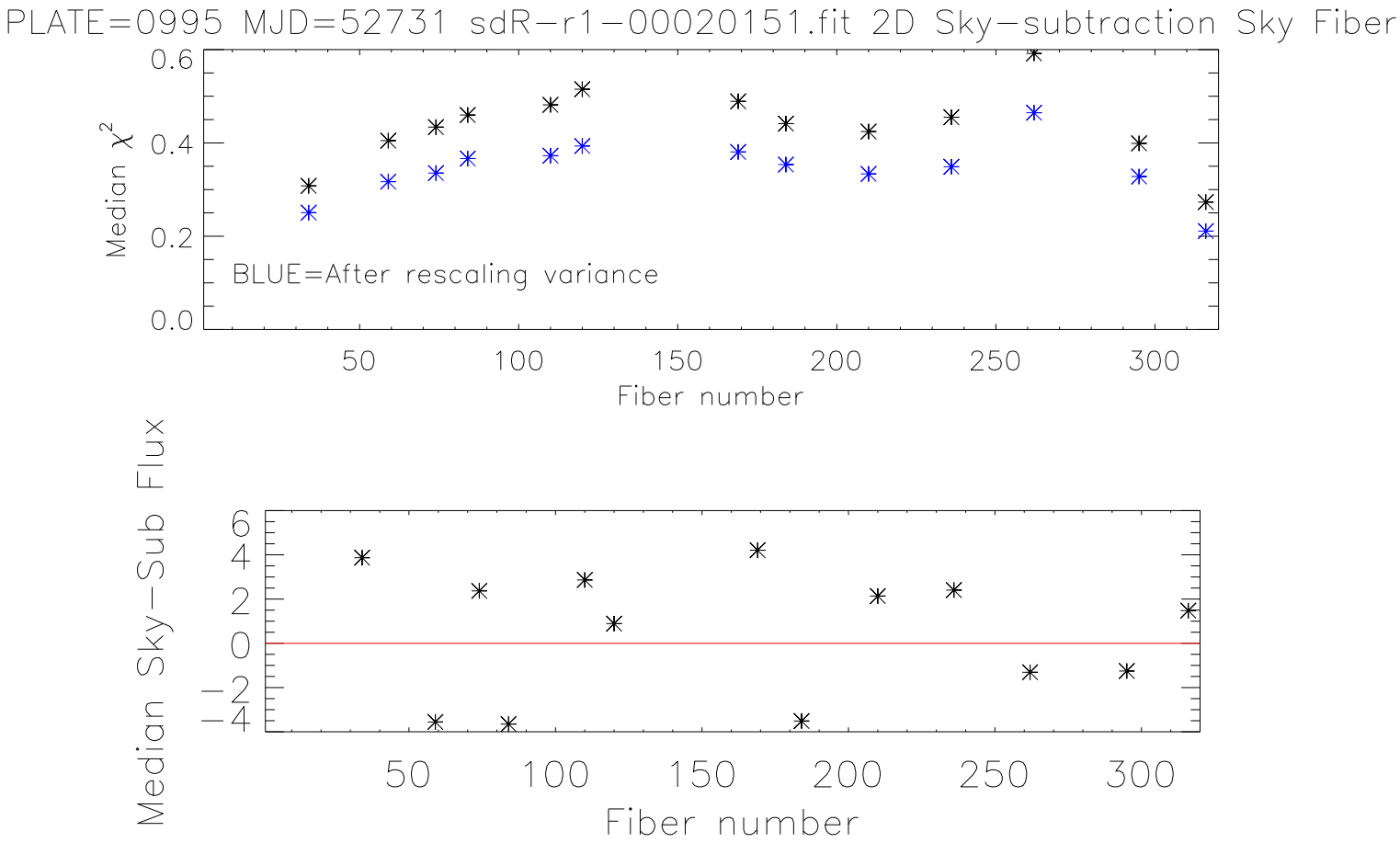

PLATE=0995 MJD=52731 Smooth superflat for sdR-r1-00020151.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

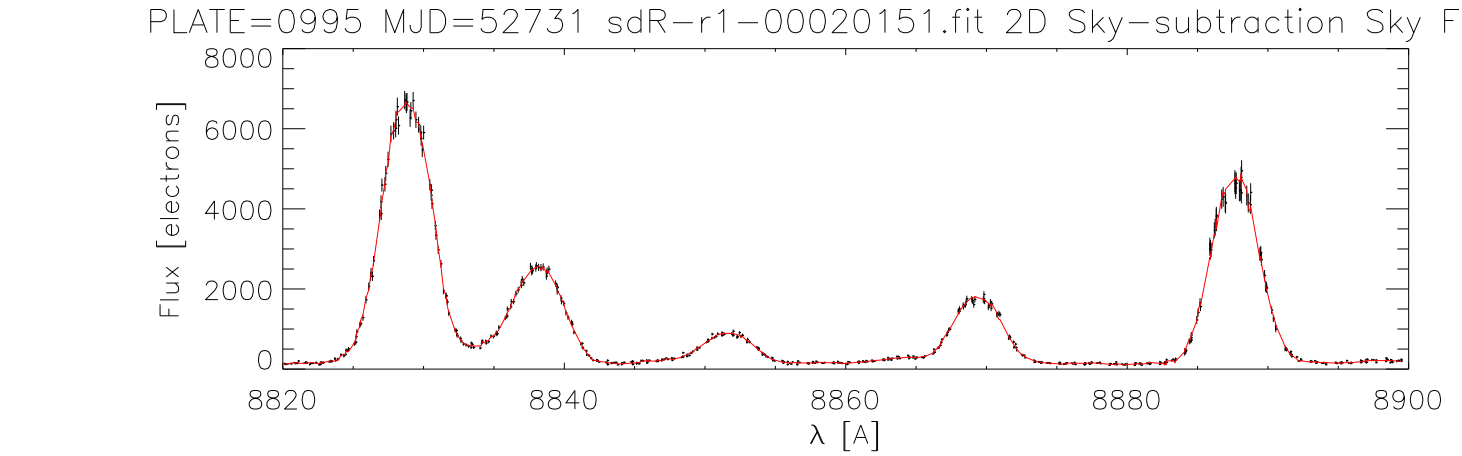

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

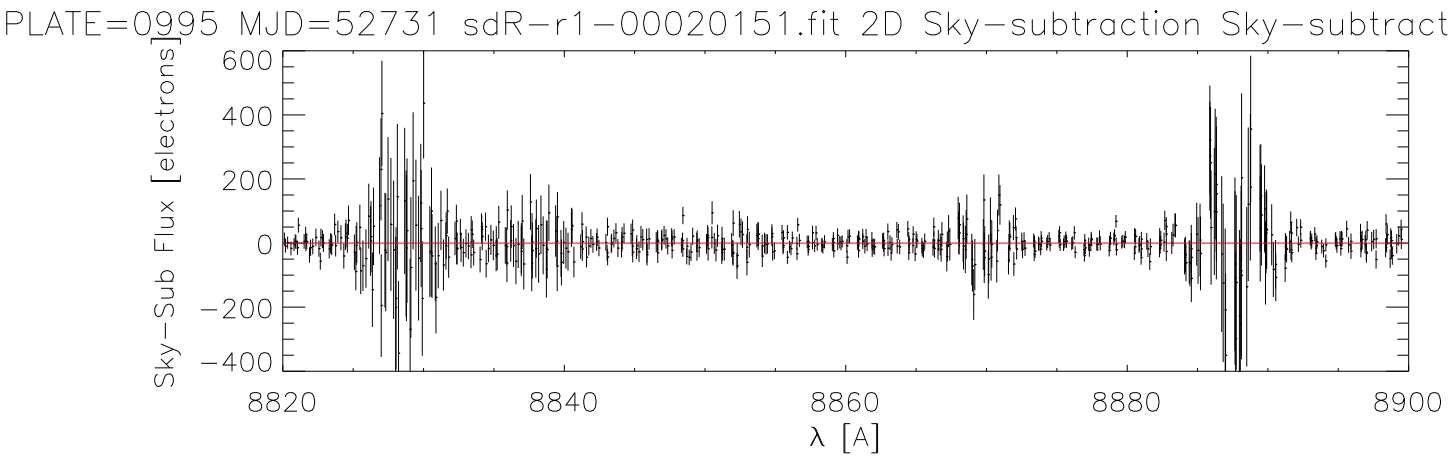

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

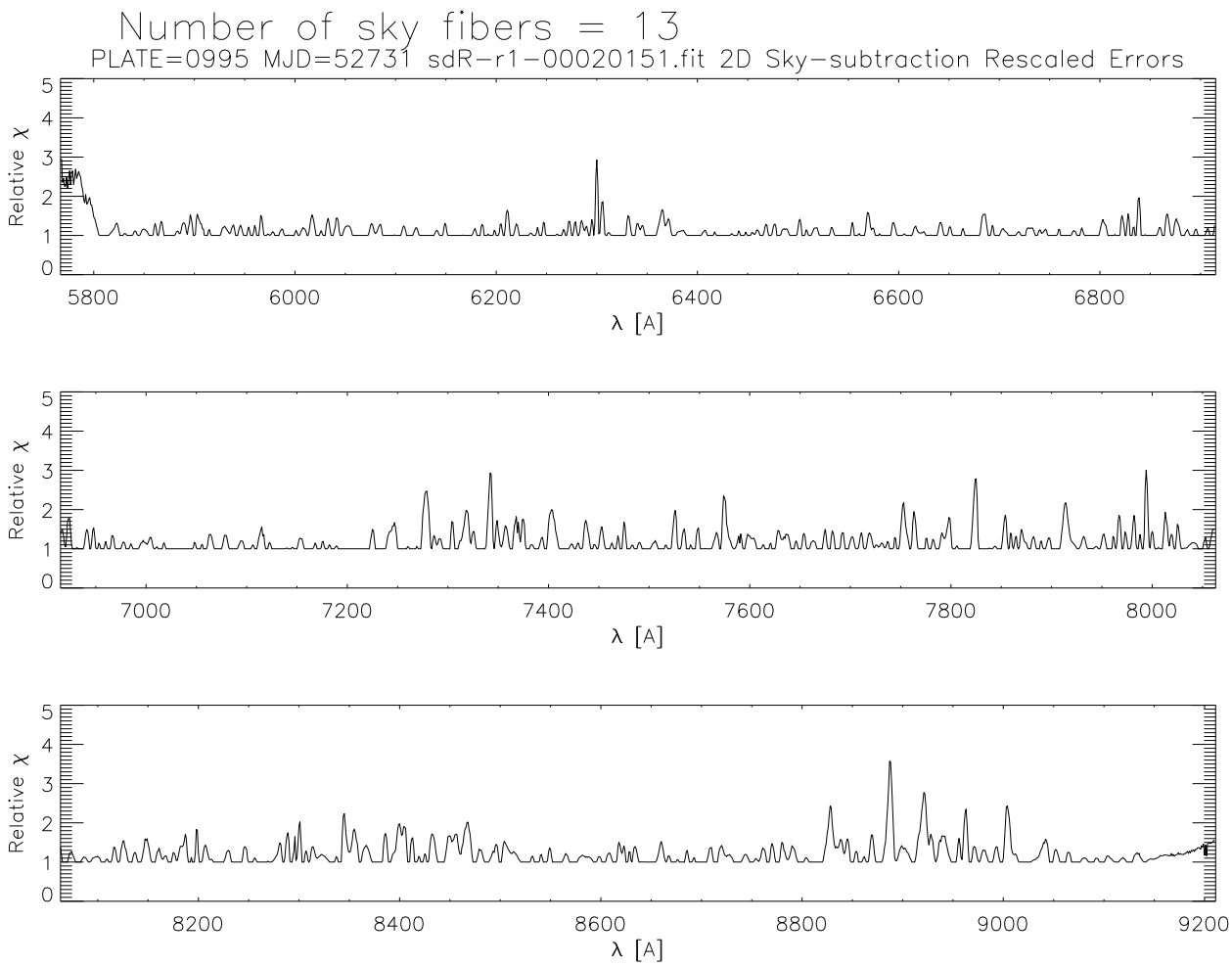

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

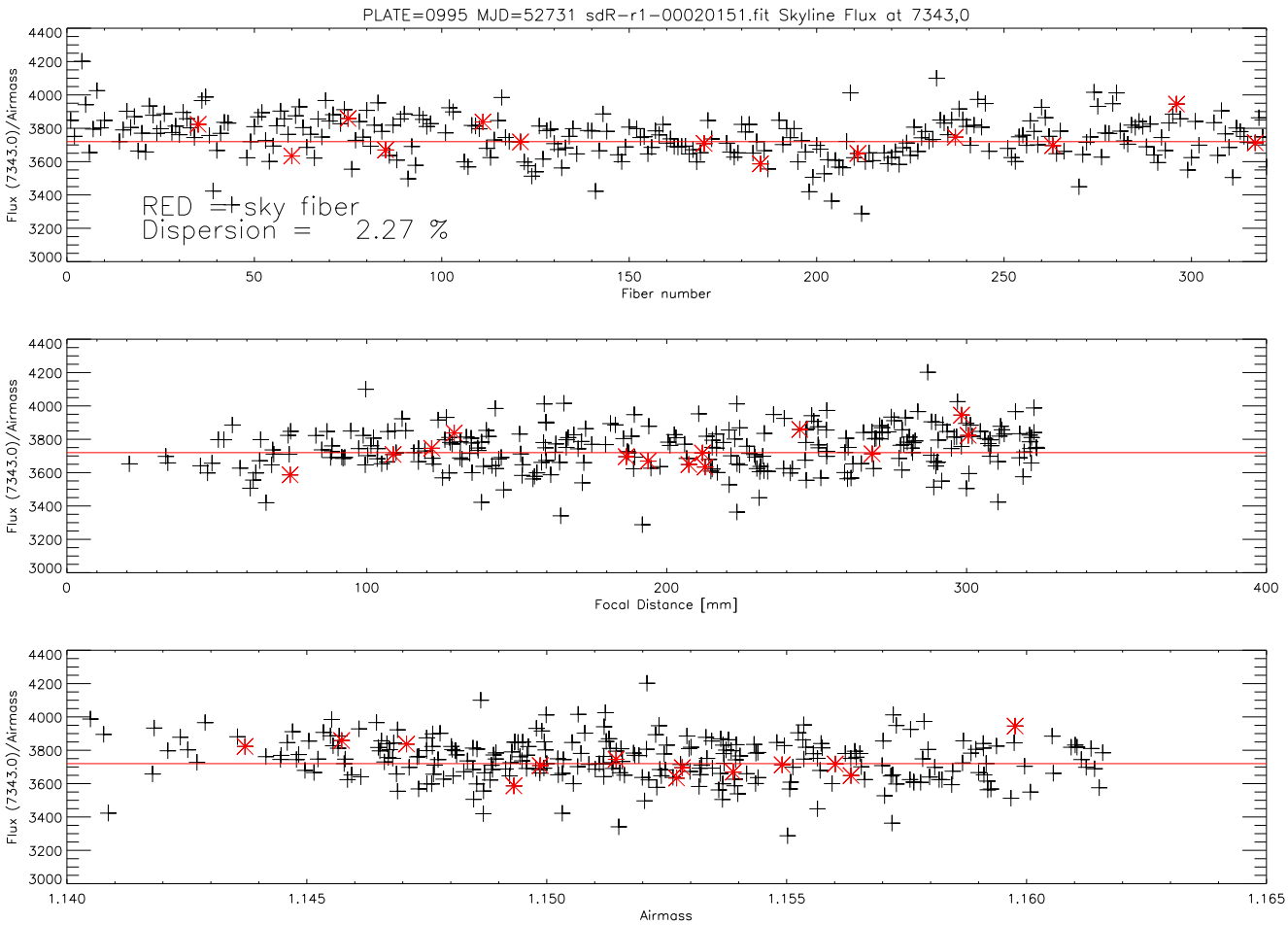

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

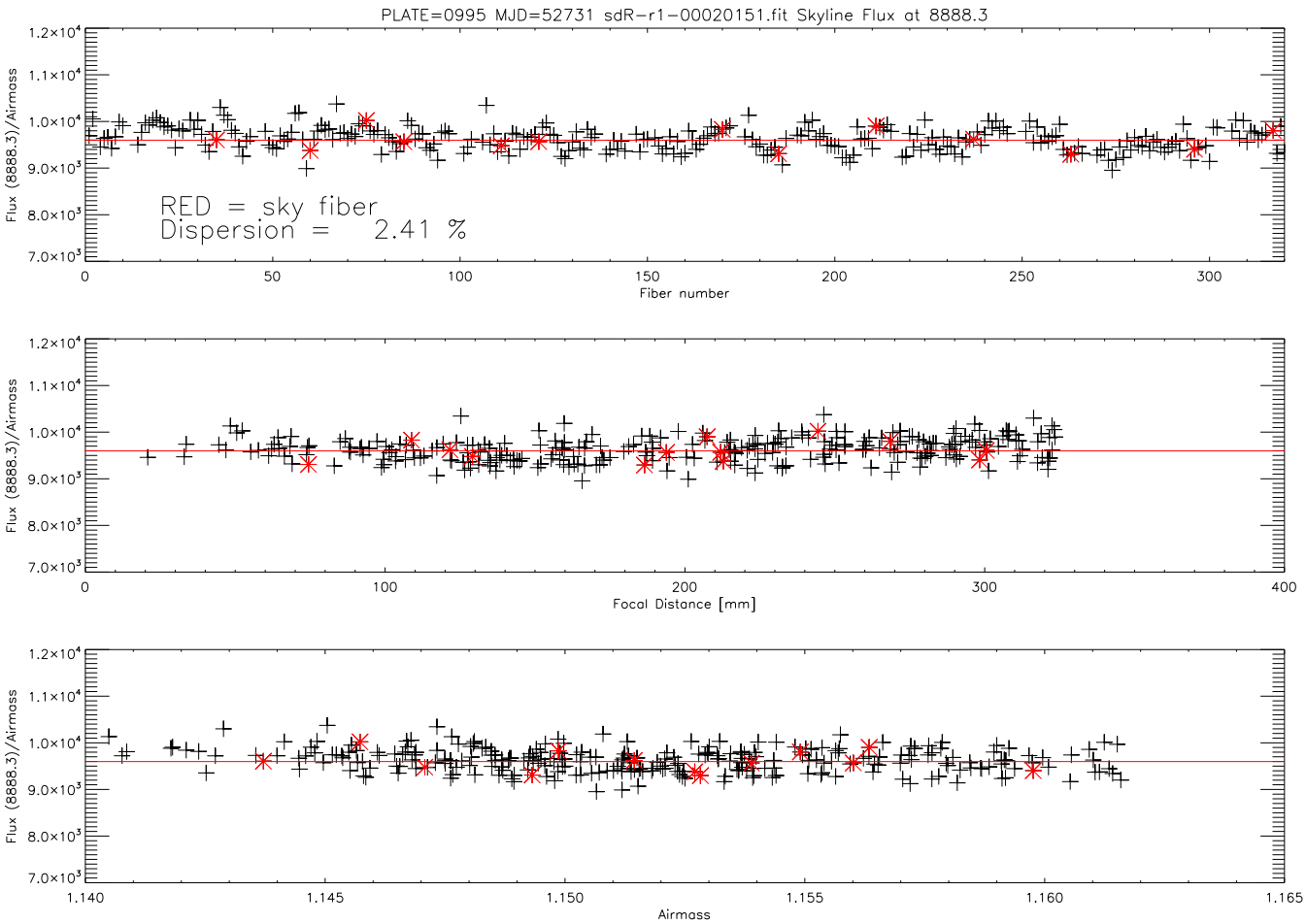

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

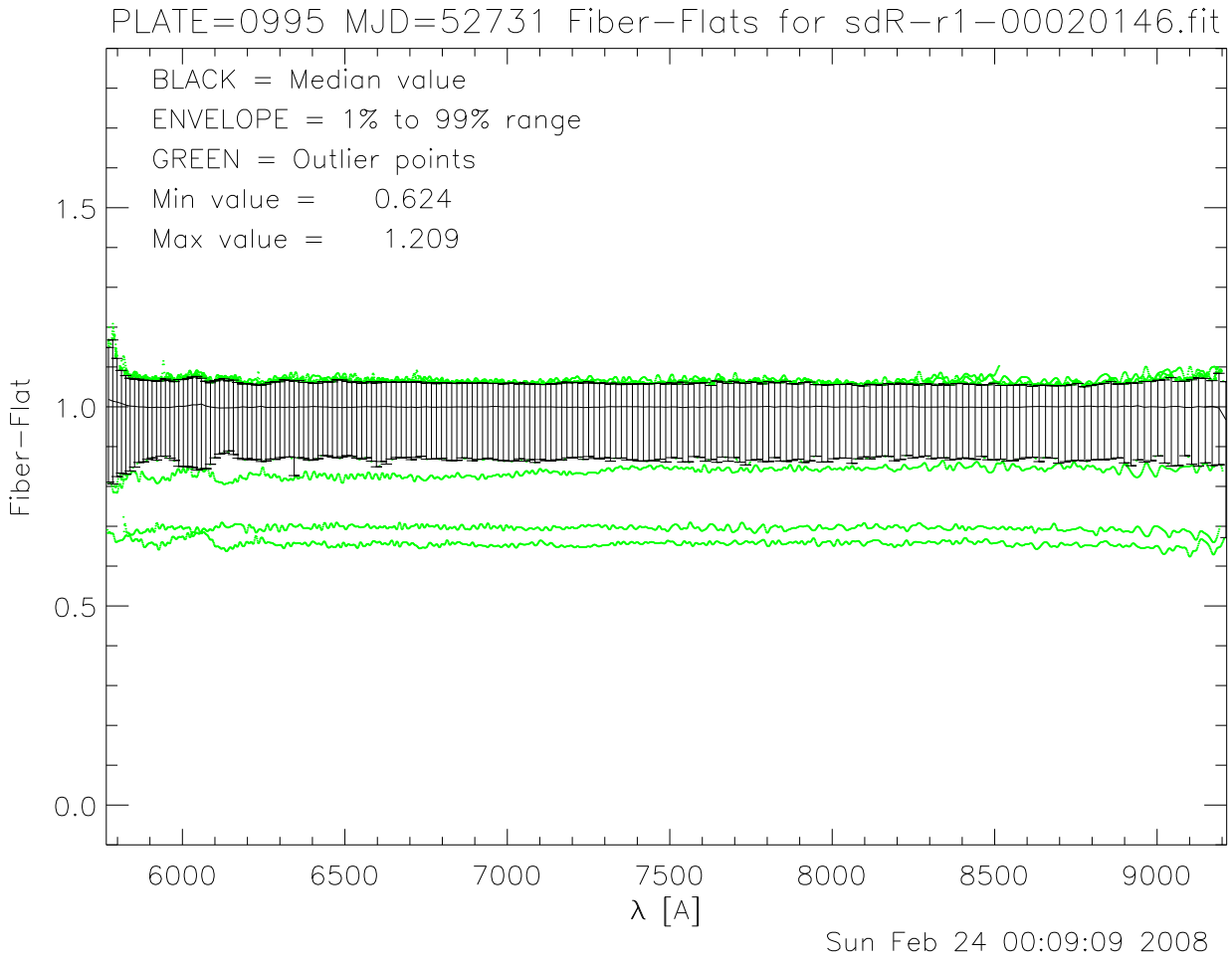

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

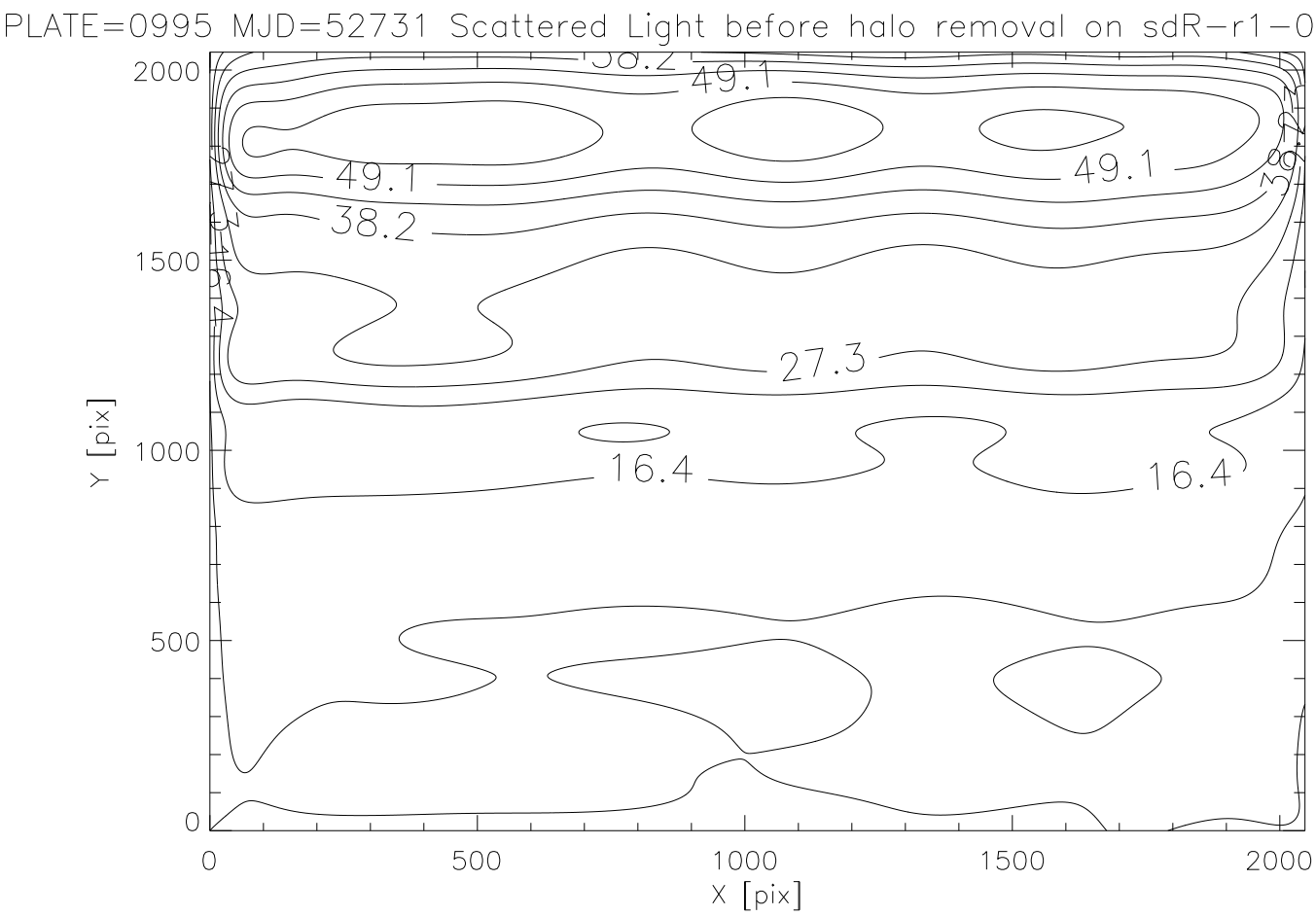

PLATE=0995 MJD=52731 sdR-r1-00020151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

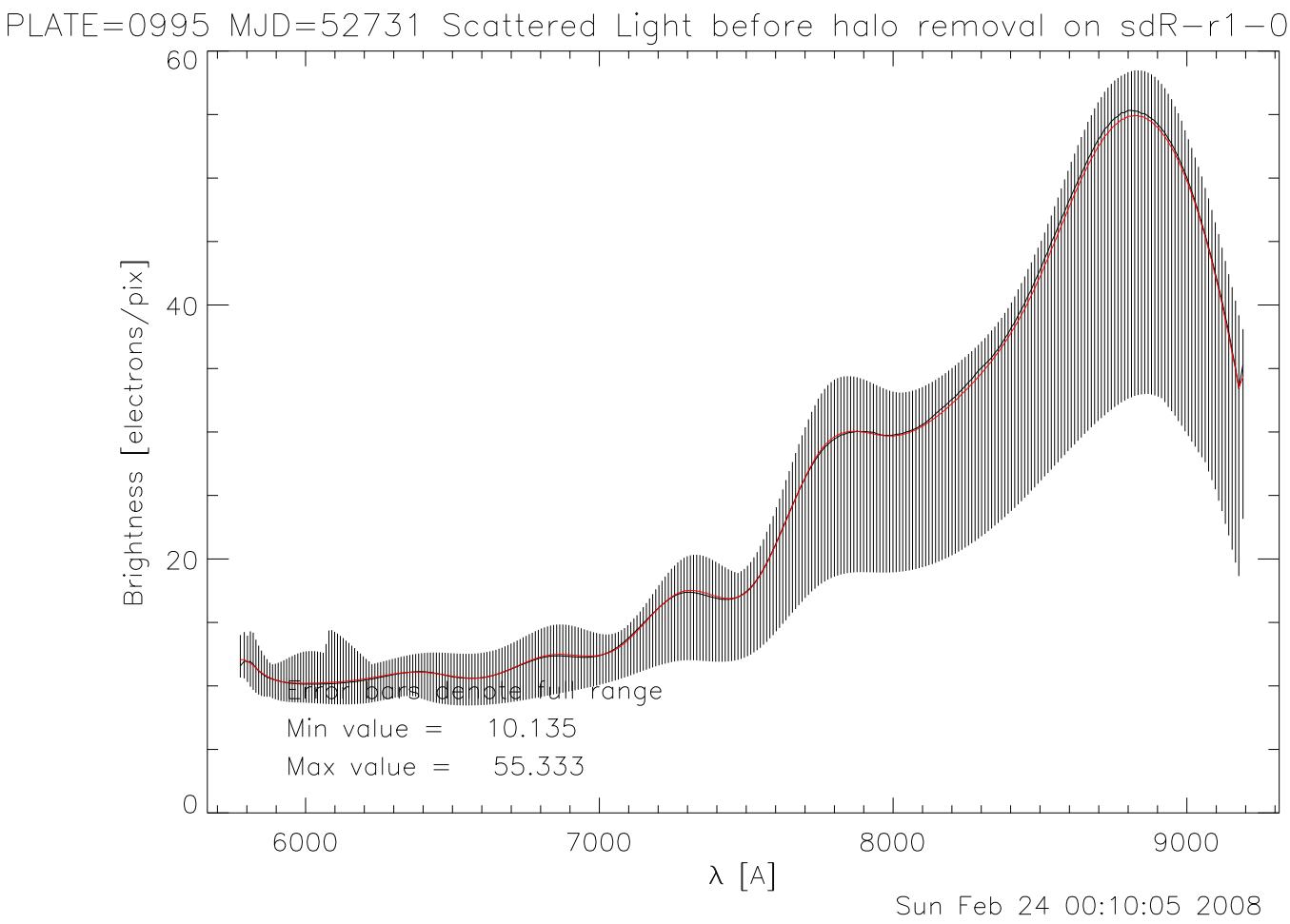

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

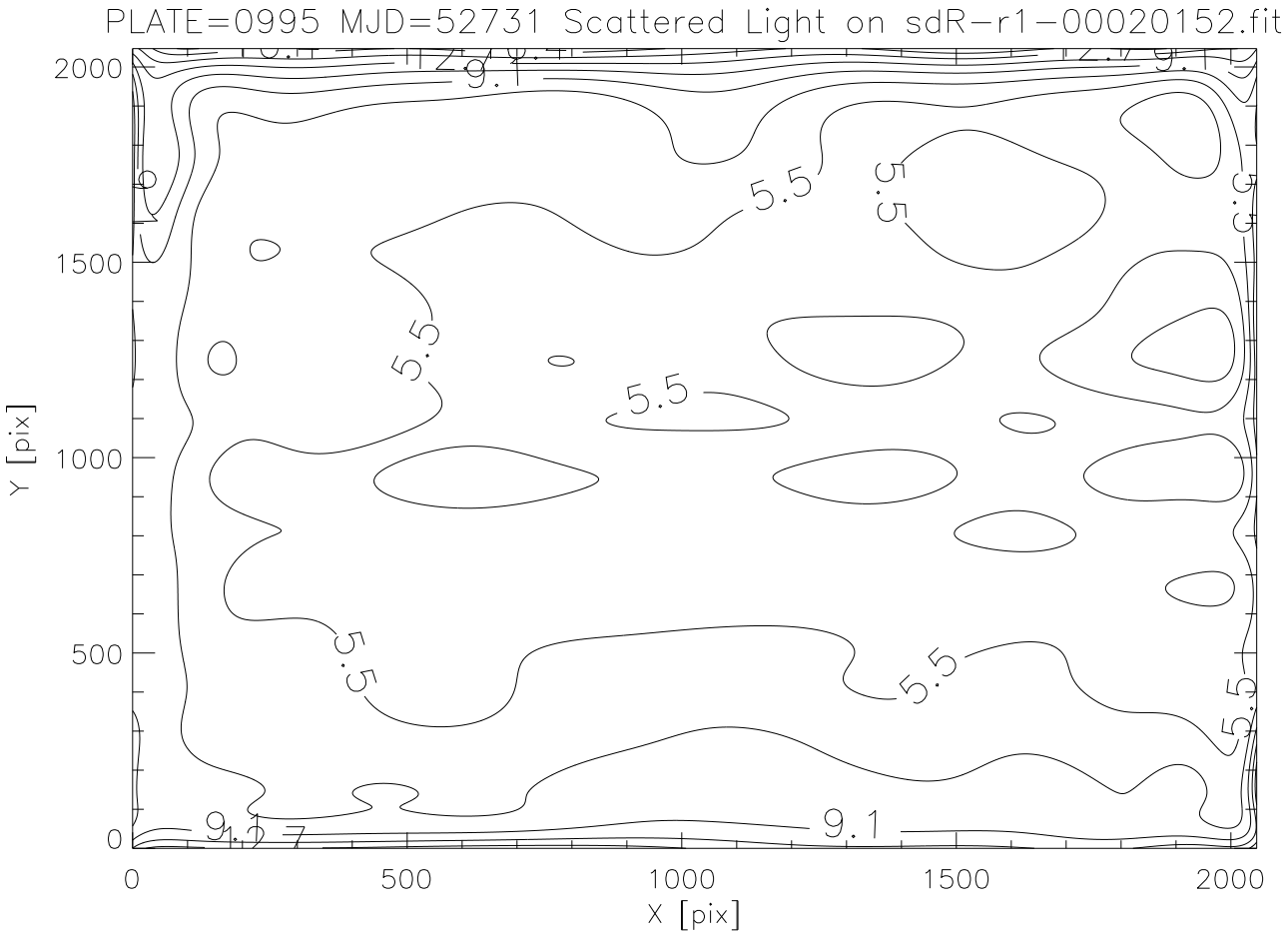

PLATE=0995 MJD=52731 sdR-r1-00020151.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED =+sky fiber
Dispersion = 2.27 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

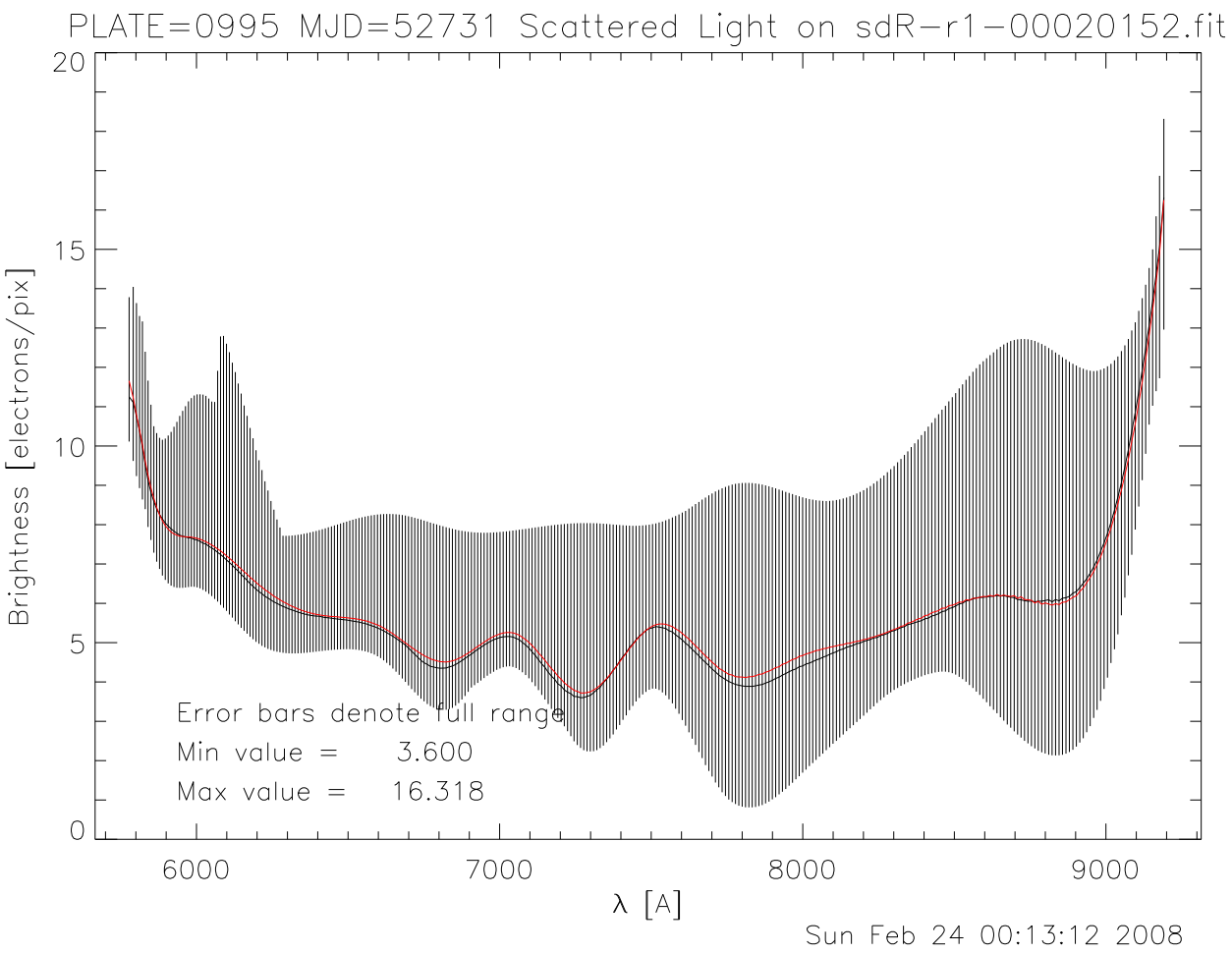

PLATE=0995 MJD=52731 sdR-r1-00020151.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.41 %
Fiber number
Focal Distance [mm]
Airmass

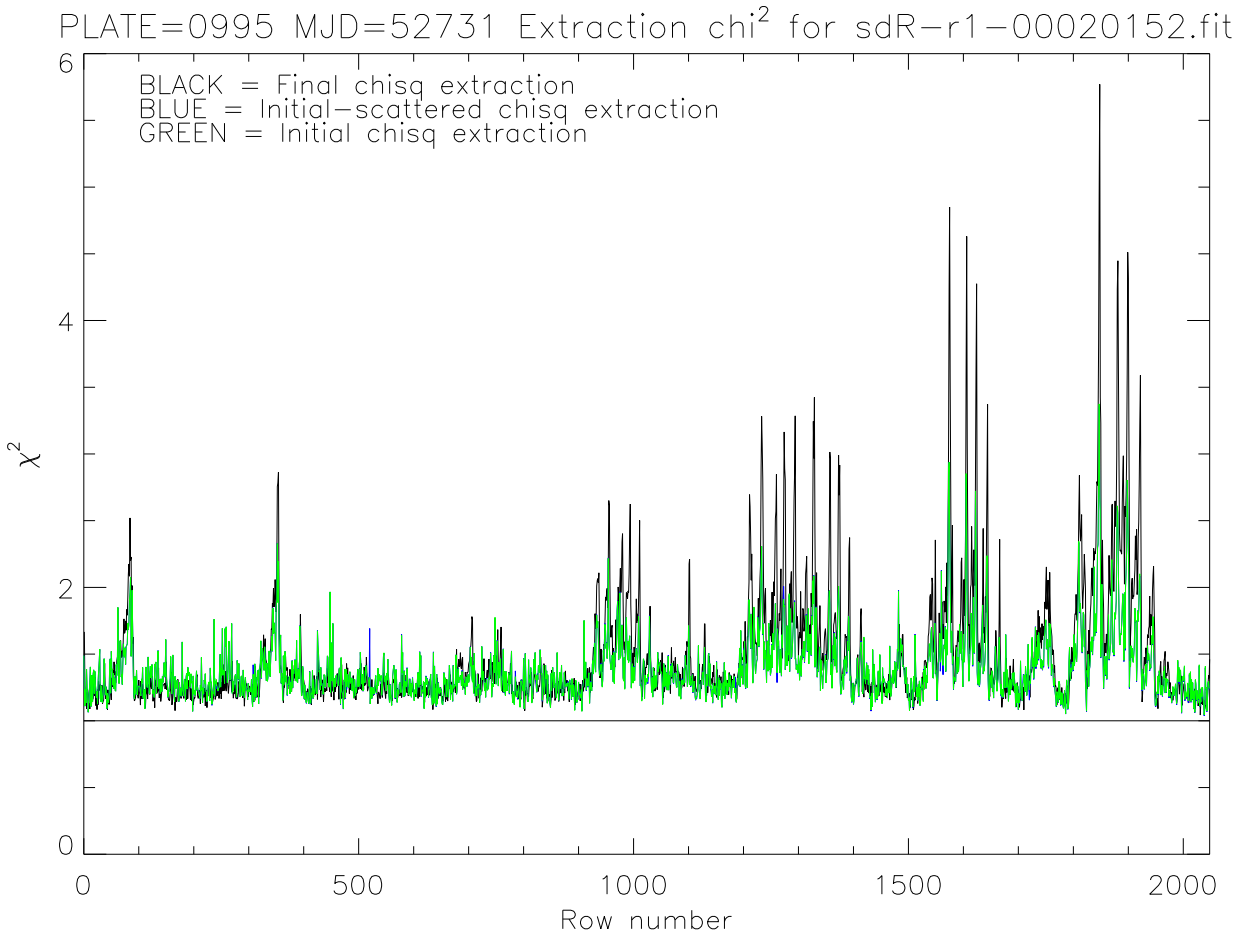

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r1−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.624
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:09:09 2008

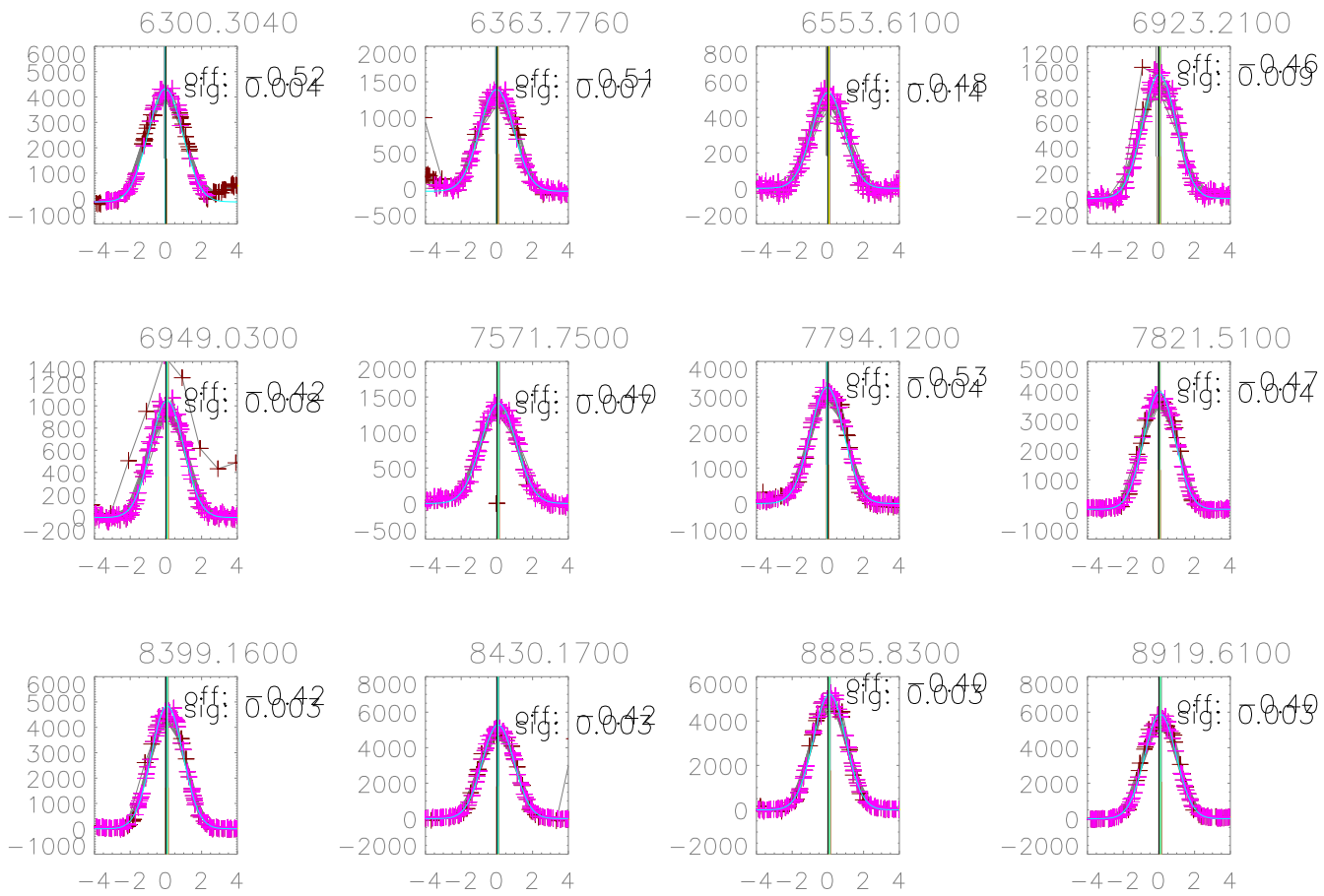

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020152.fi
49.1
49.1
49.1
38.2
27.3
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

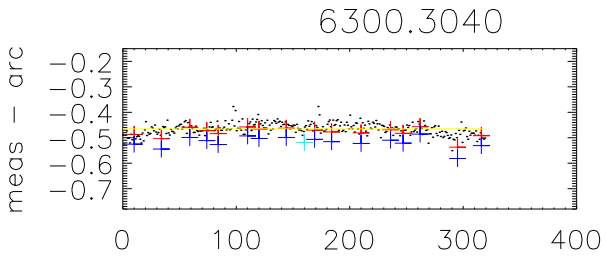

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r1-00020152.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.135
Max value = 55.333
Sun Feb 24 00:10:05 2008

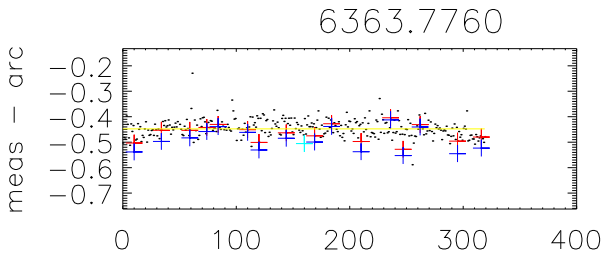

PLATE=0995 MJD=52731 Scattered Light on sdR−r1−00020152.fit
9.1
5.5
5.5
5.5
5.5
5.5
5.5
5.5
9.1
9.1
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

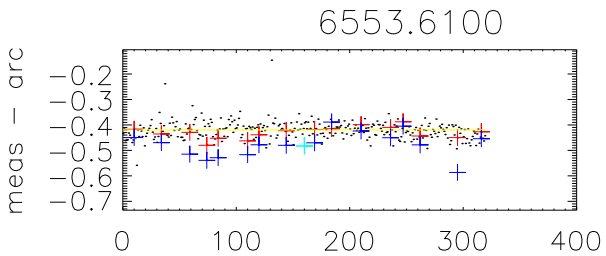

PLATE=0995 MJD=52731 Scattered Light on sdR-r1-00020152.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.600
Max value = 16.318
Sun Feb 24 00:13:12 2008

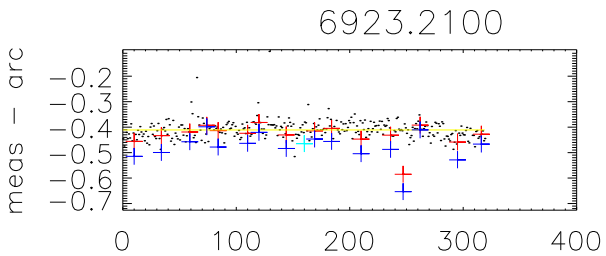

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r1−00020152.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

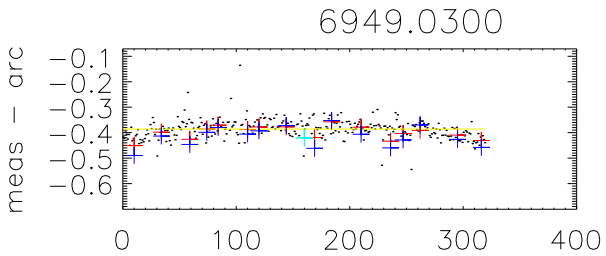

6300.3040
off: −0.52
sig: 0.004
6363.7760
off: −0.51
sig: 0.007
6553.6100
off: −0.48
sig: 0.014
6923.2100
off: −0.46
sig: 0.009
6949.0300
off: −0.42
sig: 0.008
7571.7500
off: −0.40
sig: 0.007
7794.1200
off: −0.53
sig: 0.004
7821.5100
off: −0.47
sig: 0.004
8399.1600
off: −0.42
sig: 0.003
8430.1700
off: −0.42
sig: 0.003
8885.8300
off: −0.40
sig: 0.003
8919.6100
off: −0.40
sig: 0.003

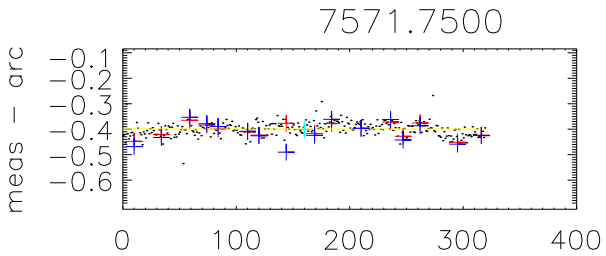

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

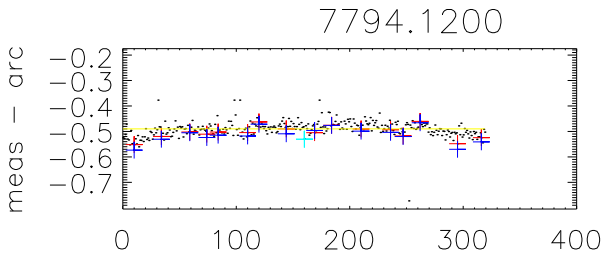

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

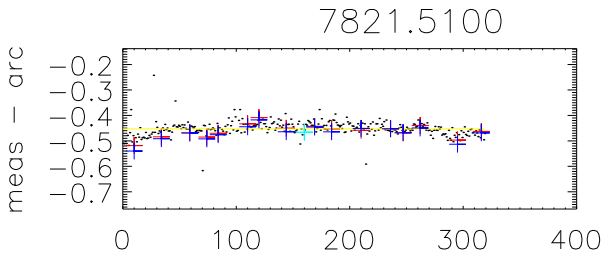

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

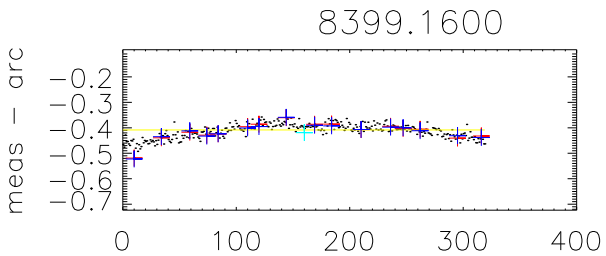

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

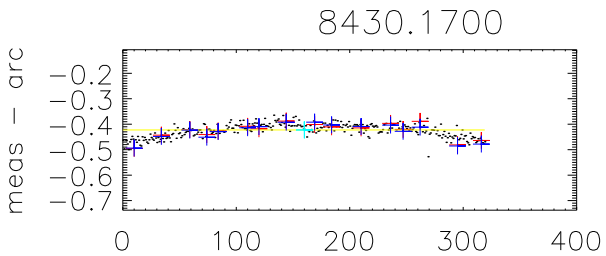

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

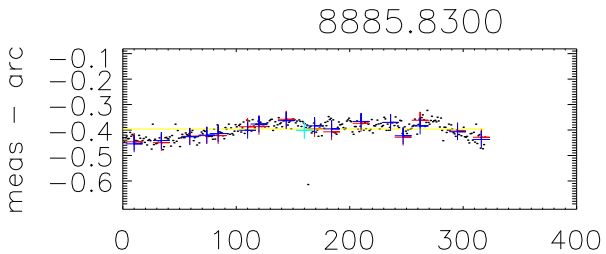

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

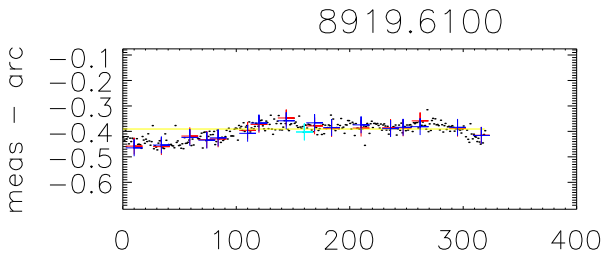

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

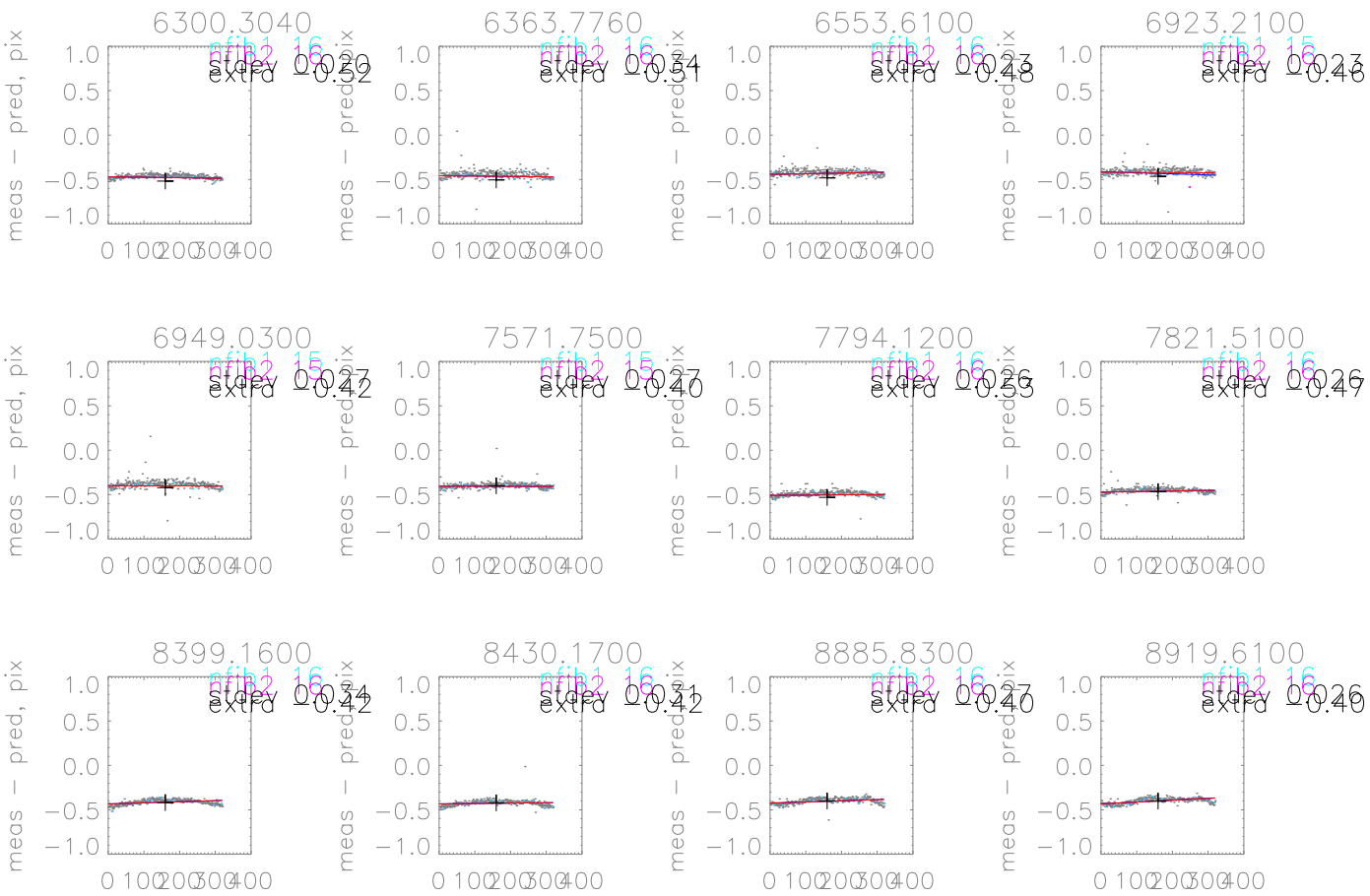

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

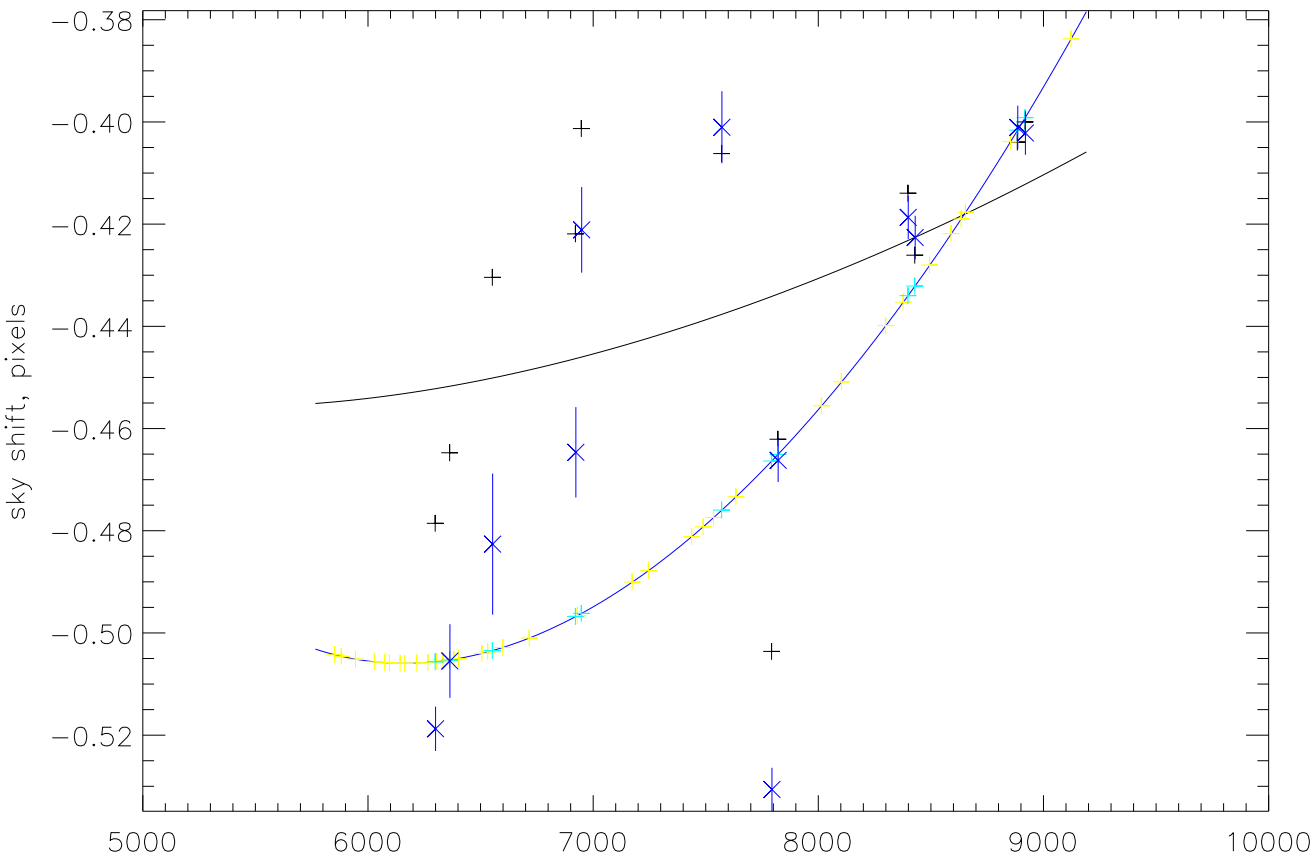

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

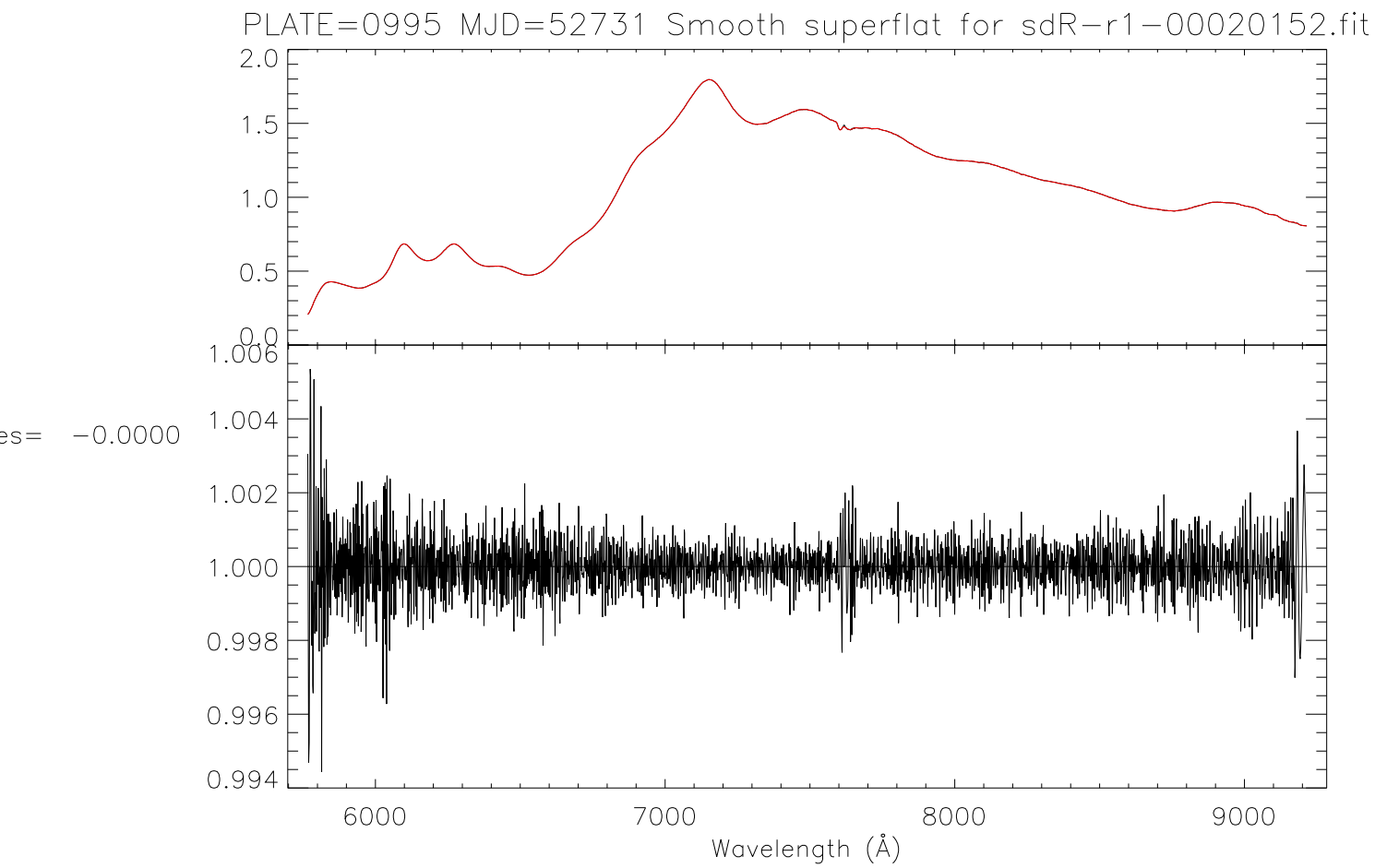

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

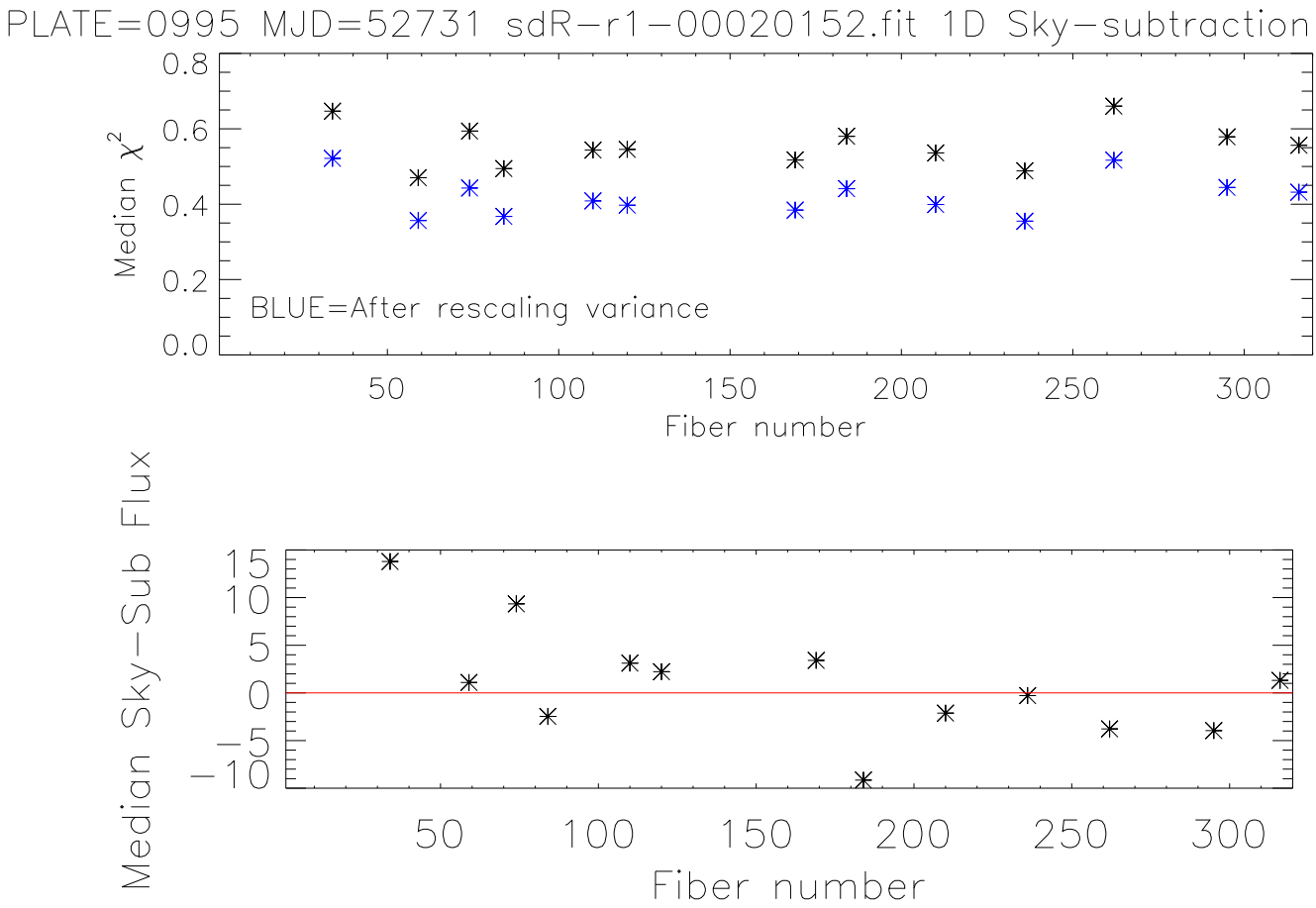

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


6300.3040
stdev 0.020
extra −0.52
6363.7760
stdev 0.034
extra −0.51
6553.6100
stdev 0.023
extra −0.48
6923.2100
stdev 0.023
extra −0.46
6949.0300
stdev 0.027
extra −0.42
7571.7500
stdev 0.027
extra −0.40
7794.1200
stdev 0.026
extra −0.53
7821.5100
stdev 0.026
extra −0.47
8399.1600
stdev 0.034
extra −0.42
8430.1700
stdev 0.031
extra −0.42
8885.8300
stdev 0.027
extra −0.40
8919.6100
stdev 0.026
extra −0.40
meas − pred, pix
mfib2 16
mfib1 15

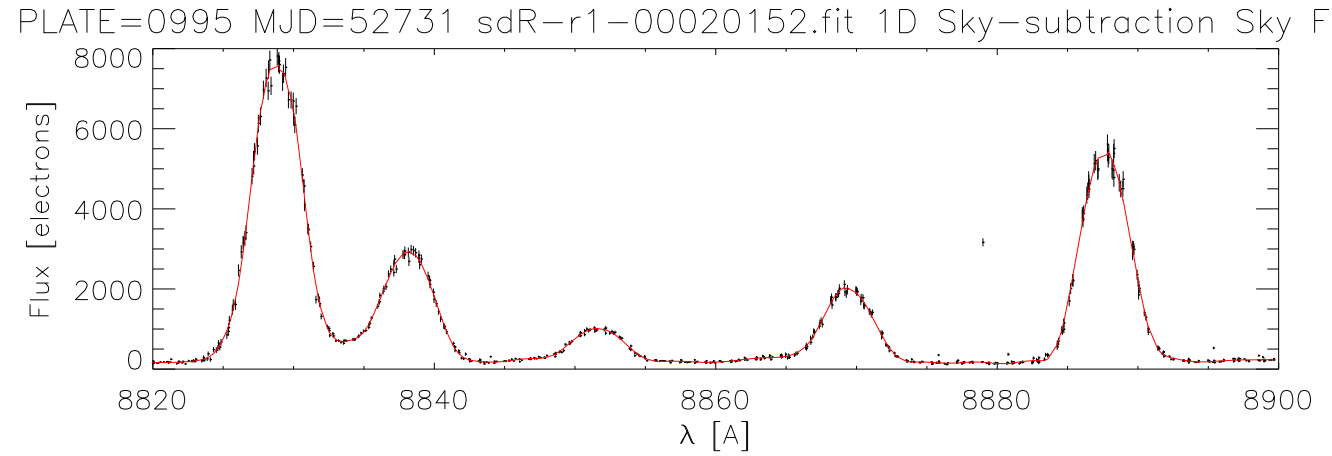

−0.38
−0.40
−0.42
−0.44
−0.46
−0.48
−0.50
−0.52
sky shift, pixels
5000
6000
7000
8000
9000
10000

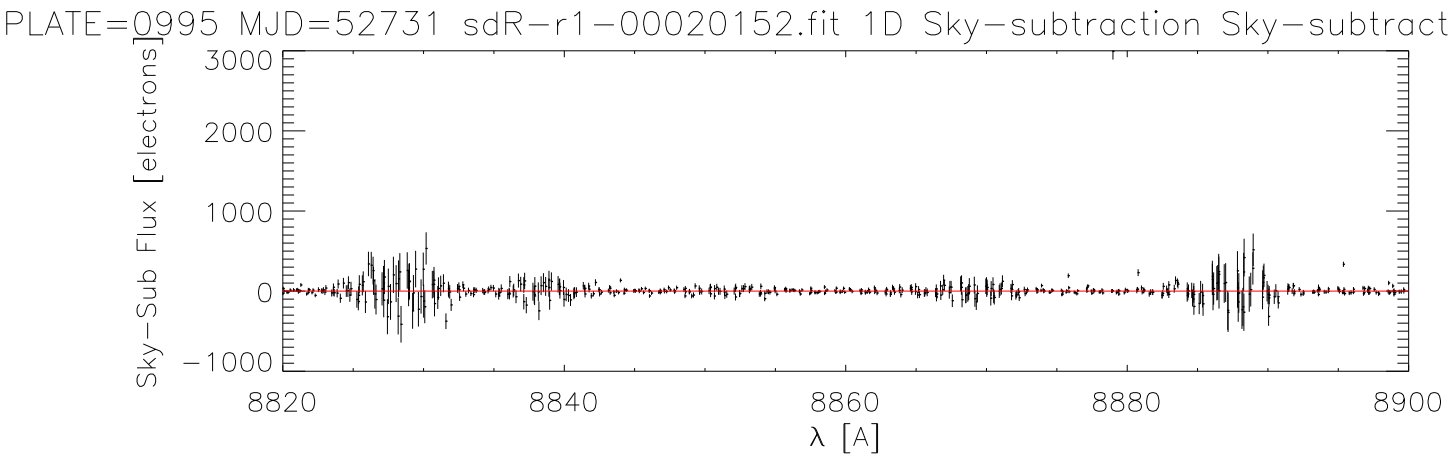

PLATE=0995 MJD=52731 Smooth superflat for sdR-r1-00020152.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

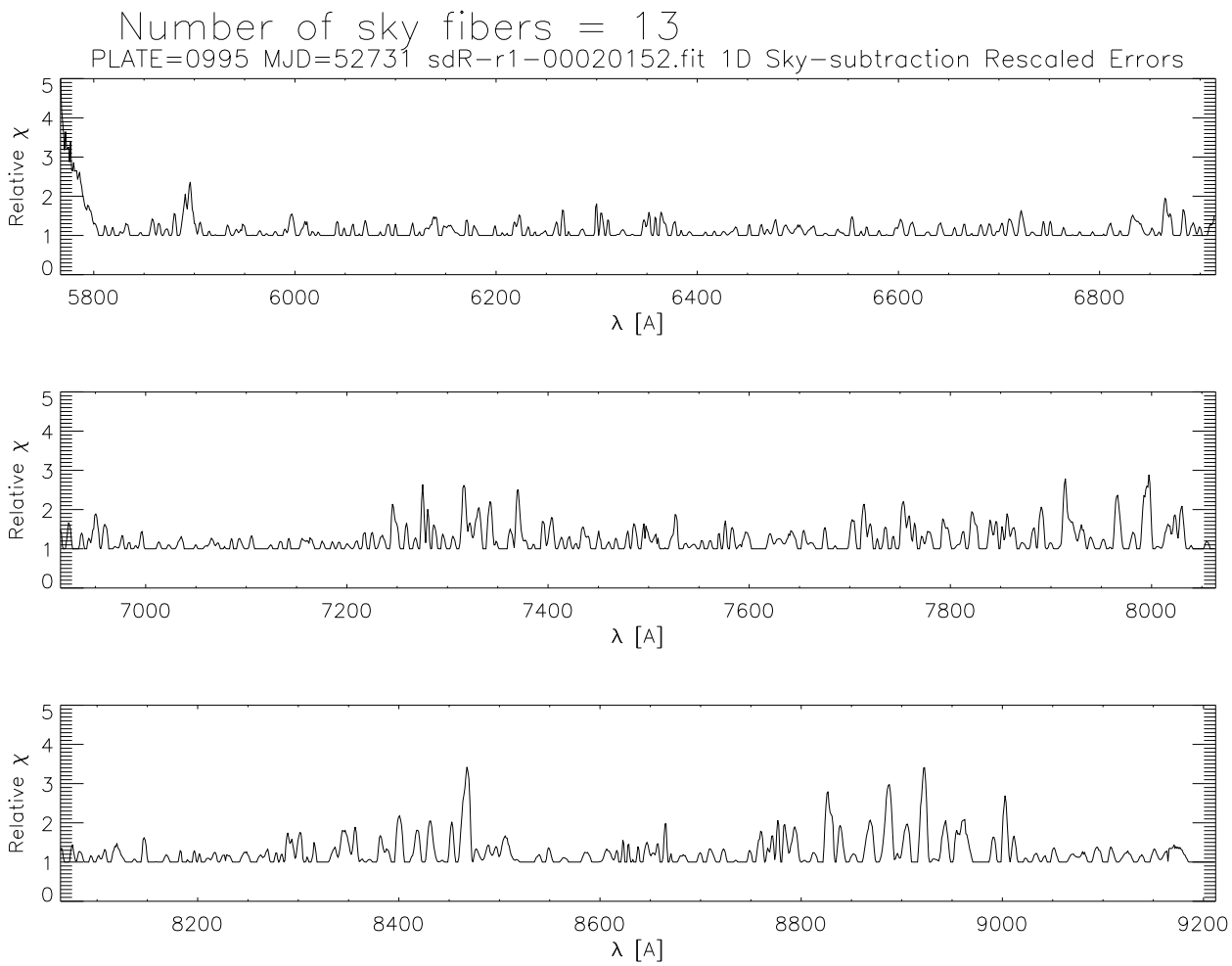
es= −0.0000

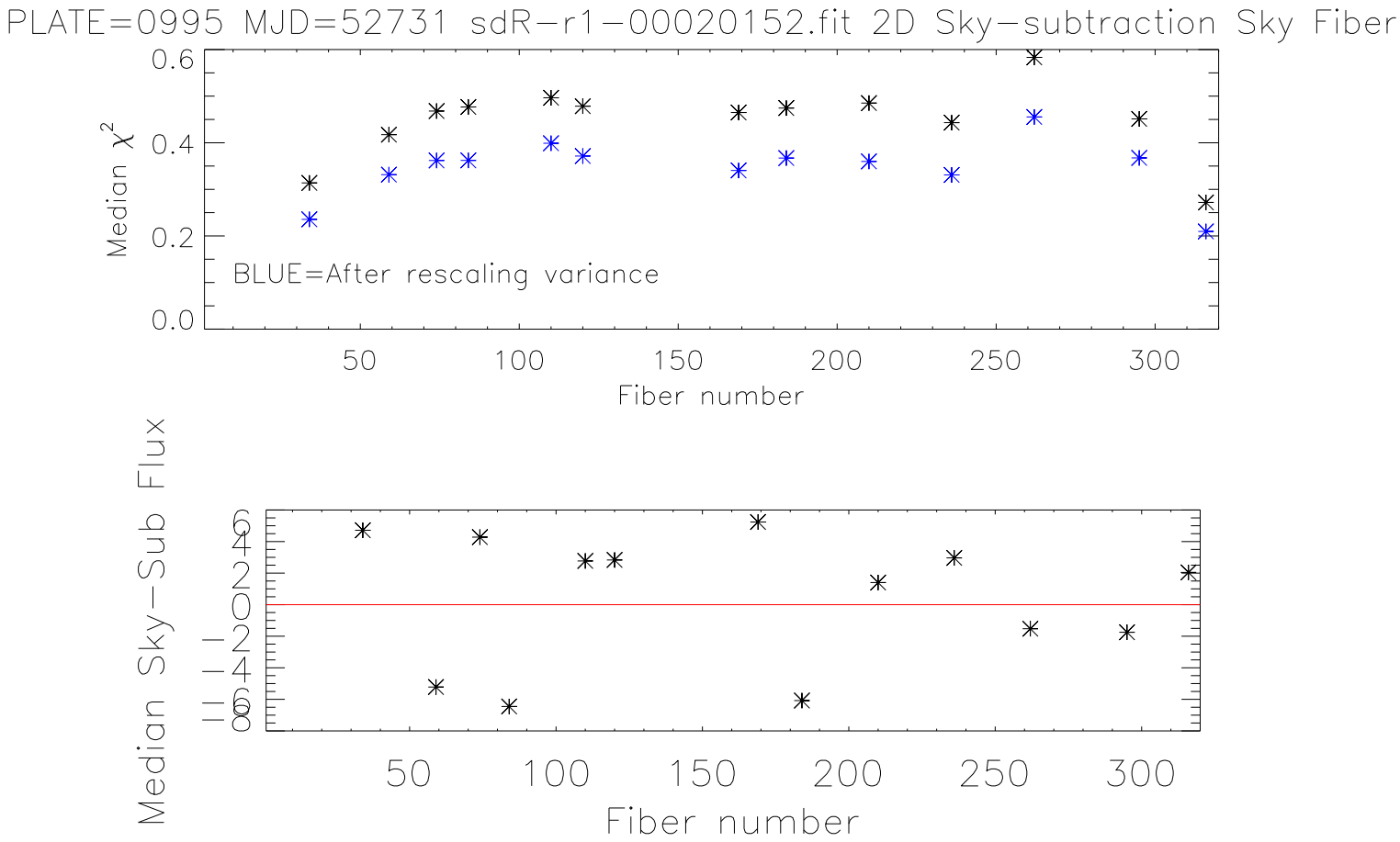

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

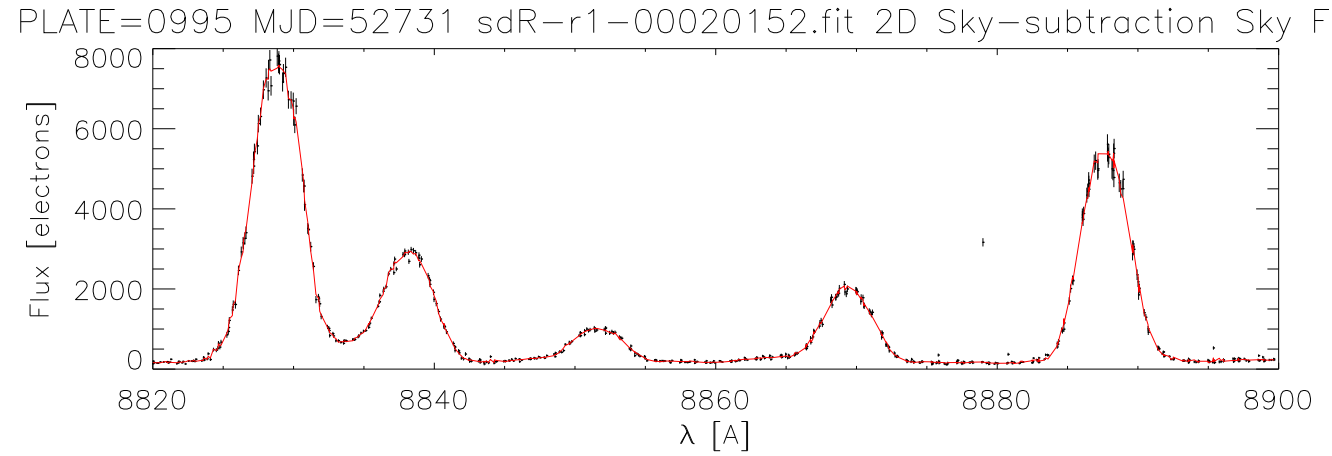
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

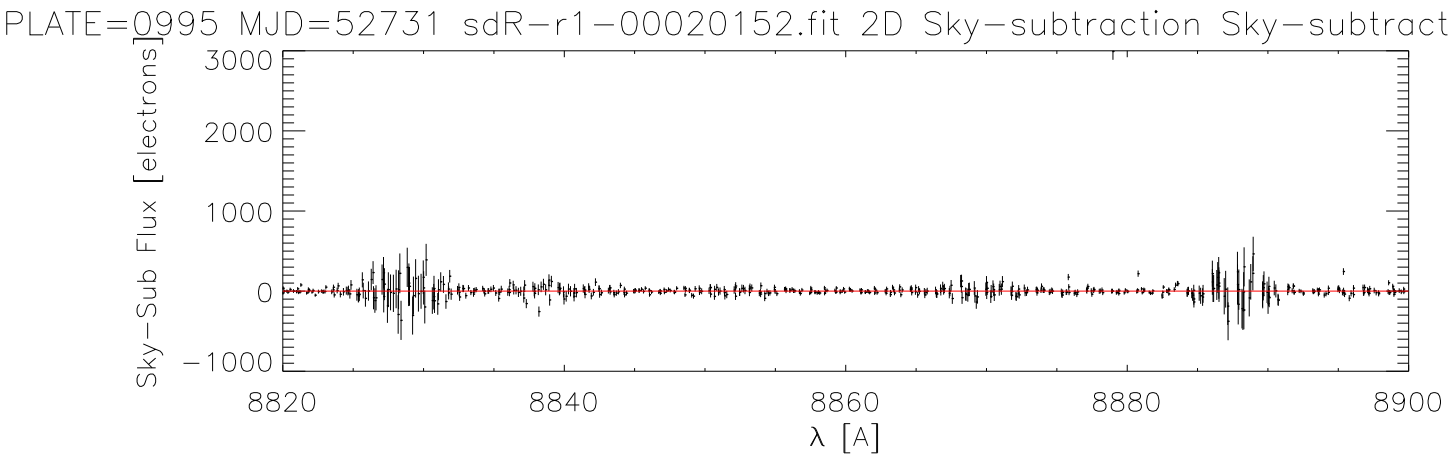

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

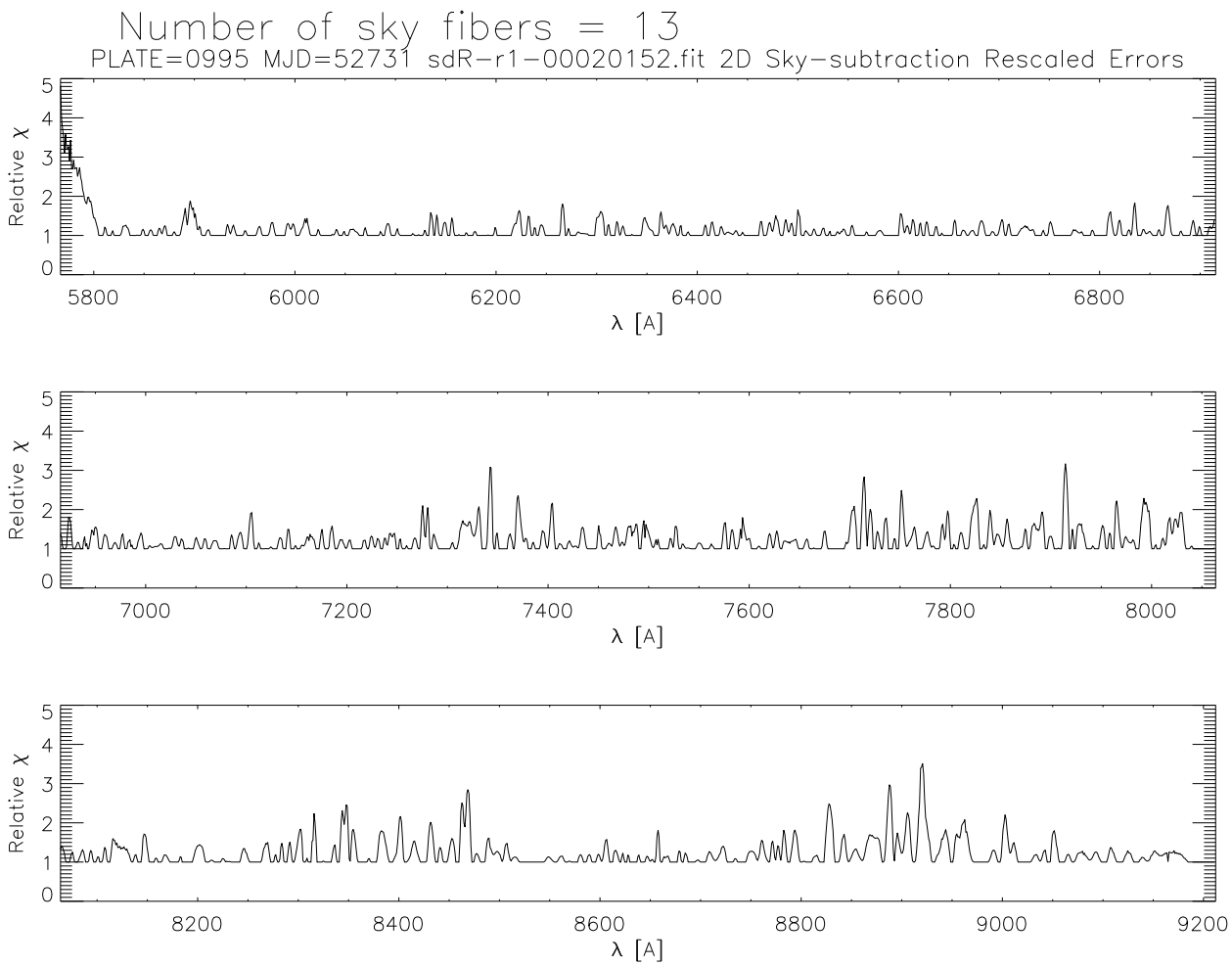

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

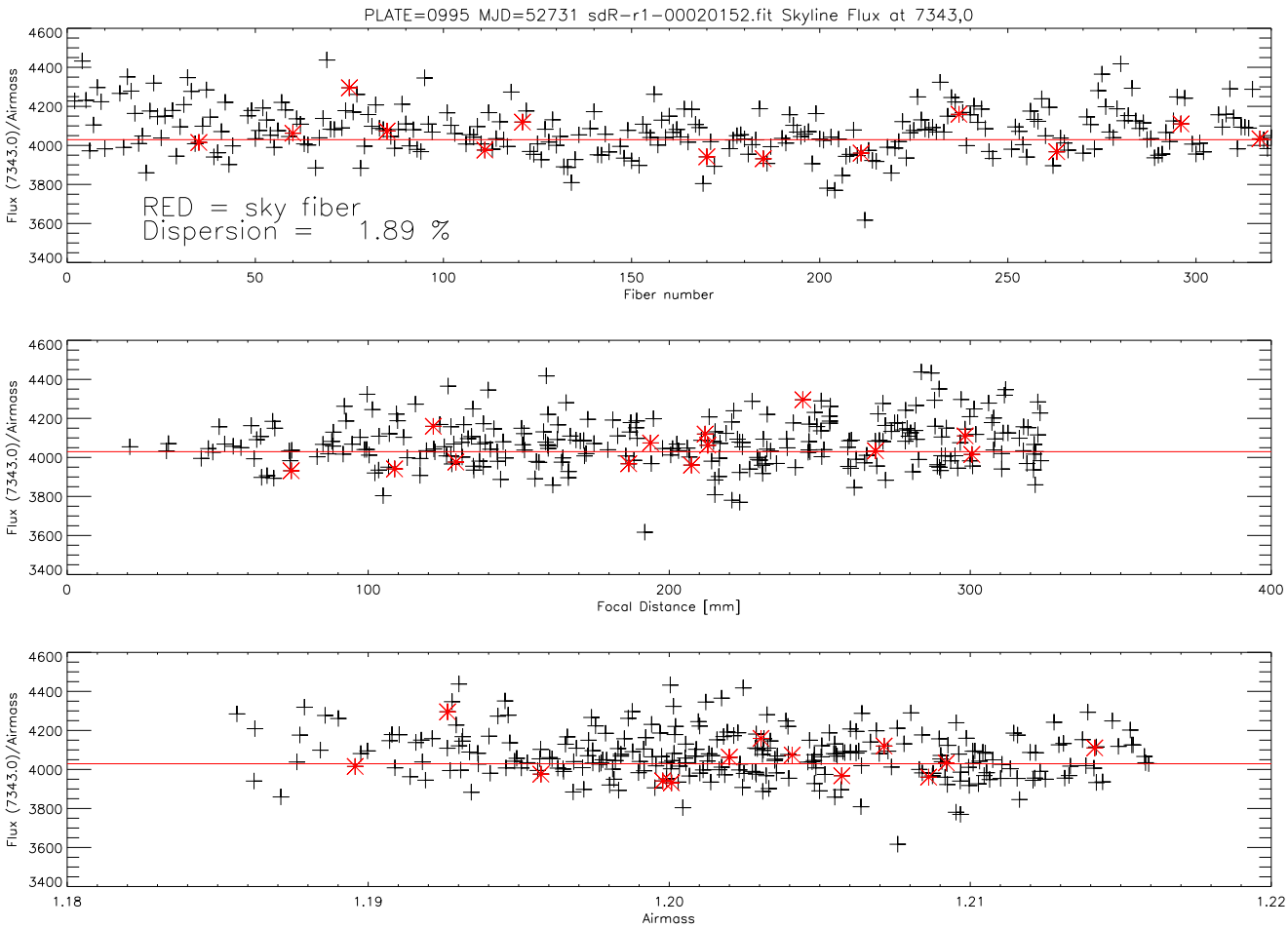

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020152.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

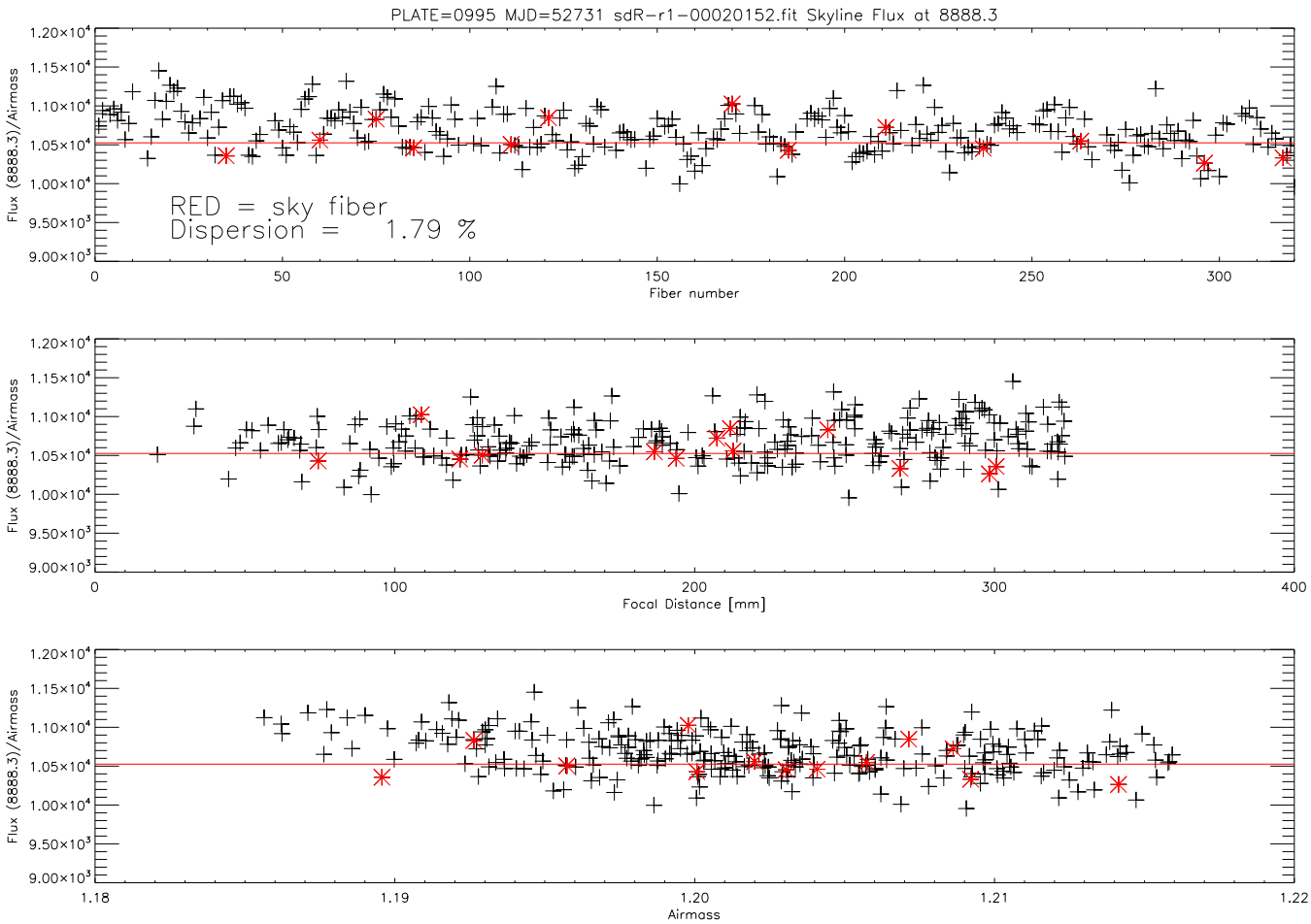

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11.4
-11.2
-11.0
-10.8
-10.6
50
100
150
200
250
300
Fiber number

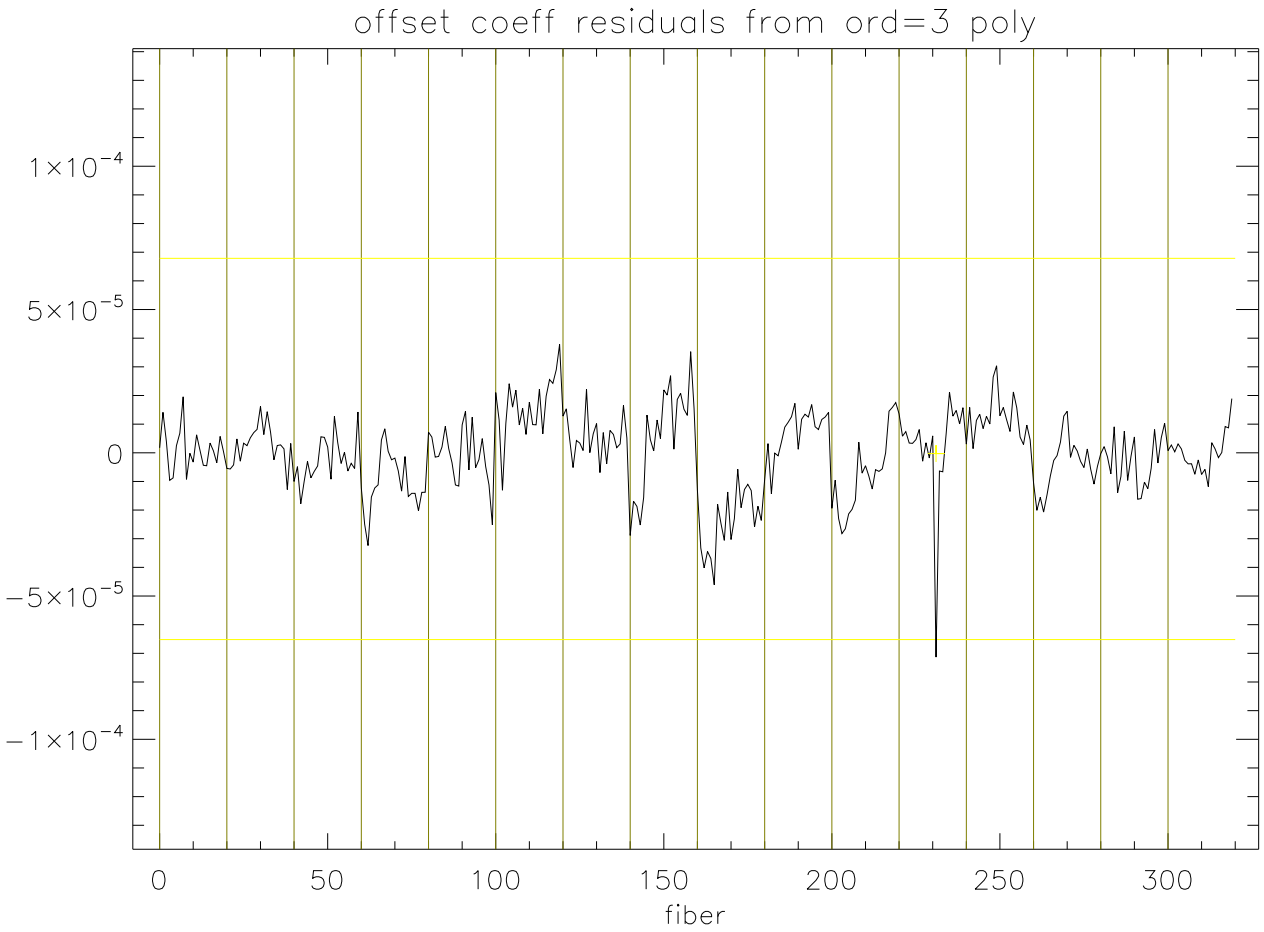

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

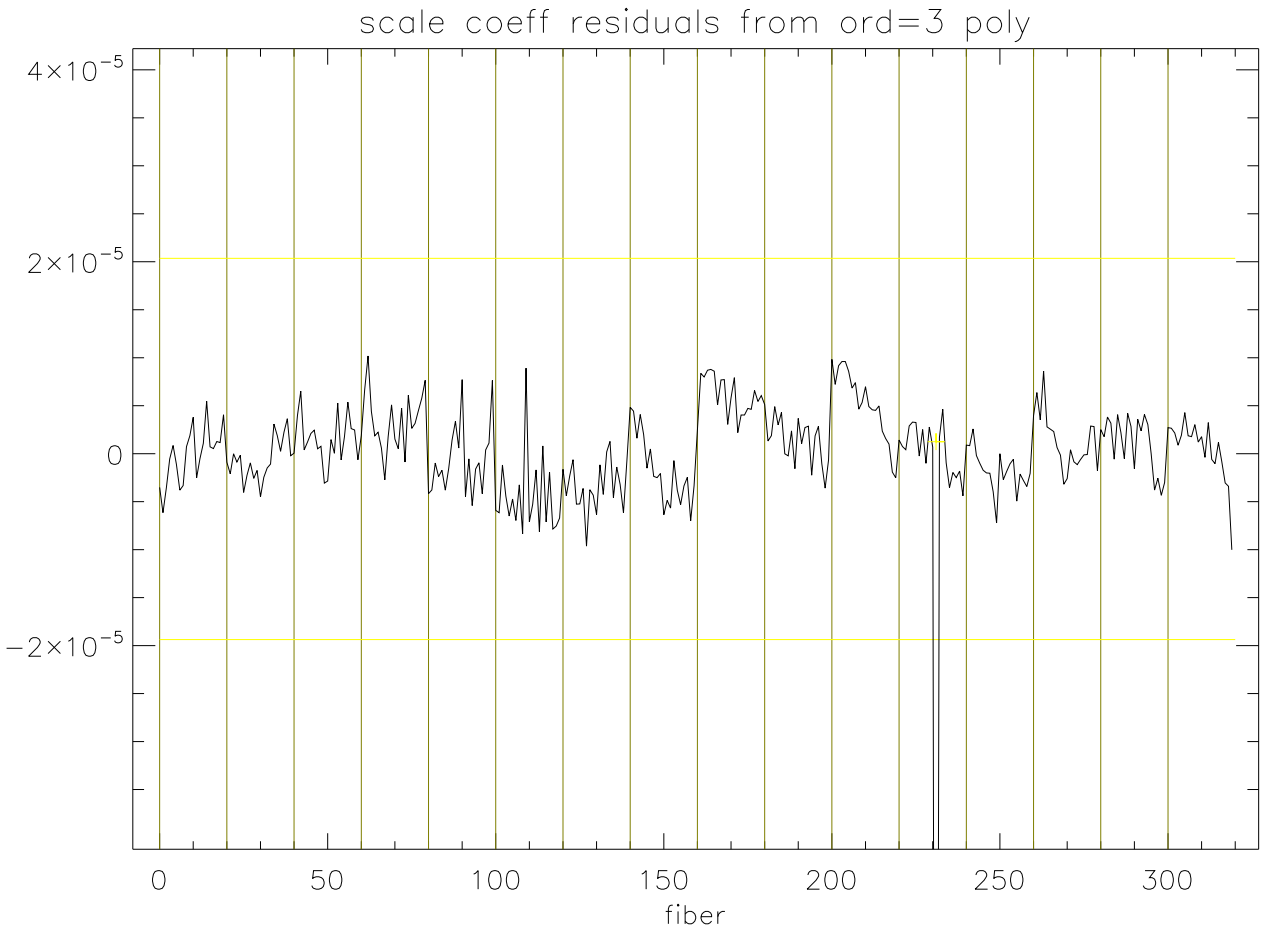

PLATE=0995 MJD=52731 sdR-r1-00020152.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

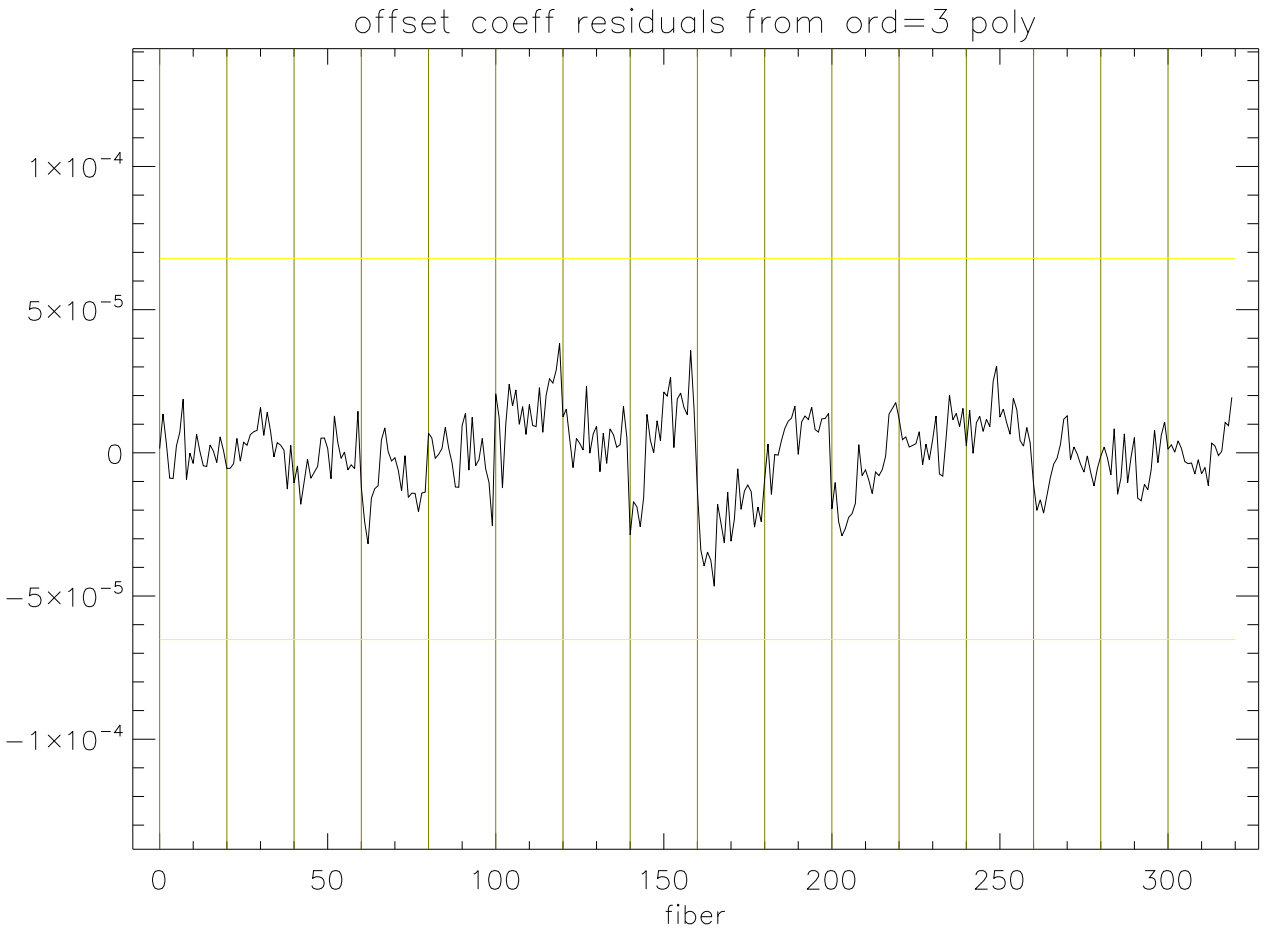

Number of sky fibers = 13
PLATE=0995 MJD=52731 sdR-r1-00020152.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

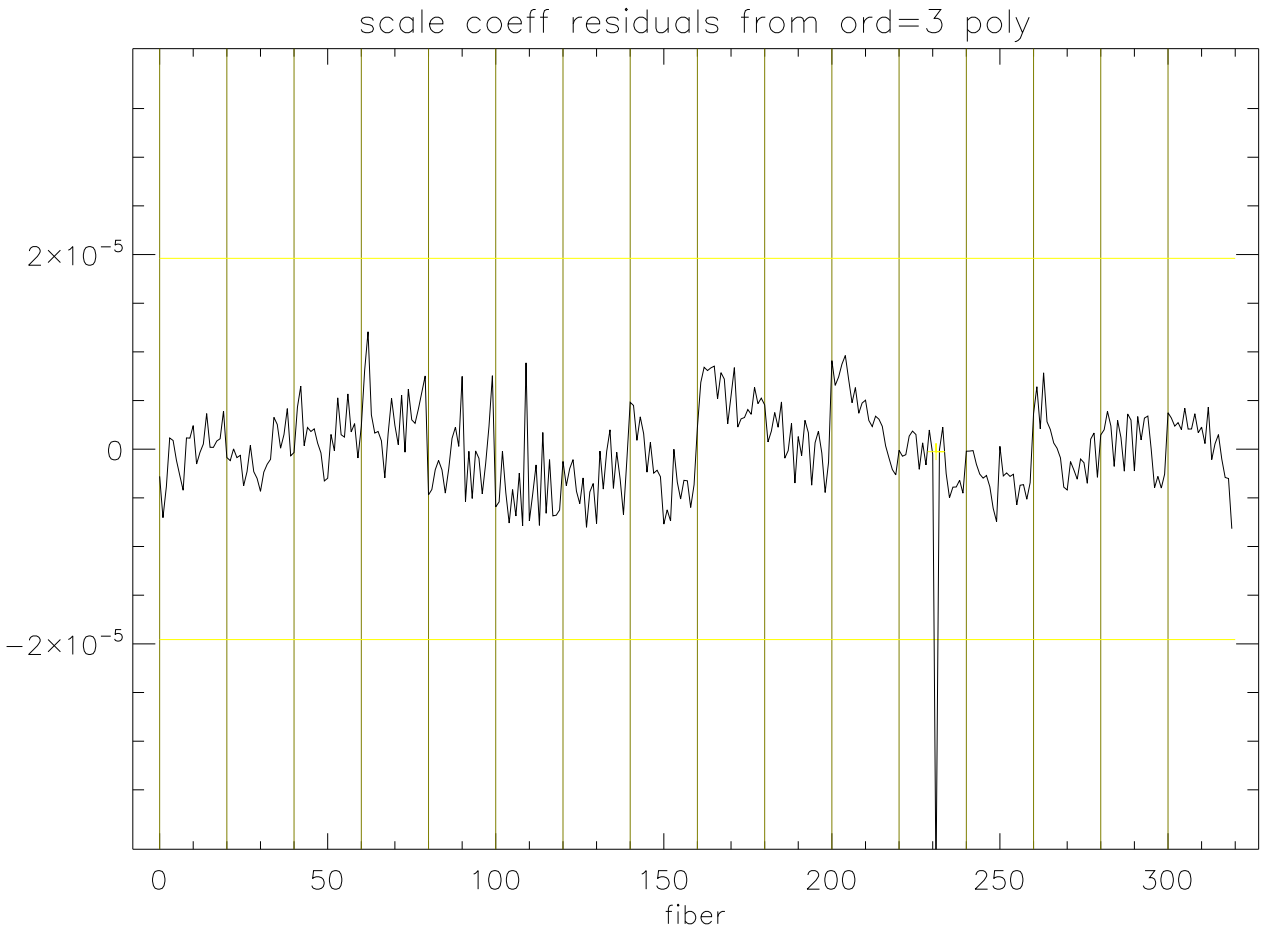

PLATE=0995 MJD=52731 sdR-r1-00020152.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.89 %
Fiber number
Focal Distance [mm]
Airmass

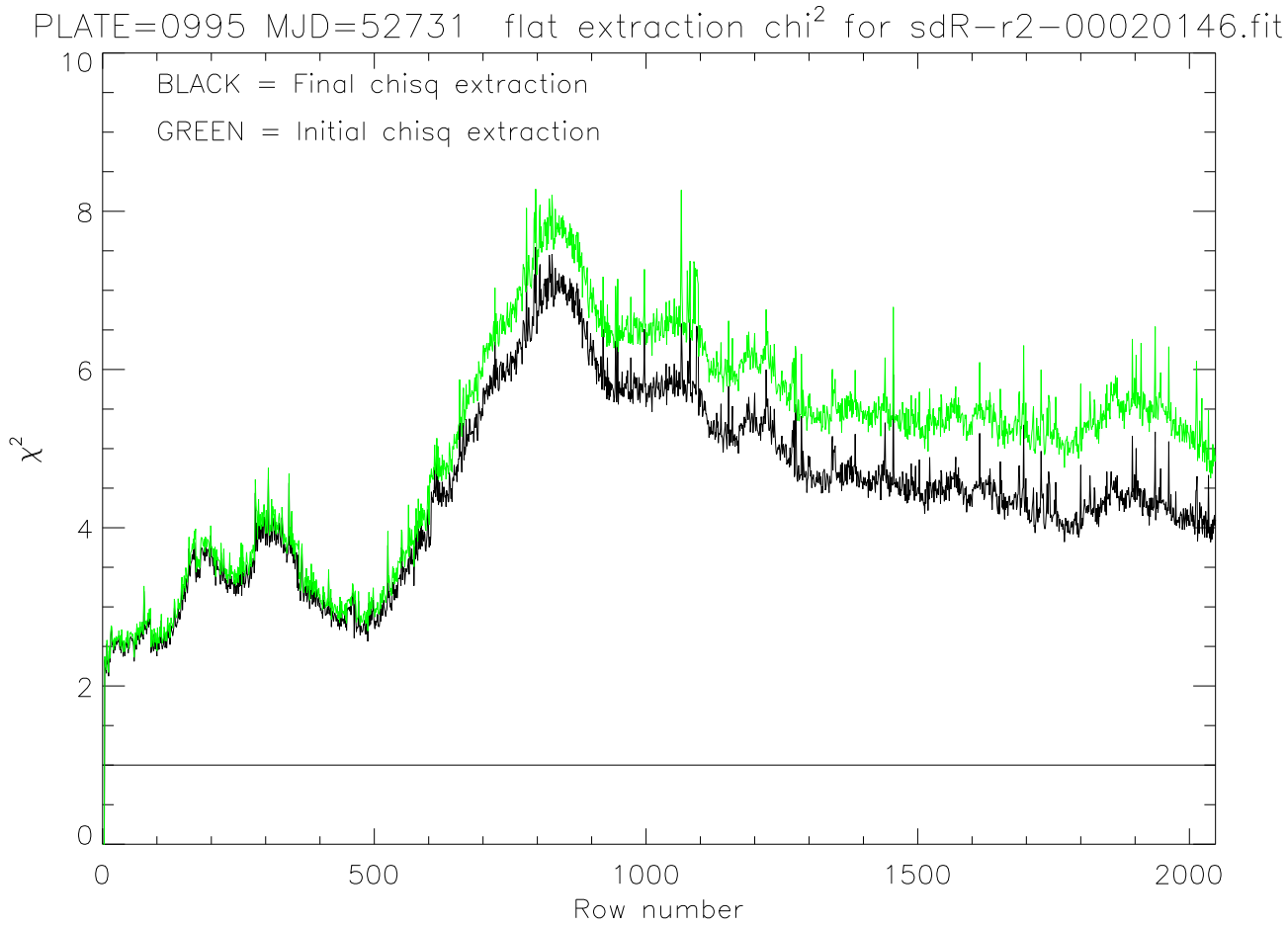

PLATE=0995 MJD=52731 sdR-r1-00020152.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.79 %
Fiber number
Focal Distance [mm]
Airmass

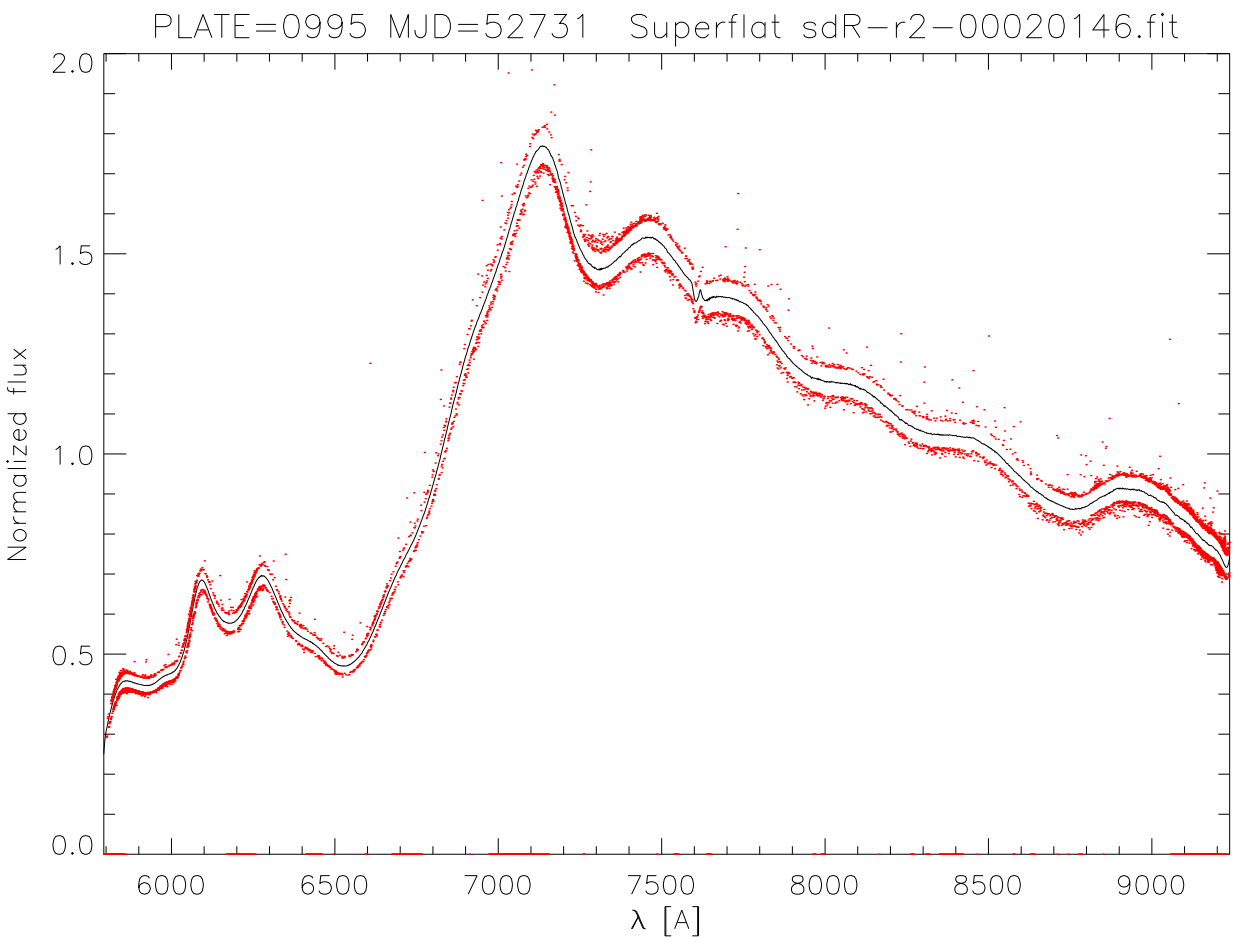

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

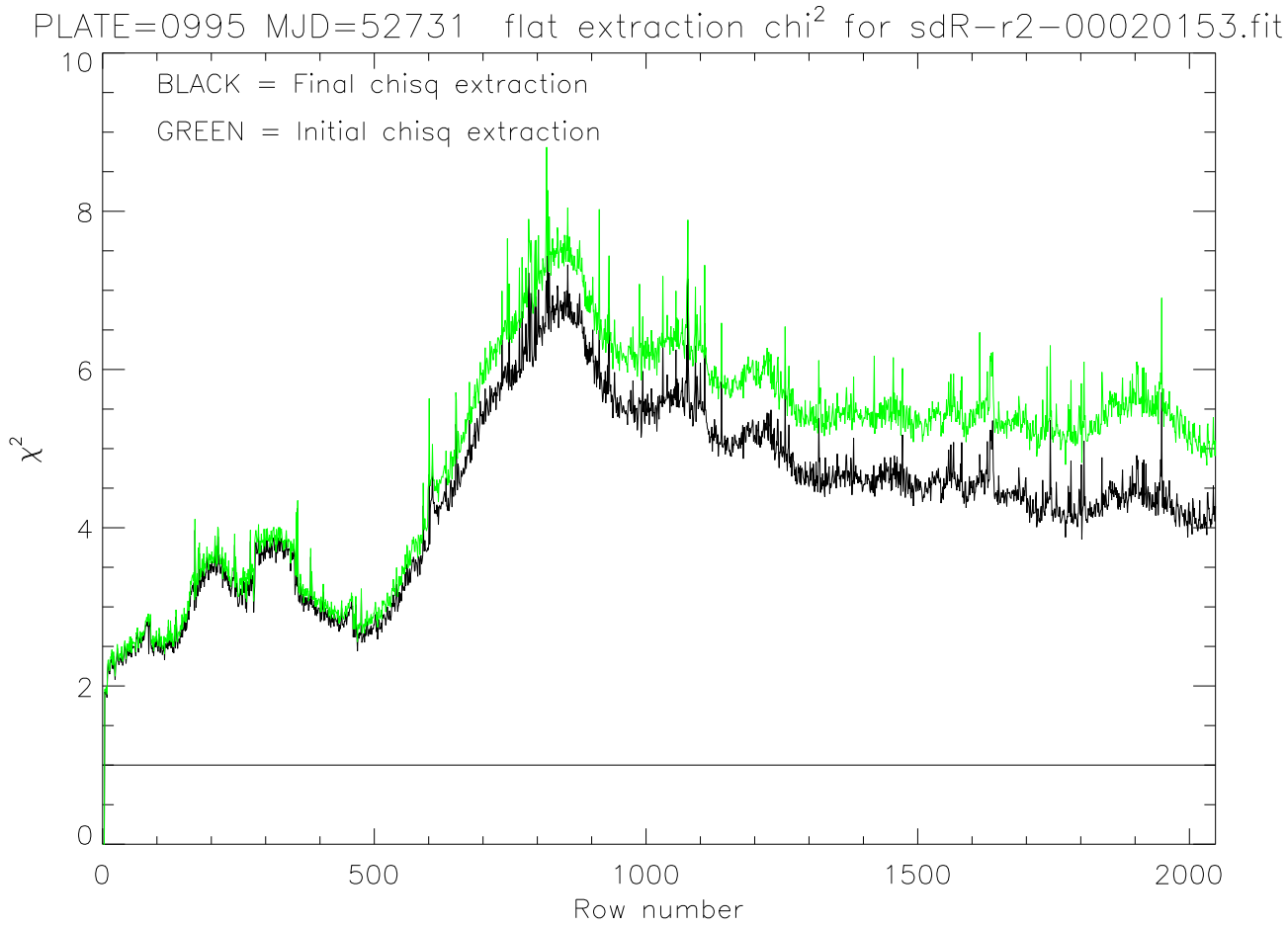

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

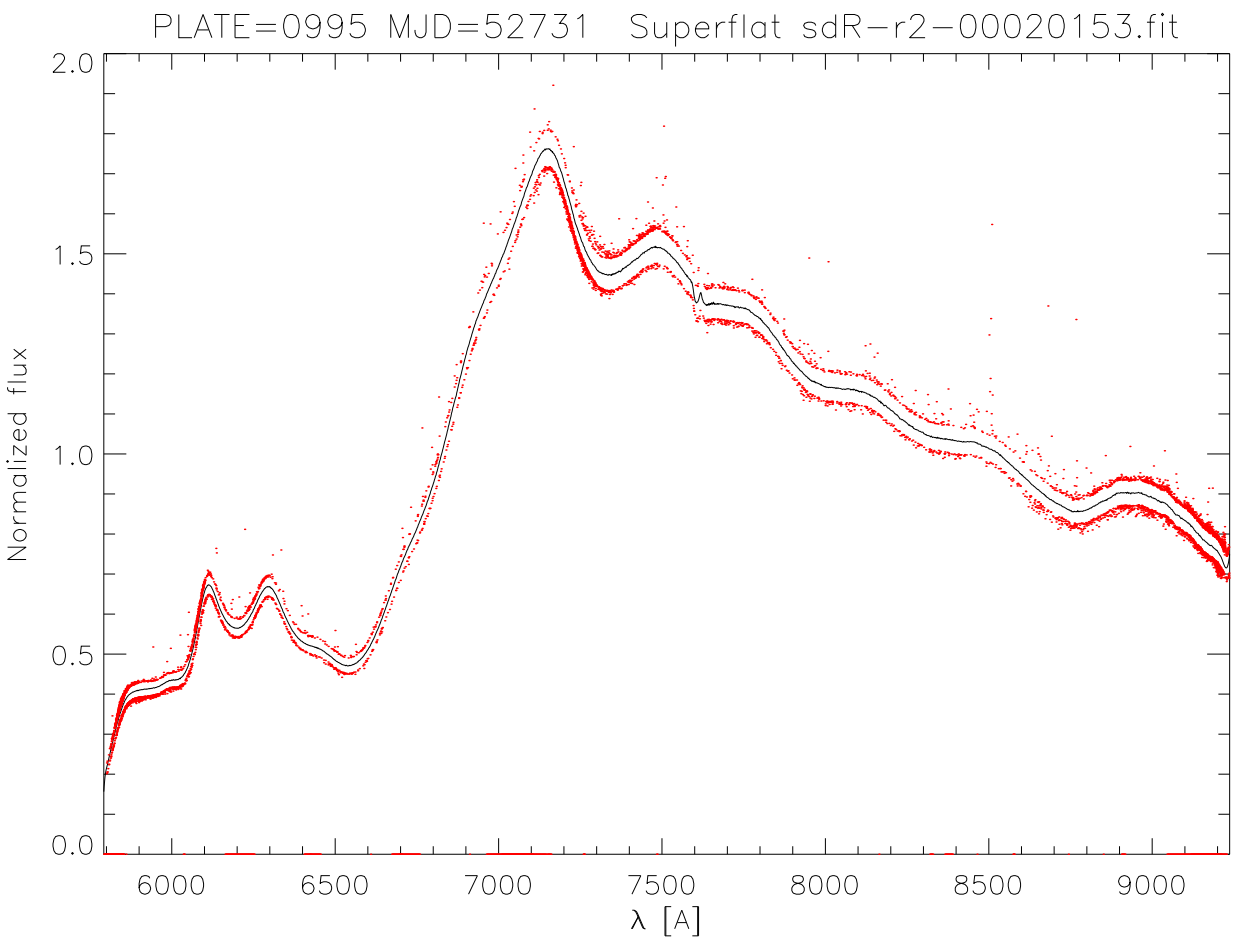

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

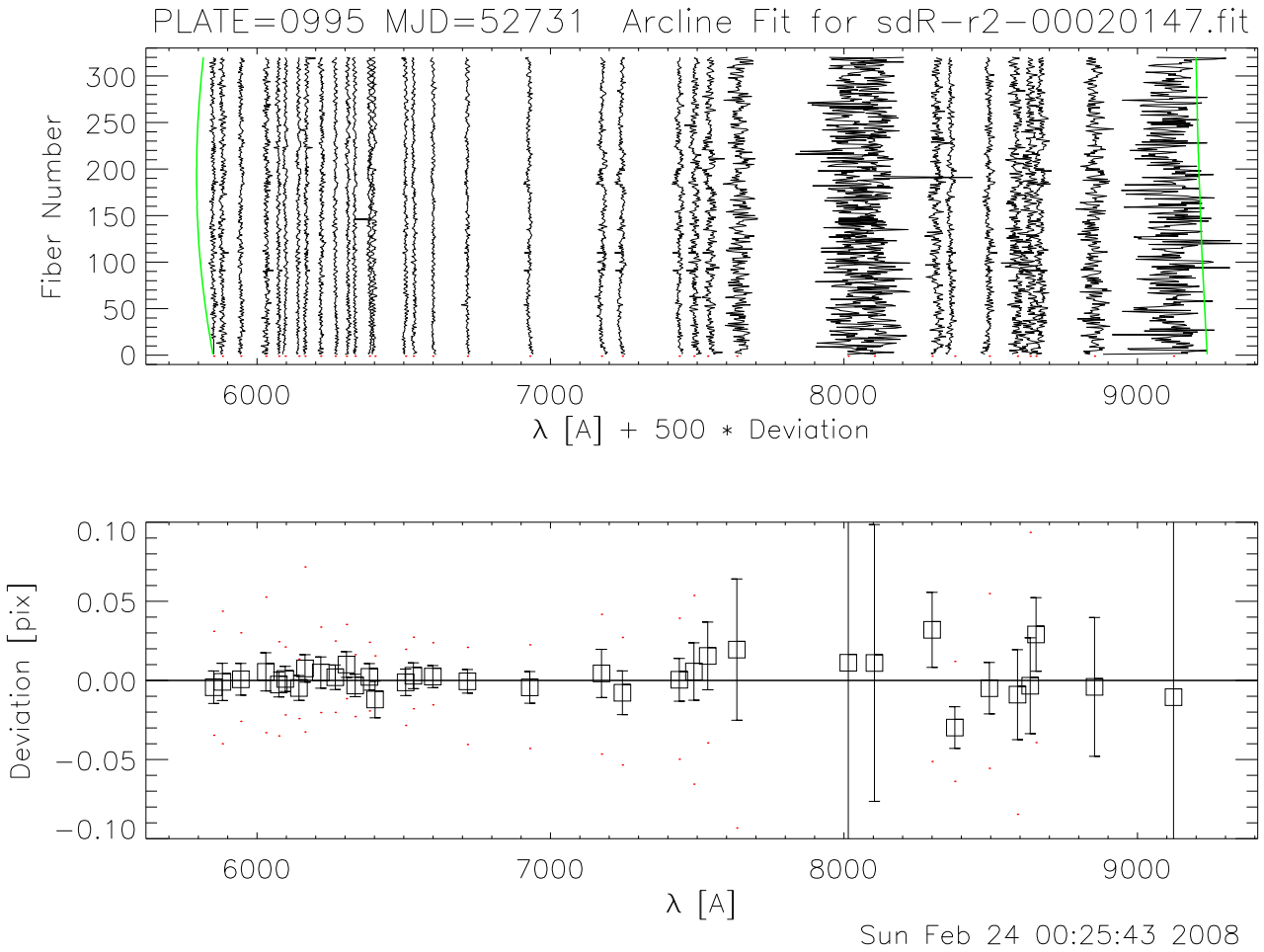

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

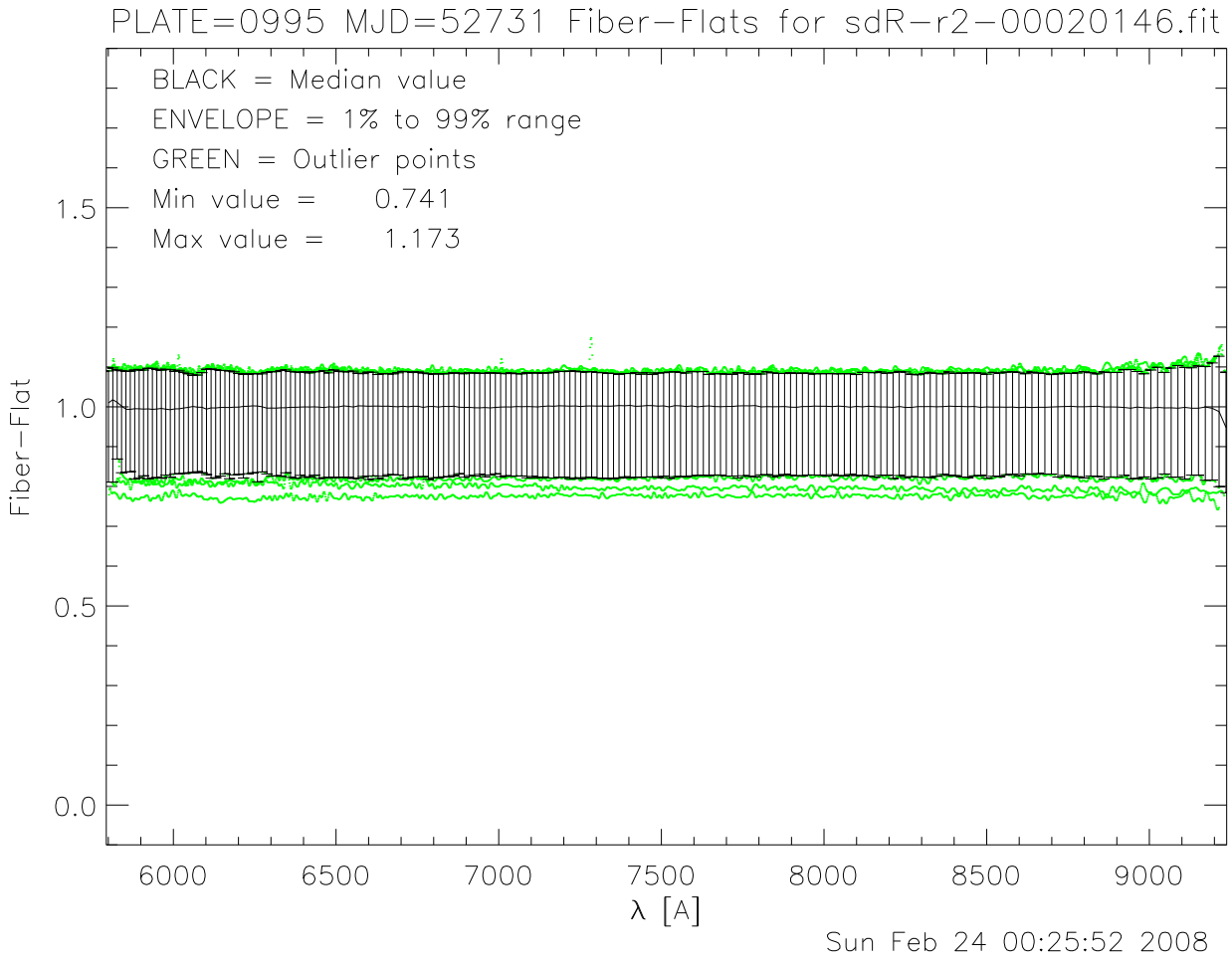

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−r2−00020146.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

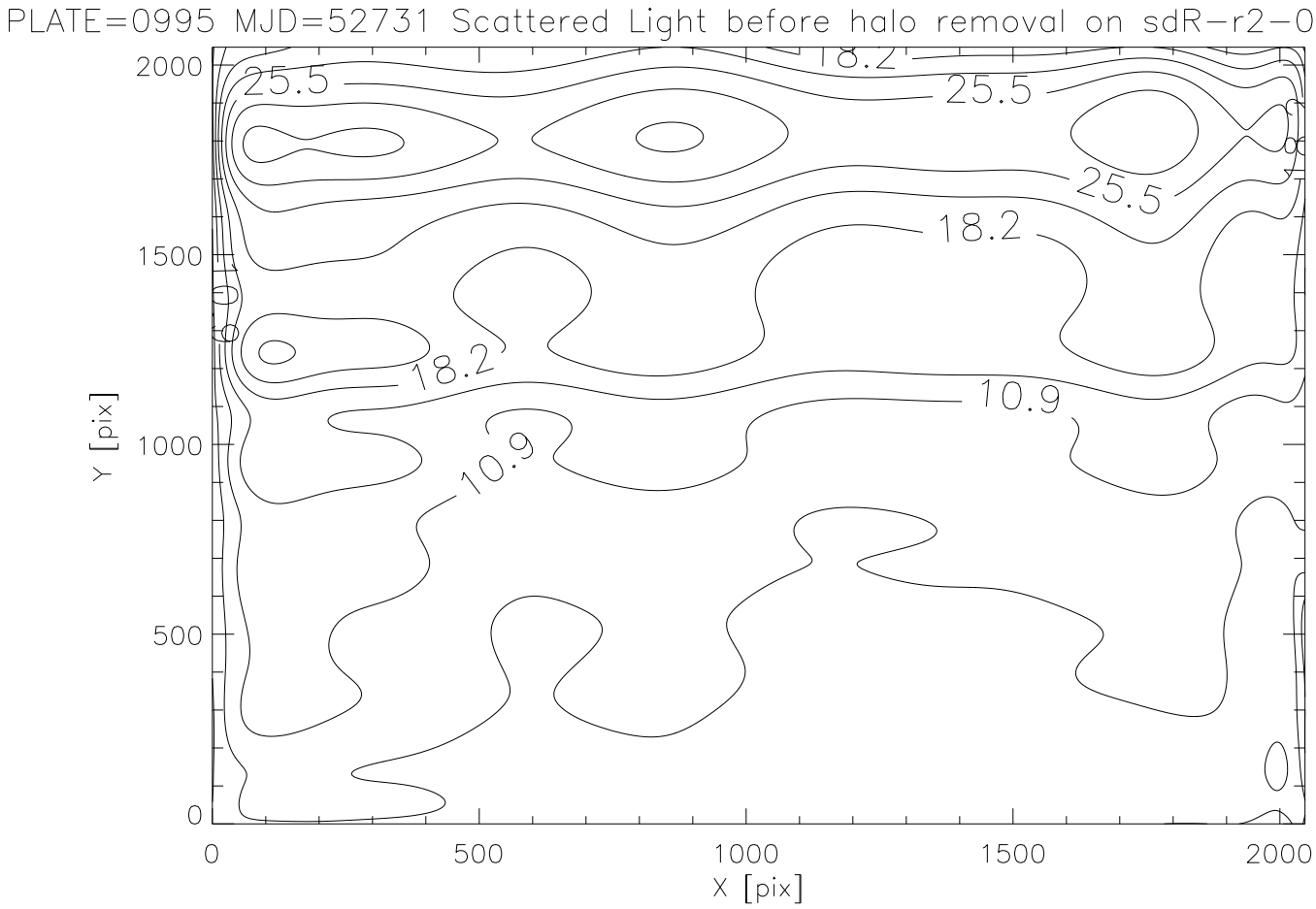

PLATE=0995 MJD=52731 Superflat sdR-r2-00020146.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

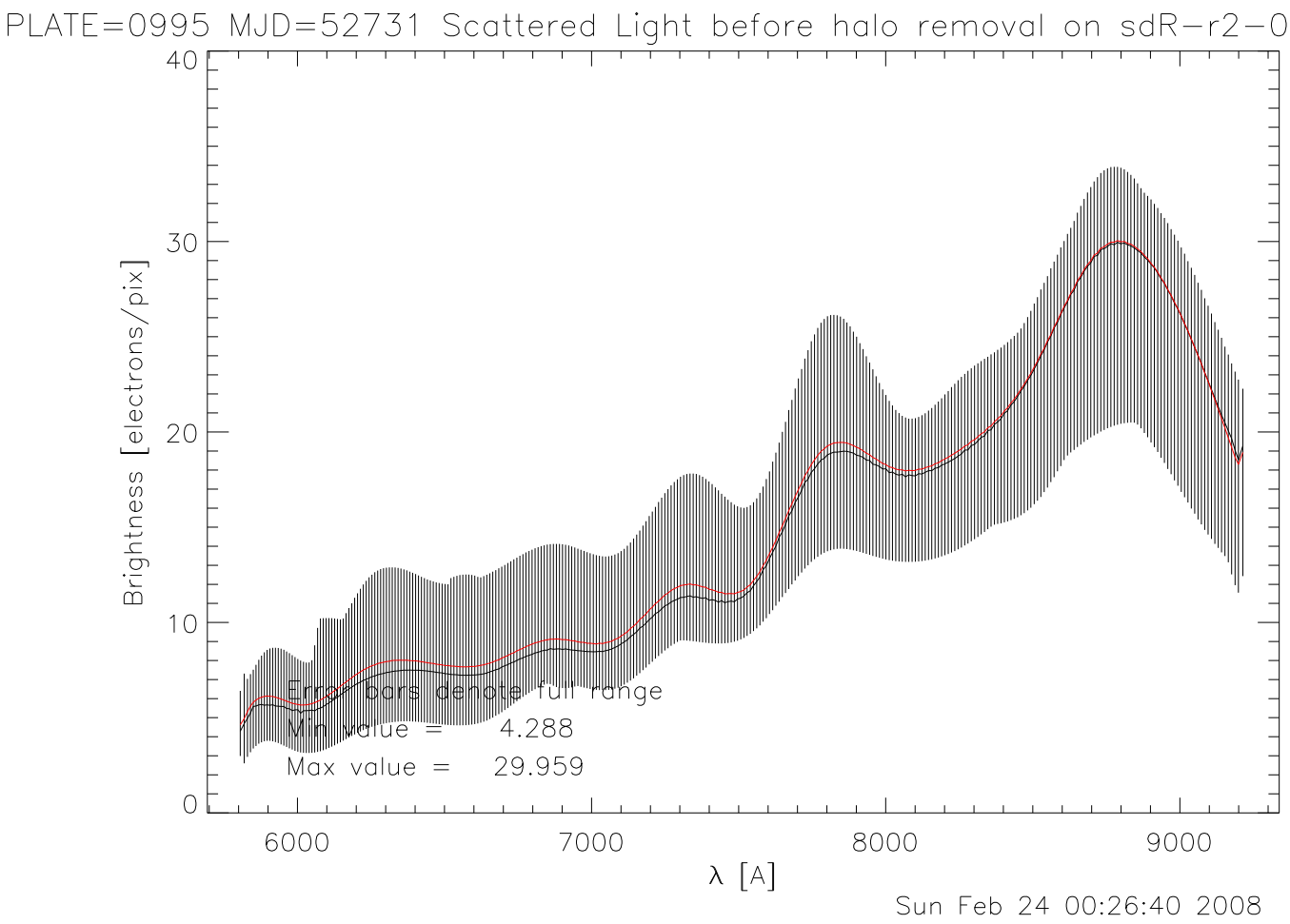

PLATE=0995 MJD=52731 flat extraction chi^2 for sdR−r2−00020153.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

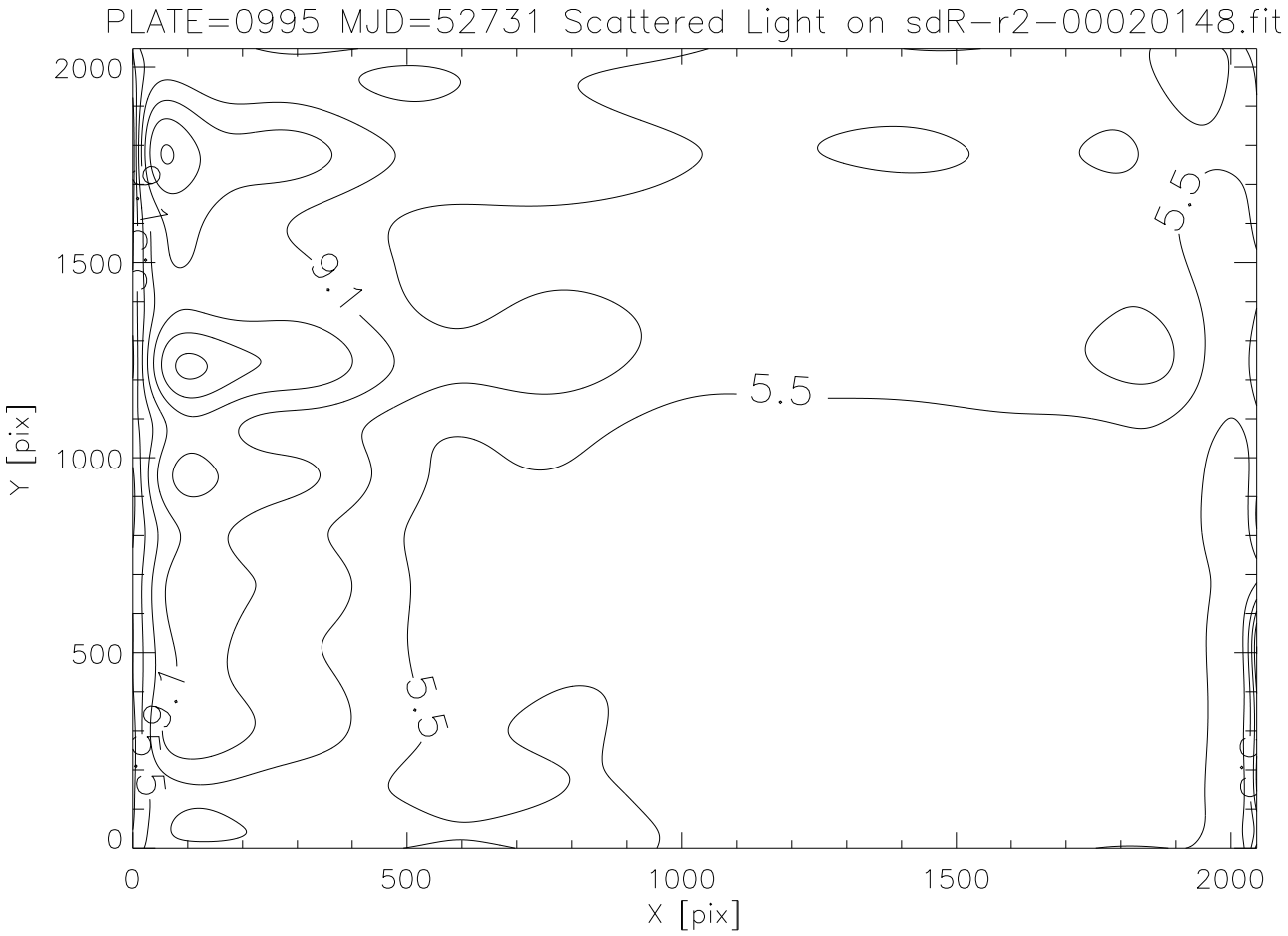

PLATE=0995 MJD=52731 Superflat sdR-r2-00020153.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

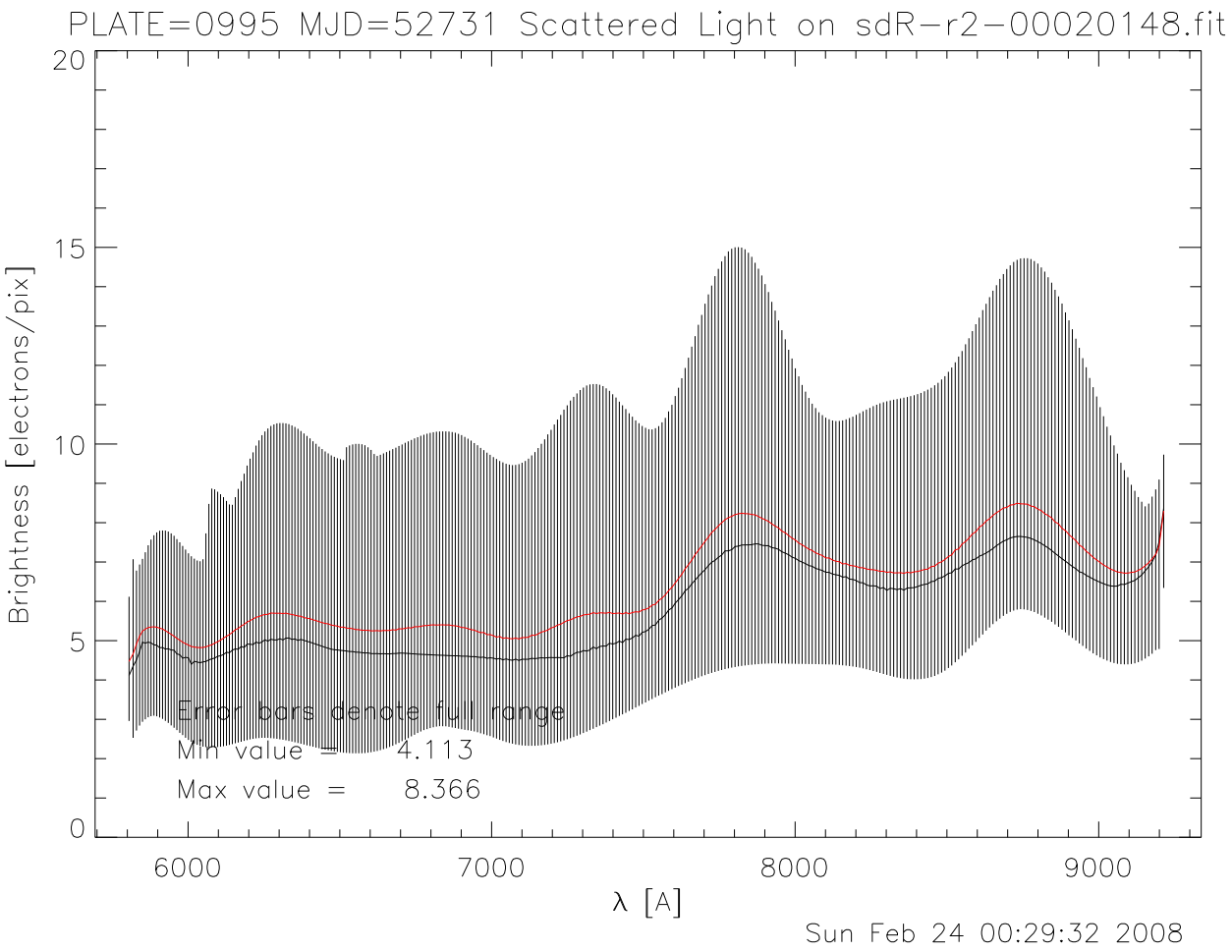

PLATE=0995 MJD=52731 Arcline Fit for sdR-r2-00020147.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sun Feb 24 00:25:43 2008

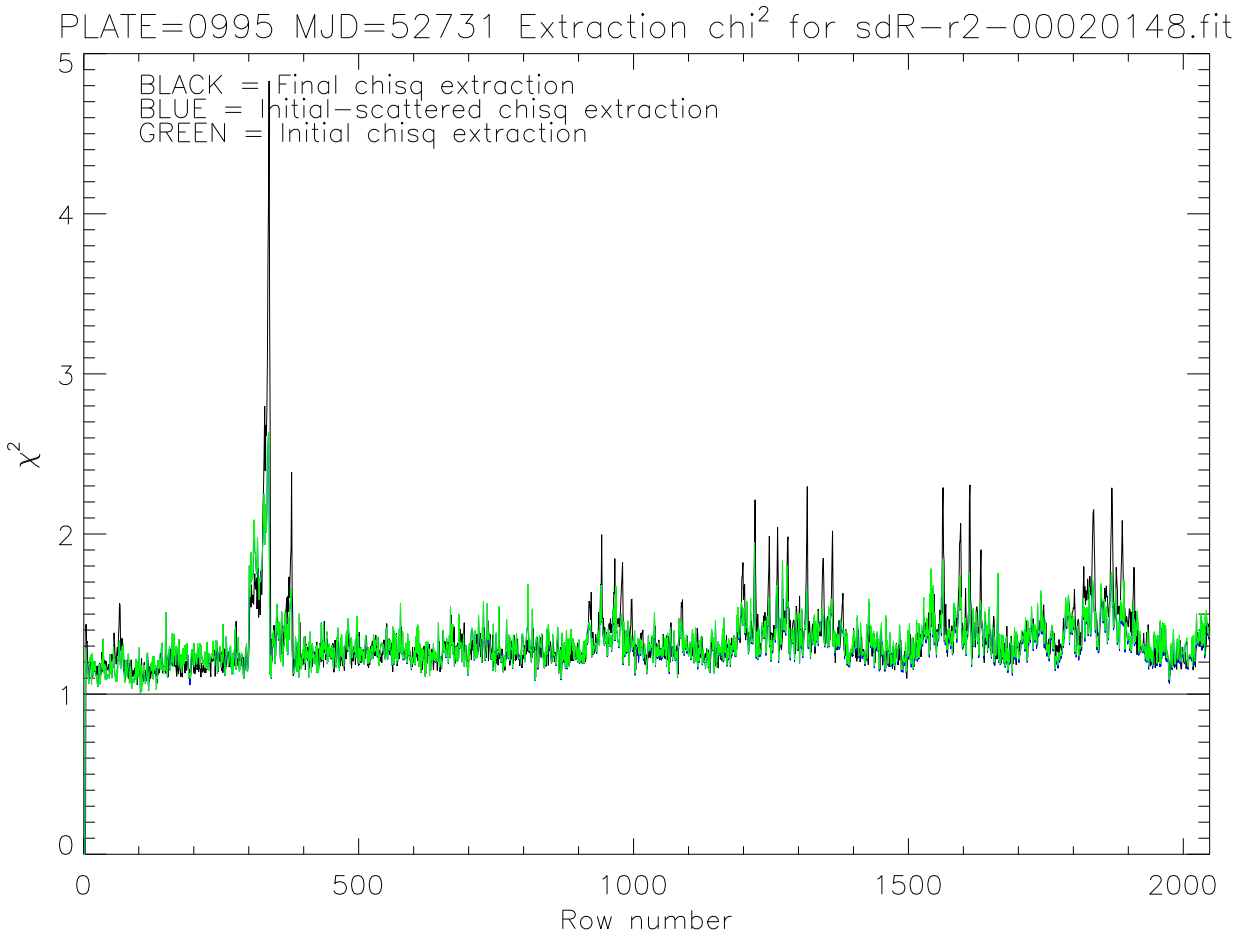

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r2−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.741
Max value = 1.173
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:25:52 2008

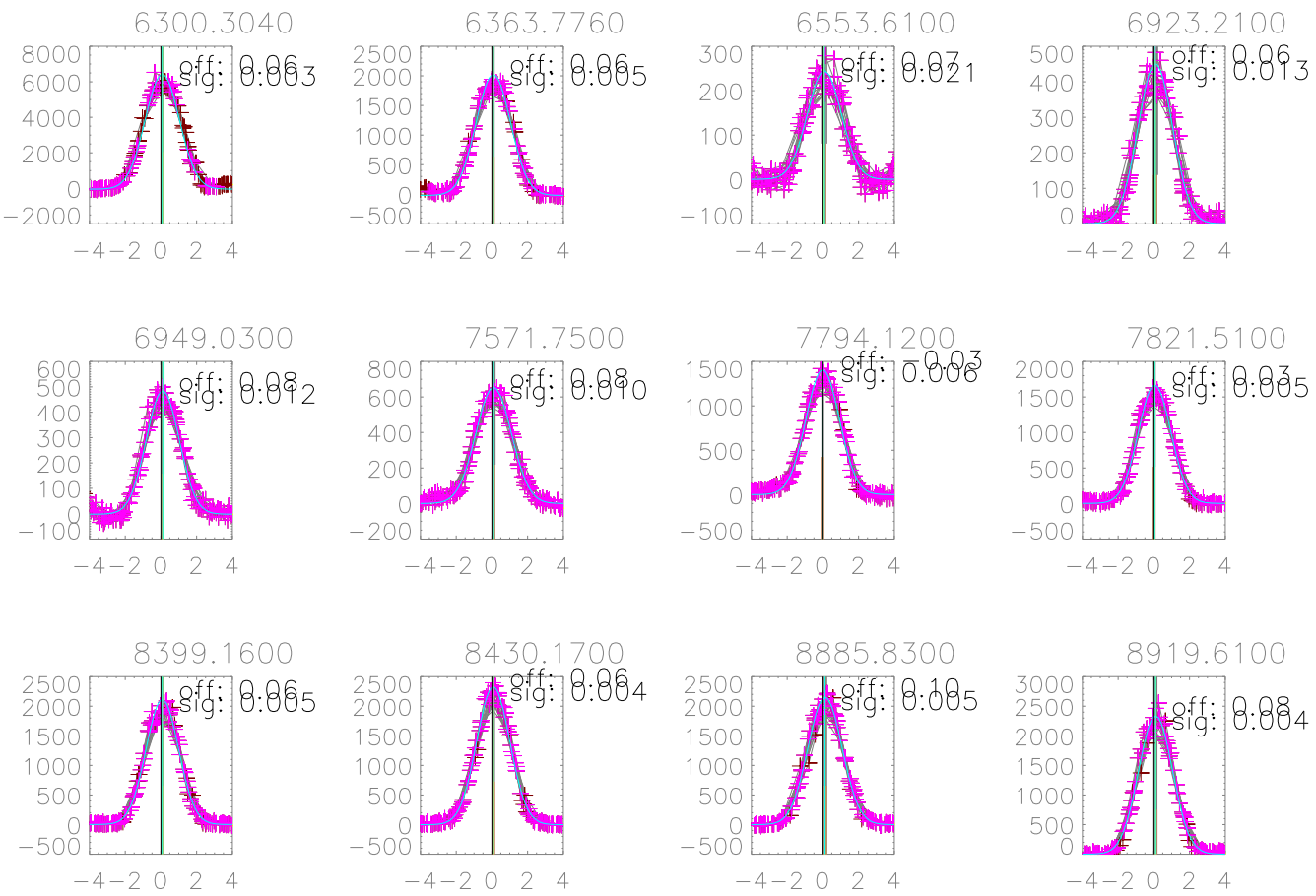

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020148.fi
25.5
25.5
25.5
18.2
18.2
18.2
10.9
10.9
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

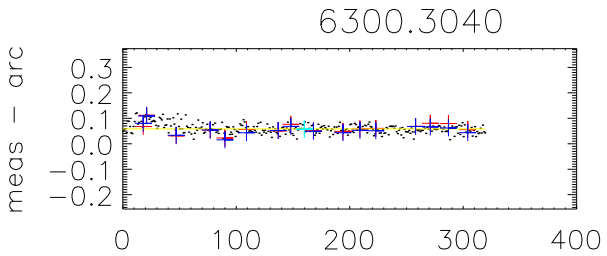

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020148.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.288
Max value = 29.959
Sun Feb 24 00:26:40 2008

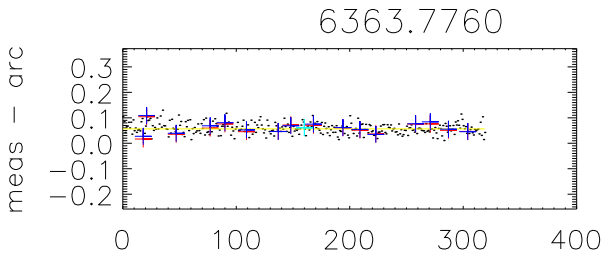

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020148.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
5.5
5.5
9.1
5.5
9.1
5.5

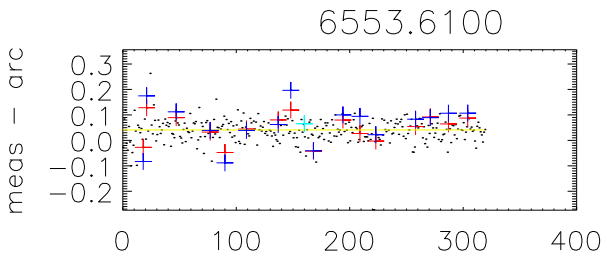

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020148.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.113
Max value = 8.366
Sun Feb 24 00:29:32 2008

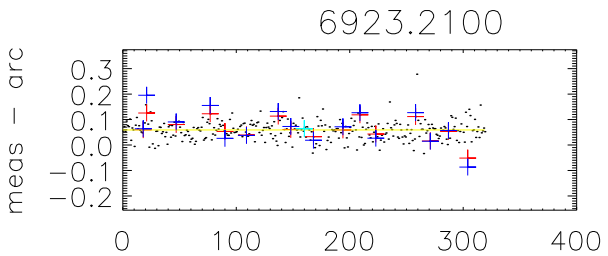

PLATE=0995 MJD=52731 Extraction chi^2 for sdR-r2-00020148.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

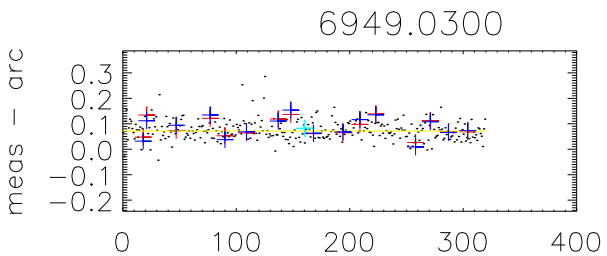

6300.3040
off: 0.06
sig: 0.003
6363.7760
off: 0.06
sig: 0.005
6553.6100
off: 0.07
sig: 0.021
6923.2100
off: 0.06
sig: 0.013
6949.0300
off: 0.08
sig: 0.012
7571.7500
off: 0.08
sig: 0.010
7794.1200
off: −0.03
sig: 0.006
7821.5100
off: 0.03
sig: 0.005
8399.1600
off: 0.06
sig: 0.005
8430.1700
off: 0.06
sig: 0.004
8885.8300
off: 0.10
sig: 0.005
8919.6100
off: 0.08
sig: 0.004

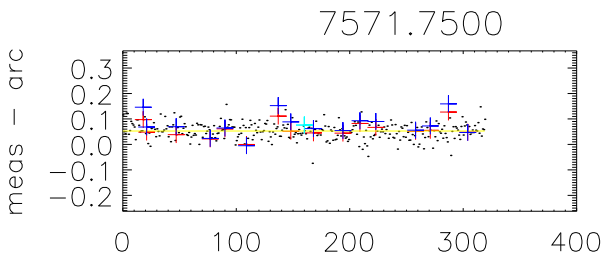

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

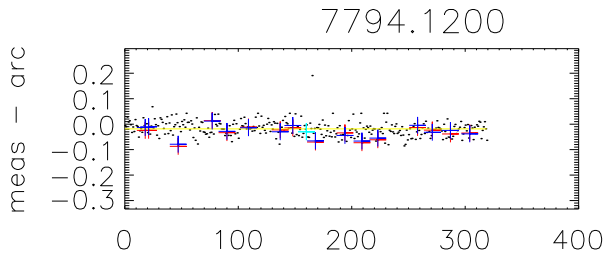

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

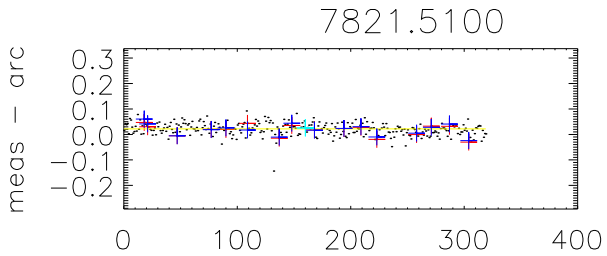

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

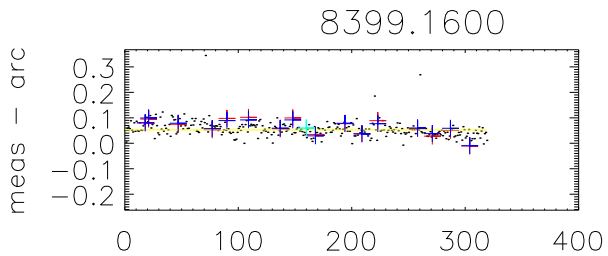

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

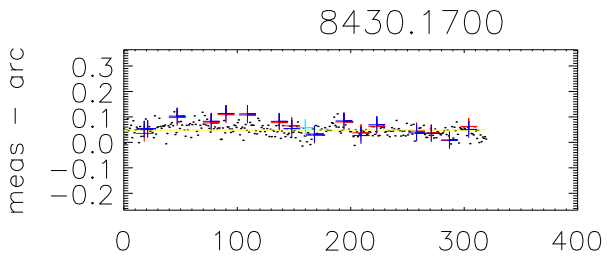

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

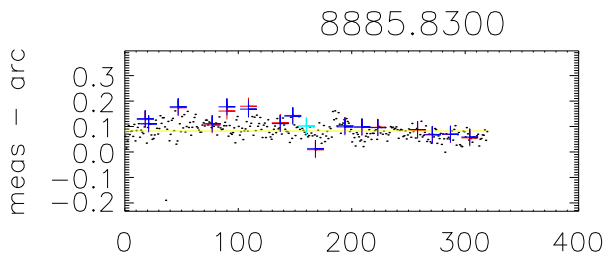

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

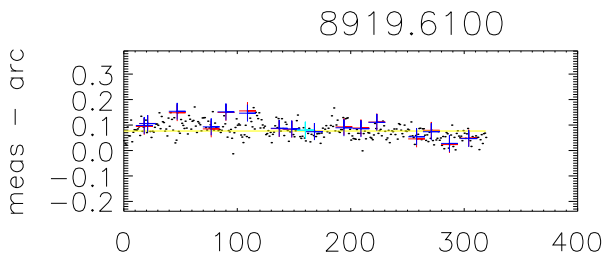

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

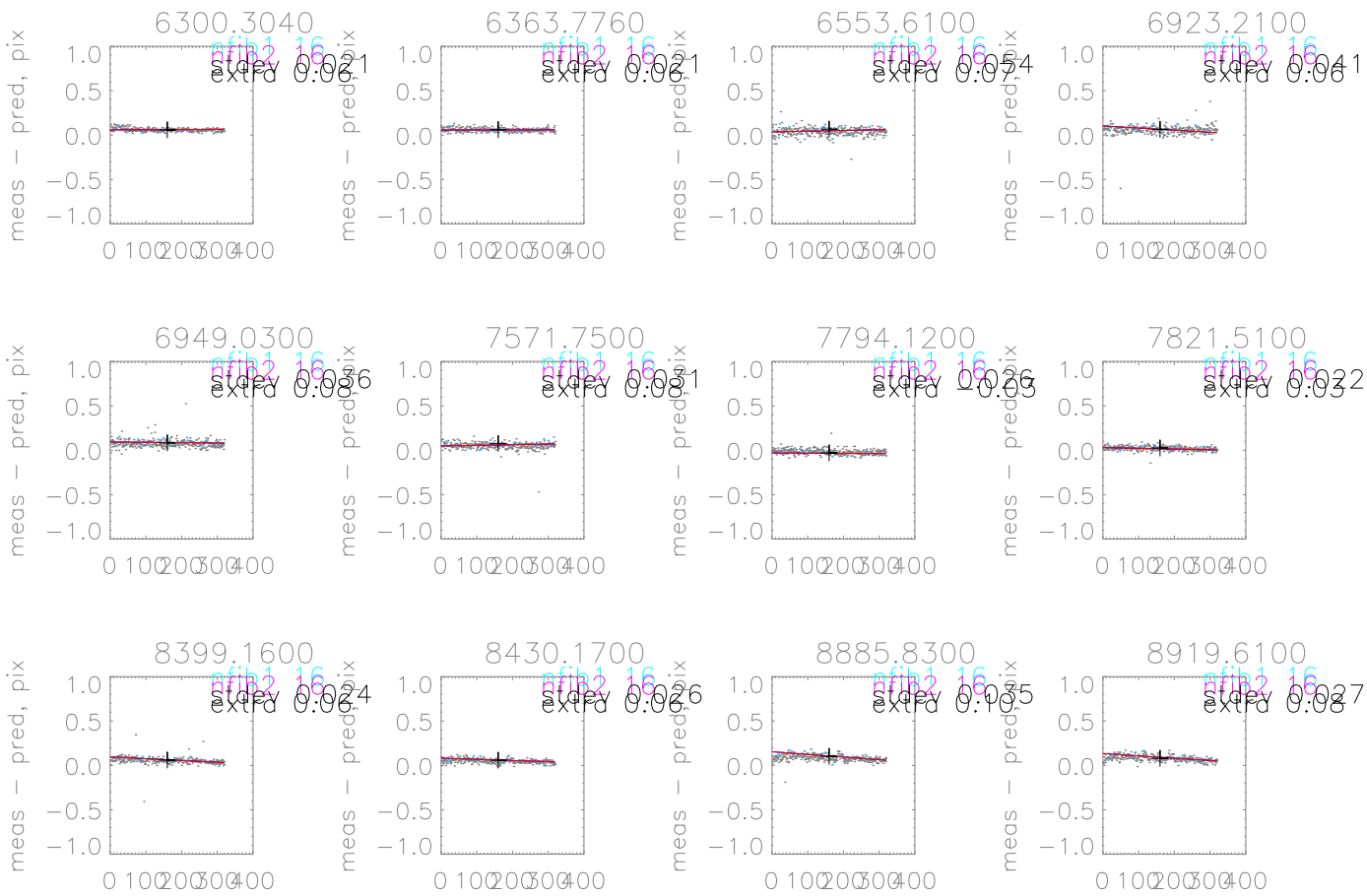

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

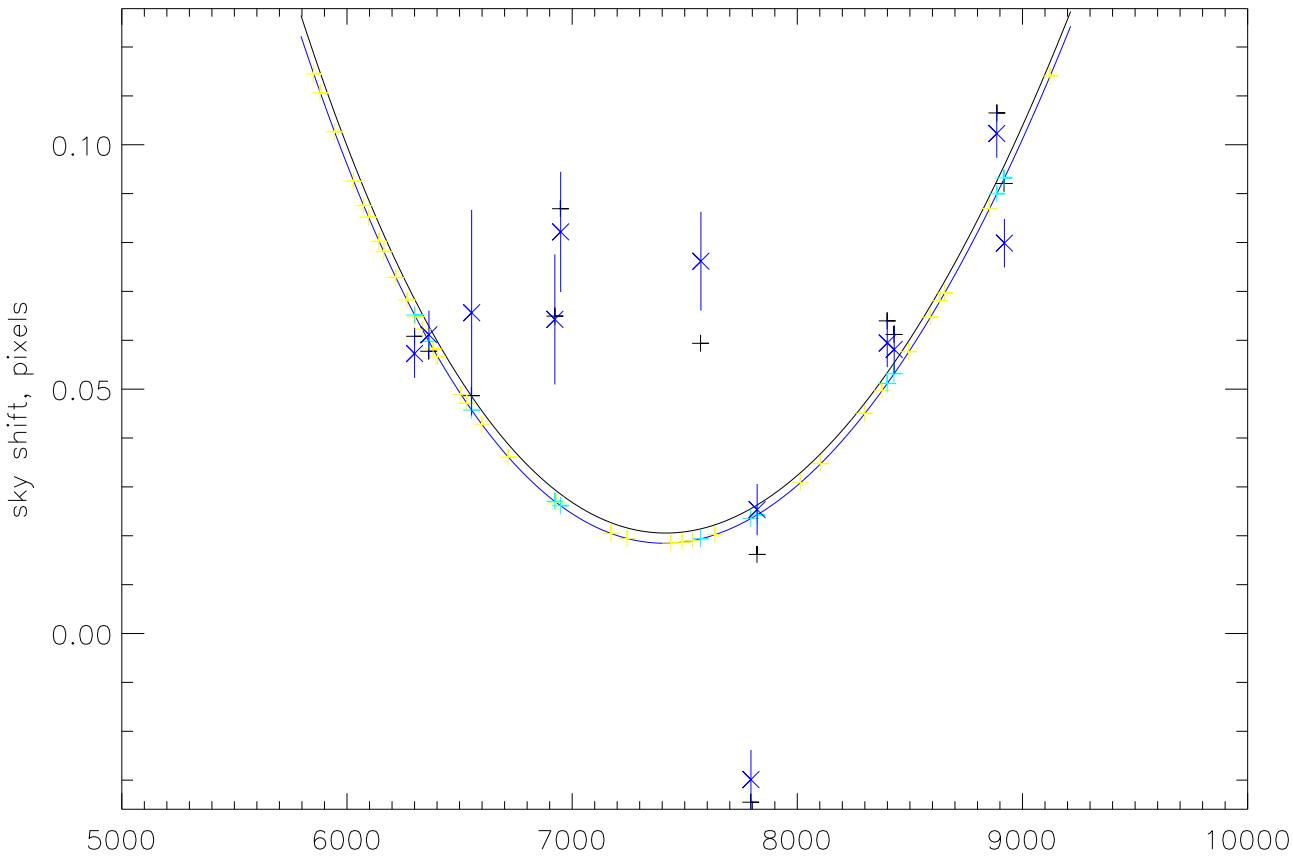

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

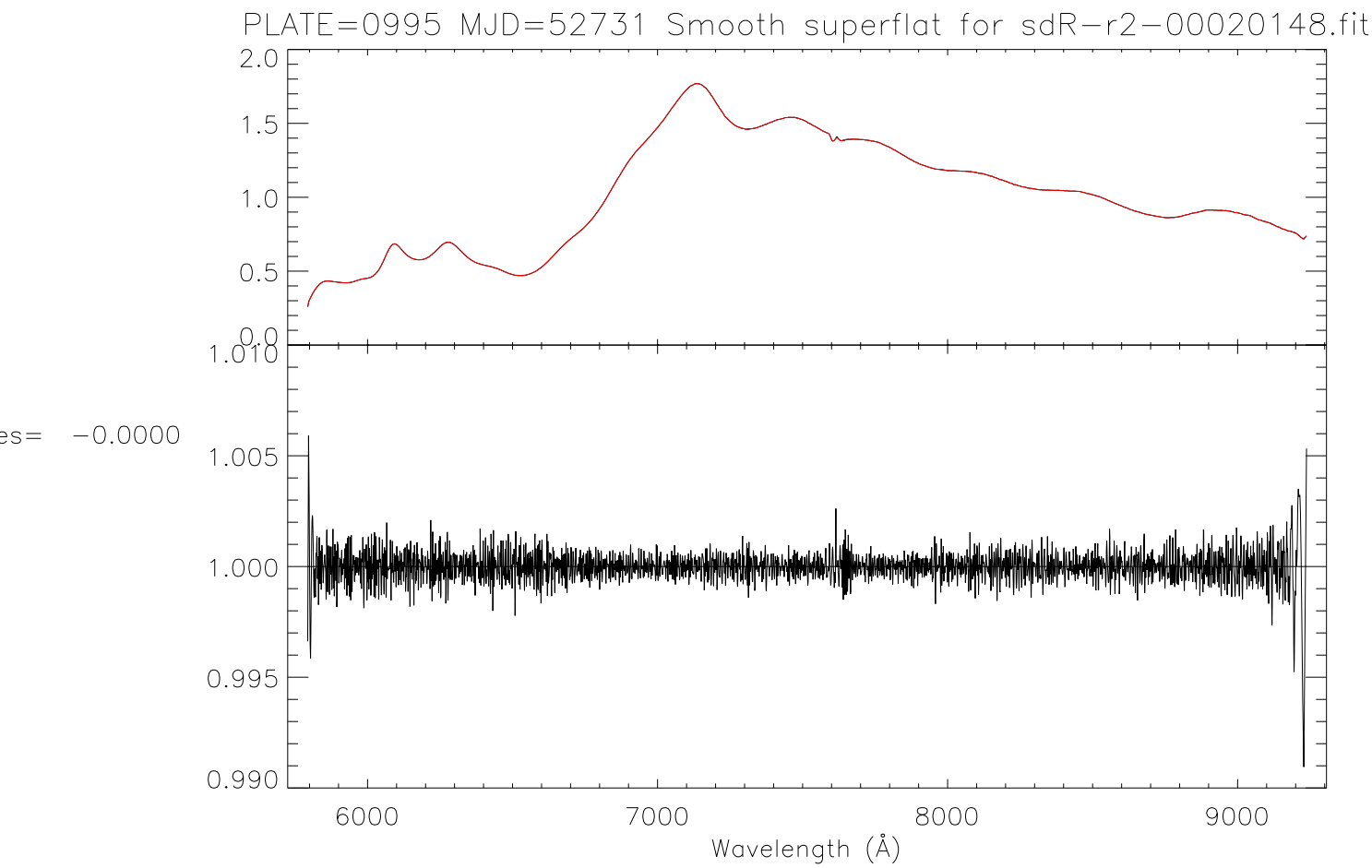

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

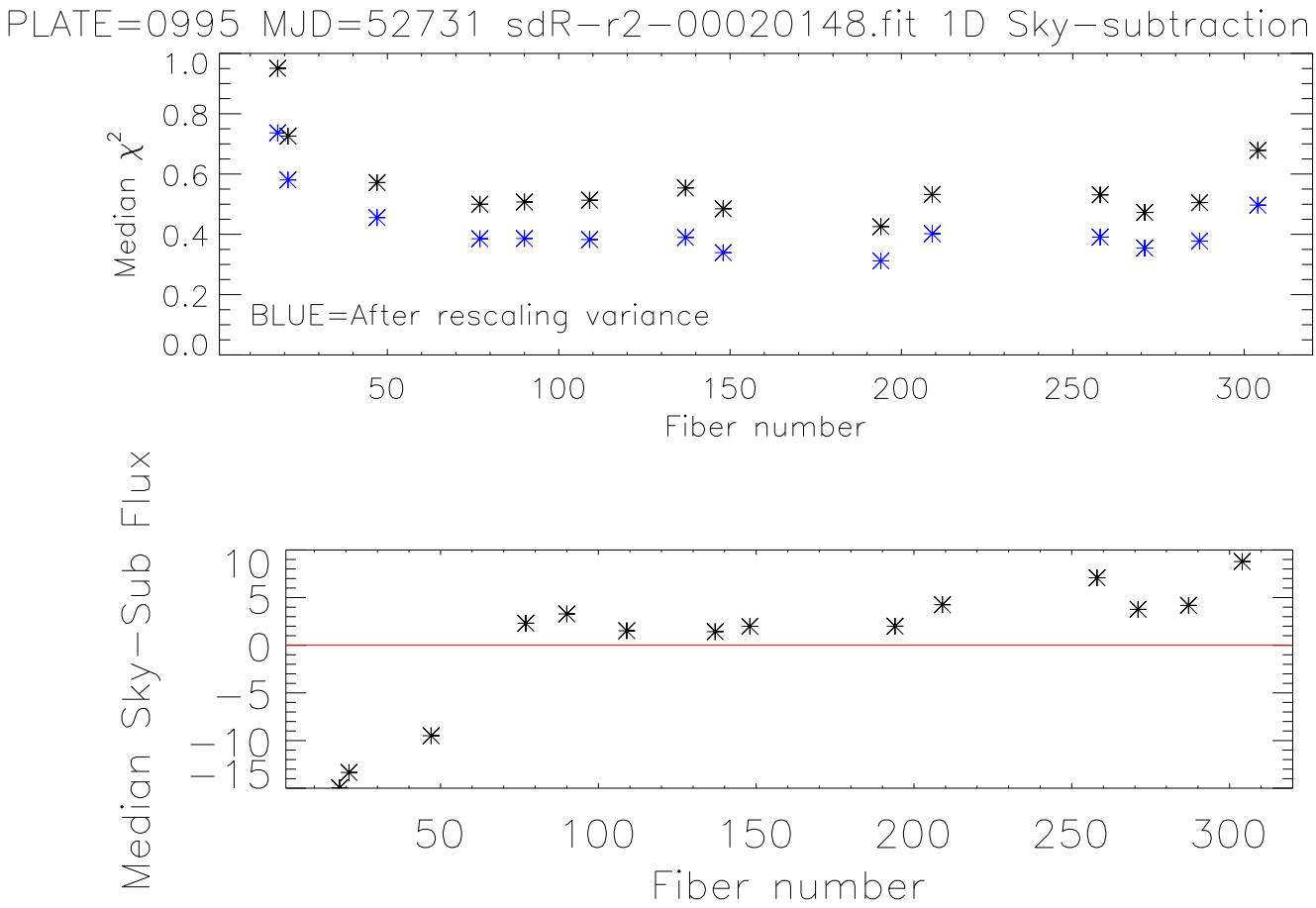

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

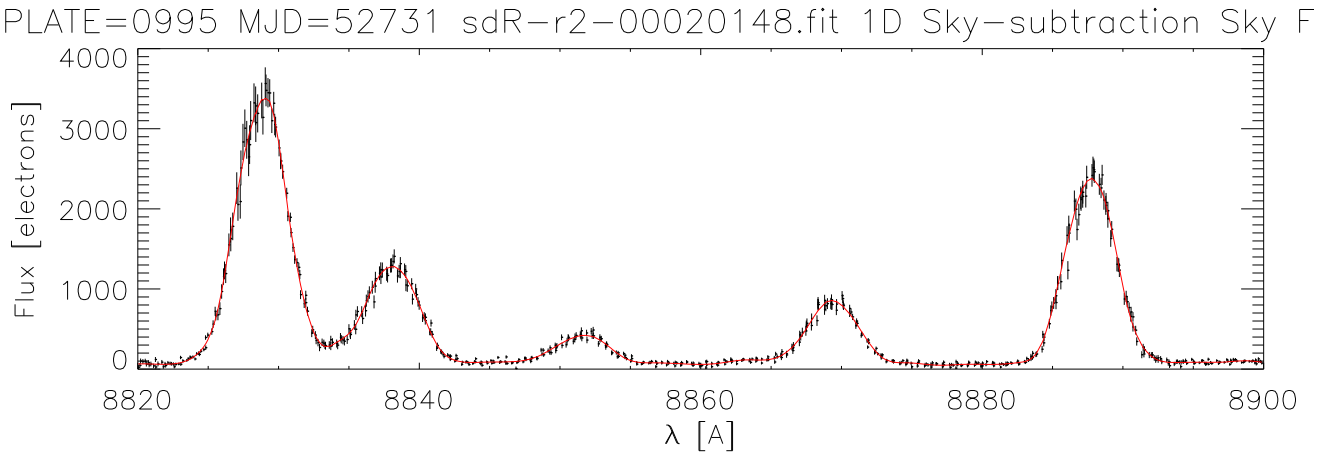

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

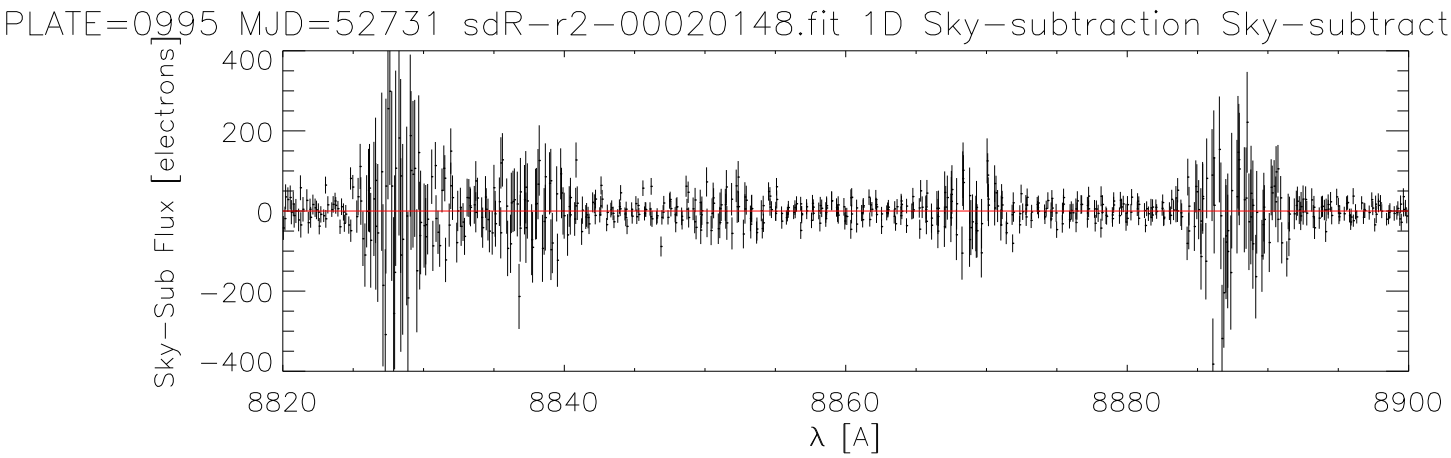

6300.3040
stdev 0.021
extra 0.06
6363.7760
stdev 0.021
extra 0.06
6553.6100
stdev 0.024
extra 0.07
6923.2100
stdev 0.041
extra 0.06
6949.0300
stdev 0.036
extra 0.08
7571.7500
stdev 0.031
extra 0.08
7794.1200
stdev 0.026
extra −0.03
7821.5100
stdev 0.022
extra 0.03
8399.1600
stdev 0.024
extra 0.06
8430.1700
stdev 0.026
extra 0.06
8885.8300
stdev 0.035
extra 0.10
8919.6100
stdev 0.027
extra 0.08
meas − pred, pix
mfhd2 16

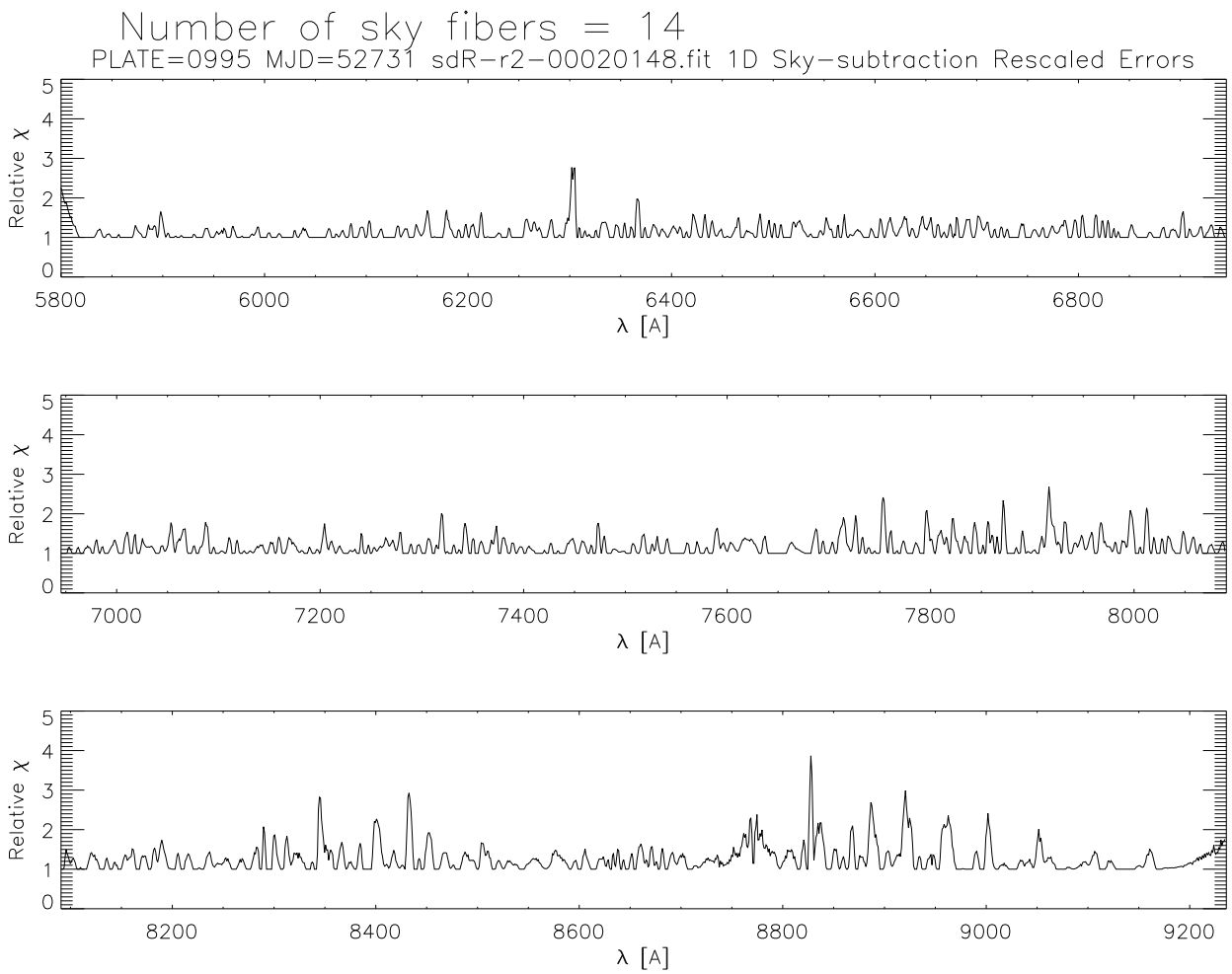

sky shift, pixels
0.10
0.05
0.00
5000
6000
7000
8000
9000
10000

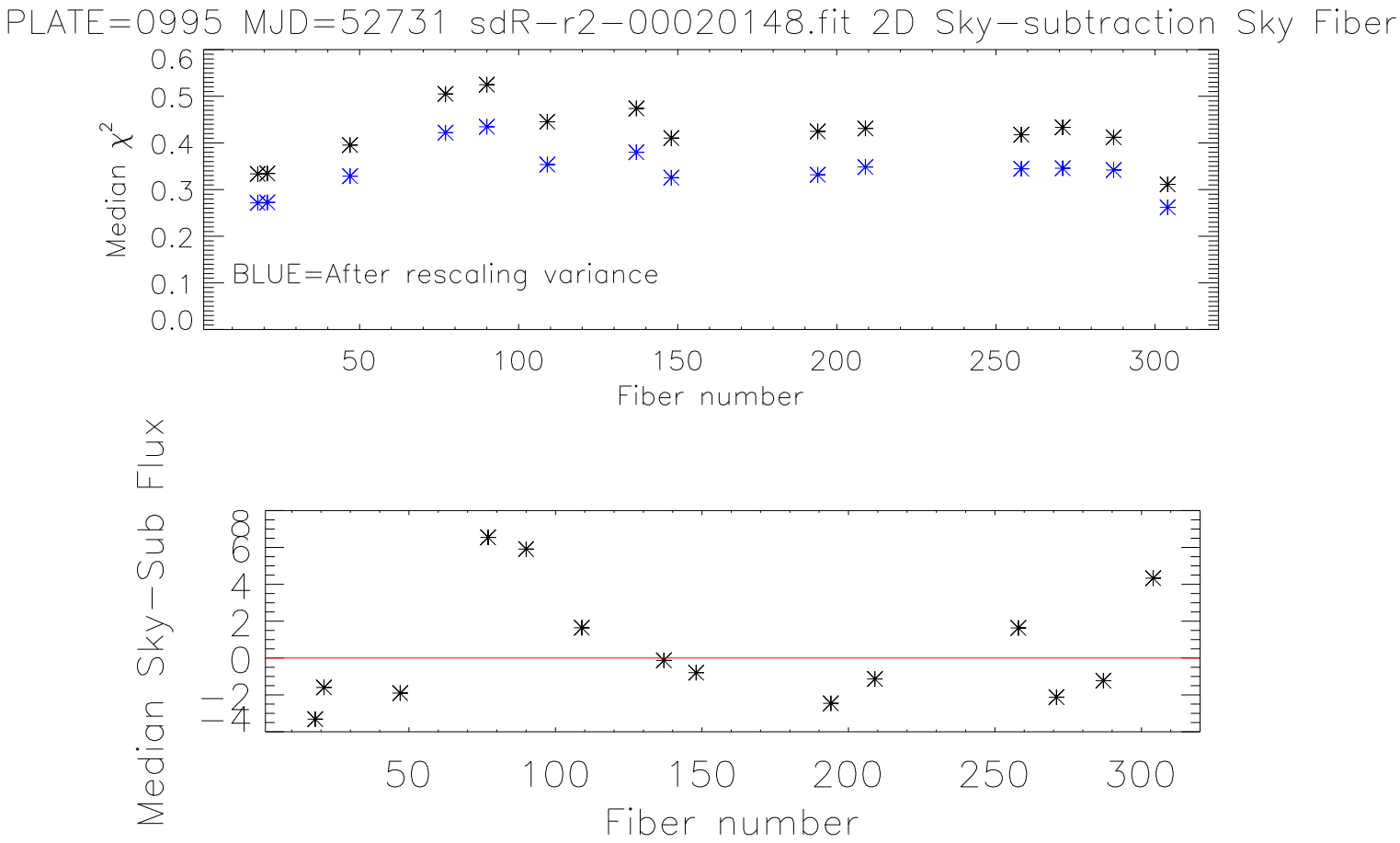

PLATE=0995 MJD=52731 Smooth superflat for sdR-r2-00020148.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

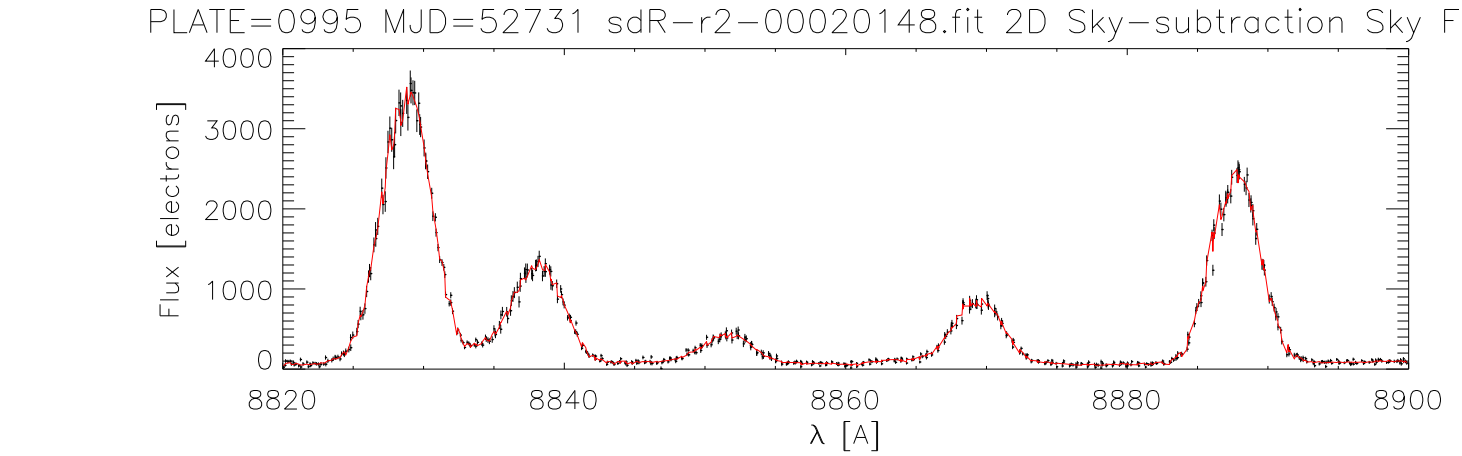

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

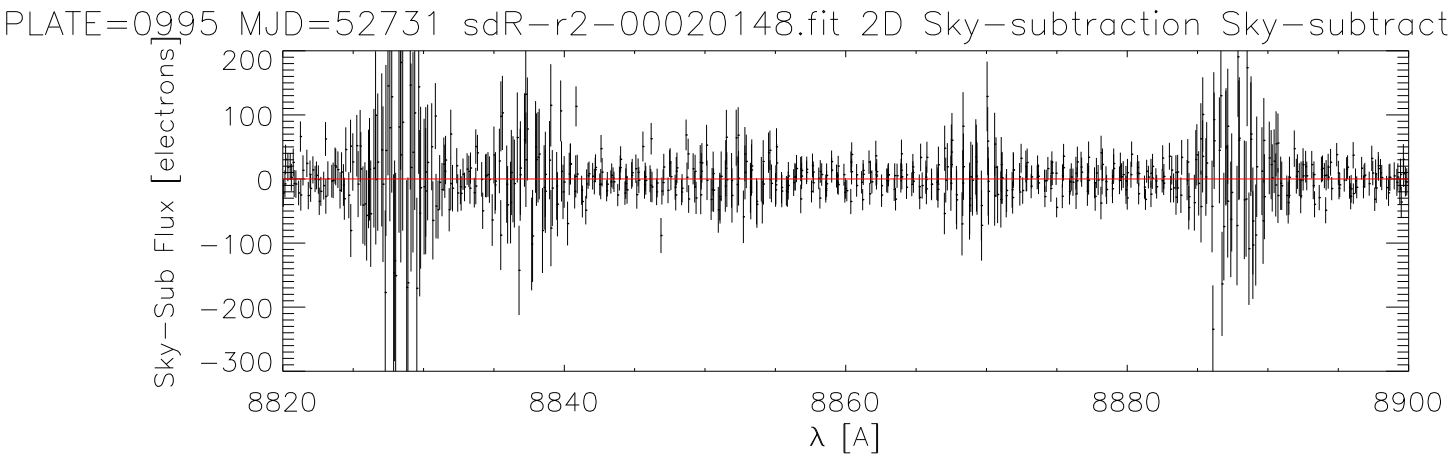

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

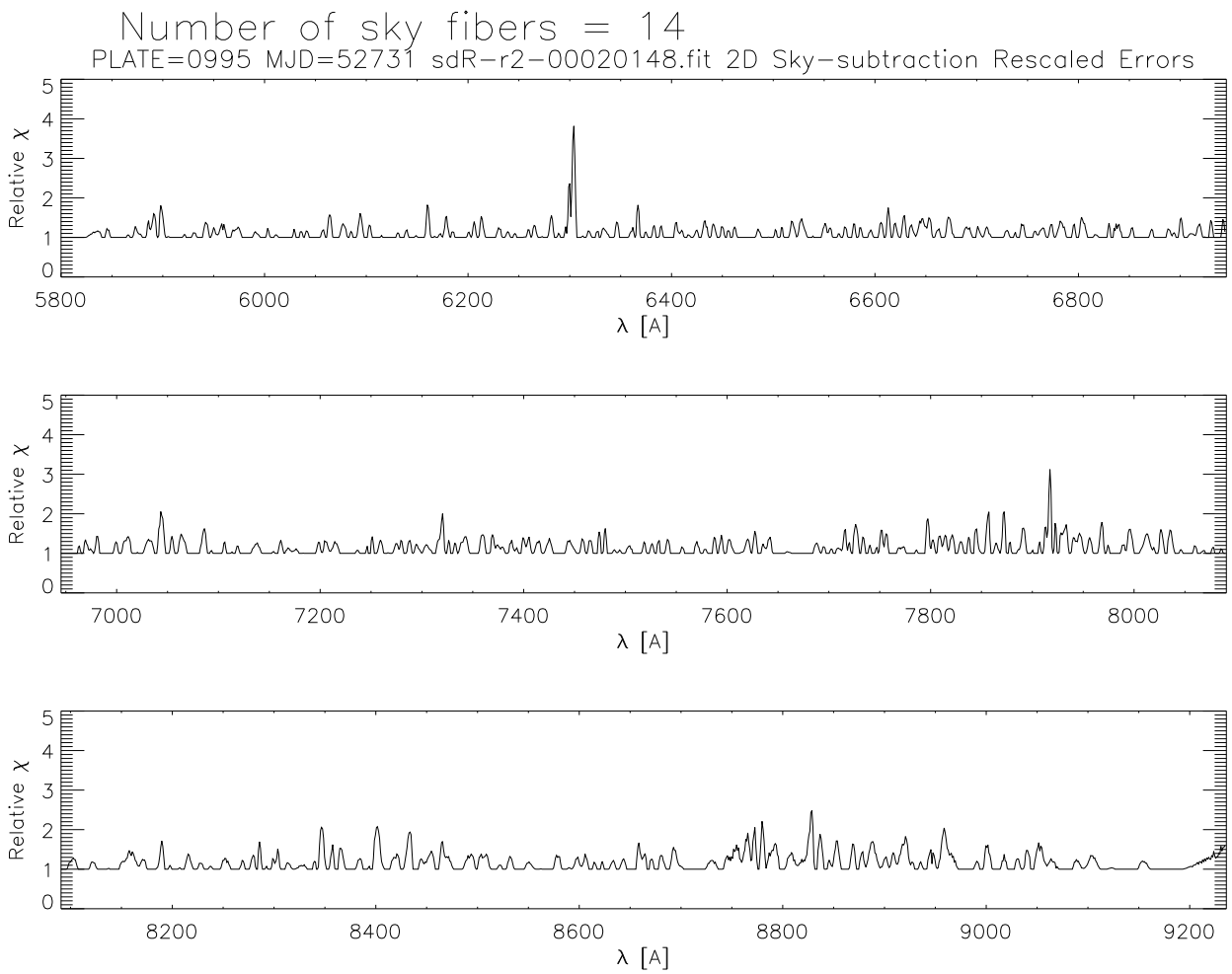

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

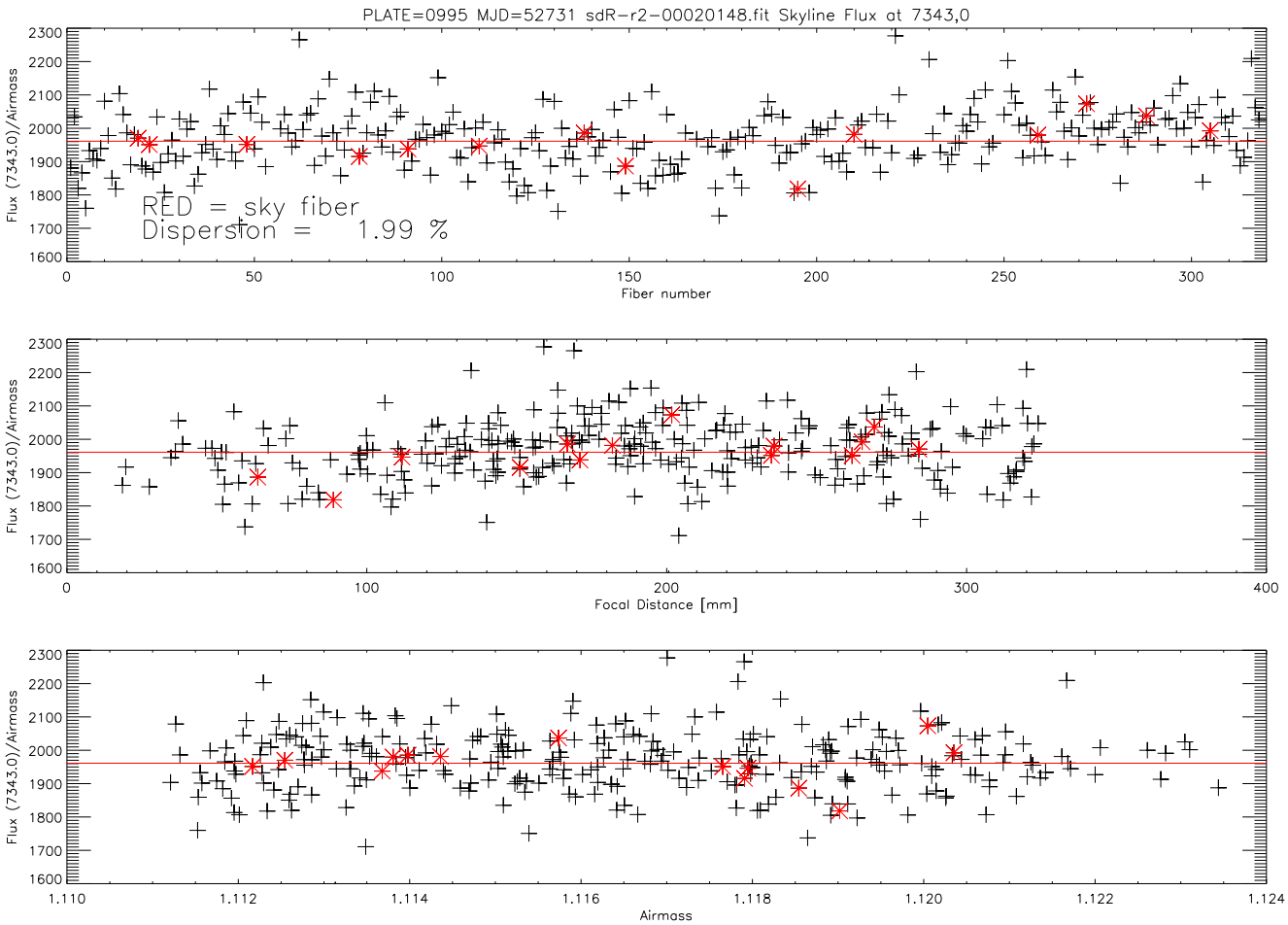

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020148.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

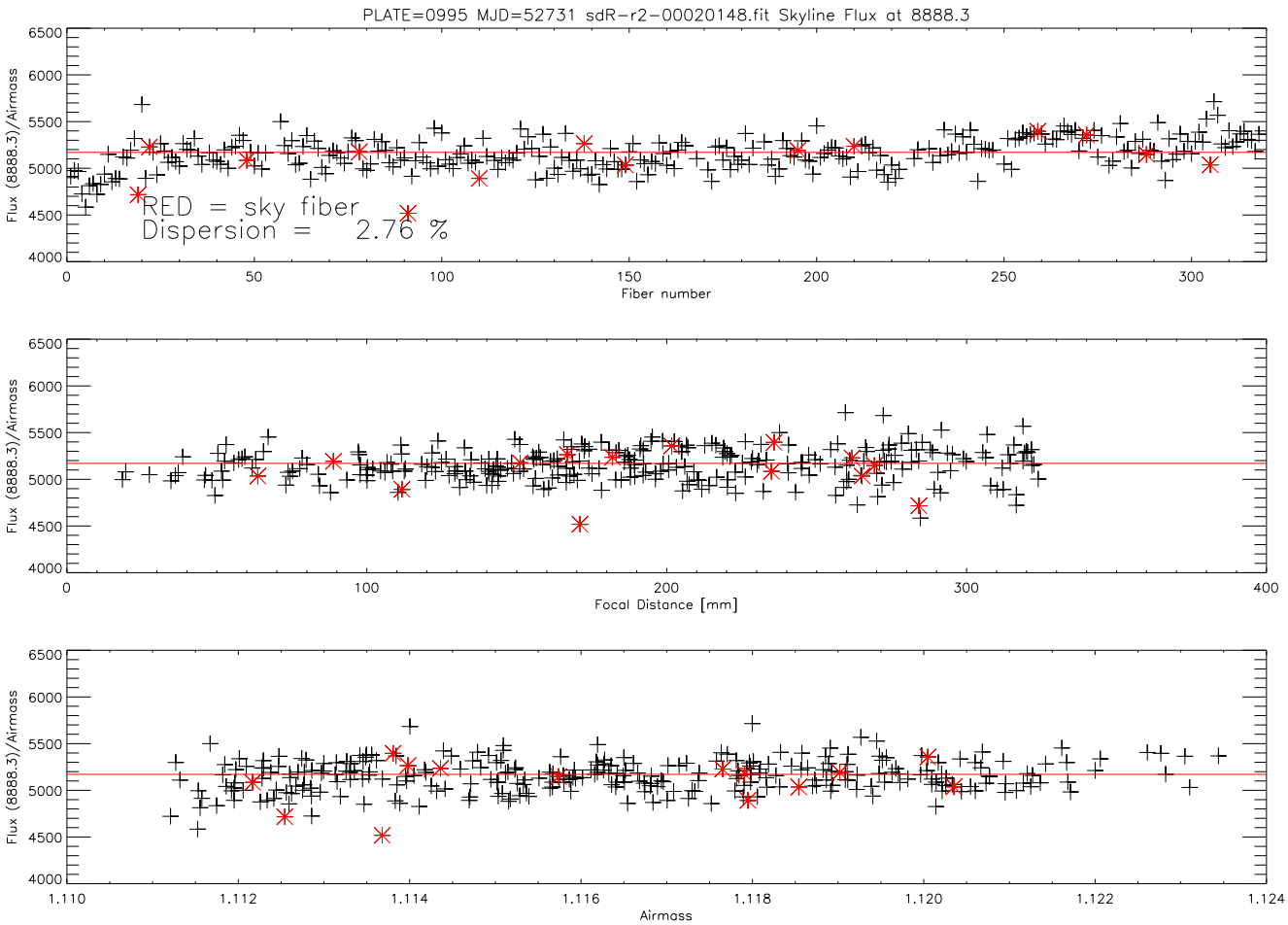

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

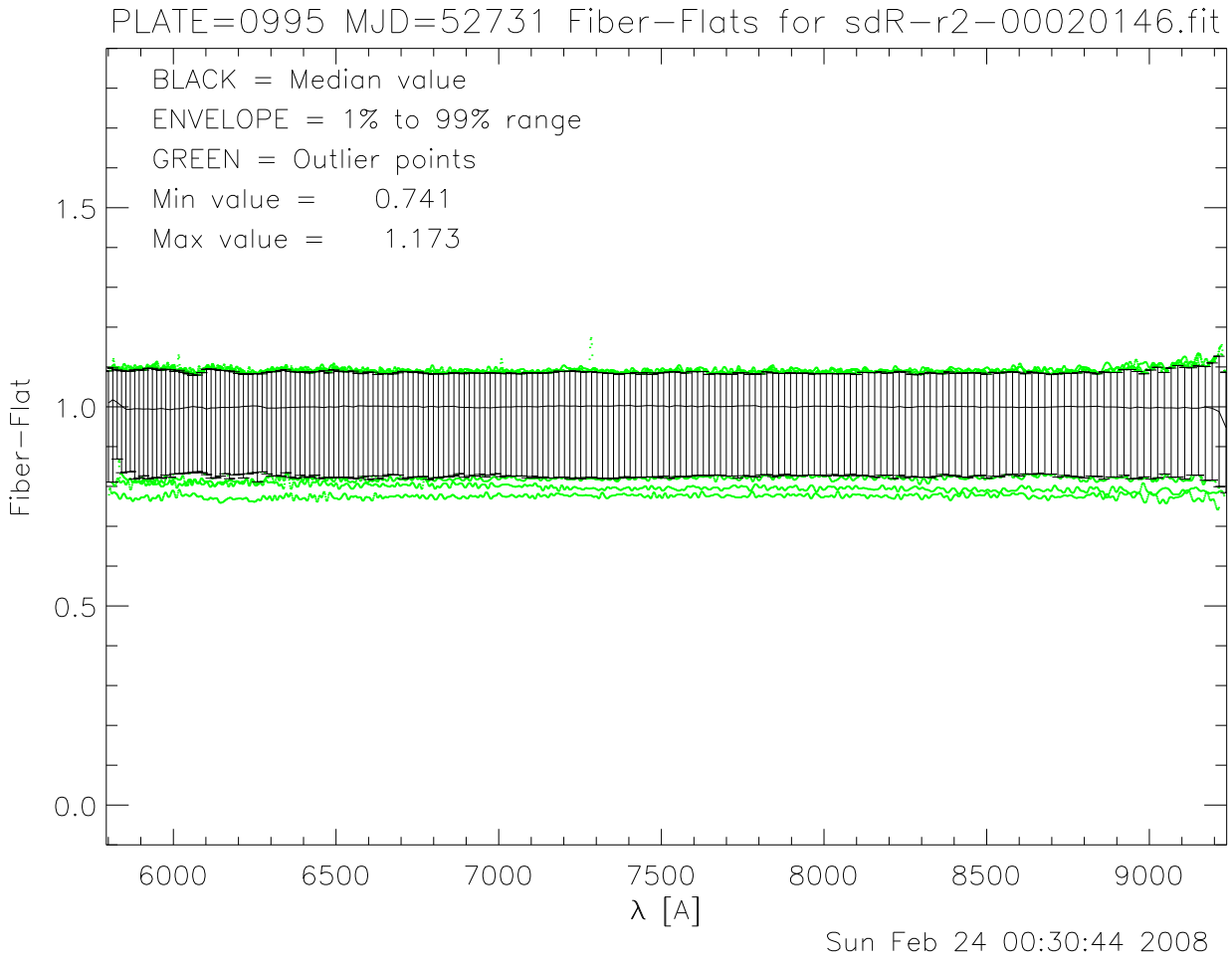

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

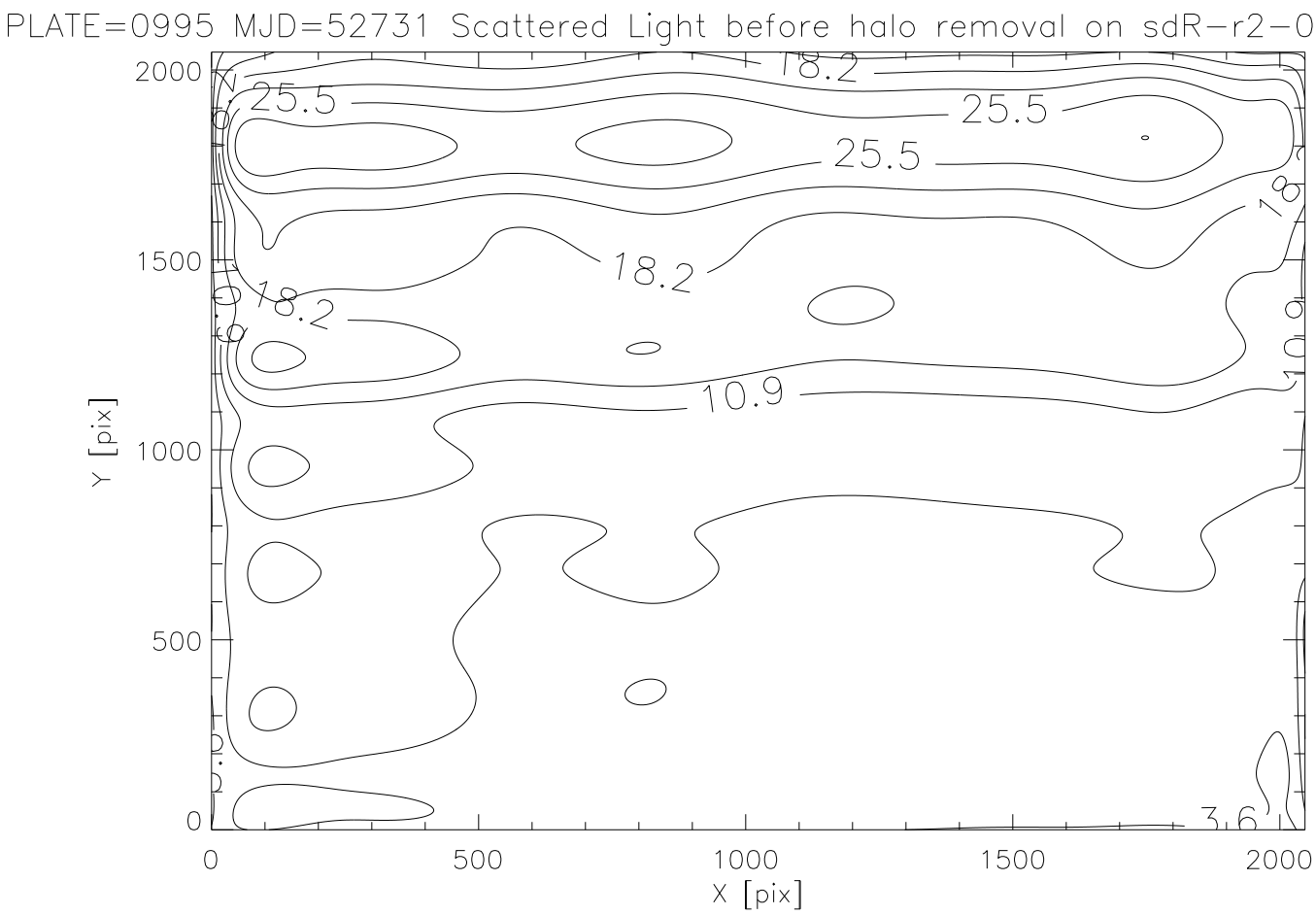

PLATE=0995 MJD=52731 sdR-r2-00020148.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

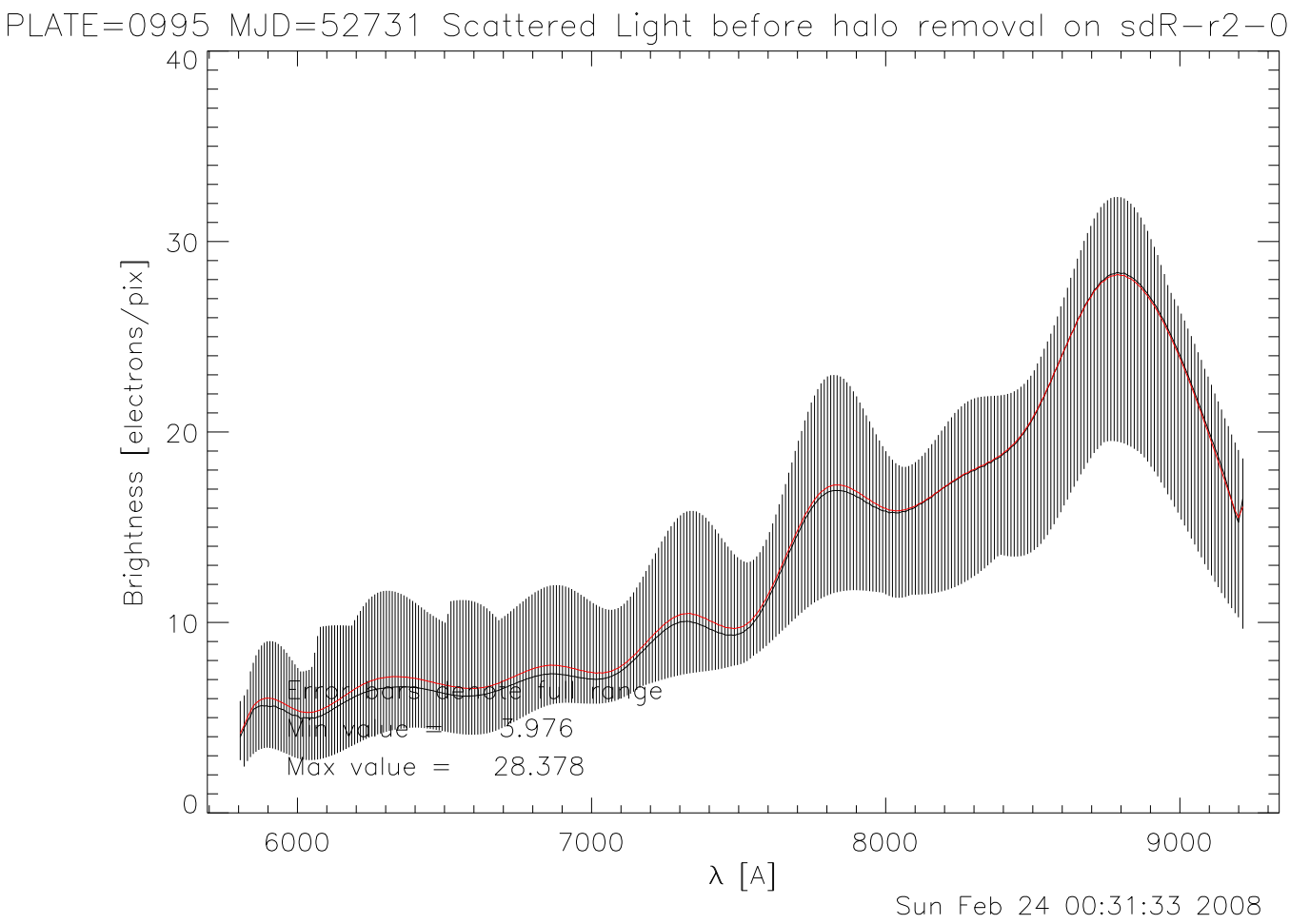

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020148.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

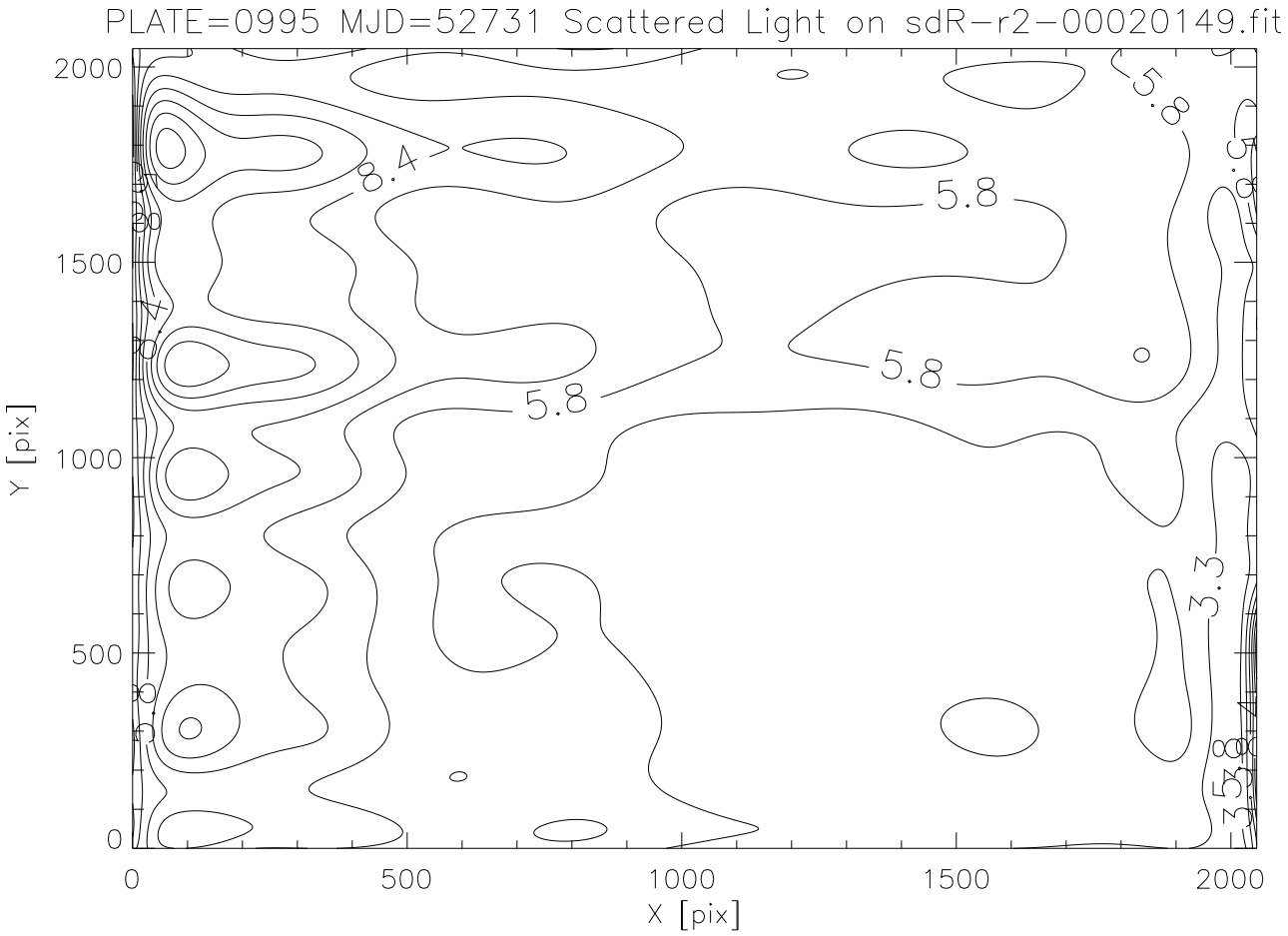

PLATE=0995 MJD=52731 sdR-r2-00020148.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

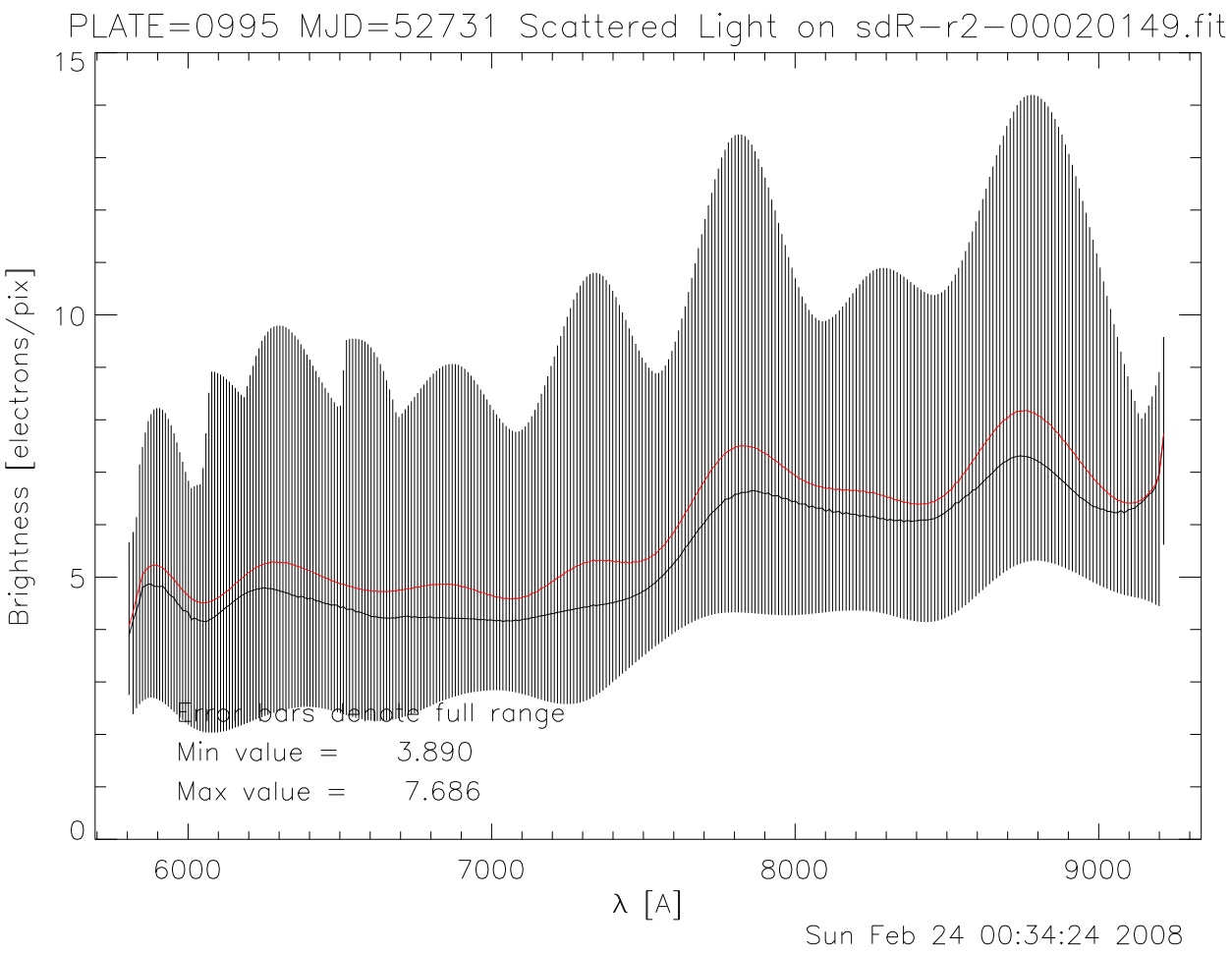

PLATE=0995 MJD=52731 sdR-r2-00020148.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.76 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

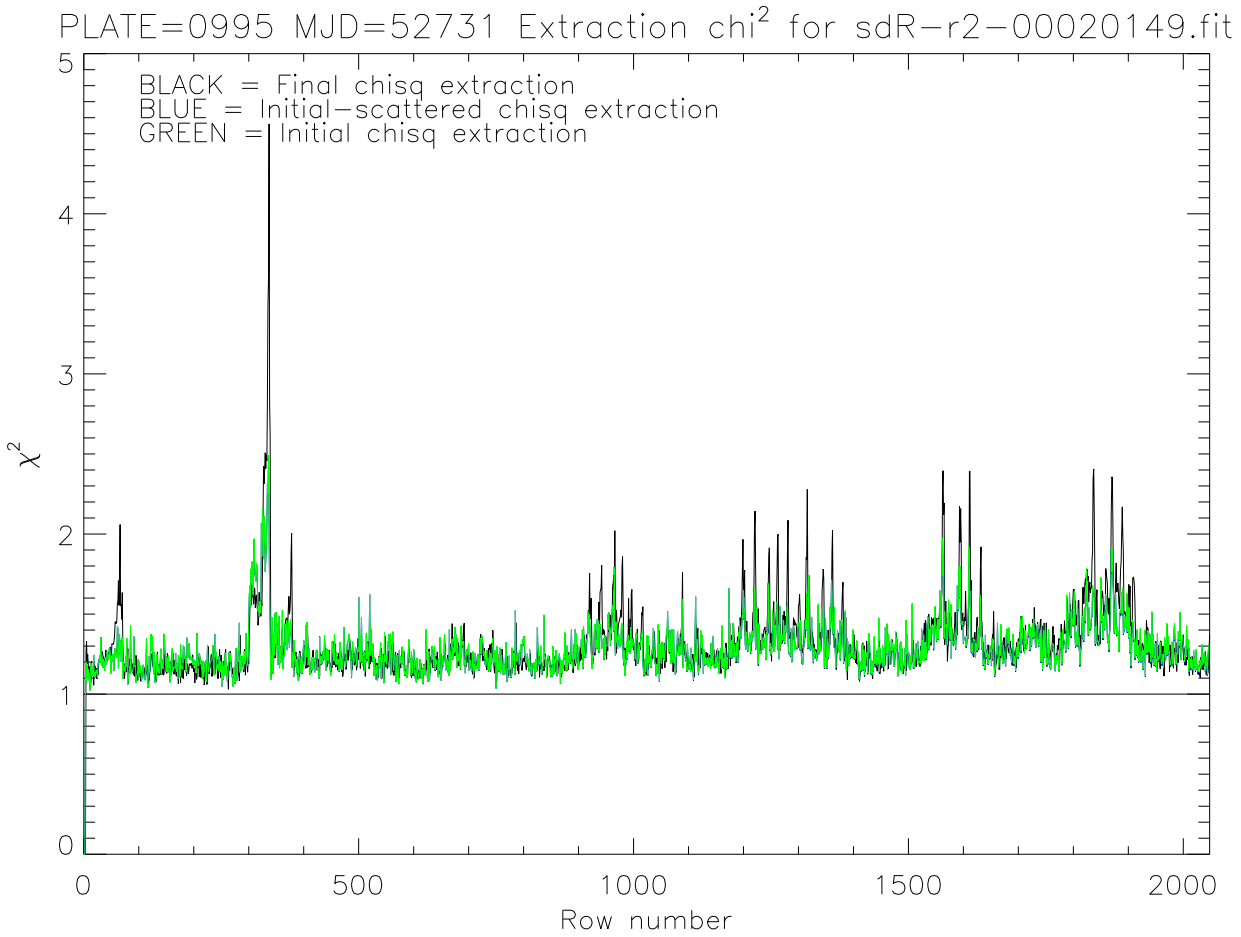

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r2−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.741
Max value = 1.173
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:30:44 2008

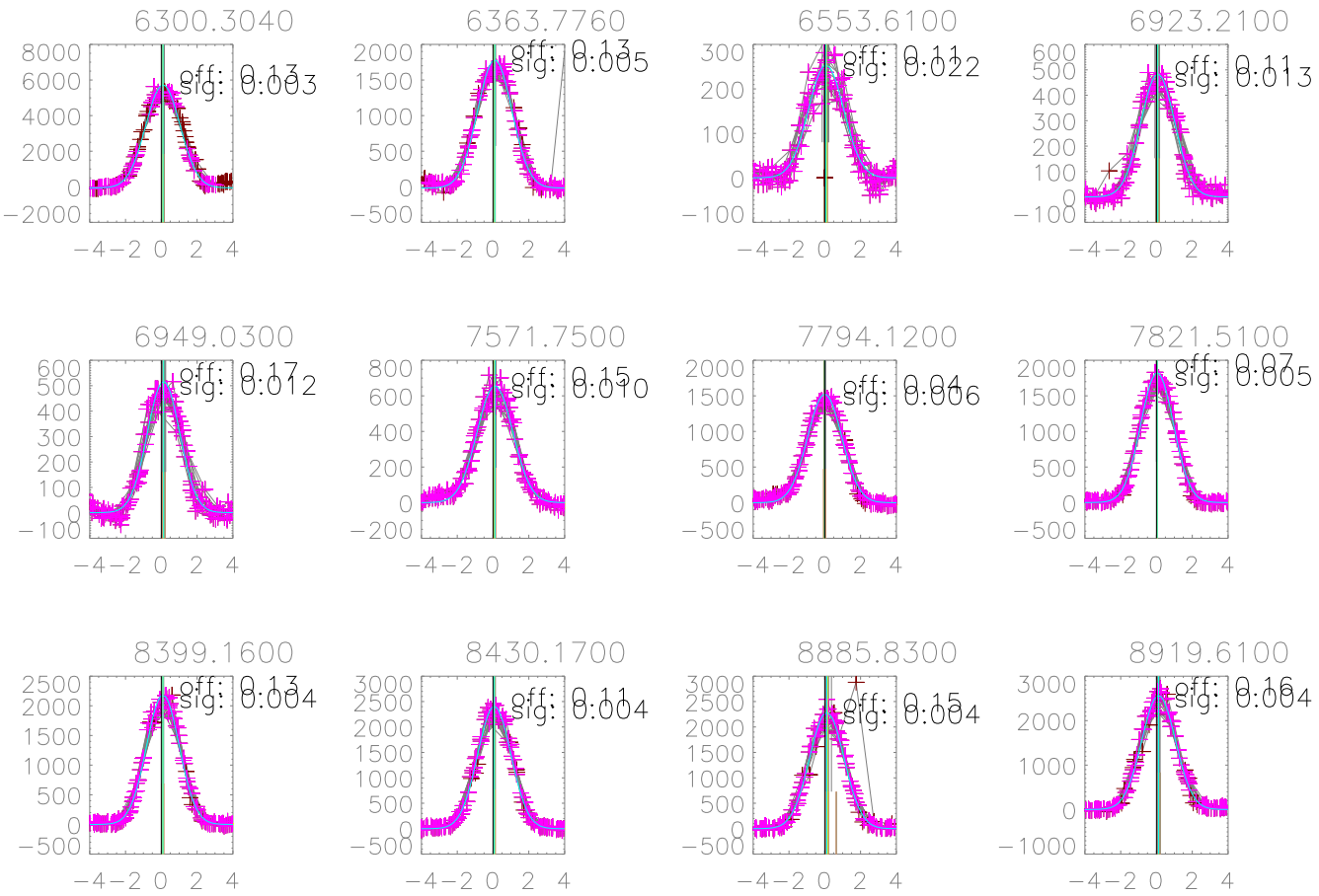

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR−r2−00020149.fi
18.2
25.5
25.5
25.5
18.2
18.2
10.9
3.6
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

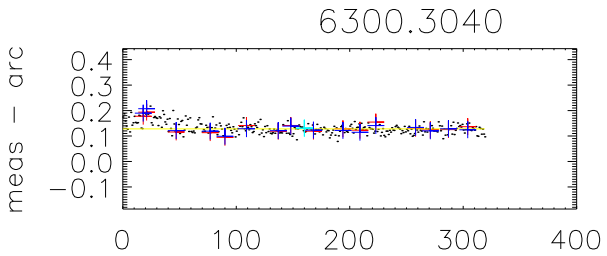

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020149.fi
Brightness [electrons/pix]
λ [A]
Error bars delete full range
Min value = 5.976
Max value = 28.378
Sun Feb 24 00:31:33 2008

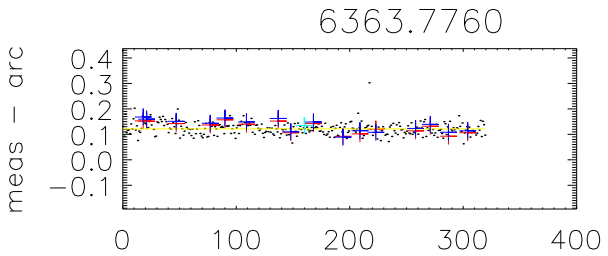

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020149.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
5.8
3.3

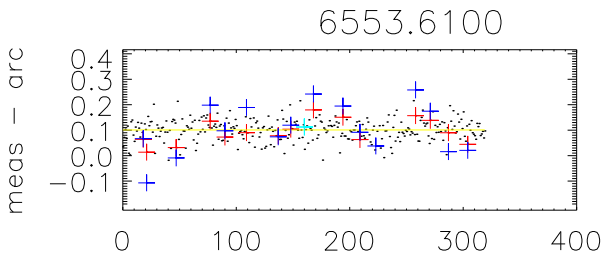

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020149.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 3.890
Max value = 7.686
Sun Feb 24 00:34:24 2008

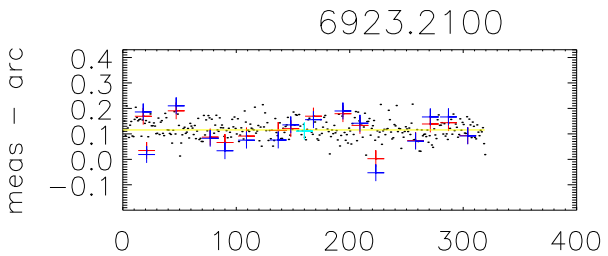

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r2−00020149.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

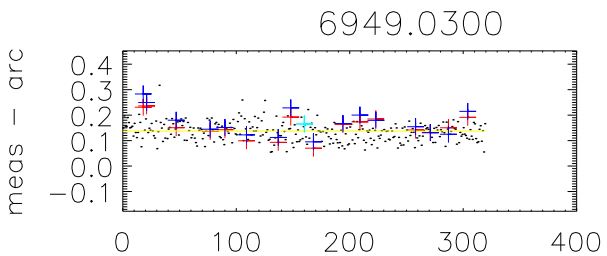

6300.3040
off: 0.13
sig: 0.003
6363.7760
off: 0.13
sig: 0.005
6553.6100
off: 0.11
sig: 0.022
6923.2100
off: 0.11
sig: 0.013
6949.0300
off: 0.17
sig: 0.012
7571.7500
off: 0.15
sig: 0.010
7794.1200
off: 0.04
sig: 0.006
7821.5100
off: 0.07
sig: 0.005
8399.1600
off: 0.13
sig: 0.004
8430.1700
off: 0.11
sig: 0.004
8885.8300
off: 0.15
sig: 0.004
8919.6100
off: 0.16
sig: 0.004

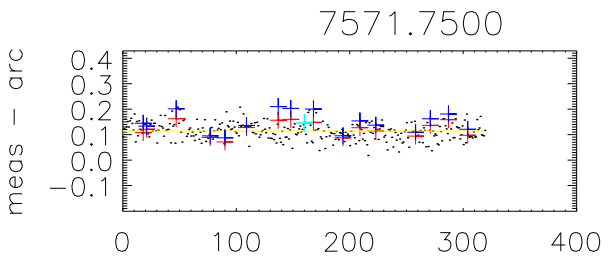

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

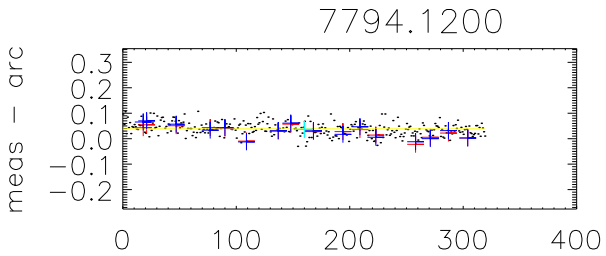

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

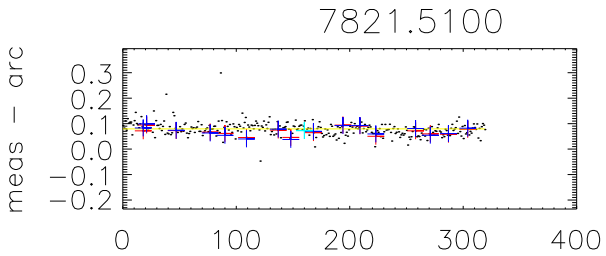

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

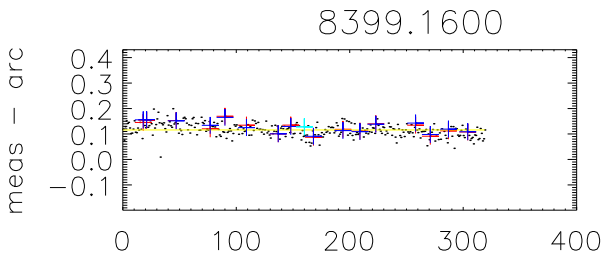

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

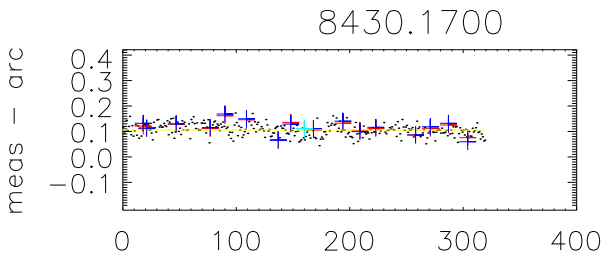

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

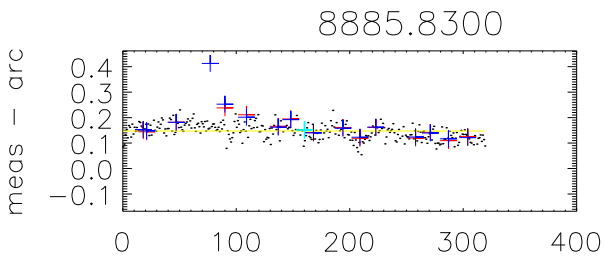

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

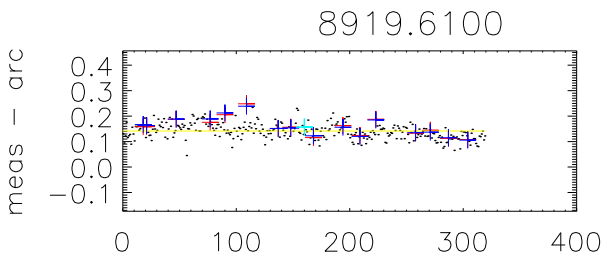

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

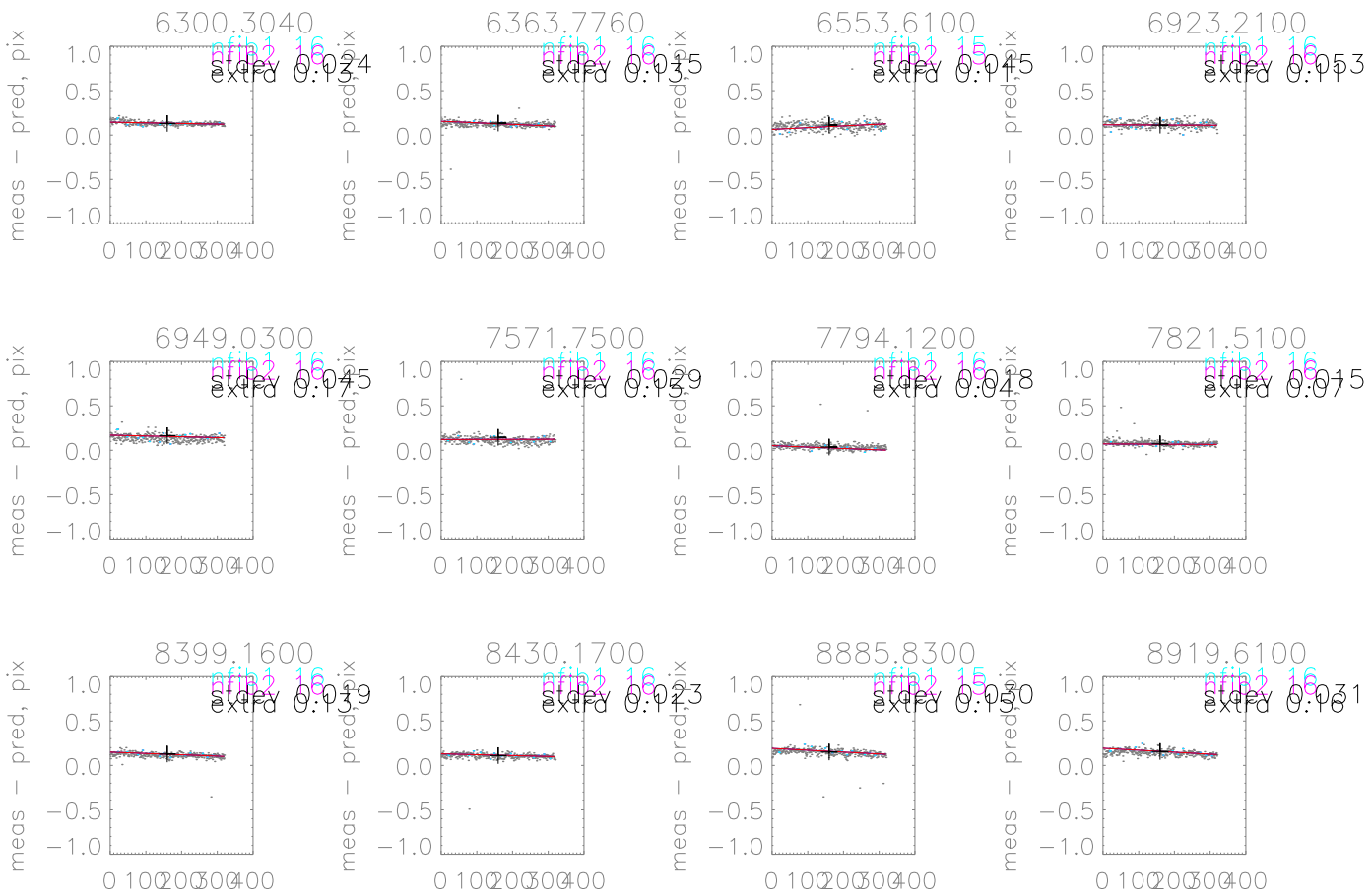

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

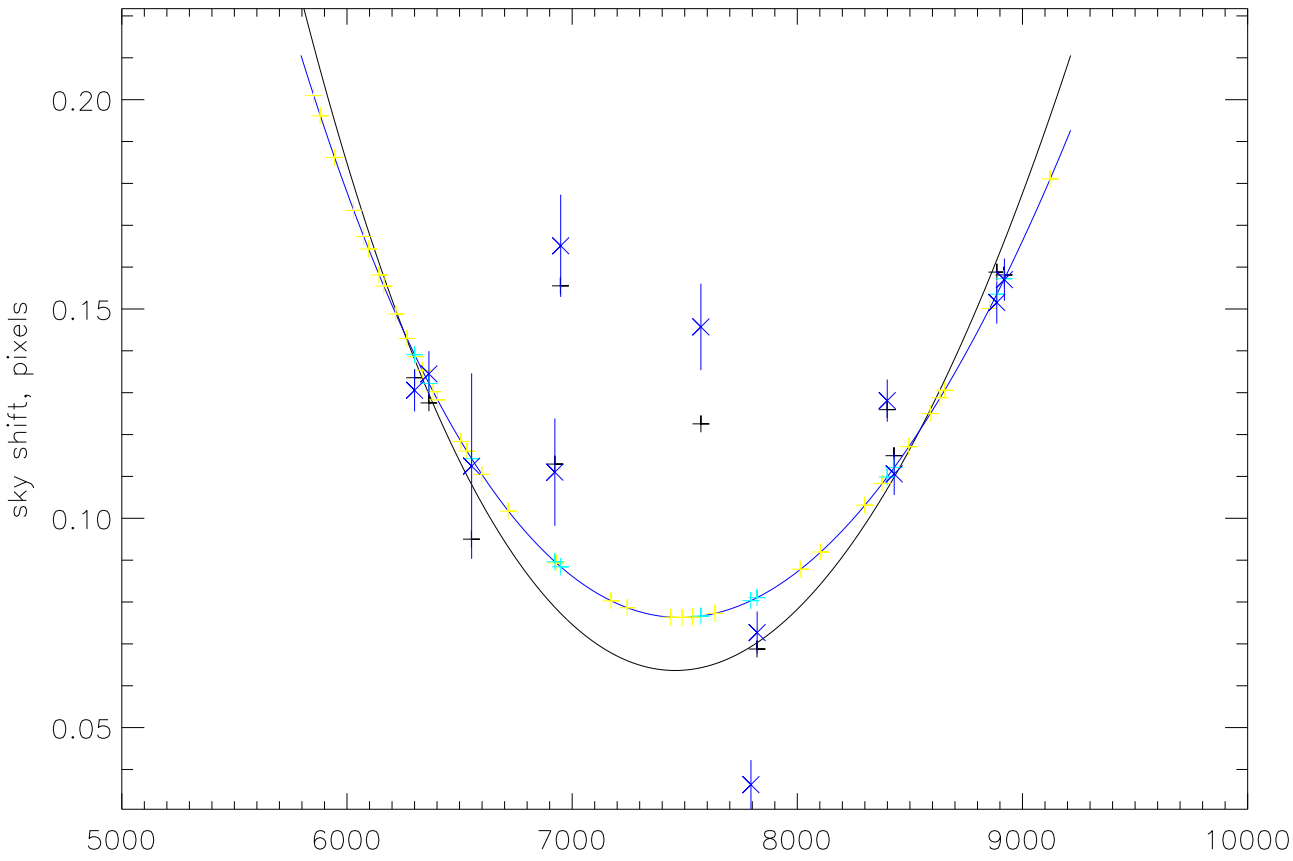

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

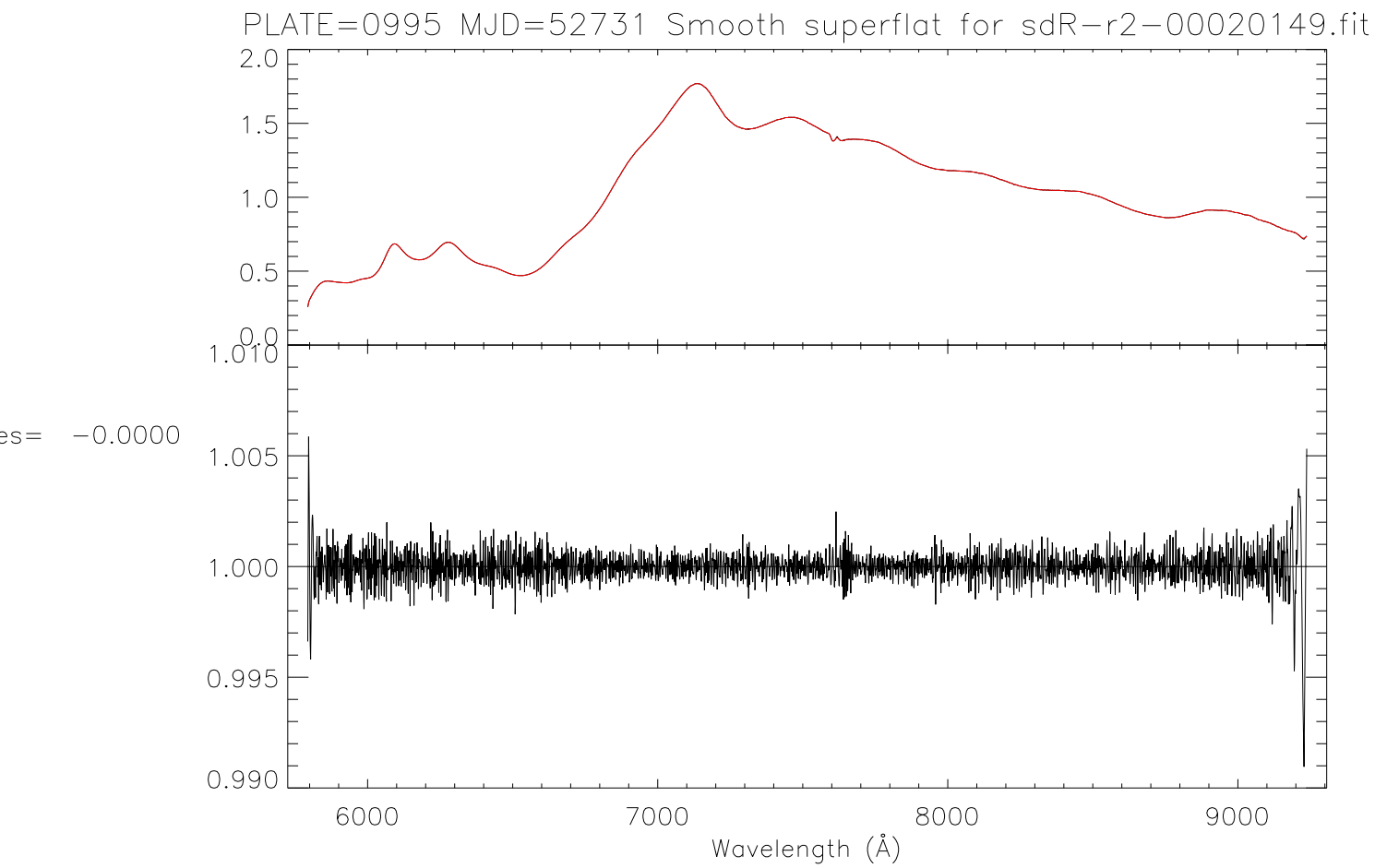

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

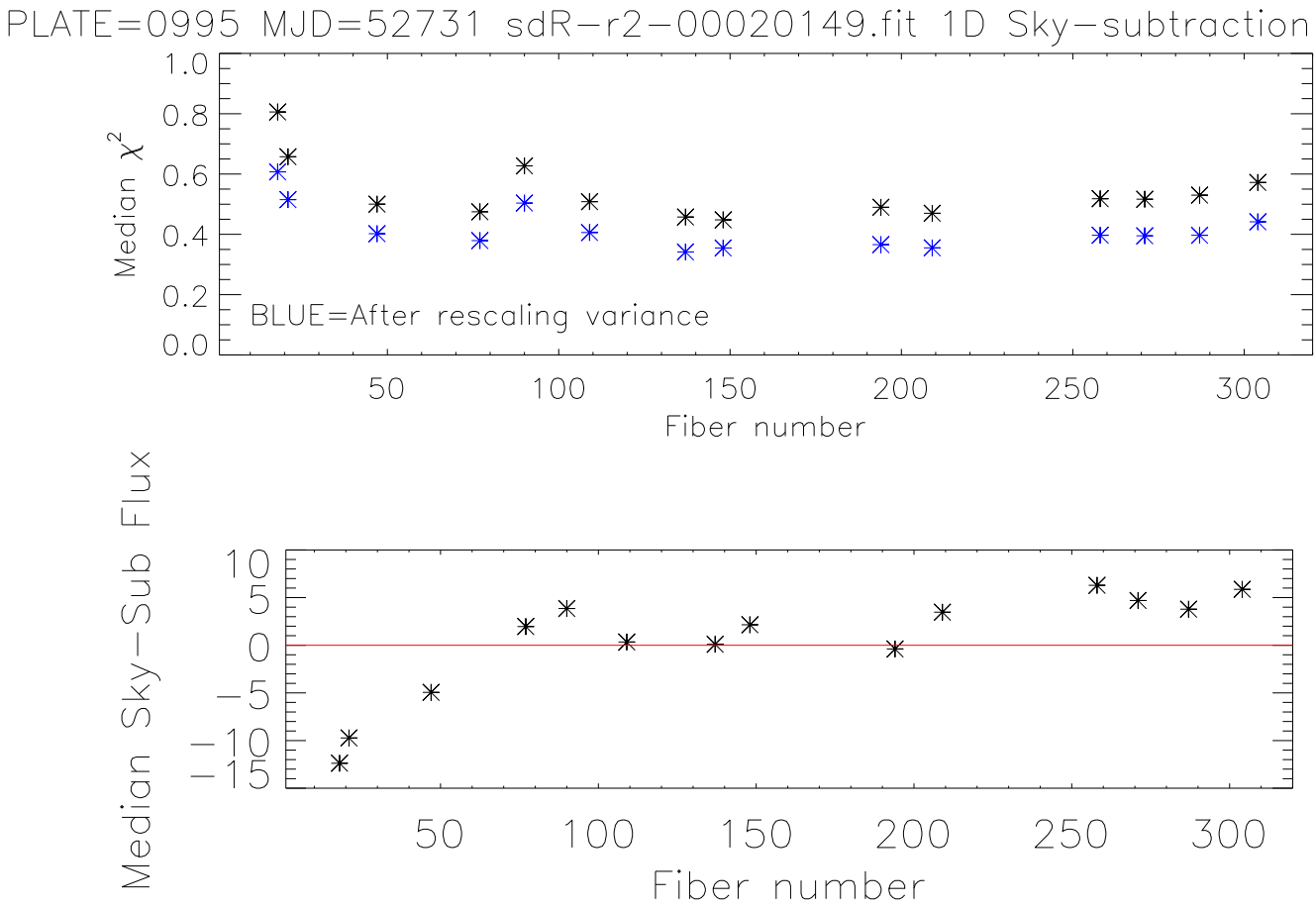

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

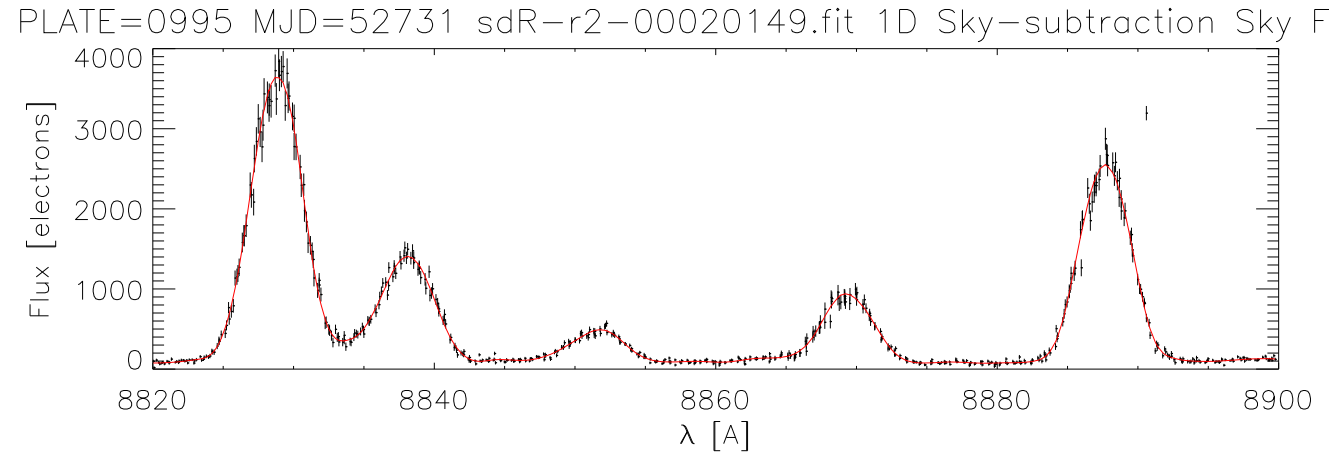

6300.3040
stdev 0.024
extra 0.13
6363.7760
stdev 0.025
extra 0.13
6553.6100
stdev 0.045
extra 0.11
6923.2100
stdev 0.053
extra 0.11
6949.0300
stdev 0.045
extra 0.17
7571.7500
stdev 0.029
extra 0.13
7794.1200
stdev 0.048
extra 0.04
7821.5100
stdev 0.045
extra 0.07
8399.1600
stdev 0.049
extra 0.13
8430.1700
stdev 0.023
extra 0.12
8885.8300
stdev 0.050
extra 0.15
8919.6100
stdev 0.031
extra 0.16
meas − pred, pix

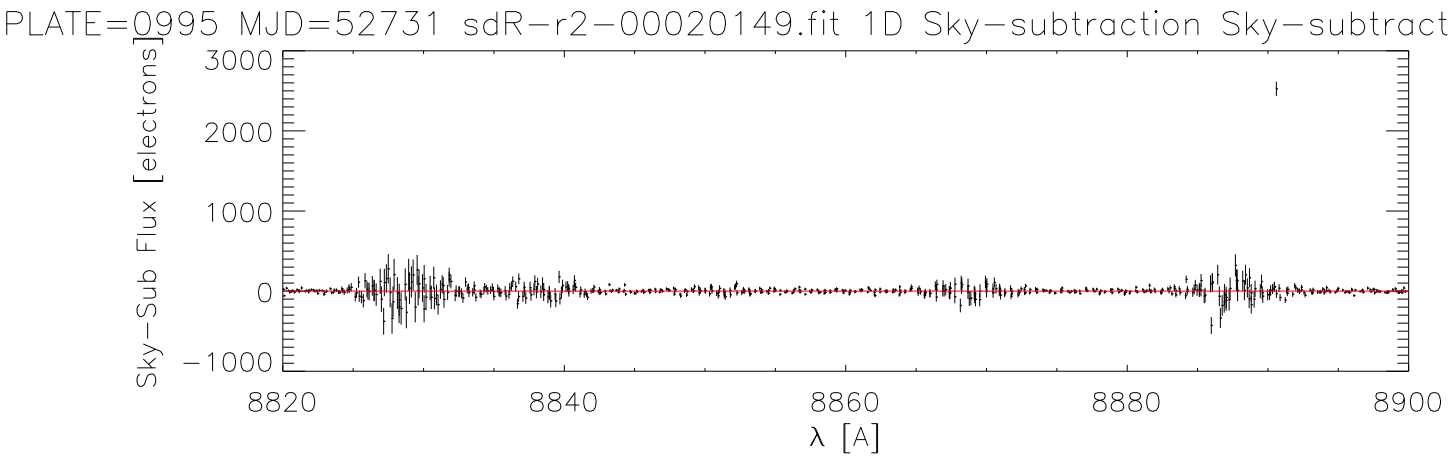

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

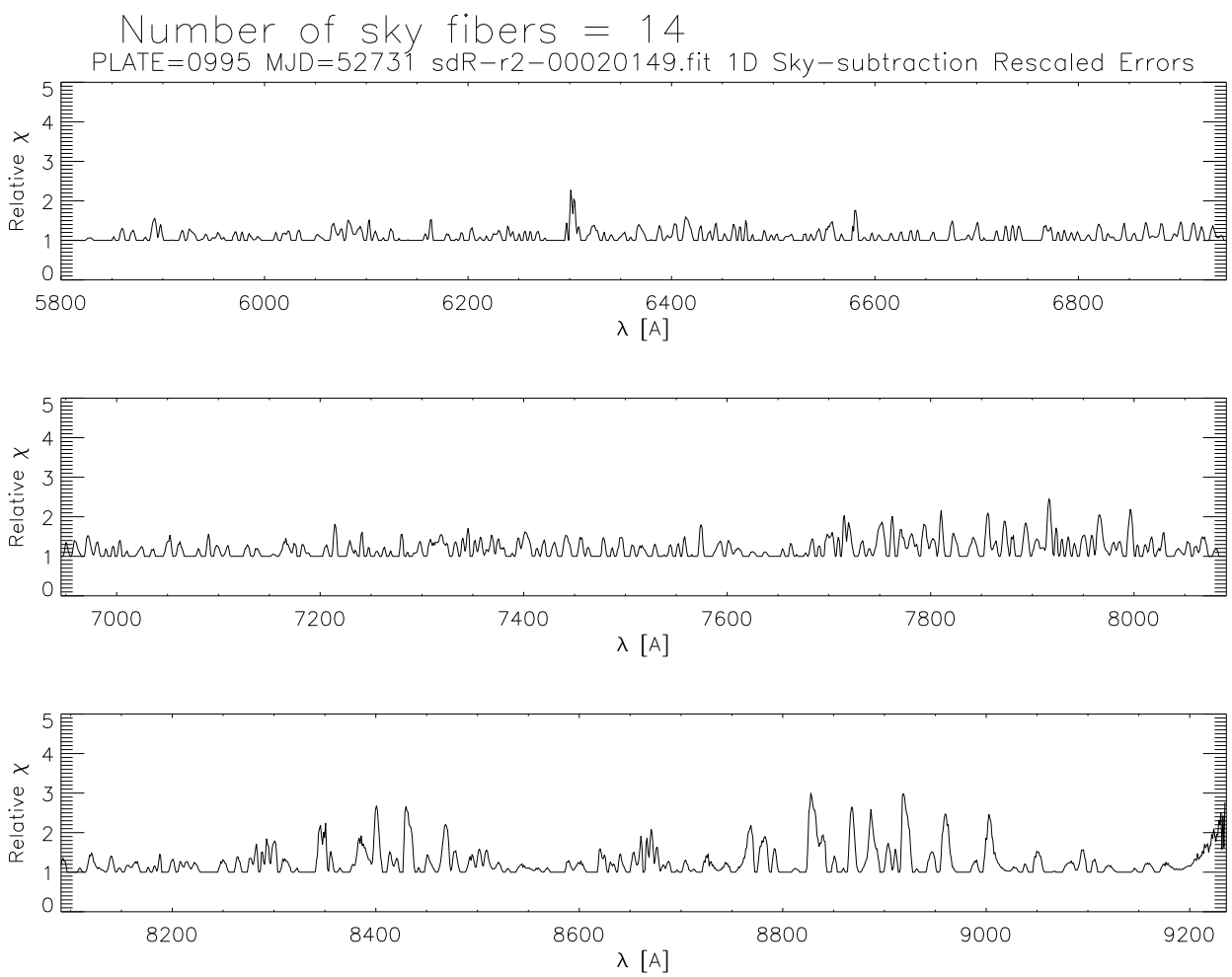

PLATE=0995 MJD=52731 Smooth superflat for sdR-r2-00020149.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

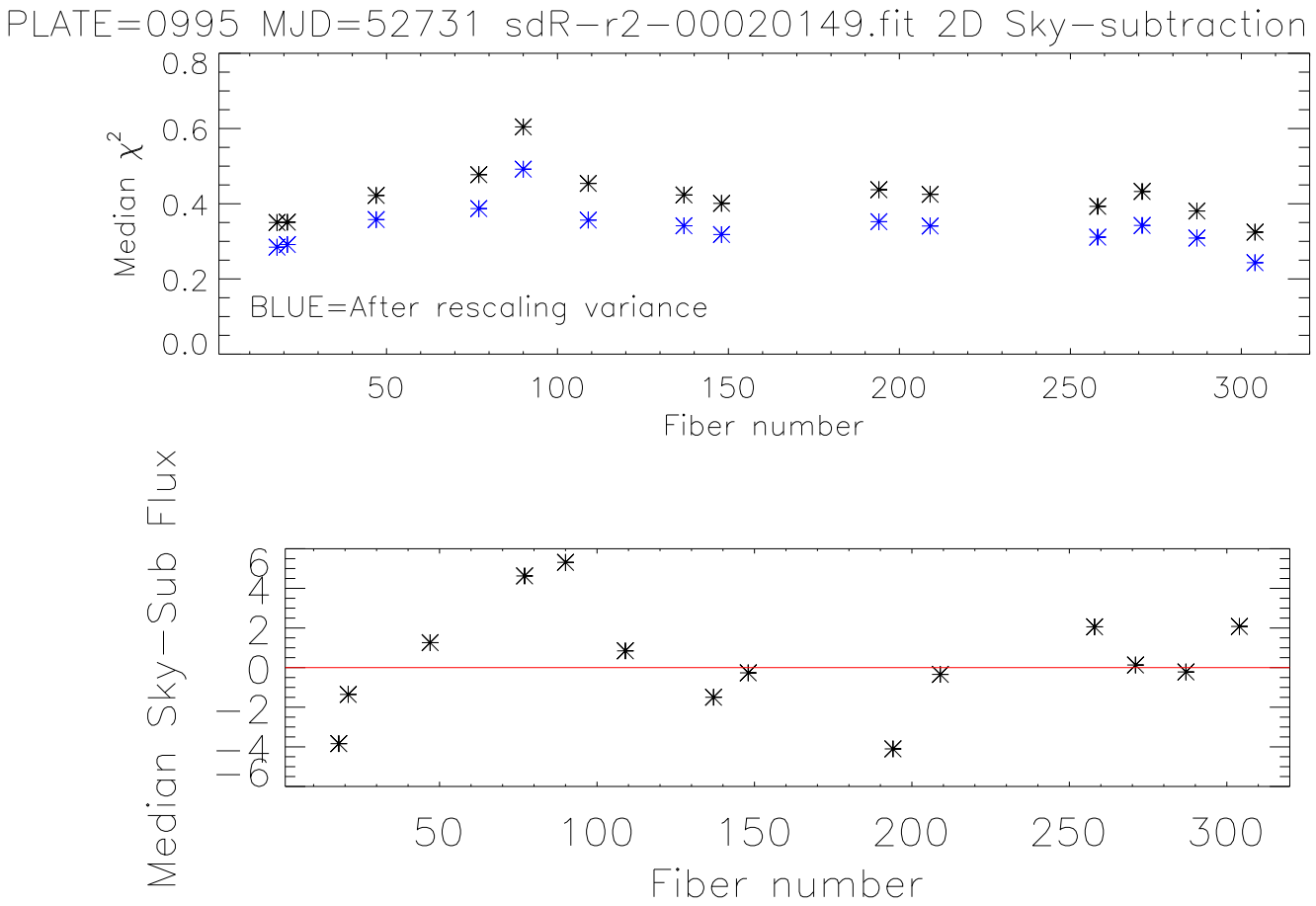
es= −0.0000

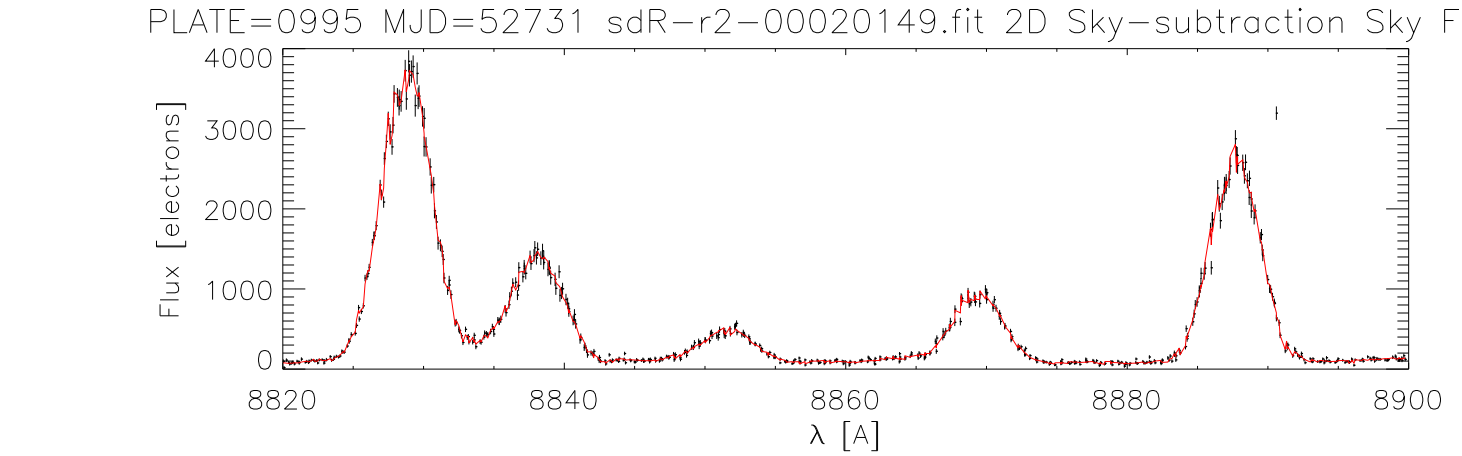

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

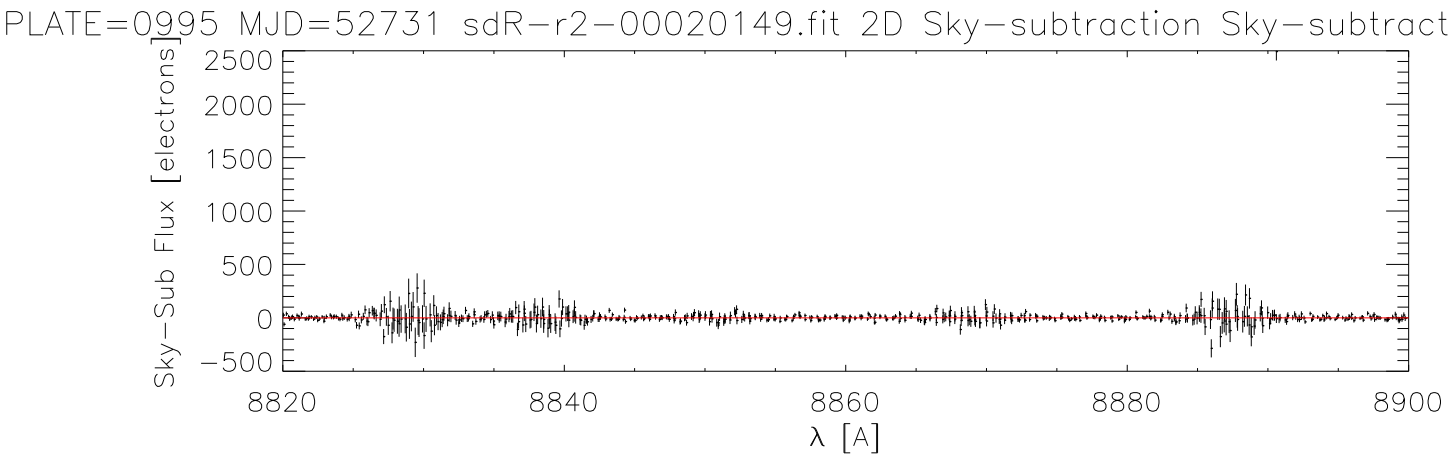

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

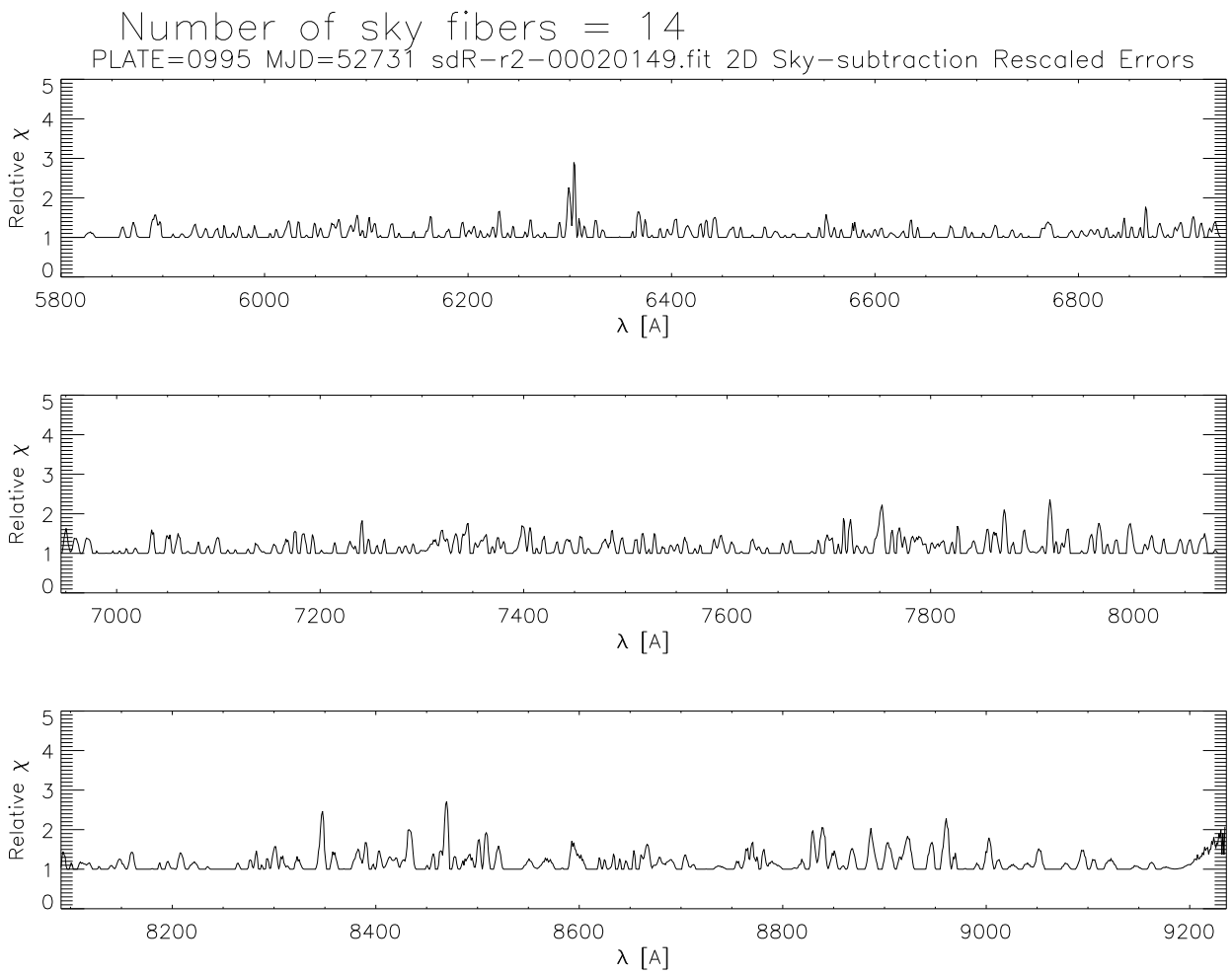

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

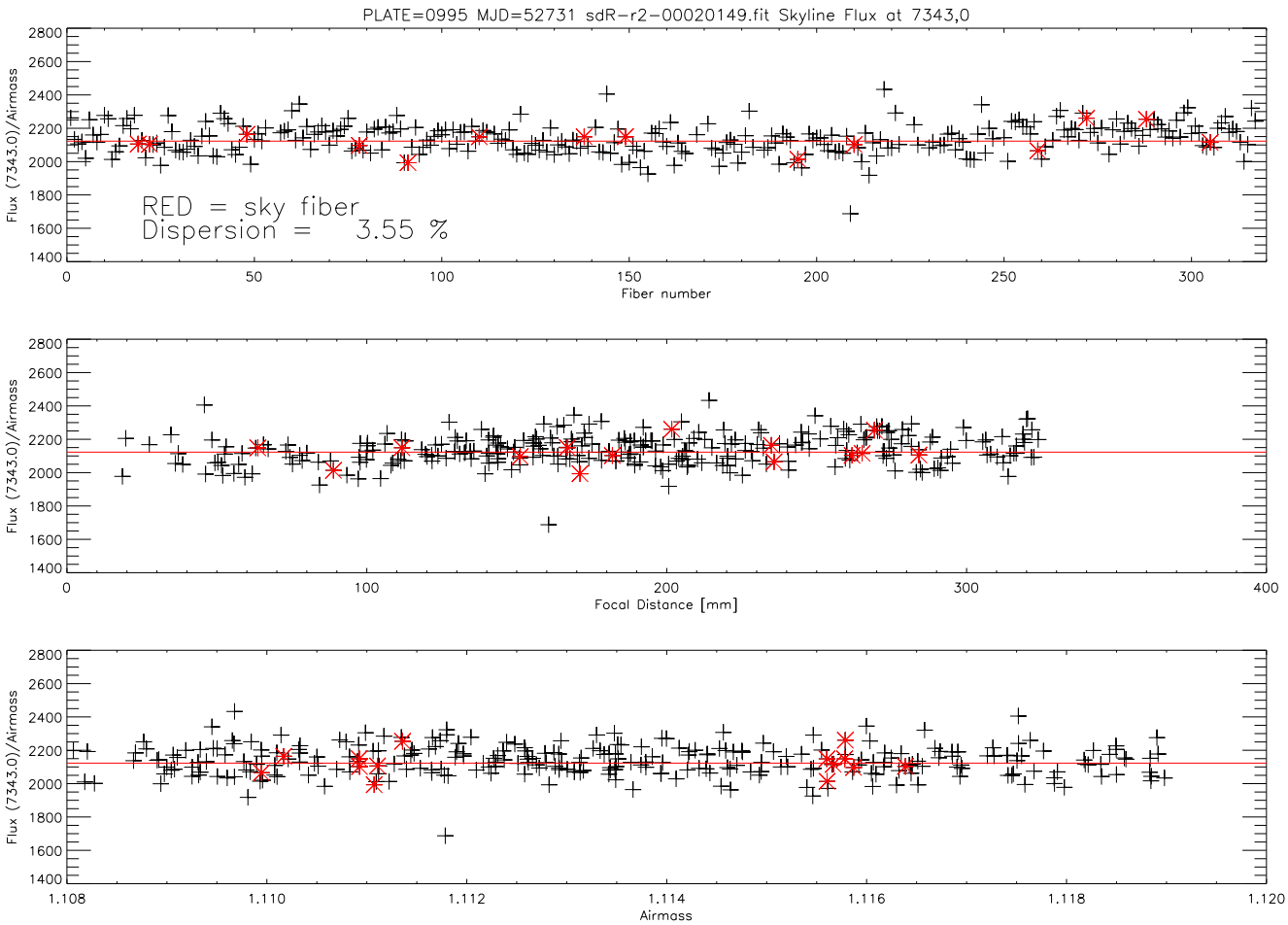

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020149.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

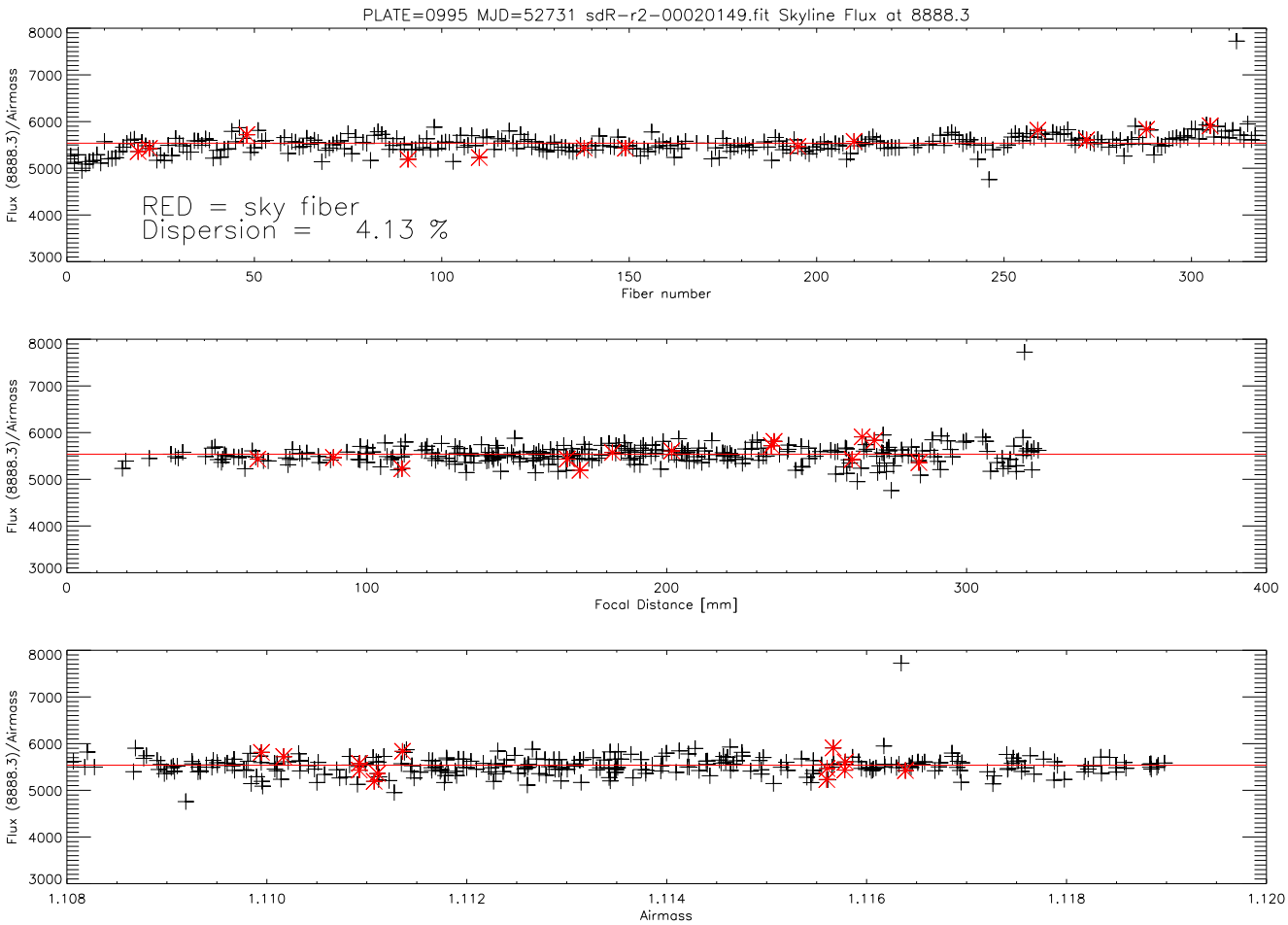

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

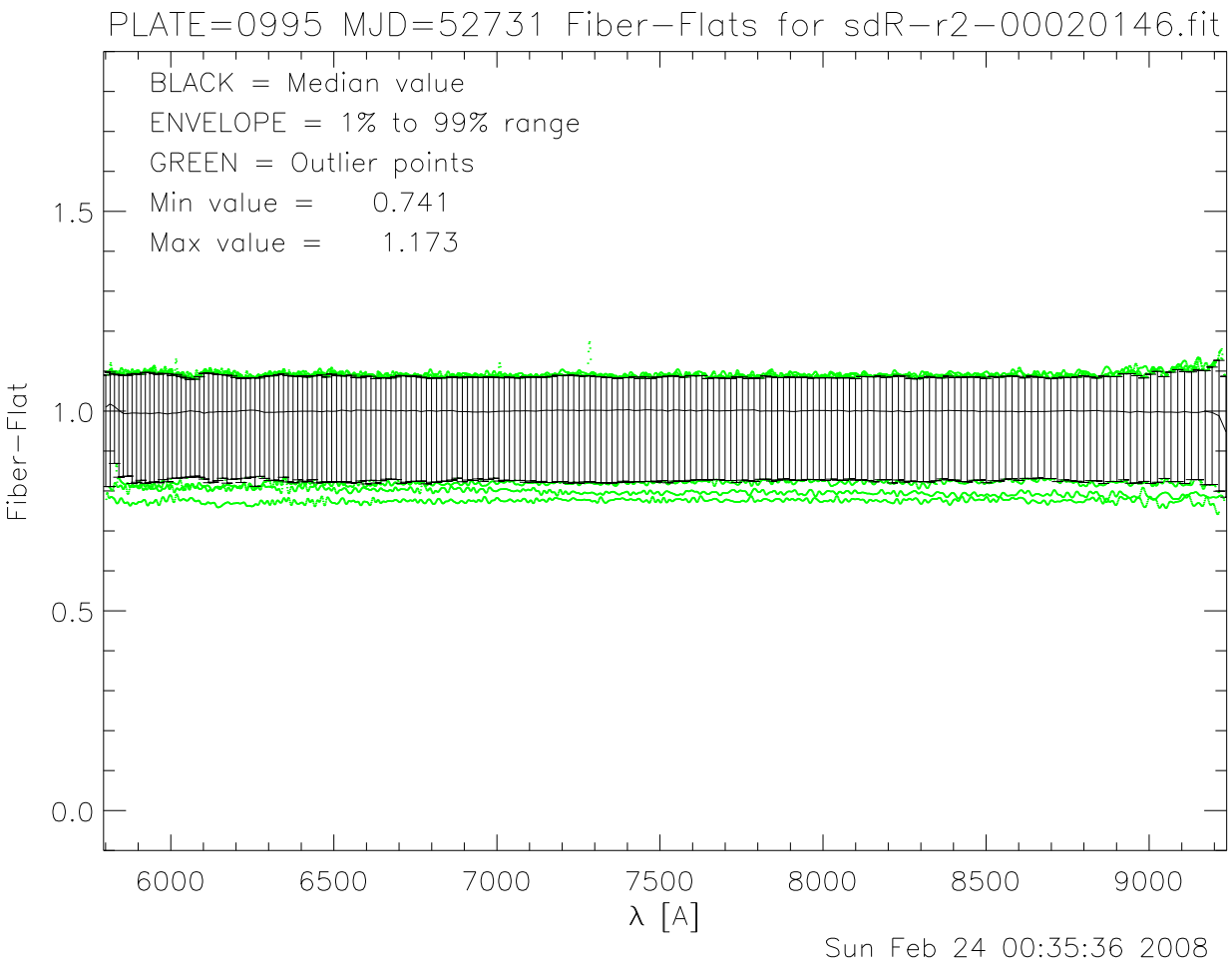

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

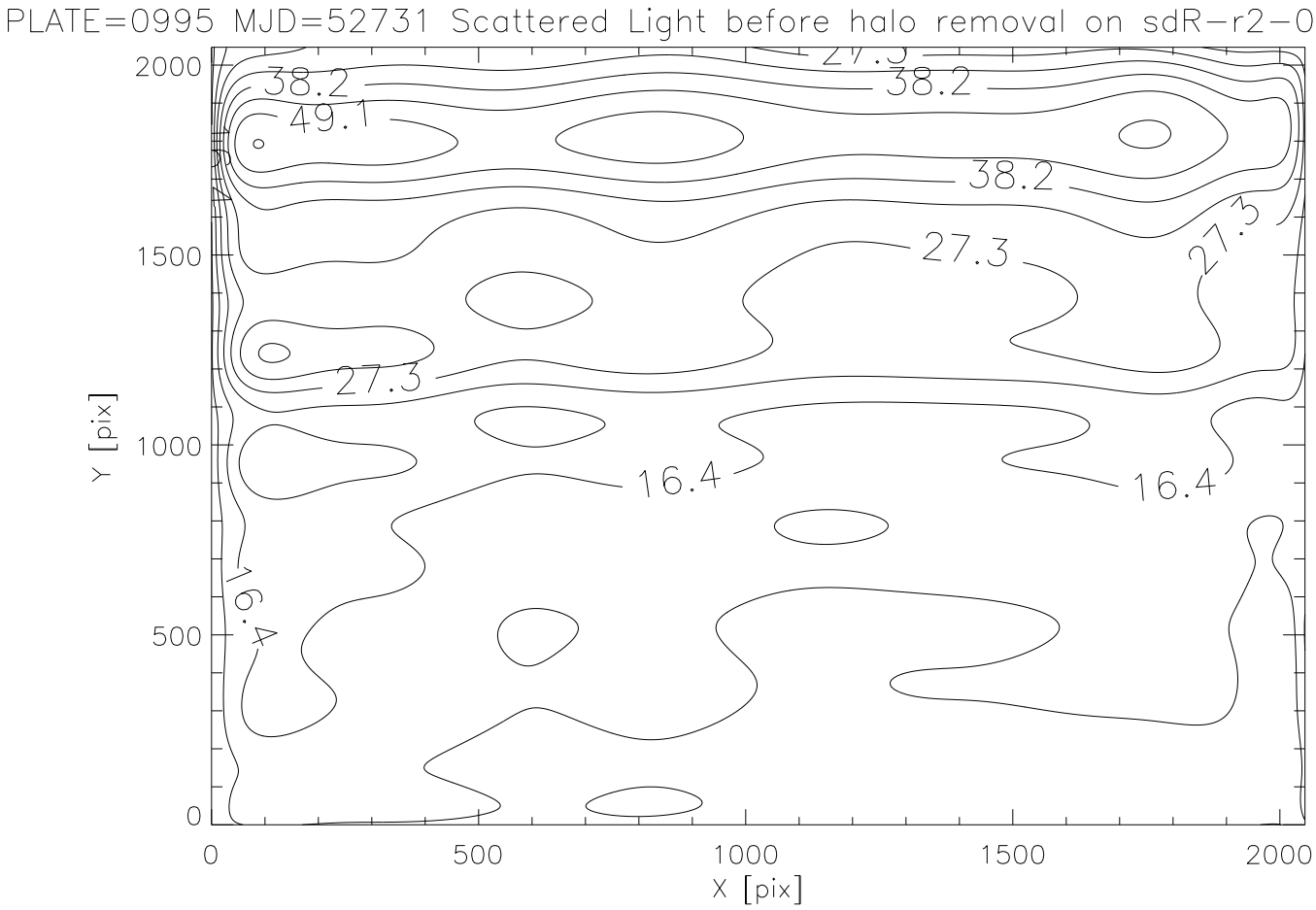

PLATE=0995 MJD=52731 sdR-r2-00020149.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

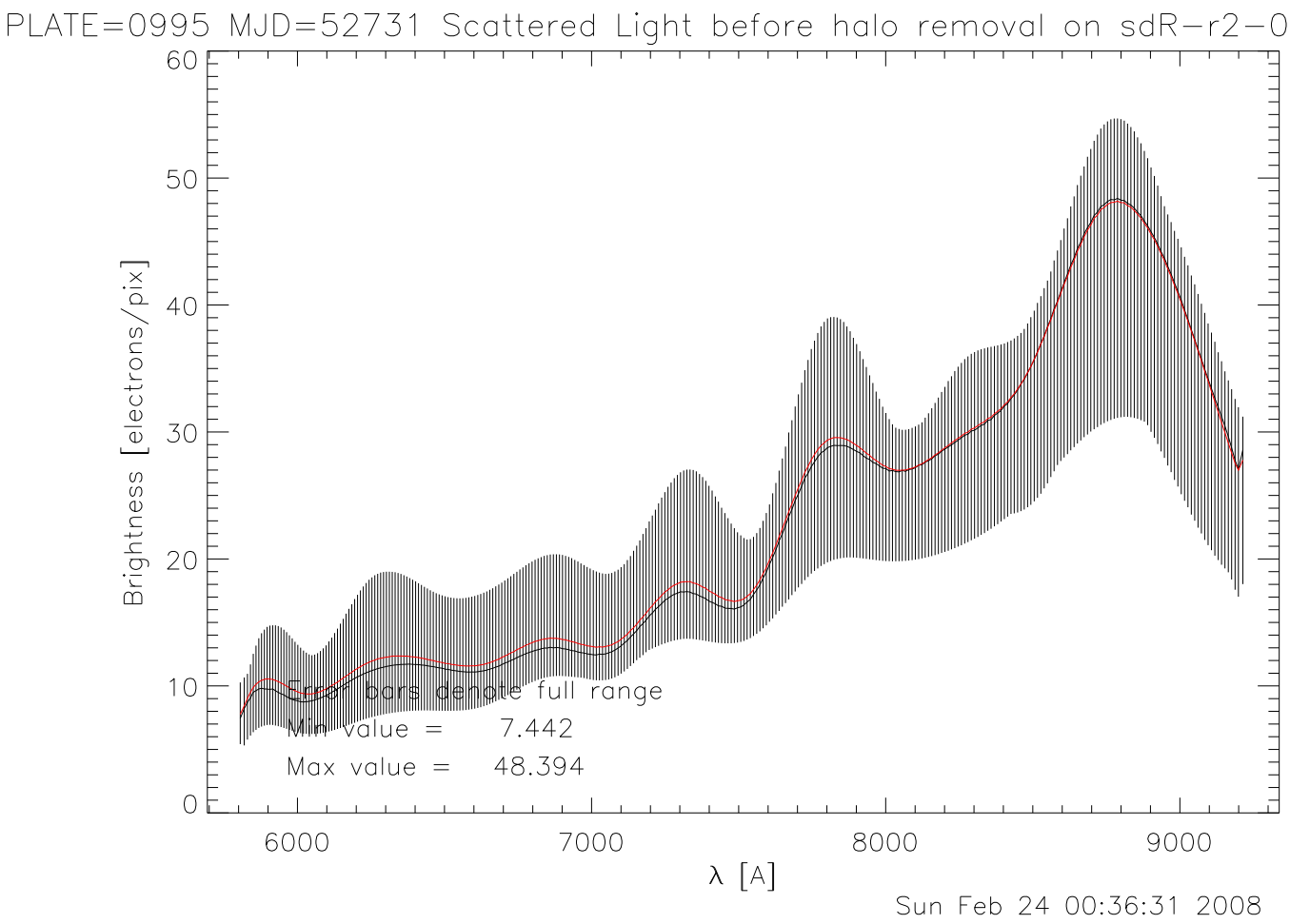

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020149.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

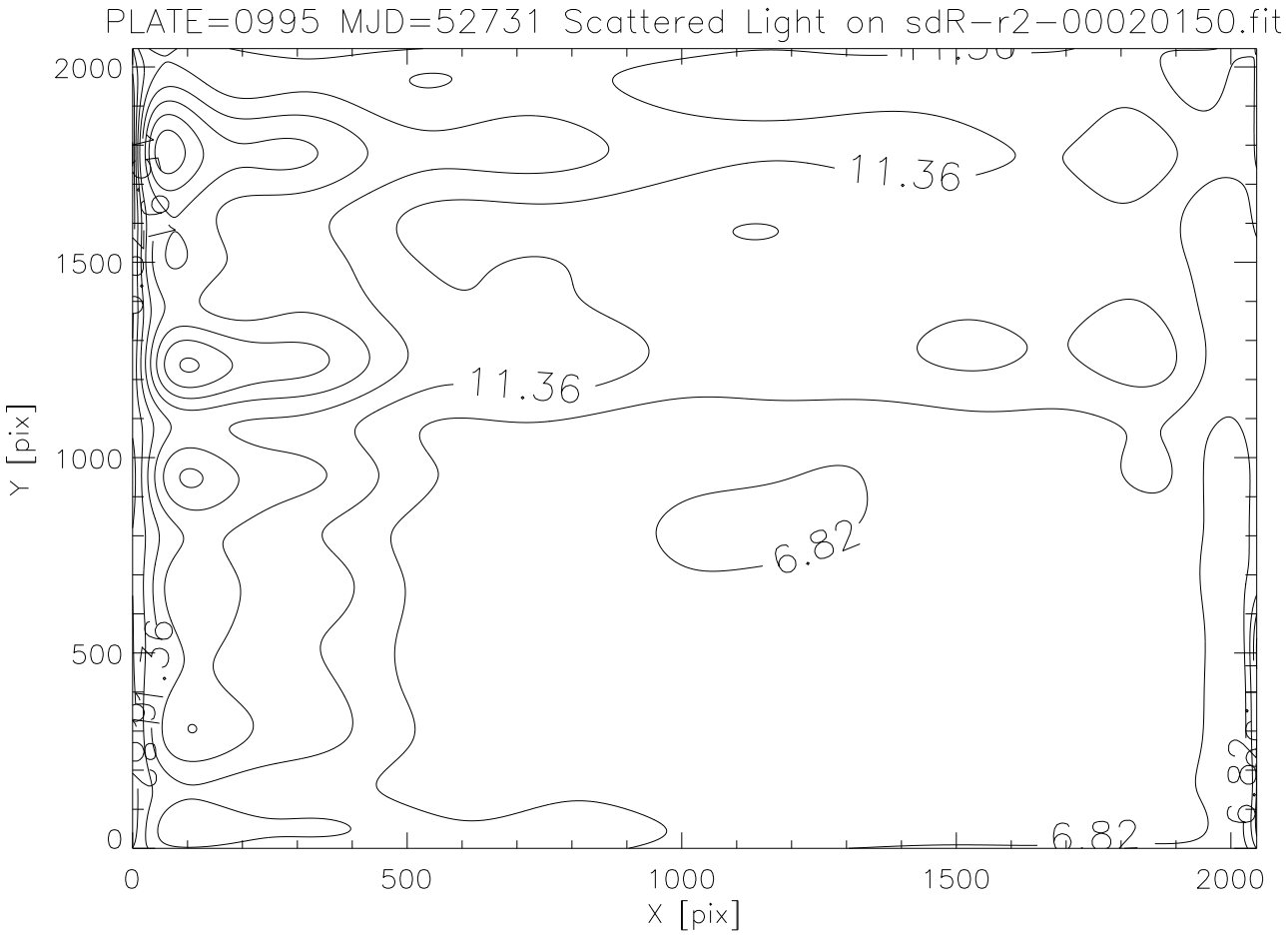

PLATE=0995 MJD=52731 sdR-r2-00020149.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.55 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

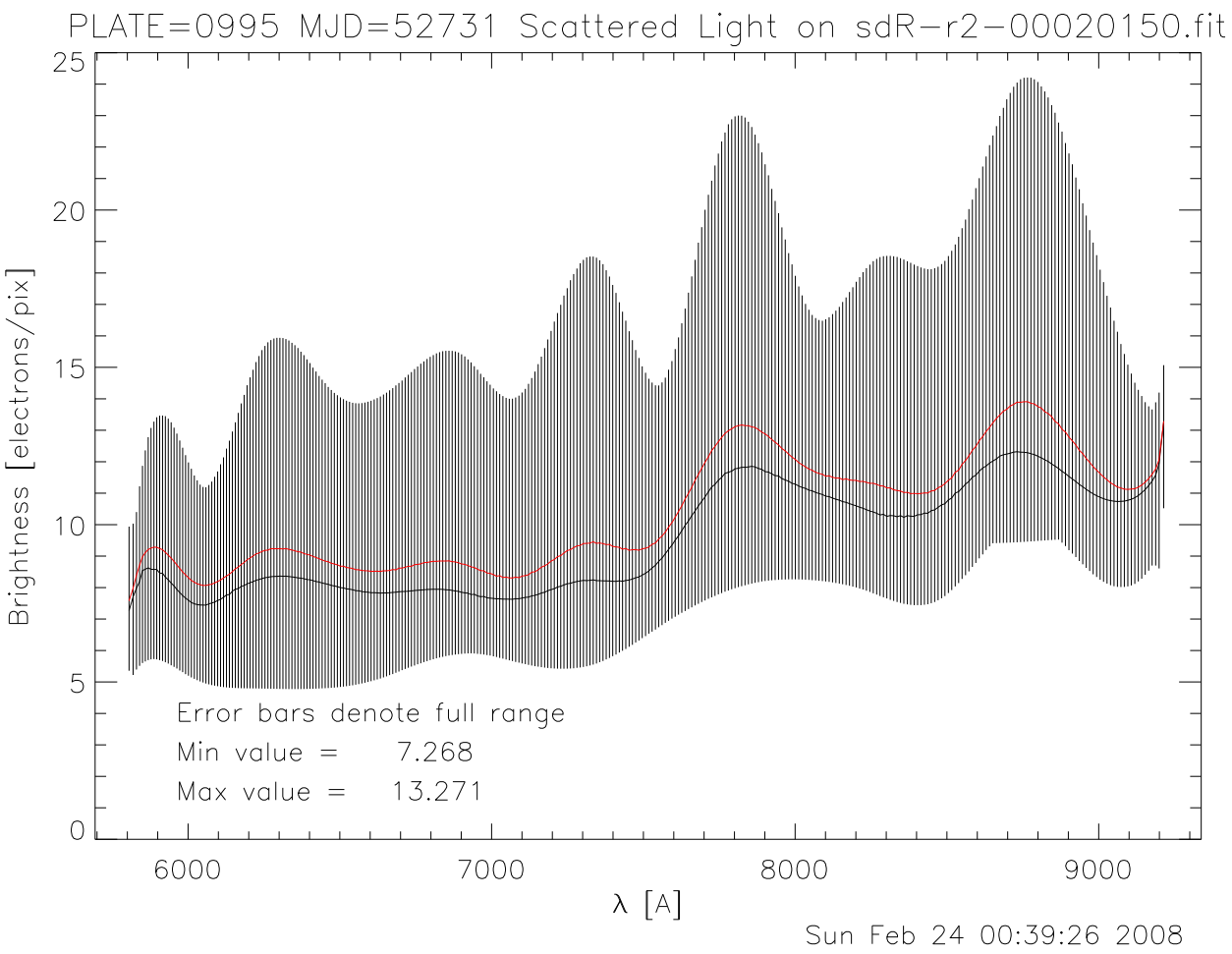

PLATE=0995 MJD=52731 sdR-r2-00020149.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.13 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

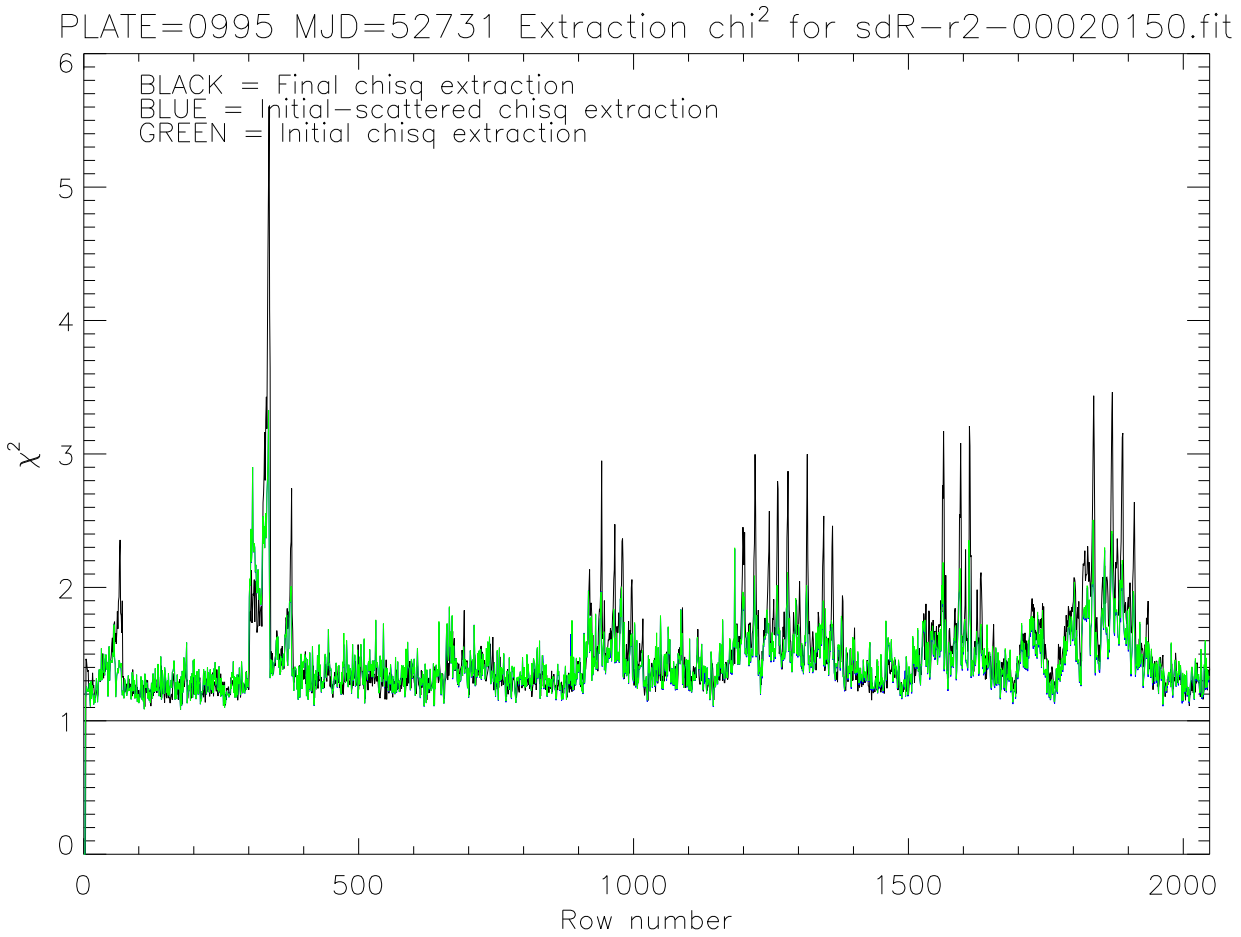

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r2−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.741
Max value = 1.173
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:35:36 2008

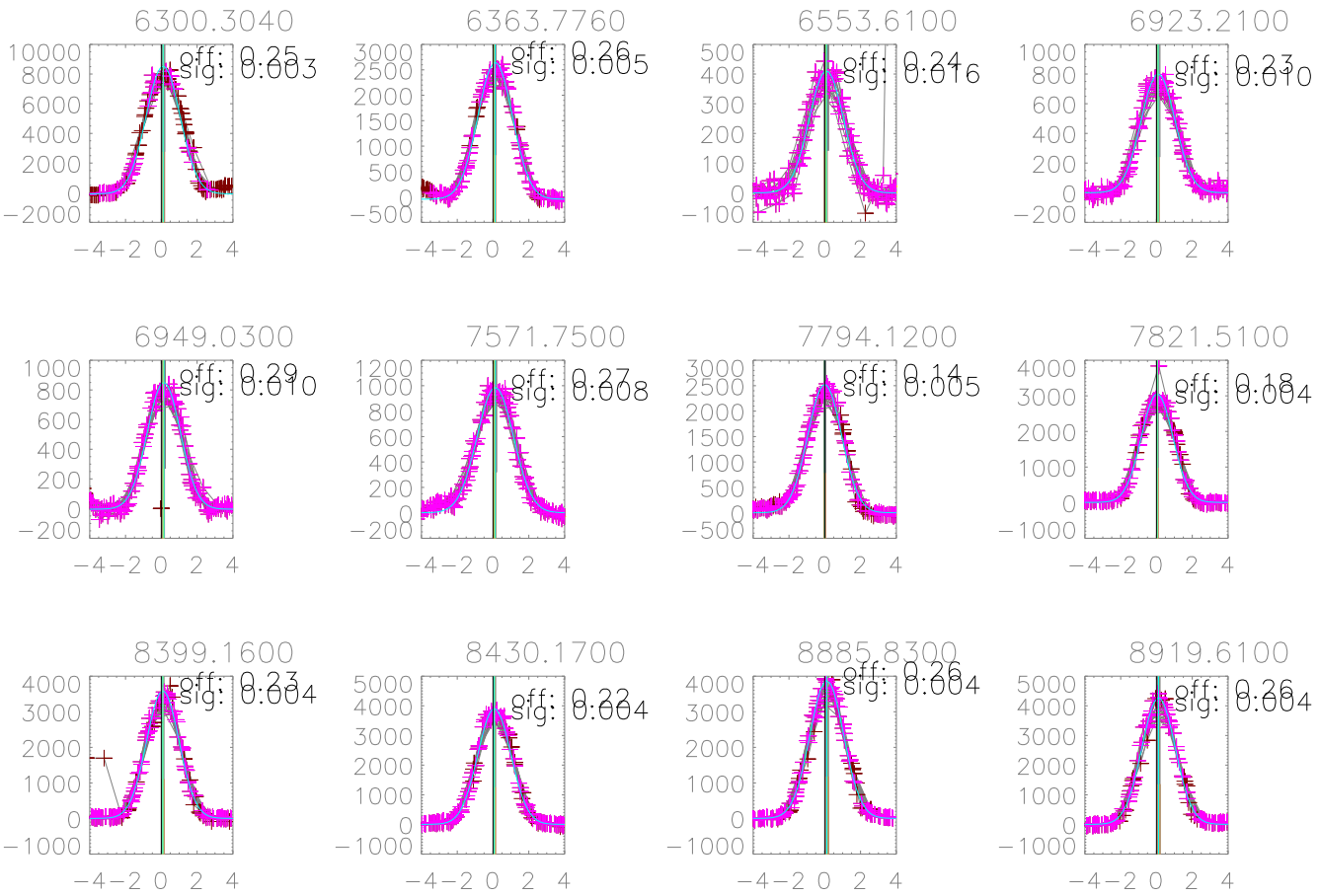

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020150.fi
38.2
38.2
49.1
38.2
27.3
27.3
27.3
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

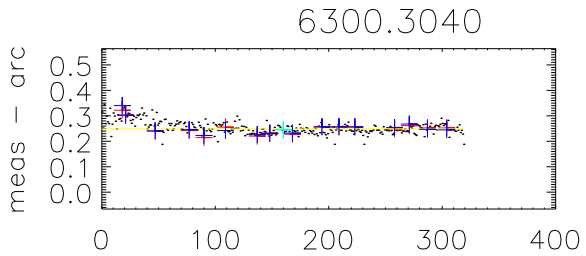

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020150.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.442
Max value = 48.394
Sun Feb 24 00:36:31 2008

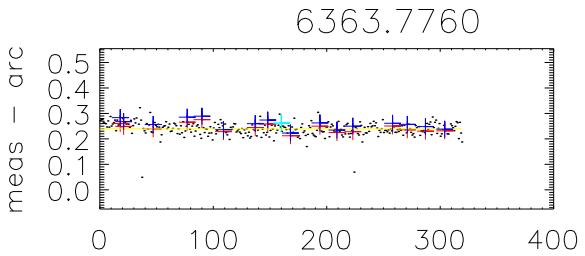

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020150.fit
11.36
11.36
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

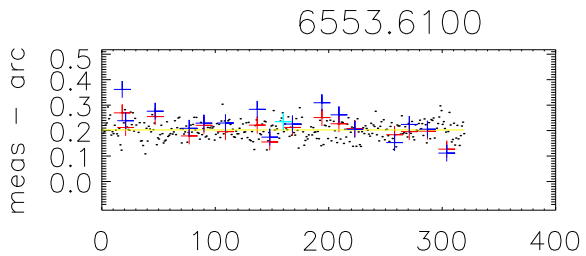

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020150.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.268
Max value = 13.271
Sun Feb 24 00:39:26 2008

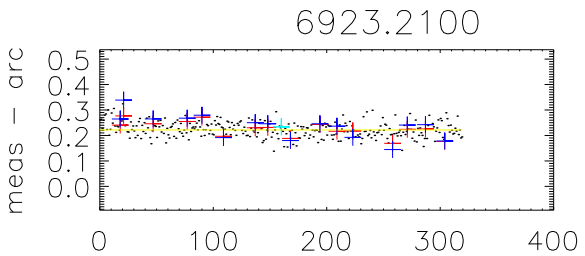

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r2−00020150.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

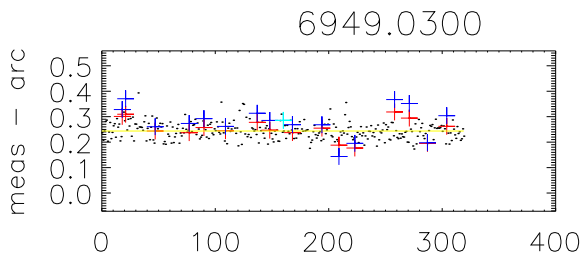

6300.3040
off: 0.25
sig: 0.003
6363.7760
off: 0.26
sig: 0.005
6553.6100
off: 0.24
sig: 0.016
6923.2100
off: 0.23
sig: 0.010
6949.0300
off: 0.29
sig: 0.010
7571.7500
off: 0.27
sig: 0.008
7794.1200
off: 0.14
sig: 0.005
7821.5100
off: 0.18
sig: 0.004
8399.1600
off: 0.23
sig: 0.004
8430.1700
off: 0.22
sig: 0.004
8885.8300
off: 0.26
sig: 0.004
8919.6100
off: 0.26
sig: 0.004

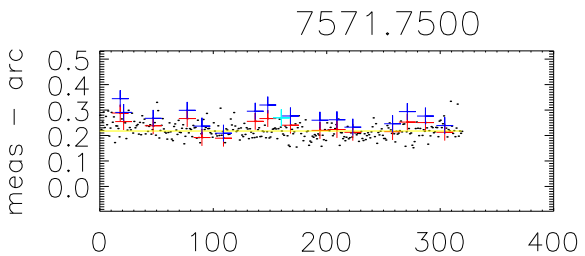

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

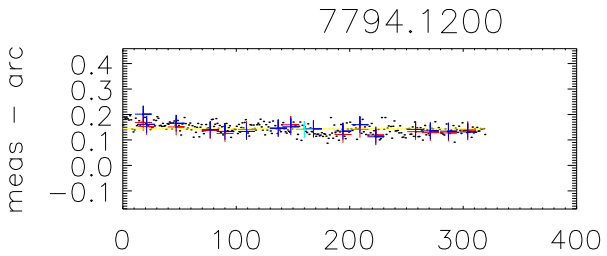

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

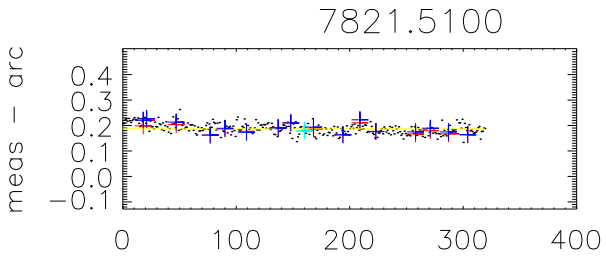

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

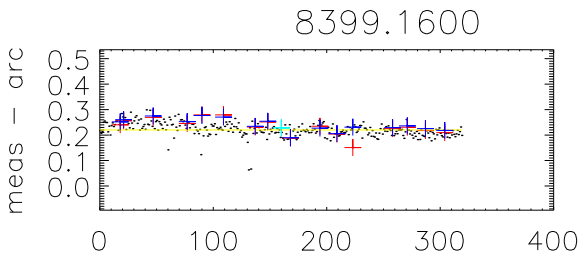

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

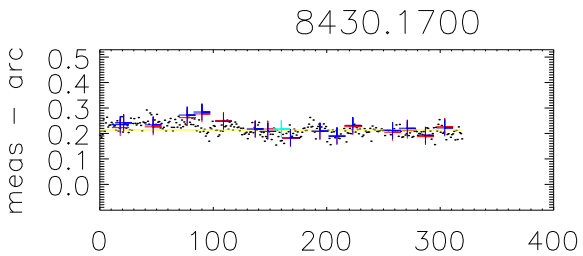

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

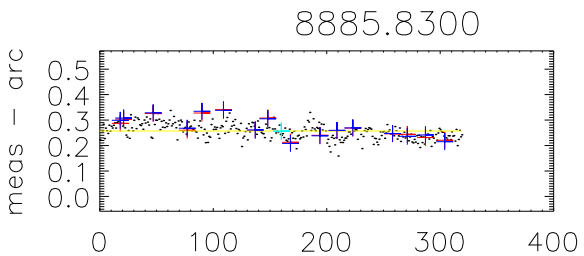

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

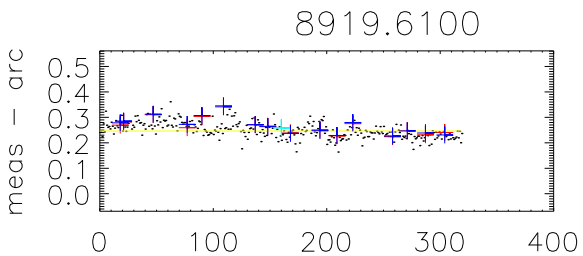

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

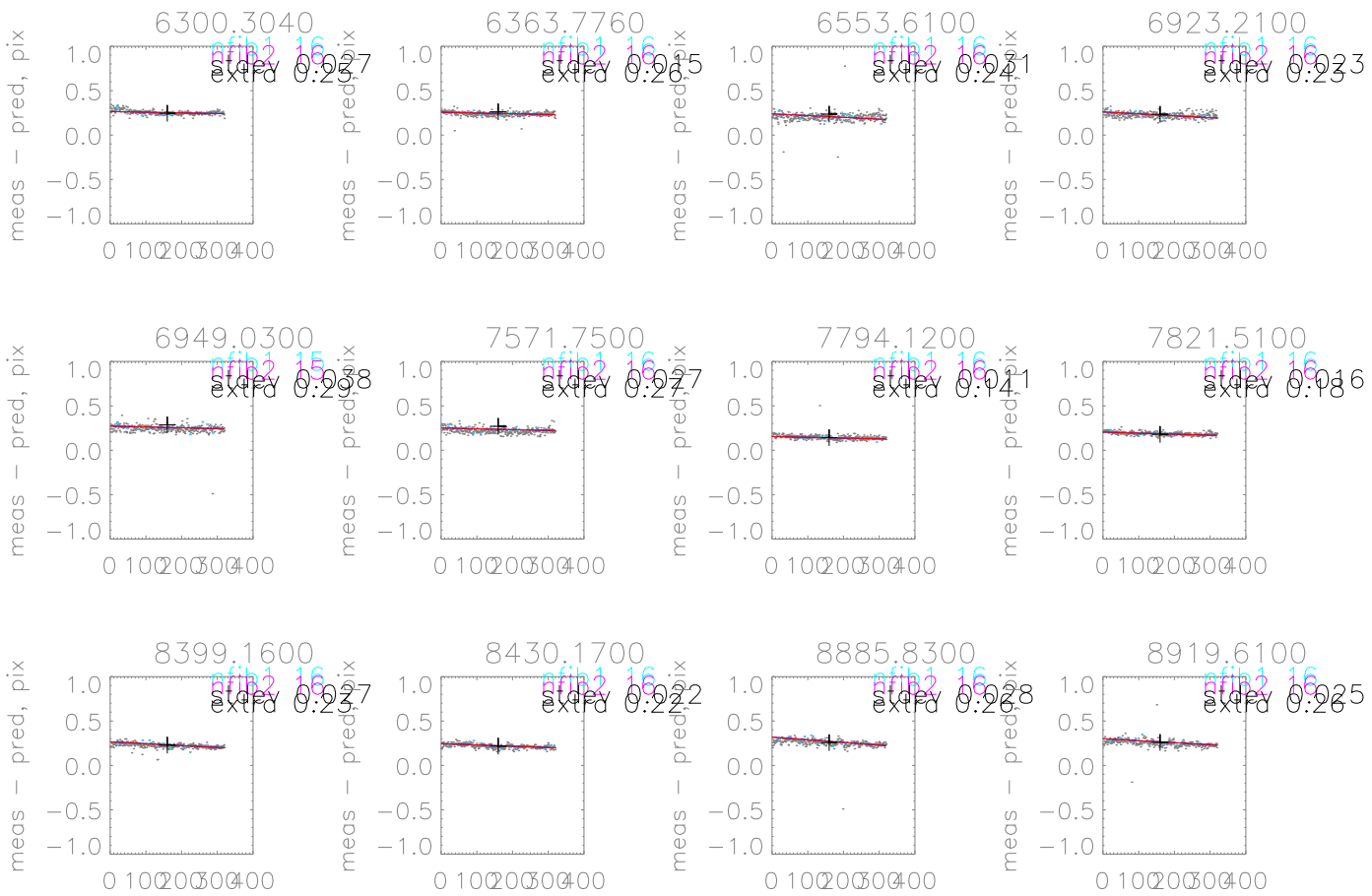

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

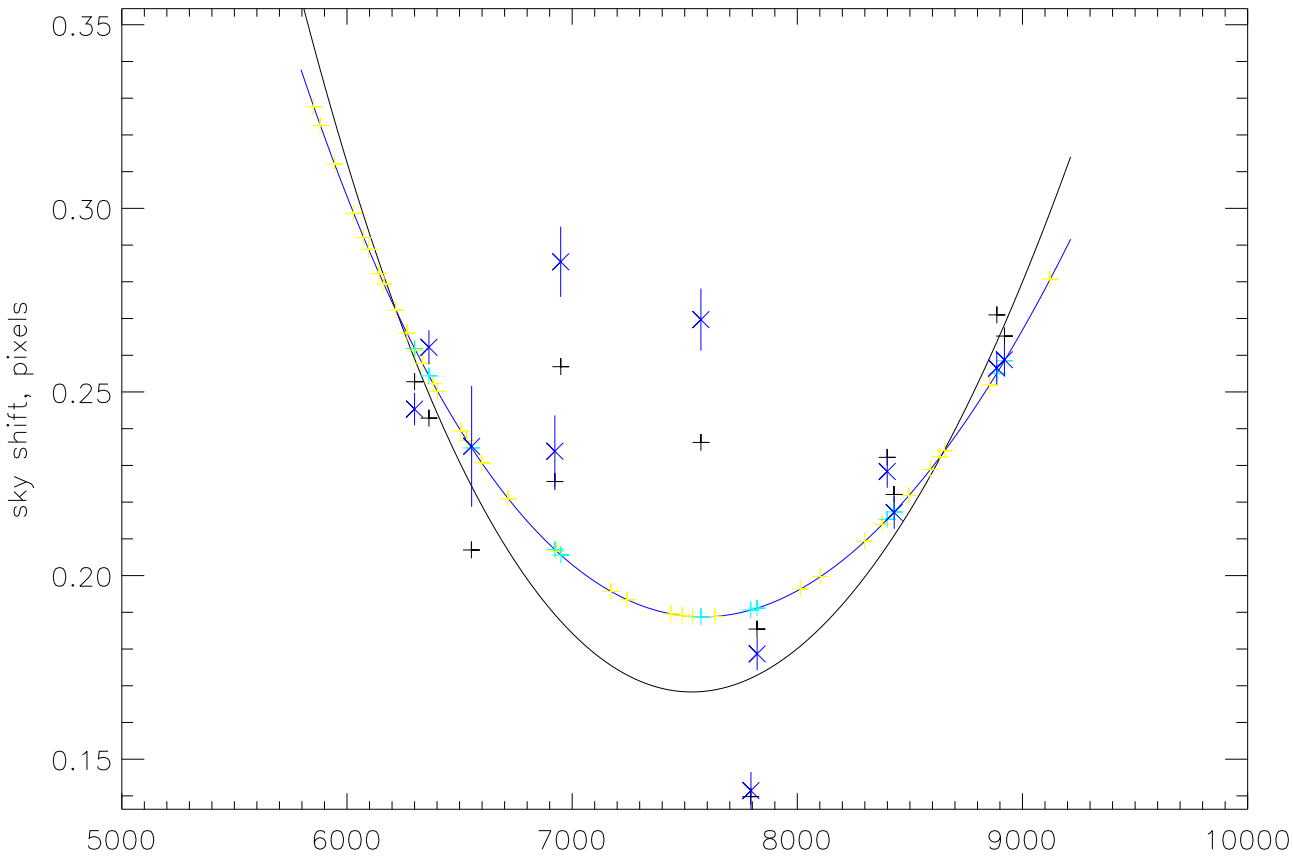

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

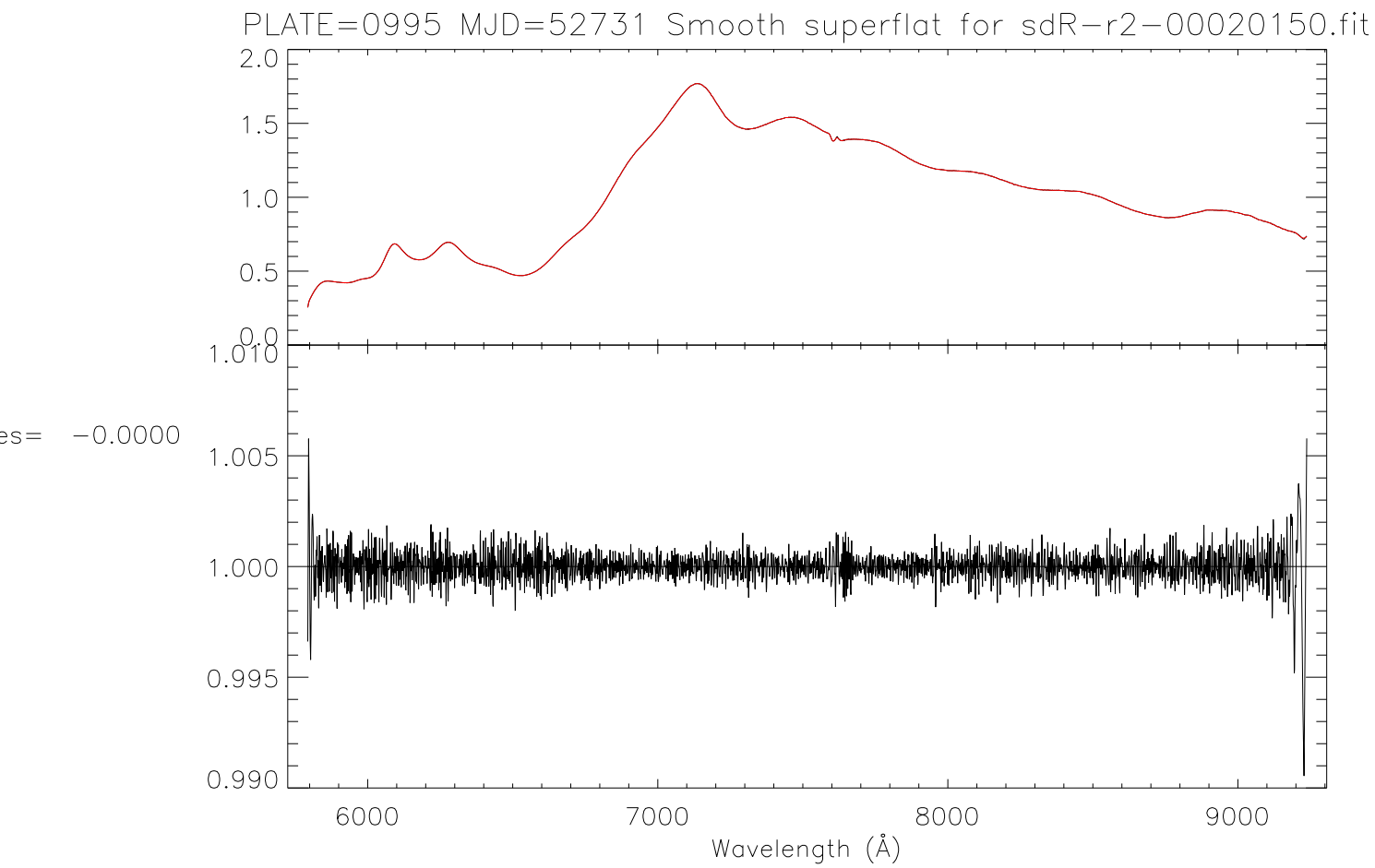

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

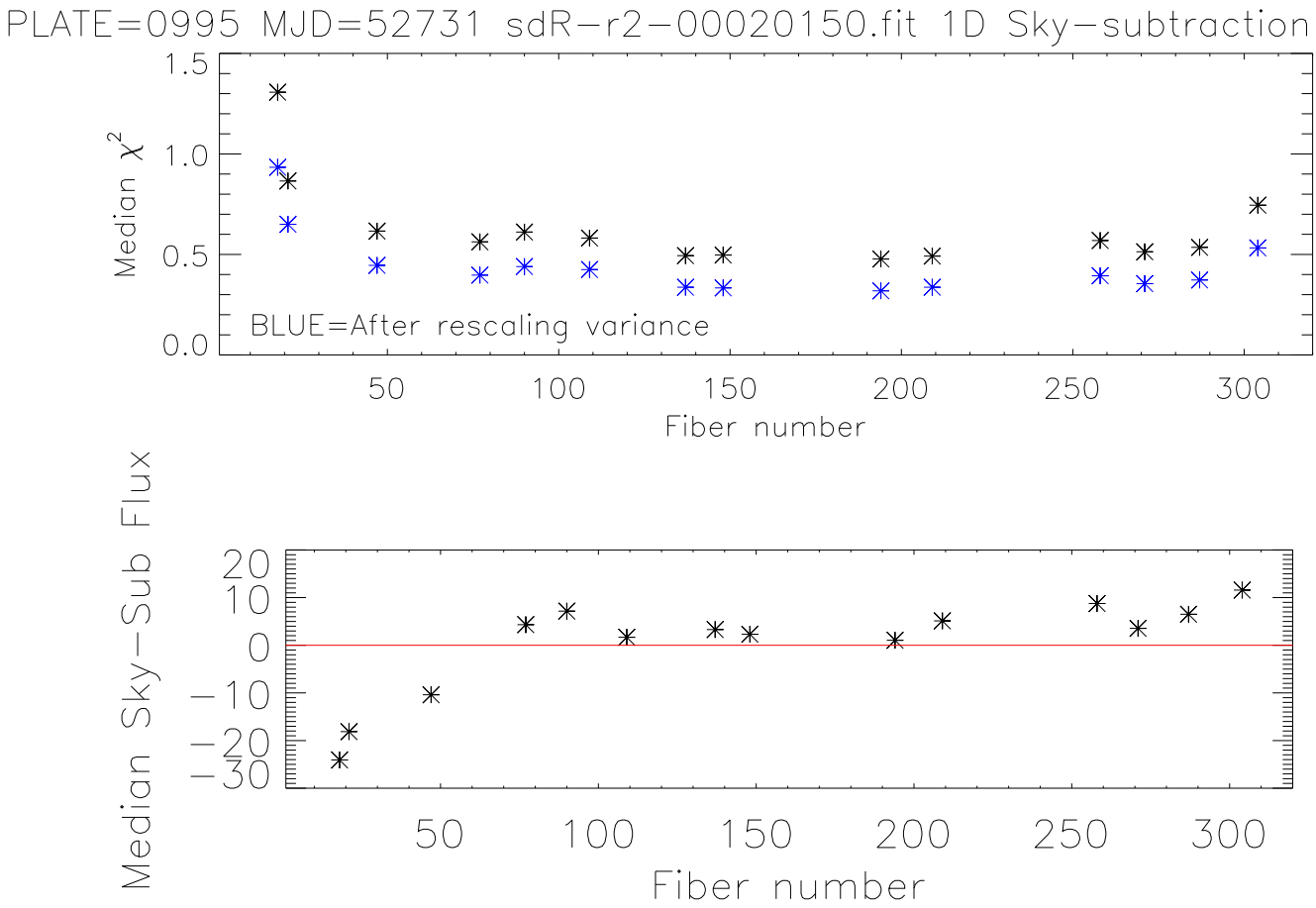

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

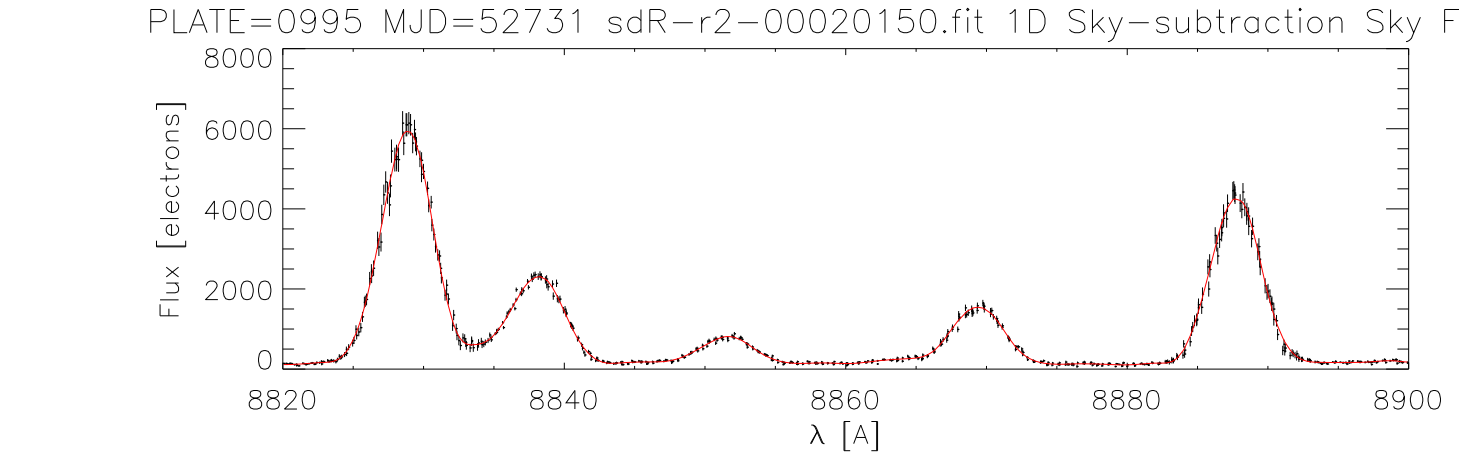

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

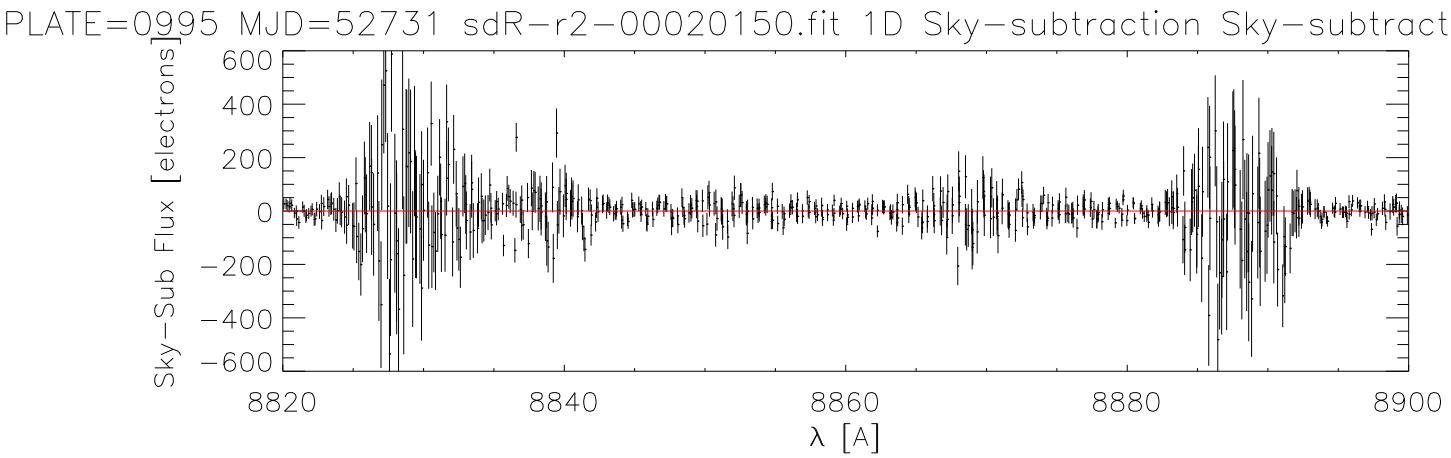

6300.3040
stdev 0.027
extra 0.25
6363.7760
stdev 0.025
extra 0.26
6553.6100
stdev 0.031
extra 0.24
6923.2100
stdev 0.023
extra 0.23
6949.0300
stdev 0.038
extra 0.29
7571.7500
stdev 0.027
extra 0.27
7794.1200
stdev 0.011
extra 0.14
7821.5100
stdev 0.016
extra 0.18
8399.1600
stdev 0.027
extra 0.23
8430.1700
stdev 0.022
extra 0.22
8885.8300
stdev 0.028
extra 0.26
8919.6100
stdev 0.025
extra 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

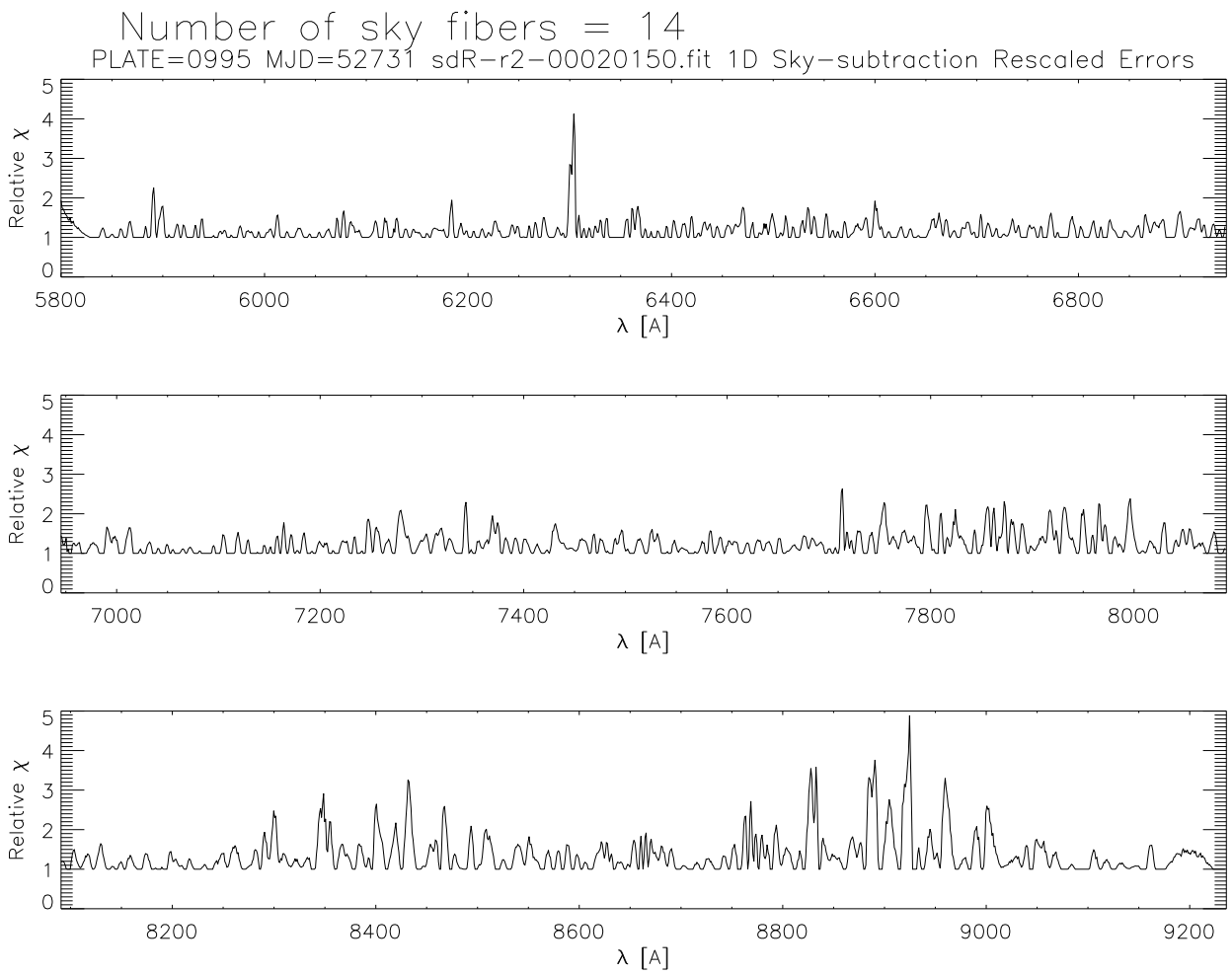

0.35
0.30
0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

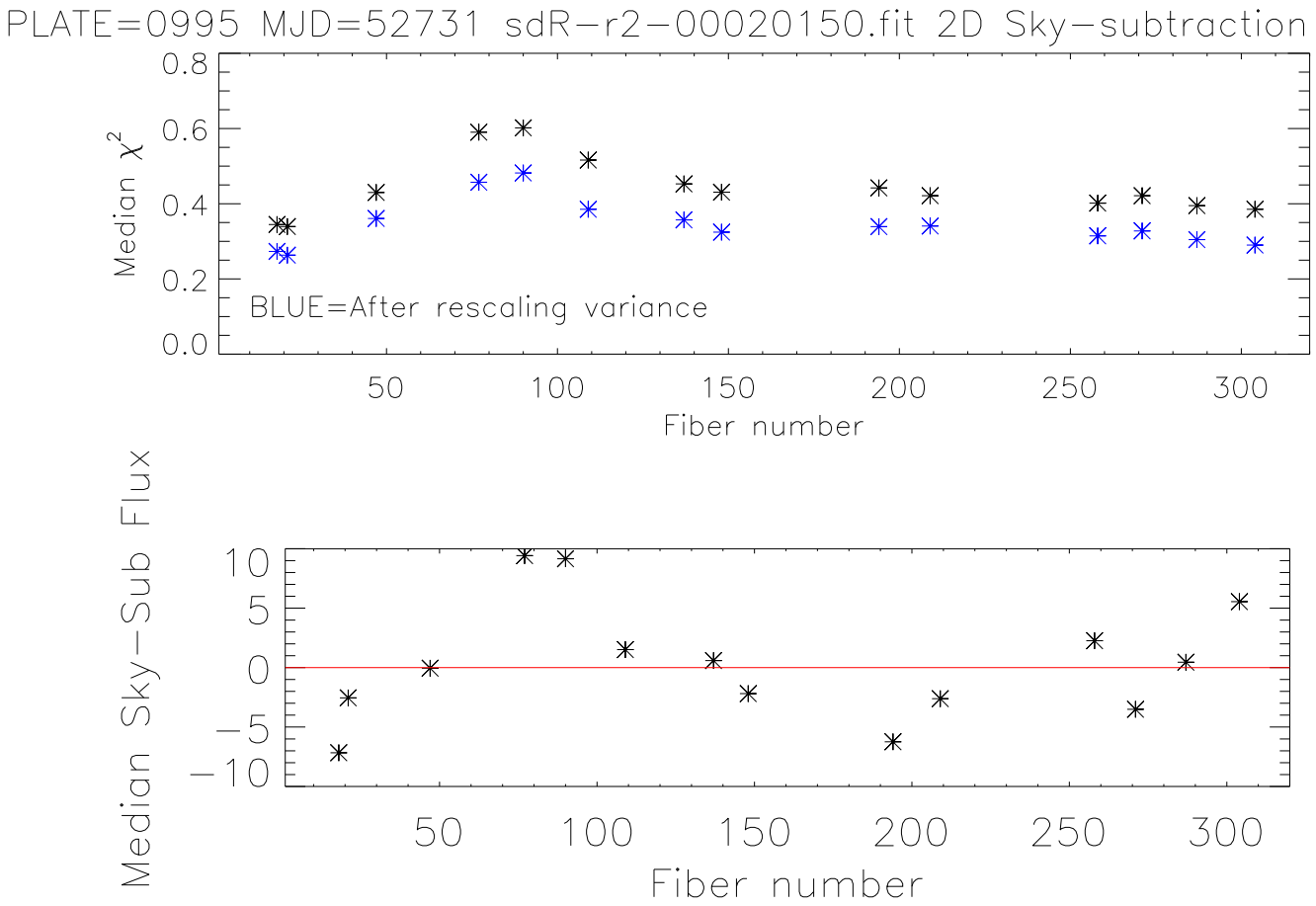

PLATE=0995 MJD=52731 Smooth superflat for sdR-r2-00020150.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

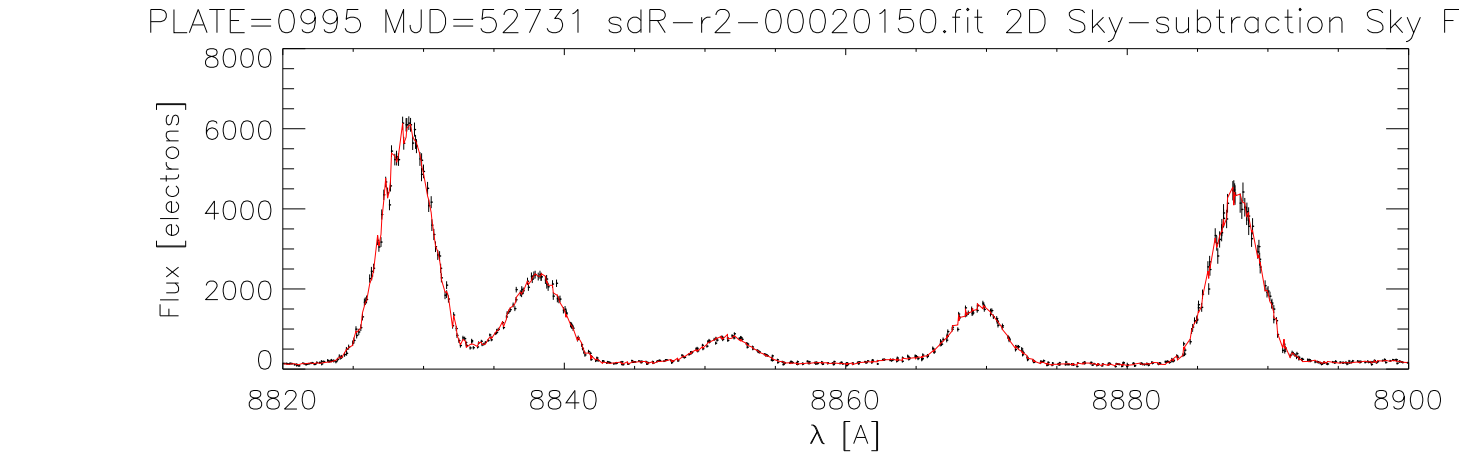

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

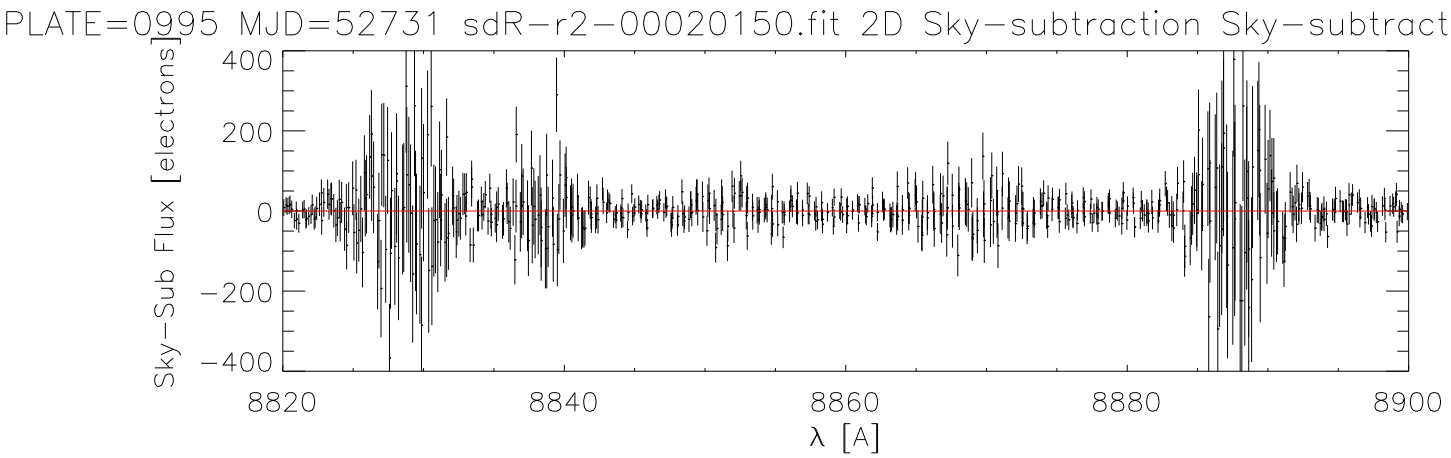

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

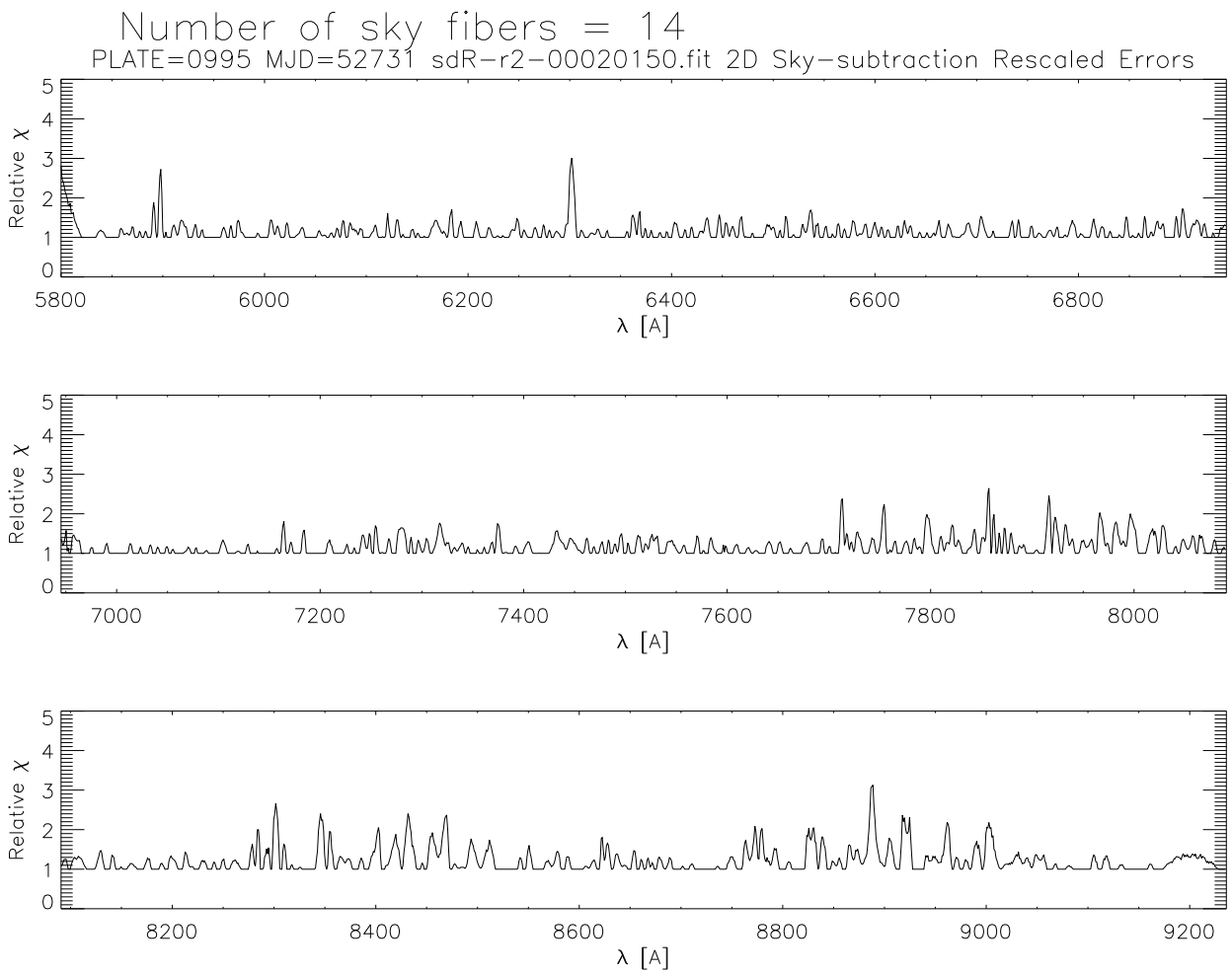

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

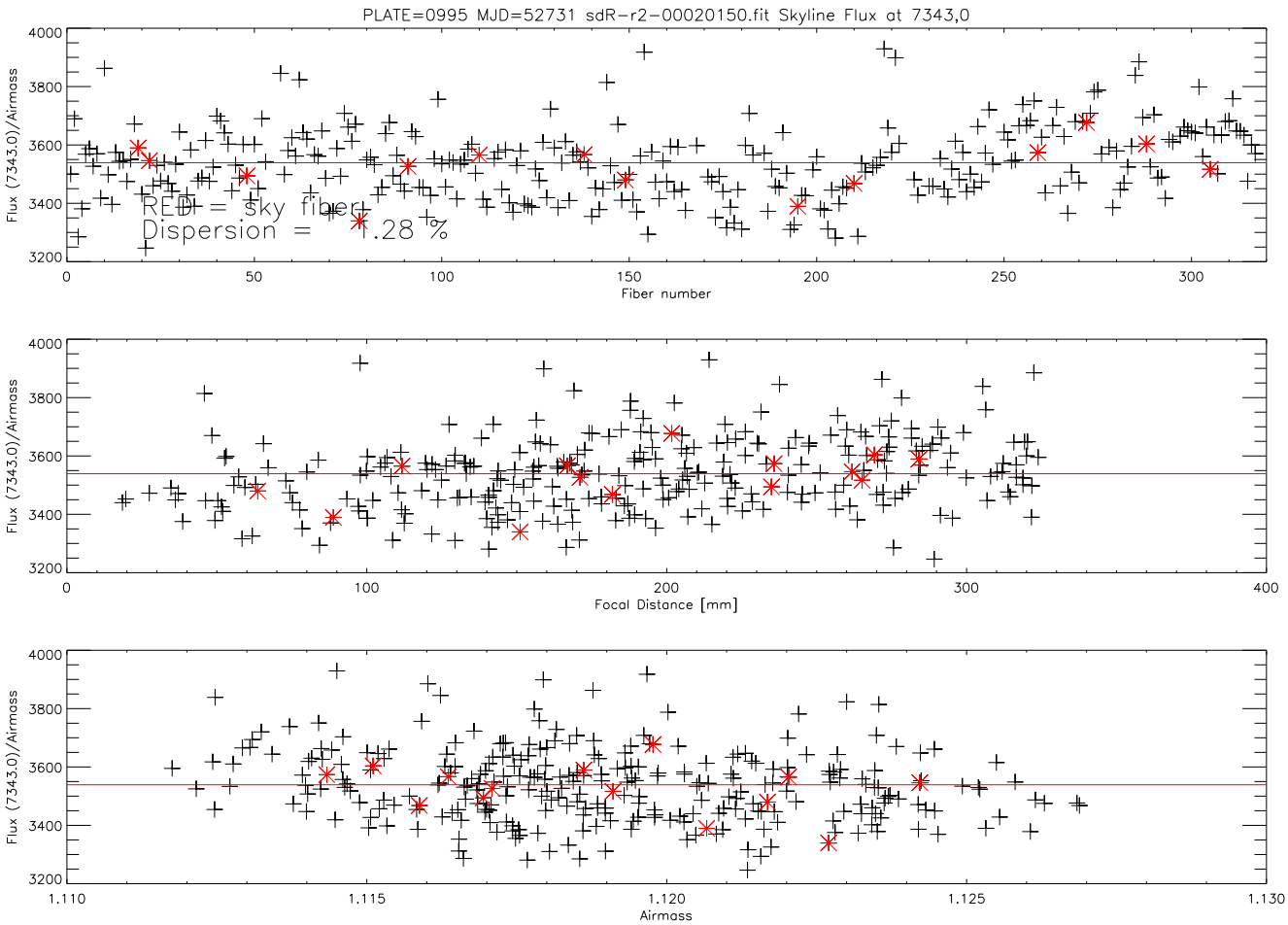

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020150.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

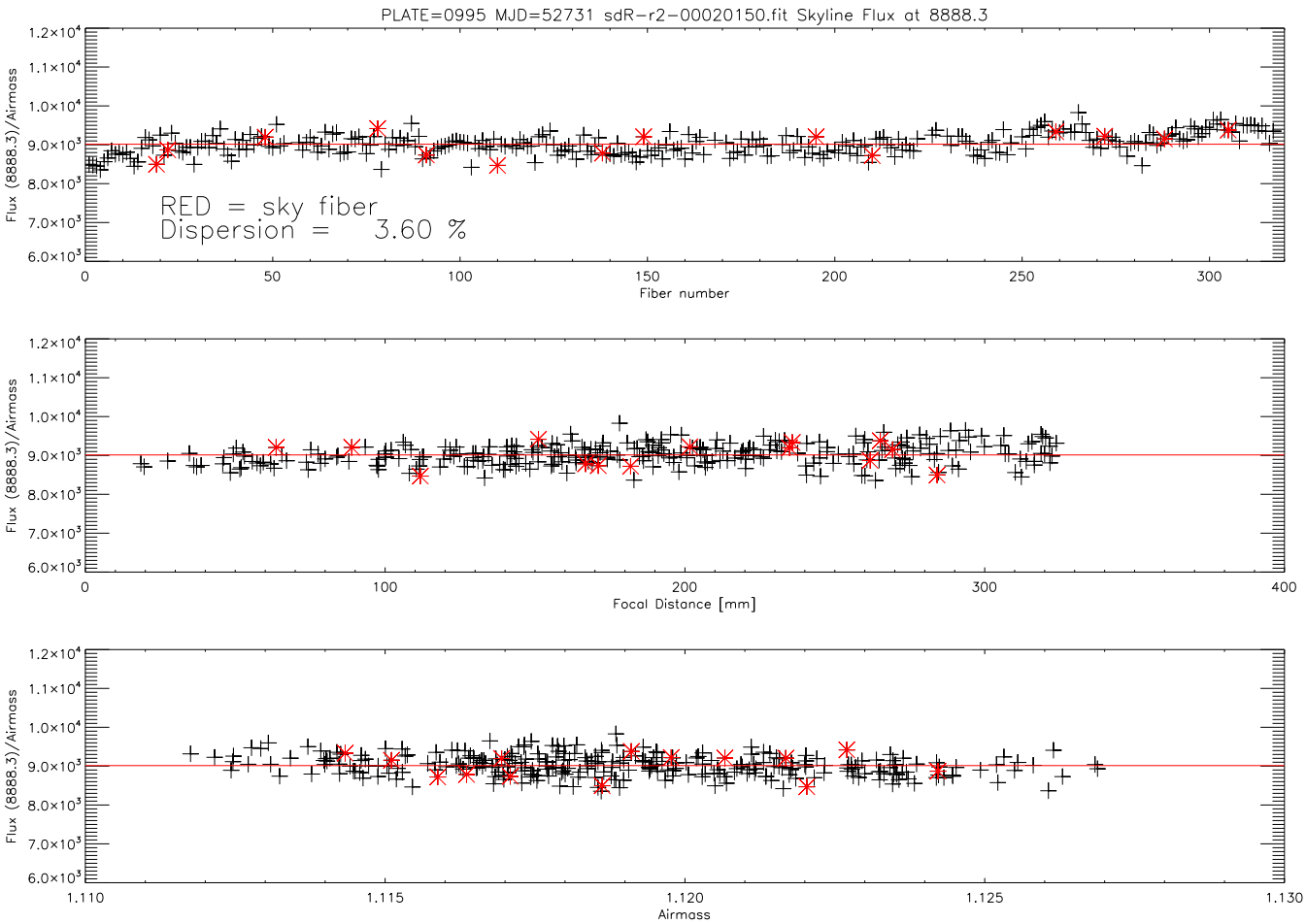

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

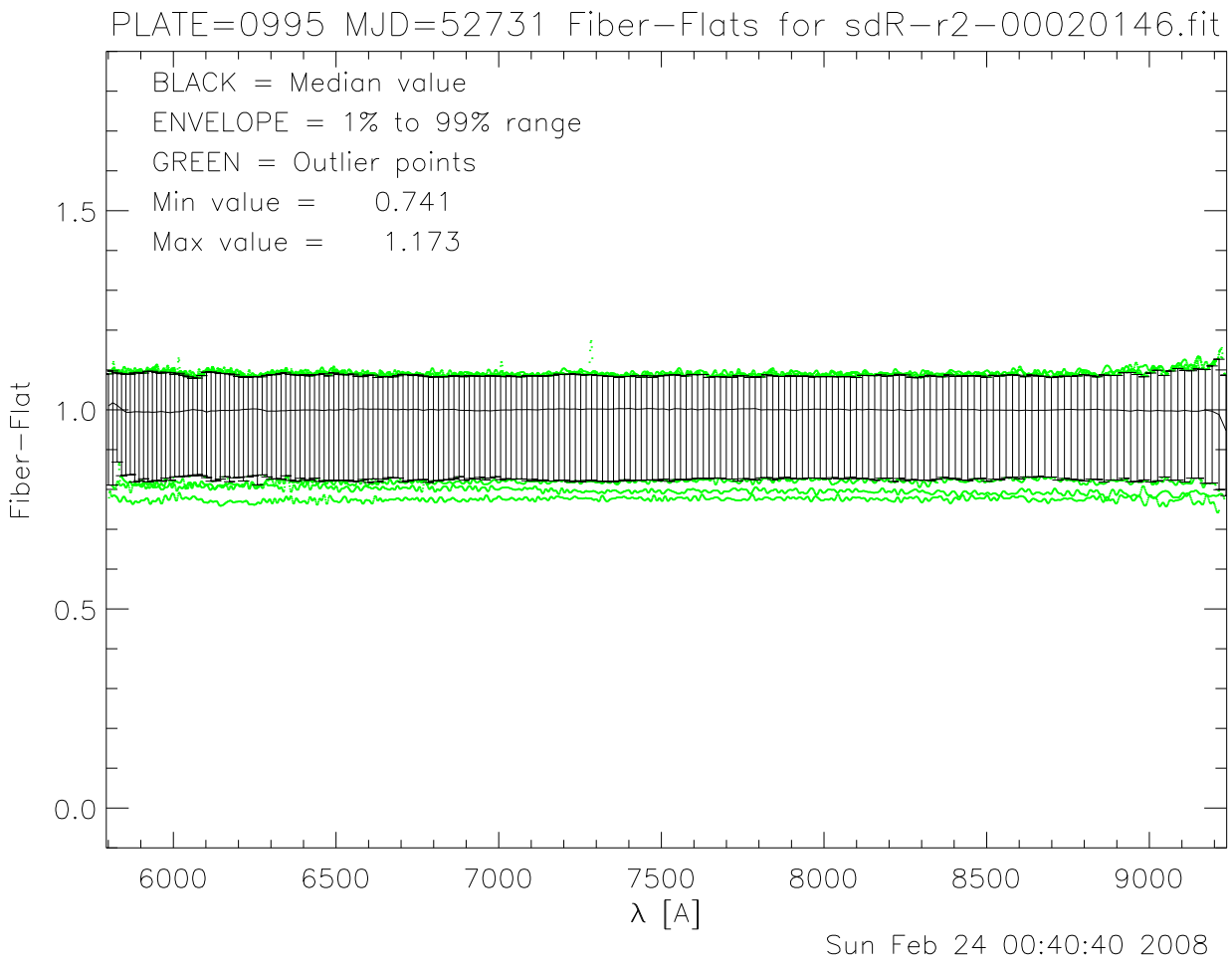

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

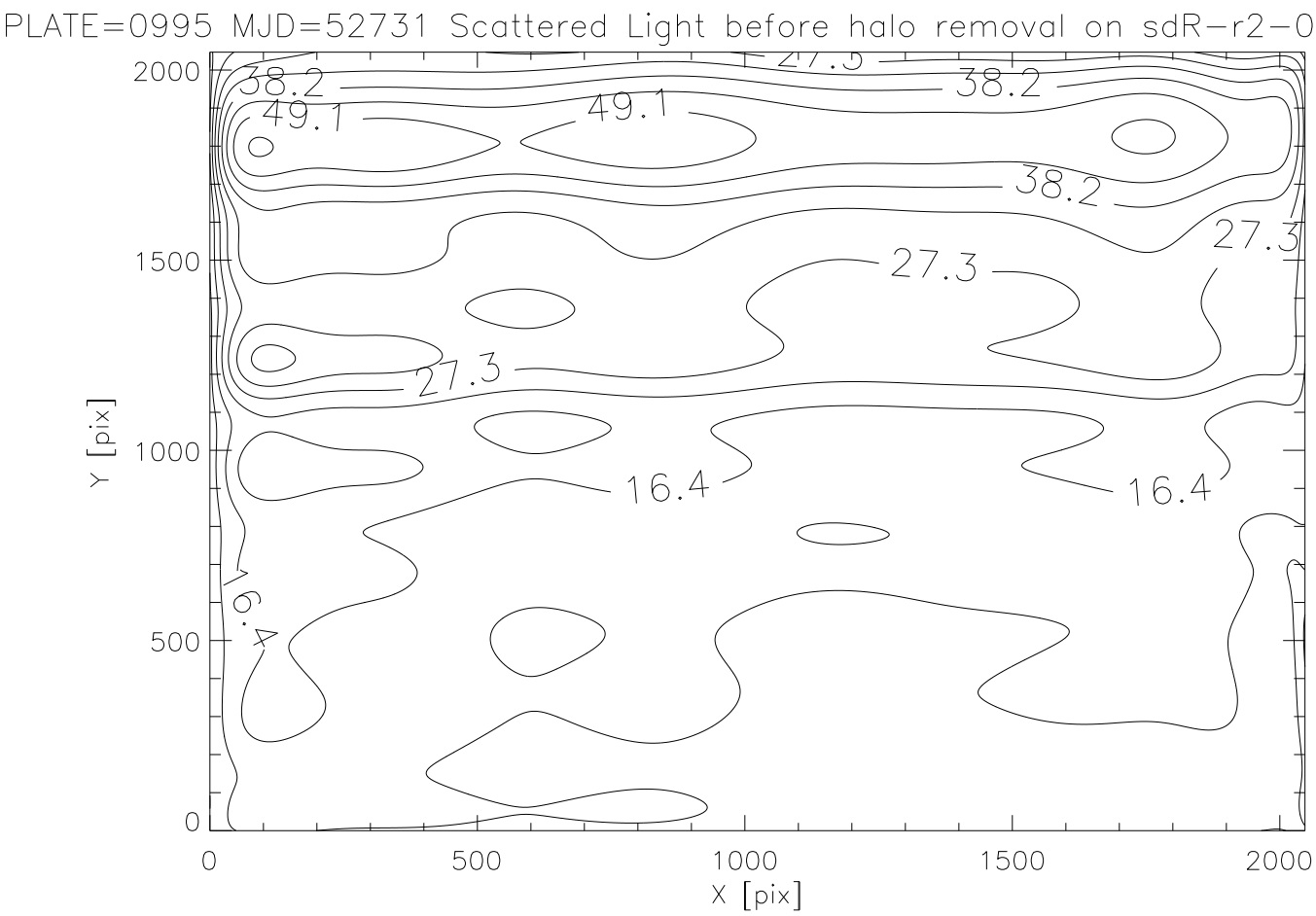

PLATE=0995 MJD=52731 sdR-r2-00020150.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

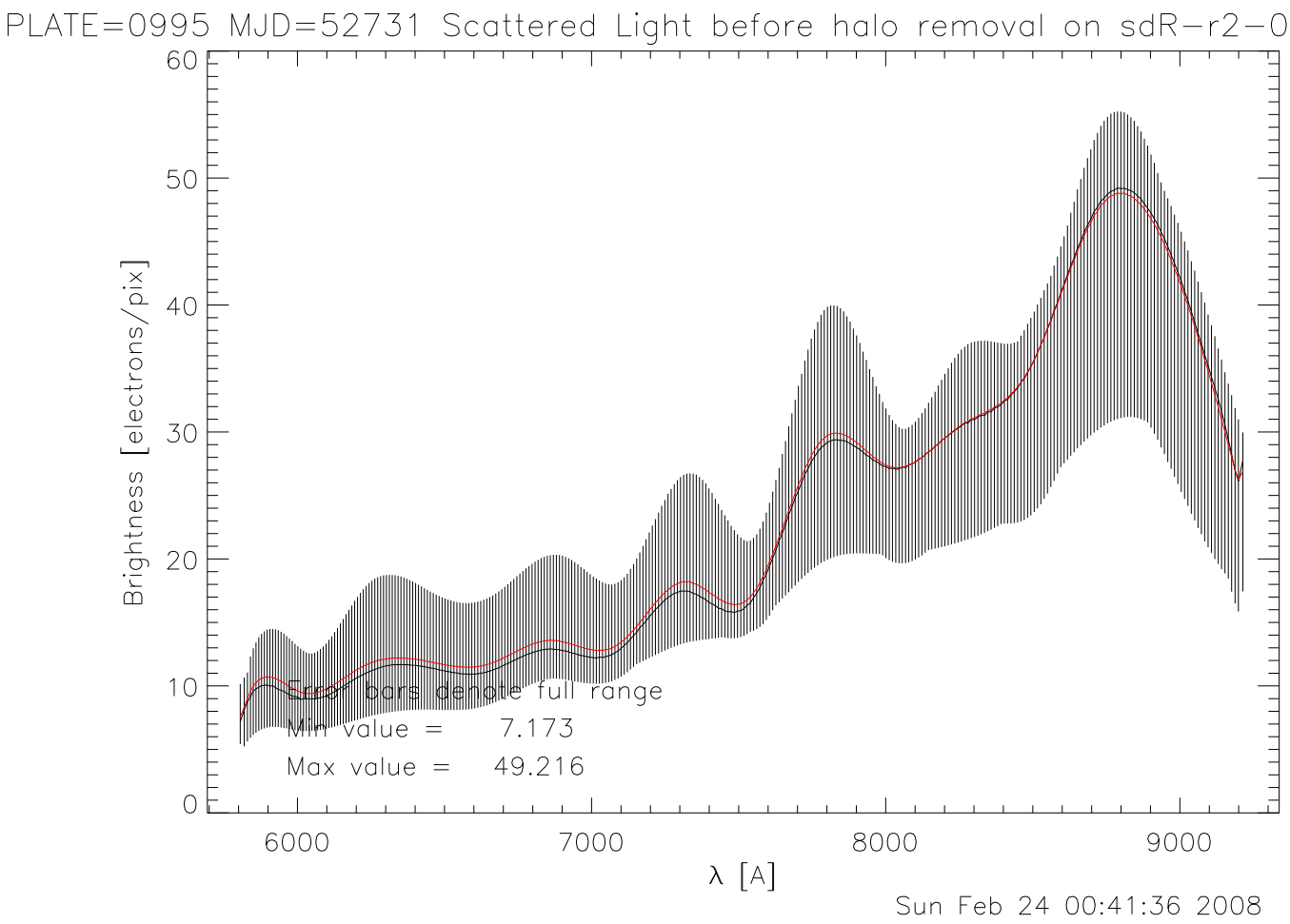

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020150.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

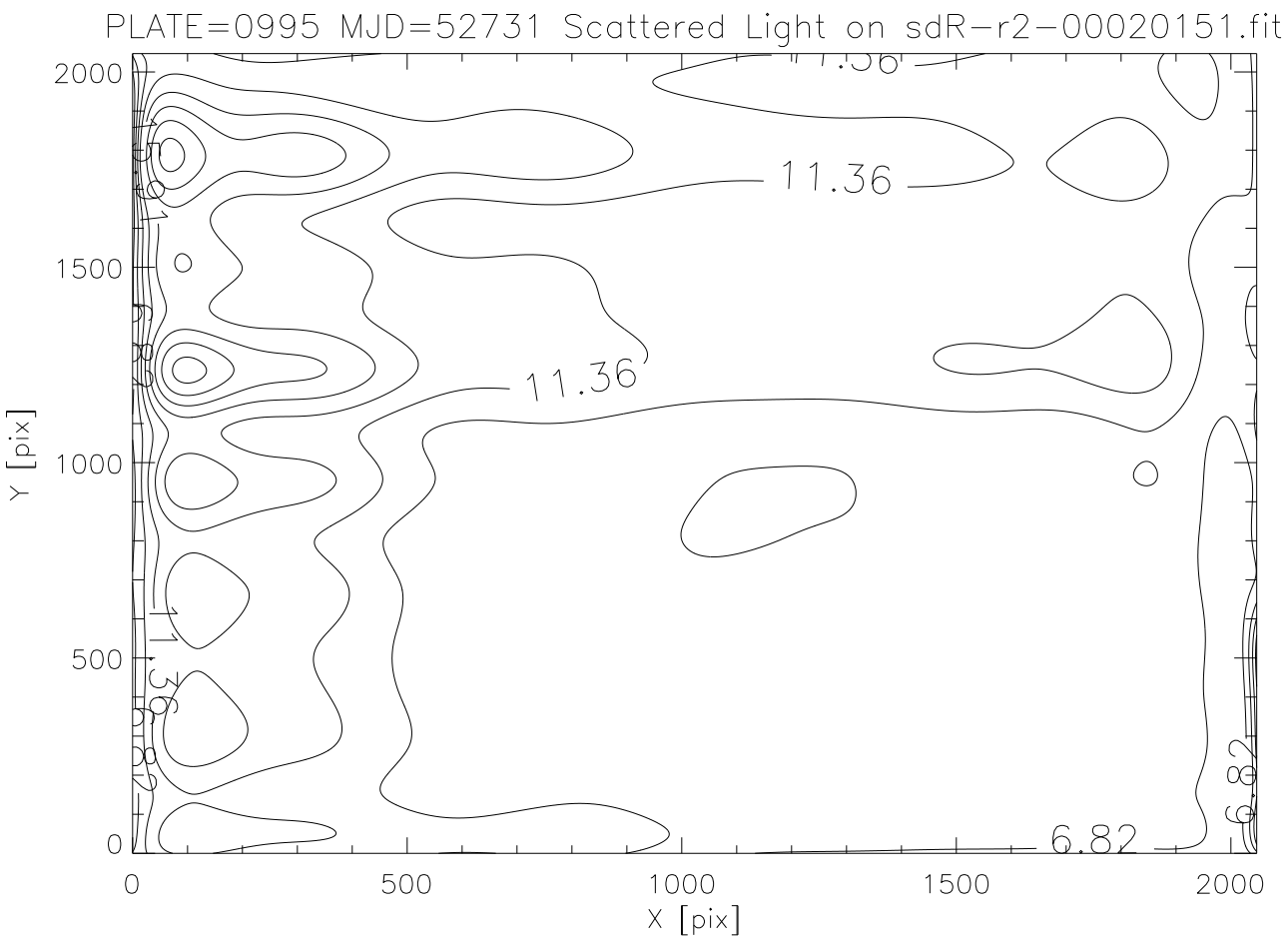

PLATE=0995 MJD=52731 sdR-r2-00020150.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 1.28 %
Flux (7343.0)/Airmass
Fiber number
Focal Distance [mm]
Airmass

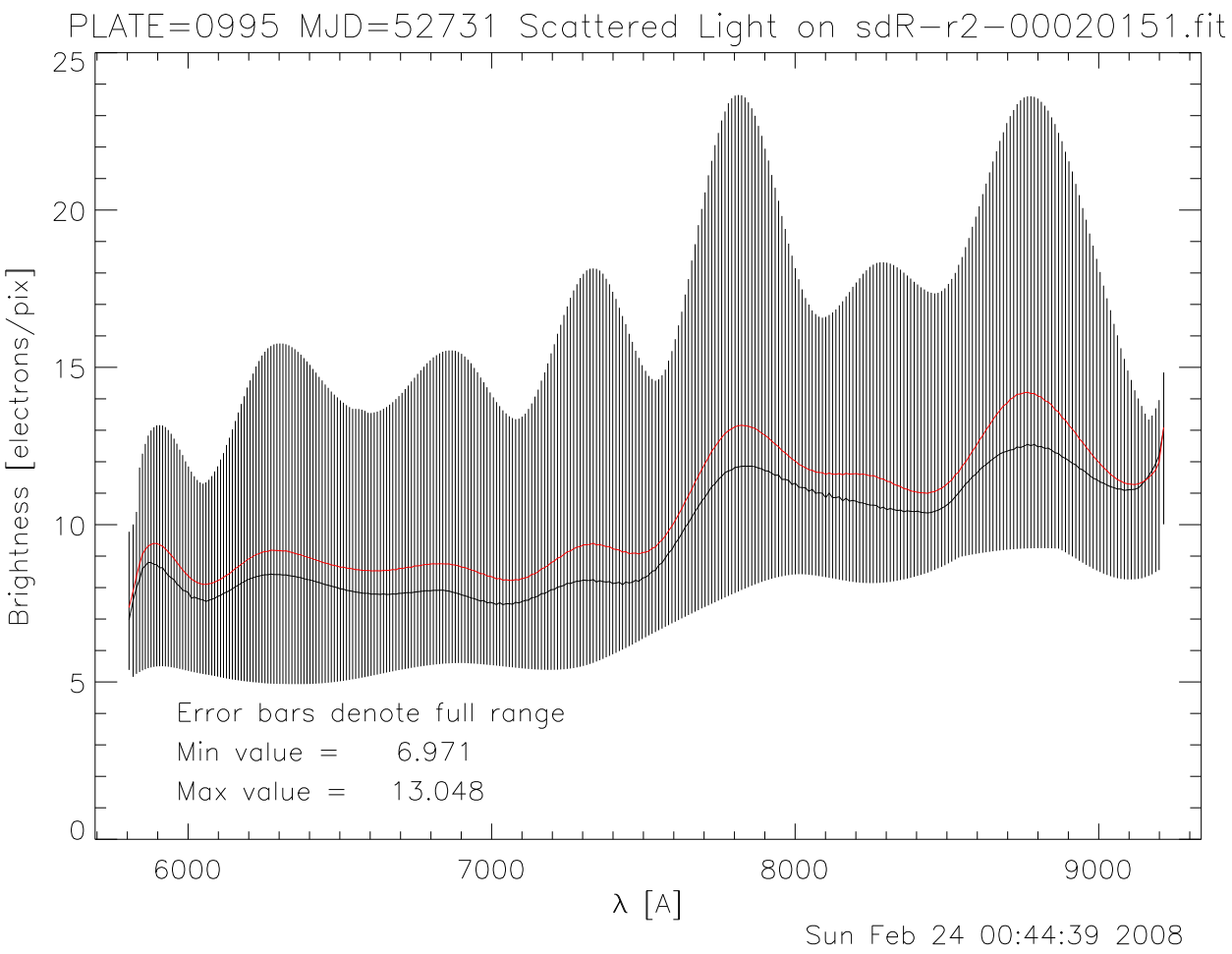

PLATE=0995 MJD=52731 sdR-r2-00020150.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.60 %
Fiber number
Focal Distance [mm]
Airmass

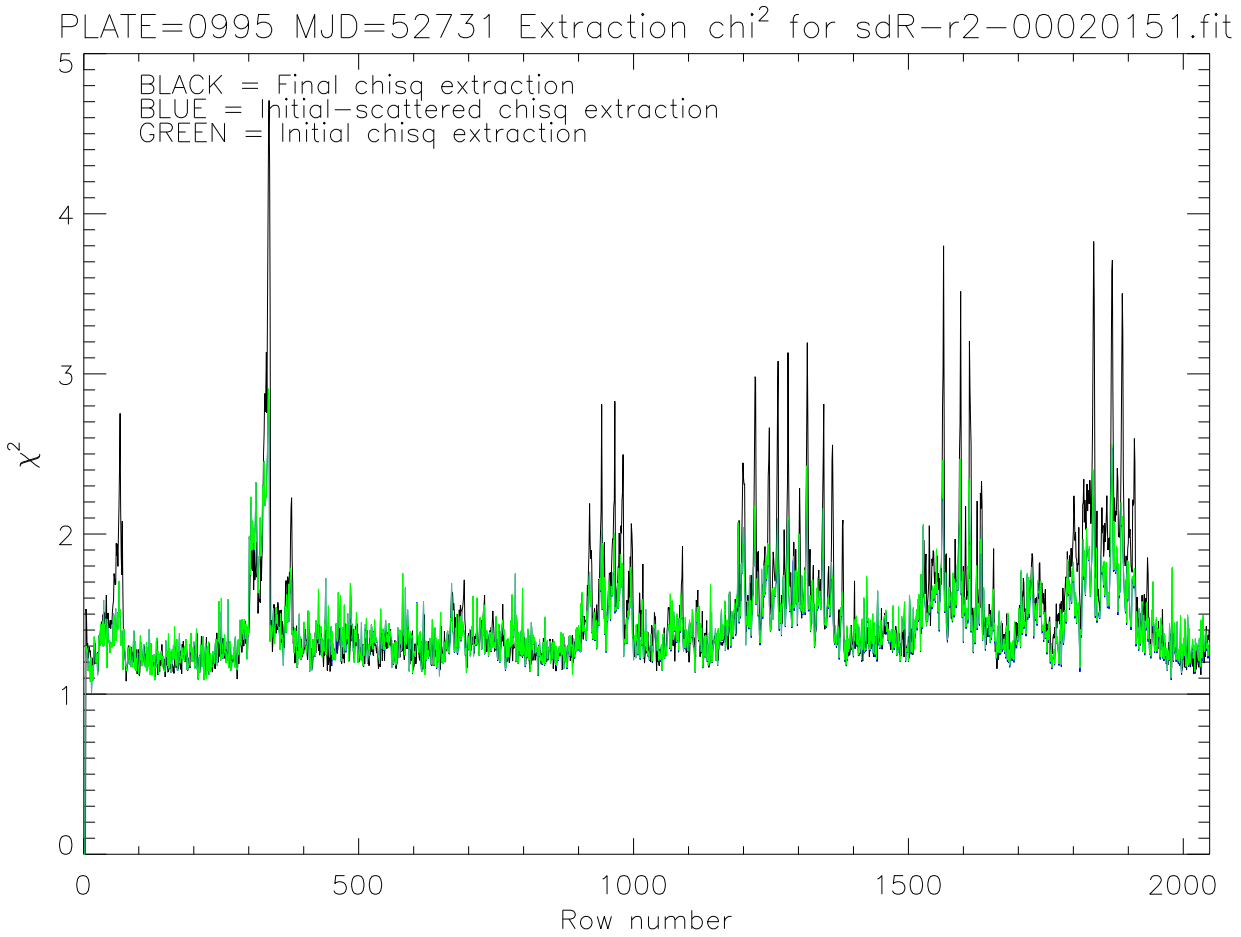

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r2−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.741
Max value = 1.173
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:40:40 2008

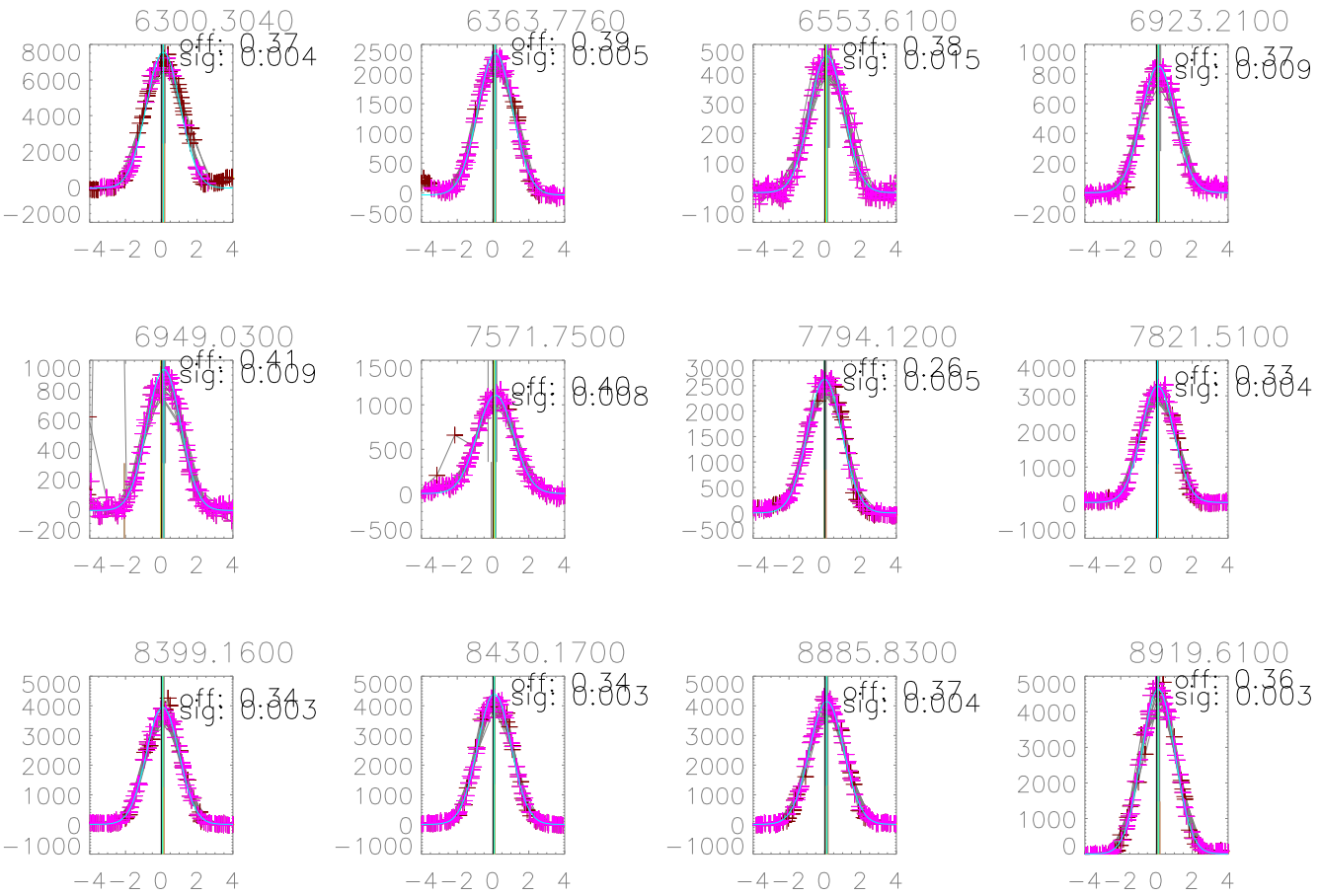

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020151.fi
38.2
49.1
49.1
38.2
38.2
27.3
27.3
27.3
16.4
16.4
6.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

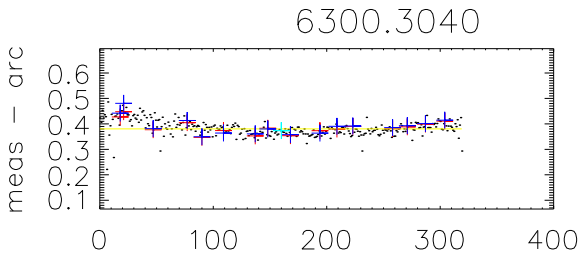

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020151.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.173
Max value = 49.216
Sun Feb 24 00:41:36 2008

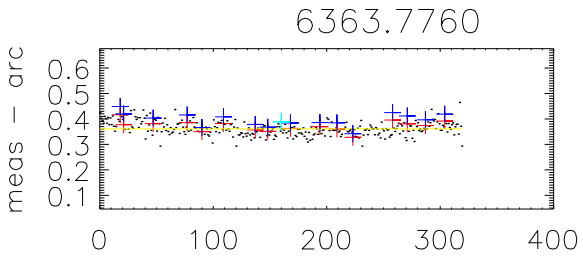

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020151.fit
11.36
11.36
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

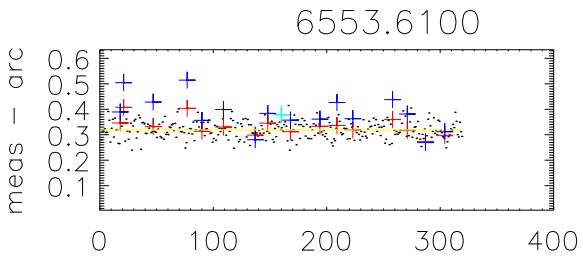

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020151.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.971
Max value = 13.048
Sun Feb 24 00:44:39 2008

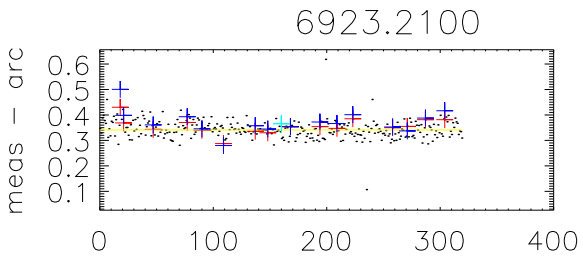

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r2−00020151.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

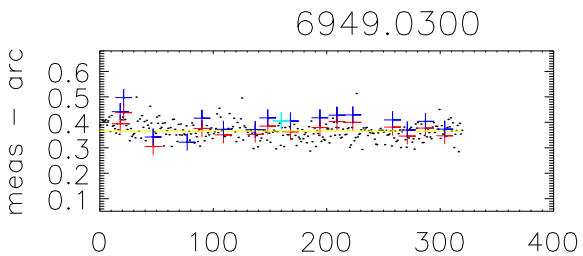

6300.3040
off: 0.37
sig: 0.004
6363.7760
off: 0.39
sig: 0.005
6553.6100
off: 0.38
sig: 0.015
6923.2100
off: 0.37
sig: 0.009
6949.0300
off: 0.41
sig: 0.009
7571.7500
off: 0.40
sig: 0.008
7794.1200
off: 0.26
sig: 0.005
7821.5100
off: 0.33
sig: 0.004
8399.1600
off: 0.34
sig: 0.003
8430.1700
off: 0.34
sig: 0.003
8885.8300
off: 0.37
sig: 0.004
8919.6100
off: 0.36
sig: 0.003

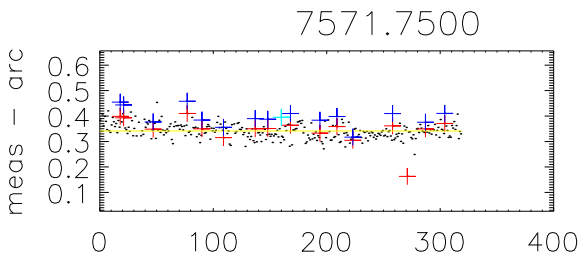

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

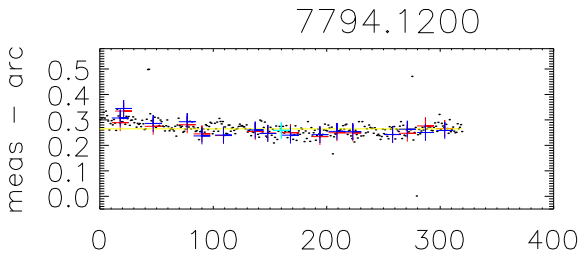

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

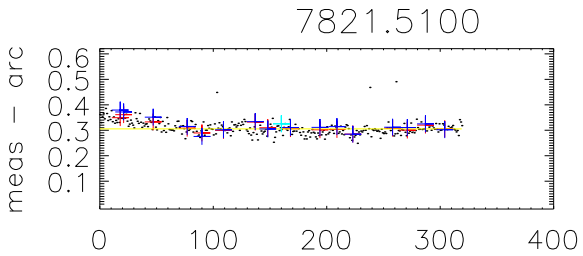

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

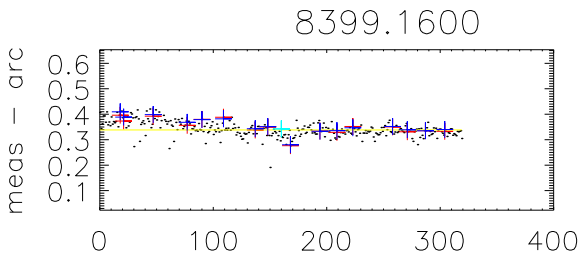

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

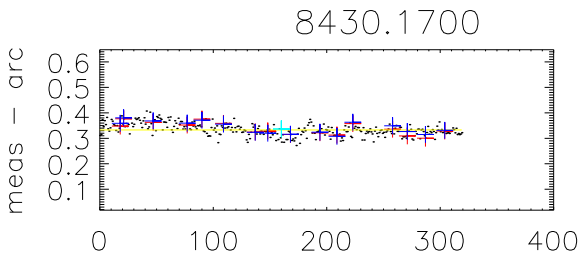

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

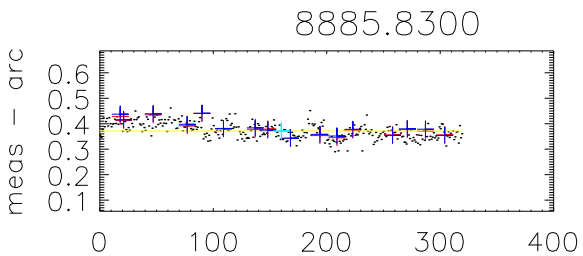

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

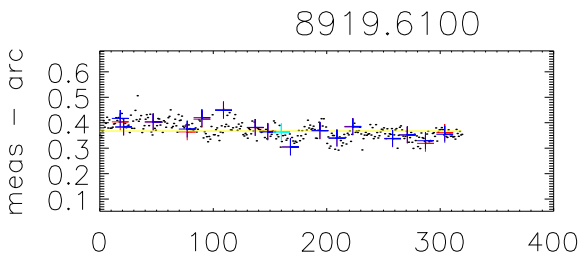

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

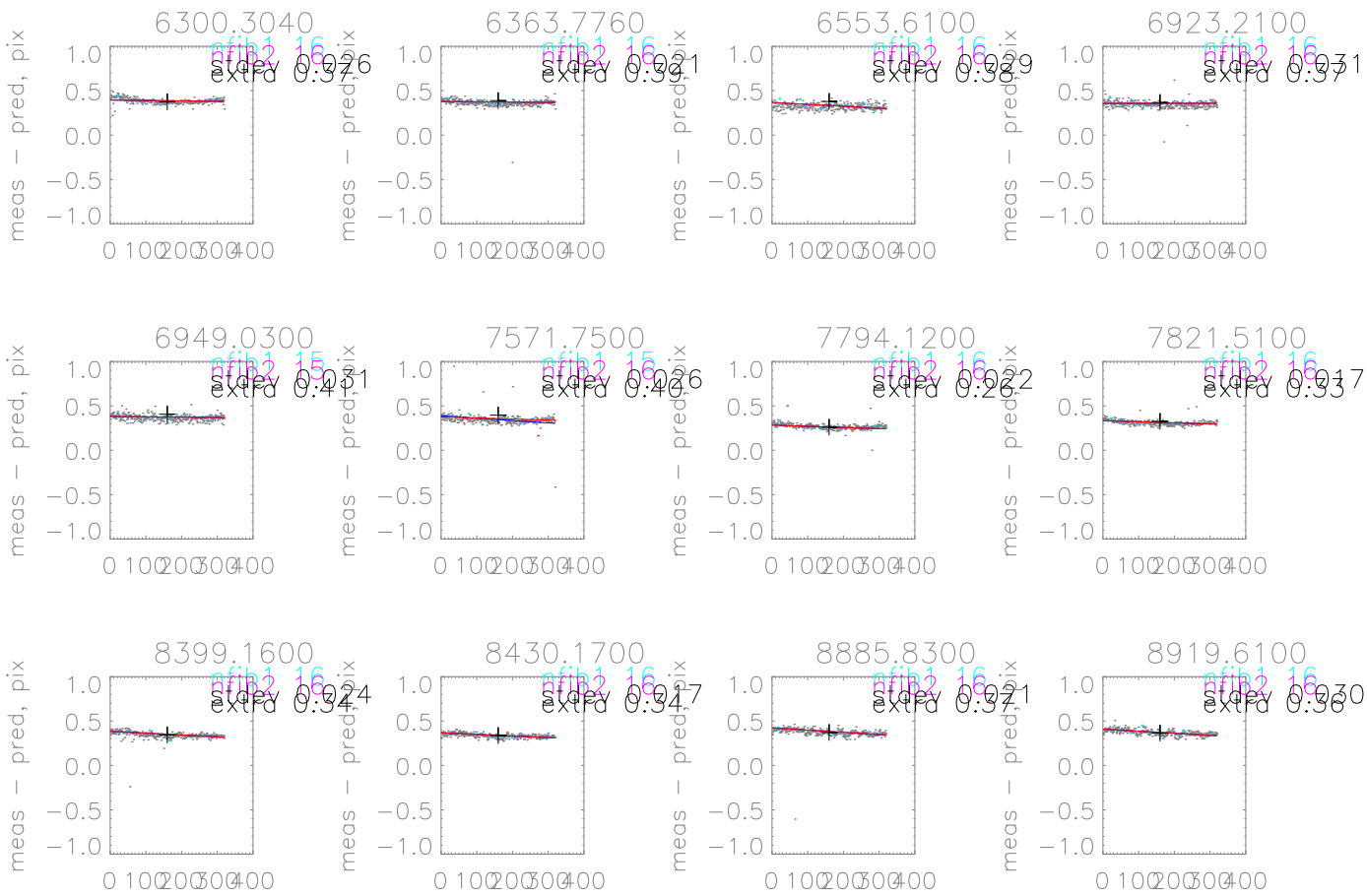

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

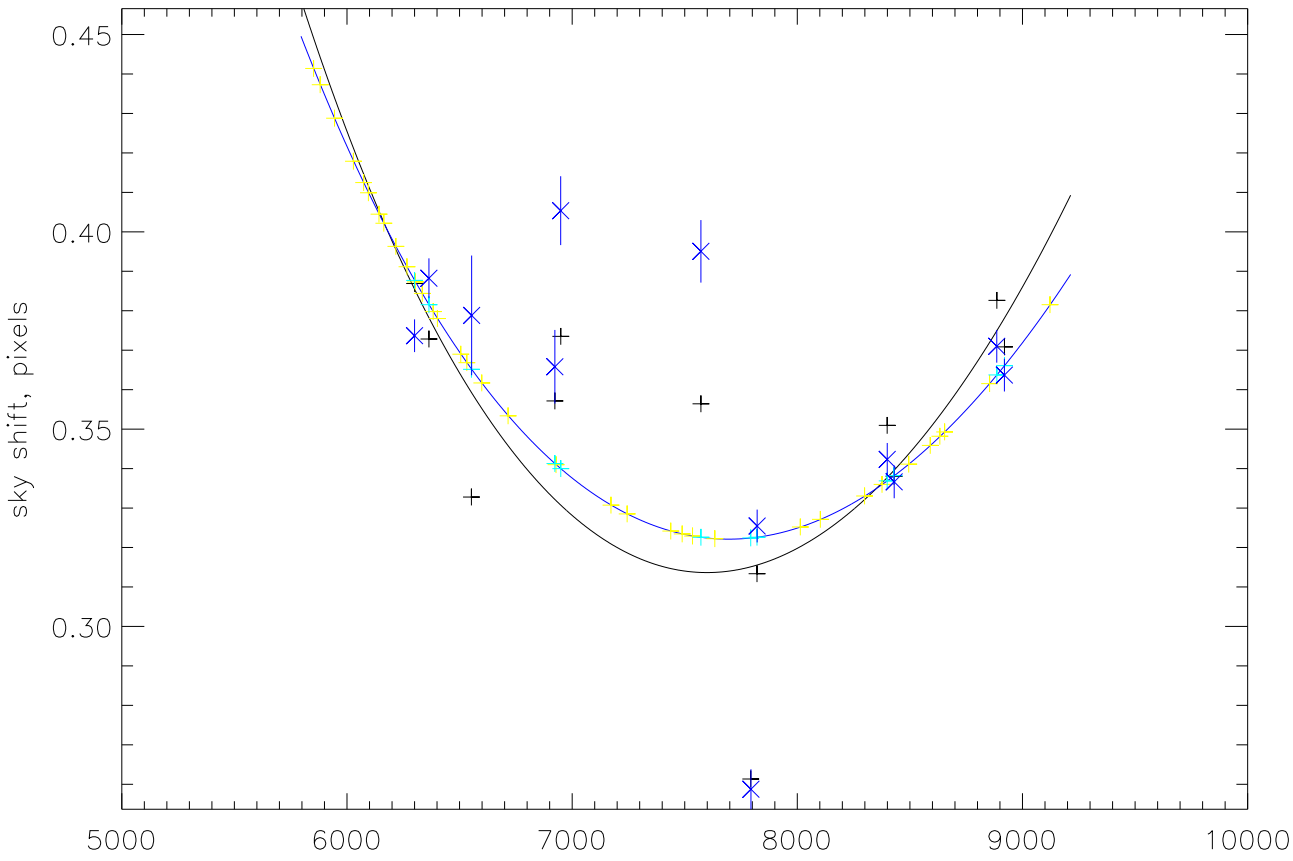

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

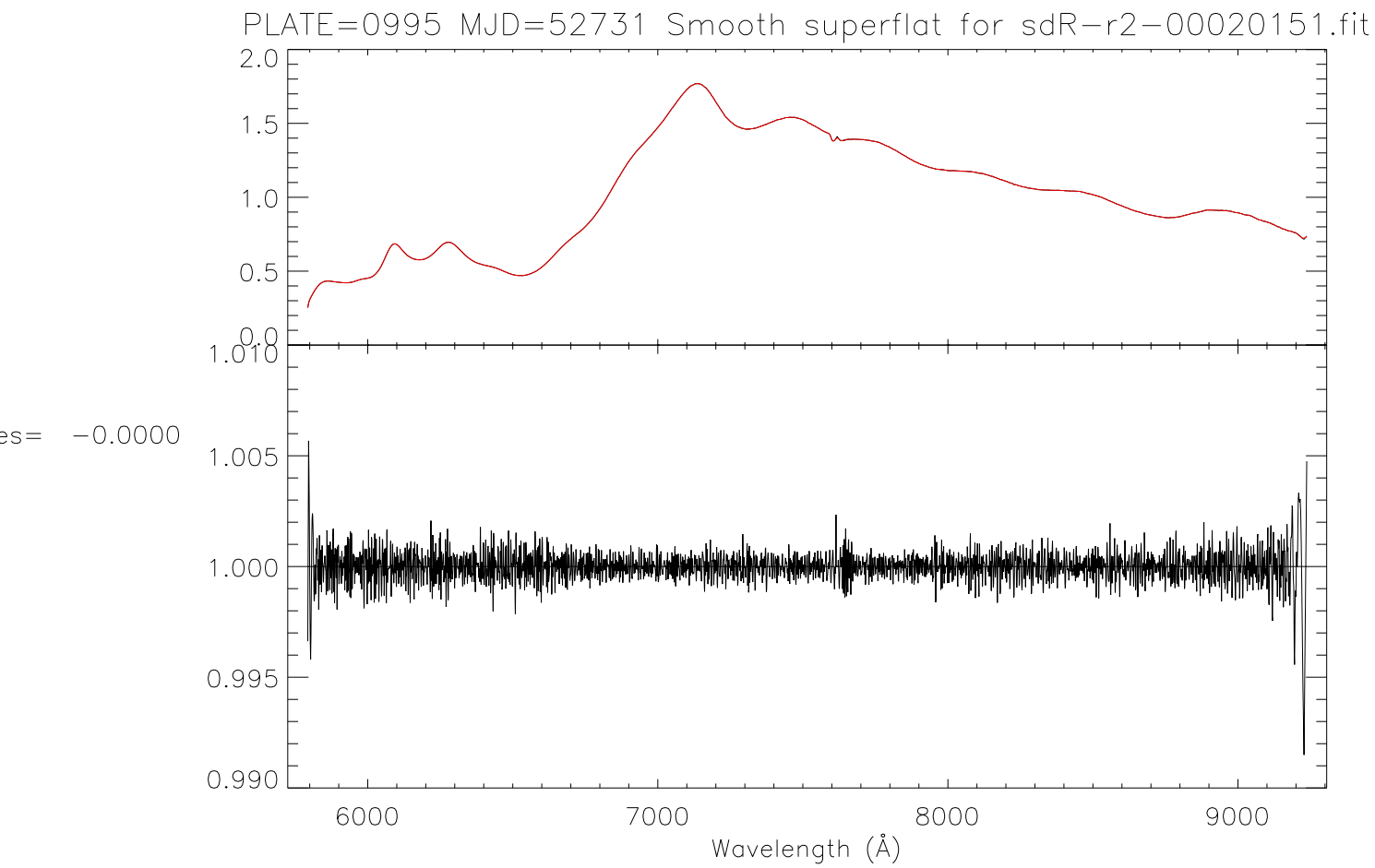

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

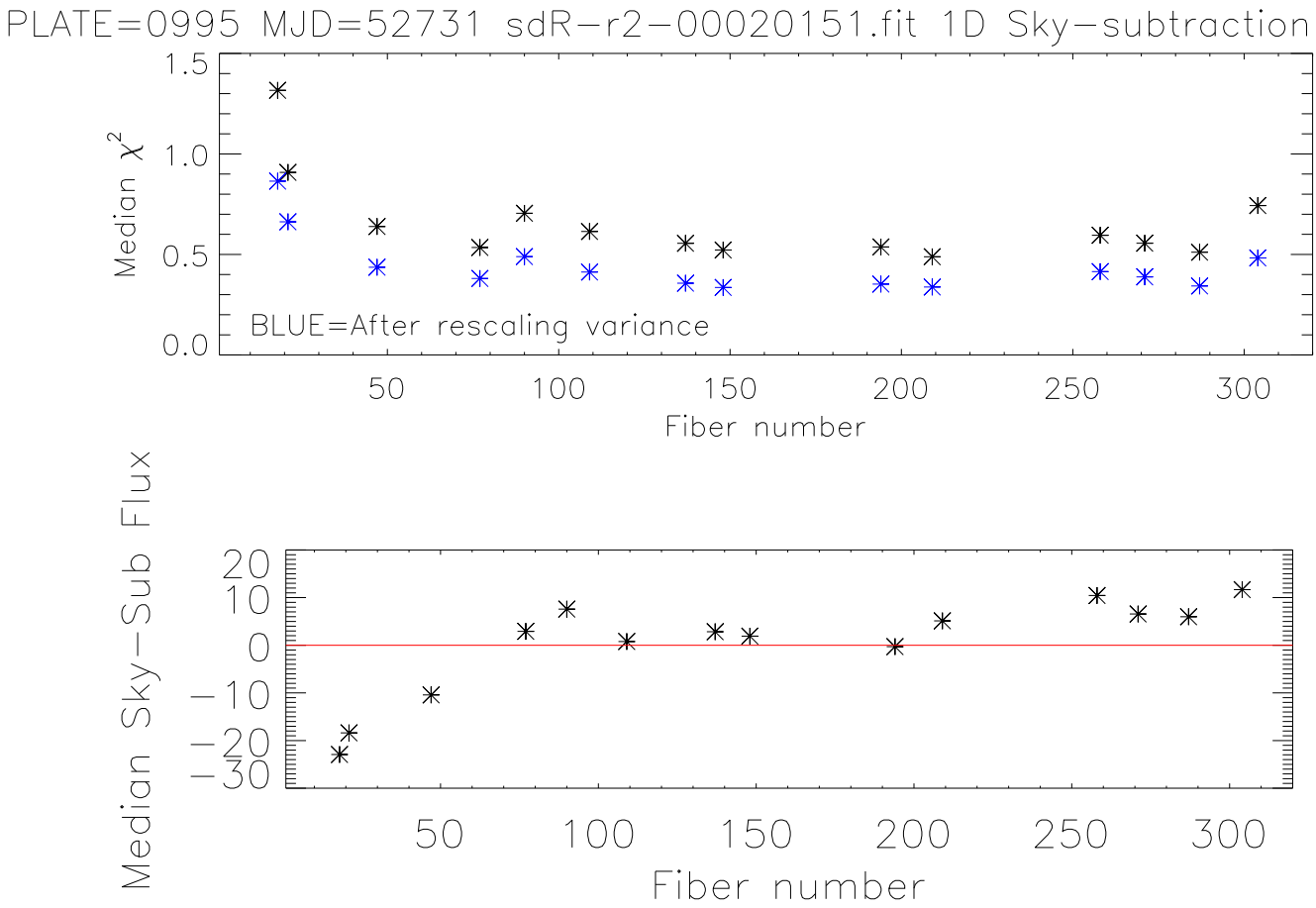

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

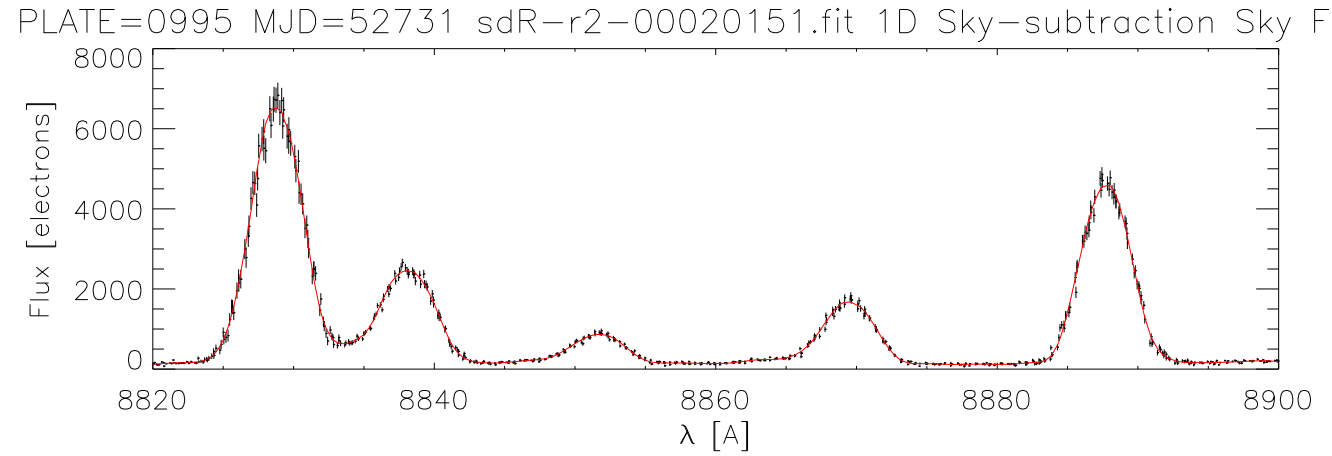

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

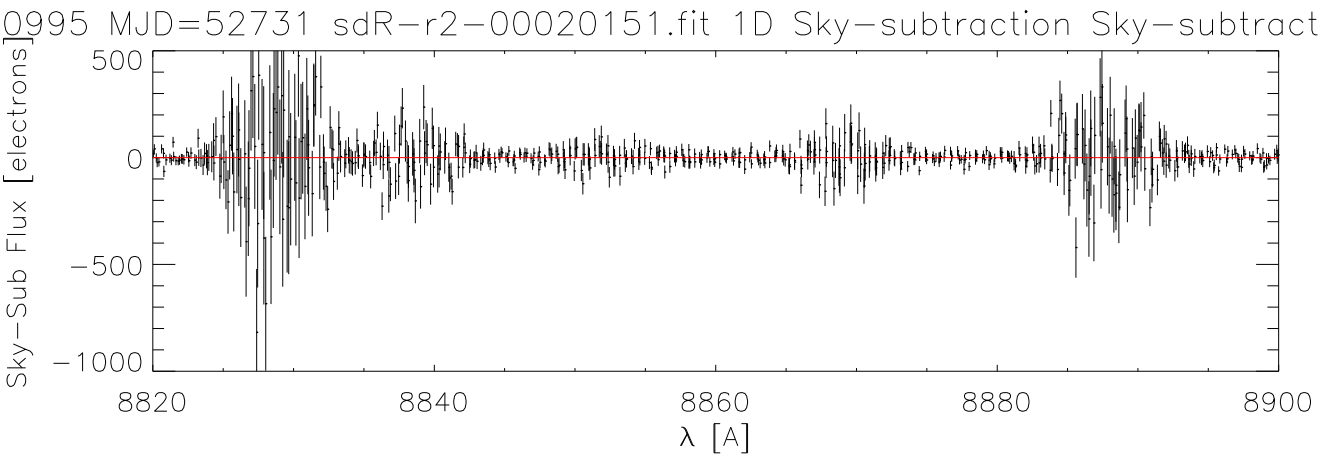

6300.3040
stdev 0.026
extra 0.37
6363.7760
stdev 0.021
extra 0.39
6553.6100
stdev 0.029
extra 0.38
6923.2100
stdev 0.031
extra 0.37
6949.0300
stdev 0.031
extra 0.41
7571.7500
stdev 0.026
extra 0.46
7794.1200
stdev 0.022
extra 0.26
7821.5100
stdev 0.017
extra 0.33
8399.1600
stdev 0.024
extra 0.34
8430.1700
stdev 0.017
extra 0.34
8885.8300
stdev 0.021
extra 0.37
8919.6100
stdev 0.030
extra 0.36
meas − pred, pix
mfib1 15
mfib2 16

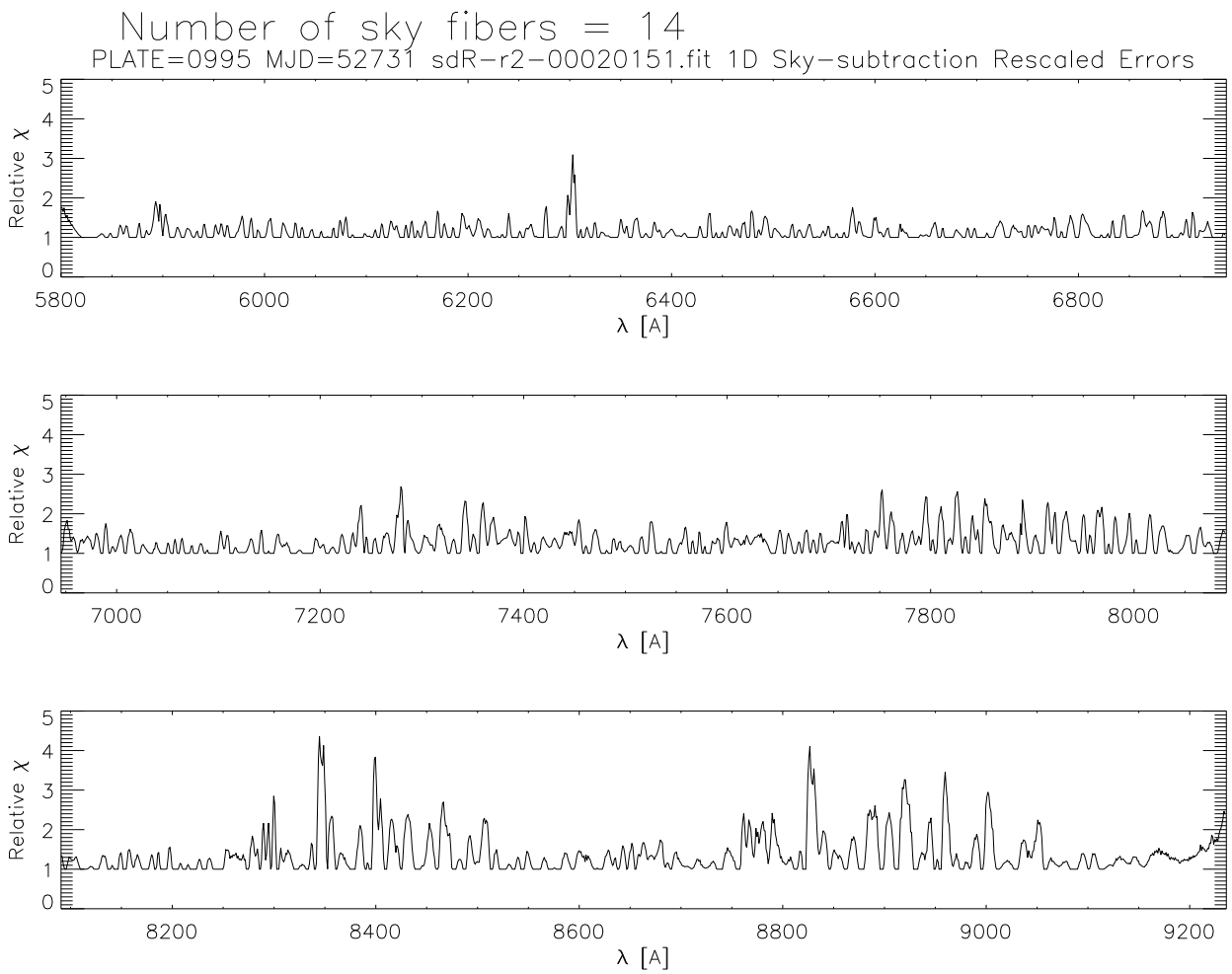

0.45
0.40
0.35
0.30
sky shift, pixels
5000
6000
7000
8000
9000
10000

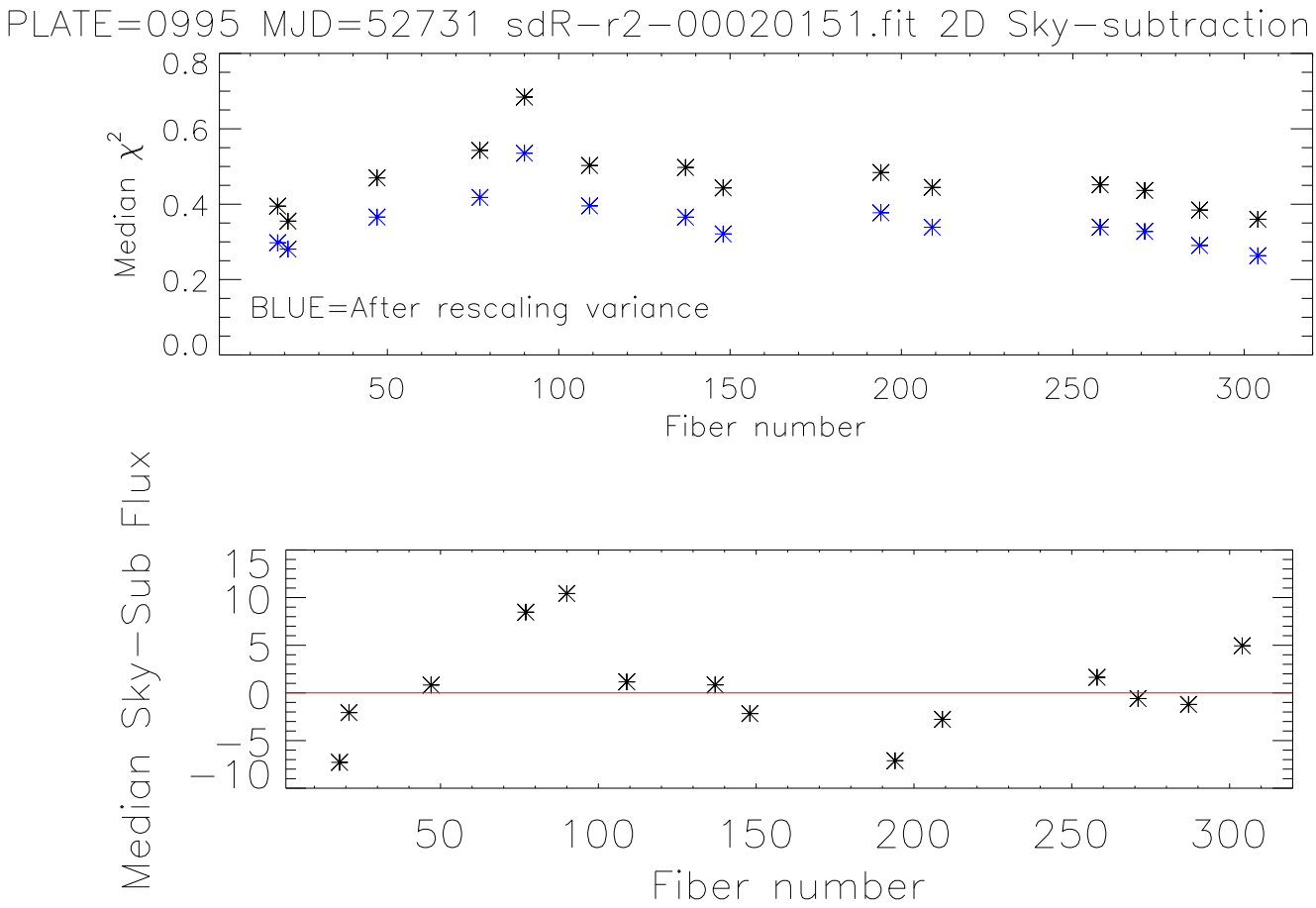

PLATE=0995 MJD=52731 Smooth superflat for sdR-r2-00020151.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

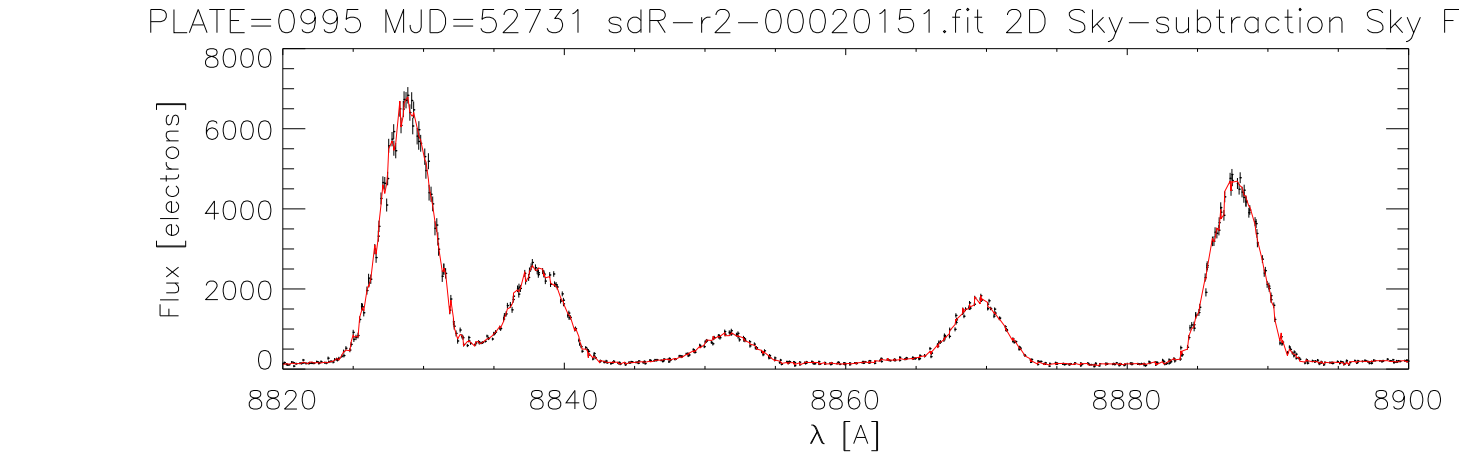

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

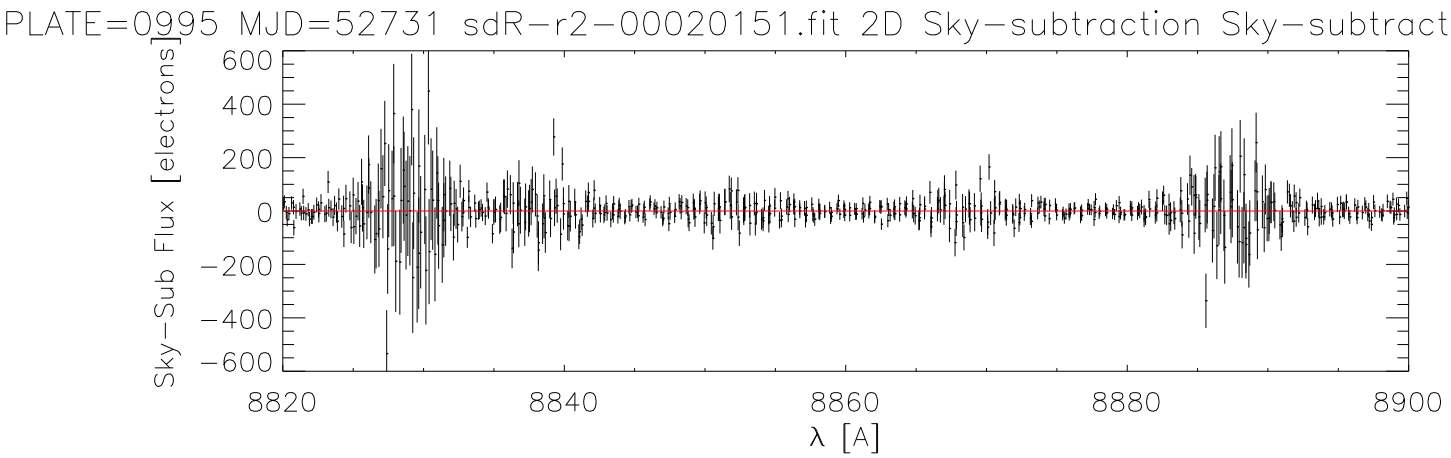

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

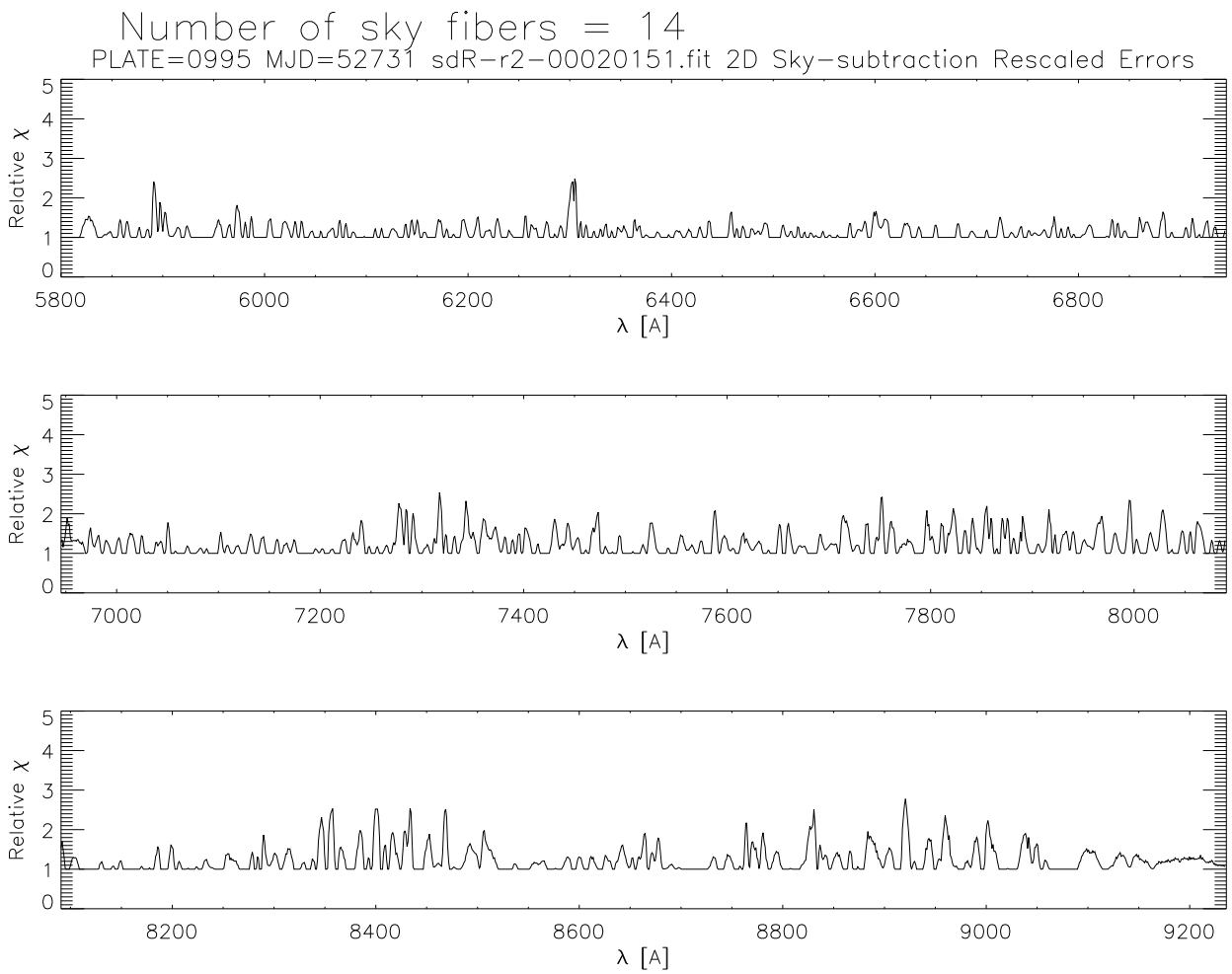

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

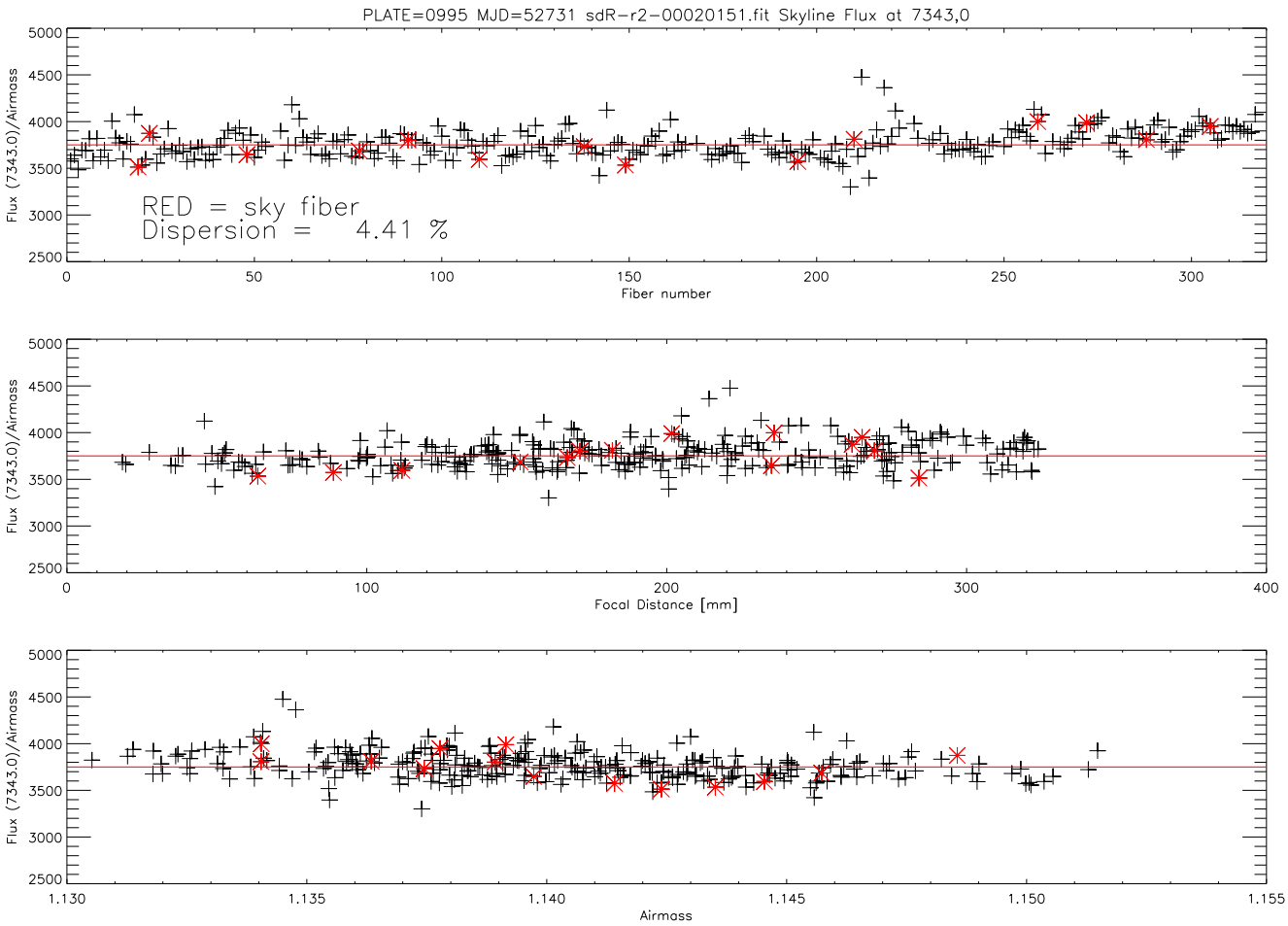

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020151.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

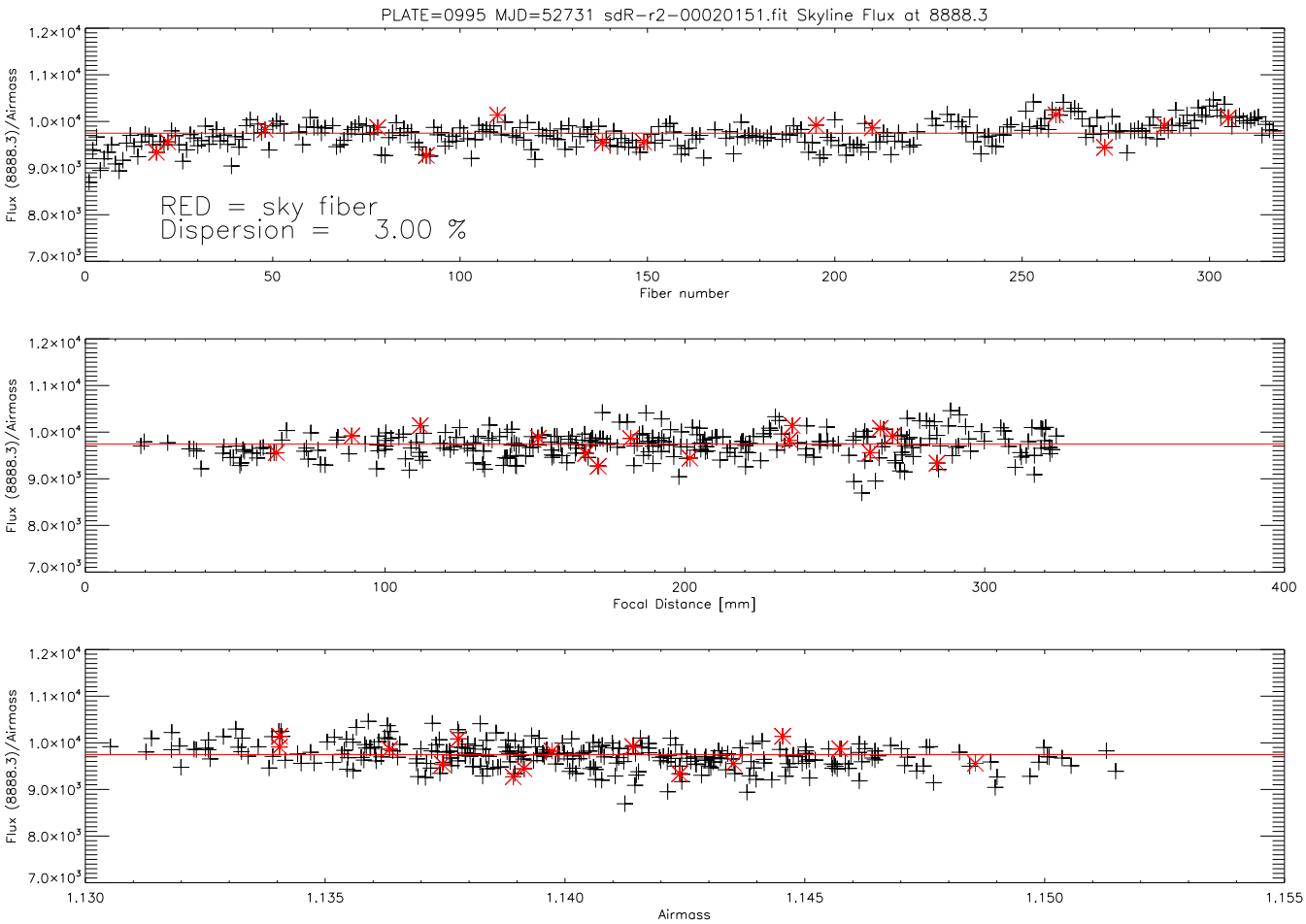

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

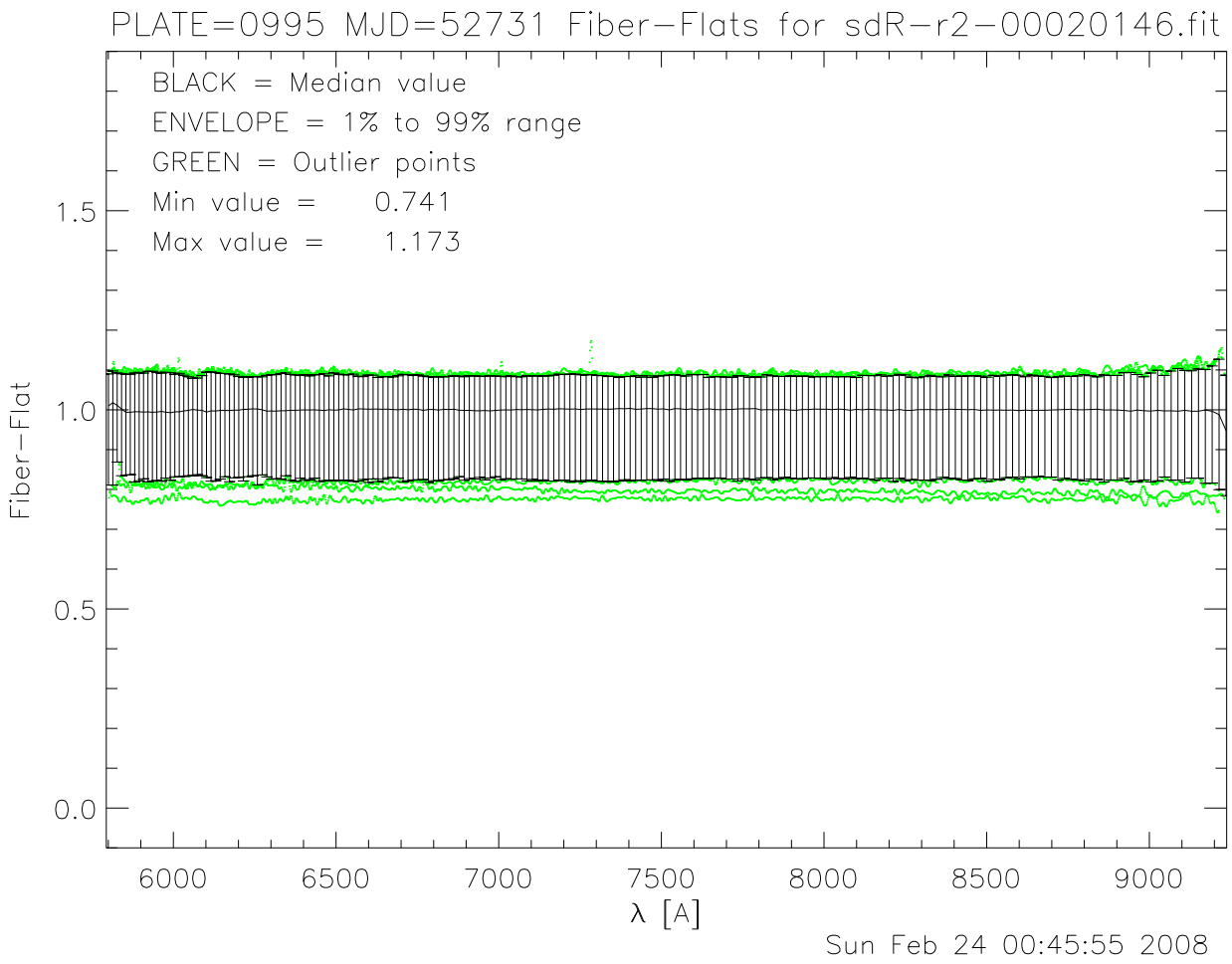

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

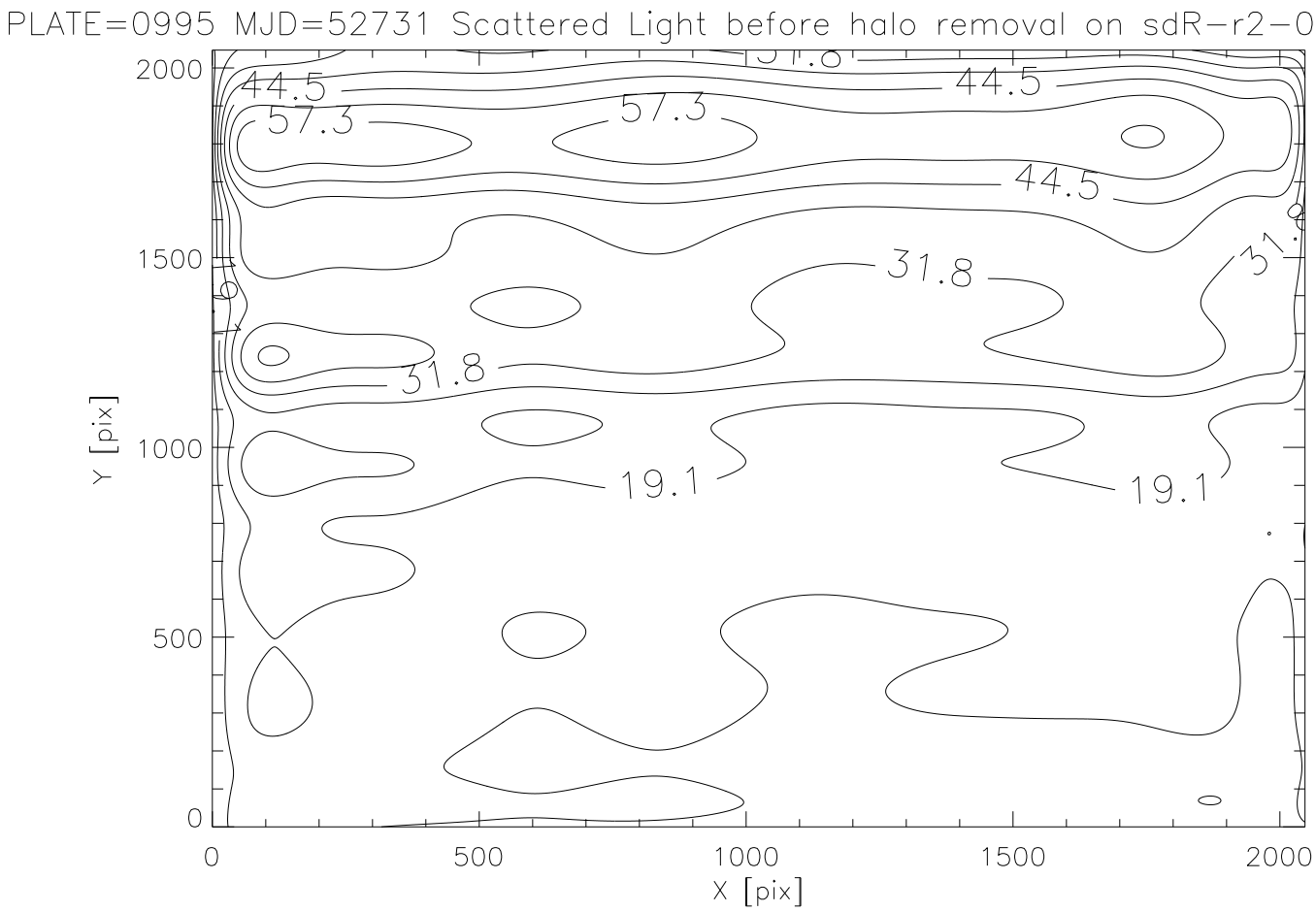

PLATE=0995 MJD=52731 sdR-r2-00020151.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

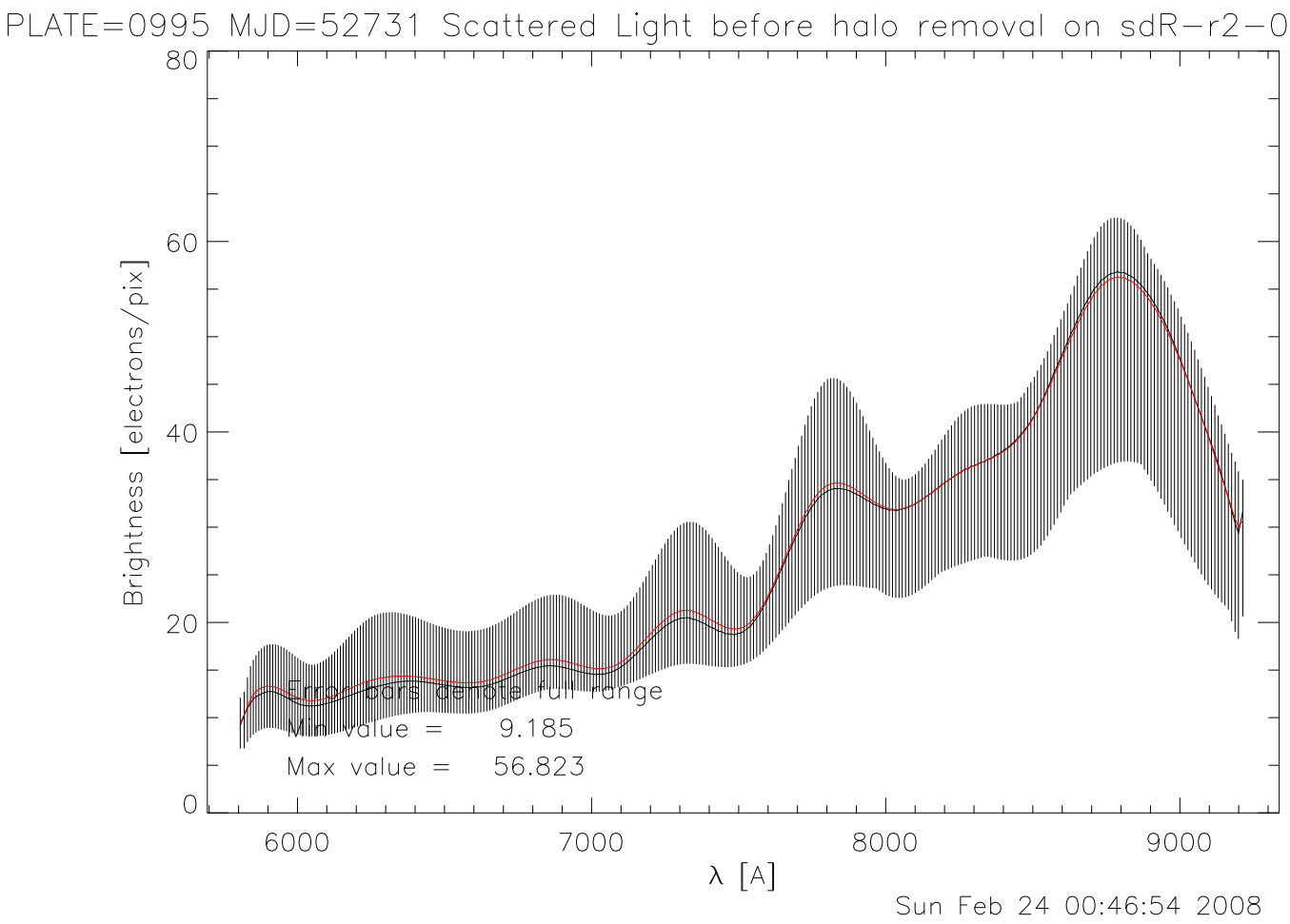

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020151.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

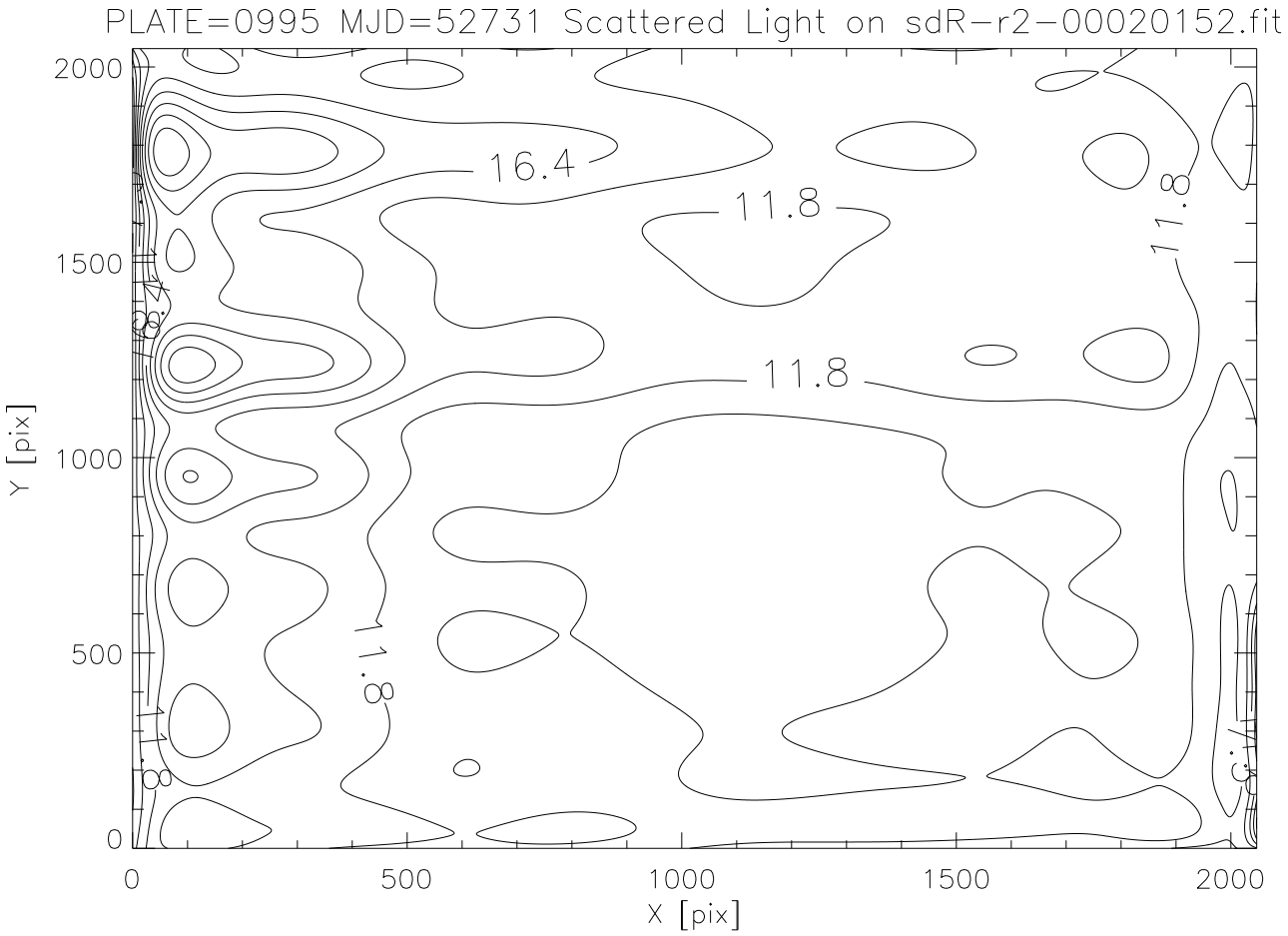

PLATE=0995 MJD=52731 sdR-r2-00020151.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.41 %
Fiber number
Focal Distance [mm]
Airmass

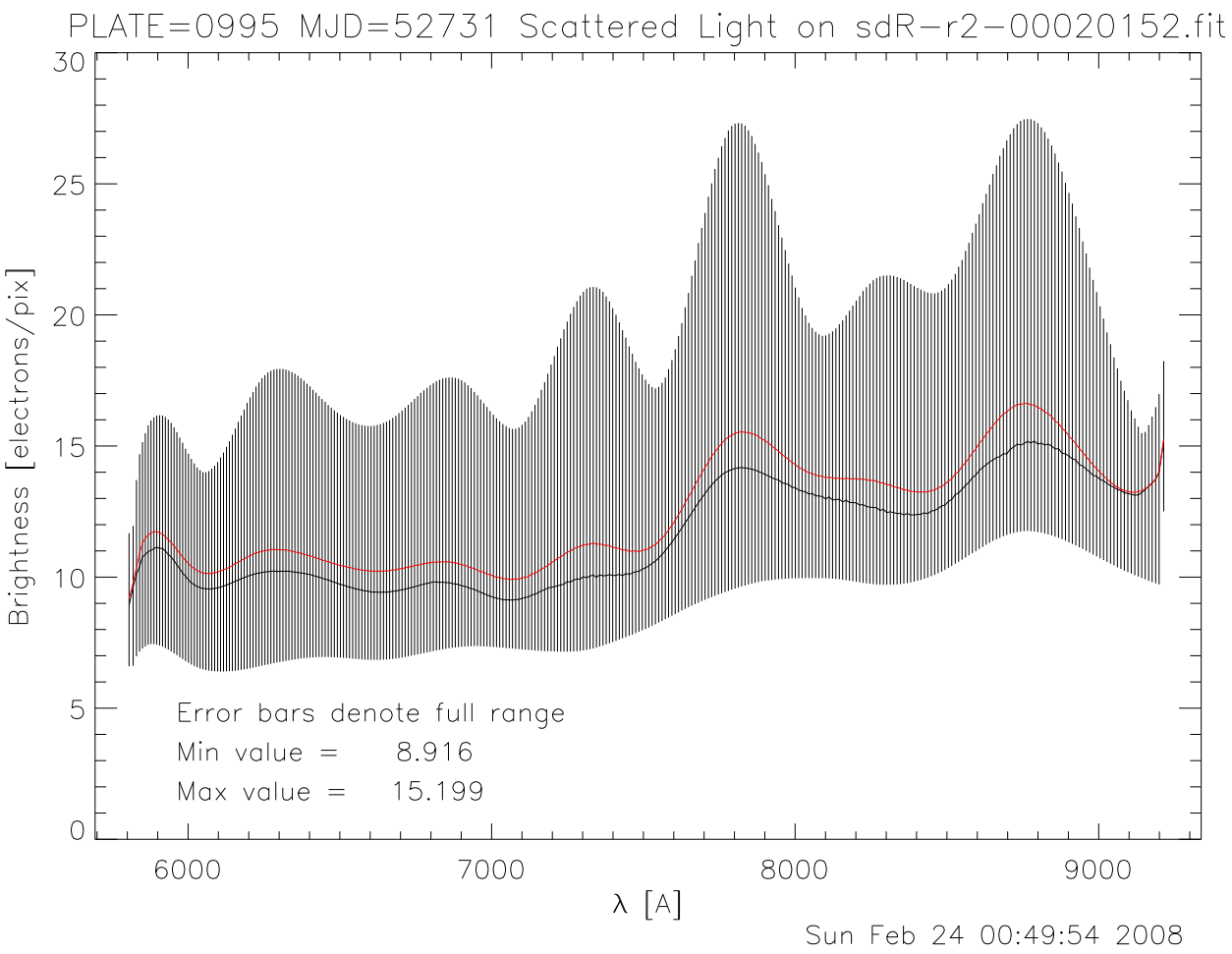

PLATE=0995 MJD=52731 sdR-r2-00020151.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Focal Distance [mm]
Airmass

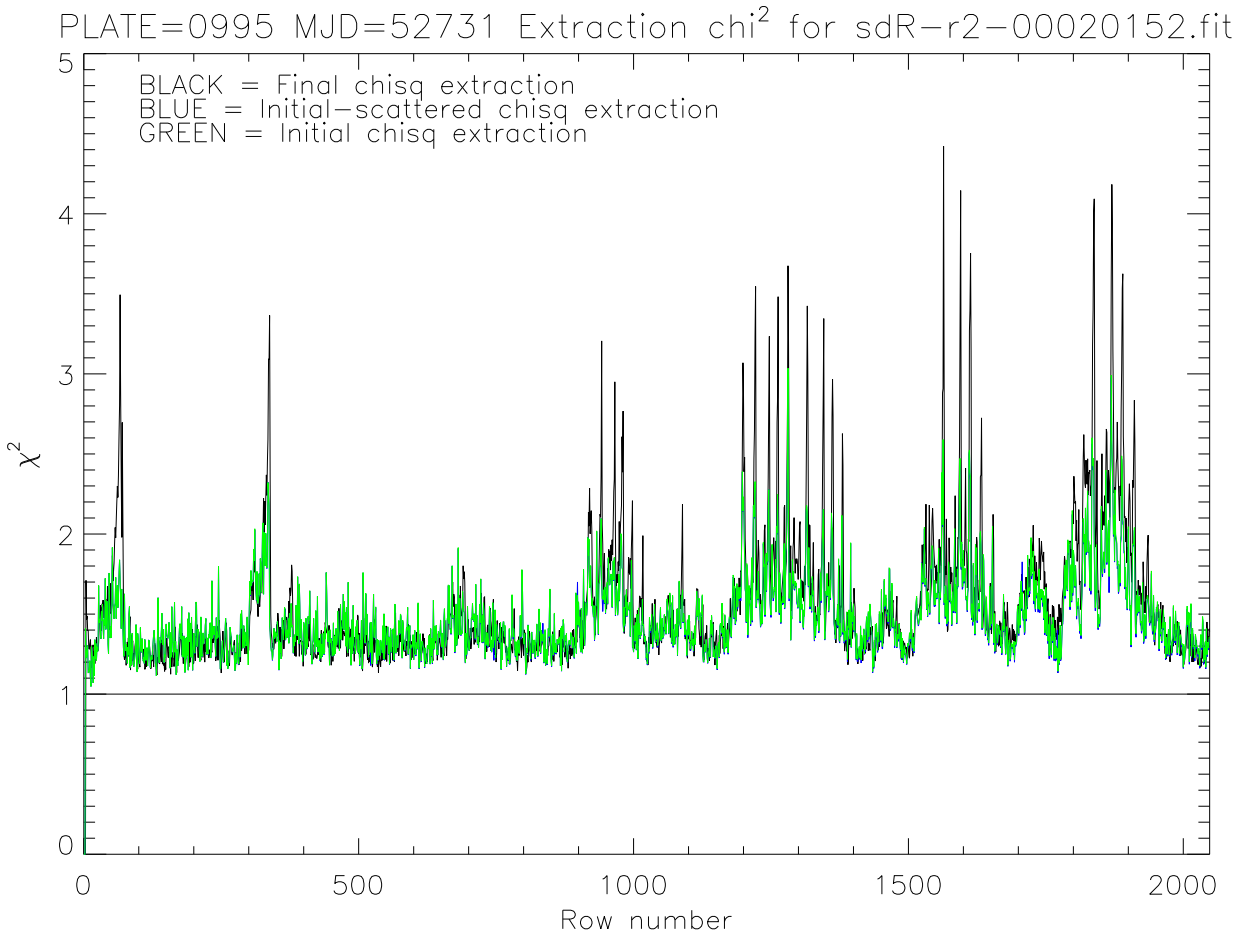

PLATE=0995 MJD=52731 Fiber−Flats for sdR−r2−00020146.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.741
Max value = 1.173
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 24 00:45:55 2008

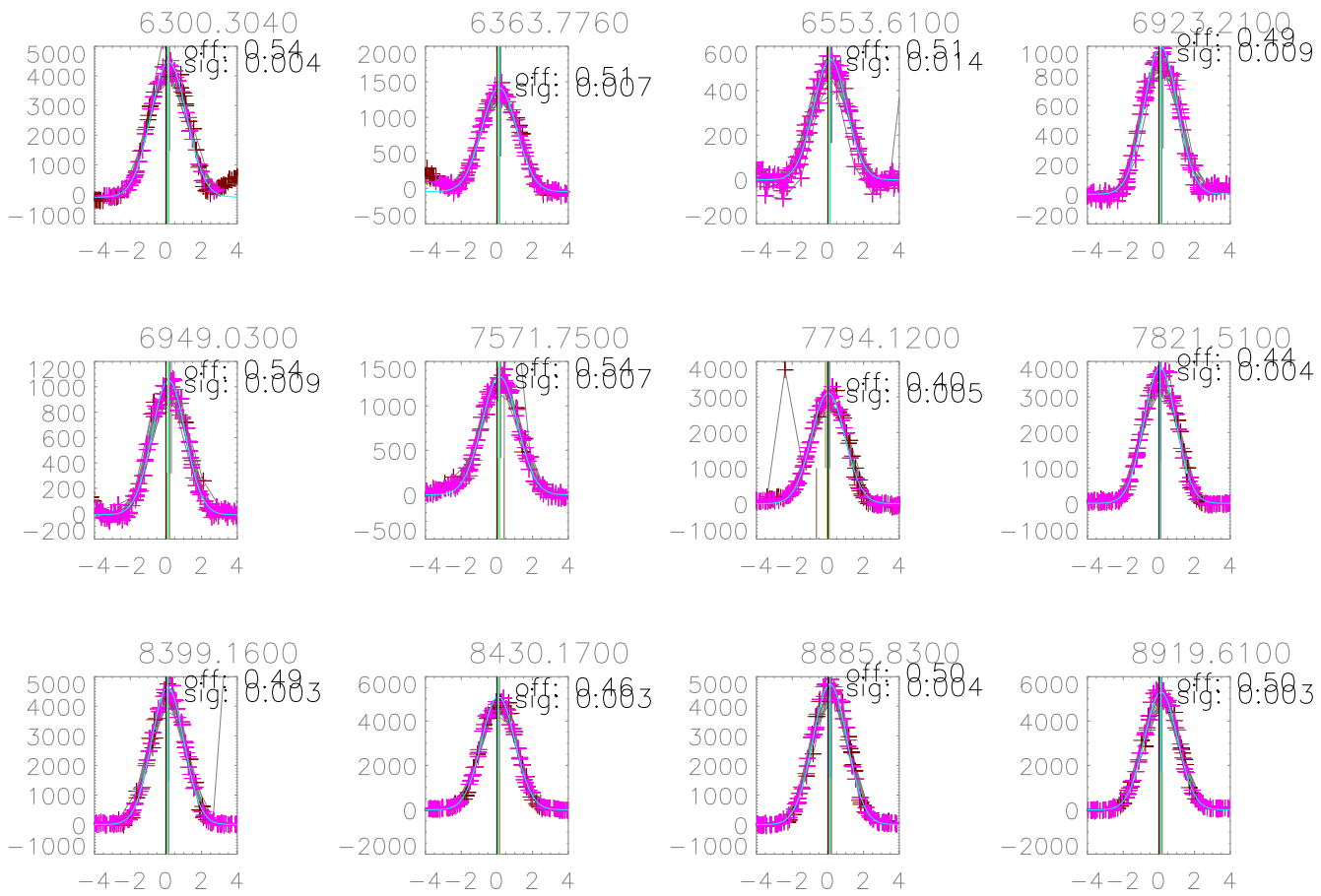

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020152.fi
44.5
57.3
44.5
57.3
44.5
31.8
31.8
31.8
19.1
19.1
Y [pix]
X [pix]
0
500
1000
1500
2000

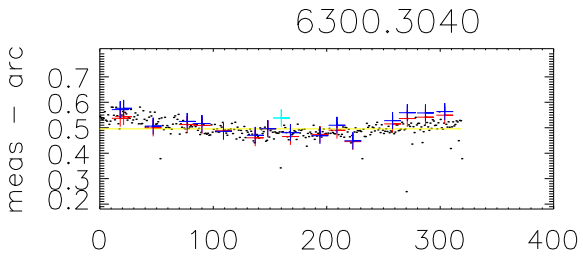

PLATE=0995 MJD=52731 Scattered Light before halo removal on sdR-r2-00020152.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.185
Max value = 56.823
Sun Feb 24 00:46:54 2008

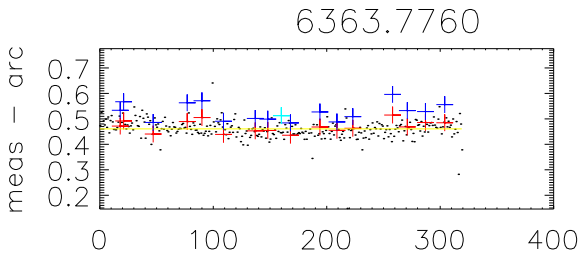

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020152.fit
16.4
11.8
11.8
11.8
11.8
11.8
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000

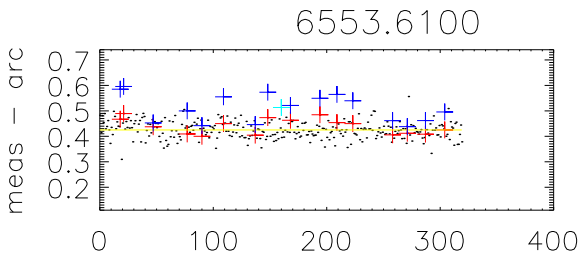

PLATE=0995 MJD=52731 Scattered Light on sdR-r2-00020152.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.916
Max value = 15.199
Sun Feb 24 00:49:54 2008

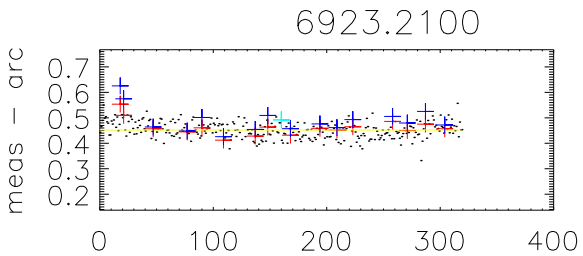

PLATE=0995 MJD=52731 Extraction chi^2 for sdR−r2−00020152.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

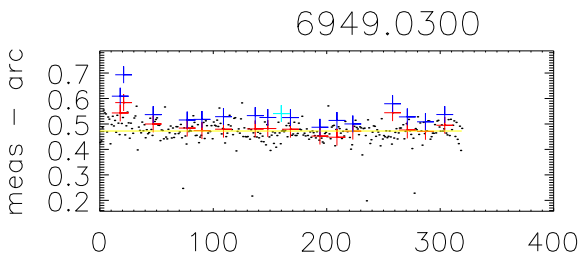

6300.3040
off: 0.54
sig: 0.004
6363.7760
off: 0.51
sig: 0.007
6553.6100
off: 0.51
sig: 0.014
6923.2100
off: 0.49
sig: 0.009
6949.0300
off: 0.54
sig: 0.009
7571.7500
off: 0.54
sig: 0.007
7794.1200
off: 0.40
sig: 0.005
7821.5100
off: 0.44
sig: 0.004
8399.1600
off: 0.49
sig: 0.003
8430.1700
off: 0.46
sig: 0.003
8885.8300
off: 0.50
sig: 0.004
8919.6100
off: 0.50
sig: 0.003

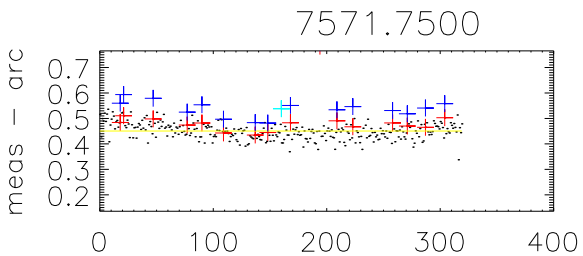

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

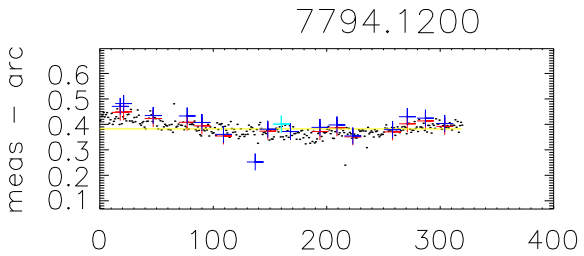

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

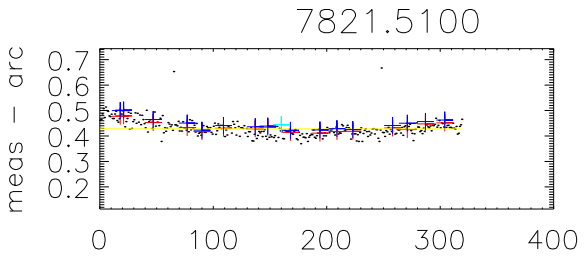

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

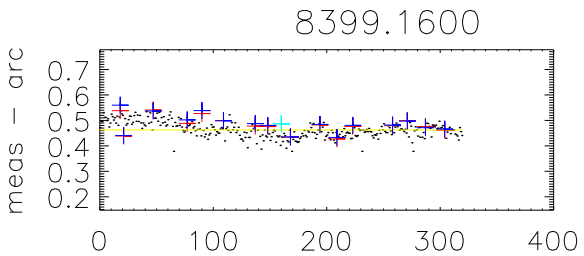

6923.2100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

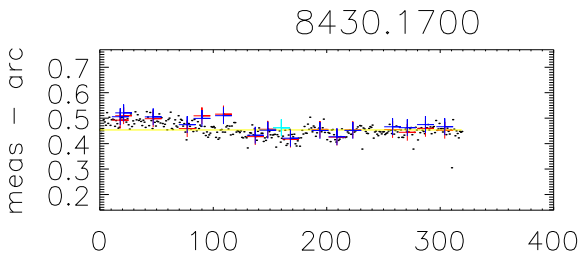

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

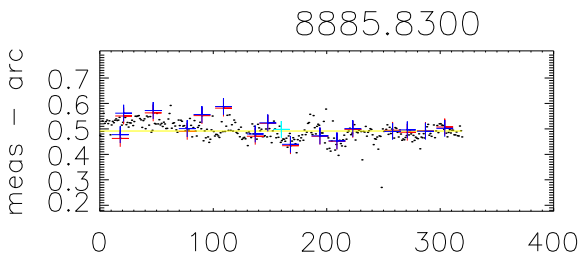

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

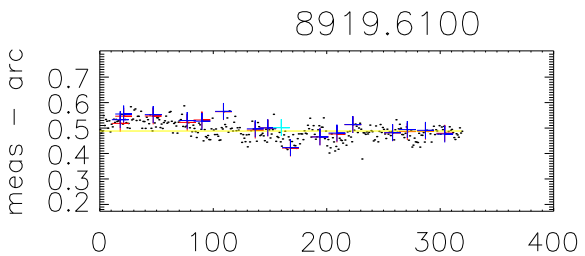

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

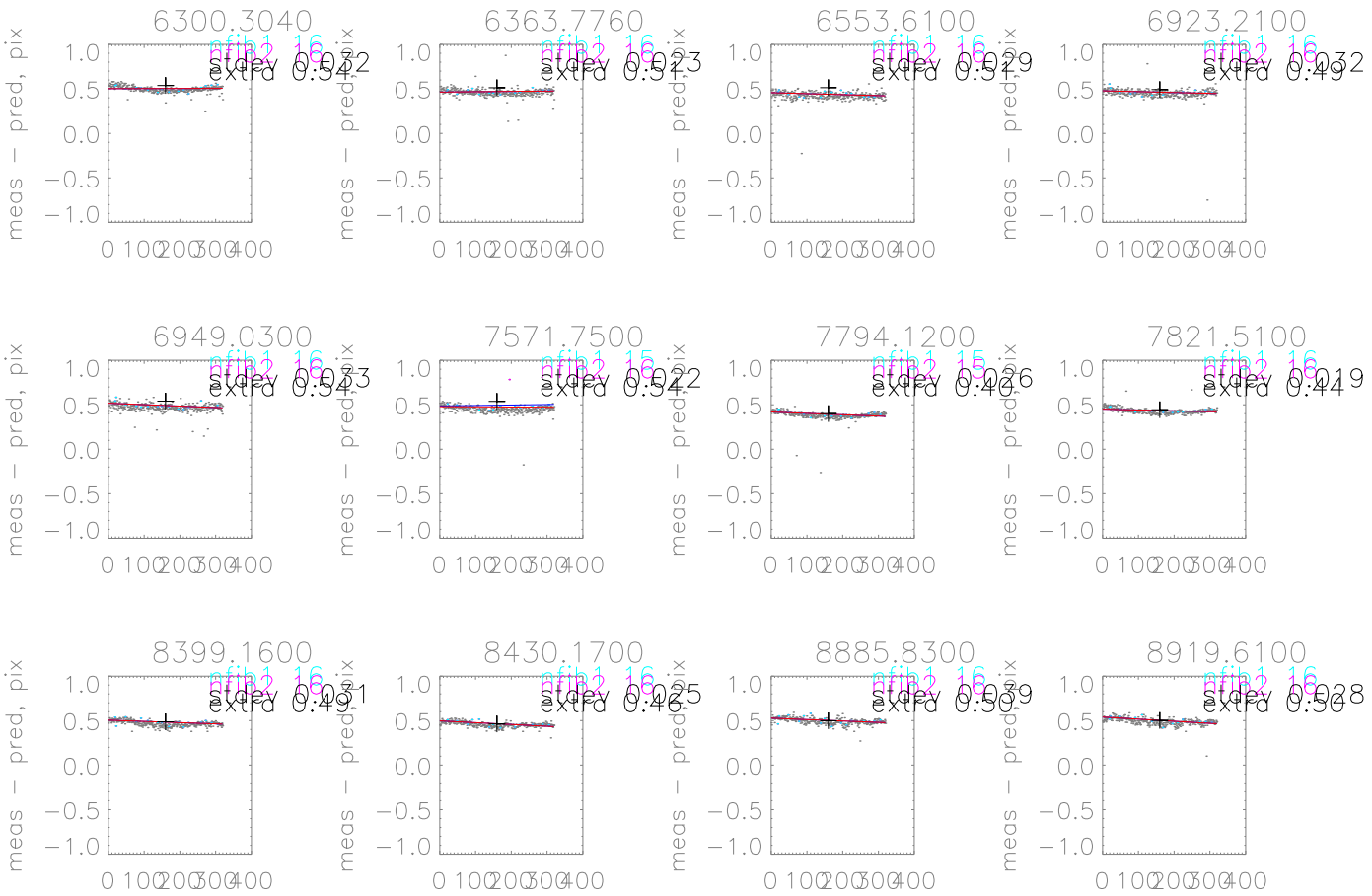

7821.5100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

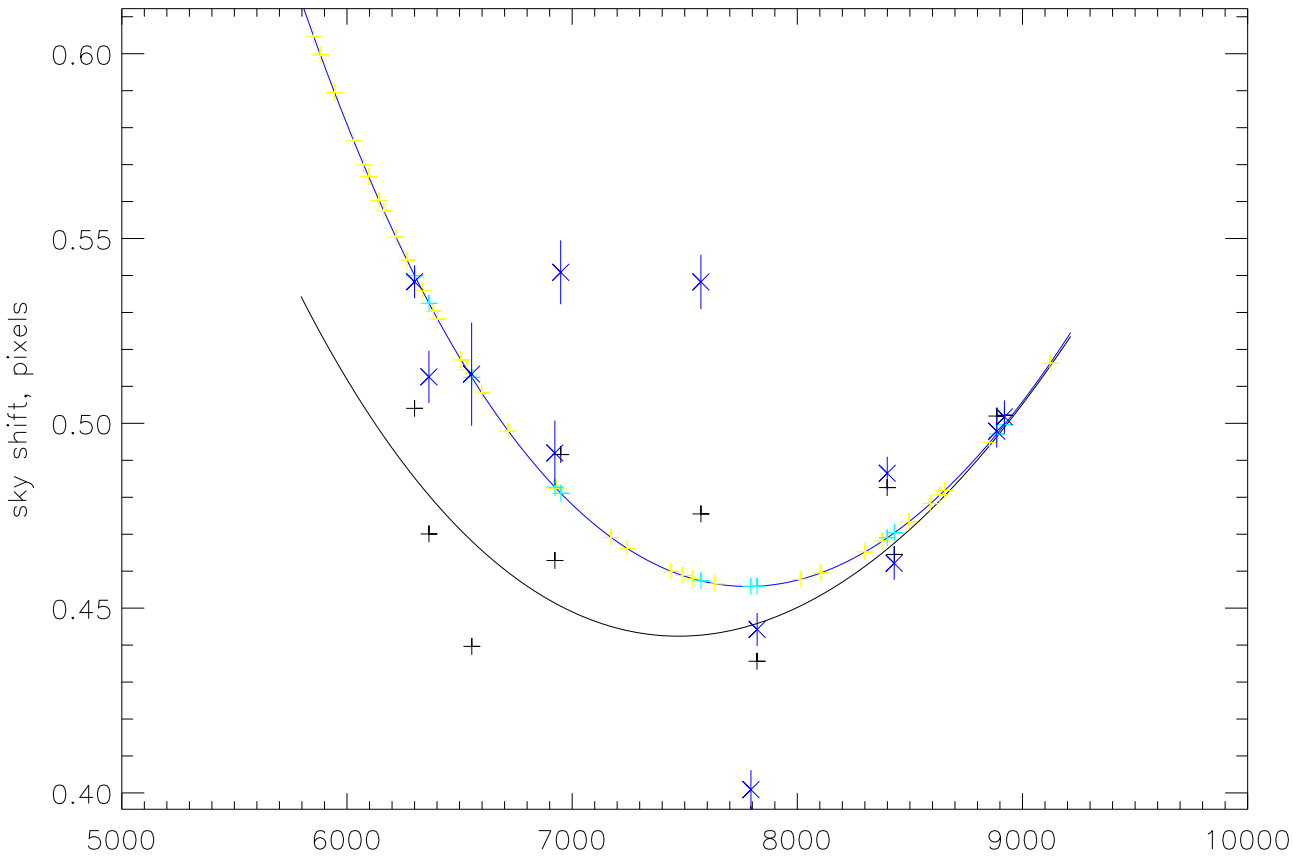

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

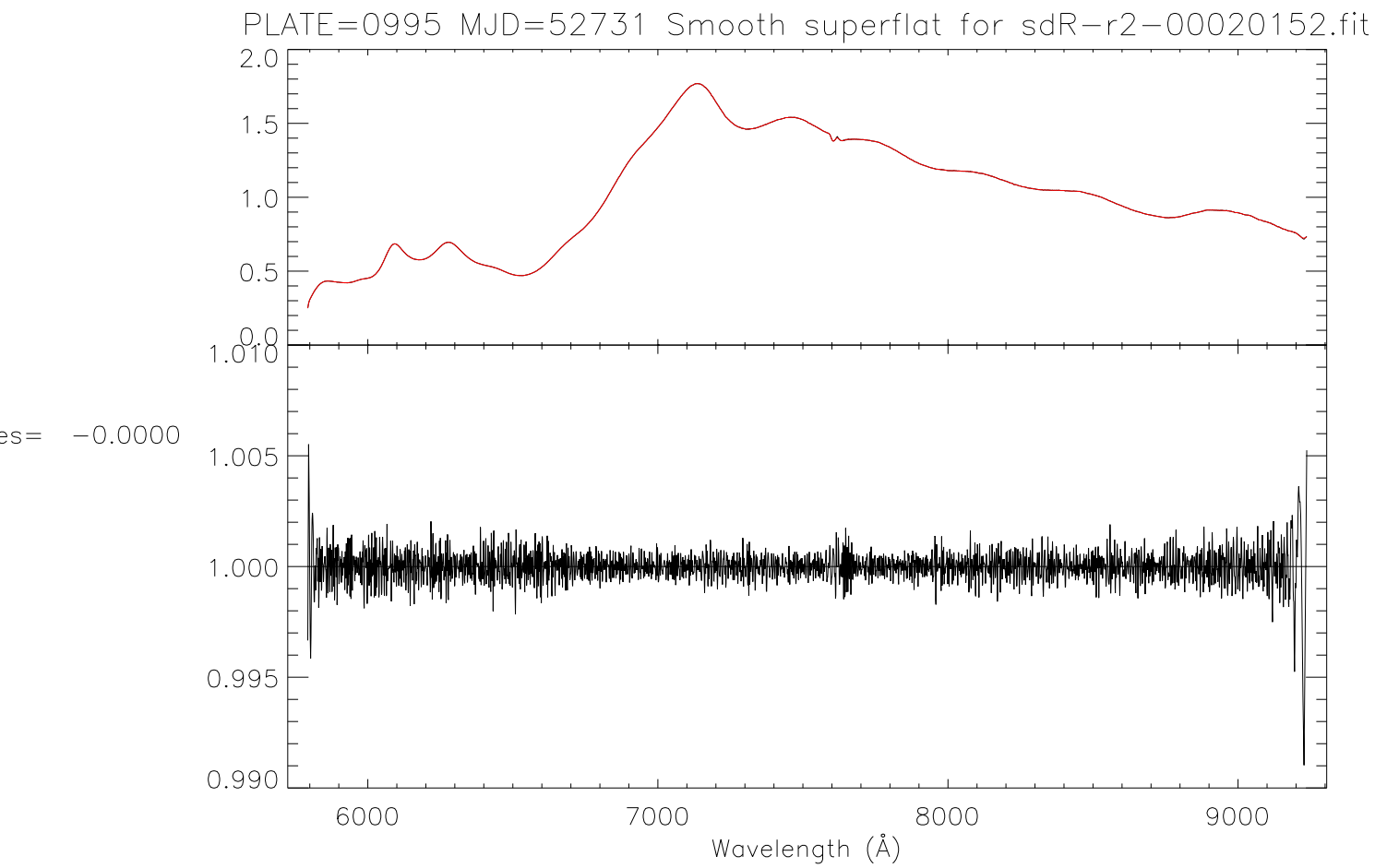

8430.1700
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

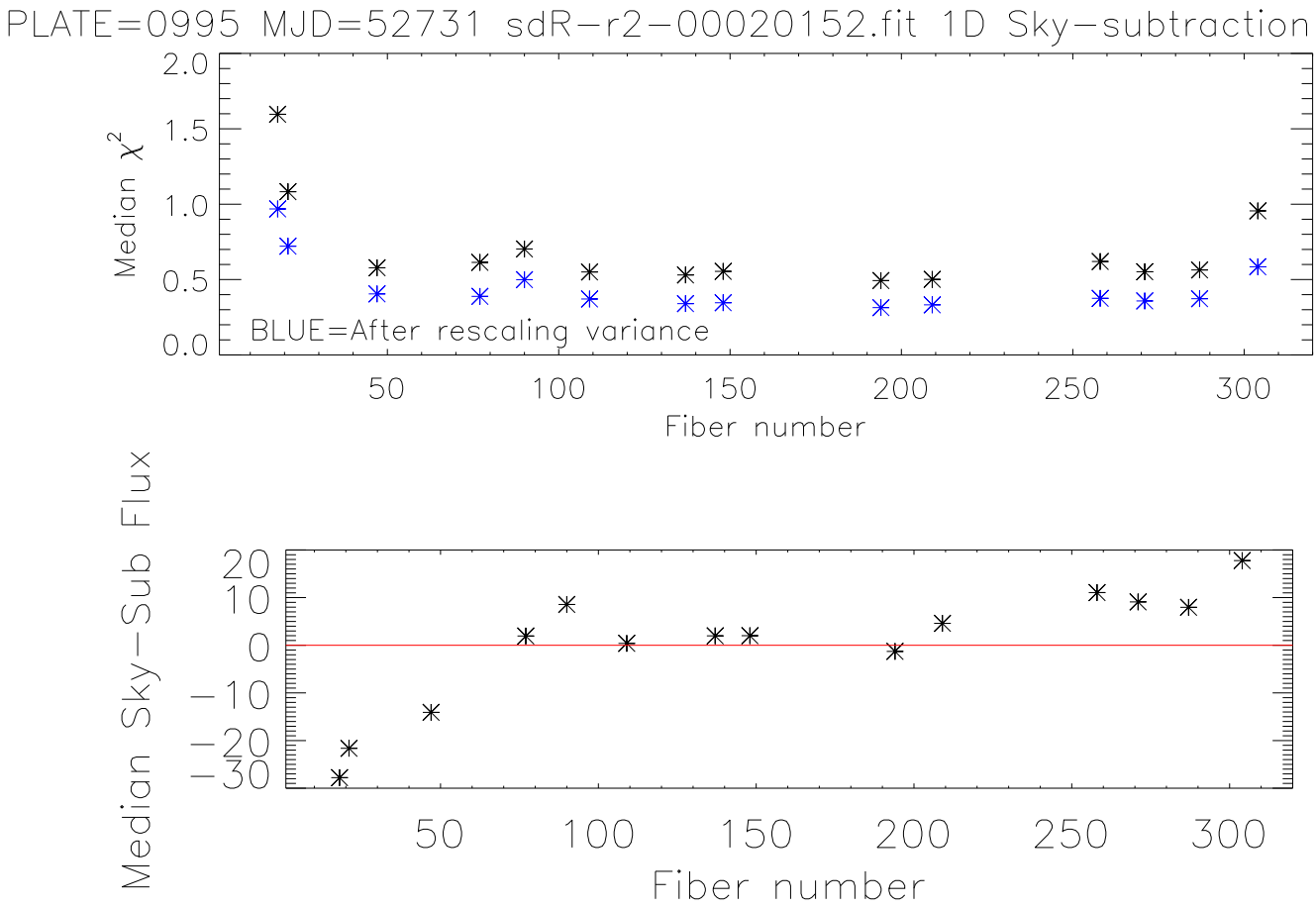

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

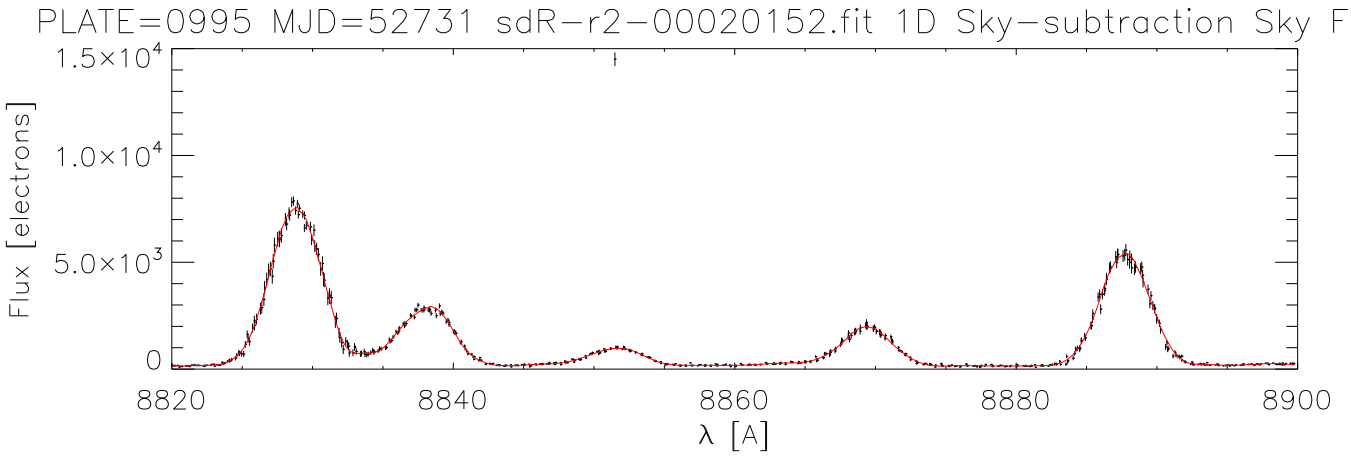

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

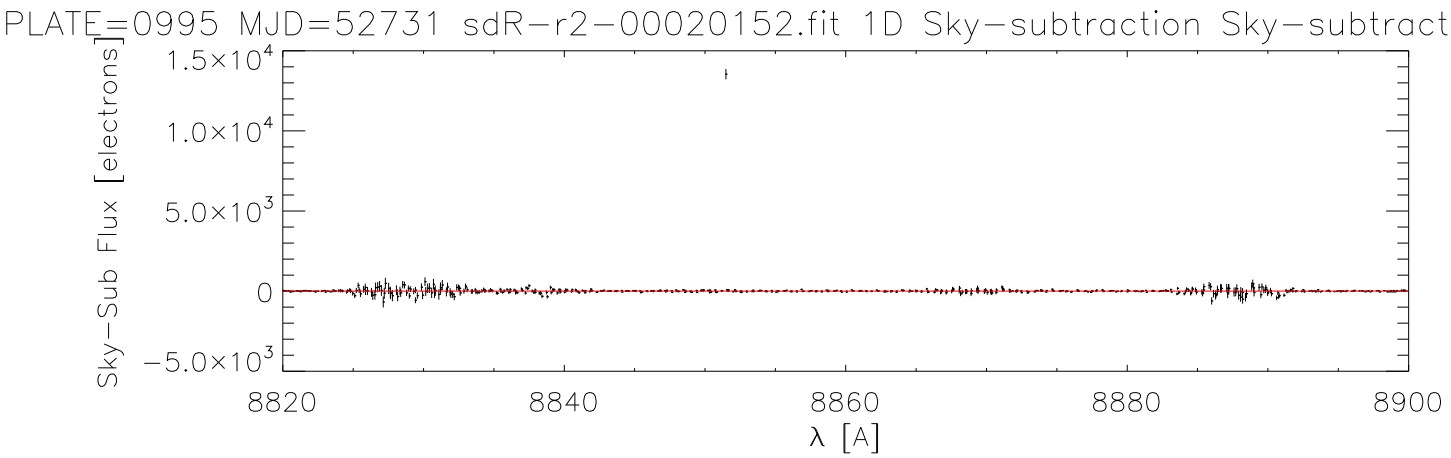

6300.3040
stdev 0.032
extra 0.54
6363.7760
stdev 0.023
extra 0.51
6553.6100
stdev 0.029
extra 0.51
6923.2100
stdev 0.032
extra 0.49
6949.0300
stdev 0.033
extra 0.54
7571.7500
stdev 0.022
extra 0.54
7794.1200
stdev 0.026
extra 0.46
7821.5100
stdev 0.019
extra 0.44
8399.1600
stdev 0.031
extra 0.49
8430.1700
stdev 0.025
extra 0.46
8885.8300
stdev 0.039
extra 0.50
8919.6100
stdev 0.028
extra 0.50
meas − pred, pix

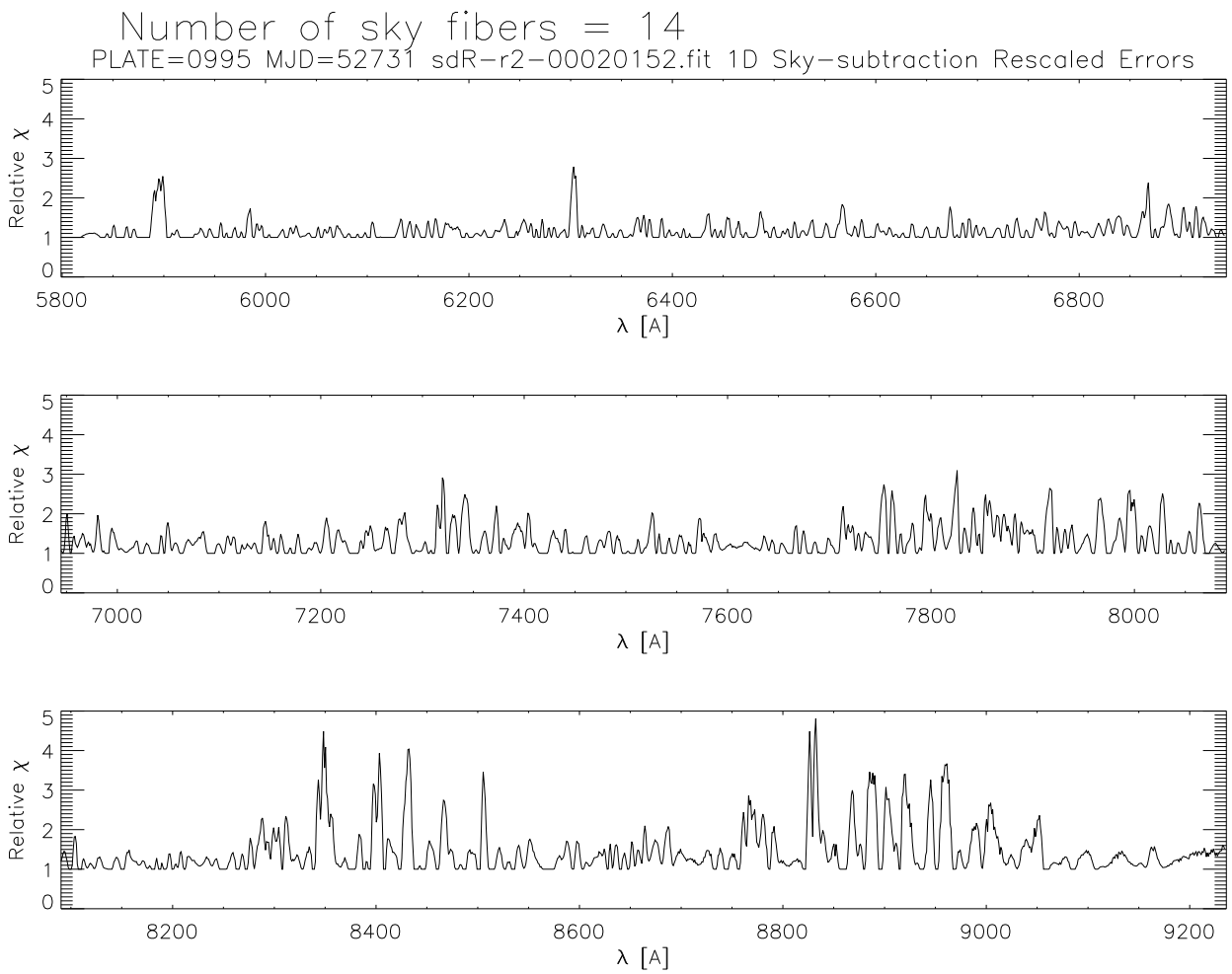

sky shift, pixels
0.60
0.55
0.50
0.45
0.40
5000
6000
7000
8000
9000
10000

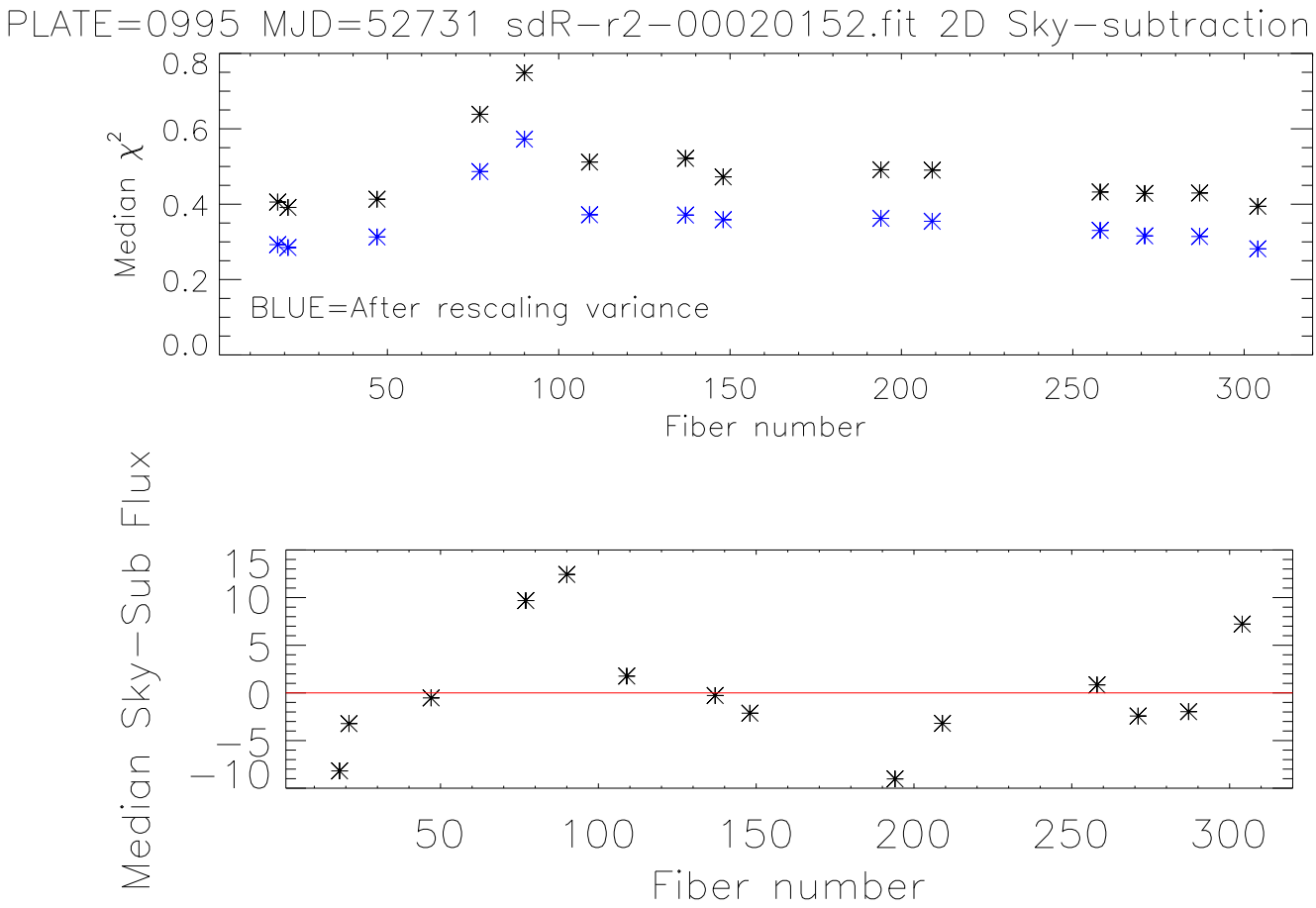

PLATE=0995 MJD=52731 Smooth superflat for sdR-r2-00020152.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

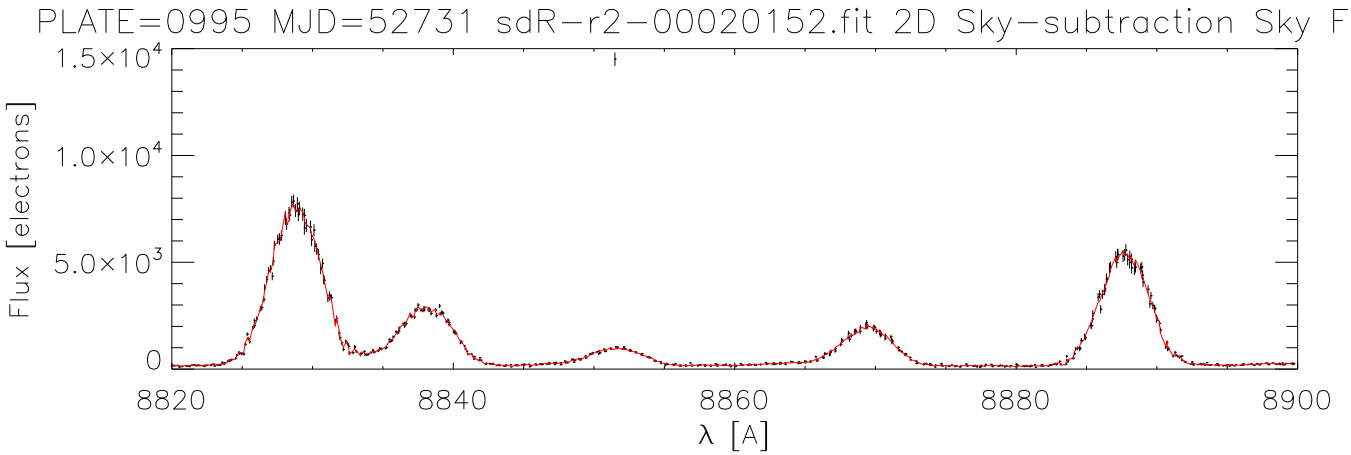

PLATE=0995 MJD=52731 sdR-r2-00020152.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

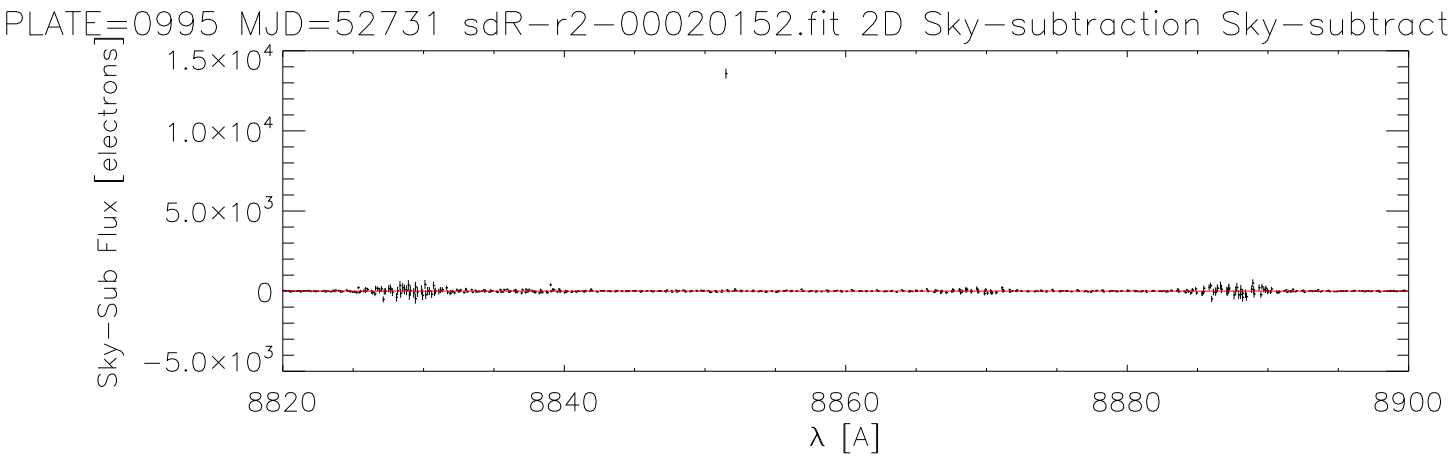

PLATE=0995 MJD=52731 sdR-r2-00020152.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

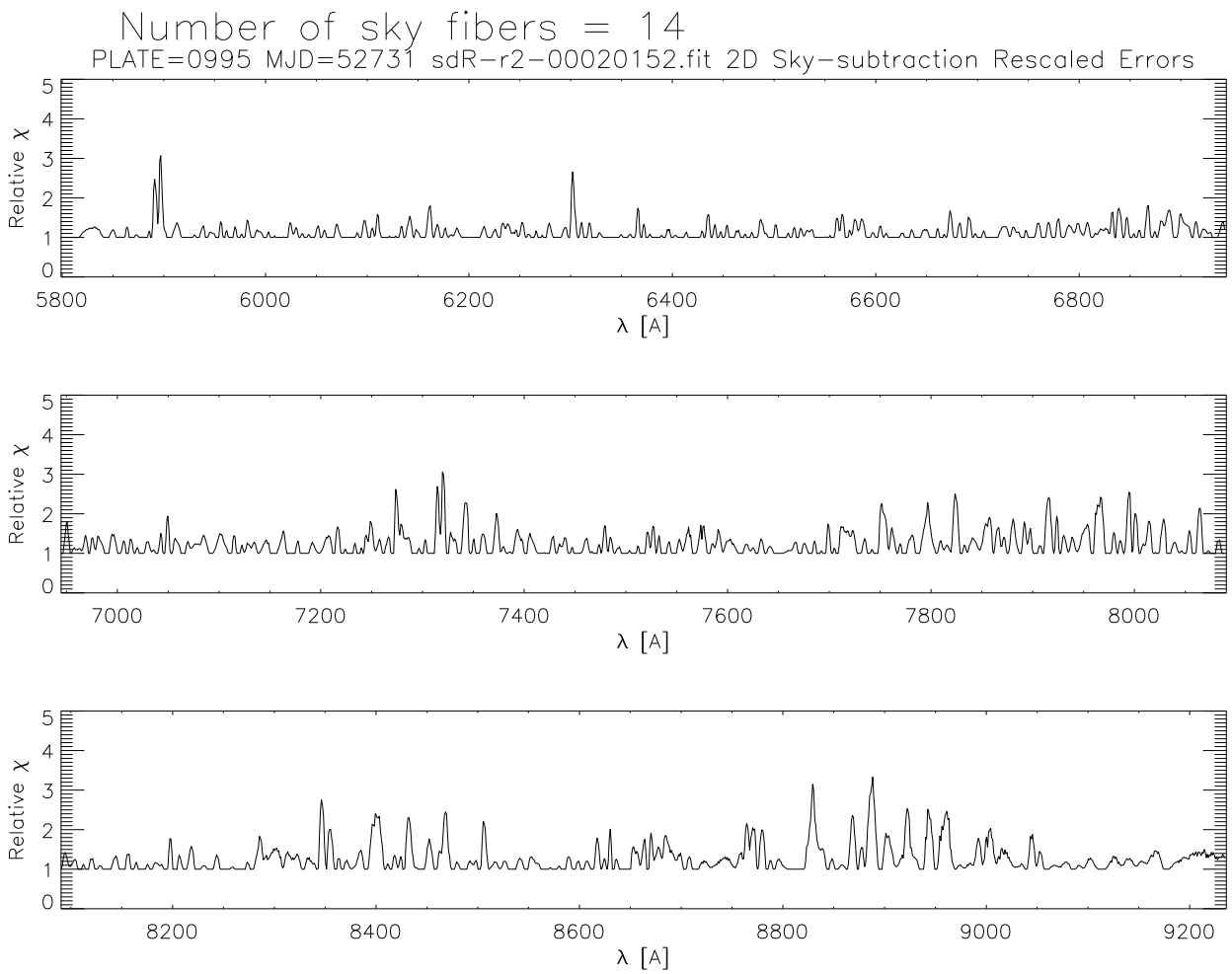

PLATE=0995 MJD=52731 sdR-r2-00020152.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

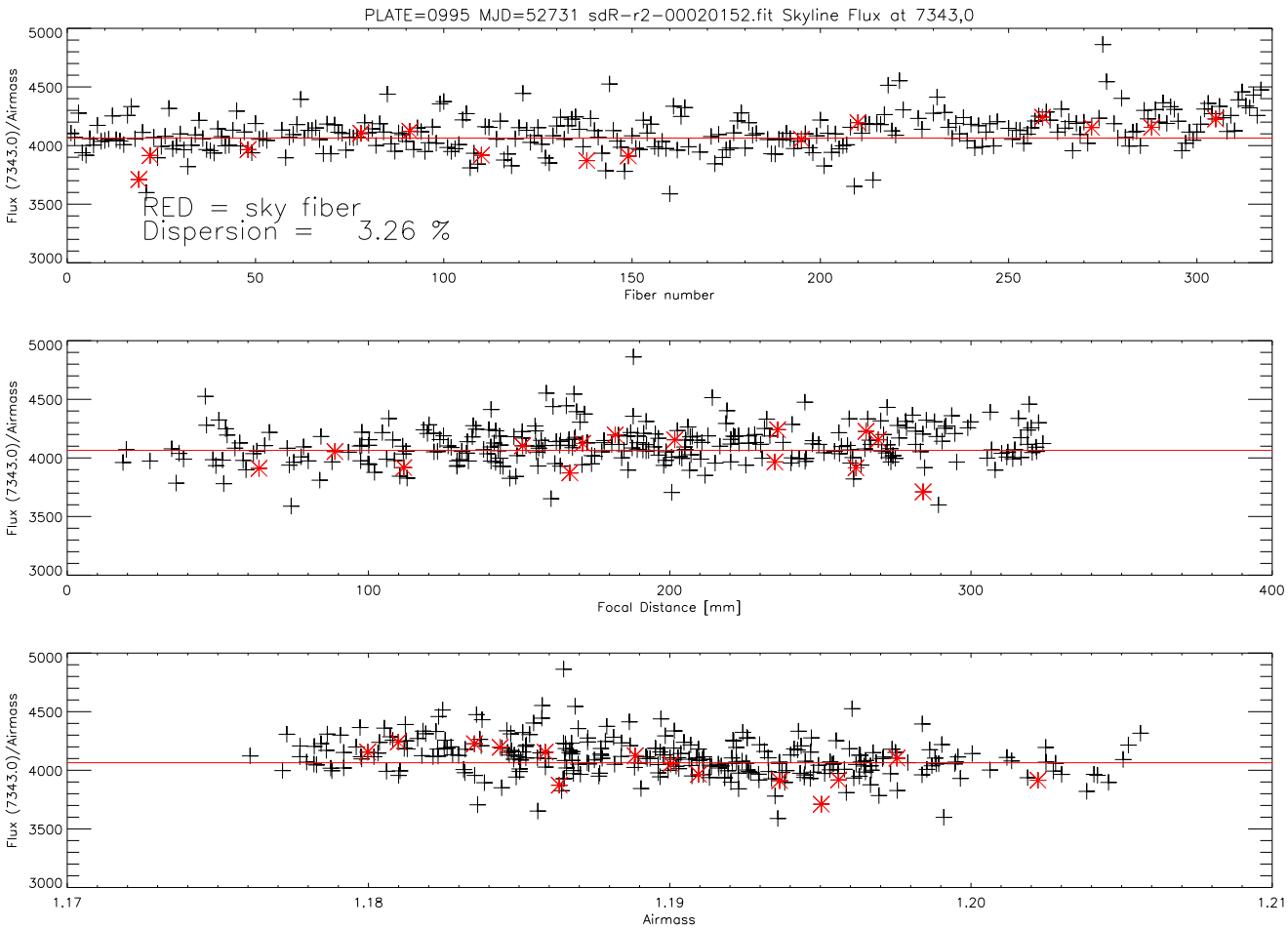

Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020152.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

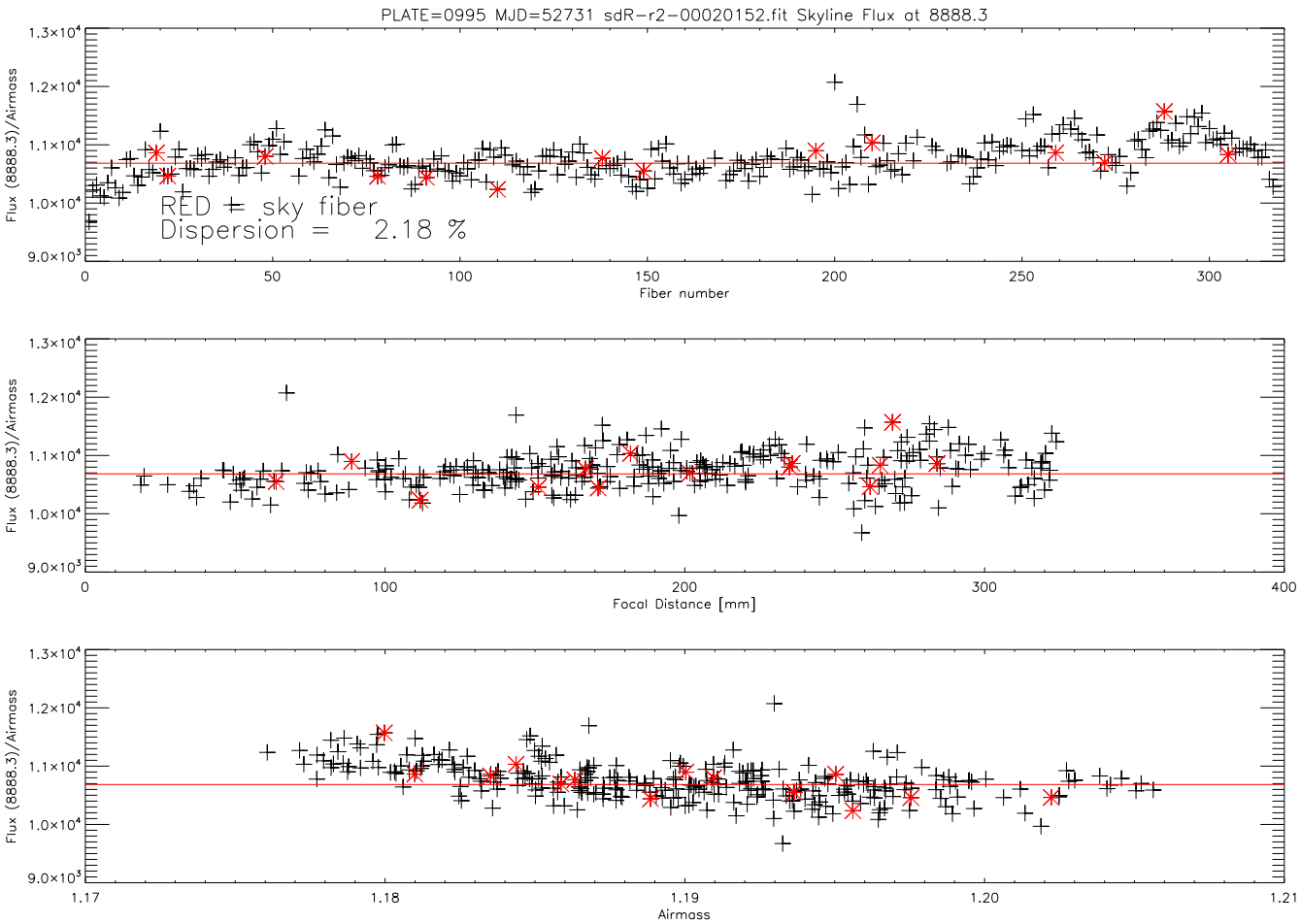

PLATE=0995 MJD=52731 sdR-r2-00020152.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number


PLATE=0995 MJD=52731 sdR-r2-00020152.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0995 MJD=52731 sdR-r2-00020152.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=0995 MJD=52731 sdR-r2-00020152.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=0995 MJD=52731 sdR-r2-00020152.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.26 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0995 MJD=52731 sdR-r2-00020152.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.18 %
Fiber number
Focal Distance [mm]
Airmass