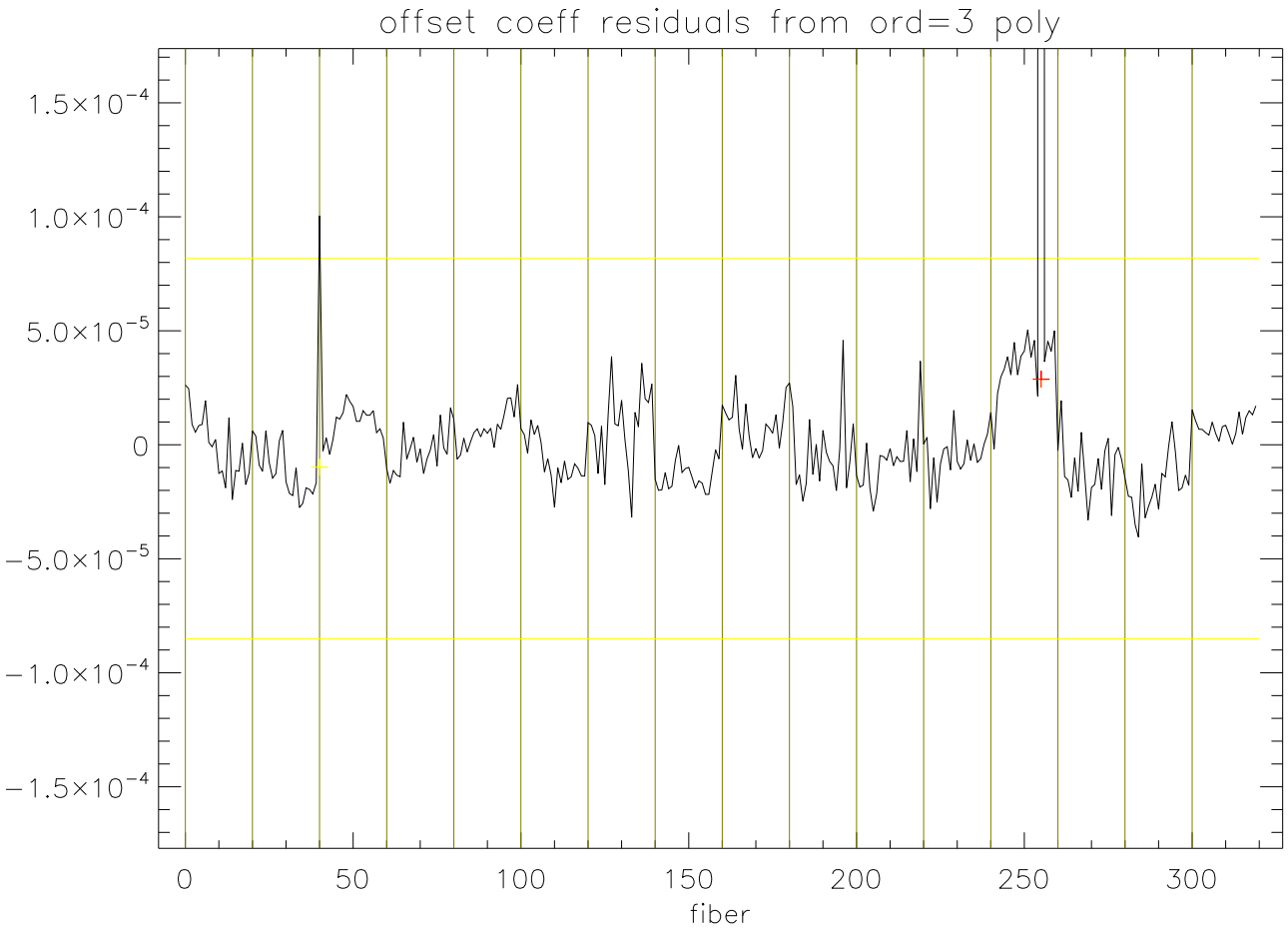
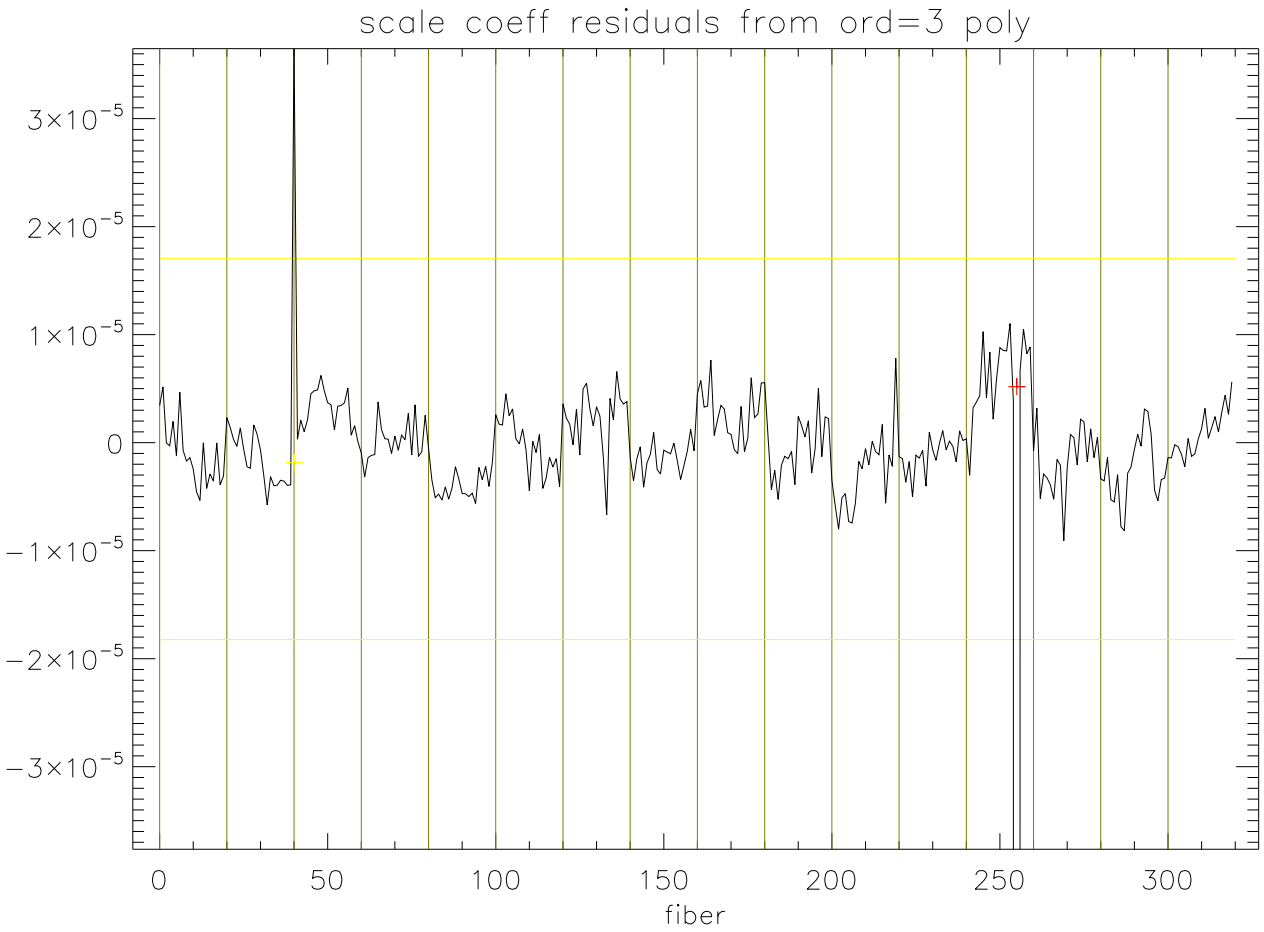
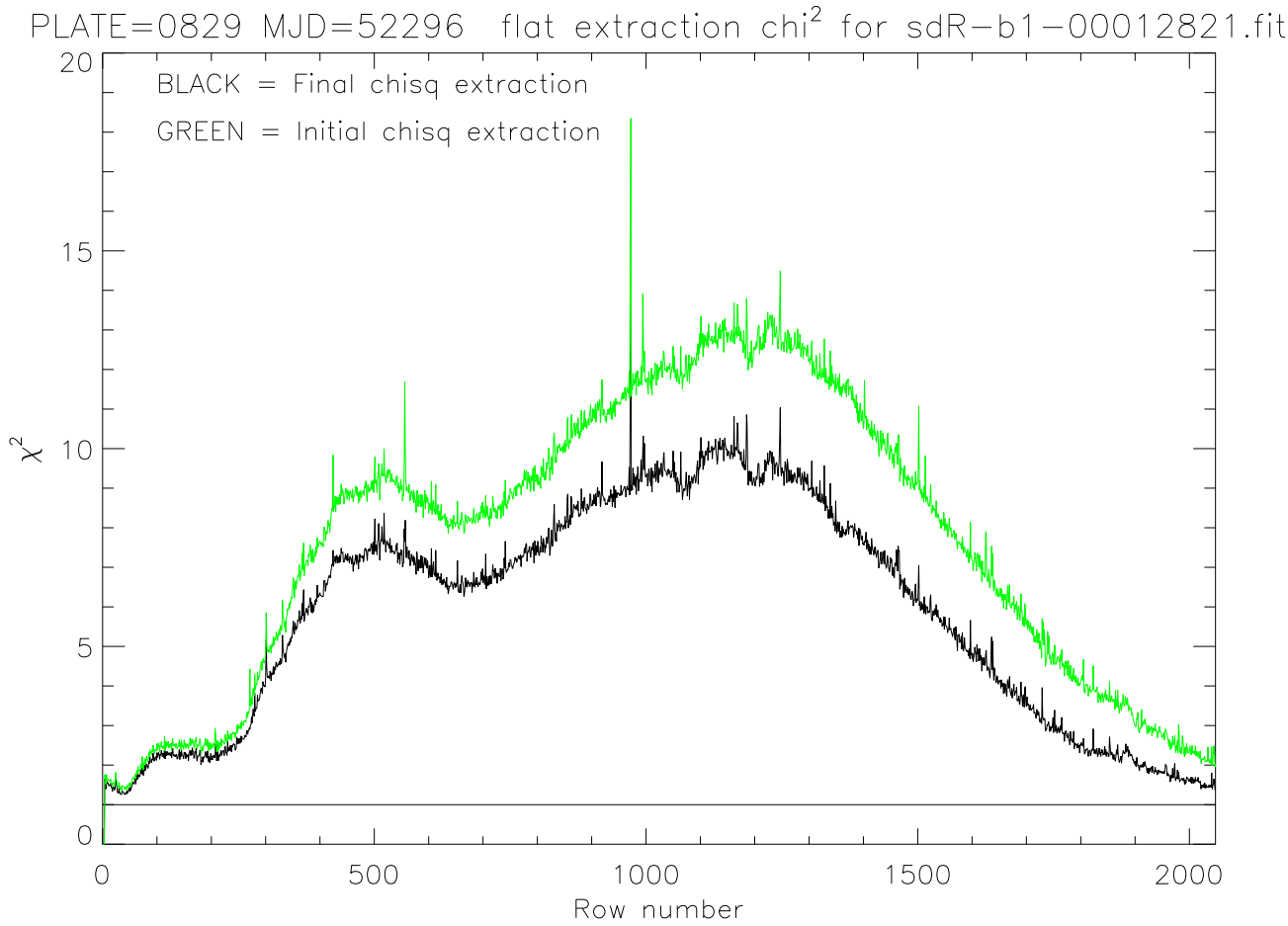
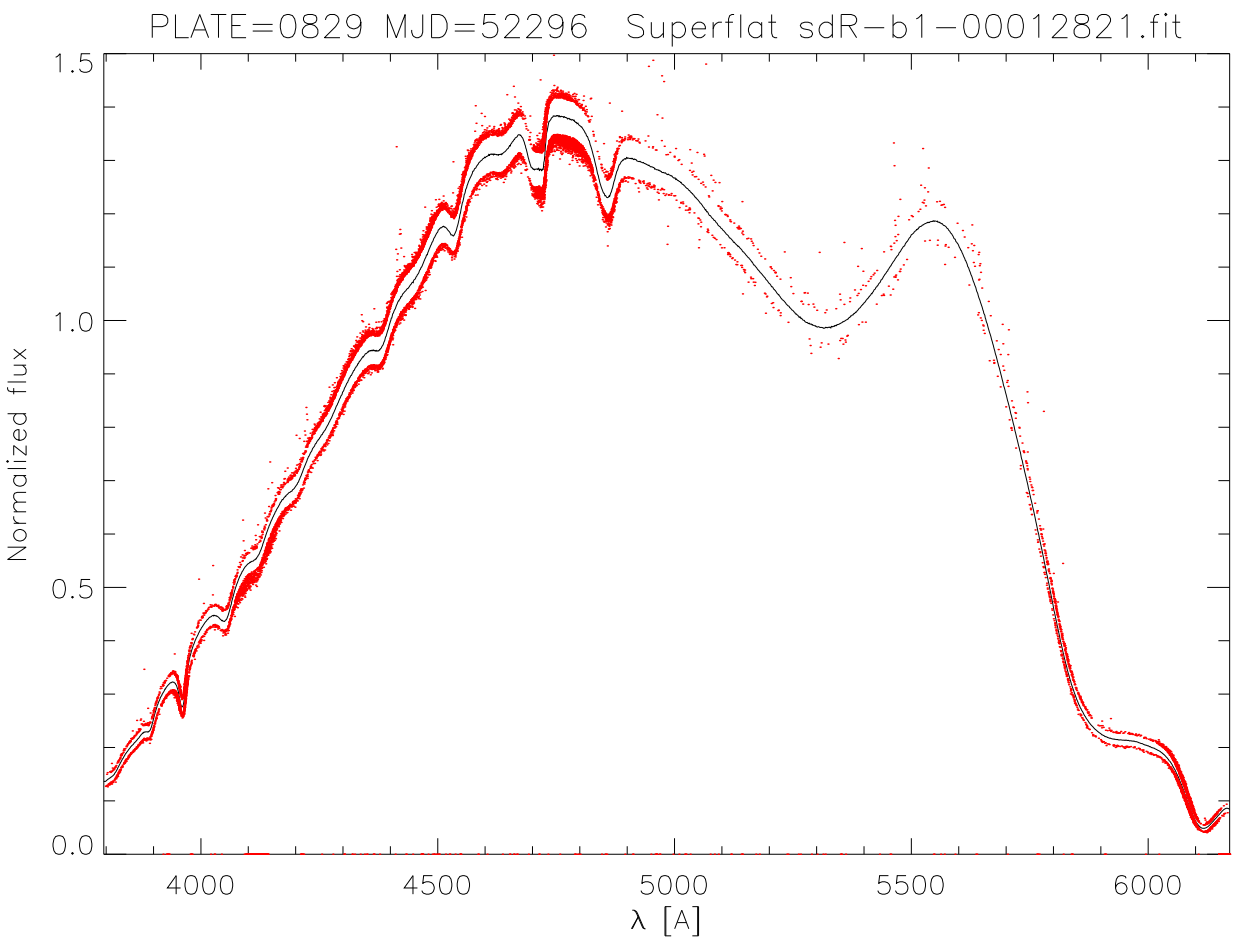
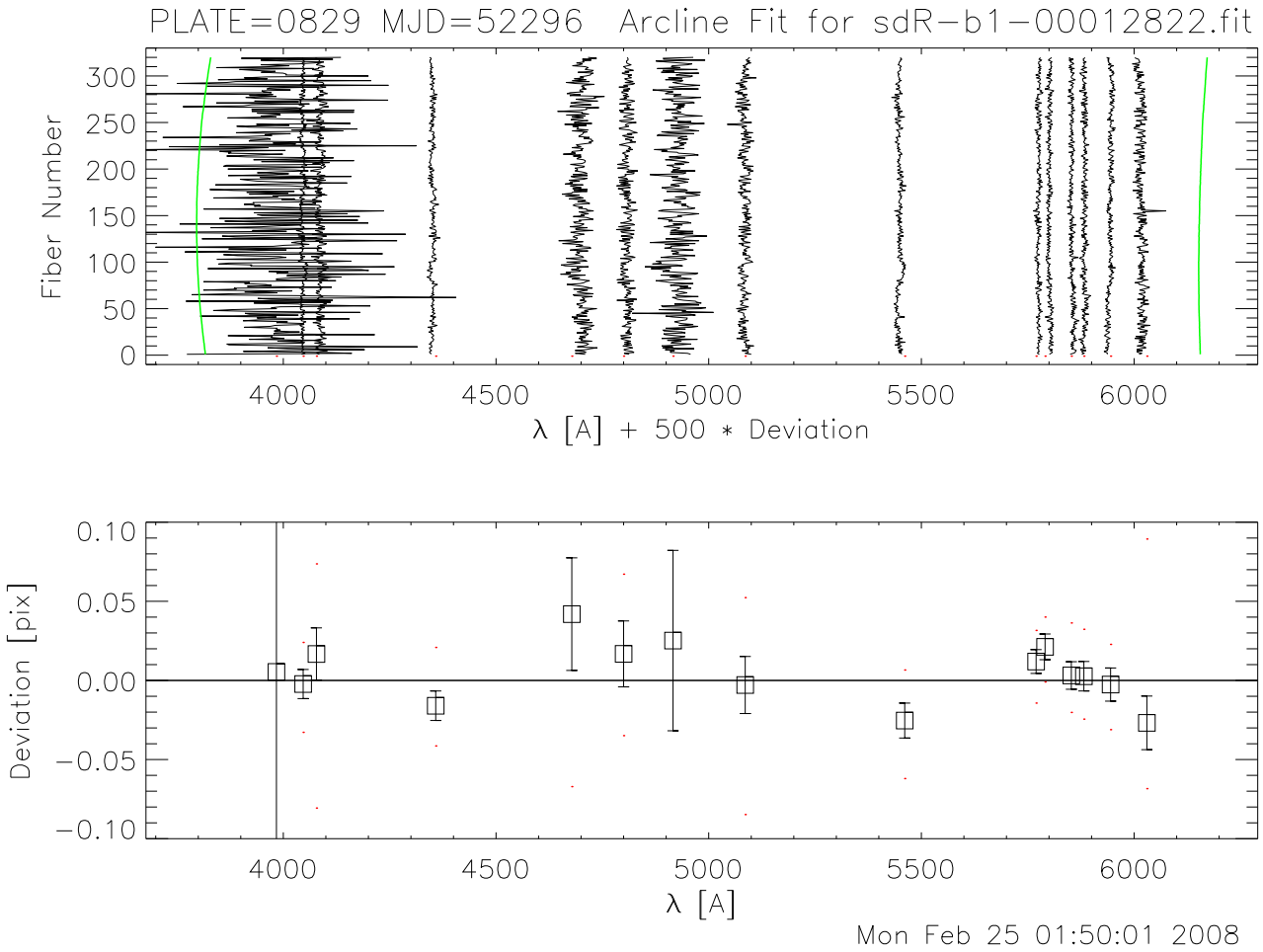
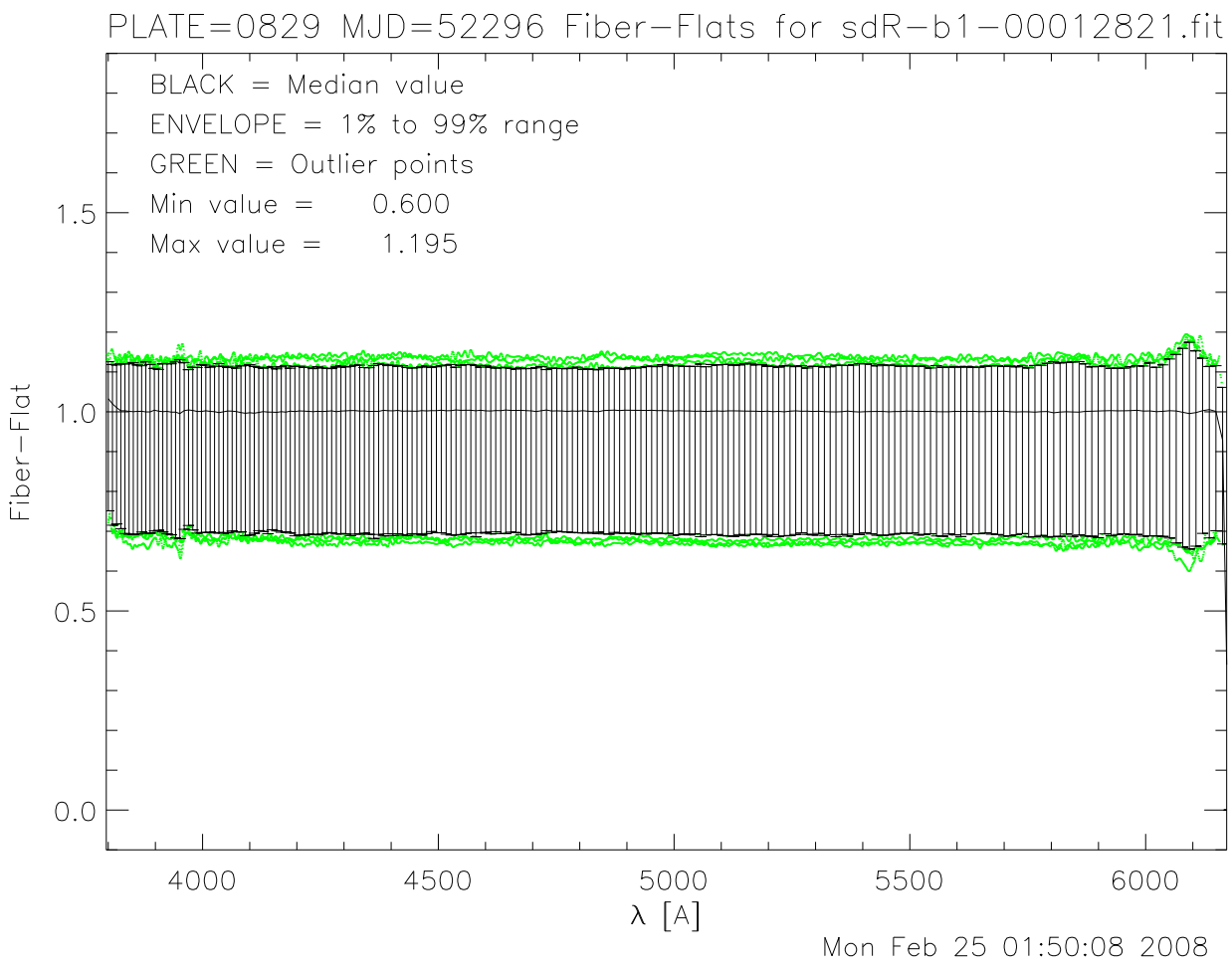

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

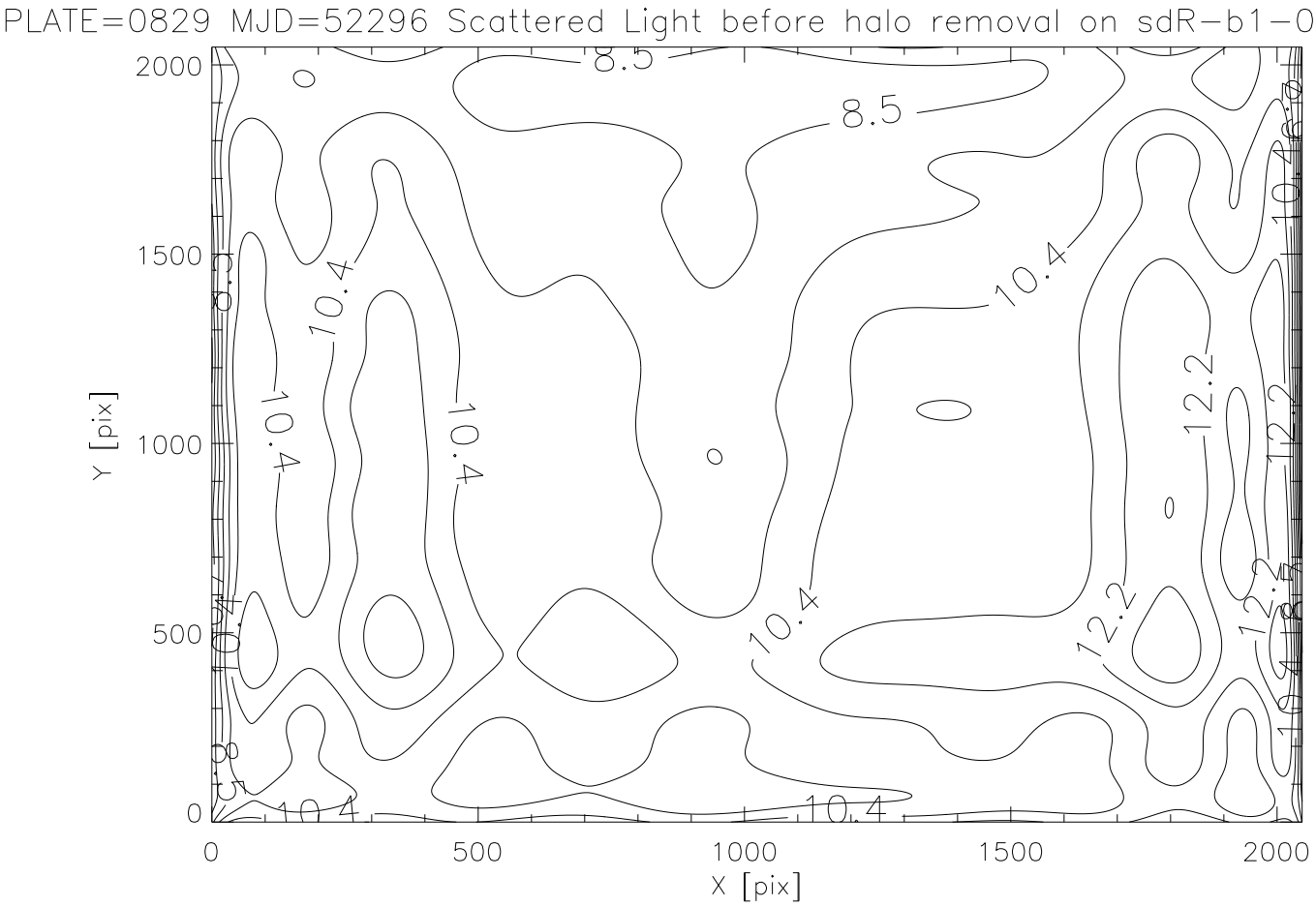

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

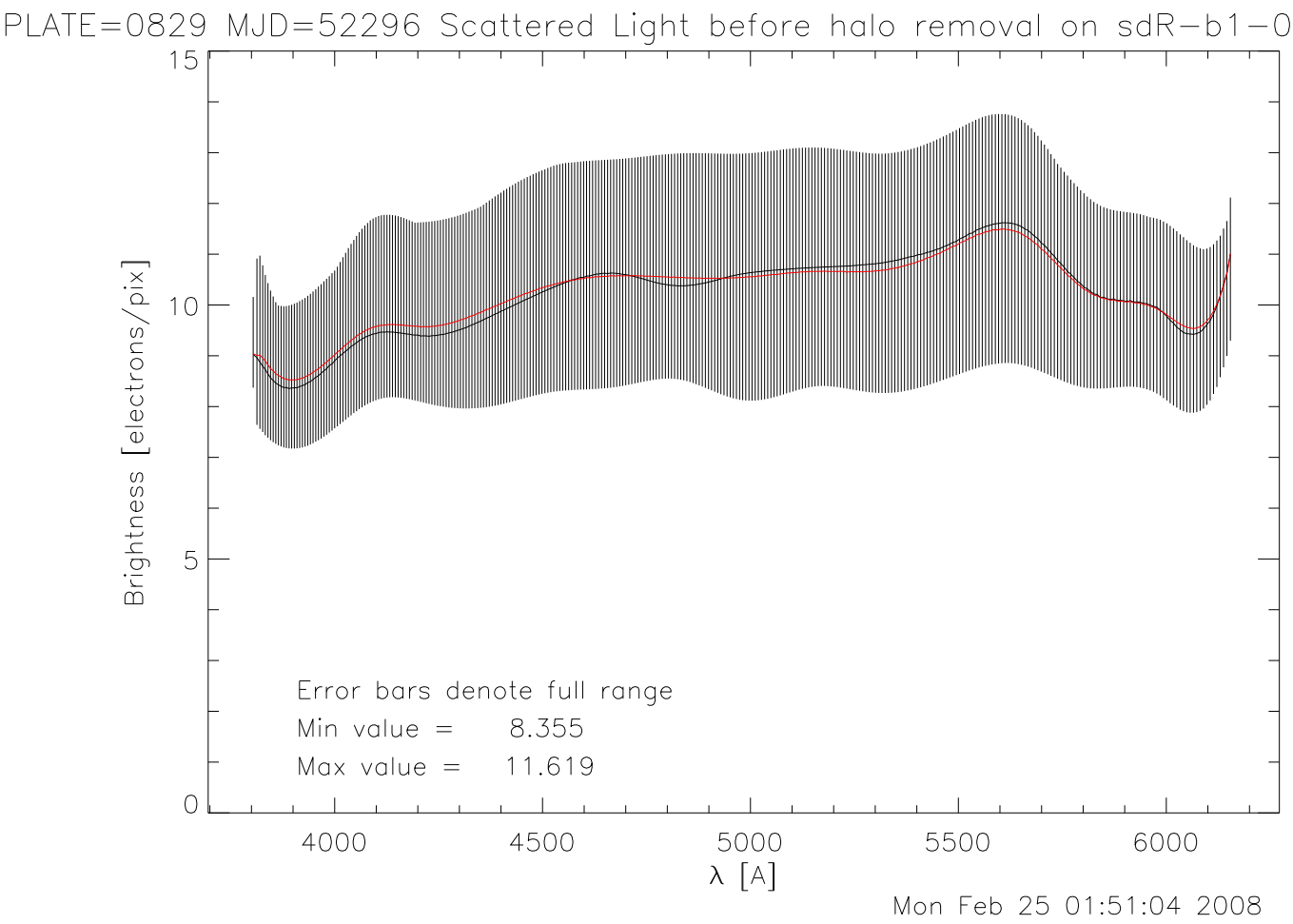

PLATE=0829 MJD=52296 flat extraction chi^2 for sdR−b1−00012821.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

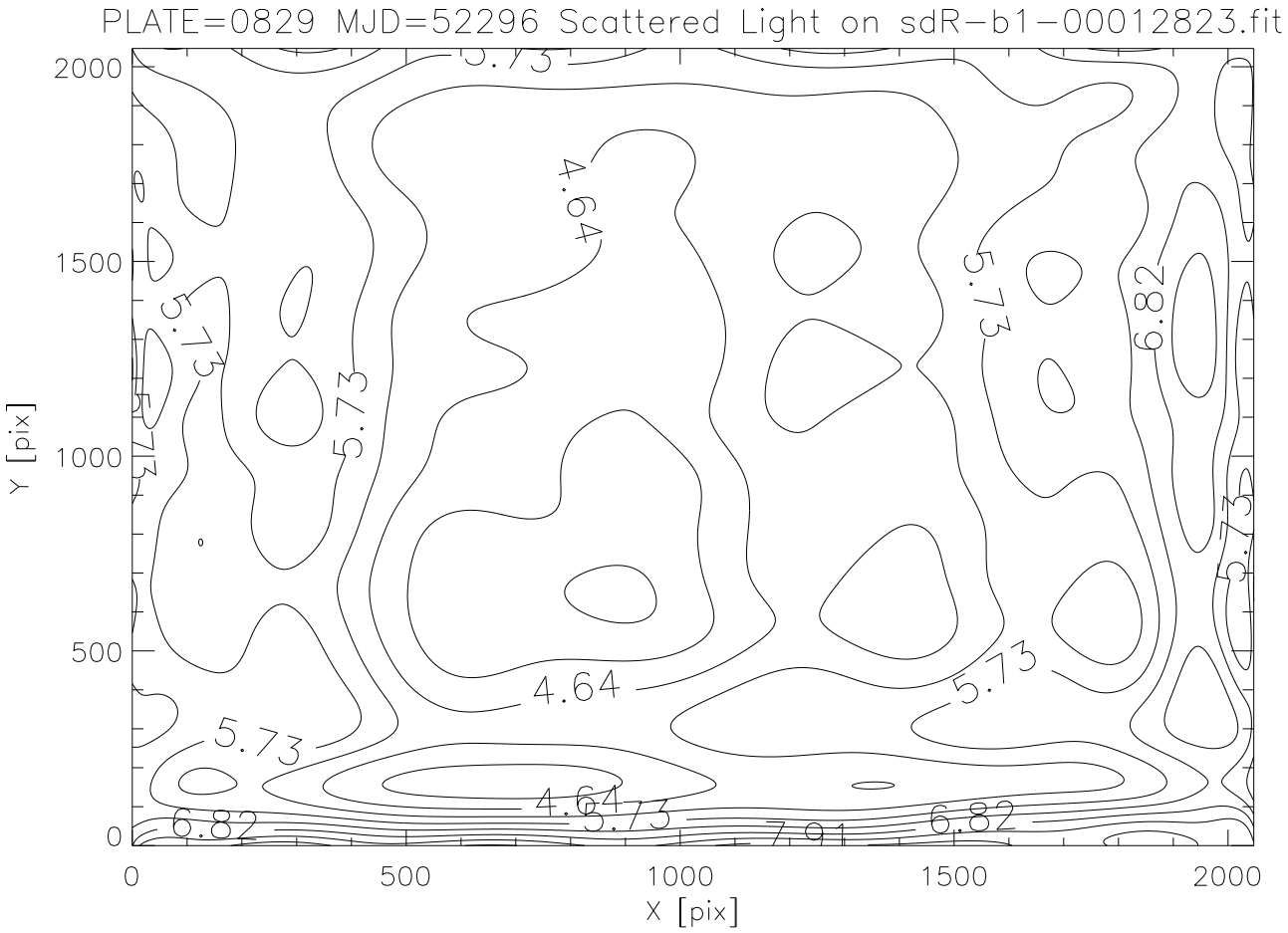

PLATE=0829 MJD=52296 Superflat sdR-b1-00012821.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

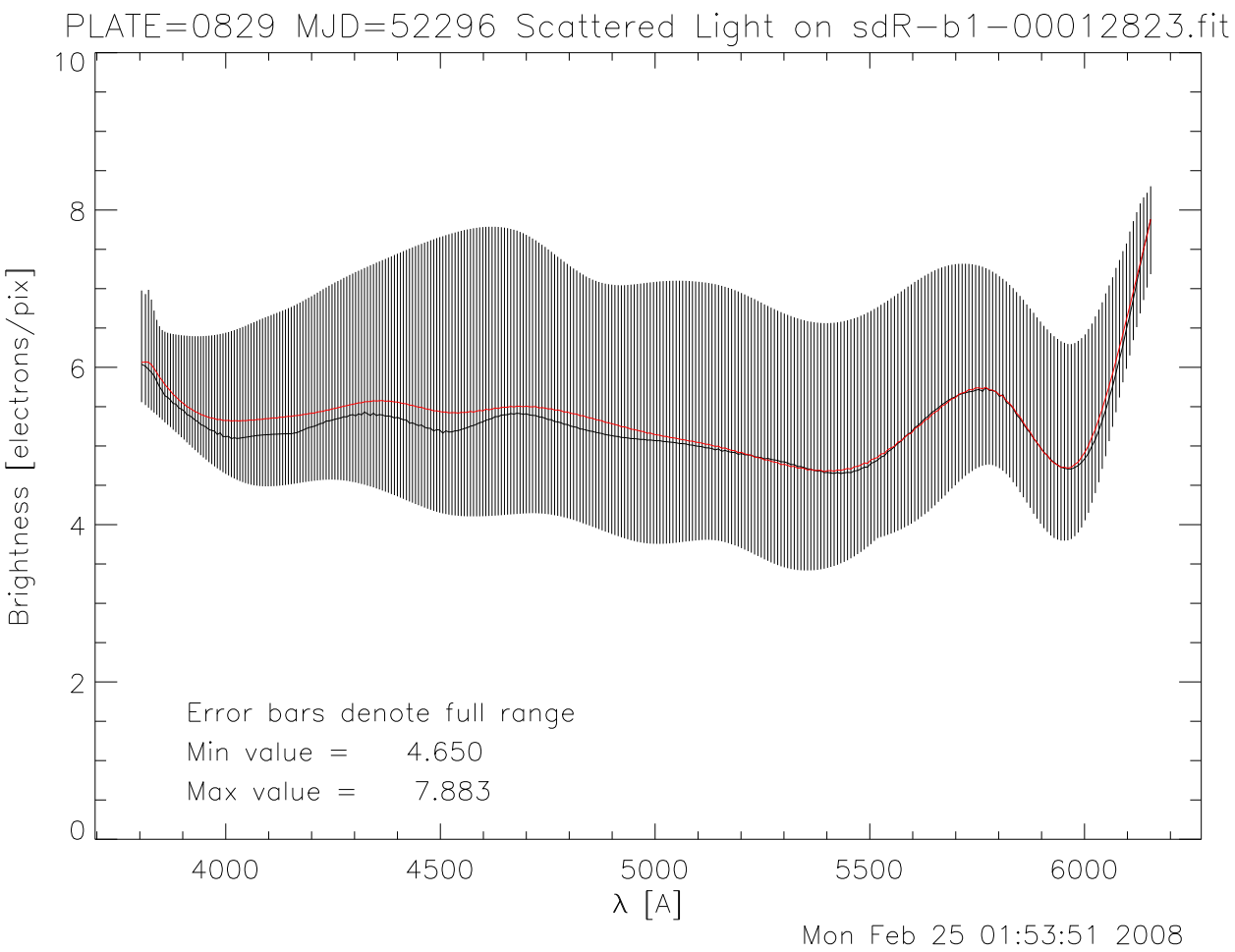

PLATE=0829 MJD=52296 Arcline Fit for sdR-b1-00012822.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:50:01 2008

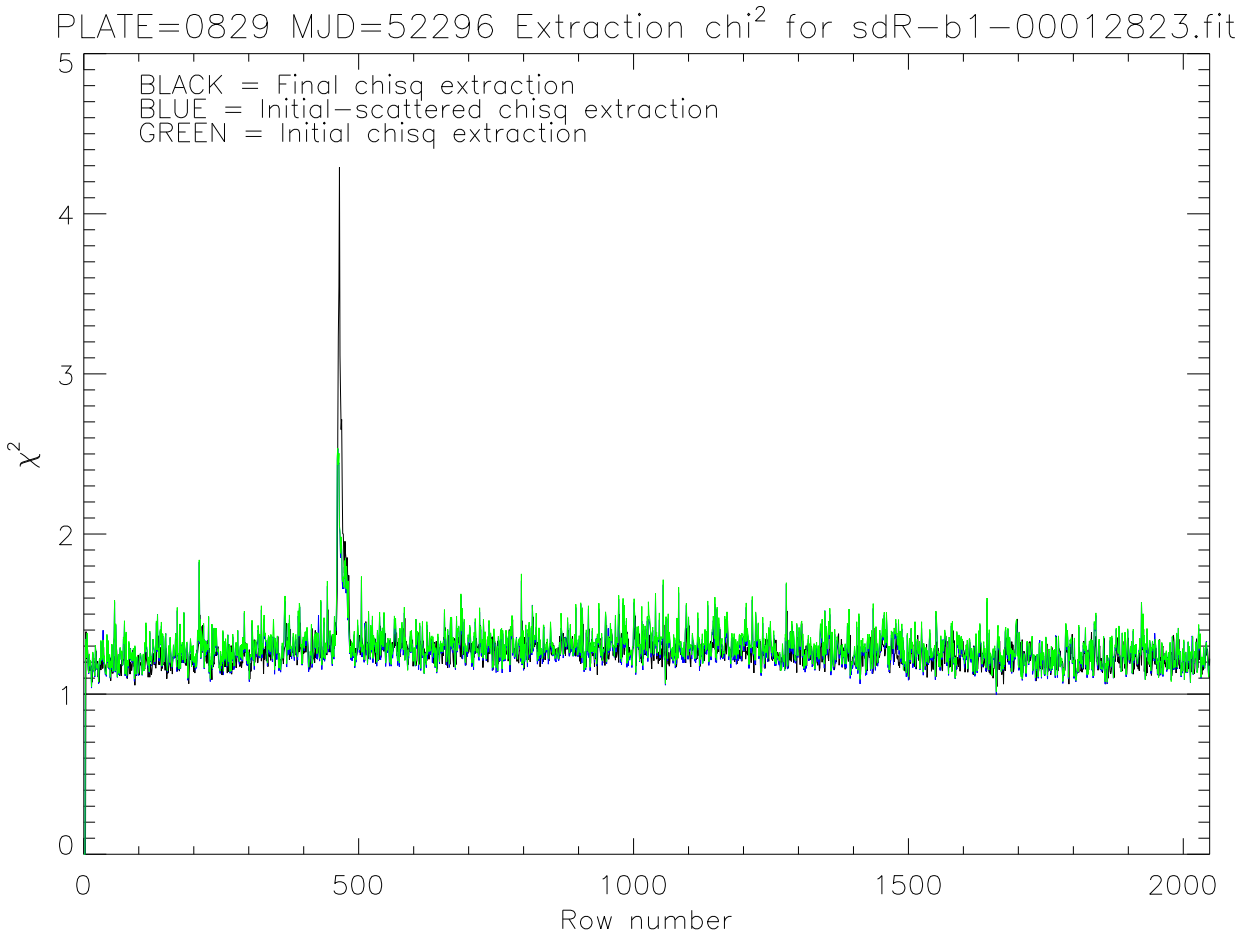

PLATE=0829 MJD=52296 Fiber-Flats for sdR-b1-00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.600
Max value = 1.195
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:50:08 2008

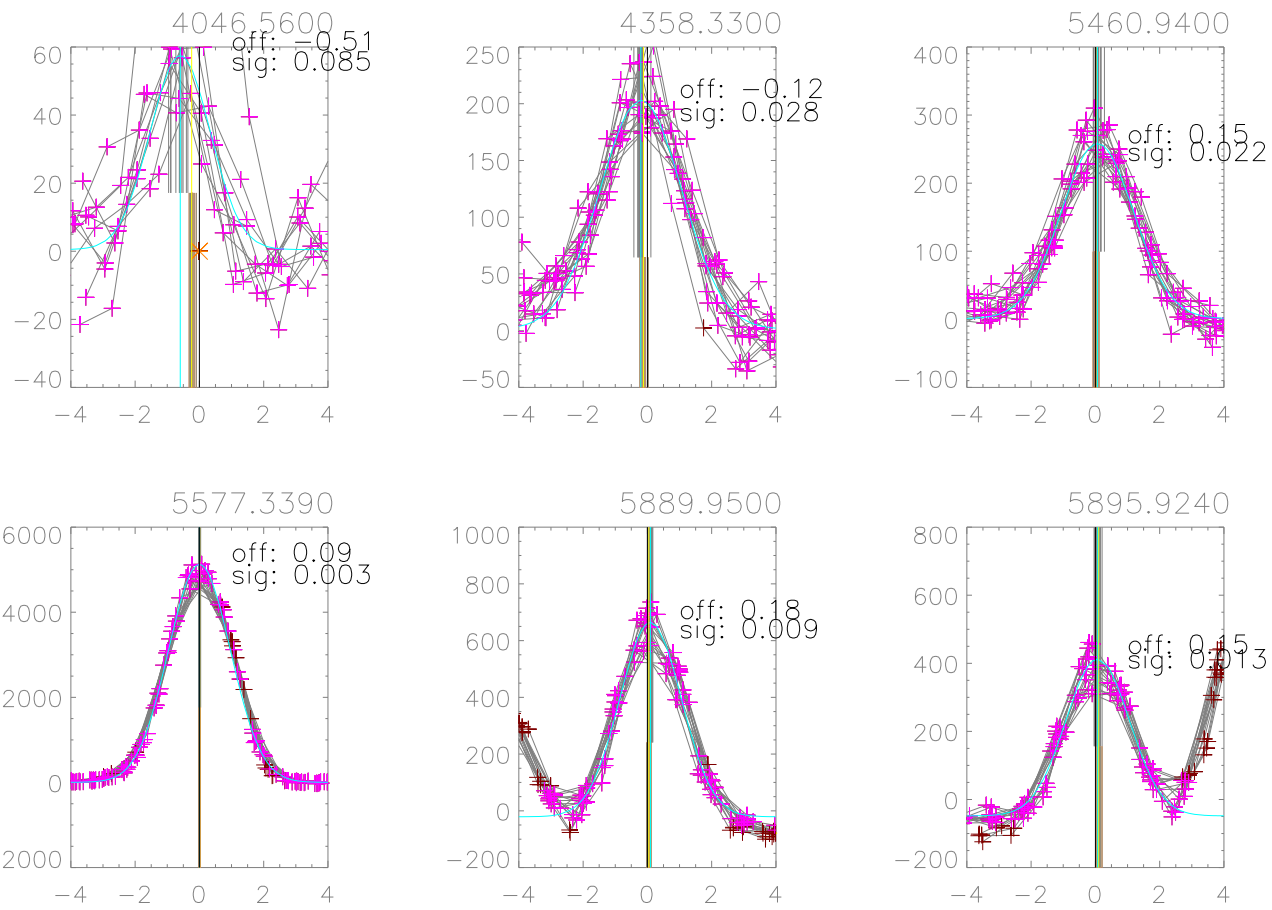

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR−b1−00012823.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.5
10.4
12.2

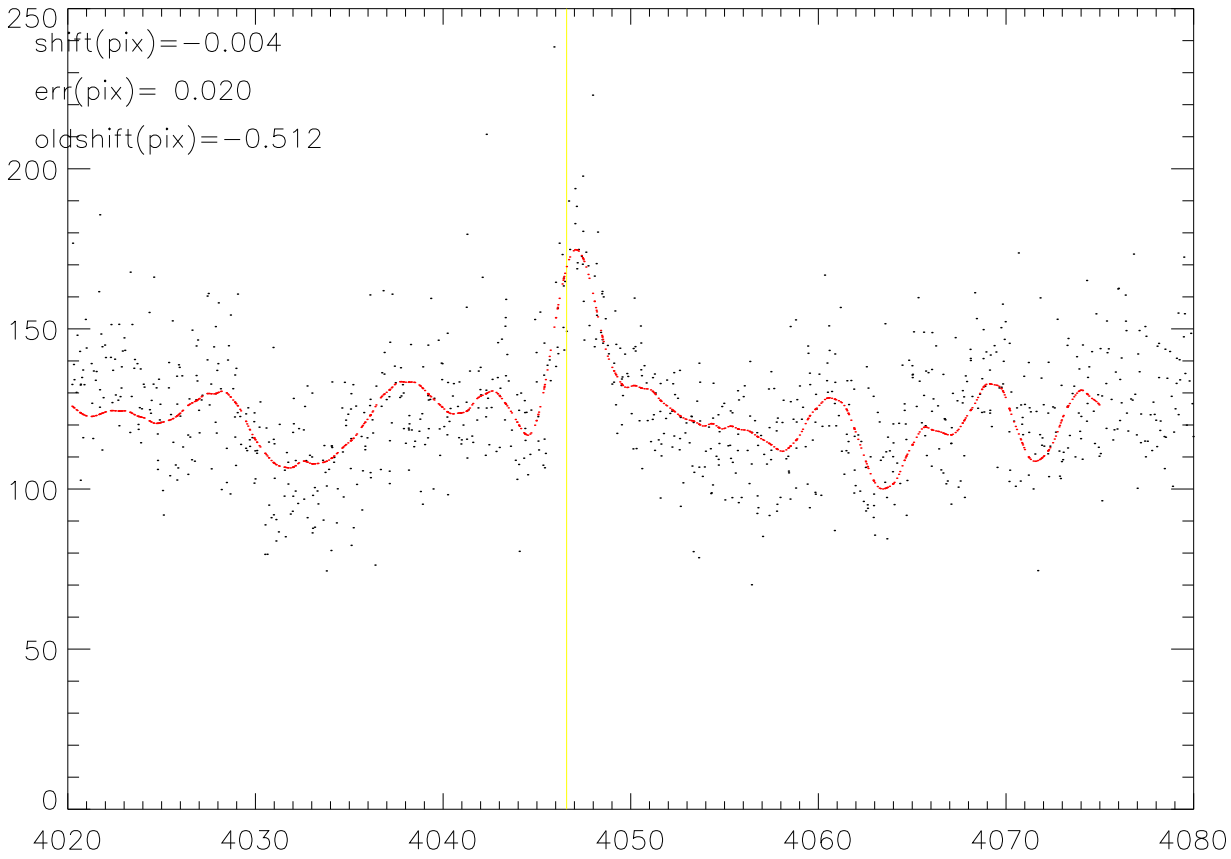

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-b1-00012823.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.355
Max value = 11.619
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:51:04 2008

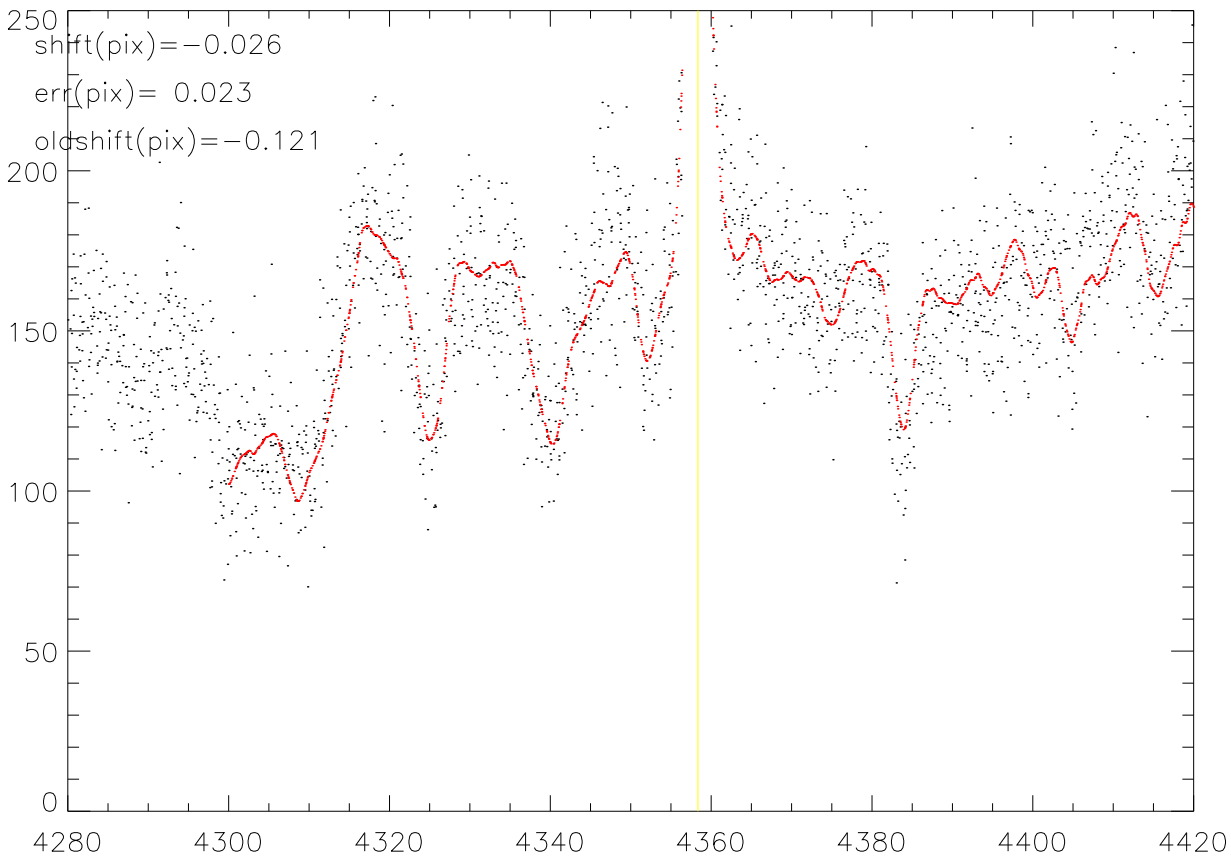

PLATE=0829 MJD=52296 Scattered Light on sdR-b1-00012823.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
5.73
6.82
7.91

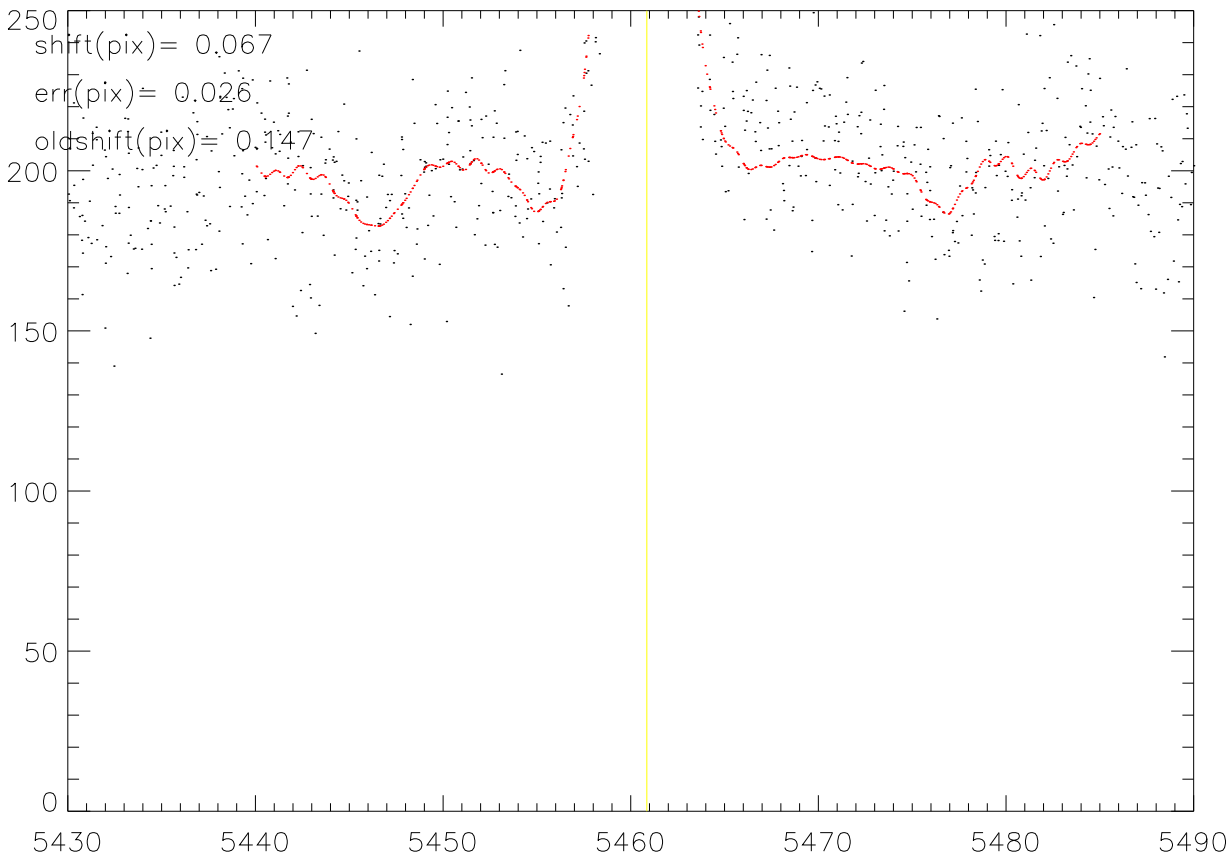

PLATE=0829 MJD=52296 Scattered Light on sdR-b1-00012823.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.650
Max value = 7.883
Mon Feb 25 01:53:51 2008

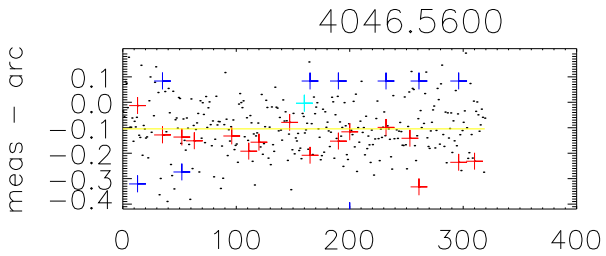

PLATE=0829 MJD=52296 Extraction chi^2 for sdR-b1-00012823.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

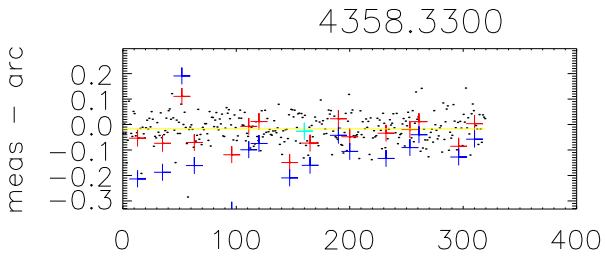

4046.5600
off: −0.51
sig: 0.085
4358.3300
off: −0.12
sig: 0.028
5460.9400
off: 0.15
sig: 0.022
5577.3390
off: 0.09
sig: 0.003
5889.9500
off: 0.18
sig: 0.009
5895.9240
off: 0.15
sig: 0.013

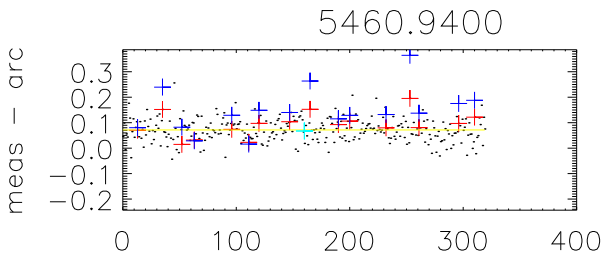

shift(pix)=−0.004
err(pix)= 0.020
oldshift(pix)=−0.512
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

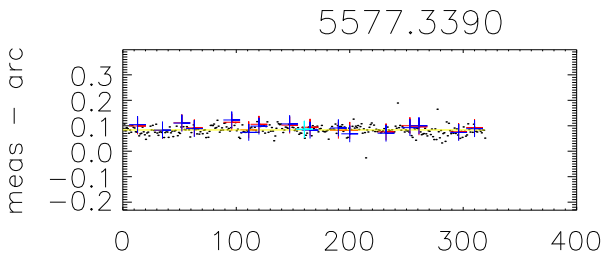

shift(pix)=−0.026
err(pix)= 0.023
oldshift(pix)=−0.121
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

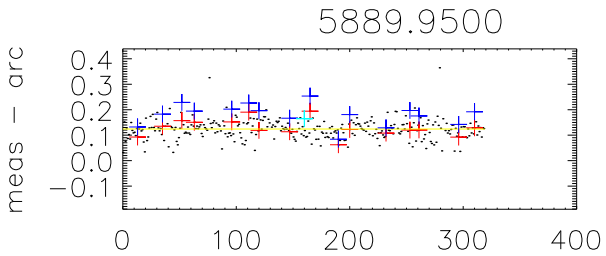

shift(pix)= 0.067
err(pix)= 0.026
oldshift(pix)= 0.147
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

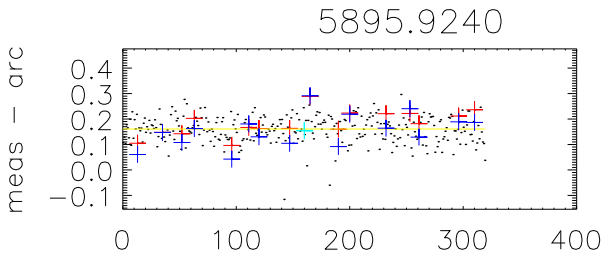

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

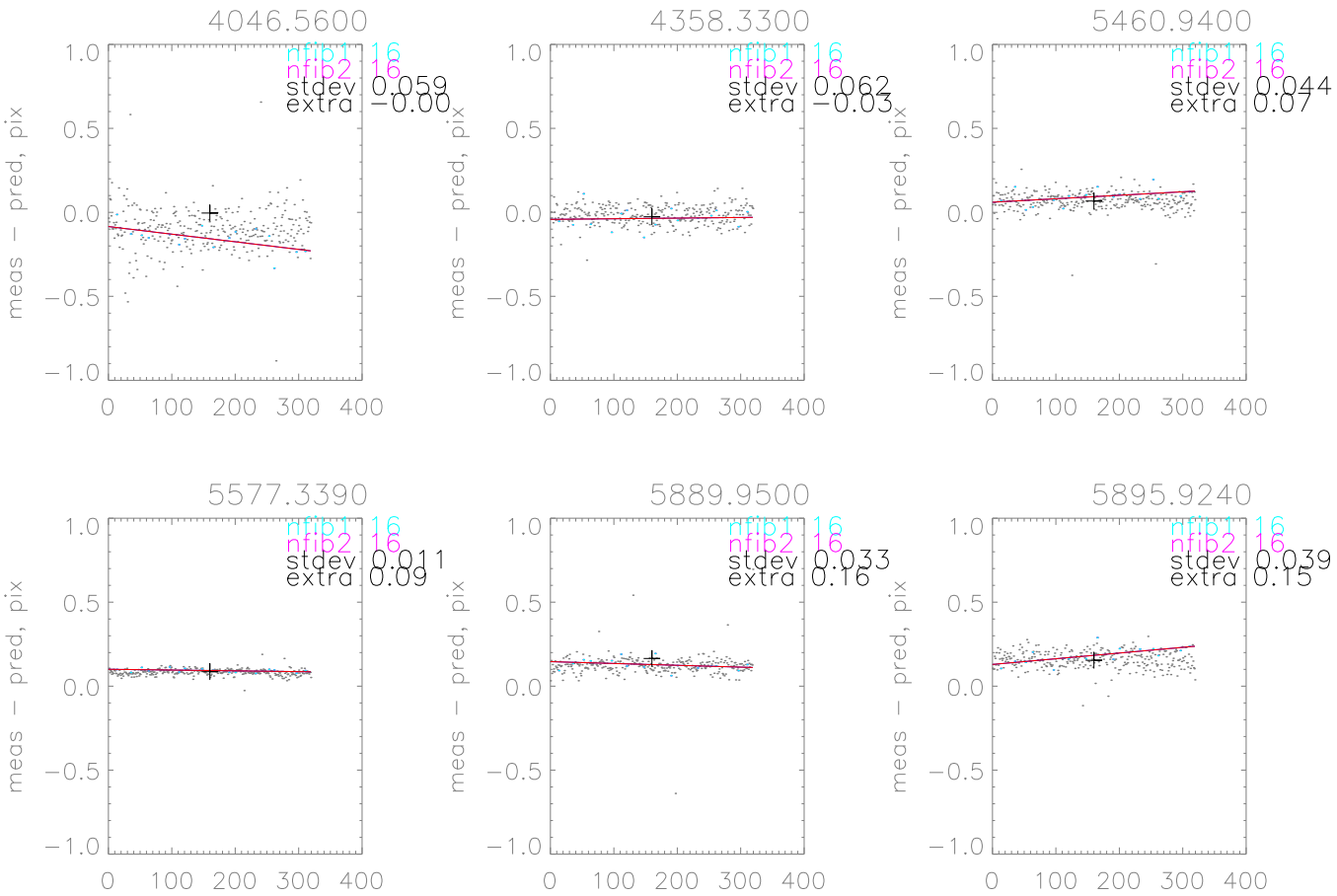

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

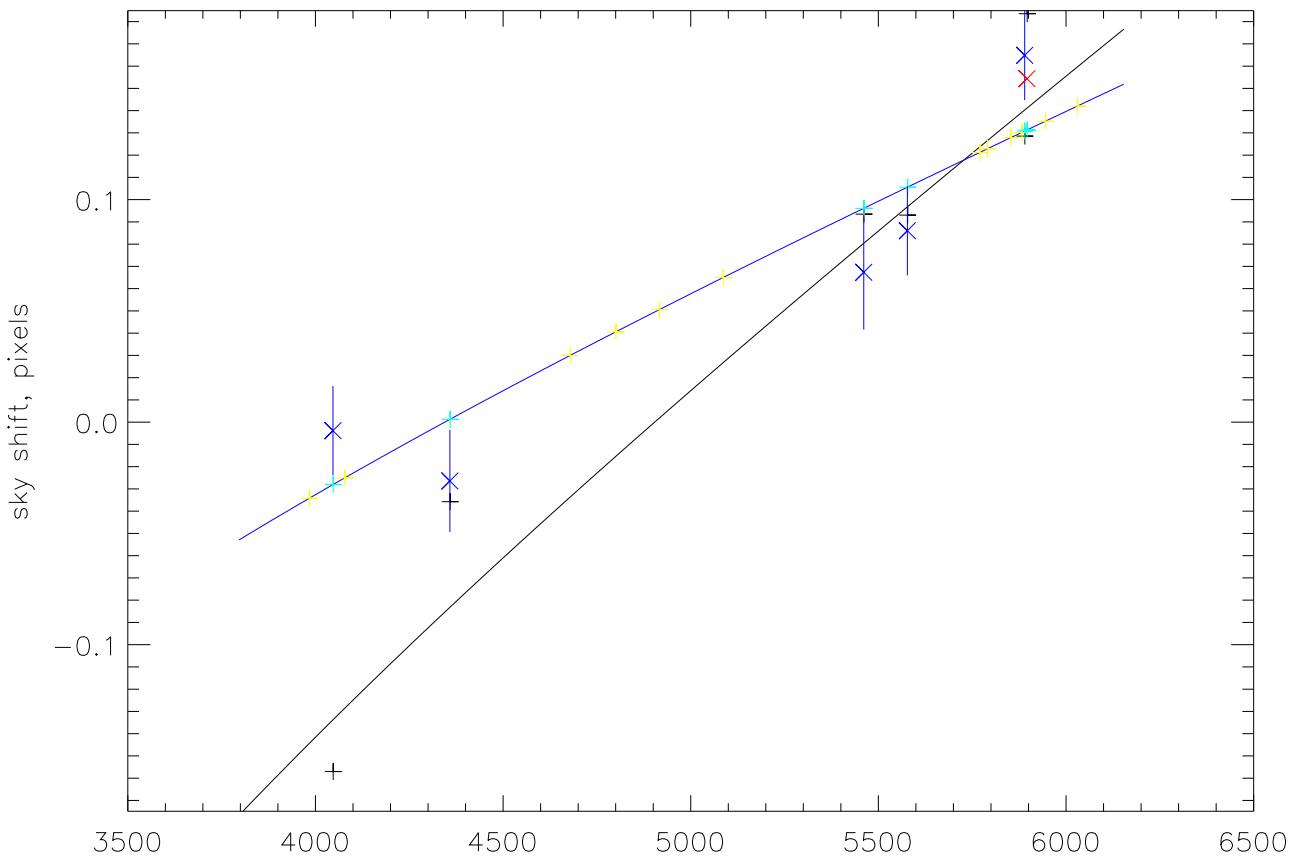

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

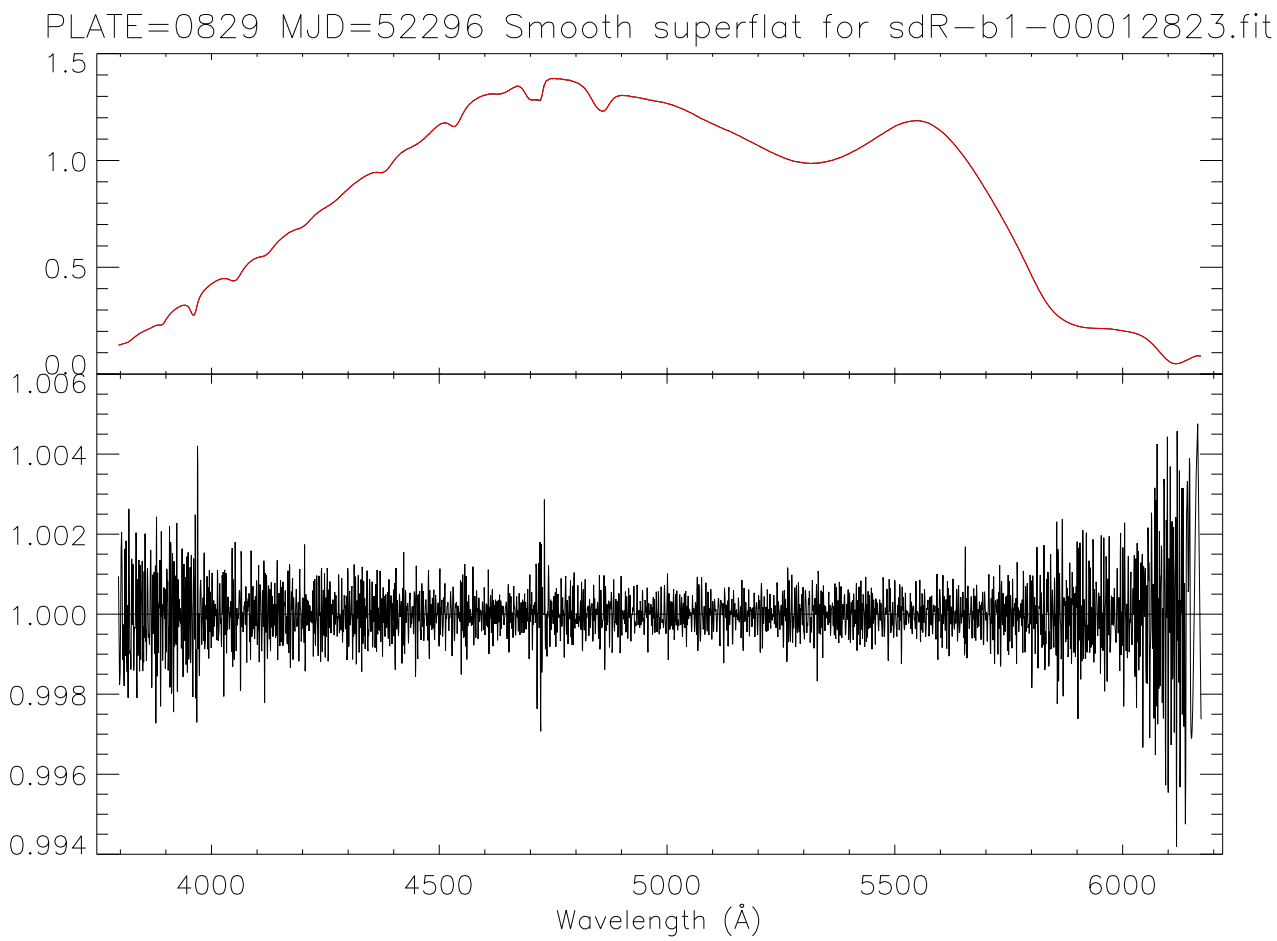

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

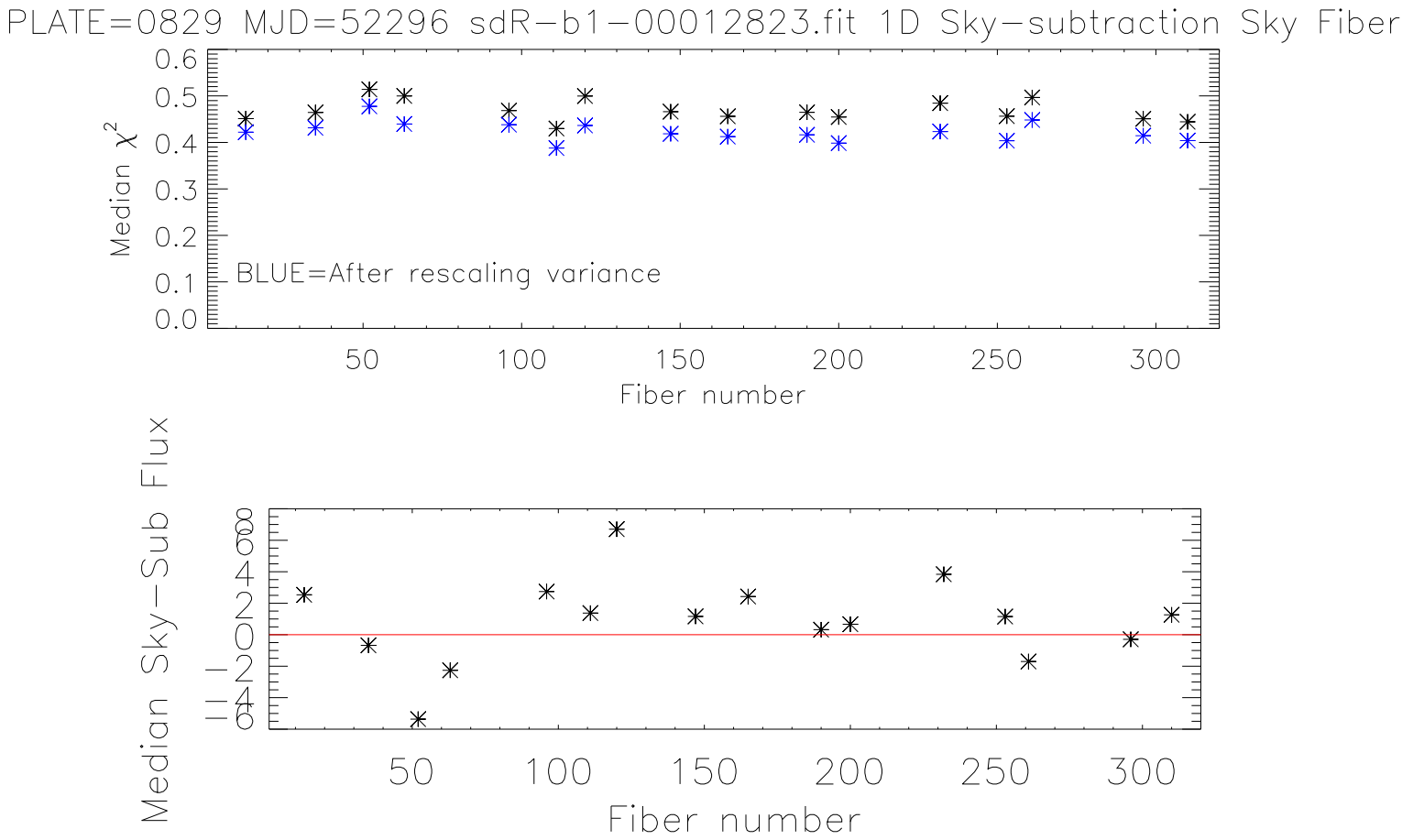

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

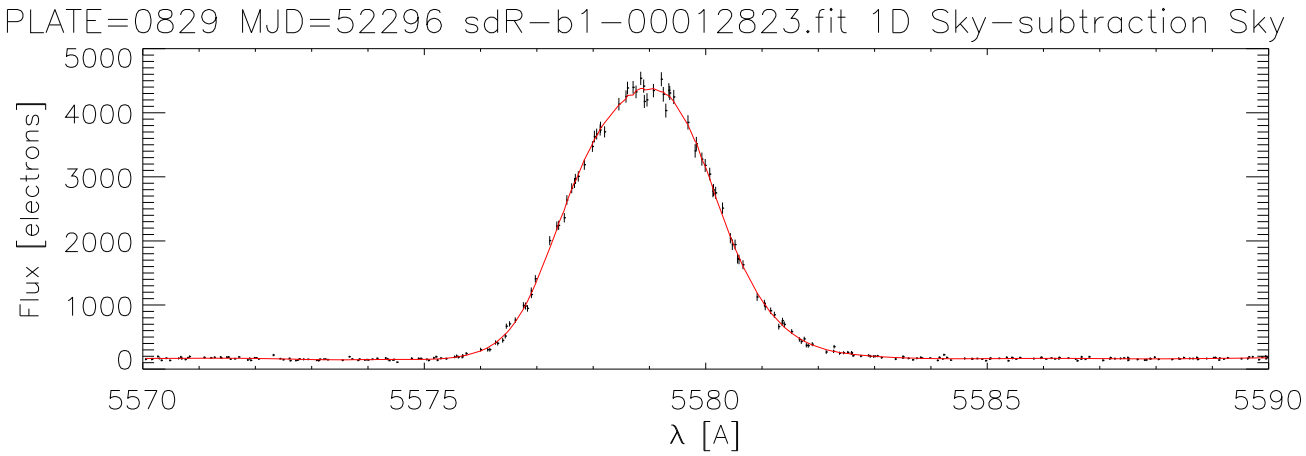

4046.5600
nfib1 16
nfib2 16
stdev 0.059
extra −0.00
4358.3300
nfib1 16
nfib2 16
stdev 0.062
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra 0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

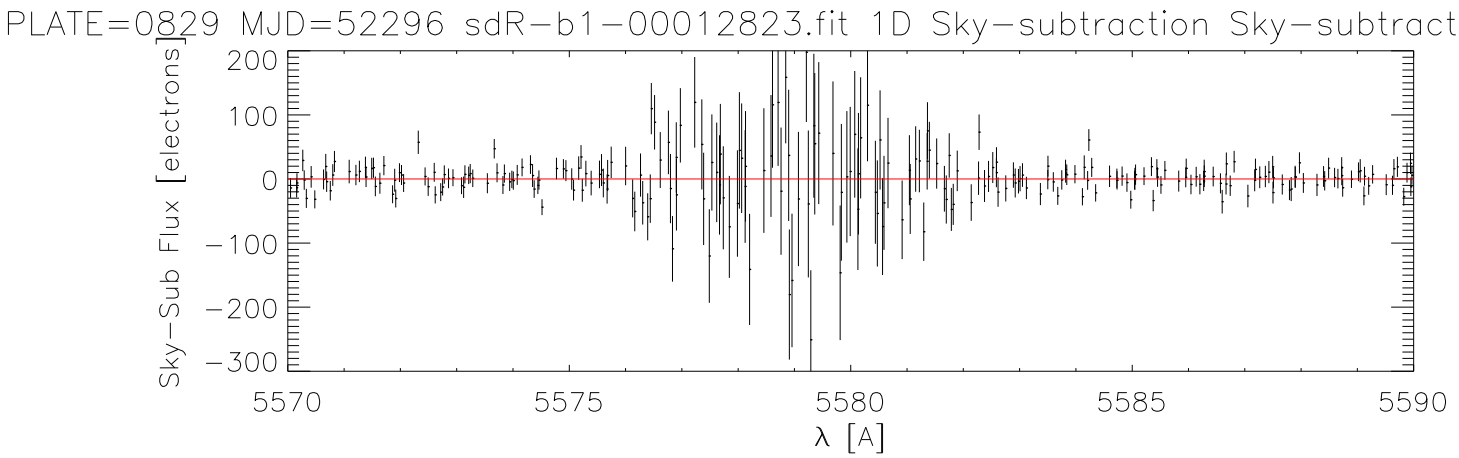

sky shift, pixels
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

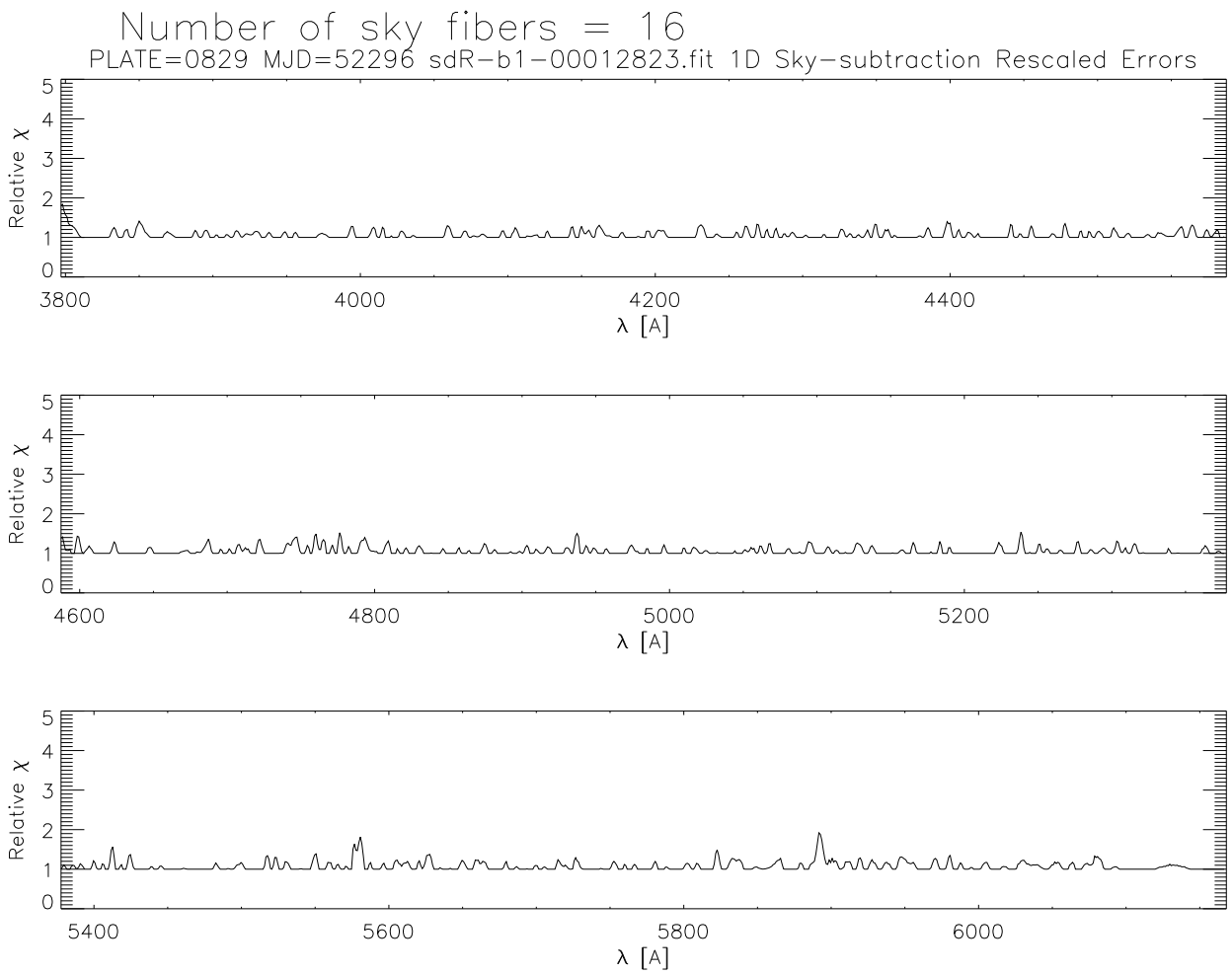
es= 0.0000

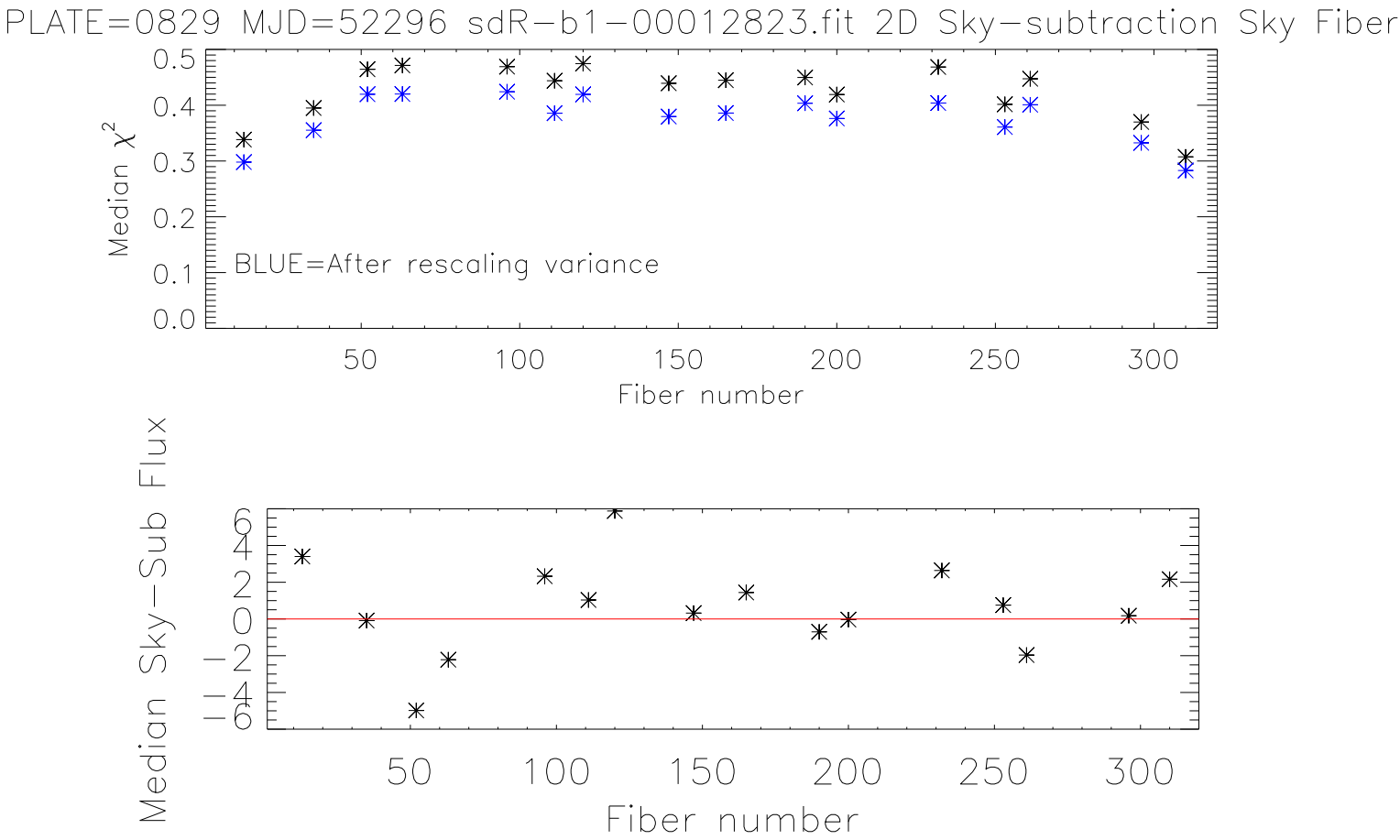

PLATE=0829 MJD=52296 Smooth superflat for sdR-b1-00012823.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

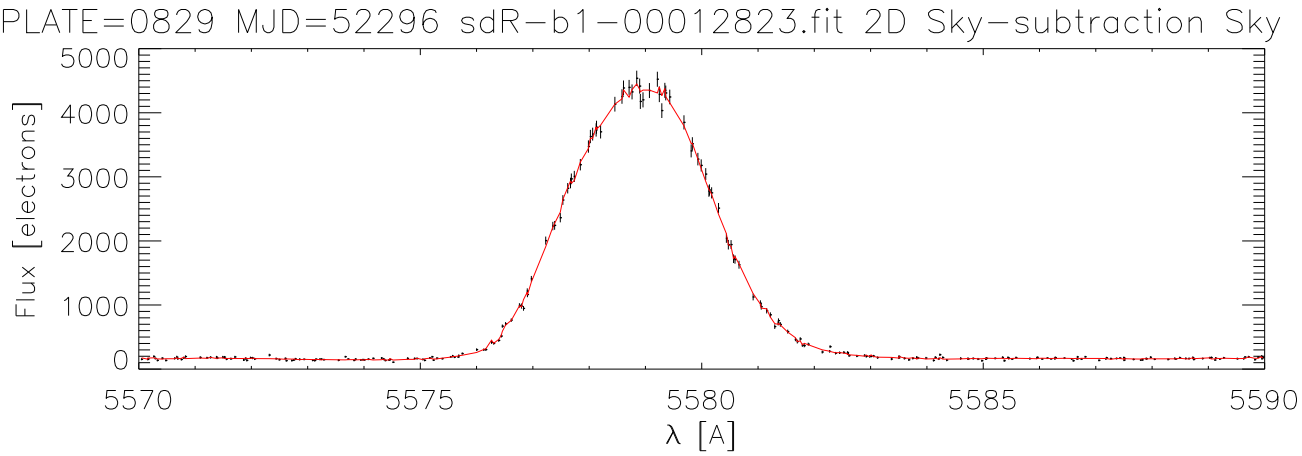

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

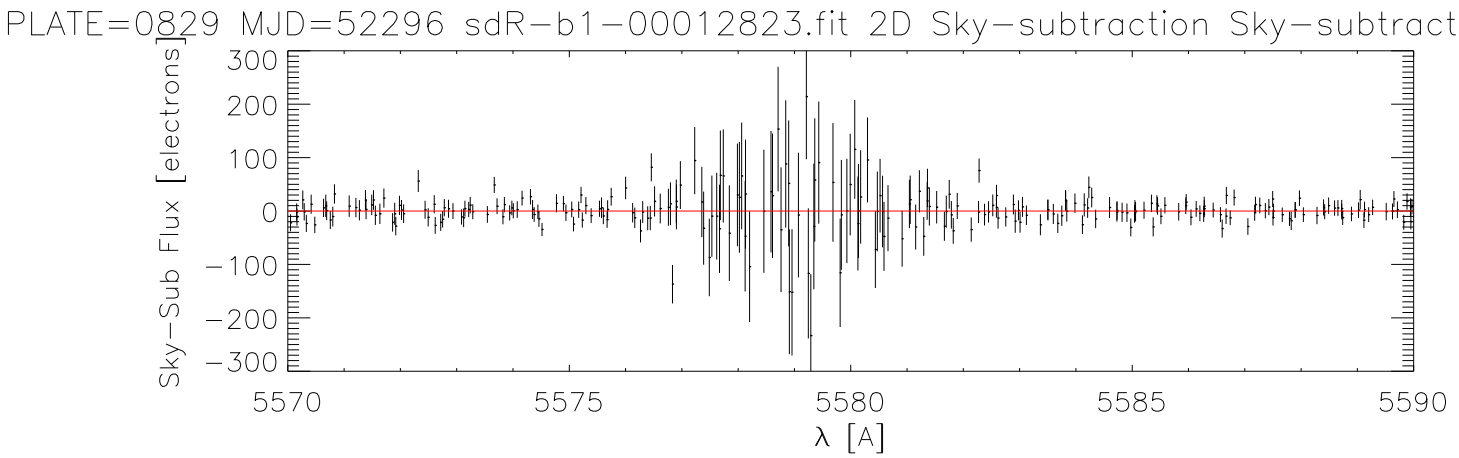

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

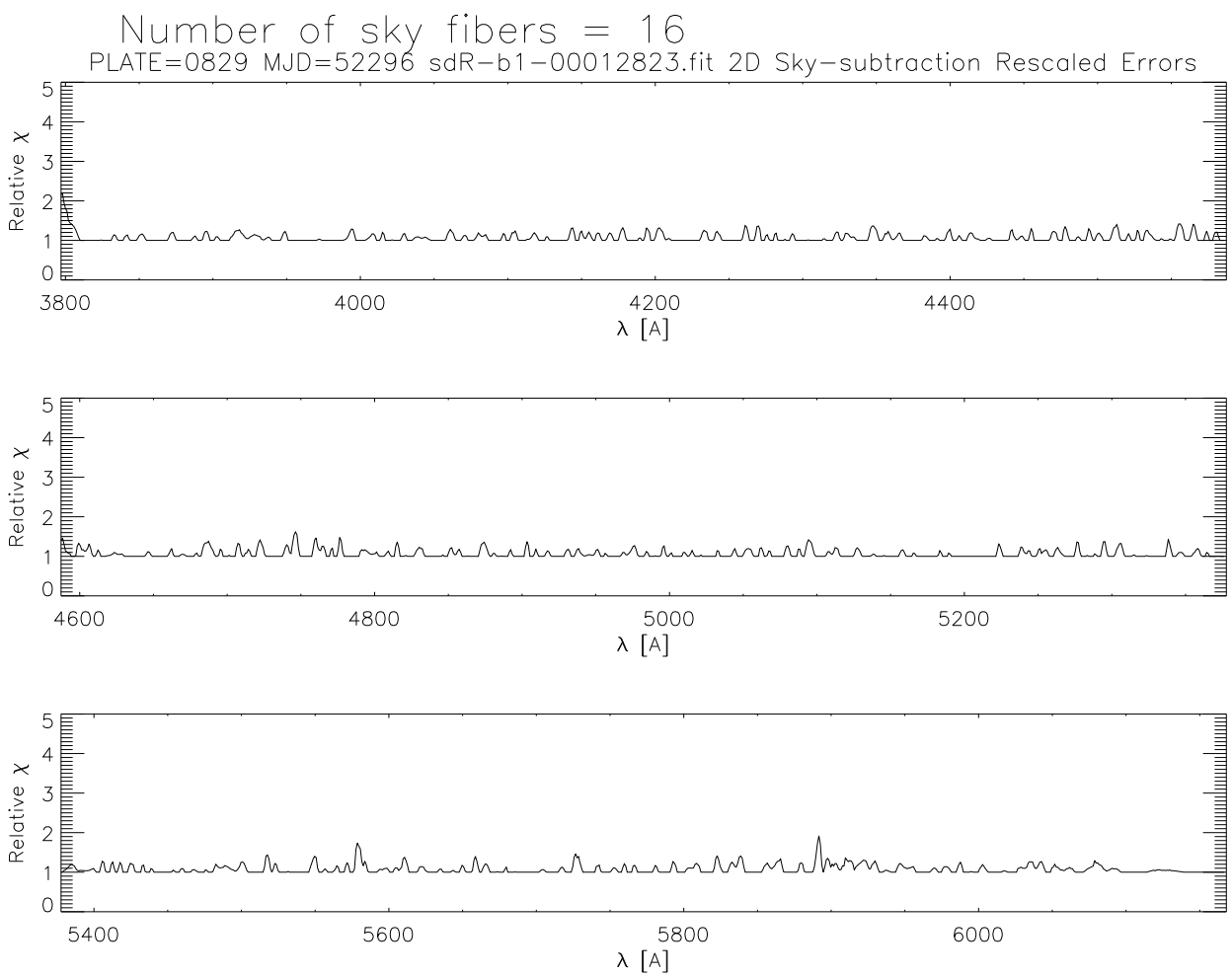

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

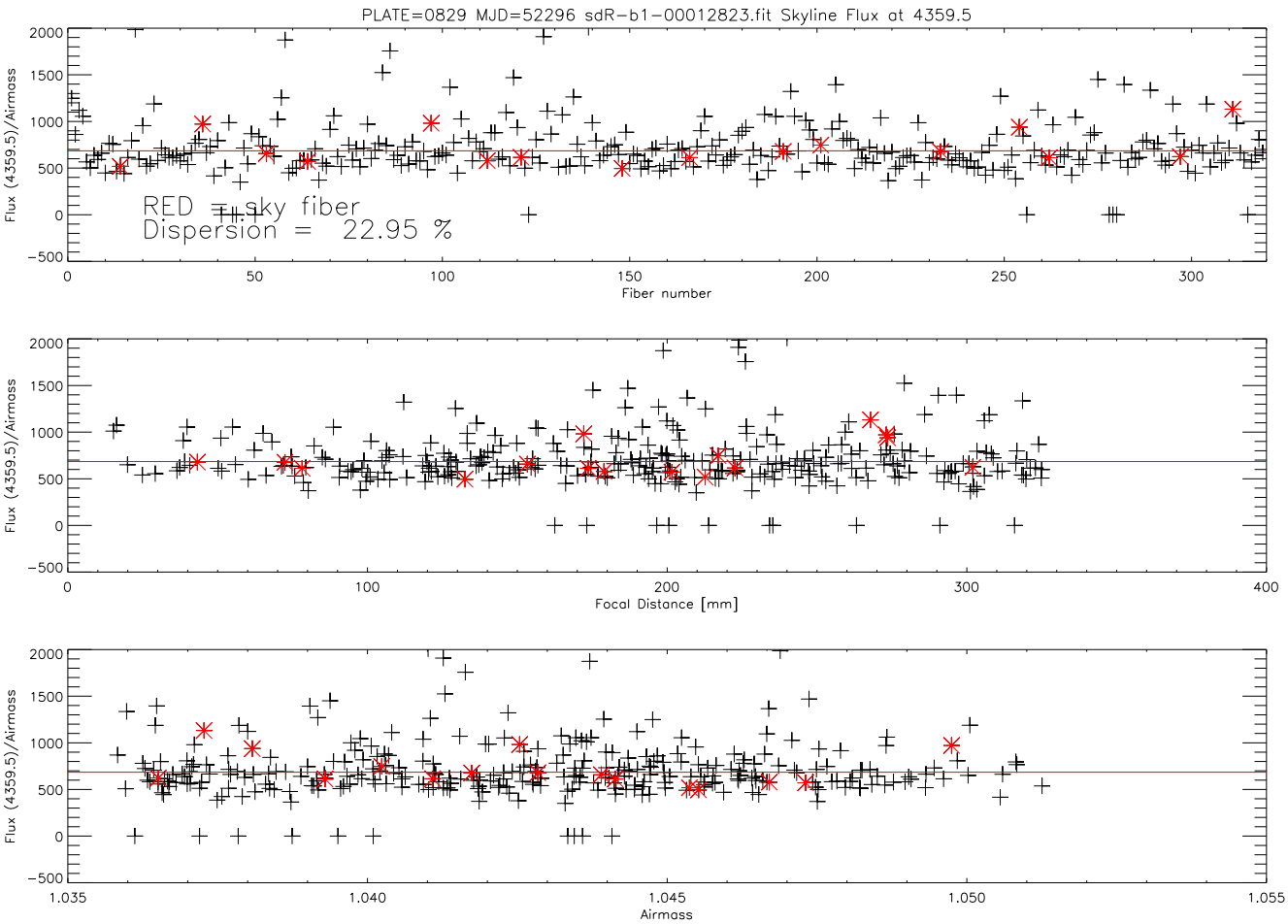

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b1-00012823.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

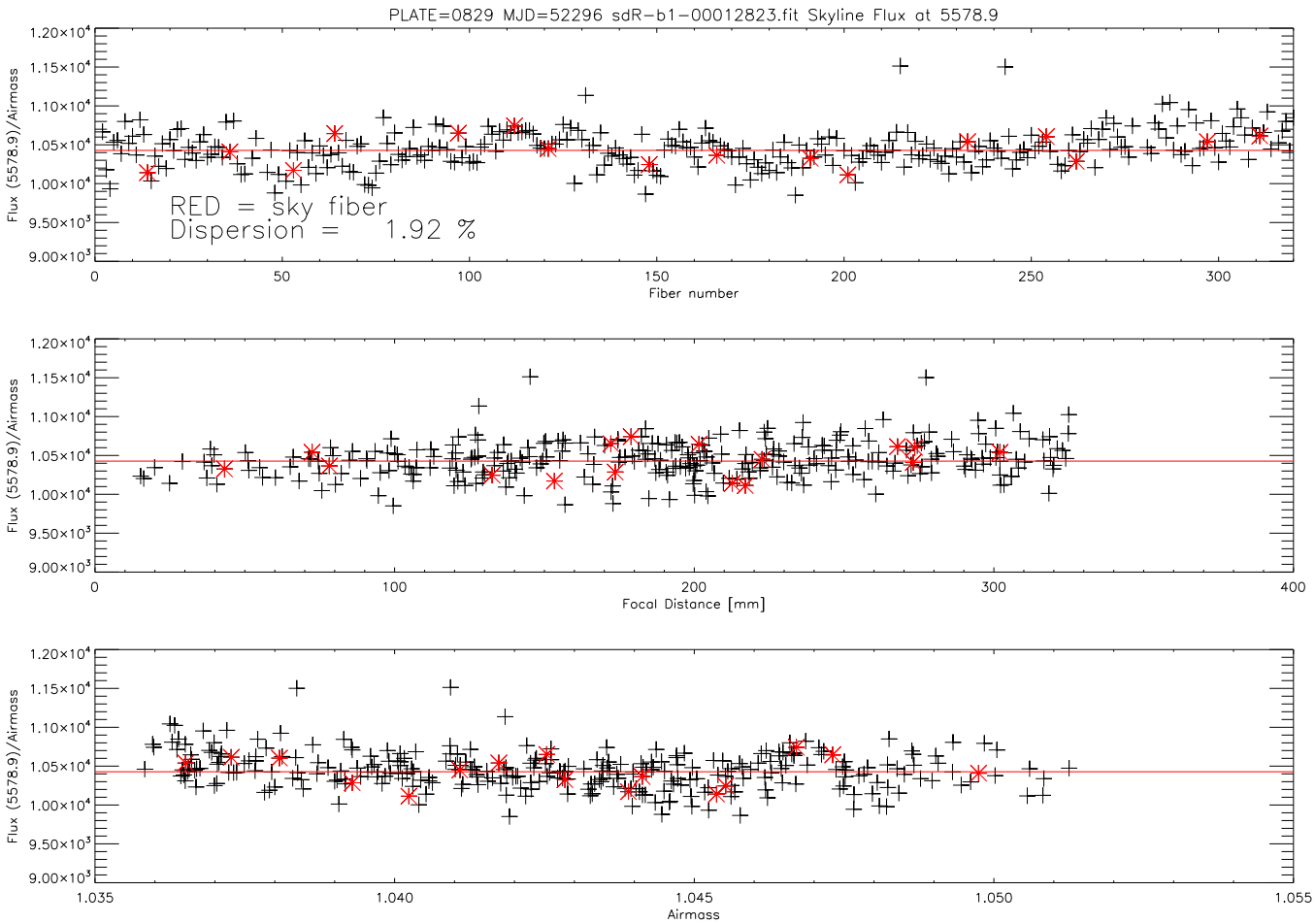

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

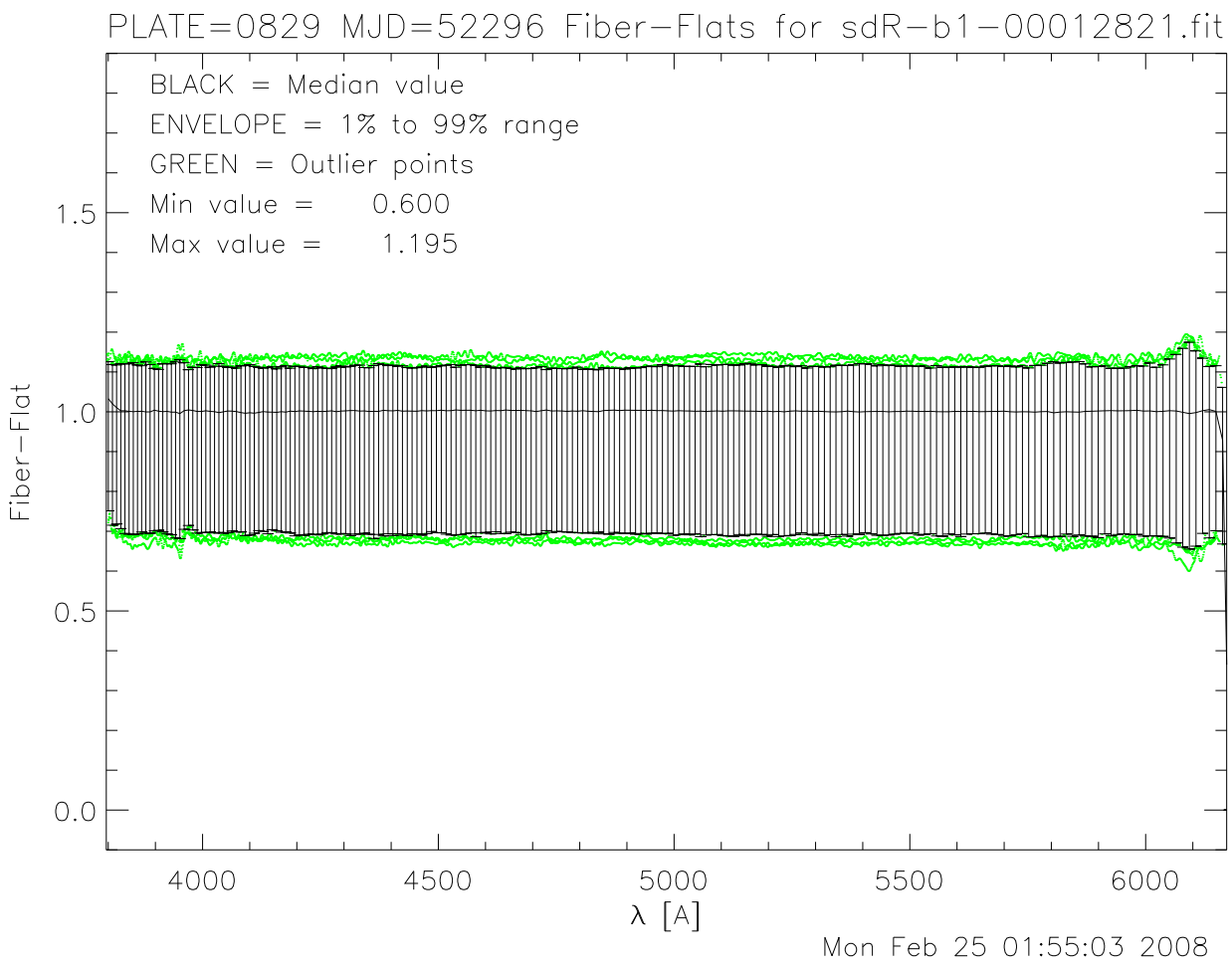

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

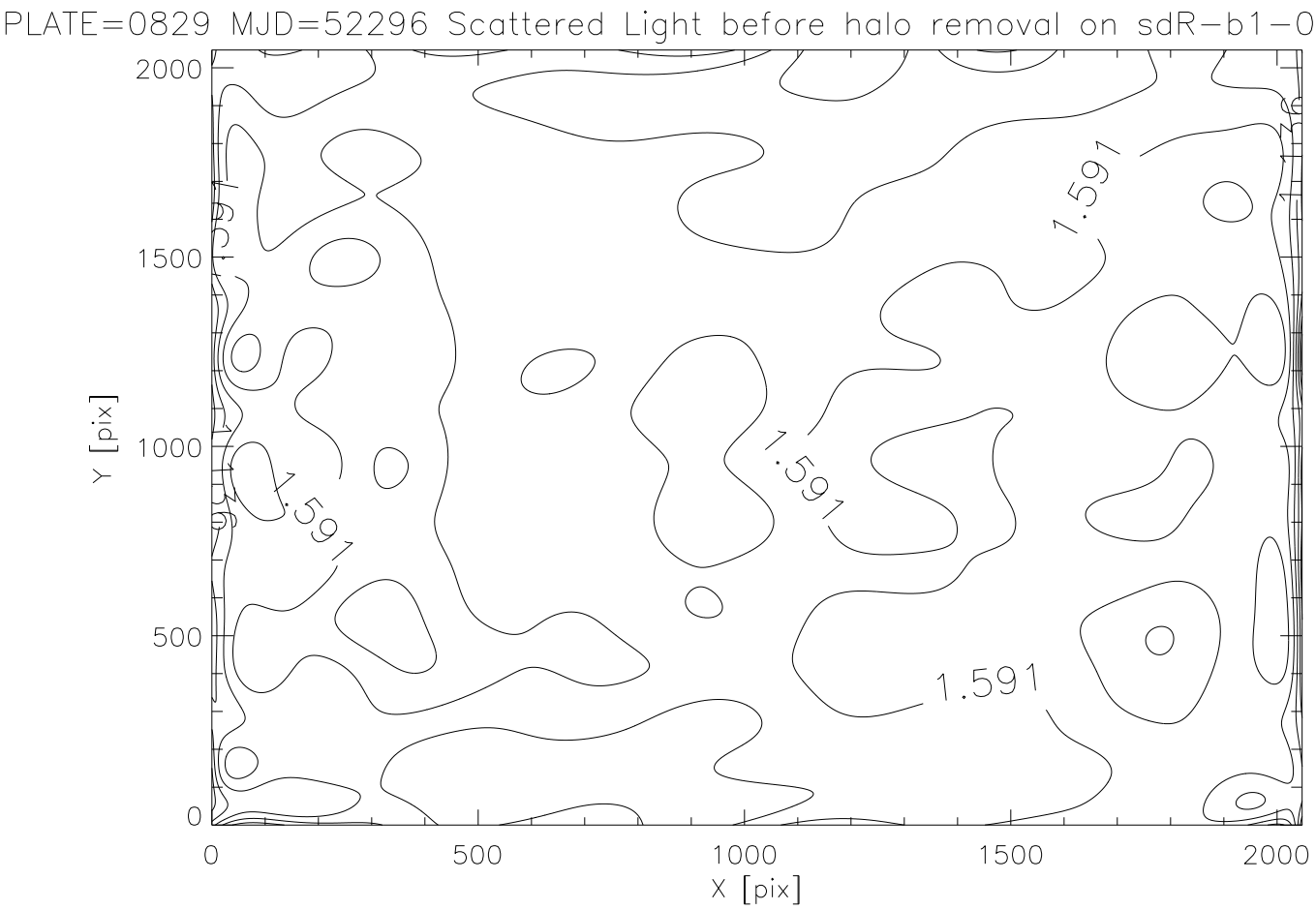

PLATE=0829 MJD=52296 sdR-b1-00012823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

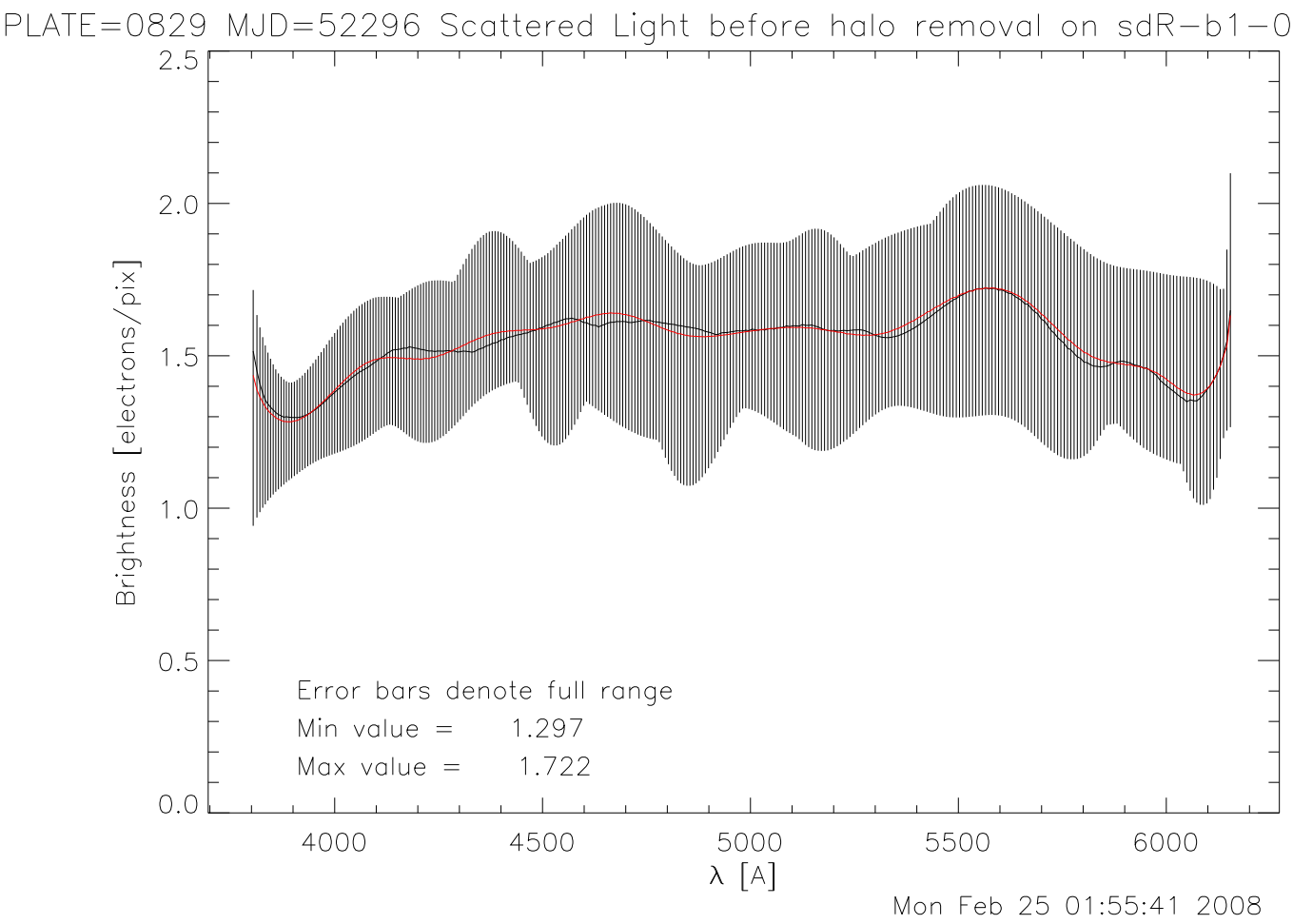

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b1-00012823.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

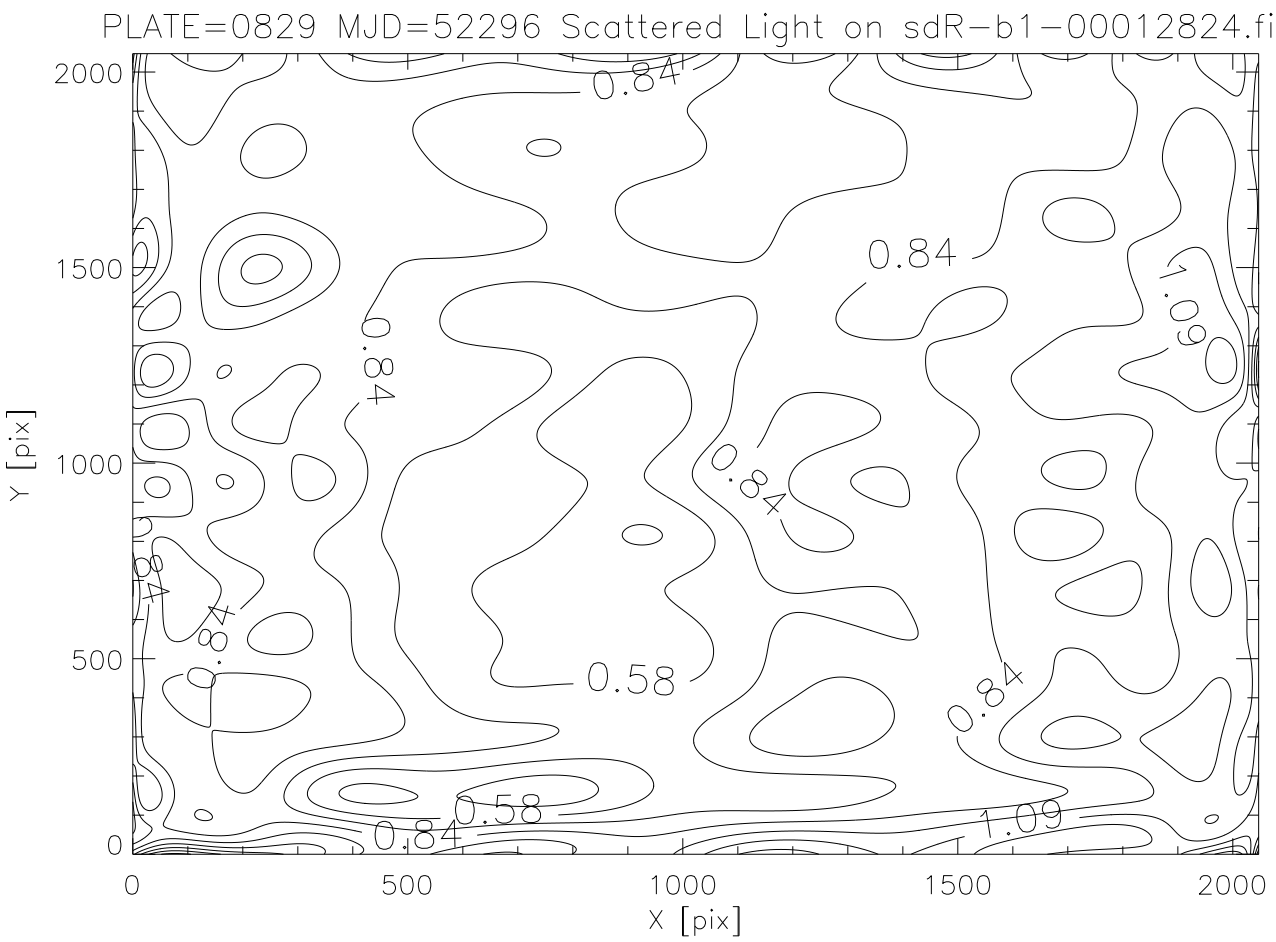

PLATE=0829 MJD=52296 sdR-b1-00012823.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 22.95 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

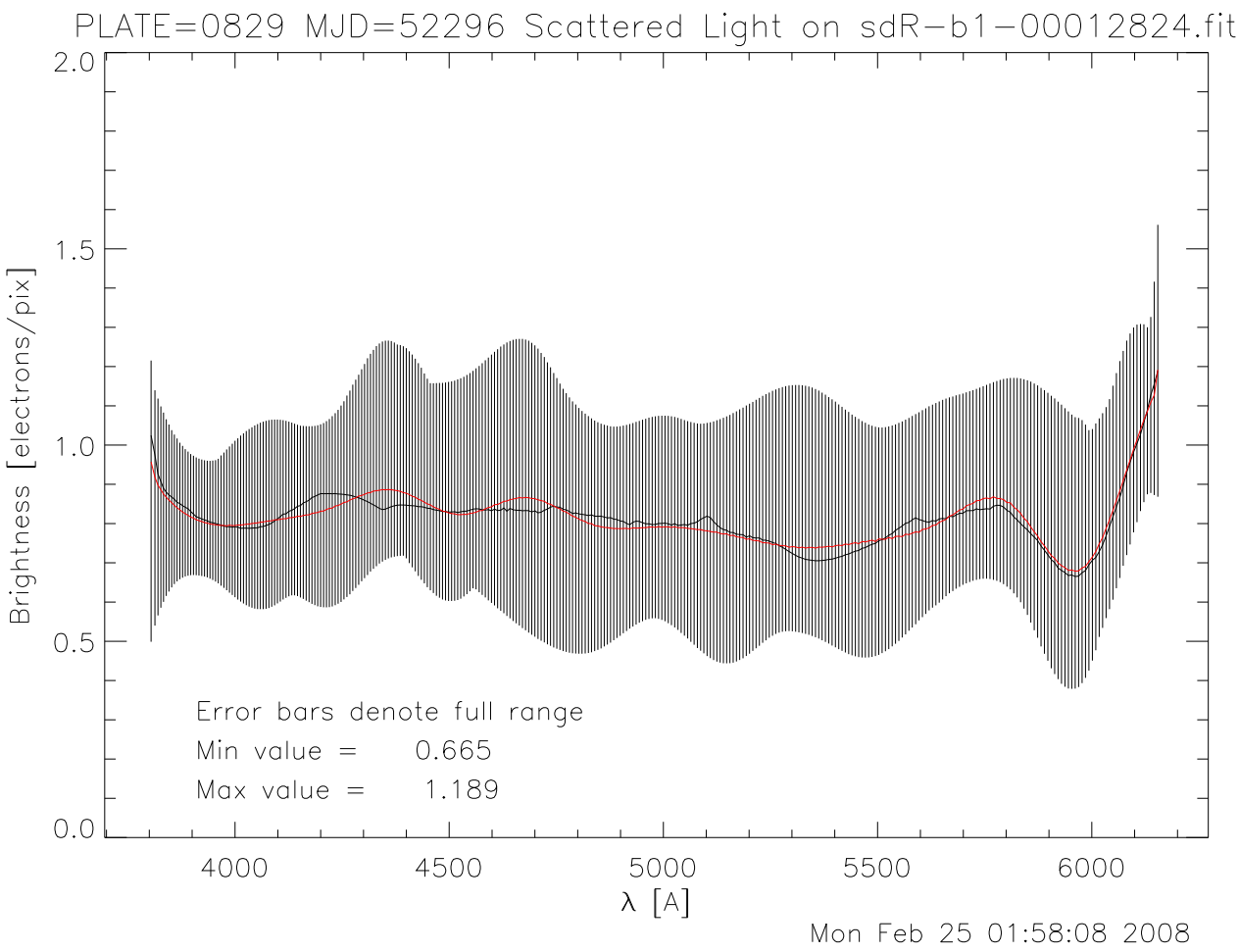

PLATE=0829 MJD=52296 sdR-b1-00012823.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Focal Distance [mm]
Airmass

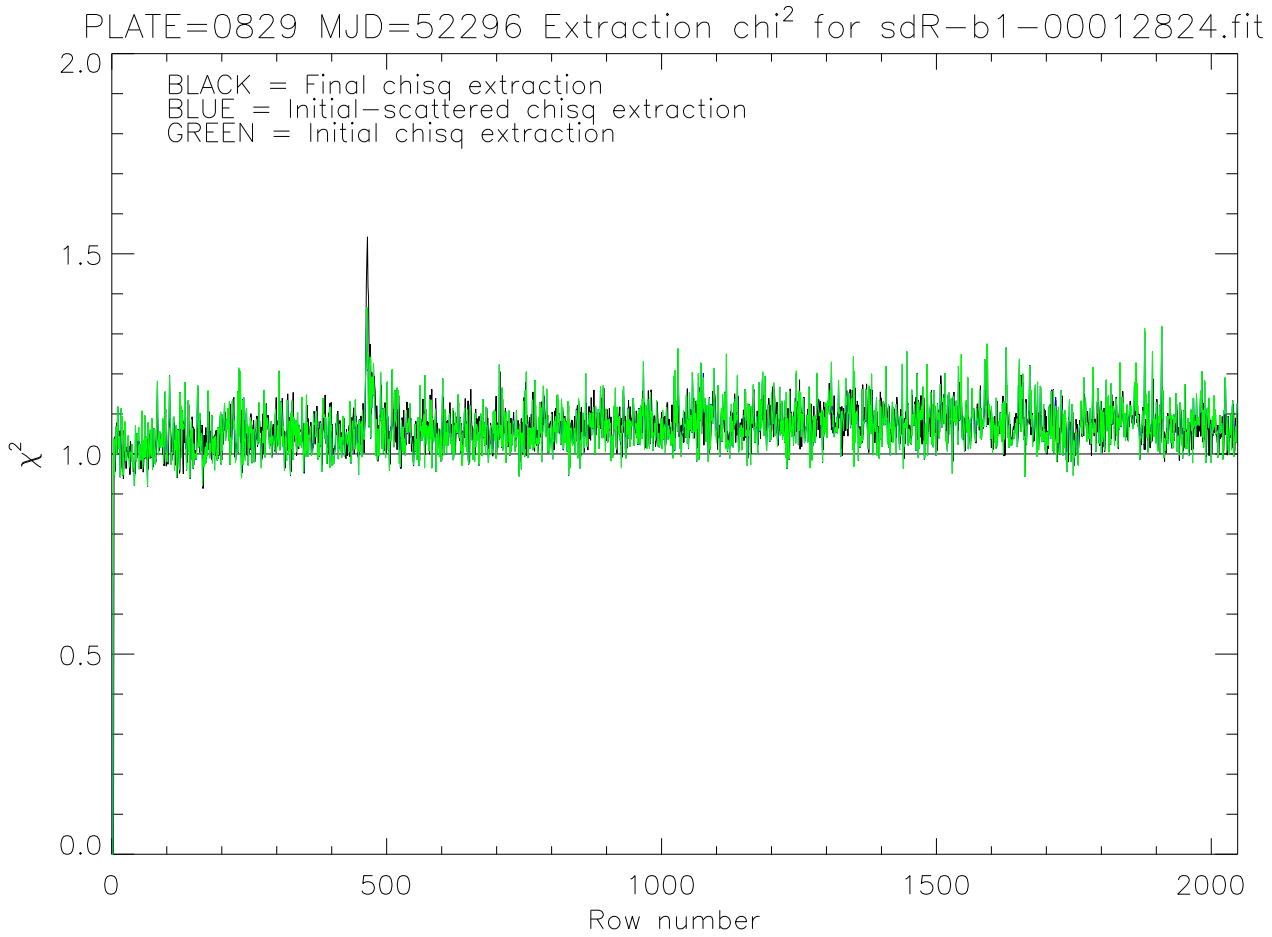

PLATE=0829 MJD=52296 Fiber-Flats for sdR-b1-00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.600
Max value = 1.195
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:55:03 2008

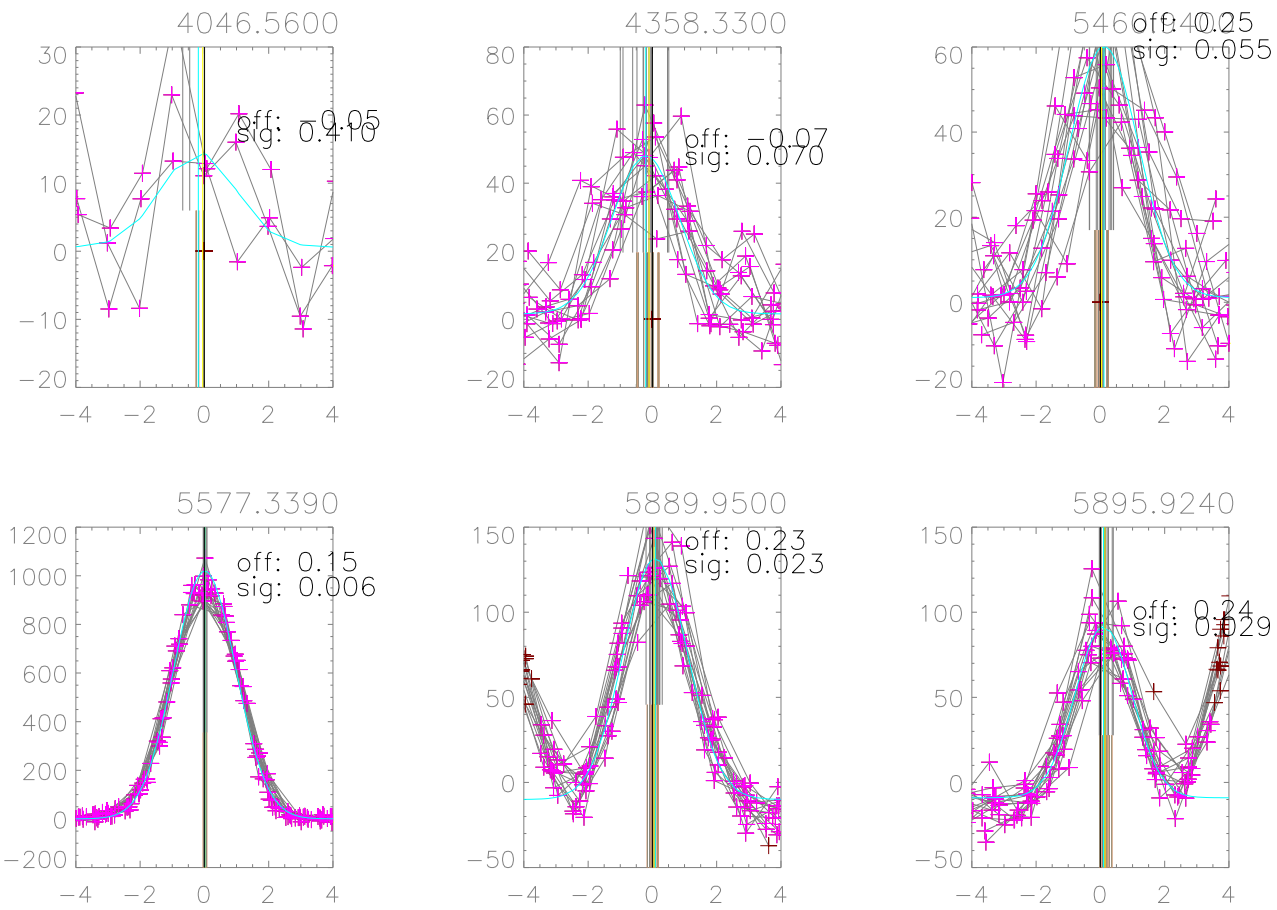

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR−b1−00012824.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.591
1.591
1.591
1.591

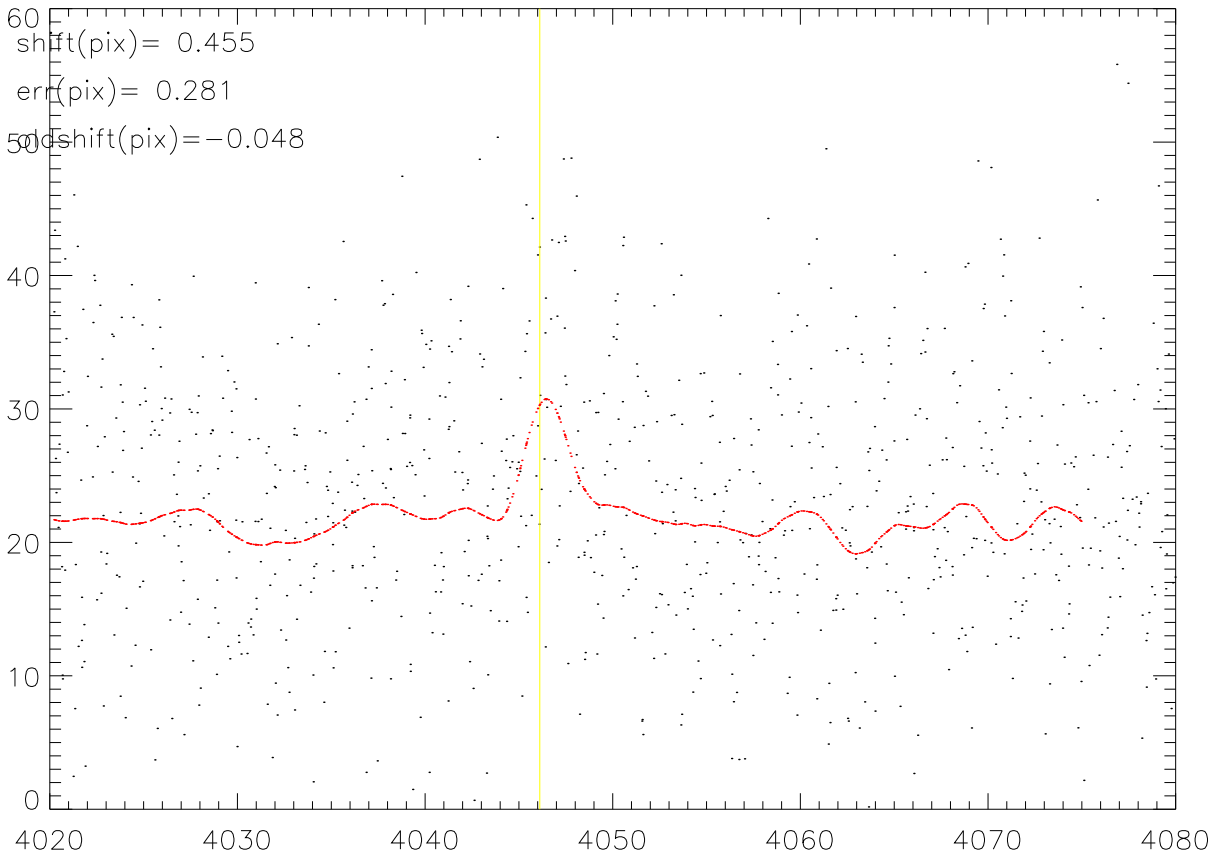

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-b1-00012824.f
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.297
Max value = 1.722
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:55:41 2008

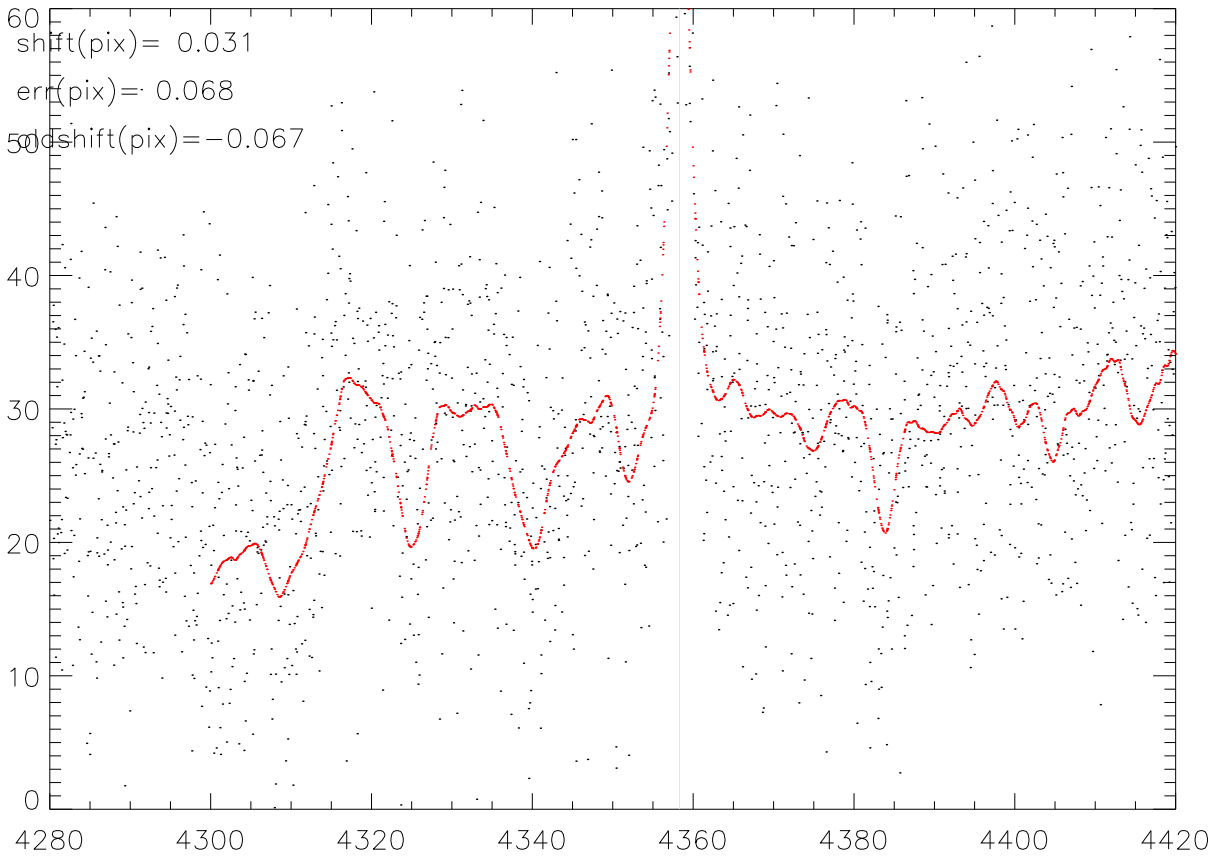

PLATE=0829 MJD=52296 Scattered Light on sdR-b1-00012824.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0.84
0.58
1.09

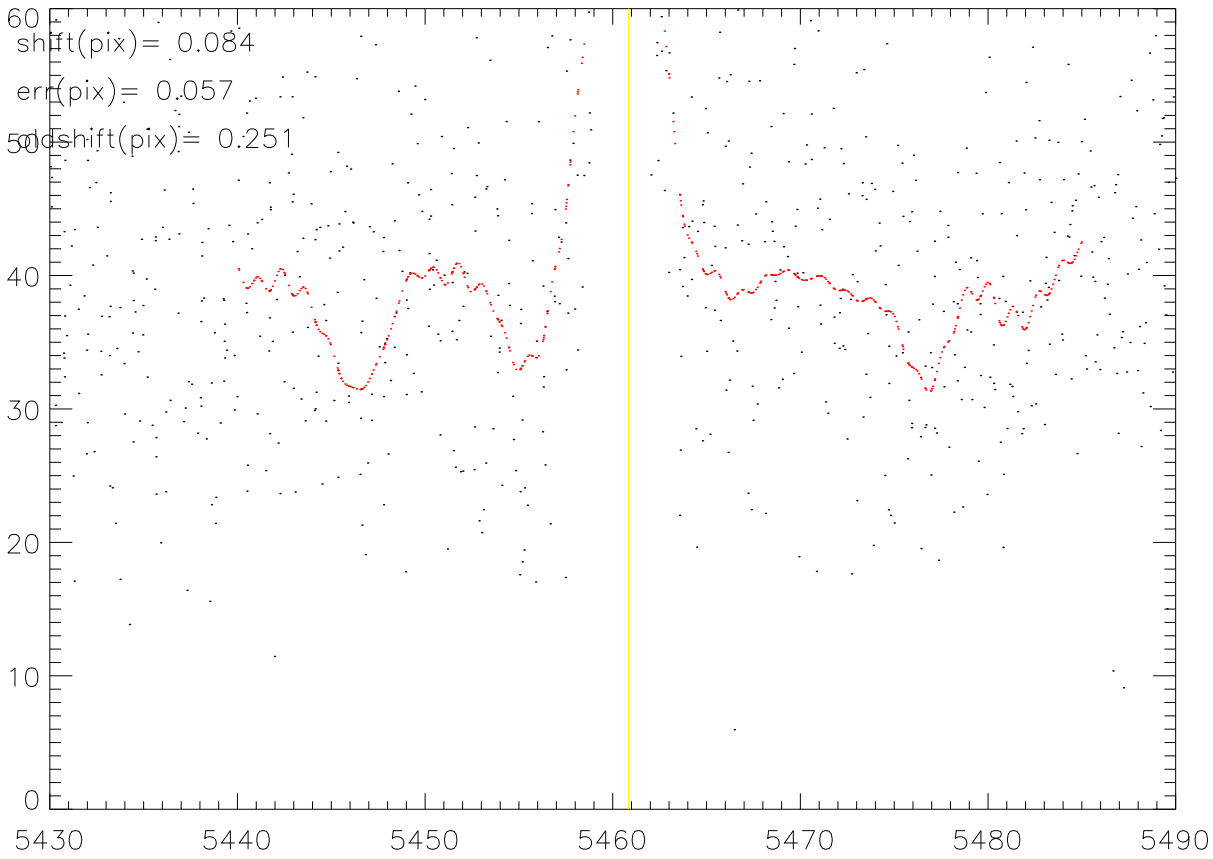

PLATE=0829 MJD=52296 Scattered Light on sdR-b1-00012824.fit
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.665
Max value = 1.189
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 01:58:08 2008

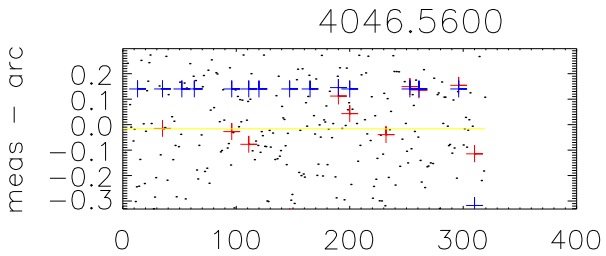

PLATE=0829 MJD=52296 Extraction chi^2 for sdR-b1-00012824.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

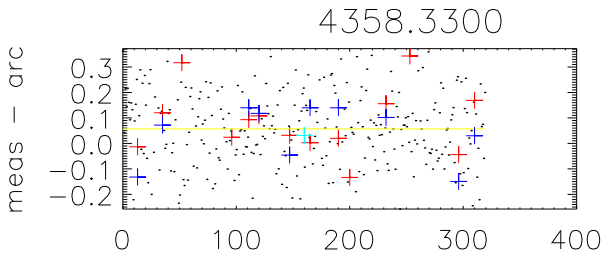

4046.5600
off: −0.05
sig: 0.410
4358.3300
off: −0.07
sig: 0.070
5460.7400
off: 0.25
sig: 0.055
5577.3390
off: 0.15
sig: 0.006
5889.9500
off: 0.23
sig: 0.023
5895.9240
off: 0.24
sig: 0.029

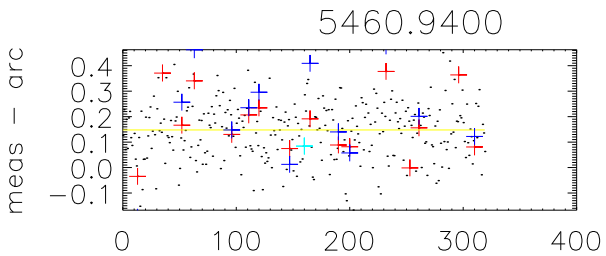

shift(pix)= 0.455
err(pix)= 0.281
oldshift(pix)=−0.048
60
50
40
30
20
10
0
4020
4030
4040
4050
4060
4070
4080

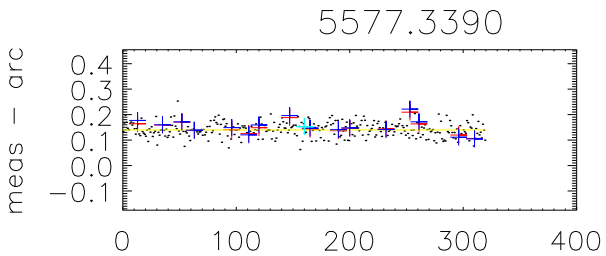

shift(pix)= 0.031
err(pix)= 0.068
oldshift(pix)=−0.067
60
50
40
30
20
10
0
4280
4300
4320
4340
4360
4380
4400
4420

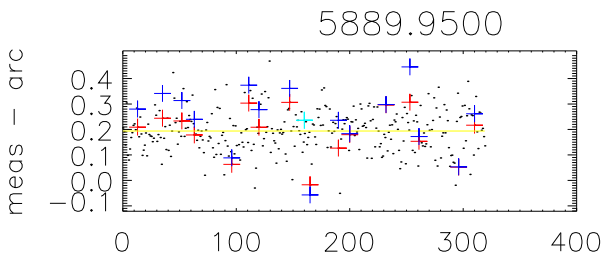

shift(pix)= 0.084
err(pix)= 0.057
oldshift(pix)= 0.251
60
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

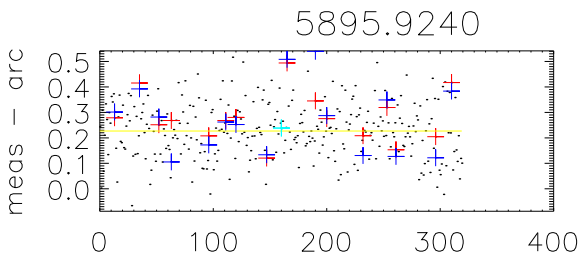

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

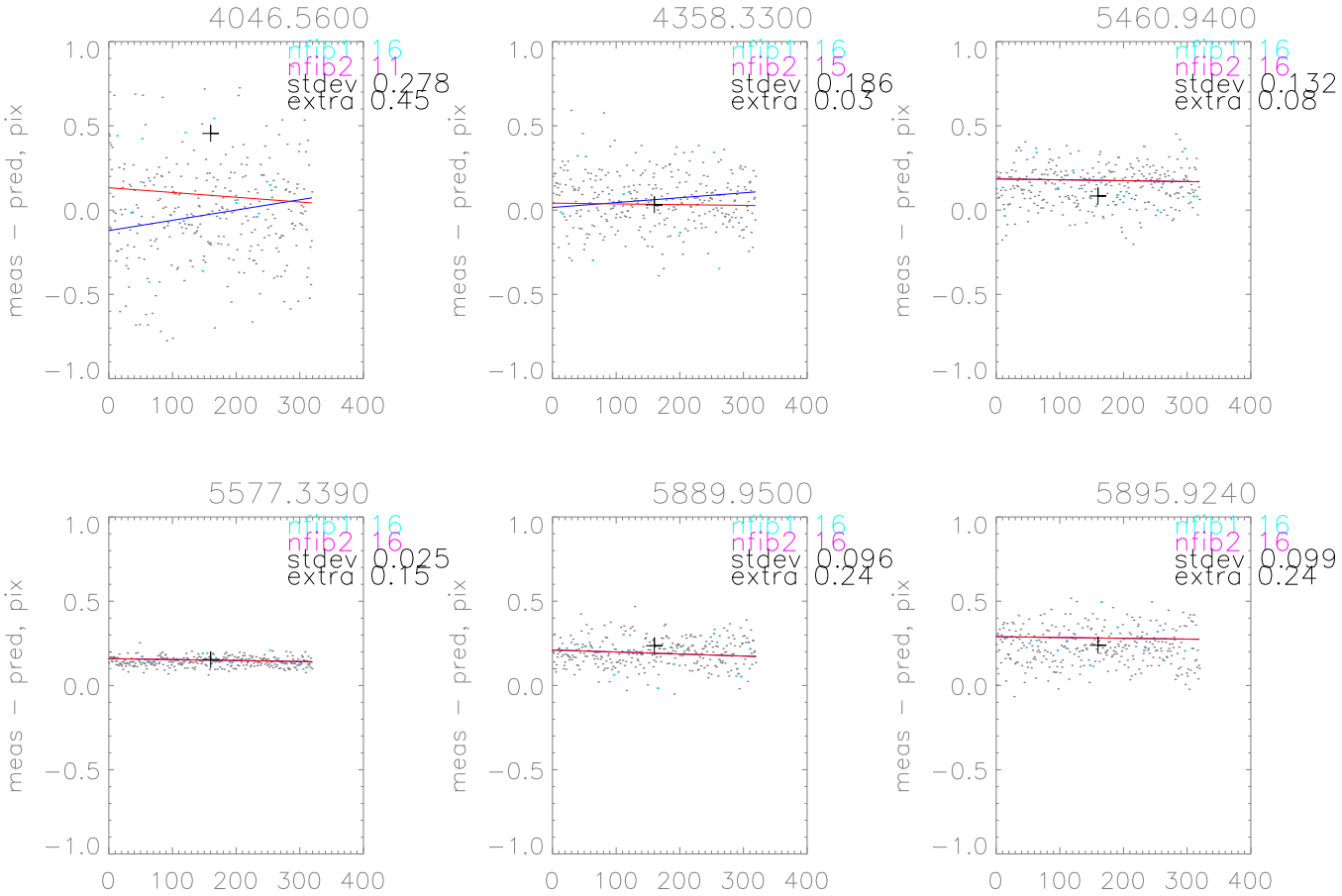

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

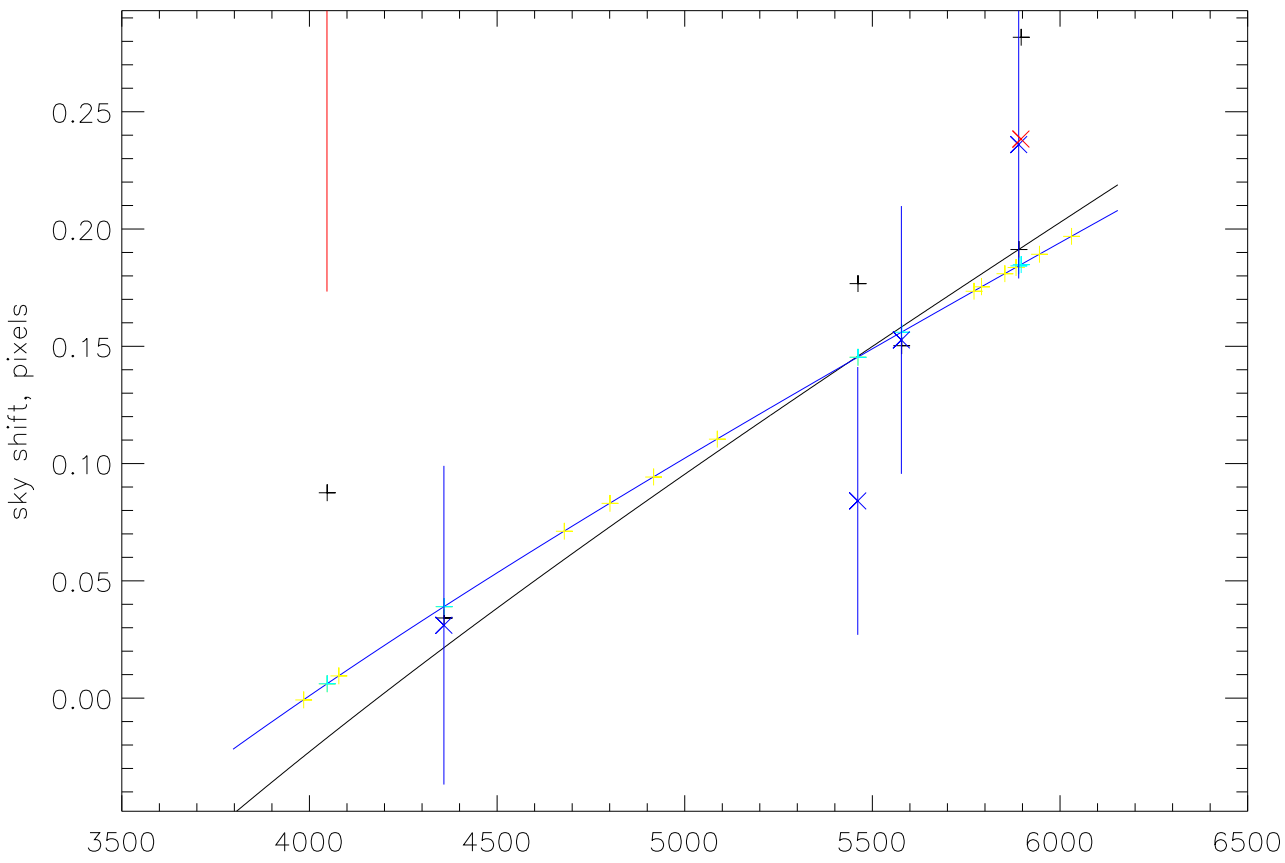

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

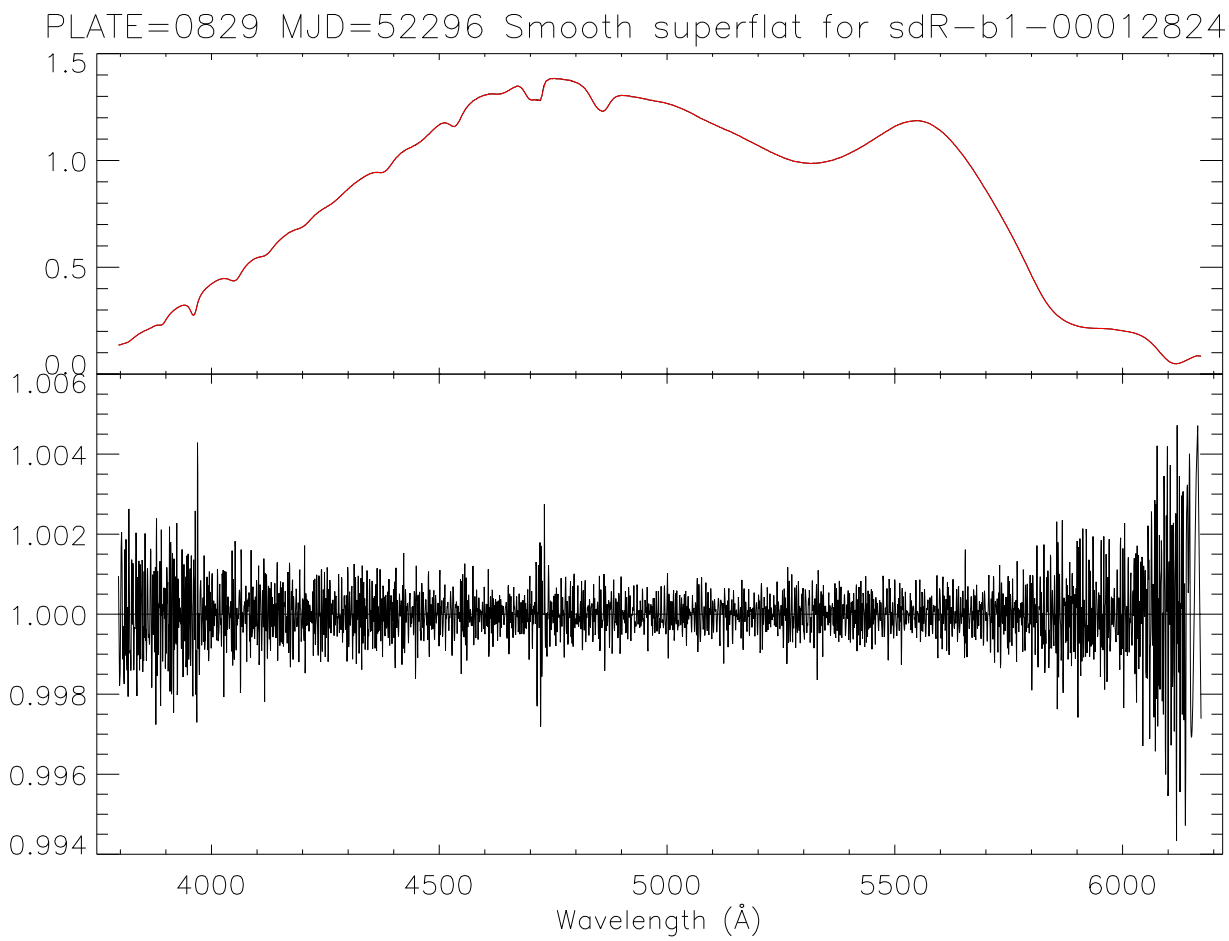

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

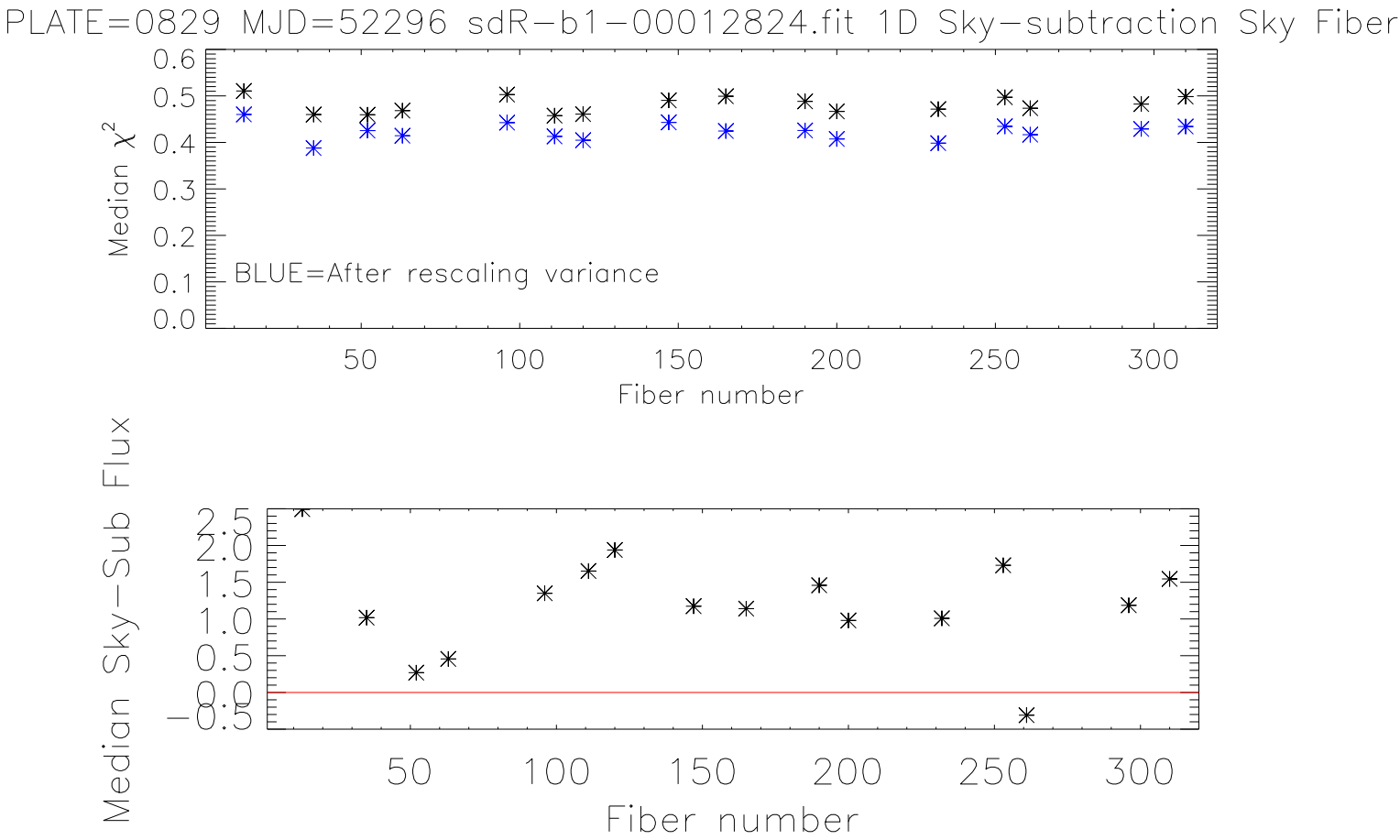

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

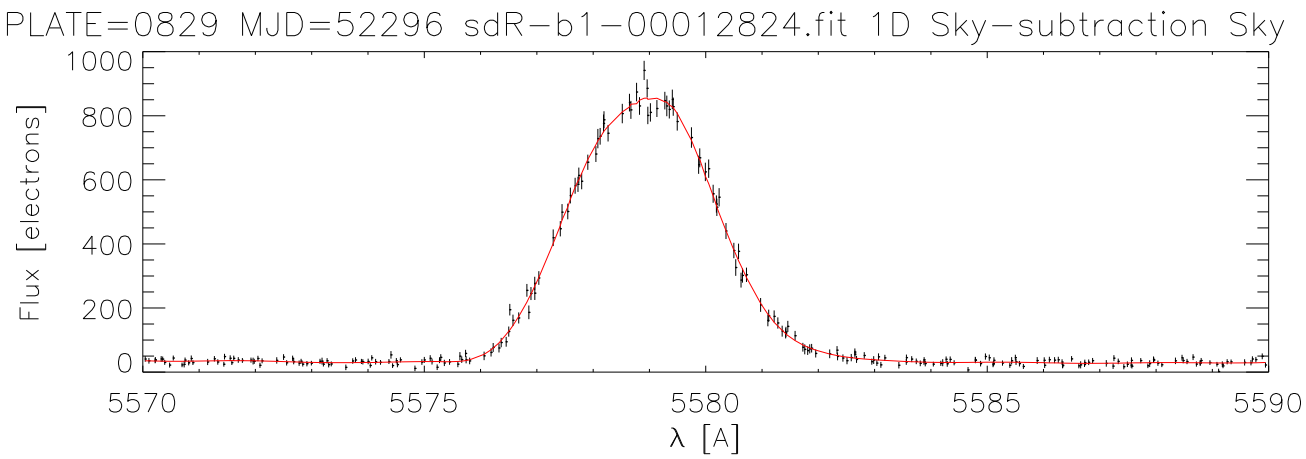

4046.5600
nfib1 16
nfib2 11
stdev 0.278
extra 0.45
4358.3300
nfib1 16
nfib2 15
stdev 0.186
extra 0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.132
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.025
extra 0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.096
extra 0.24
5895.9240
nfib1 16
nfib2 16
stdev 0.099
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

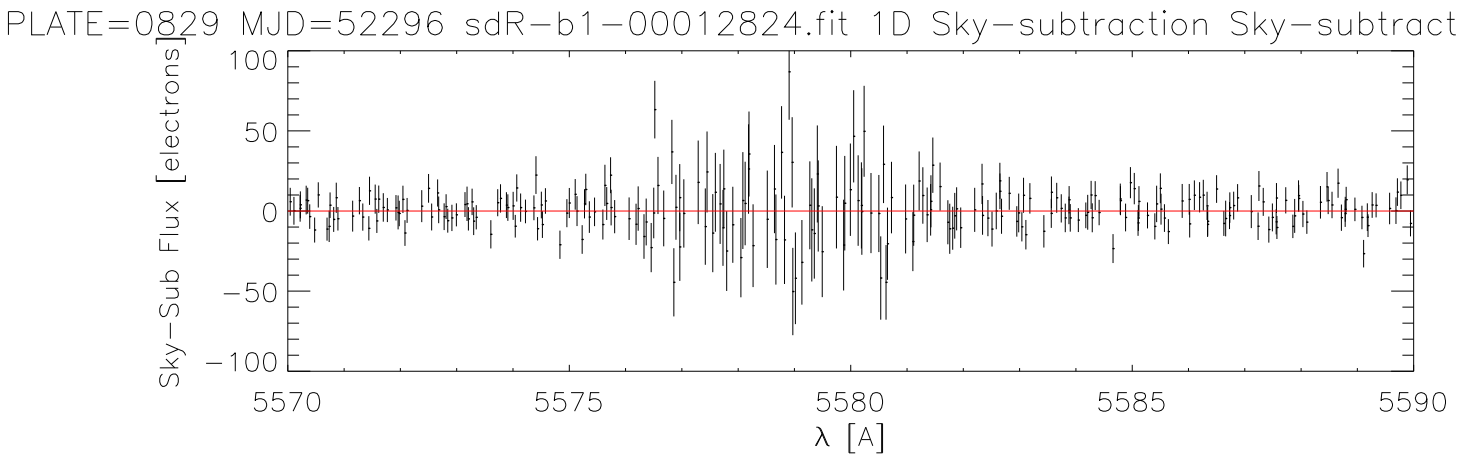

sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
3500
4000
4500
5000
5500
6000
6500

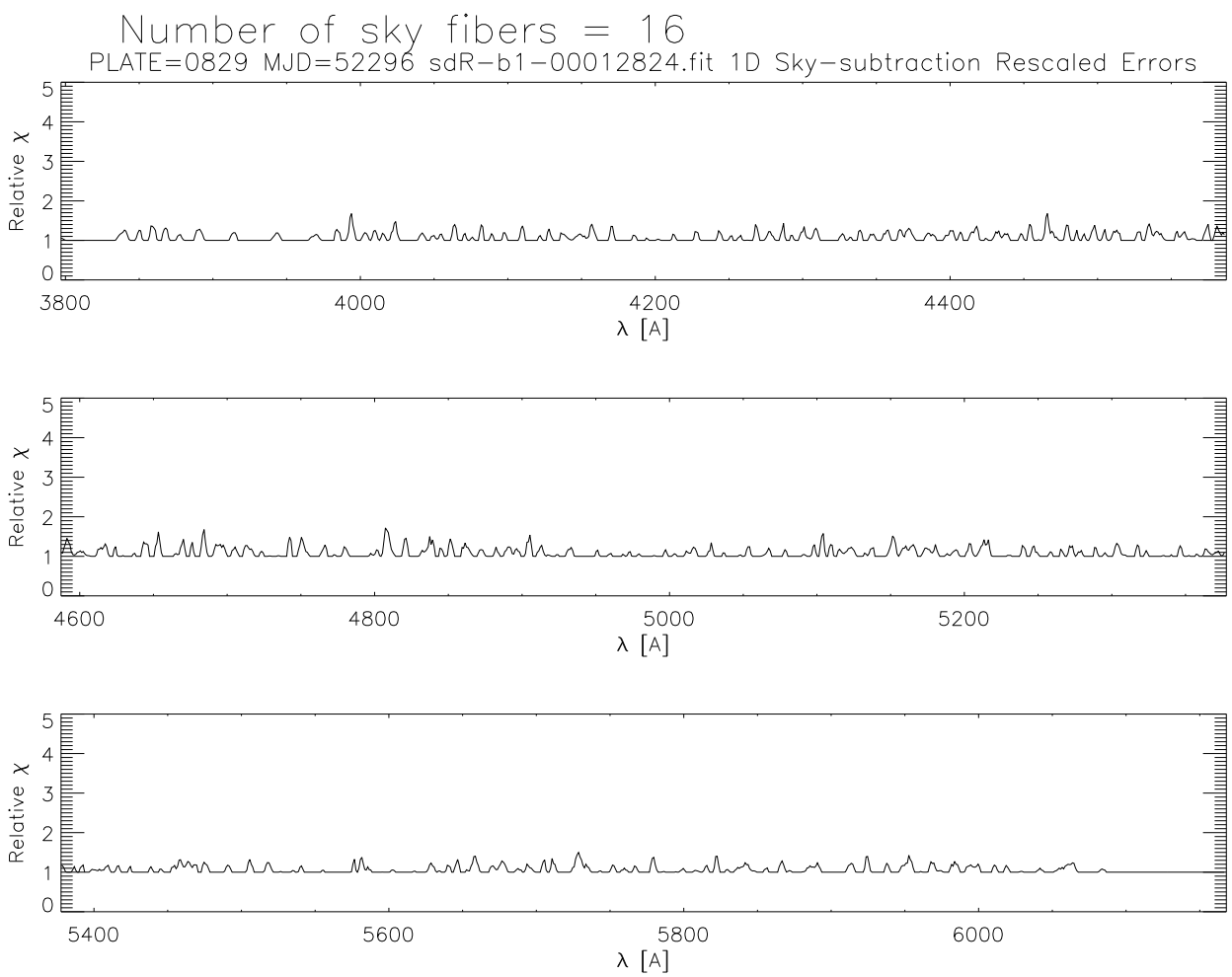
es= 0.0000

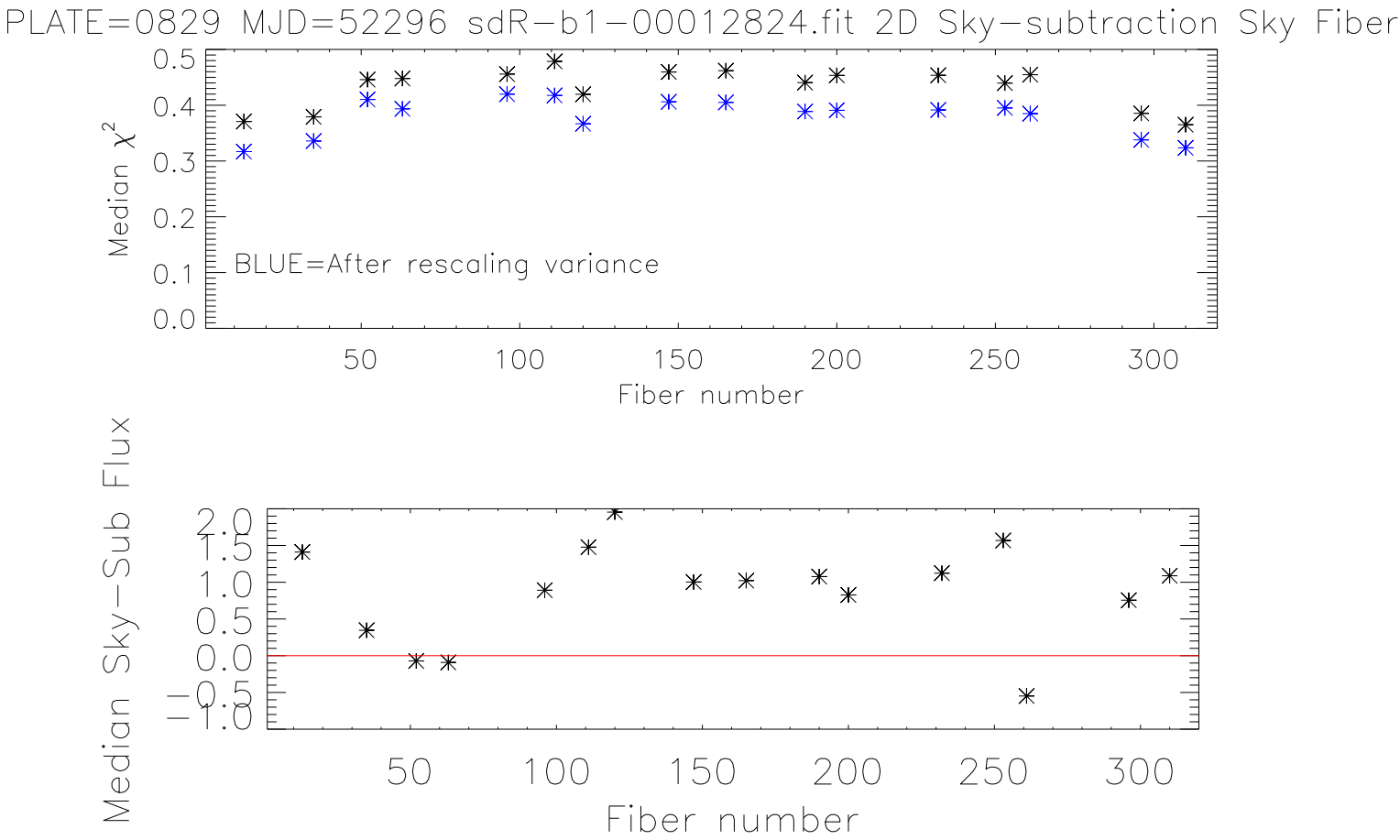

PLATE=0829 MJD=52296 Smooth superflat for sdR-b1-00012824.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

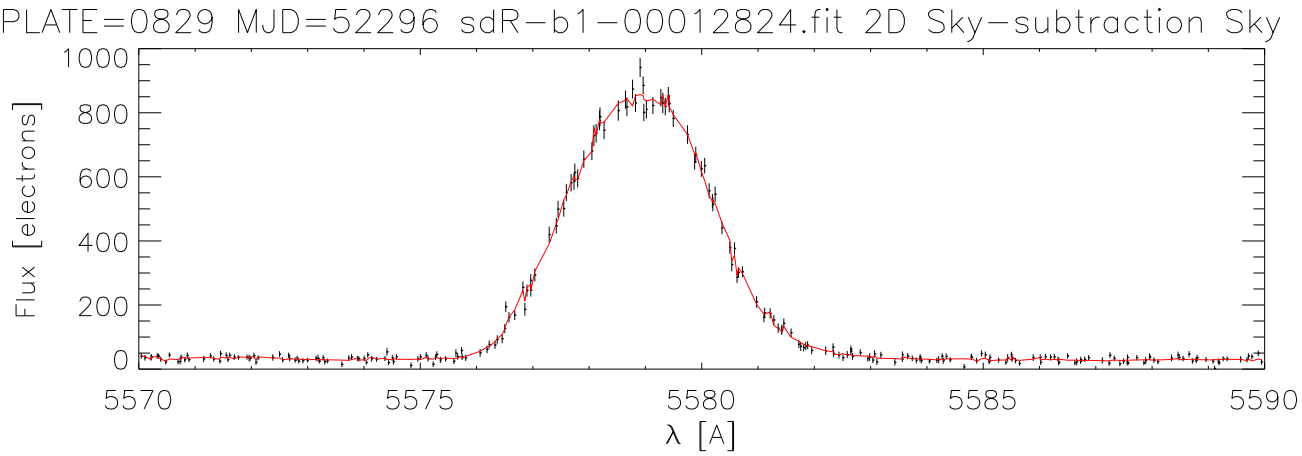

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

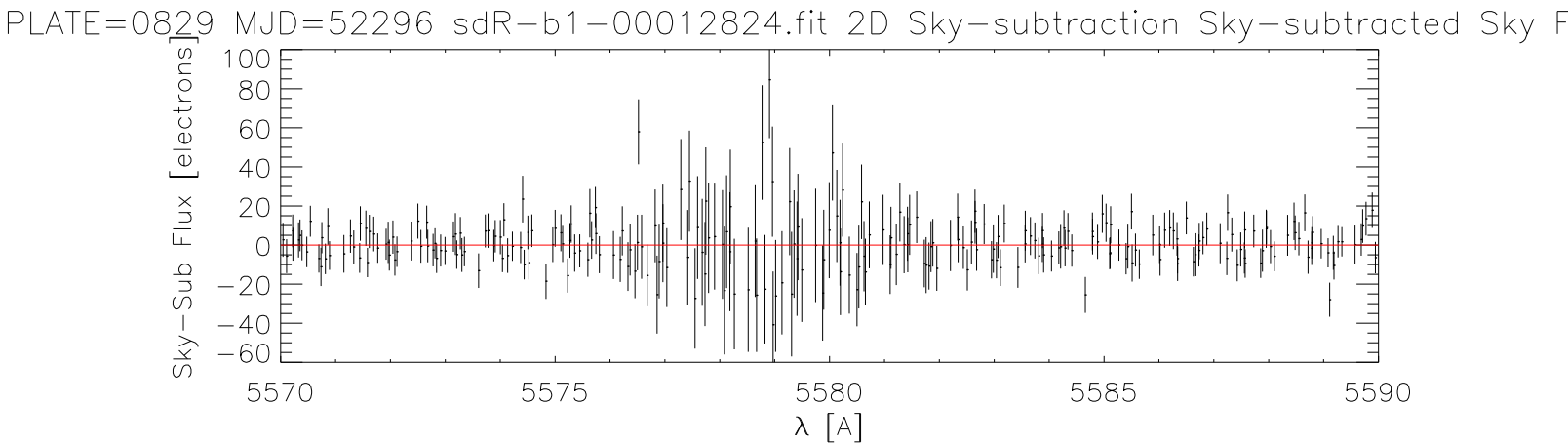

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
5570
5575
5580
5585
5590
λ [A]

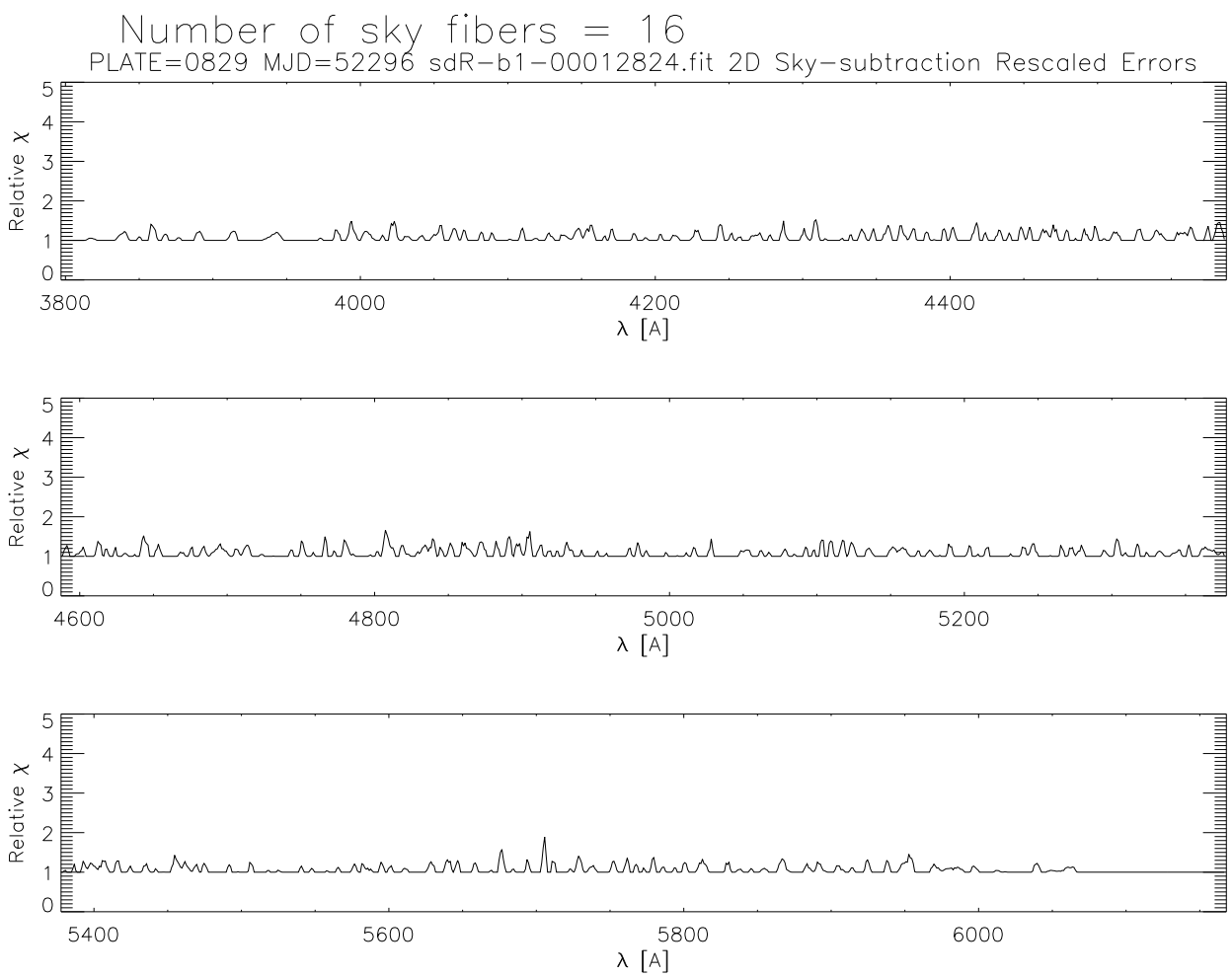

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

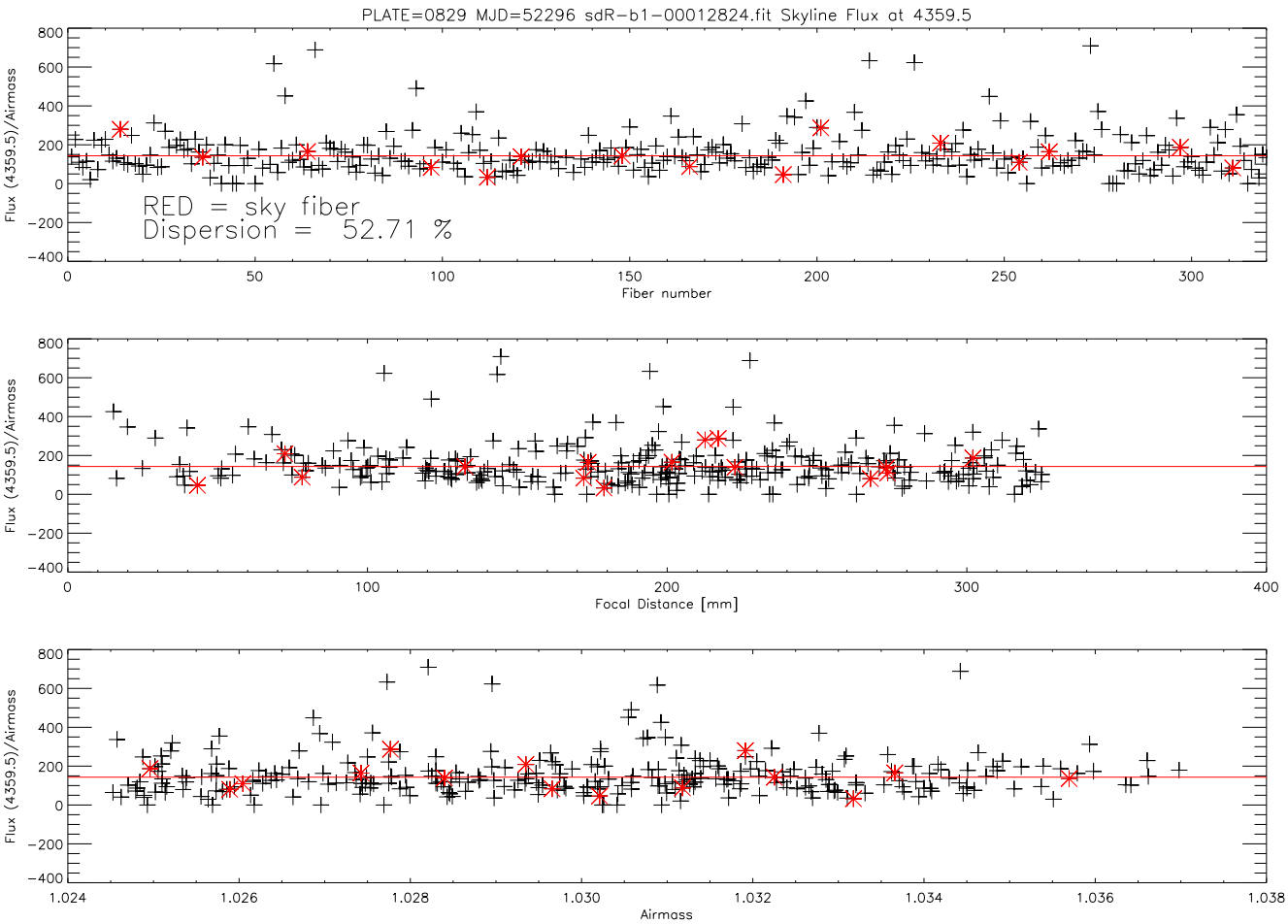

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b1-00012824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

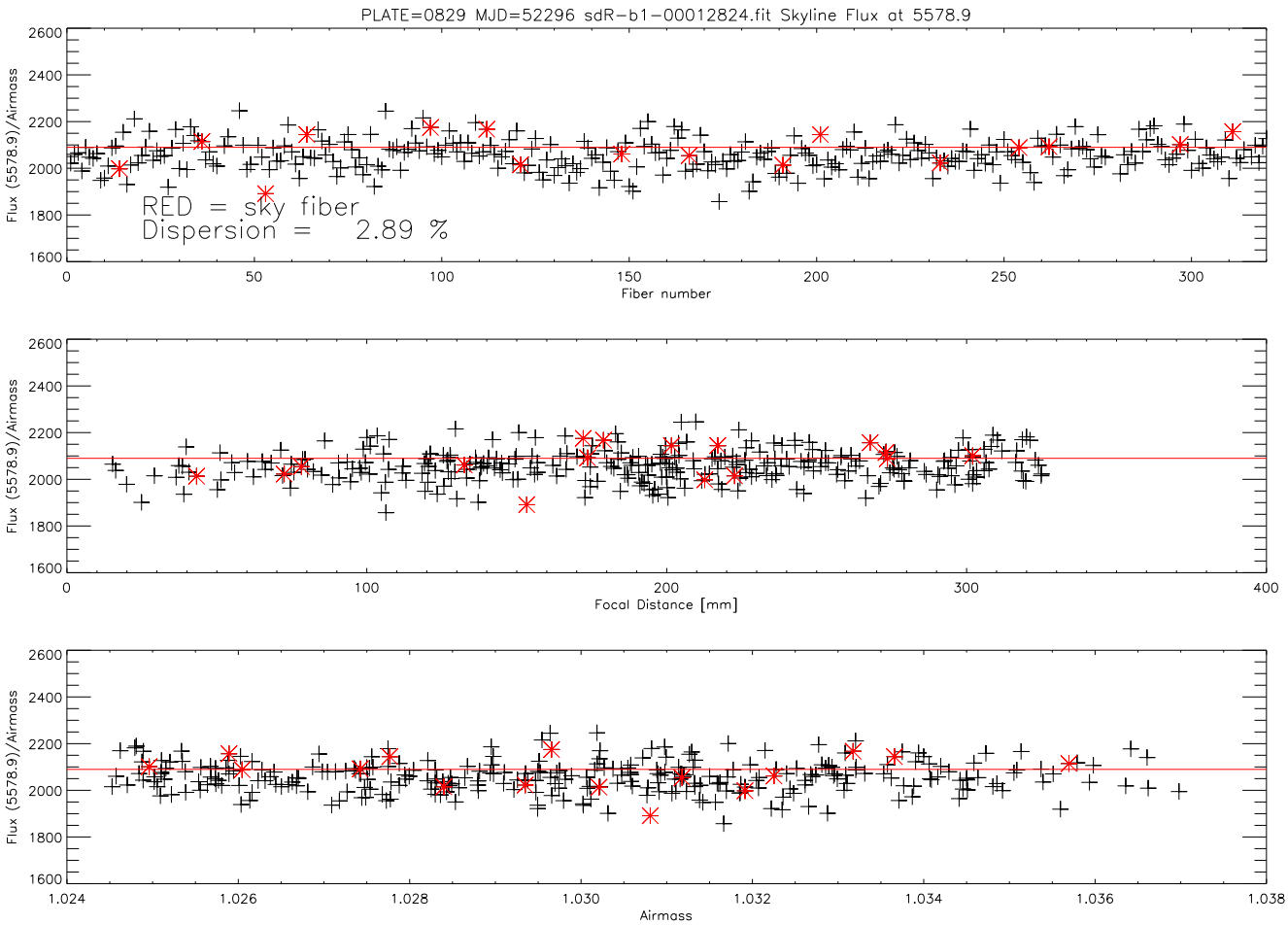

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

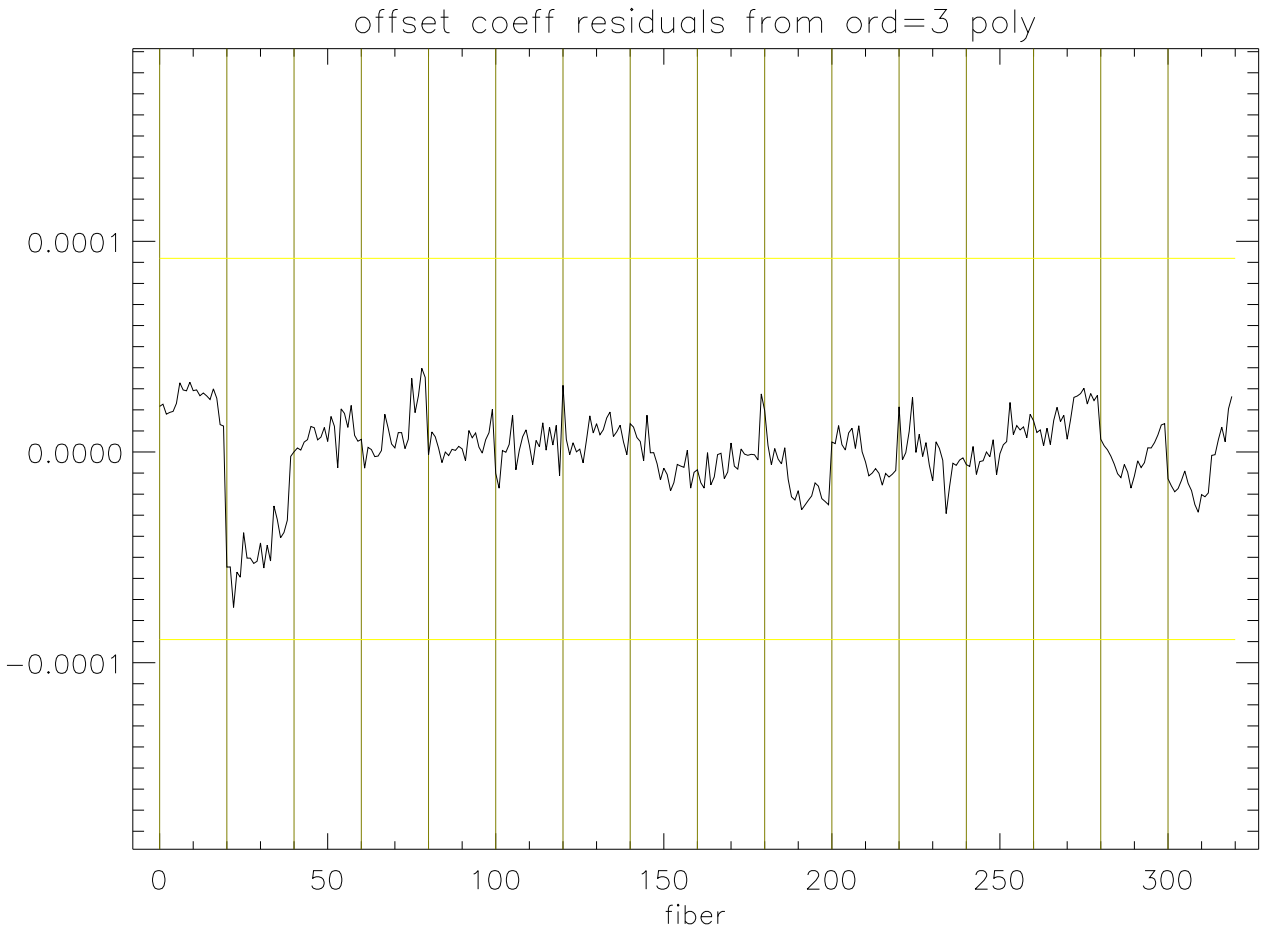

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
5570
5575
5580
5585
5590
λ [A]

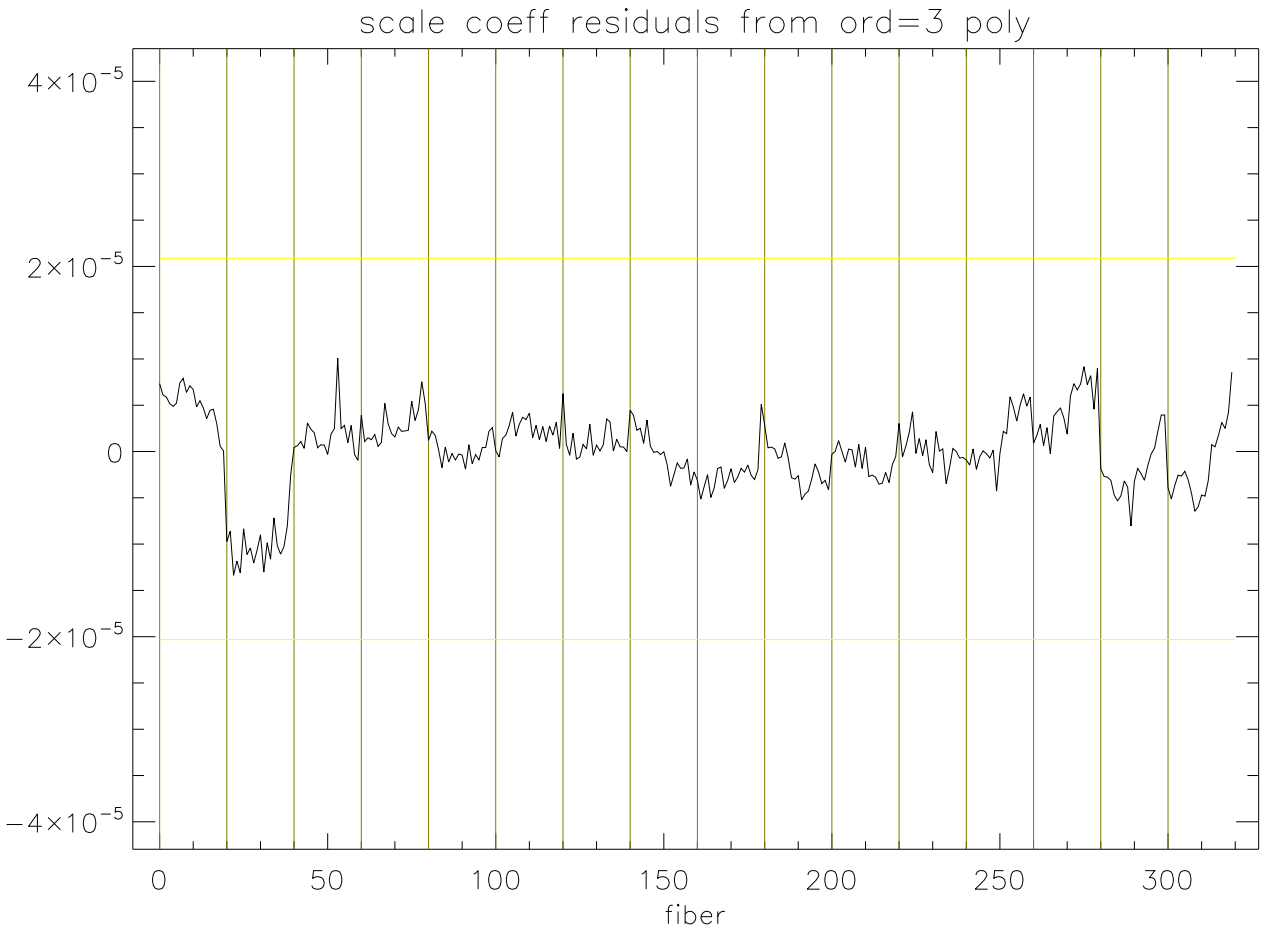

PLATE=0829 MJD=52296 sdR-b1-00012824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
80
60
40
20
0
-20
-40
-60
5570
5575
5580
5585
5590
λ [A]

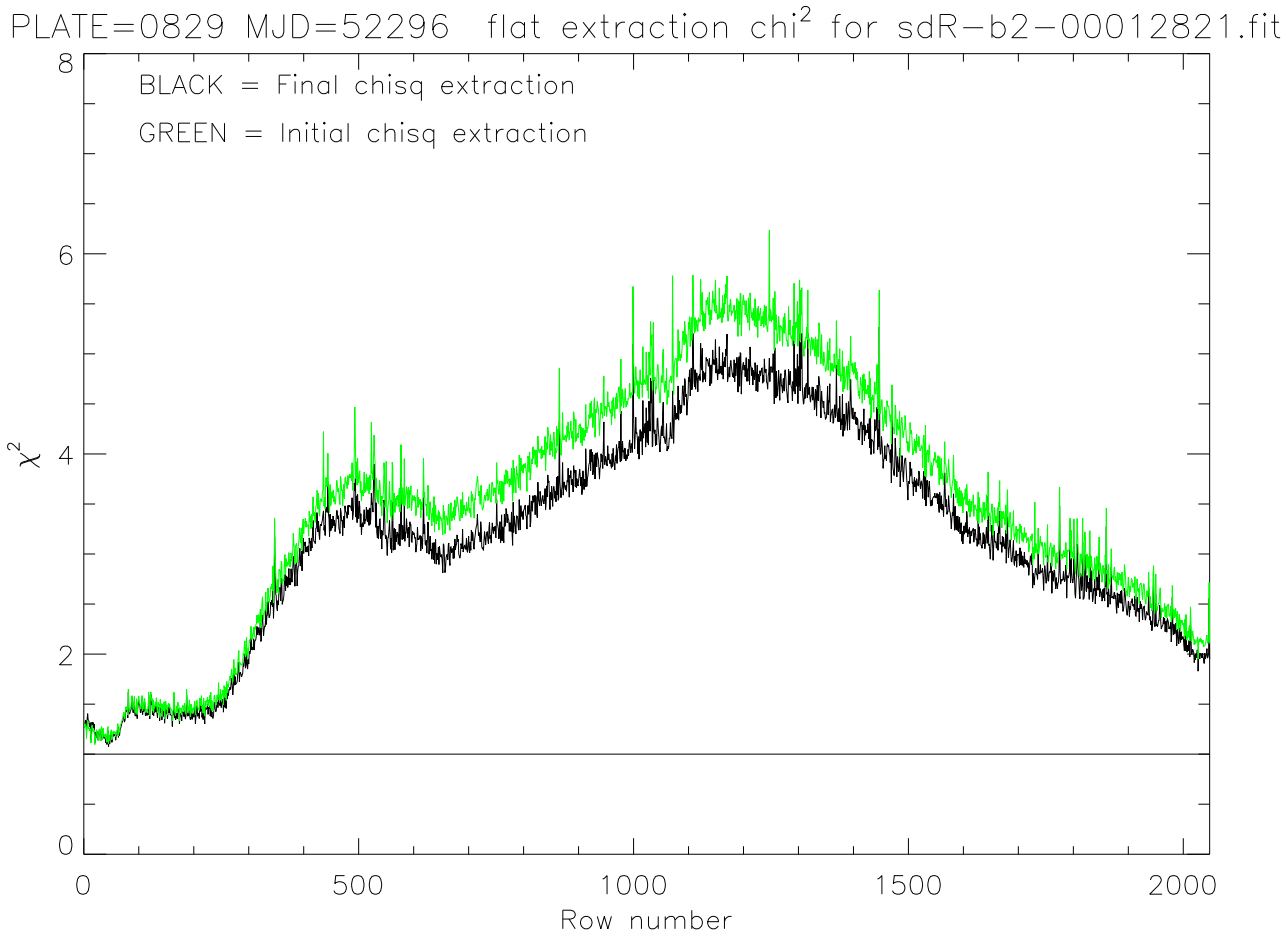

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b1-00012824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

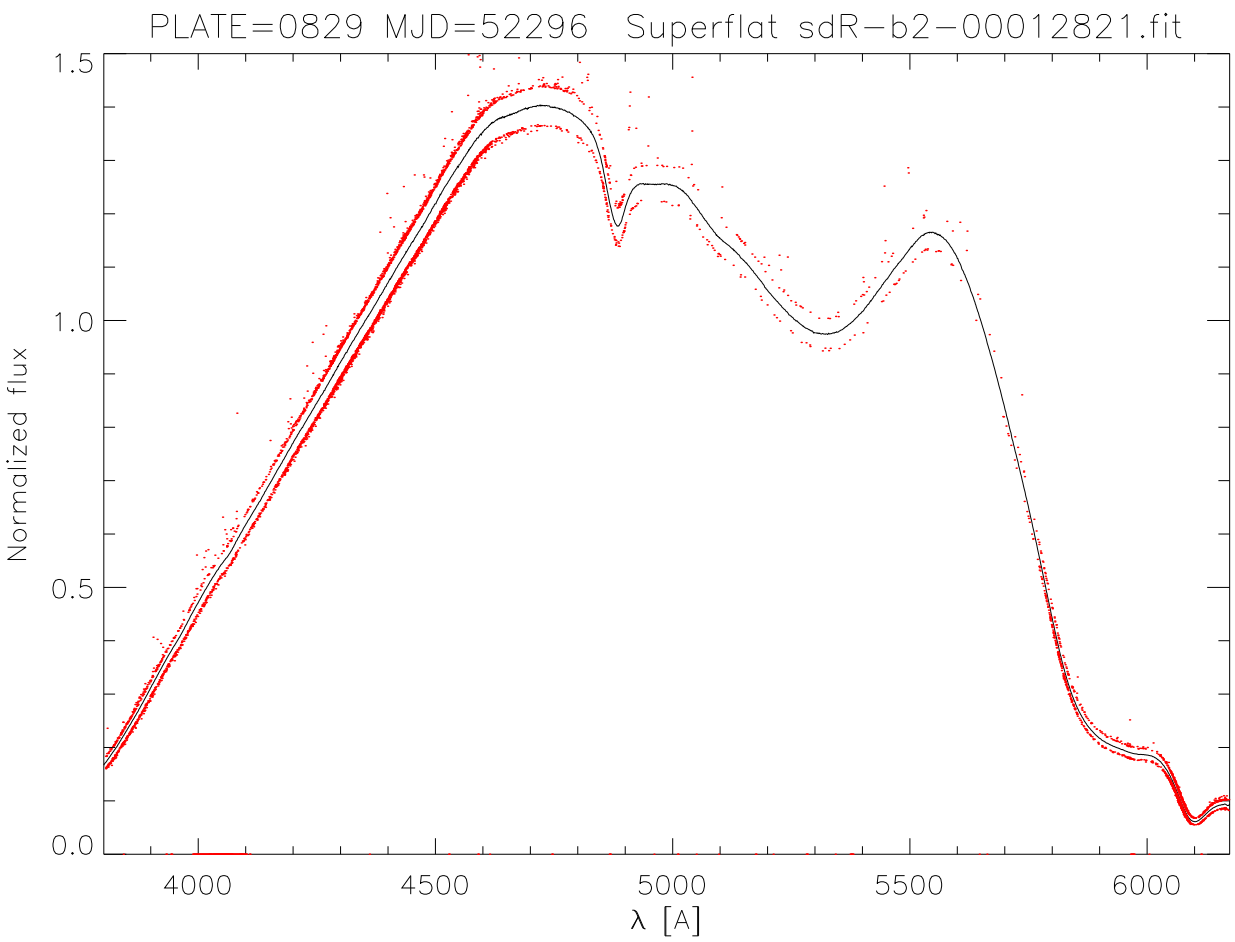

PLATE=0829 MJD=52296 sdR-b1-00012824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 52.71 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

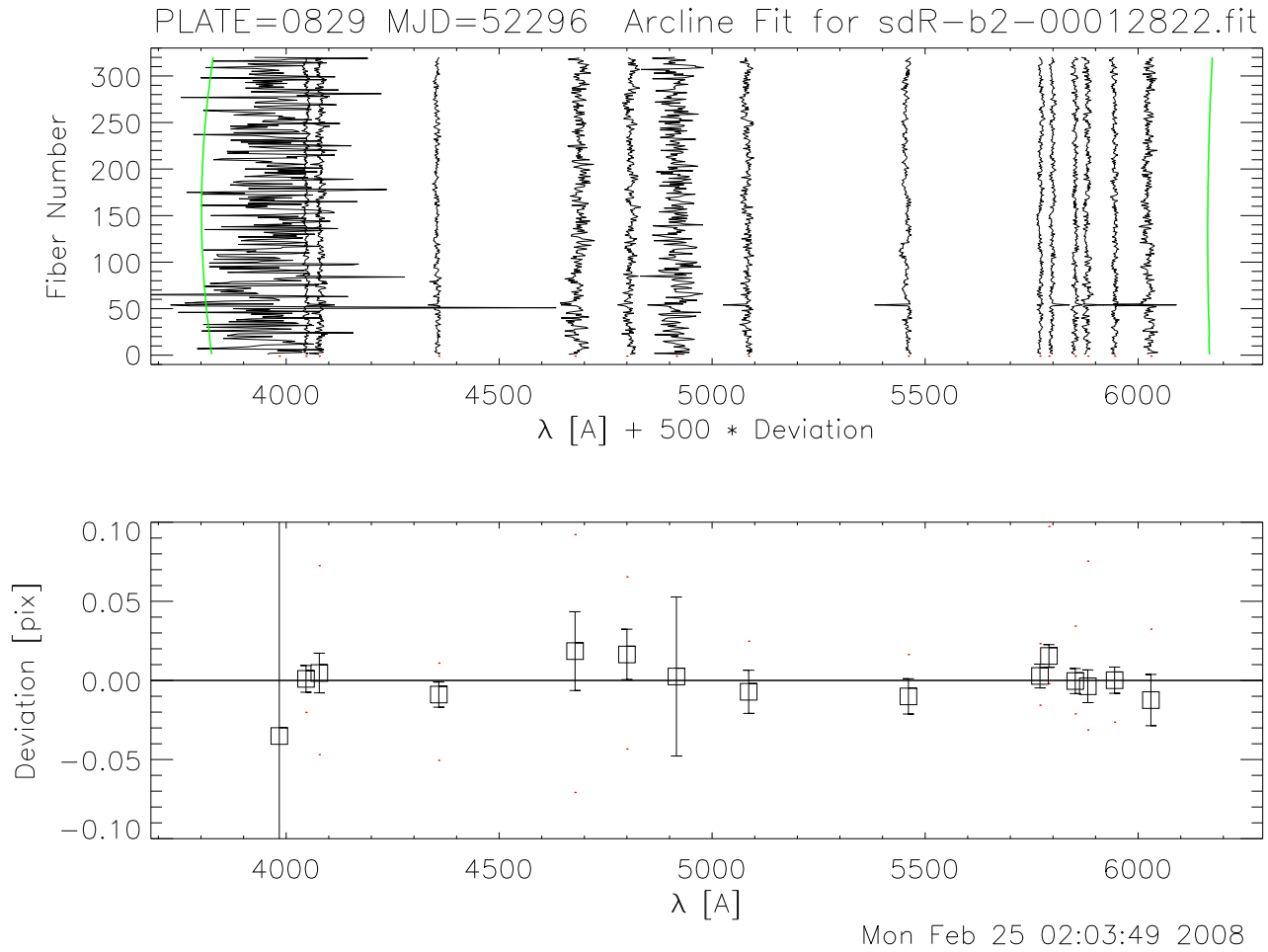

PLATE=0829 MJD=52296 sdR-b1-00012824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.89 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

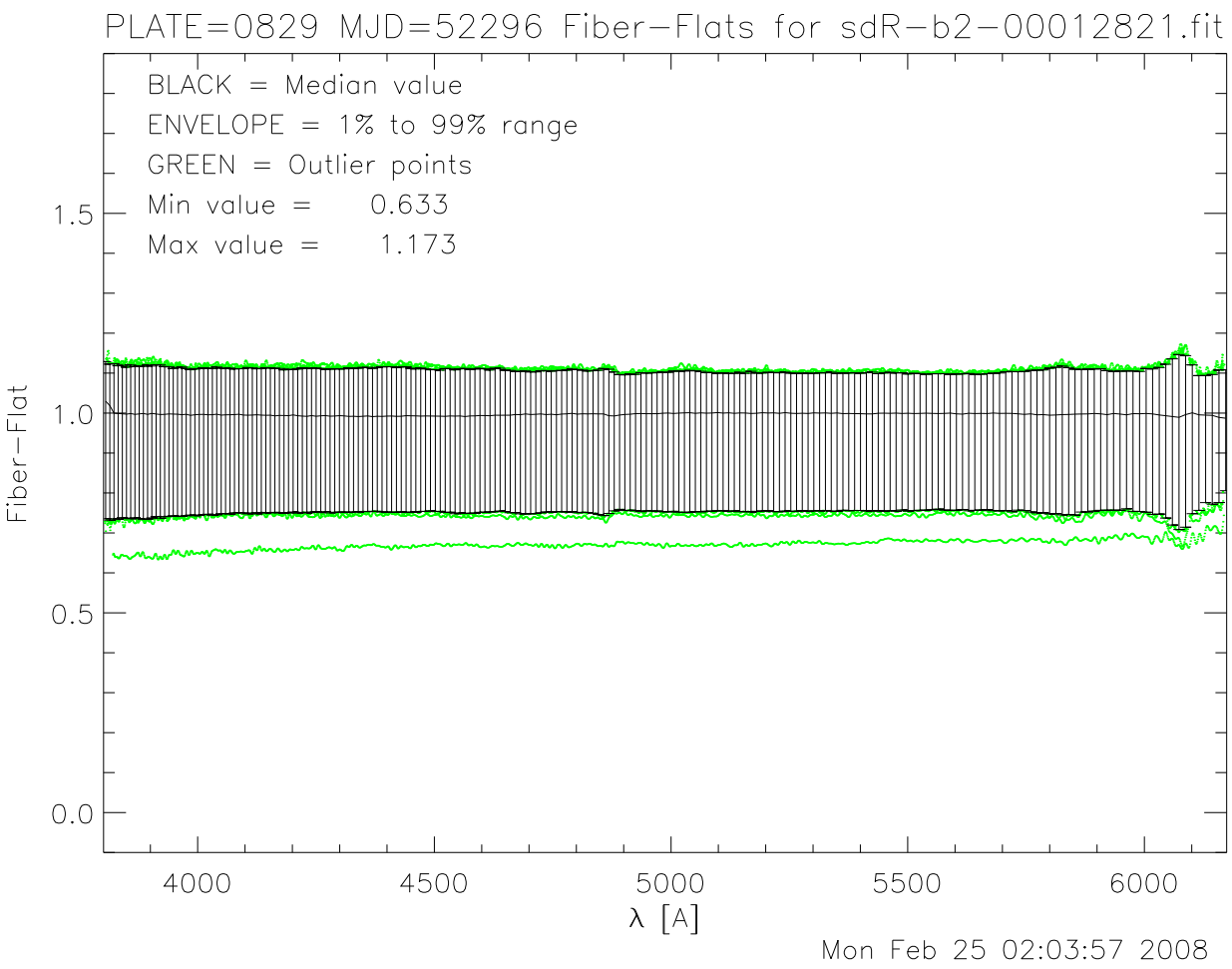

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

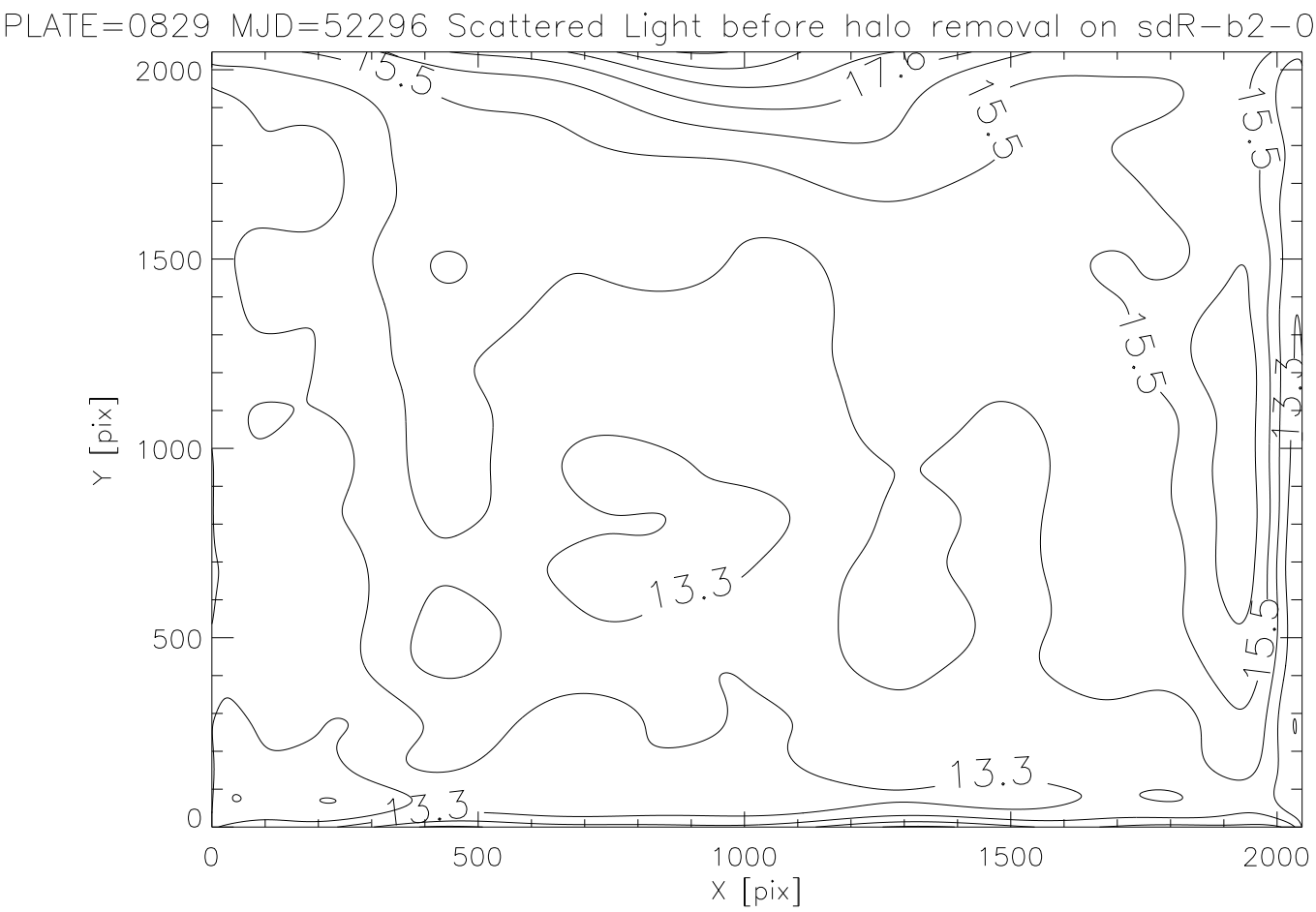

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

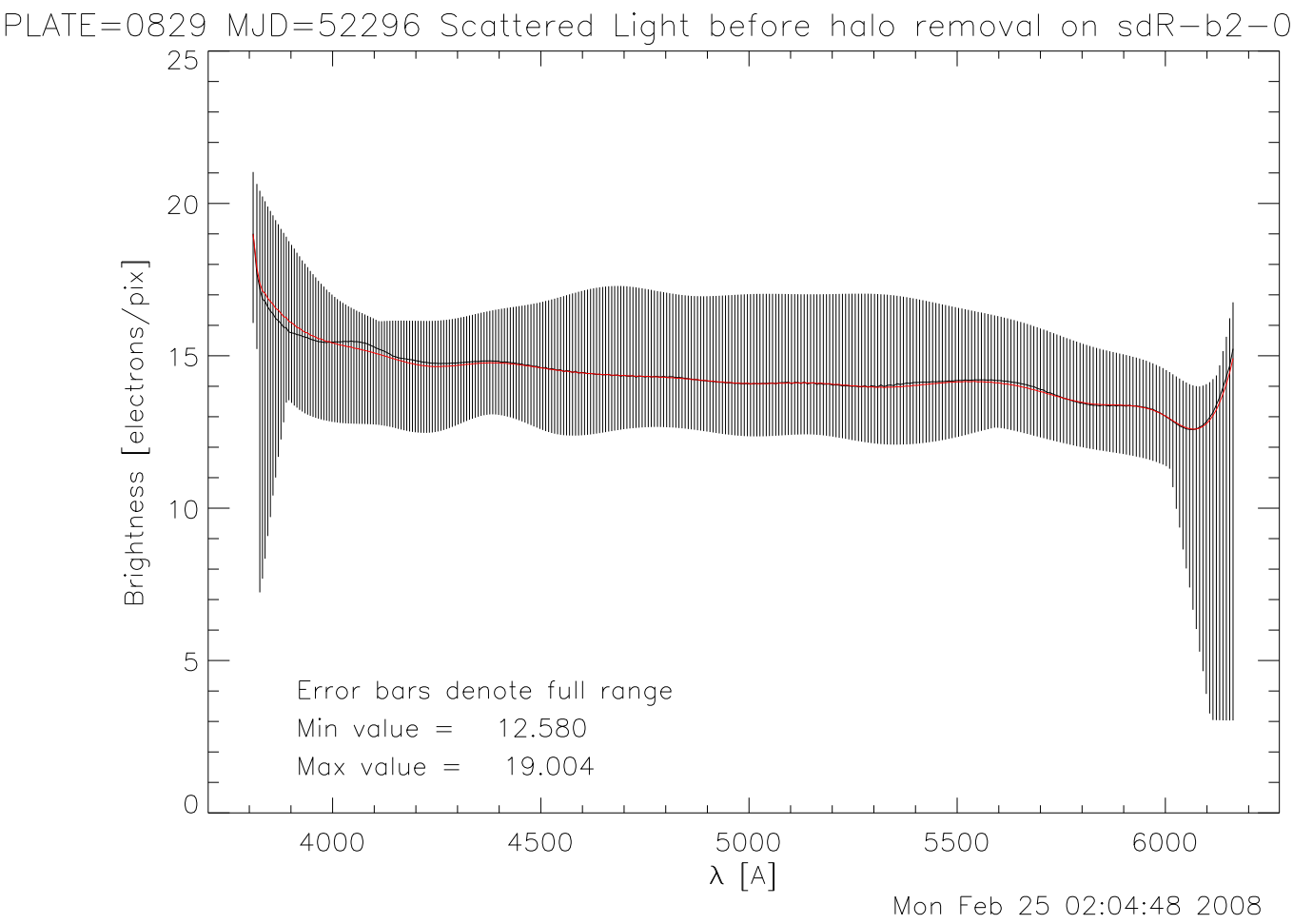

PLATE=0829 MJD=52296 flat extraction chi^2 for sdR-b2-00012821.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

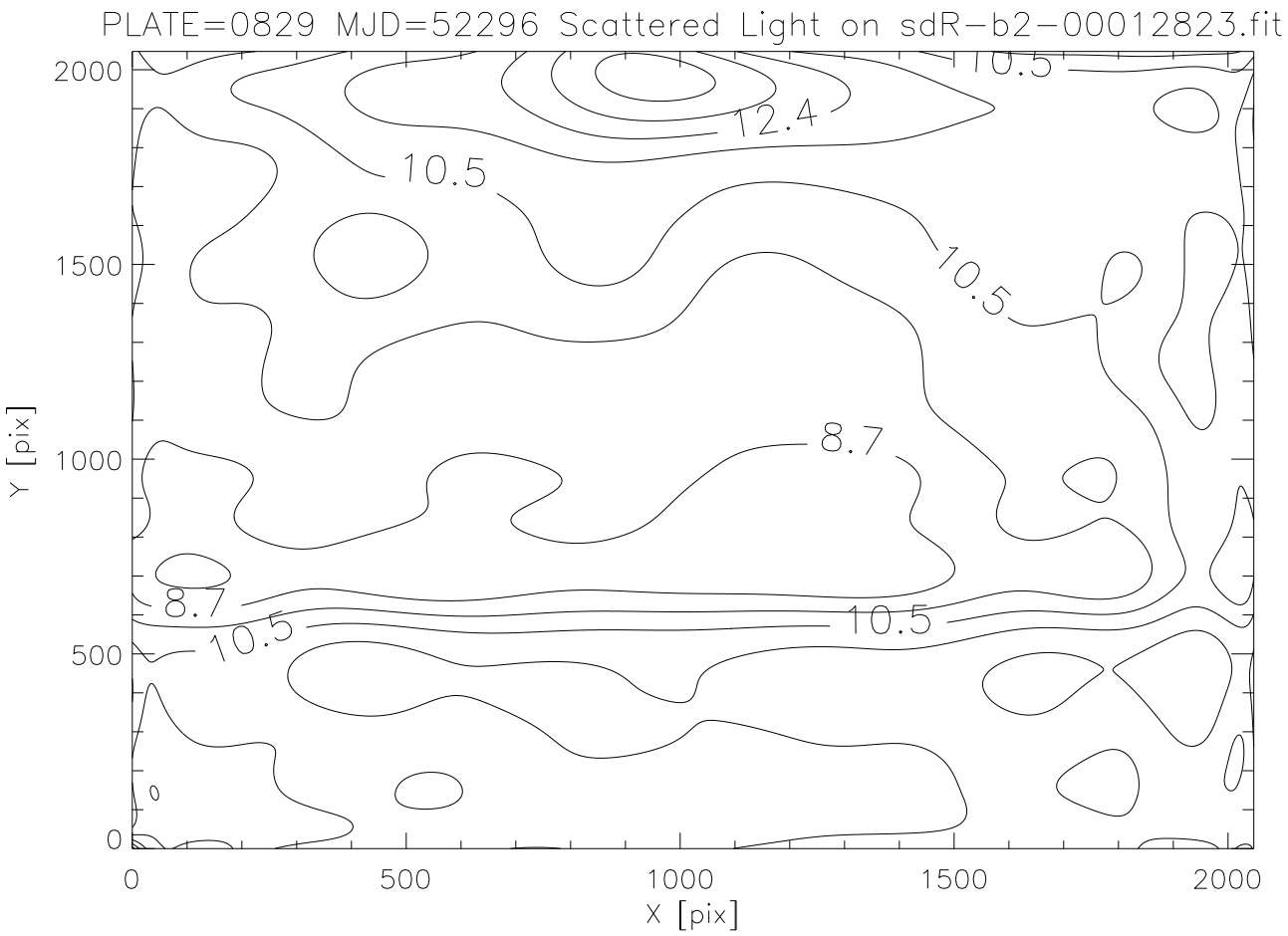

PLATE=0829 MJD=52296 Superflat sdR-b2-00012821.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

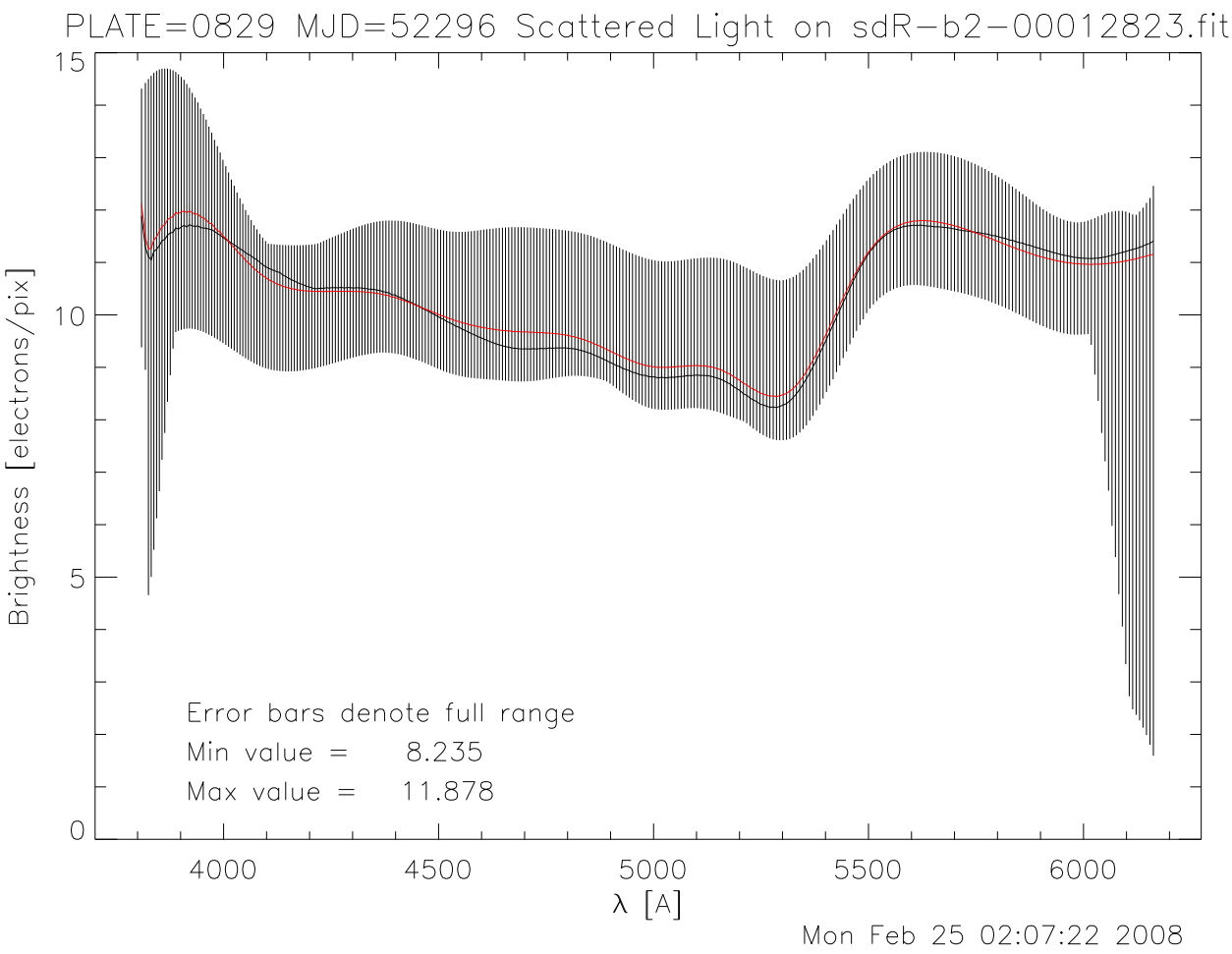

PLATE=0829 MJD=52296 Arcline Fit for sdR-b2-00012822.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:03:49 2008

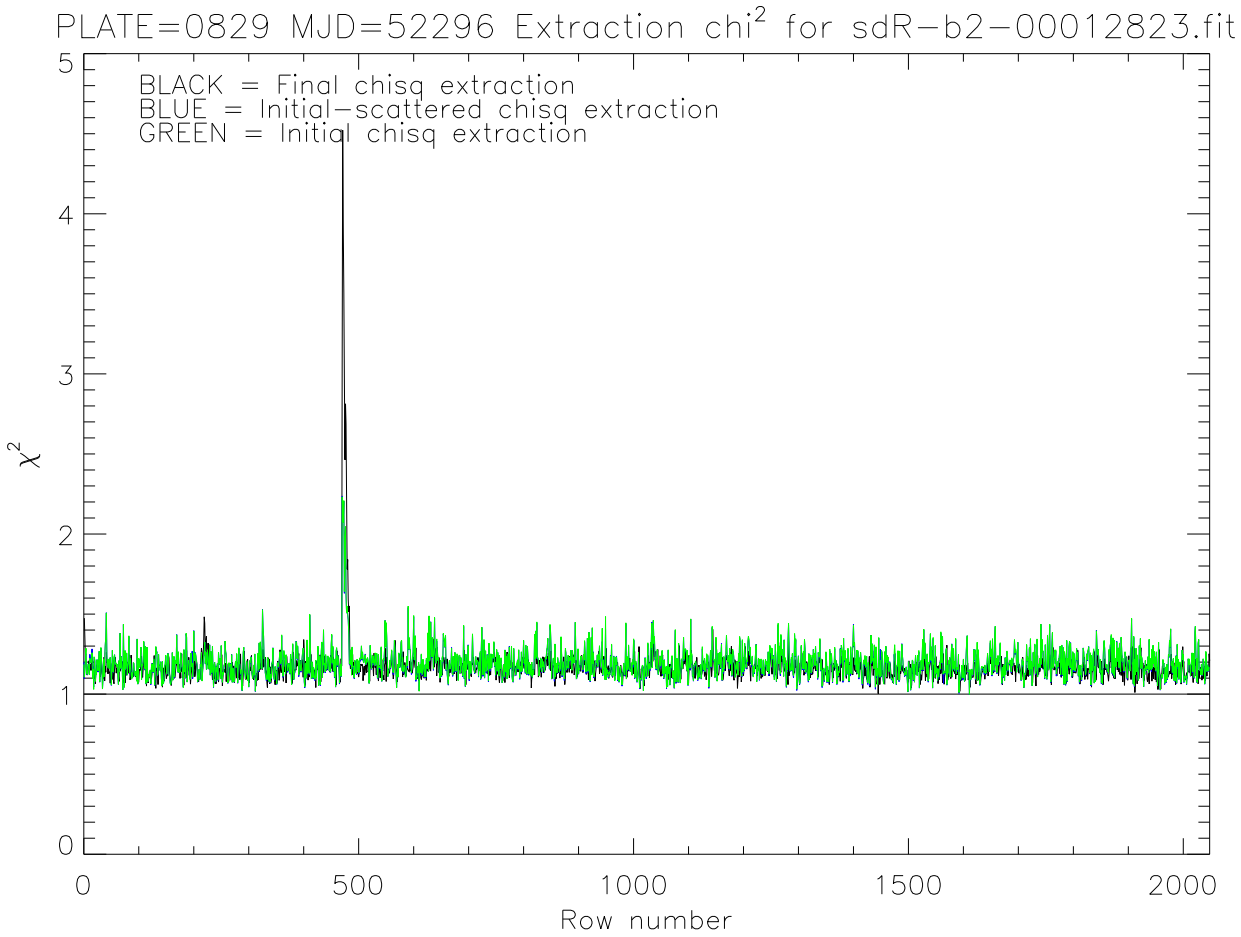

PLATE=0829 MJD=52296 Fiber-Flats for sdR-b2-00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.633
Max value = 1.173
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:03:57 2008

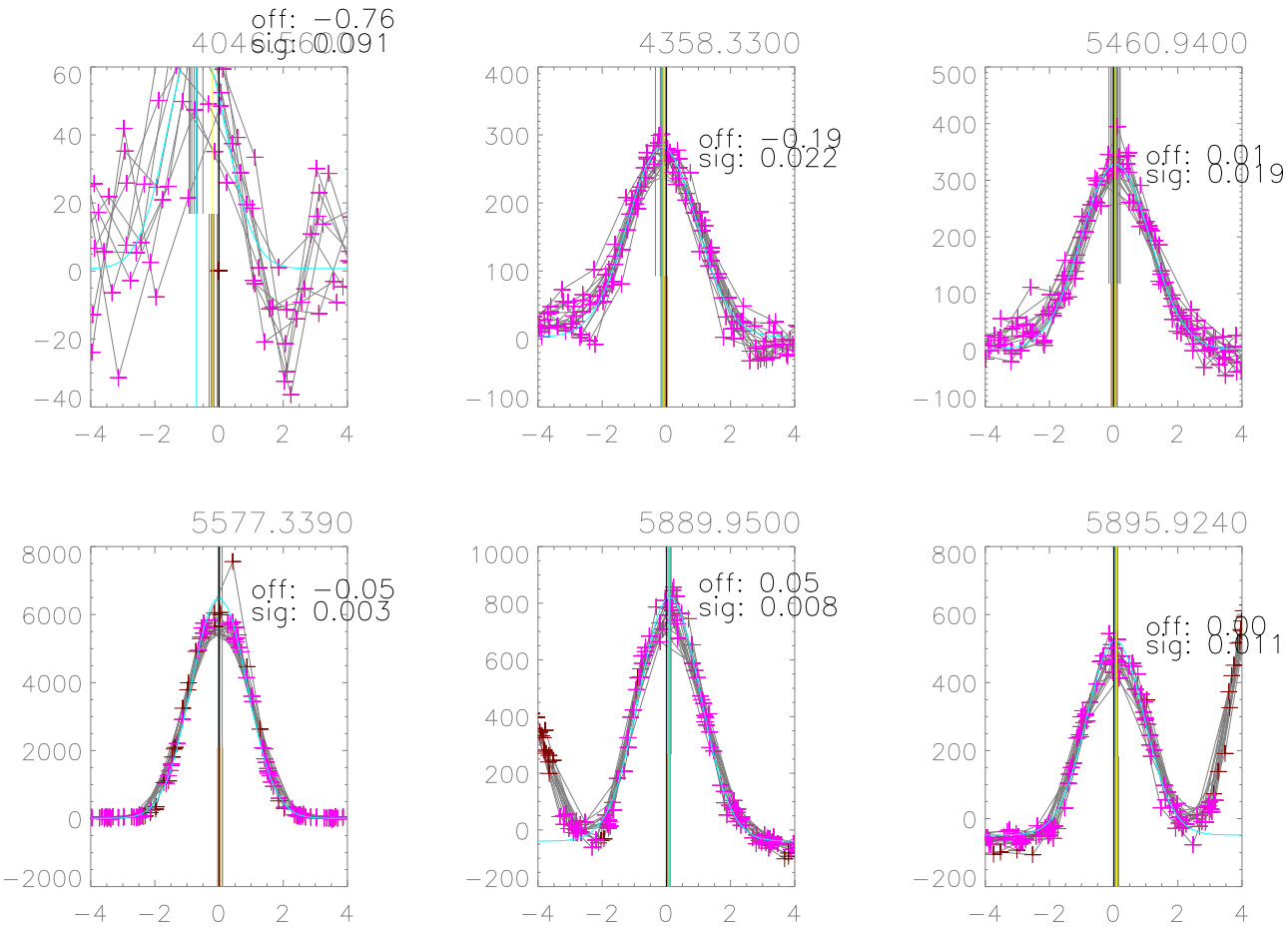

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-b2-00012823.f
15.5
17.6
15.5
15.5
15.5
13.3
13.3
15.5
13.3
13.3
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

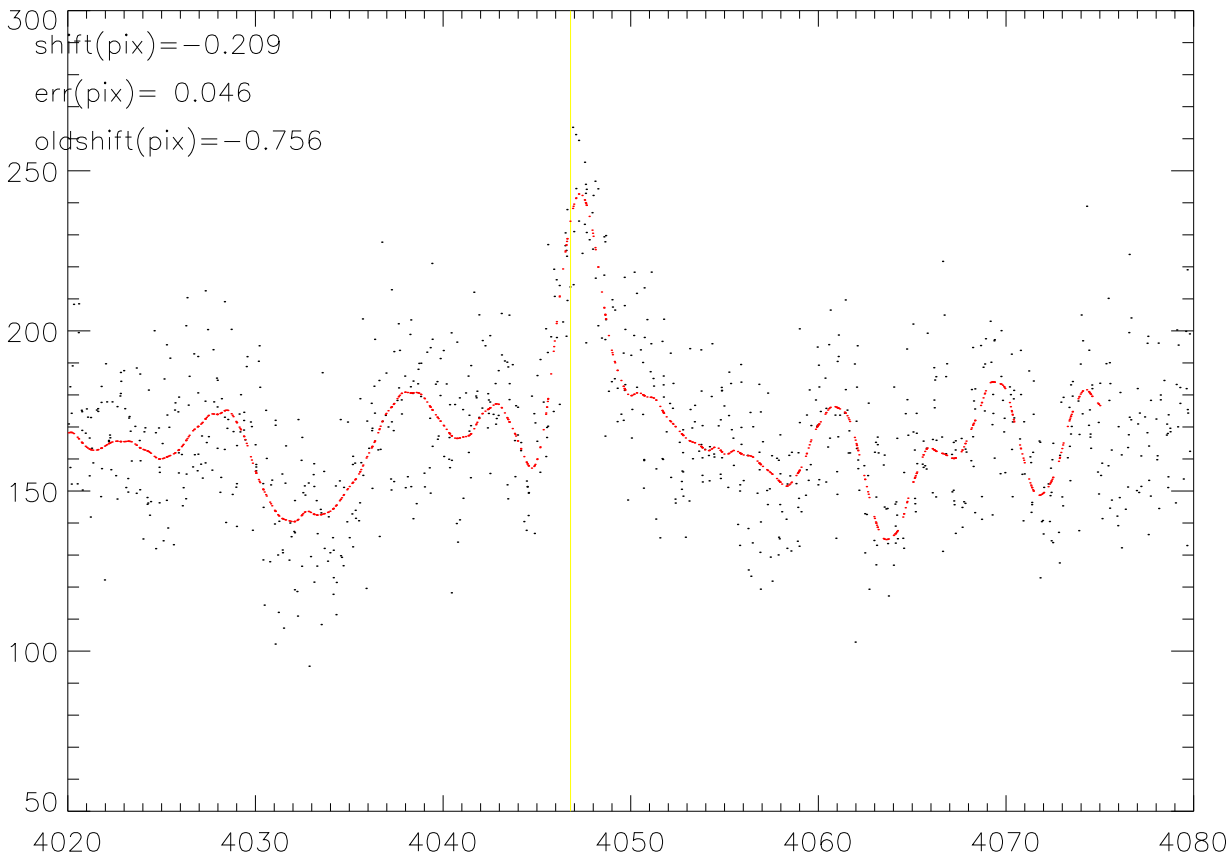

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-b2-00012823.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.580
Max value = 19.004
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:04:48 2008

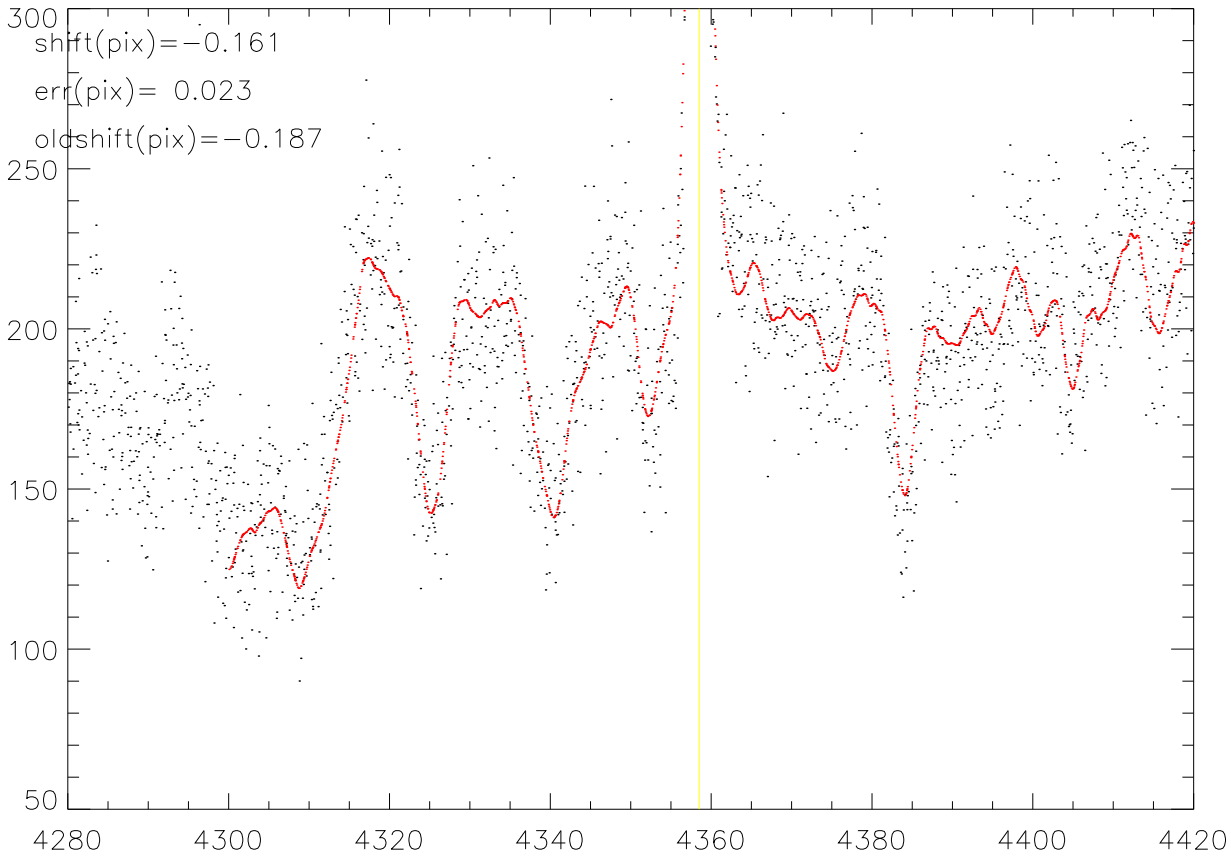

PLATE=0829 MJD=52296 Scattered Light on sdR-b2-00012823.fit
10.5
12.4
10.5
10.5
8.7
8.7
10.5
10.5
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

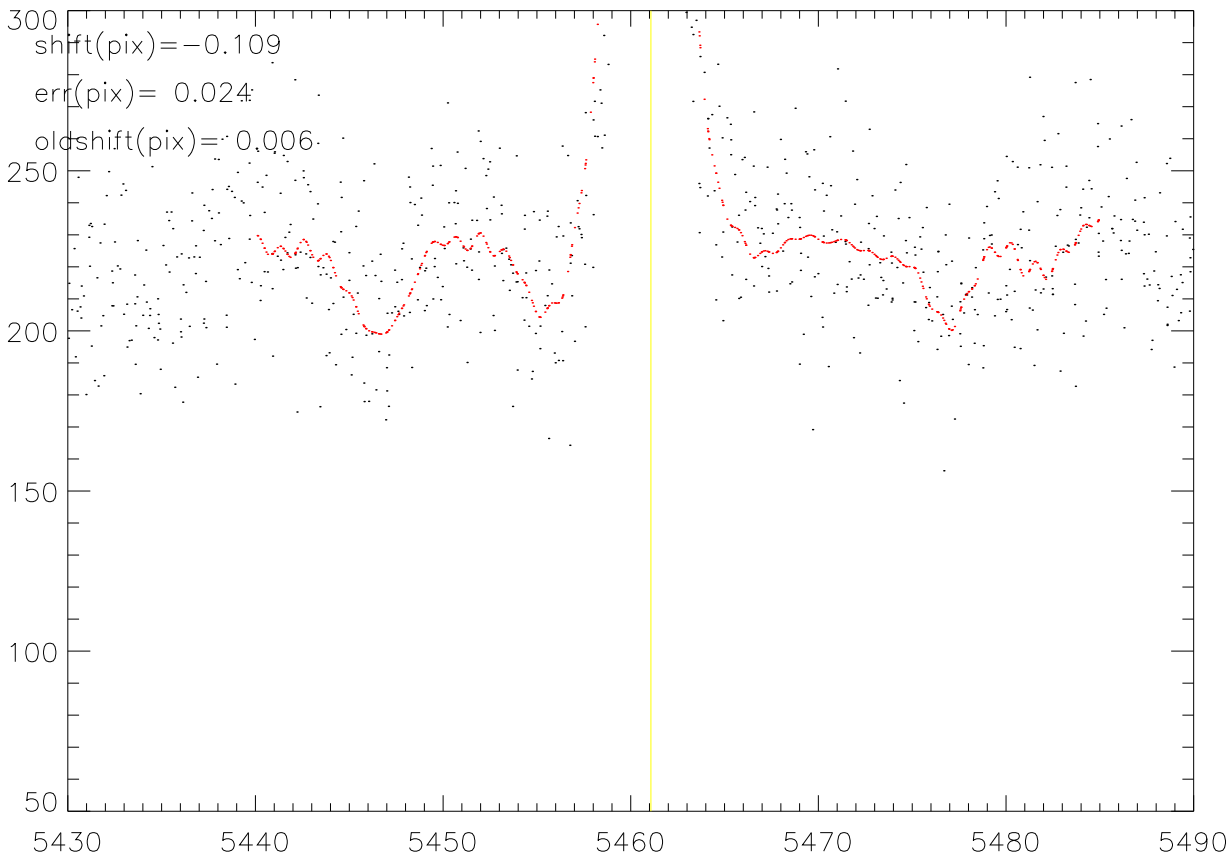

PLATE=0829 MJD=52296 Scattered Light on sdR-b2-00012823.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.235
Max value = 11.878
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:07:22 2008

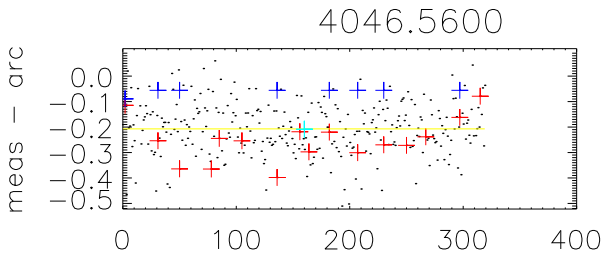

PLATE=0829 MJD=52296 Extraction chi^2 for sdR-b2-00012823.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

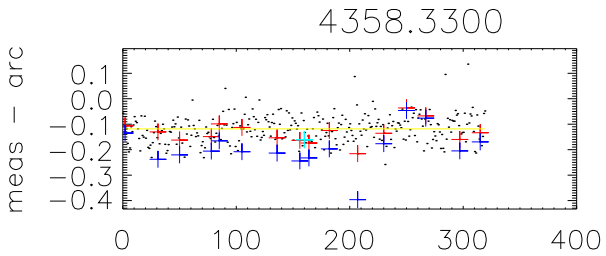

4046.5600
off: −0.76
sig: 0.091
4358.3300
off: −0.19
sig: 0.022
5460.9400
off: 0.01
sig: 0.019
5577.3390
off: −0.05
sig: 0.003
5889.9500
off: 0.05
sig: 0.008
5895.9240
off: 0.00
sig: 0.011

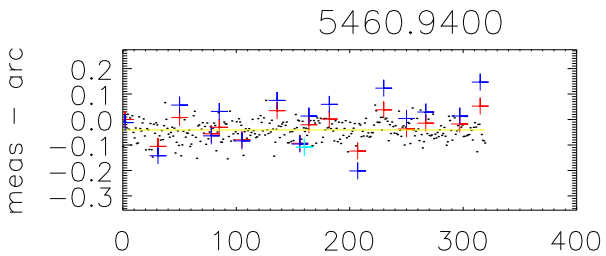

shift(pix)=−0.209
err(pix)= 0.046
oldshift(pix)=−0.756
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

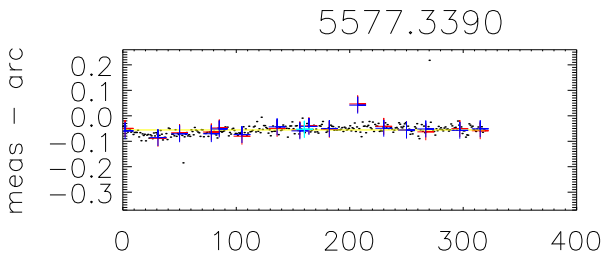

shift(pix)=−0.161
err(pix)= 0.023
oldshift(pix)=−0.187
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

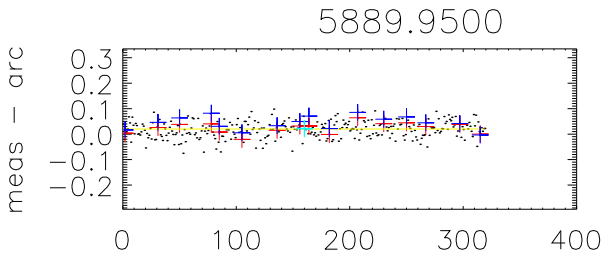

shift(pix)=−0.109
err(pix)= 0.024
oldshift(pix)= 0.006
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

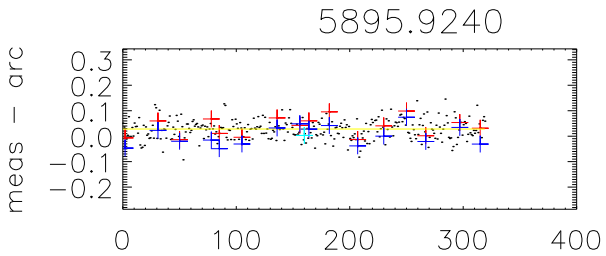

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

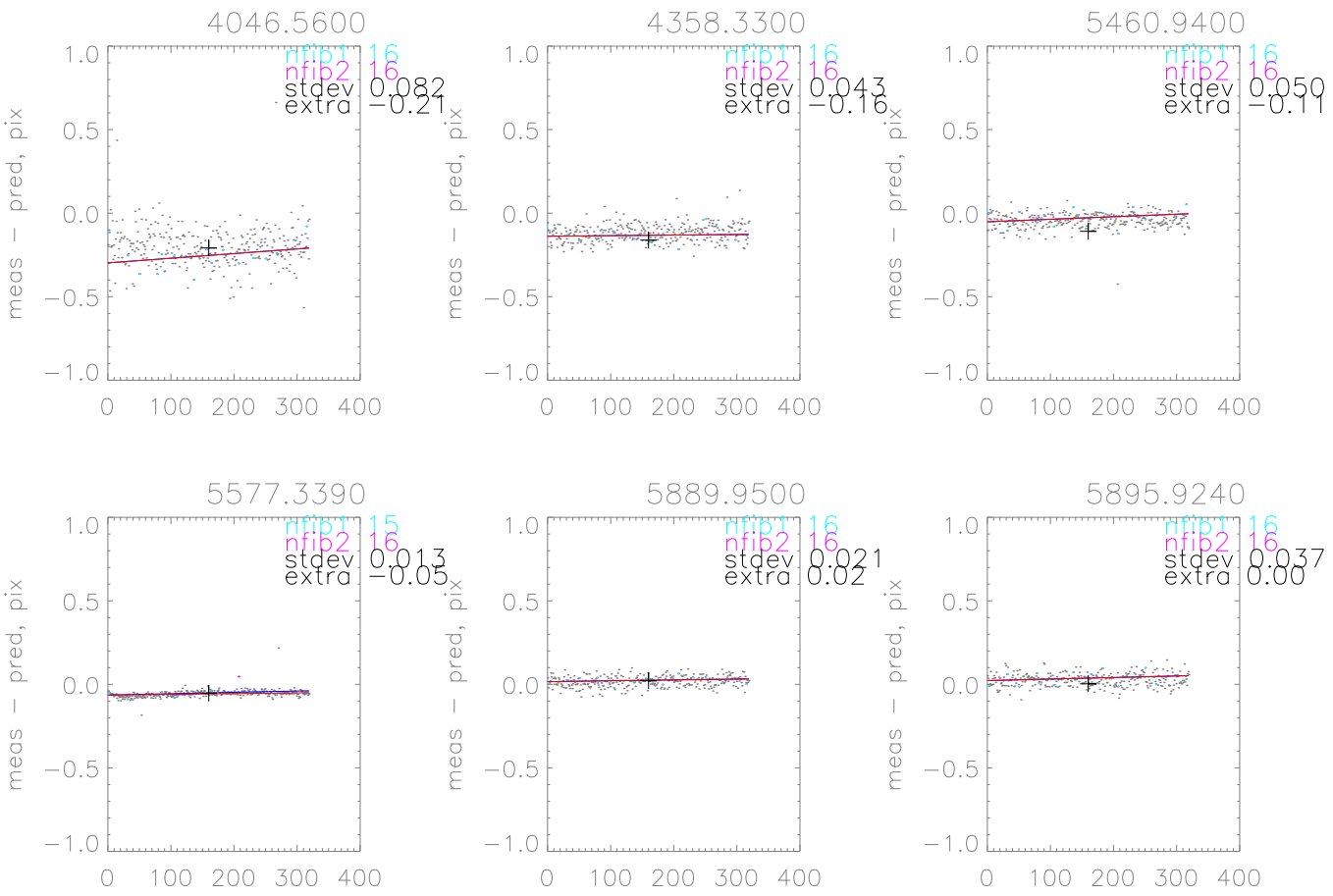

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

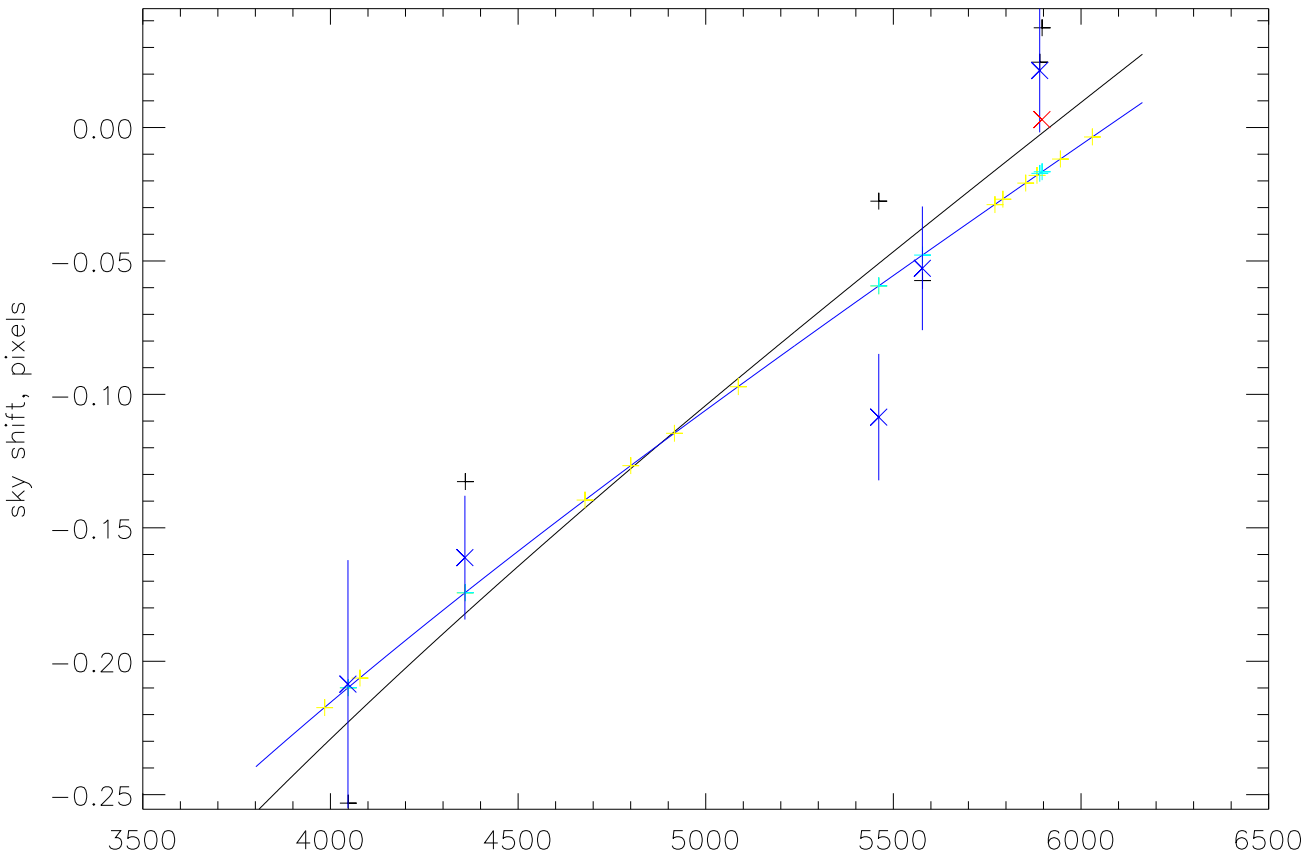

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

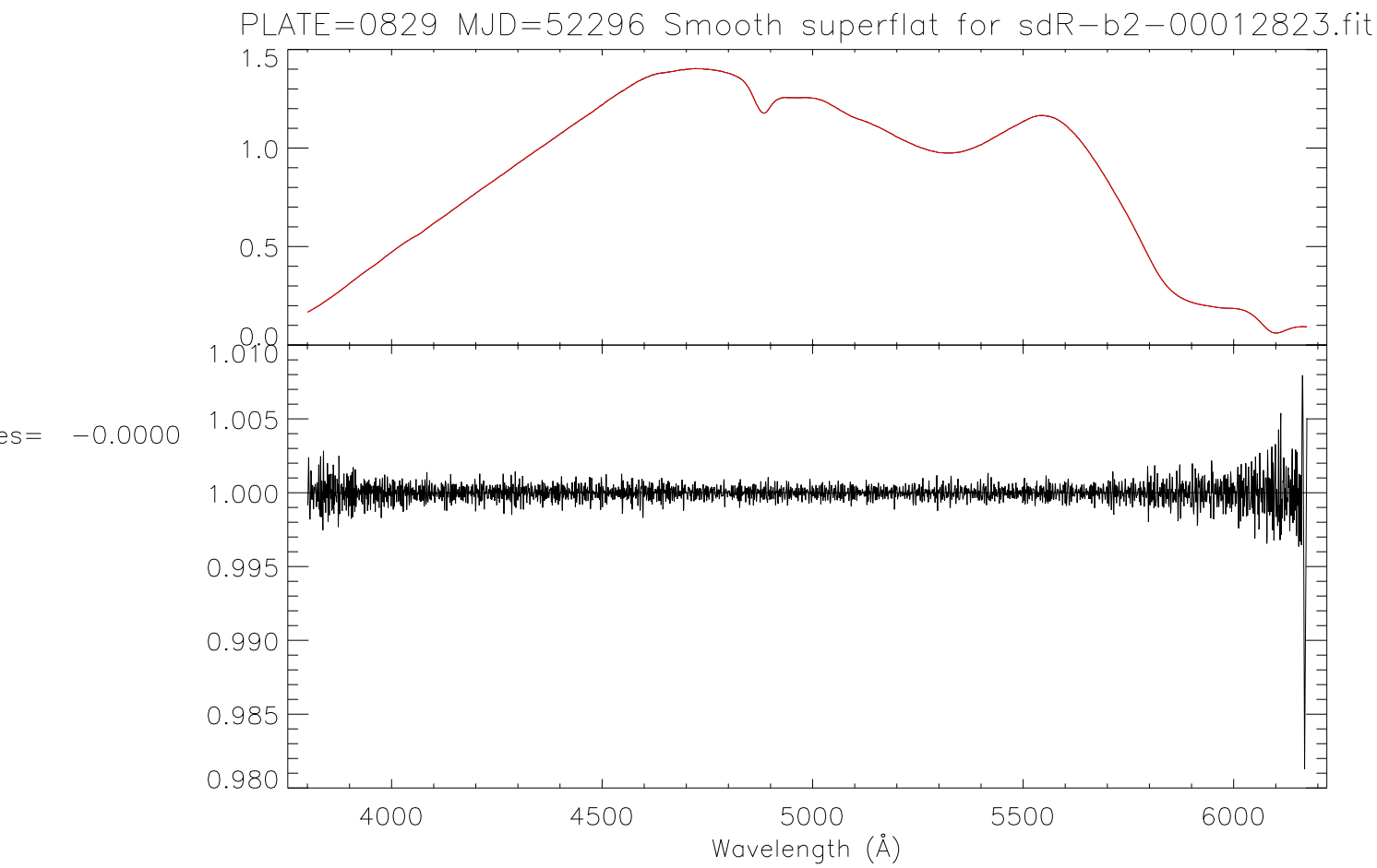

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

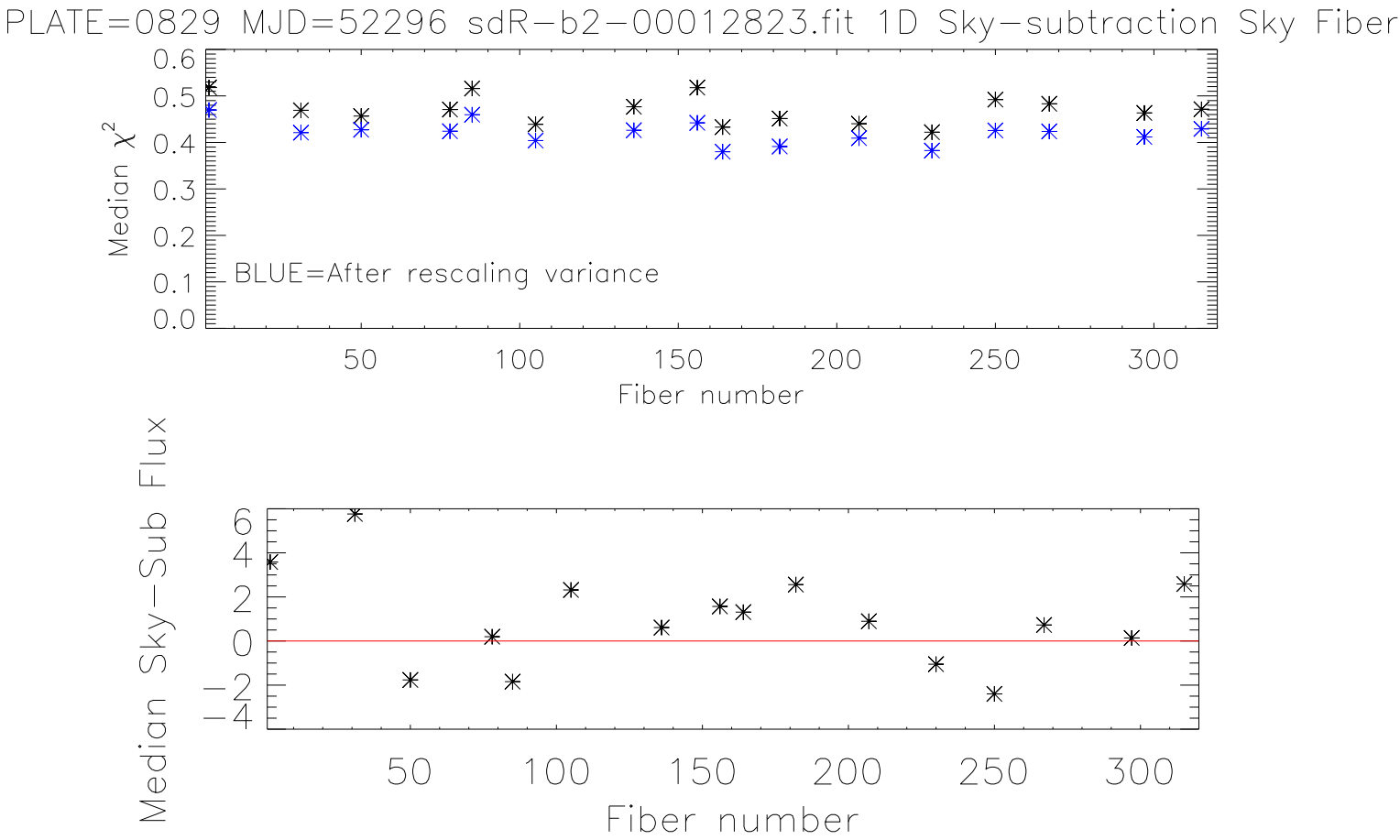

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

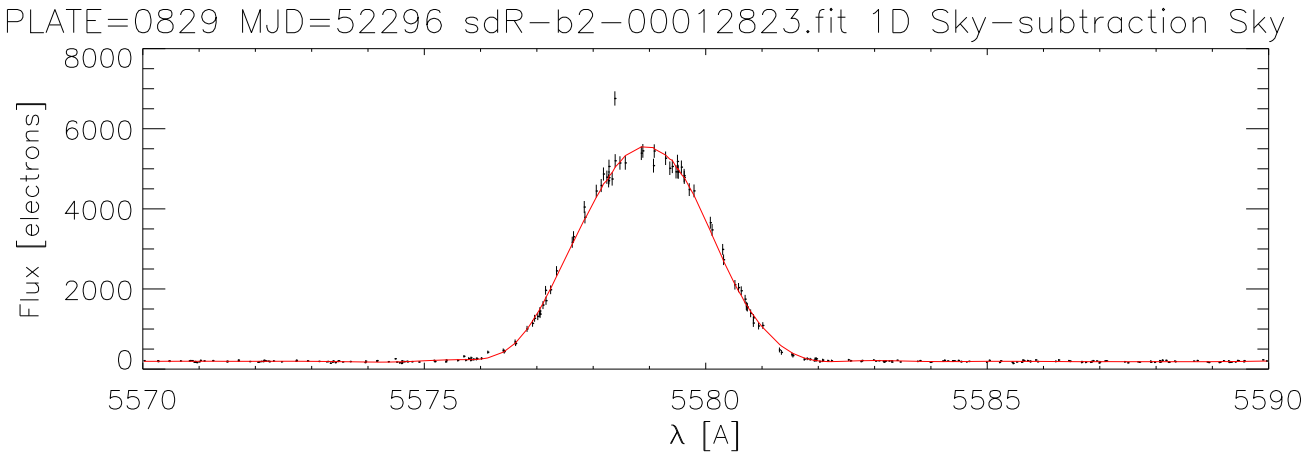

4046.5600
nfib1 16
nfib2 16
stdev 0.082
extra −0.21
4358.3300
nfib1 16
nfib2 16
stdev 0.043
extra −0.16
5460.9400
nfib1 16
nfib2 16
stdev 0.050
extra −0.11
5577.3390
nfib1 15
nfib2 16
stdev 0.013
extra −0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.037
extra 0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

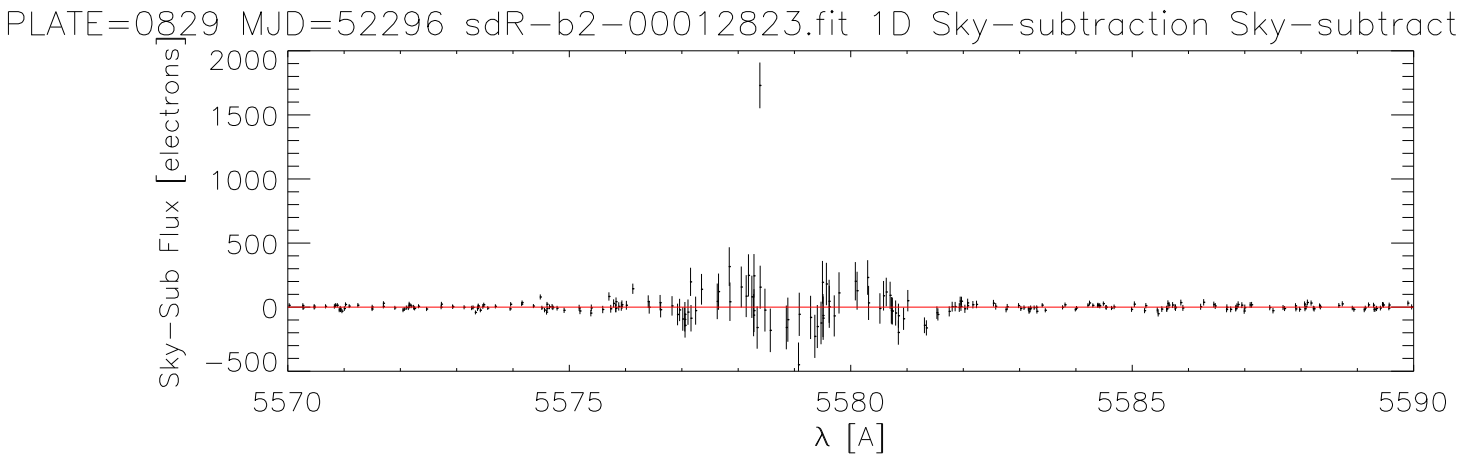

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

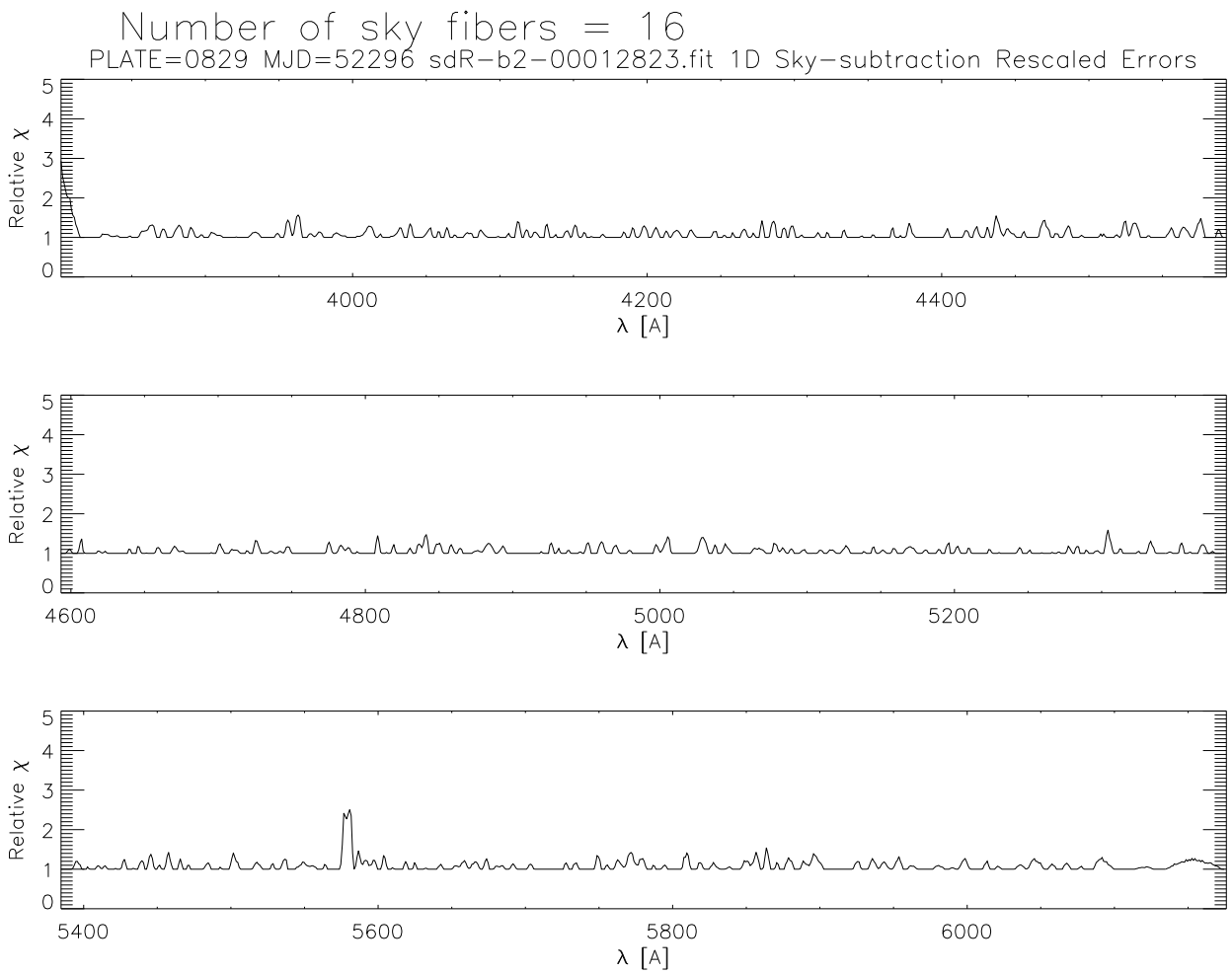

PLATE=0829 MJD=52296 Smooth superflat for sdR-b2-00012823.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

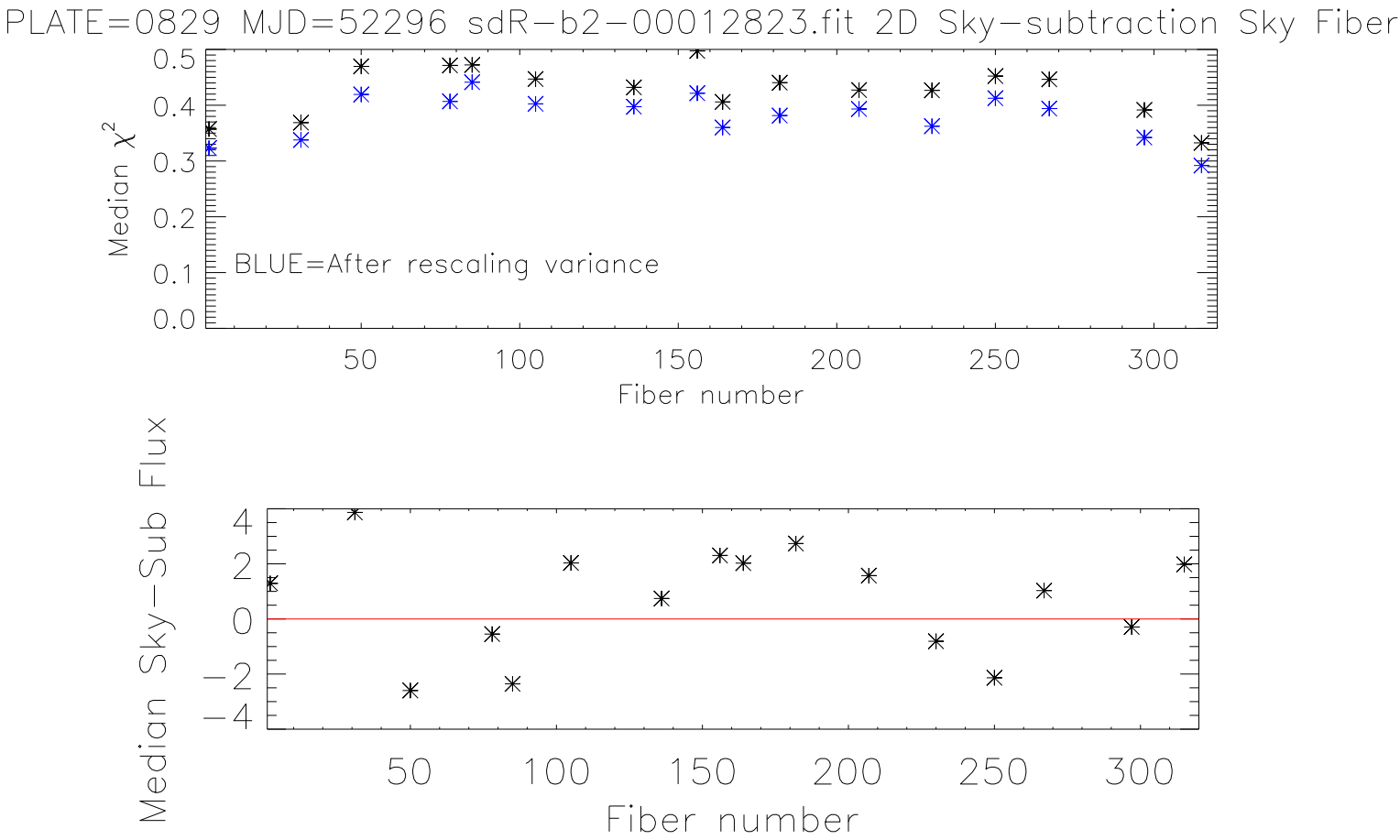
es= −0.0000

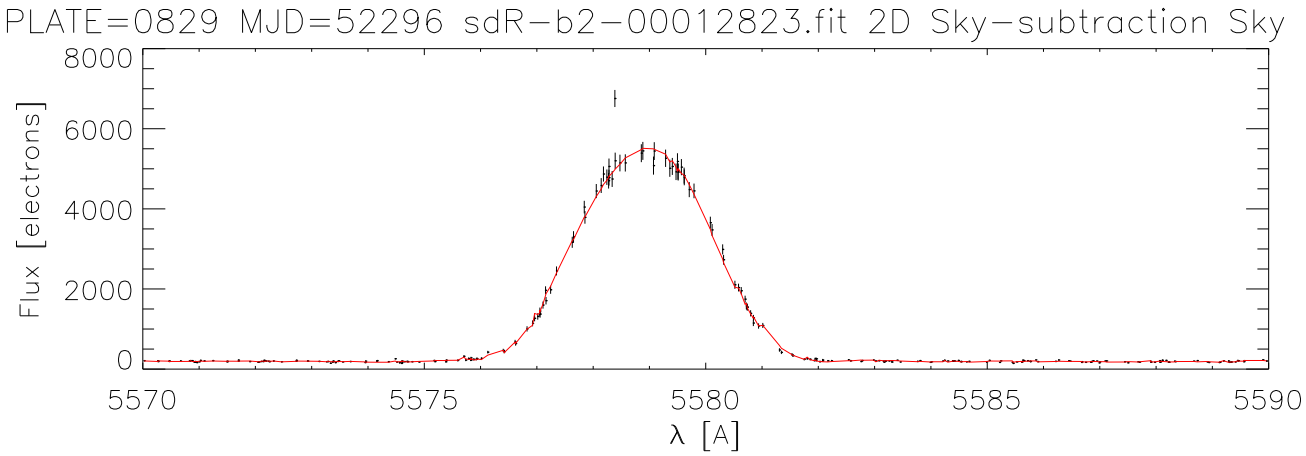

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

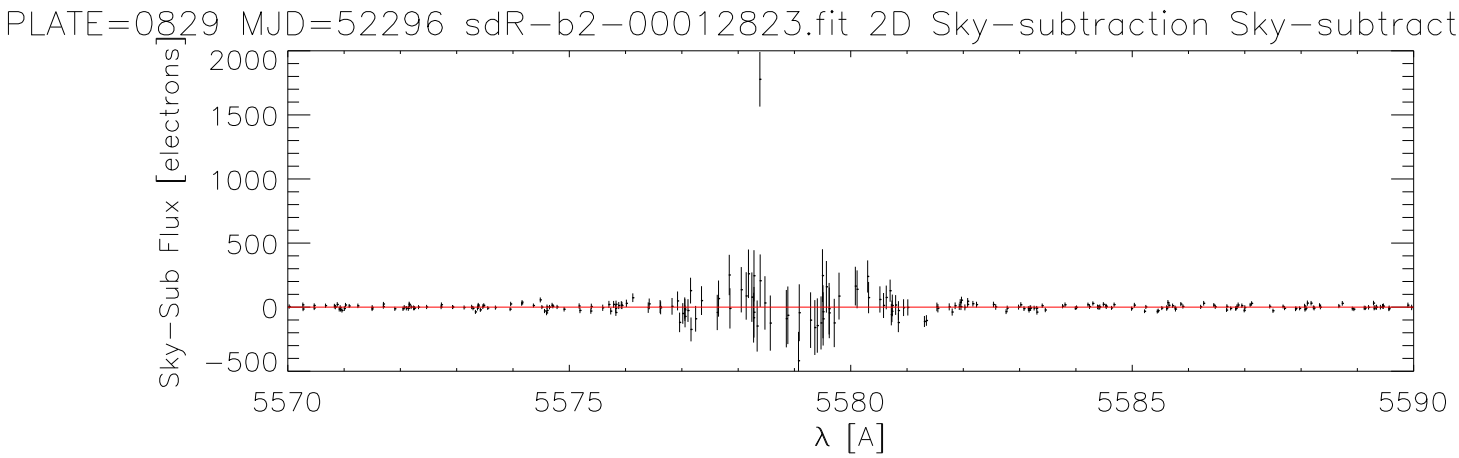

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

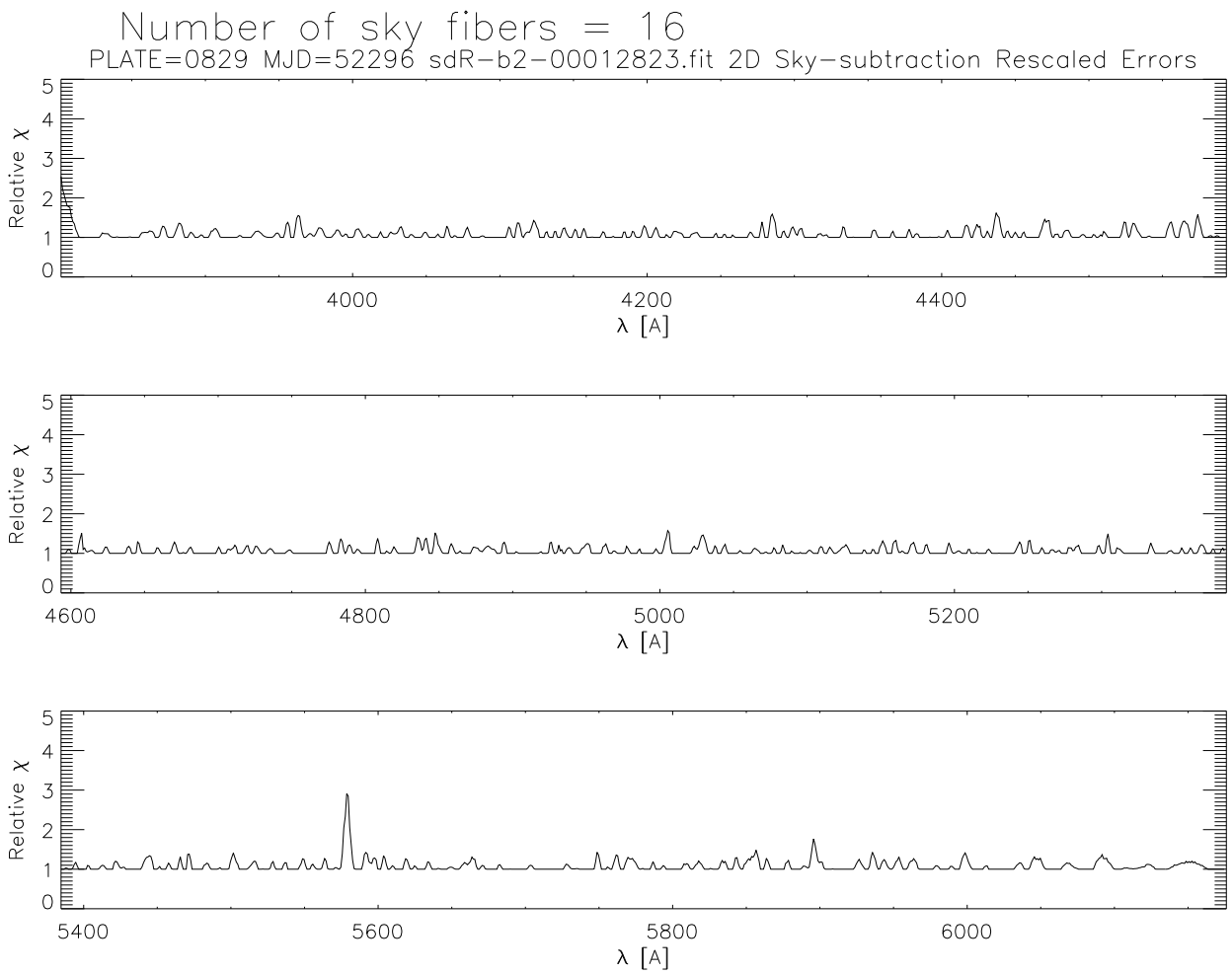

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

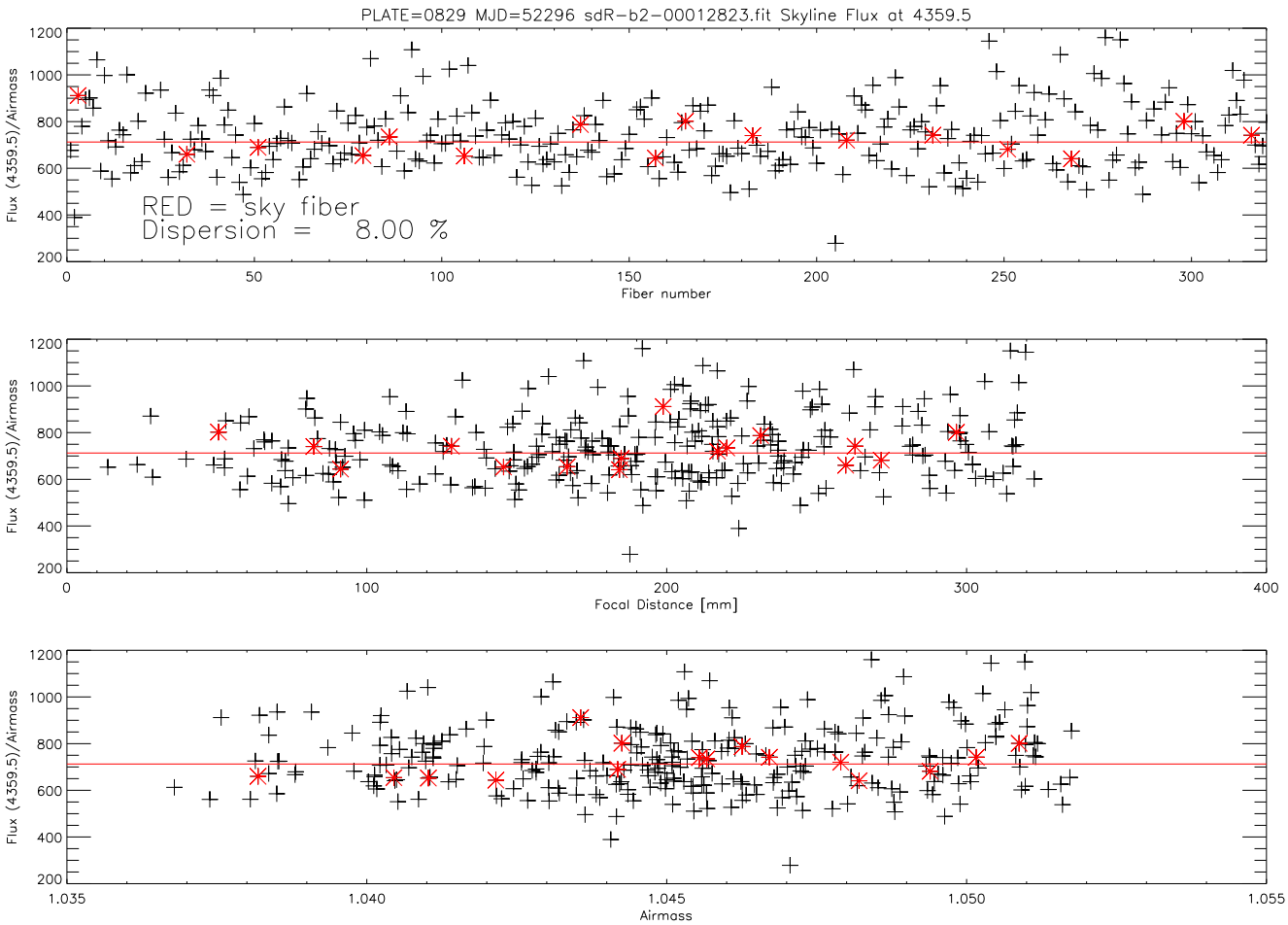

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b2-00012823.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

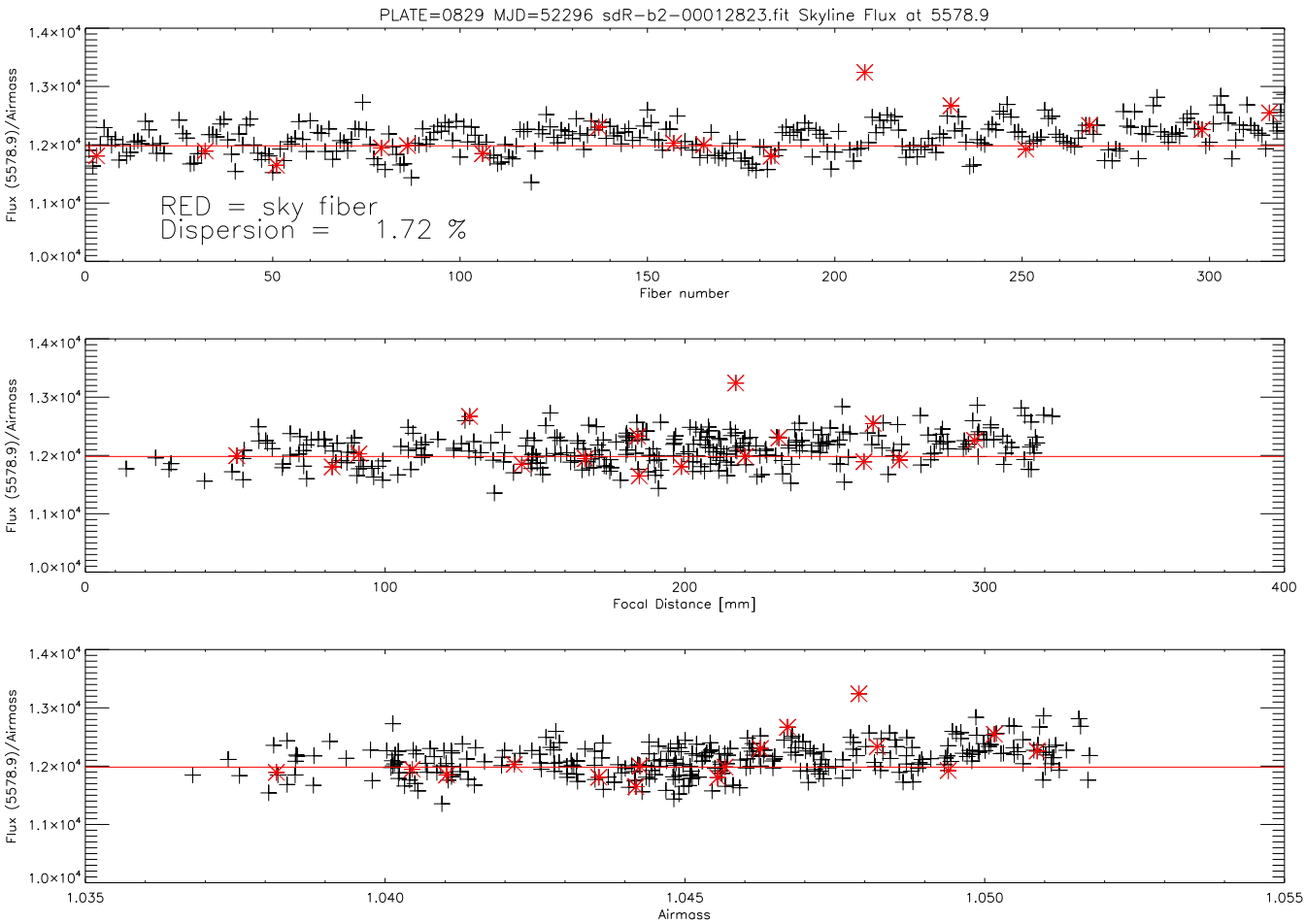

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

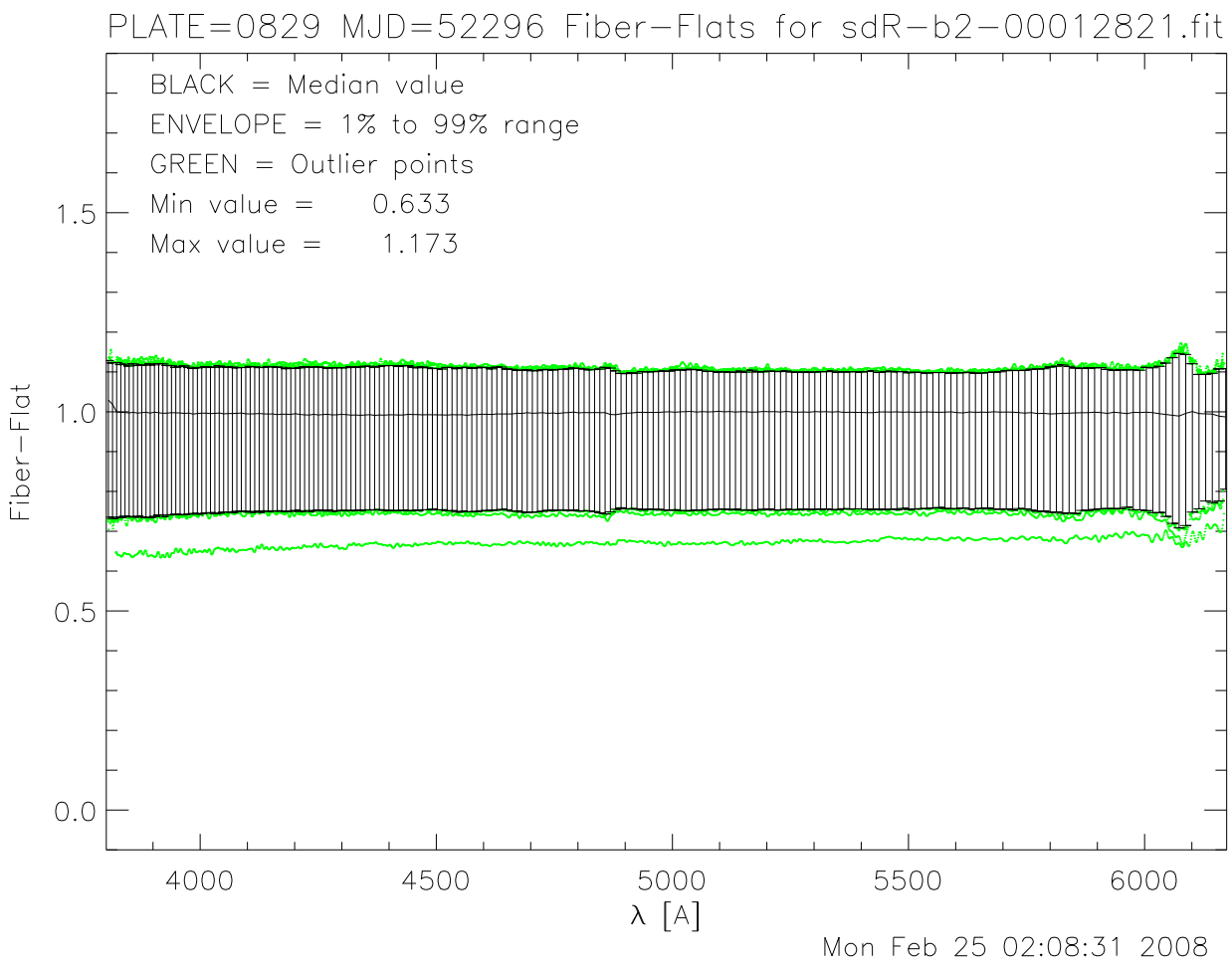

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

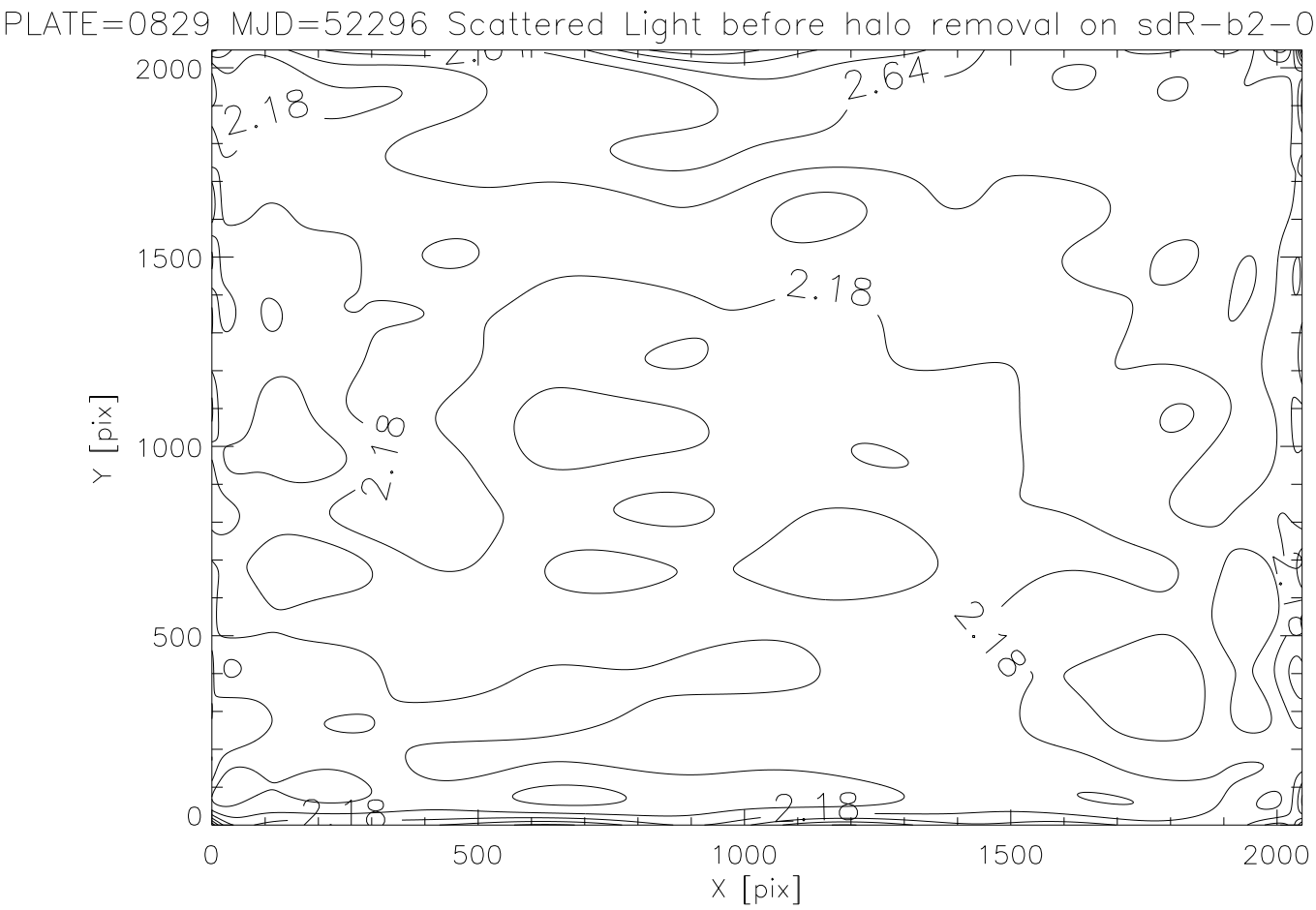

PLATE=0829 MJD=52296 sdR-b2-00012823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

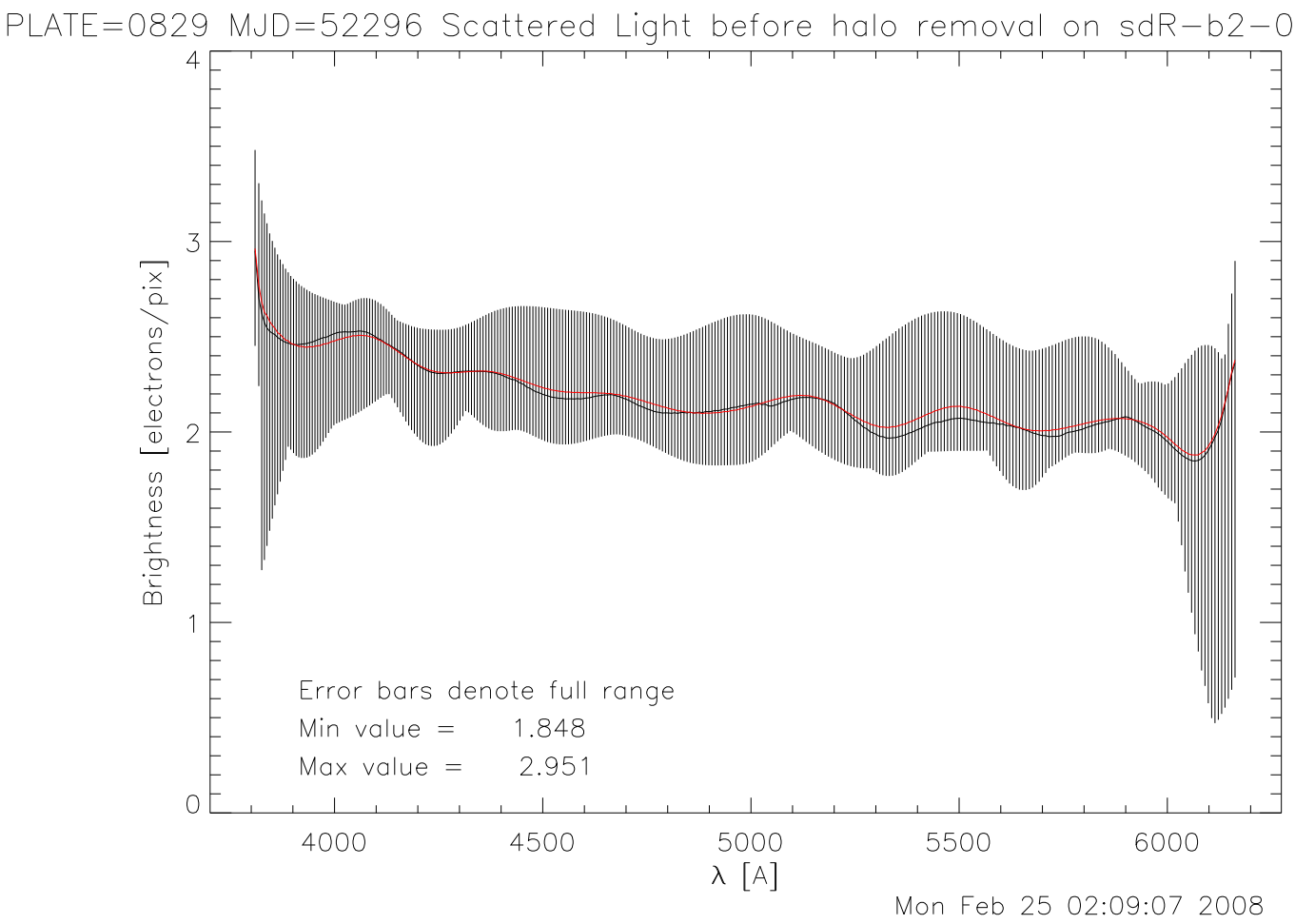

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b2-00012823.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

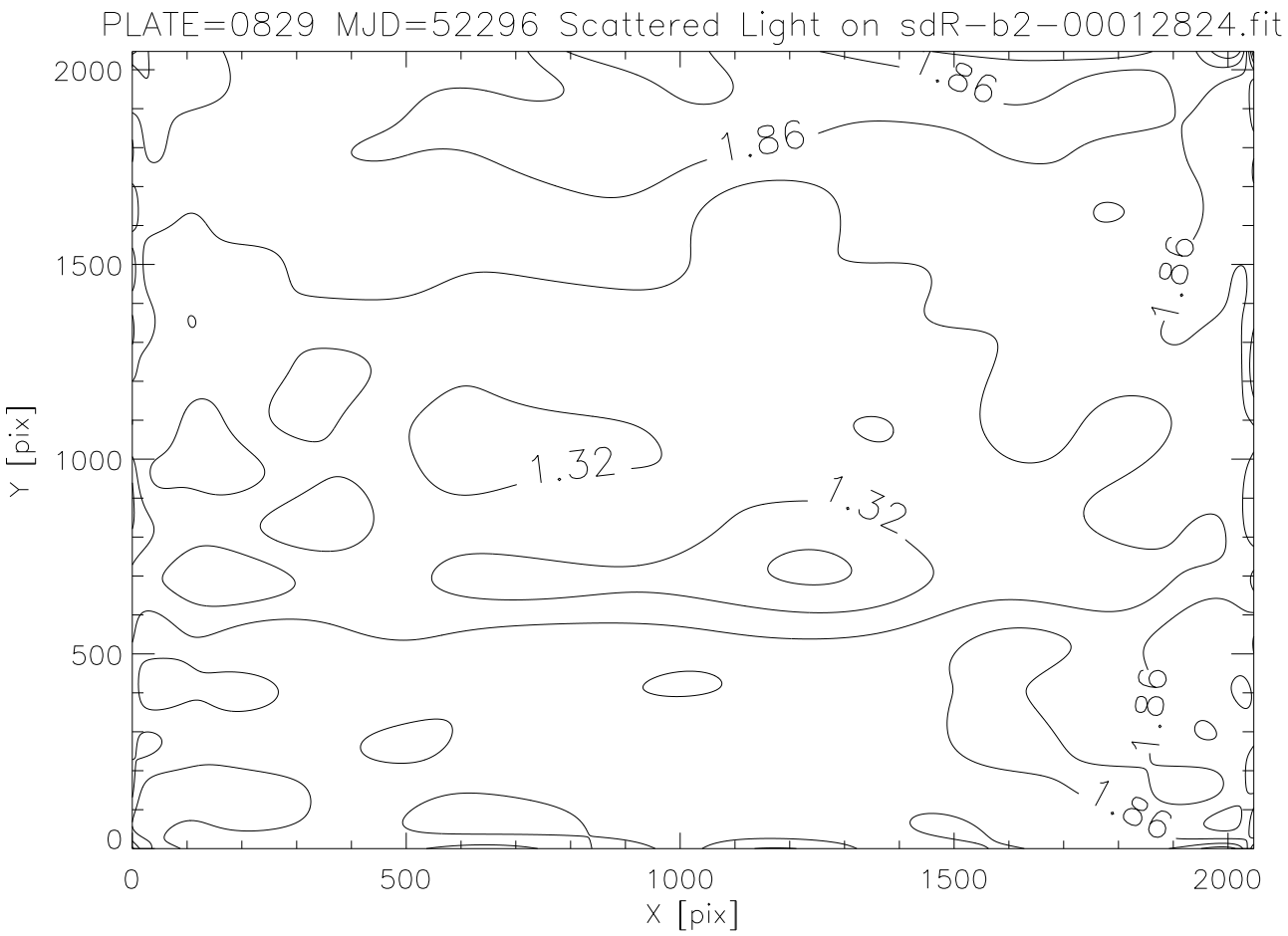

PLATE=0829 MJD=52296 sdR-b2-00012823.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.00 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

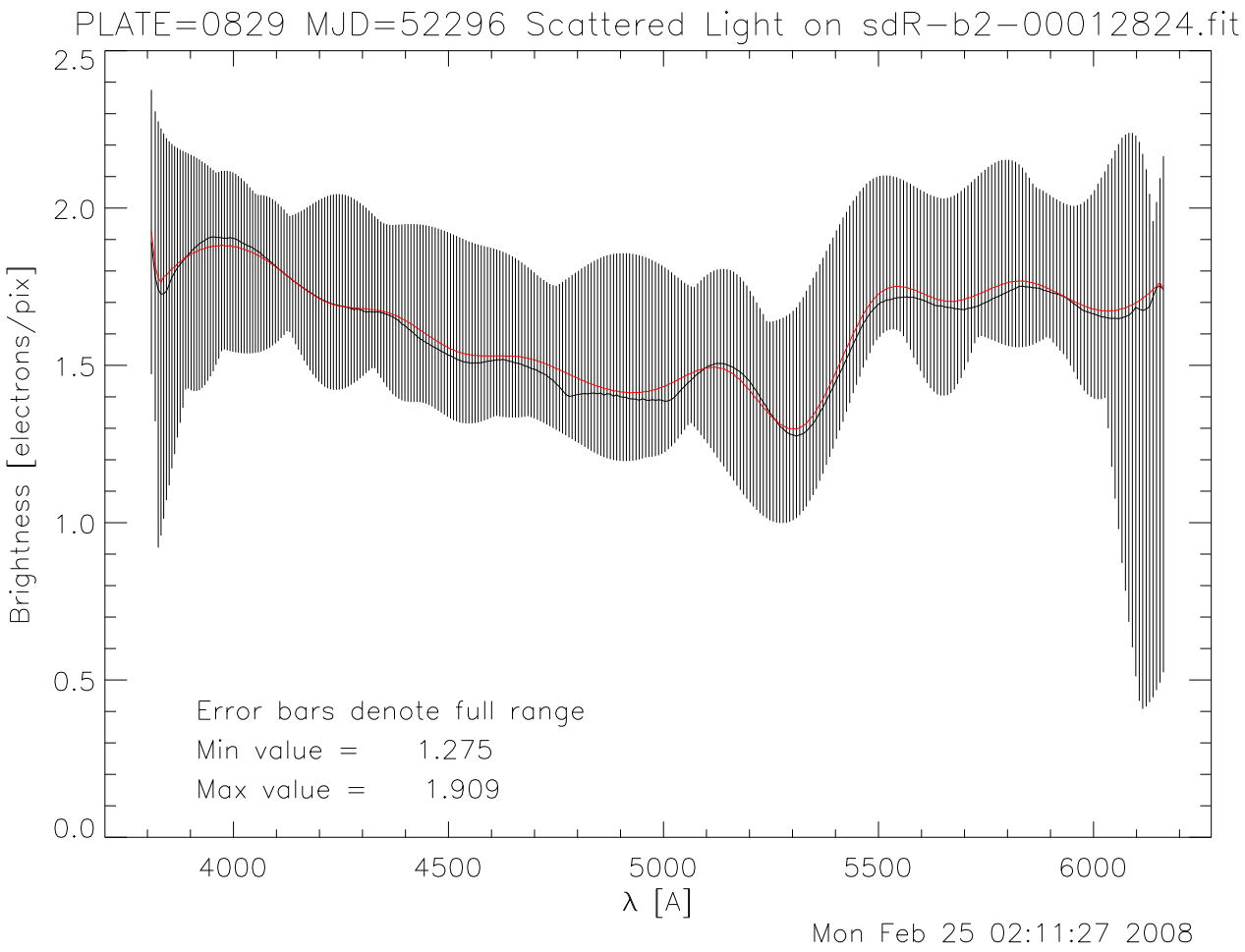

PLATE=0829 MJD=52296 sdR-b2-00012823.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Focal Distance [mm]
Airmass

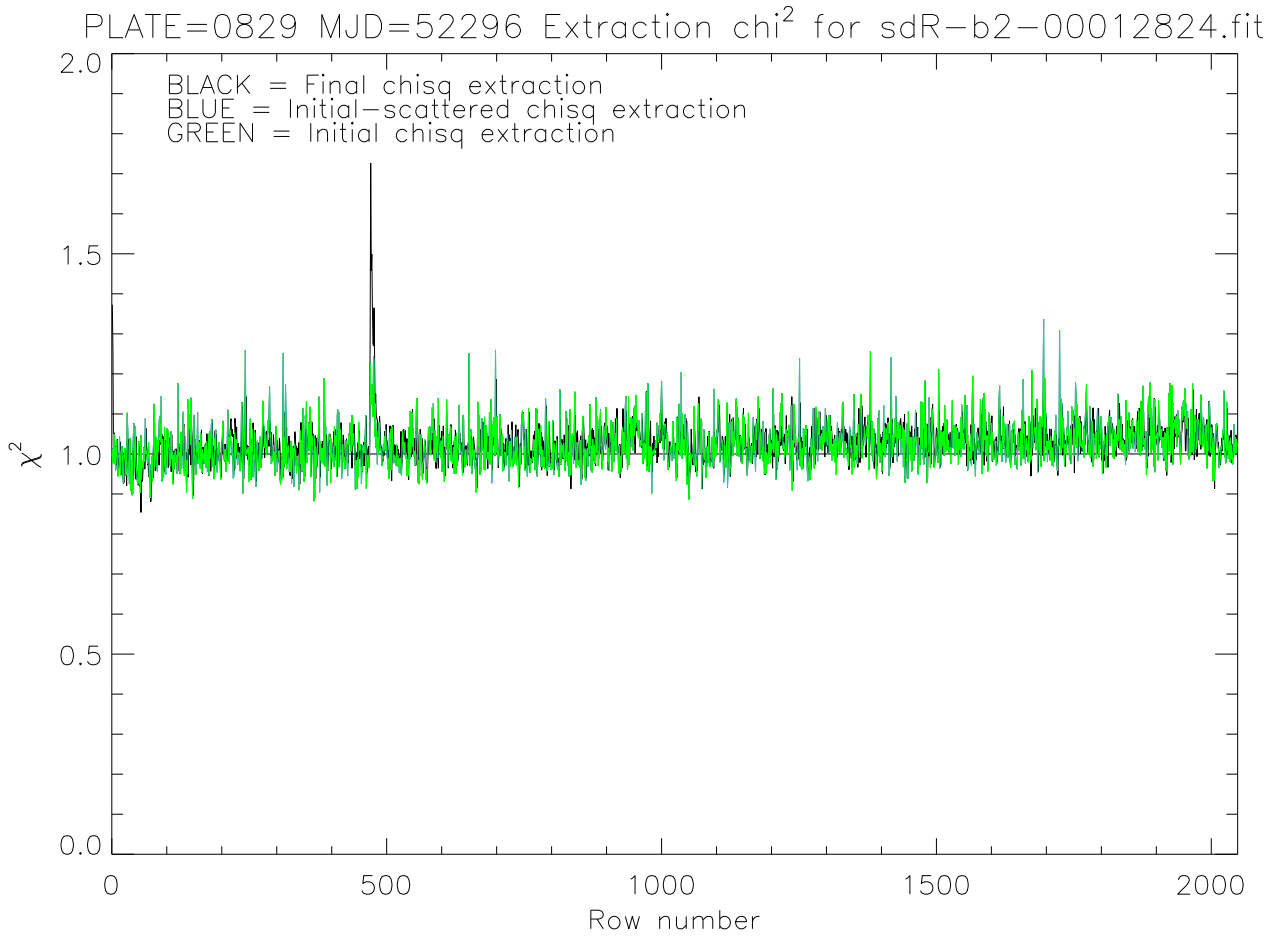

PLATE=0829 MJD=52296 Fiber-Flats for sdR-b2-00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.633
Max value = 1.173
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:08:31 2008

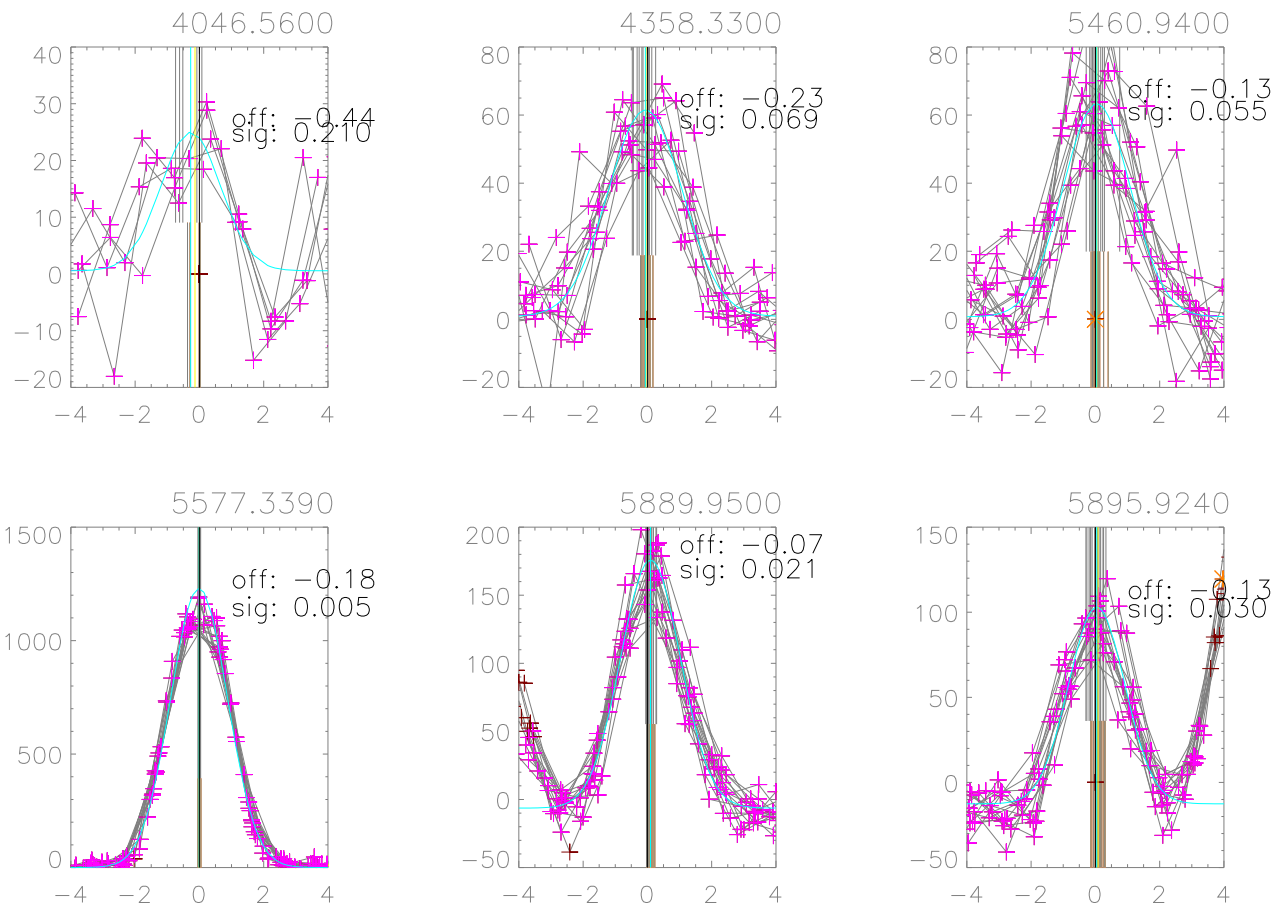

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR−b2−00012824.f
2.18
2.64
2.18
2.18
2.18
2.18
2.18
2.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

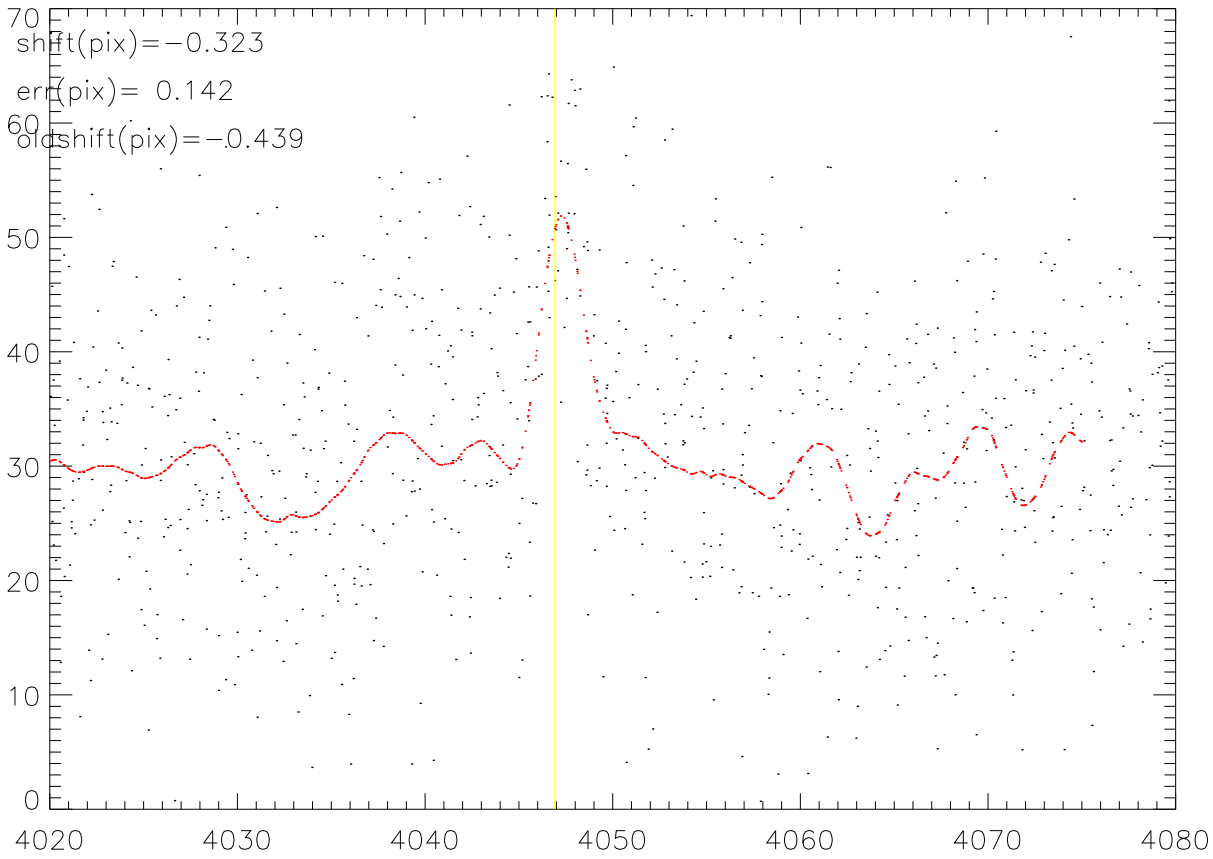

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-b2-00012824.f
Brightness [electrons/pix]
0
1
2
3
4
Error bars denote full range
Min value = 1.848
Max value = 2.951
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:09:07 2008

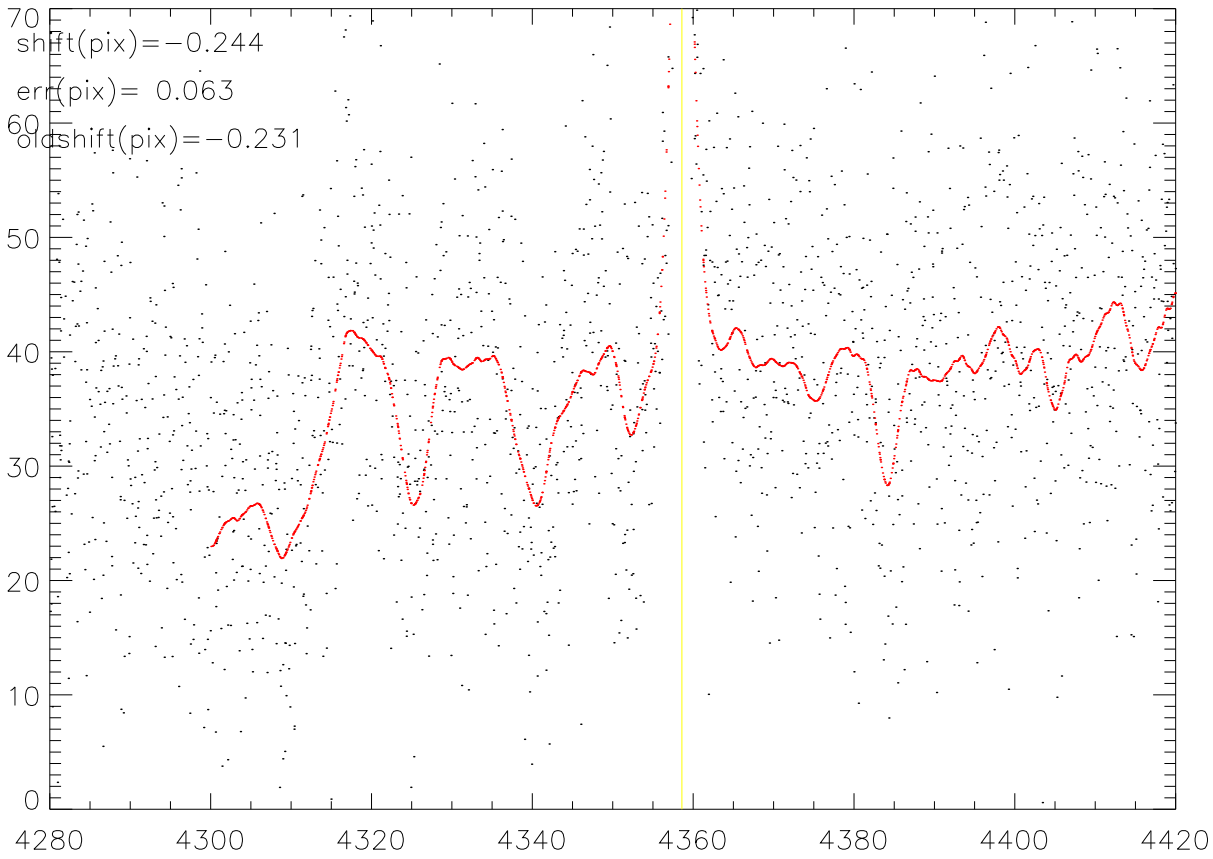

PLATE=0829 MJD=52296 Scattered Light on sdR-b2-00012824.fit
1.86
1.86
1.86
1.86
1.32
1.32
0
0
0
0
0
Y [pix]
X [pix]
2000
1500
1000
500
0
0
500
1000
1500
2000

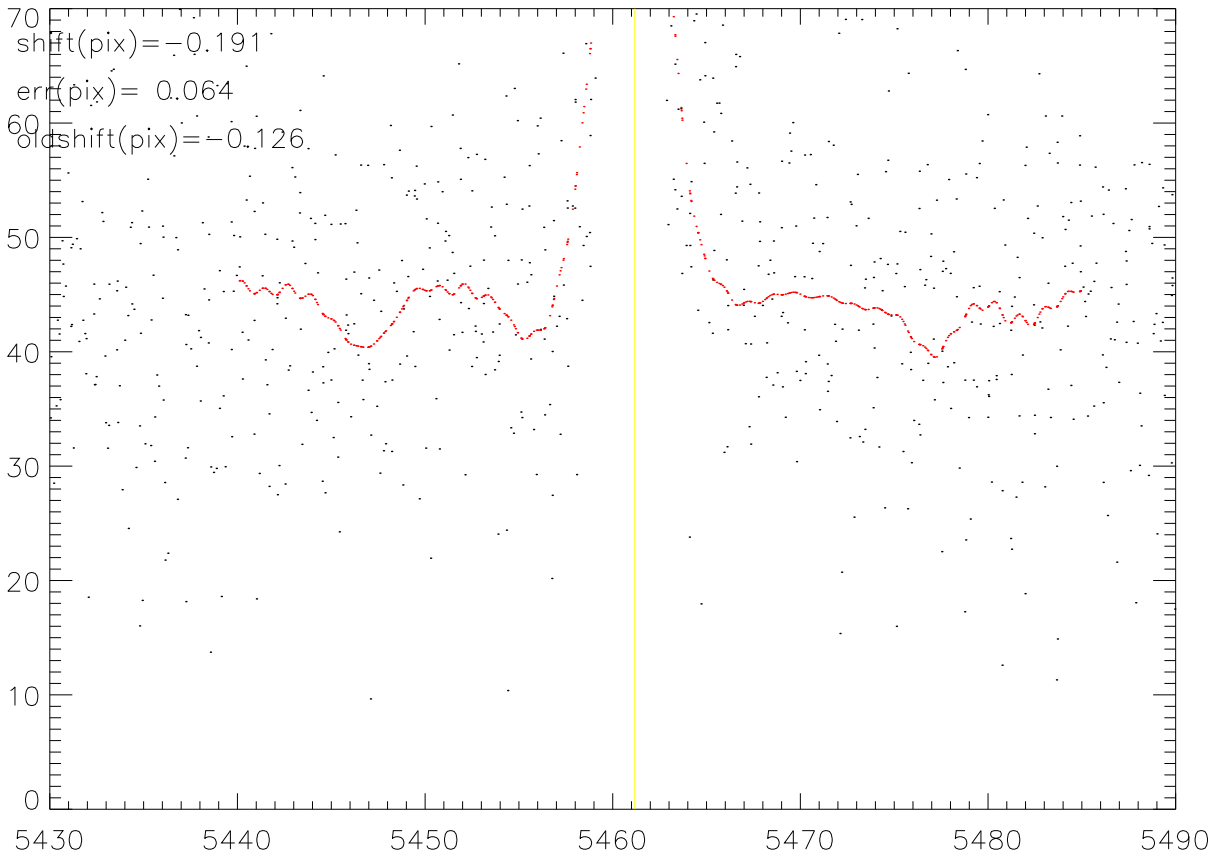

PLATE=0829 MJD=52296 Scattered Light on sdR-b2-00012824.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.275
Max value = 1.909
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 02:11:27 2008

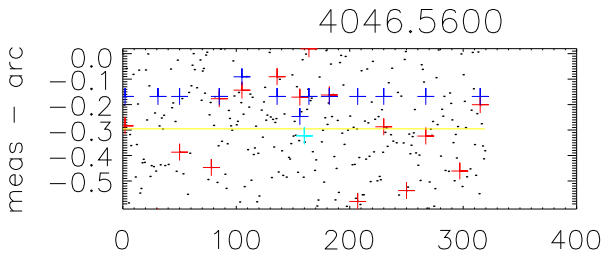

PLATE=0829 MJD=52296 Extraction chi^2 for sdR-b2-00012824.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

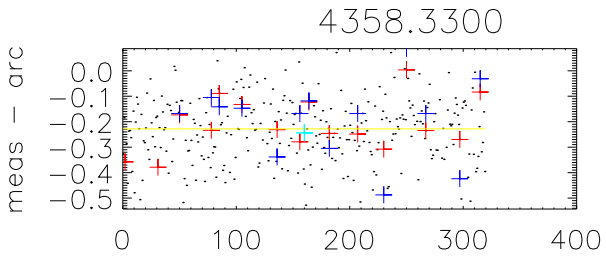

4046.5600
off: −0.44
sig: 0.210
4358.3300
off: −0.23
sig: 0.069
5460.9400
off: −0.13
sig: 0.055
5577.3390
off: −0.18
sig: 0.005
5889.9500
off: −0.07
sig: 0.021
5895.9240
off: −0.13
sig: 0.030

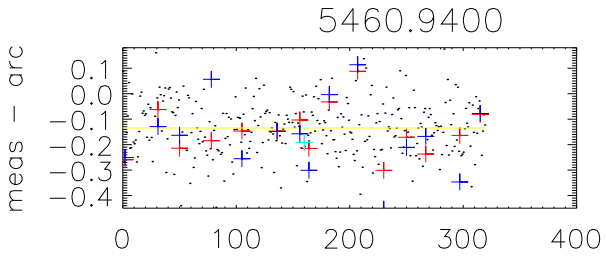

shift(pix)=−0.323
err(pix)= 0.142
oldshift(pix)=−0.439
70
60
50
40
30
20
10
0
4020
4030
4040
4050
4060
4070
4080

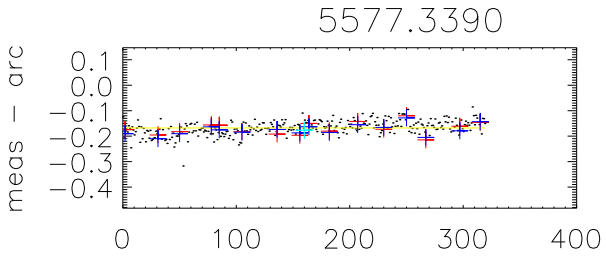

shift(pix)=−0.244
err(pix)= 0.063
oldshift(pix)=−0.231
70
60
50
40
30
20
10
0
4280
4300
4320
4340
4360
4380
4400
4420

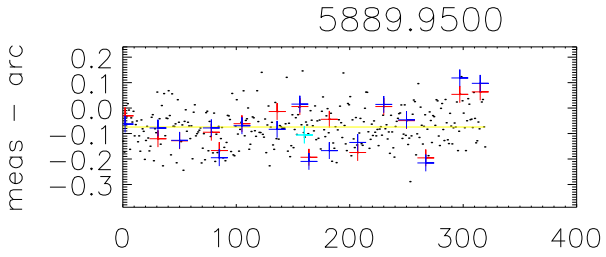

shift(pix)=−0.191
err(pix)= 0.064
oldshift(pix)=−0.126
70
60
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

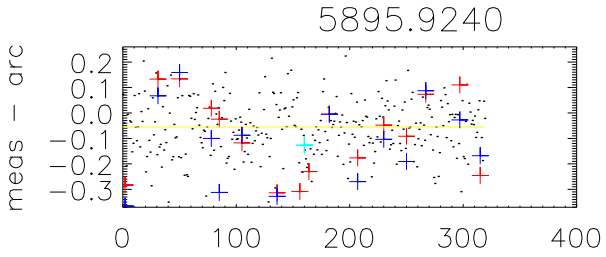

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

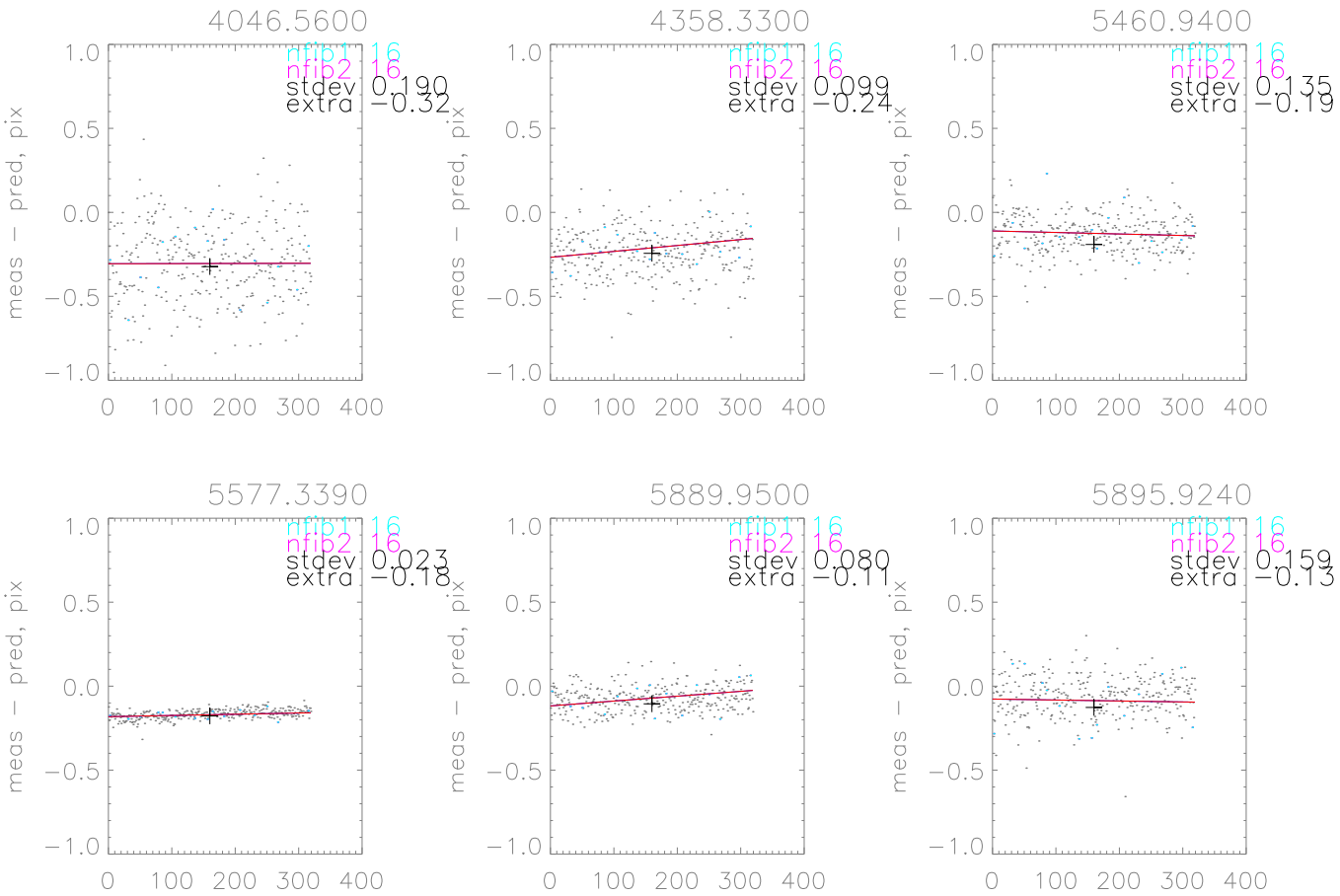

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

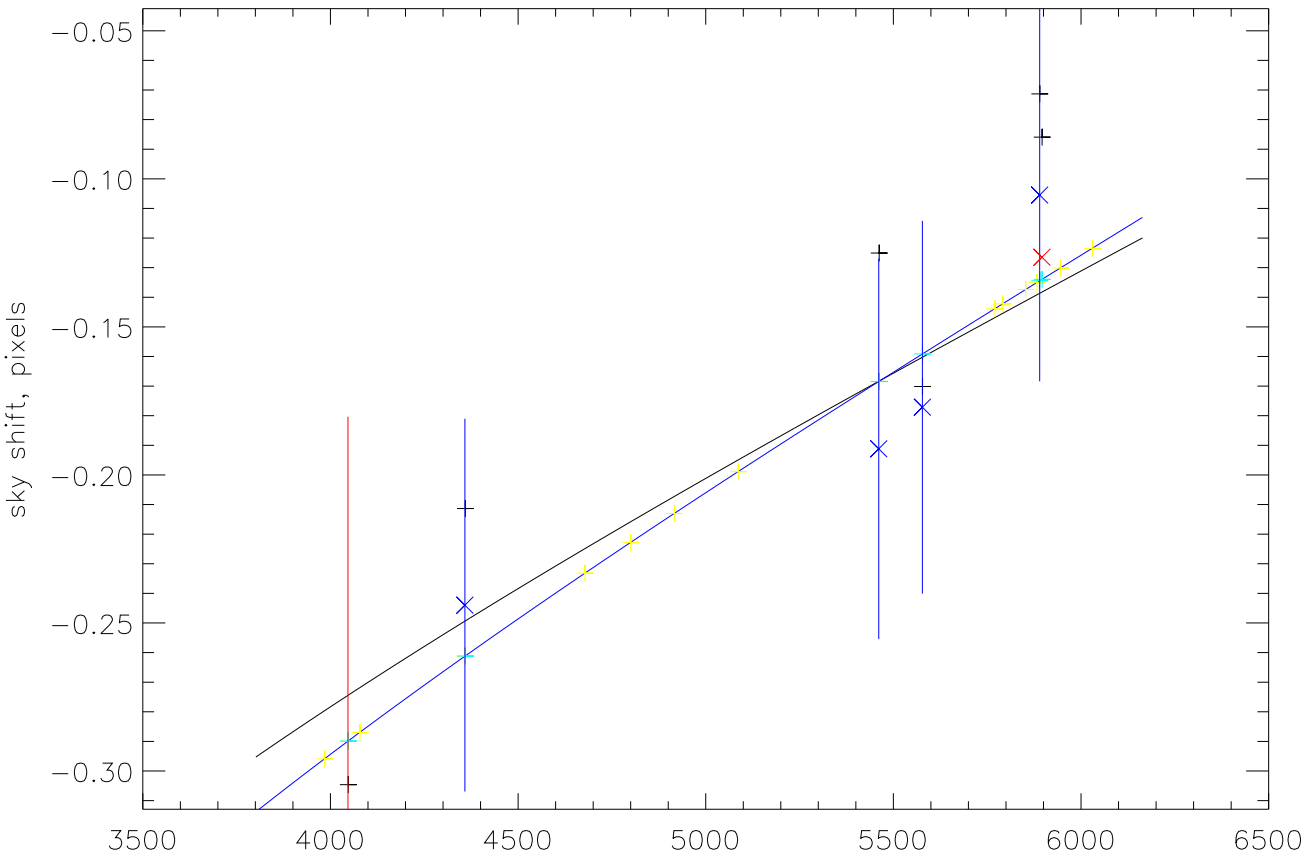

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

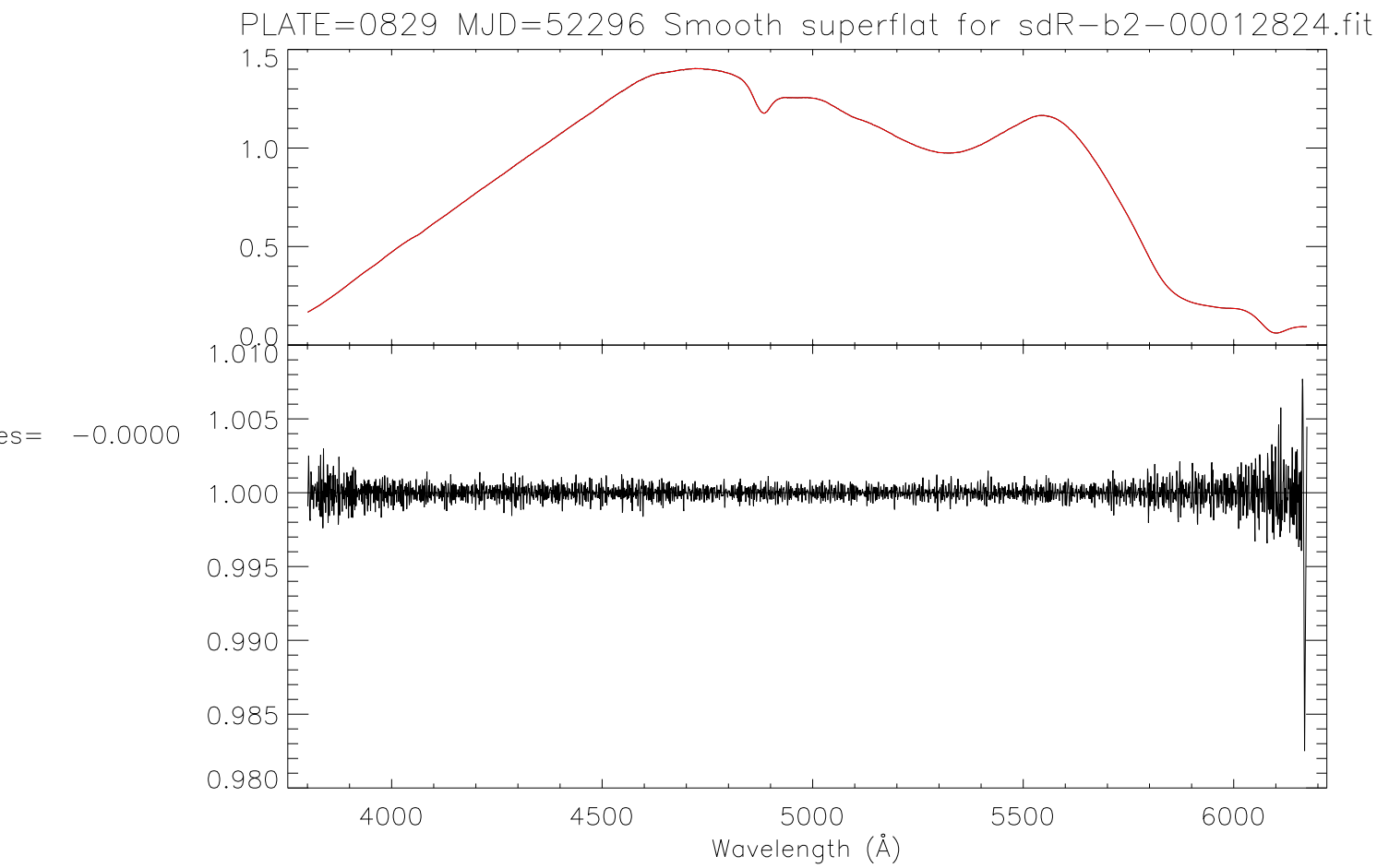

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

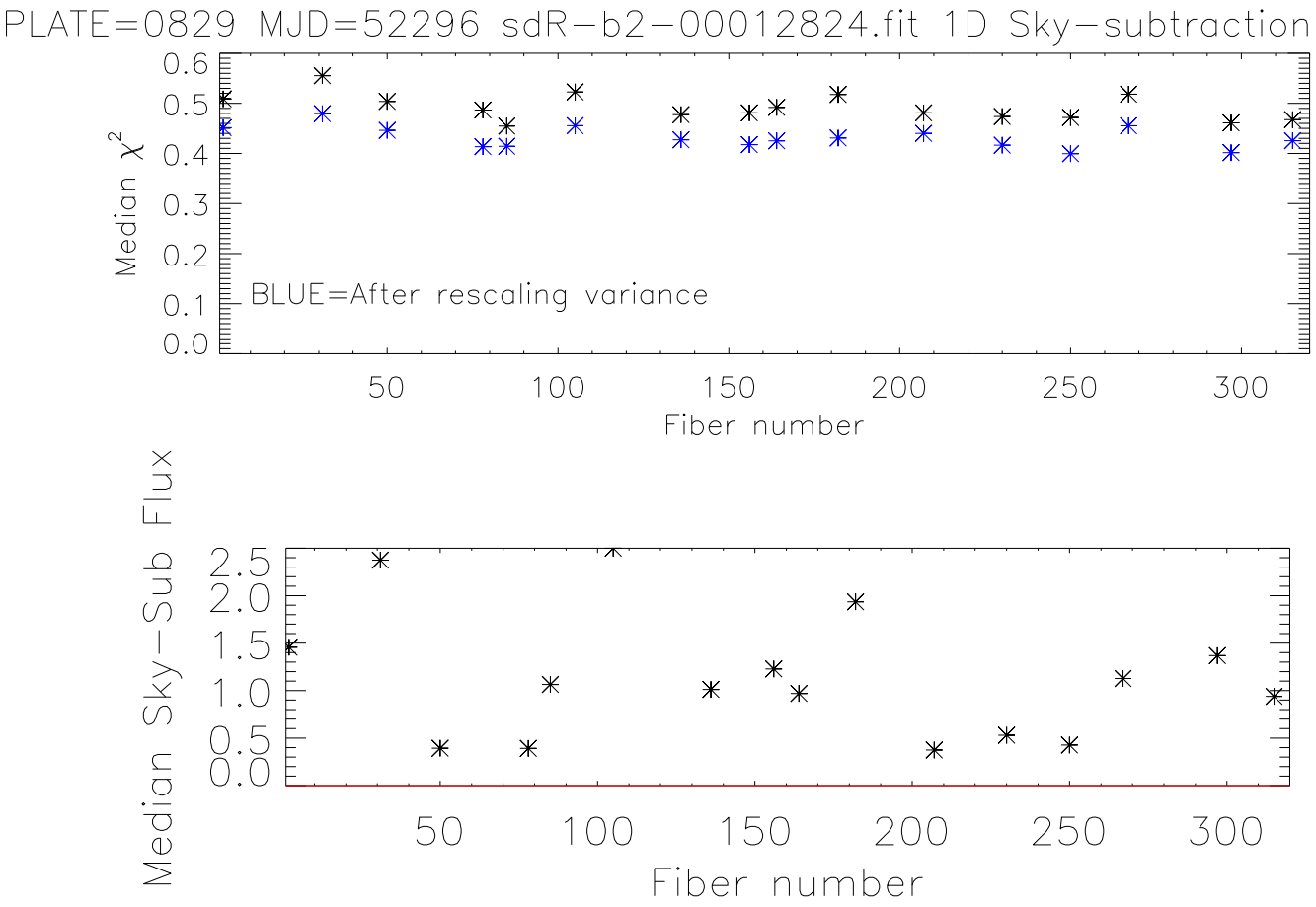

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

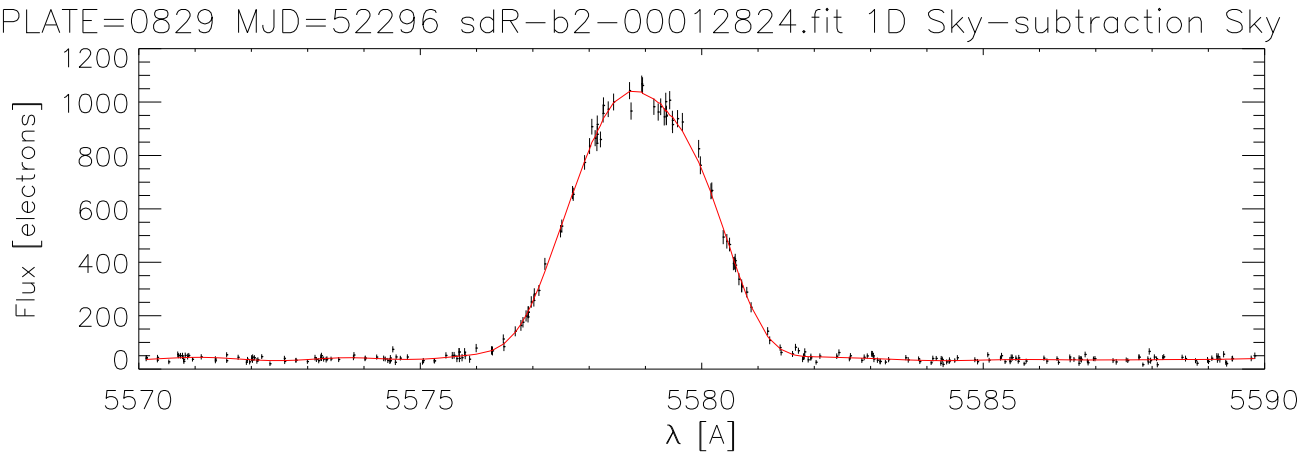

4046.5600
nfib1 16
nfib2 16
stdev 0.190
extra −0.32
4358.3300
nfib1 16
nfib2 16
stdev 0.099
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.135
extra −0.19
5577.3390
nfib1 16
nfib2 16
stdev 0.023
extra −0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.080
extra −0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.159
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

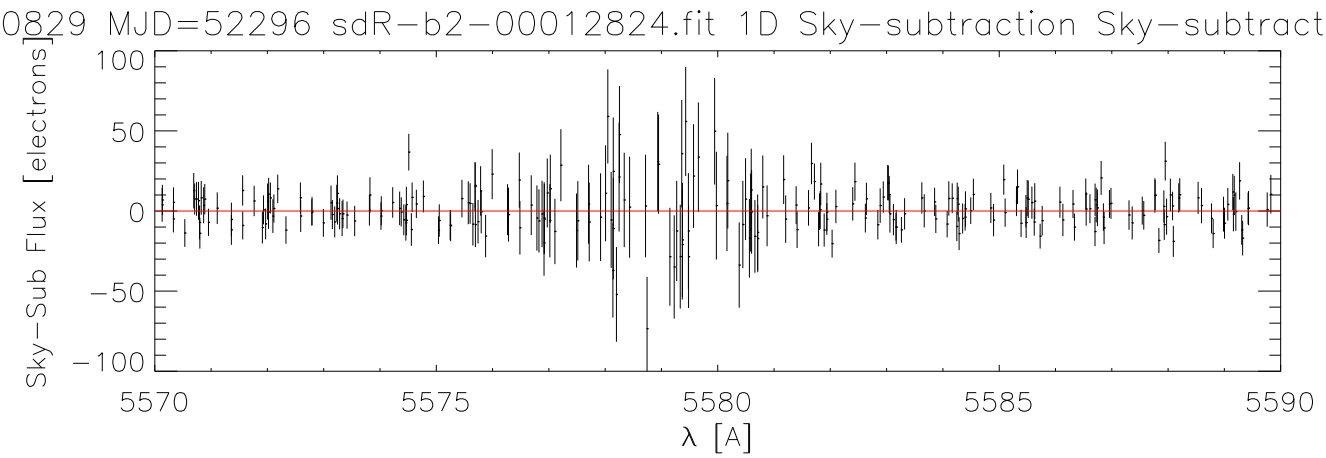

−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

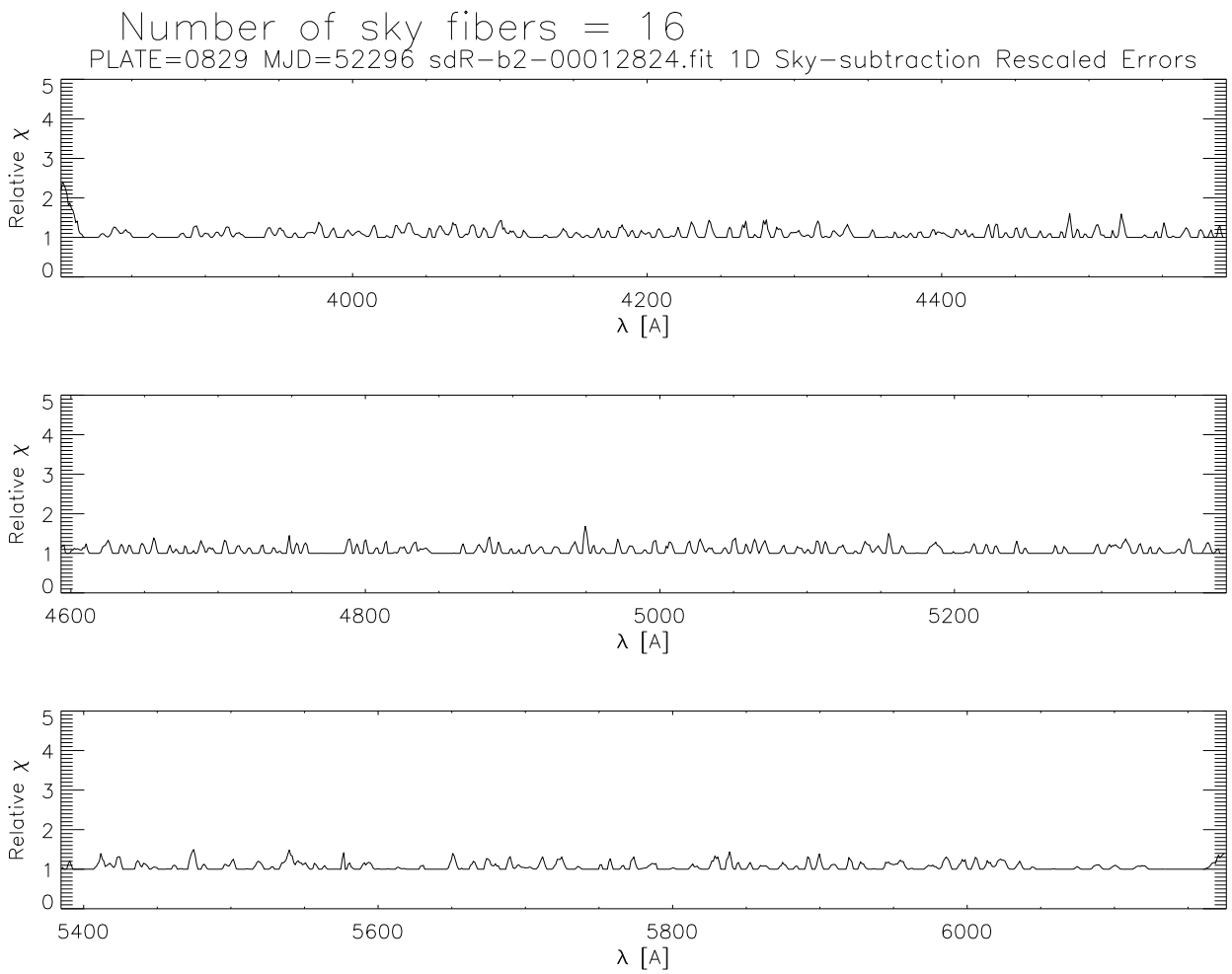

PLATE=0829 MJD=52296 Smooth superflat for sdR-b2-00012824.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

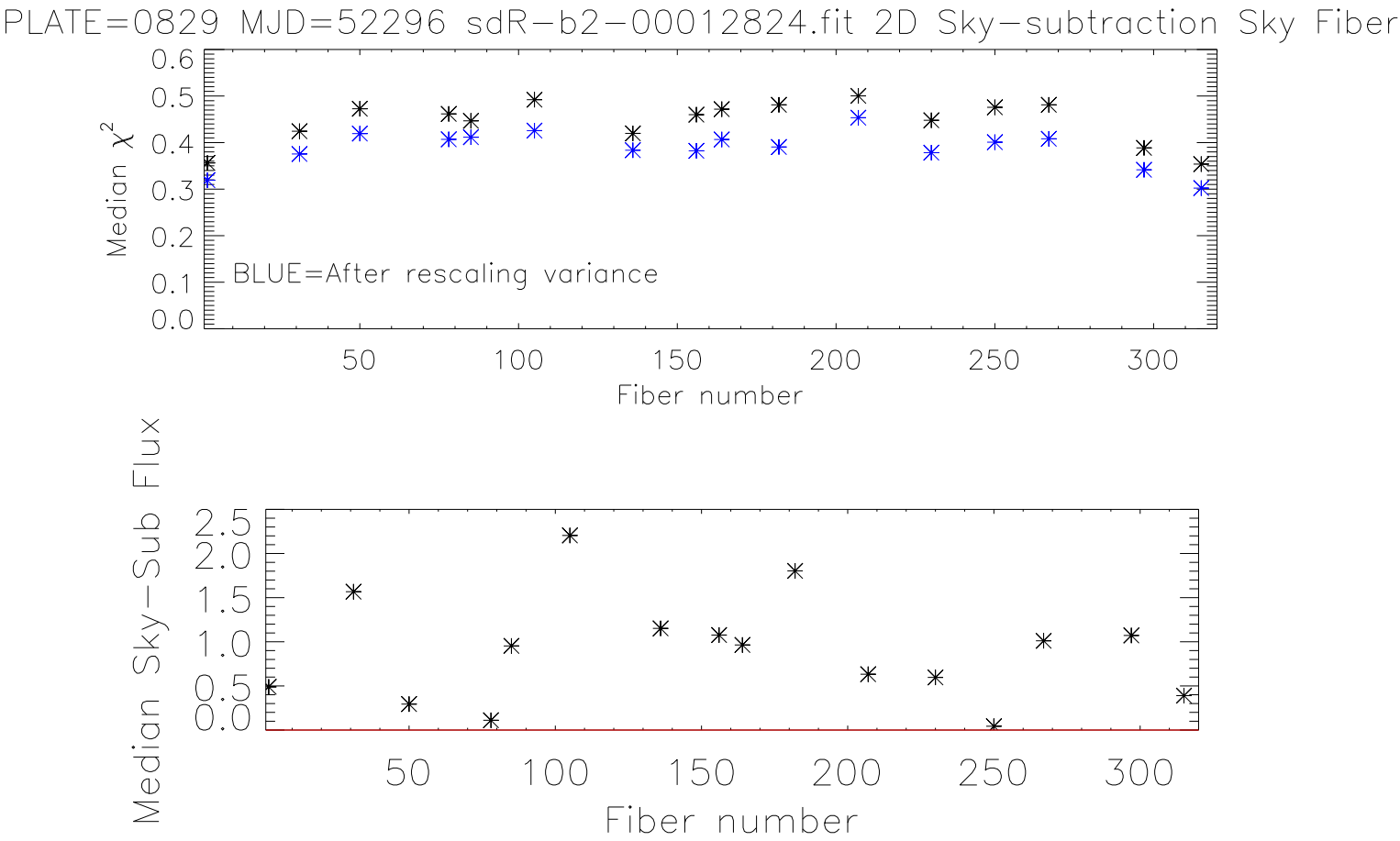
es= −0.0000

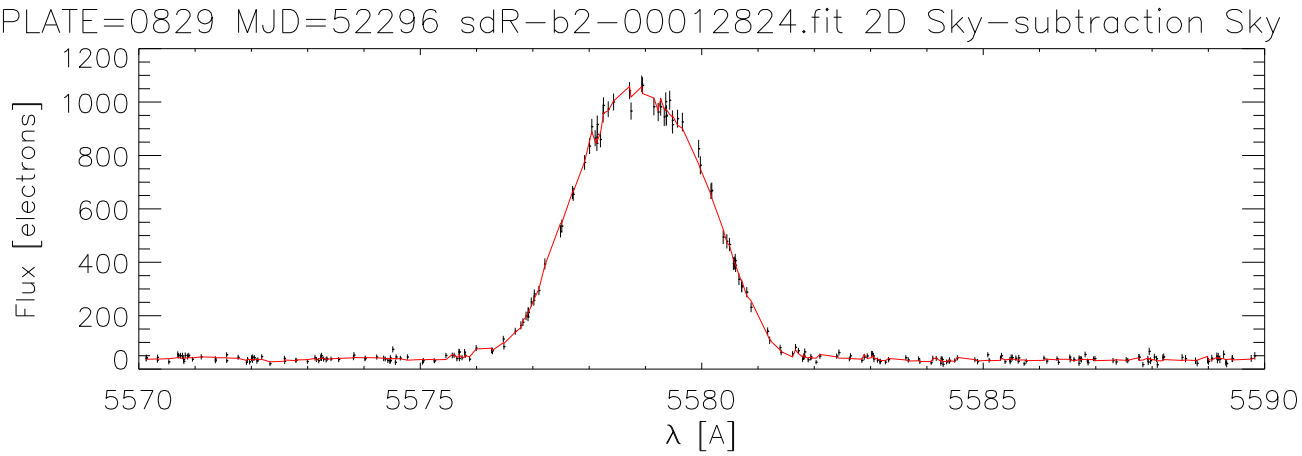

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

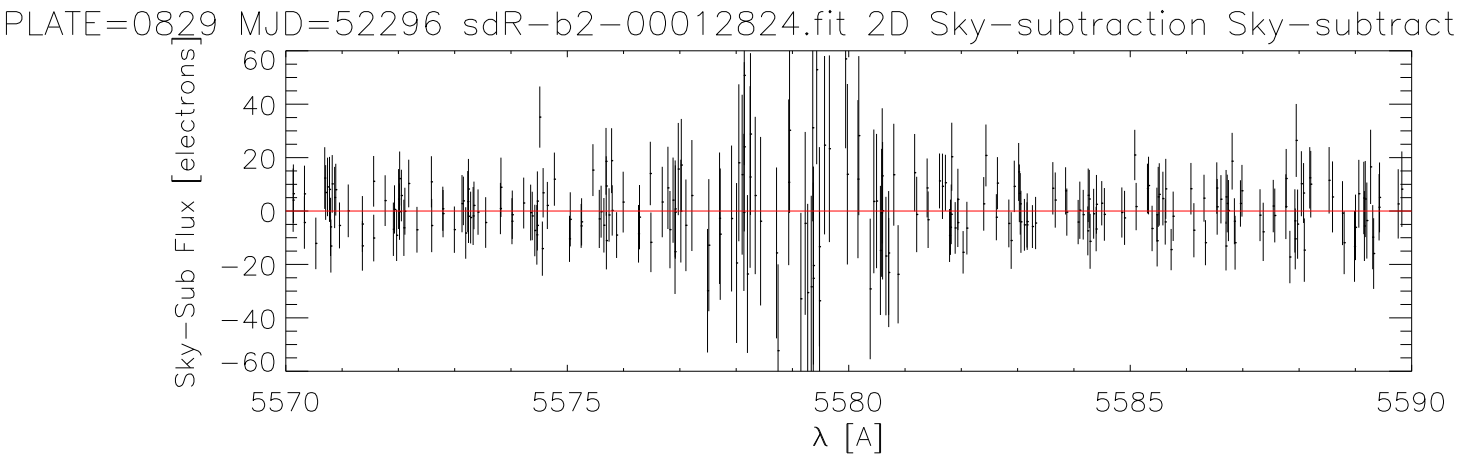

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
5570
5575
5580
5585
5590
λ [A]

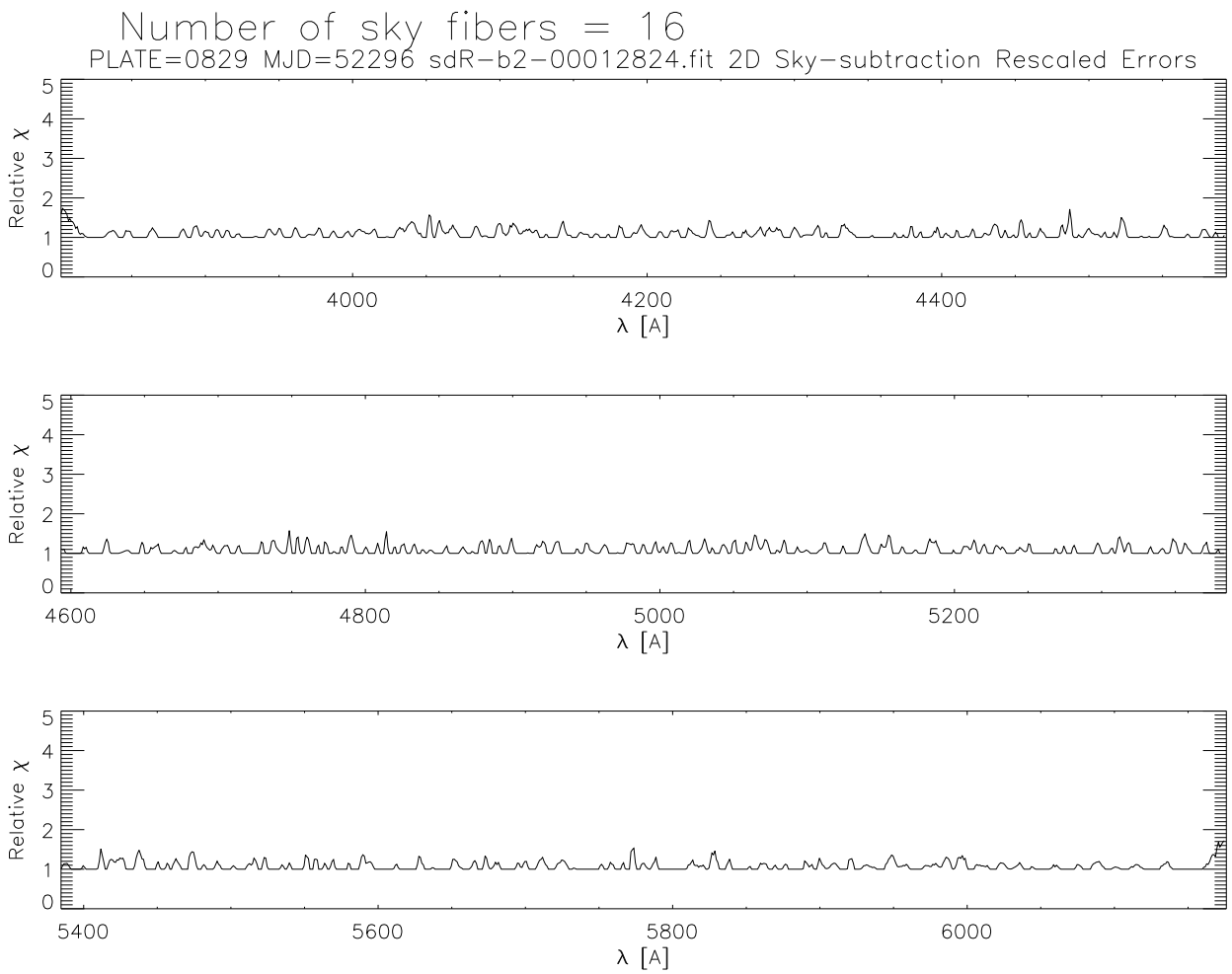

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

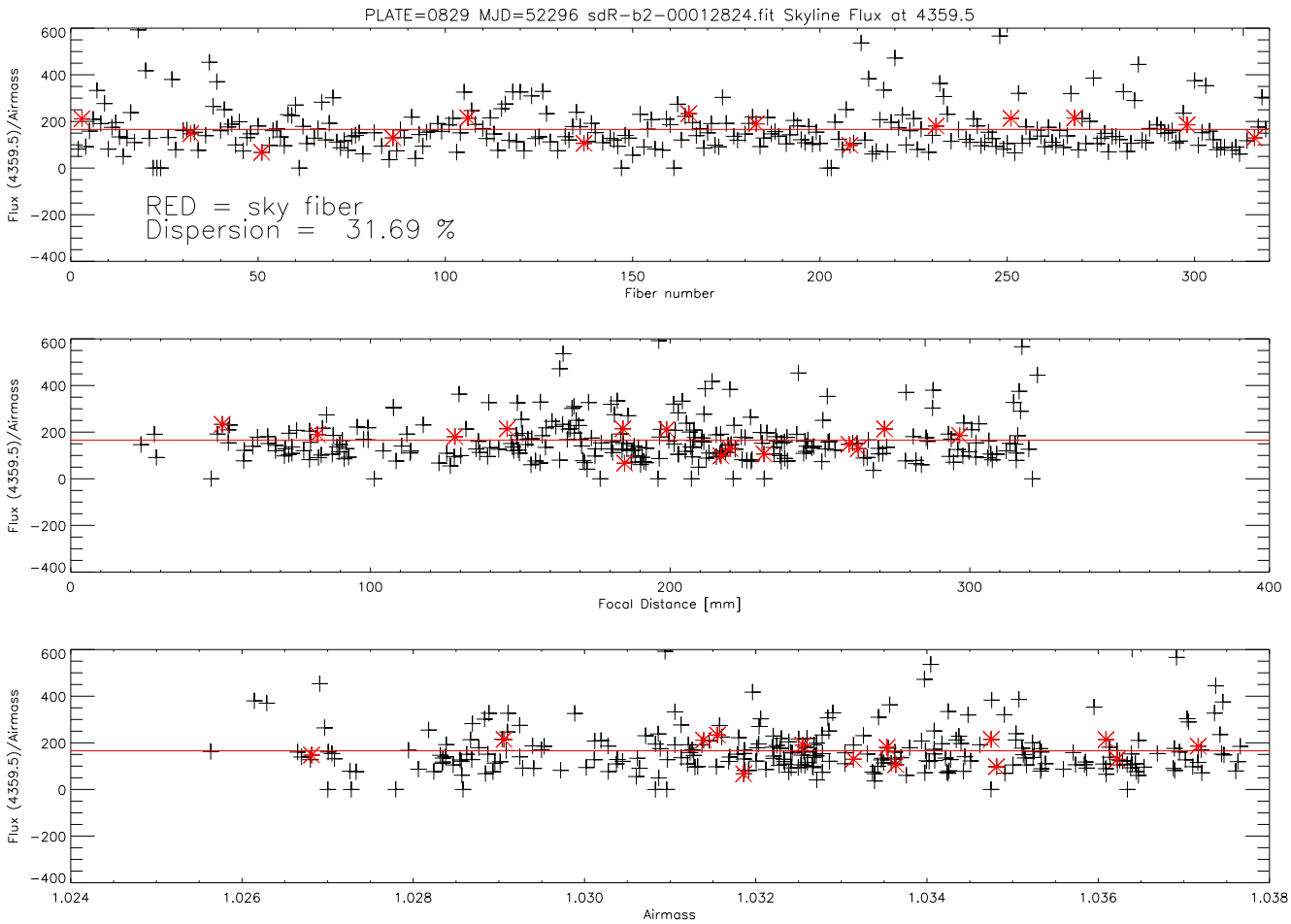

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b2-00012824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

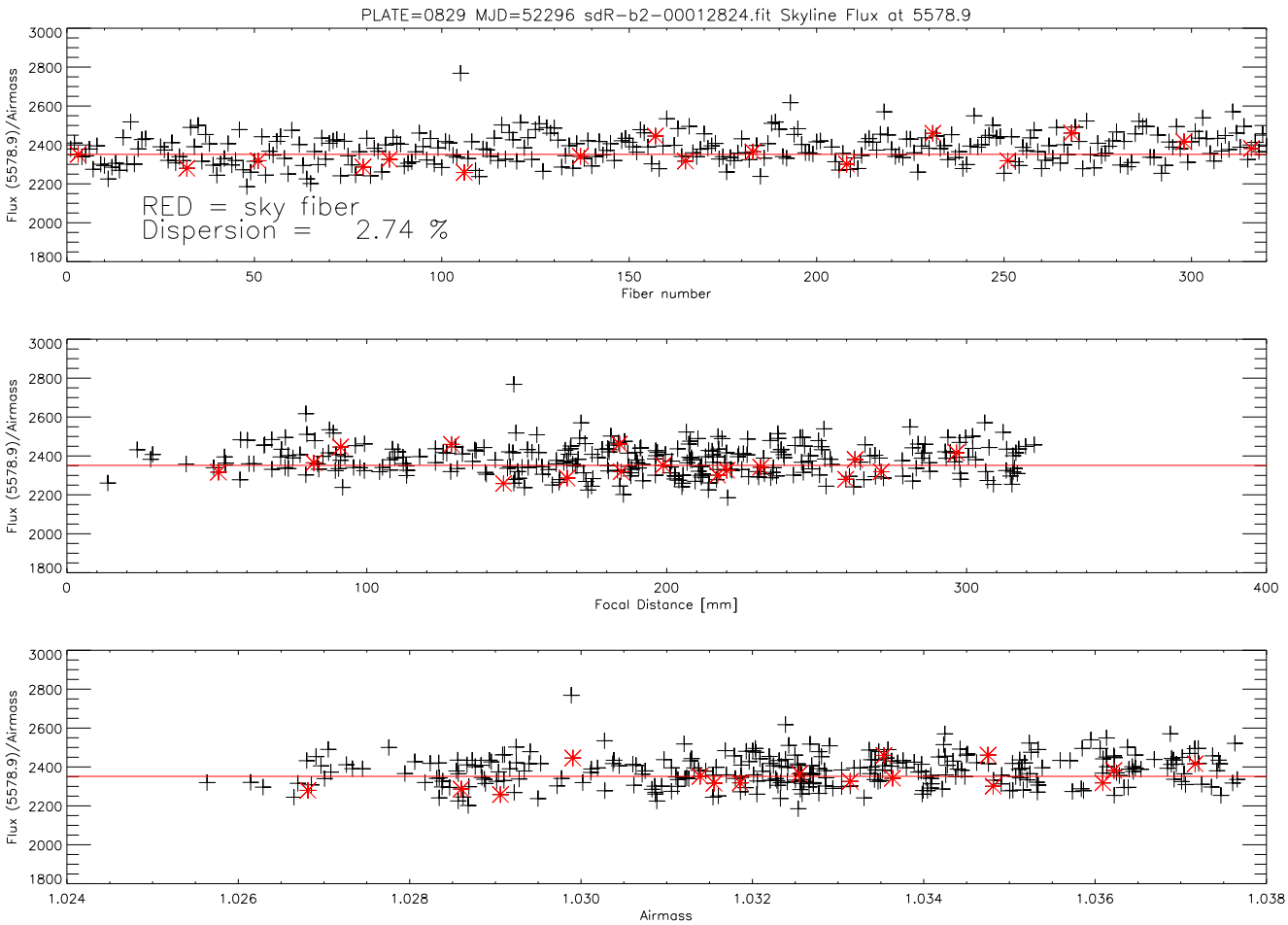

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

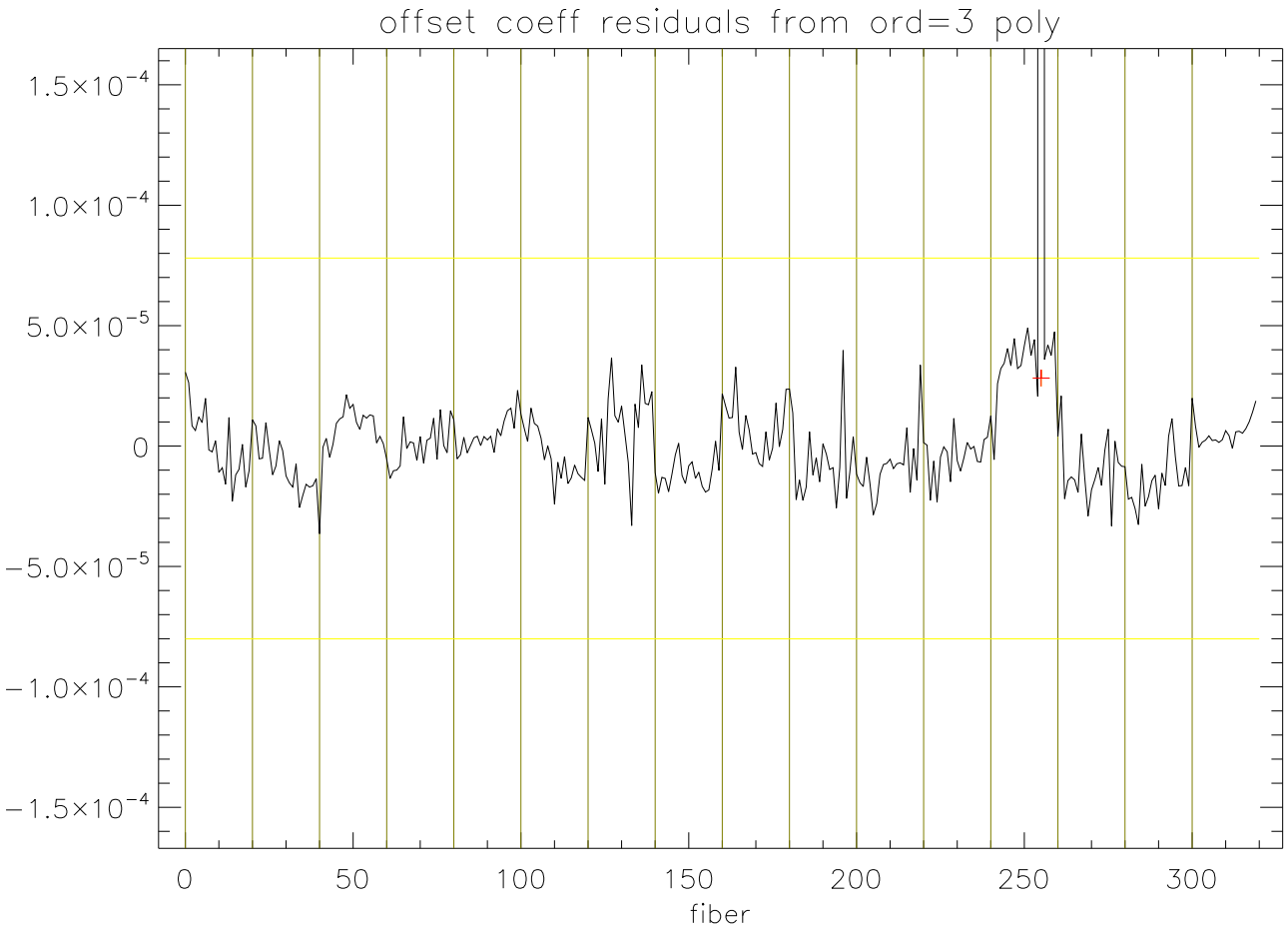

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
5570
5575
5580
5585
5590
λ [A]

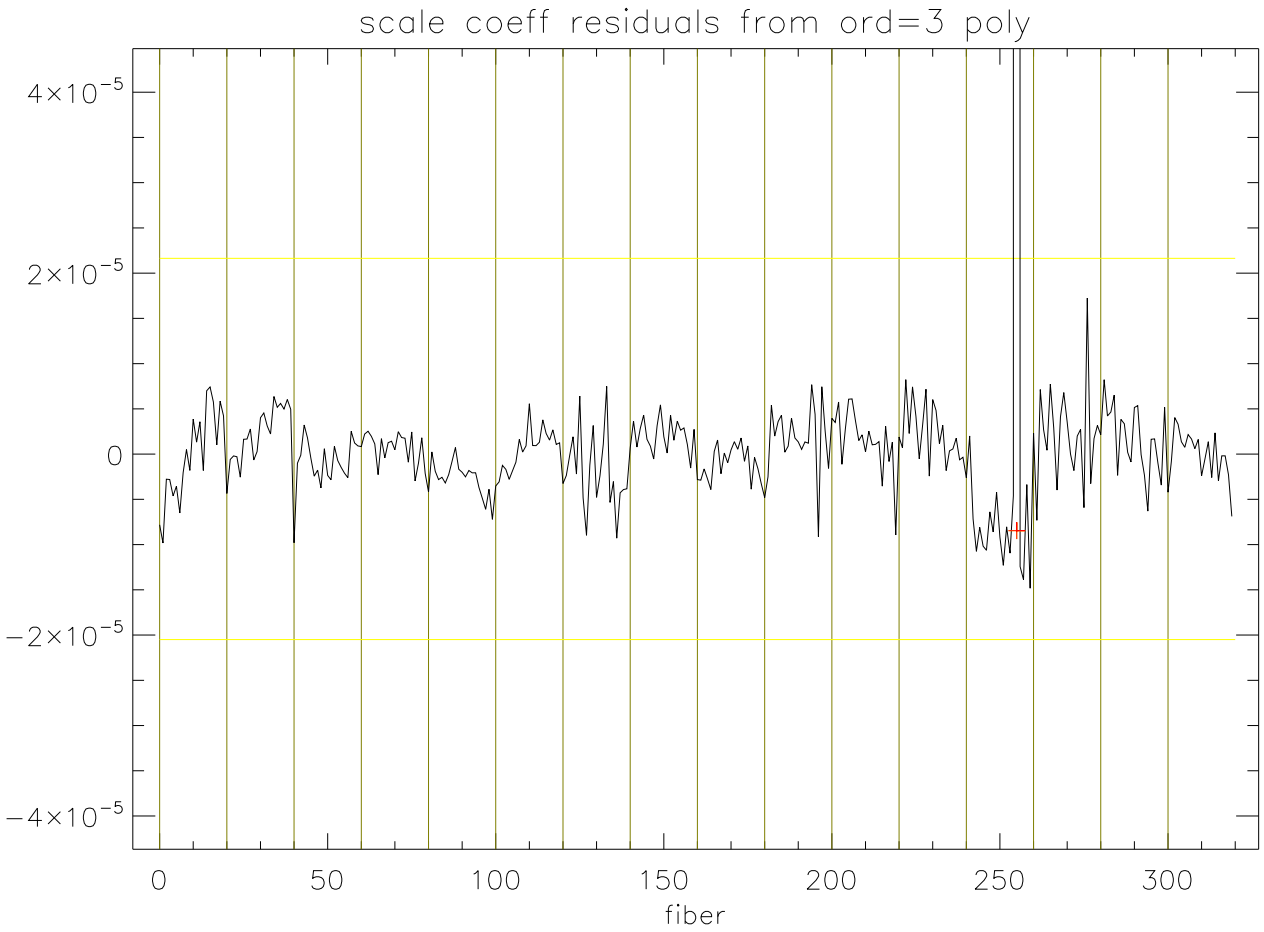

PLATE=0829 MJD=52296 sdR-b2-00012824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
-20
-40
-60
5570
5575
5580
5585
5590
λ [A]

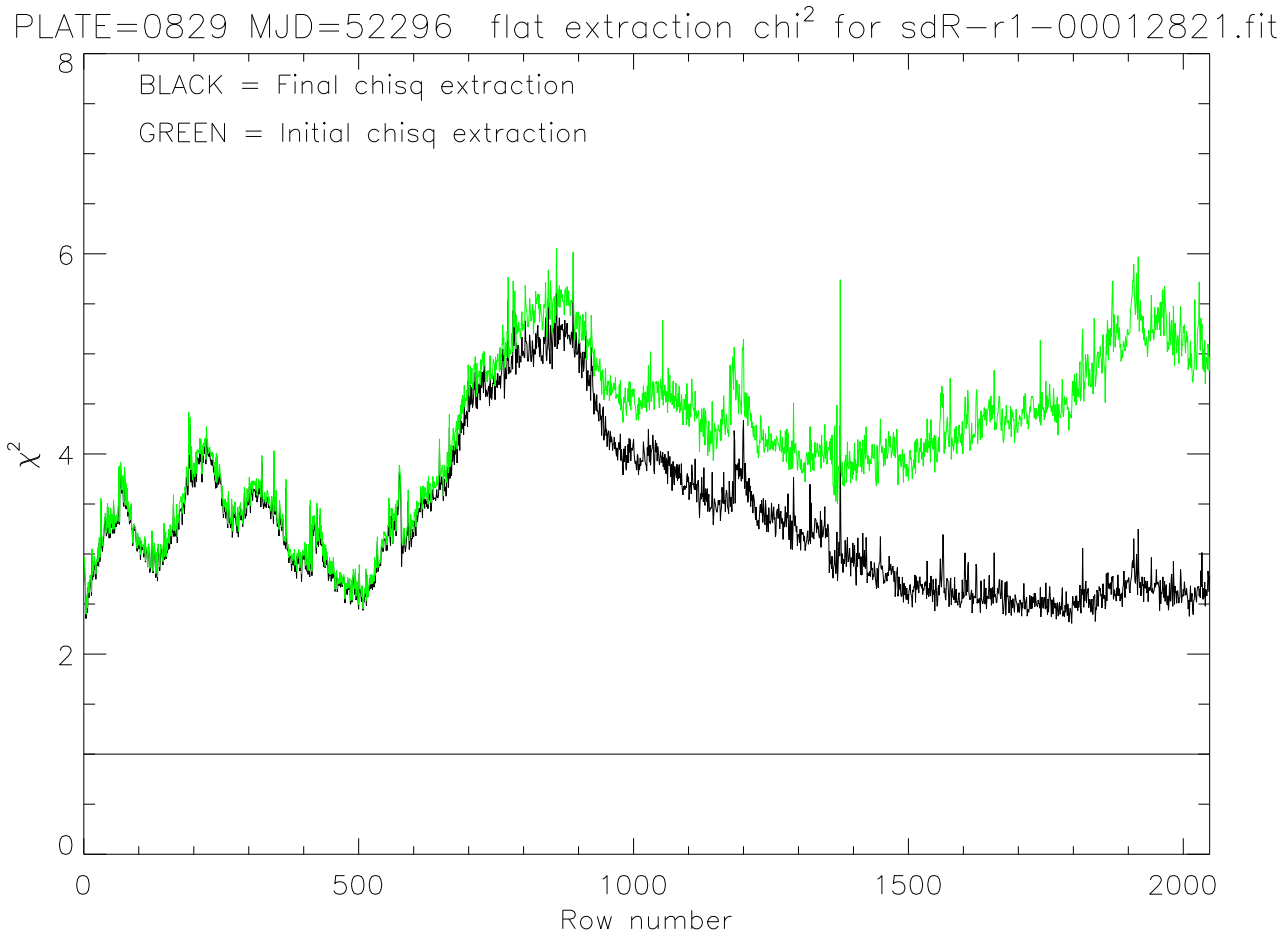

Number of sky fibers = 16
PLATE=0829 MJD=52296 sdR-b2-00012824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

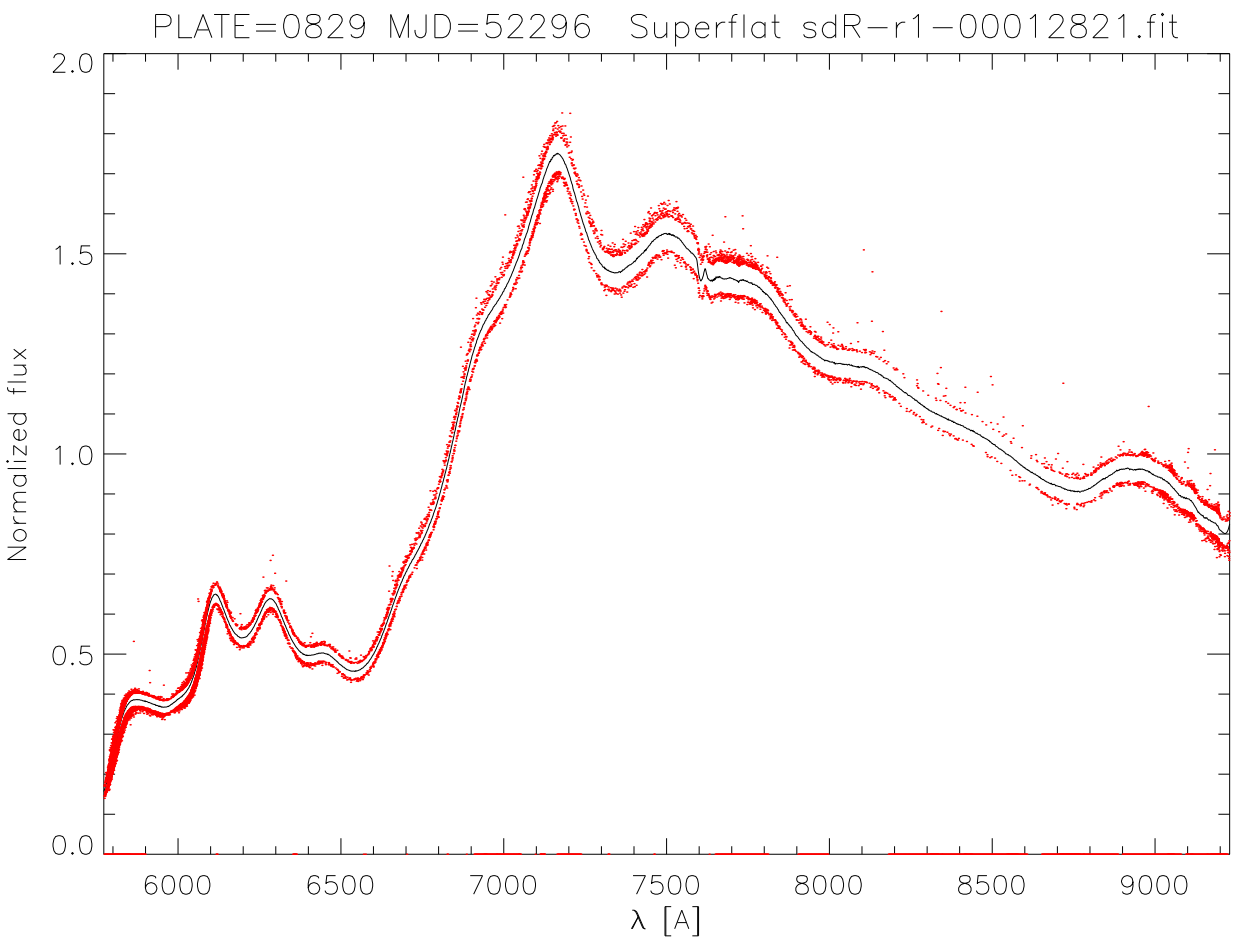

PLATE=0829 MJD=52296 sdR-b2-00012824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 31.69 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

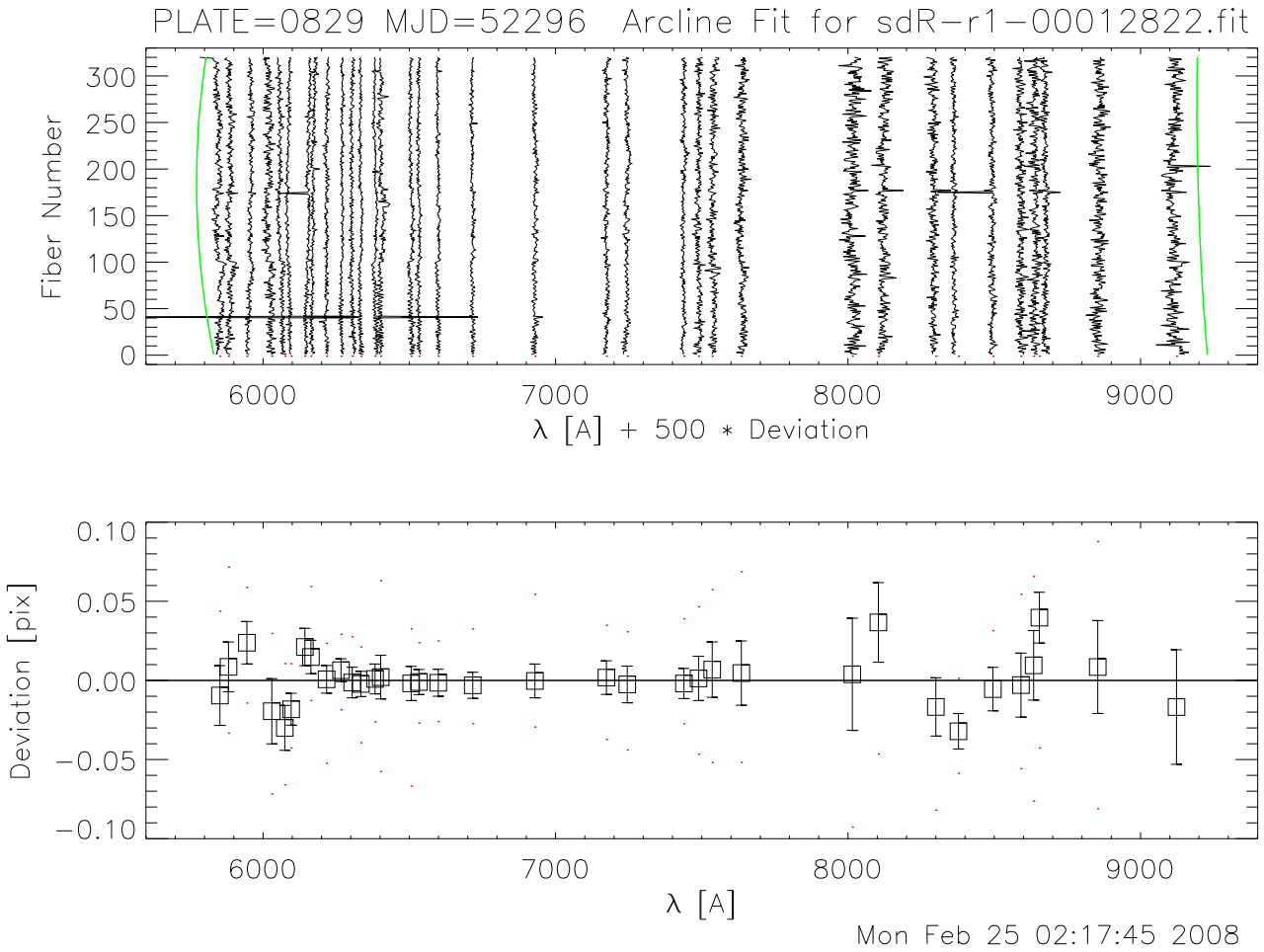

PLATE=0829 MJD=52296 sdR-b2-00012824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.74 %
Fiber number
Focal Distance [mm]
Airmass

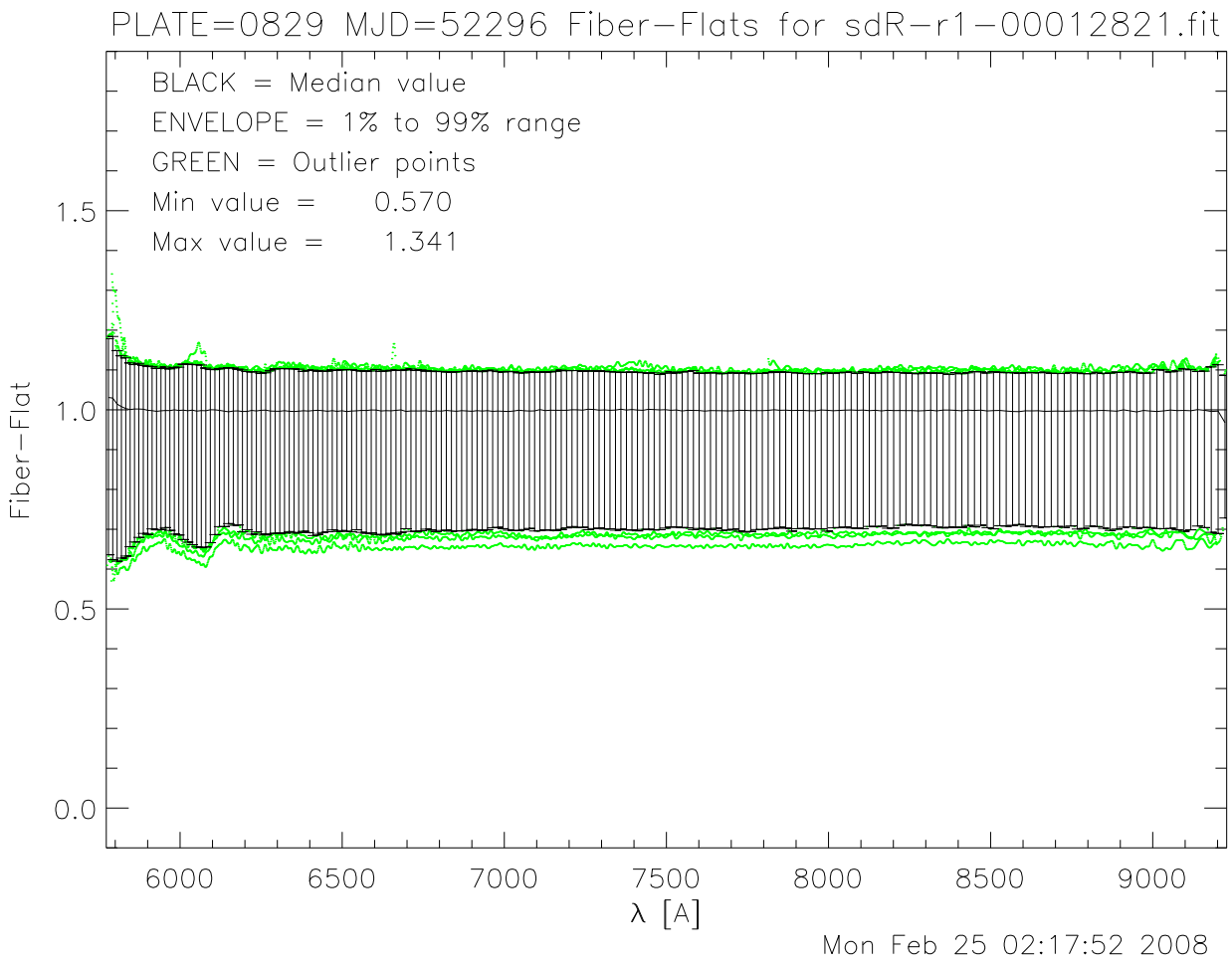

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

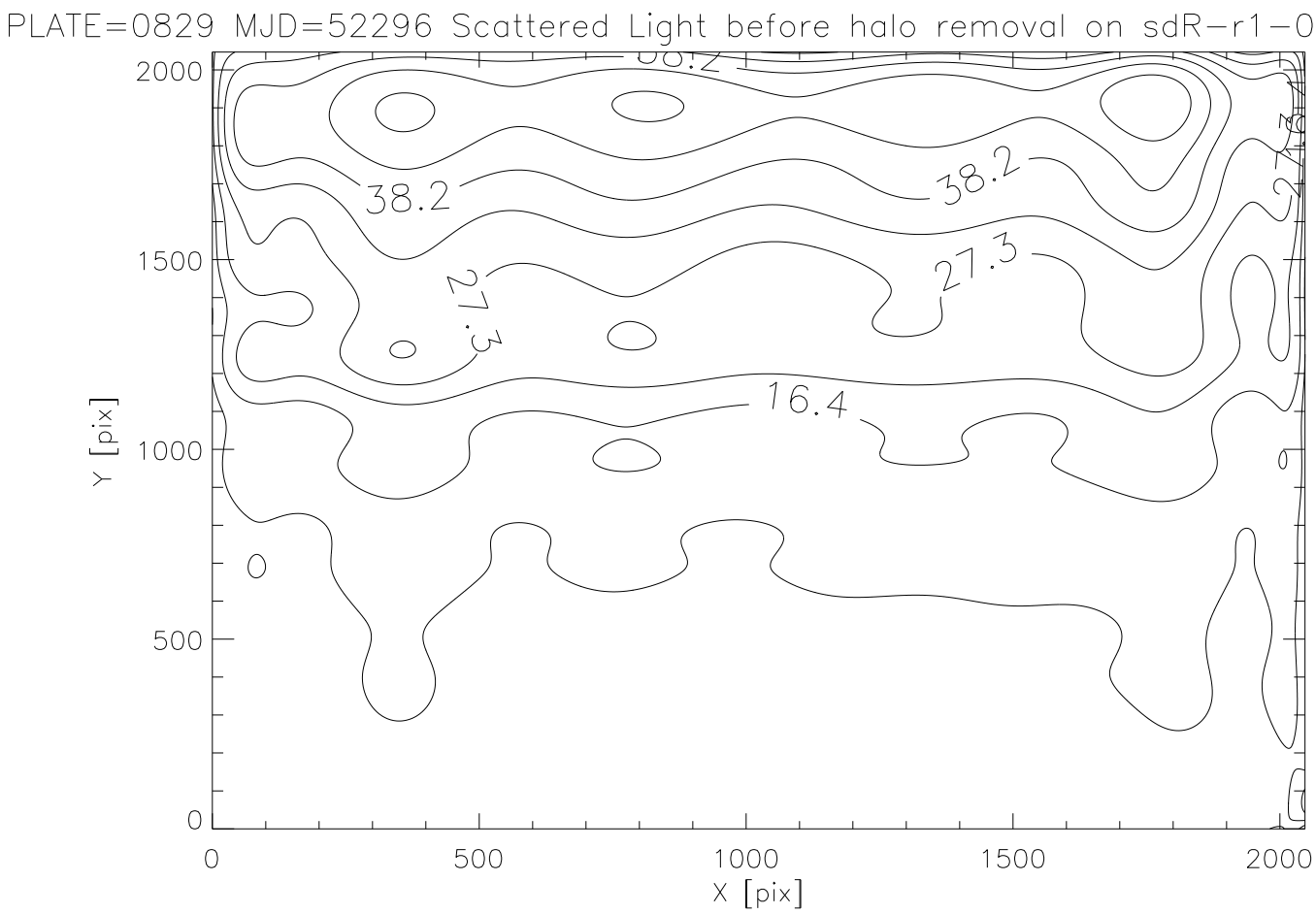

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

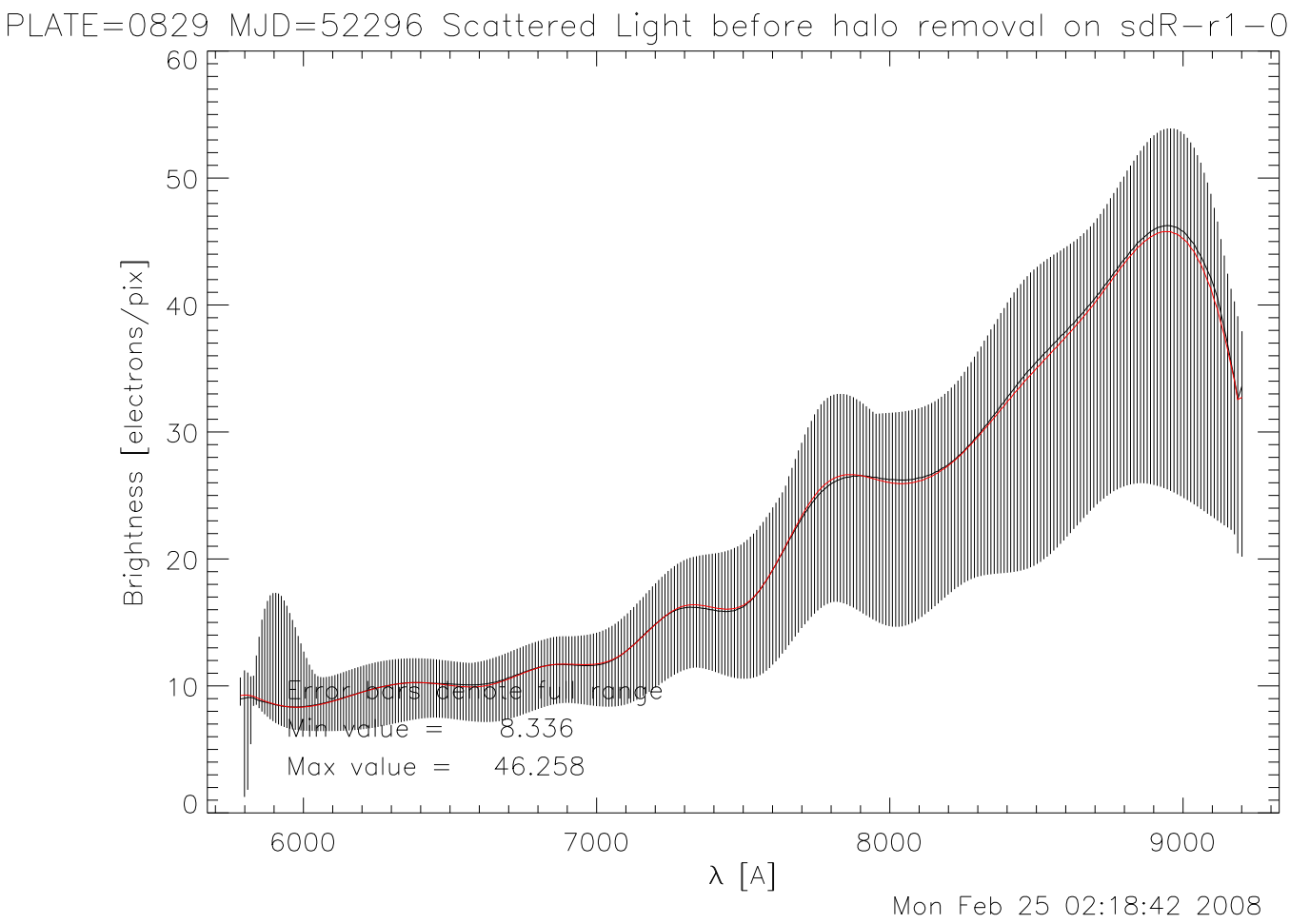

PLATE=0829 MJD=52296 flat extraction chi^2 for sdR−r1−00012821.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

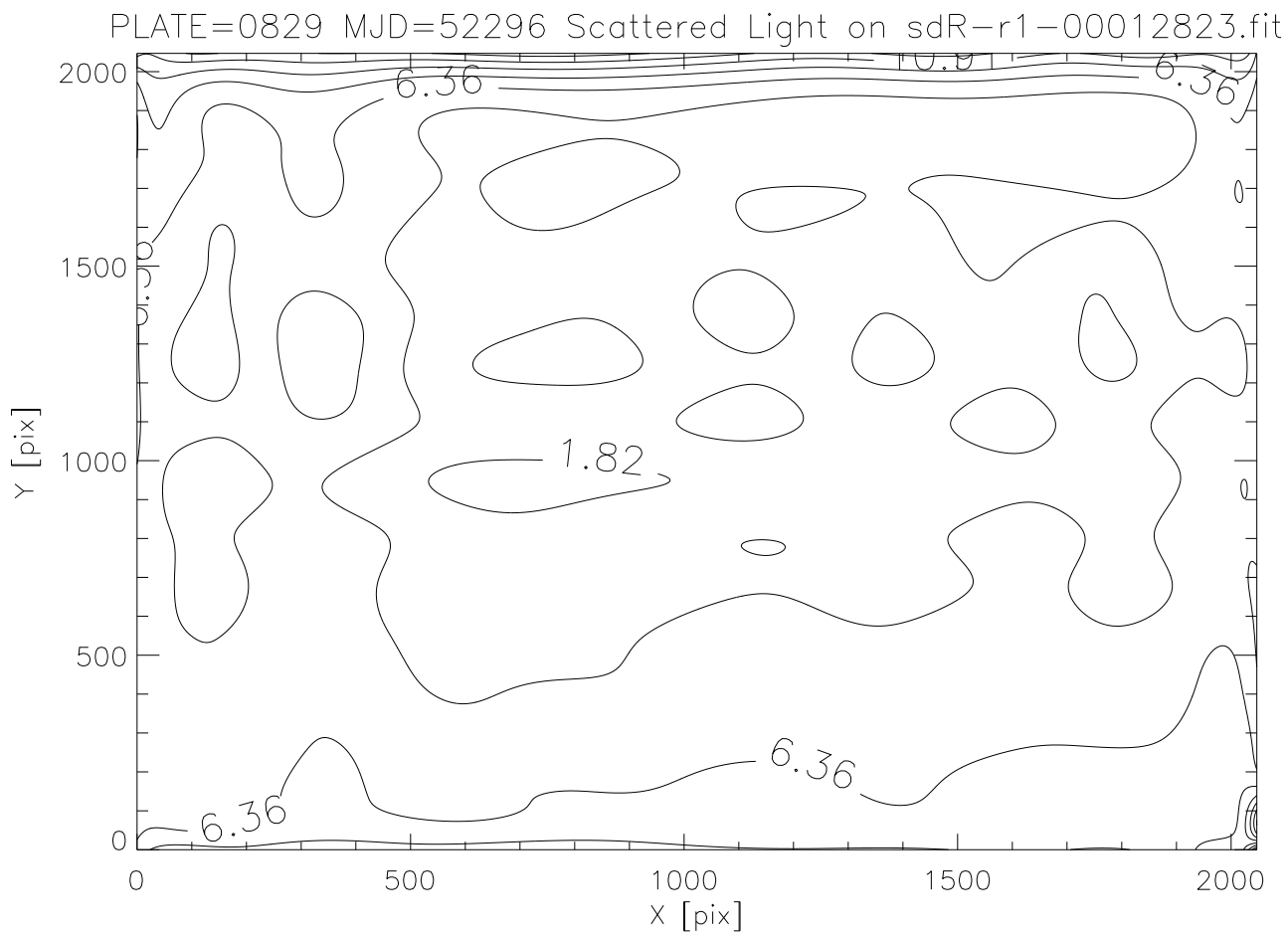

PLATE=0829 MJD=52296 Superflat sdR-r1-00012821.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

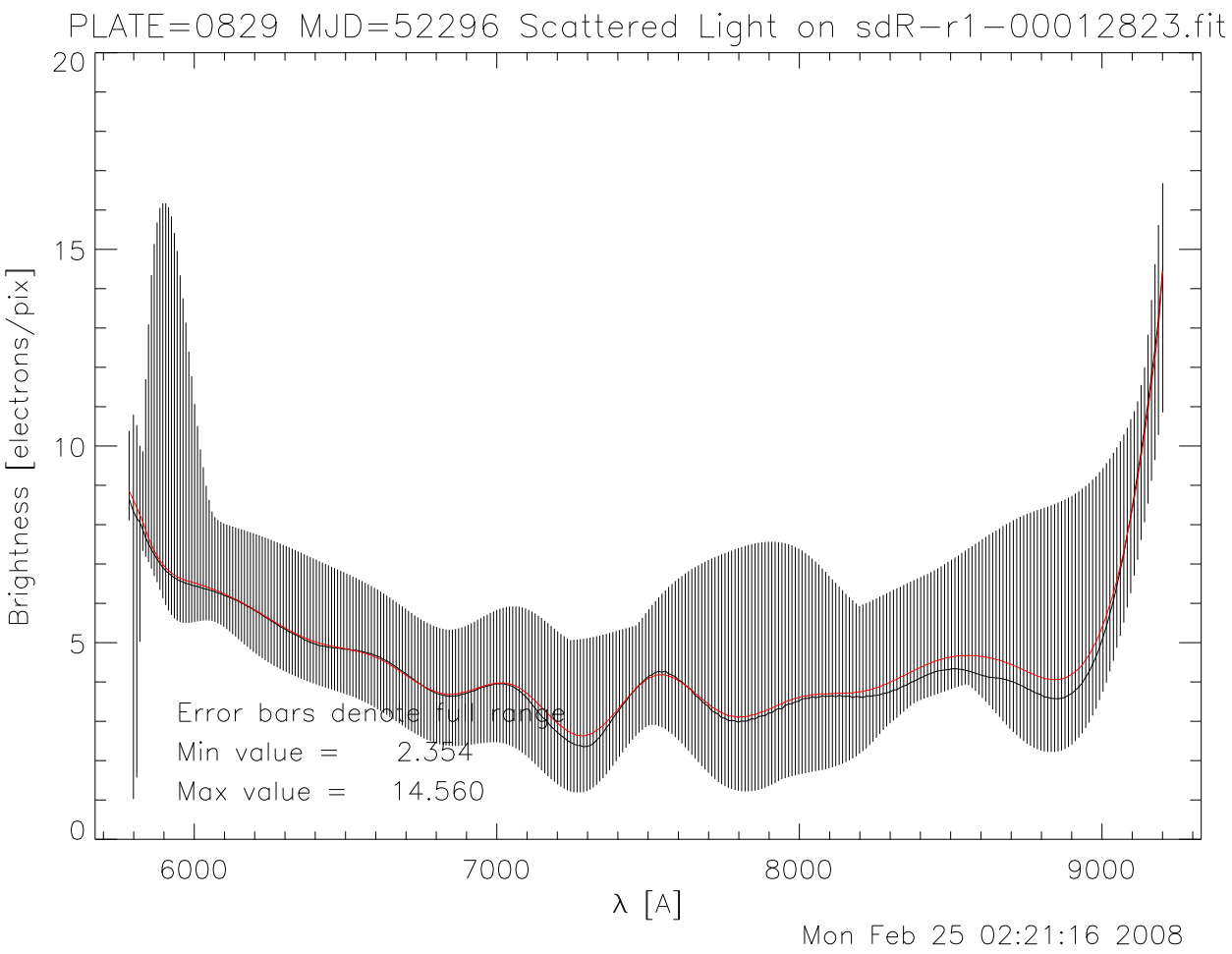

PLATE=0829 MJD=52296 Arcline Fit for sdR-r1-00012822.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 02:17:45 2008

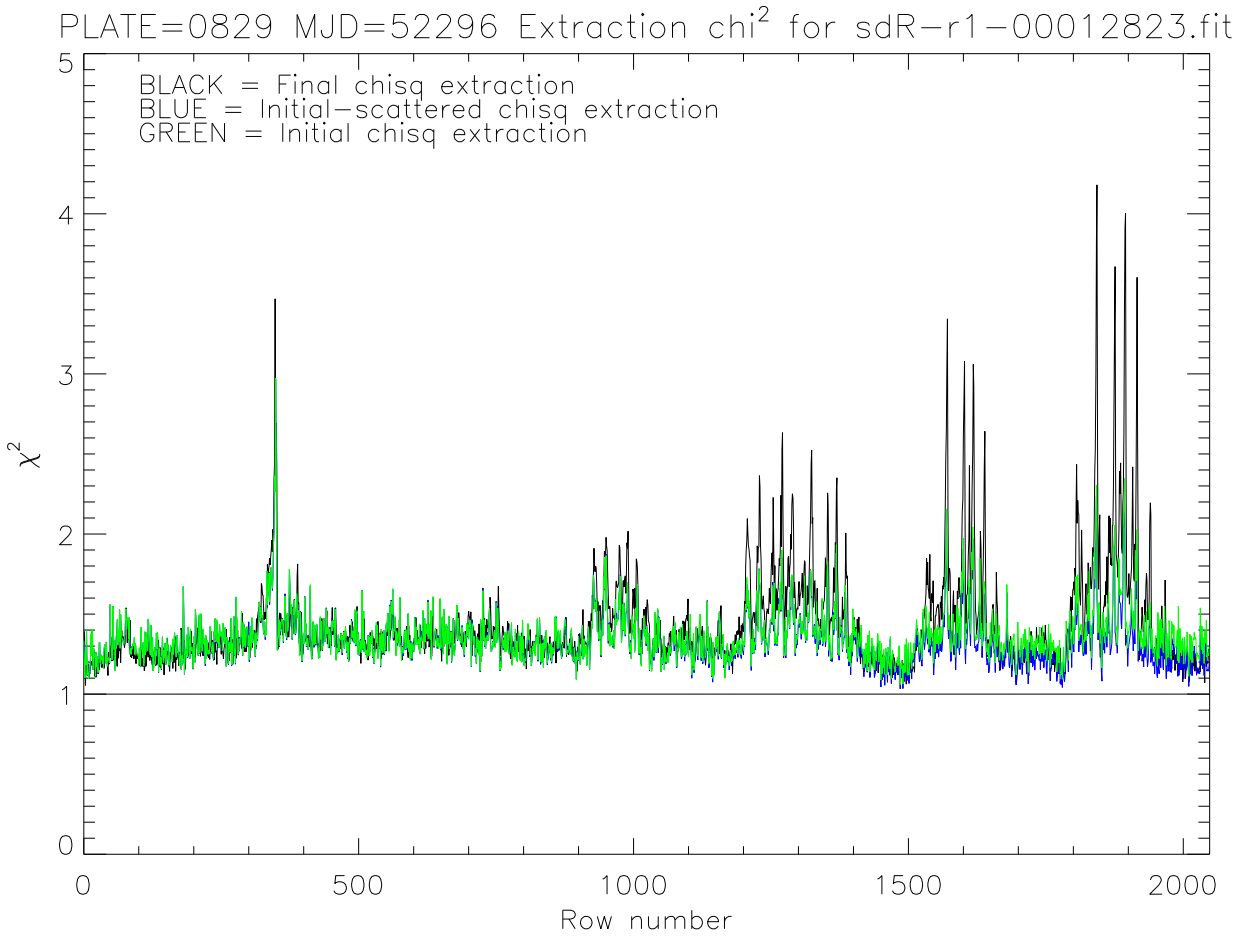

PLATE=0829 MJD=52296 Fiber−Flats for sdR−r1−00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.570
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 02:17:52 2008

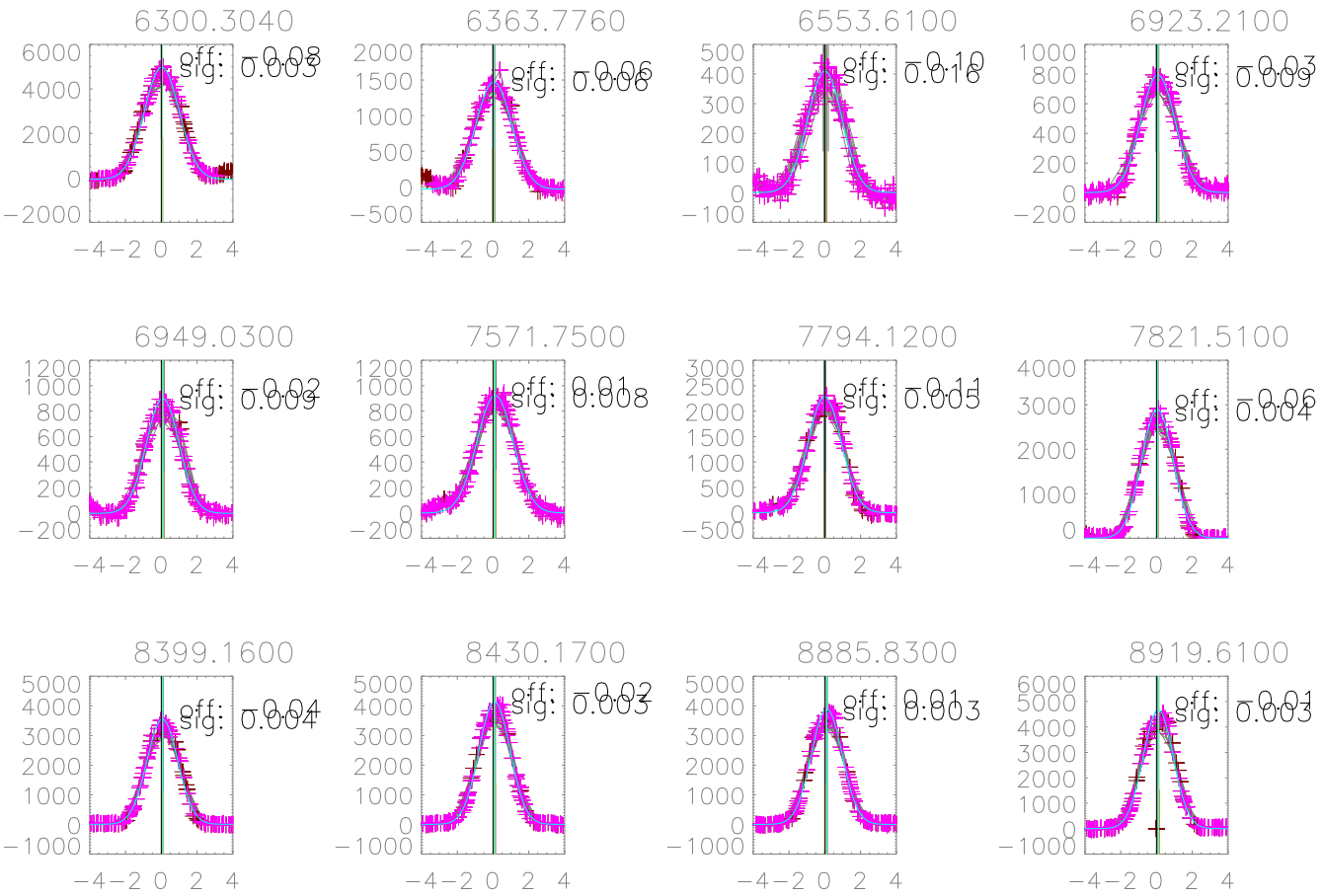

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r1-00012823.fi
38.2
38.2
27.3
27.3
16.4
0
0
0
0
500
1000
1500
2000
X [pix]
Y [pix]

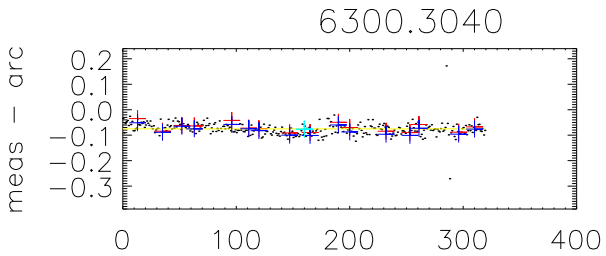

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r1-00012823.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.336
Max value = 46.258
Mon Feb 25 02:18:42 2008

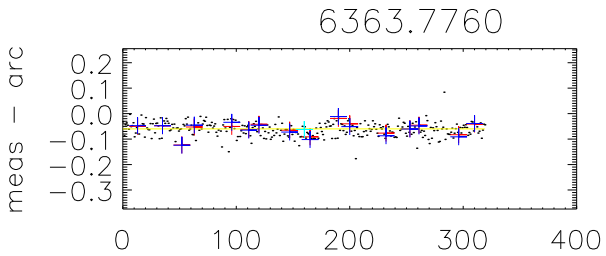

PLATE=0829 MJD=52296 Scattered Light on sdR-r1-00012823.fit
6.36
6.36
1.82
6.36
6.36
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

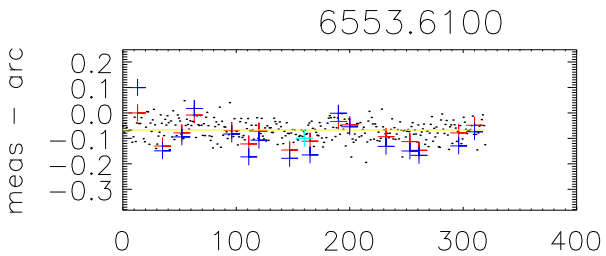

PLATE=0829 MJD=52296 Scattered Light on sdR-r1-00012823.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.354
Max value = 14.560
Mon Feb 25 02:21:16 2008

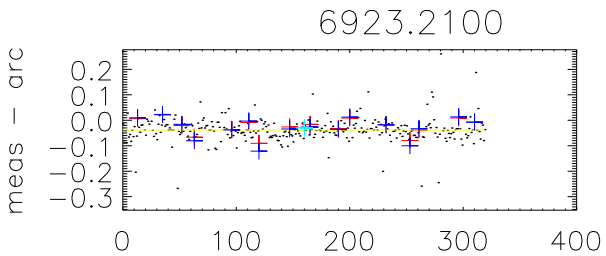

PLATE=0829 MJD=52296 Extraction chi^2 for sdR−r1−00012823.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

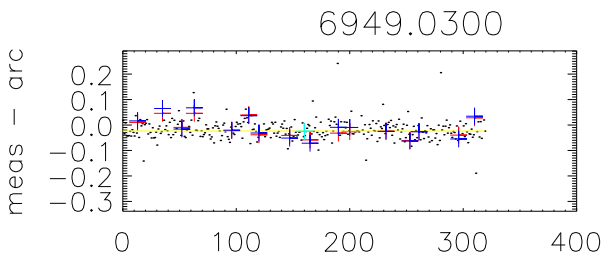

6300.3040
off: −0.08
sig: 0.003
6363.7760
off: −0.06
sig: 0.006
6553.6100
off: −0.10
sig: 0.016
6923.2100
off: −0.03
sig: 0.009
6949.0300
off: −0.02
sig: 0.009
7571.7500
off: 0.01
sig: 0.008
7794.1200
off: −0.11
sig: 0.005
7821.5100
off: −0.06
sig: 0.004
8399.1600
off: −0.04
sig: 0.004
8430.1700
off: −0.02
sig: 0.003
8885.8300
off: 0.01
sig: 0.003
8919.6100
off: −0.01
sig: 0.003

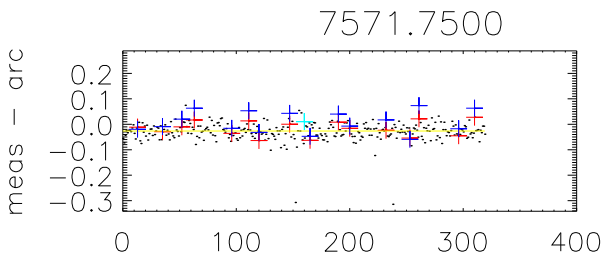

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

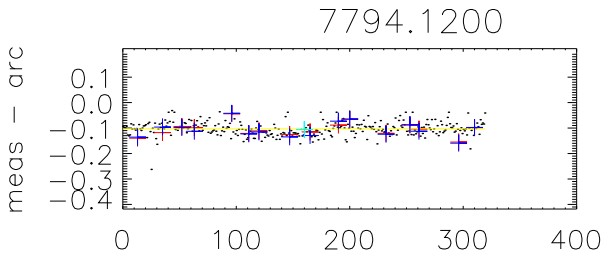

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

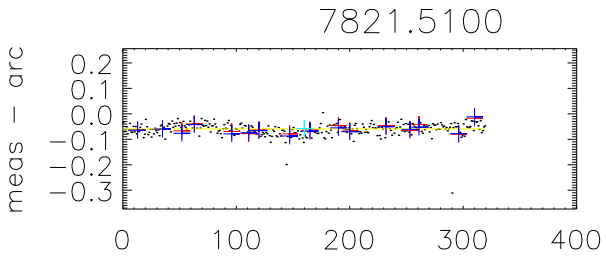

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

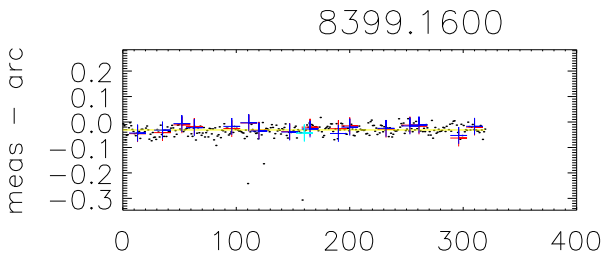

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

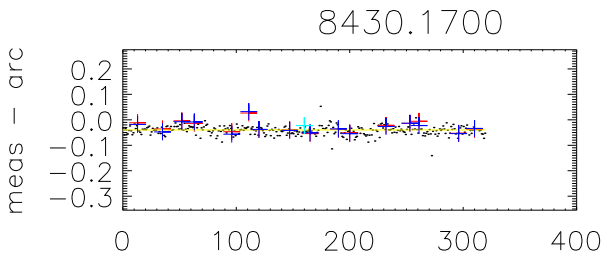

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

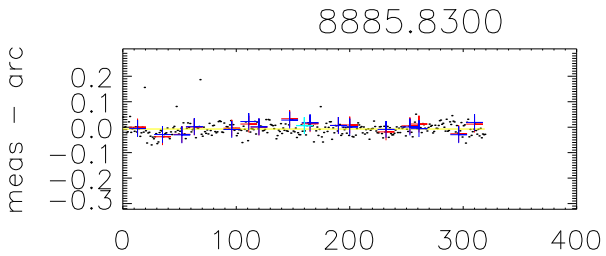

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

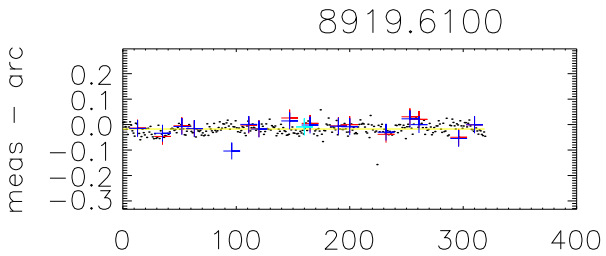

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

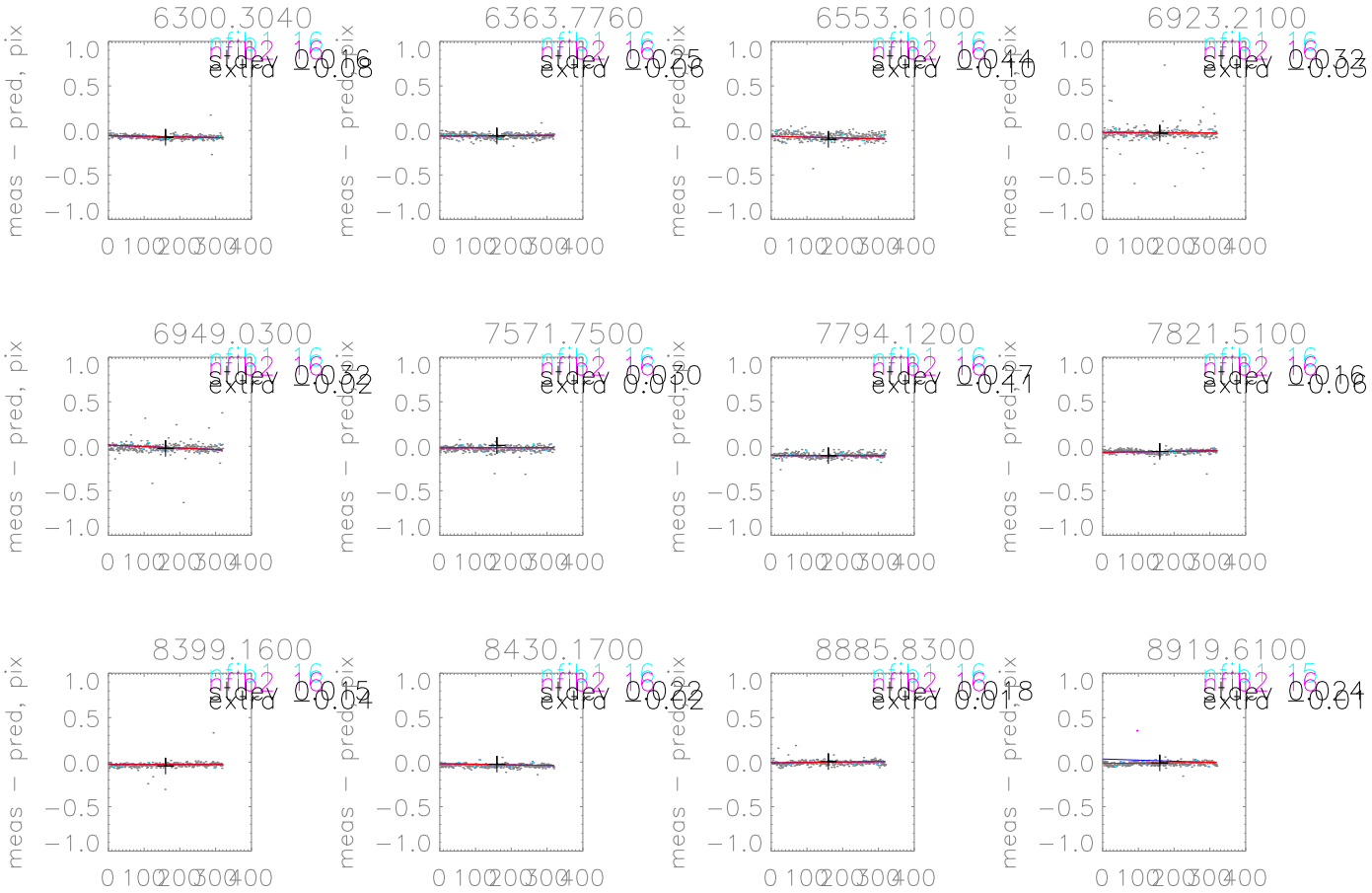

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

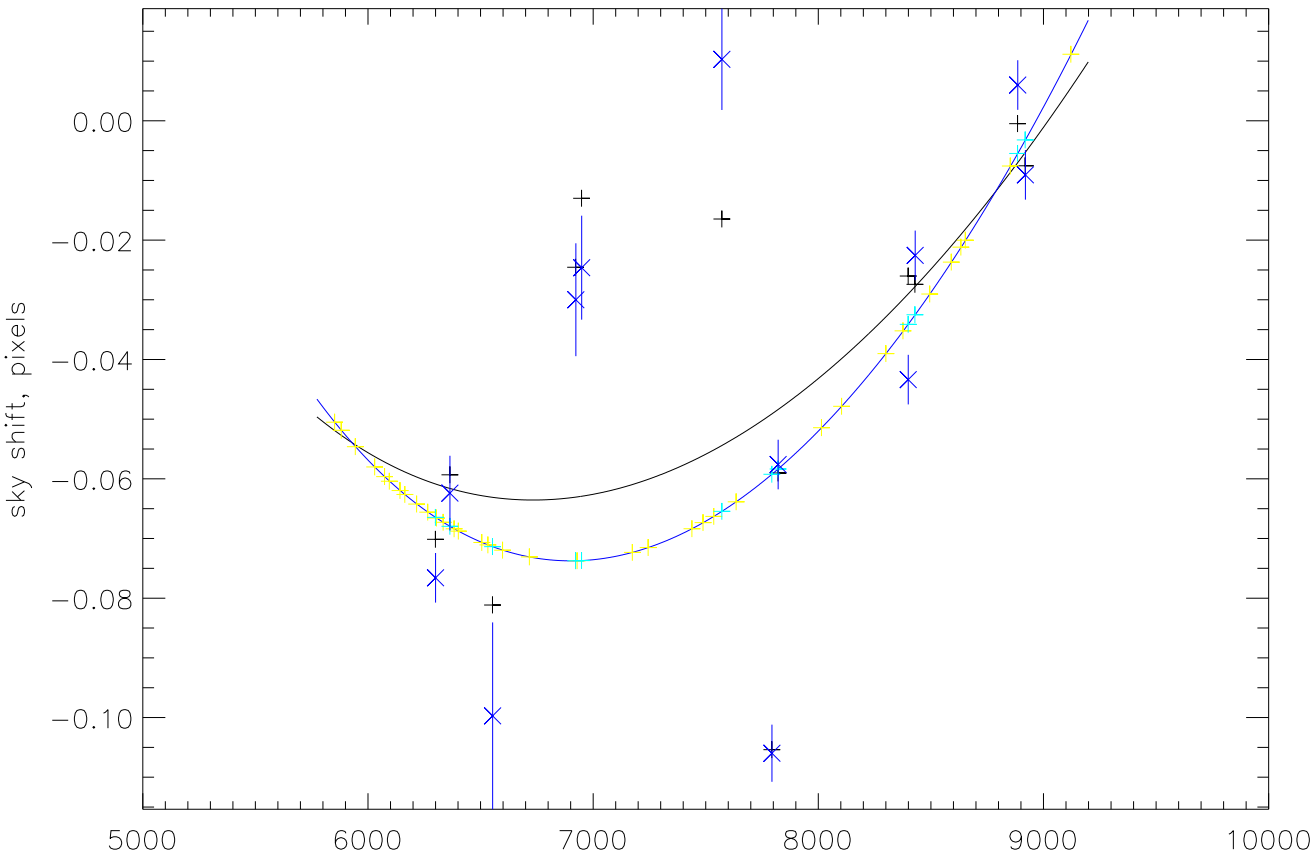

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

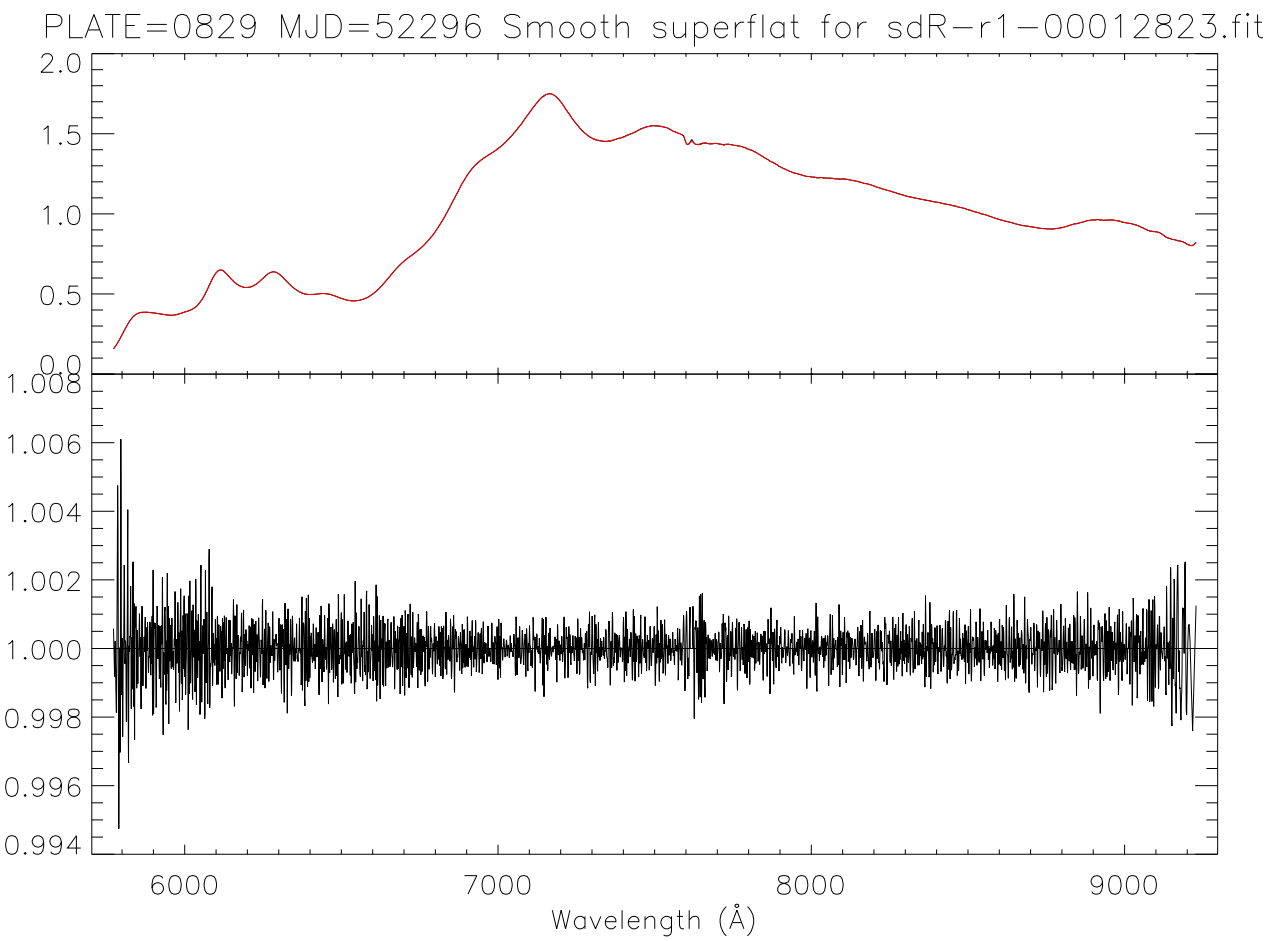

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

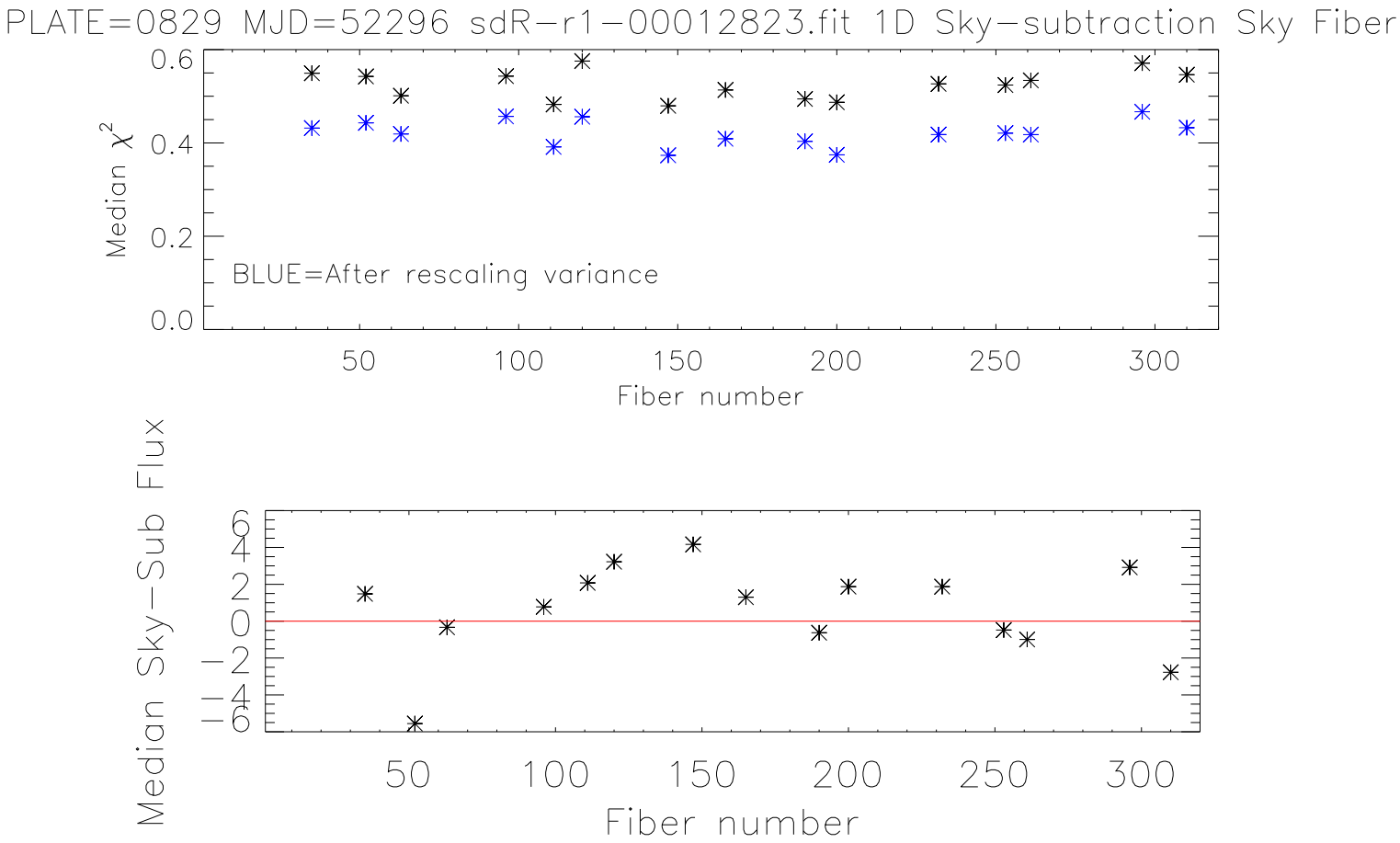

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

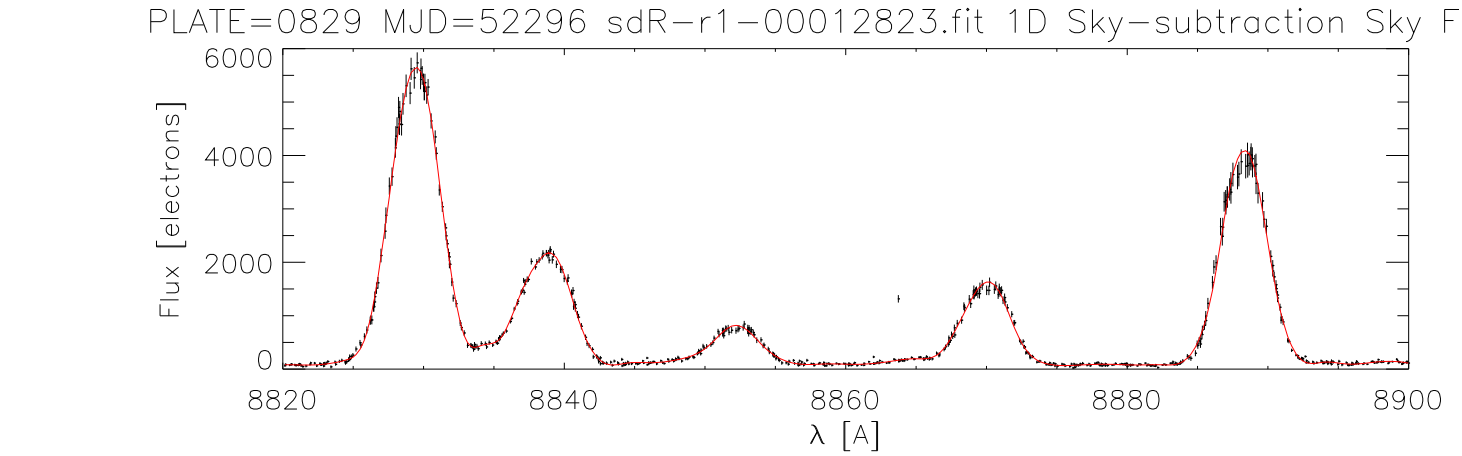

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 16
stdev 0.06
extra 0.08
stdev 0.05
extra 0.08
stdev 0.04
extra 0.10
stdev 0.03
extra 0.03
stdev 0.02
extra 0.02
stdev 0.01
extra 0.01
stdev 0.04
extra 0.41
stdev 0.01
extra 0.06
stdev 0.05
extra 0.04
stdev 0.02
extra 0.02
stdev 0.01
extra 0.01
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

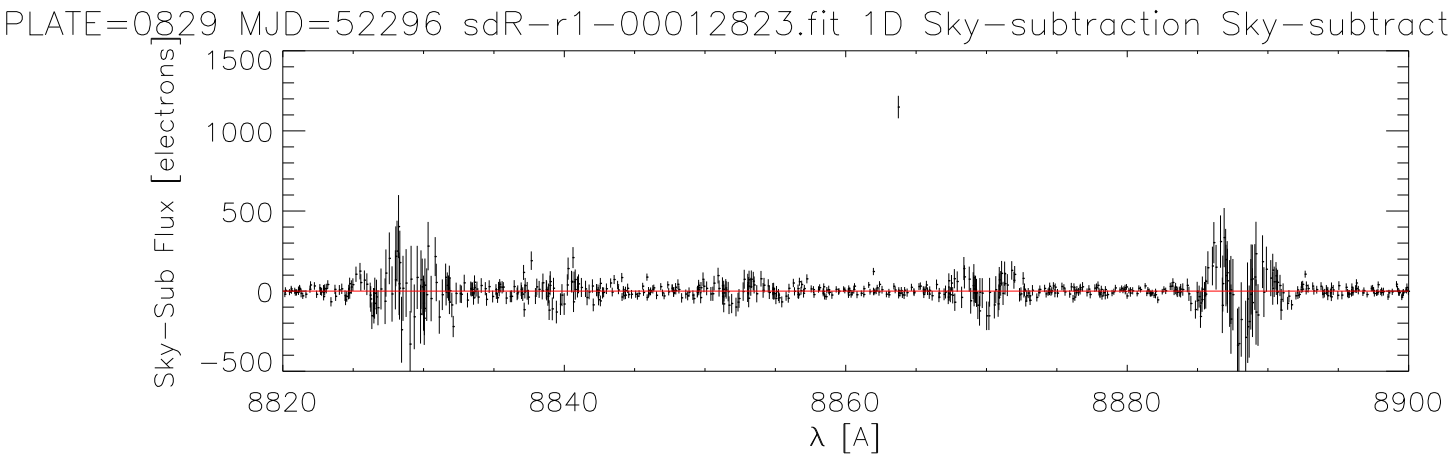

0.00
−0.02
−0.04
−0.06
−0.08
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

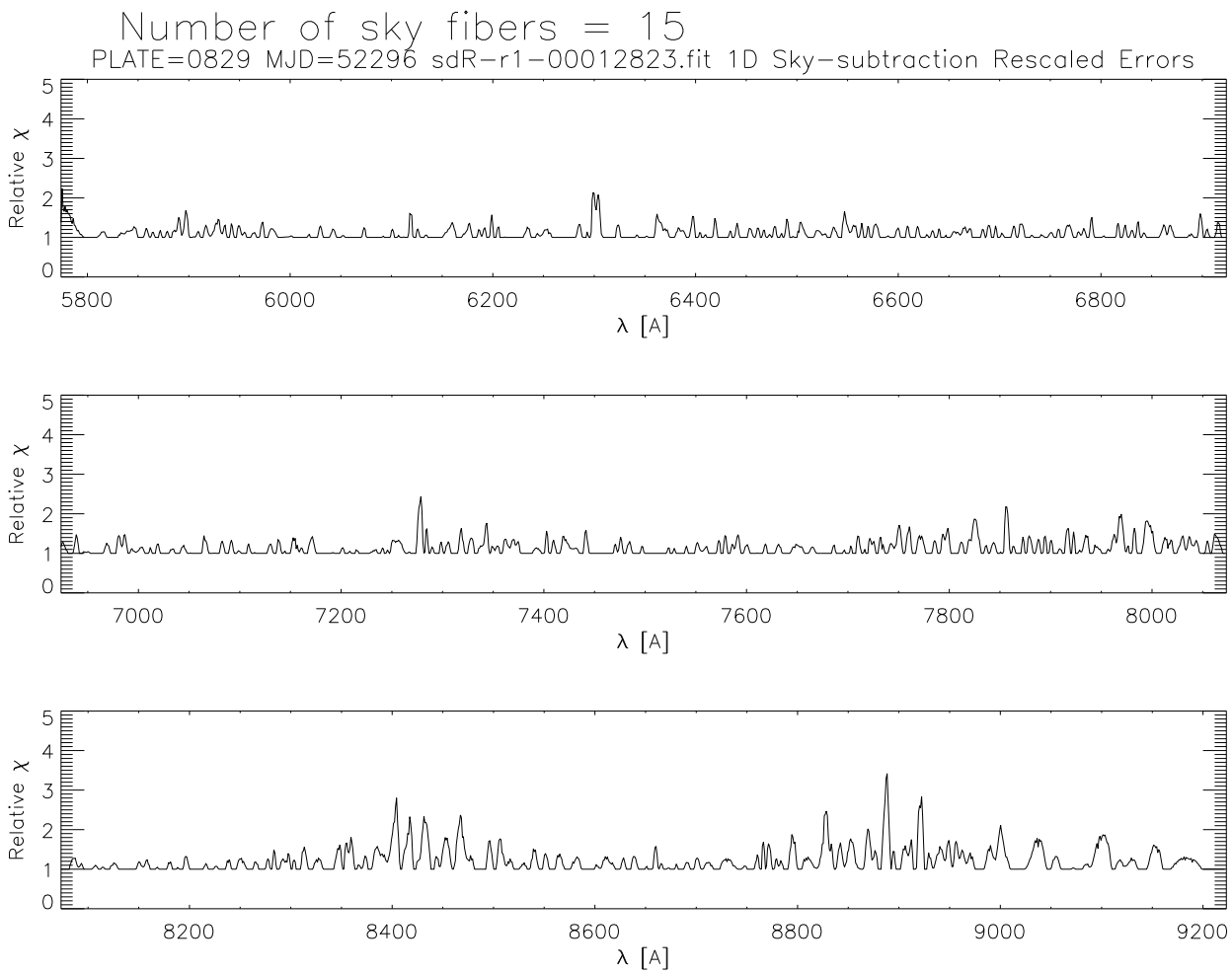
es= 0.0000

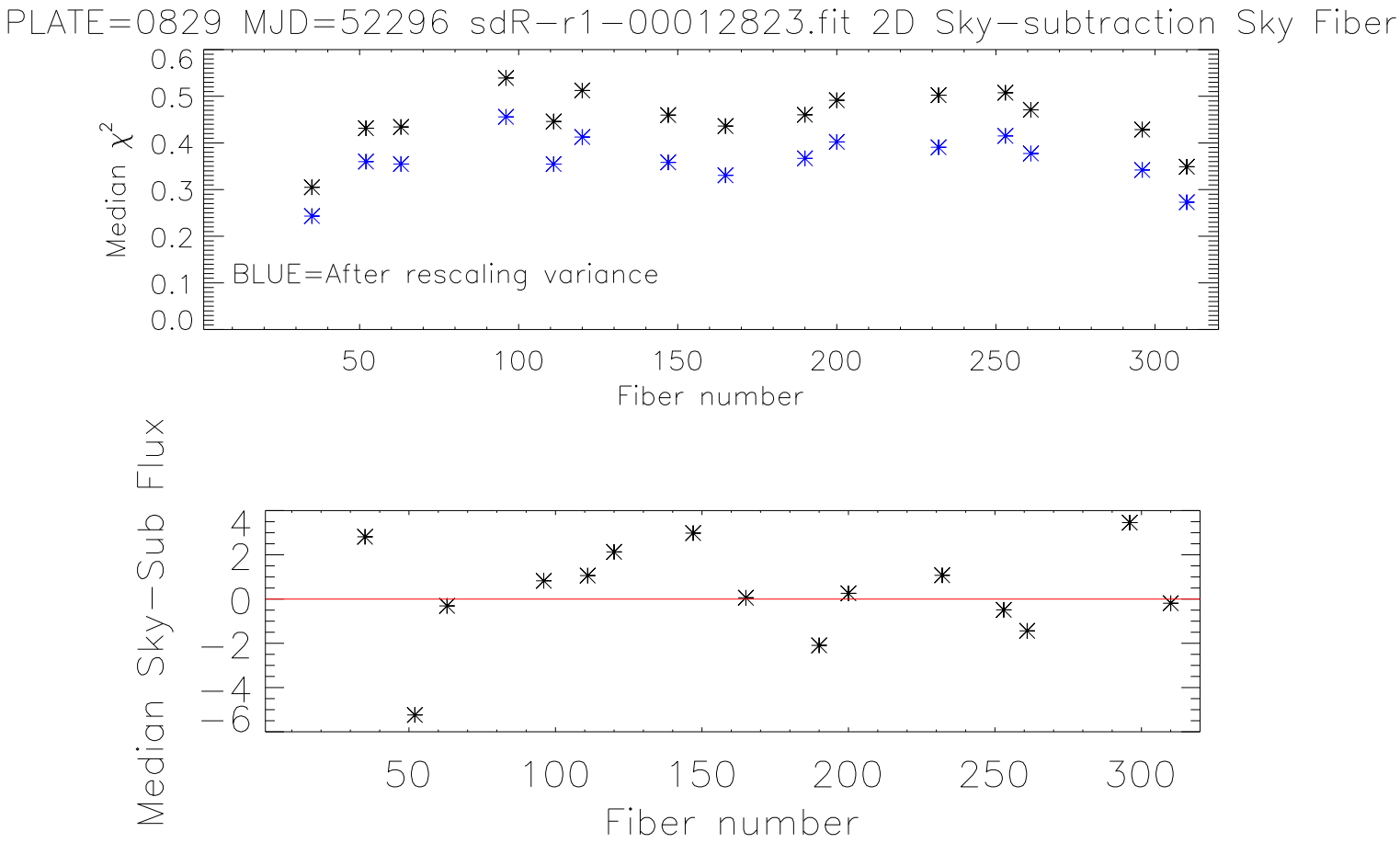

PLATE=0829 MJD=52296 Smooth superflat for sdR-r1-00012823.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

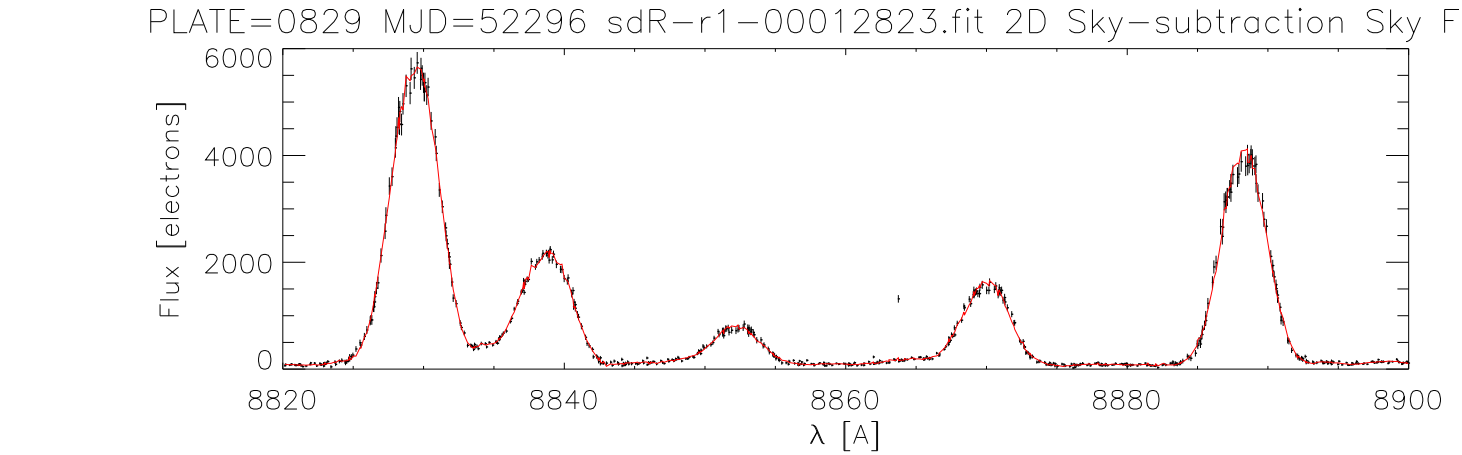

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

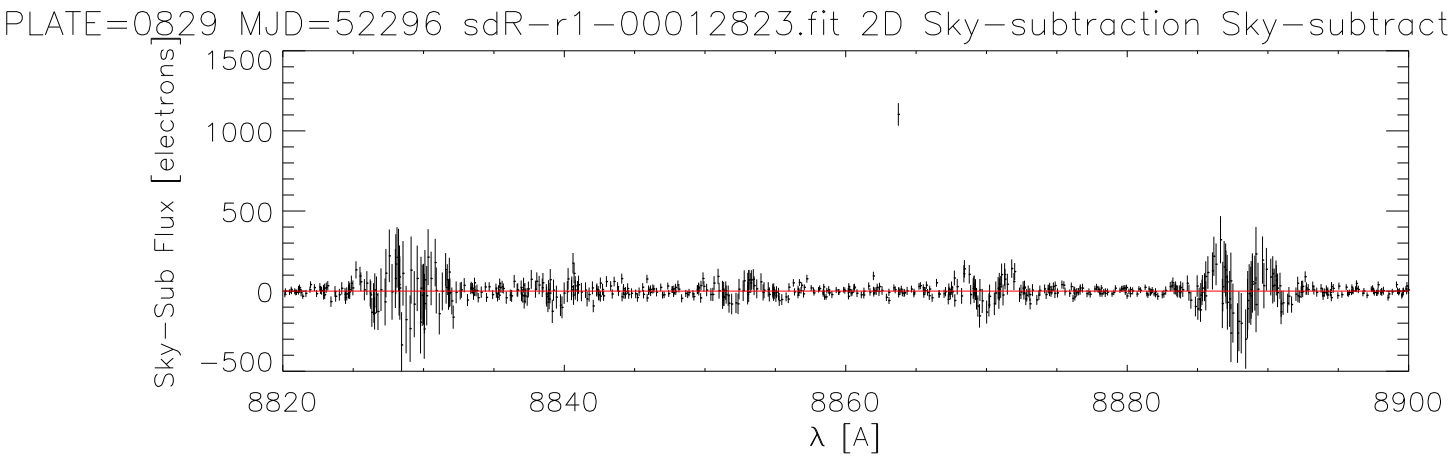

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

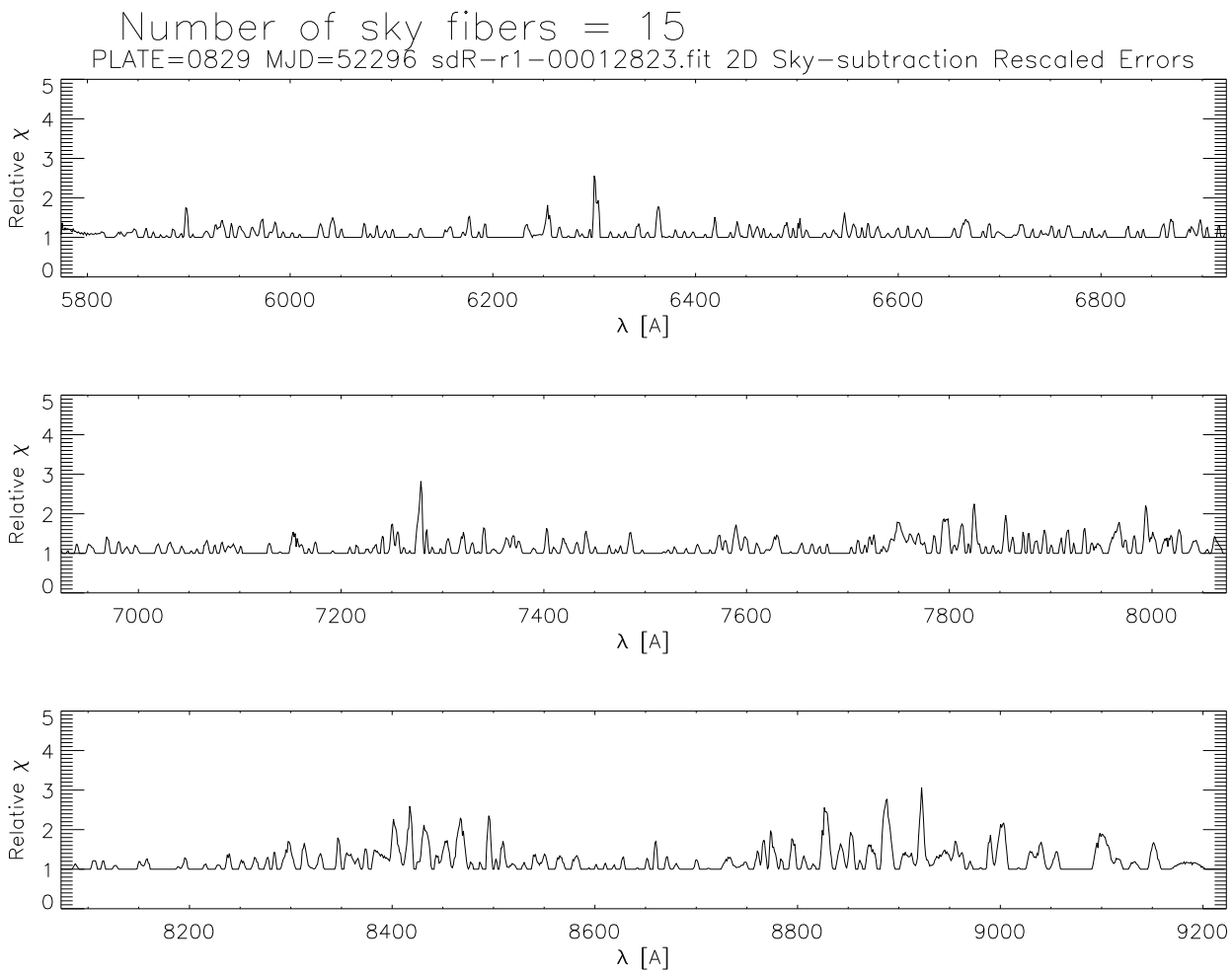

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

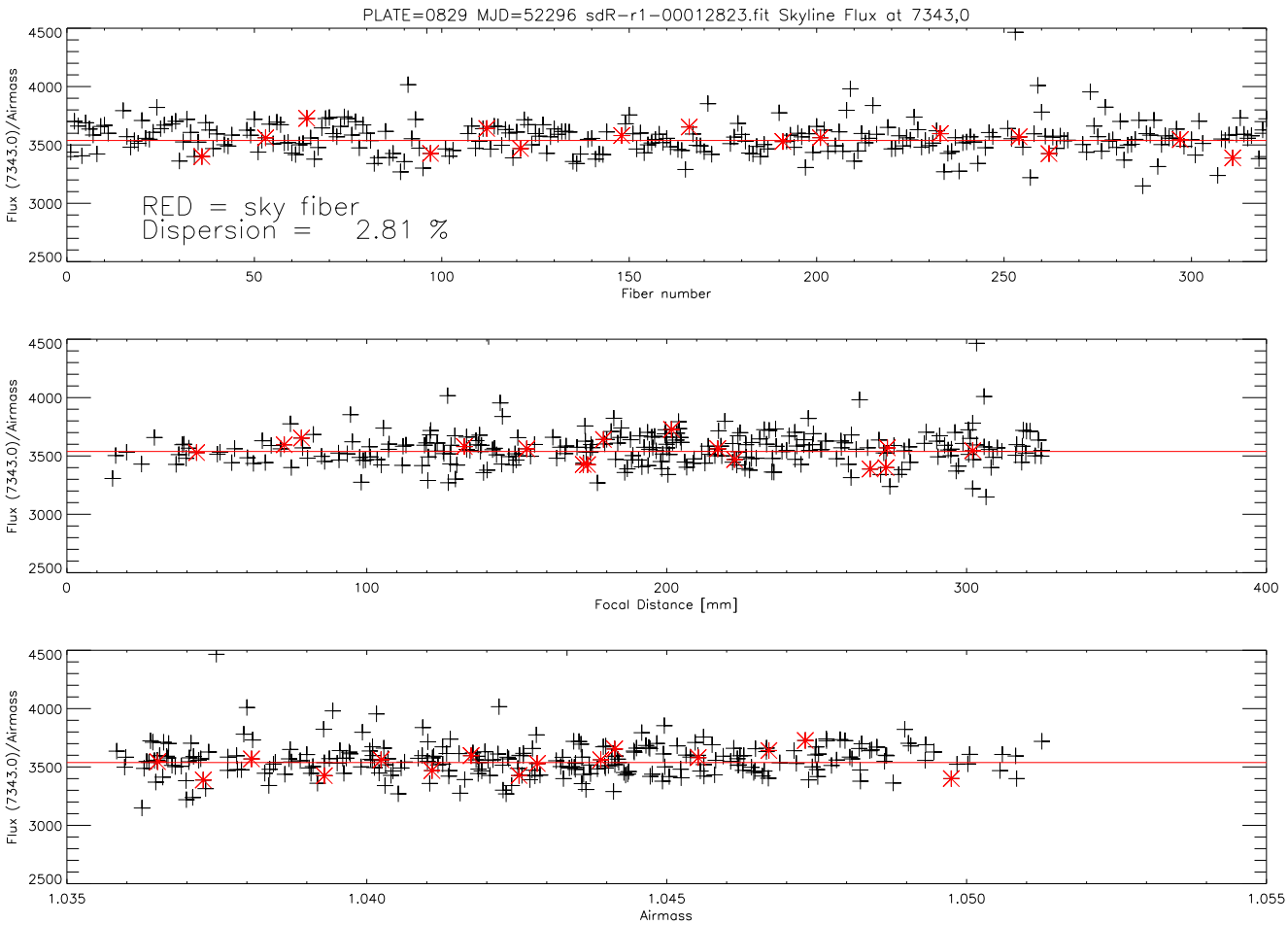

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r1-00012823.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

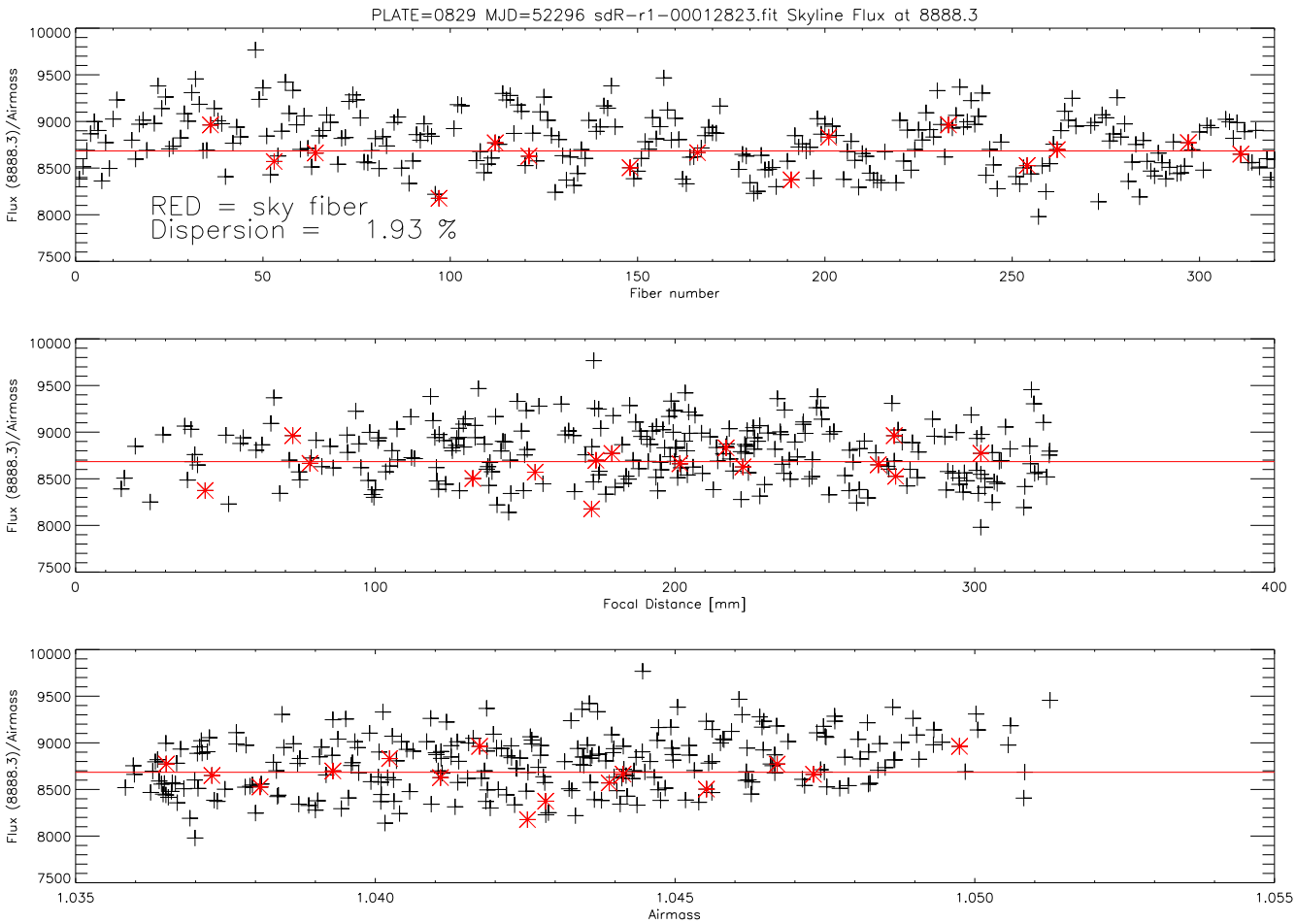

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

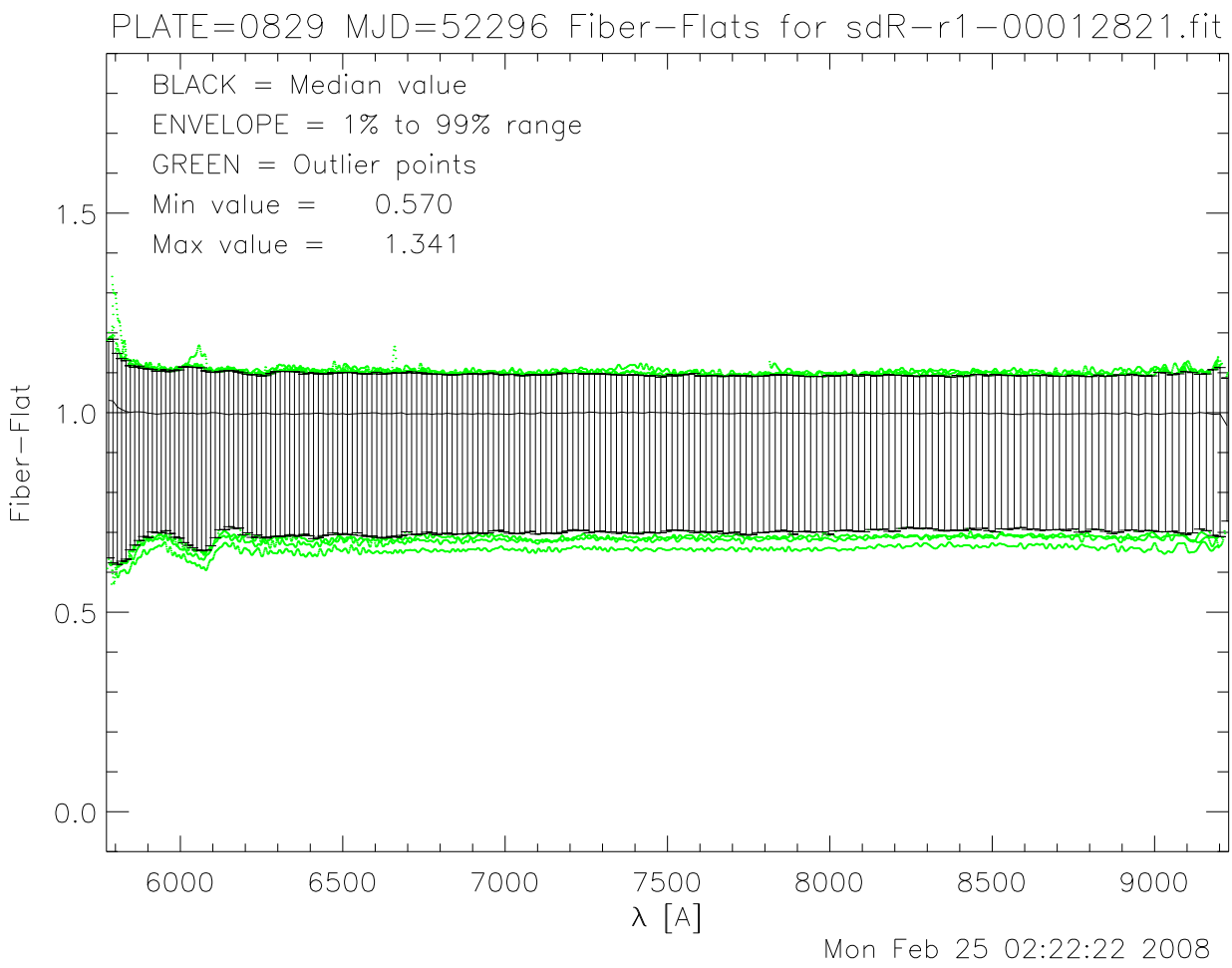

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

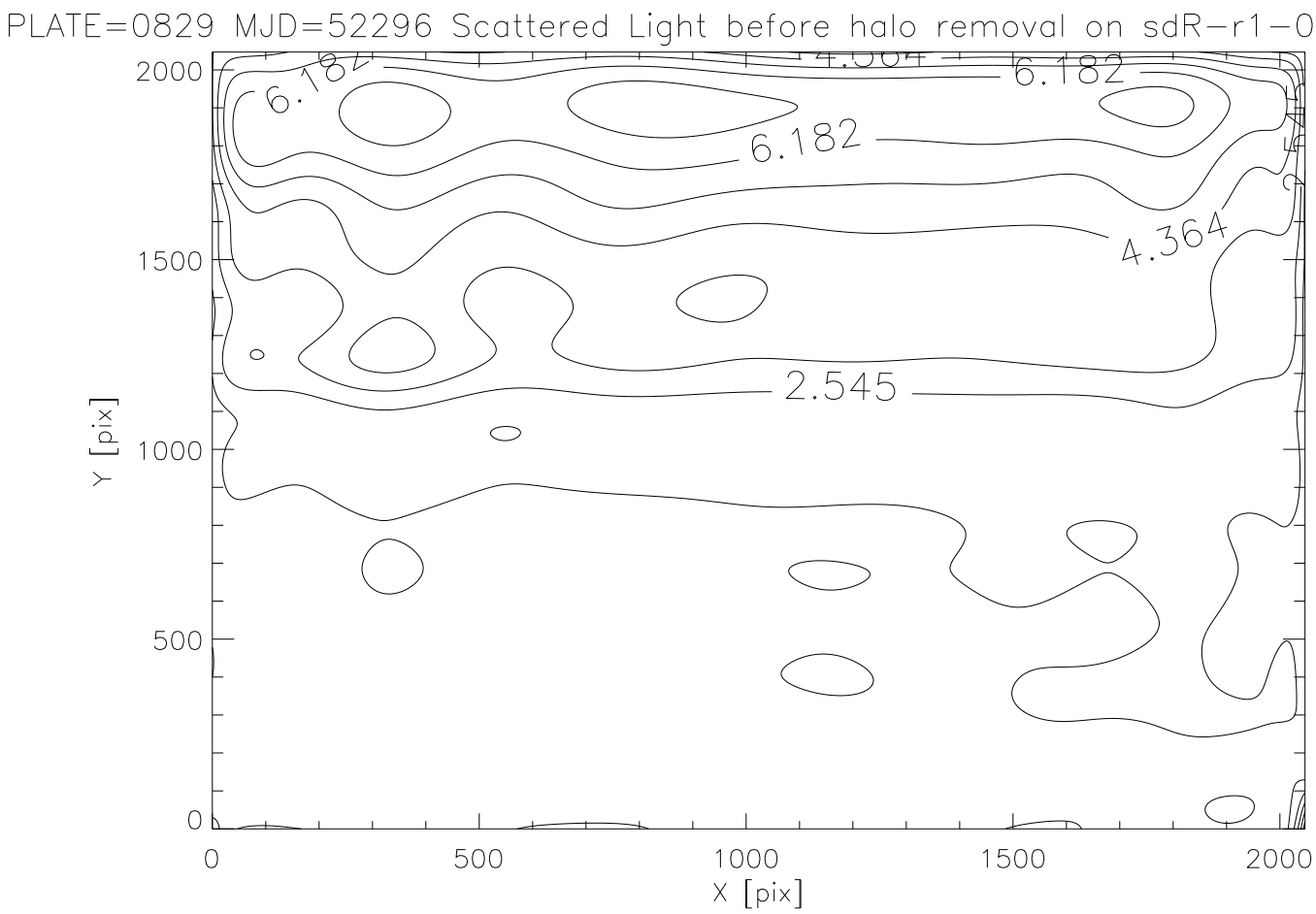

PLATE=0829 MJD=52296 sdR-r1-00012823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

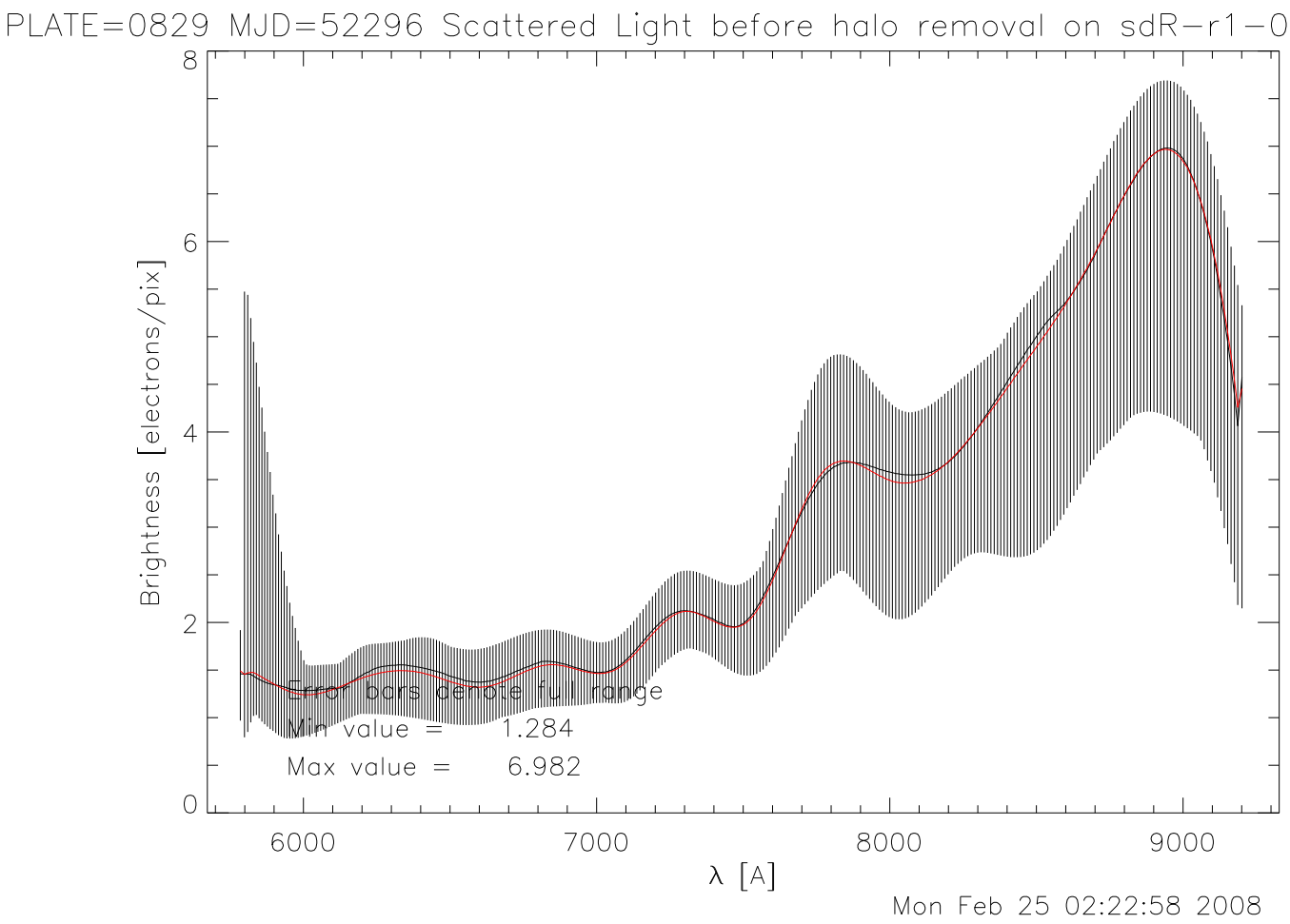

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r1-00012823.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

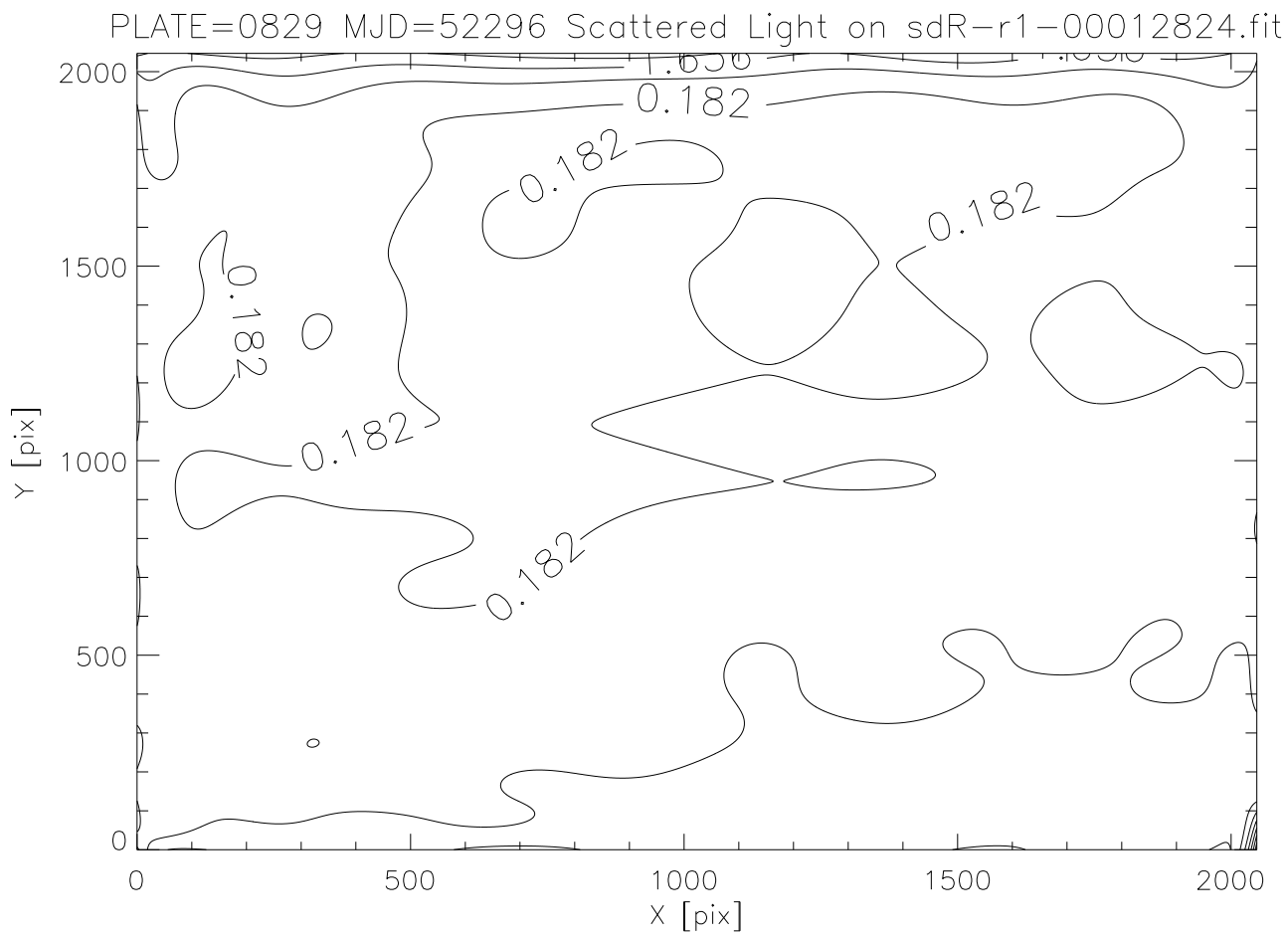

PLATE=0829 MJD=52296 sdR-r1-00012823.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.81 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

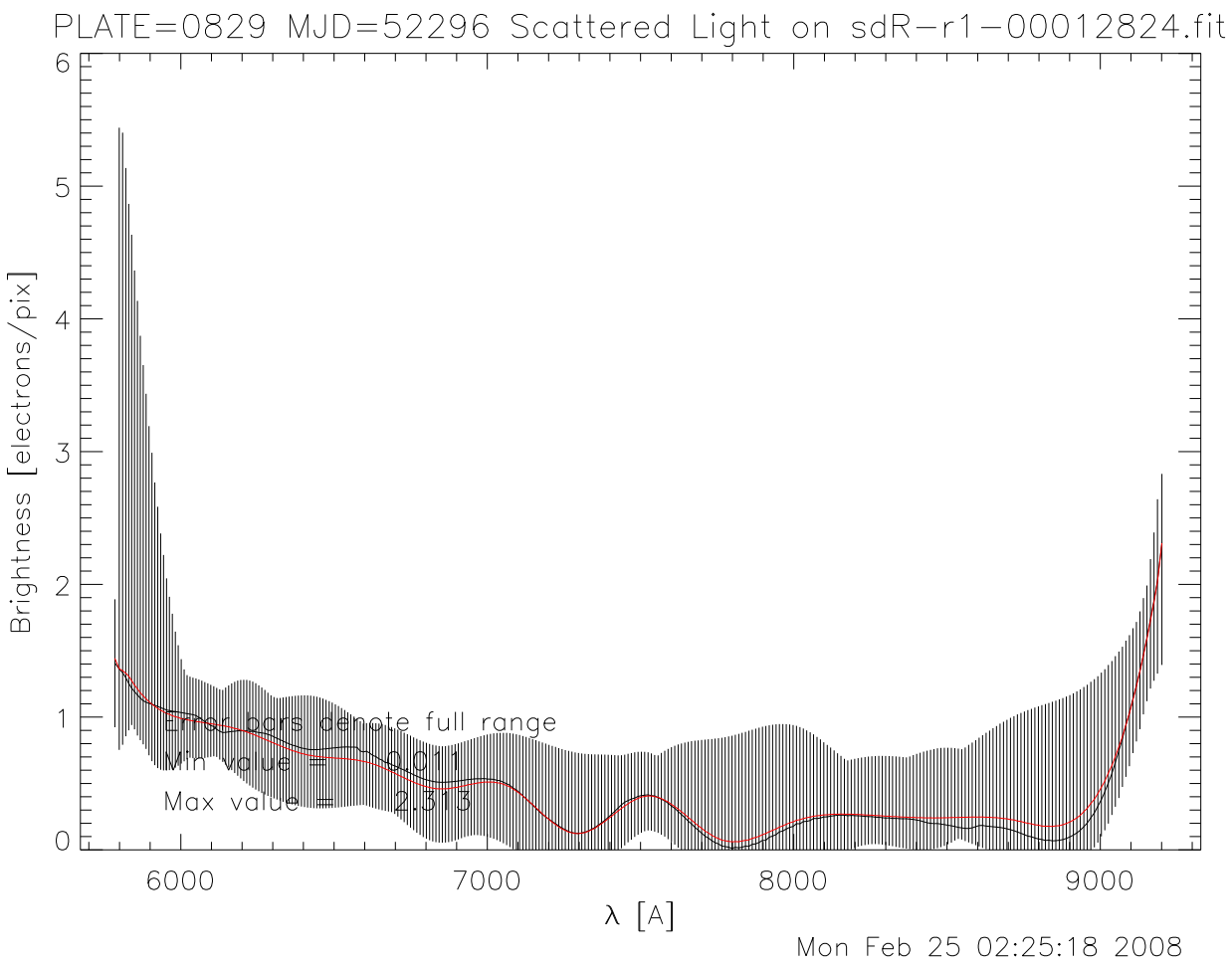

PLATE=0829 MJD=52296 sdR-r1-00012823.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Focal Distance [mm]
Airmass

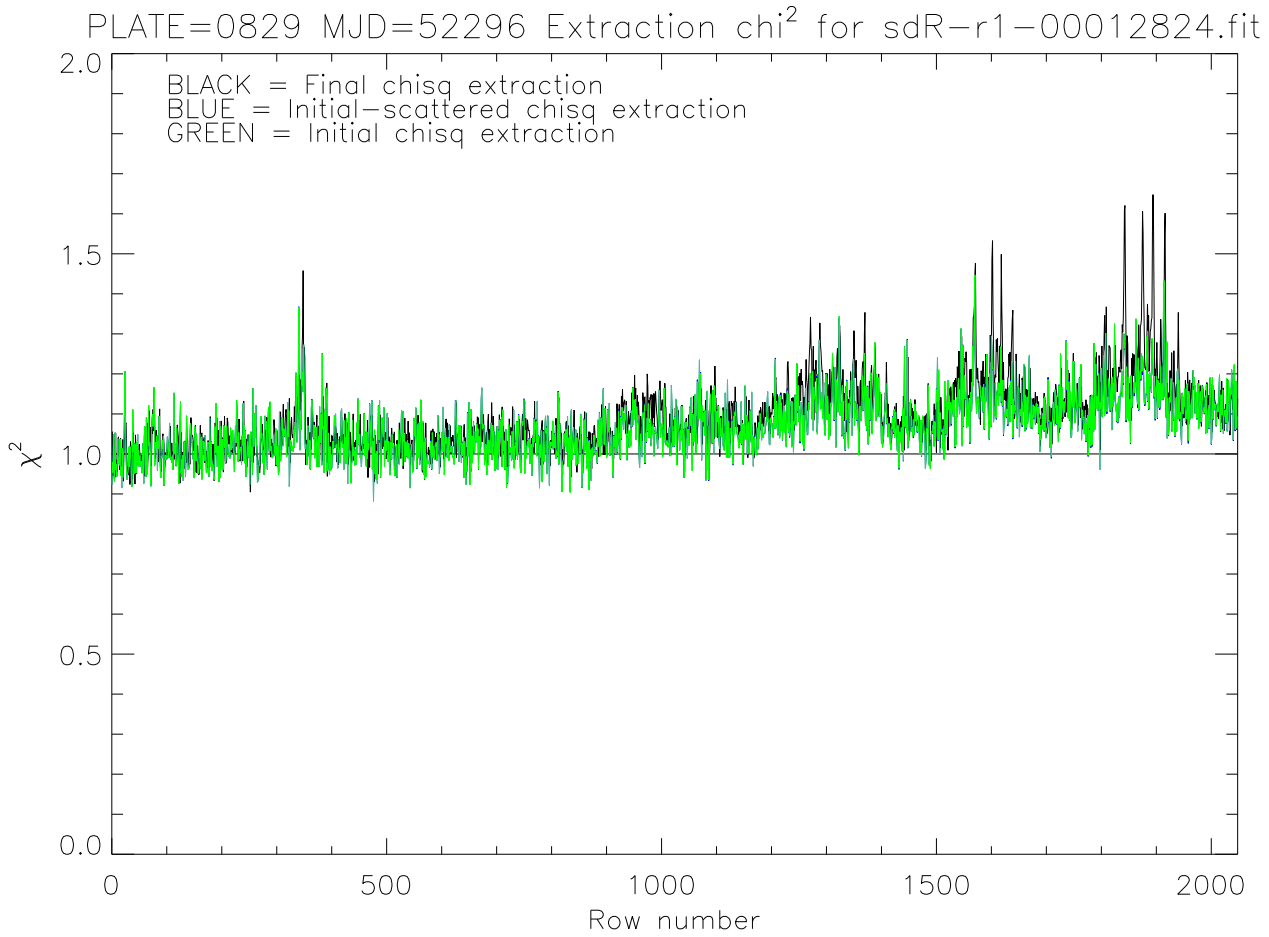

PLATE=0829 MJD=52296 Fiber−Flats for sdR−r1−00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.570
Max value = 1.341
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 02:22:22 2008

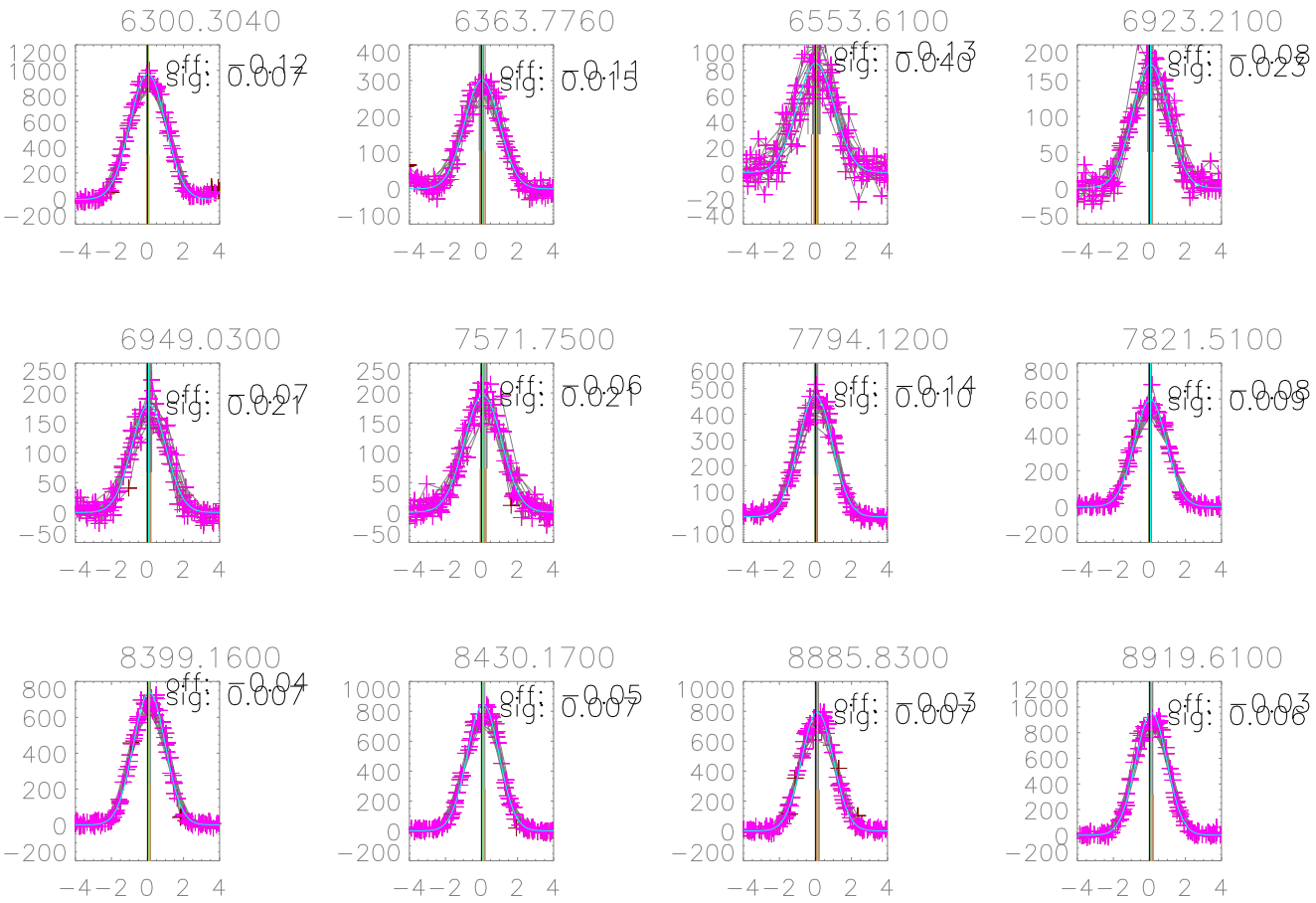

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR−r1−00012824.fi
6.182
6.182
4.364
2.545
Y [pix]
X [pix]
0
500
1000
1500
2000

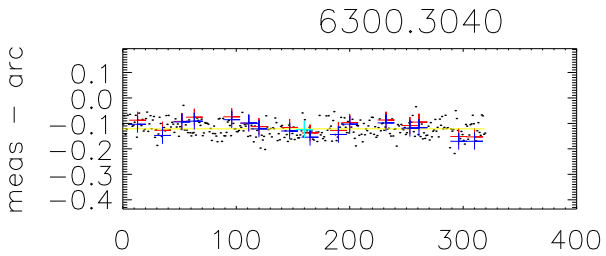

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r1-00012824.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.284
Max value = 6.982
Mon Feb 25 02:22:58 2008

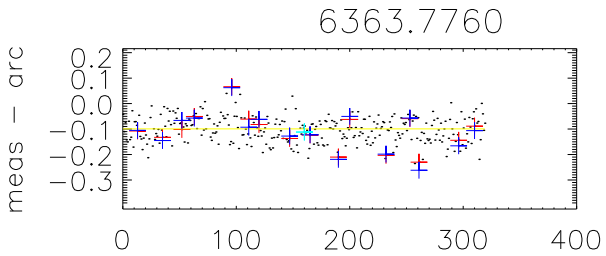

PLATE=0829 MJD=52296 Scattered Light on sdR-r1-00012824.fit
0.182
0.182
0.182
0.182
0.182
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

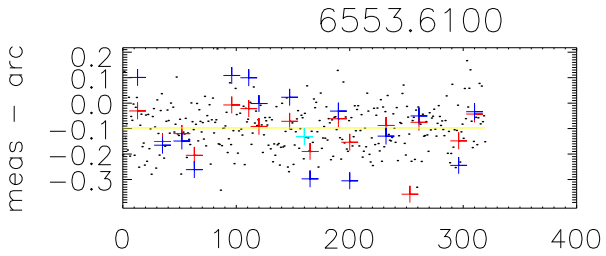

PLATE=0829 MJD=52296 Scattered Light on sdR-r1-00012824.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.011
Max value = 2.313
Mon Feb 25 02:25:18 2008

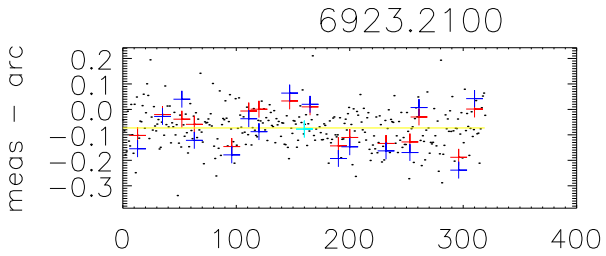

PLATE=0829 MJD=52296 Extraction chi^2 for sdR−r1−00012824.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

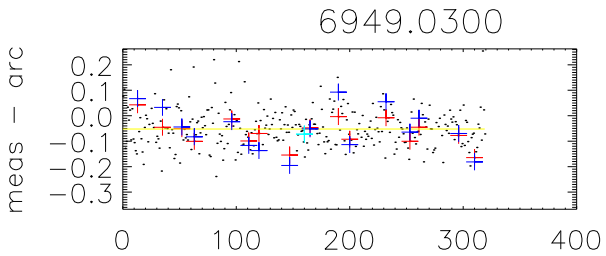

6300.3040
off: −0.12
sig: 0.007
6363.7760
off: −0.11
sig: 0.015
6553.6100
off: −0.13
sig: 0.040
6923.2100
off: −0.08
sig: 0.023
6949.0300
off: −0.07
sig: 0.021
7571.7500
off: −0.06
sig: 0.021
7794.1200
off: −0.14
sig: 0.010
7821.5100
off: −0.08
sig: 0.009
8399.1600
off: −0.04
sig: 0.007
8430.1700
off: −0.05
sig: 0.007
8885.8300
off: −0.03
sig: 0.007
8919.6100
off: −0.03
sig: 0.006

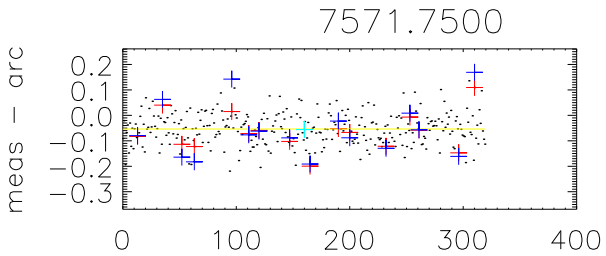

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

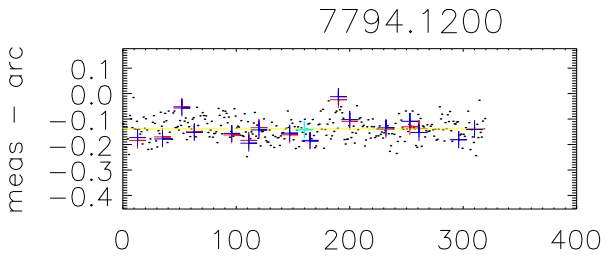

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

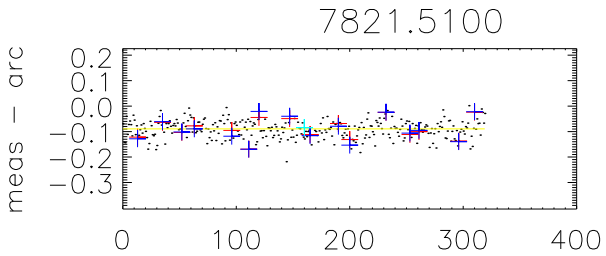

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

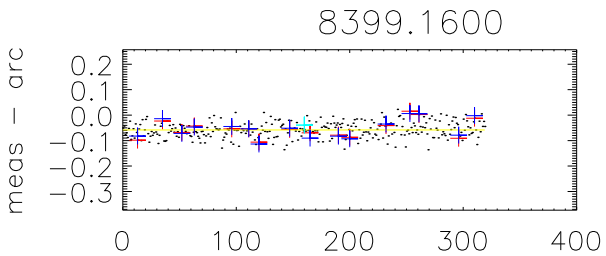

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

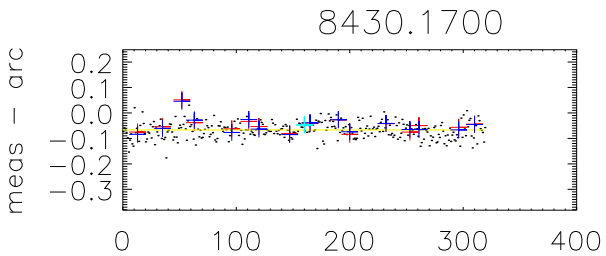

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

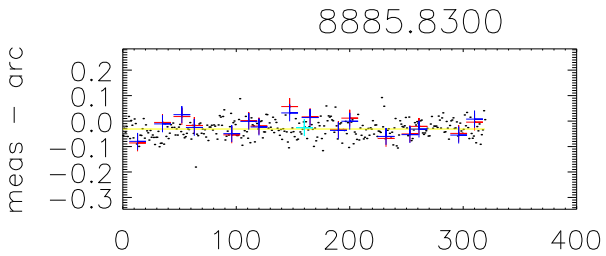

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

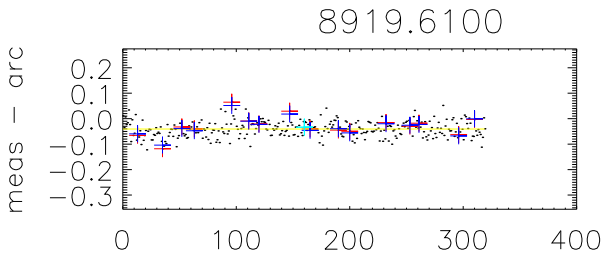

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

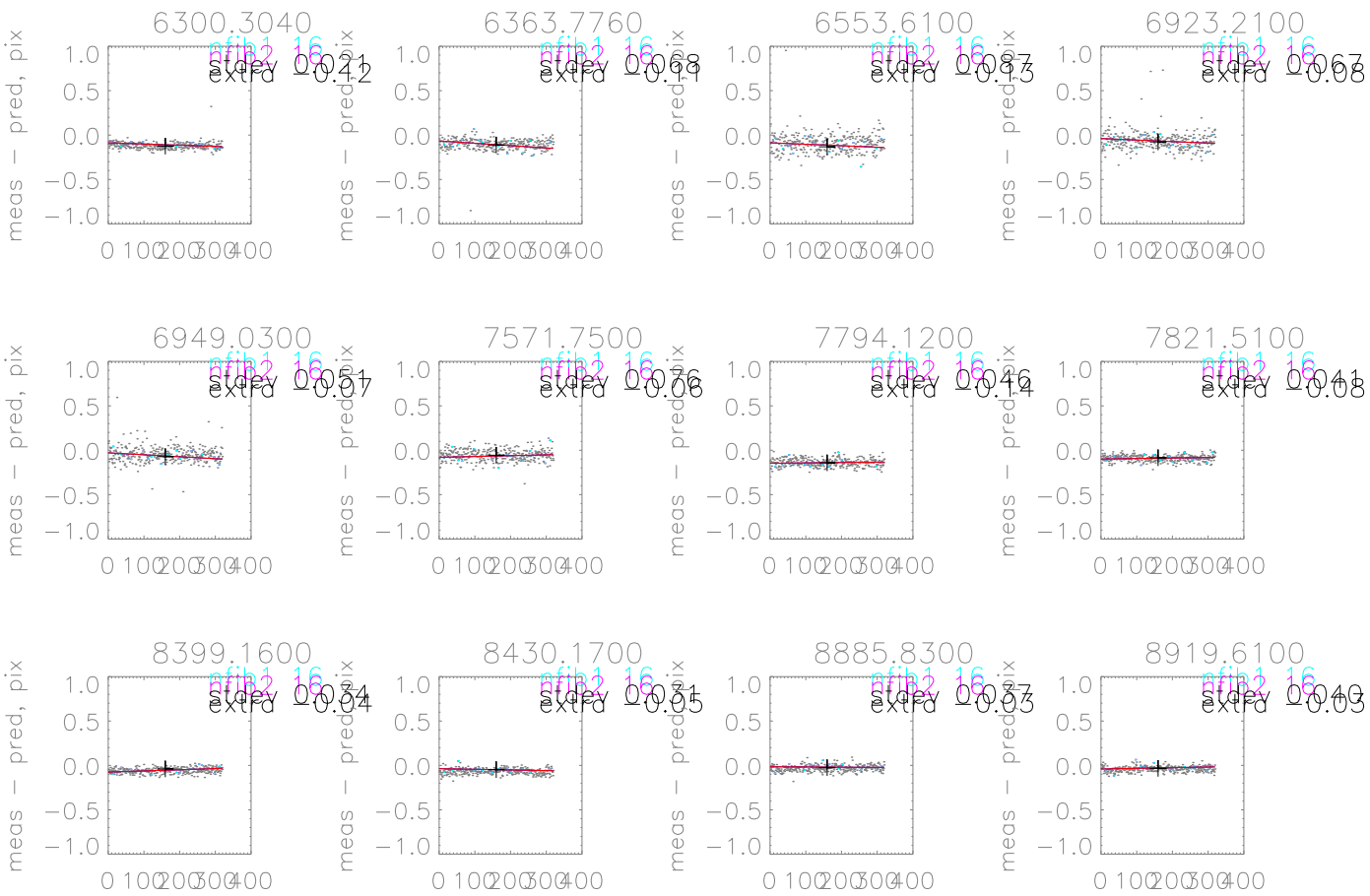

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

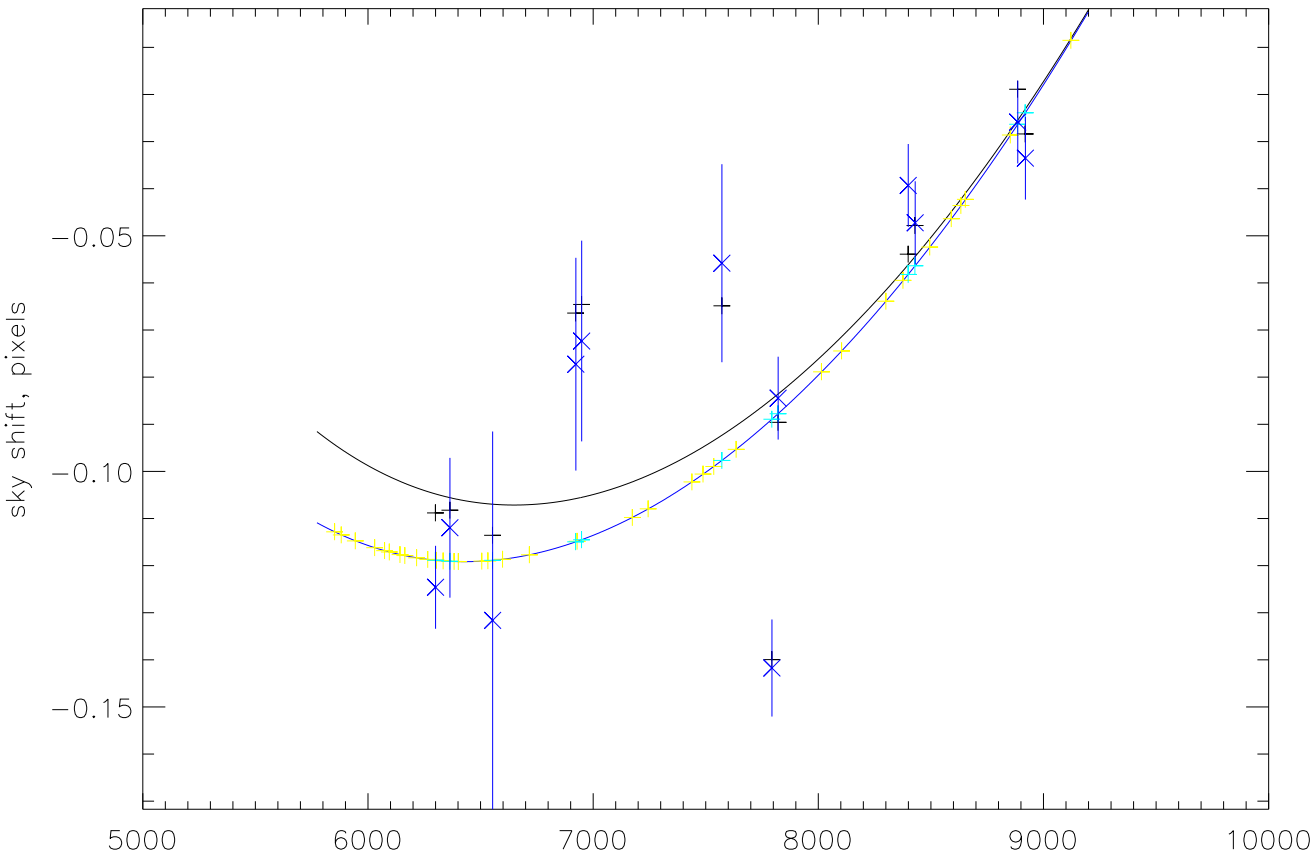

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

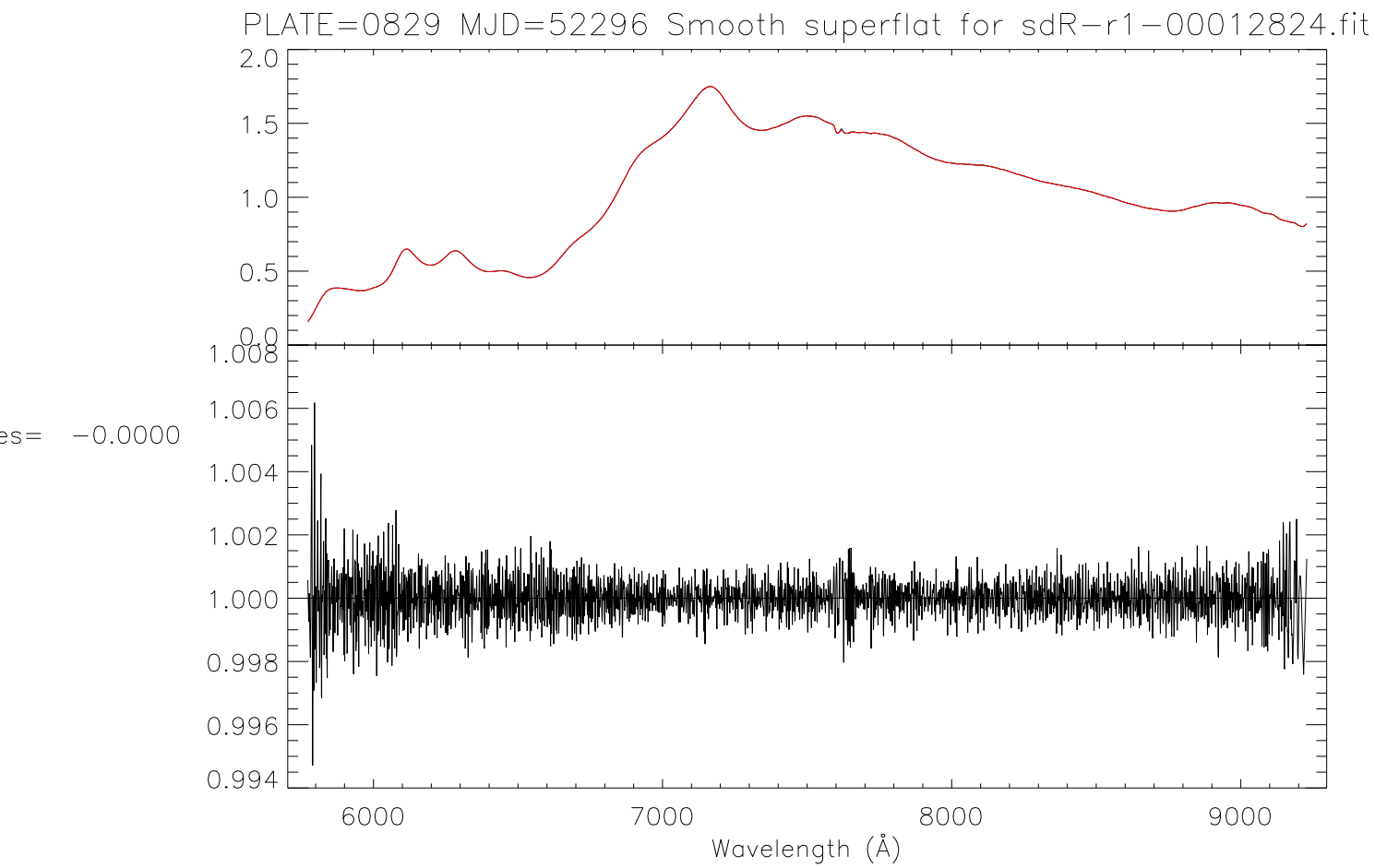

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

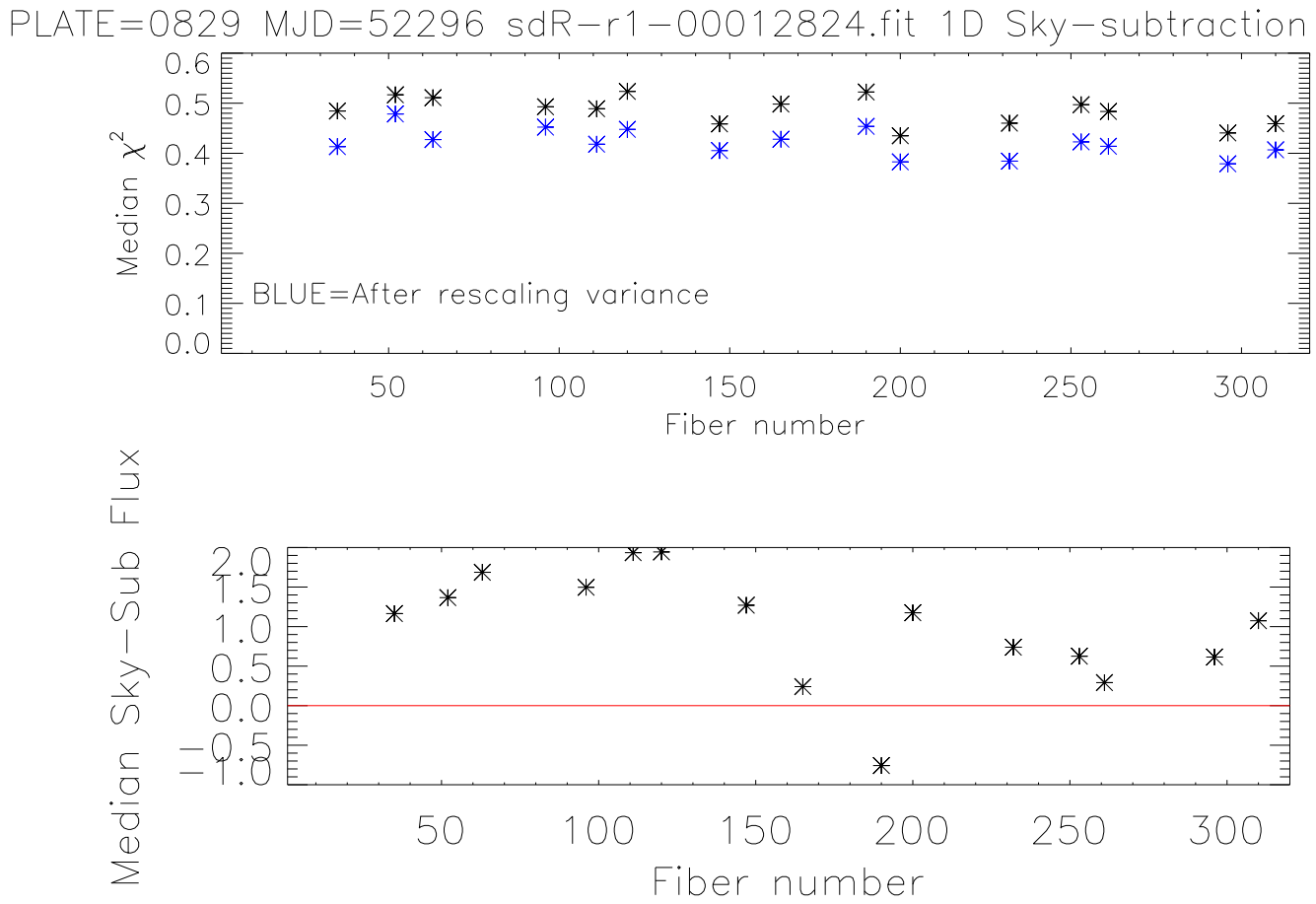

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

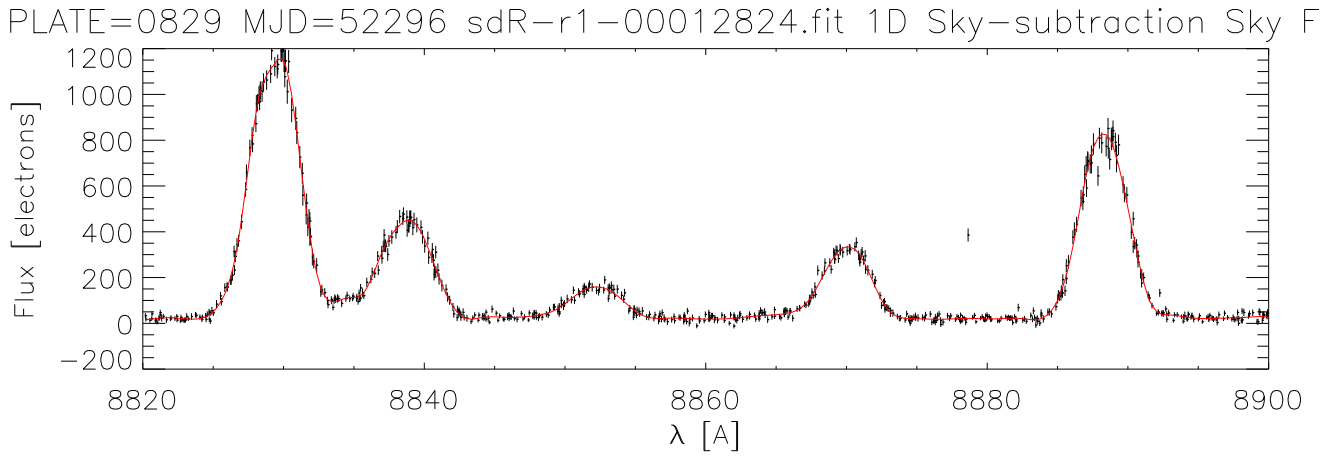

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 16
stdev 0.041
extrd 0.042
stdev 0.068
extrd 0.091
stdev 0.087
extrd 0.093
stdev 0.067
extrd 0.068
stdev 0.051
extrd 0.07
stdev 0.076
extrd 0.08
stdev 0.046
extrd 0.14
stdev 0.041
extrd 0.08
stdev 0.034
extrd 0.04
stdev 0.031
extrd 0.05
stdev 0.037
extrd 0.03
stdev 0.040
extrd 0.03

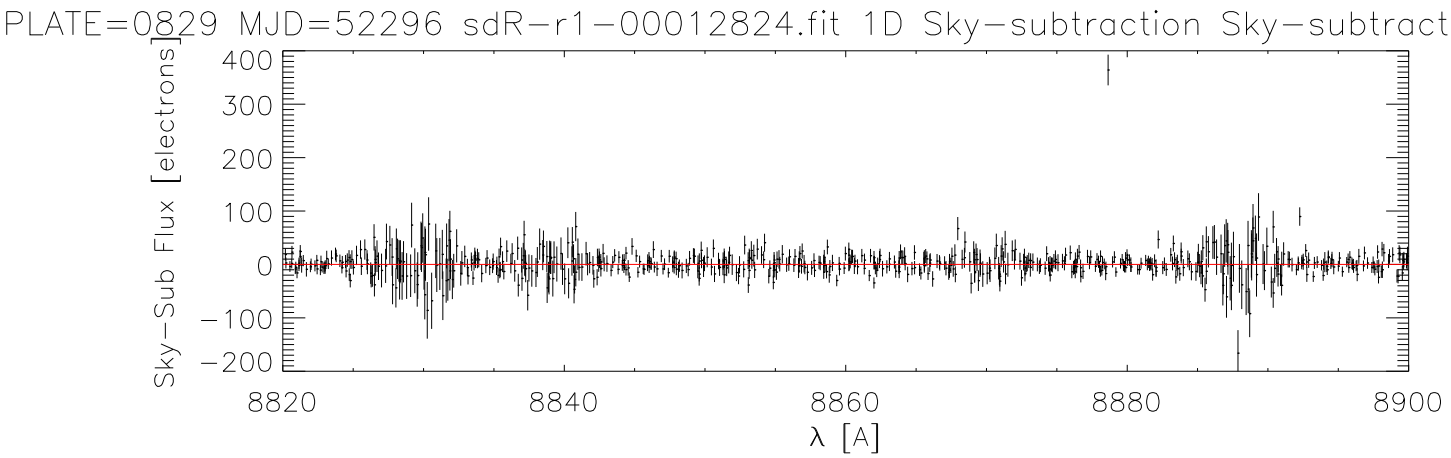

sky shift, pixels
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000

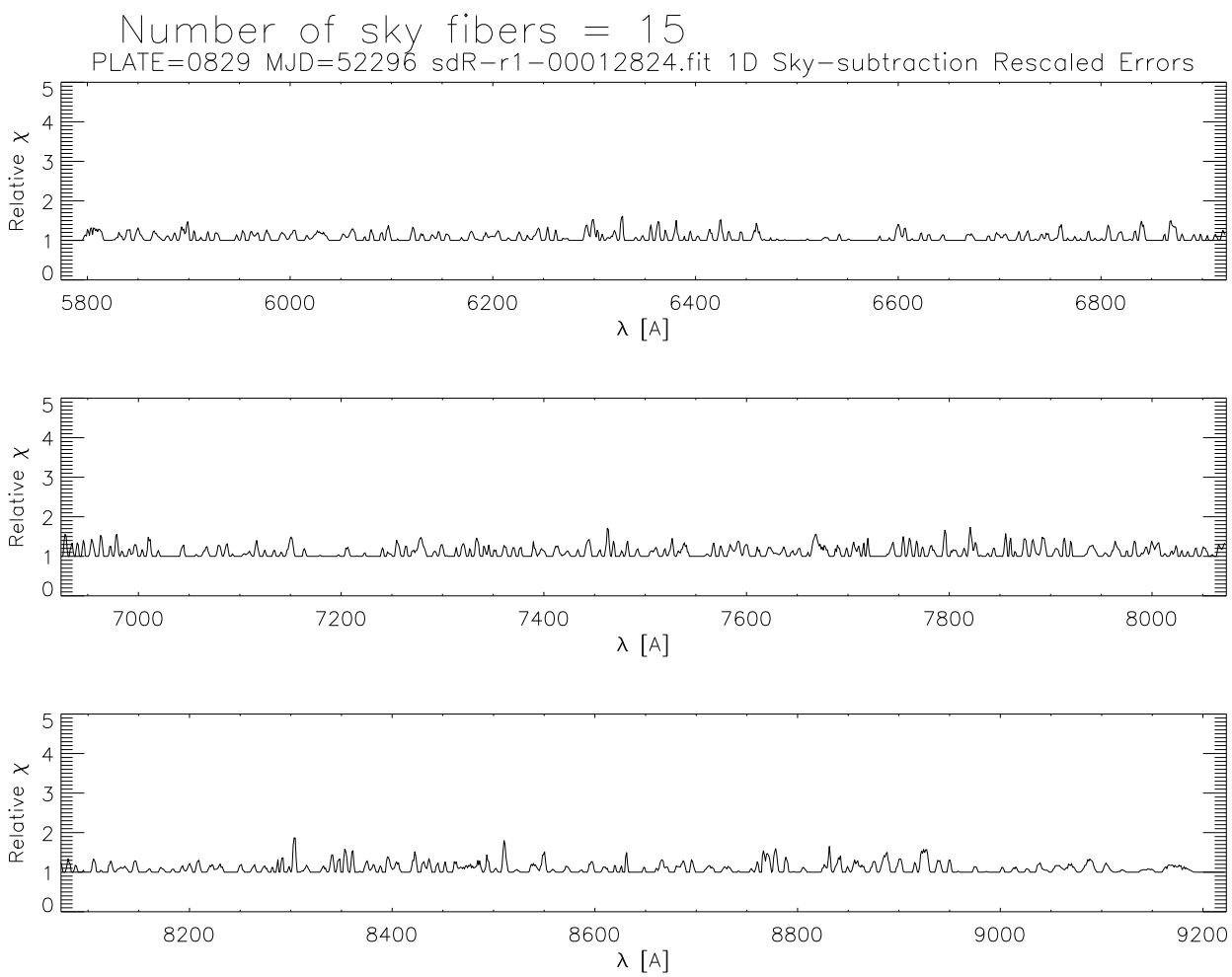

PLATE=0829 MJD=52296 Smooth superflat for sdR-r1-00012824.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

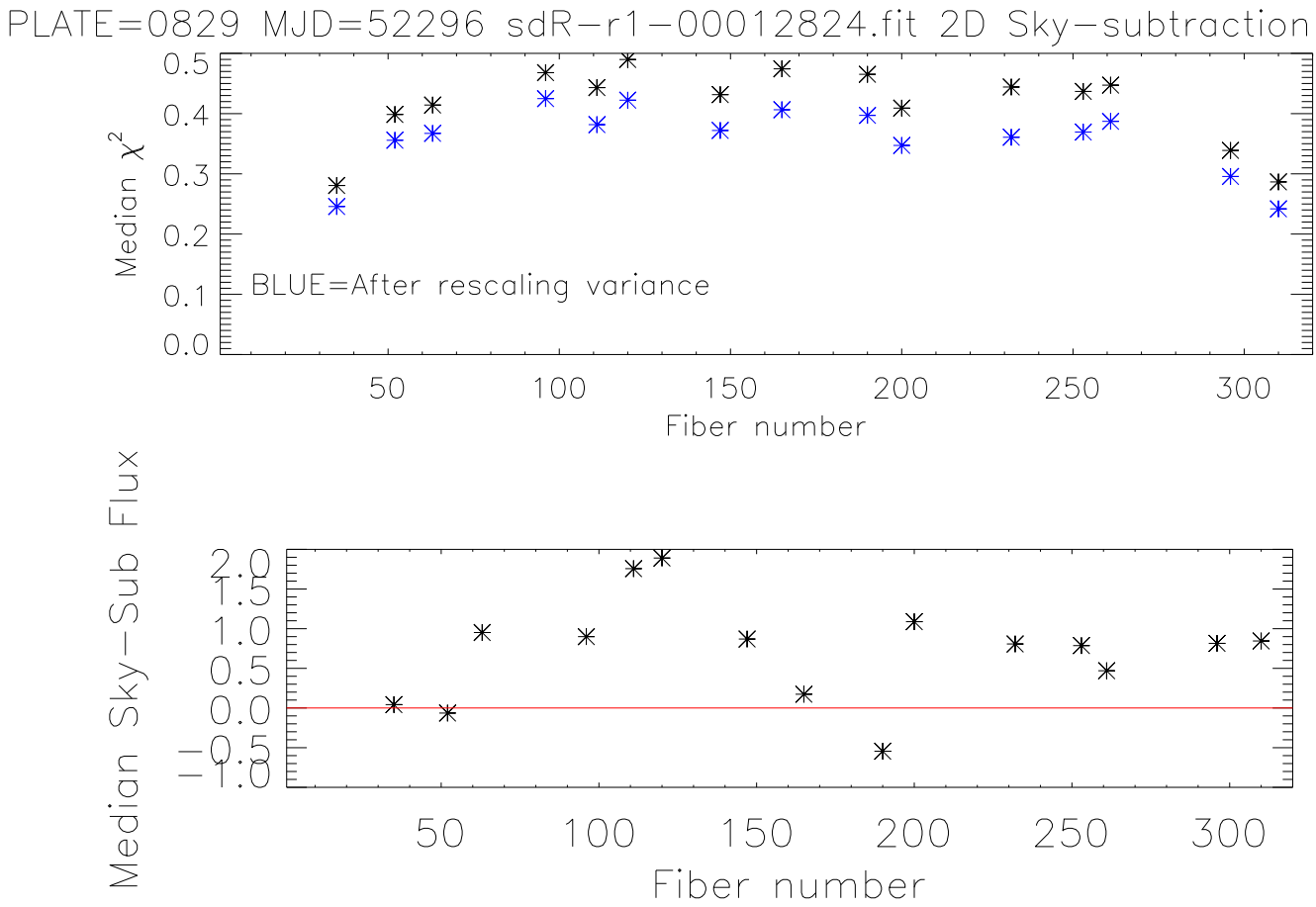
es= −0.0000

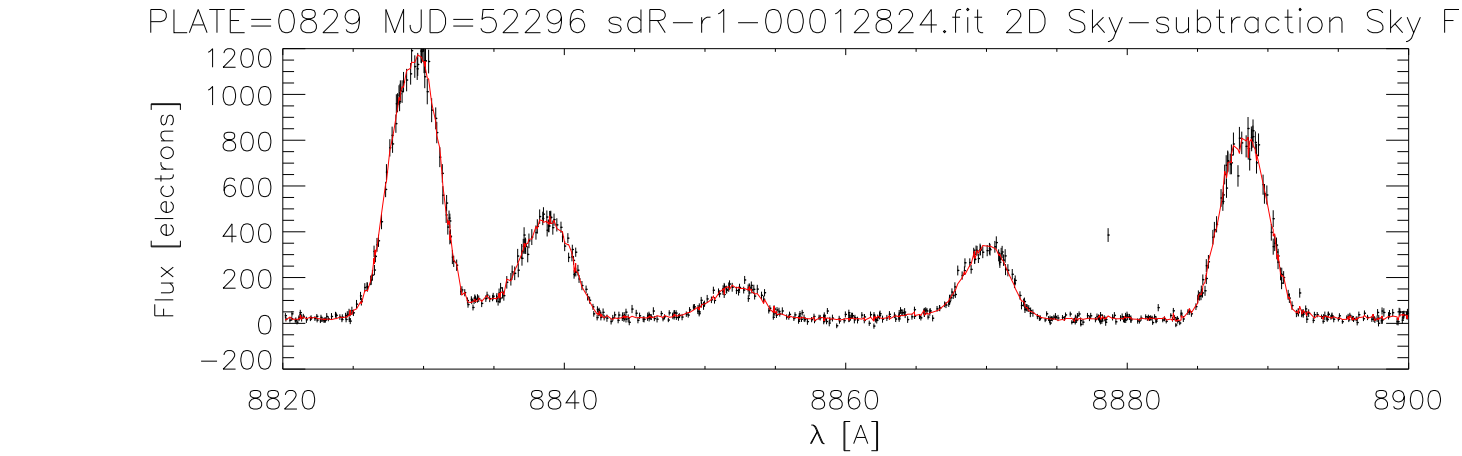

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

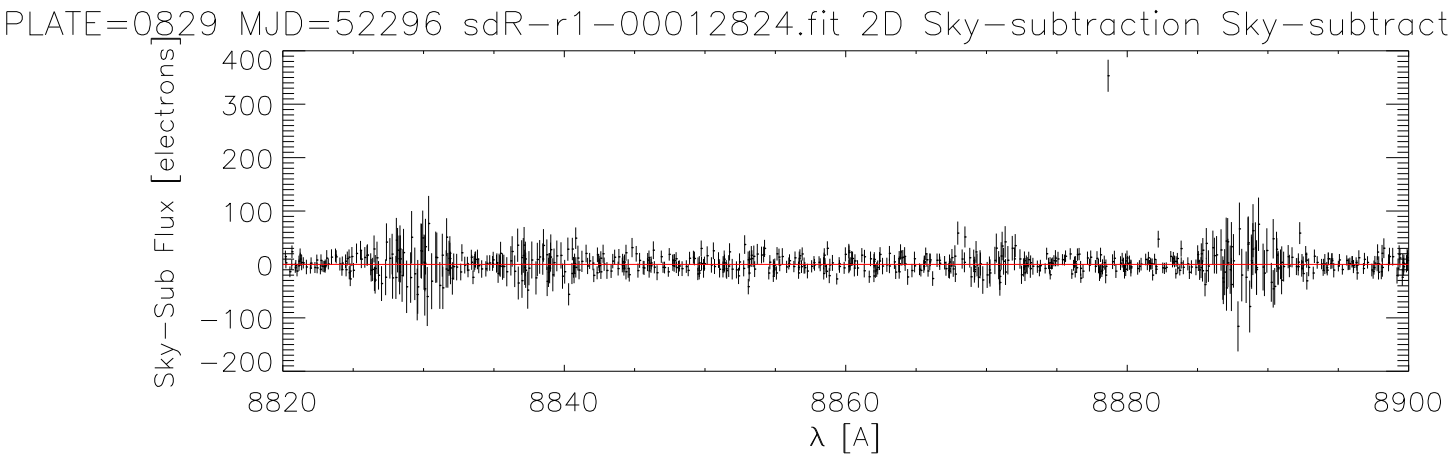

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

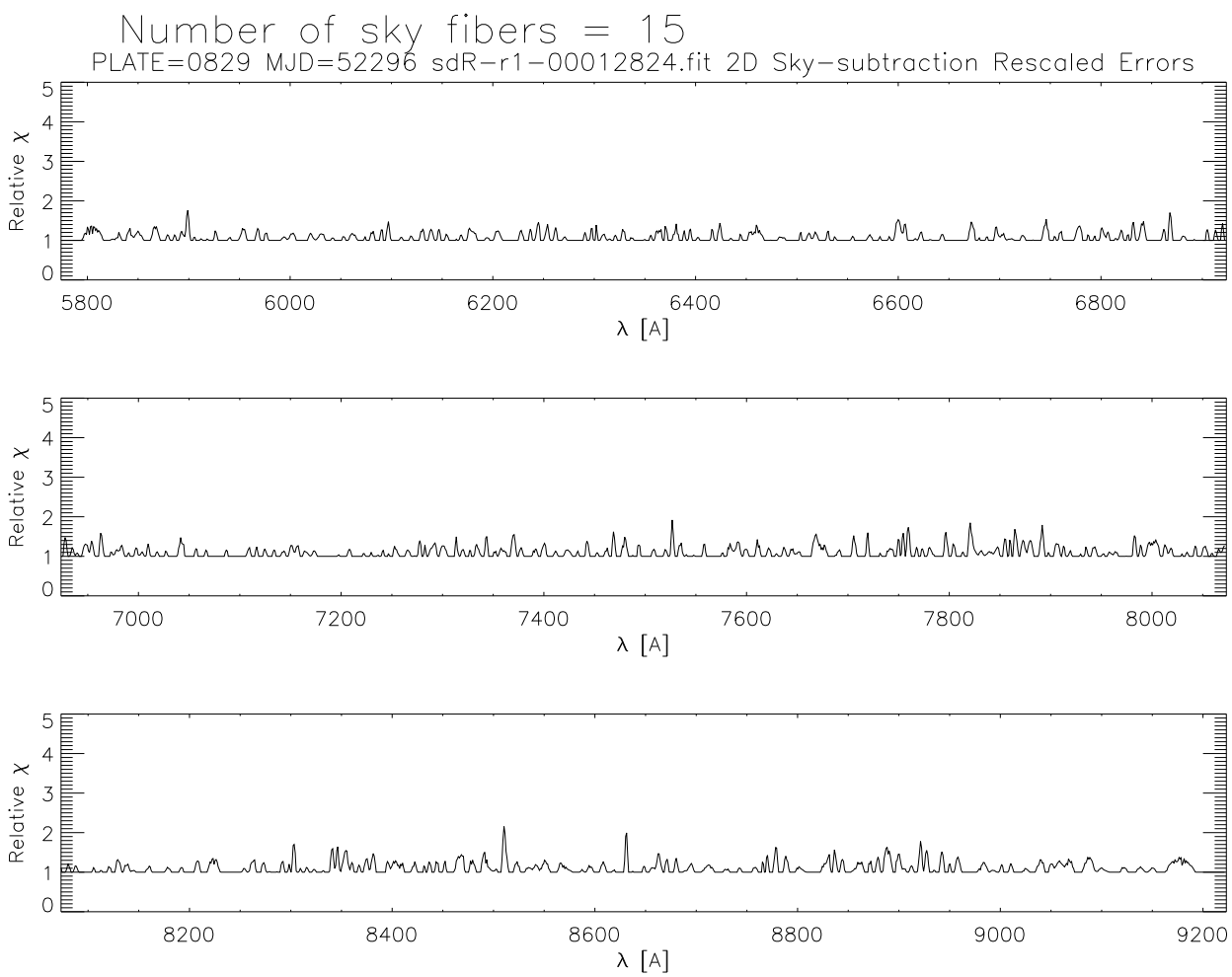

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

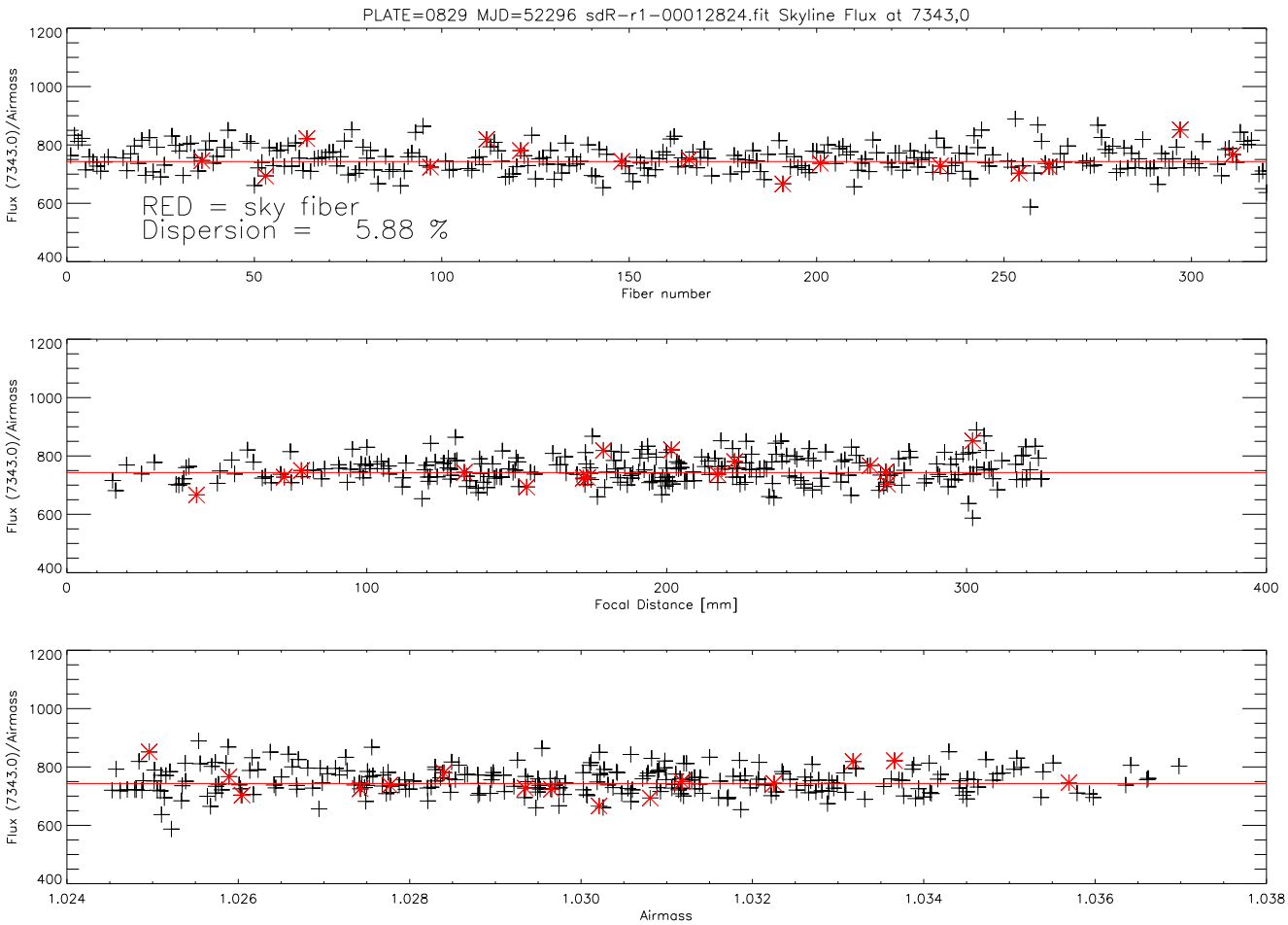

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r1-00012824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

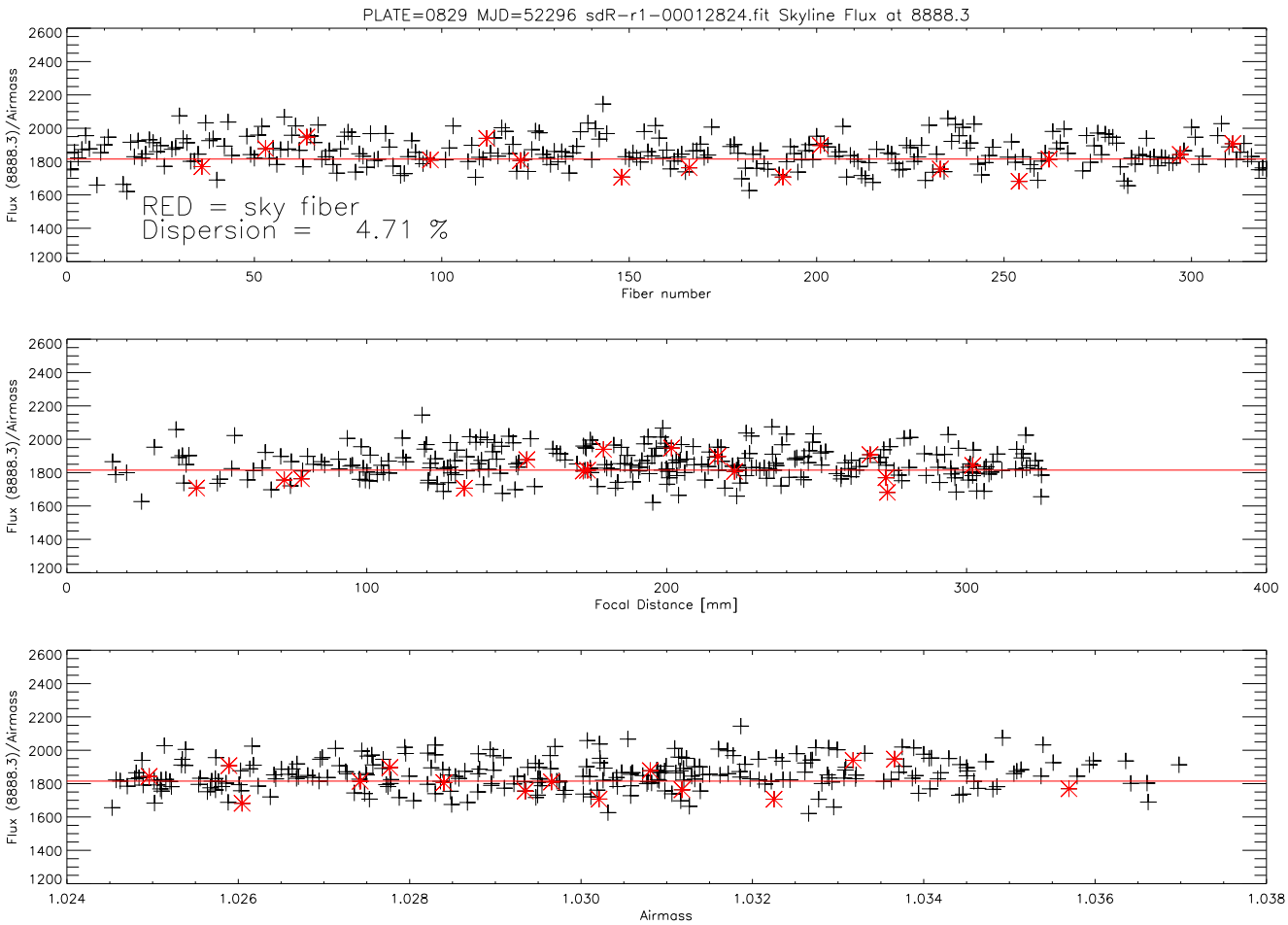

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

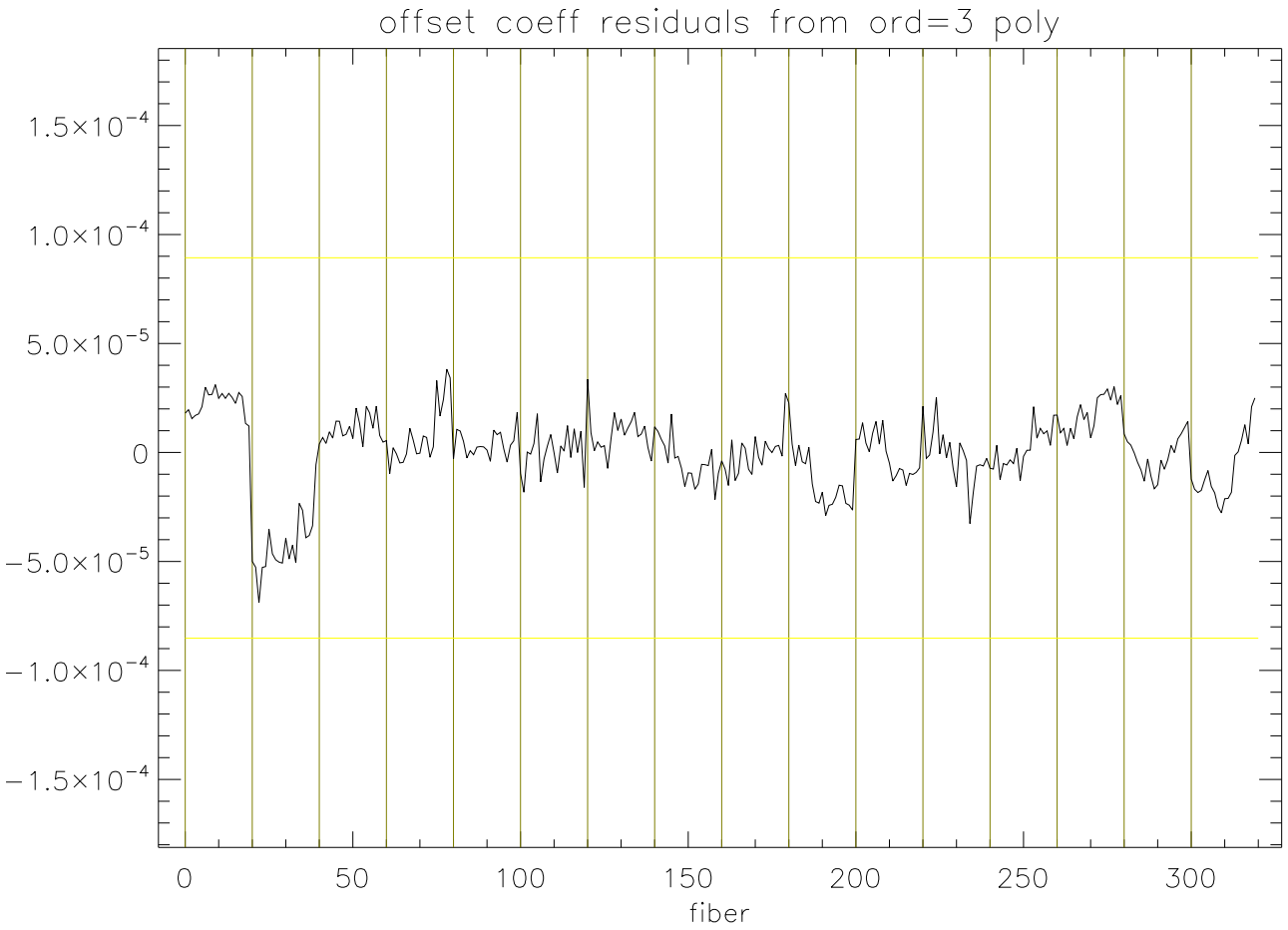

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

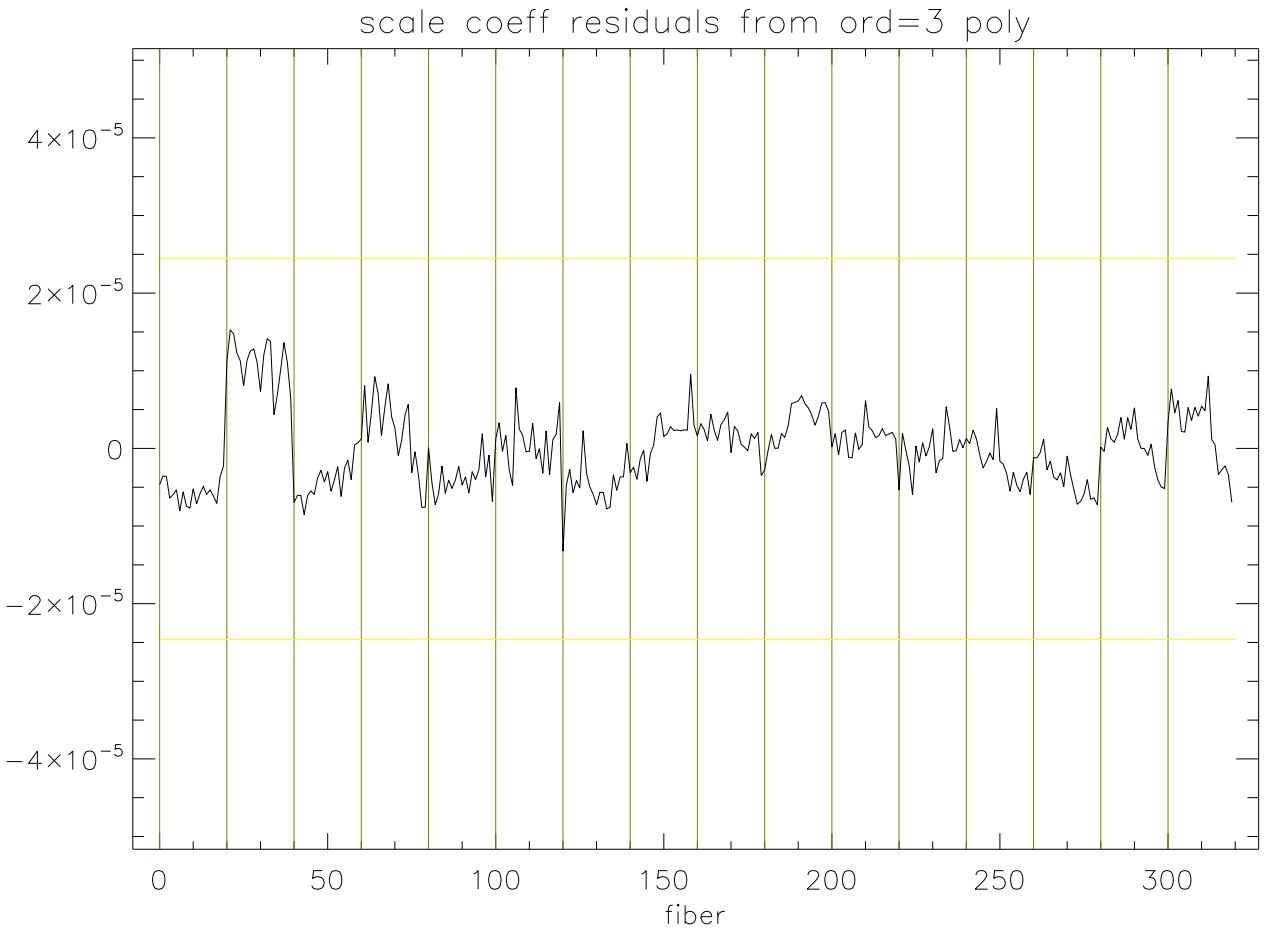

PLATE=0829 MJD=52296 sdR-r1-00012824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

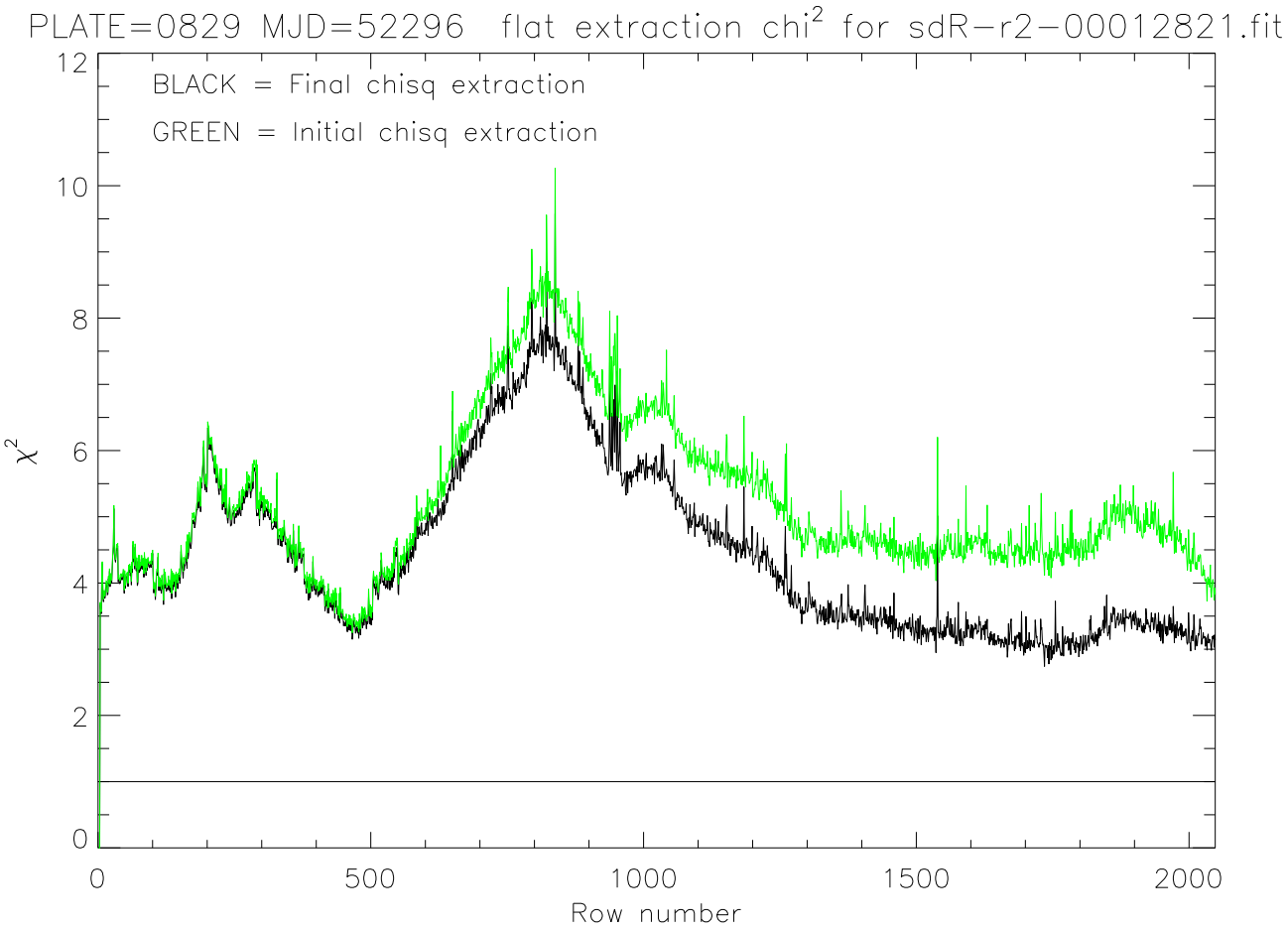

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r1-00012824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

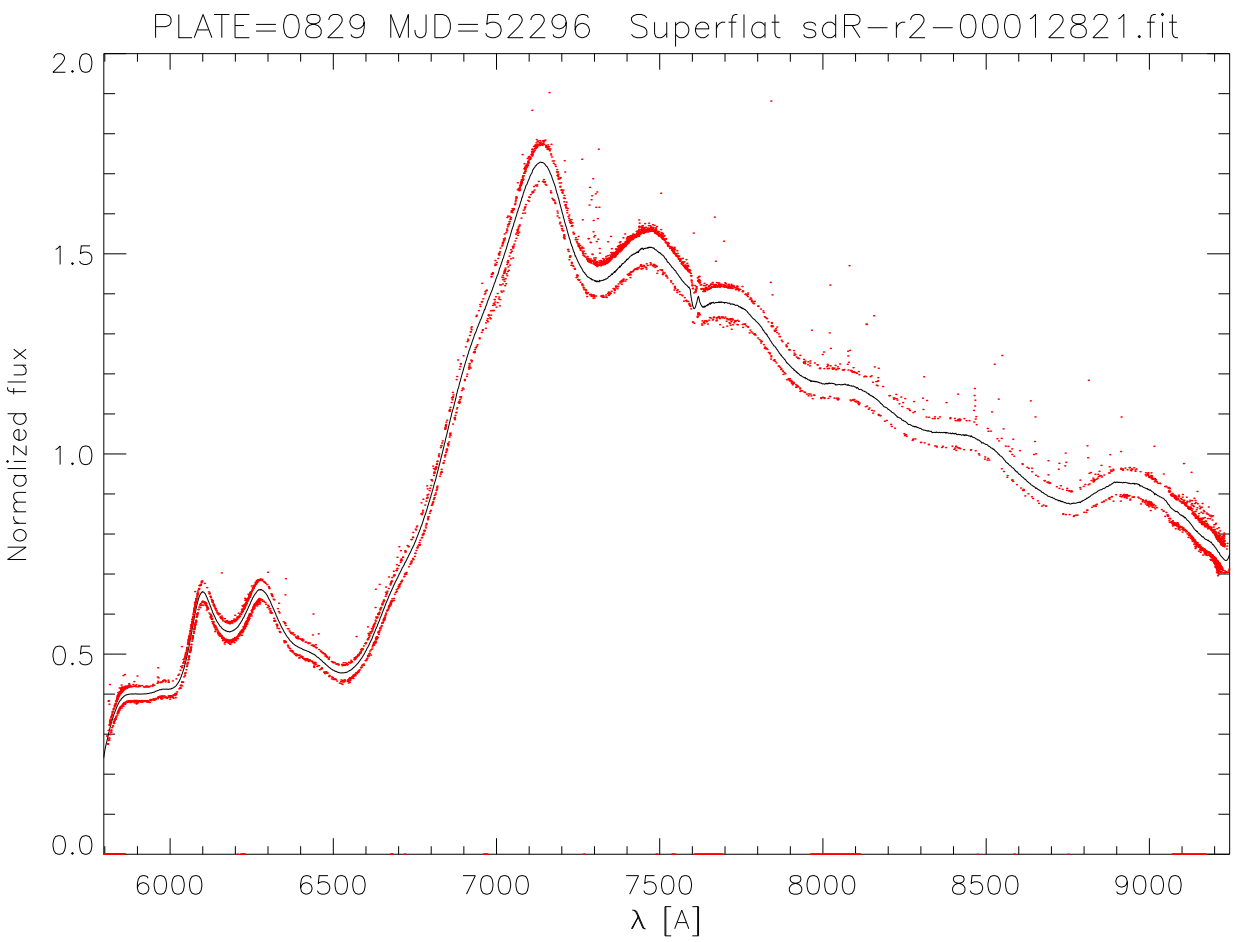

PLATE=0829 MJD=52296 sdR-r1-00012824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.88 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

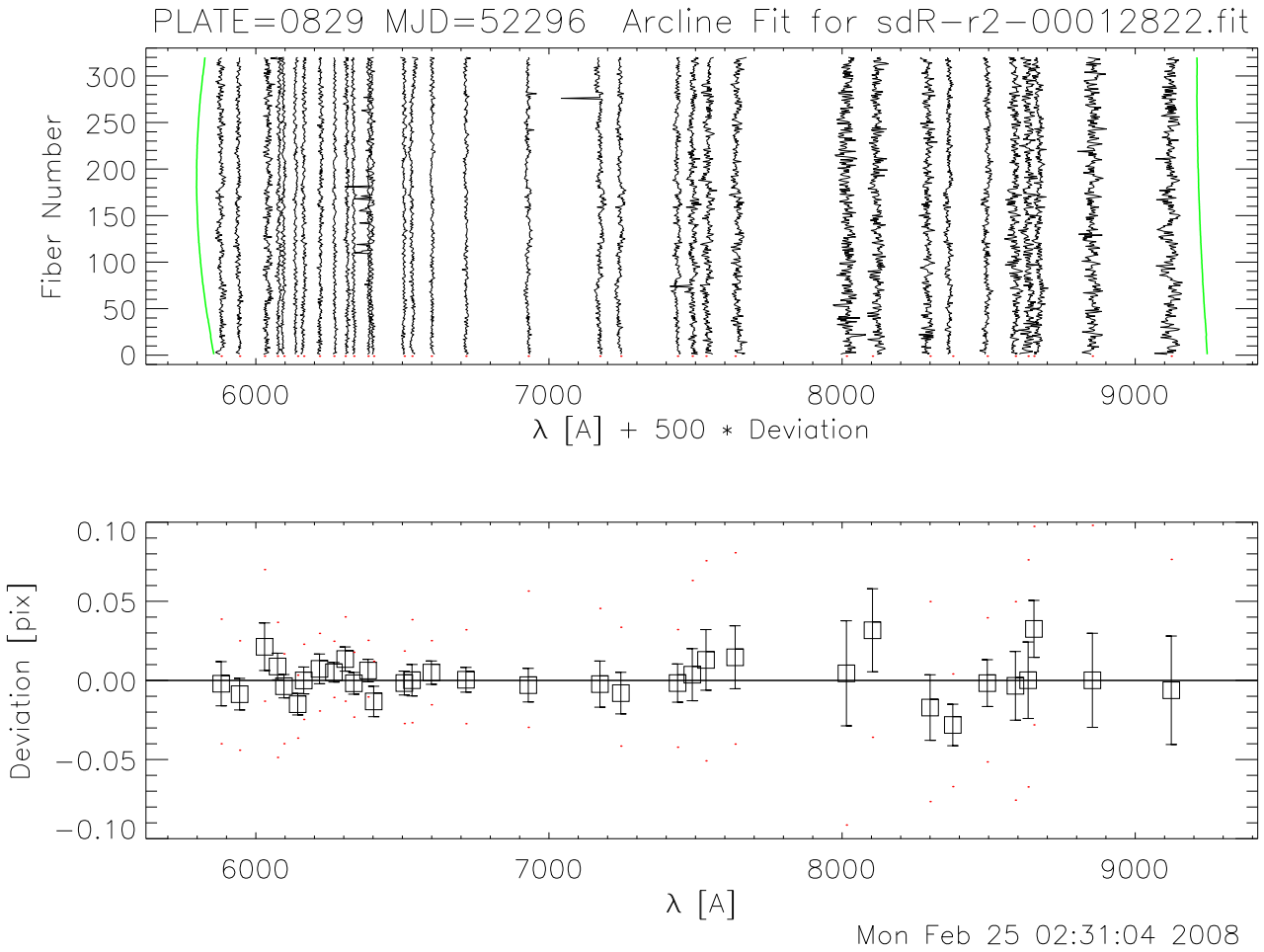

PLATE=0829 MJD=52296 sdR-r1-00012824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.71 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

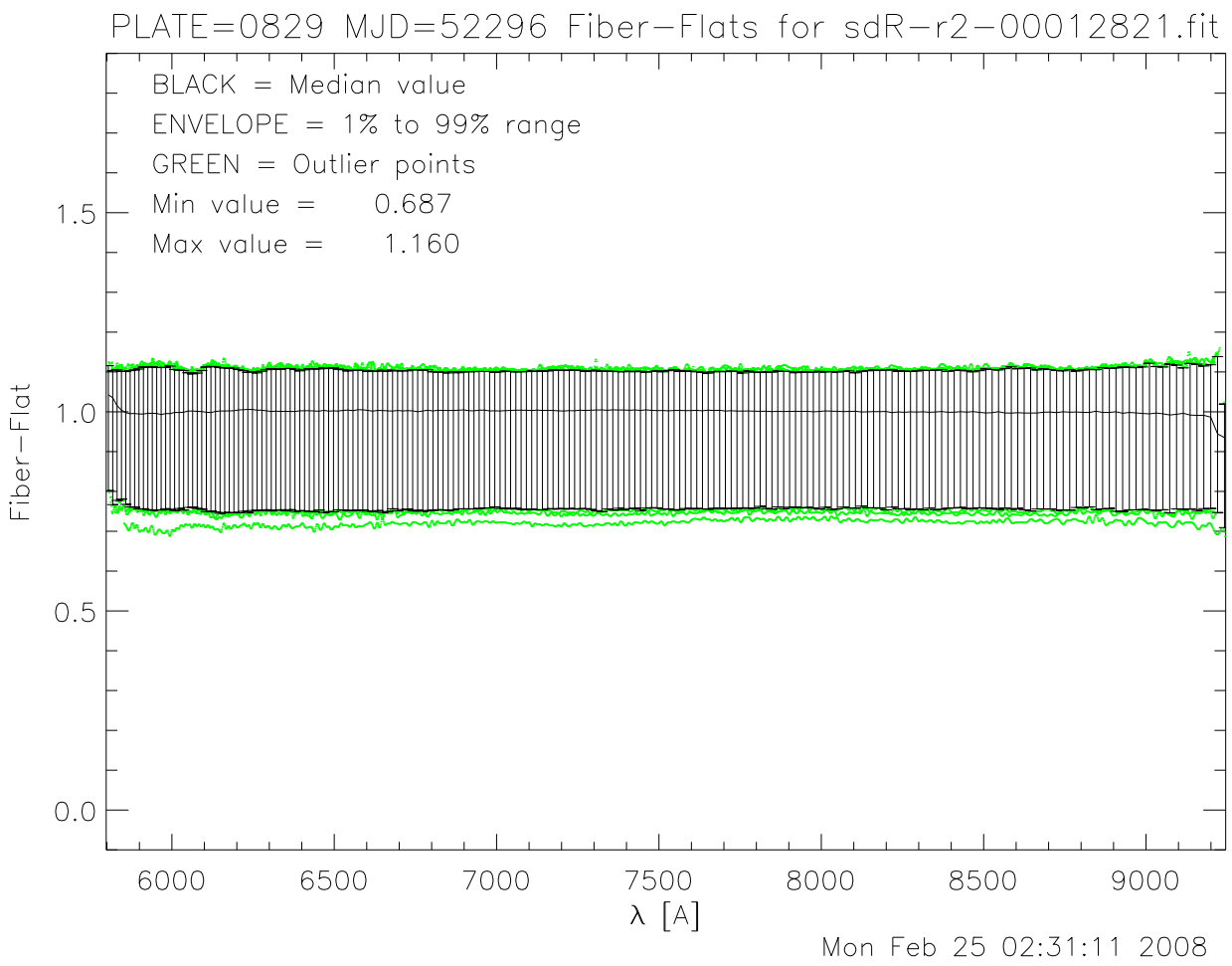

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

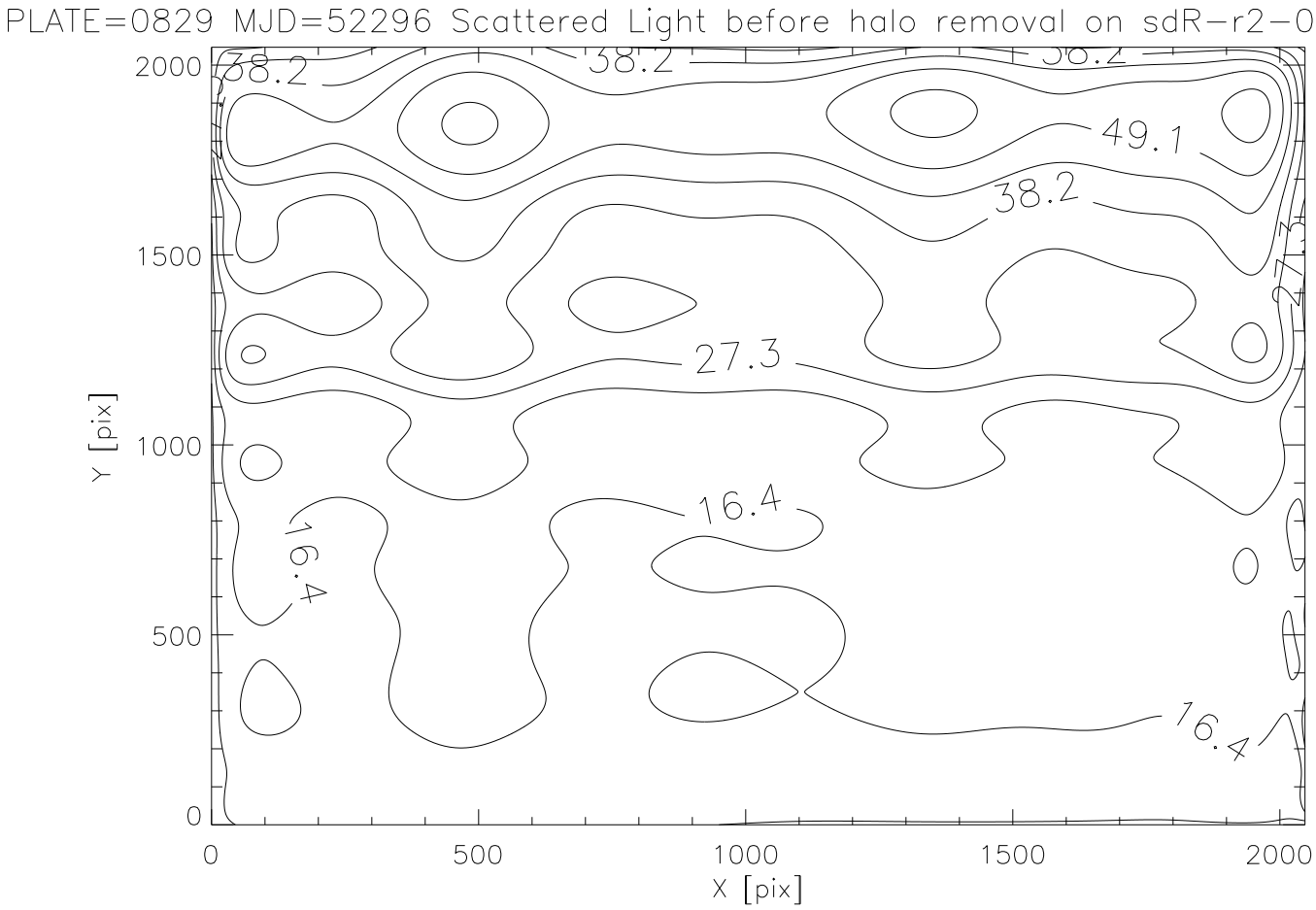

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

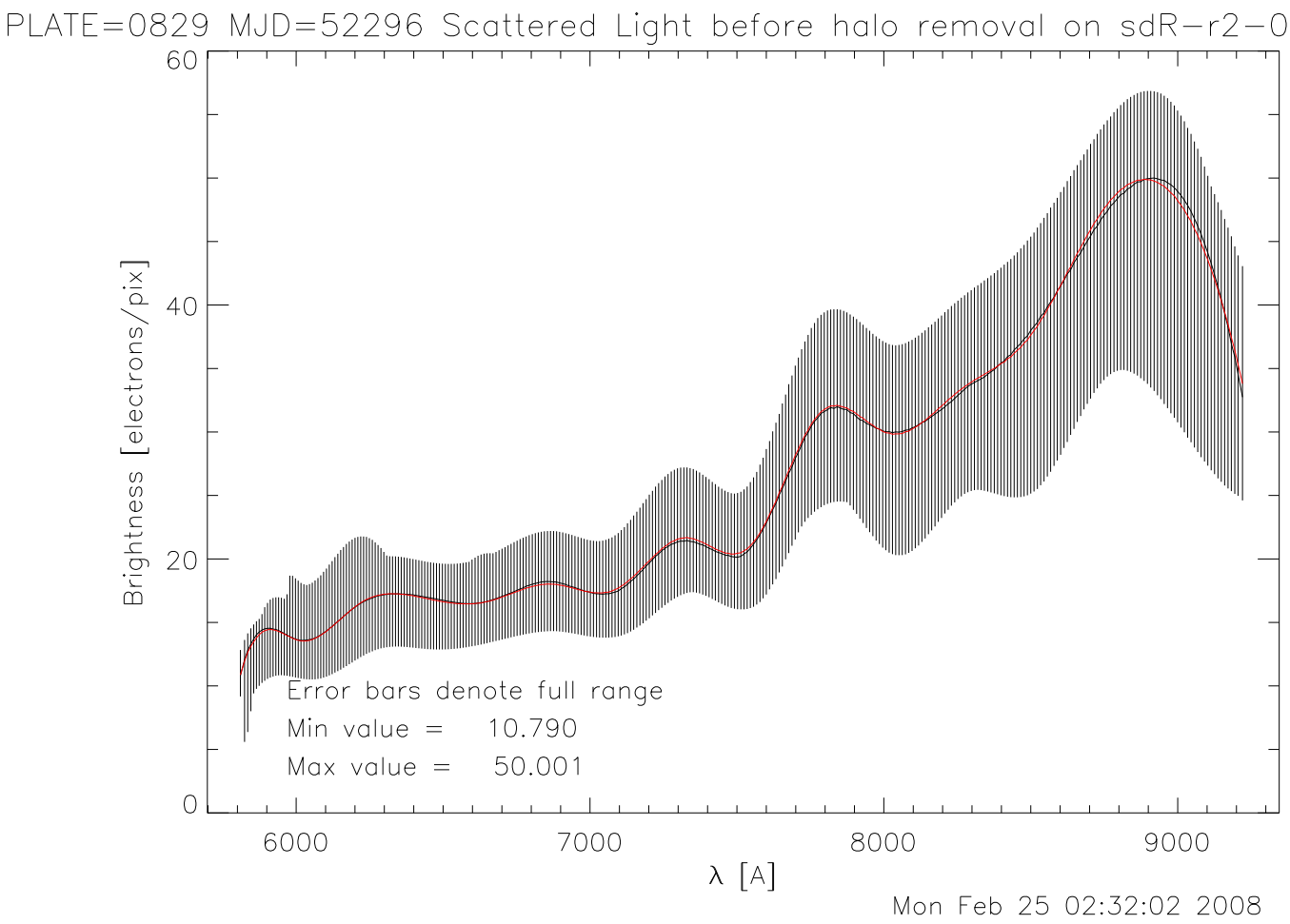

PLATE=0829 MJD=52296 flat extraction chi^2 for sdR−r2−00012821.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

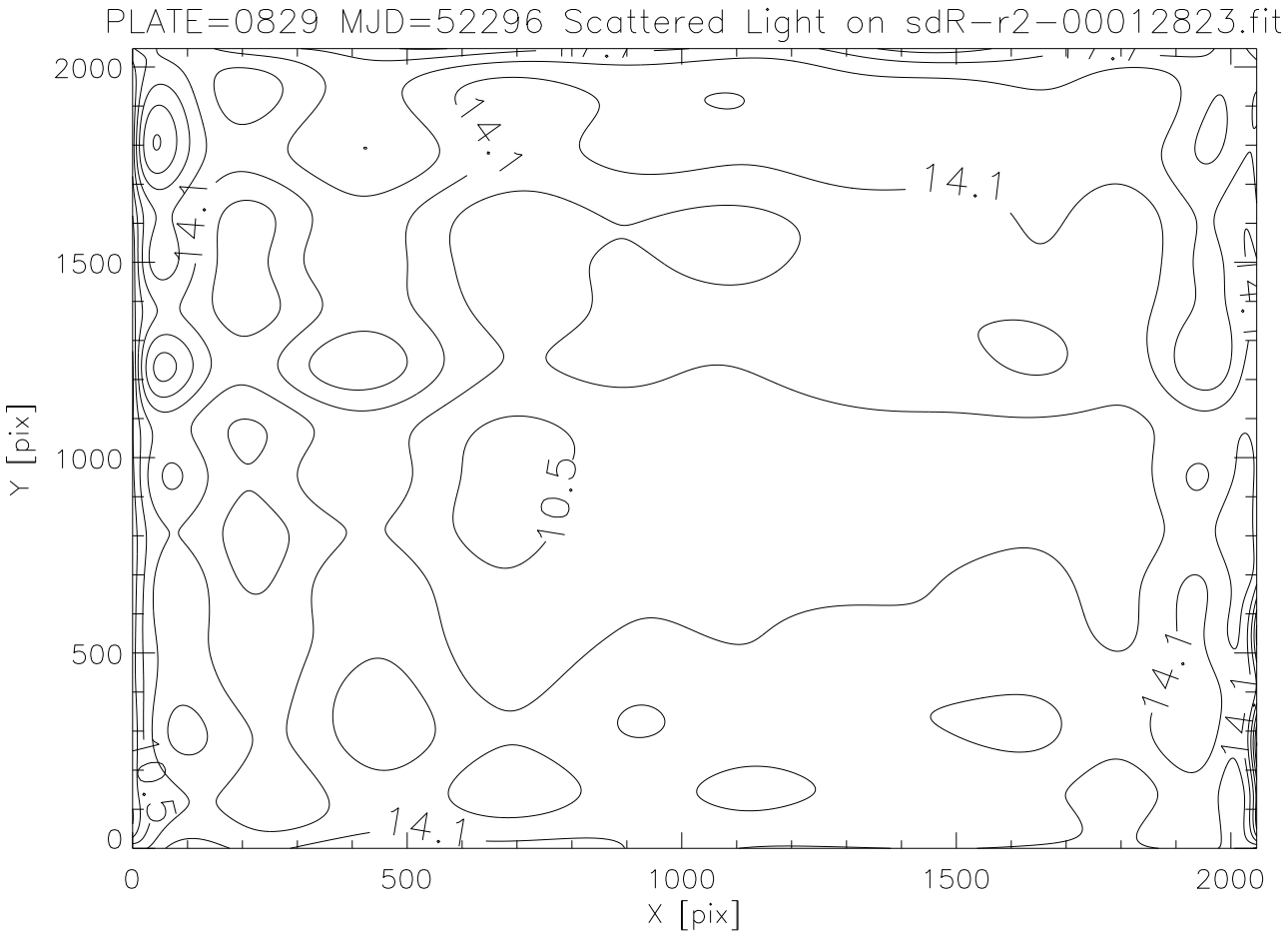

PLATE=0829 MJD=52296 Superflat sdR-r2-00012821.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

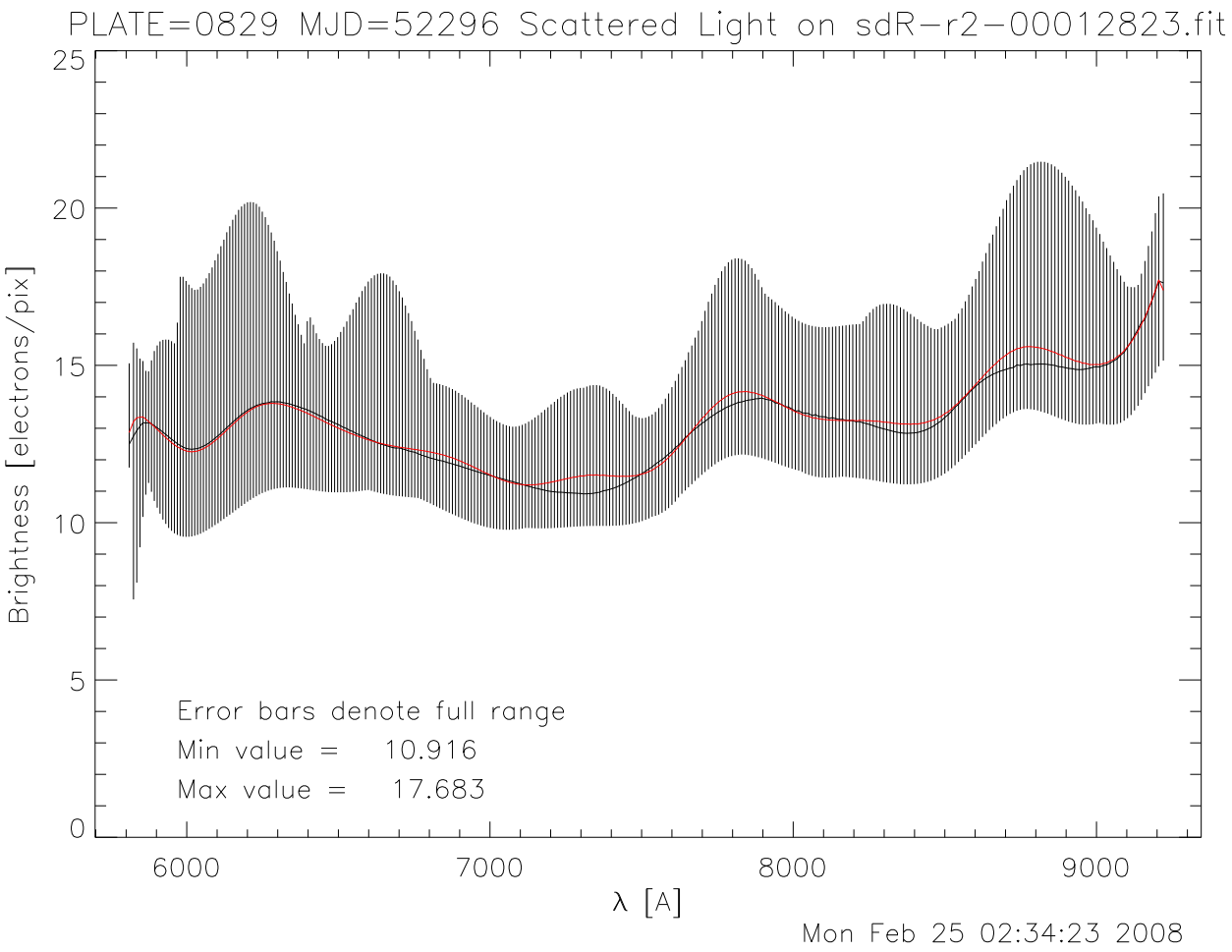

PLATE=0829 MJD=52296 Arcline Fit for sdR-r2-00012822.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 02:31:04 2008

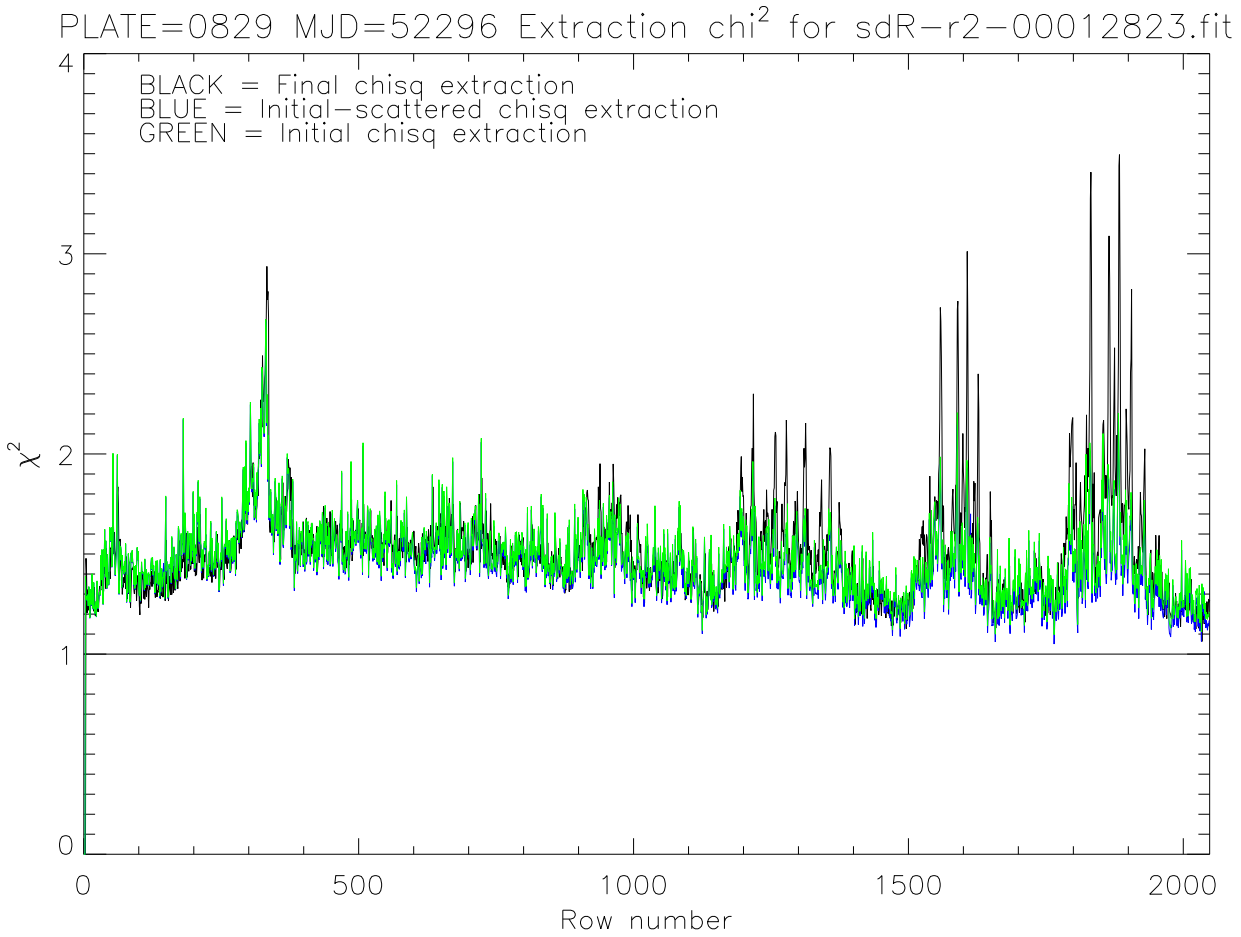

PLATE=0829 MJD=52296 Fiber−Flats for sdR−r2−00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.687
Max value = 1.160
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 02:31:11 2008

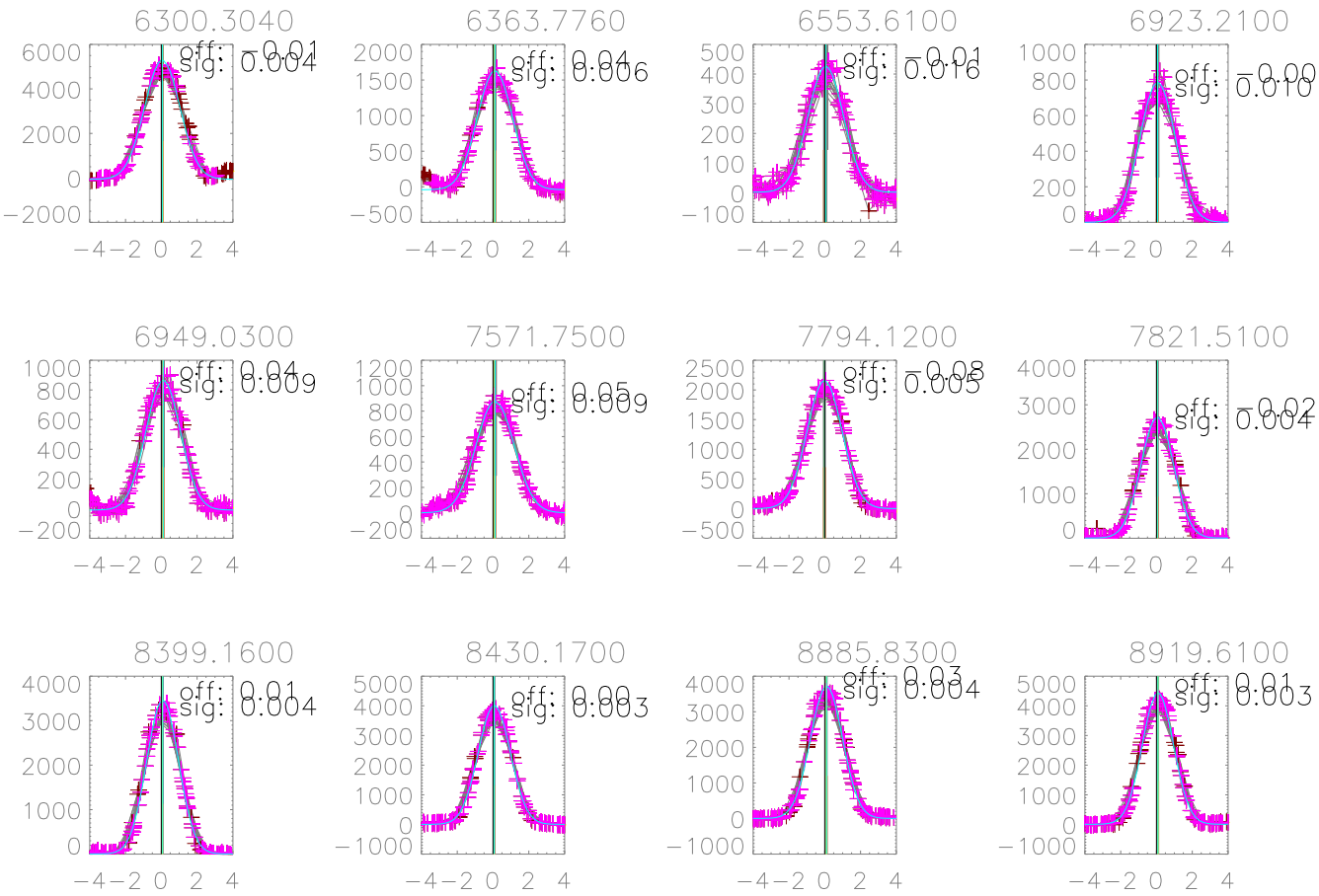

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r2-00012823.fi
38.2
38.2
38.2
49.1
38.2
27.3
16.4
16.4
16.4
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

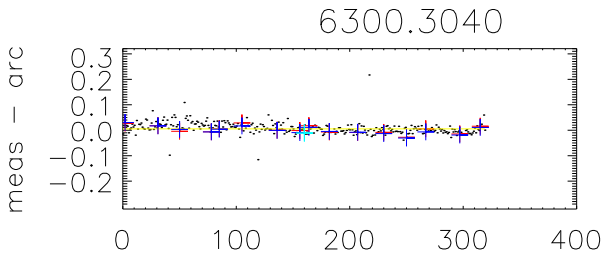

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r2-00012823.fi
60
40
20
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 10.790
Max value = 50.001
6000
7000
8000
9000
λ [A]
Mon Feb 25 02:32:02 2008

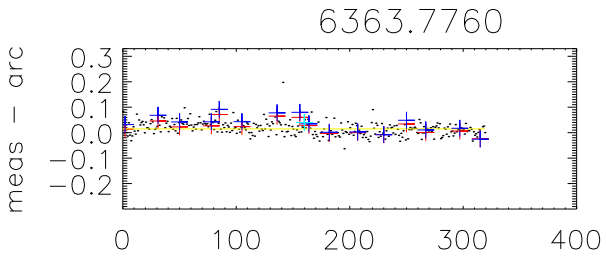

PLATE=0829 MJD=52296 Scattered Light on sdR-r2-00012823.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
14.1
14.1
14.1
10.5
10.5
14.1
14.1
14.1

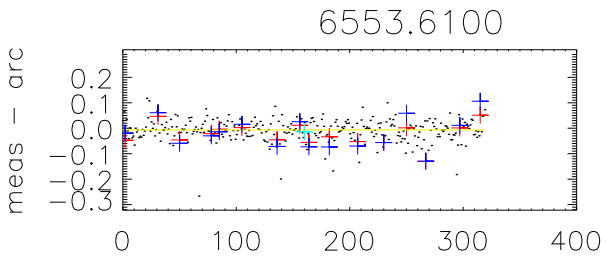

PLATE=0829 MJD=52296 Scattered Light on sdR-r2-00012823.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.916
Max value = 17.683
Mon Feb 25 02:34:23 2008

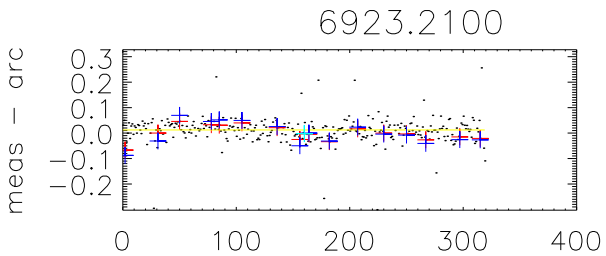

PLATE=0829 MJD=52296 Extraction chi^2 for sdR−r2−00012823.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

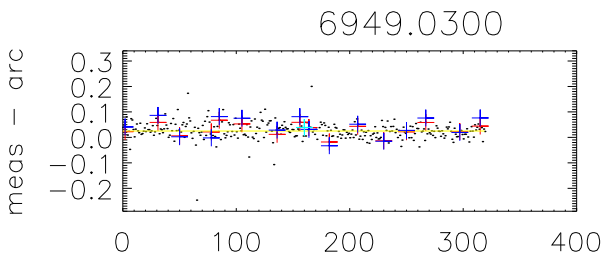

6300.3040
off: −0.01
sig: 0.004
6363.7760
off: 0.04
sig: 0.006
6553.6100
off: −0.01
sig: 0.016
6923.2100
off: −0.00
sig: 0.010
6949.0300
off: 0.04
sig: 0.009
7571.7500
off: 0.05
sig: 0.009
7794.1200
off: −0.08
sig: 0.005
7821.5100
off: −0.02
sig: 0.004
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: 0.00
sig: 0.003
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.01
sig: 0.003

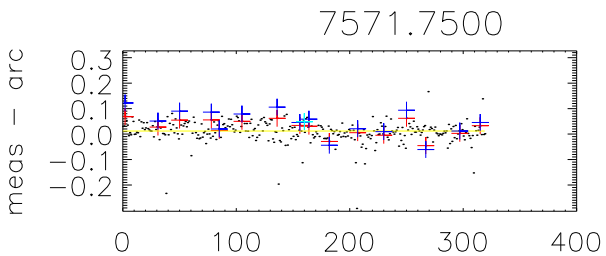

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

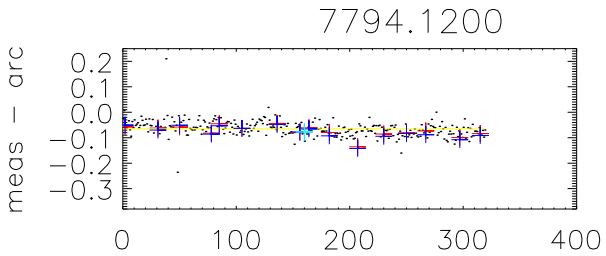

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

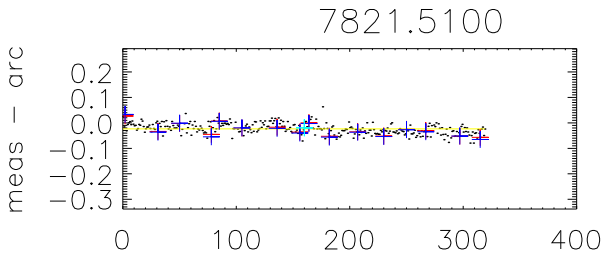

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

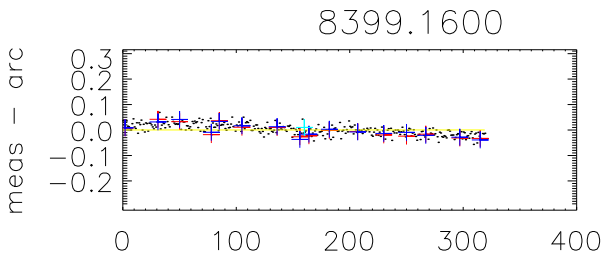

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

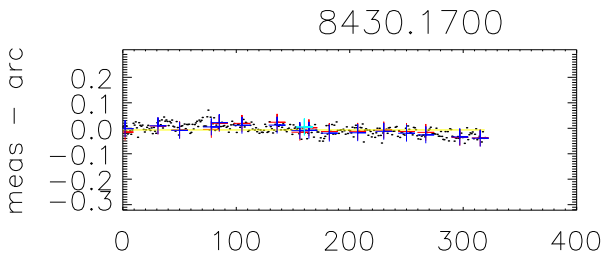

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

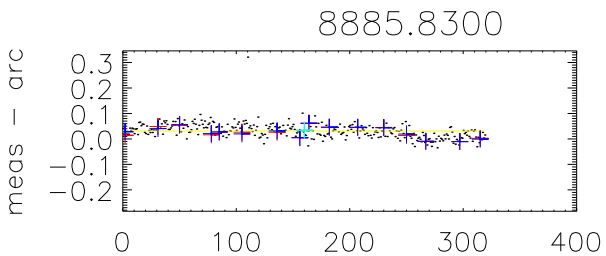

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

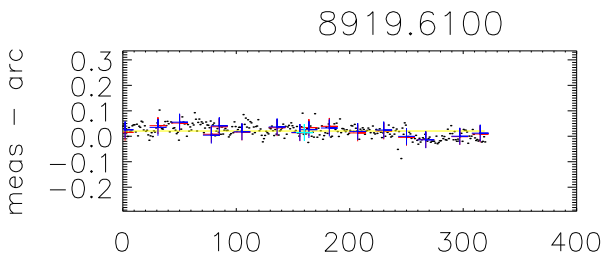

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

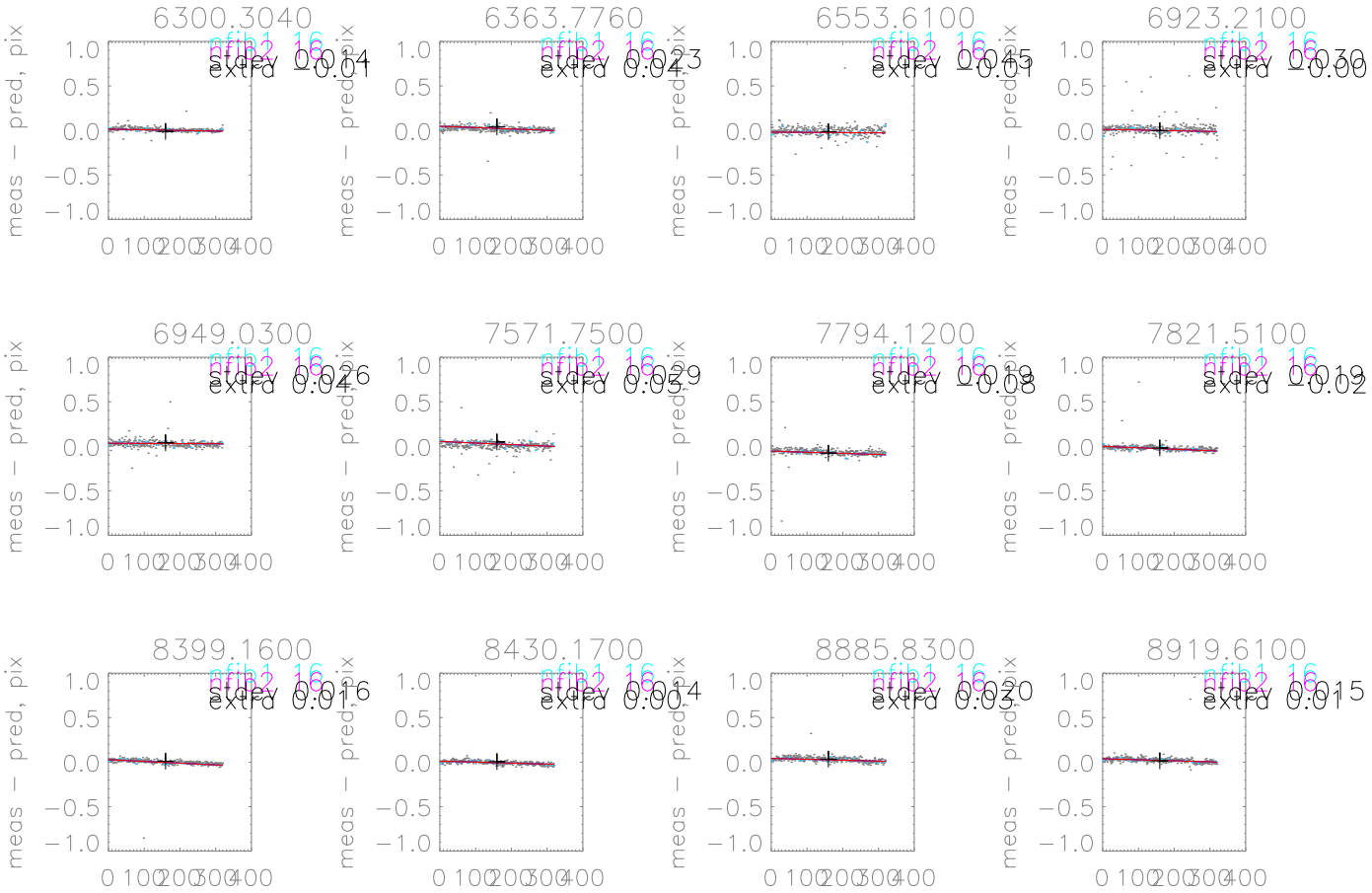

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

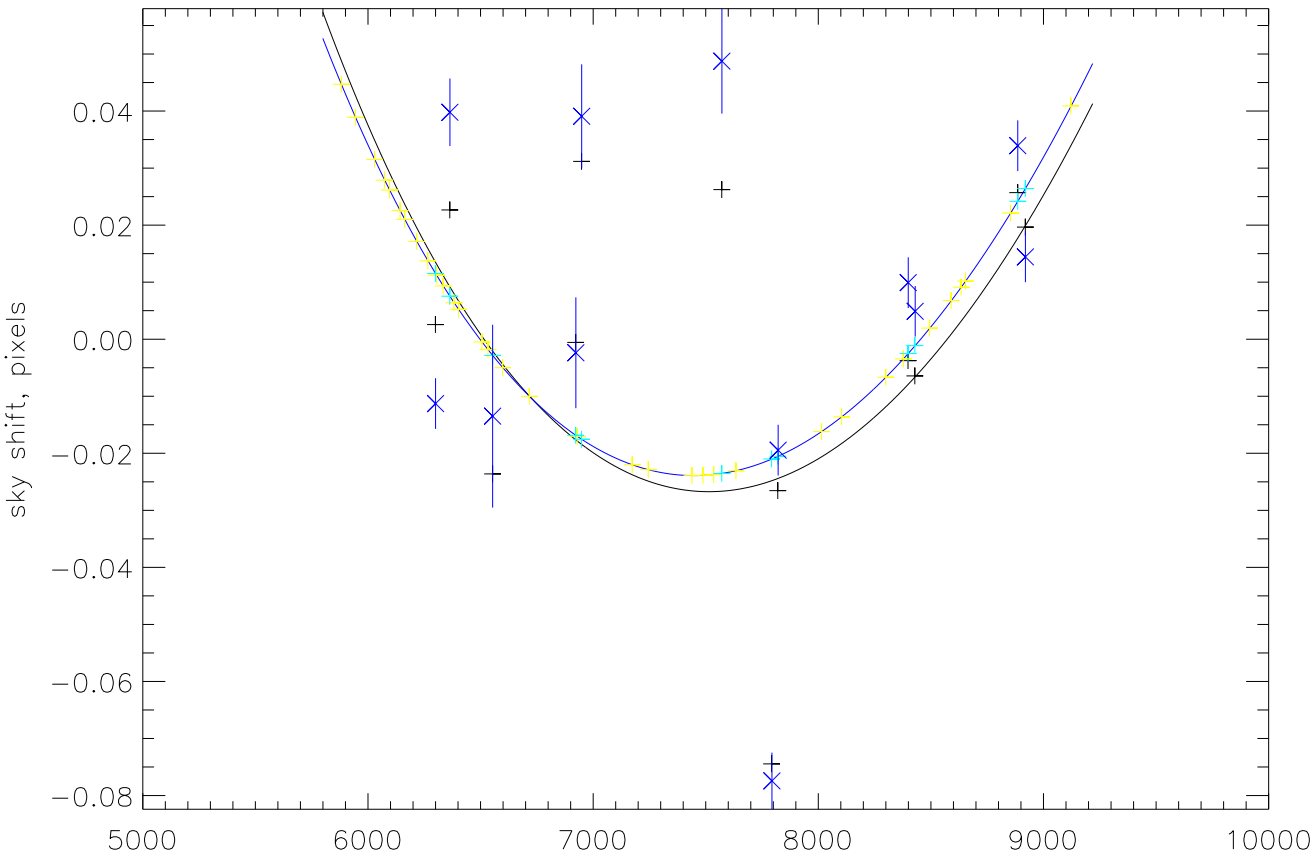

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

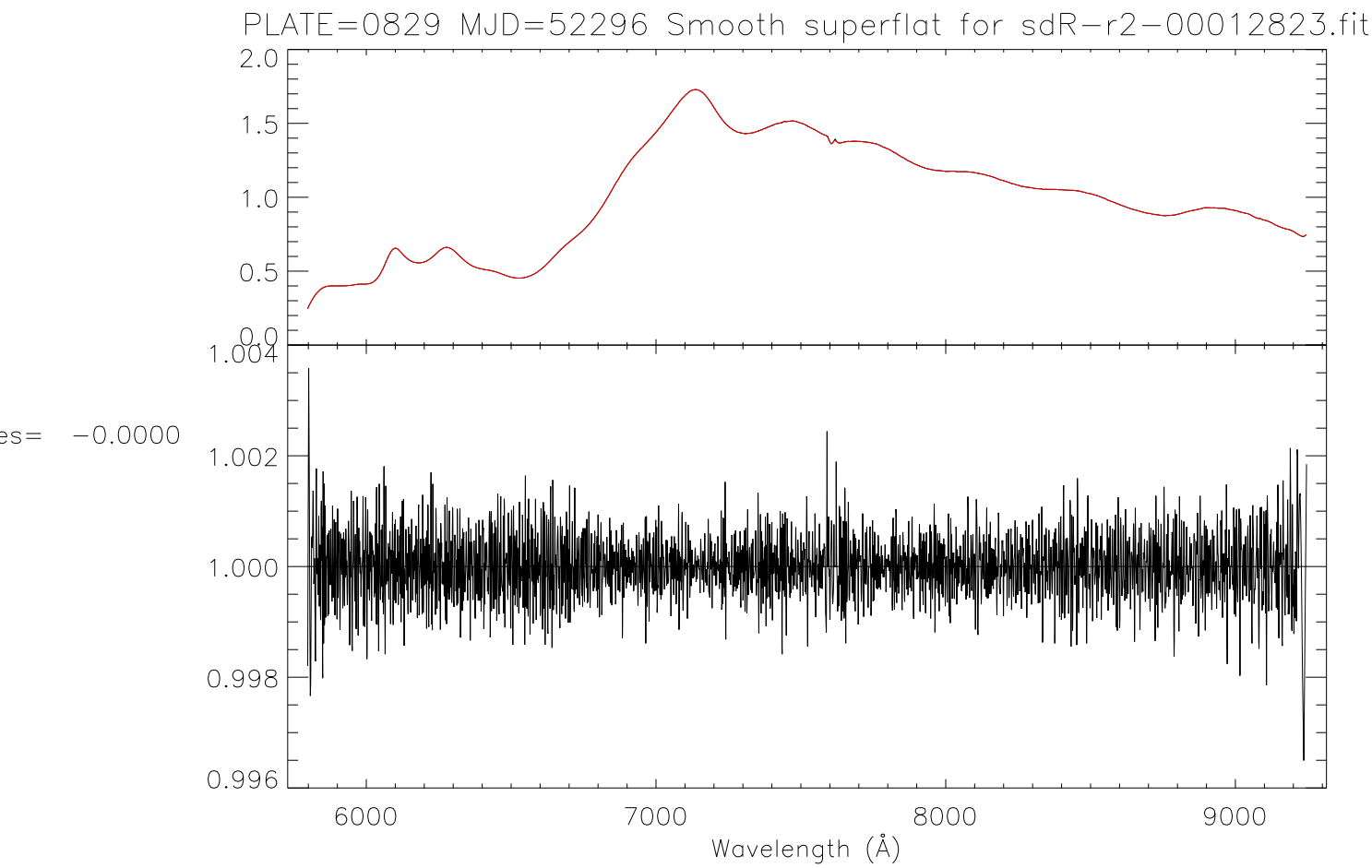

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

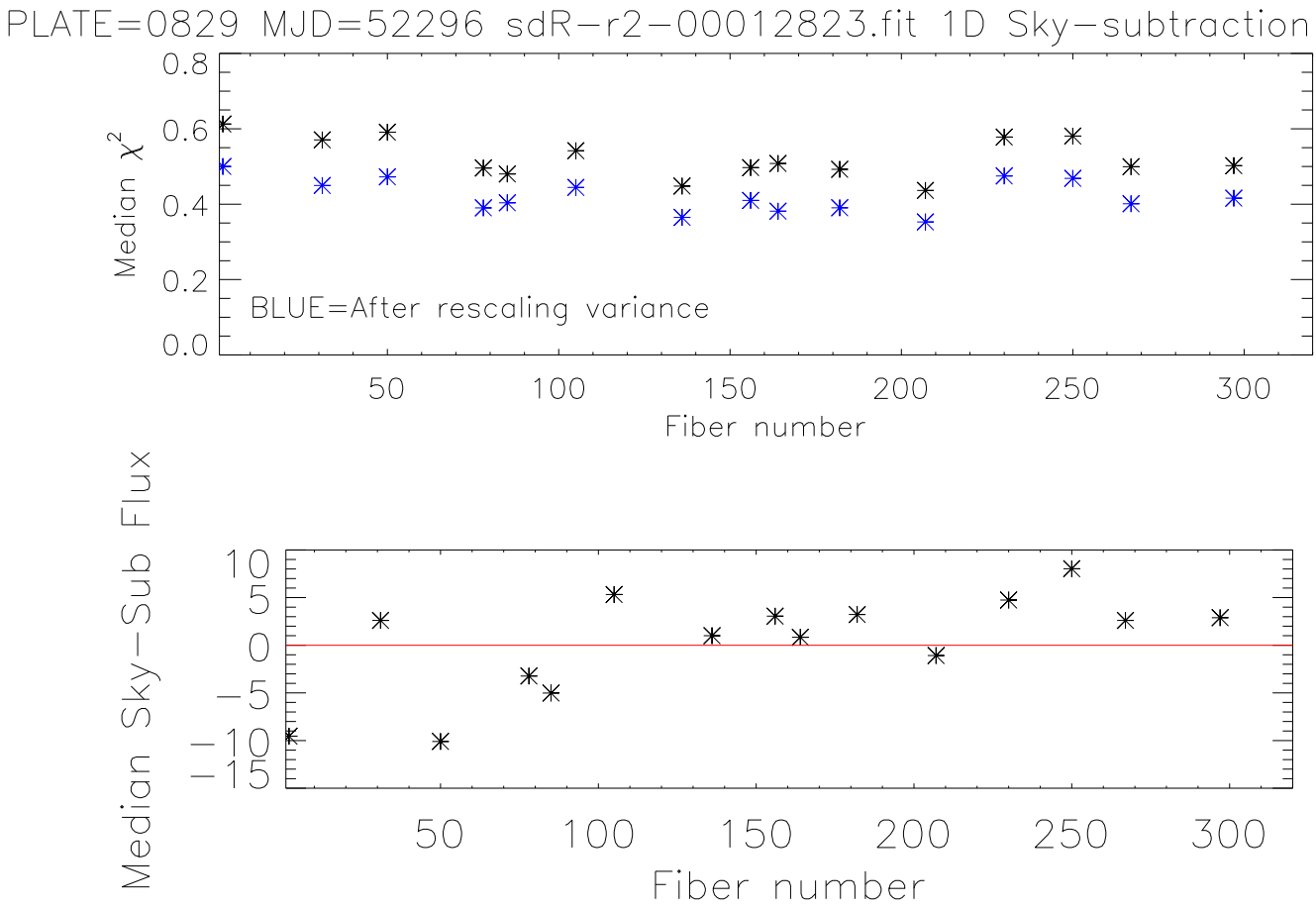

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

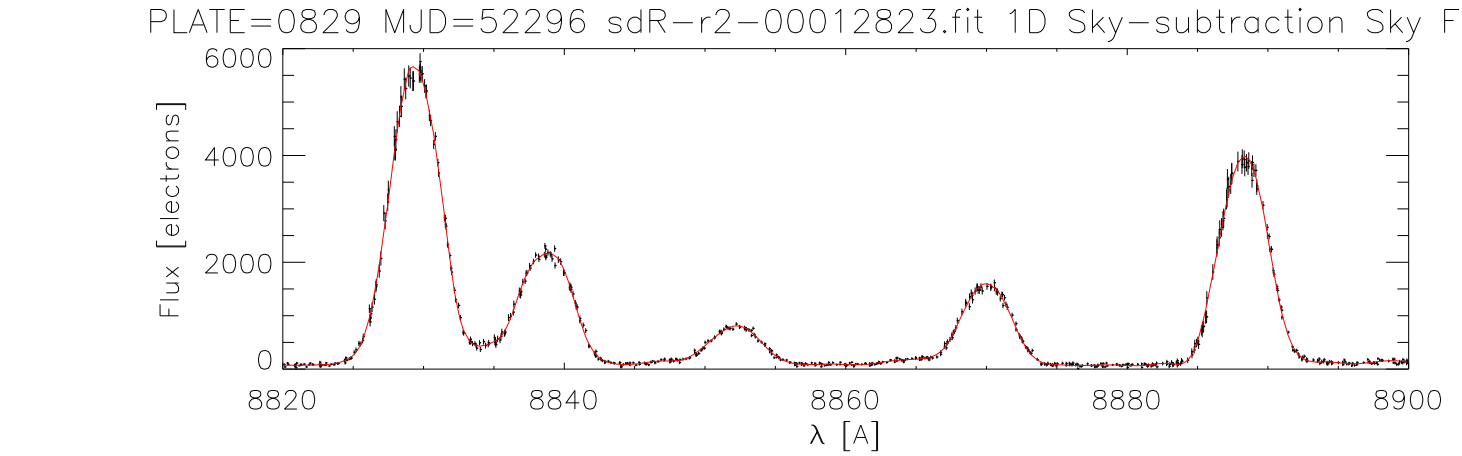

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

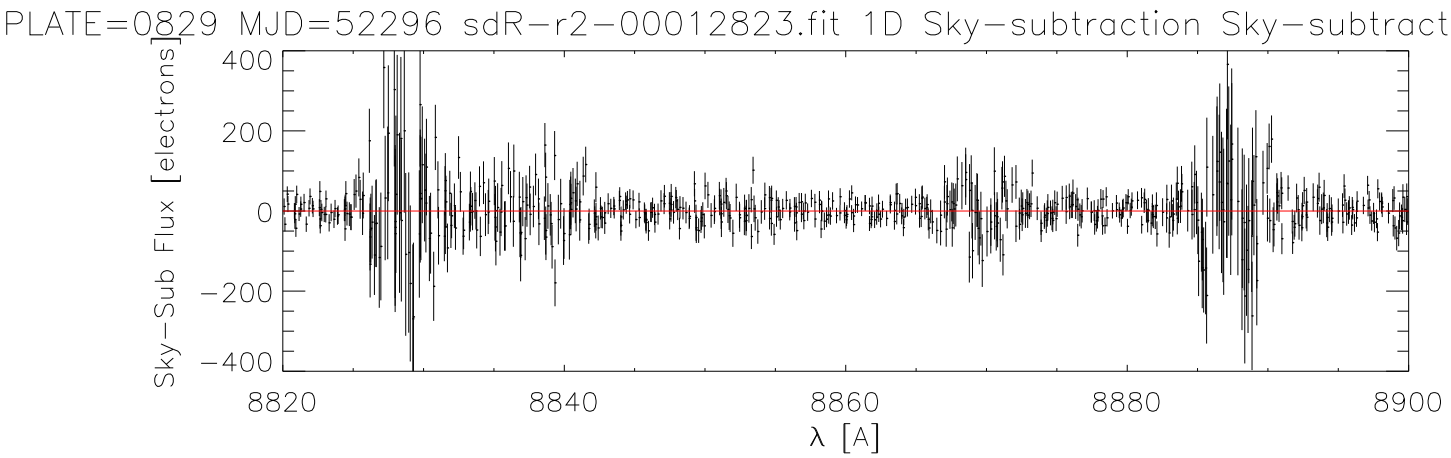

6300.3040
stdev 0.014
extra −0.01
6363.7760
stdev 0.023
extra 0.04
6553.6100
stdev 0.045
extra −0.01
6923.2100
stdev 0.030
extra −0.00
6949.0300
stdev 0.026
extra 0.04
7571.7500
stdev 0.029
extra 0.03
7794.1200
stdev 0.019
extra −0.08
7821.5100
stdev 0.019
extra −0.02
8399.1600
stdev 0.016
extra 0.01
8430.1700
stdev 0.014
extra 0.00
8885.8300
stdev 0.020
extra 0.03
8919.6100
stdev 0.015
extra 0.01
meas − pred, pix
mfbx1 16
mfbx2 16

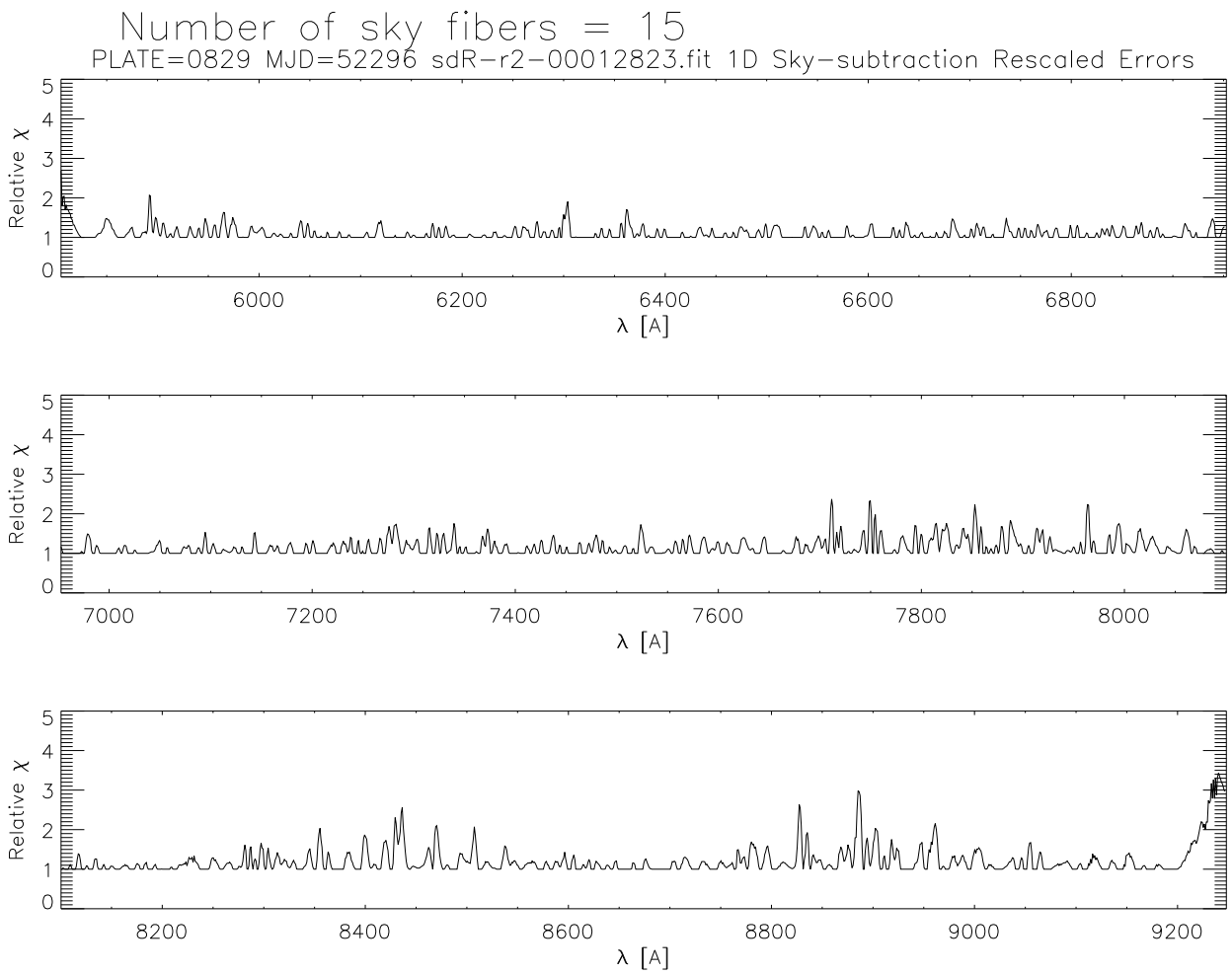

sky shift, pixels
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
5000
6000
7000
8000
9000
10000

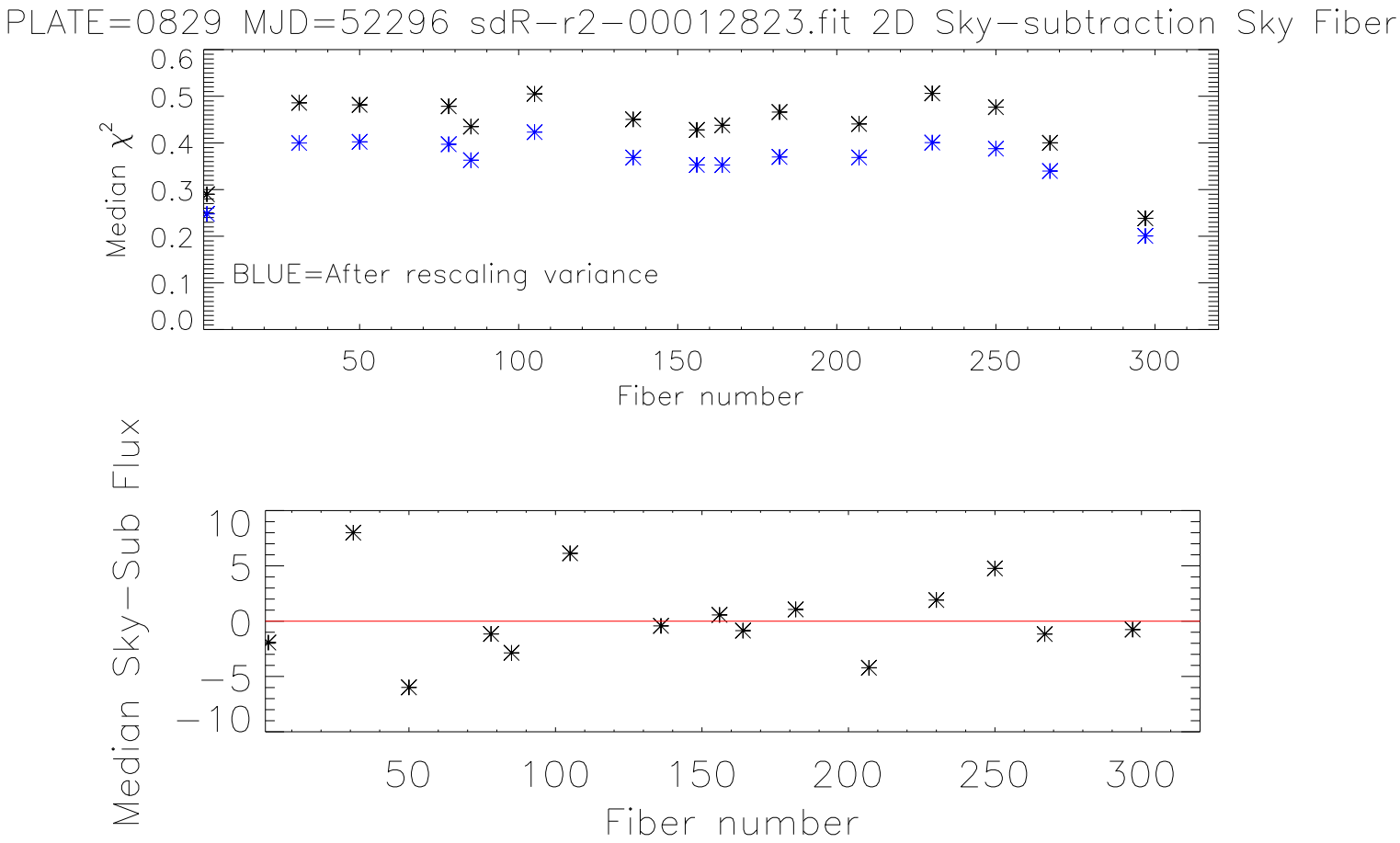

PLATE=0829 MJD=52296 Smooth superflat for sdR-r2-00012823.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

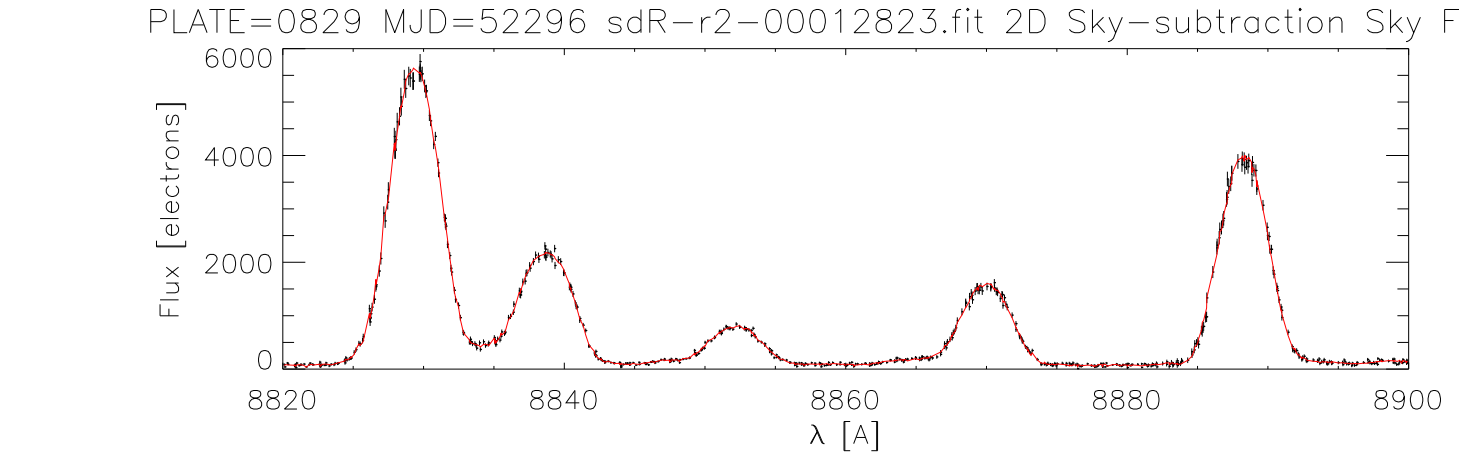

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

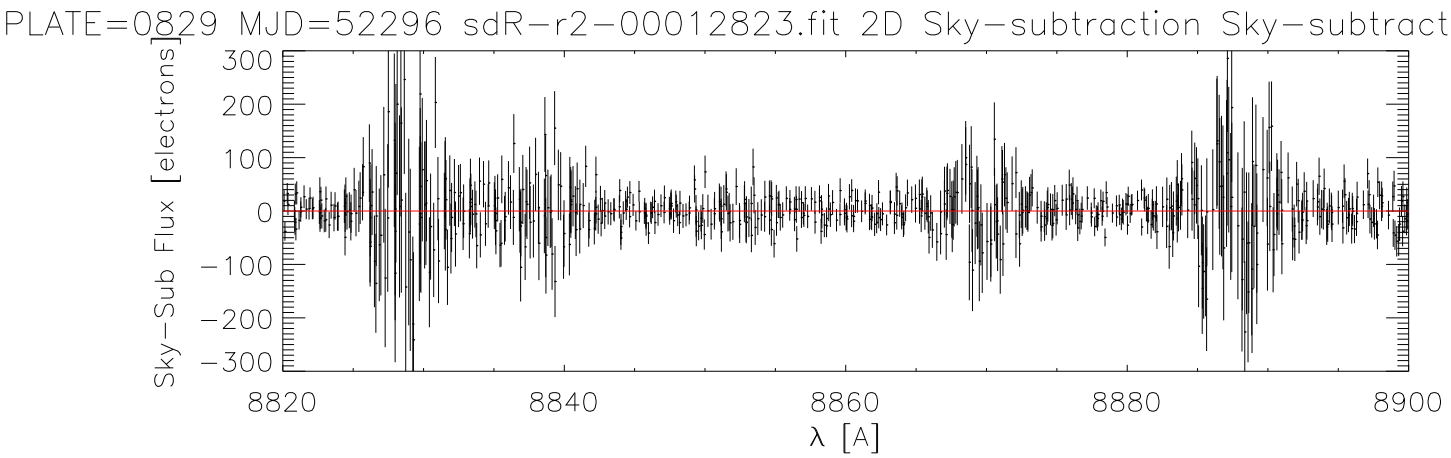

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

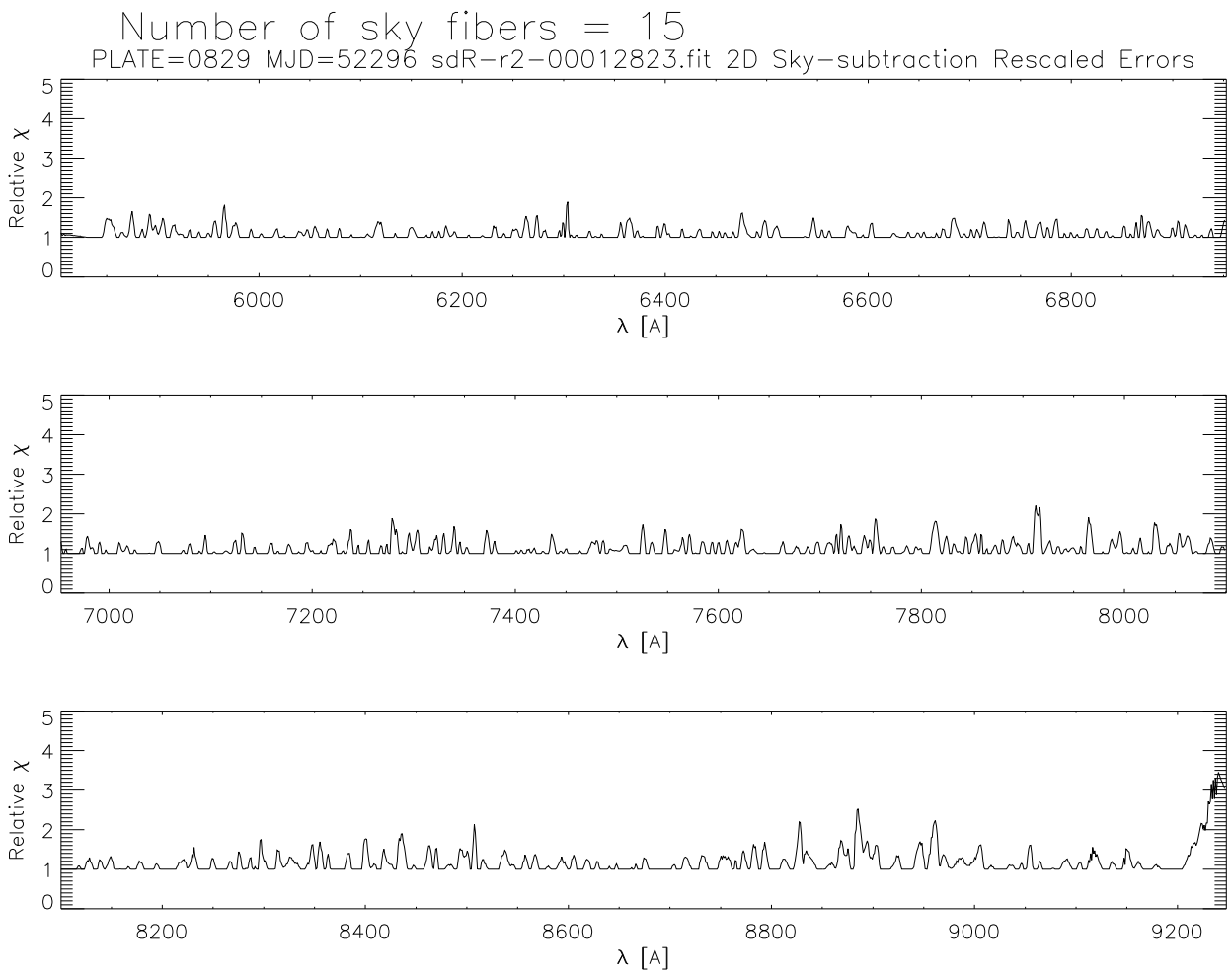

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

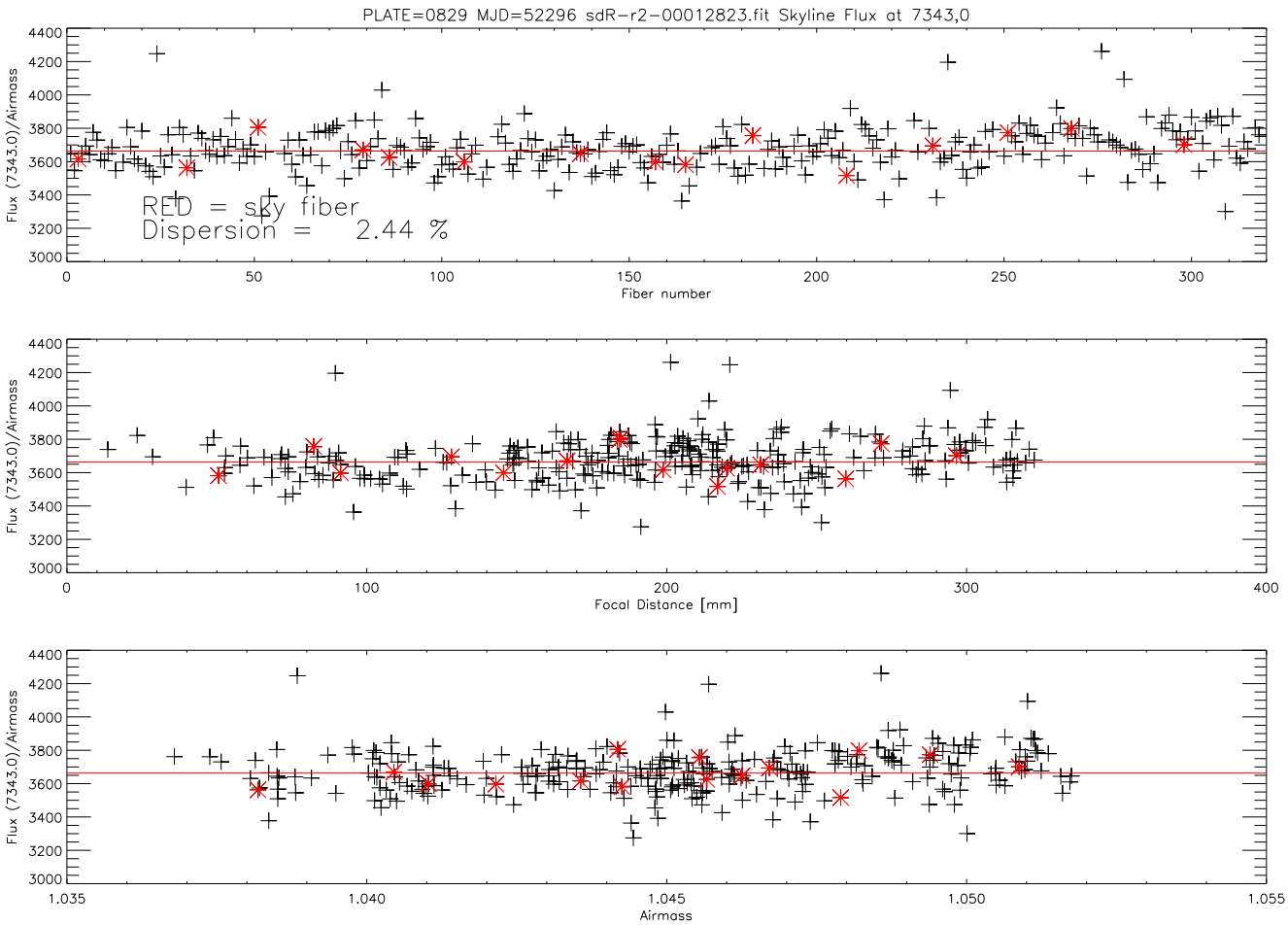

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r2-00012823.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

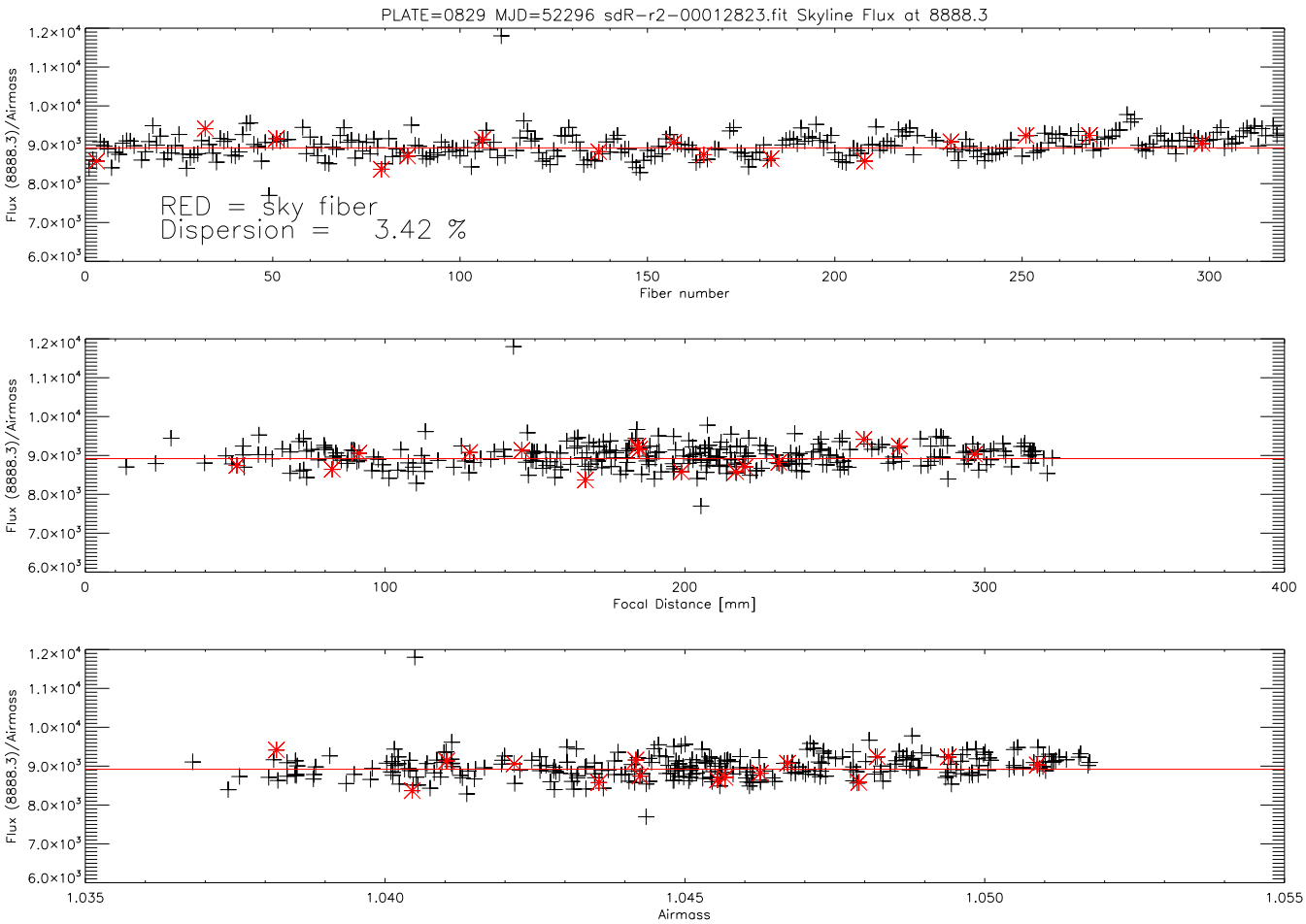

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

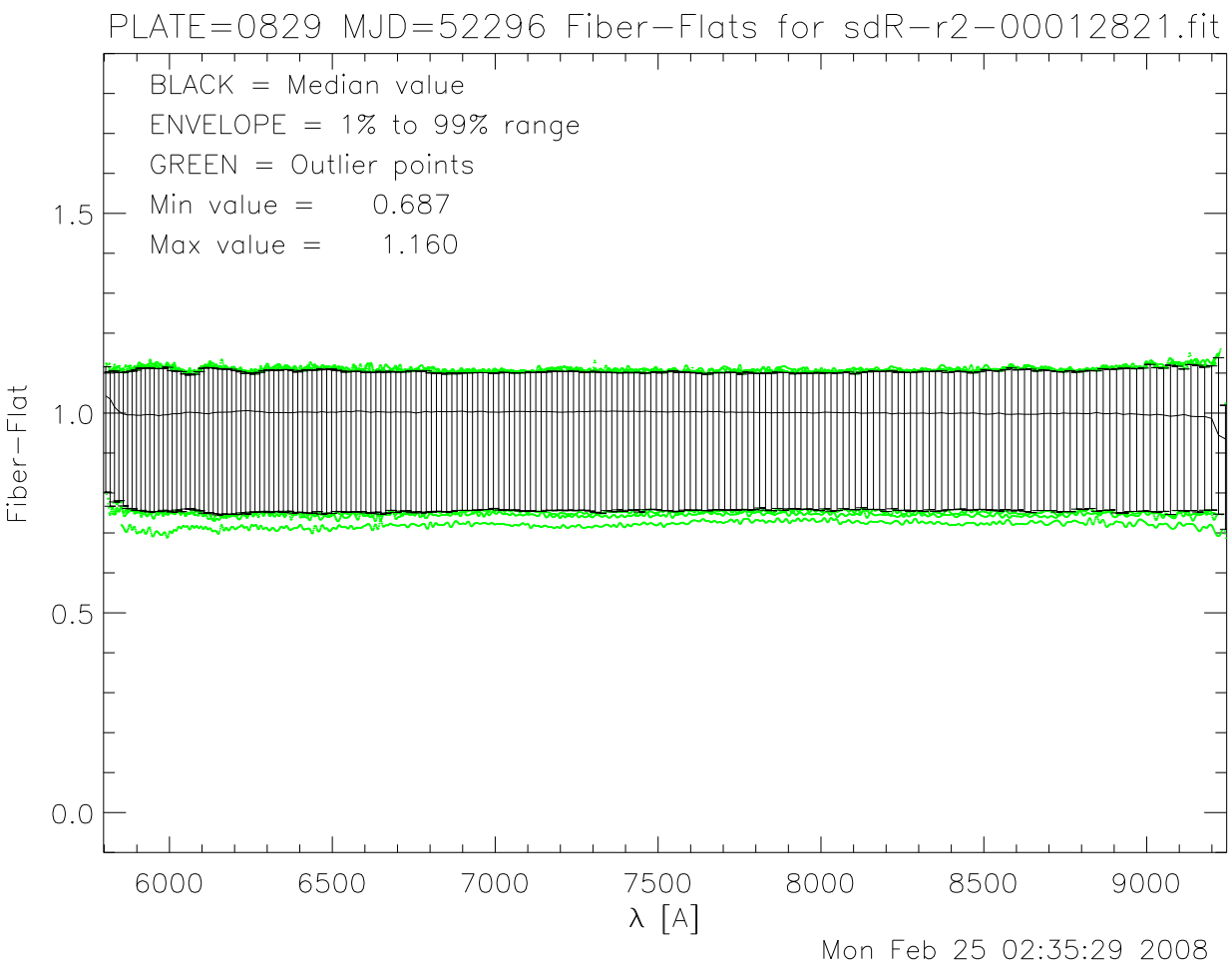

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

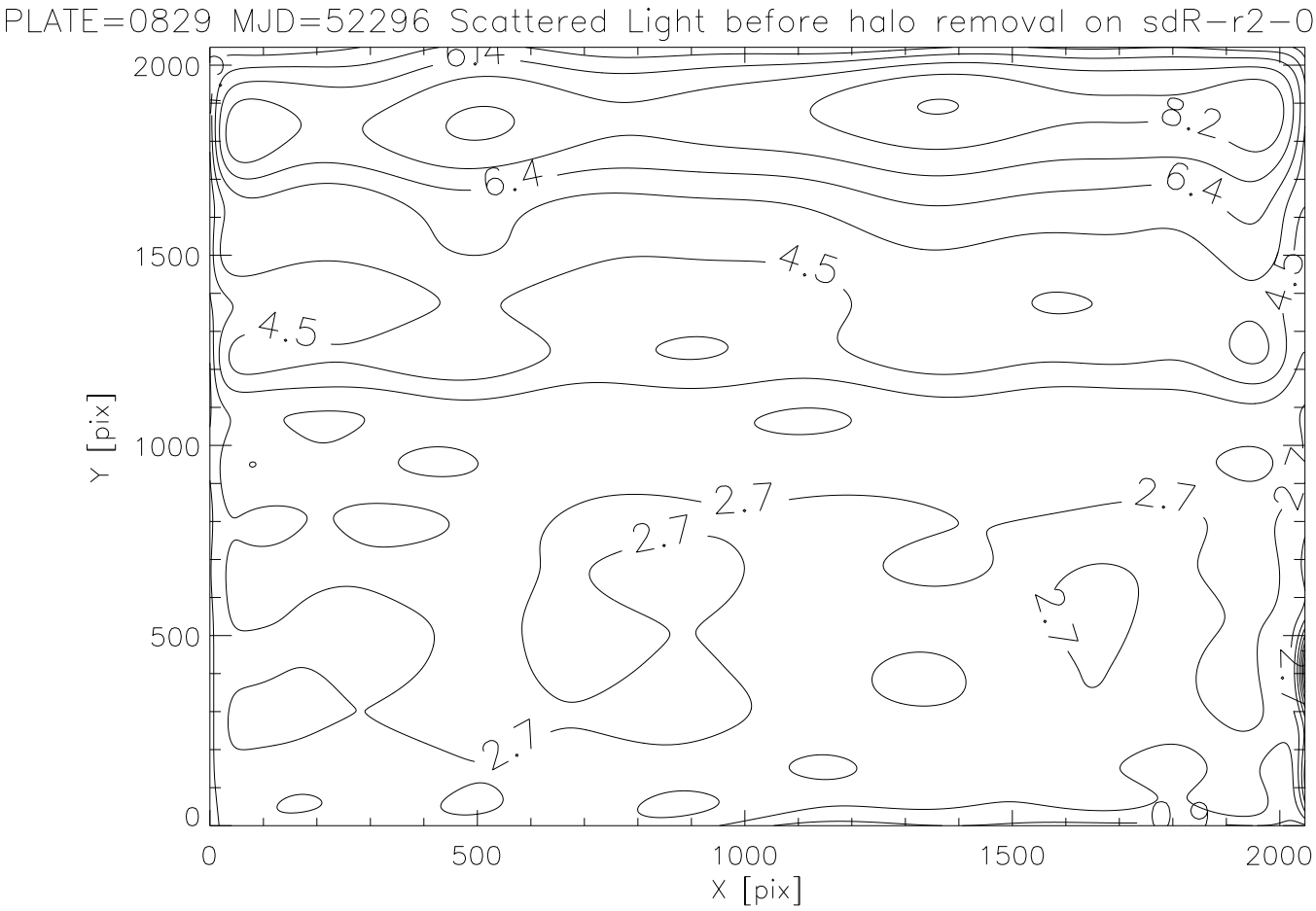

PLATE=0829 MJD=52296 sdR-r2-00012823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

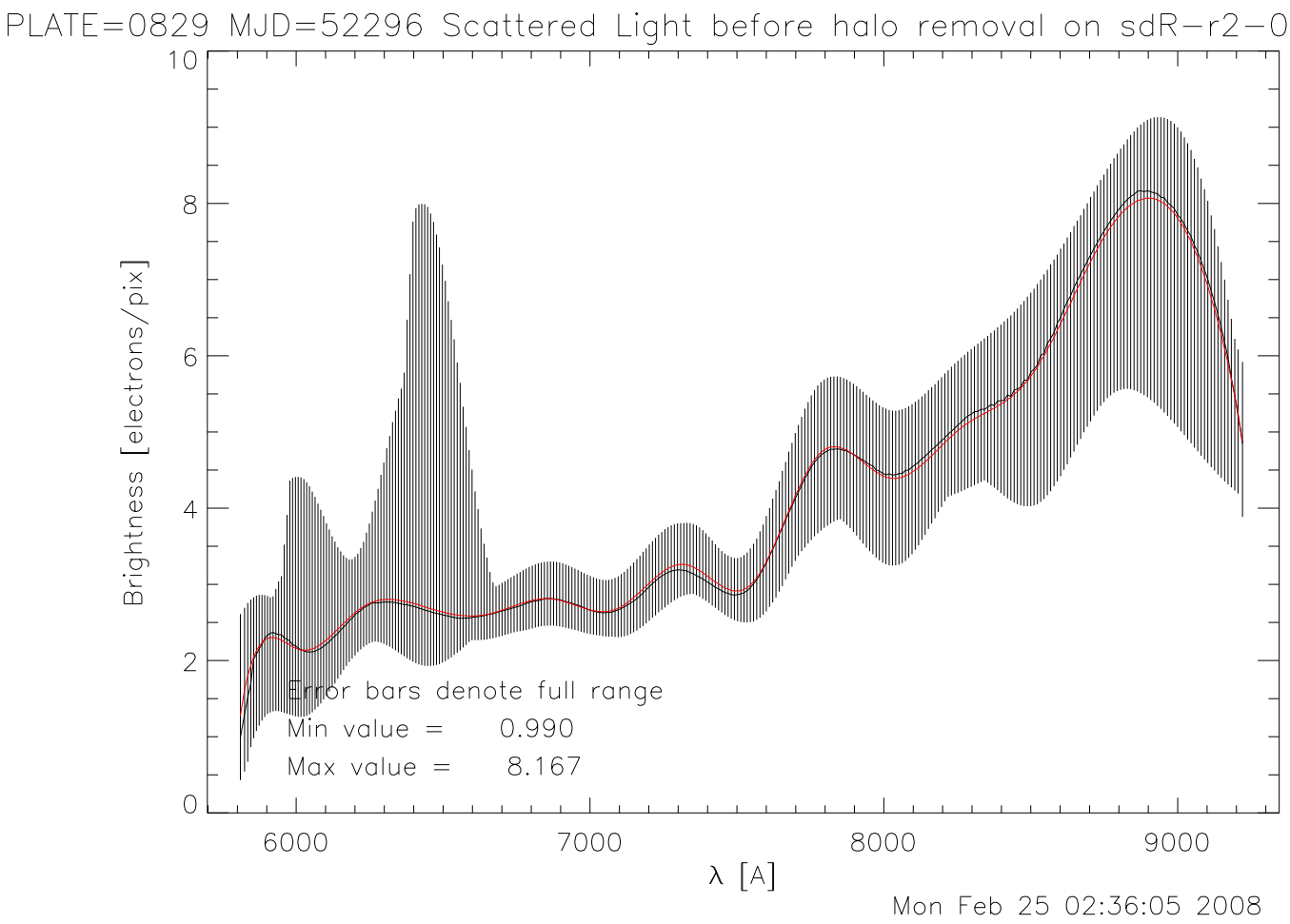

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r2-00012823.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

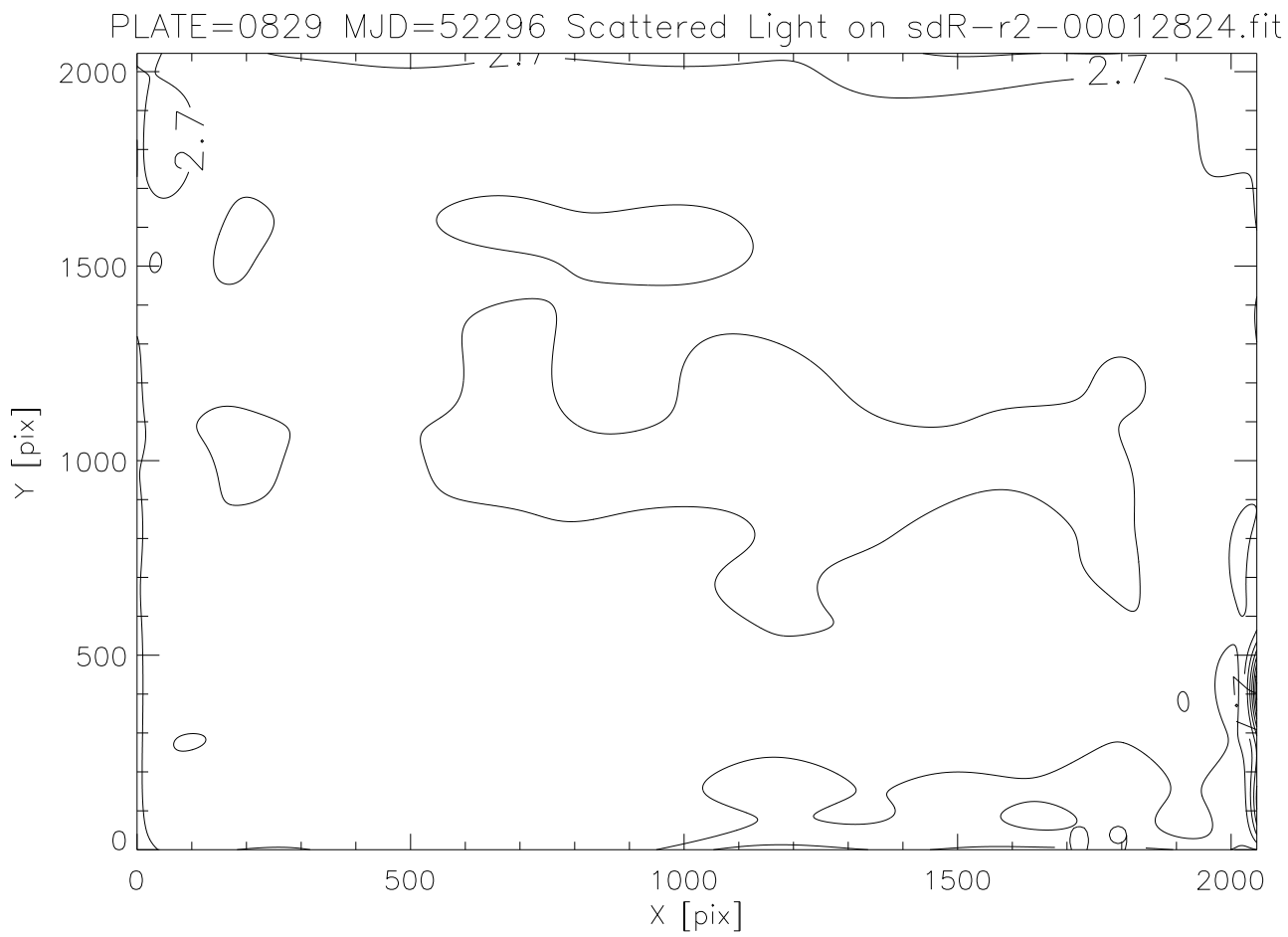

PLATE=0829 MJD=52296 sdR-r2-00012823.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.44 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

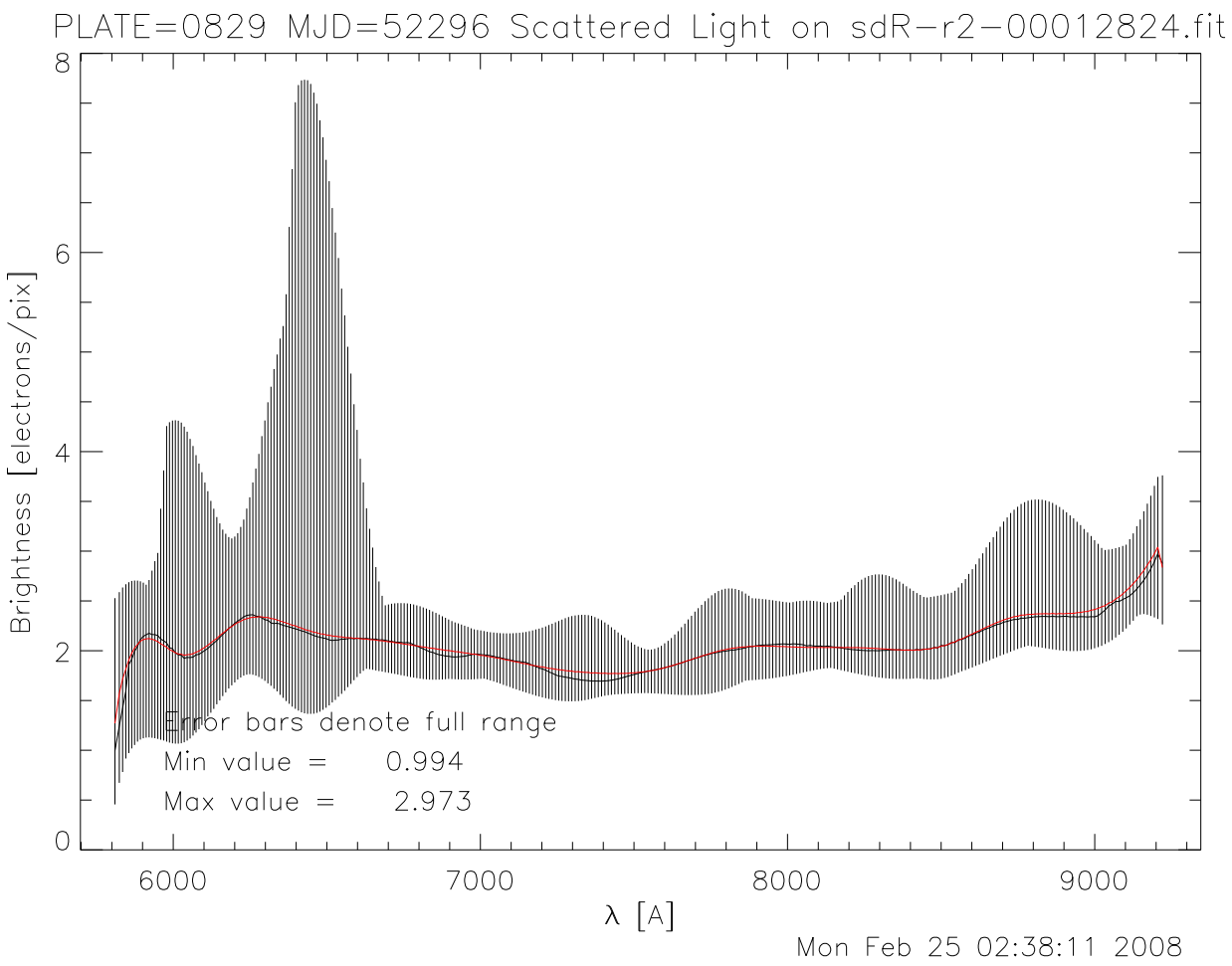

PLATE=0829 MJD=52296 sdR-r2-00012823.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.42 %
Fiber number
Focal Distance [mm]
Airmass

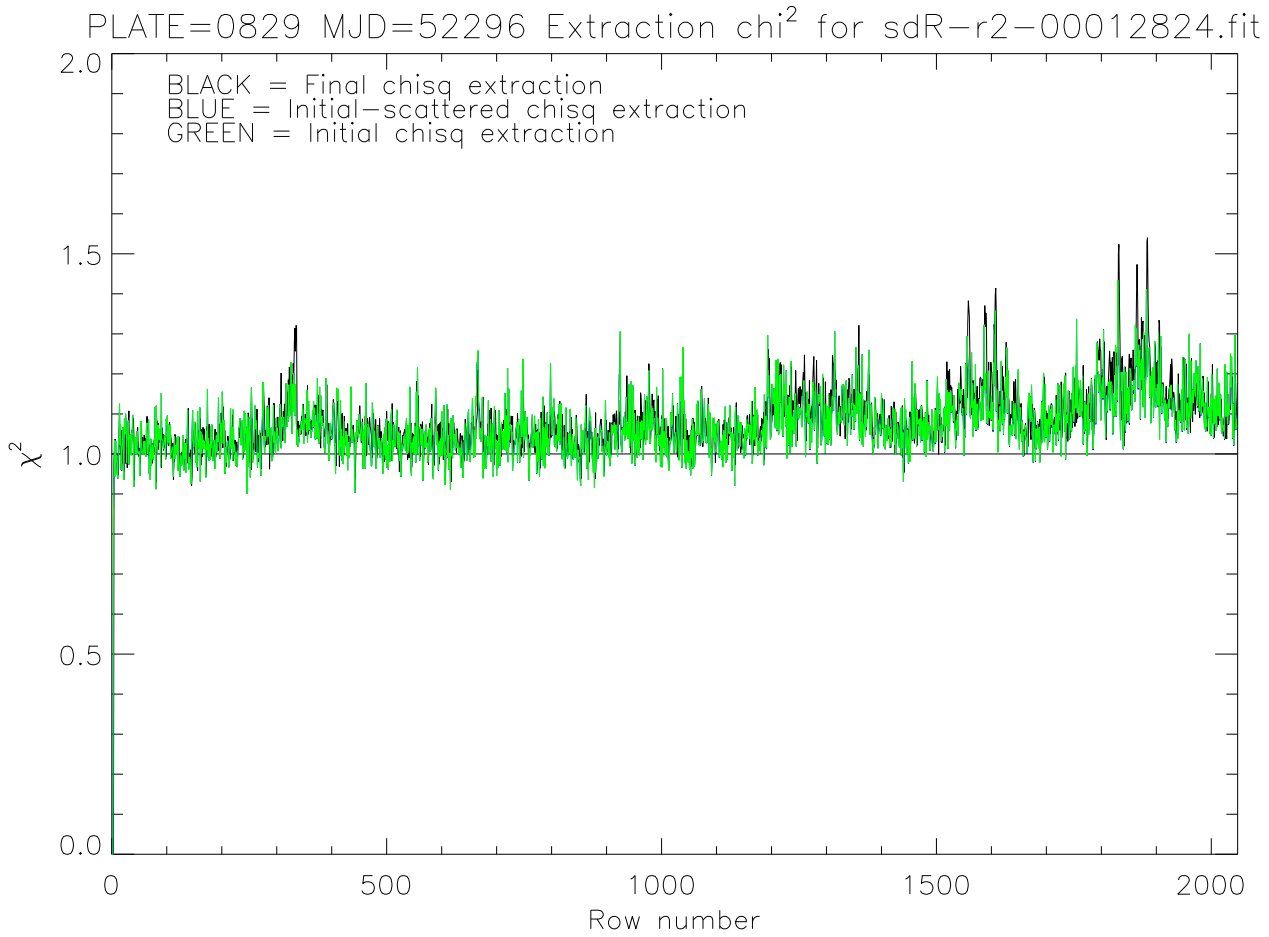

PLATE=0829 MJD=52296 Fiber−Flats for sdR−r2−00012821.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.687
Max value = 1.160
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 25 02:35:29 2008

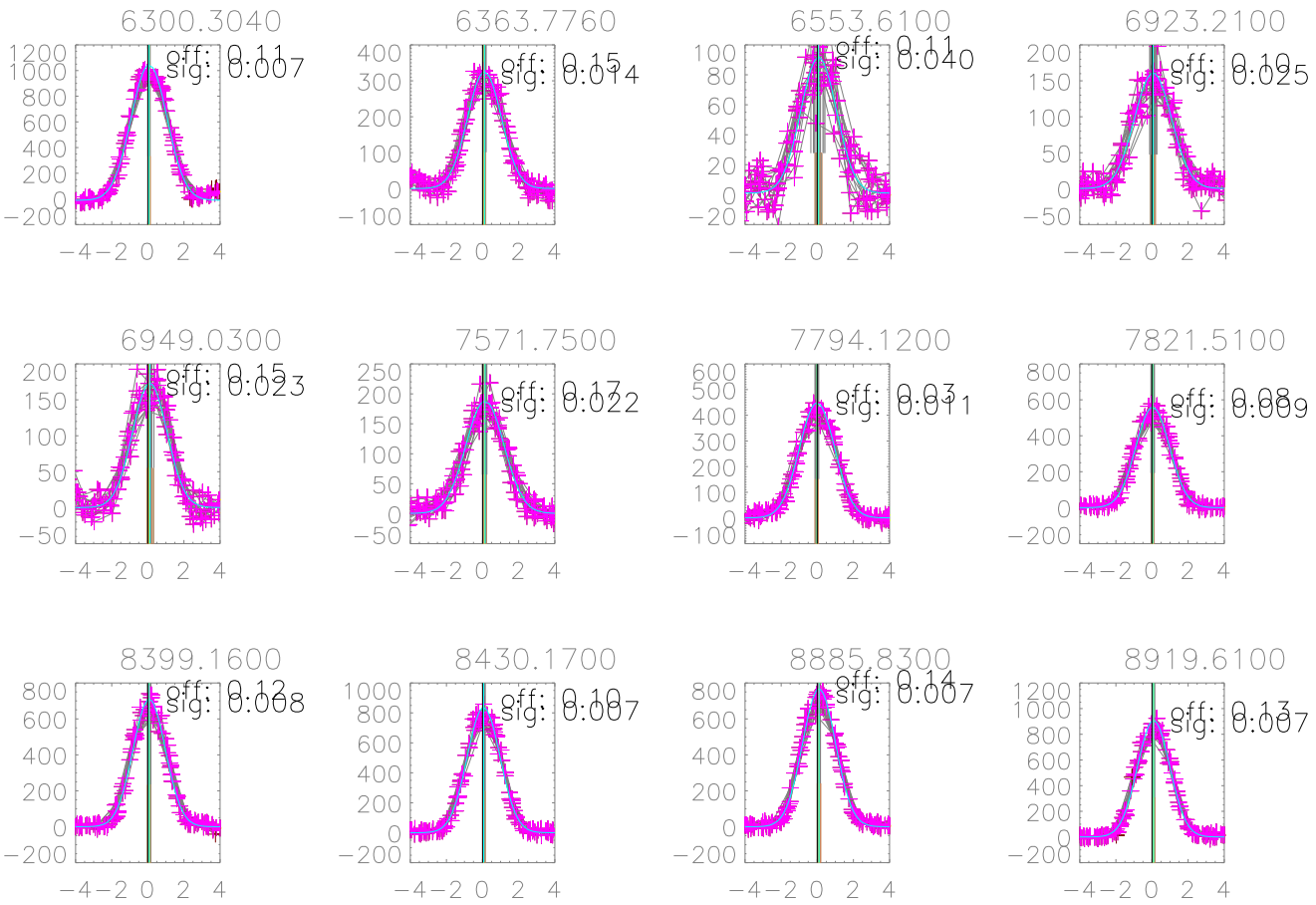

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r2-00012824.fi
8.2
6.4
4.5
2.7
Y [pix]
X [pix]
0
500
1000
1500
2000

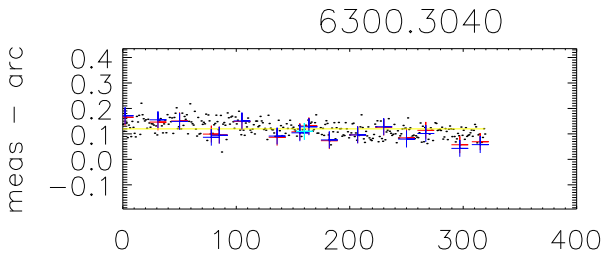

PLATE=0829 MJD=52296 Scattered Light before halo removal on sdR-r2-00012824.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.990
Max value = 8.167
Mon Feb 25 02:36:05 2008

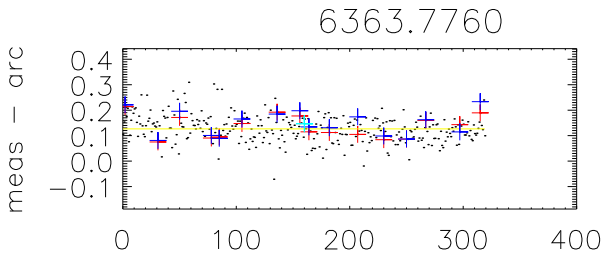

PLATE=0829 MJD=52296 Scattered Light on sdR-r2-00012824.fit
2.7
2.7
2.7
0
0
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

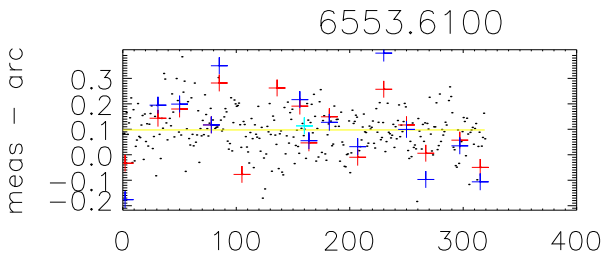

PLATE=0829 MJD=52296 Scattered Light on sdR-r2-00012824.fit
Brightness [electrons/pix]
0
2
4
6
8
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.994
Max value = 2.973
Mon Feb 25 02:38:11 2008

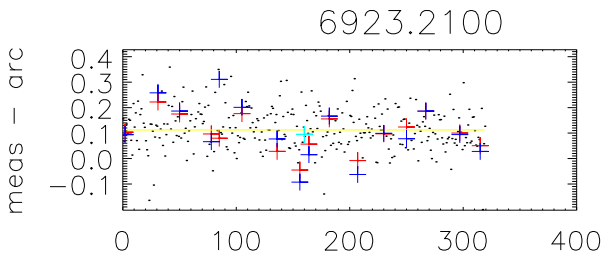

PLATE=0829 MJD=52296 Extraction chi^2 for sdR-r2-00012824.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

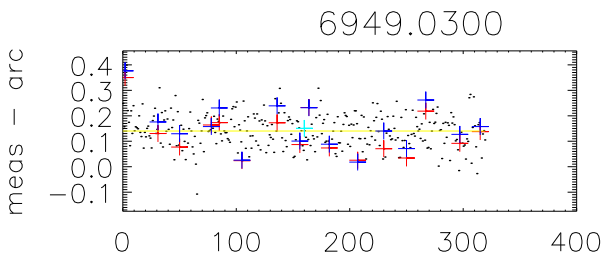

6300.3040
off: 0.11
sig: 0.007
6363.7760
off: 0.15
sig: 0.014
6553.6100
off: 0.11
sig: 0.040
6923.2100
off: 0.10
sig: 0.025
6949.0300
off: 0.15
sig: 0.023
7571.7500
off: 0.17
sig: 0.022
7794.1200
off: 0.03
sig: 0.011
7821.5100
off: 0.08
sig: 0.009
8399.1600
off: 0.12
sig: 0.008
8430.1700
off: 0.10
sig: 0.007
8885.8300
off: 0.14
sig: 0.007
8919.6100
off: 0.13
sig: 0.007

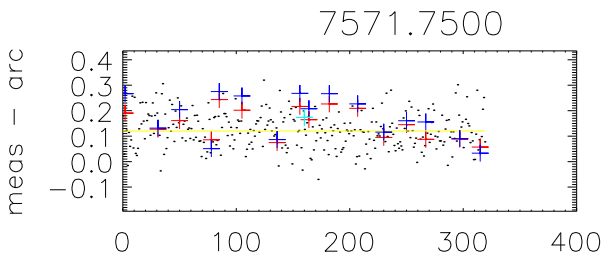

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

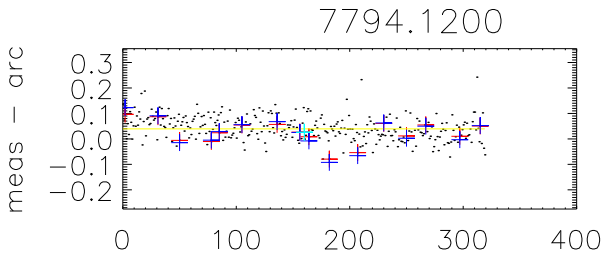

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

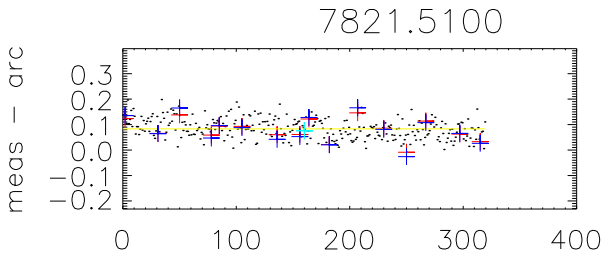

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

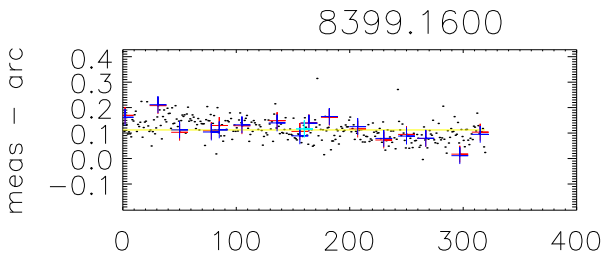

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

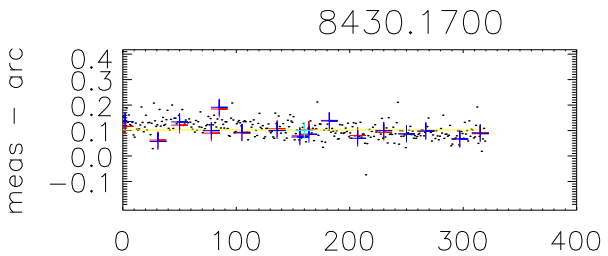

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

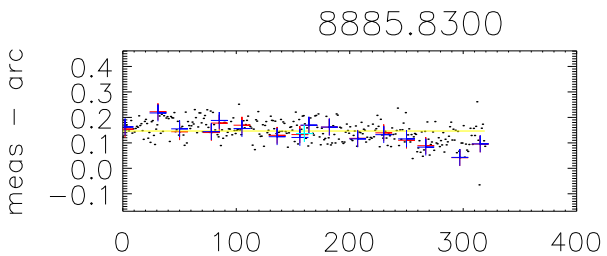

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

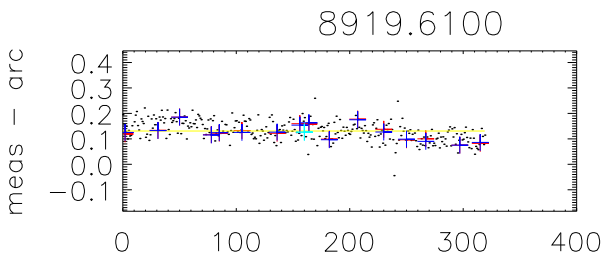

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

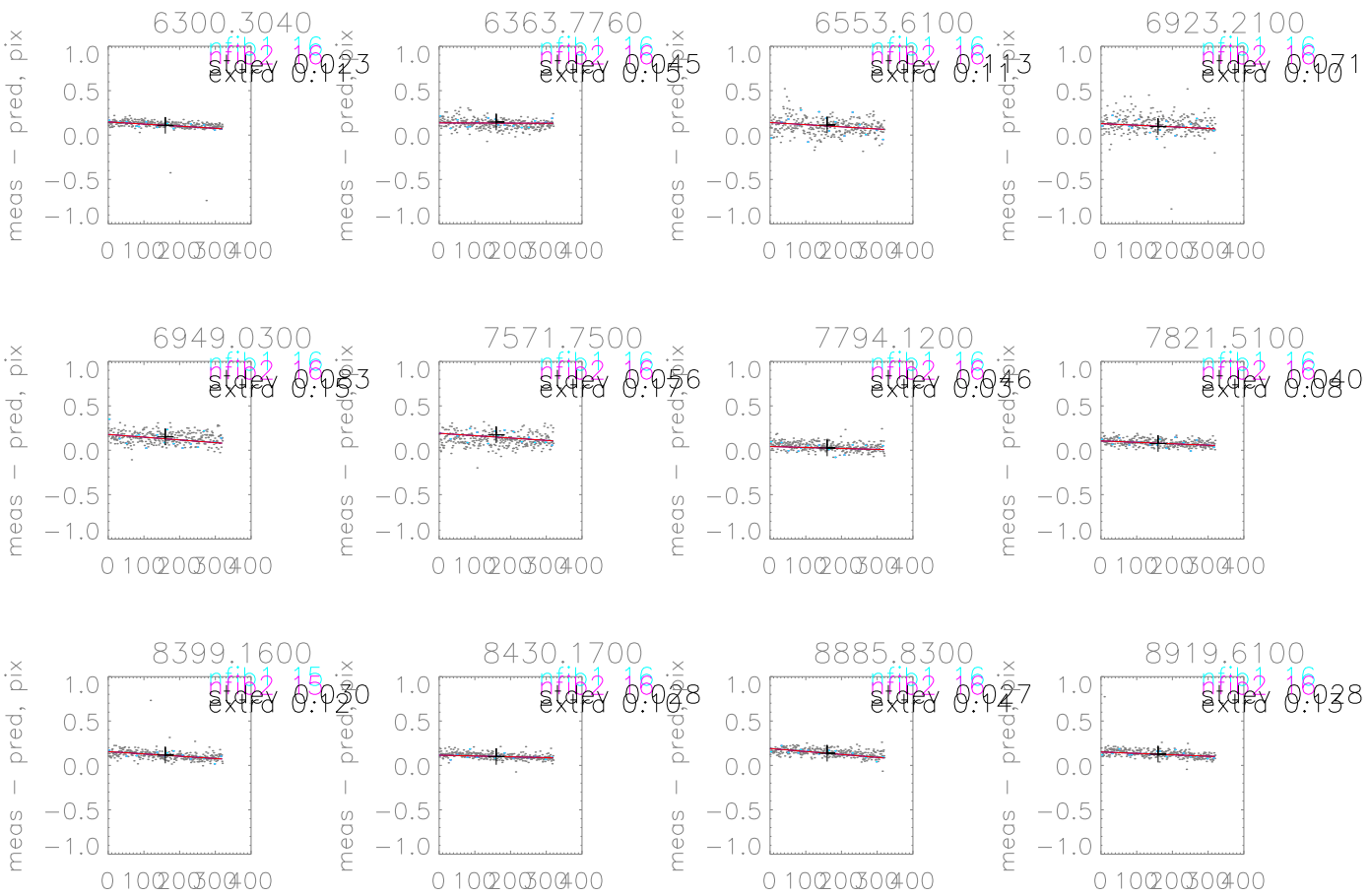

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

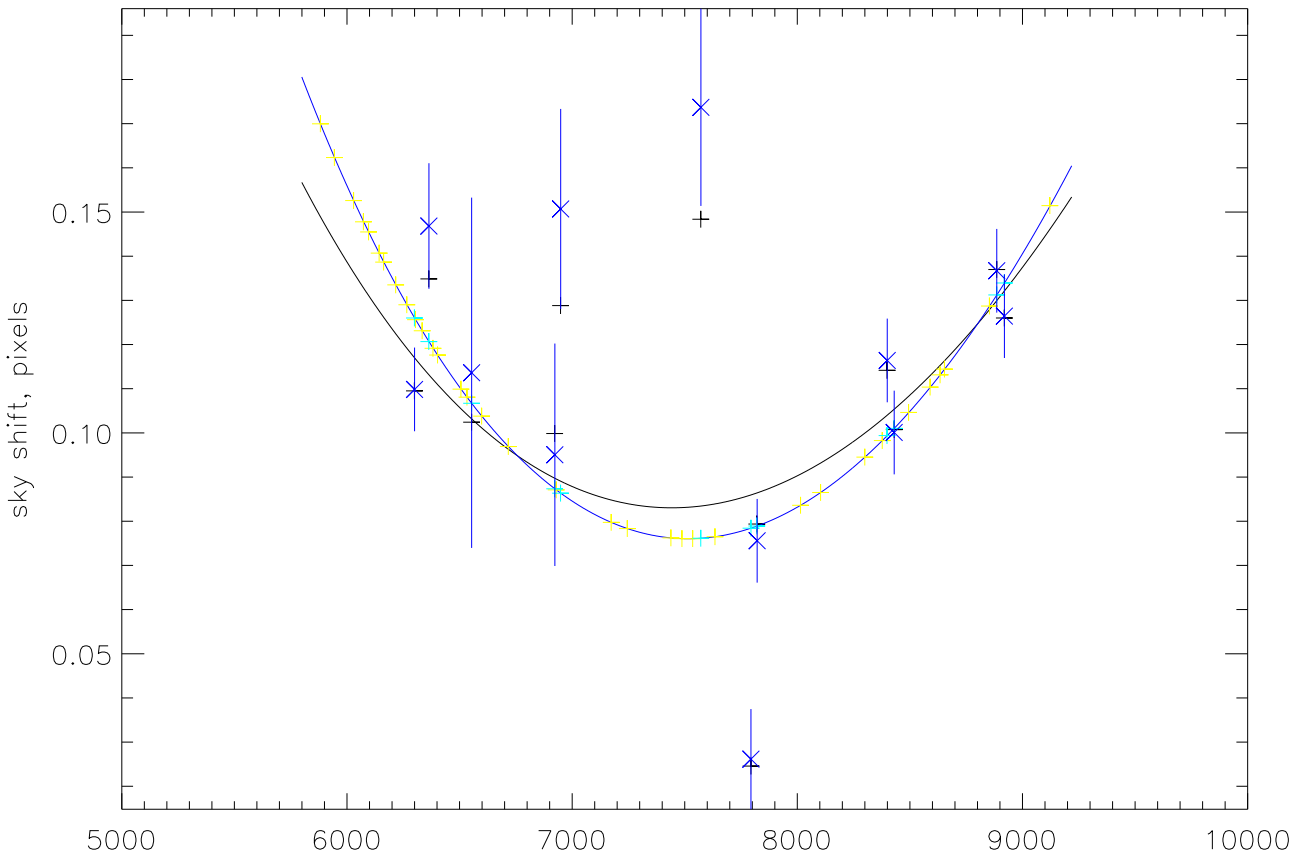

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

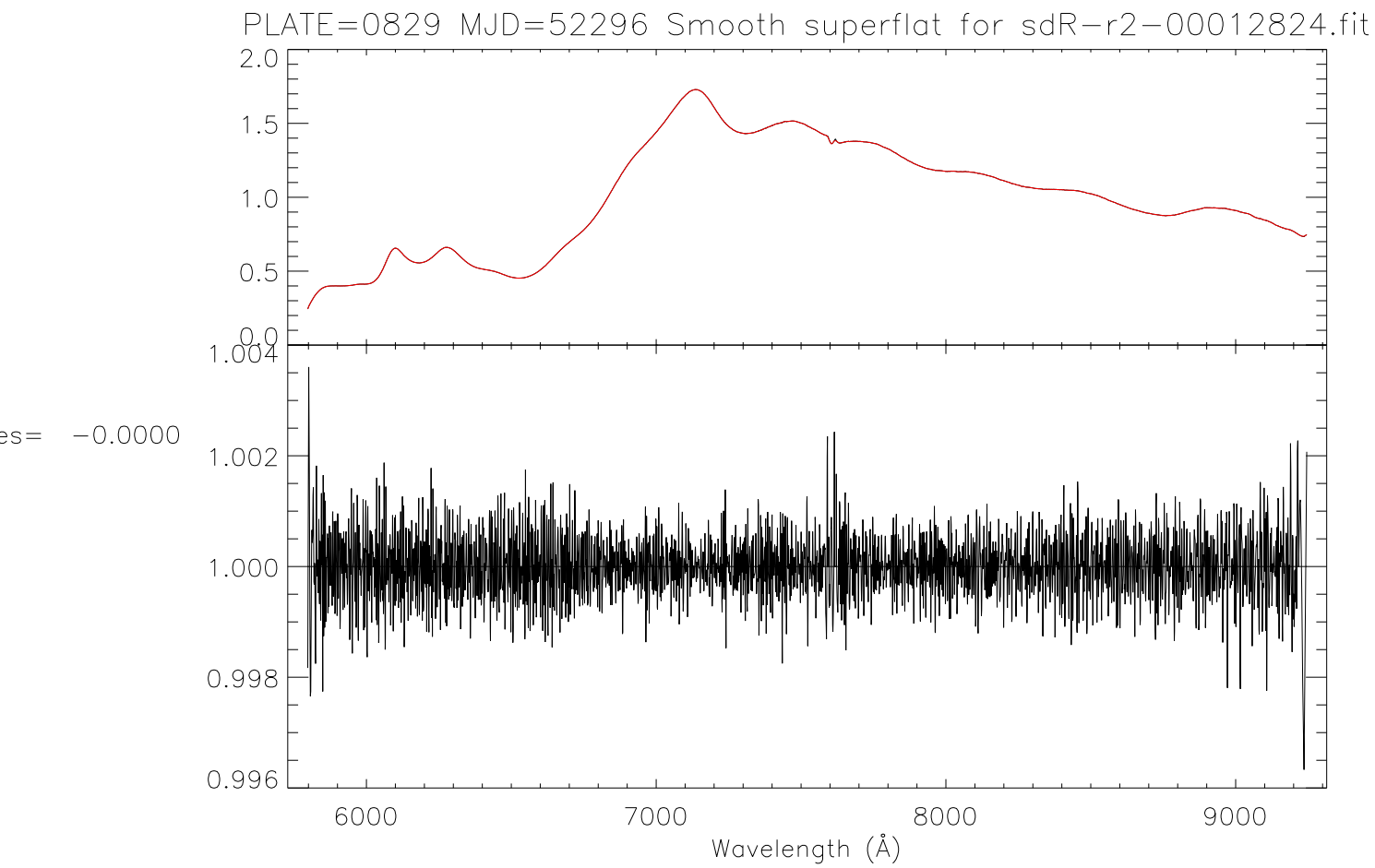

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

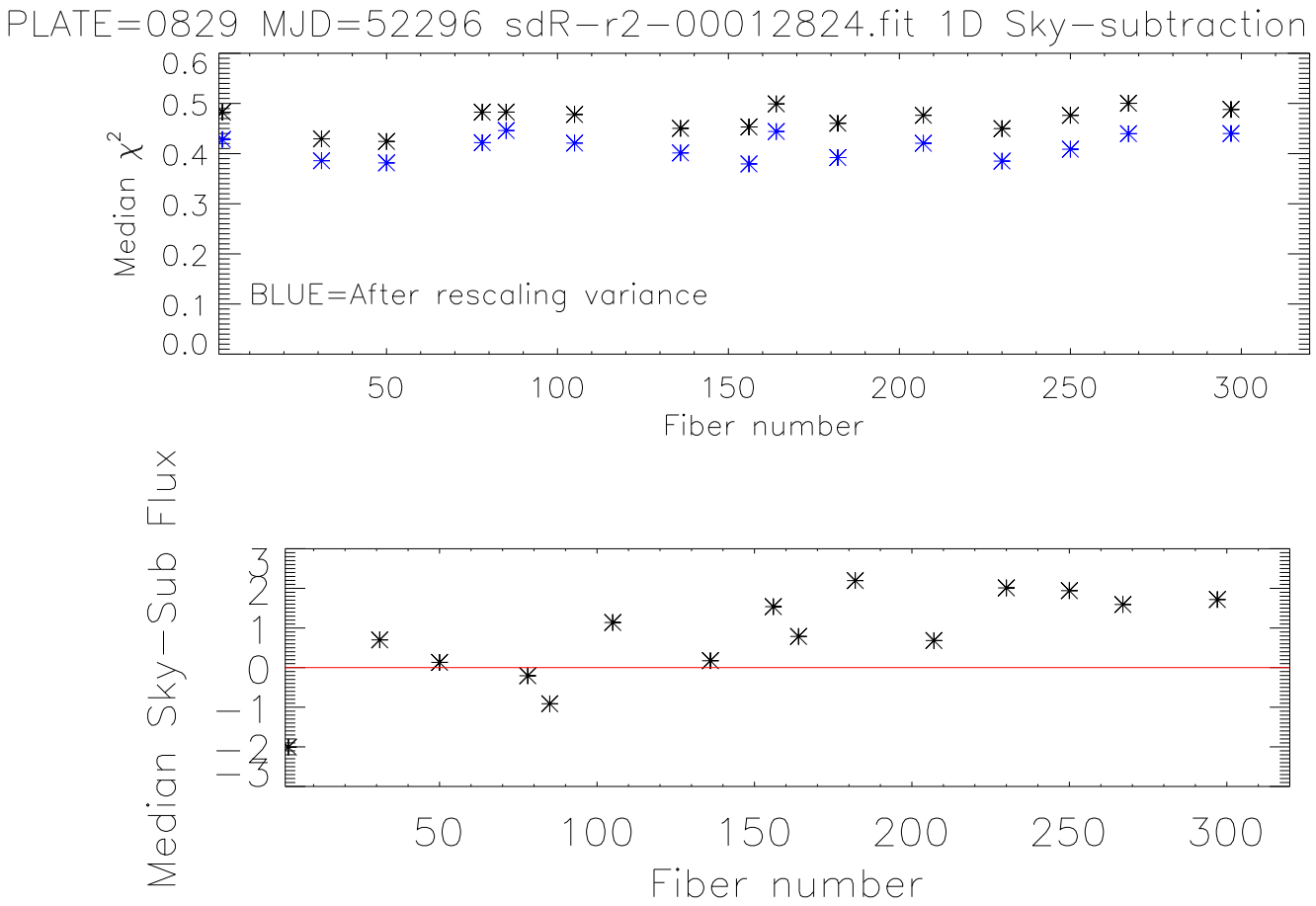

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

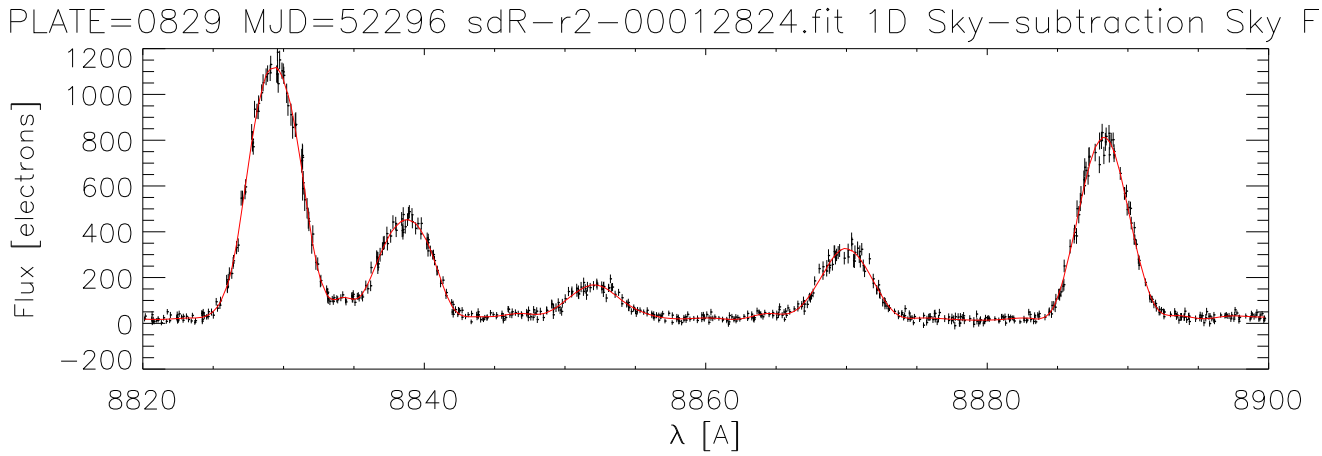

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

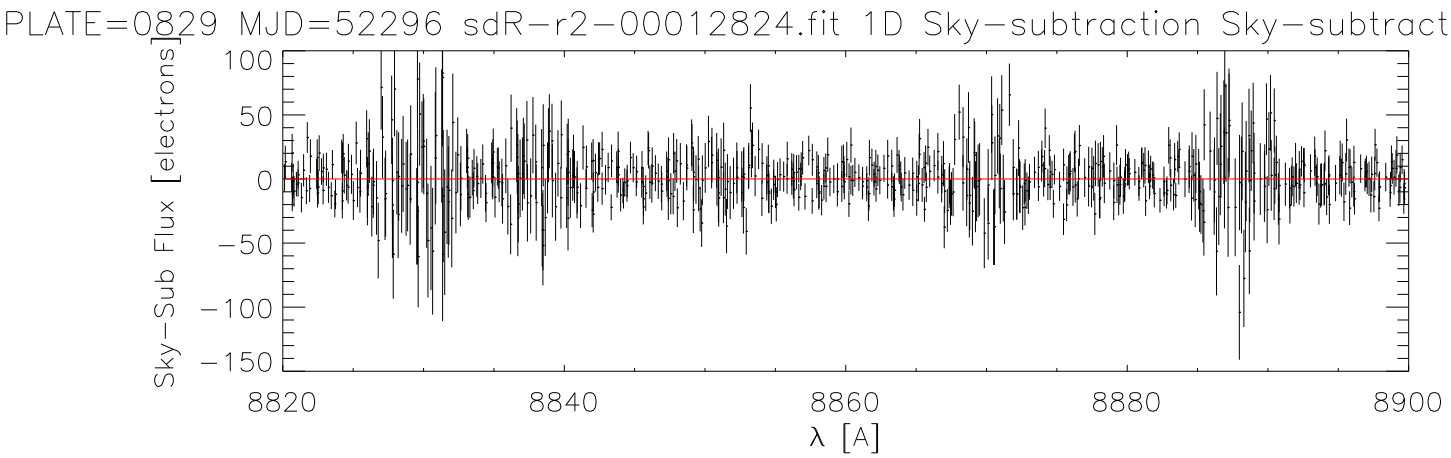

6300.3040
stdev 0.023
extra 0.11
6363.7760
stdev 0.045
extra 0.15
6553.6100
stdev 0.113
extra 0.11
6923.2100
stdev 0.071
extra 0.10
6949.0300
stdev 0.083
extra 0.15
7571.7500
stdev 0.056
extra 0.17
7794.1200
stdev 0.046
extra 0.03
7821.5100
stdev 0.040
extra 0.08
8399.1600
stdev 0.030
extra 0.12
8430.1700
stdev 0.028
extra 0.16
8885.8300
stdev 0.027
extra 0.14
8919.6100
stdev 0.028
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

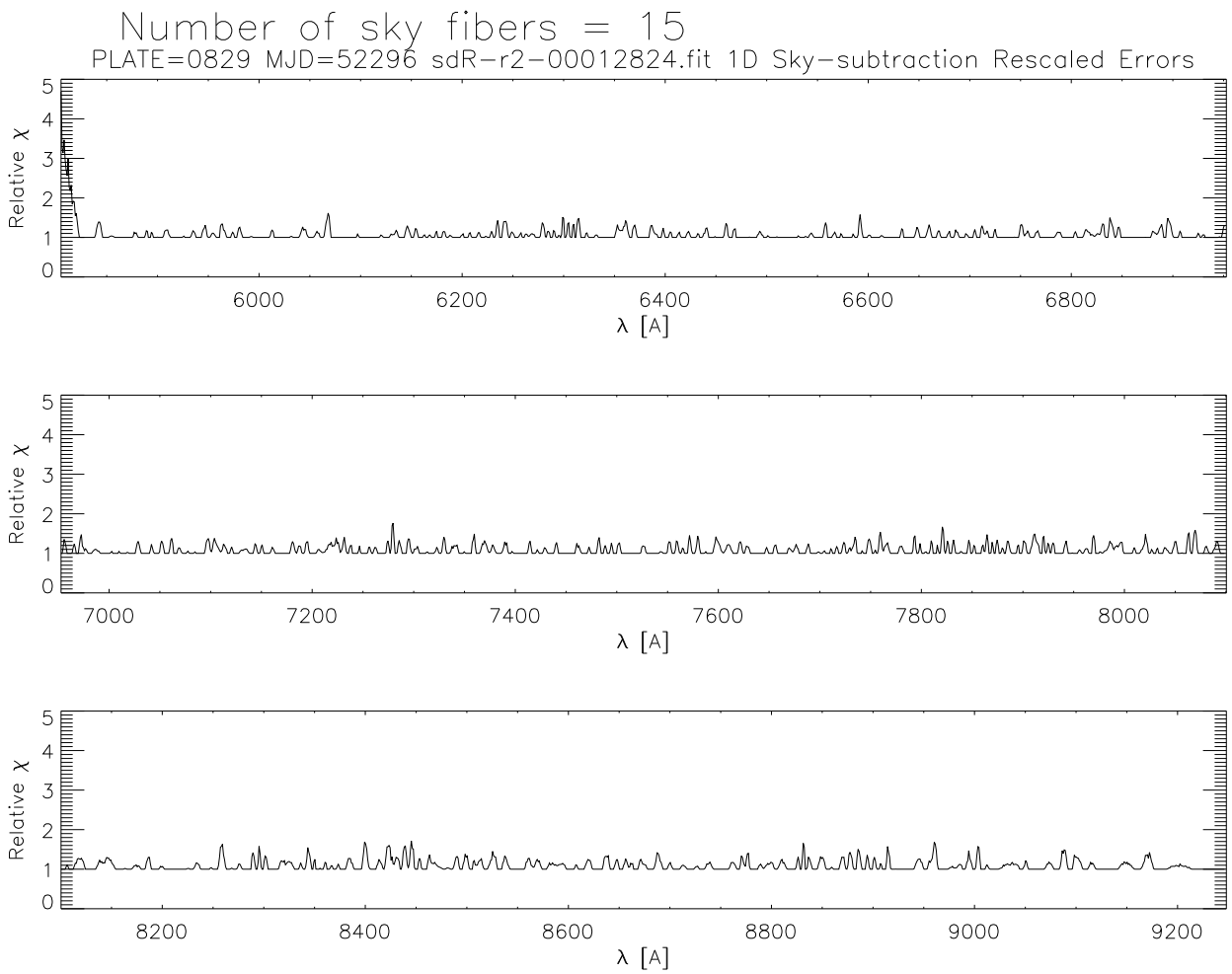

sky shift, pixels
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

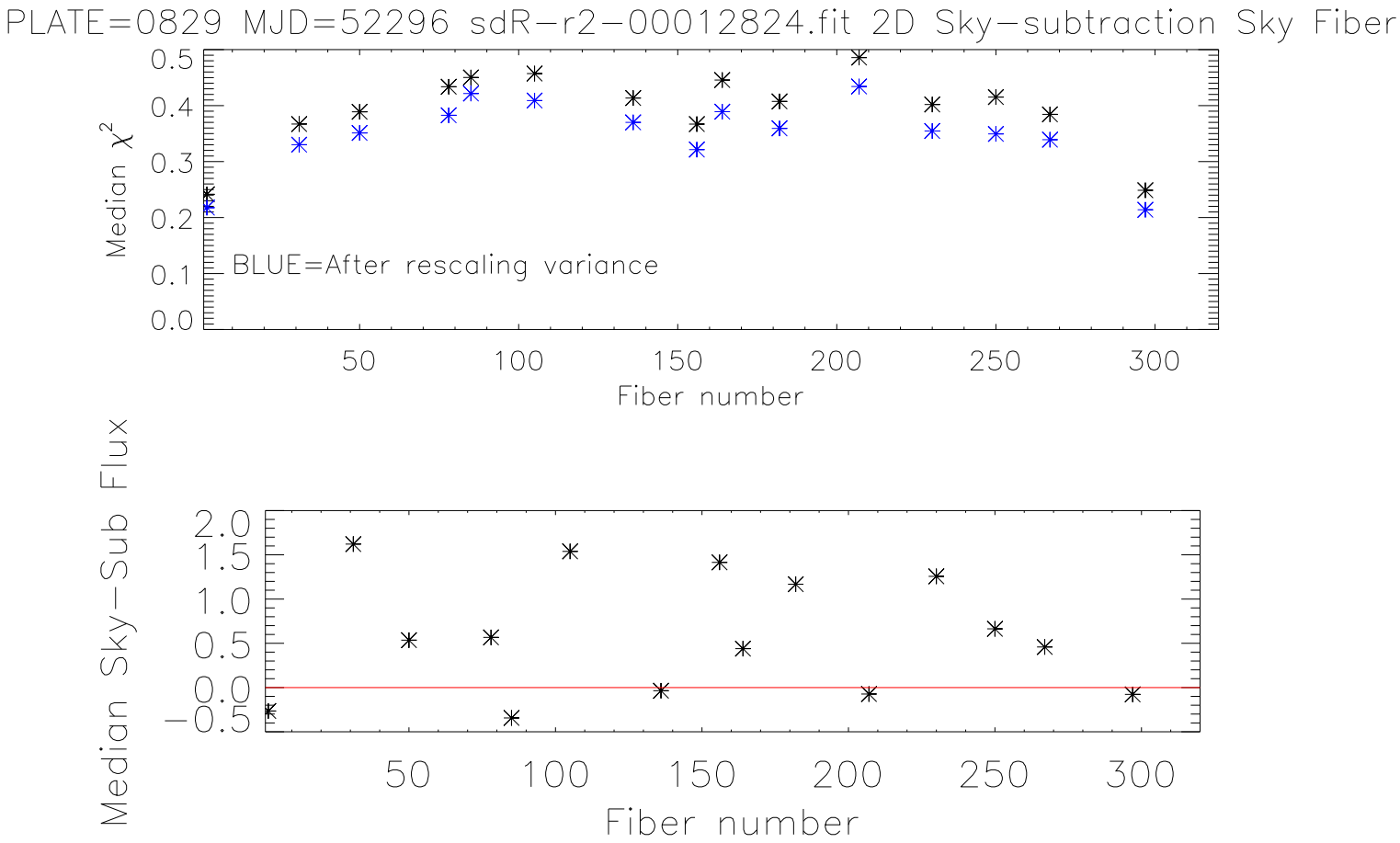

PLATE=0829 MJD=52296 Smooth superflat for sdR-r2-00012824.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

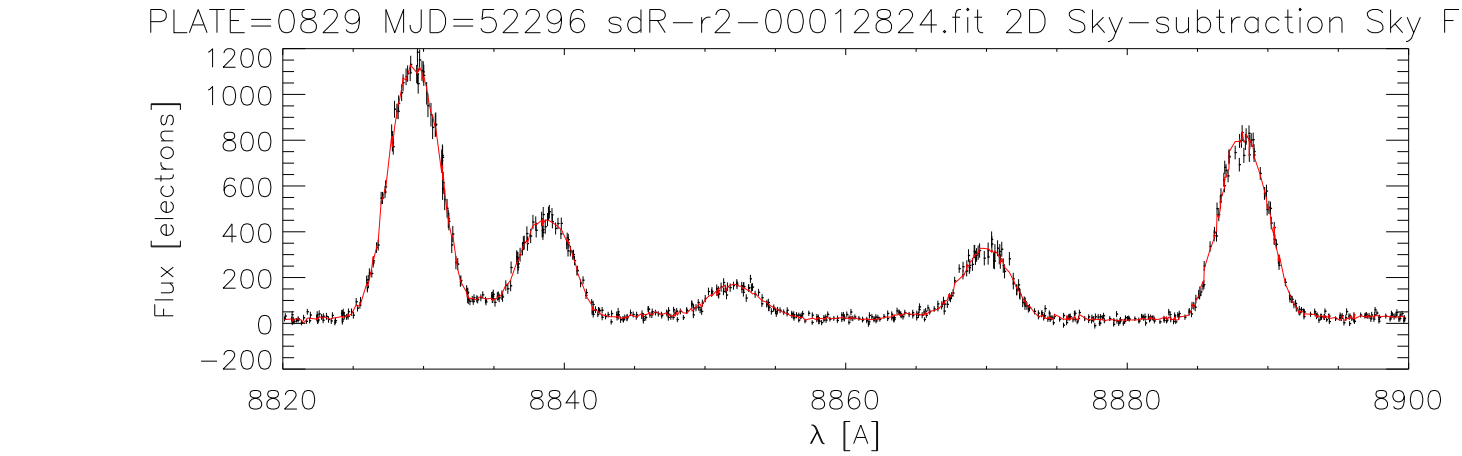

PLATE=0829 MJD=52296 sdR-r2-00012824.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

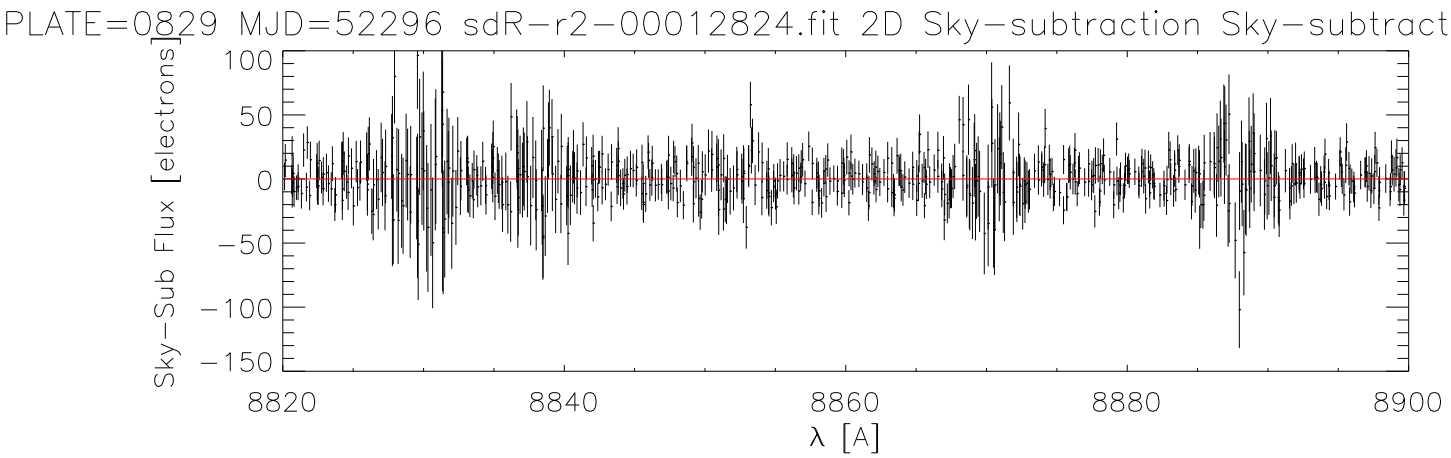

PLATE=0829 MJD=52296 sdR-r2-00012824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

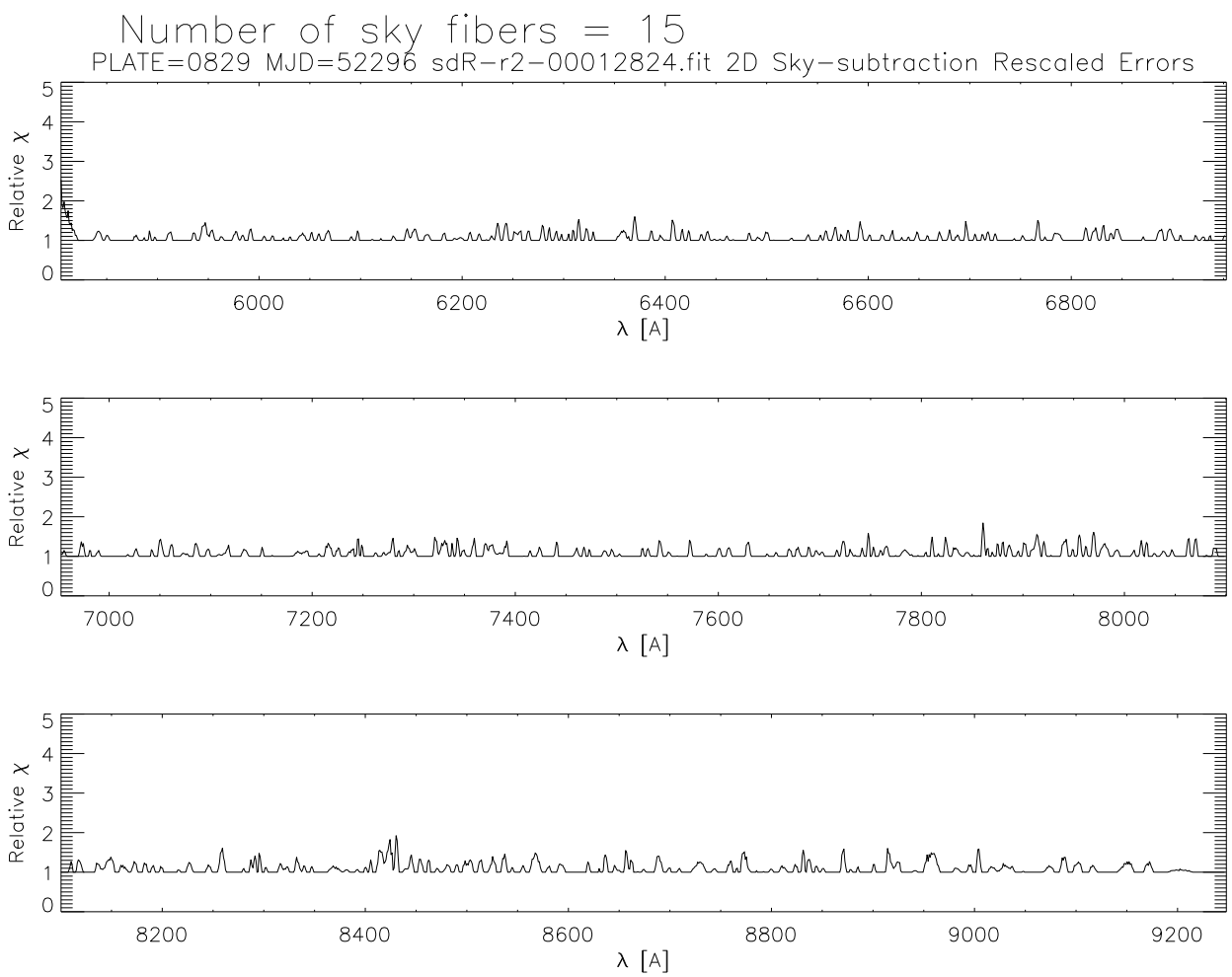

PLATE=0829 MJD=52296 sdR-r2-00012824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

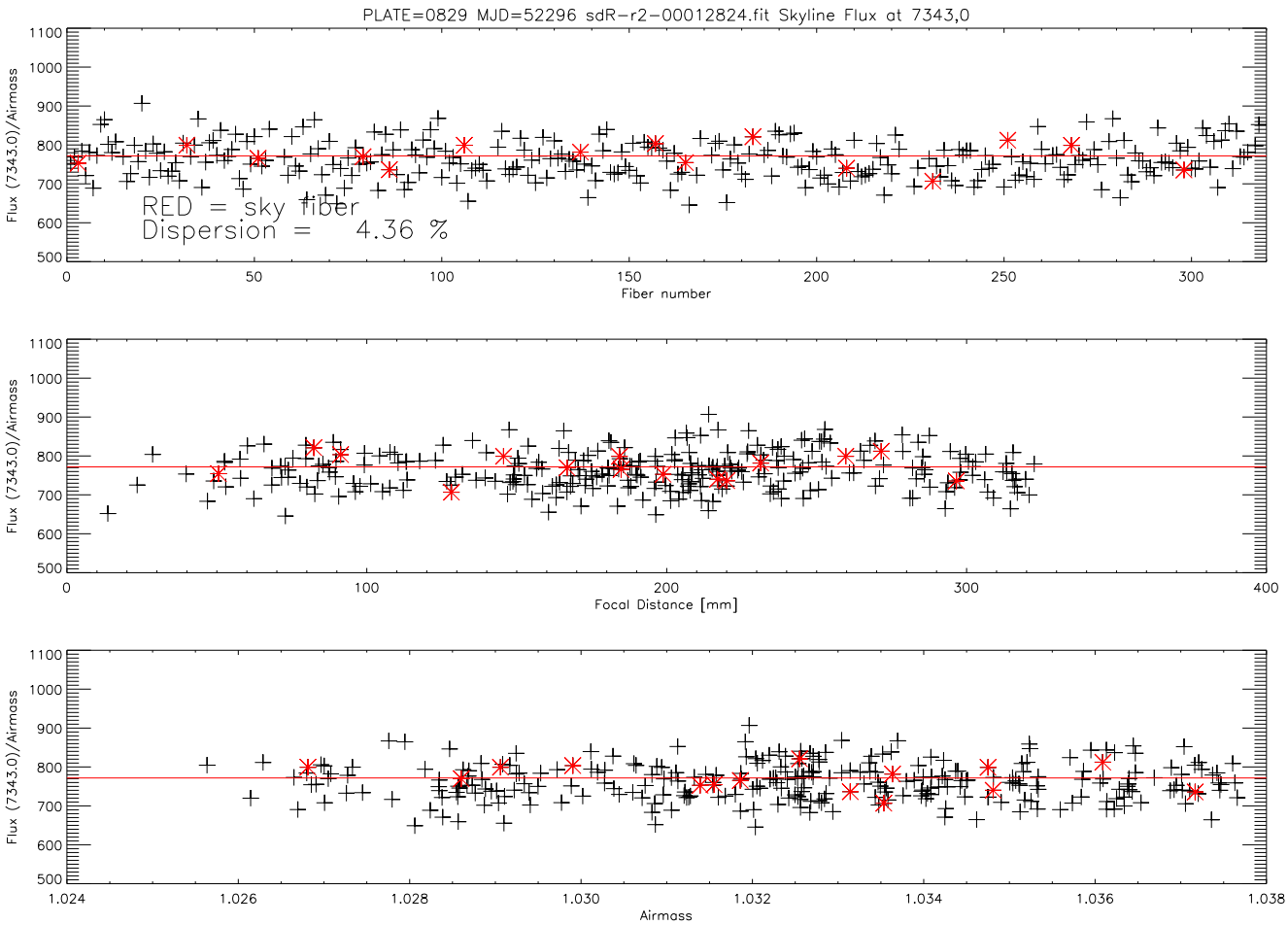

Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r2-00012824.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

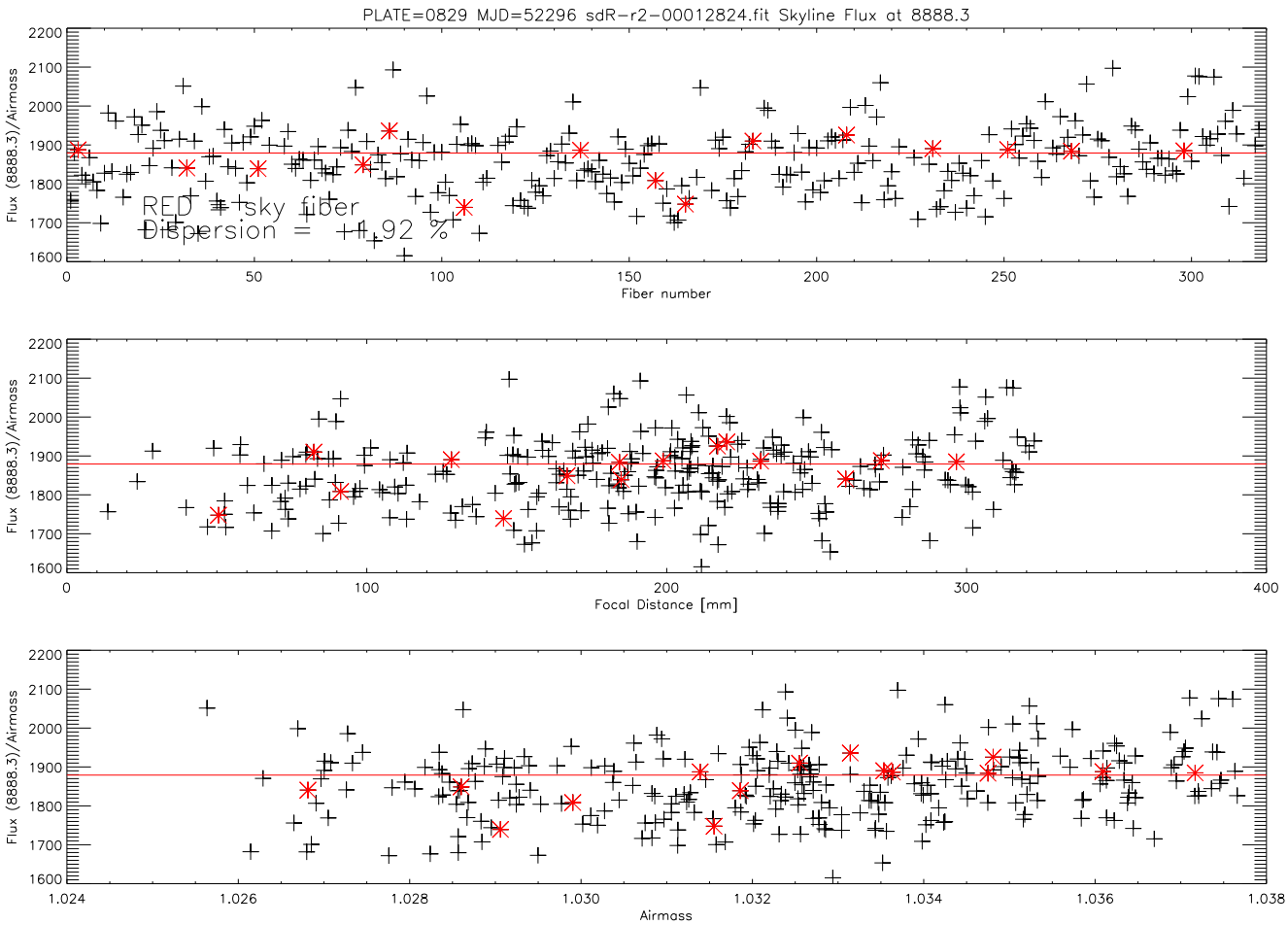

PLATE=0829 MJD=52296 sdR-r2-00012824.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0829 MJD=52296 sdR-r2-00012824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]


PLATE=0829 MJD=52296 sdR-r2-00012824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=0829 MJD=52296 sdR-r2-00012824.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=0829 MJD=52296 sdR-r2-00012824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.36 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0829 MJD=52296 sdR-r2-00012824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = +1.92 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass