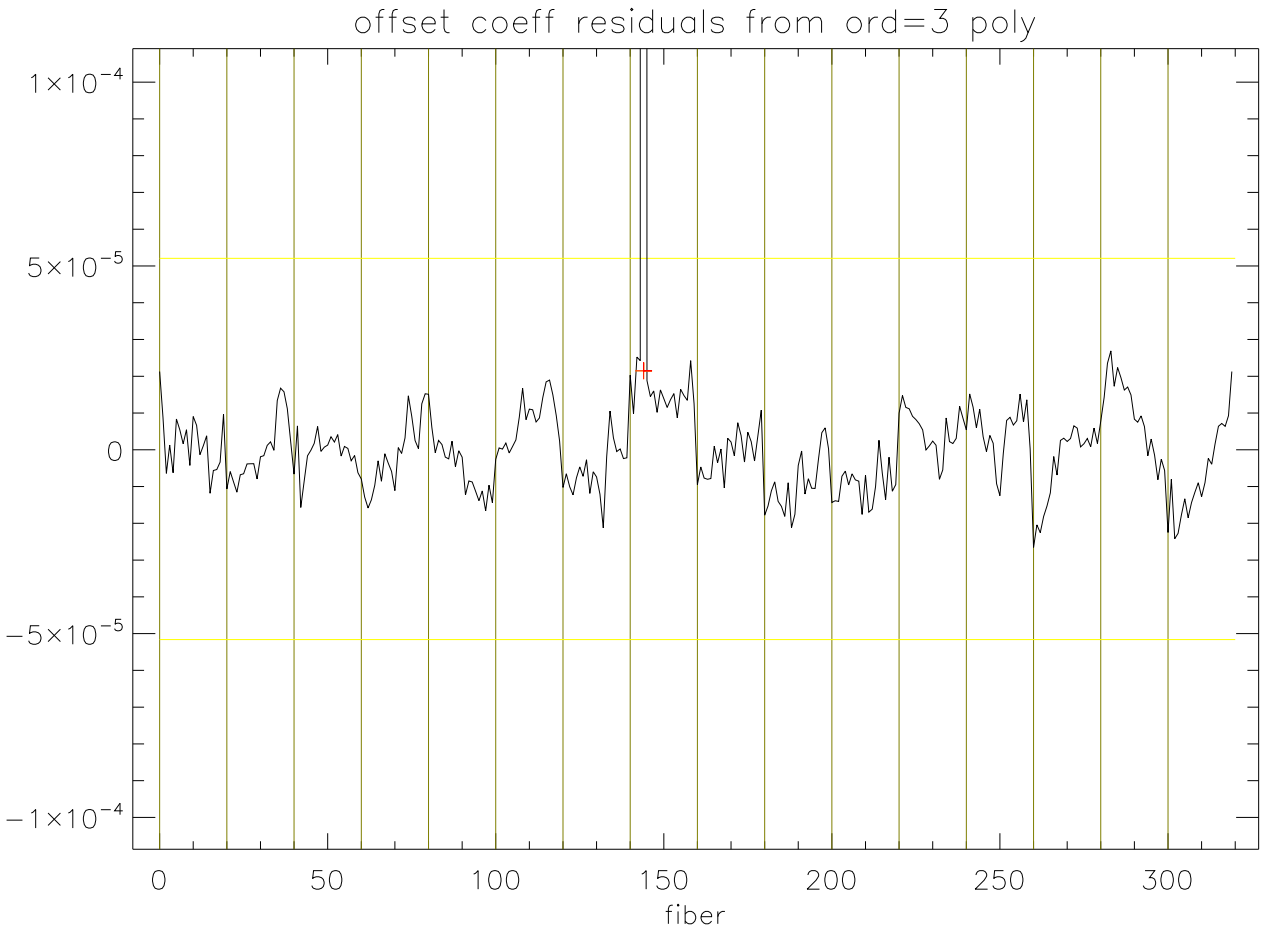
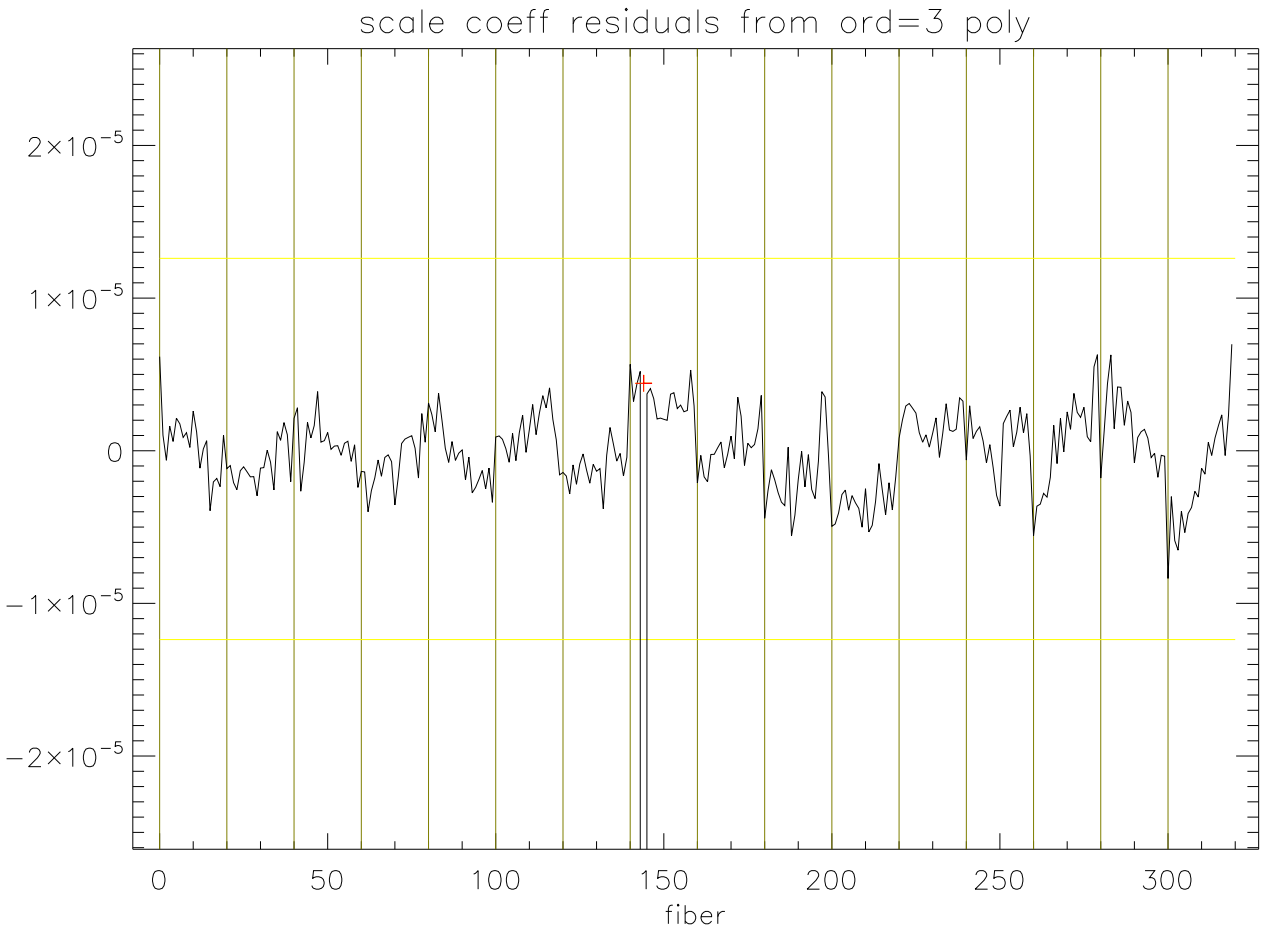
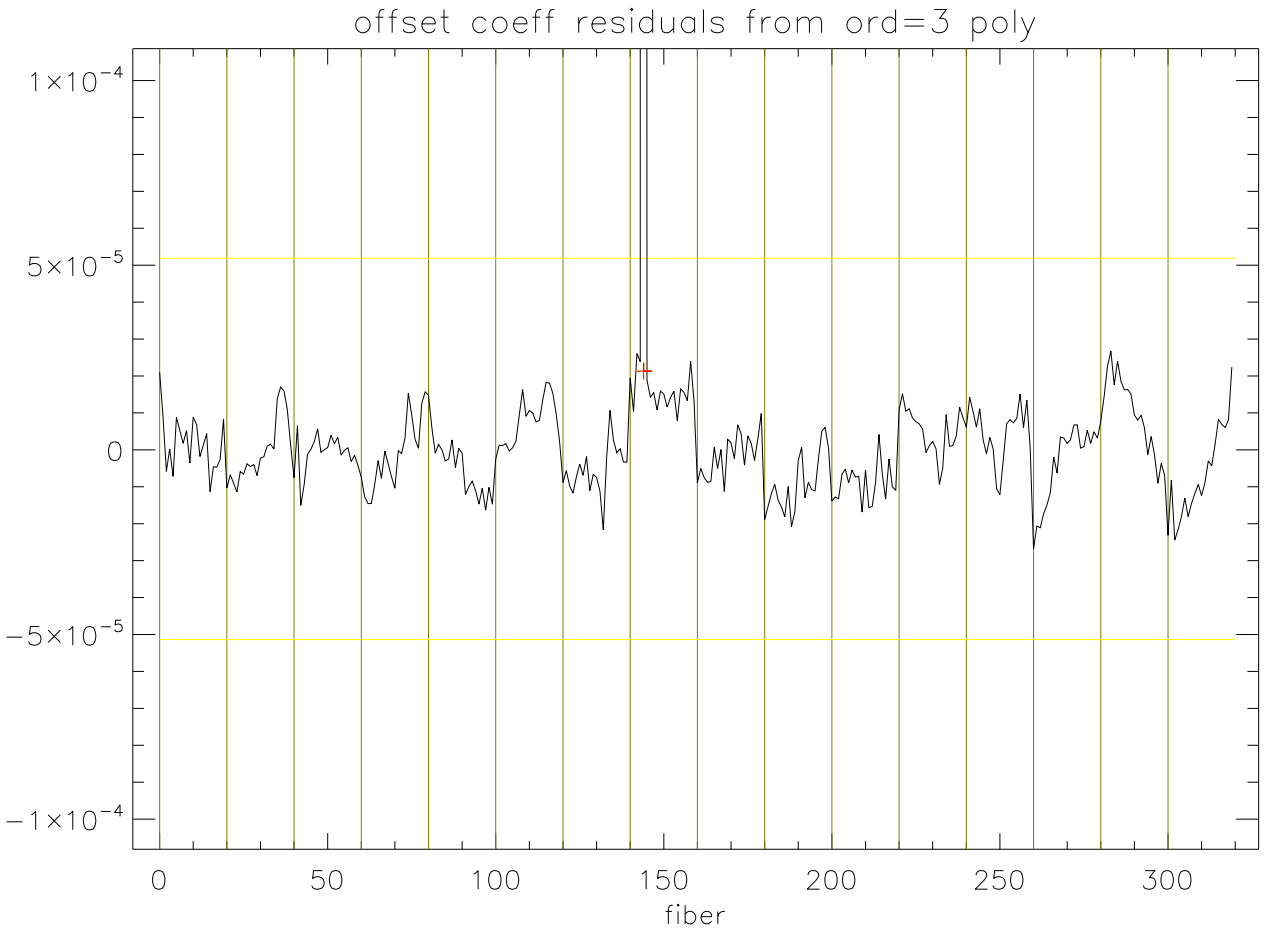
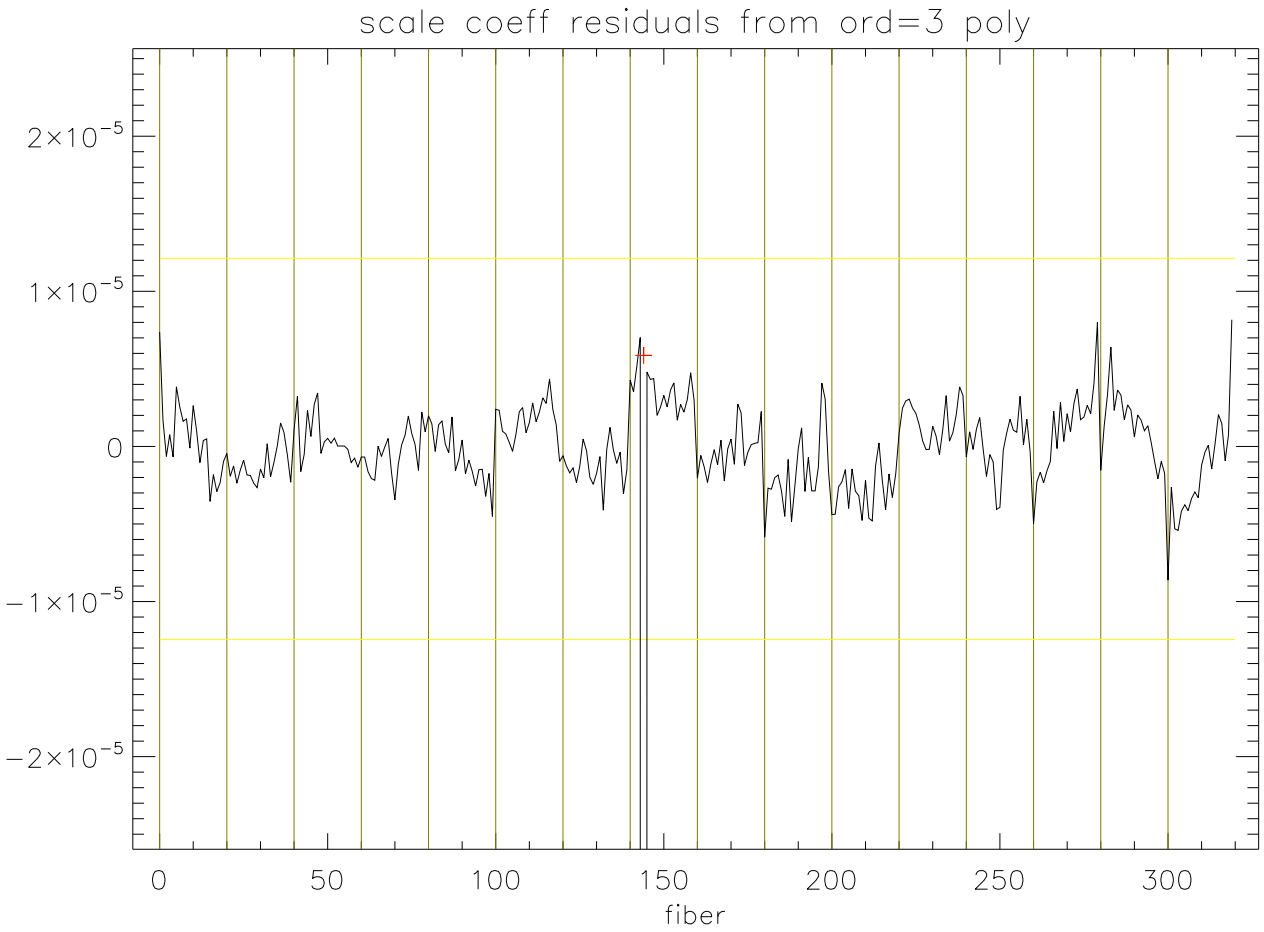
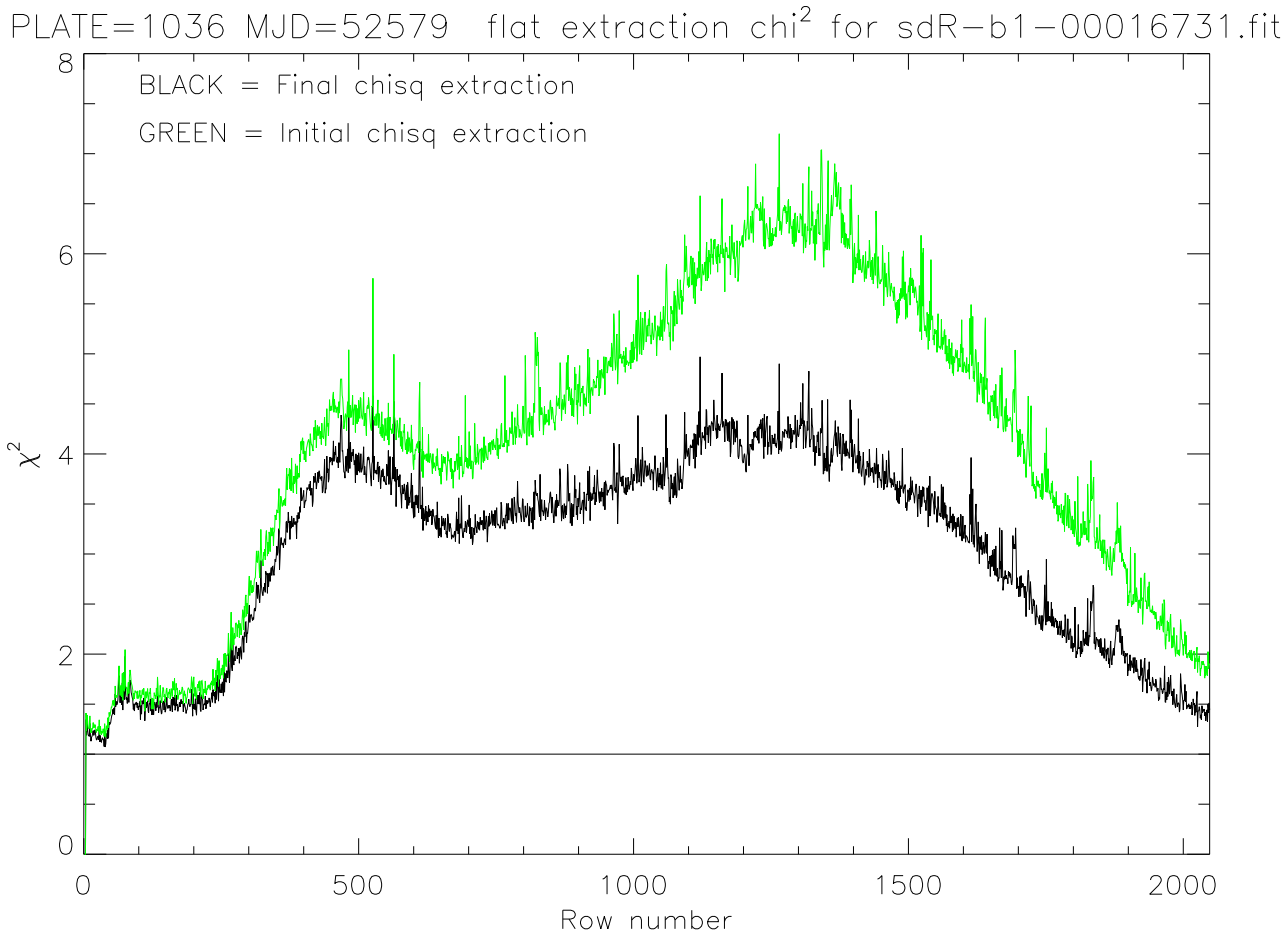
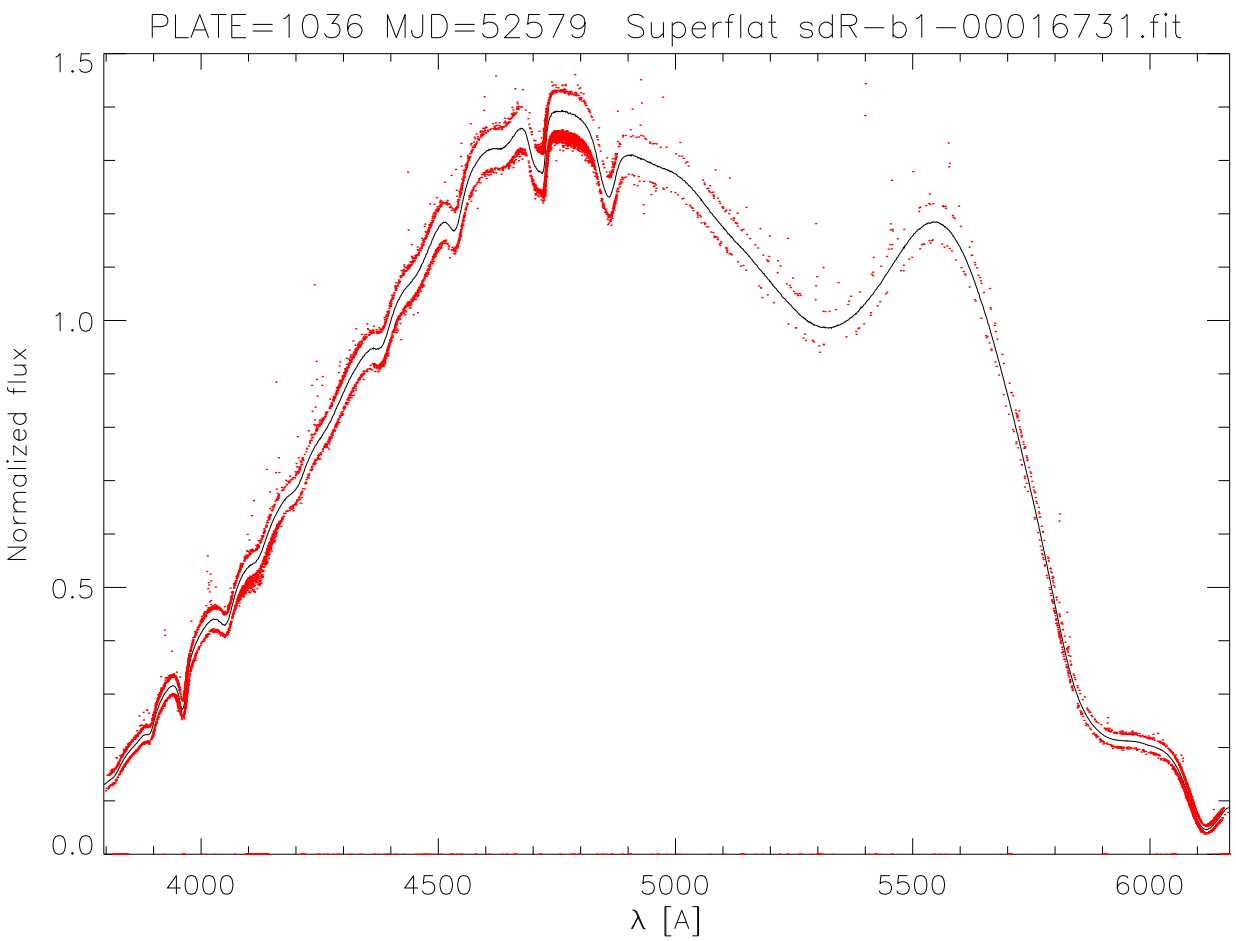

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

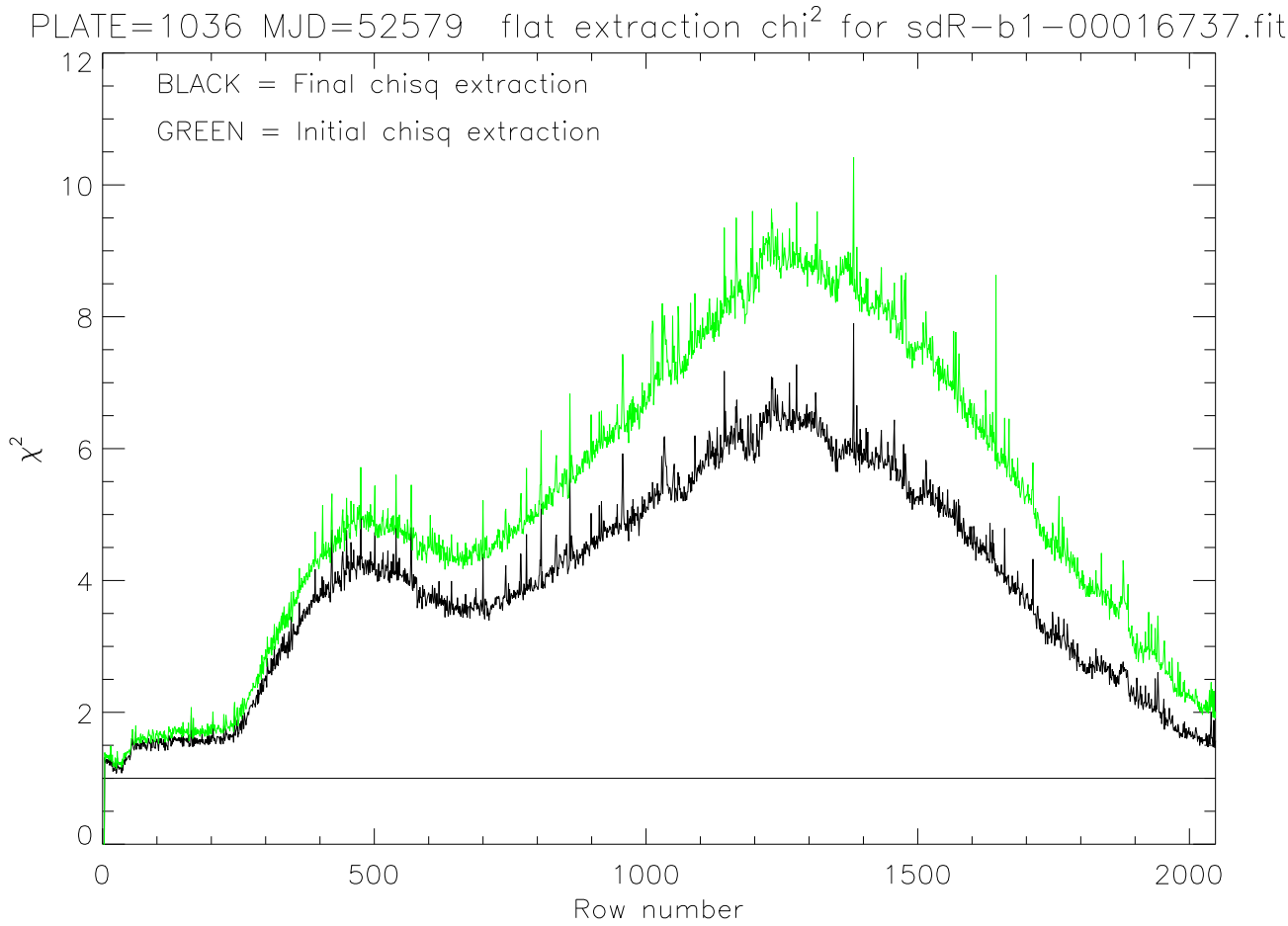

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

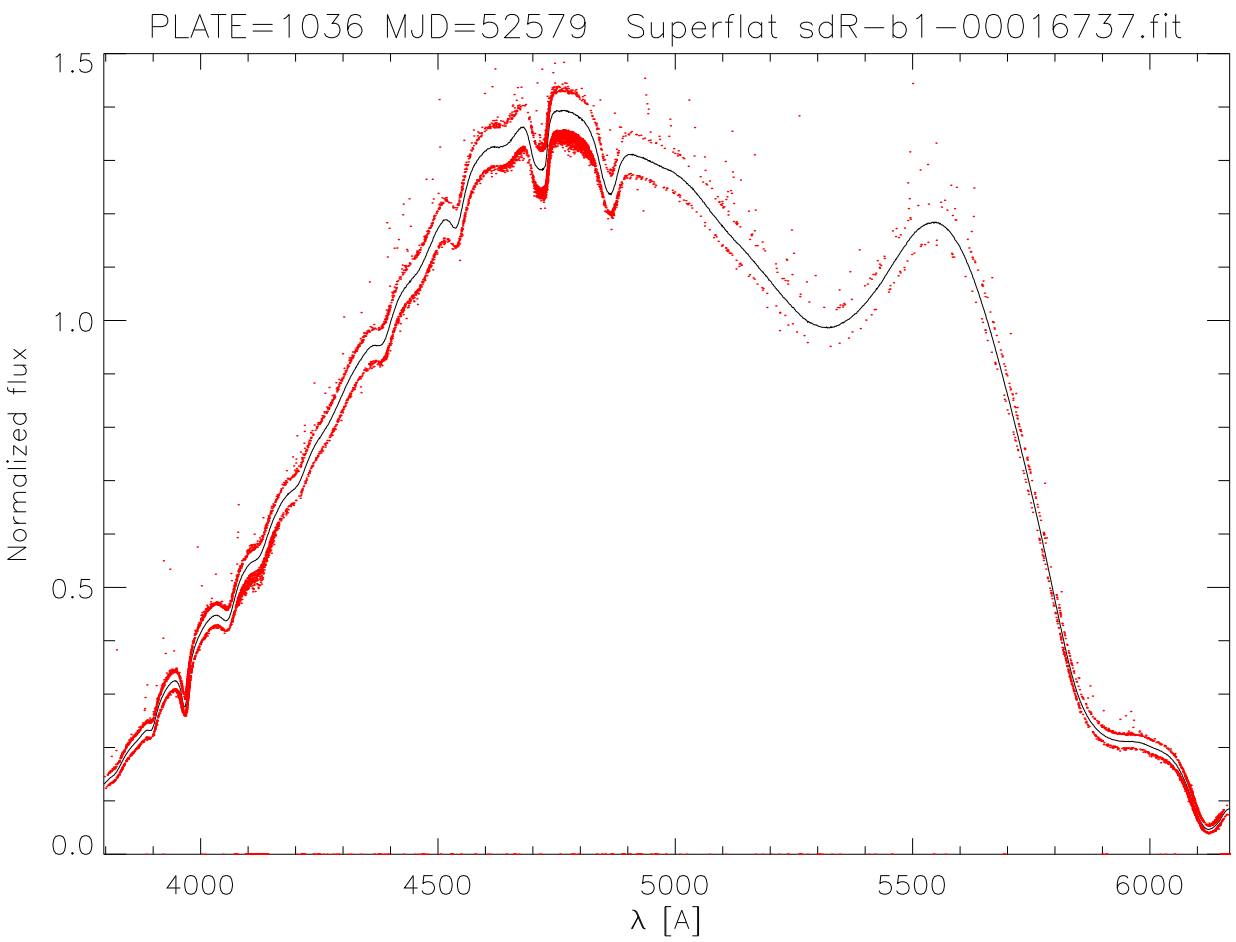

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

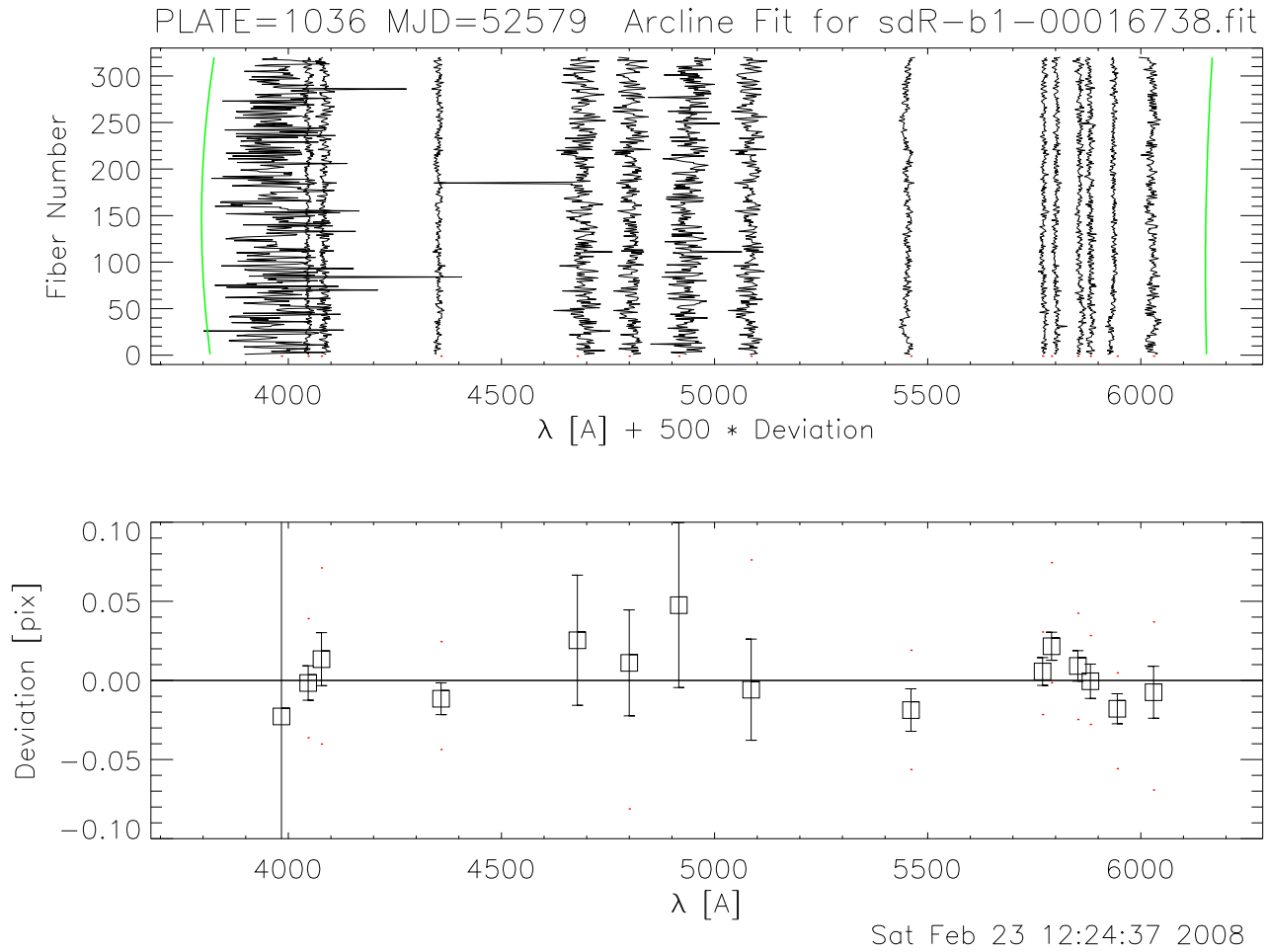

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

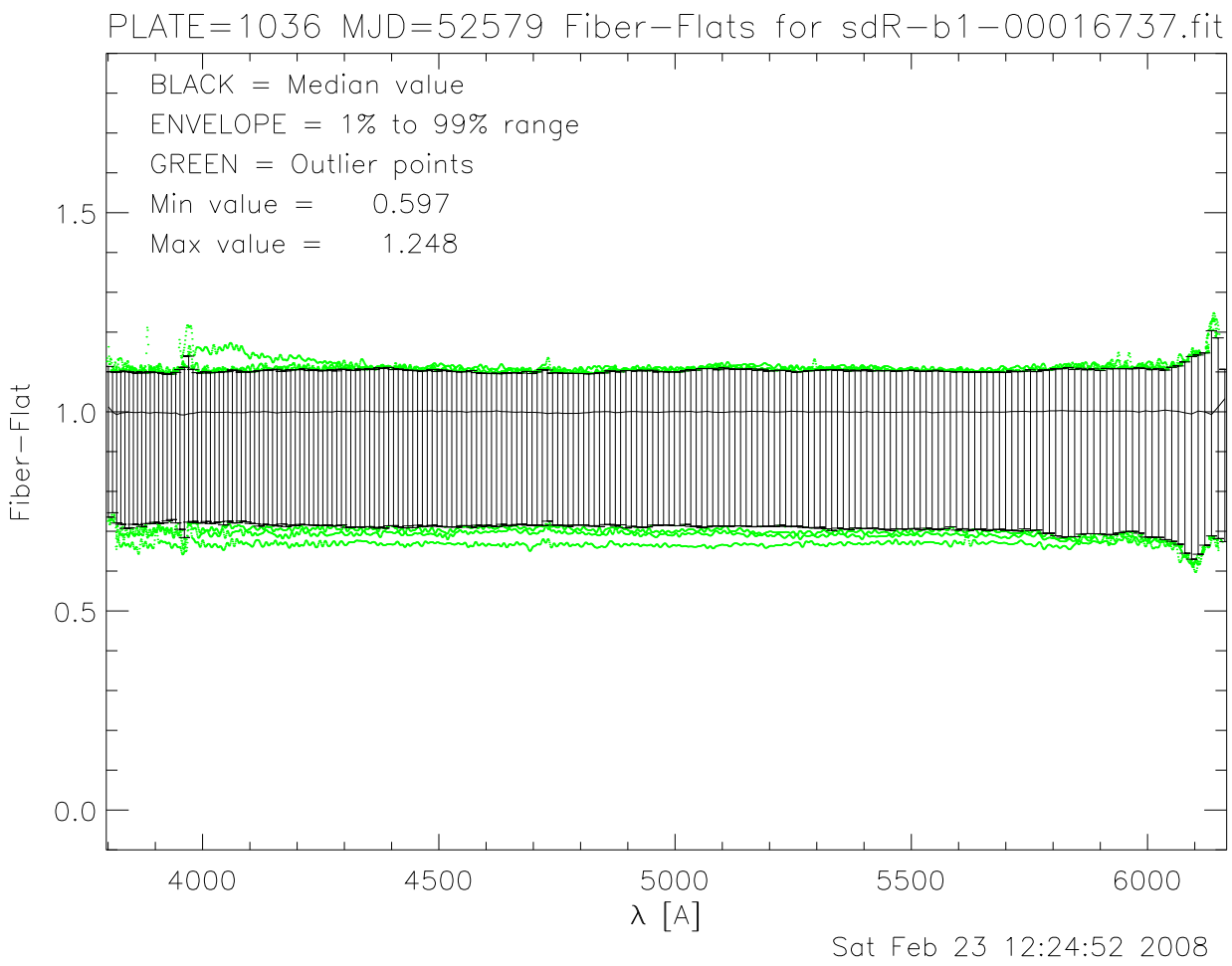

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR-b1-00016731.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

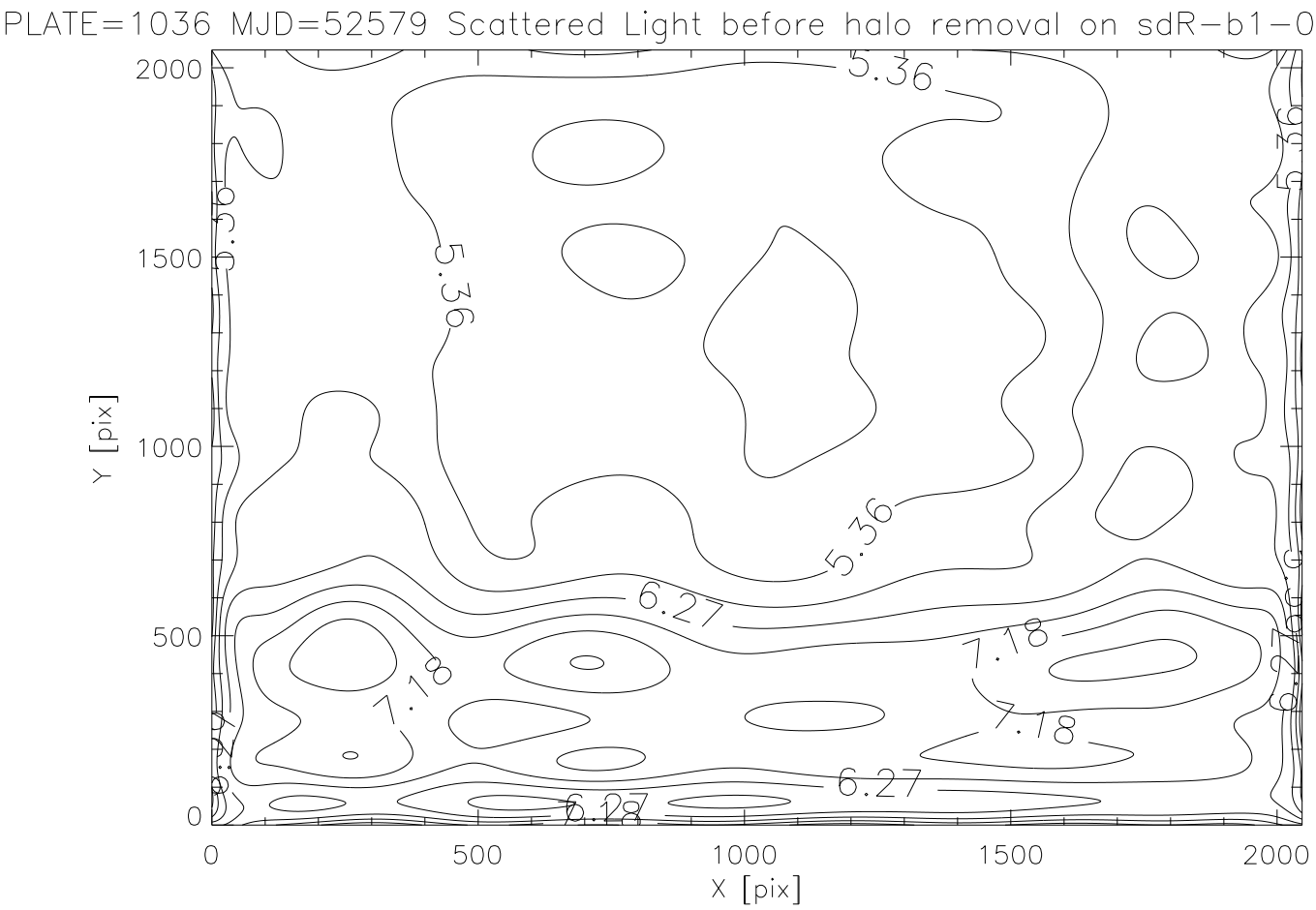

PLATE=1036 MJD=52579 Superflat sdR-b1-00016731.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

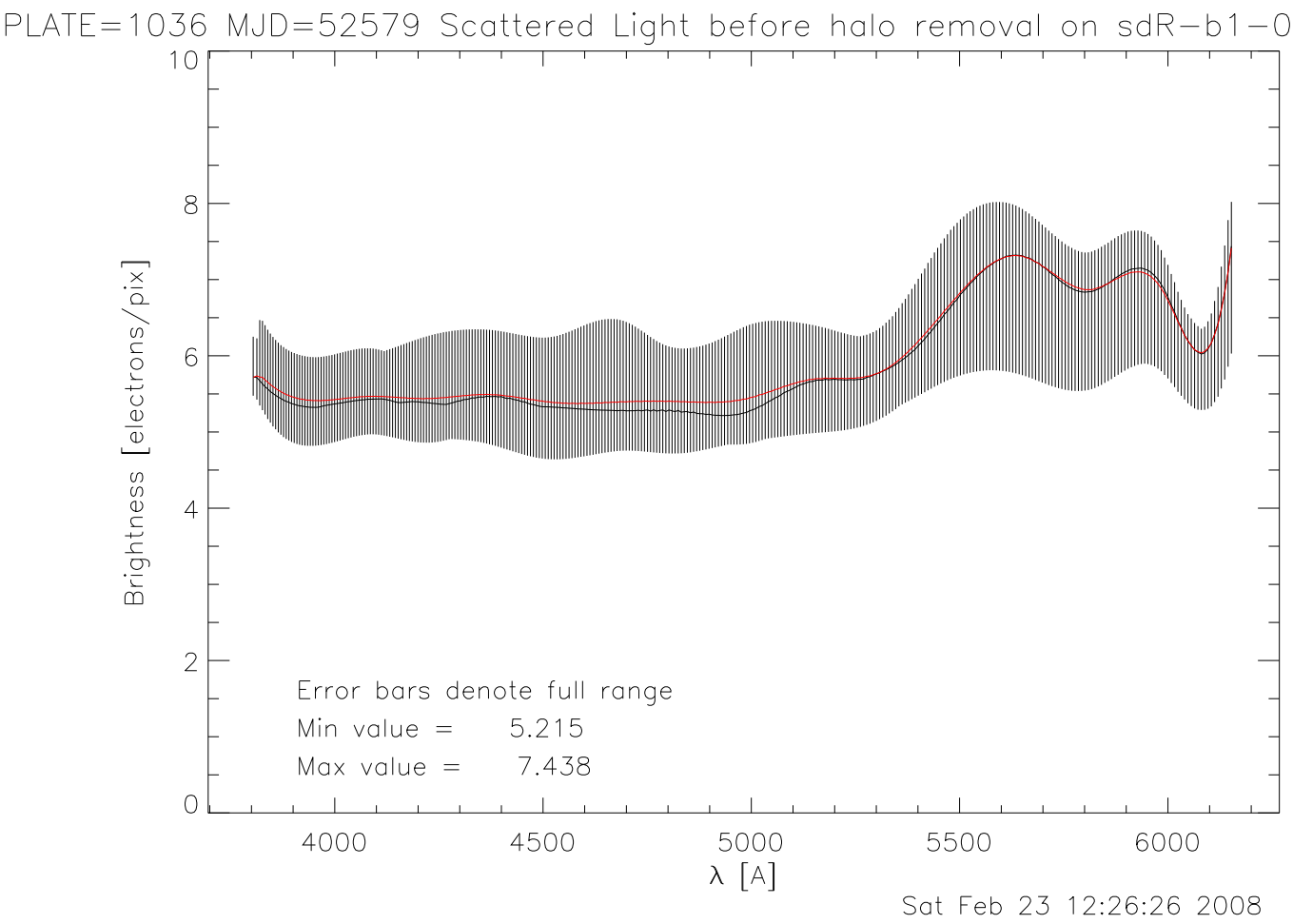

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−b1−00016737.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

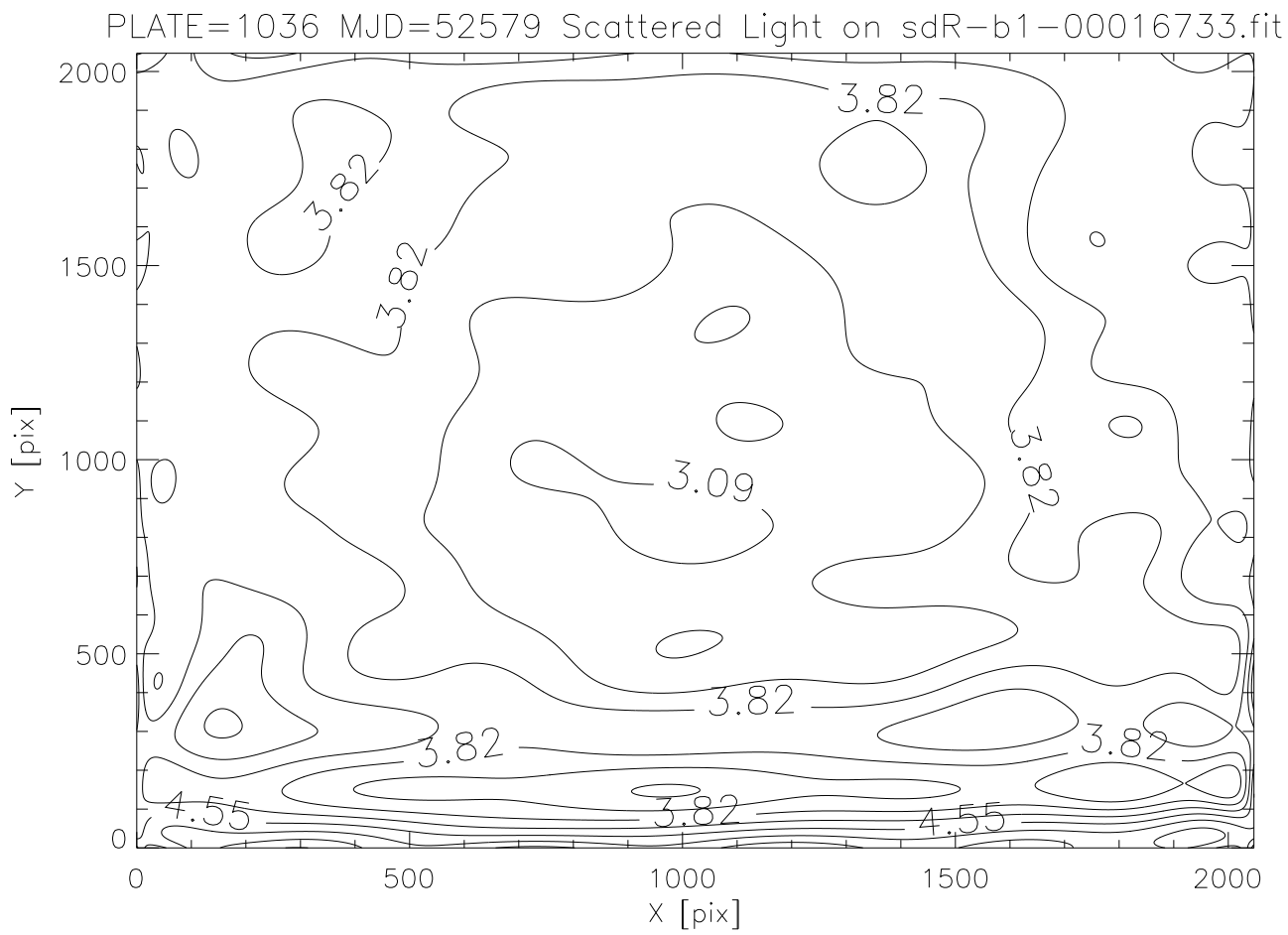

PLATE=1036 MJD=52579 Superflat sdR-b1-00016737.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

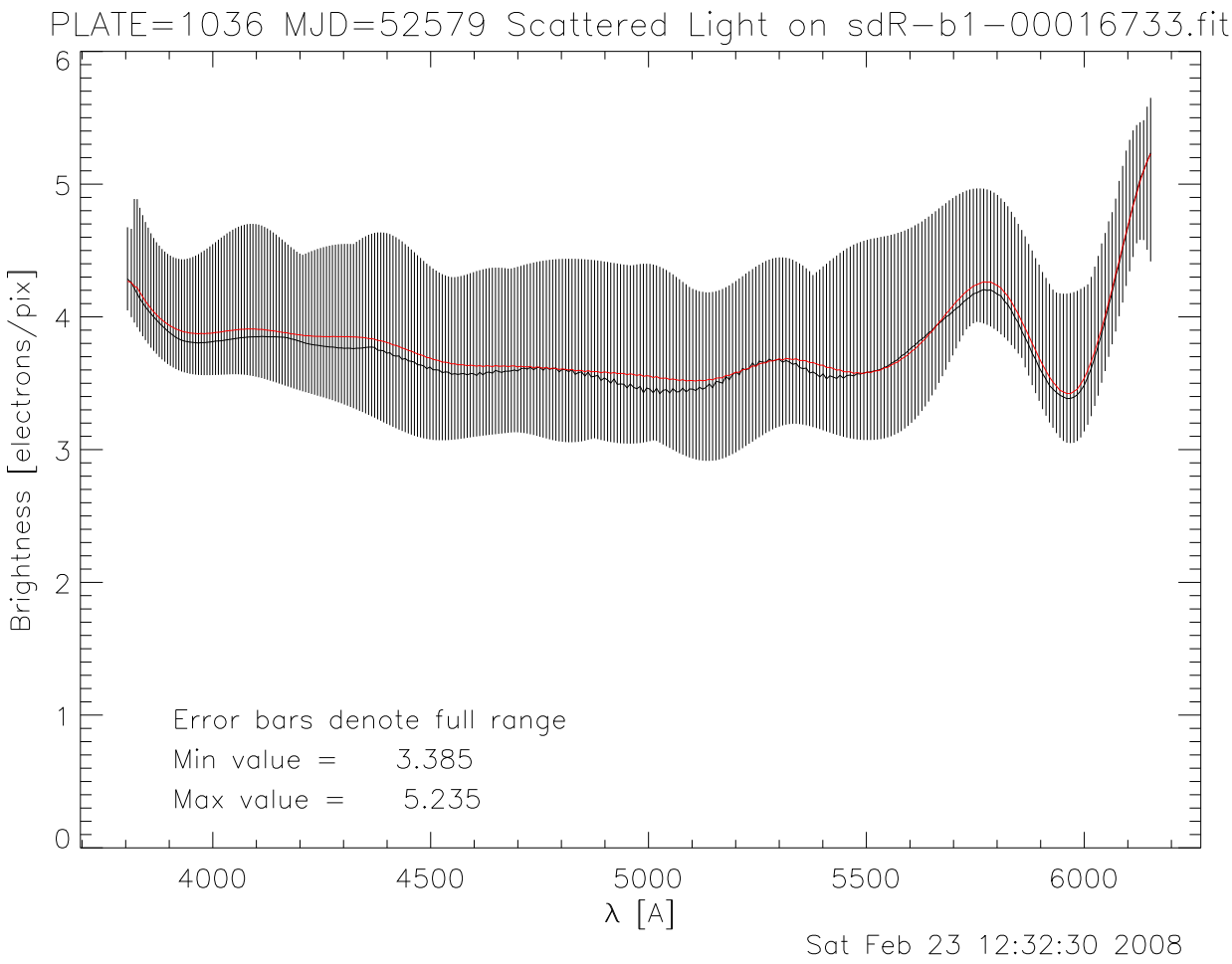

PLATE=1036 MJD=52579 Arcline Fit for sdR-b1-00016738.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:24:37 2008

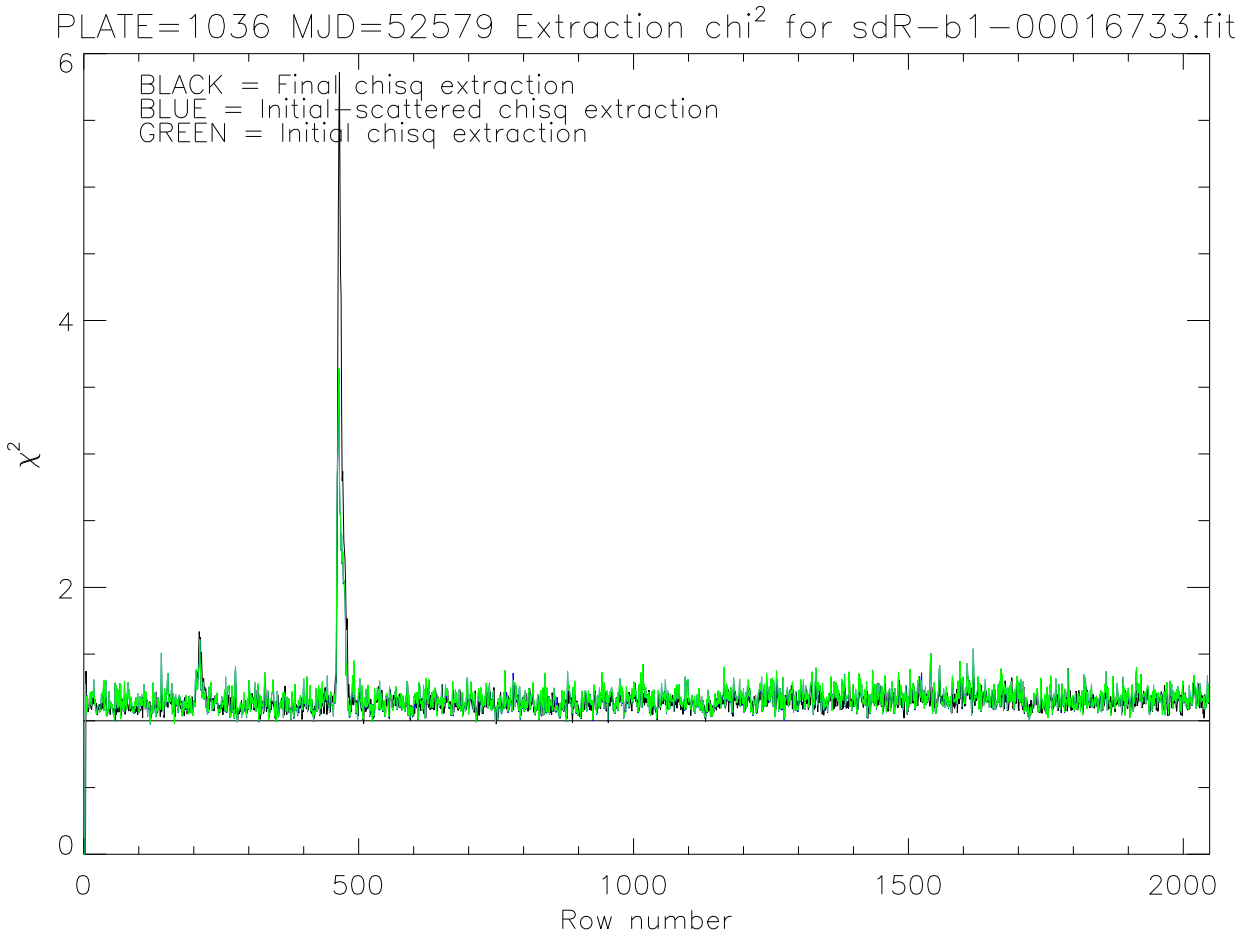

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b1-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.597
Max value = 1.248
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:24:52 2008

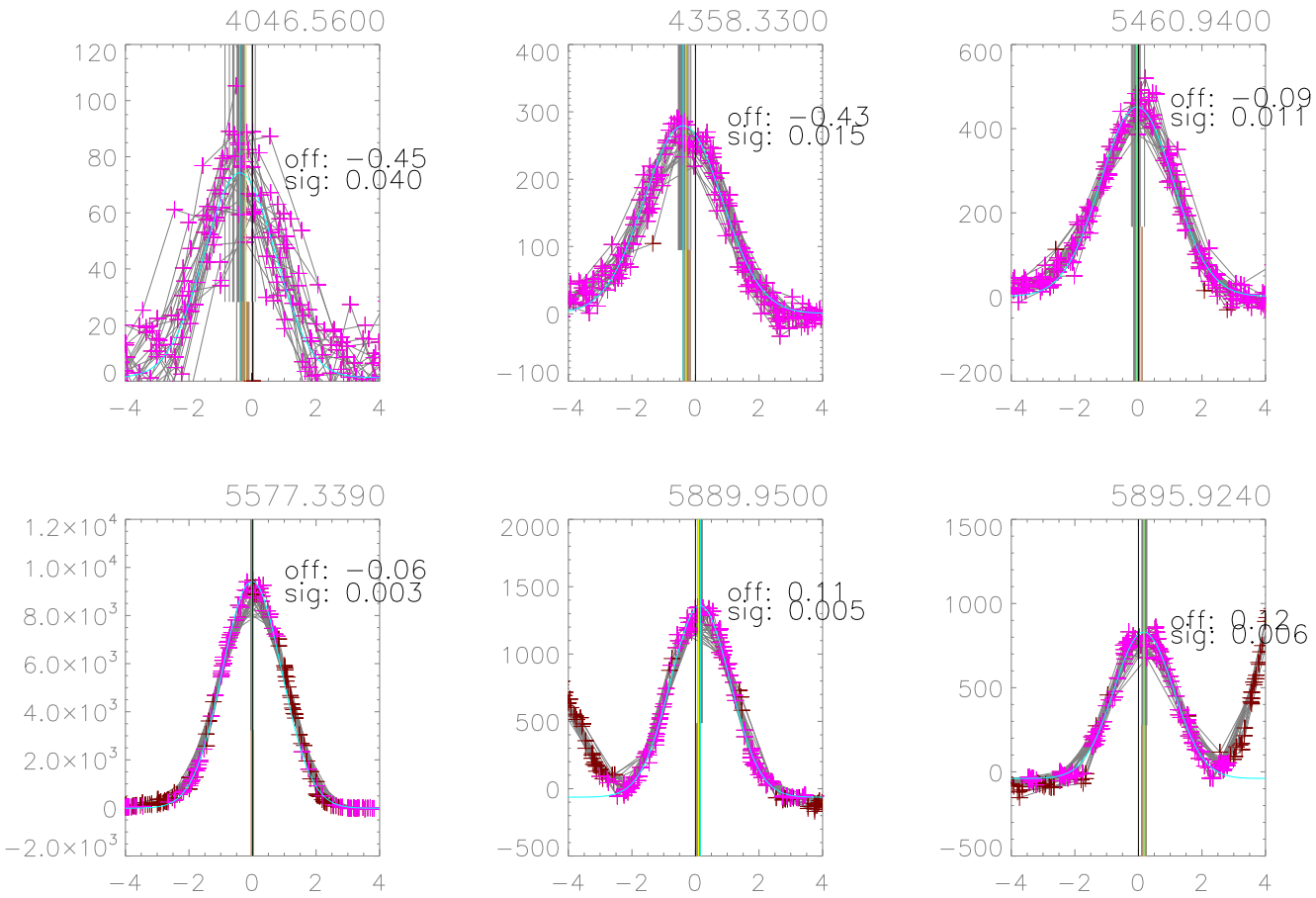

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016733.f
5.36
6.27
7.18
6.28
Y [pix]
X [pix]
0
500
1000
1500
2000

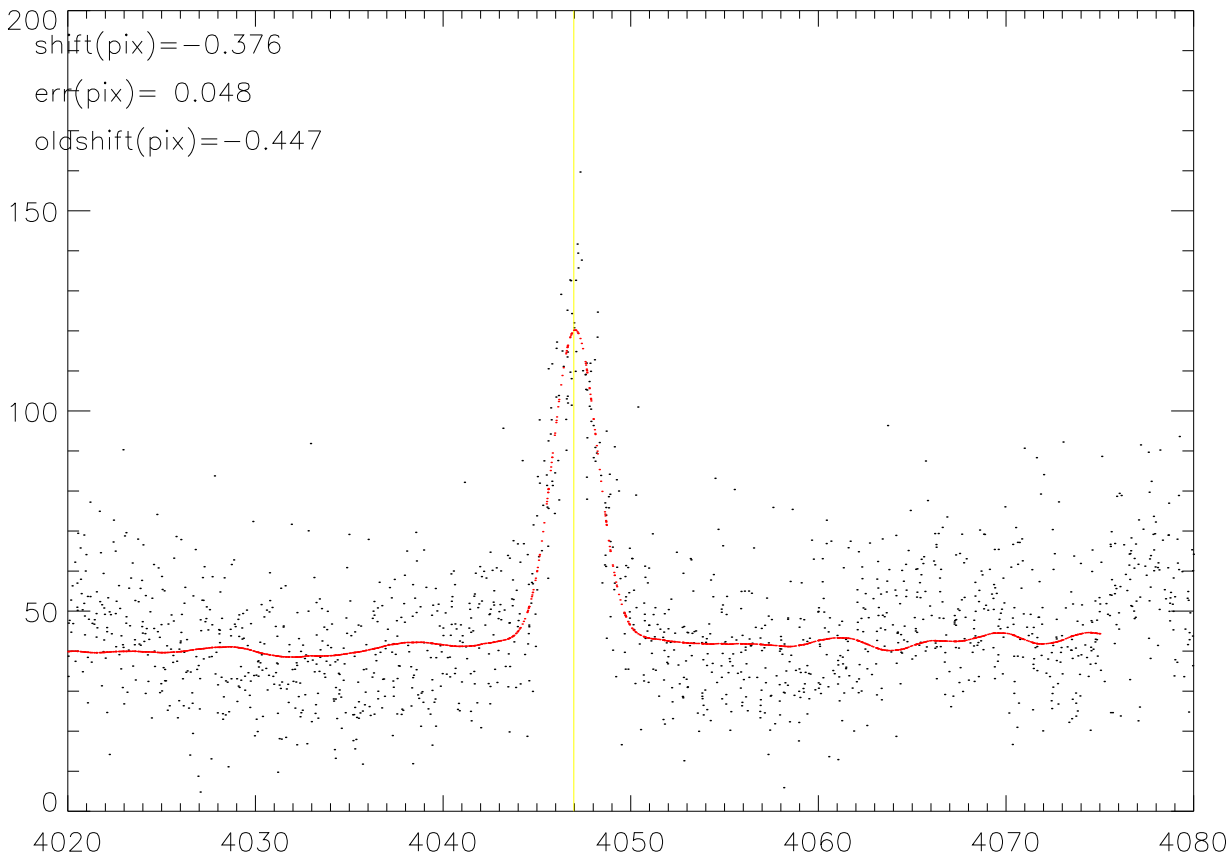

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016733.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.215
Max value = 7.438
Sat Feb 23 12:26:26 2008

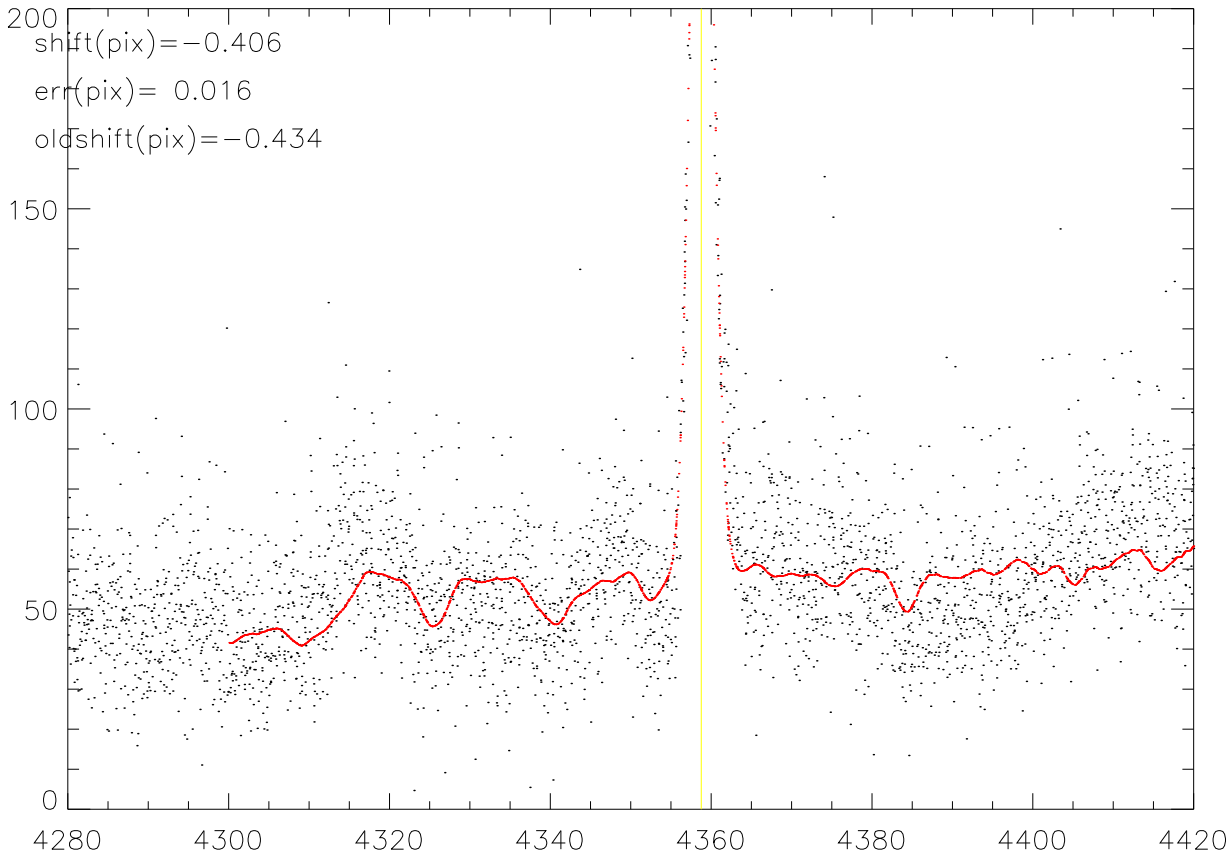

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016733.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
3.09
4.55

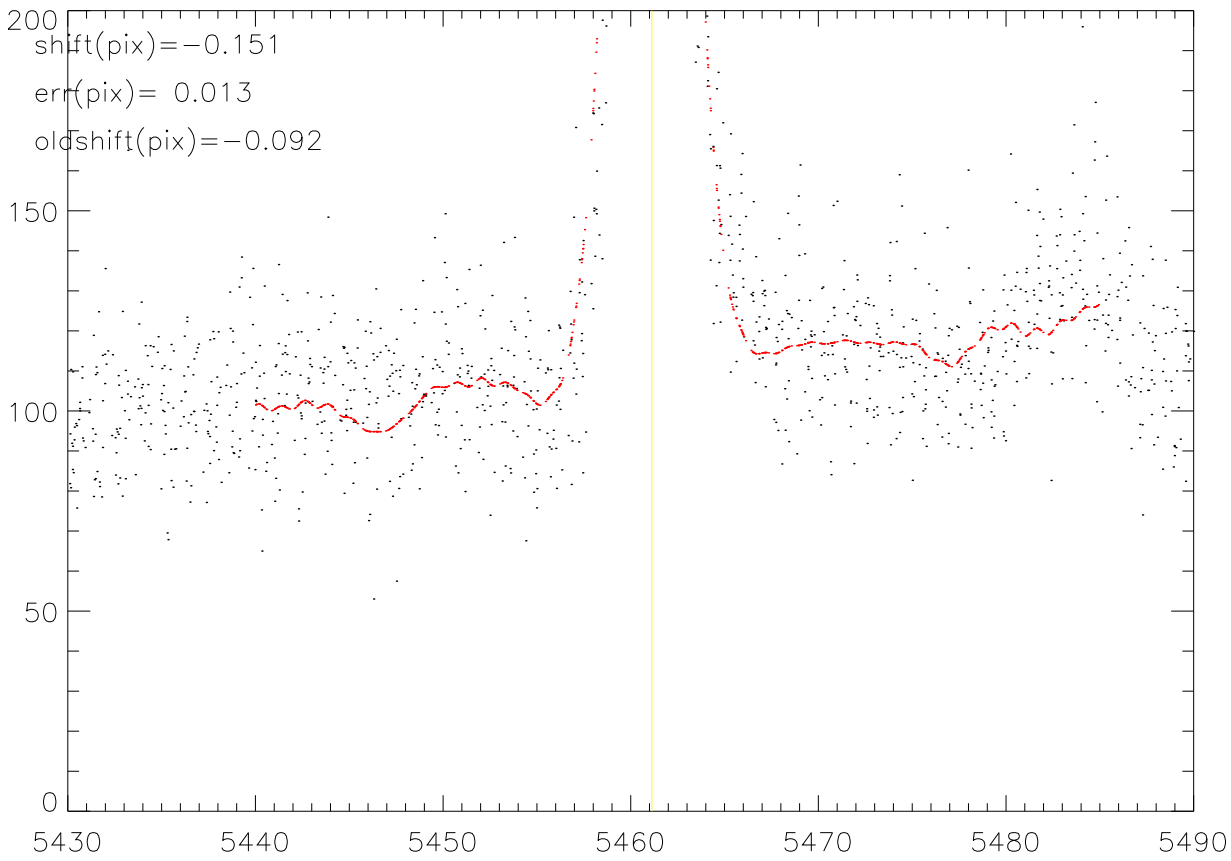

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016733.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
Error bars denote full range
Min value = 3.385
Max value = 5.235
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:32:30 2008

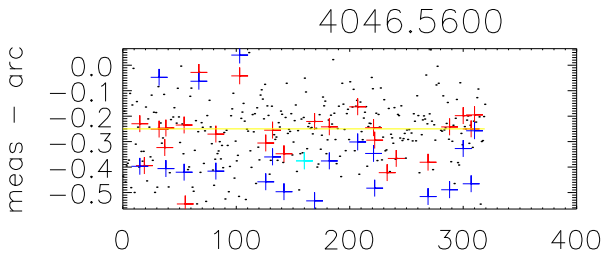

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b1-00016733.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

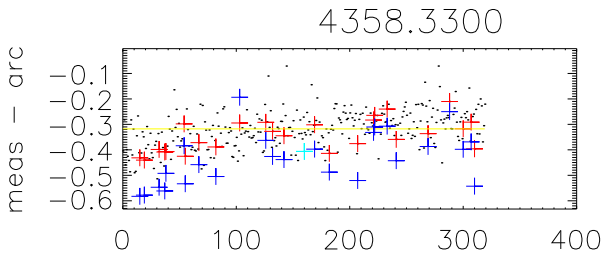

4046.5600
off: −0.45
sig: 0.040
4358.3300
off: −0.43
sig: 0.015
5460.9400
off: −0.09
sig: 0.011
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: 0.11
sig: 0.005
5895.9240
off: 0.12
sig: 0.006

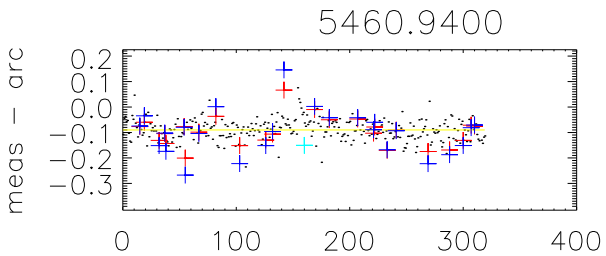

shift(pix)=−0.376
err(pix)= 0.048
oldshift(pix)=−0.447
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

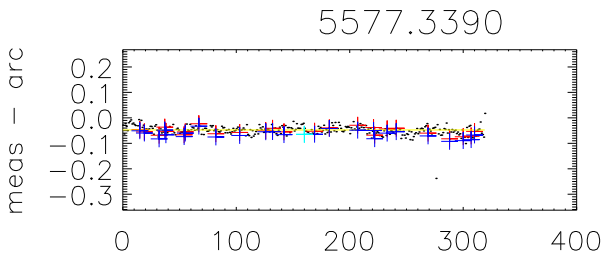

shift(pix)=−0.406
err(pix)= 0.016
oldshift(pix)=−0.434
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

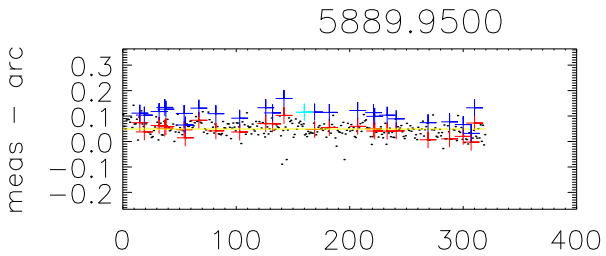

shift(pix)=−0.151
err(pix)= 0.013
oldshift(pix)=−0.092
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

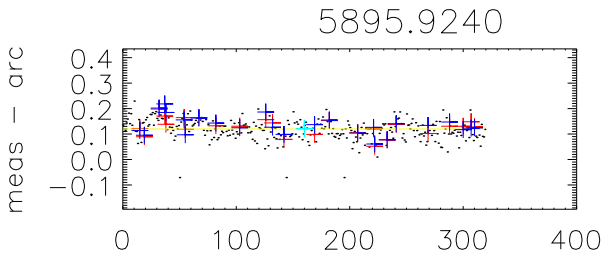

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

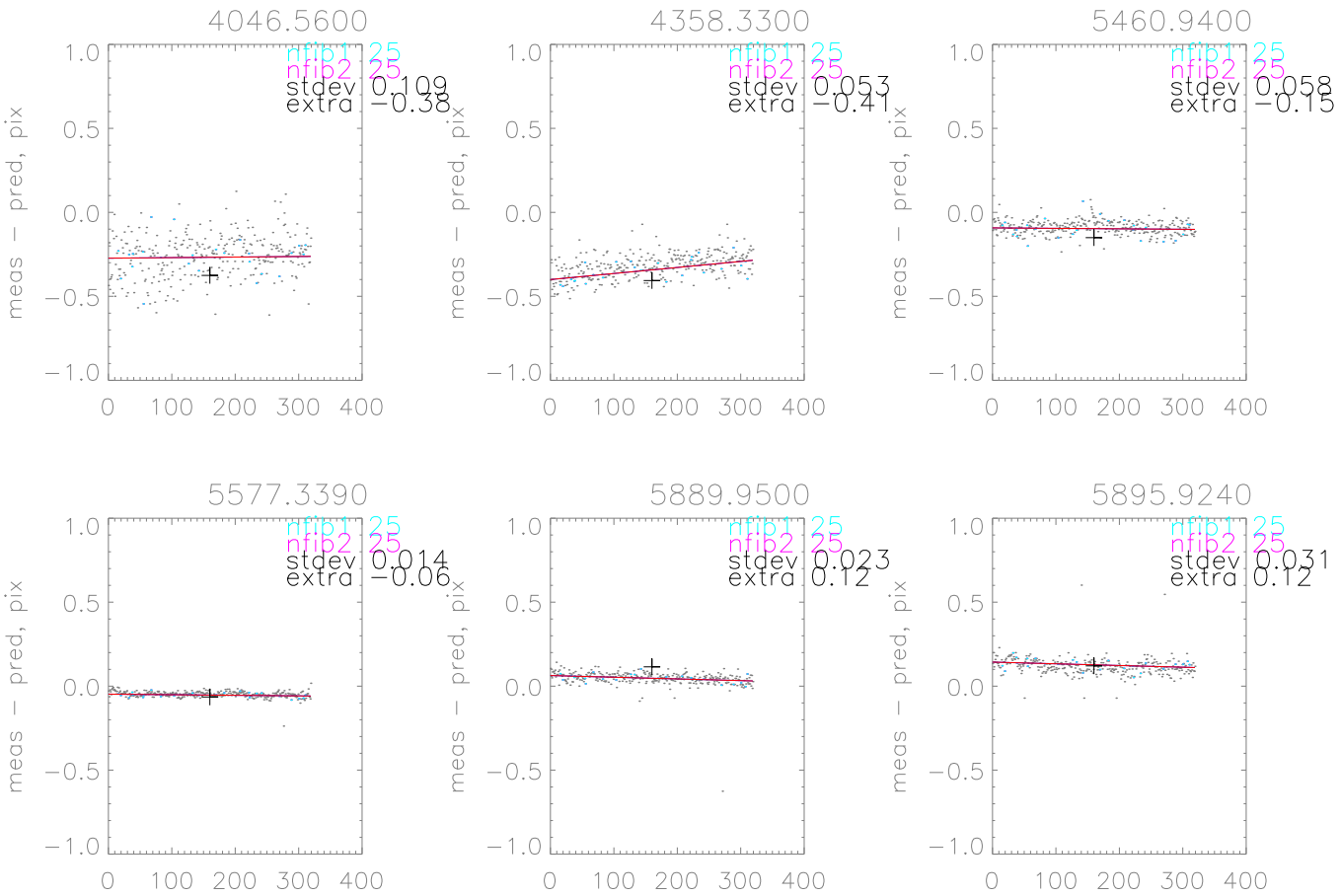

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

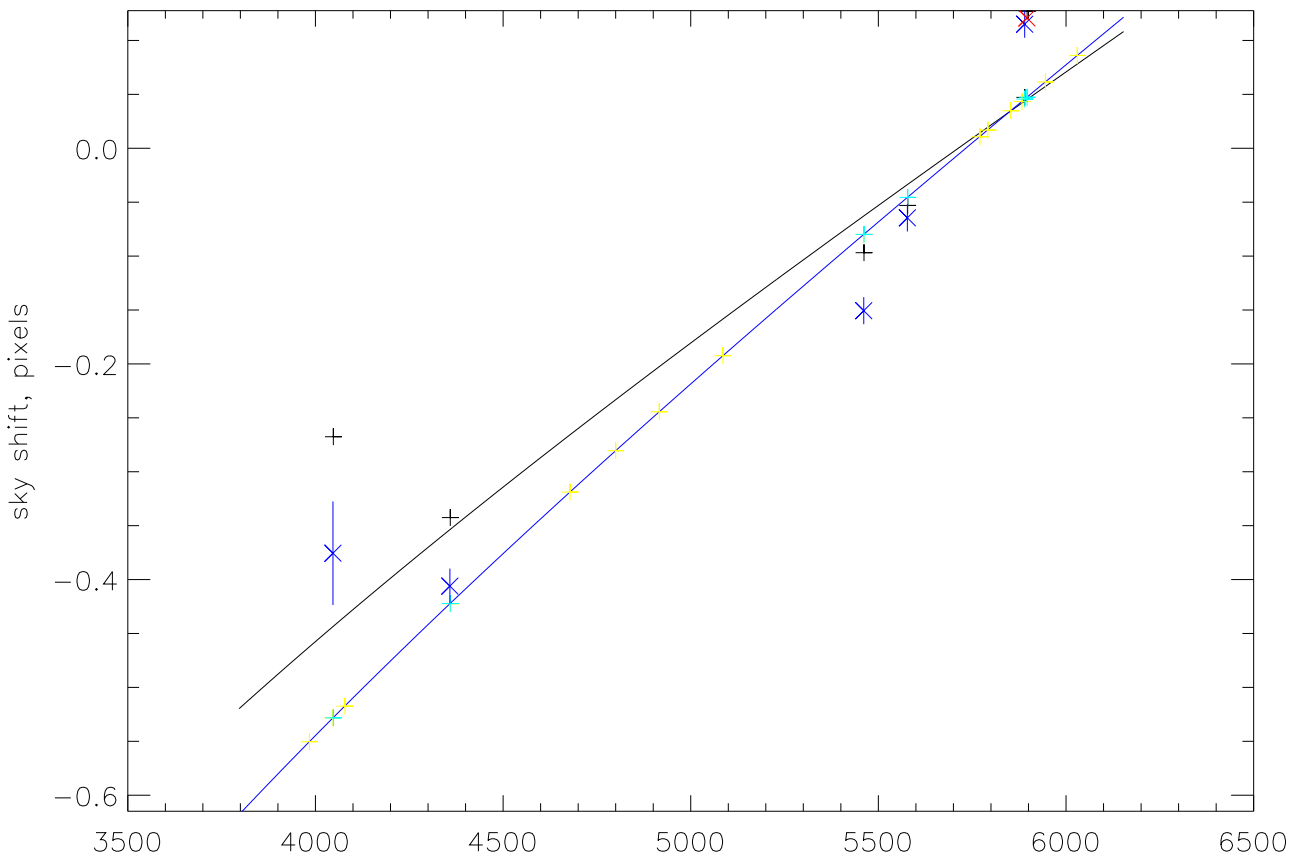

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

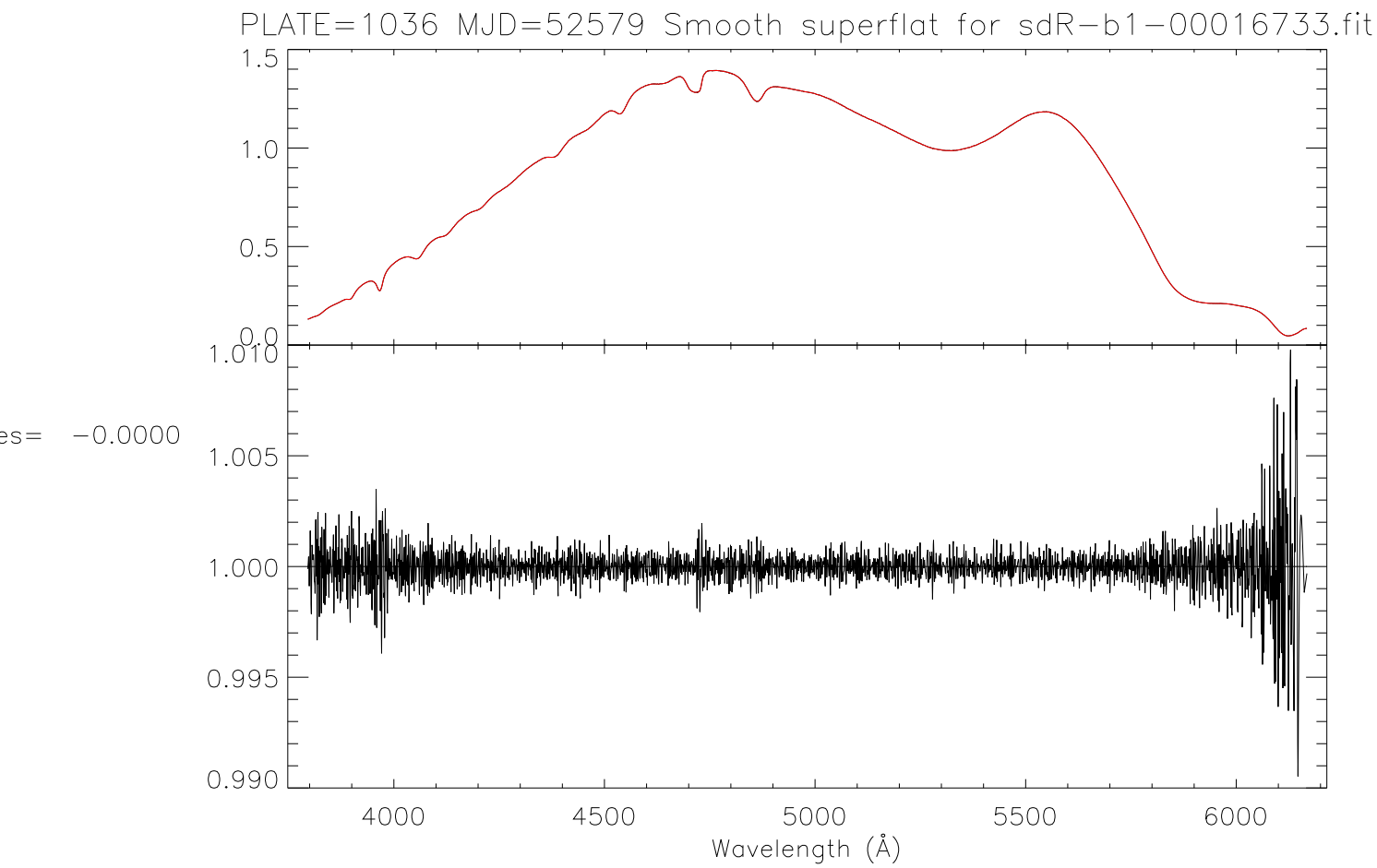

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

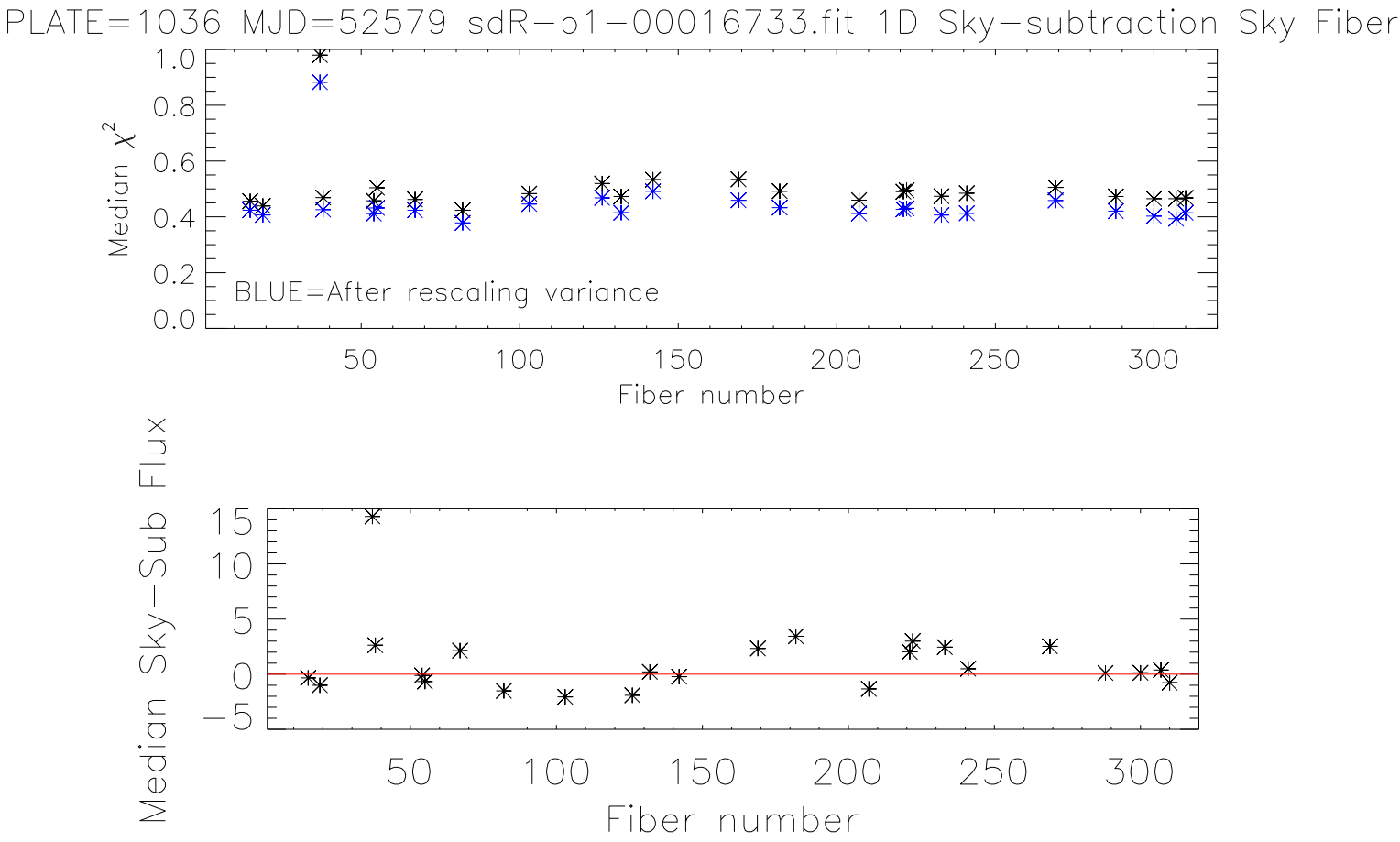

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

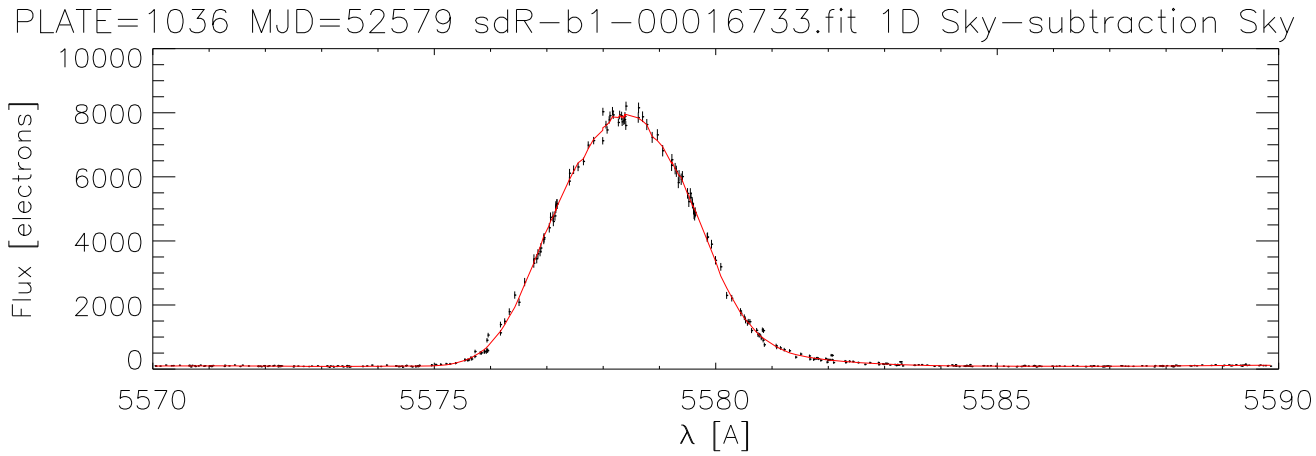

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

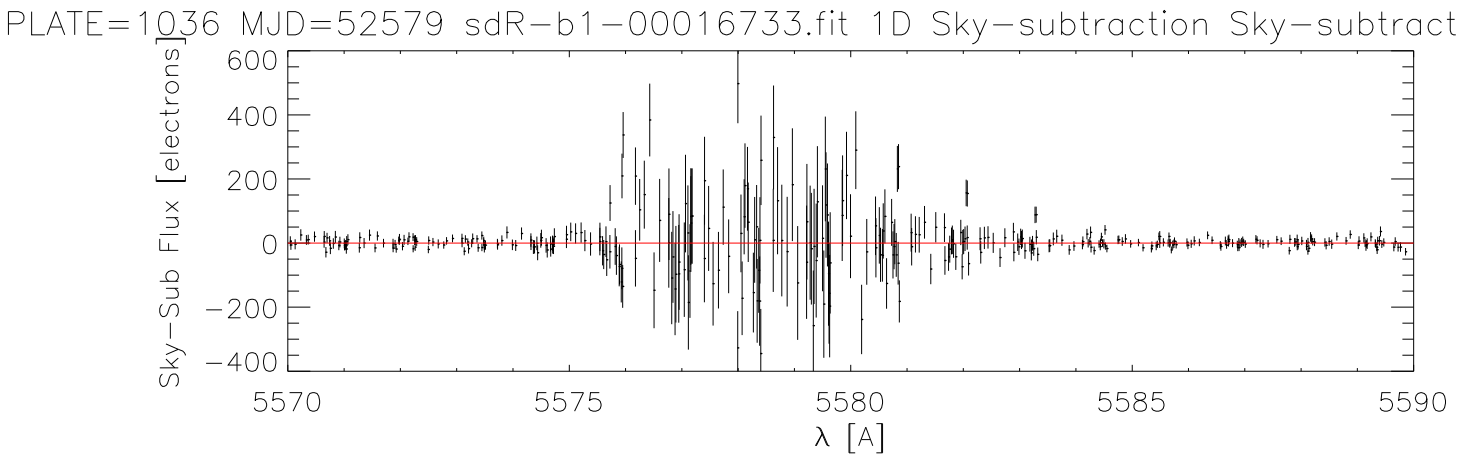

4046.5600
nfib1 25
nfib2 25
stdev 0.109
extra −0.38
4358.3300
nfib1 25
nfib2 25
stdev 0.053
extra −0.41
5460.9400
nfib1 25
nfib2 25
stdev 0.058
extra −0.15
5577.3390
nfib1 25
nfib2 25
stdev 0.014
extra −0.06
5889.9500
nfib1 25
nfib2 25
stdev 0.023
extra 0.12
5895.9240
nfib1 25
nfib2 25
stdev 0.031
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

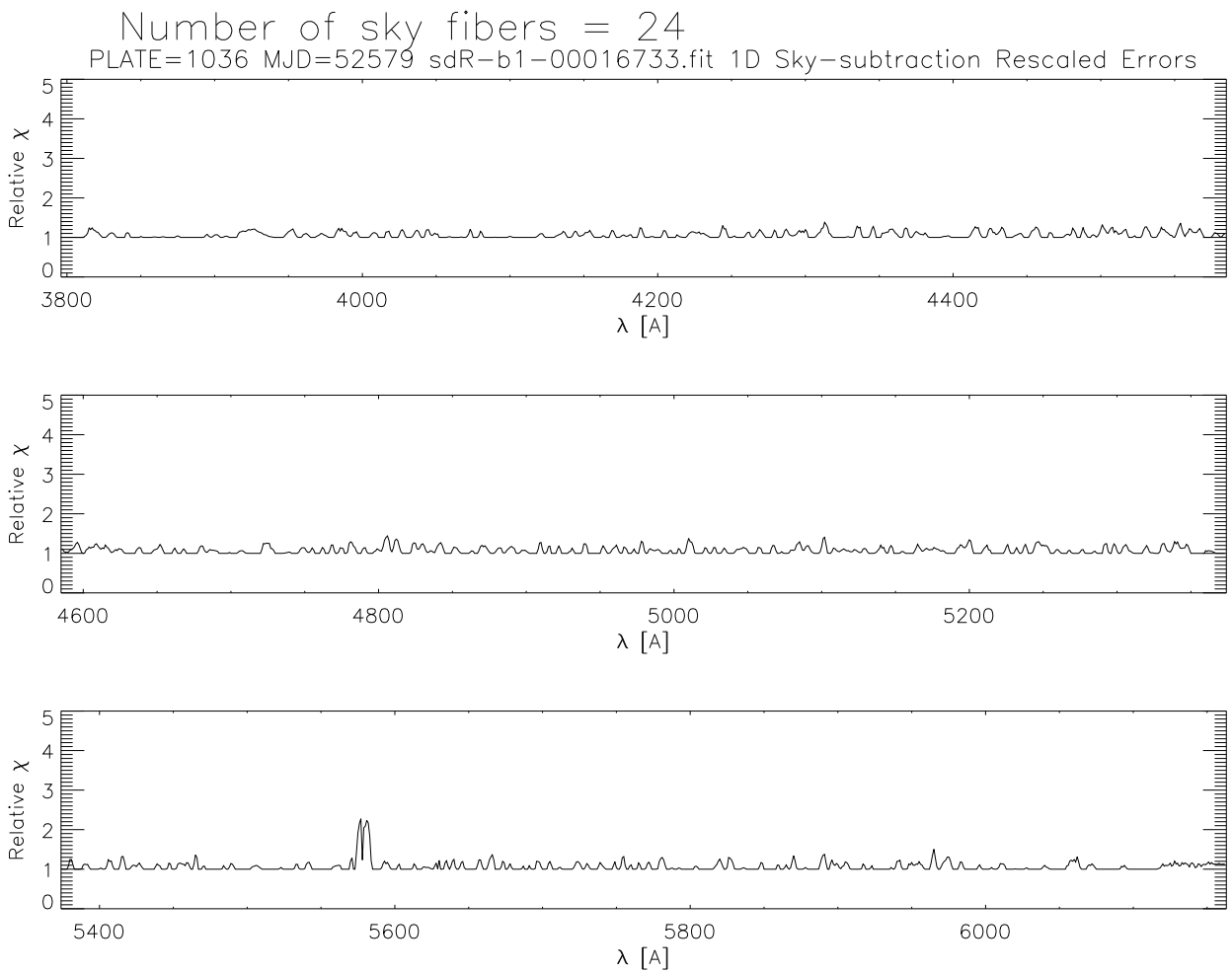

sky shift, pixels
0.0
−0.2
−0.4
−0.6
3500
4000
4500
5000
5500
6000
6500

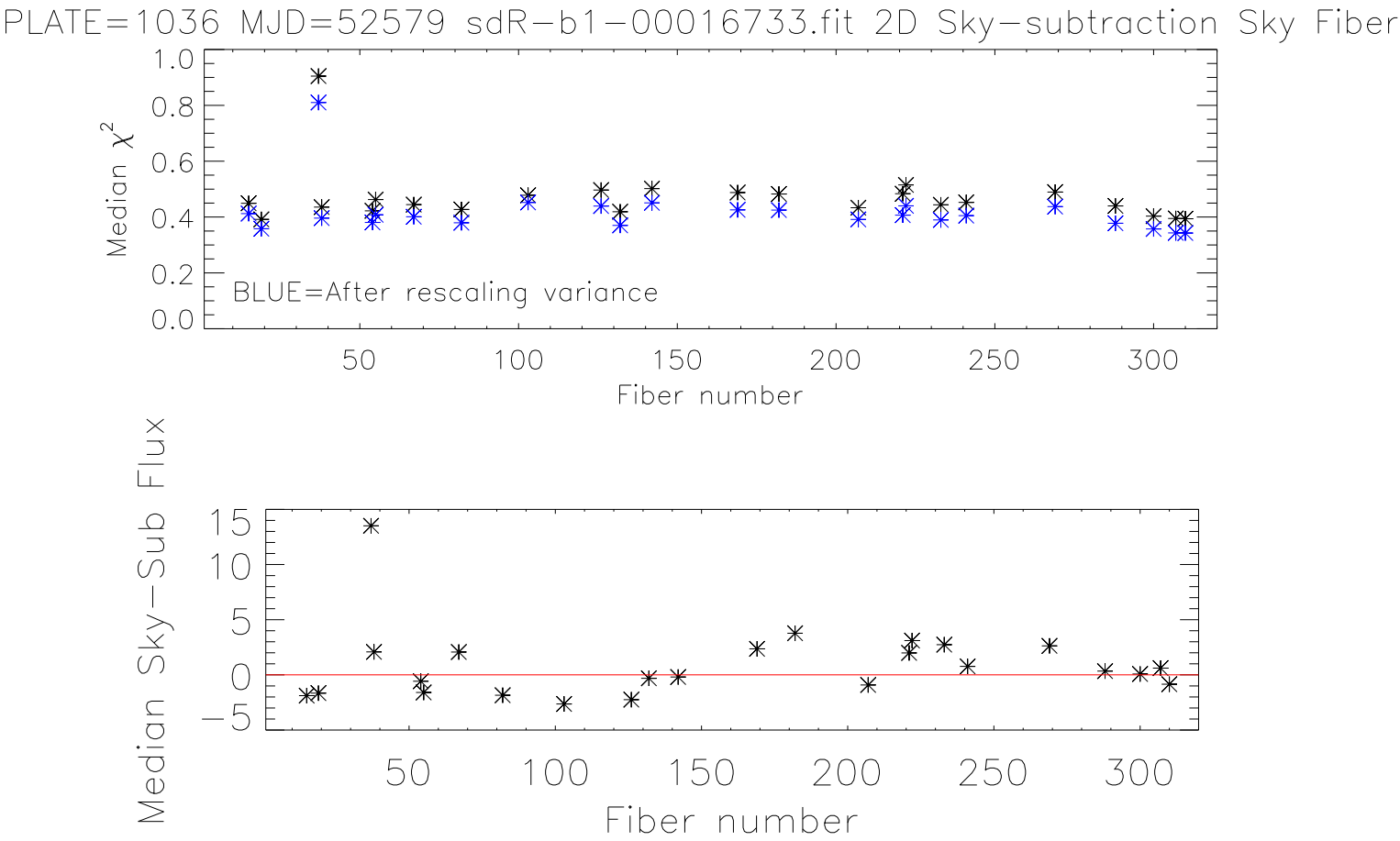

PLATE=1036 MJD=52579 Smooth superflat for sdR-b1-00016733.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

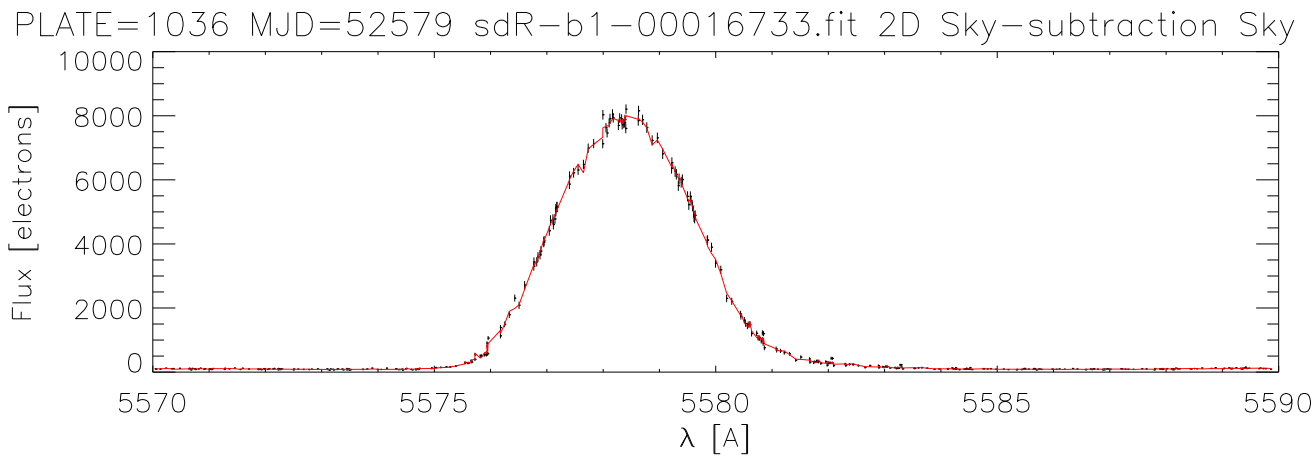

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

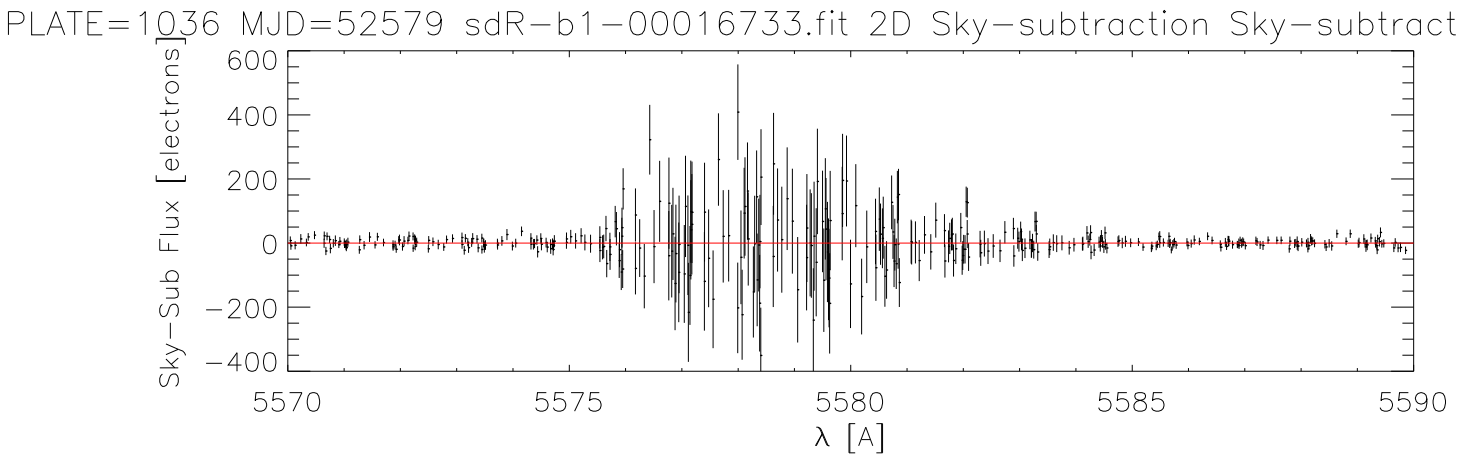

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

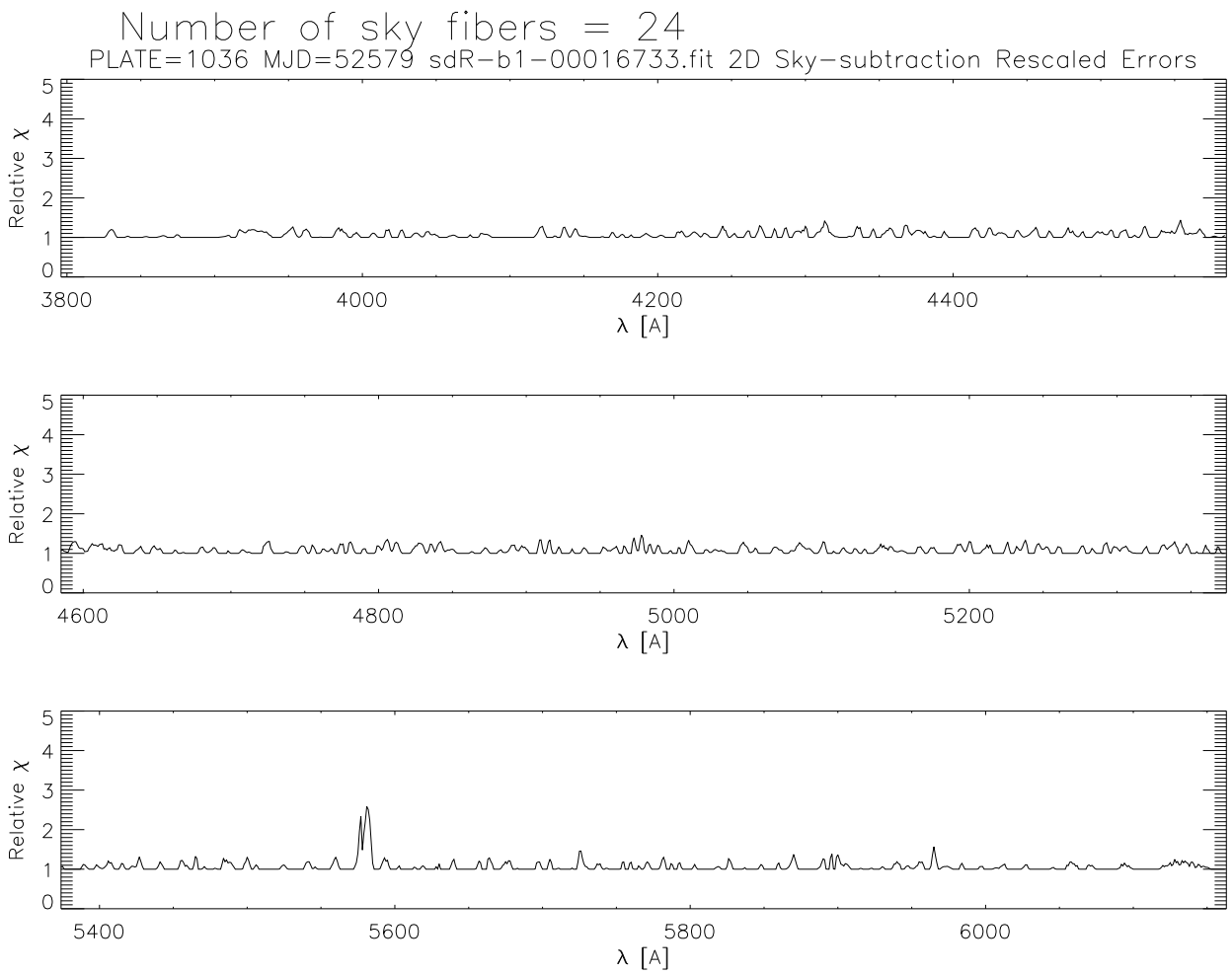

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

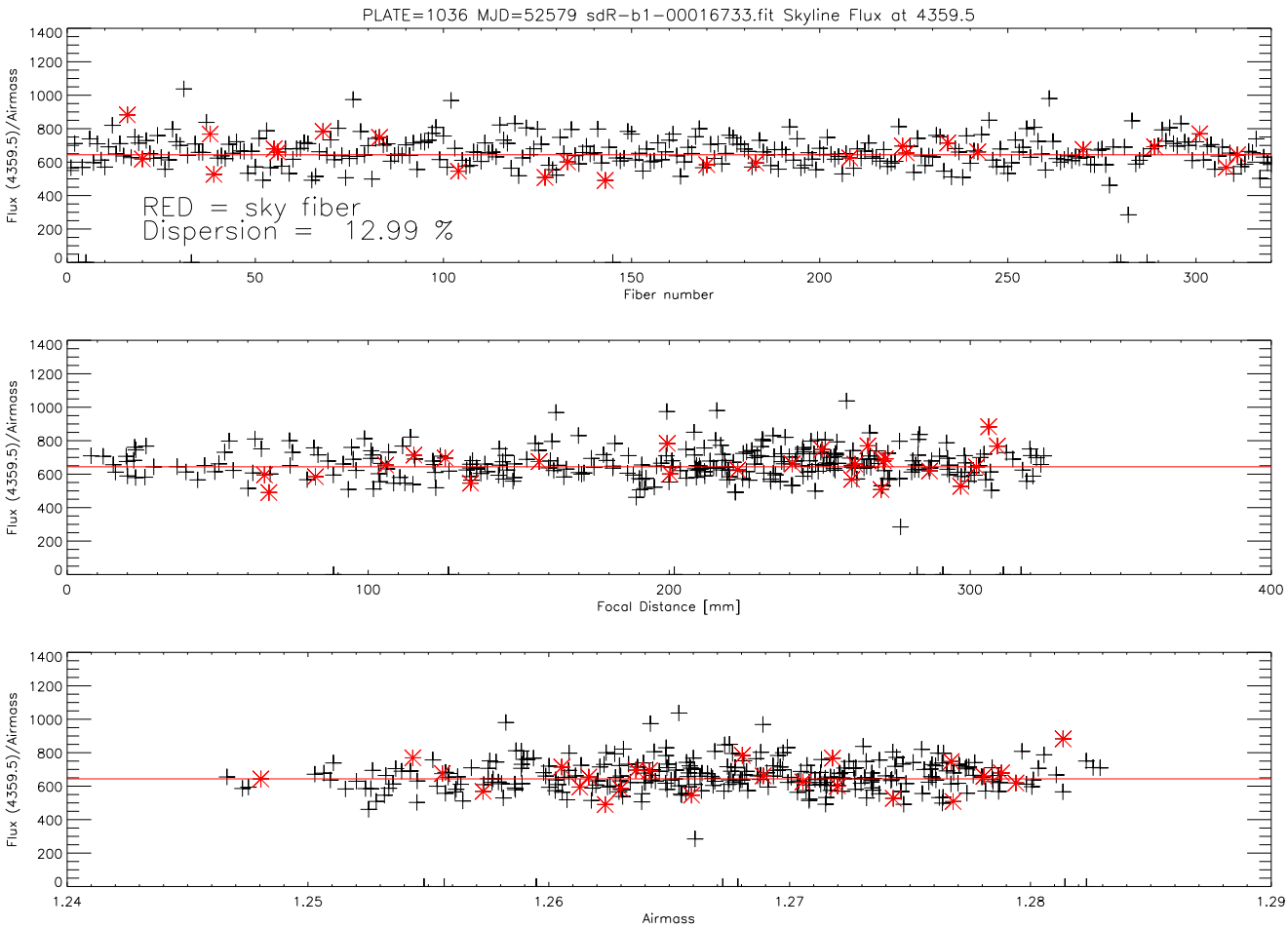

Number of sky fibers = 24
PLATE=1036 MJD=52579 sdR-b1-00016733.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

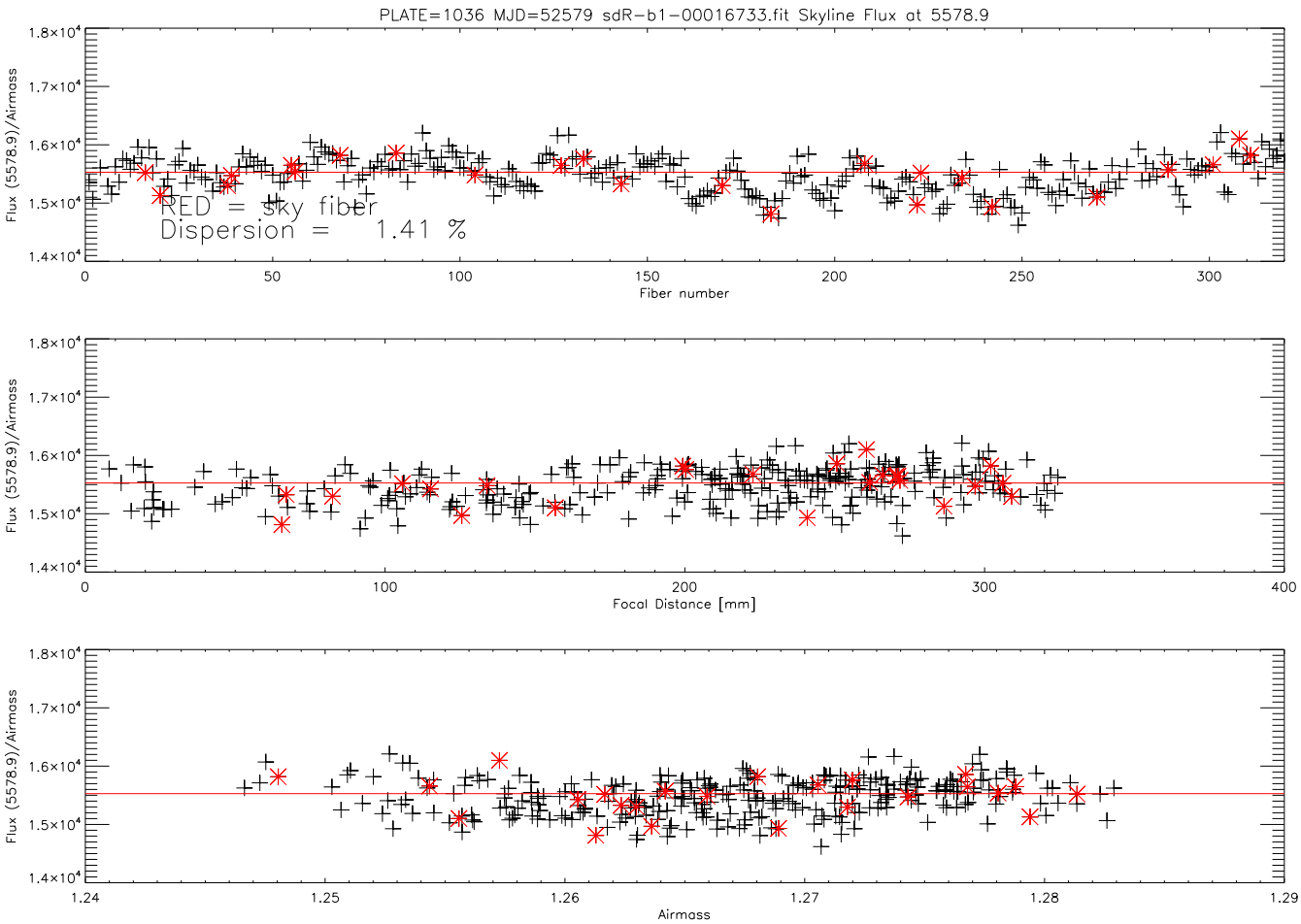

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

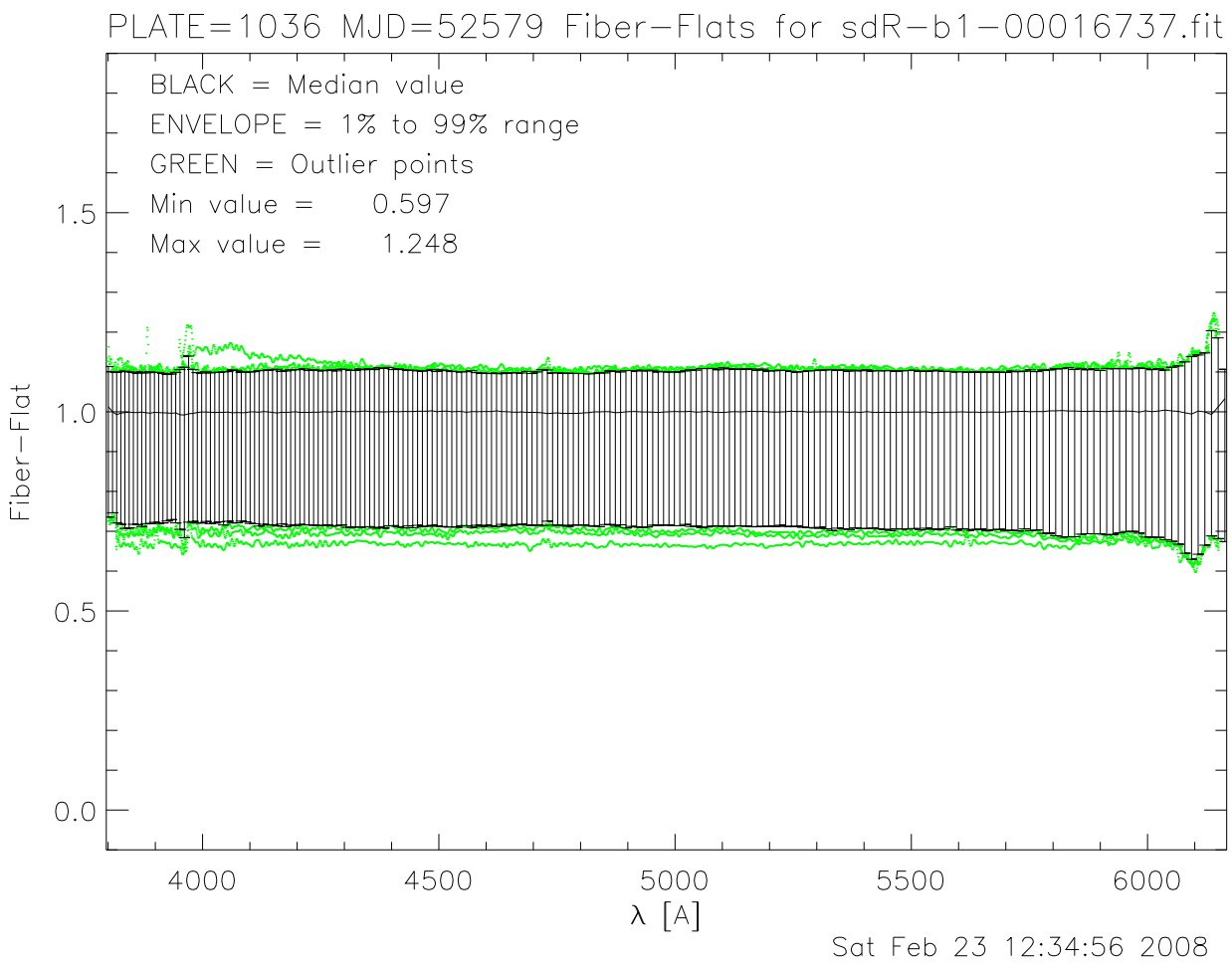

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

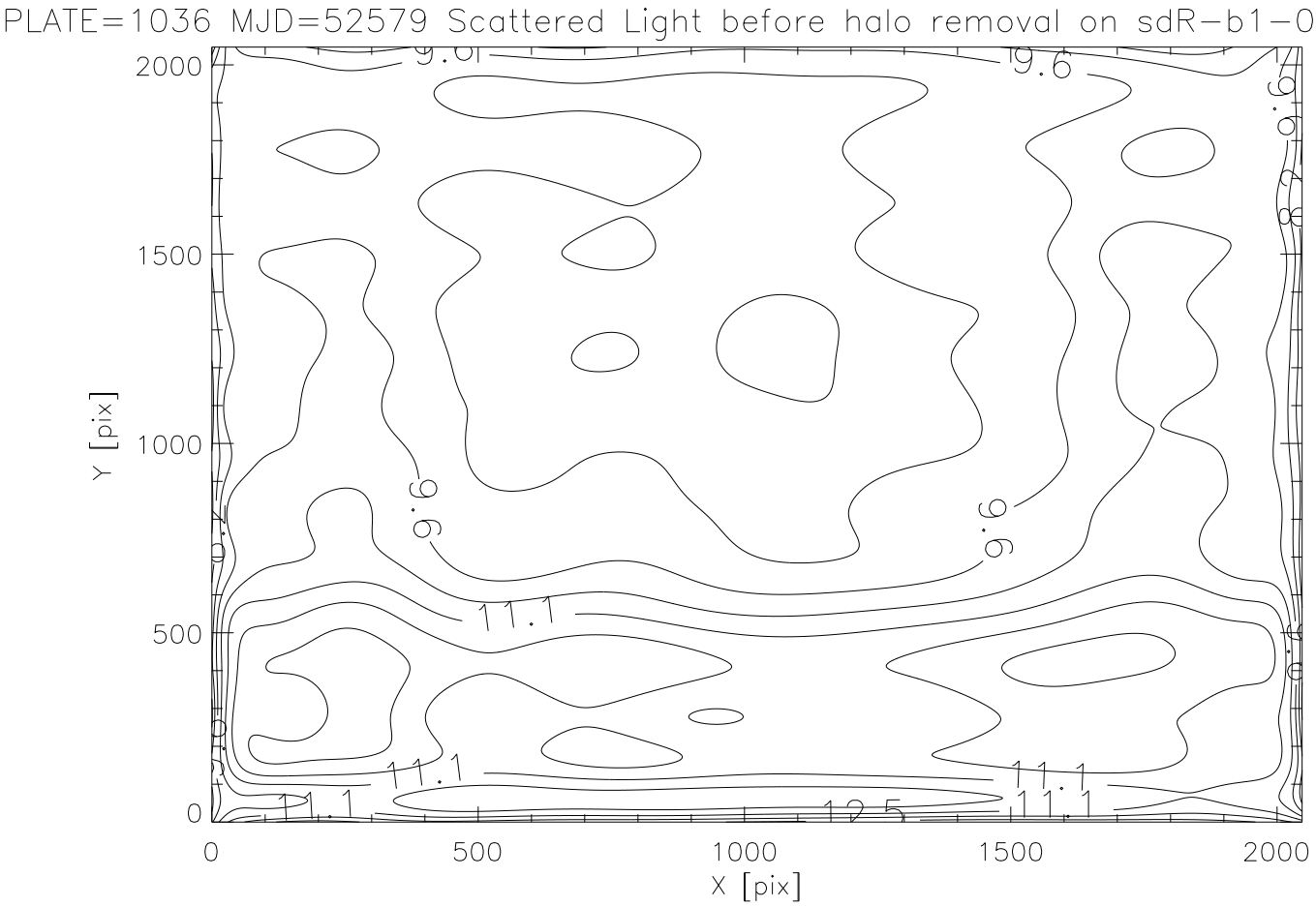

PLATE=1036 MJD=52579 sdR-b1-00016733.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

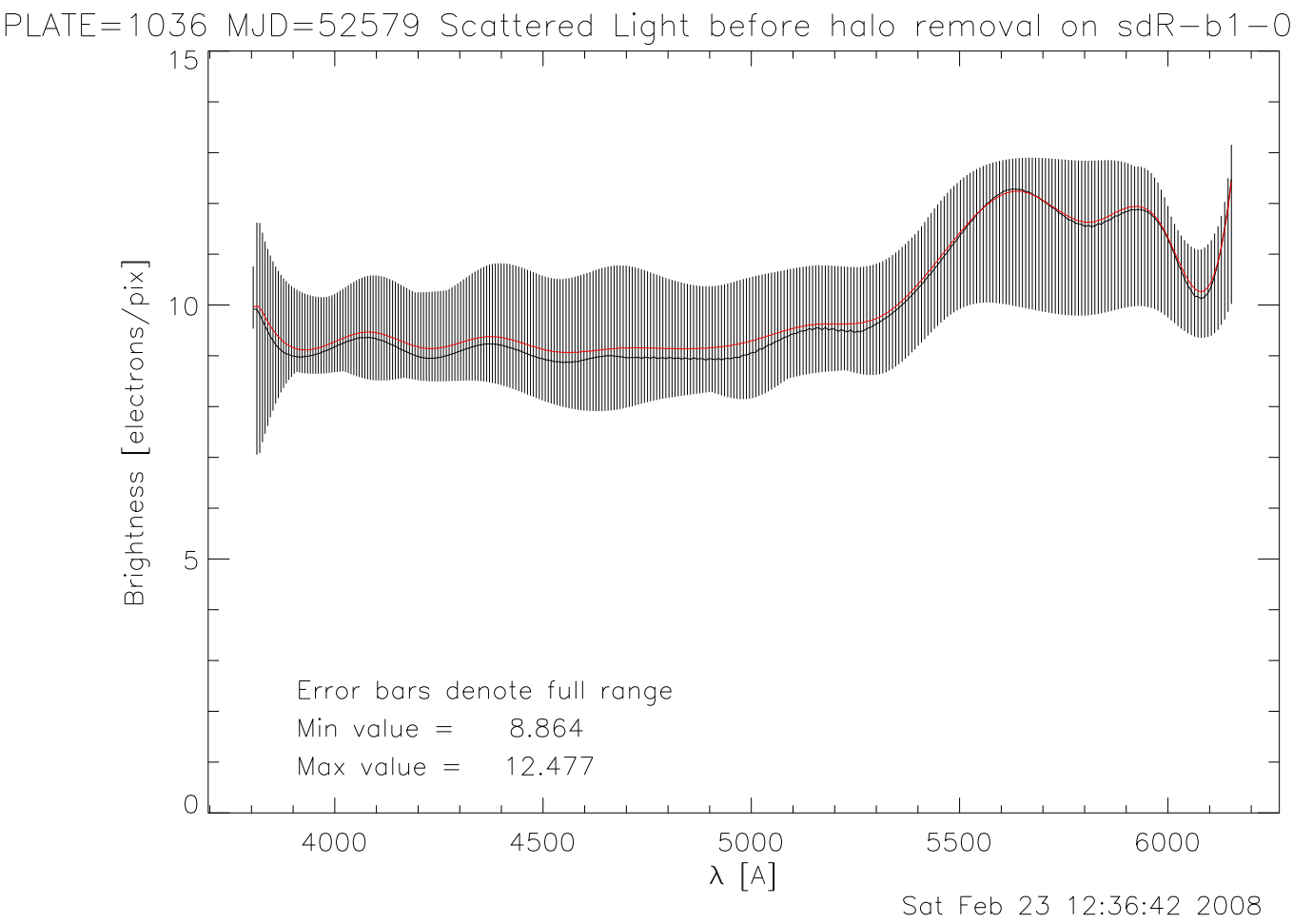

Number of sky fibers = 24
PLATE=1036 MJD=52579 sdR-b1-00016733.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

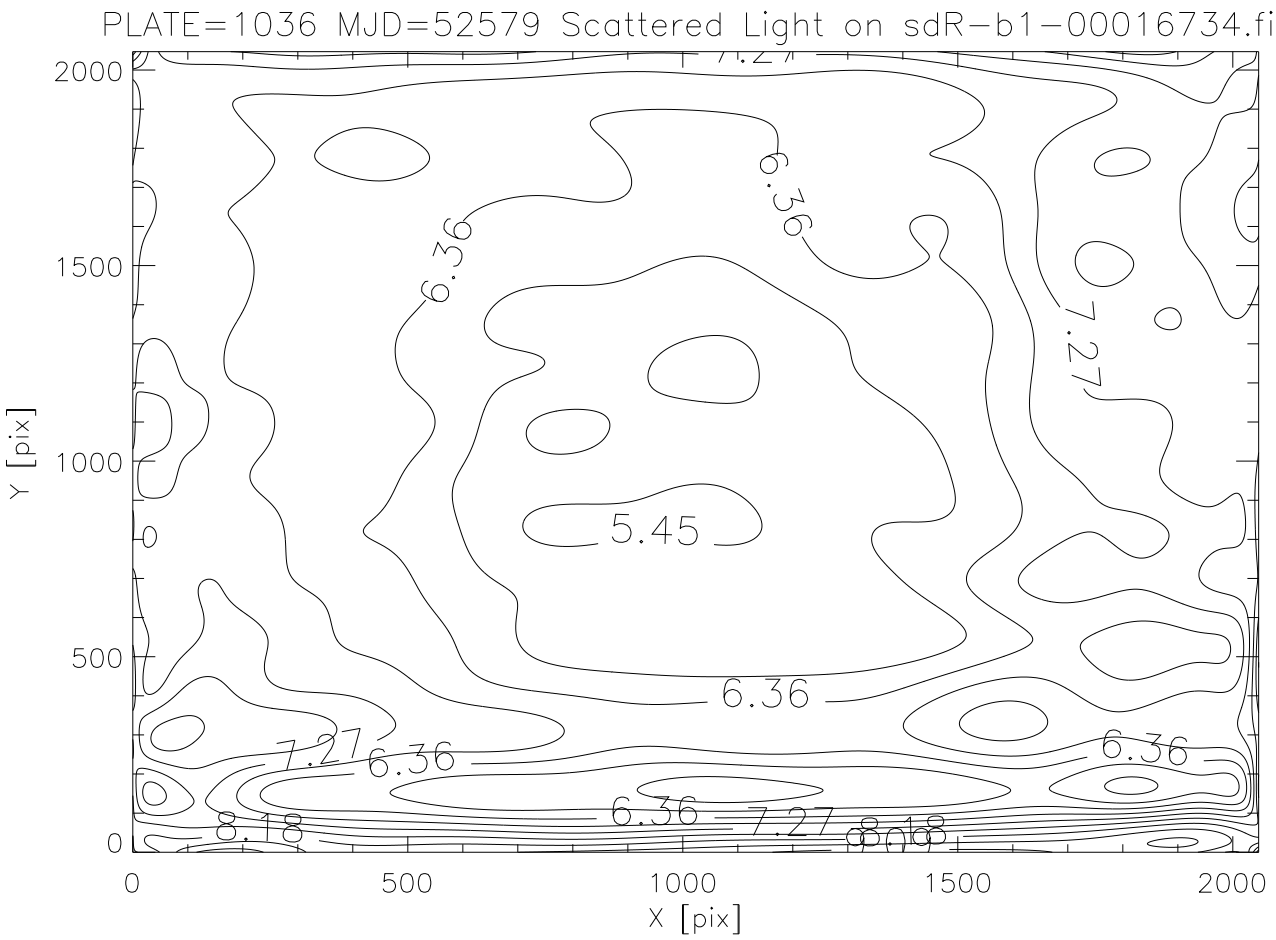

PLATE=1036 MJD=52579 sdR-b1-00016733.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.99 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

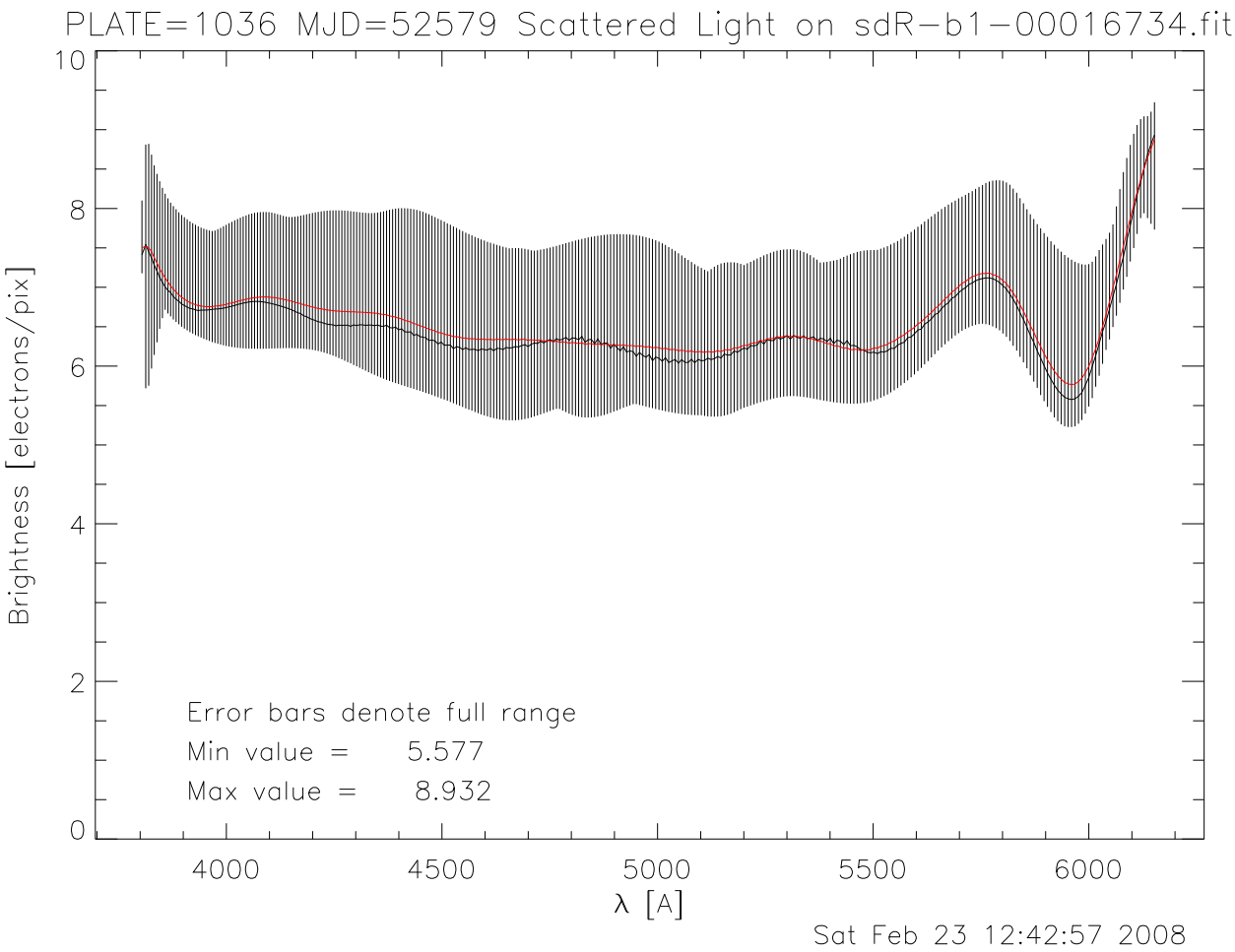

PLATE=1036 MJD=52579 sdR-b1-00016733.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.41 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

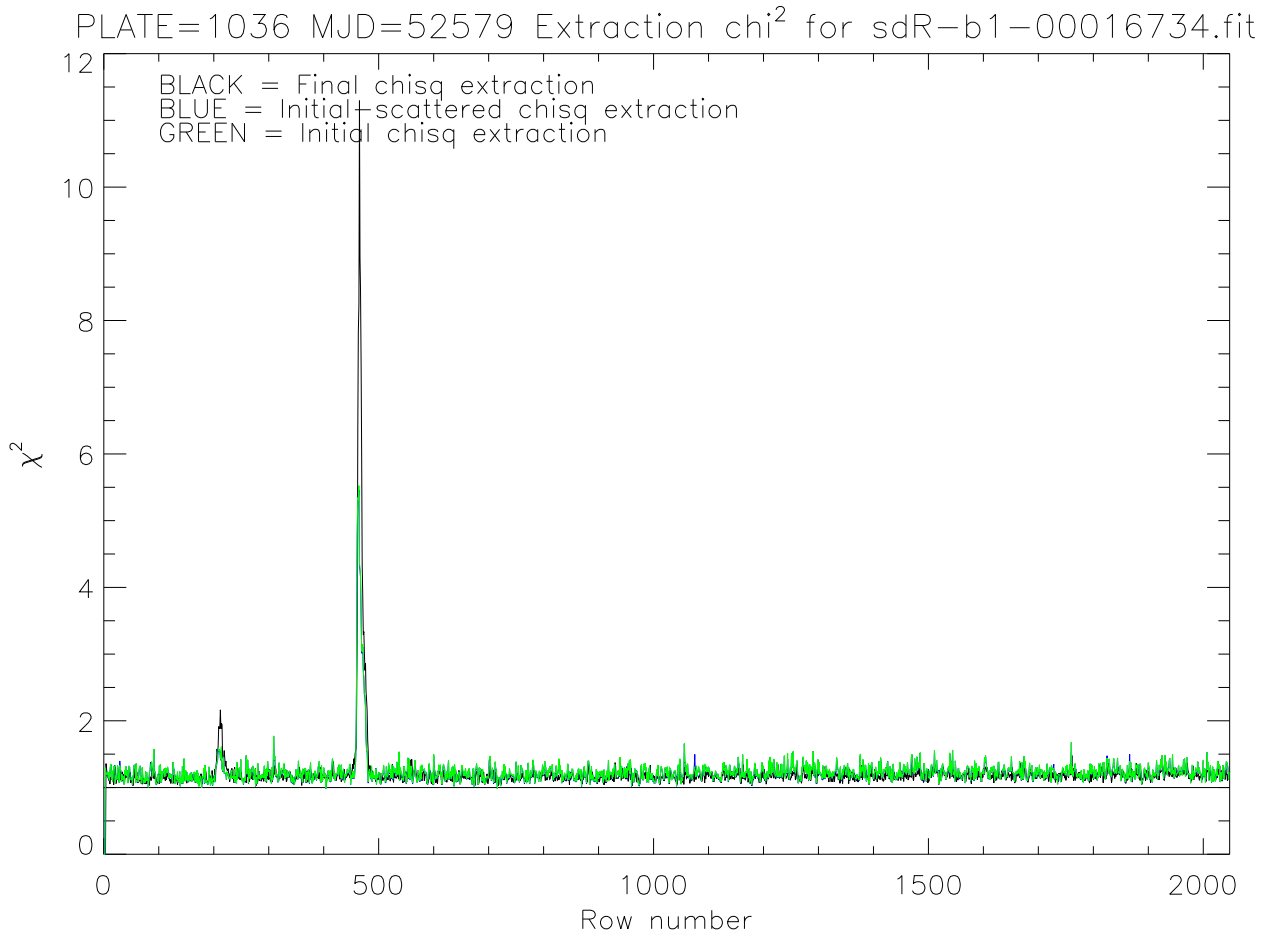

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b1-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.597
Max value = 1.248
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:34:56 2008

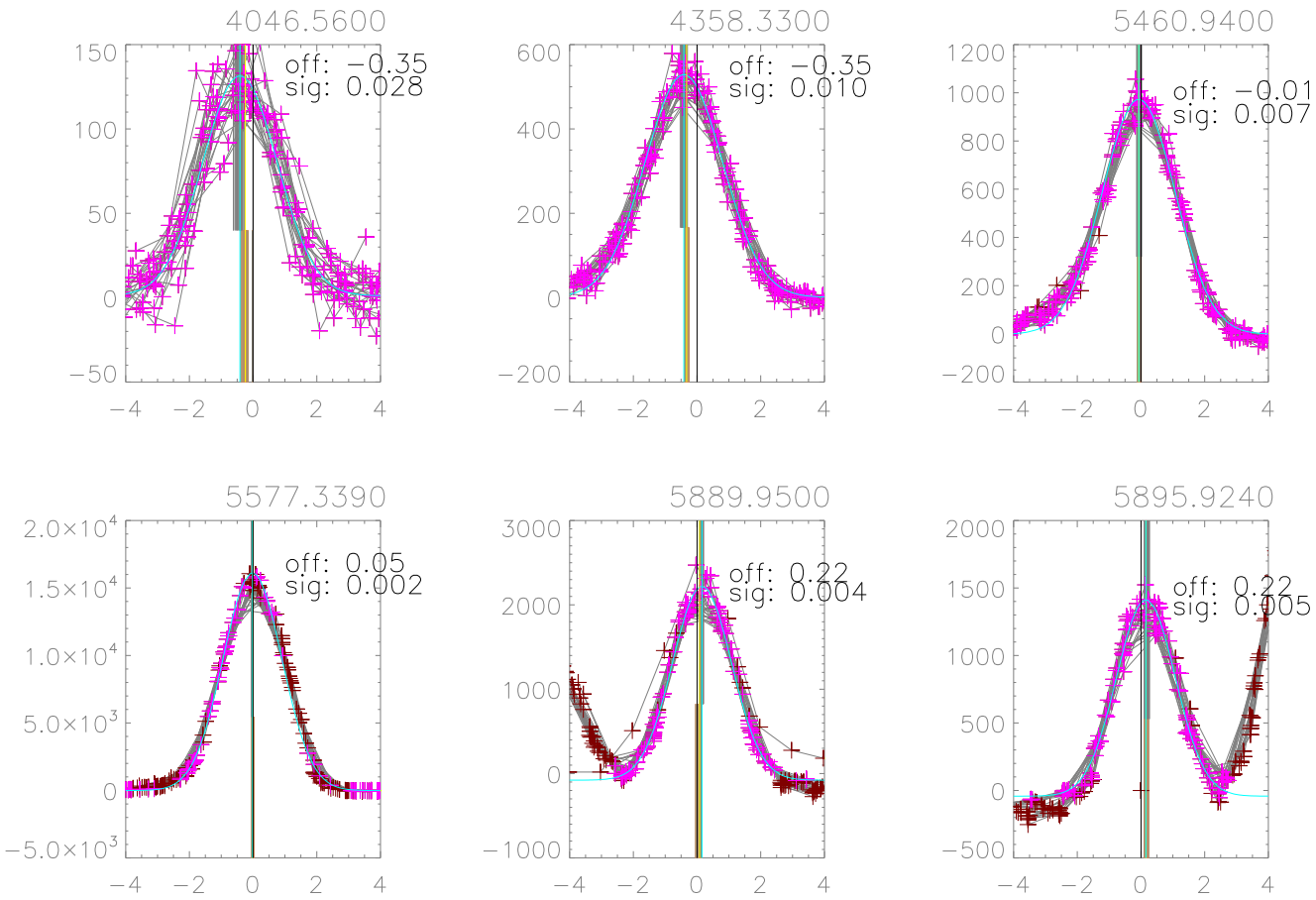

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016734.f
9.6
11.1
12.5
Y [pix]
X [pix]
0
500
1000
1500
2000

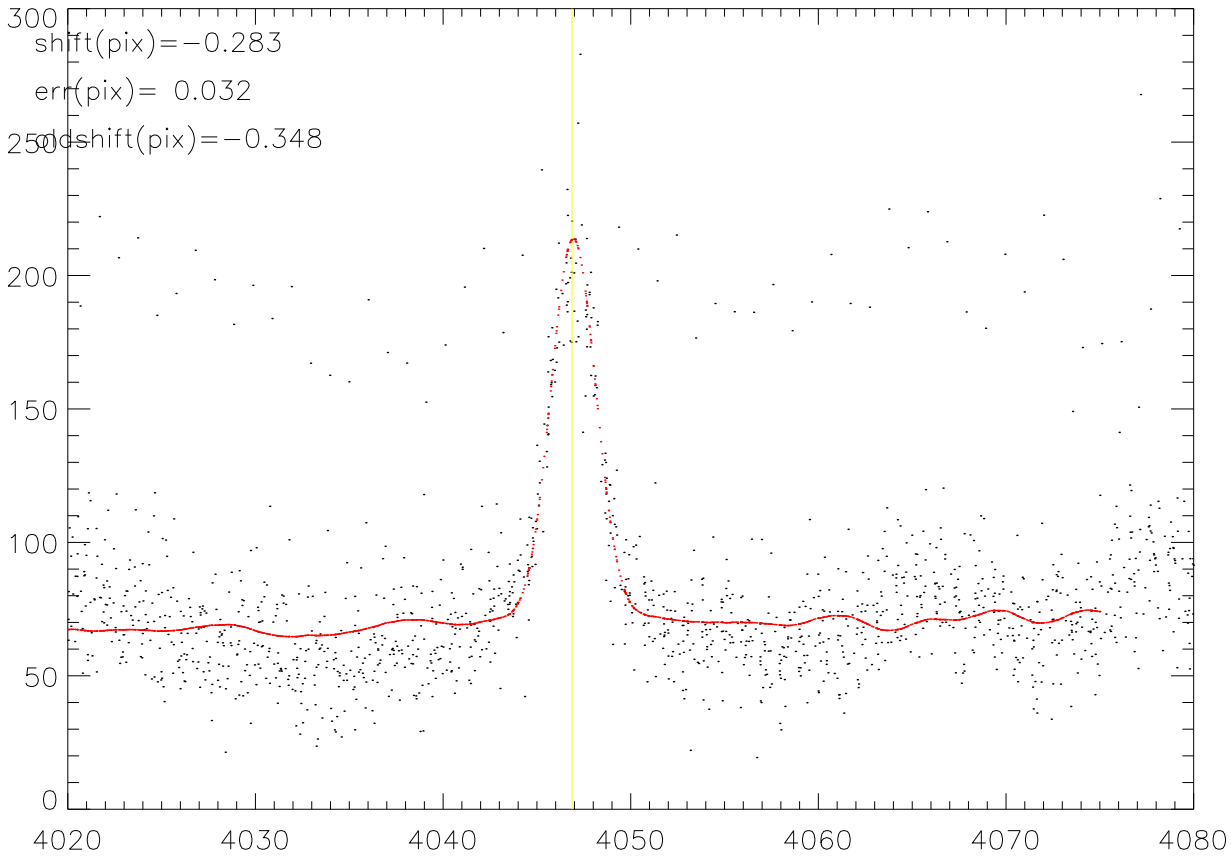

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016734.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.864
Max value = 12.477
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:36:42 2008

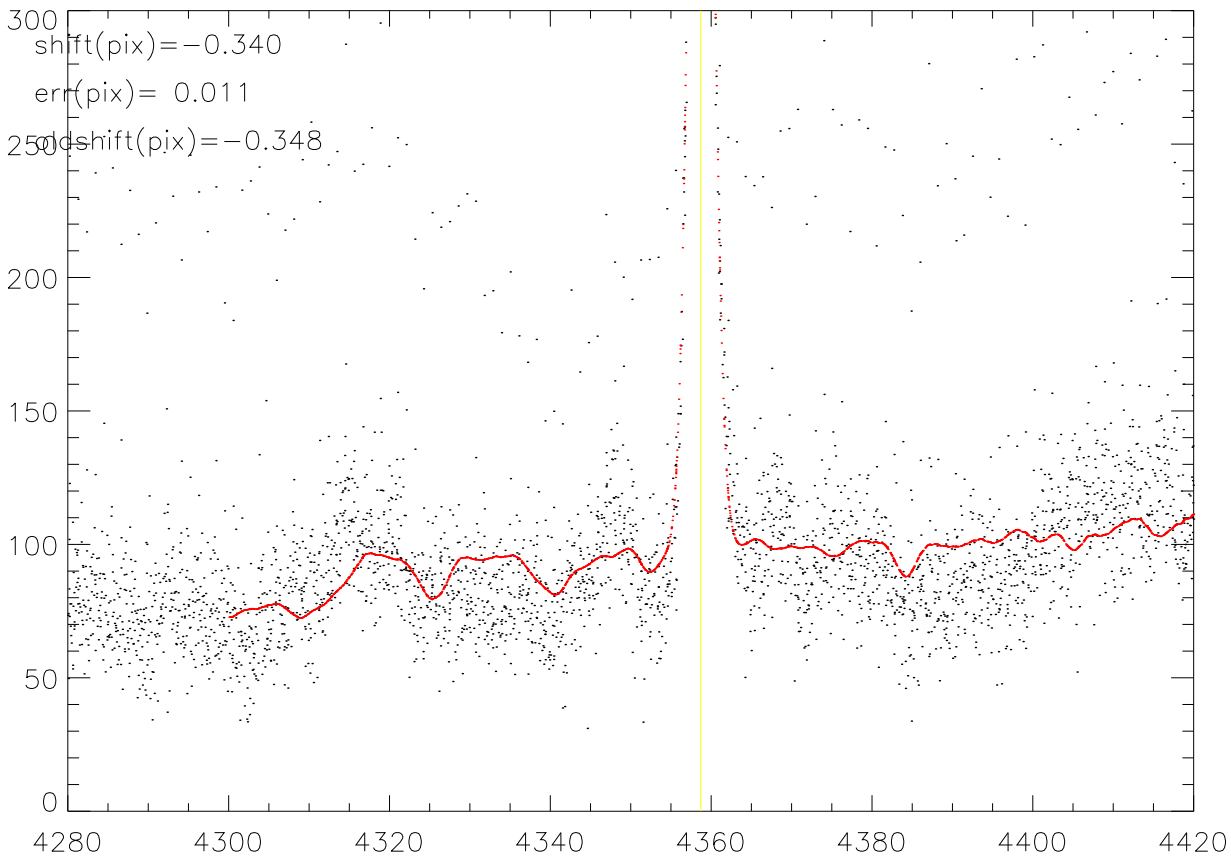

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016734.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
7.27
5.45
8.18

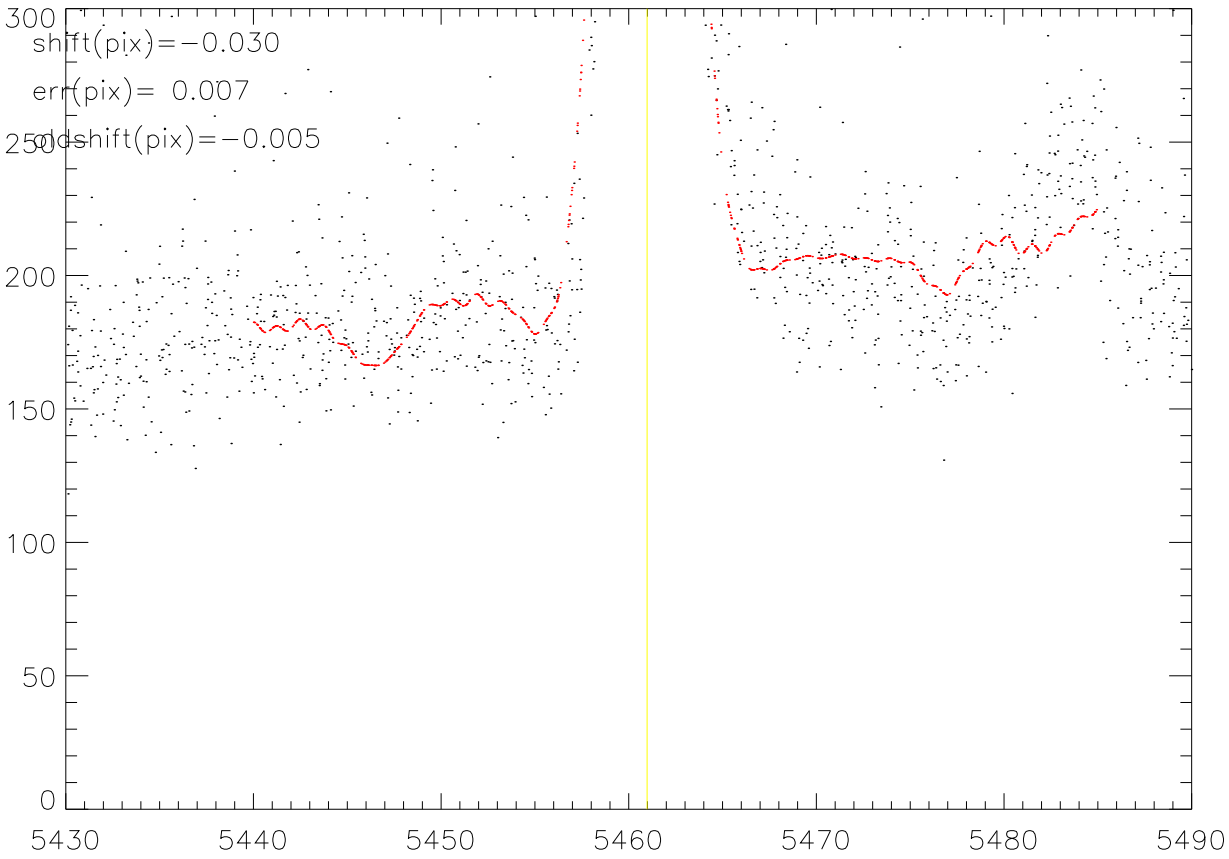

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016734.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.577
Max value = 8.932
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:42:57 2008

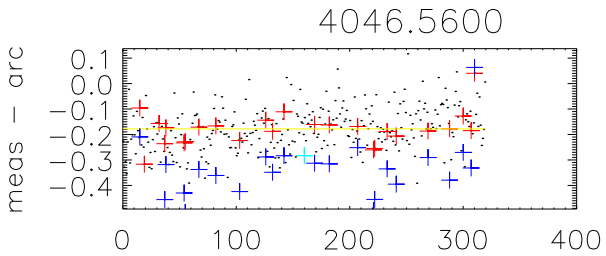

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b1-00016734.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

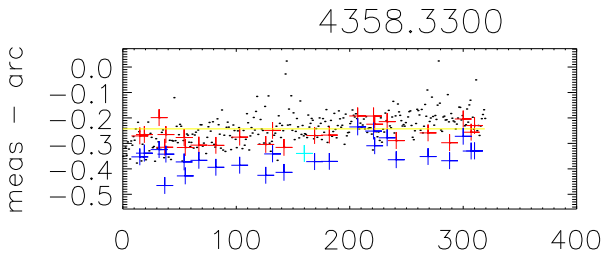

4046.5600
off: −0.35
sig: 0.028
4358.3300
off: −0.35
sig: 0.010
5460.9400
off: −0.01
sig: 0.007
5577.3390
off: 0.05
sig: 0.002
5889.9500
off: 0.22
sig: 0.004
5895.9240
off: 0.22
sig: 0.005

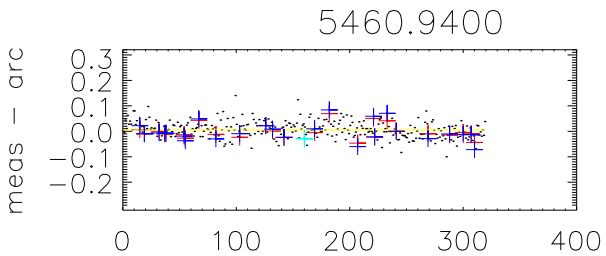

shift(pix)=−0.283
err(pix)= 0.032
oldshift(pix)=−0.348
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

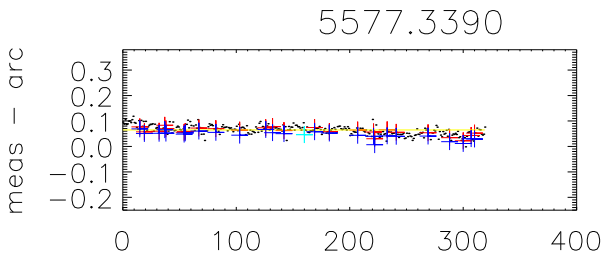

shift(pix)=−0.340
err(pix)= 0.011
oldshift(pix)=−0.348
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

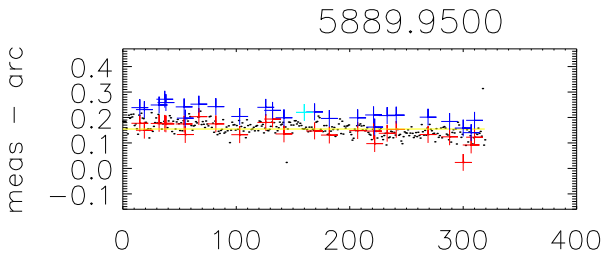

shift(pix)=−0.030
err(pix)= 0.007
oldshift(pix)=−0.005
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

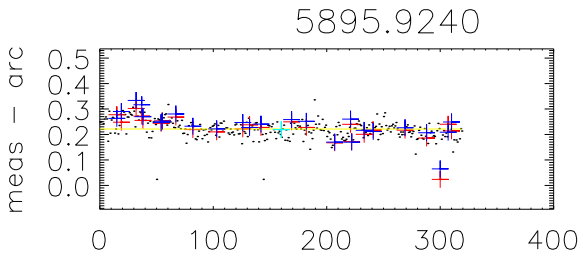

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

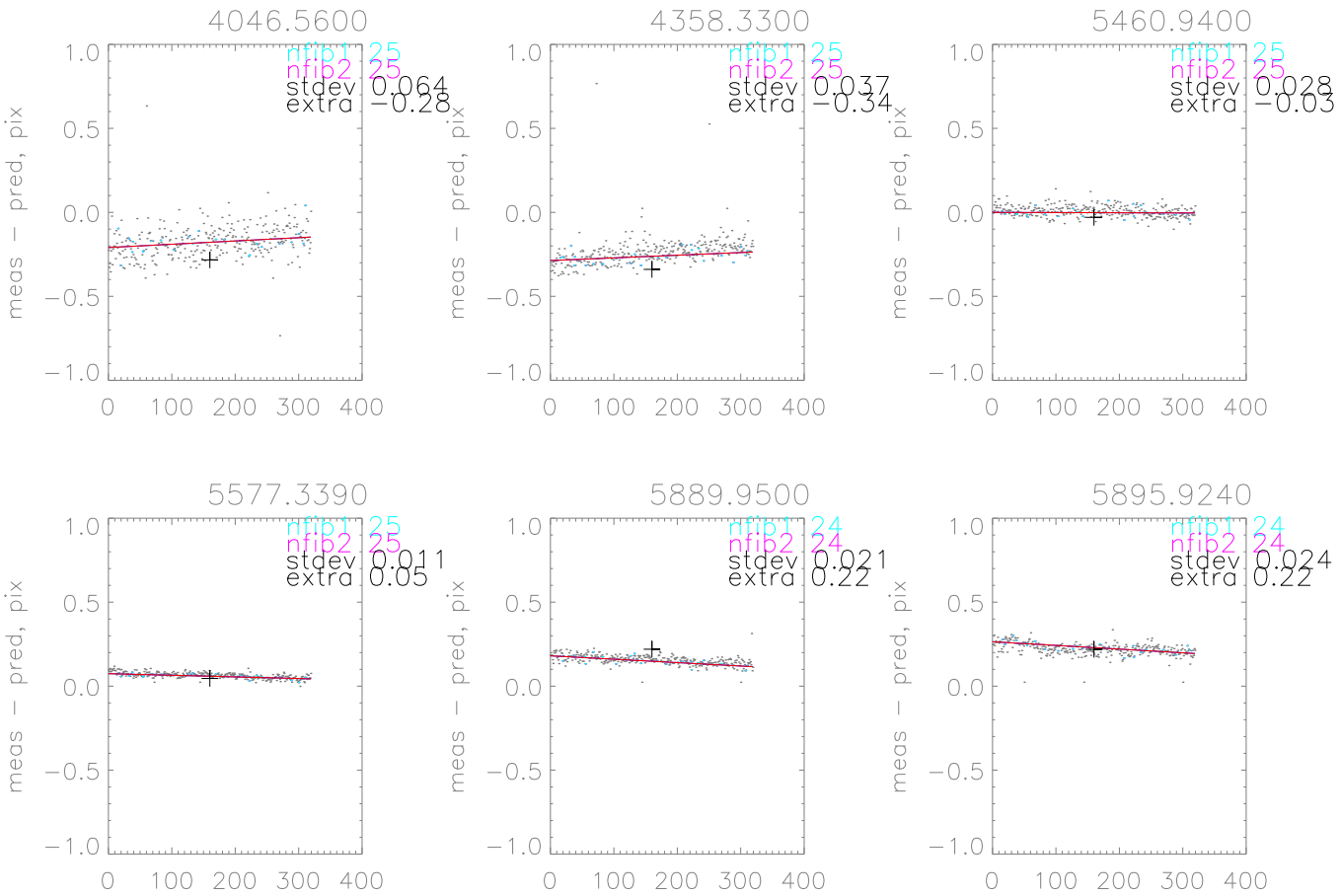

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

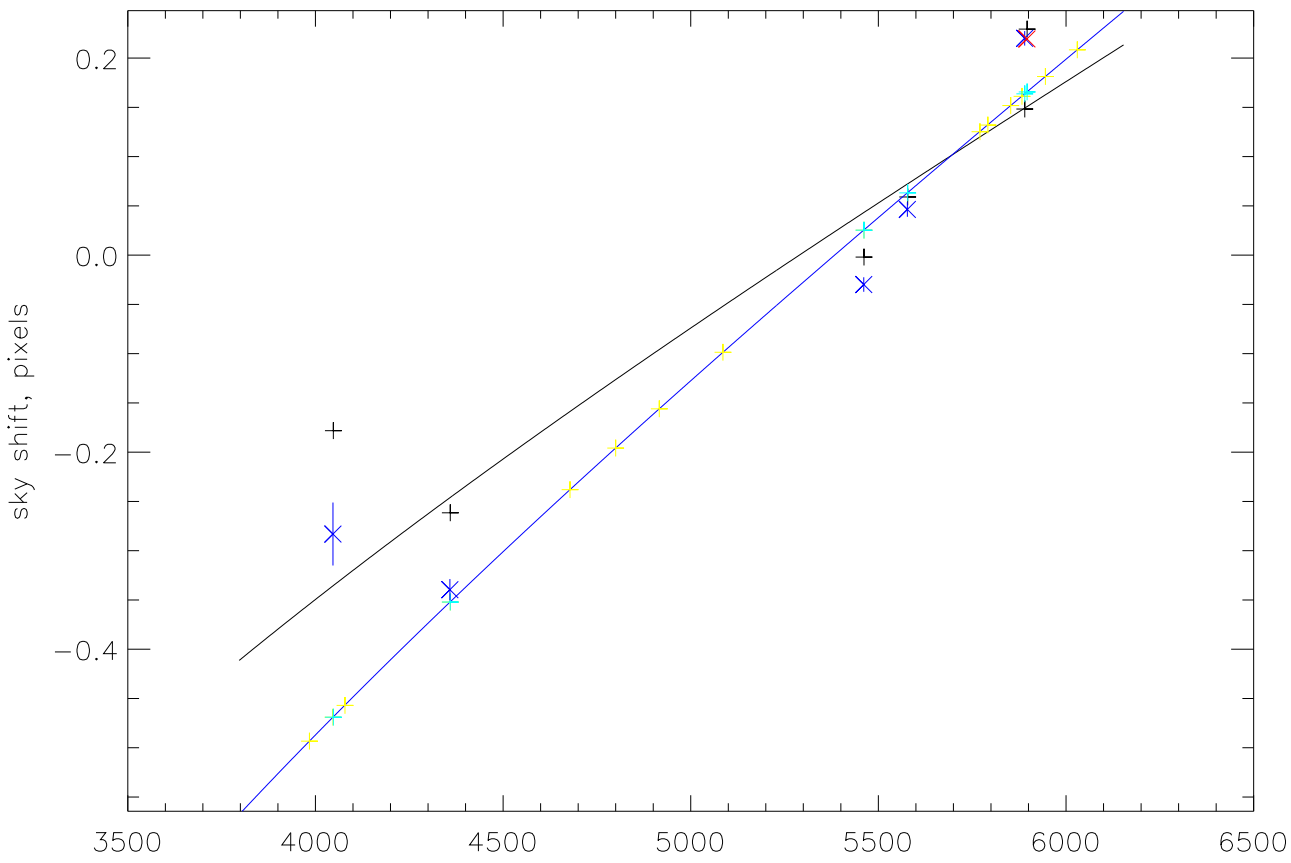

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

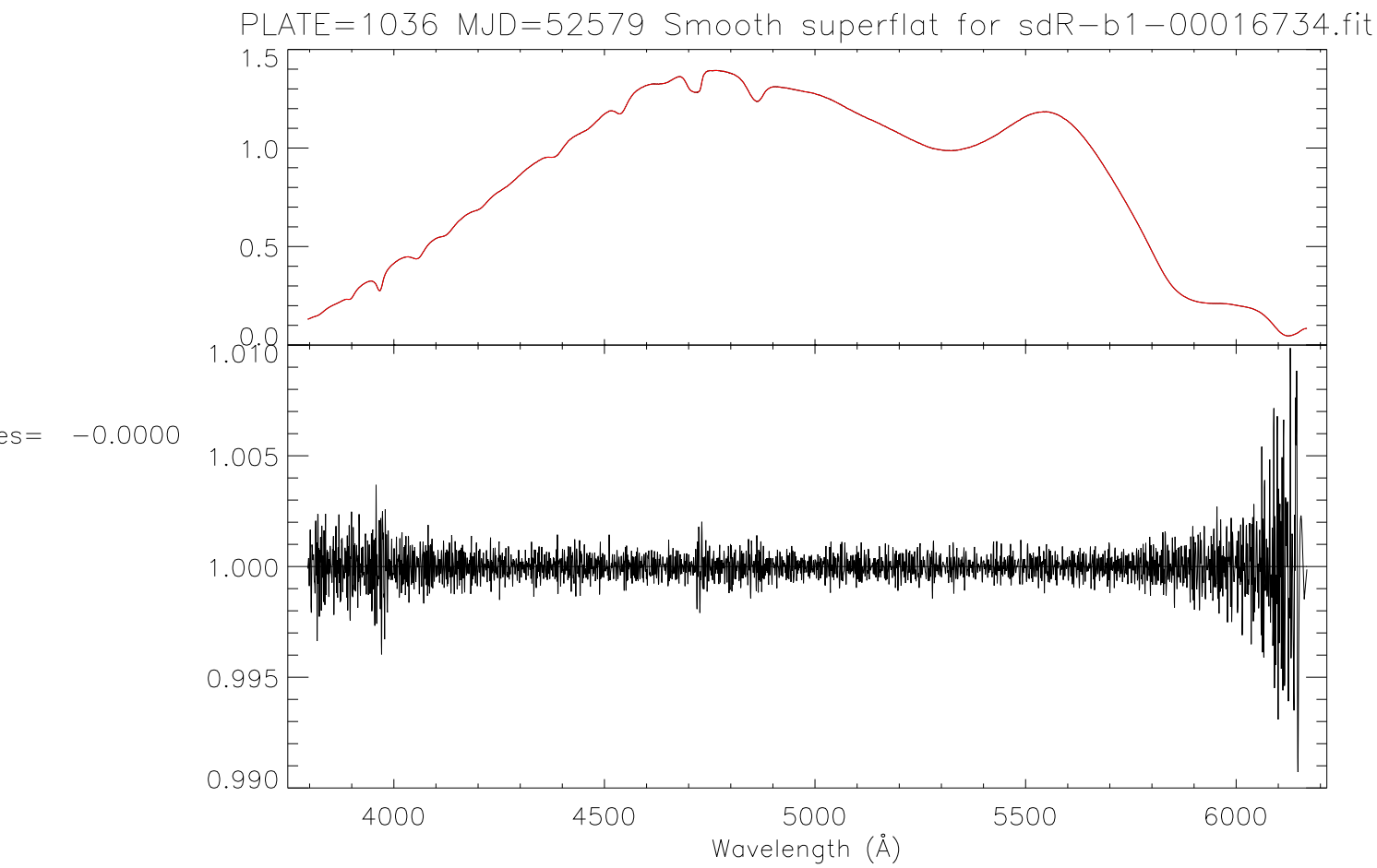

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

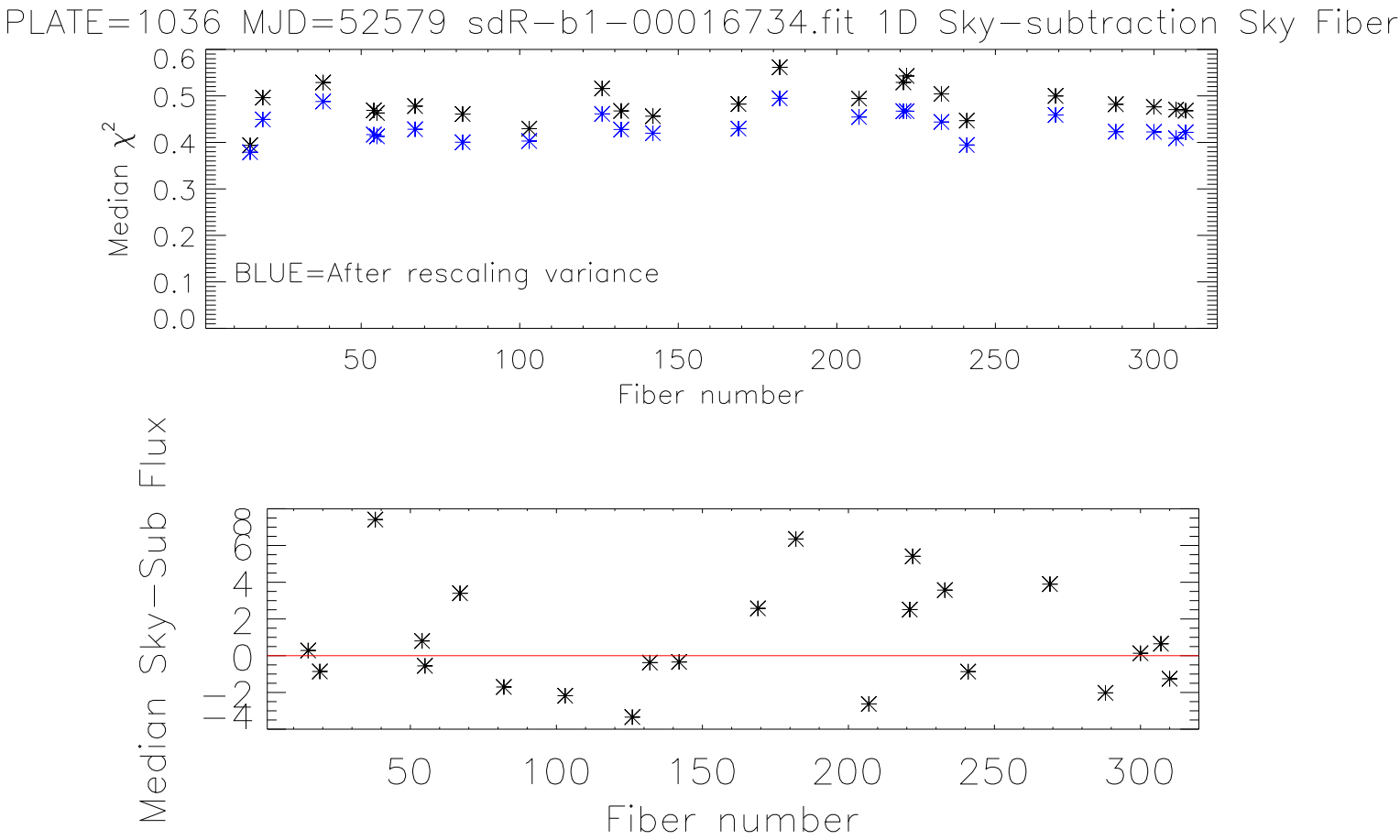

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

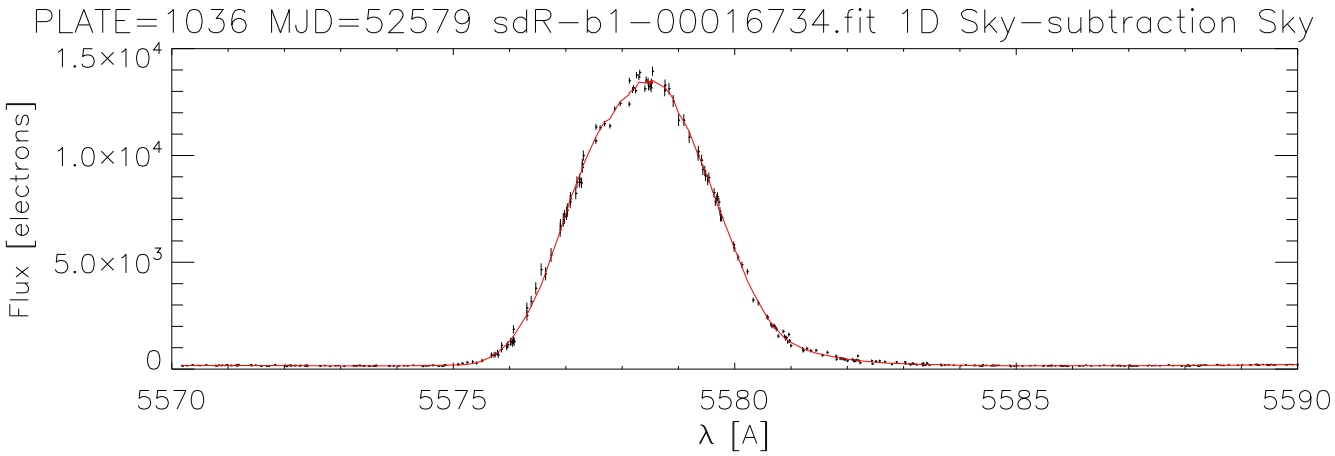

4046.5600
nfib1 25
nfib2 25
stdev 0.064
extra −0.28
4358.3300
nfib1 25
nfib2 25
stdev 0.037
extra −0.34
5460.9400
nfib1 25
nfib2 25
stdev 0.028
extra −0.03
5577.3390
nfib1 25
nfib2 25
stdev 0.011
extra 0.05
5889.9500
nfib1 24
nfib2 24
stdev 0.021
extra 0.22
5895.9240
nfib1 24
nfib2 24
stdev 0.024
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

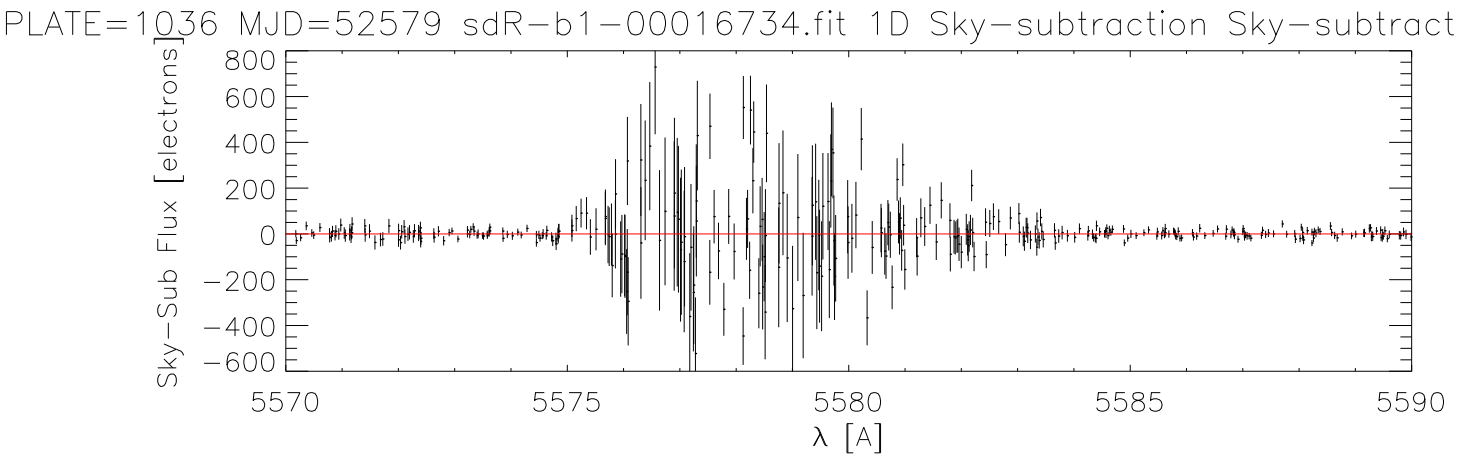

0.2
0.0
−0.2
−0.4
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

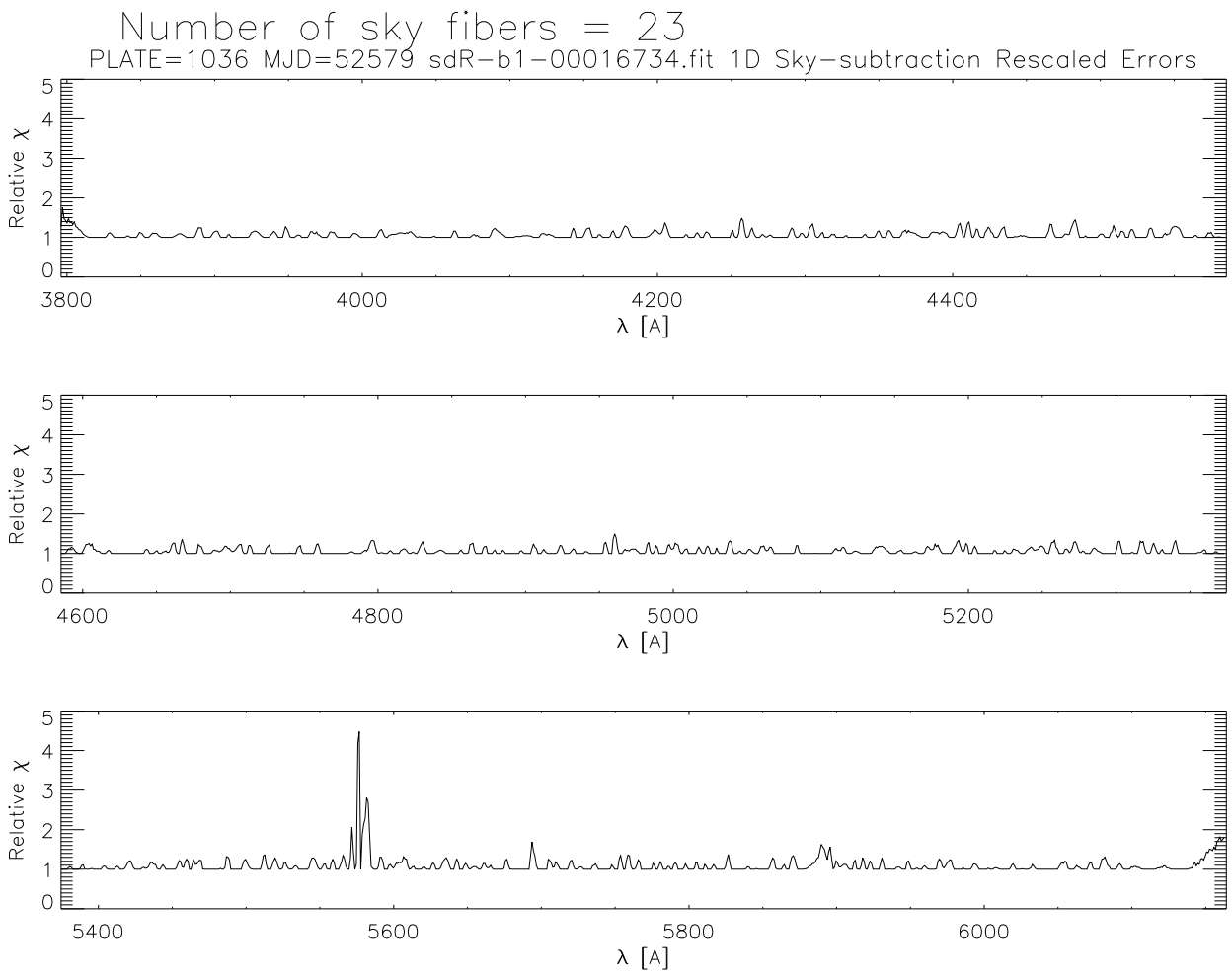

PLATE=1036 MJD=52579 Smooth superflat for sdR-b1-00016734.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

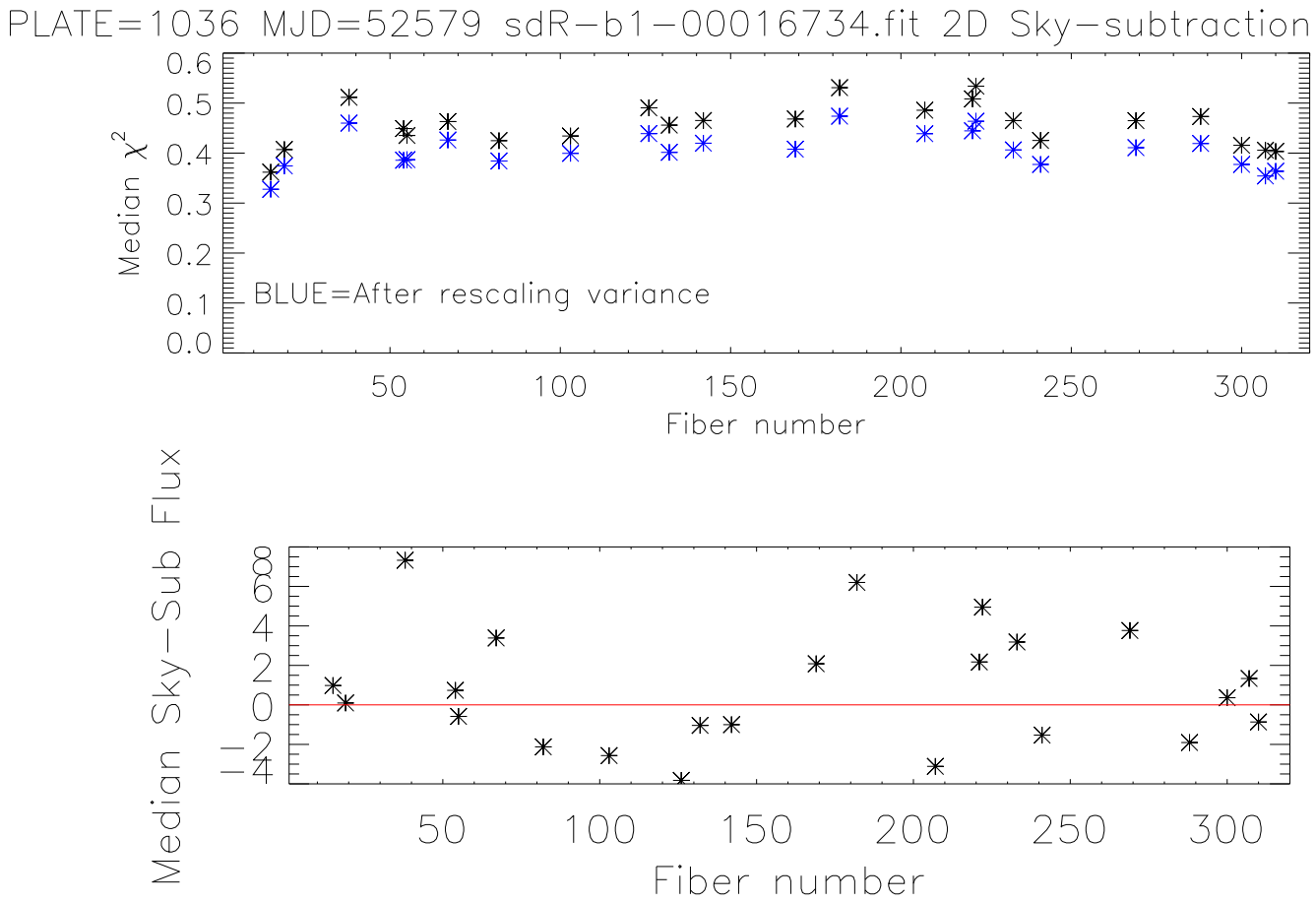
es= −0.0000

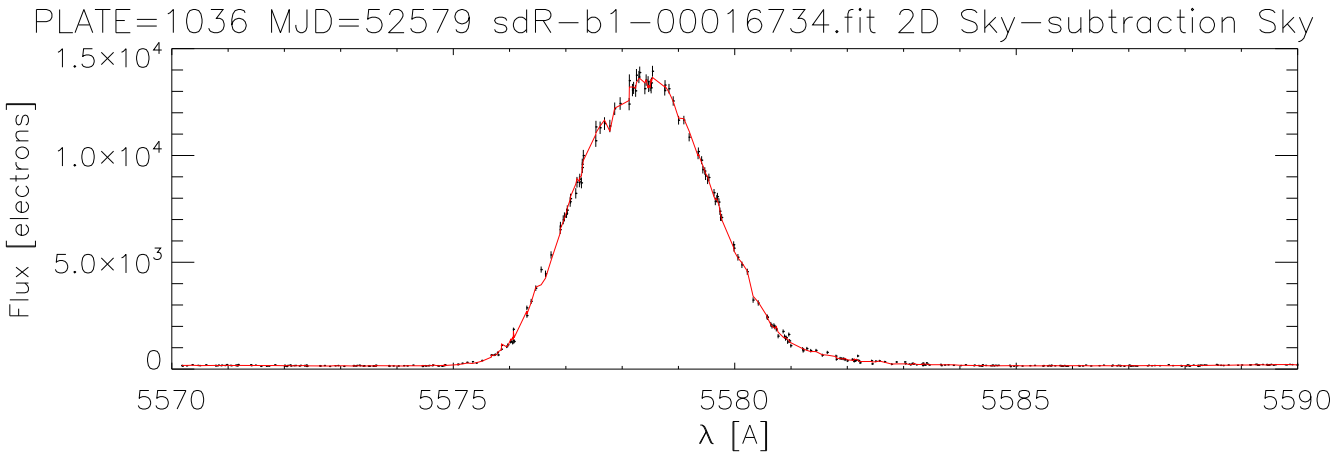

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

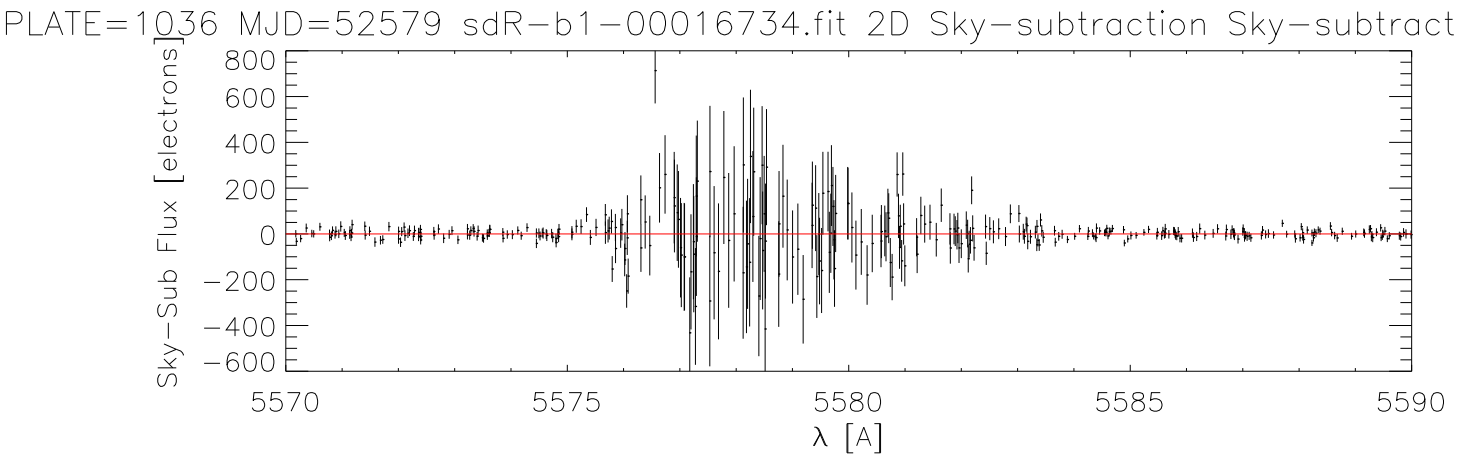

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

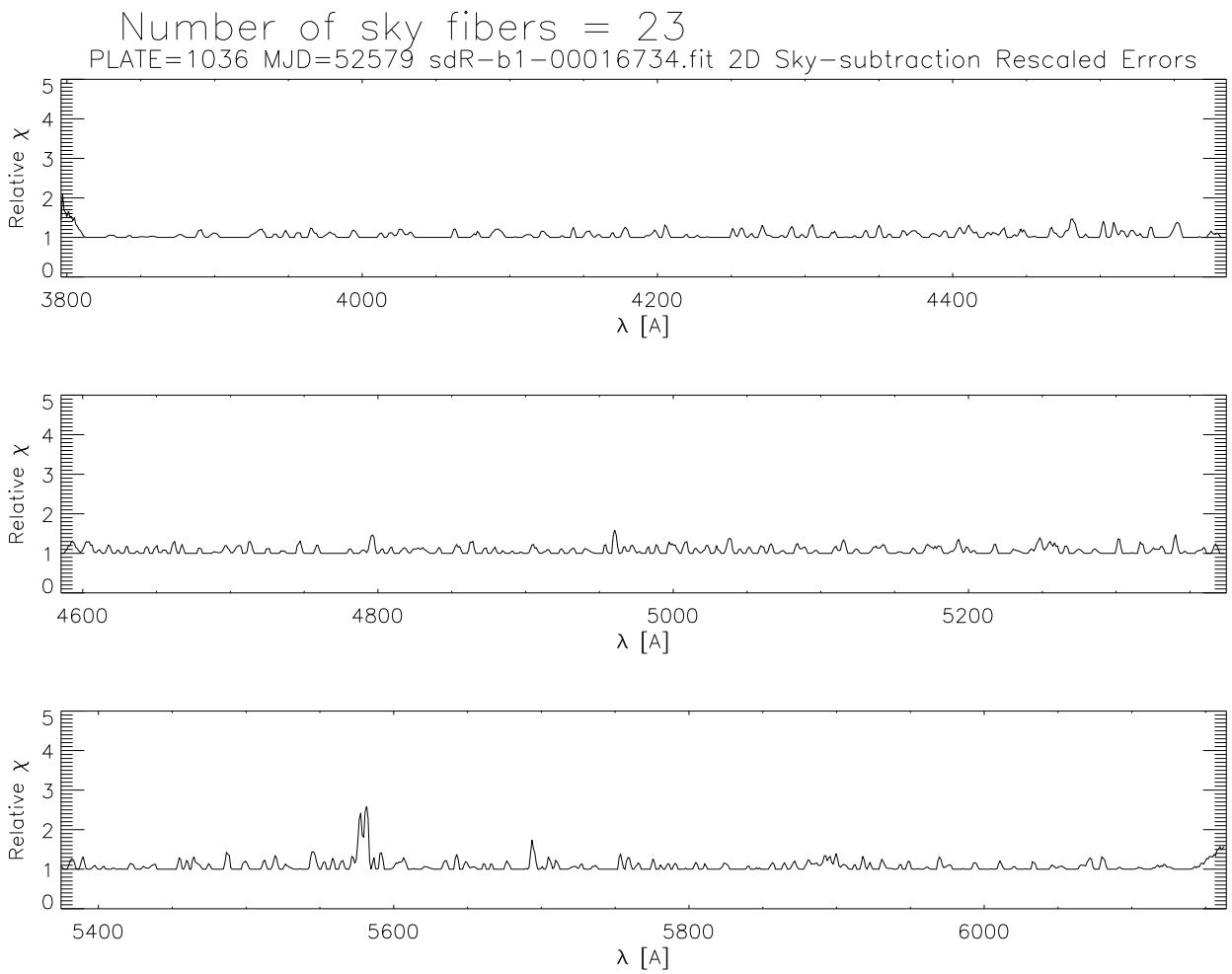

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

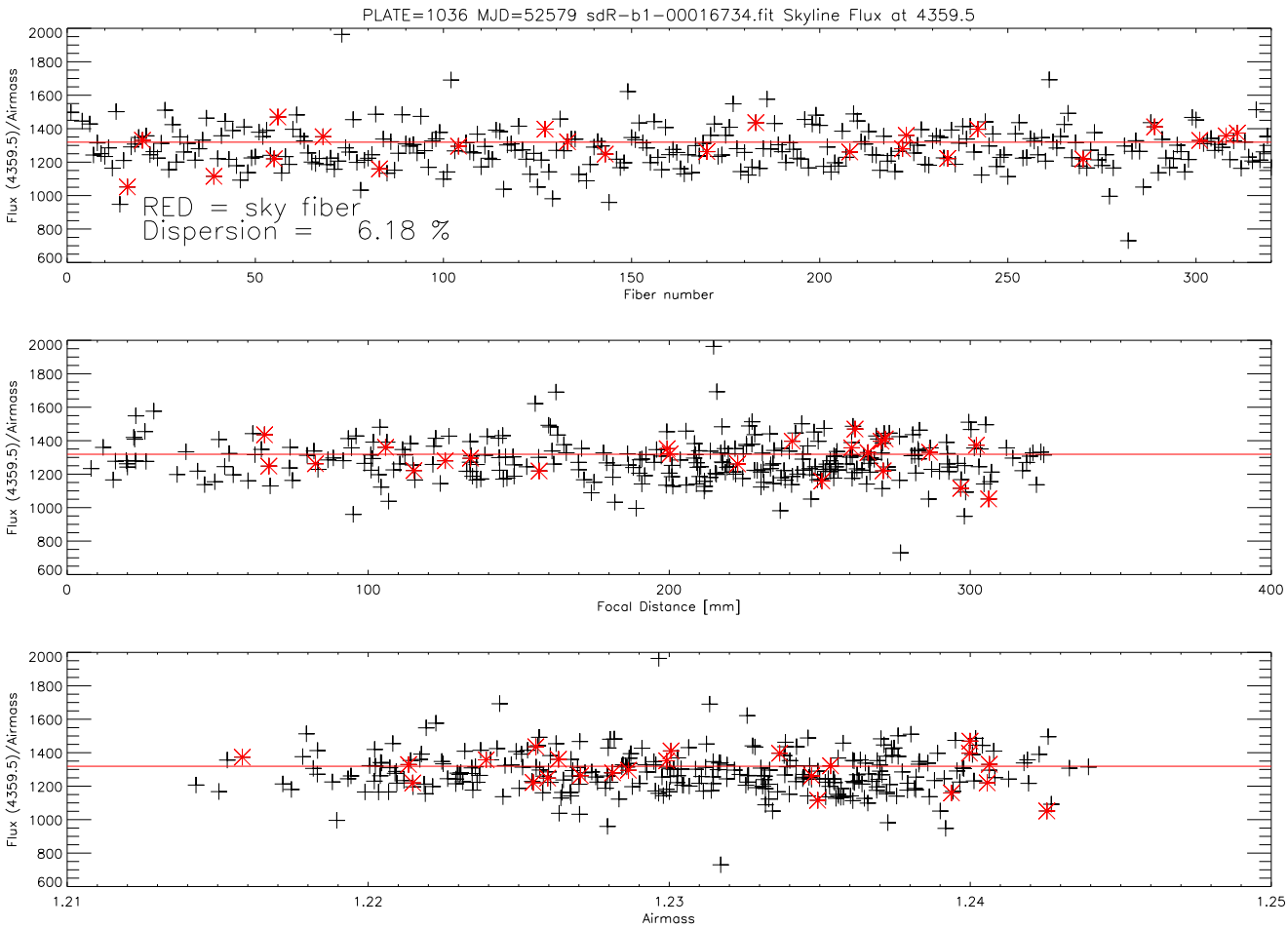

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016734.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

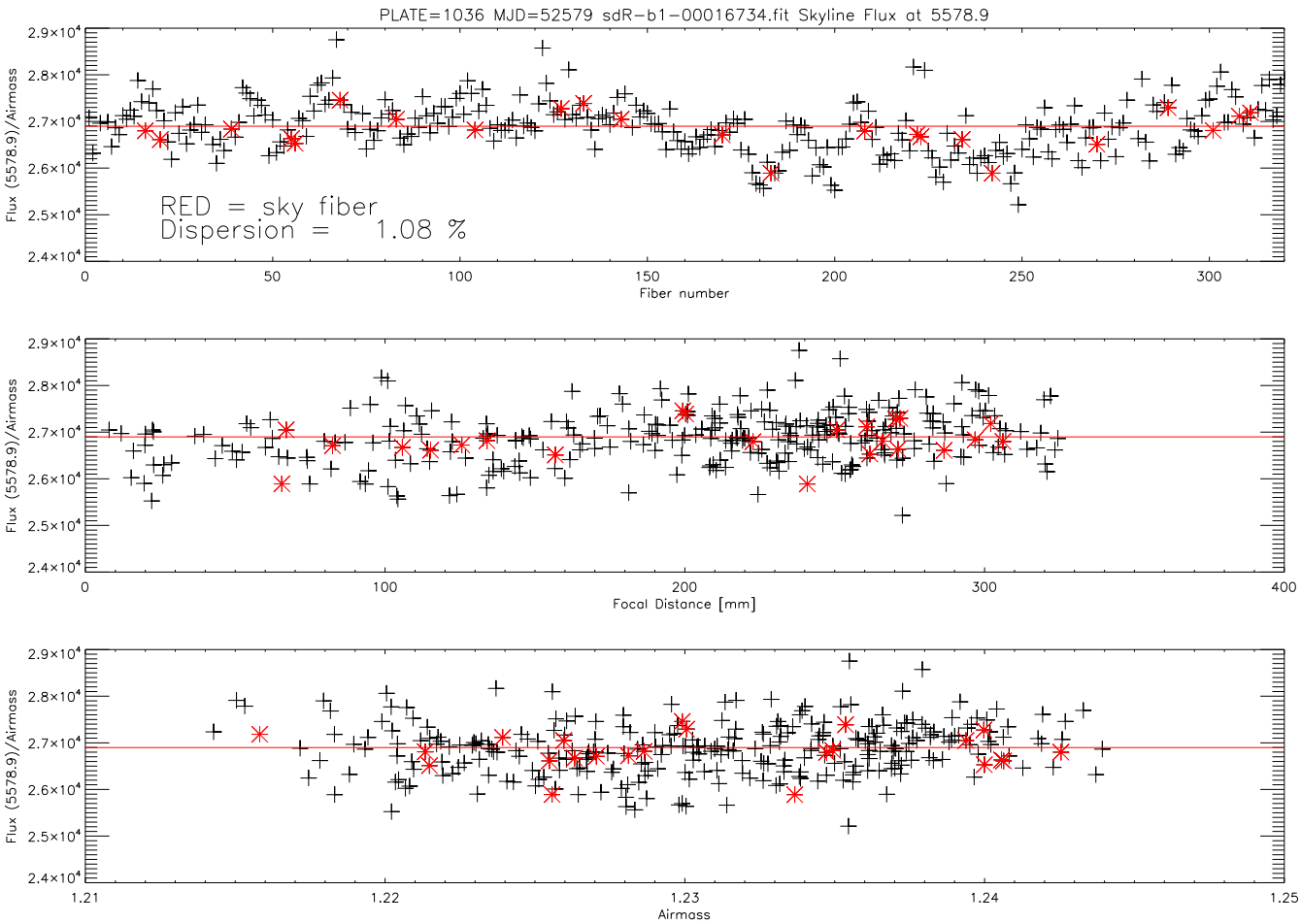

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

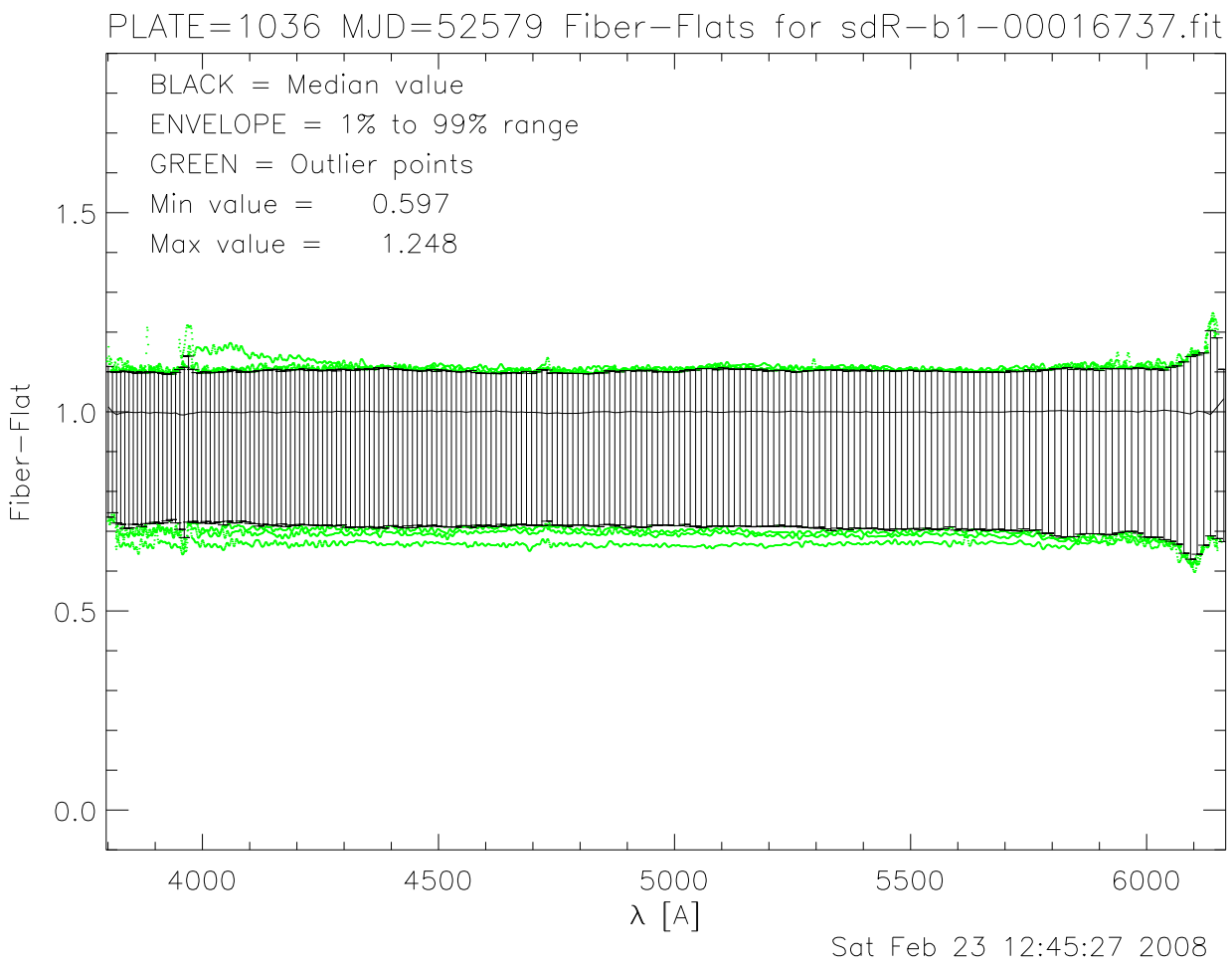

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

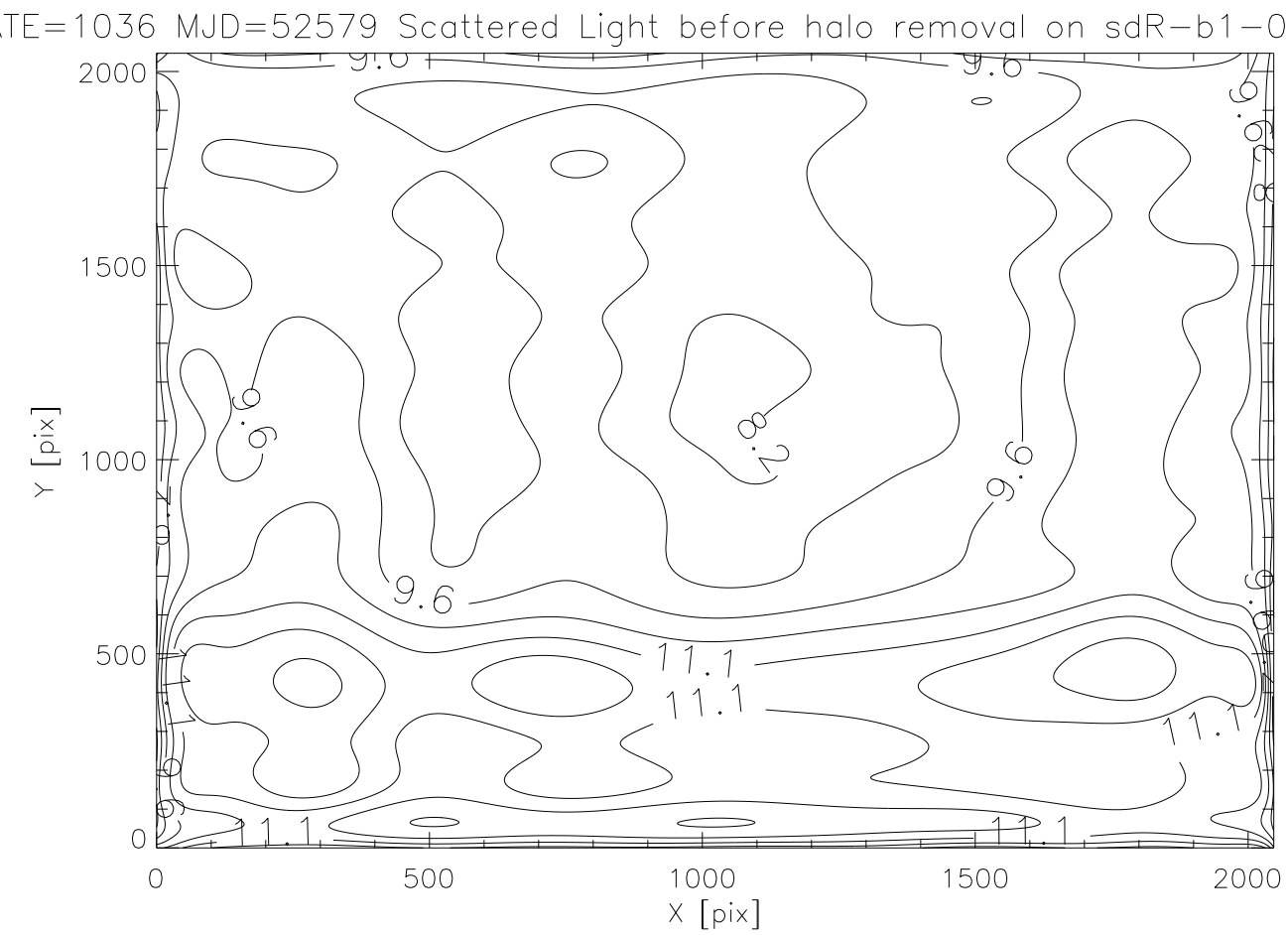

PLATE=1036 MJD=52579 sdR-b1-00016734.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

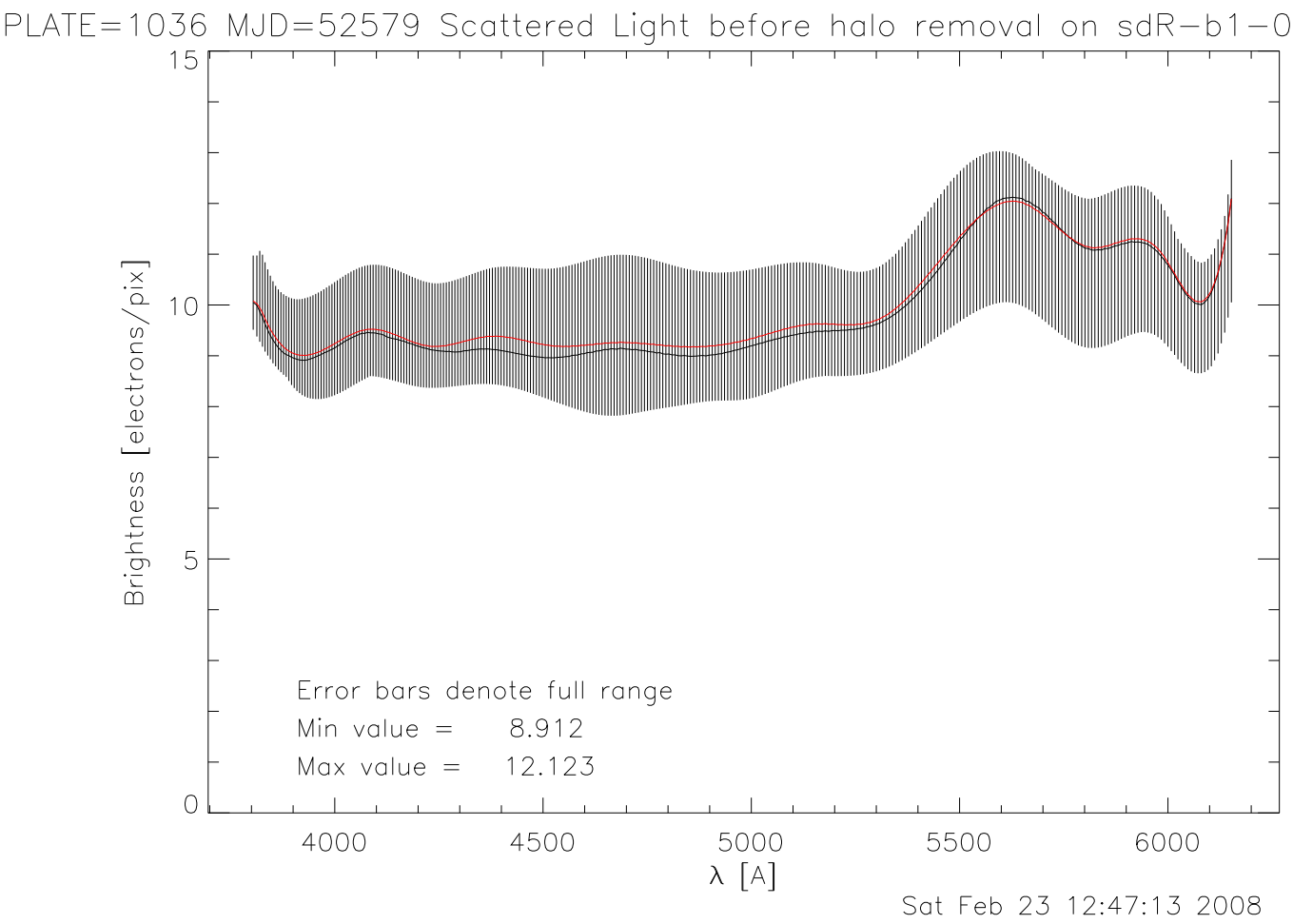

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016734.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

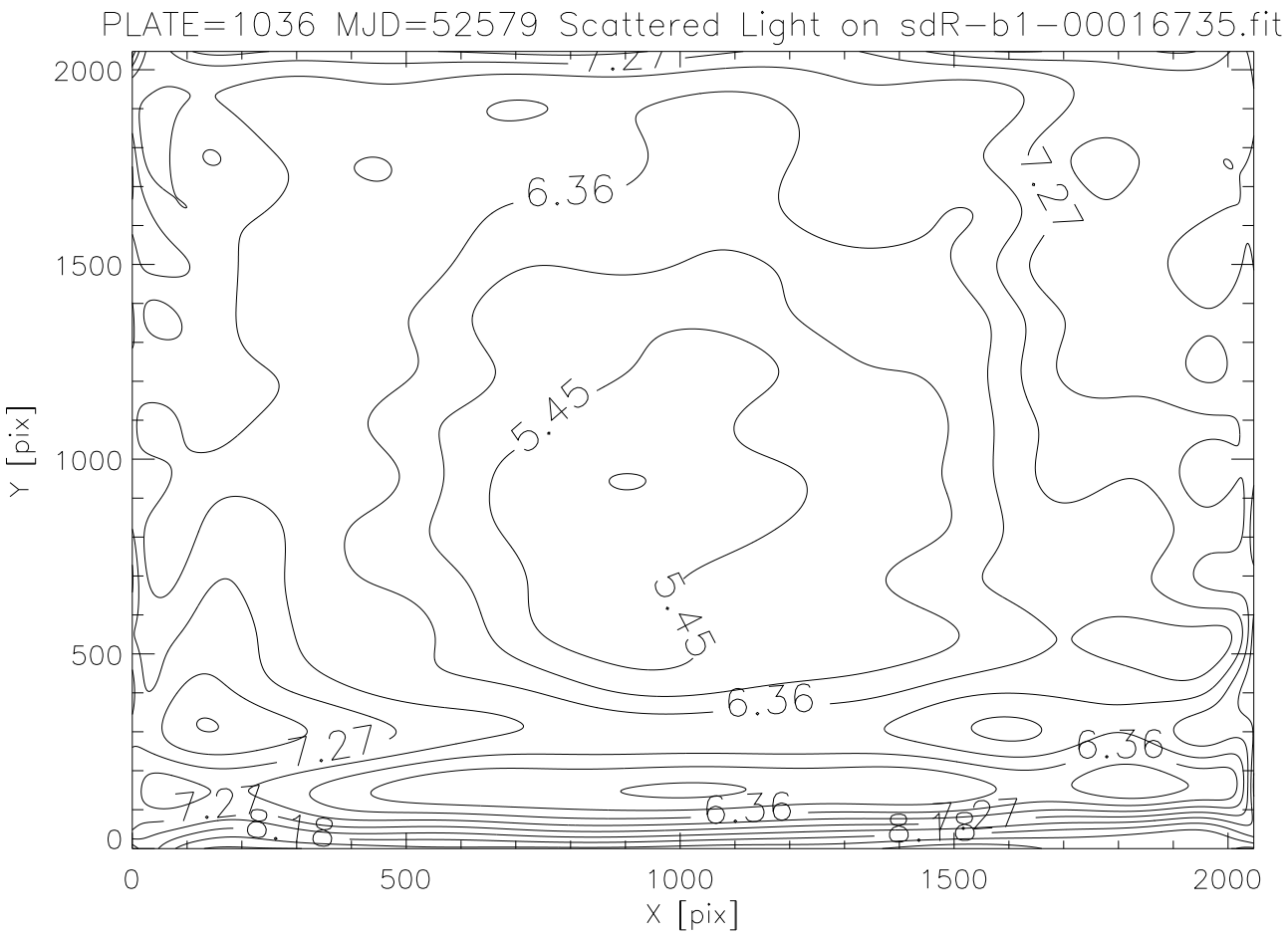

PLATE=1036 MJD=52579 sdR-b1-00016734.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.18 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

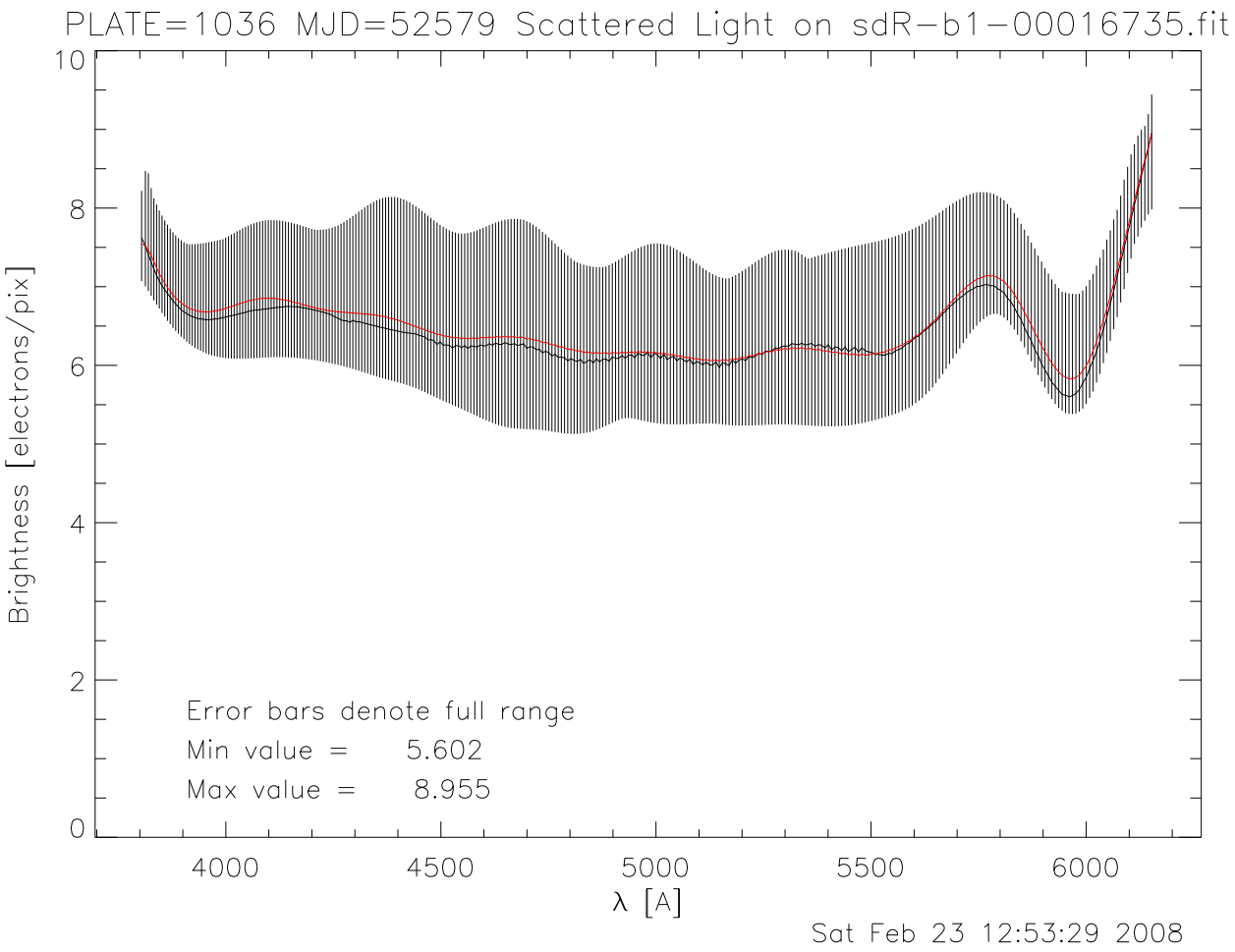

PLATE=1036 MJD=52579 sdR-b1-00016734.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.08 %
Fiber number
Focal Distance [mm]
Airmass

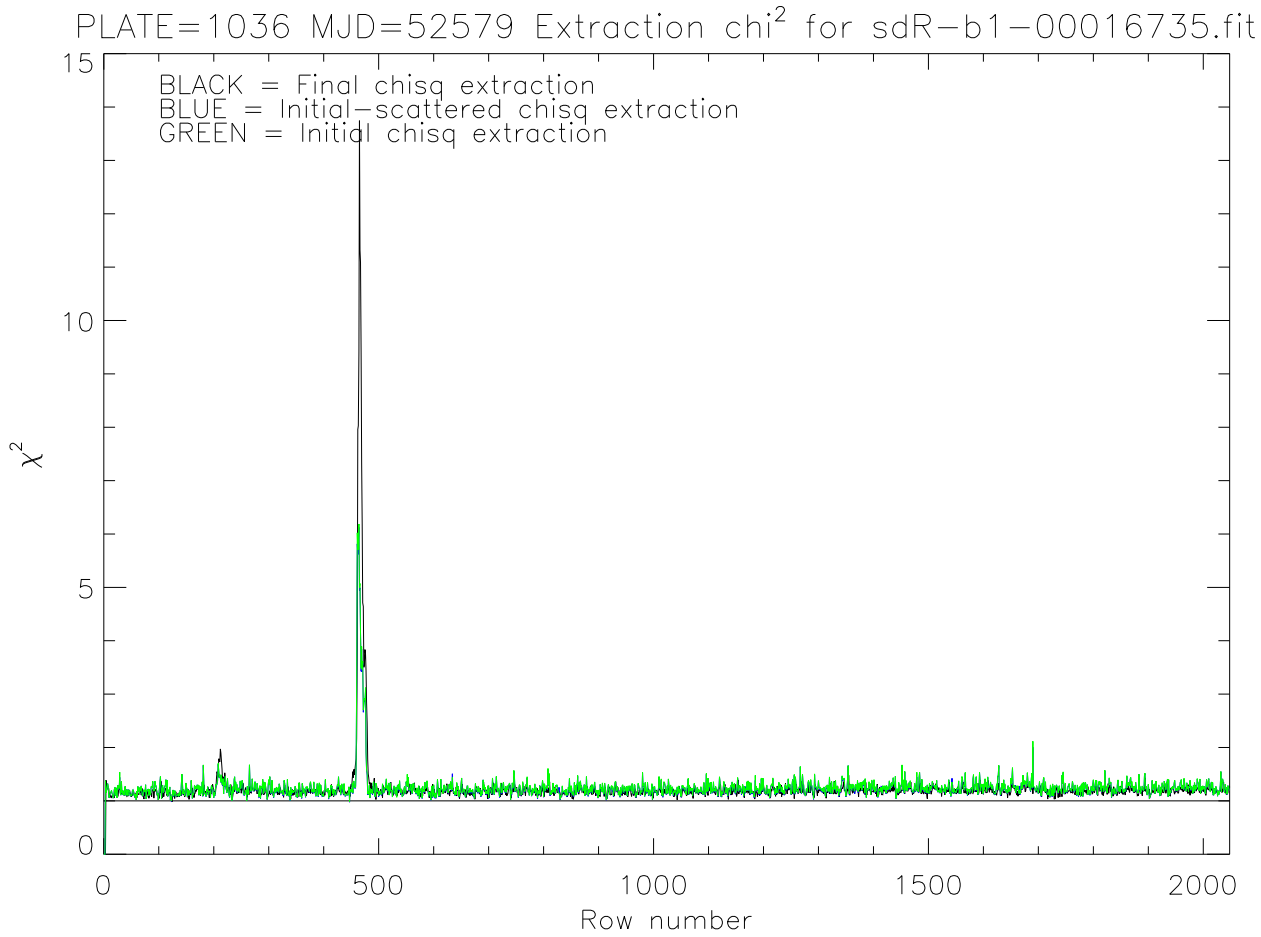

PLATE=1036 MJD=52579 Fiber−Flats for sdR−b1−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.597
Max value = 1.248
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:45:27 2008

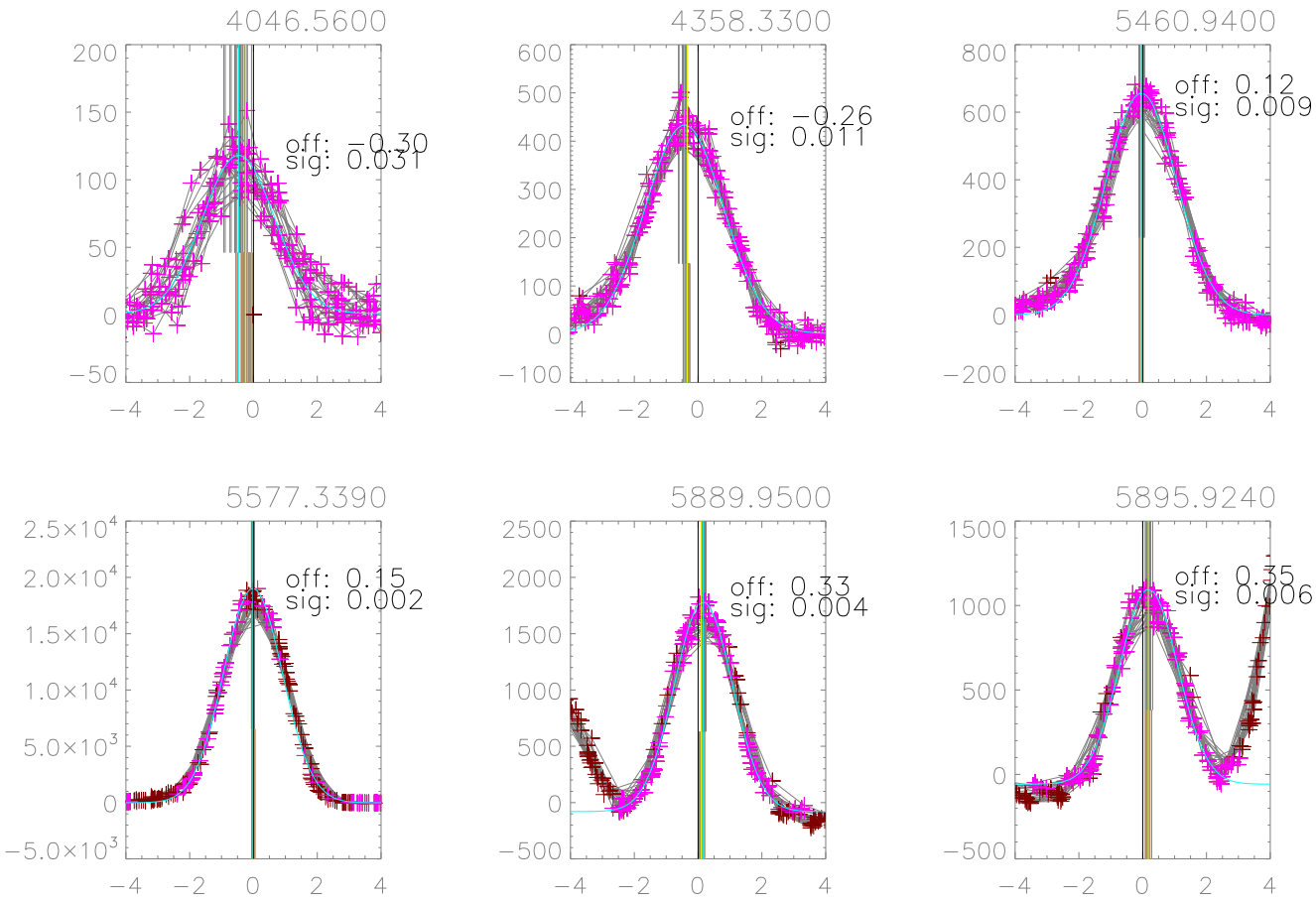

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR−b1−00016735.f
9.6
11.1
Y [pix]
X [pix]
0
500
1000
1500
2000

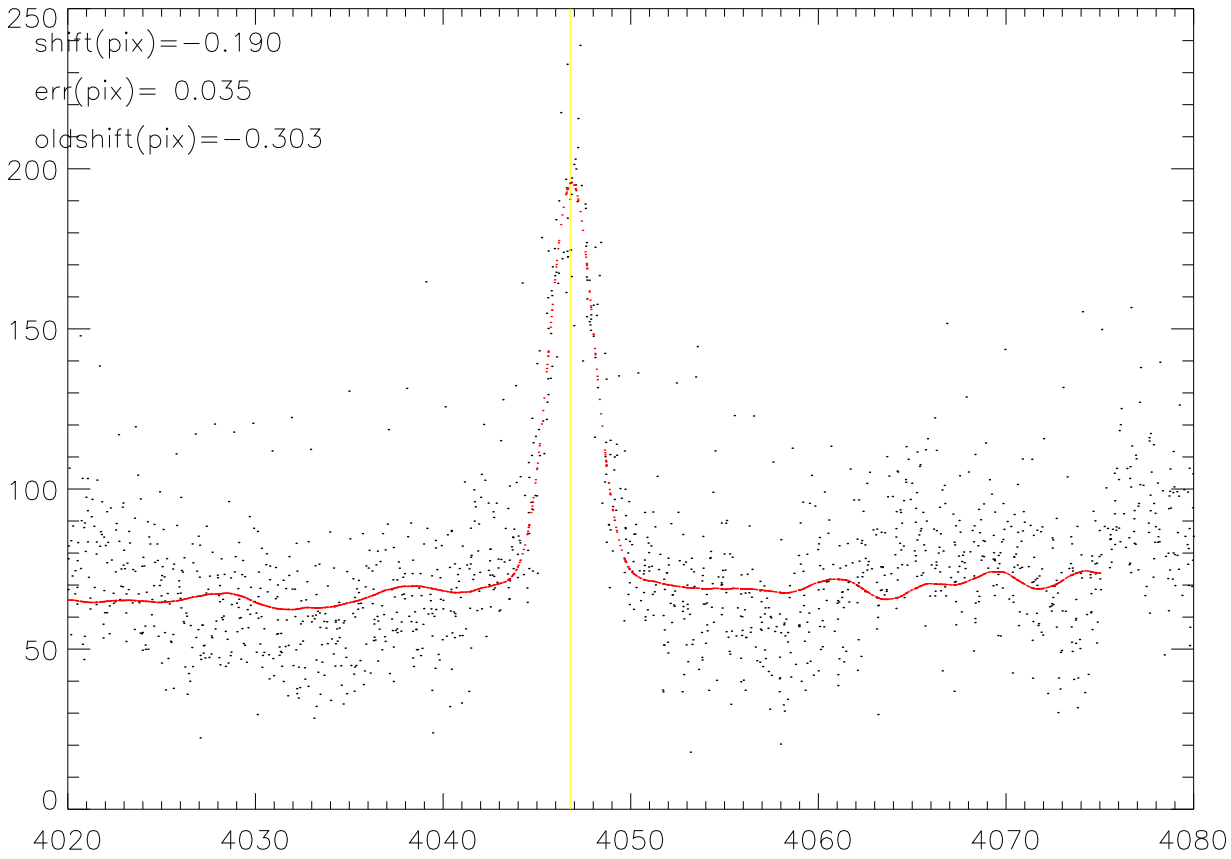

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016735.f
15
10
5
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 8.912
Max value = 12.123
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:47:13 2008

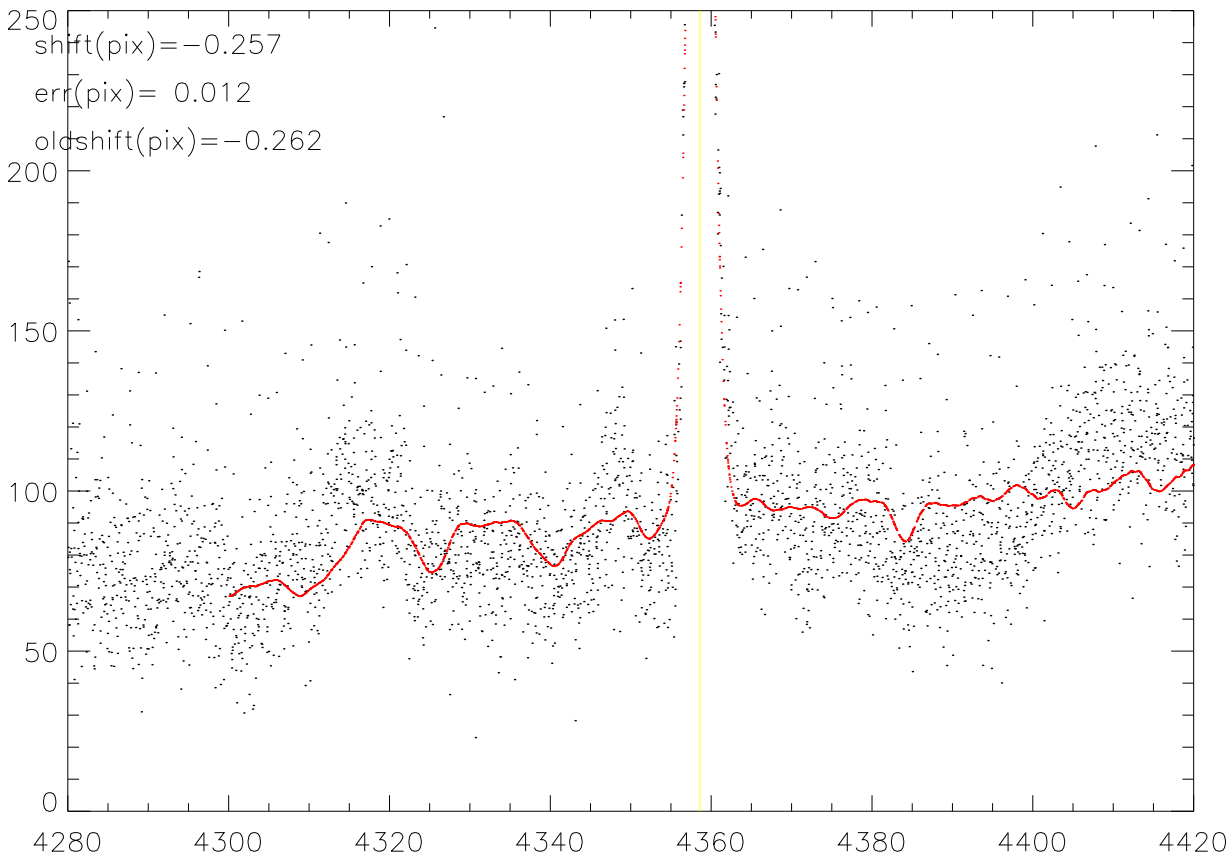

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016735.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
5.45
7.27
8.18

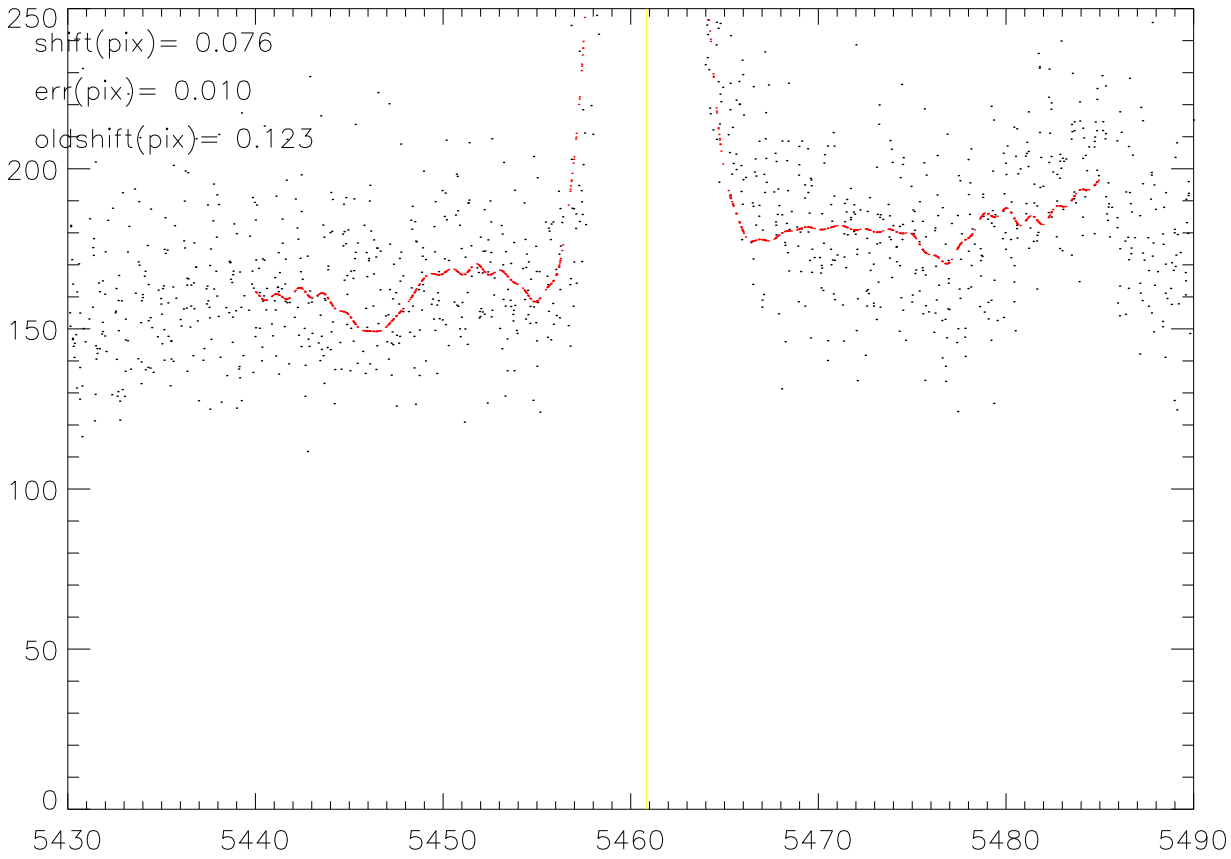

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016735.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 5.602
Max value = 8.955
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:53:29 2008

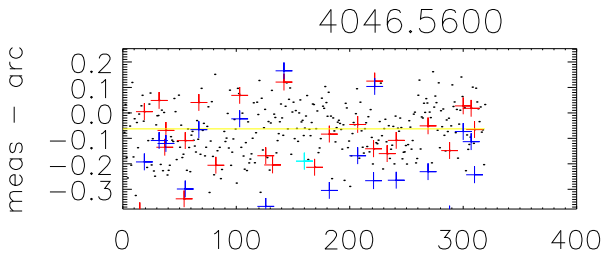

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b1-00016735.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

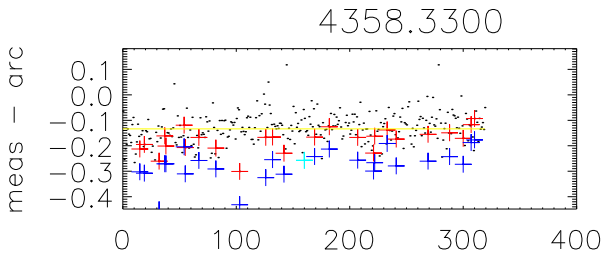

4046.5600
off: −0.30
sig: 0.031
4358.3300
off: −0.26
sig: 0.011
5460.9400
off: 0.12
sig: 0.009
5577.3390
off: 0.15
sig: 0.002
5889.9500
off: 0.33
sig: 0.004
5895.9240
off: 0.35
sig: 0.006

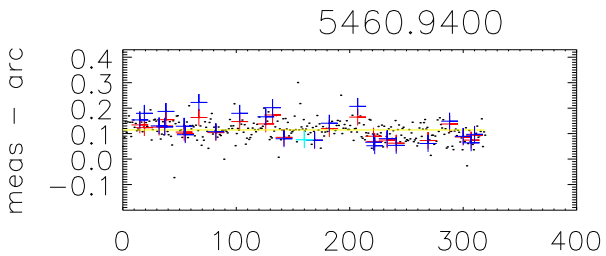

shift(pix)=−0.190
err(pix)= 0.035
oldshift(pix)=−0.303
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

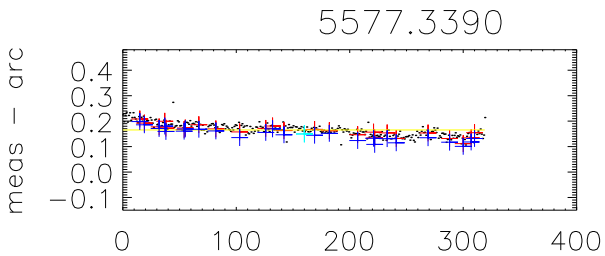

shift(pix)=−0.257
err(pix)= 0.012
oldshift(pix)=−0.262
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

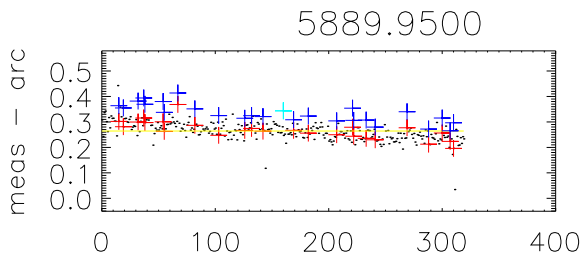

shift(pix)= 0.076
err(pix)= 0.010
oldshift(pix)= 0.123
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

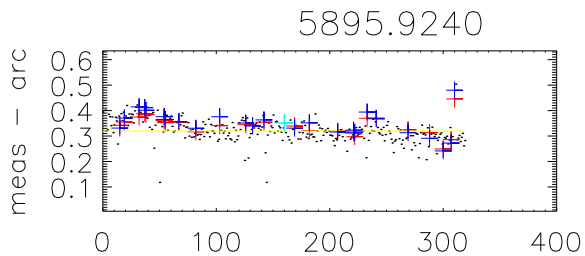

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

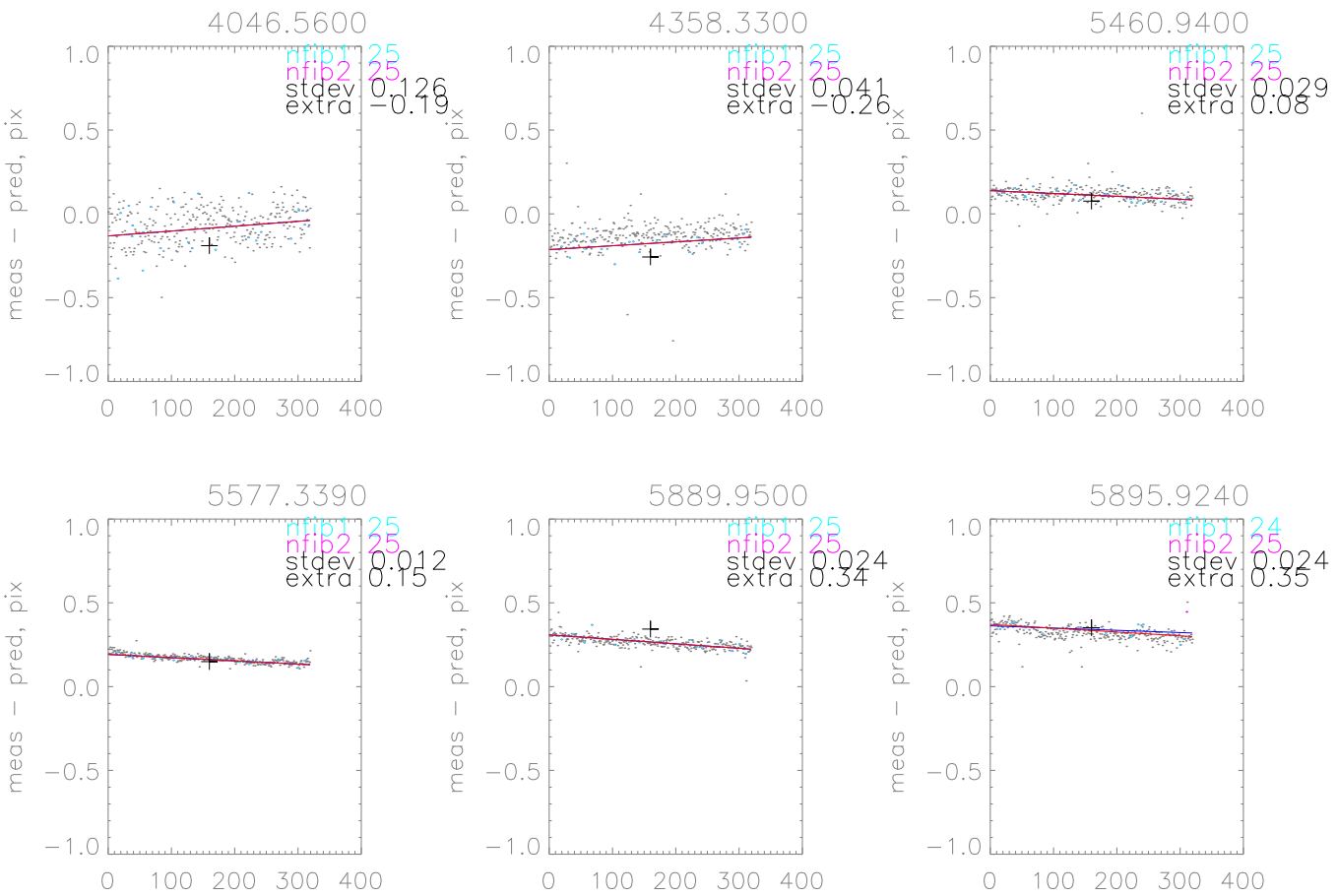

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

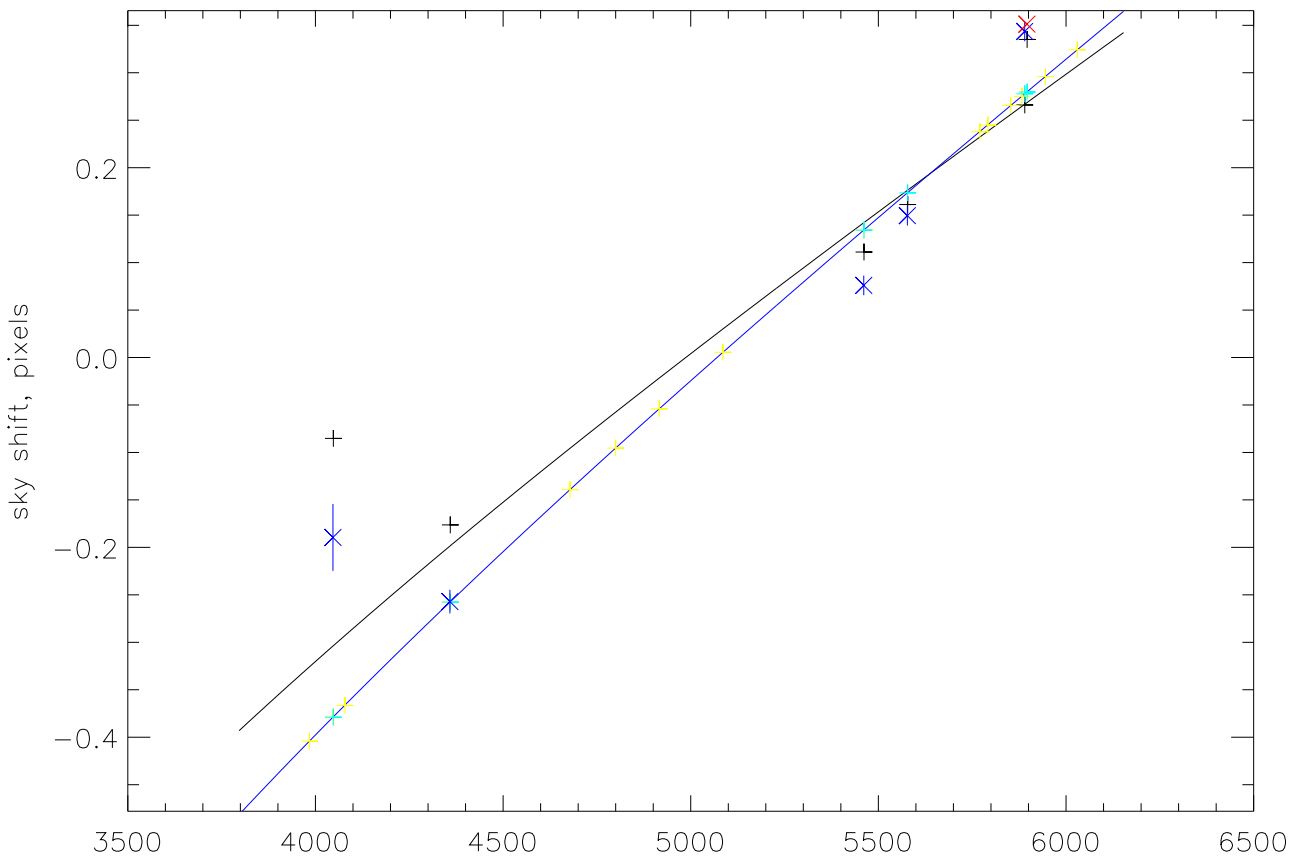

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

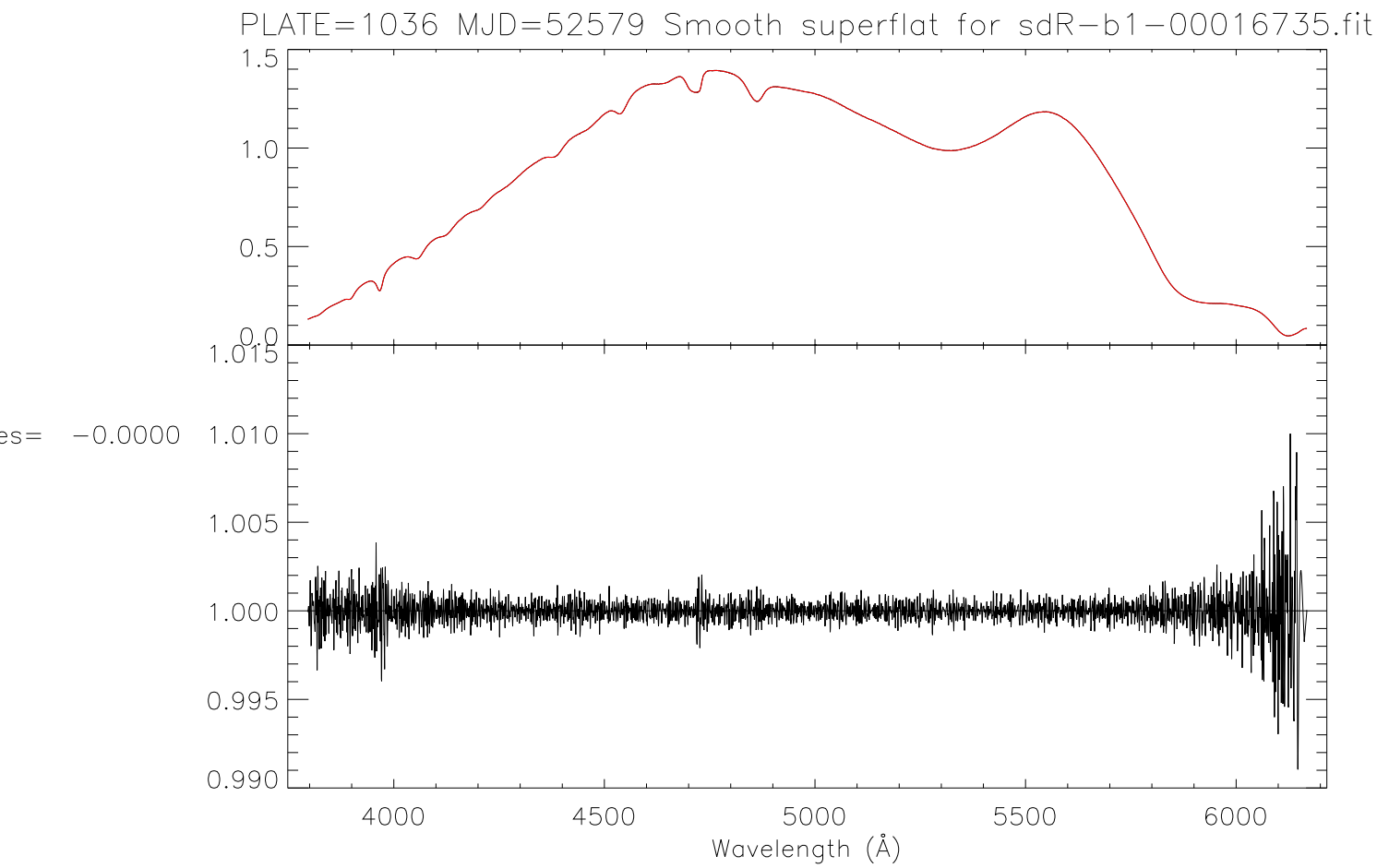

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

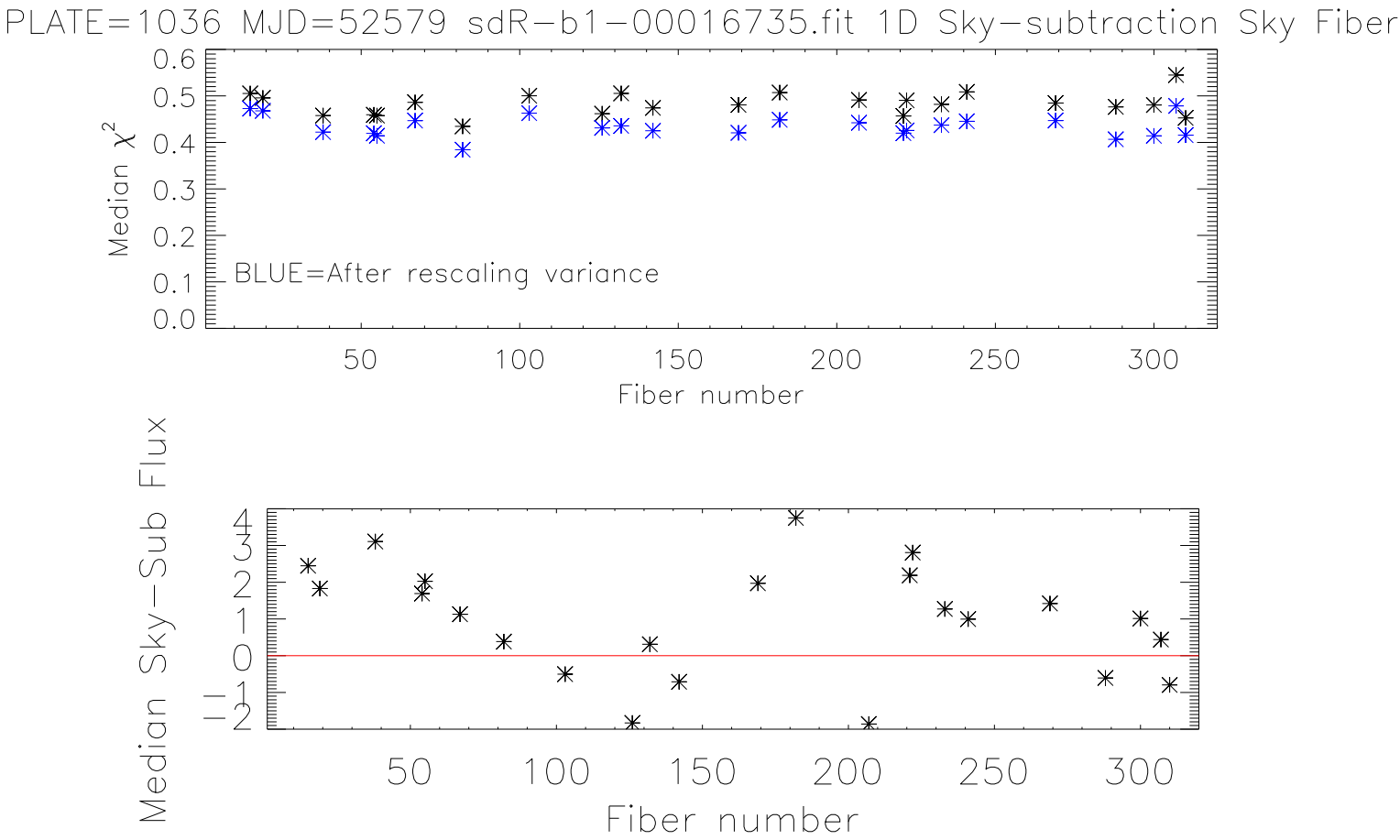

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

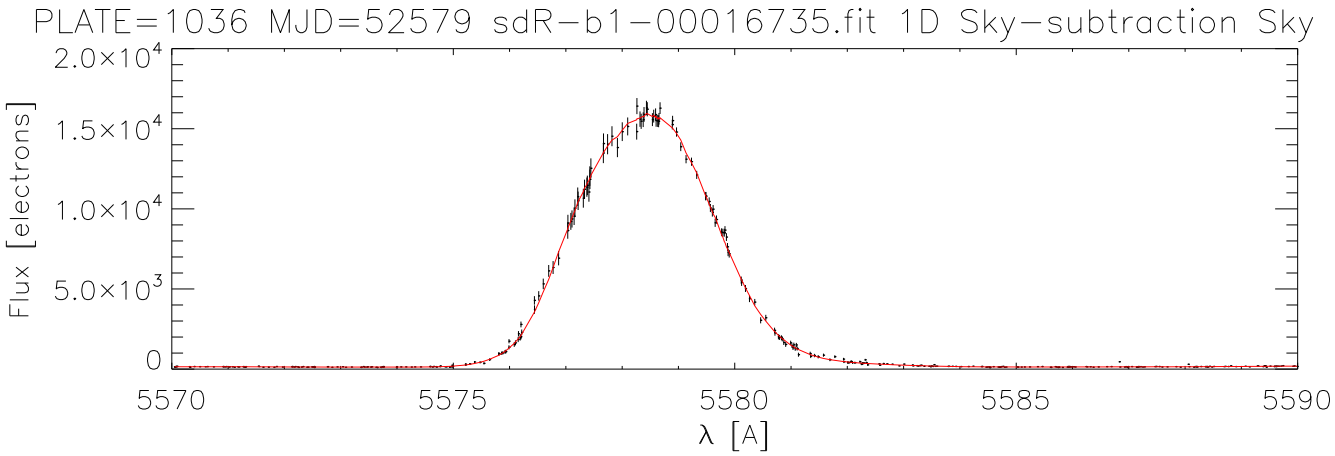

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

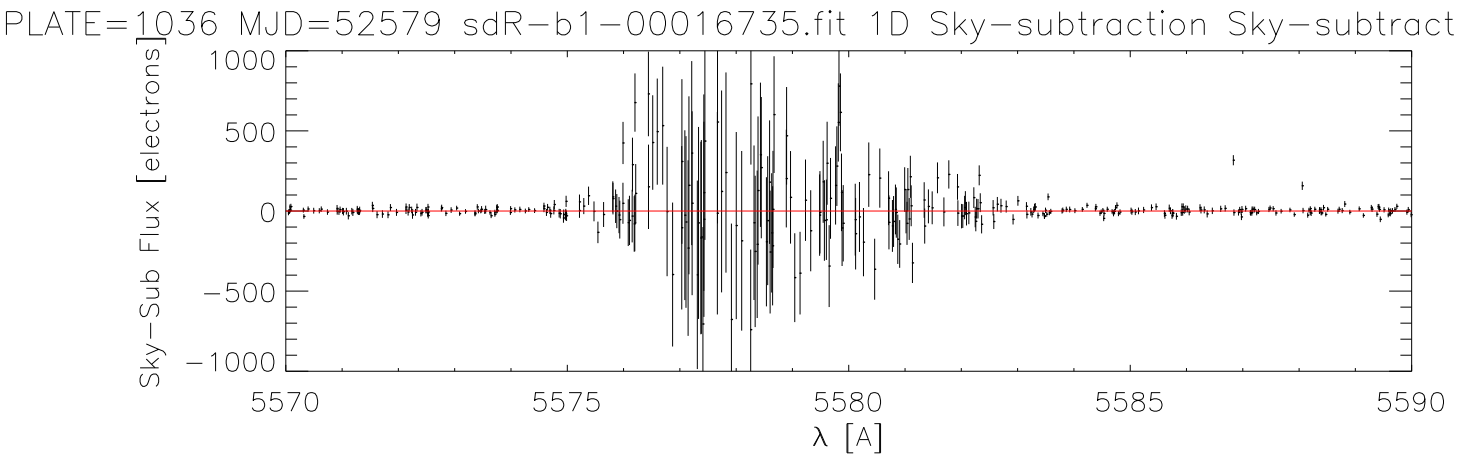

4046.5600
nfib1 25
nfib2 25
stdev 0.126
extra −0.19
4358.3300
nfib1 25
nfib2 25
stdev 0.041
extra −0.26
5460.9400
nfib1 25
nfib2 25
stdev 0.029
extra 0.08
5577.3390
nfib1 25
nfib2 25
stdev 0.012
extra 0.15
5889.9500
nfib1 25
nfib2 25
stdev 0.024
extra 0.34
5895.9240
nfib1 24
nfib2 25
stdev 0.024
extra 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

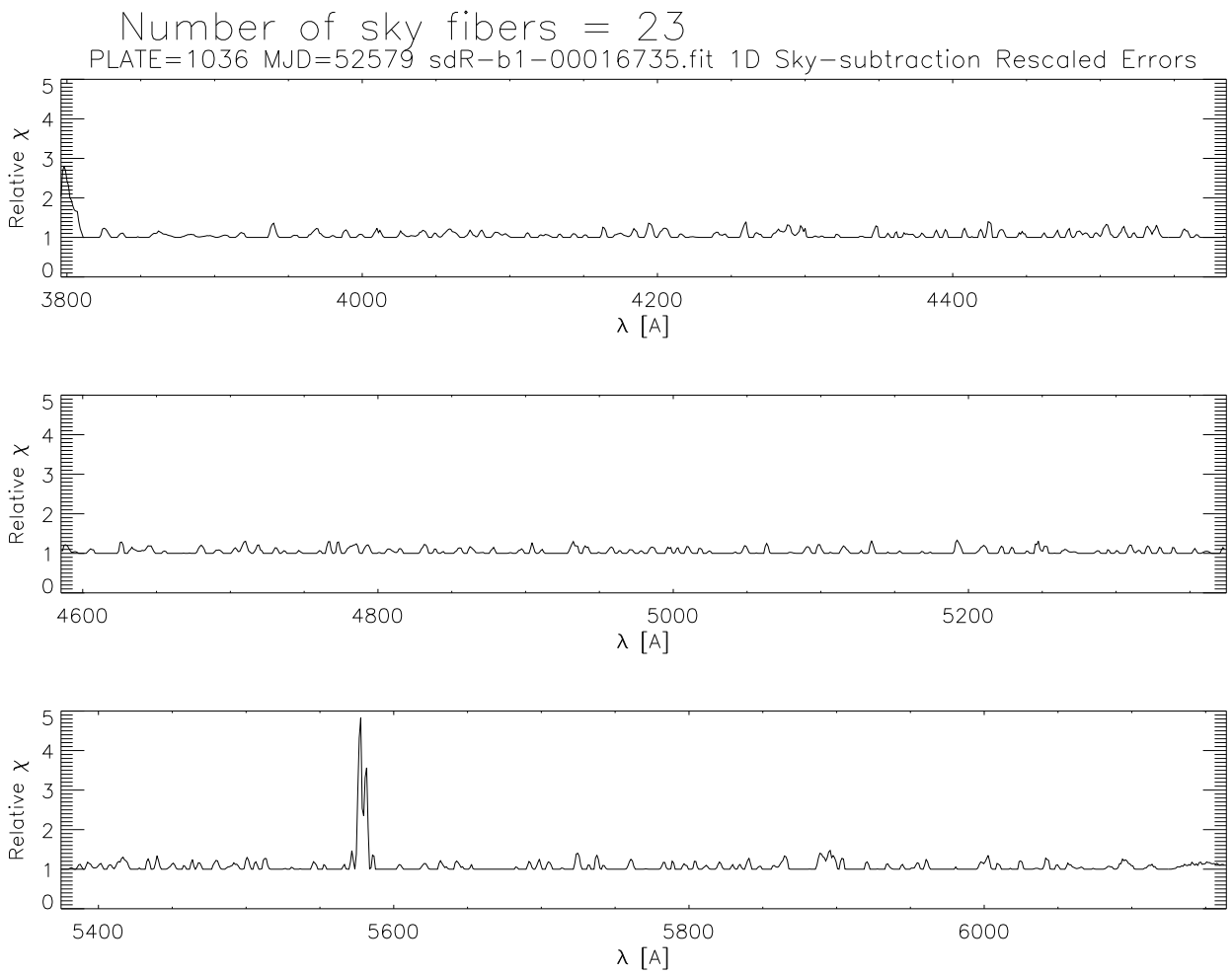

sky shift, pixels
0.2
0.0
−0.2
−0.4
3500
4000
4500
5000
5500
6000
6500

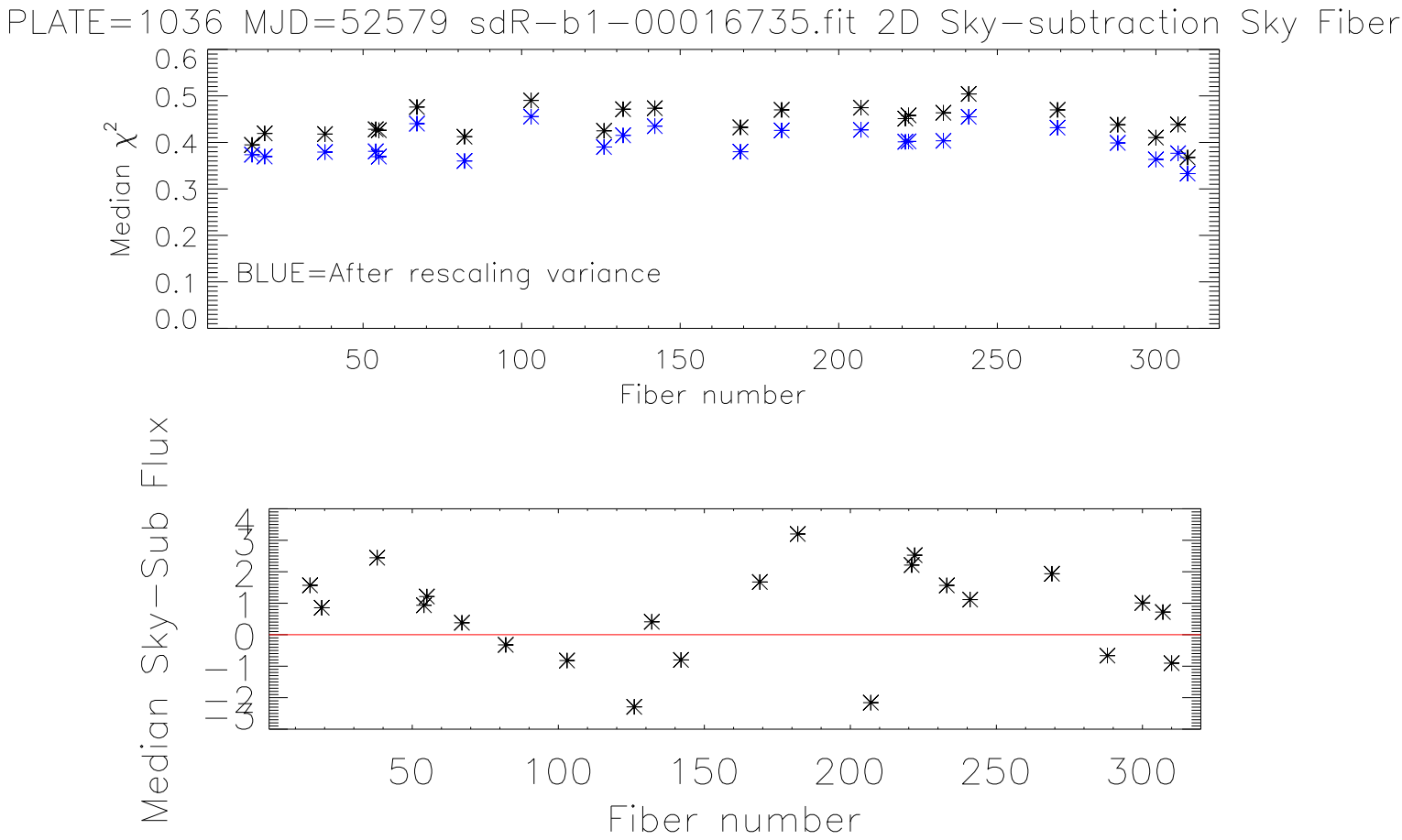

PLATE=1036 MJD=52579 Smooth superflat for sdR-b1-00016735.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

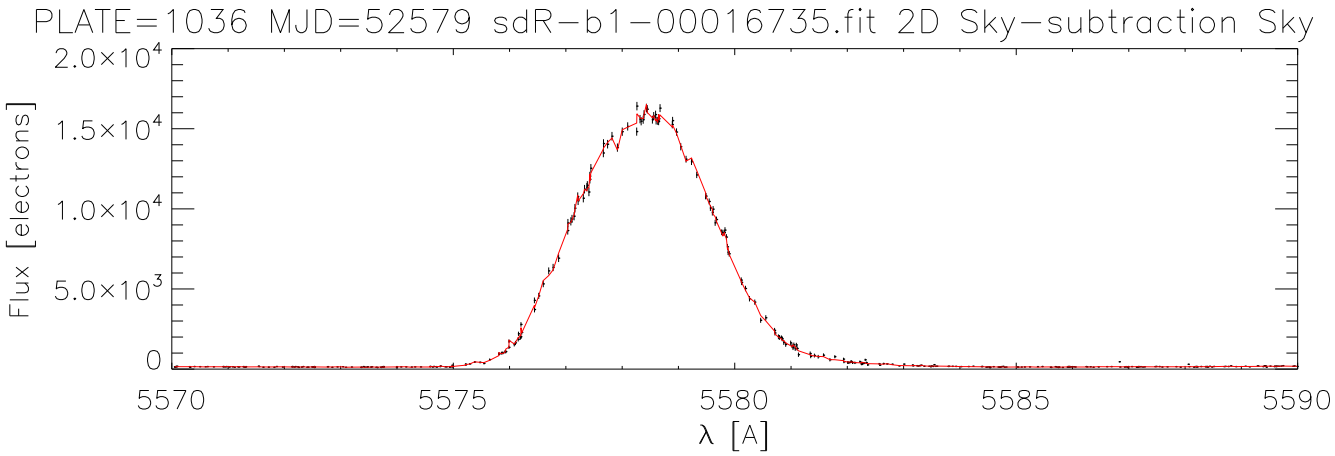

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

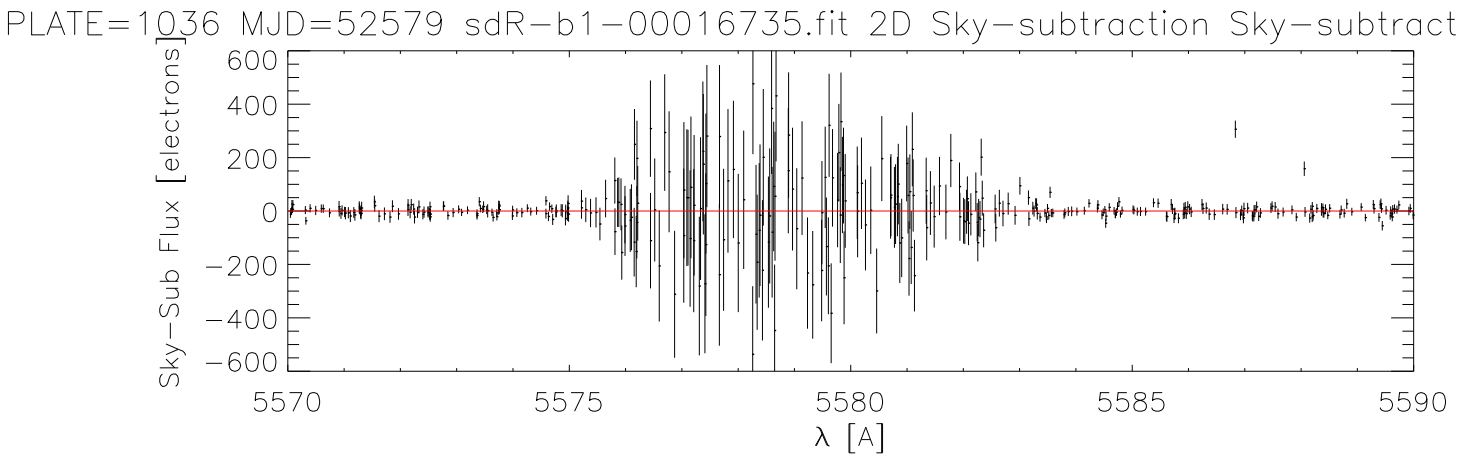

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

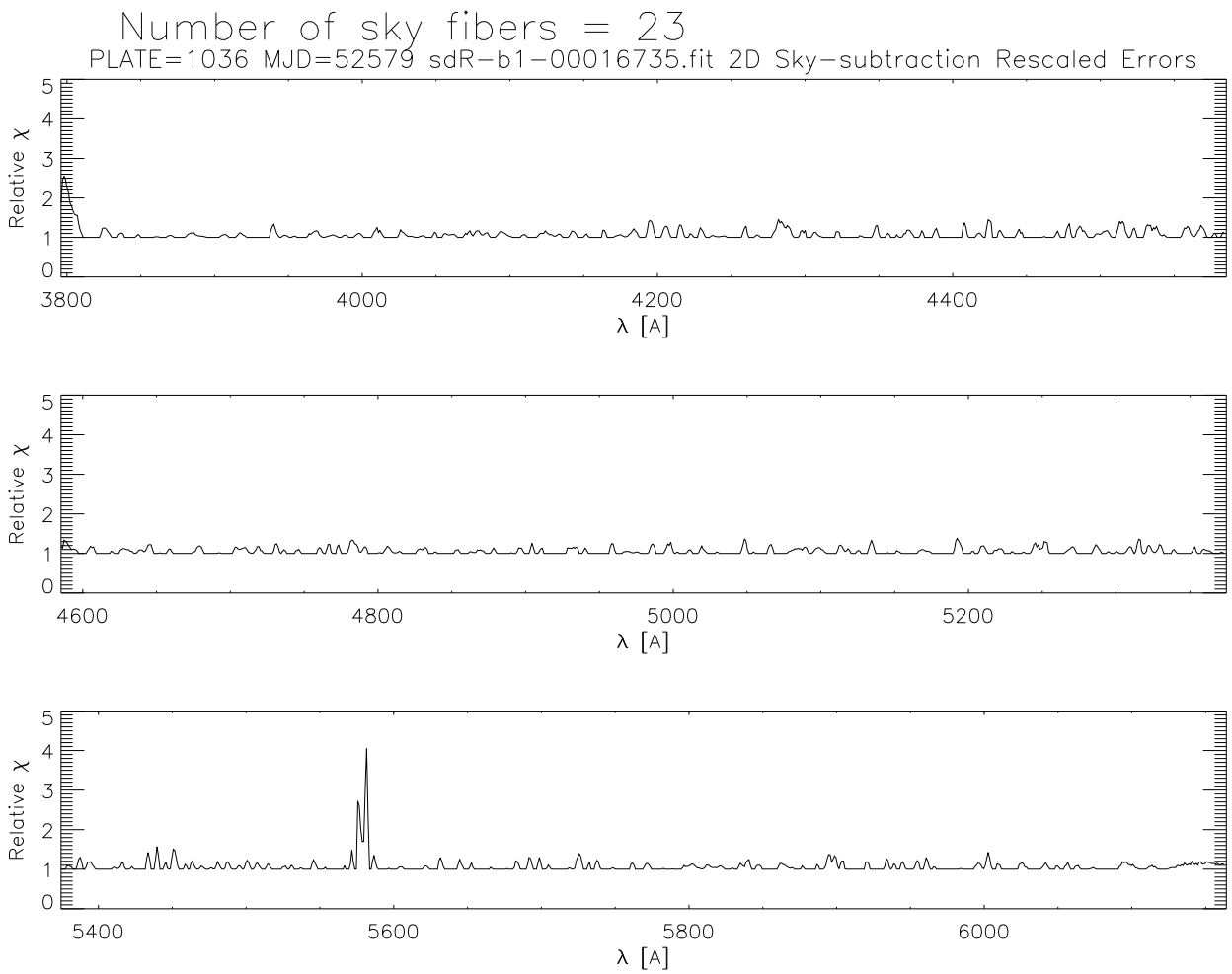

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

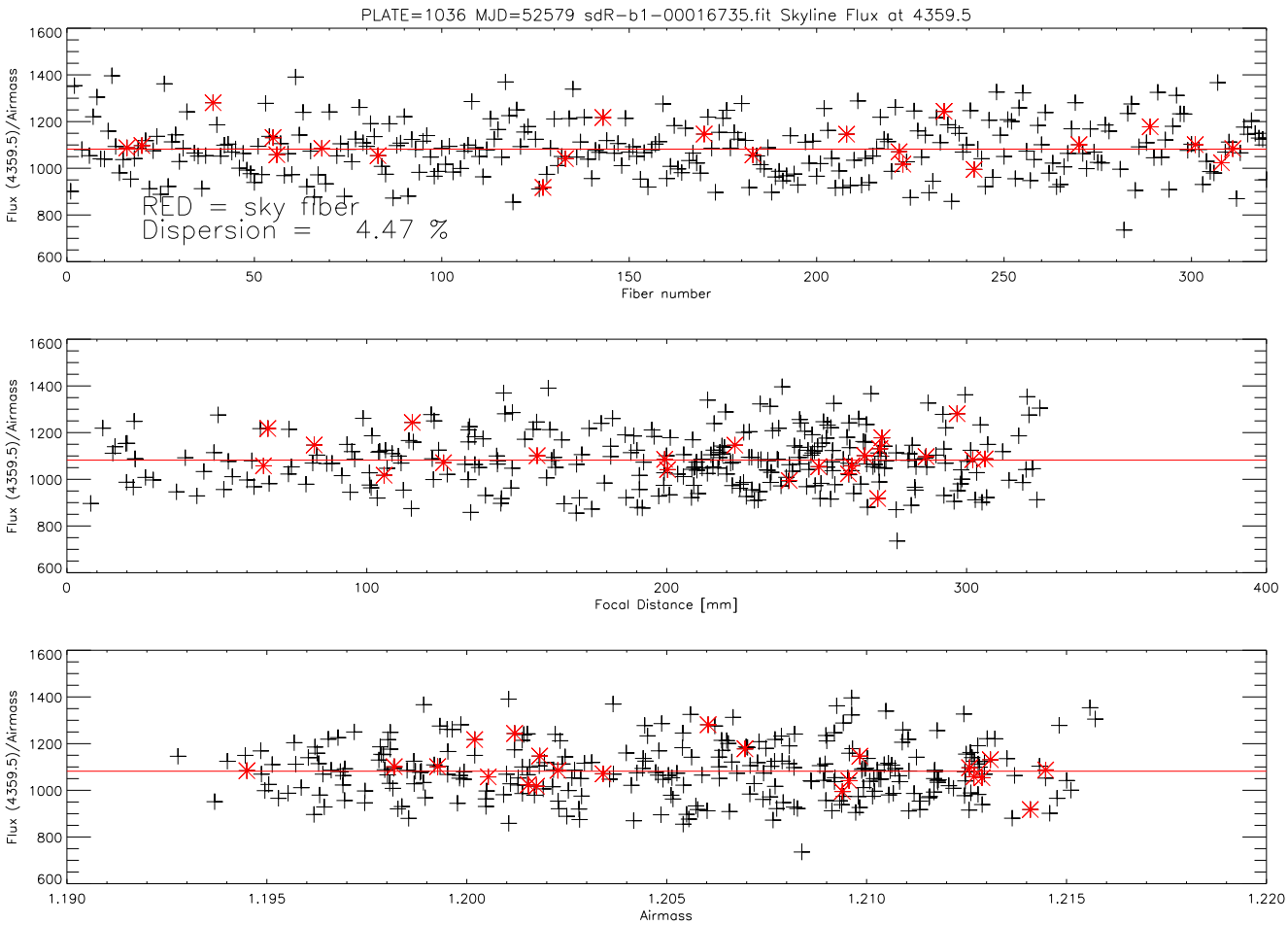

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016735.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

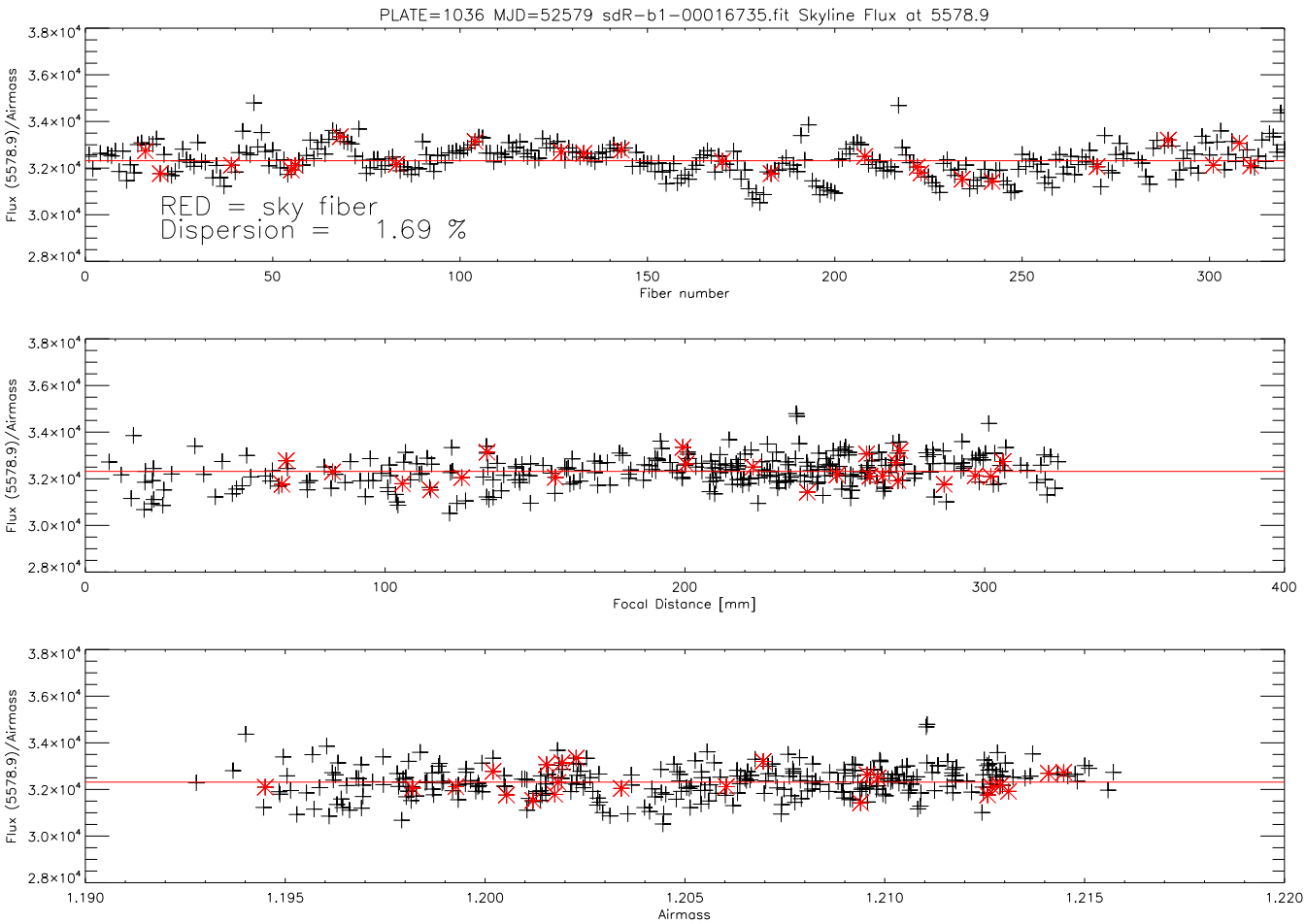

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

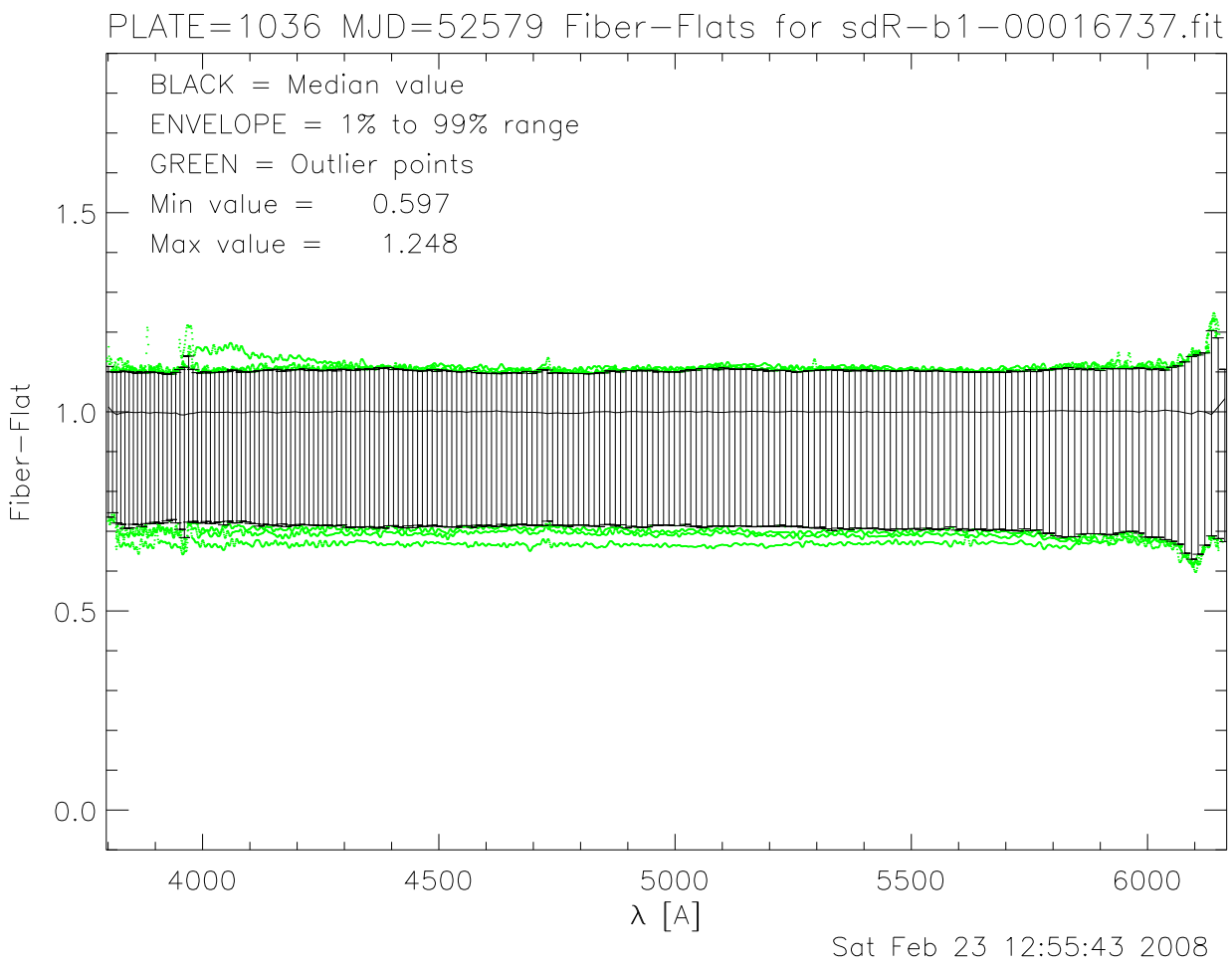

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

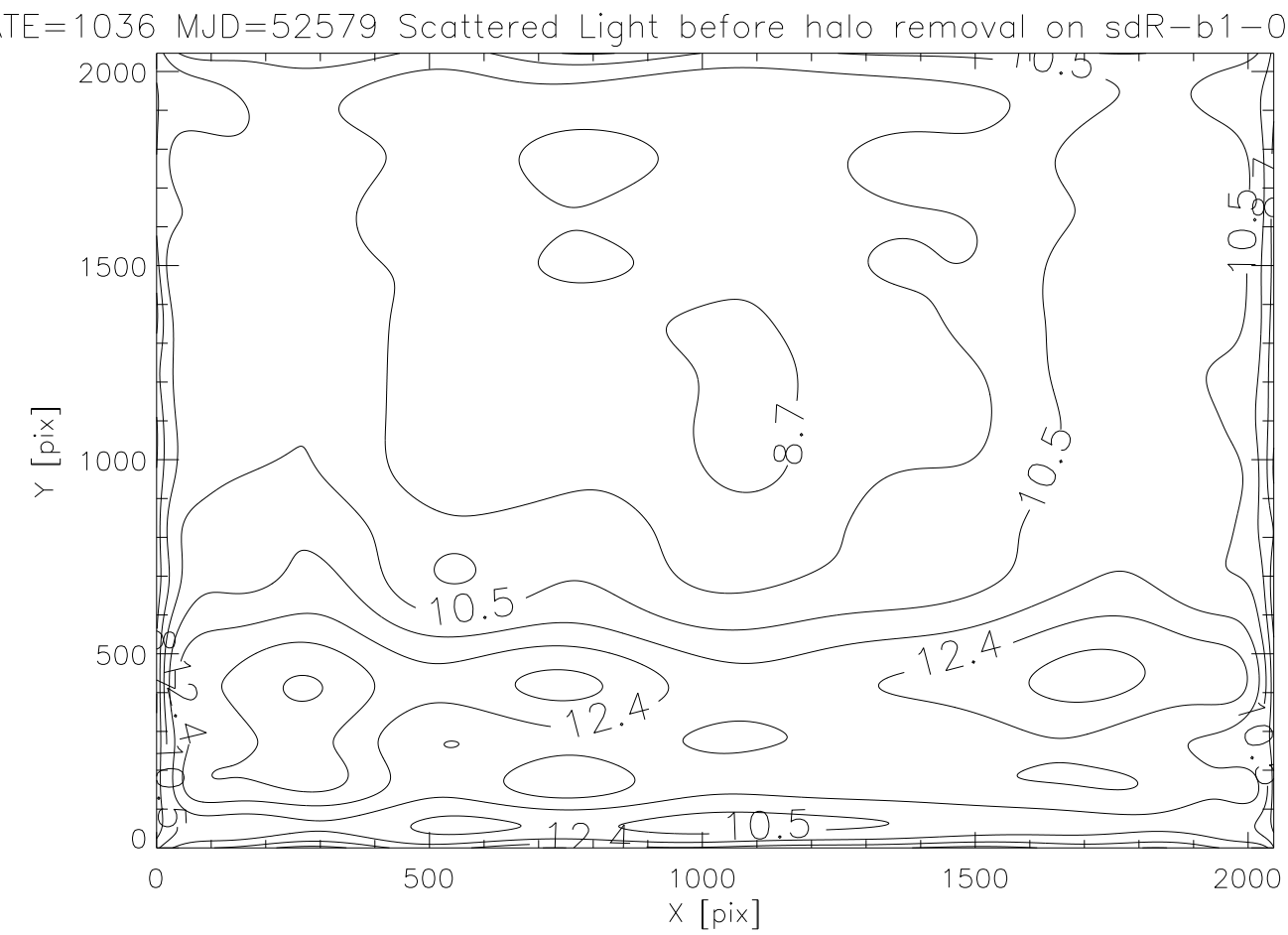

PLATE=1036 MJD=52579 sdR-b1-00016735.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

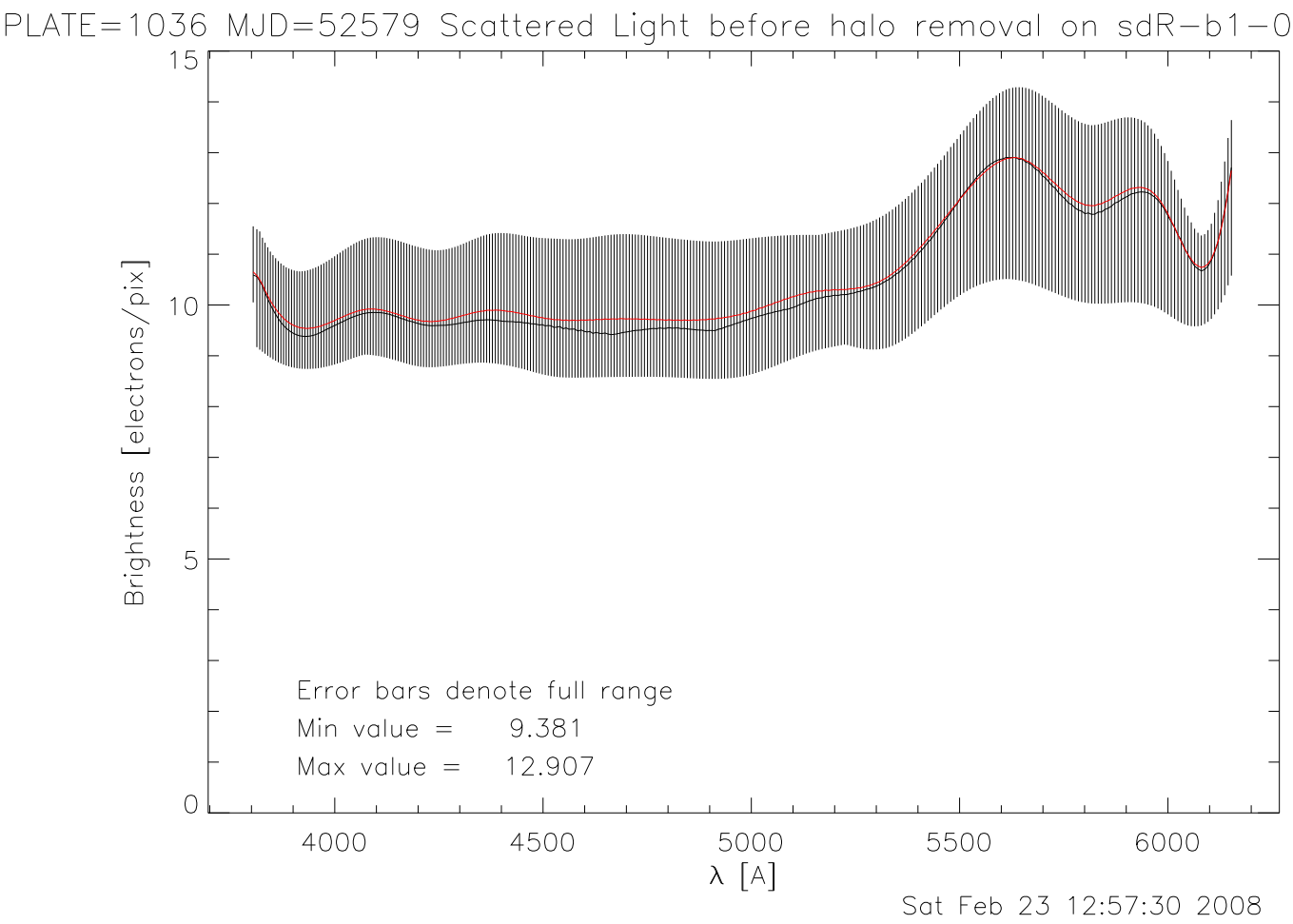

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016735.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

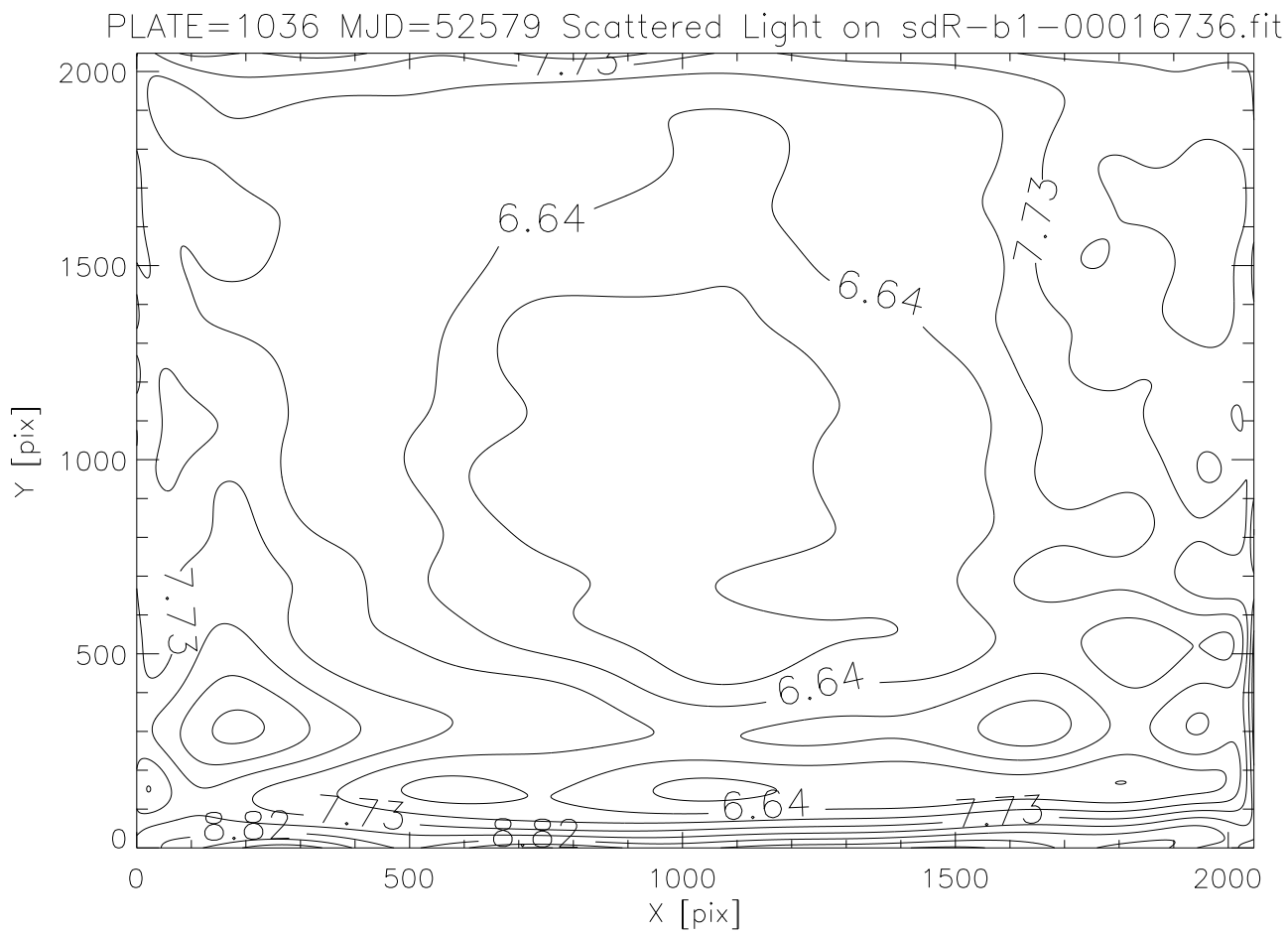

PLATE=1036 MJD=52579 sdR-b1-00016735.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.47 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

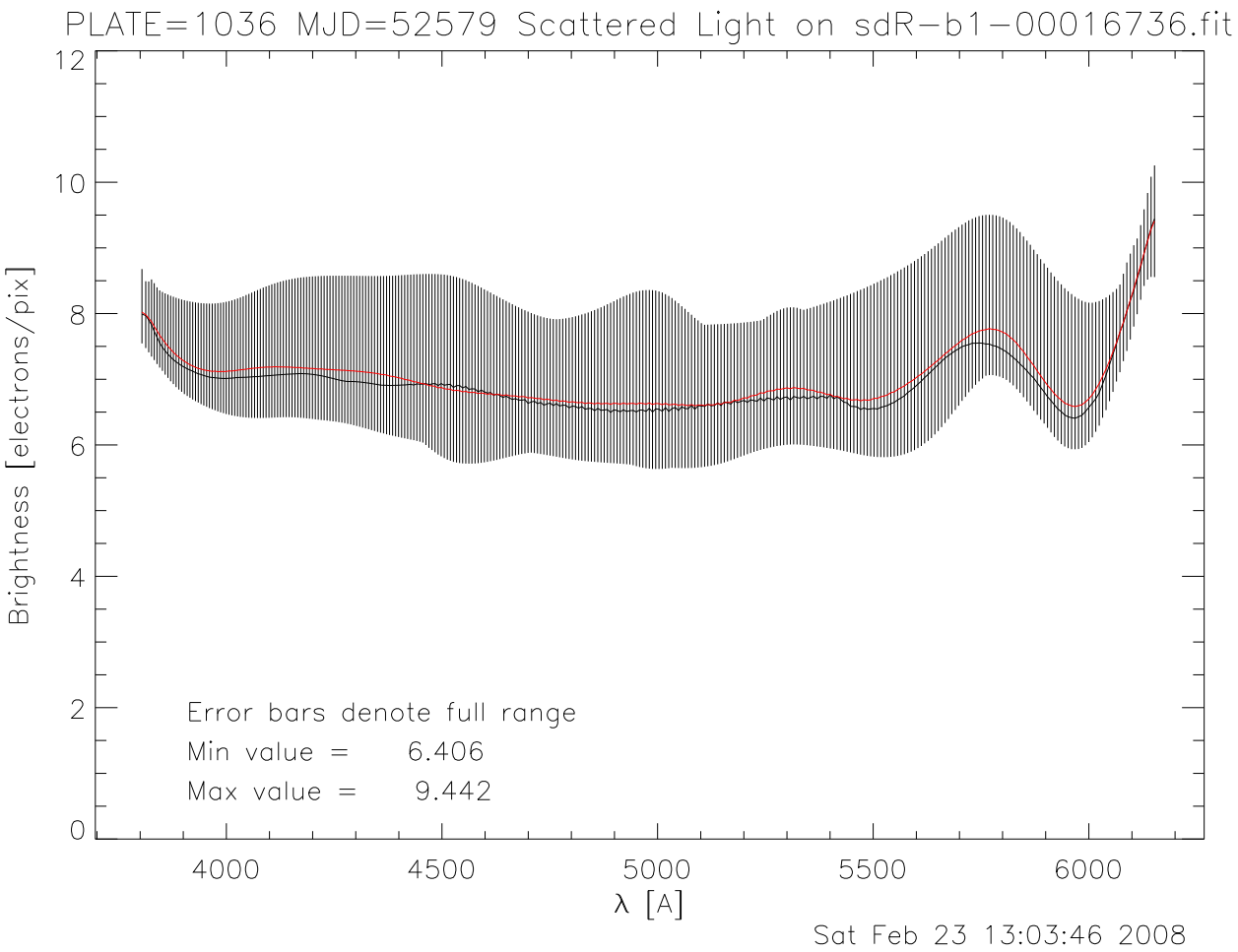

PLATE=1036 MJD=52579 sdR-b1-00016735.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.69 %
Fiber number
Focal Distance [mm]
Airmass

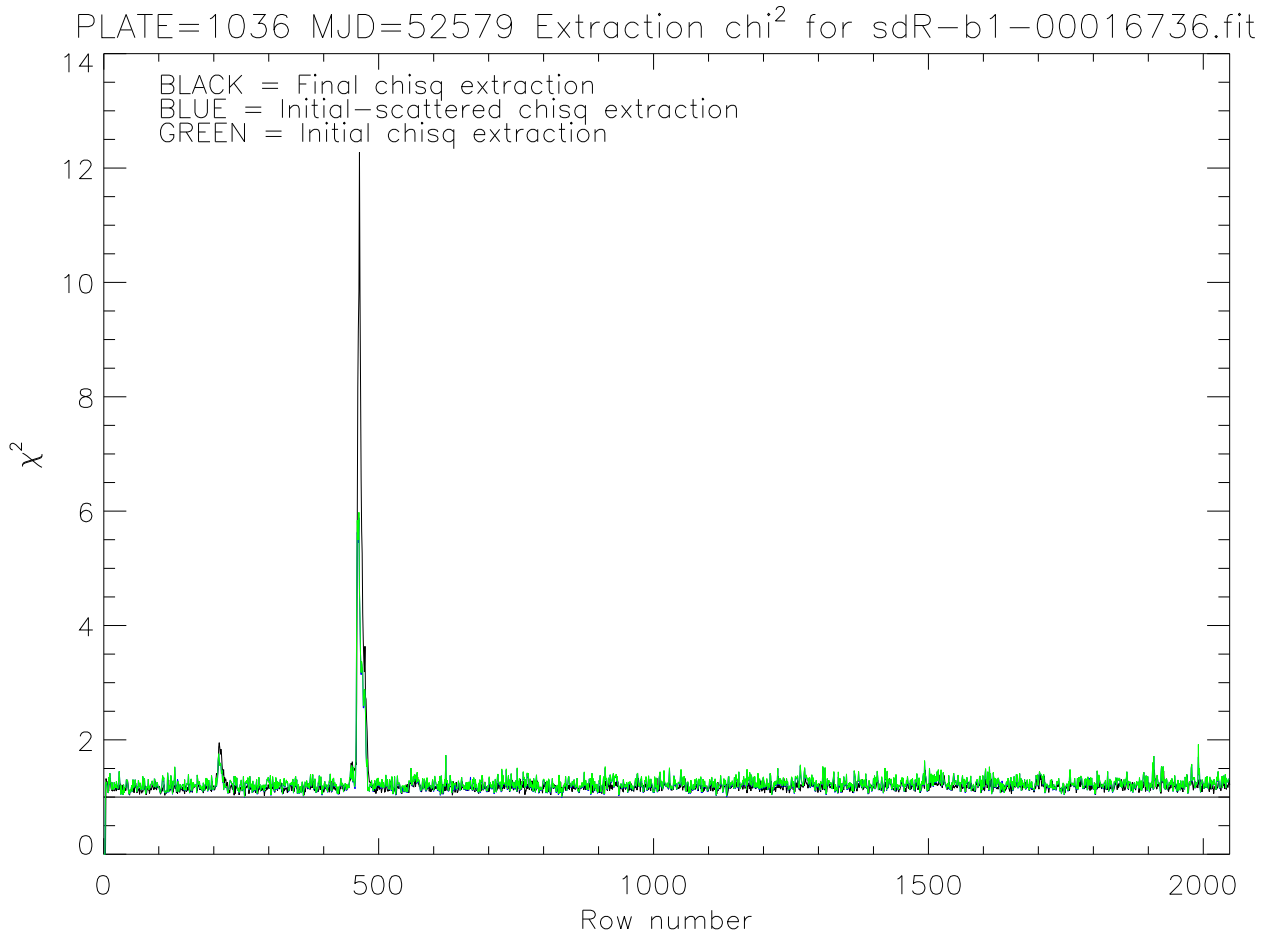

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b1-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.597
Max value = 1.248
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:55:43 2008

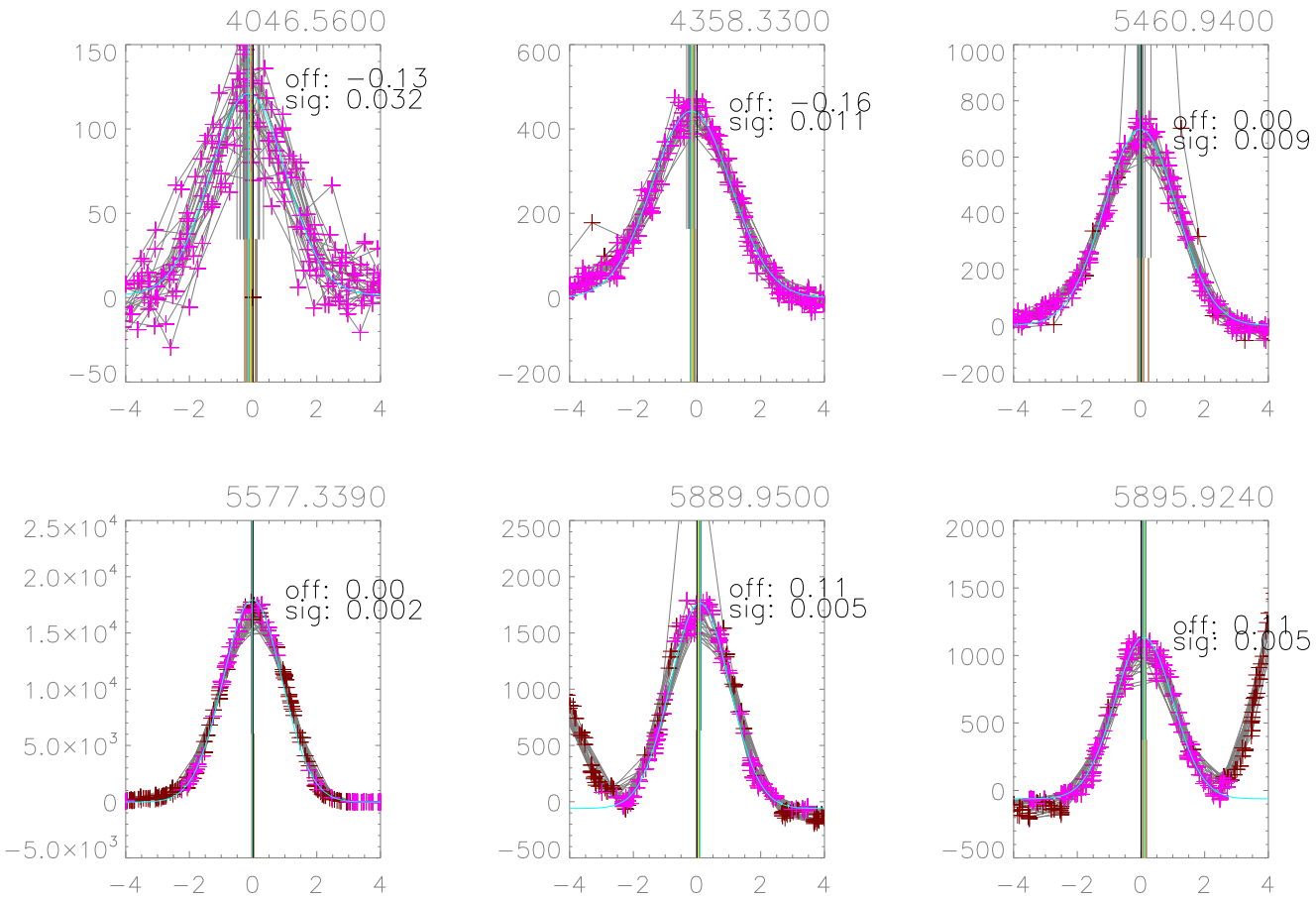

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016736.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
8.7
10.5
10.5
12.4
12.4
12.4
10.5
10.5
8.7
12.4

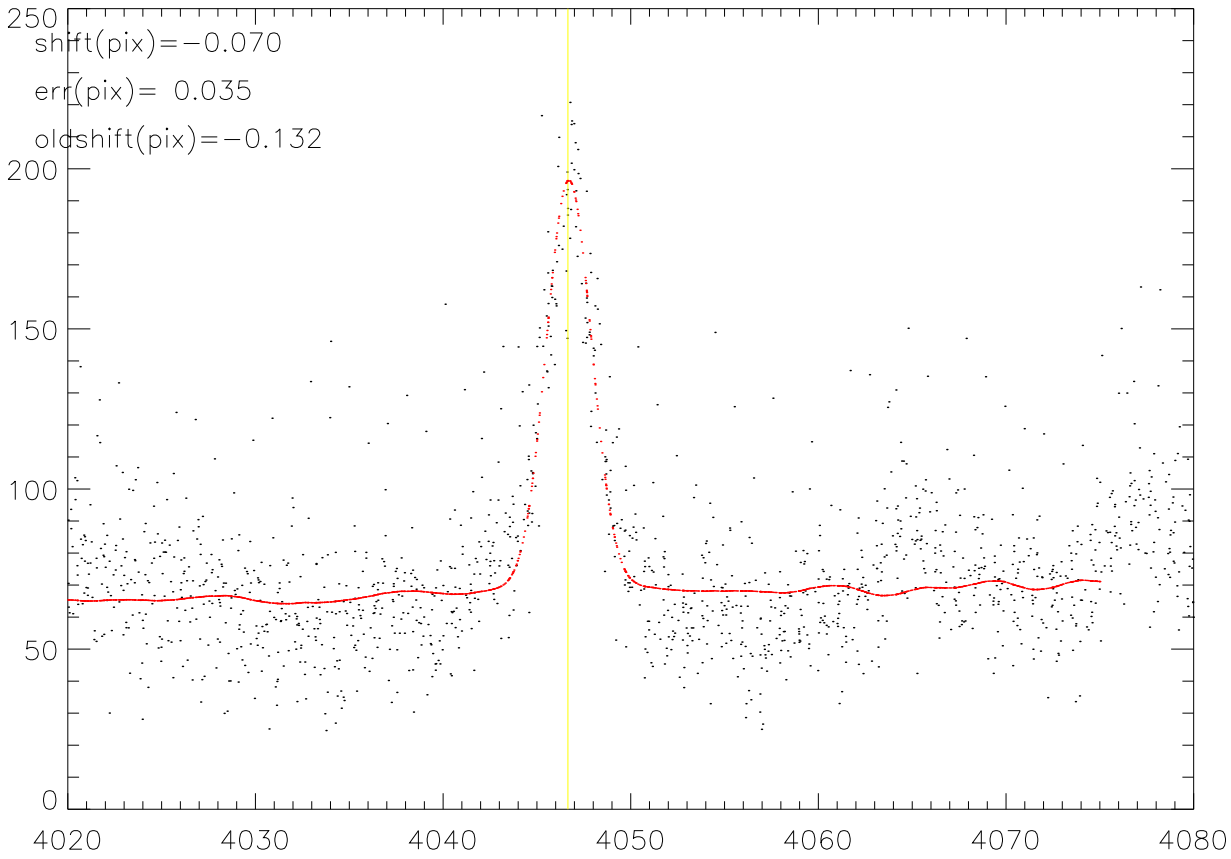

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b1-00016736.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 9.381
Max value = 12.907
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 12:57:30 2008

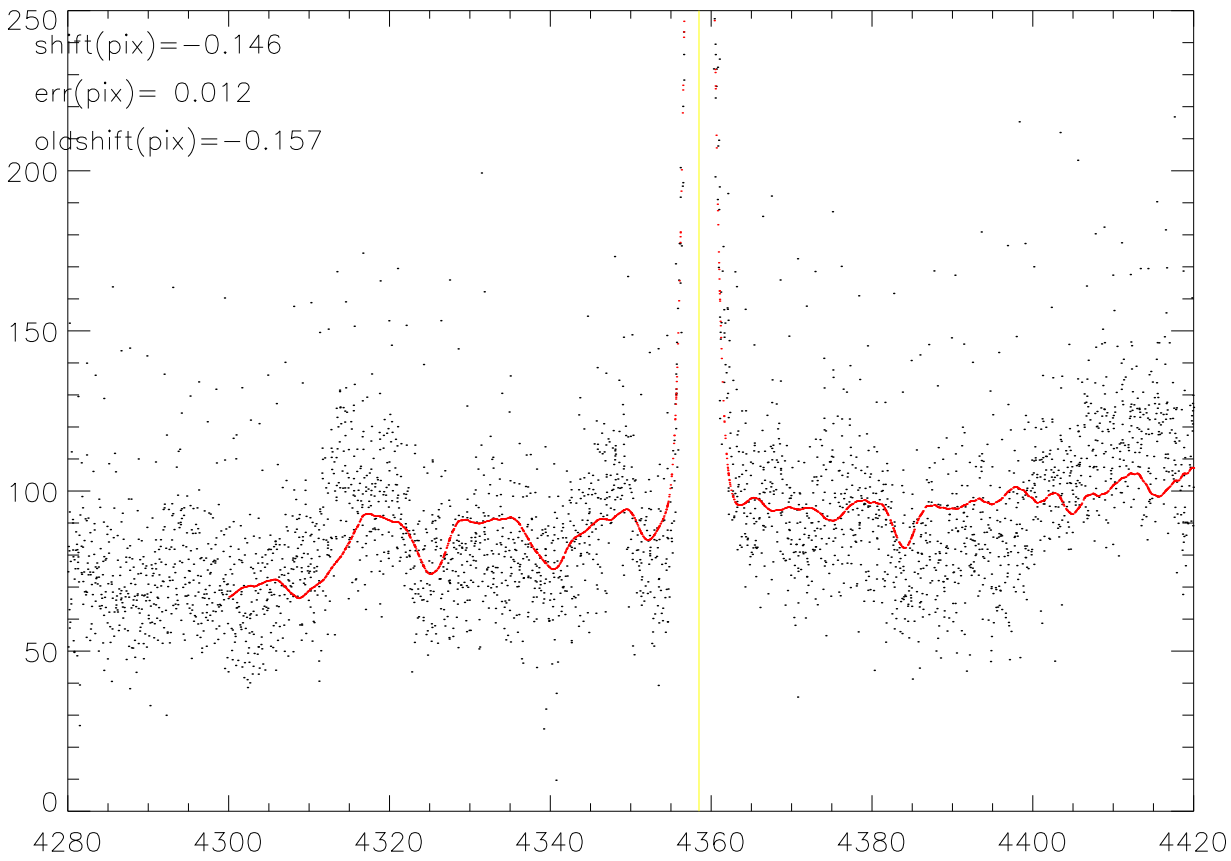

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016736.fit
7.73
6.64
6.64
7.73
7.73
6.64
8.82
7.73
8.82
6.64
7.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

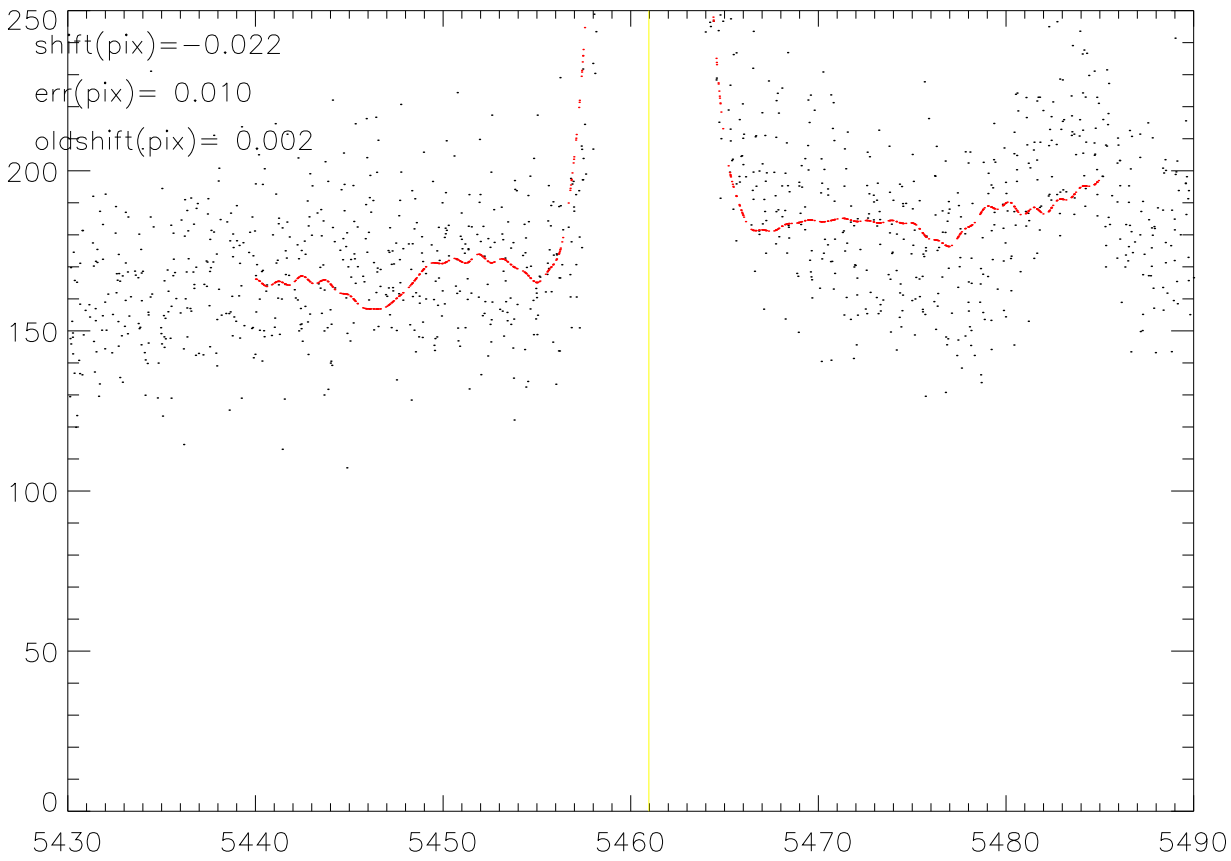

PLATE=1036 MJD=52579 Scattered Light on sdR-b1-00016736.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.406
Max value = 9.442
Sat Feb 23 13:03:46 2008

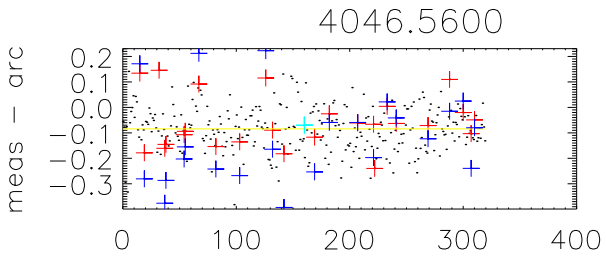

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b1-00016736.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

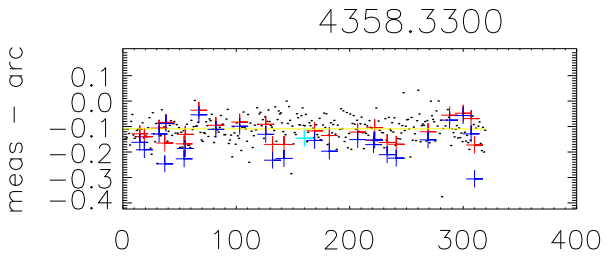

4046.5600
off: −0.13
sig: 0.032
4358.3300
off: −0.16
sig: 0.011
5460.9400
off: 0.00
sig: 0.009
5577.3390
off: 0.00
sig: 0.002
5889.9500
off: 0.11
sig: 0.005
5895.9240
off: 0.11
sig: 0.005

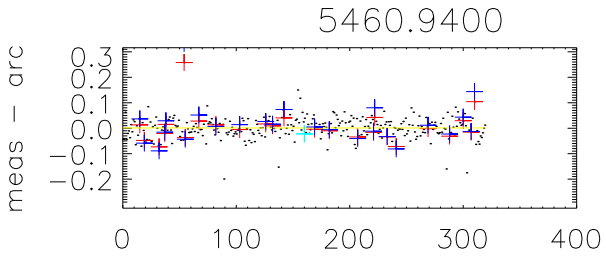

shift(pix)=−0.070
err(pix)= 0.035
oldshift(pix)=−0.132
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

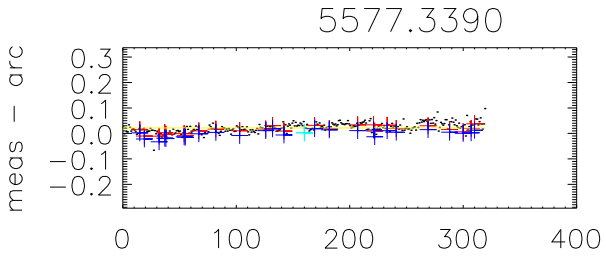

shift(pix)=−0.146
err(pix)= 0.012
oldshift(pix)=−0.157
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

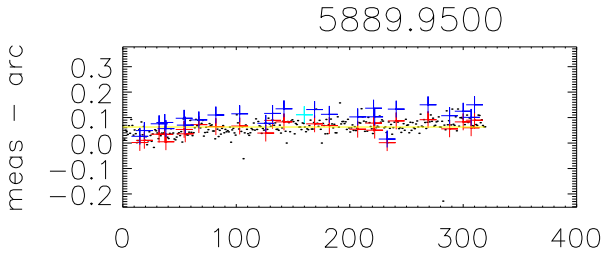

shift(pix)=−0.022
err(pix)= 0.010
oldshift(pix)= 0.002
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

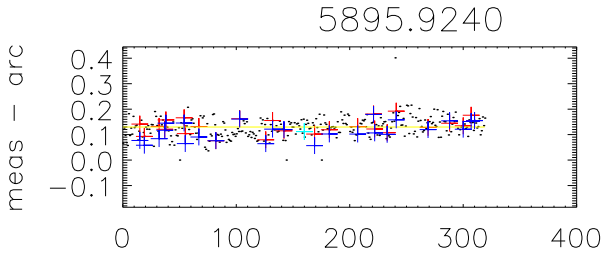

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

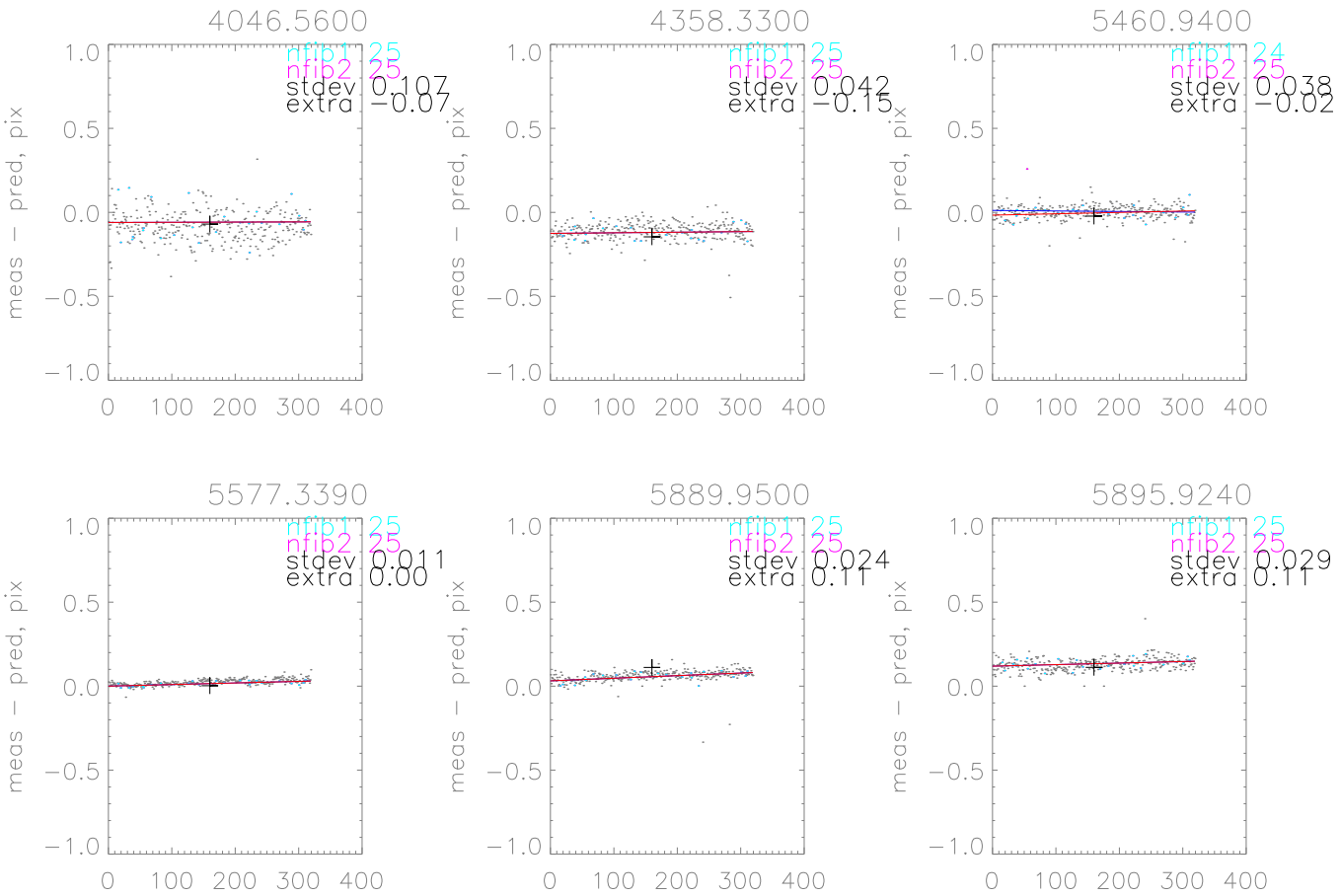

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

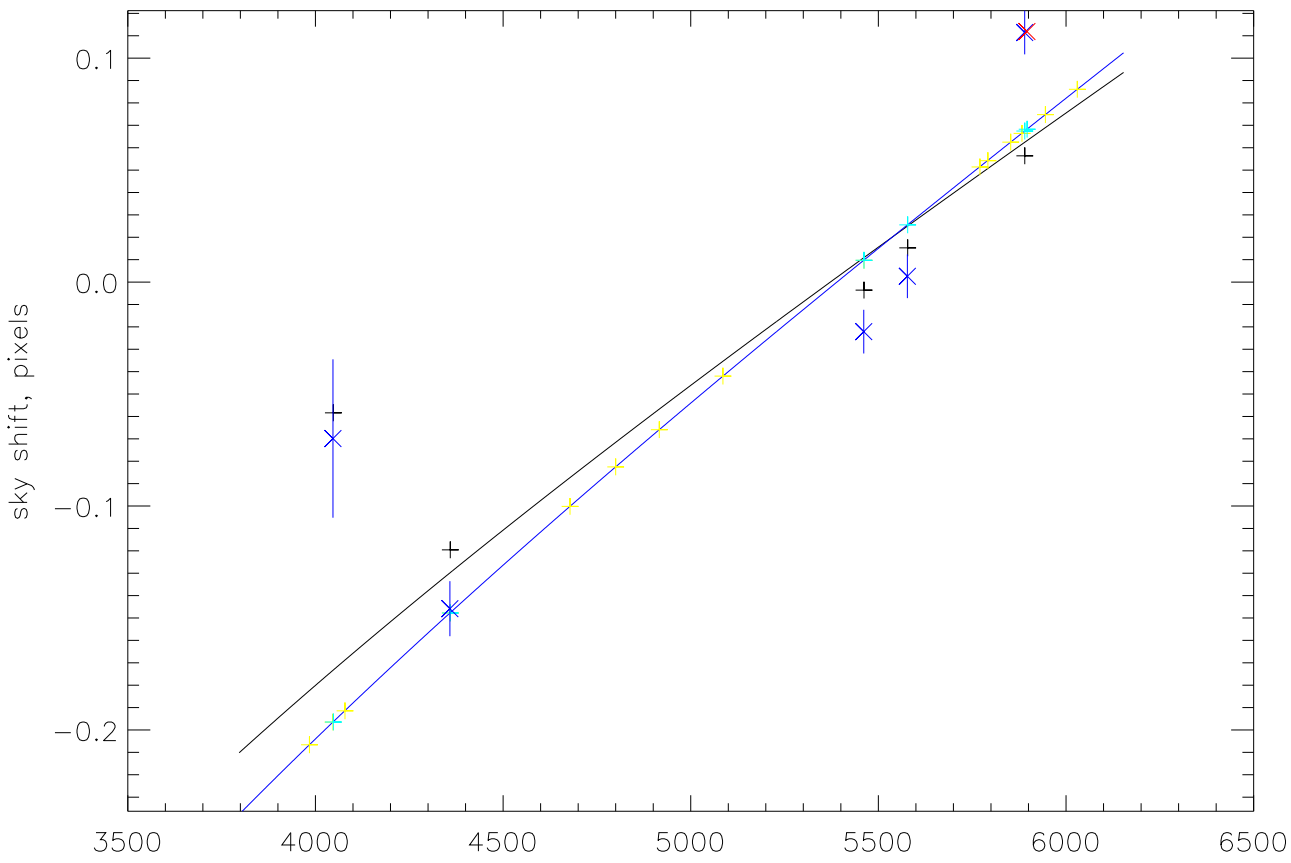

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

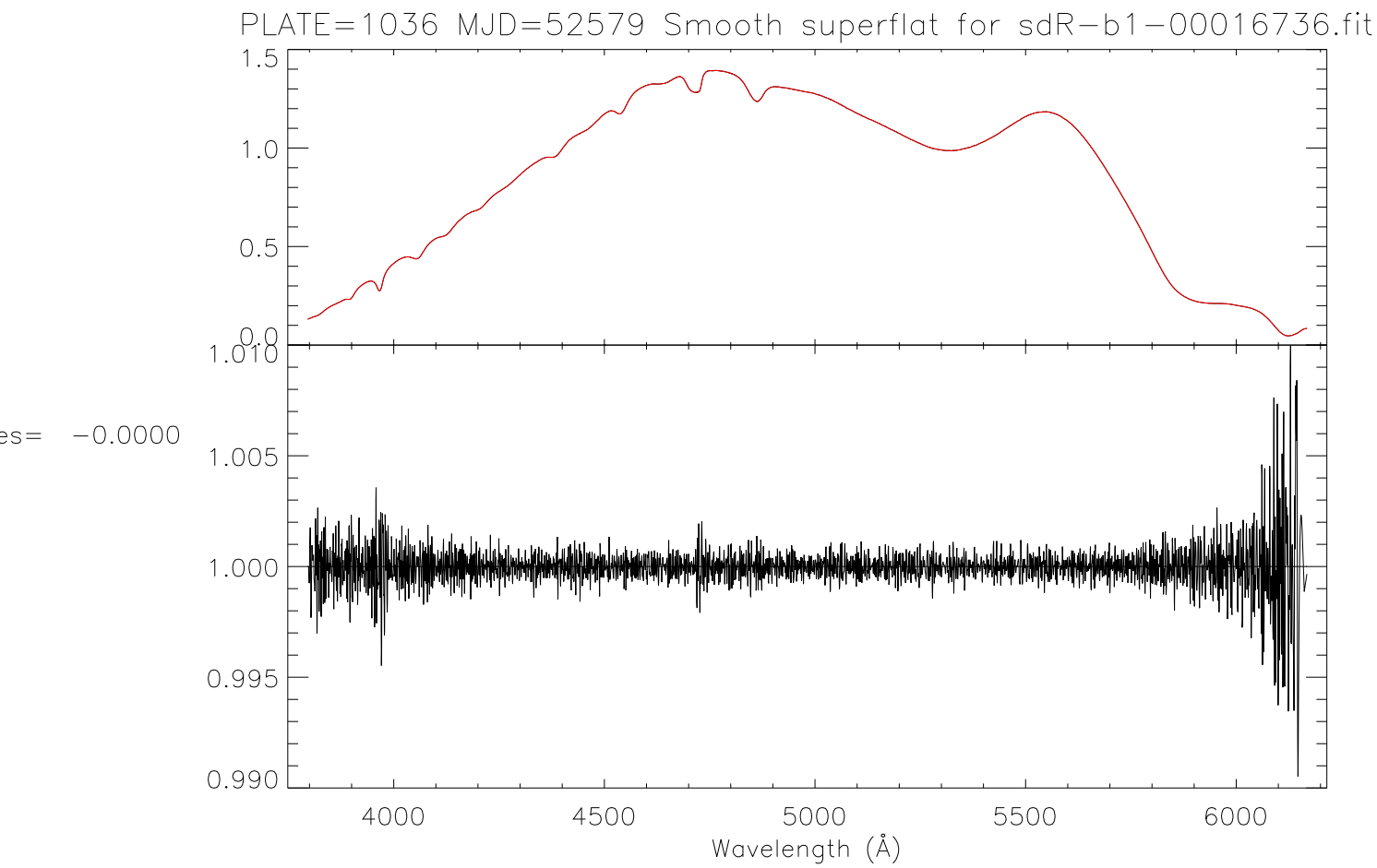

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

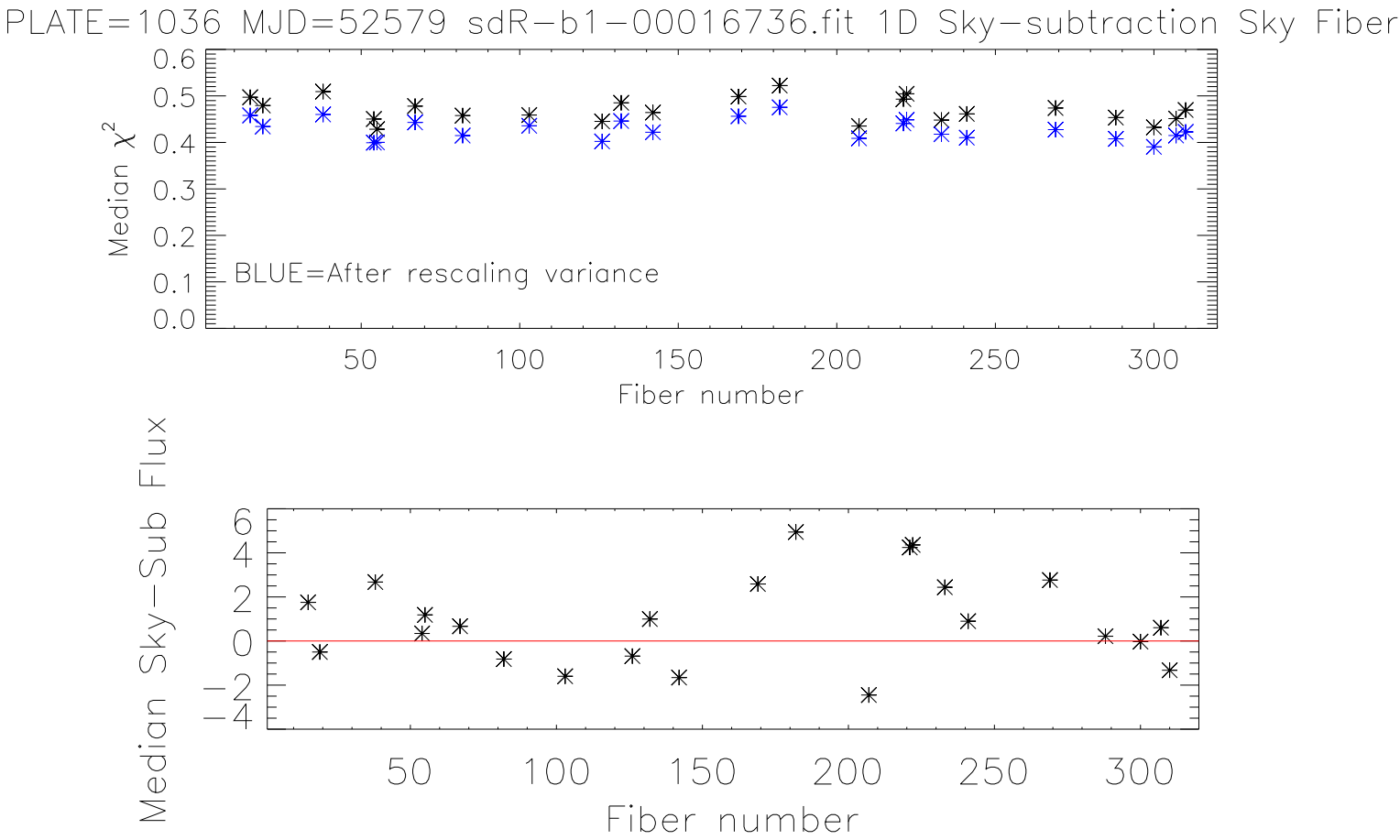

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

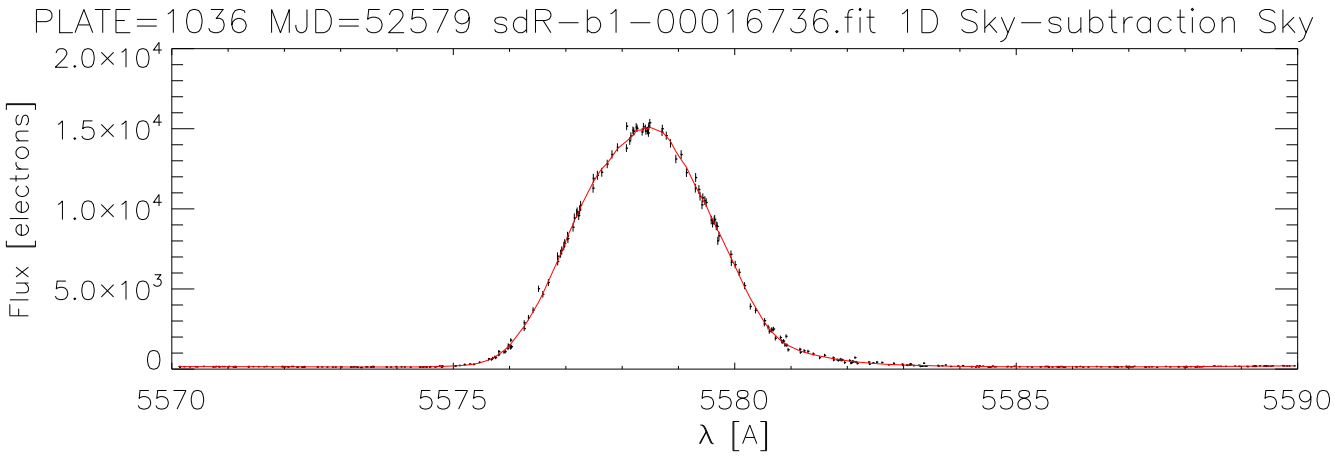

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

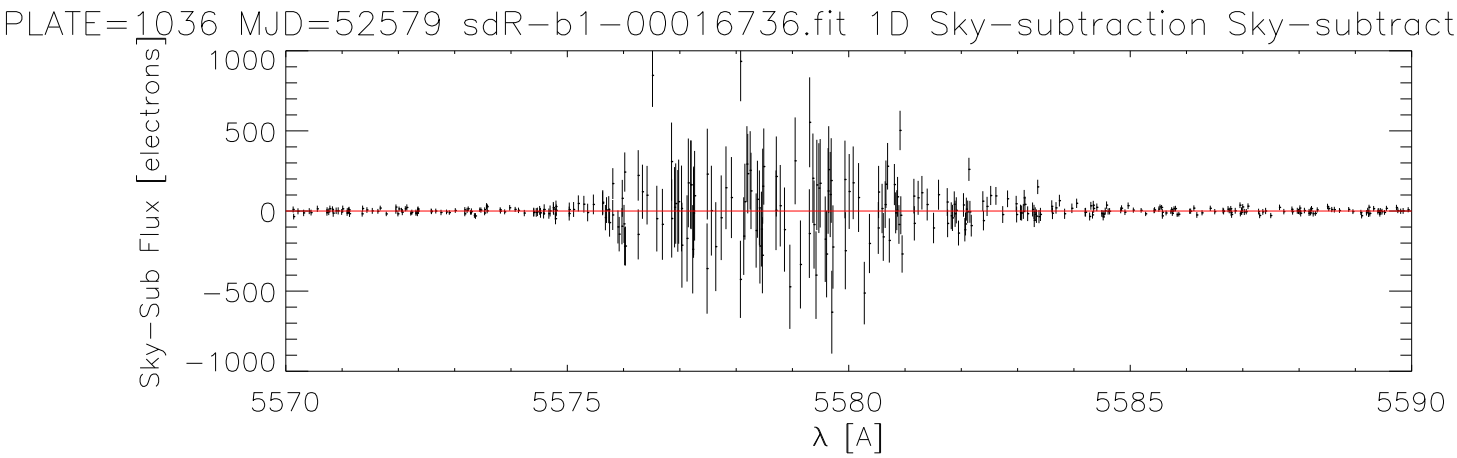

4046.5600
nfib1 25
nfib2 25
stdev 0.107
extra −0.07
4358.3300
nfib1 25
nfib2 25
stdev 0.042
extra −0.15
5460.9400
nfib1 24
nfib2 25
stdev 0.038
extra −0.02
5577.3390
nfib1 25
nfib2 25
stdev 0.011
extra 0.00
5889.9500
nfib1 25
nfib2 25
stdev 0.024
extra 0.11
5895.9240
nfib1 25
nfib2 25
stdev 0.029
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

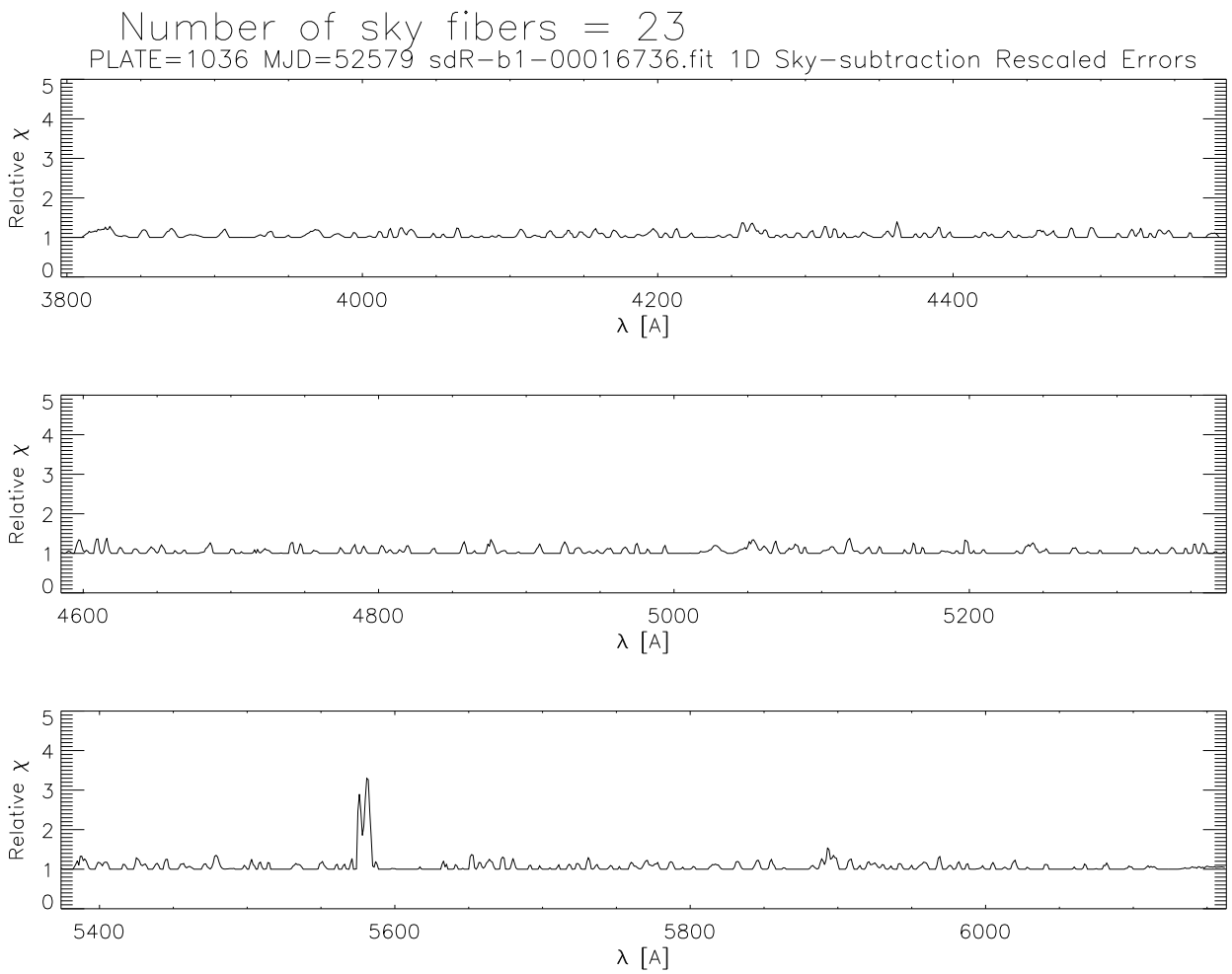

0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

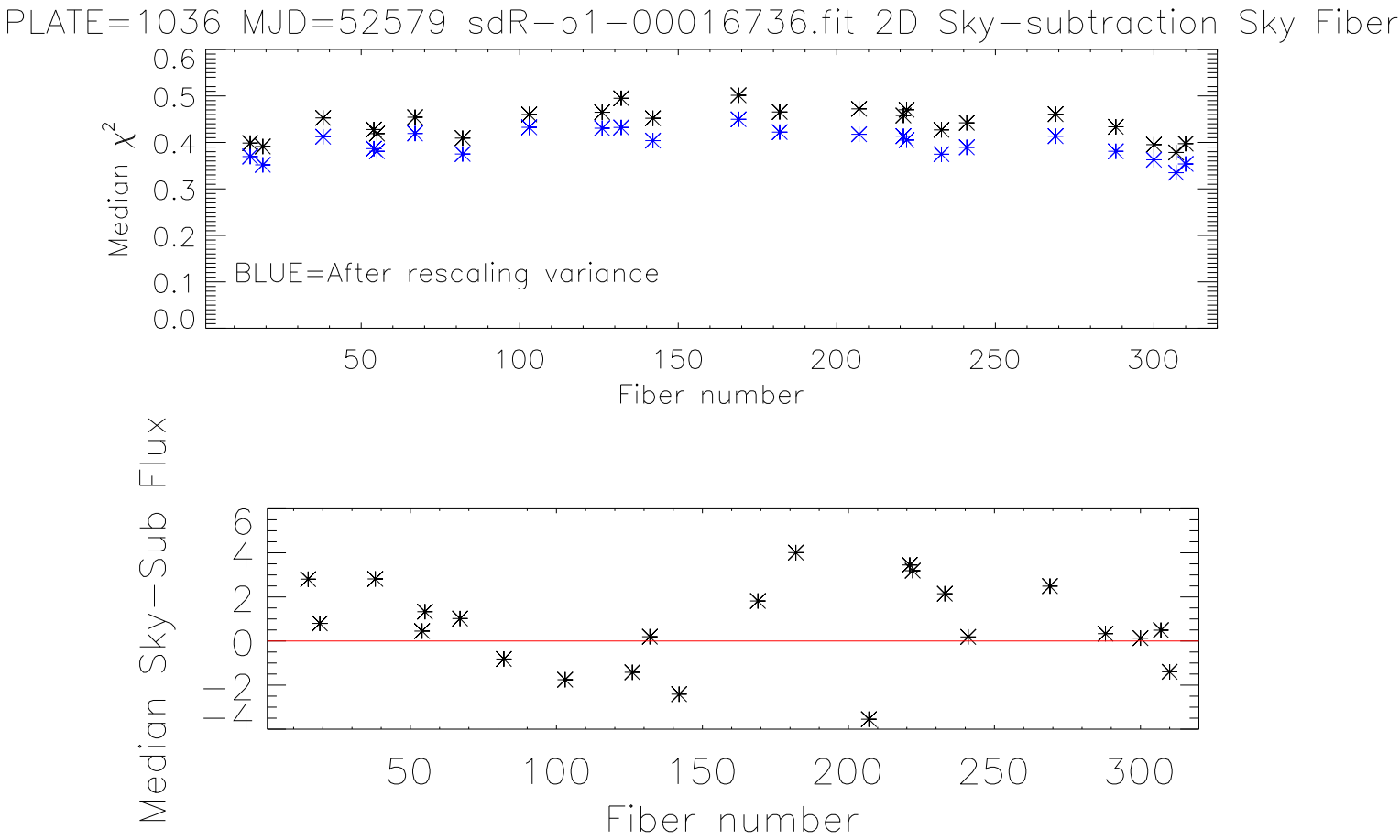

PLATE=1036 MJD=52579 Smooth superflat for sdR-b1-00016736.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

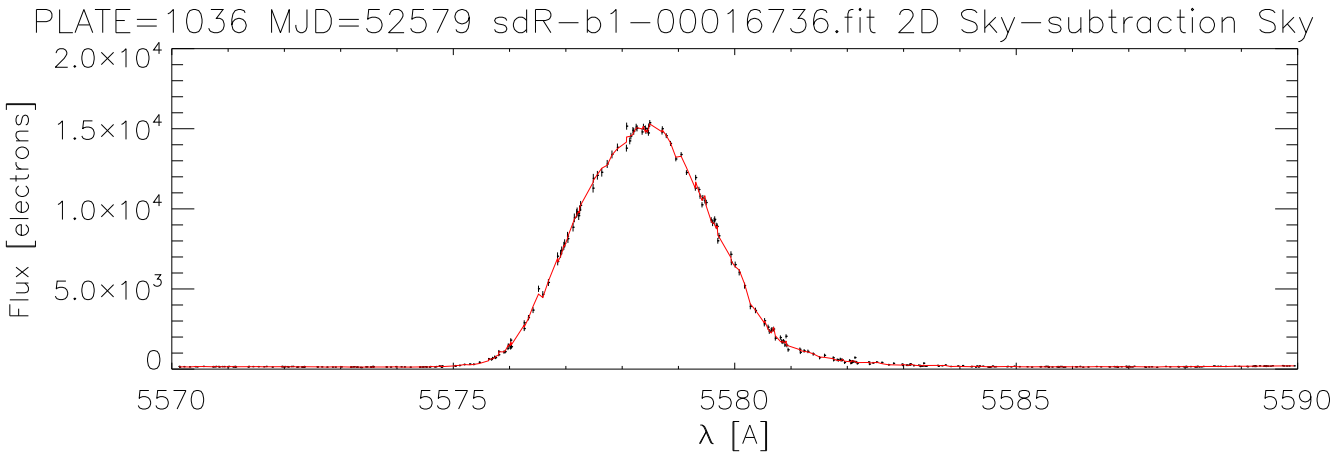

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

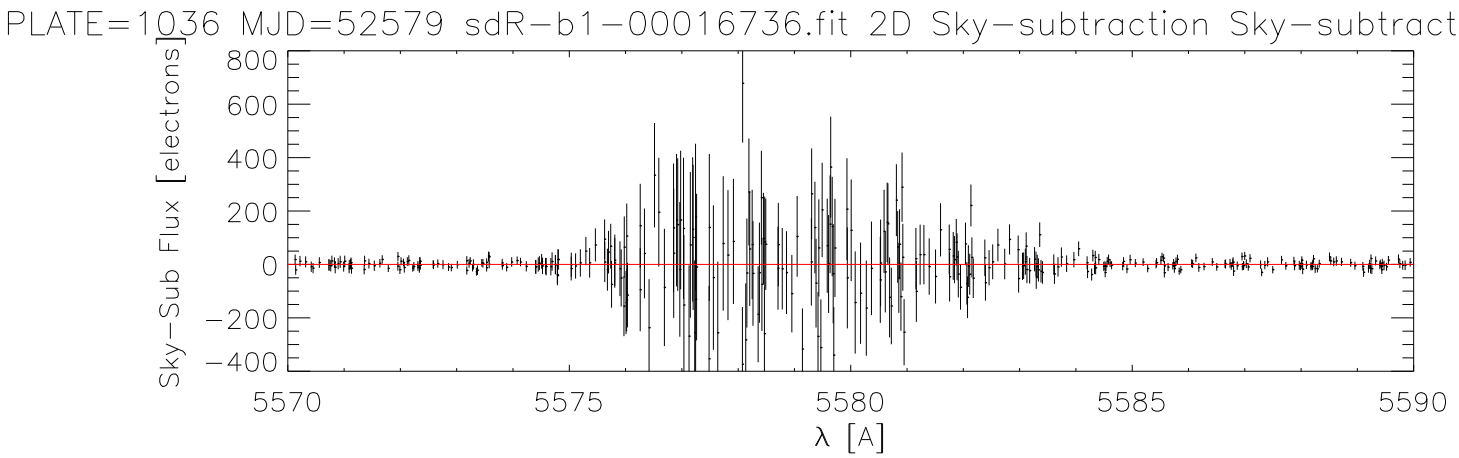

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

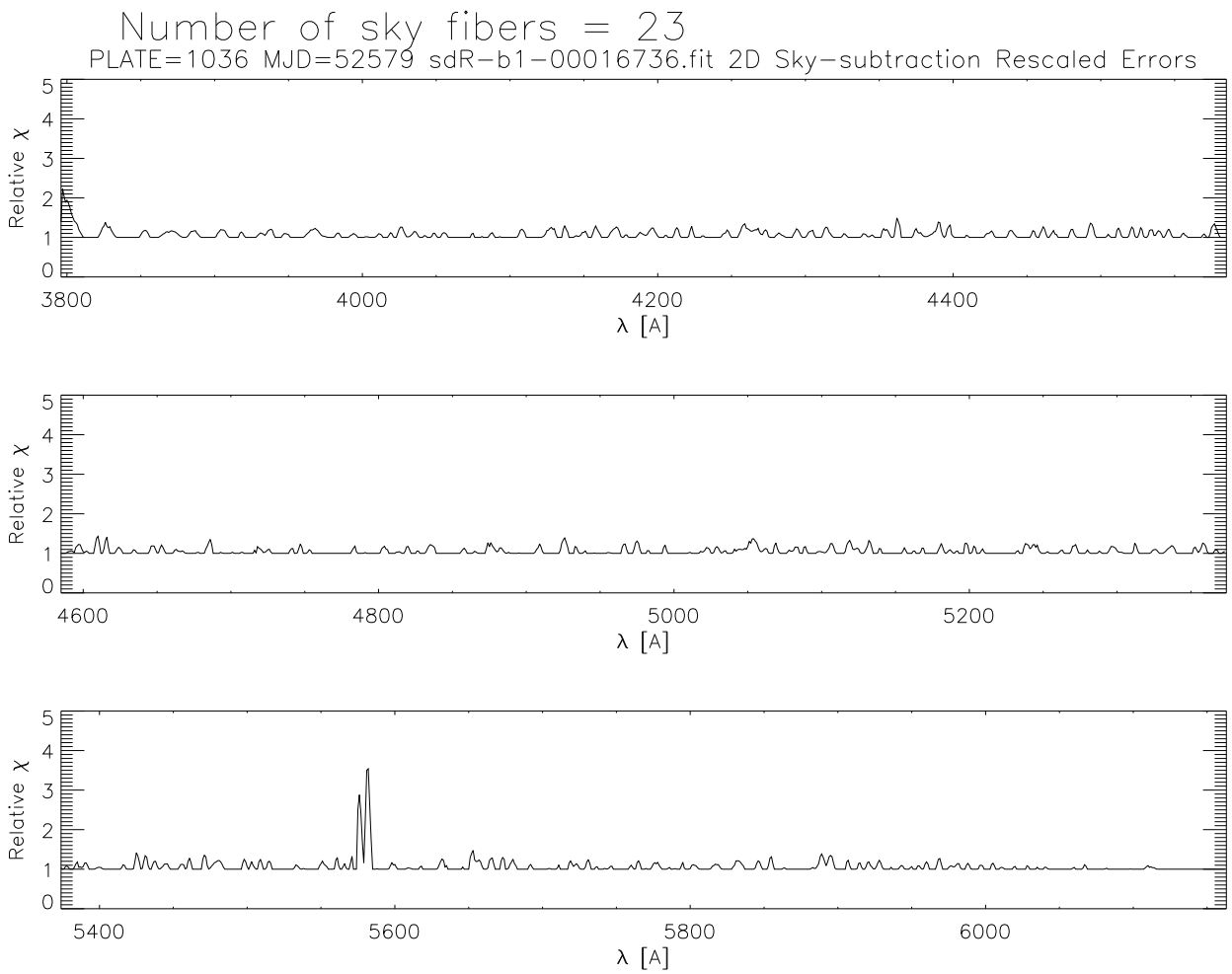

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

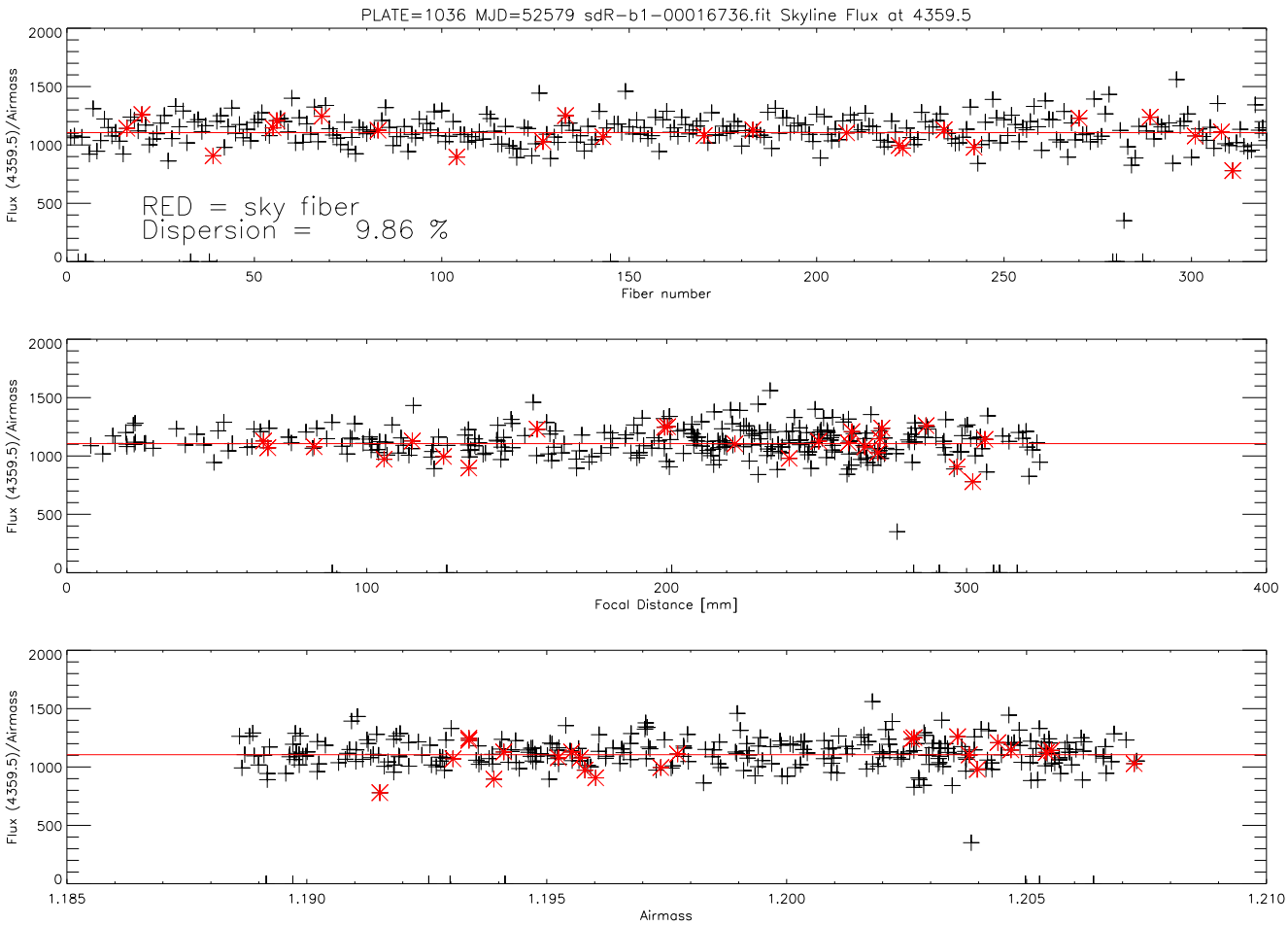

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016736.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

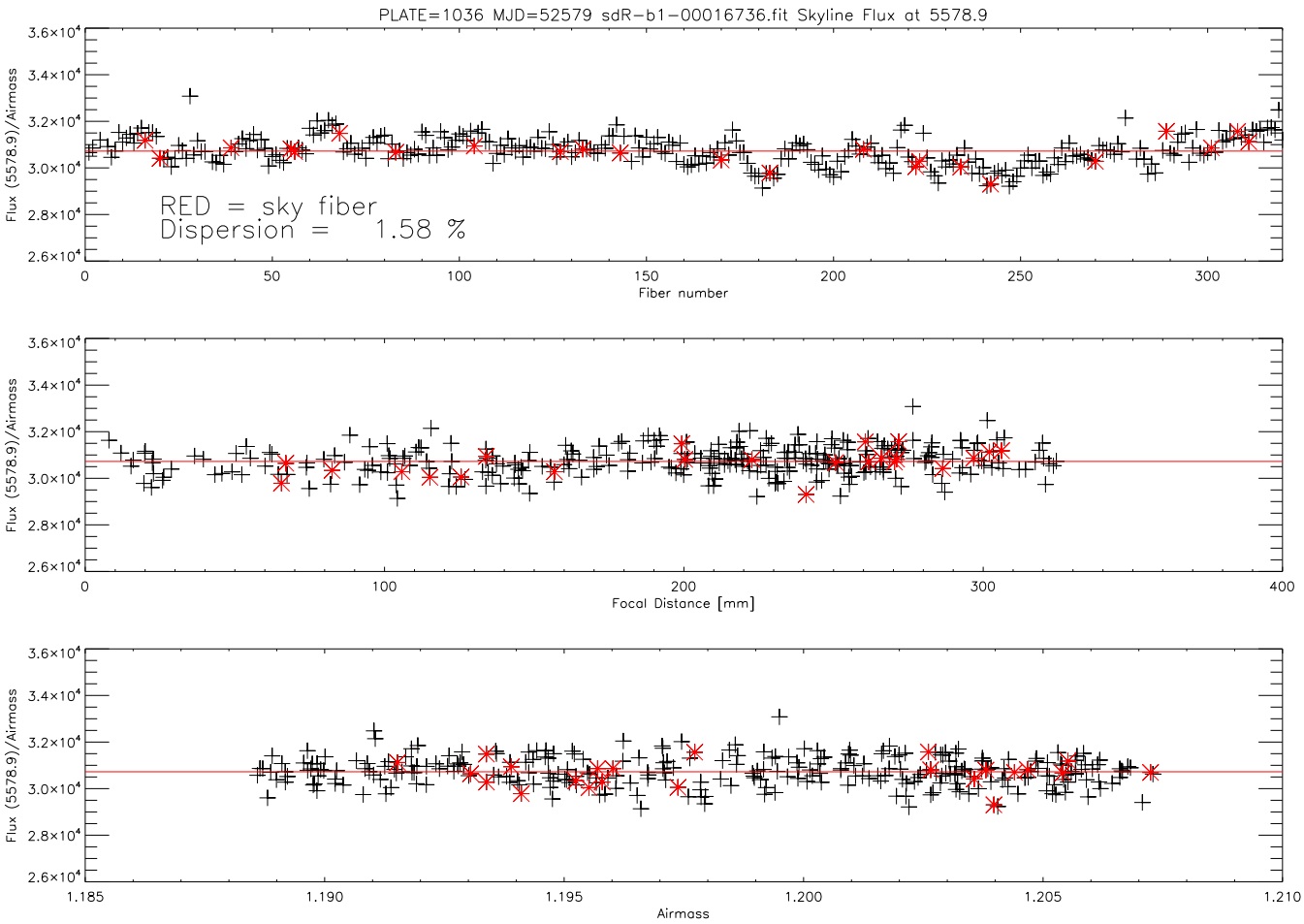

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

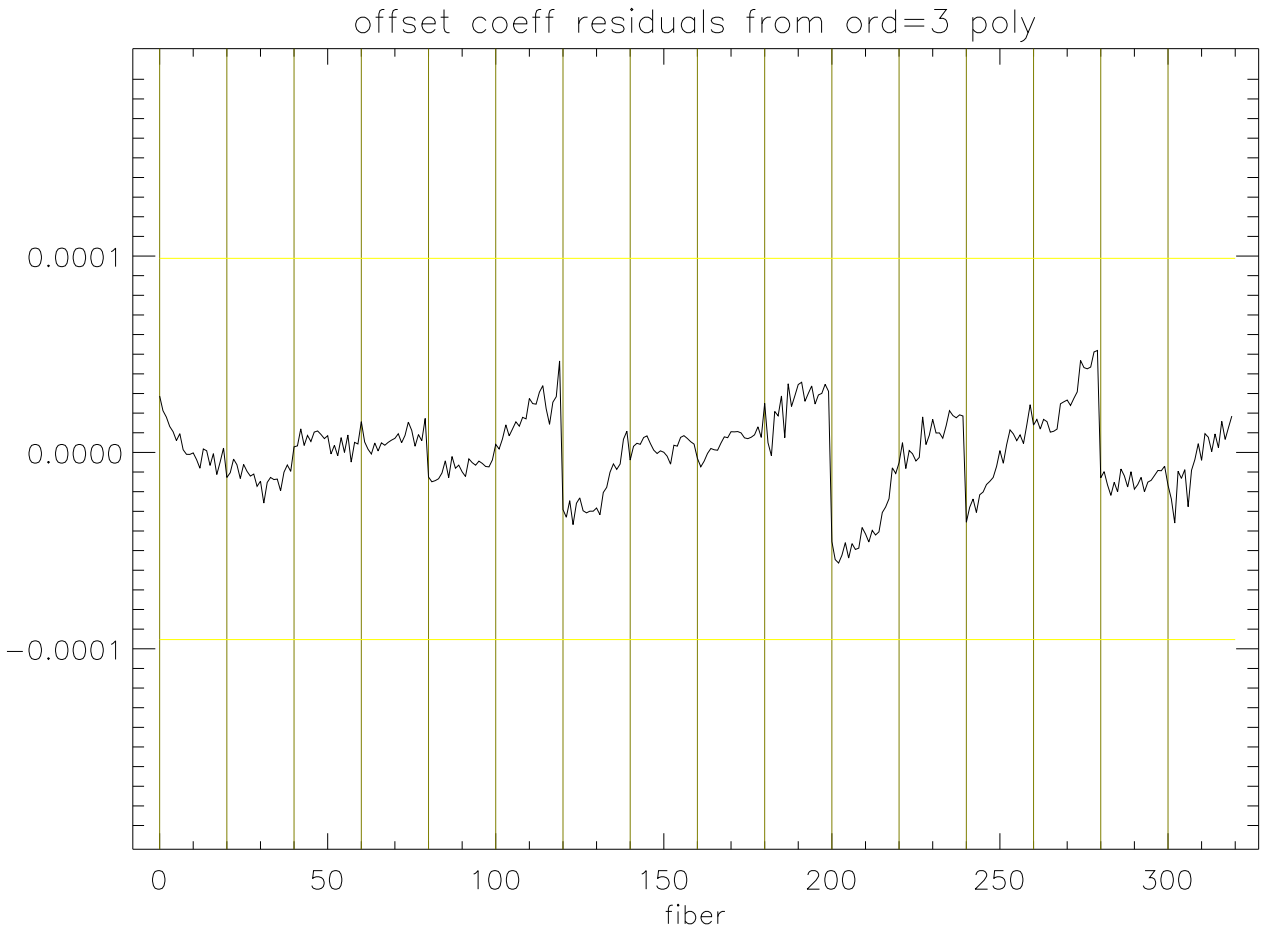

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

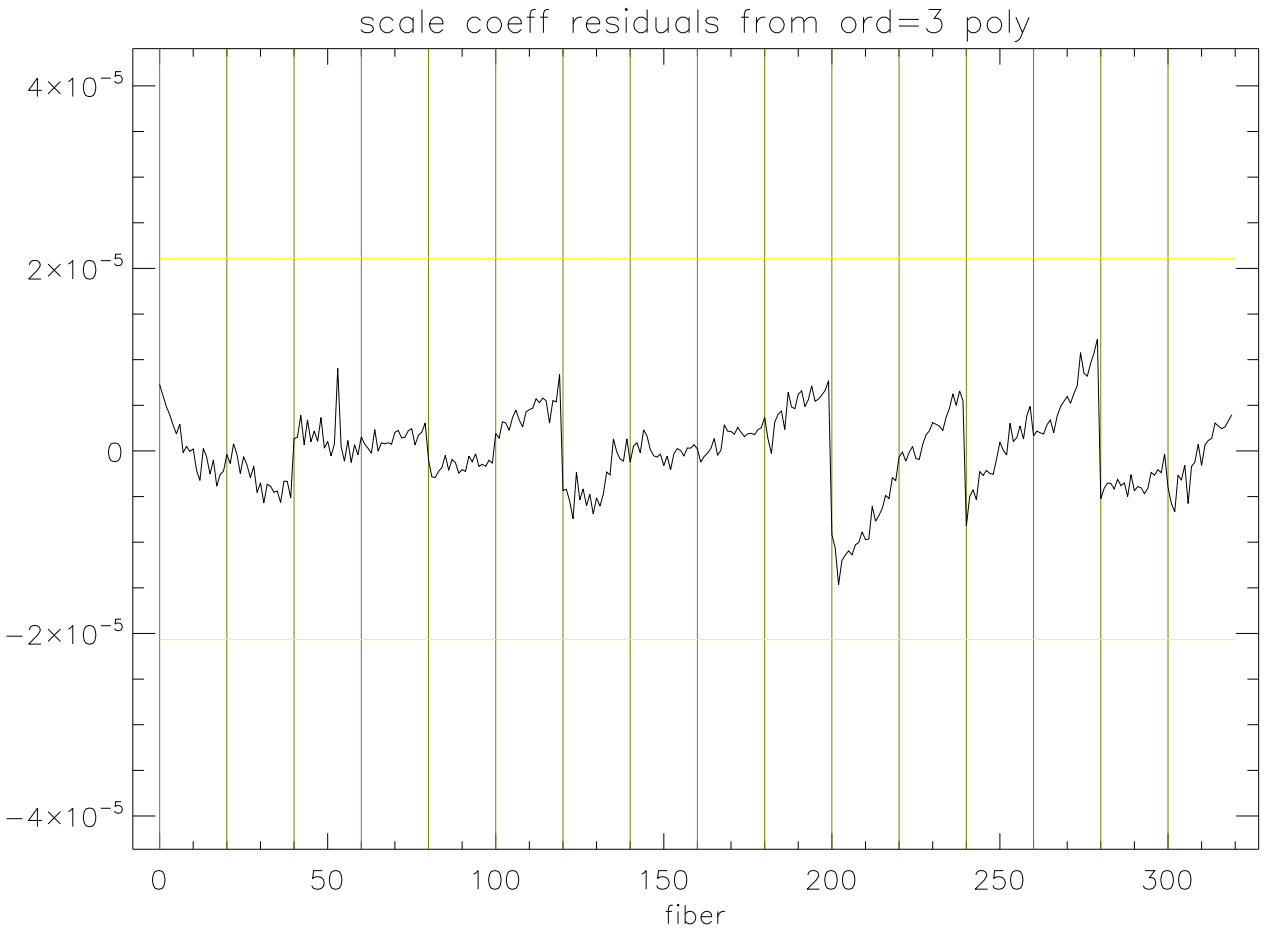

PLATE=1036 MJD=52579 sdR-b1-00016736.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

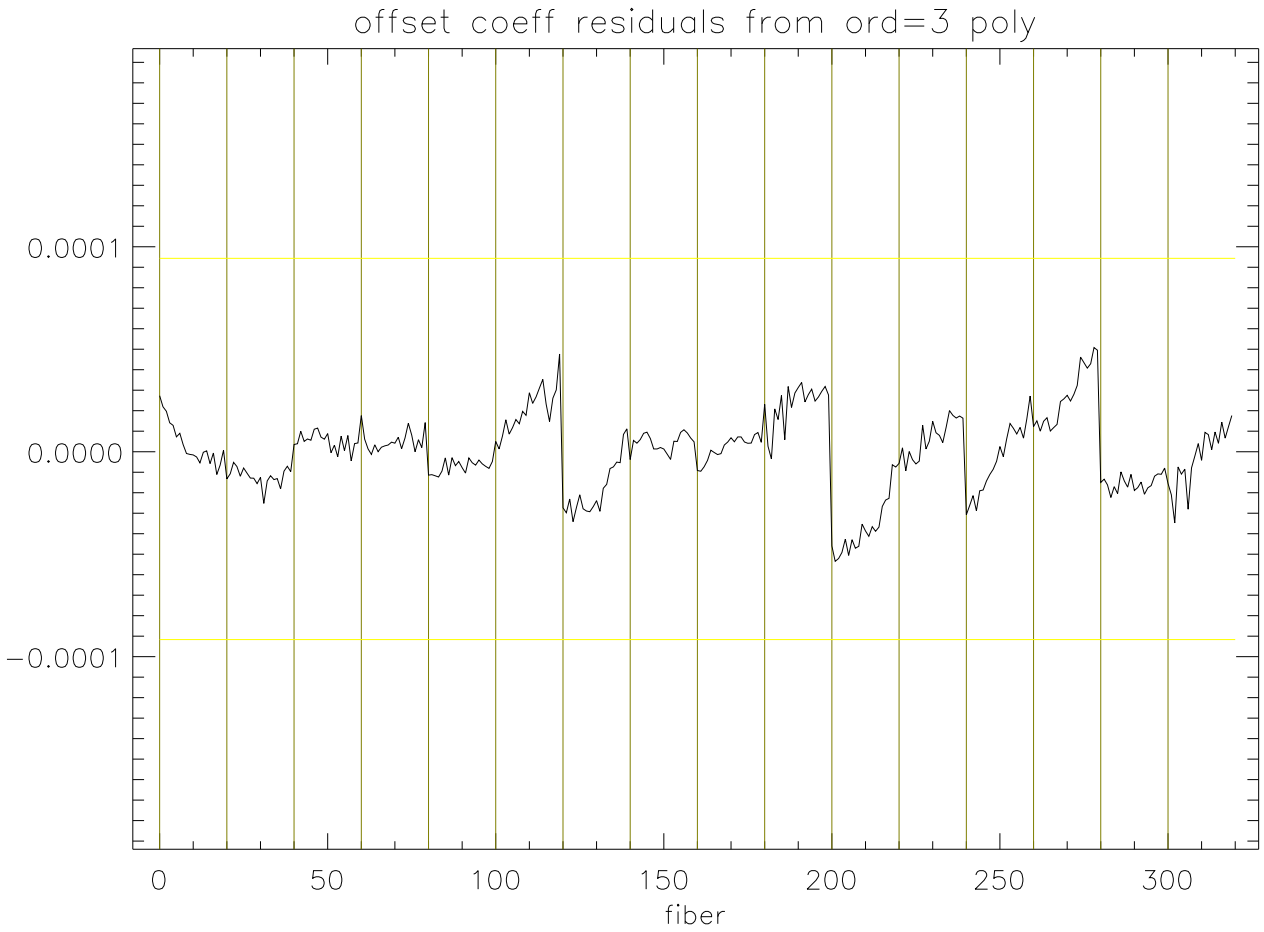

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b1-00016736.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

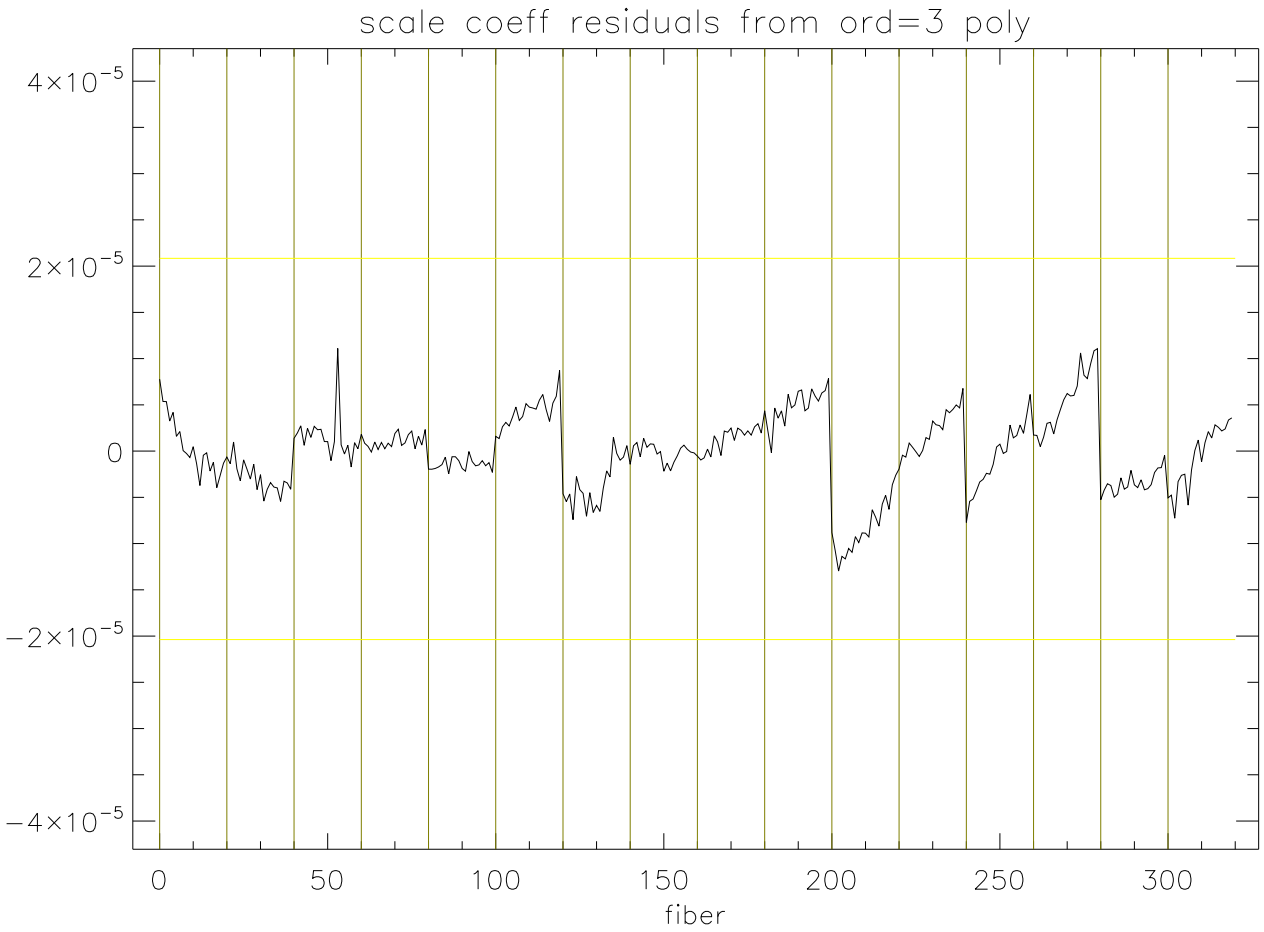

PLATE=1036 MJD=52579 sdR-b1-00016736.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.86 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

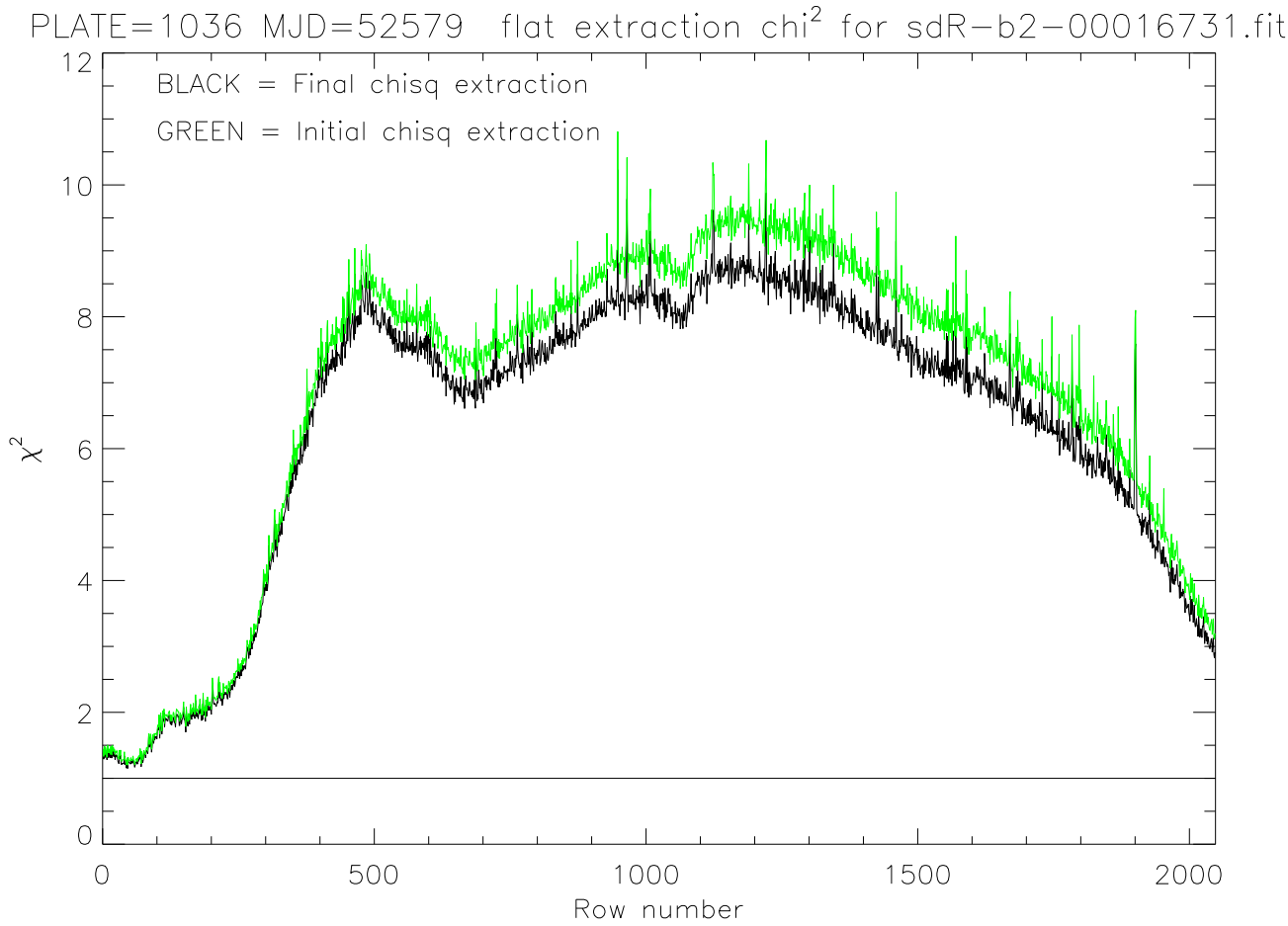

PLATE=1036 MJD=52579 sdR-b1-00016736.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.58 %
Fiber number
Focal Distance [mm]
Airmass

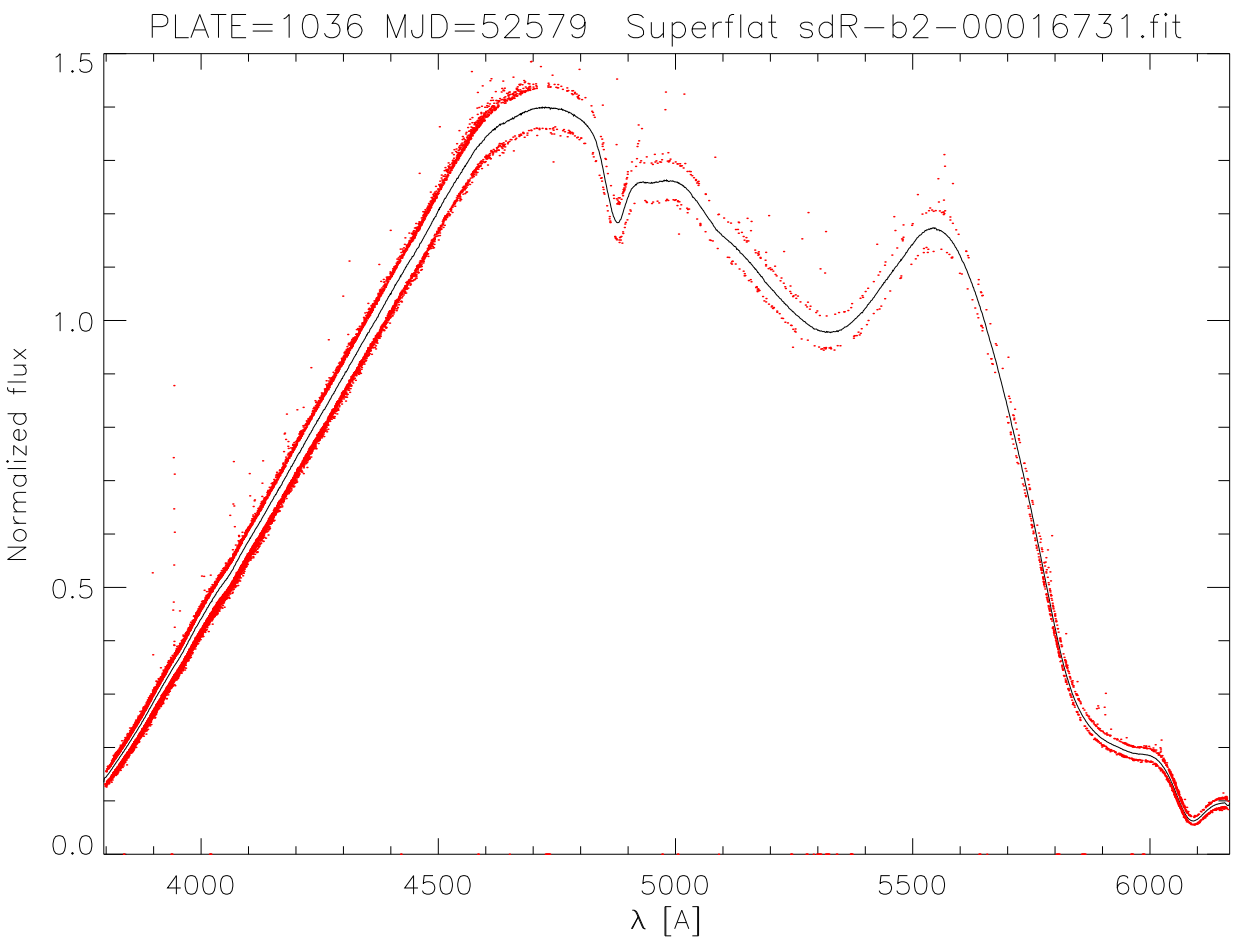

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

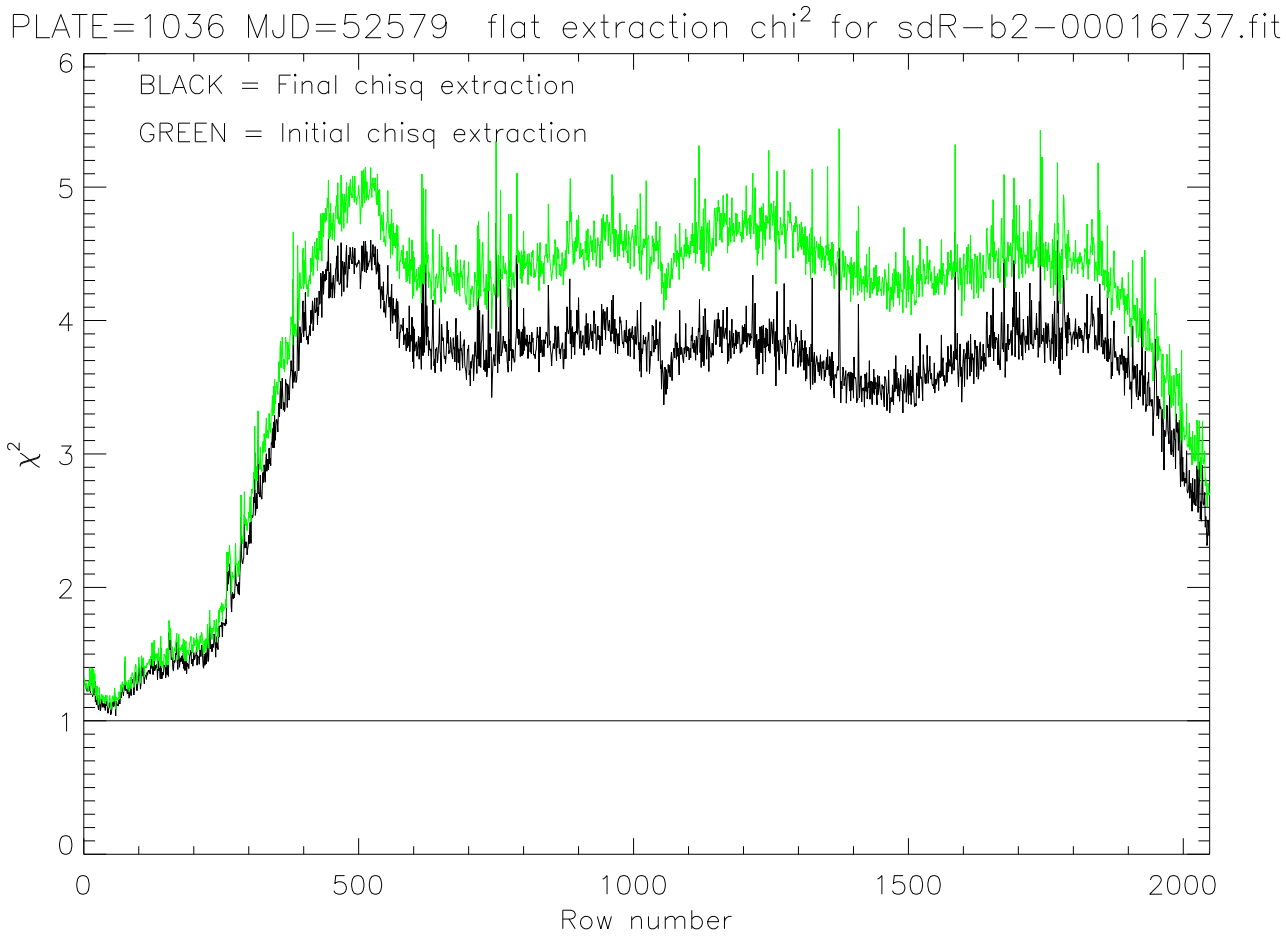

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

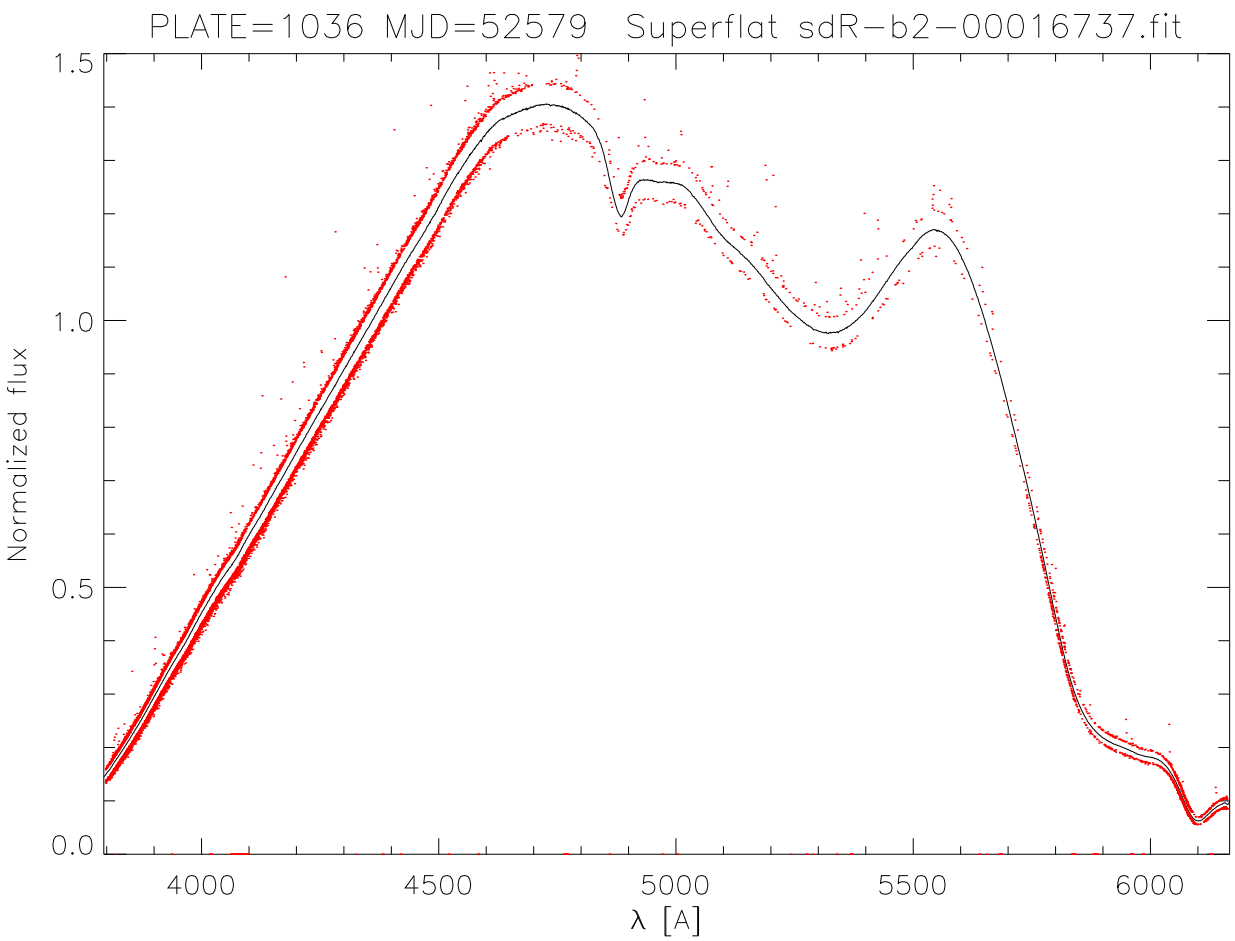

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

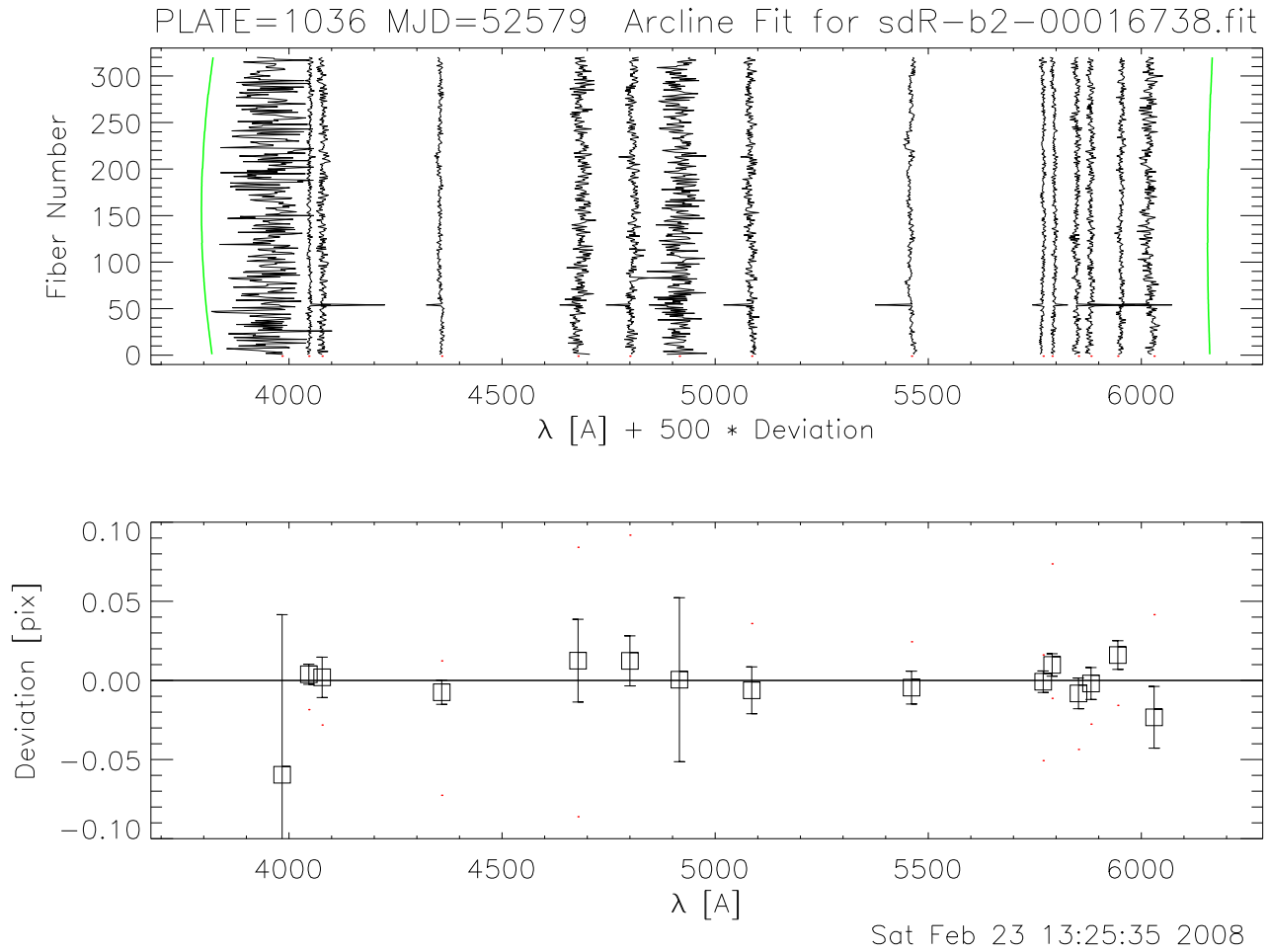

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

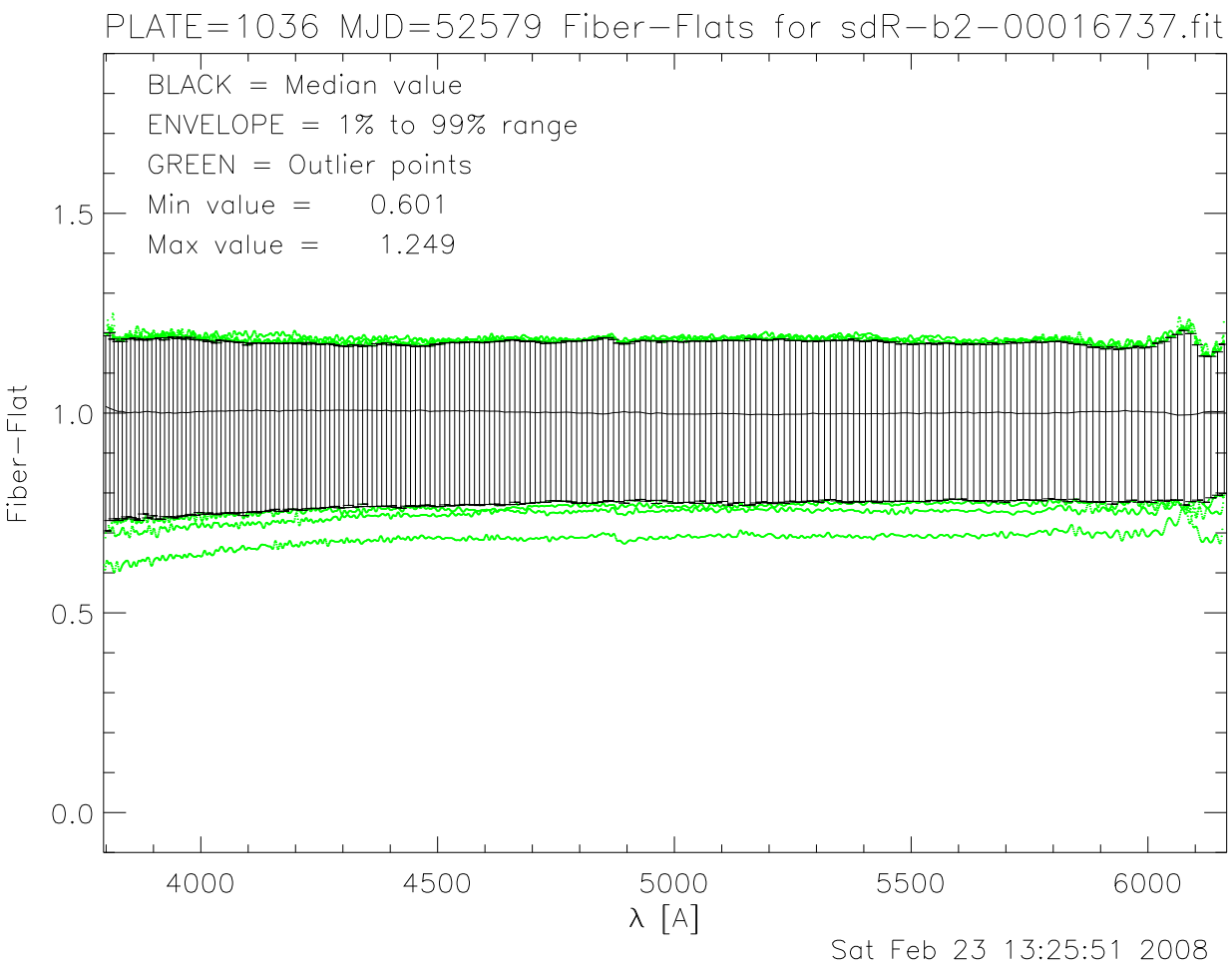

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−b2−00016731.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

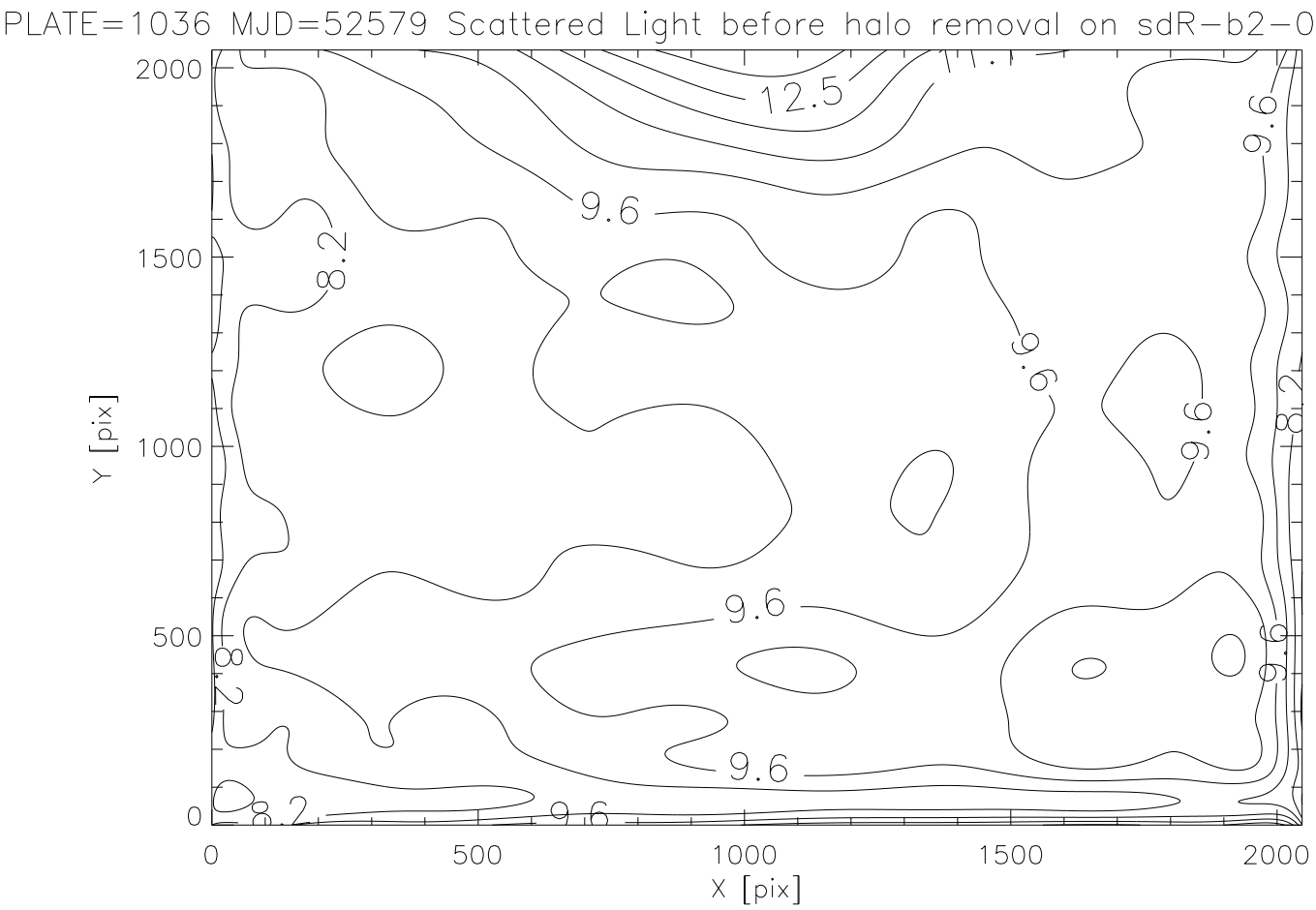

PLATE=1036 MJD=52579 Superflat sdR-b2-00016731.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

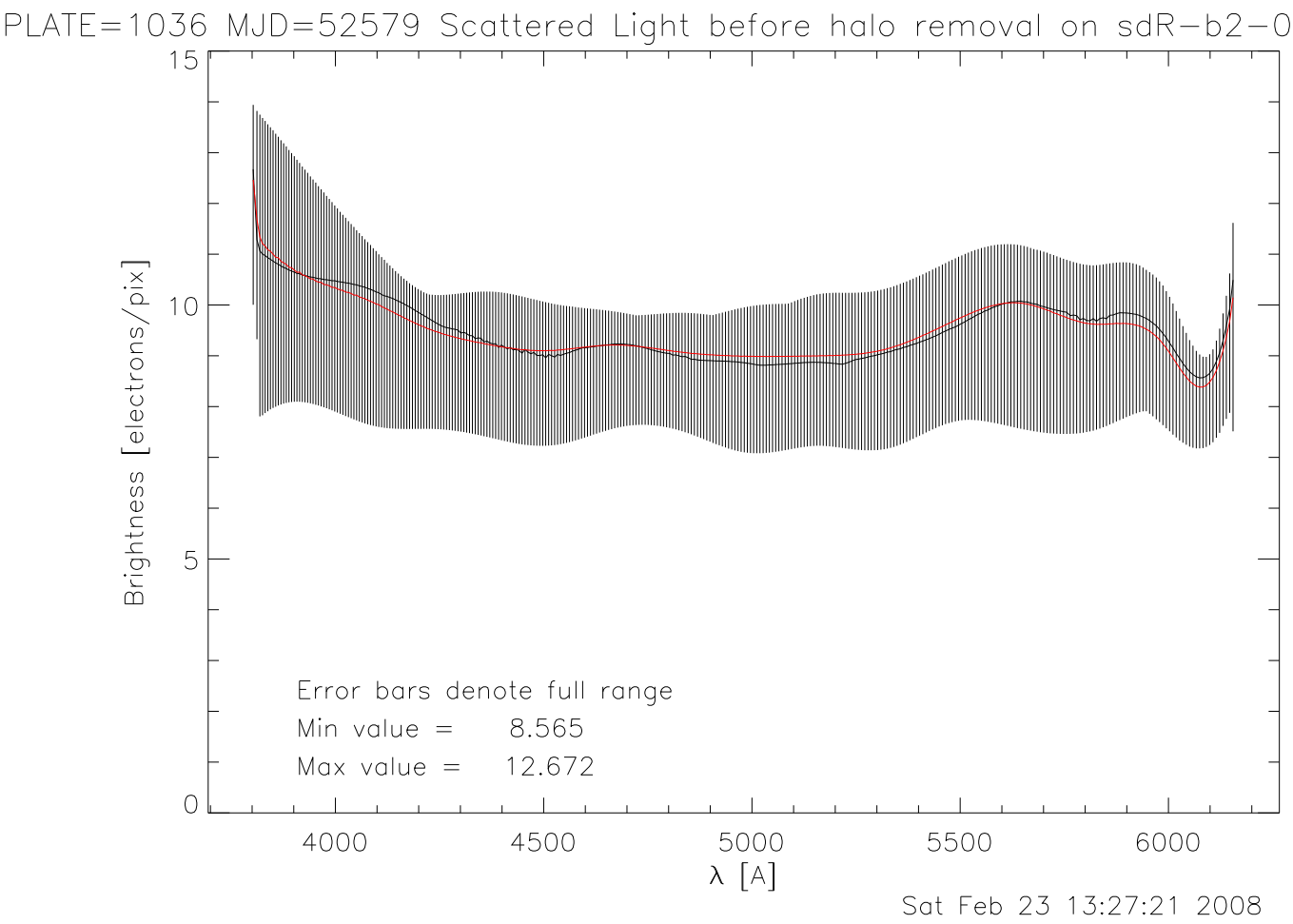

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−b2−00016737.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

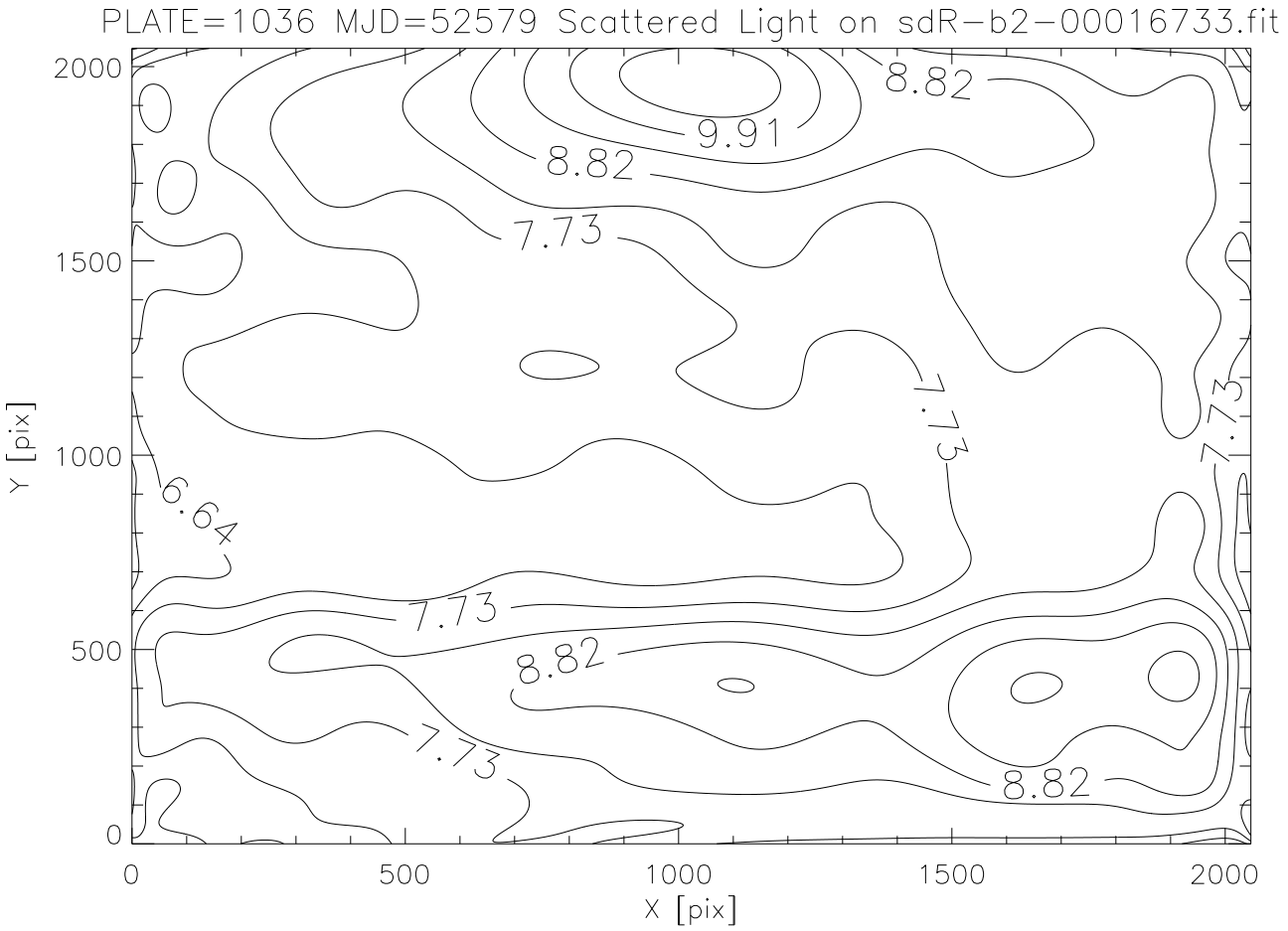

PLATE=1036 MJD=52579 Superflat sdR-b2-00016737.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

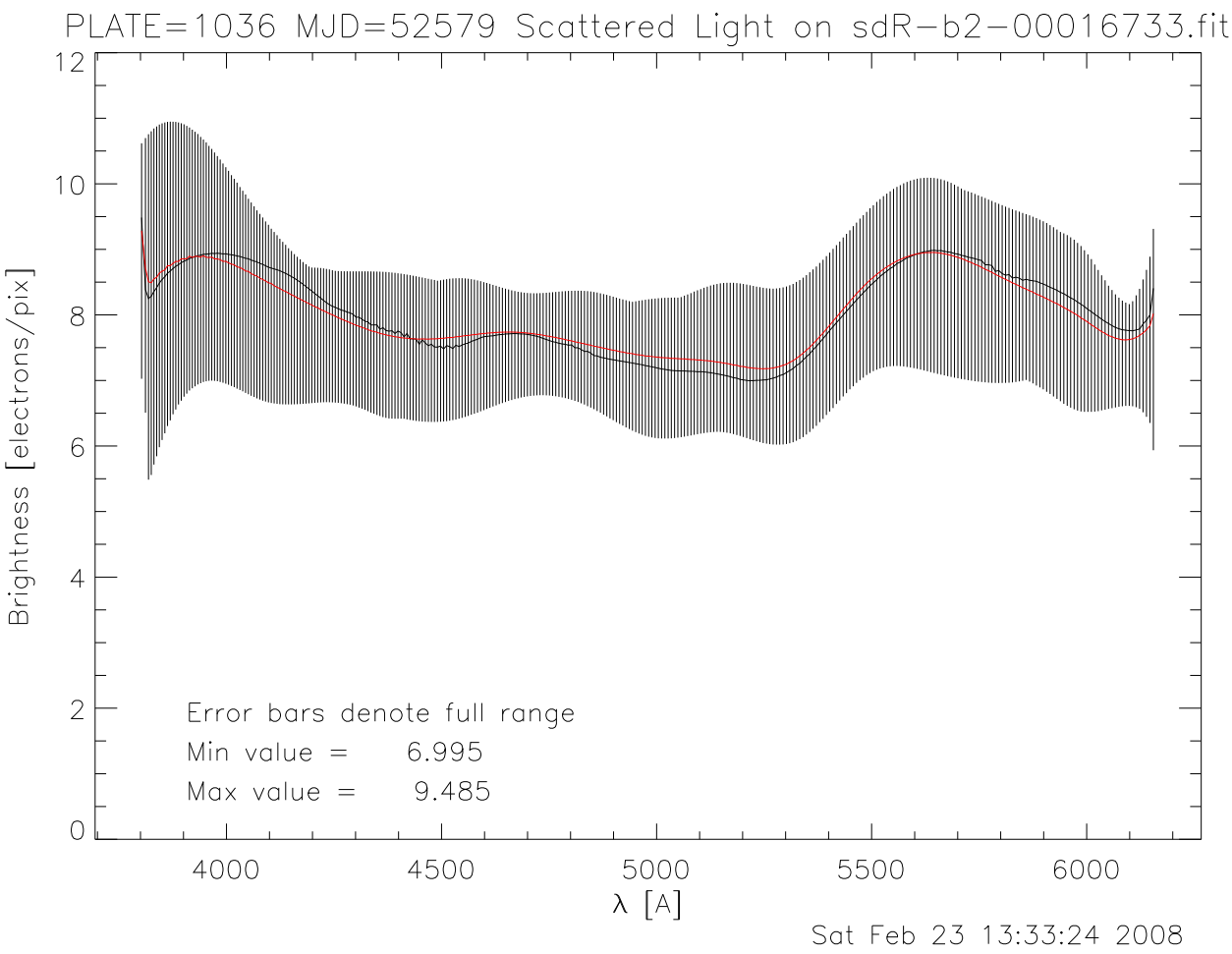

PLATE=1036 MJD=52579 Arcline Fit for sdR-b2-00016738.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:25:35 2008

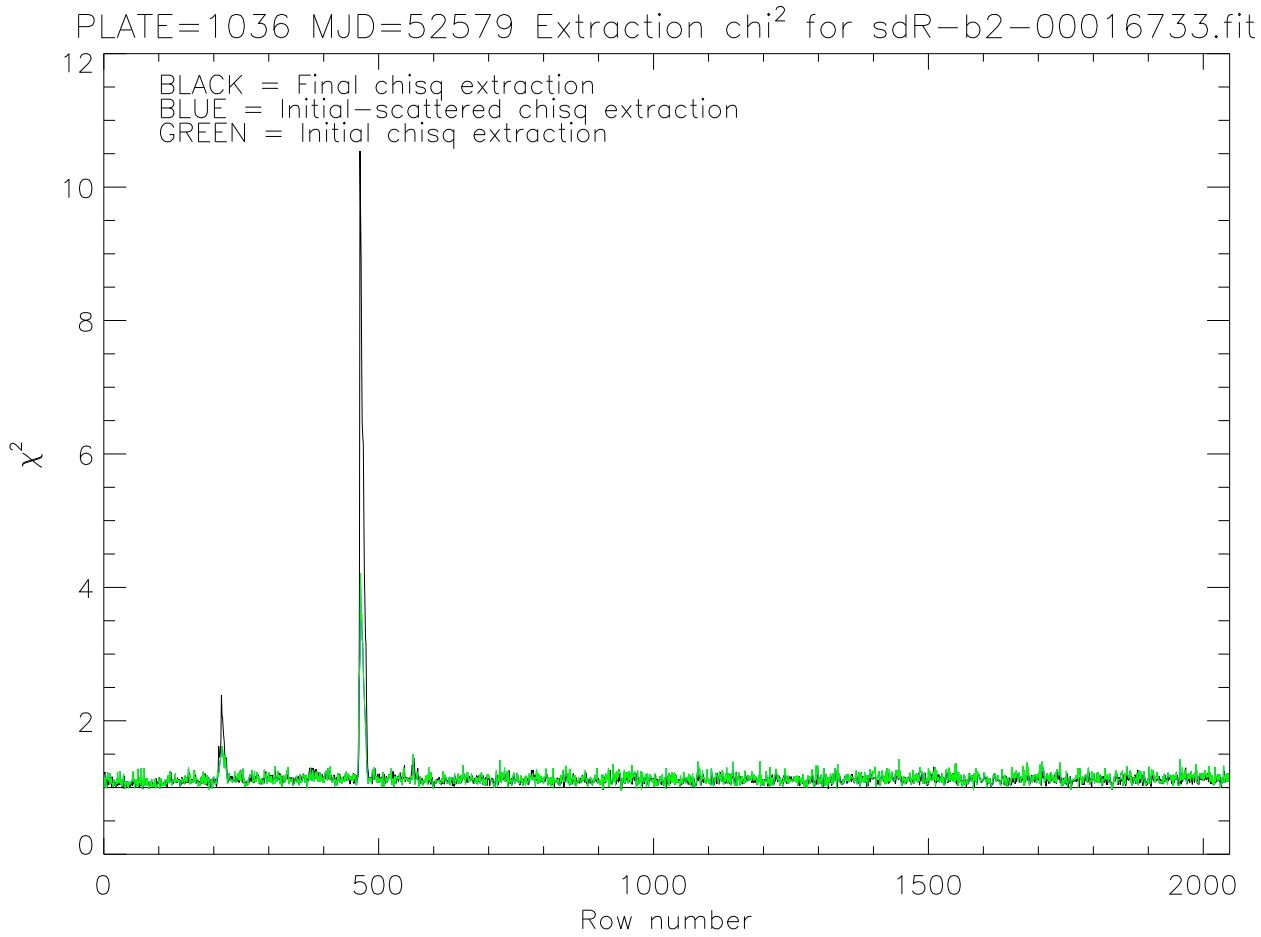

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b2-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.601
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:25:51 2008

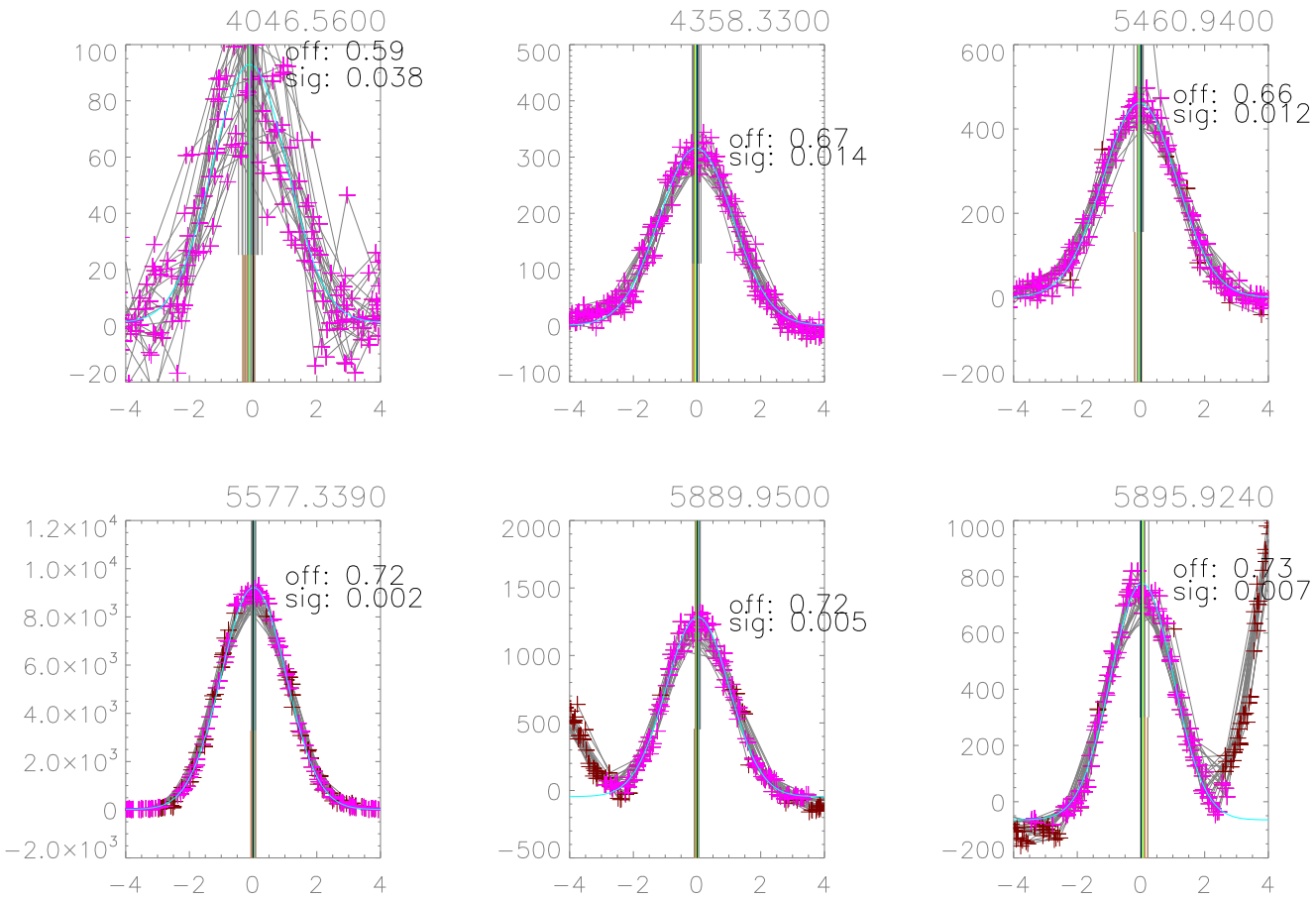

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016733.f
12.5
9.6
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

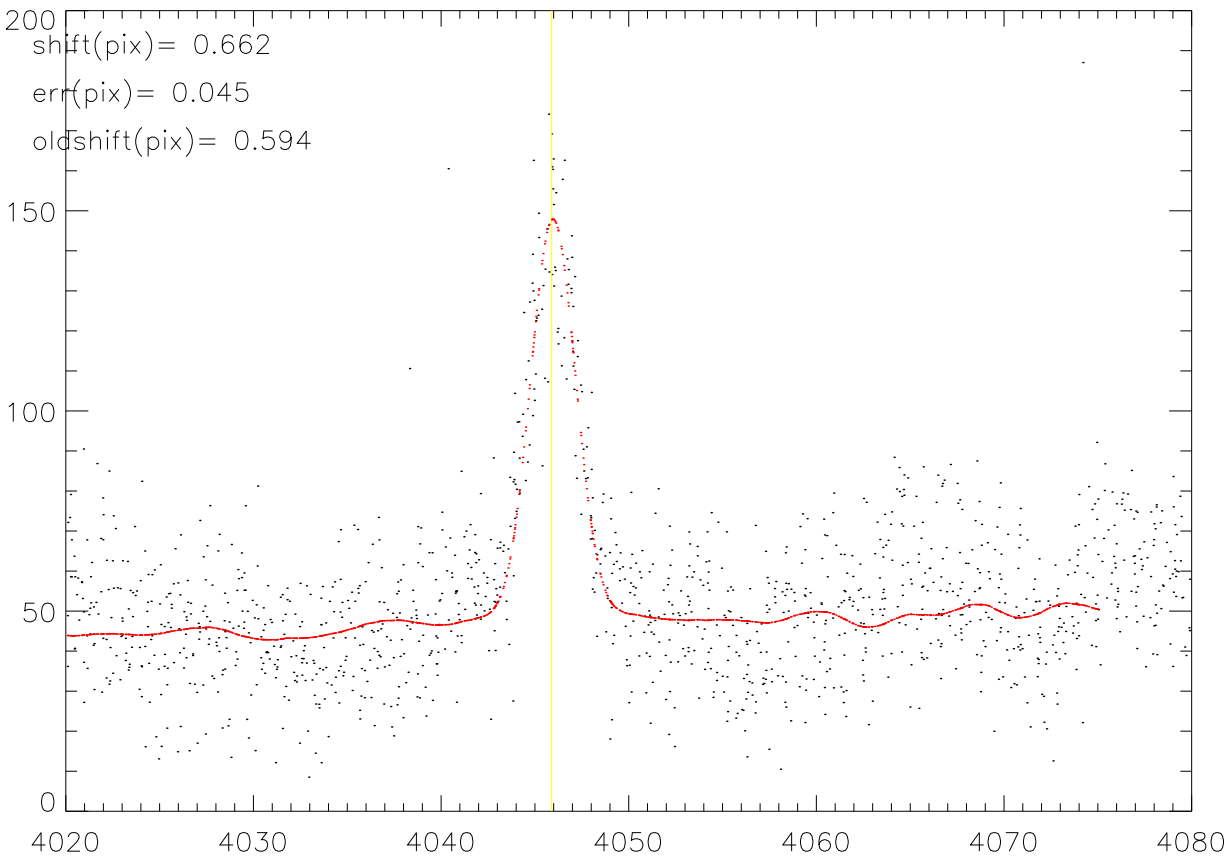

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016733.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.565
Max value = 12.672
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:27:21 2008

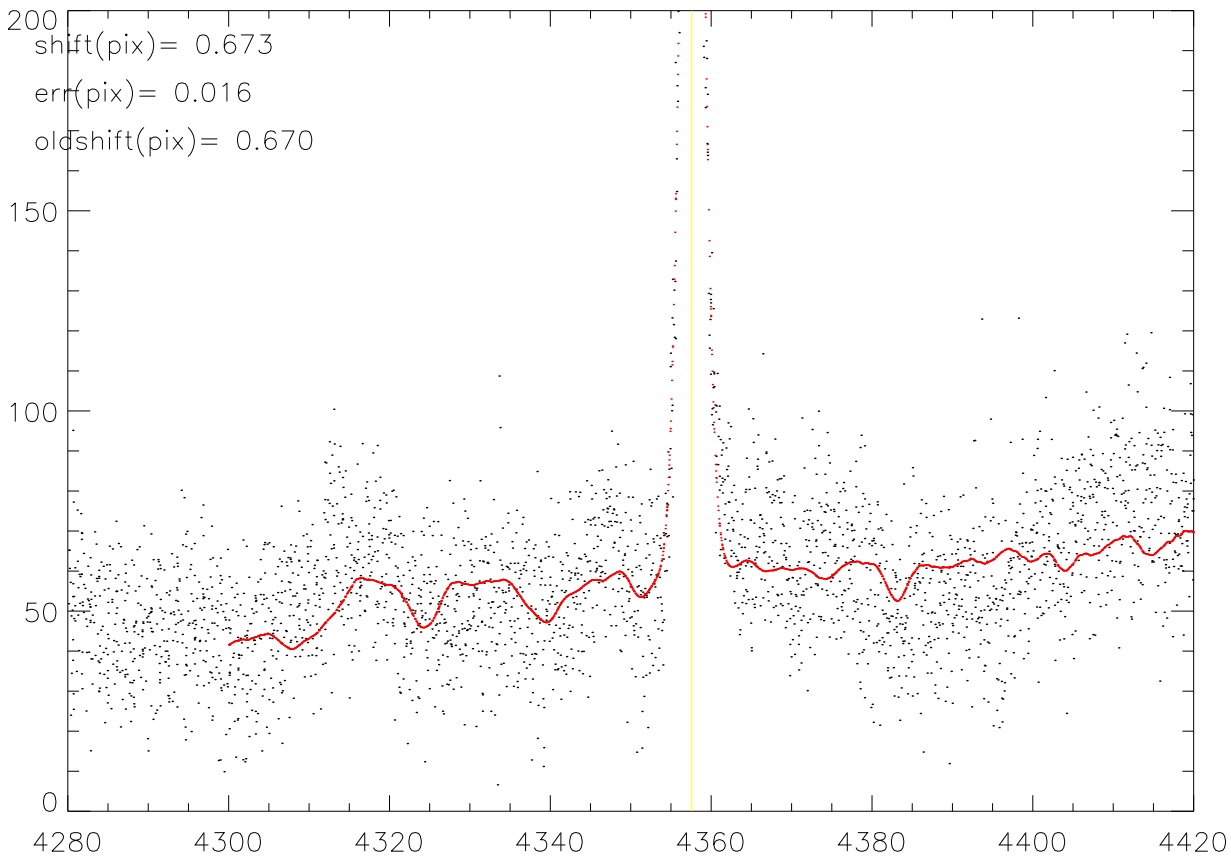

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016733.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.82
9.91
8.82
7.73
7.73
7.73
6.64
7.73
8.82
7.73
8.82

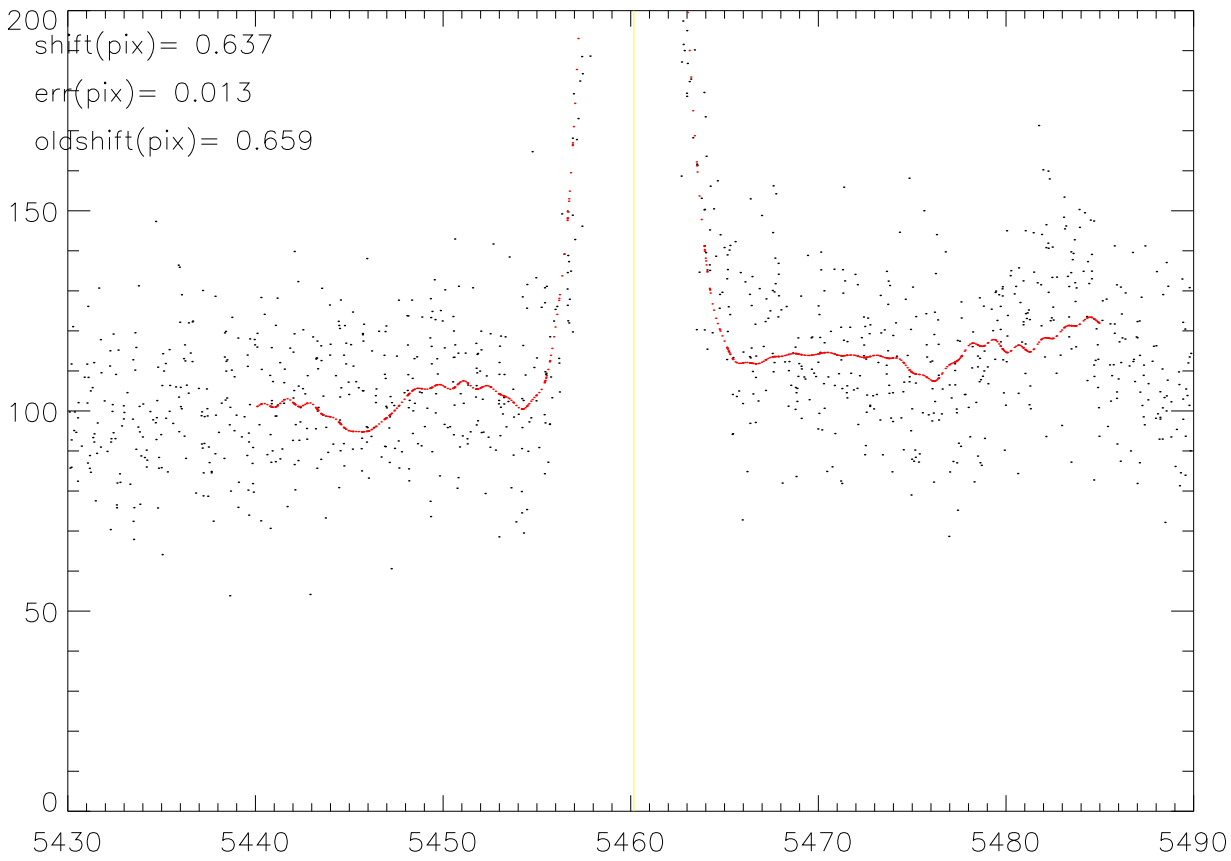

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016733.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.995
Max value = 9.485
Sat Feb 23 13:33:24 2008

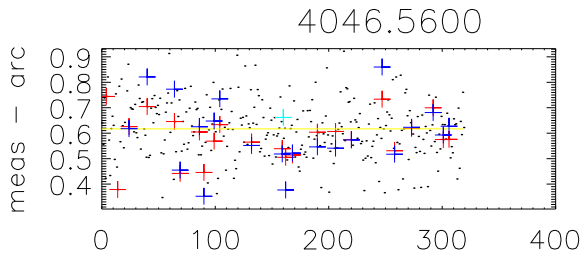

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b2-00016733.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

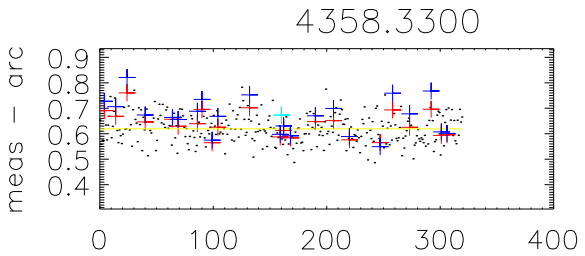

4046.5600
off: 0.59
sig: 0.038
4358.3300
off: 0.67
sig: 0.014
5460.9400
off: 0.66
sig: 0.012
5577.3390
off: 0.72
sig: 0.002
5889.9500
off: 0.72
sig: 0.005
5895.9240
off: 0.73
sig: 0.007

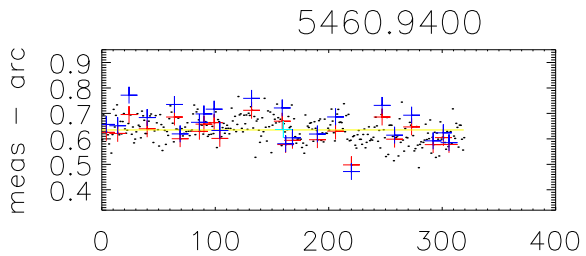

shift(pix)= 0.662
err(pix)= 0.045
oldshift(pix)= 0.594
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

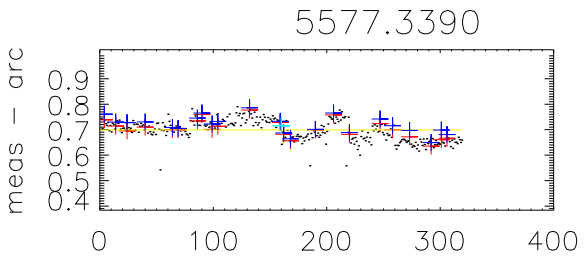

shift(pix)= 0.673
err(pix)= 0.016
oldshift(pix)= 0.670
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

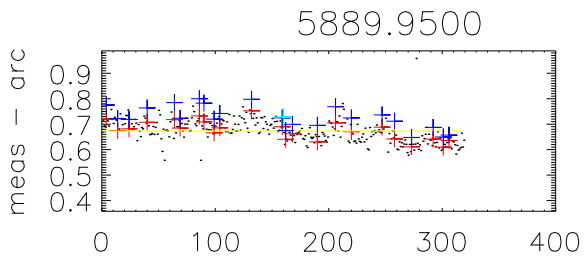

shift(pix)= 0.637
err(pix)= 0.013
oldshift(pix)= 0.659
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

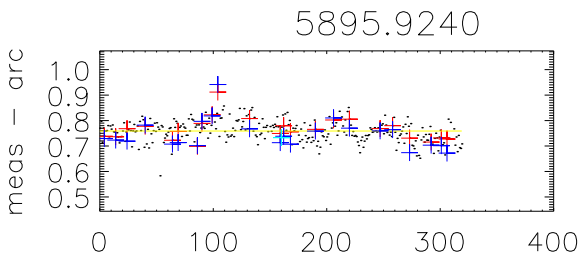

4046.5600
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

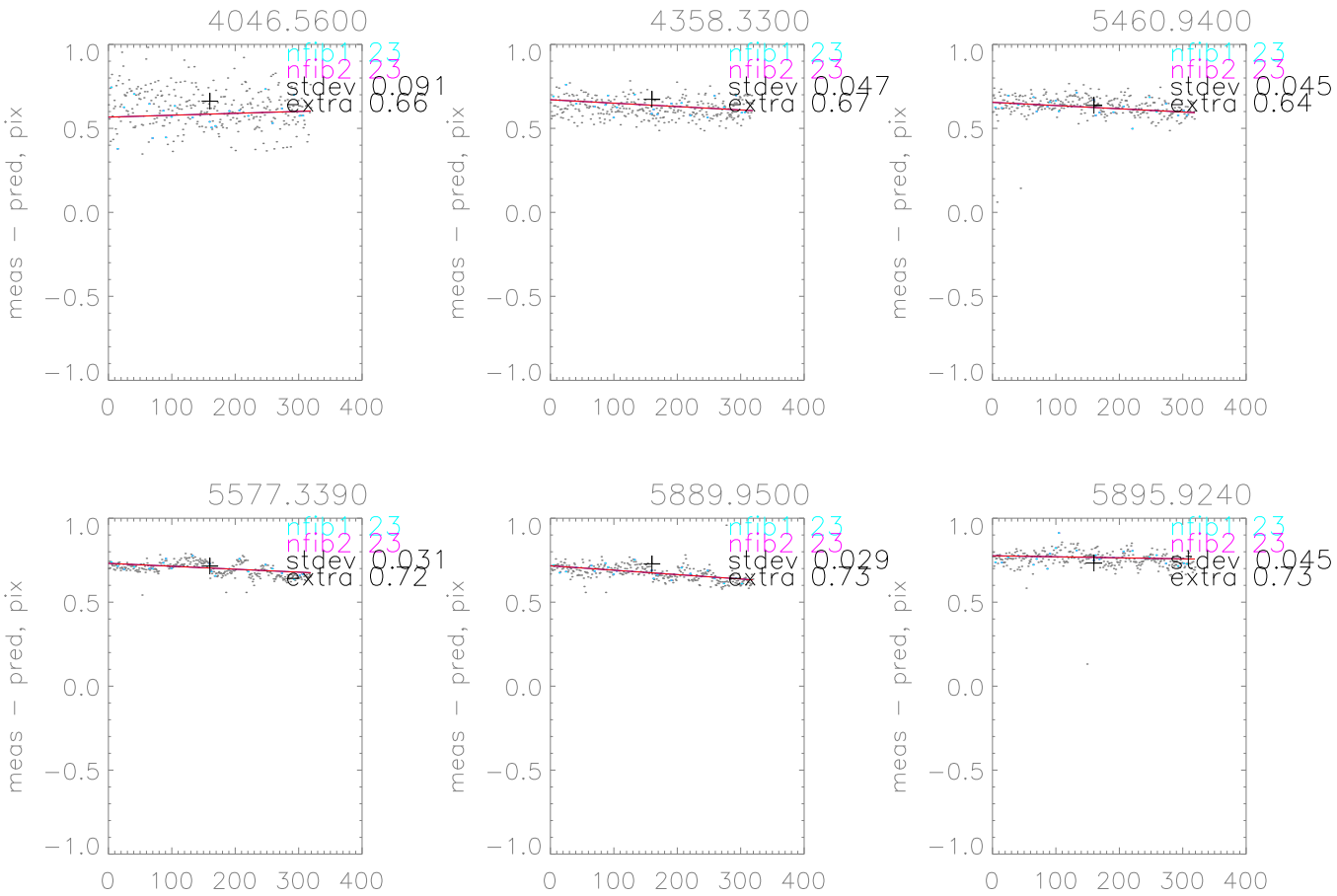

4358.3300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

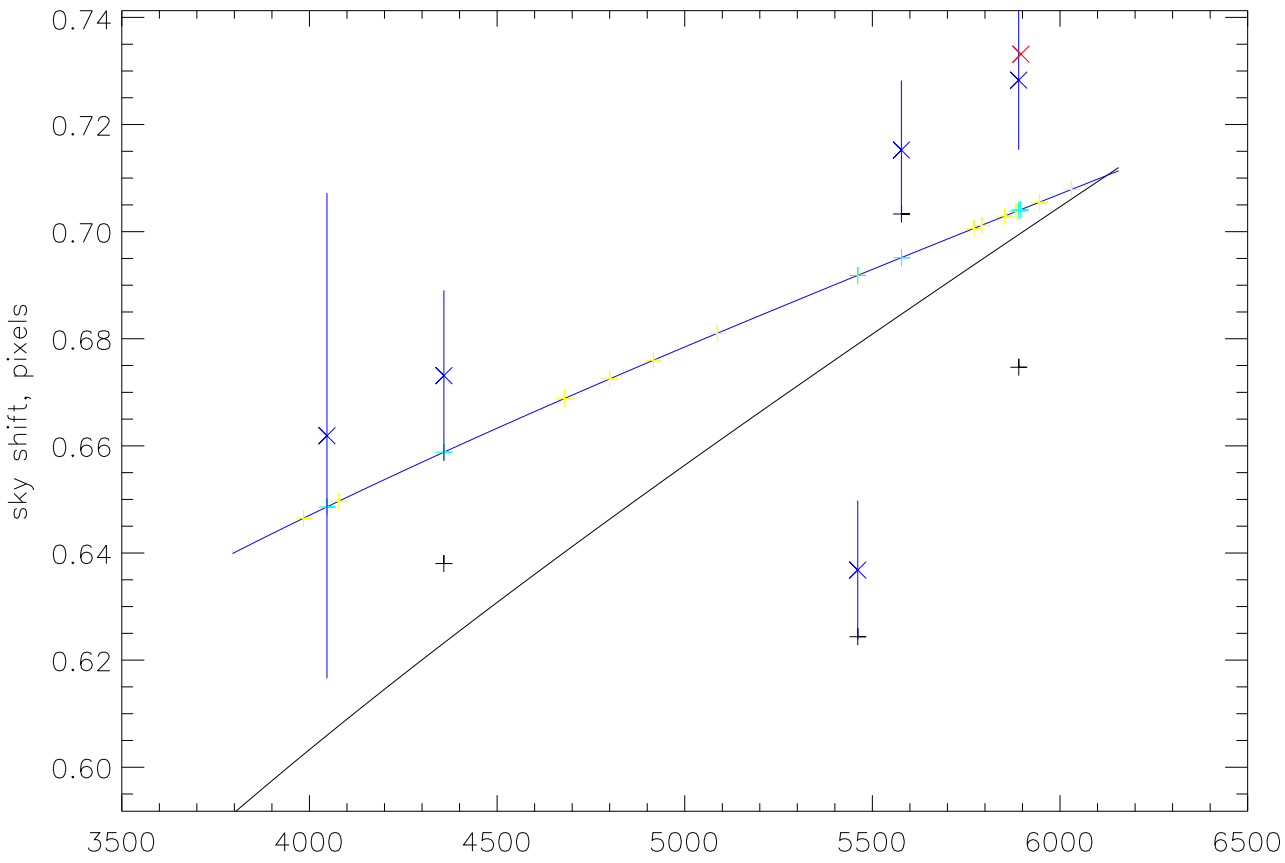

5460.9400
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400


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

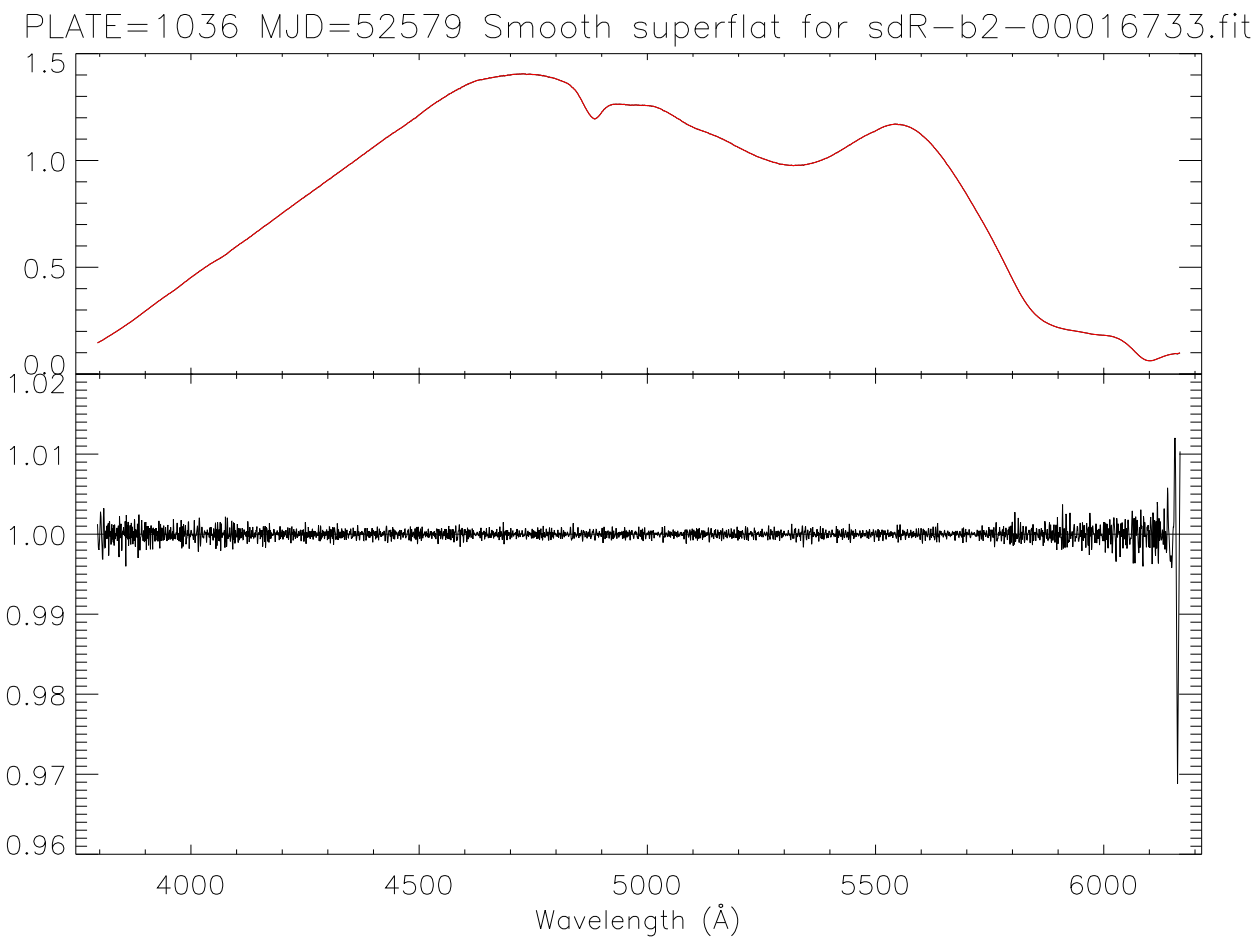

5889.9500
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

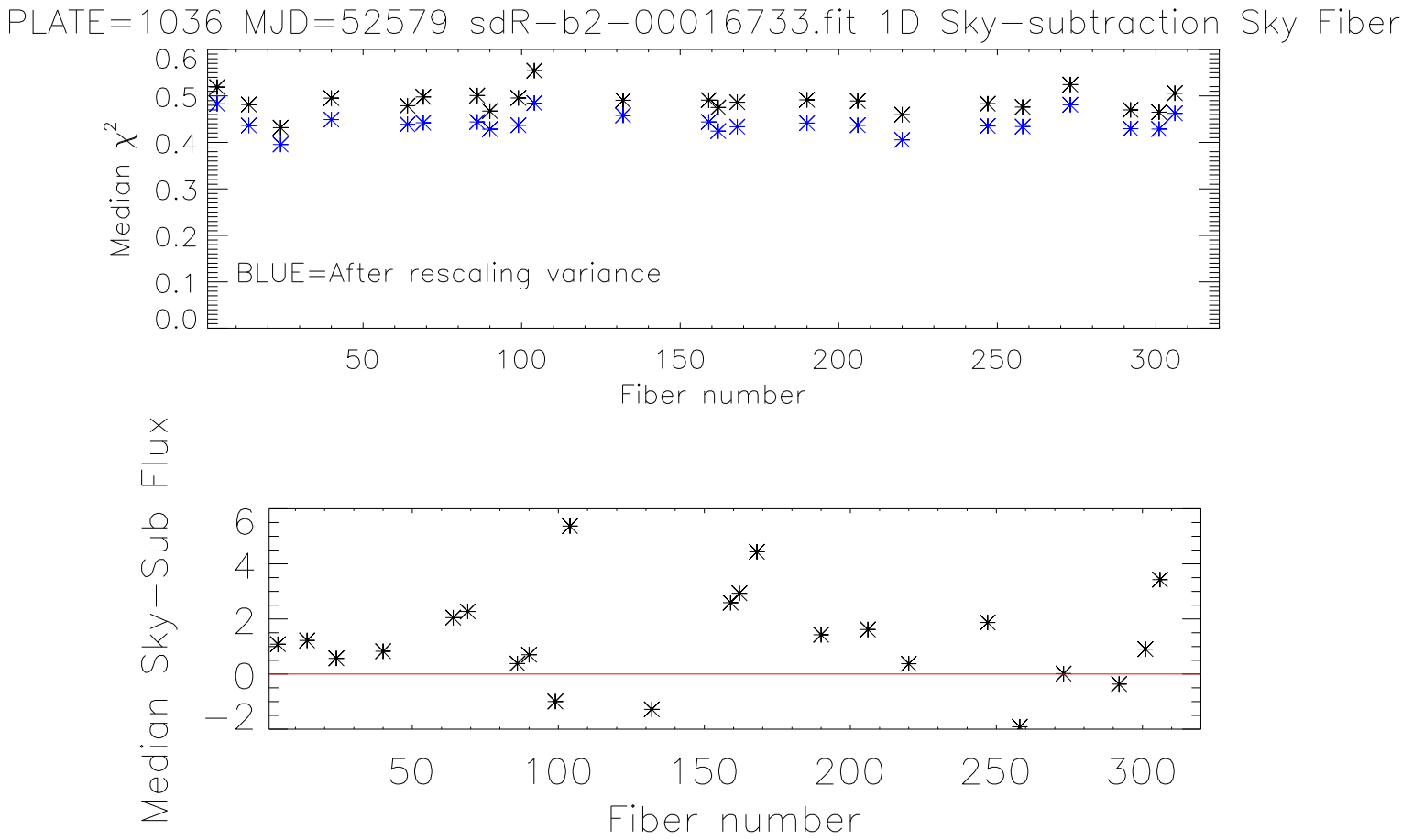

5895.9240
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

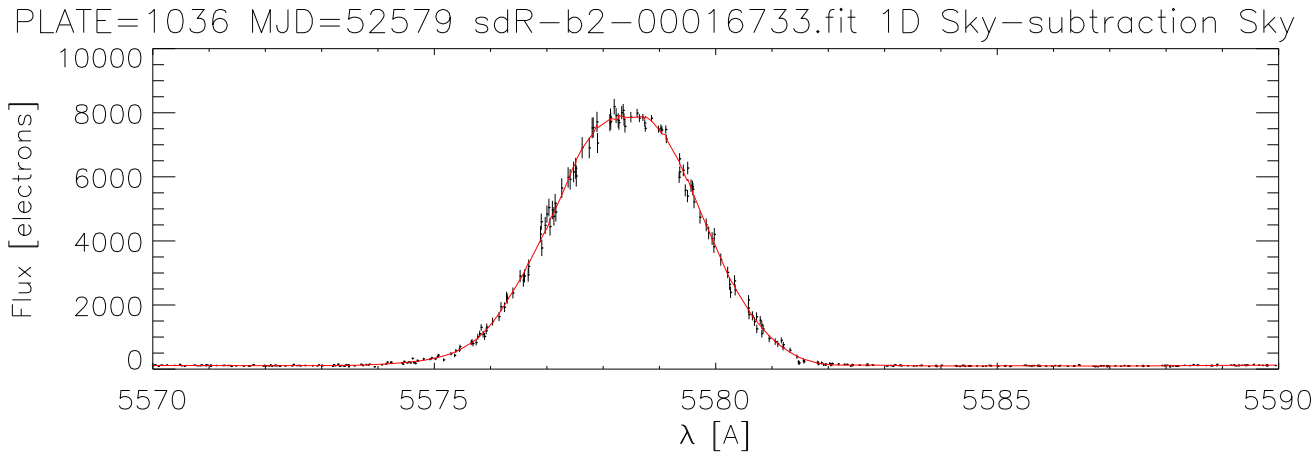

4046.5600
nfib1 23
nfib2 23
stdev 0.091
extra 0.66
4358.3300
nfib1 23
nfib2 23
stdev 0.047
extra 0.67
5460.9400
nfib1 23
nfib2 23
stdev 0.045
extra 0.64
5577.3390
nfib1 23
nfib2 23
stdev 0.031
extra 0.72
5889.9500
nfib1 23
nfib2 23
stdev 0.029
extra 0.73
5895.9240
nfib1 23
nfib2 23
stdev 0.045
extra 0.73
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

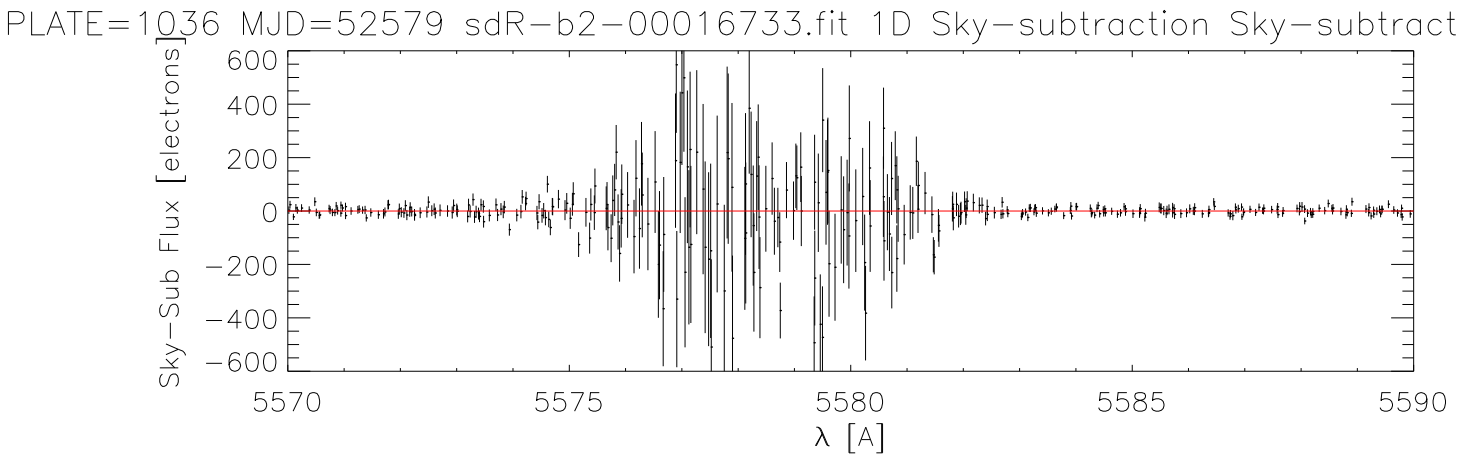

0.74
0.72
0.70
0.68
0.66
0.64
0.62
0.60
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

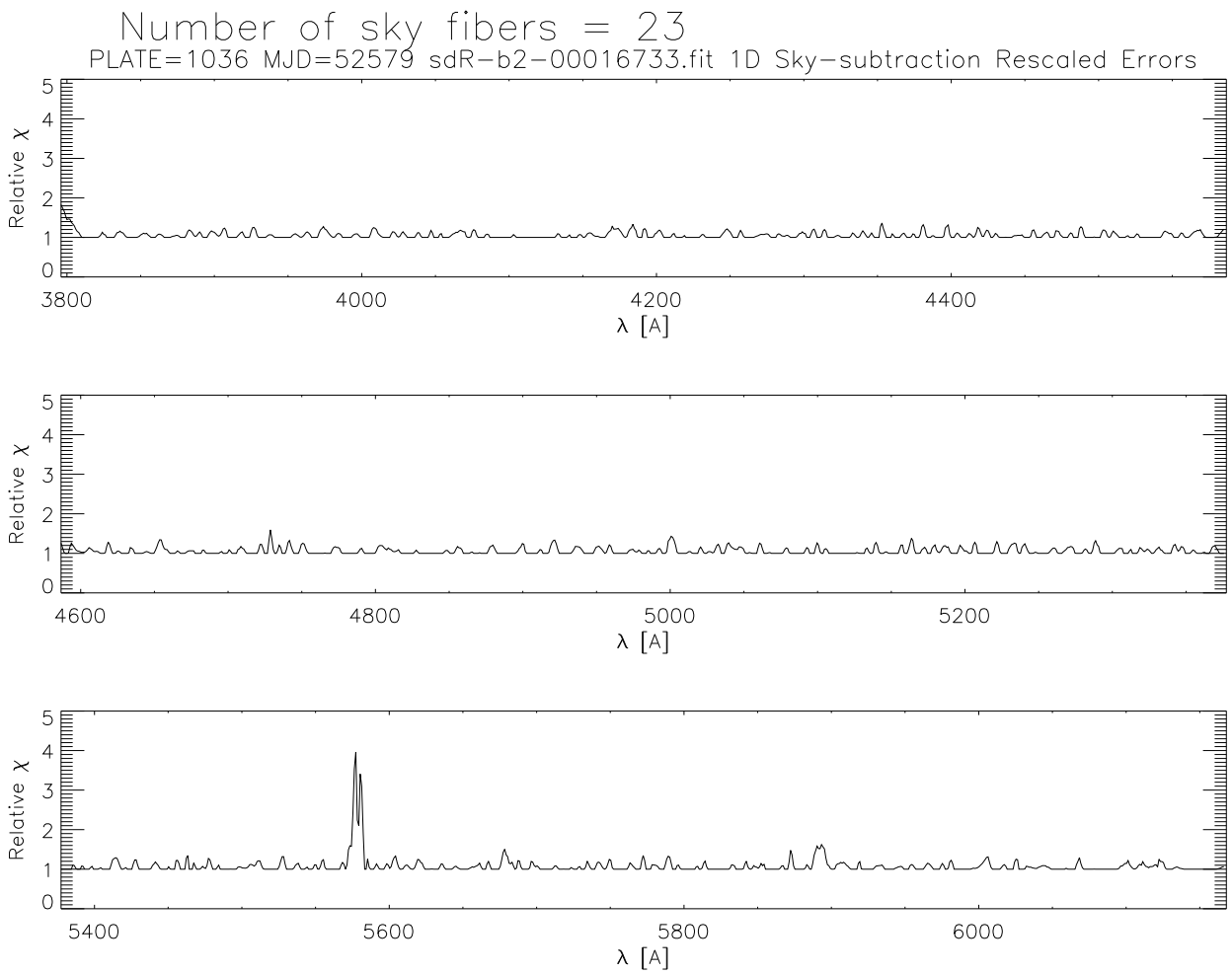
es= −0.0001

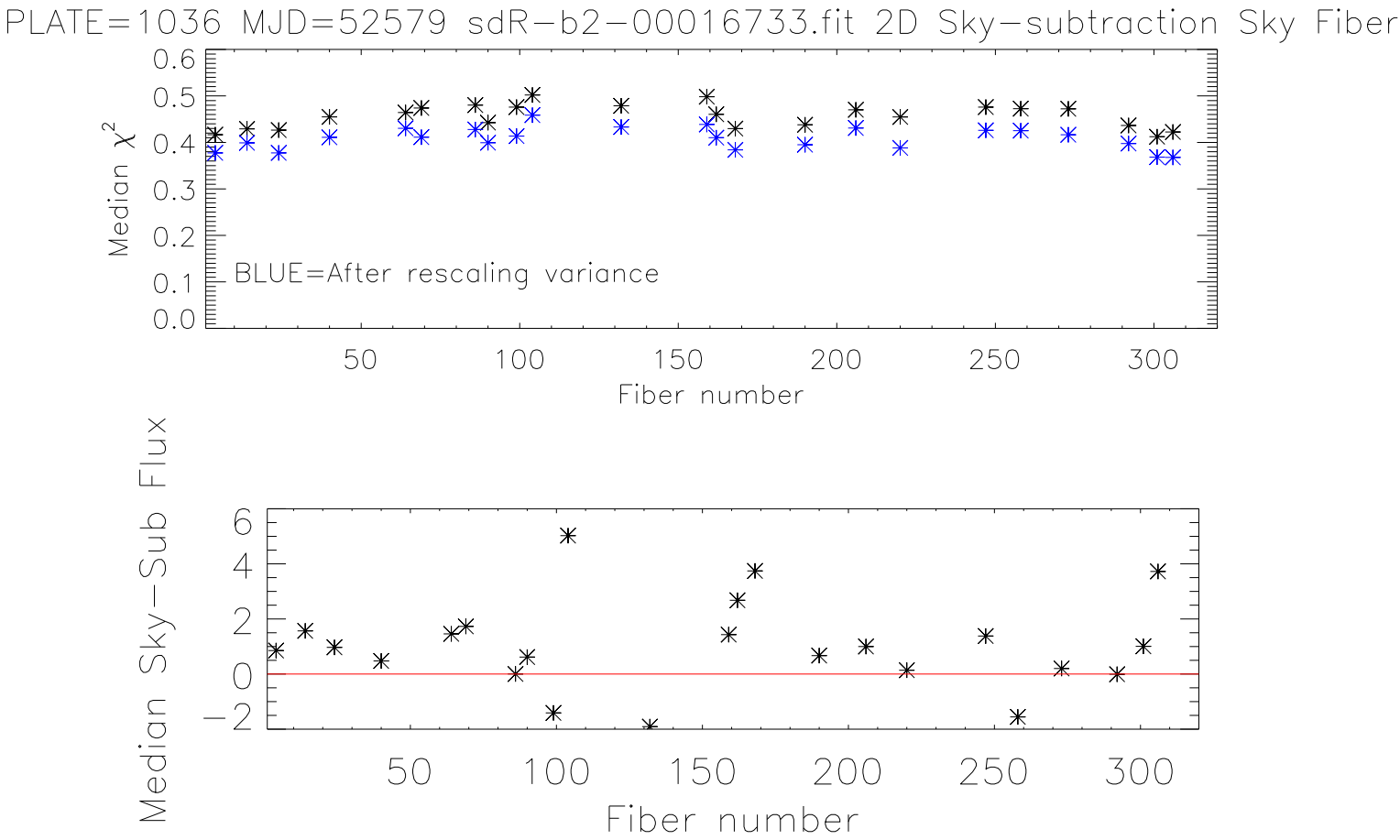

PLATE=1036 MJD=52579 Smooth superflat for sdR−b2−00016733.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

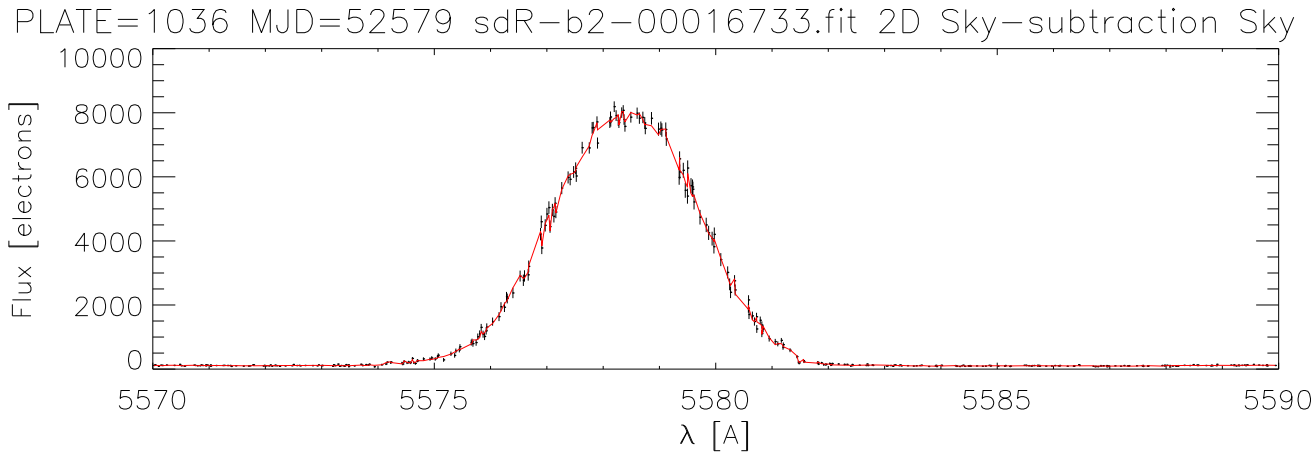

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

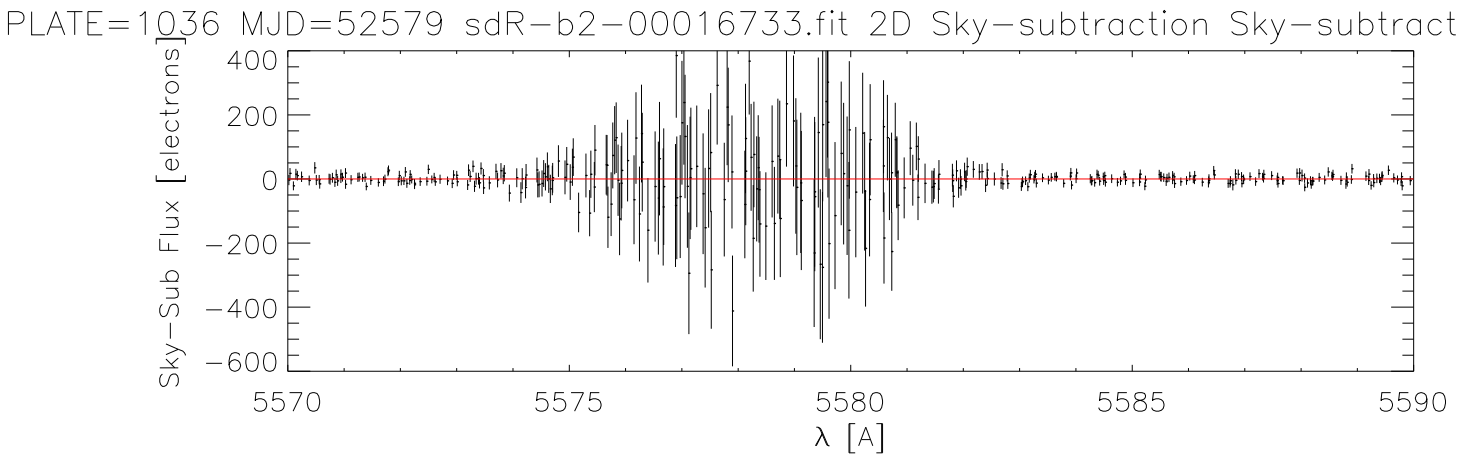

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

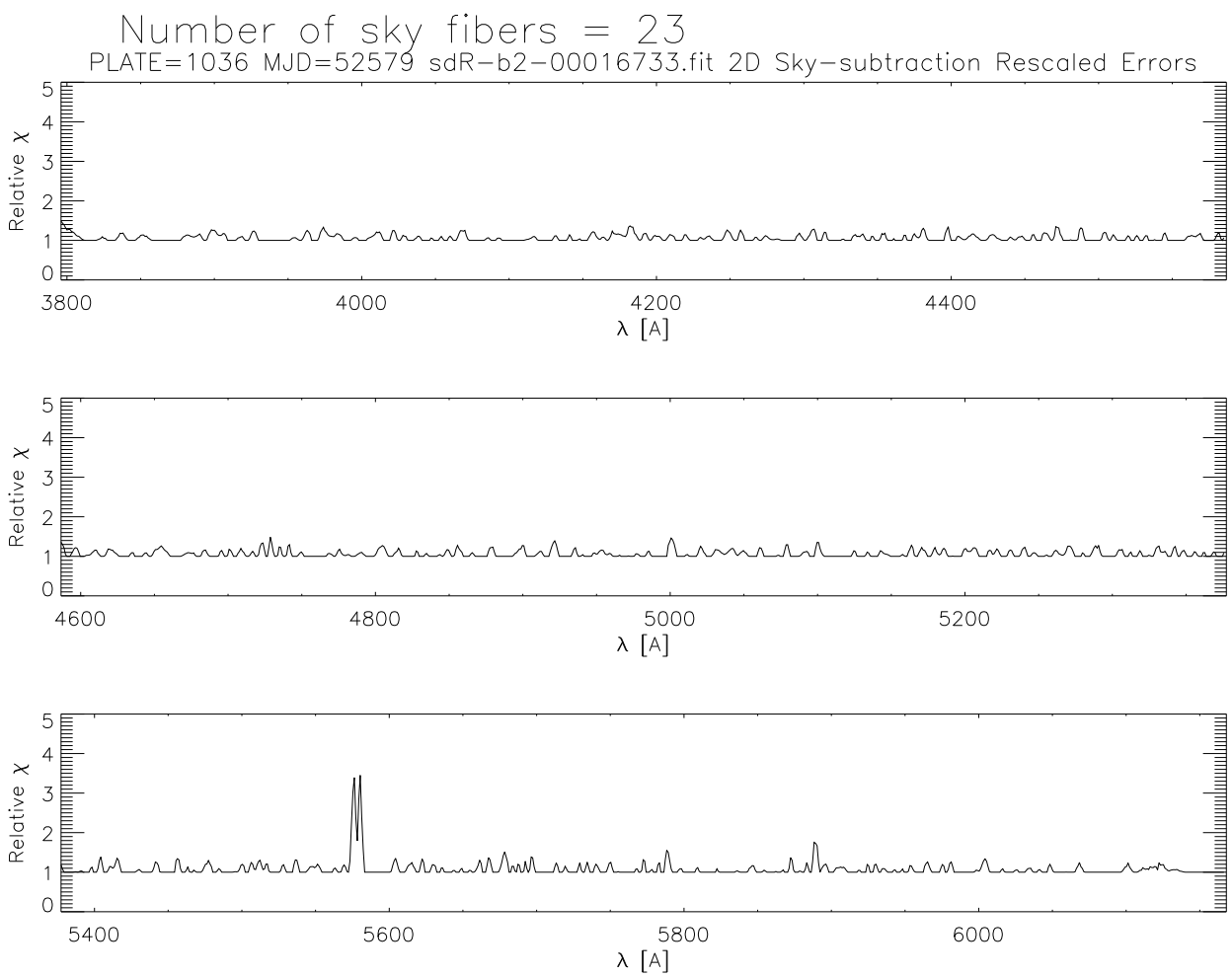

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

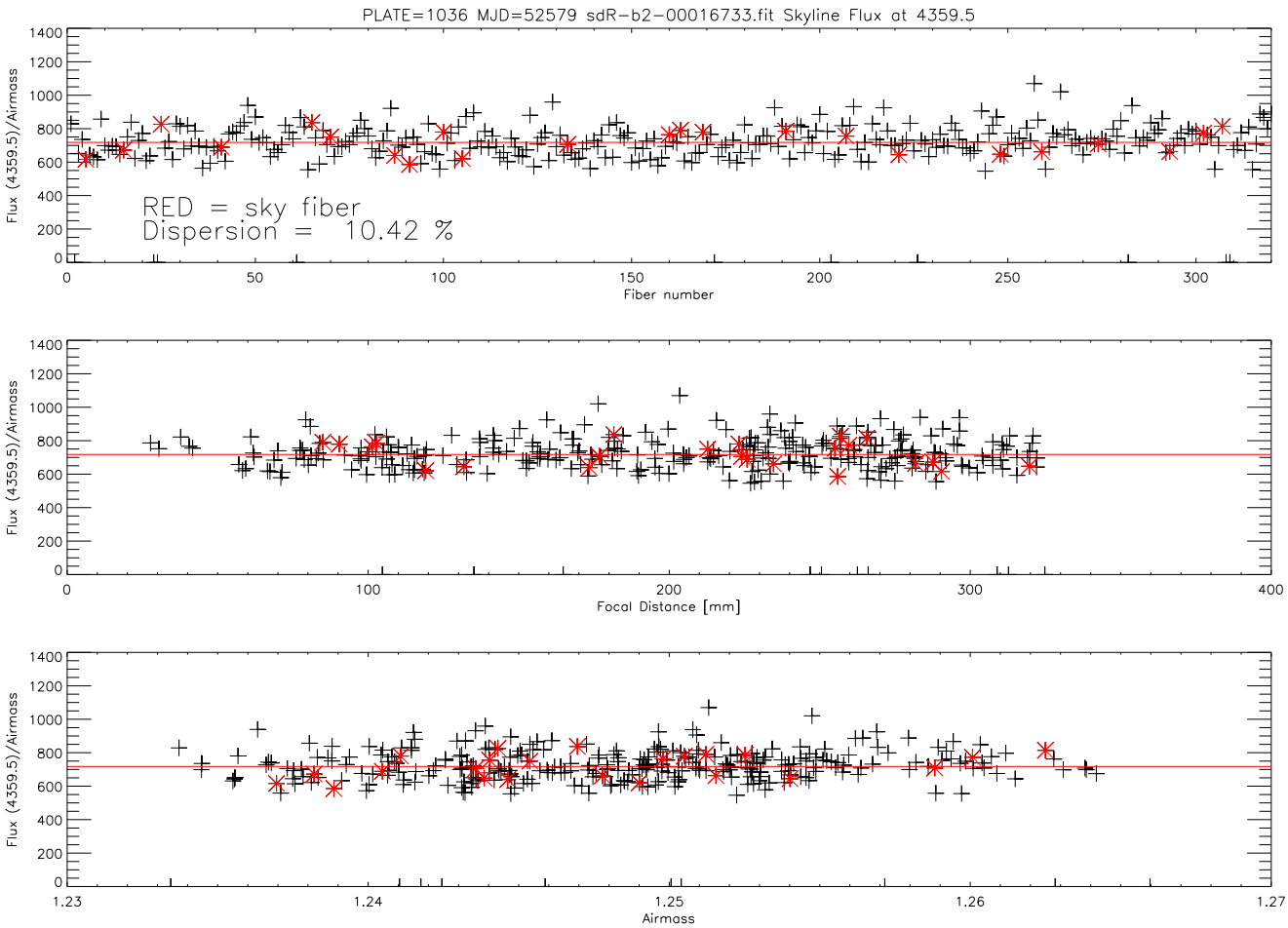

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016733.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

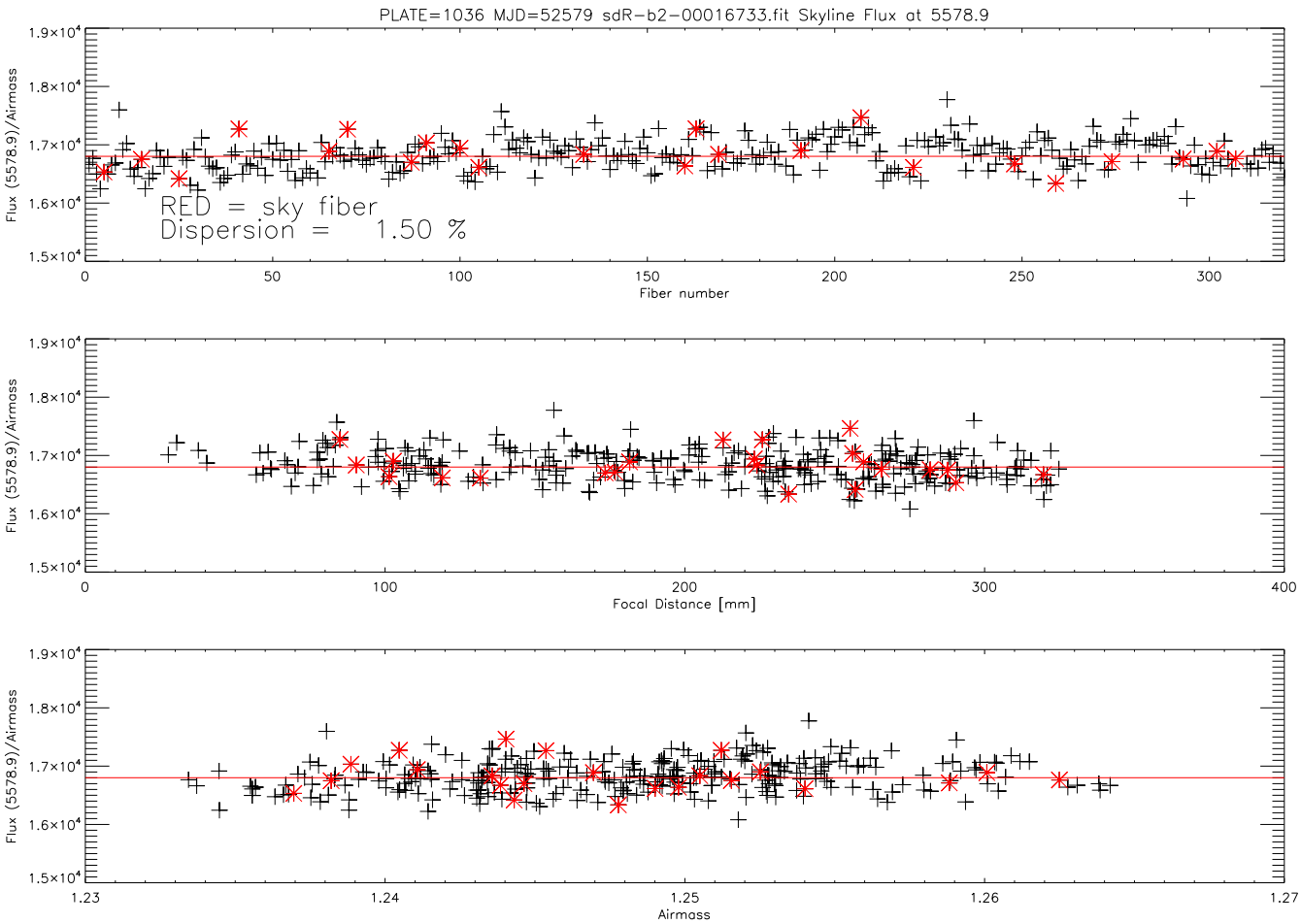

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

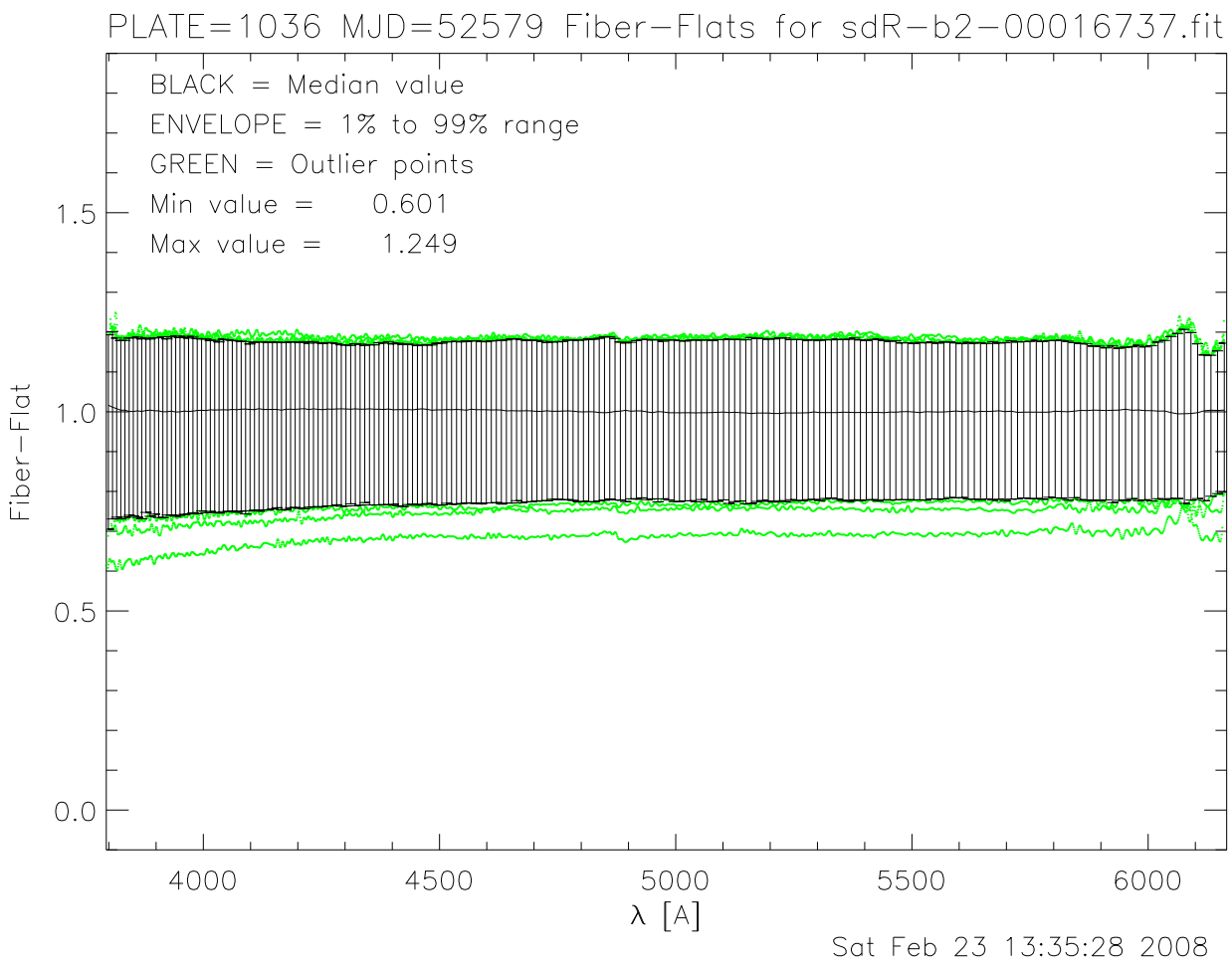

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

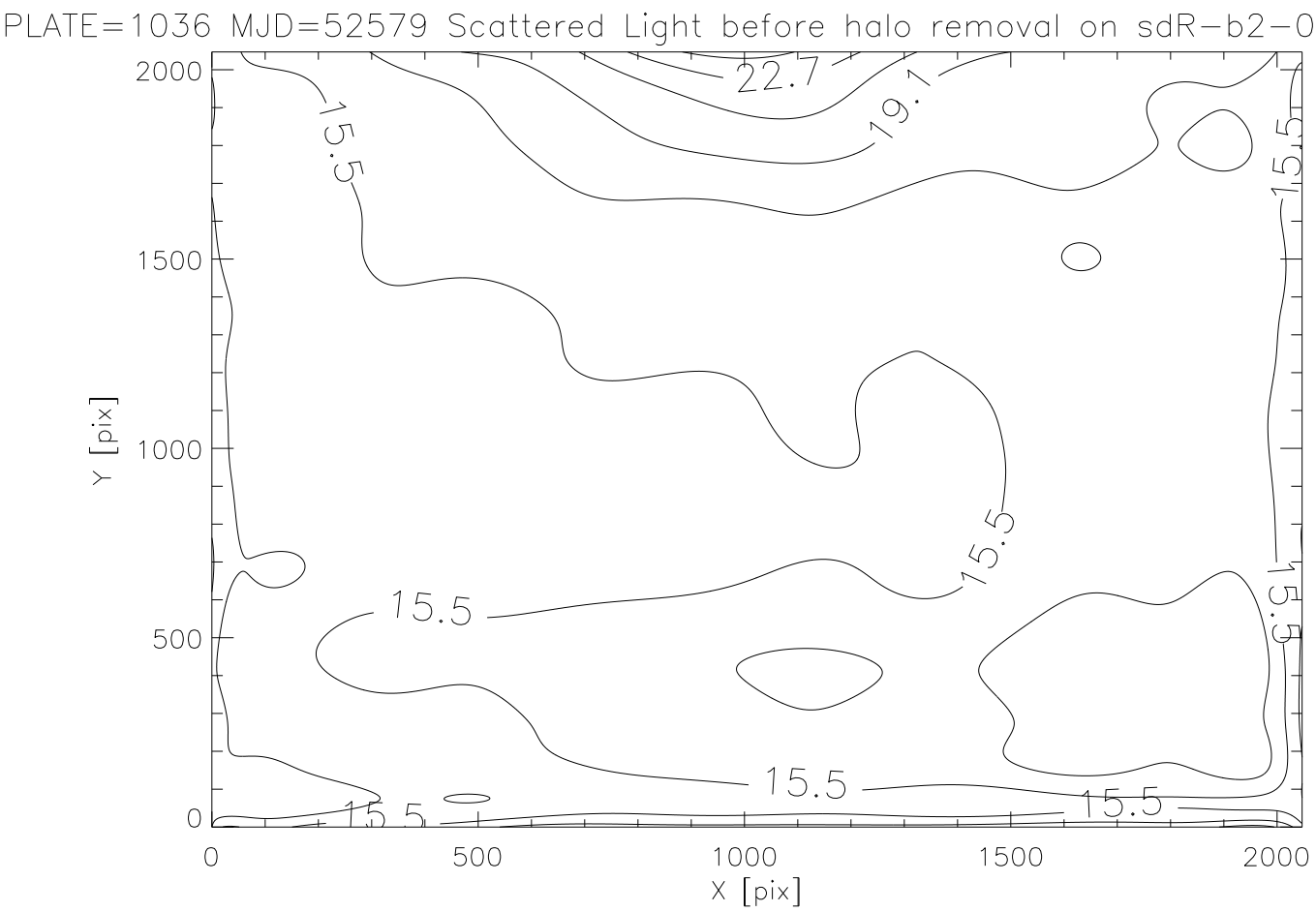

PLATE=1036 MJD=52579 sdR-b2-00016733.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

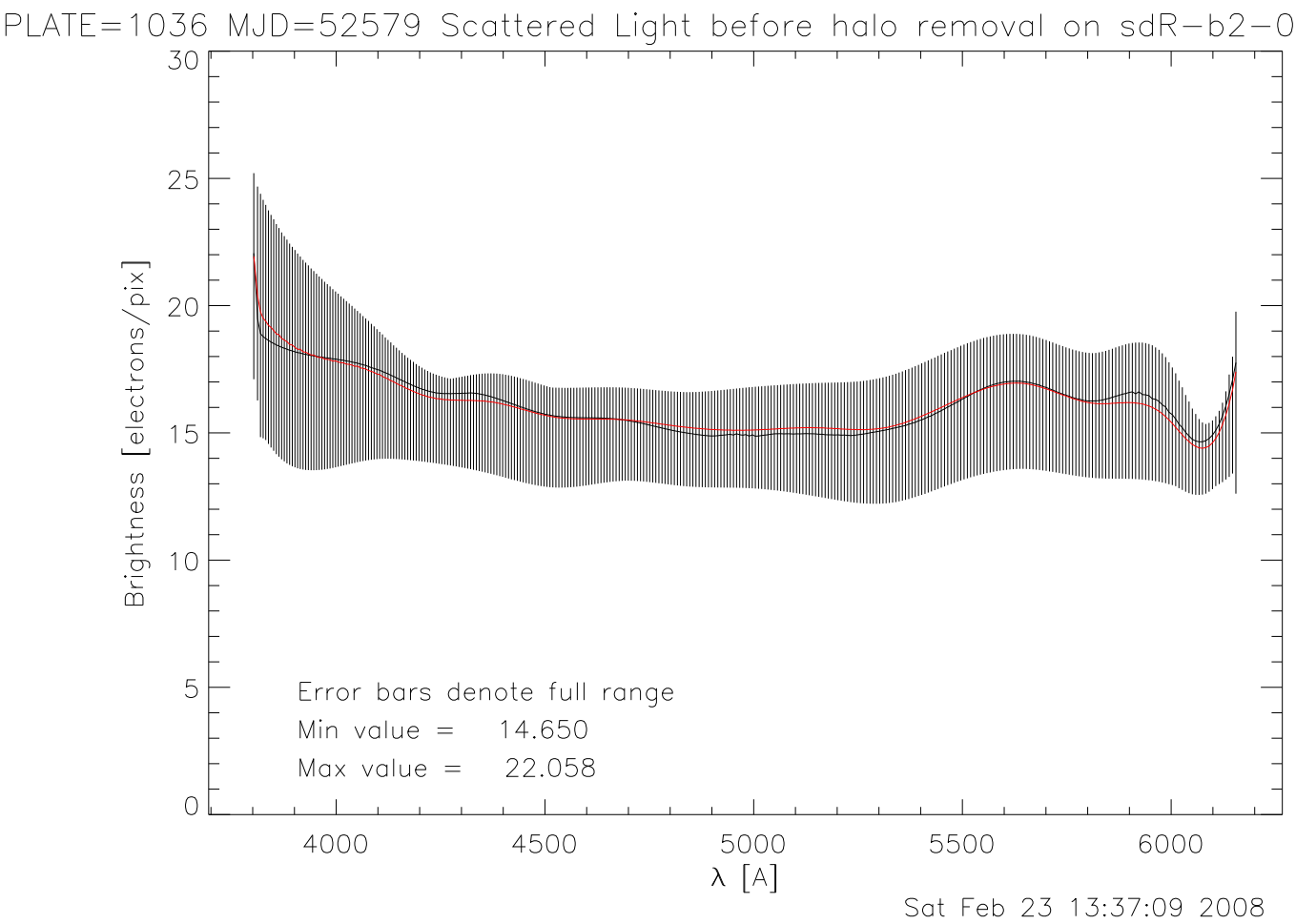

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016733.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

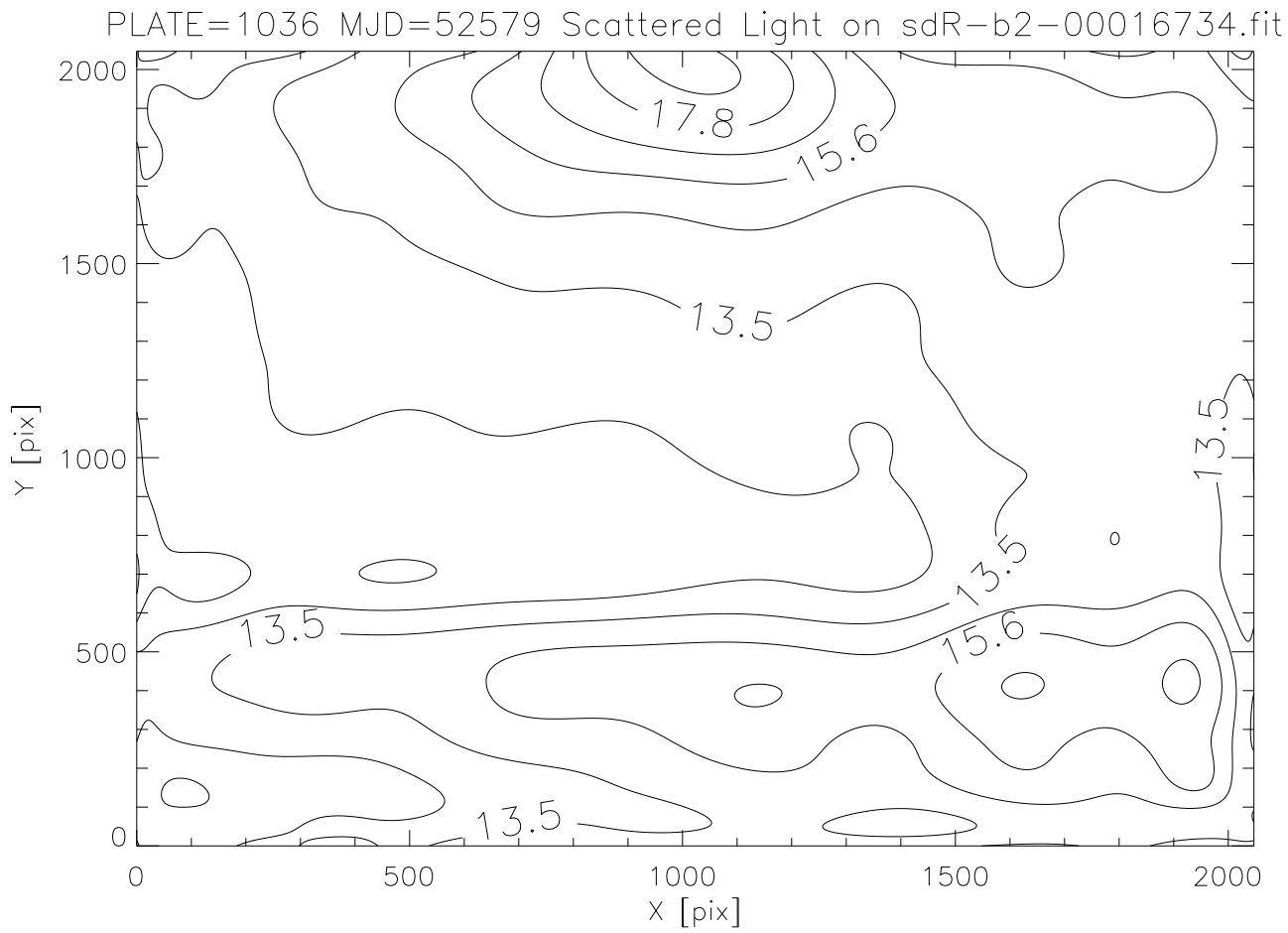

PLATE=1036 MJD=52579 sdR-b2-00016733.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.42 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

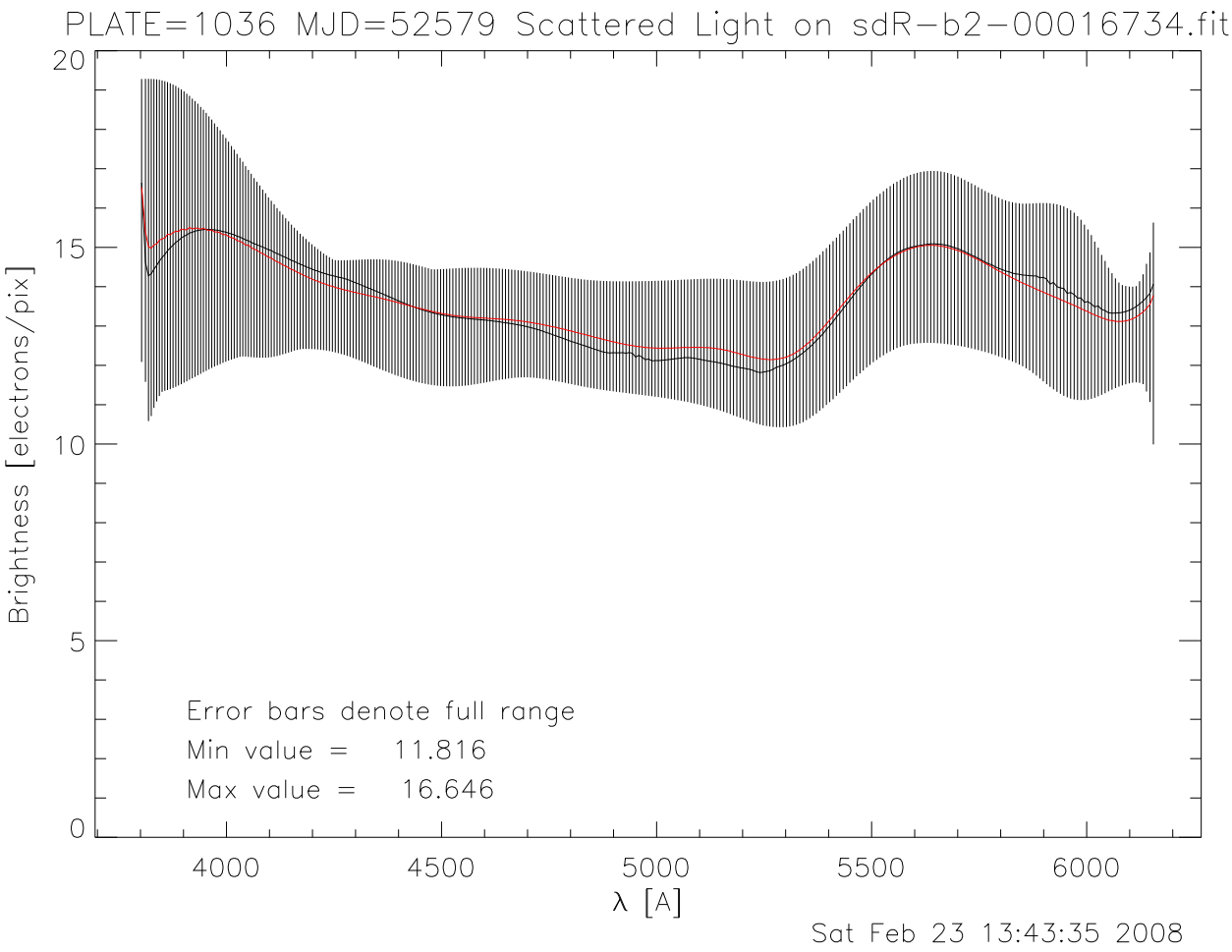

PLATE=1036 MJD=52579 sdR-b2-00016733.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
RED = sky fiber
Dispersion = 1.50 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.23
1.24
1.25
1.26
1.27
Airmass

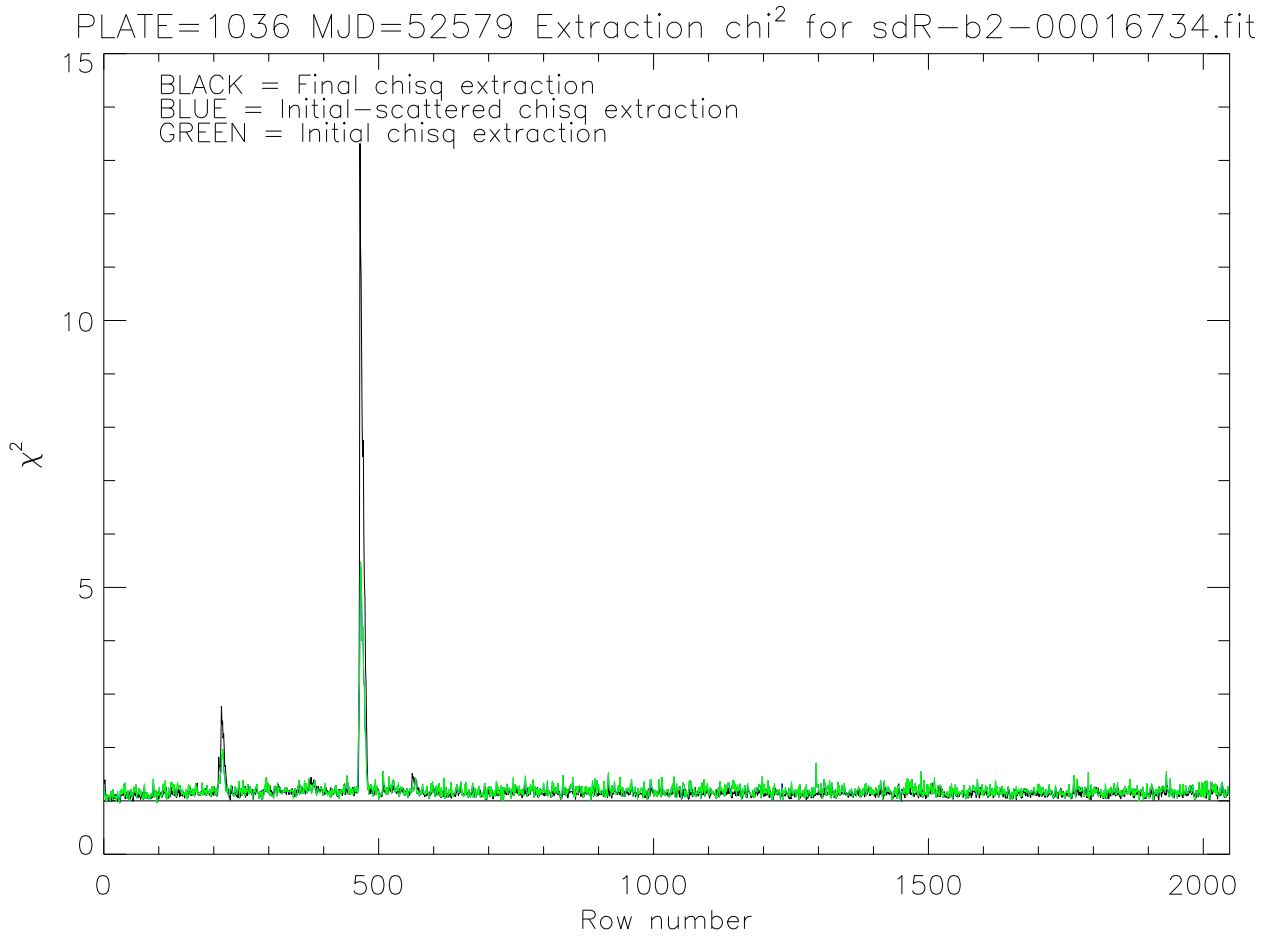

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b2-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.601
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:35:28 2008

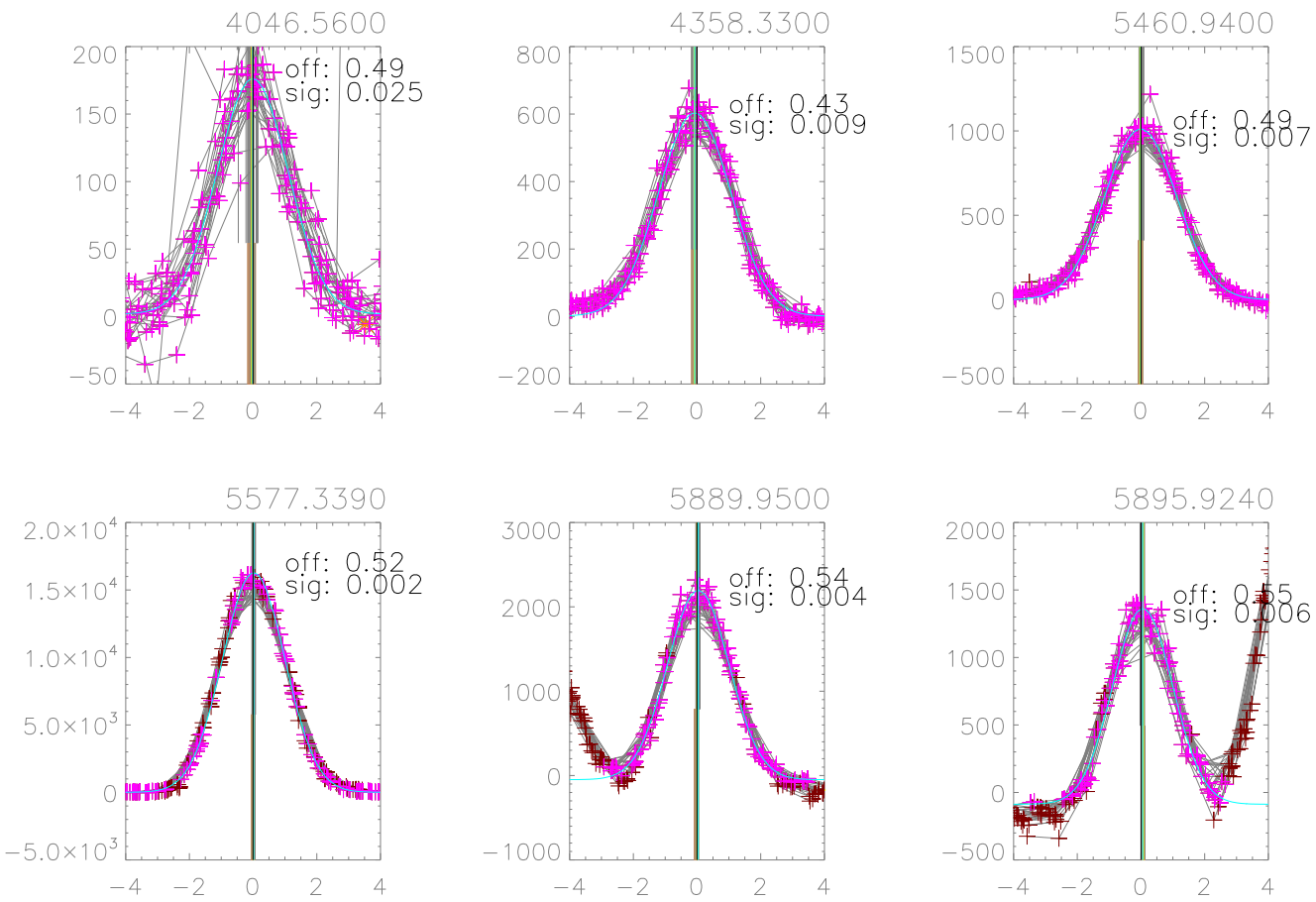

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR−b2−00016734.f
22.7
19.1
15.5
15.5
15.5
15.5
15.5
15.5
15.5
15.5
Y [pix]
X [pix]
0
500
1000
1500
2000

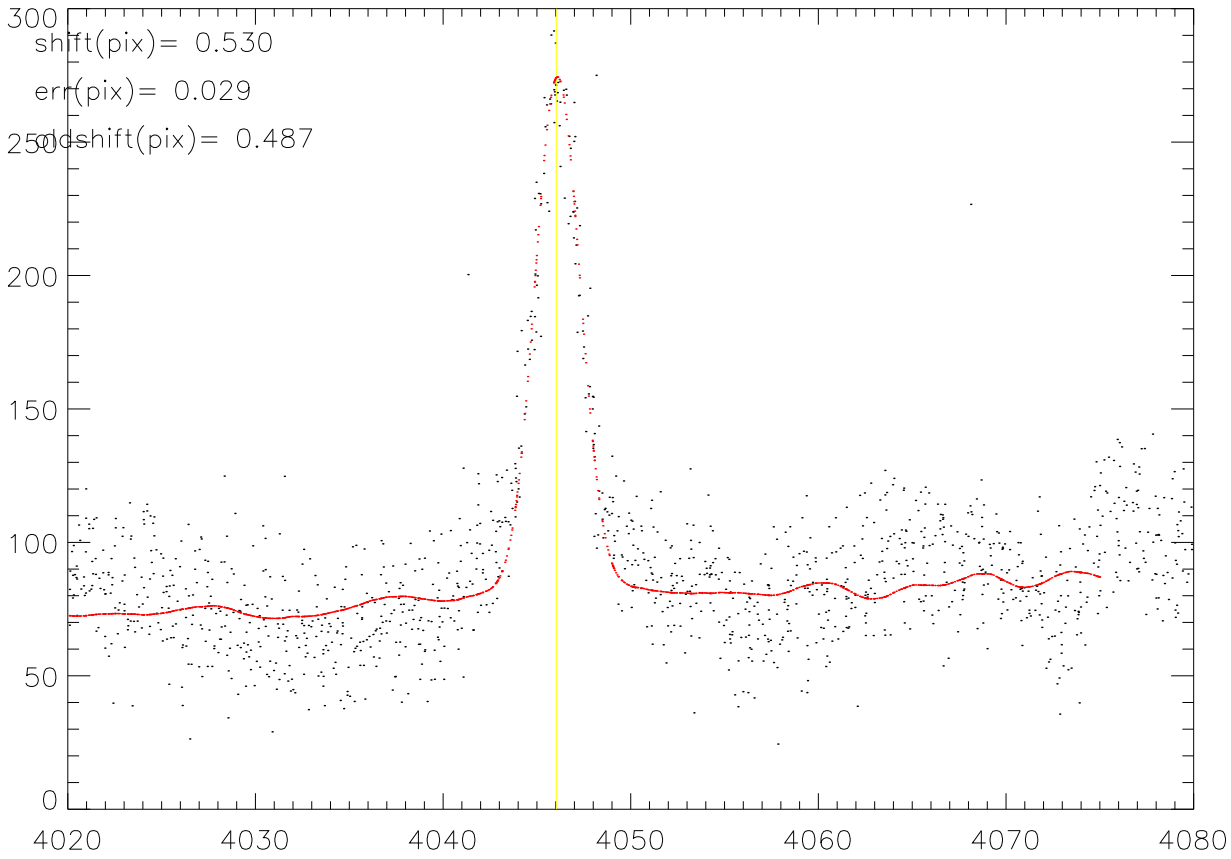

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016734.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 14.650
Max value = 22.058
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:37:09 2008

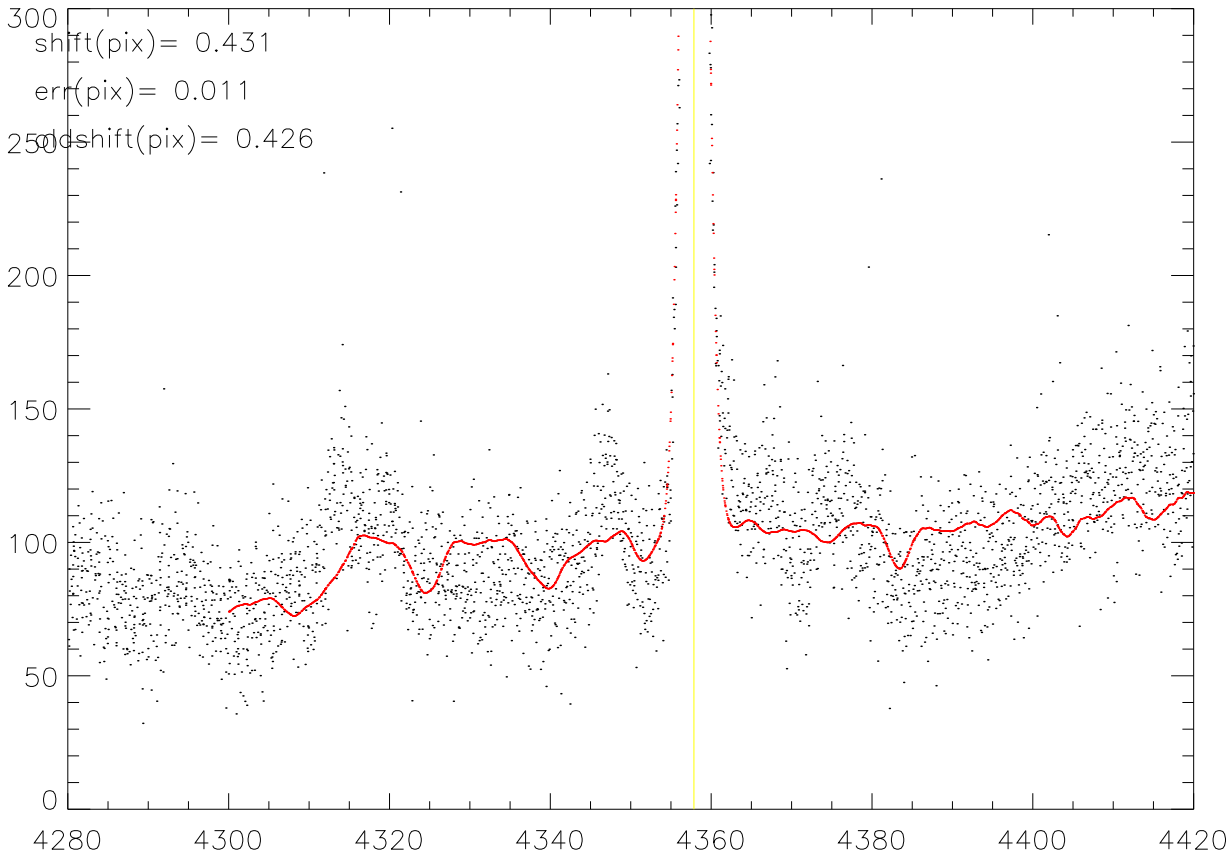

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016734.fit
17.8
15.6
13.5
13.5
13.5
13.5
15.6
13.5
Y [pix]
X [pix]
0
500
1000
1500
2000

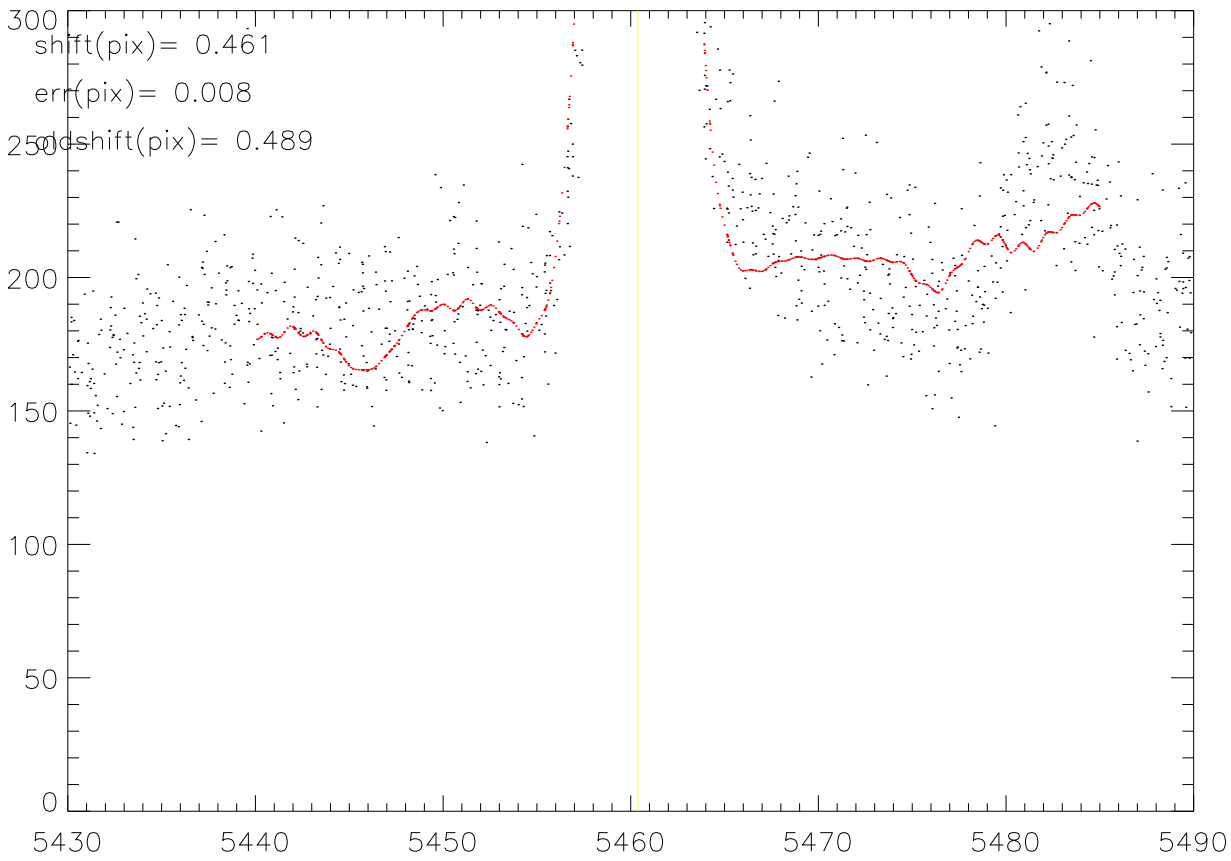

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016734.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.816
Max value = 16.646
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:43:35 2008

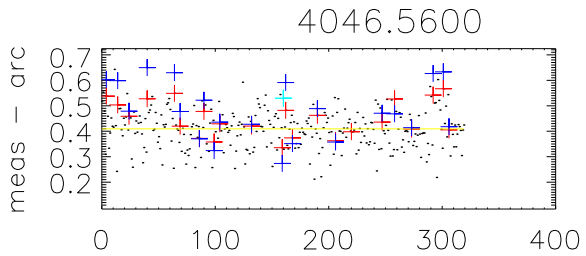

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b2-00016734.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

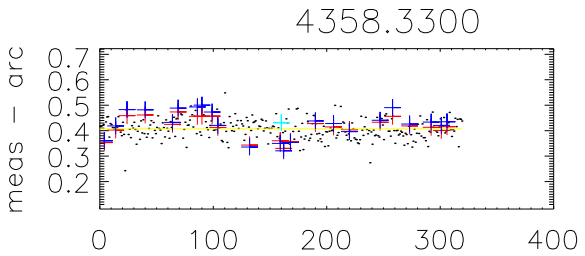

4046.5600
off: 0.49
sig: 0.025
4358.3300
off: 0.43
sig: 0.009
5460.9400
off: 0.49
sig: 0.007
5577.3390
off: 0.52
sig: 0.002
5889.9500
off: 0.54
sig: 0.004
5895.9240
off: 0.55
sig: 0.006

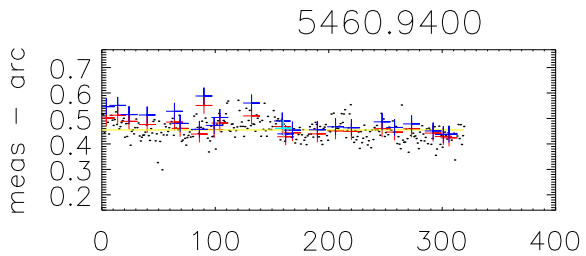

shift(pix)= 0.530
err(pix)= 0.029
oldshift(pix)= 0.487
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

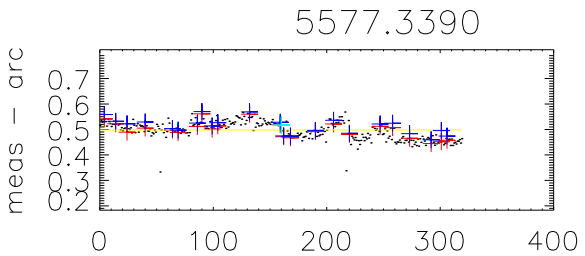

shift(pix)= 0.431
err(pix)= 0.011
oldshift(pix)= 0.426
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

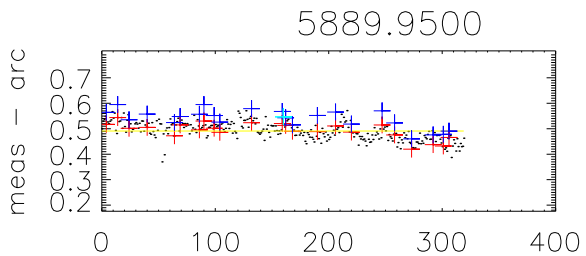

shift(pix)= 0.461
err(pix)= 0.008
oldshift(pix)= 0.489
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

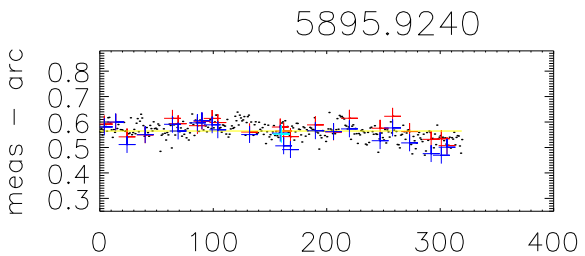

4046.5600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

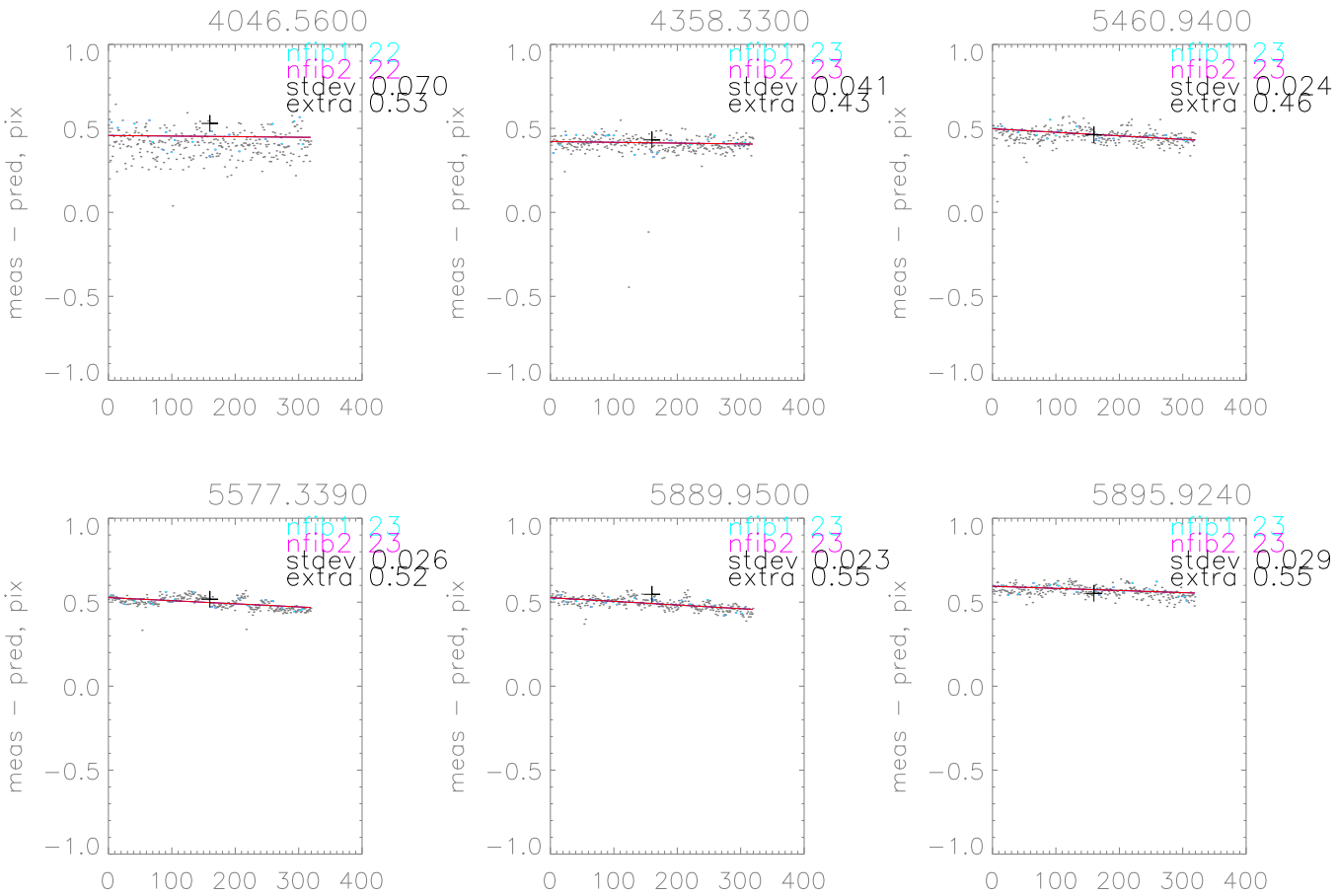

4358.3300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

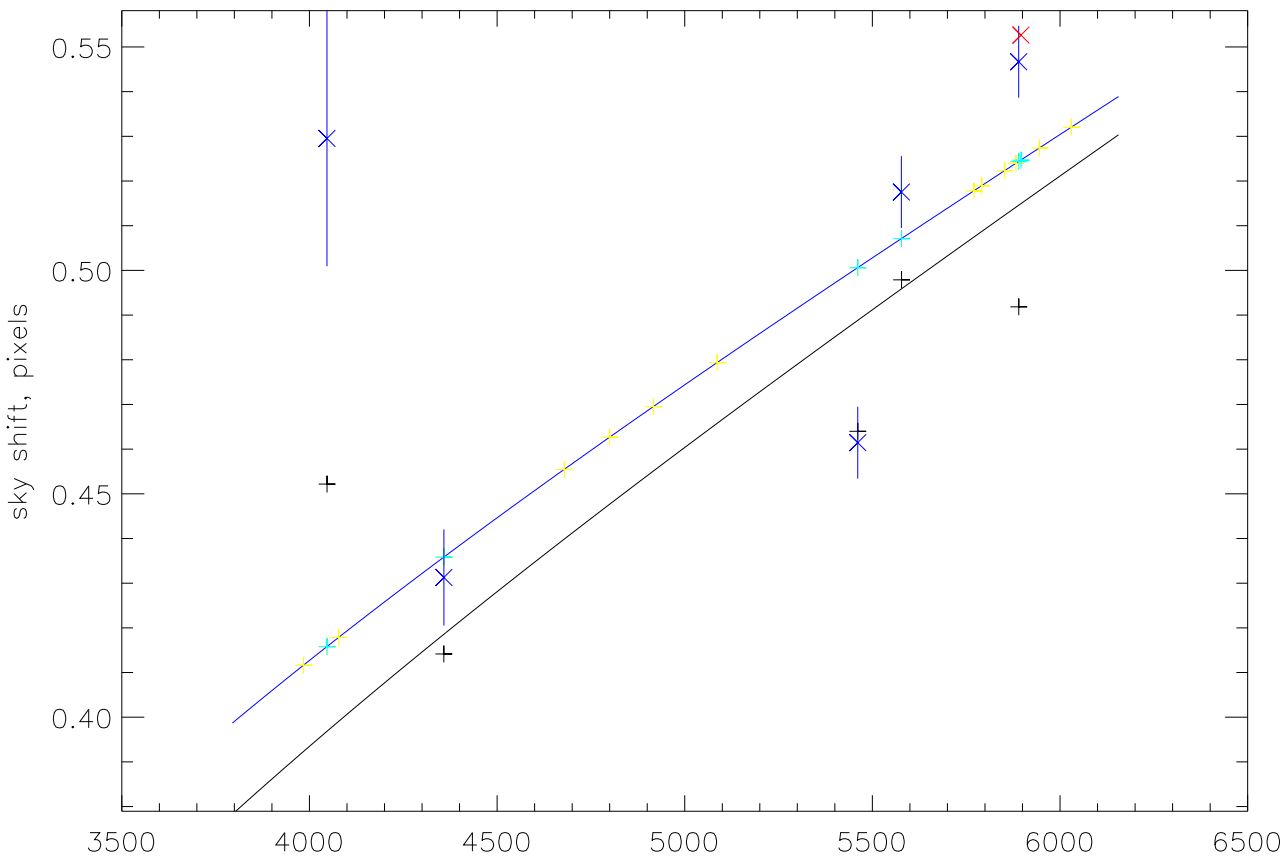

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

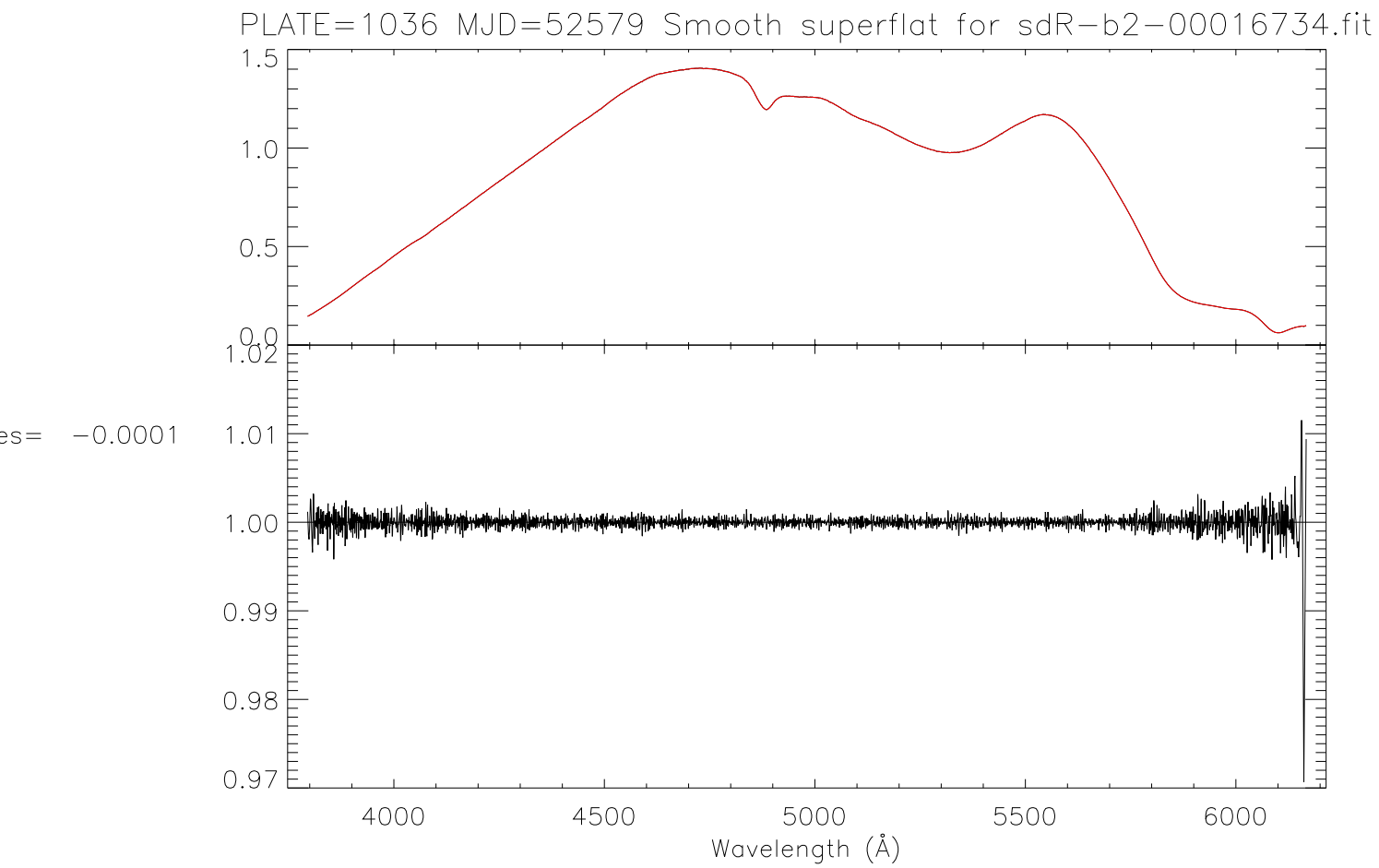

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


5889.9500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

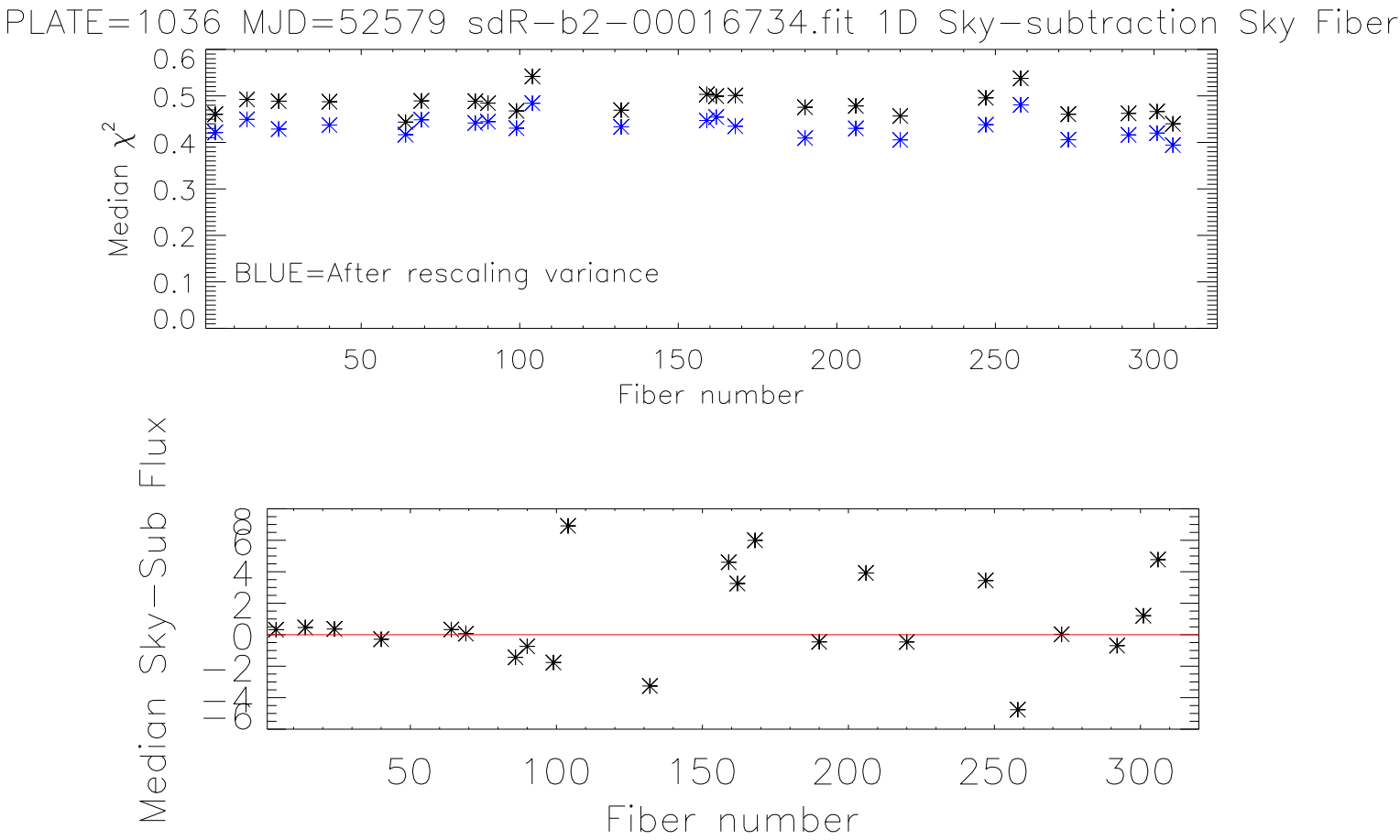

5895.9240
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

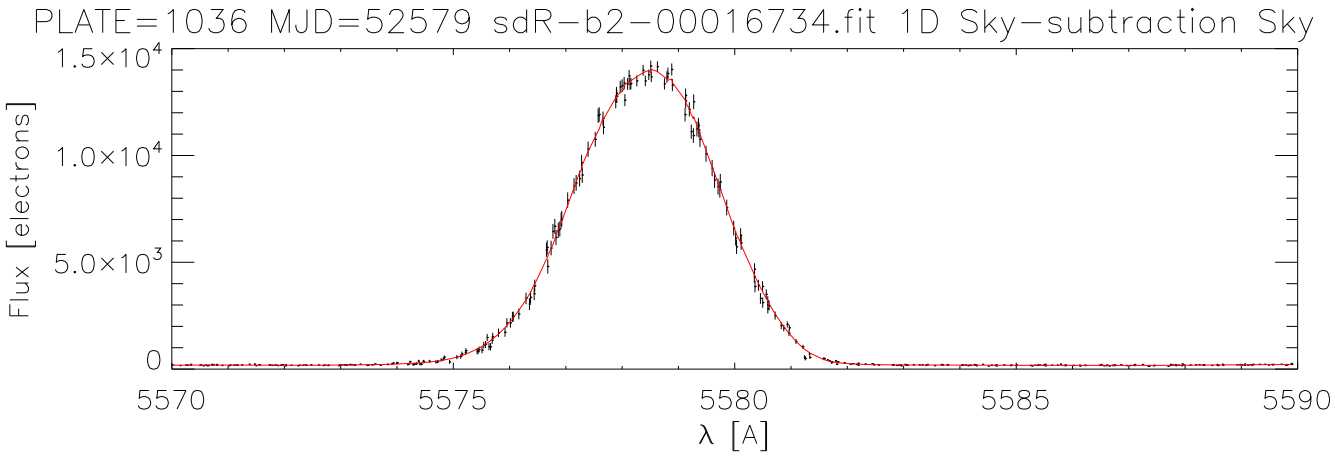

4046.5600
nfib1 22
nfib2 22
stdev 0.070
extra 0.53
4358.3300
nfib1 23
nfib2 23
stdev 0.041
extra 0.43
5460.9400
nfib1 23
nfib2 23
stdev 0.024
extra 0.46
5577.3390
nfib1 23
nfib2 23
stdev 0.026
extra 0.52
5889.9500
nfib1 23
nfib2 23
stdev 0.023
extra 0.55
5895.9240
nfib1 23
nfib2 23
stdev 0.029
extra 0.55
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

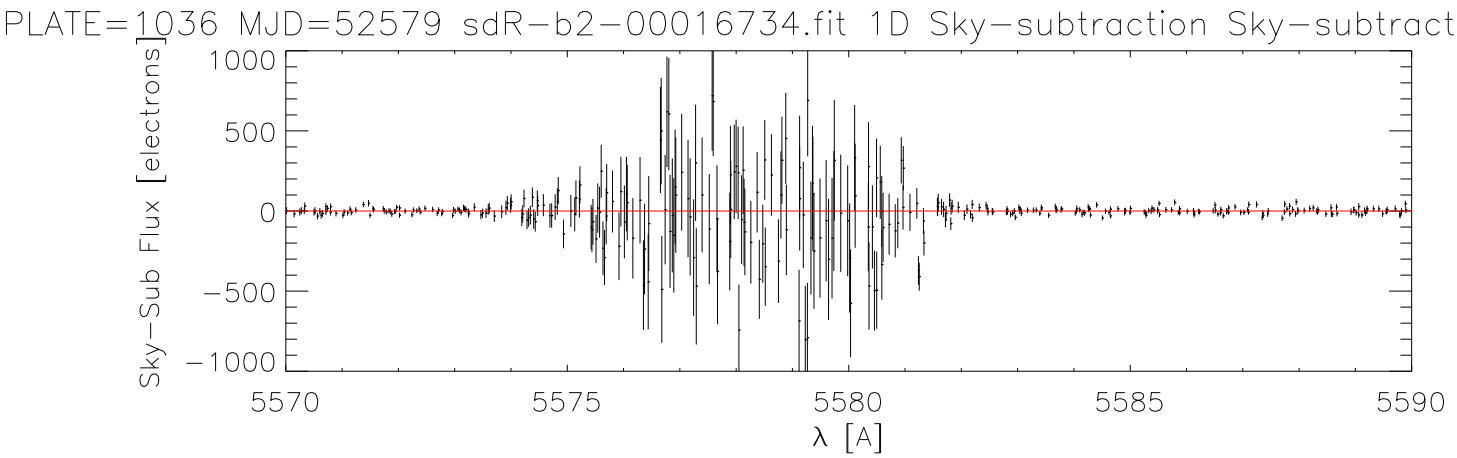

sky shift, pixels
0.55
0.50
0.45
0.40
3500
4000
4500
5000
5500
6000
6500

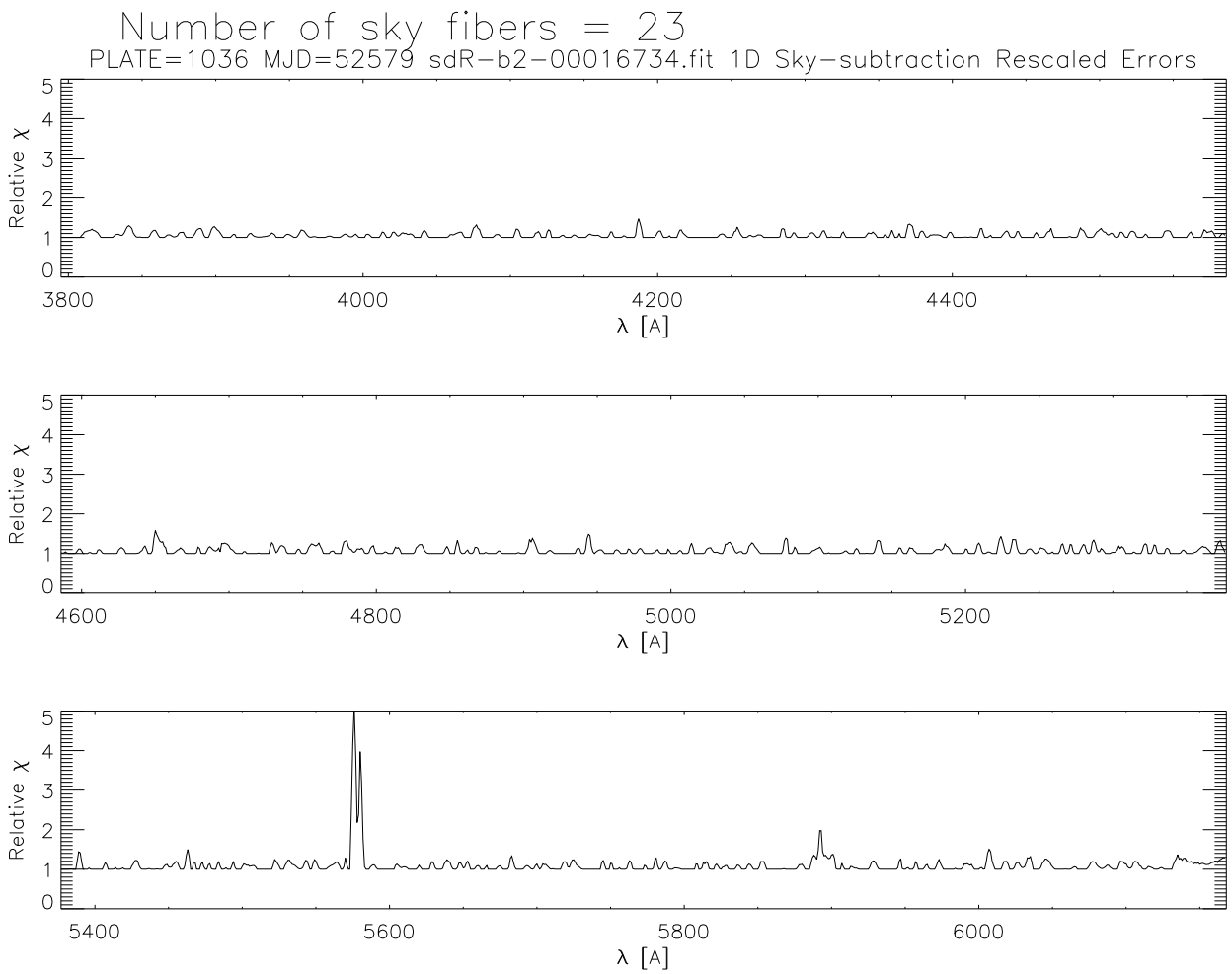

PLATE=1036 MJD=52579 Smooth superflat for sdR-b2-00016734.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

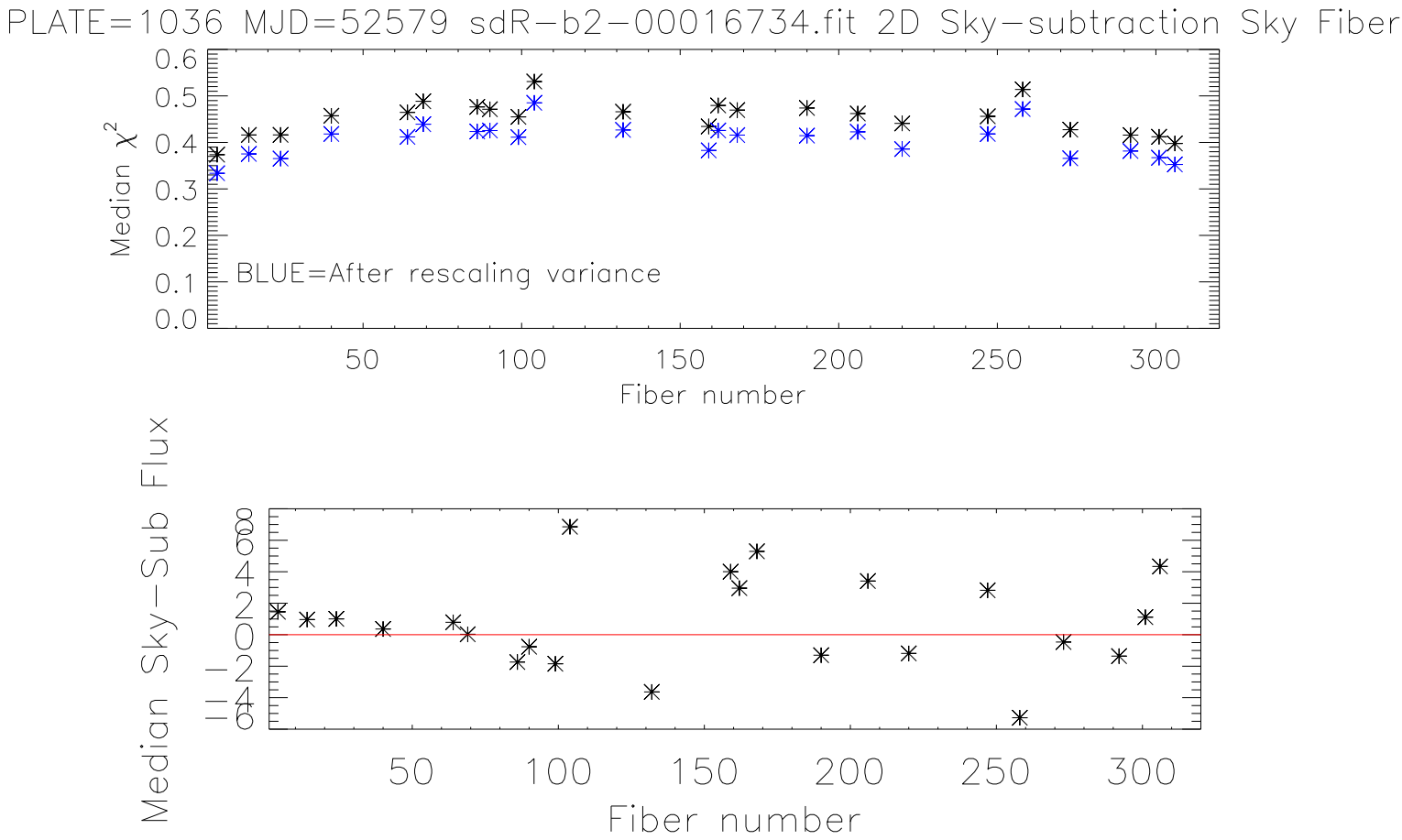
es= −0.0001

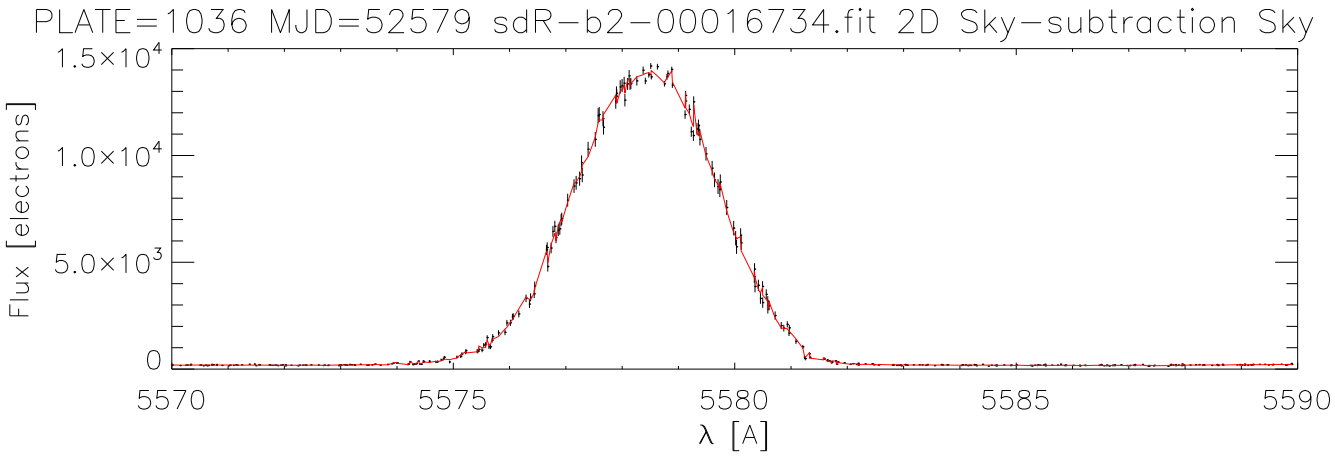

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

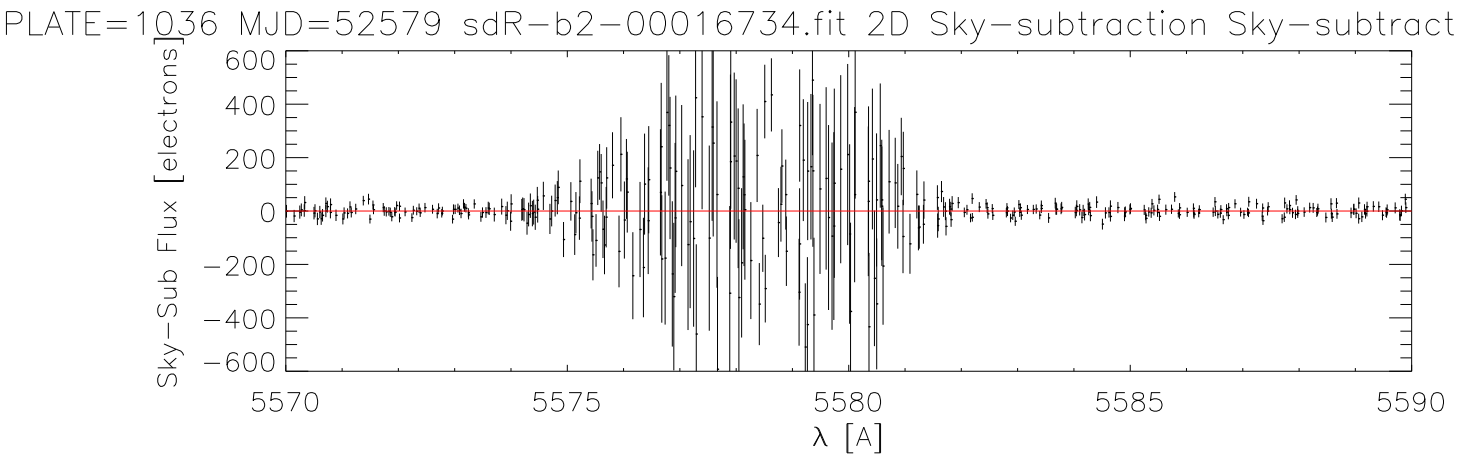

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

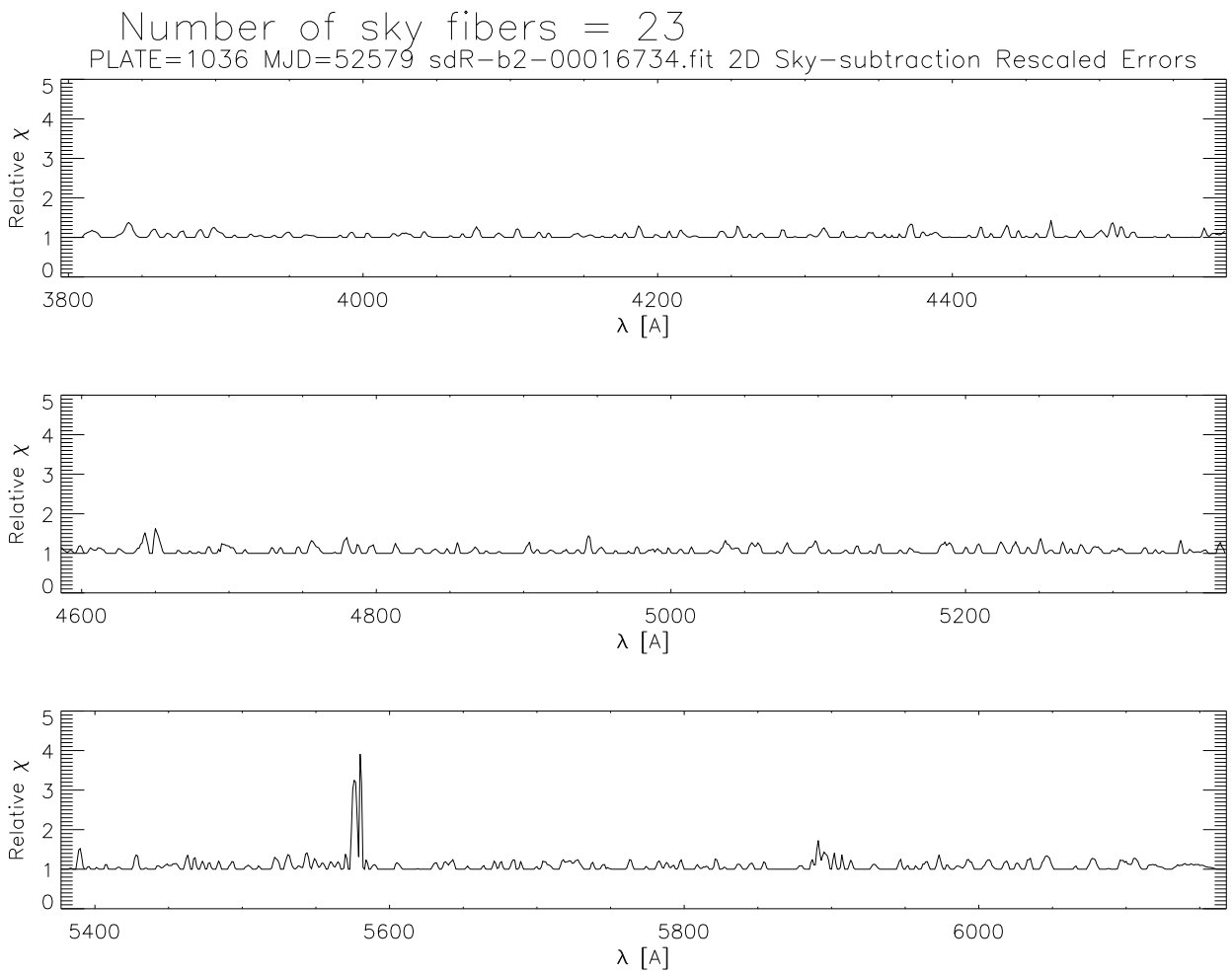

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

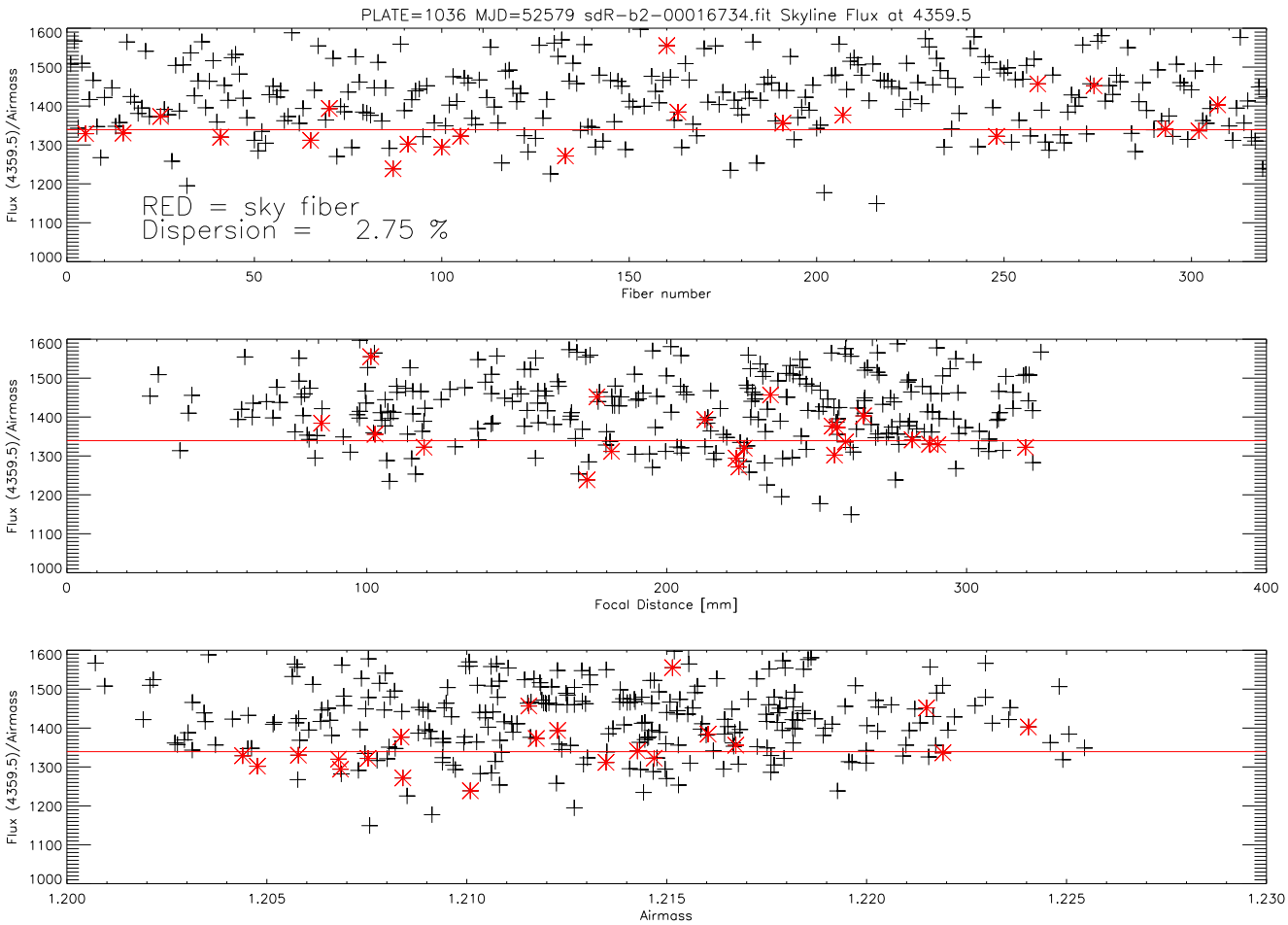

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016734.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

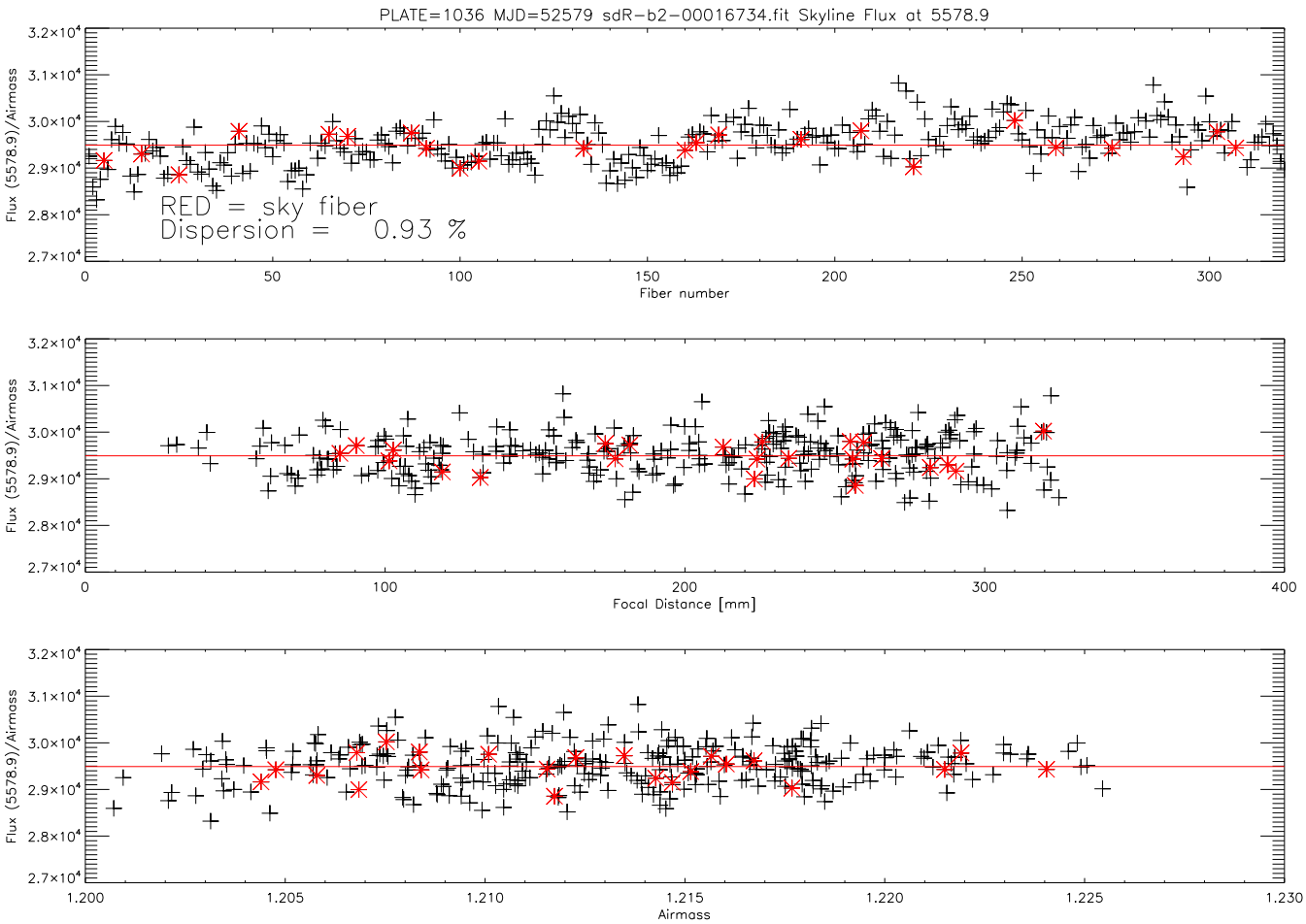

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

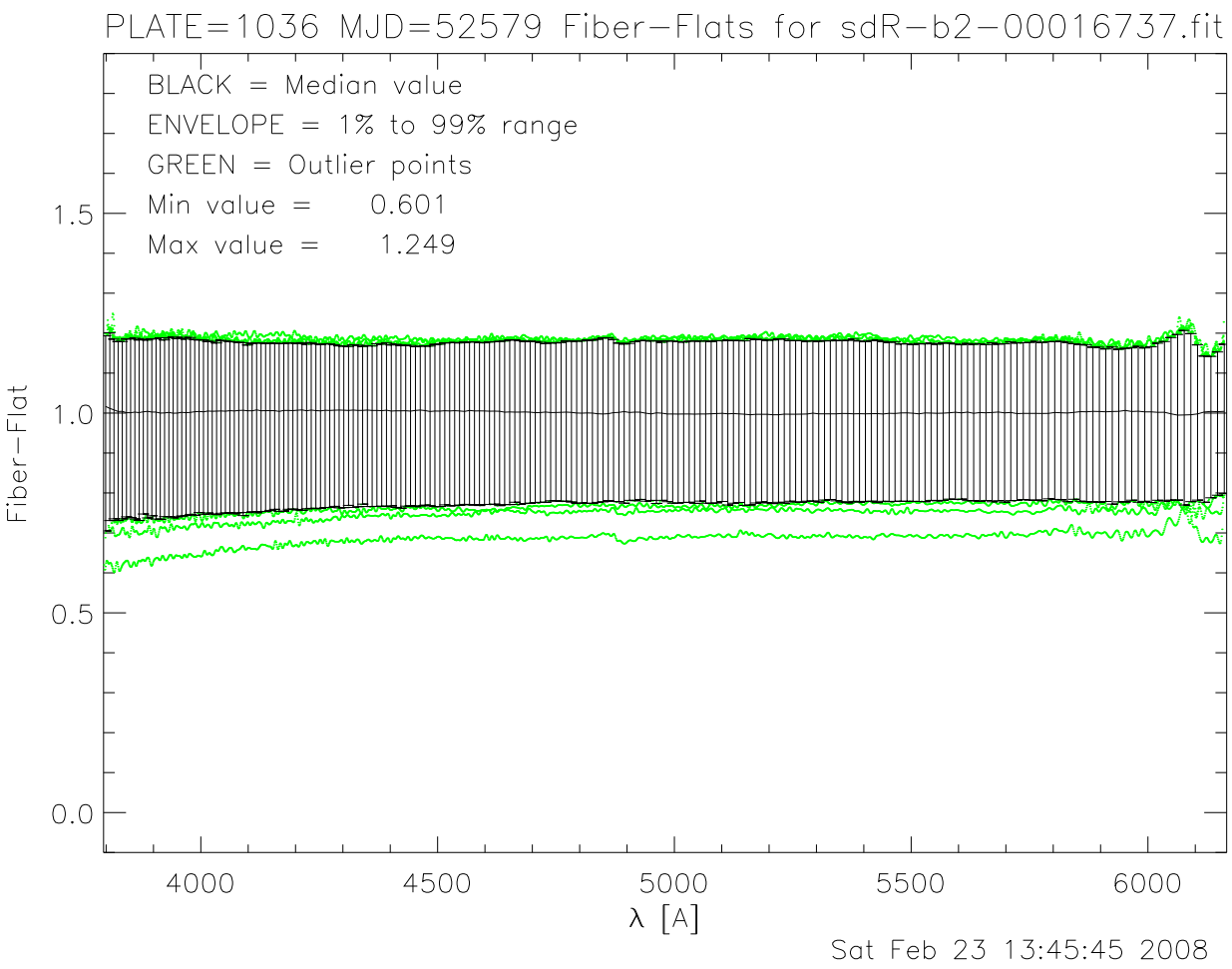

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

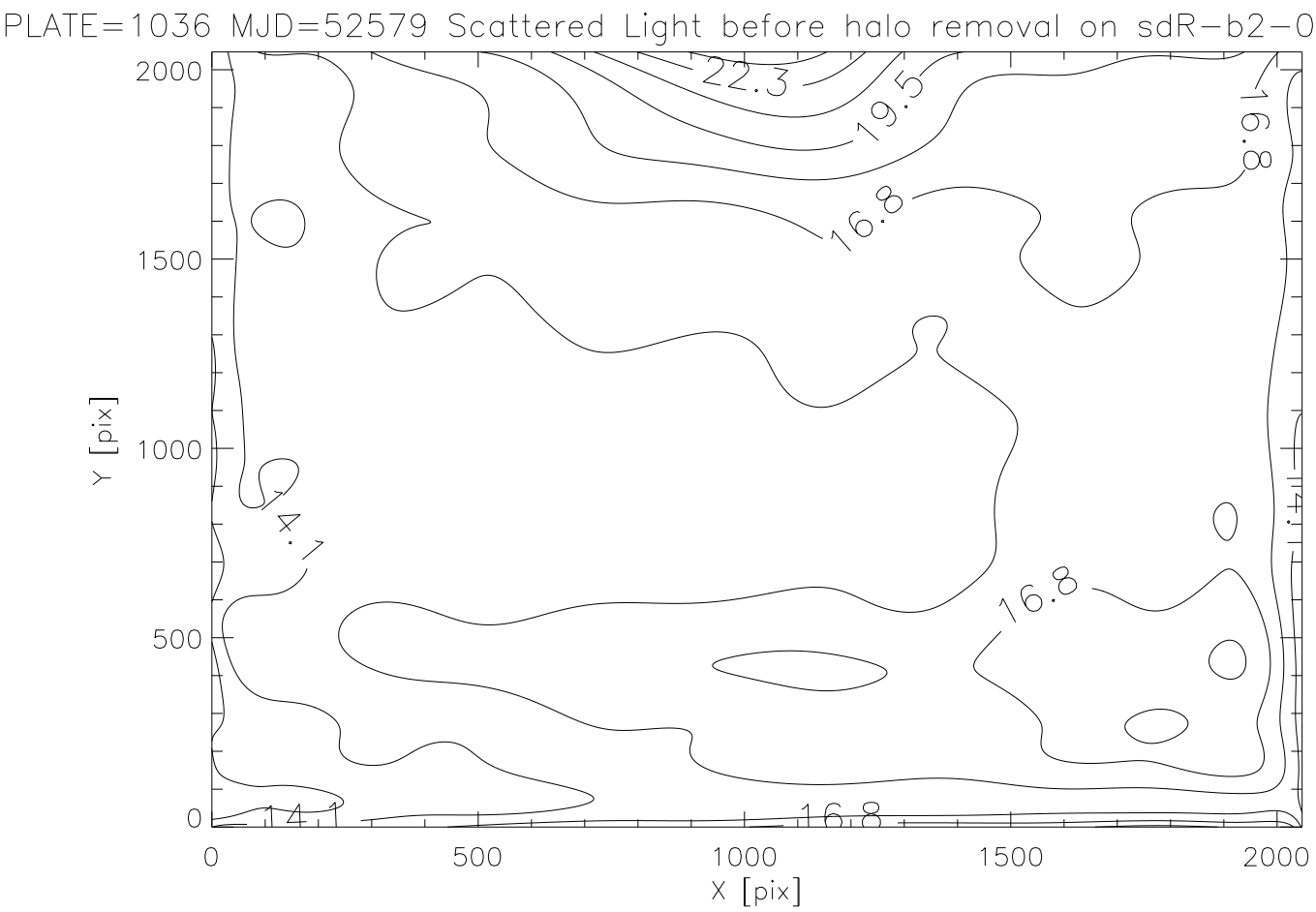

PLATE=1036 MJD=52579 sdR-b2-00016734.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

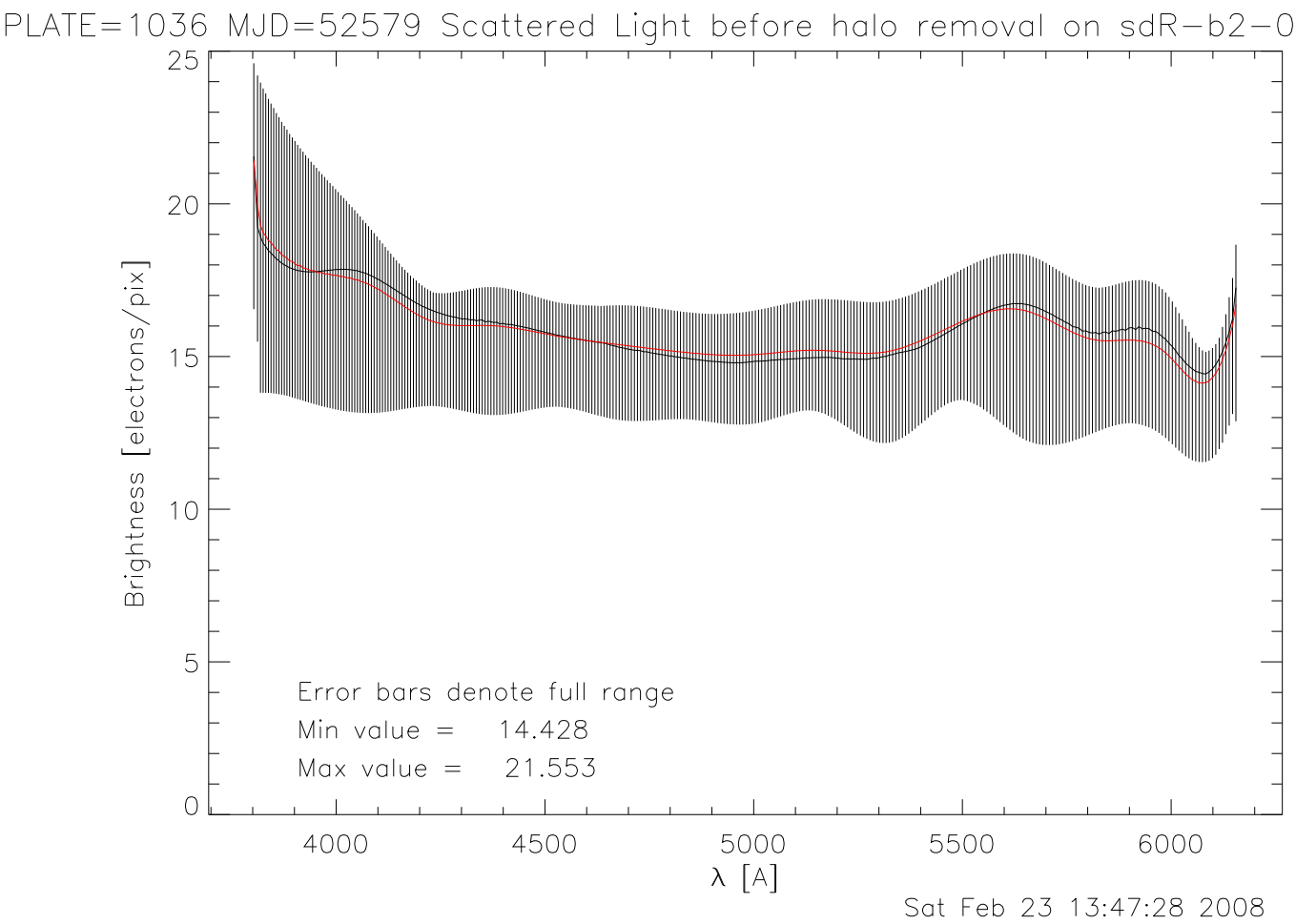

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016734.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

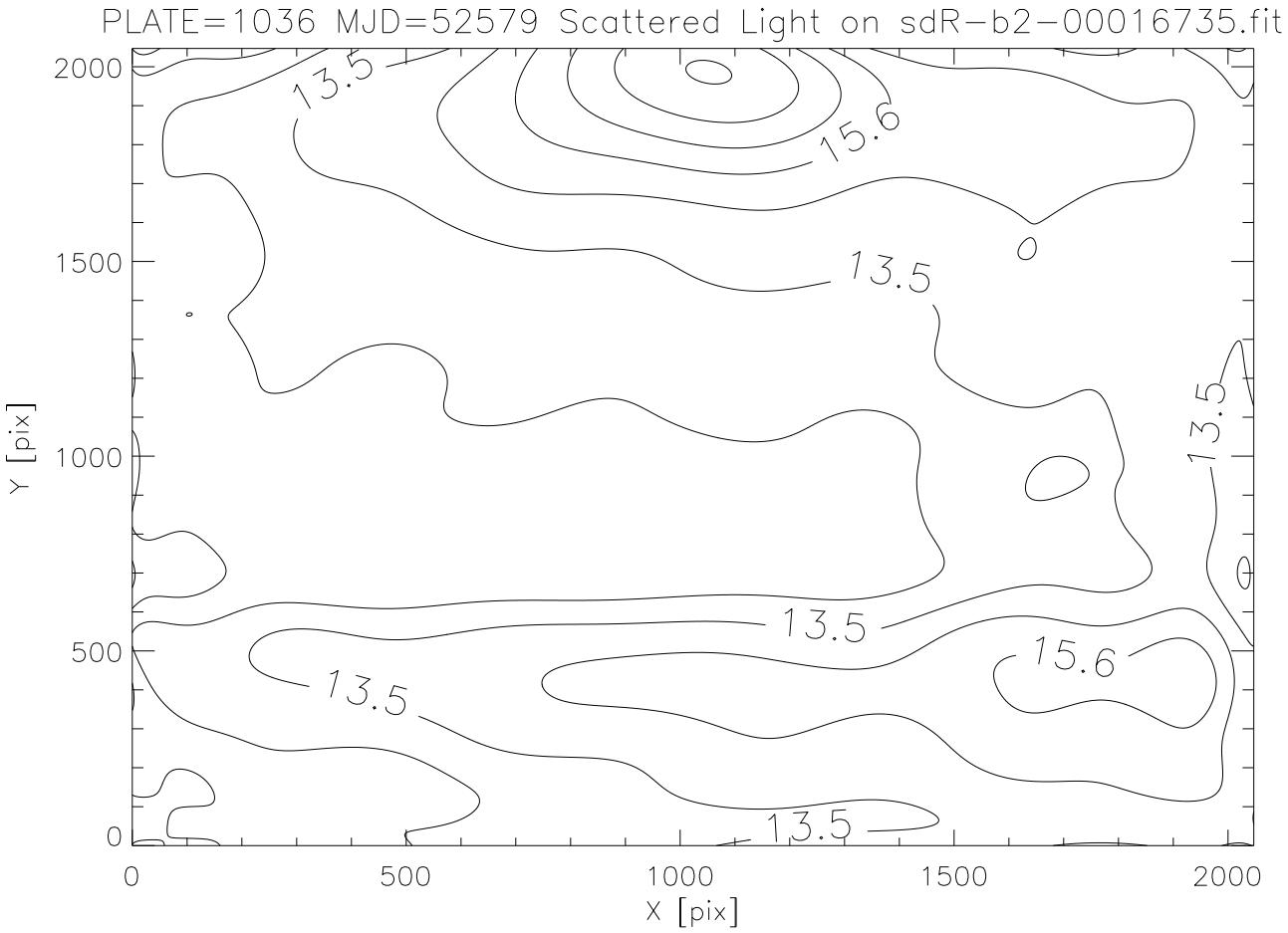

PLATE=1036 MJD=52579 sdR-b2-00016734.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 2.75 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

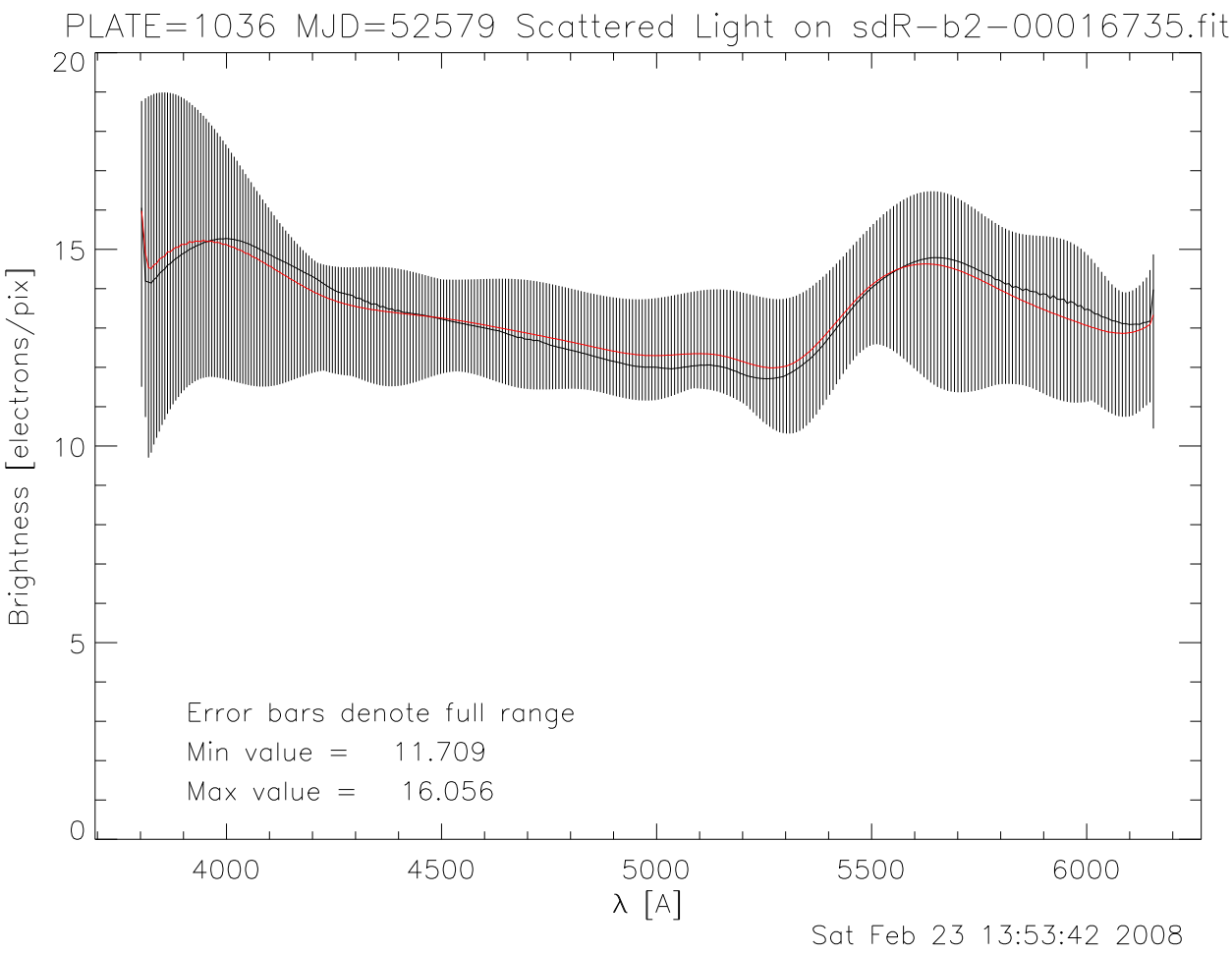

PLATE=1036 MJD=52579 sdR-b2-00016734.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.93 %
Fiber number
Focal Distance [mm]
Airmass

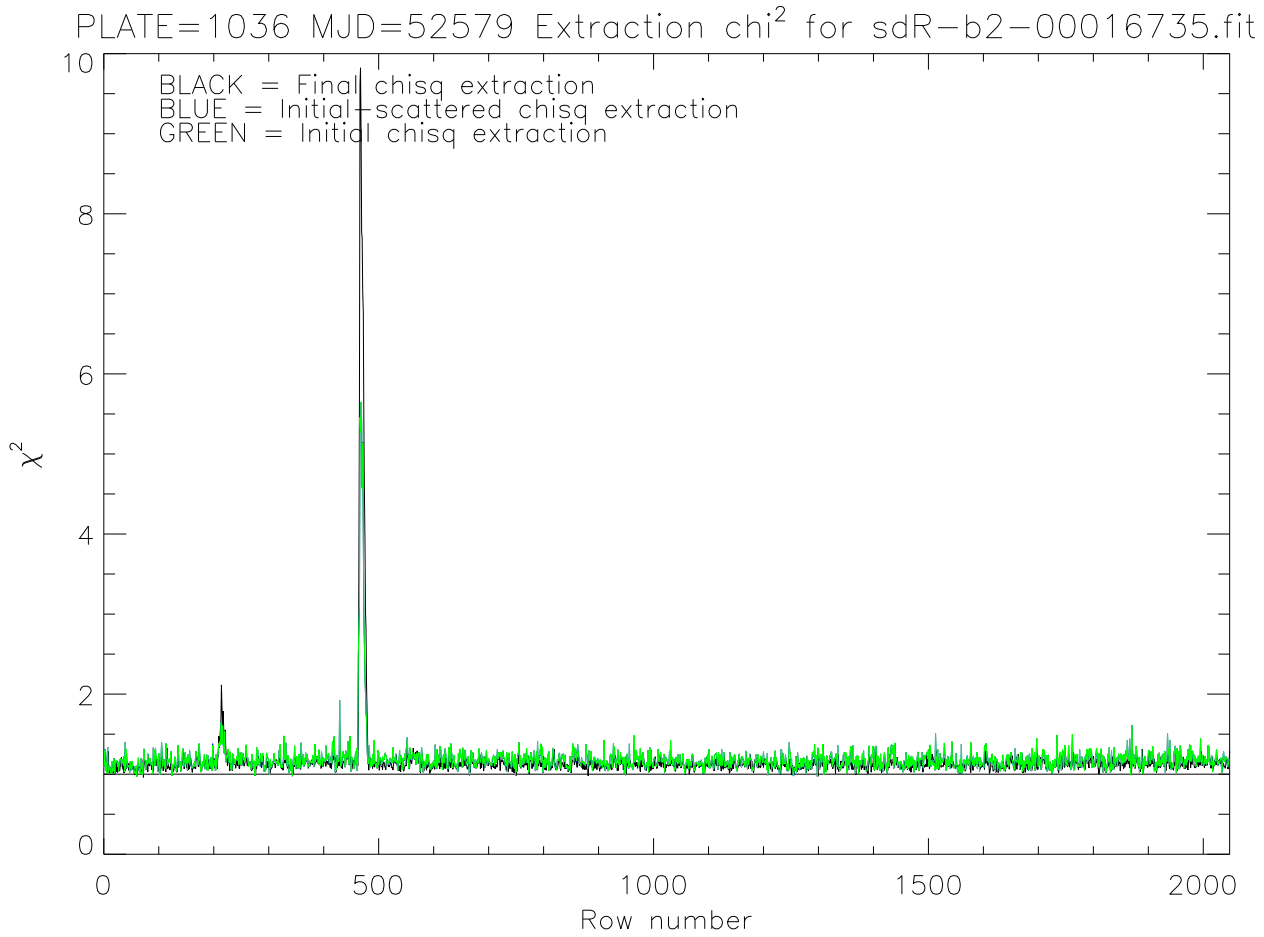

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b2-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.601
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:45:45 2008

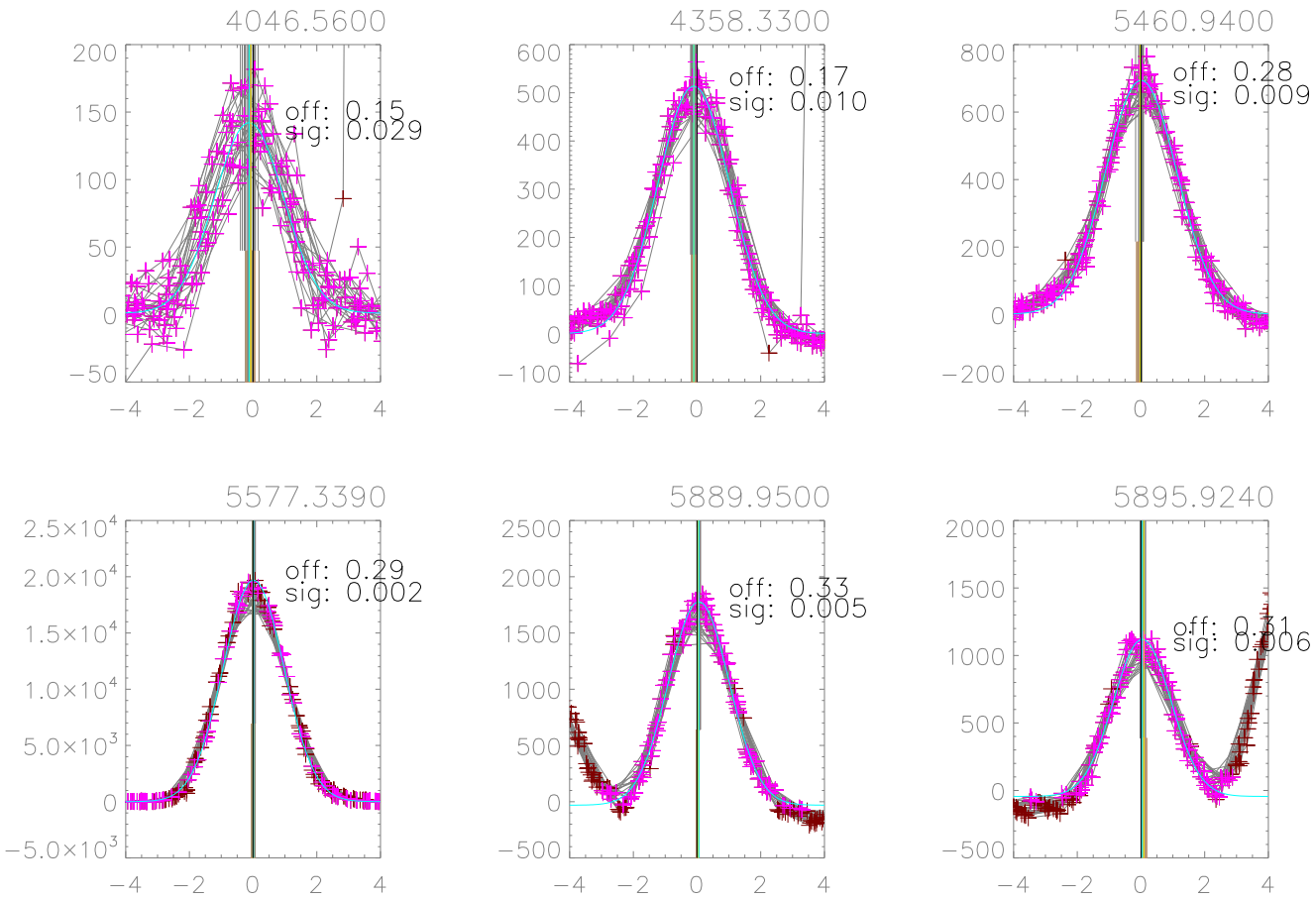

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016735.f
22.3
19.5
16.8
16.8
14.1
16.8
14.1
16.8
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

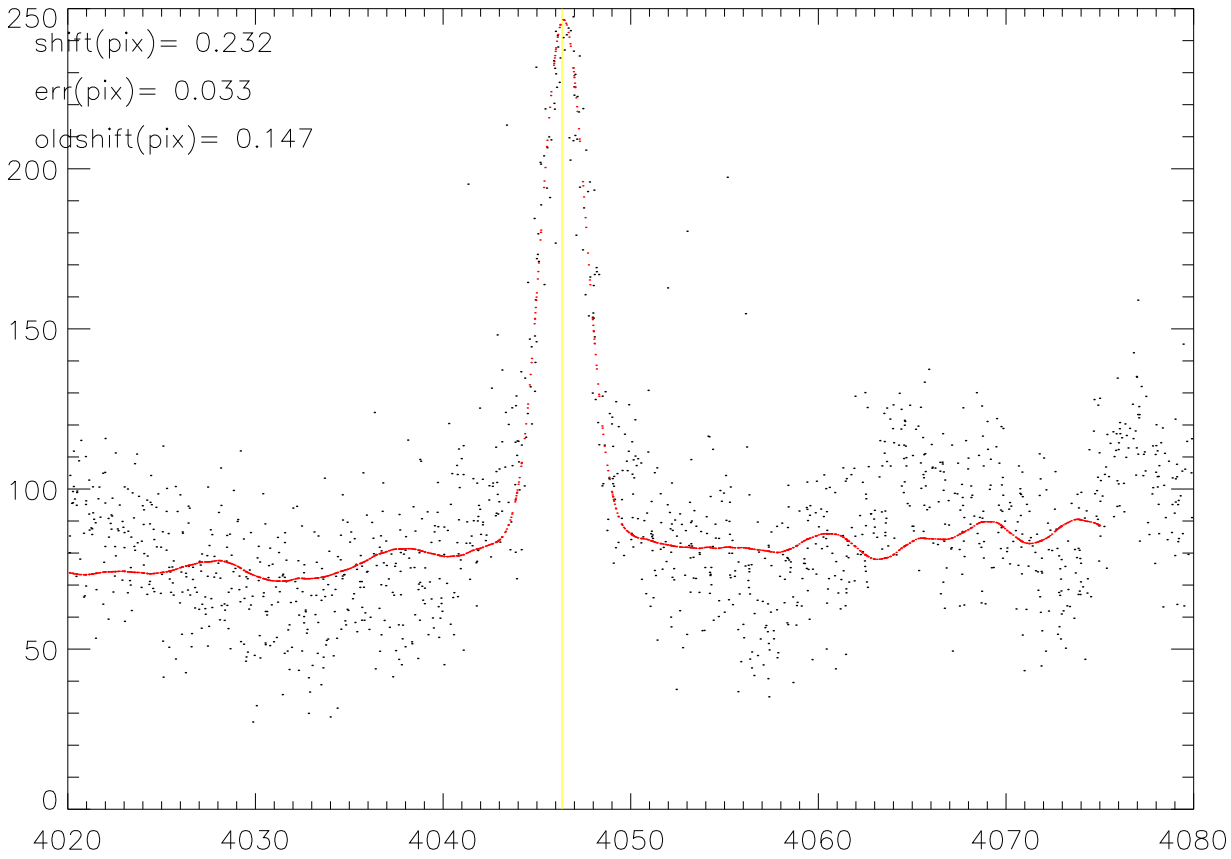

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016735.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 14.428
Max value = 21.553
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:47:28 2008

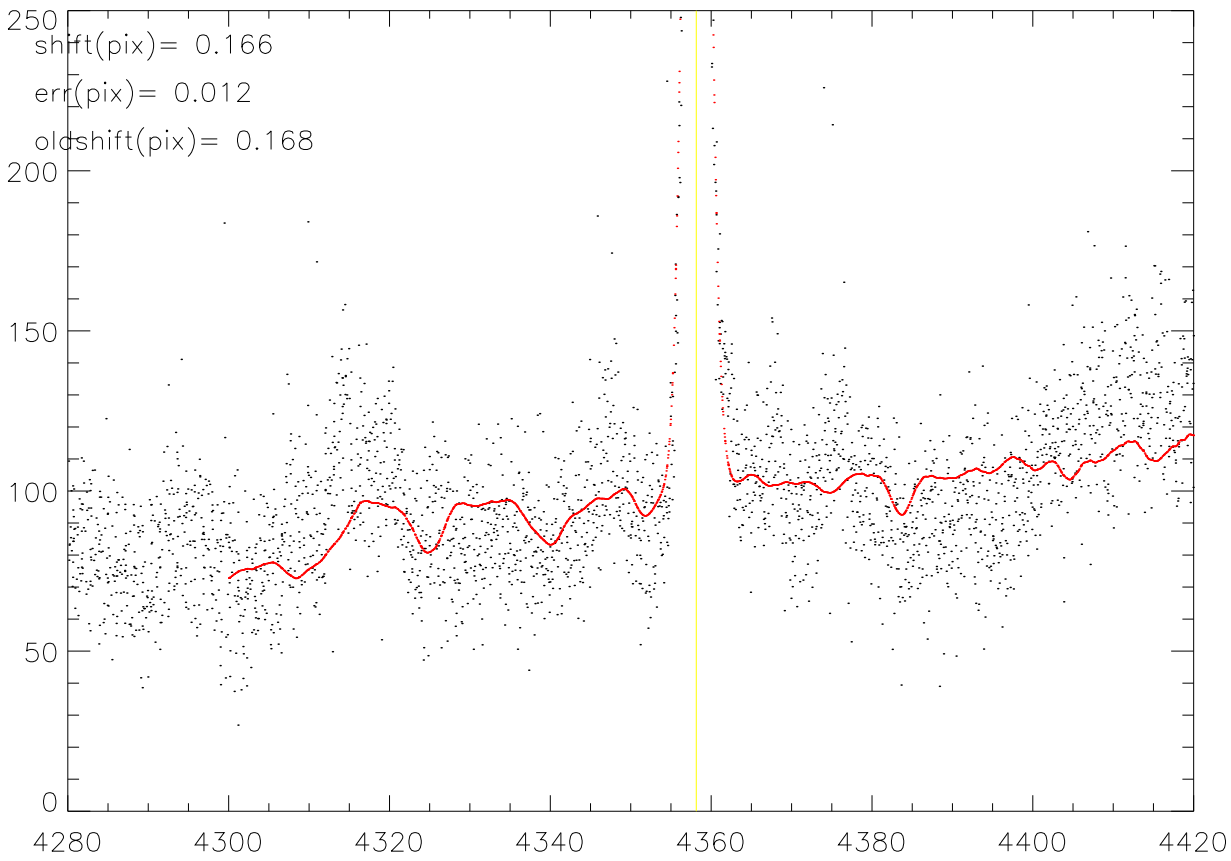

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016735.fit
13.5
15.6
0
13.5
13.5
13.5
15.6
13.5
0
500
1000
1500
2000
Y [pix]
X [pix]

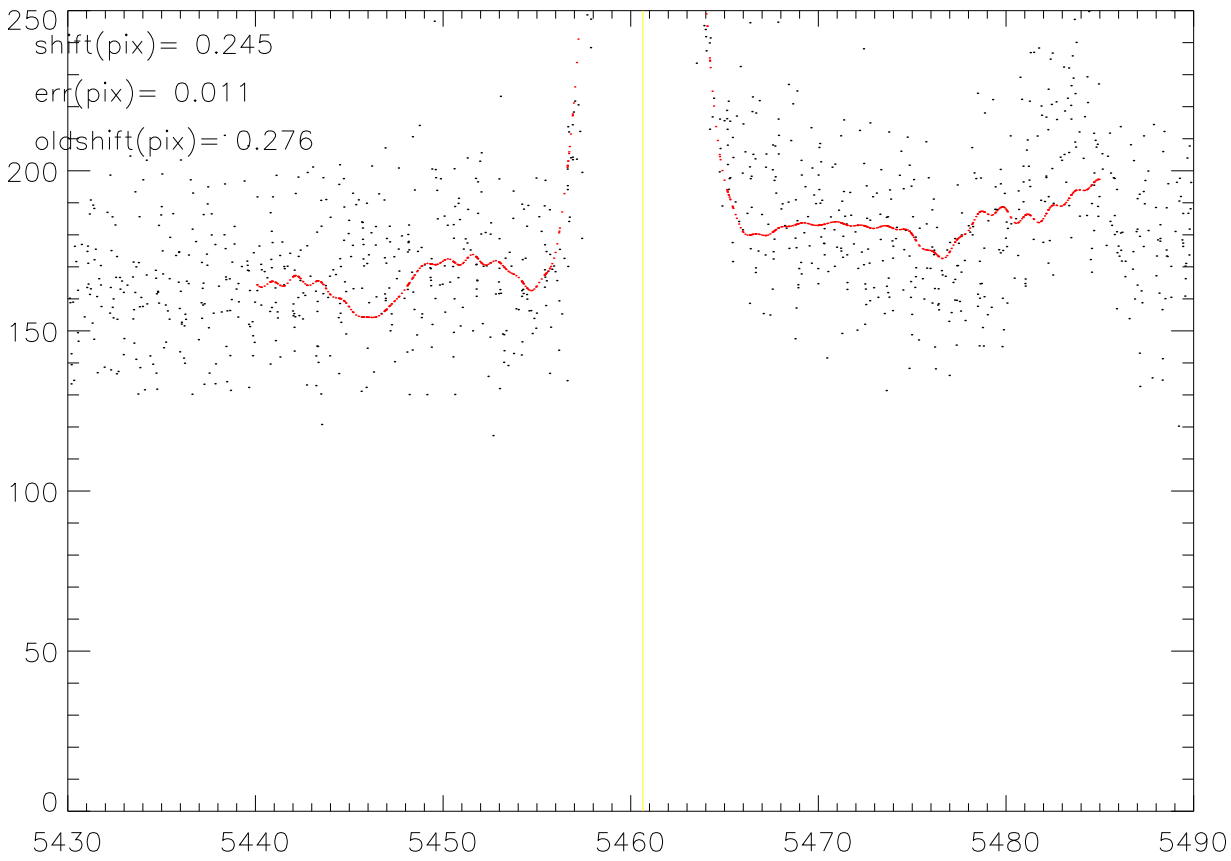

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016735.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.709
Max value = 16.056
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:53:42 2008

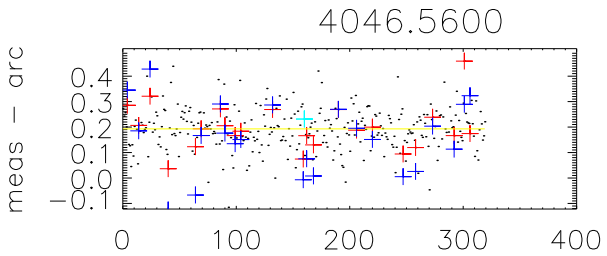

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b2-00016735.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

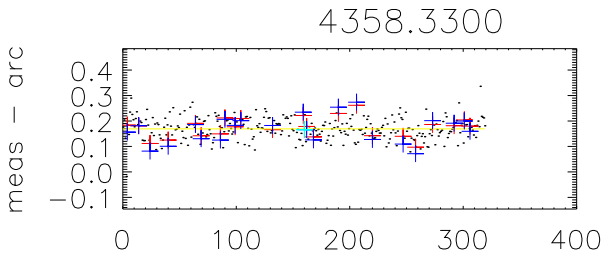

4046.5600
off: 0.15
sig: 0.029
4358.3300
off: 0.17
sig: 0.010
5460.9400
off: 0.28
sig: 0.009
5577.3390
off: 0.29
sig: 0.002
5889.9500
off: 0.33
sig: 0.005
5895.9240
off: 0.31
sig: 0.006

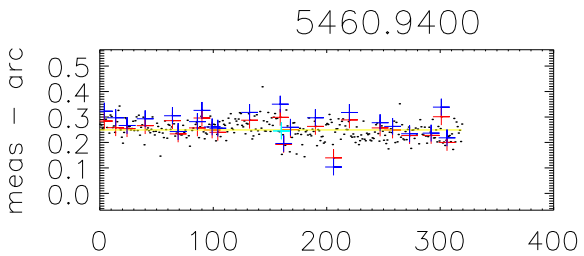

shift(pix)= 0.232
err(pix)= 0.033
oldshift(pix)= 0.147
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

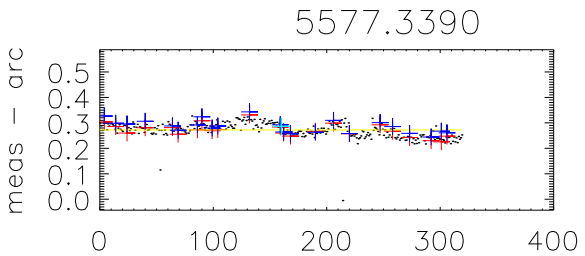

shift(pix)= 0.166
err(pix)= 0.012
oldshift(pix)= 0.168
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

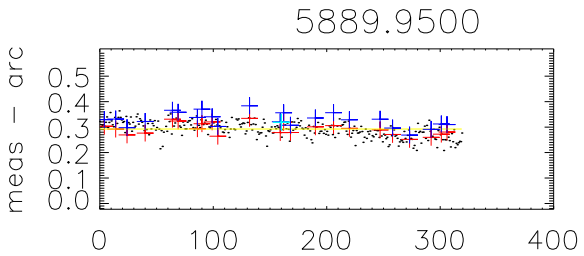

shift(pix)= 0.245
err(pix)= 0.011
oldshift(pix)= 0.276
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

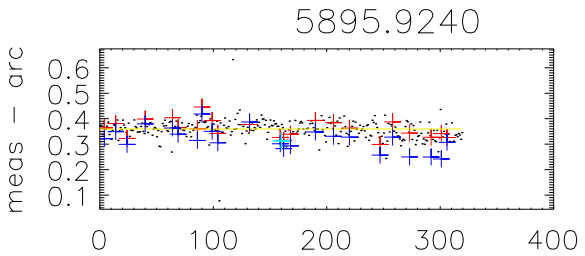

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

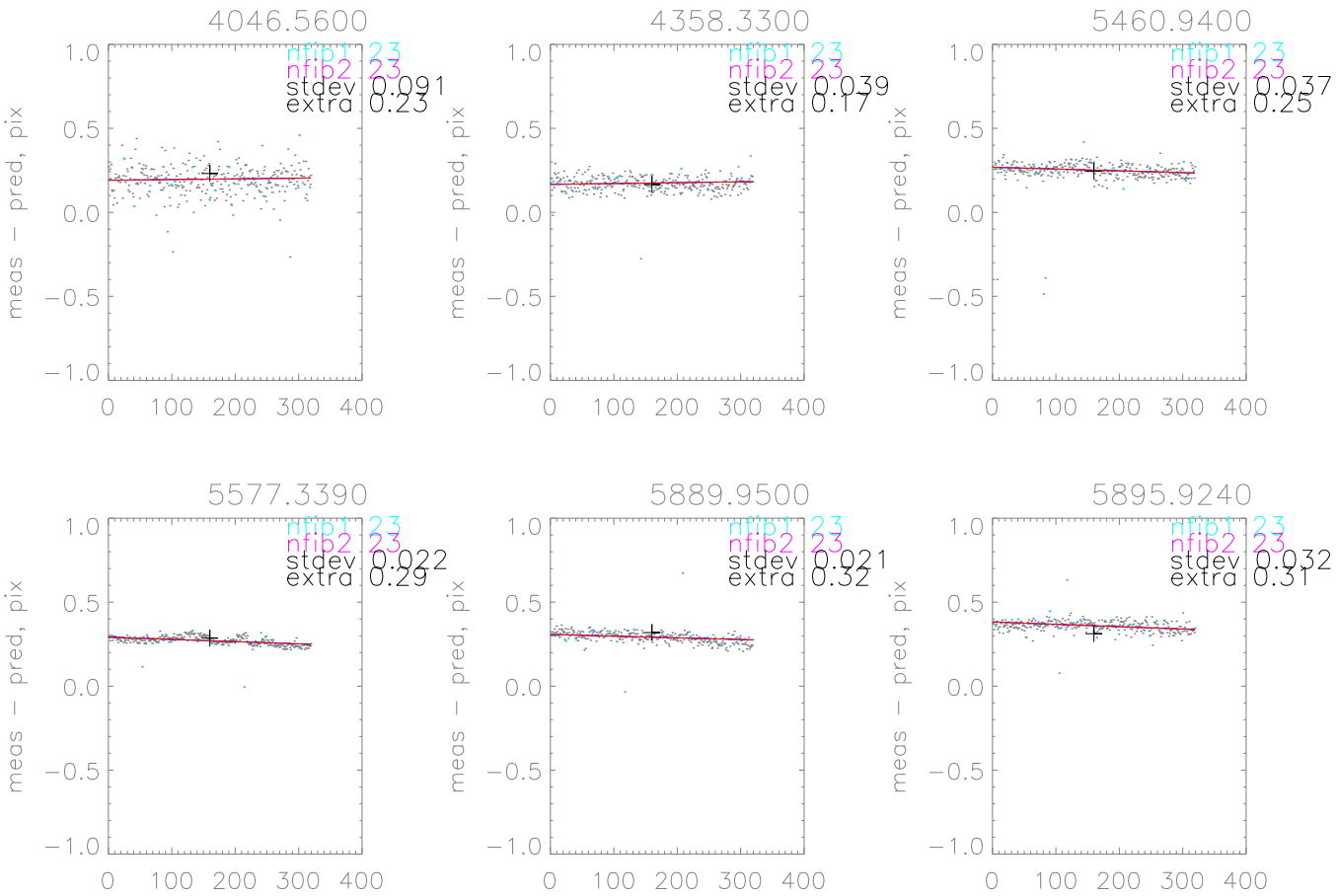

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

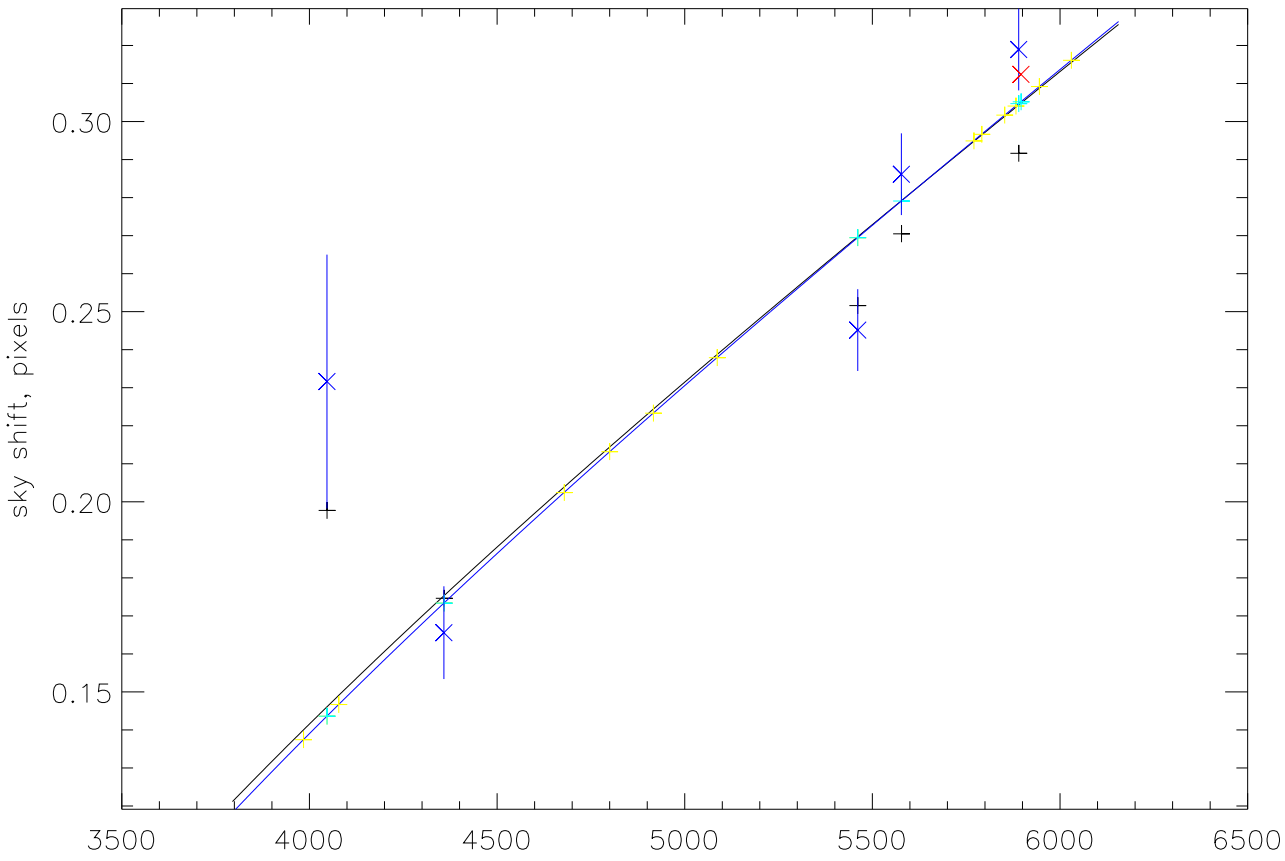

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

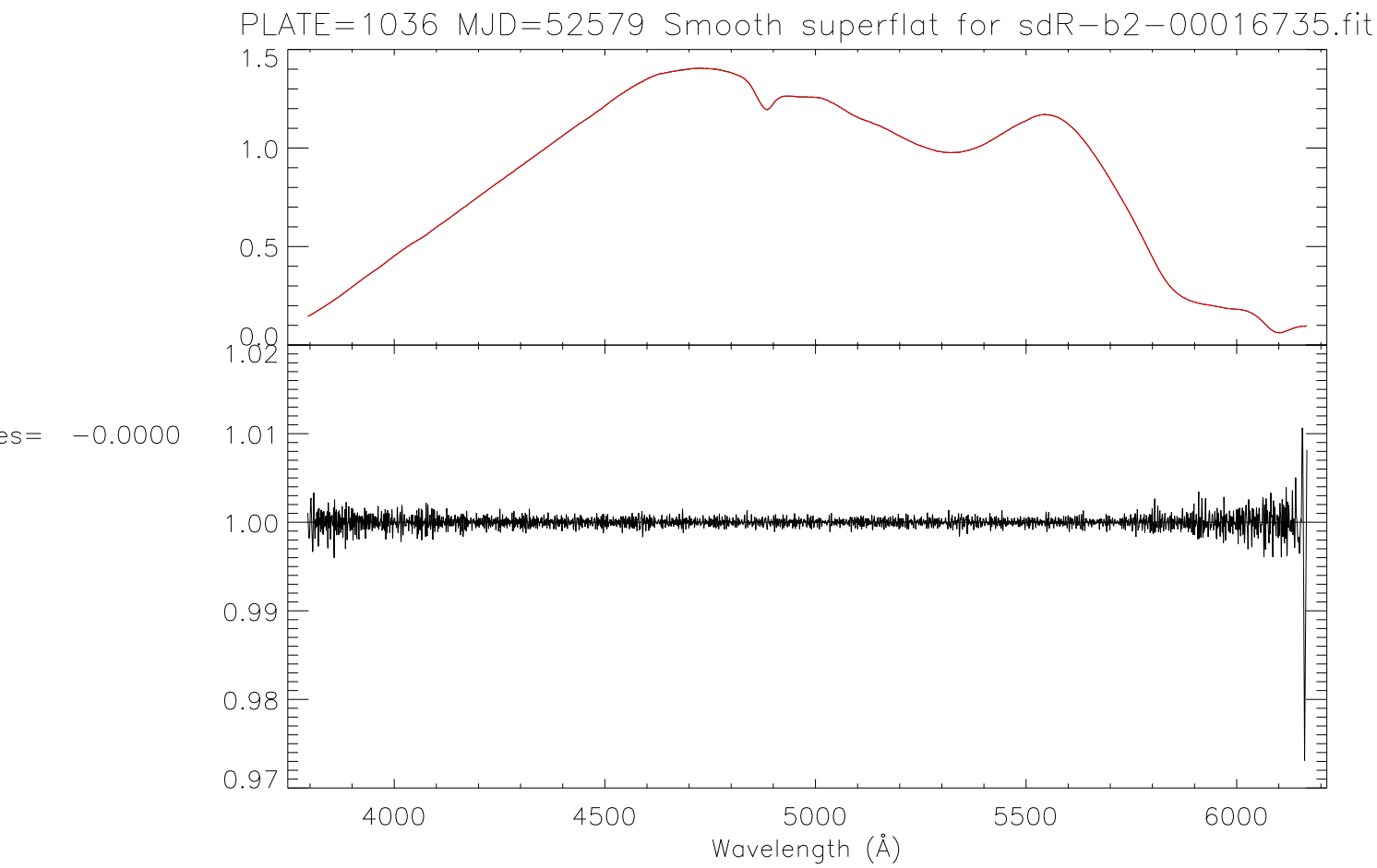

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

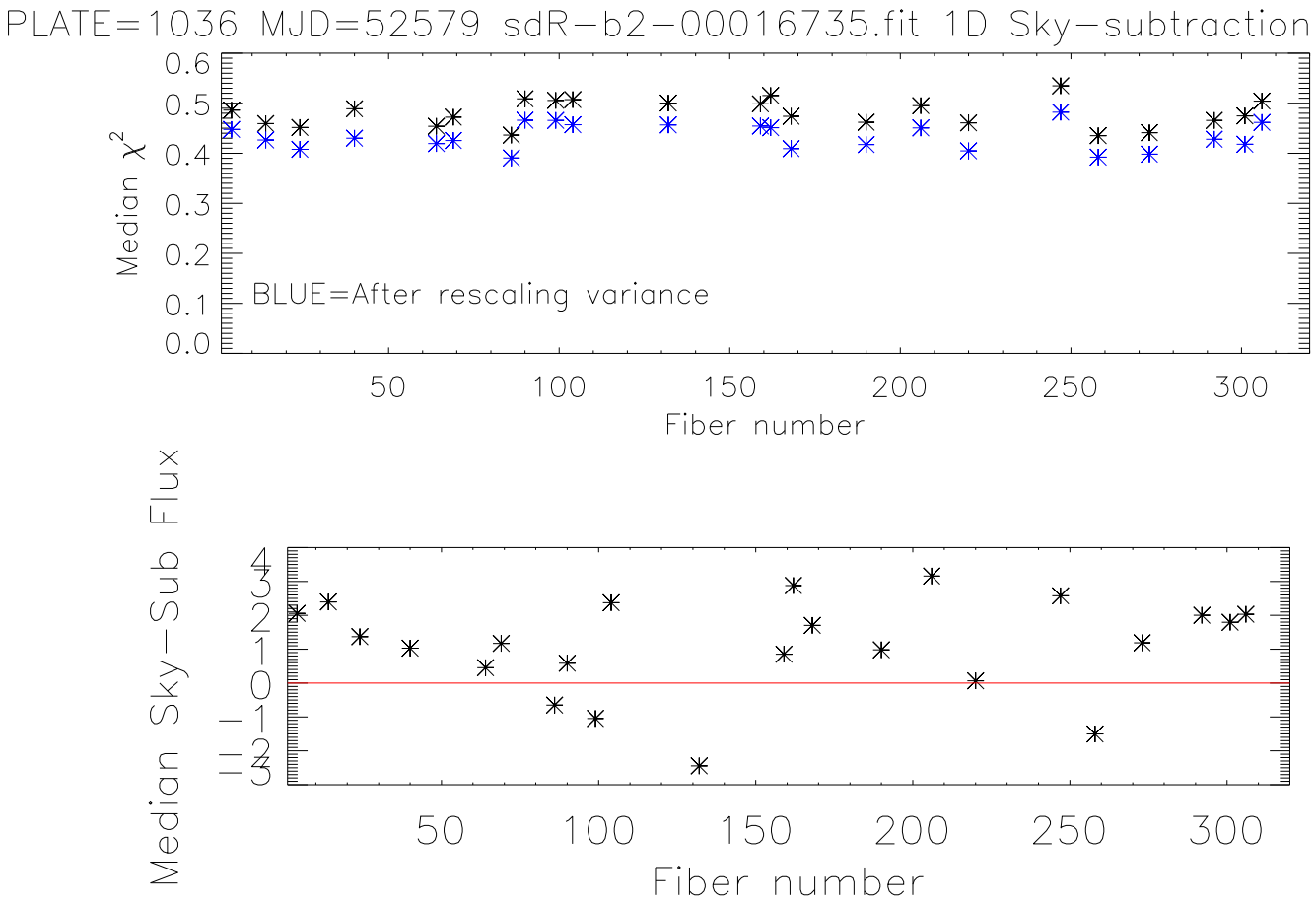

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

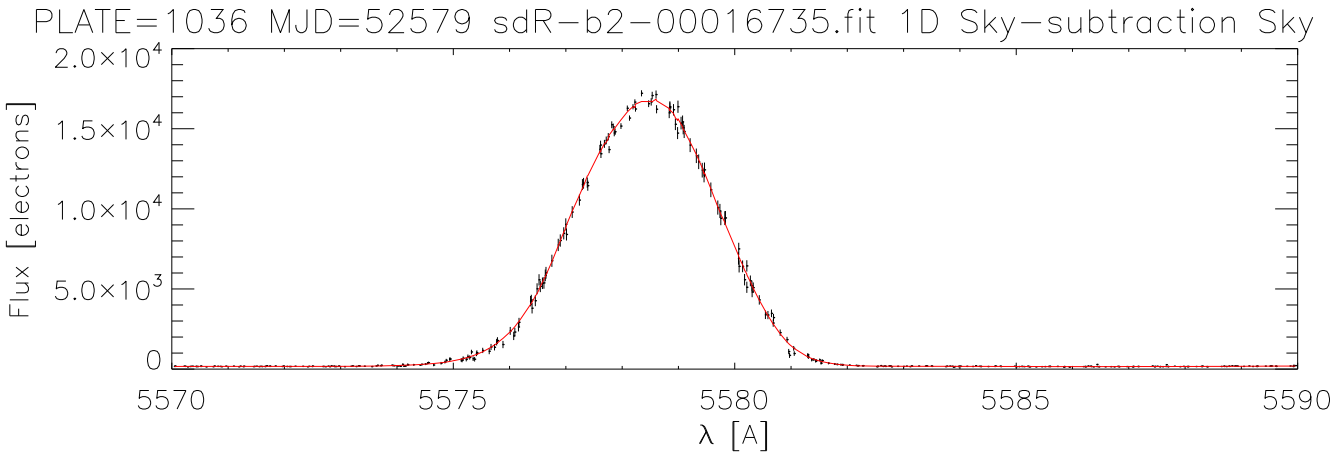

4046.5600
nfib1 23
nfib2 23
stdev 0.091
extra 0.23
4358.3300
nfib1 23
nfib2 23
stdev 0.039
extra 0.17
5460.9400
nfib1 23
nfib2 23
stdev 0.037
extra 0.25
5577.3390
nfib1 23
nfib2 23
stdev 0.022
extra 0.29
5889.9500
nfib1 23
nfib2 23
stdev 0.021
extra 0.32
5895.9240
nfib1 23
nfib2 23
stdev 0.032
extra 0.31
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

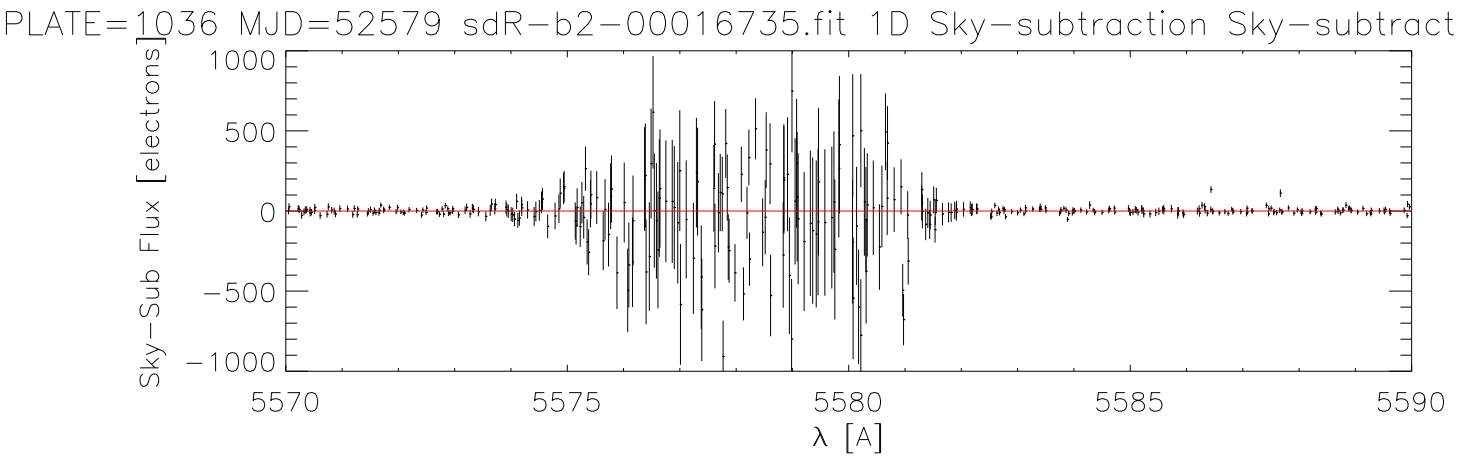

sky shift, pixels
0.30
0.25
0.20
0.15
3500
4000
4500
5000
5500
6000
6500

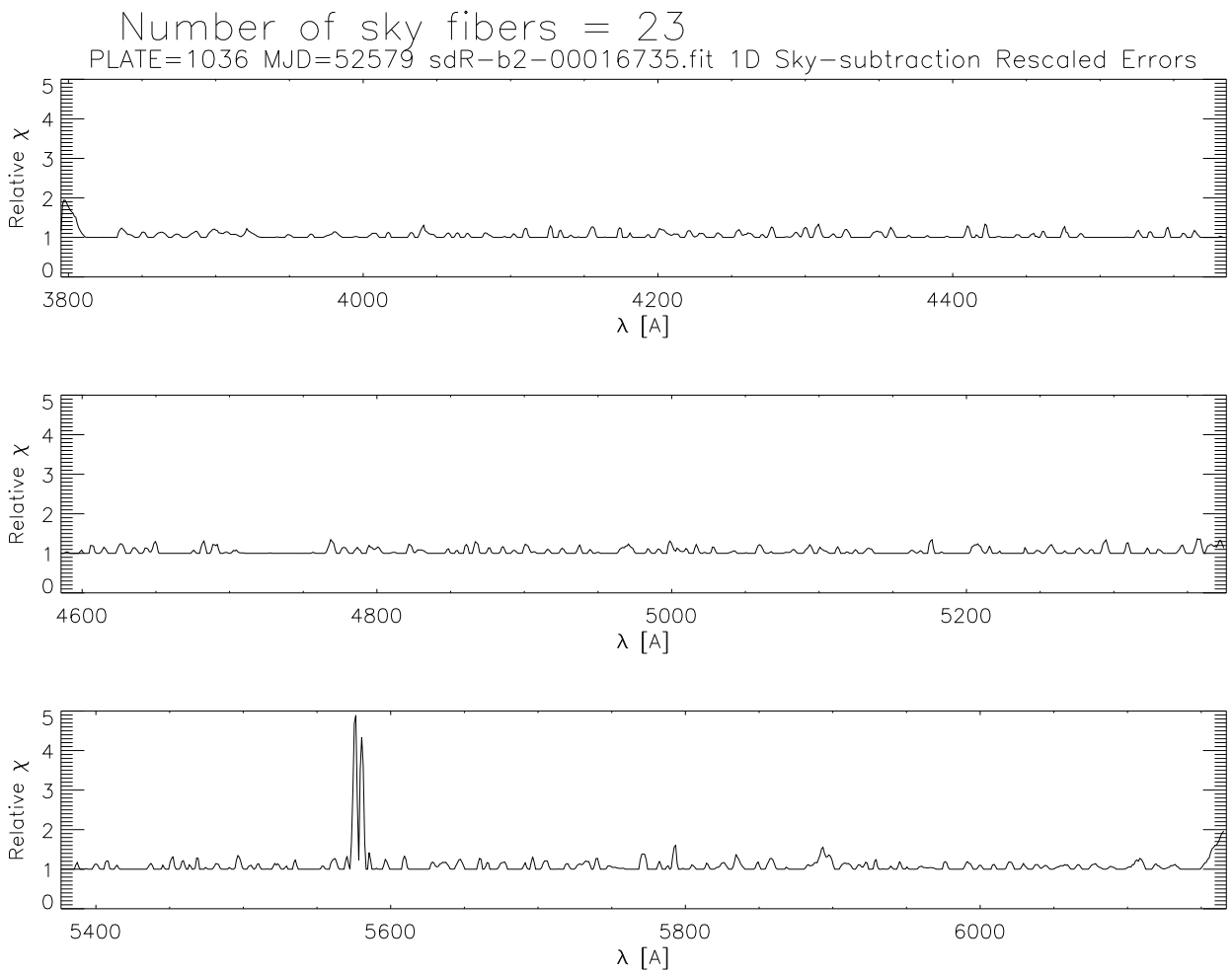

PLATE=1036 MJD=52579 Smooth superflat for sdR-b2-00016735.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

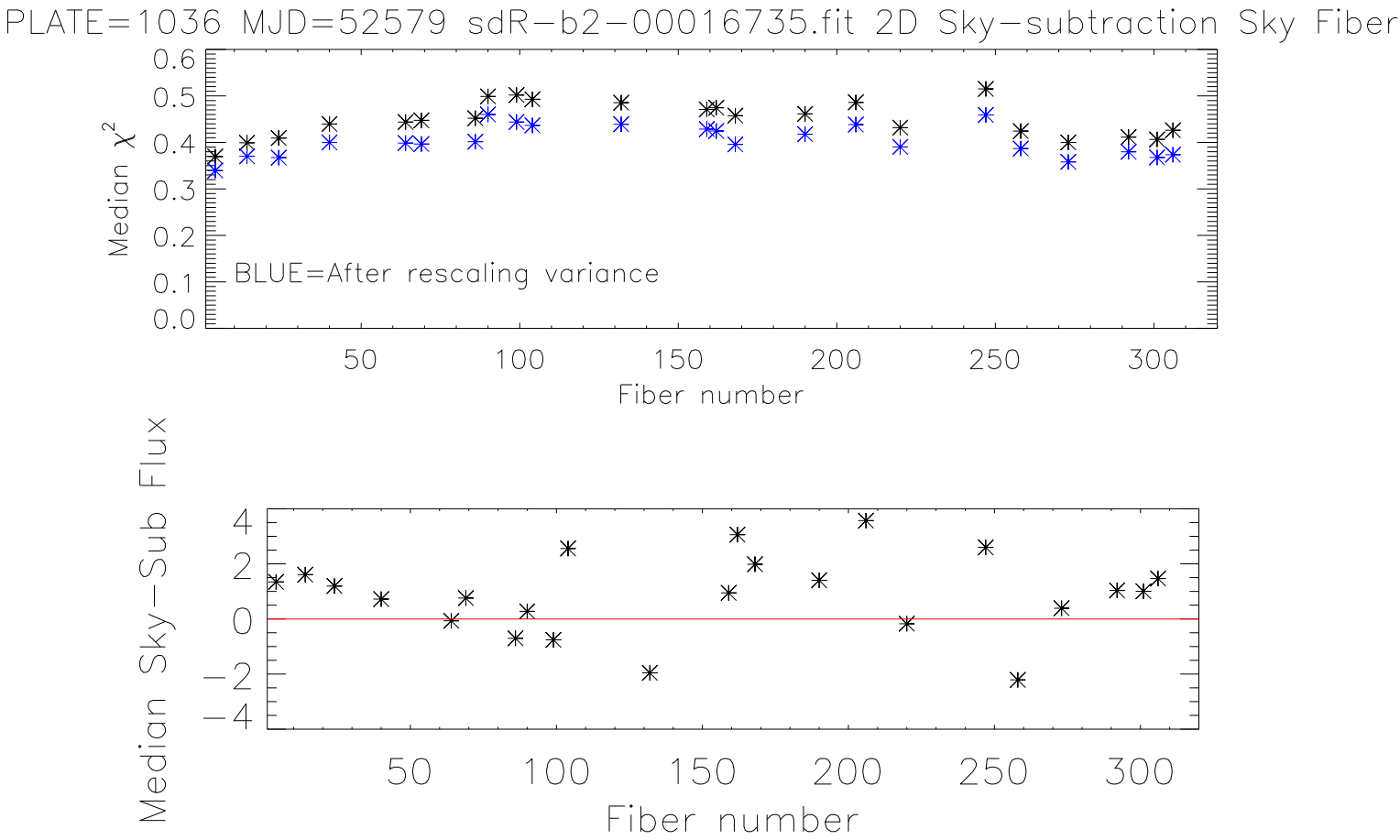
es= −0.0000

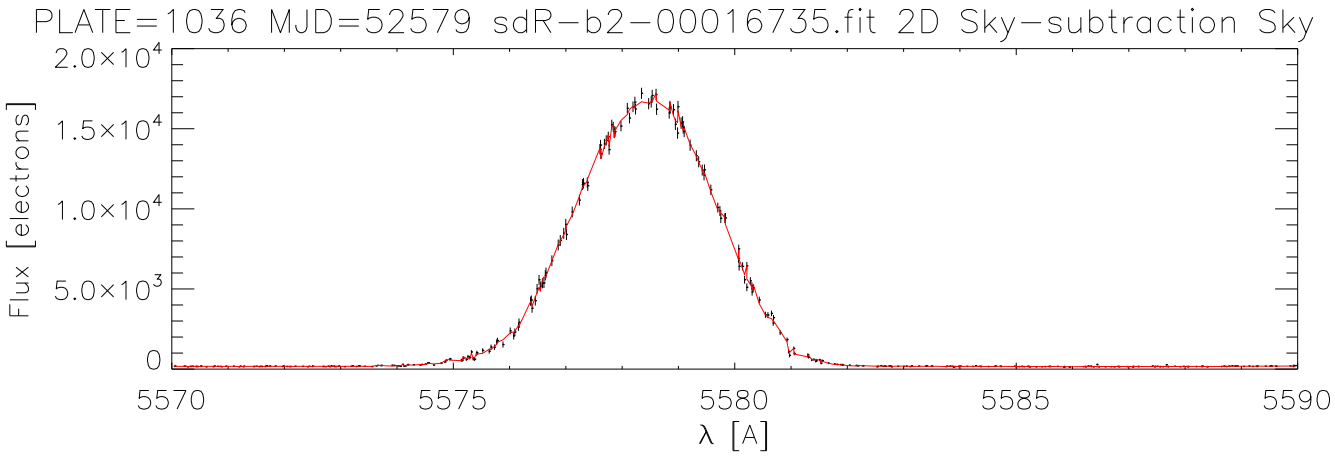

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

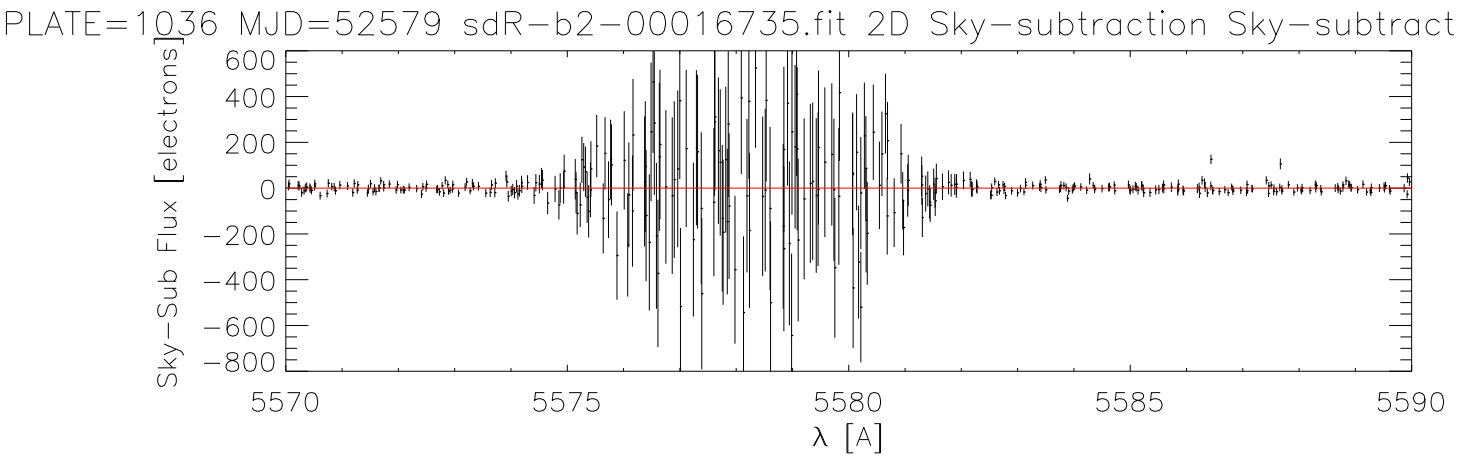

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

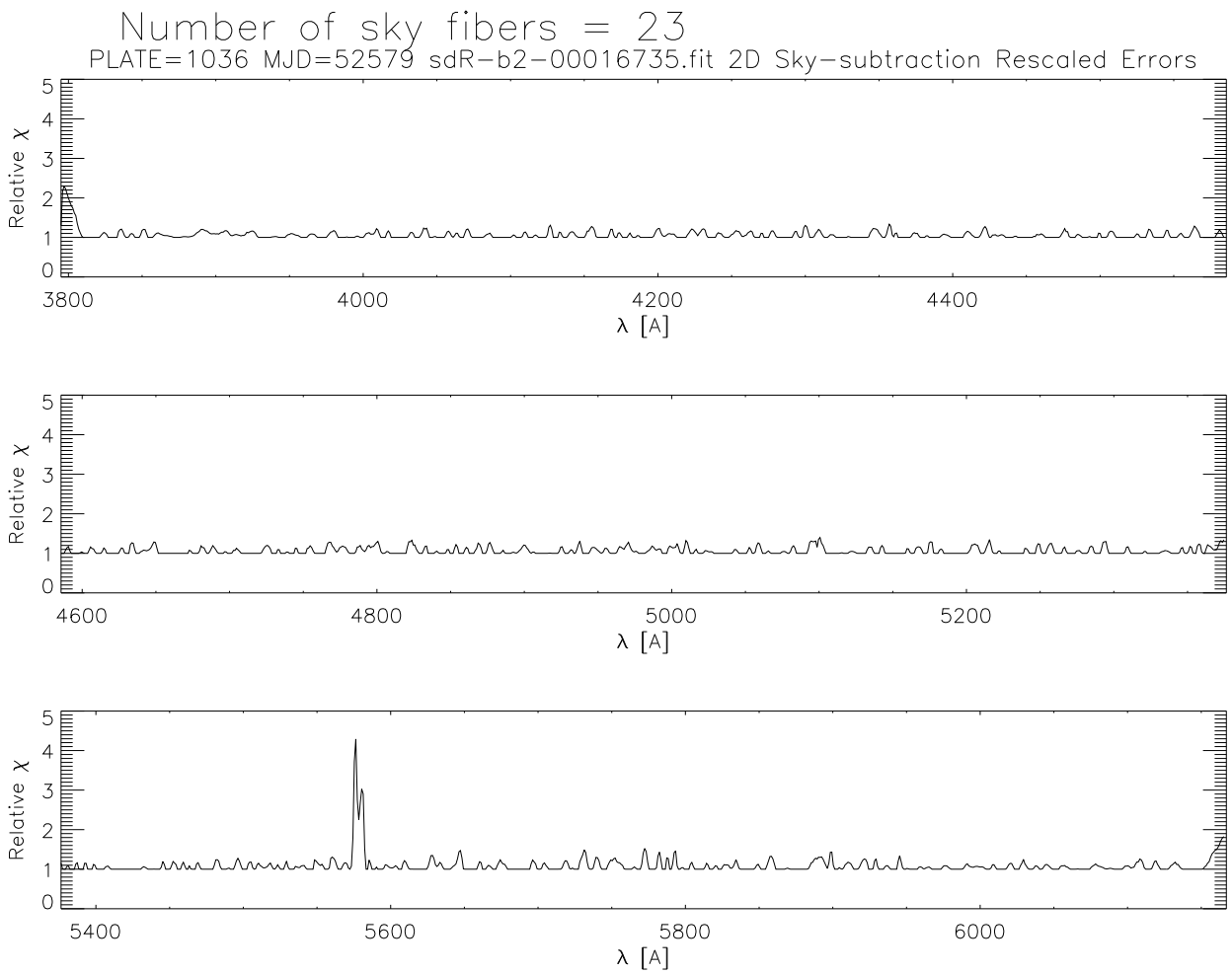

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

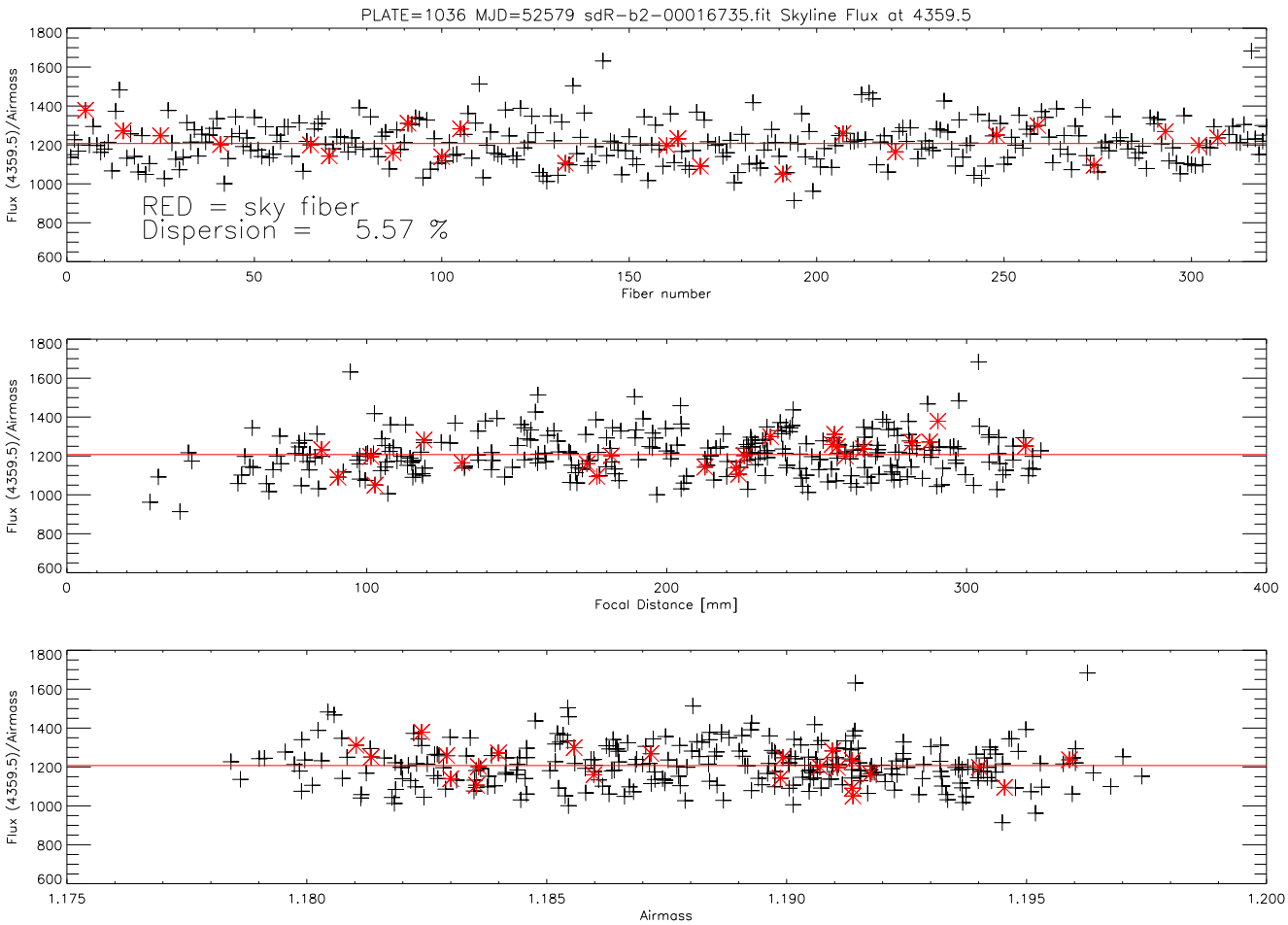

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016735.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

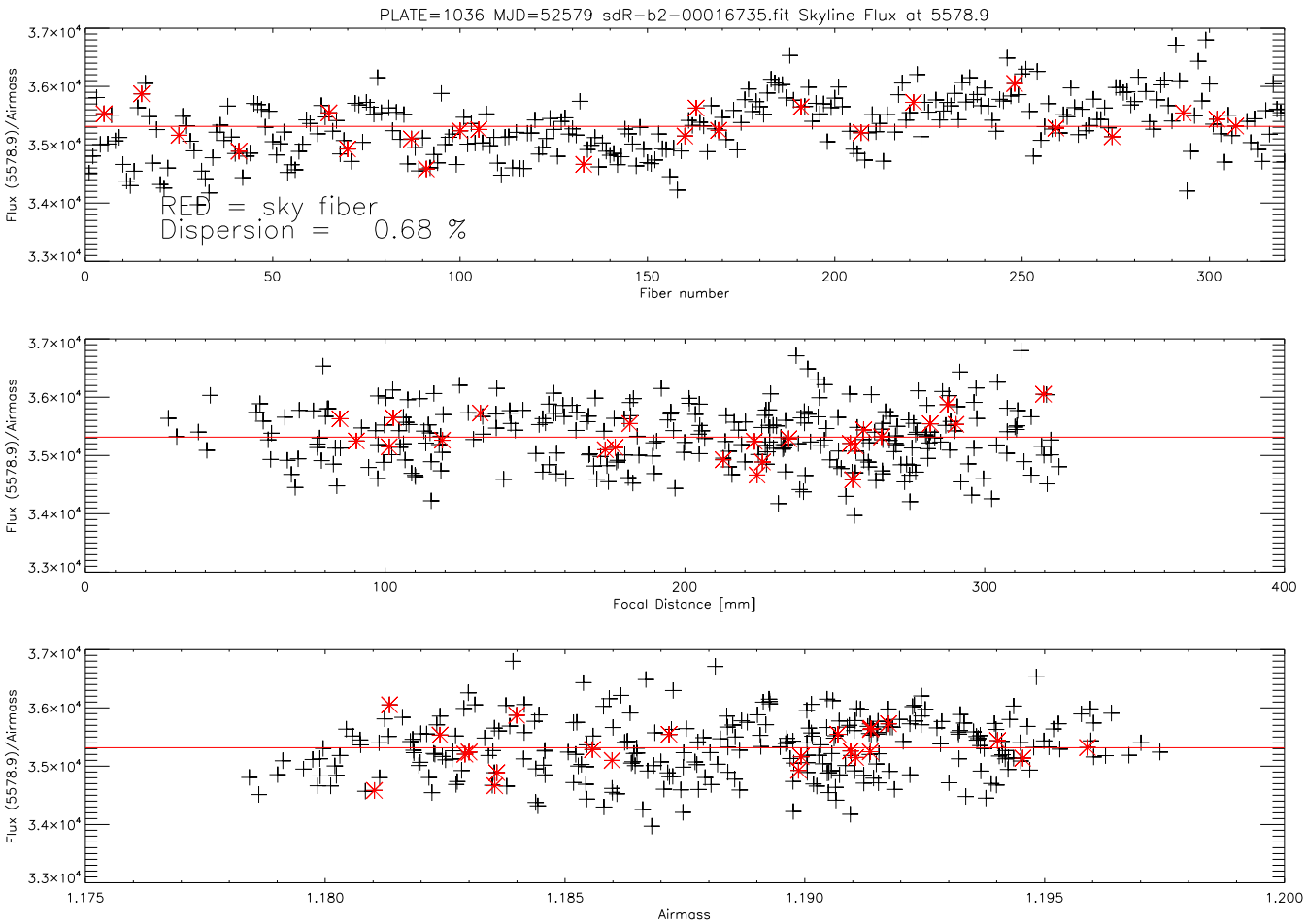

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

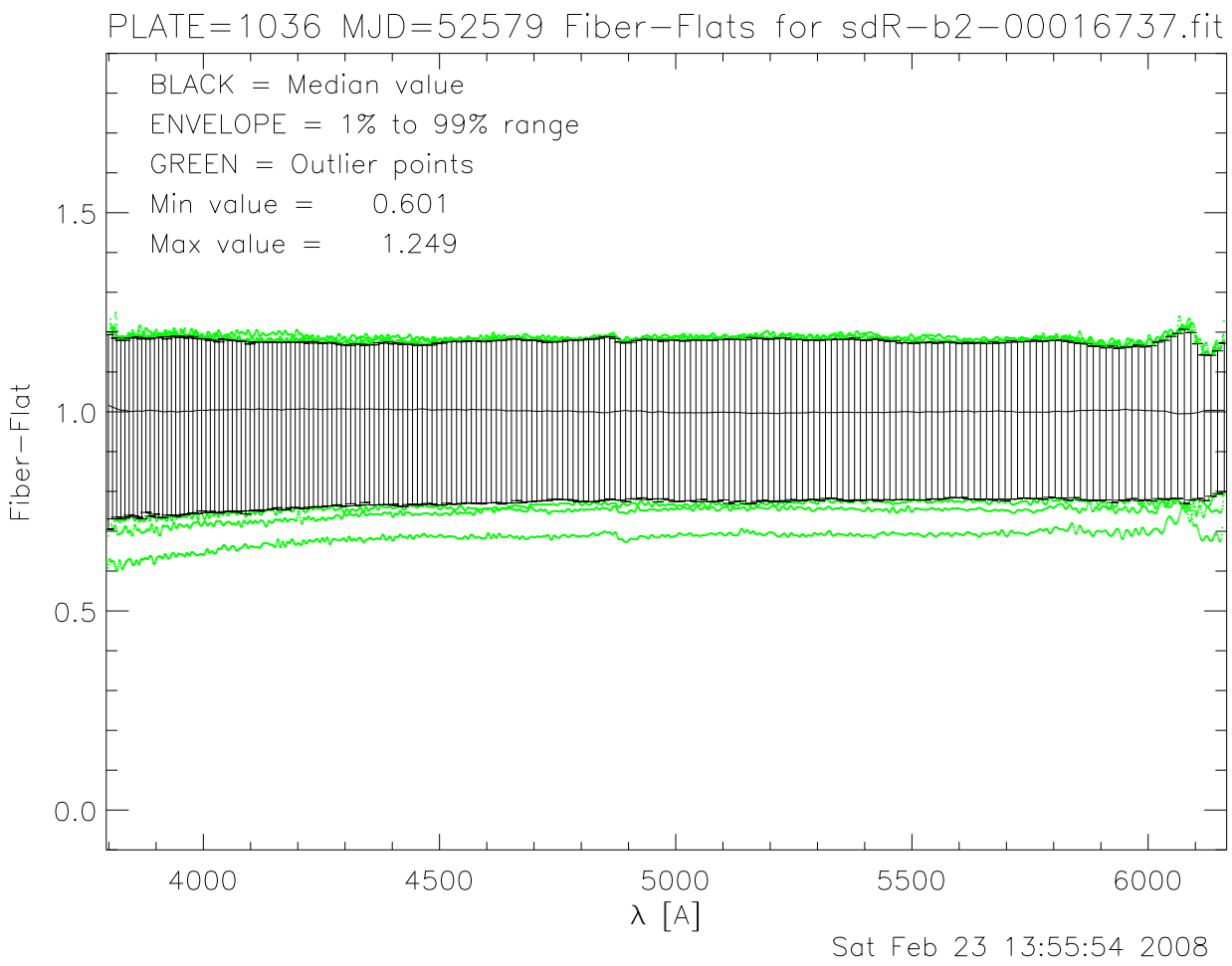

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

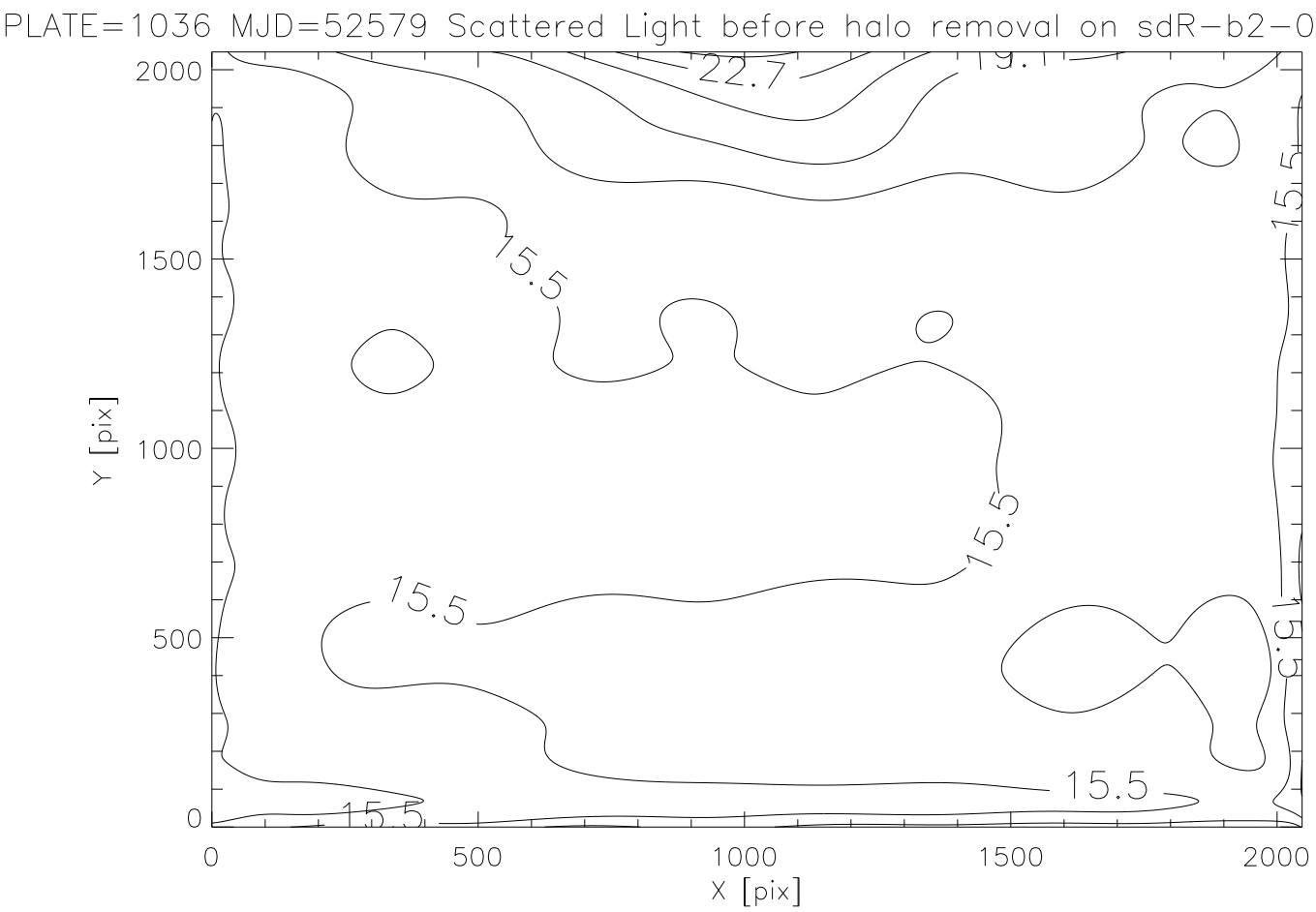

PLATE=1036 MJD=52579 sdR-b2-00016735.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

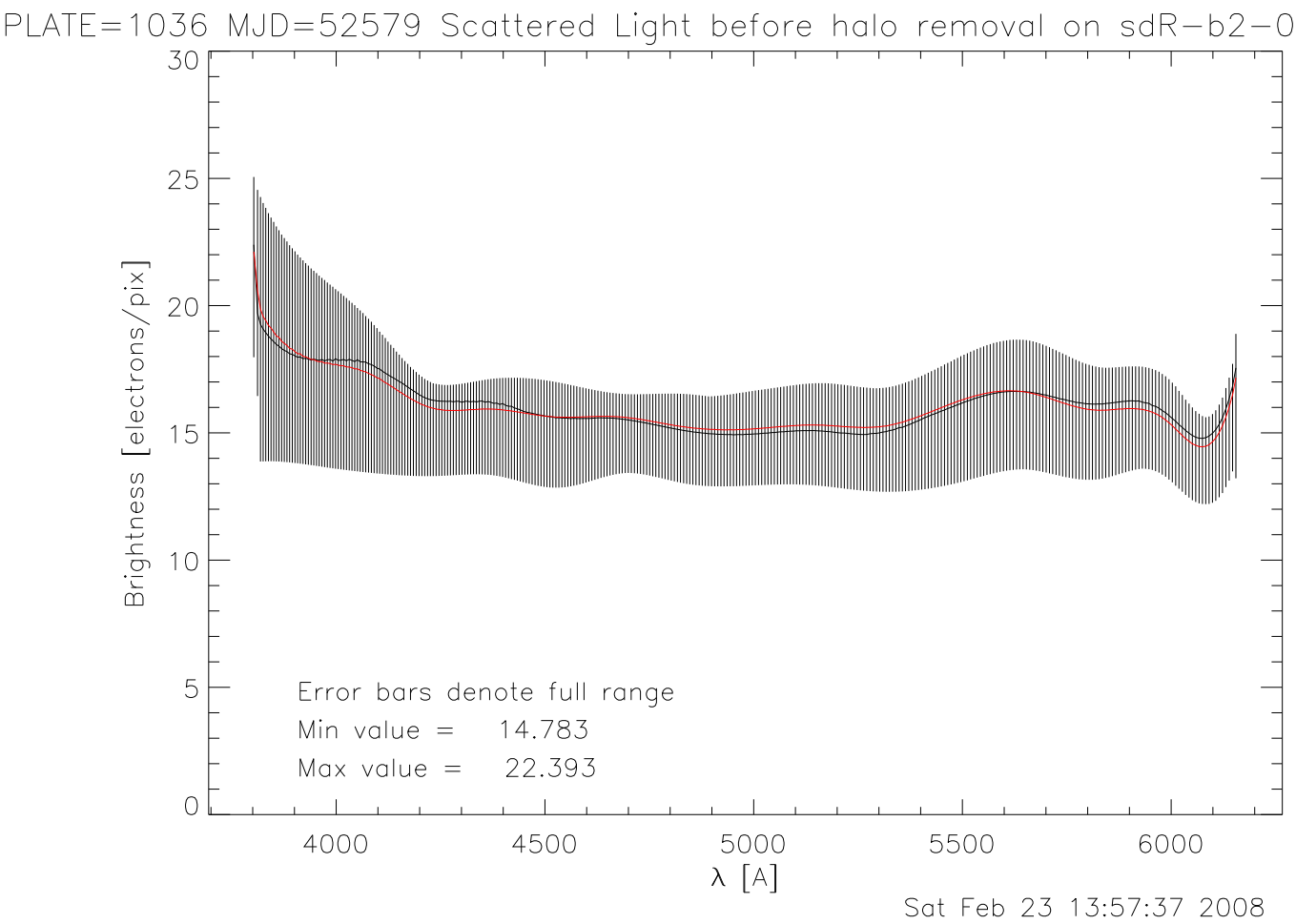

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016735.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

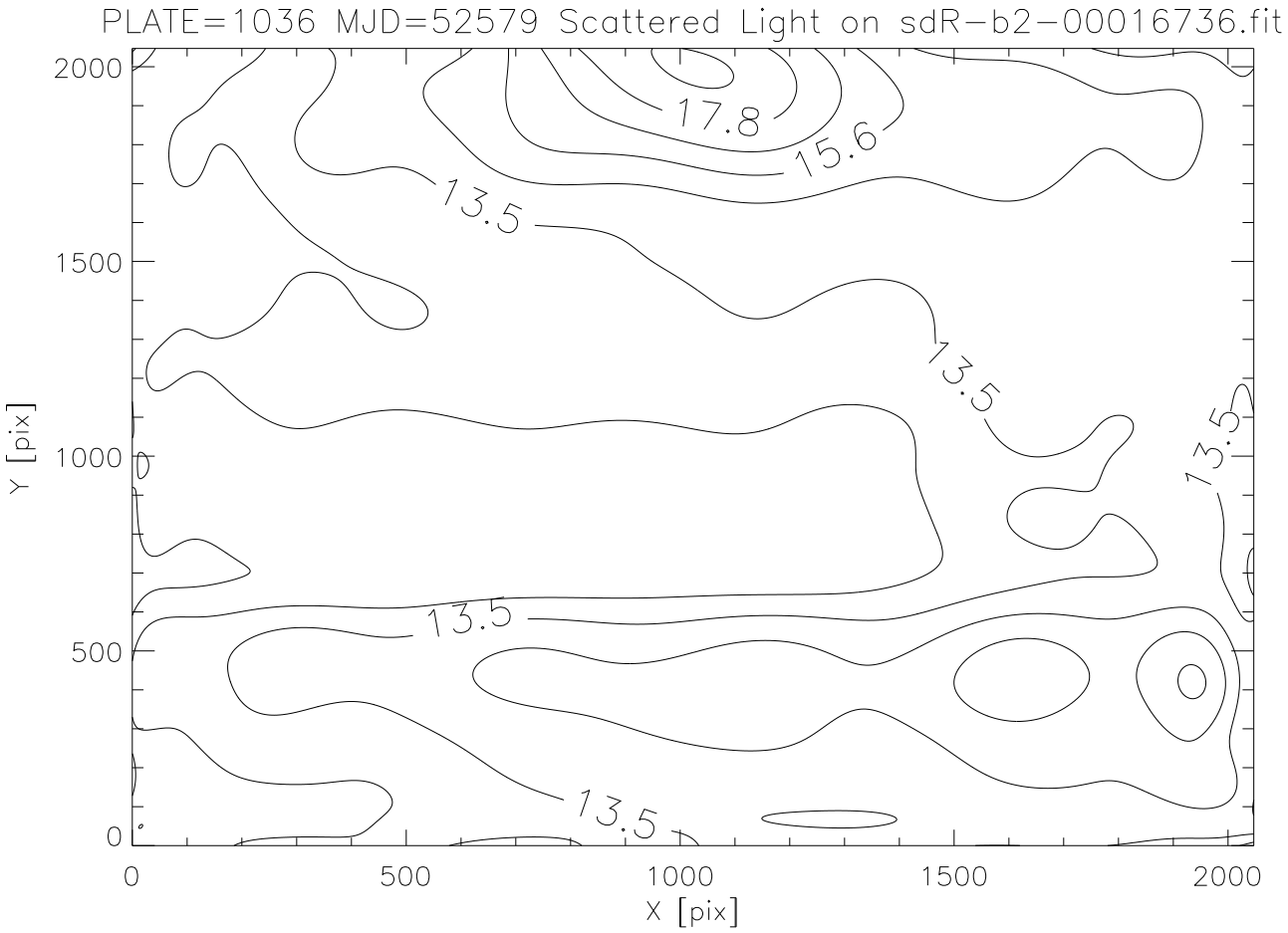

PLATE=1036 MJD=52579 sdR-b2-00016735.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.57 %
Fiber number
Focal Distance [mm]
Airmass

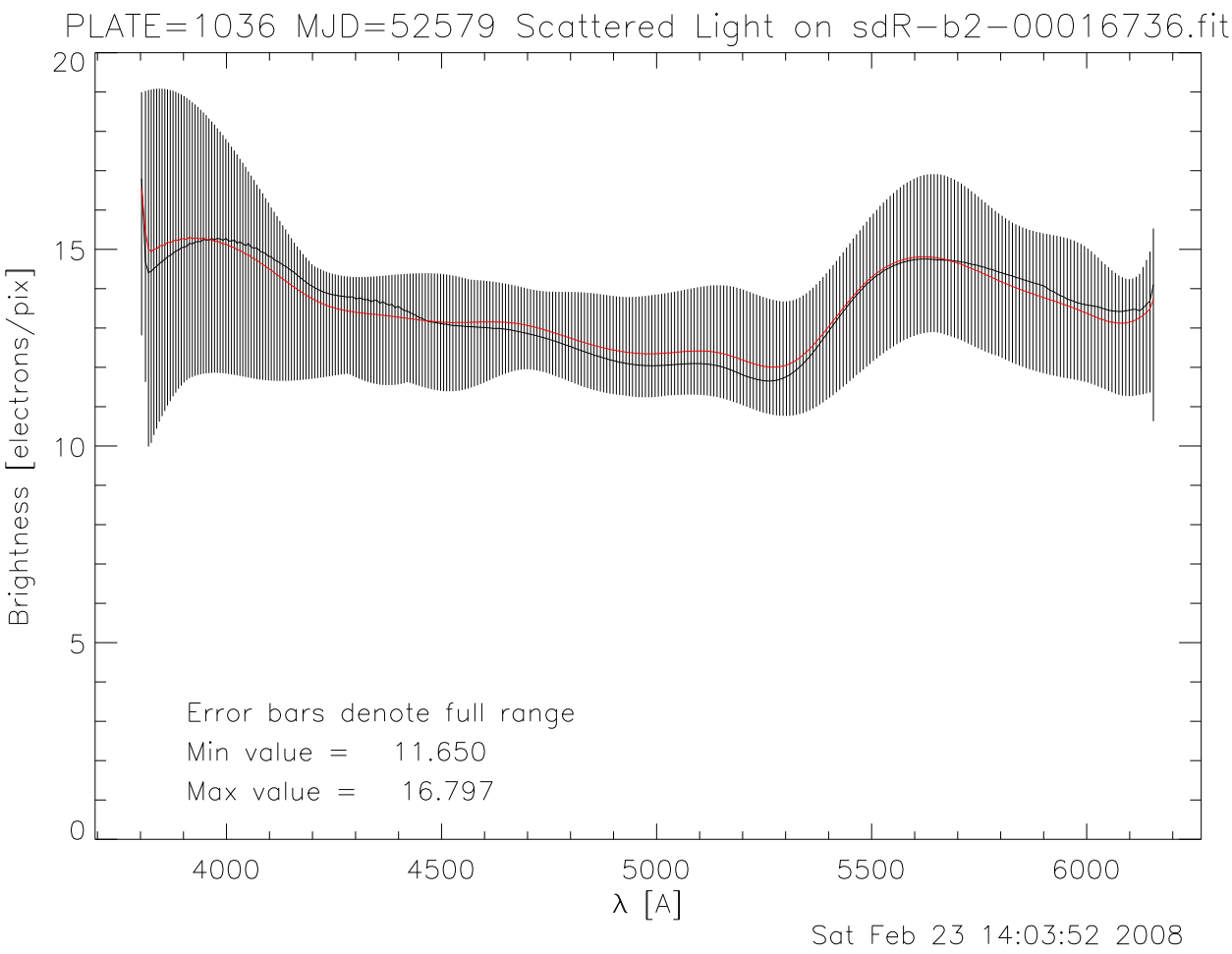

PLATE=1036 MJD=52579 sdR-b2-00016735.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
3.7×10⁴
3.6×10⁴
3.5×10⁴
3.4×10⁴
3.3×10⁴
RED = sky fiber
Dispersion = 0.68 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
3.7×10⁴
3.6×10⁴
3.5×10⁴
3.4×10⁴
3.3×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
3.7×10⁴
3.6×10⁴
3.5×10⁴
3.4×10⁴
3.3×10⁴
1.175
1.180
1.185
1.190
1.195
1.200
Airmass

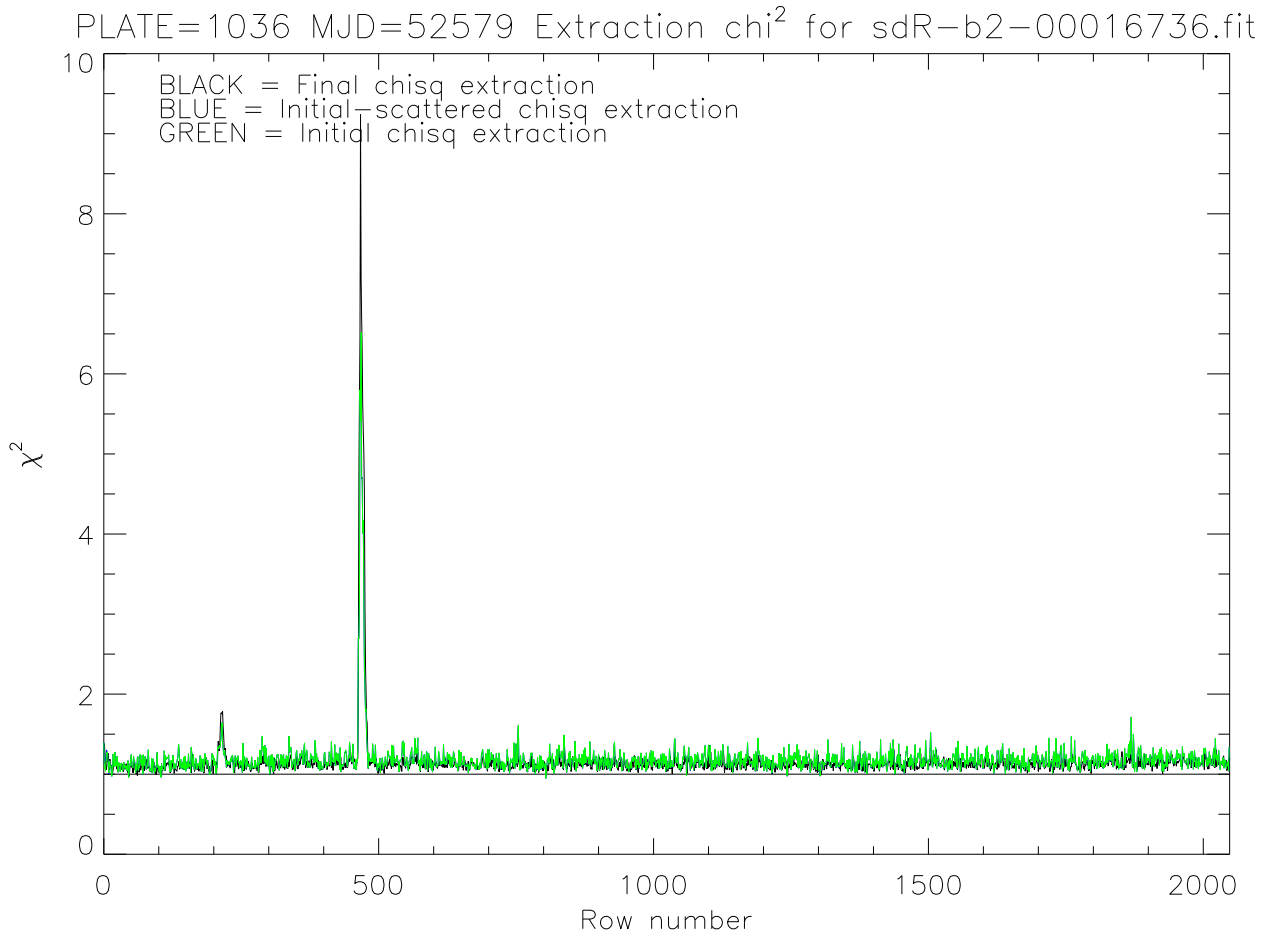

PLATE=1036 MJD=52579 Fiber-Flats for sdR-b2-00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.601
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:55:54 2008

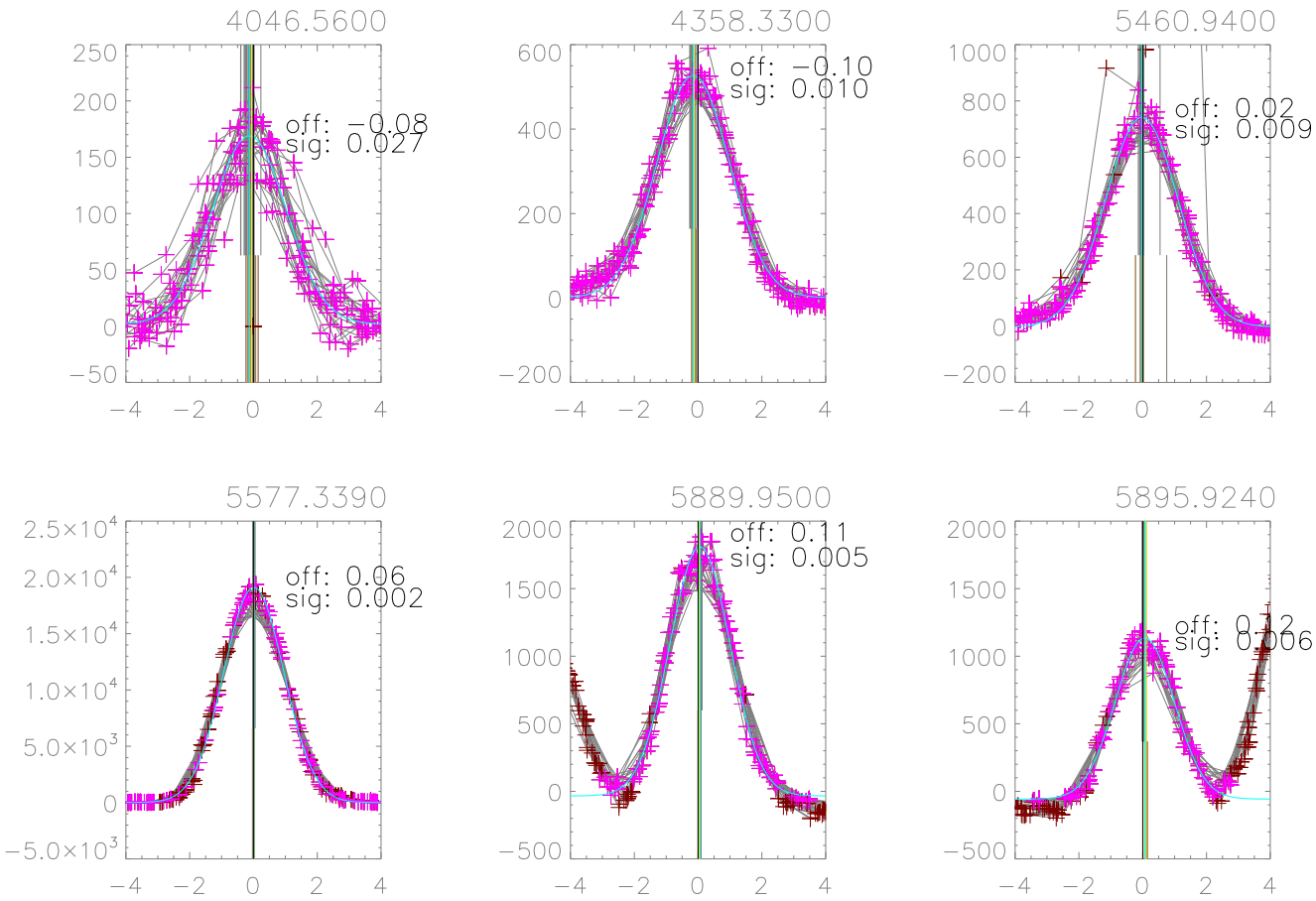

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016736.f
22.7
15.5
15.5
15.5
15.5
15.5
15.5
Y [pix]
X [pix]
0
500
1000
1500
2000

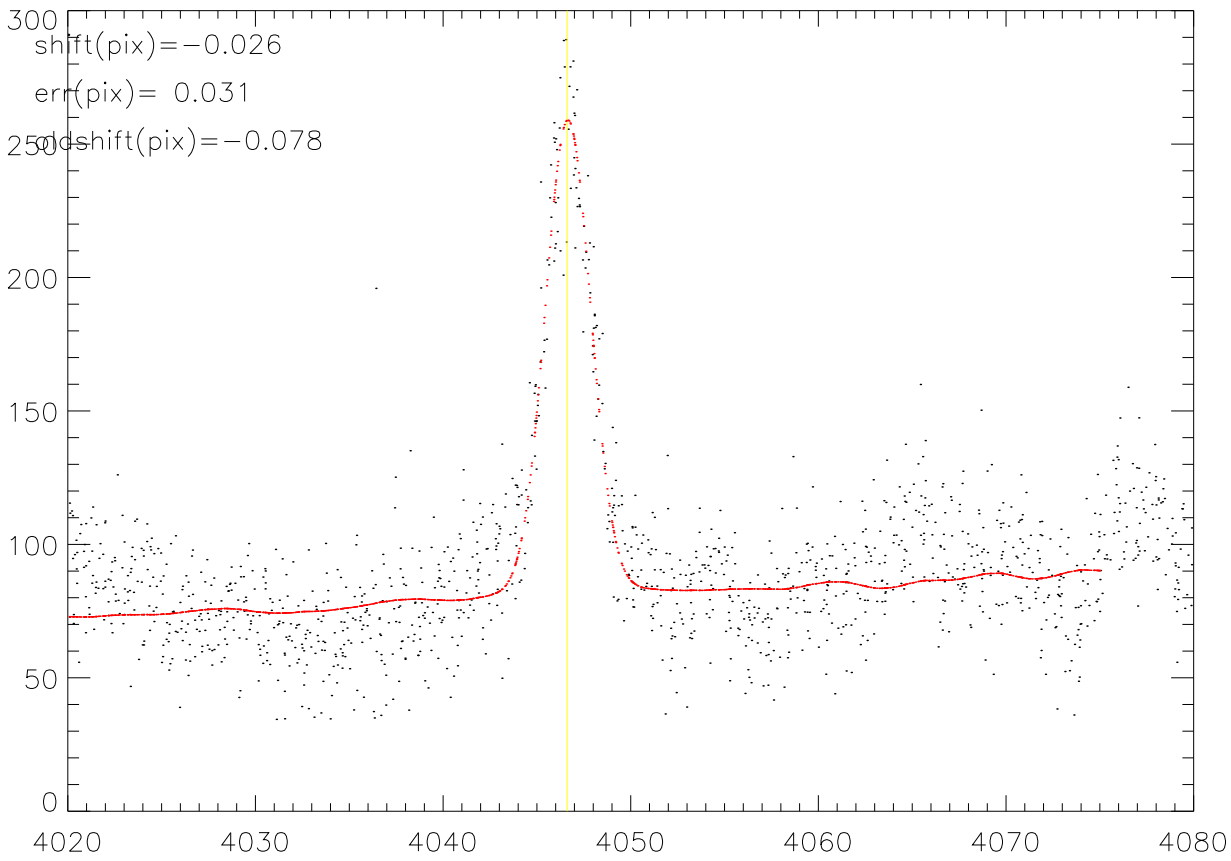

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-b2-00016736.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 14.783
Max value = 22.393
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 13:57:37 2008

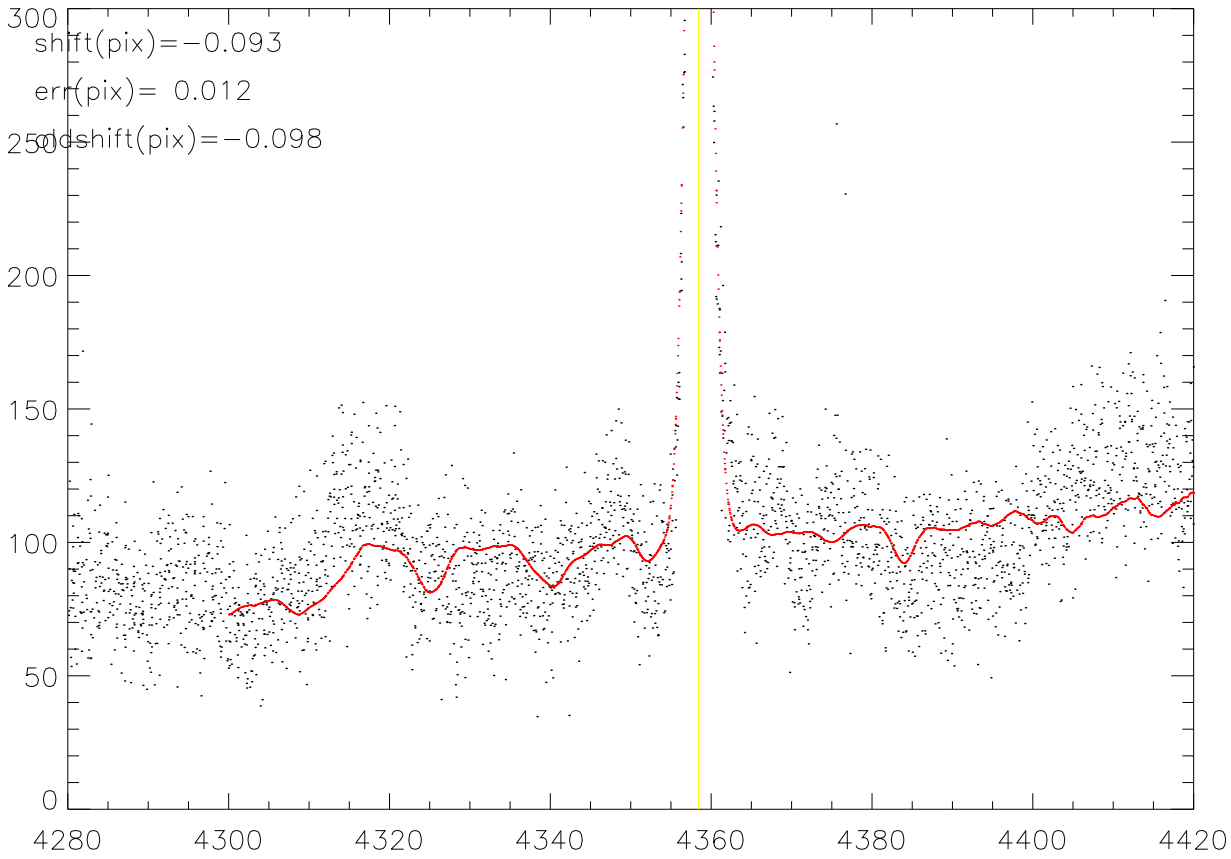

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016736.fit
17.8
15.6
13.5
13.5
13.5
13.5
13.5
Y [pix]
X [pix]
0
500
1000
1500
2000

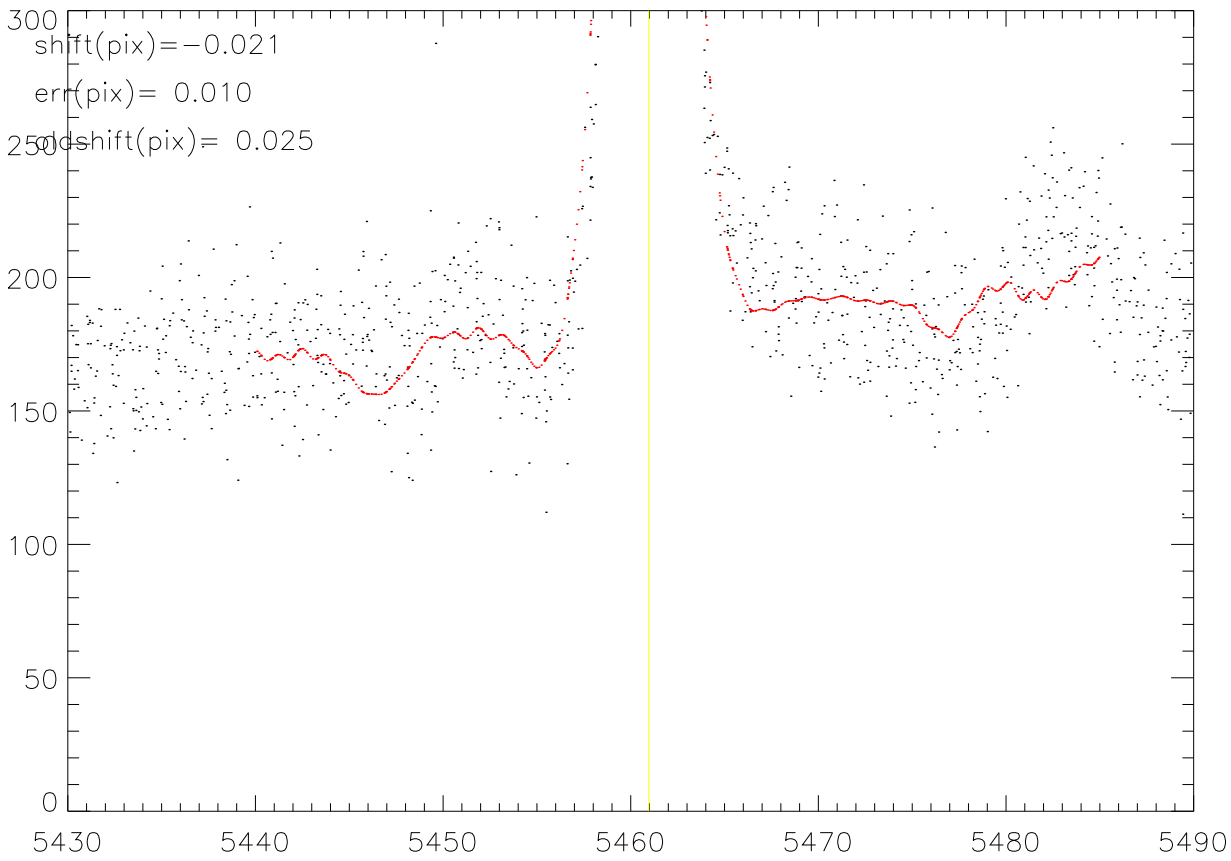

PLATE=1036 MJD=52579 Scattered Light on sdR-b2-00016736.fit
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.650
Max value = 16.797
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 14:03:52 2008

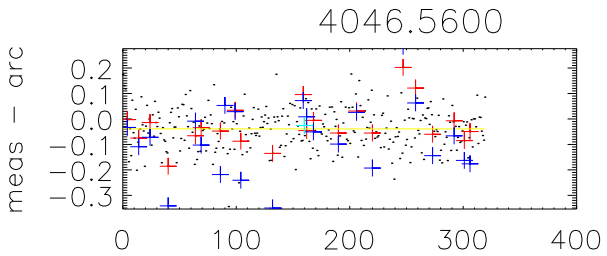

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-b2-00016736.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

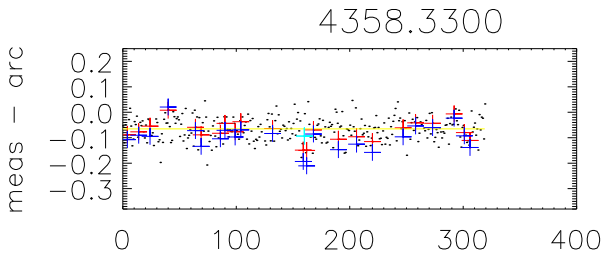

4046.5600
off: −0.08
sig: 0.027
4358.3300
off: −0.10
sig: 0.010
5460.9400
off: 0.02
sig: 0.009
5577.3390
off: 0.06
sig: 0.002
5889.9500
off: 0.11
sig: 0.005
5895.9240
off: 0.12
sig: 0.006

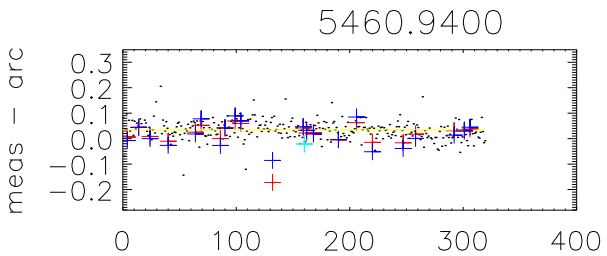

shift(pix)=−0.026
err(pix)= 0.031
oldshift(pix)=−0.078
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

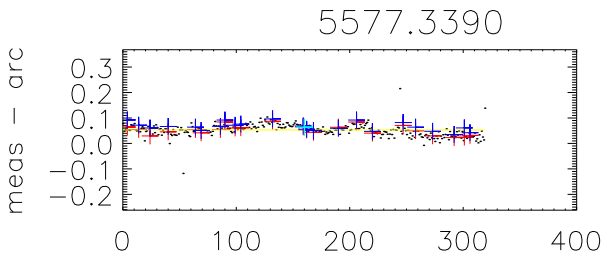

shift(pix)=−0.093
err(pix)= 0.012
oldshift(pix)=−0.098
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

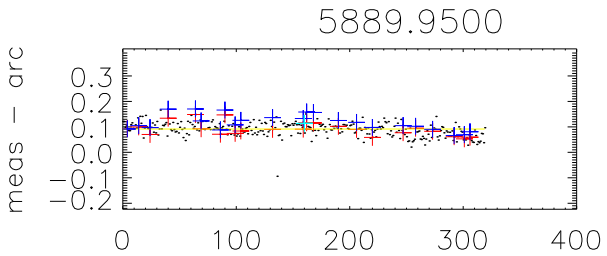

shift(pix)=−0.021
err(pix)= 0.010
oldshift(pix)= 0.025
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

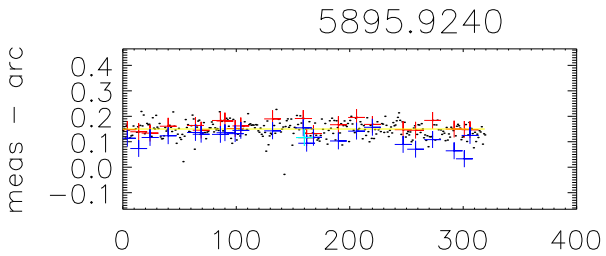

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

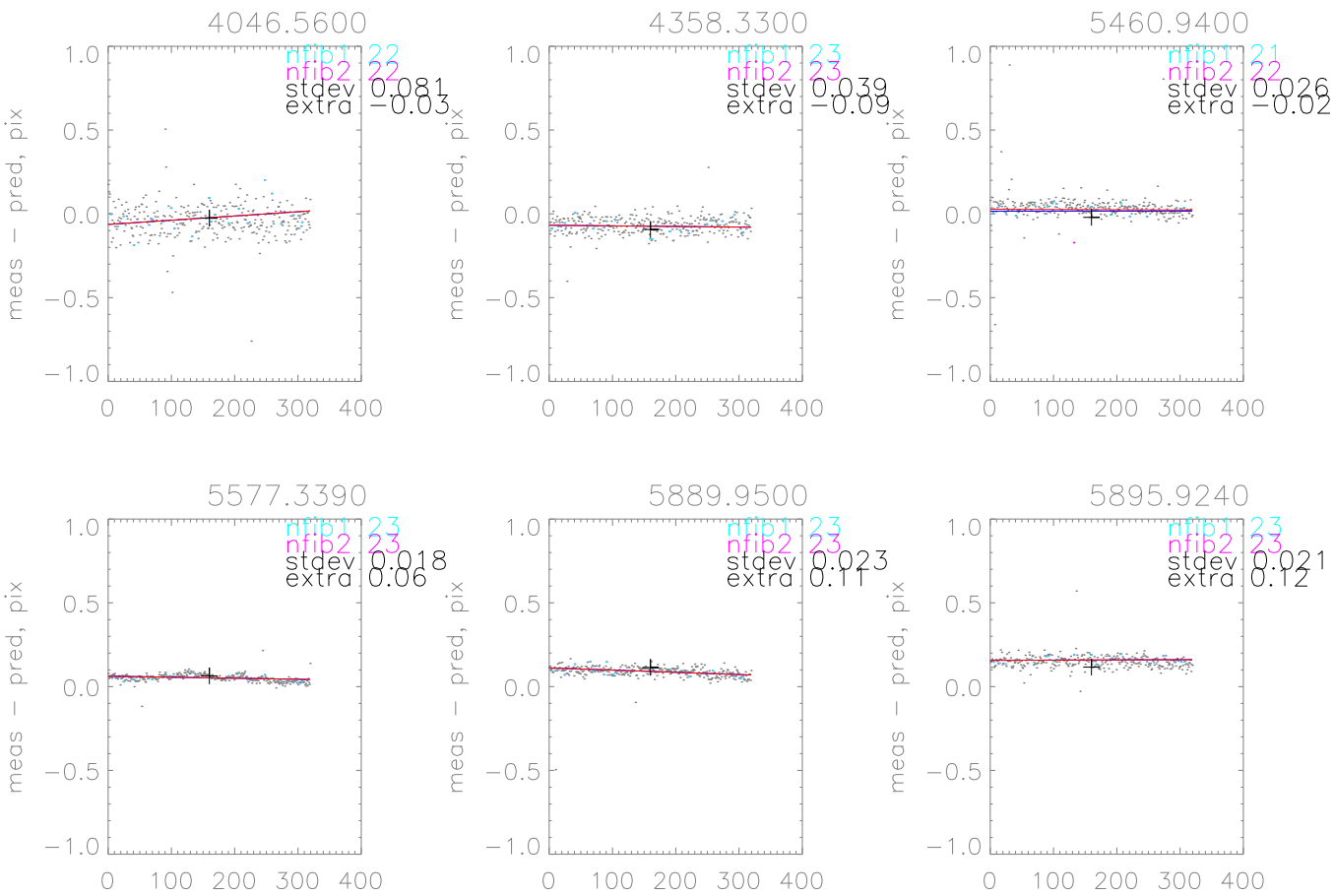

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

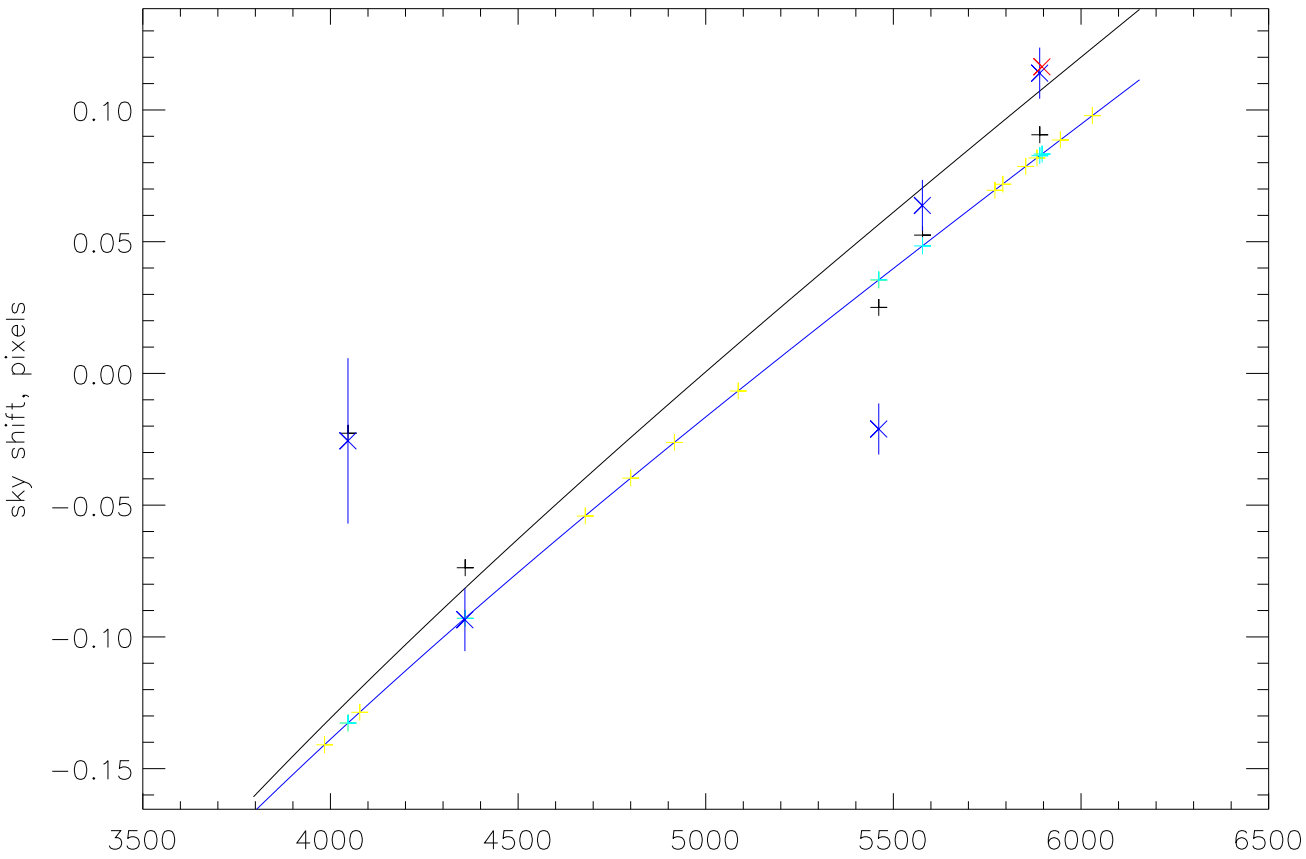

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

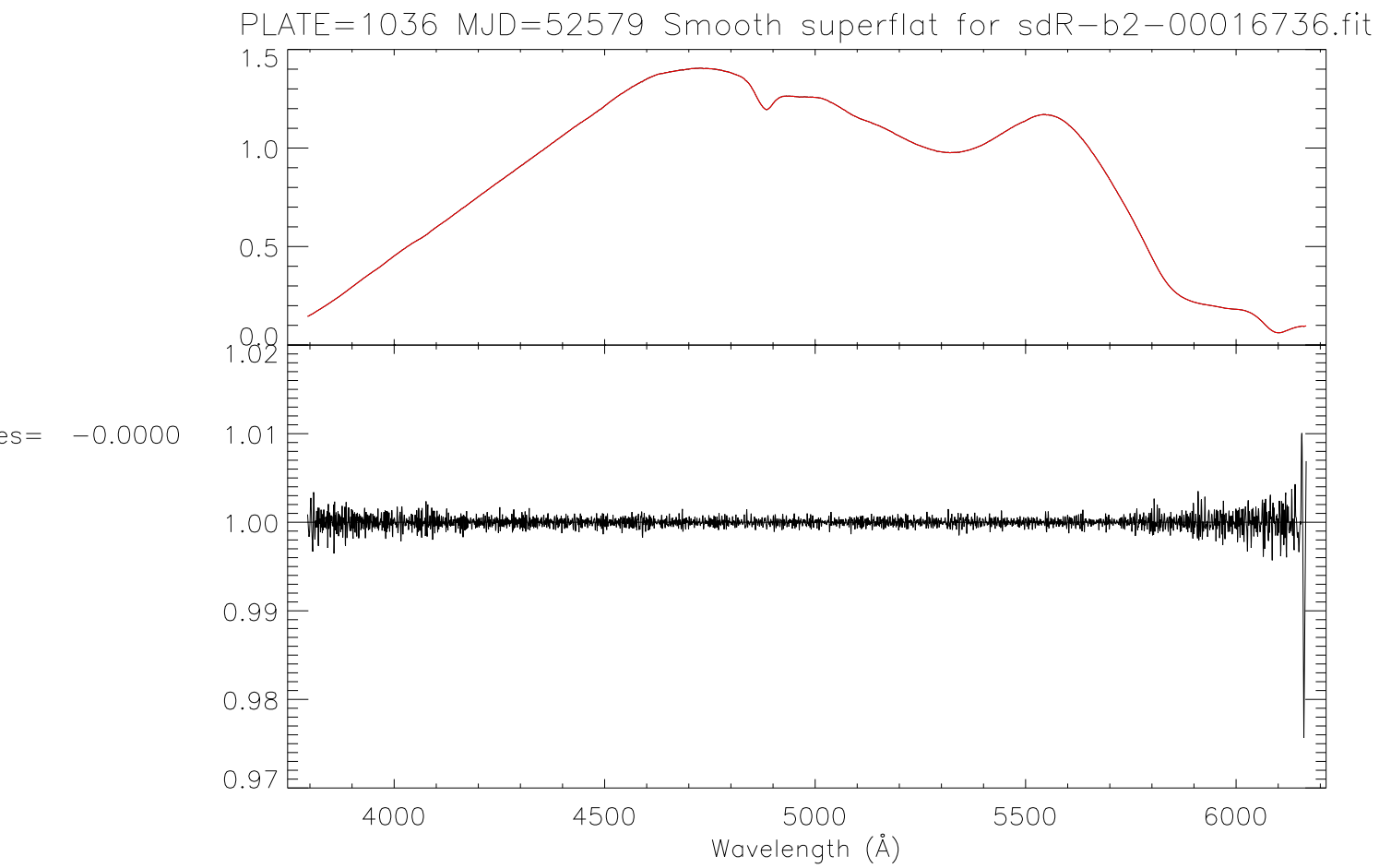

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

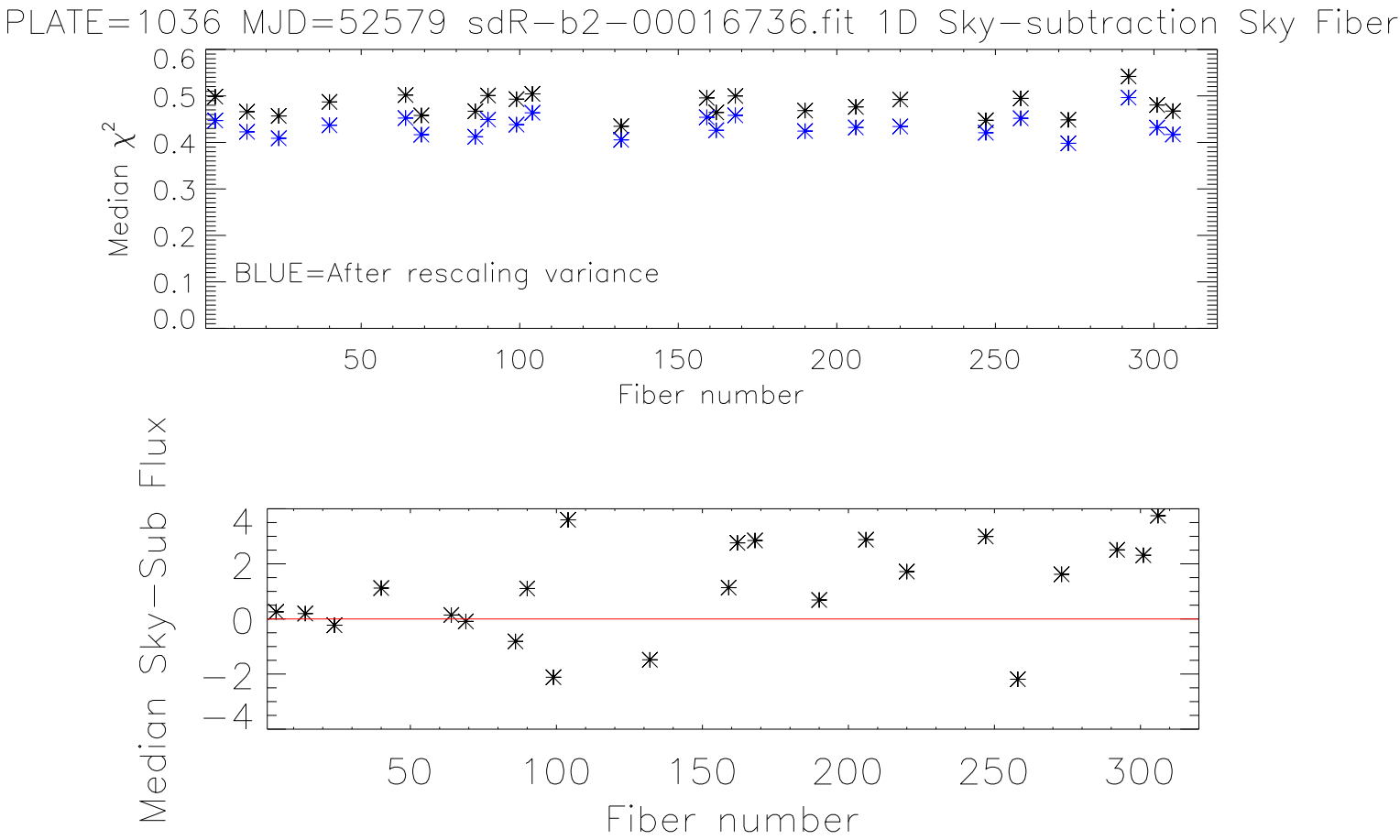

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

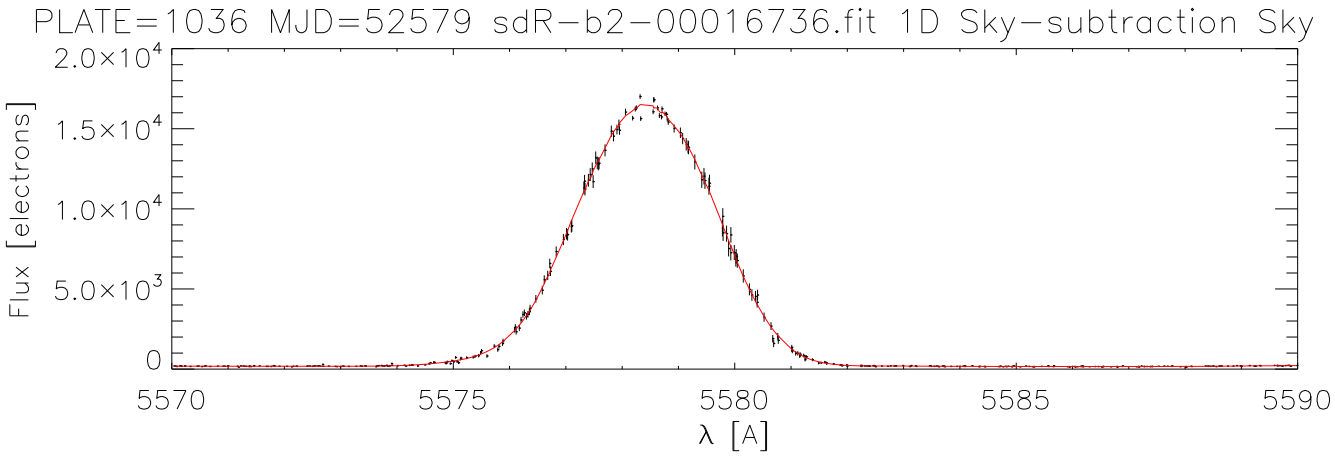

4046.5600
nfib1 22
nfib2 22
stdev 0.081
extra −0.03
4358.3300
nfib1 23
nfib2 23
stdev 0.039
extra −0.09
5460.9400
nfib1 21
nfib2 22
stdev 0.026
extra −0.02
5577.3390
nfib1 23
nfib2 23
stdev 0.018
extra 0.06
5889.9500
nfib1 23
nfib2 23
stdev 0.023
extra 0.11
5895.9240
nfib1 23
nfib2 23
stdev 0.021
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

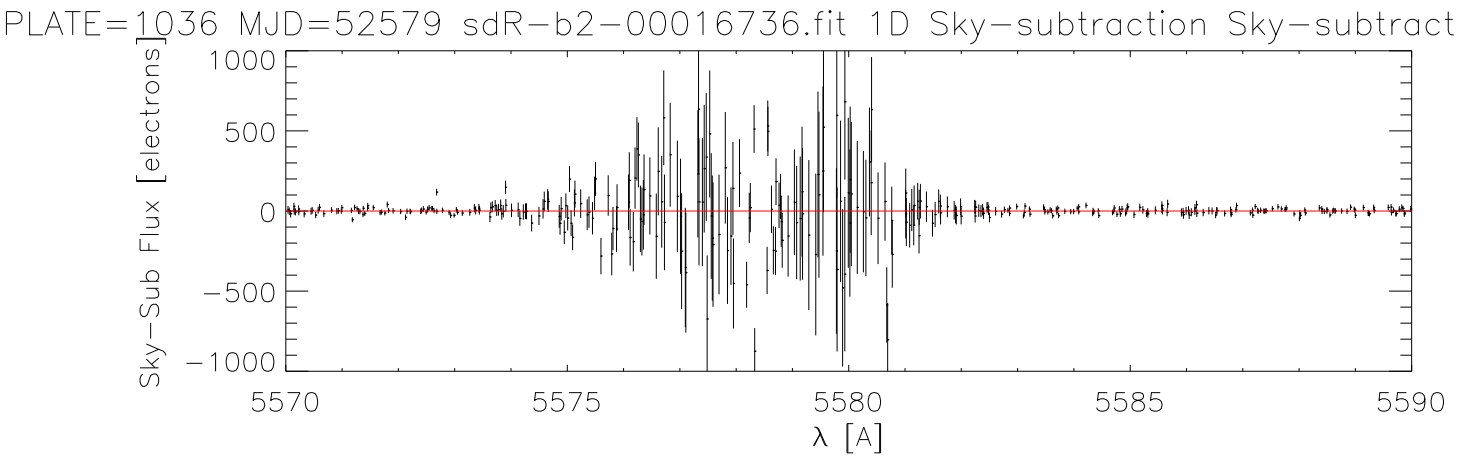

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

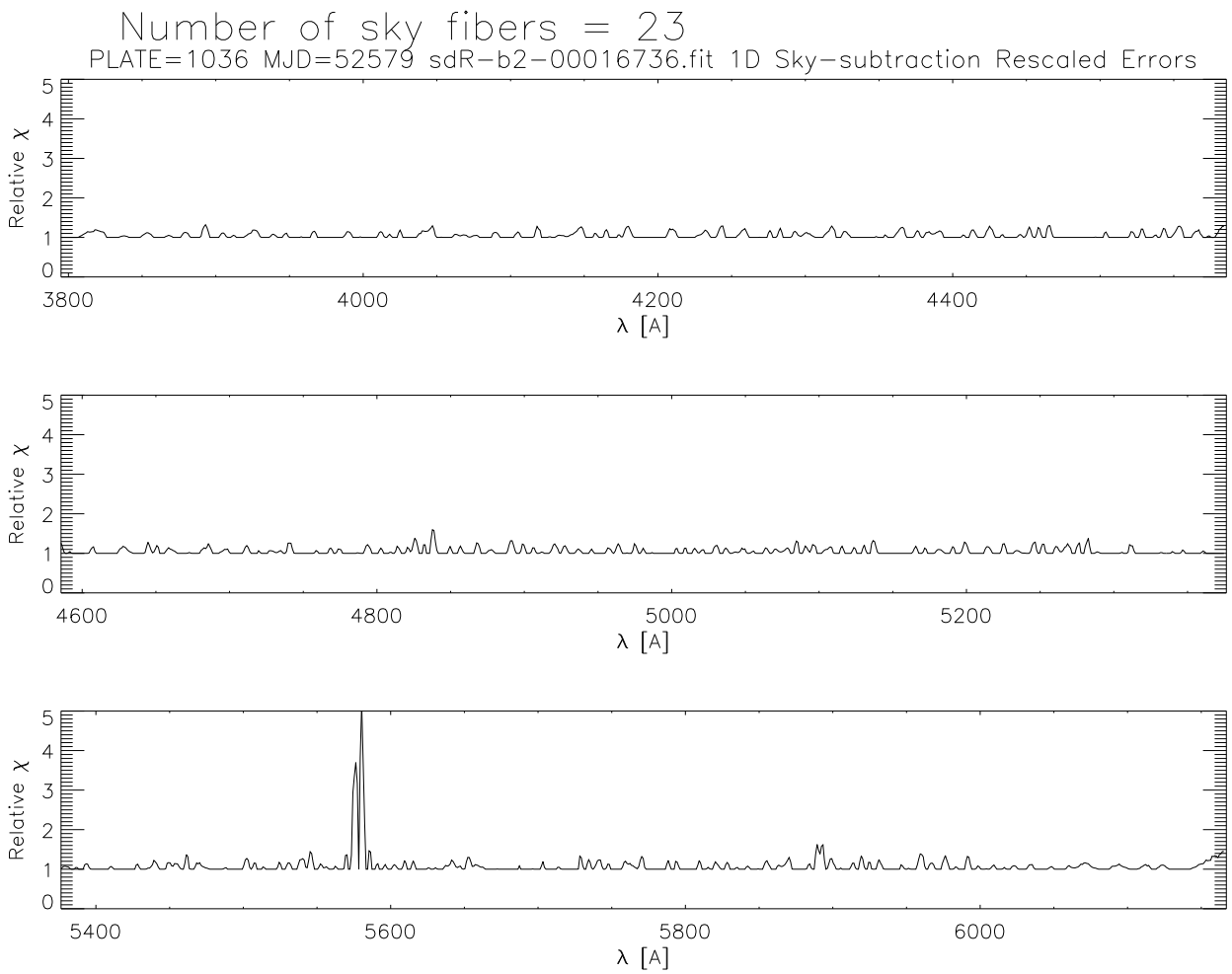

PLATE=1036 MJD=52579 Smooth superflat for sdR-b2-00016736.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

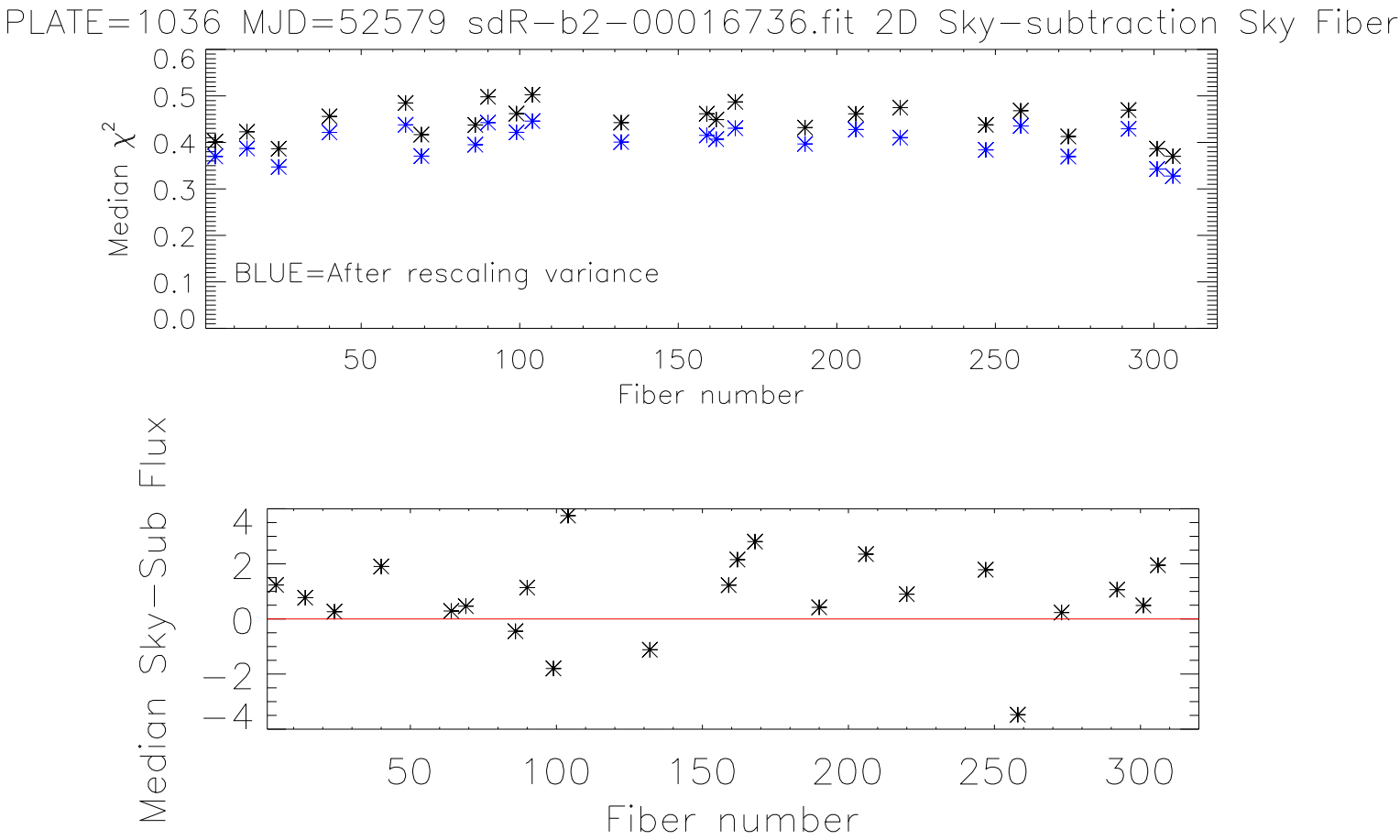
es= −0.0000

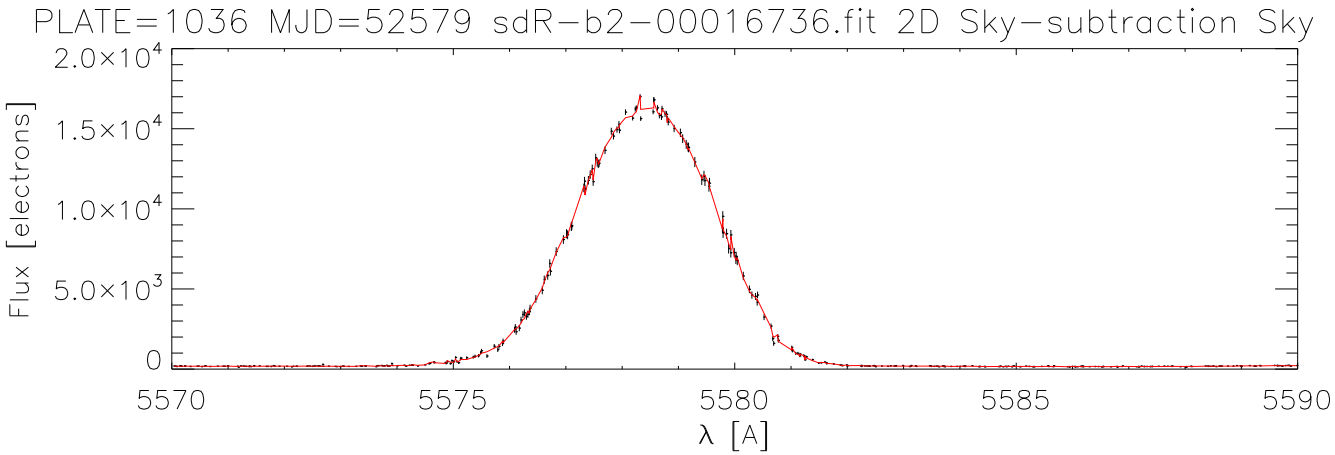

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

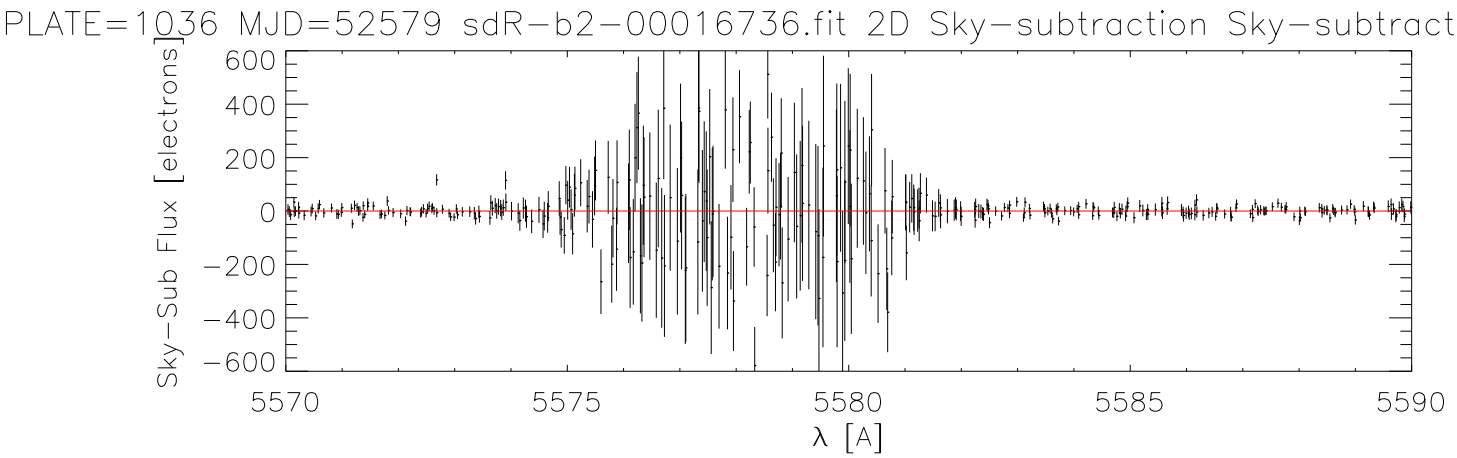

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

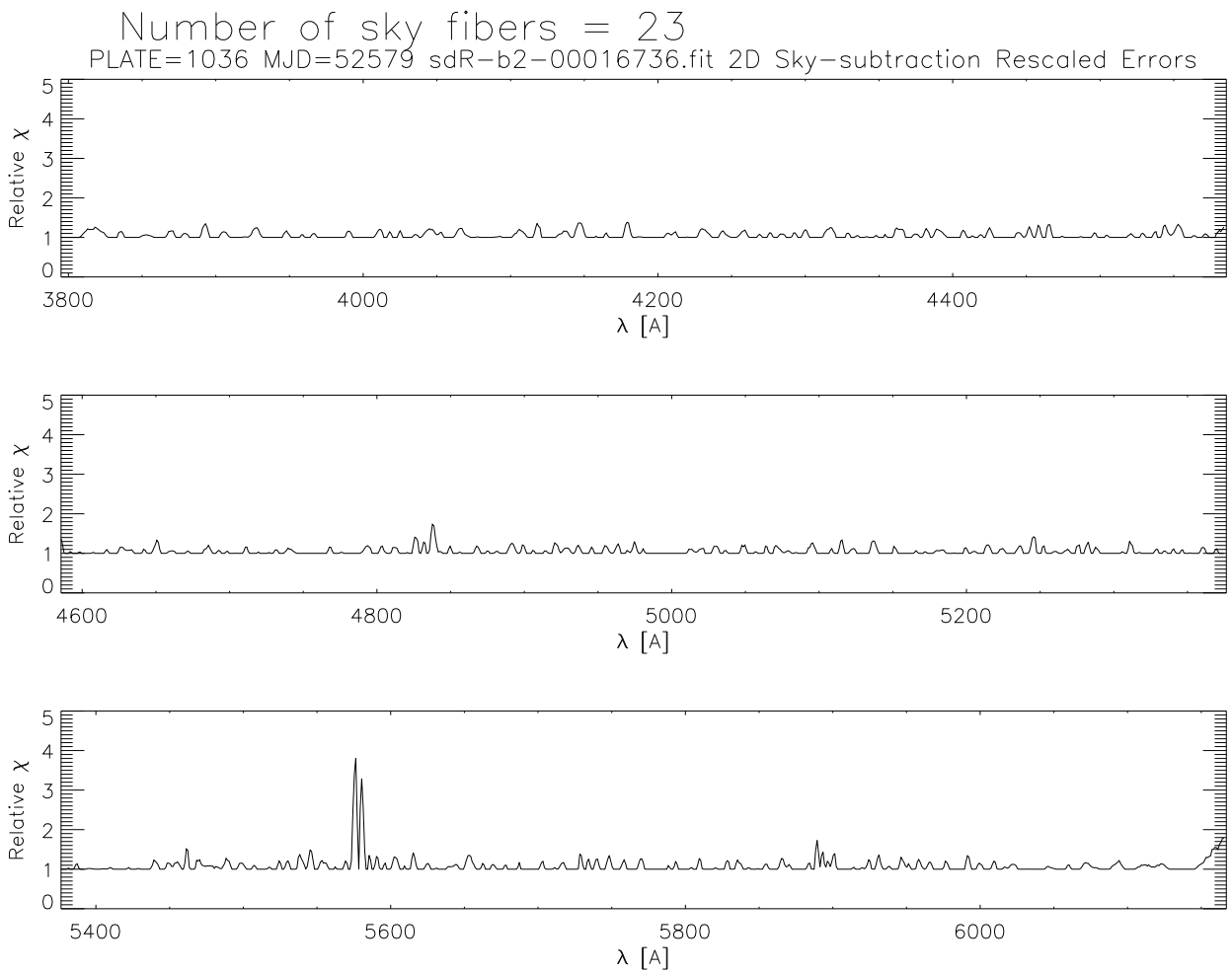

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

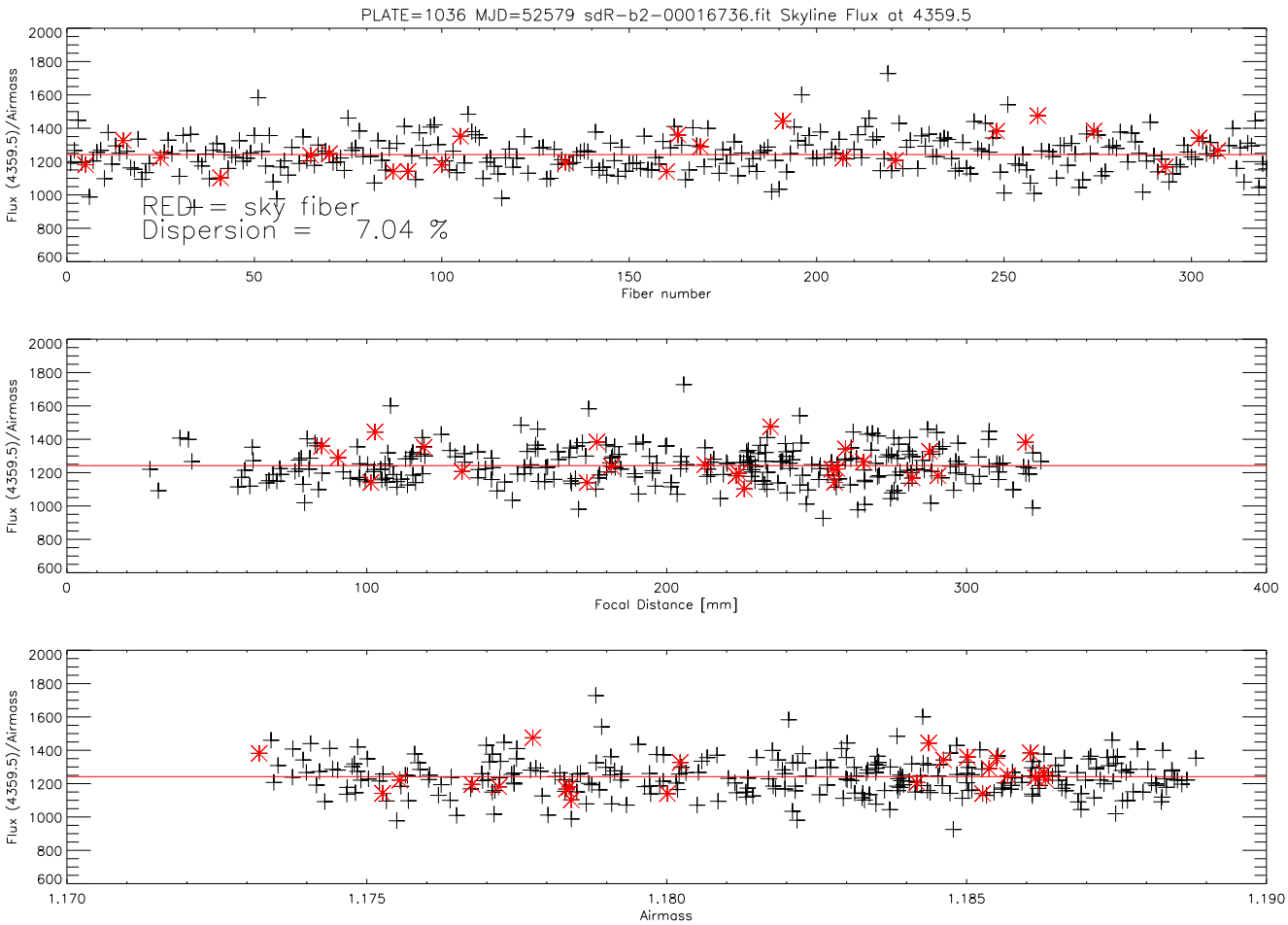

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016736.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

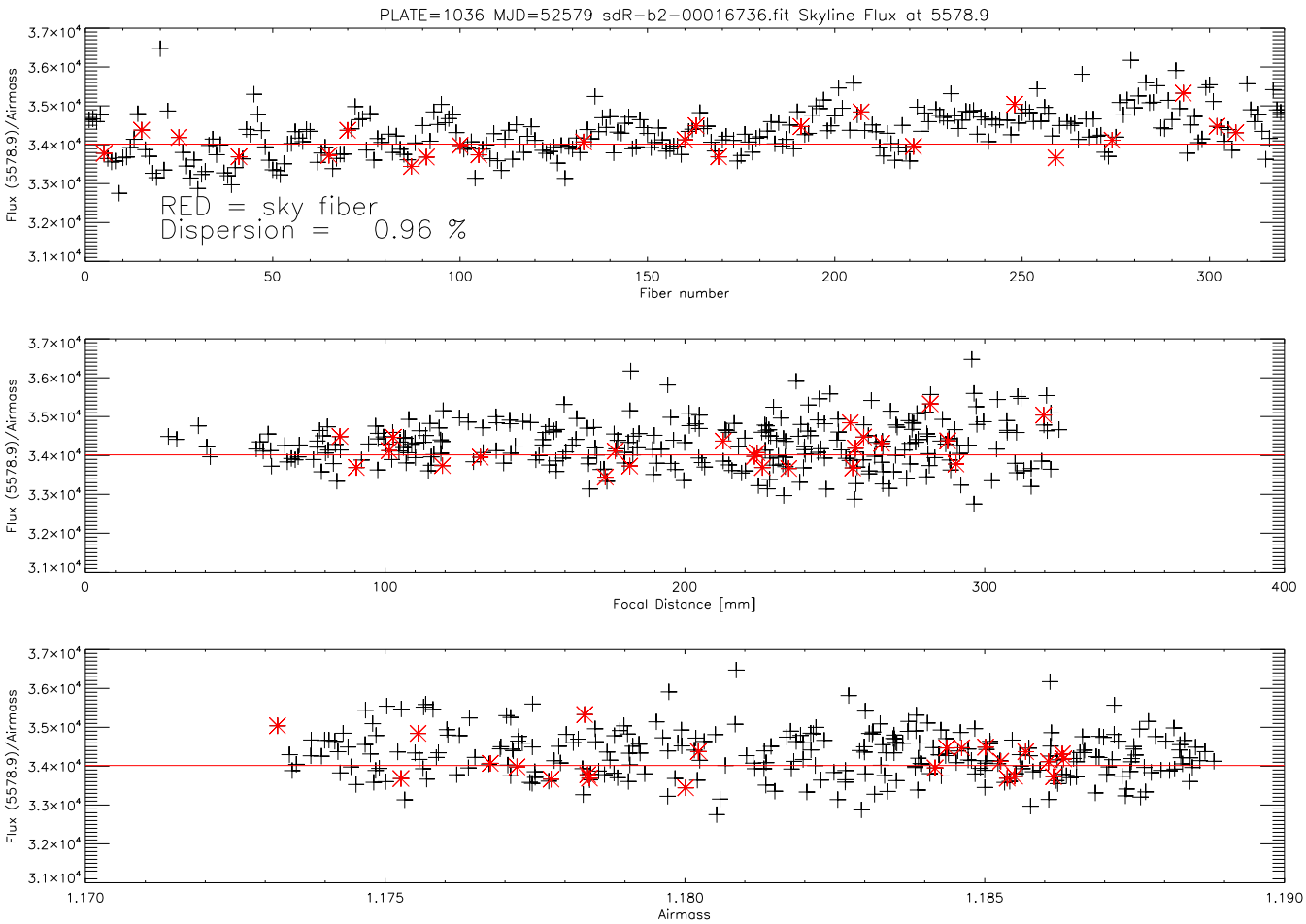

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

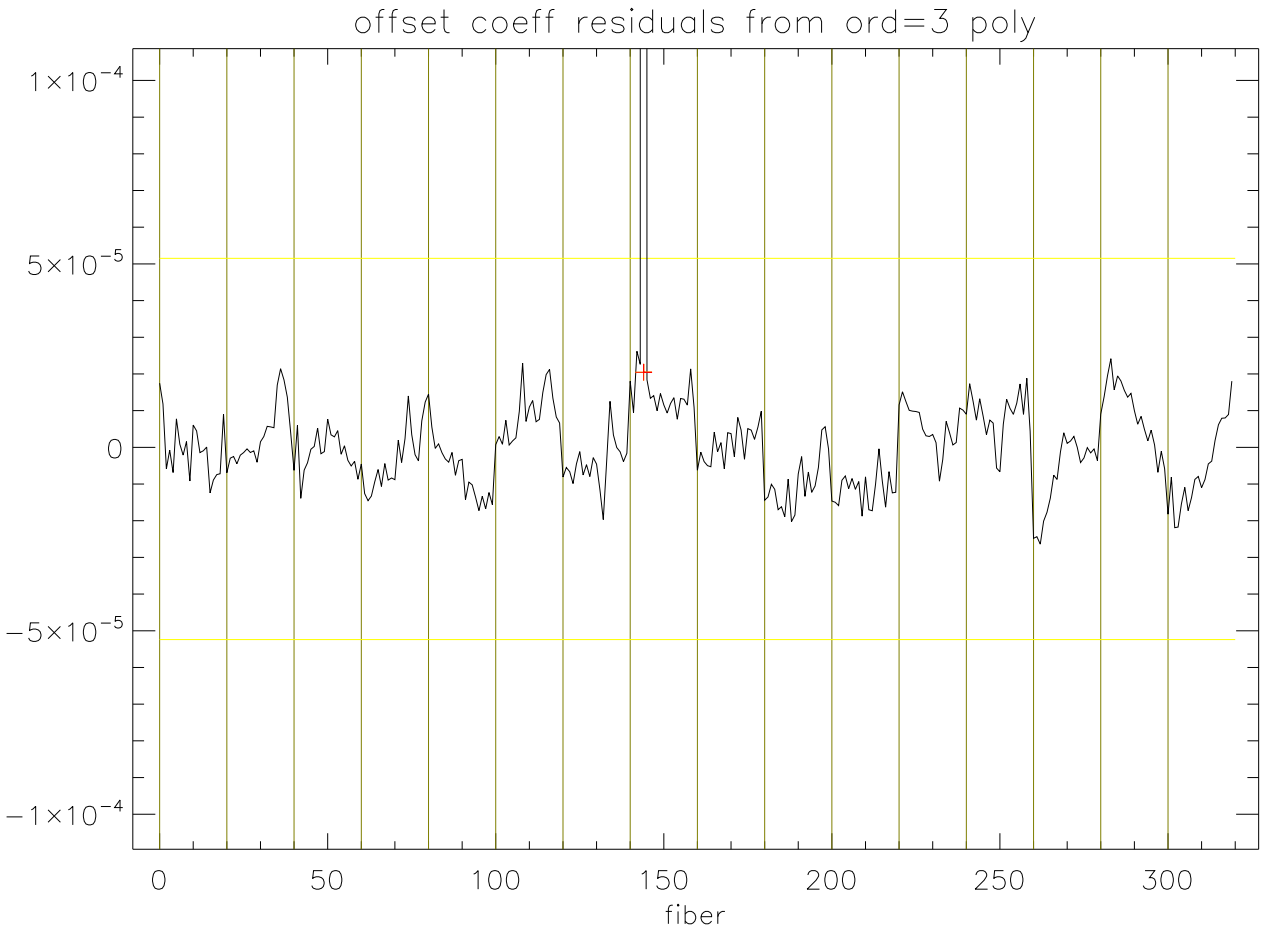

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

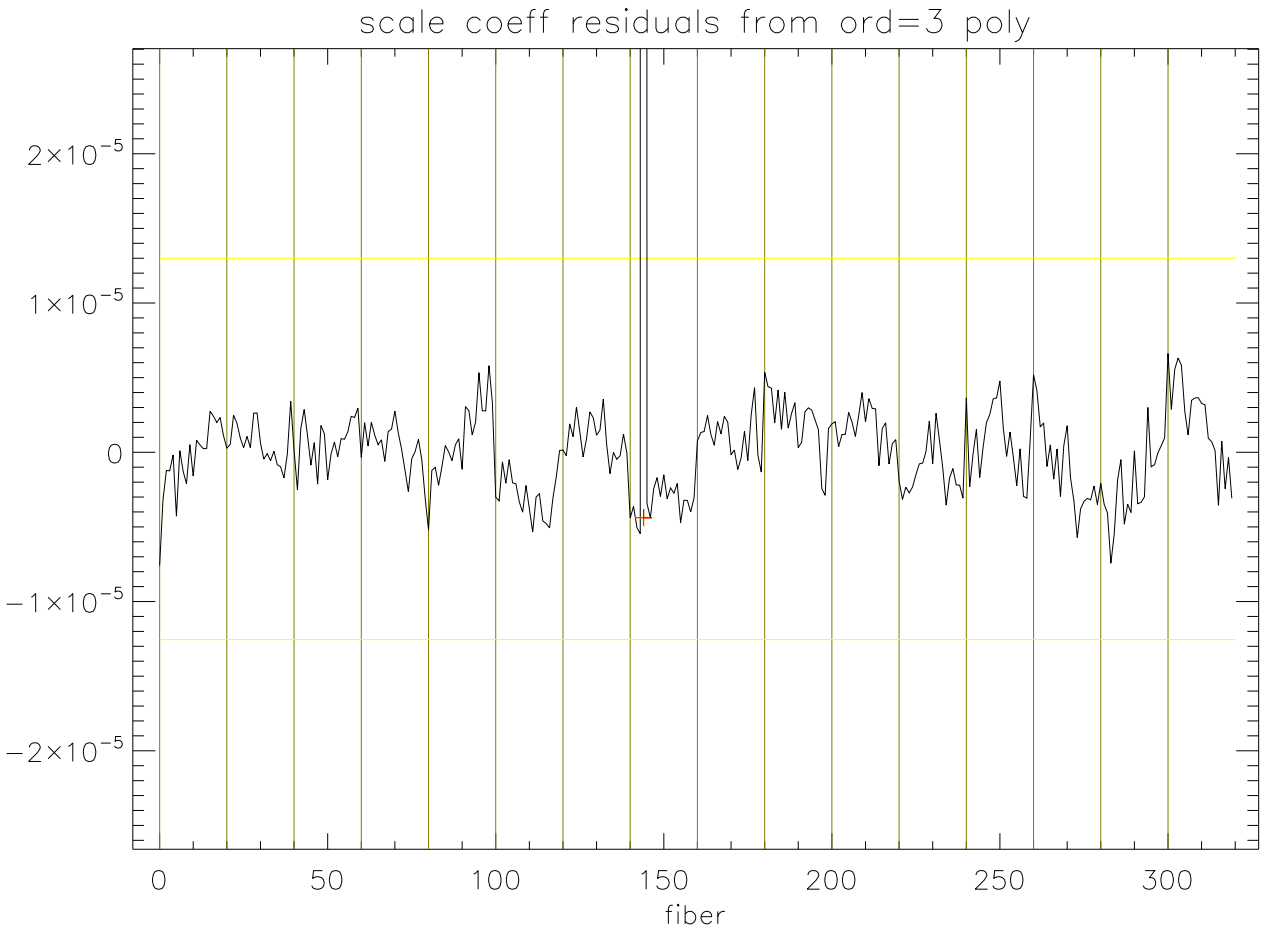

PLATE=1036 MJD=52579 sdR-b2-00016736.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

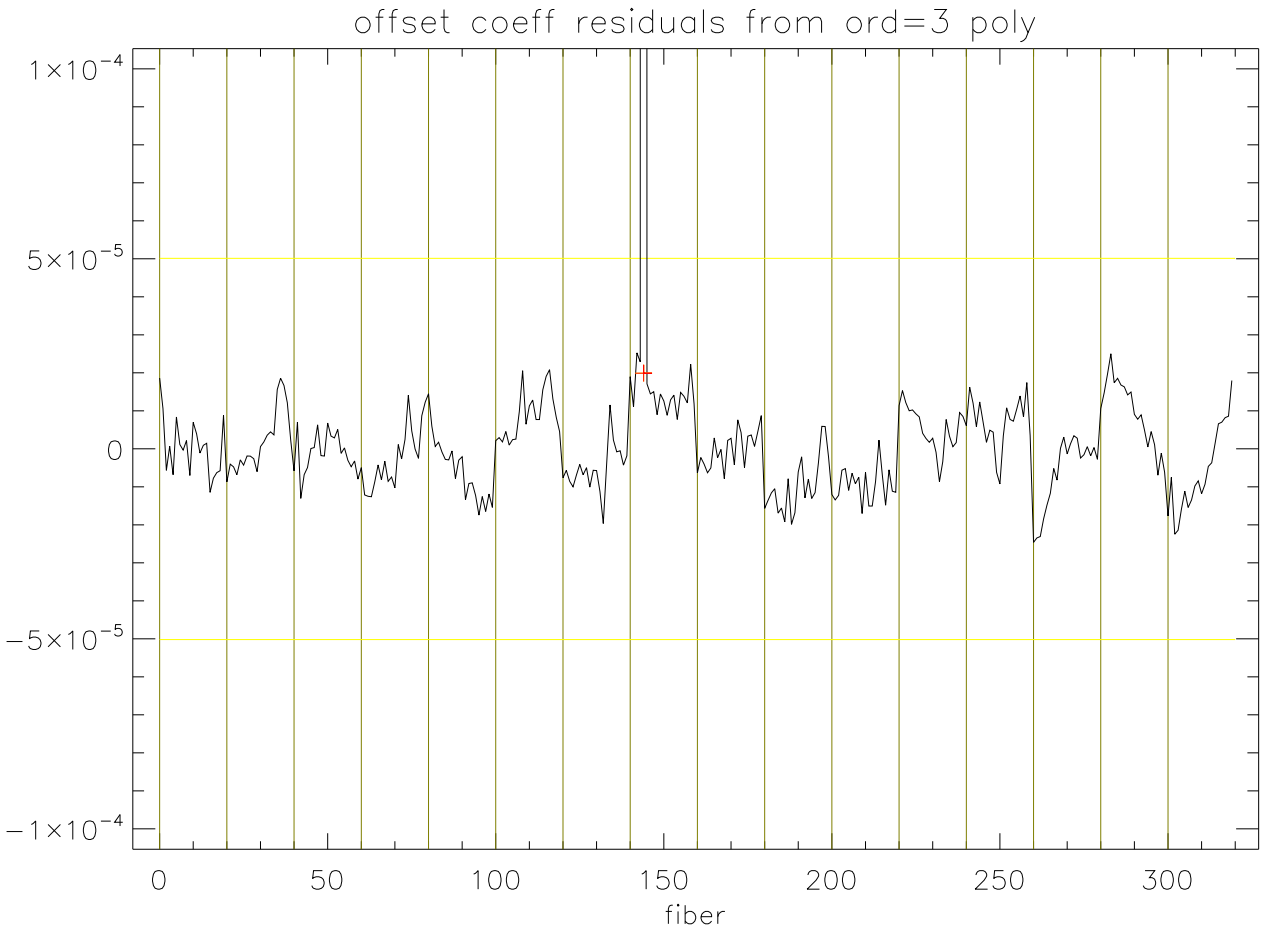

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-b2-00016736.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

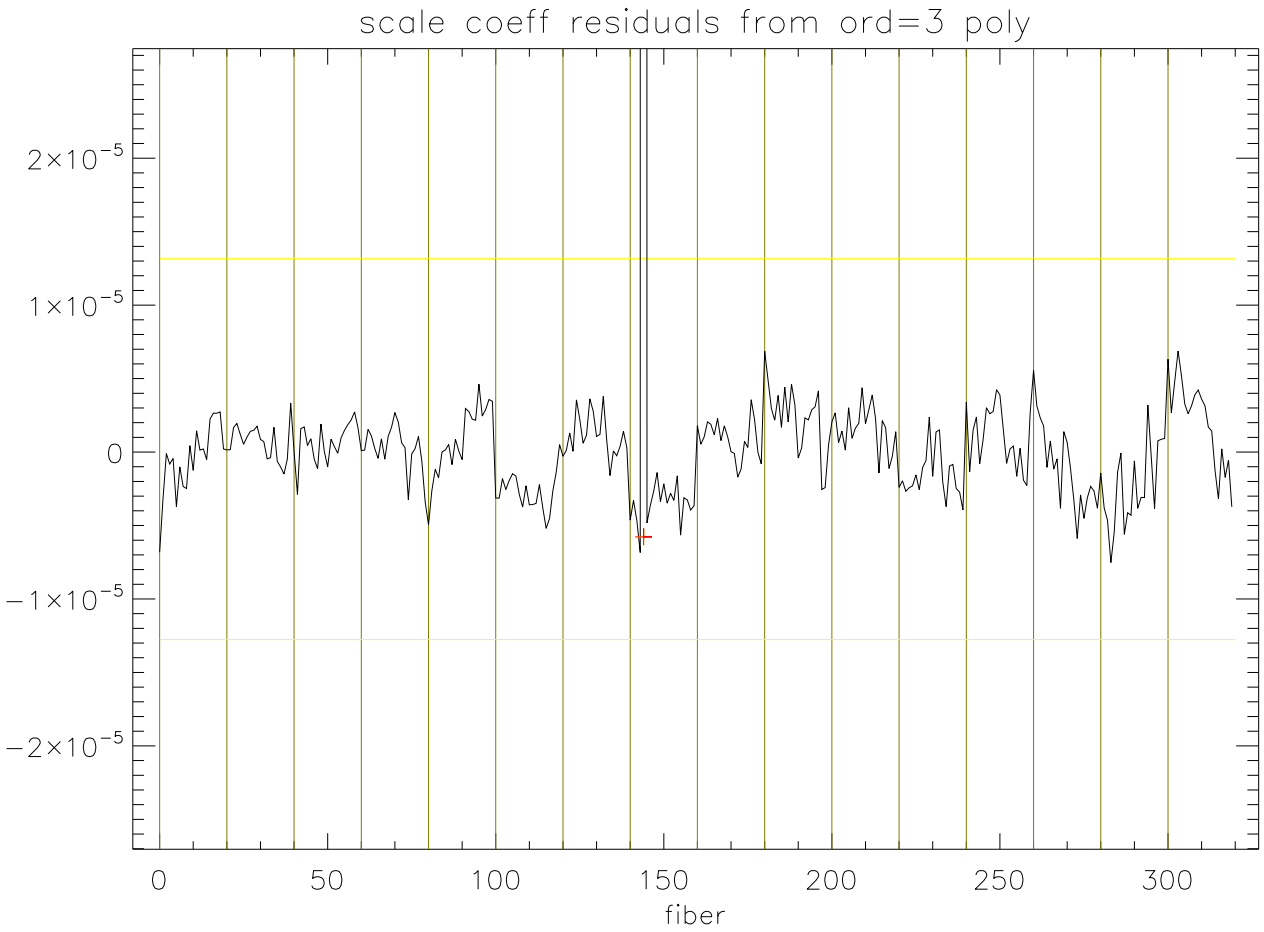

PLATE=1036 MJD=52579 sdR-b2-00016736.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED+ = sky fiber
Dispersion = 7.04 %
Fiber number
Focal Distance [mm]
Airmass

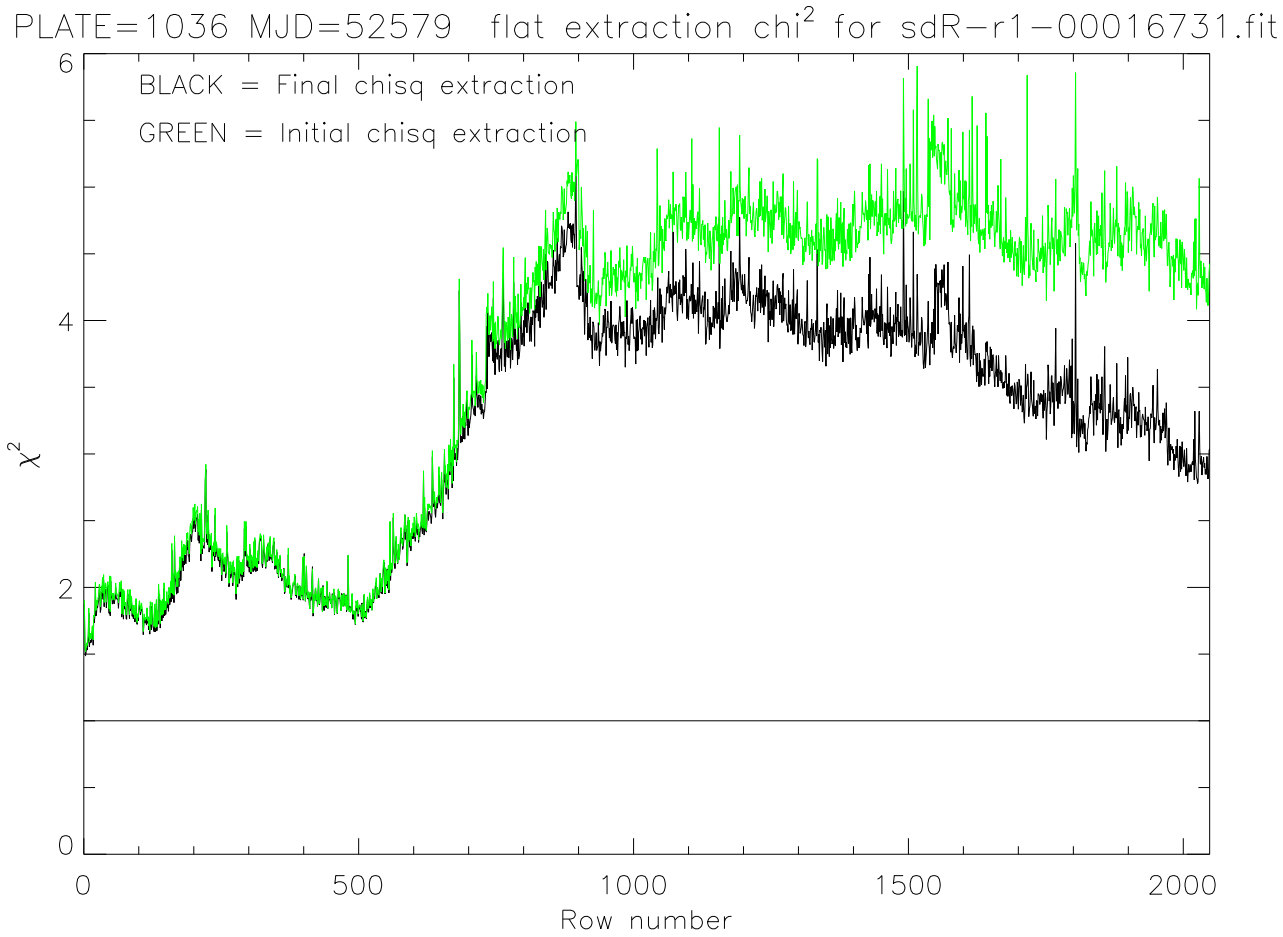

PLATE=1036 MJD=52579 sdR-b2-00016736.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.96 %
Fiber number
Focal Distance [mm]
Airmass

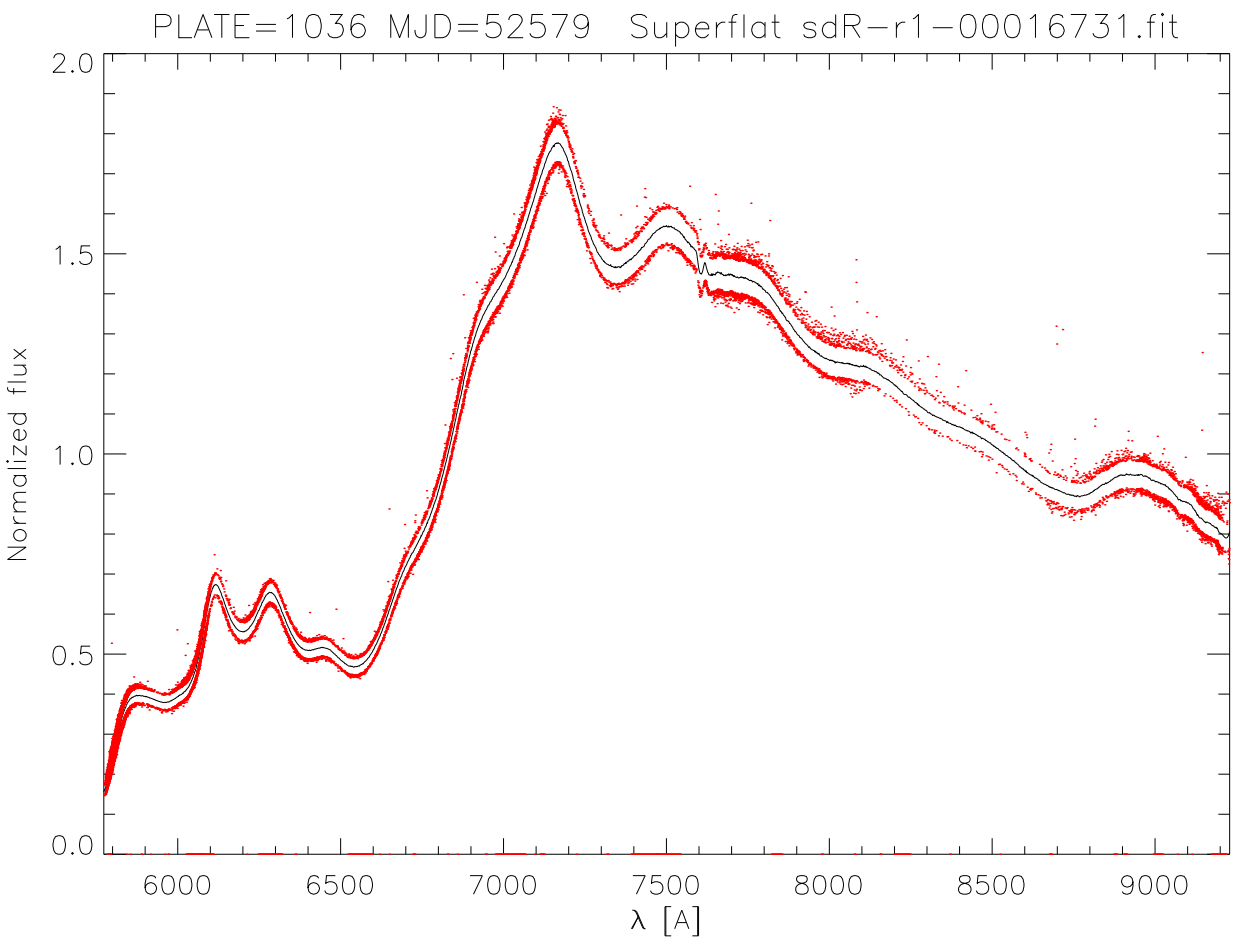

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

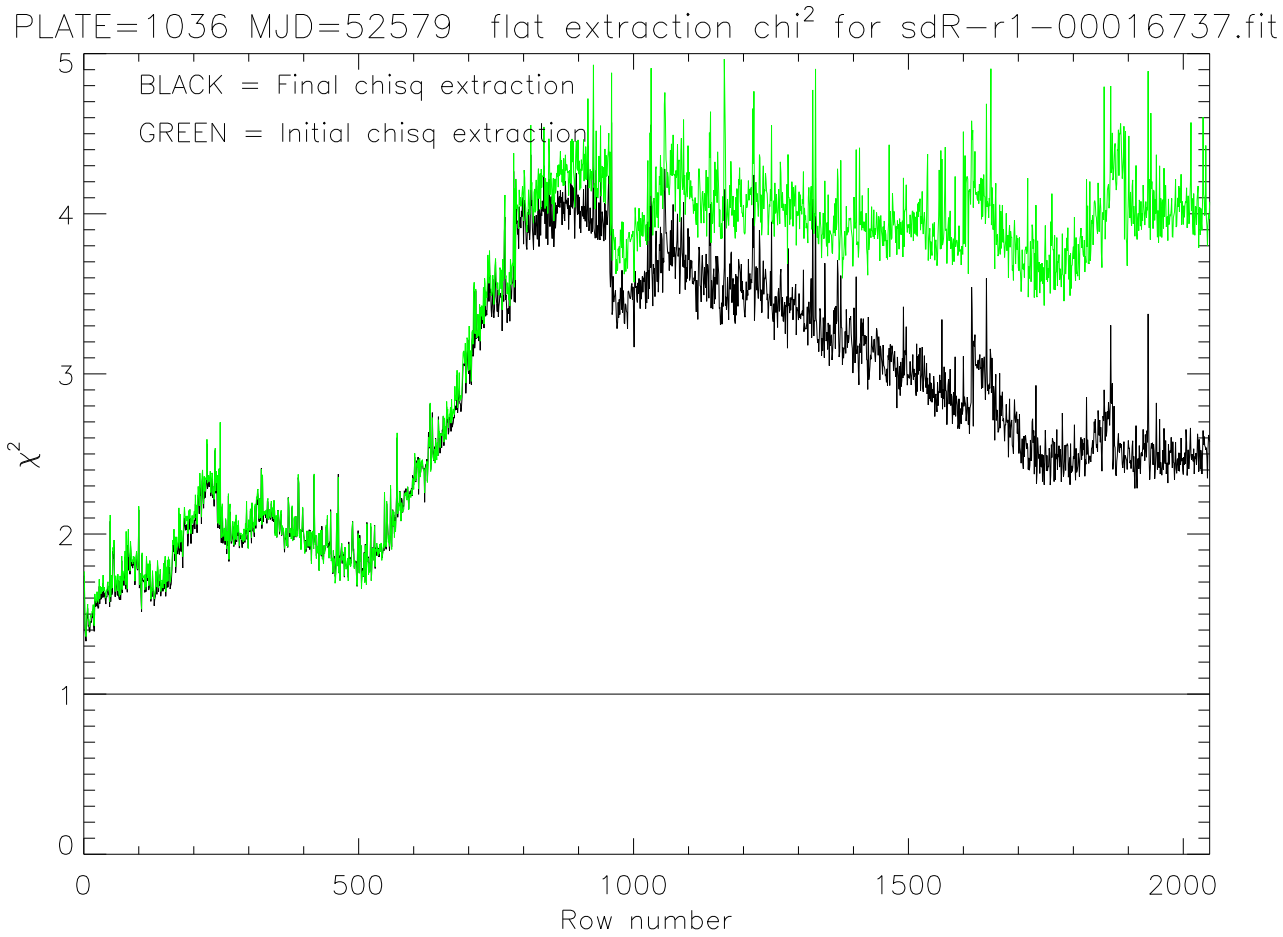

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

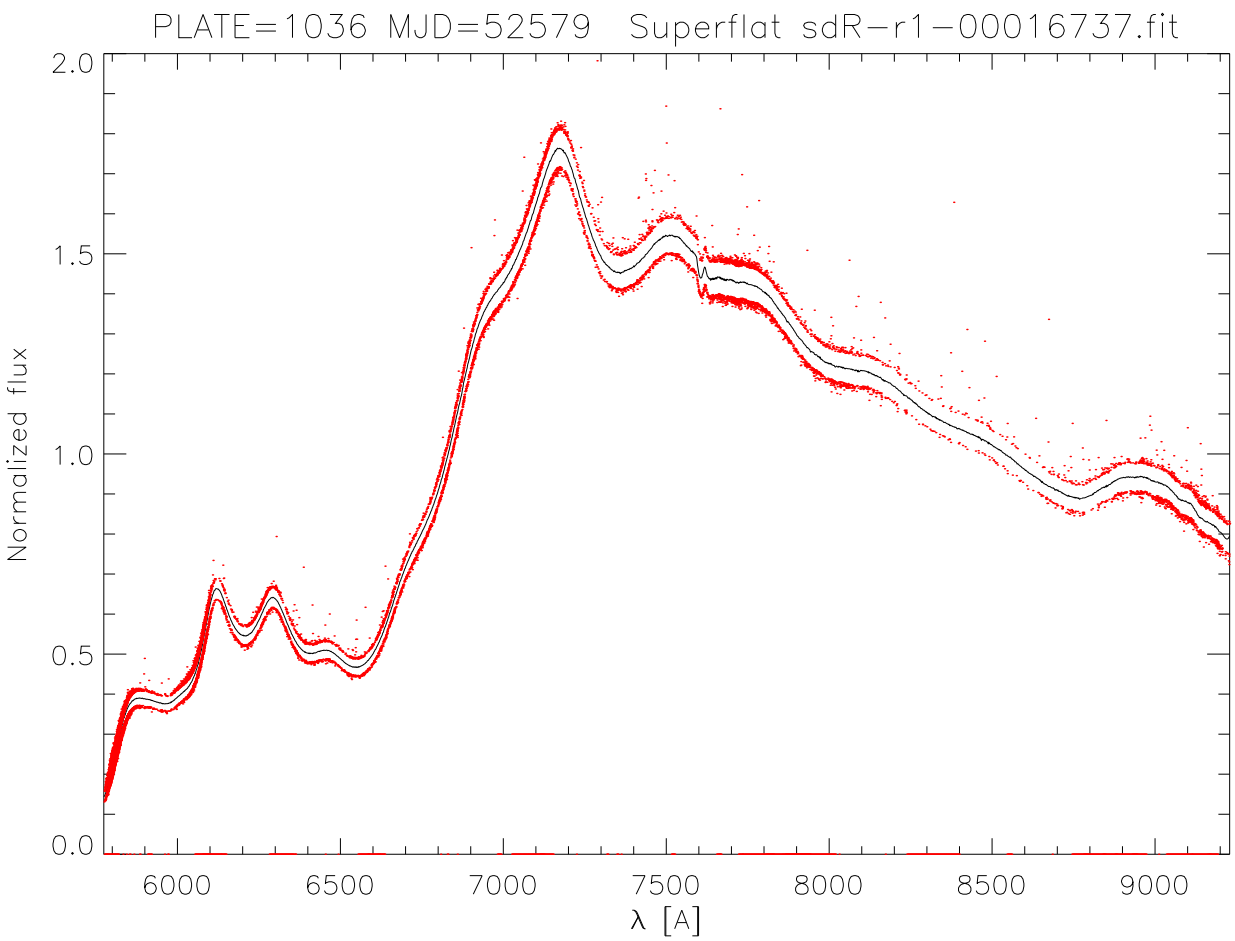

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

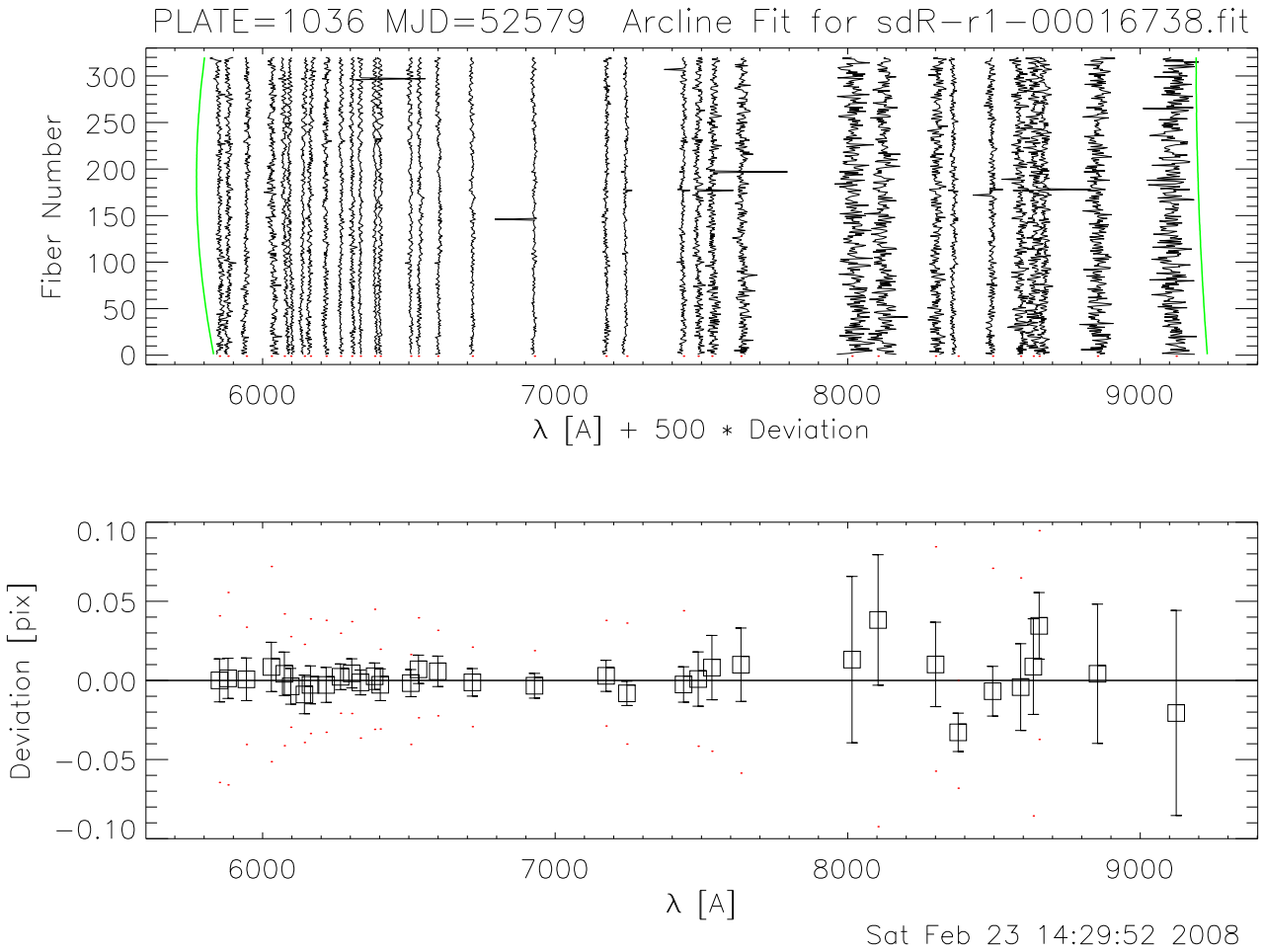

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

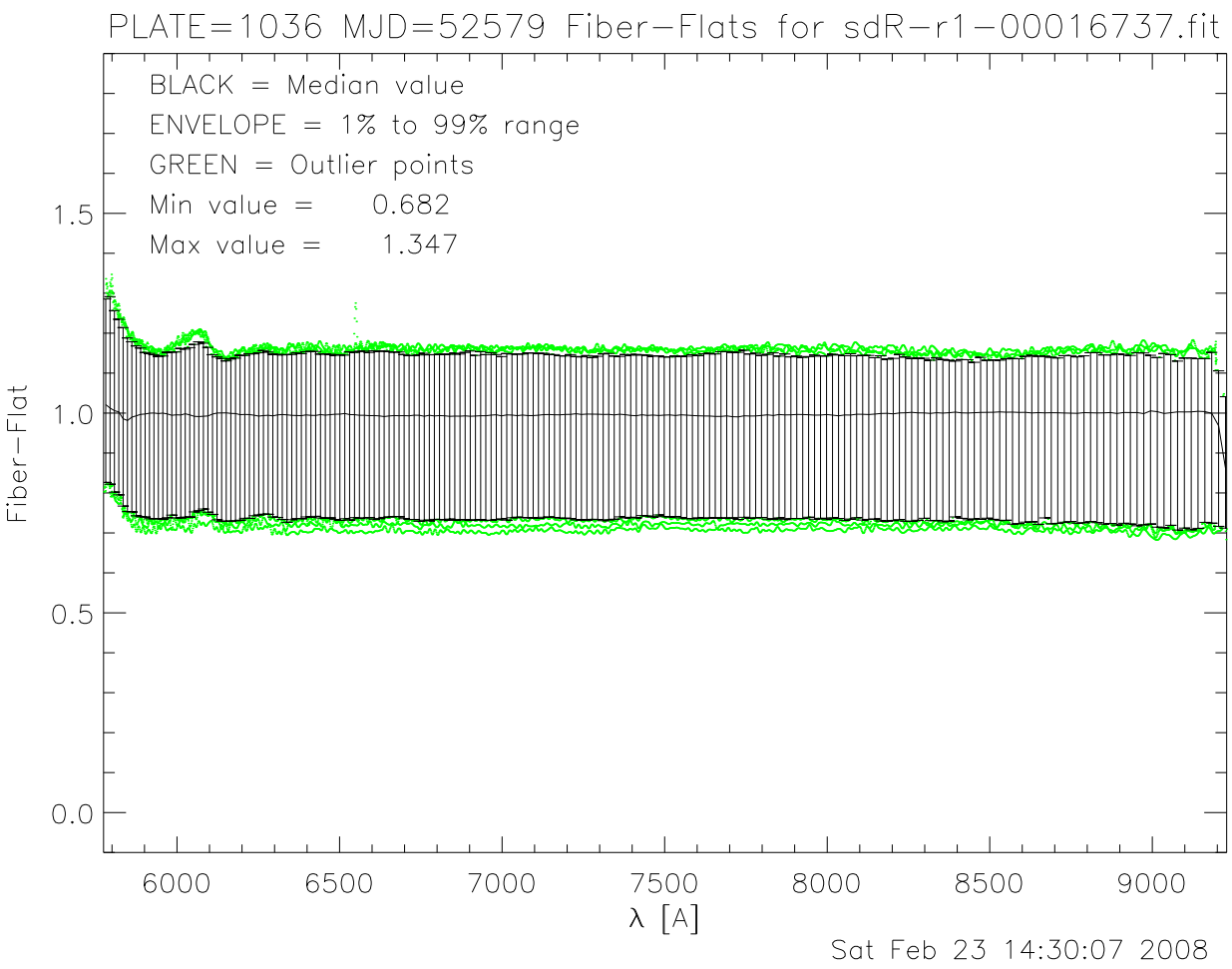

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−r1−00016731.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

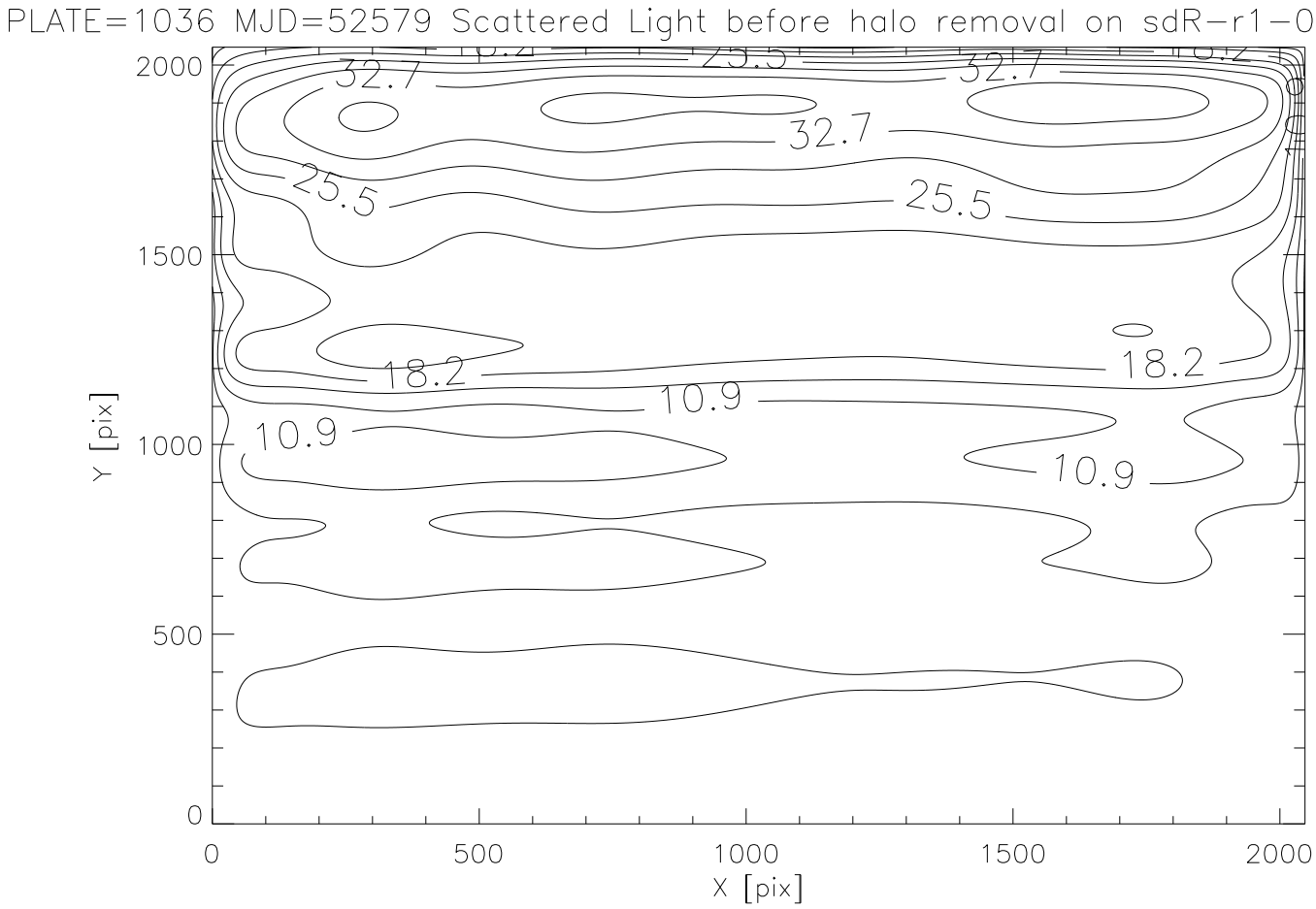

PLATE=1036 MJD=52579 Superflat sdR-r1-00016731.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

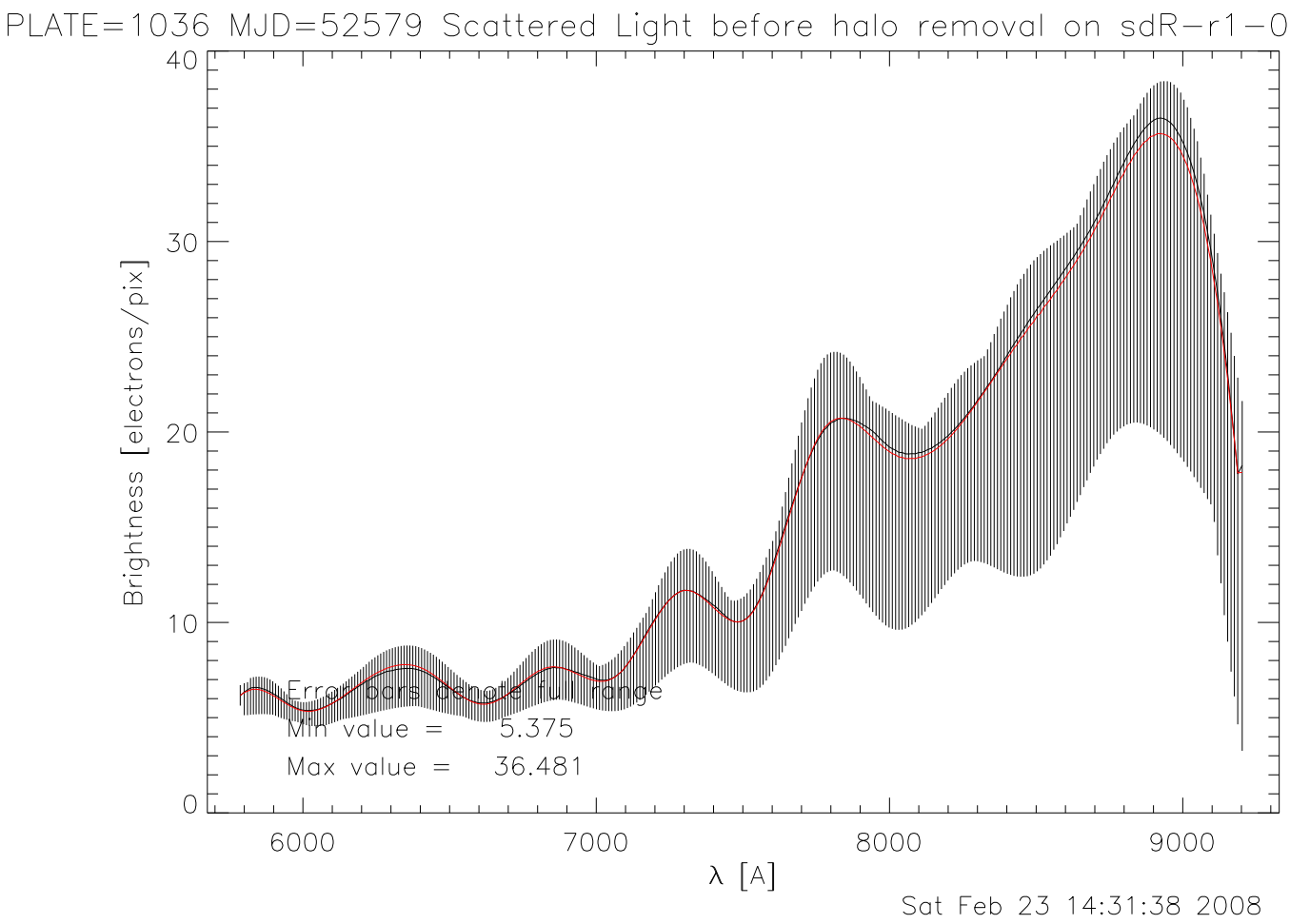

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−r1−00016737.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

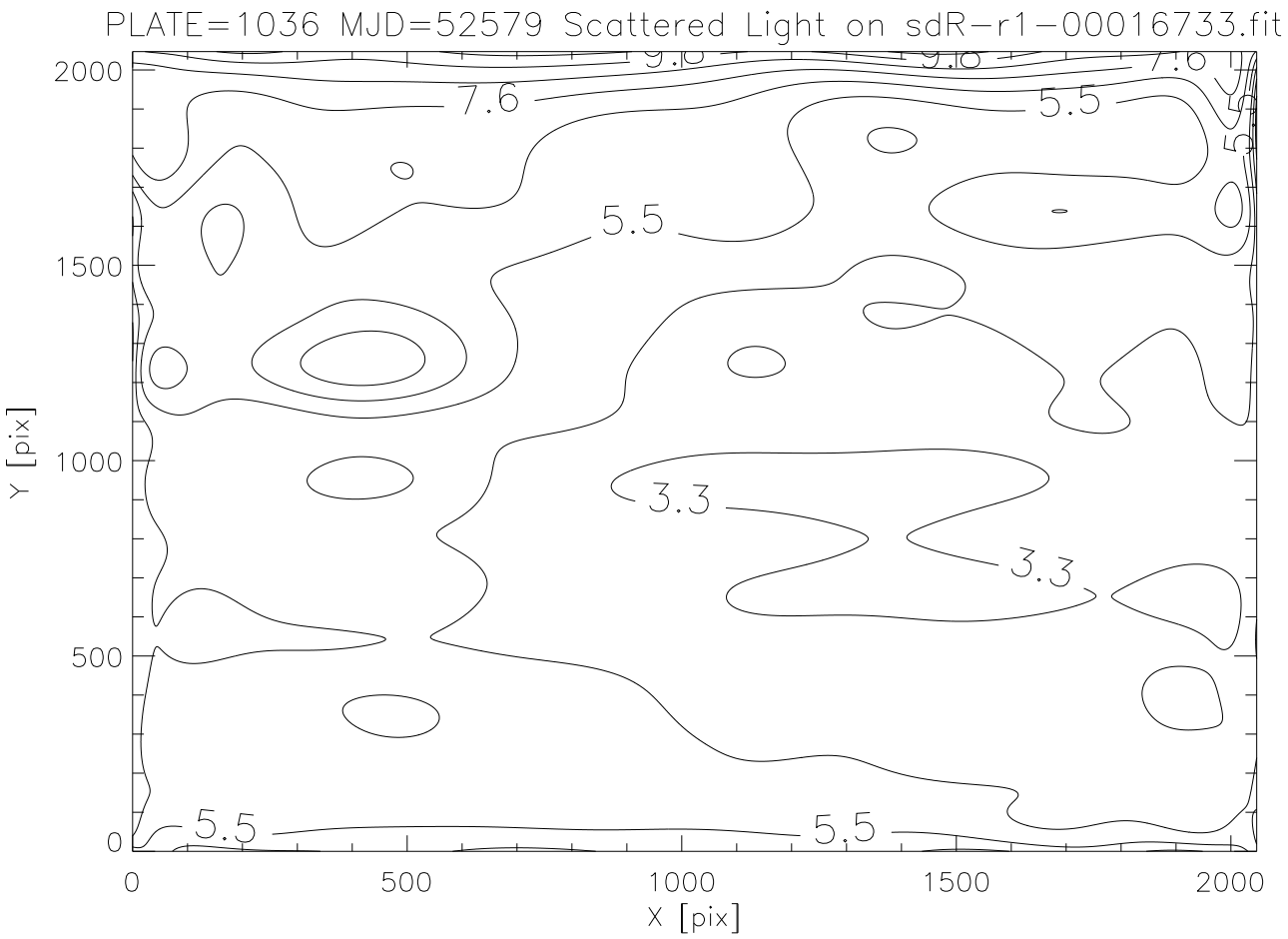

PLATE=1036 MJD=52579 Superflat sdR-r1-00016737.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

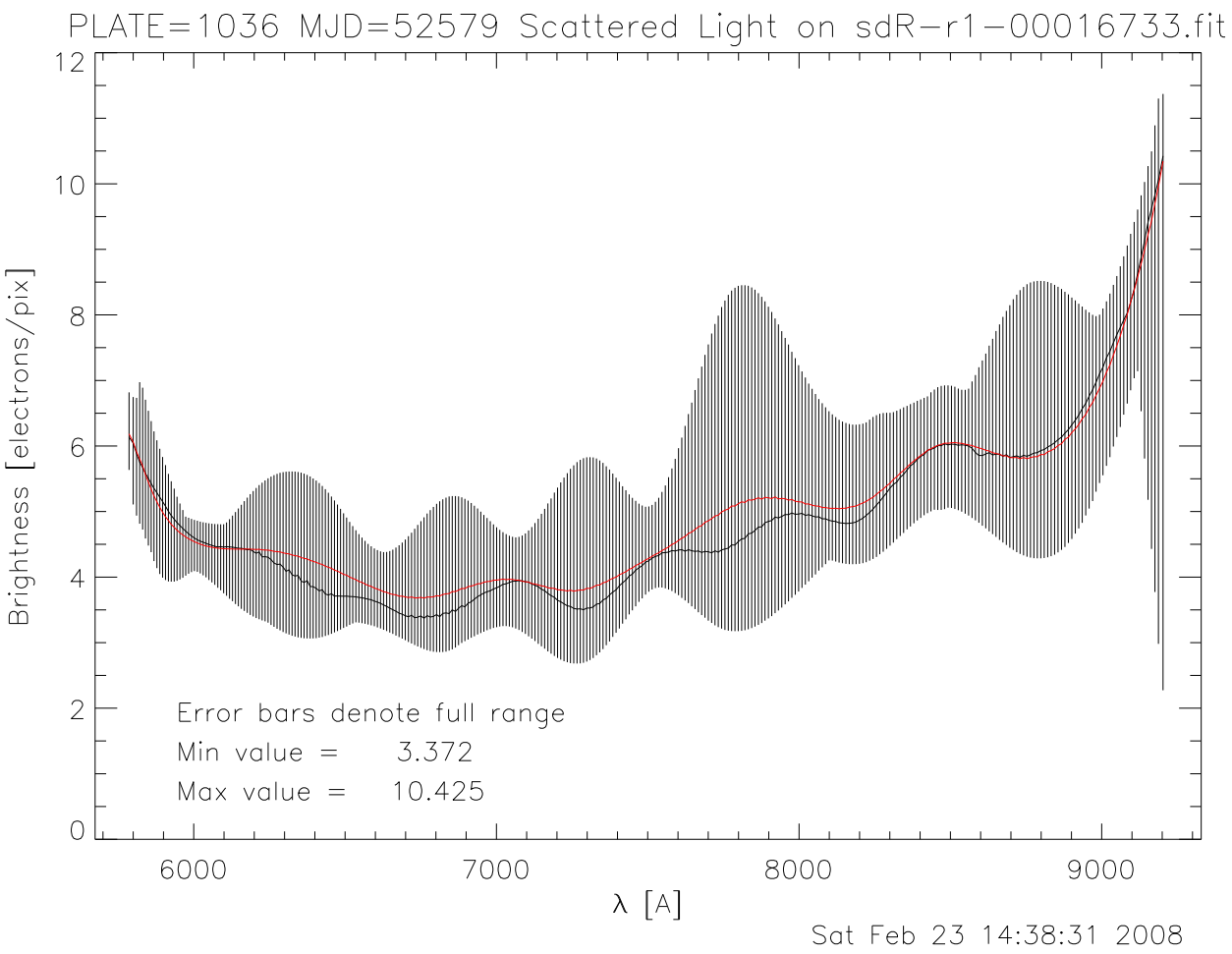

PLATE=1036 MJD=52579 Arcline Fit for sdR-r1-00016738.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 14:29:52 2008

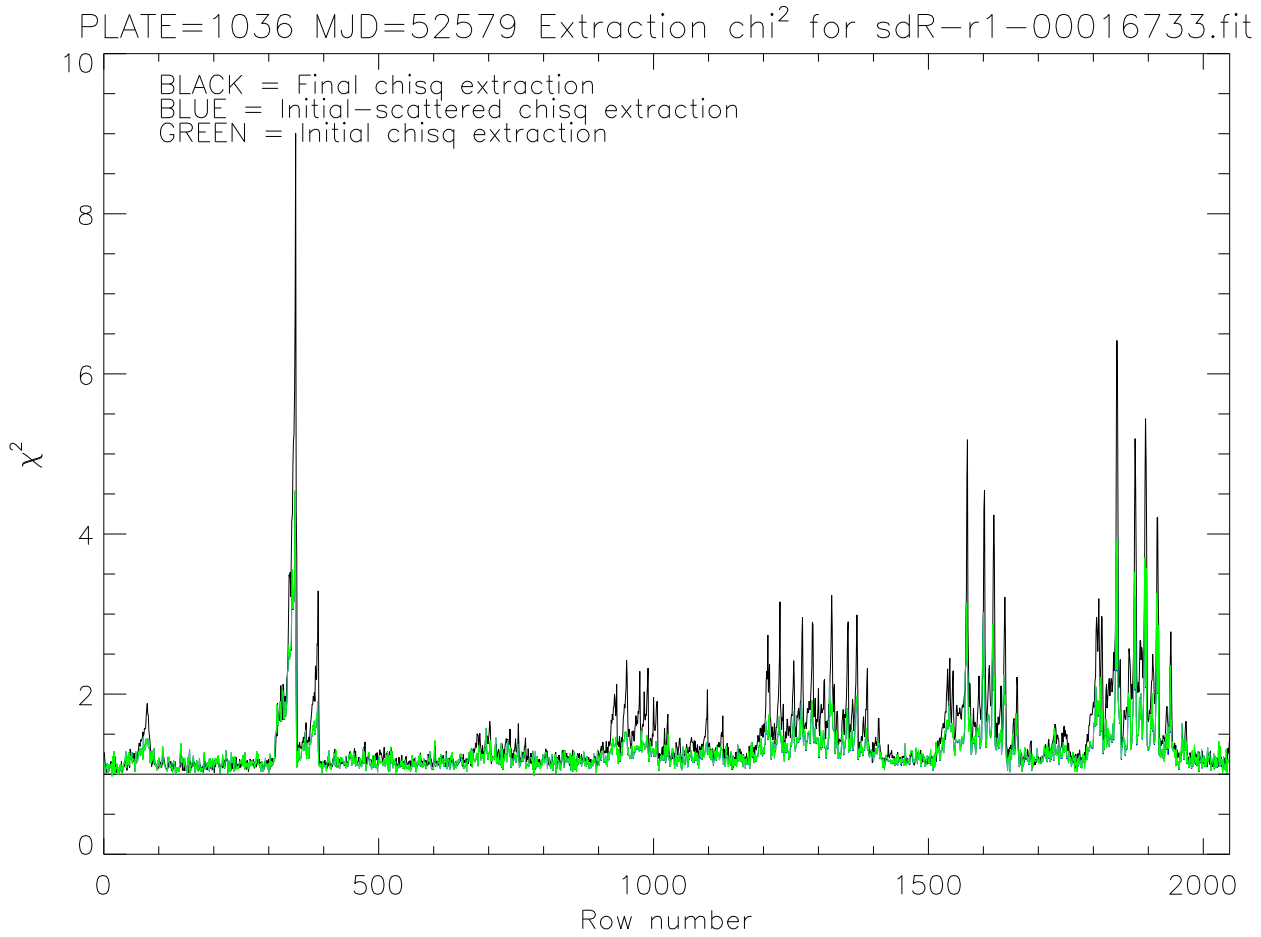

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r1−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.682
Max value = 1.347
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 14:30:07 2008

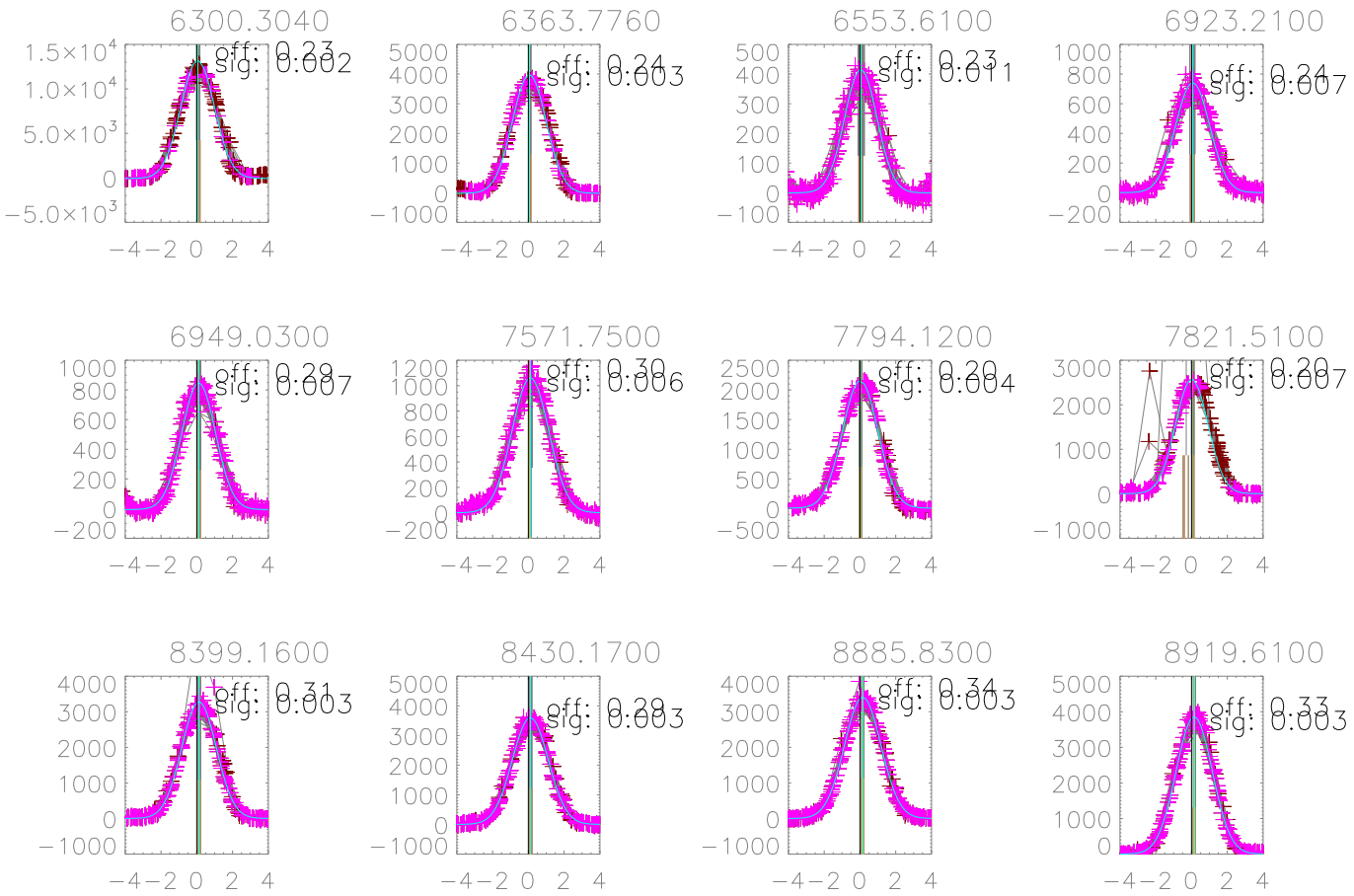

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016733.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

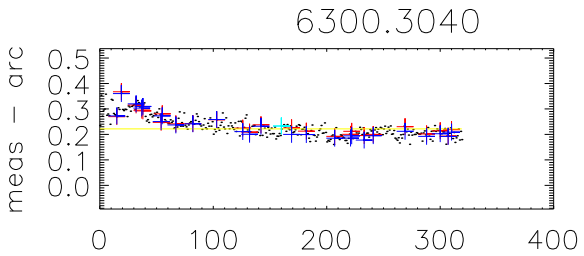

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016733.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.375
Max value = 36.481
Sat Feb 23 14:31:38 2008

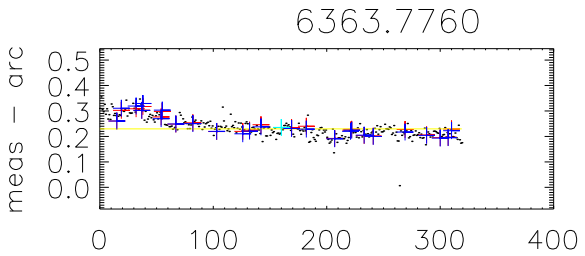

PLATE=1036 MJD=52579 Scattered Light on sdR−r1−00016733.fit
9.8
9.8
7.6
7.6
5.5
5.5
5.5
3.3
3.3
5.5
5.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

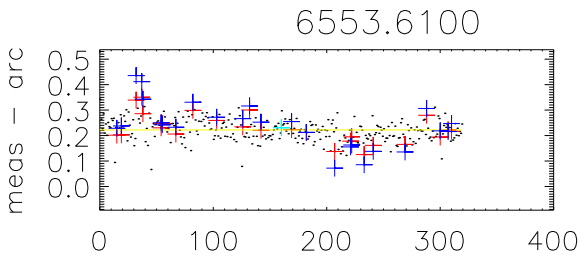

PLATE=1036 MJD=52579 Scattered Light on sdR-r1-00016733.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.372
Max value = 10.425
Sat Feb 23 14:38:31 2008

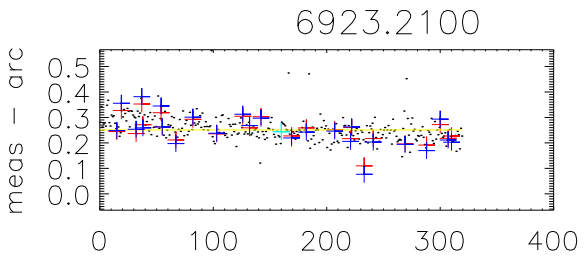

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-r1-00016733.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

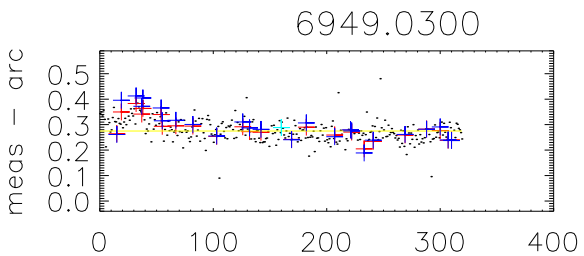

6300.3040
off: 0.23
sig: 0.002
6363.7760
off: 0.24
sig: 0.003
6553.6100
off: 0.23
sig: 0.011
6923.2100
off: 0.24
sig: 0.007
6949.0300
off: 0.28
sig: 0.007
7571.7500
off: 0.30
sig: 0.006
7794.1200
off: 0.20
sig: 0.004
7821.5100
off: 0.20
sig: 0.007
8399.1600
off: 0.31
sig: 0.003
8430.1700
off: 0.28
sig: 0.003
8885.8300
off: 0.34
sig: 0.003
8919.6100
off: 0.33
sig: 0.003

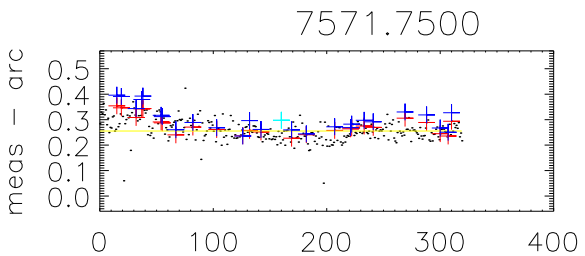

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

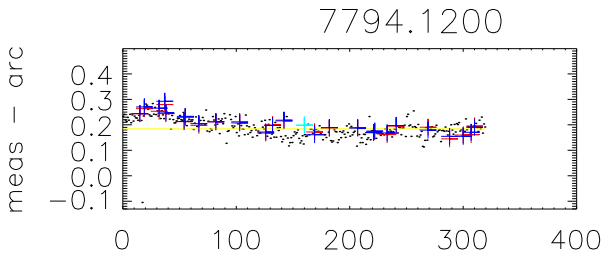

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

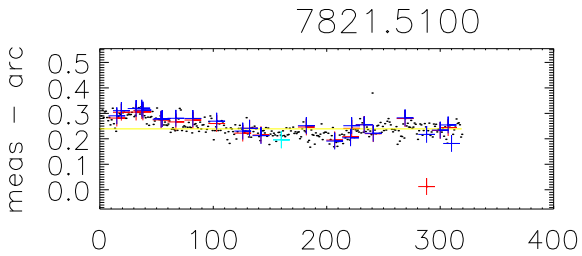

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

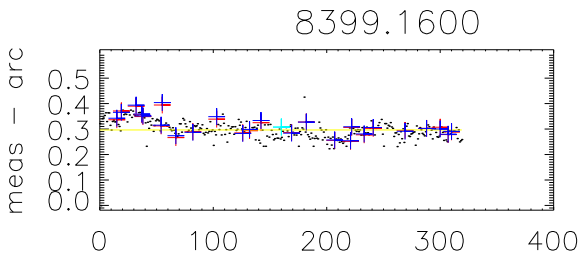

6923.2100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

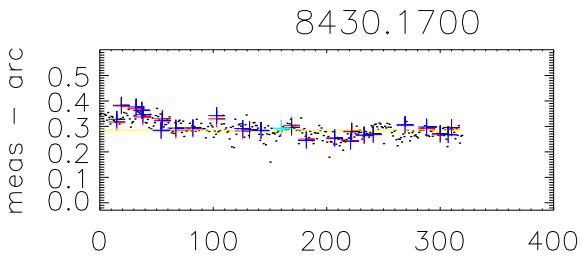

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

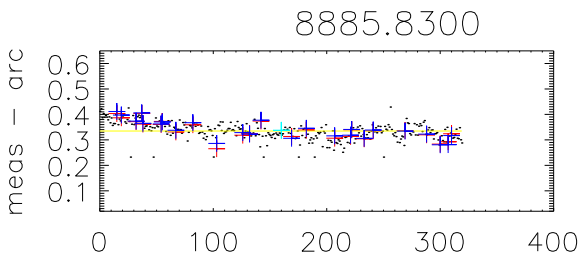

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

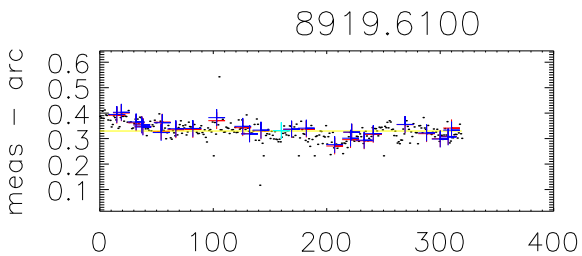

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

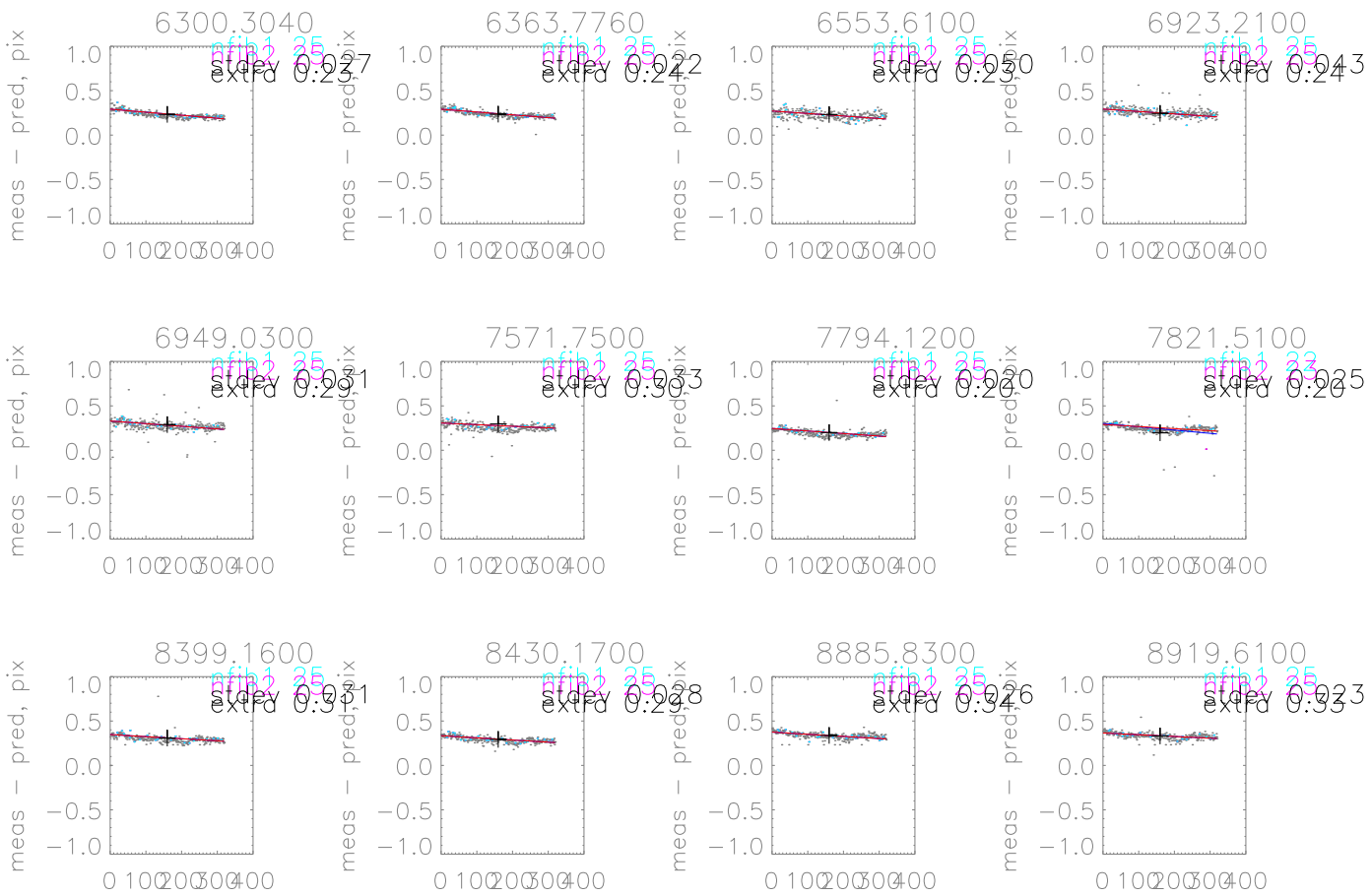

7821.5100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

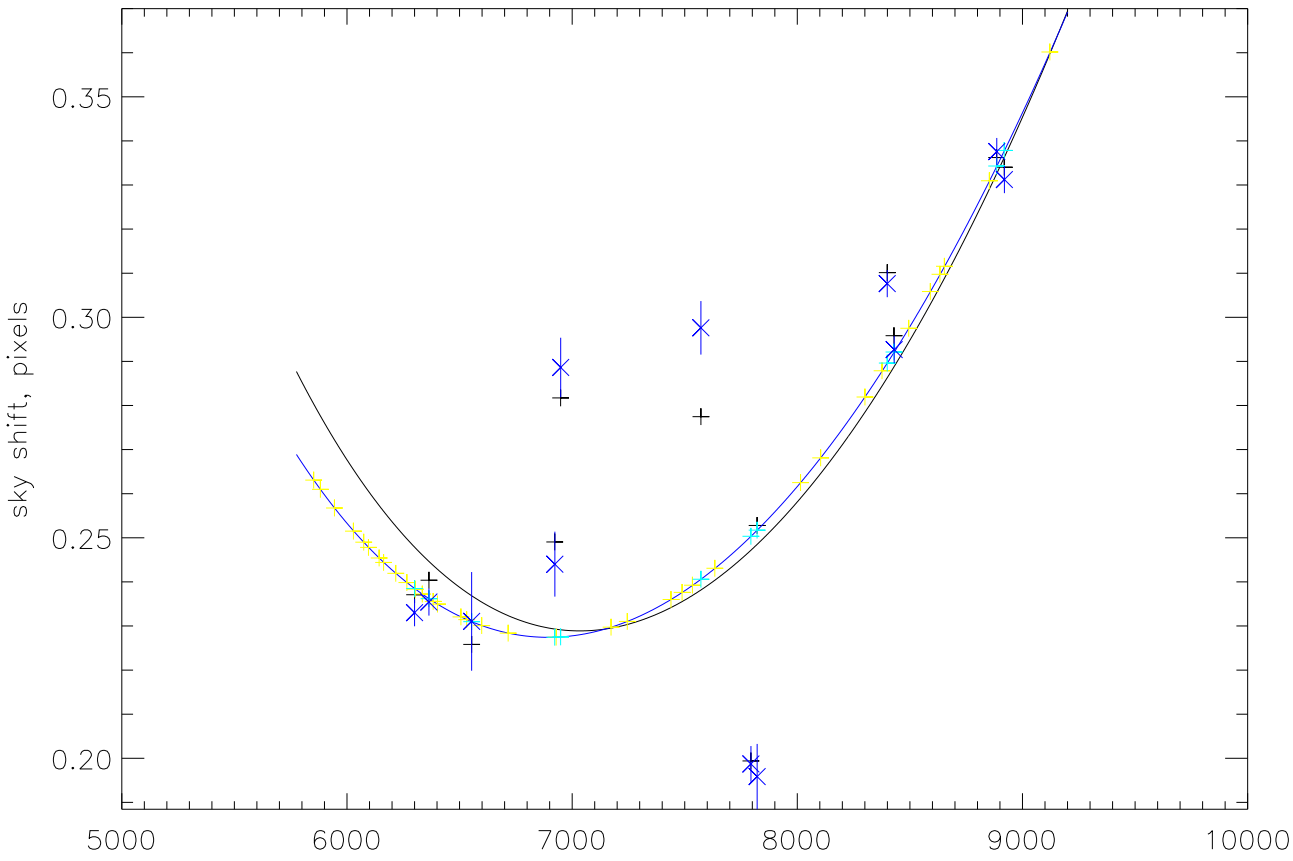

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

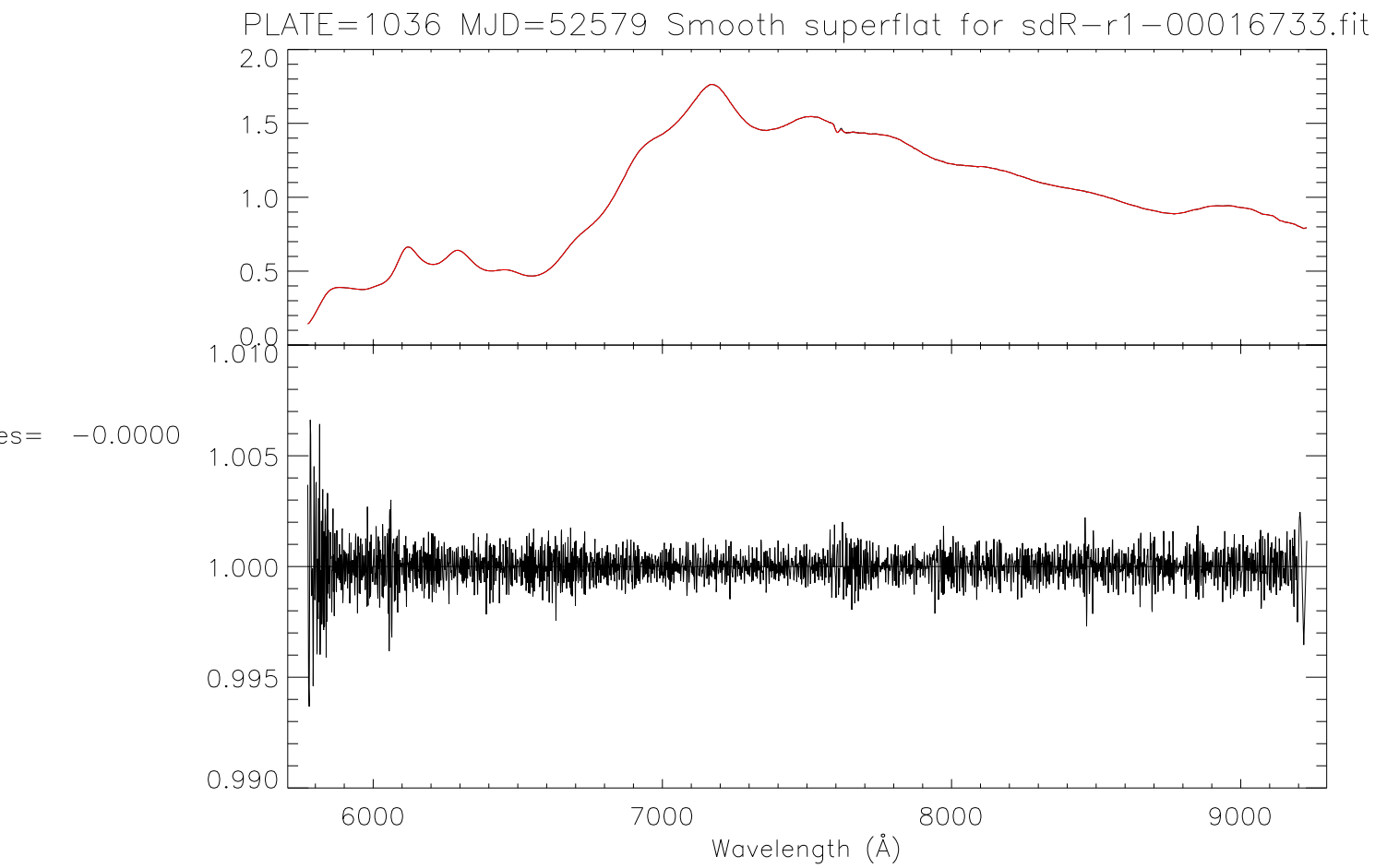

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

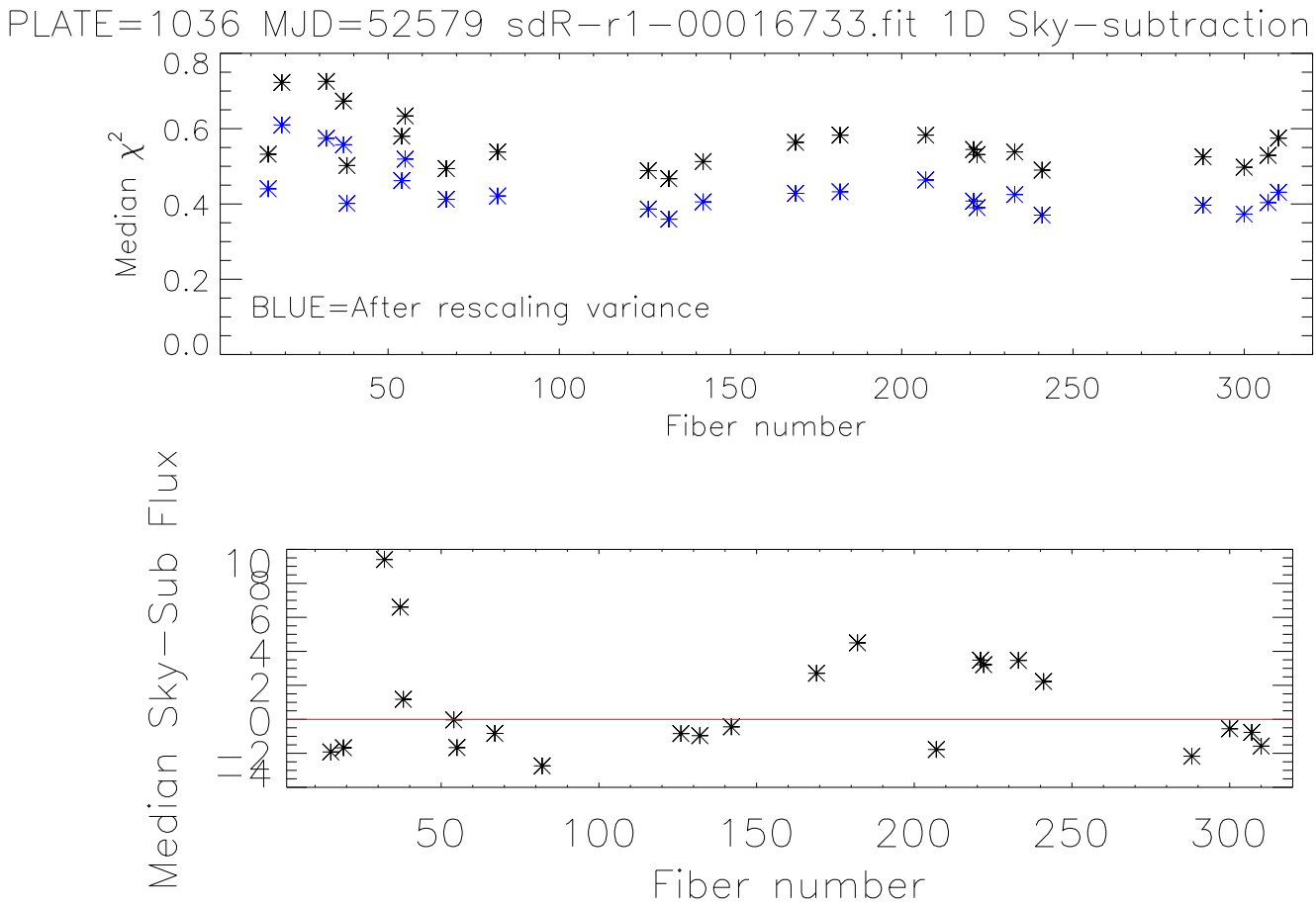

8885.8300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

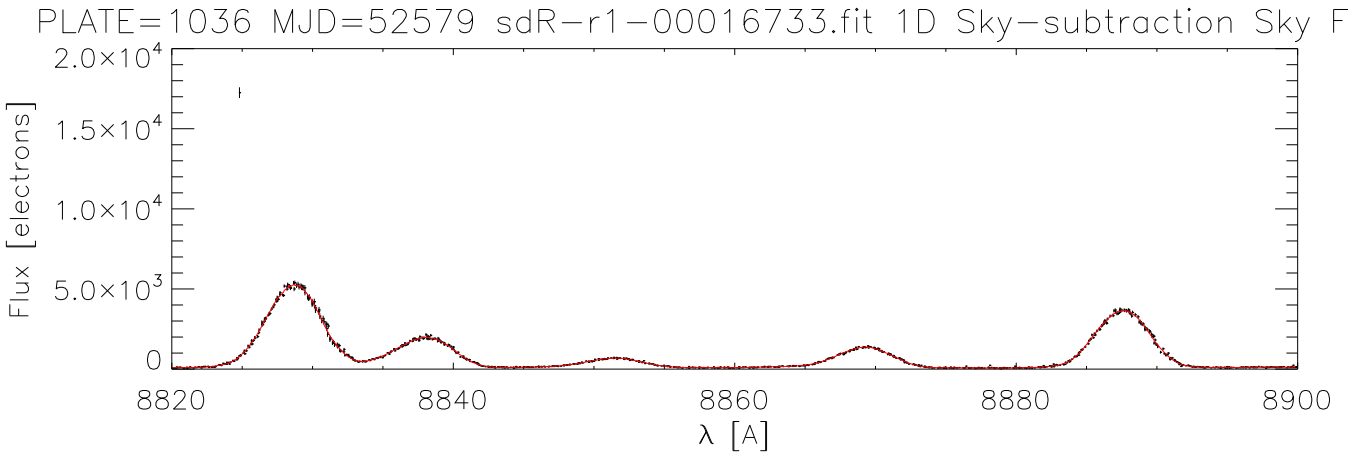

8919.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

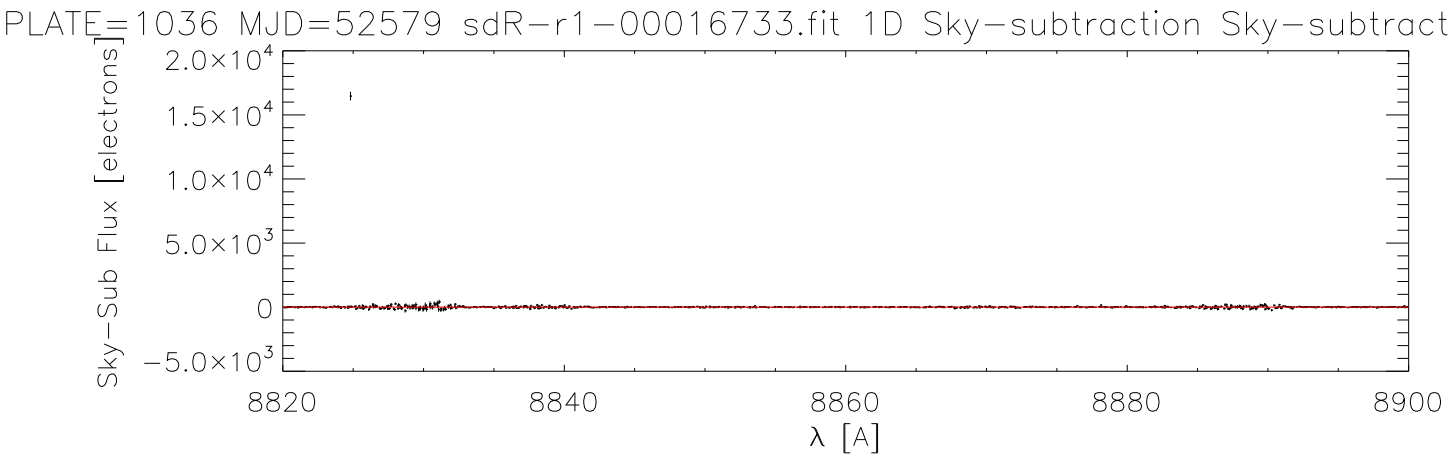

6300.3040
stdev 0.027
extra 0.23
6363.7760
stdev 0.022
extra 0.24
6553.6100
stdev 0.050
extra 0.23
6923.2100
stdev 0.043
extra 0.24
6949.0300
stdev 0.031
extra 0.29
7571.7500
stdev 0.033
extra 0.30
7794.1200
stdev 0.020
extra 0.26
7821.5100
stdev 0.025
extra 0.26
8399.1600
stdev 0.031
extra 0.31
8430.1700
stdev 0.028
extra 0.29
8885.8300
stdev 0.026
extra 0.34
8919.6100
stdev 0.023
extra 0.33
meas − pred, pix
mfhd1 25
mfhd2 25

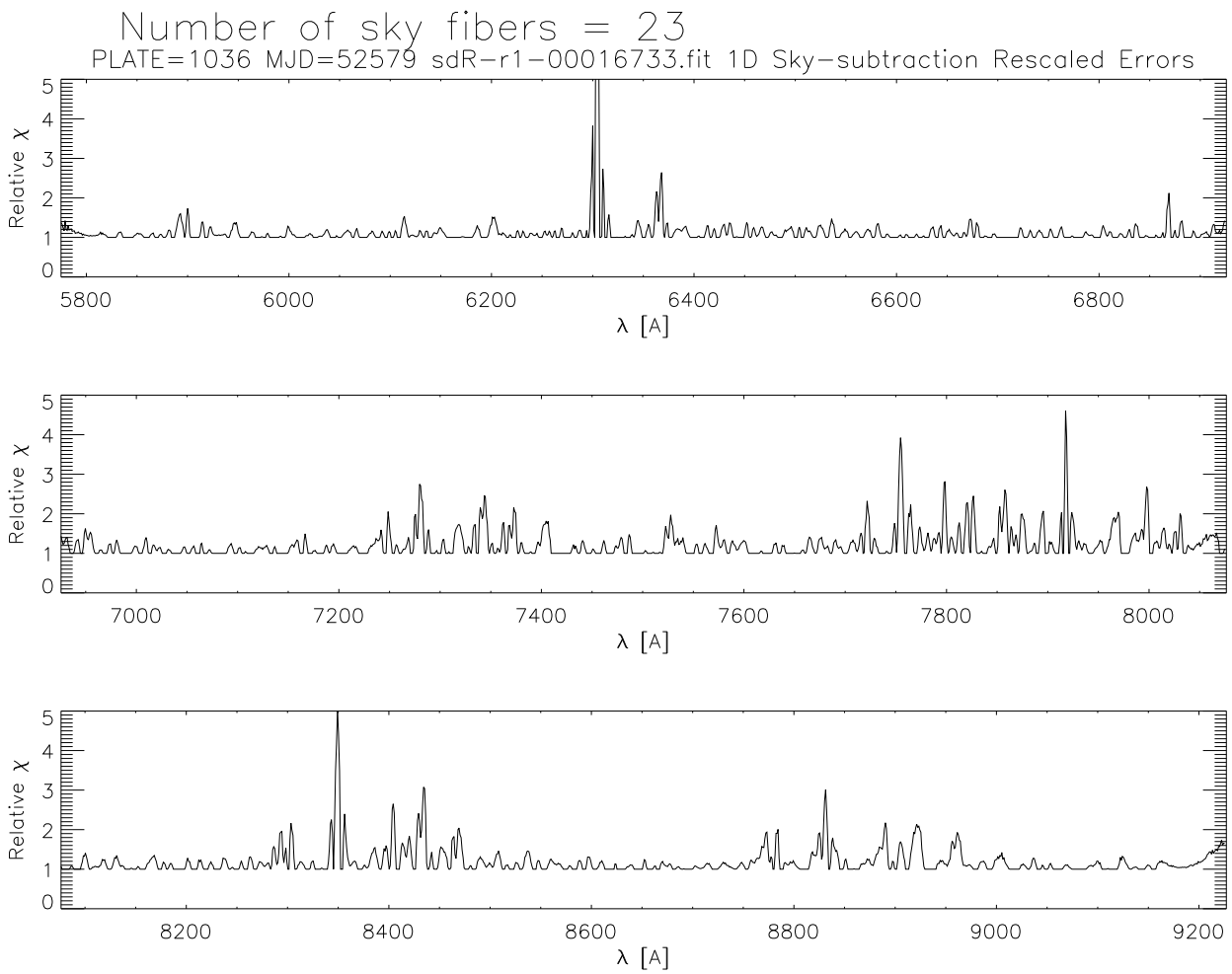

sky shift, pixels
0.35
0.30
0.25
0.20
5000
6000
7000
8000
9000
10000

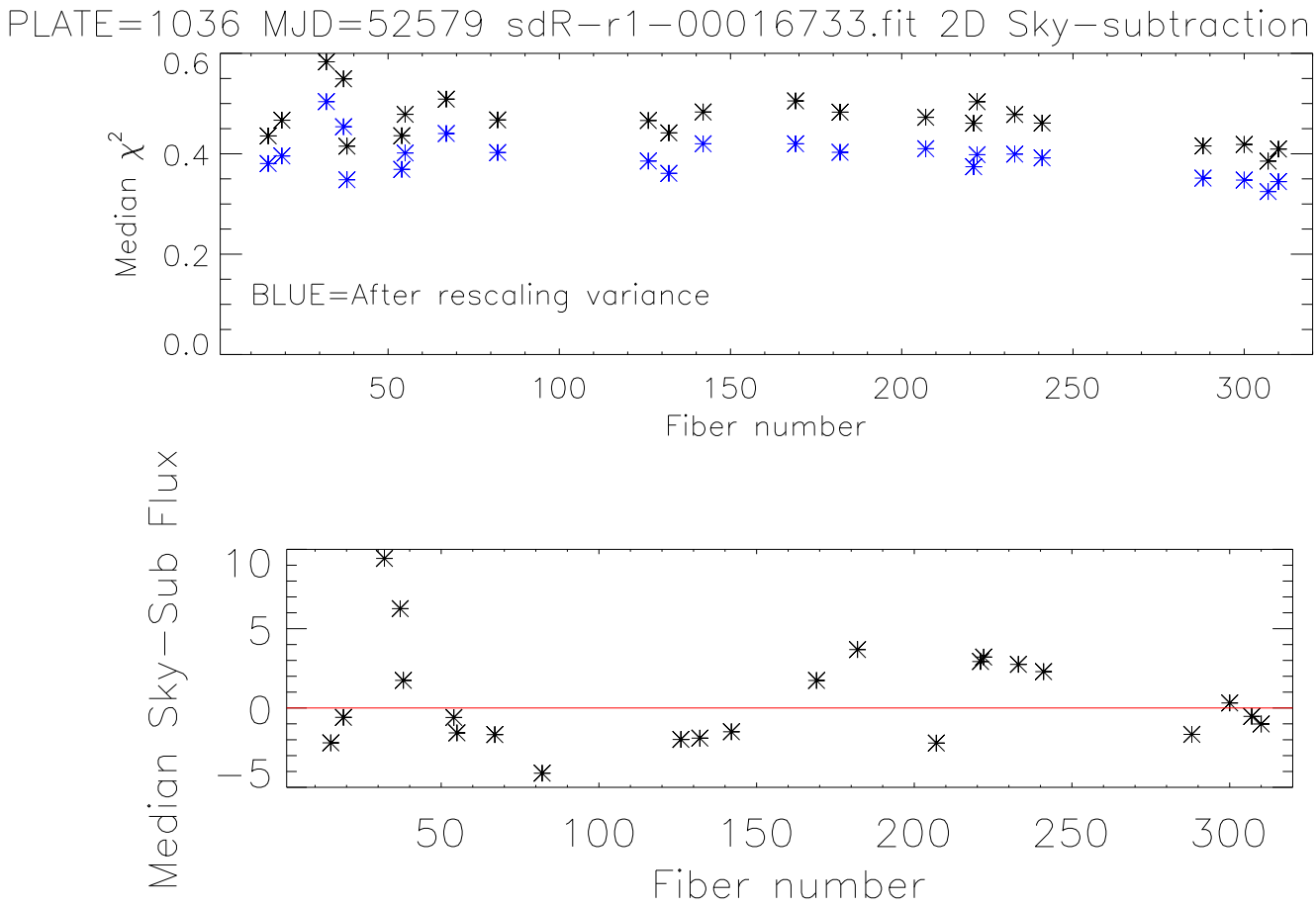

PLATE=1036 MJD=52579 Smooth superflat for sdR-r1-00016733.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

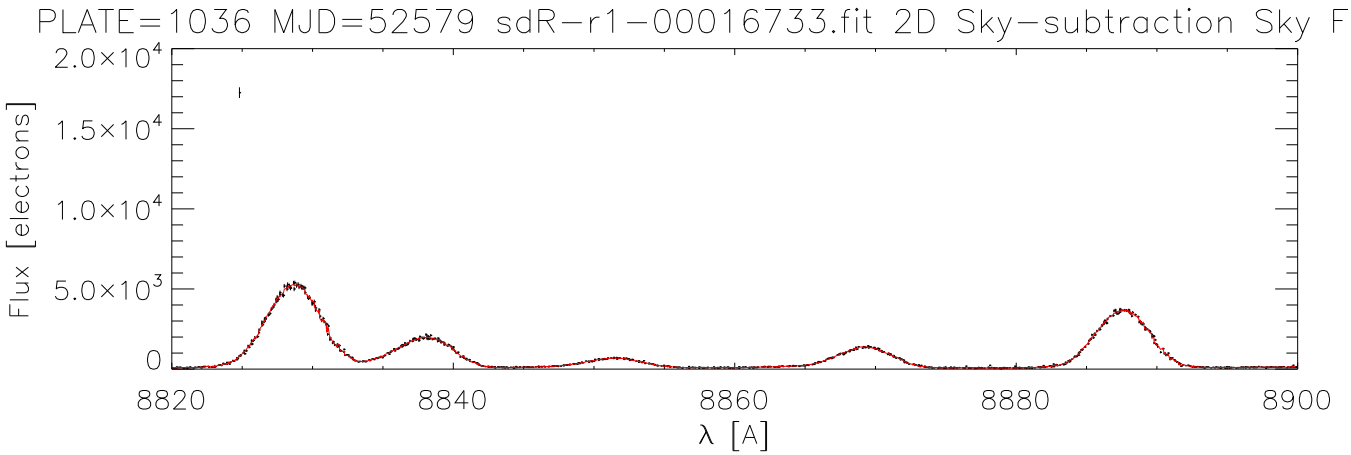

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-10
-8
-6
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

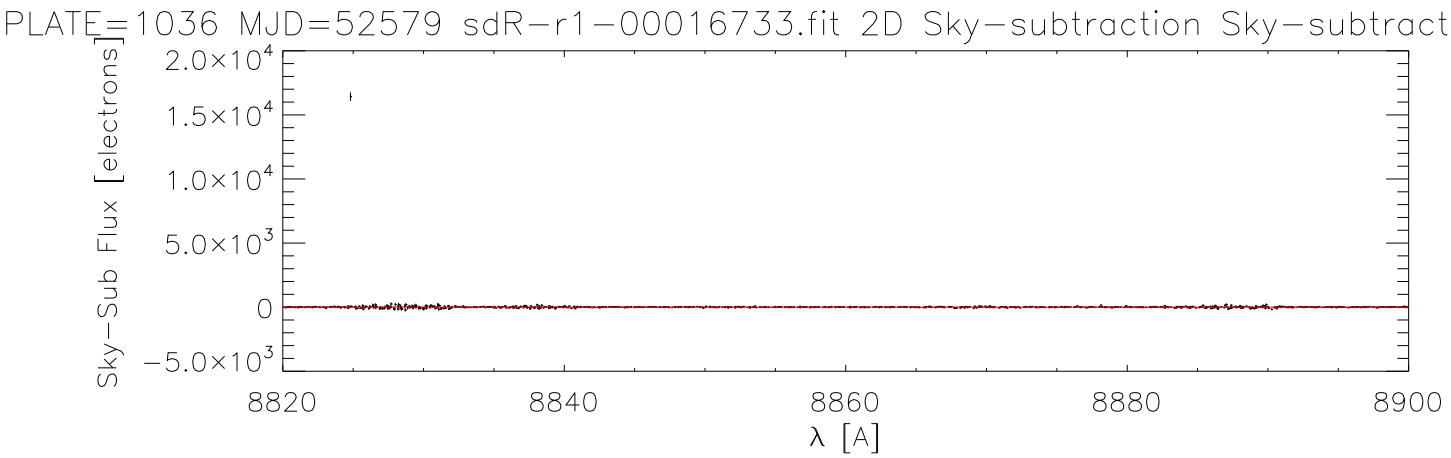

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

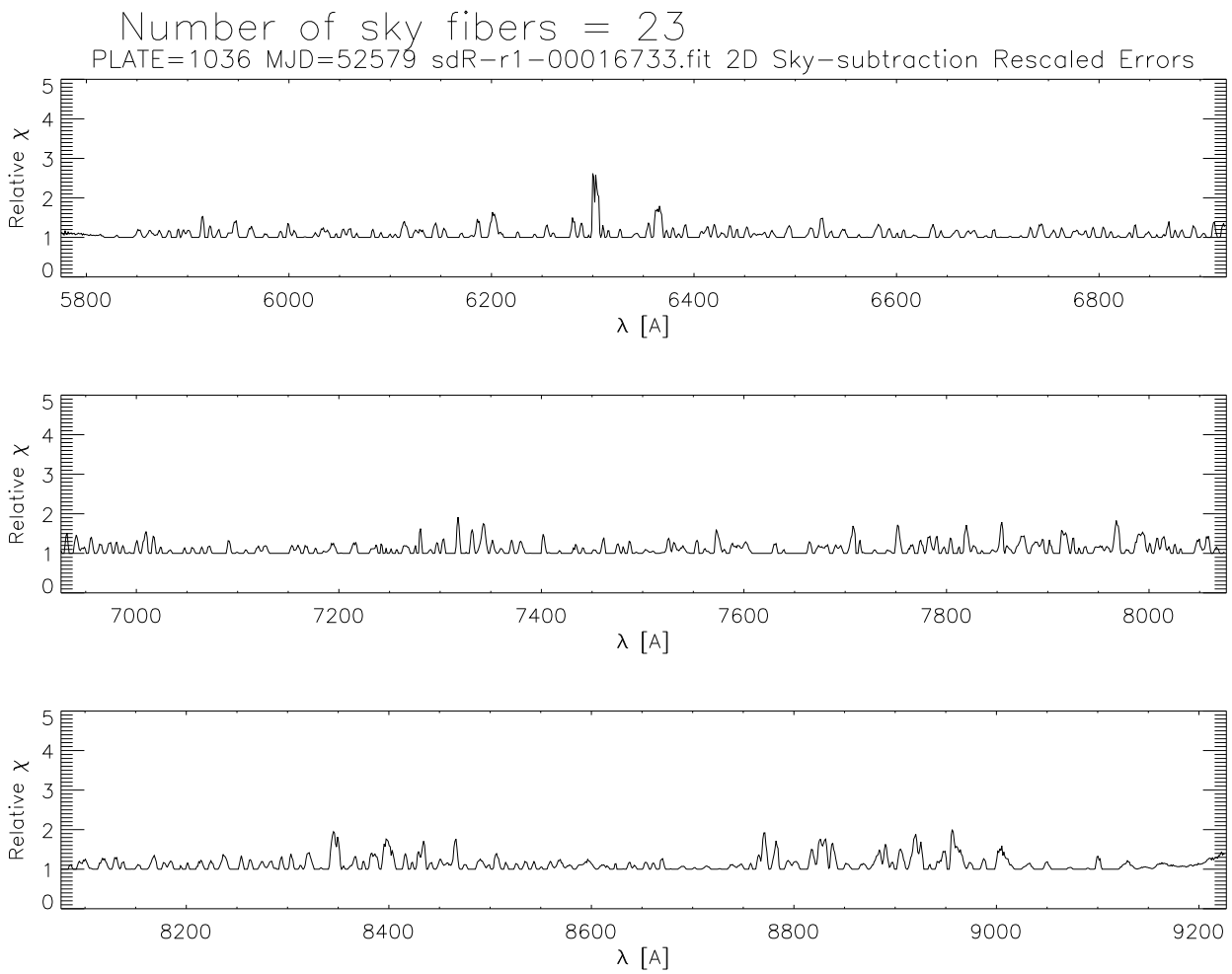

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

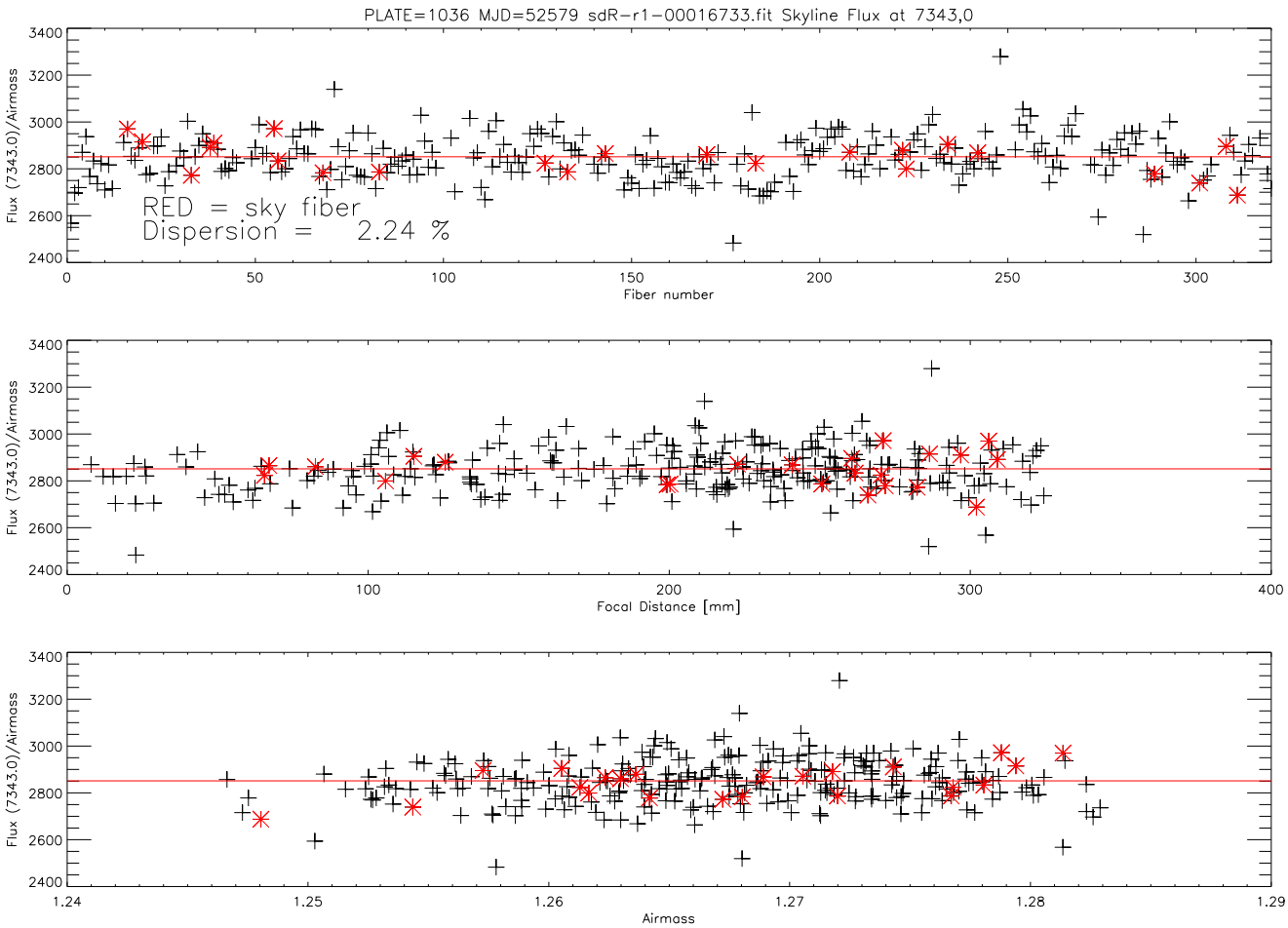

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-r1-00016733.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

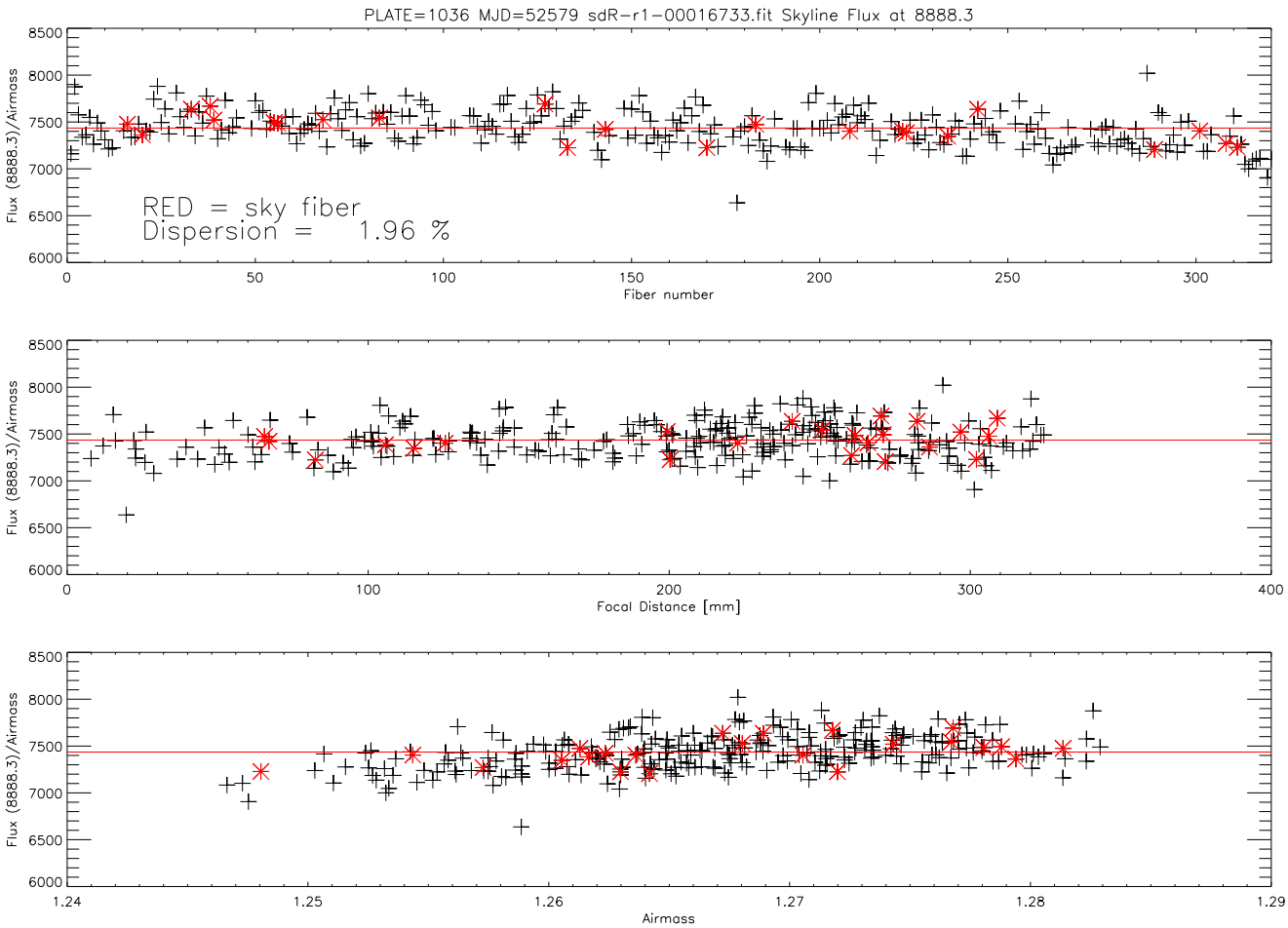

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

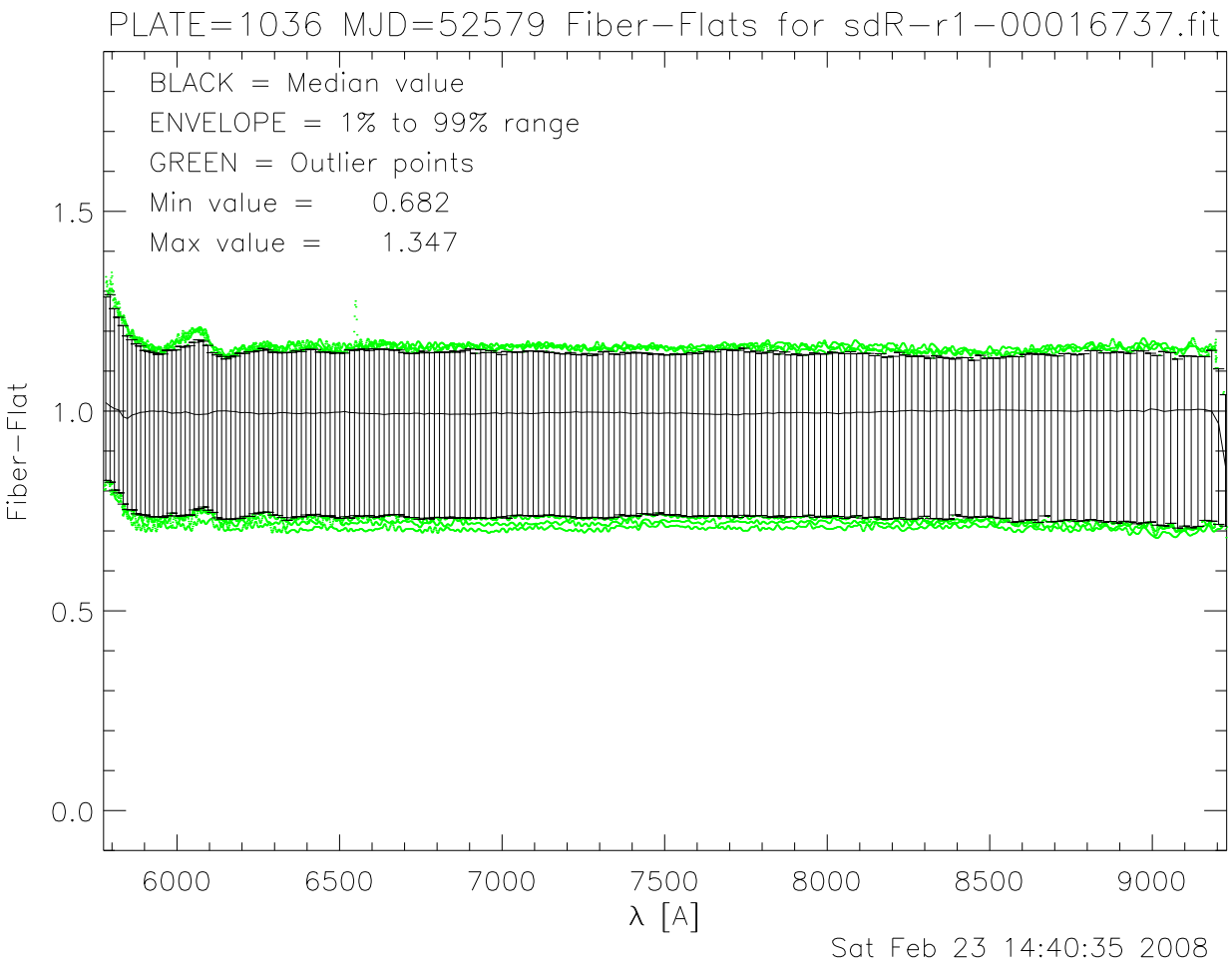

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

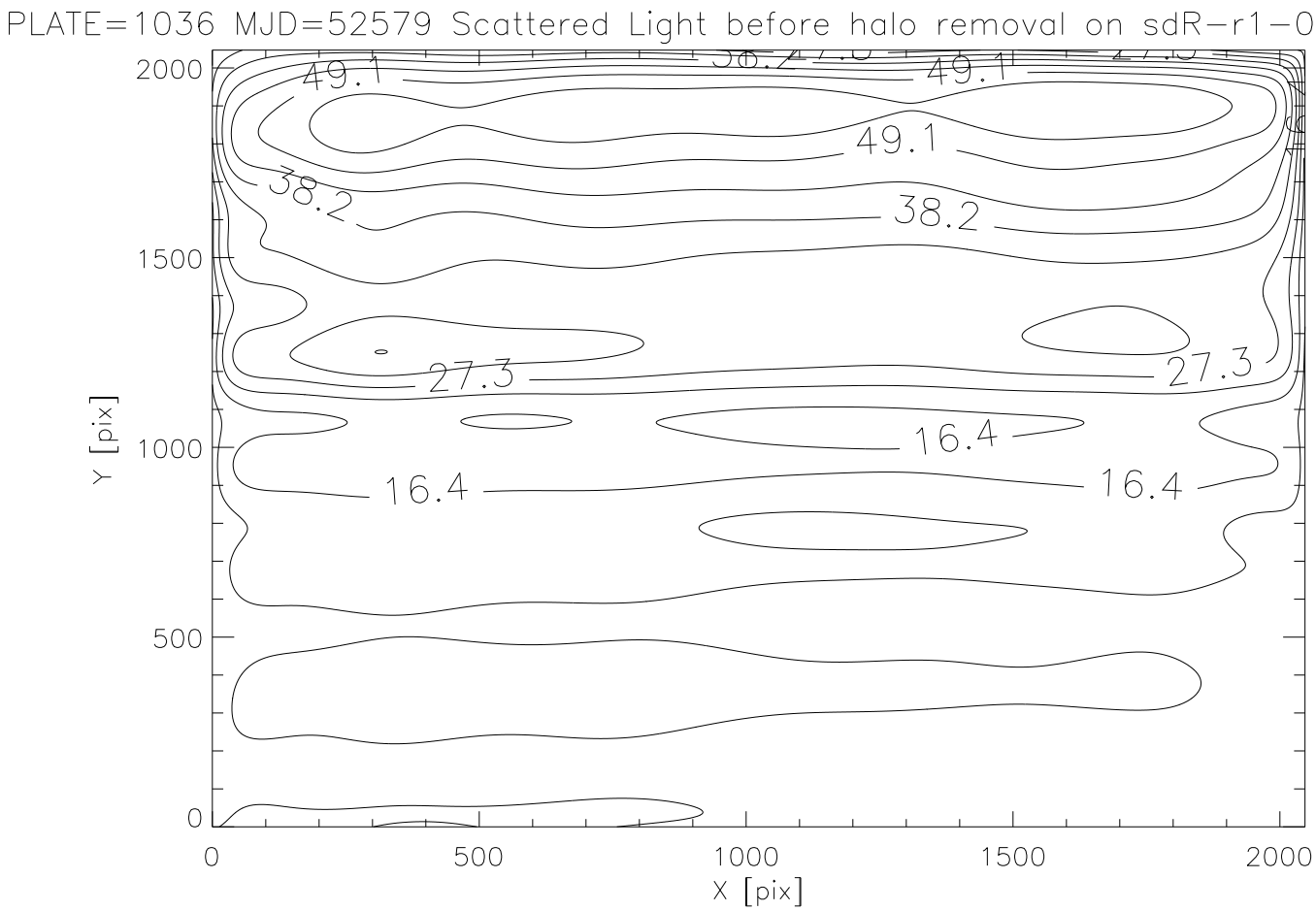

PLATE=1036 MJD=52579 sdR-r1-00016733.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
-5.0×10^3
8820
8840
8860
8880
8900
λ [A]

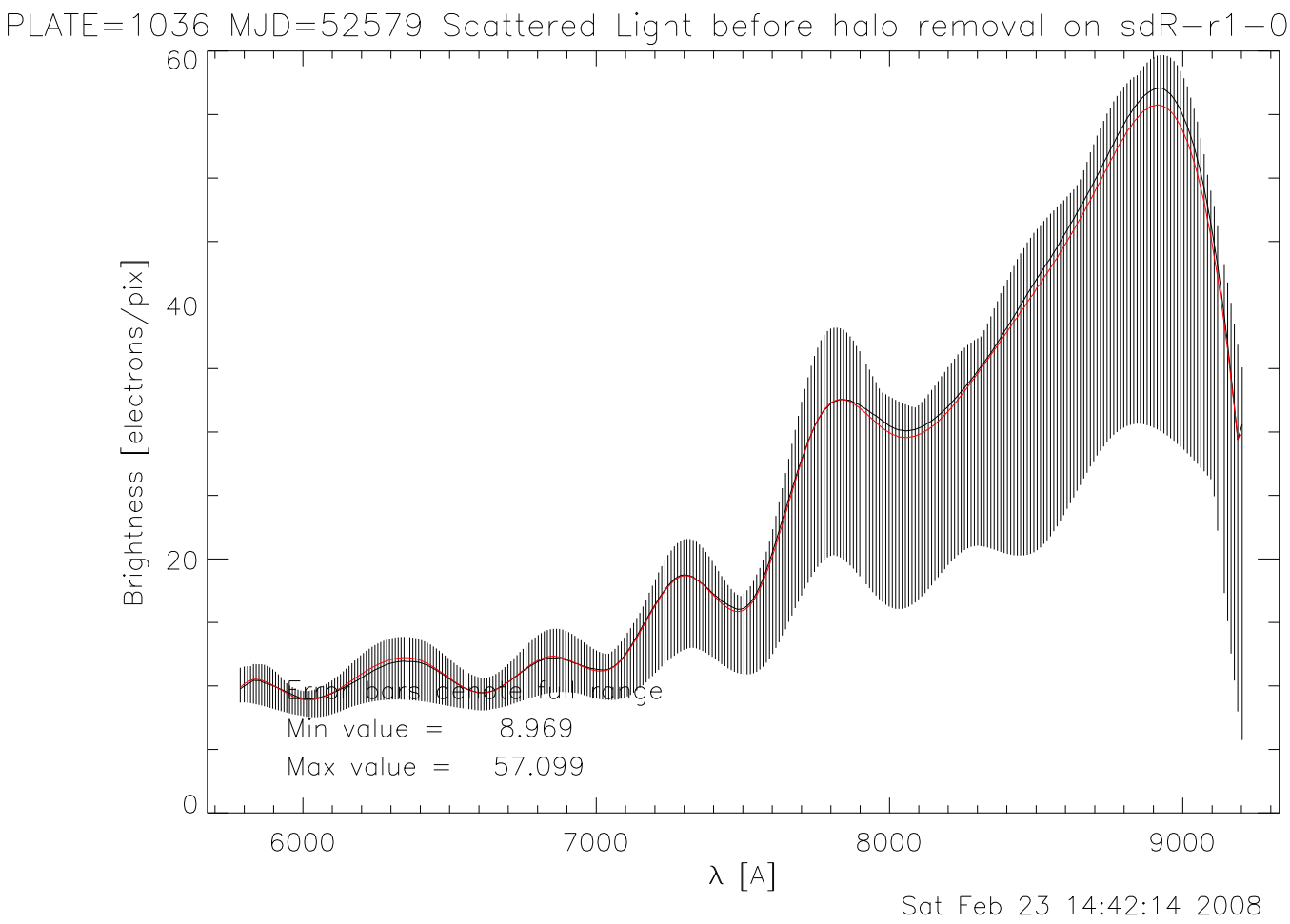

Number of sky fibers = 23
PLATE=1036 MJD=52579 sdR-r1-00016733.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

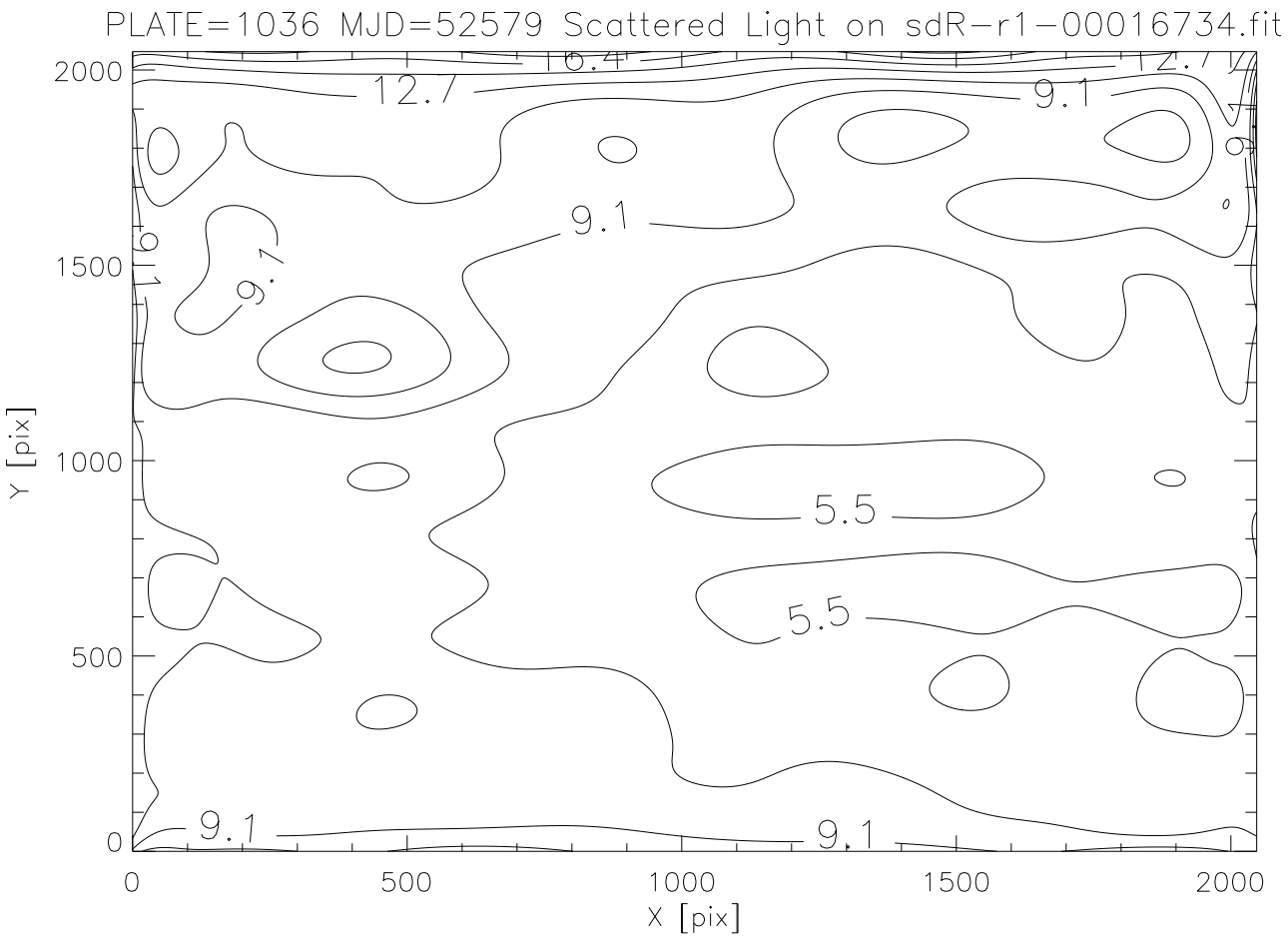

PLATE=1036 MJD=52579 sdR-r1-00016733.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.24 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

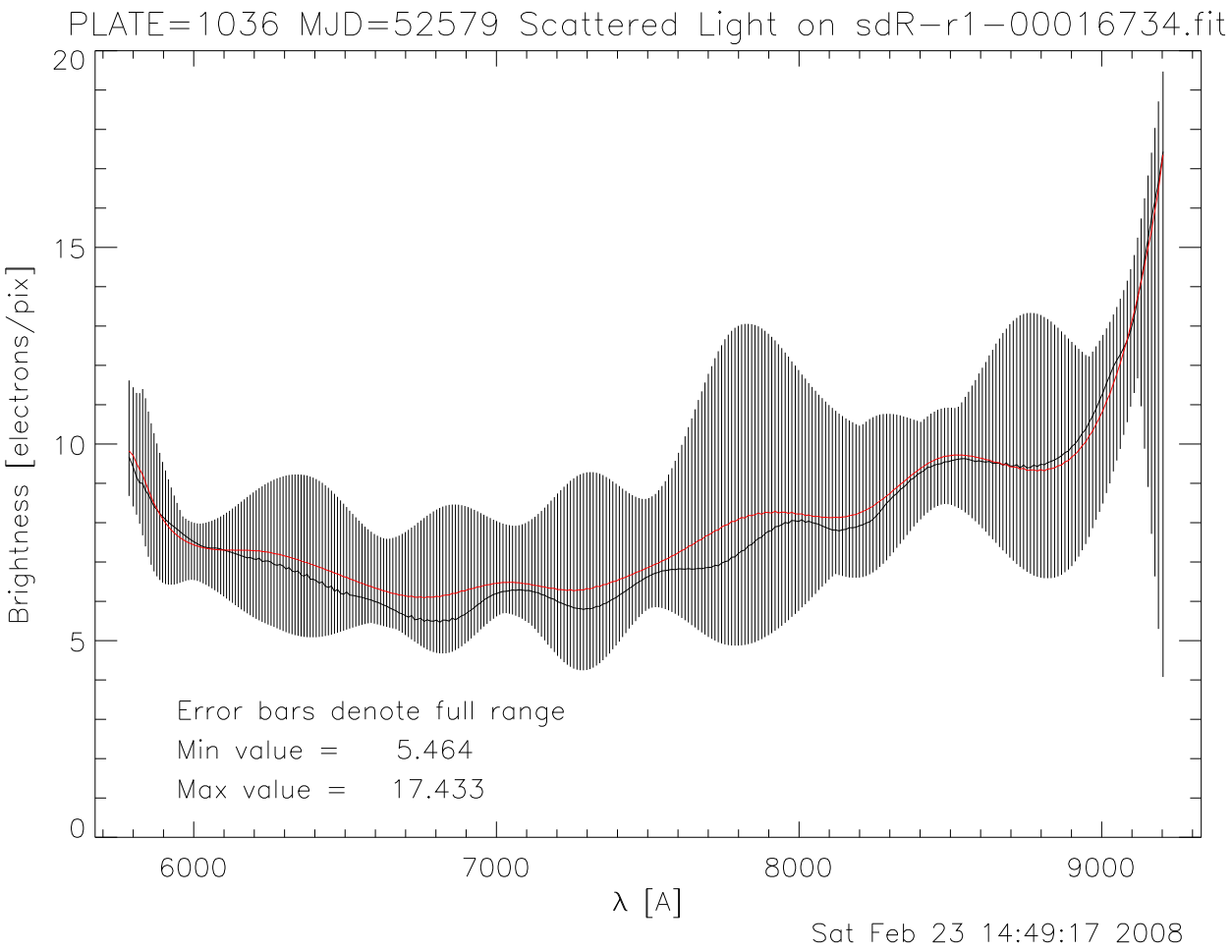

PLATE=1036 MJD=52579 sdR-r1-00016733.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Focal Distance [mm]
Airmass

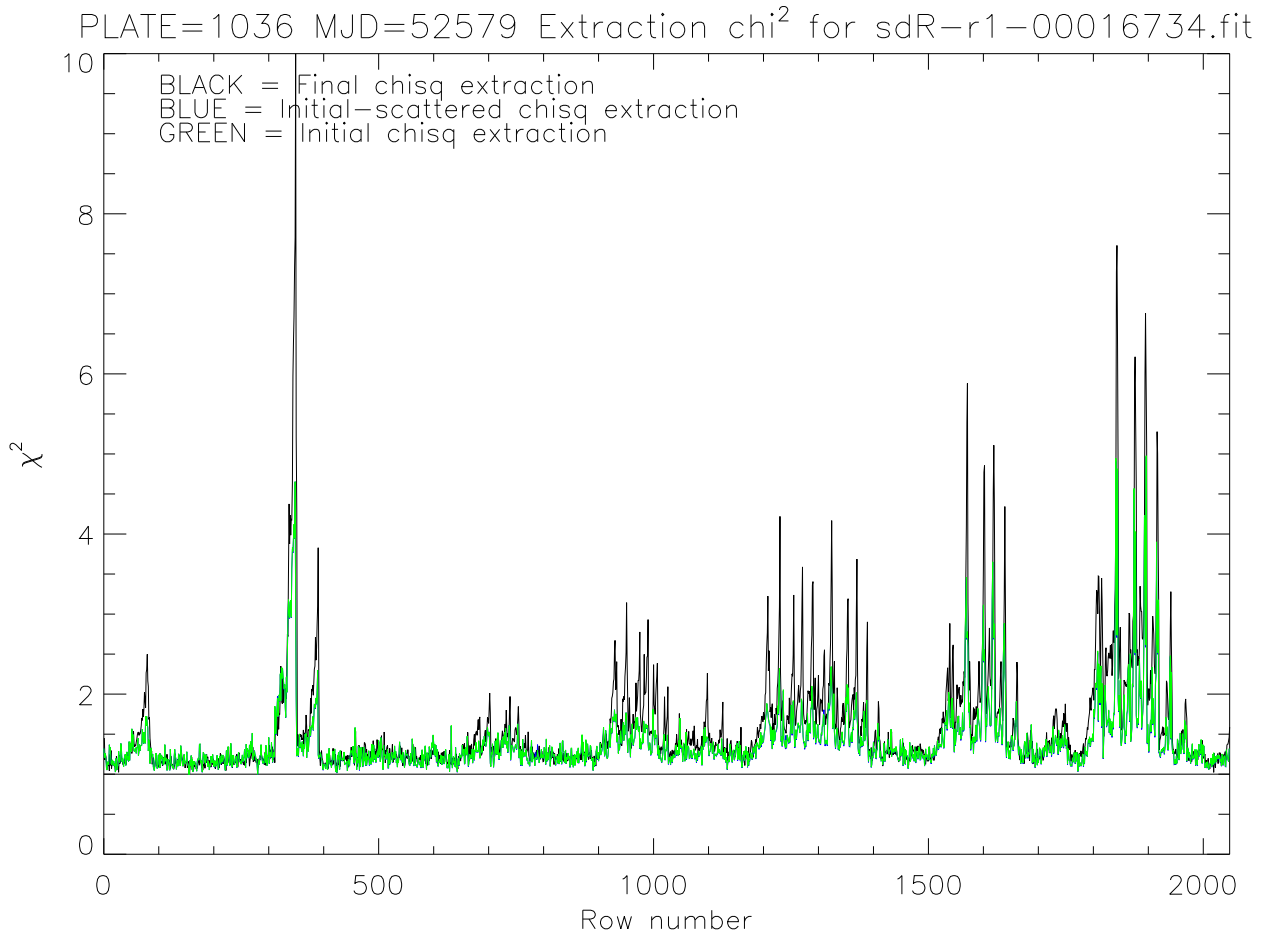

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r1−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.682
Max value = 1.347
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 14:40:35 2008

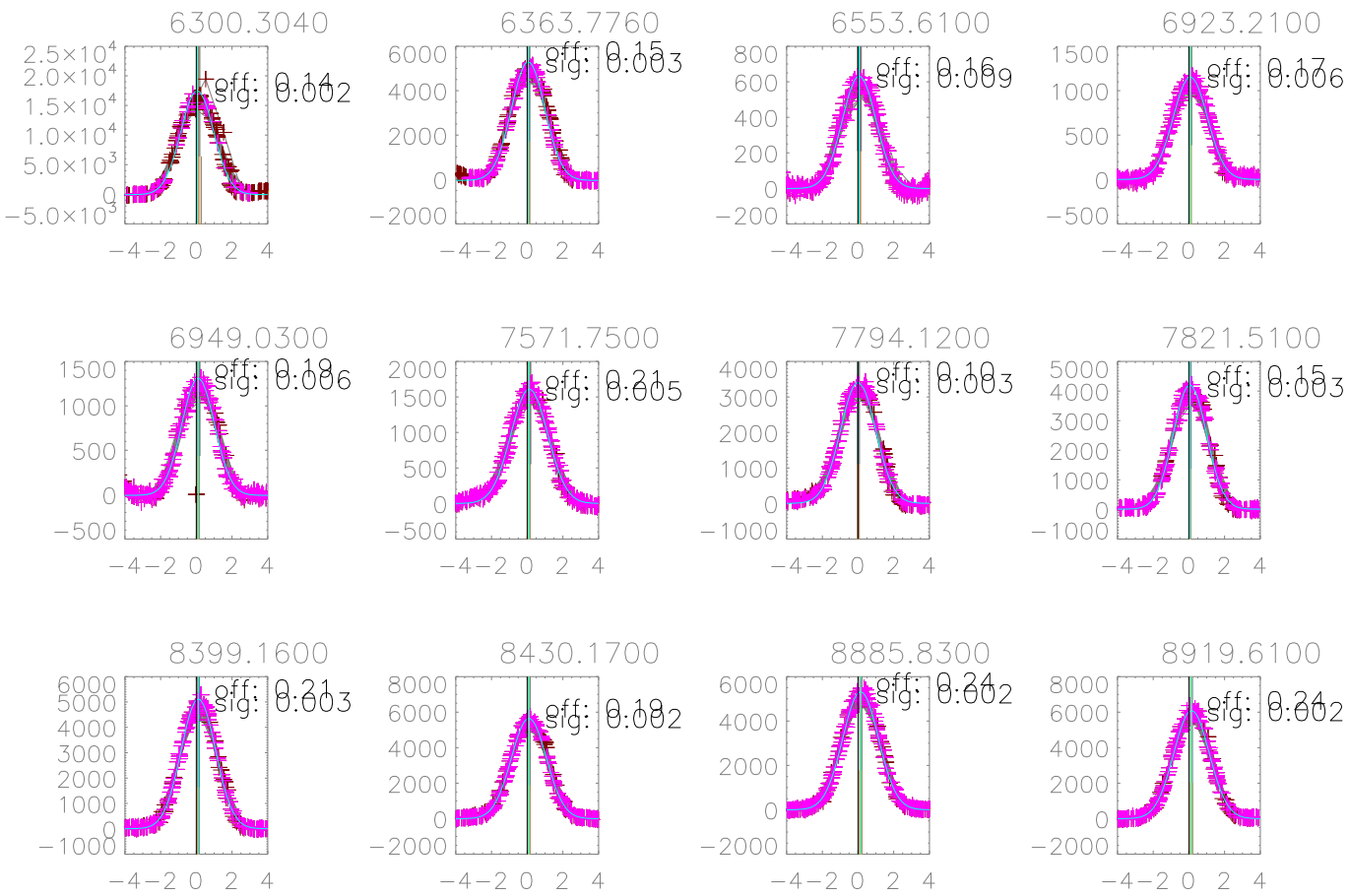

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016734.fi
49.1
49.1
49.1
38.2
38.2
27.3
27.3
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

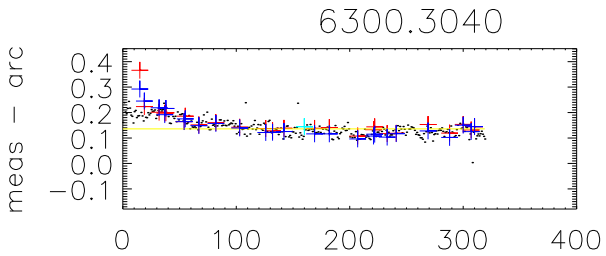

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016734.fi
Brightness [electrons/pix]
60
40
20
0
Error bars denote full range
Min value = 8.969
Max value = 57.099
6000
7000
8000
9000
λ [A]
Sat Feb 23 14:42:14 2008

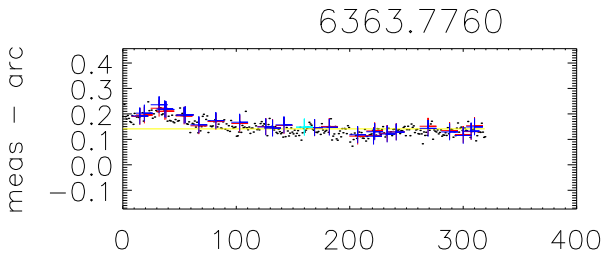

PLATE=1036 MJD=52579 Scattered Light on sdR−r1−00016734.fit
16.4
12.7
12.7
9.1
9.1
9.1
9.1
9.1
5.5
5.5
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

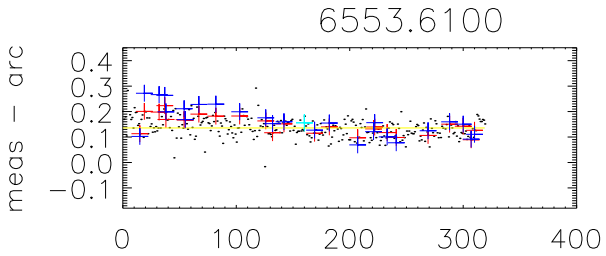

PLATE=1036 MJD=52579 Scattered Light on sdR-r1-00016734.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.464
Max value = 17.433
Sat Feb 23 14:49:17 2008

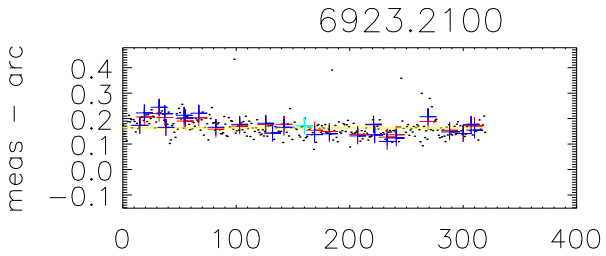

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-r1-00016734.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

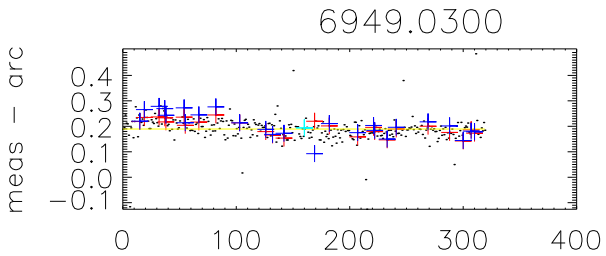

6300.3040
off: 0.14
sig: 0.002
6363.7760
off: 0.15
sig: 0.003
6553.6100
off: 0.16
sig: 0.009
6923.2100
off: 0.17
sig: 0.006
6949.0300
off: 0.18
sig: 0.006
7571.7500
off: 0.21
sig: 0.005
7794.1200
off: 0.10
sig: 0.003
7821.5100
off: 0.15
sig: 0.003
8399.1600
off: 0.21
sig: 0.003
8430.1700
off: 0.18
sig: 0.002
8885.8300
off: 0.24
sig: 0.002
8919.6100
off: 0.24
sig: 0.002

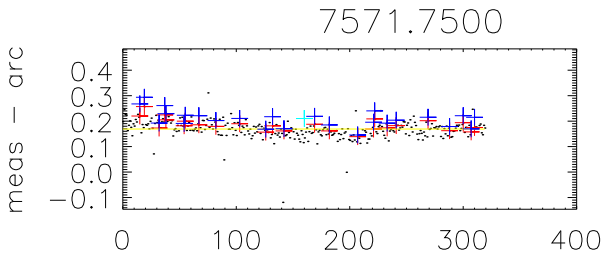

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

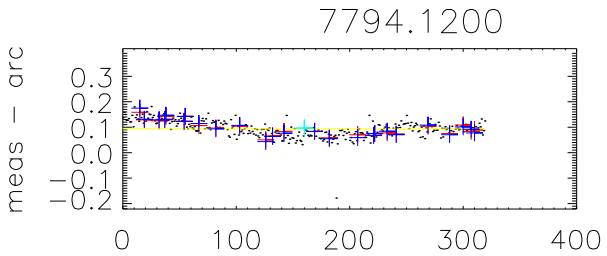

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

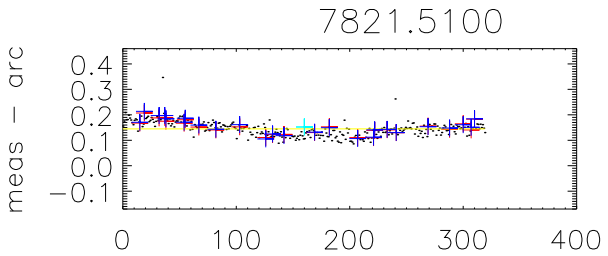

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

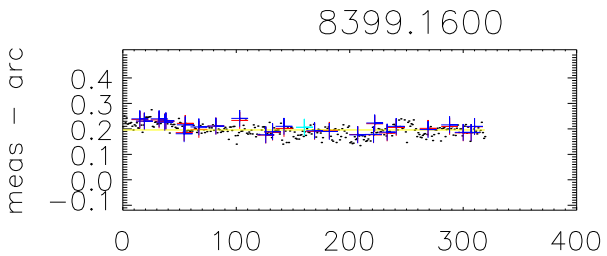

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

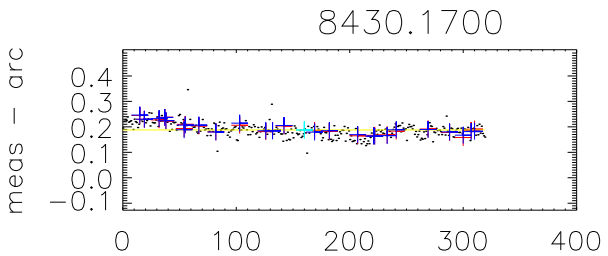

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

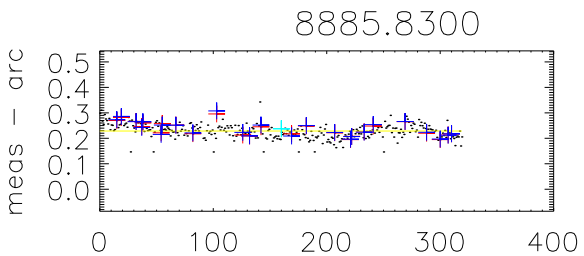

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

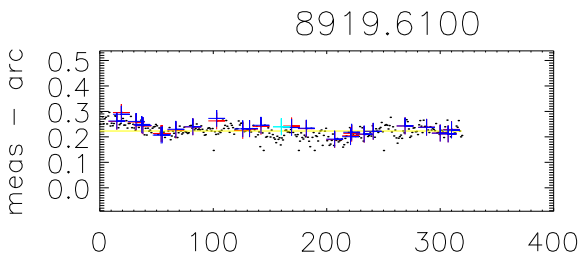

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

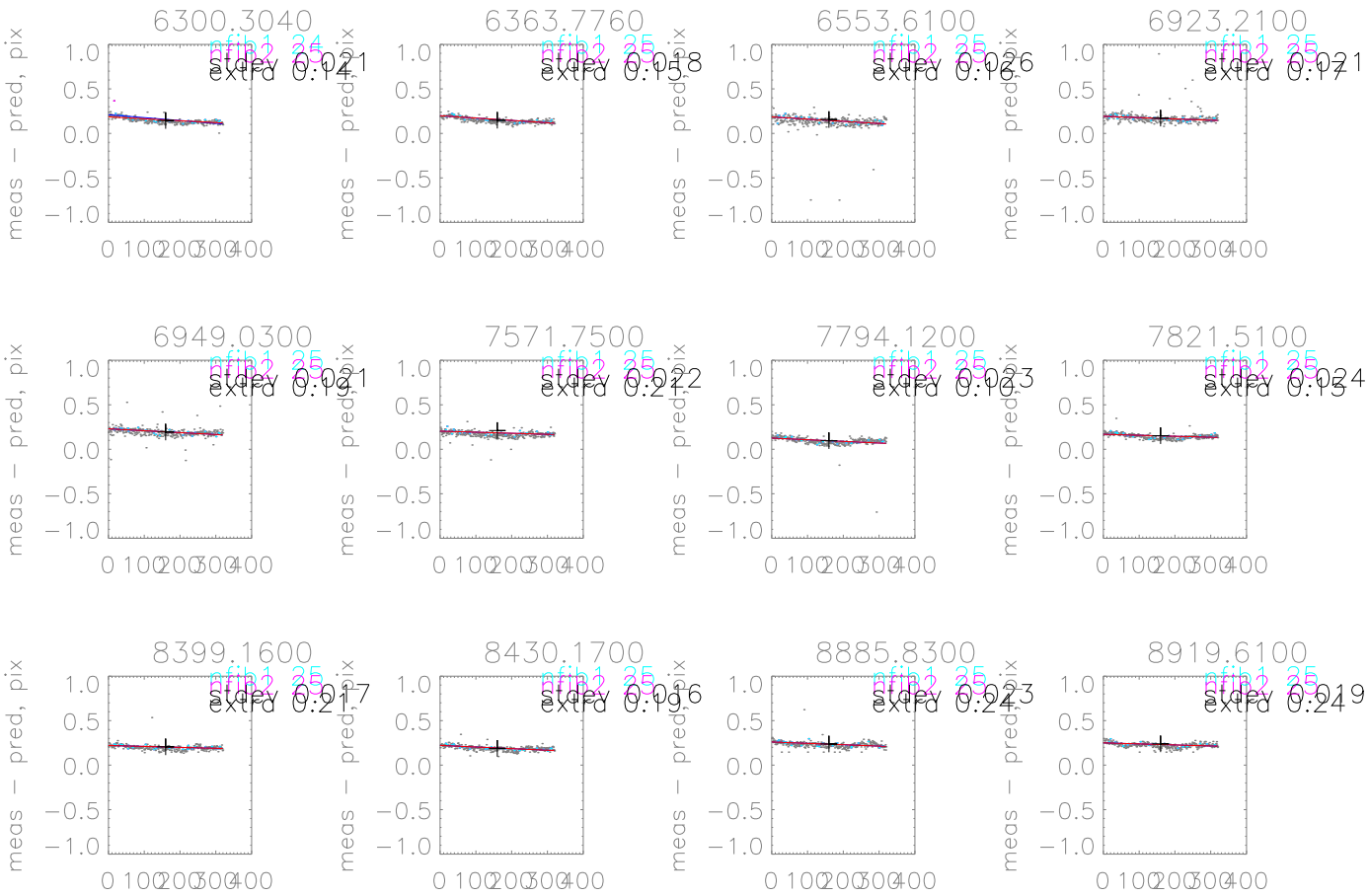

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

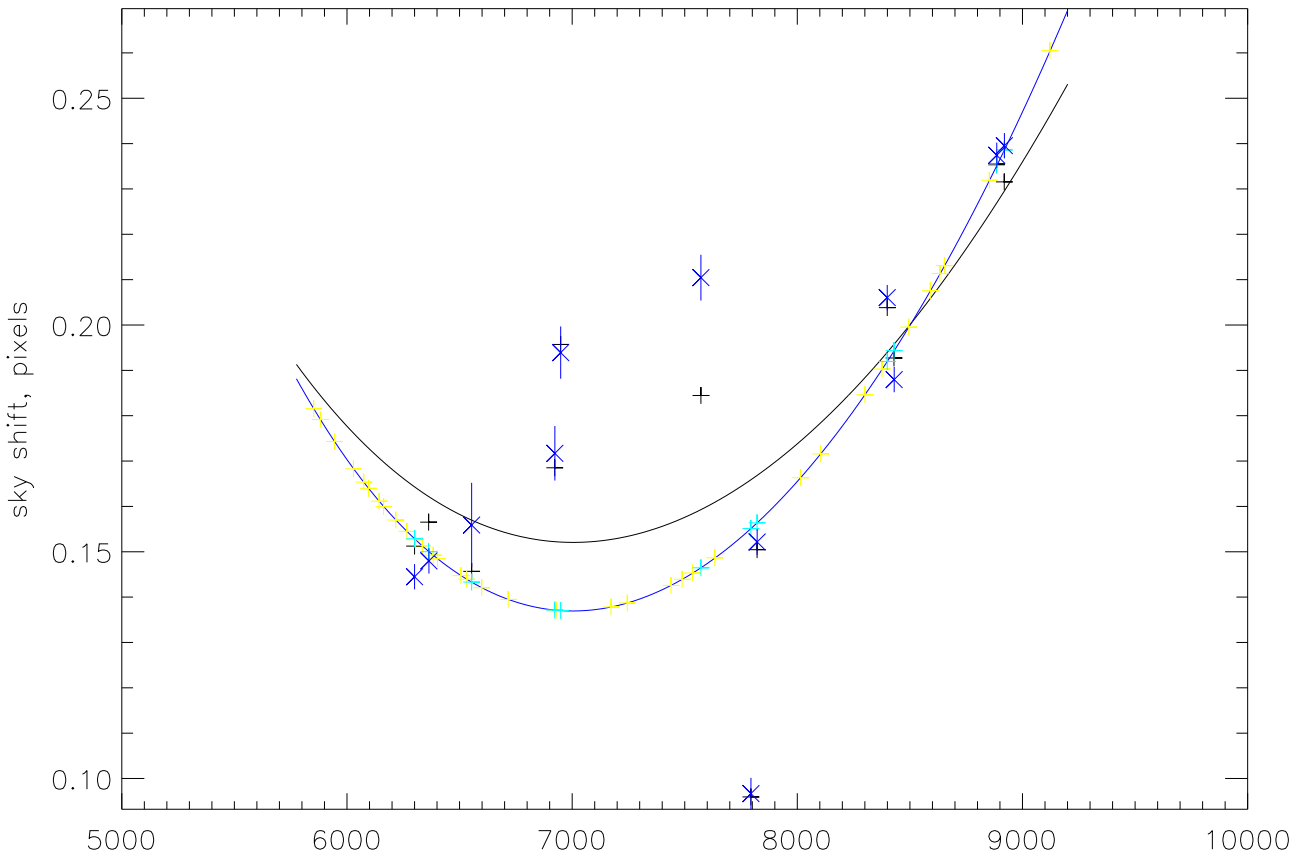

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

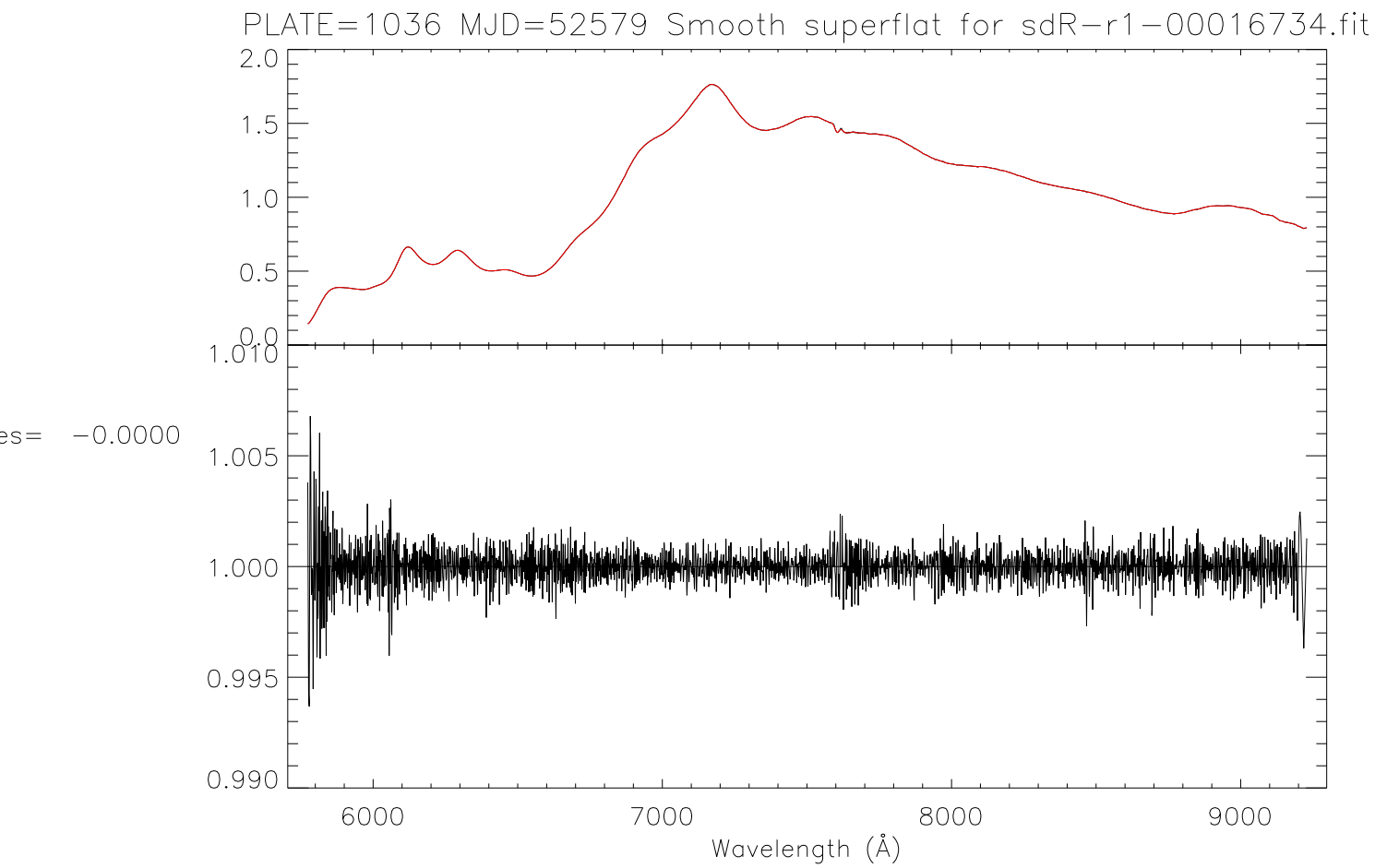

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

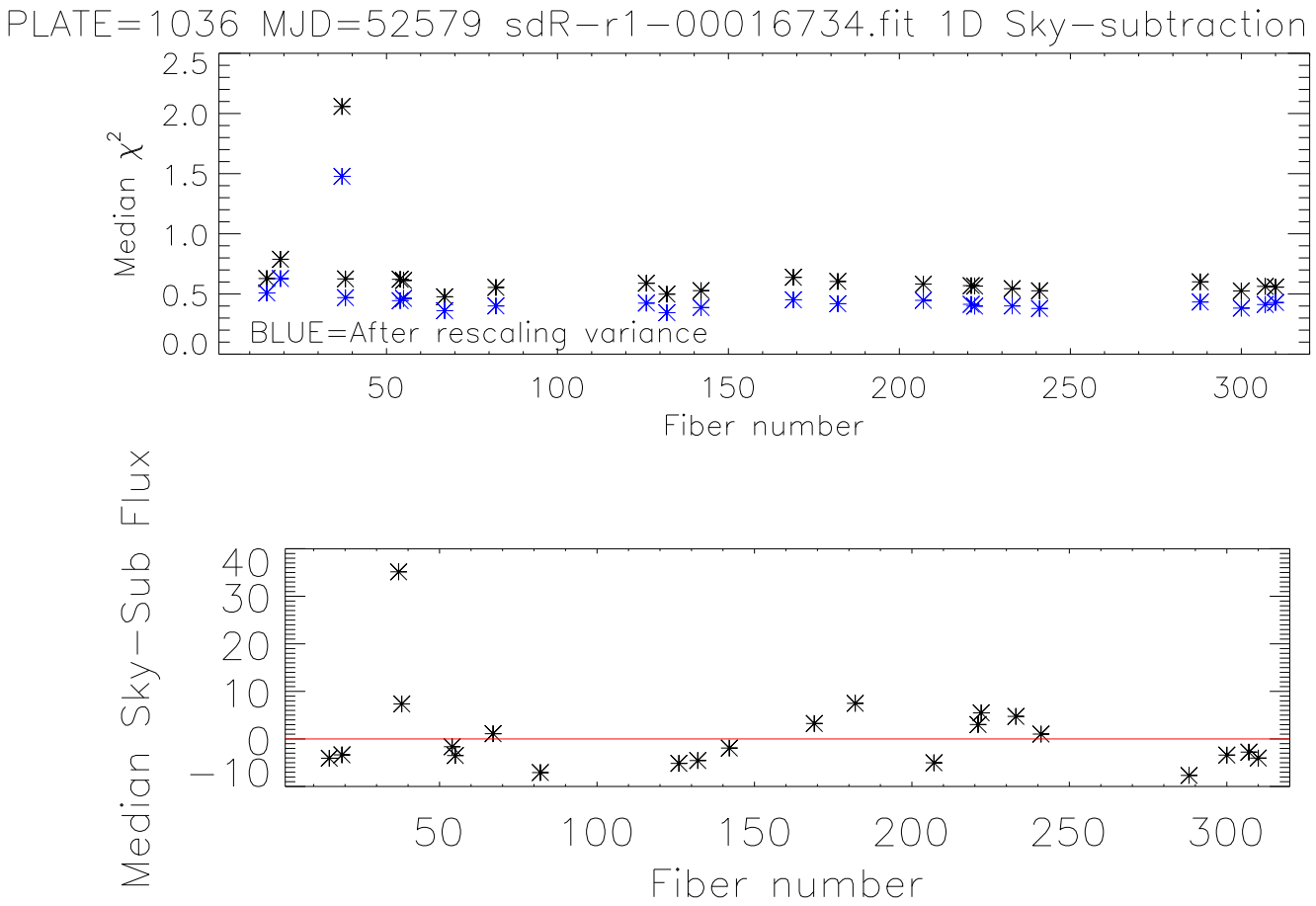

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

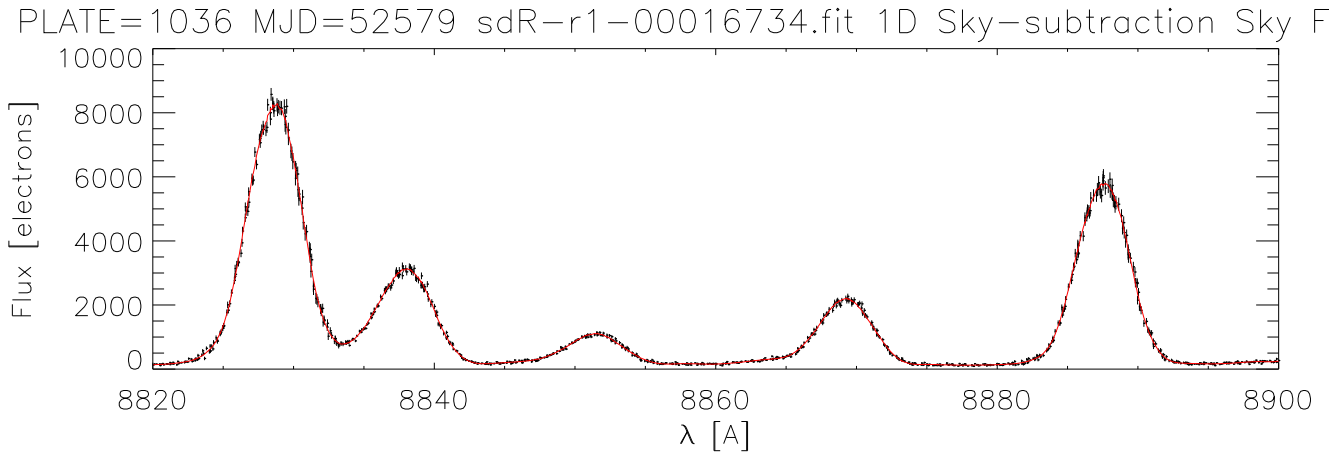

6300.3040
mfhd1 24
mfhd2 25
stdev 0.021
extra 0.14
6363.7760
mfhd1 25
mfhd2 25
stdev 0.018
extra 0.15
6553.6100
mfhd1 25
mfhd2 25
stdev 0.026
extra 0.16
6923.2100
mfhd1 25
mfhd2 25
stdev 0.021
extra 0.17
6949.0300
mfhd1 25
mfhd2 25
stdev 0.021
extra 0.19
7571.7500
mfhd1 25
mfhd2 25
stdev 0.022
extra 0.21
7794.1200
mfhd1 25
mfhd2 25
stdev 0.023
extra 0.19
7821.5100
mfhd1 25
mfhd2 25
stdev 0.024
extra 0.15
8399.1600
mfhd1 25
mfhd2 25
stdev 0.017
extra 0.21
8430.1700
mfhd1 25
mfhd2 25
stdev 0.016
extra 0.19
8885.8300
mfhd1 25
mfhd2 25
stdev 0.023
extra 0.24
8919.6100
mfhd1 25
mfhd2 25
stdev 0.019
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

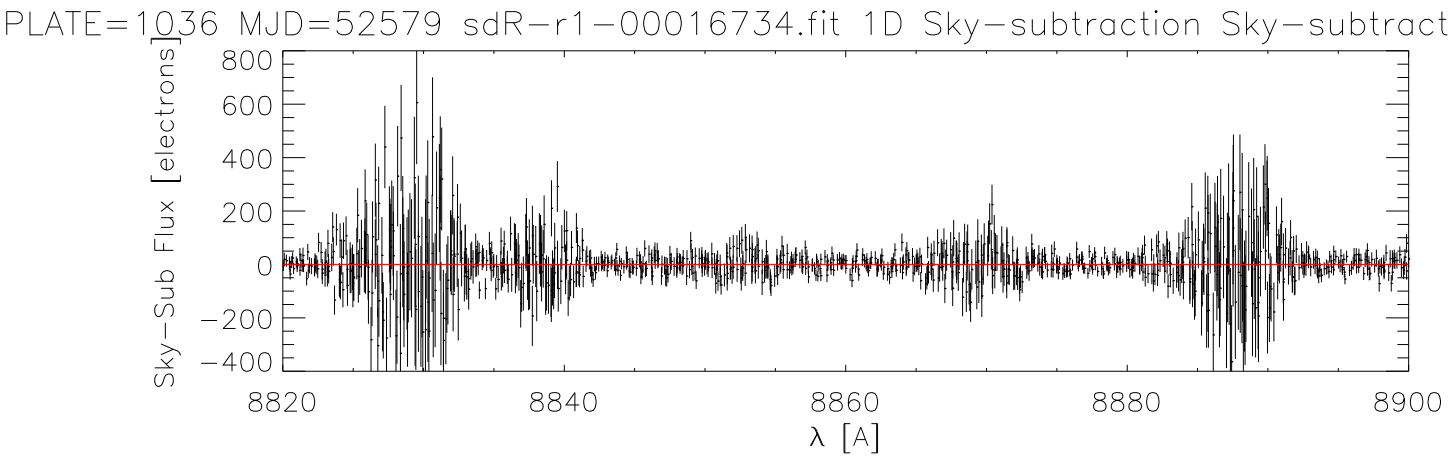

sky shift, pixels
0.25
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

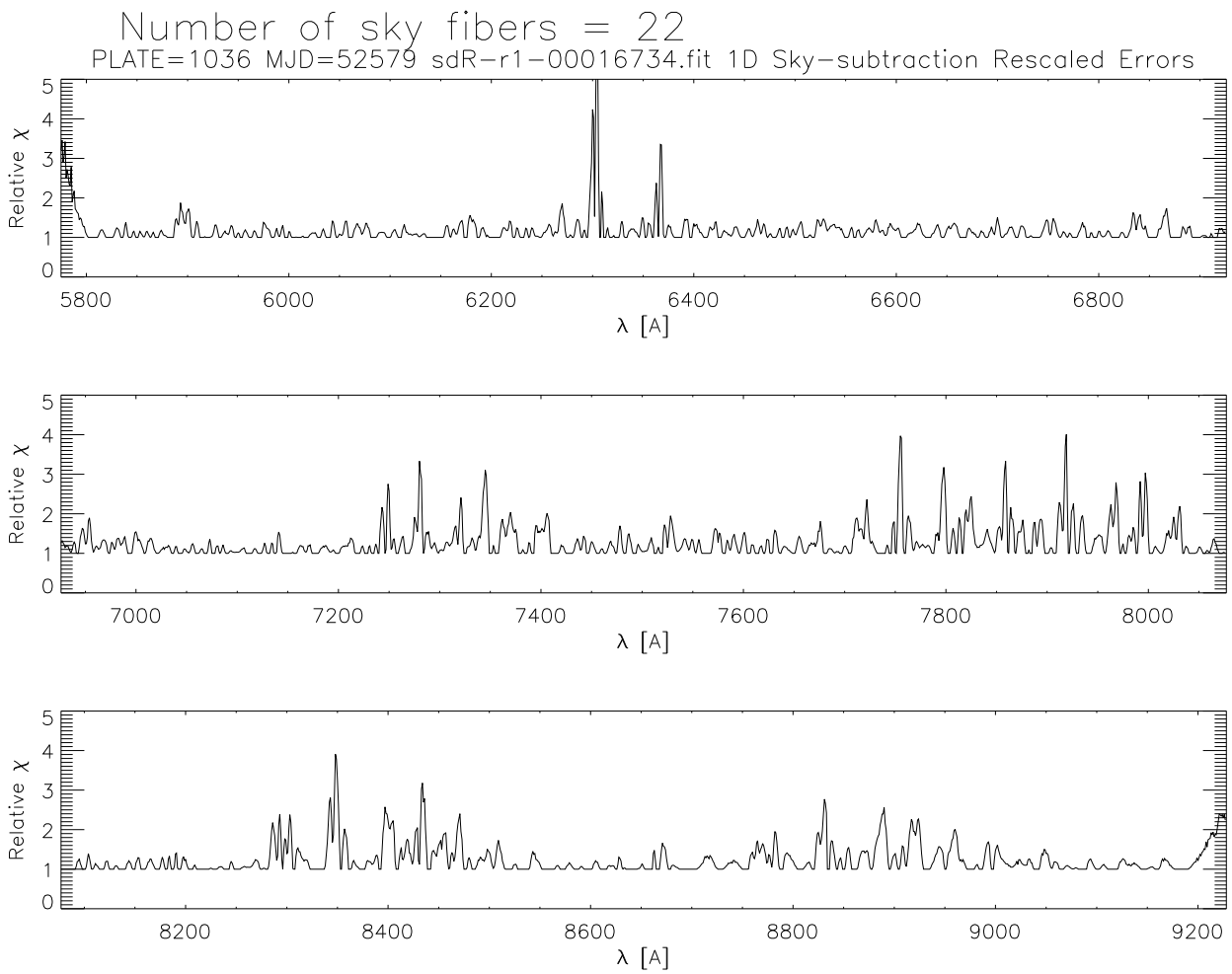

PLATE=1036 MJD=52579 Smooth superflat for sdR-r1-00016734.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

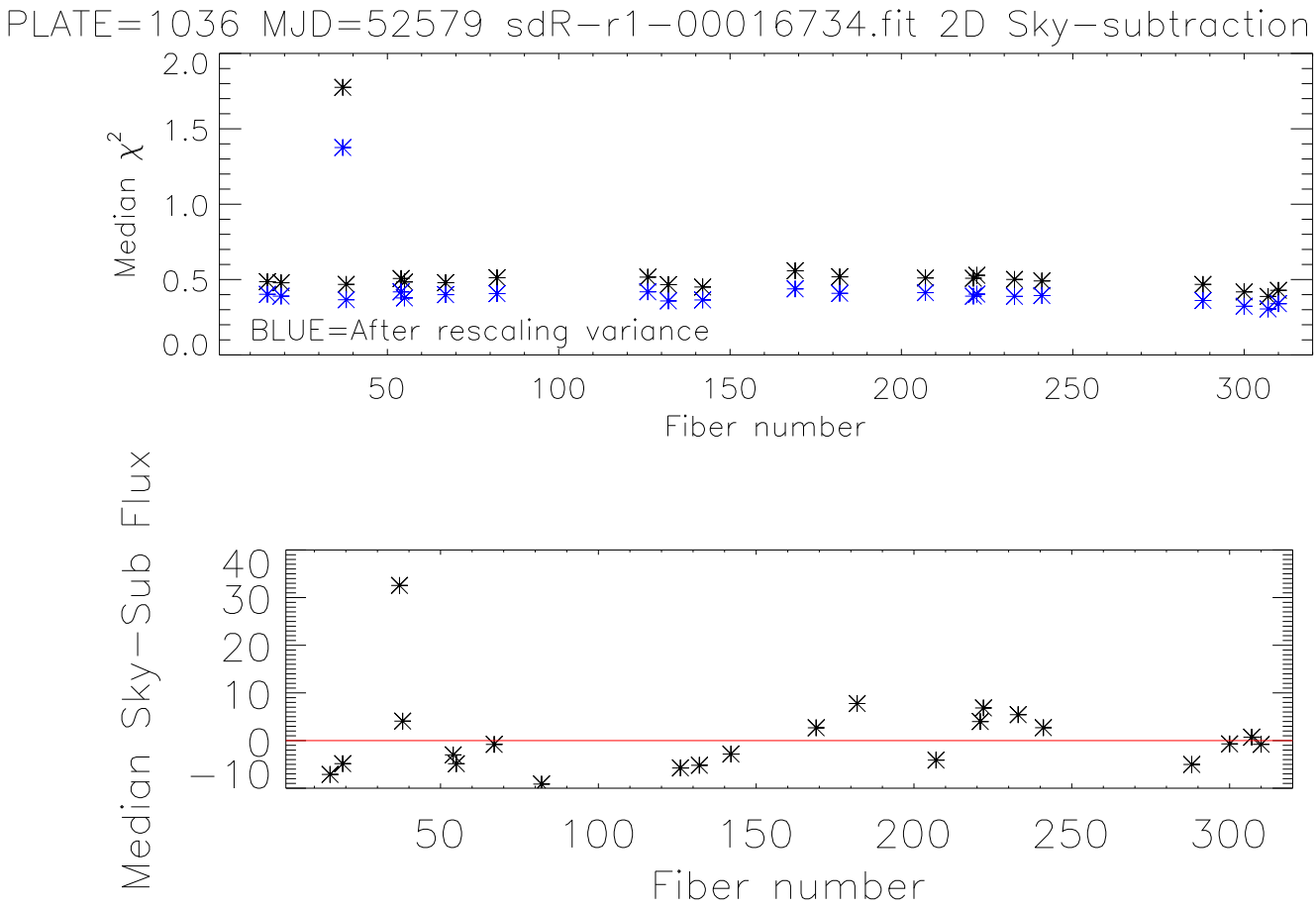
es= −0.0000

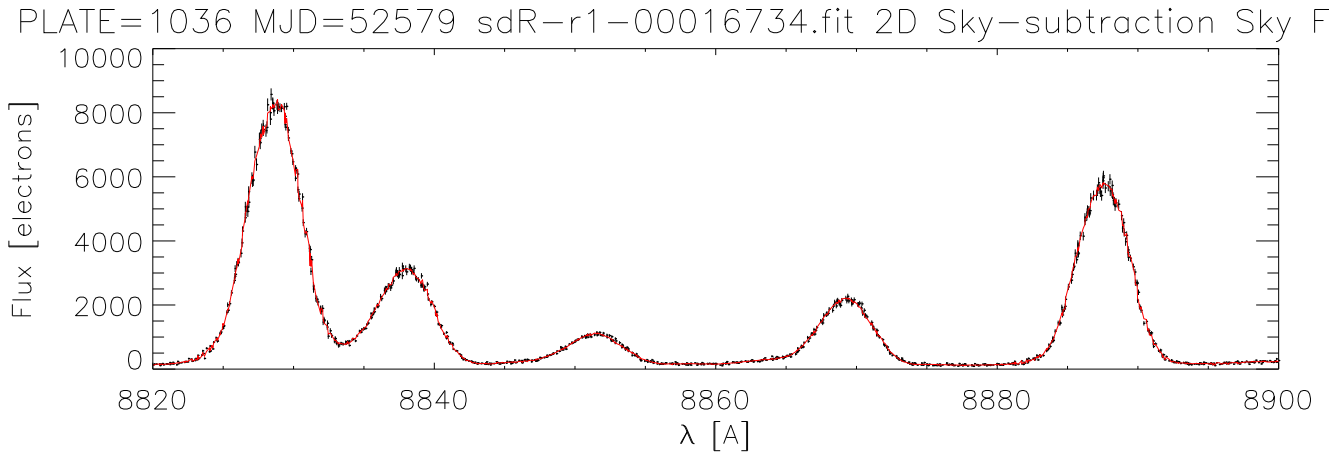

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

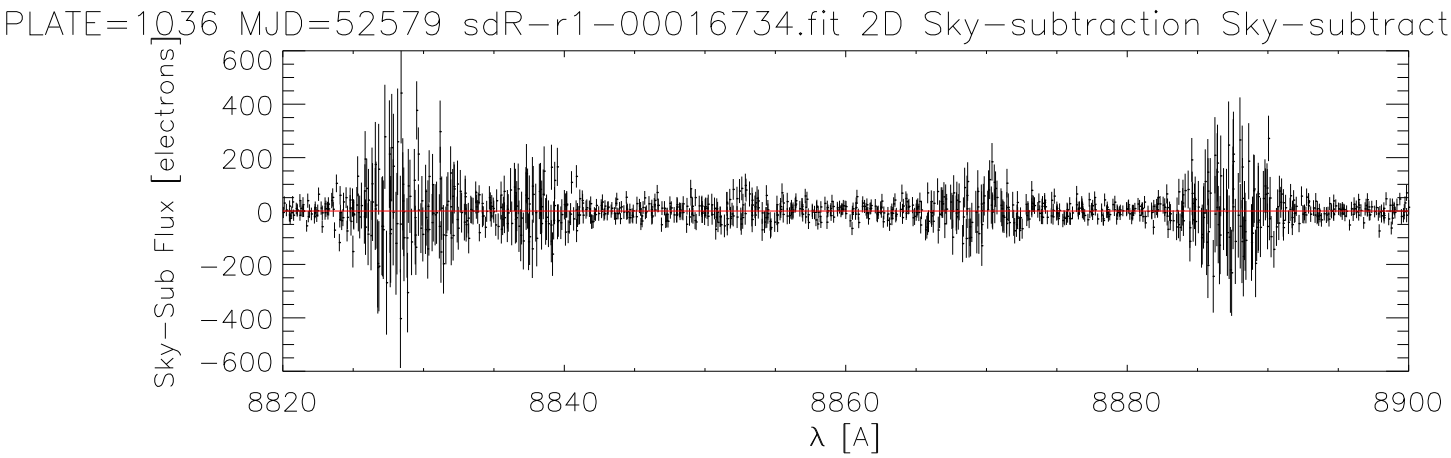

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

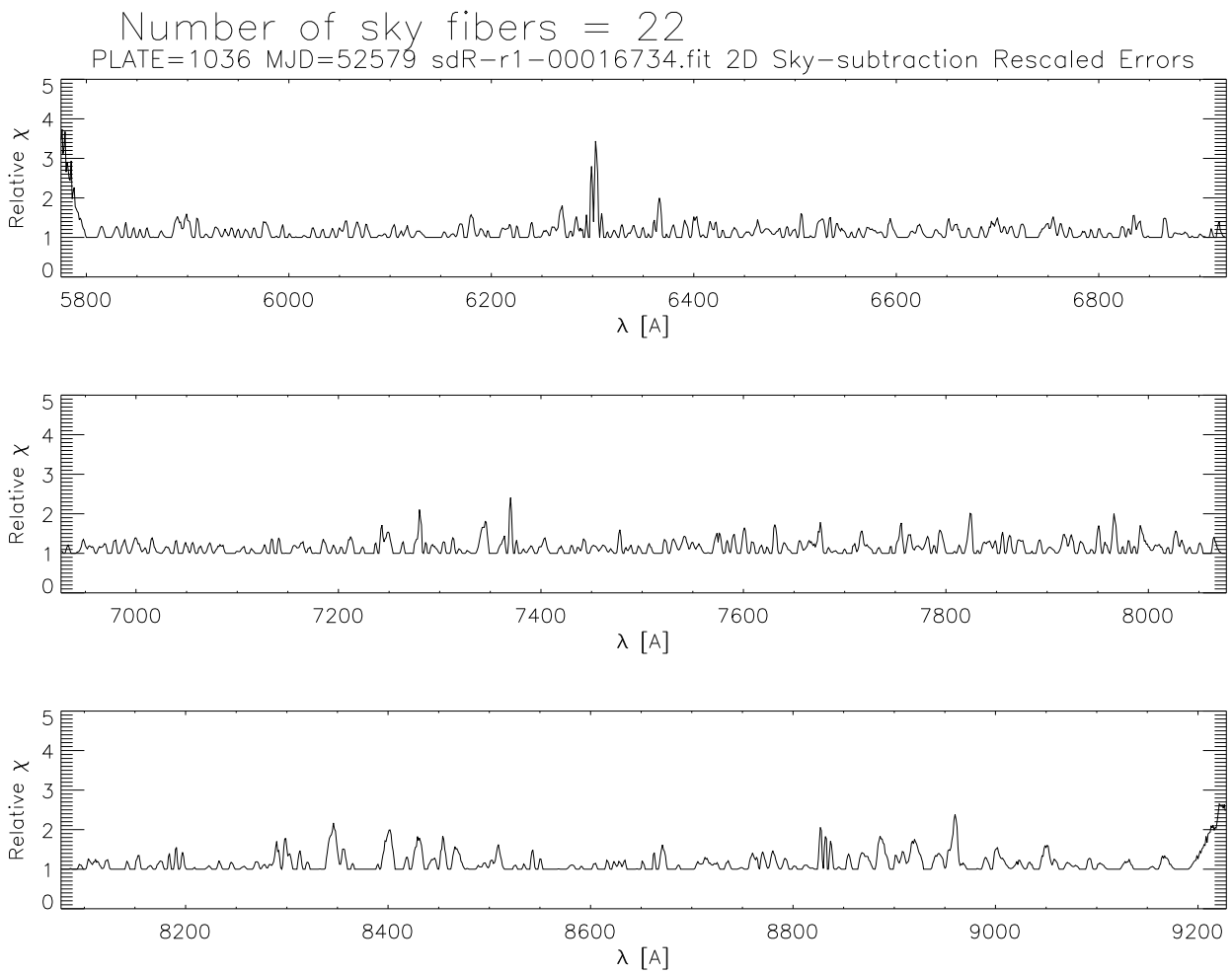

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

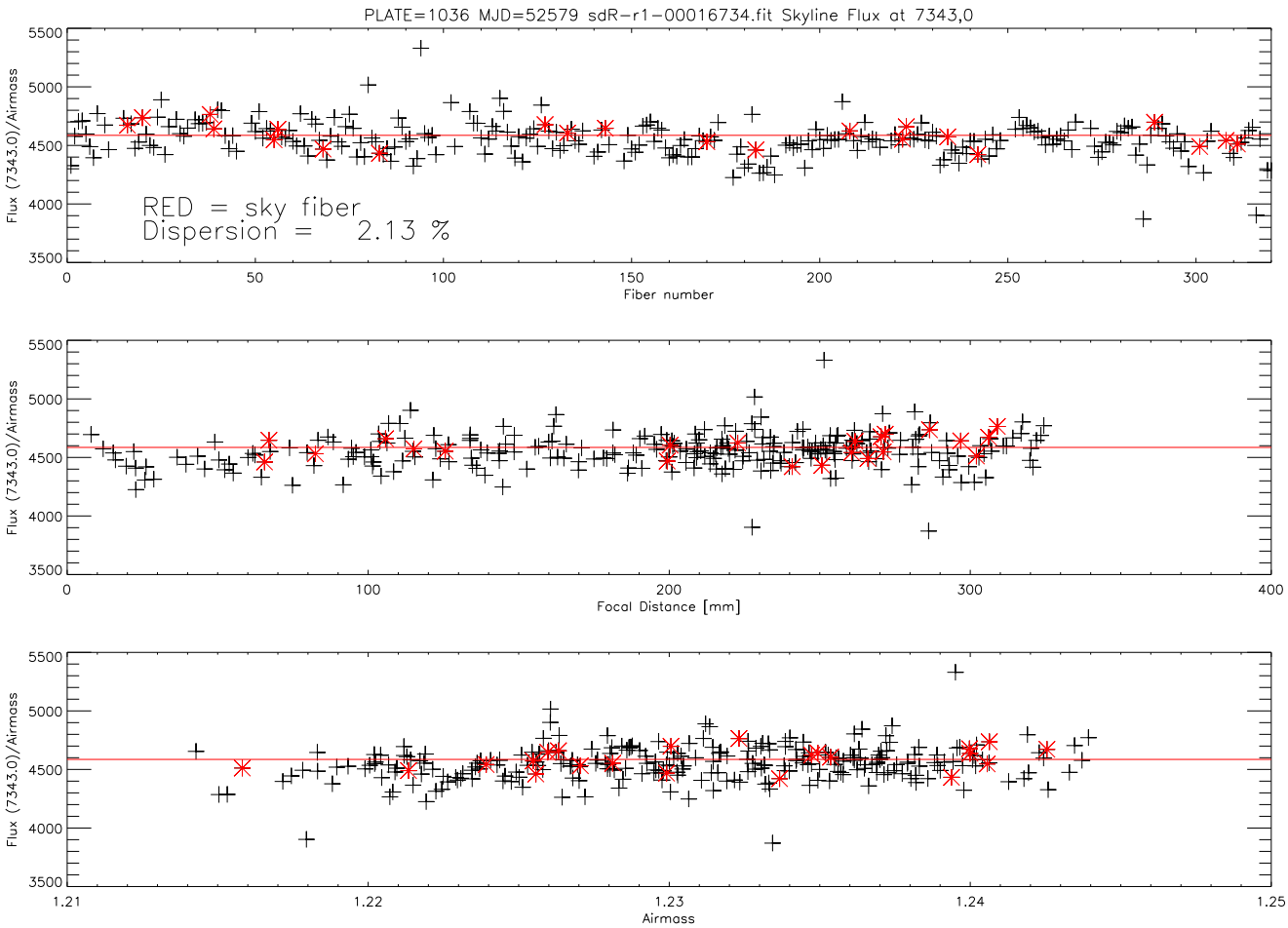

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016734.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

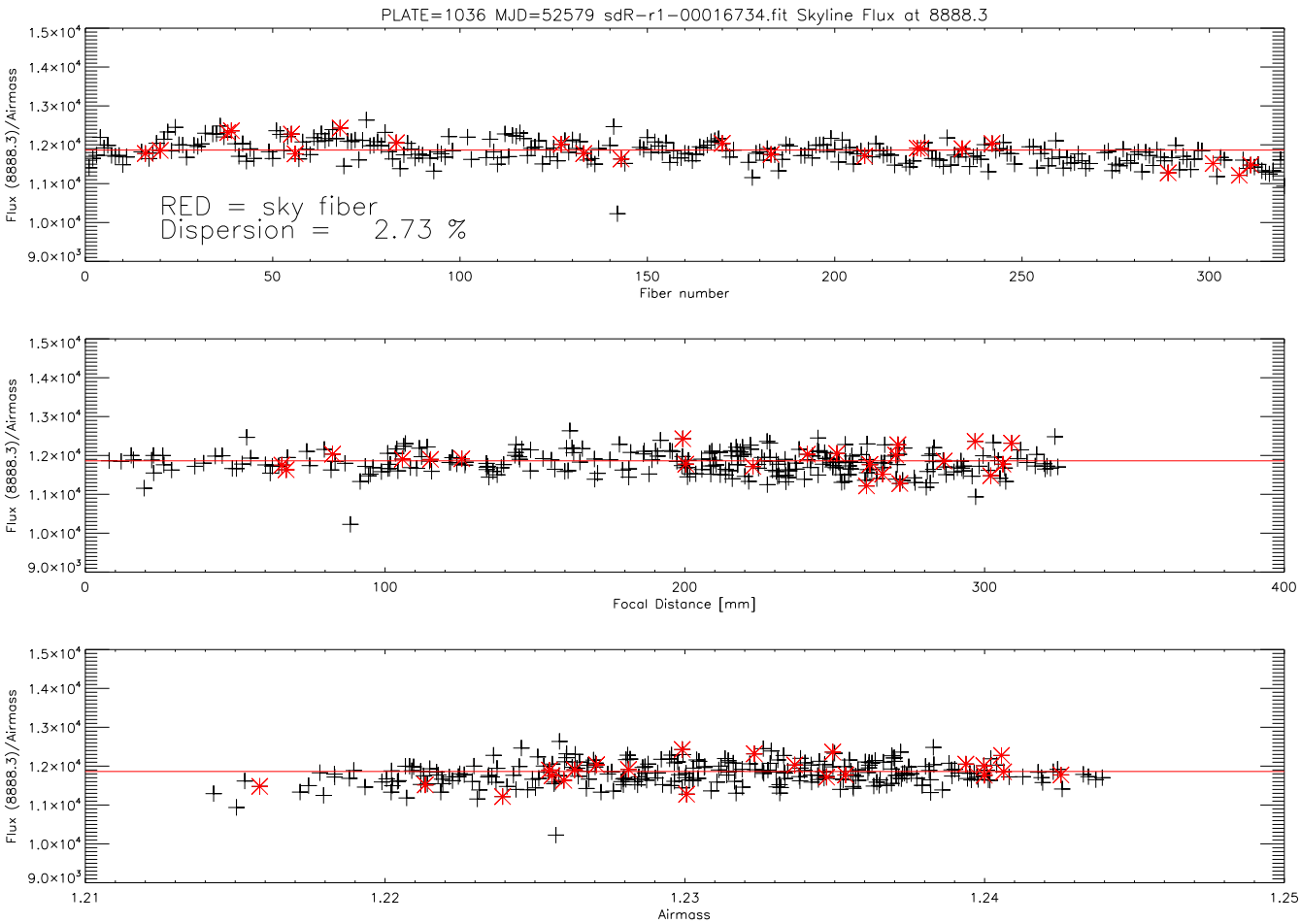

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 2D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
50
100
150
200
250
300
Fiber number

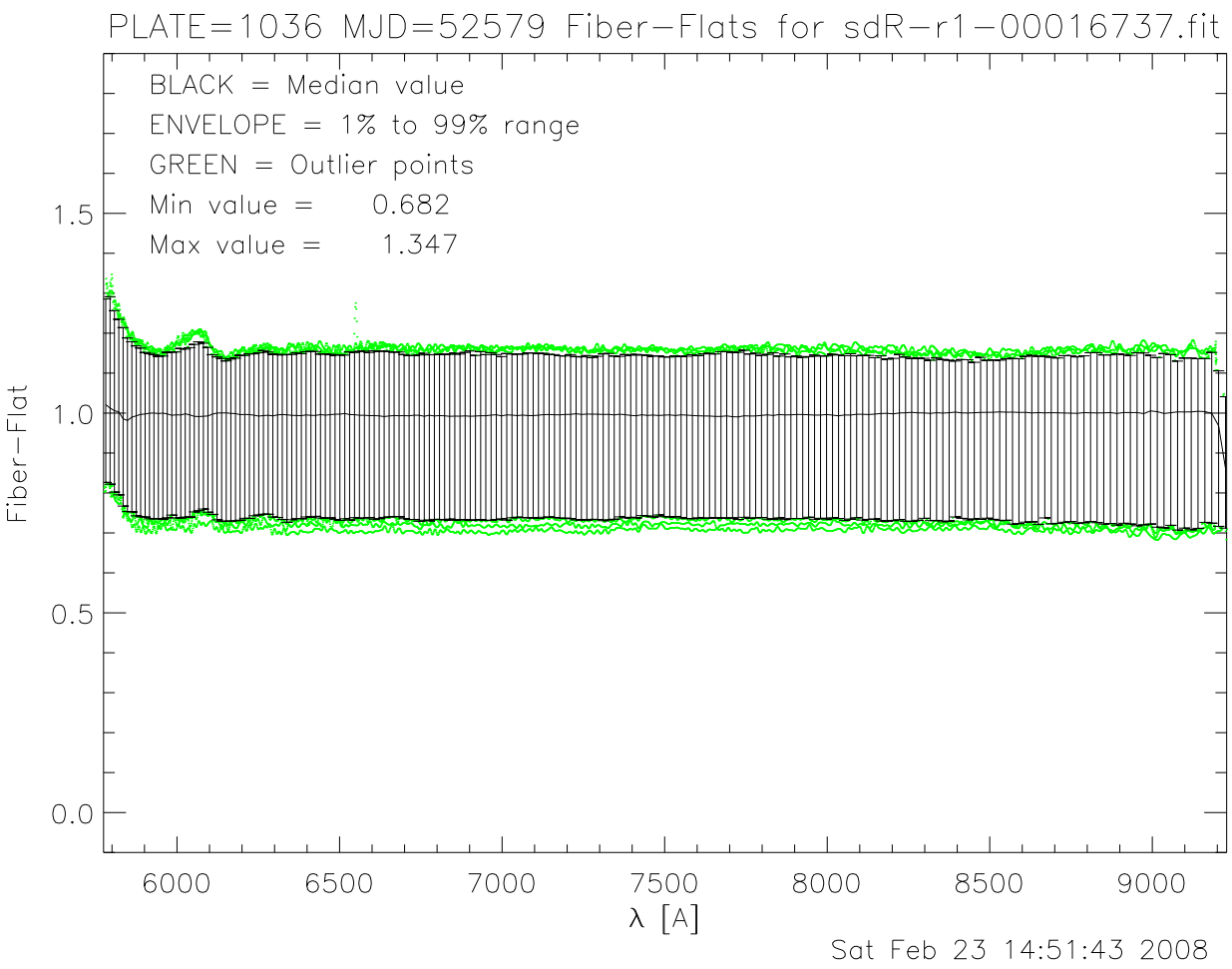

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

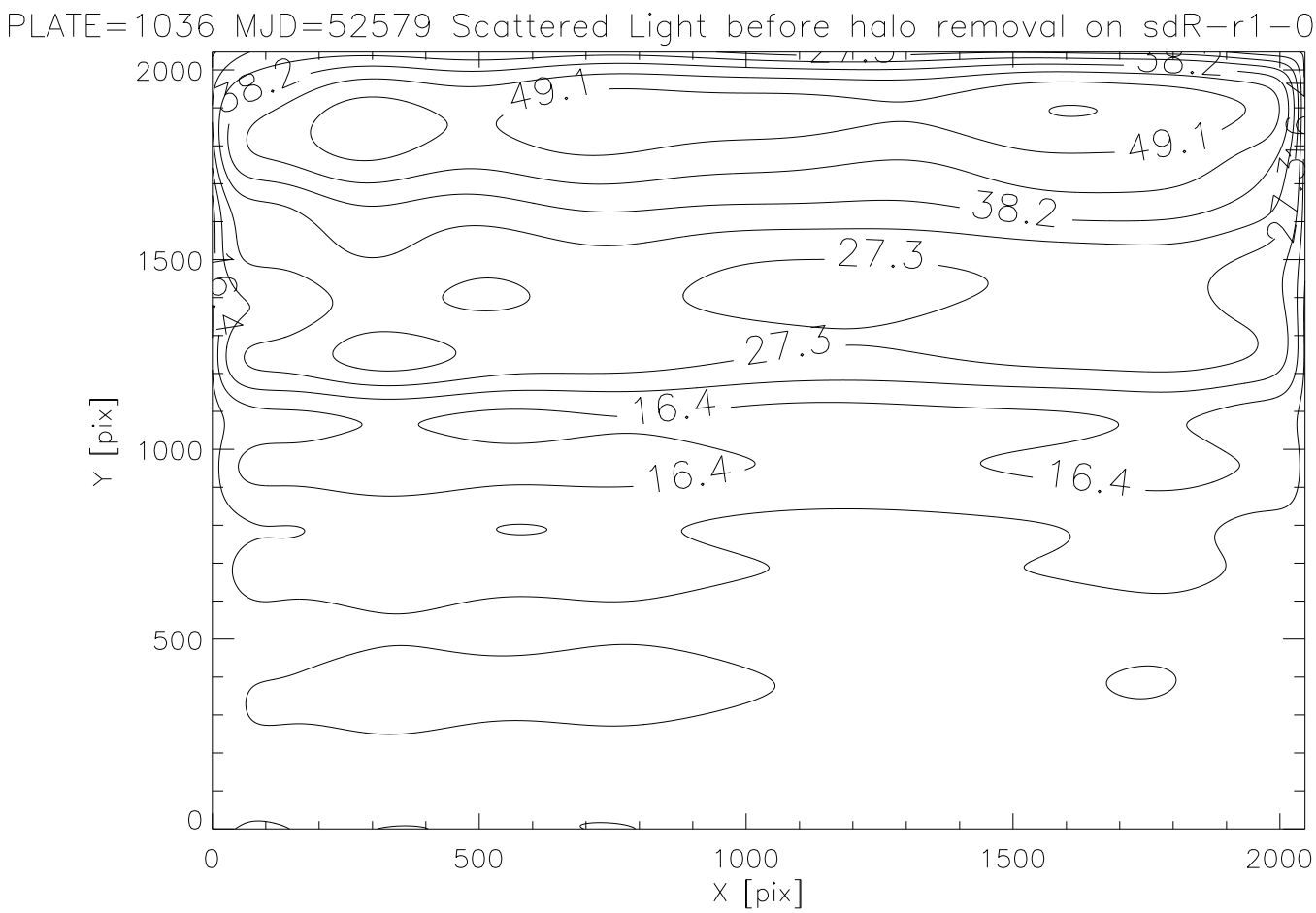

PLATE=1036 MJD=52579 sdR-r1-00016734.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

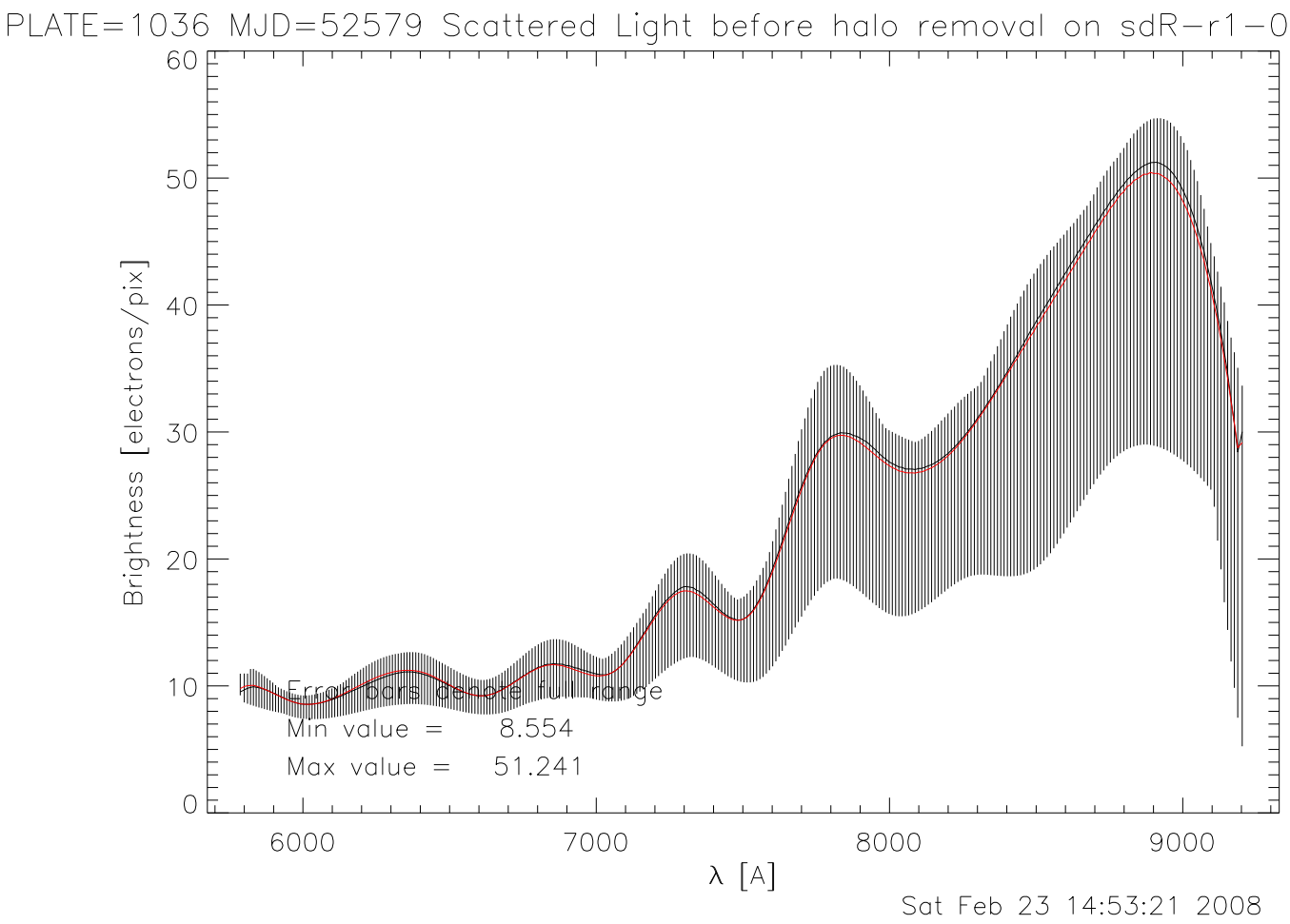

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016734.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

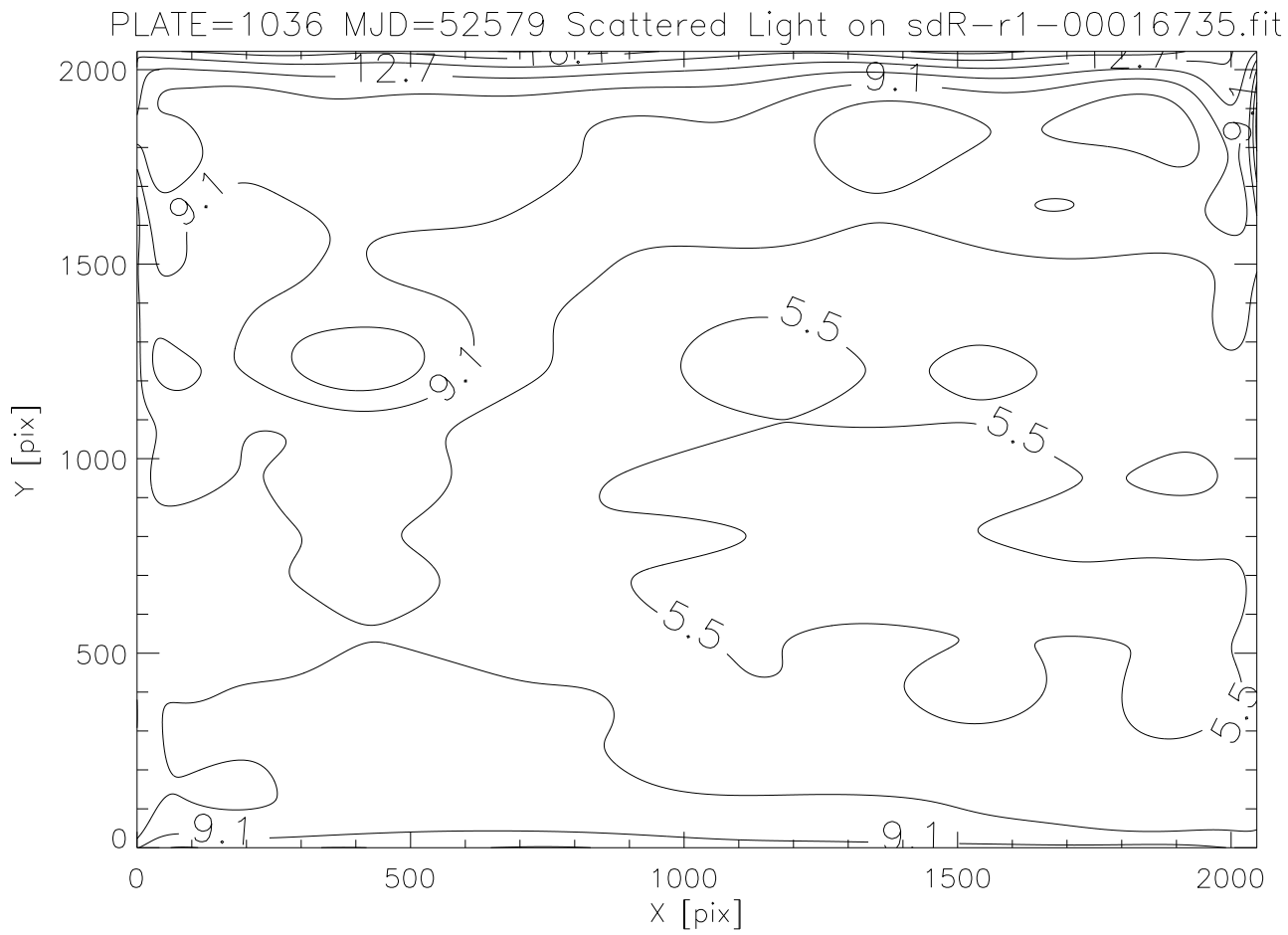

PLATE=1036 MJD=52579 sdR-r1-00016734.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.13 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

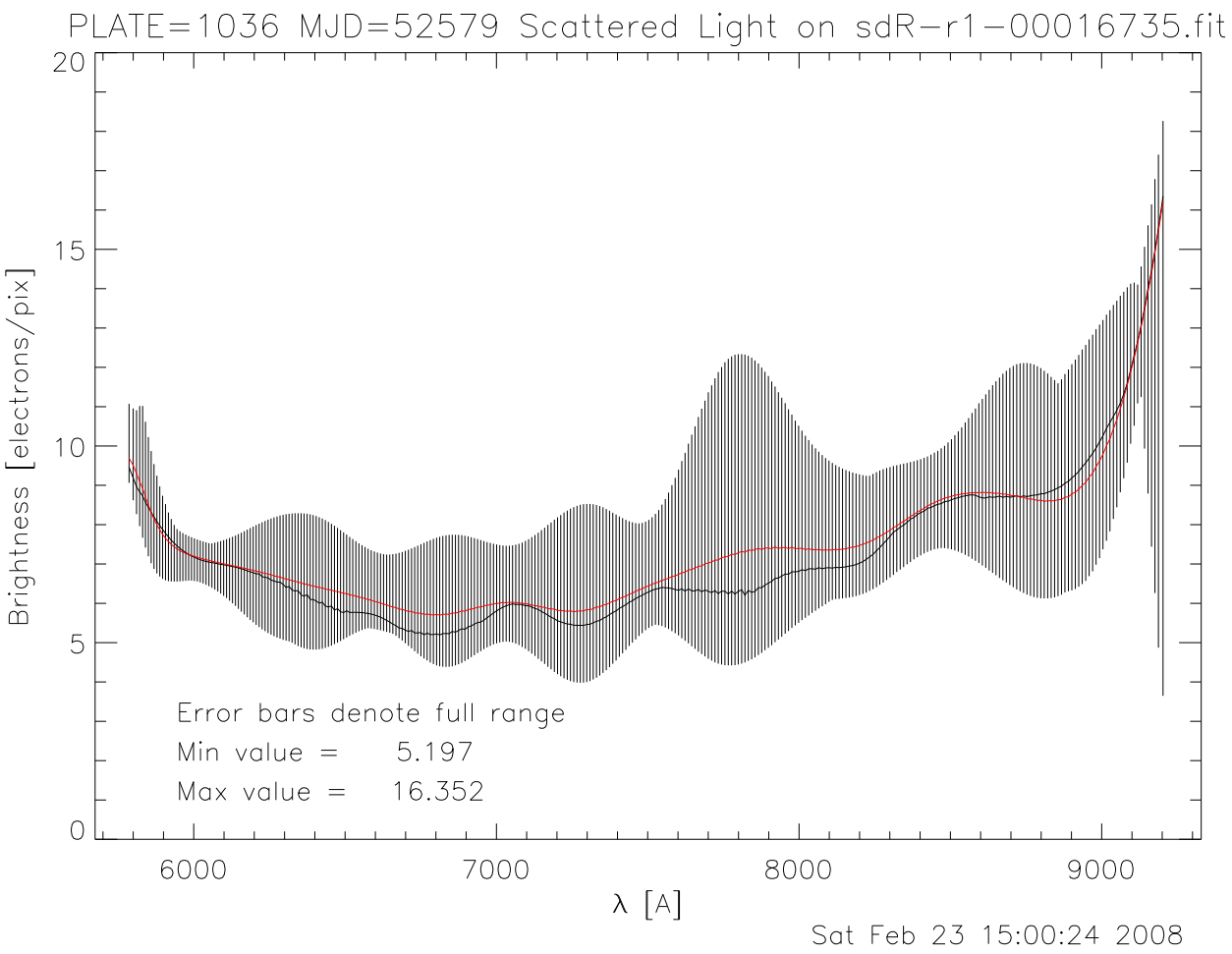

PLATE=1036 MJD=52579 sdR-r1-00016734.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.73 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

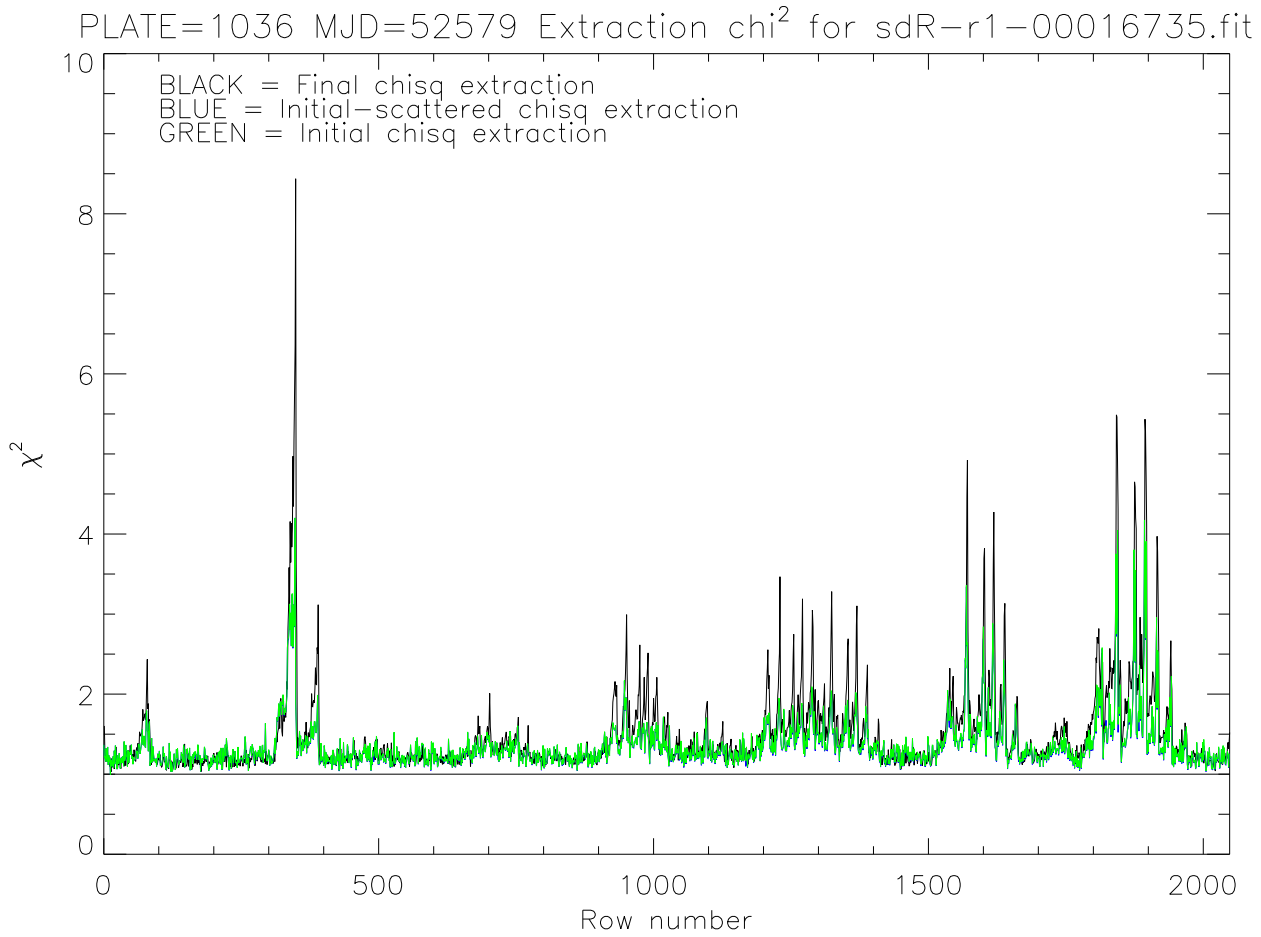

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r1−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.682
Max value = 1.347
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 14:51:43 2008

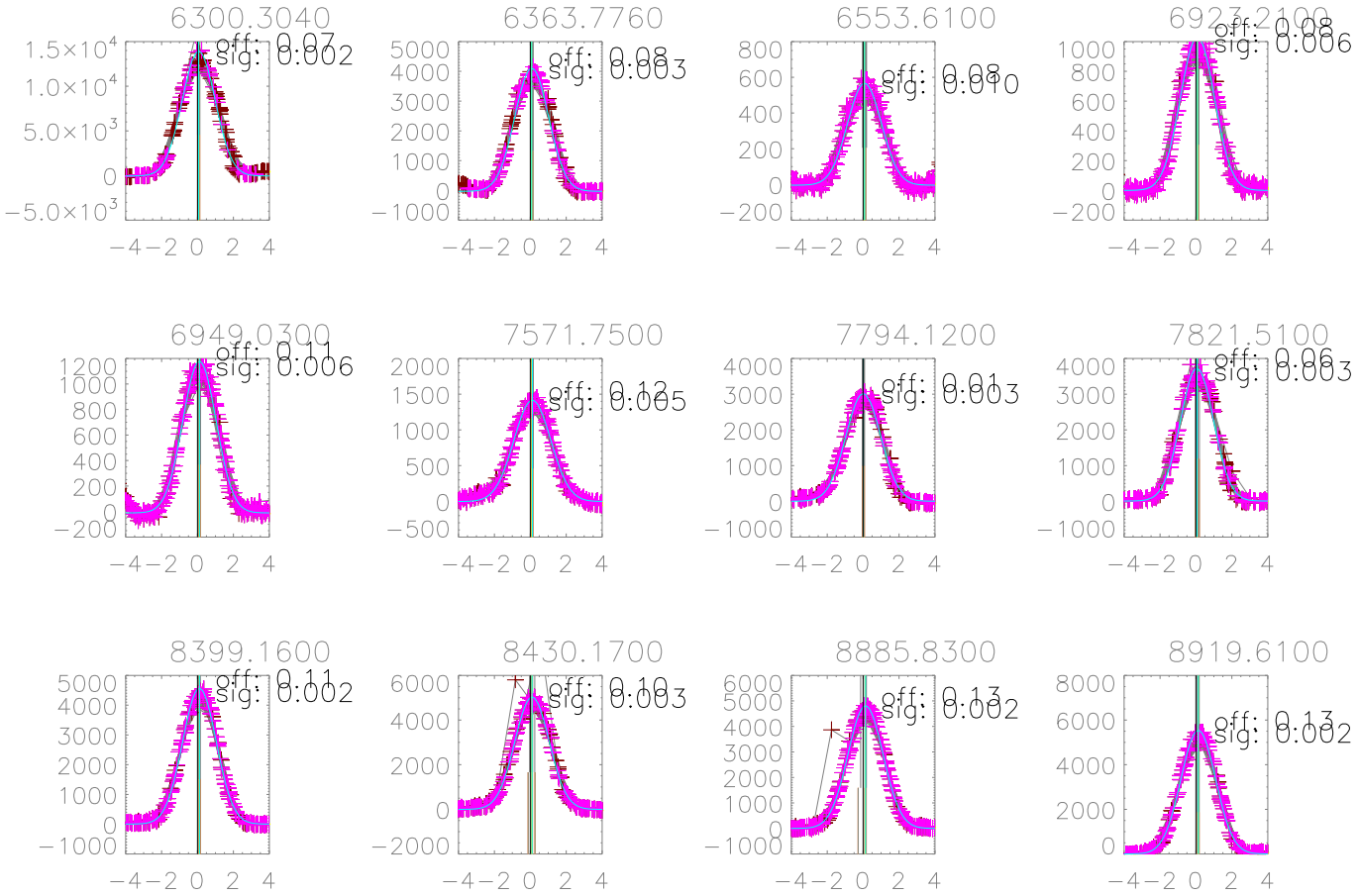

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR−r1−00016735.fi
68.2
49.1
49.1
38.2
27.3
27.3
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

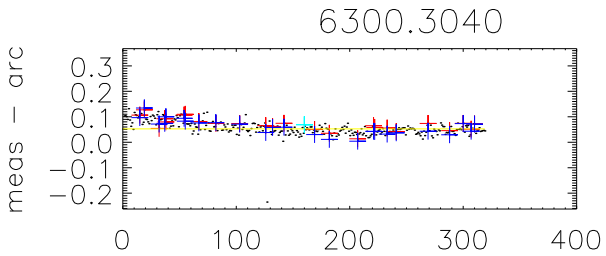

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016735.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.554
Max value = 51.241
Sat Feb 23 14:53:21 2008

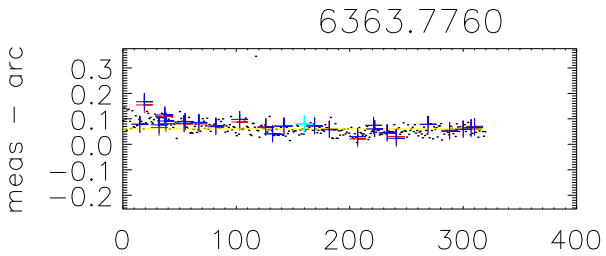

PLATE=1036 MJD=52579 Scattered Light on sdR-r1-00016735.fit
12.7
9.1
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

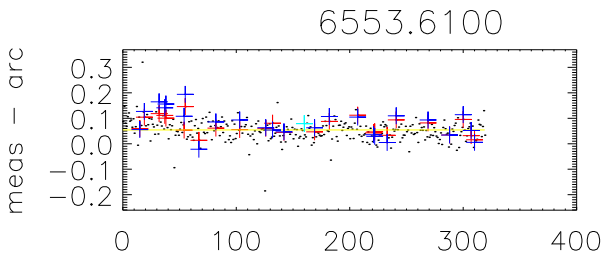

PLATE=1036 MJD=52579 Scattered Light on sdR-r1-00016735.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.197
Max value = 16.352
Sat Feb 23 15:00:24 2008

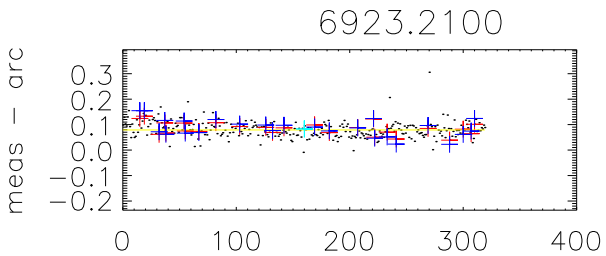

PLATE=1036 MJD=52579 Extraction chi^2 for sdR−r1−00016735.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

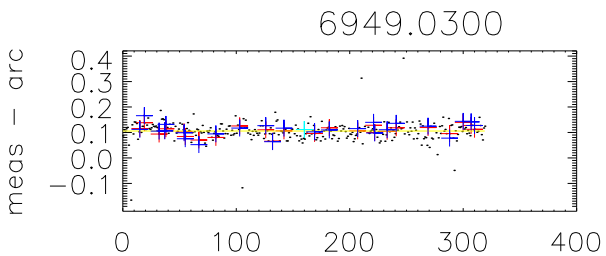

6300.3040
off: 0.07
sig: 0.002
6363.7760
off: 0.08
sig: 0.003
6553.6100
off: 0.08
sig: 0.010
6923.2100
off: 0.08
sig: 0.006
6949.0300
off: 0.11
sig: 0.006
7571.7500
off: 0.12
sig: 0.005
7794.1200
off: 0.01
sig: 0.003
7821.5100
off: 0.06
sig: 0.003
8399.1600
off: 0.11
sig: 0.002
8430.1700
off: 0.10
sig: 0.003
8885.8300
off: 0.13
sig: 0.002
8919.6100
off: 0.13
sig: 0.002

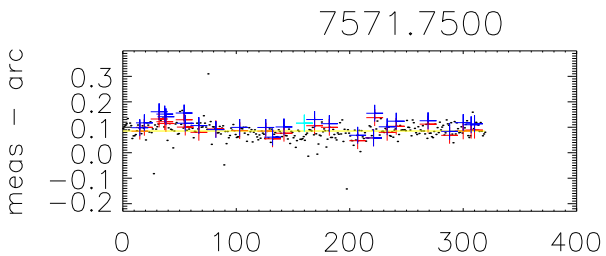

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

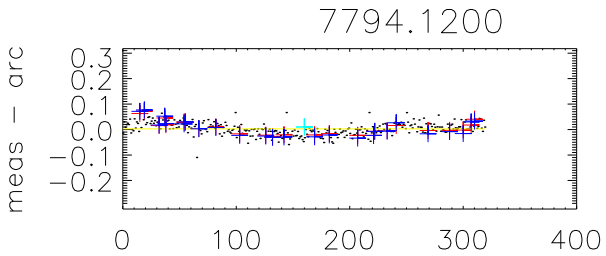

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

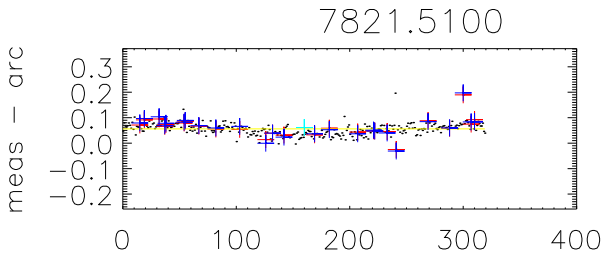

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

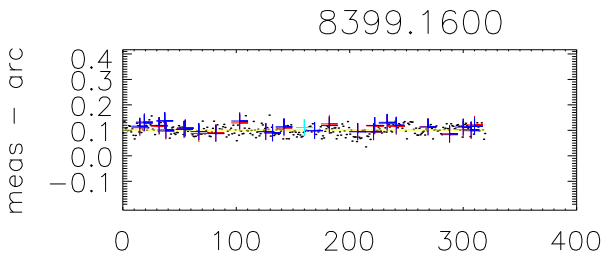

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

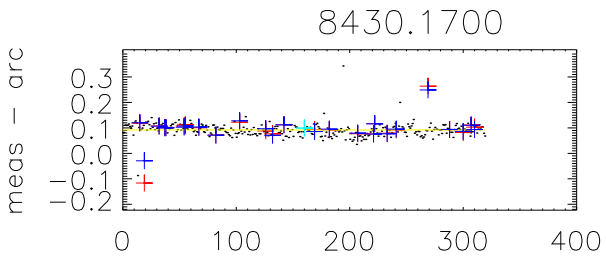

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

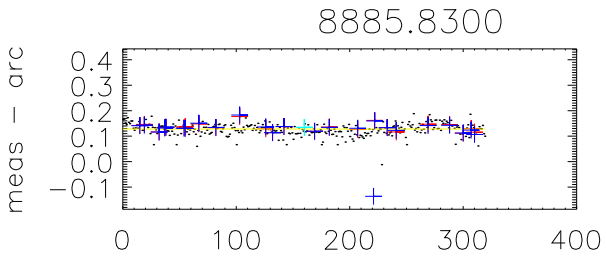

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

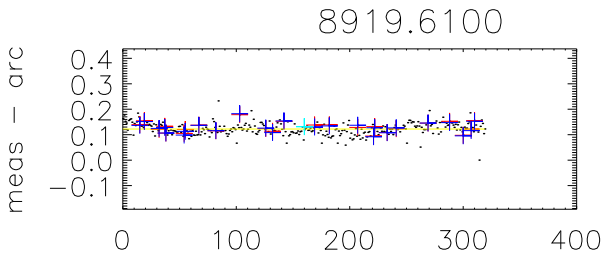

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

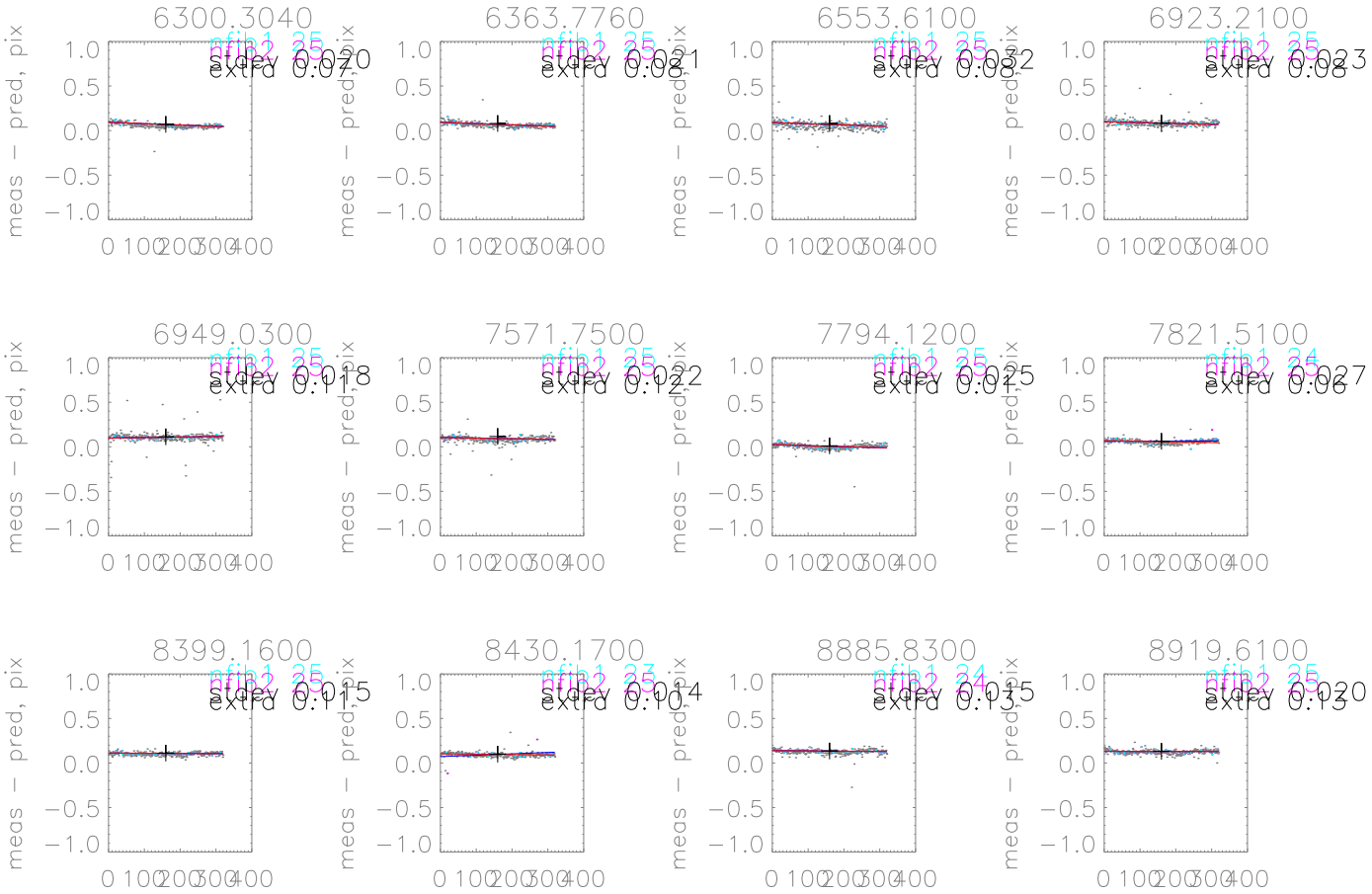

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

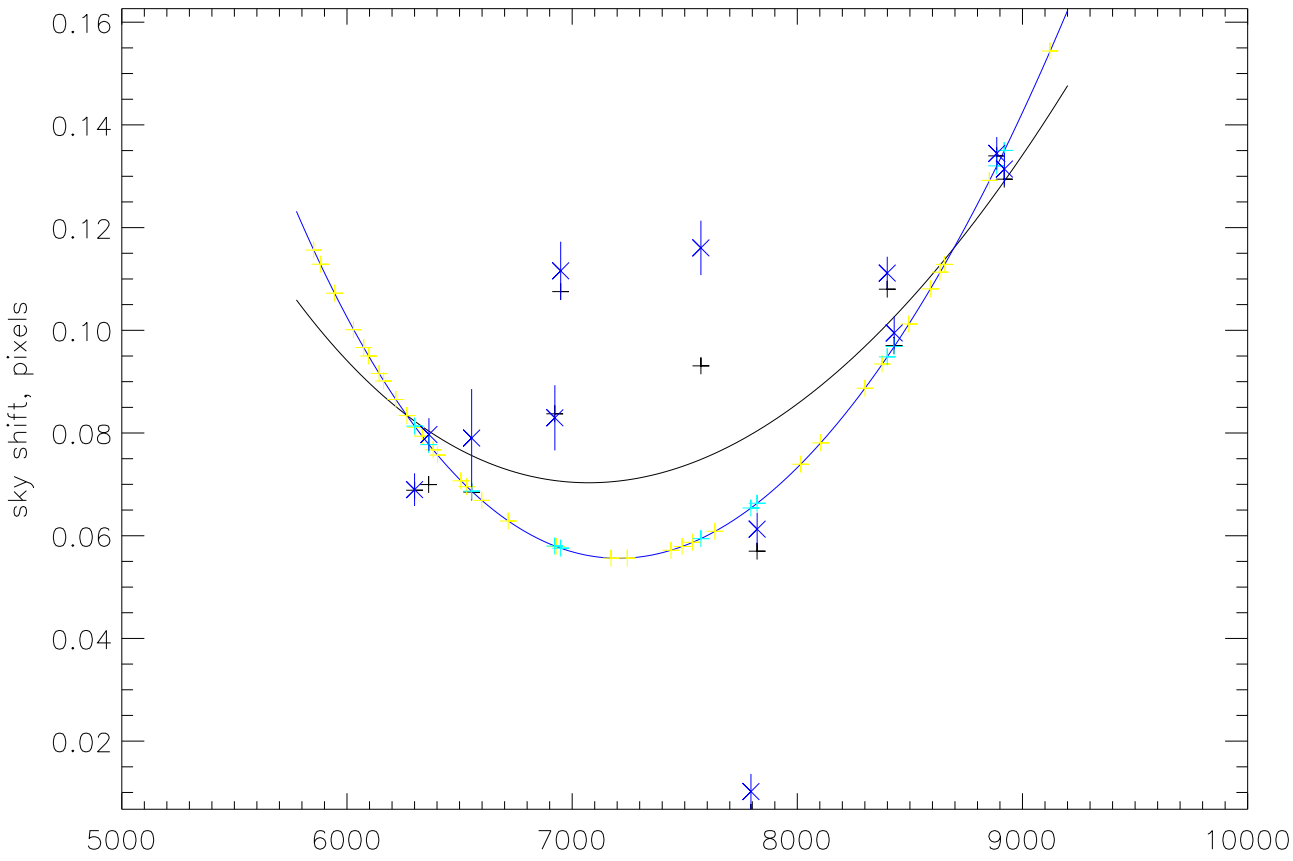

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

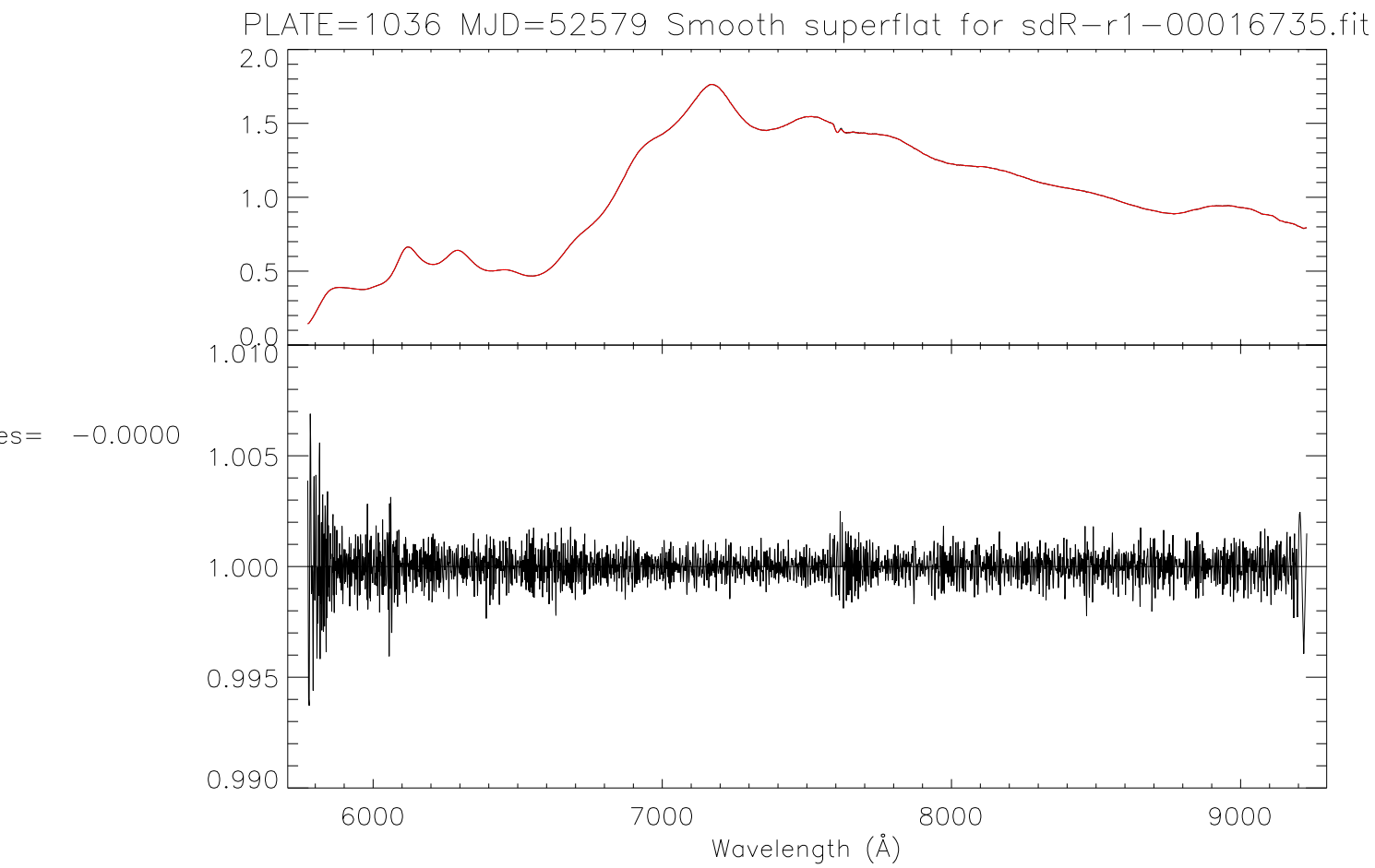

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

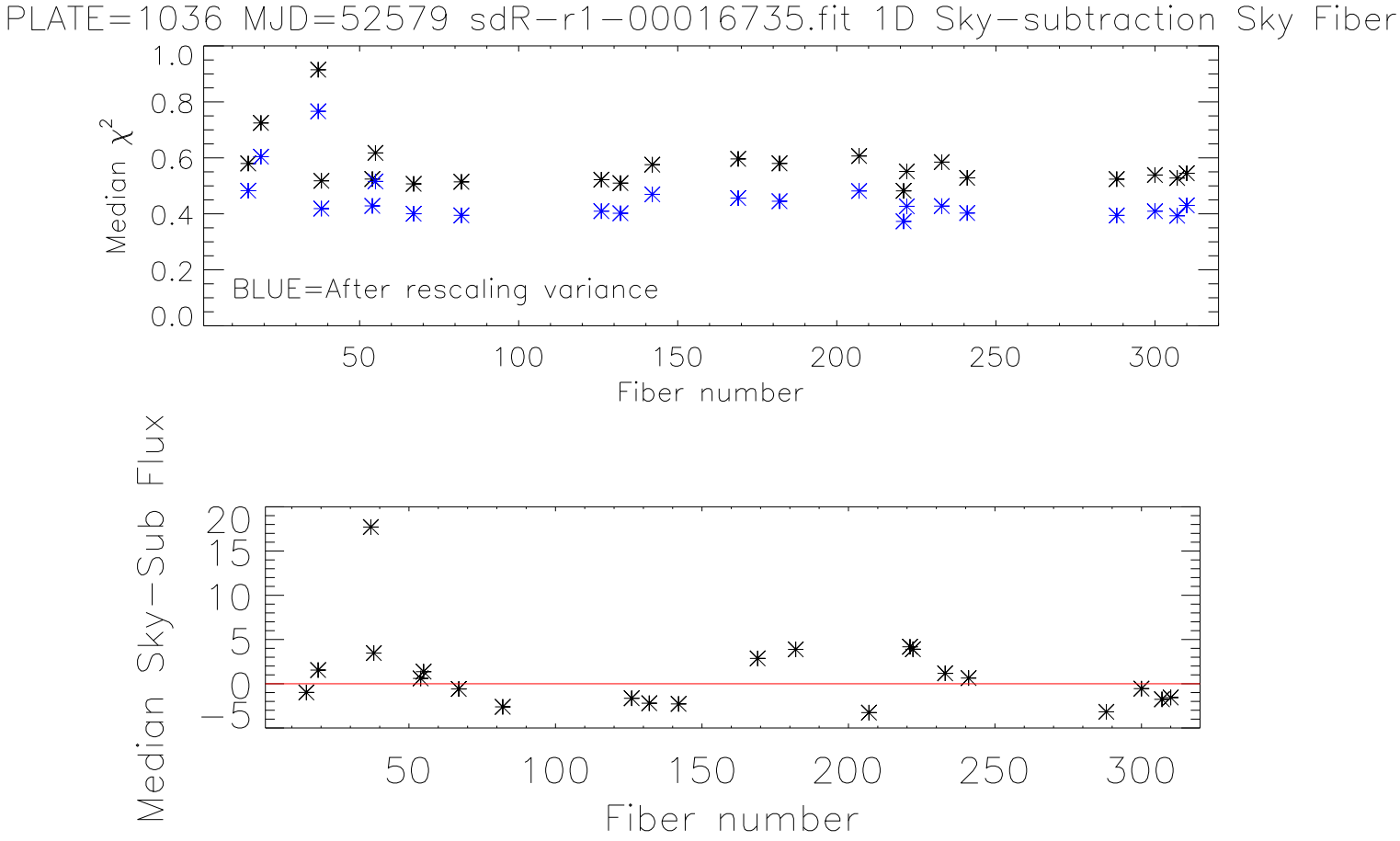

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

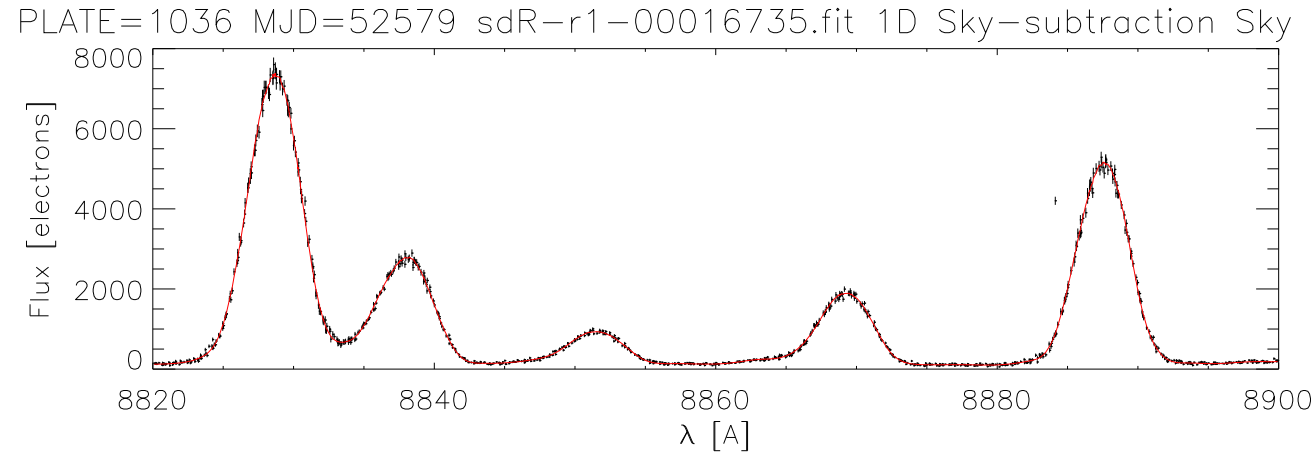

6300.3040
mfib1 25
mfib2 25
stdev 0.020
extra 0.07
6363.7760
mfib1 25
mfib2 25
stdev 0.021
extra 0.08
6553.6100
mfib1 25
mfib2 25
stdev 0.032
extra 0.08
6923.2100
mfib1 25
mfib2 25
stdev 0.023
extra 0.08
6949.0300
mfib1 25
mfib2 25
stdev 0.018
extra 0.11
7571.7500
mfib1 25
mfib2 25
stdev 0.022
extra 0.12
7794.1200
mfib1 25
mfib2 25
stdev 0.025
extra 0.01
7821.5100
mfib1 24
mfib2 25
stdev 0.027
extra 0.06
8399.1600
mfib1 25
mfib2 25
stdev 0.015
extra 0.11
8430.1700
mfib1 23
mfib2 25
stdev 0.014
extra 0.10
8885.8300
mfib1 24
mfib2 24
stdev 0.015
extra 0.13
8919.6100
mfib1 25
mfib2 25
stdev 0.020
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

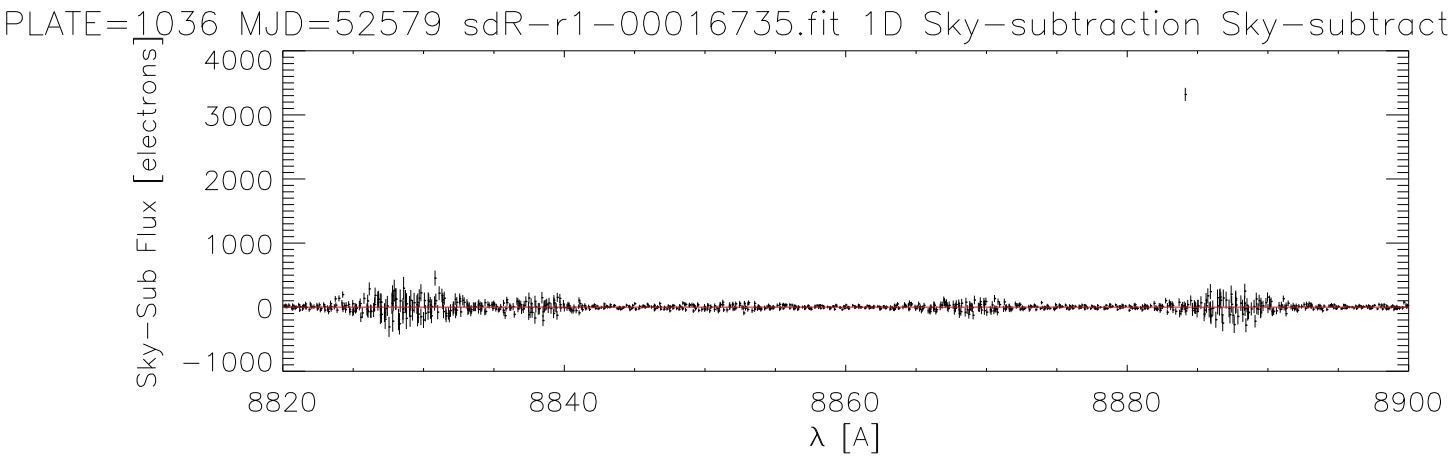

0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
sky shift, pixels
5000
6000
7000
8000
9000
10000

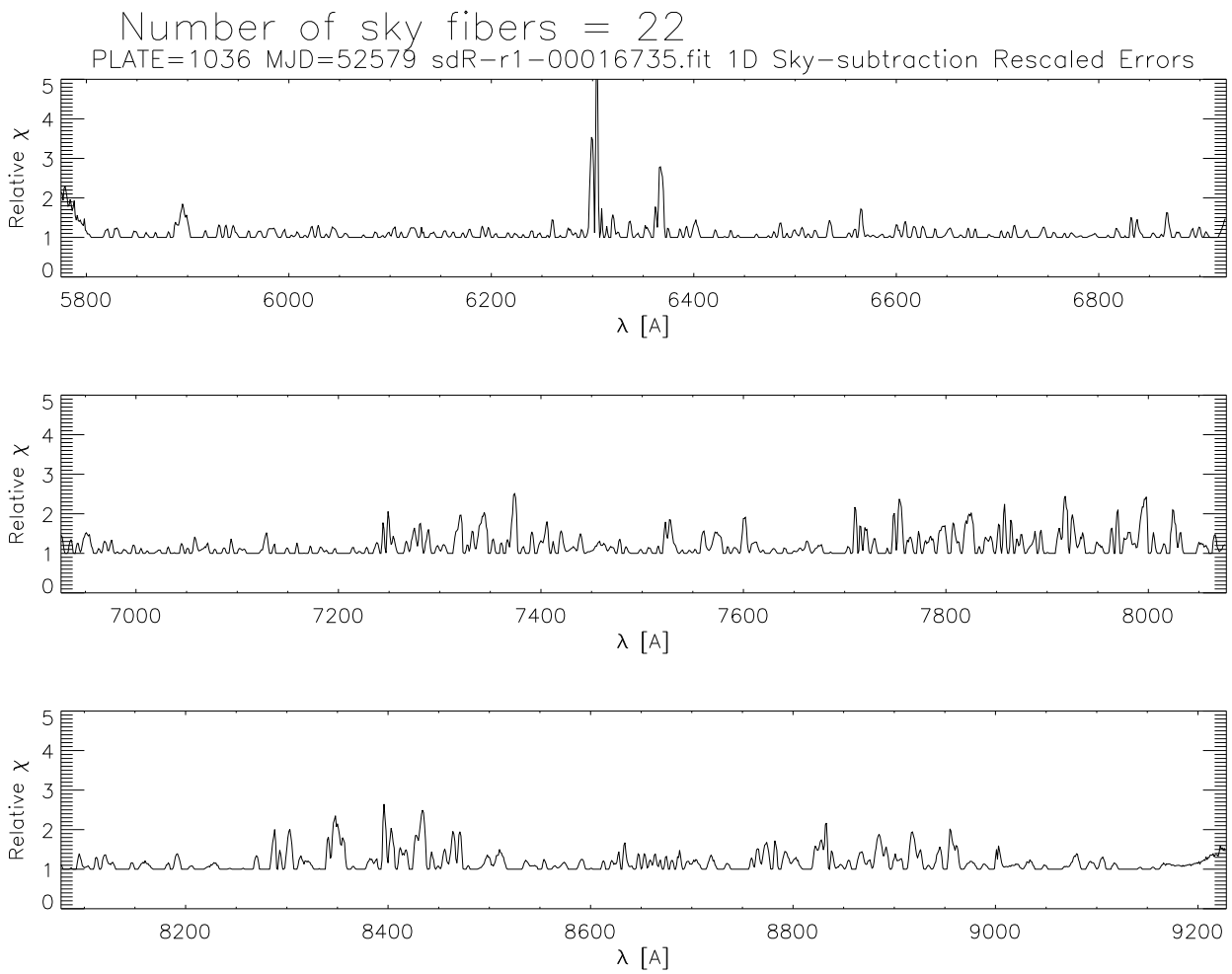

PLATE=1036 MJD=52579 Smooth superflat for sdR-r1-00016735.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

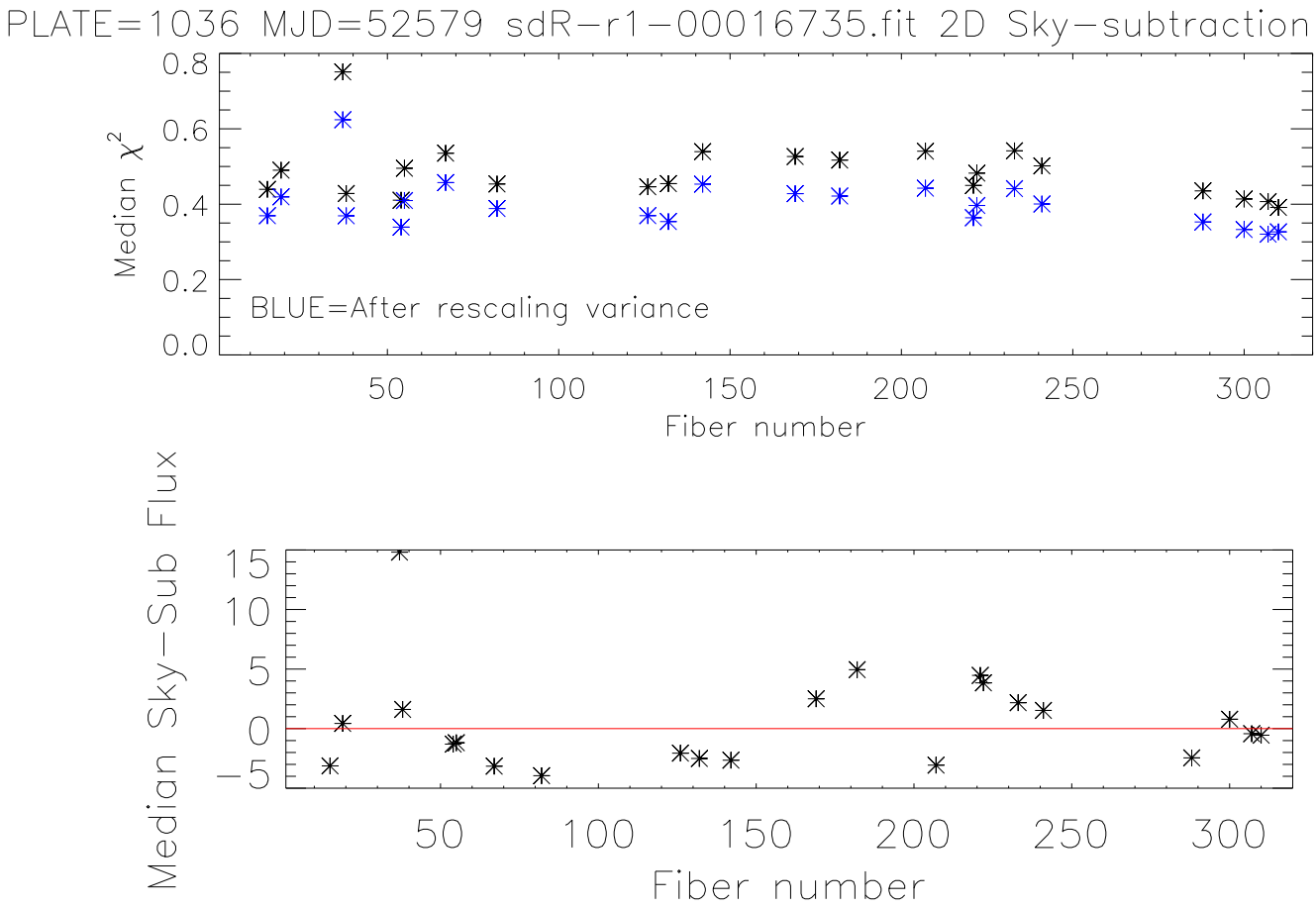
es= −0.0000


PLATE=1036 MJD=52579 sdR-r1-00016735.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

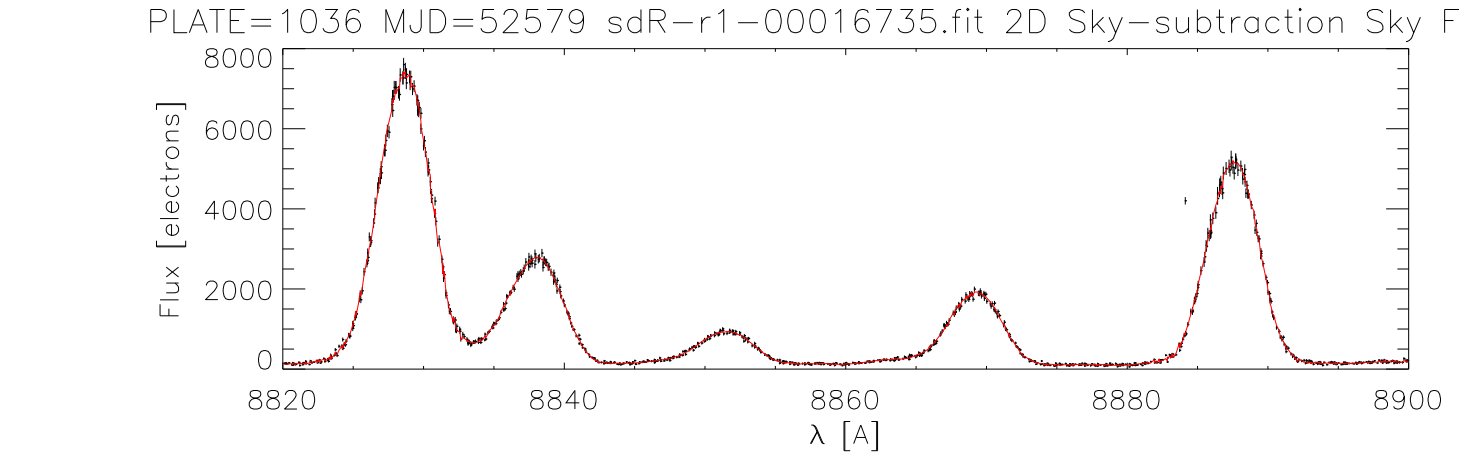

PLATE=1036 MJD=52579 sdR-r1-00016735.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

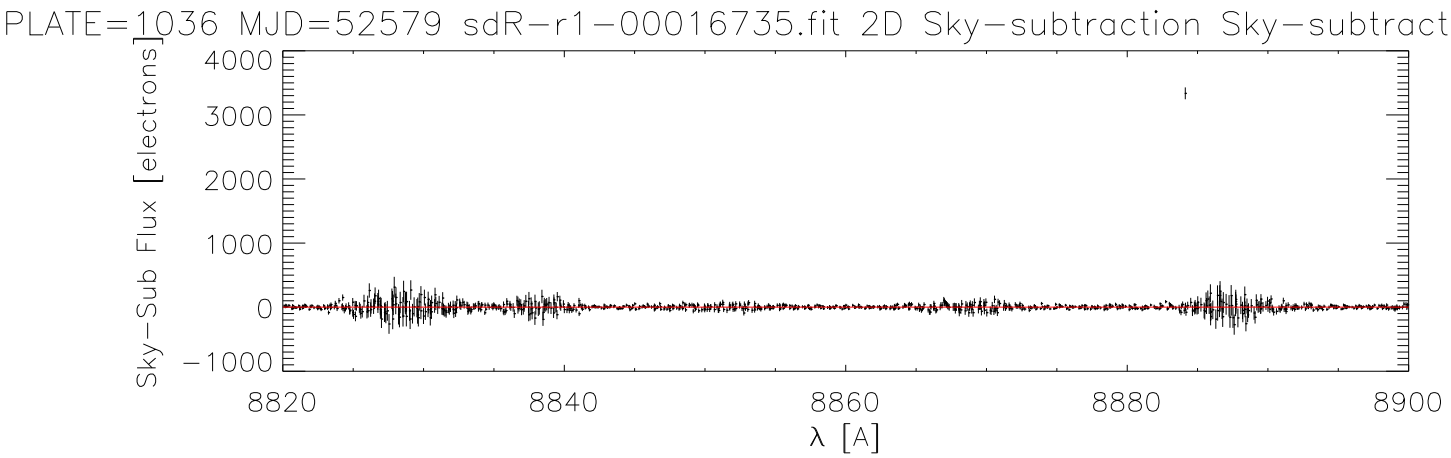

PLATE=1036 MJD=52579 sdR-r1-00016735.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

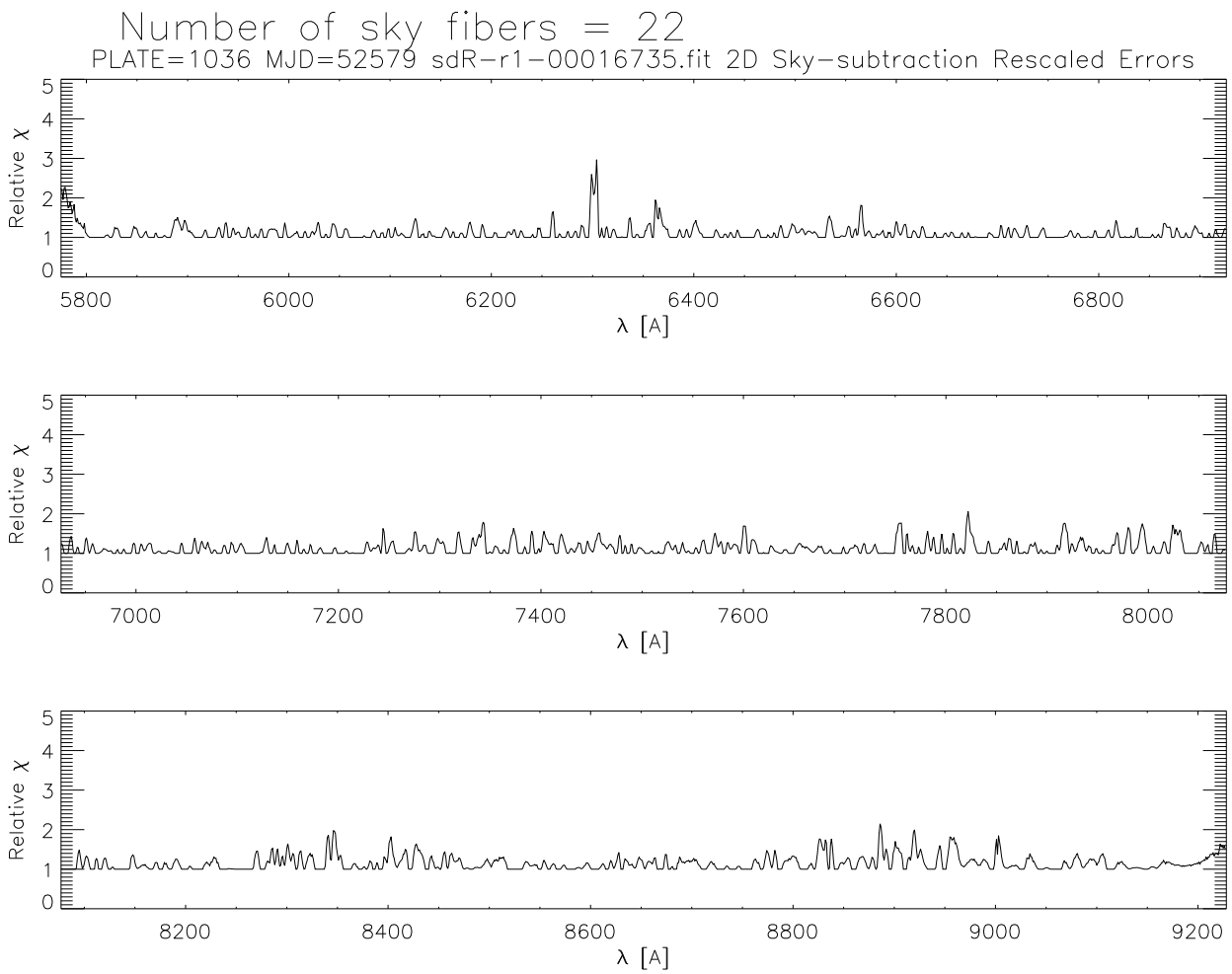

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016735.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

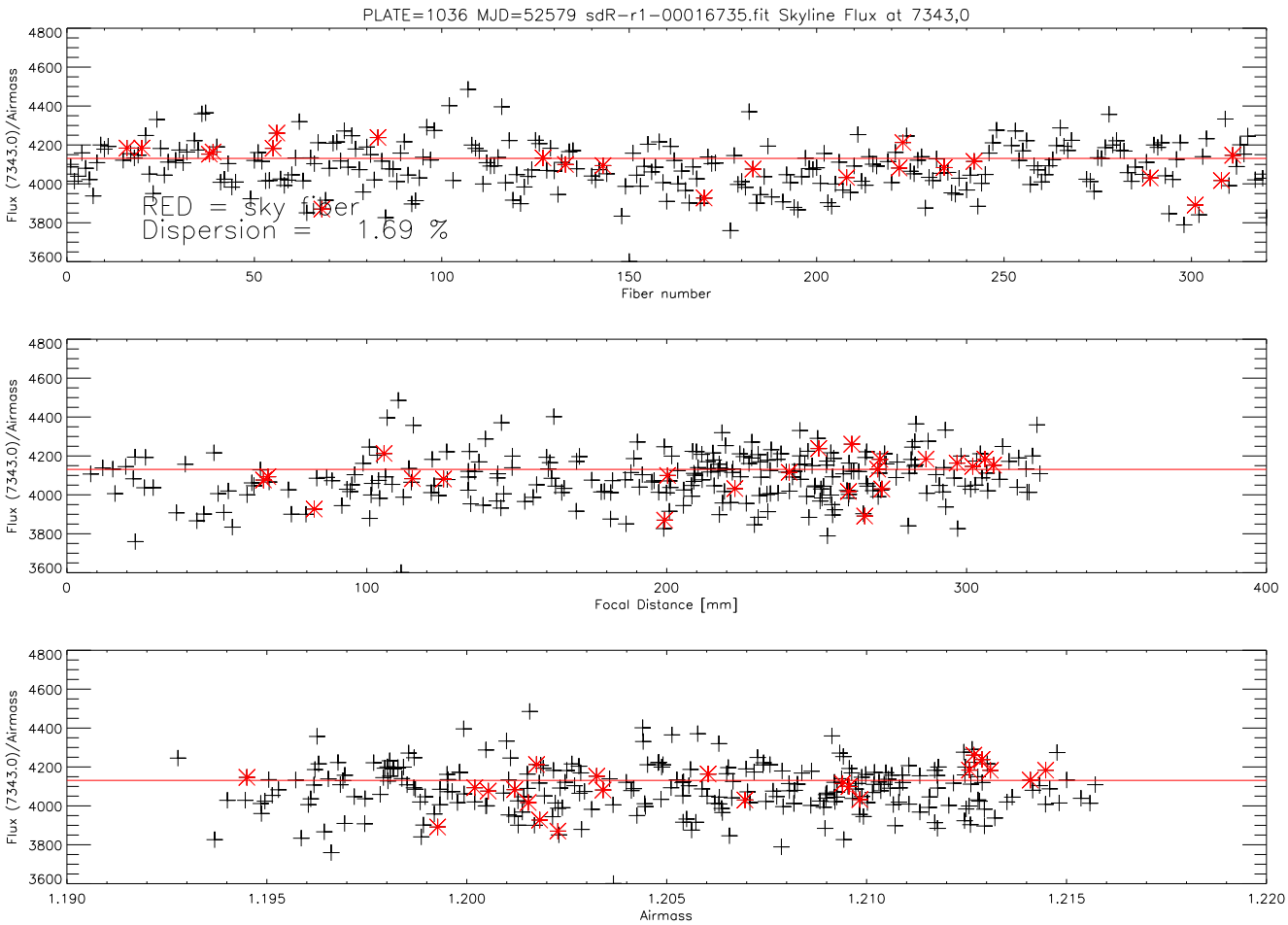

PLATE=1036 MJD=52579 sdR-r1-00016735.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

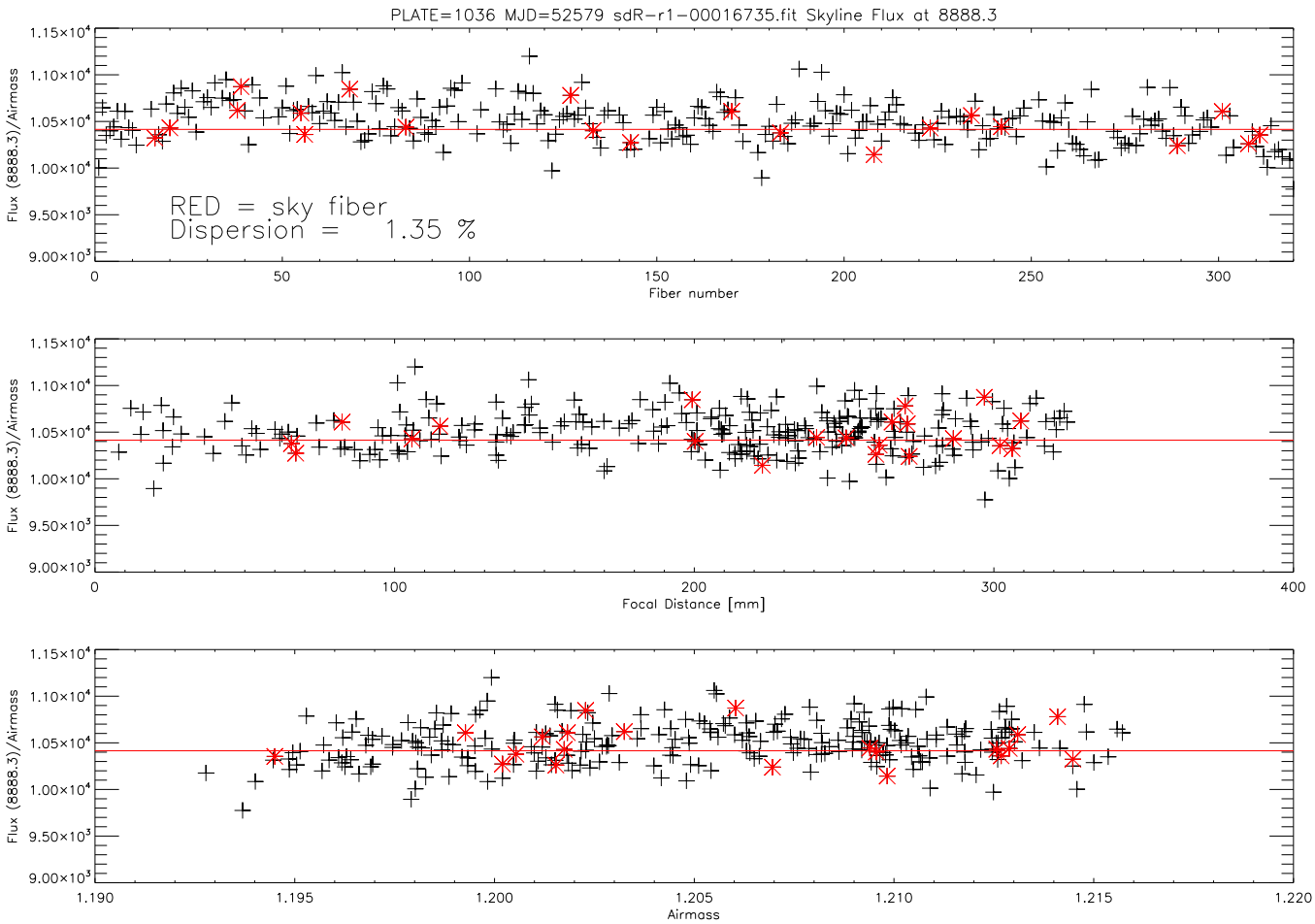
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

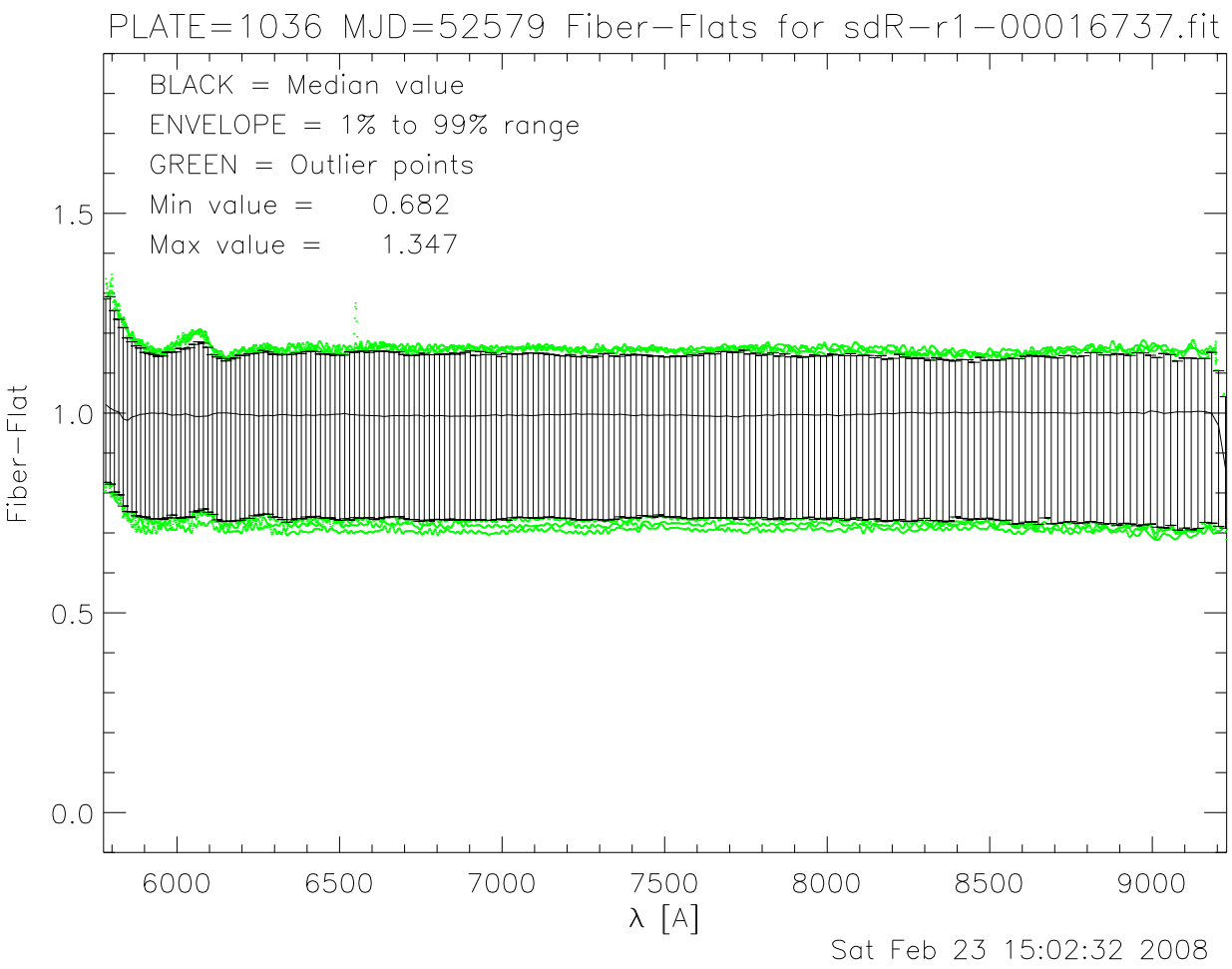

PLATE=1036 MJD=52579 sdR-r1-00016735.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

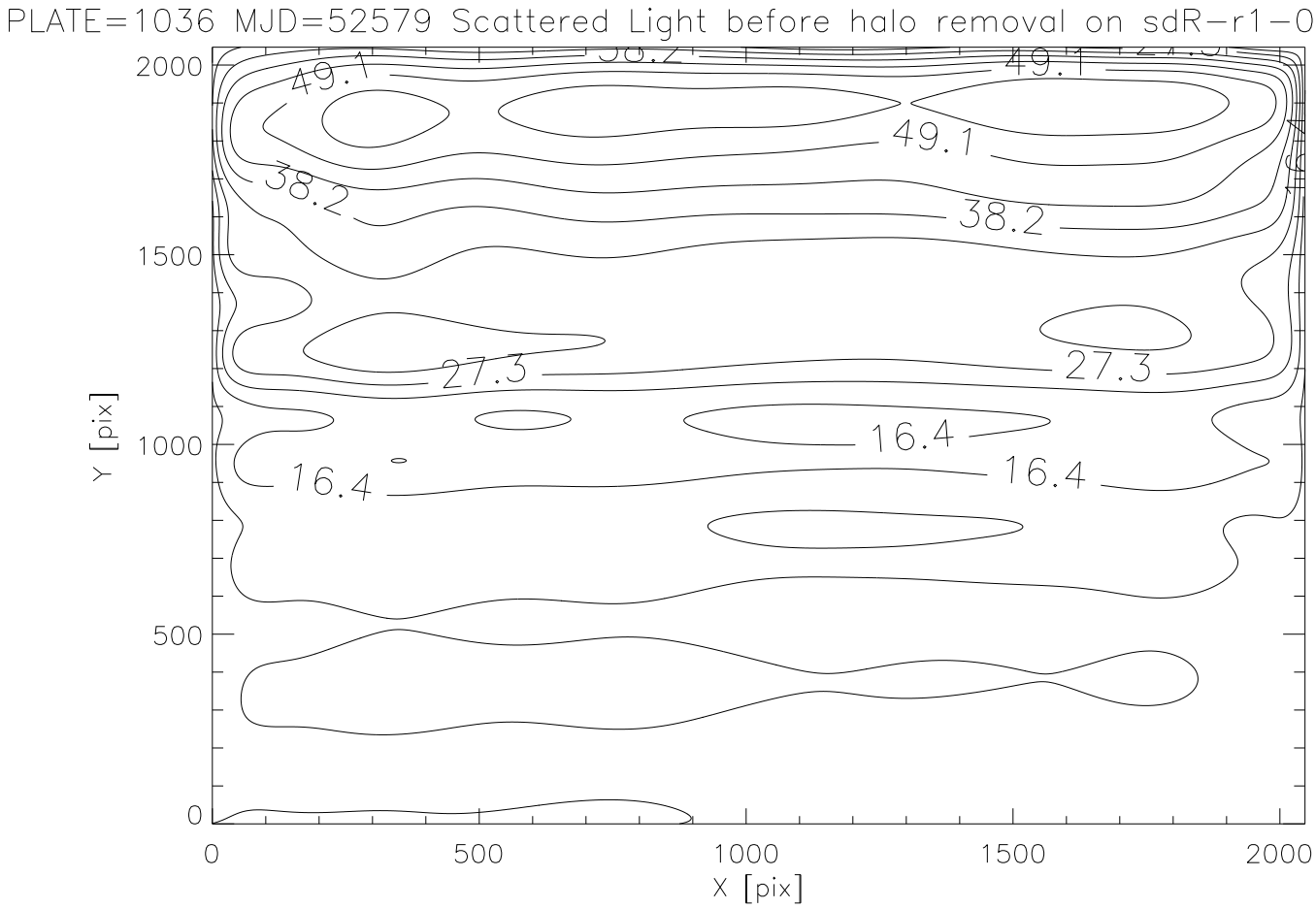

PLATE=1036 MJD=52579 sdR-r1-00016735.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

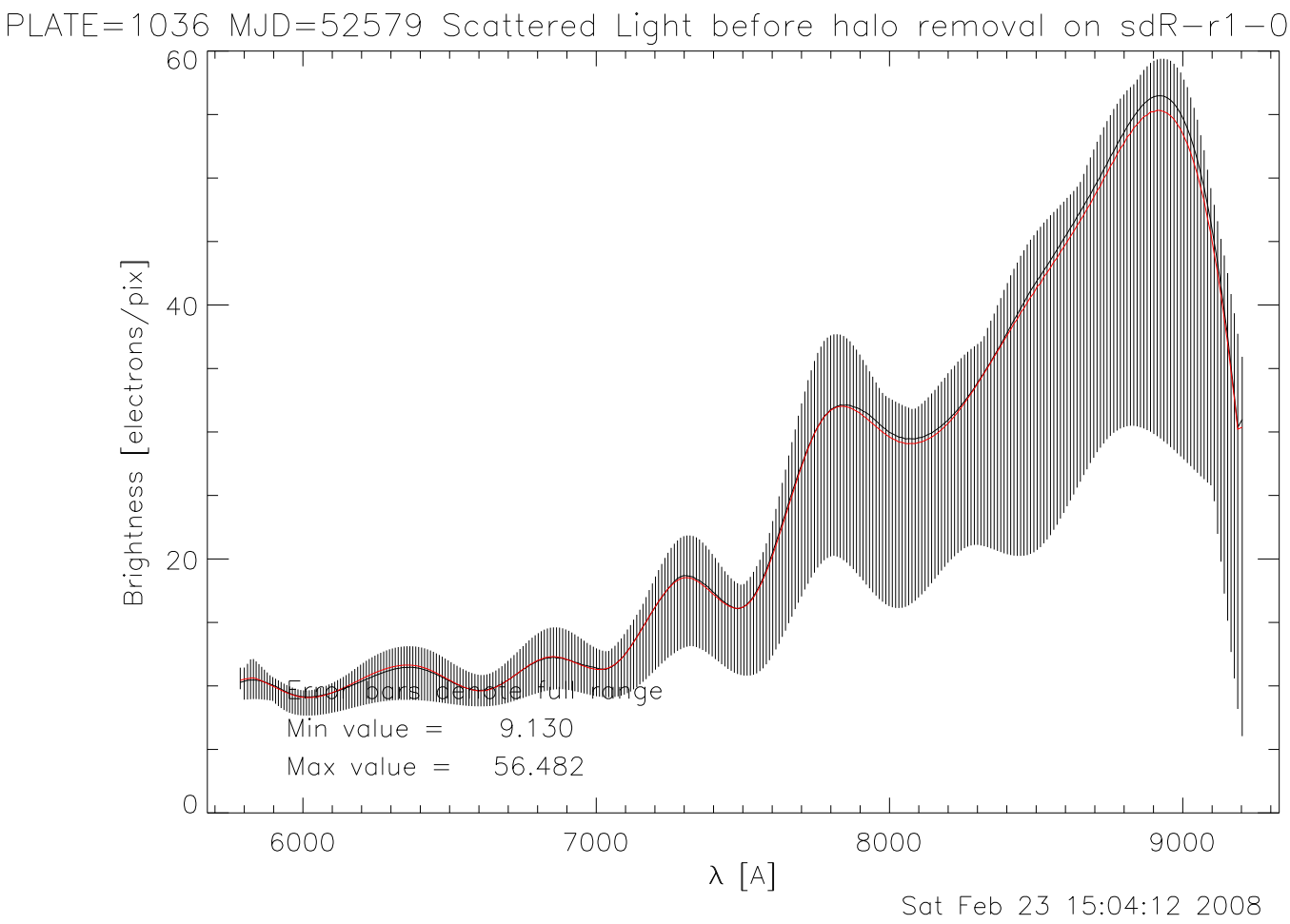

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016735.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

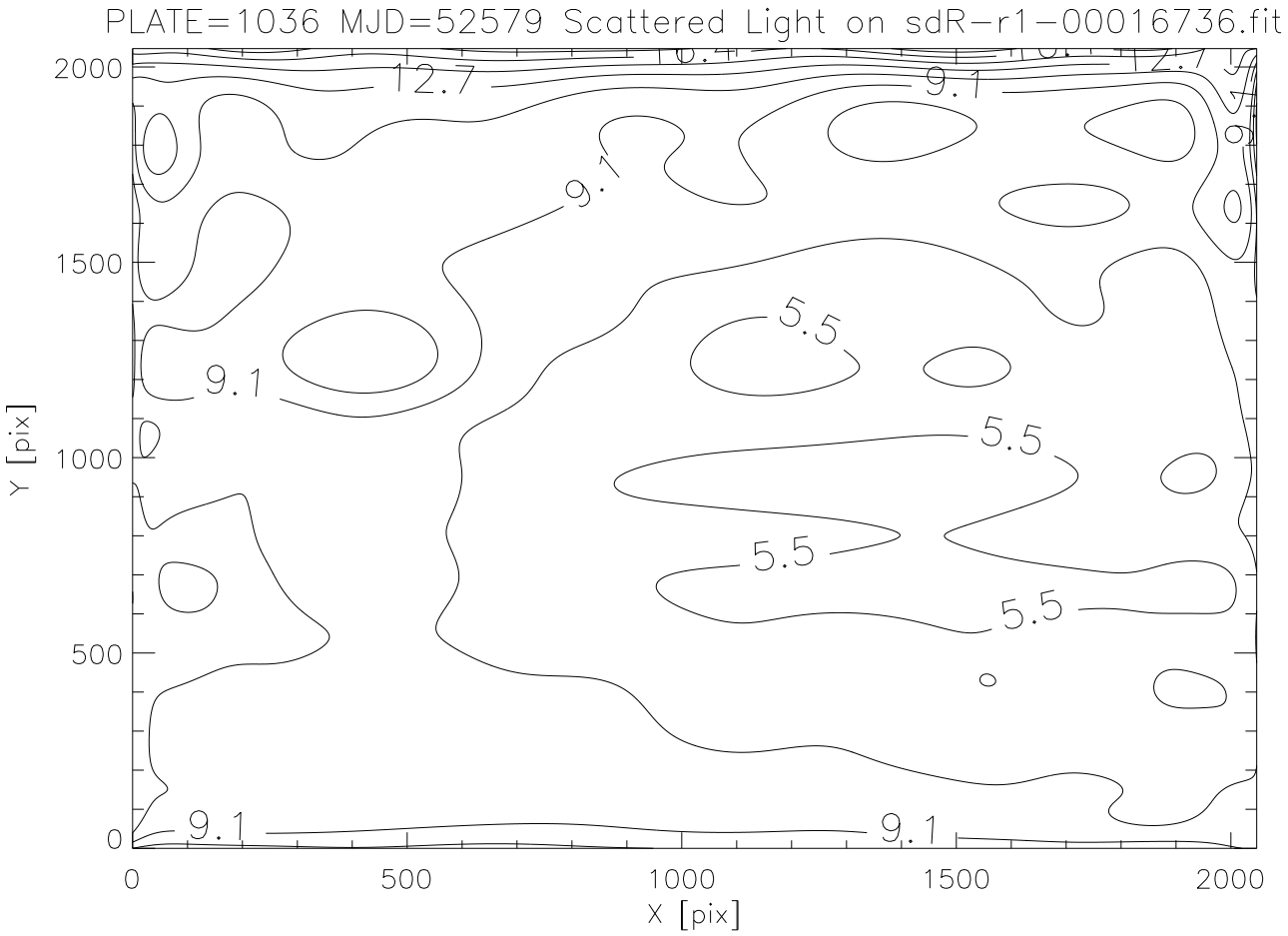

PLATE=1036 MJD=52579 sdR-r1-00016735.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.69 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

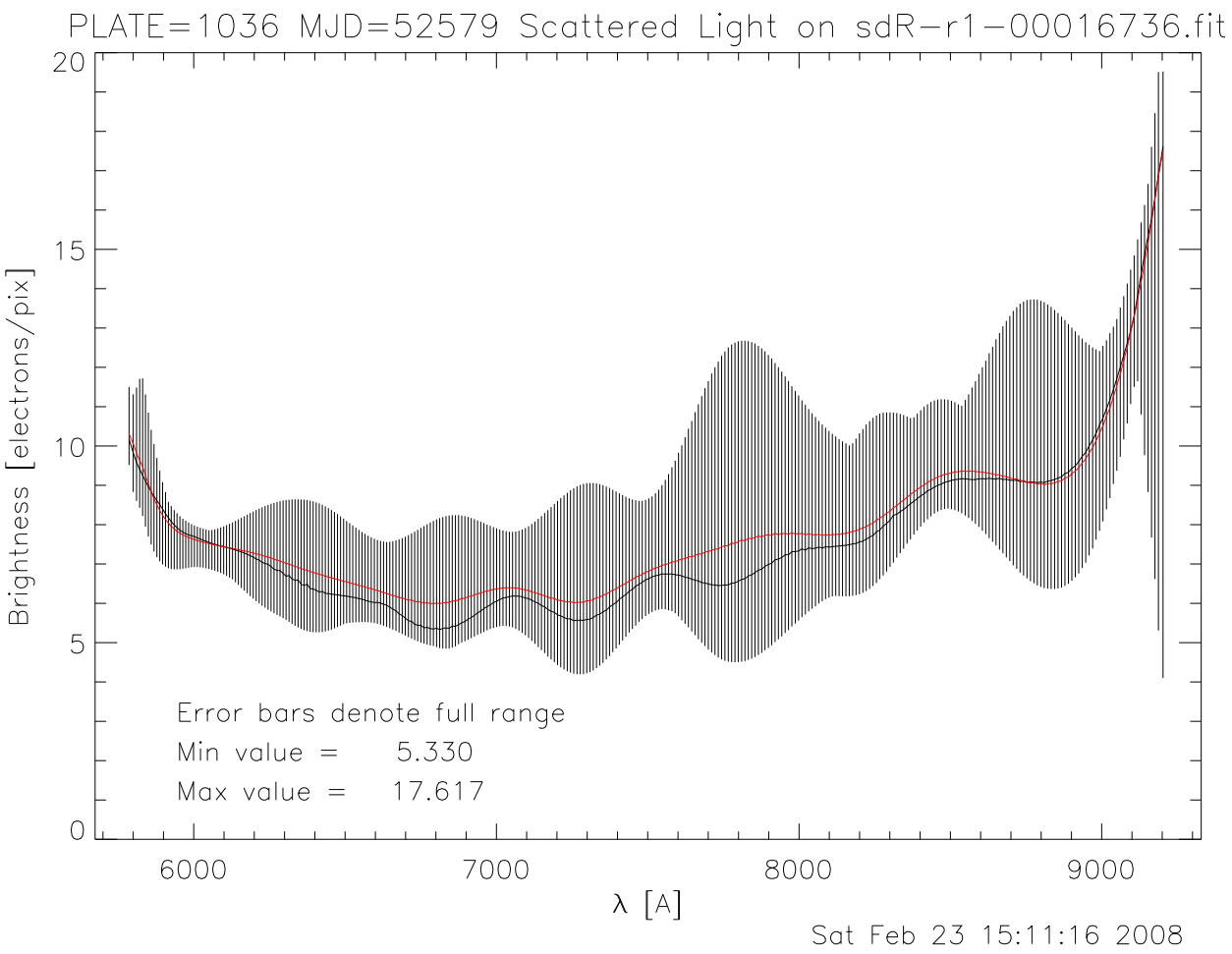

PLATE=1036 MJD=52579 sdR-r1-00016735.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.35 %
Fiber number
Focal Distance [mm]
Airmass

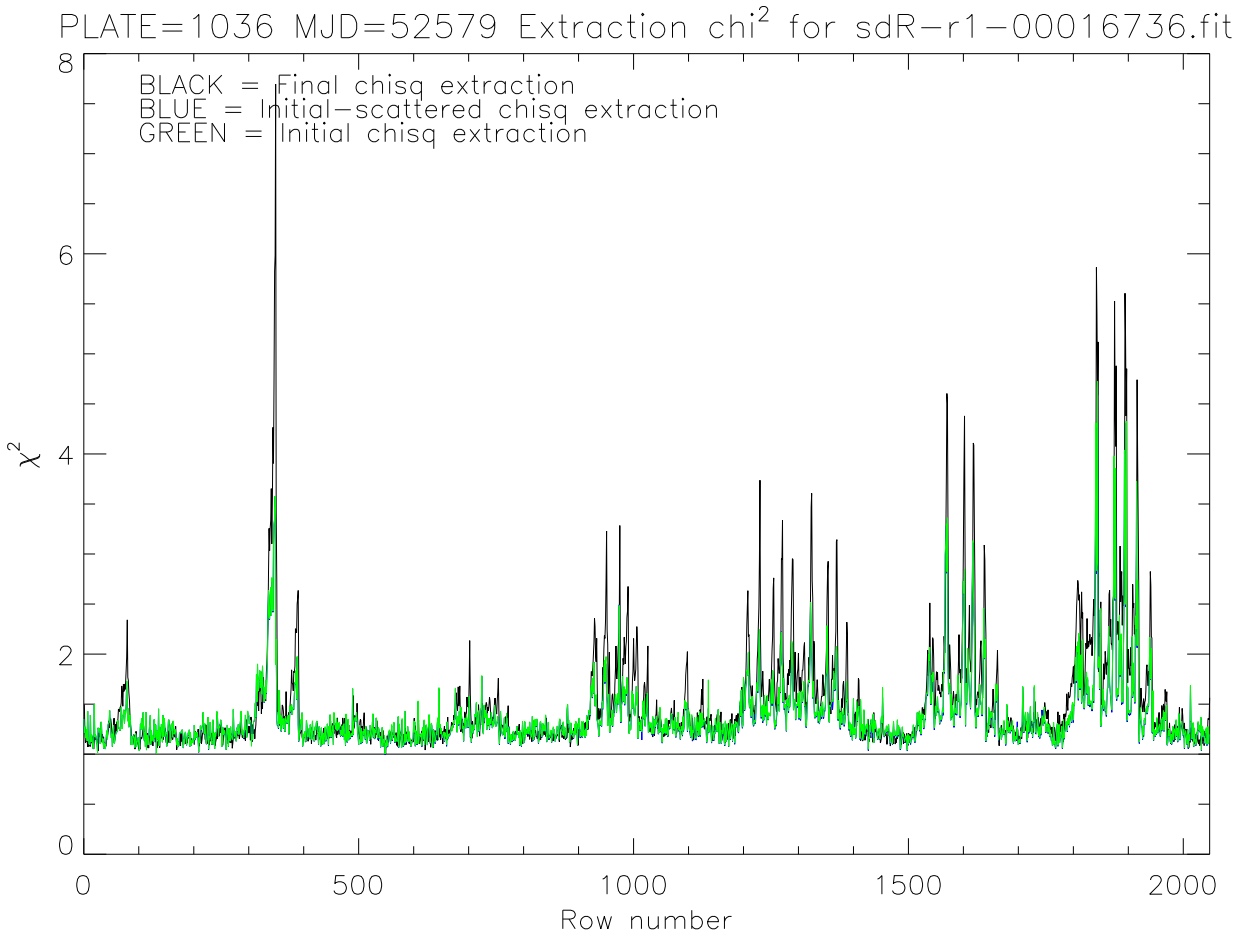

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r1−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.682
Max value = 1.347
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 15:02:32 2008

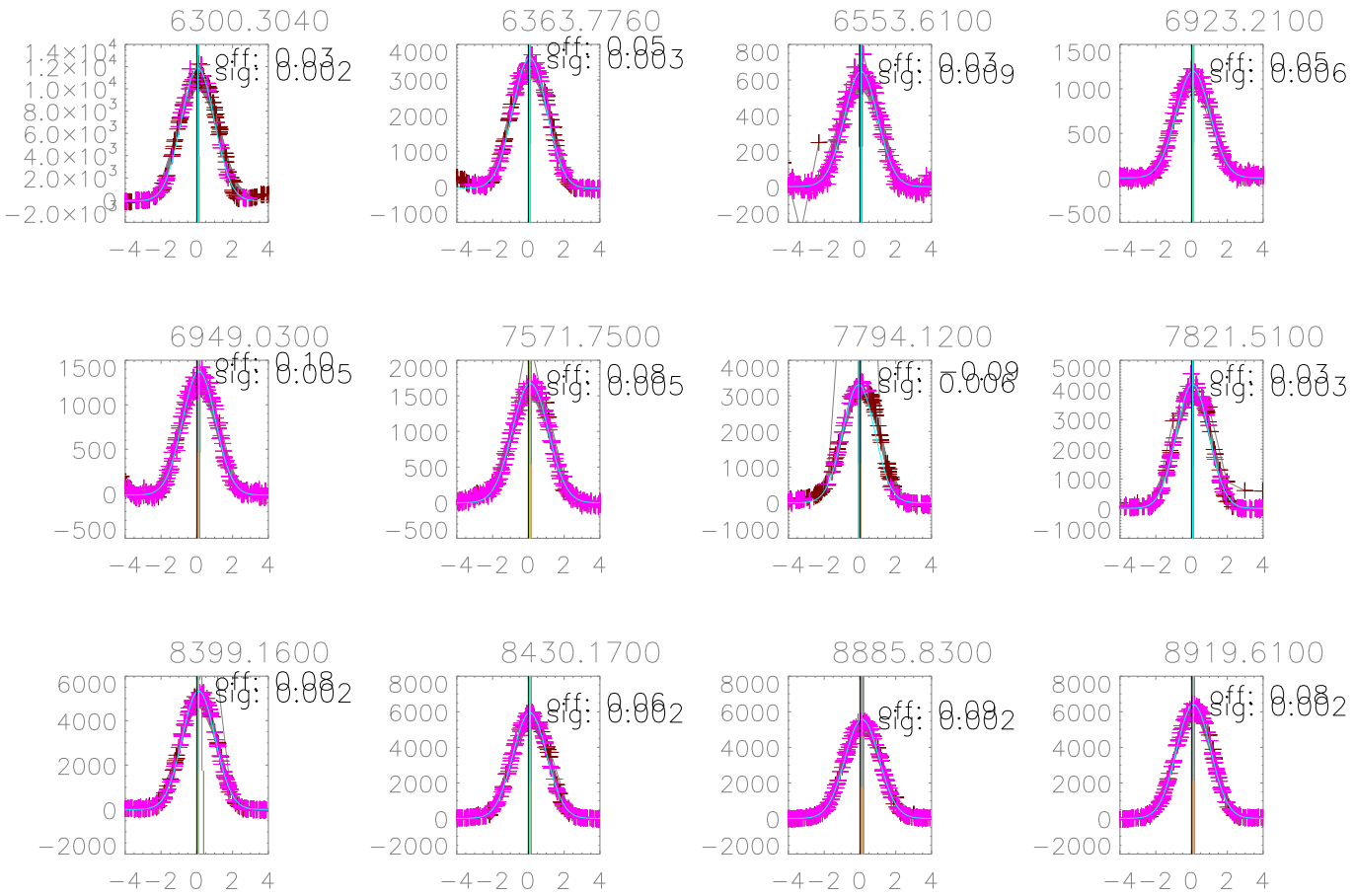

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016736.fi
49.1
49.1
49.1
38.2
38.2
27.3
27.3
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

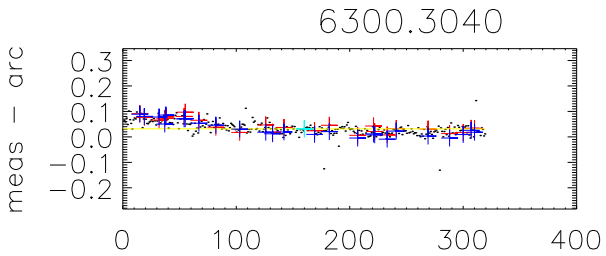

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r1-00016736.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.130
Max value = 56.482
Sat Feb 23 15:04:12 2008

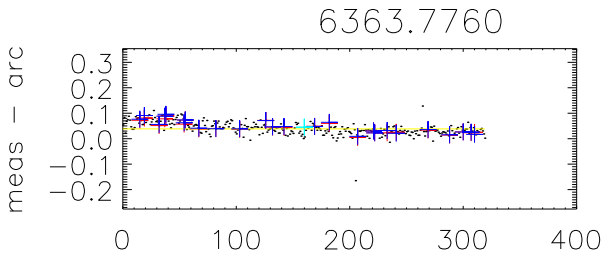

PLATE=1036 MJD=52579 Scattered Light on sdR−r1−00016736.fit
12.7
9.1
9.1
5.5
9.1
5.5
5.5
5.5
9.1
9.1
0
0
0
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

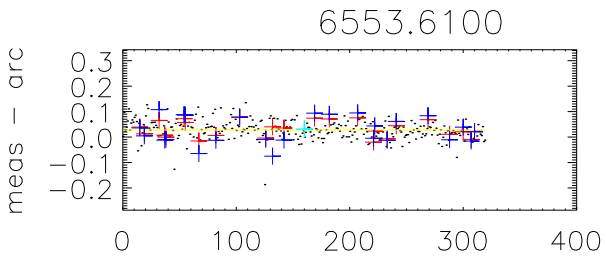

PLATE=1036 MJD=52579 Scattered Light on sdR-r1-00016736.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.330
Max value = 17.617
Sat Feb 23 15:11:16 2008

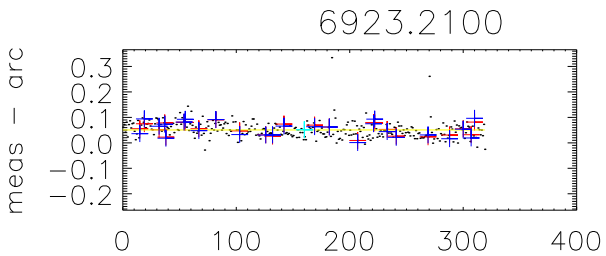

PLATE=1036 MJD=52579 Extraction chi^2 for sdR−r1−00016736.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

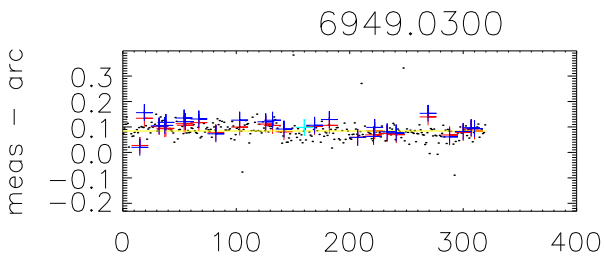

6300.3040
off: 0.03
sig: 0.002
6363.7760
off: 0.05
sig: 0.003
6553.6100
off: 0.03
sig: 0.009
6923.2100
off: 0.05
sig: 0.006
6949.0300
off: 0.10
sig: 0.005
7571.7500
off: 0.08
sig: 0.005
7794.1200
off: −0.09
sig: 0.006
7821.5100
off: 0.03
sig: 0.003
8399.1600
off: 0.08
sig: 0.002
8430.1700
off: 0.06
sig: 0.002
8885.8300
off: 0.08
sig: 0.002
8919.6100
off: 0.08
sig: 0.002

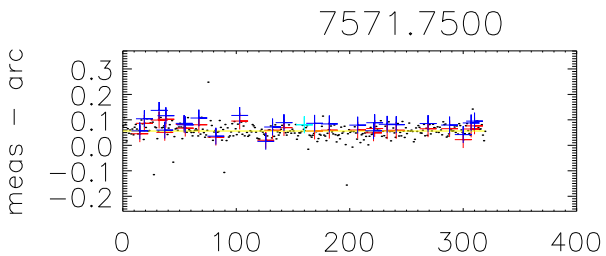

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

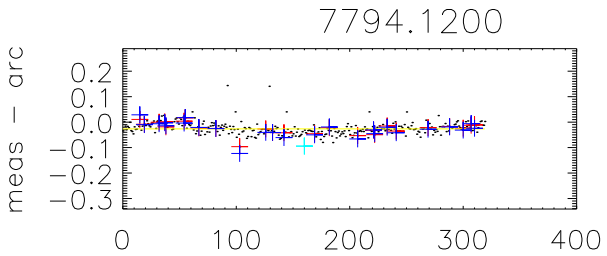

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

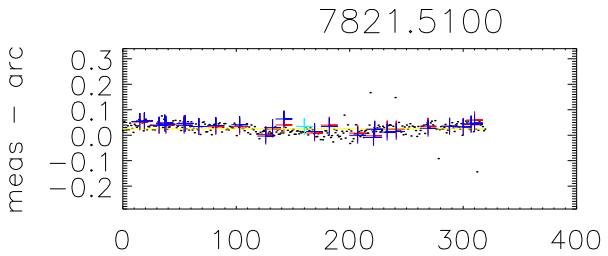

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

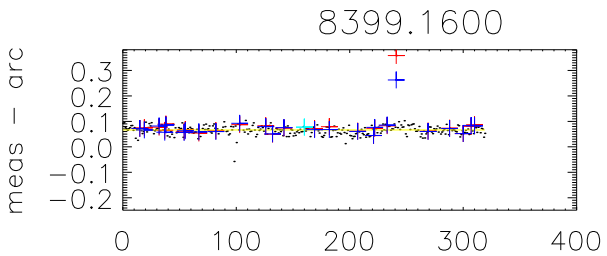

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

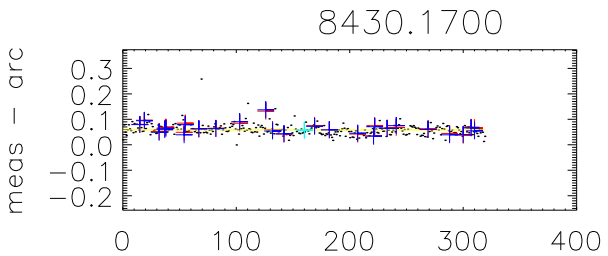

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

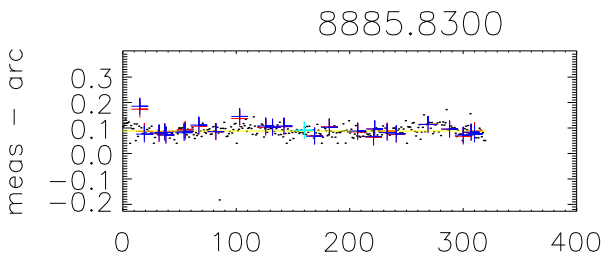

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

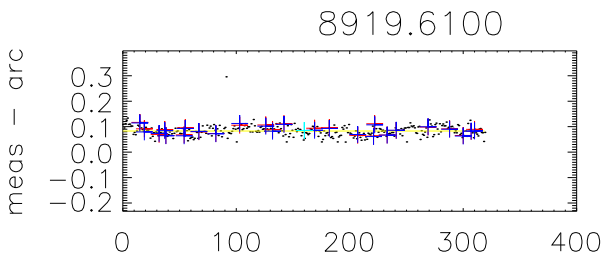

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

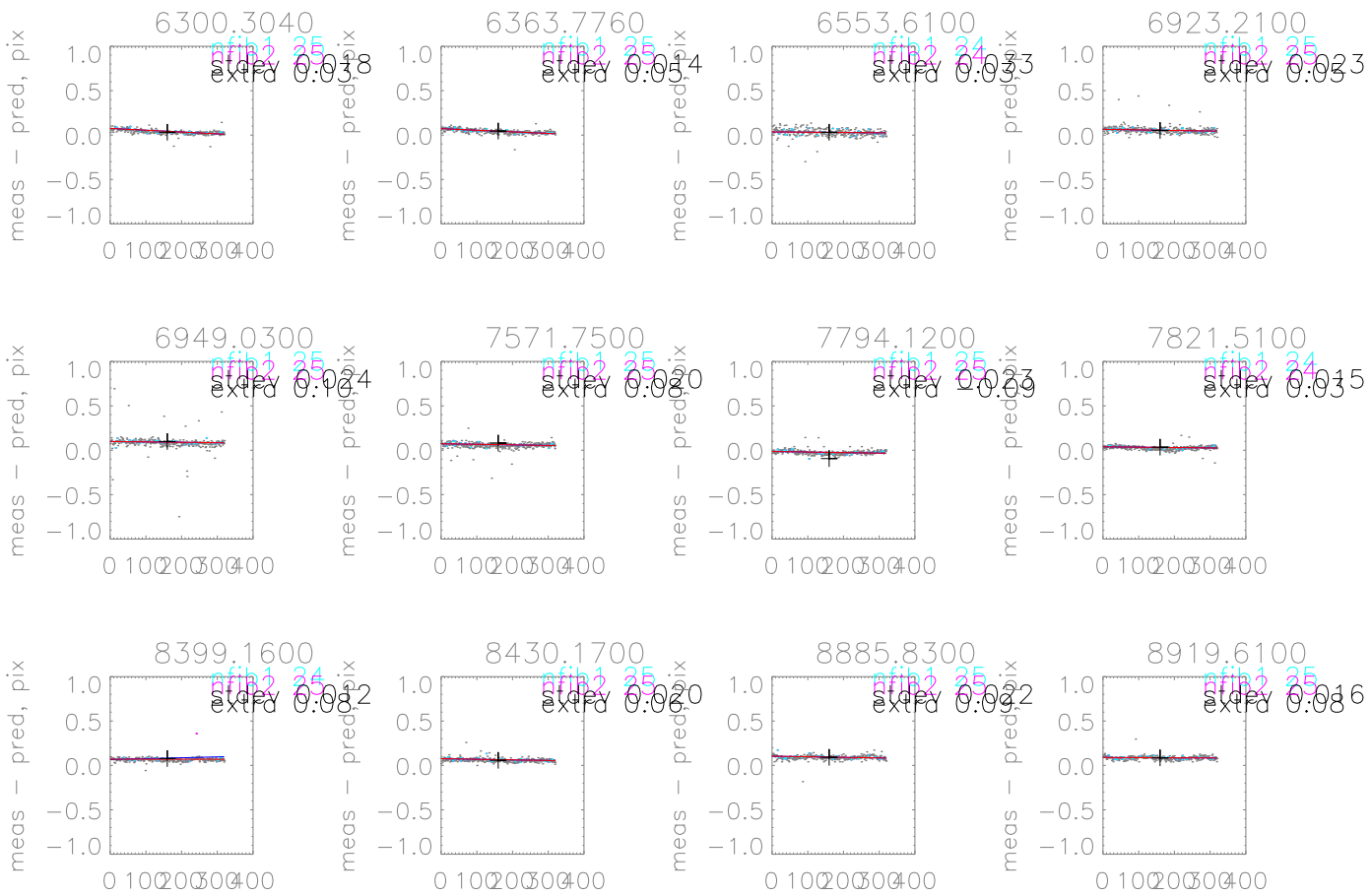

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

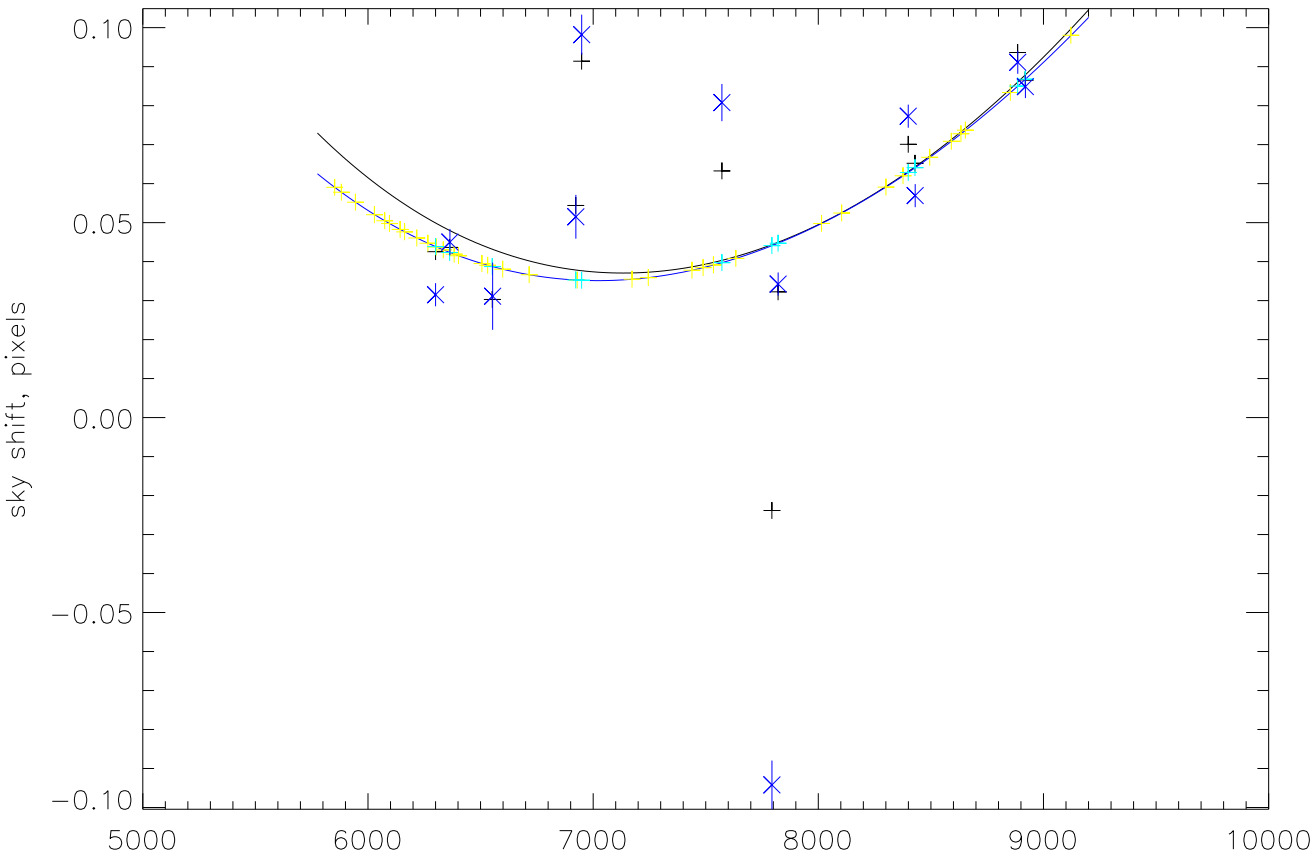

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

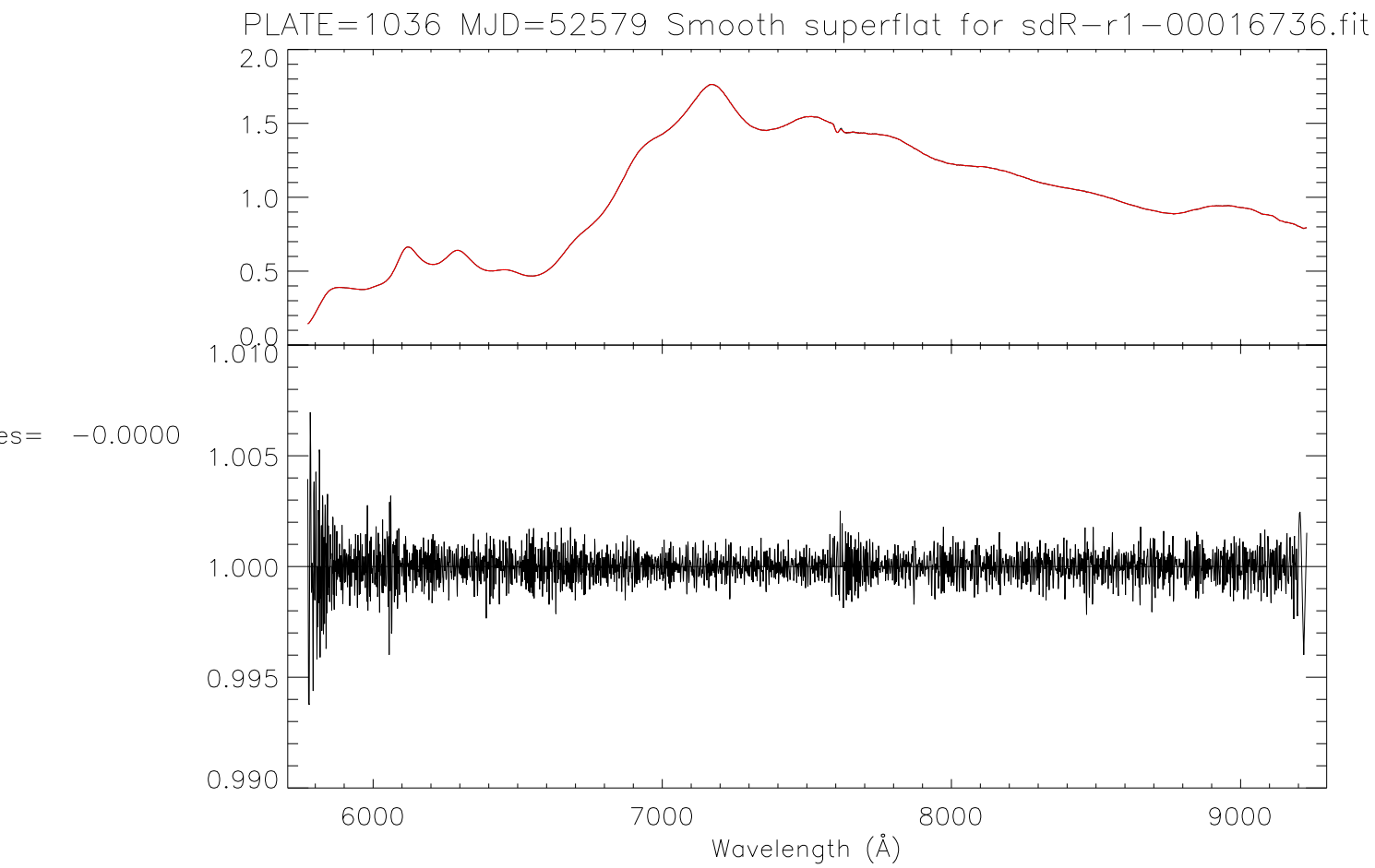

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

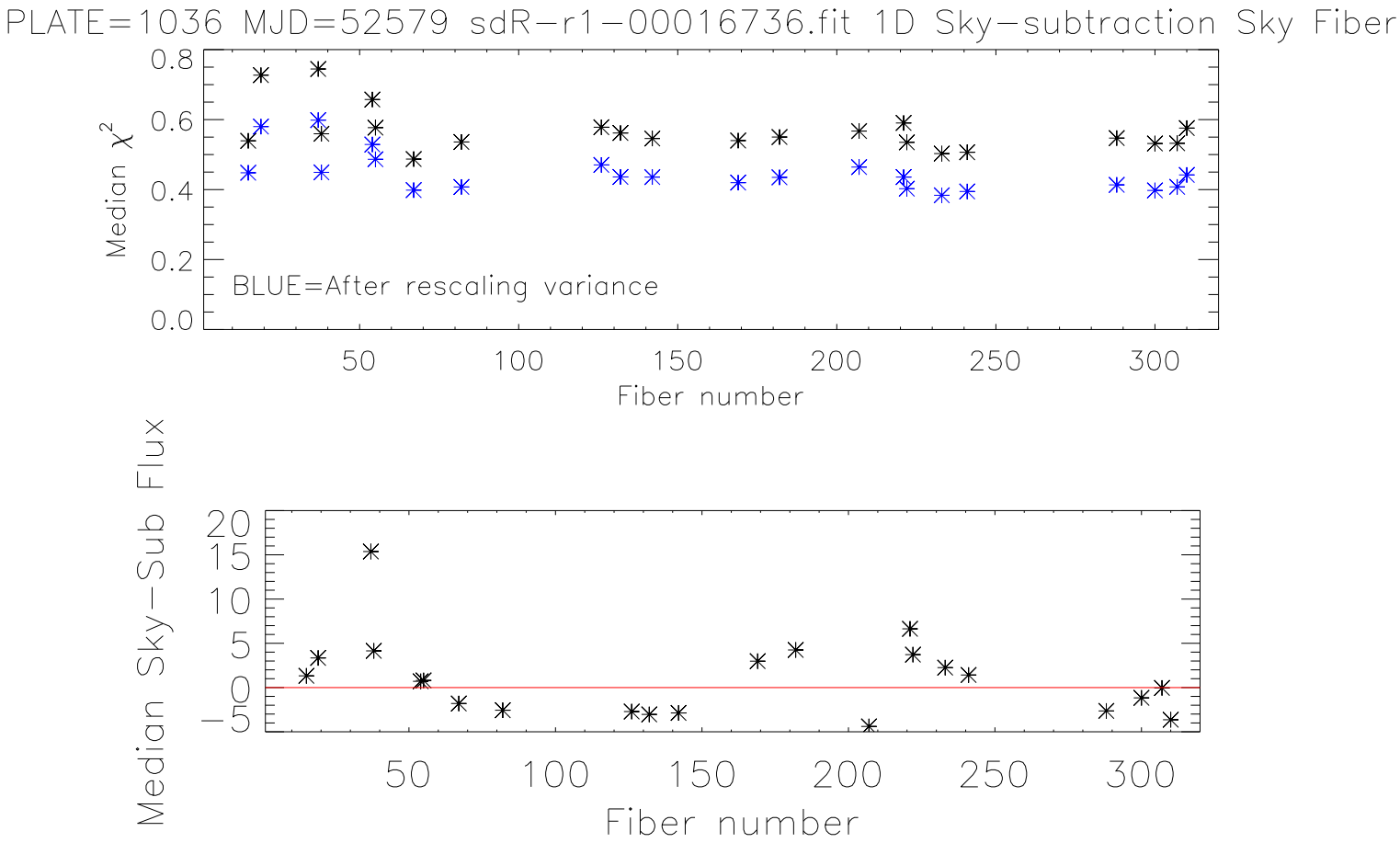

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

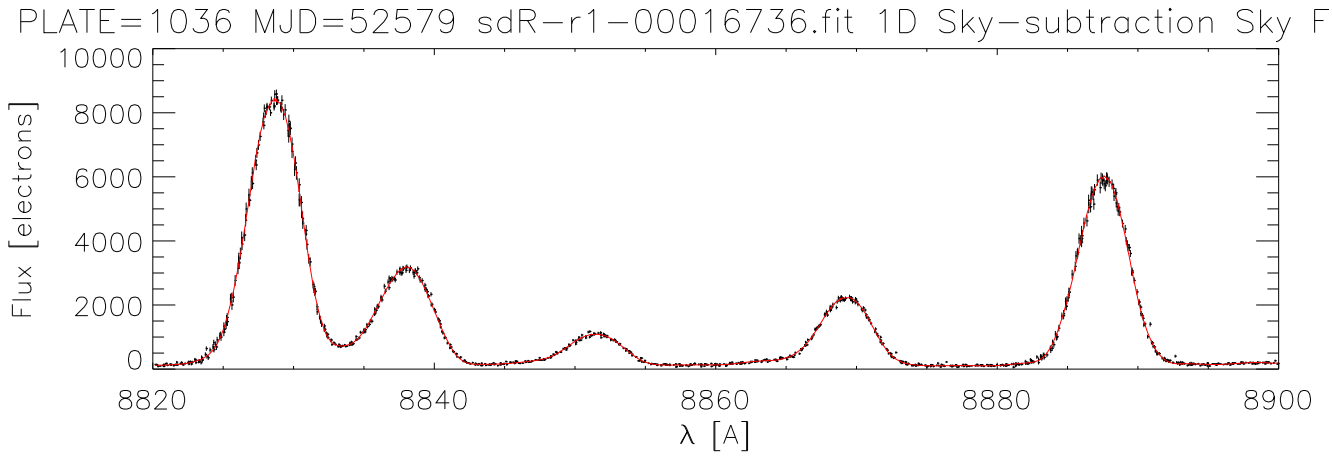

6300.3040
mfib1 25
mfib2 25
stdev 0.018
extra 0.038
6363.7760
mfib1 25
mfib2 25
stdev 0.014
extra 0.054
6553.6100
mfib1 24
mfib2 25
stdev 0.033
extra 0.033
6923.2100
mfib1 25
mfib2 25
stdev 0.023
extra 0.05
6949.0300
mfib1 25
mfib2 25
stdev 0.024
extra 0.10
7571.7500
mfib1 25
mfib2 25
stdev 0.020
extra 0.08
7794.1200
mfib1 25
mfib2 25
stdev 0.033
extra −0.09
7821.5100
mfib1 24
mfib2 25
stdev 0.015
extra 0.03
8399.1600
mfib1 24
mfib2 25
stdev 0.042
extra 0.08
8430.1700
mfib1 25
mfib2 25
stdev 0.020
extra 0.06
8885.8300
mfib1 25
mfib2 25
stdev 0.022
extra 0.02
8919.6100
mfib1 25
mfib2 25
stdev 0.016
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

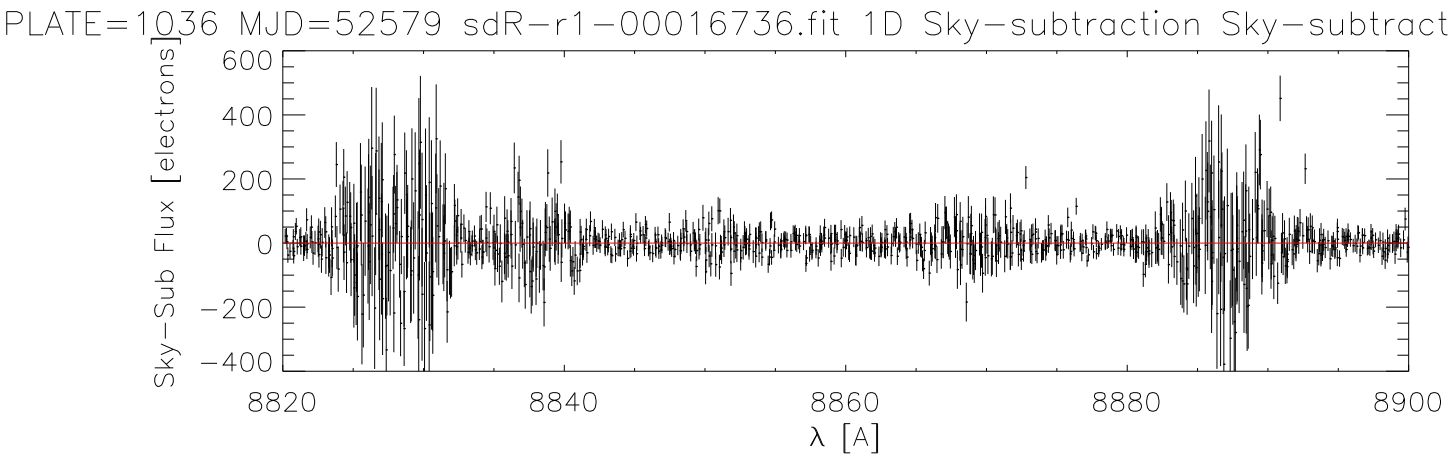

0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

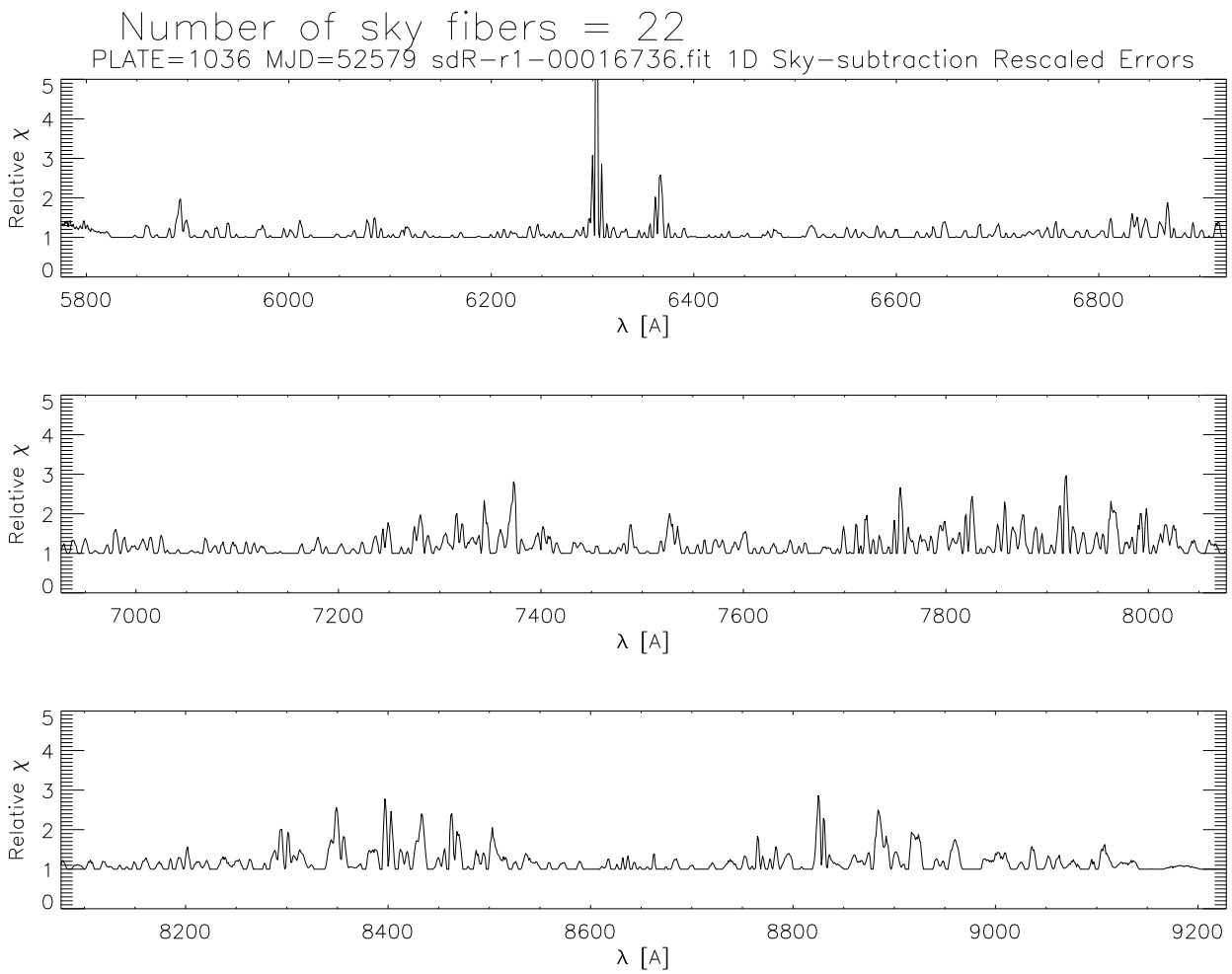

PLATE=1036 MJD=52579 Smooth superflat for sdR-r1-00016736.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

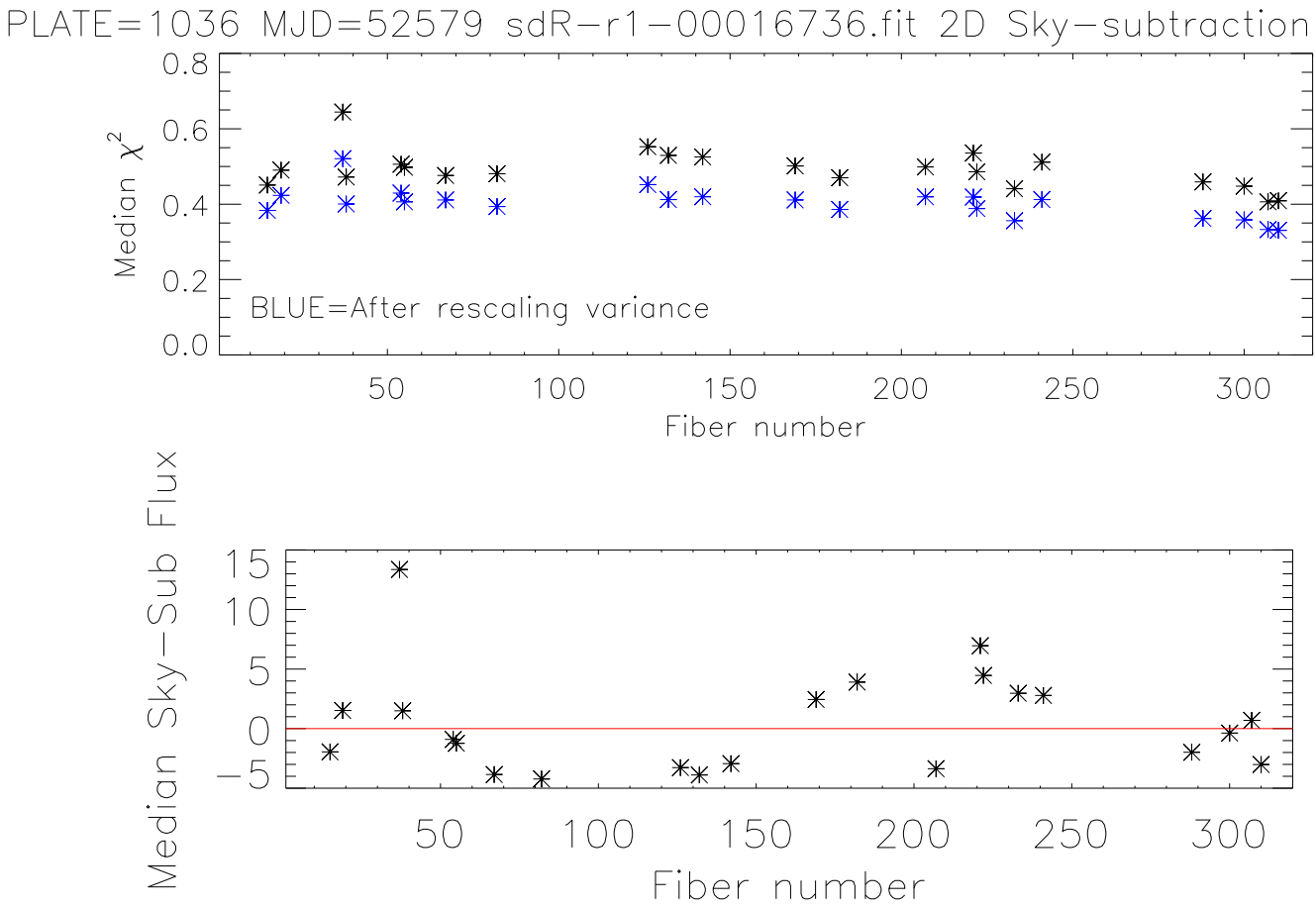
es= −0.0000

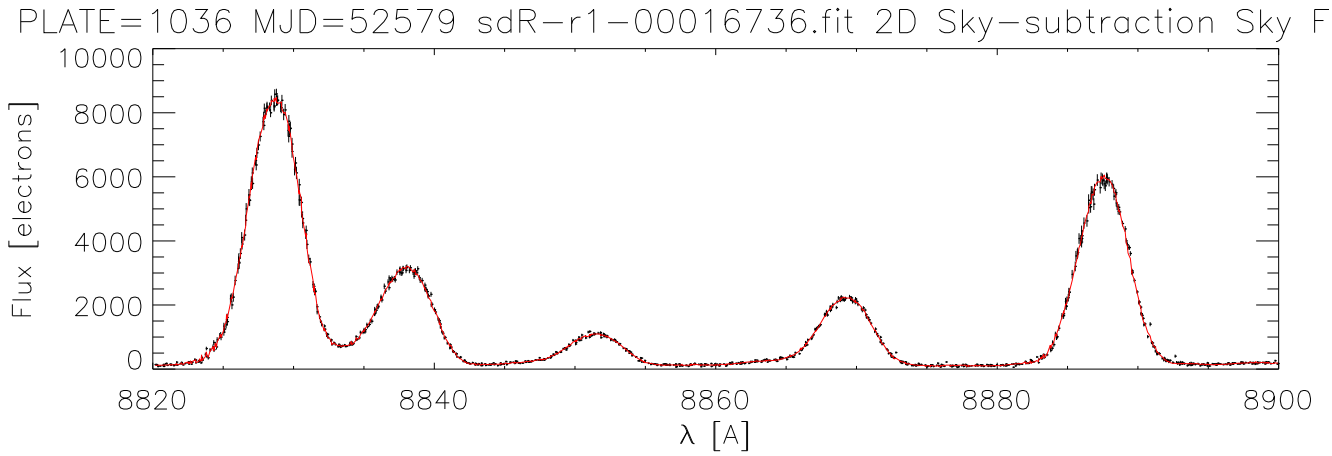

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-5
0
5
10
15
20
50
100
150
200
250
300
Fiber number

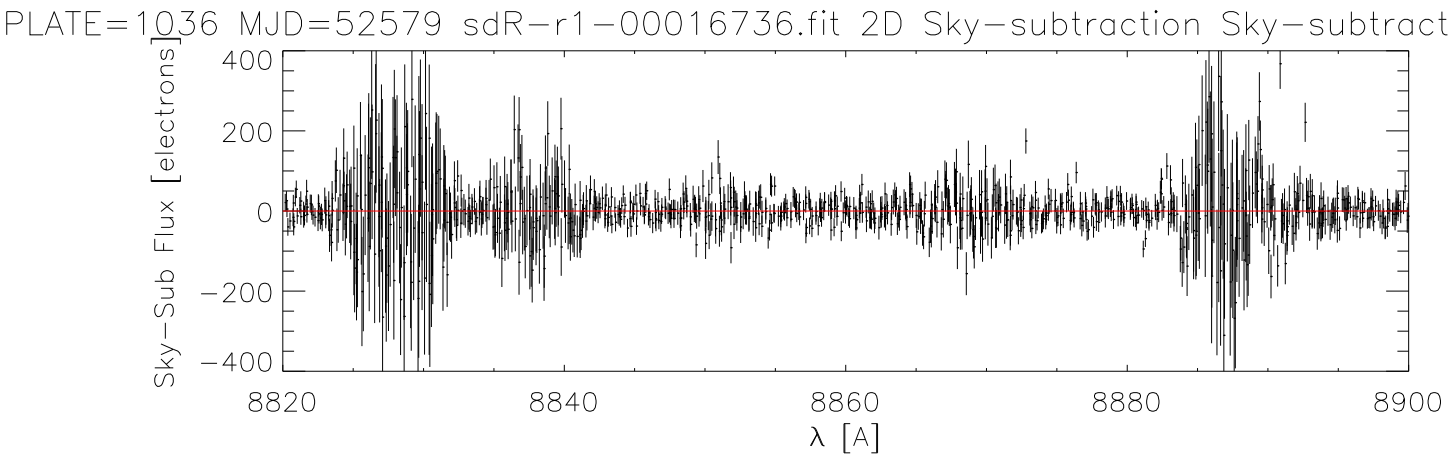

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

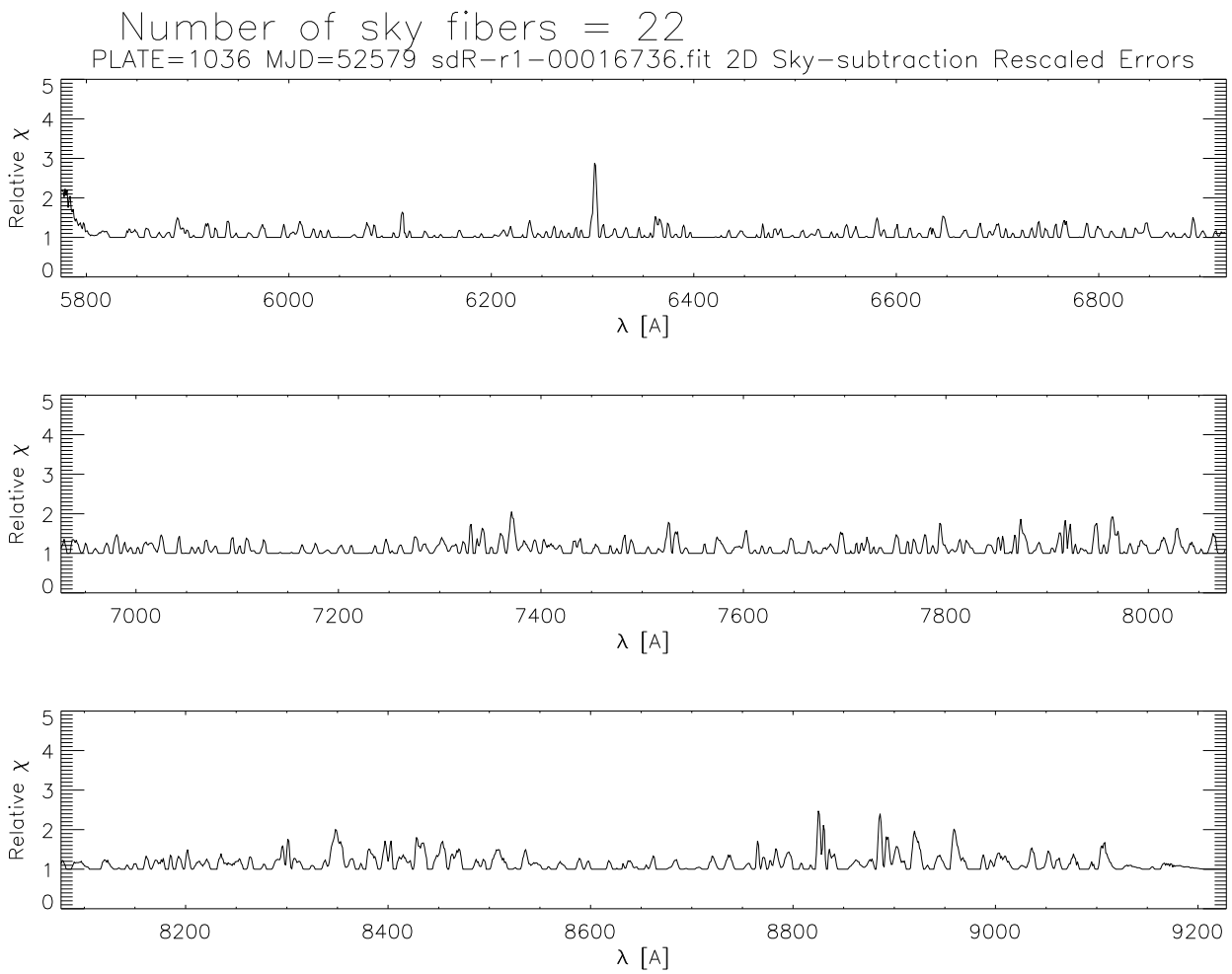

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

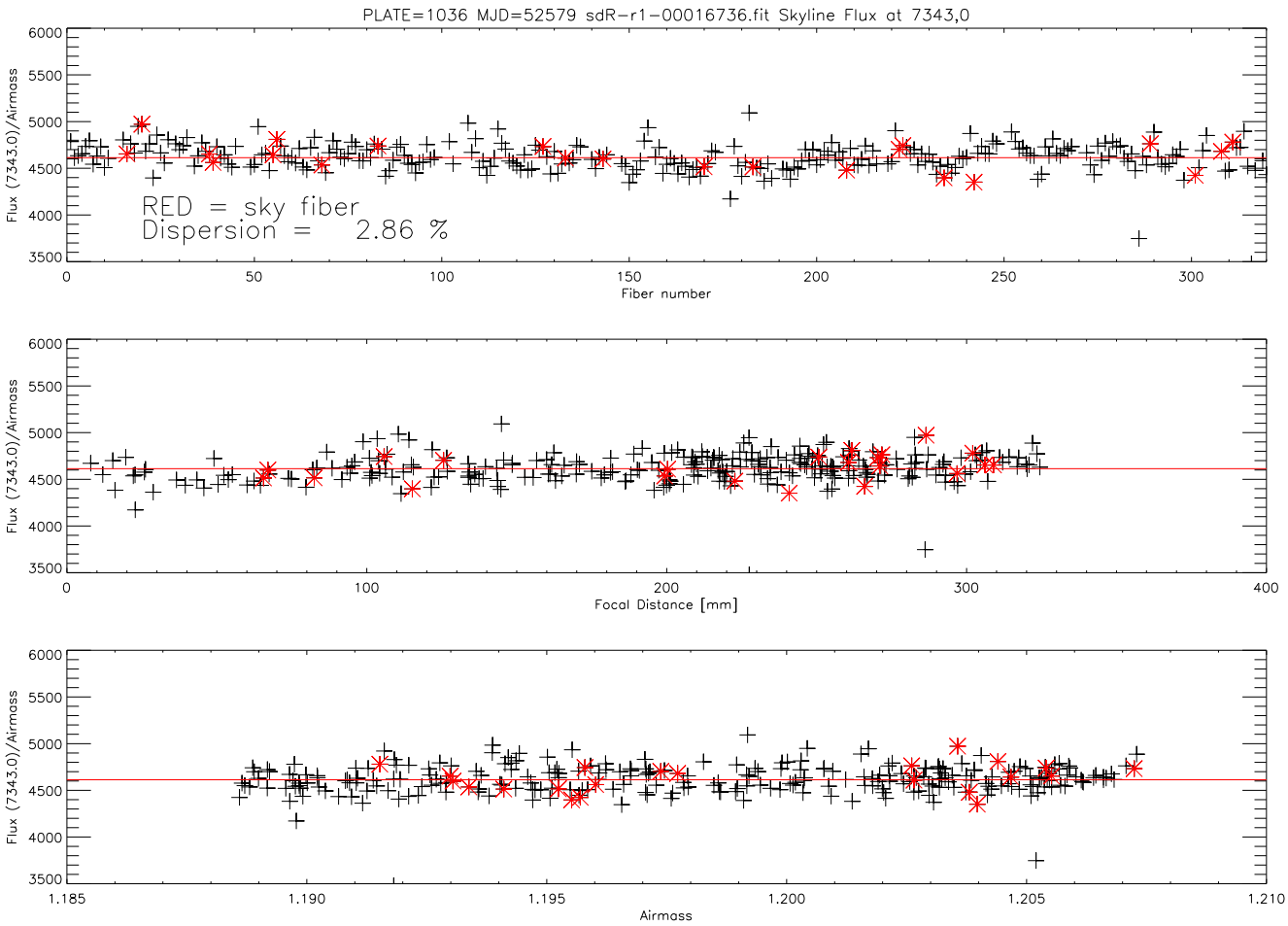

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016736.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

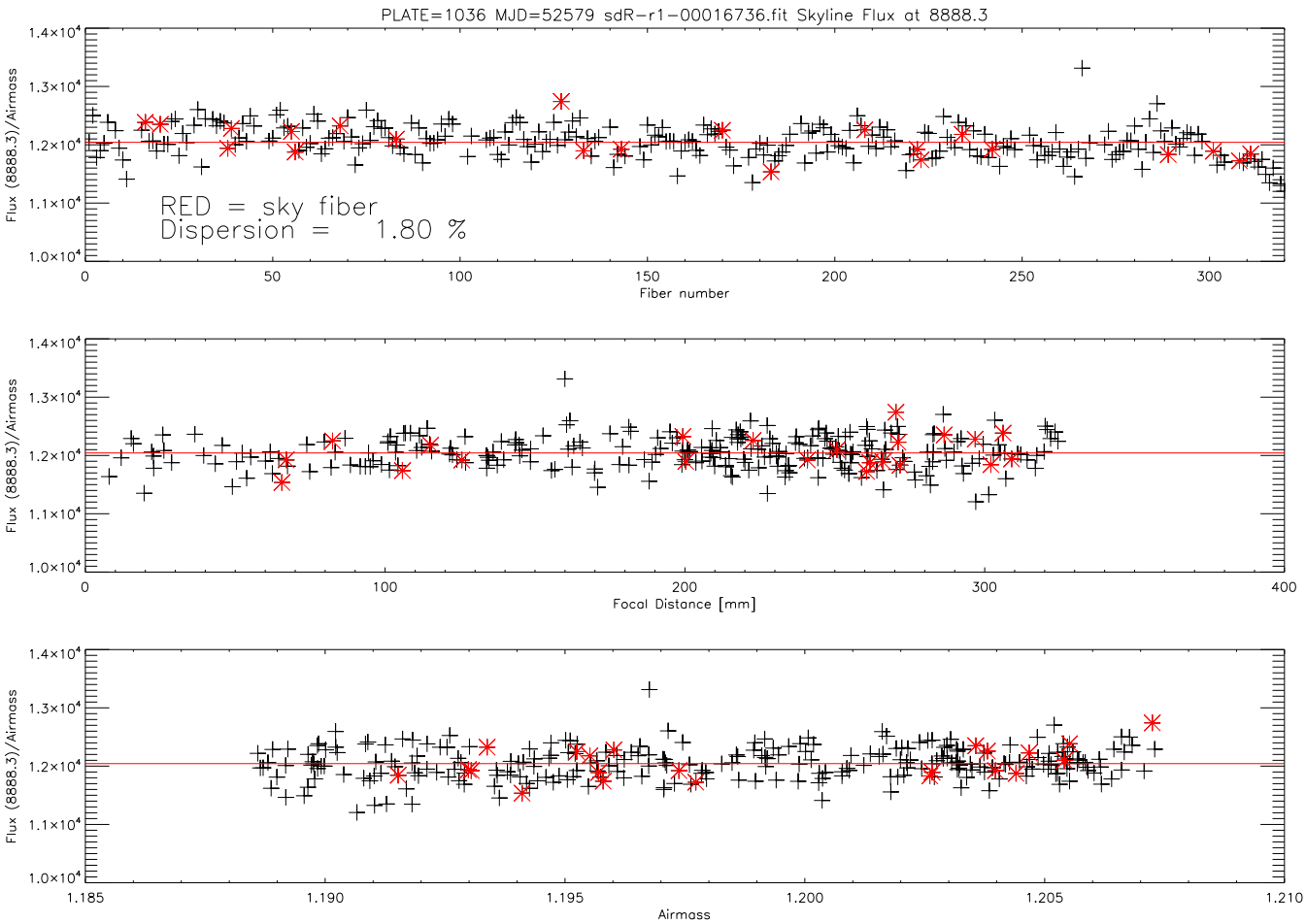

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

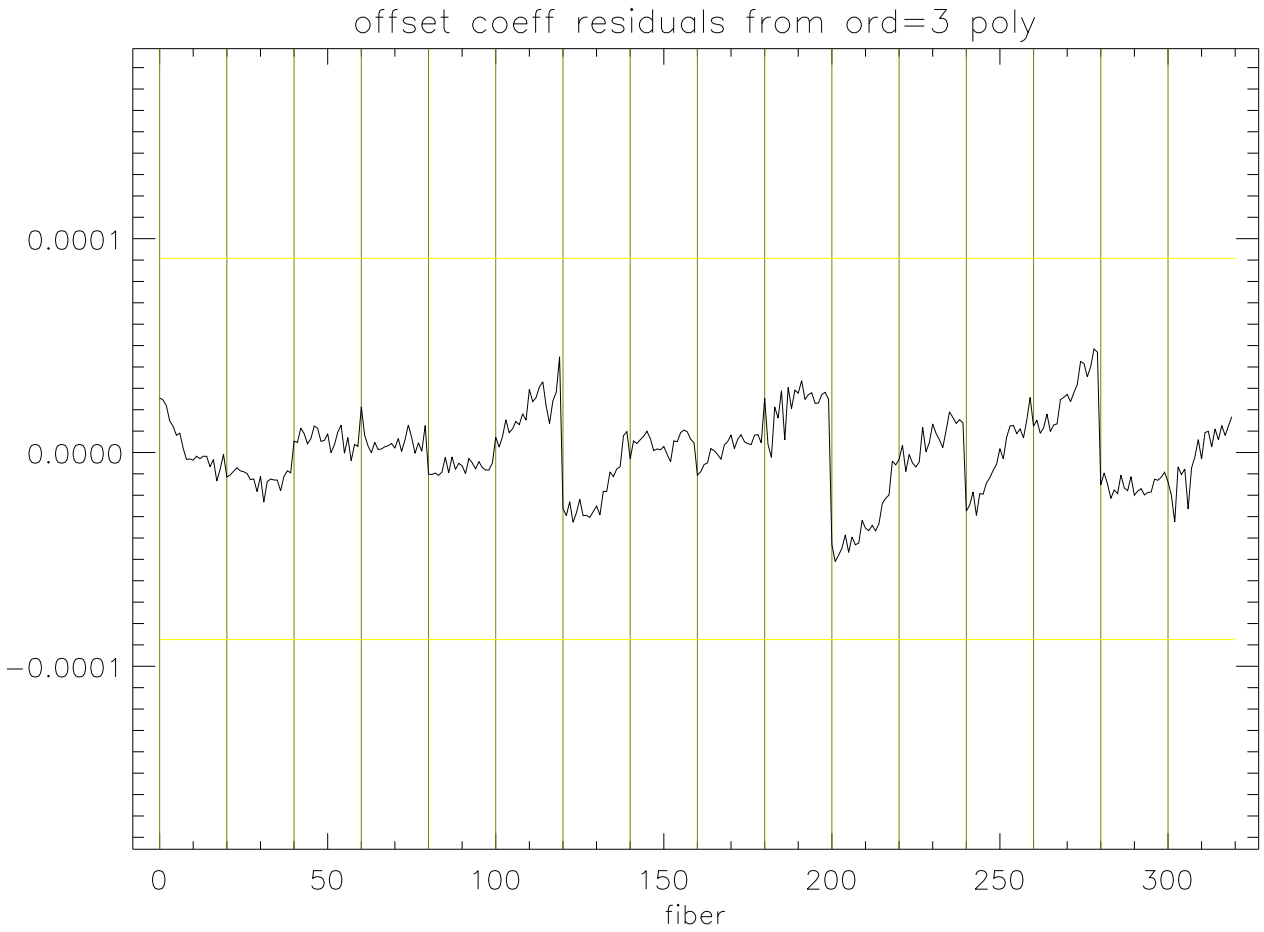

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

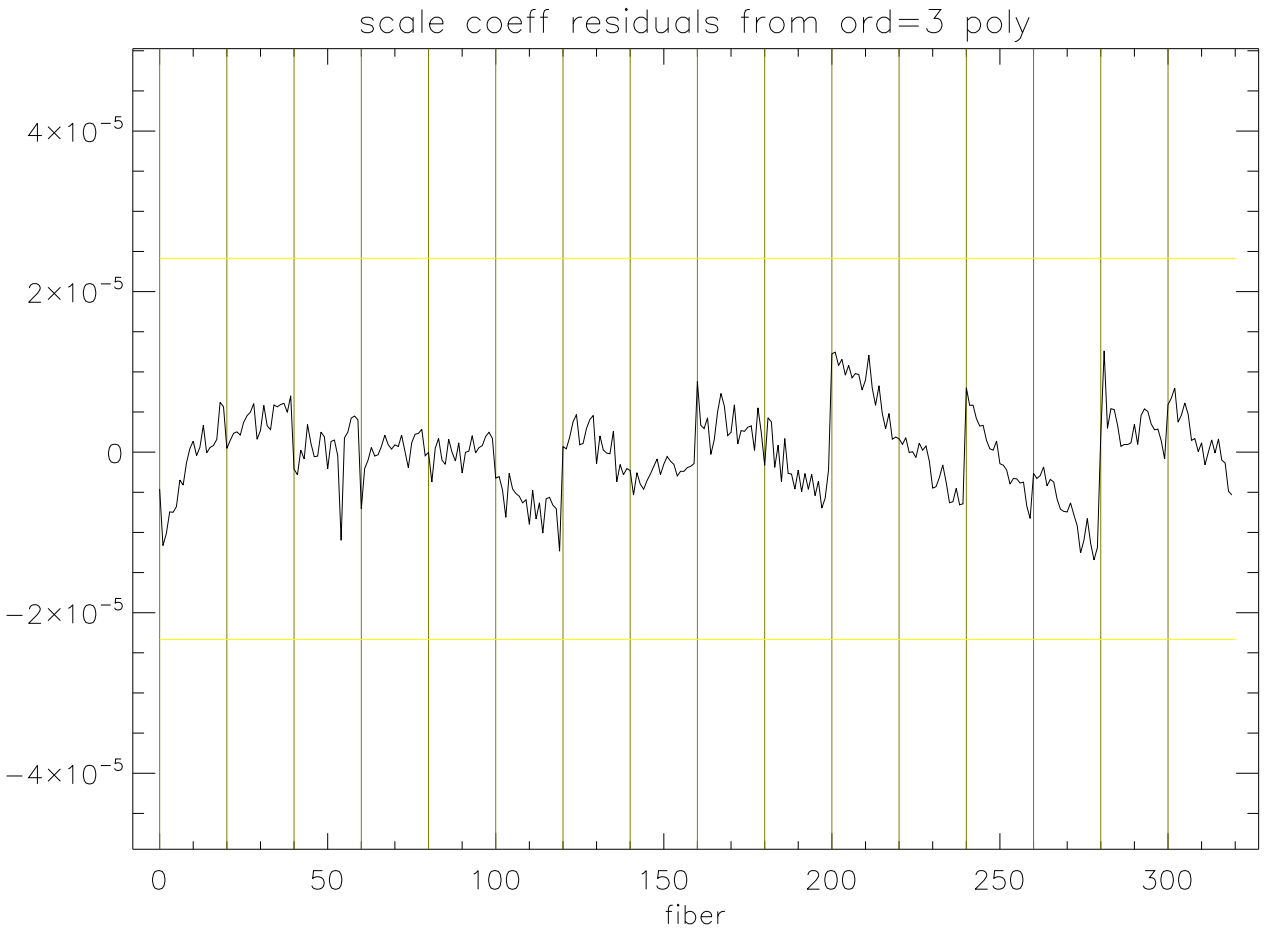

PLATE=1036 MJD=52579 sdR-r1-00016736.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

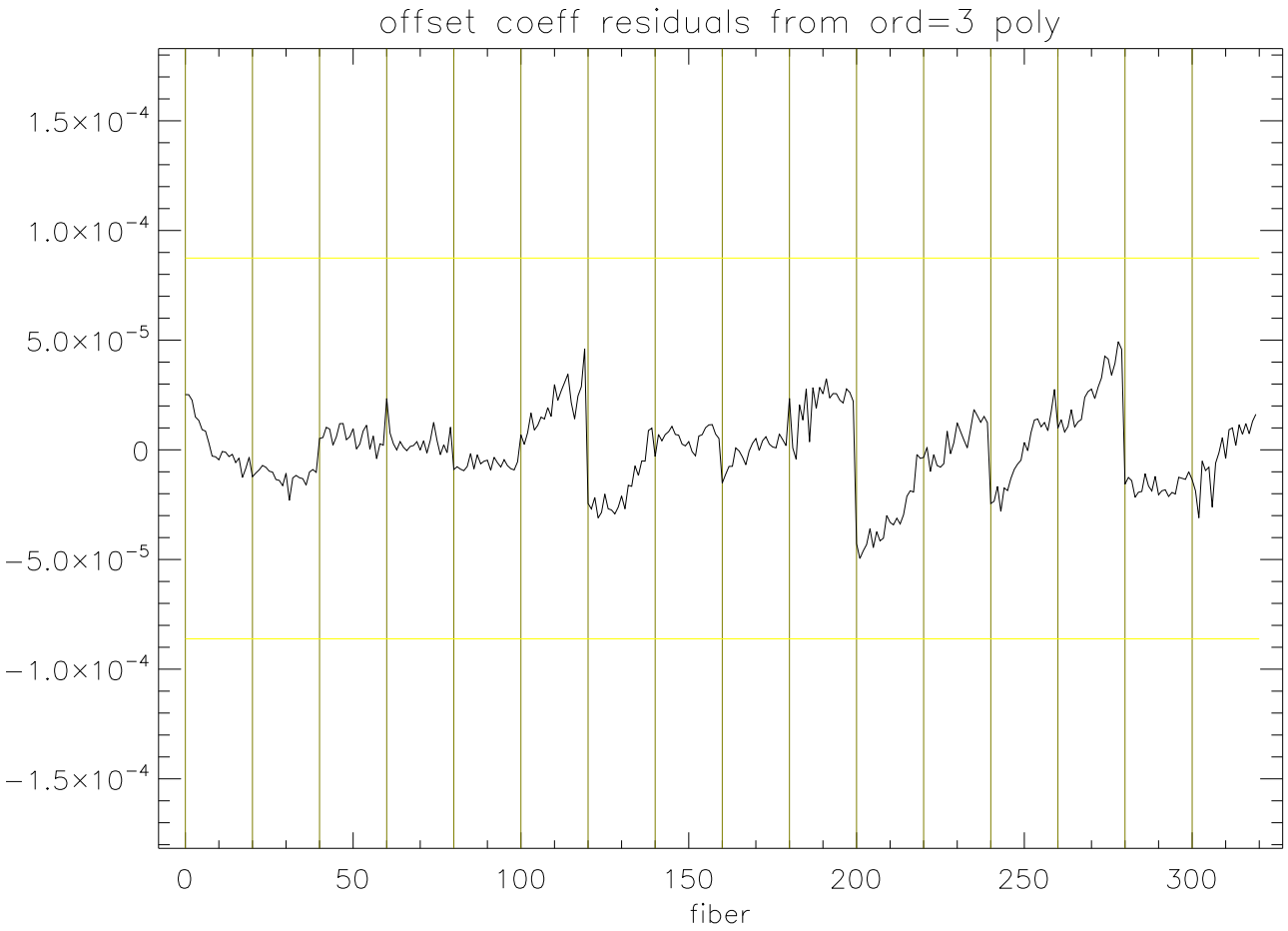

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r1-00016736.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

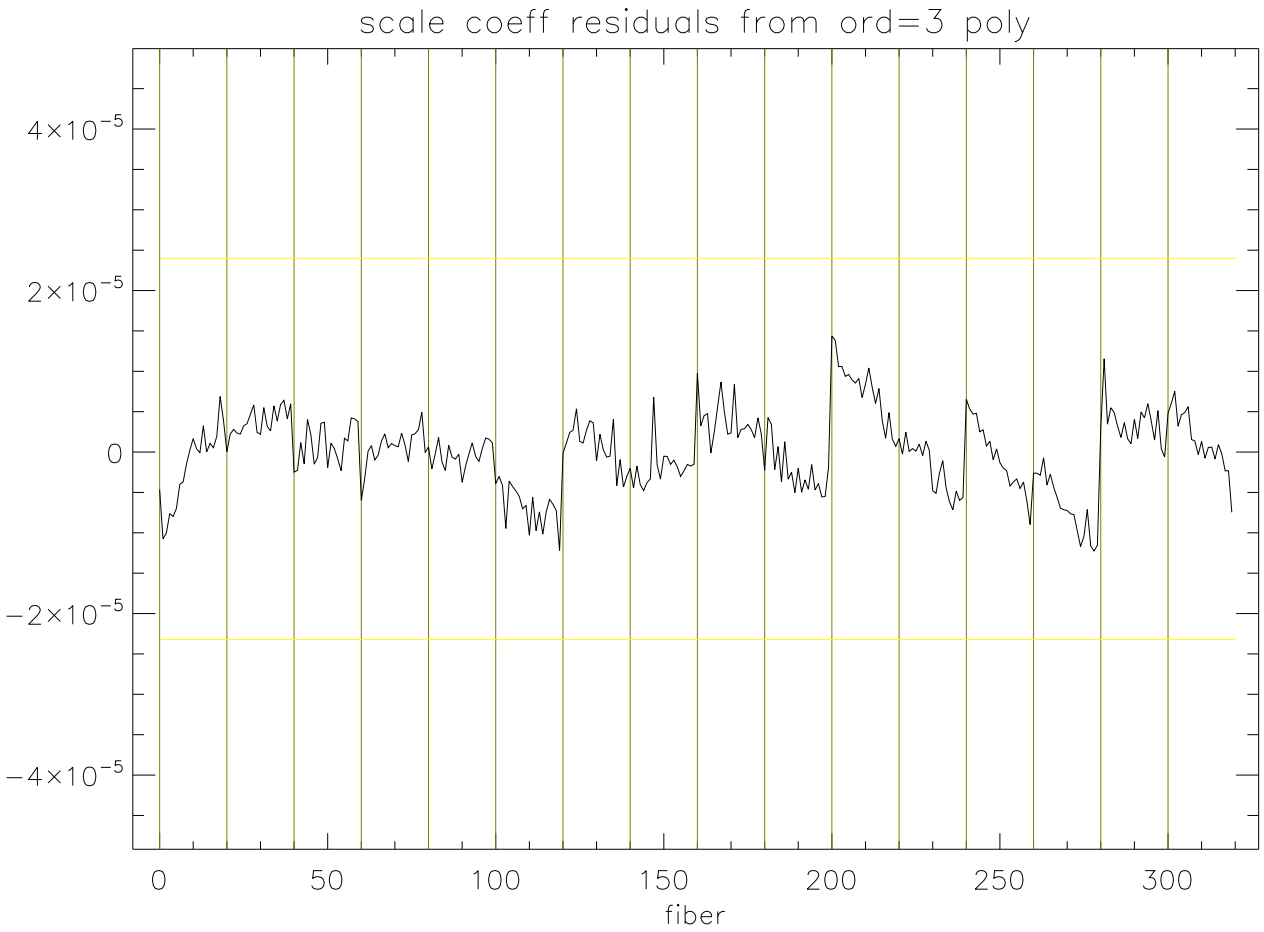

PLATE=1036 MJD=52579 sdR-r1-00016736.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

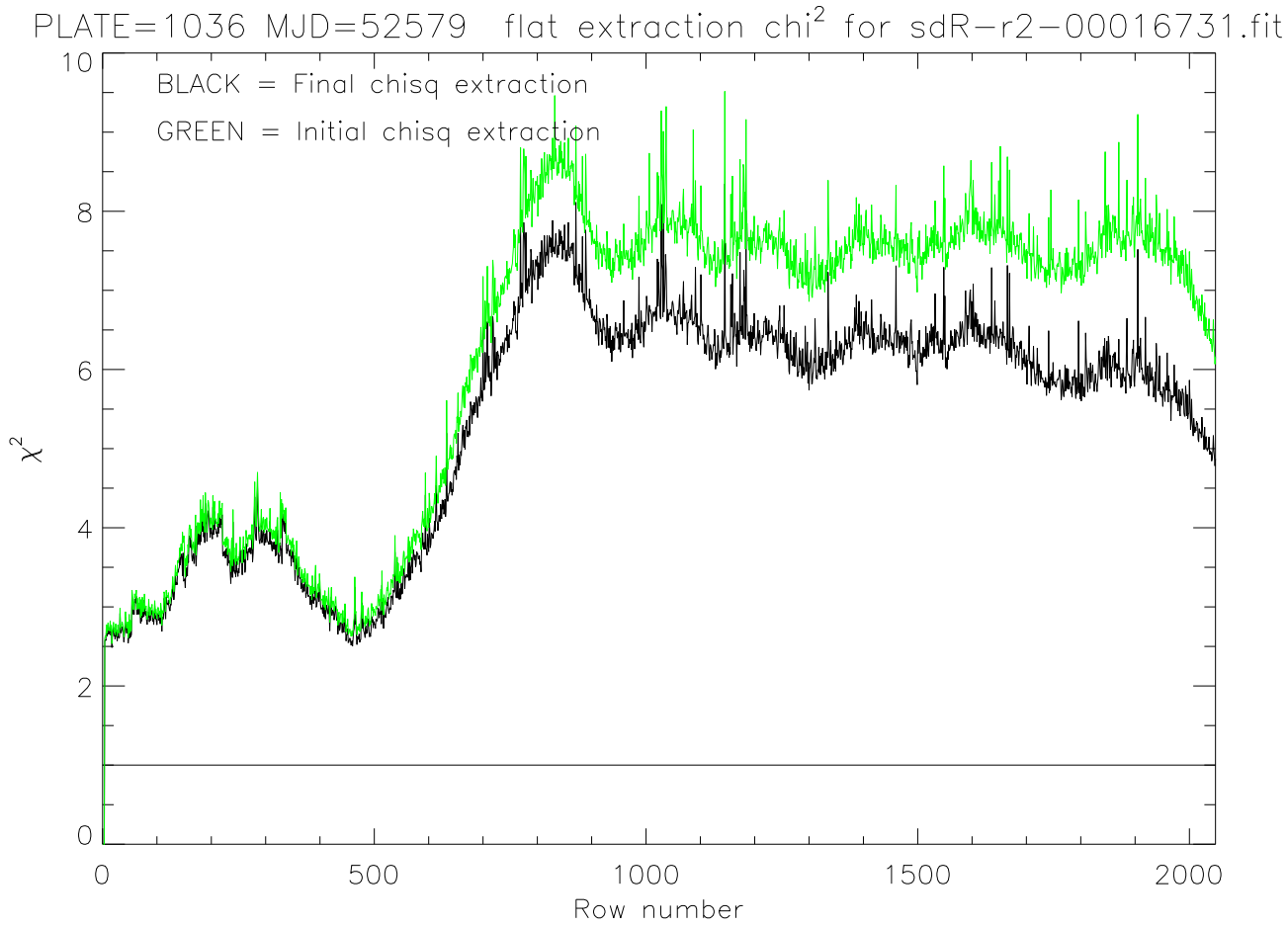

PLATE=1036 MJD=52579 sdR-r1-00016736.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.80 %
Fiber number
Focal Distance [mm]
Airmass

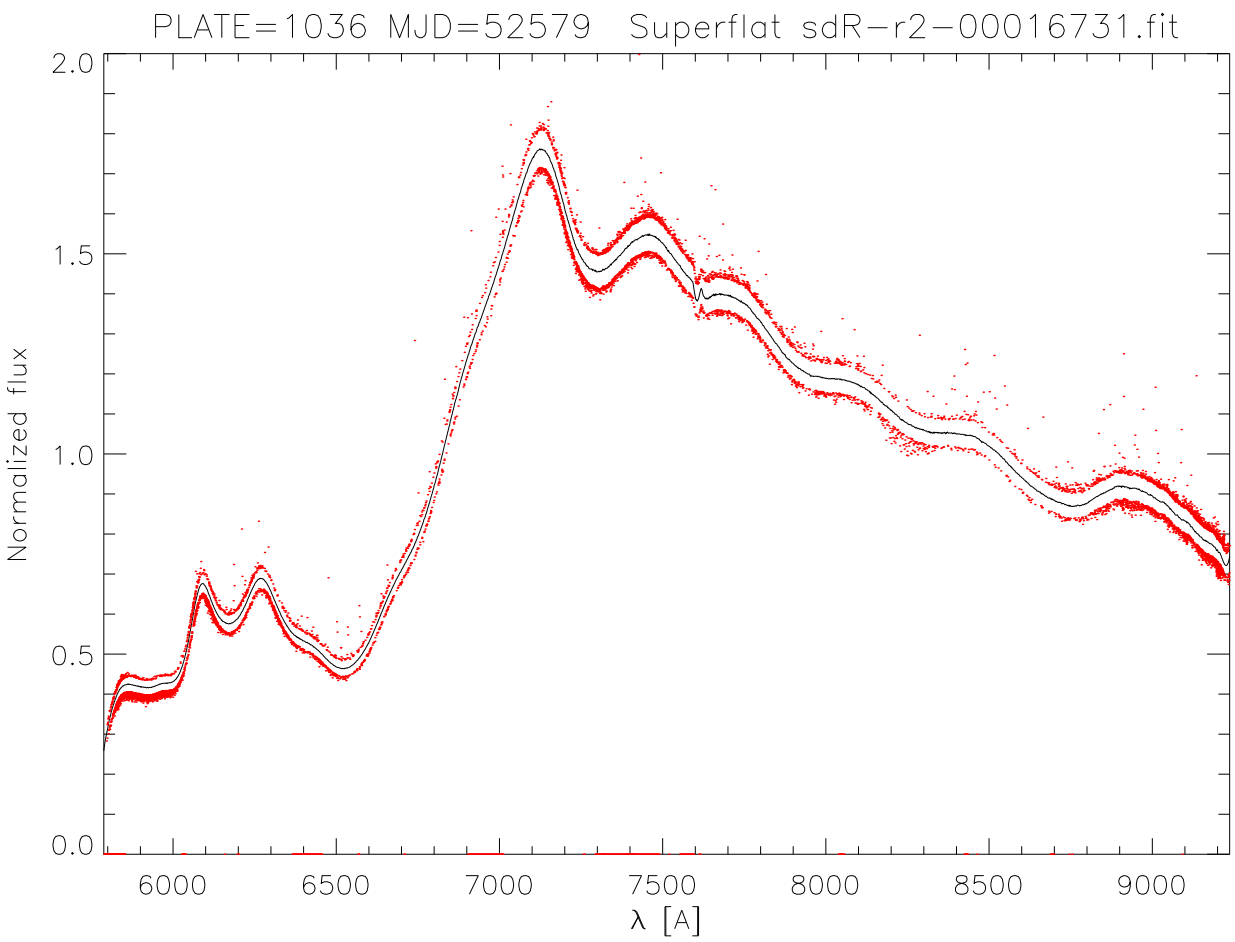

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

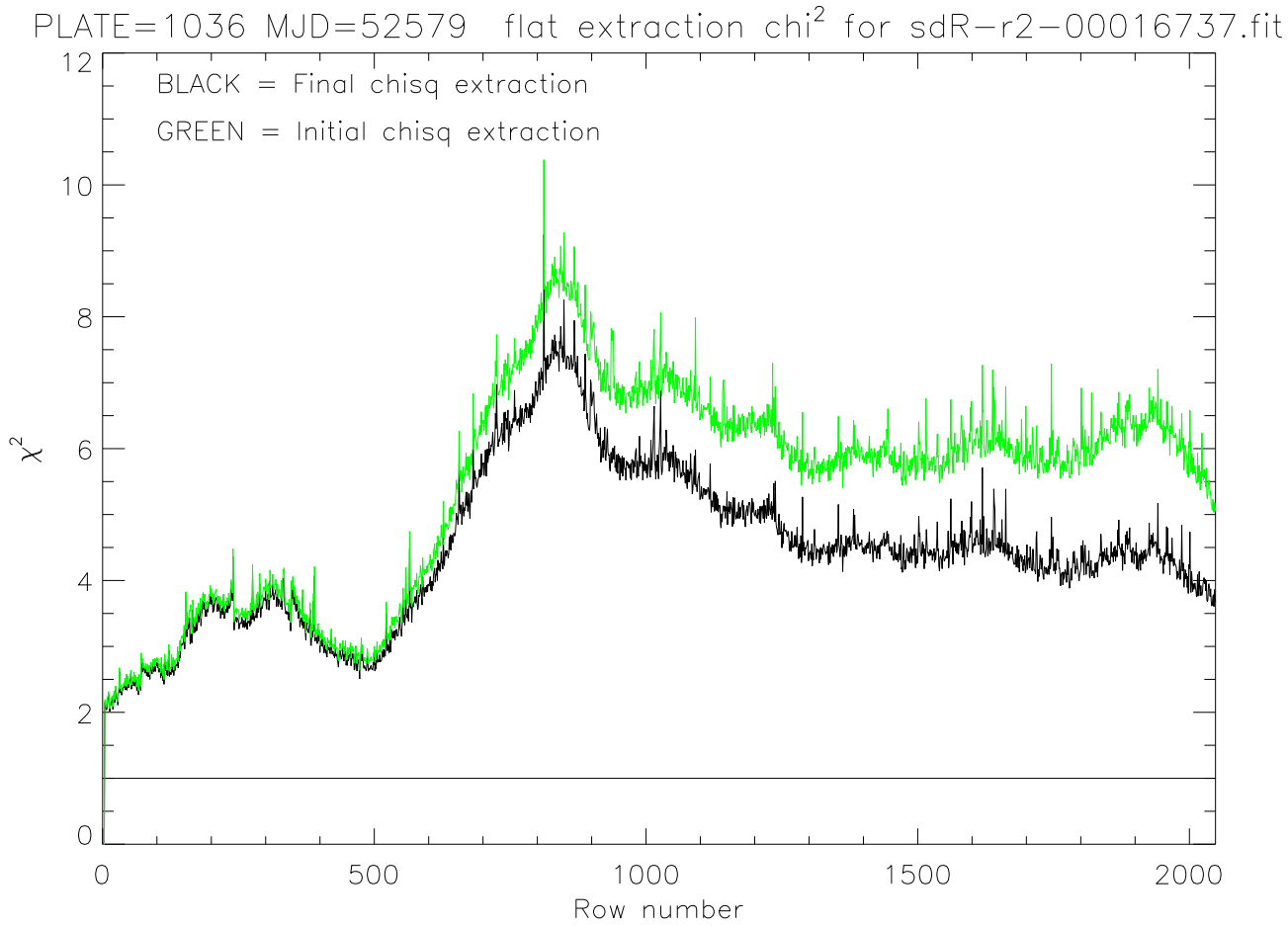

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

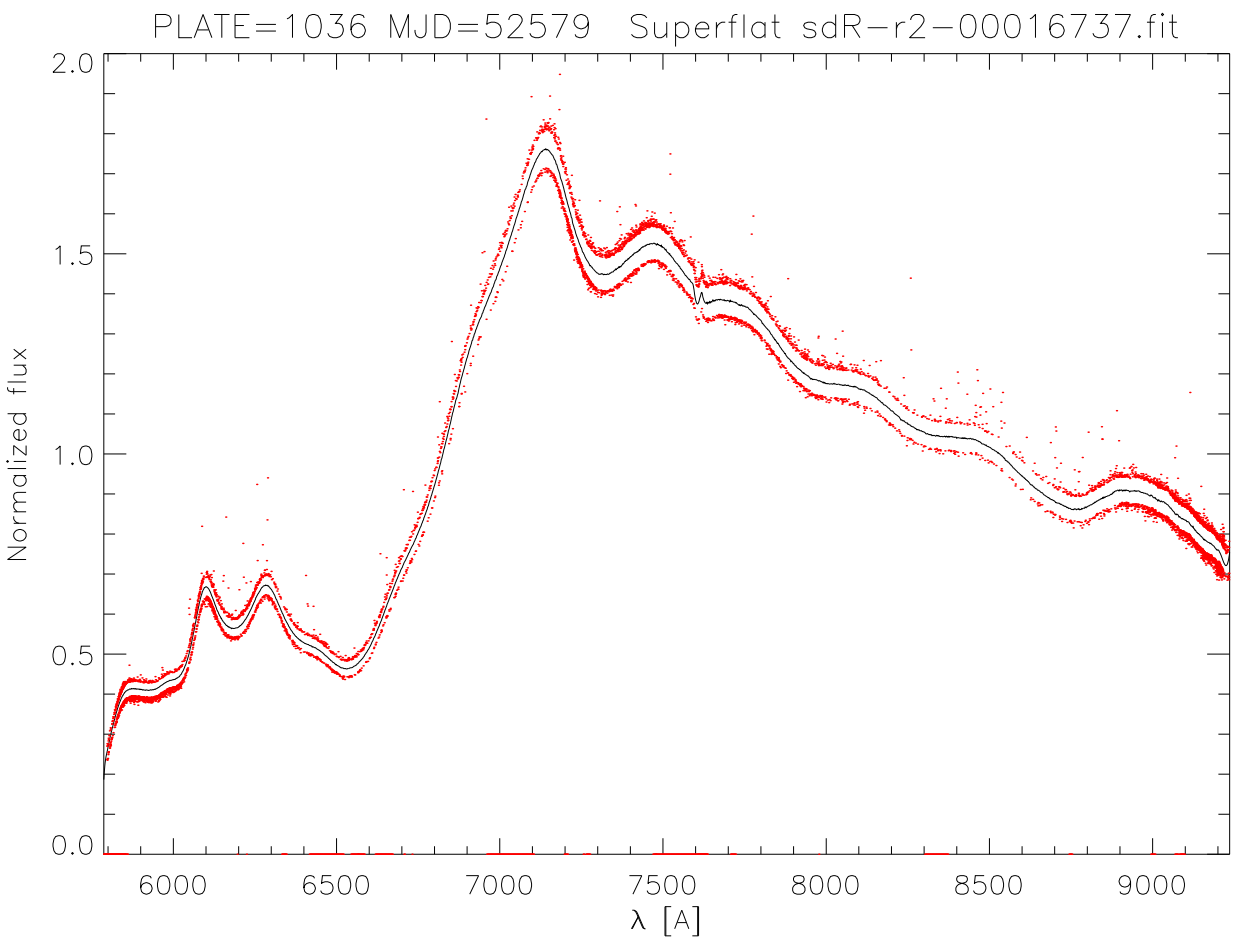

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

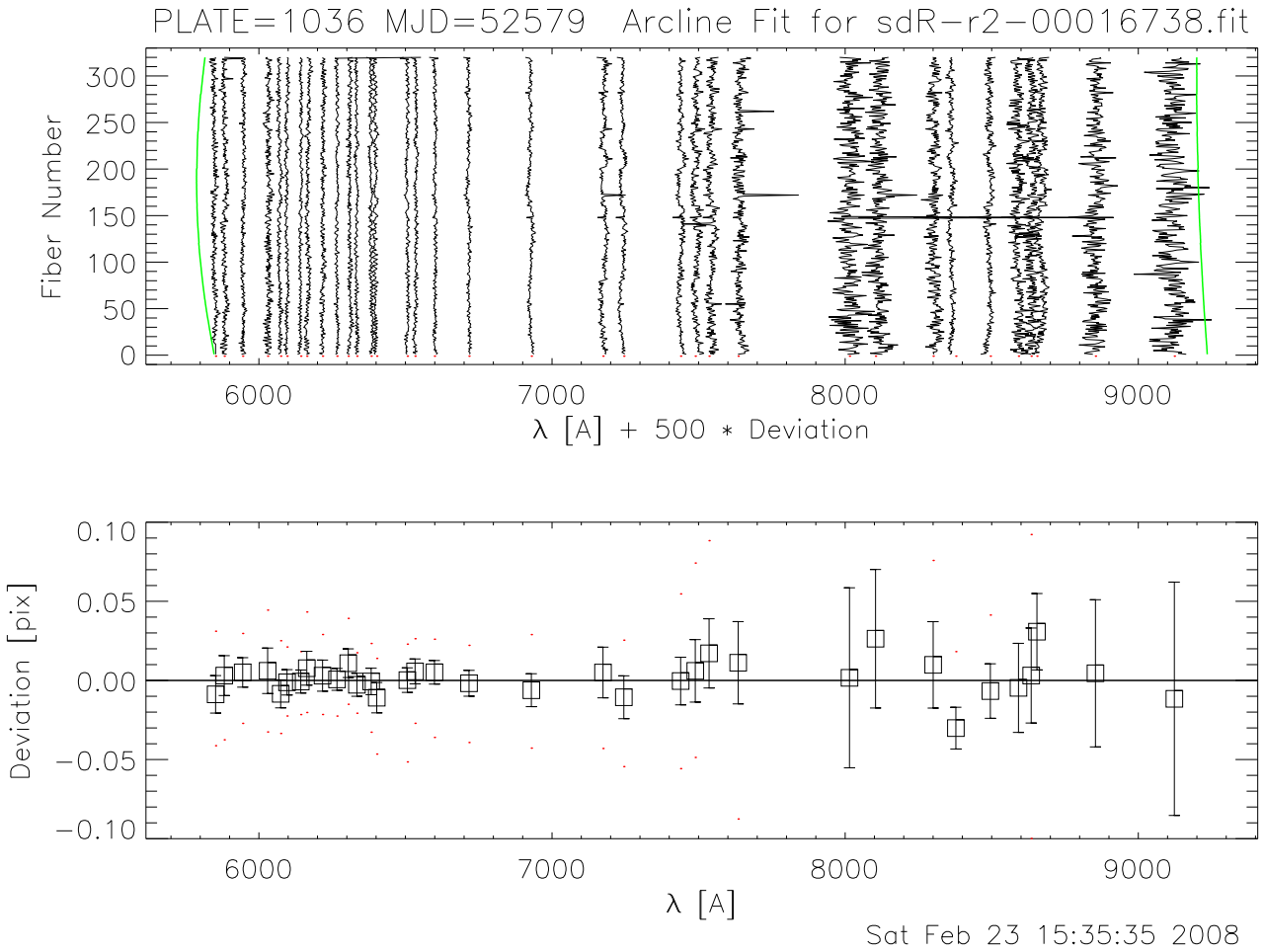

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

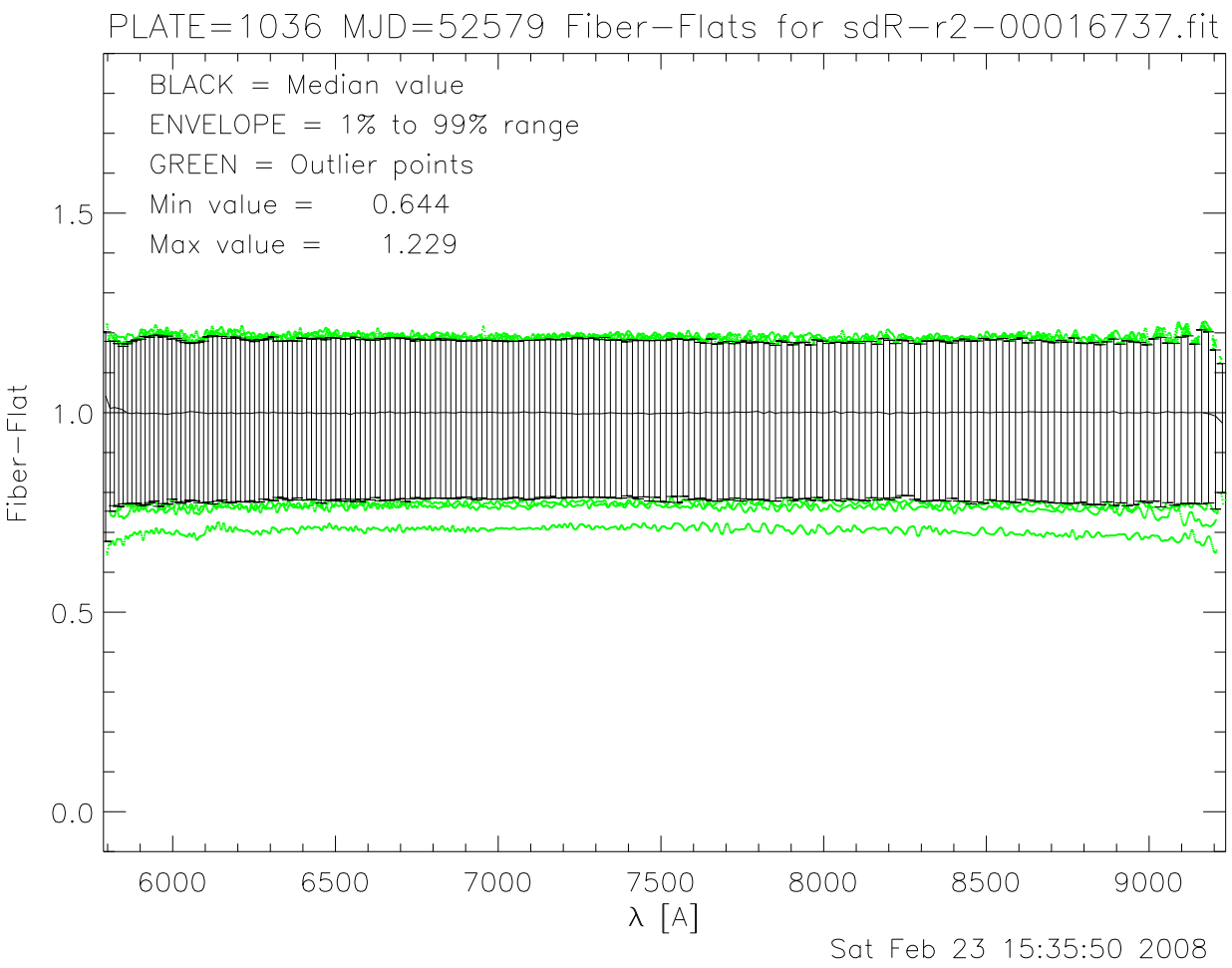

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−r2−00016731.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

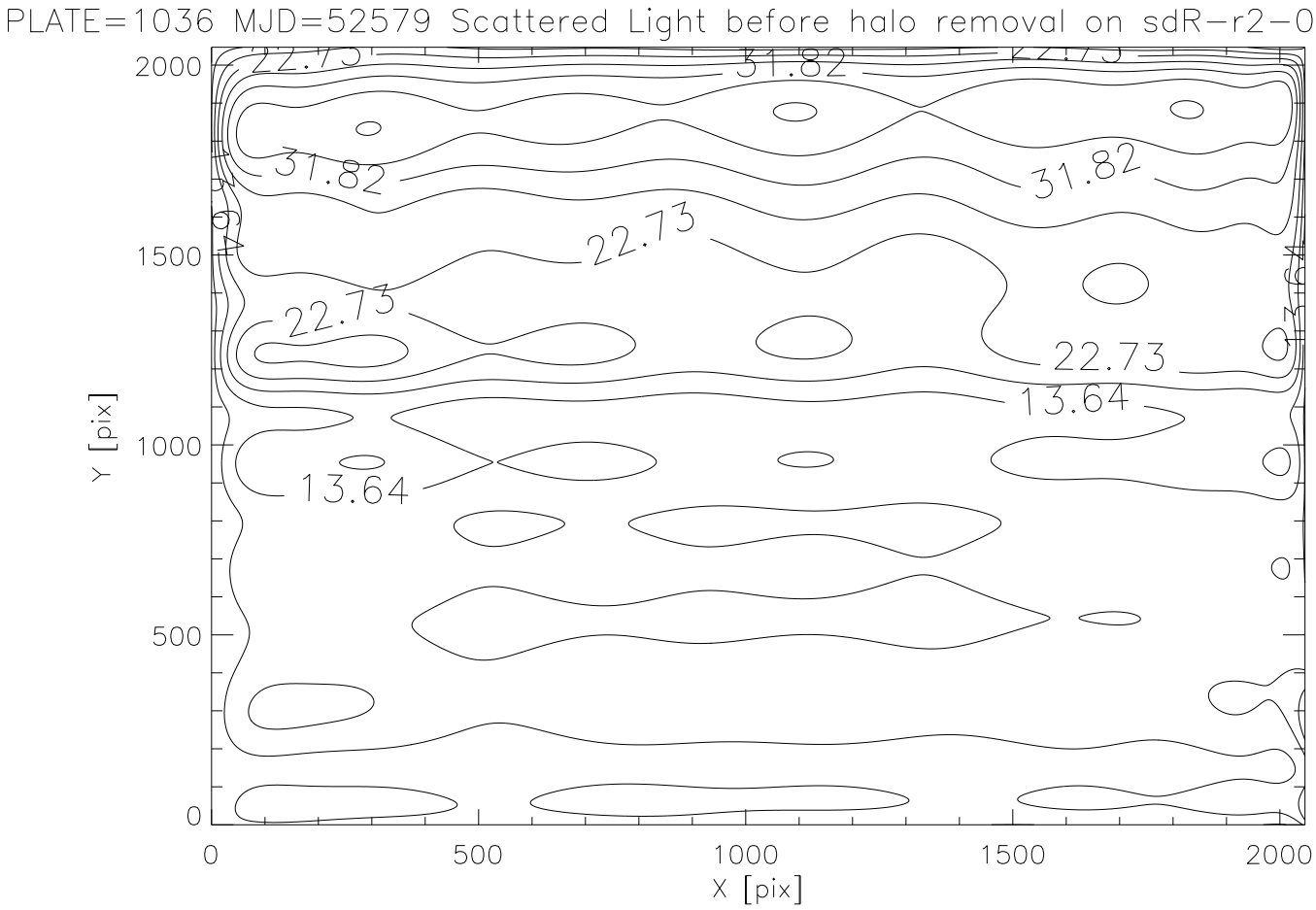

PLATE=1036 MJD=52579 Superflat sdR-r2-00016731.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

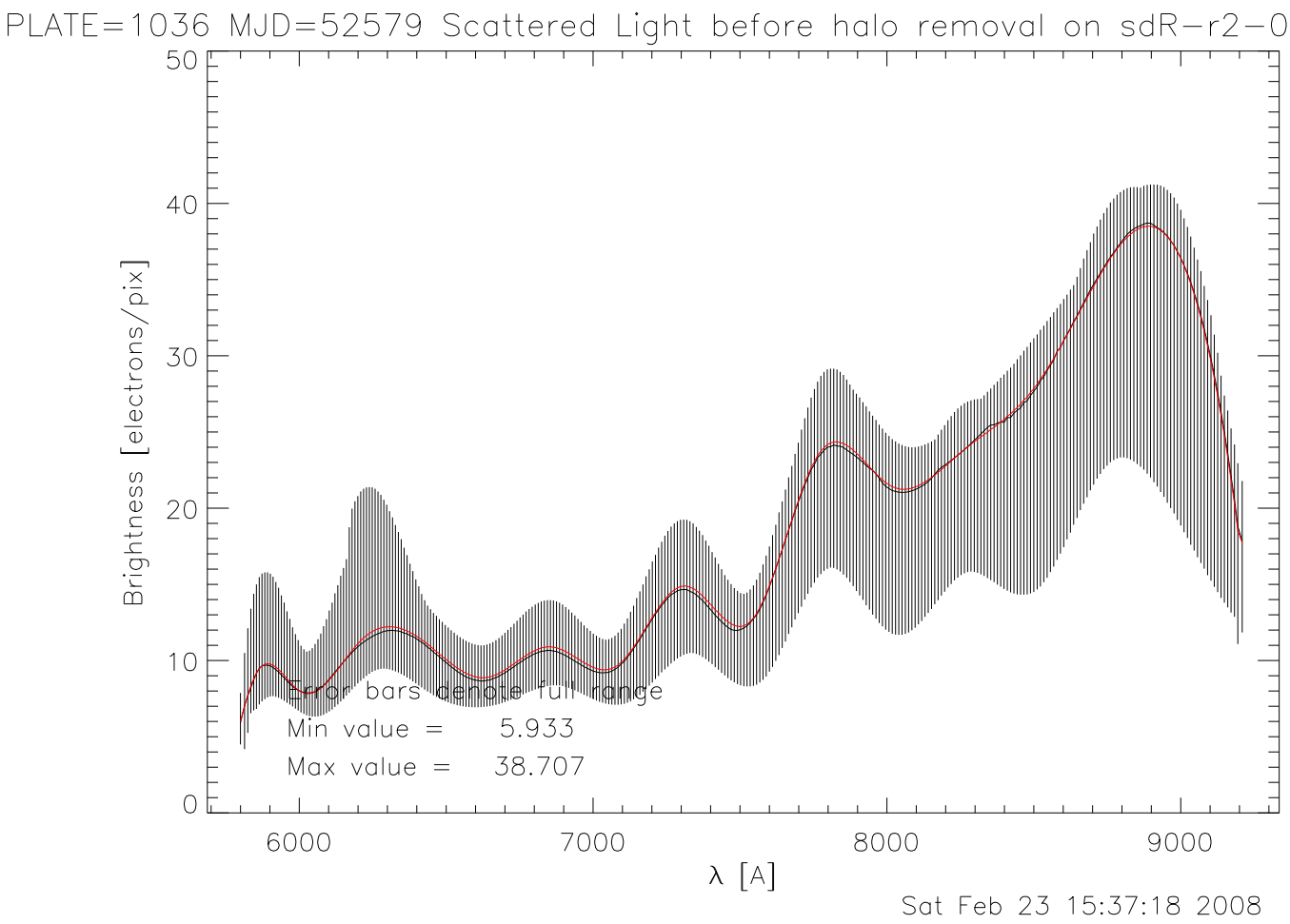

PLATE=1036 MJD=52579 flat extraction chi^2 for sdR−r2−00016737.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

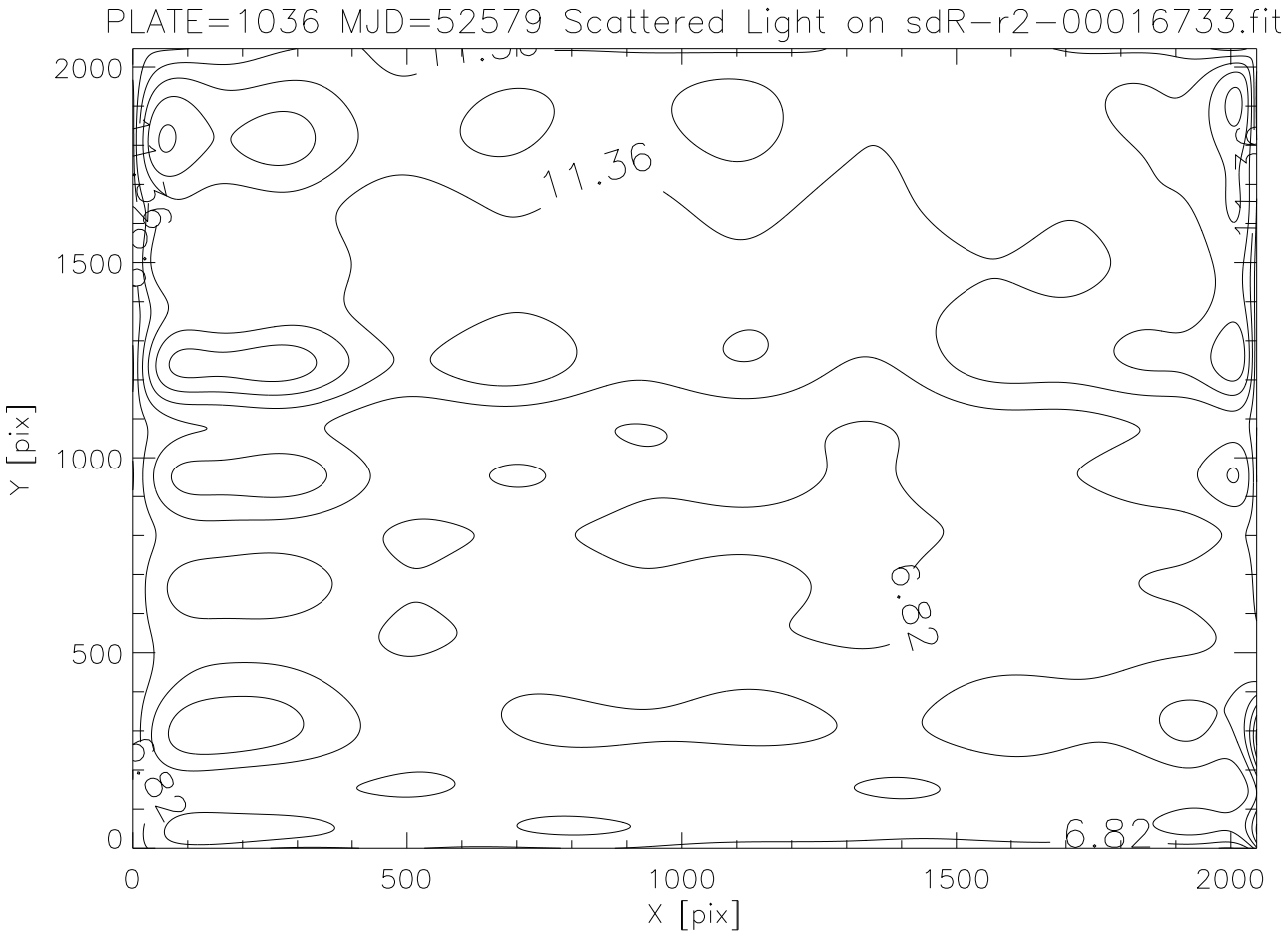

PLATE=1036 MJD=52579 Superflat sdR-r2-00016737.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

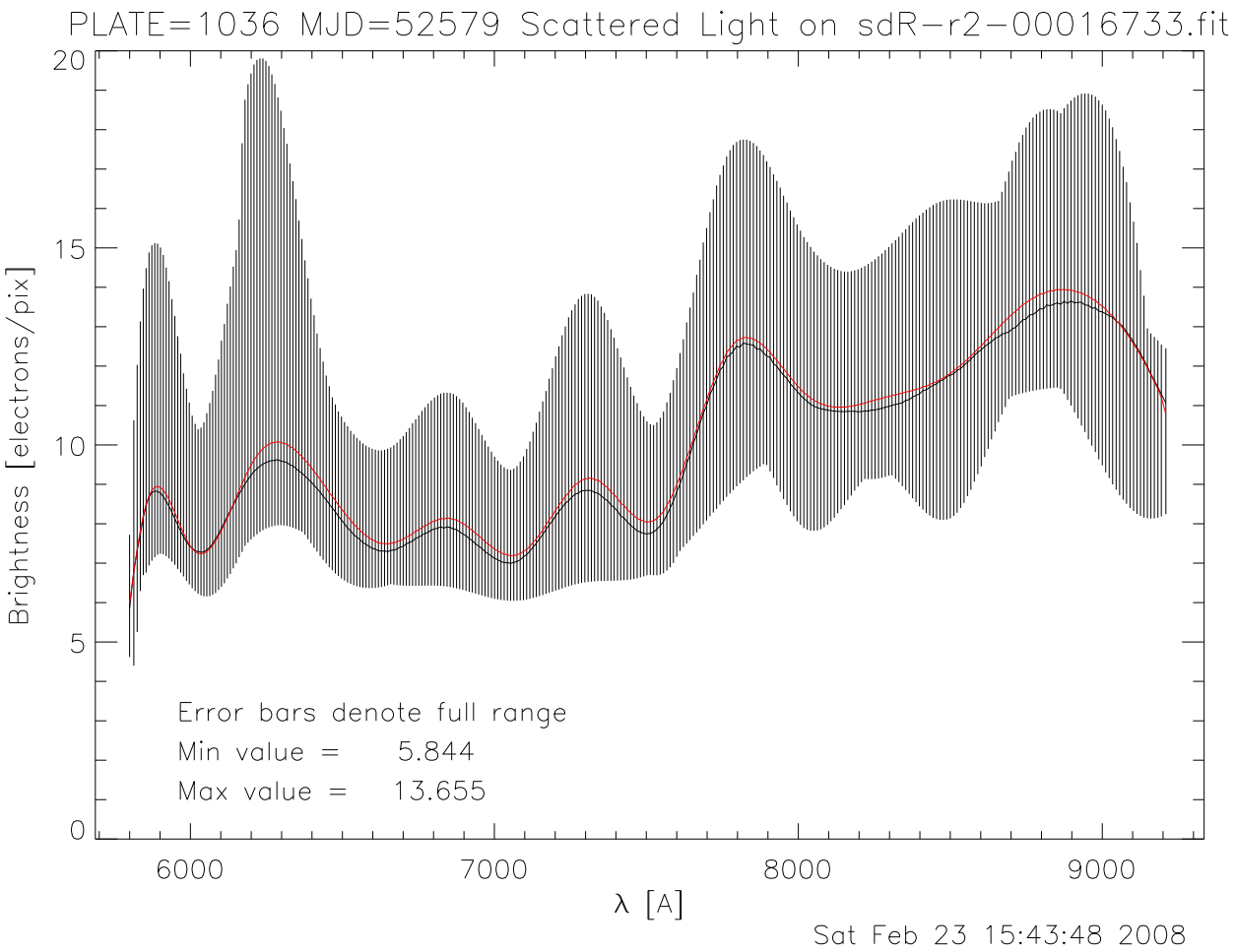

PLATE=1036 MJD=52579 Arcline Fit for sdR-r2-00016738.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 15:35:35 2008

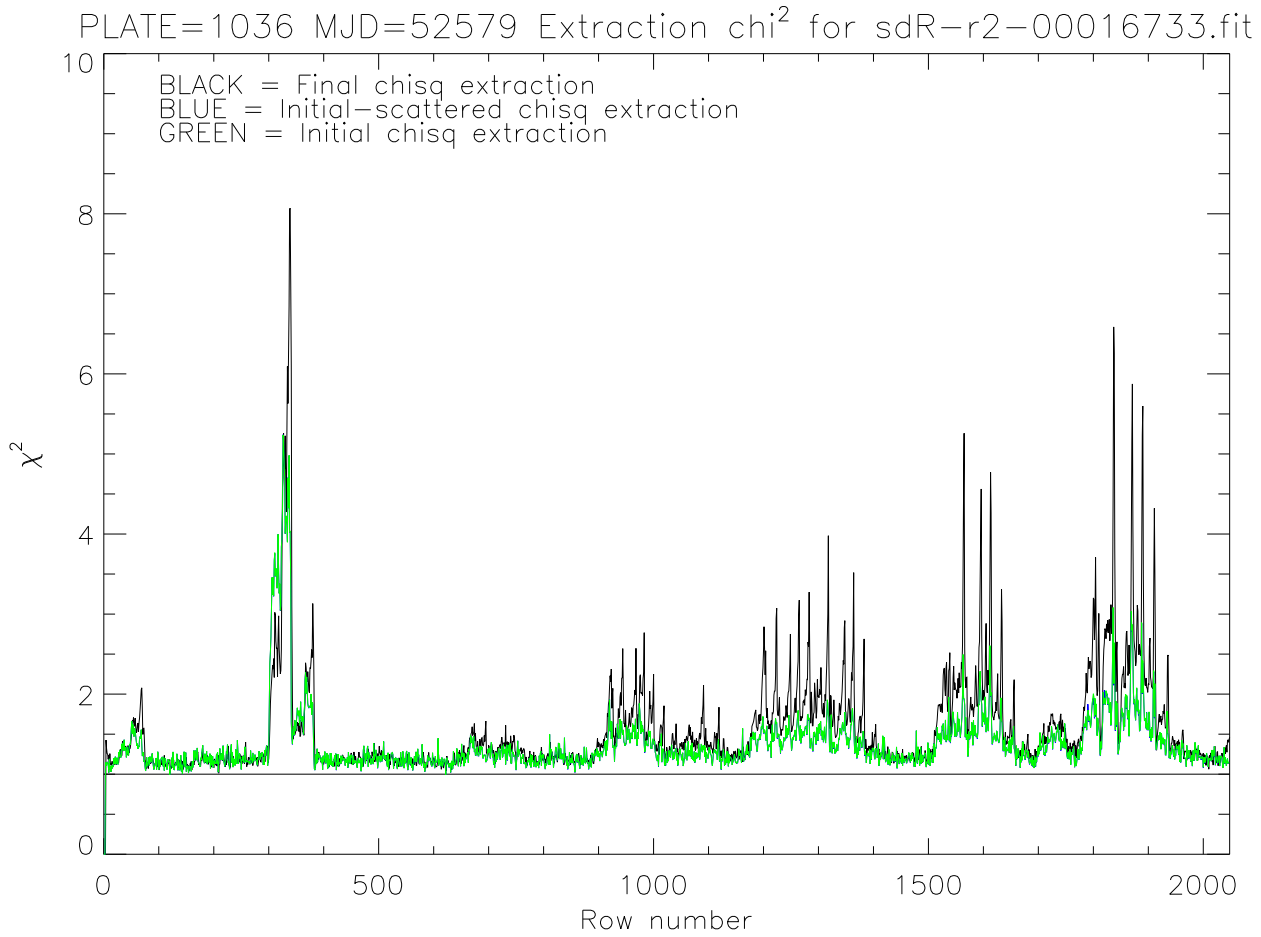

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r2−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.644
Max value = 1.229
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 15:35:50 2008

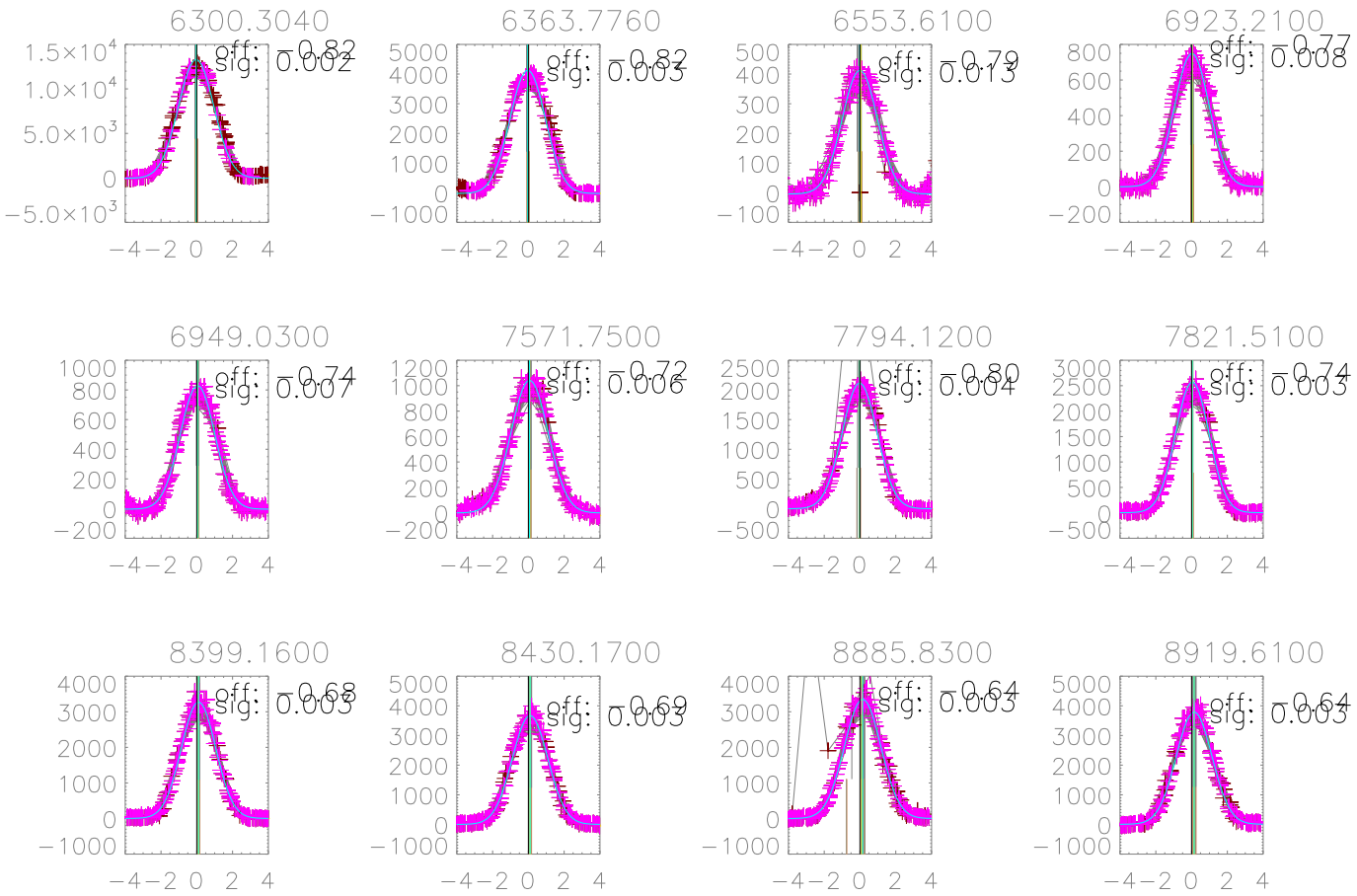

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016733.fi
31.82
31.82
31.82
22.73
22.73
22.73
13.64
13.64
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

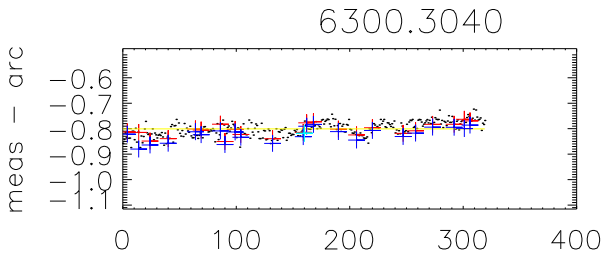

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016733.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.933
Max value = 38.707
Sat Feb 23 15:37:18 2008

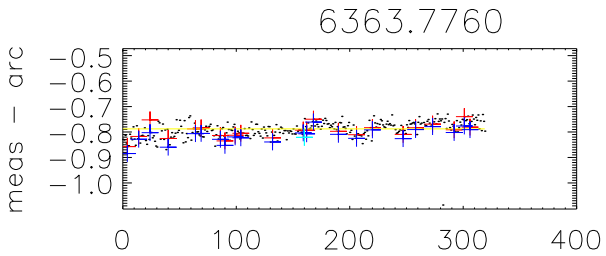

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016733.fit
11.36
6.82
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

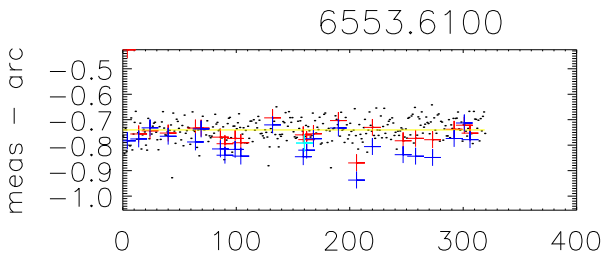

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016733.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.844
Max value = 13.655
Sat Feb 23 15:43:48 2008

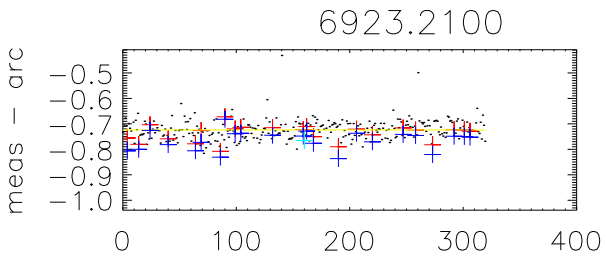

PLATE=1036 MJD=52579 Extraction chi^2 for sdR−r2−00016733.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

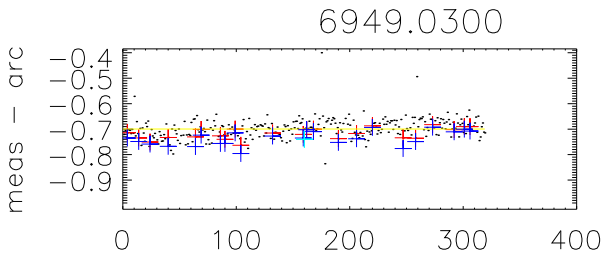

6300.3040
off: −0.82
sig: 0.002
6363.7760
off: −0.82
sig: 0.003
6553.6100
off: −0.79
sig: 0.013
6923.2100
off: −0.77
sig: 0.008
6949.0300
off: −0.74
sig: 0.007
7571.7500
off: −0.72
sig: 0.006
7794.1200
off: −0.80
sig: 0.004
7821.5100
off: −0.74
sig: 0.003
8399.1600
off: −0.68
sig: 0.003
8430.1700
off: −0.69
sig: 0.003
8885.8300
off: −0.64
sig: 0.003
8919.6100
off: −0.64
sig: 0.003

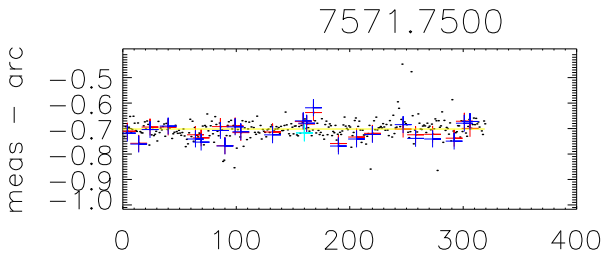

6300.3040
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

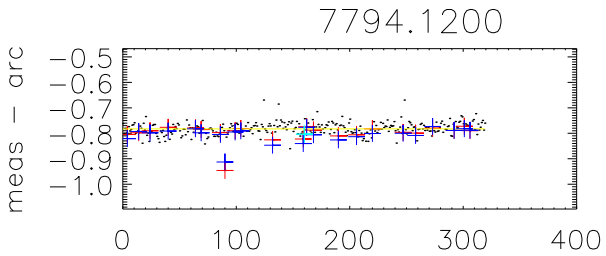

6363.7760
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

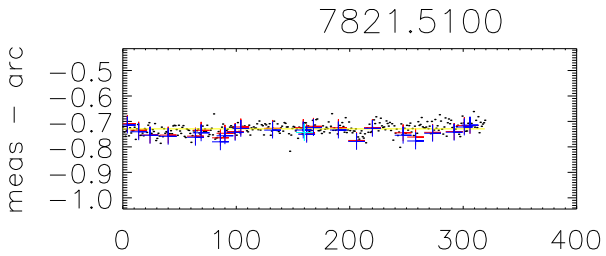

6553.6100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

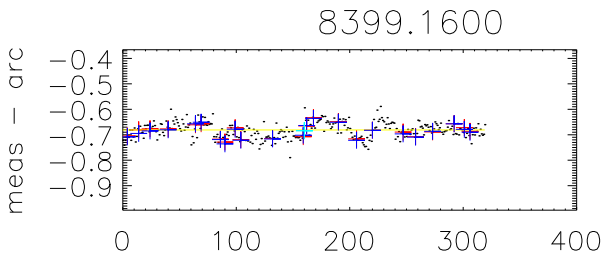

6923.2100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

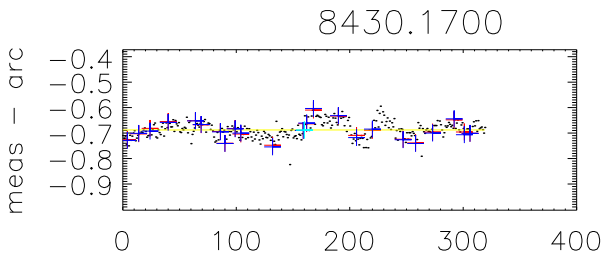

6949.0300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

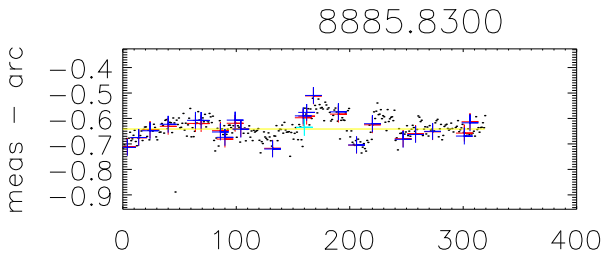

7571.7500
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

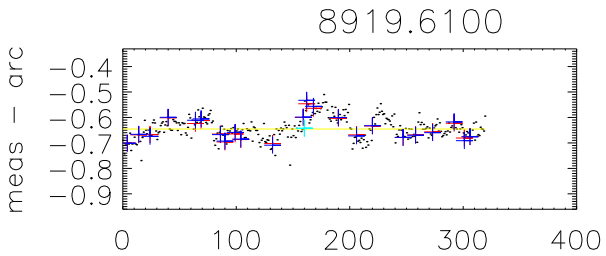

7794.1200
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

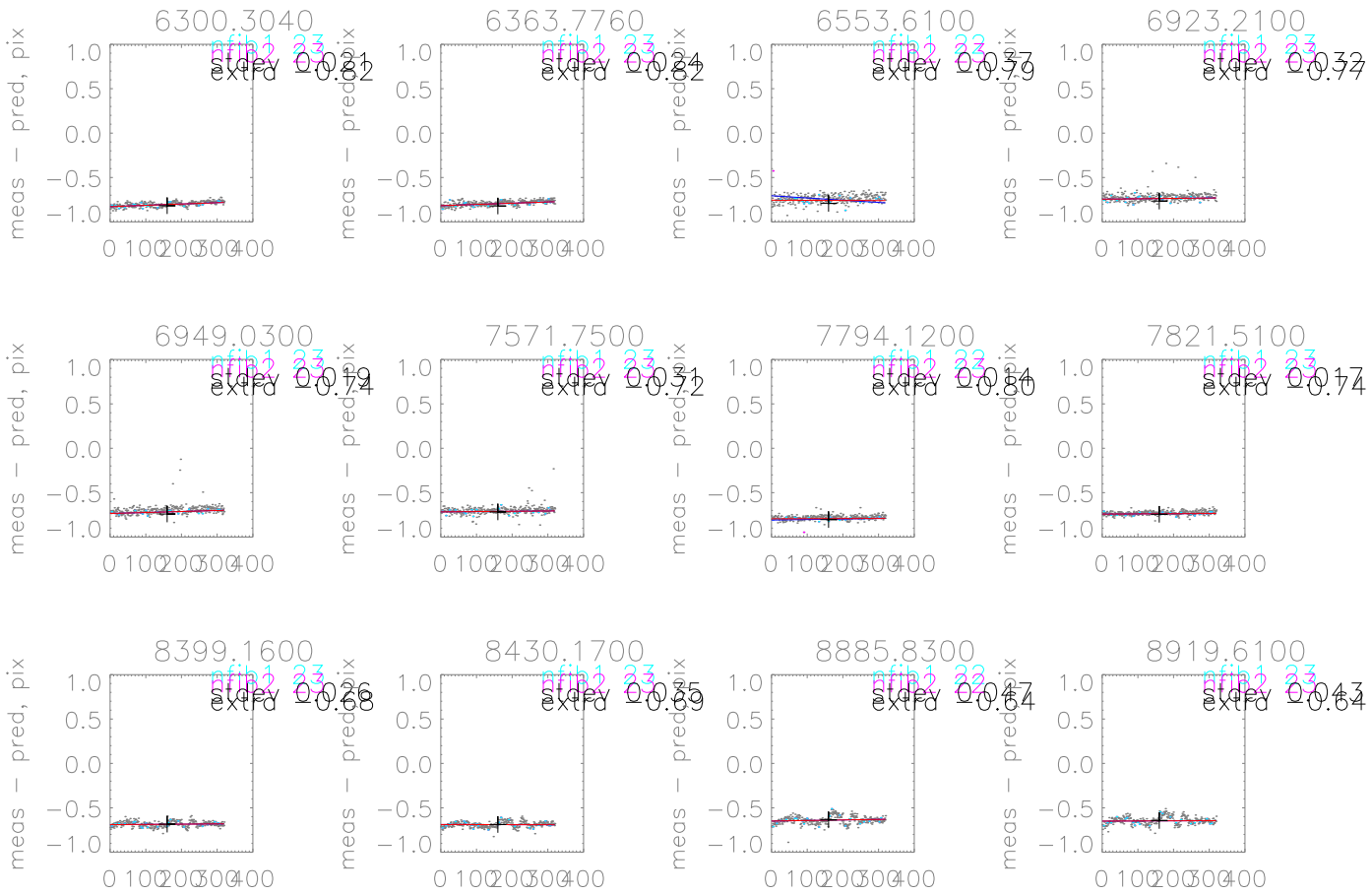

7821.5100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

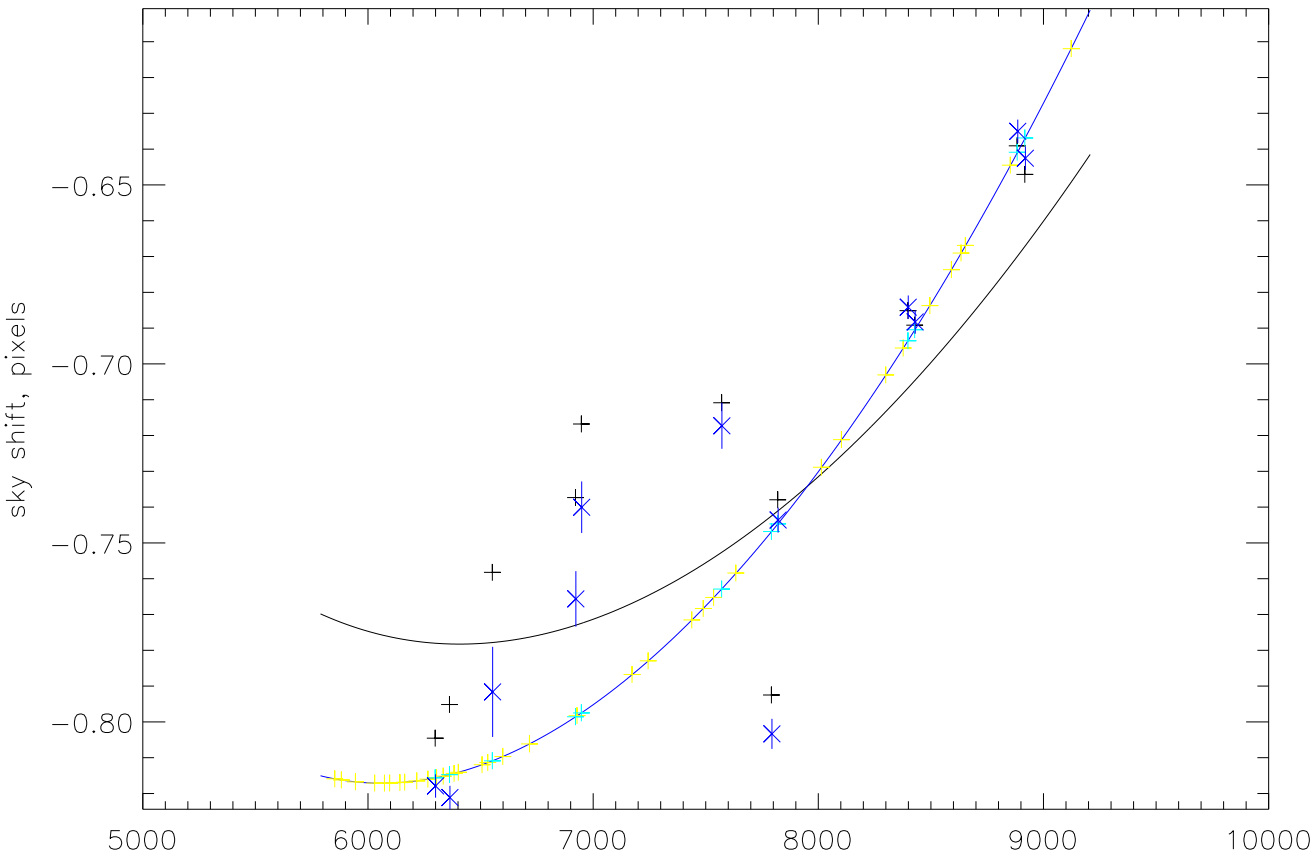

8399.1600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

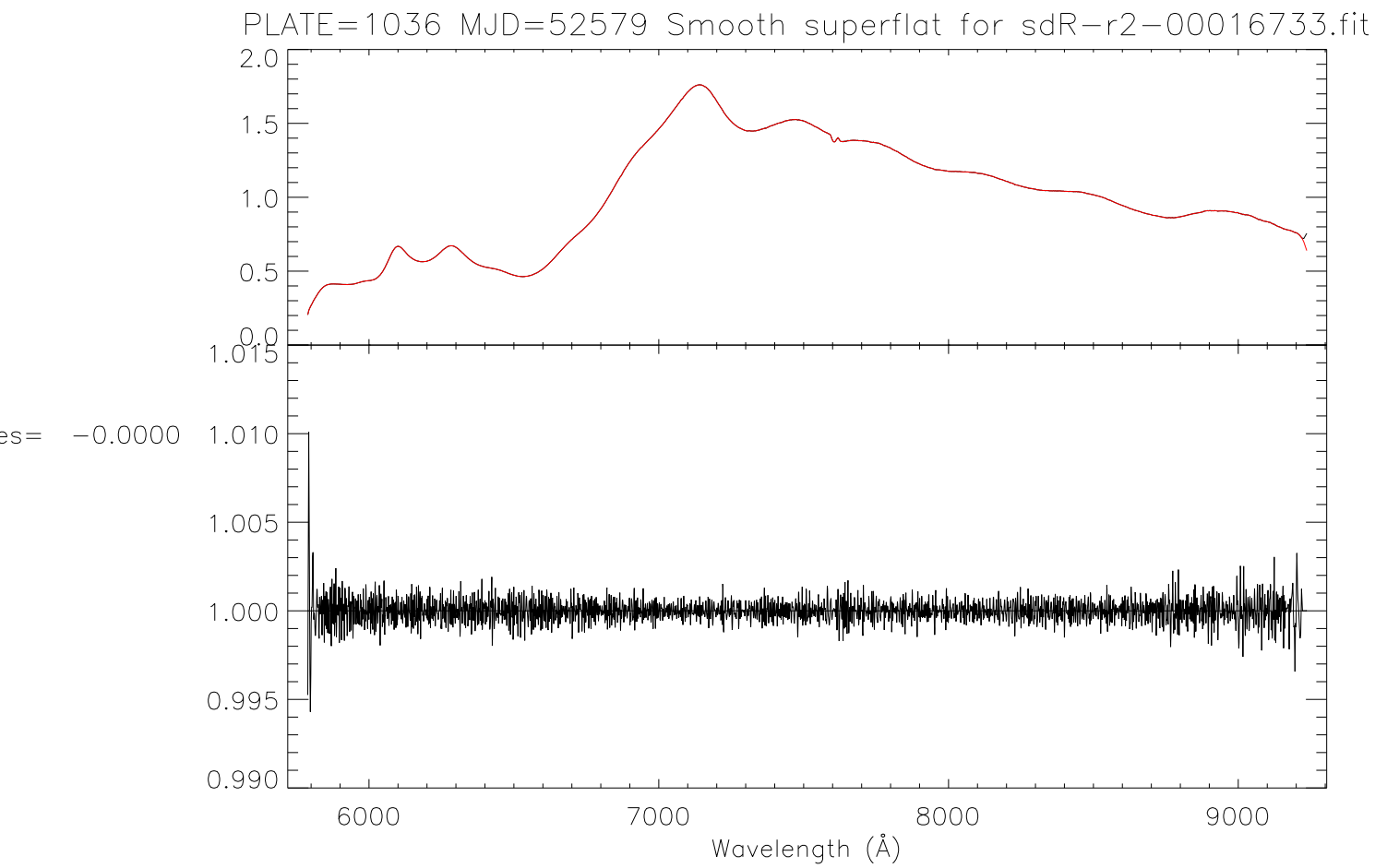

8430.1700
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400


8885.8300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

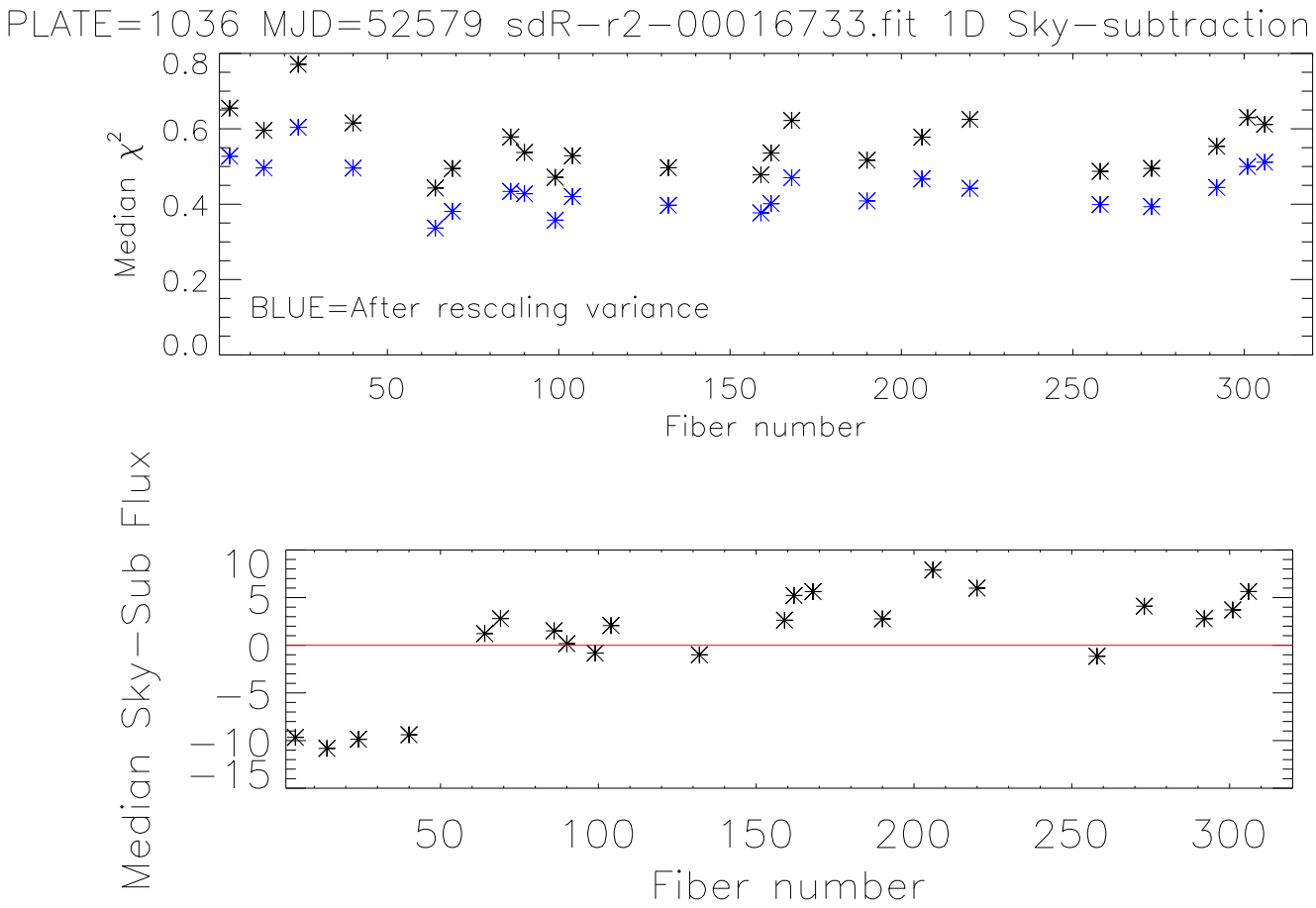

8919.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

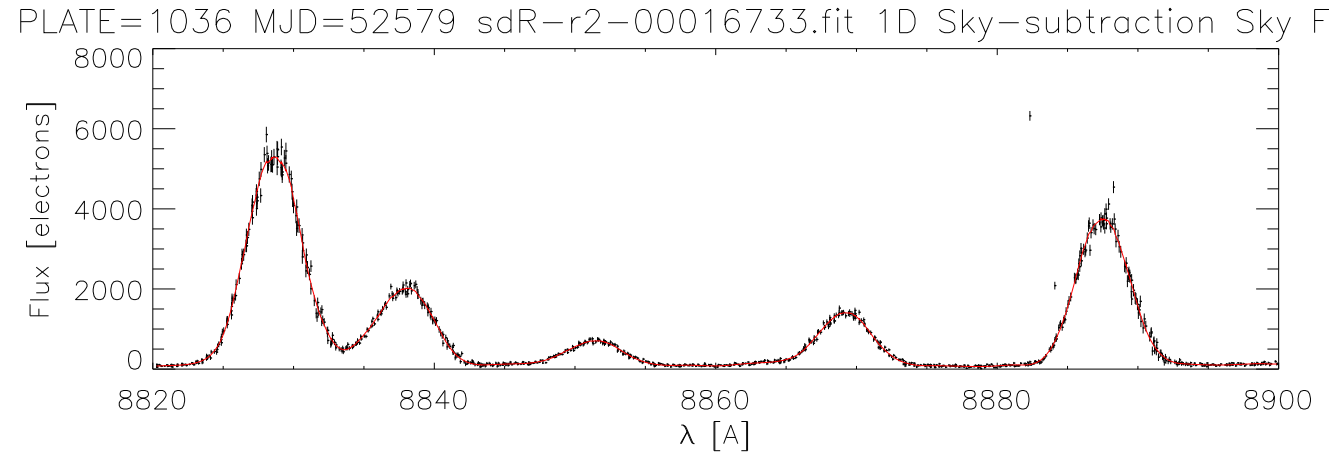

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhb1 23
mfhb2 23
stdev 0.021
extrd 0.82
stdev 0.024
extrd 0.82
mfhb2 22
stdev 0.037
extrd 0.79
stdev 0.032
extrd 0.77
stdev 0.049
extrd 0.74
stdev 0.031
extrd 0.72
stdev 0.014
extrd 0.80
stdev 0.017
extrd 0.74
stdev 0.026
extrd 0.68
stdev 0.035
extrd 0.69
stdev 0.047
extrd 0.64
stdev 0.043
extrd 0.64
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

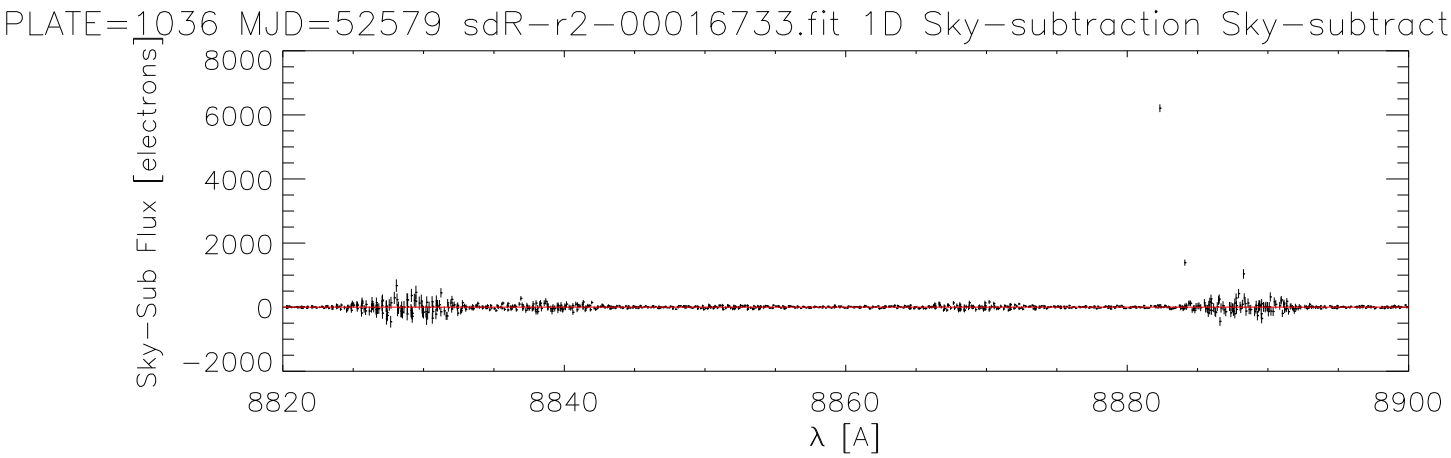

sky shift, pixels
−0.65
−0.70
−0.75
−0.80
5000
6000
7000
8000
9000
10000

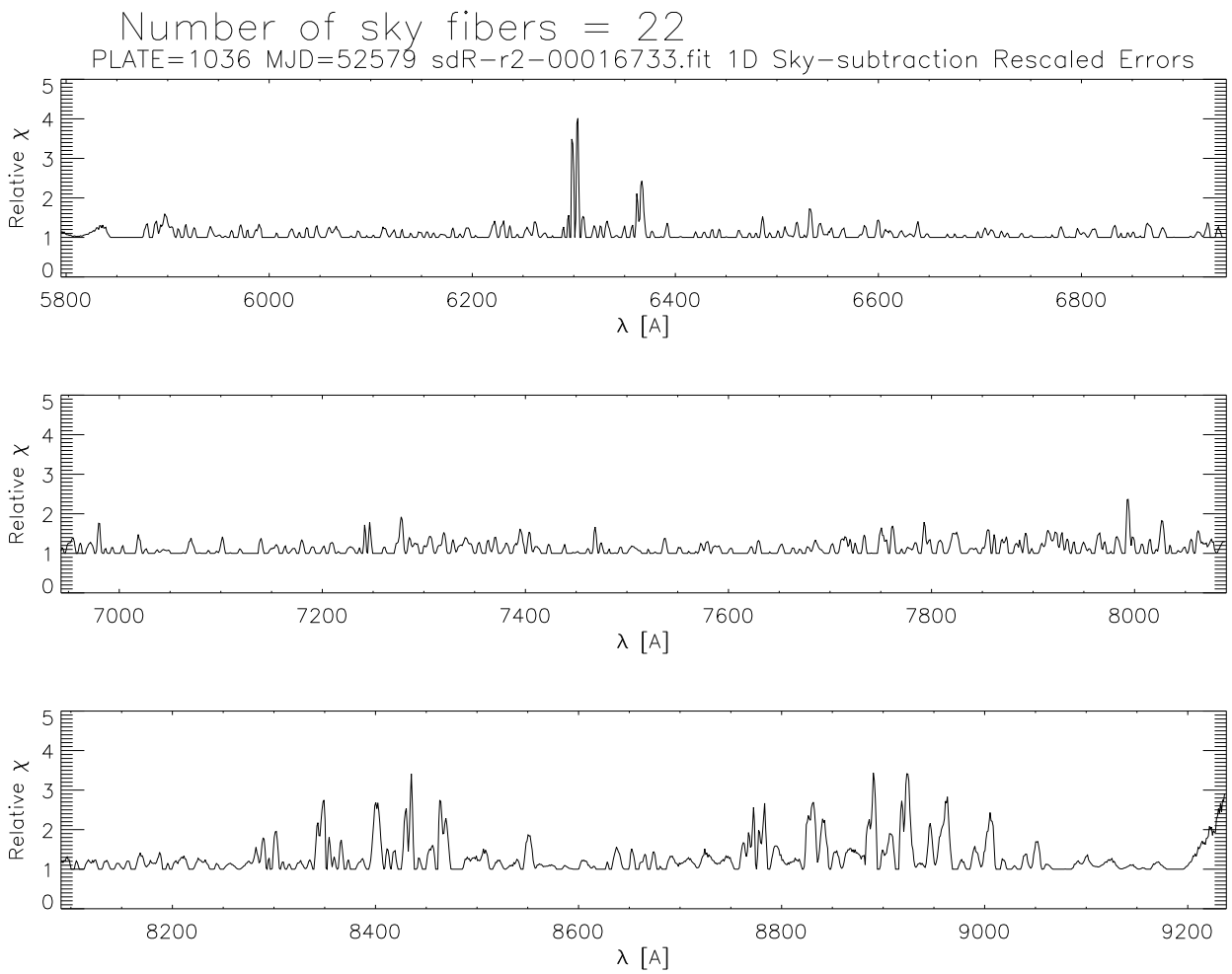

PLATE=1036 MJD=52579 Smooth superflat for sdR-r2-00016733.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

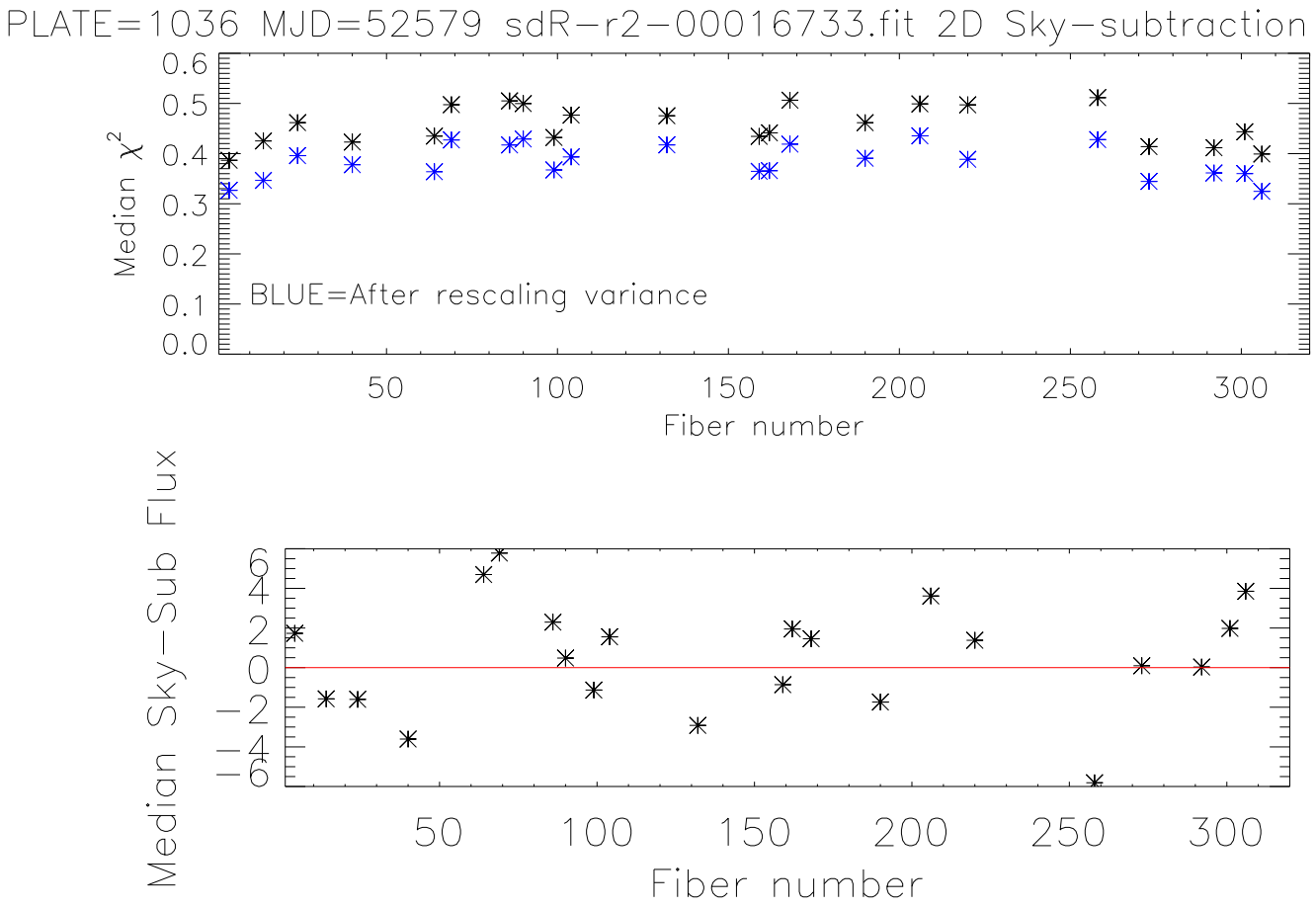
es= −0.0000

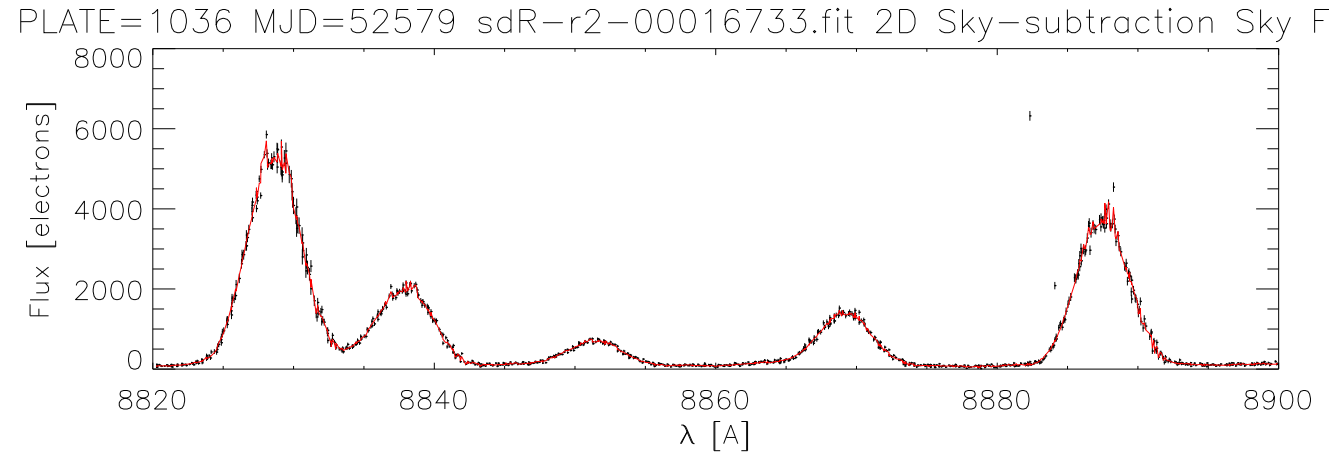

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

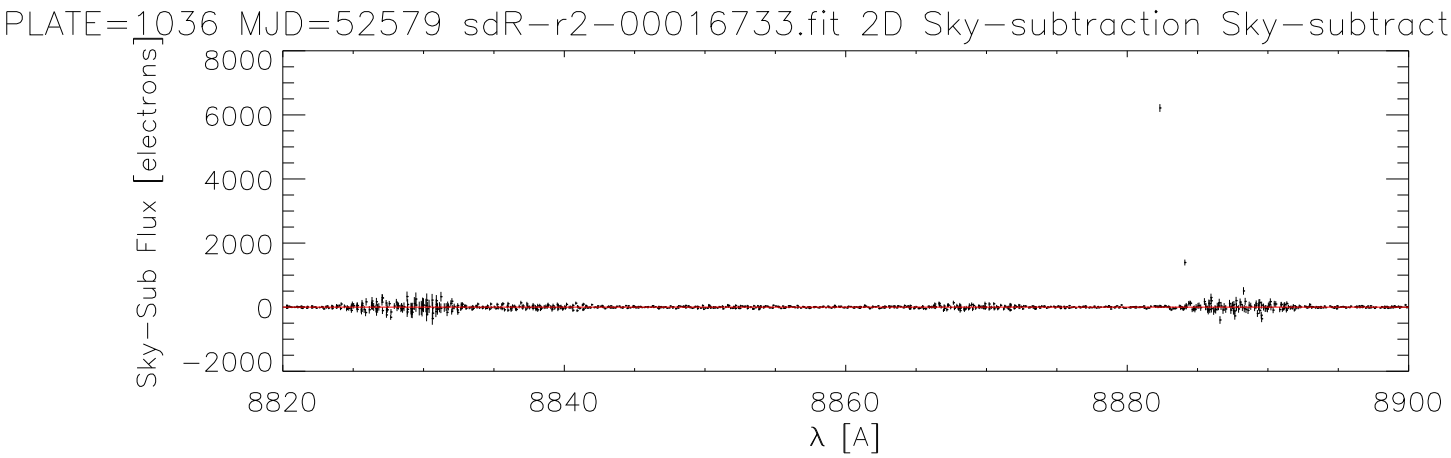

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

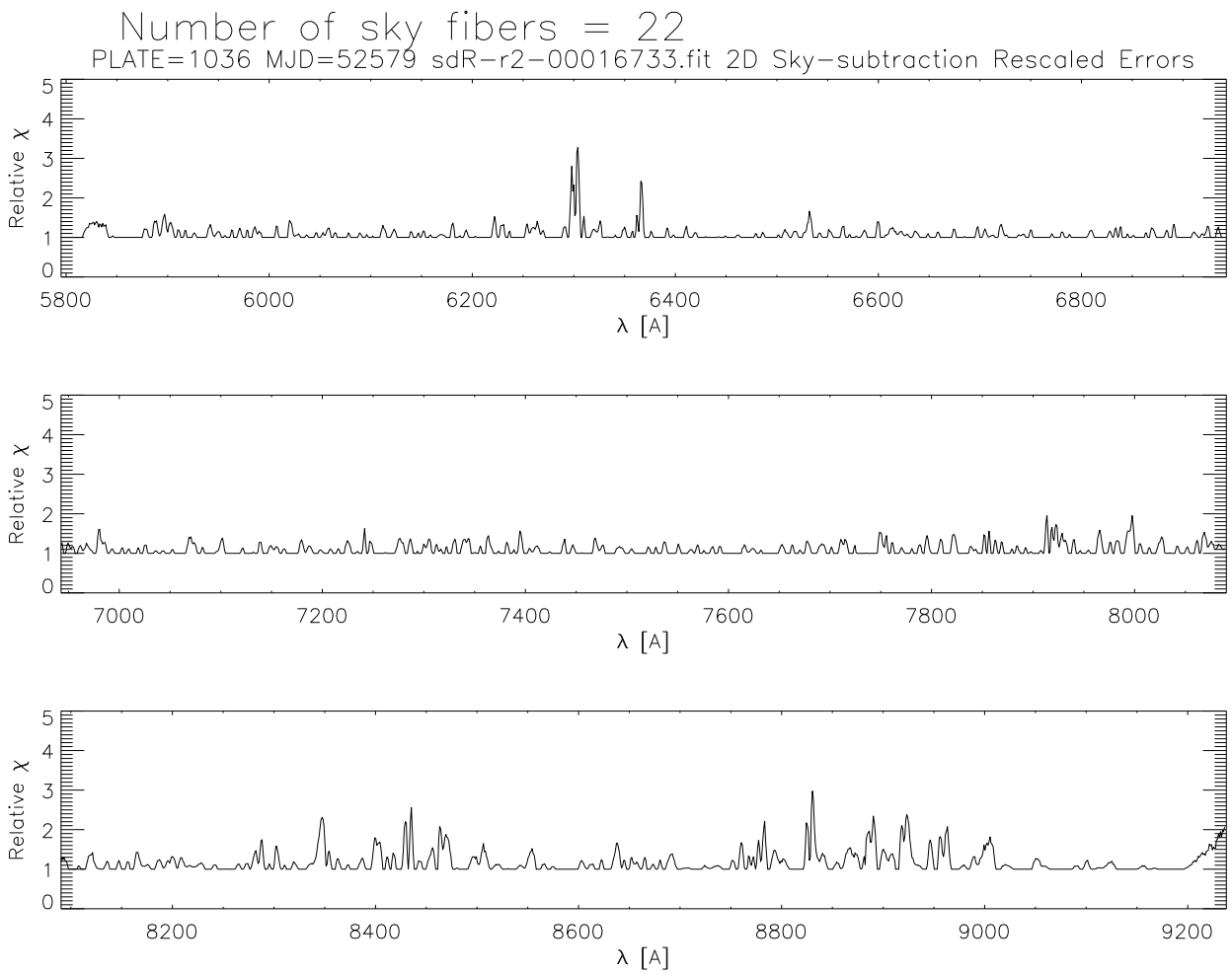

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

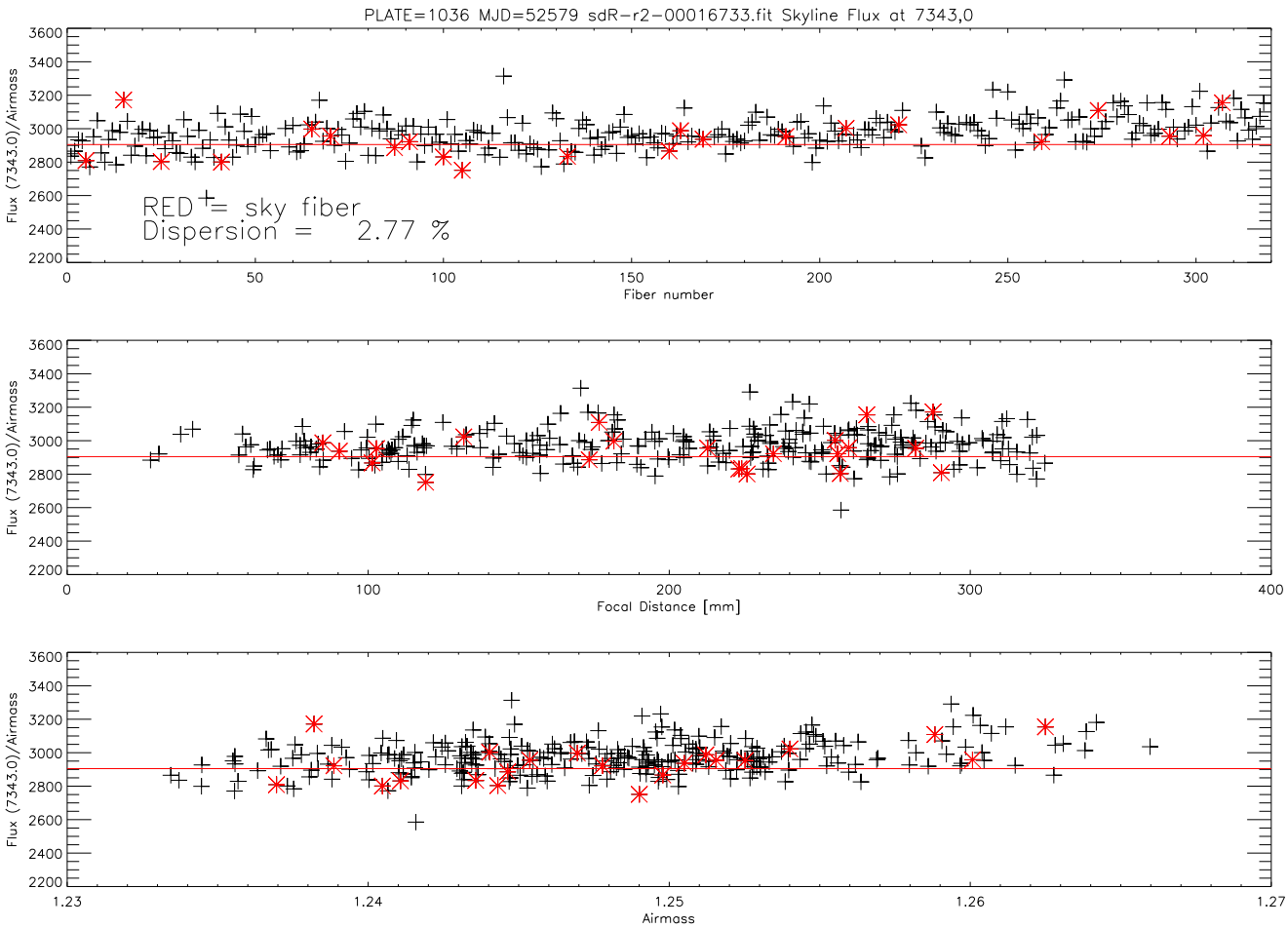

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016733.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

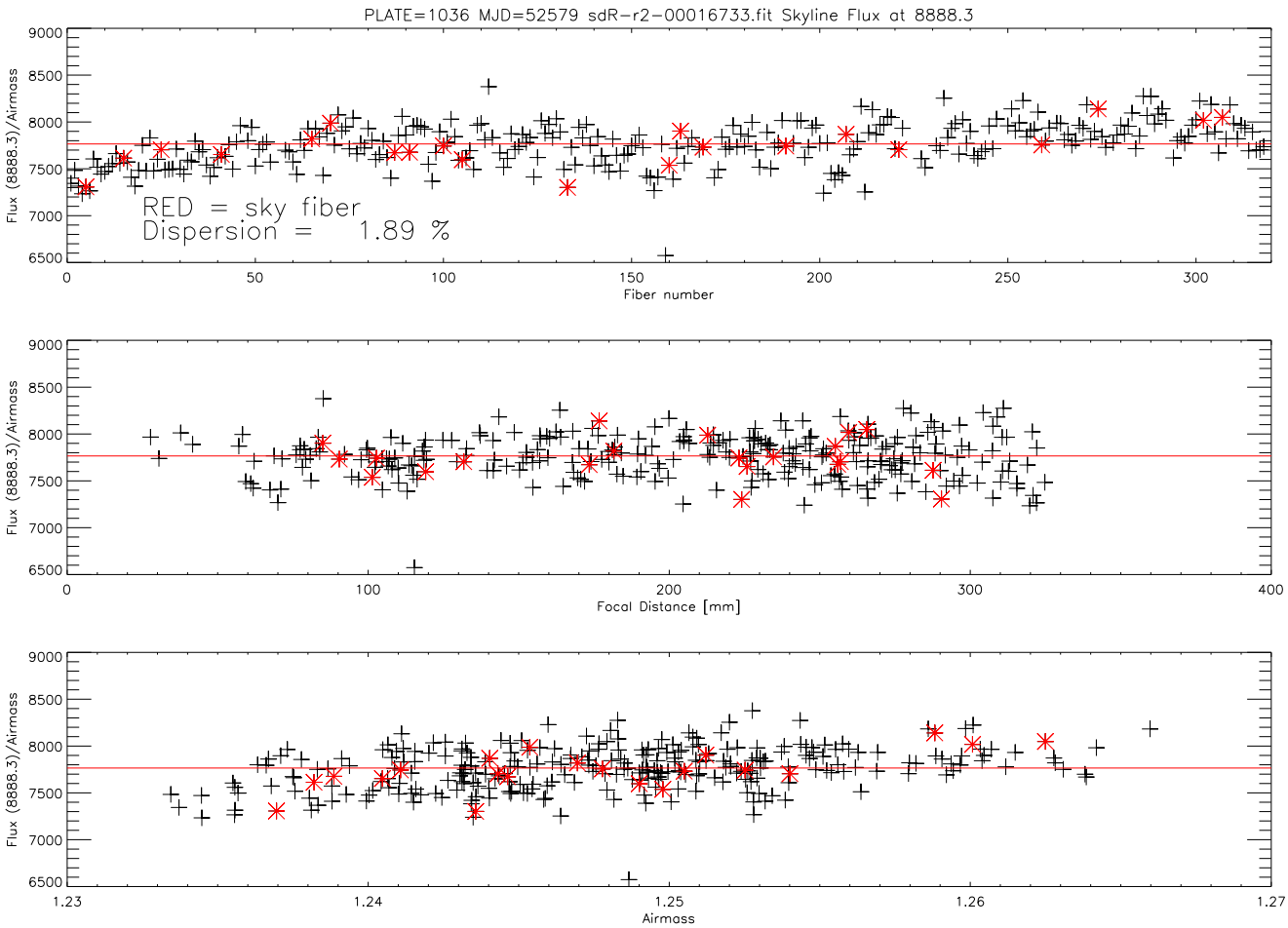

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

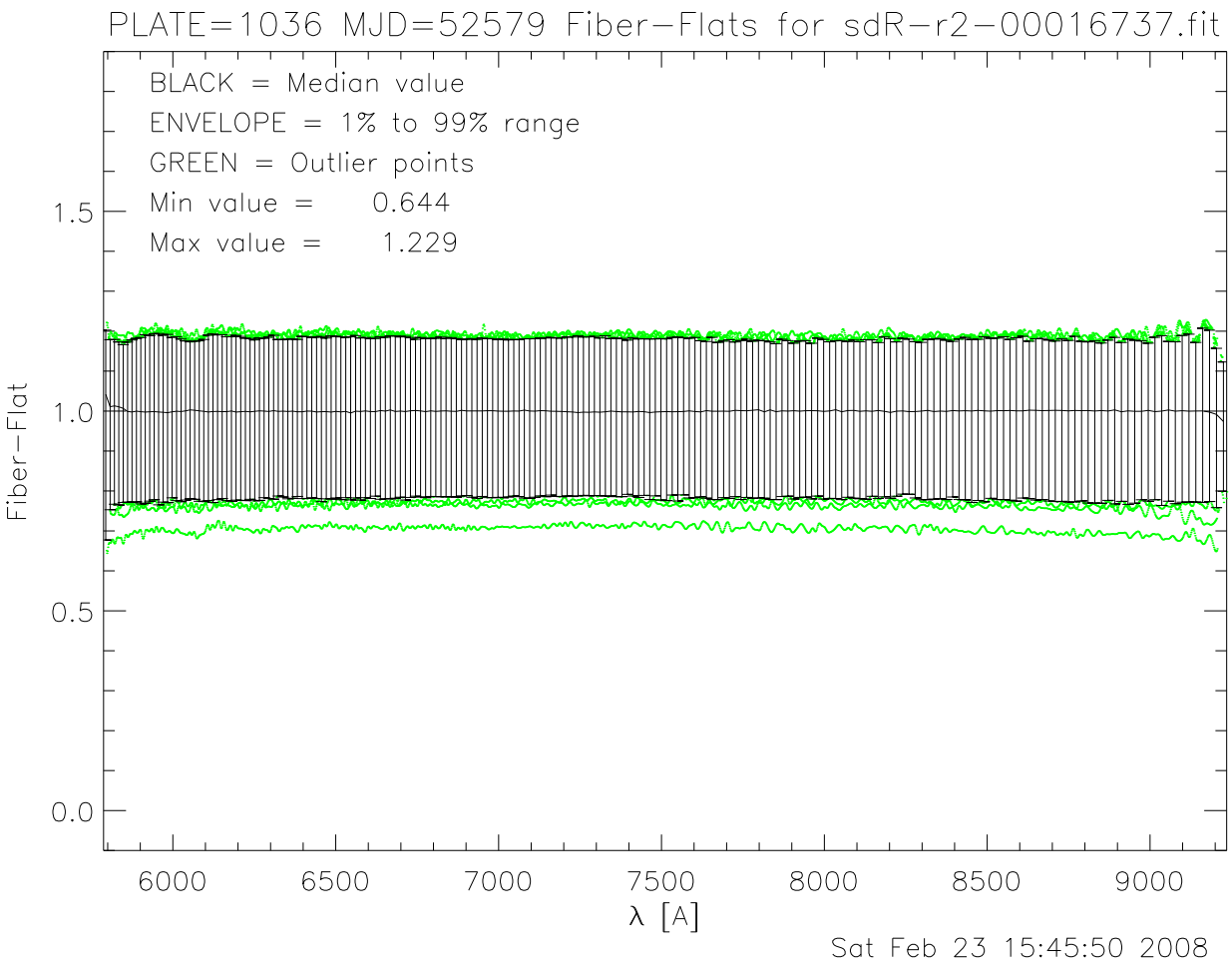

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

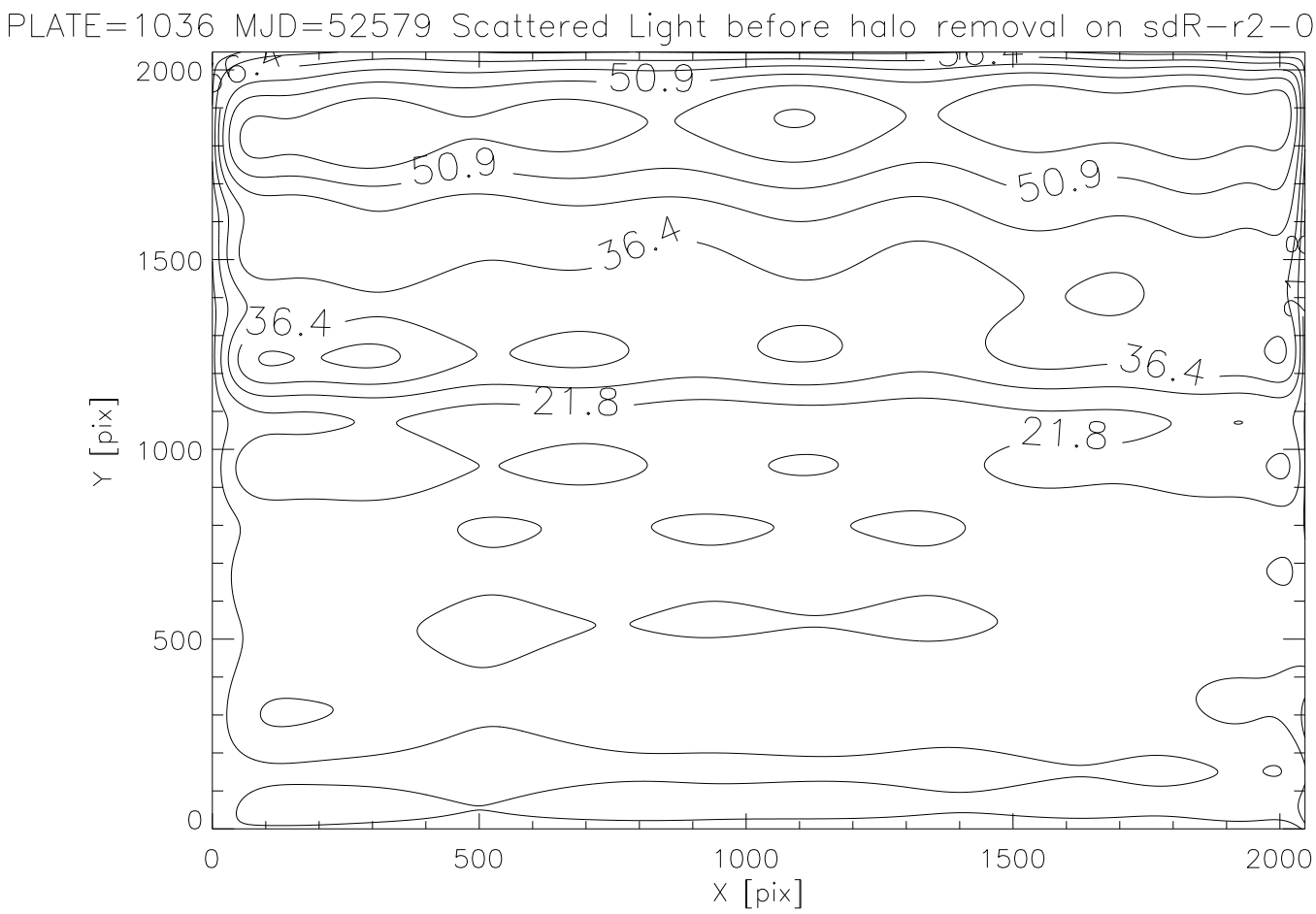

PLATE=1036 MJD=52579 sdR-r2-00016733.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

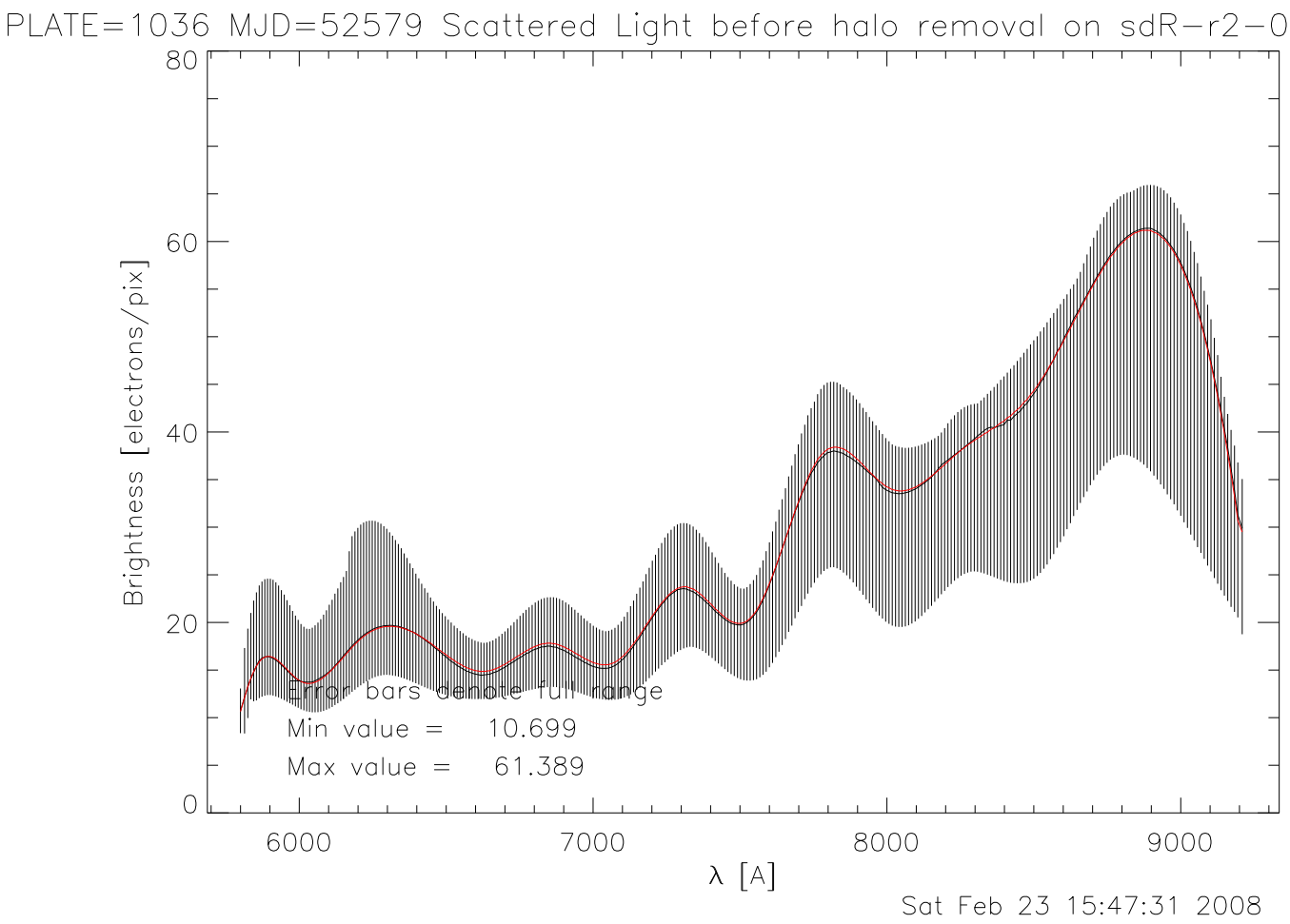

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016733.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

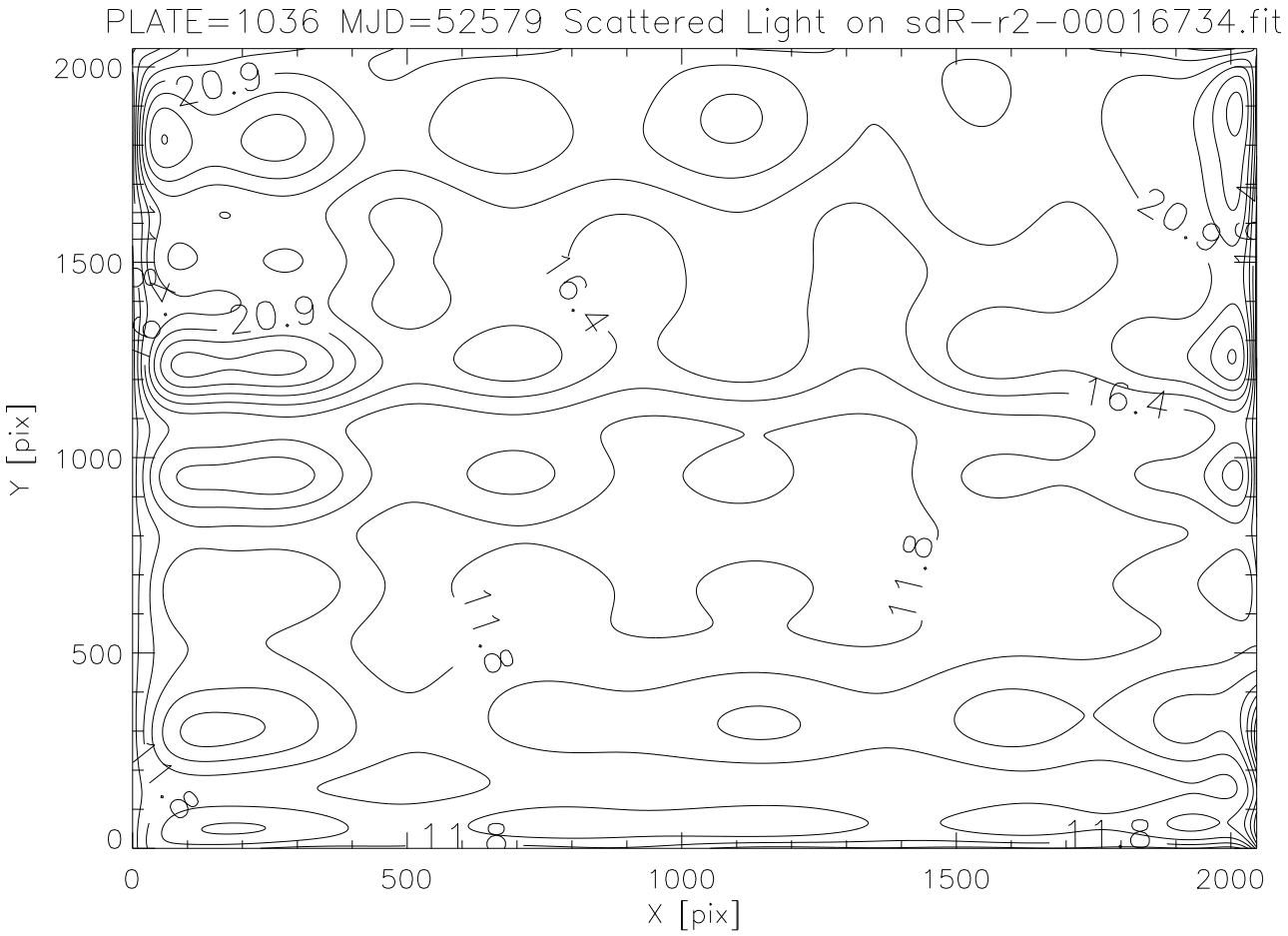

PLATE=1036 MJD=52579 sdR-r2-00016733.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED += sky fiber
Dispersion = 2.77 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

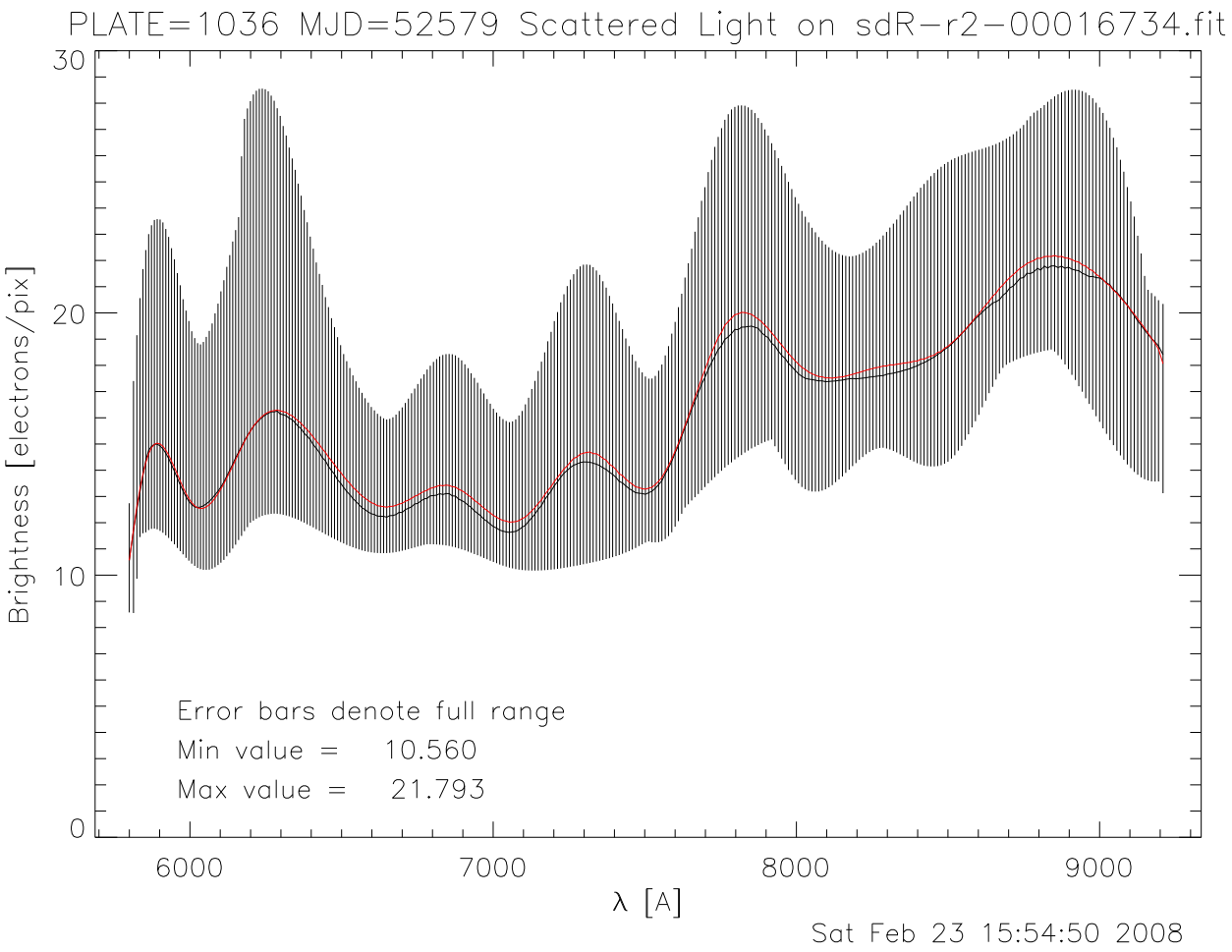

PLATE=1036 MJD=52579 sdR-r2-00016733.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.89 %
Fiber number
Focal Distance [mm]
Airmass

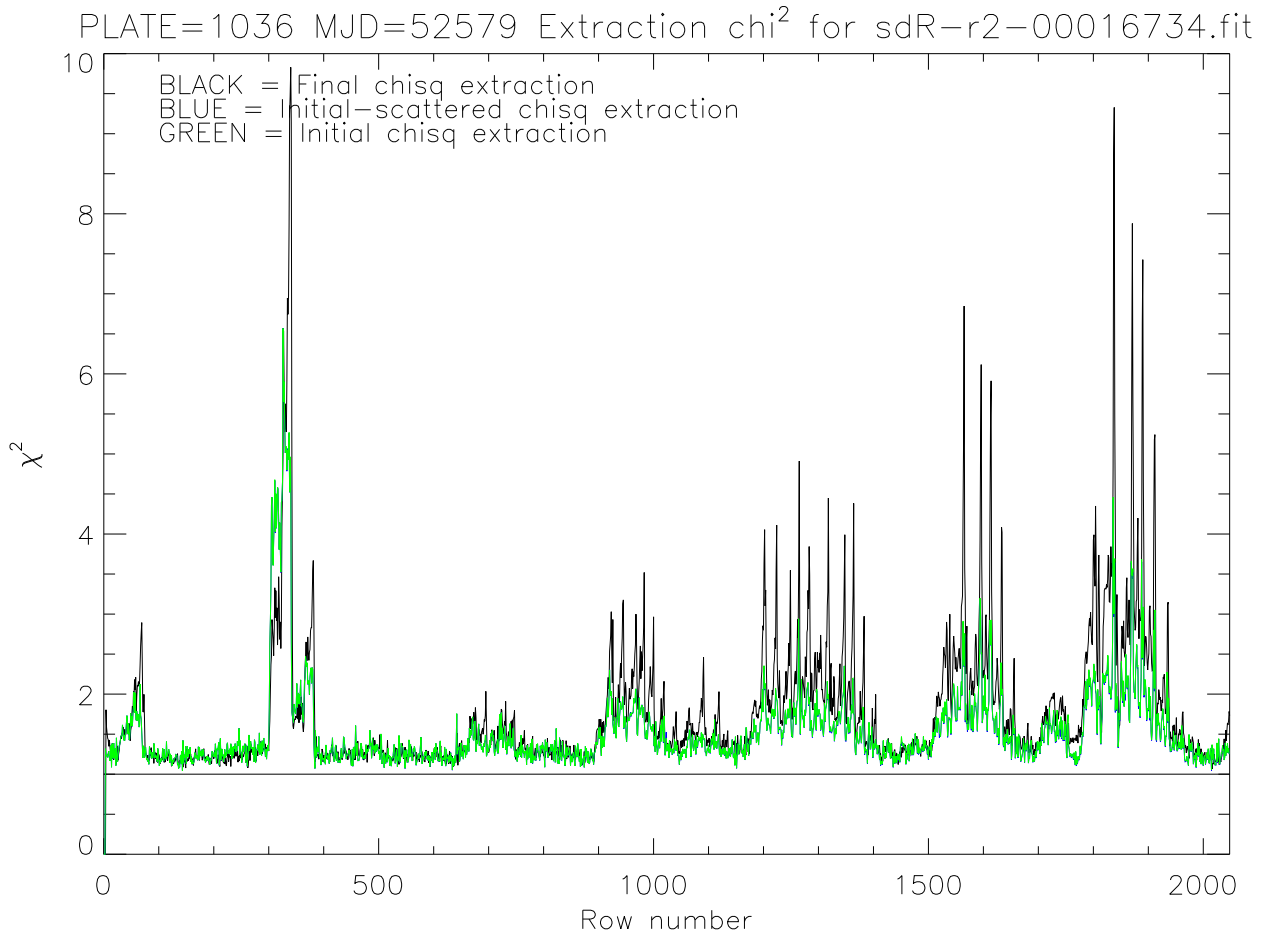

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r2−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.644
Max value = 1.229
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 15:45:50 2008

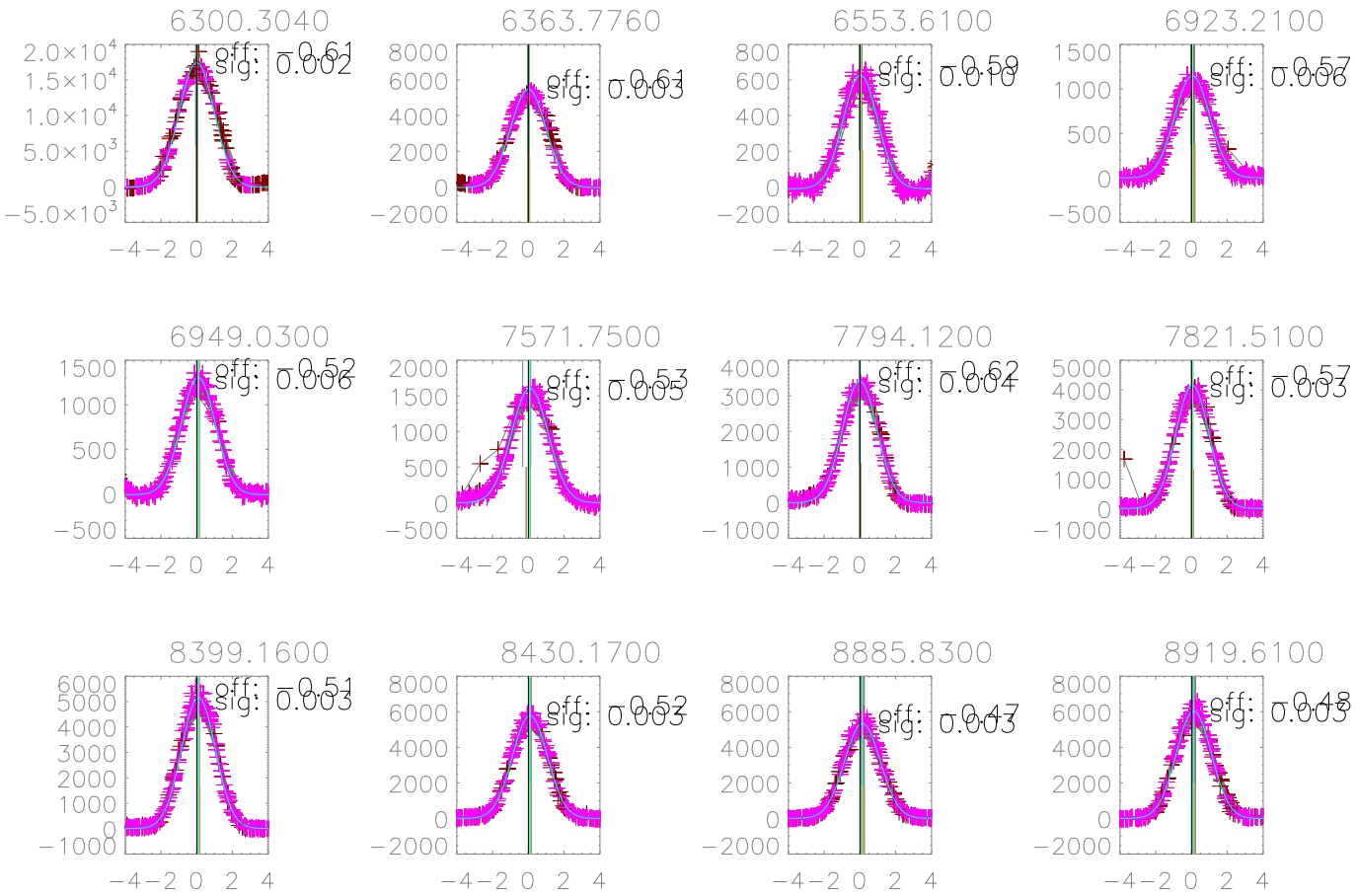

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016734.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

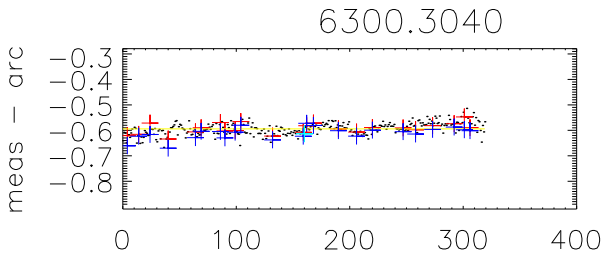

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016734.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.699
Max value = 61.389
Sat Feb 23 15:47:31 2008

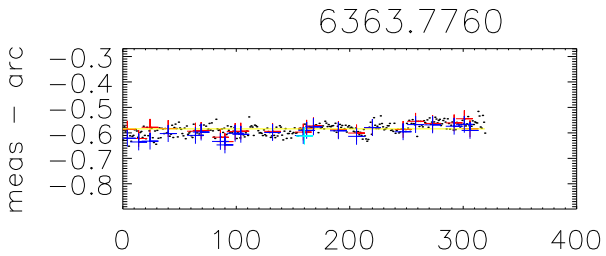

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016734.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
20.9
16.4
11.8

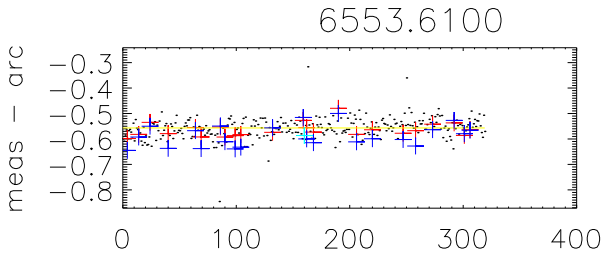

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016734.fit
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.560
Max value = 21.793
Sat Feb 23 15:54:50 2008

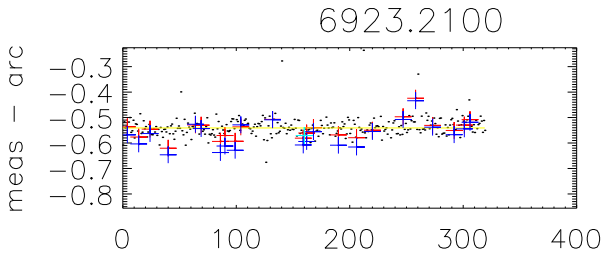

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-r2-00016734.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

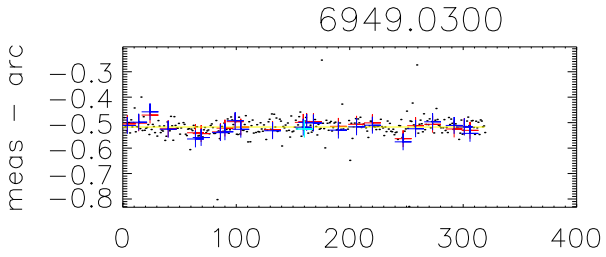

6300.3040
off: -0.61
sig: 0.002
6363.7760
off: -0.61
sig: 0.003
6553.6100
off: -0.59
sig: 0.010
6923.2100
off: -0.57
sig: 0.006
6949.0300
off: -0.52
sig: 0.006
7571.7500
off: -0.53
sig: 0.005
7794.1200
off: -0.62
sig: 0.004
7821.5100
off: -0.57
sig: 0.003
8399.1600
off: -0.51
sig: 0.003
8430.1700
off: -0.52
sig: 0.003
8885.8300
off: -0.47
sig: 0.003
8919.6100
off: -0.48
sig: 0.003

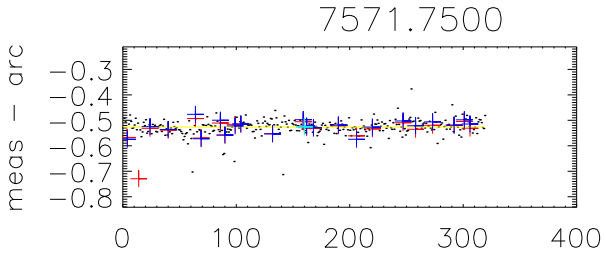

6300.3040
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

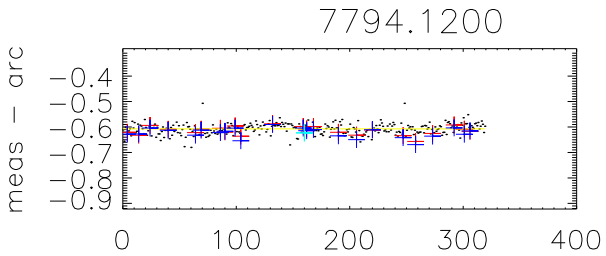

6363.7760
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

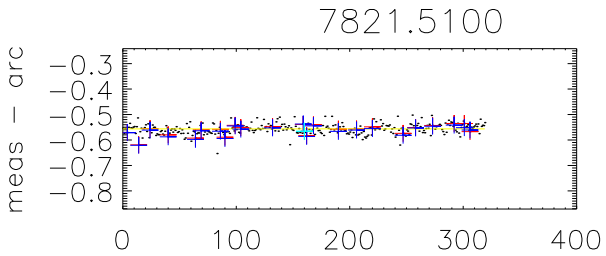

6553.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

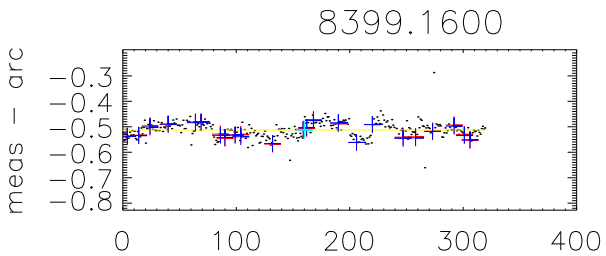

6923.2100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

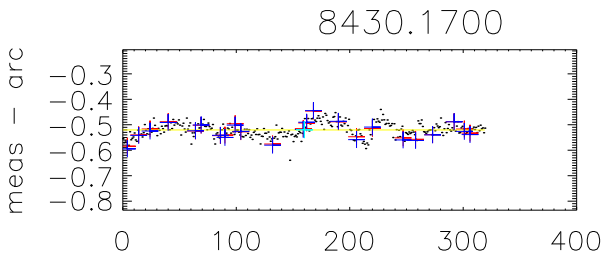

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

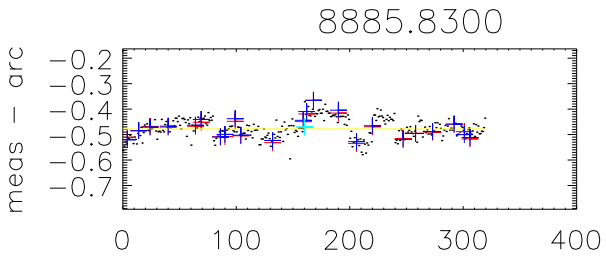

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

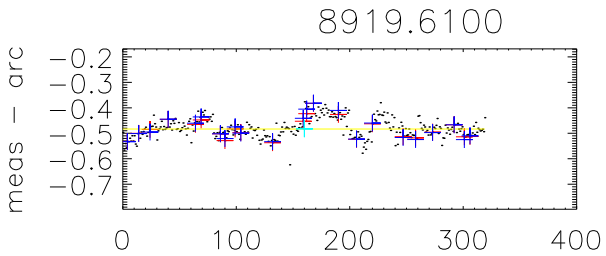

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

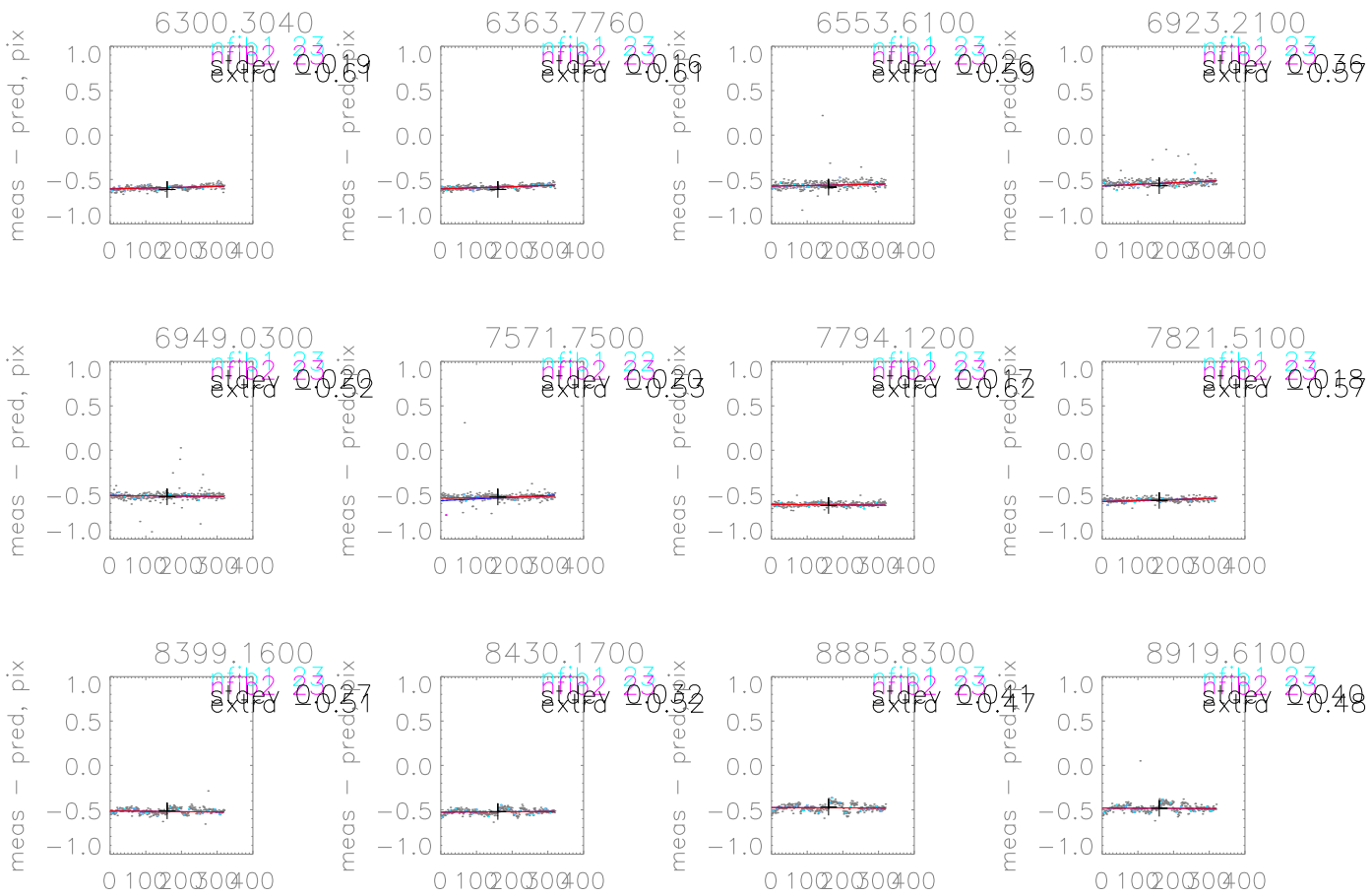

7821.5100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

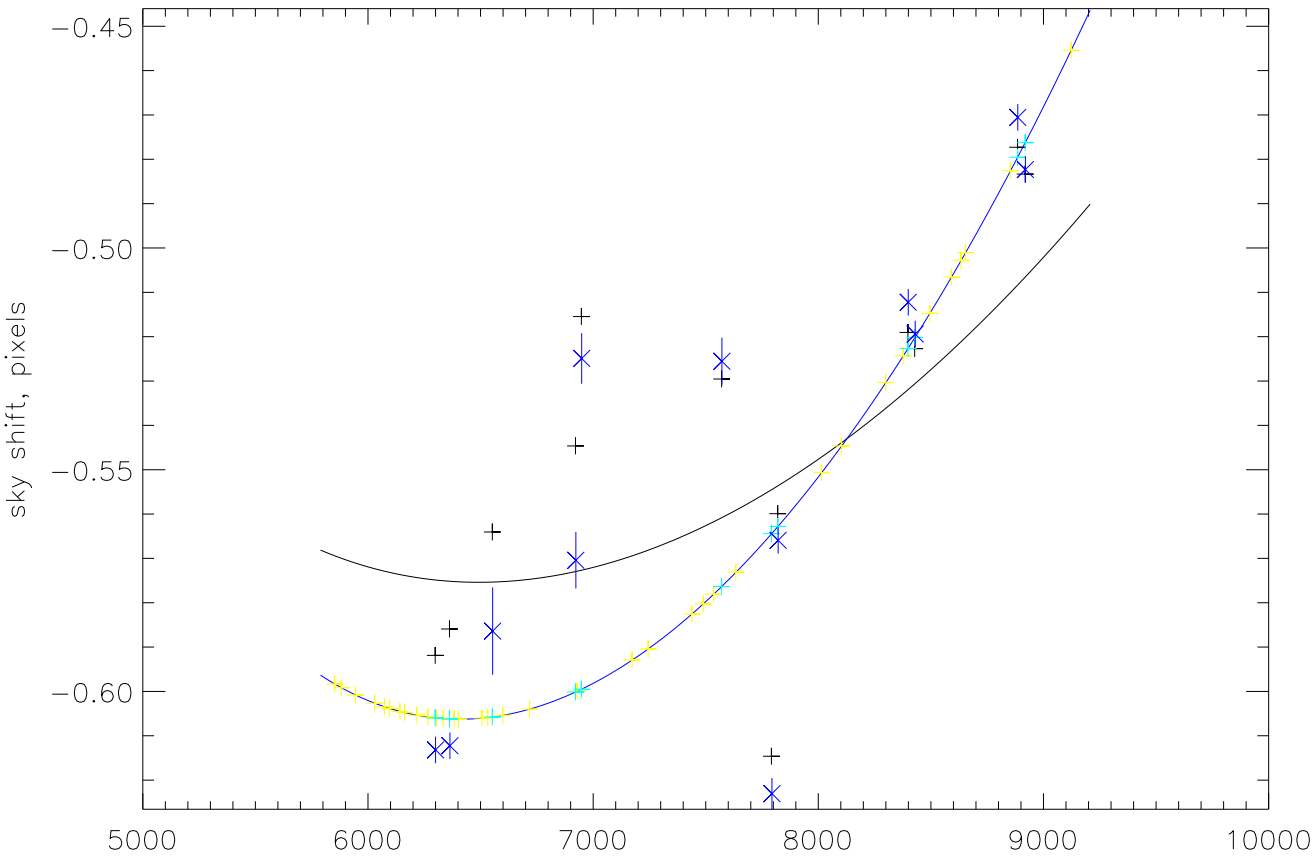

8399.1600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

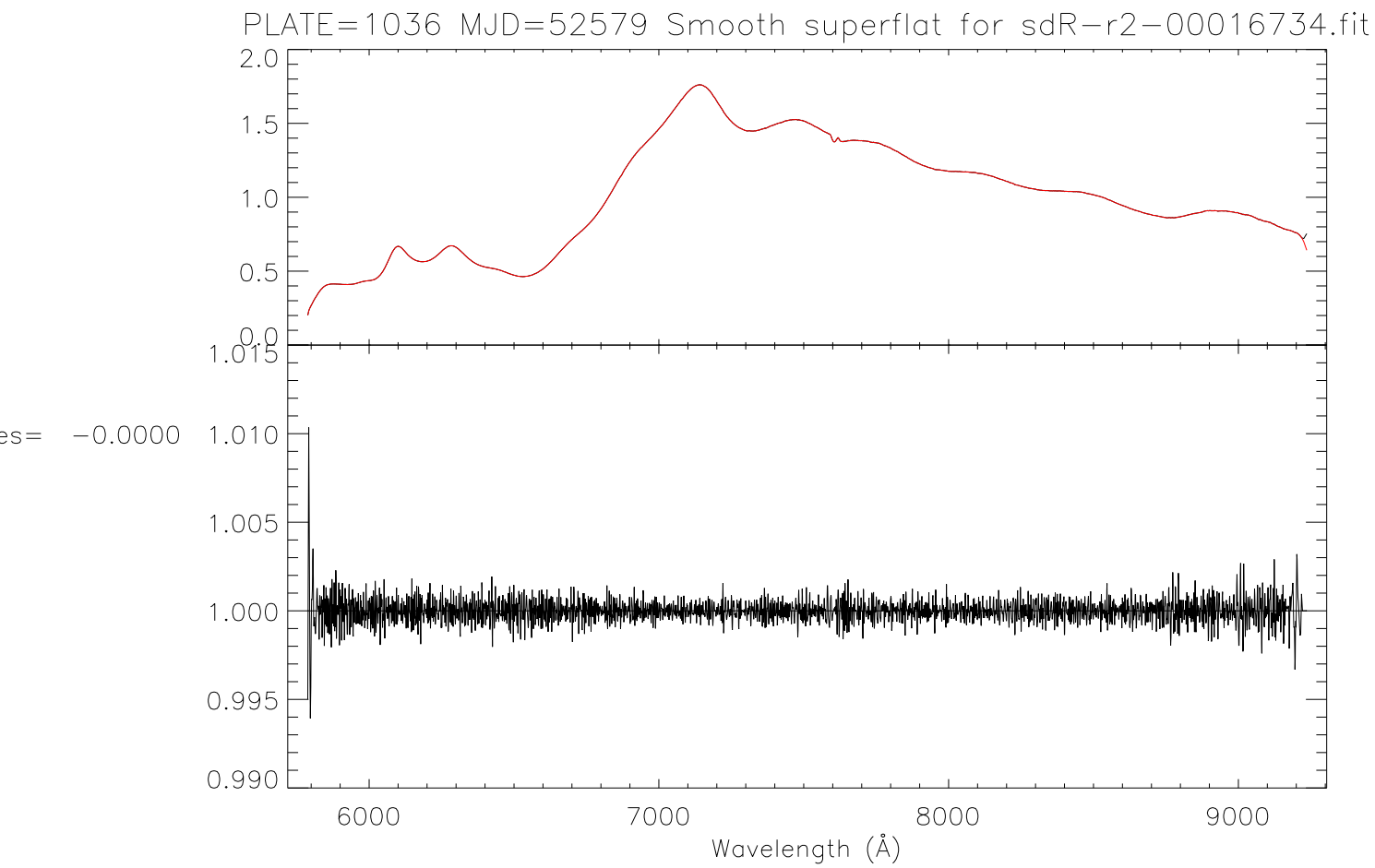

8430.1700
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


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

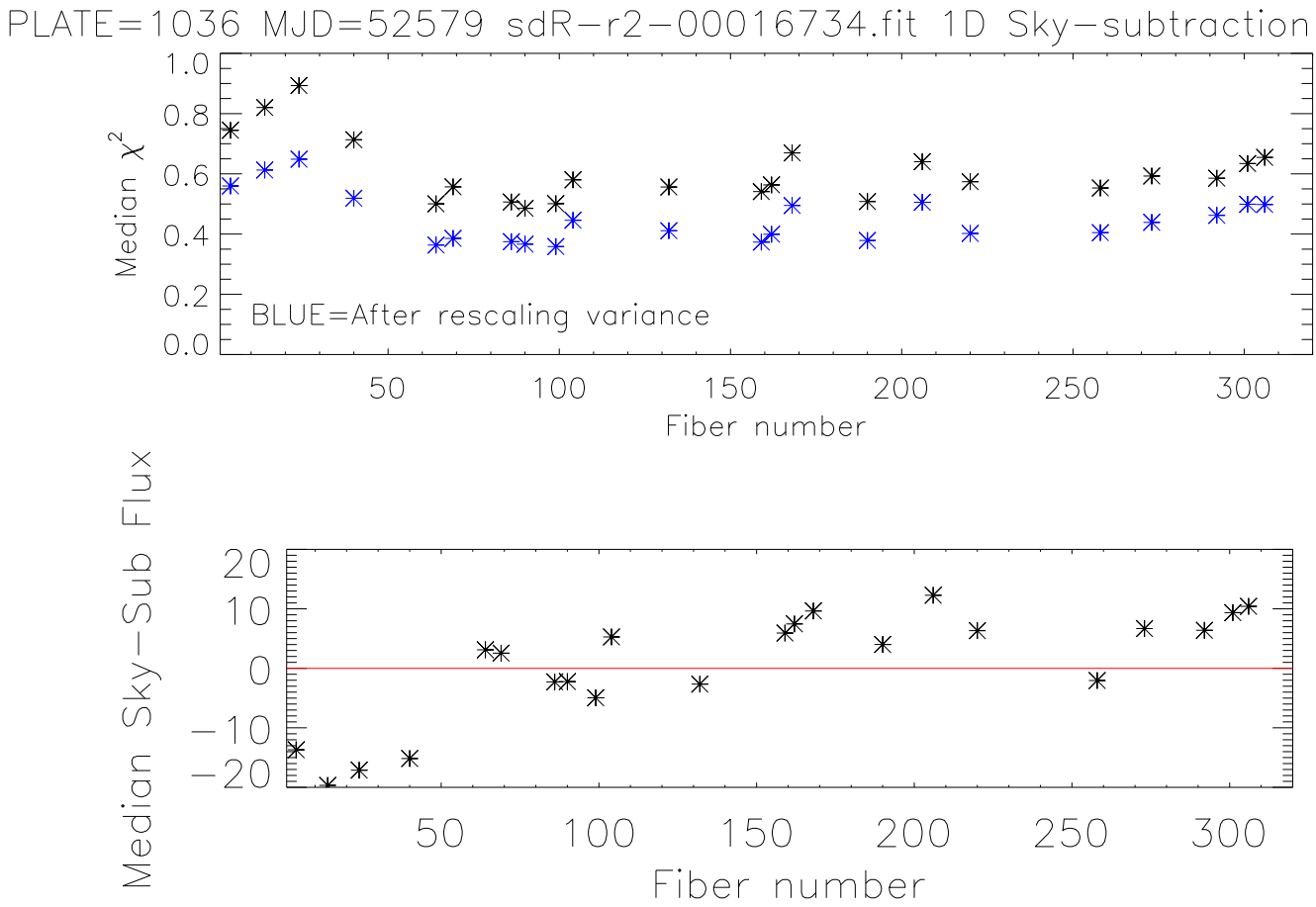

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

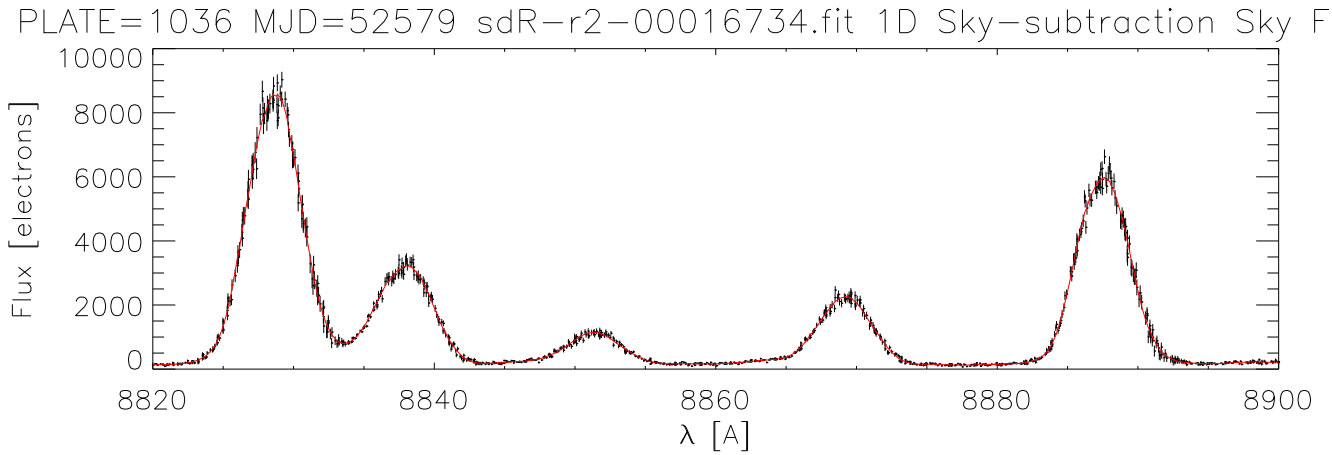

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 23
mfib2 23
stdev 0.019
extrd 0.61
stdev 0.016
extrd 0.61
stdev 0.026
extrd 0.59
stdev 0.036
extrd 0.57
stdev 0.020
extrd 0.52
stdev 0.020
extrd 0.53
stdev 0.017
extrd 0.62
stdev 0.018
extrd 0.57
stdev 0.027
extrd 0.51
stdev 0.032
extrd 0.52
stdev 0.041
extrd 0.47
stdev 0.040
extrd 0.48
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

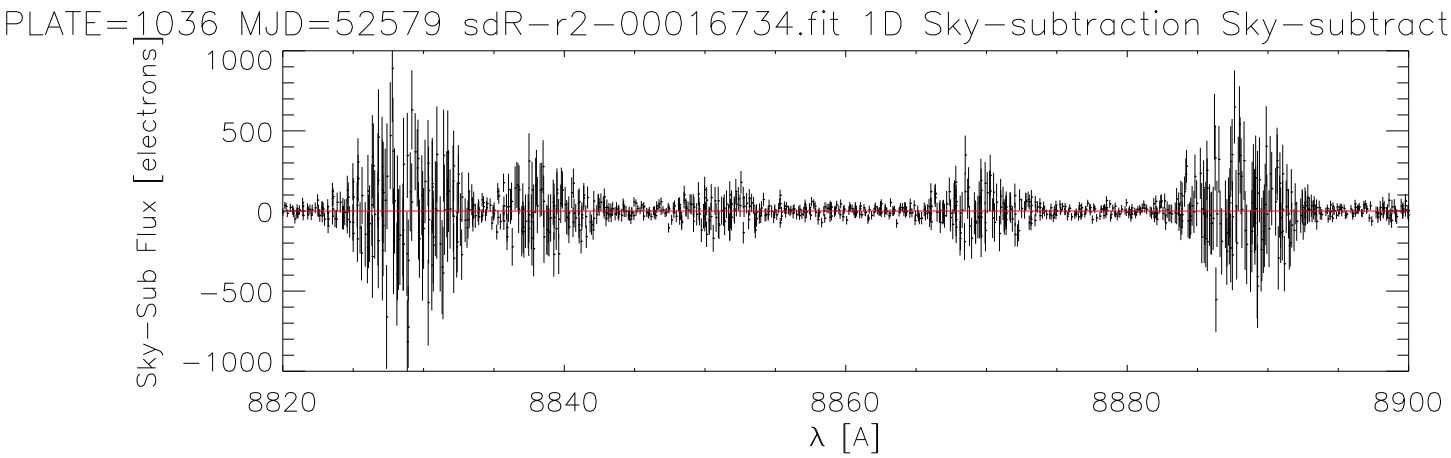

−0.45
−0.50
−0.55
−0.60
sky shift, pixels
5000
6000
7000
8000
9000
10000

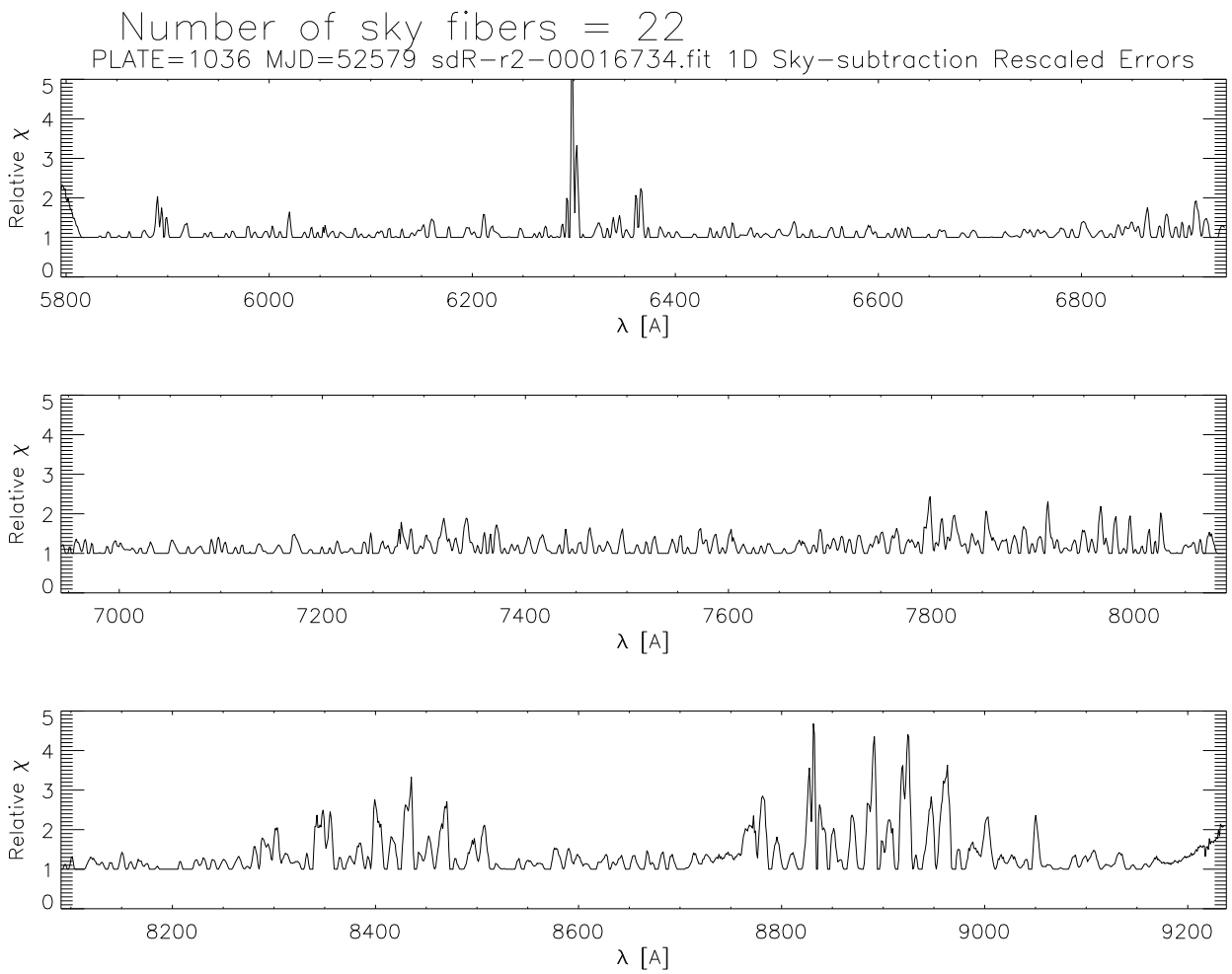

PLATE=1036 MJD=52579 Smooth superflat for sdR-r2-00016734.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

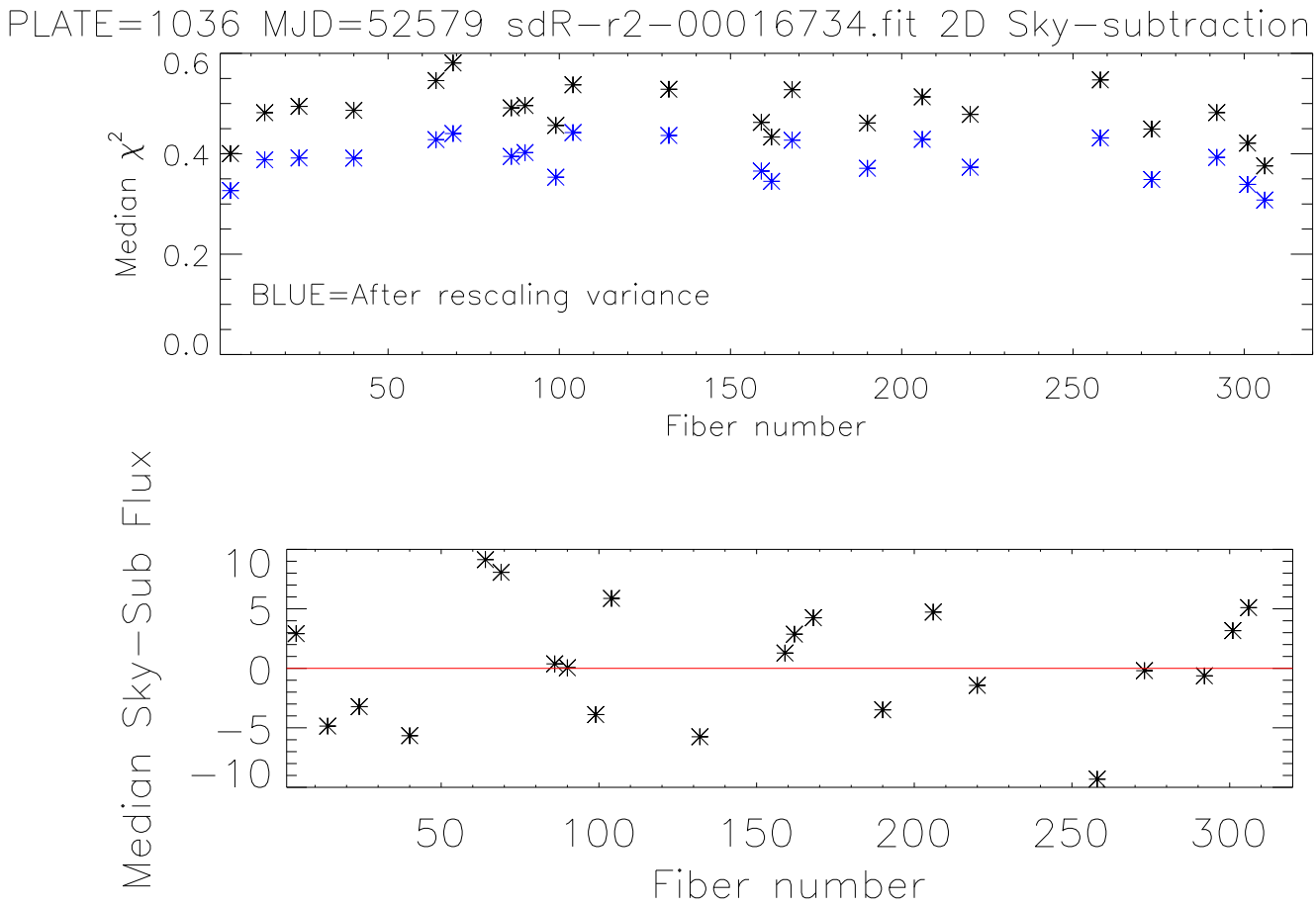
es= −0.0000

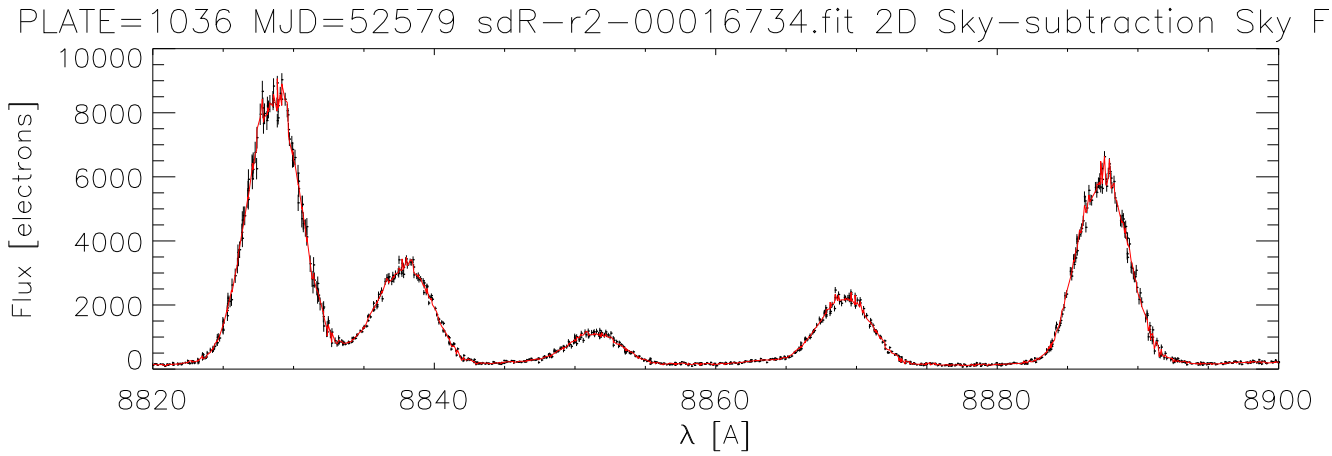

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

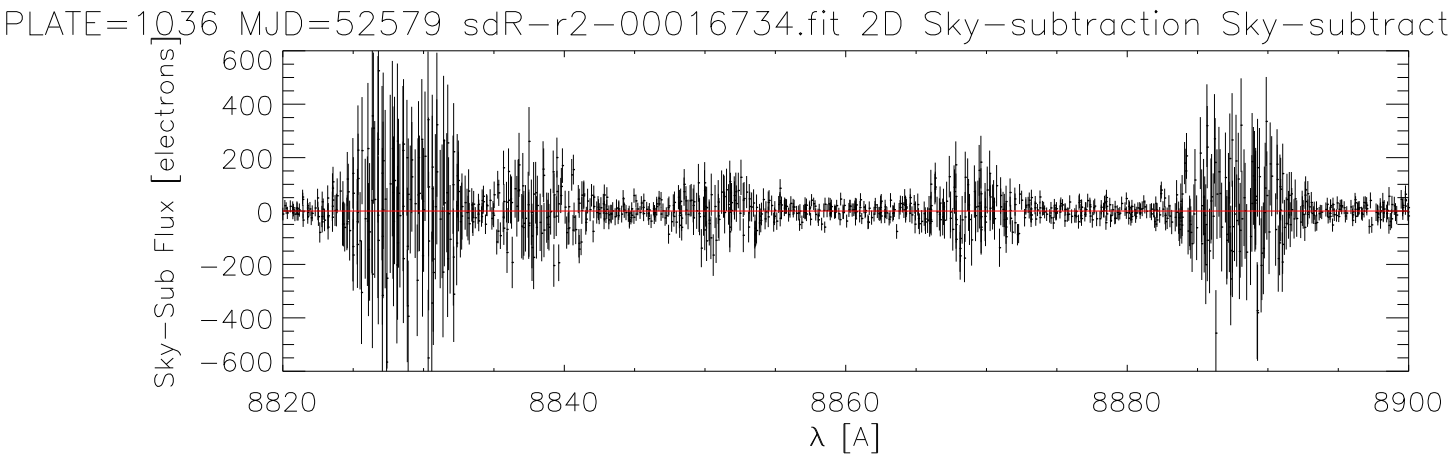

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

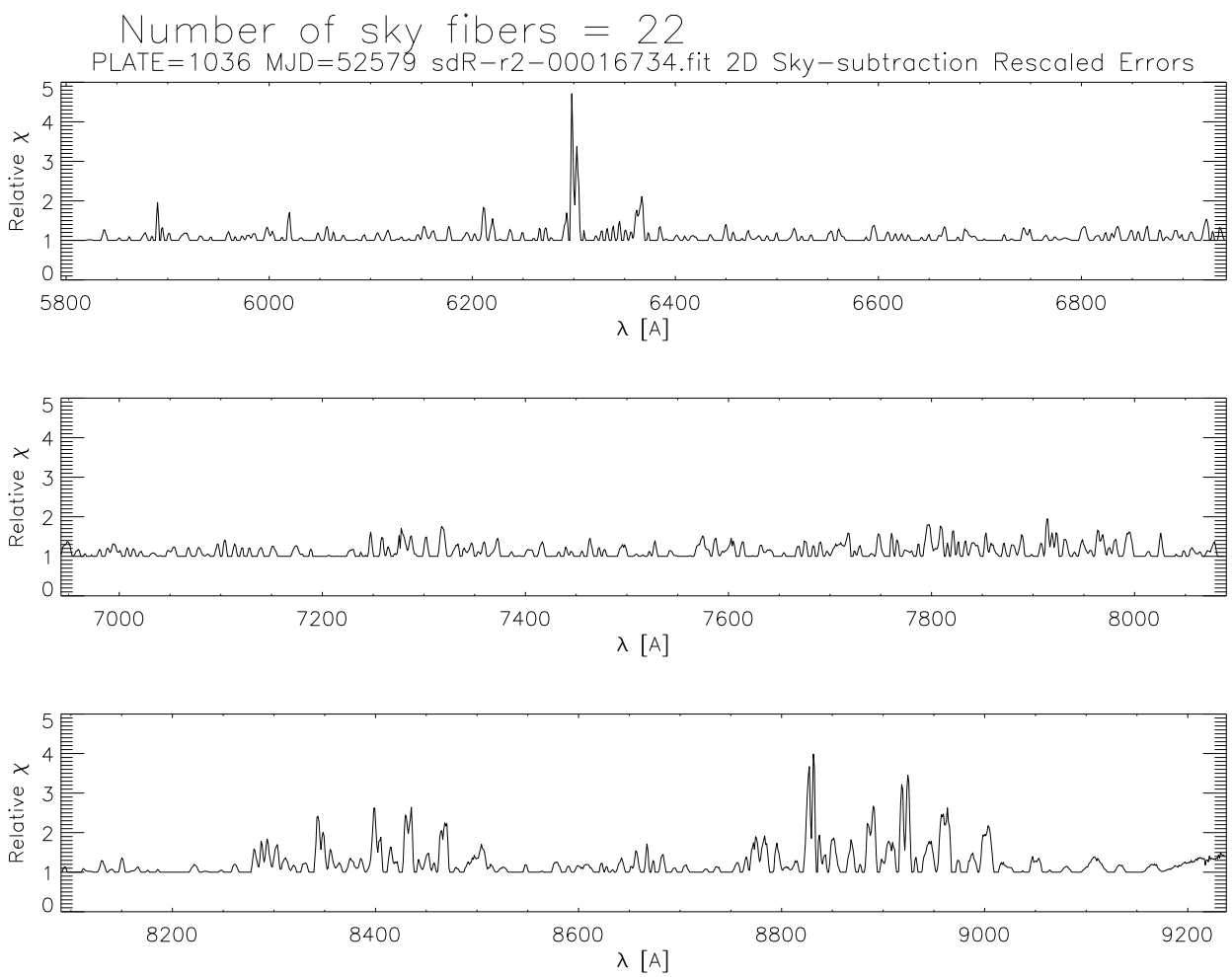

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

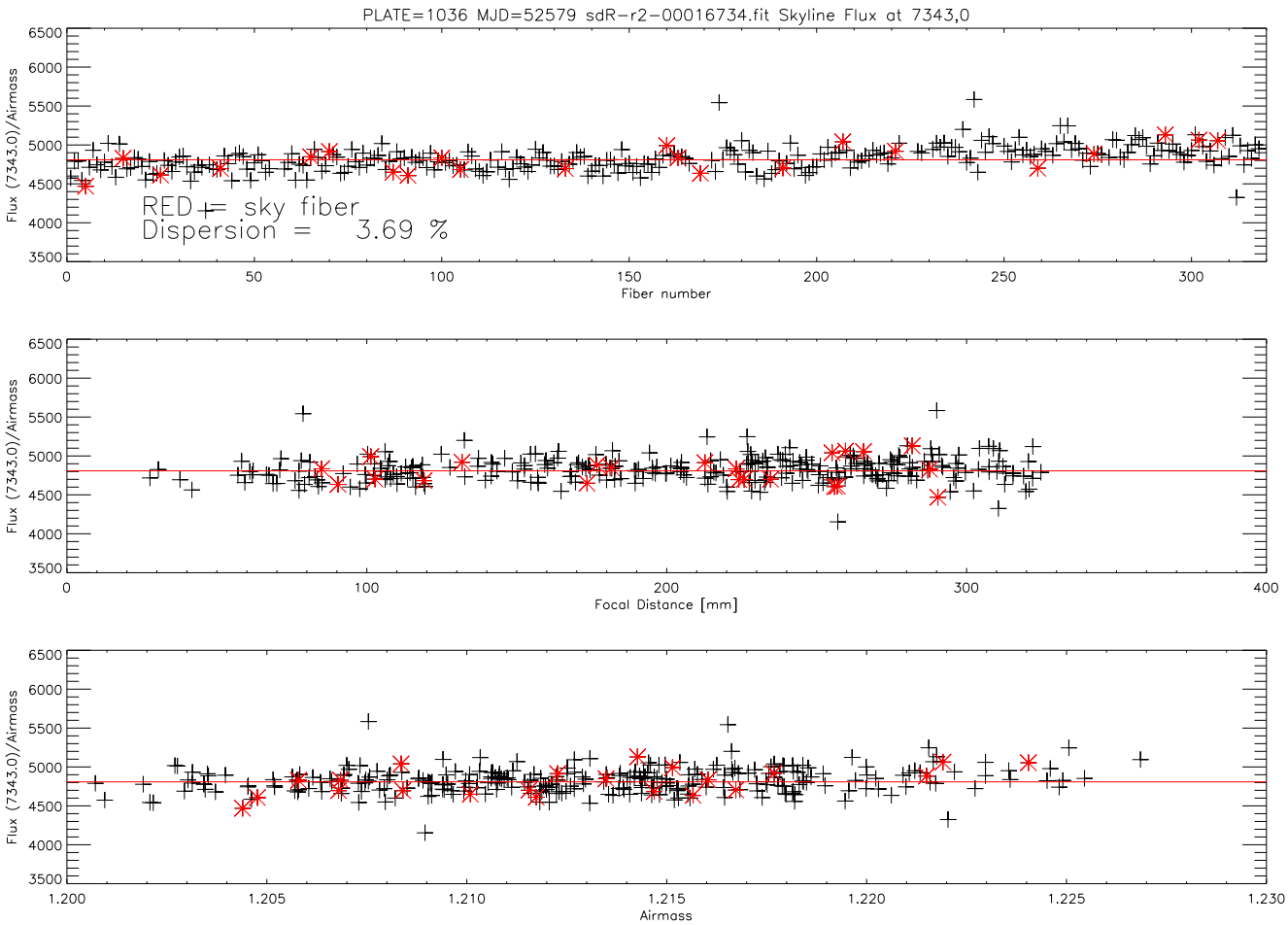

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016734.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

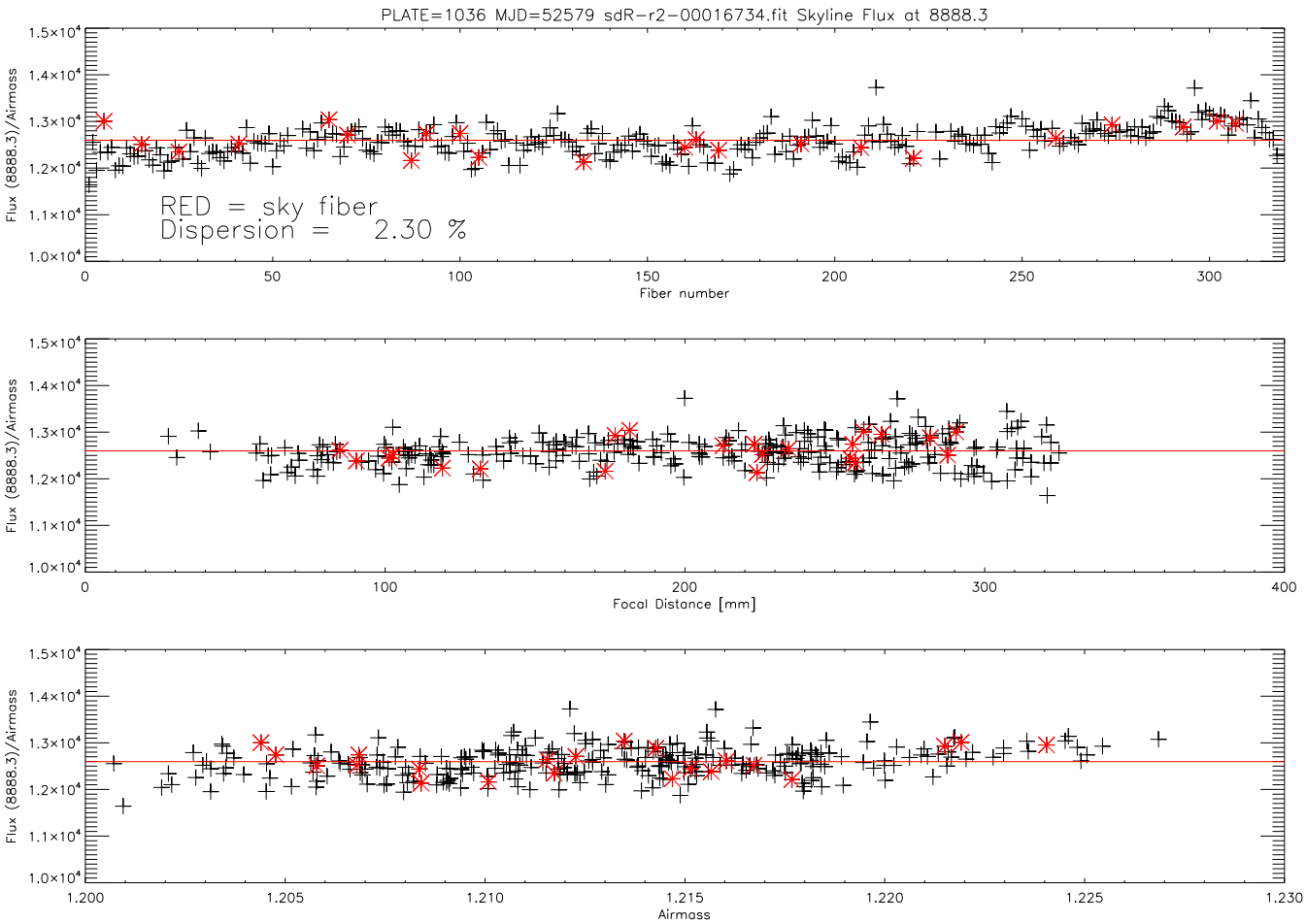

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

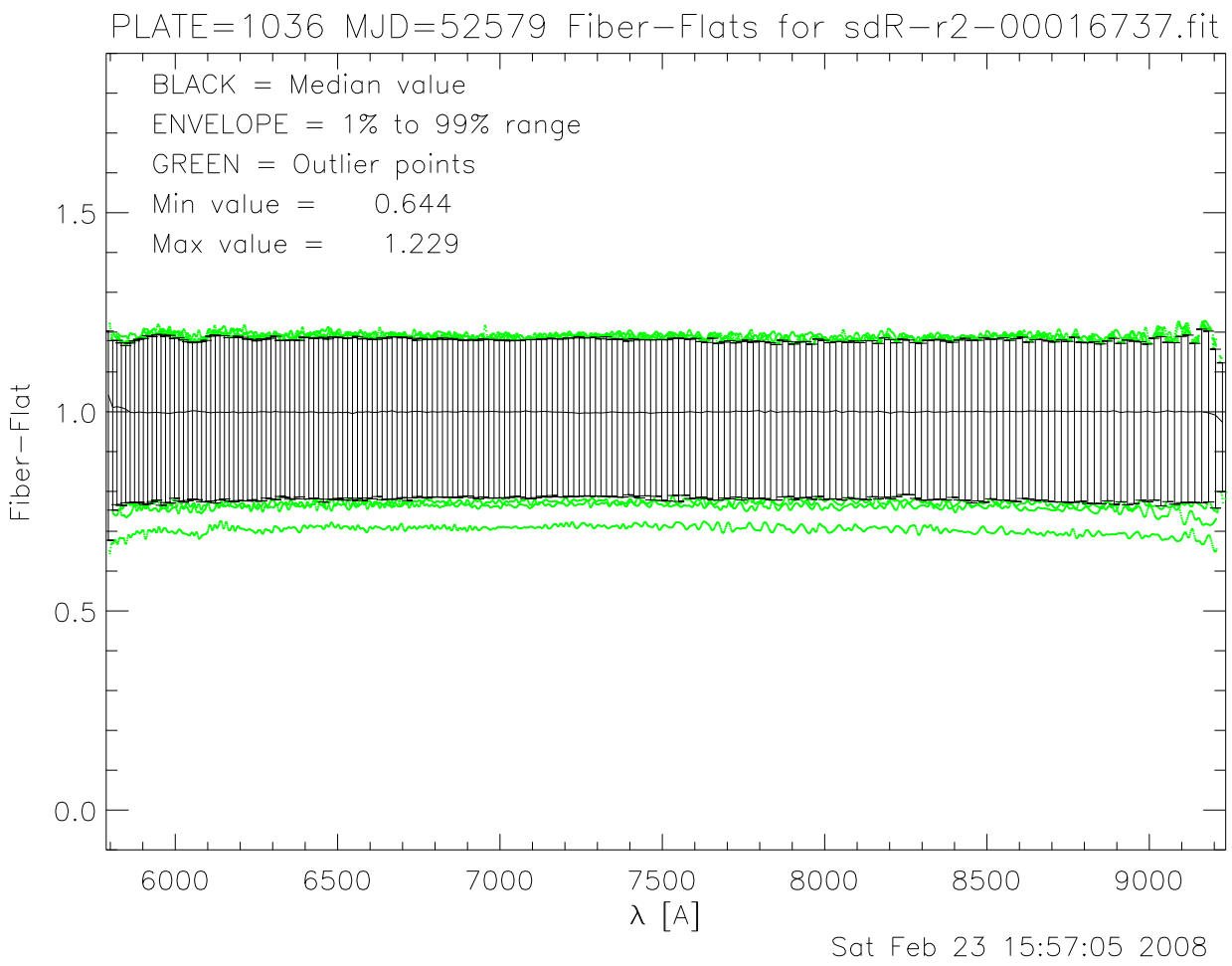

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

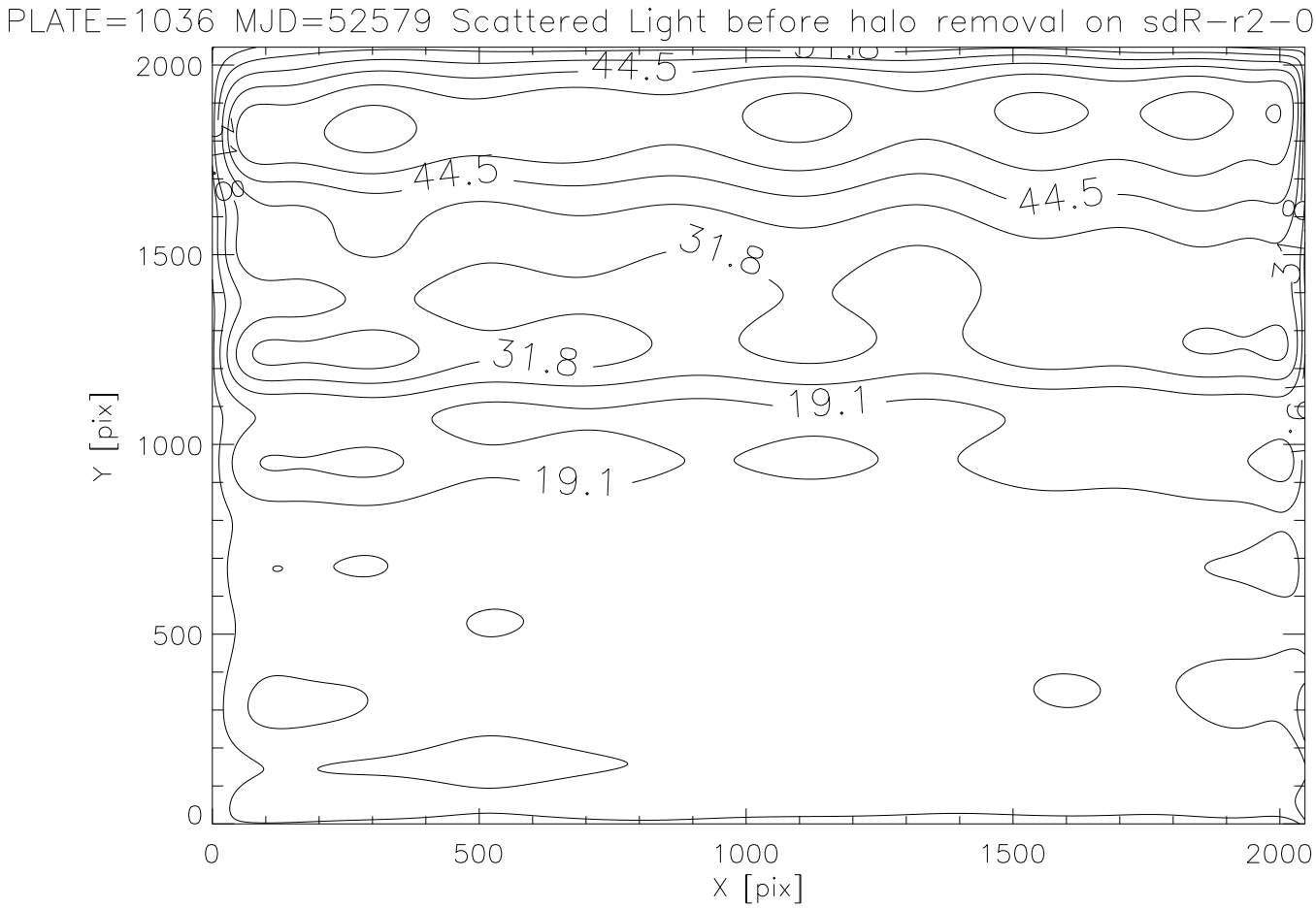

PLATE=1036 MJD=52579 sdR-r2-00016734.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

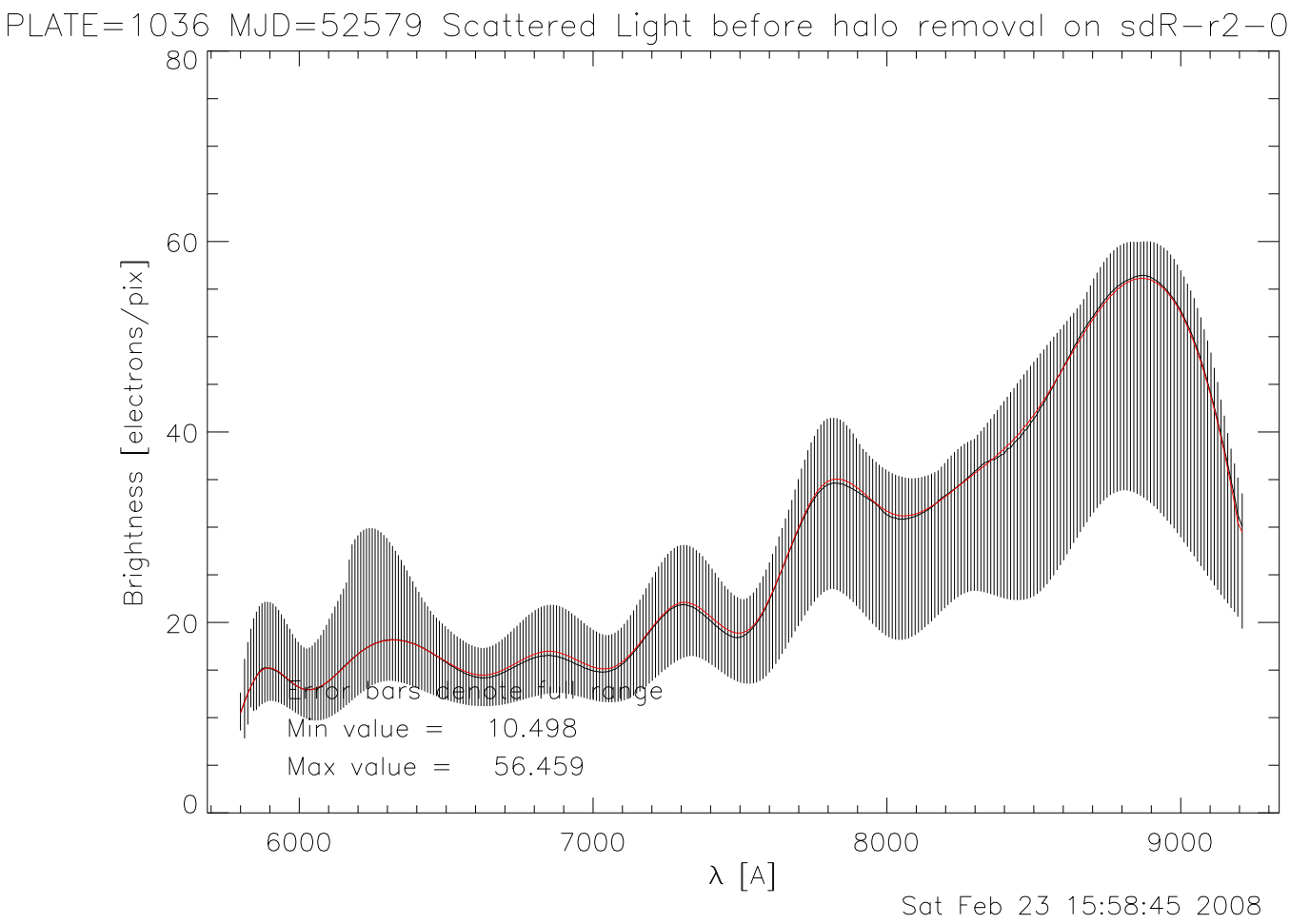

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016734.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

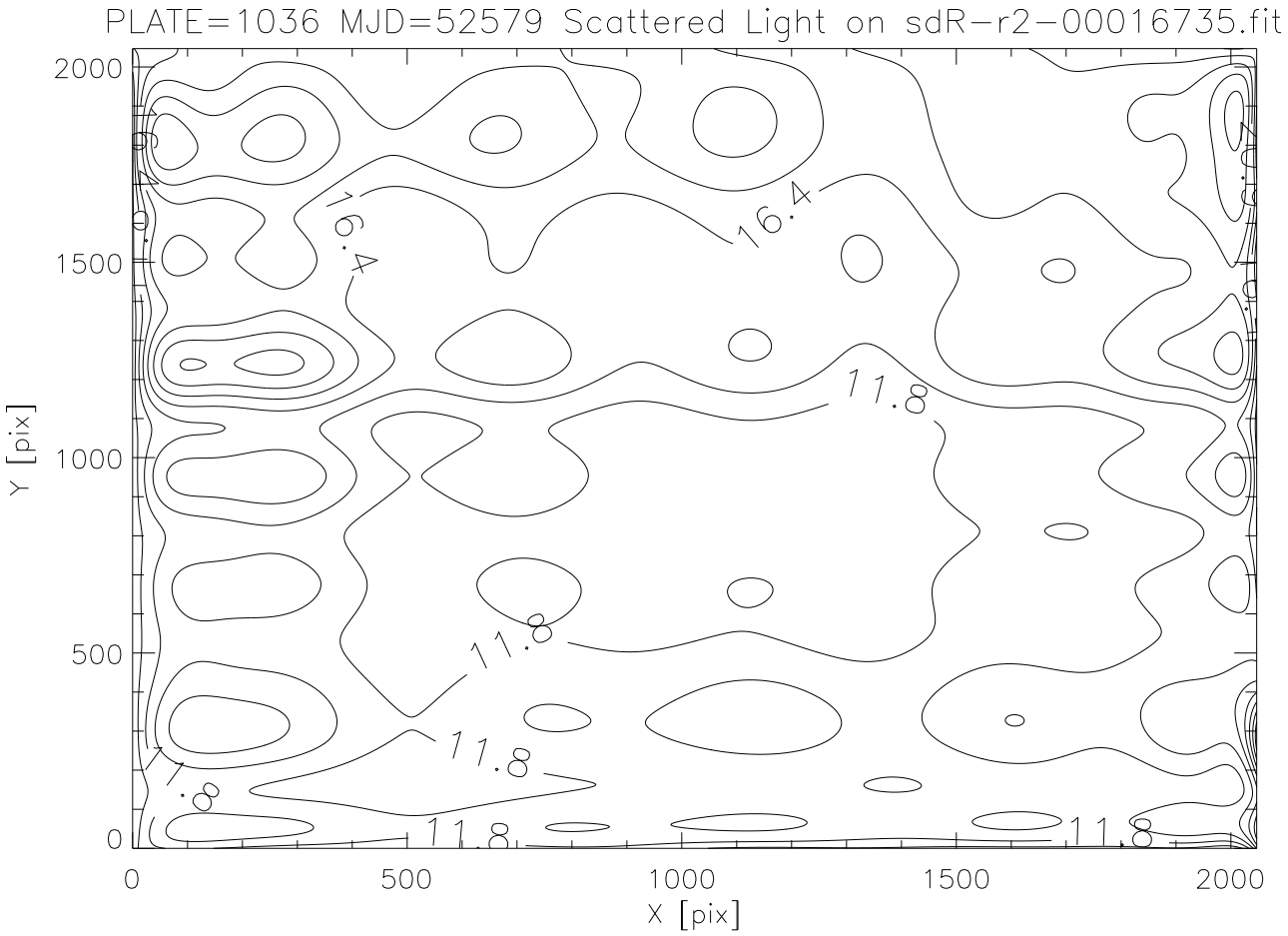

PLATE=1036 MJD=52579 sdR-r2-00016734.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED += sky fiber
Dispersion = 3.69 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

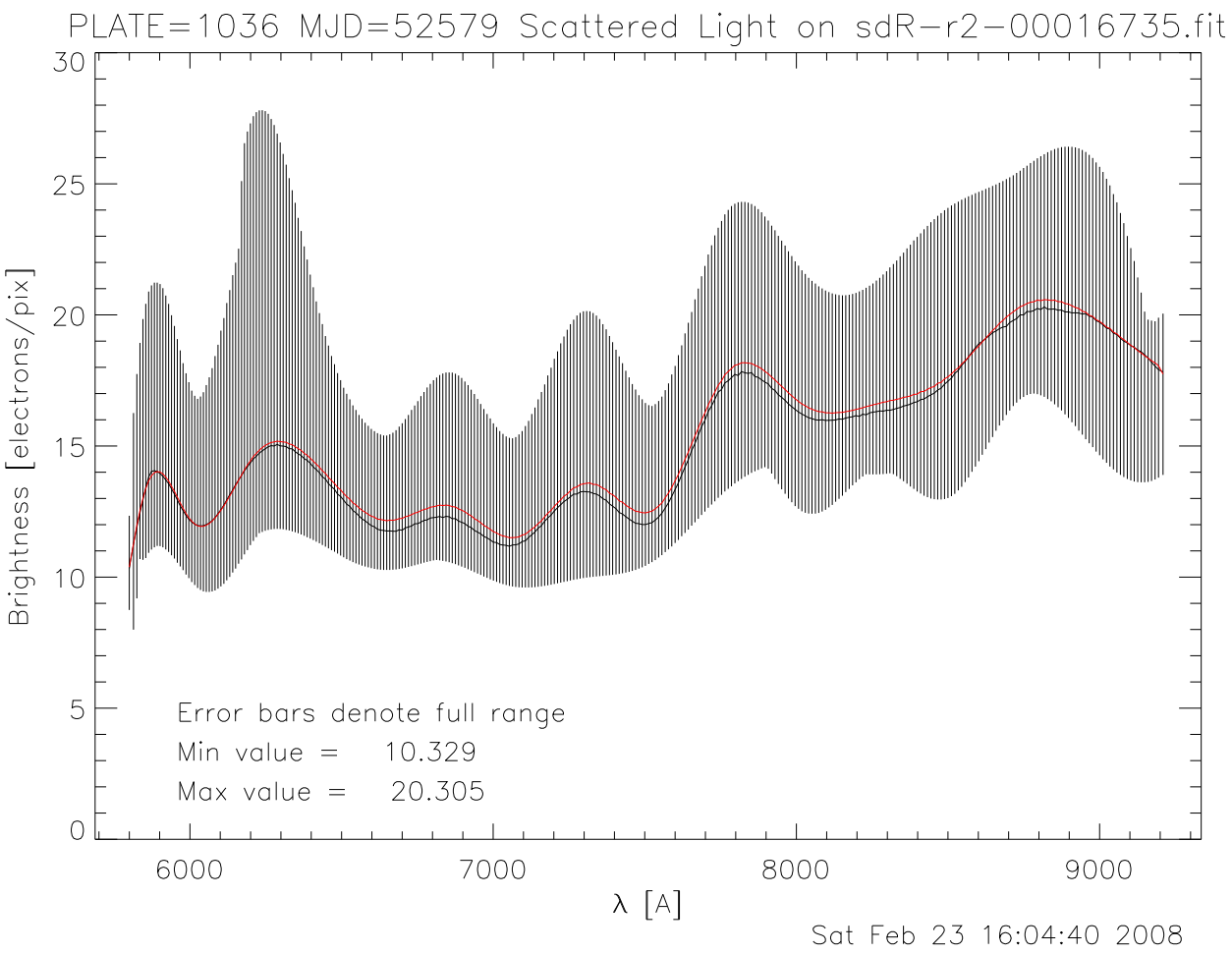

PLATE=1036 MJD=52579 sdR-r2-00016734.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Focal Distance [mm]
Airmass

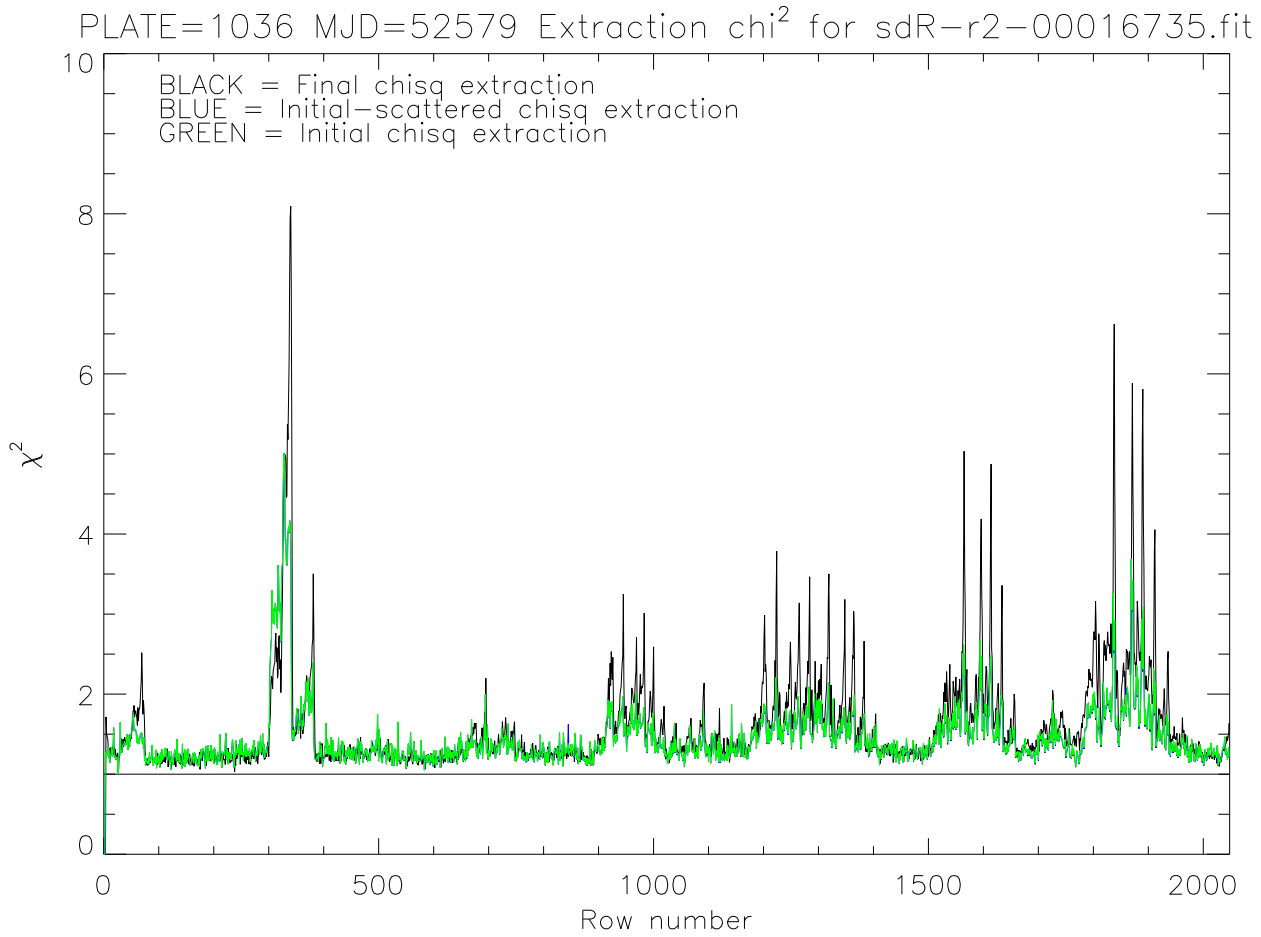

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r2−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.644
Max value = 1.229
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 15:57:05 2008

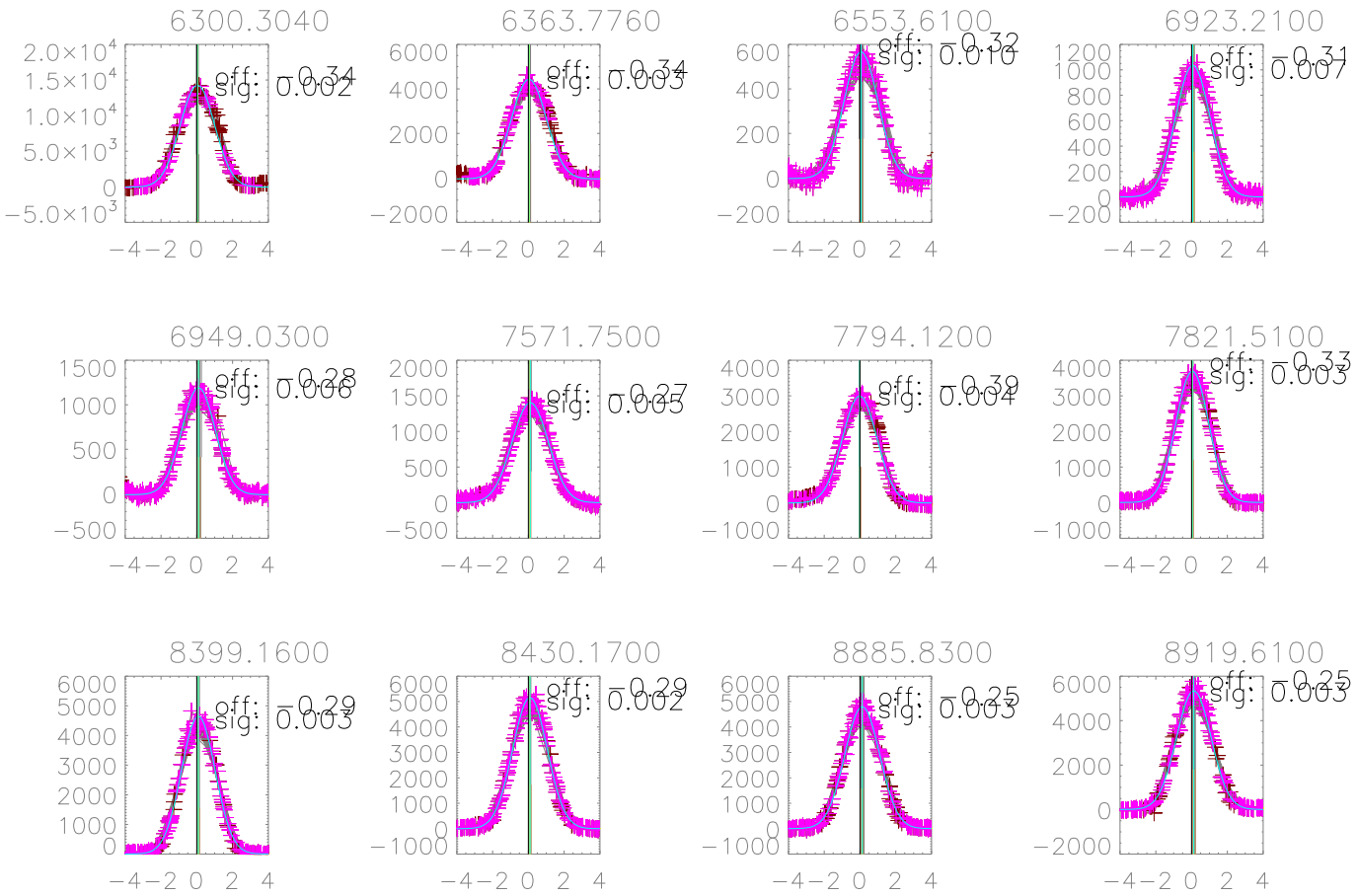

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016735.fi
44.5
44.5
44.5
31.8
31.8
19.1
19.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

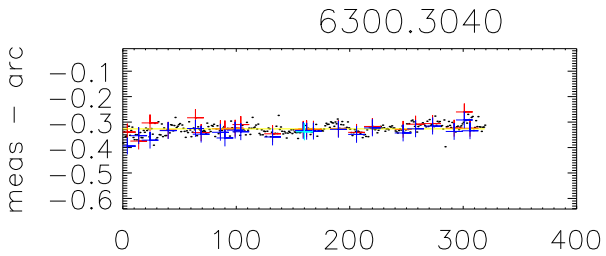

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016735.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.498
Max value = 56.459
Sat Feb 23 15:58:45 2008

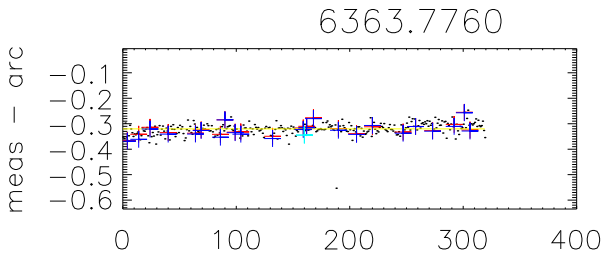

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016735.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
11.8

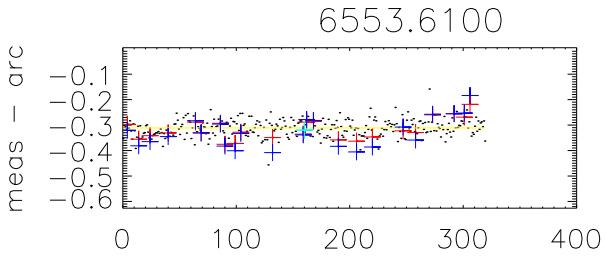

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016735.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.329
Max value = 20.305
Sat Feb 23 16:04:40 2008

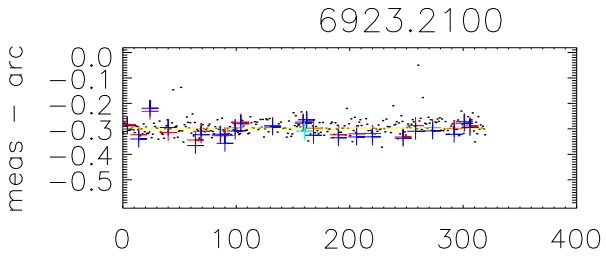

PLATE=1036 MJD=52579 Extraction chi^2 for sdR-r2-00016735.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

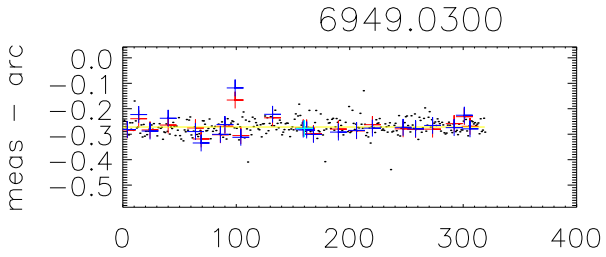

6300.3040
off: −0.34
sig: 0.002
6363.7760
off: −0.34
sig: 0.003
6553.6100
off: −0.32
sig: 0.010
6923.2100
off: −0.31
sig: 0.007
6949.0300
off: −0.28
sig: 0.008
7571.7500
off: −0.27
sig: 0.005
7794.1200
off: −0.39
sig: 0.004
7821.5100
off: −0.33
sig: 0.003
8399.1600
off: −0.29
sig: 0.003
8430.1700
off: −0.29
sig: 0.002
8885.8300
off: −0.25
sig: 0.003
8919.6100
off: −0.25
sig: 0.003

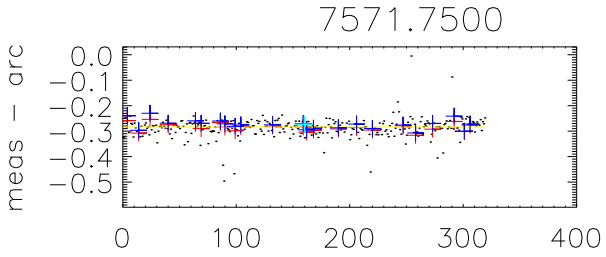

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

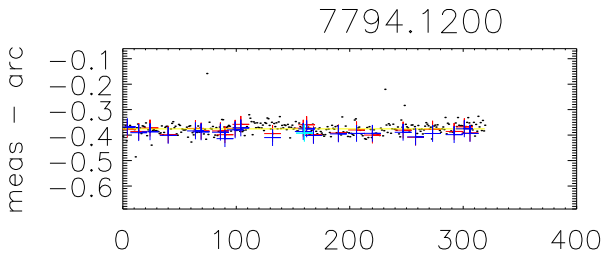

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

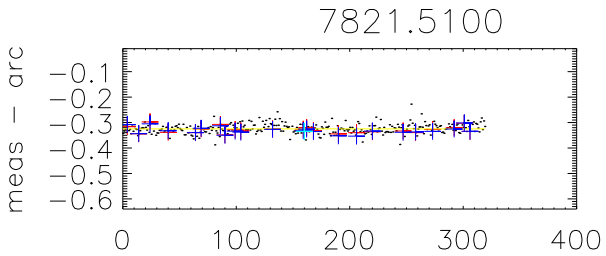

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

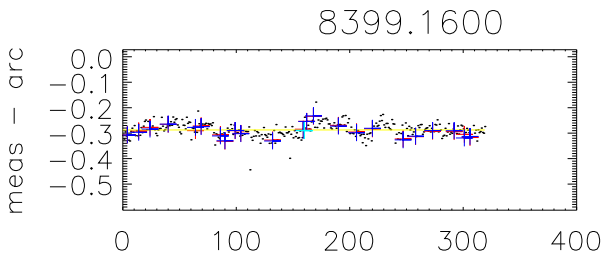

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

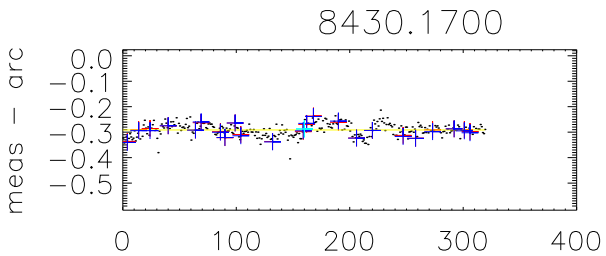

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

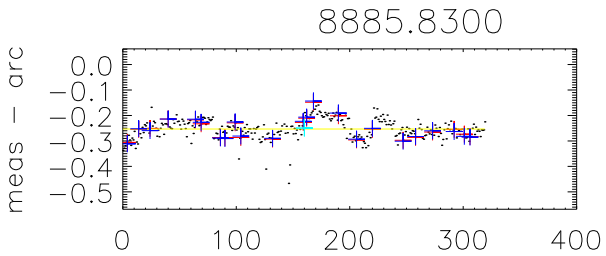

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

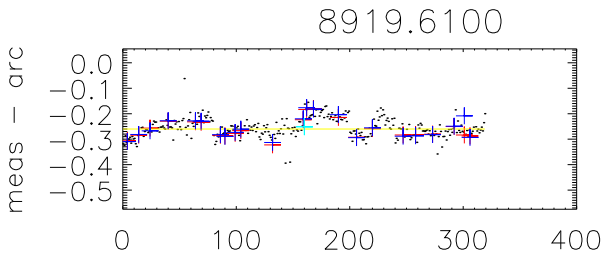

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

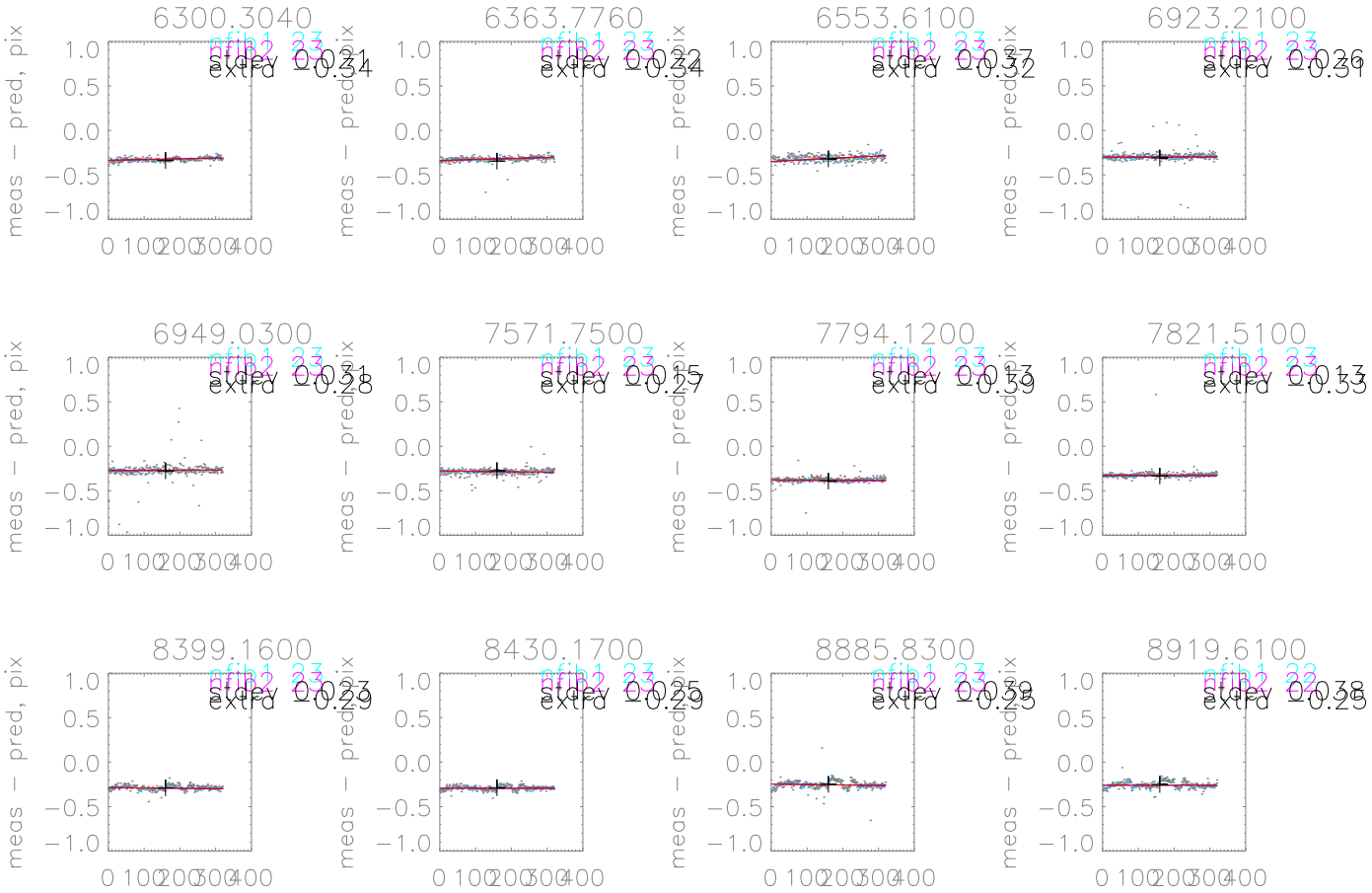

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

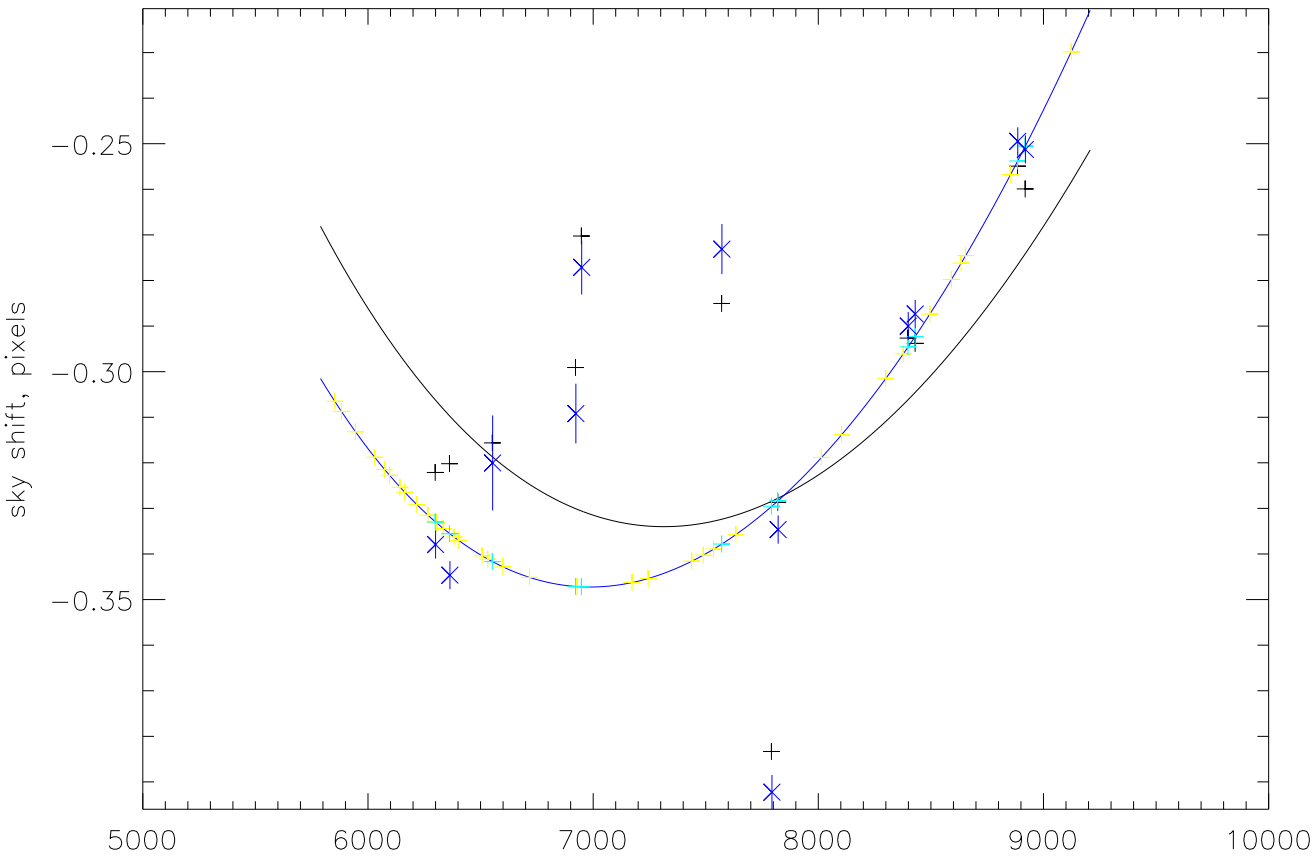

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

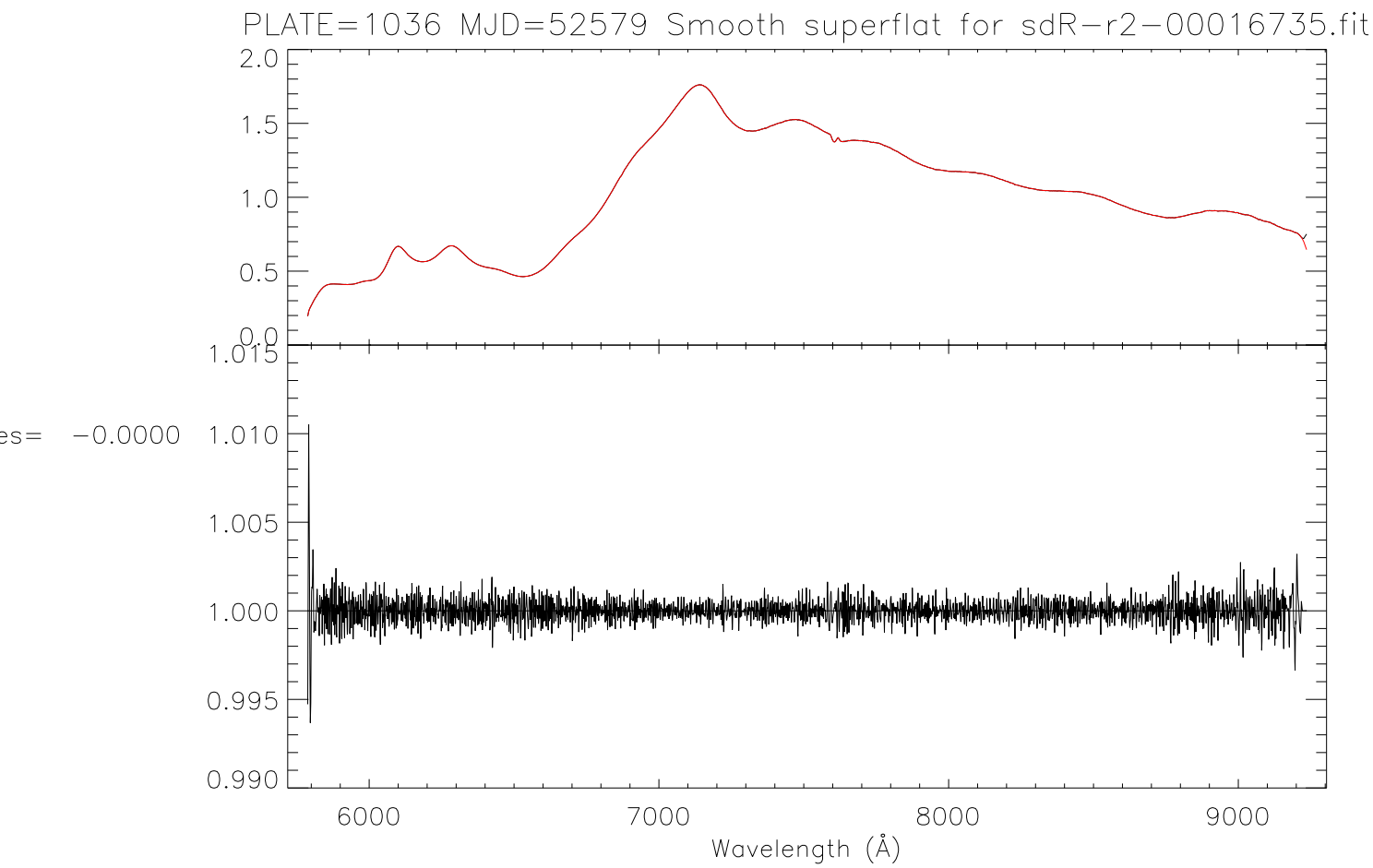

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

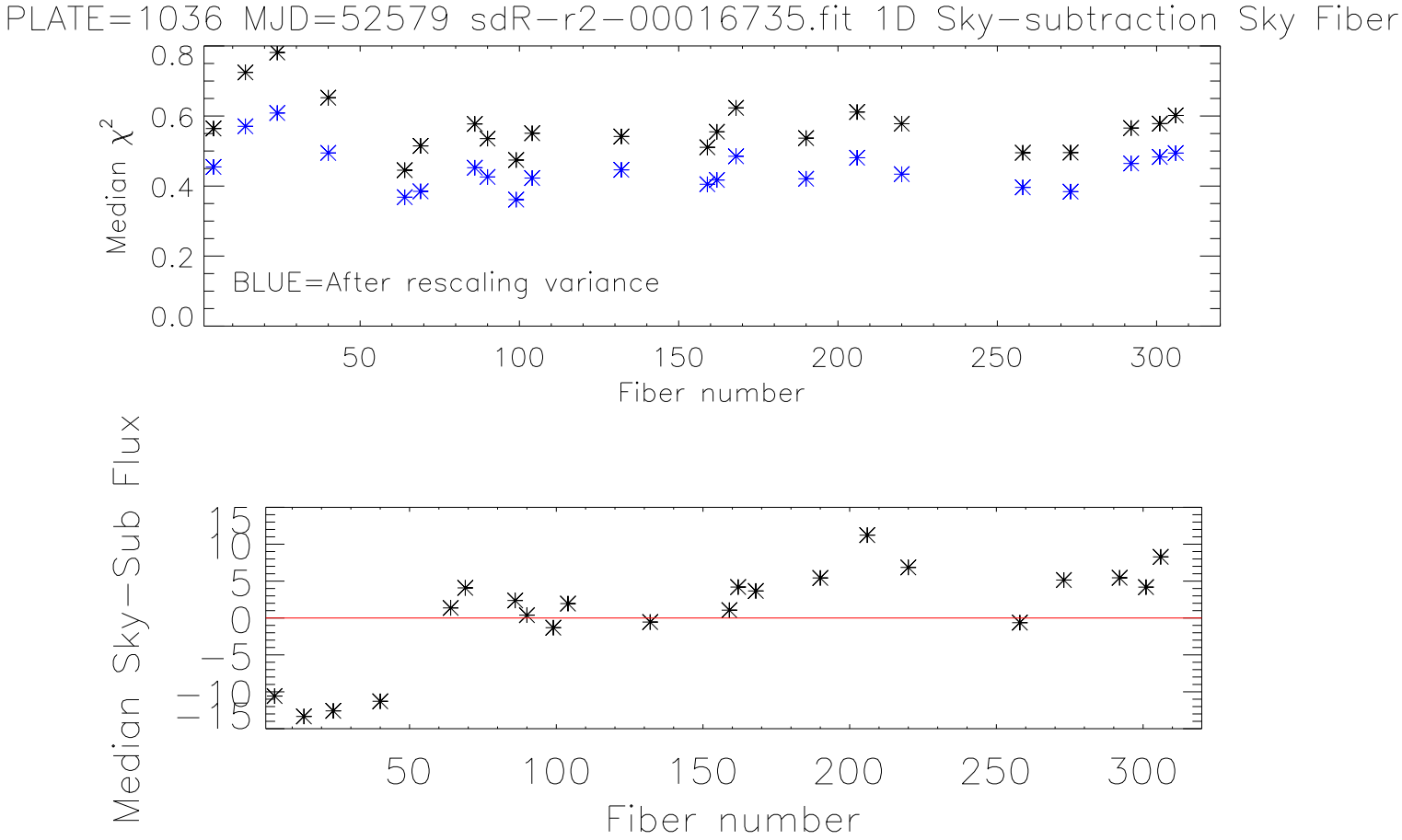

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

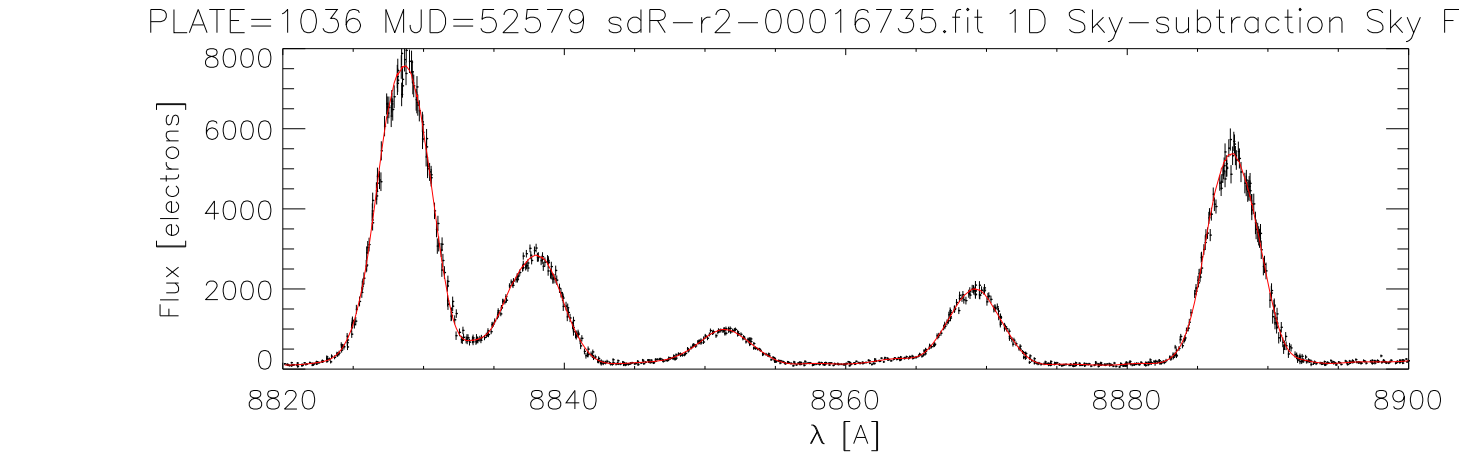

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

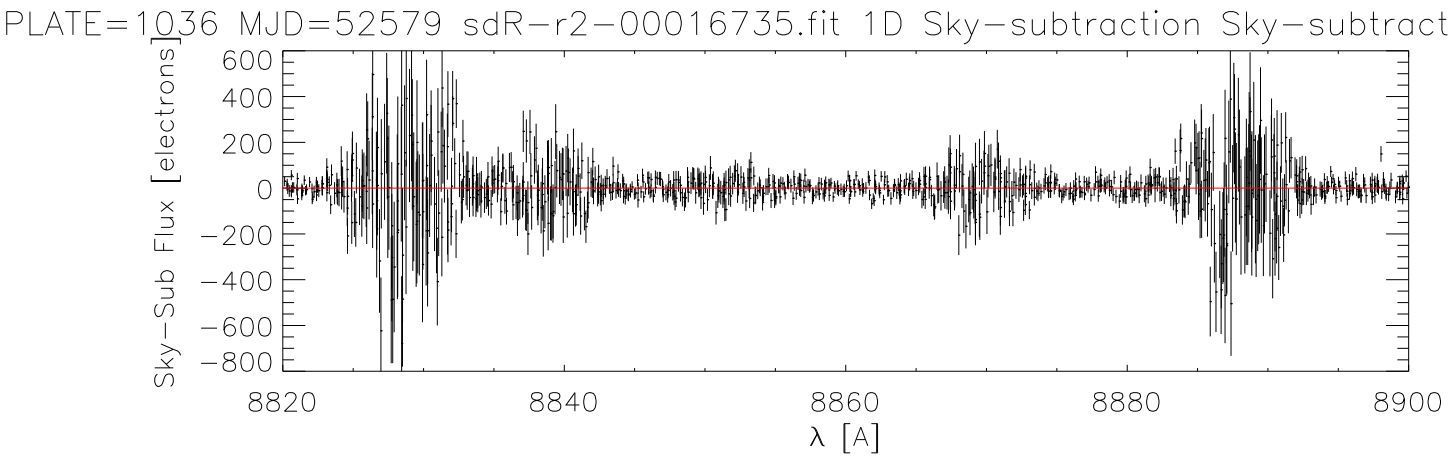

6300.3040
stdev 0.021
extrd −0.34
6363.7760
stdev 0.022
extrd −0.34
6553.6100
stdev 0.037
extrd −0.32
6923.2100
stdev 0.026
extrd −0.31
6949.0300
stdev 0.031
extrd −0.28
7571.7500
stdev 0.015
extrd −0.27
7794.1200
stdev 0.013
extrd −0.39
7821.5100
stdev 0.013
extrd −0.33
8399.1600
stdev 0.023
extrd −0.29
8430.1700
stdev 0.025
extrd −0.29
8885.8300
stdev 0.039
extrd −0.25
8919.6100
stdev 0.038
extrd −0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

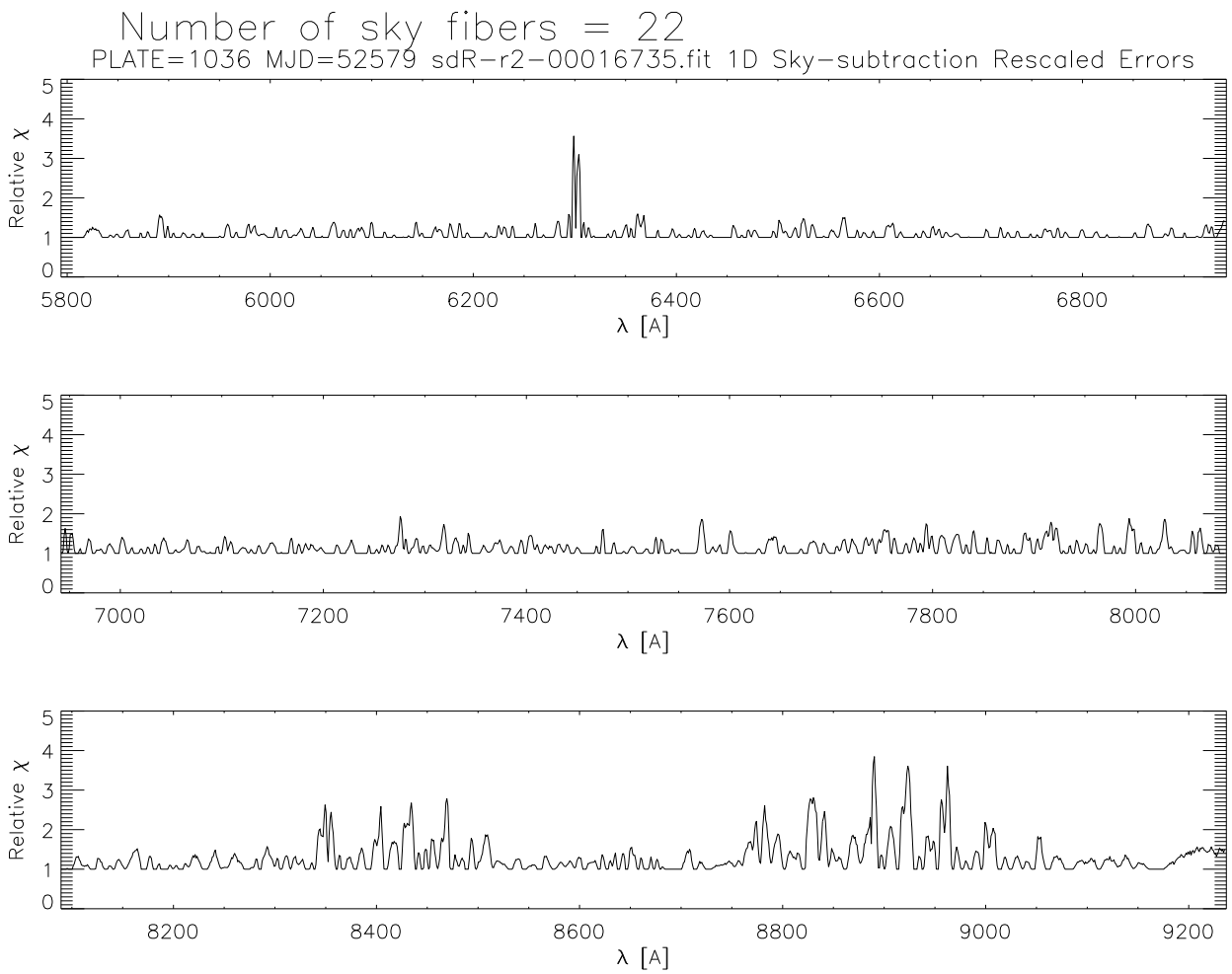

sky shift, pixels
−0.25
−0.30
−0.35
5000
6000
7000
8000
9000
10000

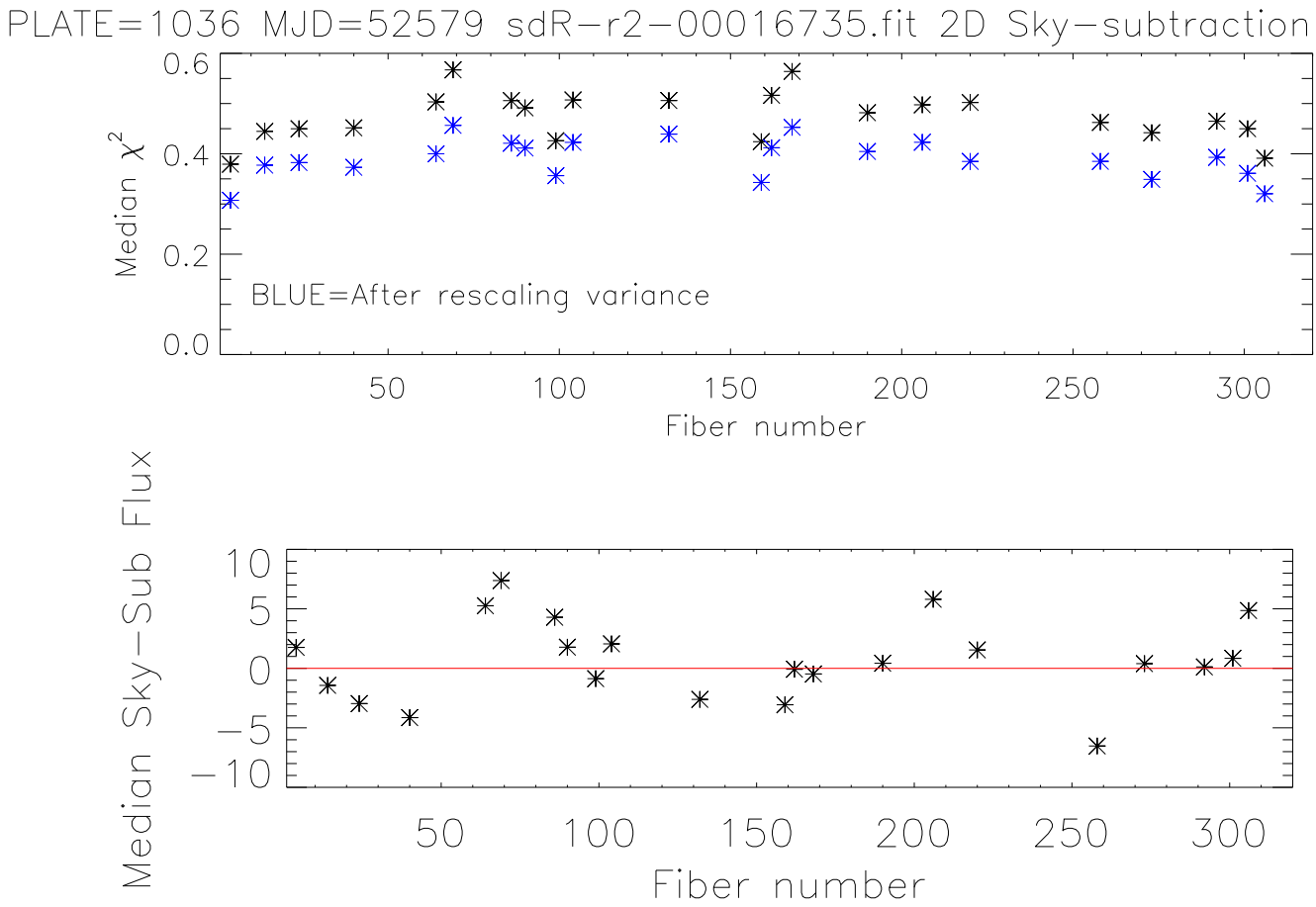

PLATE=1036 MJD=52579 Smooth superflat for sdR-r2-00016735.fit
2.0
1.5
1.0
0.5
0.0
1.015
es= −0.0000
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

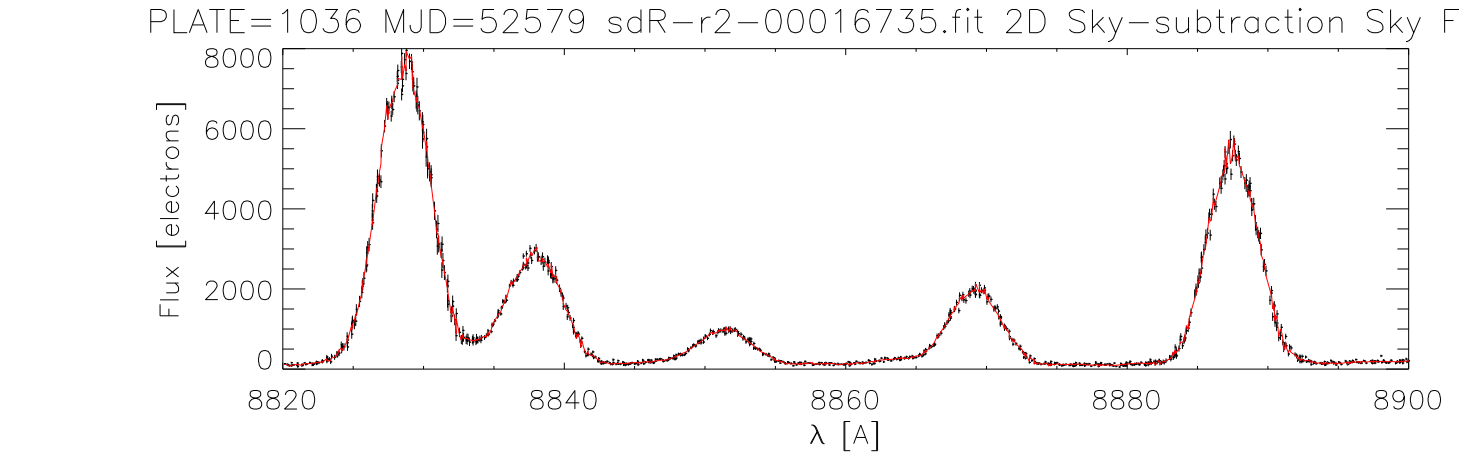

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

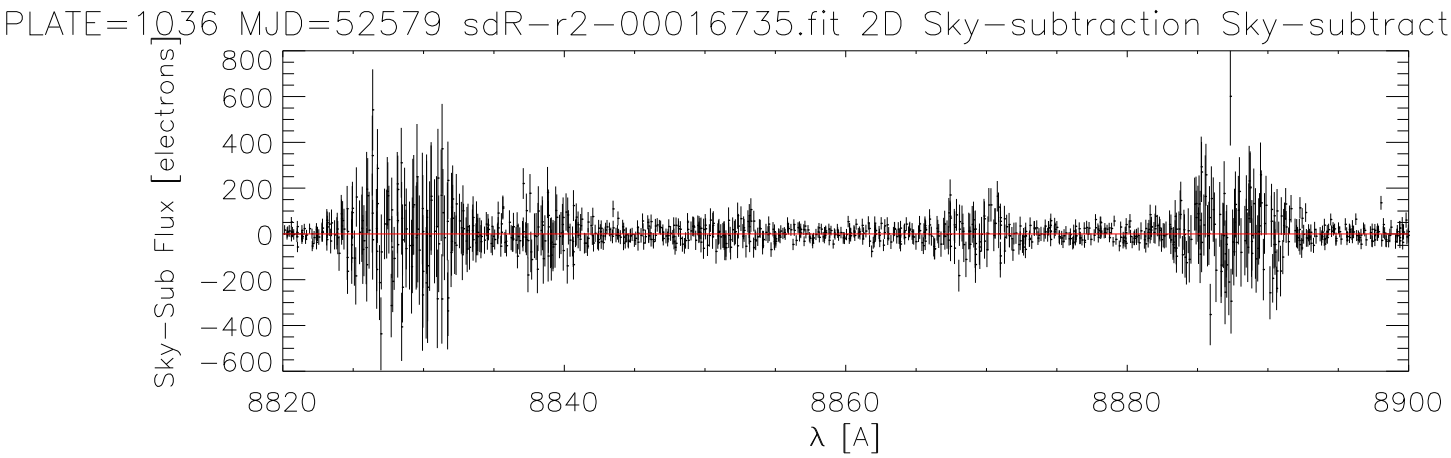

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

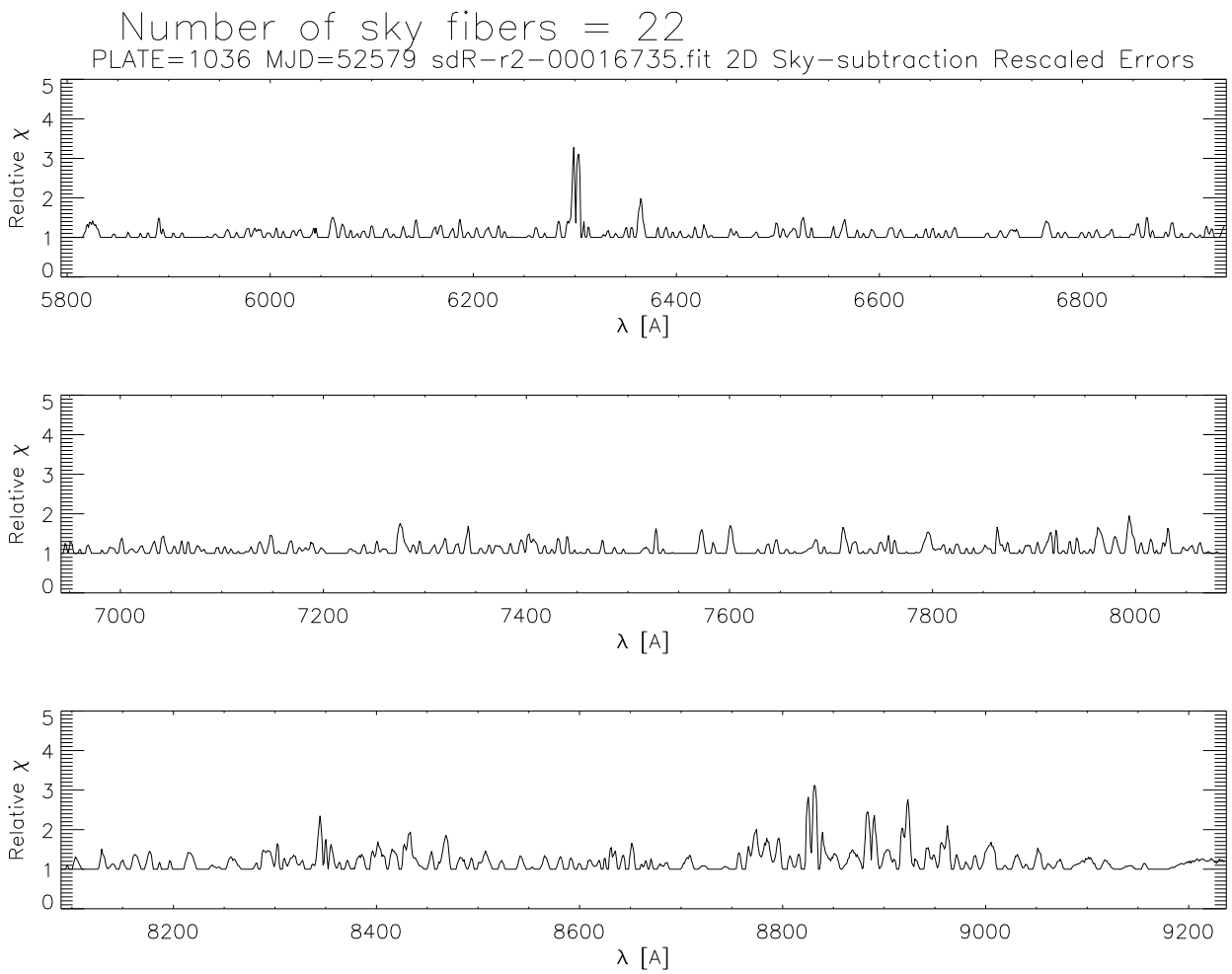

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
-800
8820
8840
8860
8880
8900
λ [A]

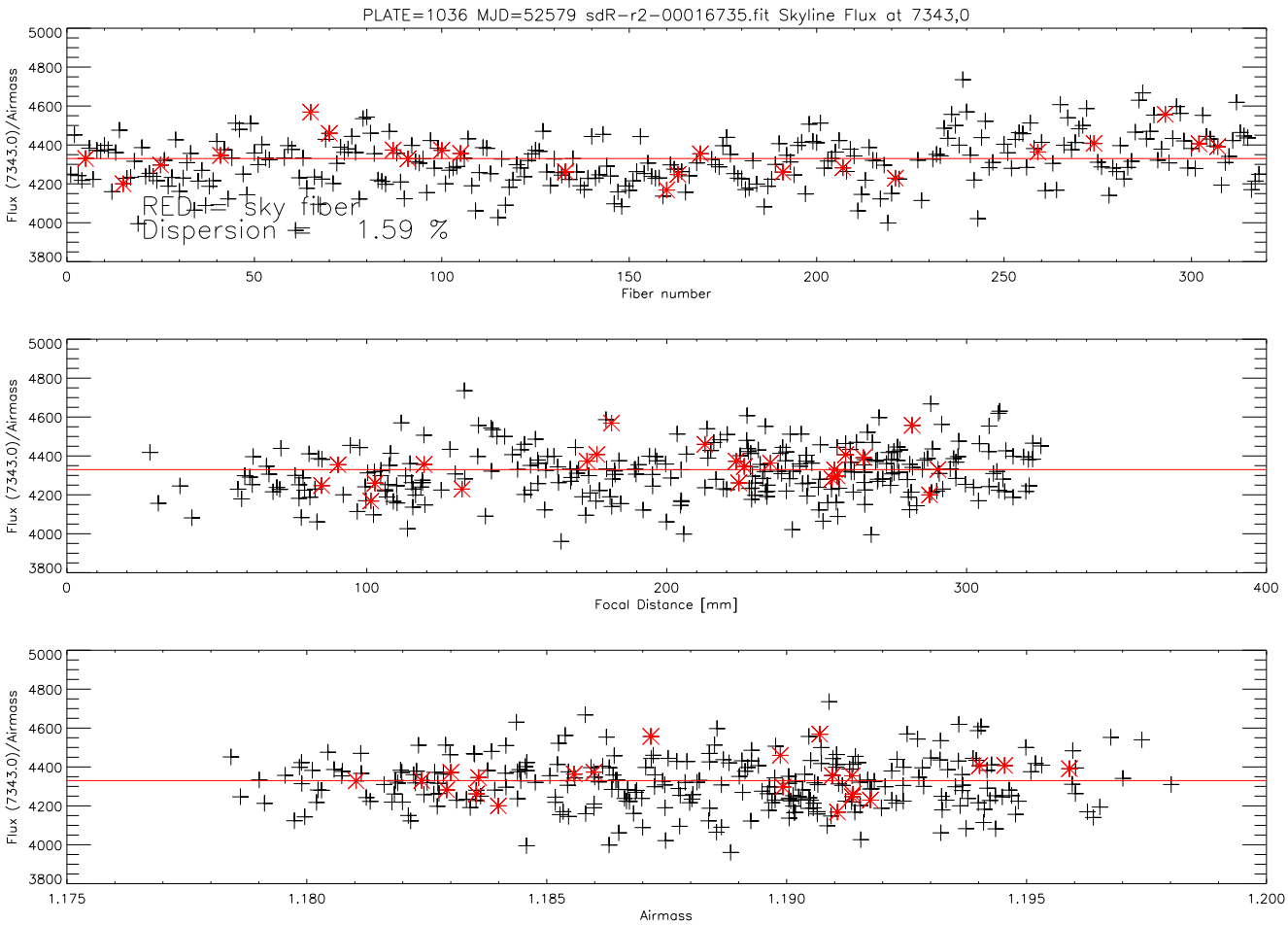

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016735.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

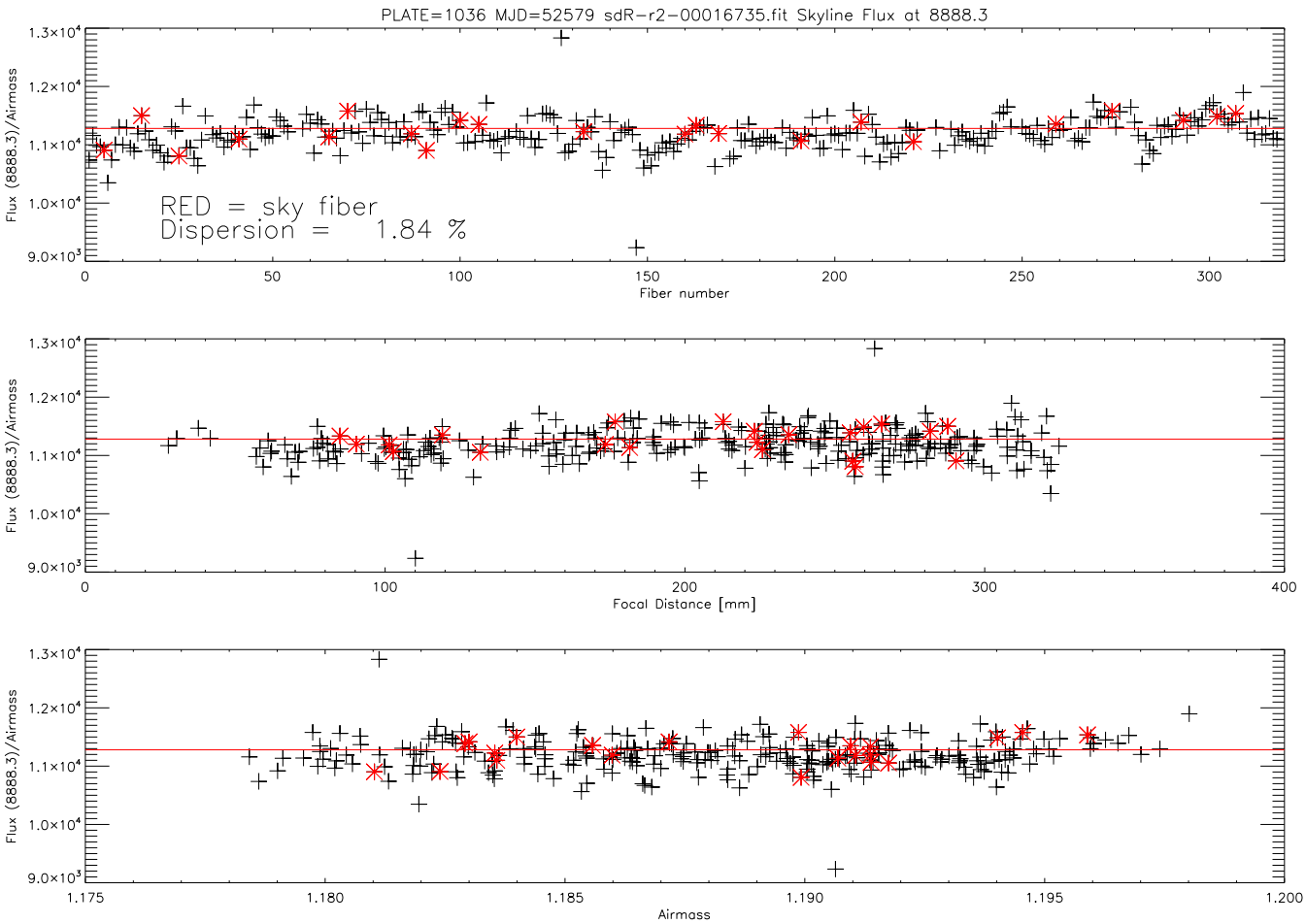

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

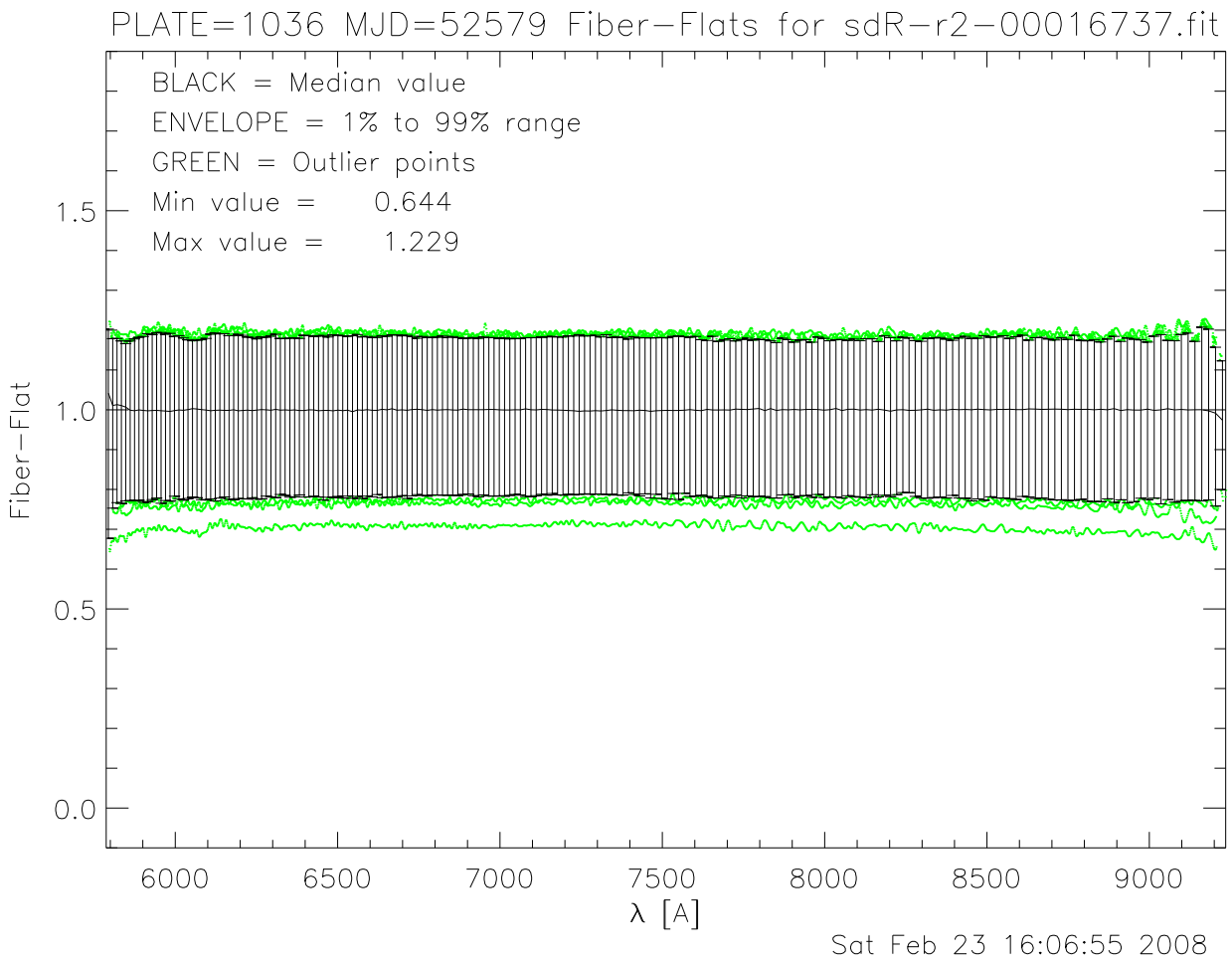

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

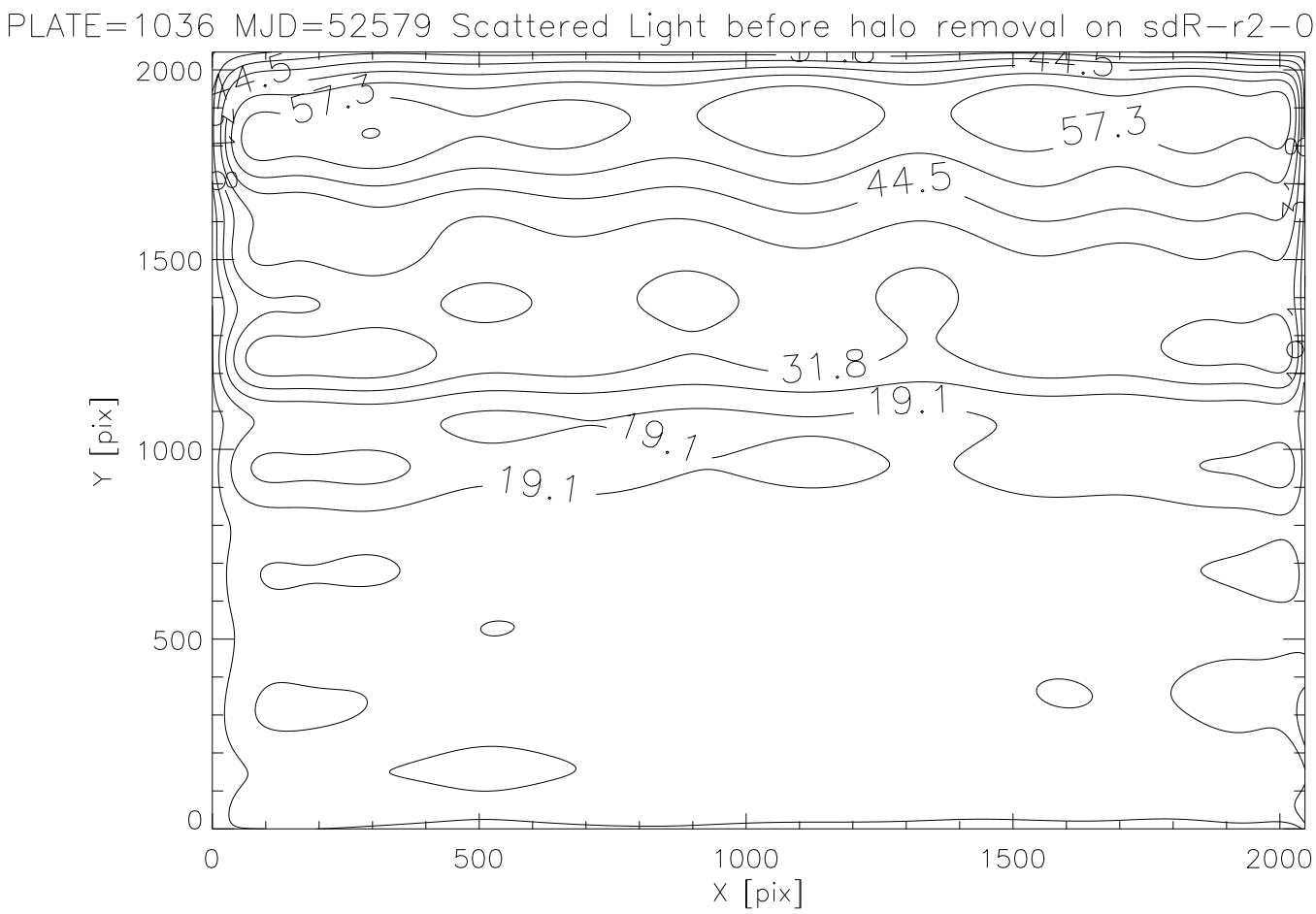

PLATE=1036 MJD=52579 sdR-r2-00016735.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

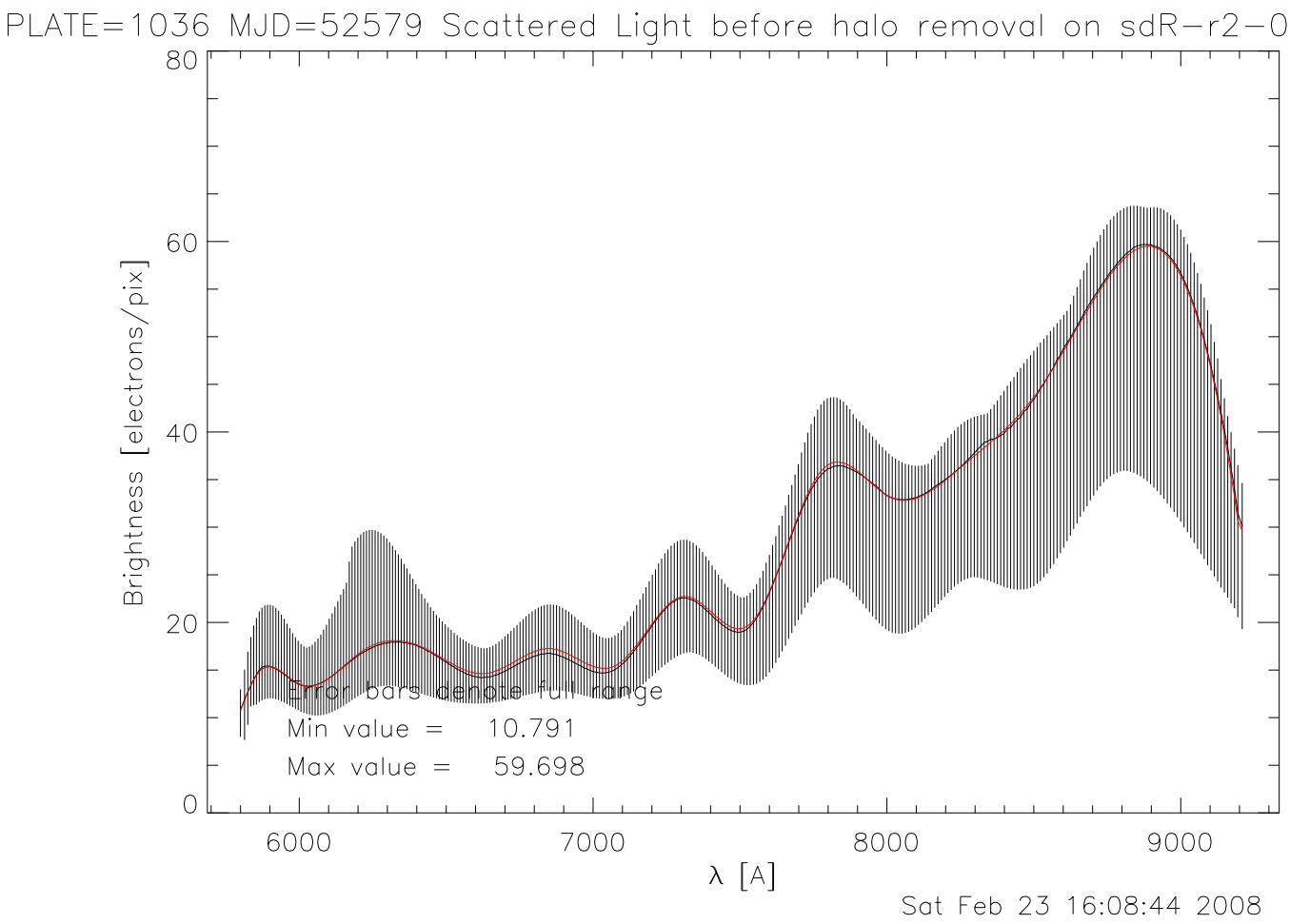

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016735.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

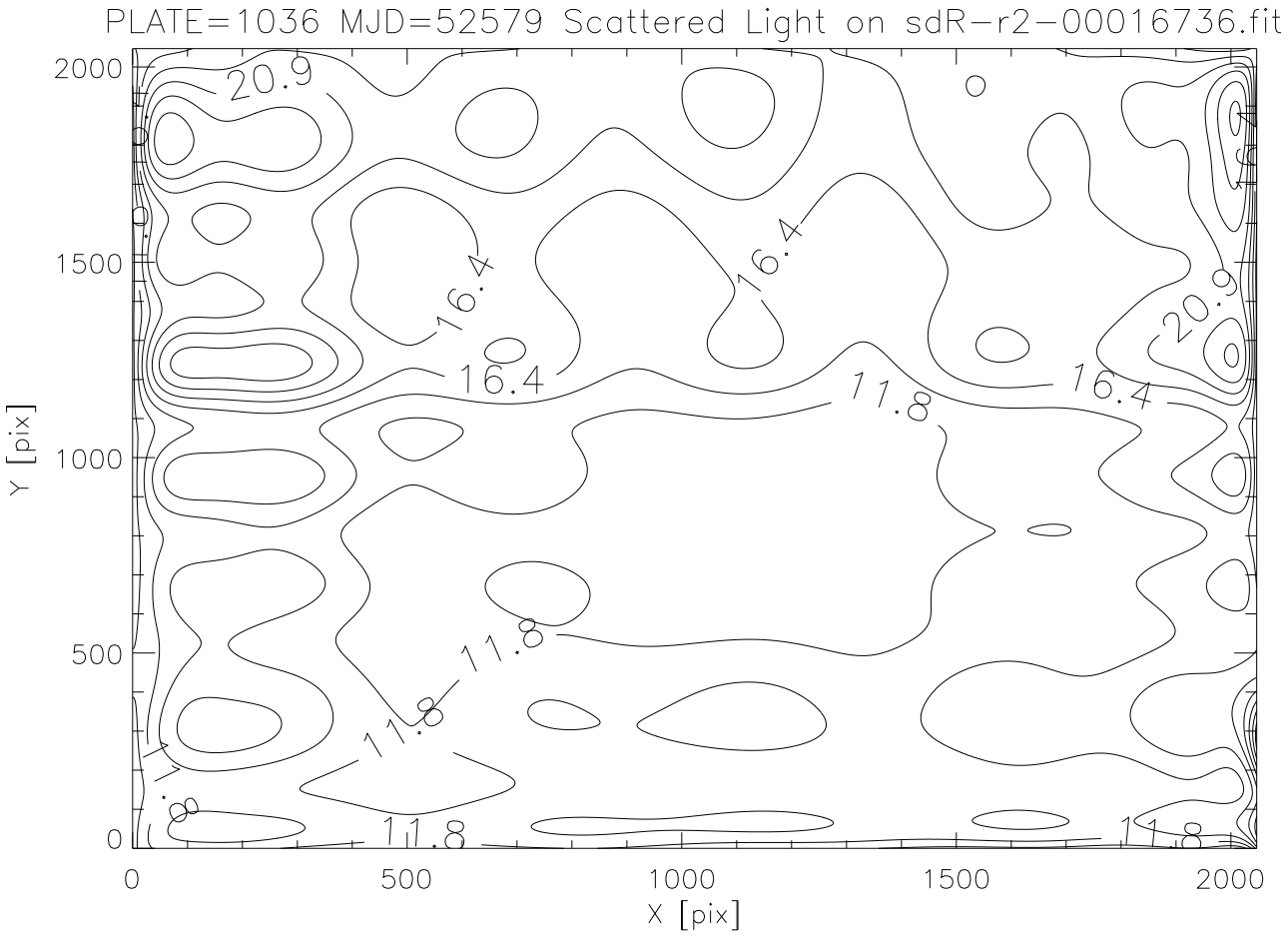

PLATE=1036 MJD=52579 sdR-r2-00016735.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.59 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

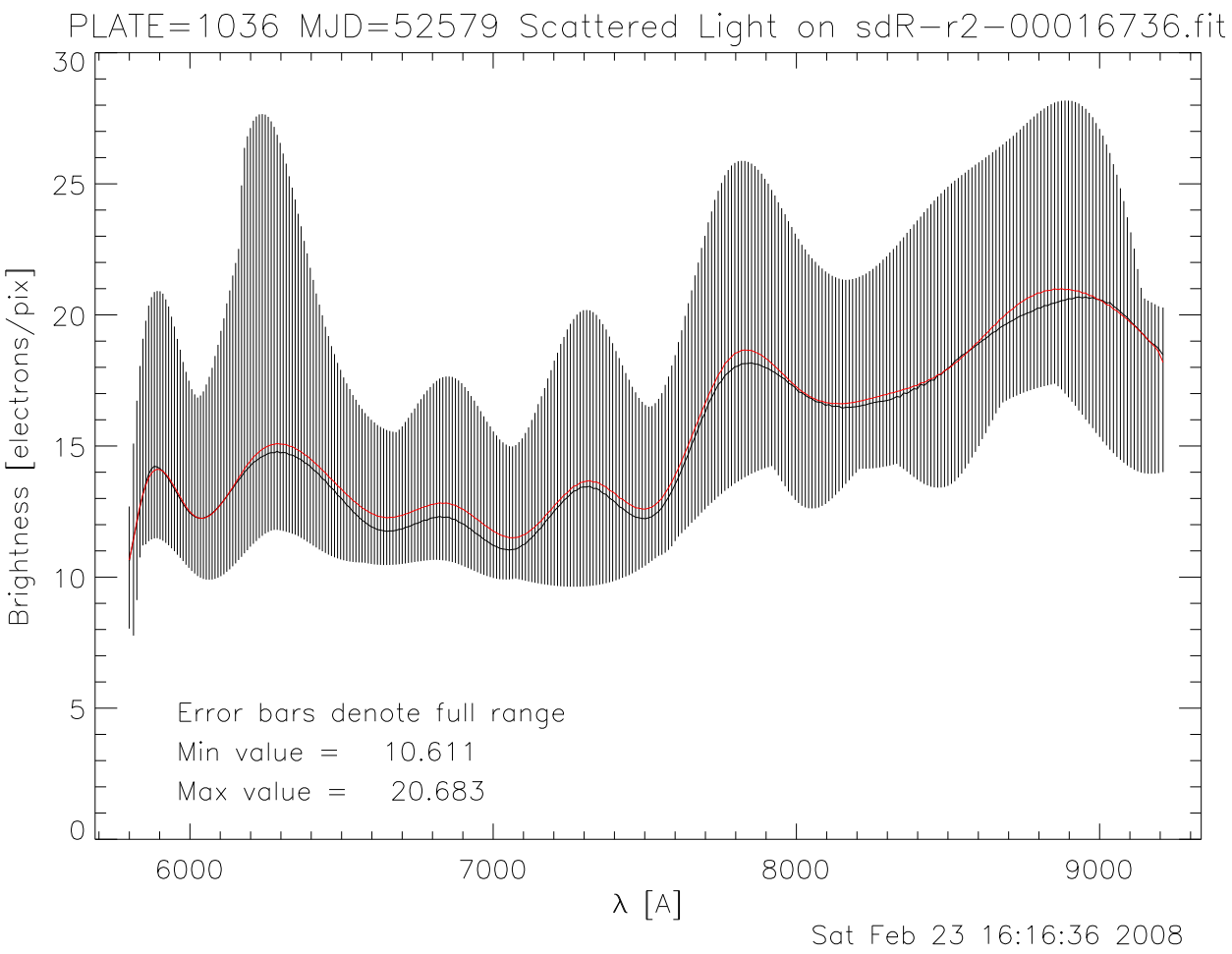

PLATE=1036 MJD=52579 sdR-r2-00016735.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.84 %
Fiber number
Focal Distance [mm]
Airmass

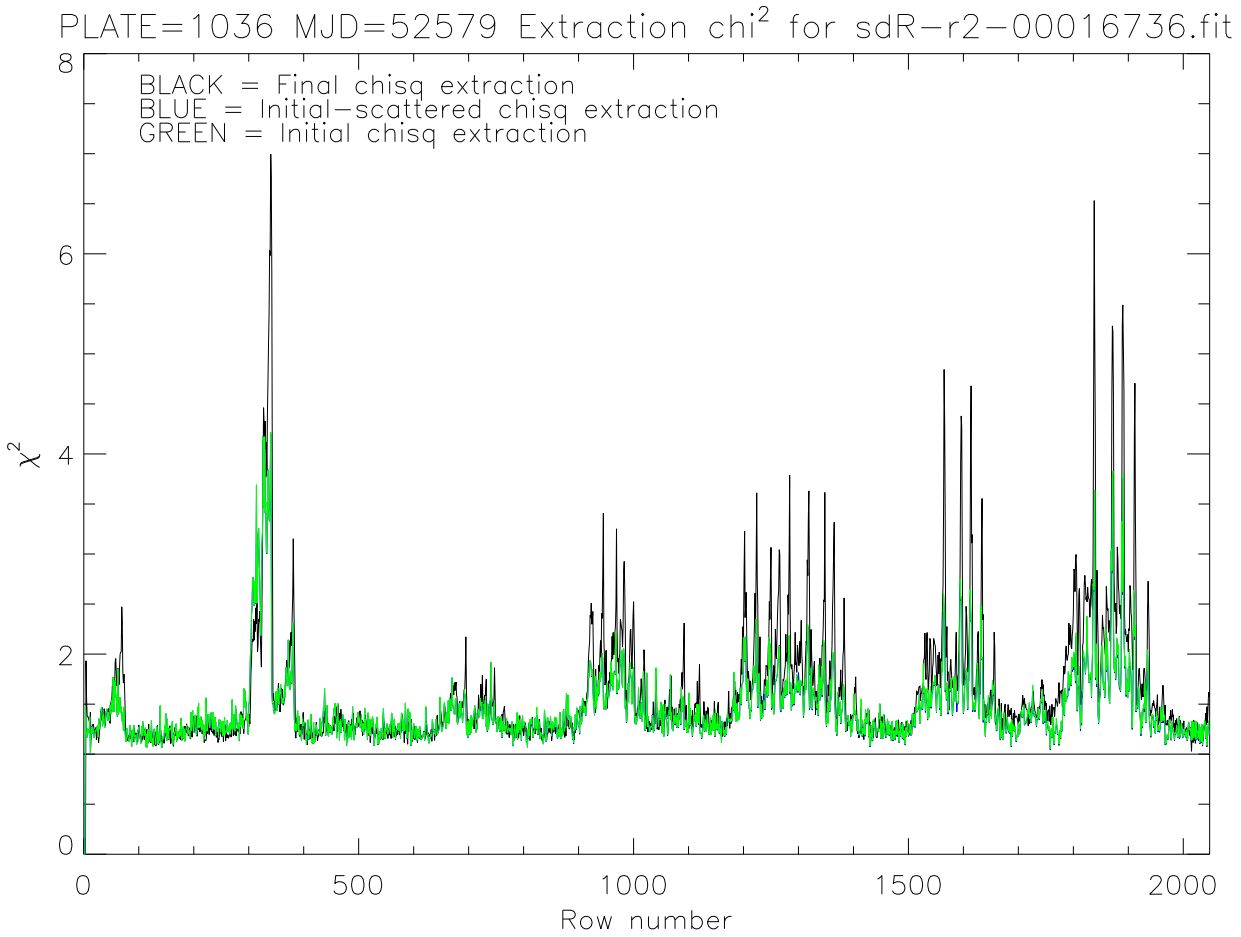

PLATE=1036 MJD=52579 Fiber−Flats for sdR−r2−00016737.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.644
Max value = 1.229
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:06:55 2008

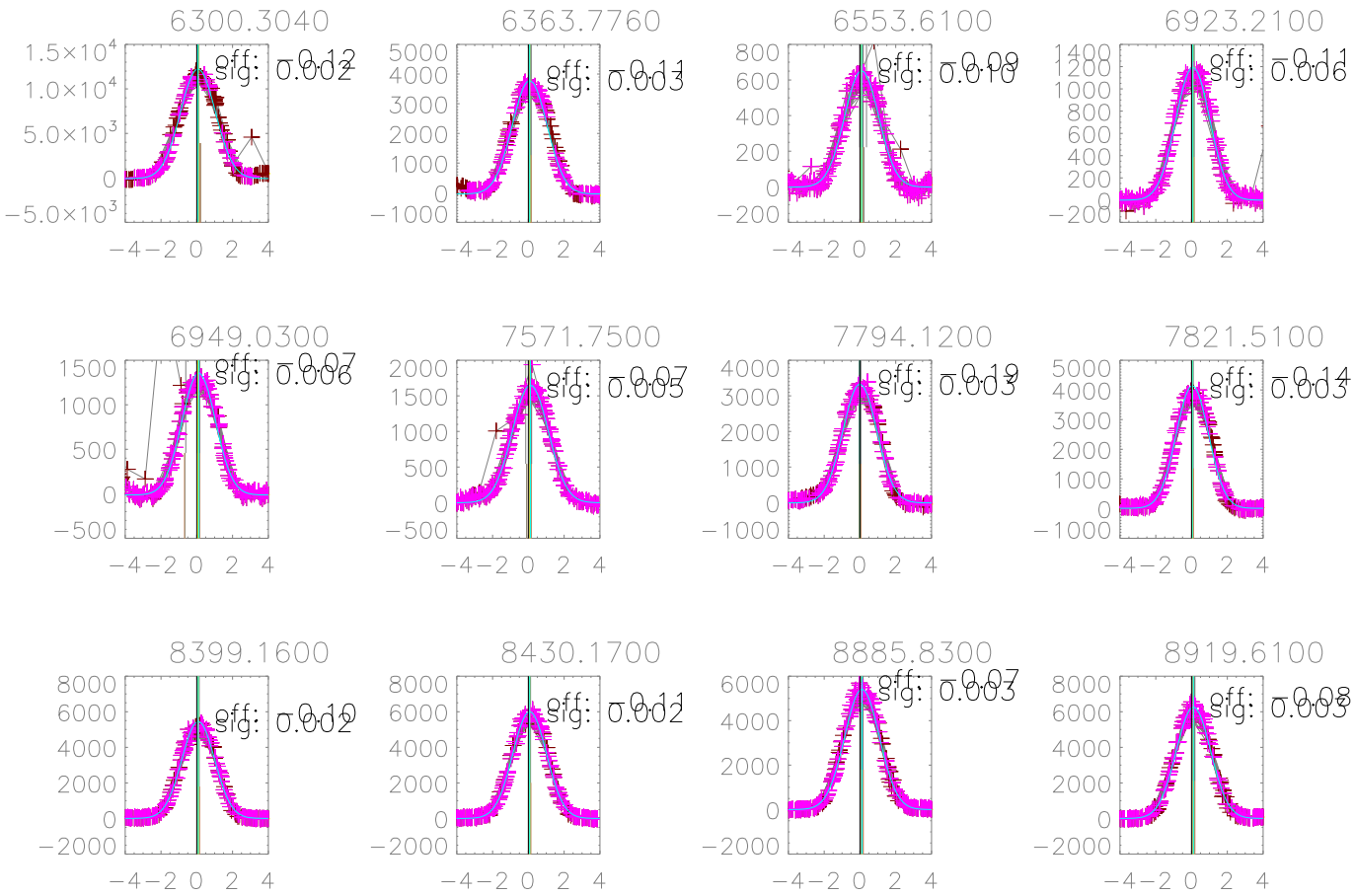

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016736.fi
57.3
44.5
31.8
19.1
19.1
19.1
Y [pix]
X [pix]
0
500
1000
1500
2000

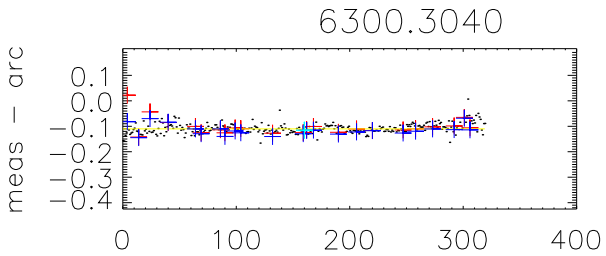

PLATE=1036 MJD=52579 Scattered Light before halo removal on sdR-r2-00016736.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.791
Max value = 59.698
Sat Feb 23 16:08:44 2008

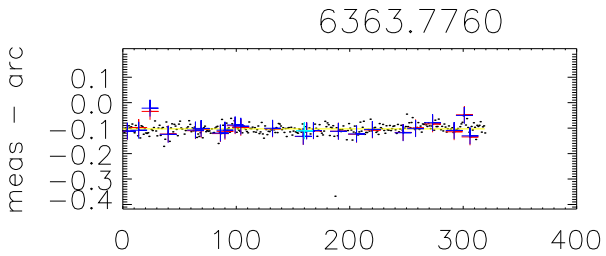

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016736.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
20.9
16.4
11.8

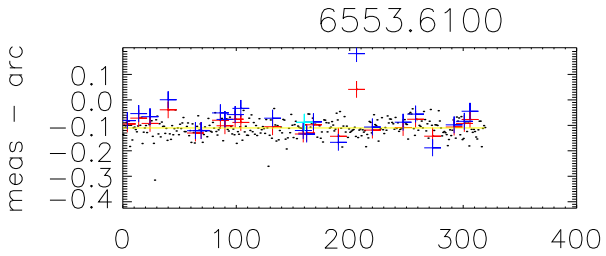

PLATE=1036 MJD=52579 Scattered Light on sdR-r2-00016736.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.611
Max value = 20.683
Sat Feb 23 16:16:36 2008

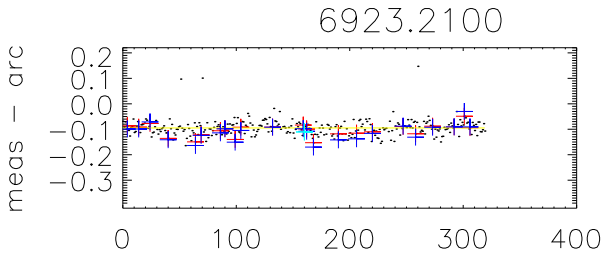

PLATE=1036 MJD=52579 Extraction chi^2 for sdR−r2−00016736.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

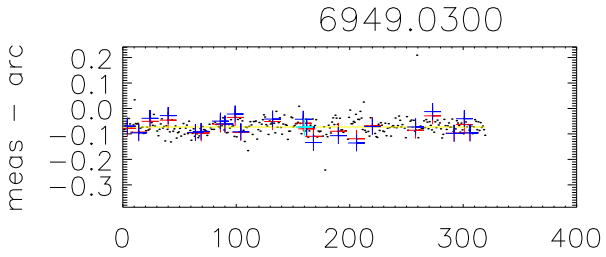

6300.3040
off: −0.12
sig: 0.002
6363.7760
off: −0.11
sig: 0.003
6553.6100
off: −0.09
sig: 0.010
6923.2100
off: −0.11
sig: 0.006
6949.0300
off: −0.07
sig: 0.006
7571.7500
off: −0.07
sig: 0.005
7794.1200
off: −0.19
sig: 0.003
7821.5100
off: −0.14
sig: 0.003
8399.1600
off: −0.10
sig: 0.002
8430.1700
off: −0.11
sig: 0.002
8885.8300
off: −0.07
sig: 0.003
8919.6100
off: −0.08
sig: 0.003

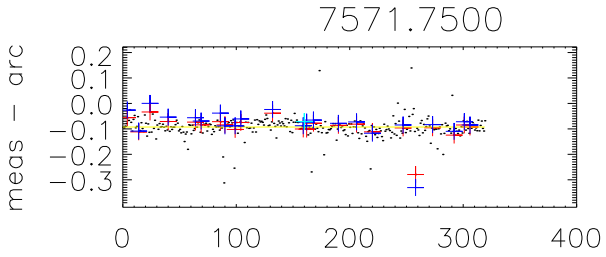

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

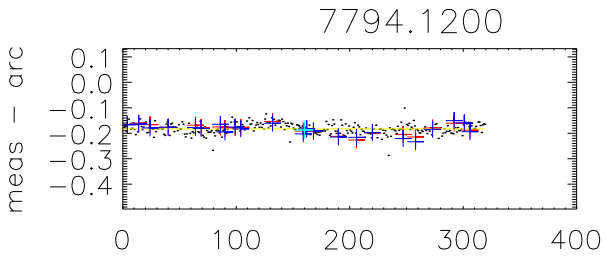

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

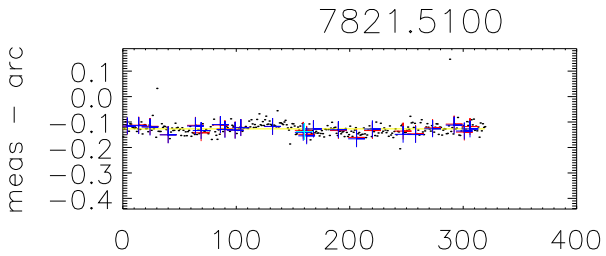

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

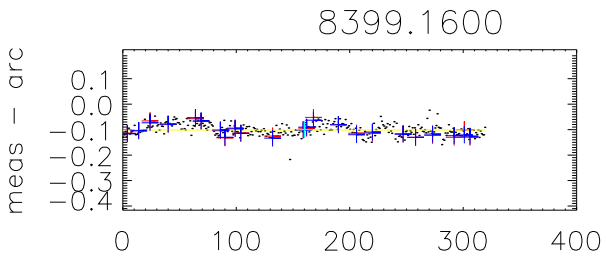

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

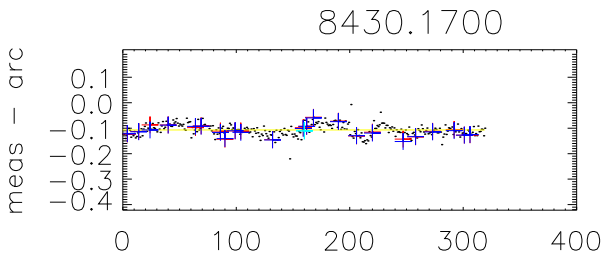

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

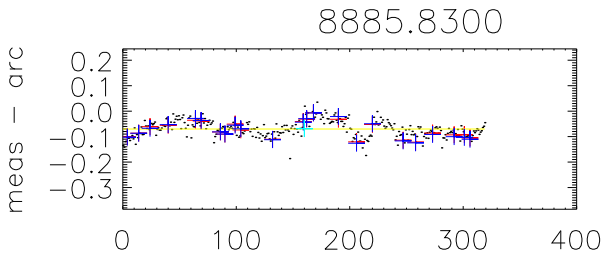

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

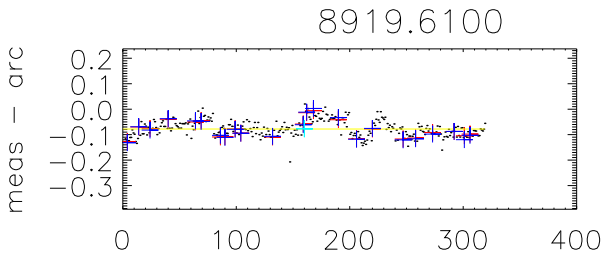

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

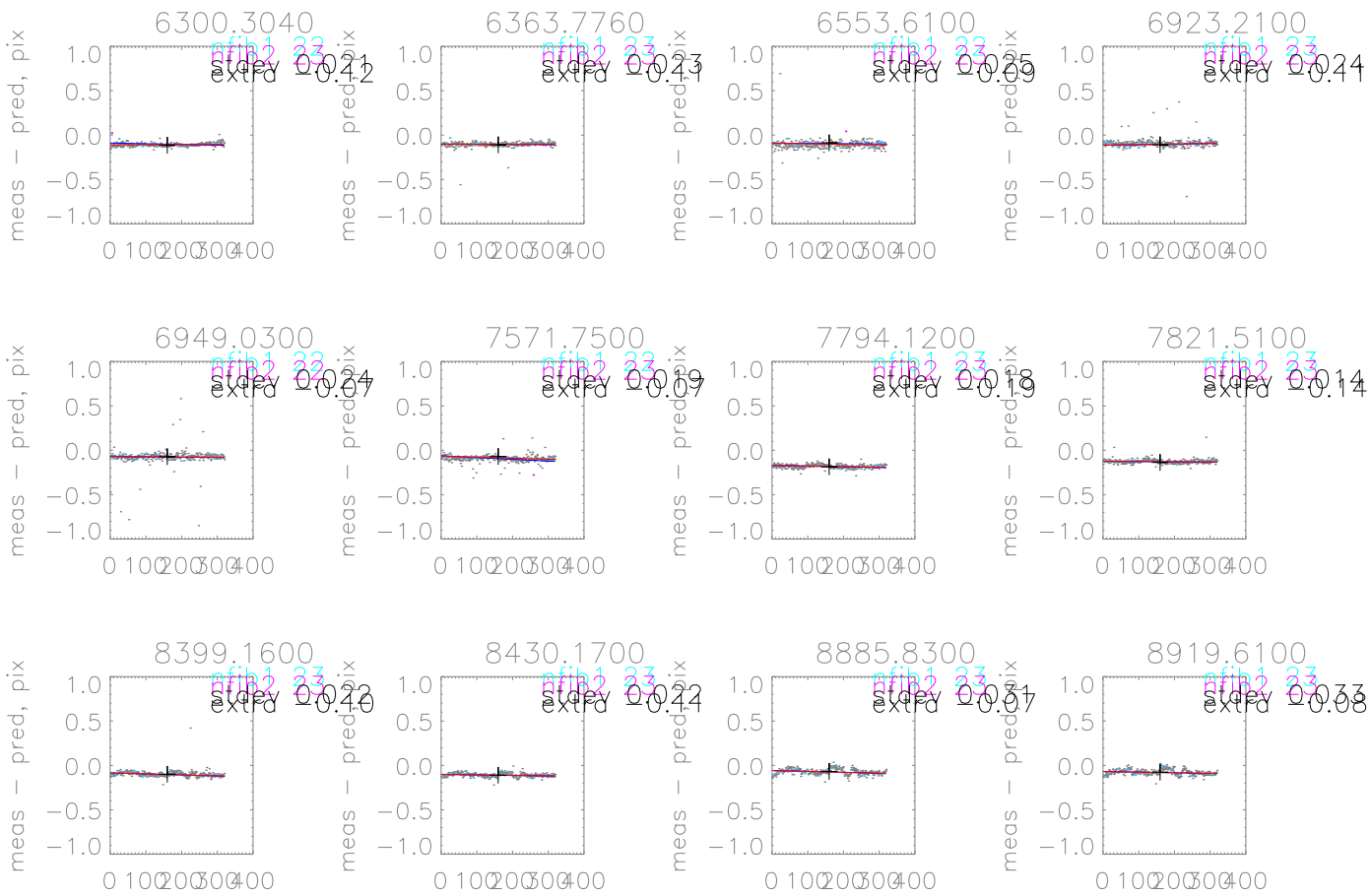

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

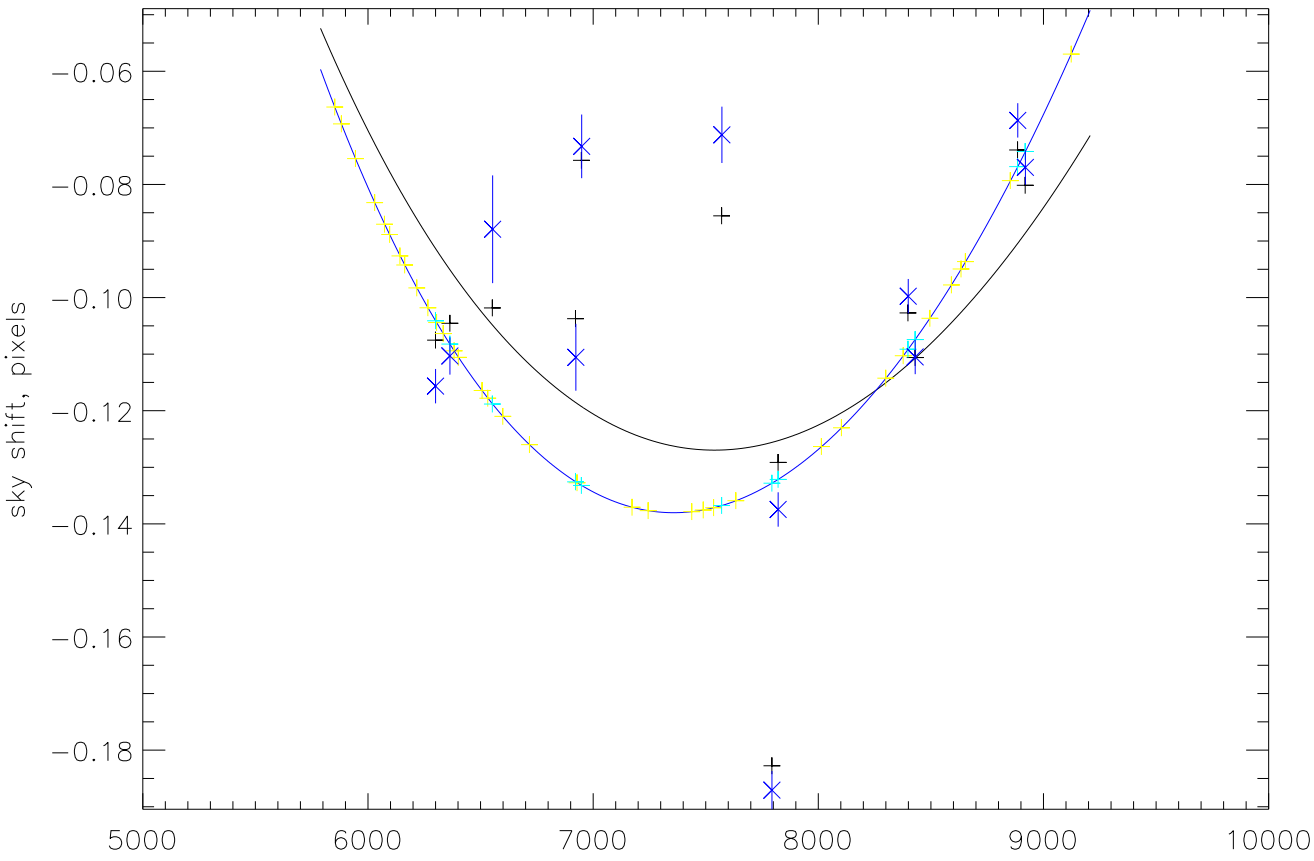

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

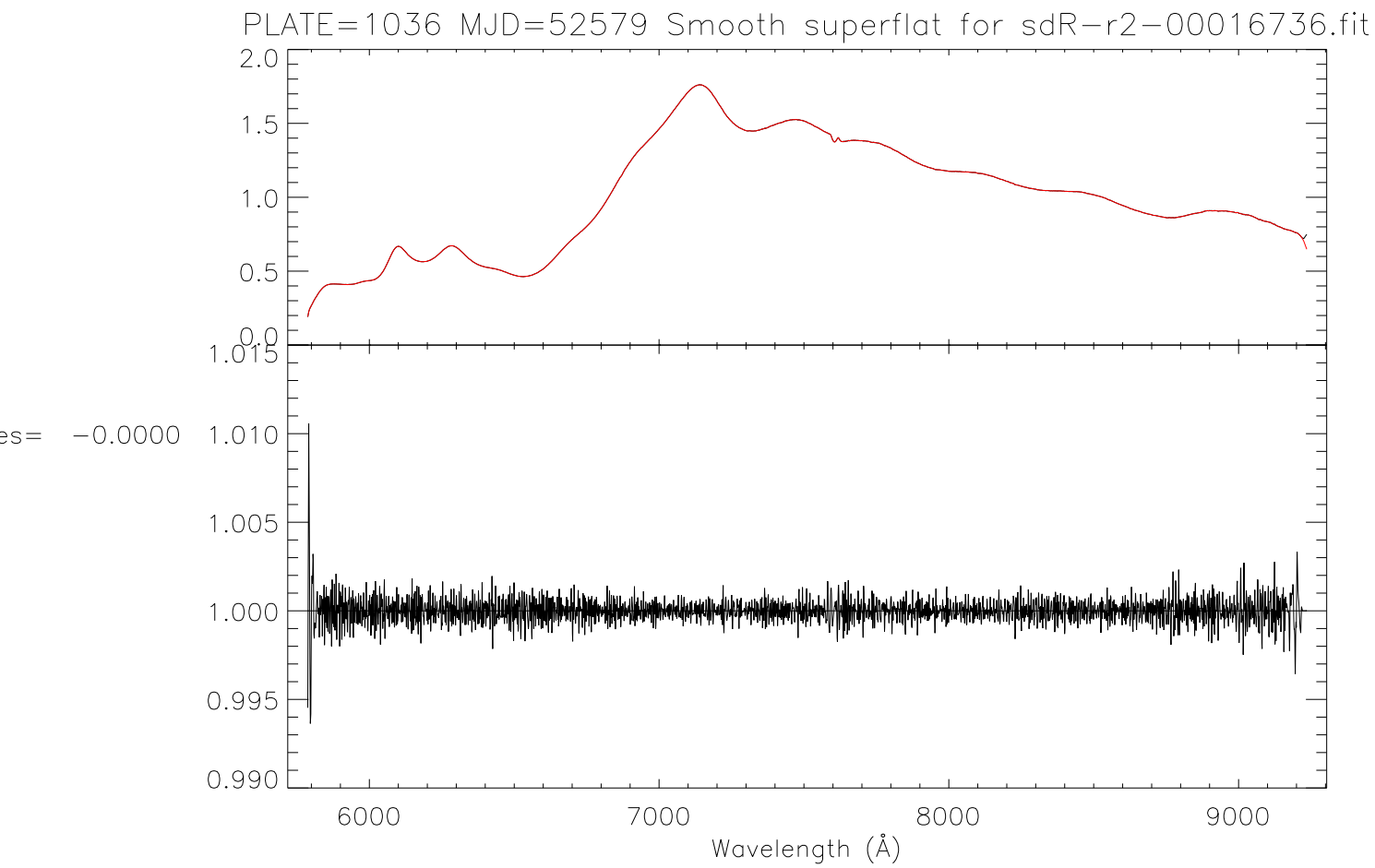

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

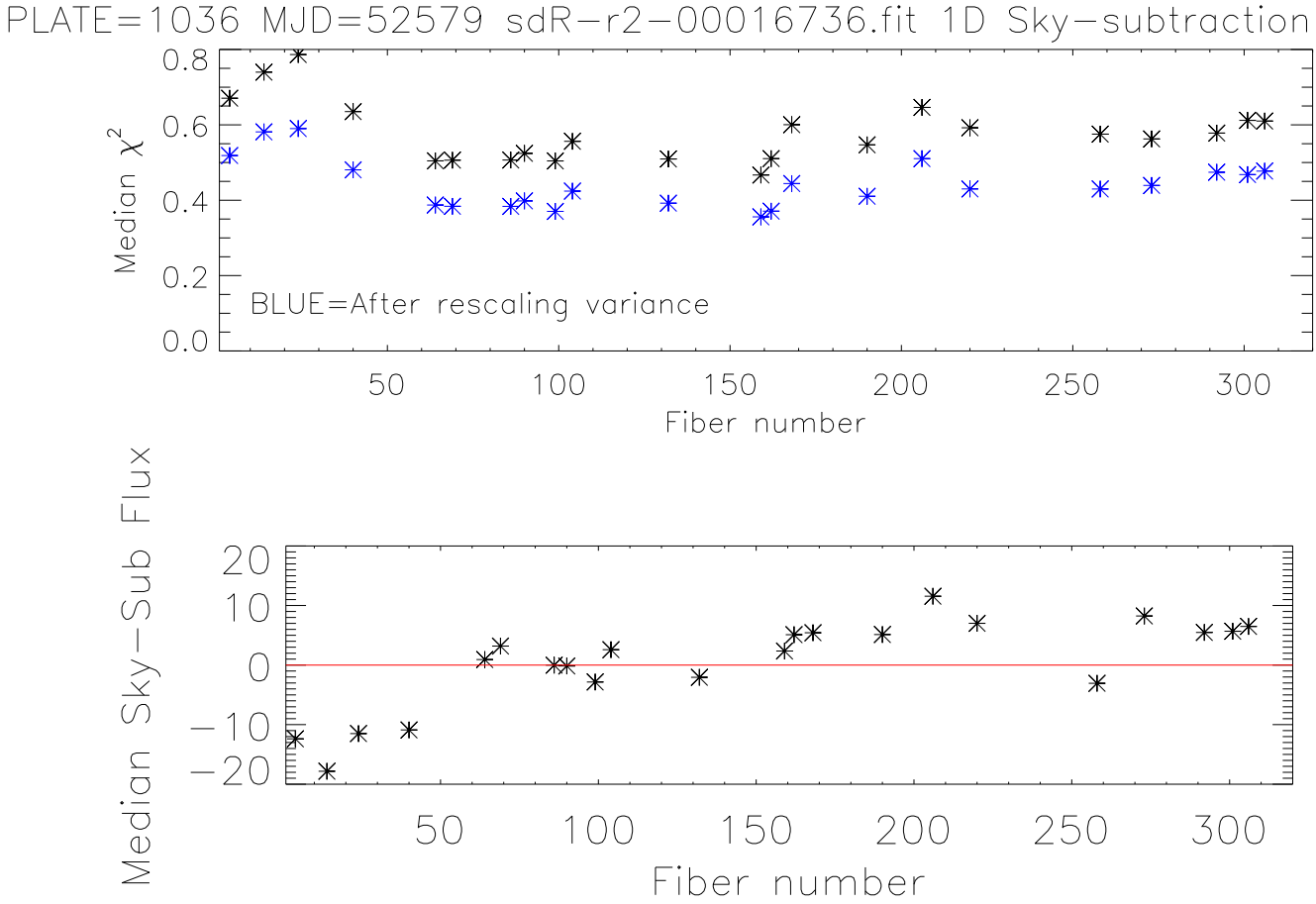

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

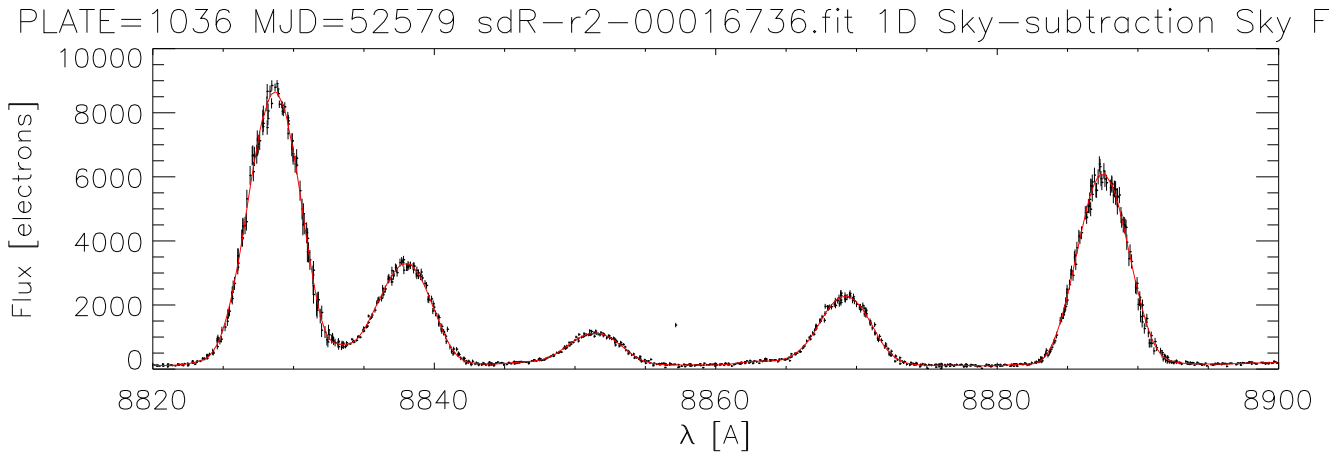

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

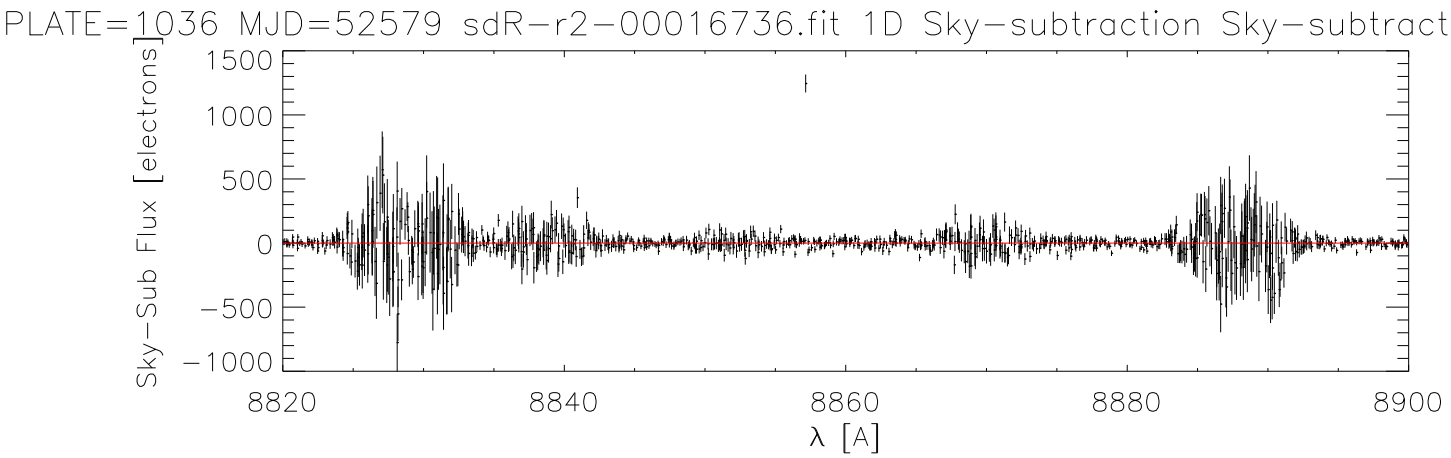

6300.3040
stdev 0.021
extra −0.42
6363.7760
stdev 0.023
extra −0.41
6553.6100
stdev 0.025
extra −0.09
6923.2100
stdev 0.024
extra −0.41
6949.0300
stdev 0.024
extra −0.07
7571.7500
stdev 0.019
extra −0.07
7794.1200
stdev 0.018
extra −0.19
7821.5100
stdev 0.014
extra −0.14
8399.1600
stdev 0.022
extra −0.46
8430.1700
stdev 0.022
extra −0.44
8885.8300
stdev 0.031
extra −0.07
8919.6100
stdev 0.033
extra −0.08
meas − pred, pix
mfib1 22
mfib2 23

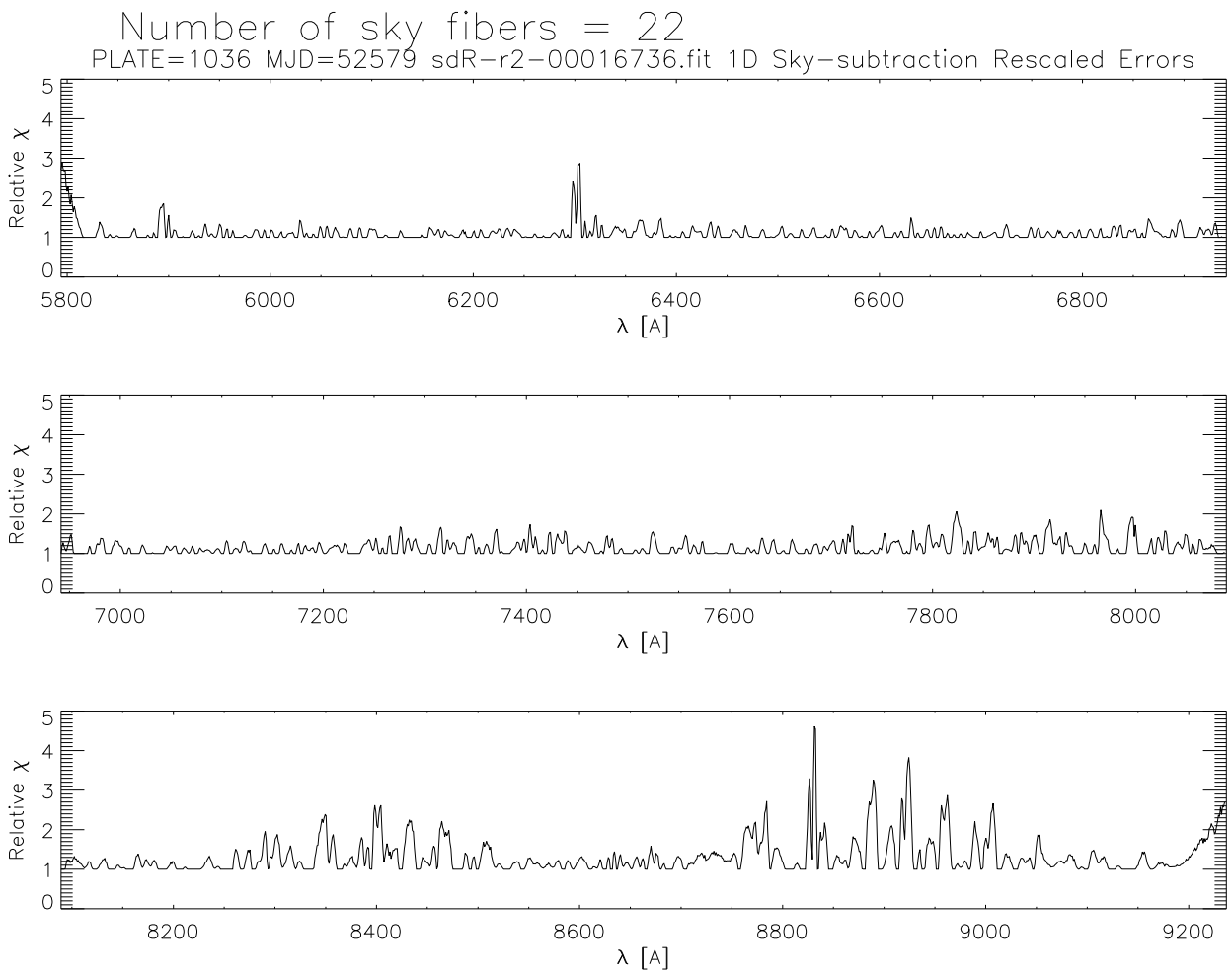

sky shift, pixels
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
5000
6000
7000
8000
9000
10000

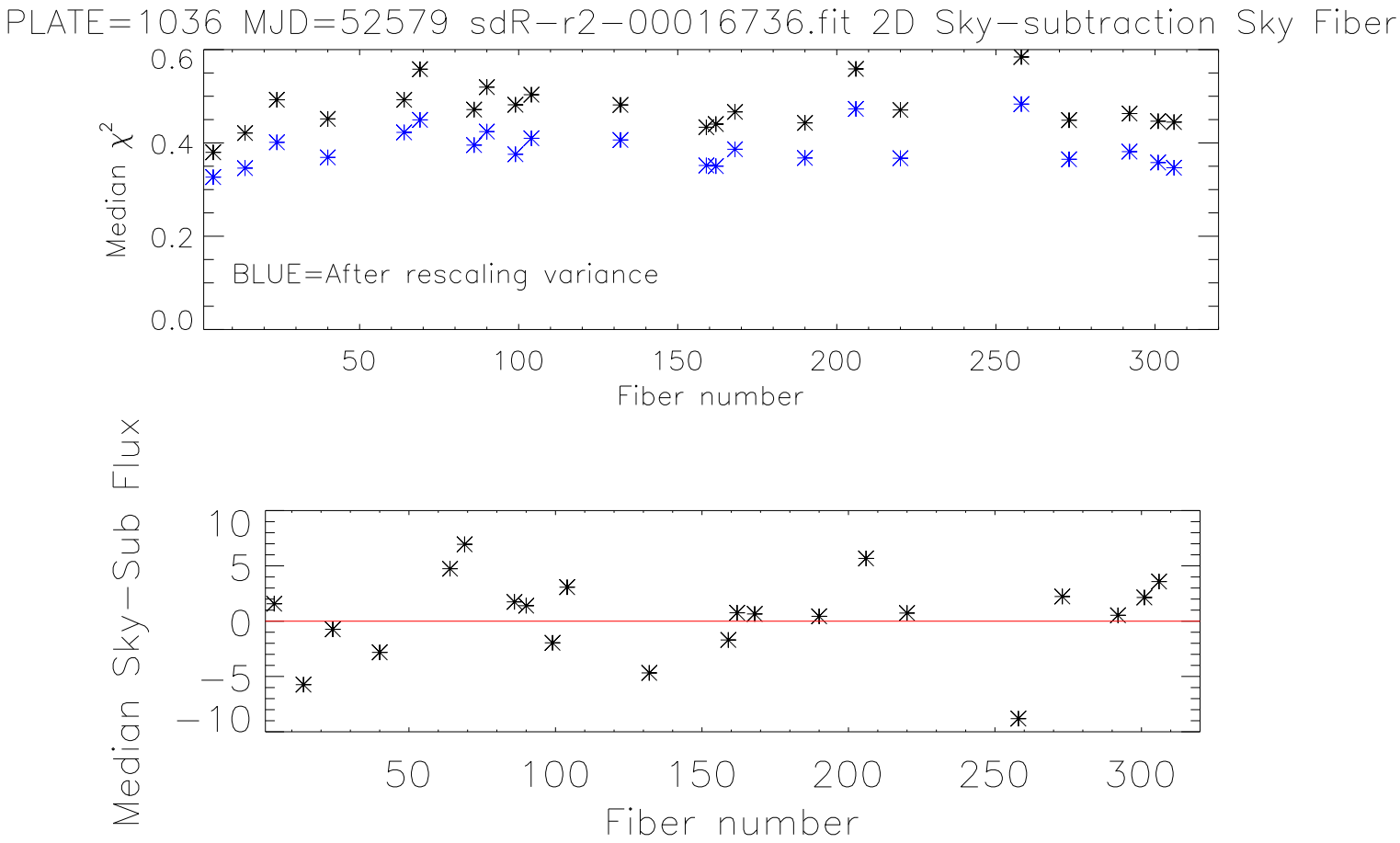

PLATE=1036 MJD=52579 Smooth superflat for sdR-r2-00016736.fit
2.0
1.5
1.0
0.5
0.0
1.015
es= −0.0000
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

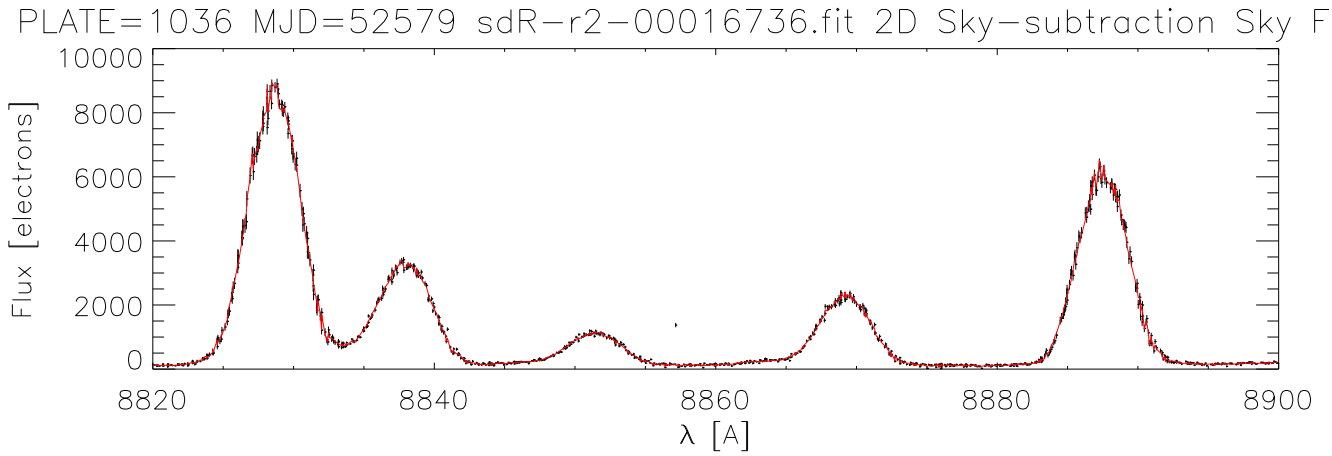

PLATE=1036 MJD=52579 sdR-r2-00016736.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

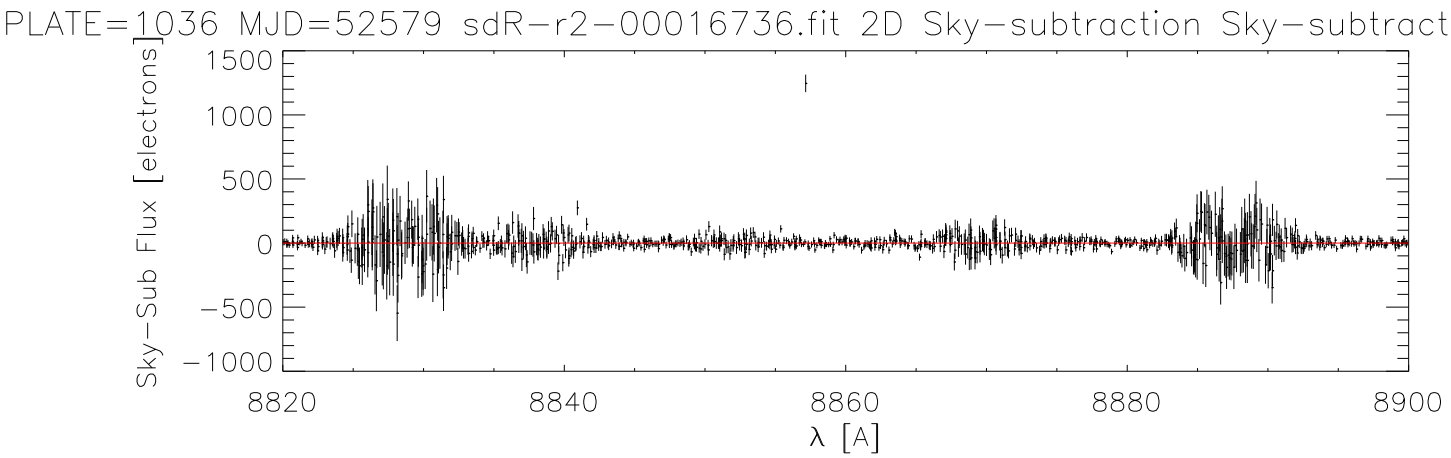

PLATE=1036 MJD=52579 sdR-r2-00016736.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

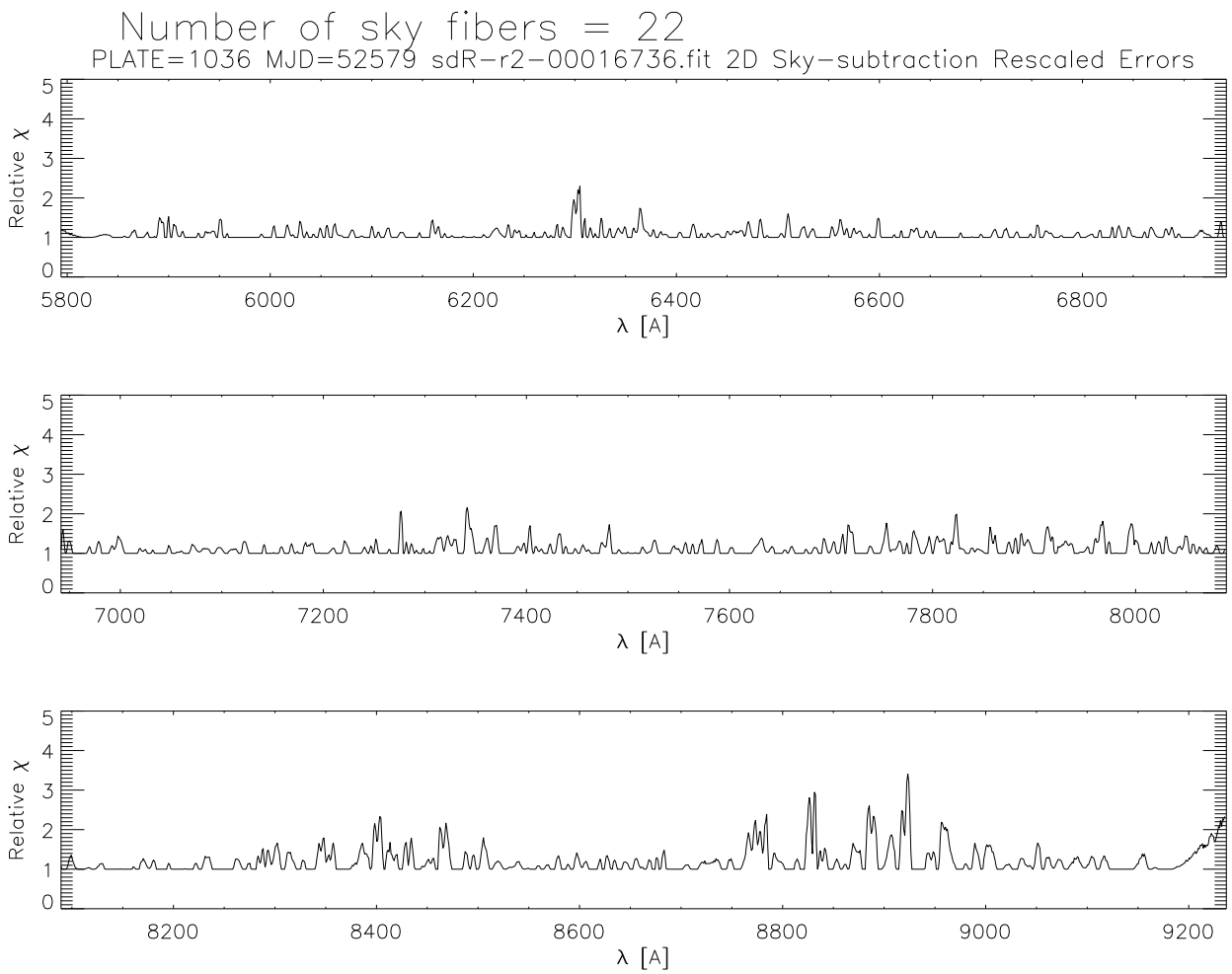

PLATE=1036 MJD=52579 sdR-r2-00016736.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

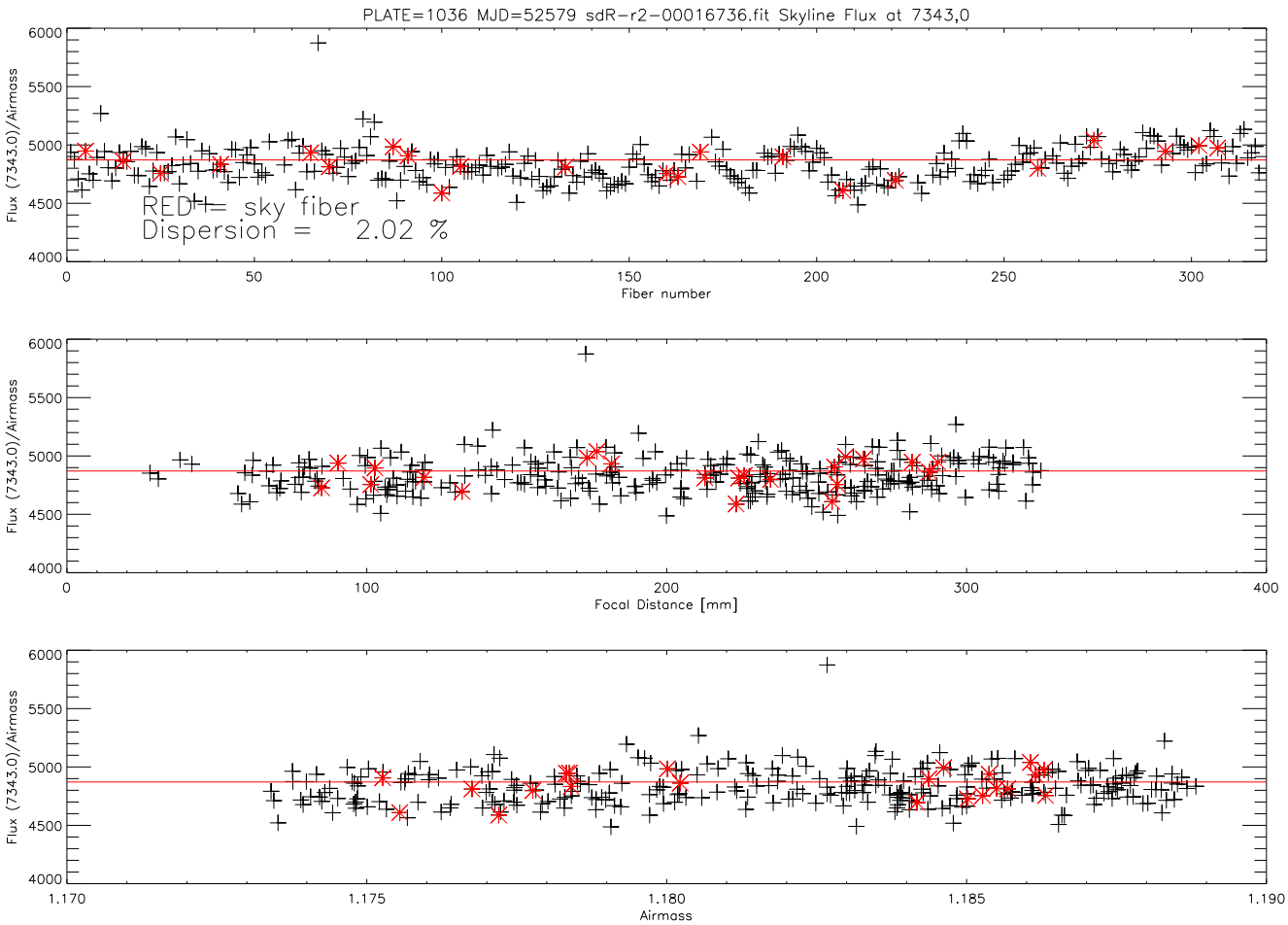

Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016736.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

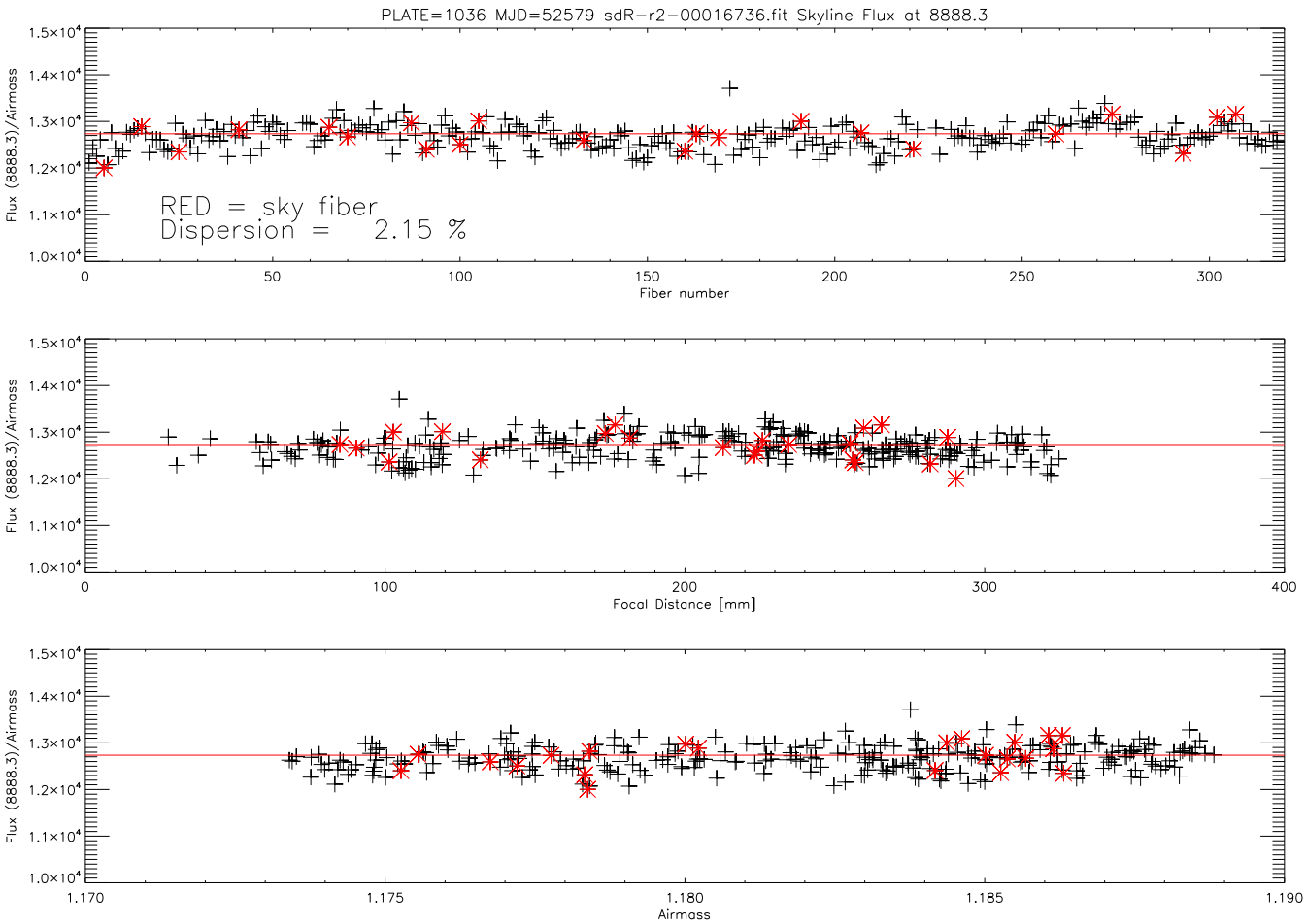

PLATE=1036 MJD=52579 sdR-r2-00016736.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=1036 MJD=52579 sdR-r2-00016736.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1036 MJD=52579 sdR-r2-00016736.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 22
PLATE=1036 MJD=52579 sdR-r2-00016736.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=1036 MJD=52579 sdR-r2-00016736.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED= sky fiber
Dispersion = 2.02 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1036 MJD=52579 sdR-r2-00016736.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.15 %
Fiber number
Focal Distance [mm]
Airmass