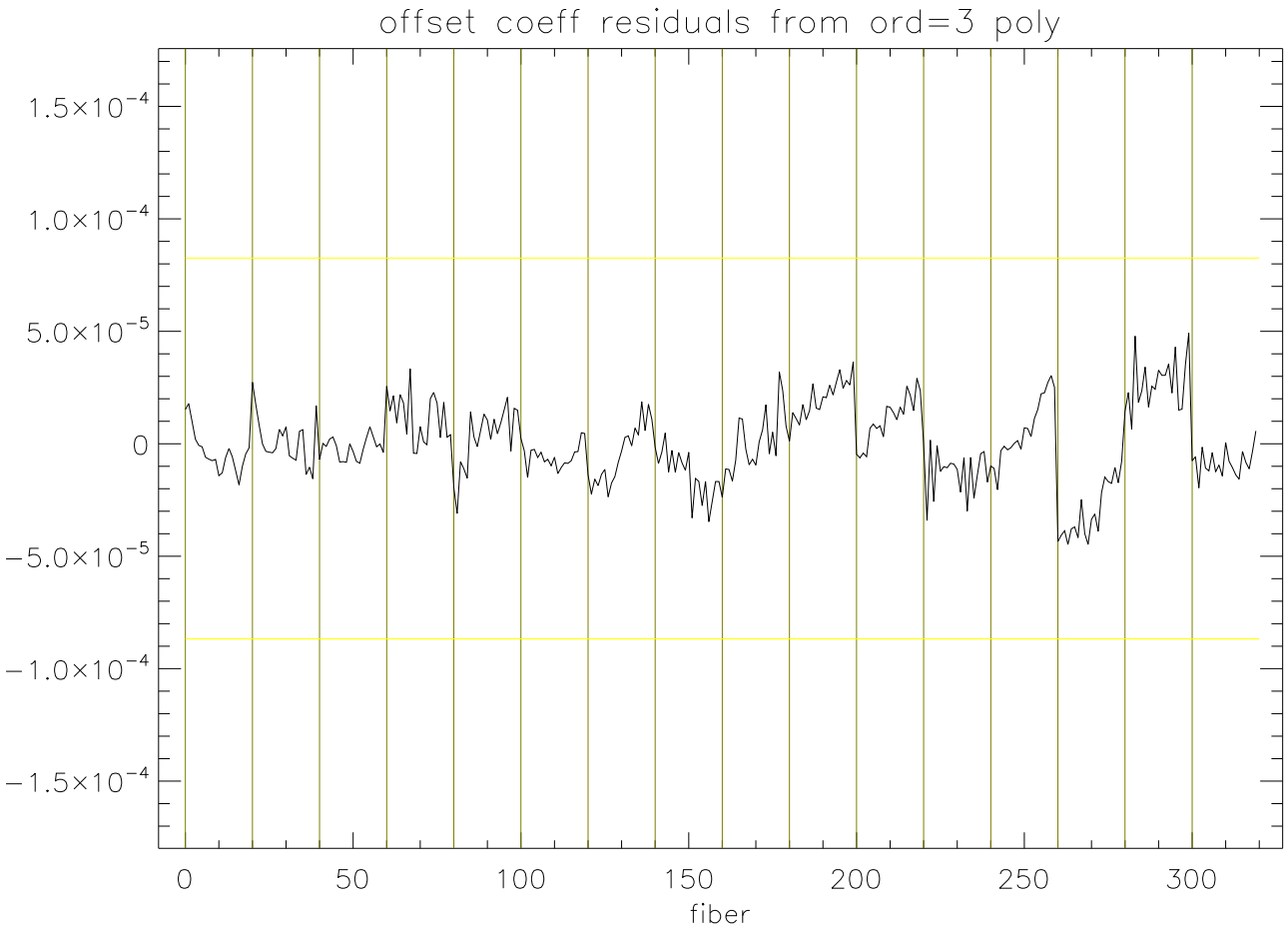
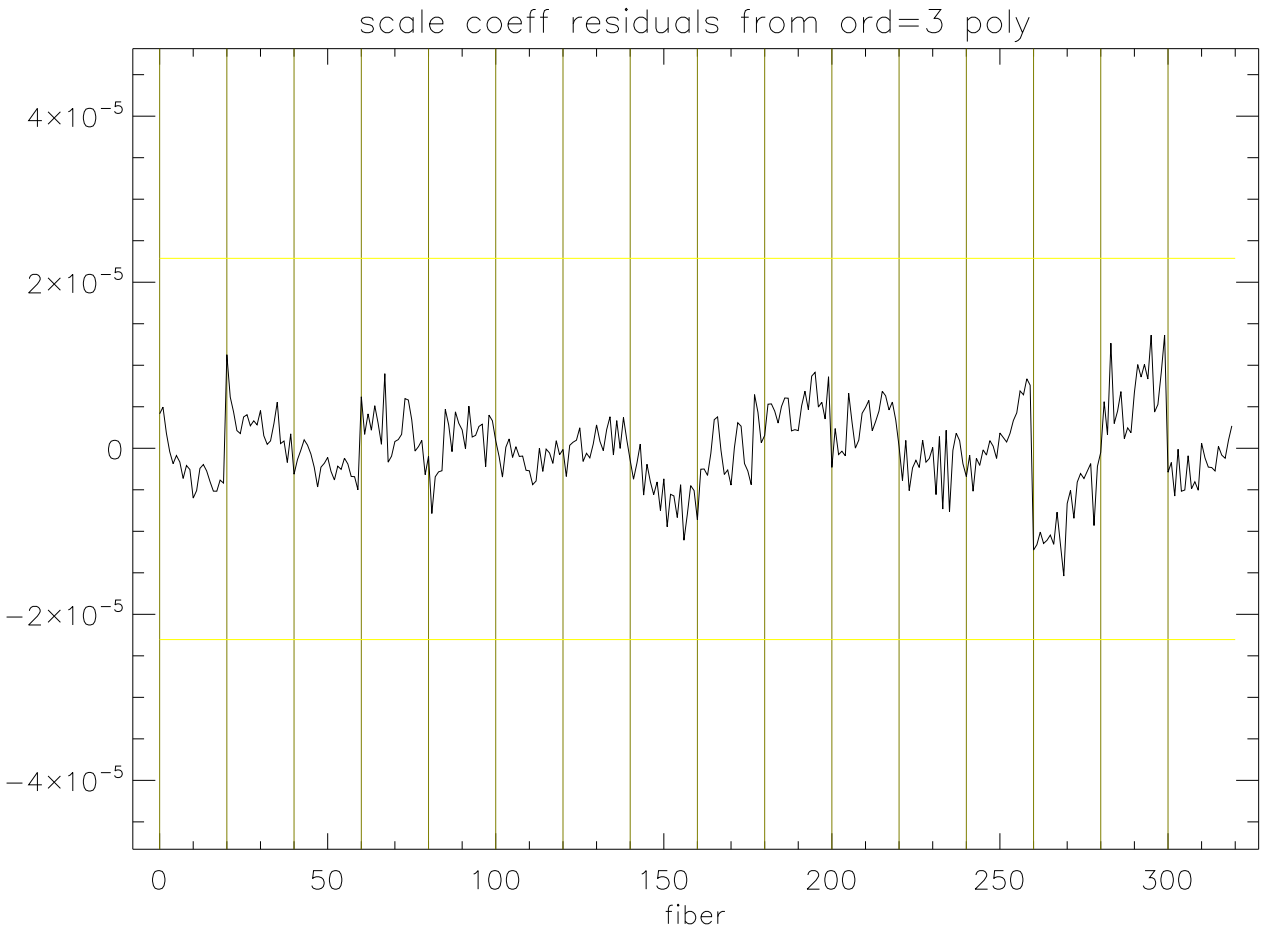
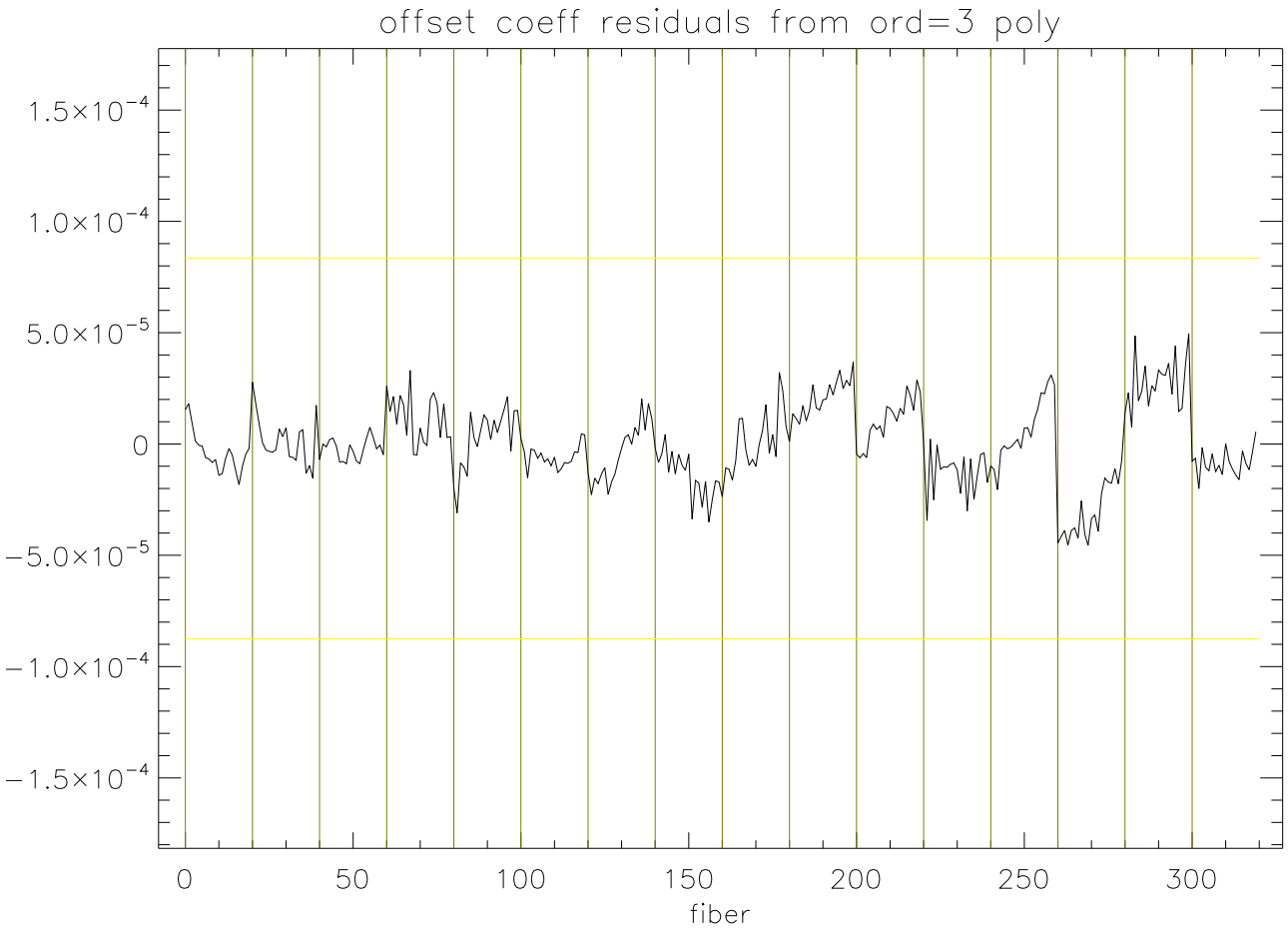
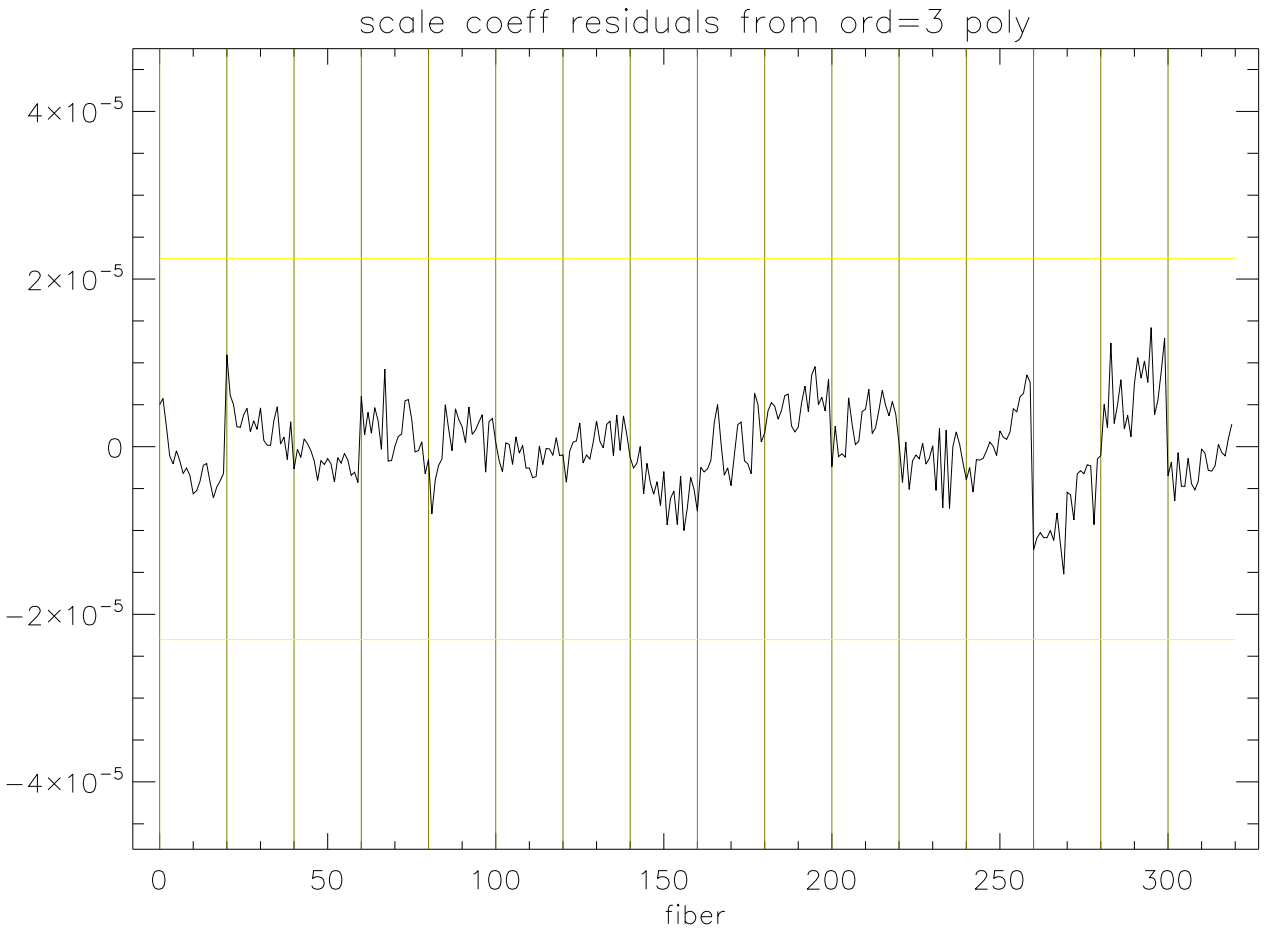
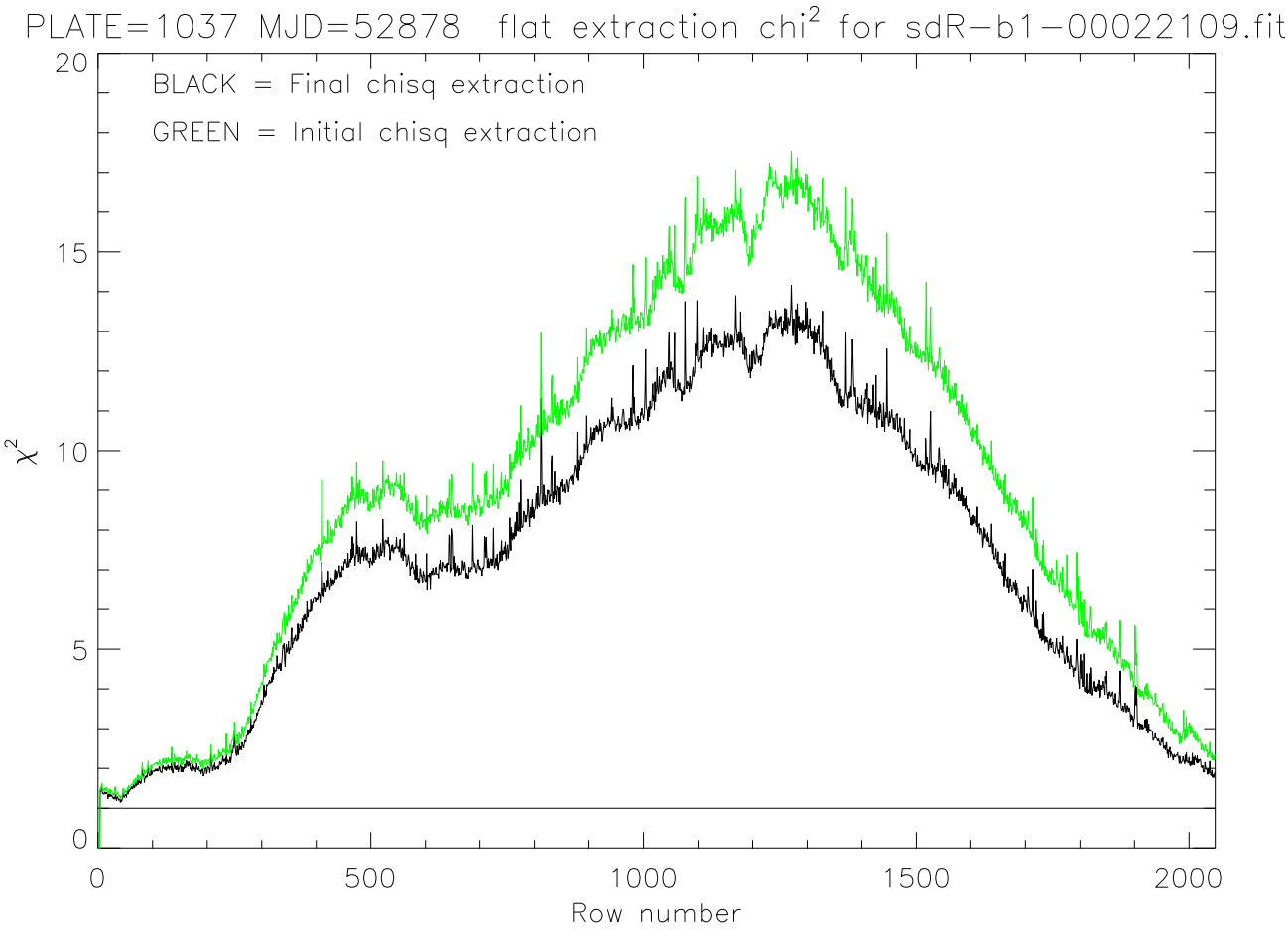
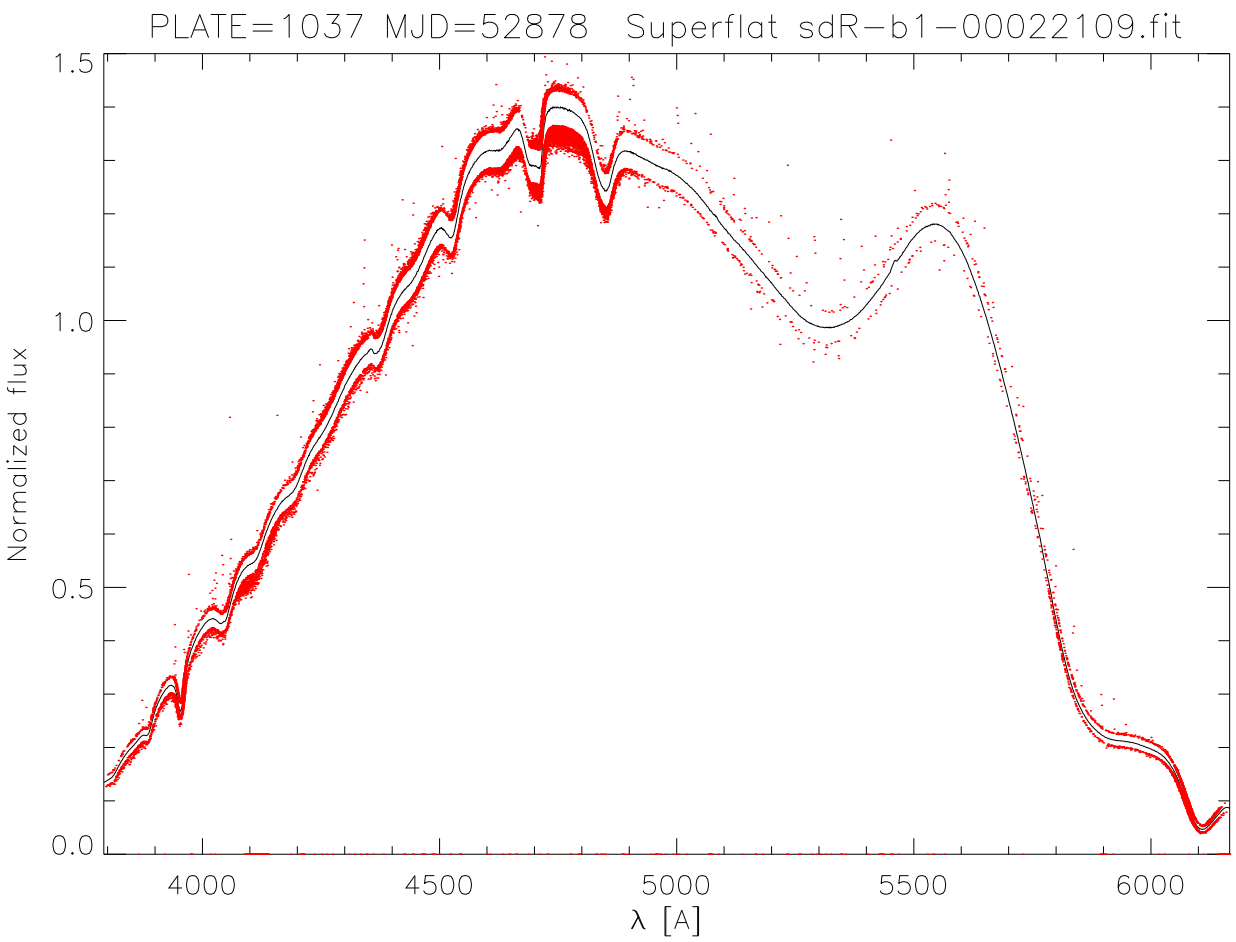

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

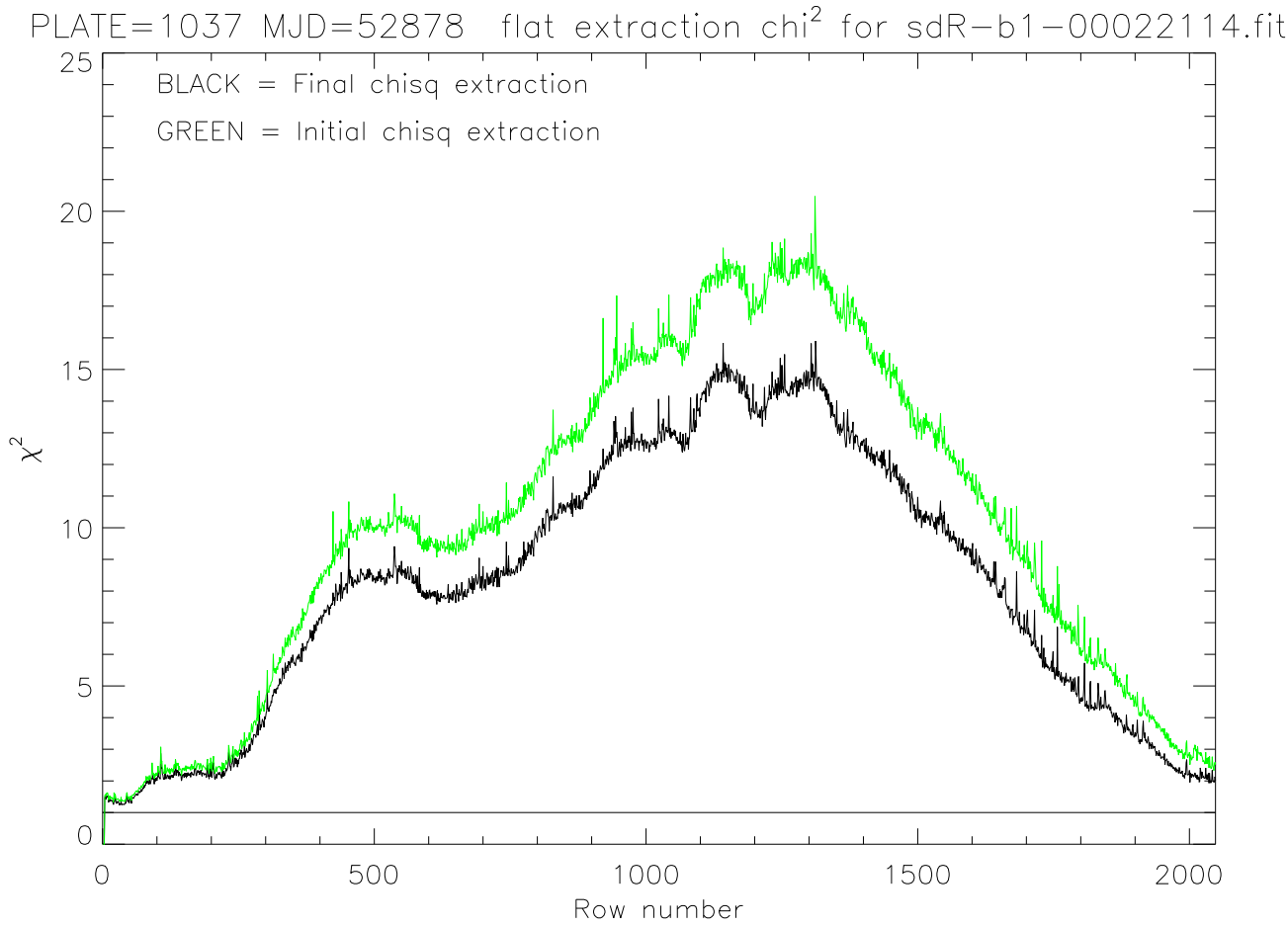

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

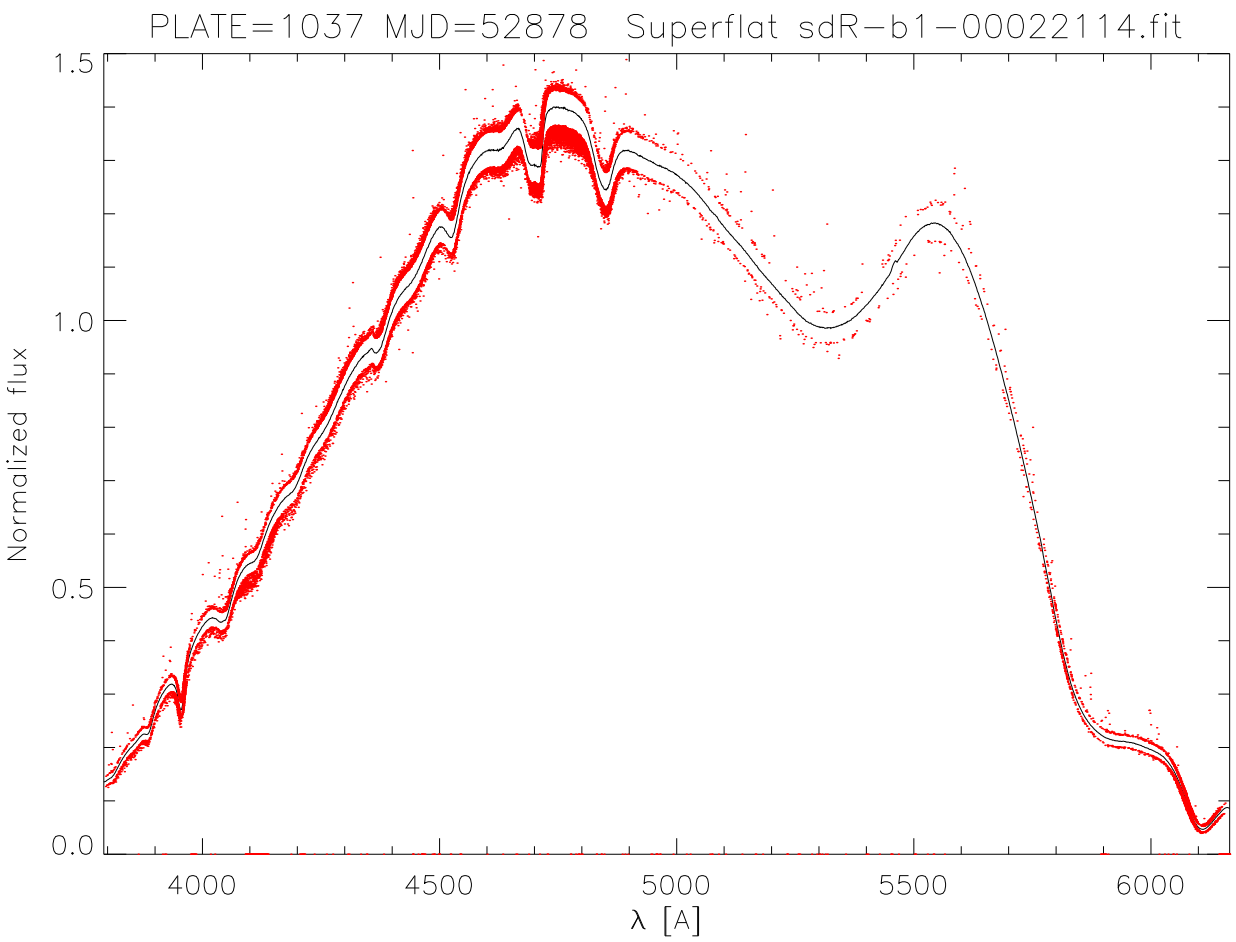

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

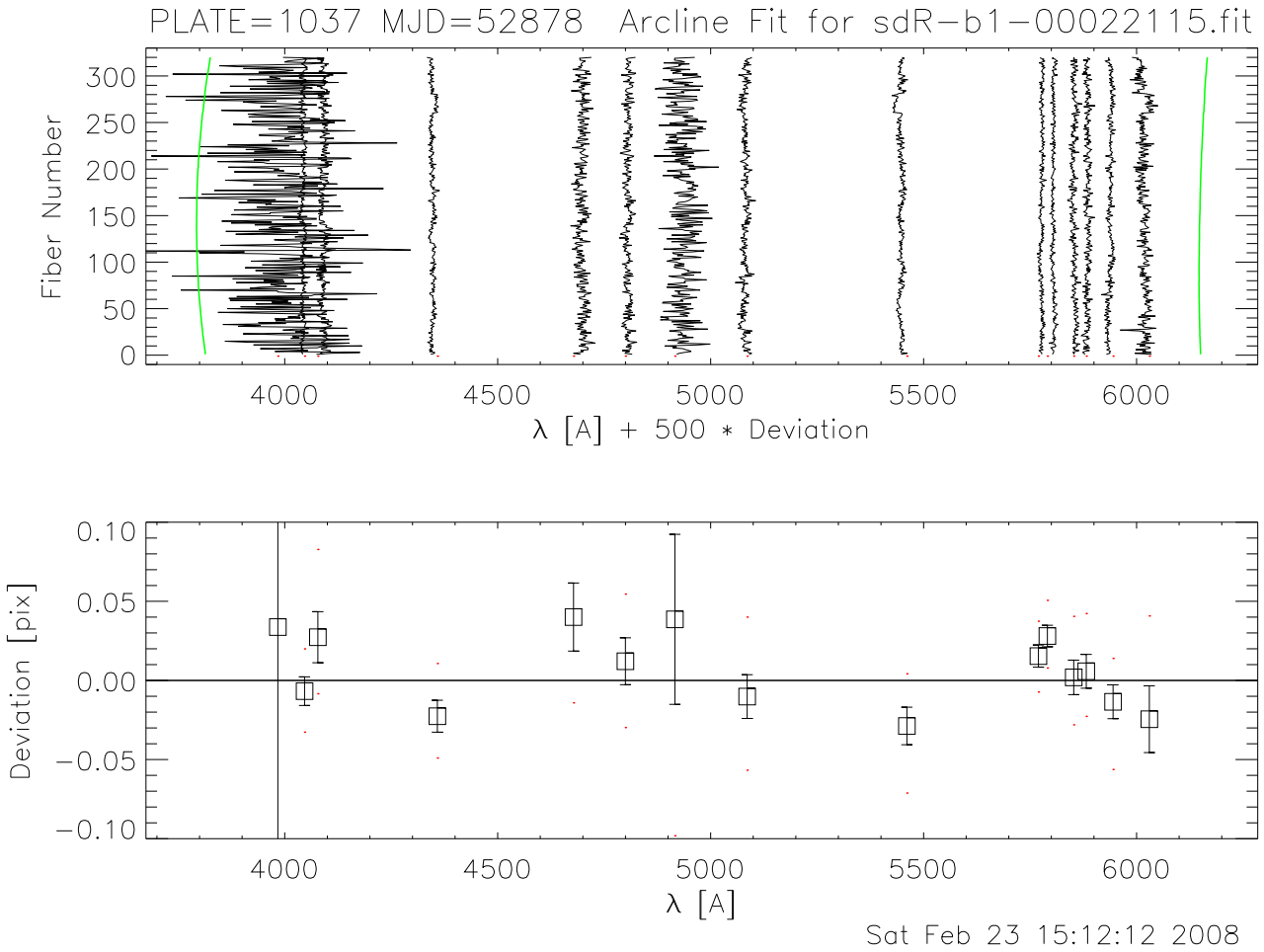

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

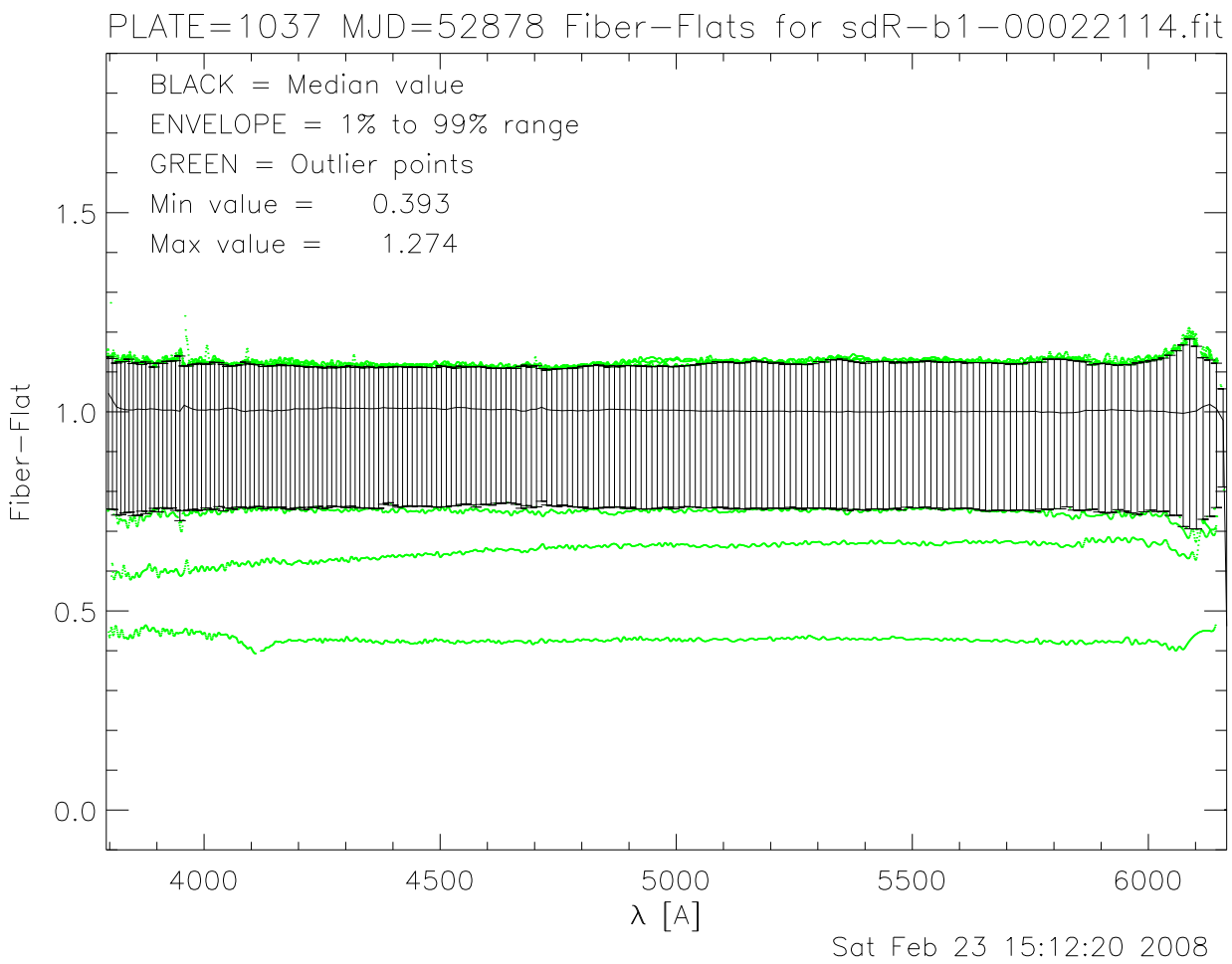

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−b1−00022109.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

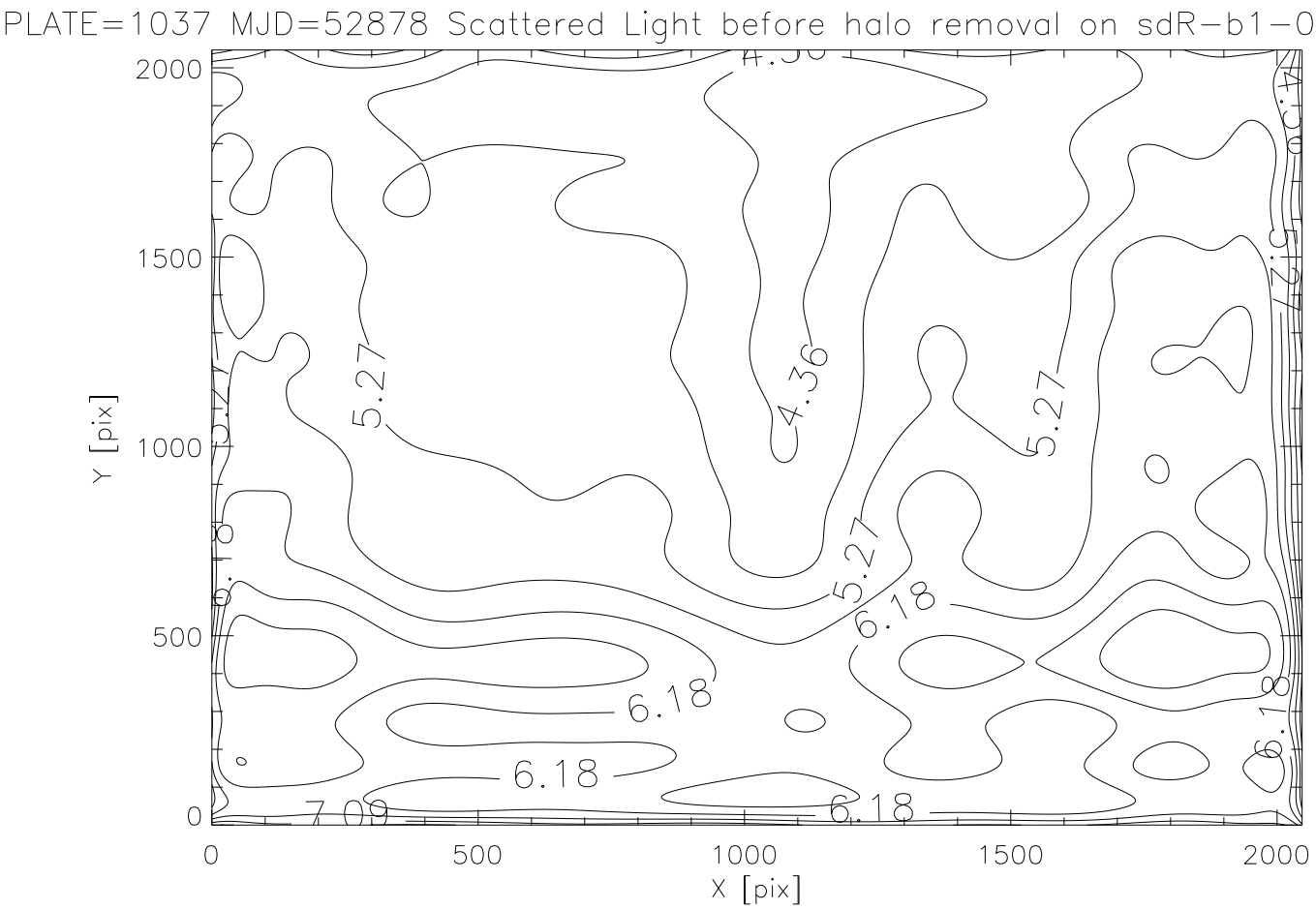

PLATE=1037 MJD=52878 Superflat sdR-b1-00022109.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

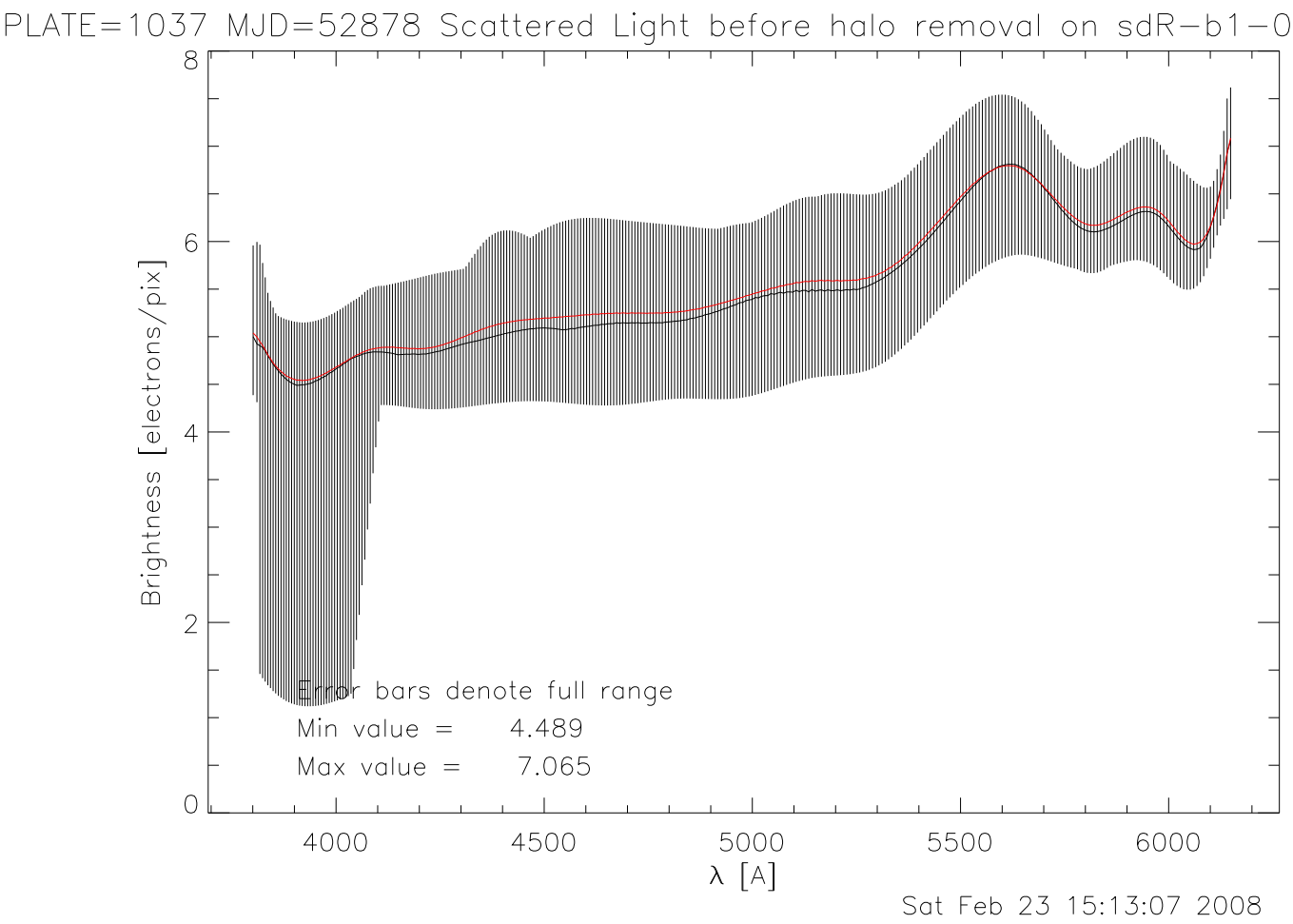

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR-b1-00022114.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000

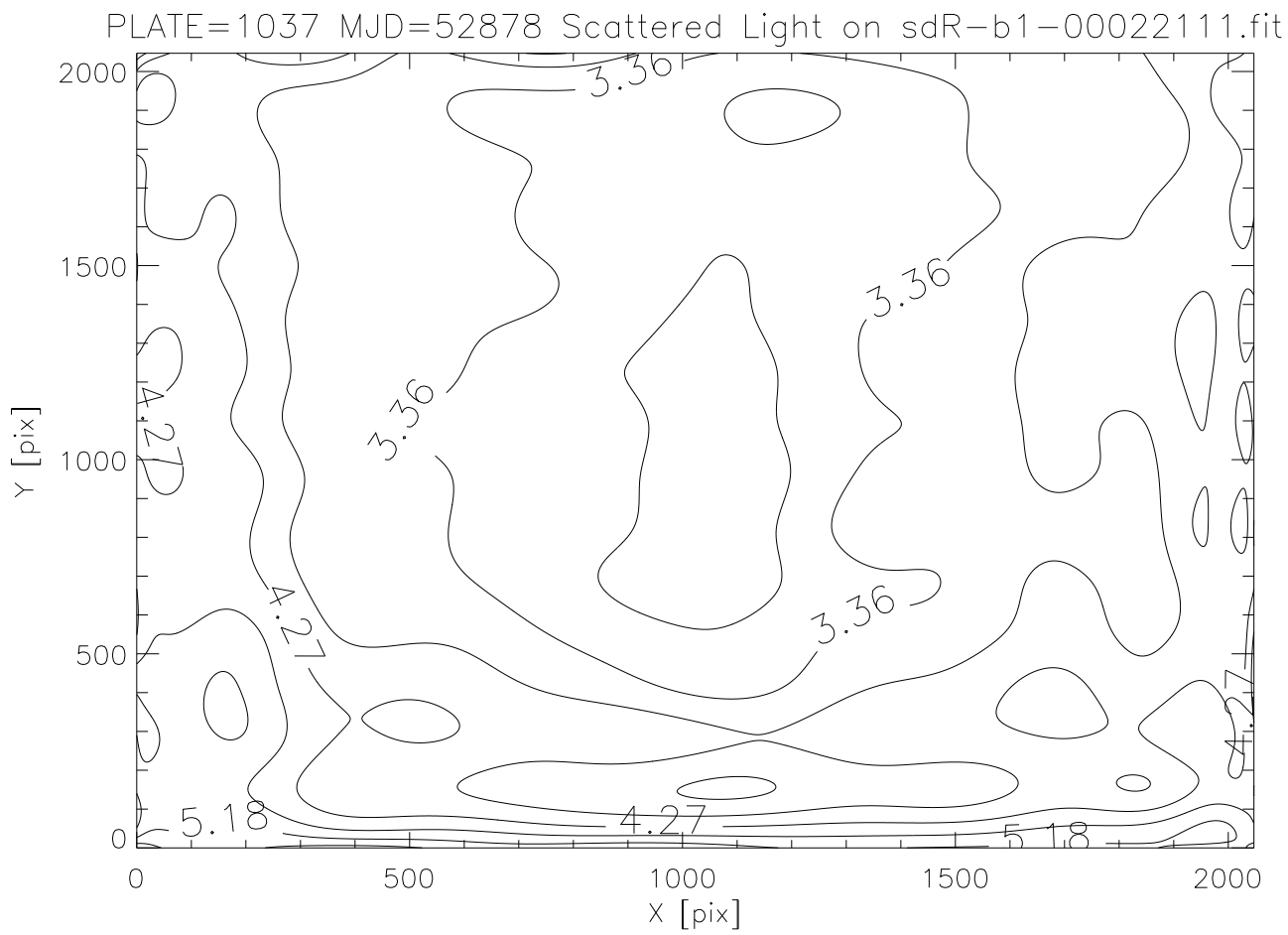

PLATE=1037 MJD=52878 Superflat sdR-b1-00022114.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

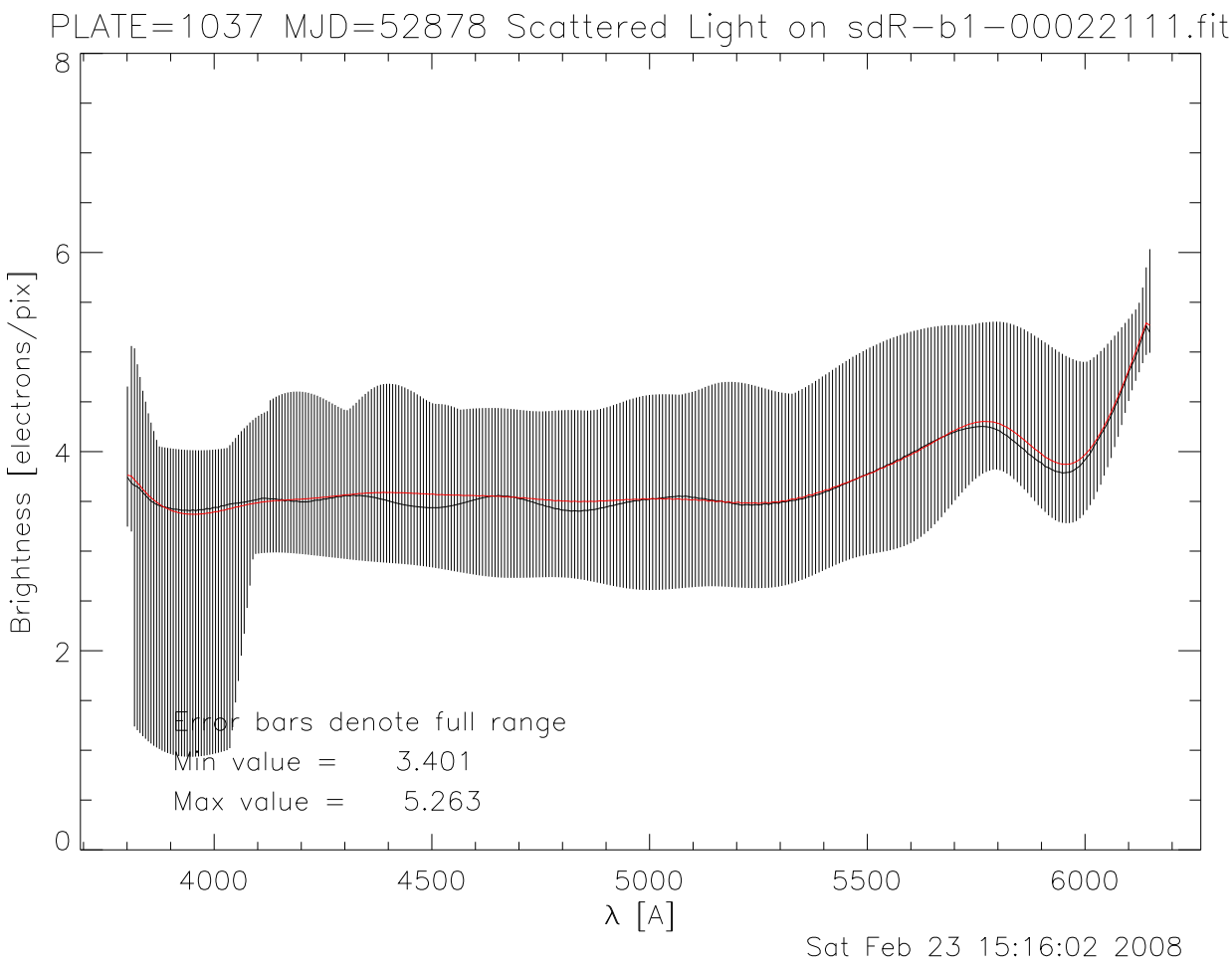

PLATE=1037 MJD=52878 Arcline Fit for sdR-b1-00022115.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:12:12 2008

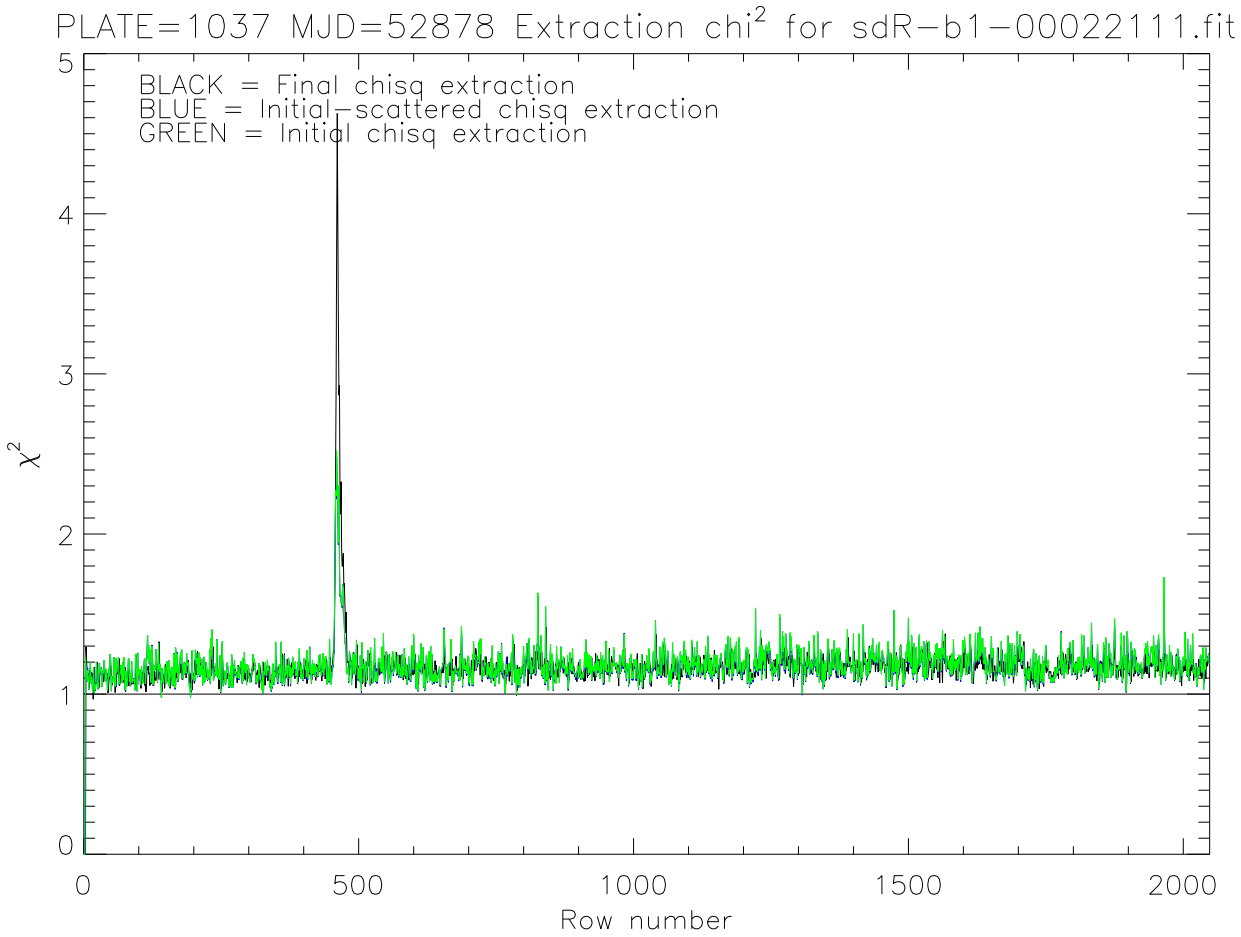

PLATE=1037 MJD=52878 Fiber-Flats for sdR-b1-00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.393
Max value = 1.274
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:12:20 2008

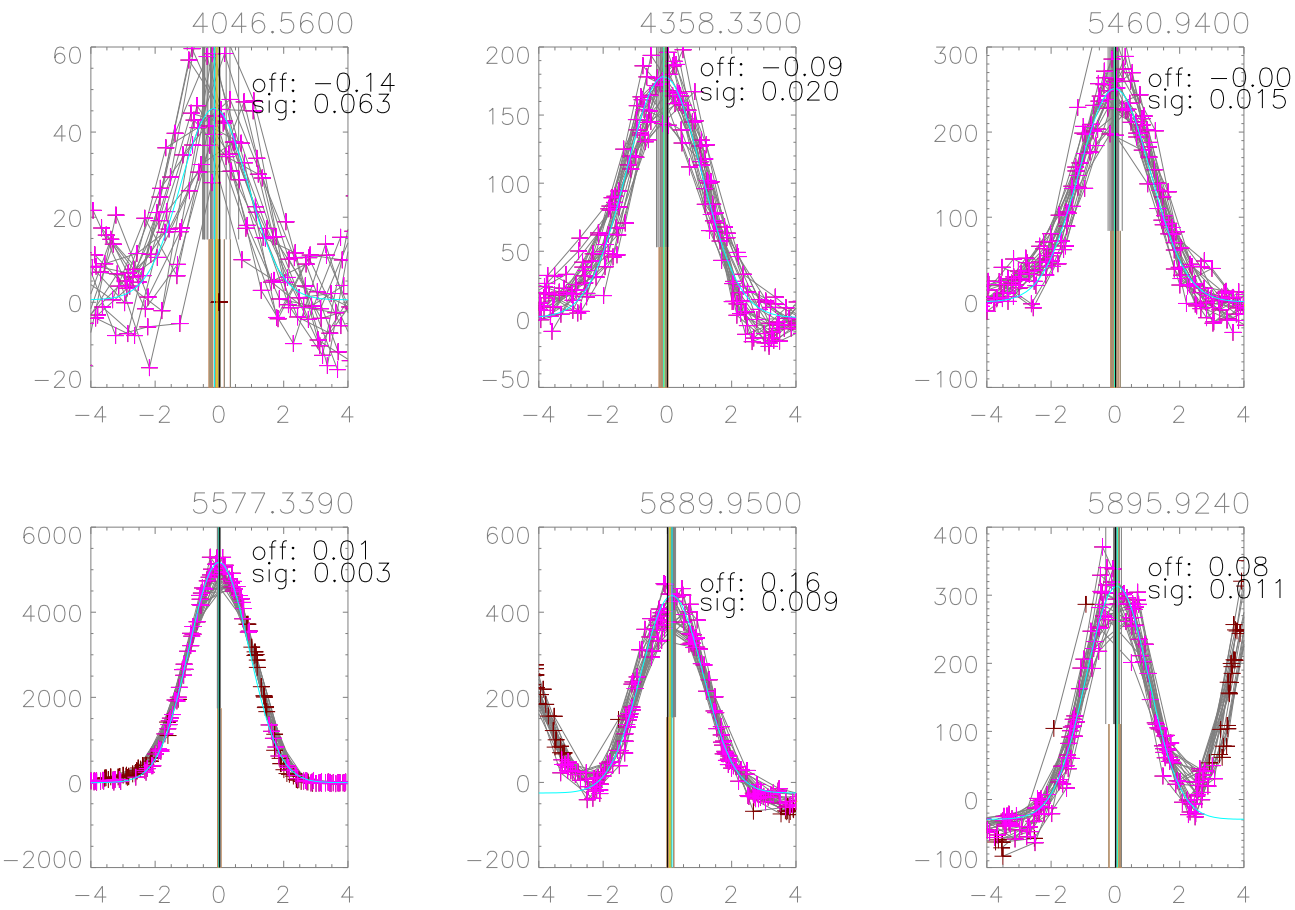

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b1-00022111.f
Y [pix]
X [pix]
0
500
1000
1500
2000
4.36
5.27
6.18
7.09

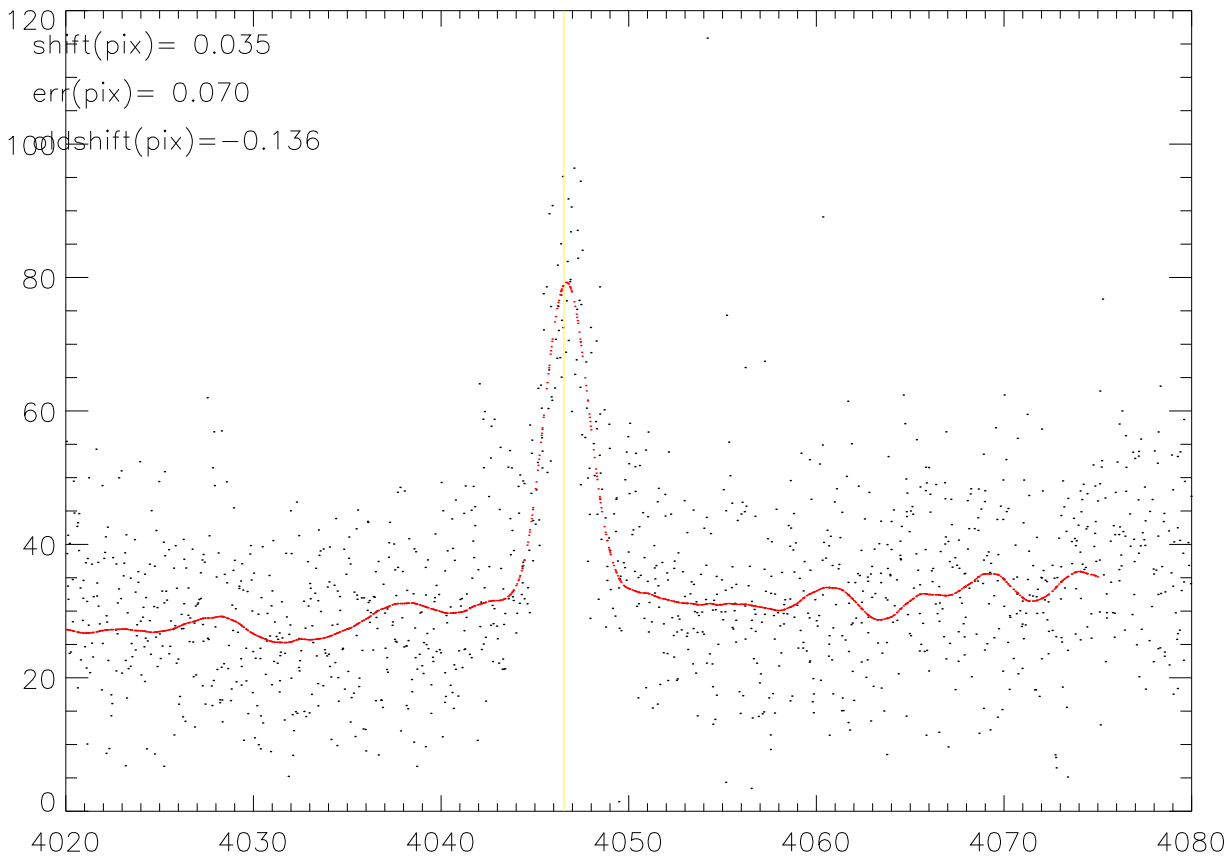

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR−b1−00022111.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.489
Max value = 7.065
Sat Feb 23 15:13:07 2008

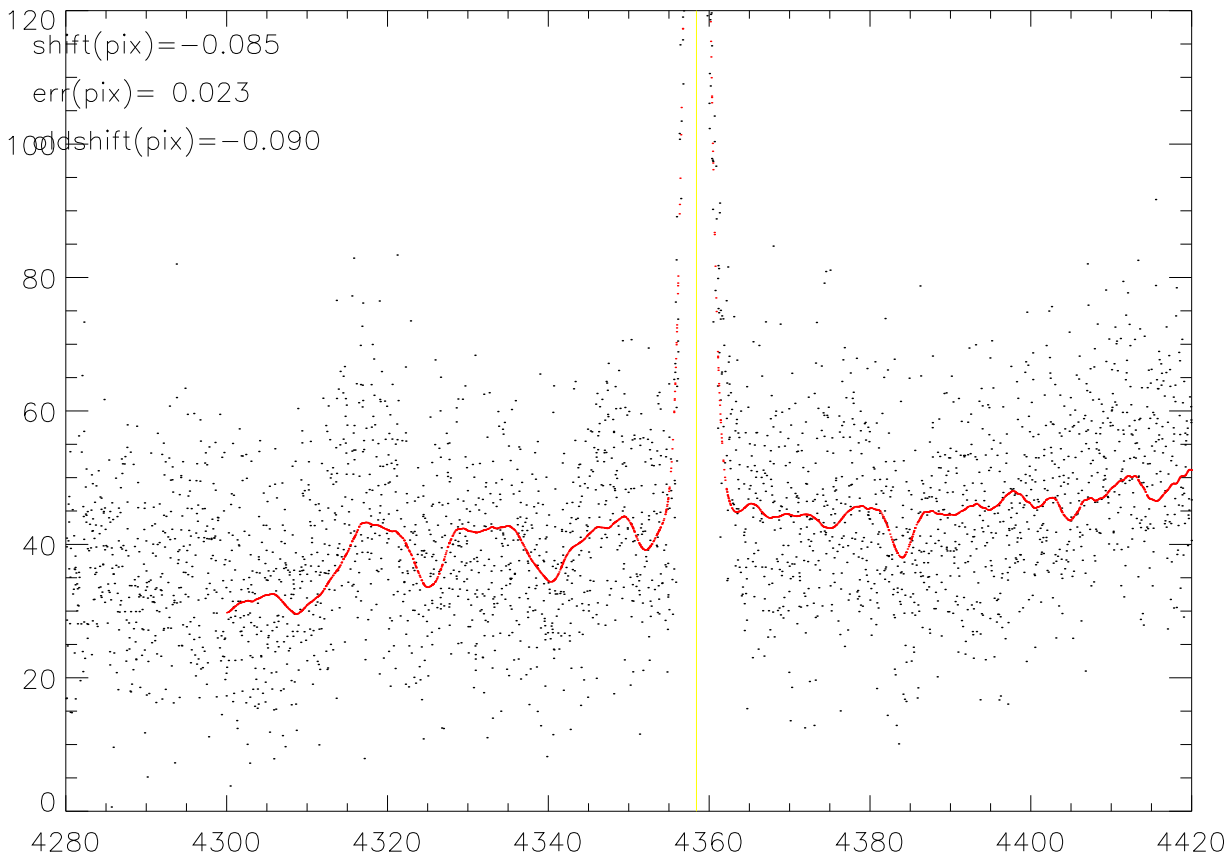

PLATE=1037 MJD=52878 Scattered Light on sdR-b1-00022111.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18

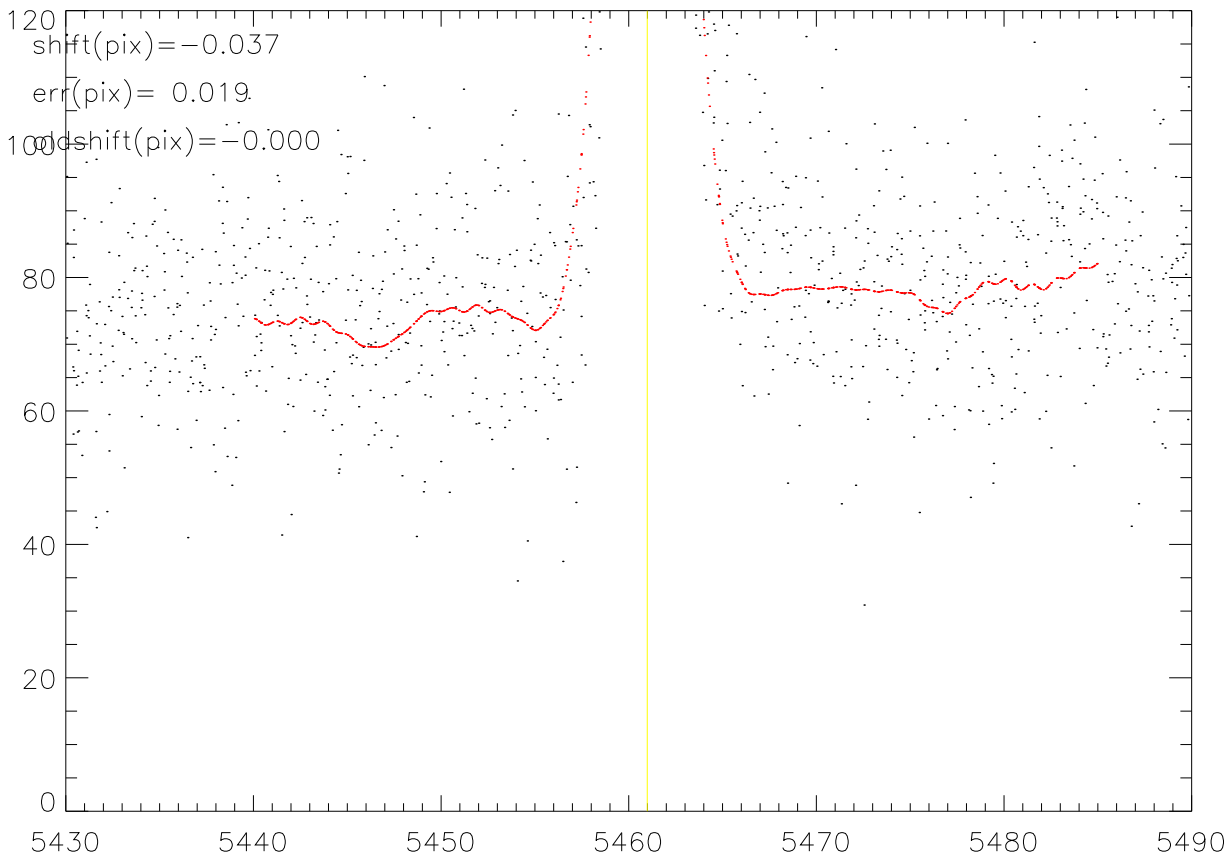

PLATE=1037 MJD=52878 Scattered Light on sdR-b1-00022111.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.401
Max value = 5.263
Sat Feb 23 15:16:02 2008

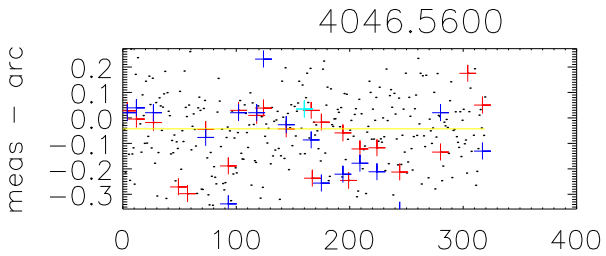

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b1-00022111.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

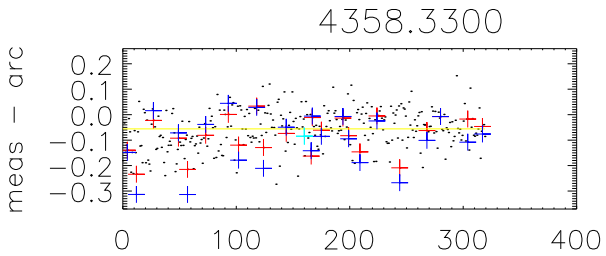

4046.5600
off: −0.14
sig: 0.063
4358.3300
off: −0.09
sig: 0.020
5460.9400
off: −0.00
sig: 0.015
5577.3390
off: 0.01
sig: 0.003
5889.9500
off: 0.16
sig: 0.009
5895.9240
off: 0.08
sig: 0.011

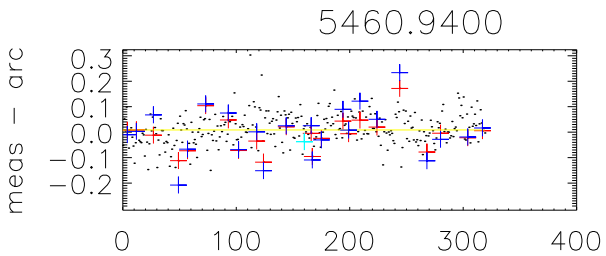

shift(pix)= 0.035
err(pix)= 0.070
oldshift(pix)=−0.136
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

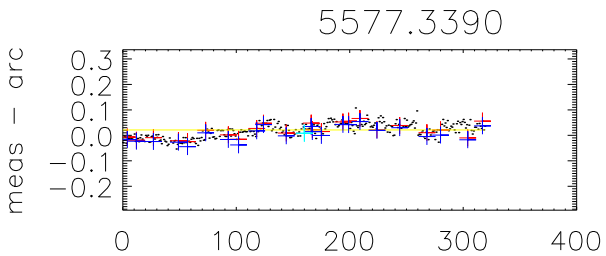

shift(pix)=−0.085
err(pix)= 0.023
oldshift(pix)=−0.090
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

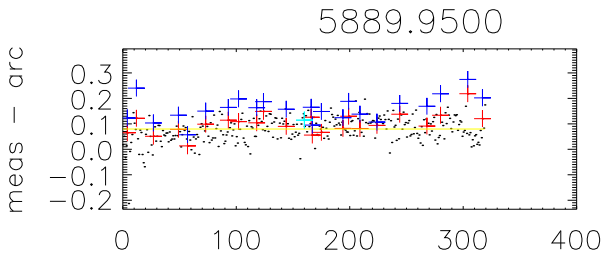

shift(pix)=−0.037
err(pix)= 0.019
oldshift(pix)=−0.000
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

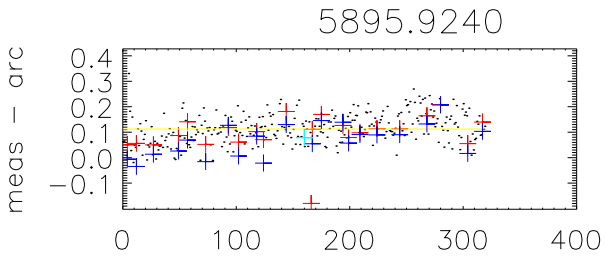

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

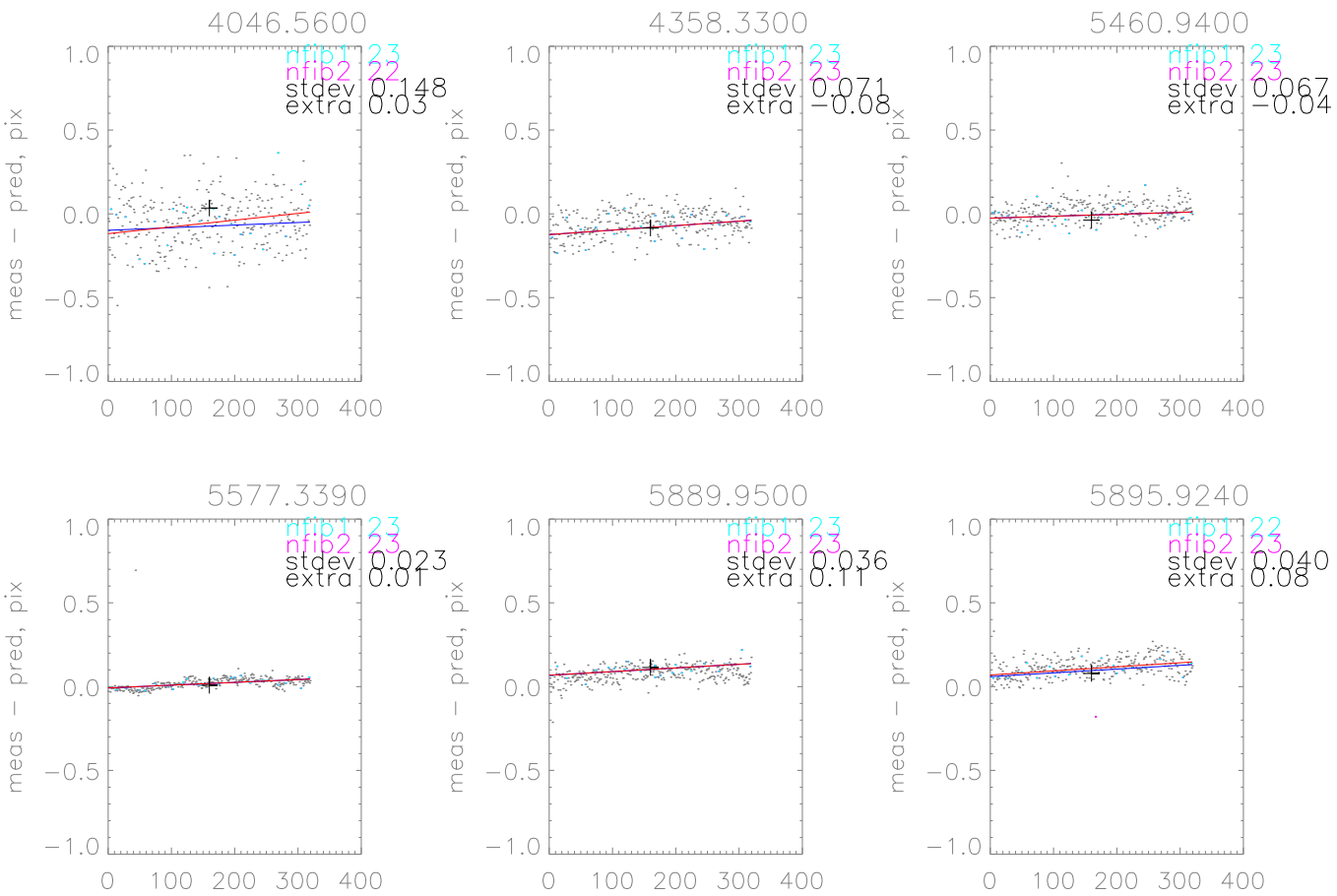

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

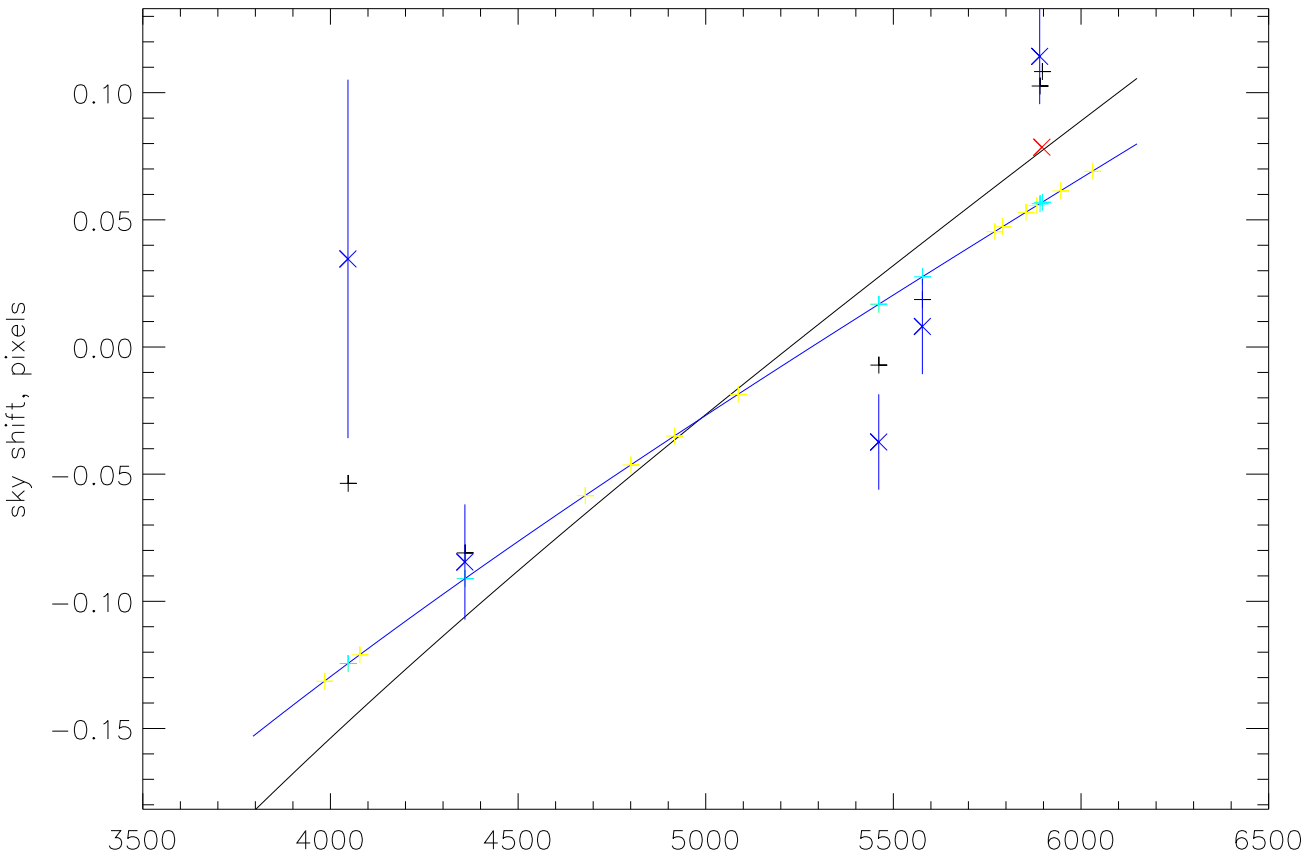

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

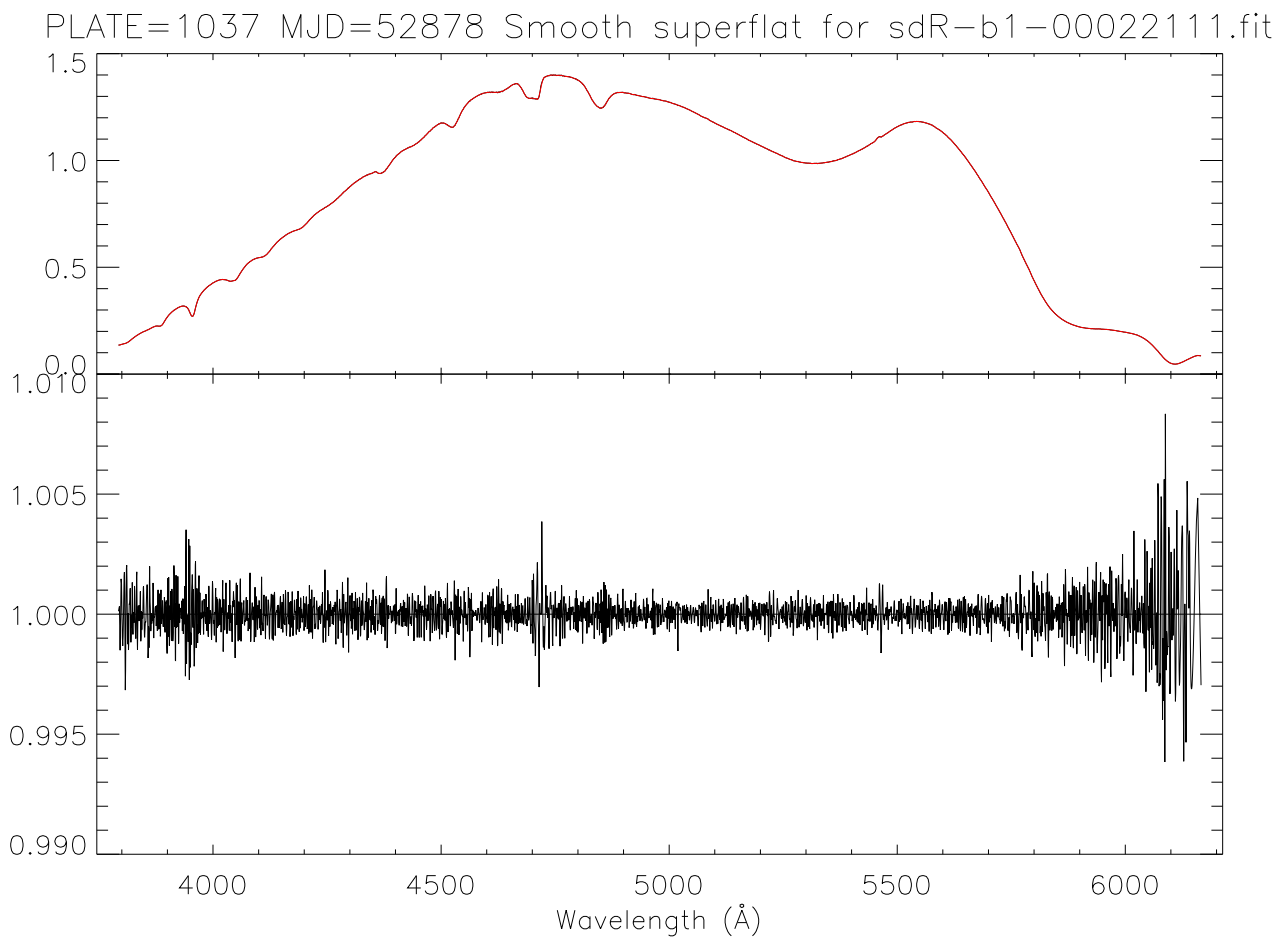

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

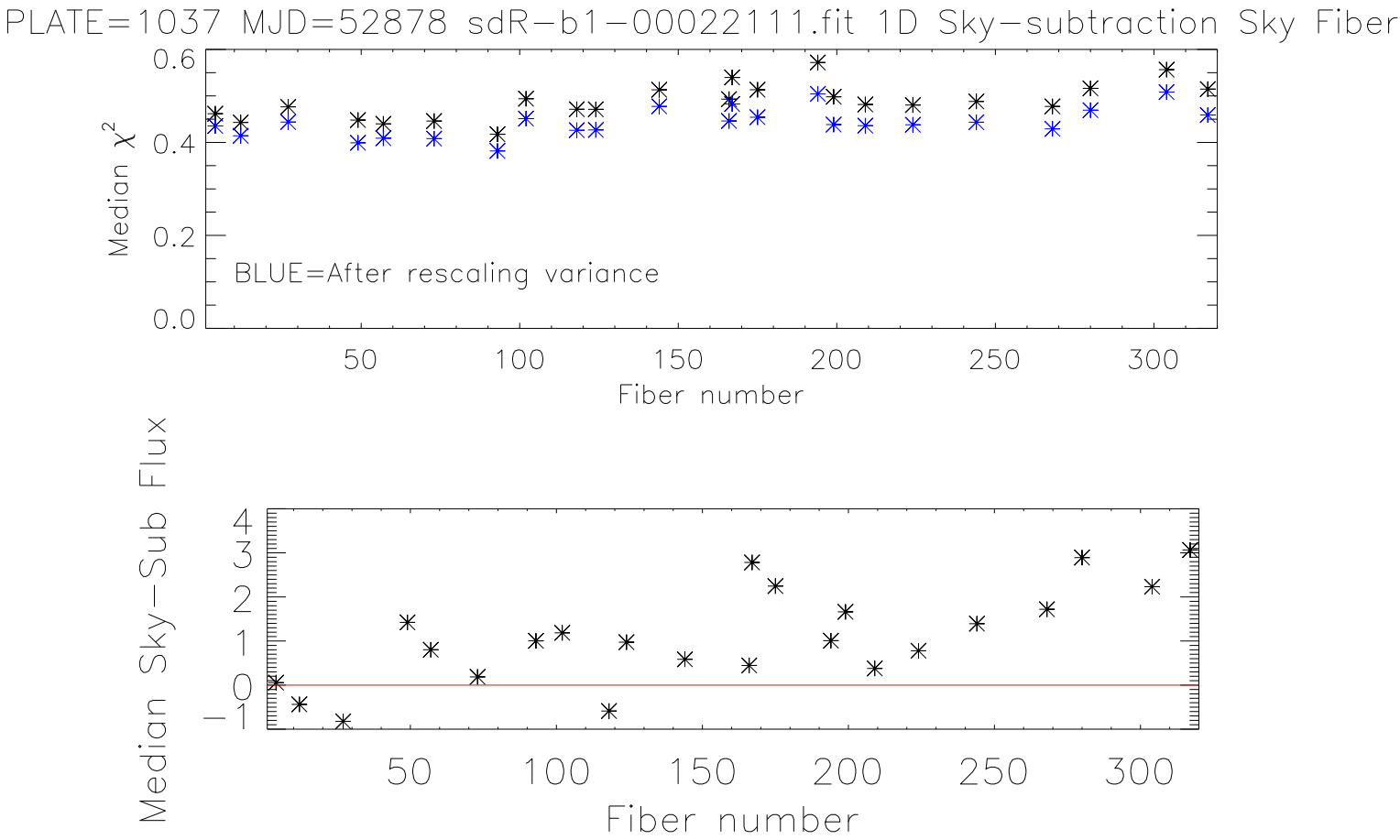

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

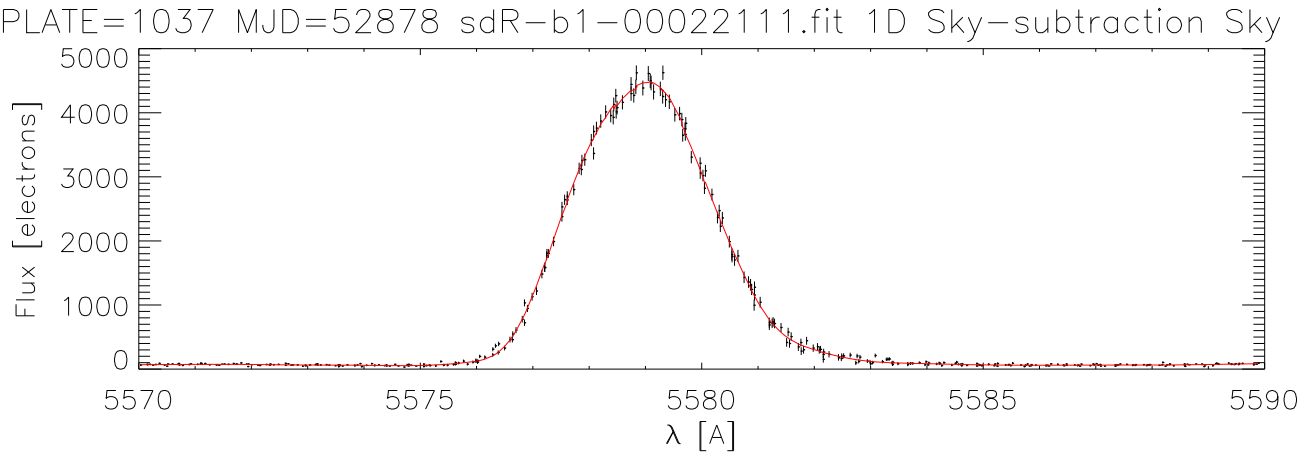

4046.5600
nfib1 23
nfib2 22
stdev 0.148
extra 0.03
4358.3300
nfib1 23
nfib2 23
stdev 0.071
extra −0.08
5460.9400
nfib1 23
nfib2 23
stdev 0.067
extra −0.04
5577.3390
nfib1 23
nfib2 23
stdev 0.023
extra 0.01
5889.9500
nfib1 23
nfib2 23
stdev 0.036
extra 0.11
5895.9240
nfib1 22
nfib2 23
stdev 0.040
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

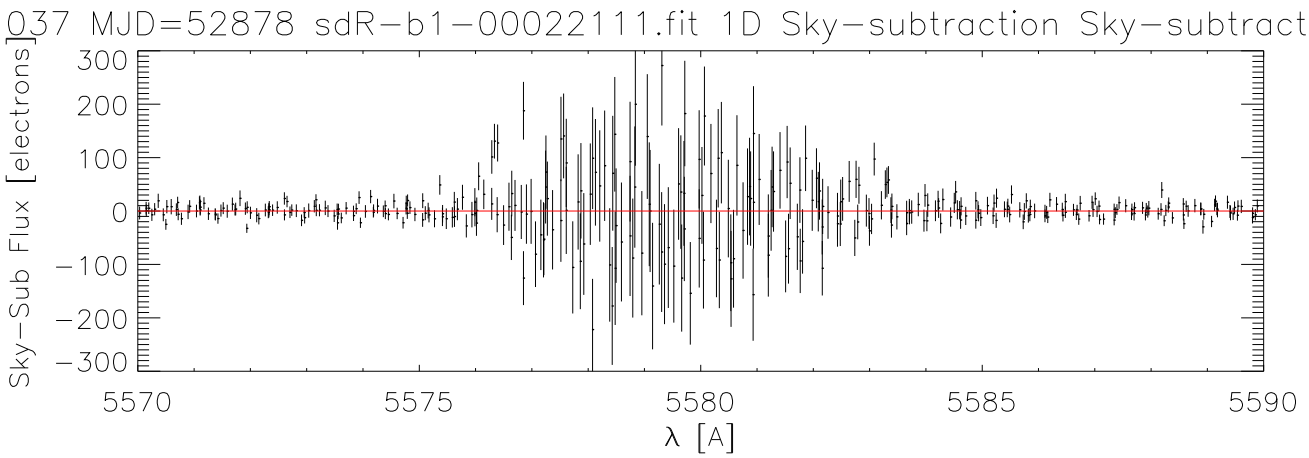

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

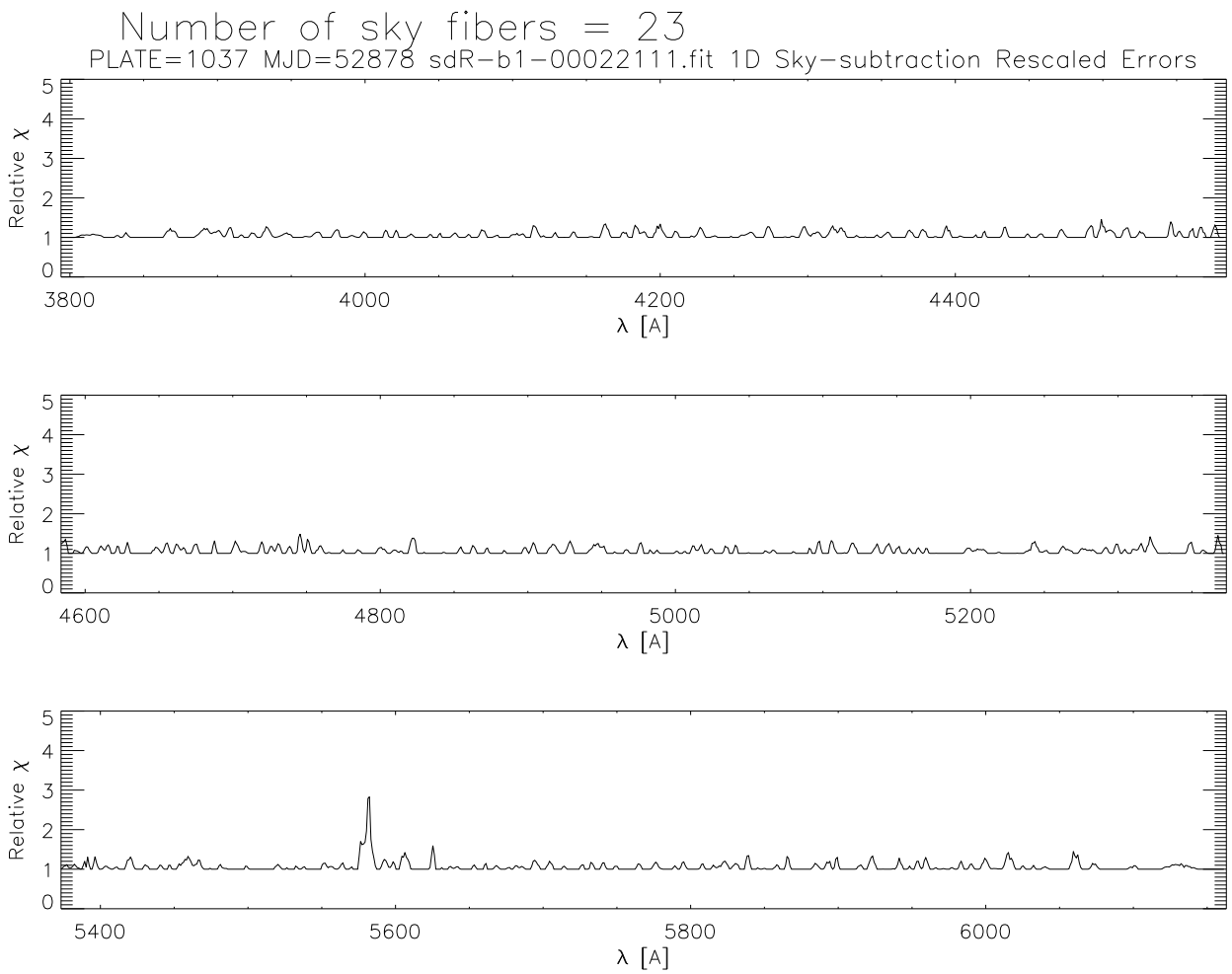
es= 0.0000

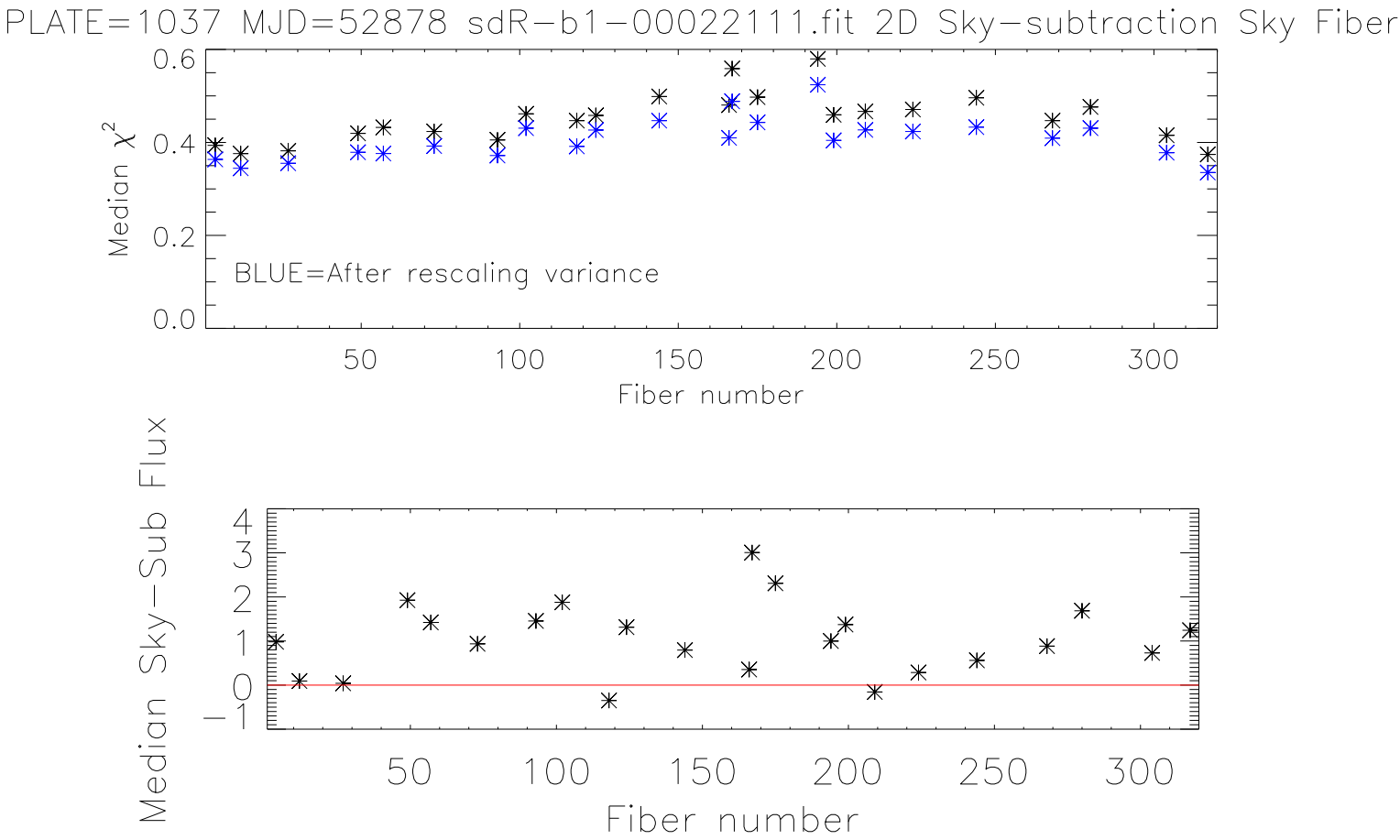

PLATE=1037 MJD=52878 Smooth superflat for sdR-b1-00022111.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

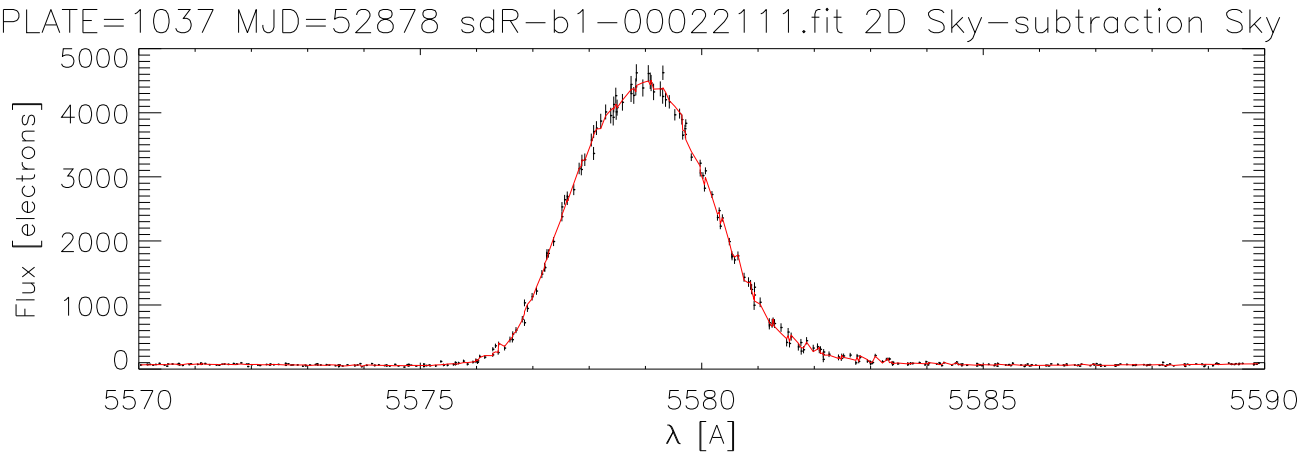

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

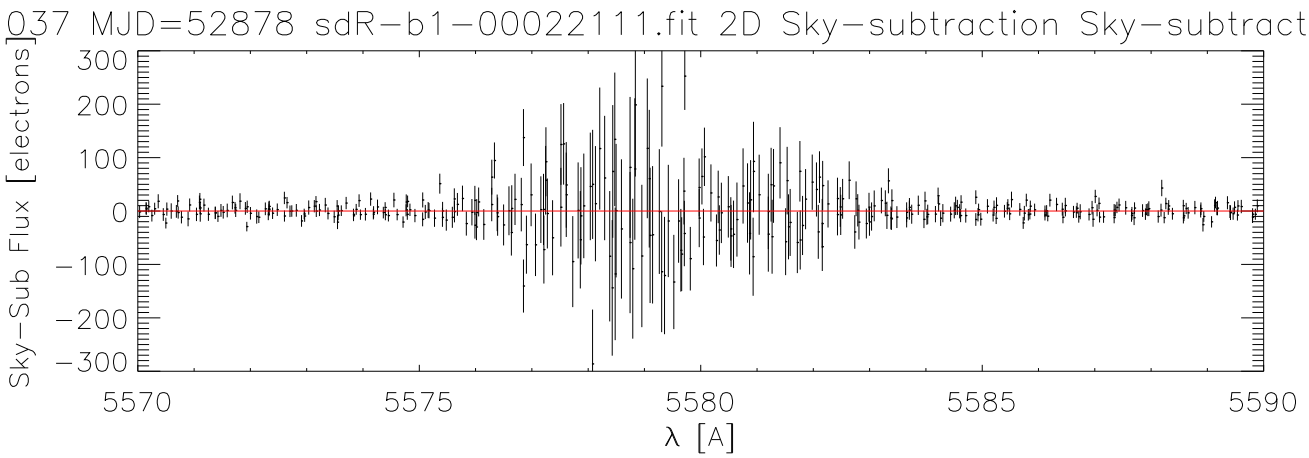

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

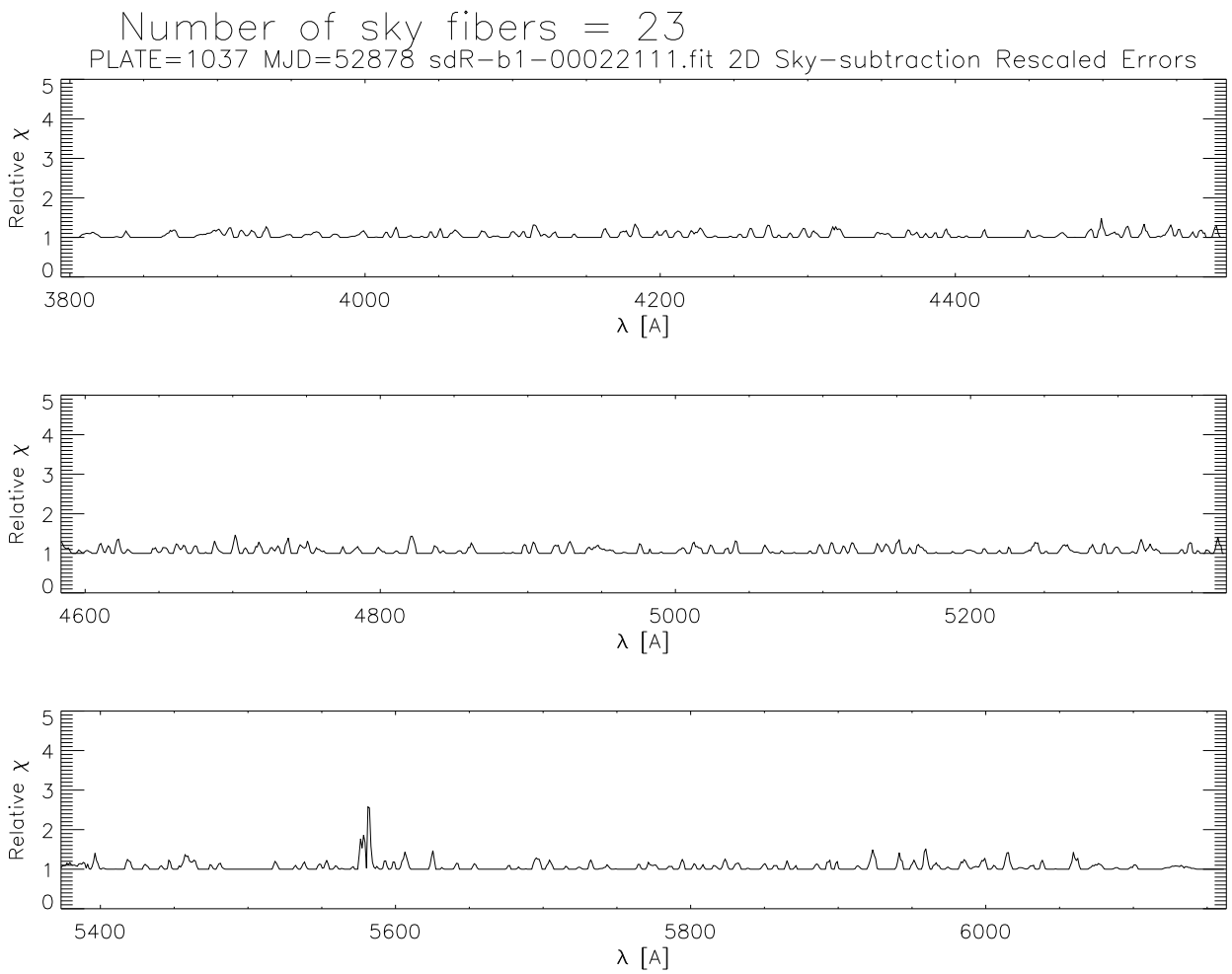

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

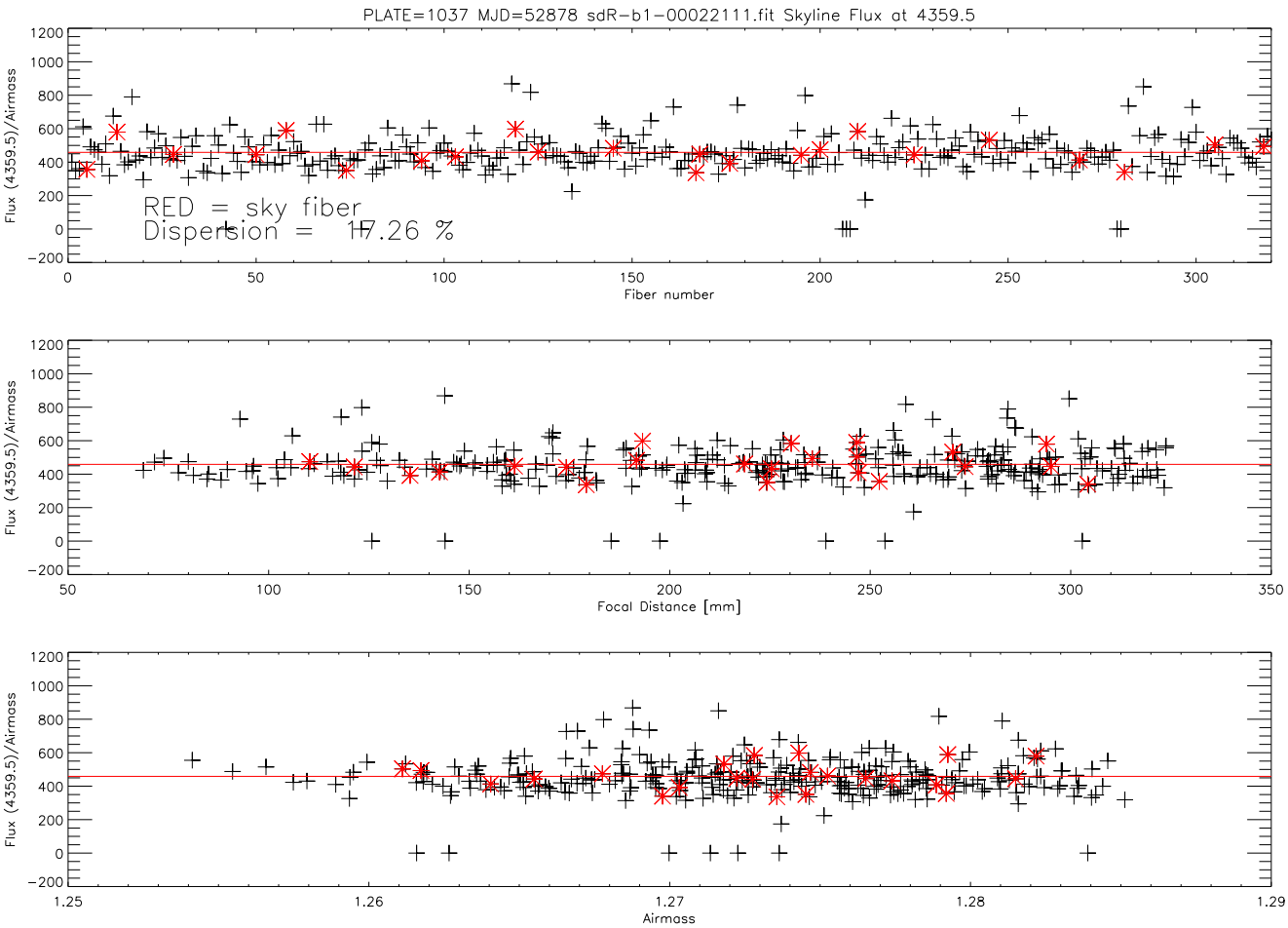

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022111.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

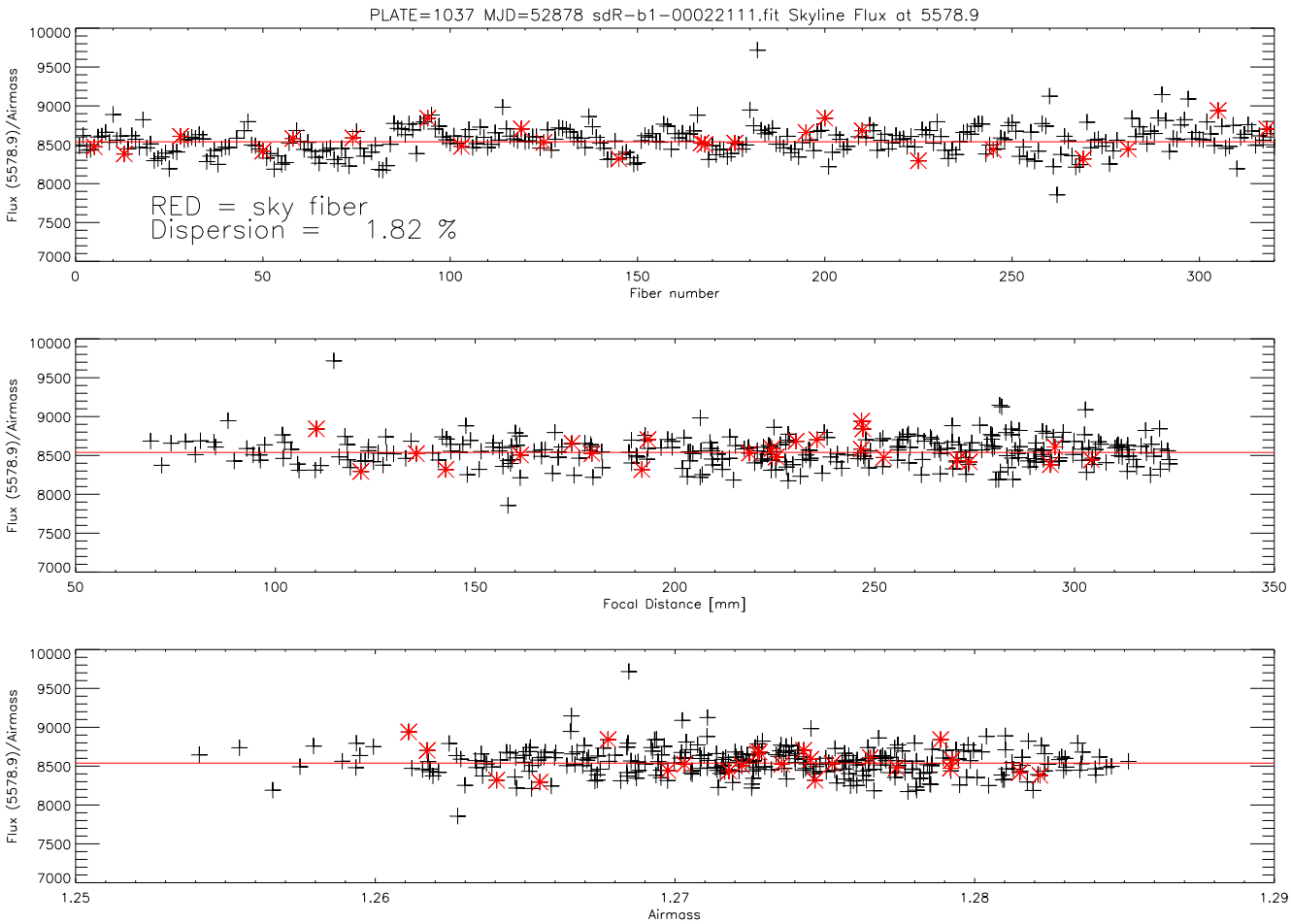

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

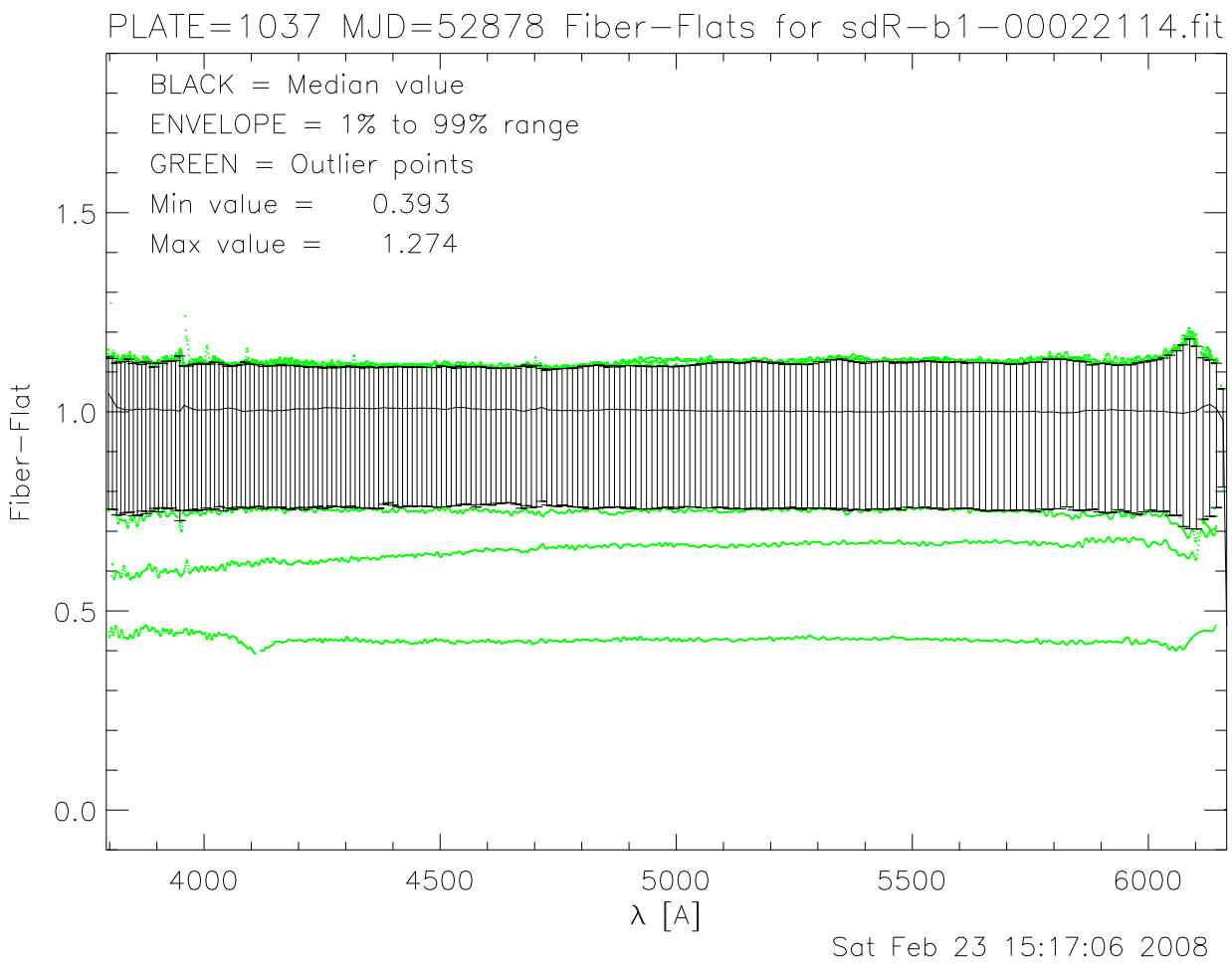

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

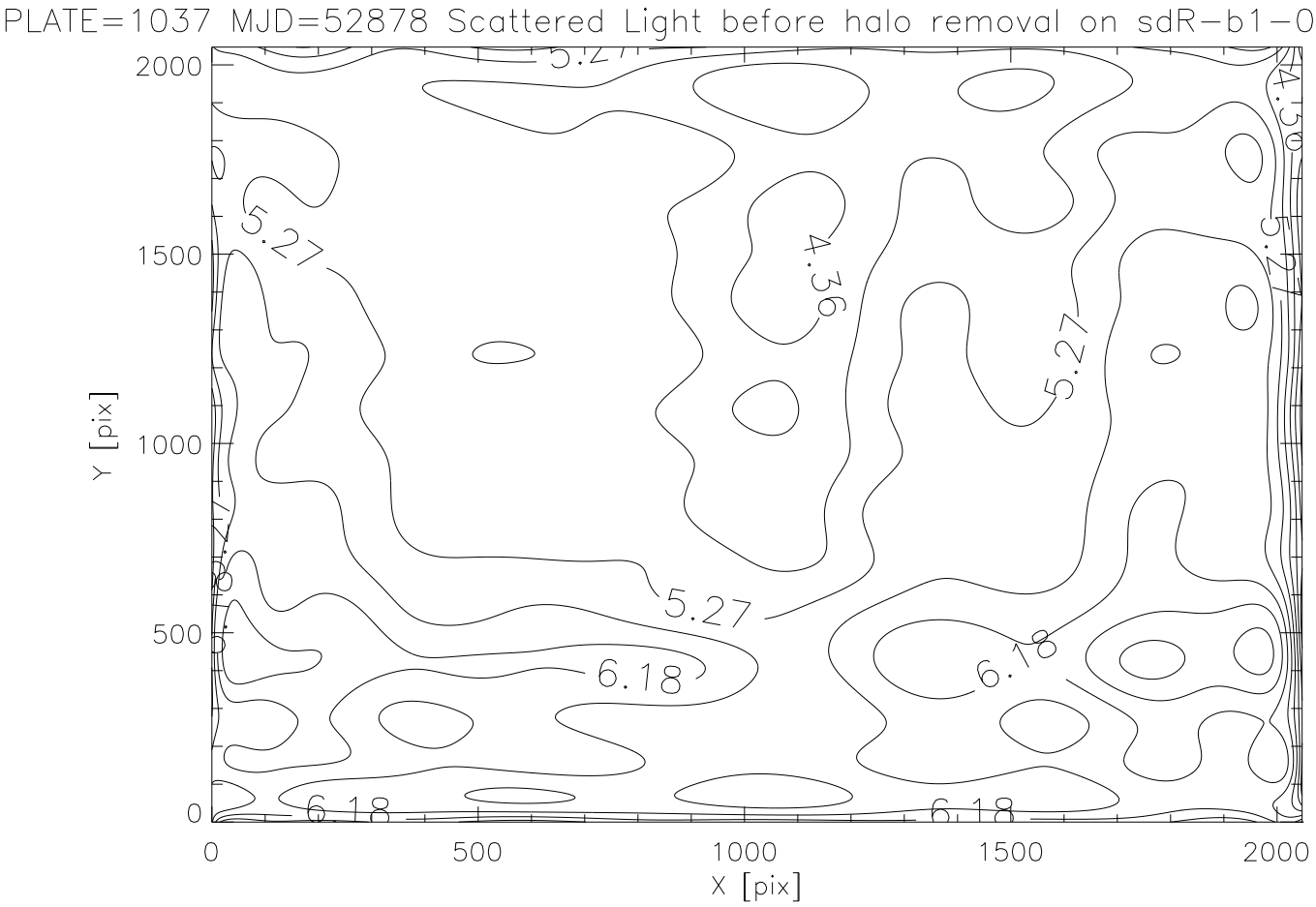

PLATE=1037 MJD=52878 sdR-b1-00022111.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

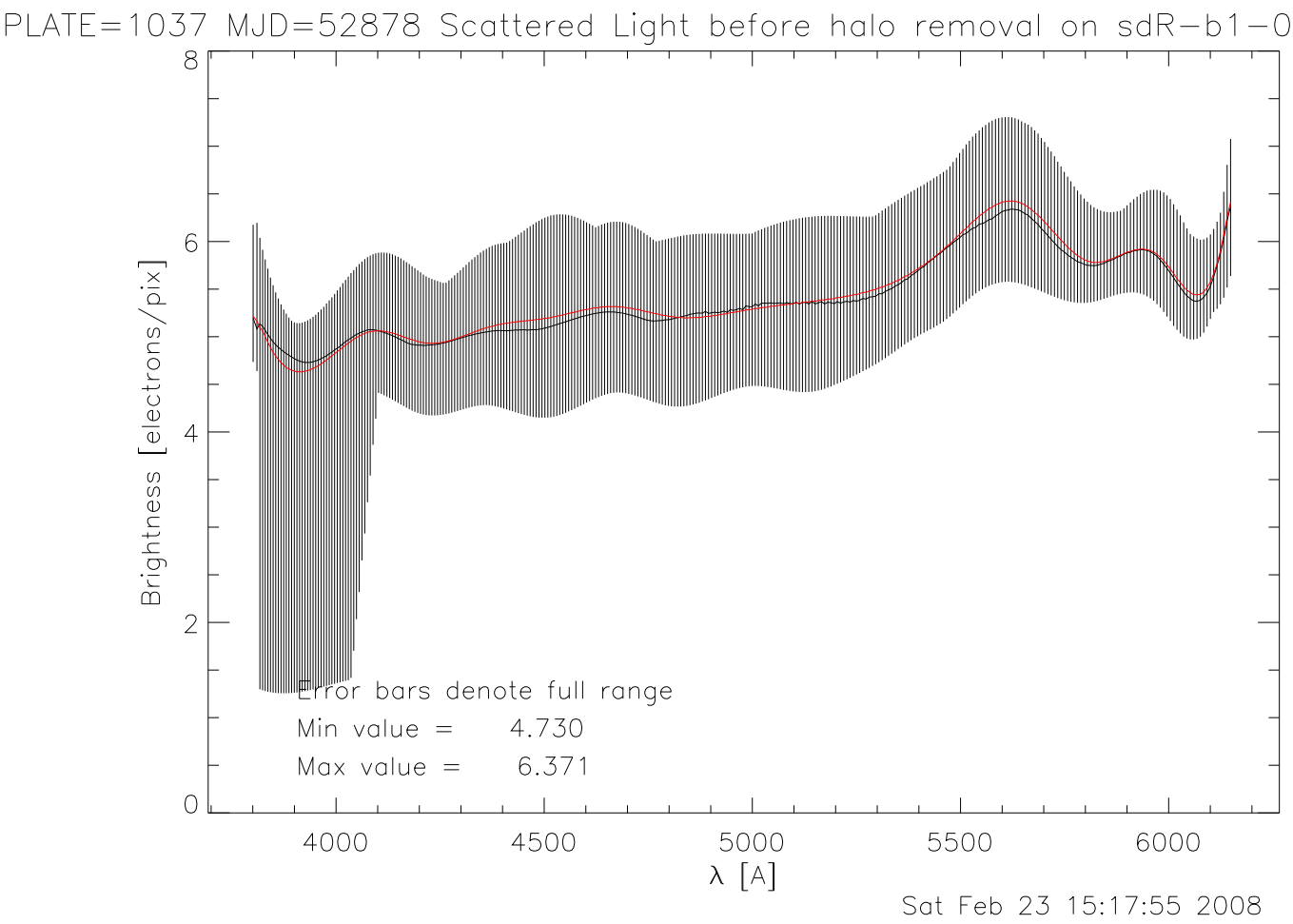

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022111.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

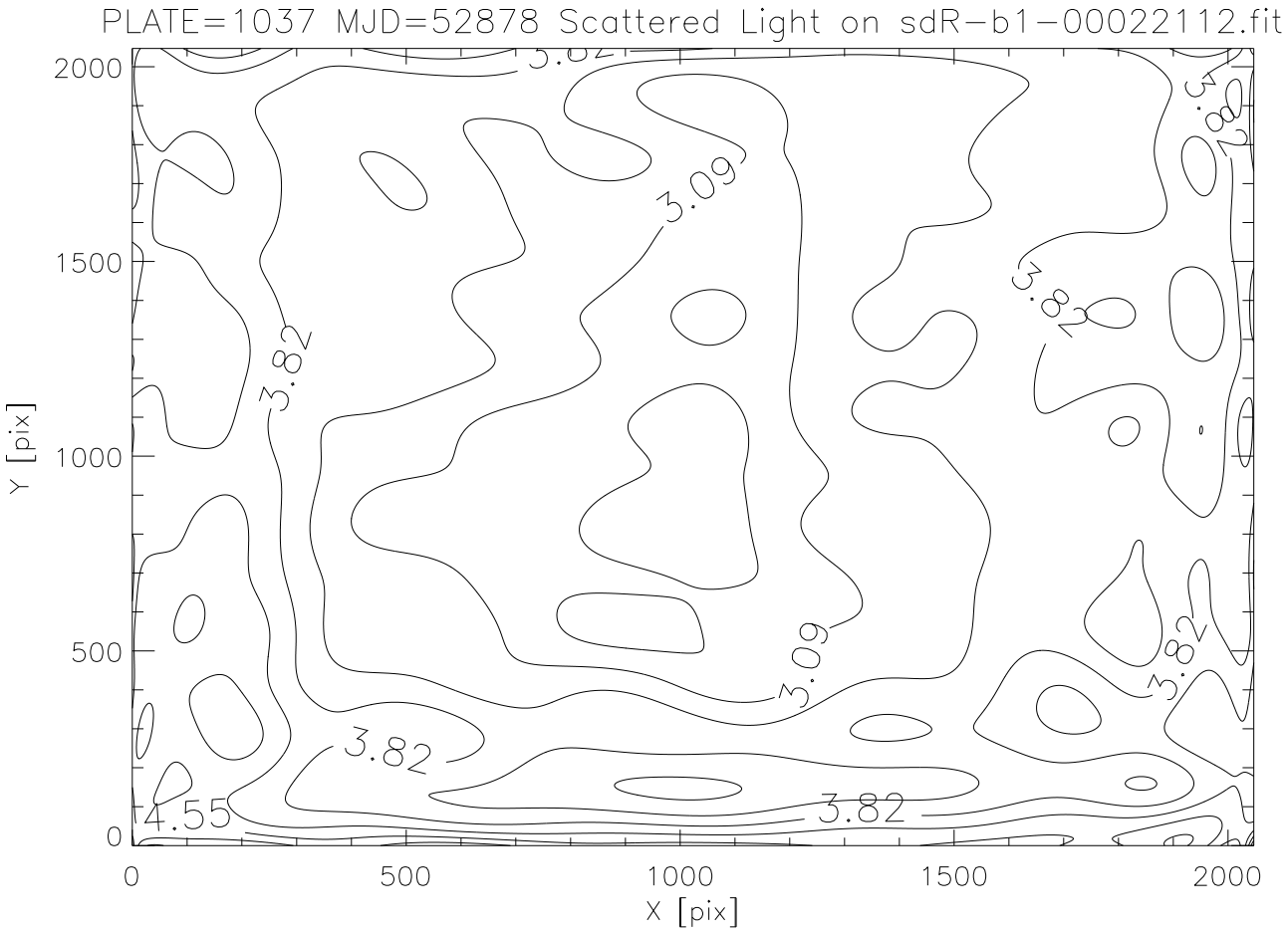

PLATE=1037 MJD=52878 sdR-b1-00022111.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 17.26 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

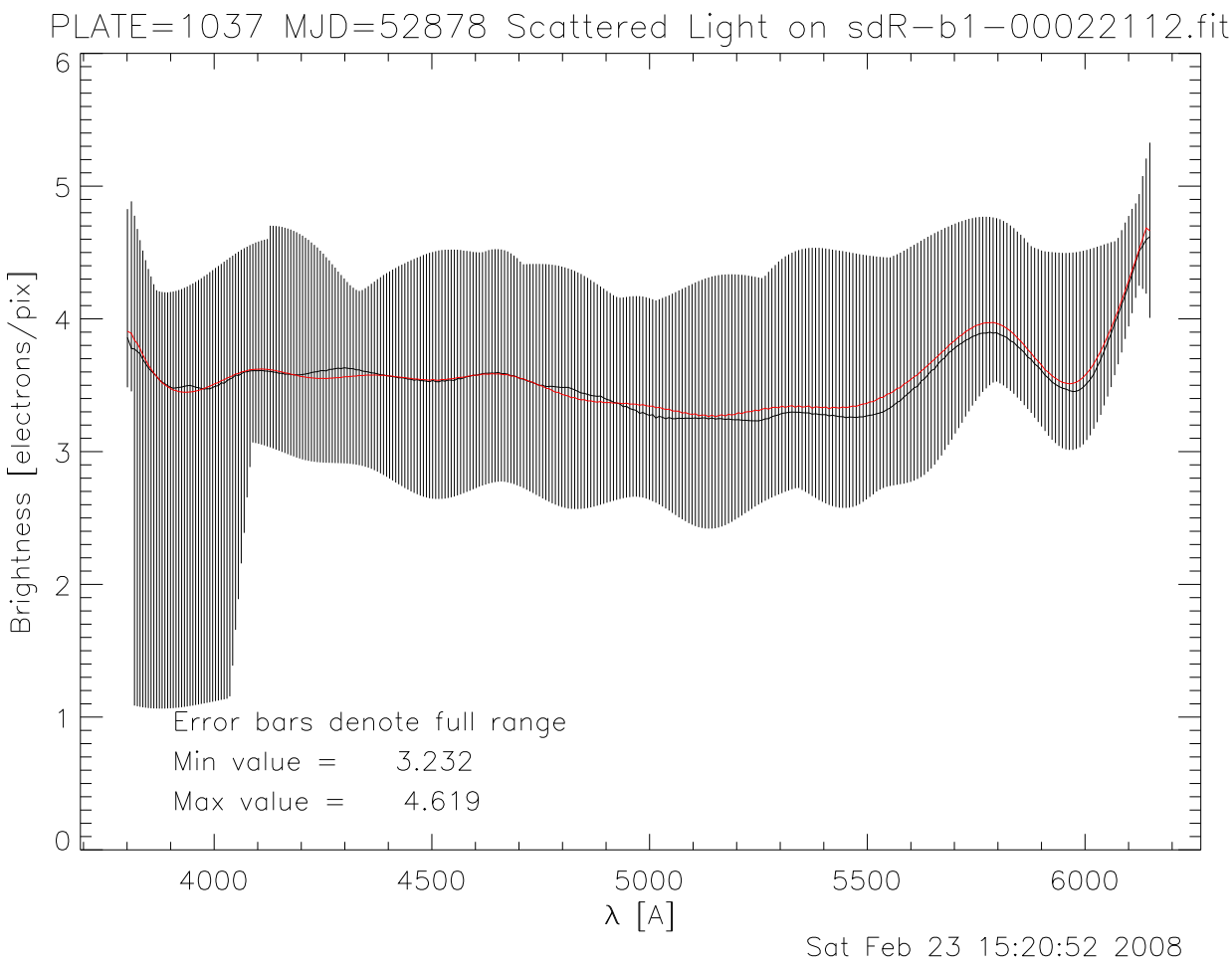

PLATE=1037 MJD=52878 sdR-b1-00022111.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.82 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

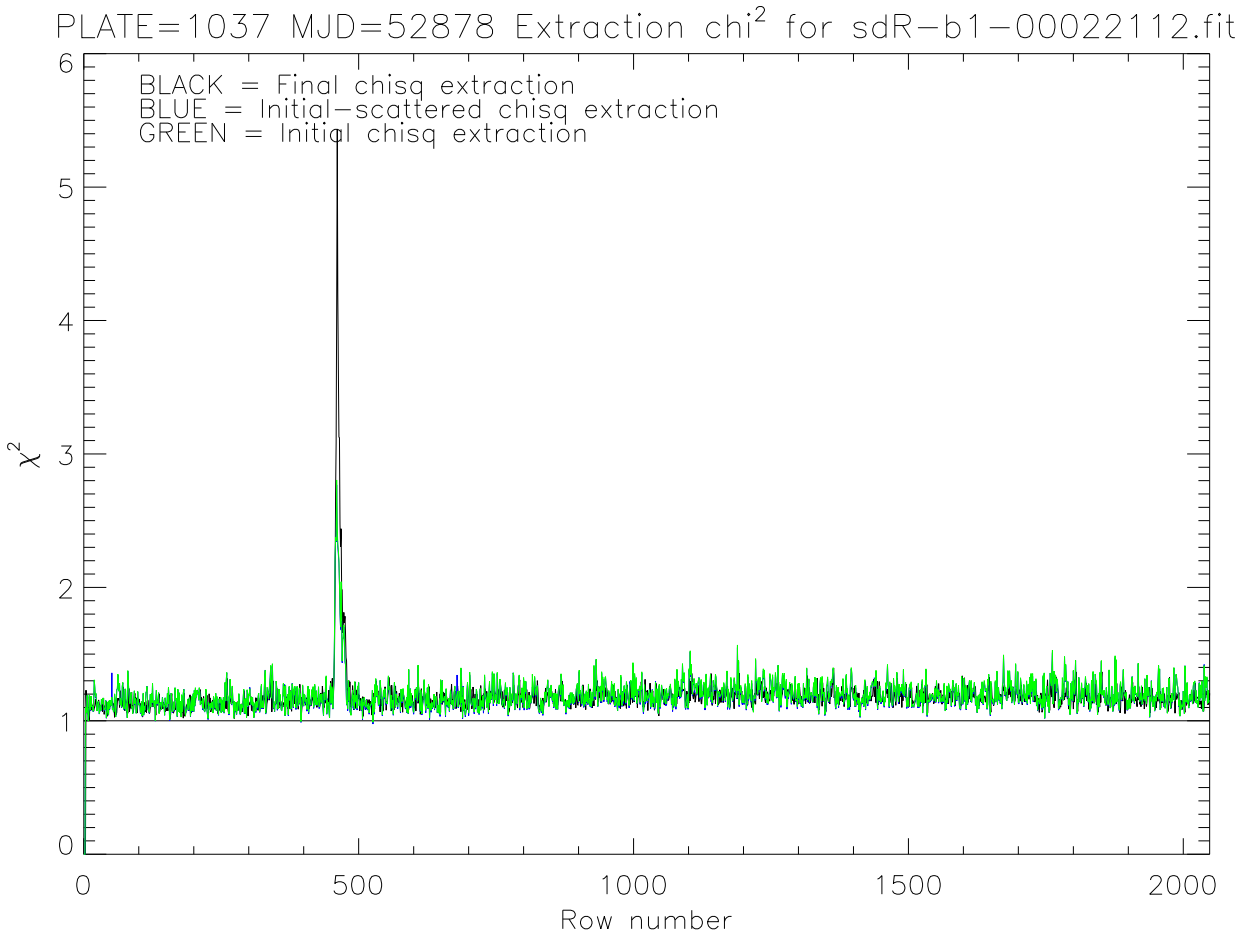

PLATE=1037 MJD=52878 Fiber-Flats for sdR-b1-00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.393
Max value = 1.274
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:17:06 2008

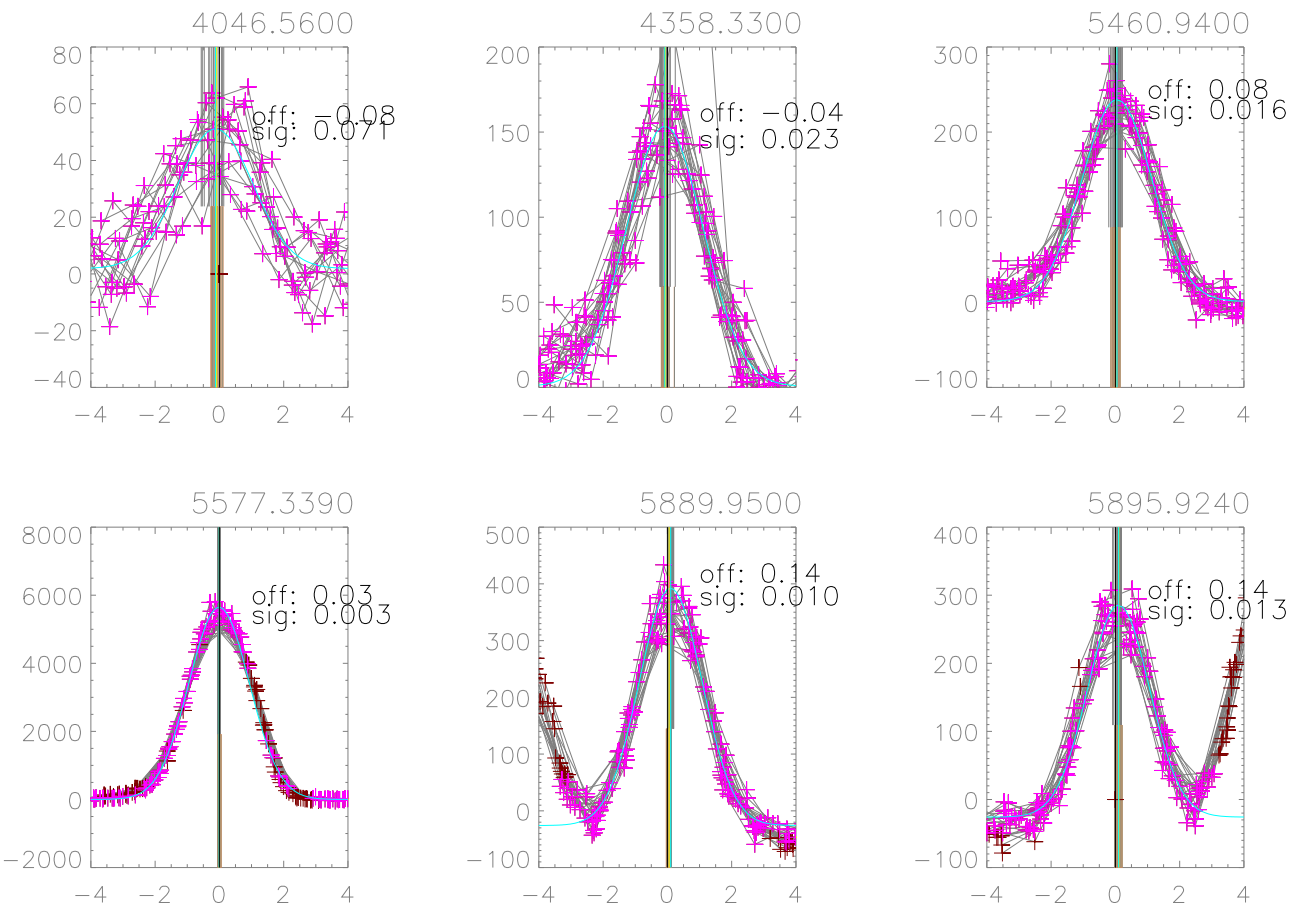

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b1-00022112.f
5.27
4.36
5.27
5.27
4.36
5.27
6.18
6.18
6.18
0
500
1000
1500
2000
Y [pix]
X [pix]

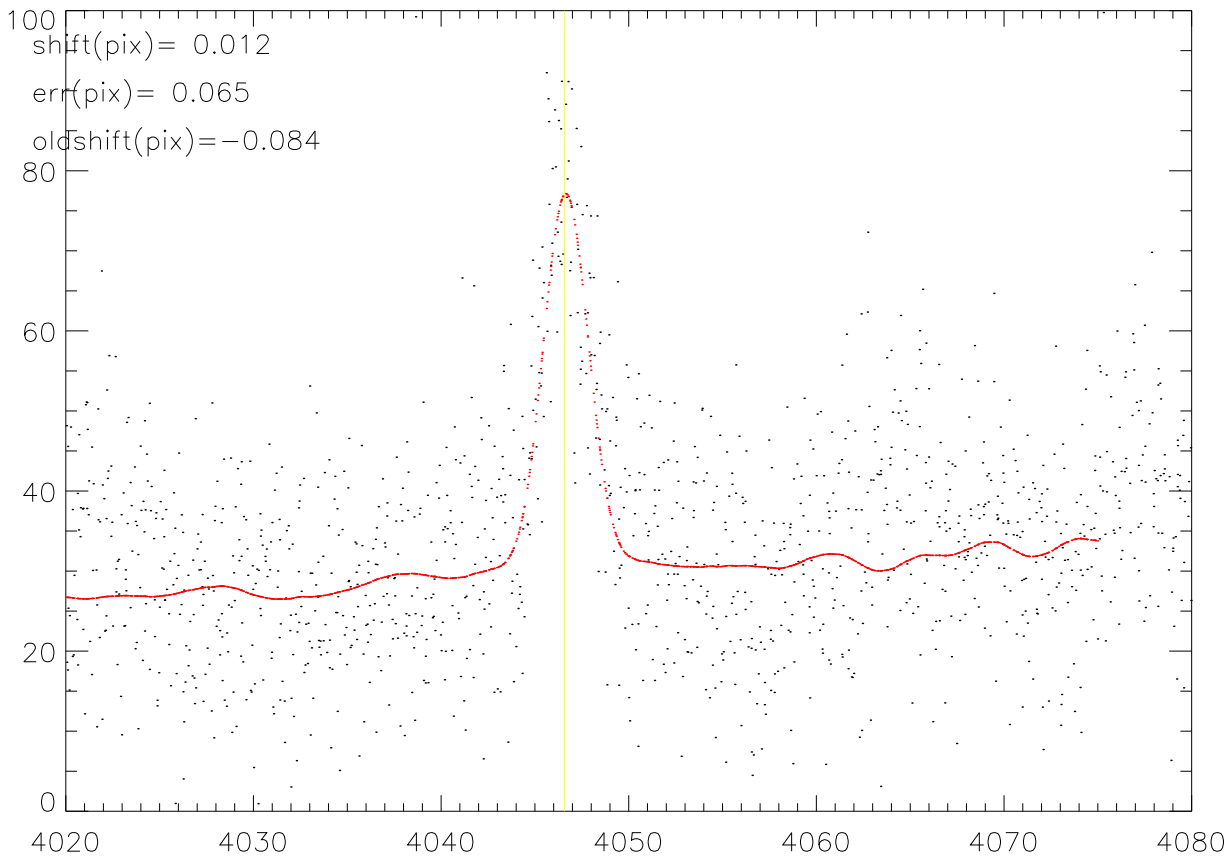

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b1-00022112.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.730
Max value = 6.371
Sat Feb 23 15:17:55 2008

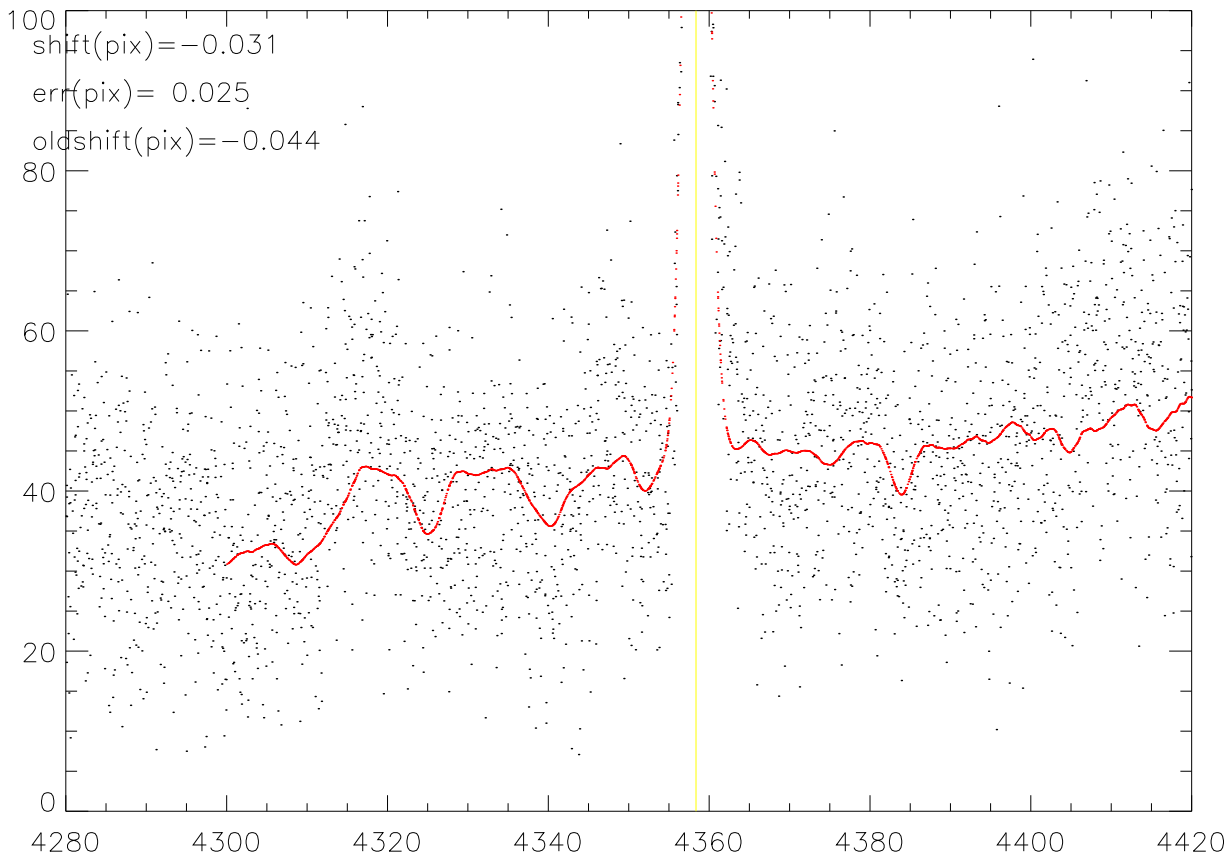

PLATE=1037 MJD=52878 Scattered Light on sdR-b1-00022112.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
3.09
4.55

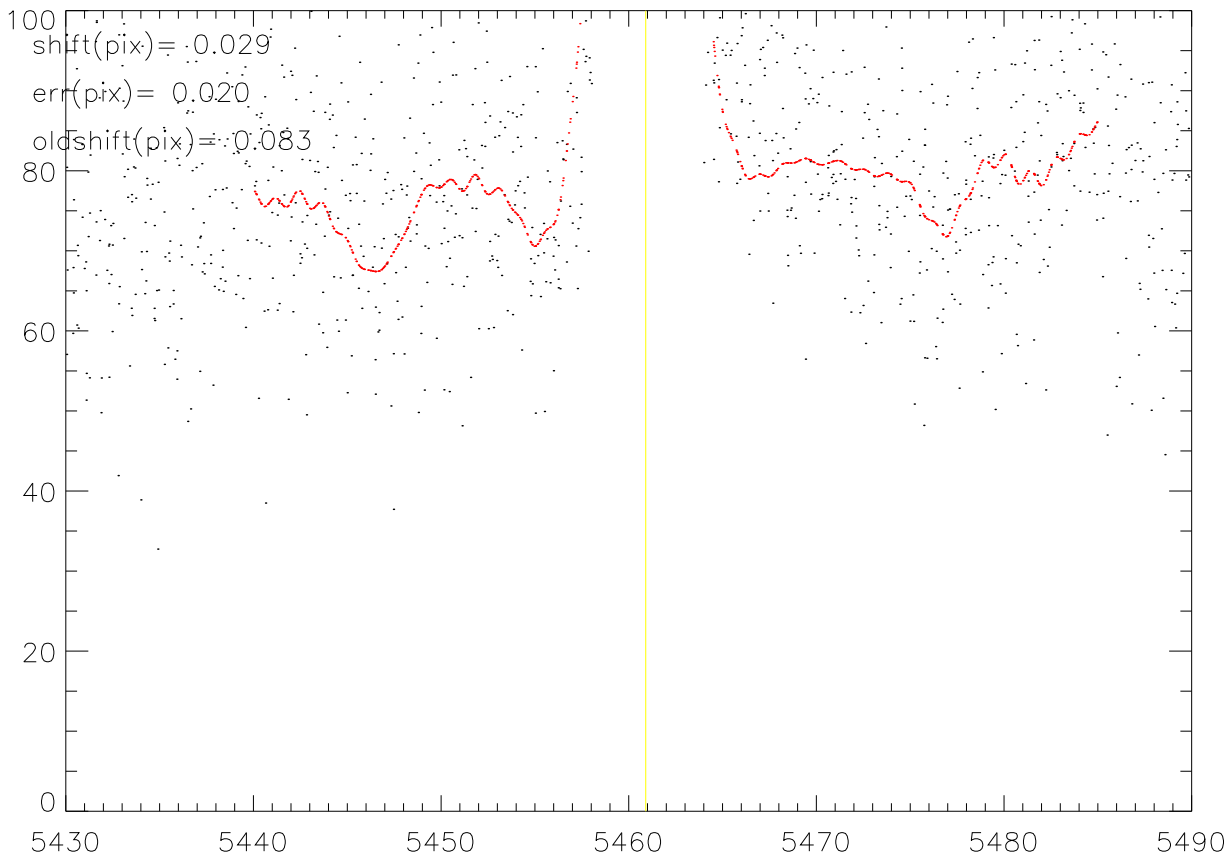

PLATE=1037 MJD=52878 Scattered Light on sdR-b1-00022112.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.232
Max value = 4.619
Sat Feb 23 15:20:52 2008

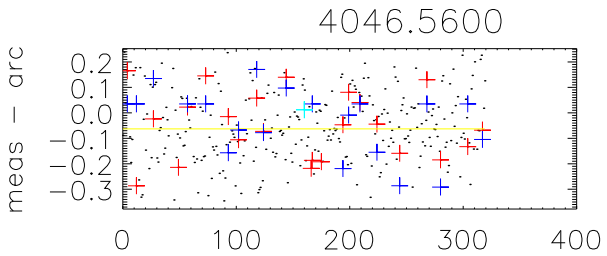

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b1-00022112.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

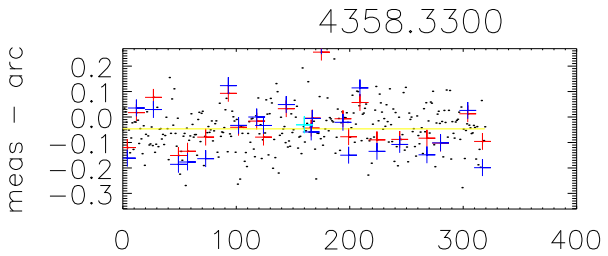

4046.5600
off: −0.08
sig: 0.071
4358.3300
off: −0.04
sig: 0.023
5460.9400
off: 0.08
sig: 0.016
5577.3390
off: 0.03
sig: 0.003
5889.9500
off: 0.14
sig: 0.010
5895.9240
off: 0.14
sig: 0.013

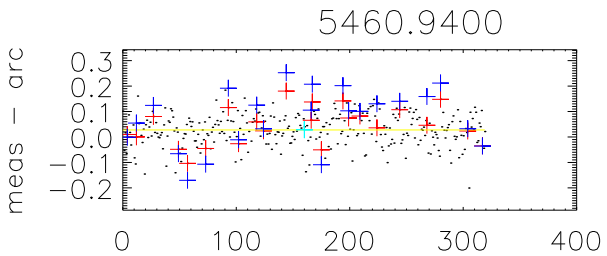

shift(pix)= 0.012
err(pix)= 0.065
oldshift(pix)=−0.084
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

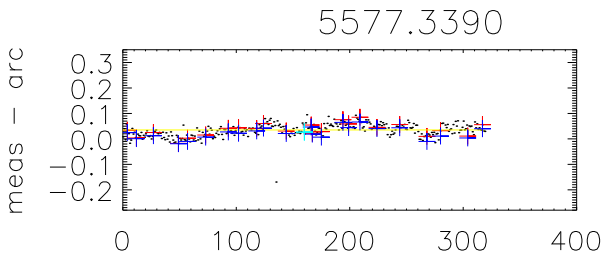

shift(pix)=−0.031
err(pix)= 0.025
oldshift(pix)=−0.044
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

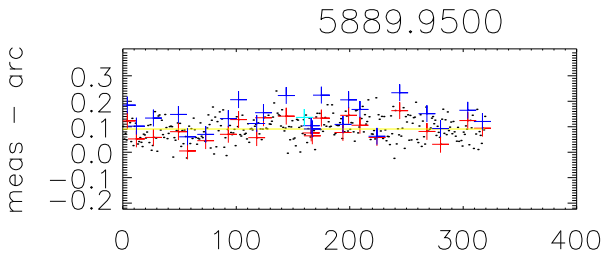

shift(pix)= 0.029
err(pix)= 0.020
oldshift(pix)= 0.083
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

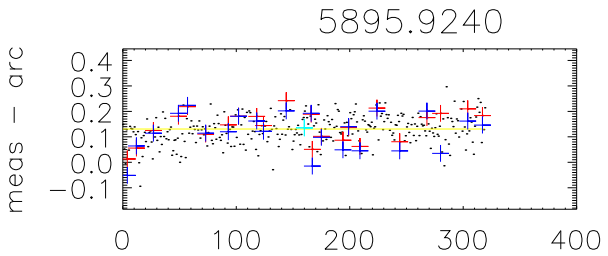

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

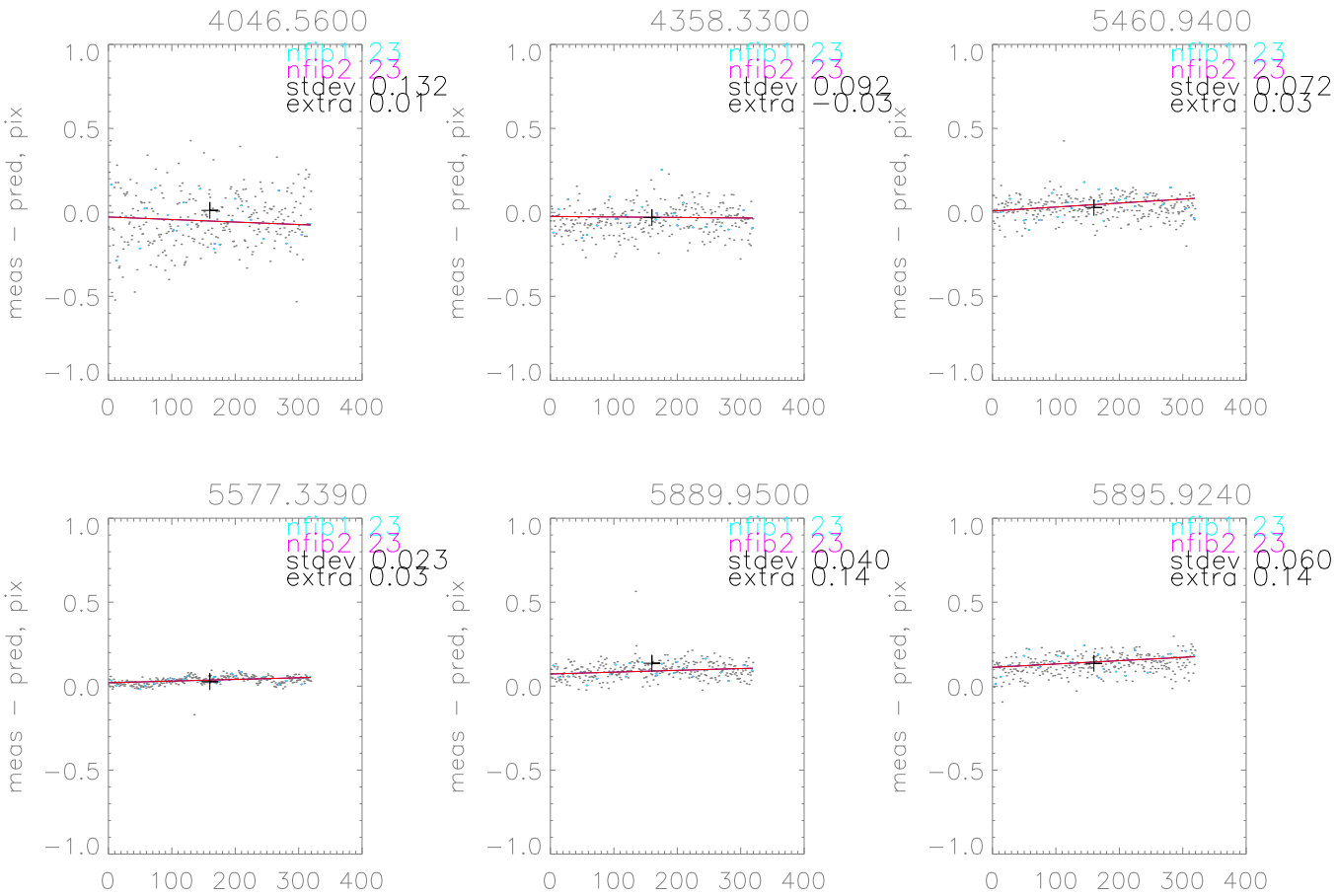

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

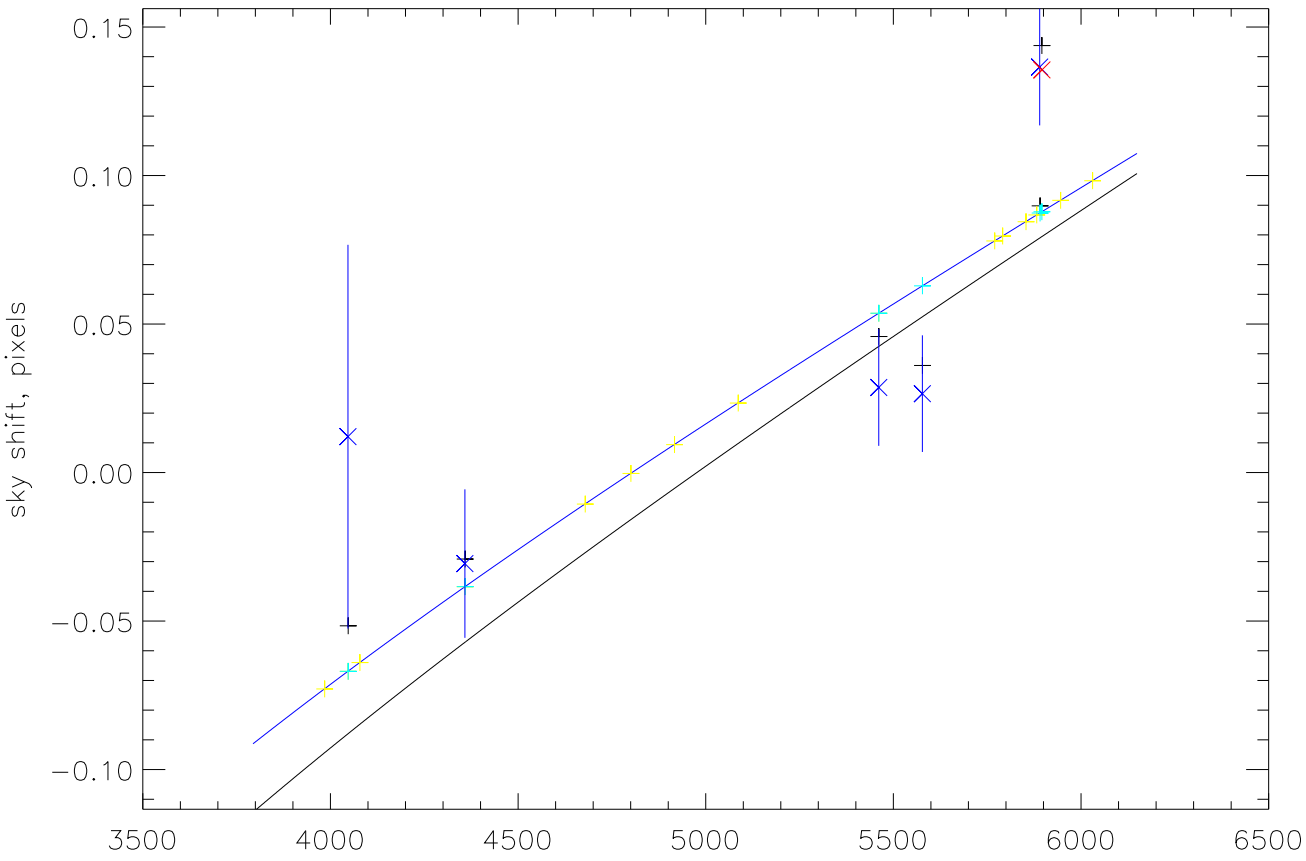

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

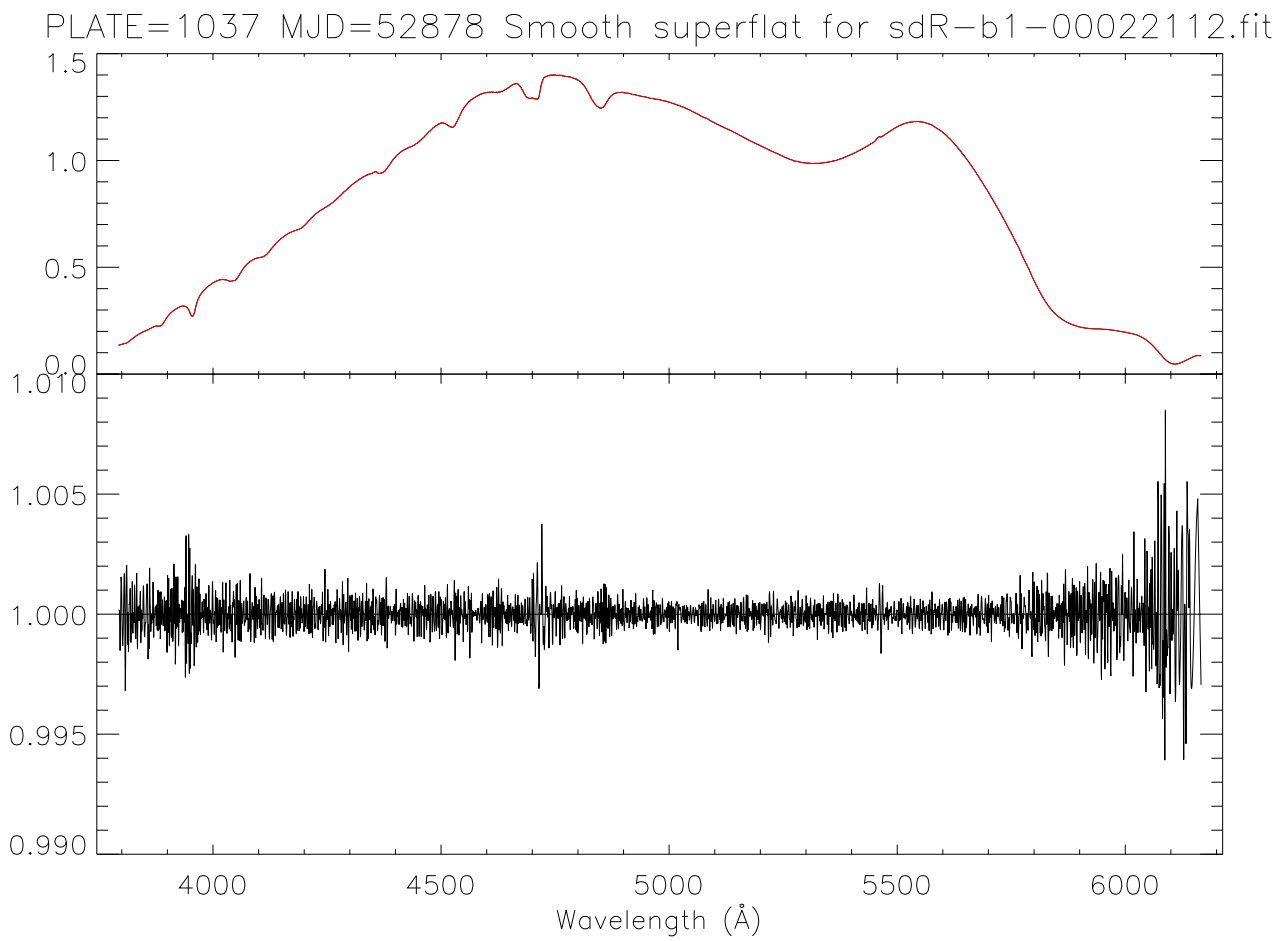

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

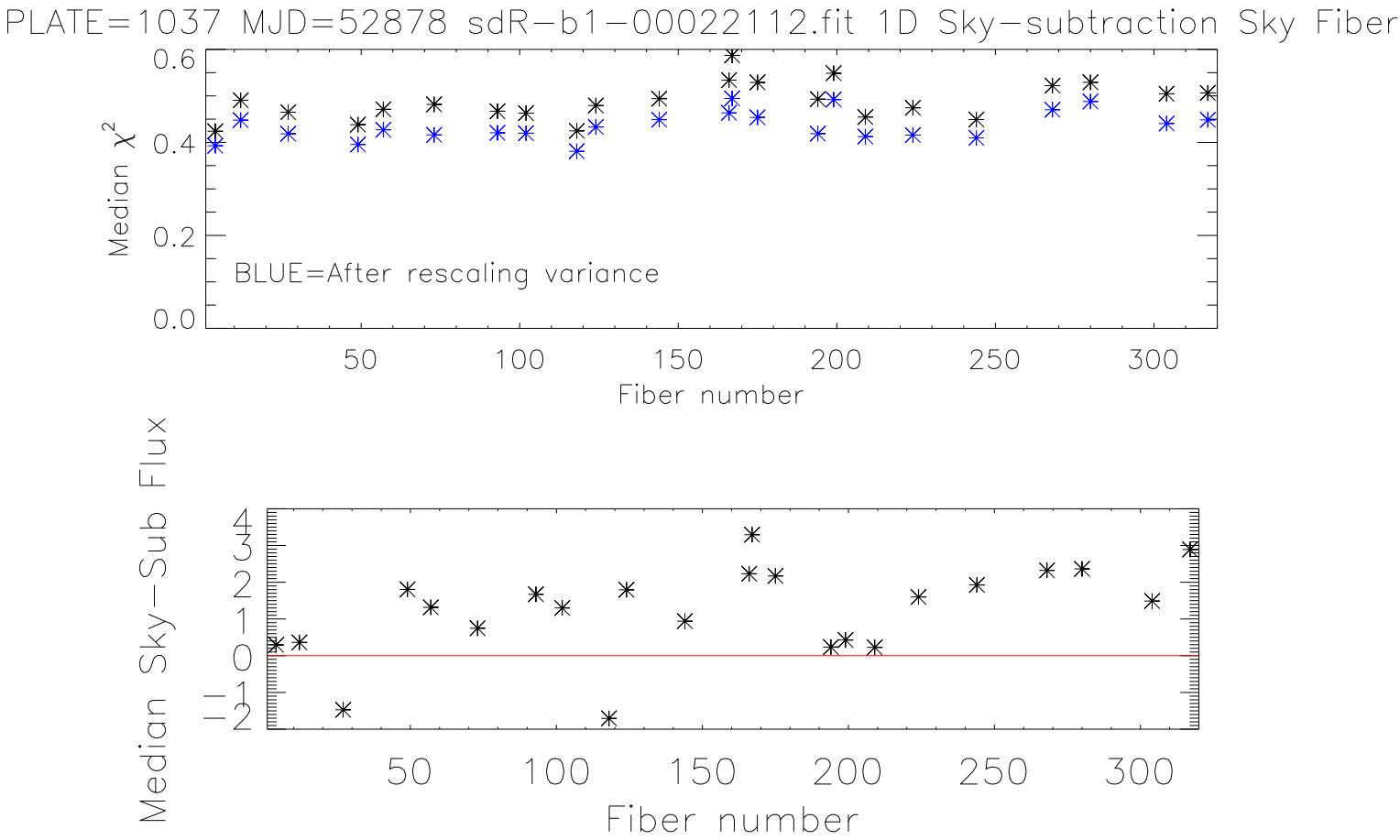

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

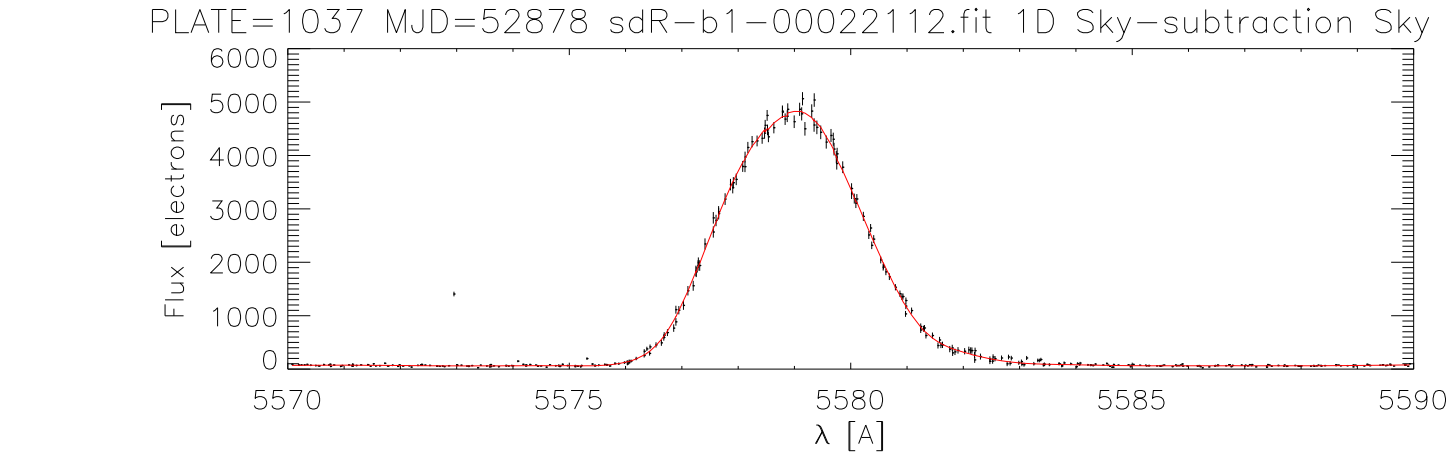

4046.5600
nfib1 23
nfib2 23
stdev 0.132
extra 0.01
4358.3300
nfib1 23
nfib2 23
stdev 0.092
extra −0.03
5460.9400
nfib1 23
nfib2 23
stdev 0.072
extra 0.03
5577.3390
nfib1 23
nfib2 23
stdev 0.023
extra 0.03
5889.9500
nfib1 23
nfib2 23
stdev 0.040
extra 0.14
5895.9240
nfib1 23
nfib2 23
stdev 0.060
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

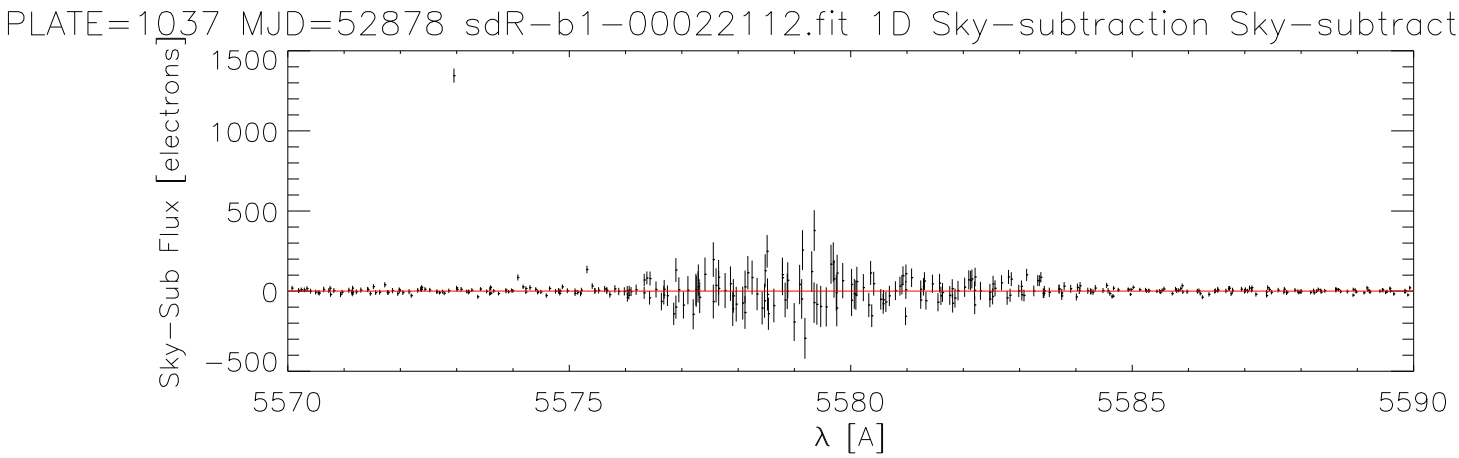

0.15
0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

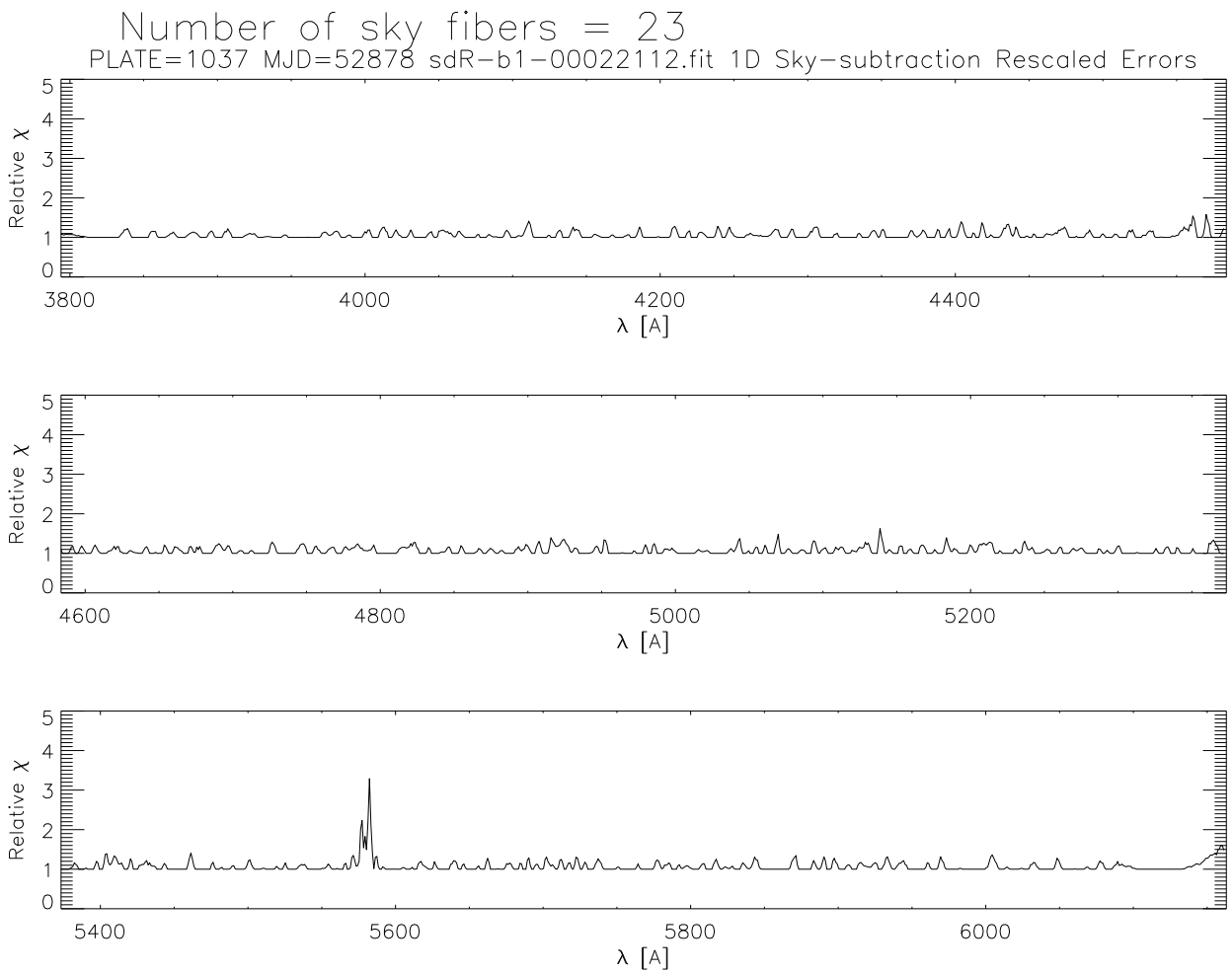
es= 0.0000

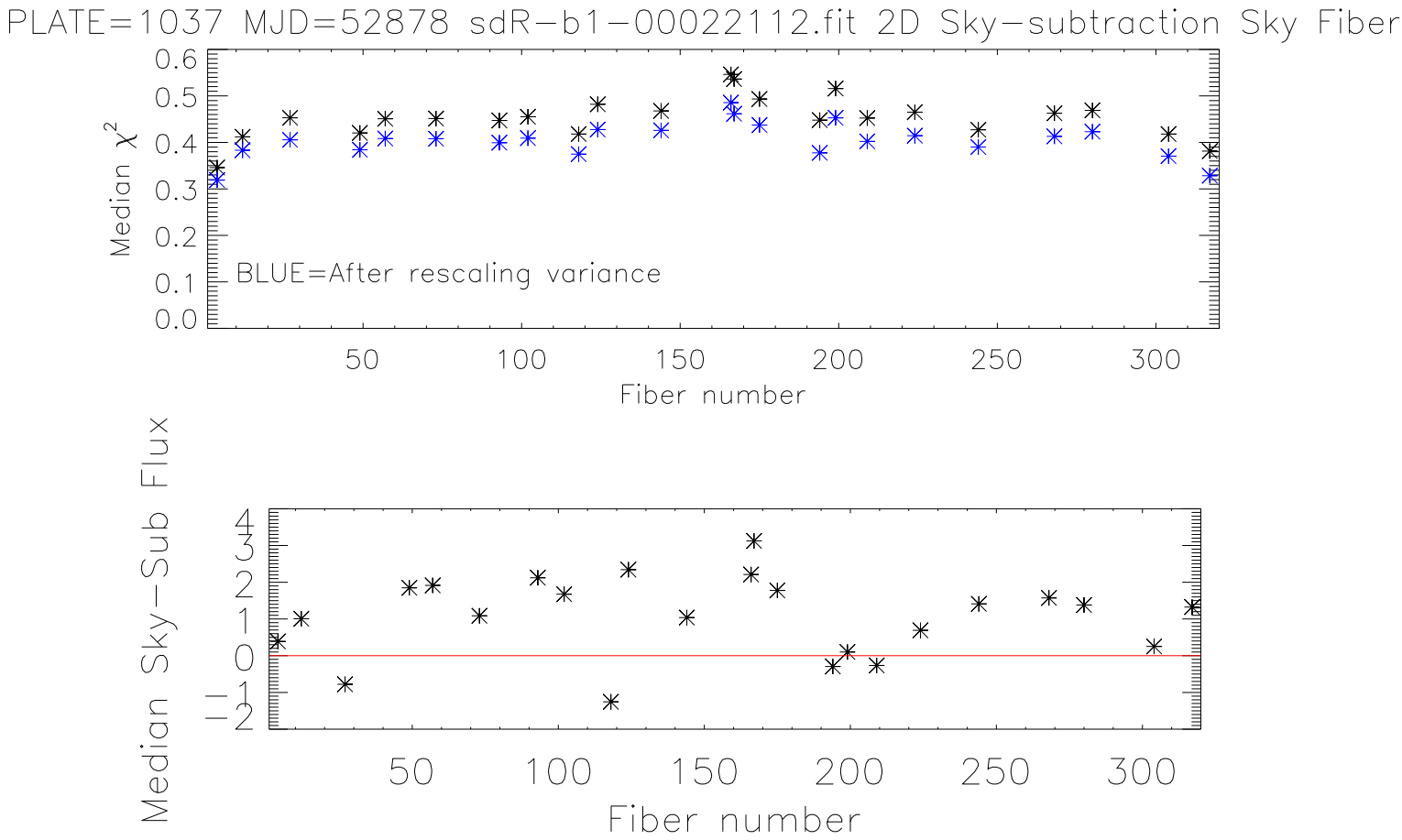

PLATE=1037 MJD=52878 Smooth superflat for sdR-b1-00022112.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

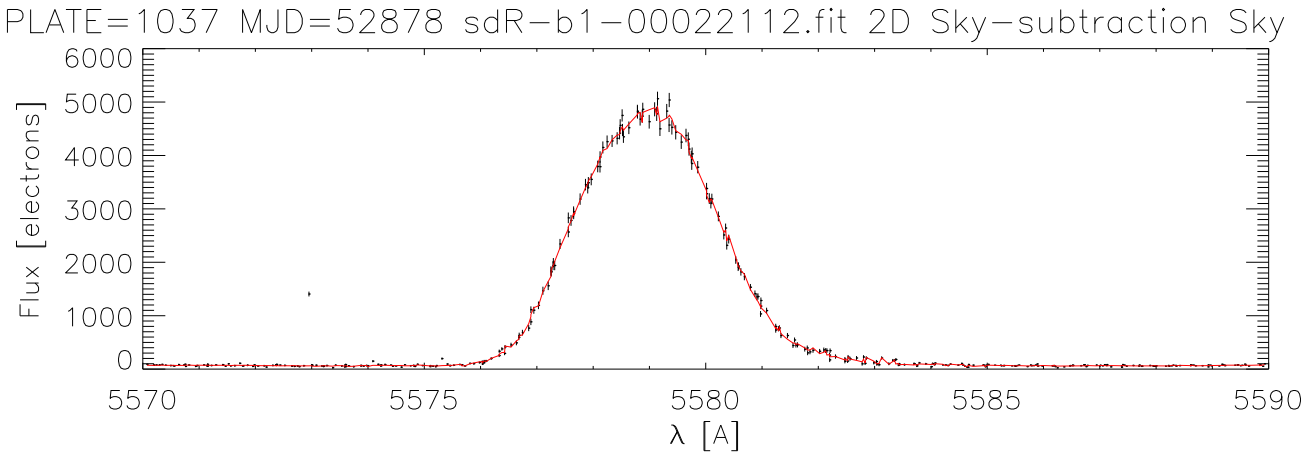

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

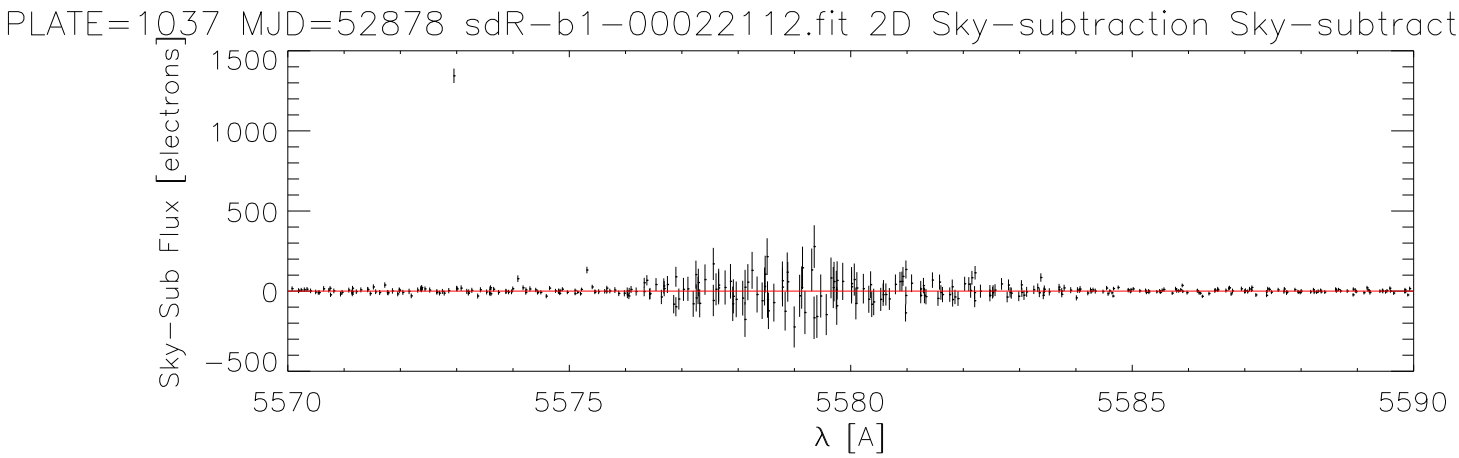

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

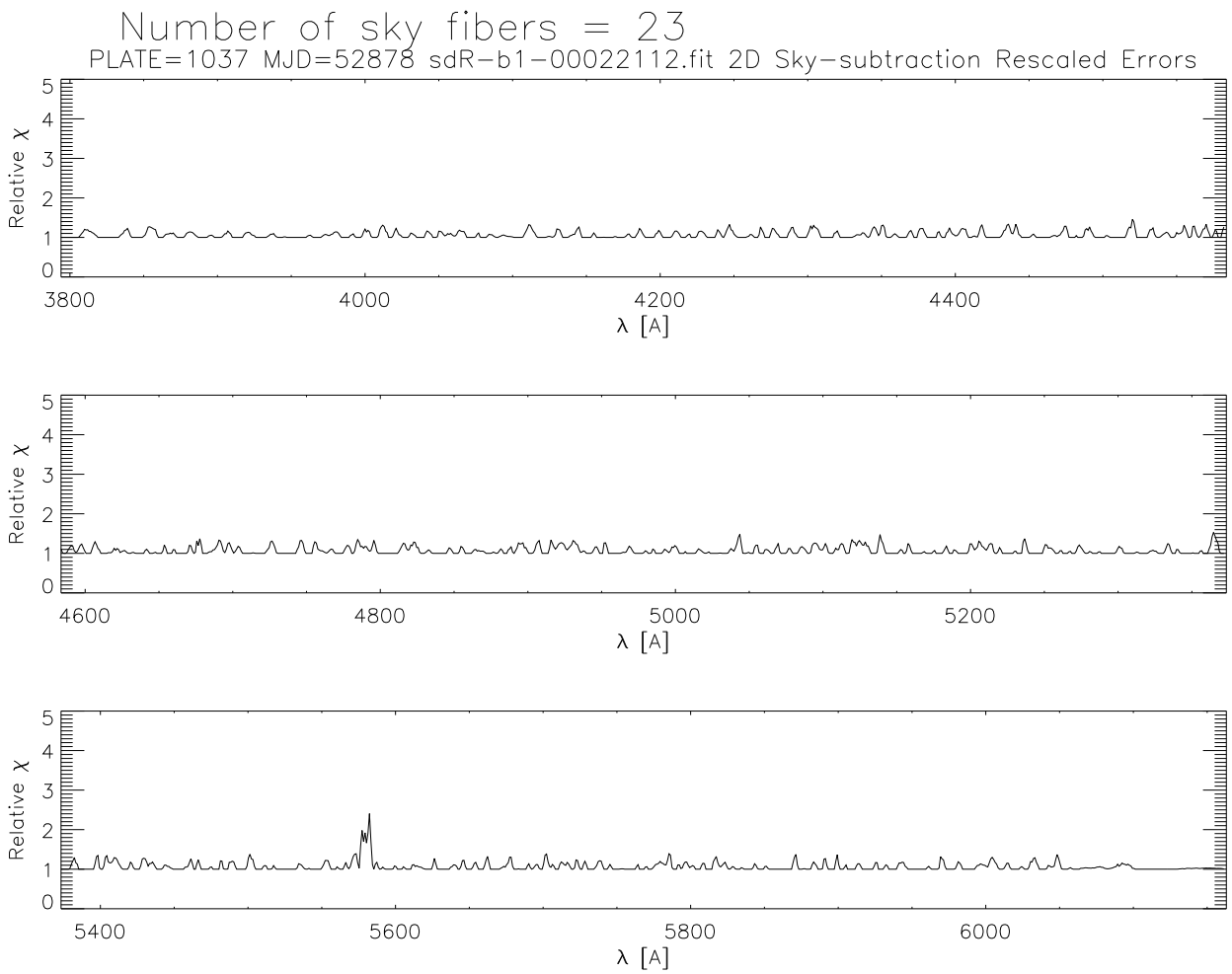

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

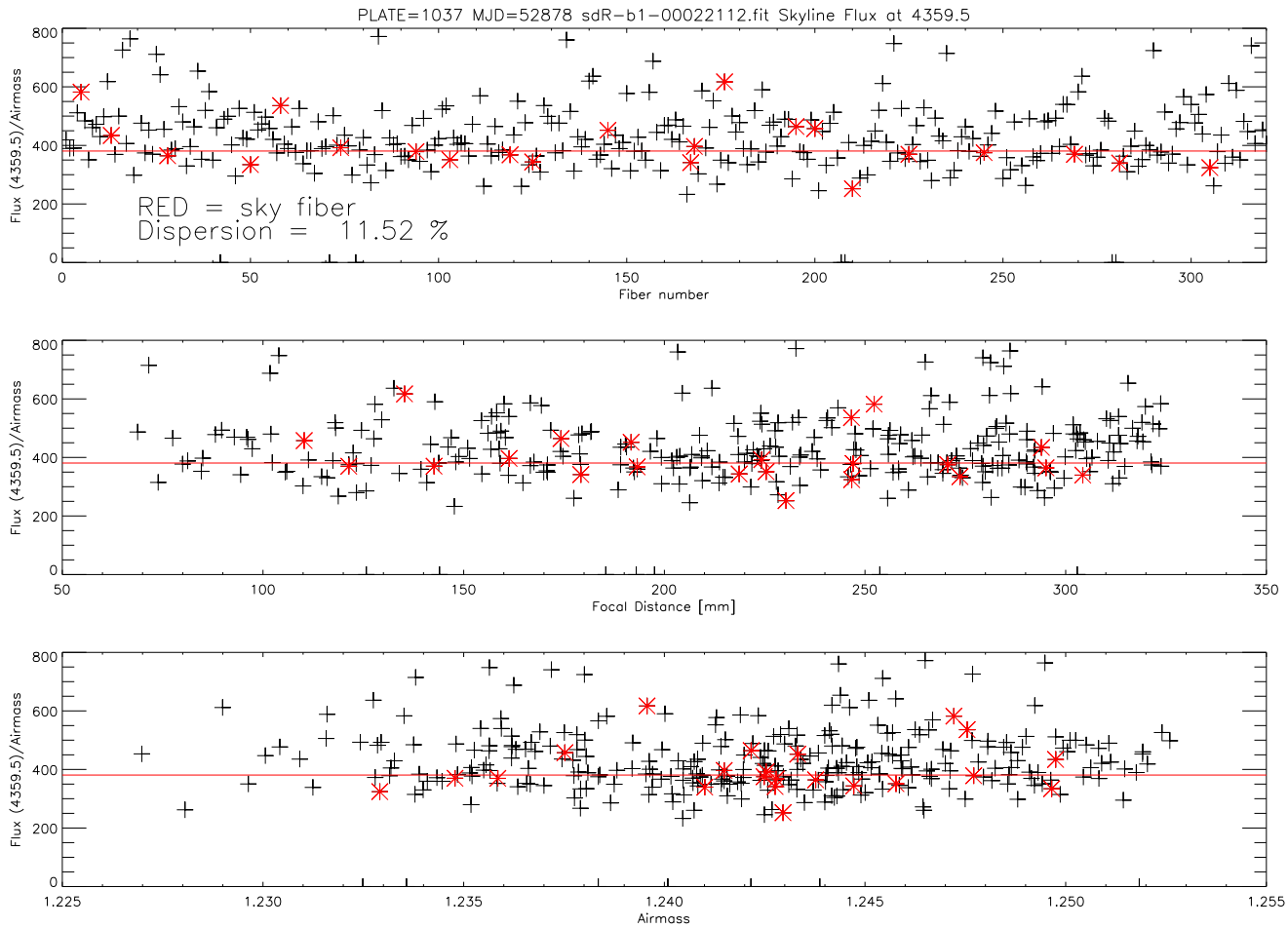

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022112.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

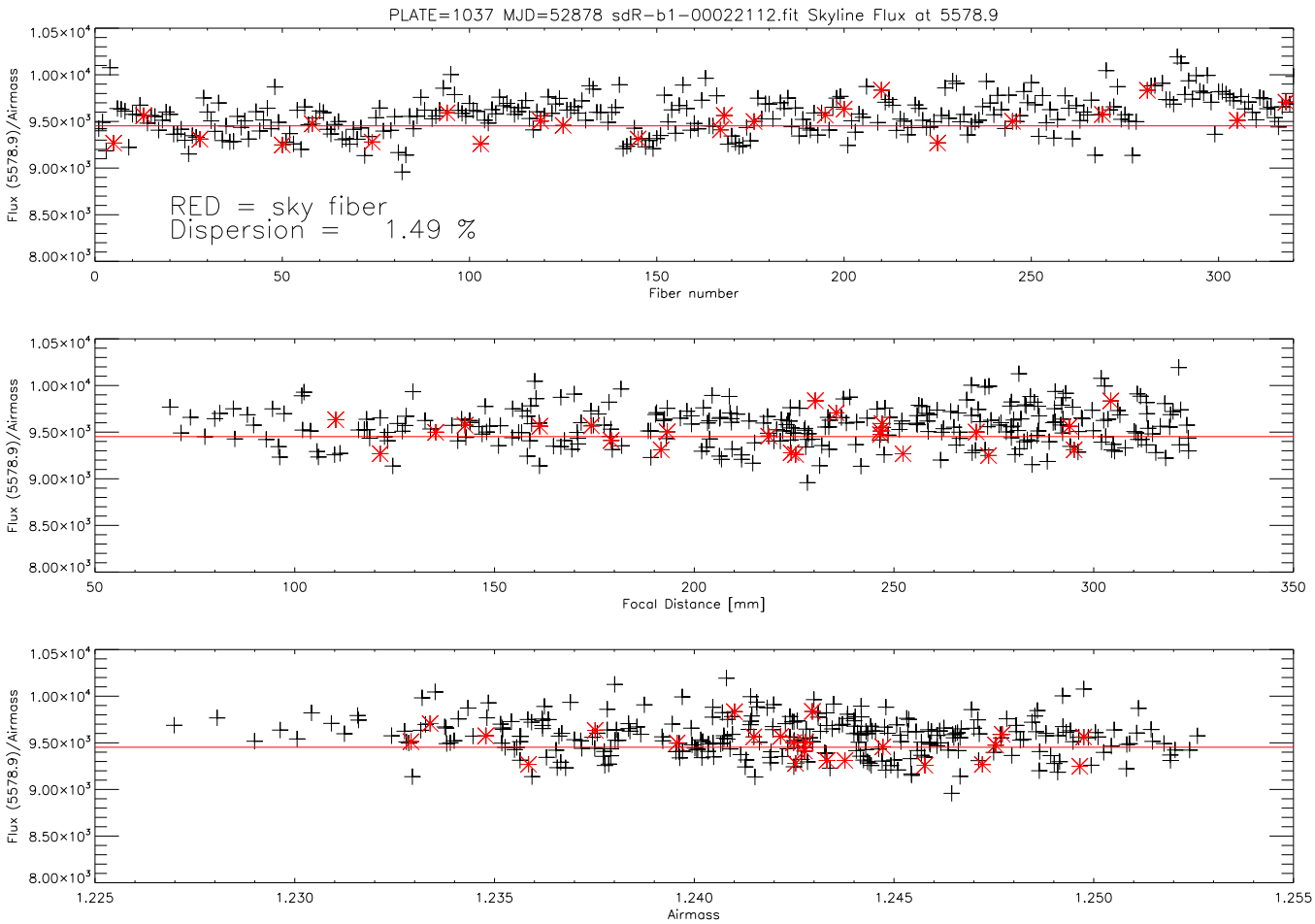

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

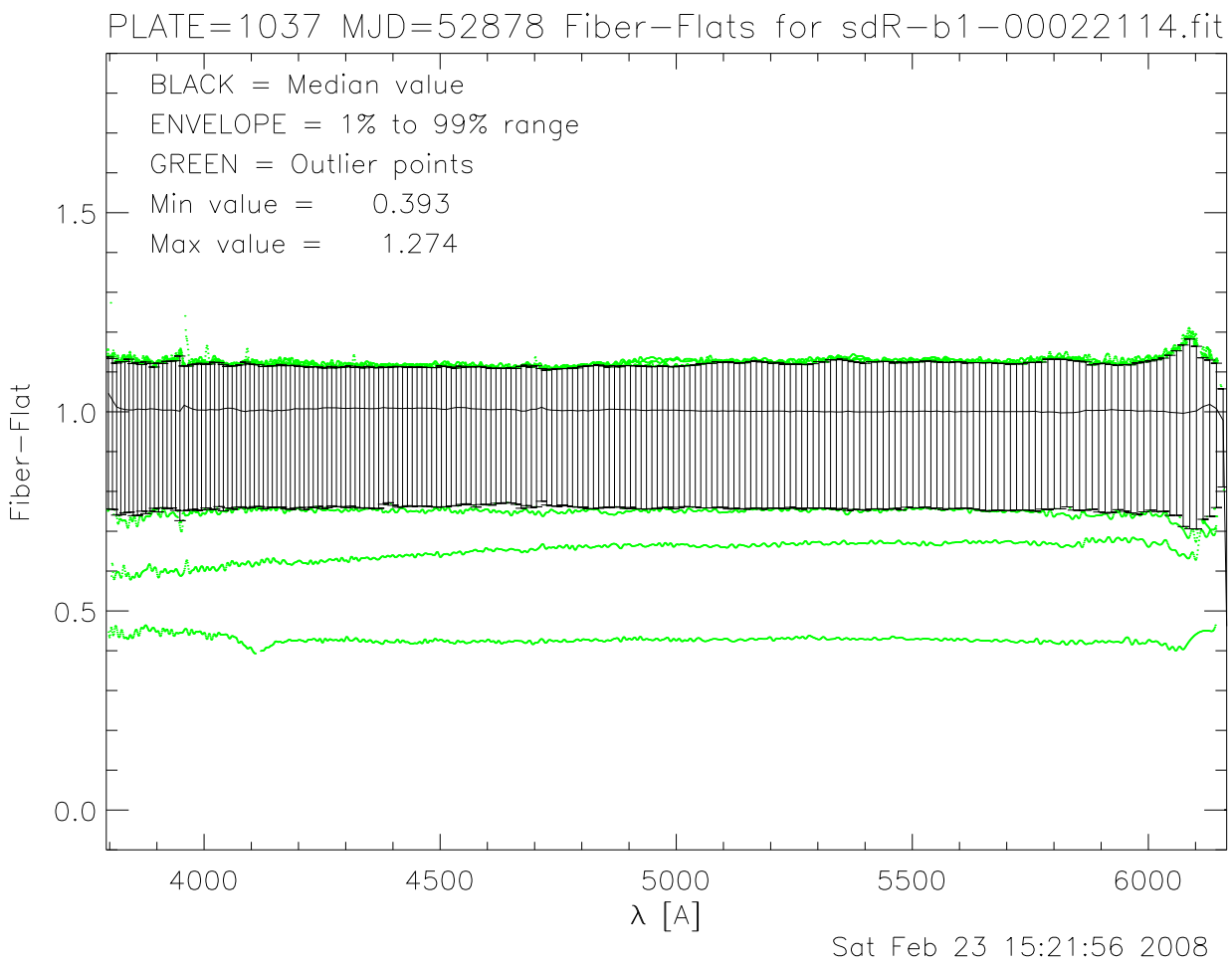

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

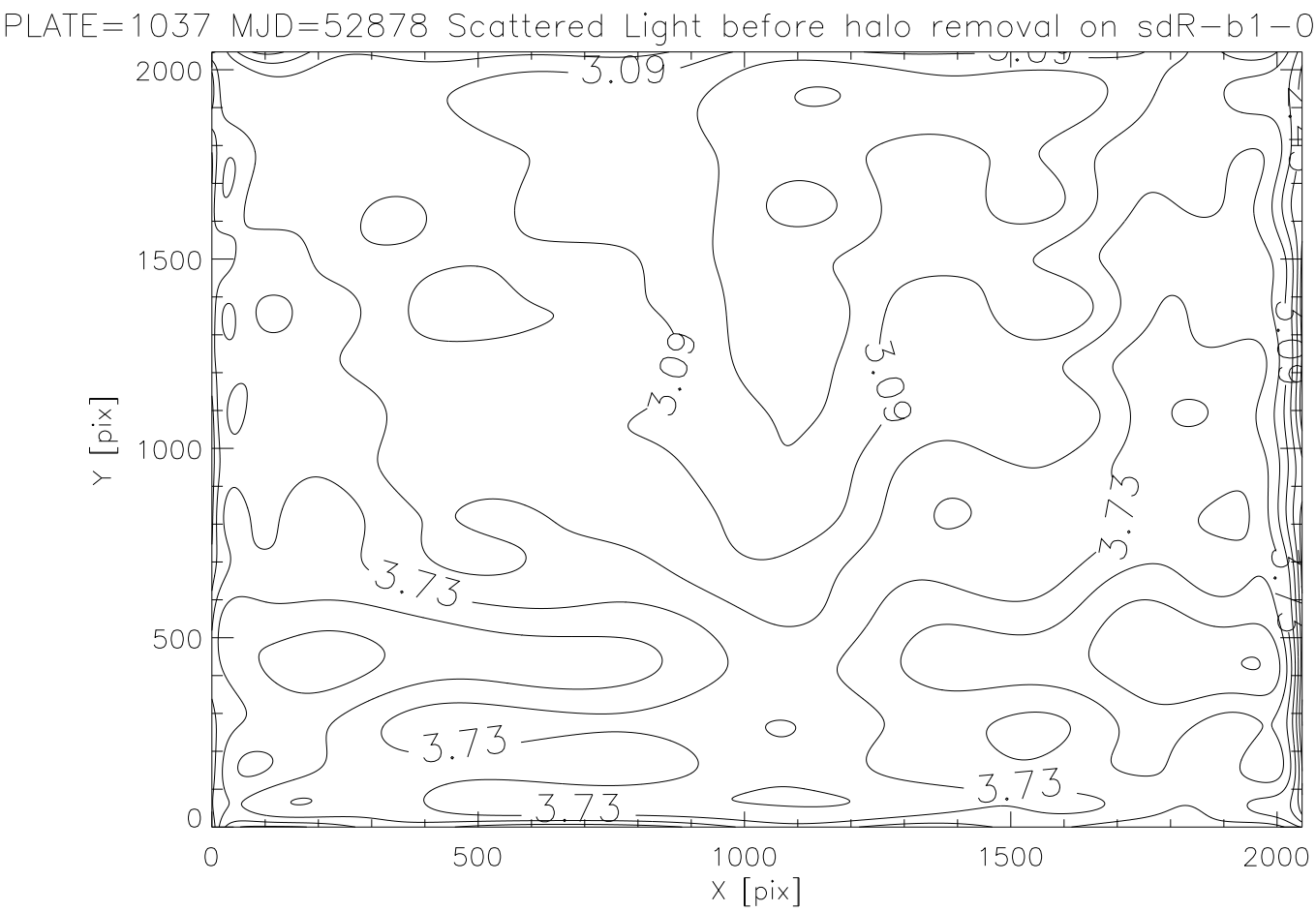

PLATE=1037 MJD=52878 sdR-b1-00022112.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

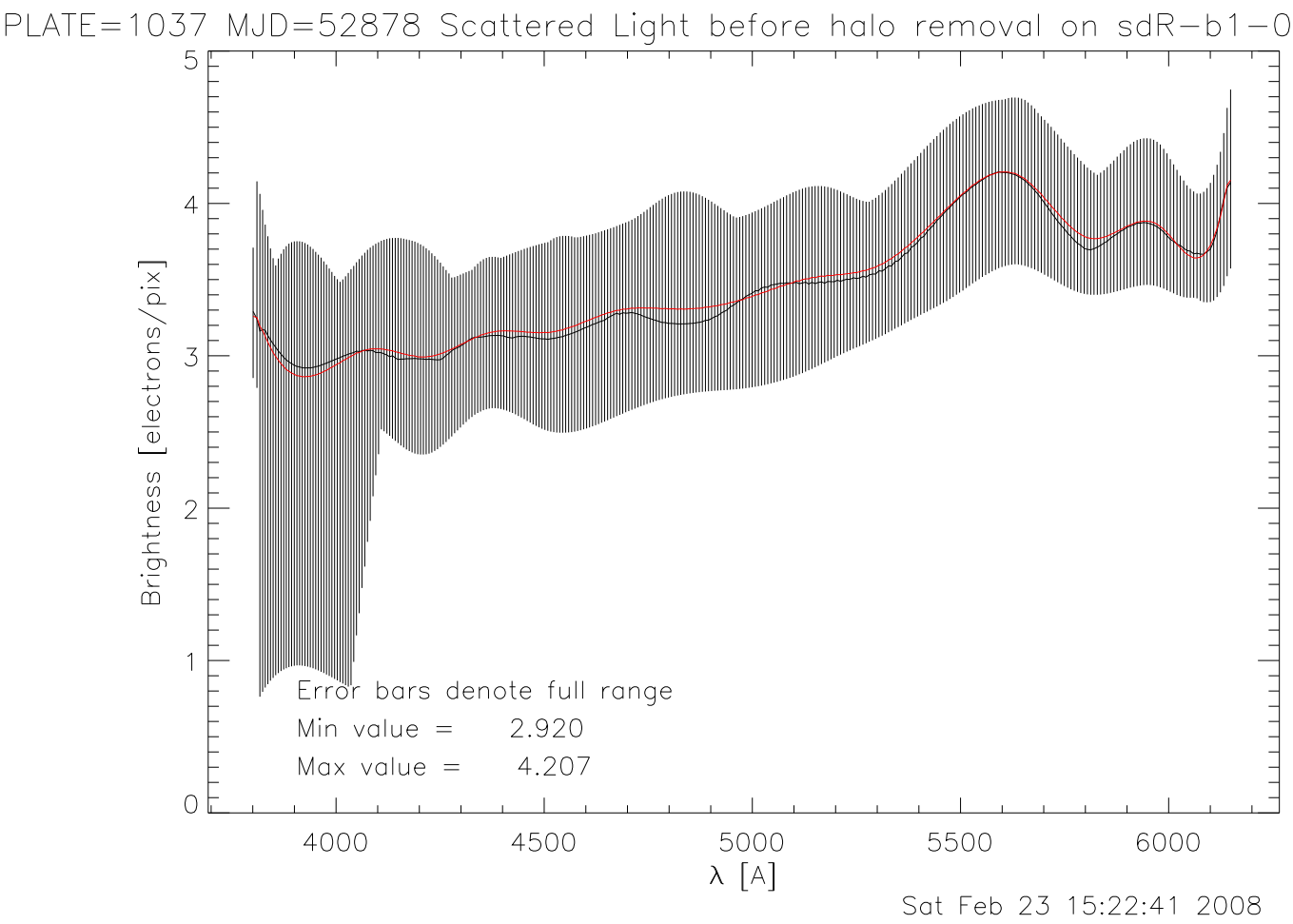

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022112.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

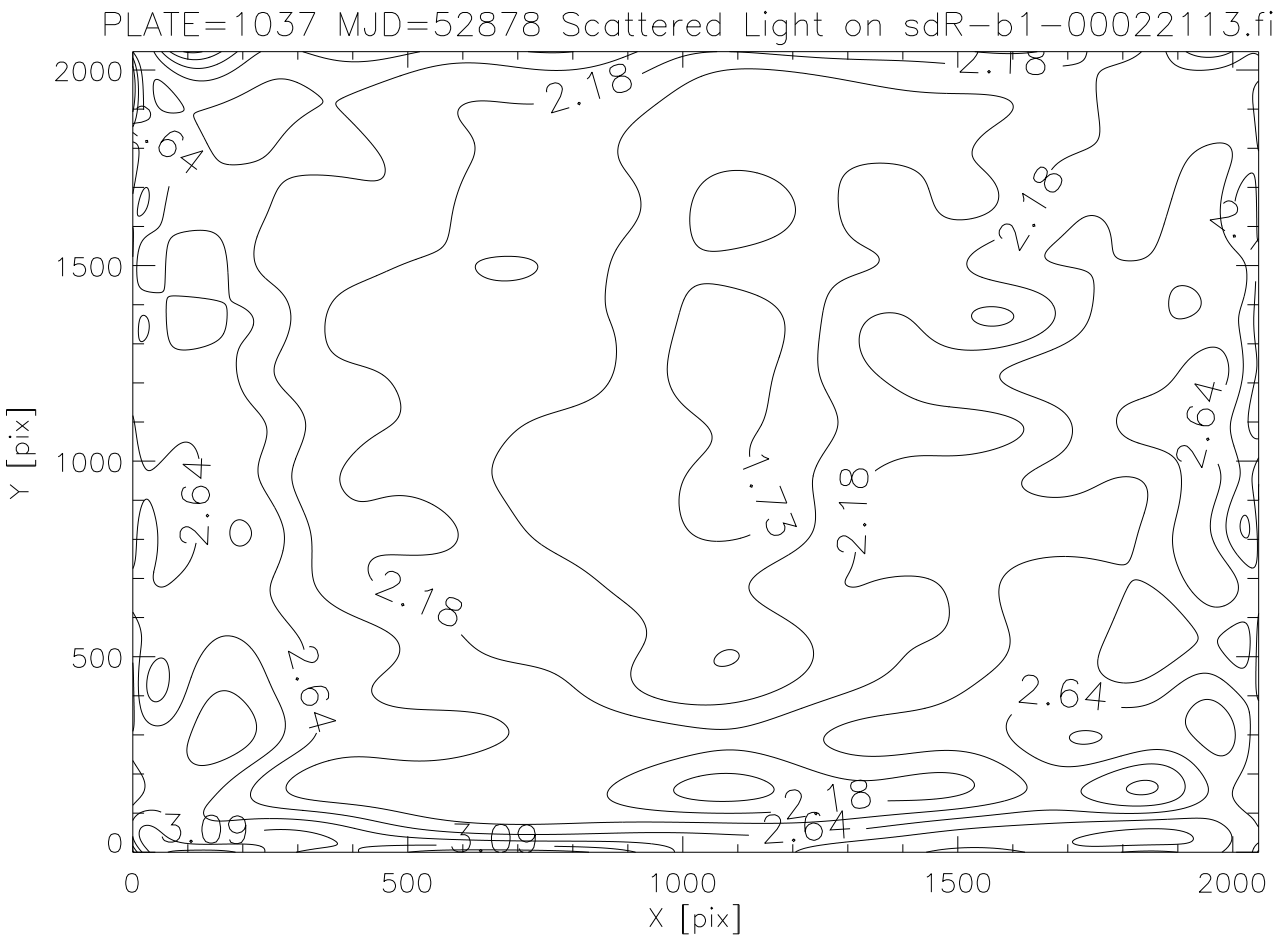

PLATE=1037 MJD=52878 sdR-b1-00022112.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.52 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

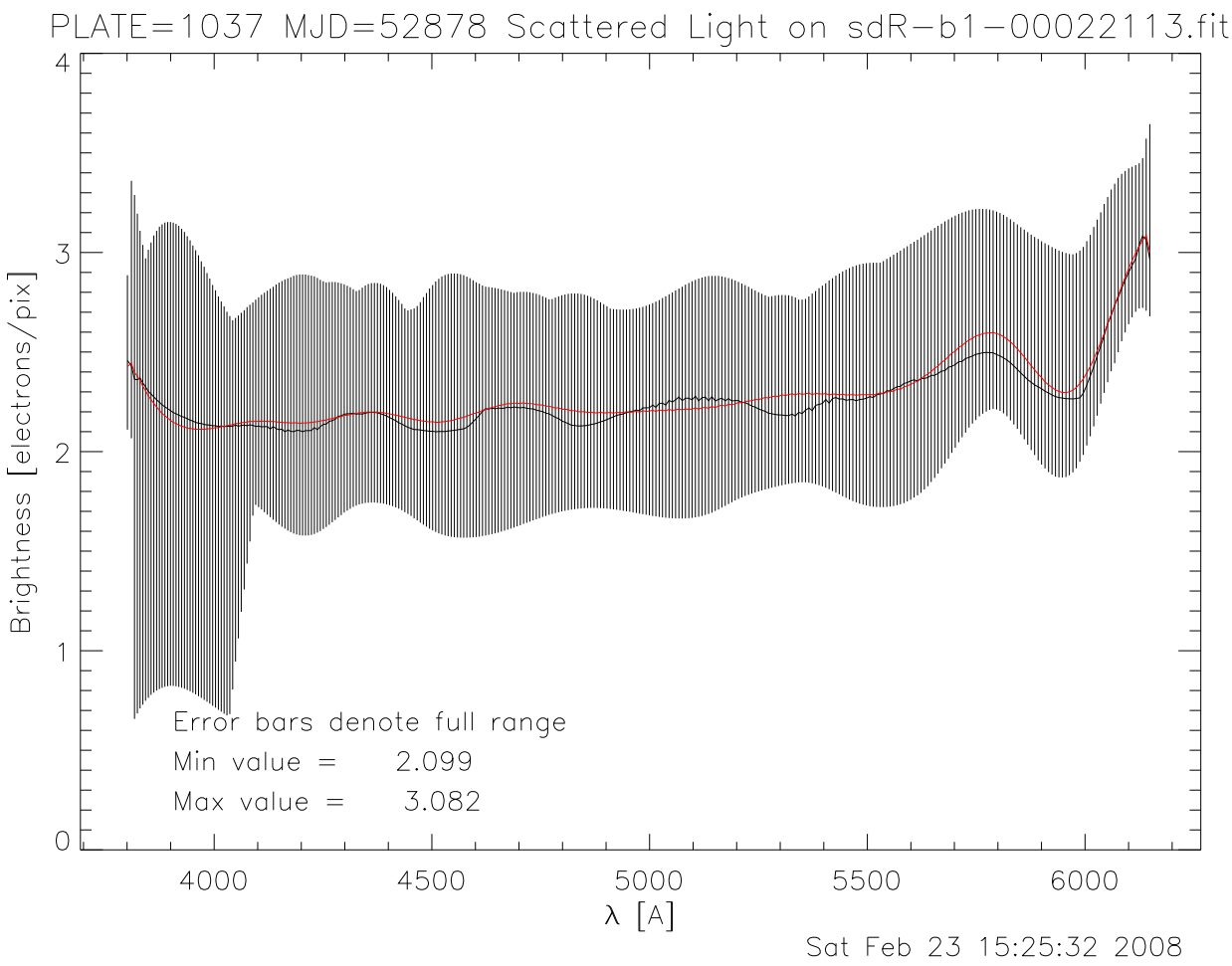

PLATE=1037 MJD=52878 sdR-b1-00022112.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.49 %
Fiber number
Focal Distance [mm]
Airmass

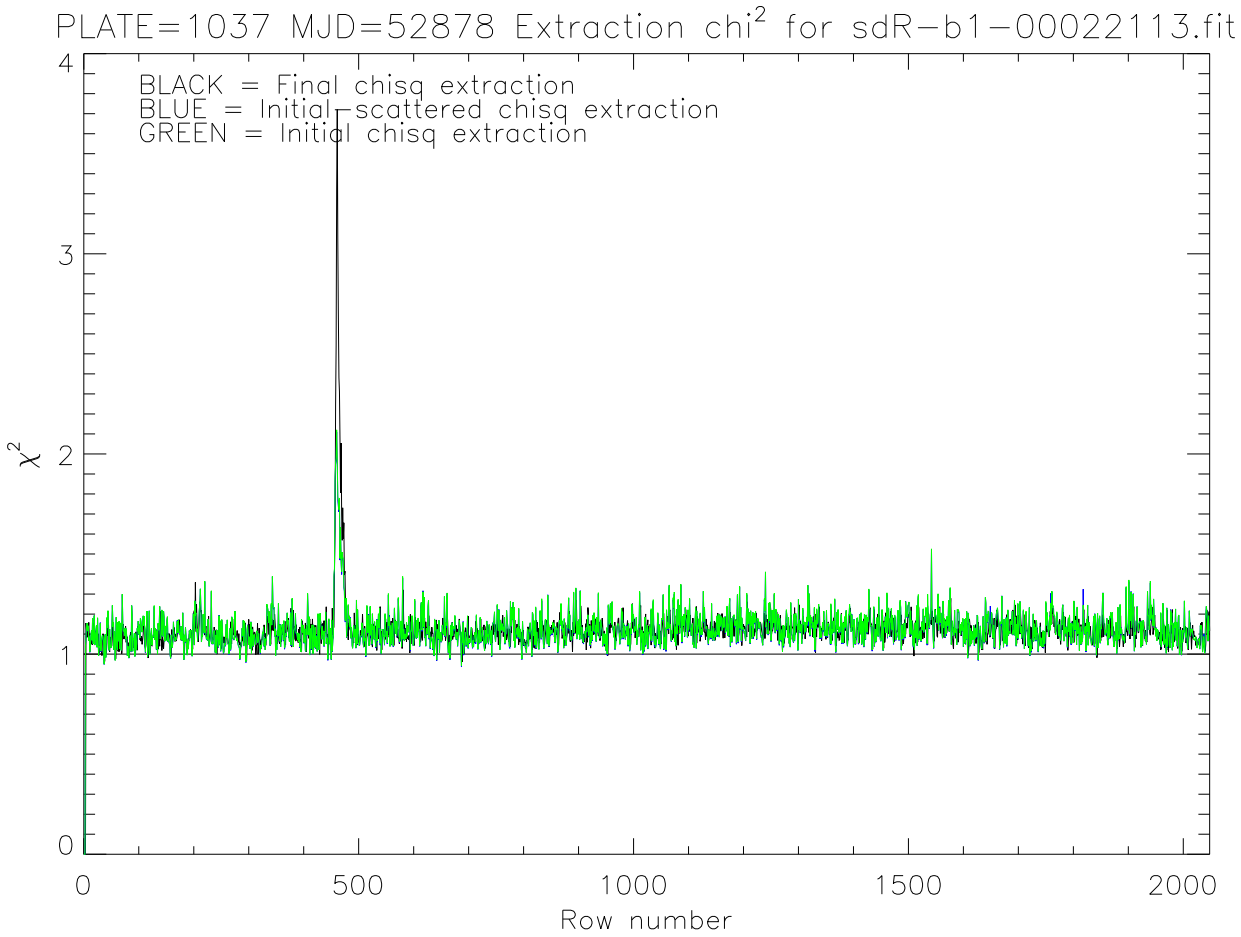

PLATE=1037 MJD=52878 Fiber-Flats for sdR-b1-00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.393
Max value = 1.274
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:21:56 2008

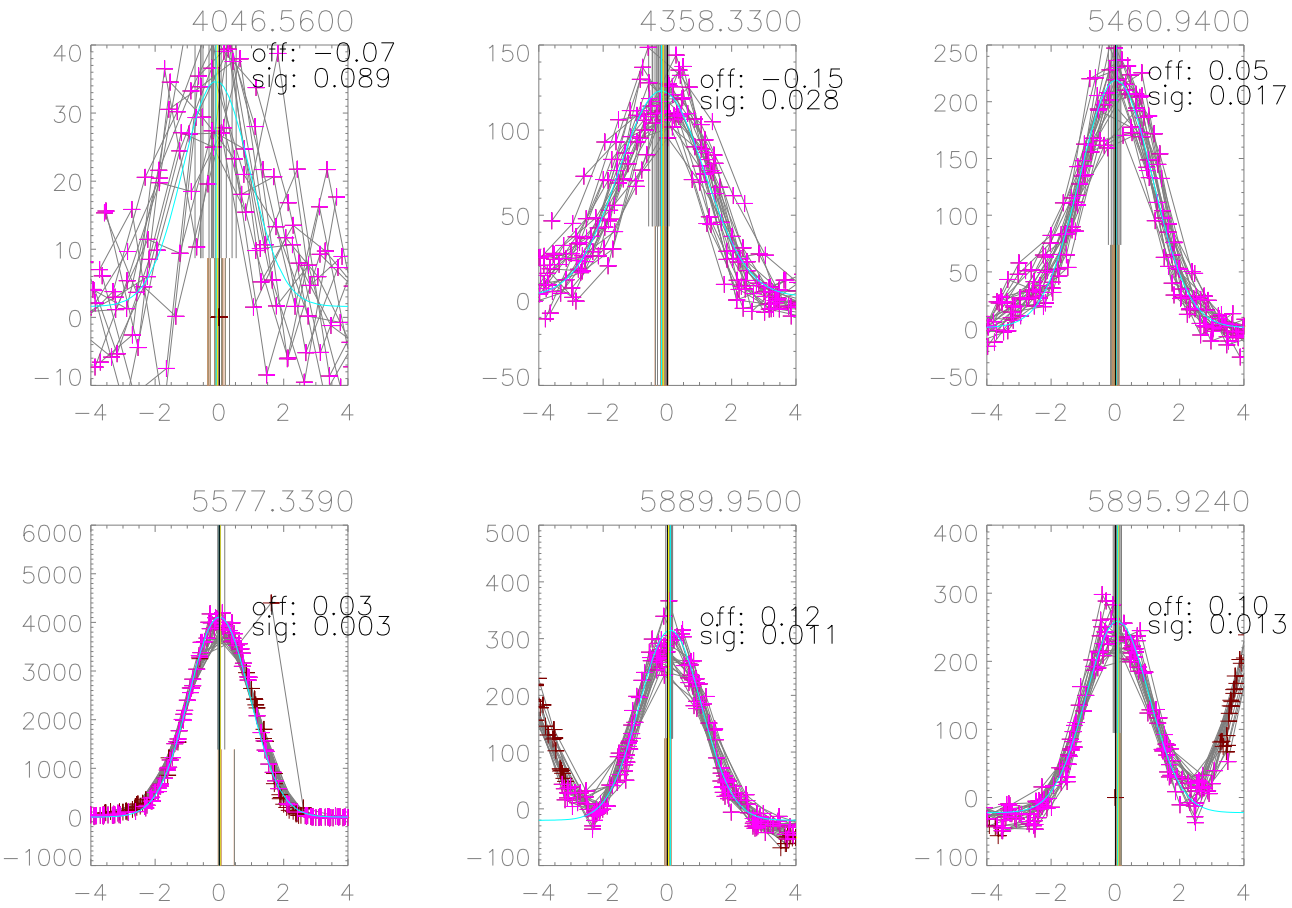

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR−b1−00022113.f
3.09
3.09
3.09
3.73
3.73
3.73
3.73
3.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

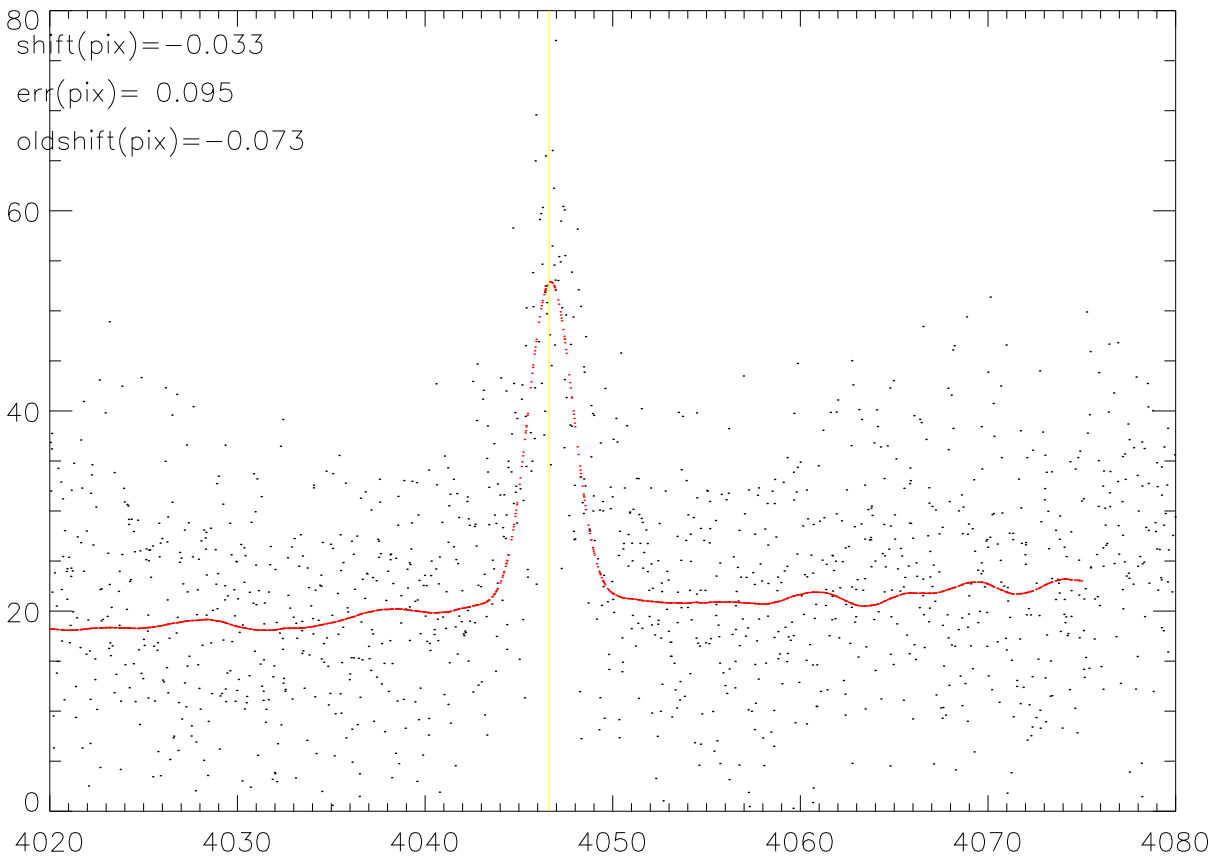

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b1-00022113.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.920
Max value = 4.207
Sat Feb 23 15:22:41 2008

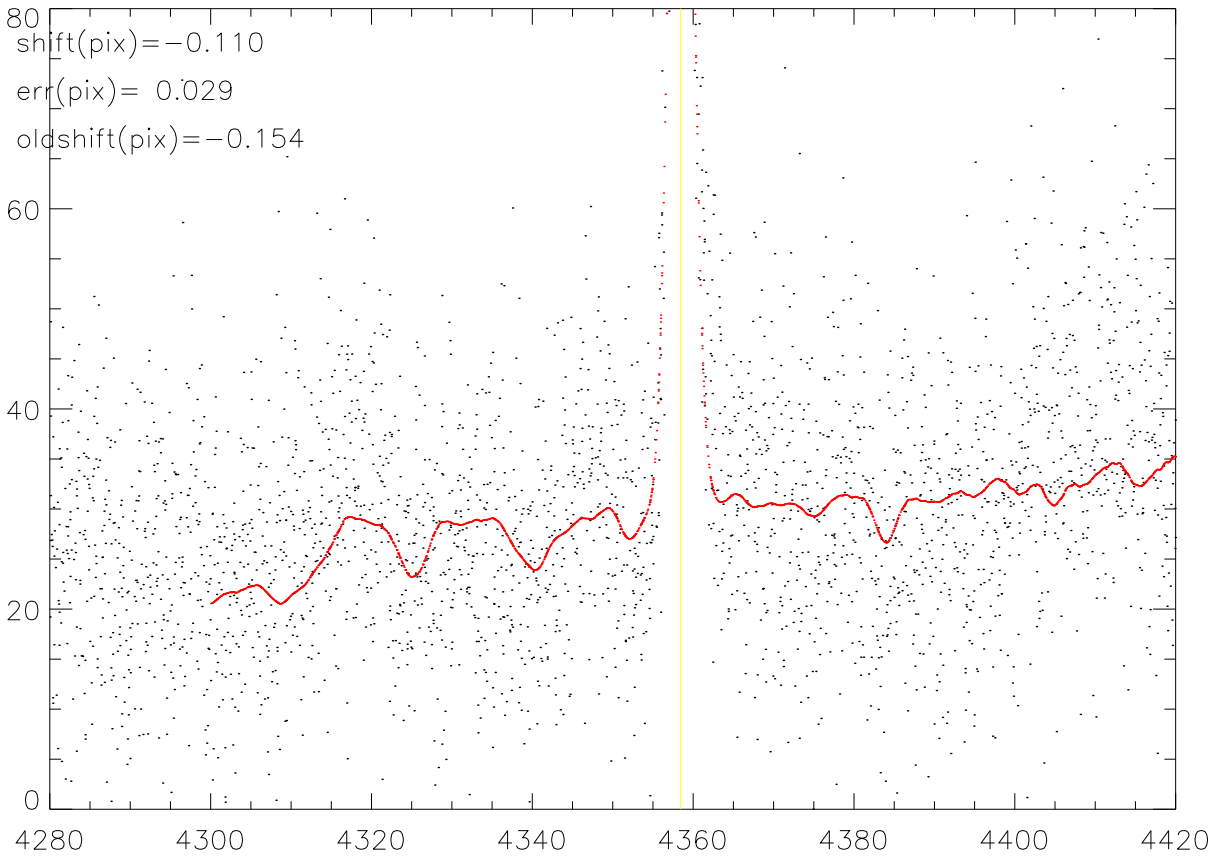

PLATE=1037 MJD=52878 Scattered Light on sdR−b1−00022113.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
2.18
2.64
1.73
3.09

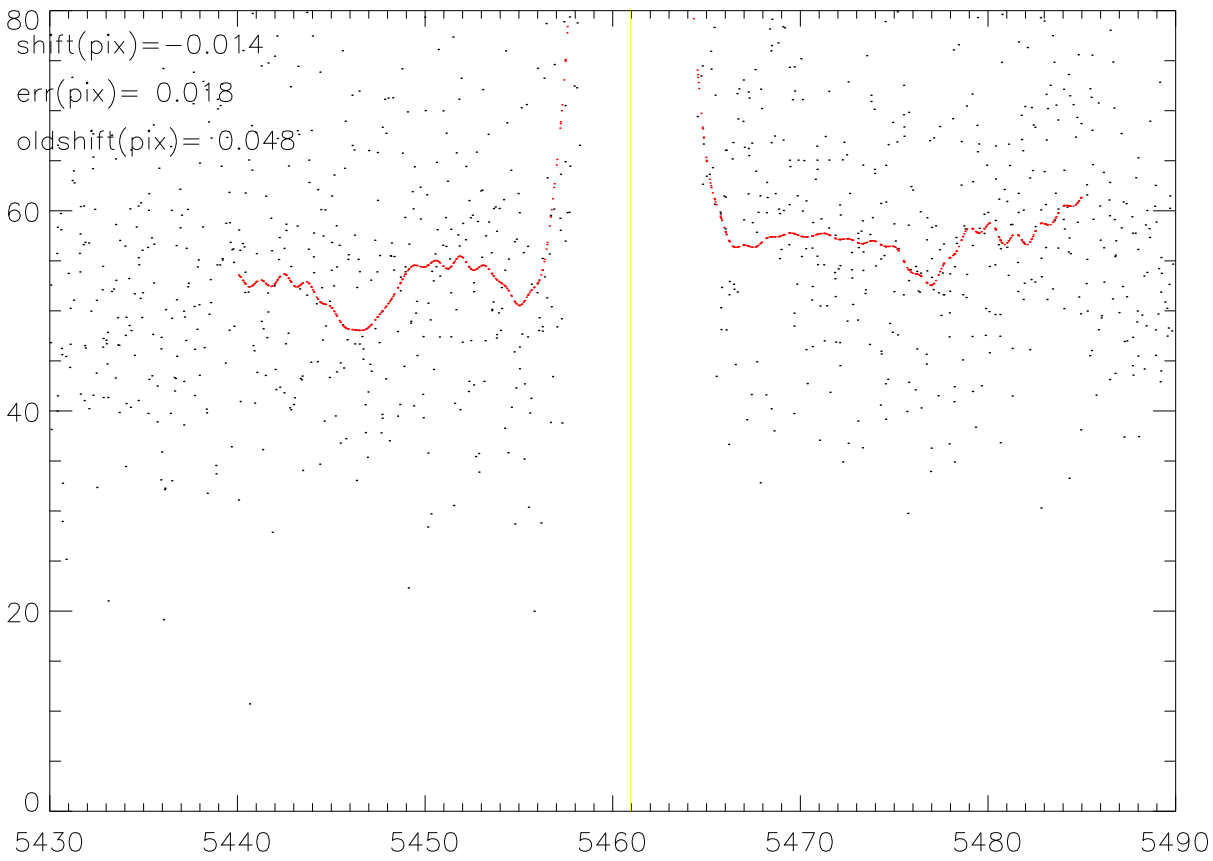

PLATE=1037 MJD=52878 Scattered Light on sdR-b1-00022113.fit
Brightness [electrons/pix]
0
1
2
3
4
Error bars denote full range
Min value = 2.099
Max value = 3.082
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:25:32 2008

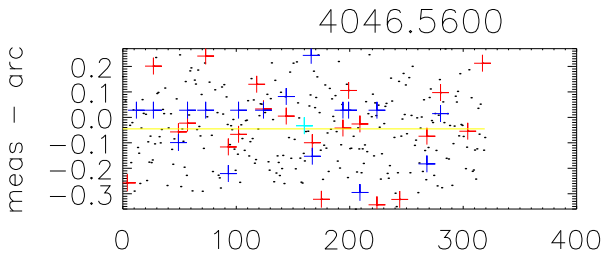

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b1-00022113.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

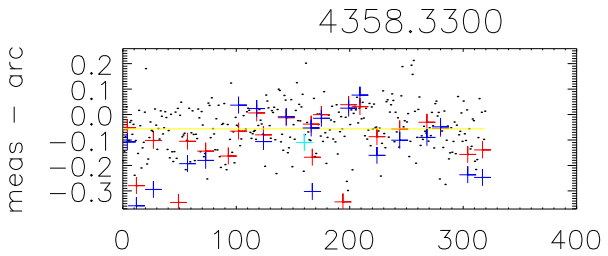

4046.5600
off: −0.07
sig: 0.089
4358.3300
off: −0.15
sig: 0.028
5460.9400
off: 0.05
sig: 0.017
5577.3390
off: 0.03
sig: 0.003
5889.9500
off: 0.12
sig: 0.011
5895.9240
off: 0.10
sig: 0.013

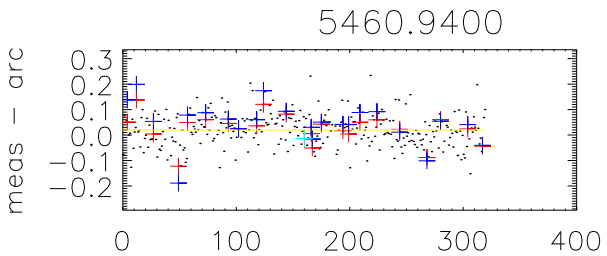

shift(pix)=−0.033
err(pix)= 0.095
oldshift(pix)=−0.073
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

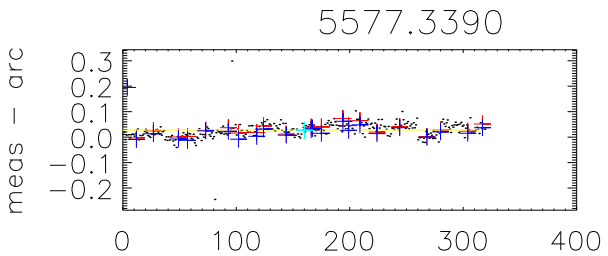

shift(pix)=−0.110
err(pix)= 0.029
oldshift(pix)=−0.154
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

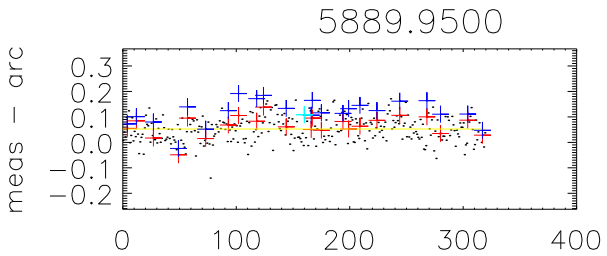

shift(pix)=−0.014
err(pix)= 0.018
oldshift(pix)= 0.048
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

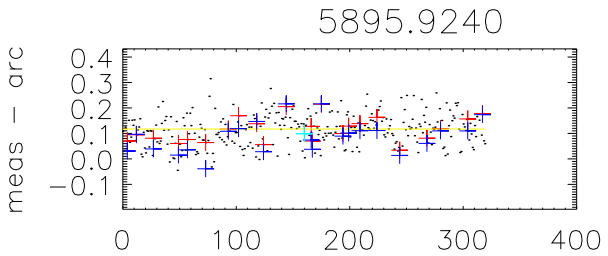

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

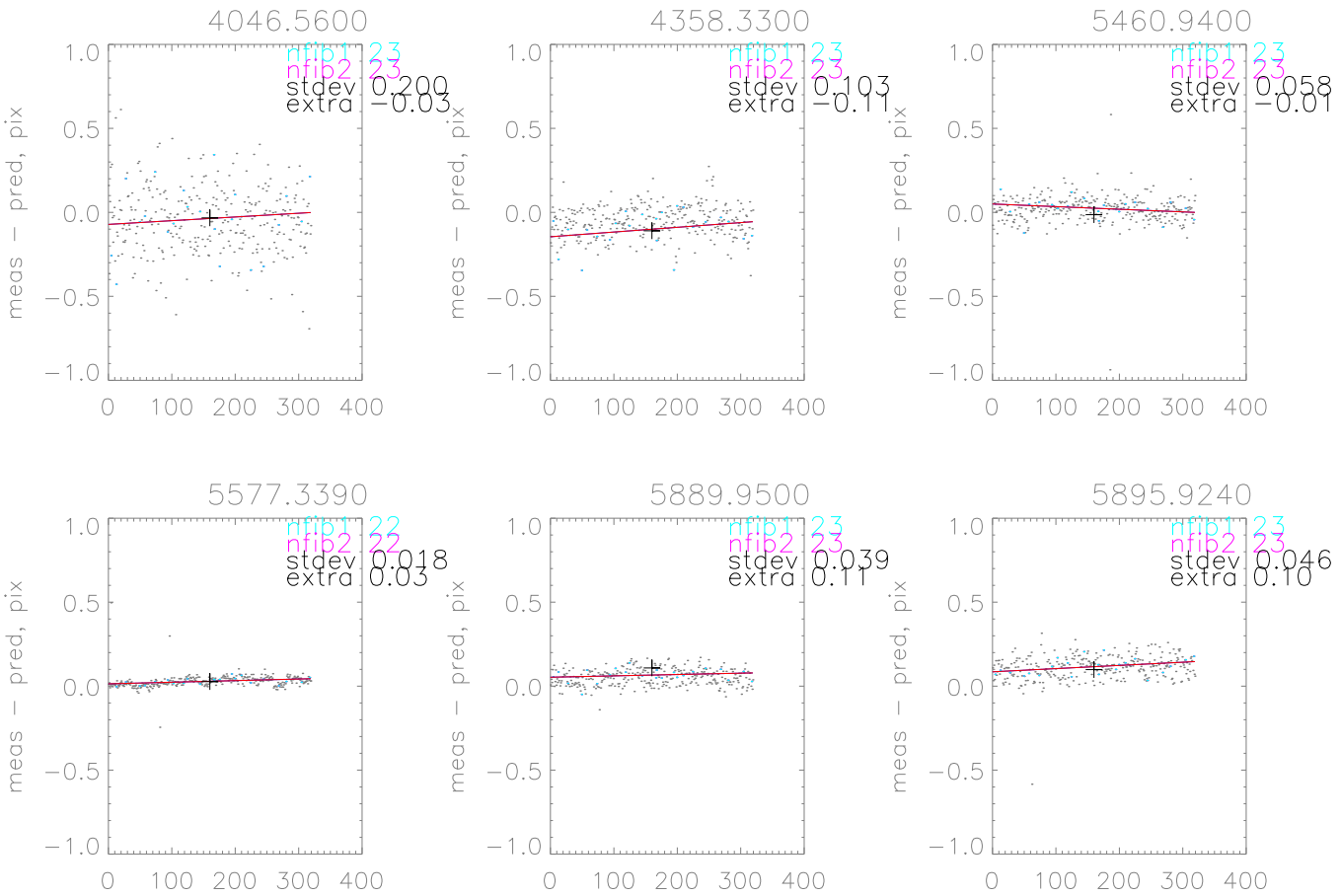

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

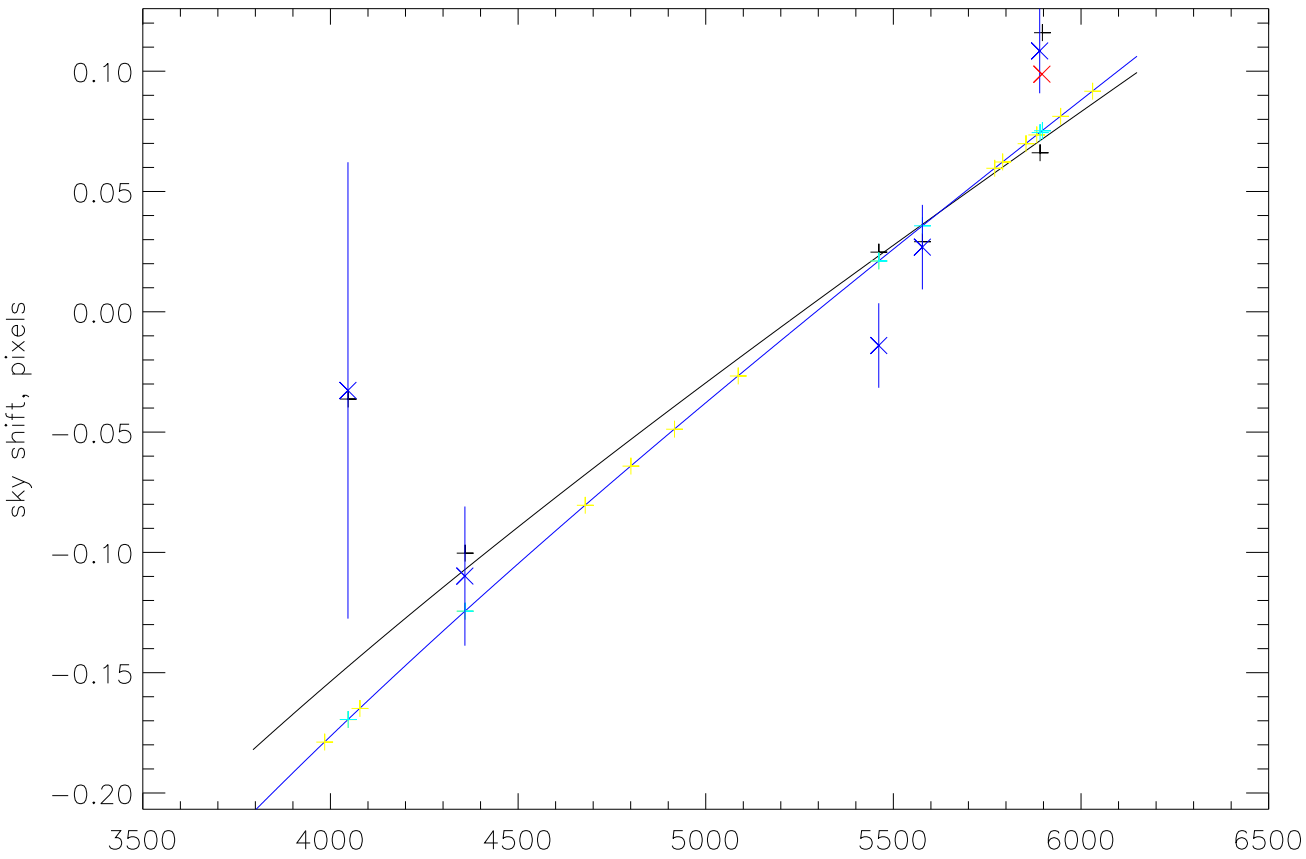

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

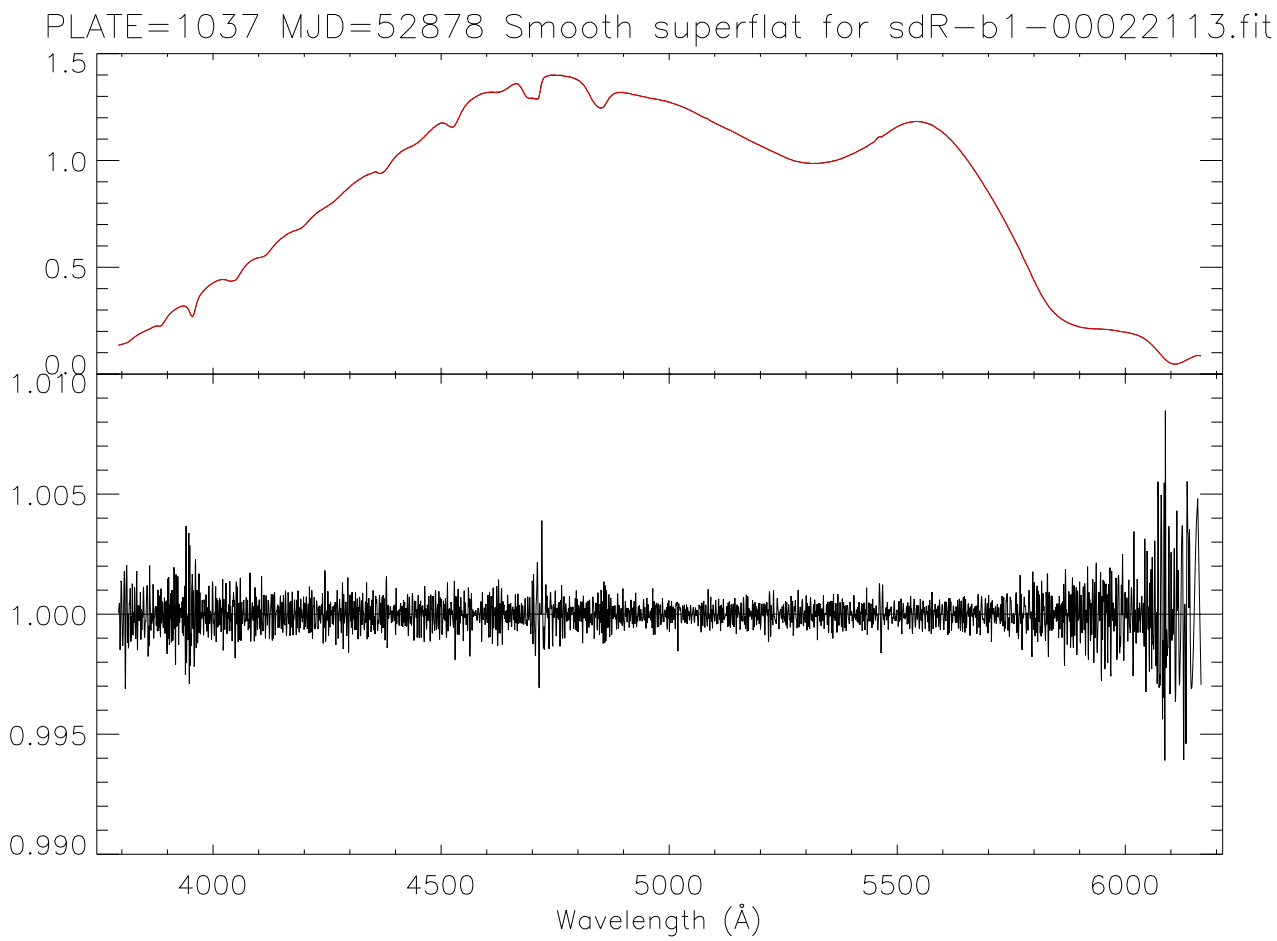

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

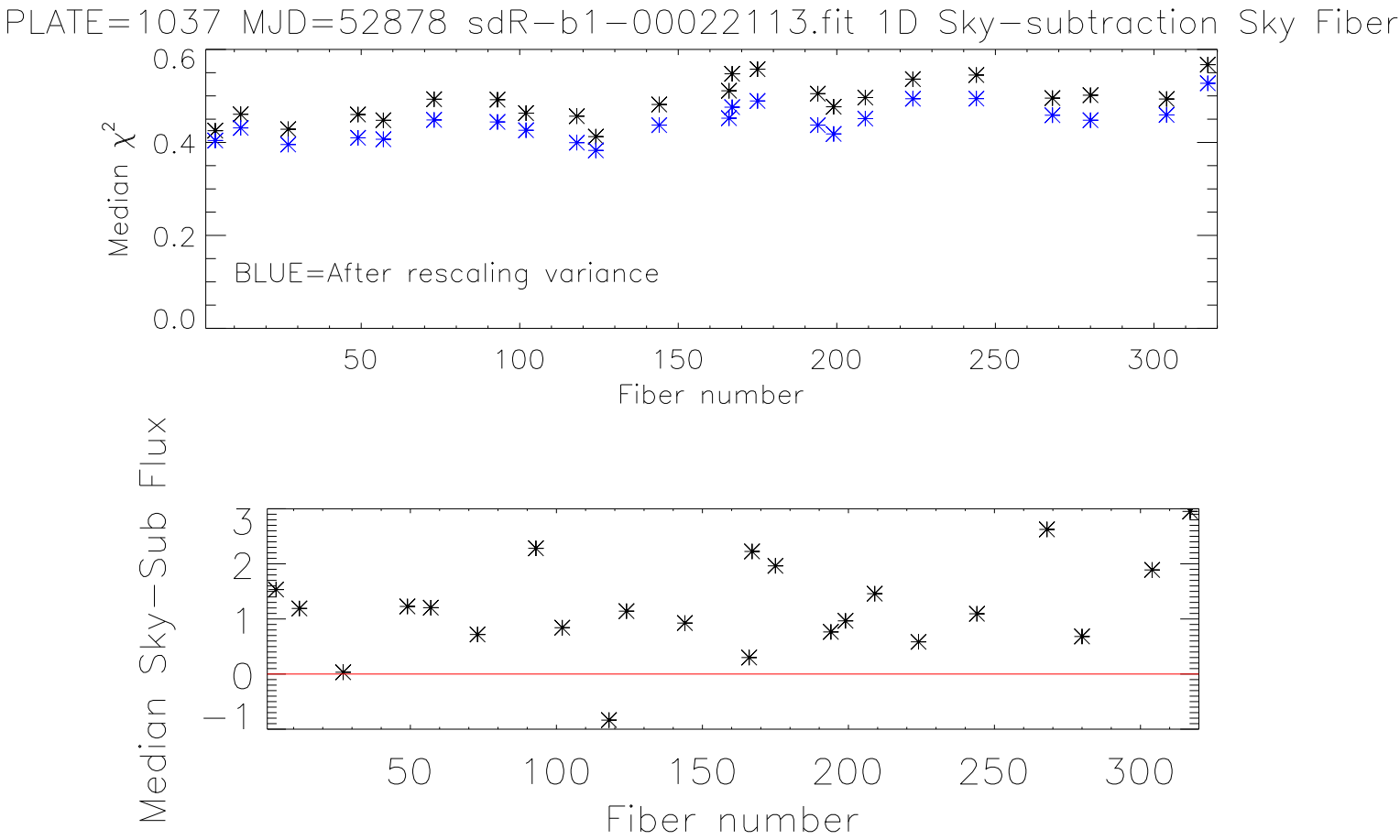

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

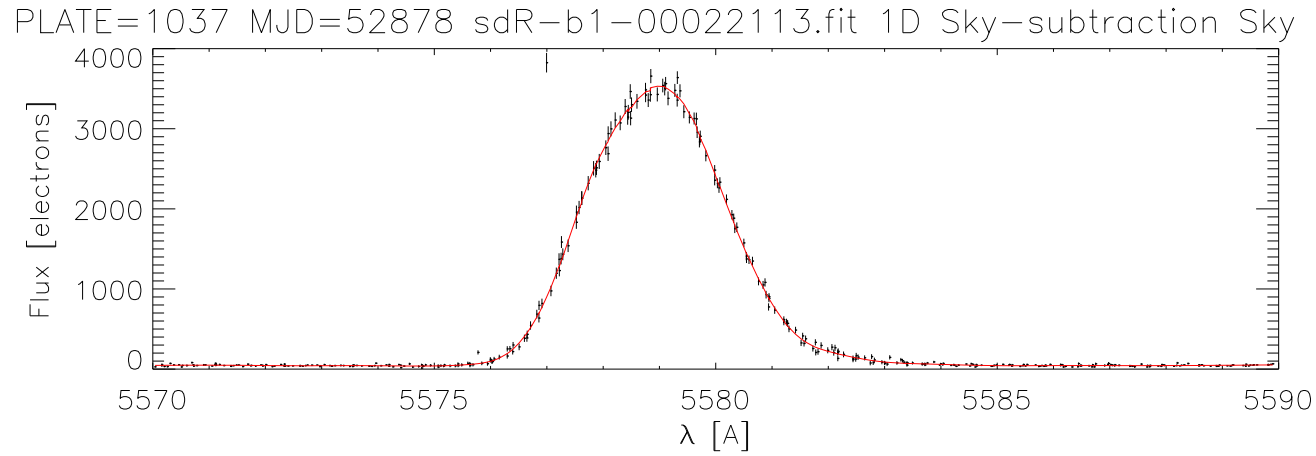

4046.5600
nfib1 23
nfib2 23
stdev 0.200
extra −0.03
4358.3300
nfib1 23
nfib2 23
stdev 0.103
extra −0.11
5460.9400
nfib1 23
nfib2 23
stdev 0.058
extra −0.01
5577.3390
nfib1 22
nfib2 22
stdev 0.018
extra 0.03
5889.9500
nfib1 23
nfib2 23
stdev 0.039
extra 0.11
5895.9240
nfib1 23
nfib2 23
stdev 0.046
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

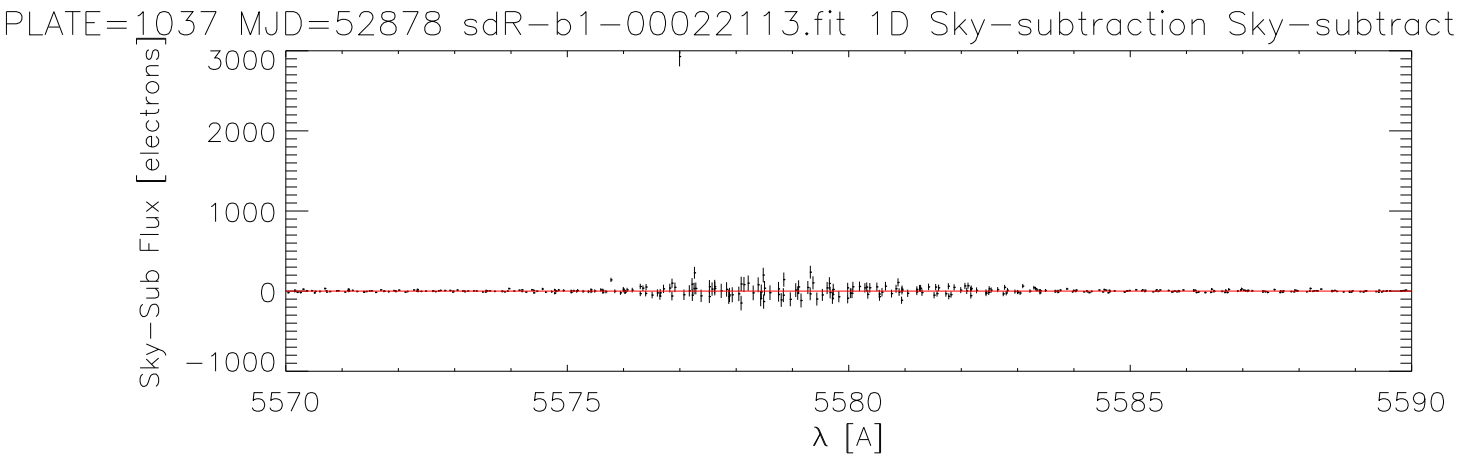

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
3500
4000
4500
5000
5500
6000
6500

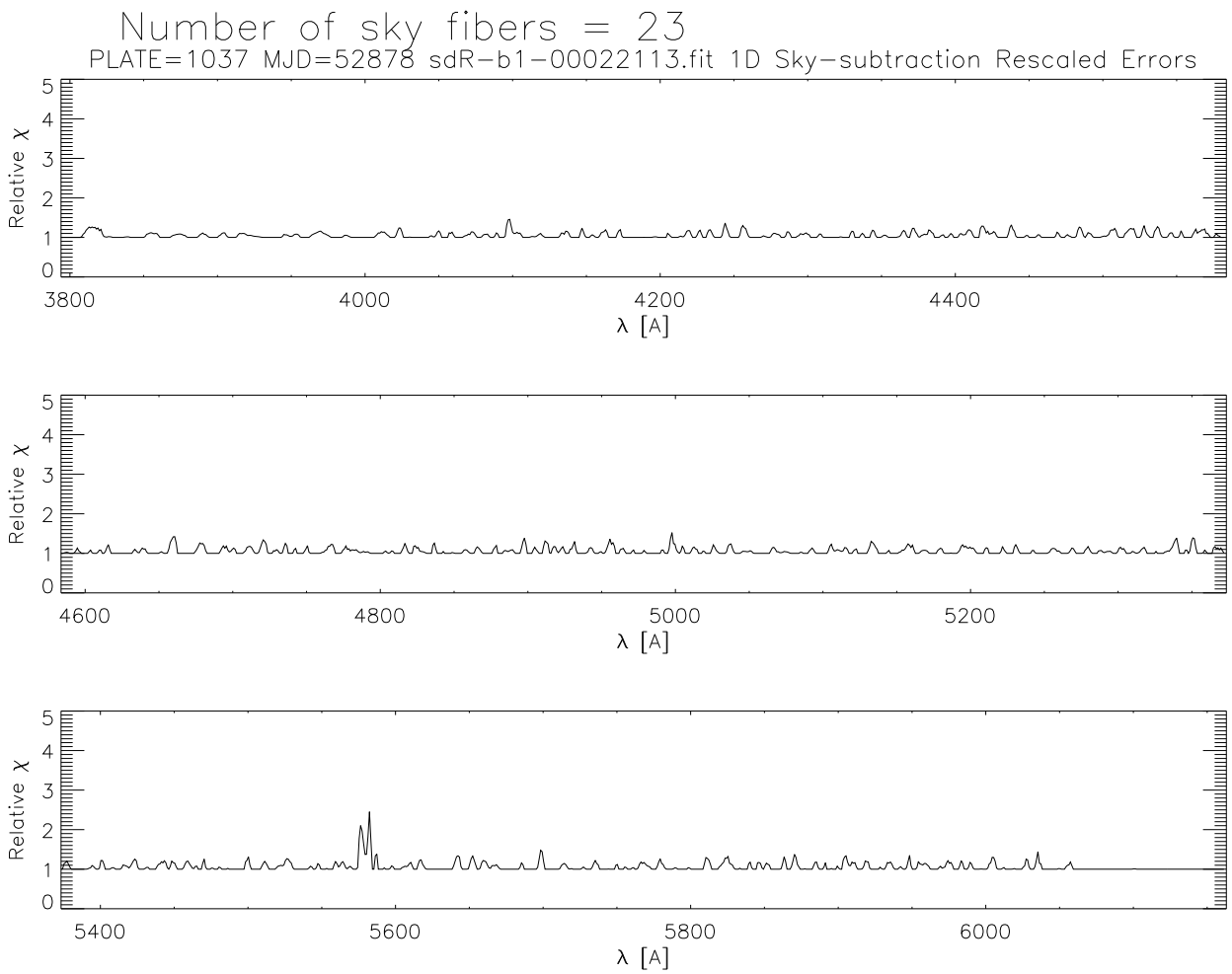
es= 0.0000

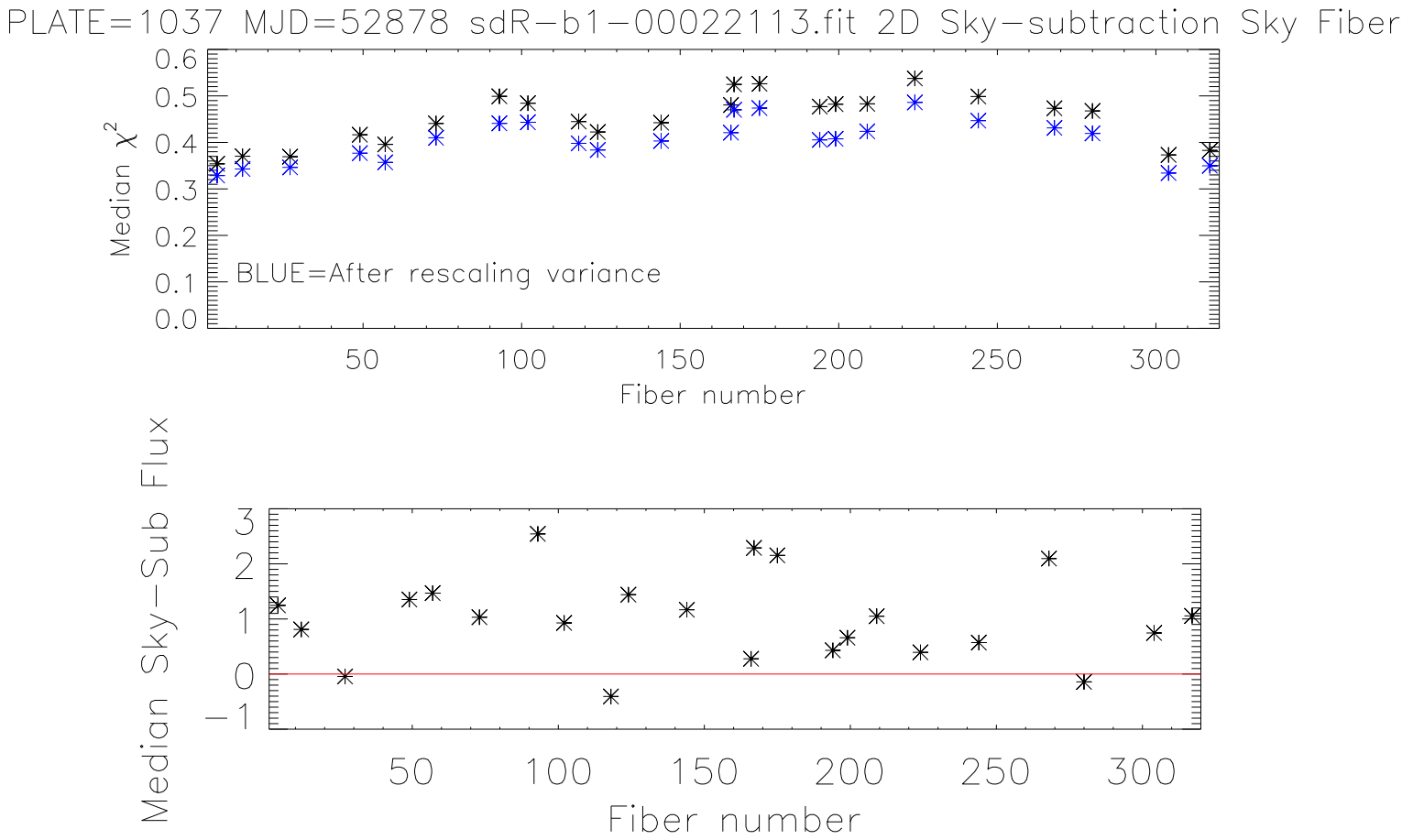

PLATE=1037 MJD=52878 Smooth superflat for sdR-b1-00022113.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

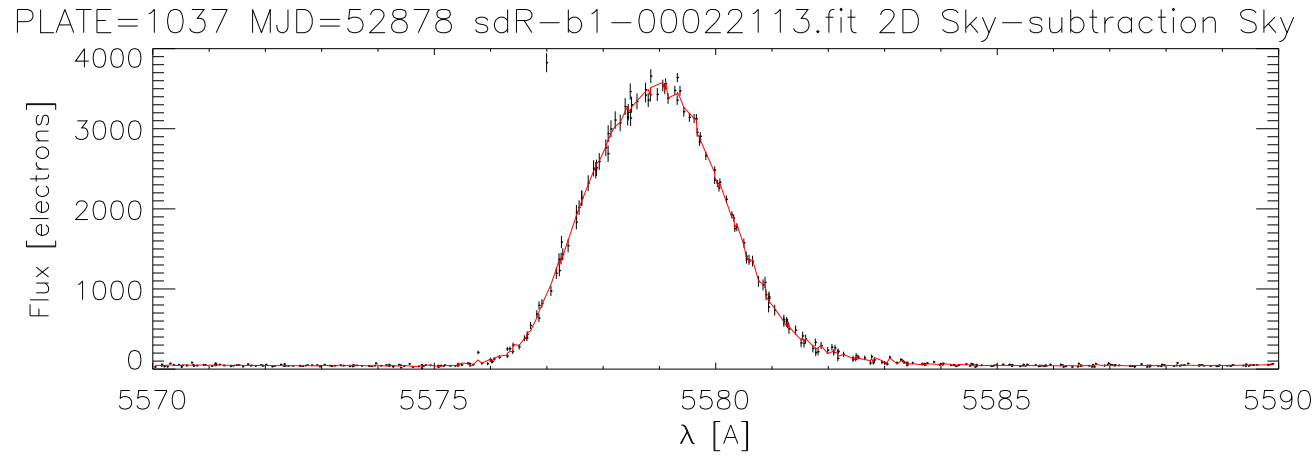

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

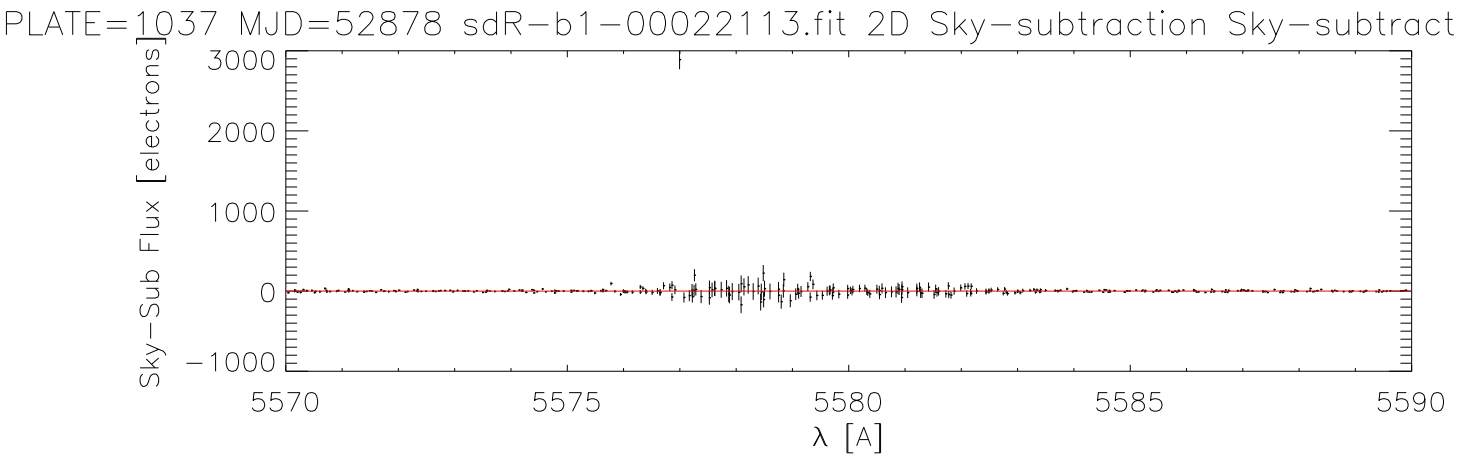

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

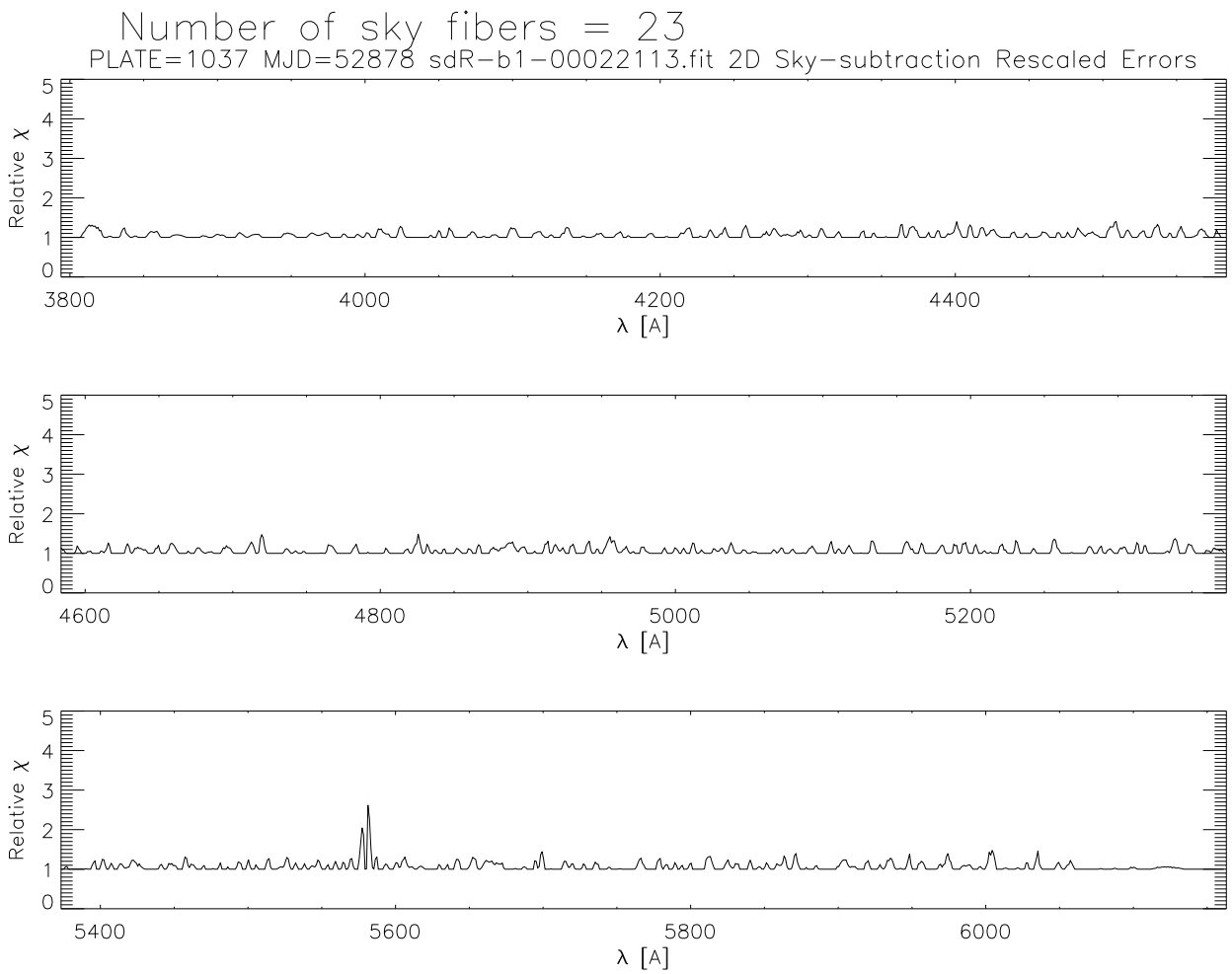

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

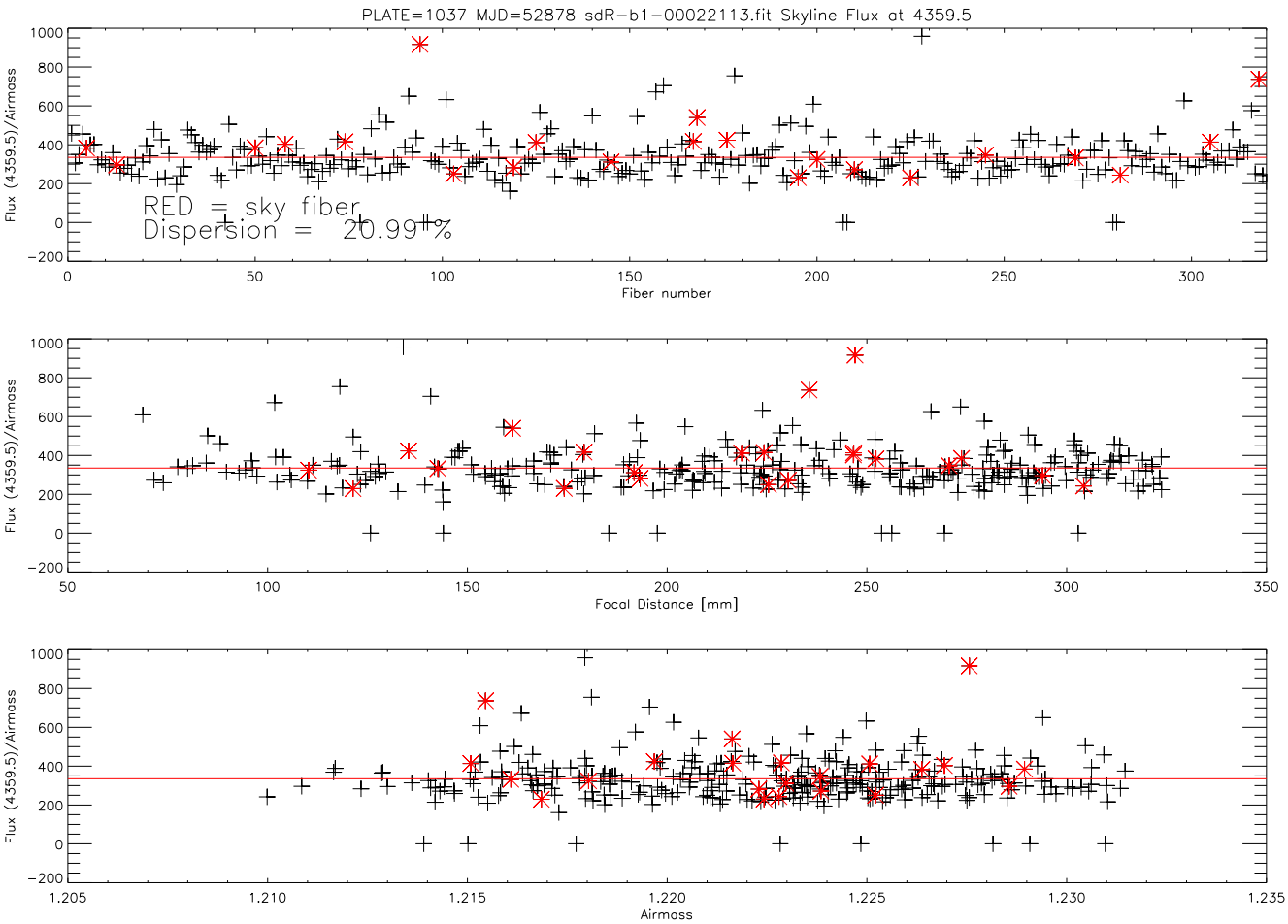

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022113.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

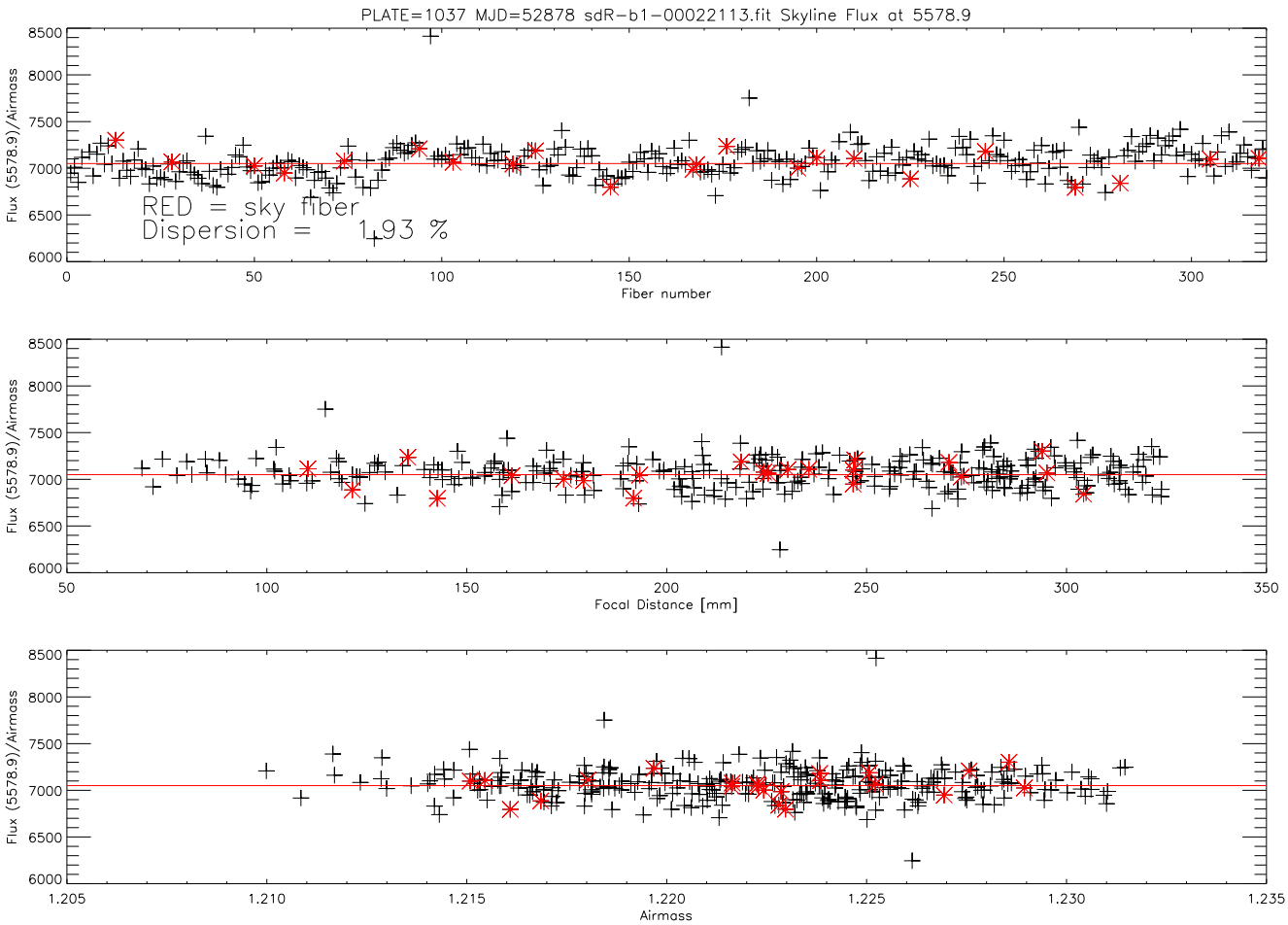

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

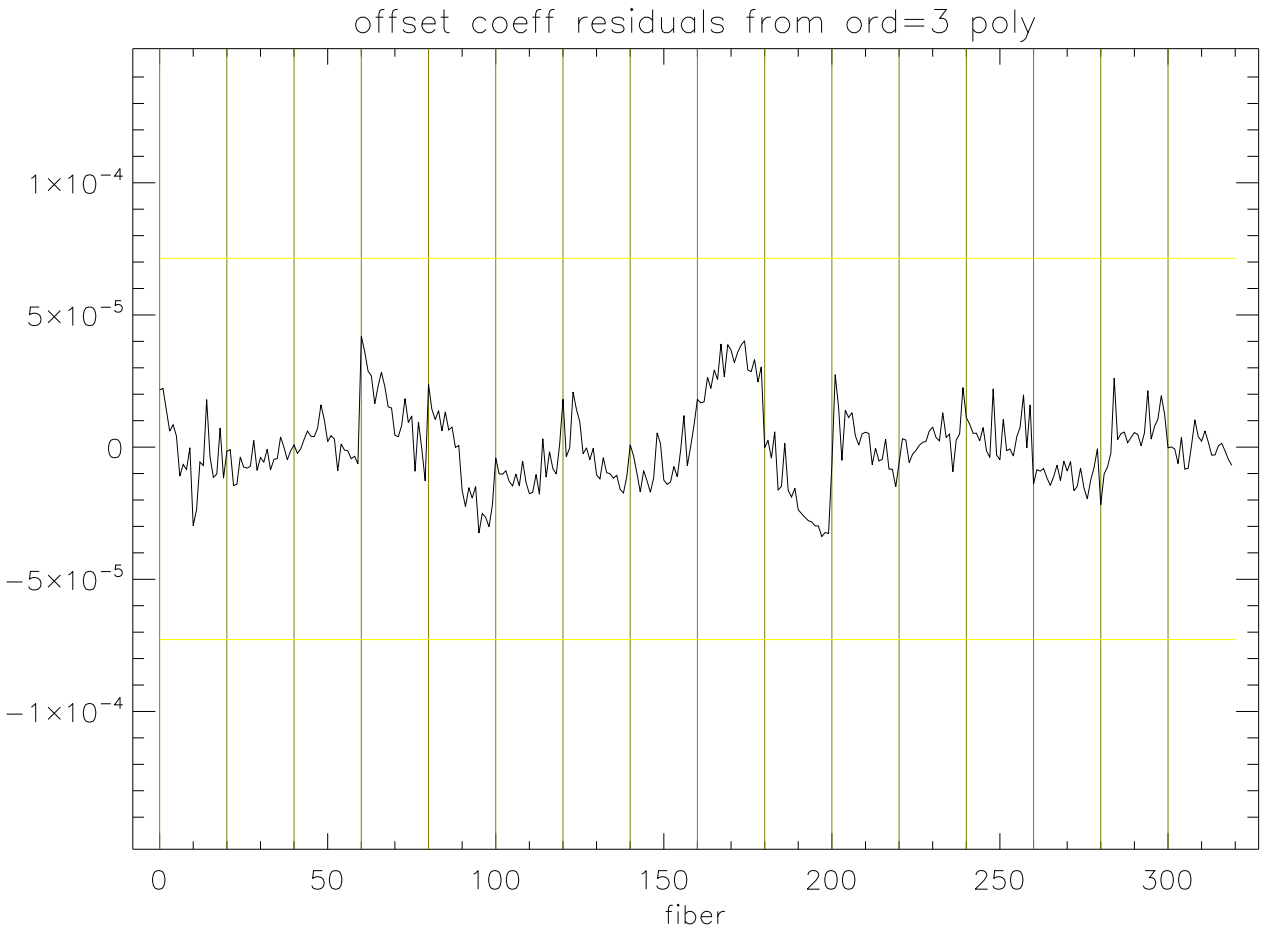

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

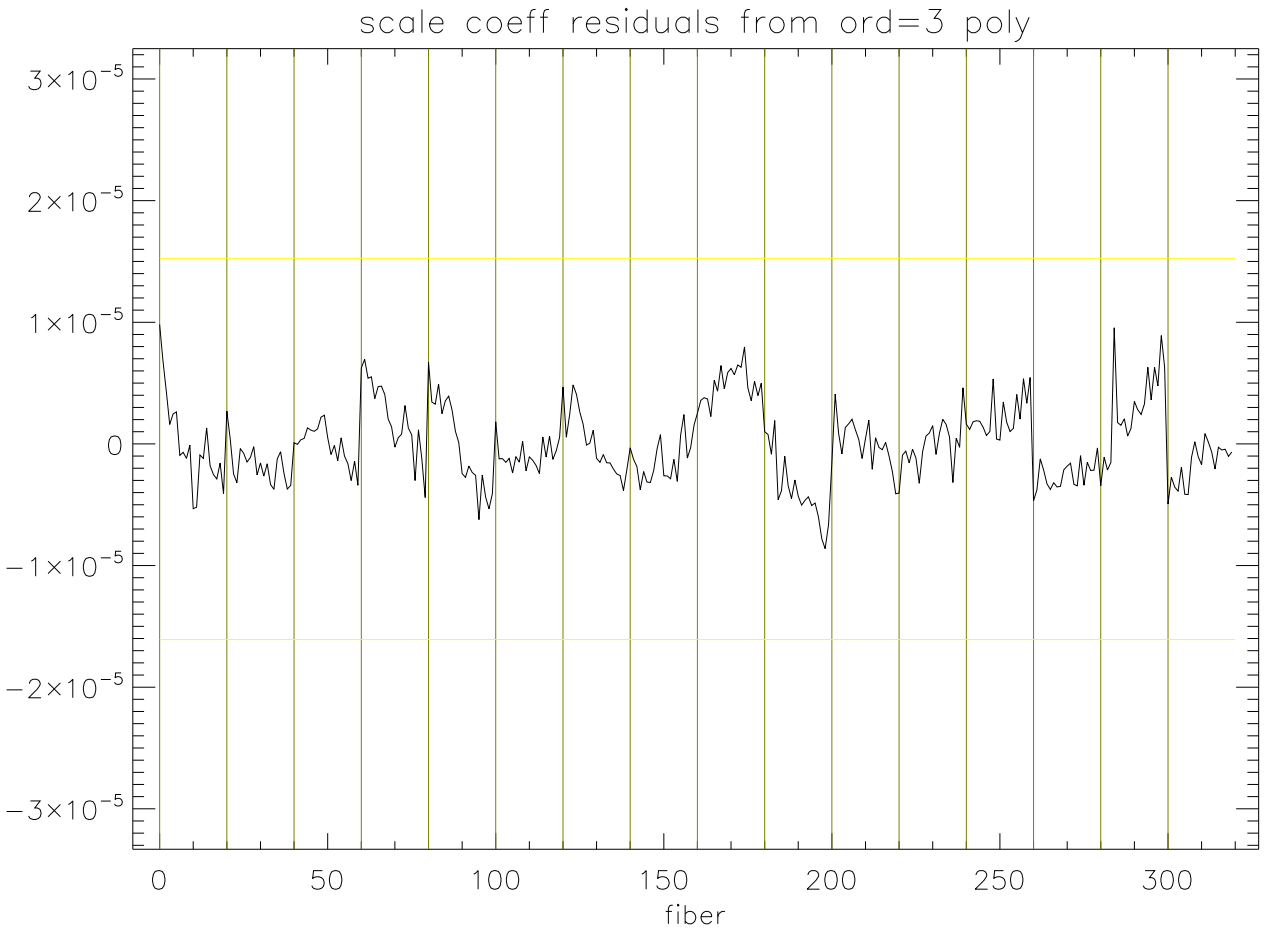

PLATE=1037 MJD=52878 sdR-b1-00022113.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

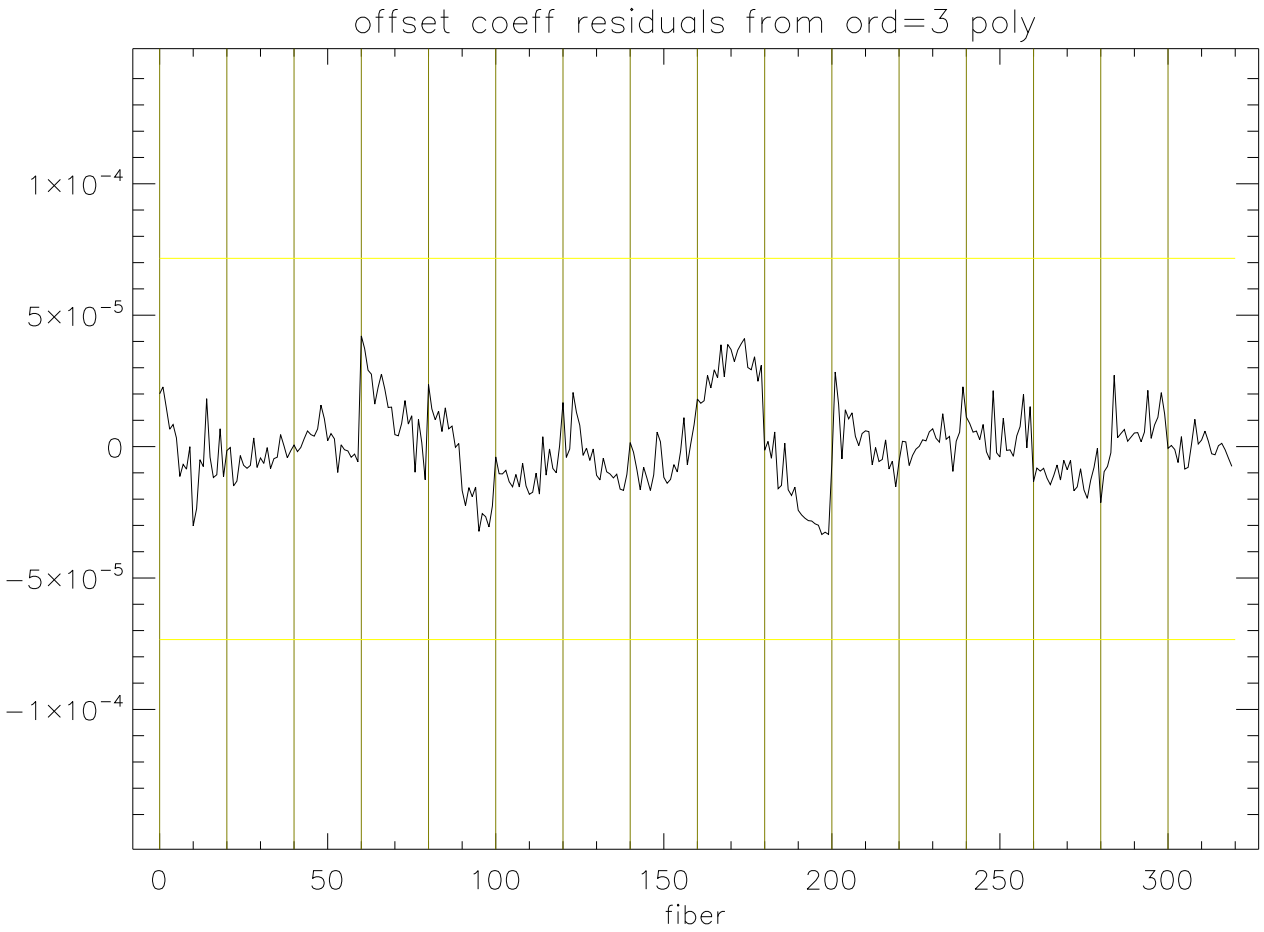

Number of sky fibers = 23
PLATE=1037 MJD=52878 sdR-b1-00022113.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

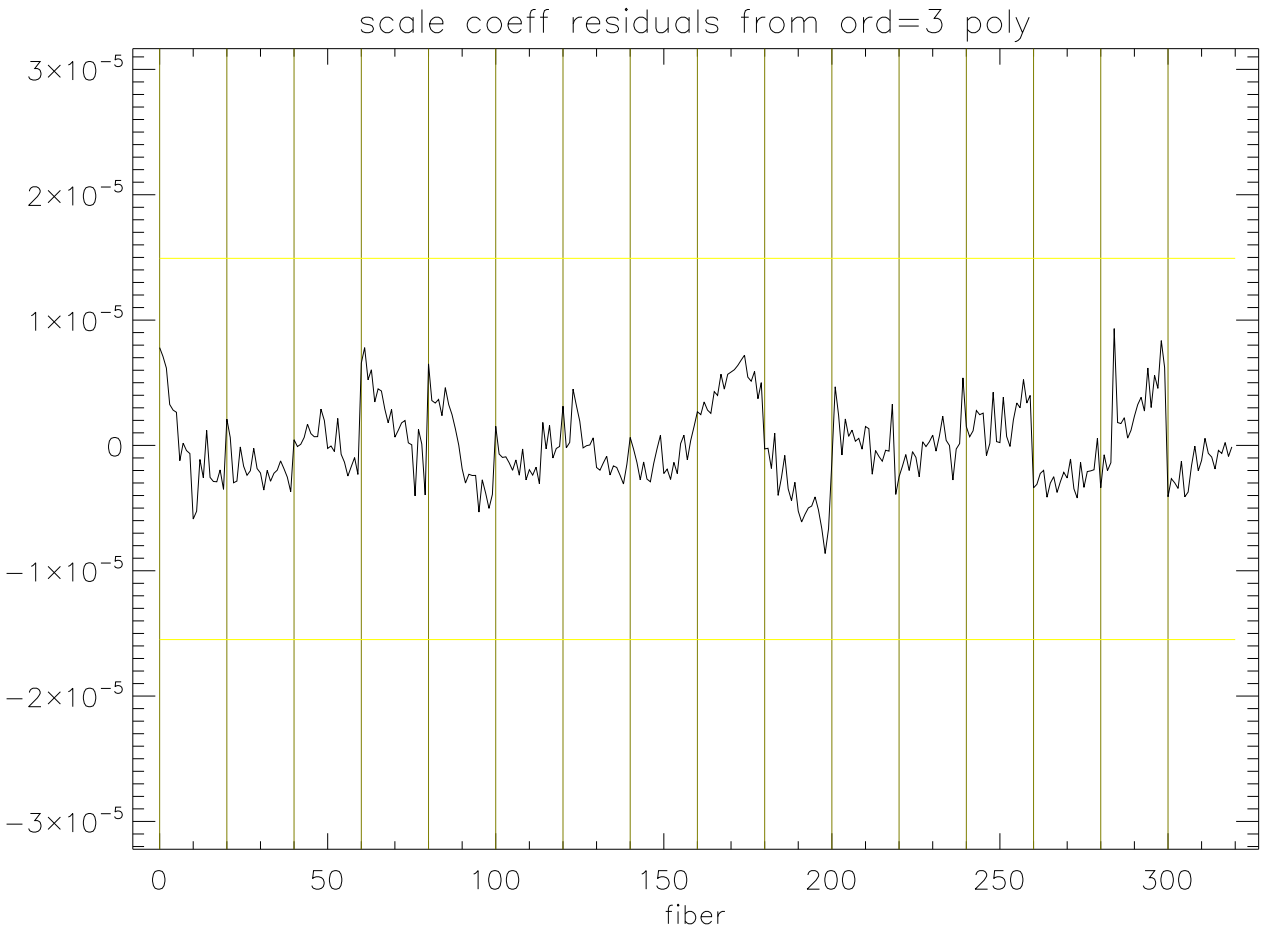

PLATE=1037 MJD=52878 sdR-b1-00022113.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 20.99 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

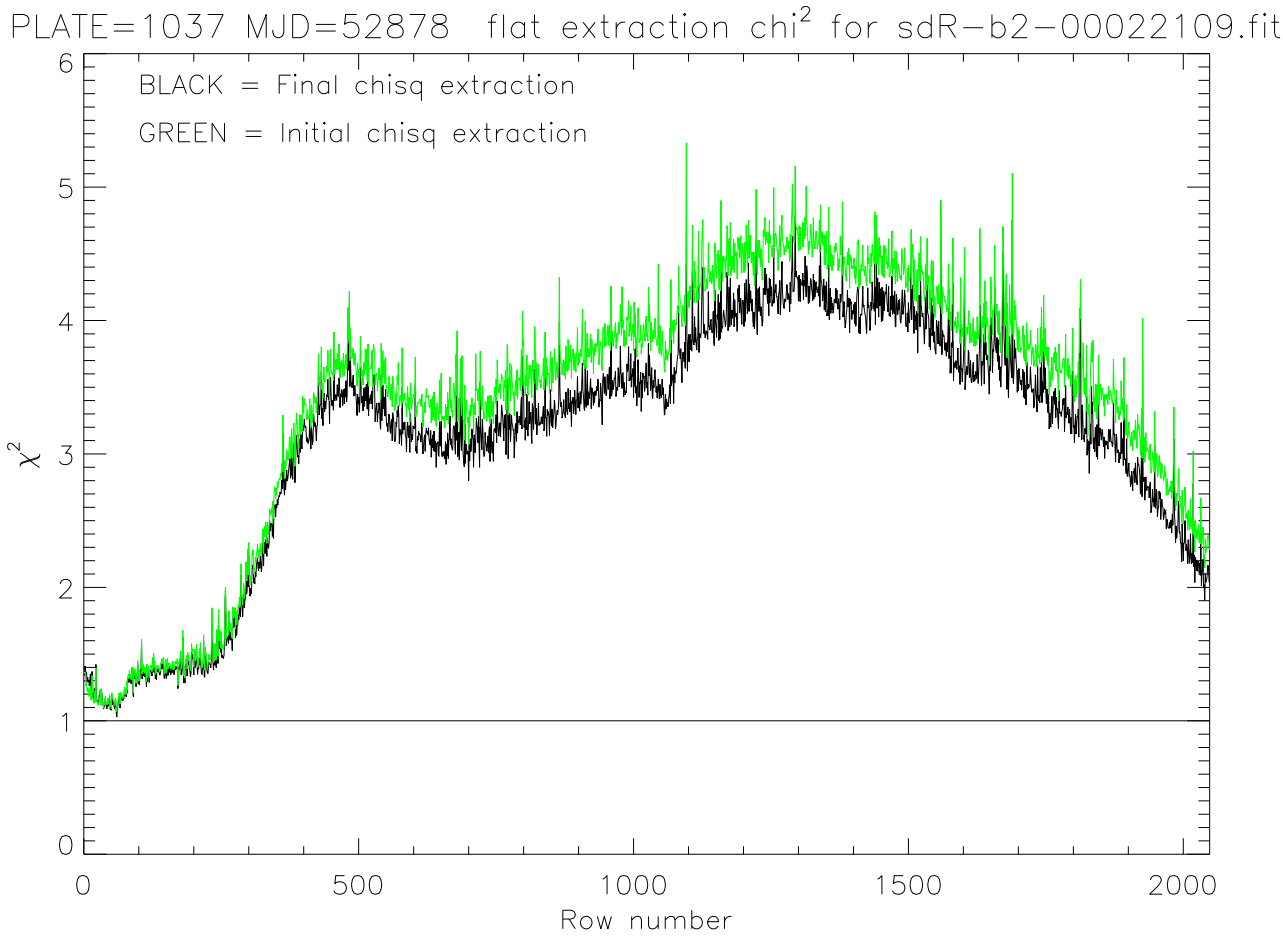

PLATE=1037 MJD=52878 sdR-b1-00022113.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

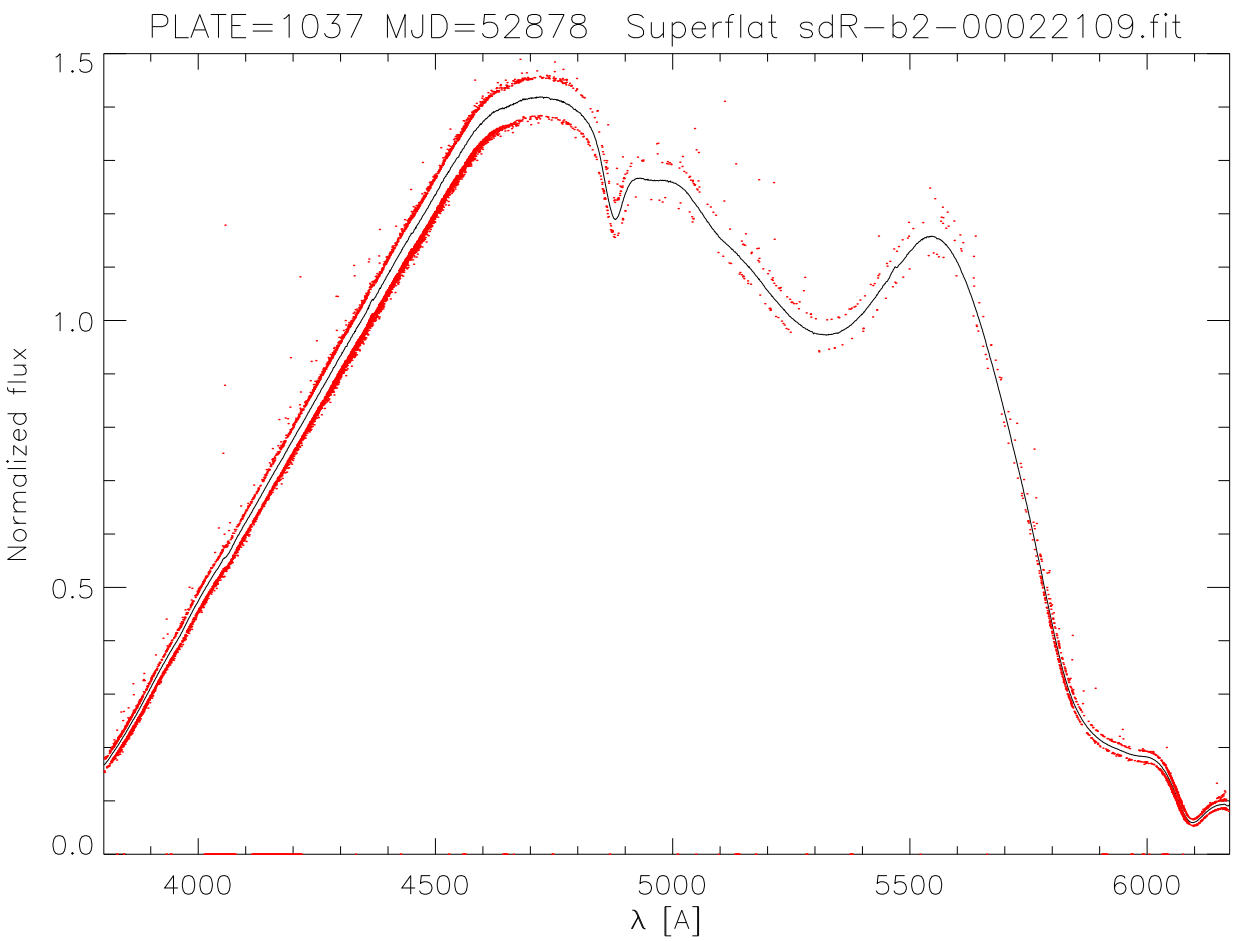

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

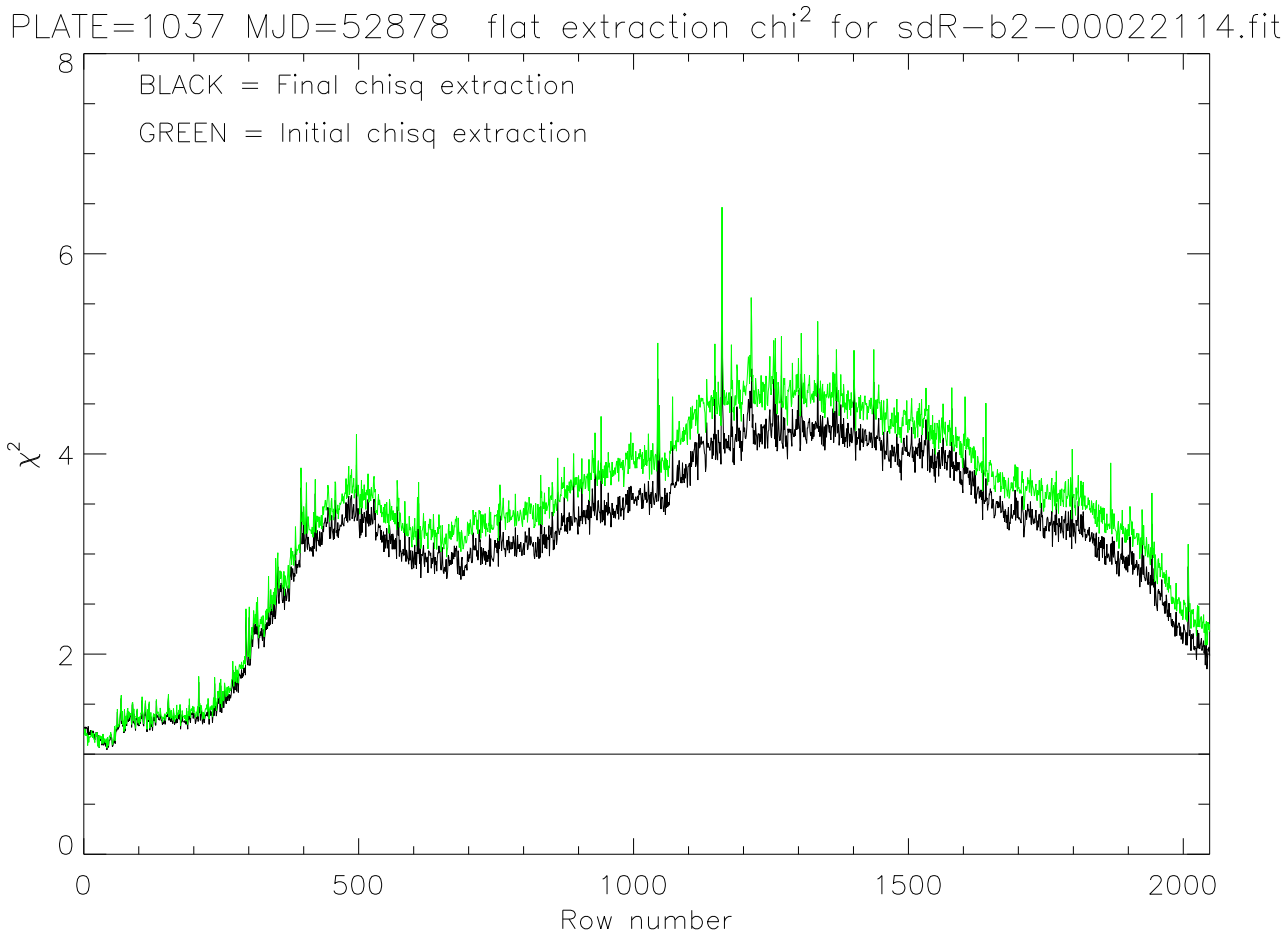

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

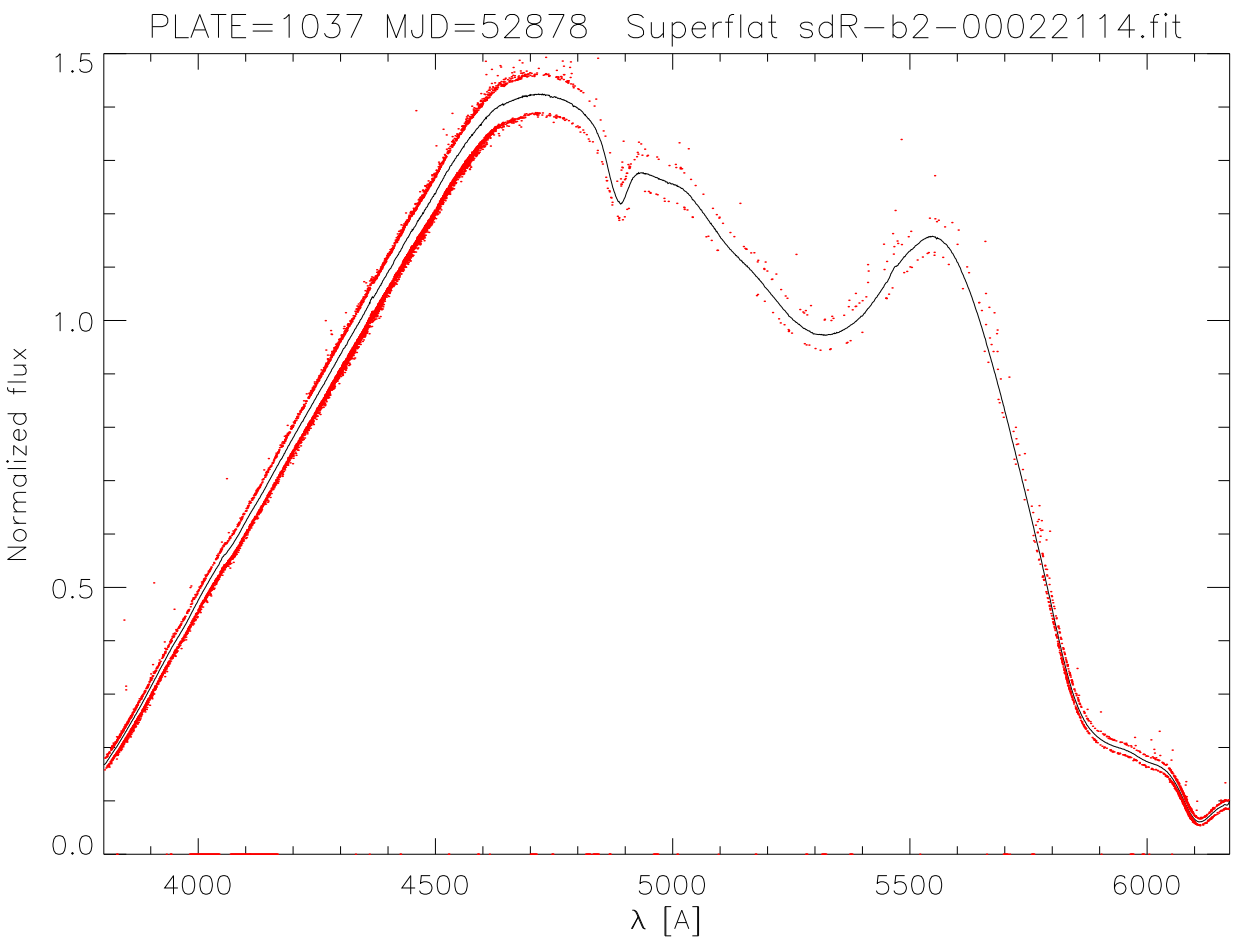

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

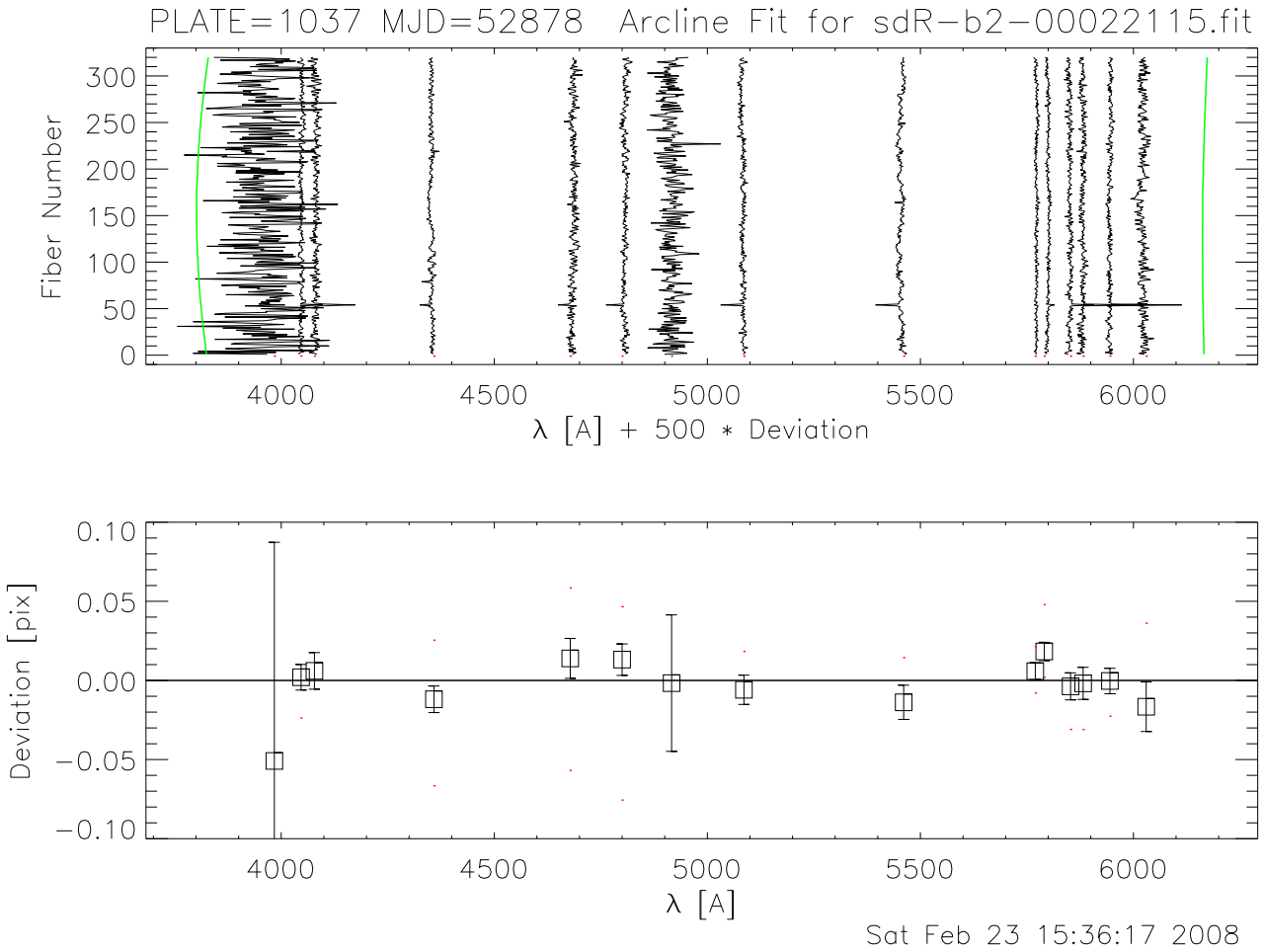

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

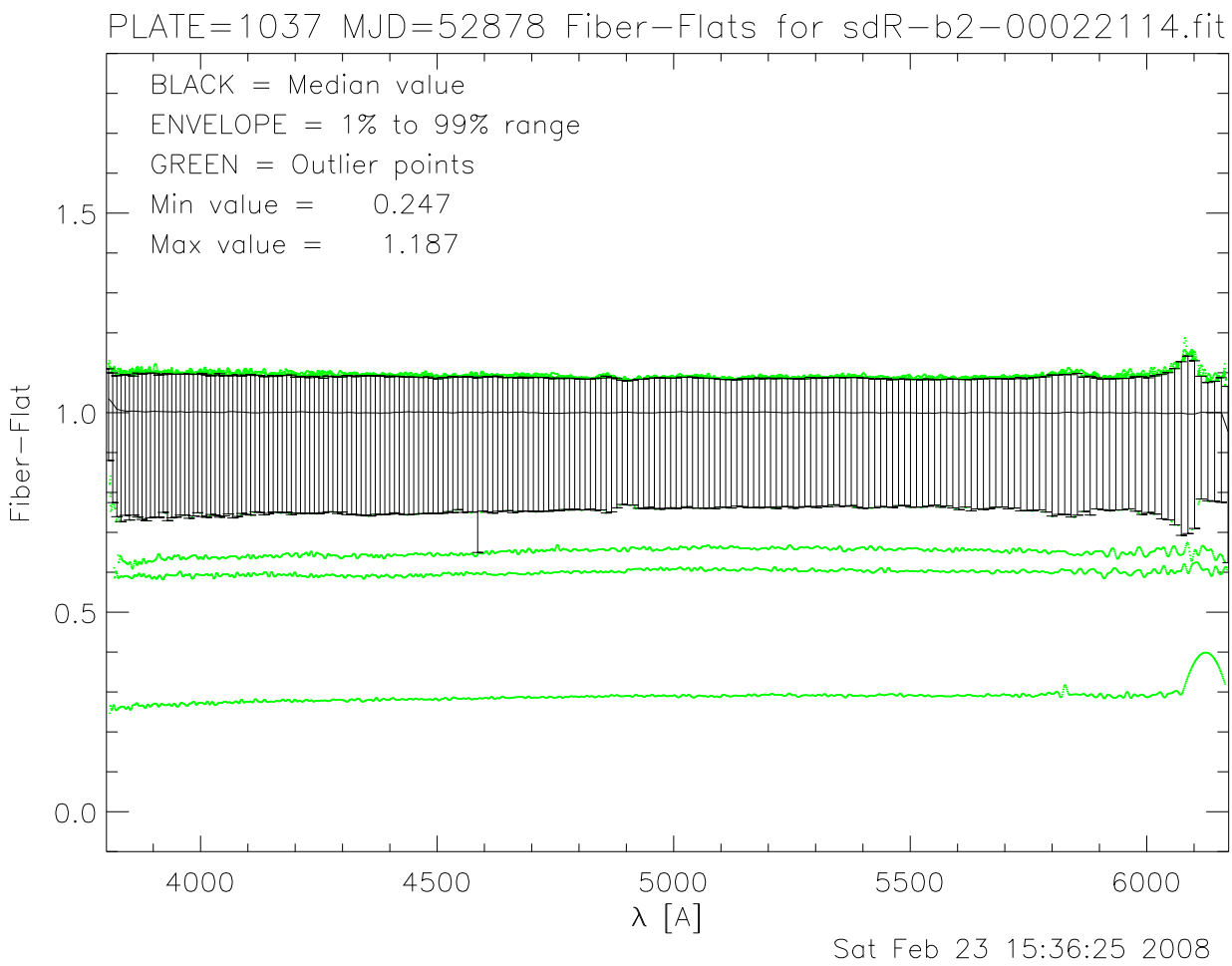

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−b2−00022109.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

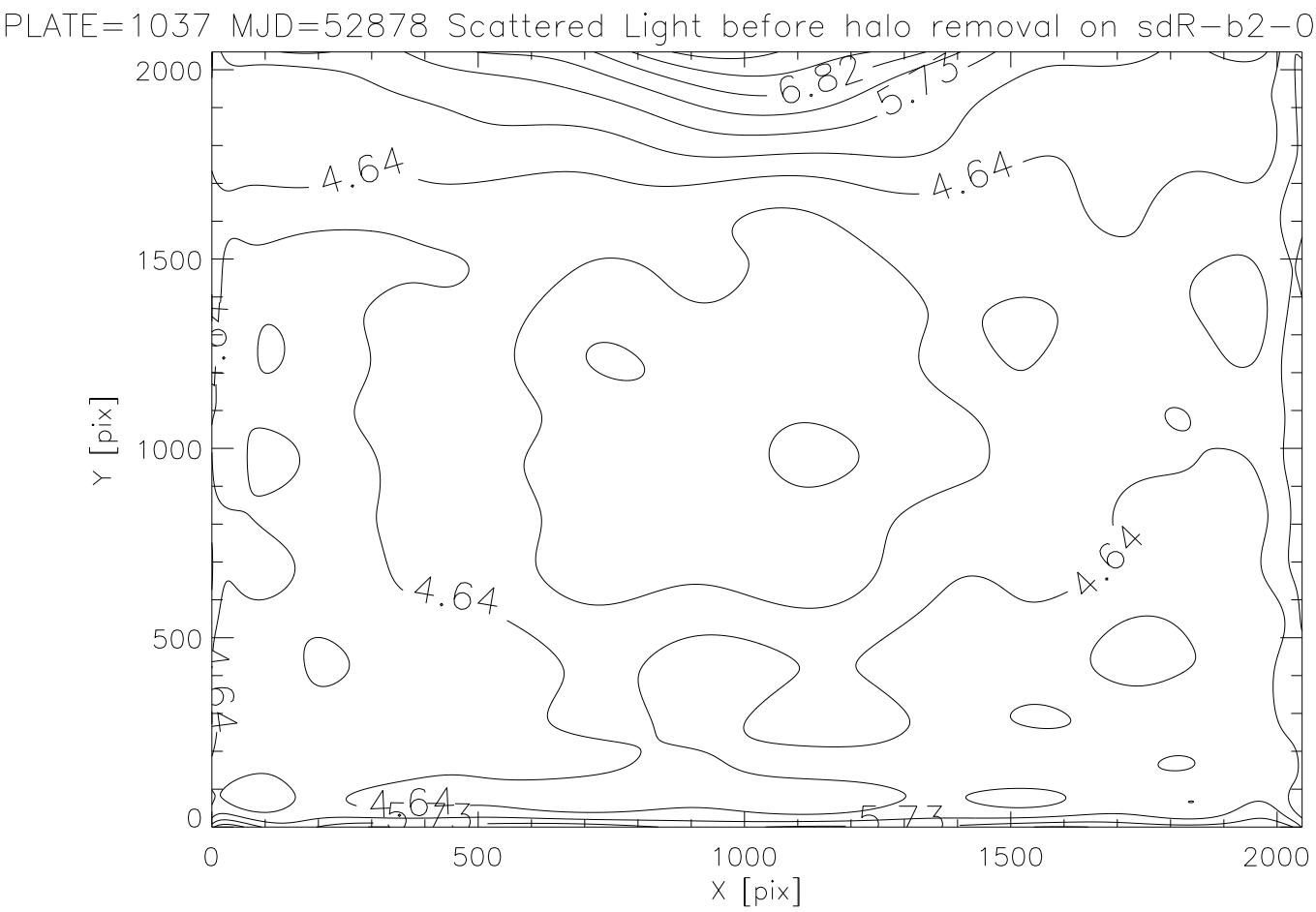

PLATE=1037 MJD=52878 Superflat sdR-b2-00022109.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

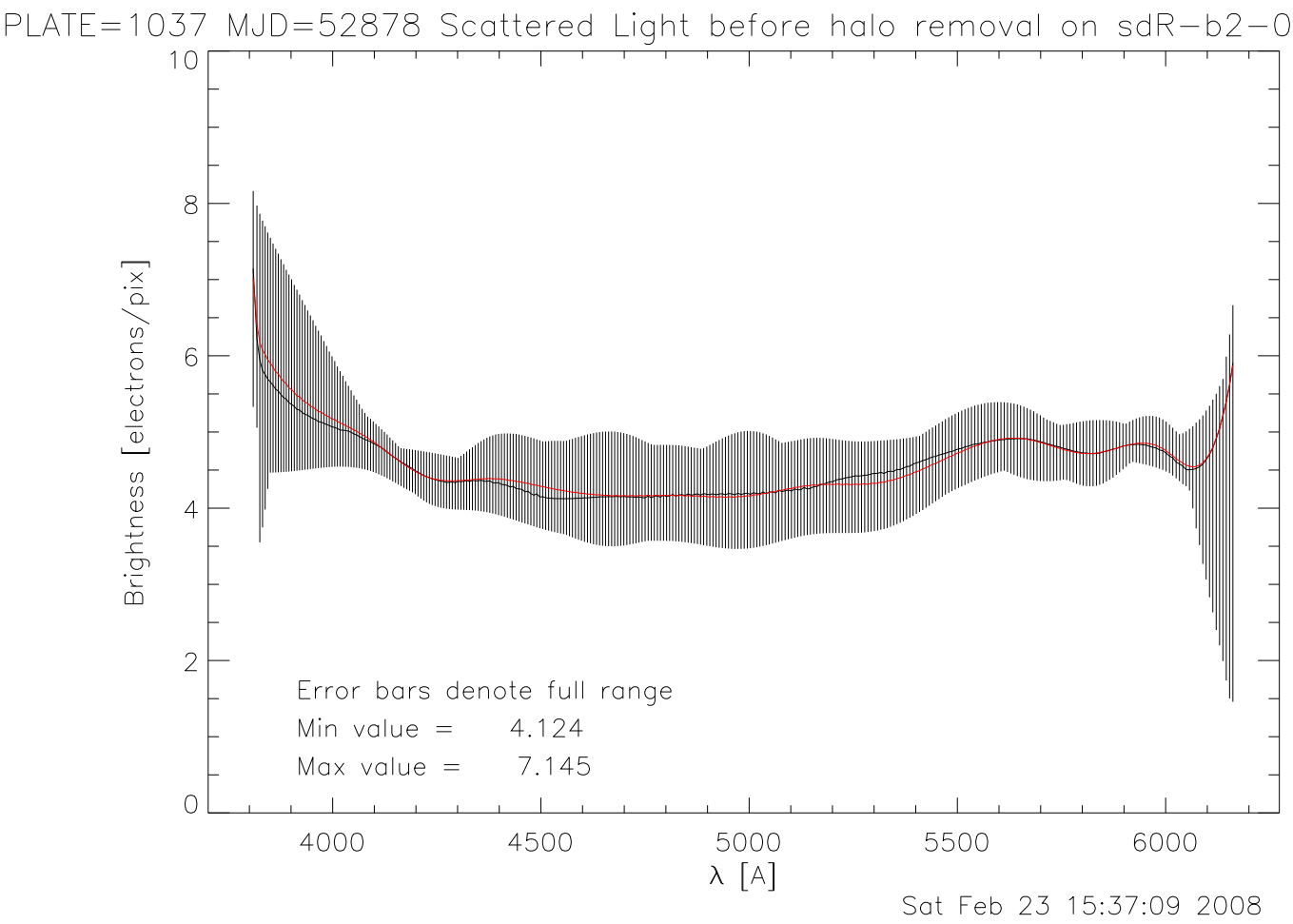

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−b2−00022114.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

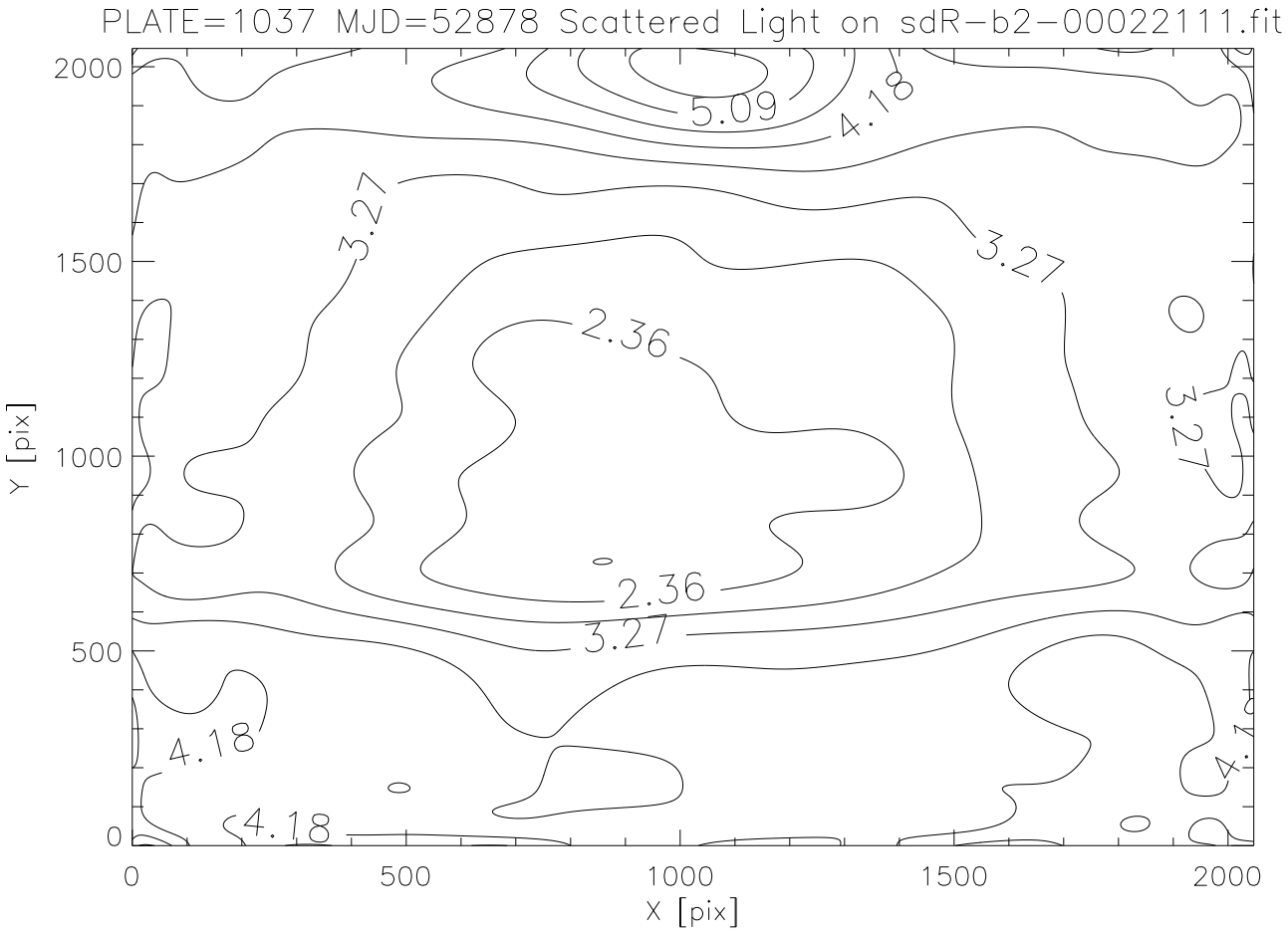

PLATE=1037 MJD=52878 Superflat sdR-b2-00022114.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

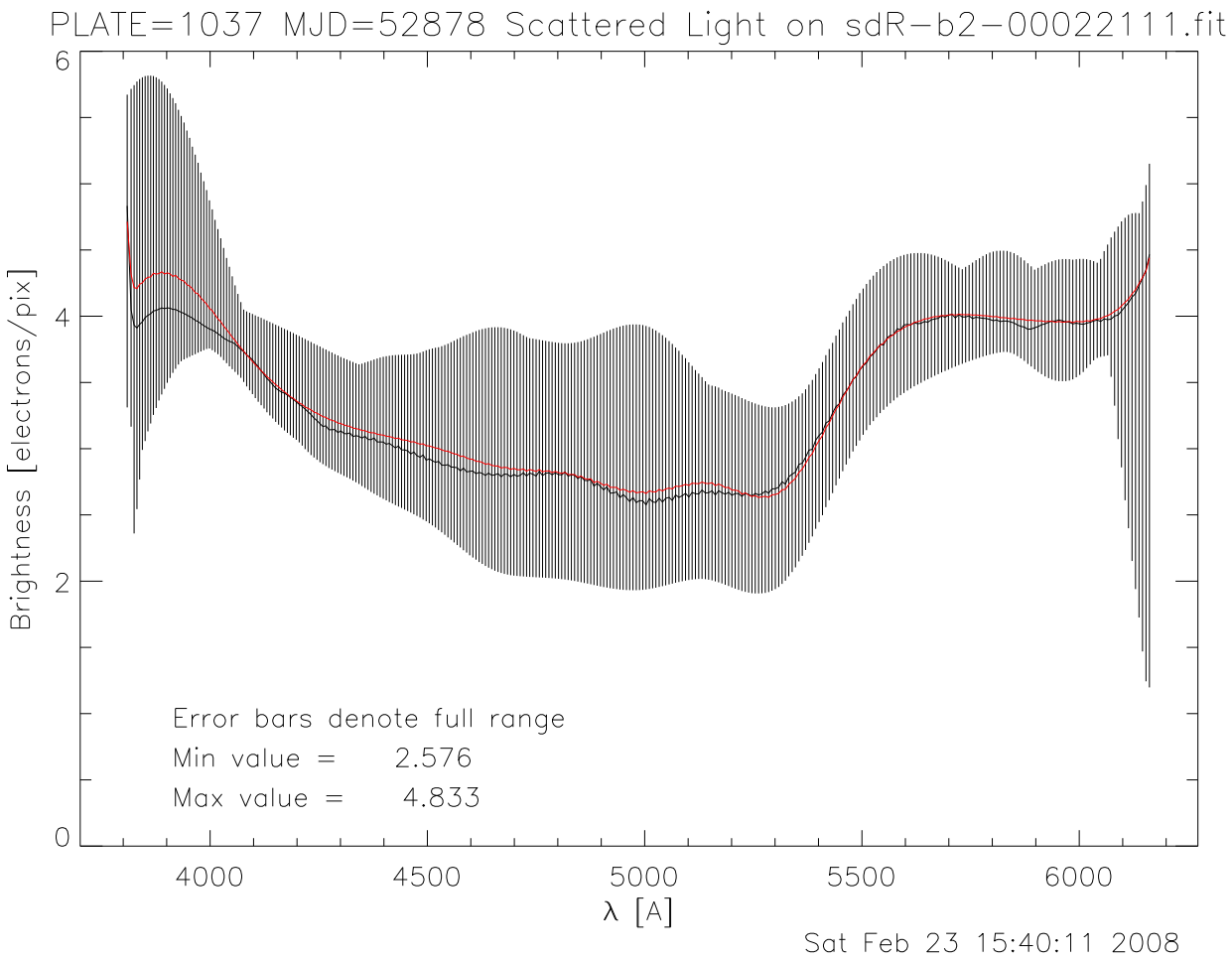

PLATE=1037 MJD=52878 Arcline Fit for sdR-b2-00022115.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:36:17 2008

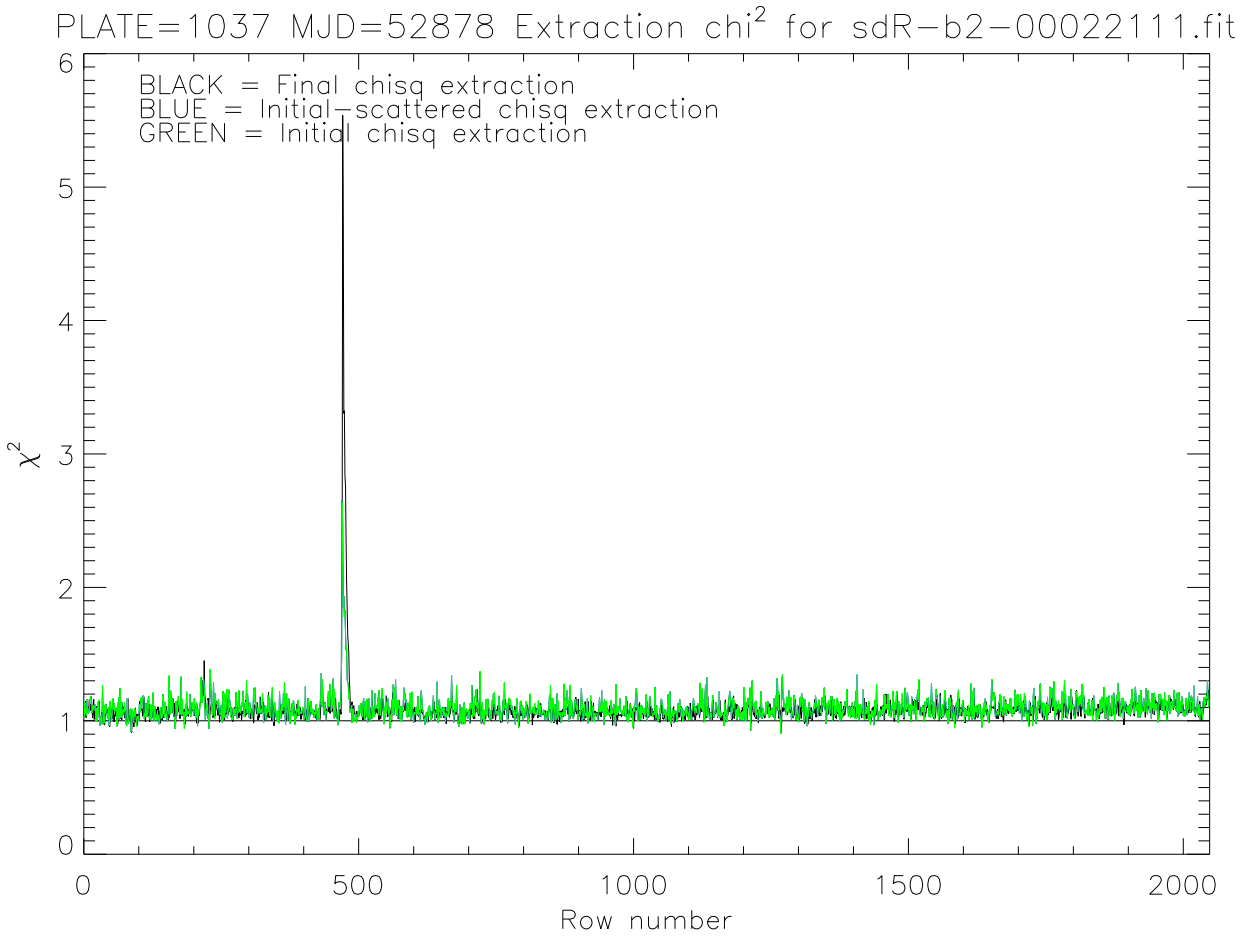

PLATE=1037 MJD=52878 Fiber−Flats for sdR−b2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.247
Max value = 1.187
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:36:25 2008

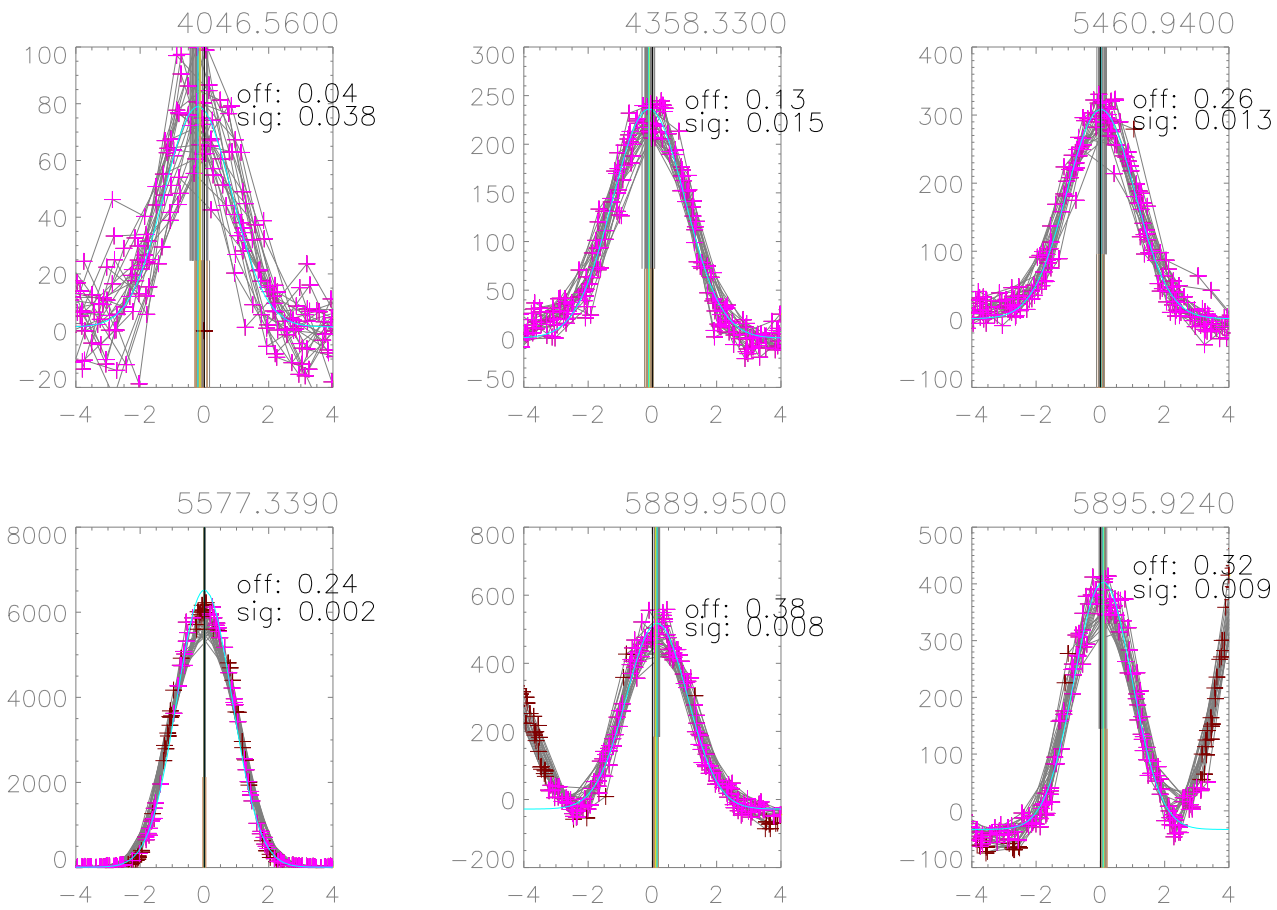

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022111.f
6.82
5.75
4.64
4.64
4.64
4.64
4.64
4.64
4.64
5.73
5.73
Y [pix]
X [pix]
0
500
1000
1500
2000

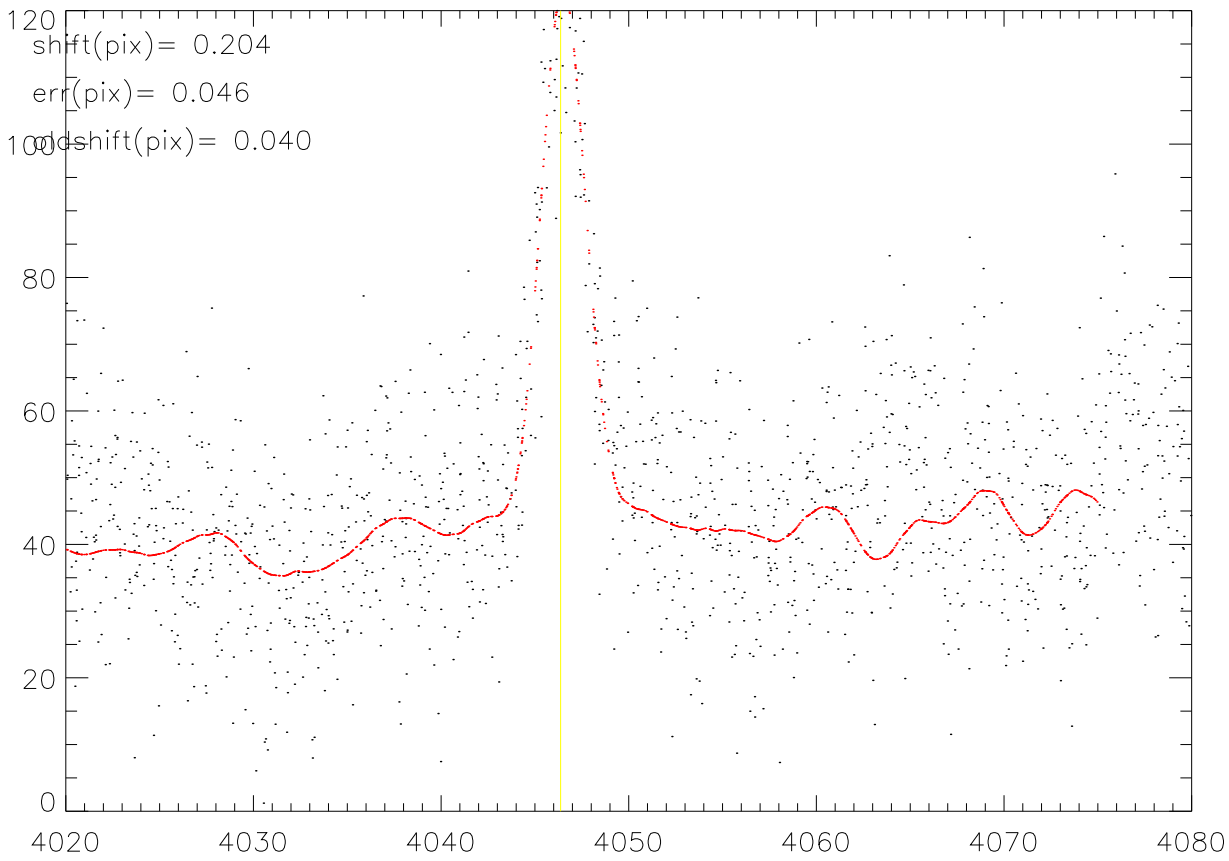

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022111.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.124
Max value = 7.145
Sat Feb 23 15:37:09 2008

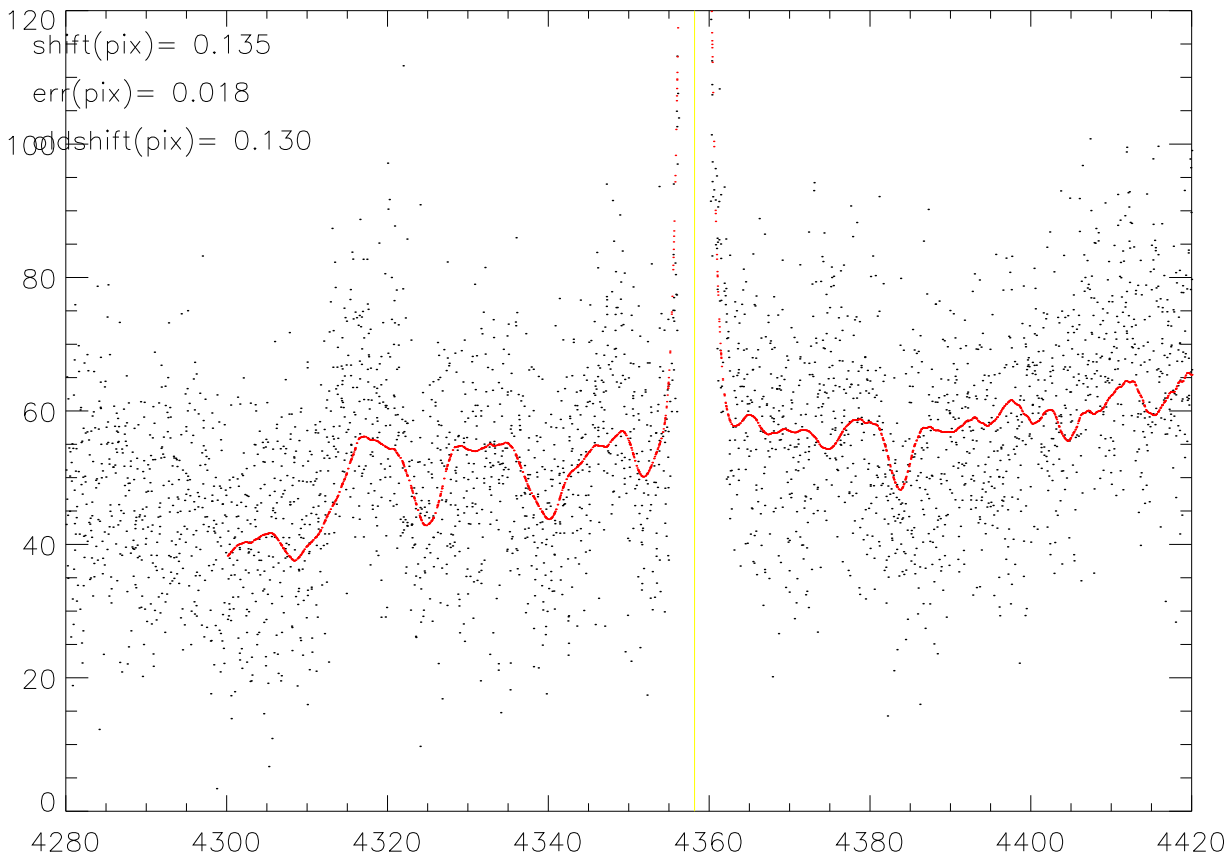

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022111.fit
5.09
4.18
3.27
3.27
2.36
3.27
2.36
3.27
4.18
4.18
0
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

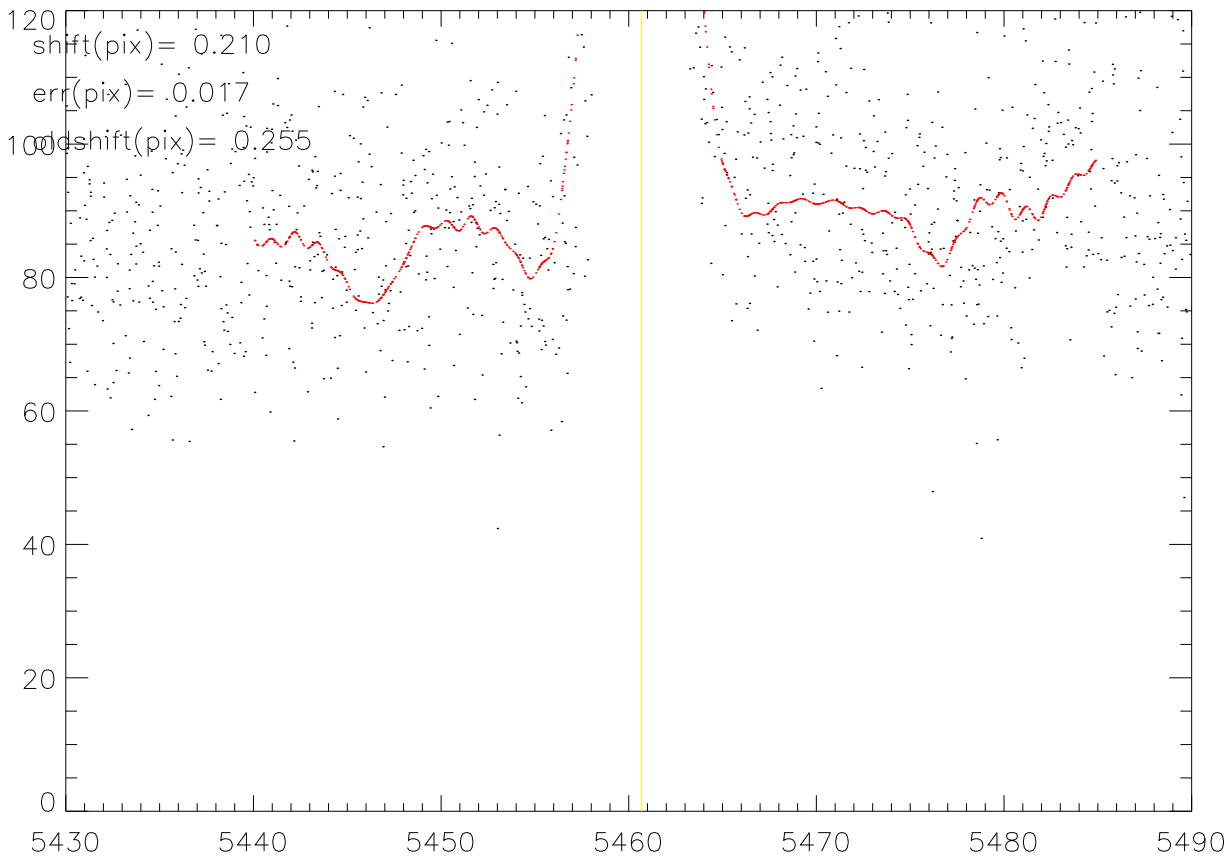

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022111.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.576
Max value = 4.833
Sat Feb 23 15:40:11 2008

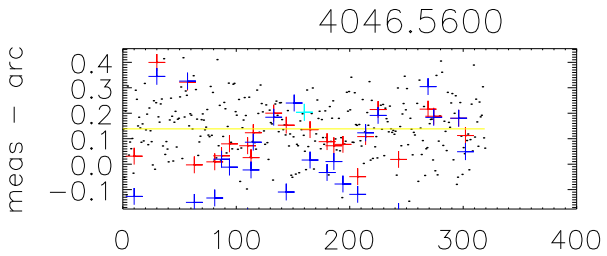

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b2-00022111.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

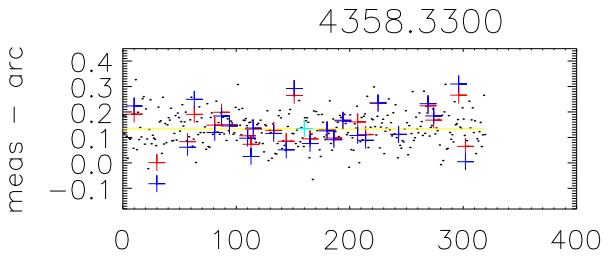

4046.5600
off: 0.04
sig: 0.038
4358.3300
off: 0.13
sig: 0.015
5460.9400
off: 0.26
sig: 0.013
5577.3390
off: 0.24
sig: 0.002
5889.9500
off: 0.38
sig: 0.008
5895.9240
off: 0.32
sig: 0.009

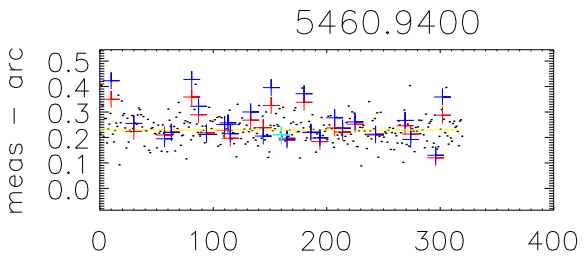

shift(pix)= 0.204
err(pix)= 0.046
oldshift(pix)= 0.040
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

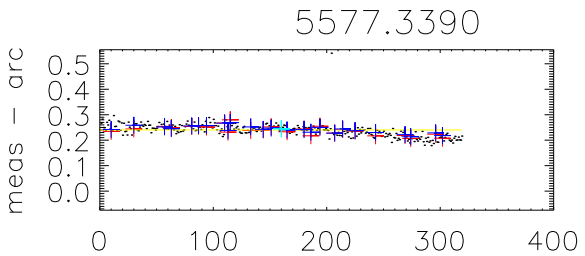

shift(pix)= 0.135
err(pix)= 0.018
oldshift(pix)= 0.130
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

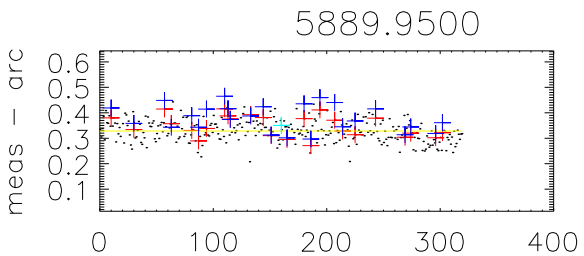

shift(pix)= 0.210
err(pix)= 0.017
oldshift(pix)= 0.255
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

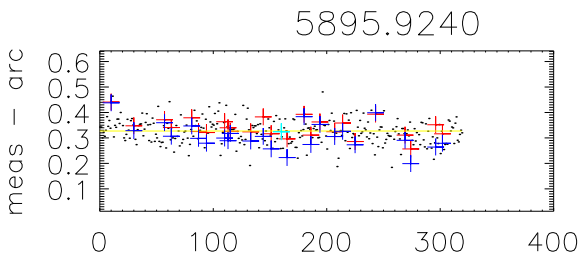

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

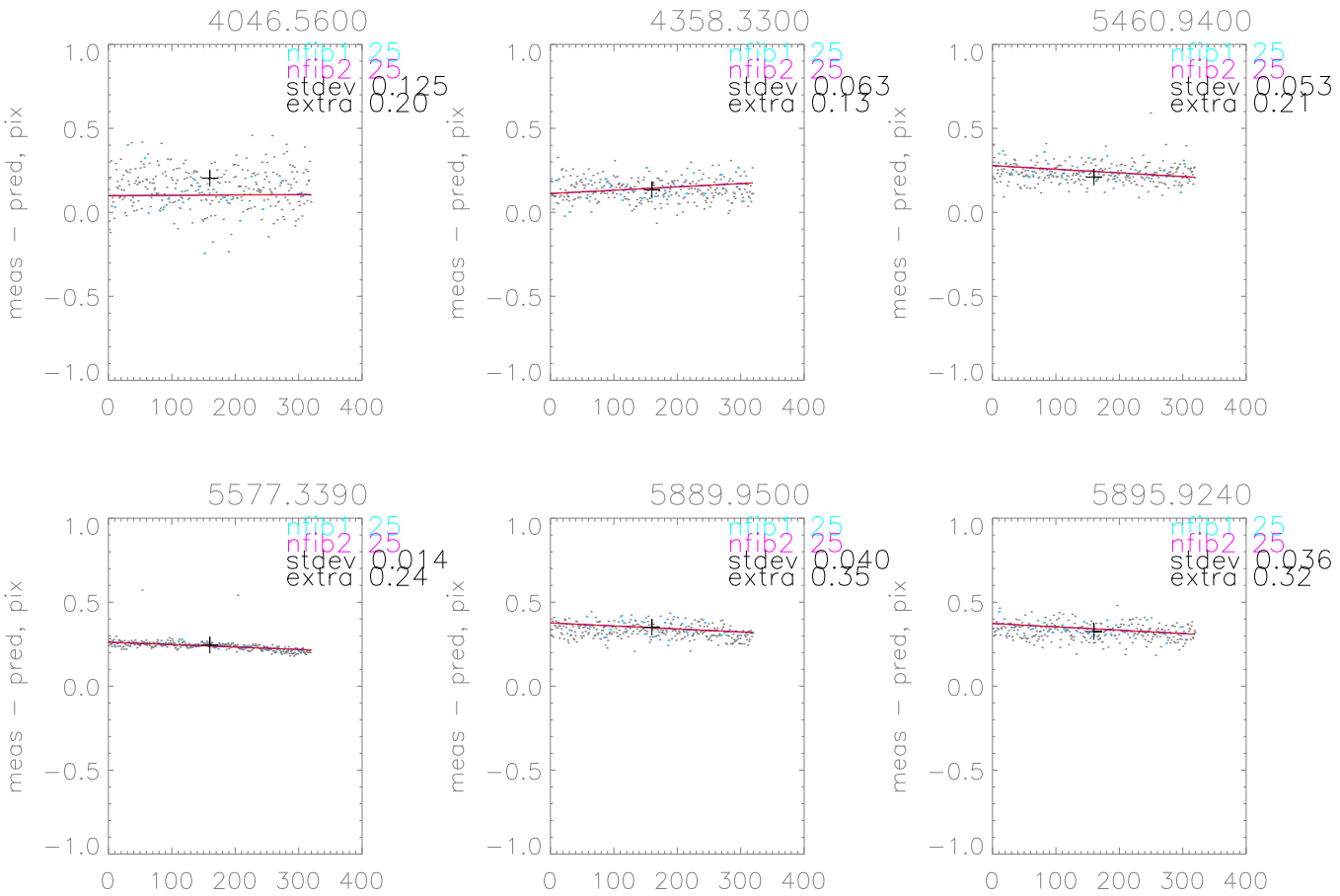

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

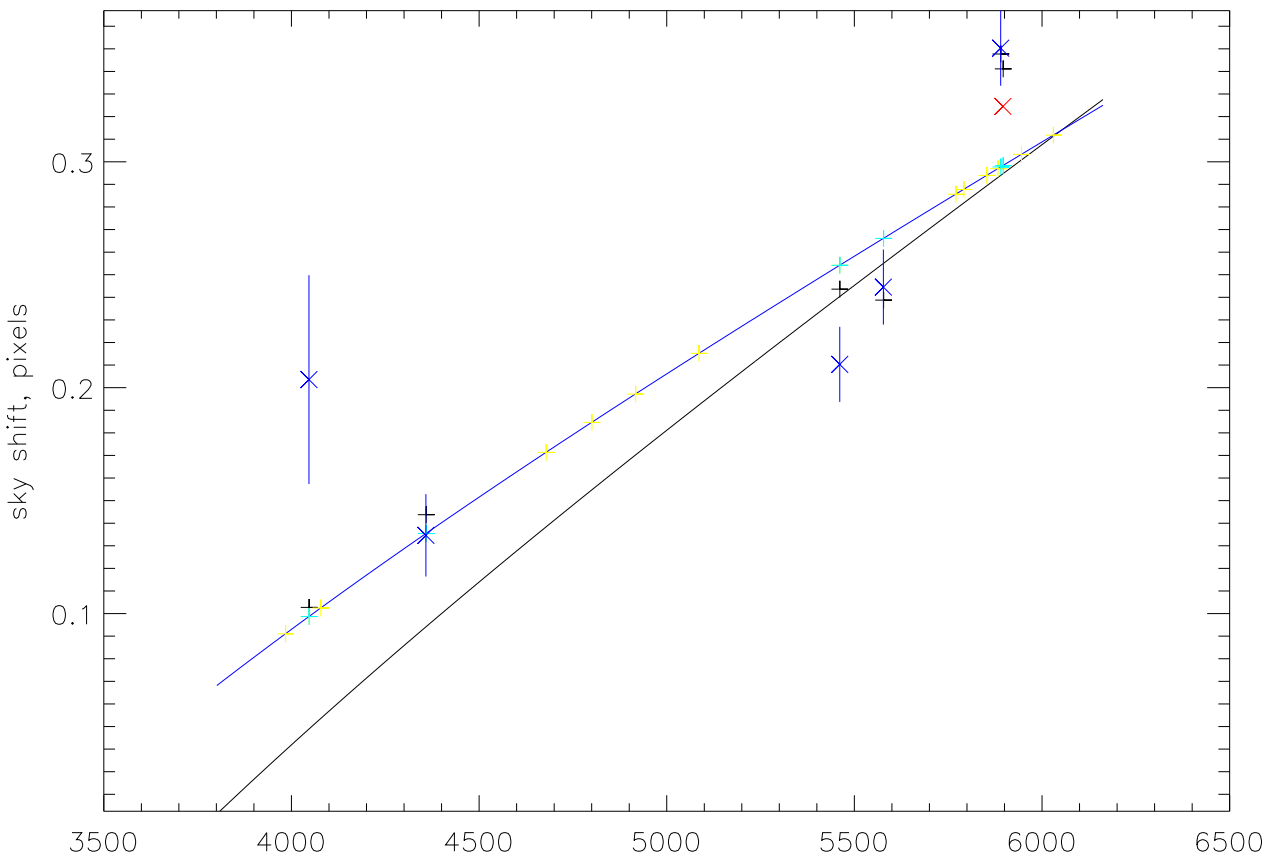

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

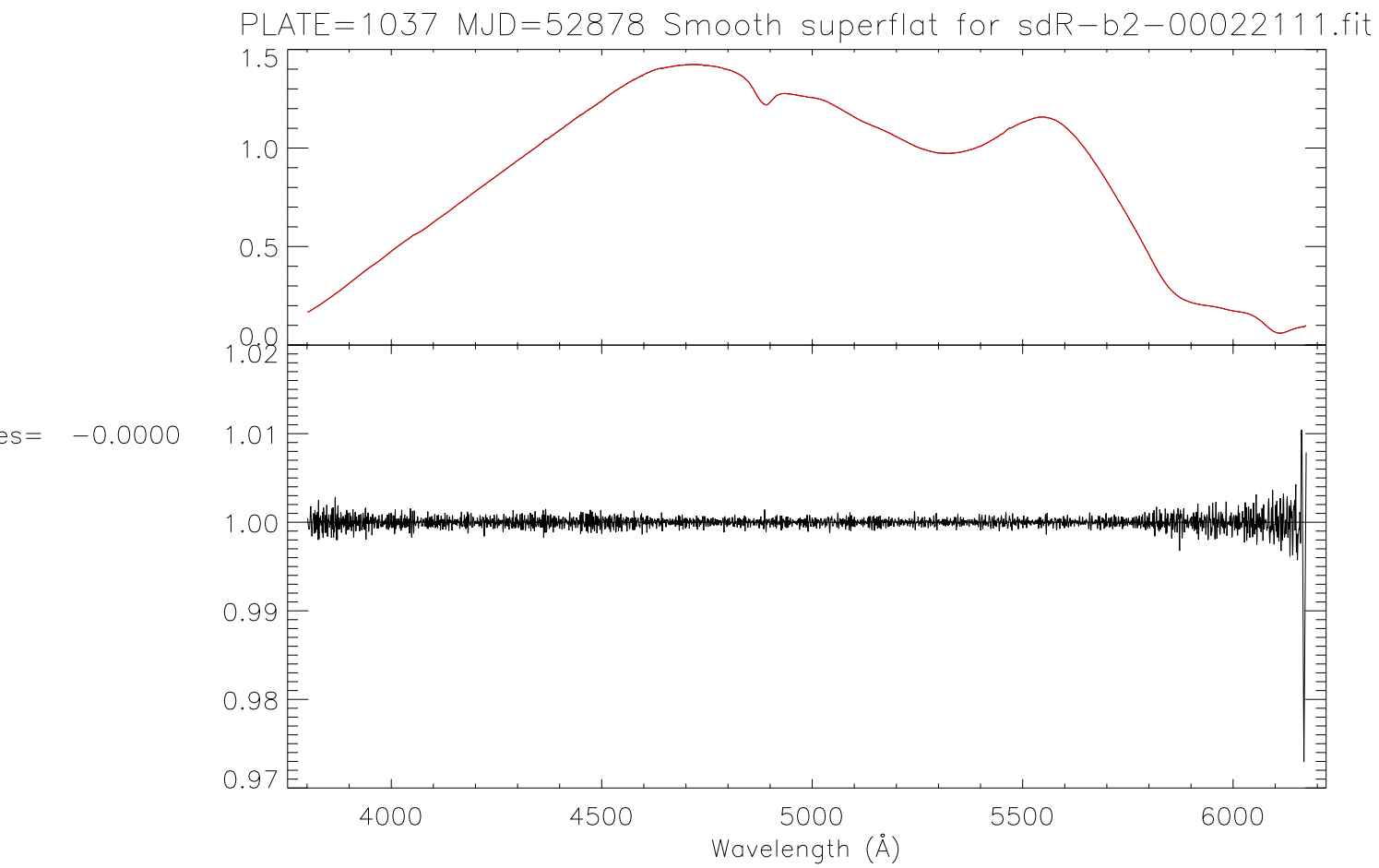

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

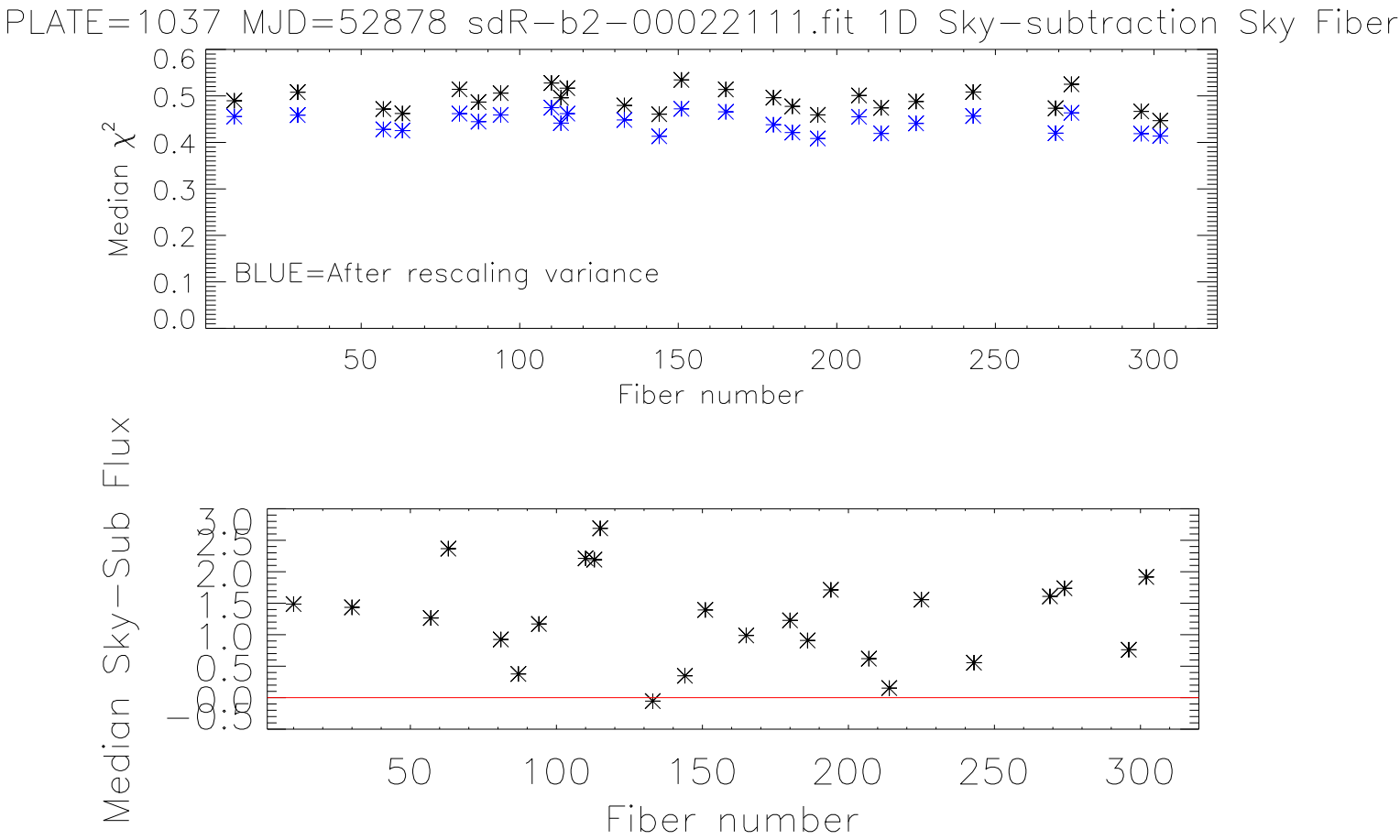

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

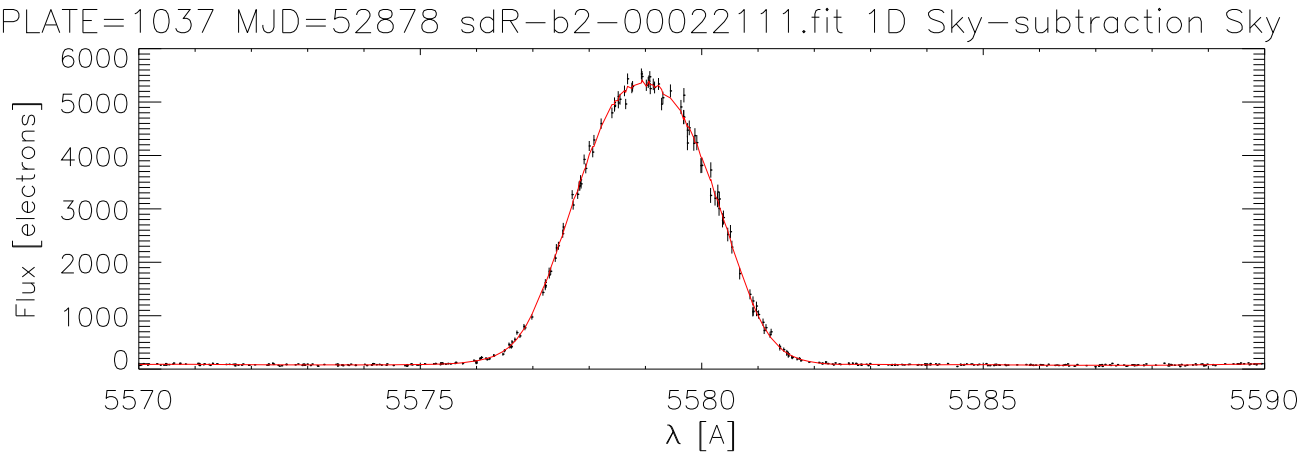

4046.5600
nfib1 25
nfib2 25
stdev 0.125
extra 0.20
4358.3300
nfib1 25
nfib2 25
stdev 0.063
extra 0.13
5460.9400
nfib1 25
nfib2 25
stdev 0.053
extra 0.21
5577.3390
nfib1 25
nfib2 25
stdev 0.014
extra 0.24
5889.9500
nfib1 25
nfib2 25
stdev 0.040
extra 0.35
5895.9240
nfib1 25
nfib2 25
stdev 0.036
extra 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

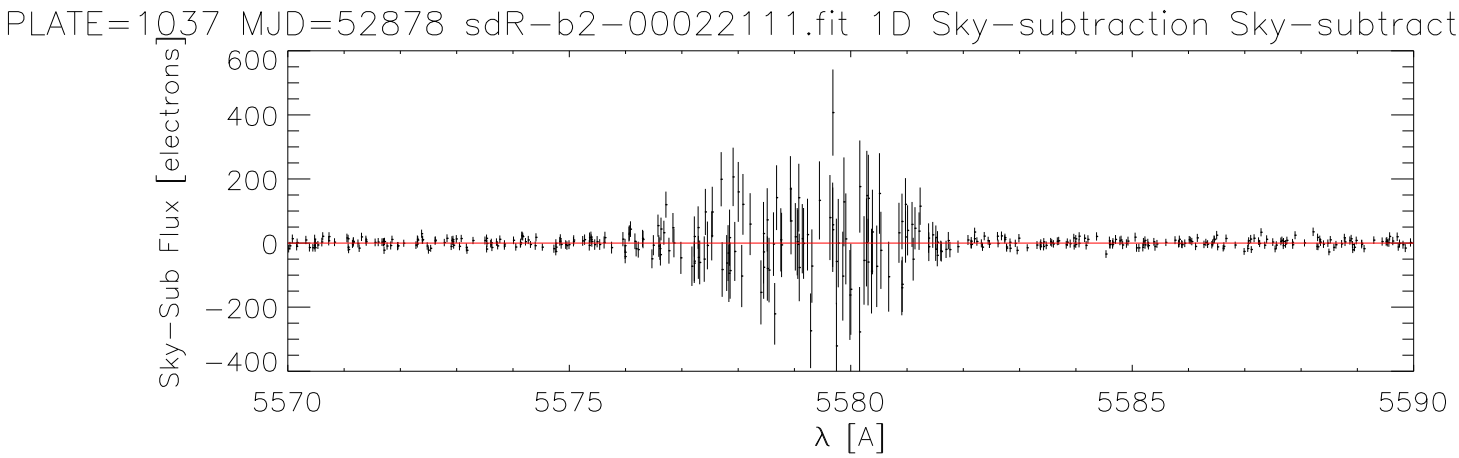

sky shift, pixels
0.1
0.2
0.3
3500
4000
4500
5000
5500
6000
6500

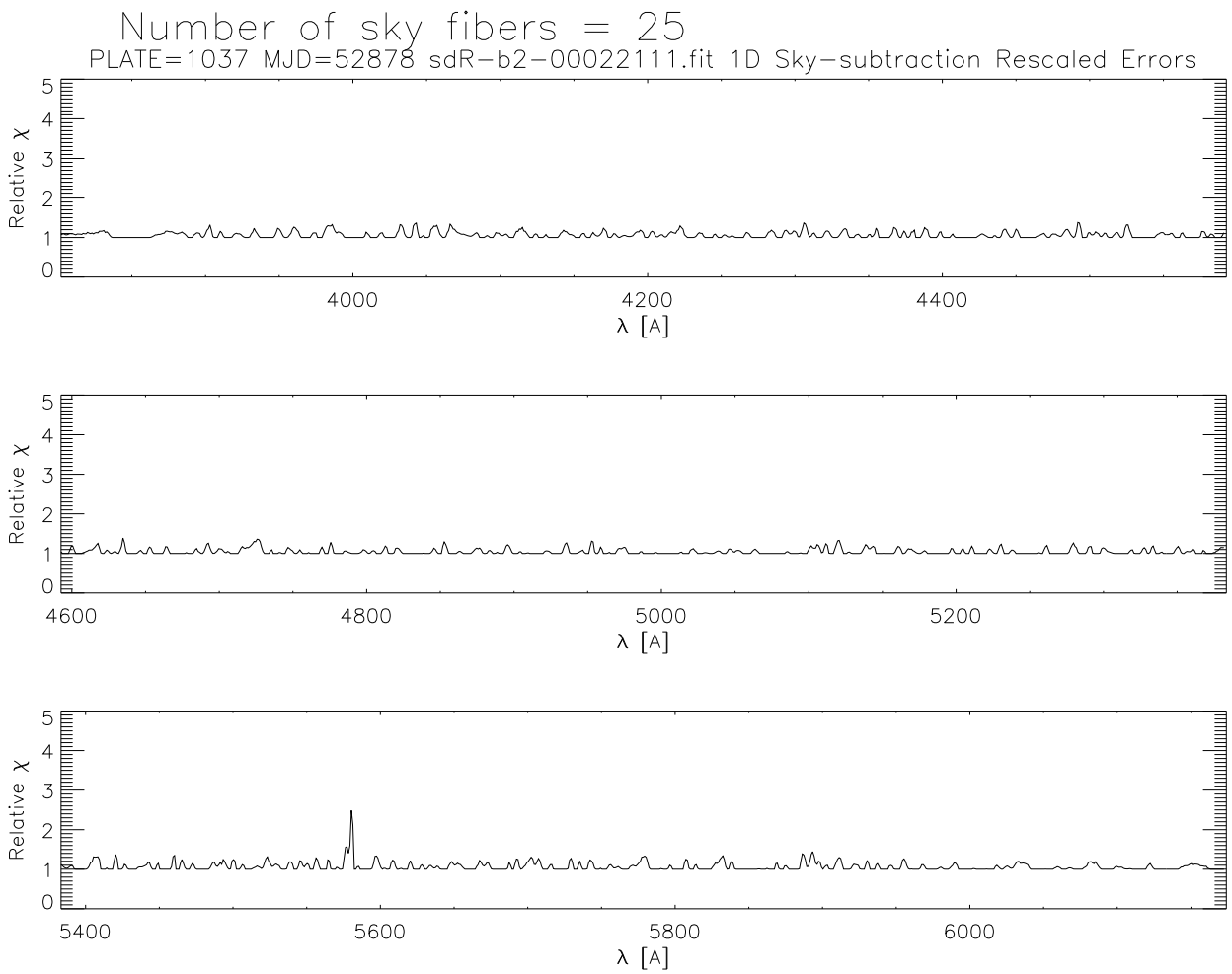

PLATE=1037 MJD=52878 Smooth superflat for sdR-b2-00022111.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

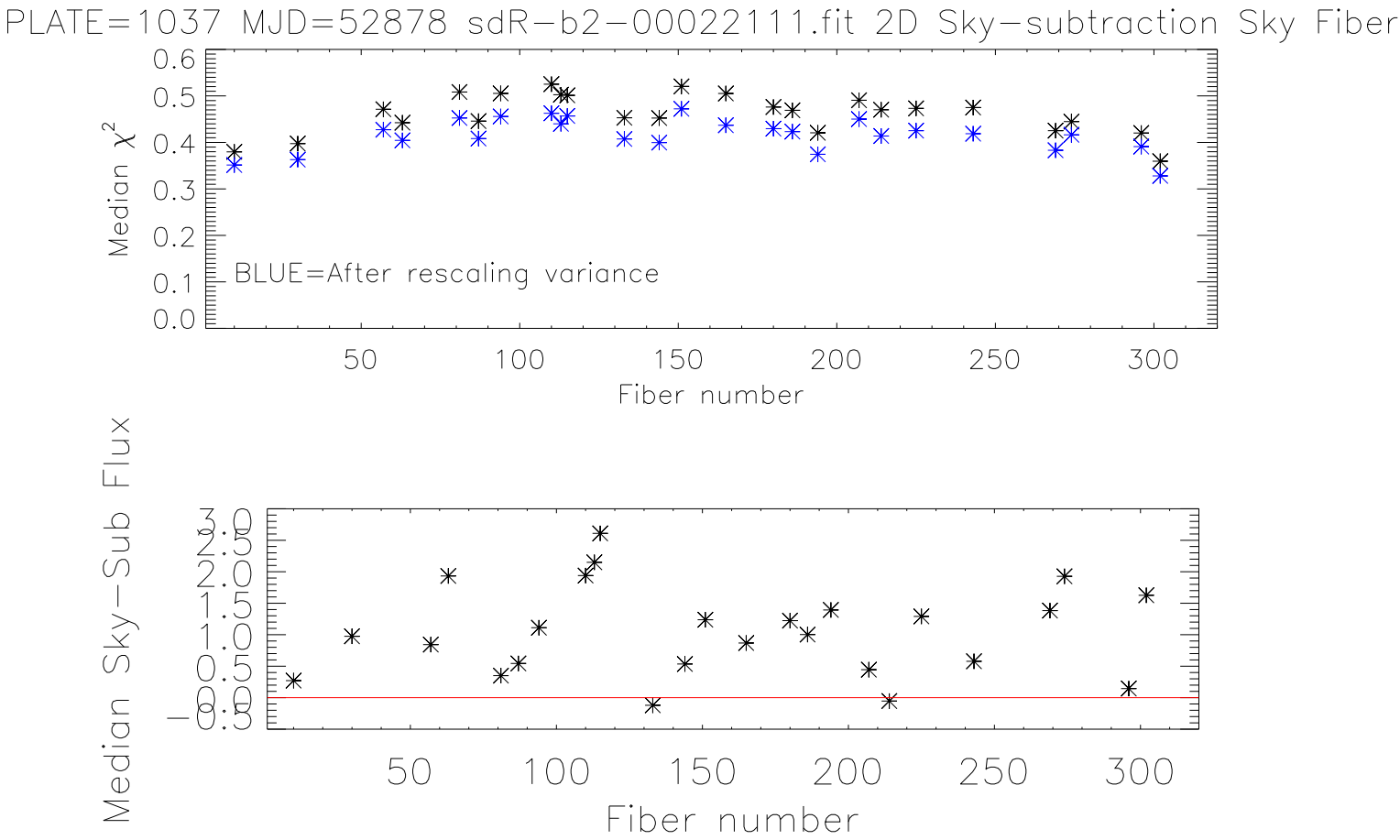
es= −0.0000

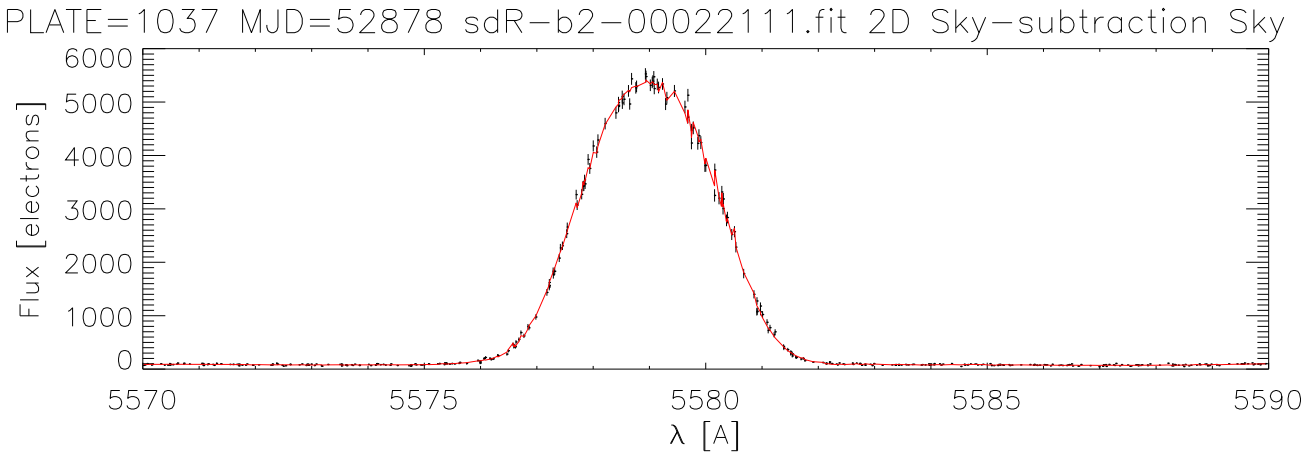

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

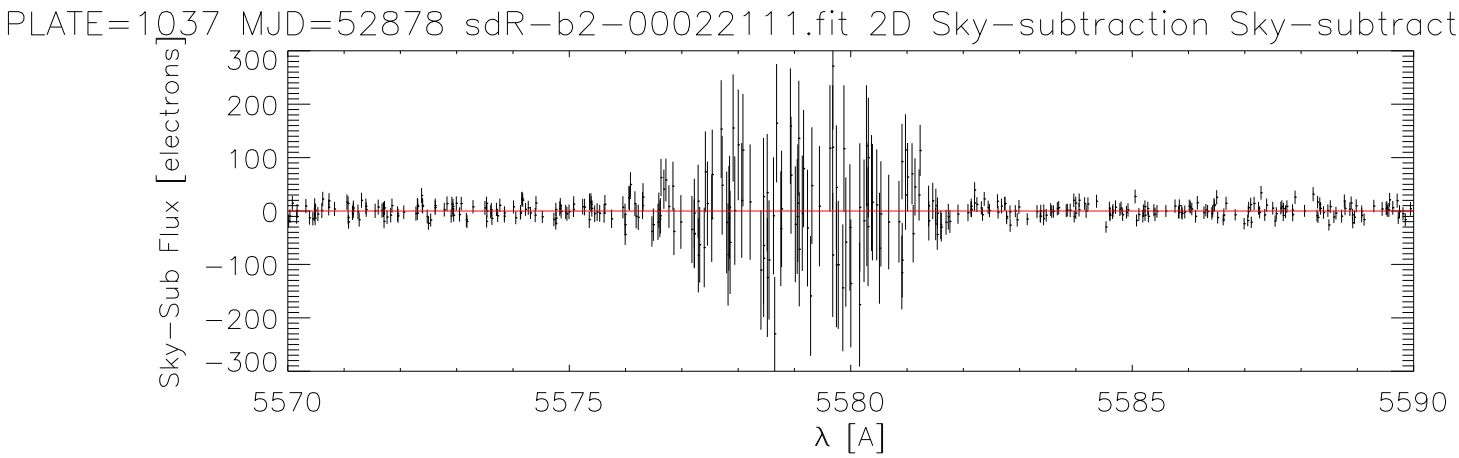

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

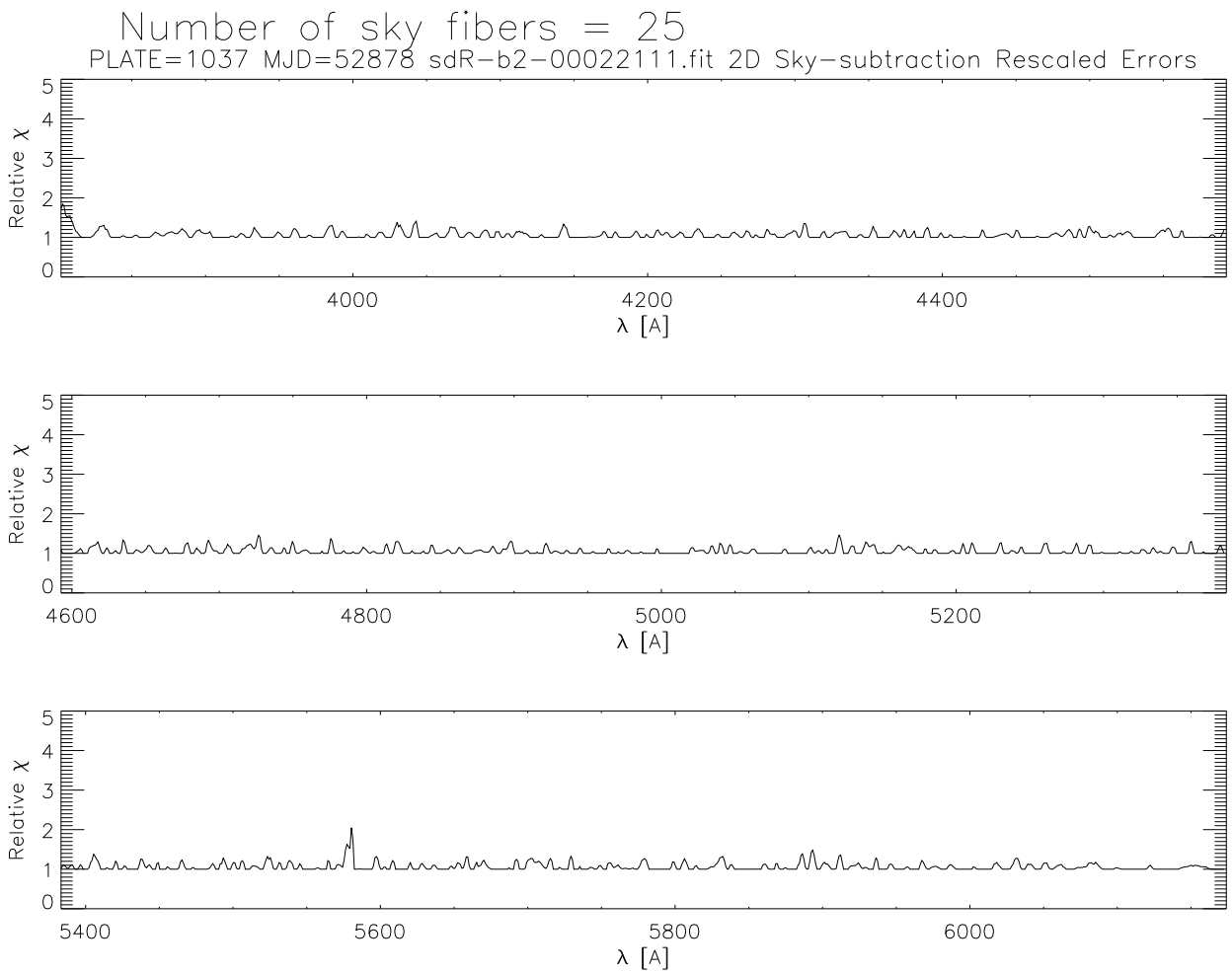

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

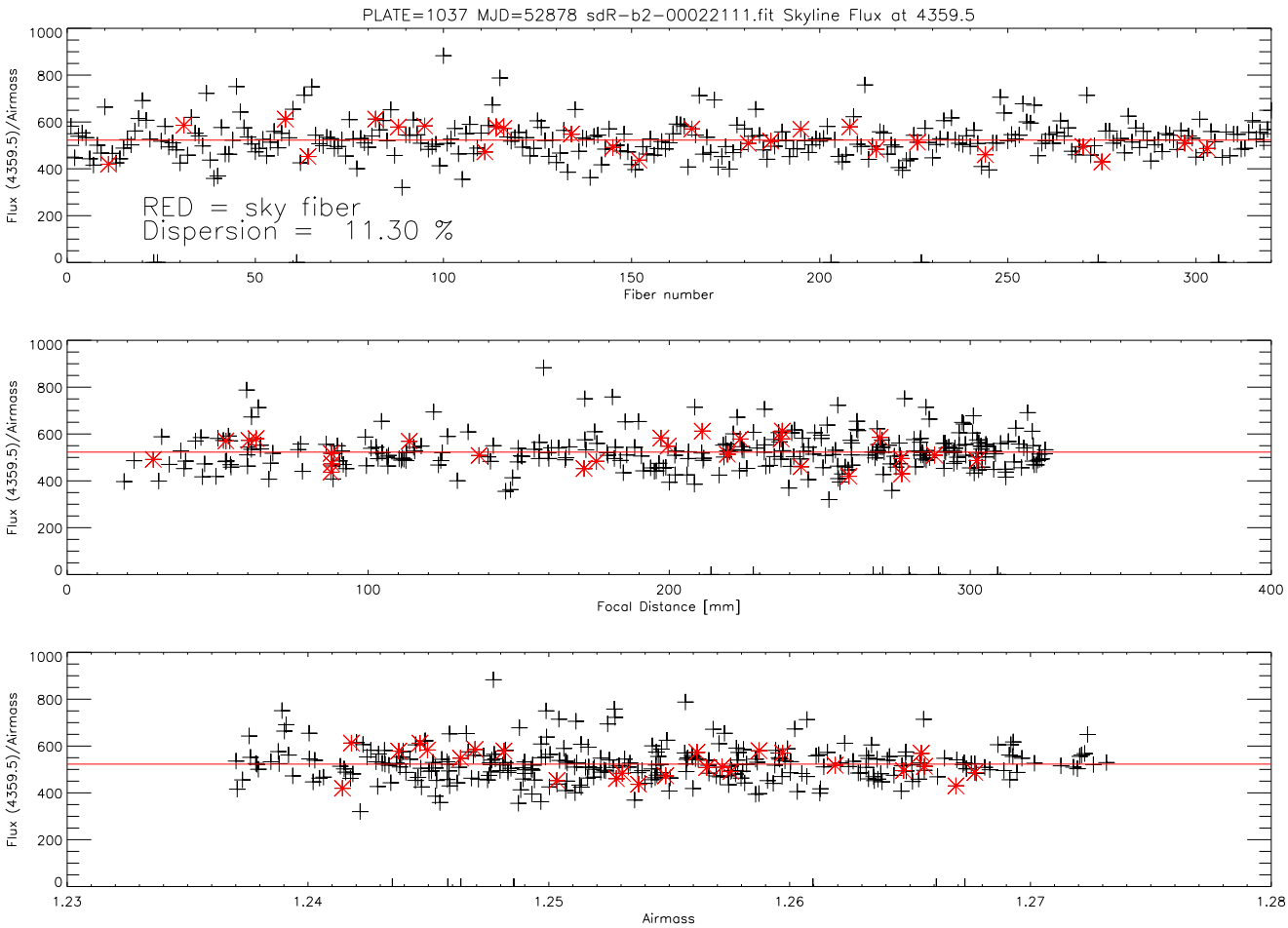

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022111.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

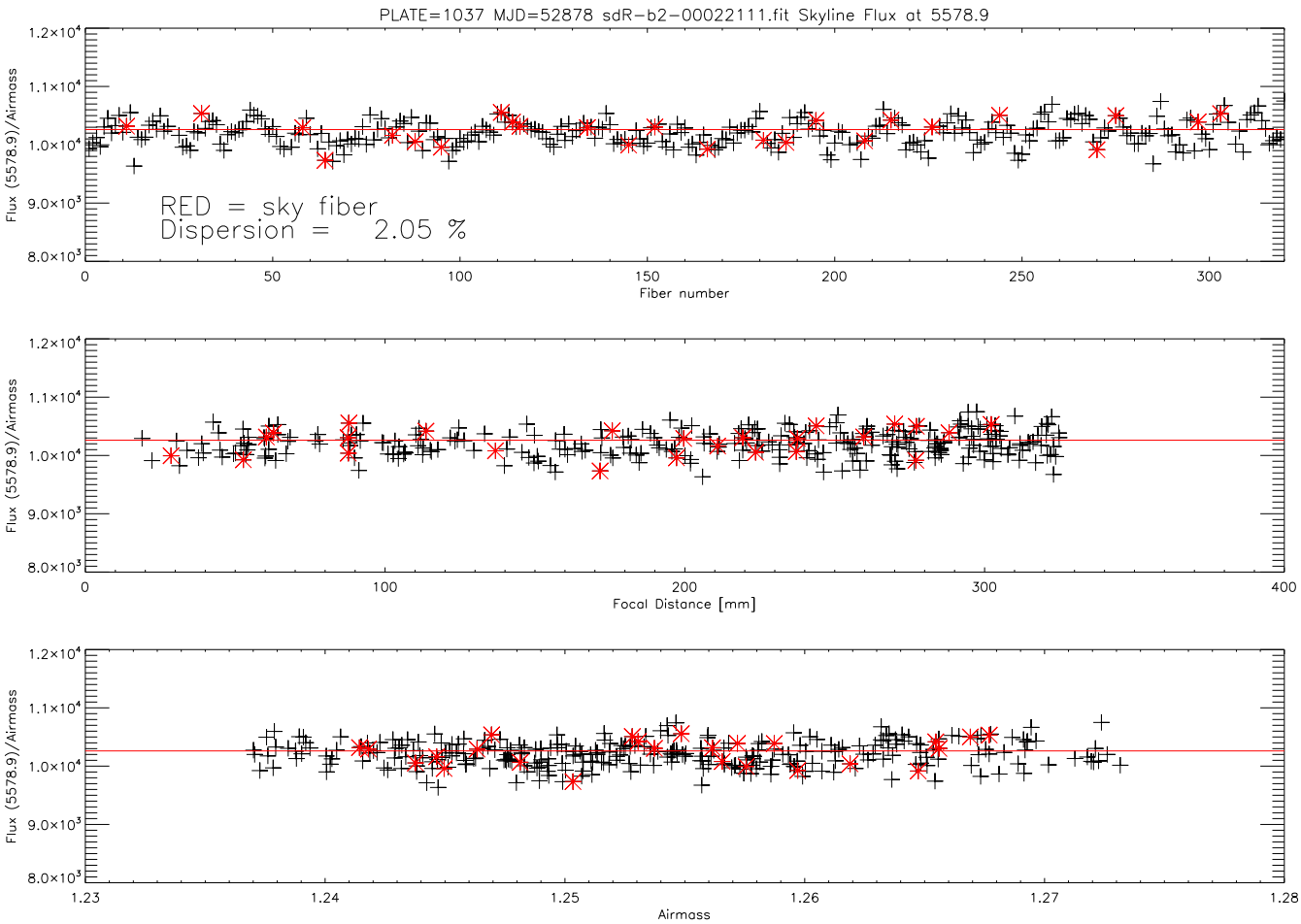

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

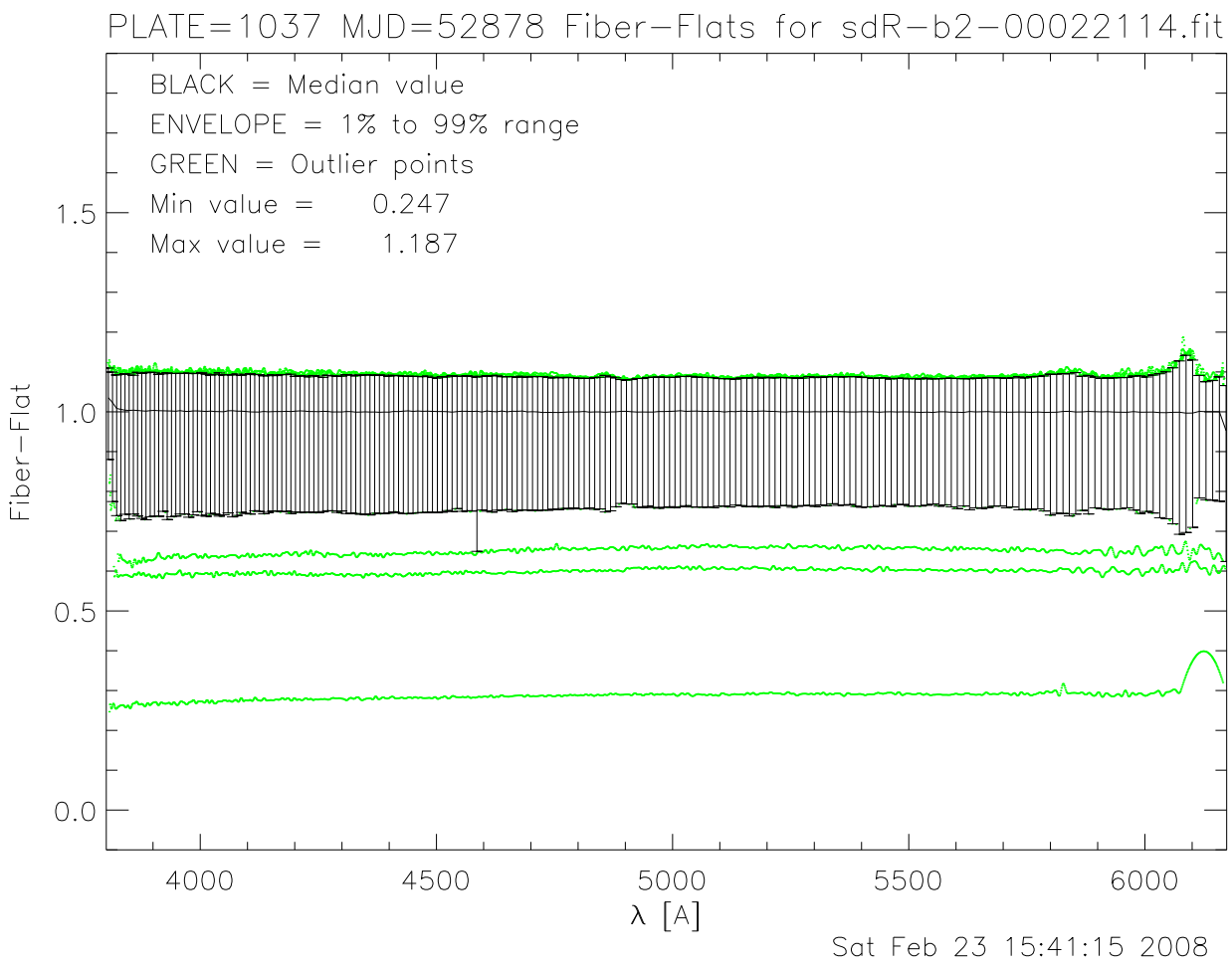

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

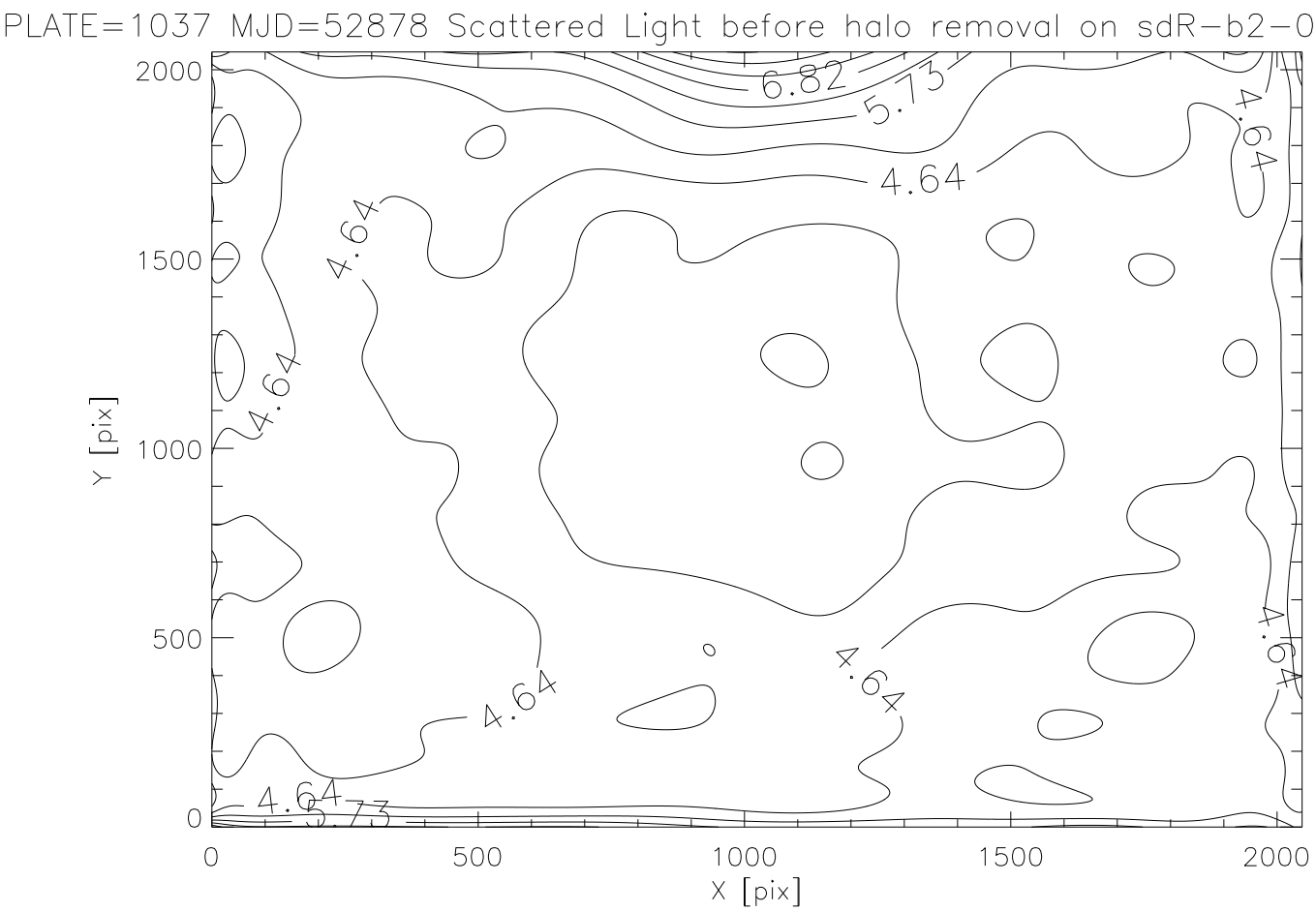

PLATE=1037 MJD=52878 sdR-b2-00022111.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

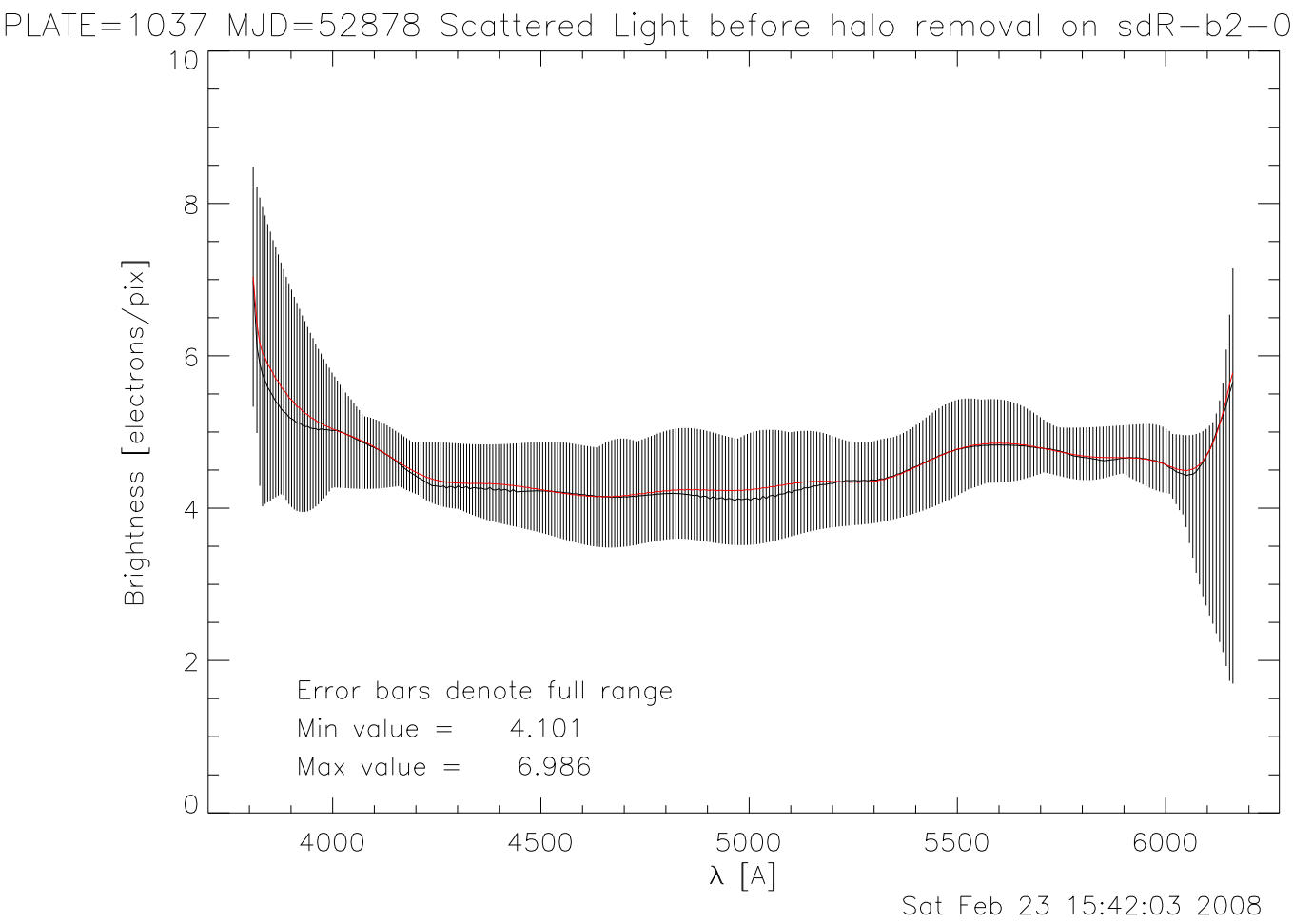

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022111.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

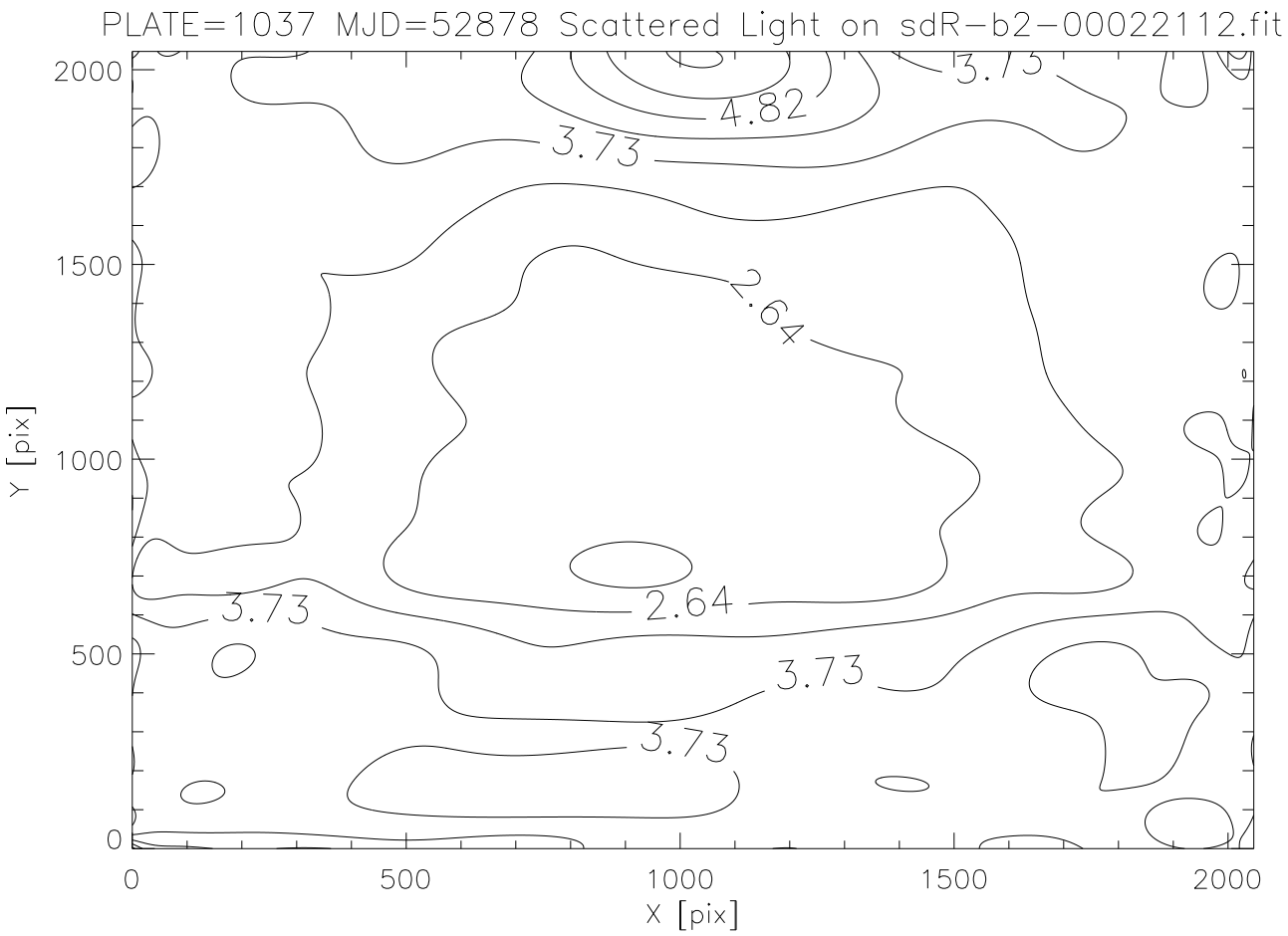

PLATE=1037 MJD=52878 sdR-b2-00022111.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.30 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

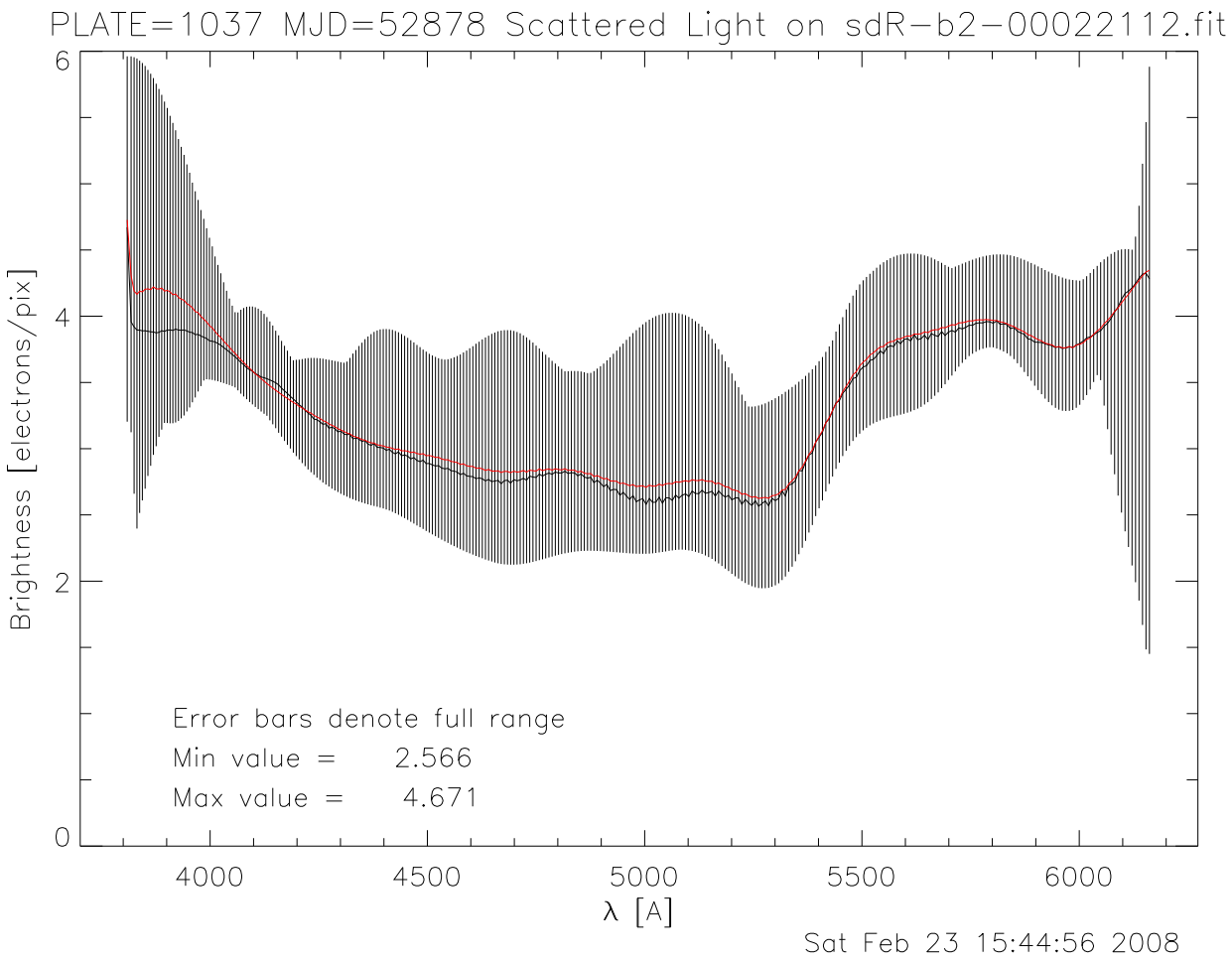

PLATE=1037 MJD=52878 sdR-b2-00022111.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.05 %
Fiber number
Focal Distance [mm]
Airmass

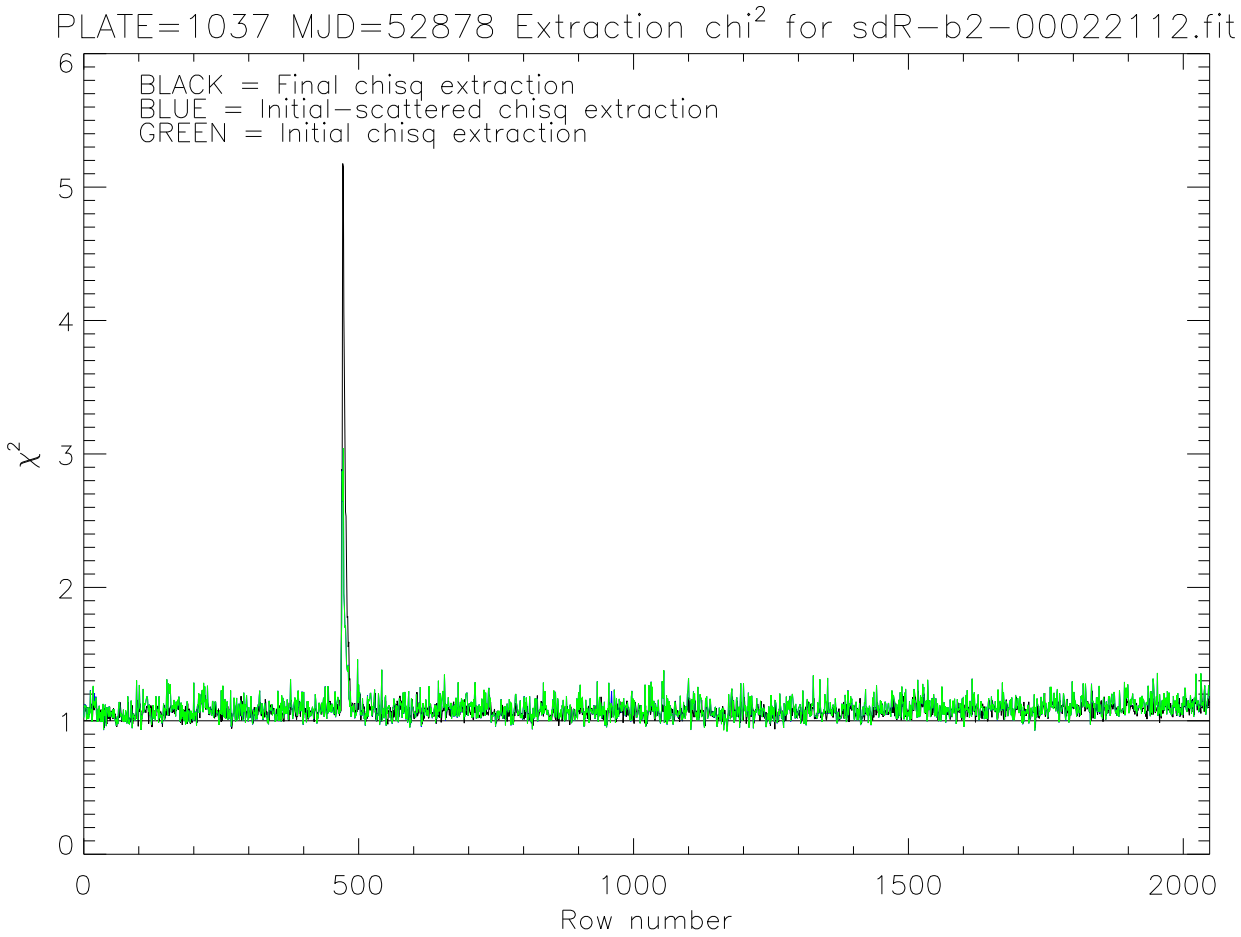

PLATE=1037 MJD=52878 Fiber−Flats for sdR−b2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.247
Max value = 1.187
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:41:15 2008

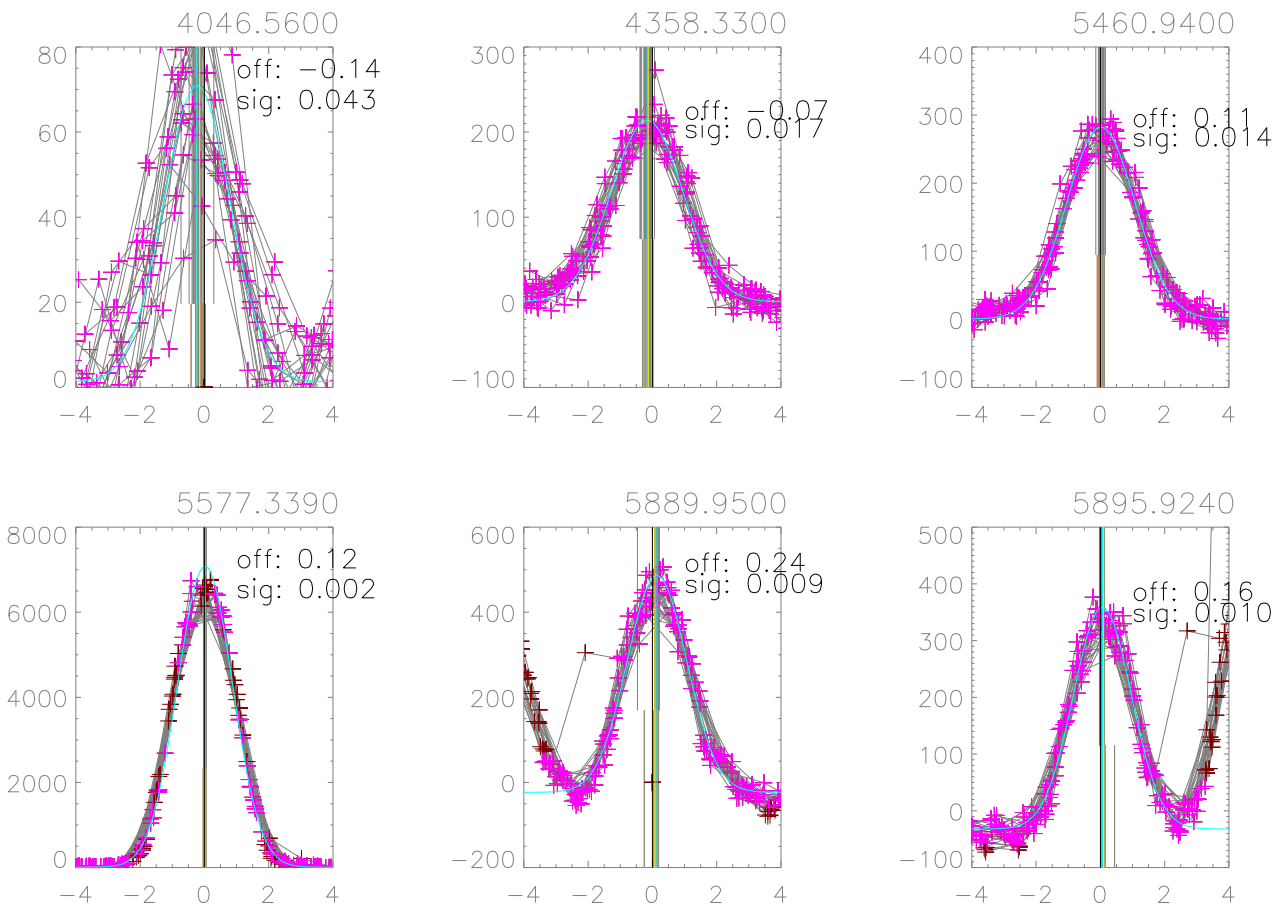

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022112.f
6.82
5.73
4.64
4.64
4.64
4.64
4.64
4.64
4.64
4.64
4.64
5.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

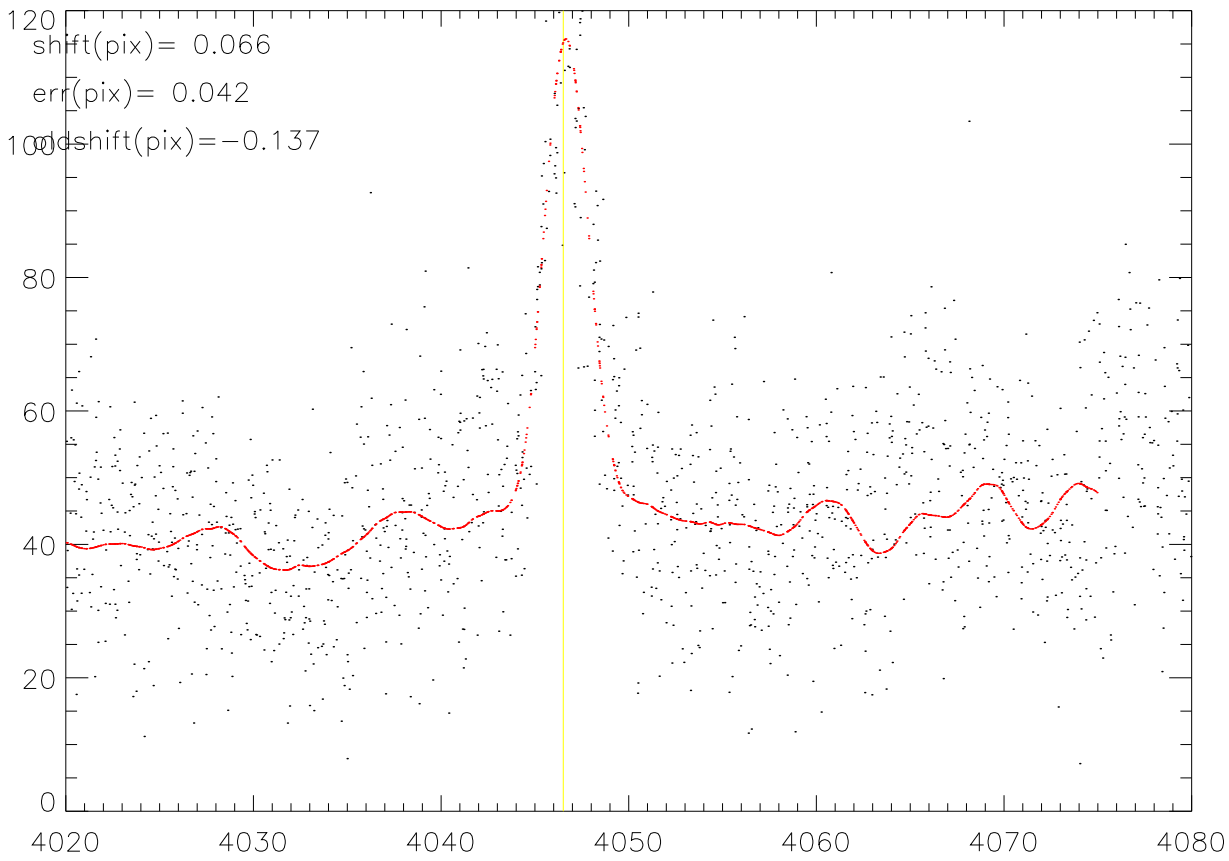

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022112.f
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 4.101
Max value = 6.986
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:42:03 2008

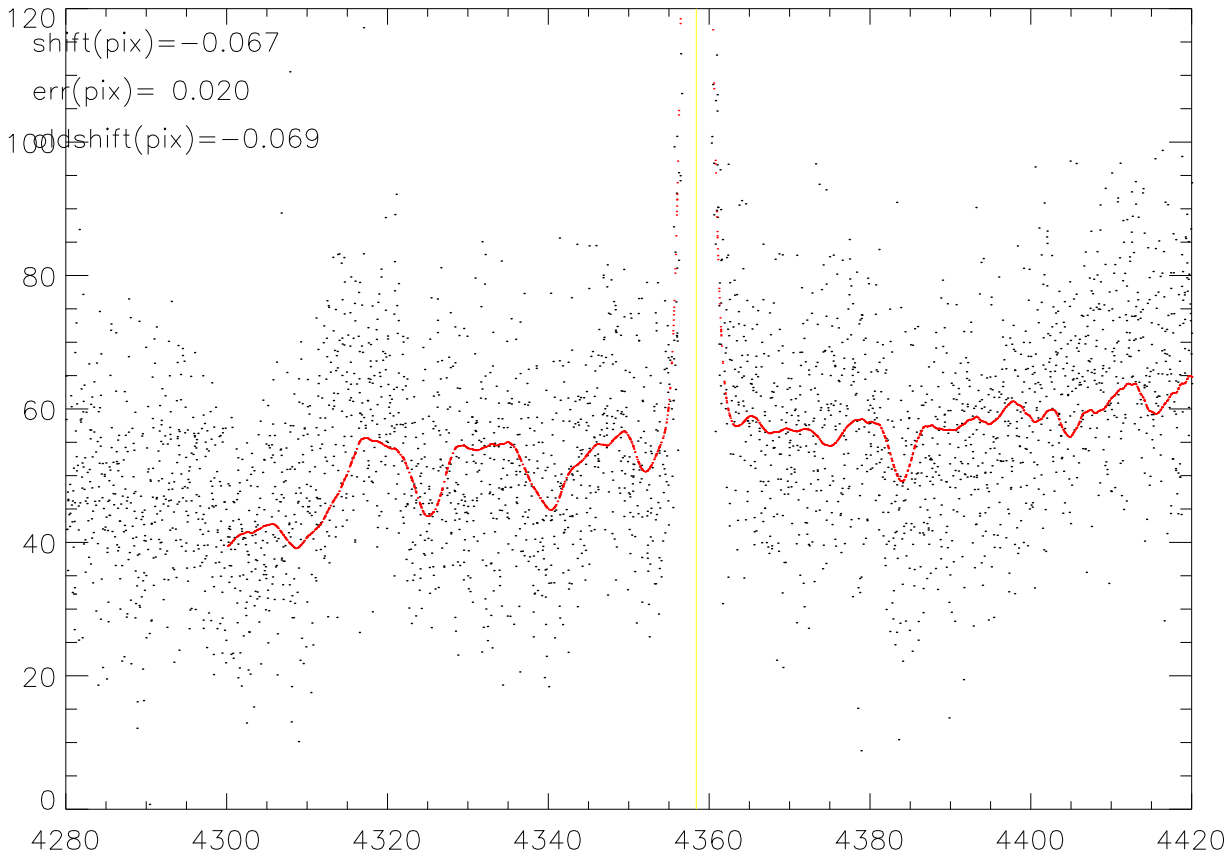

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022112.fit
4.82
3.73
3.73
2.64
2.64
3.73
3.73
3.73
Y [pix]
X [pix]
0
500
1000
1500
2000

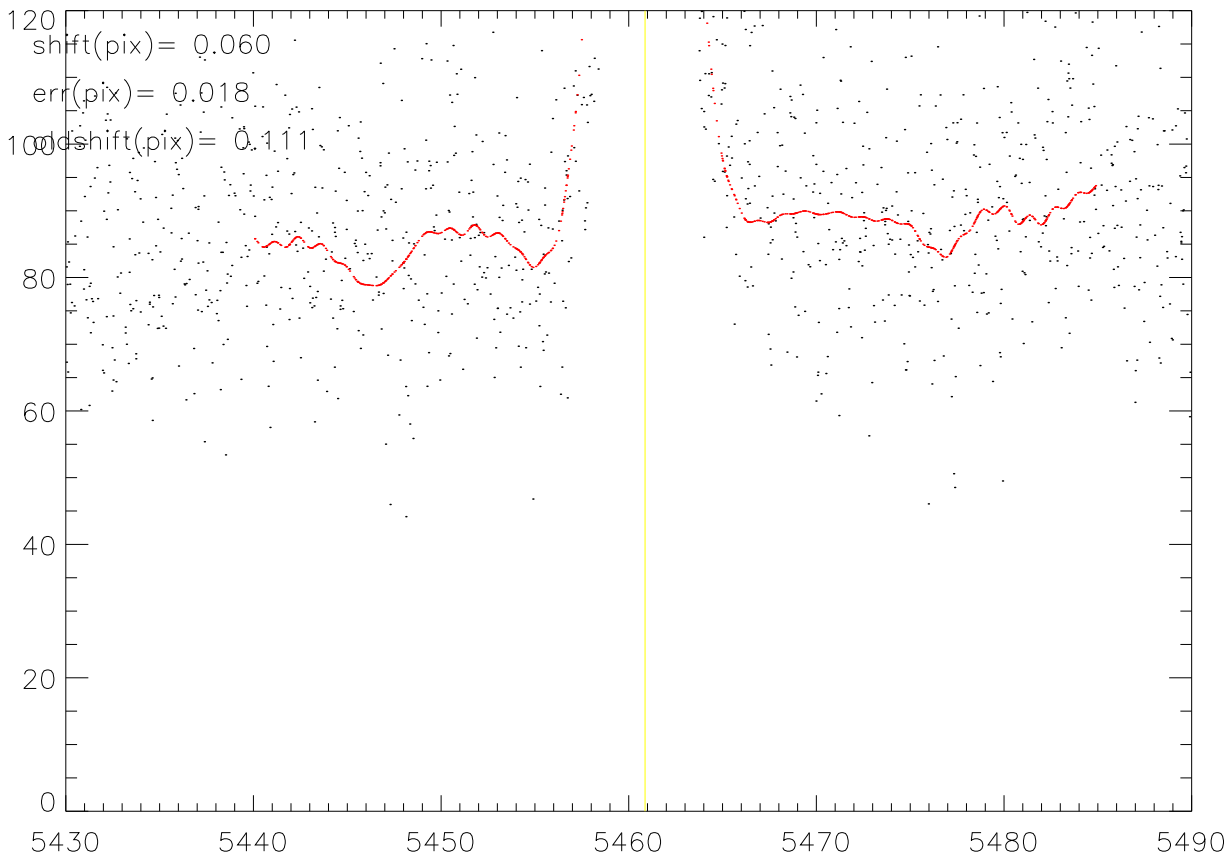

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022112.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.566
Max value = 4.671
Sat Feb 23 15:44:56 2008

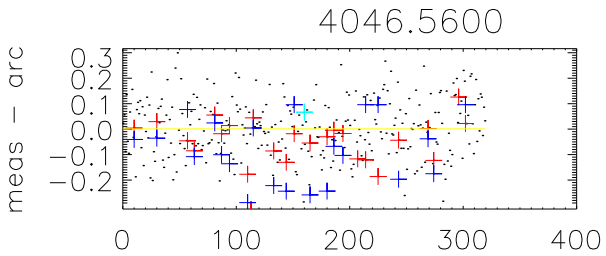

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b2-00022112.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

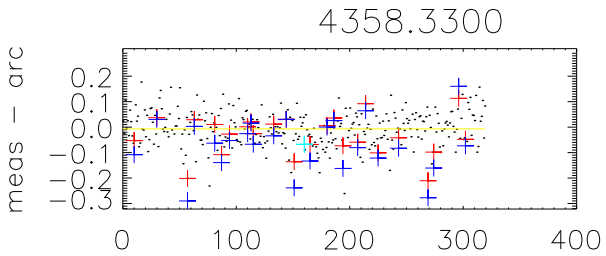

4046.5600
off: −0.14
sig: 0.043
4358.3300
off: −0.07
sig: 0.017
5460.9400
off: 0.11
sig: 0.014
5577.3390
off: 0.12
sig: 0.002
5889.9500
off: 0.24
sig: 0.009
5895.9240
off: 0.16
sig: 0.010

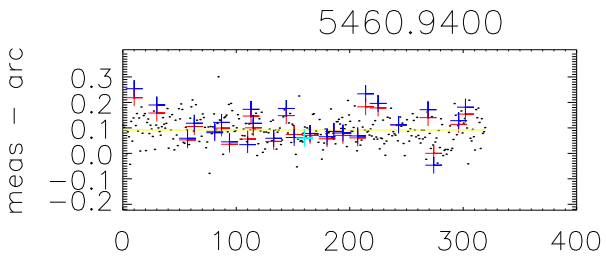

shift(pix)= 0.066
err(pix)= 0.042
oldshift(pix)=−0.137
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

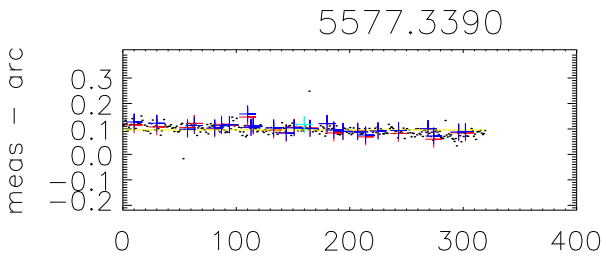

shift(pix)=−0.067
err(pix)= 0.020
oldshift(pix)=−0.069
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

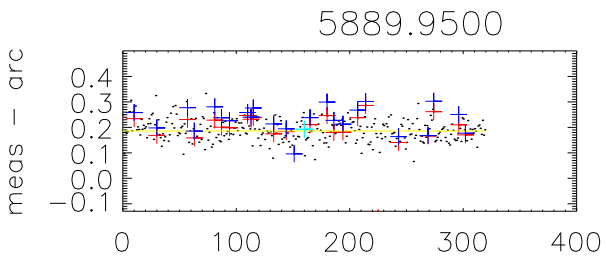

shift(pix)= 0.060
err(pix)= 0.018
oldshift(pix)= 0.111
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

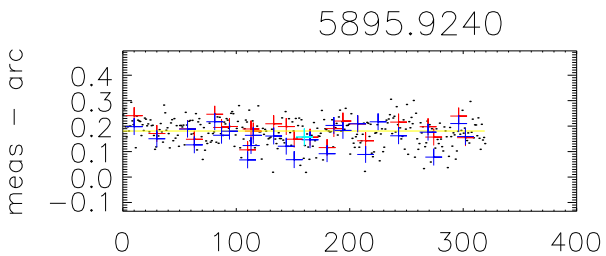

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

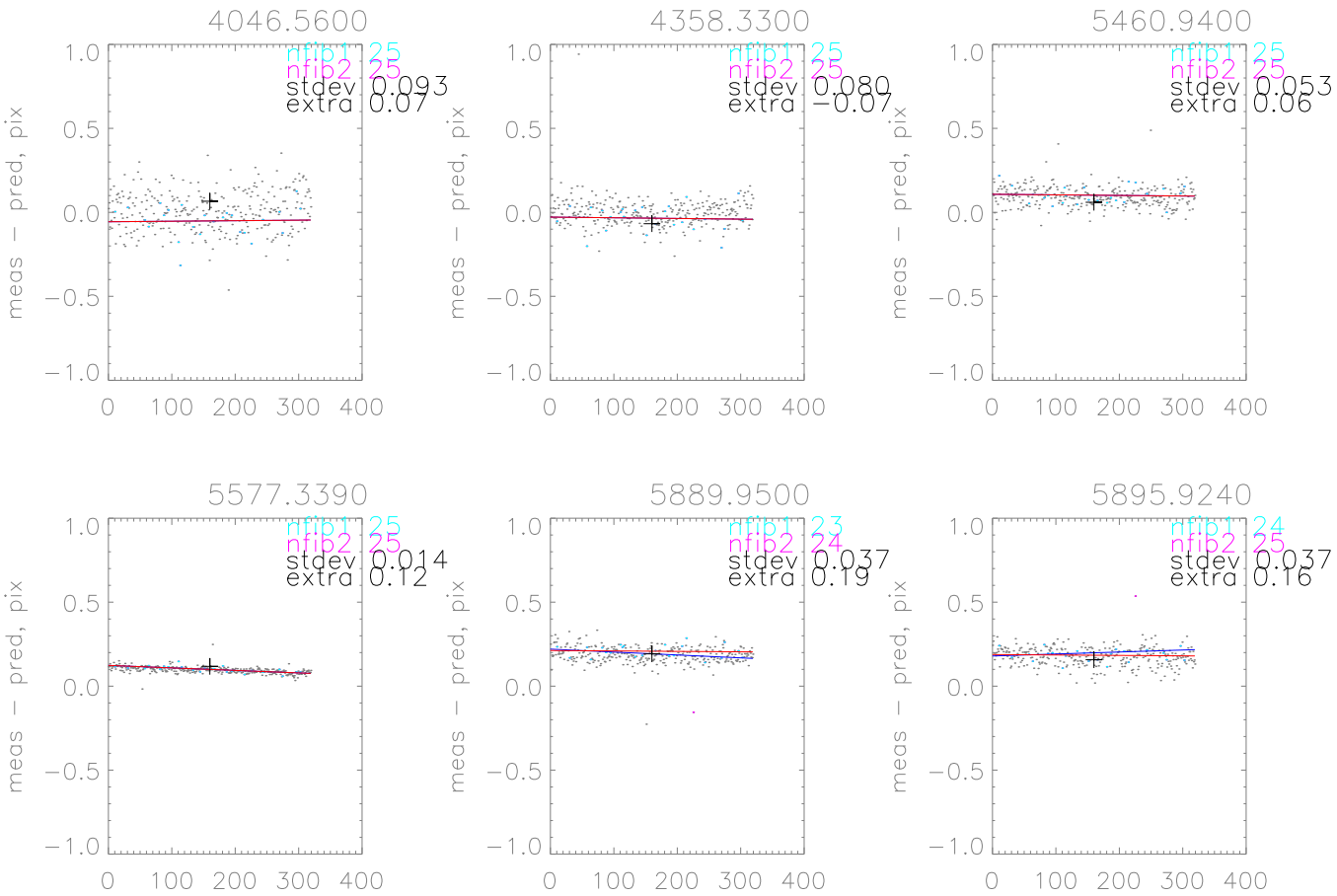

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

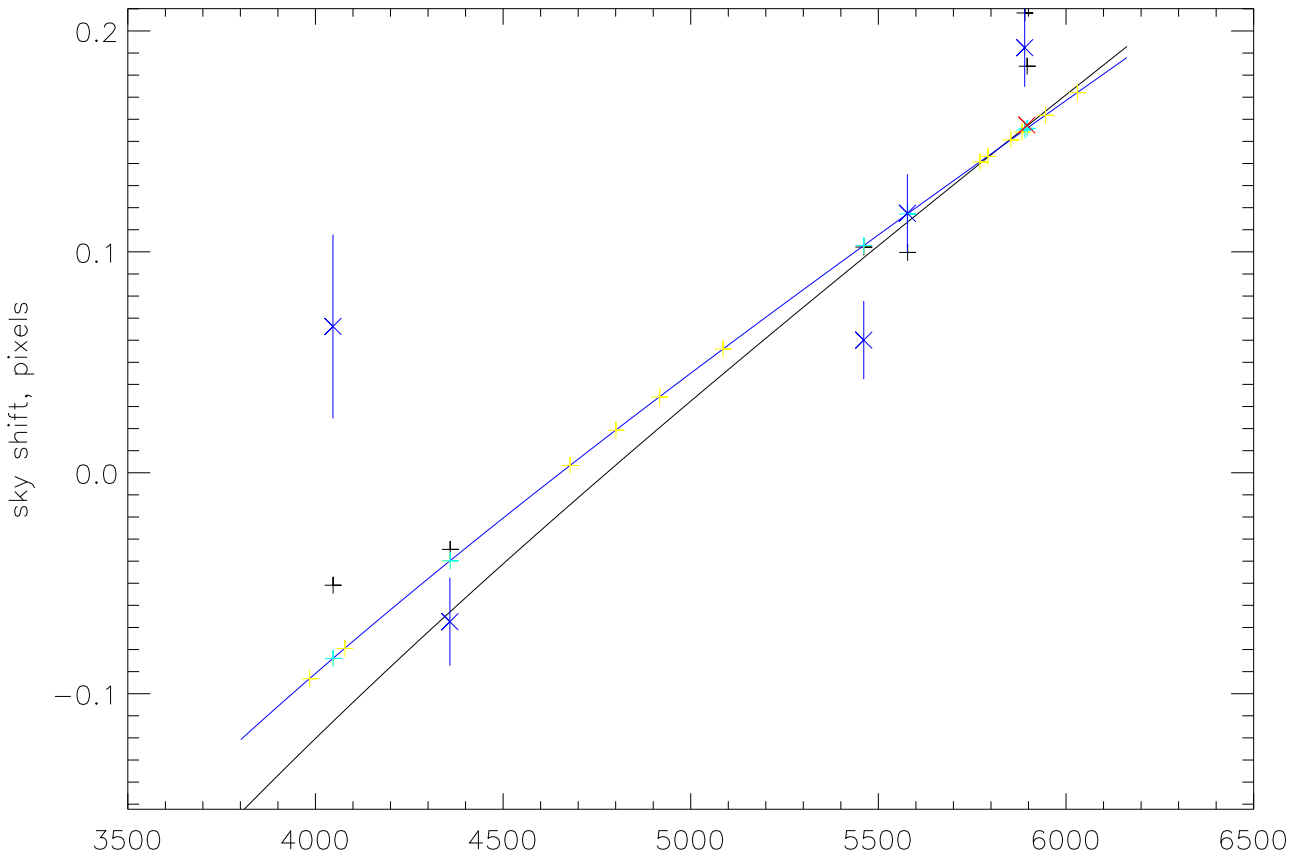

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

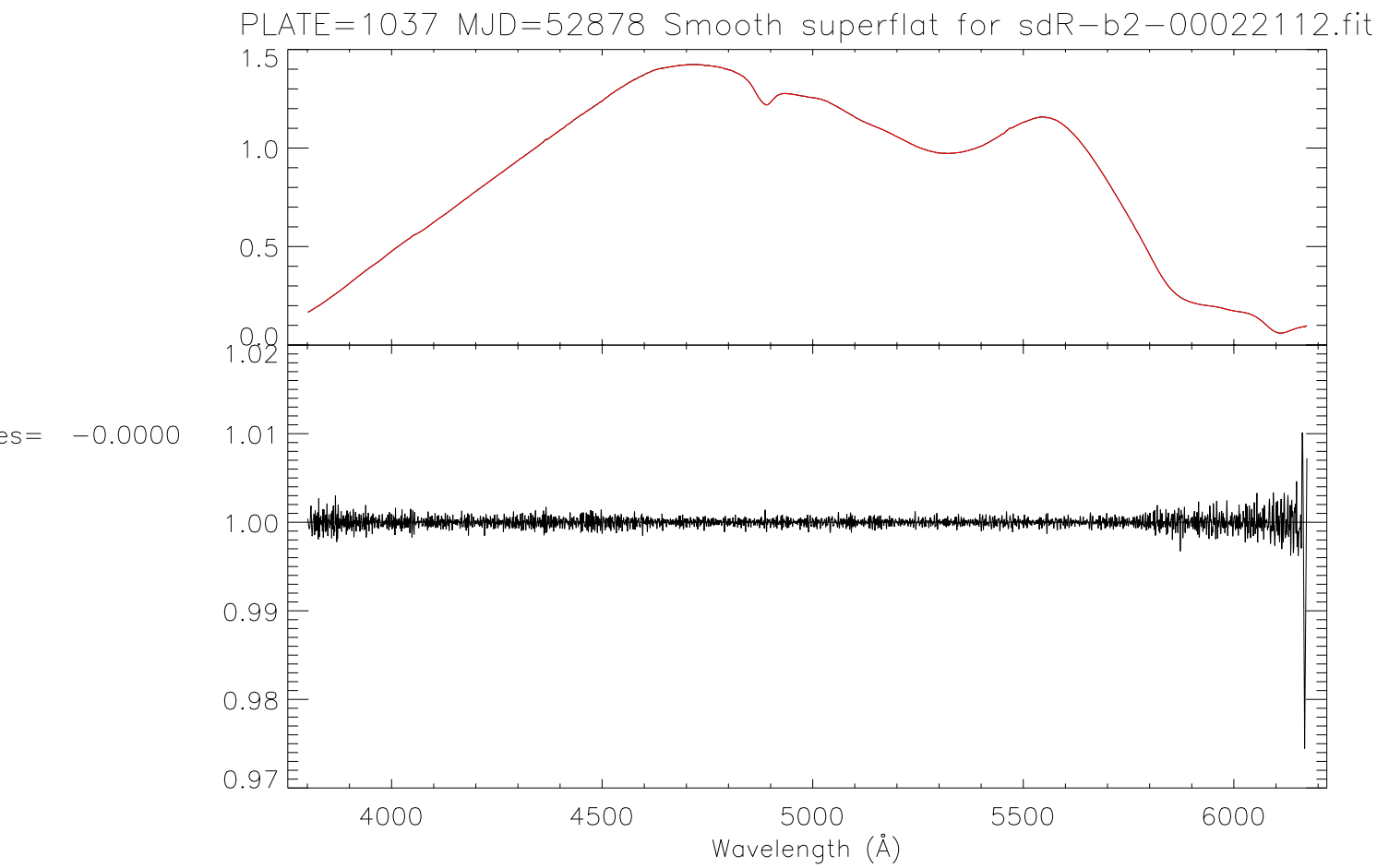

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

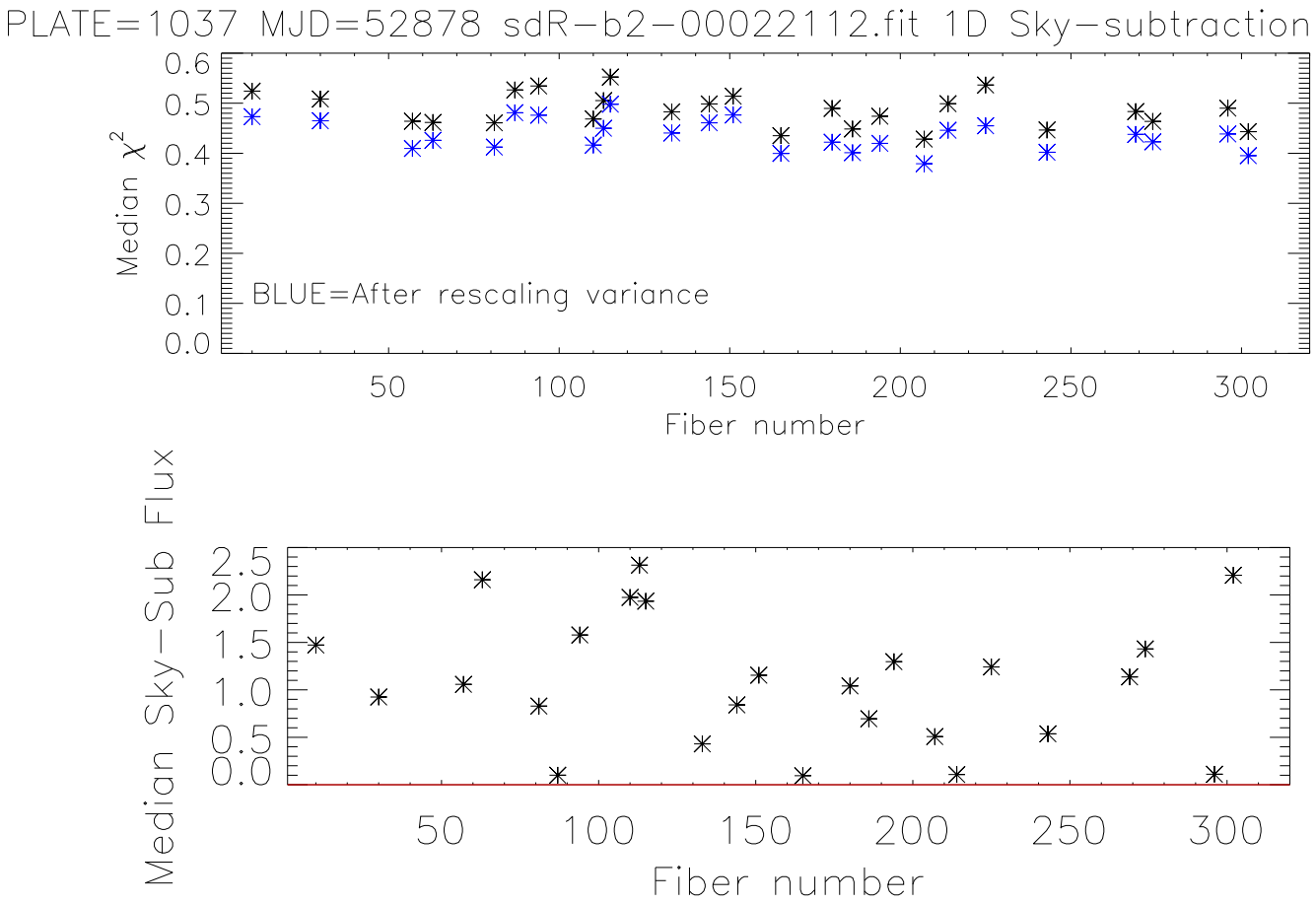

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

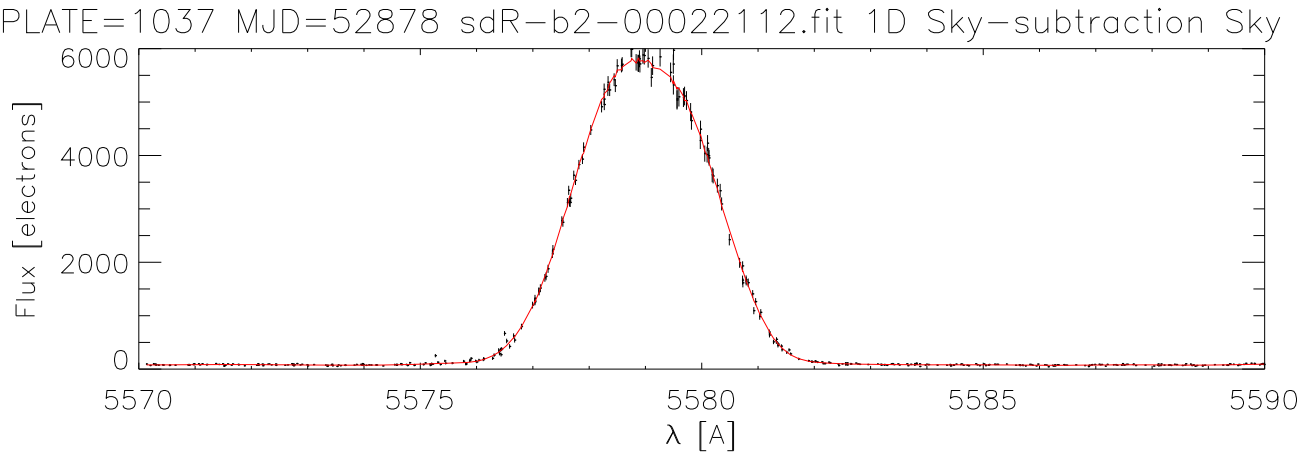

4046.5600
nfib1 25
nfib2 25
stdev 0.093
extra 0.07
4358.3300
nfib1 25
nfib2 25
stdev 0.080
extra −0.07
5460.9400
nfib1 25
nfib2 25
stdev 0.053
extra 0.06
5577.3390
nfib1 25
nfib2 25
stdev 0.014
extra 0.12
5889.9500
nfib1 23
nfib2 24
stdev 0.037
extra 0.19
5895.9240
nfib1 24
nfib2 25
stdev 0.037
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

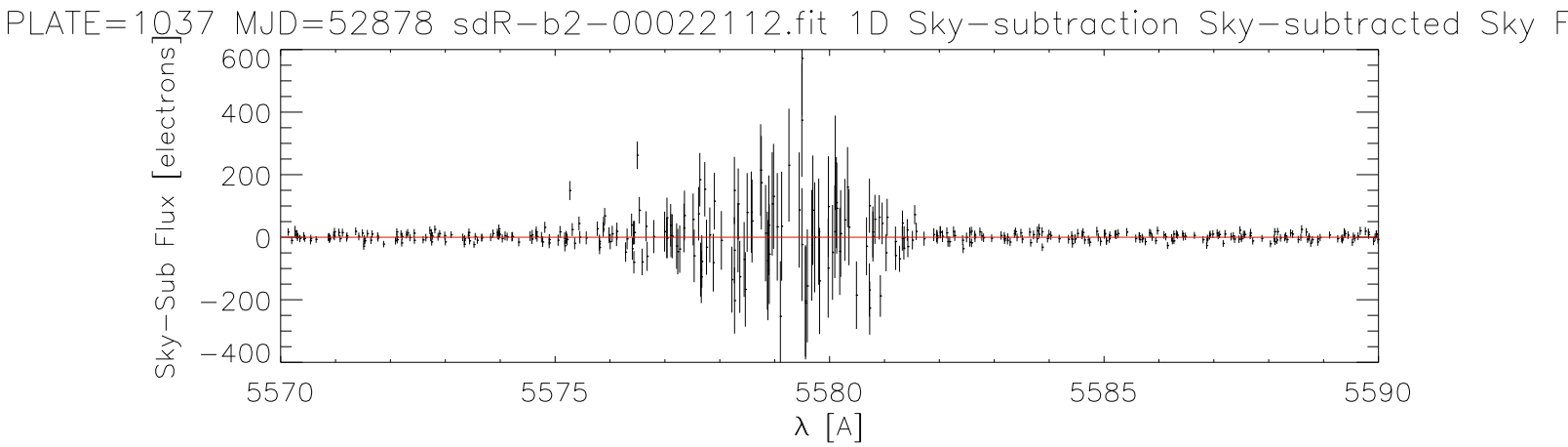

0.2
0.1
0.0
−0.1
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

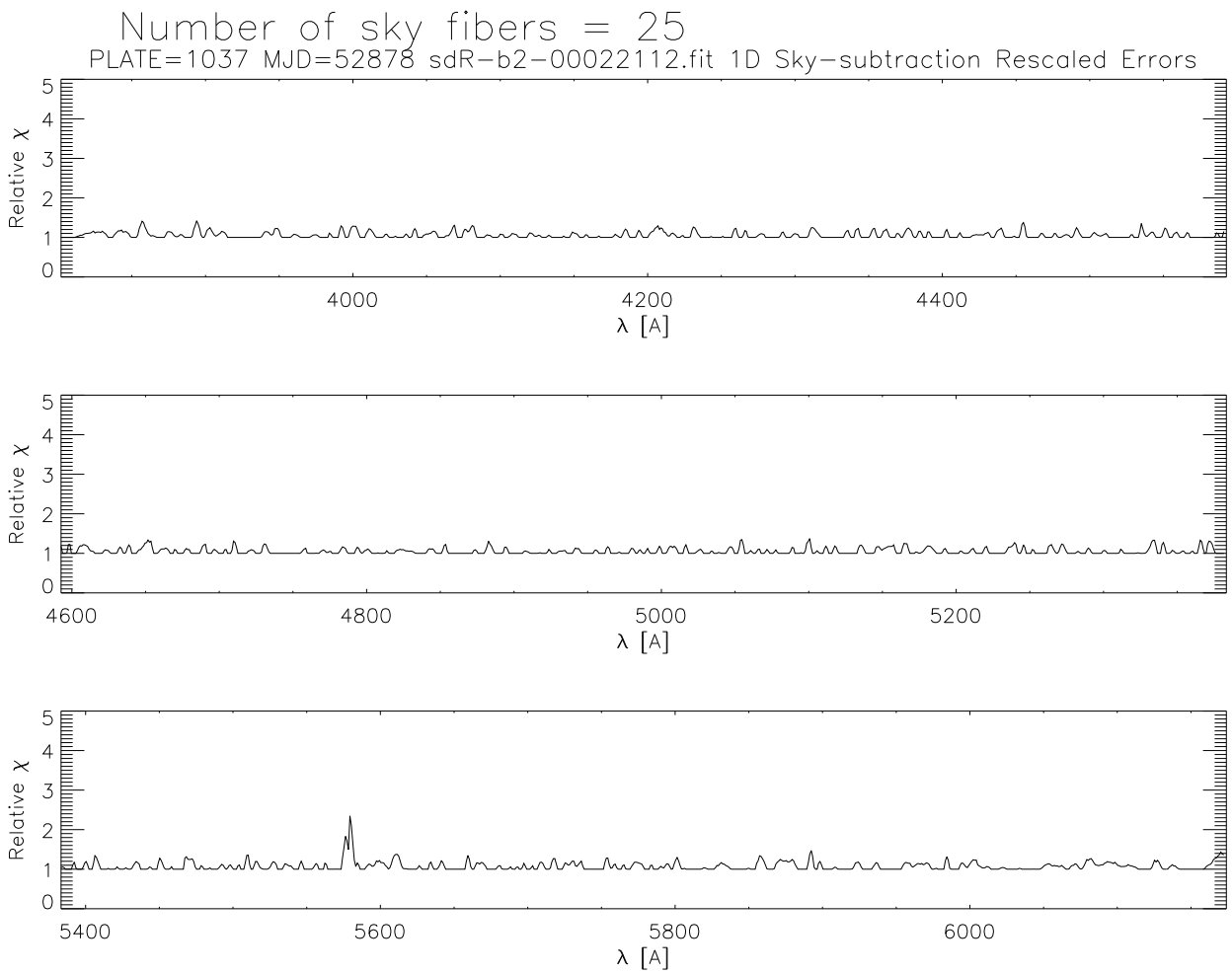

PLATE=1037 MJD=52878 Smooth superflat for sdR-b2-00022112.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

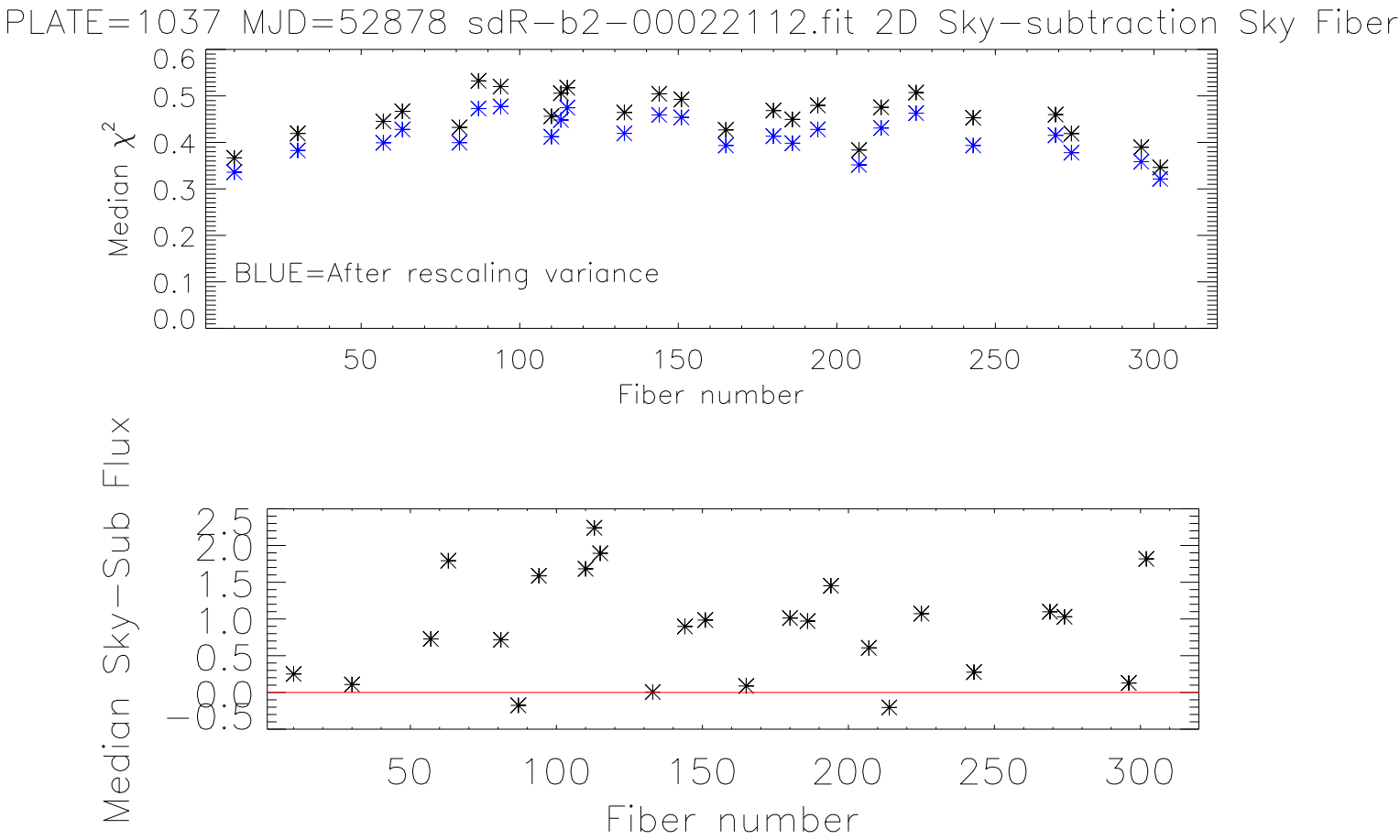
es= −0.0000

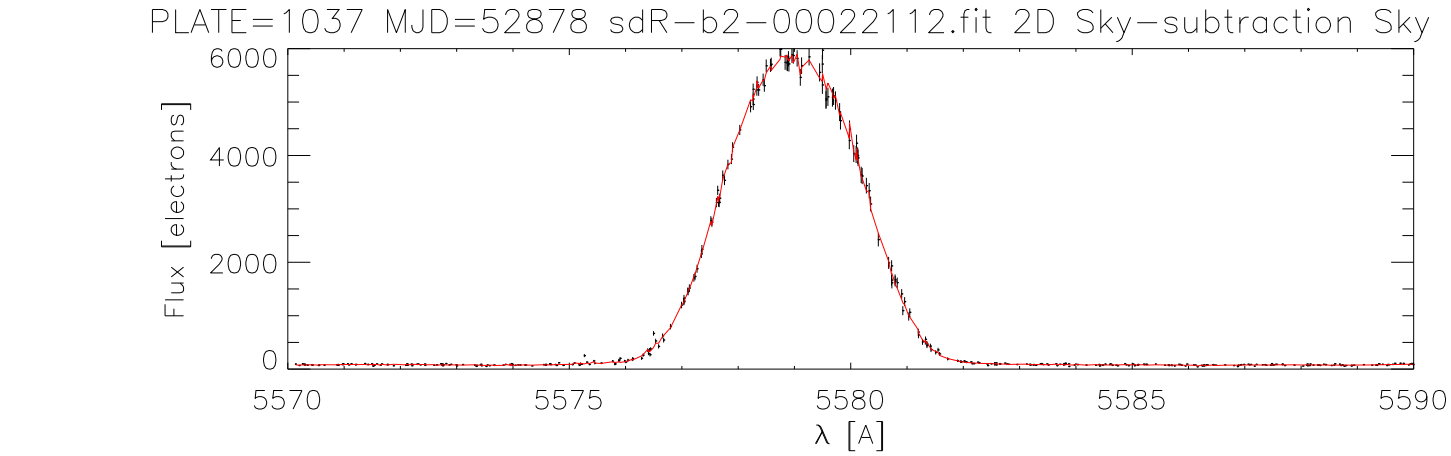

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

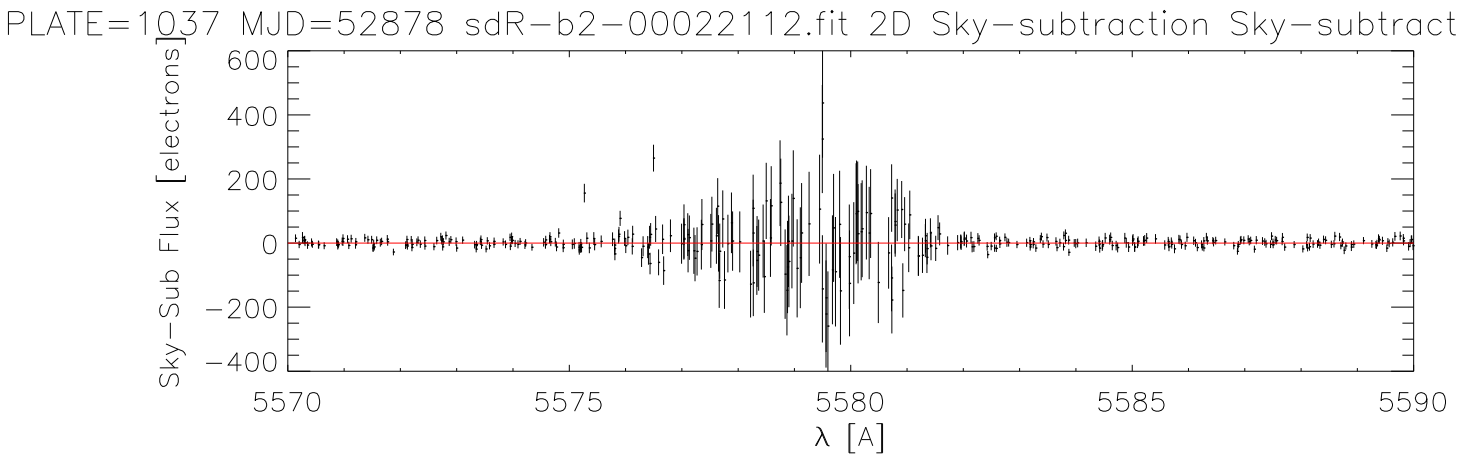

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

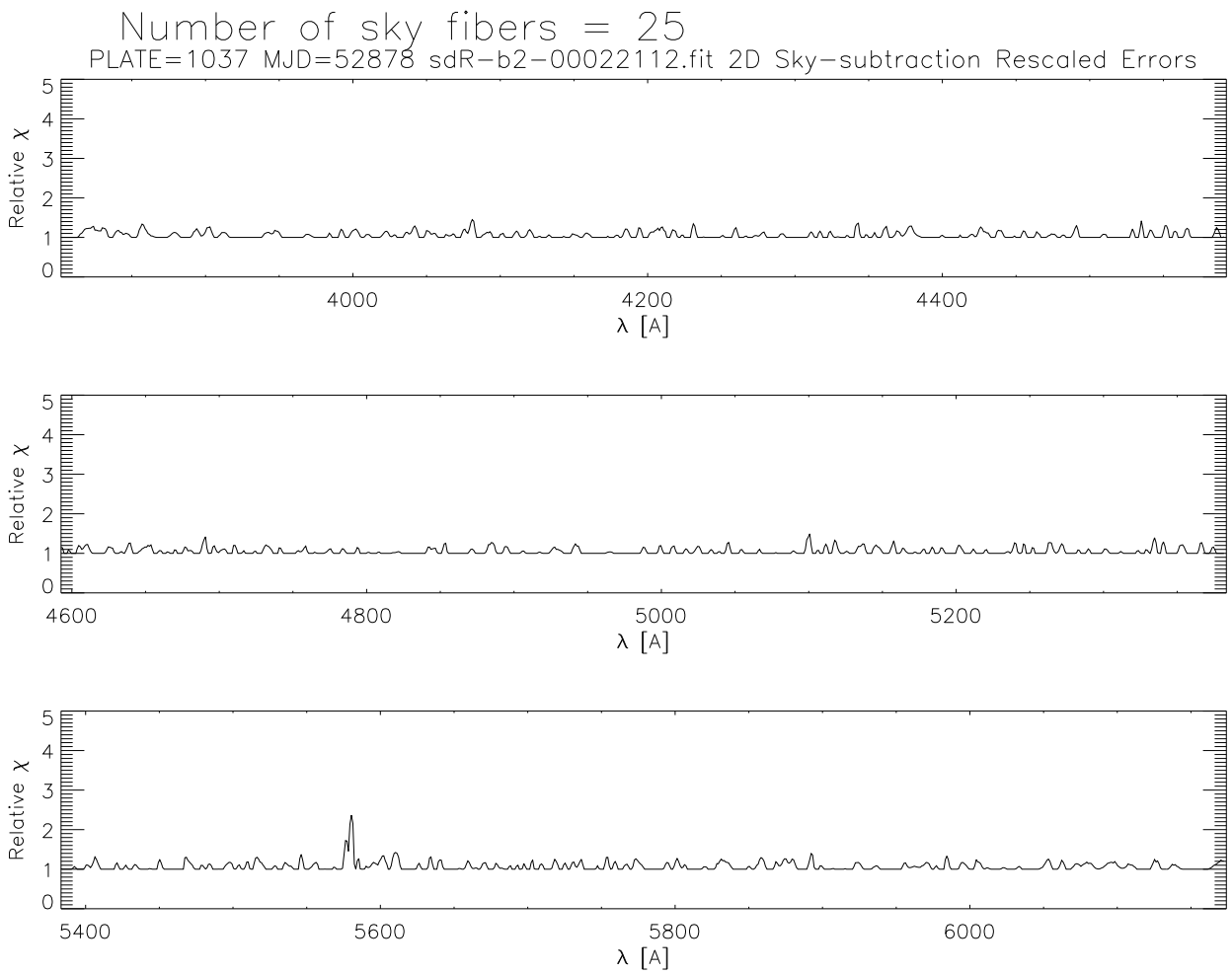

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

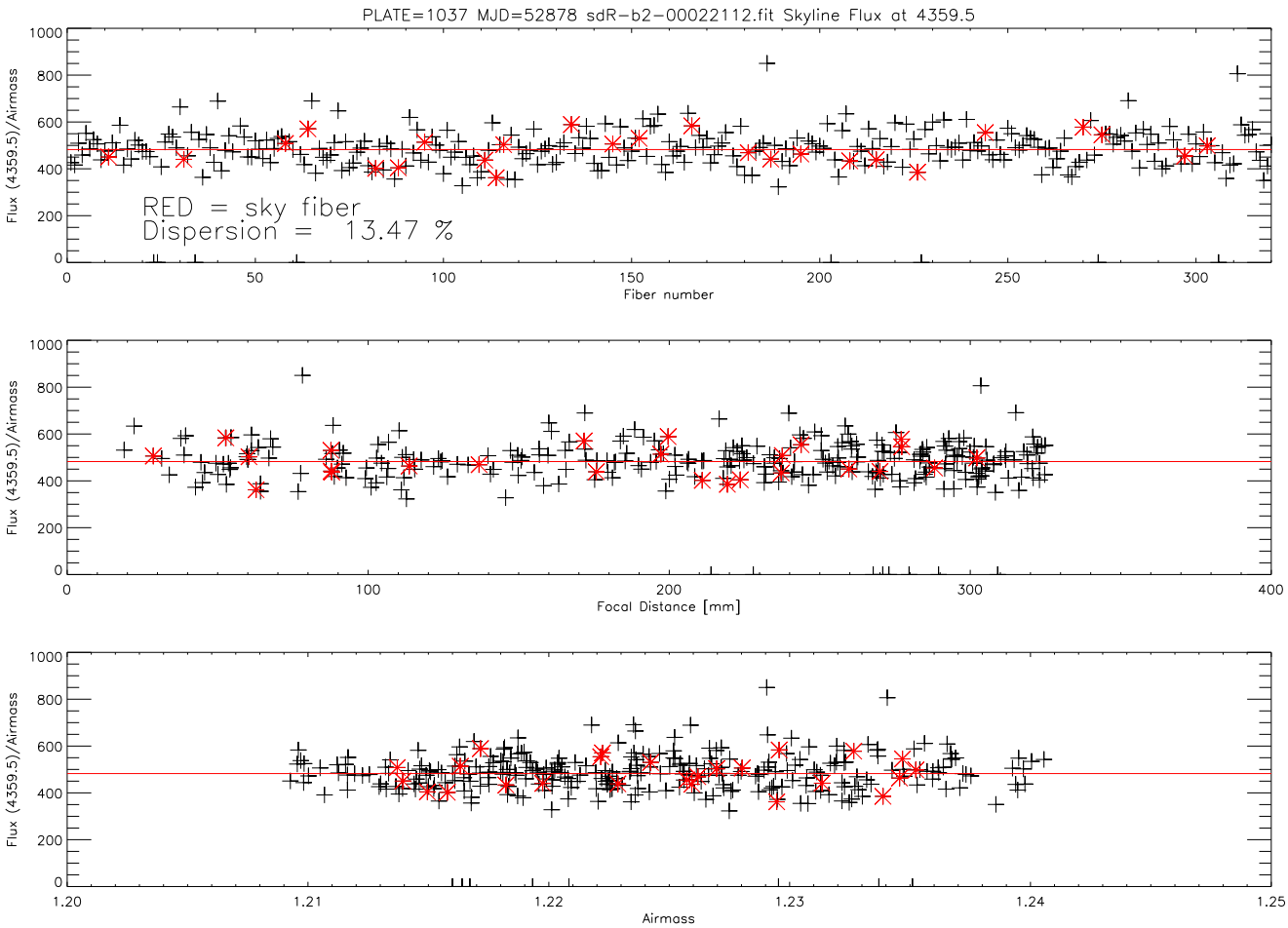

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022112.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

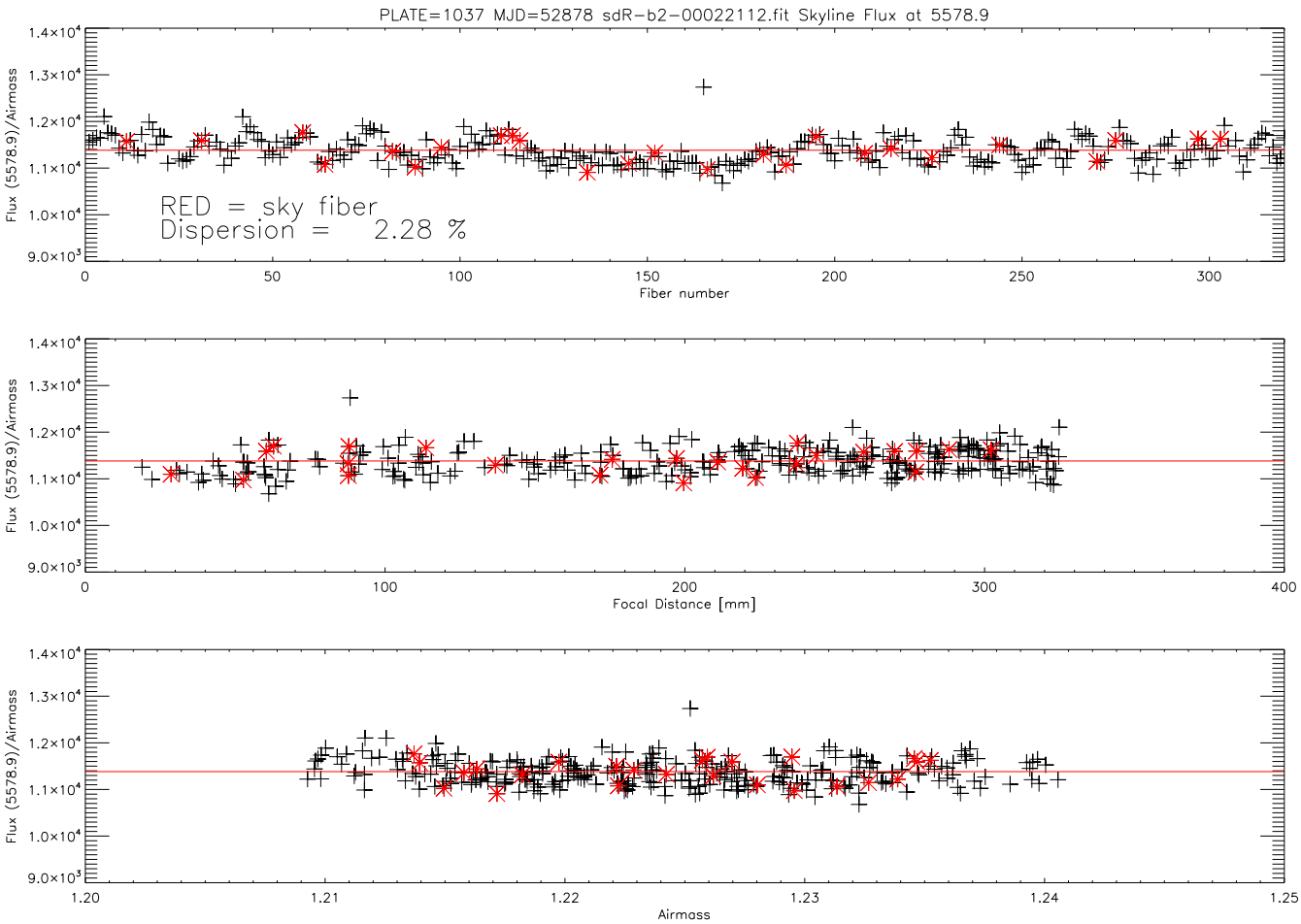

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

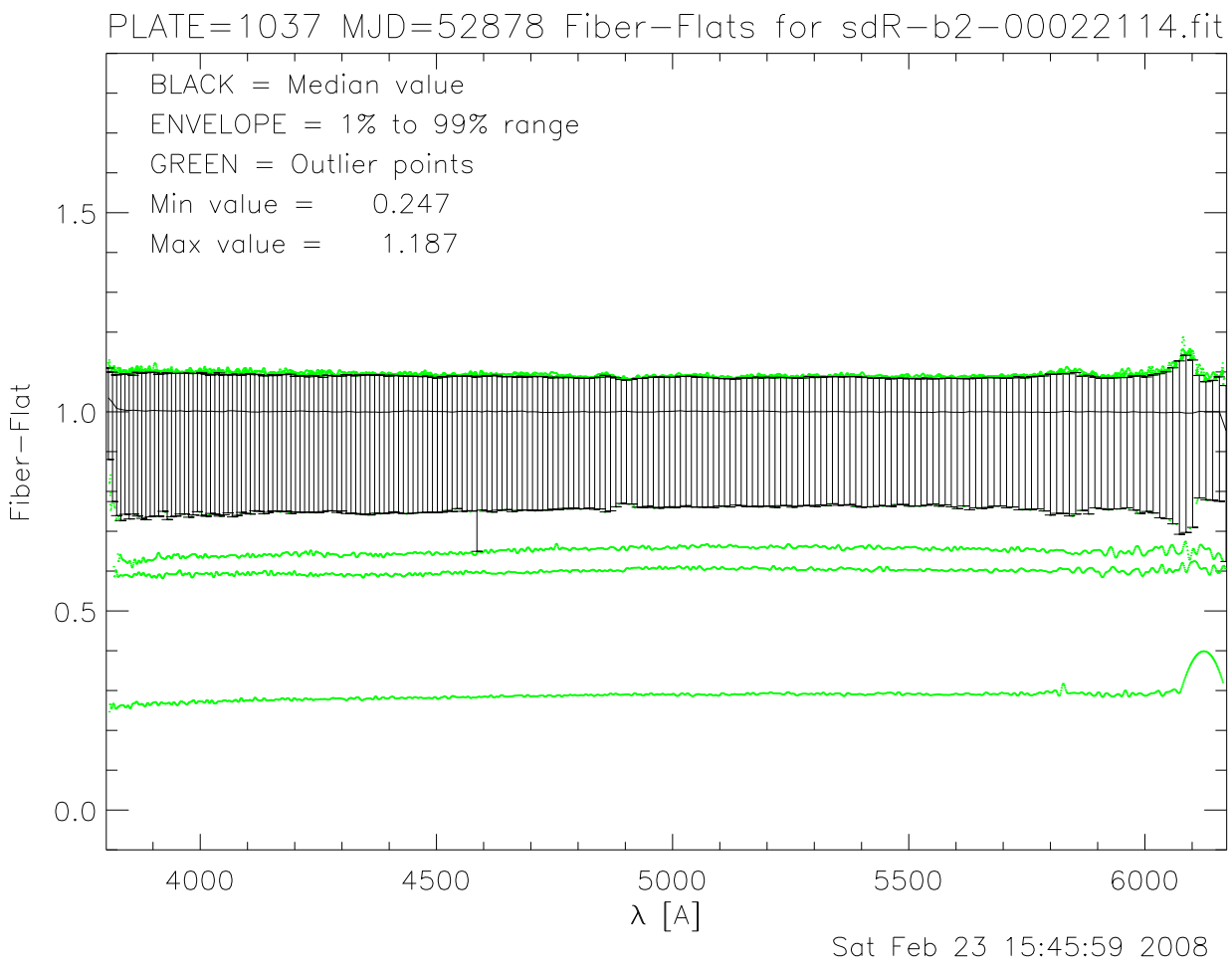

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

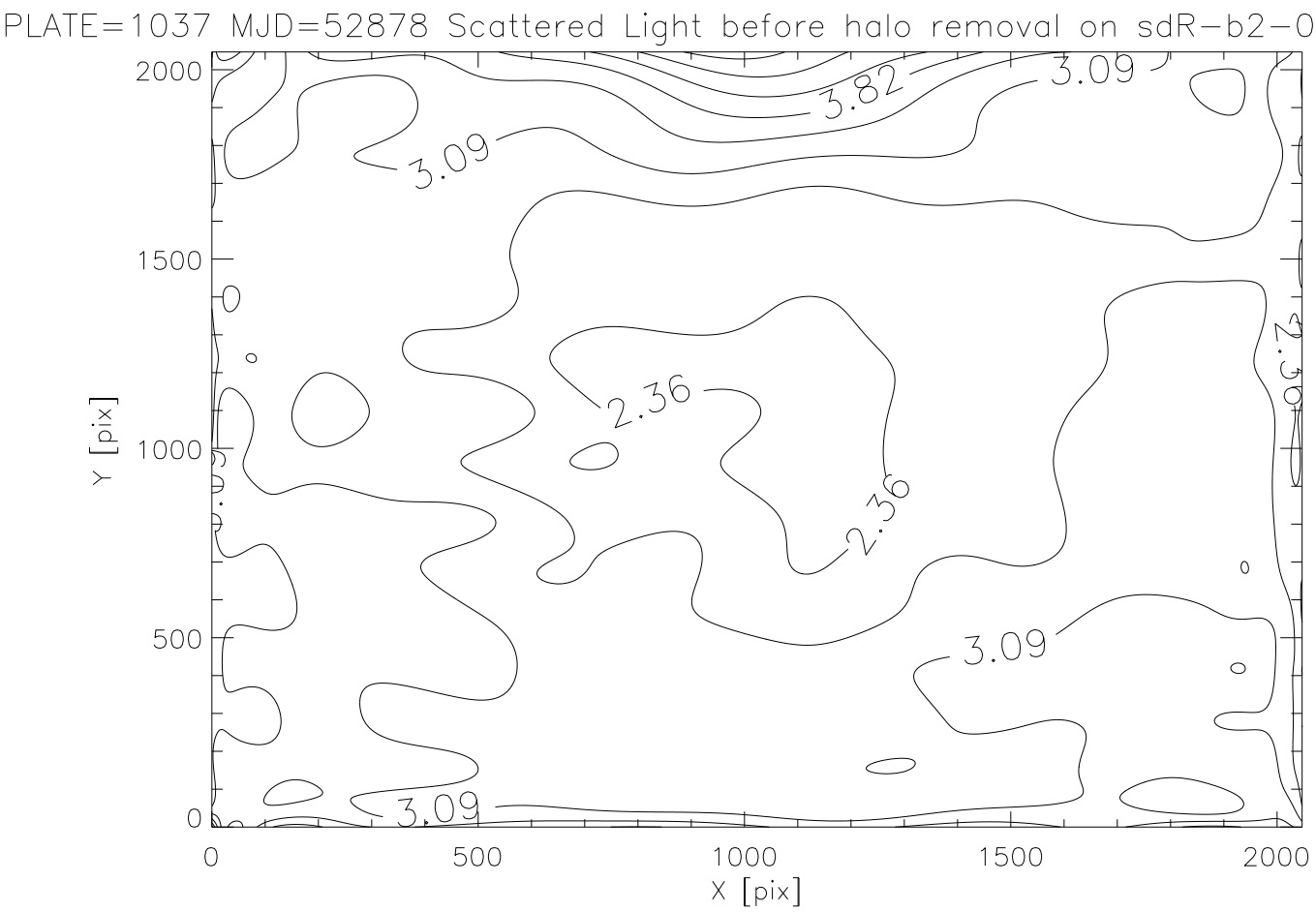

PLATE=1037 MJD=52878 sdR-b2-00022112.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

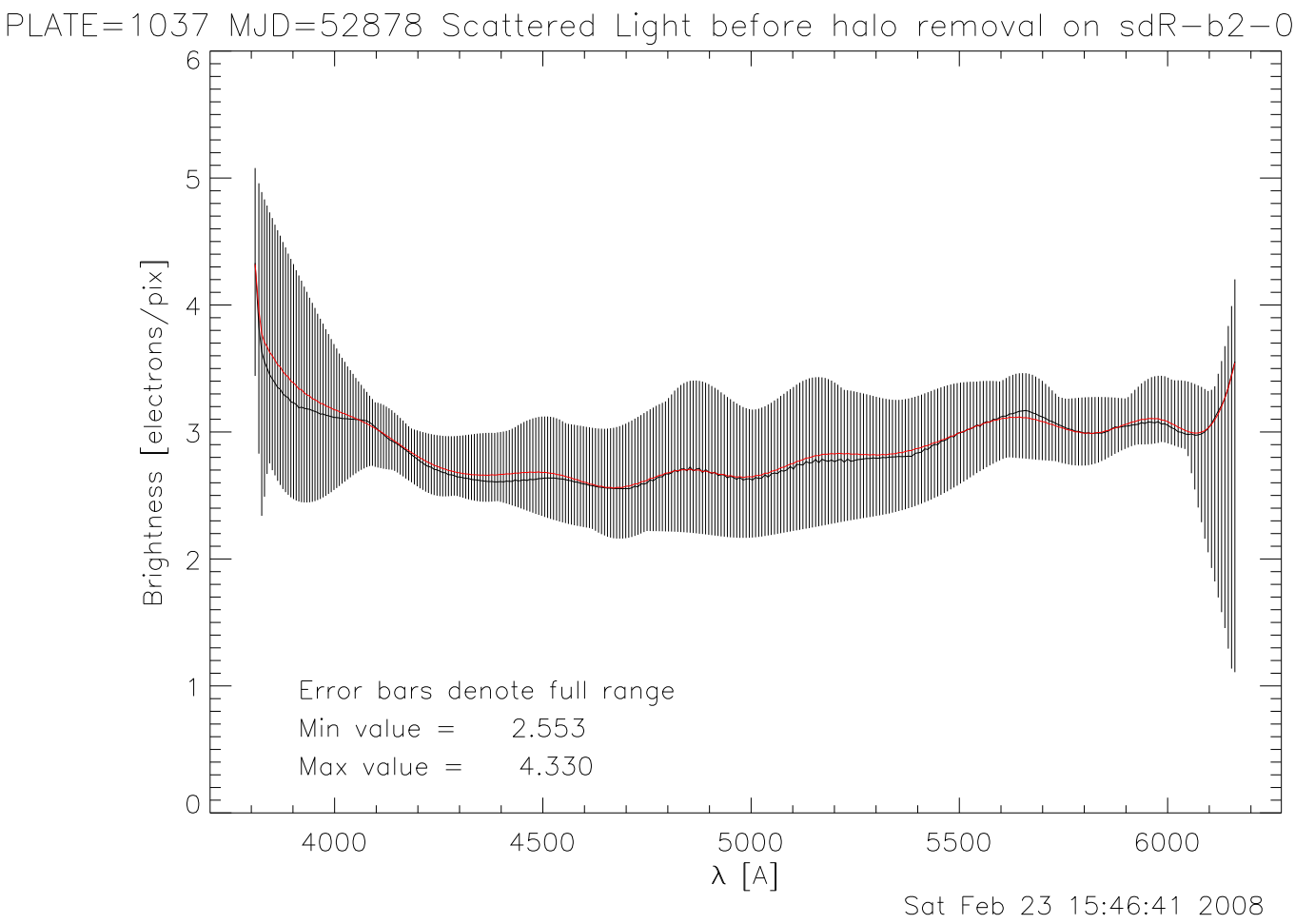

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022112.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

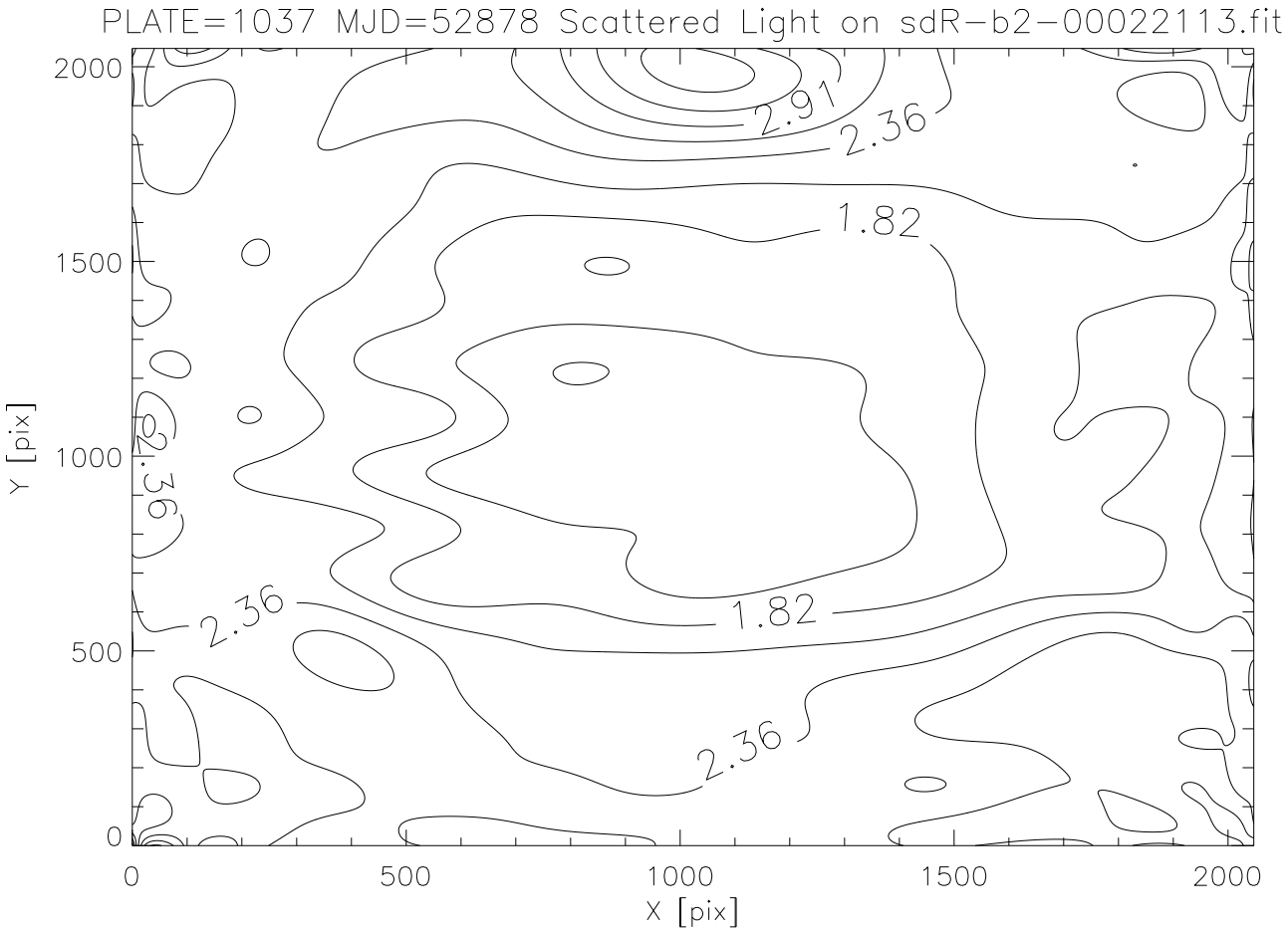

PLATE=1037 MJD=52878 sdR-b2-00022112.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.47 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

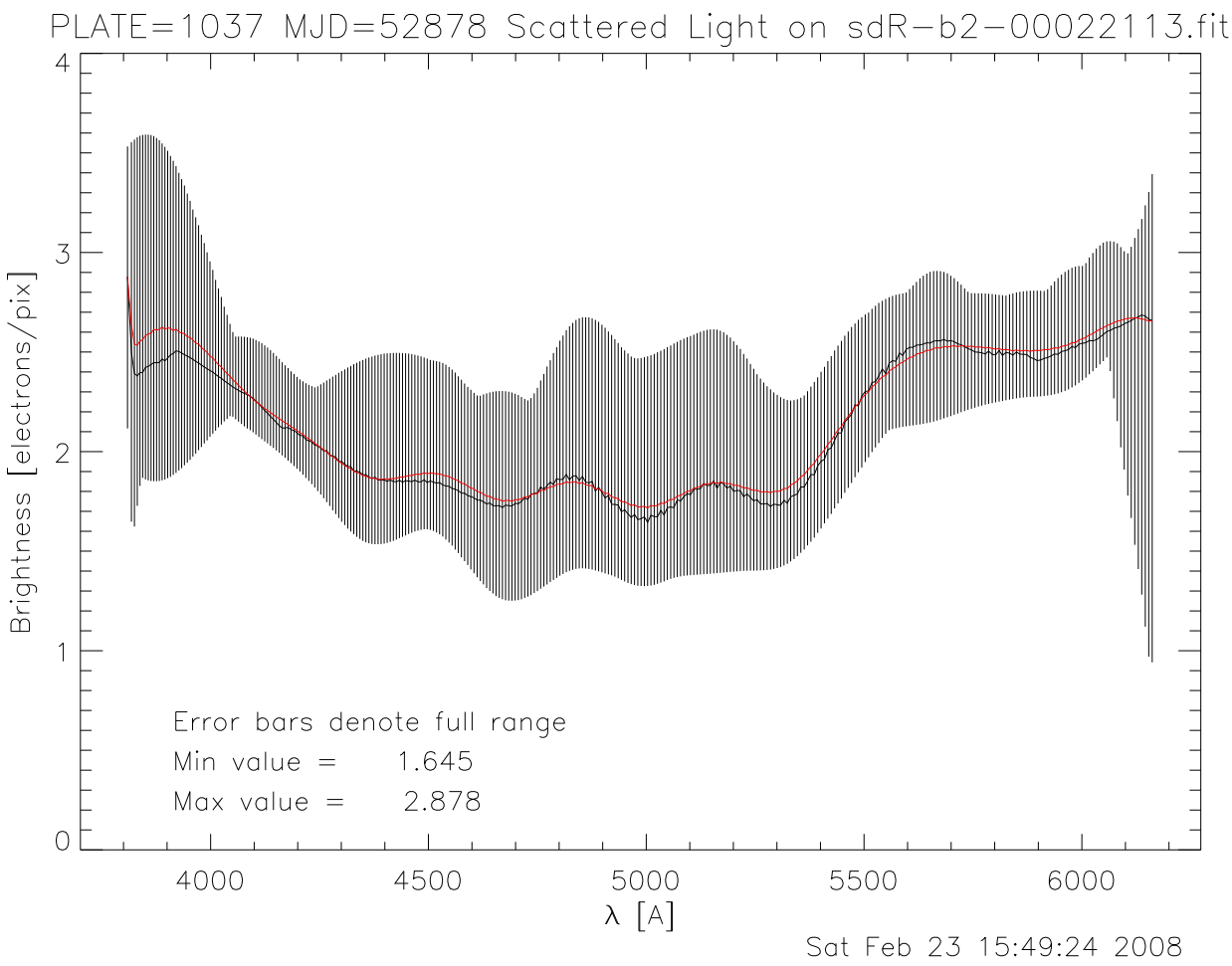

PLATE=1037 MJD=52878 sdR-b2-00022112.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.28 %
Fiber number
Focal Distance [mm]
Airmass

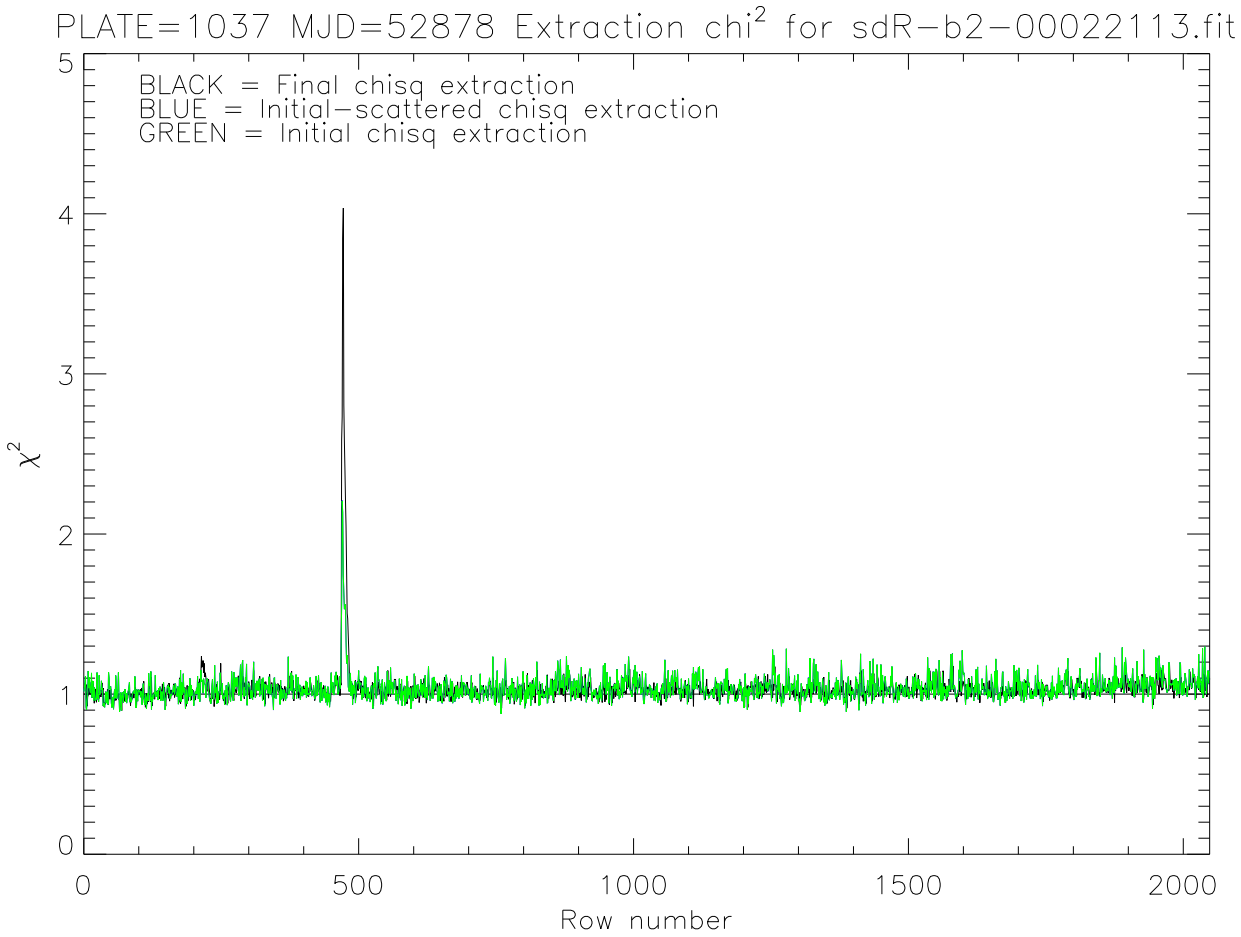

PLATE=1037 MJD=52878 Fiber−Flats for sdR−b2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.247
Max value = 1.187
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 23 15:45:59 2008

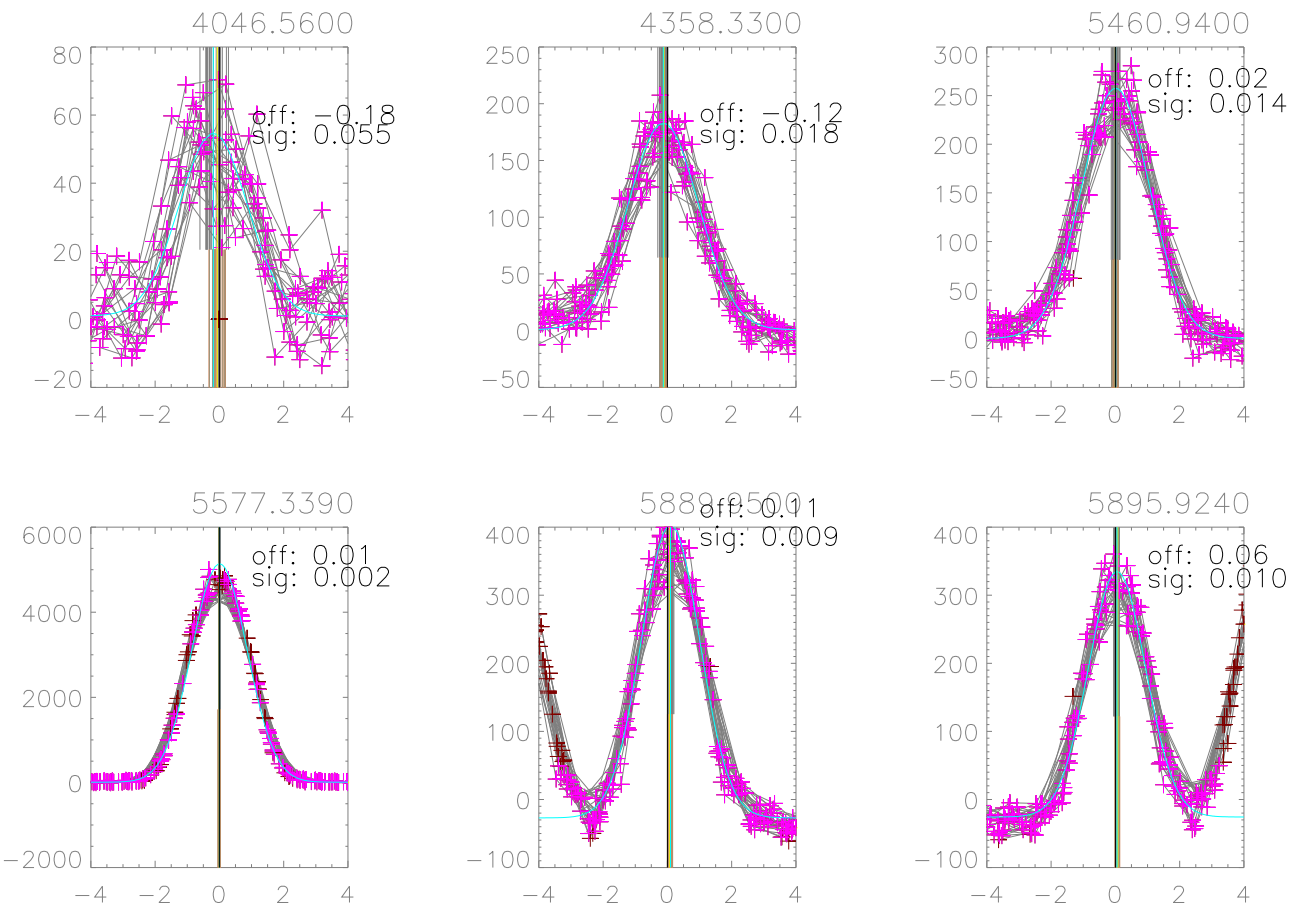

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022113.f
3.09
3.82
3.09
3.09
2.36
2.36
2.36
3.09
3.09
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

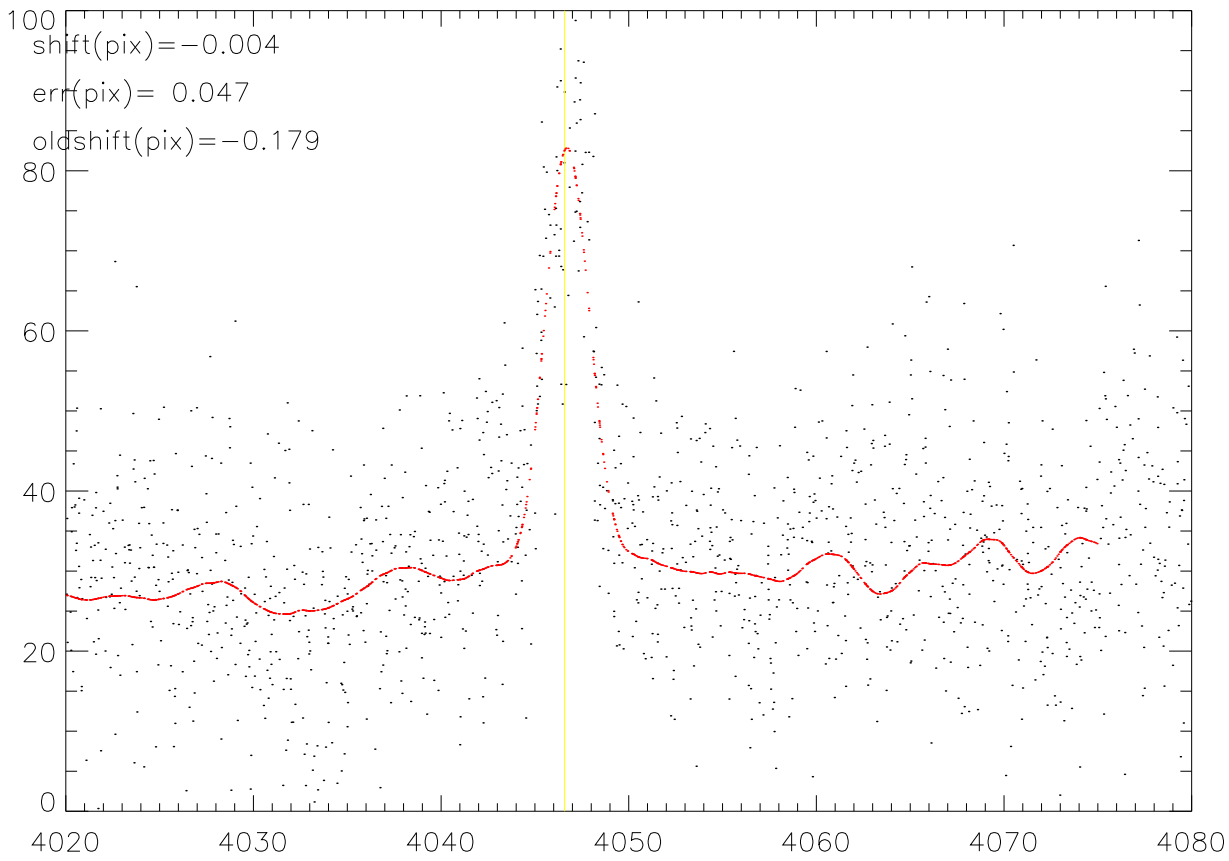

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-b2-00022113.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.553
Max value = 4.330
Sat Feb 23 15:46:41 2008

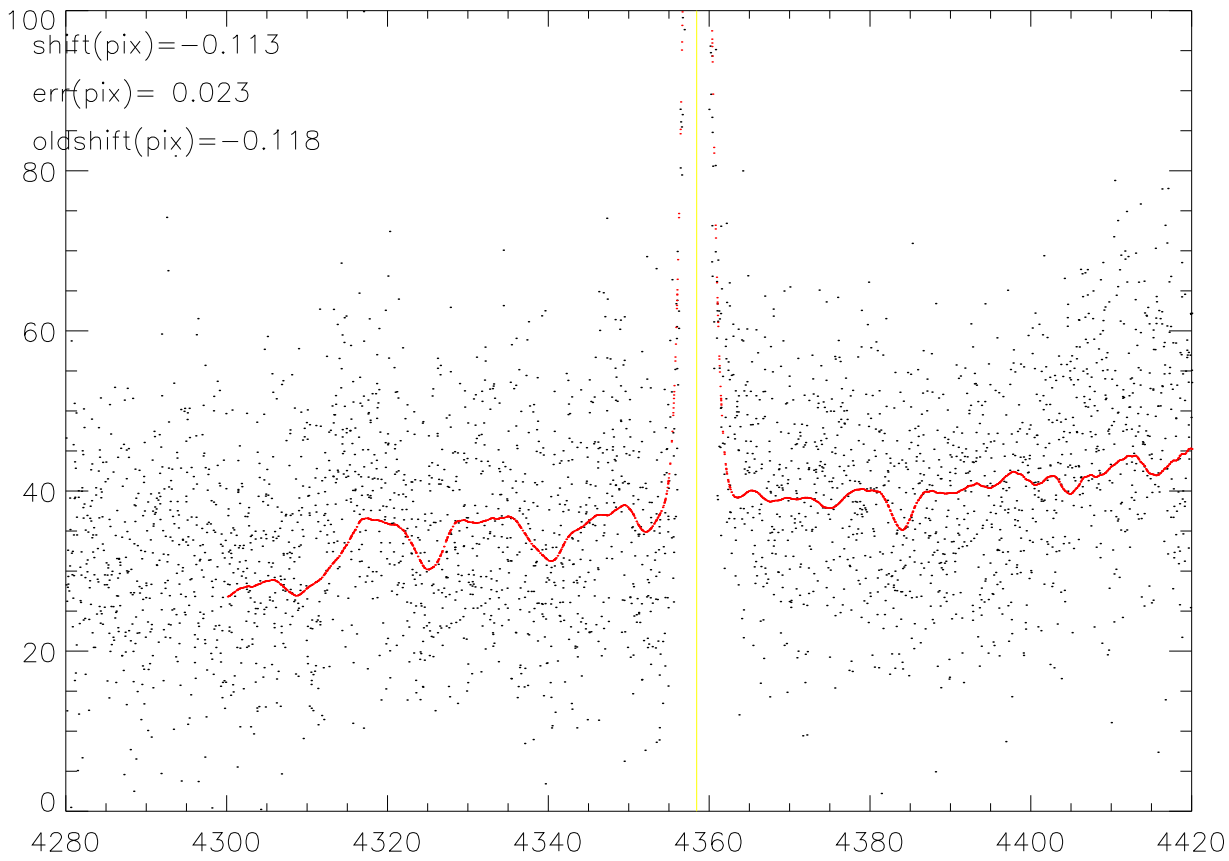

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022113.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.91
2.36
1.82
0
2.36
2.36
1.82
2.36

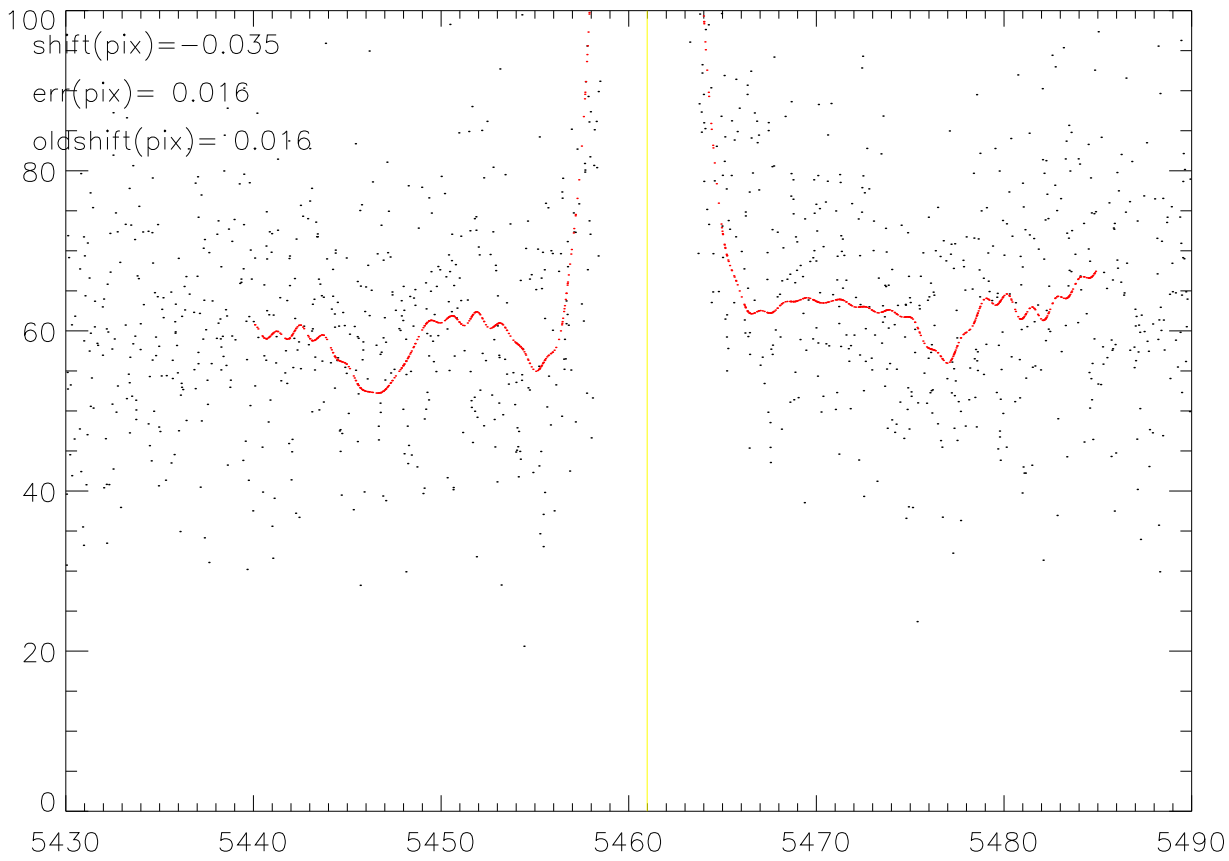

PLATE=1037 MJD=52878 Scattered Light on sdR-b2-00022113.fit
Brightness [electrons/pix]
0
1
2
3
4
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.645
Max value = 2.878
Sat Feb 23 15:49:24 2008

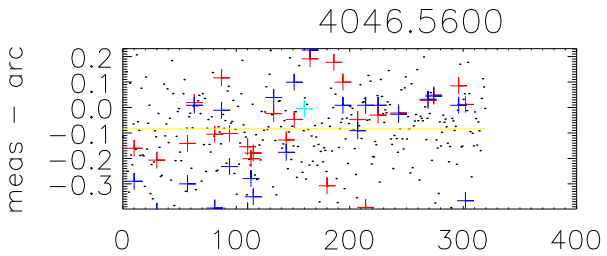

PLATE=1037 MJD=52878 Extraction chi^2 for sdR-b2-00022113.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

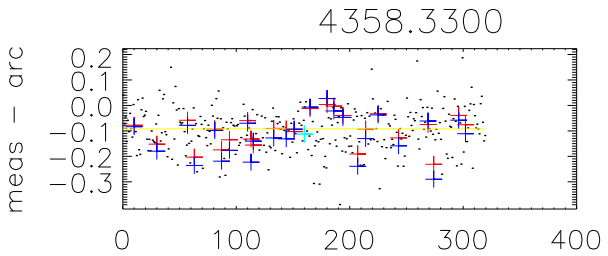

4046.5600
off: −0.18
sig: 0.055
4358.3300
off: −0.12
sig: 0.018
5460.9400
off: 0.02
sig: 0.014
5577.3390
off: 0.01
sig: 0.002
5889.9500
off: 0.11
sig: 0.009
5895.9240
off: 0.06
sig: 0.010

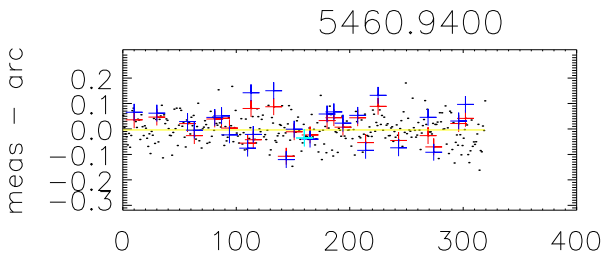

shift(pix)=−0.004
err(pix)= 0.047
oldshift(pix)=−0.179
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

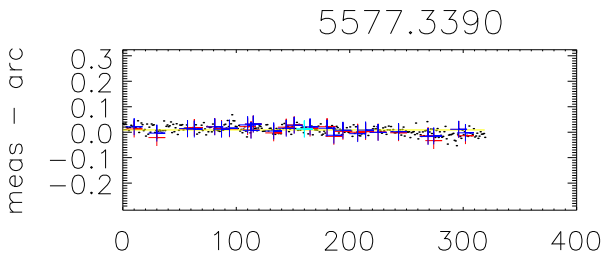

shift(pix)=−0.113
err(pix)= 0.023
oldshift(pix)=−0.118
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

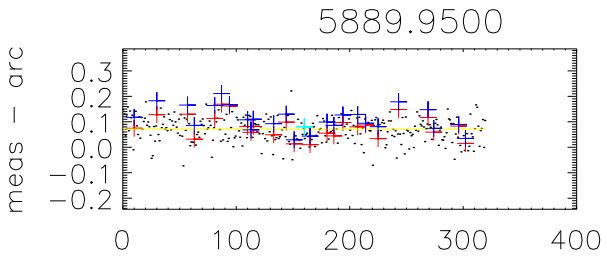

shift(pix)=−0.035
err(pix)= 0.016
oldshift(pix)= 0.016
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

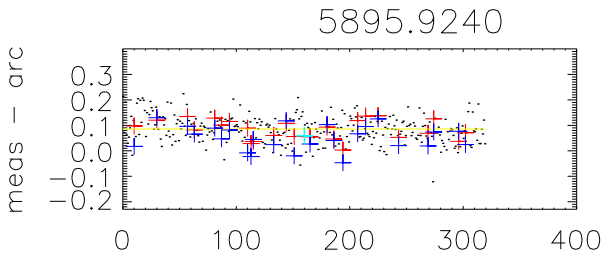

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

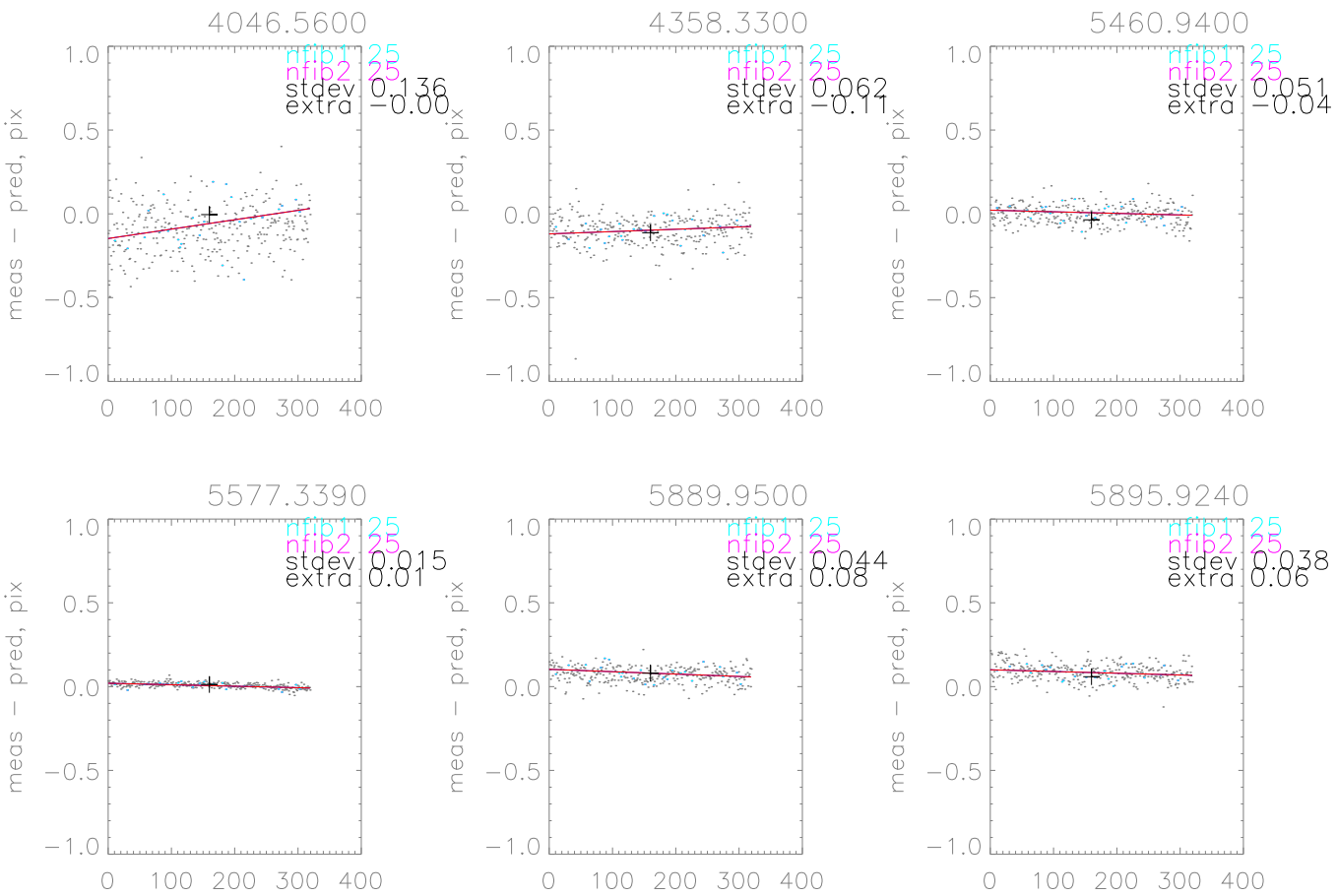

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

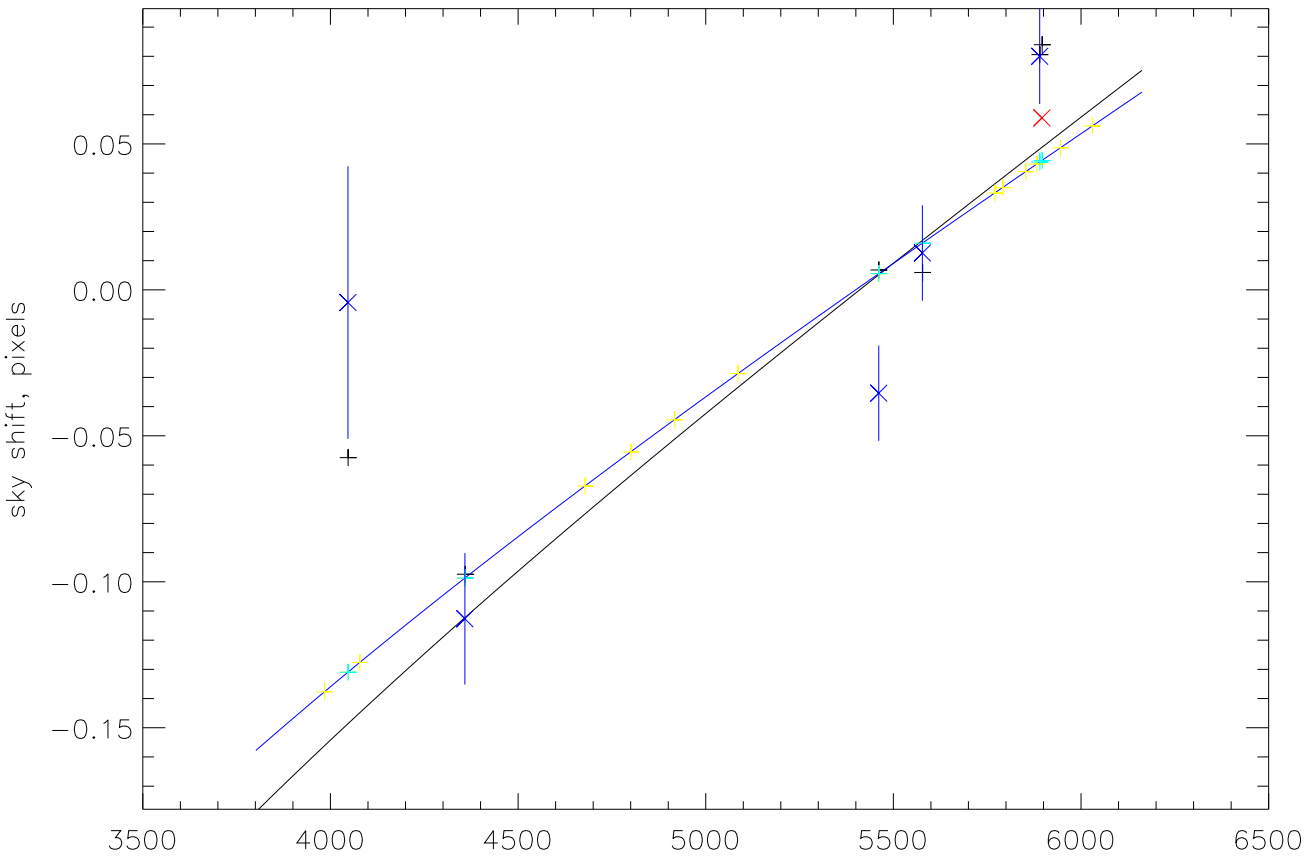

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

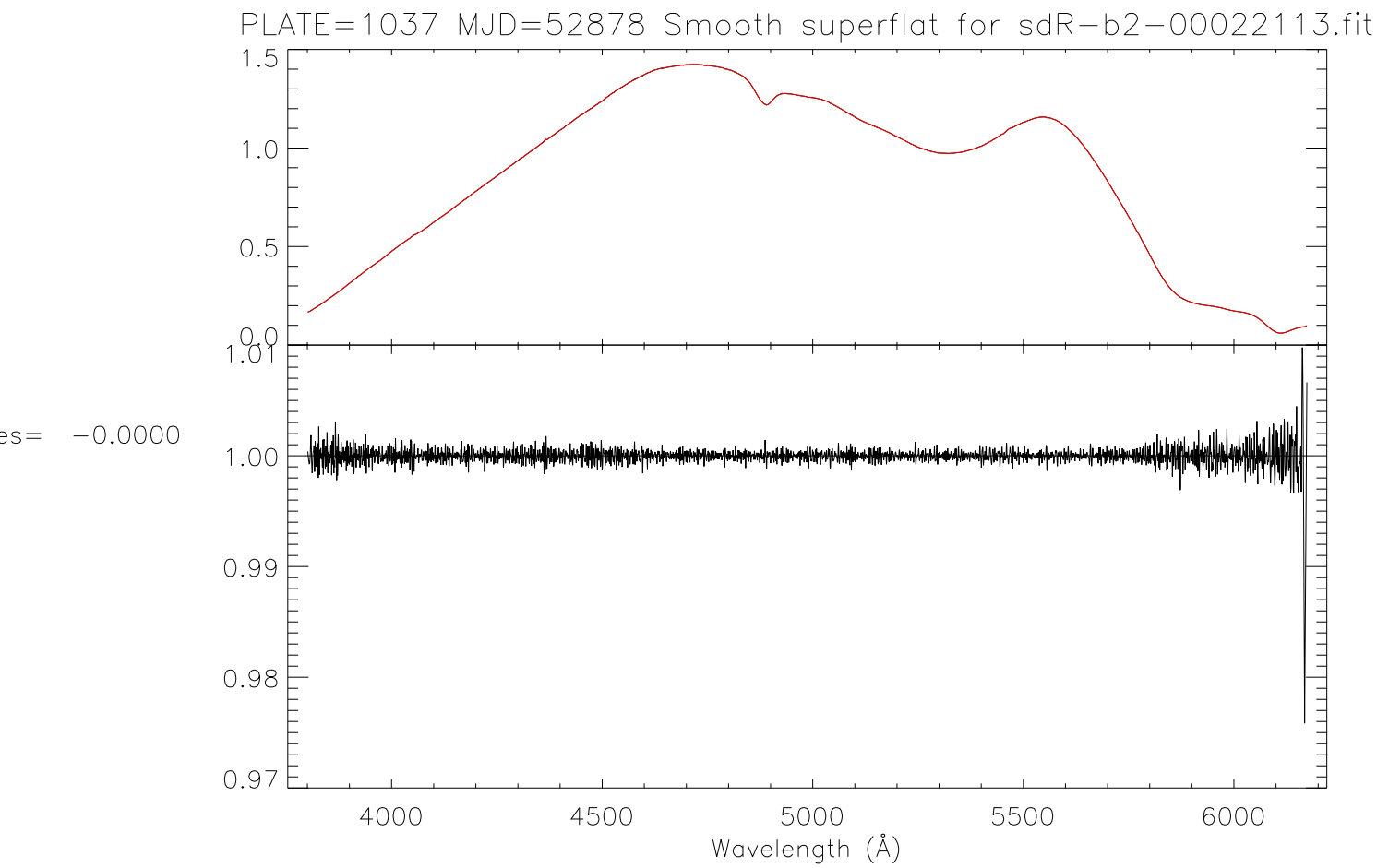

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

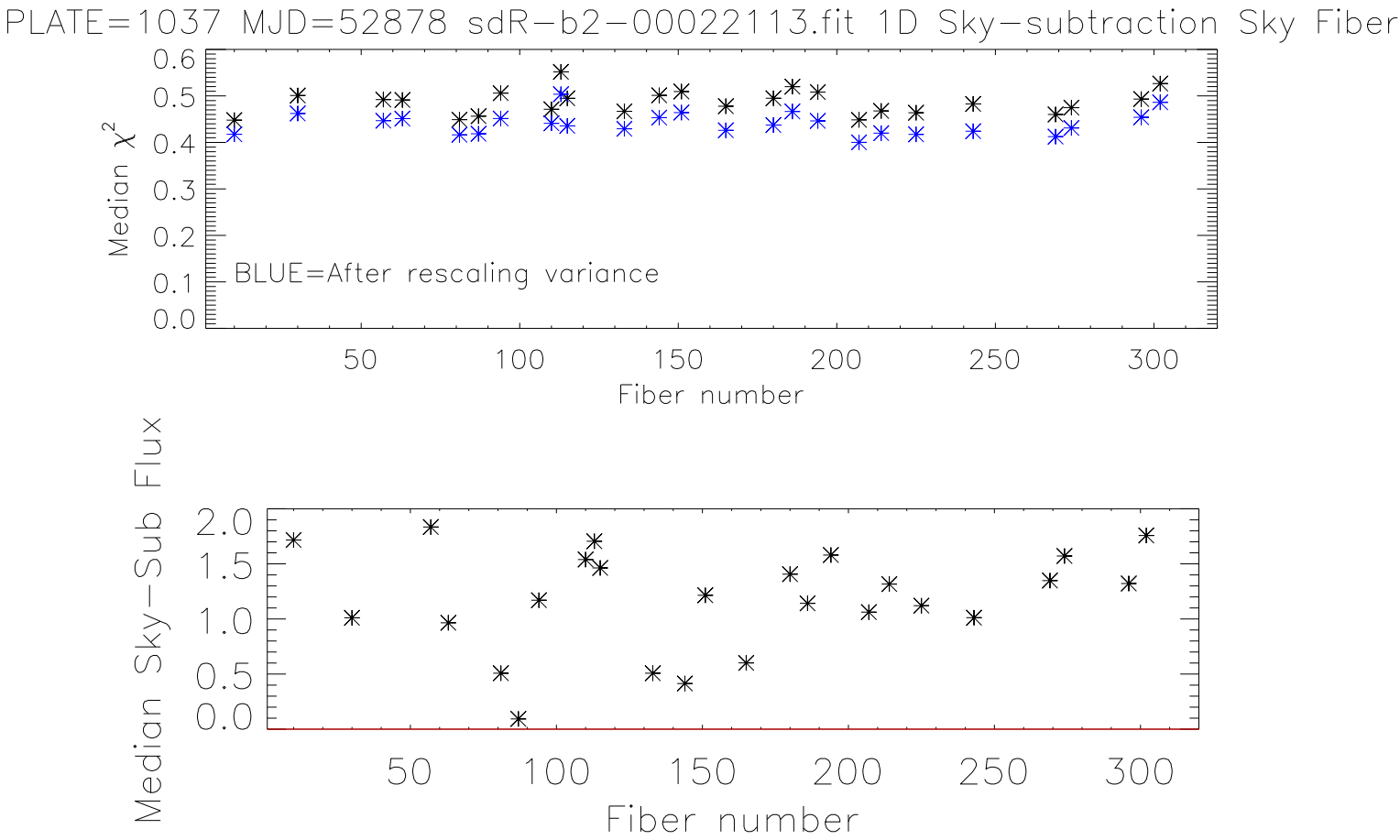

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

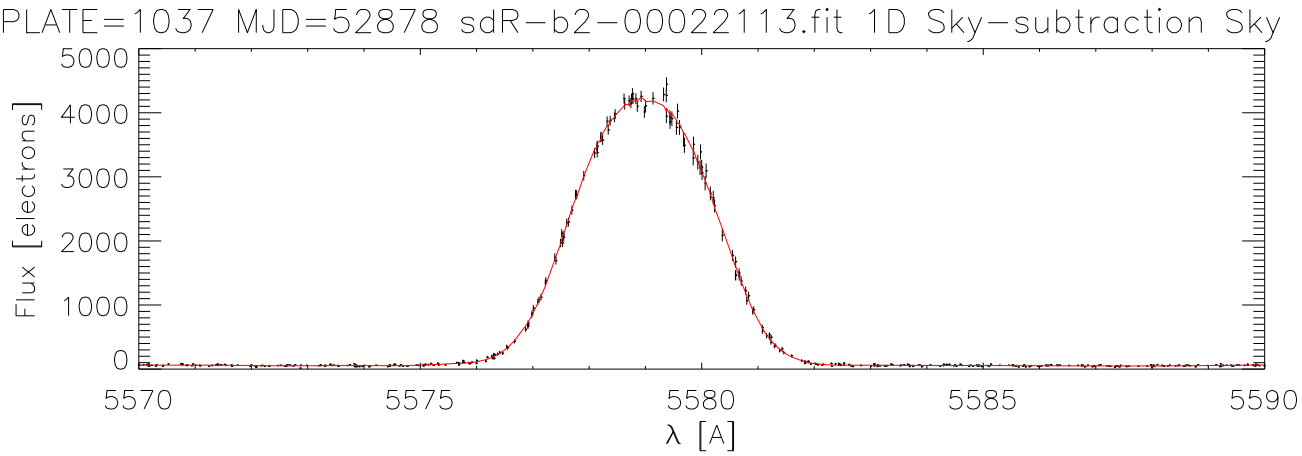

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

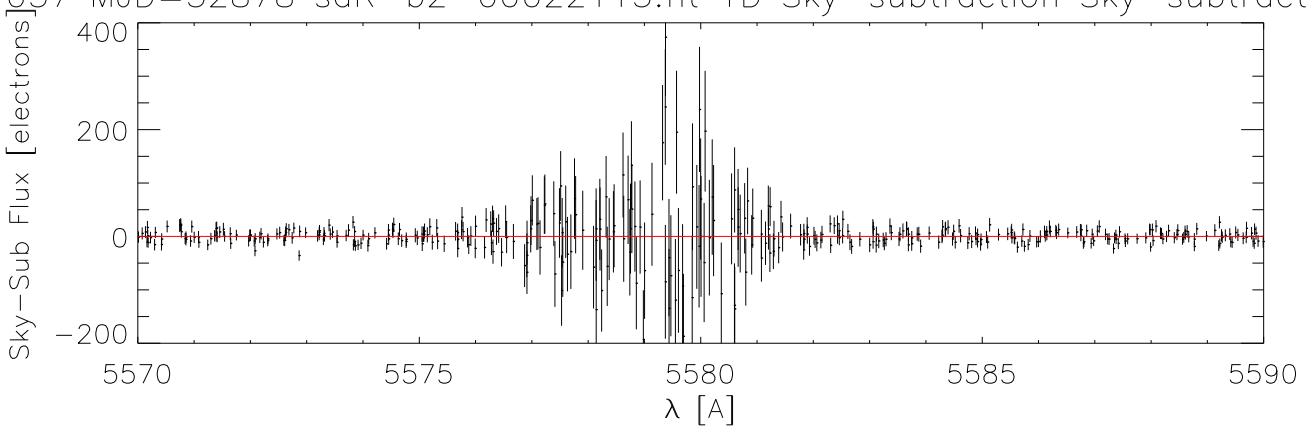

4046.5600
nfib1 25
nfib2 25
stdev 0.136
extra −0.00
4358.3300
nfib1 25
nfib2 25
stdev 0.062
extra −0.11
5460.9400
nfib1 25
nfib2 25
stdev 0.051
extra −0.04
5577.3390
nfib1 25
nfib2 25
stdev 0.015
extra 0.01
5889.9500
nfib1 25
nfib2 25
stdev 0.044
extra 0.08
5895.9240
nfib1 25
nfib2 25
stdev 0.038
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

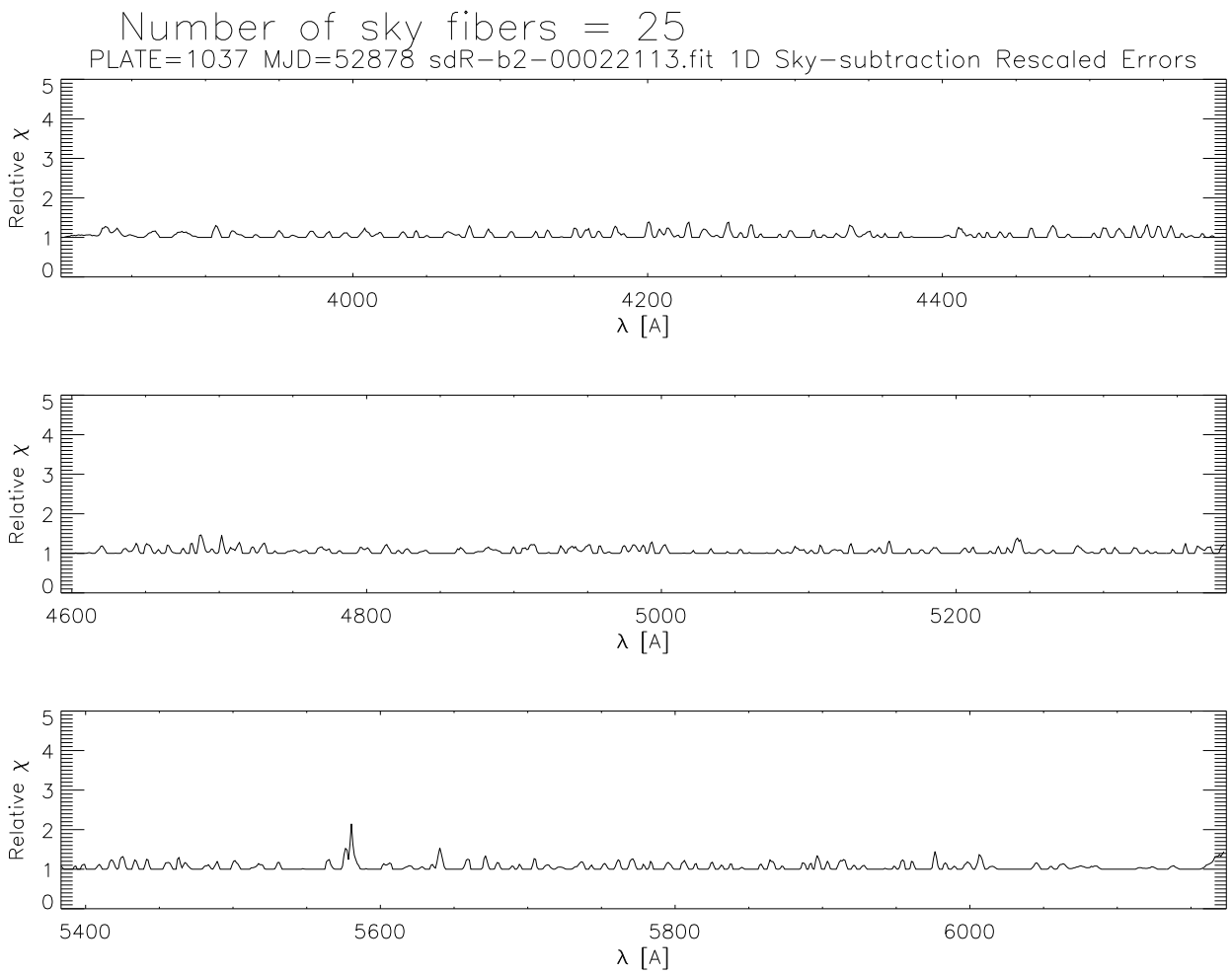

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

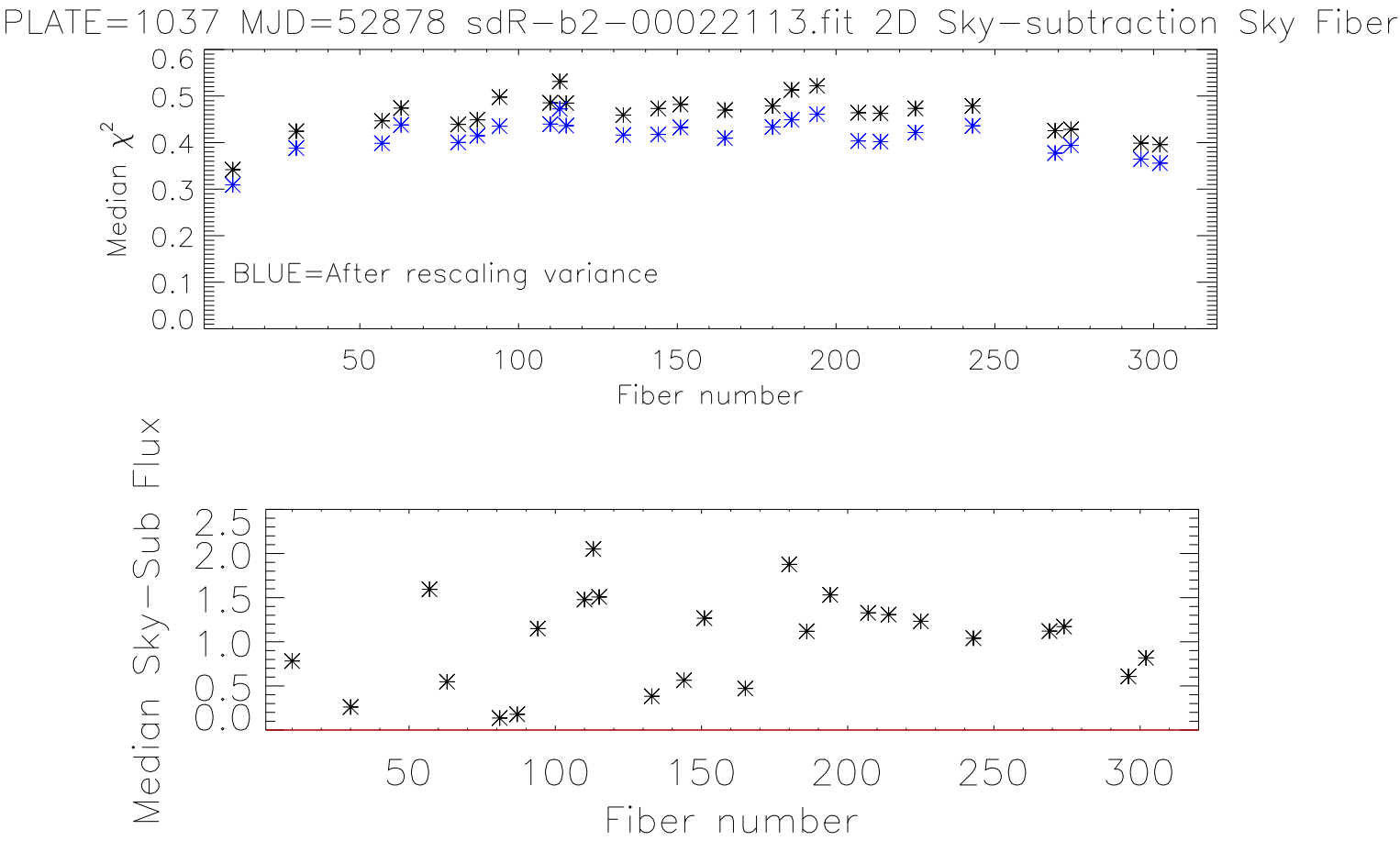

PLATE=1037 MJD=52878 Smooth superflat for sdR-b2-00022113.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
0.97
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

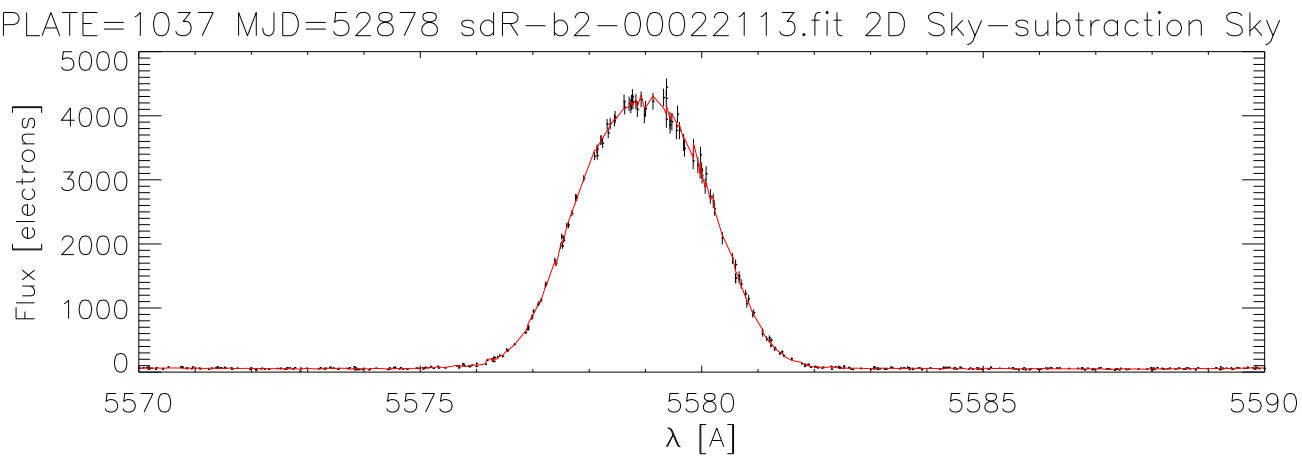

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
2.0
50
100
150
200
250
300
Fiber number

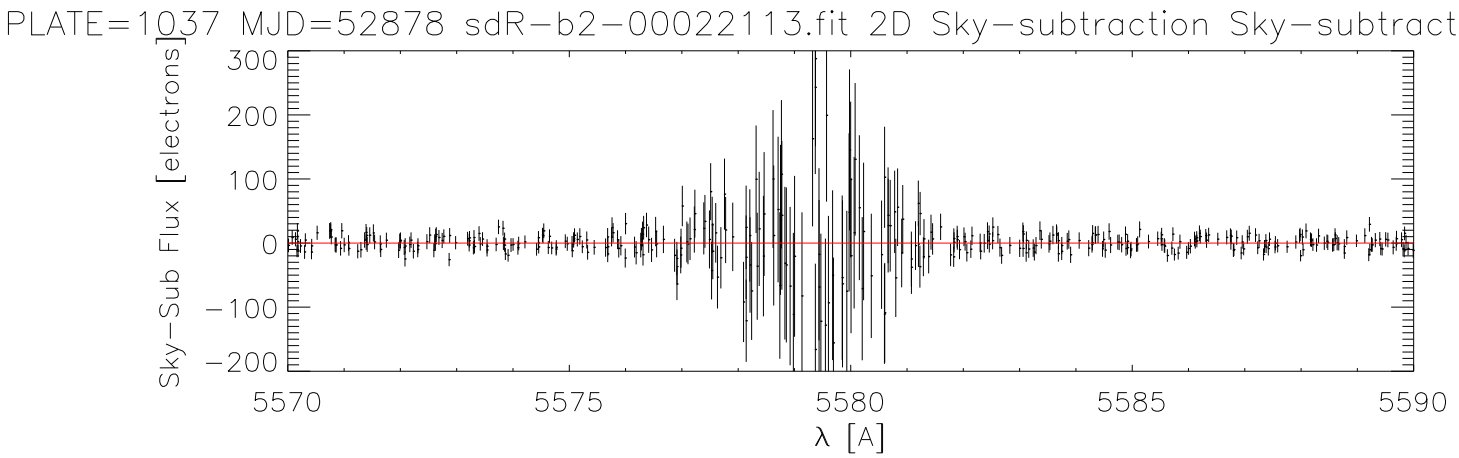

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

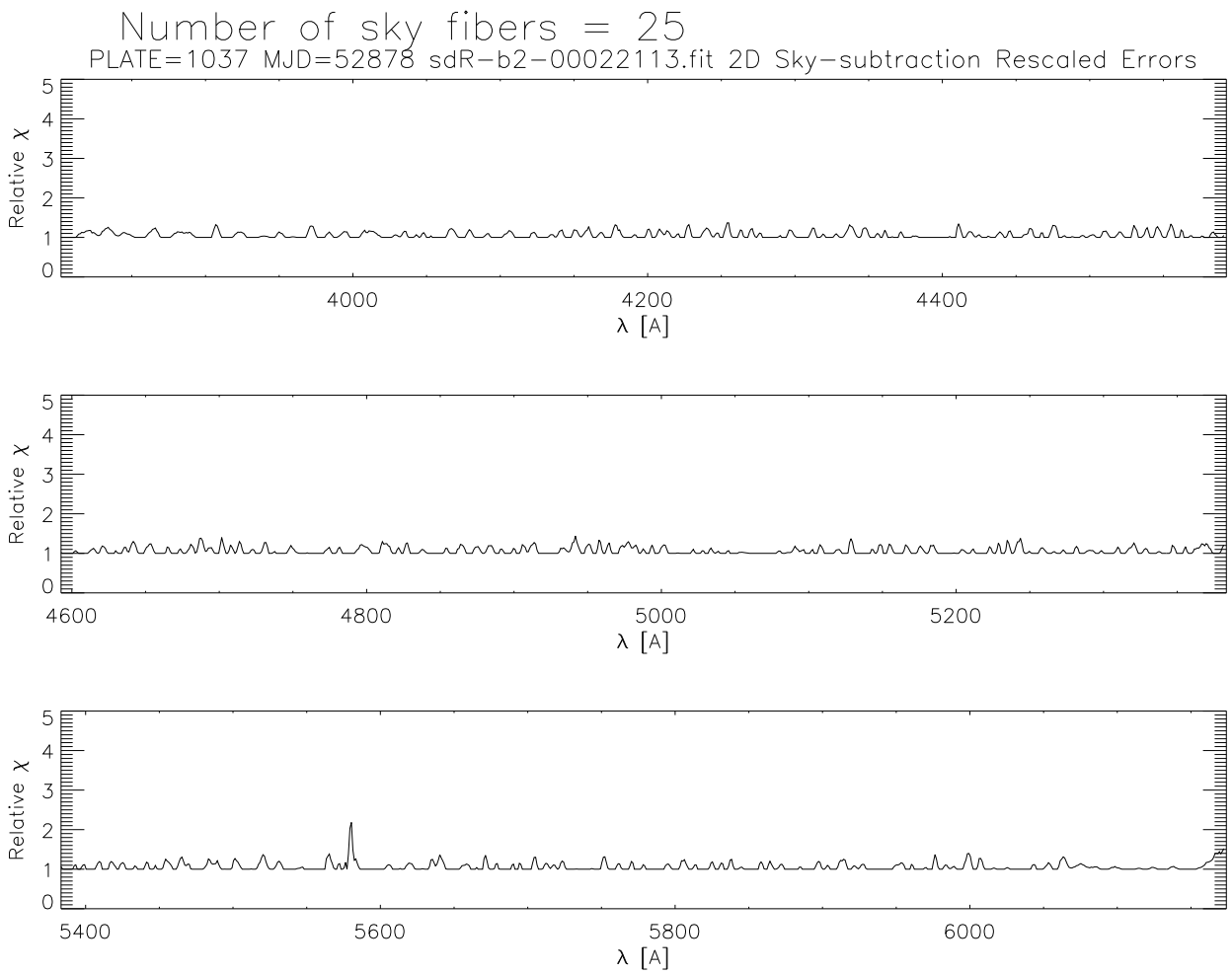

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

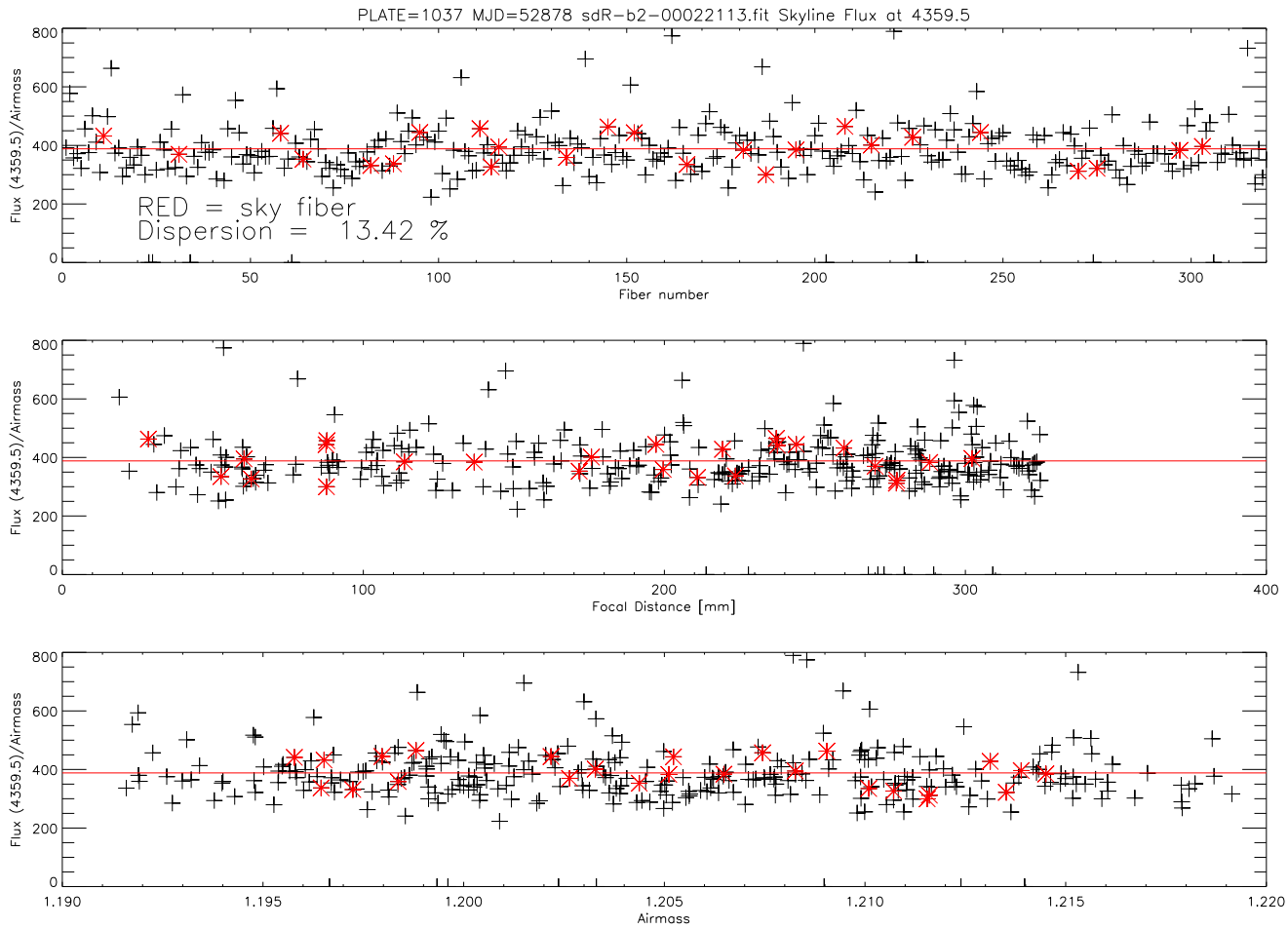

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022113.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

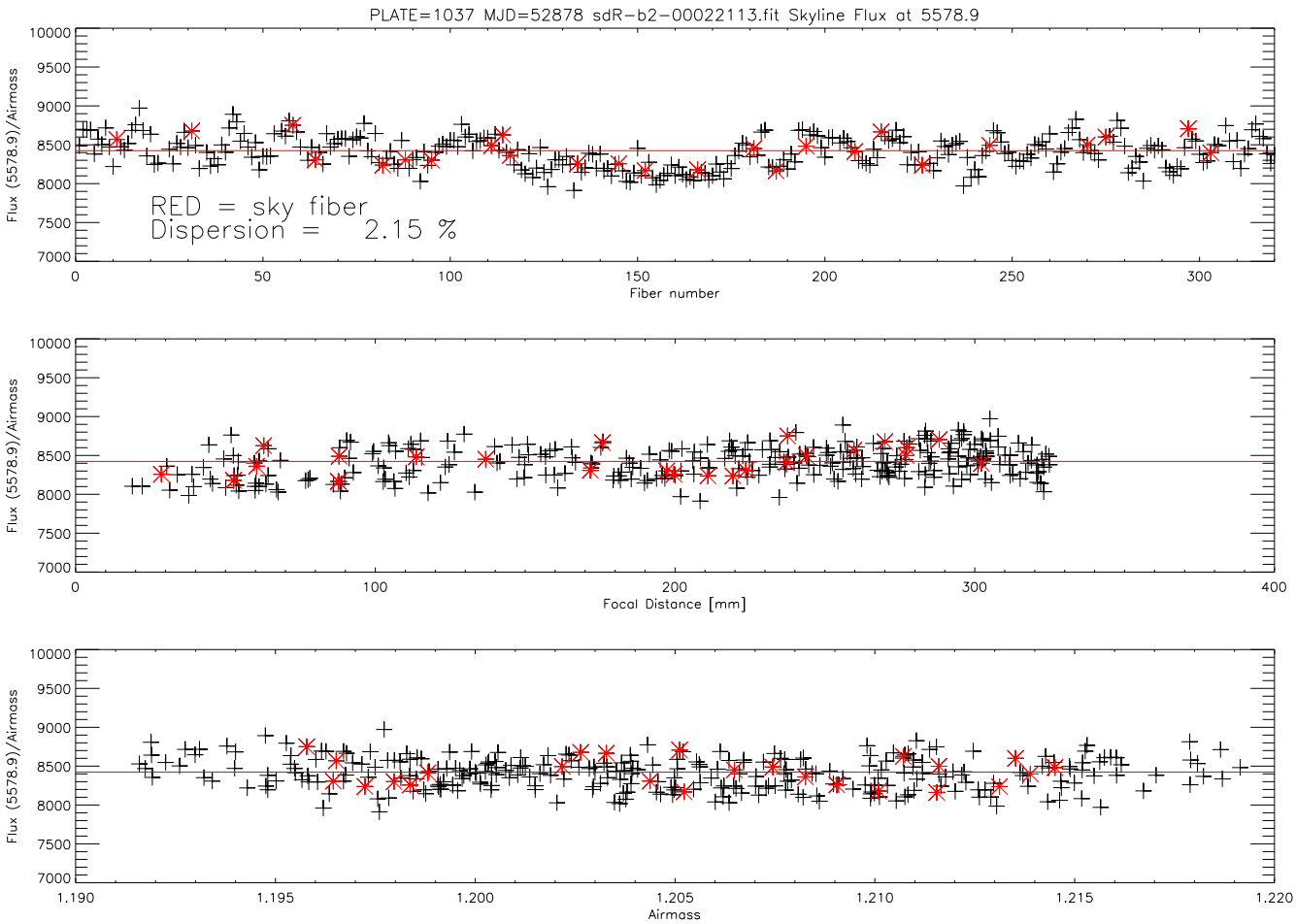

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
2.0
2.5
50
100
150
200
250
300
Fiber number

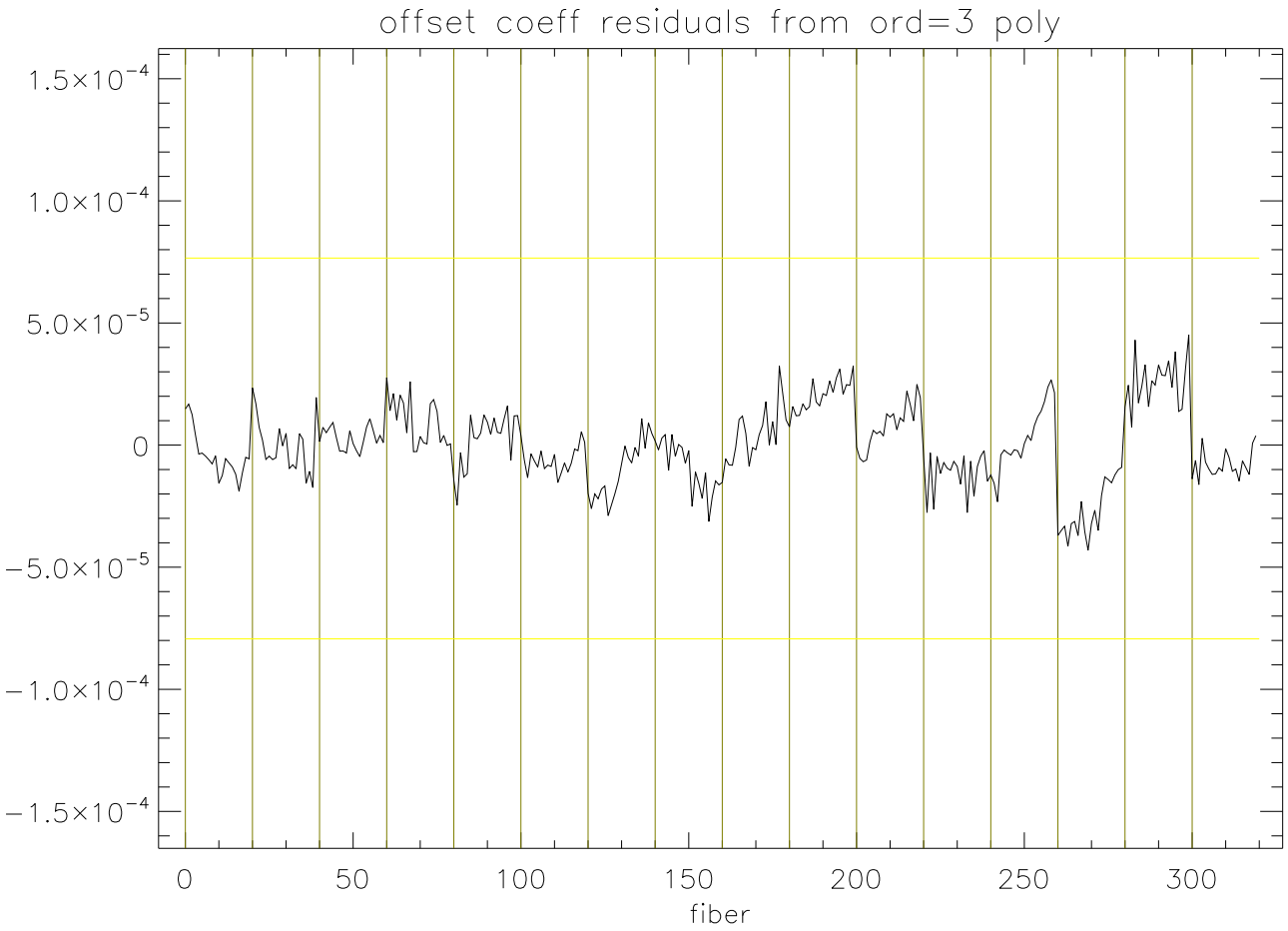

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

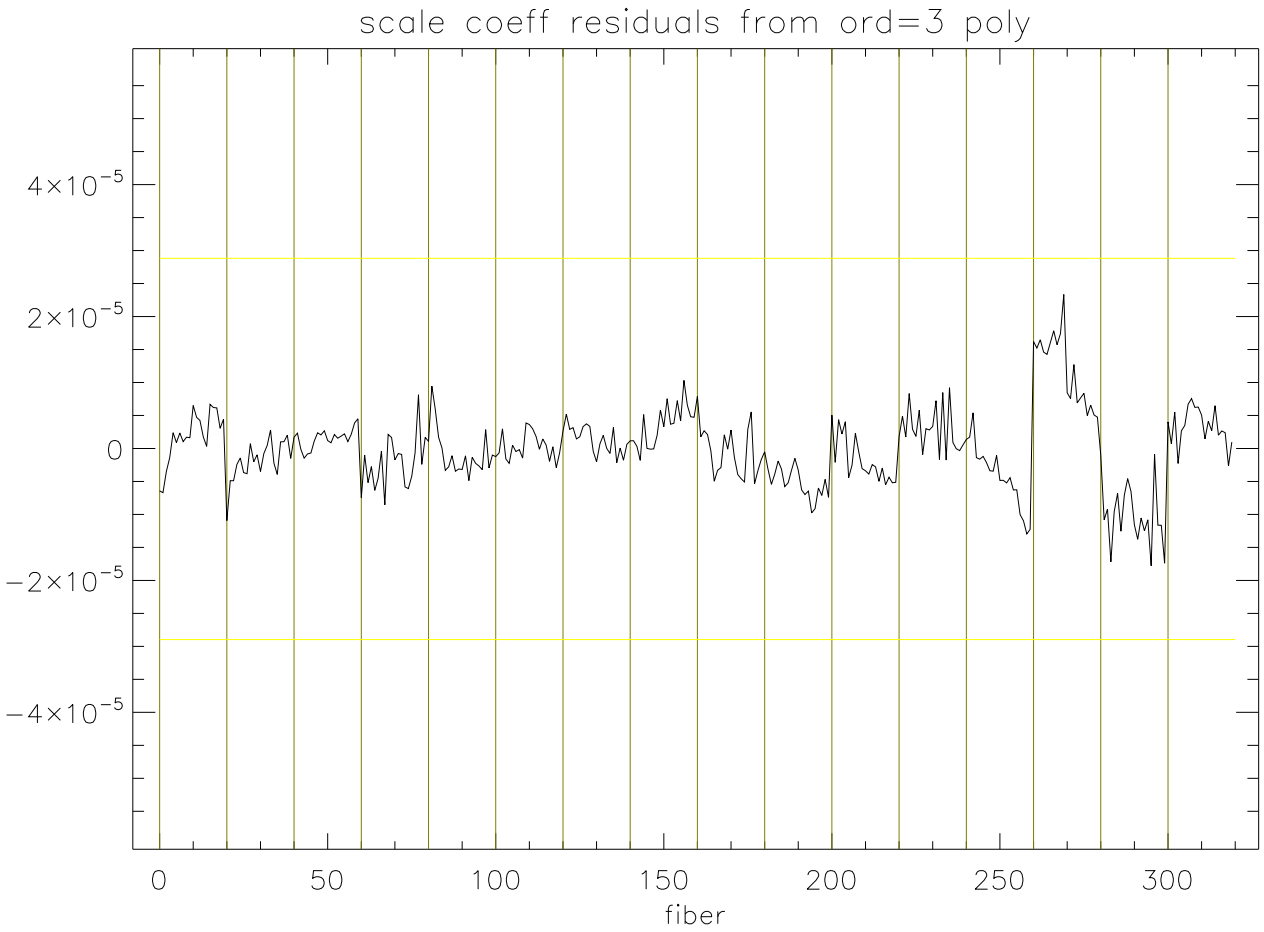

PLATE=1037 MJD=52878 sdR-b2-00022113.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

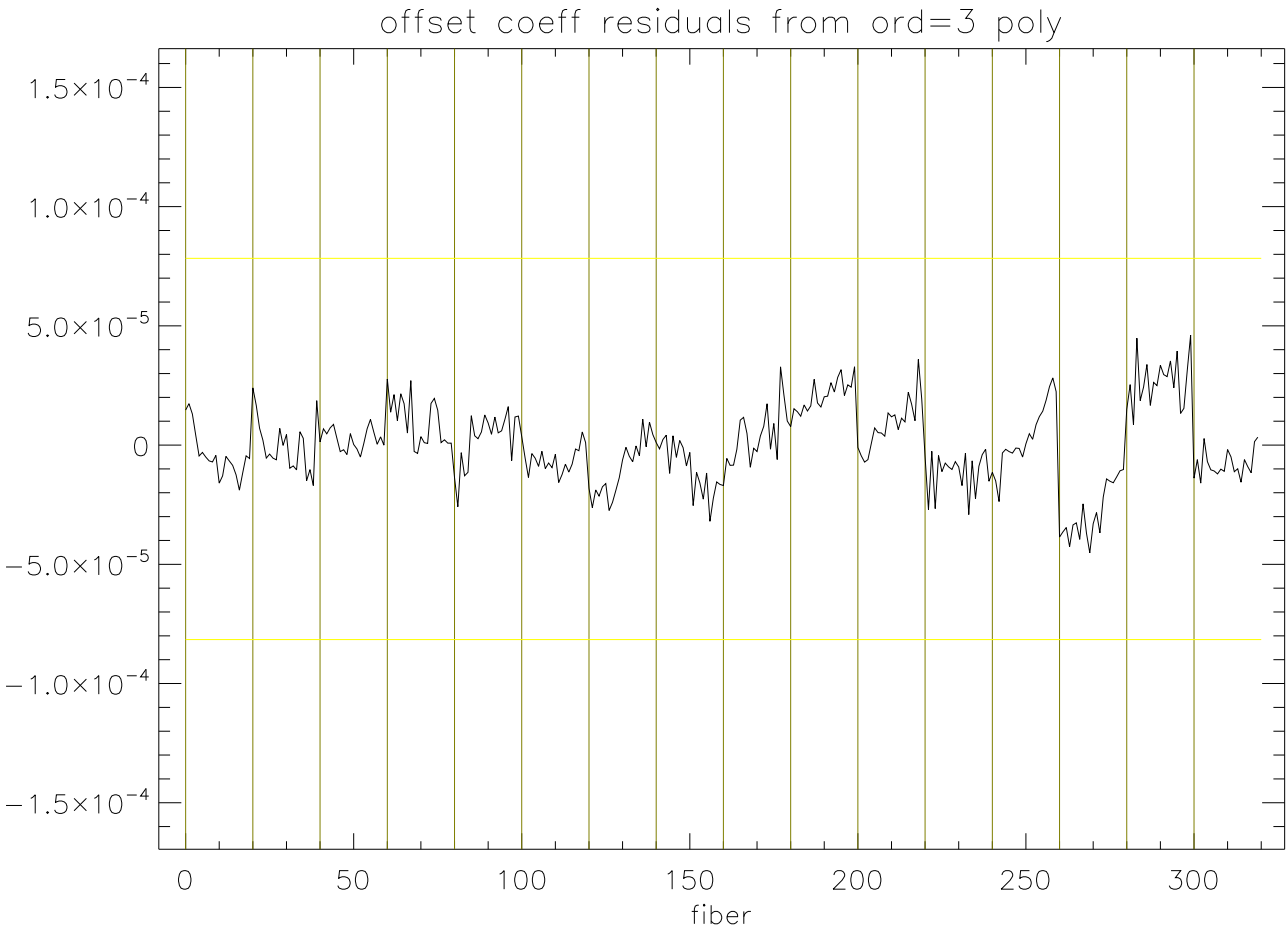

Number of sky fibers = 25
PLATE=1037 MJD=52878 sdR-b2-00022113.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

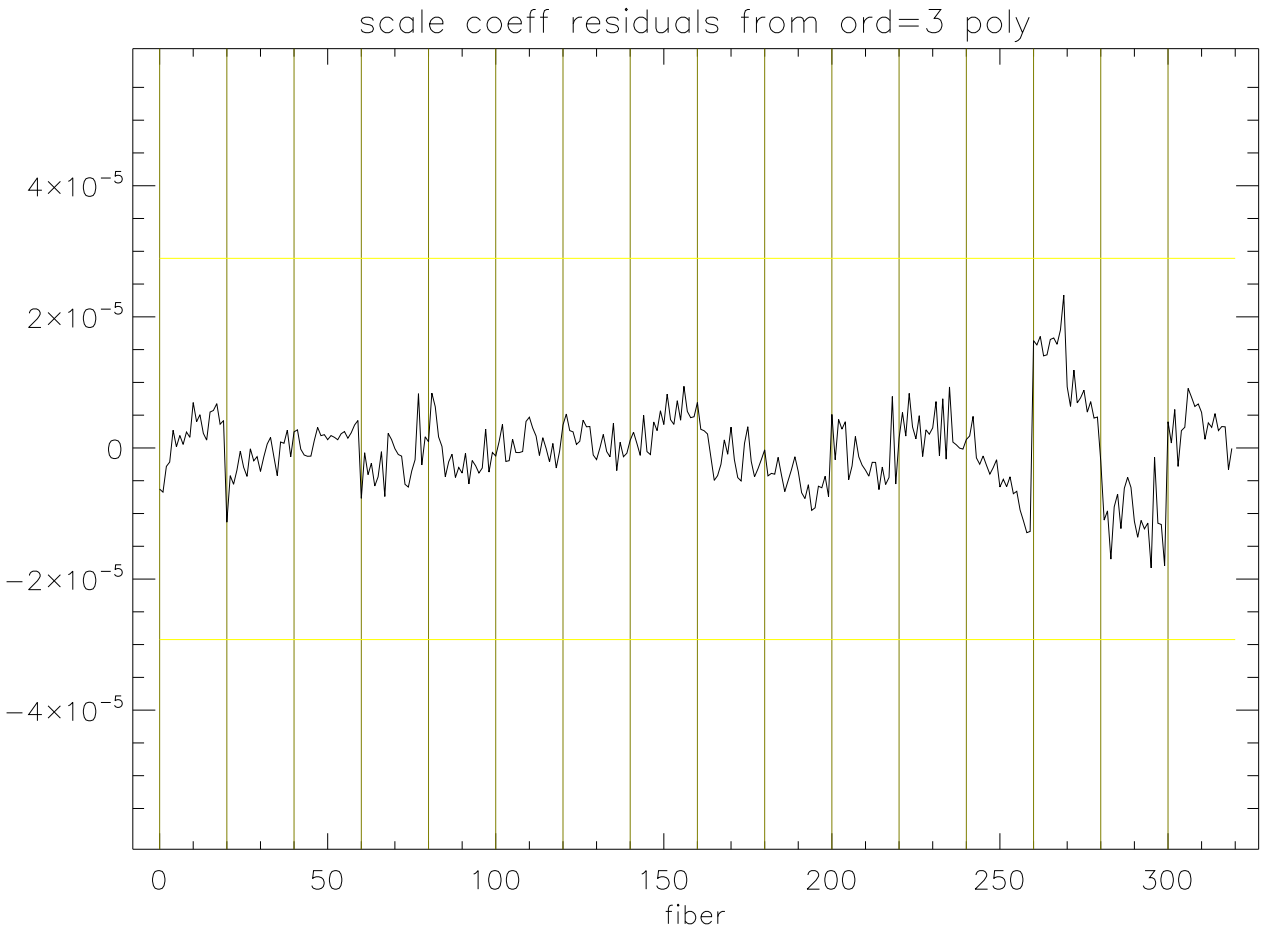

PLATE=1037 MJD=52878 sdR-b2-00022113.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.42 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

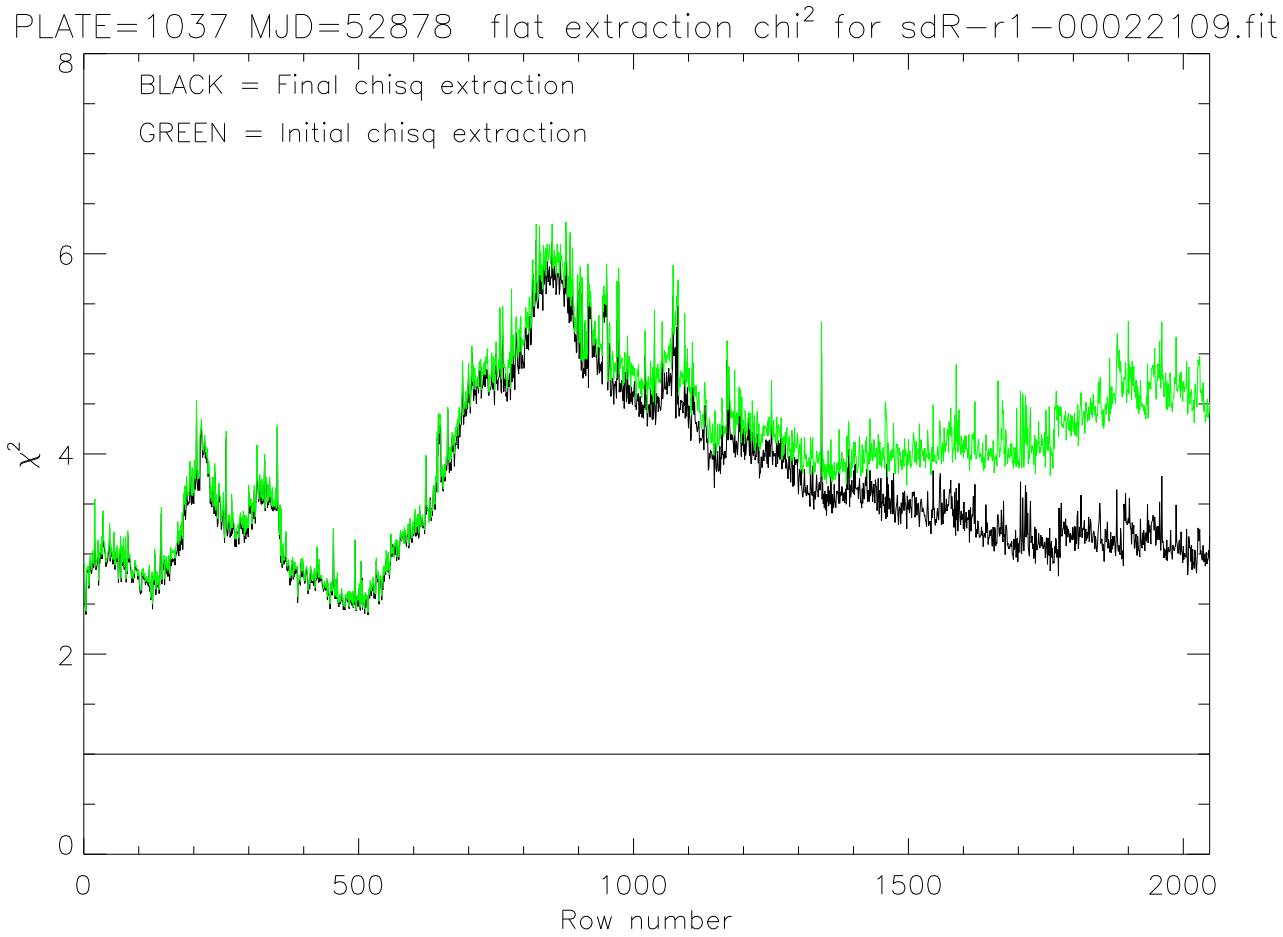

PLATE=1037 MJD=52878 sdR-b2-00022113.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.15 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

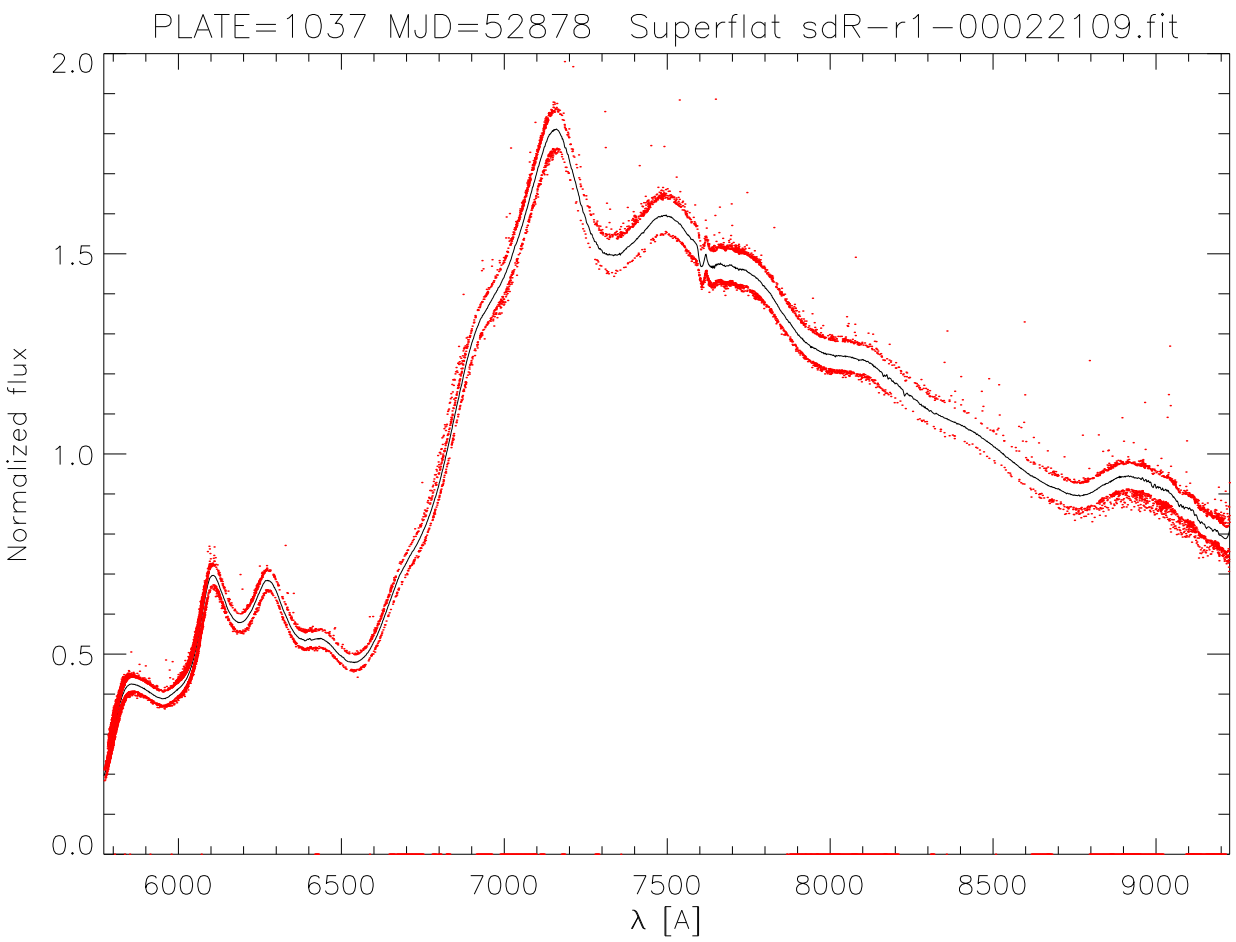

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

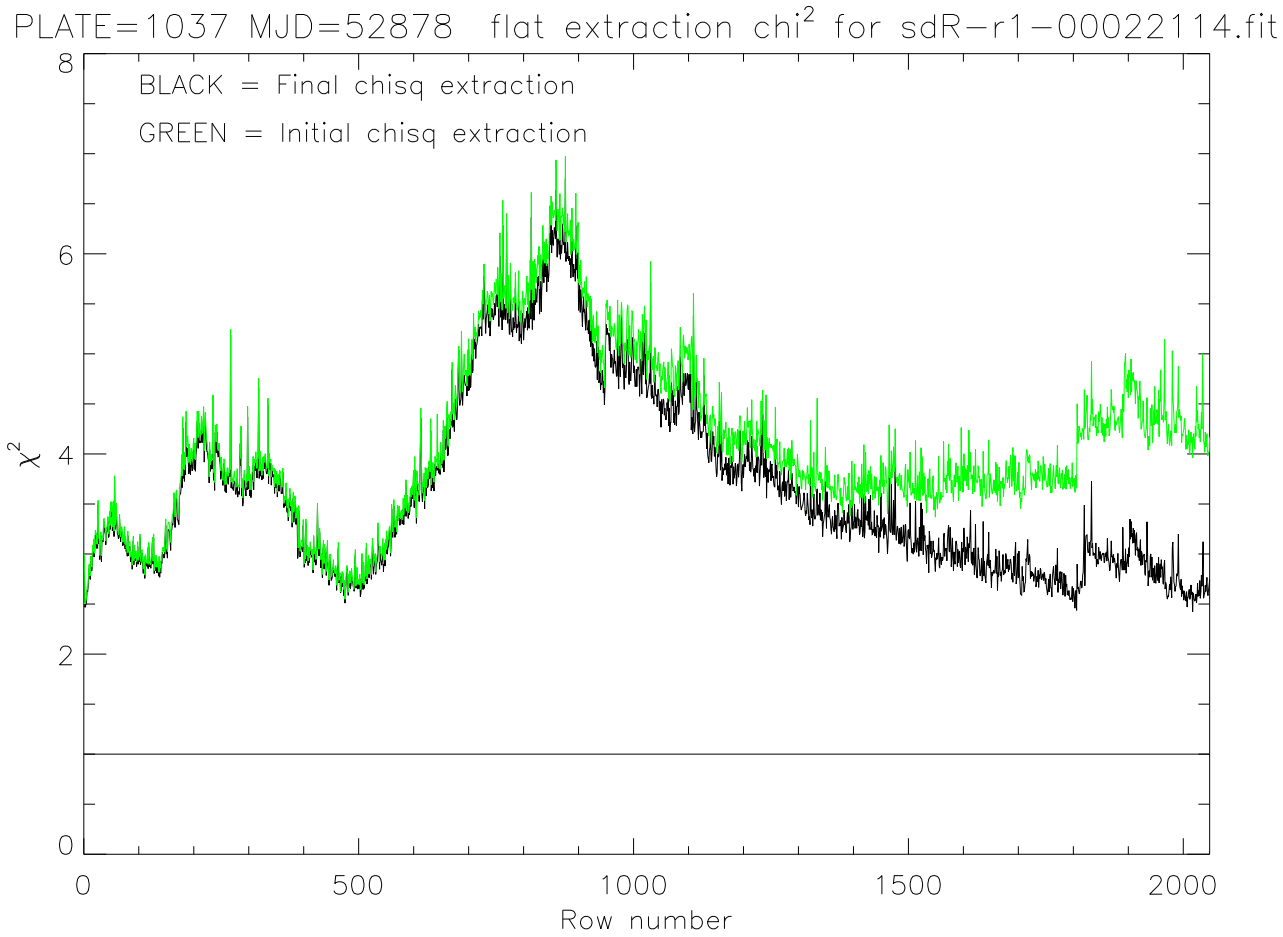

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

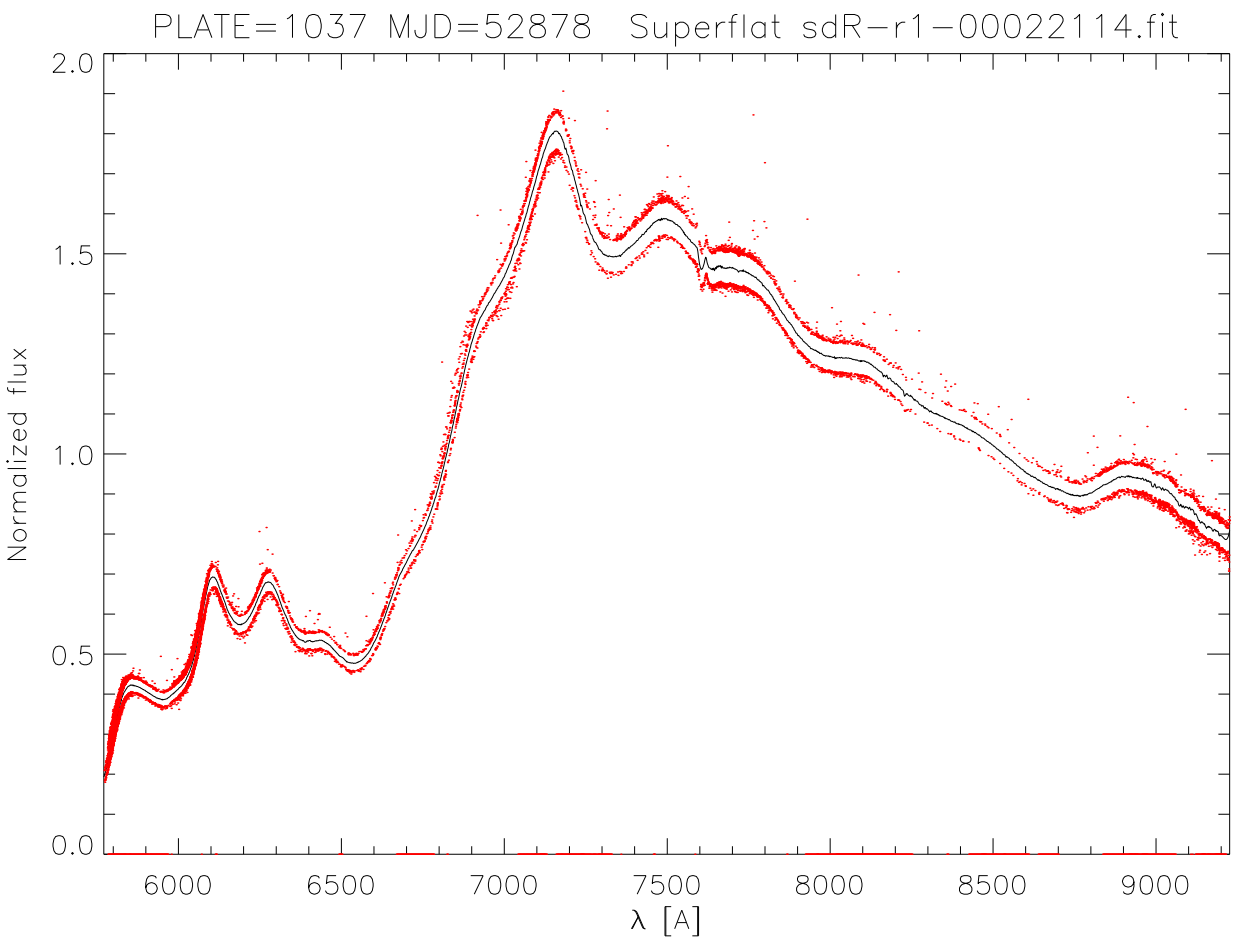

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

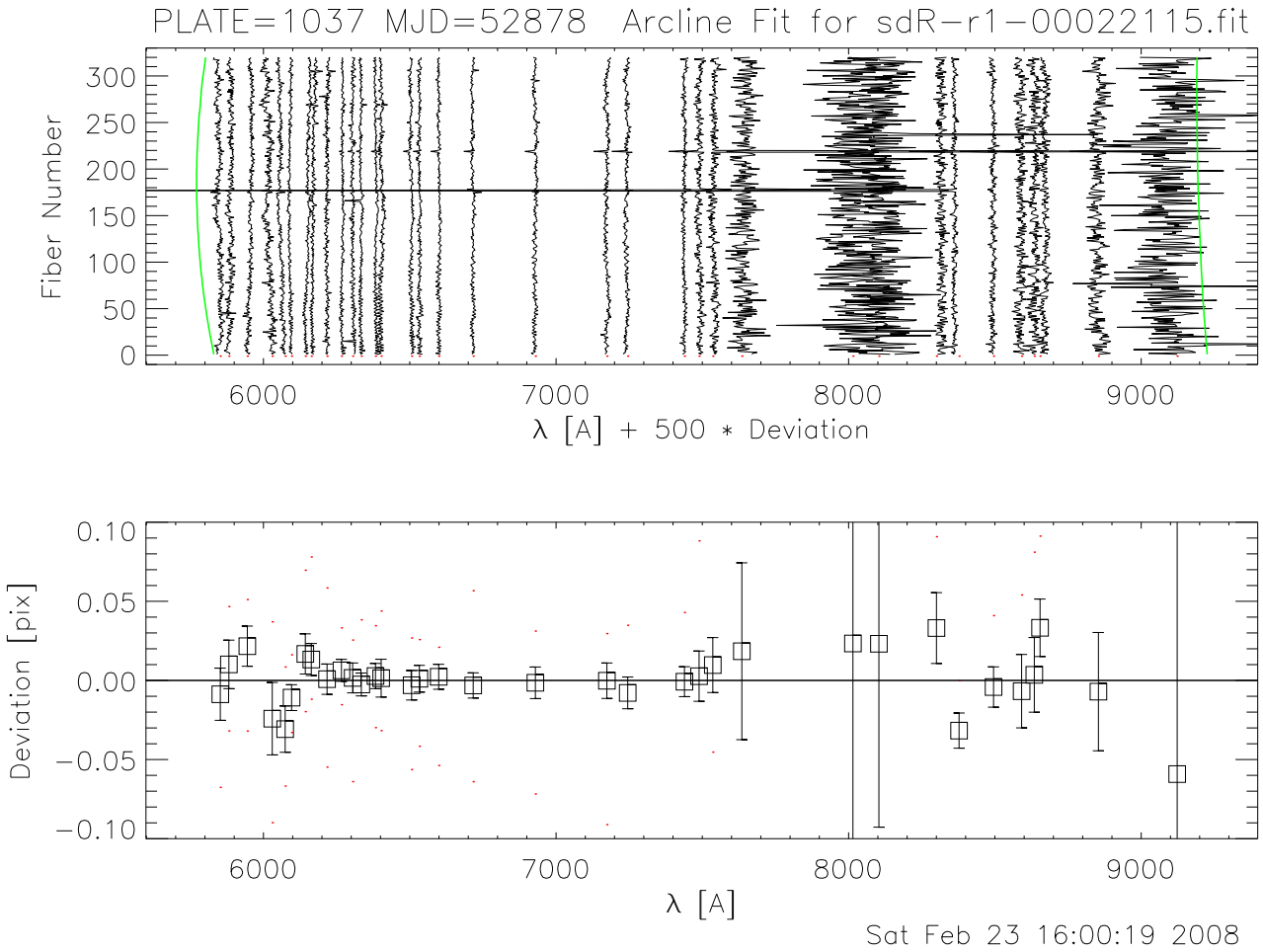

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

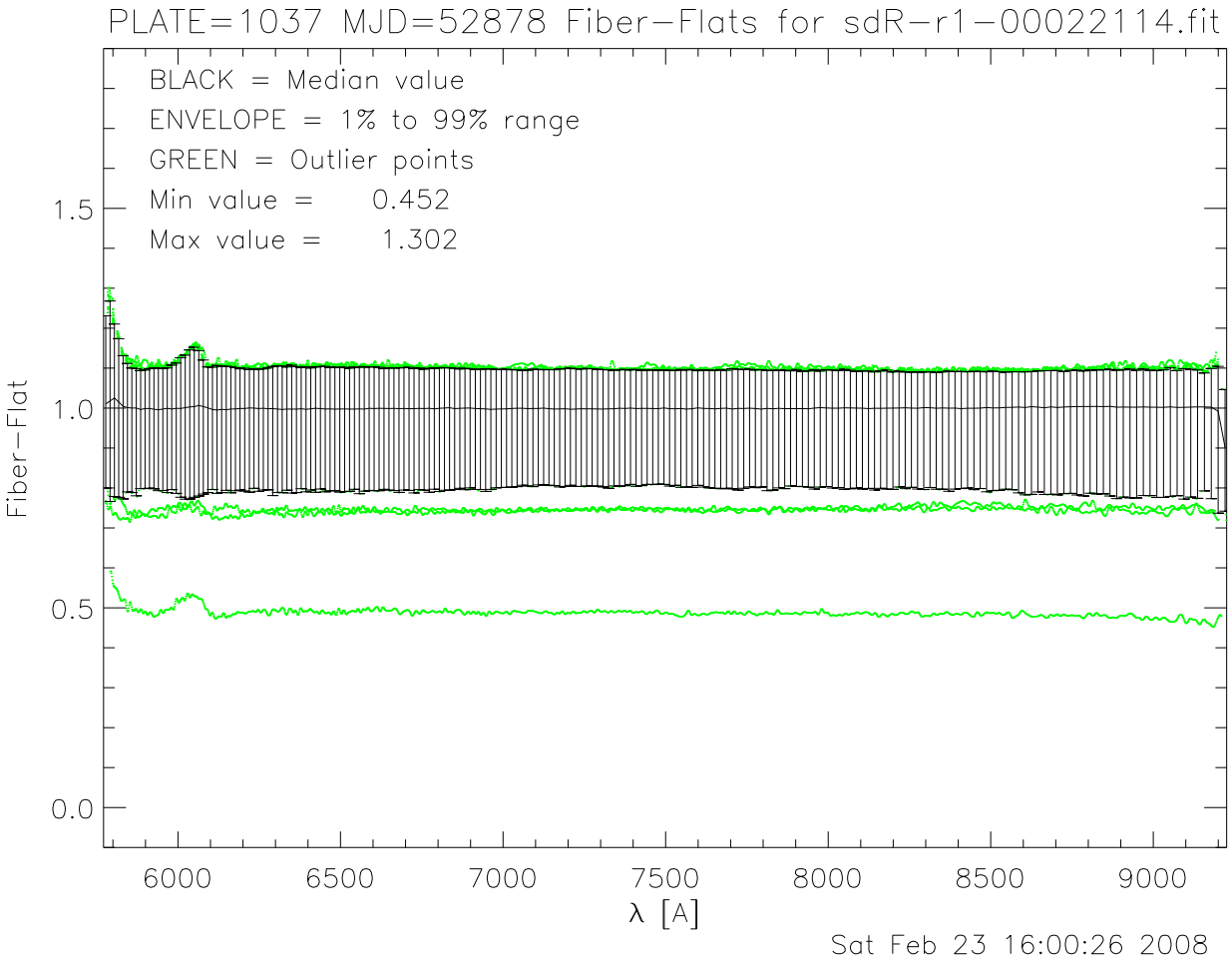

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−r1−00022109.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

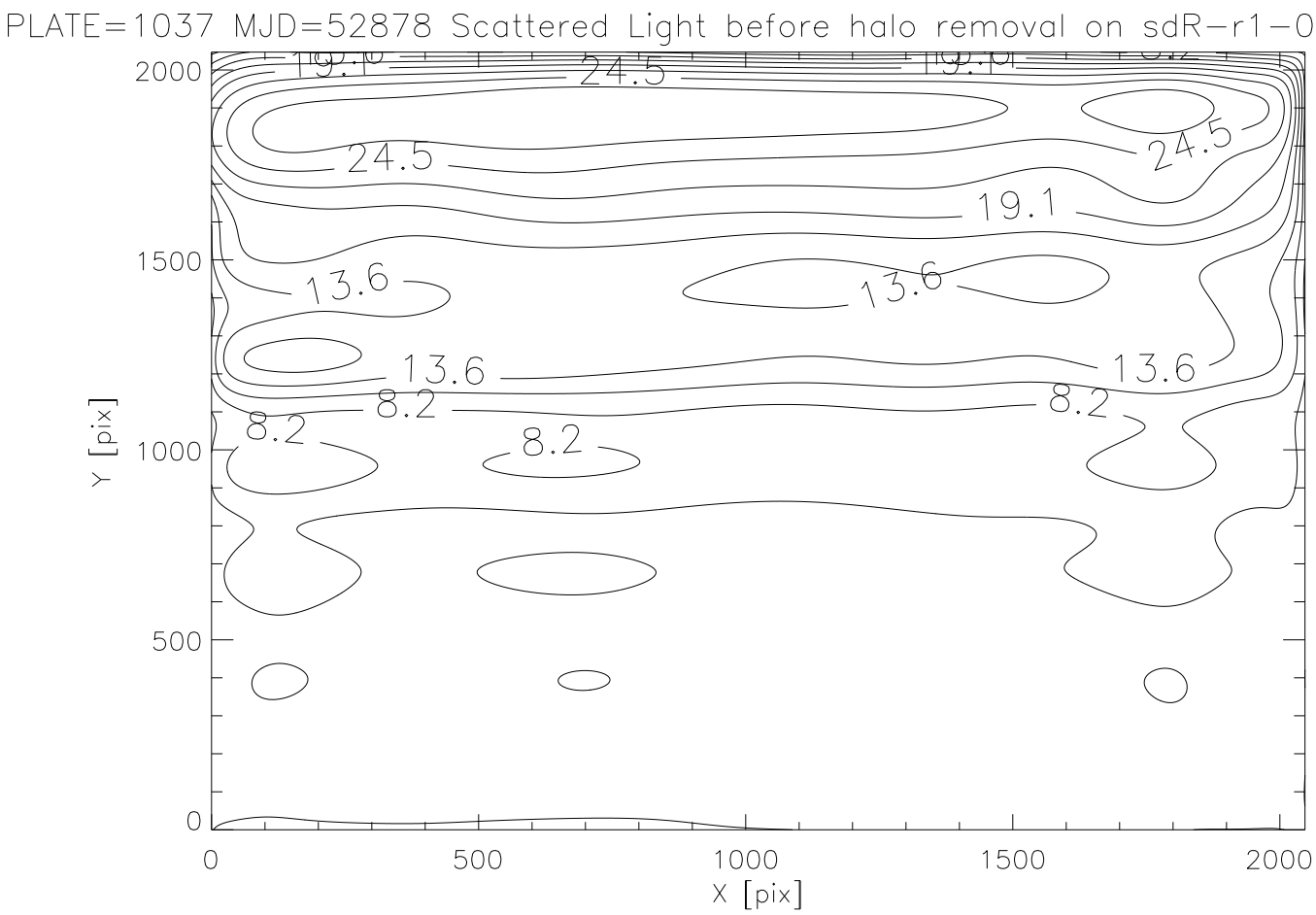

PLATE=1037 MJD=52878 Superflat sdR-r1-00022109.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

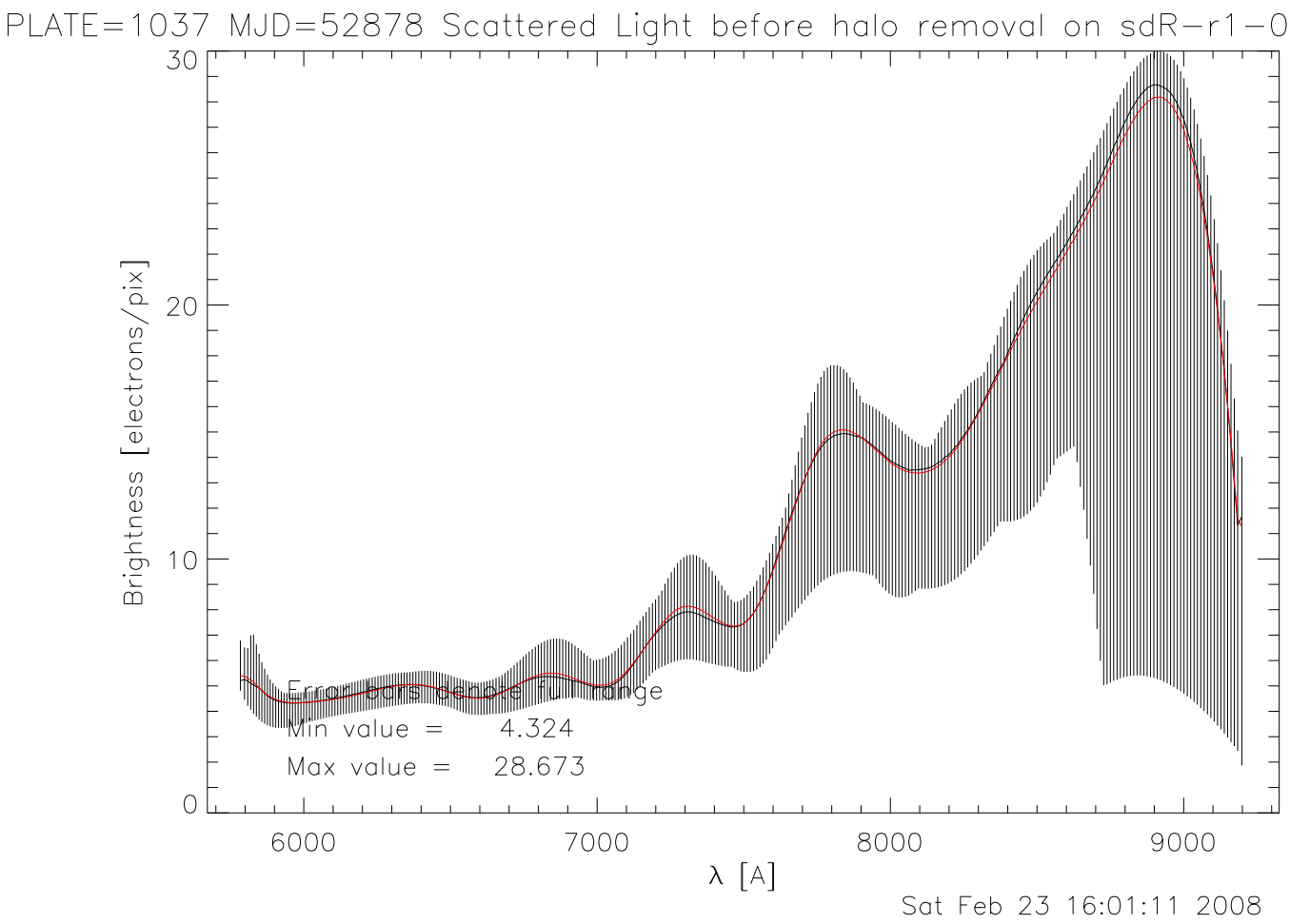

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−r1−00022114.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

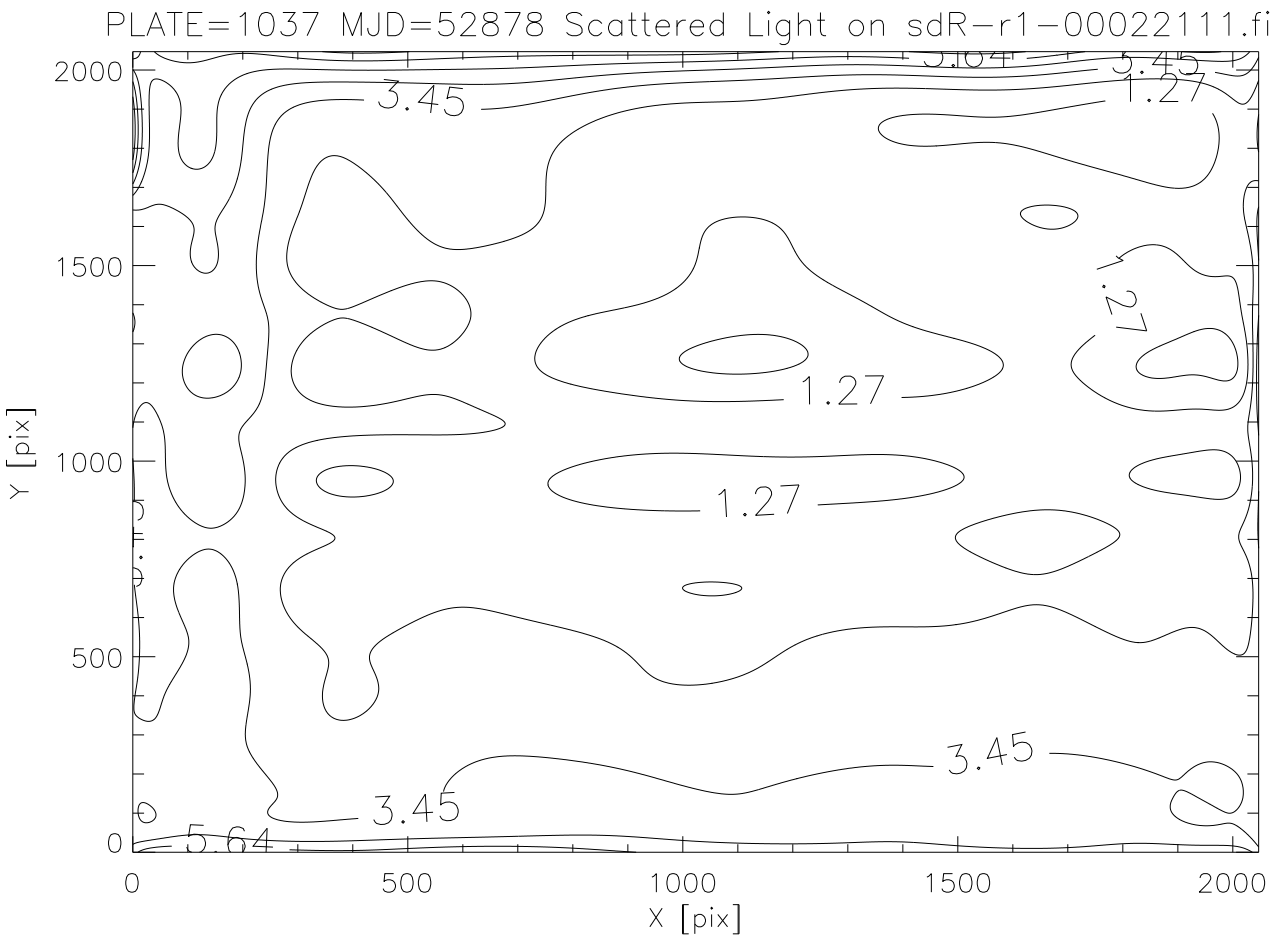

PLATE=1037 MJD=52878 Superflat sdR-r1-00022114.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

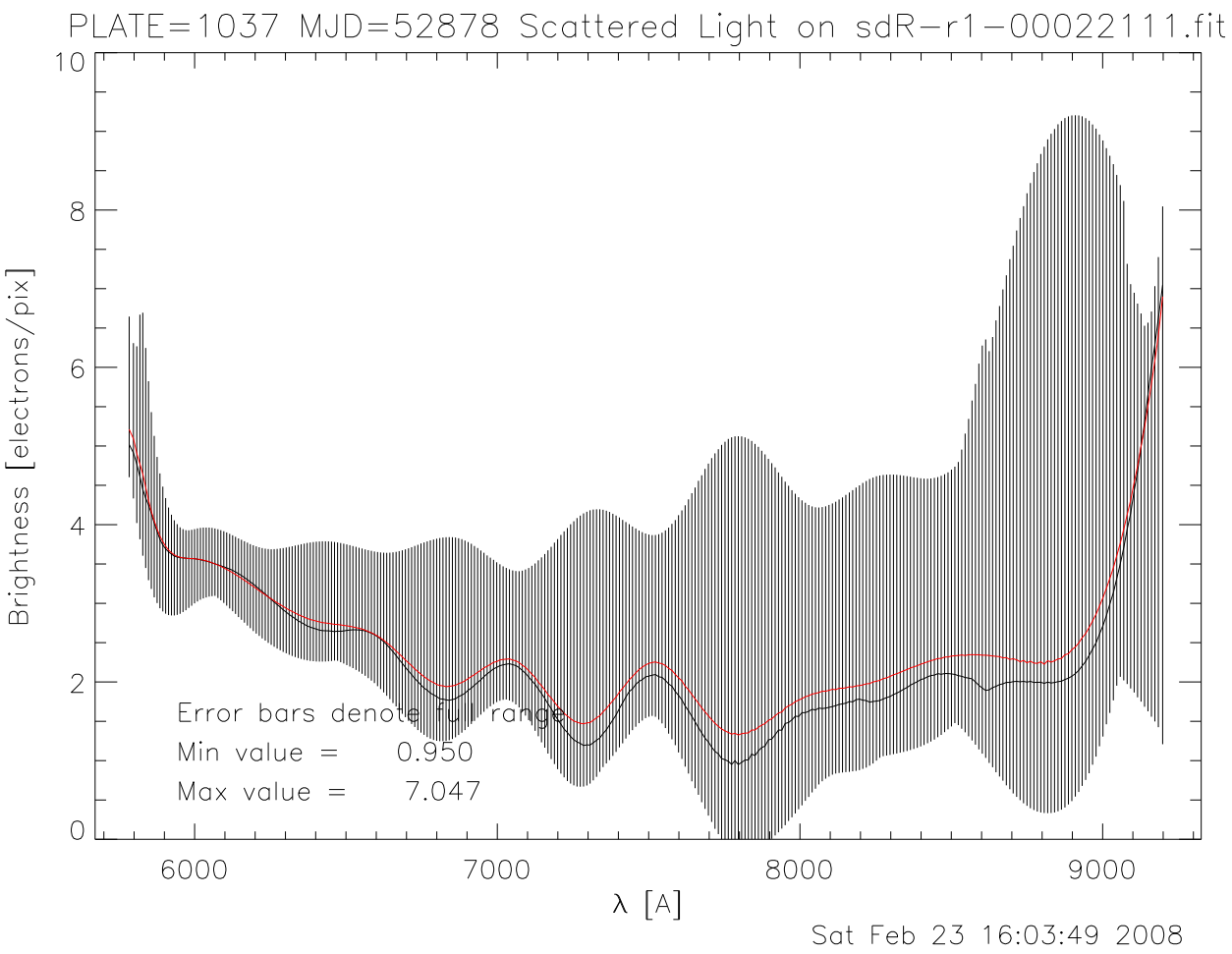

PLATE=1037 MJD=52878 Arcline Fit for sdR-r1-00022115.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 16:00:19 2008

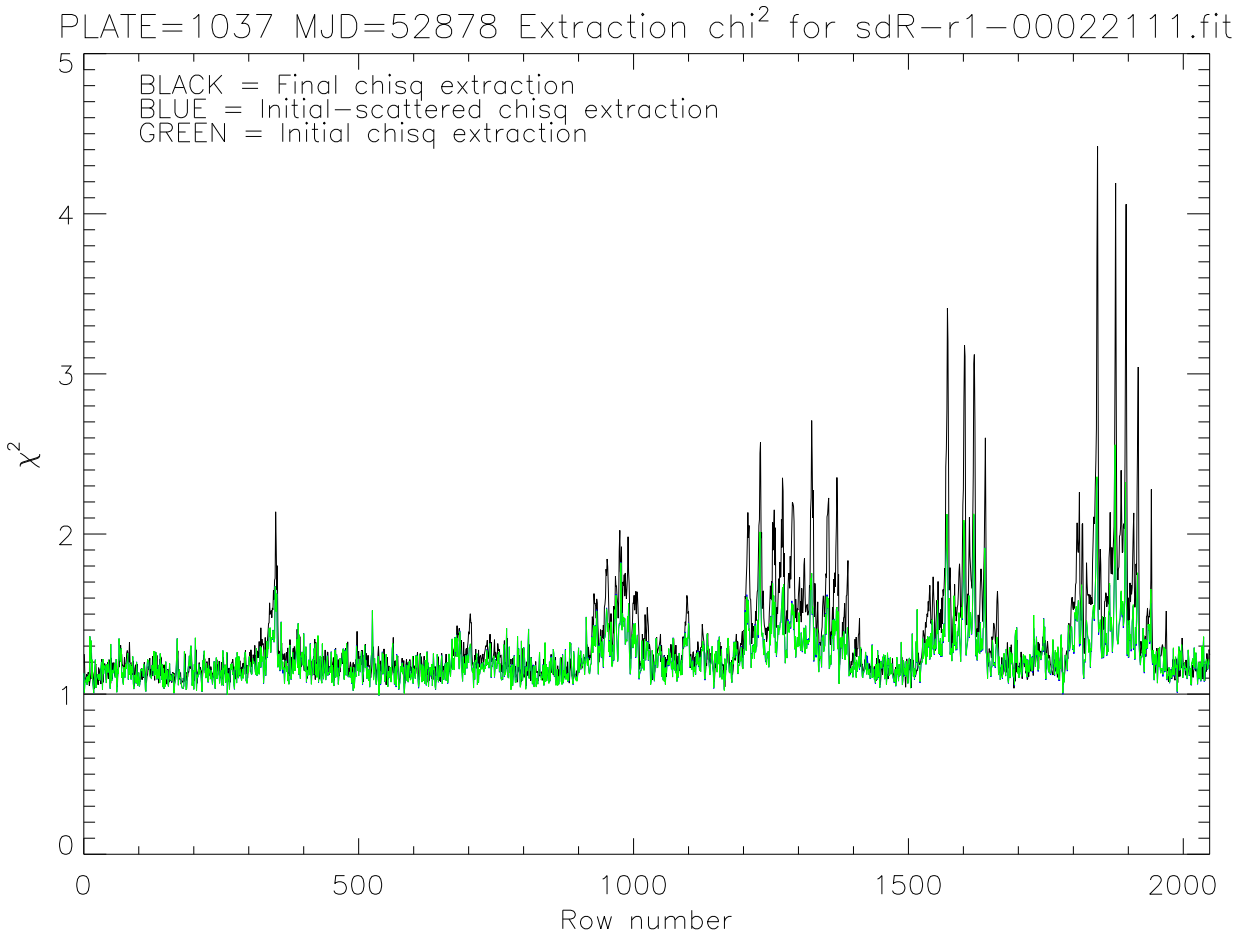

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r1−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.452
Max value = 1.302
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:00:26 2008

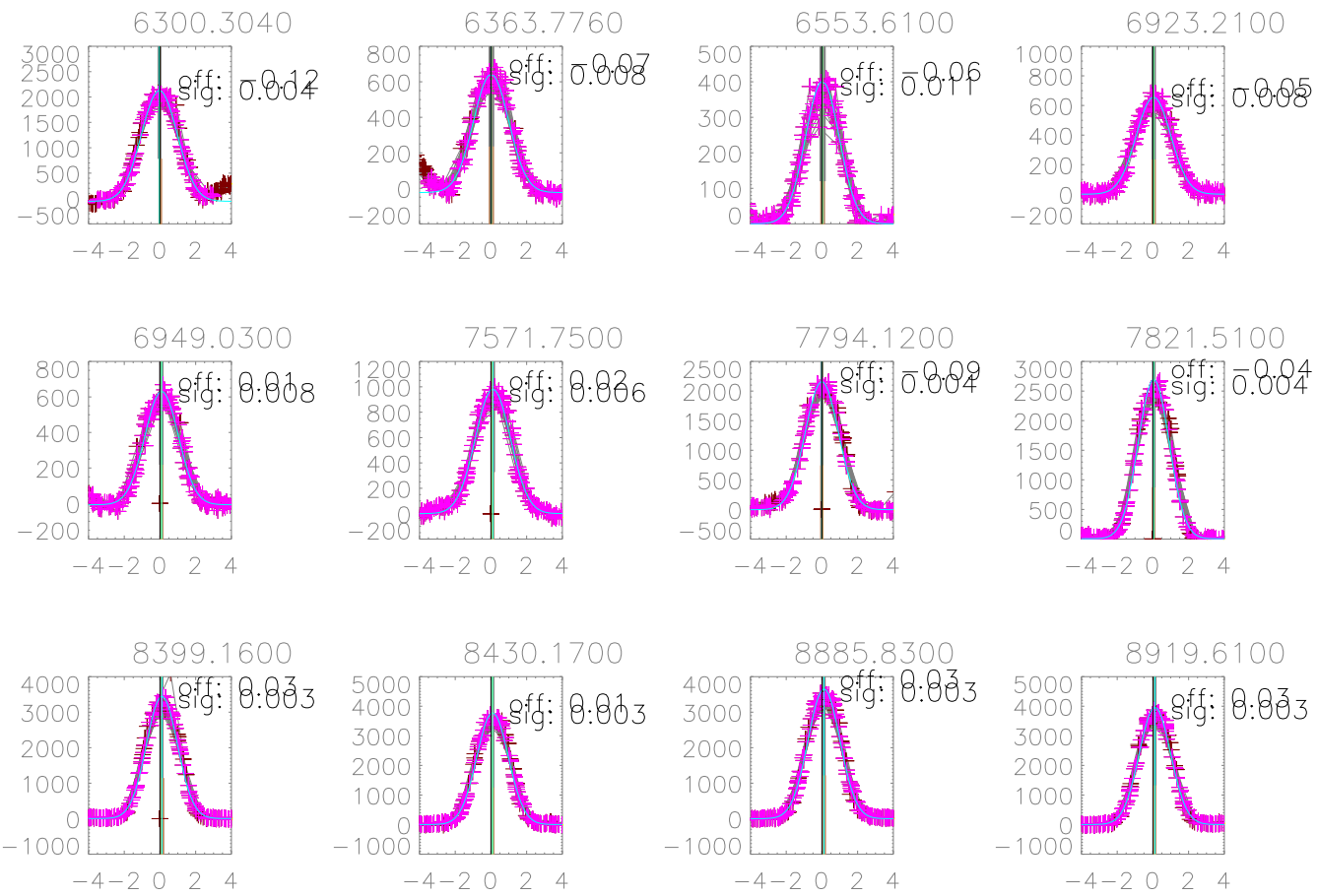

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022111.fi
24.5
24.5
24.5
19.1
13.6
13.6
13.6
13.6
8.2
8.2
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

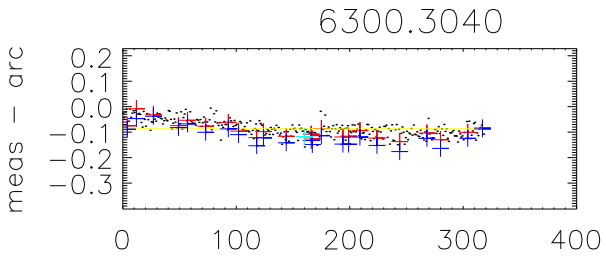

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022111.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.324
Max value = 28.673
Sat Feb 23 16:01:11 2008

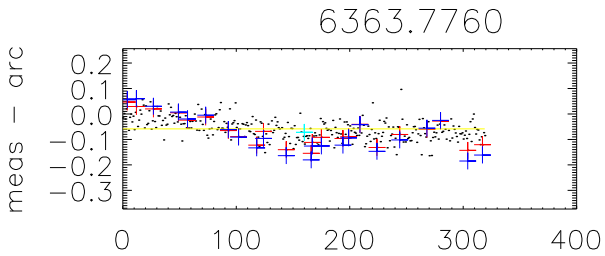

PLATE=1037 MJD=52878 Scattered Light on sdR−r1−00022111.fit
3.45
1.27
1.27
1.27
1.27
3.45
3.45
5.64
Y [pix]
X [pix]
0
500
1000
1500
2000

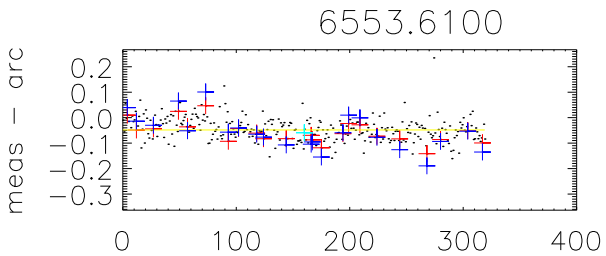

PLATE=1037 MJD=52878 Scattered Light on sdR-r1-00022111.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.950
Max value = 7.047
Sat Feb 23 16:03:49 2008

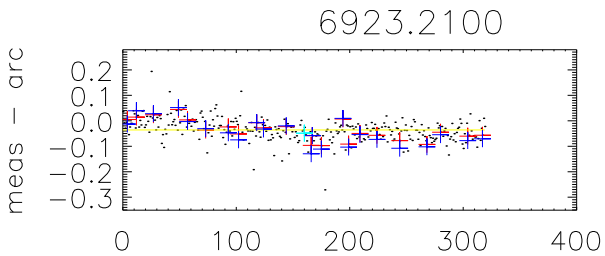

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r1−00022111.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

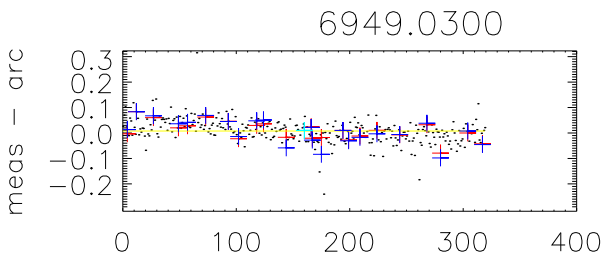

6300.3040
off: −0.12
sig: 0.004
6363.7760
off: −0.07
sig: 0.008
6553.6100
off: −0.06
sig: 0.011
6923.2100
off: −0.05
sig: 0.008
6949.0300
off: 0.01
sig: 0.008
7571.7500
off: 0.02
sig: 0.006
7794.1200
off: −0.09
sig: 0.004
7821.5100
off: −0.04
sig: 0.004
8399.1600
off: 0.03
sig: 0.003
8430.1700
off: 0.01
sig: 0.003
8885.8300
off: 0.03
sig: 0.003
8919.6100
off: 0.03
sig: 0.003

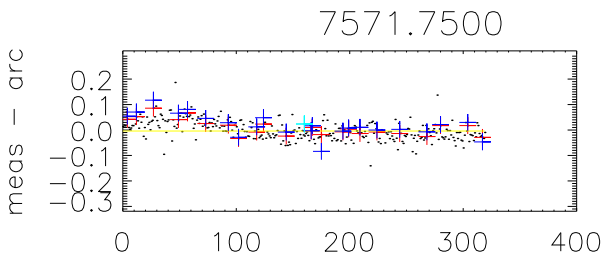

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

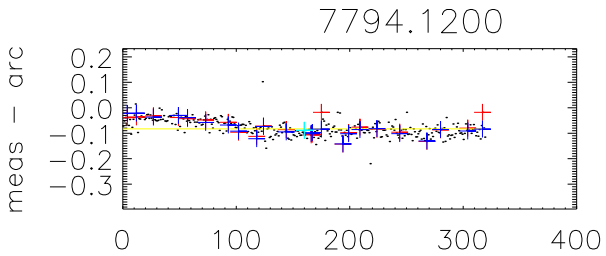

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

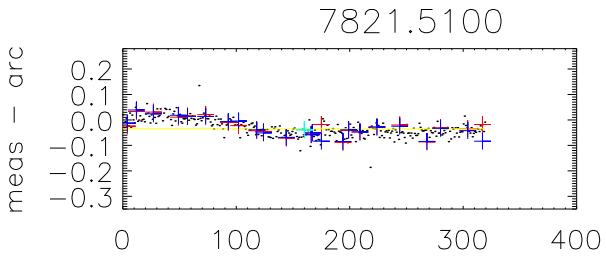

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

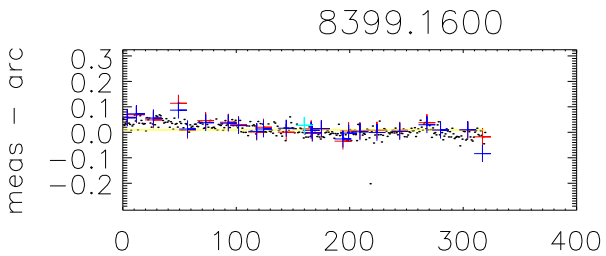

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

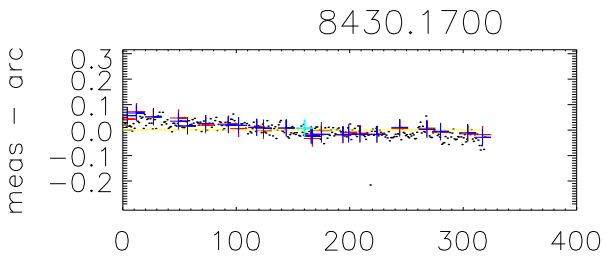

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

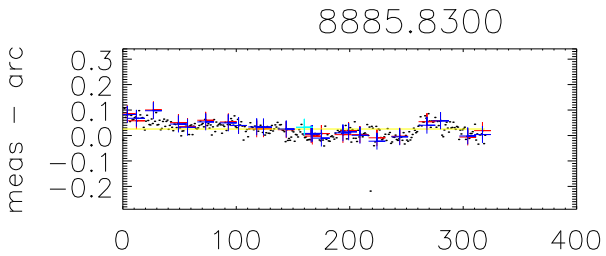

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

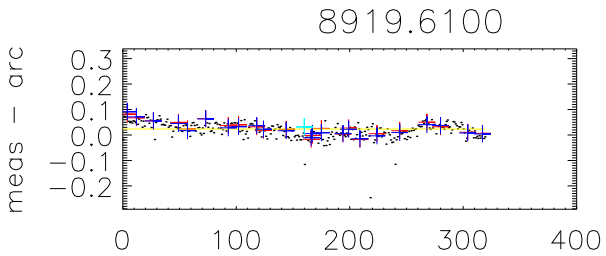

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

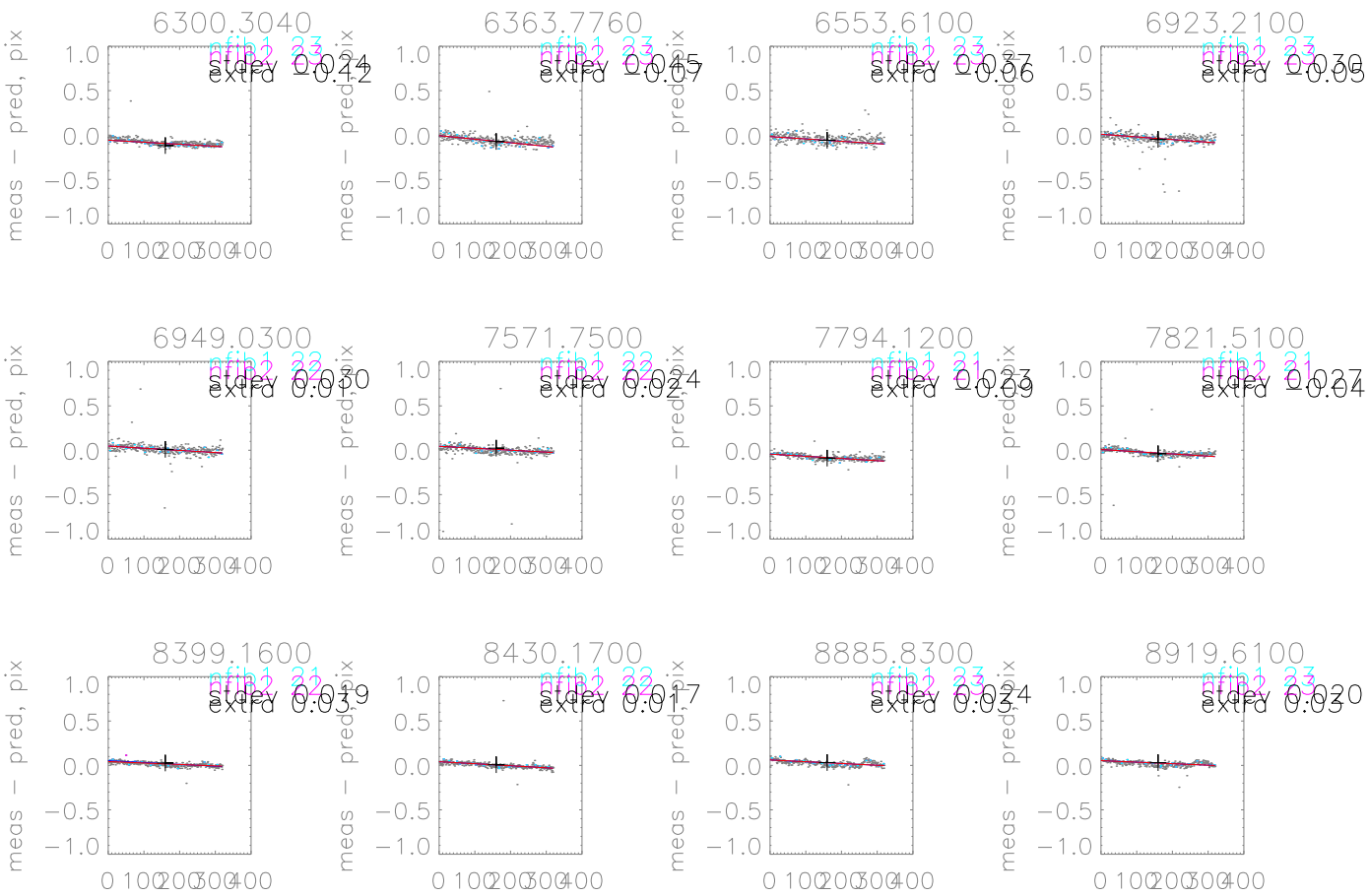

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

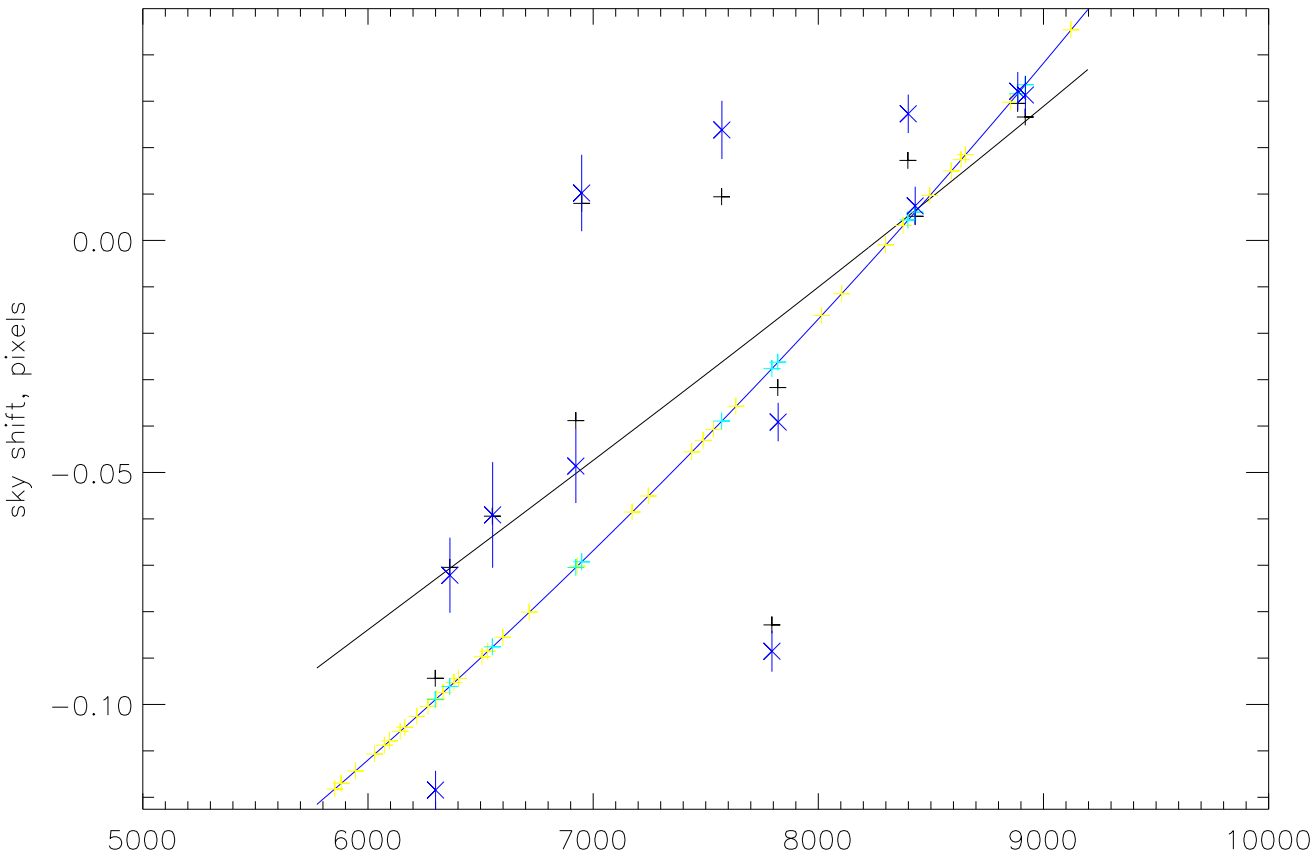

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

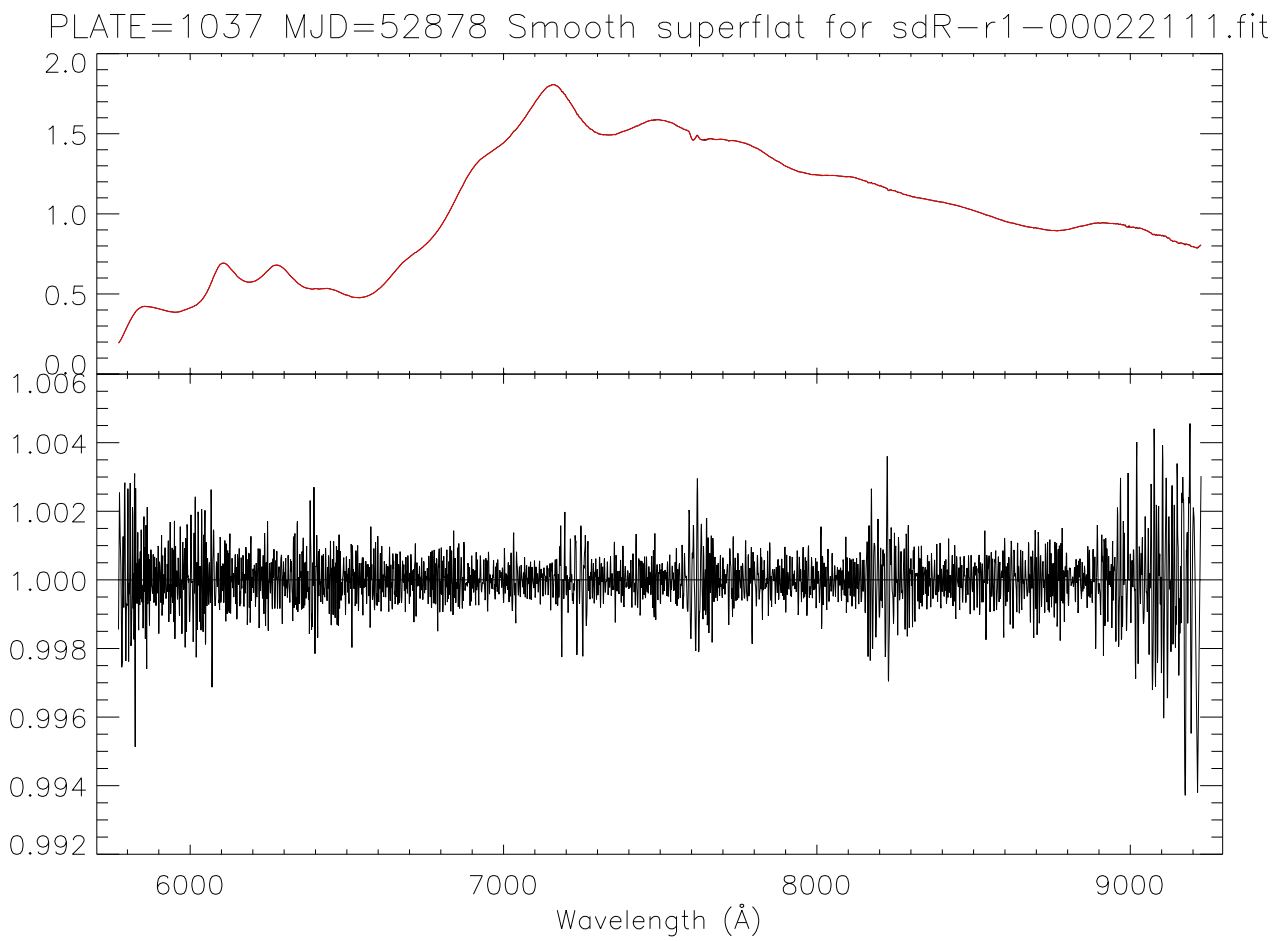

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

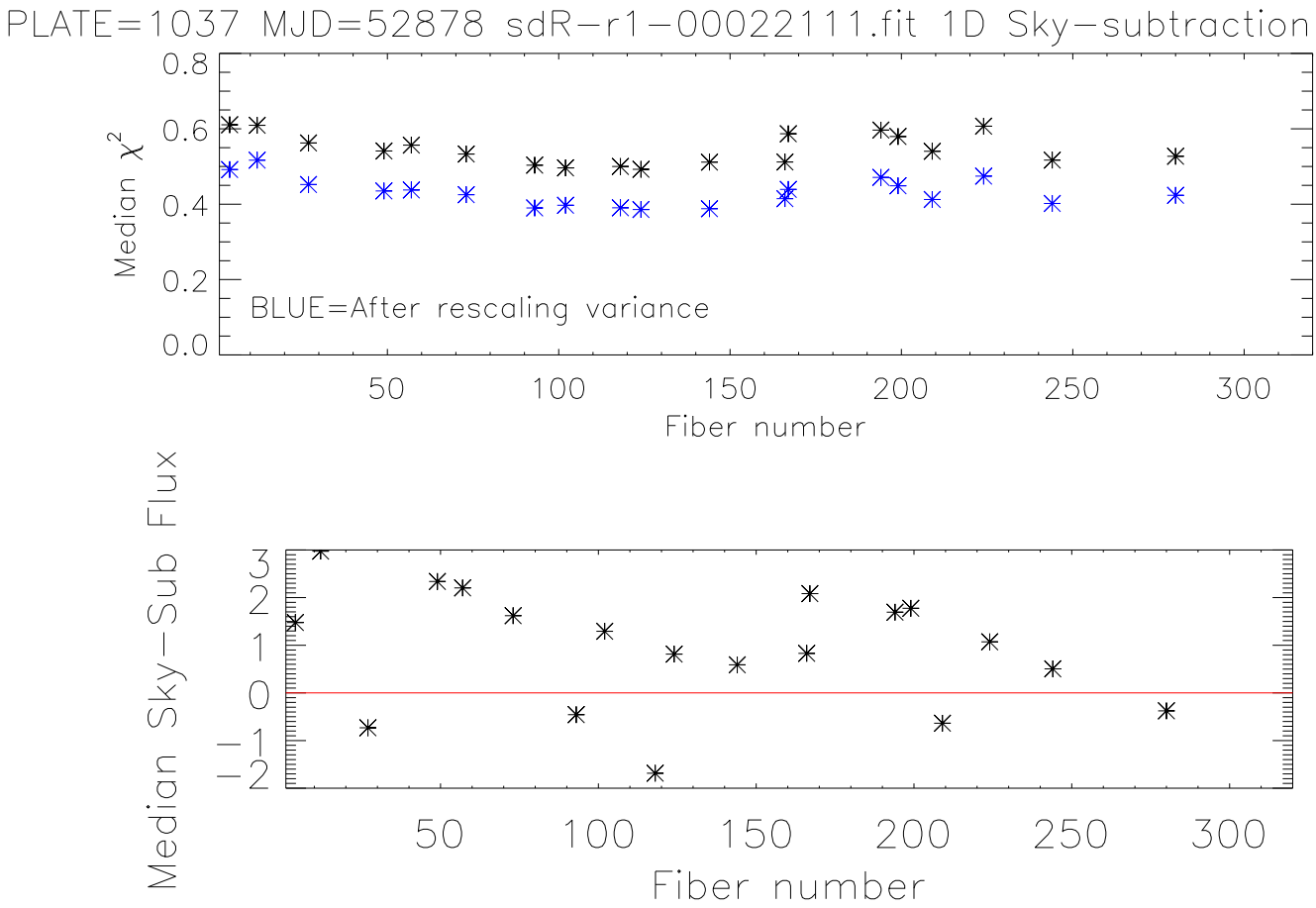

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
mfib1 23
mfib2 23
stdev 0.024
extra −0.42
6363.7760
mfib1 23
mfib2 23
stdev 0.045
extra −0.07
6553.6100
mfib1 23
mfib2 23
stdev 0.037
extra −0.06
6923.2100
mfib1 23
mfib2 23
stdev 0.030
extra −0.05
6949.0300
mfib1 22
mfib2 22
stdev 0.030
extra 0.01
7571.7500
mfib1 22
mfib2 22
stdev 0.024
extra 0.02
7794.1200
mfib1 21
mfib2 21
stdev 0.033
extra −0.09
7821.5100
mfib1 21
mfib2 21
stdev 0.027
extra −0.04
8399.1600
mfib1 21
mfib2 22
stdev 0.019
extra 0.03
8430.1700
mfib1 22
mfib2 22
stdev 0.017
extra 0.01
8885.8300
mfib1 23
mfib2 23
stdev 0.024
extra 0.03
8919.6100
mfib1 23
mfib2 23
stdev 0.020
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

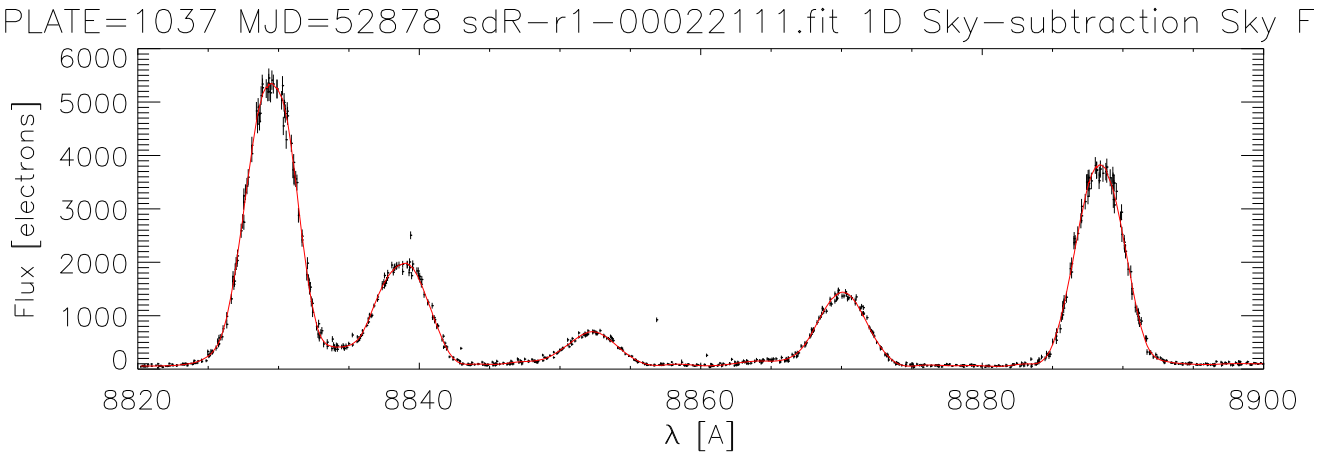

sky shift, pixels
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

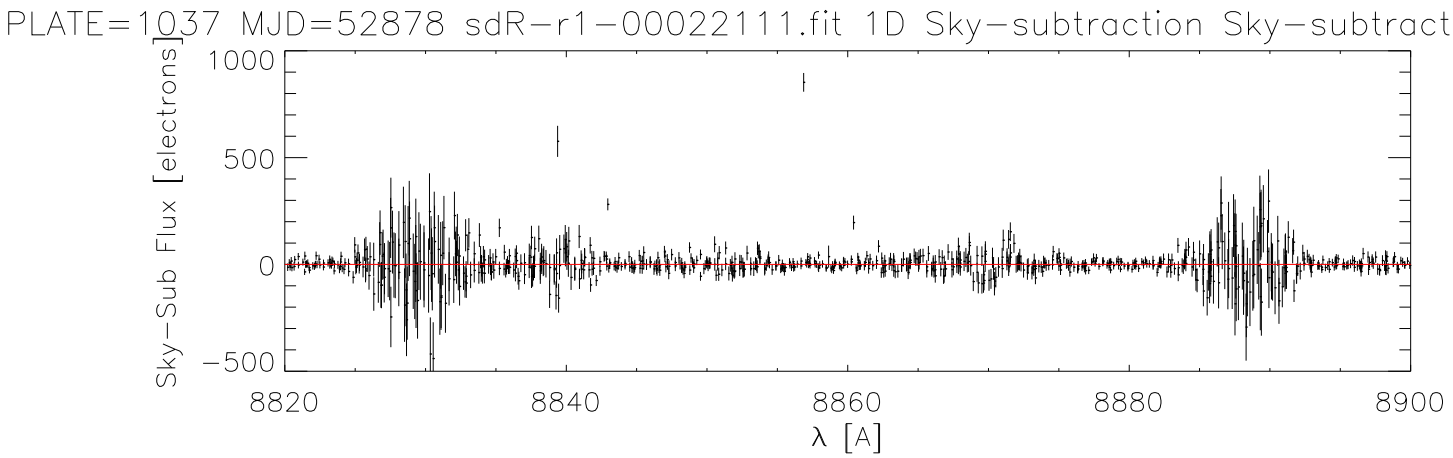
es= 0.0000

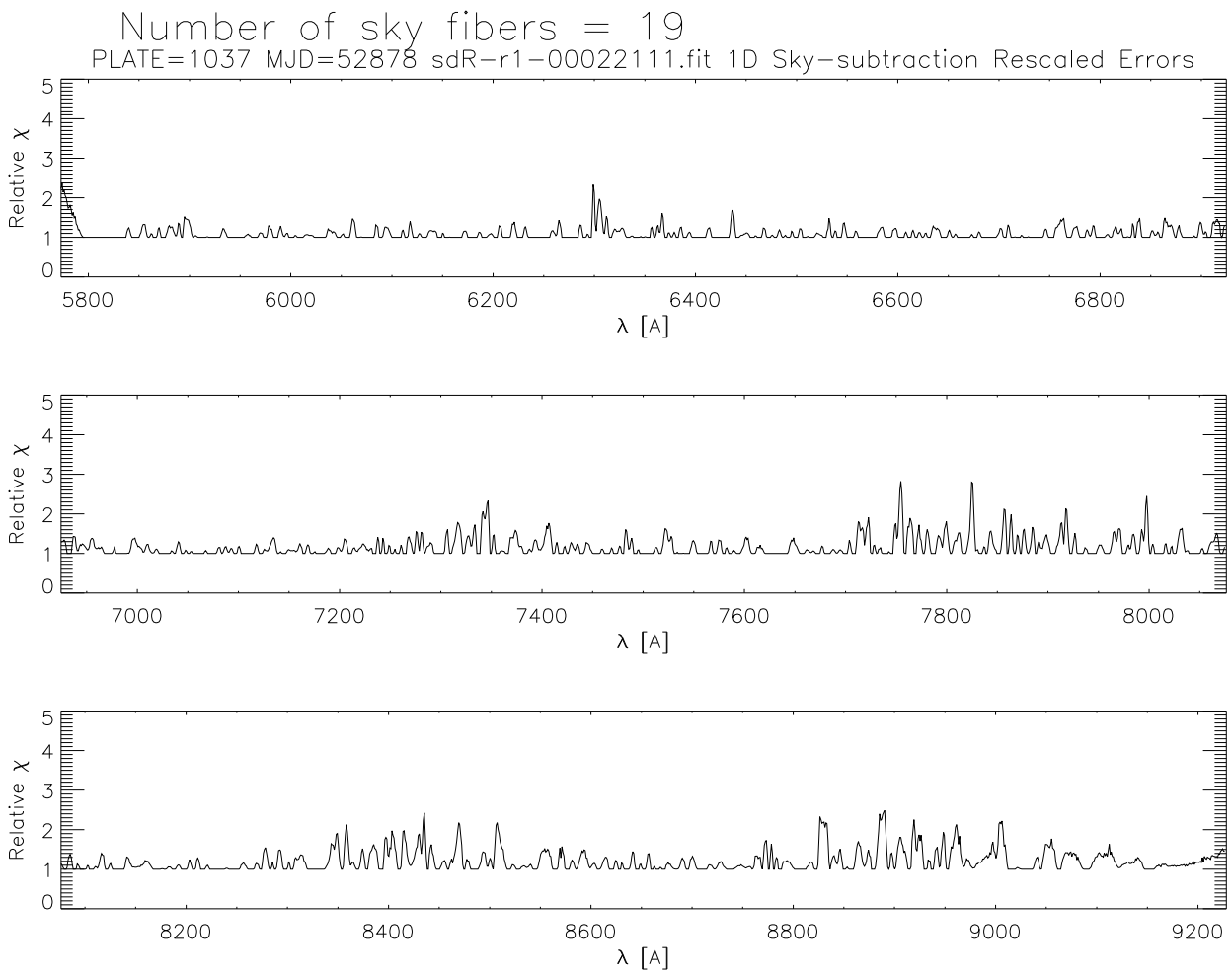

PLATE=1037 MJD=52878 Smooth superflat for sdR-r1-00022111.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

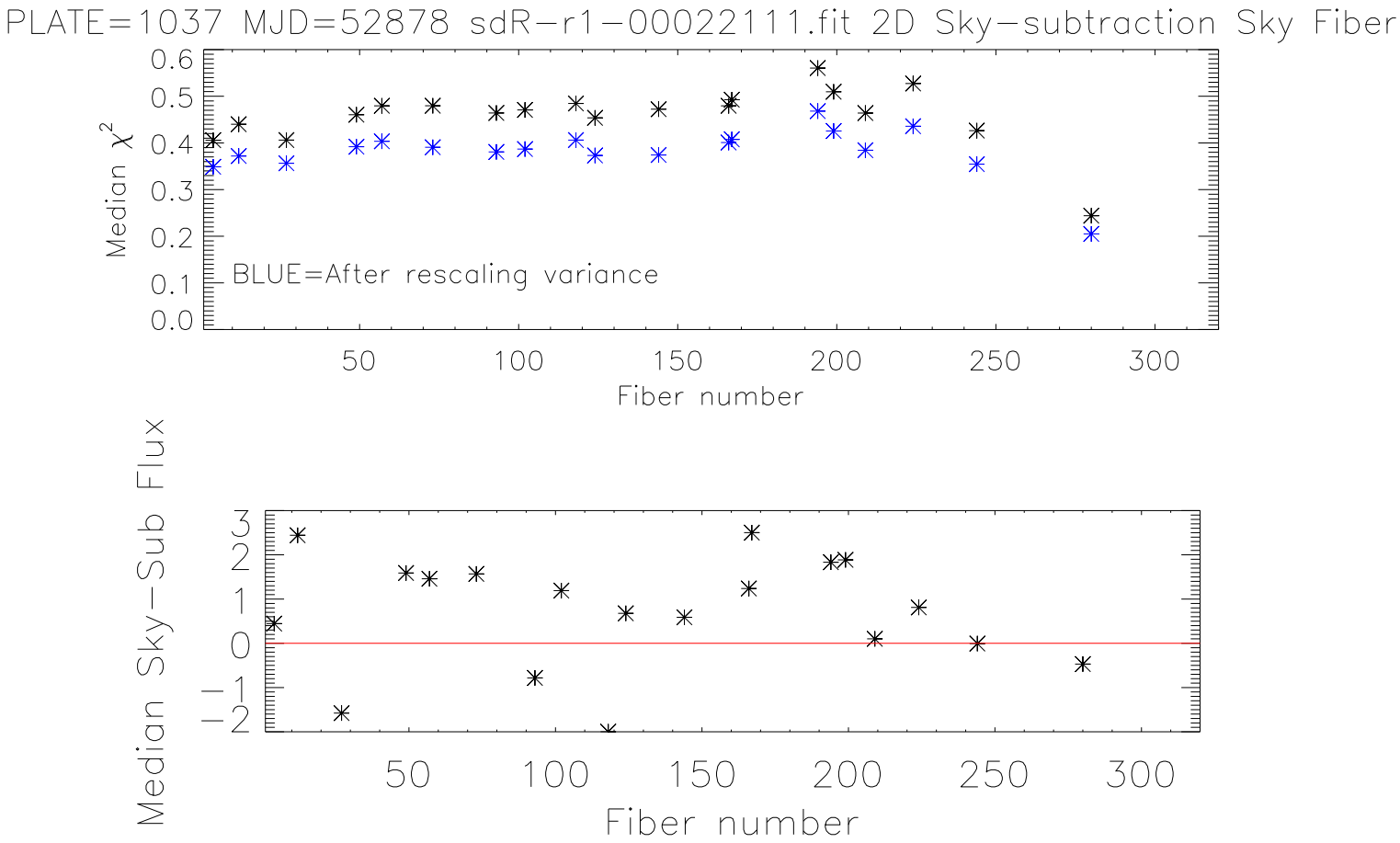

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

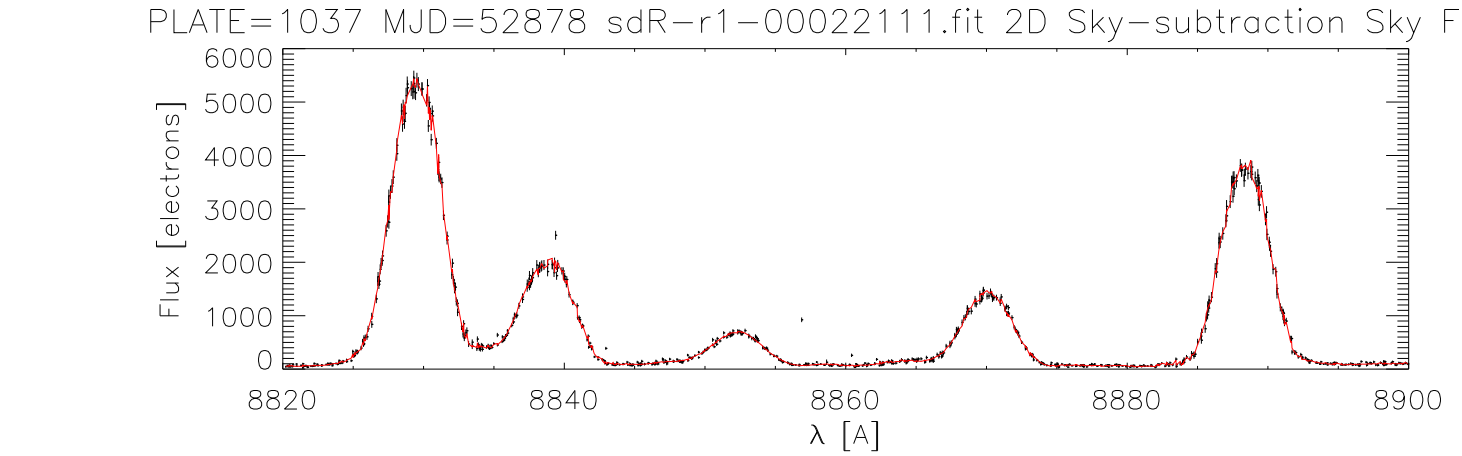
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

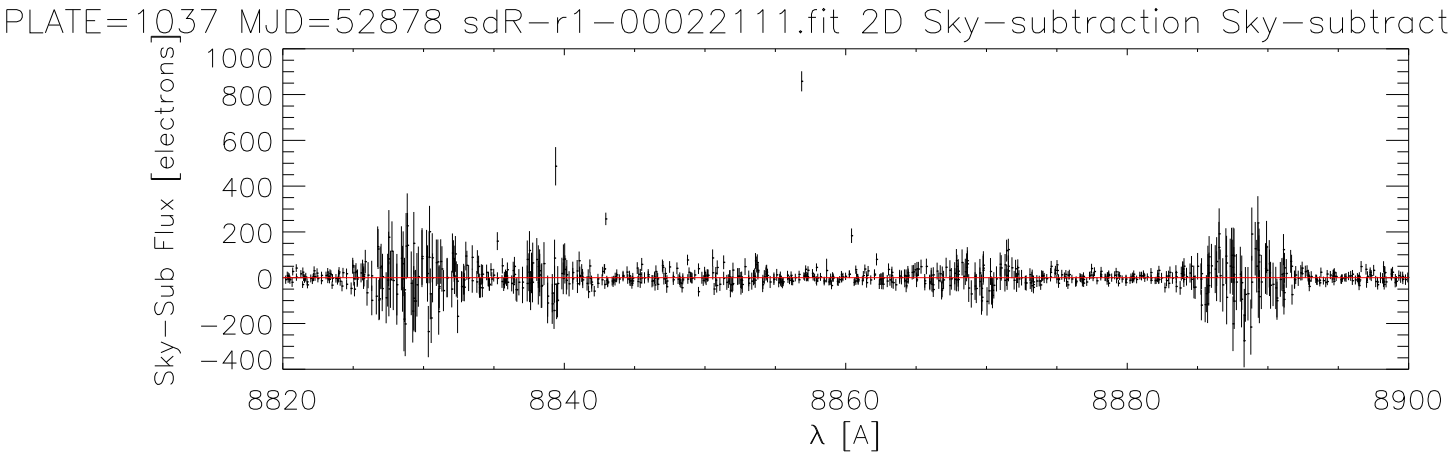

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

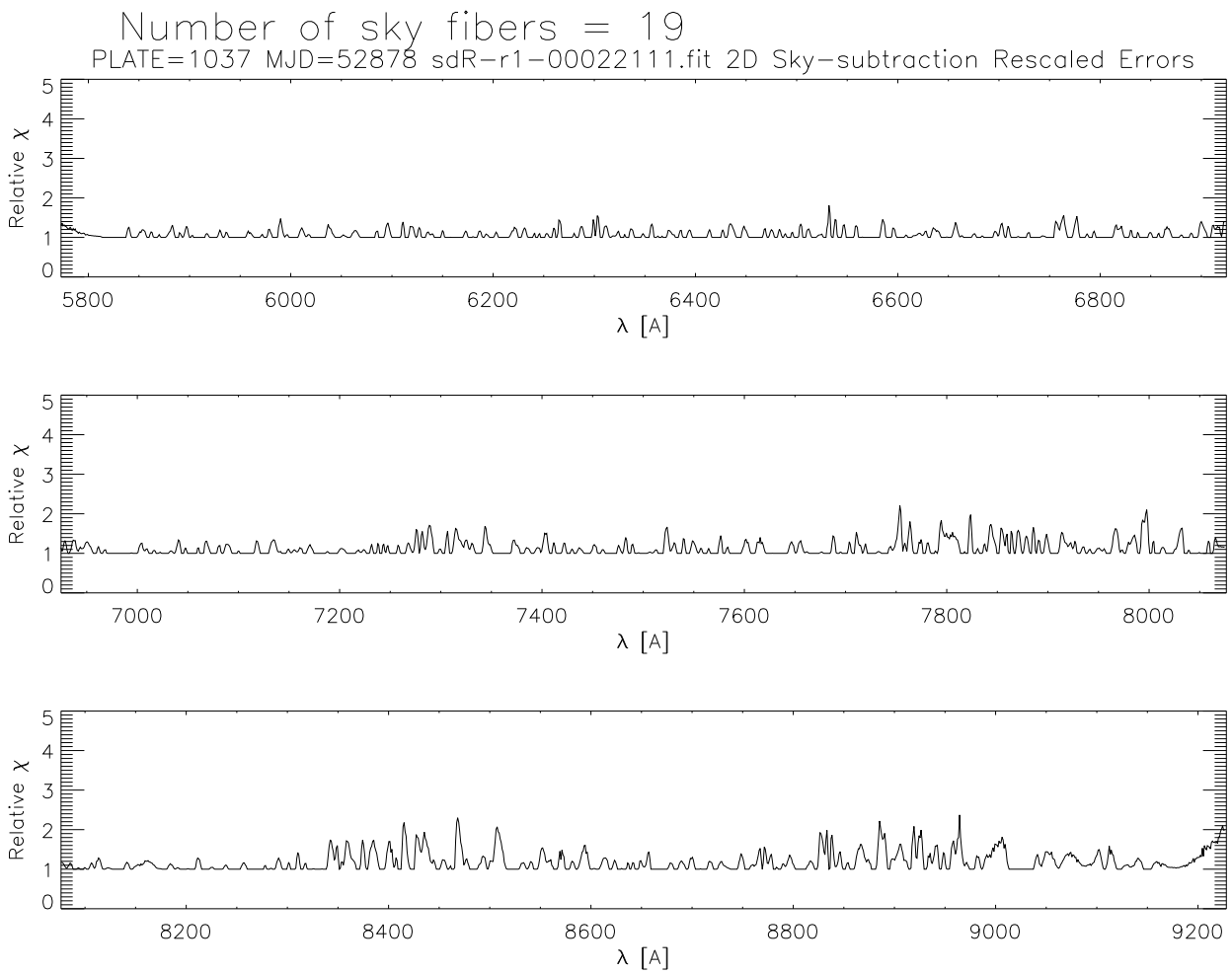

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

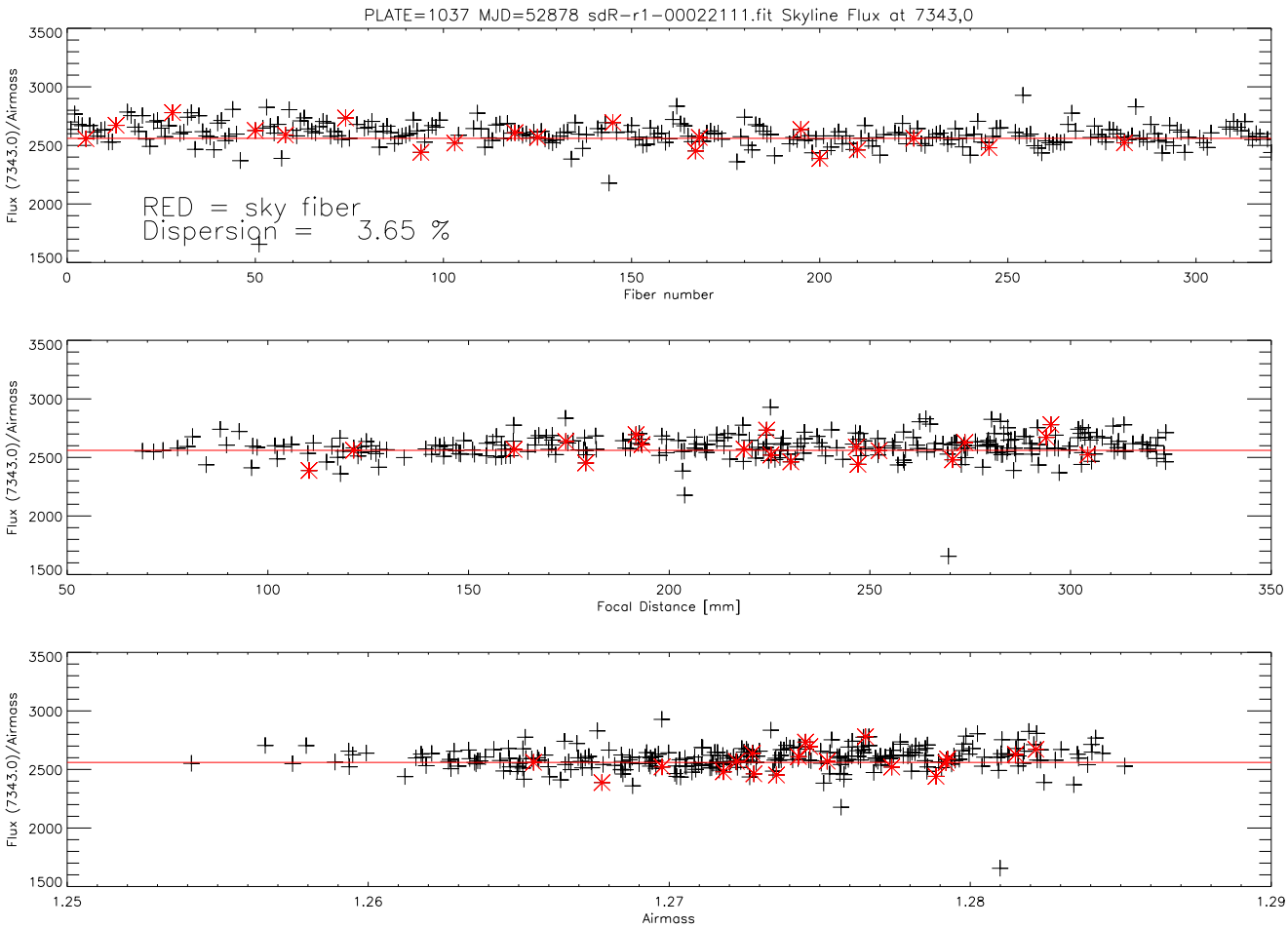

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022111.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

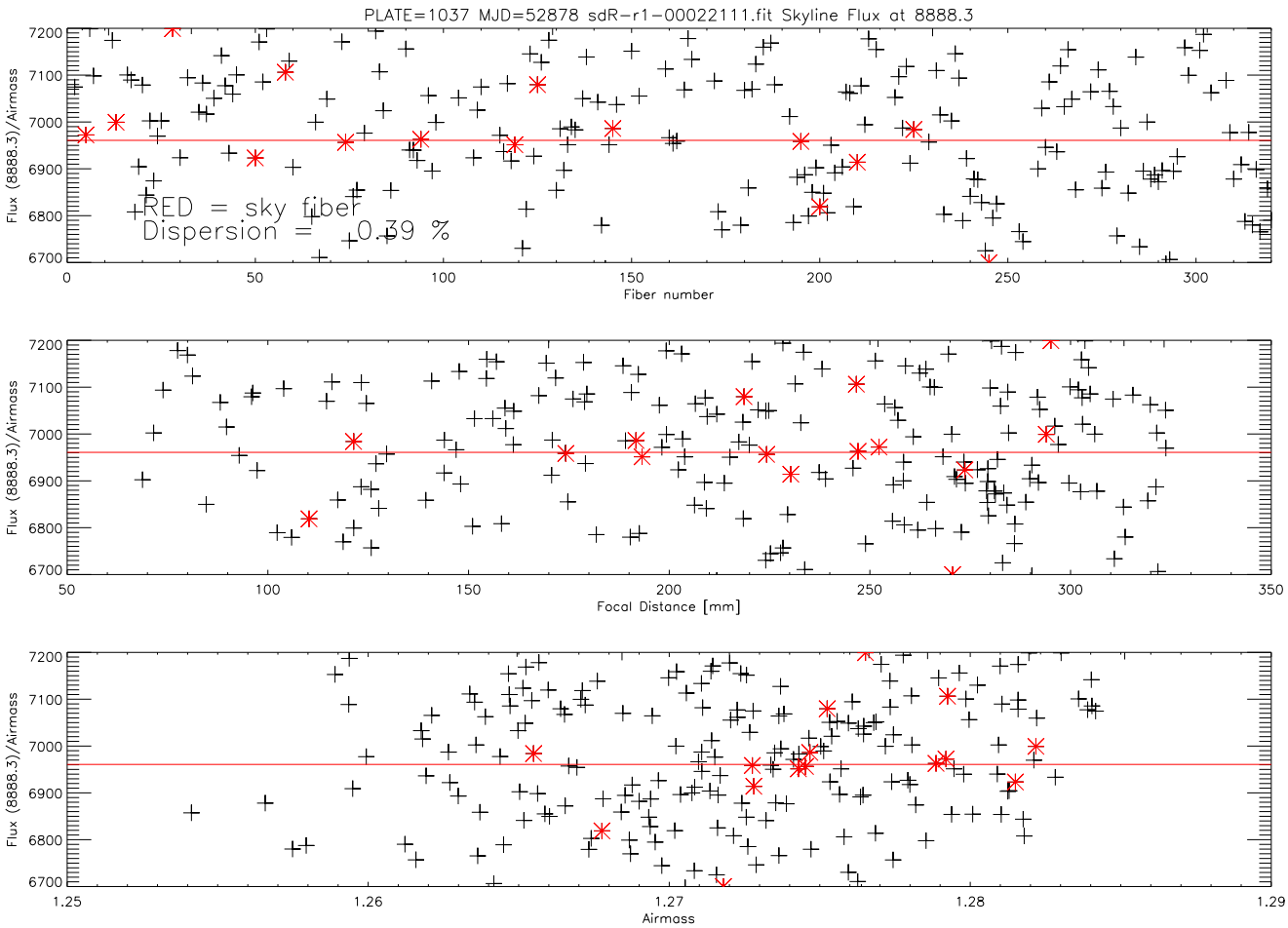

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

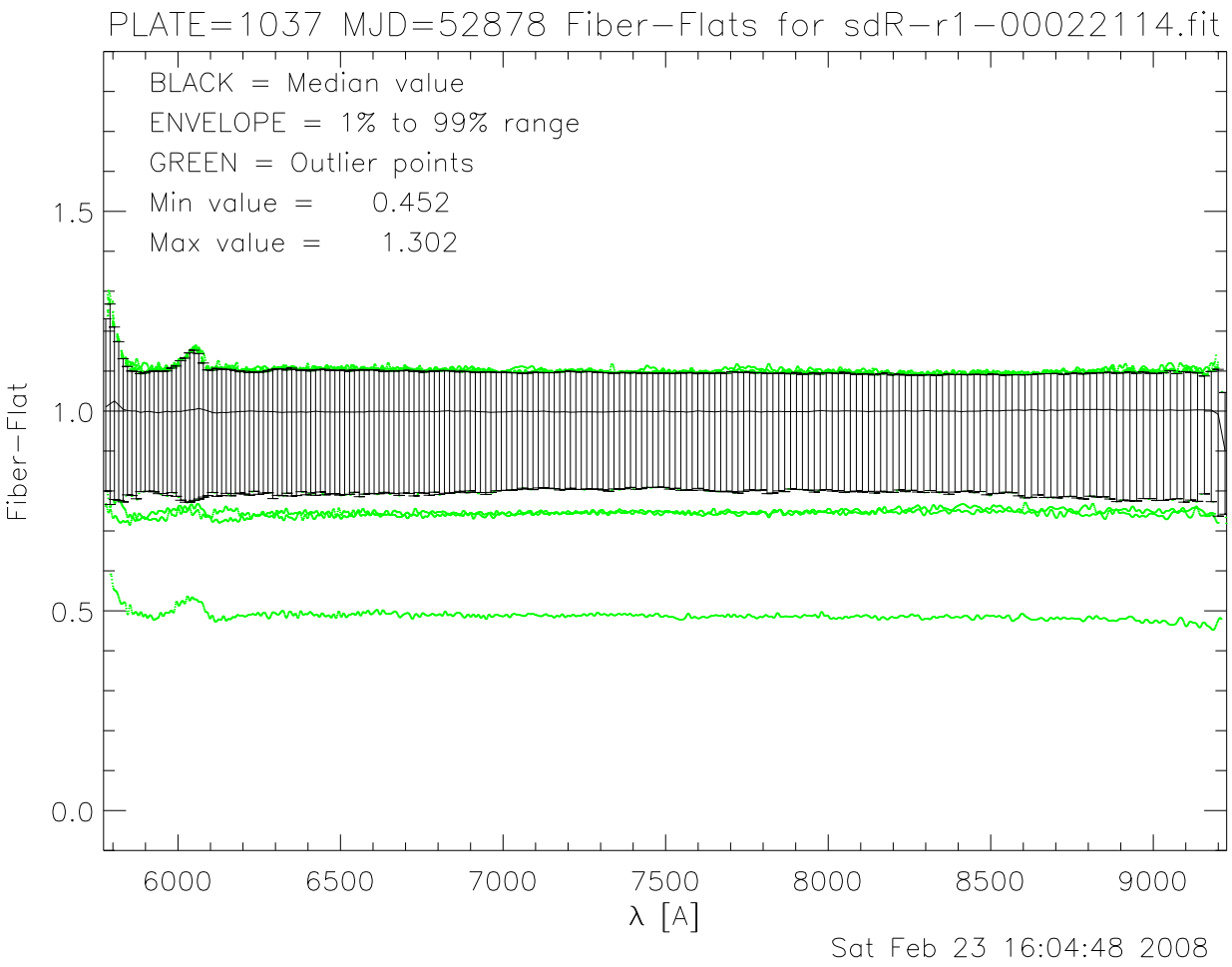

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

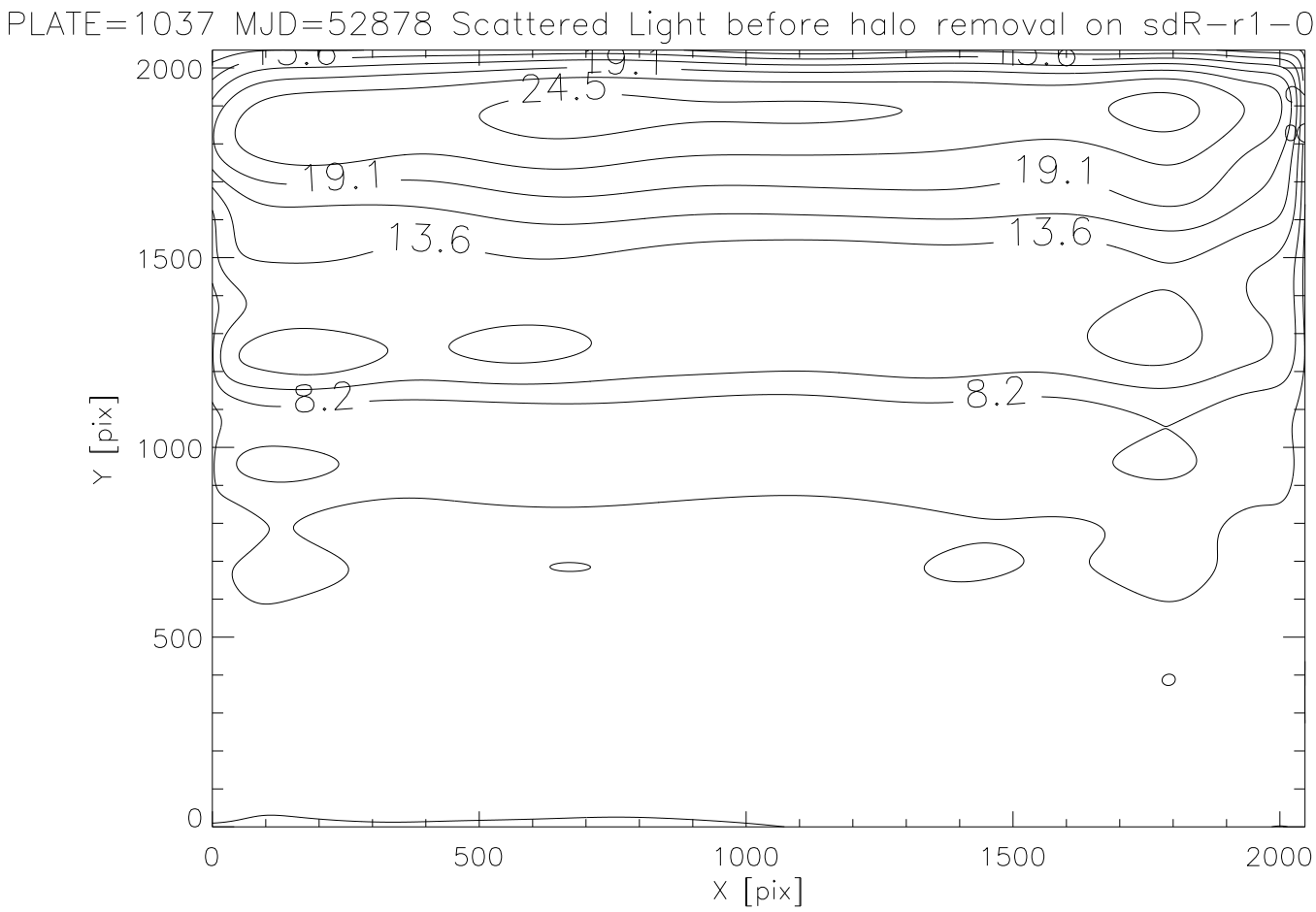

PLATE=1037 MJD=52878 sdR-r1-00022111.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

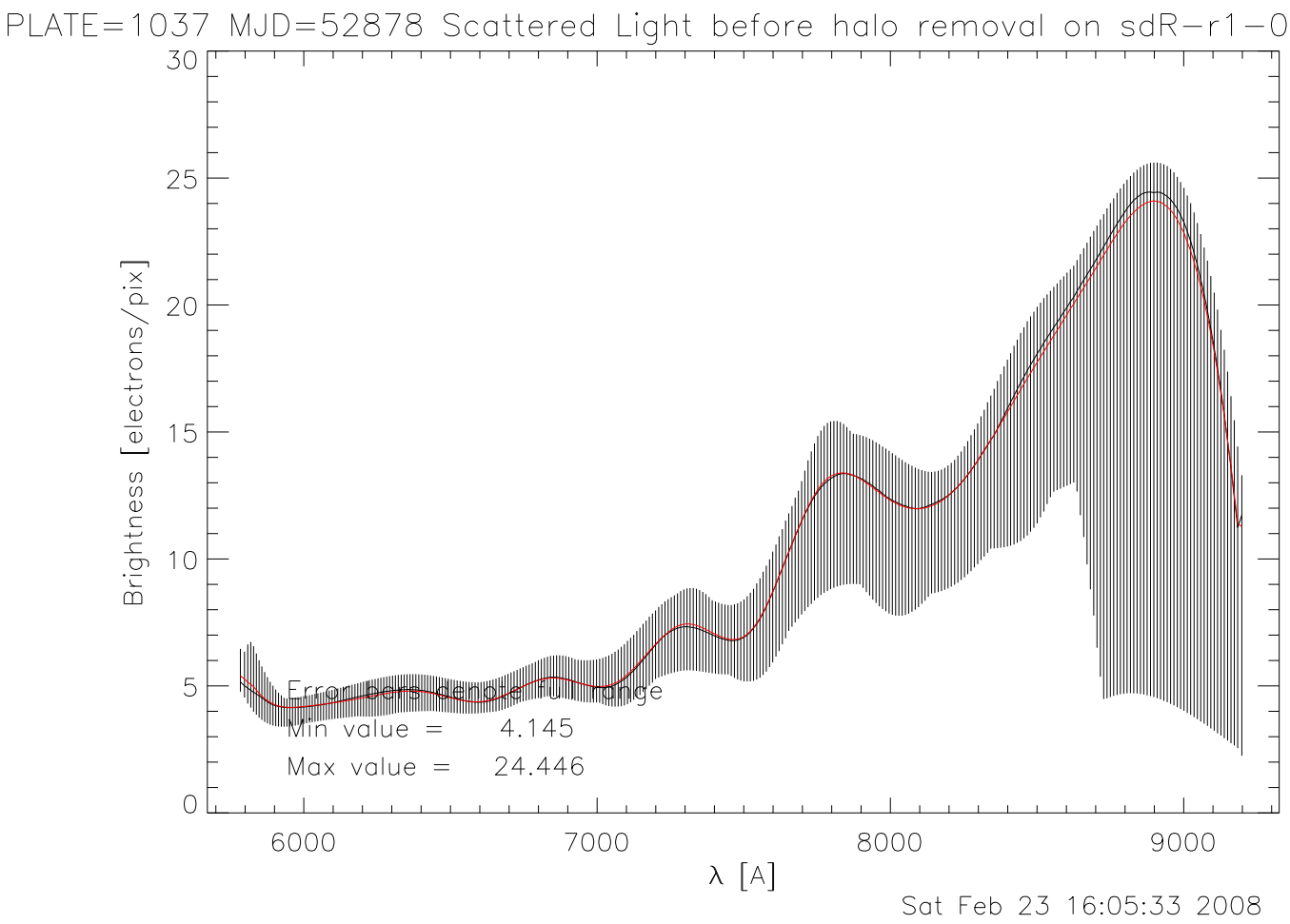

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022111.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

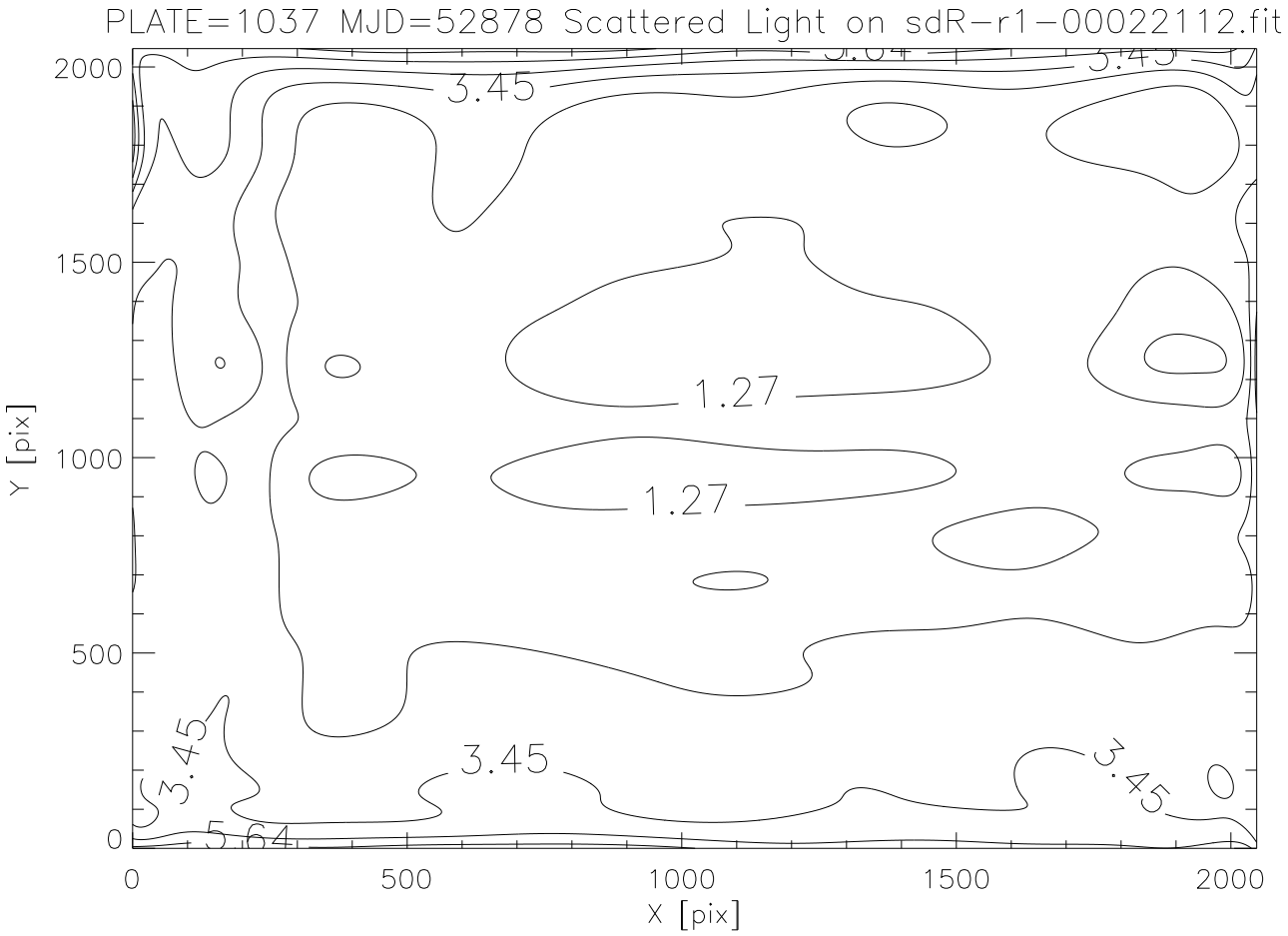

PLATE=1037 MJD=52878 sdR-r1-00022111.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.65 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

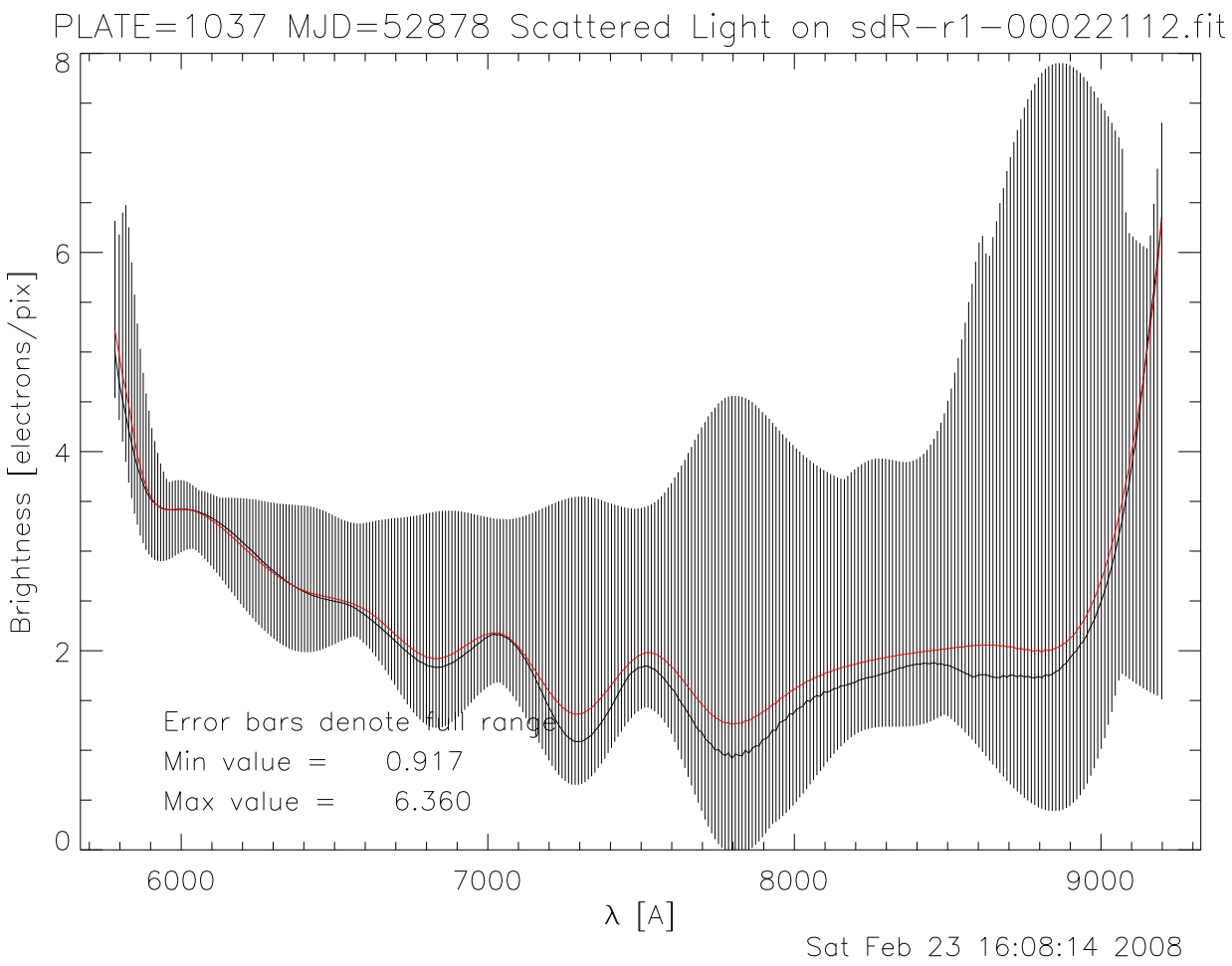

PLATE=1037 MJD=52878 sdR-r1-00022111.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.39 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

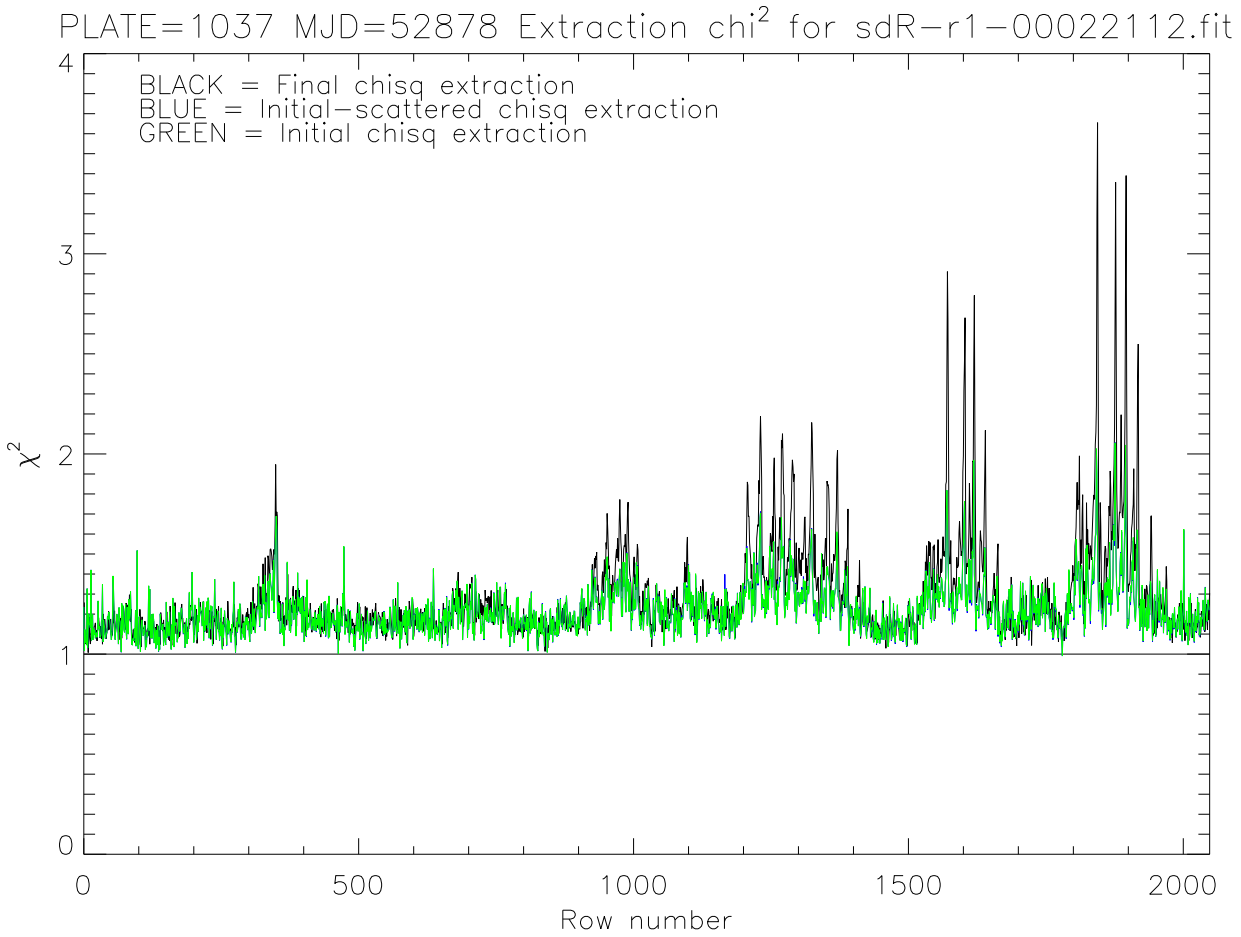

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r1−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.452
Max value = 1.302
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:04:48 2008

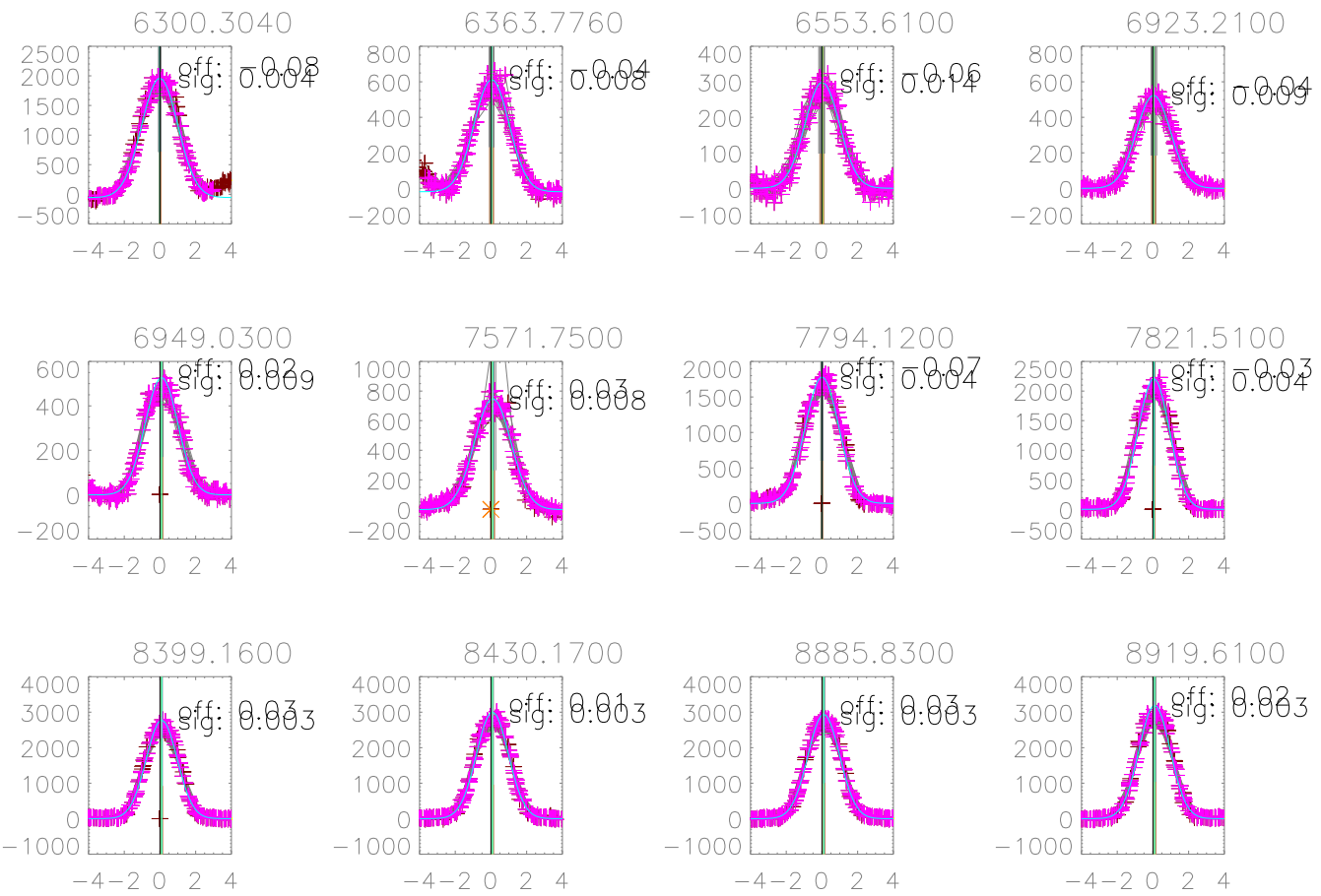

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022112.fi
15.6
19.1
15.6
24.5
19.1
19.1
13.6
13.6
8.2
8.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

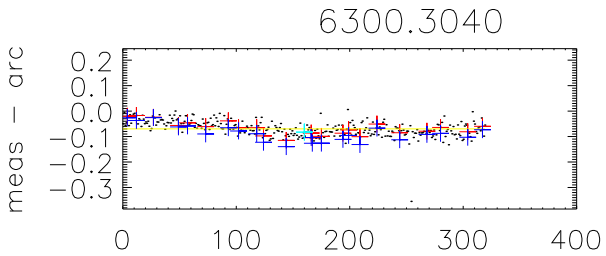

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022112.fi
Brightness [electrons/pix]
λ [A]
Error bars before halo fit range
Min value = 4.145
Max value = 24.446
Sat Feb 23 16:05:33 2008

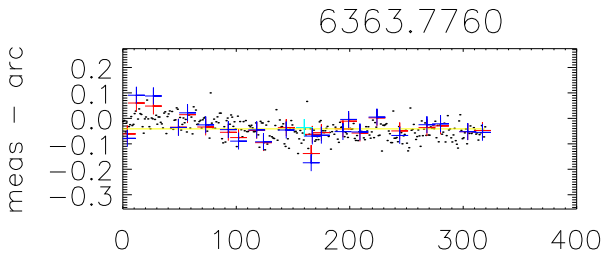

PLATE=1037 MJD=52878 Scattered Light on sdR−r1−00022112.fit
3.45
1.27
1.27
3.45
3.45
3.45
5.64
0
0
500
1000
1500
2000
X [pix]
Y [pix]

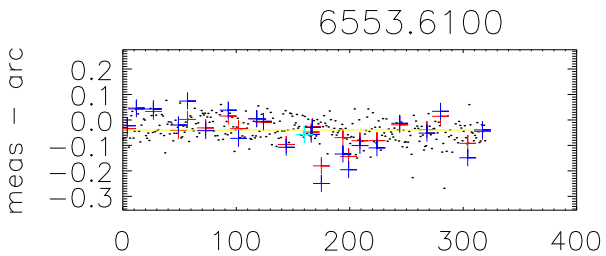

PLATE=1037 MJD=52878 Scattered Light on sdR-r1-00022112.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.917
Max value = 6.360
Sat Feb 23 16:08:14 2008

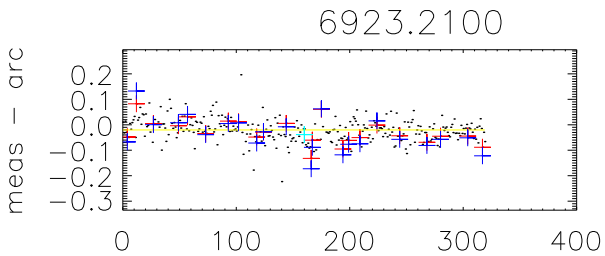

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r1−00022112.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

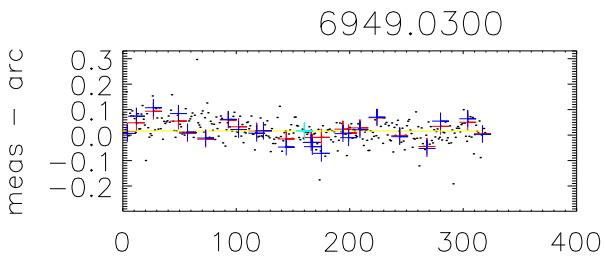

6300.3040
off: −0.08
sig: 0.004
6363.7760
off: −0.04
sig: 0.008
6553.6100
off: −0.06
sig: 0.014
6923.2100
off: −0.04
sig: 0.009
6949.0300
off: 0.02
sig: 0.009
7571.7500
off: 0.03
sig: 0.008
7794.1200
off: −0.07
sig: 0.004
7821.5100
off: −0.03
sig: 0.004
8399.1600
off: 0.03
sig: 0.003
8430.1700
off: 0.01
sig: 0.003
8885.8300
off: 0.03
sig: 0.003
8919.6100
off: 0.02
sig: 0.003

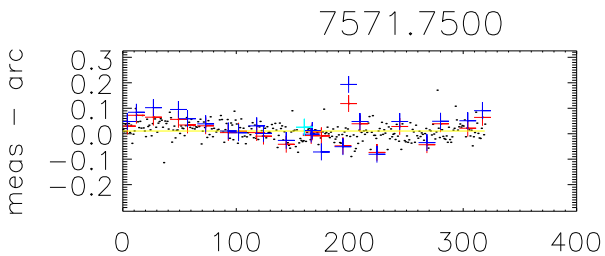

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

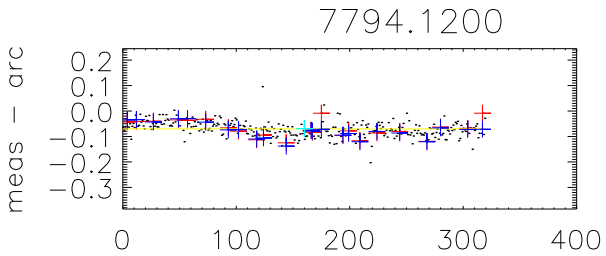

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

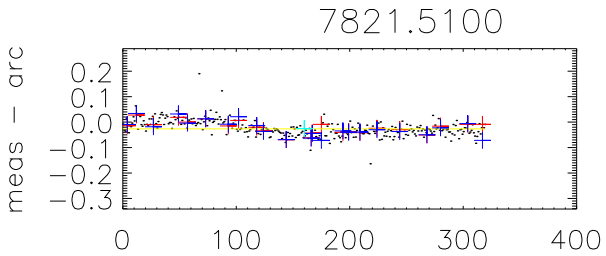

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

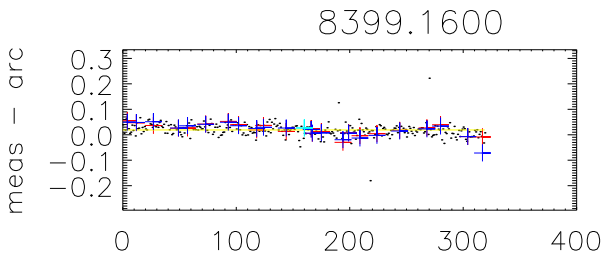

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

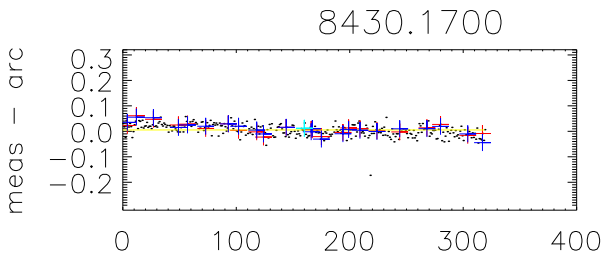

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

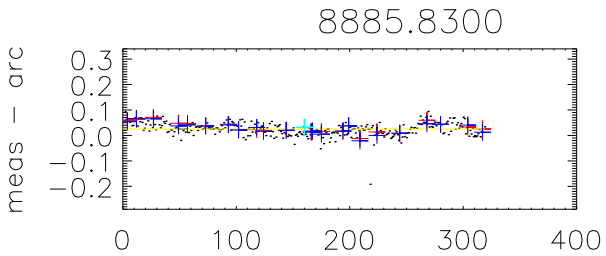

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

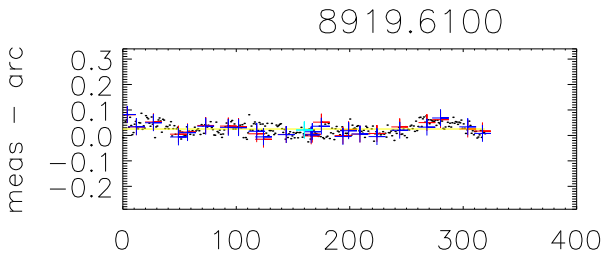

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

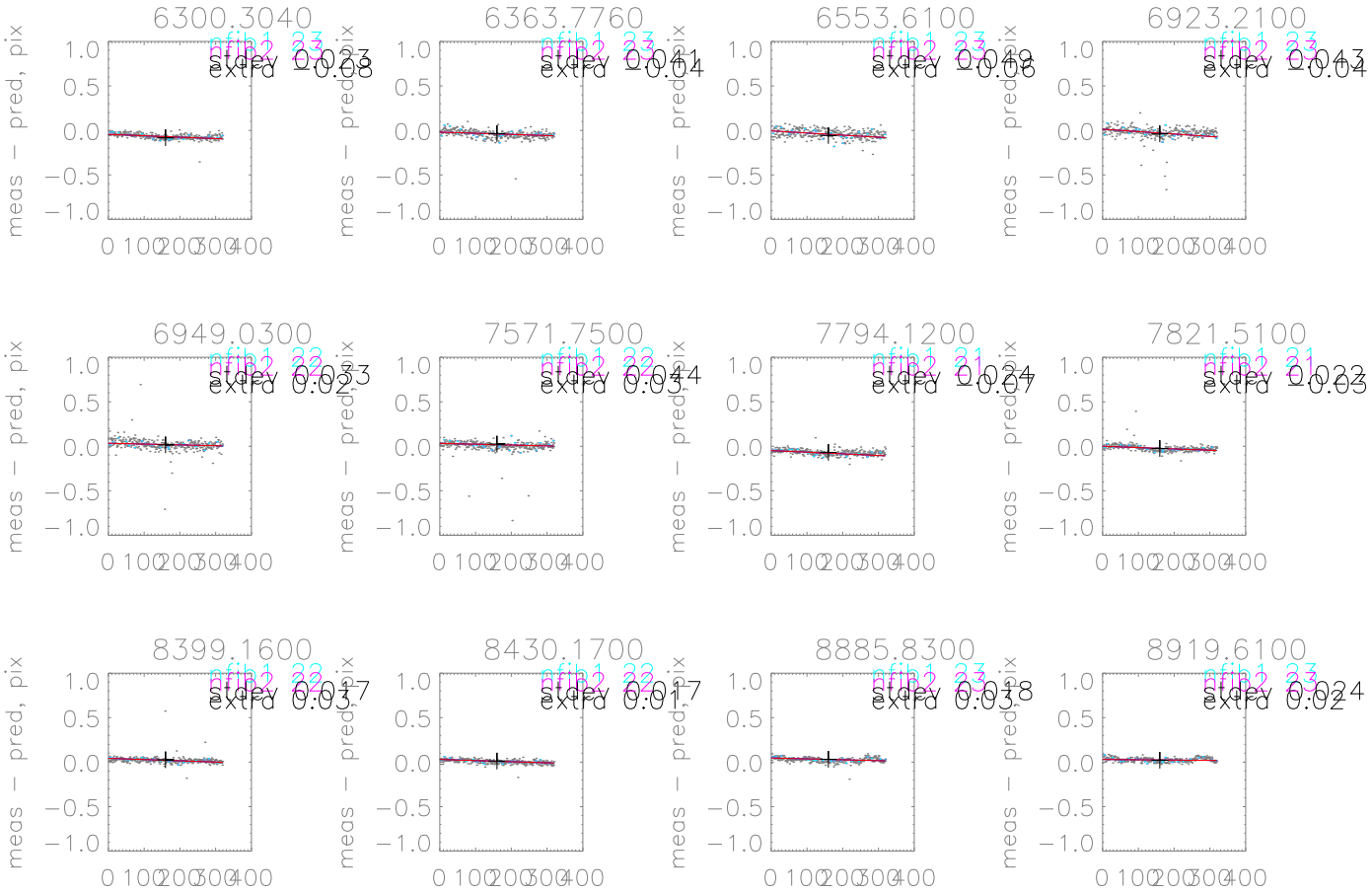

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

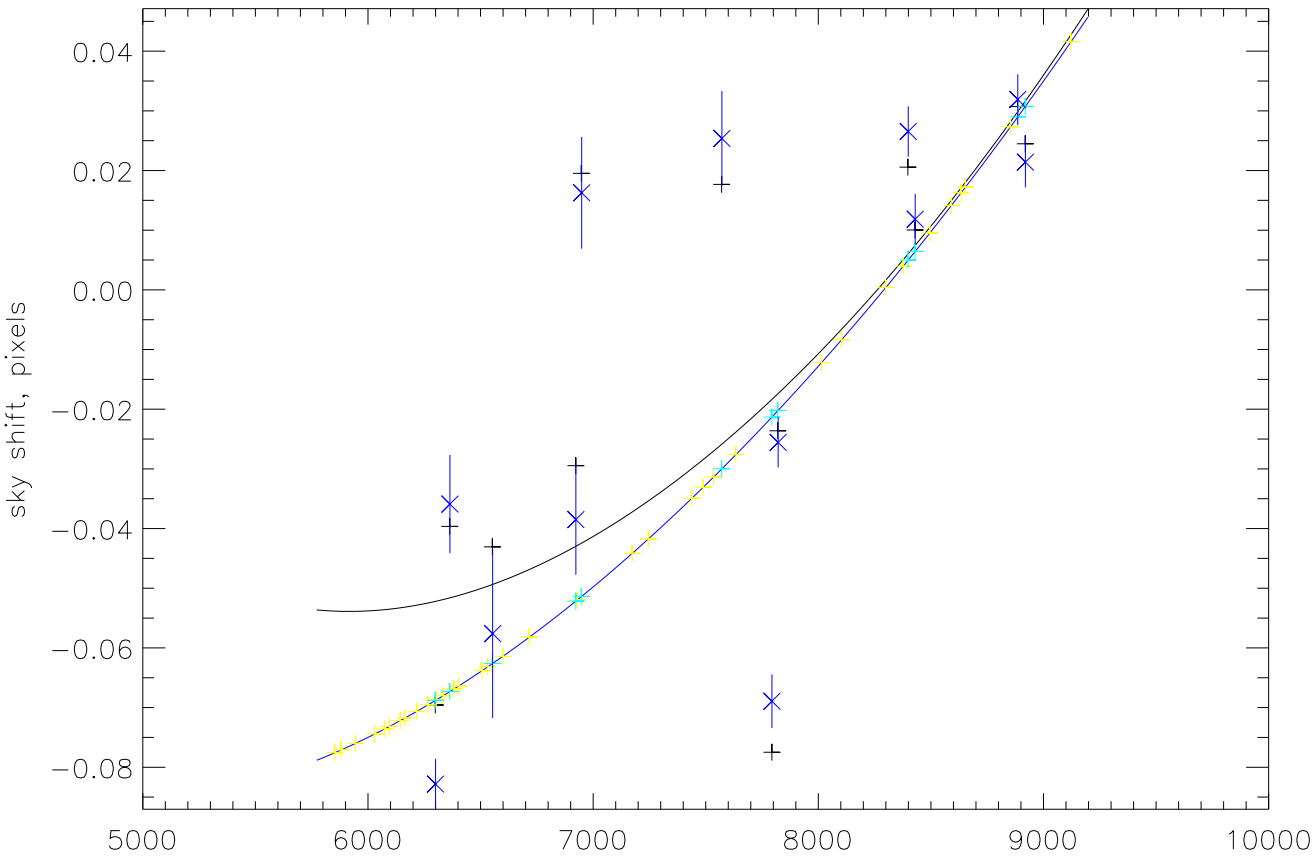

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

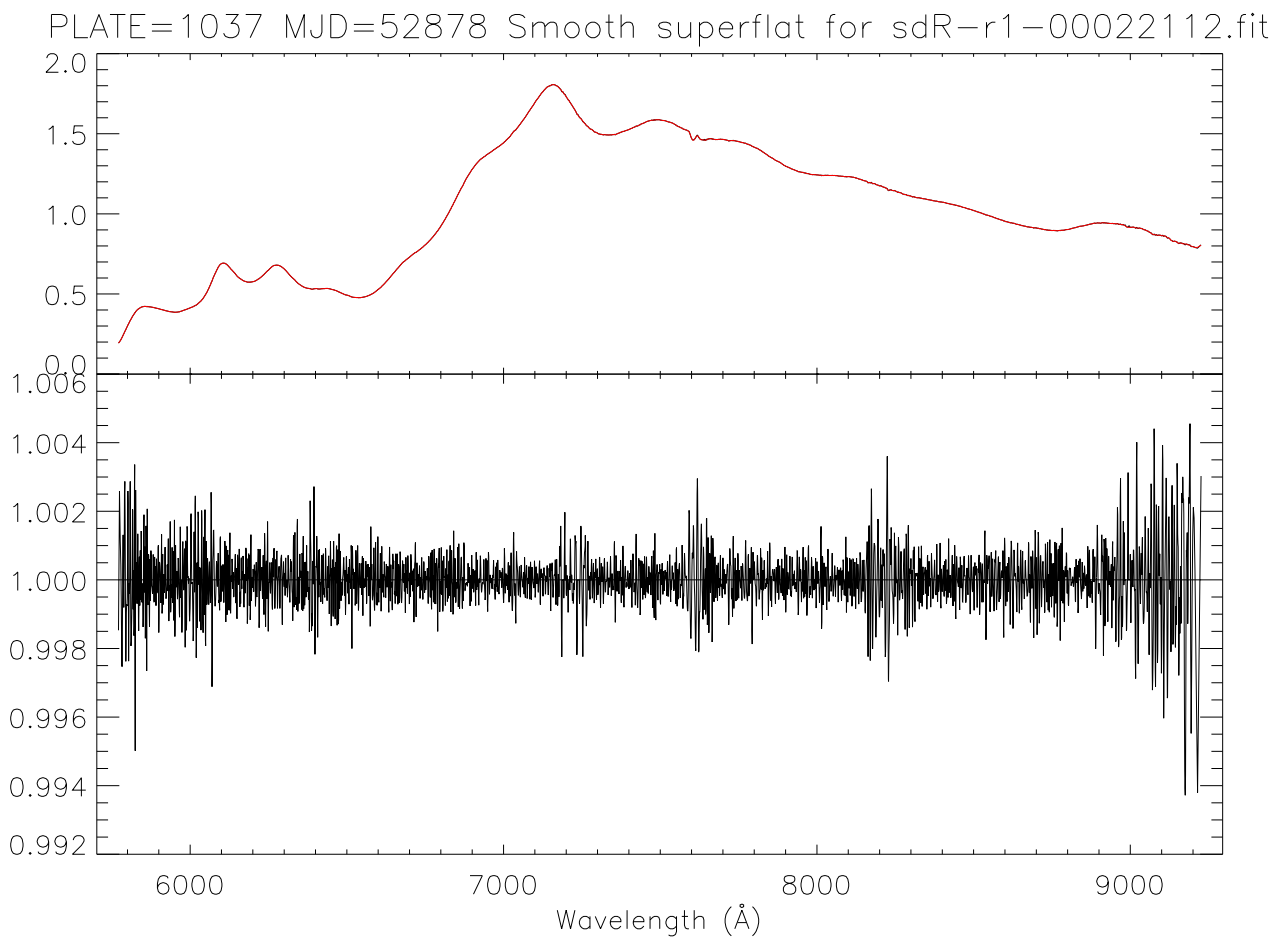

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

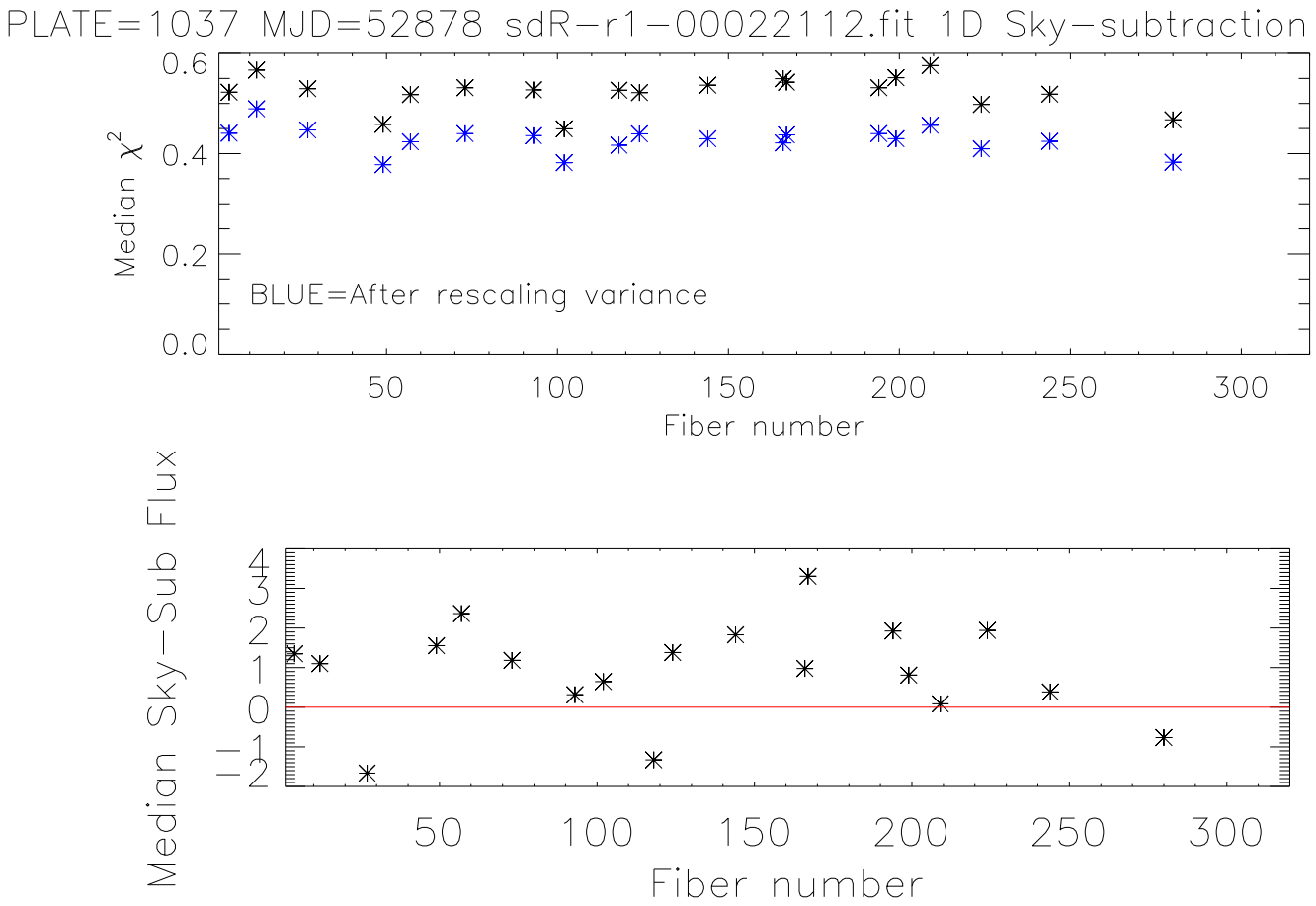

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

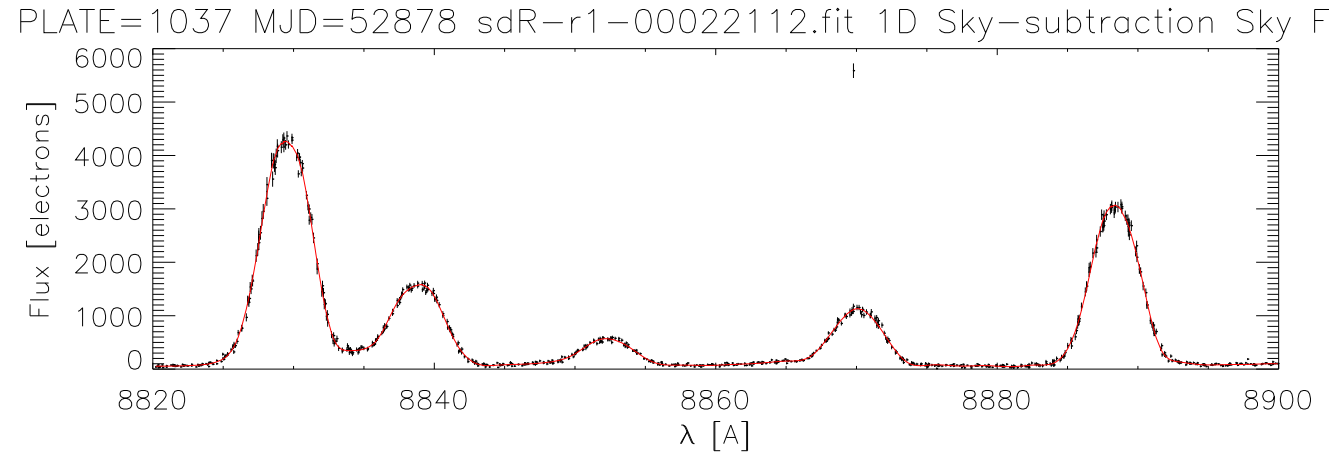

6300.3040
mfib1 23
mfib2 23
stdev 0.023
extra −0.08
6363.7760
mfib1 23
mfib2 23
stdev 0.041
extra −0.04
6553.6100
mfib1 23
mfib2 23
stdev 0.049
extra −0.06
6923.2100
mfib1 23
mfib2 23
stdev 0.043
extra −0.04
6949.0300
mfib1 22
mfib2 22
stdev 0.033
extra 0.02
7571.7500
mfib1 22
mfib2 22
stdev 0.044
extra 0.03
7794.1200
mfib1 21
mfib2 21
stdev 0.024
extra −0.07
7821.5100
mfib1 21
mfib2 21
stdev 0.022
extra −0.03
8399.1600
mfib1 22
mfib2 22
stdev 0.017
extra 0.03
8430.1700
mfib1 22
mfib2 22
stdev 0.017
extra 0.01
8885.8300
mfib1 23
mfib2 23
stdev 0.038
extra 0.03
8919.6100
mfib1 23
mfib2 23
stdev 0.024
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

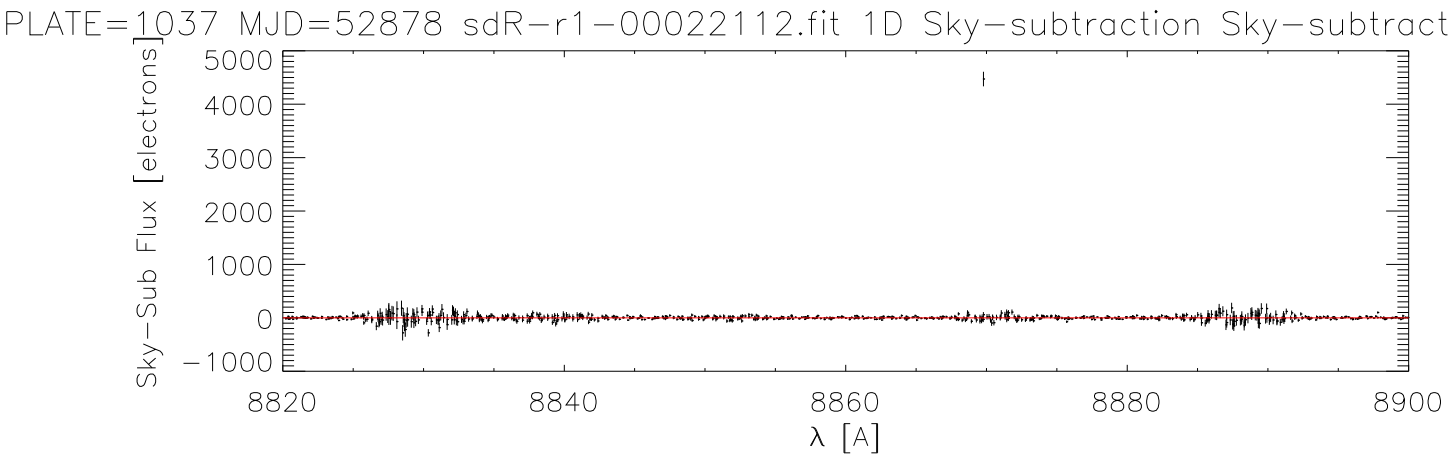

sky shift, pixels
0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
5000
6000
7000
8000
9000
10000

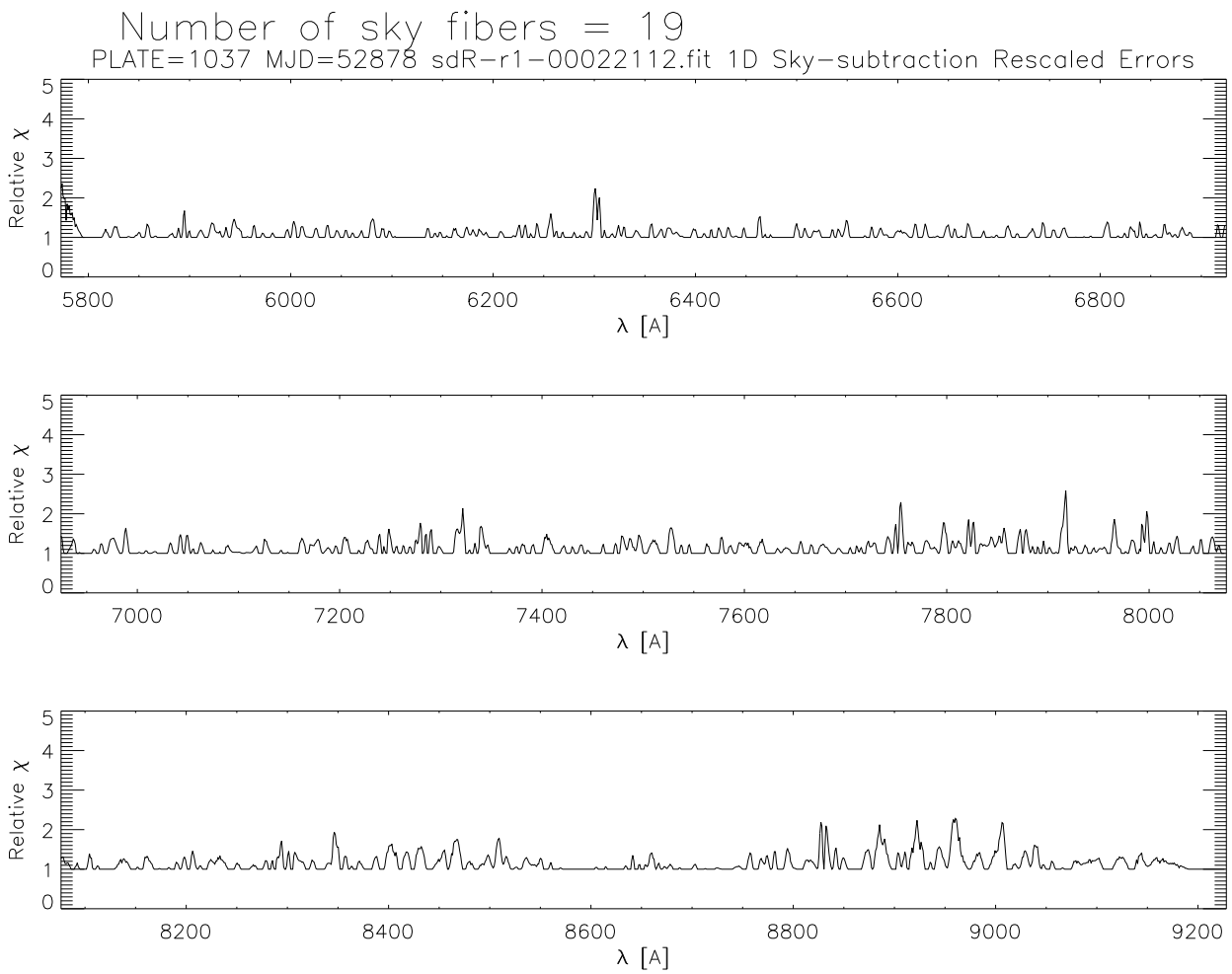
es= 0.0000

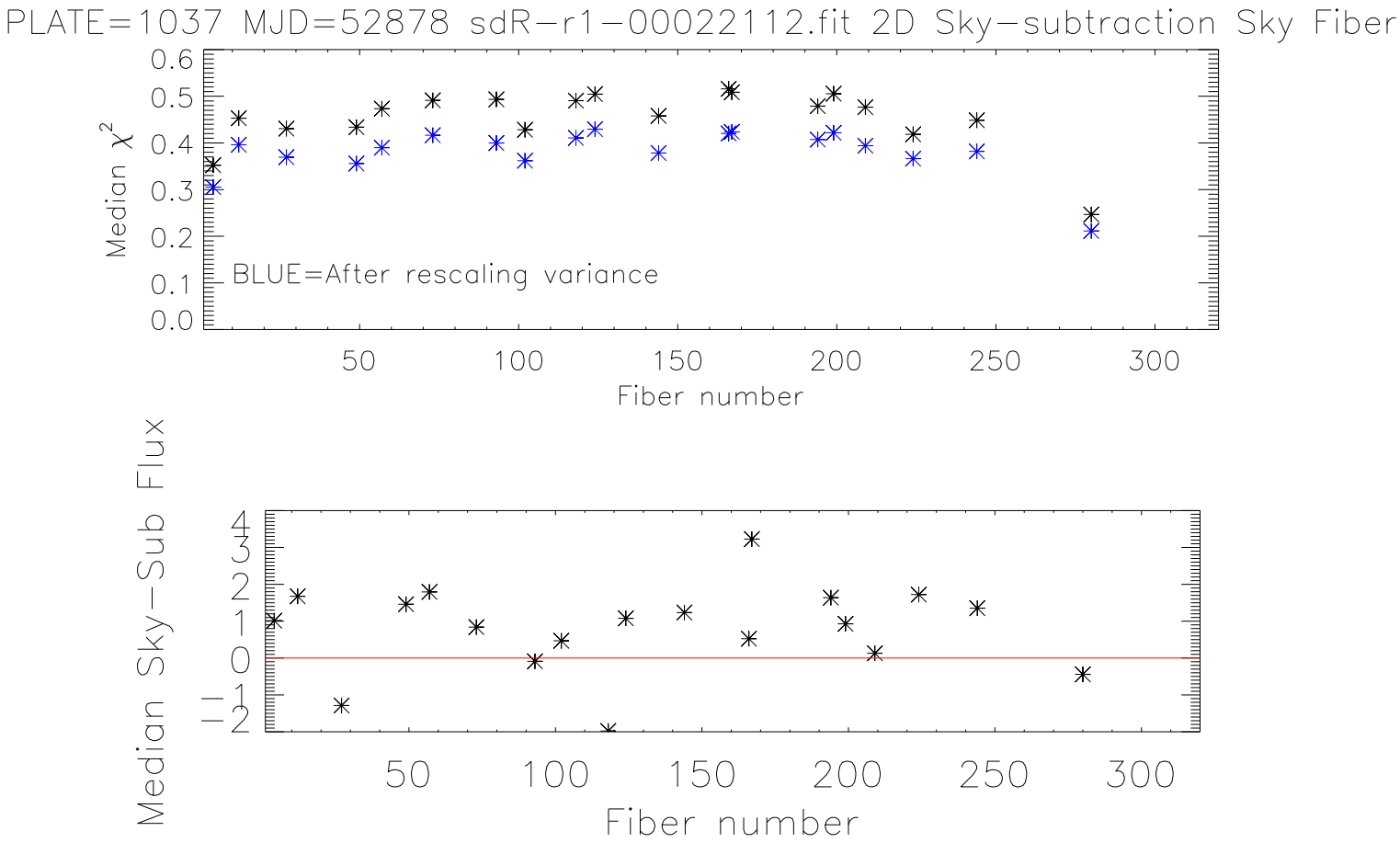

PLATE=1037 MJD=52878 Smooth superflat for sdR-r1-00022112.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

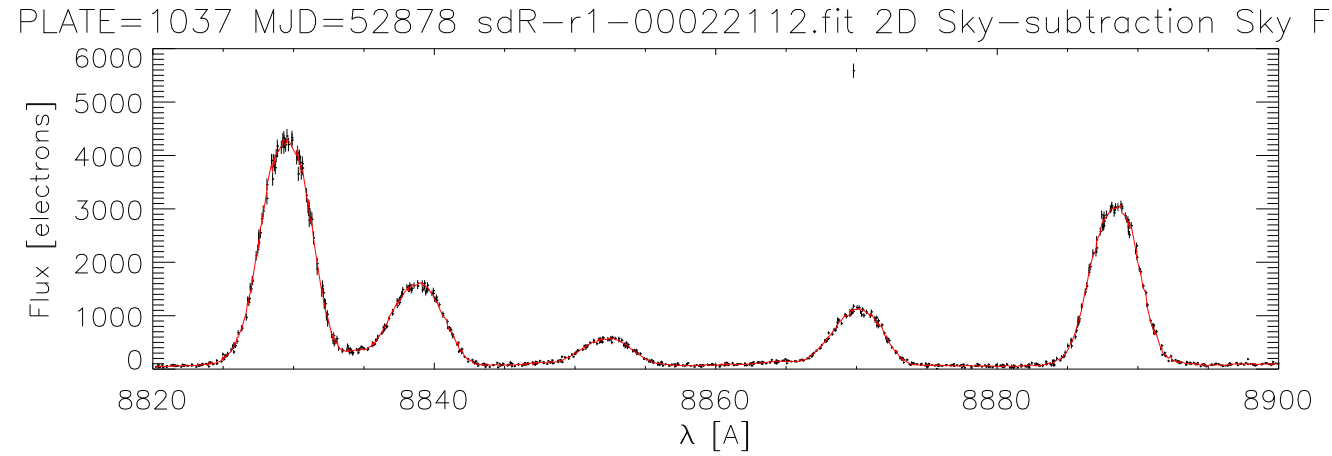

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

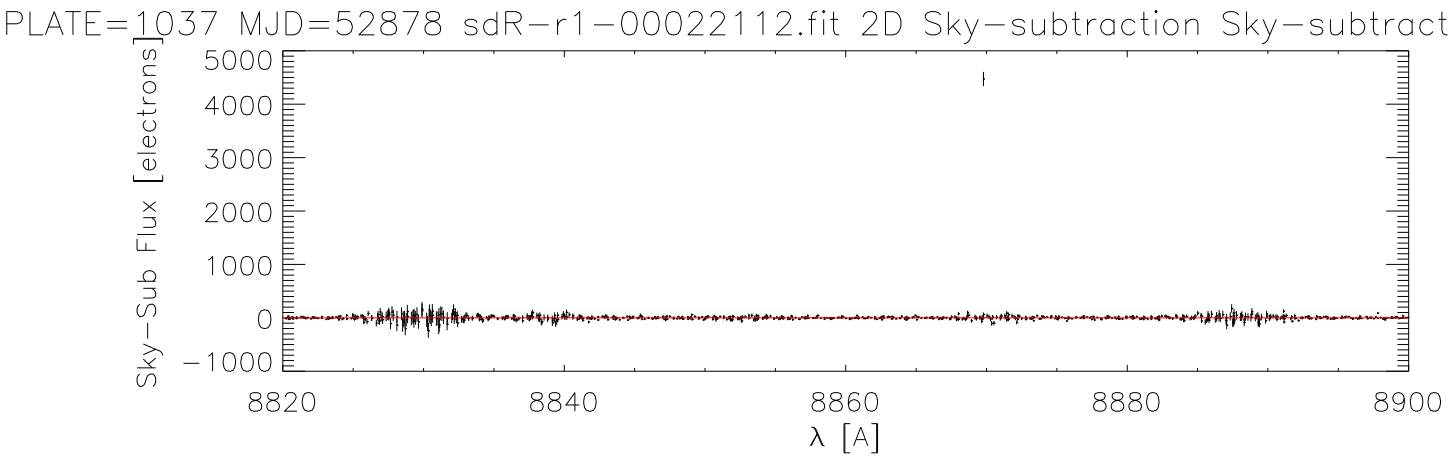

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

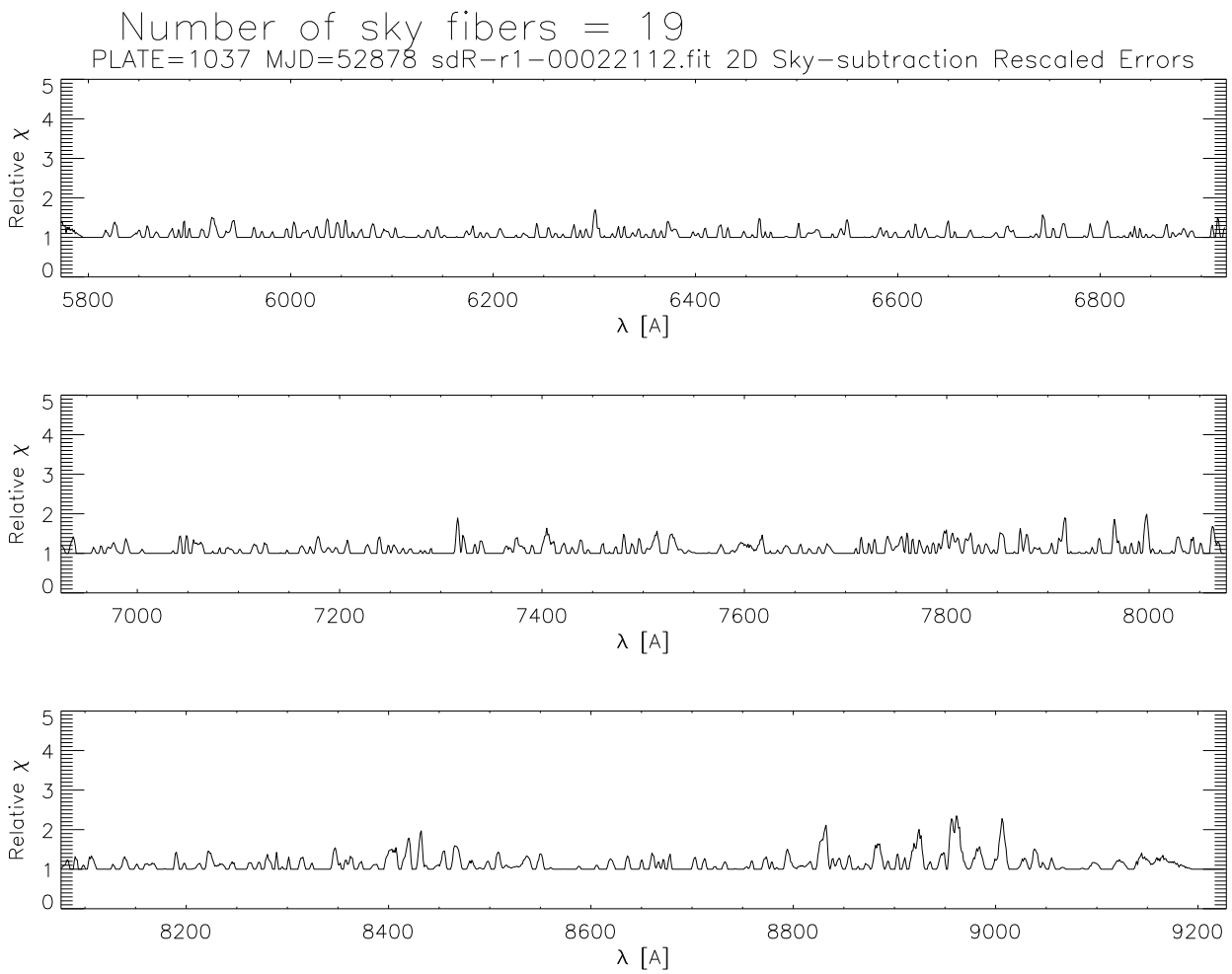

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

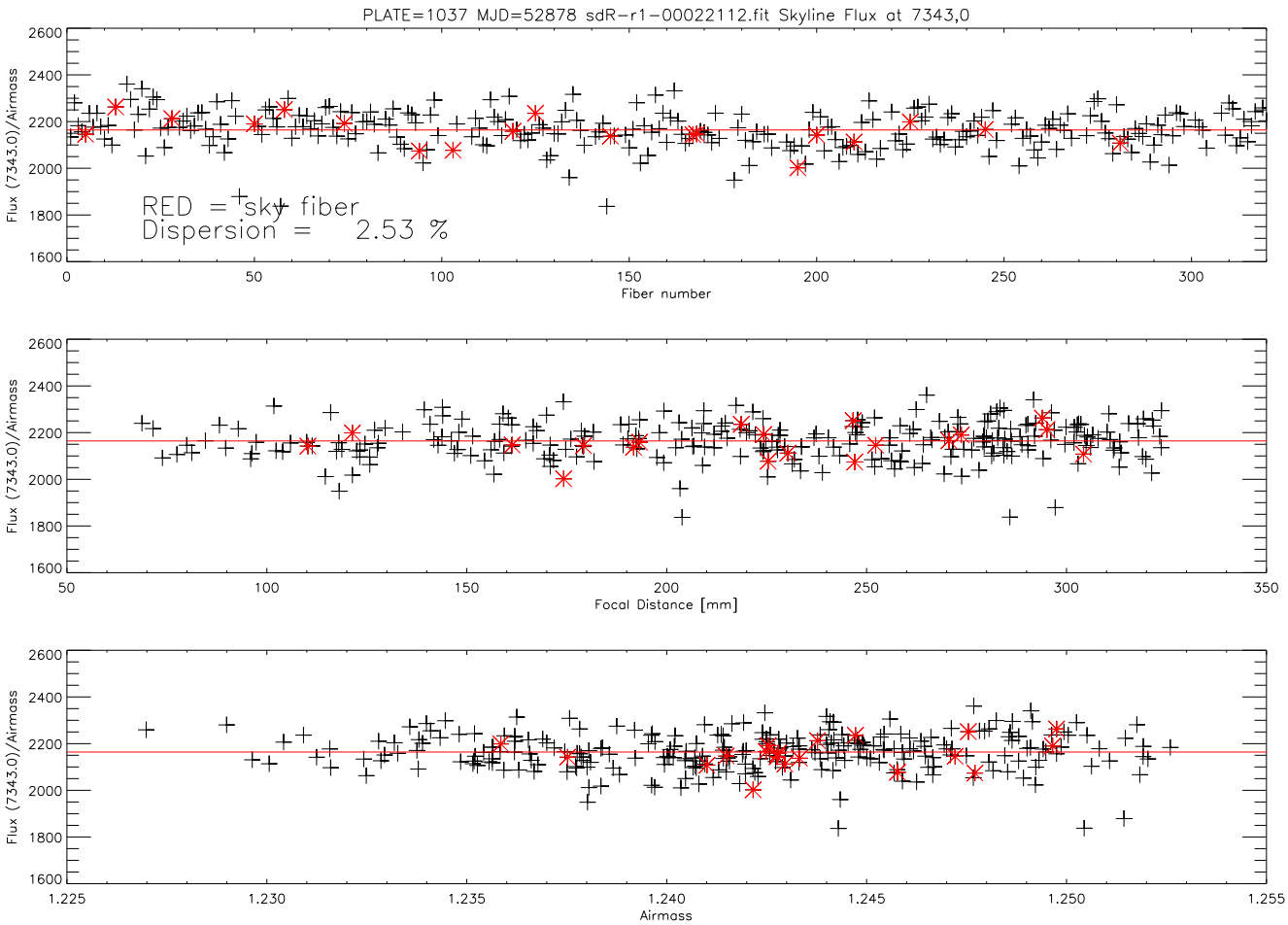

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022112.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

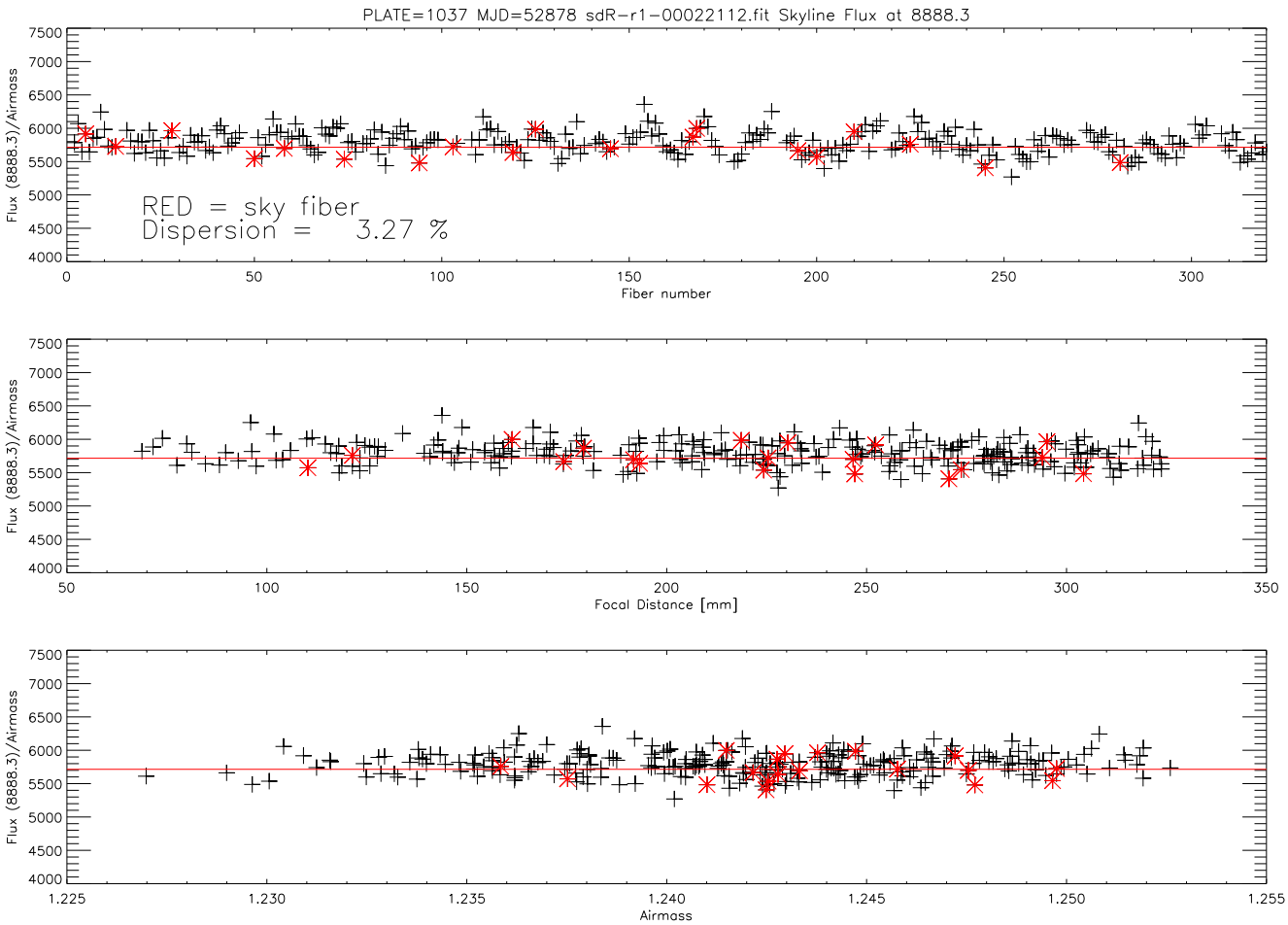

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

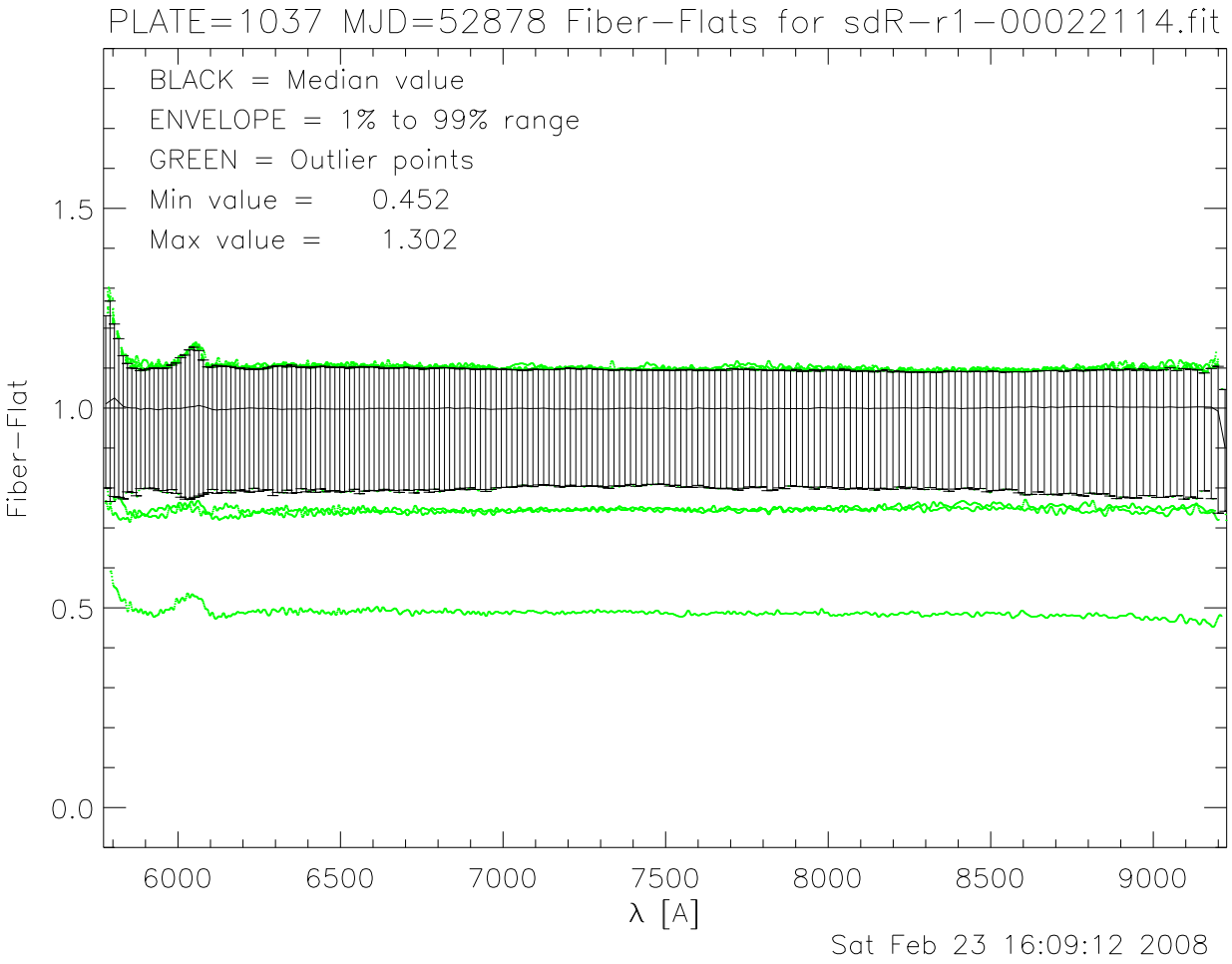

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

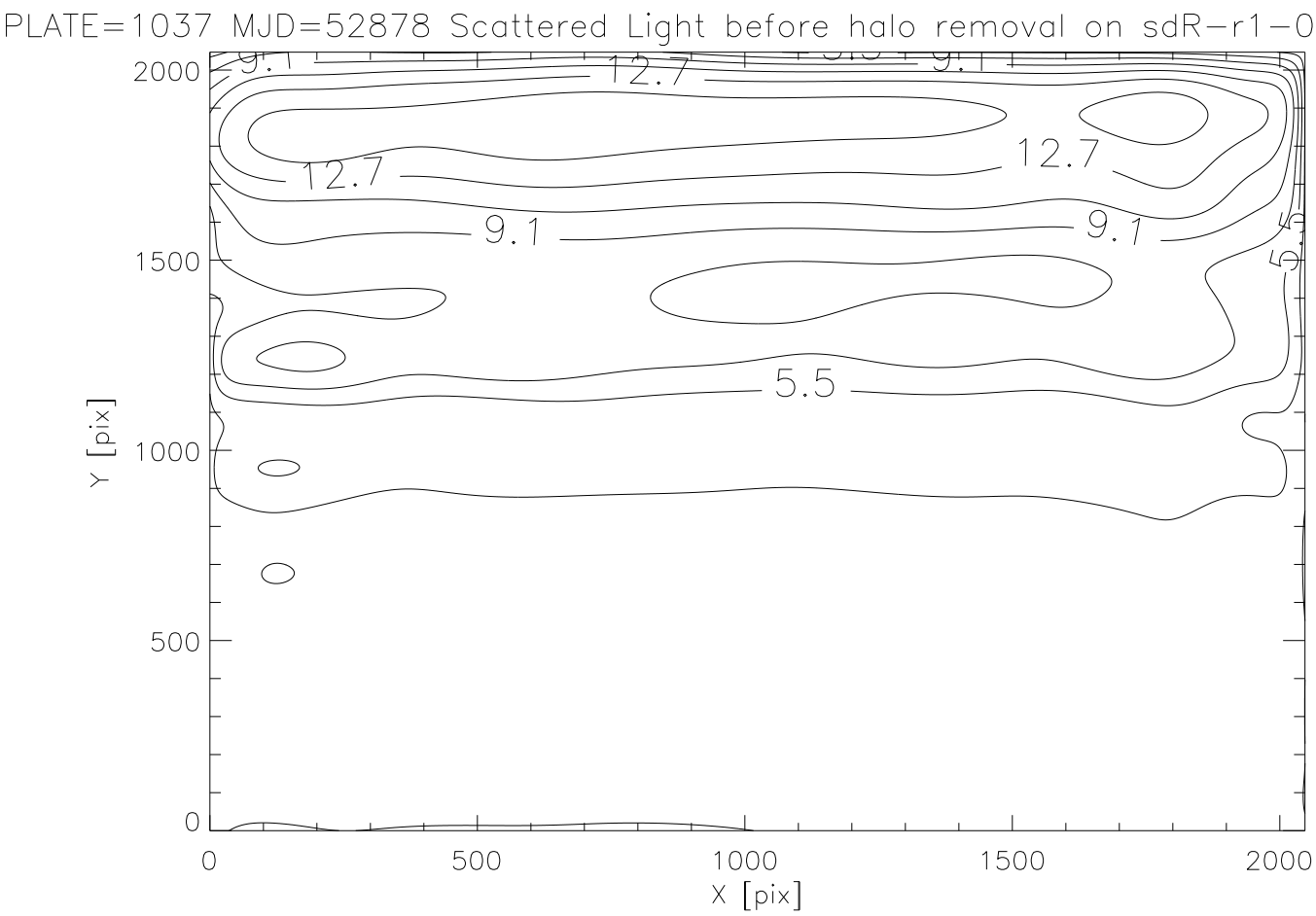

PLATE=1037 MJD=52878 sdR-r1-00022112.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

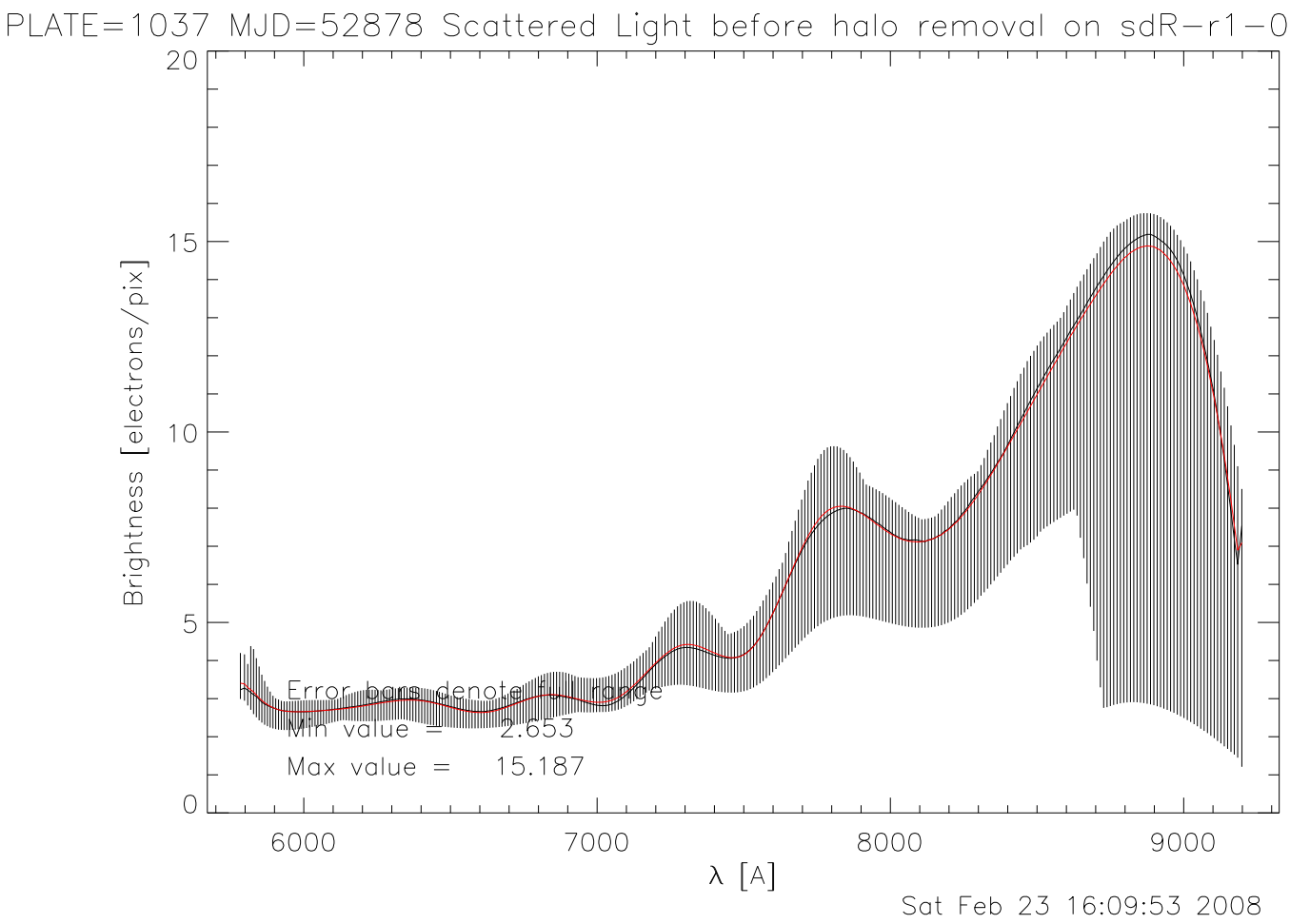

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022112.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

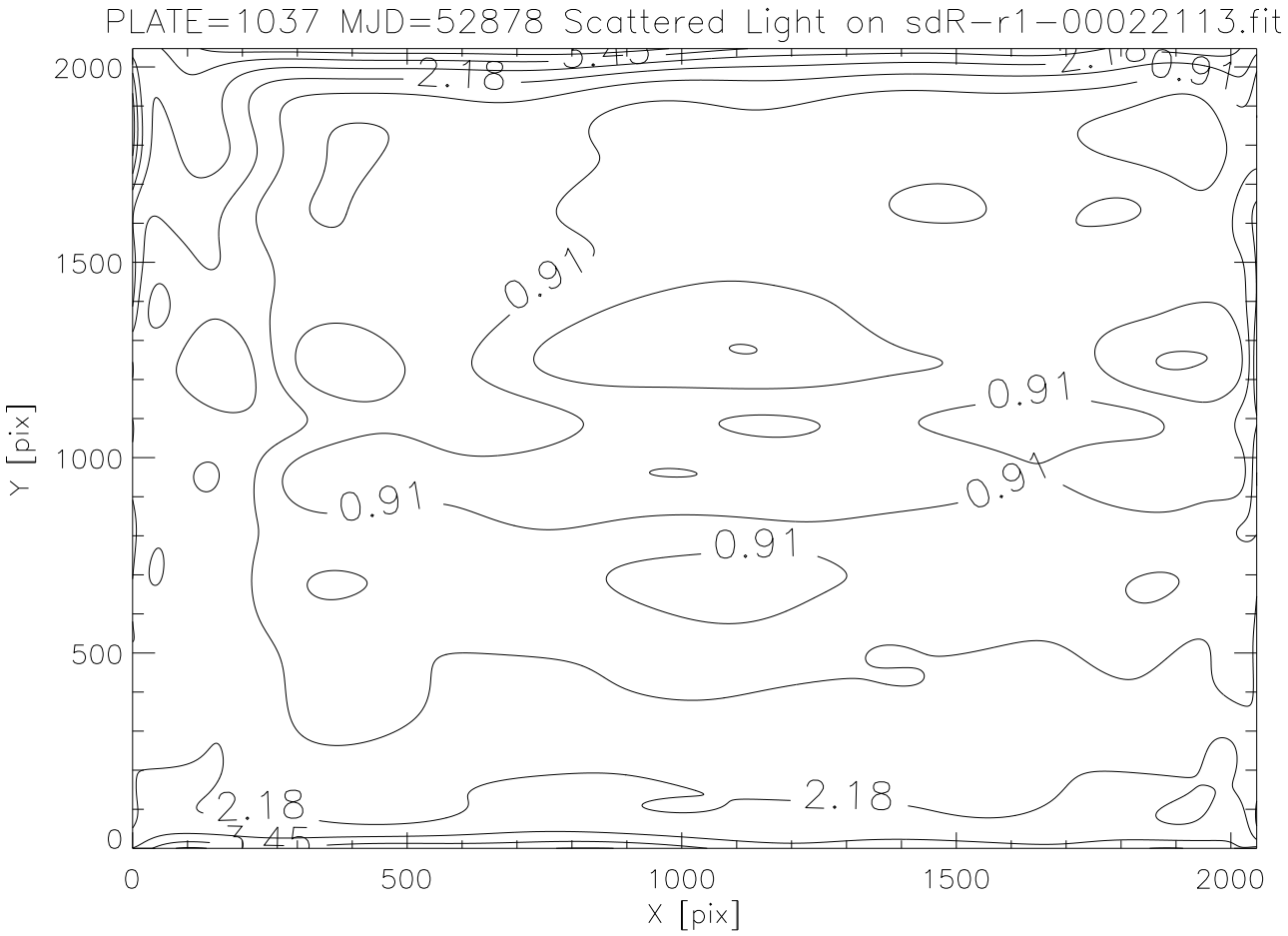

PLATE=1037 MJD=52878 sdR-r1-00022112.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.53 %
Fiber number
Focal Distance [mm]
Airmass

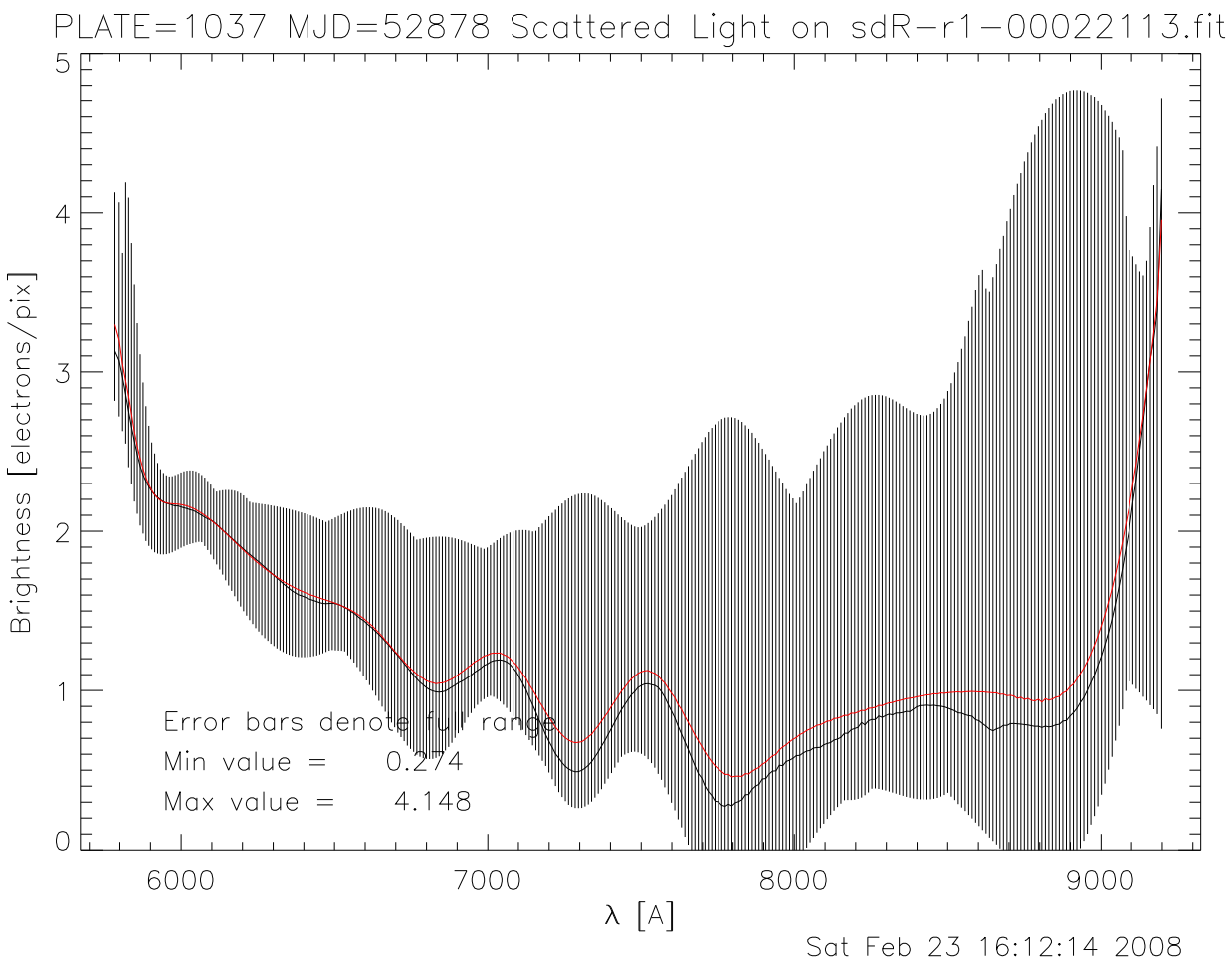

PLATE=1037 MJD=52878 sdR-r1-00022112.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.27 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

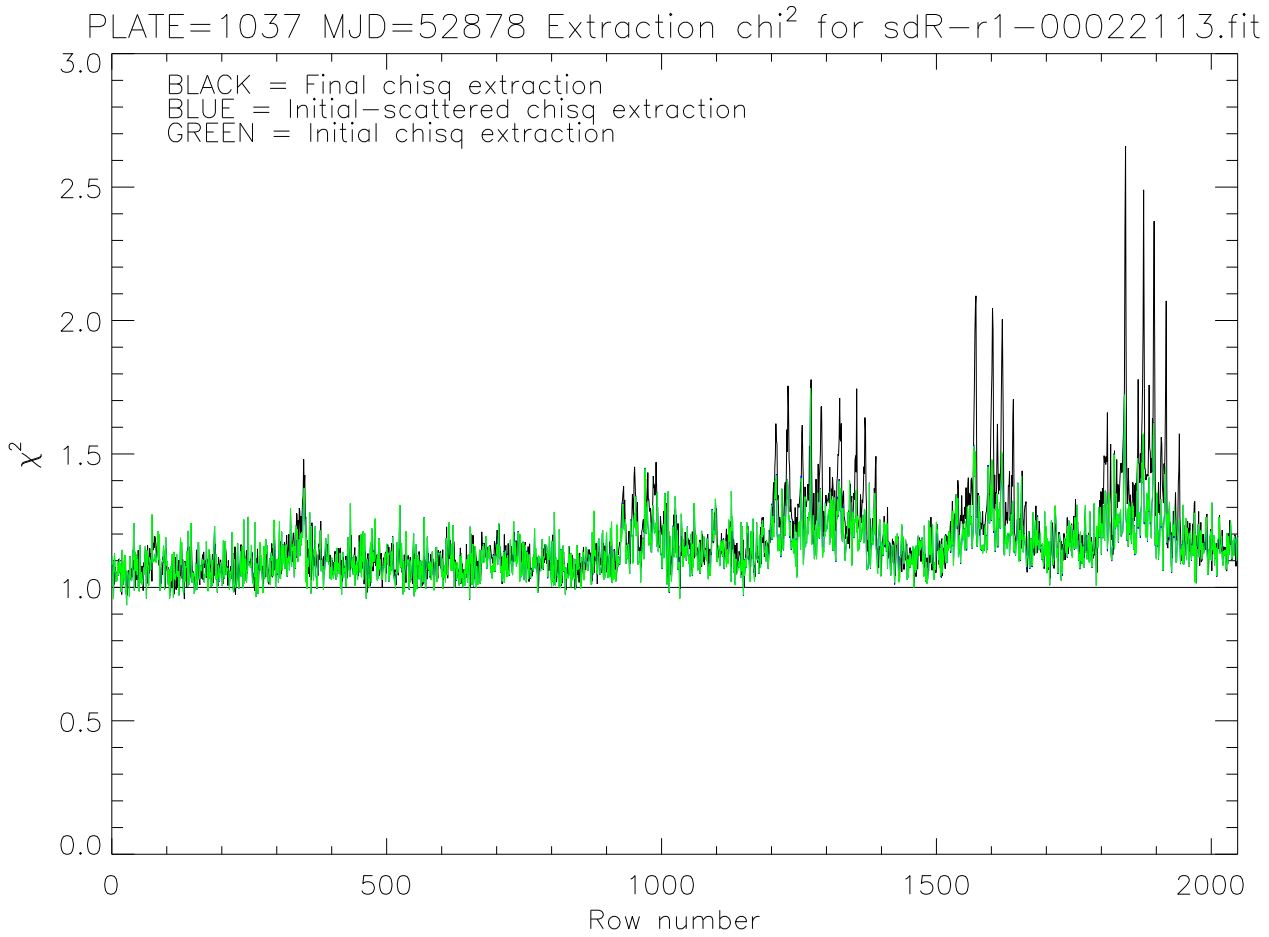

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r1−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.452
Max value = 1.302
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:09:12 2008

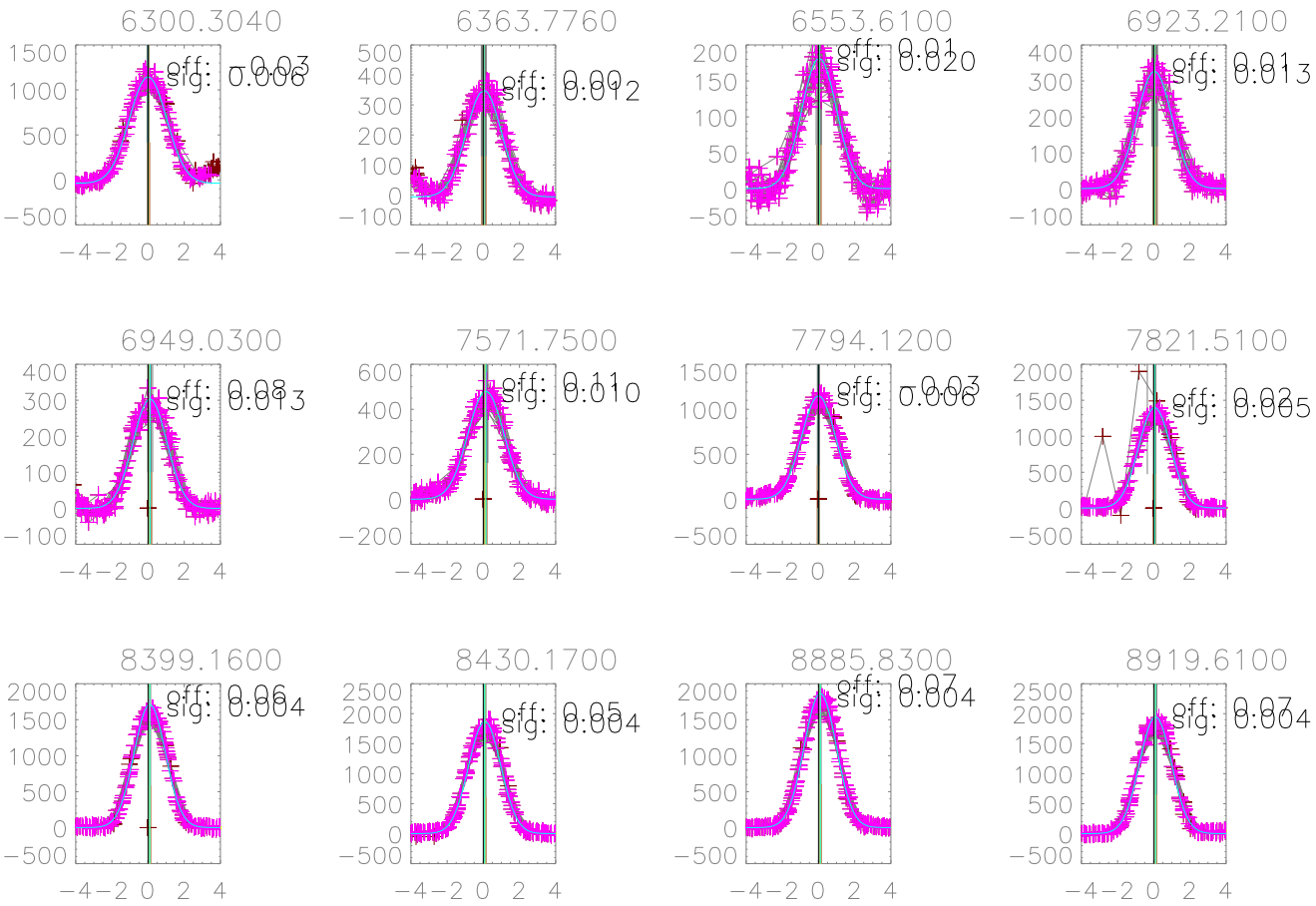

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022113.fi
12.7
12.7
12.7
9.1
9.1
5.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

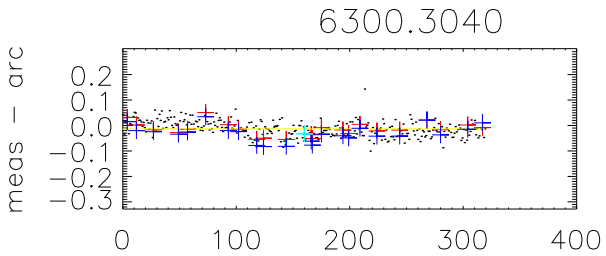

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r1-00022113.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.653
Max value = 15.187
Sat Feb 23 16:09:53 2008

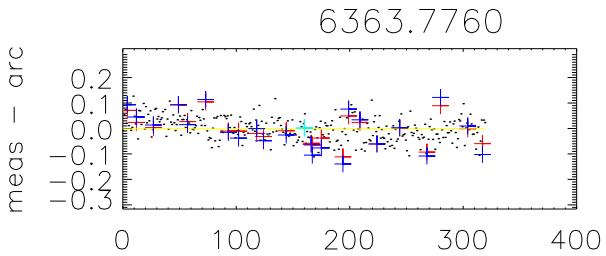

PLATE=1037 MJD=52878 Scattered Light on sdR-r1-00022113.fit
2.18
0.91
0.91
0.91
0.91
0.91
0
0
2.18
2.18
3.45
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

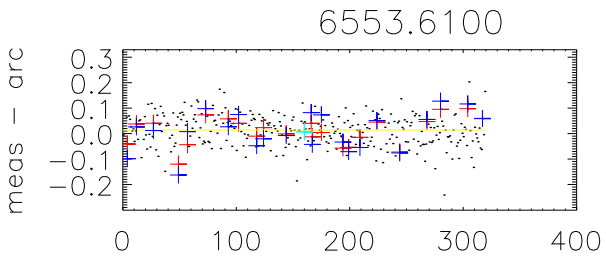

PLATE=1037 MJD=52878 Scattered Light on sdR-r1-00022113.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.274
Max value = 4.148
Sat Feb 23 16:12:14 2008

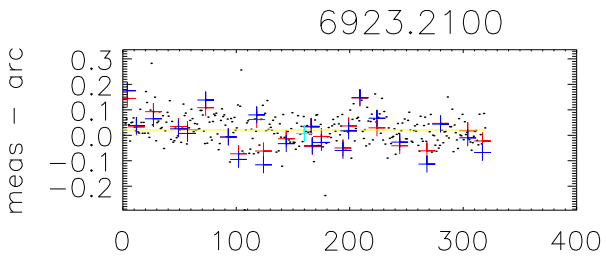

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r1−00022113.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

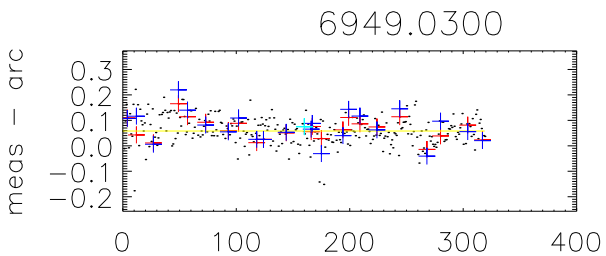

6300.3040
off: −0.03
sig: 0.006
6363.7760
off: 0.00
sig: 0.012
6553.6100
off: 0.01
sig: 0.020
6923.2100
off: 0.01
sig: 0.013
6949.0300
off: 0.08
sig: 0.013
7571.7500
off: 0.11
sig: 0.010
7794.1200
off: −0.03
sig: 0.006
7821.5100
off: 0.02
sig: 0.005
8399.1600
off: 0.06
sig: 0.004
8430.1700
off: 0.05
sig: 0.004
8885.8300
off: 0.07
sig: 0.004
8919.6100
off: 0.07
sig: 0.004

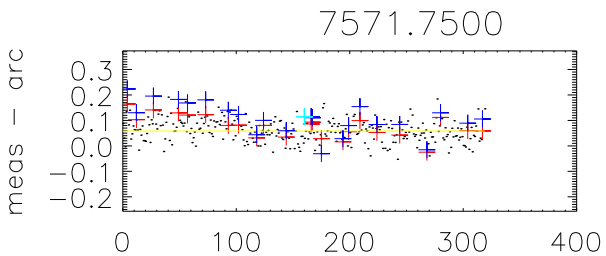

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

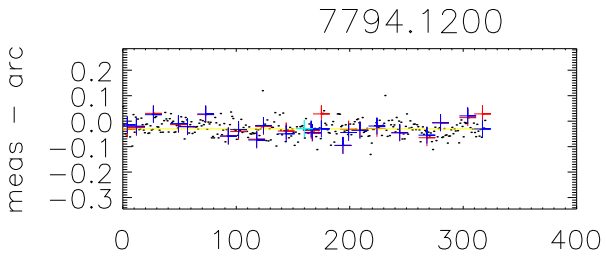

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

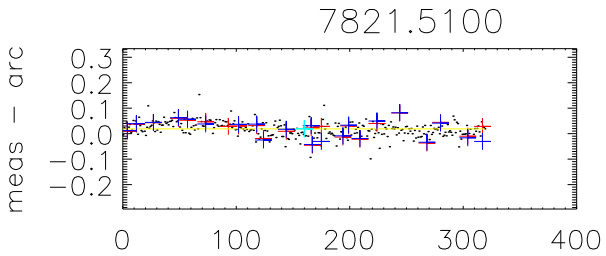

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

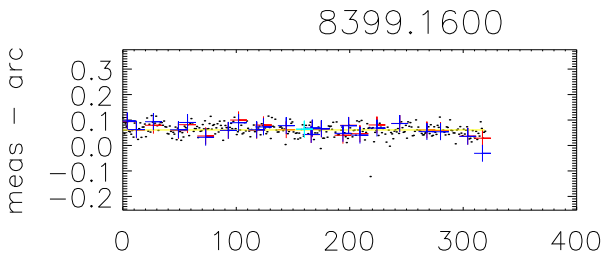

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

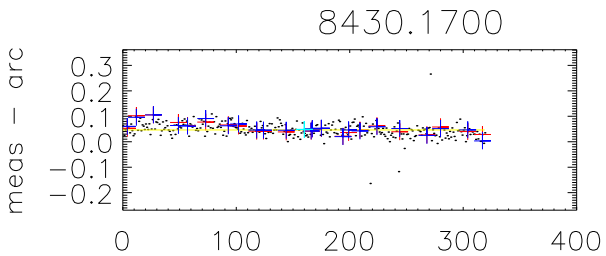

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

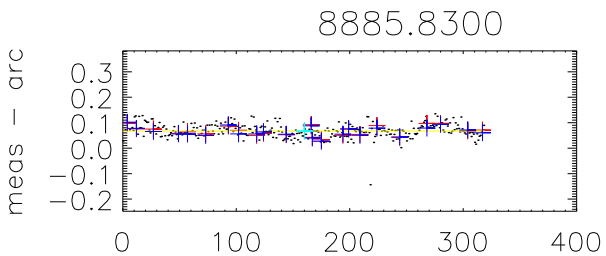

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

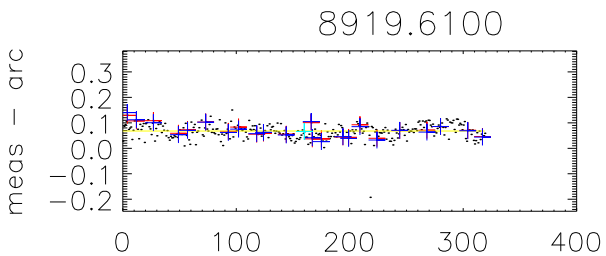

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

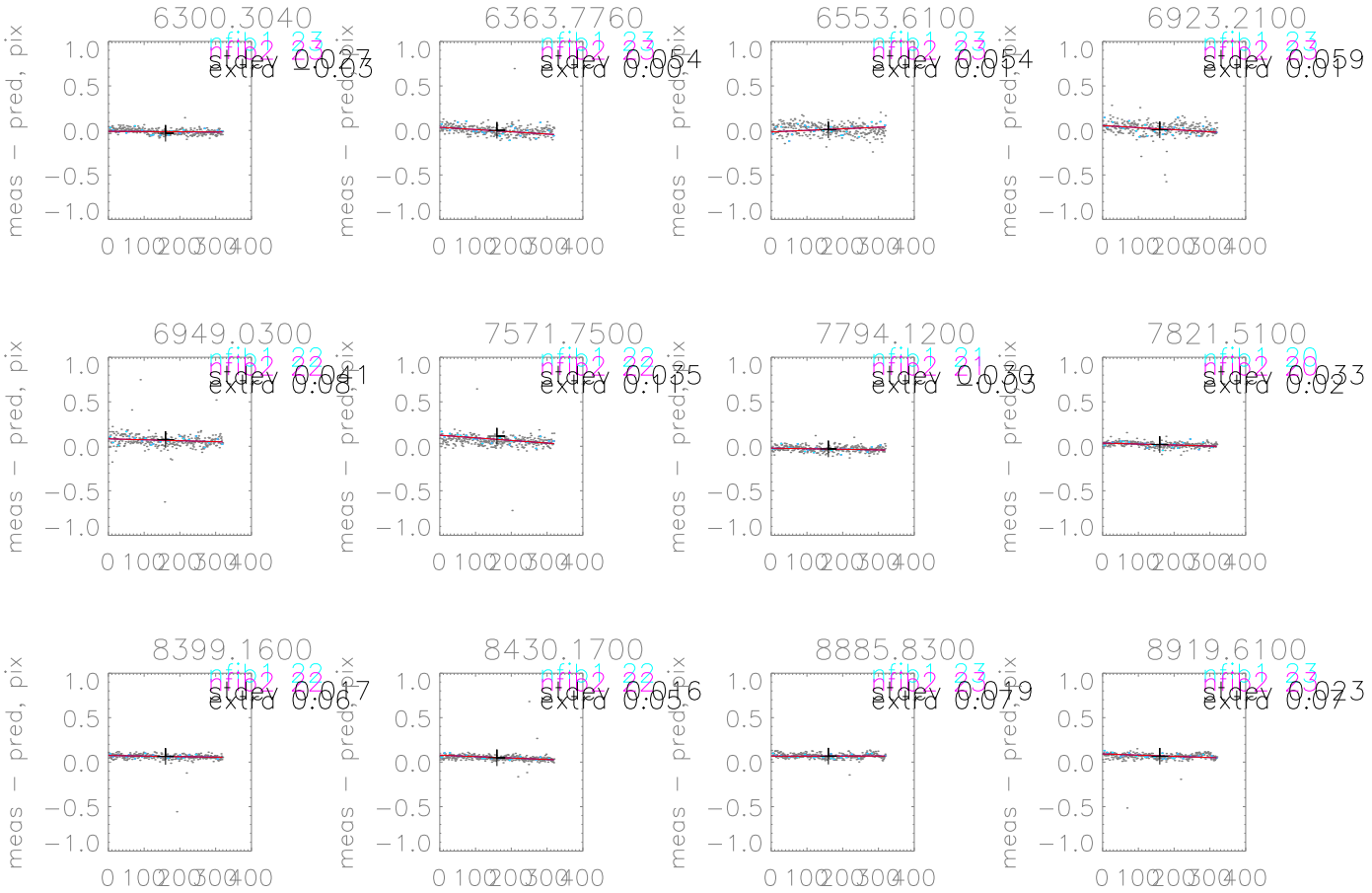

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

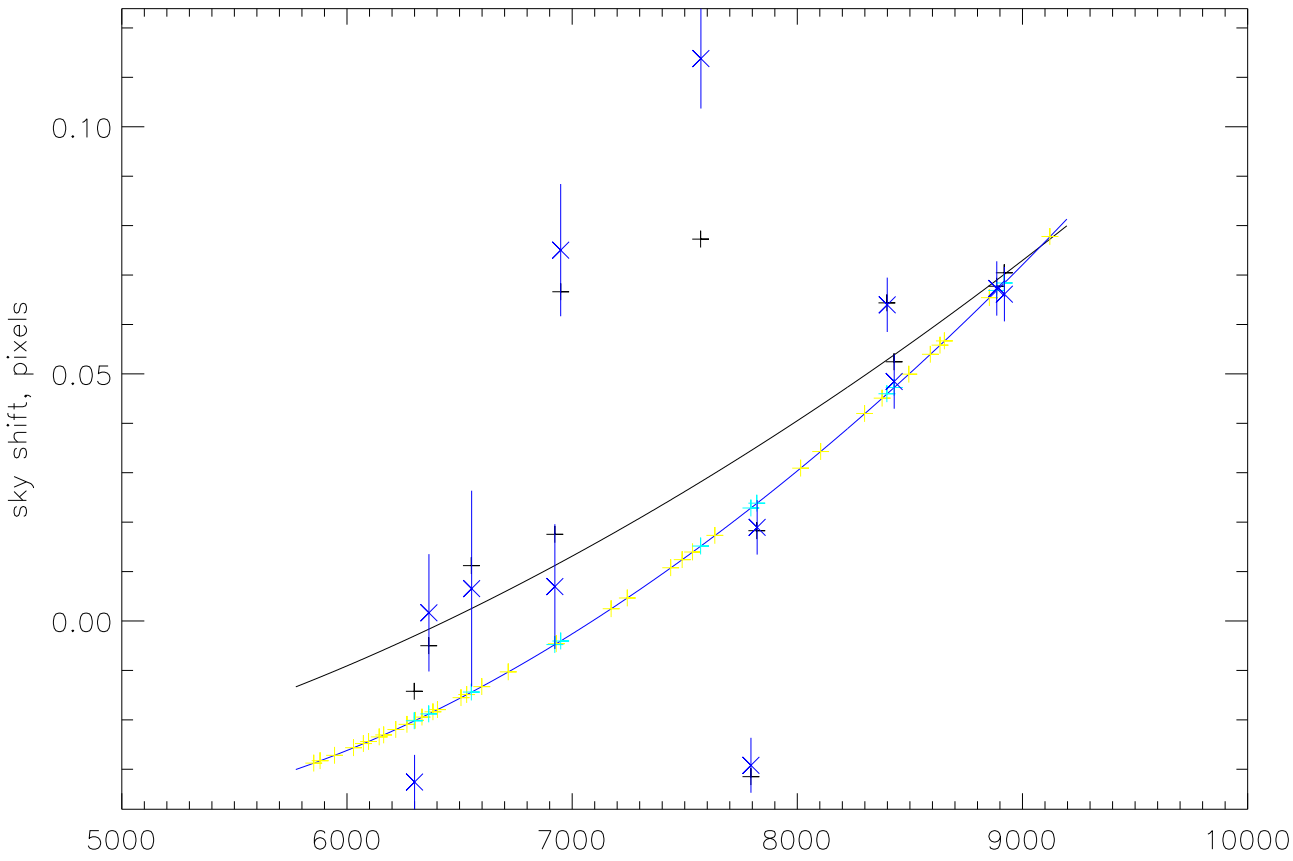

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

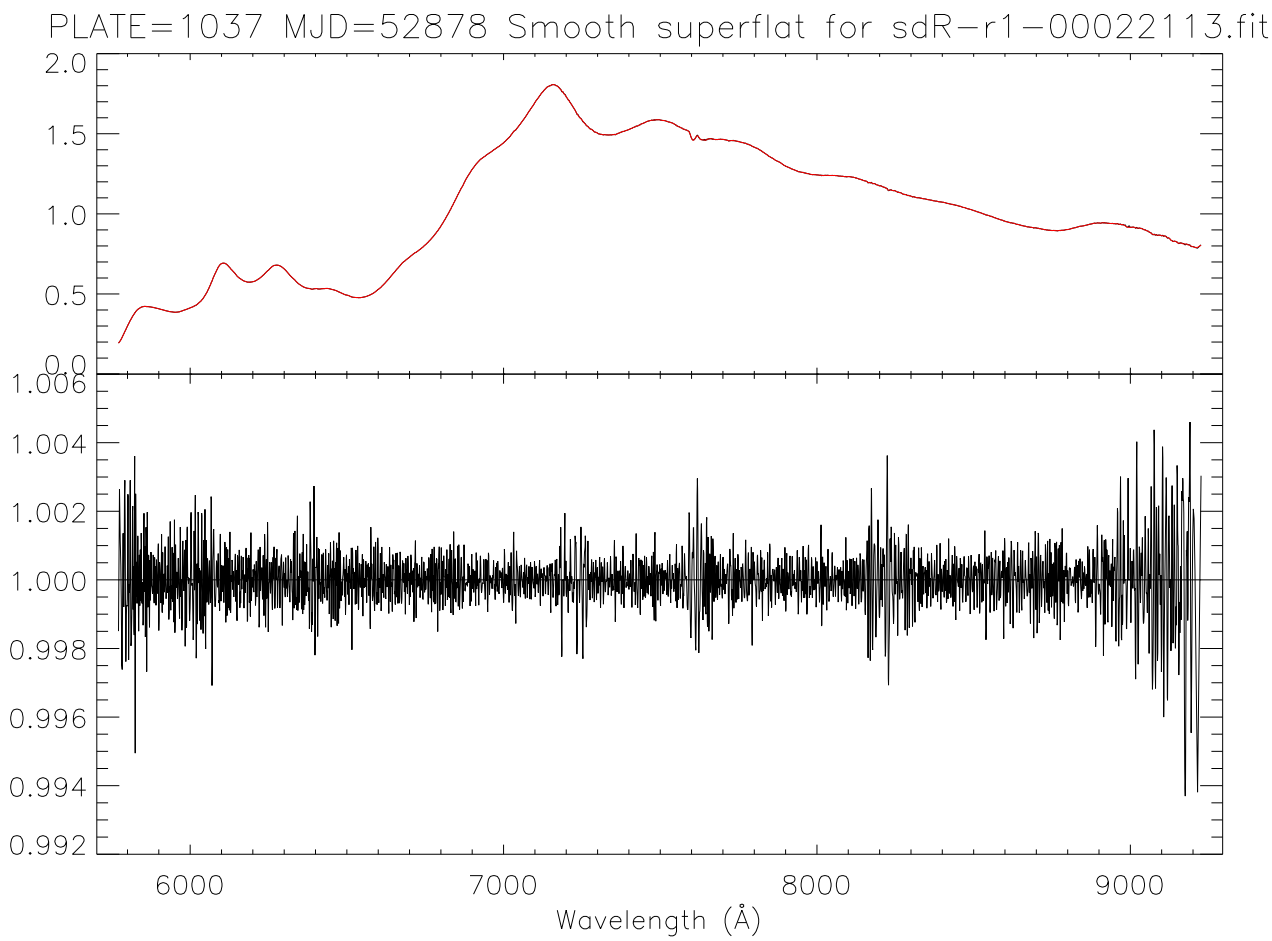

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

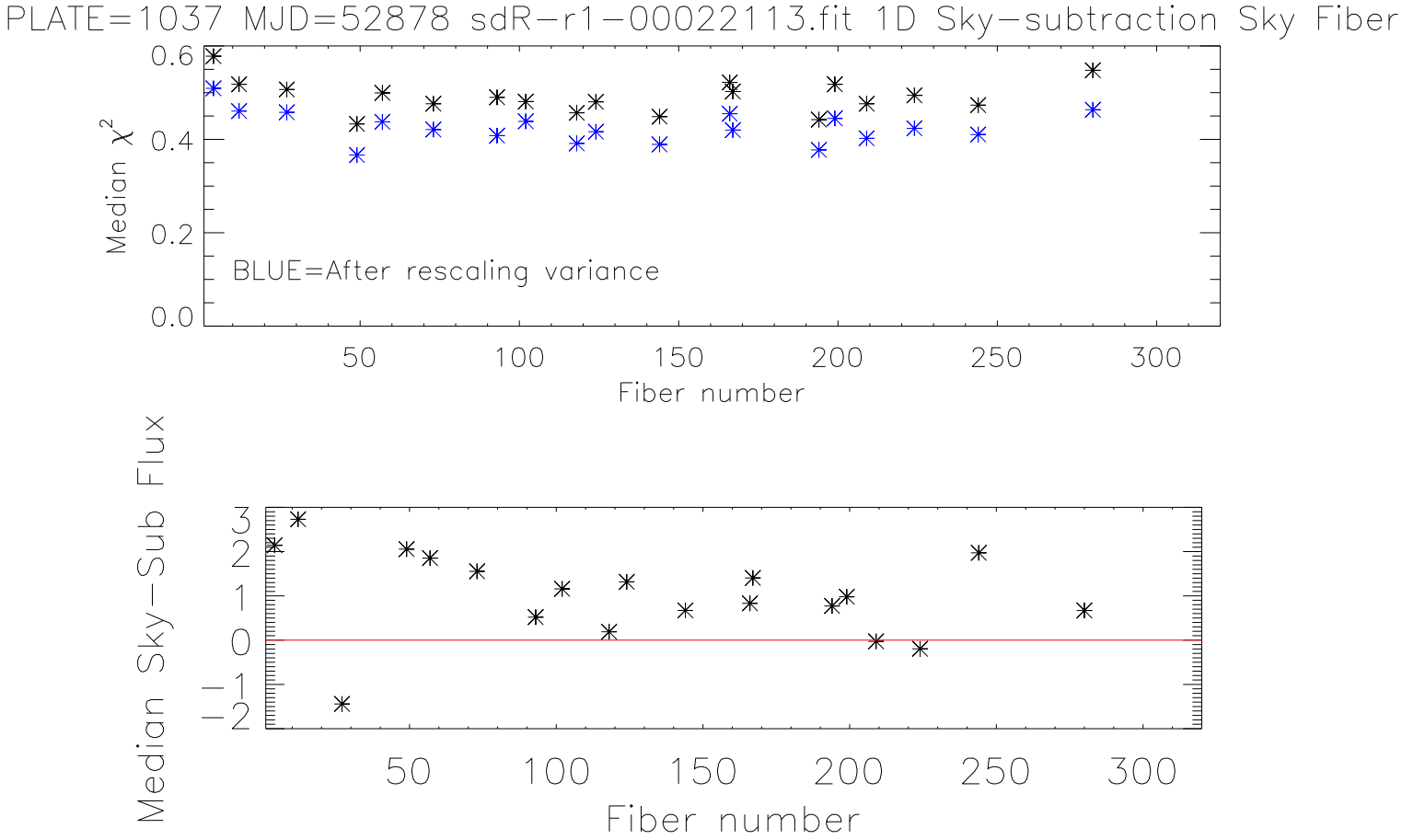

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

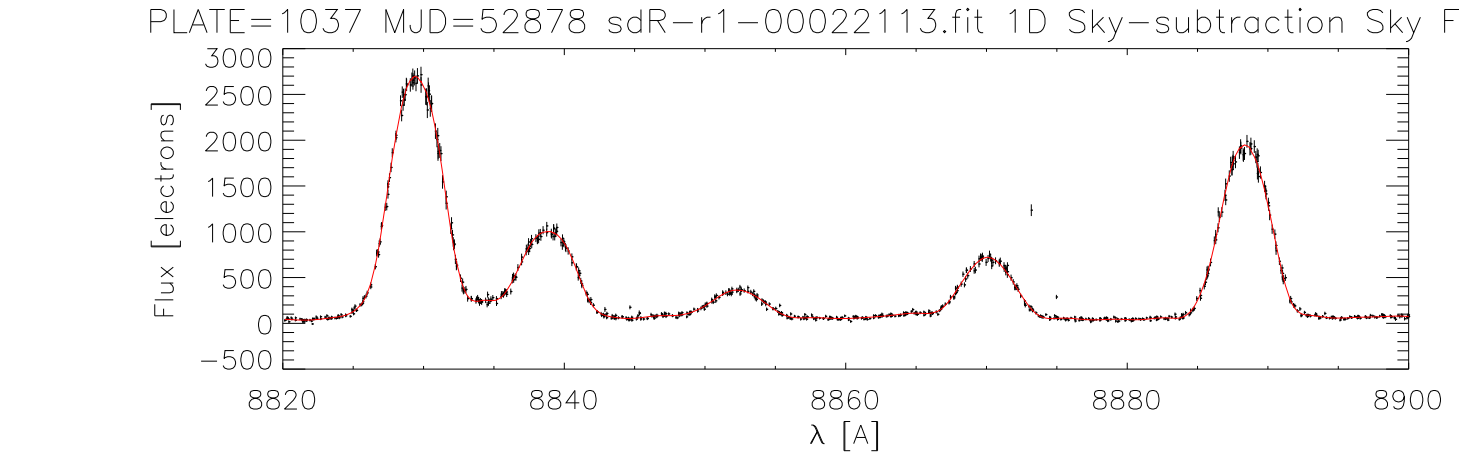

6300.3040
mfib1 23
mfib2 23
stdev 0.027
extra −0.03
6363.7760
mfib1 23
mfib2 23
stdev 0.054
extra 0.00
6553.6100
mfib1 23
mfib2 23
stdev 0.054
extra 0.01
6923.2100
mfib1 23
mfib2 23
stdev 0.059
extra 0.01
6949.0300
mfib1 22
mfib2 22
stdev 0.041
extra 0.08
7571.7500
mfib1 22
mfib2 22
stdev 0.035
extra 0.11
7794.1200
mfib1 21
mfib2 21
stdev 0.030
extra −0.03
7821.5100
mfib1 20
mfib2 20
stdev 0.033
extra 0.02
8399.1600
mfib1 22
mfib2 22
stdev 0.047
extra 0.06
8430.1700
mfib1 22
mfib2 22
stdev 0.056
extra 0.05
8885.8300
mfib1 23
mfib2 23
stdev 0.079
extra 0.07
8919.6100
mfib1 23
mfib2 23
stdev 0.073
extra 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

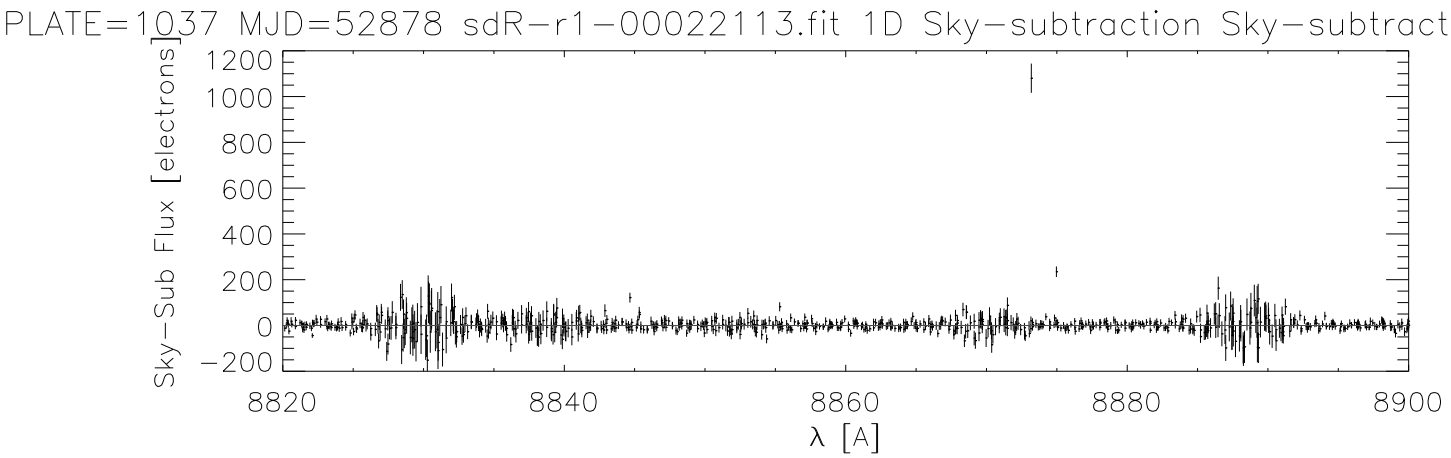

sky shift, pixels
0.10
0.05
0.00
5000
6000
7000
8000
9000
10000

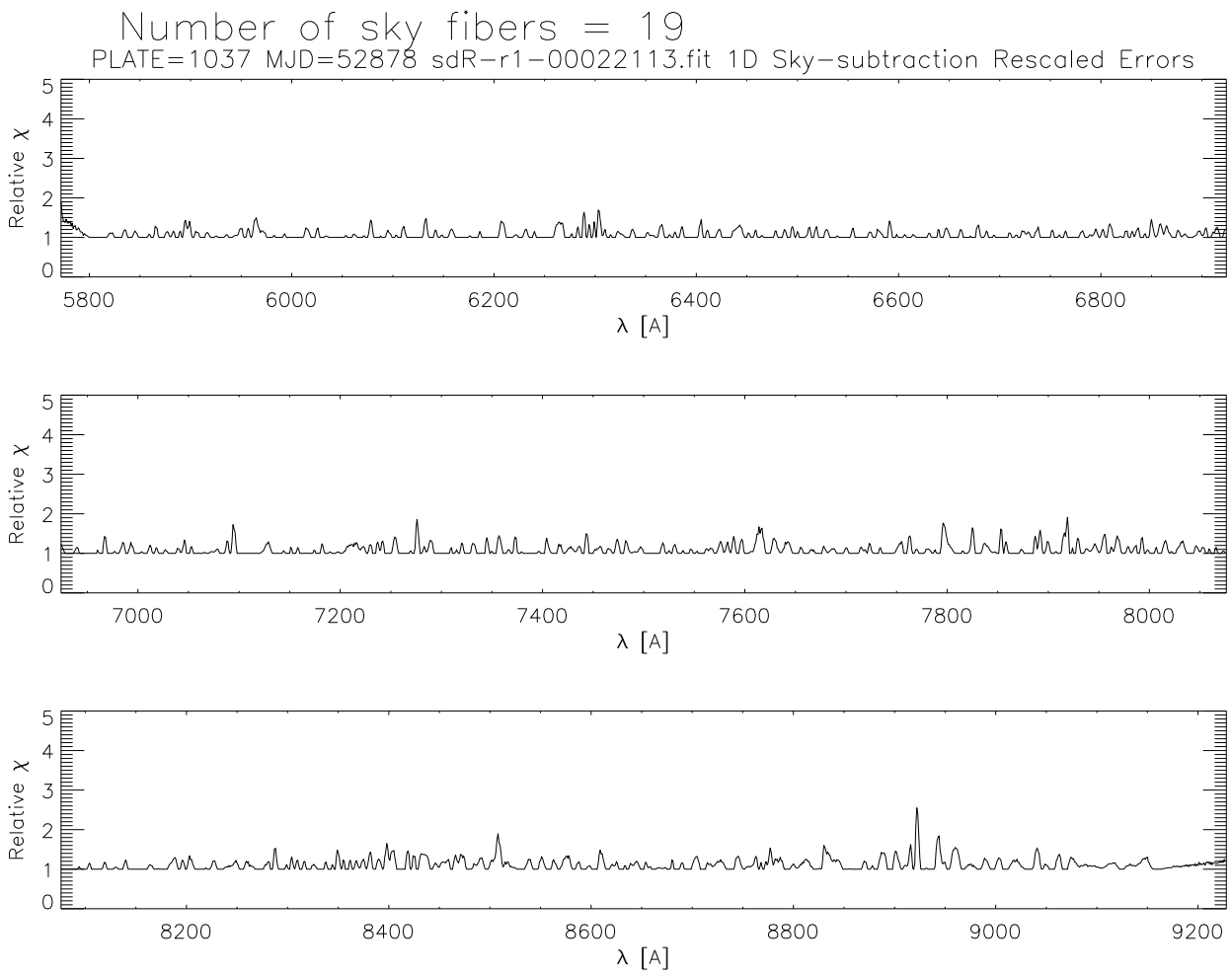
es= 0.0000

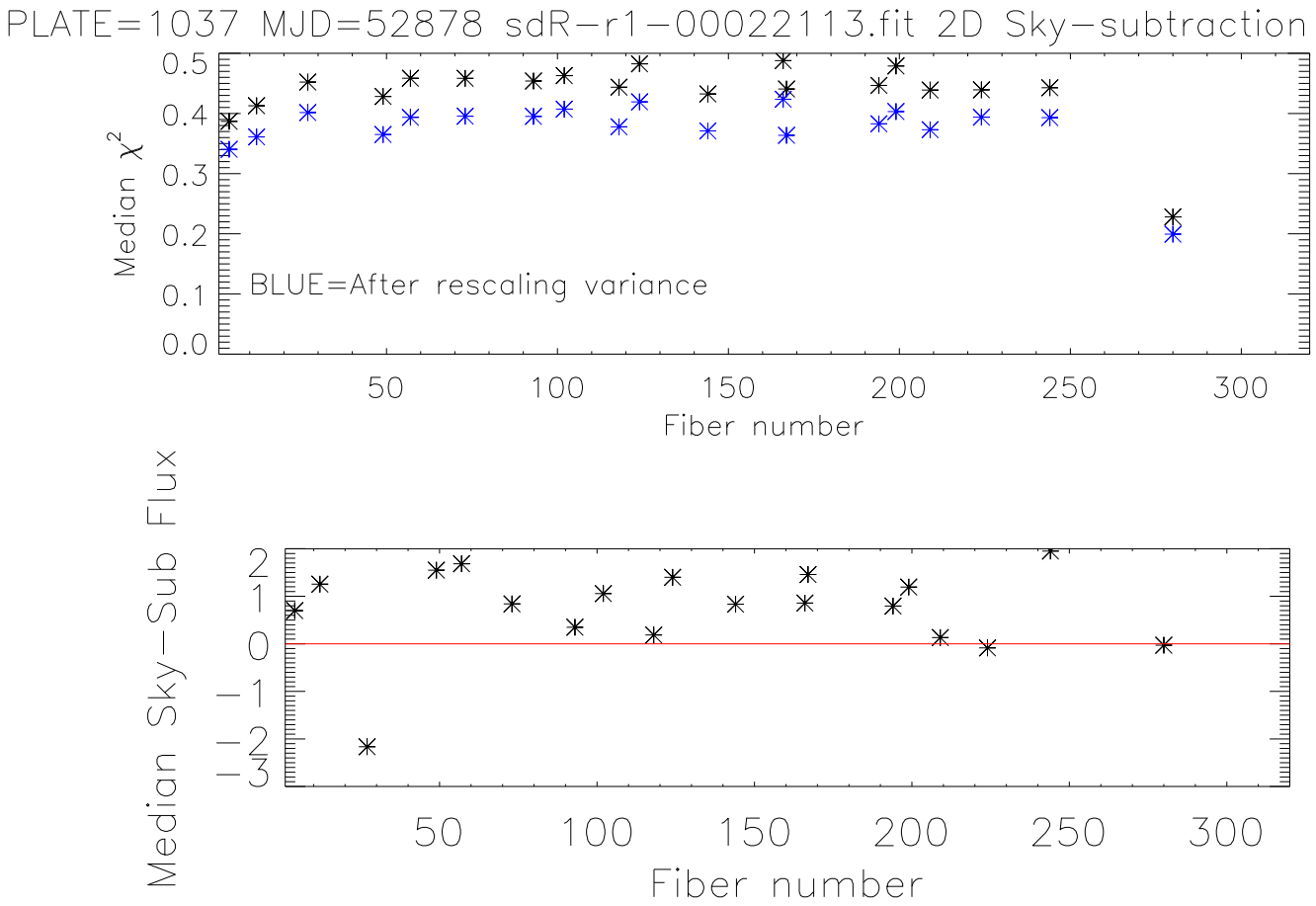

PLATE=1037 MJD=52878 Smooth superflat for sdR-r1-00022113.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

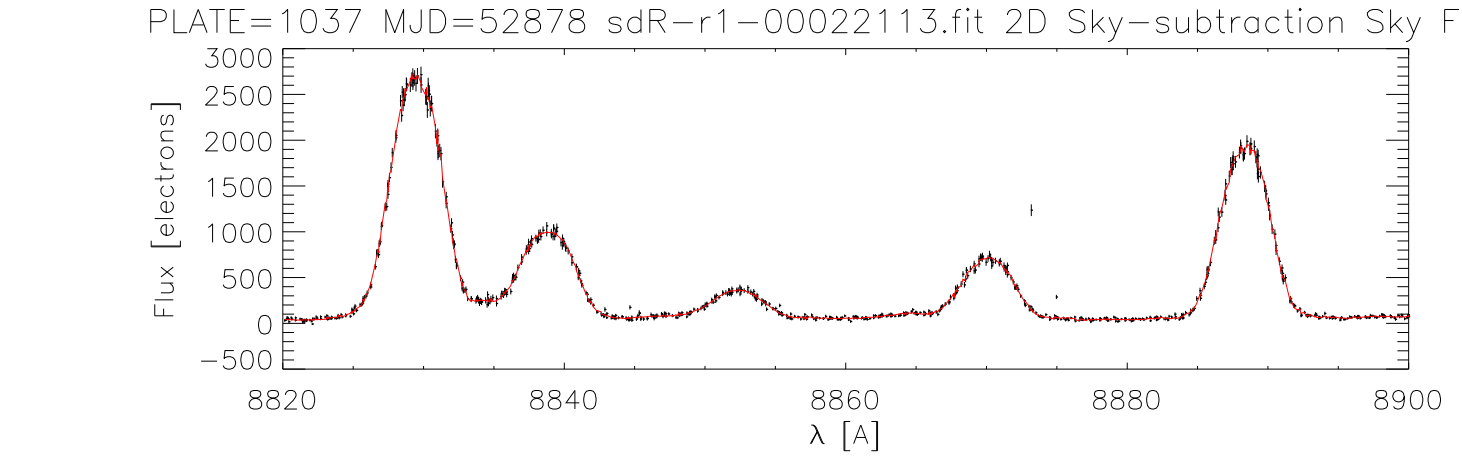

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

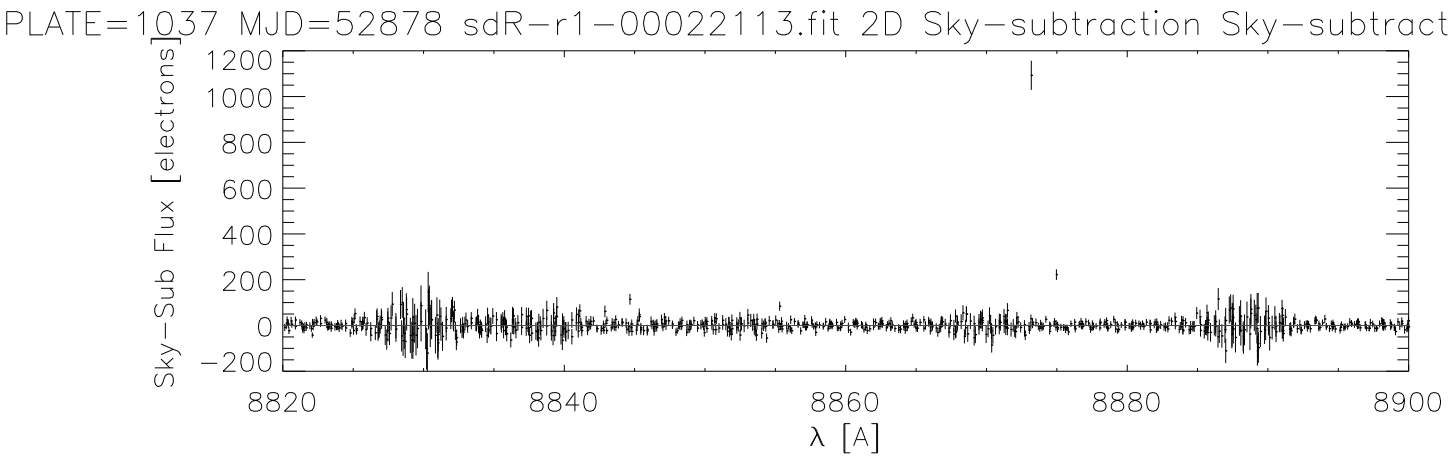

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

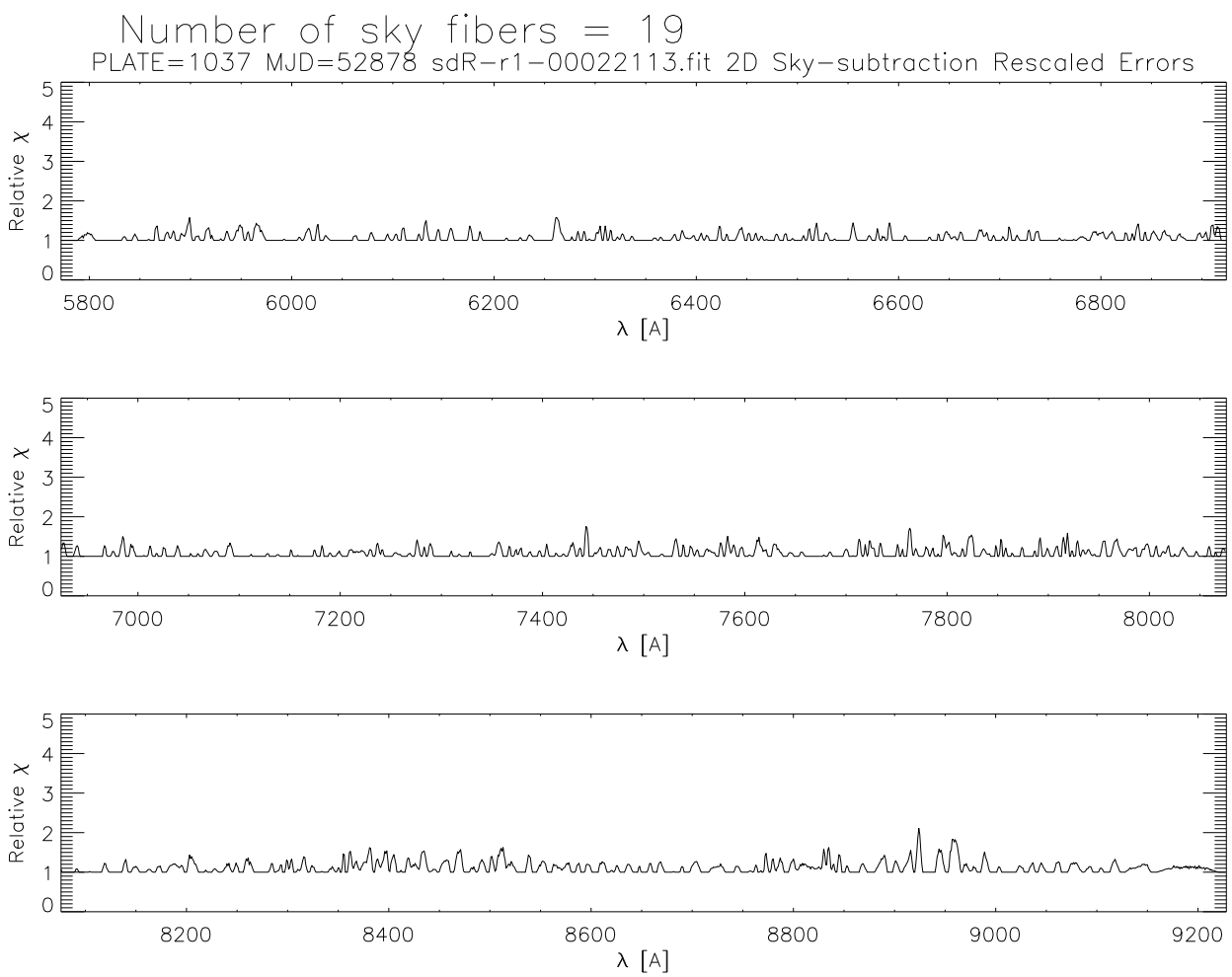

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

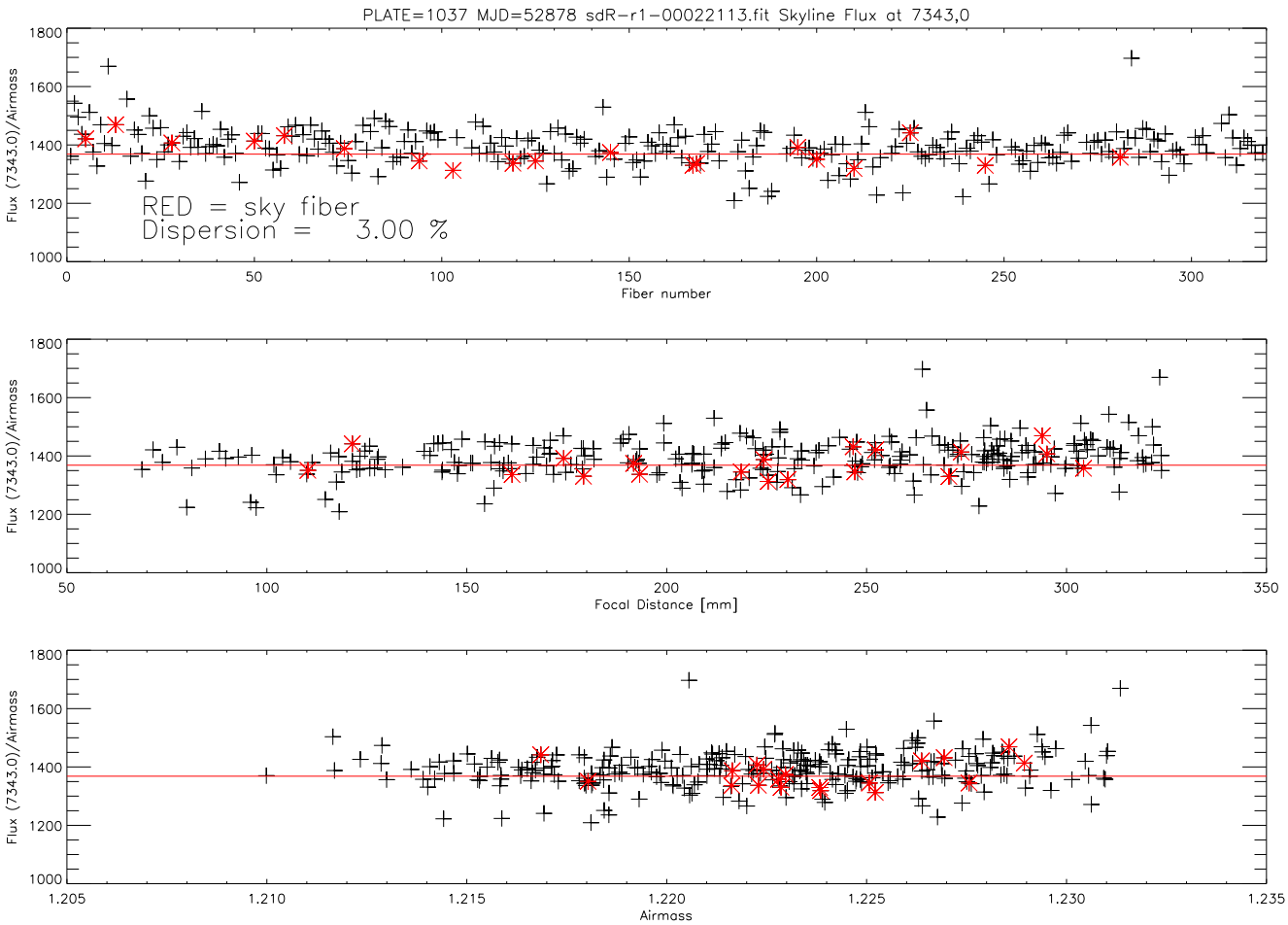

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022113.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

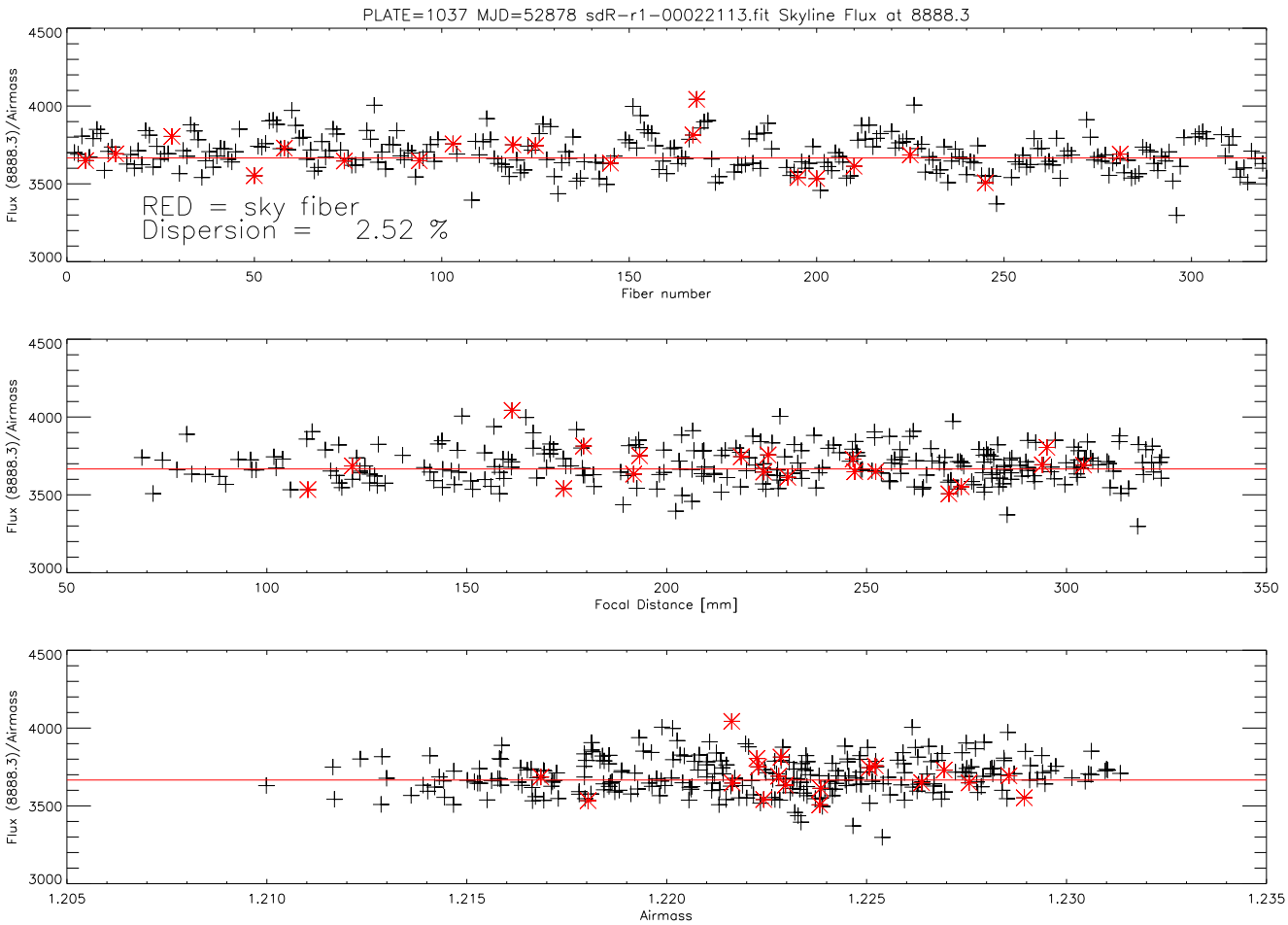

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

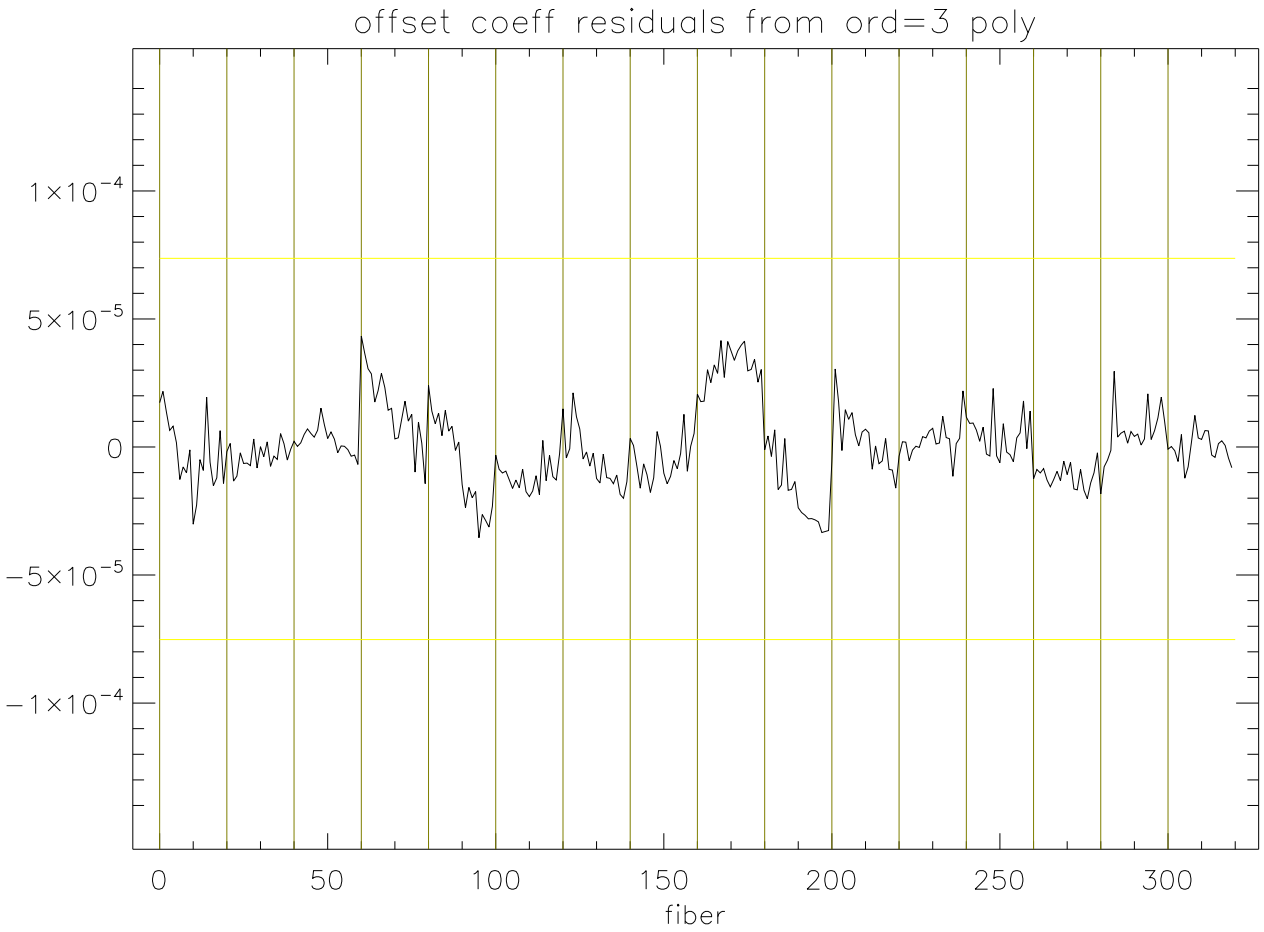

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

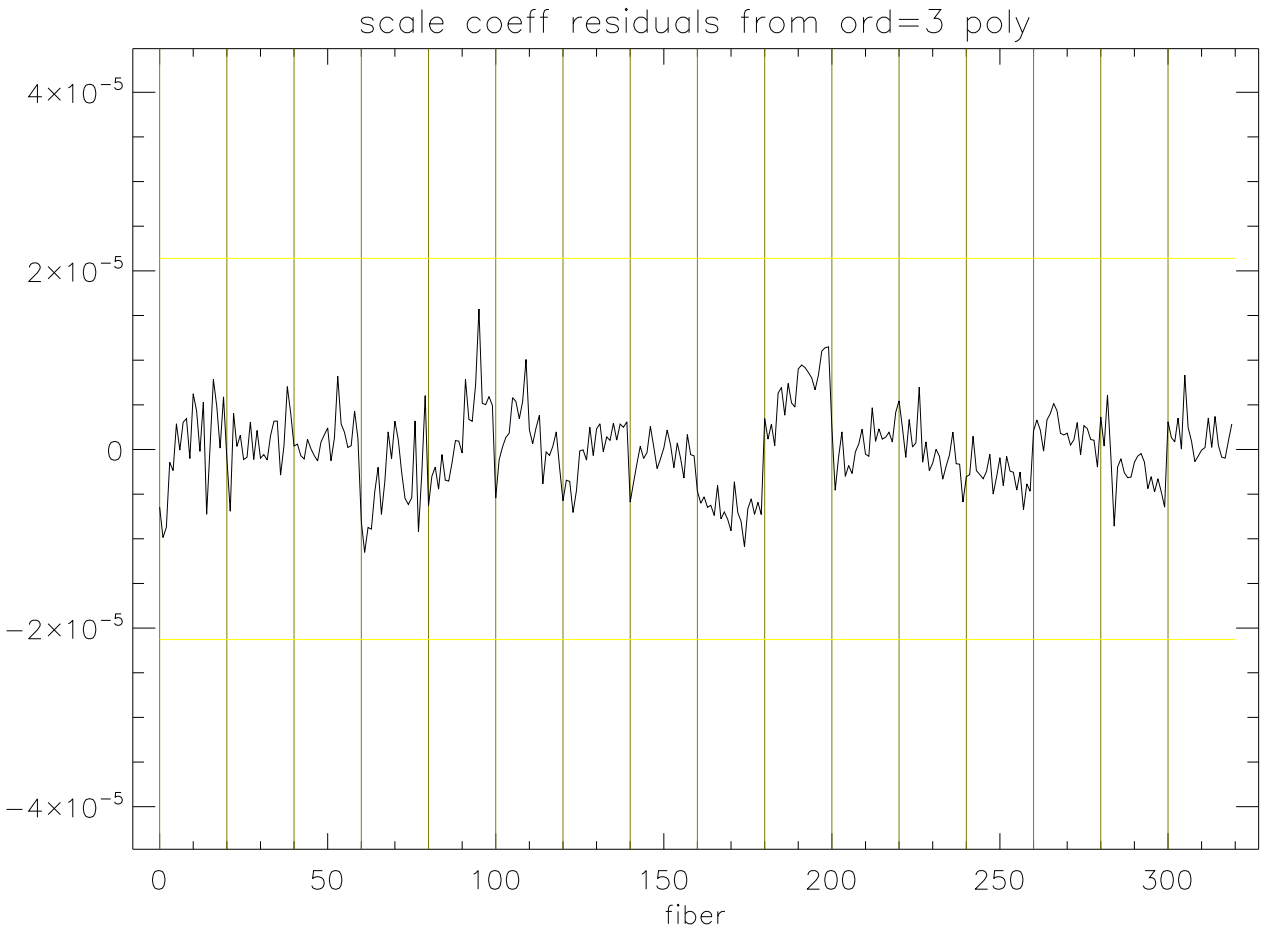

PLATE=1037 MJD=52878 sdR-r1-00022113.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1200
1000
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

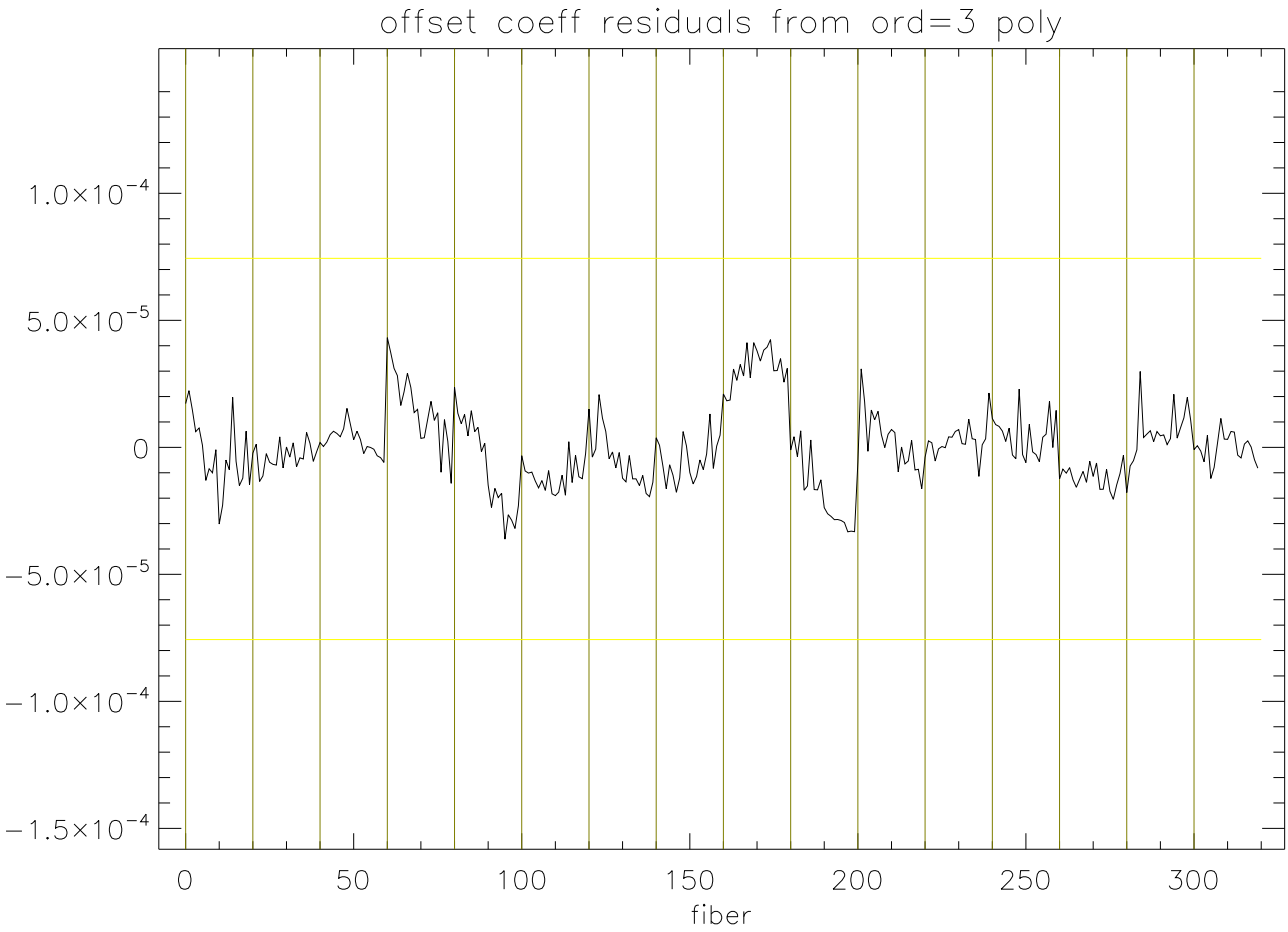

Number of sky fibers = 19
PLATE=1037 MJD=52878 sdR-r1-00022113.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

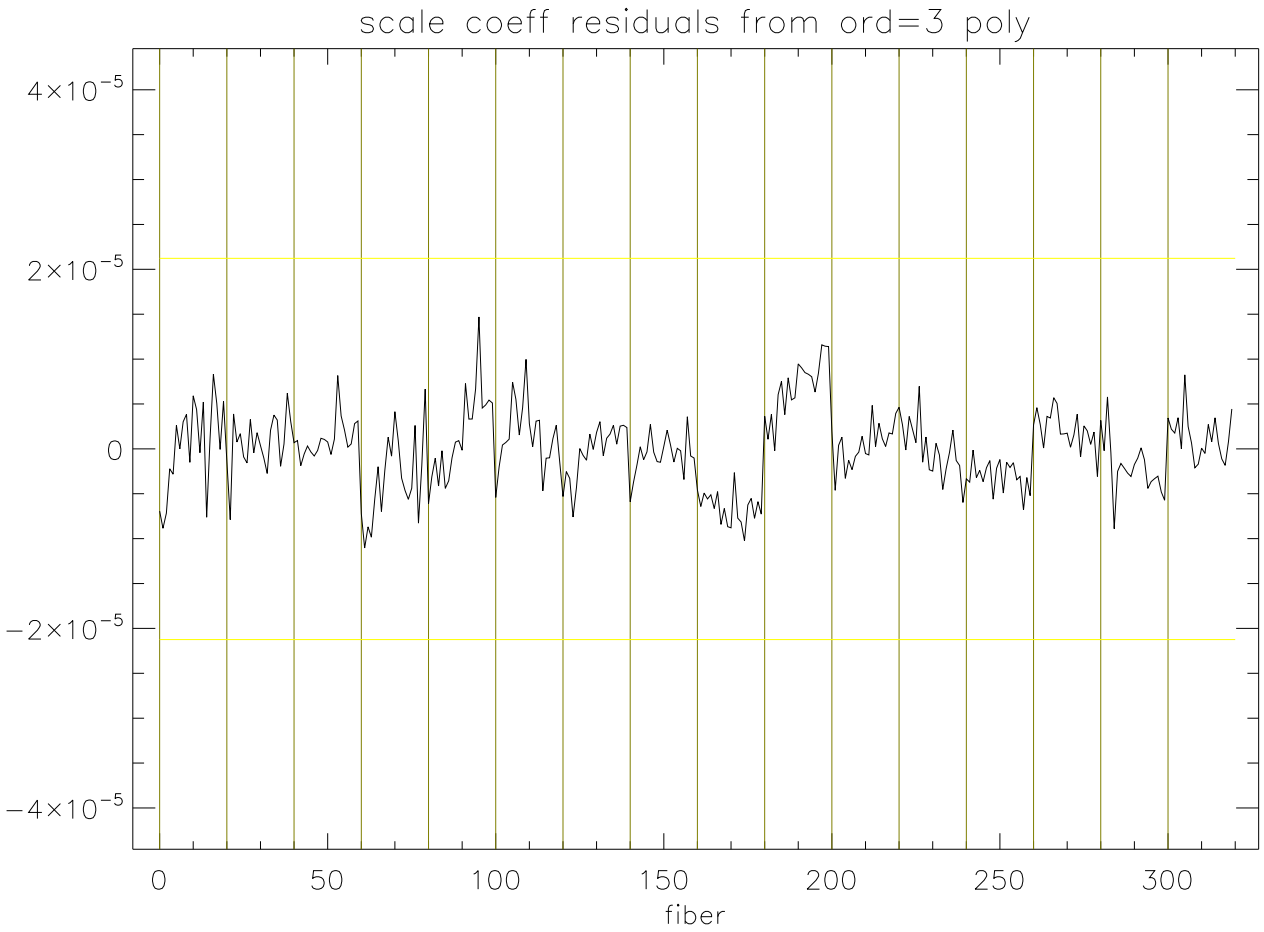

PLATE=1037 MJD=52878 sdR-r1-00022113.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

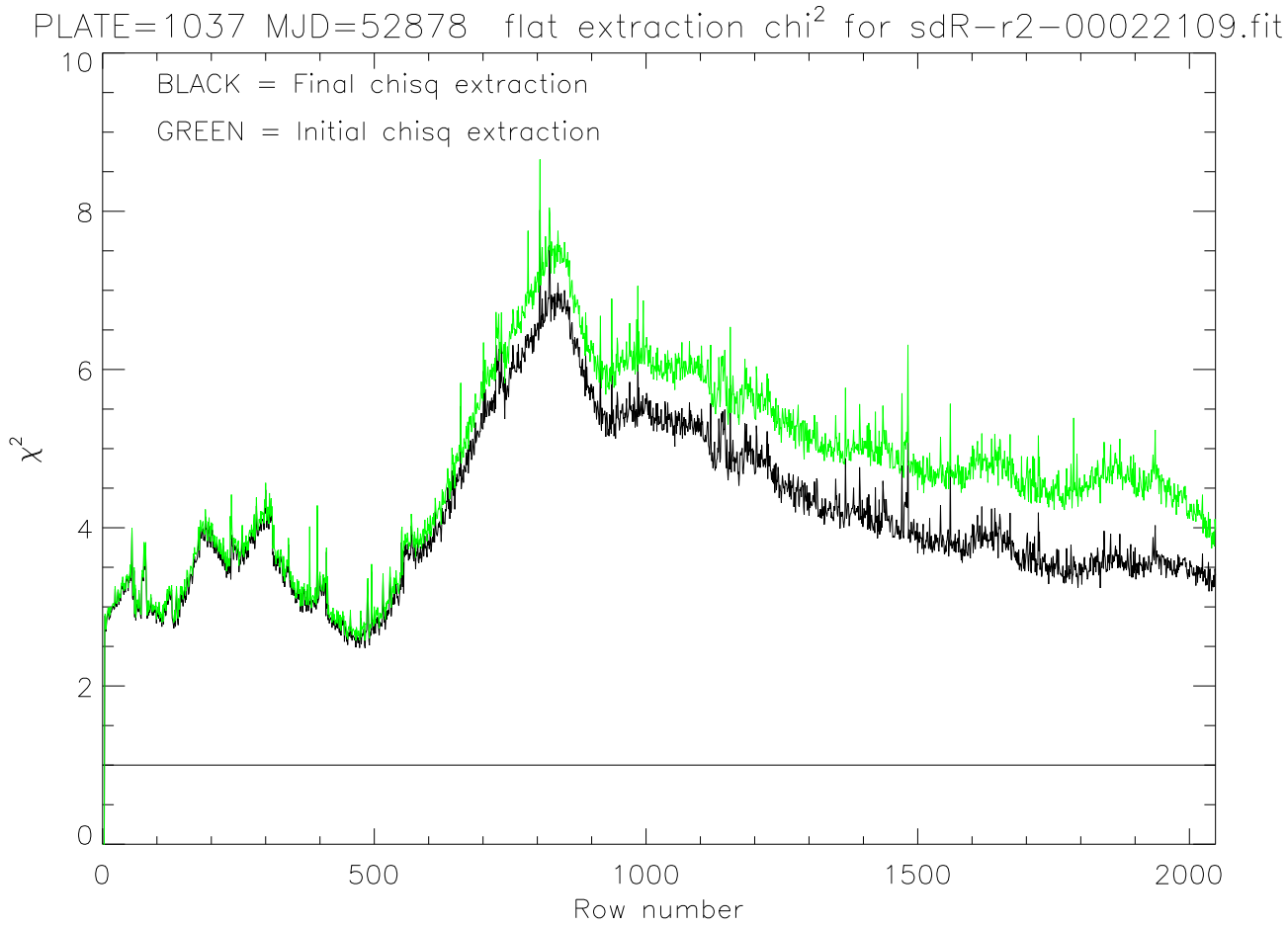

PLATE=1037 MJD=52878 sdR-r1-00022113.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.52 %
Fiber number
Focal Distance [mm]
Airmass

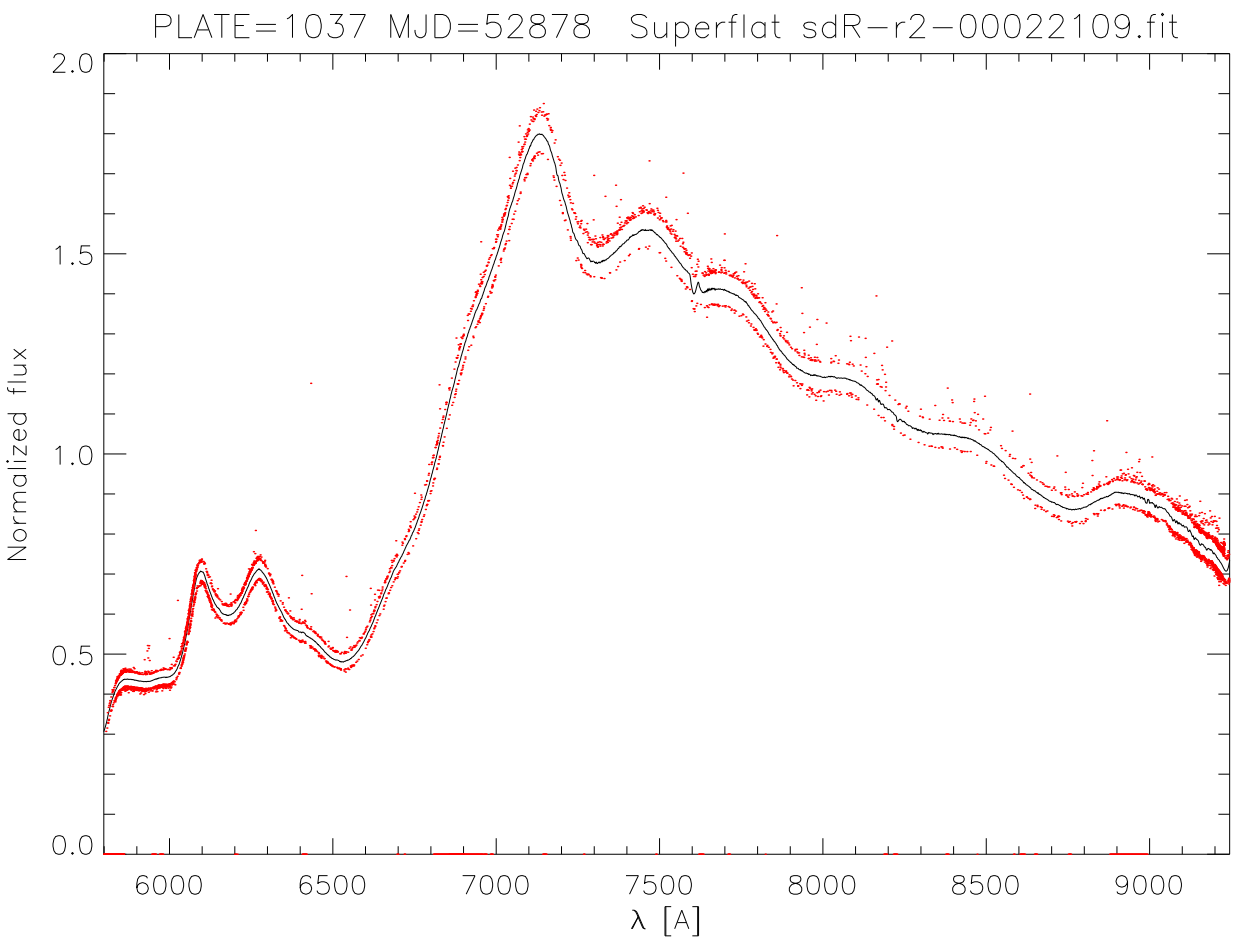

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

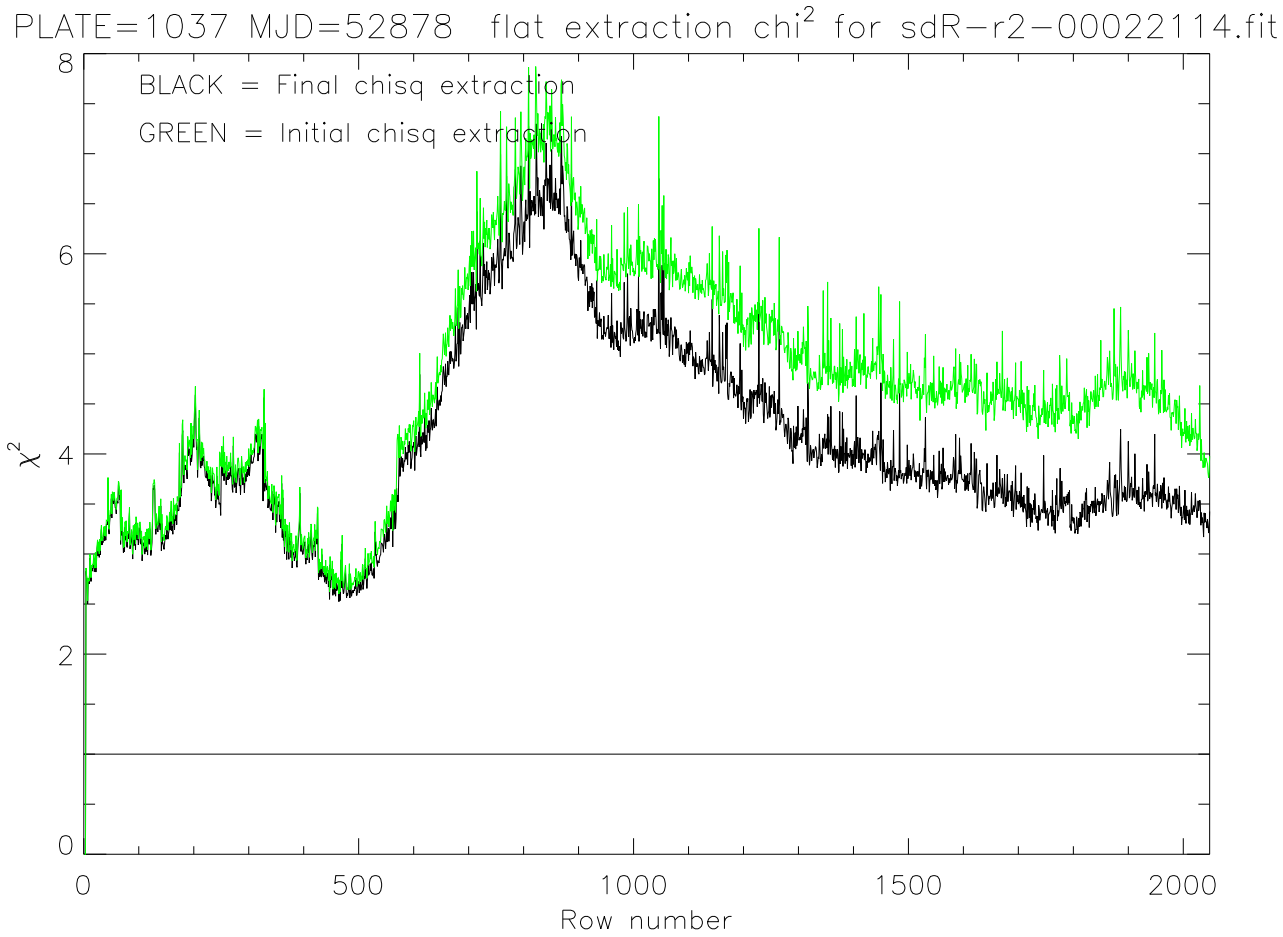

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

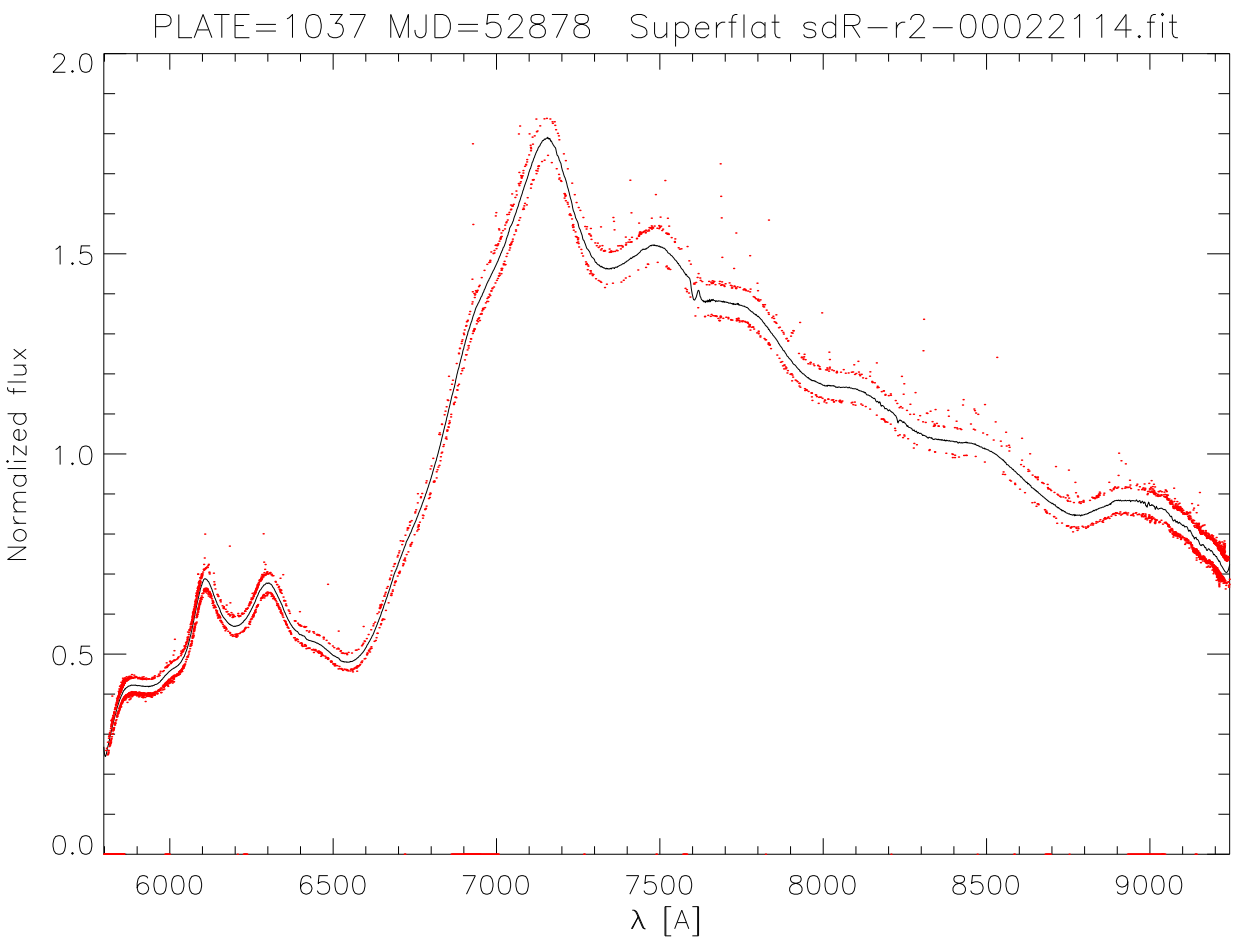

offset coeff residuals from ord=3 poly
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

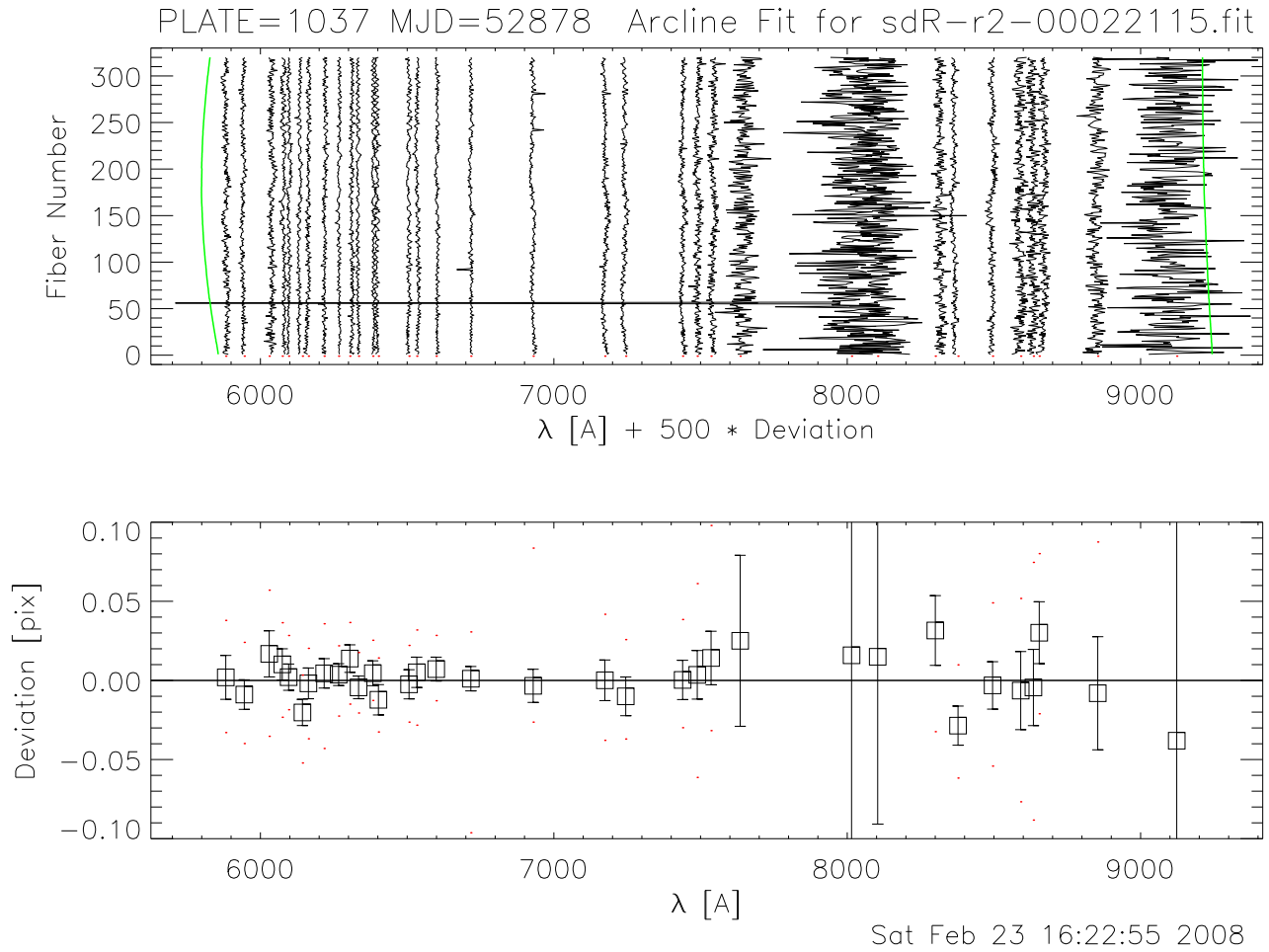

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

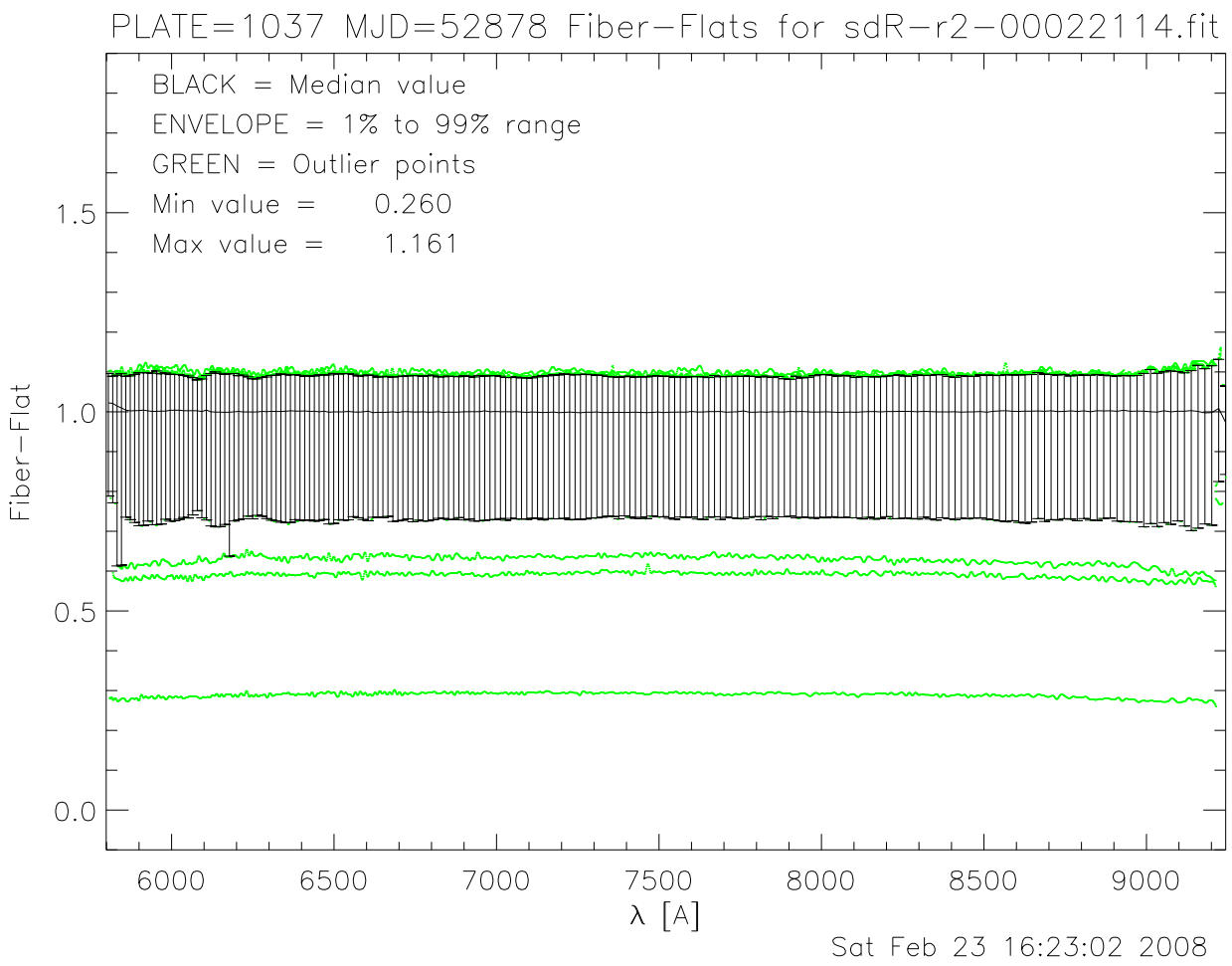

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−r2−00022109.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

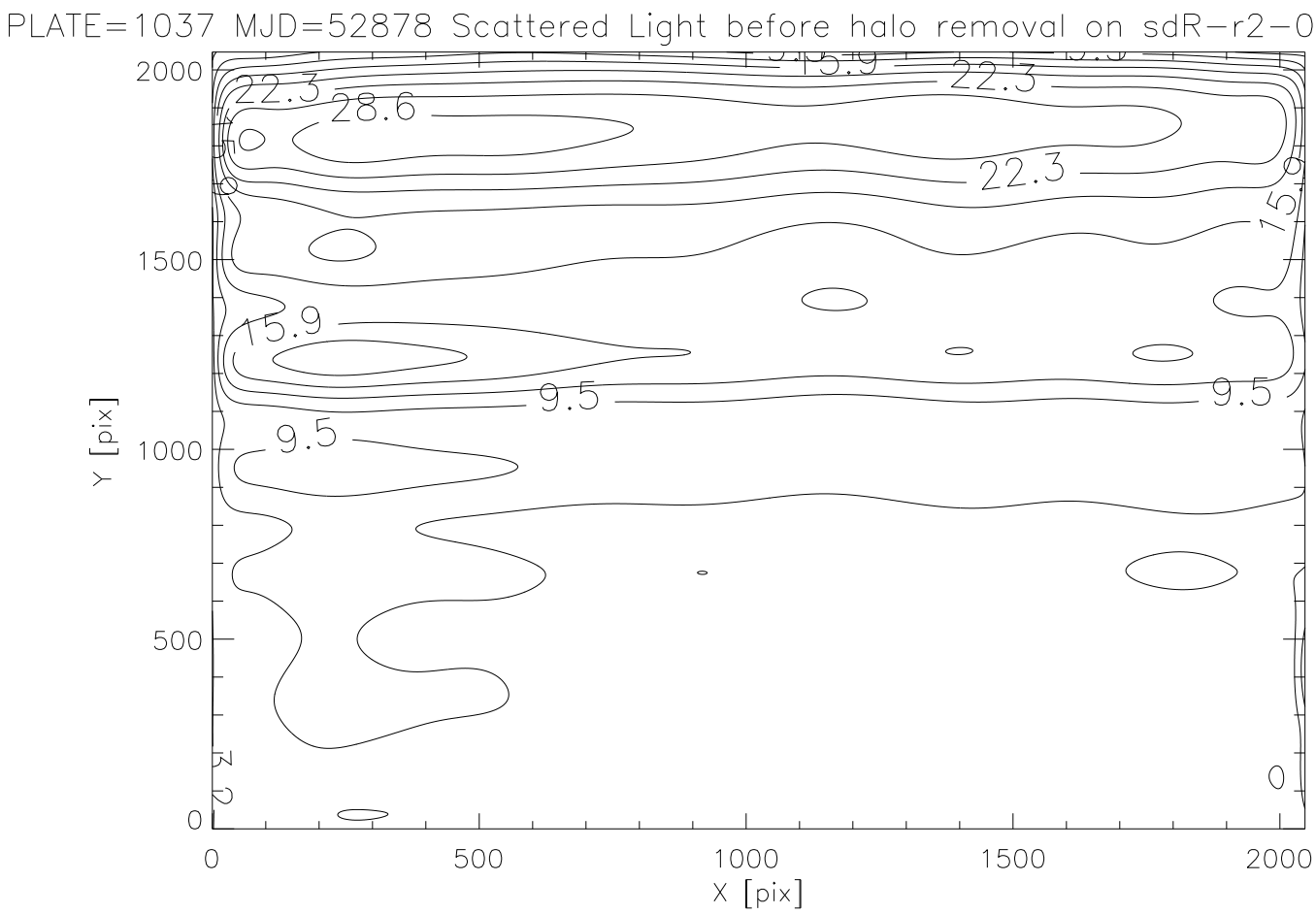

PLATE=1037 MJD=52878 Superflat sdR-r2-00022109.fit
Normalized flux
λ [A]
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000

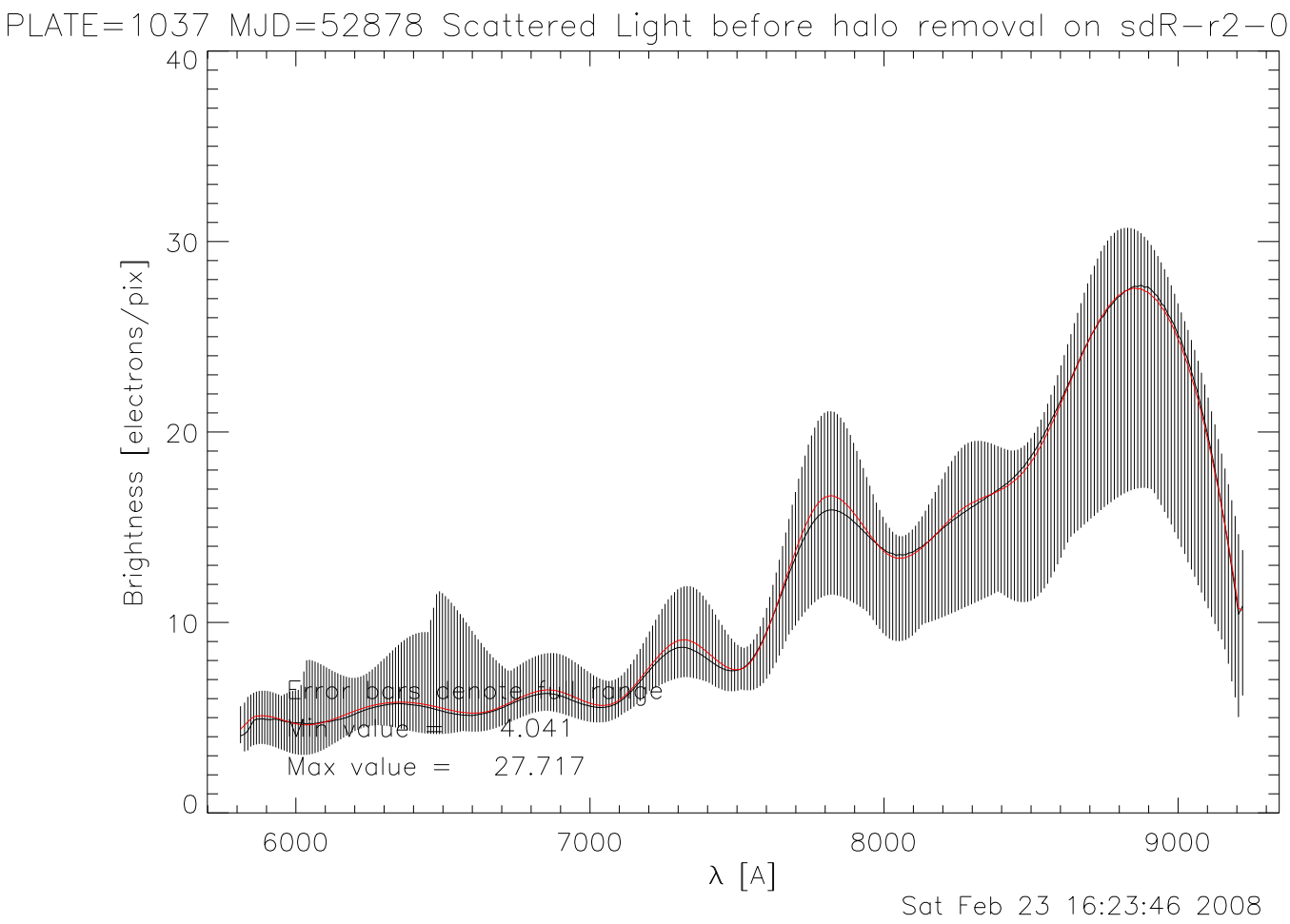

PLATE=1037 MJD=52878 flat extraction chi^2 for sdR−r2−00022114.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

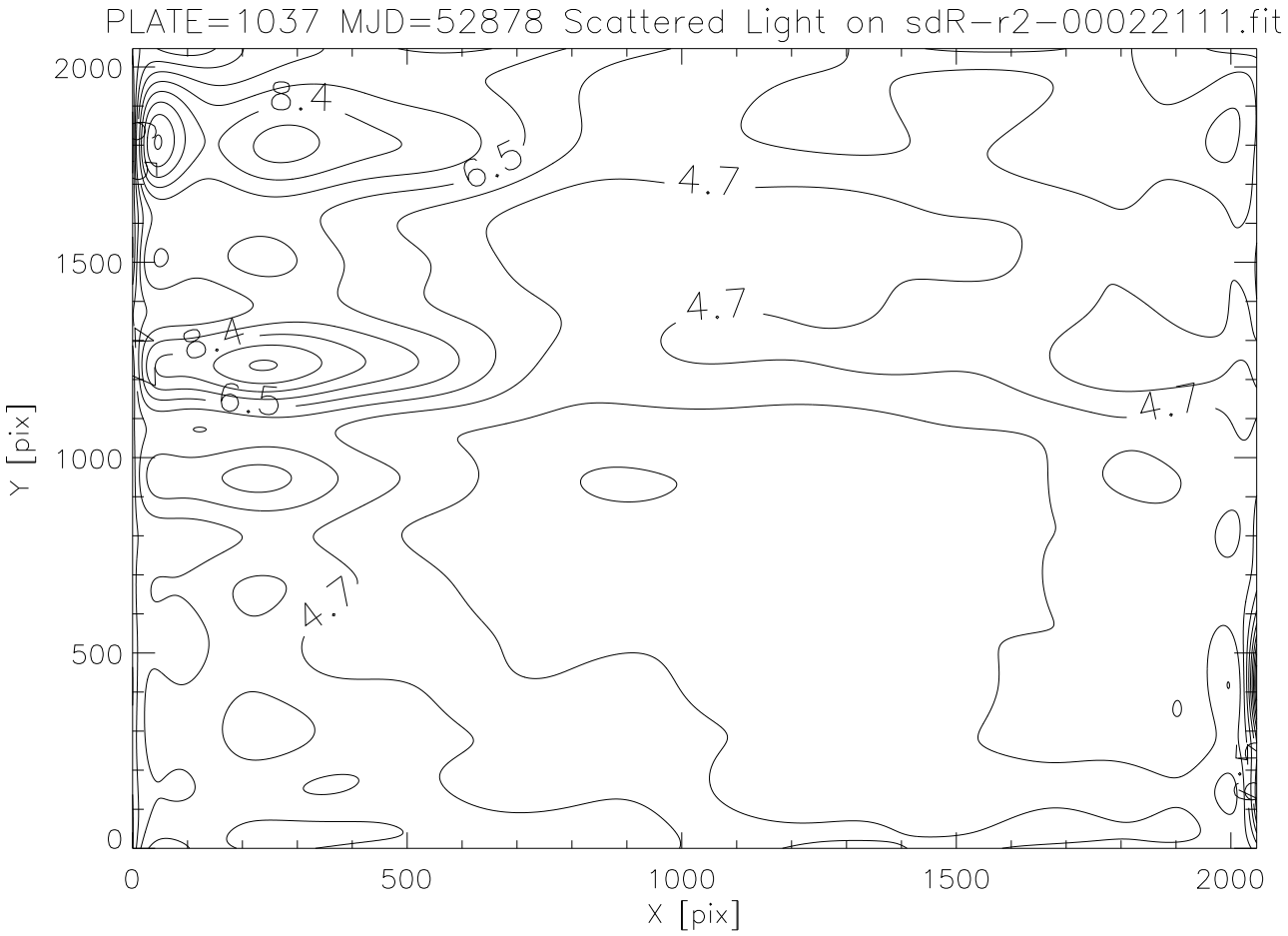

PLATE=1037 MJD=52878 Superflat sdR-r2-00022114.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

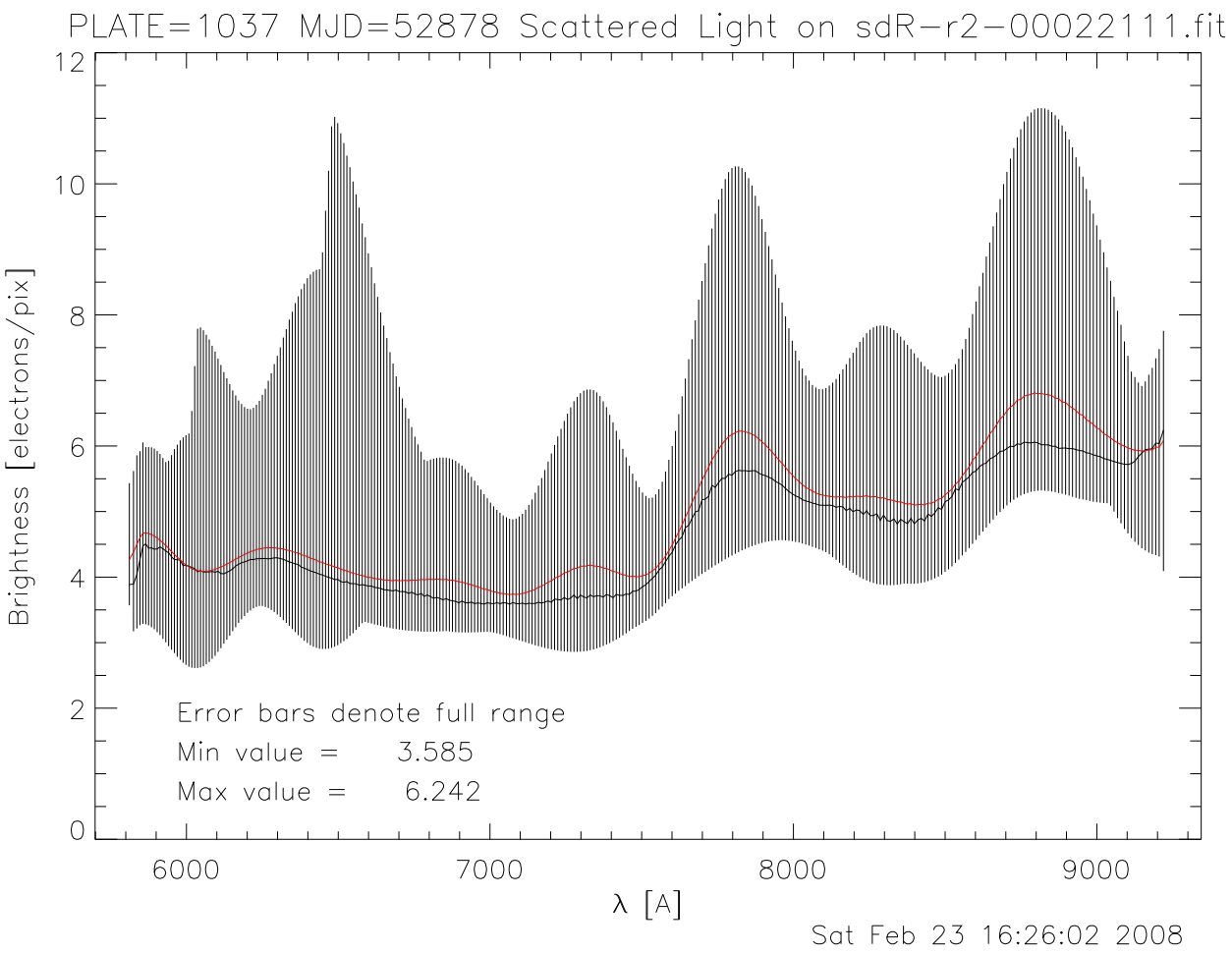

PLATE=1037 MJD=52878 Arcline Fit for sdR-r2-00022115.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 23 16:22:55 2008

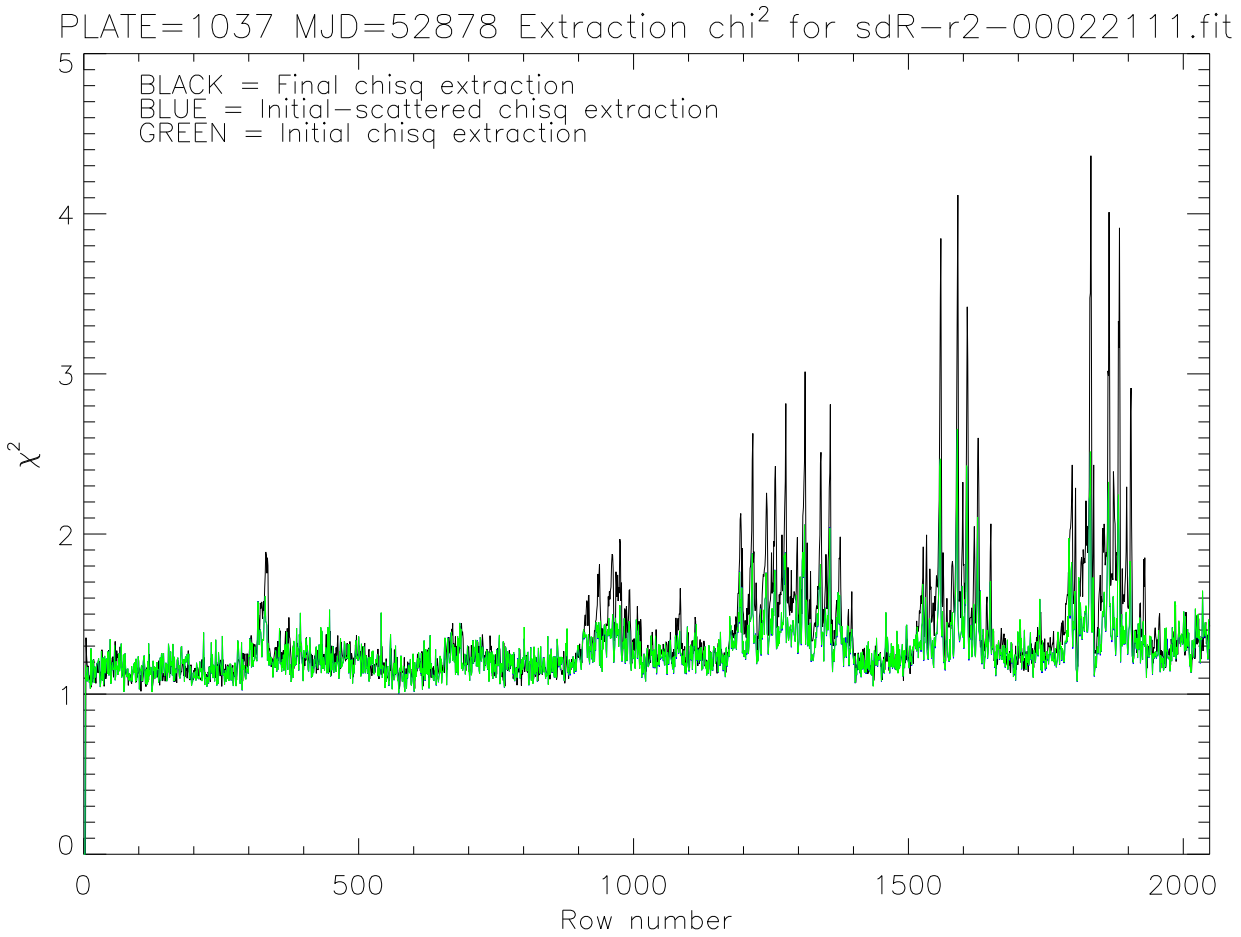

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.161
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:23:02 2008

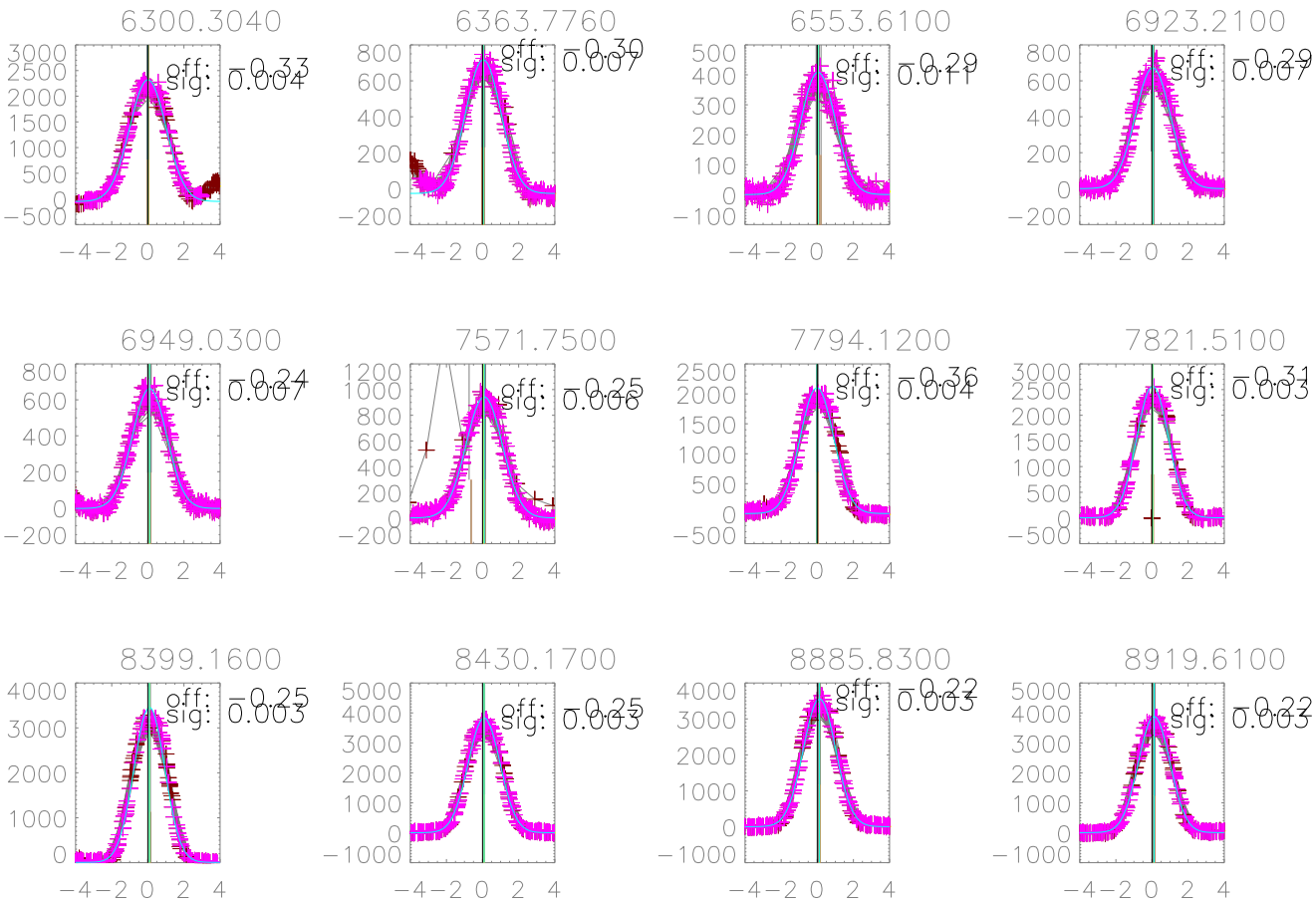

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022111.fi
22.3
28.6
22.3
22.3
15.9
15.9
9.5
9.5
9.5
2.5
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

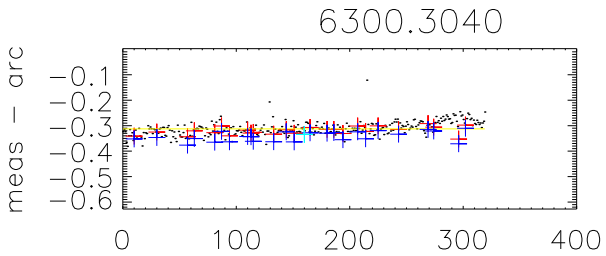

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022111.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.041
Max value = 27.717
Sat Feb 23 16:23:46 2008

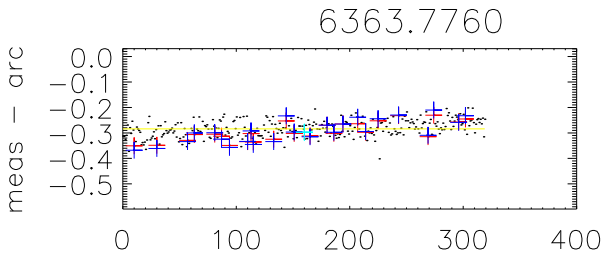

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022111.fit
8.4
6.5
4.7
4.7
8.4
6.5
4.7
4.7
0
0
6.5
Y [pix]
X [pix]
0
500
1000
1500
2000

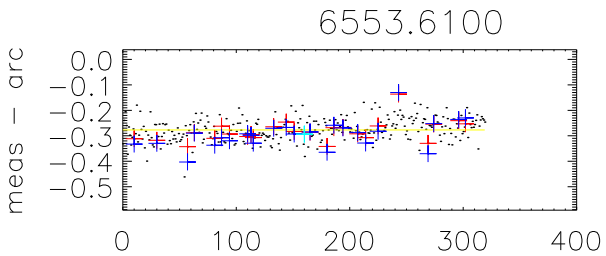

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022111.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.585
Max value = 6.242
Sat Feb 23 16:26:02 2008

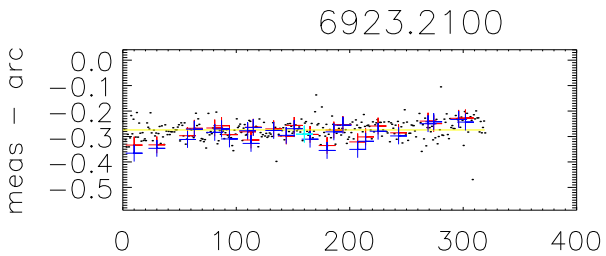

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r2−00022111.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

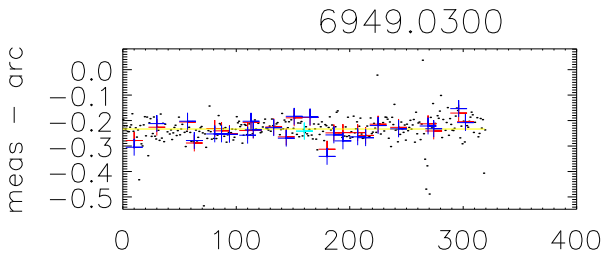

6300.3040
off: −0.33
sig: 0.004
6363.7760
off: −0.30
sig: 0.007
6553.6100
off: −0.29
sig: 0.011
6923.2100
off: −0.29
sig: 0.007
6949.0300
off: −0.24
sig: 0.007
7571.7500
off: −0.25
sig: 0.006
7794.1200
off: −0.36
sig: 0.004
7821.5100
off: −0.31
sig: 0.003
8399.1600
off: −0.25
sig: 0.003
8430.1700
off: −0.25
sig: 0.003
8885.8300
off: −0.22
sig: 0.003
8919.6100
off: −0.22
sig: 0.003

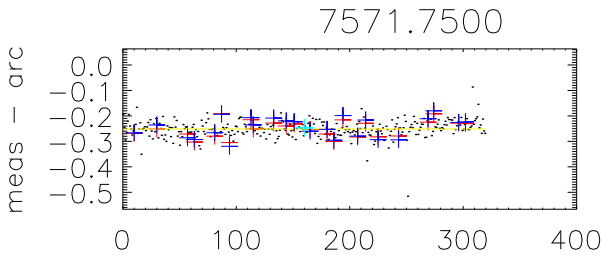

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

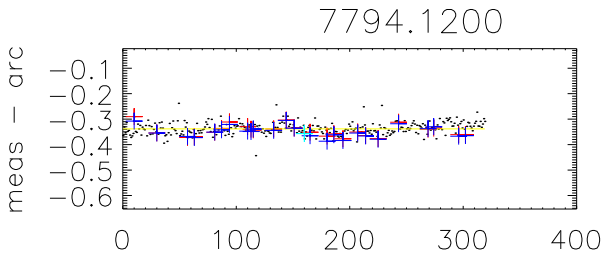

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

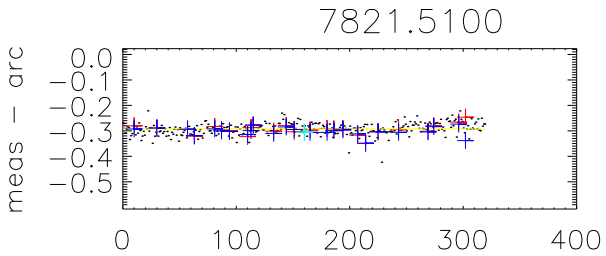

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

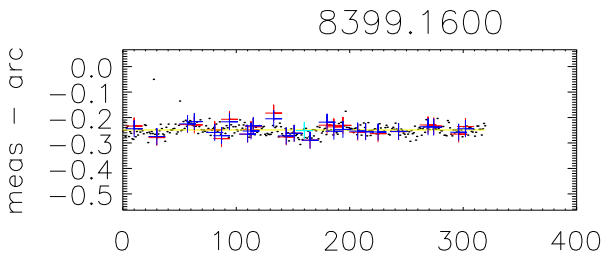

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

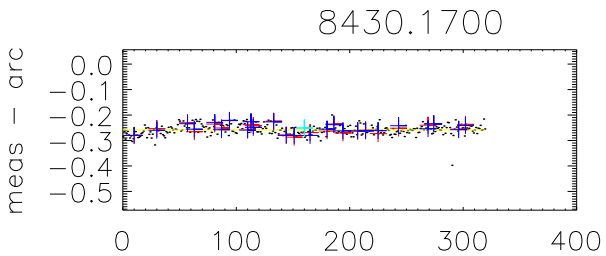

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

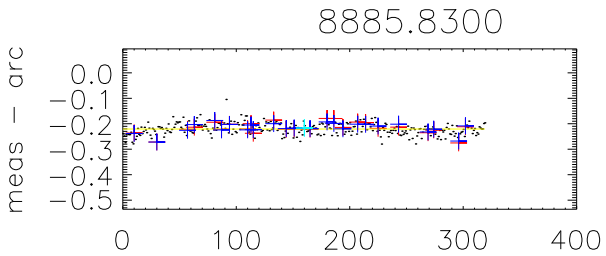

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

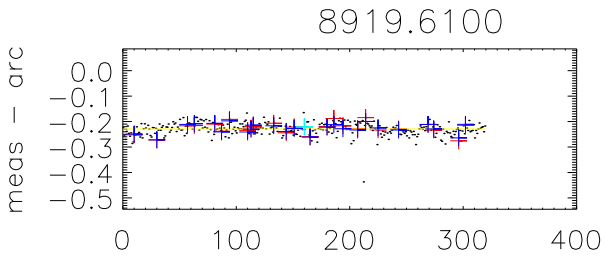

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

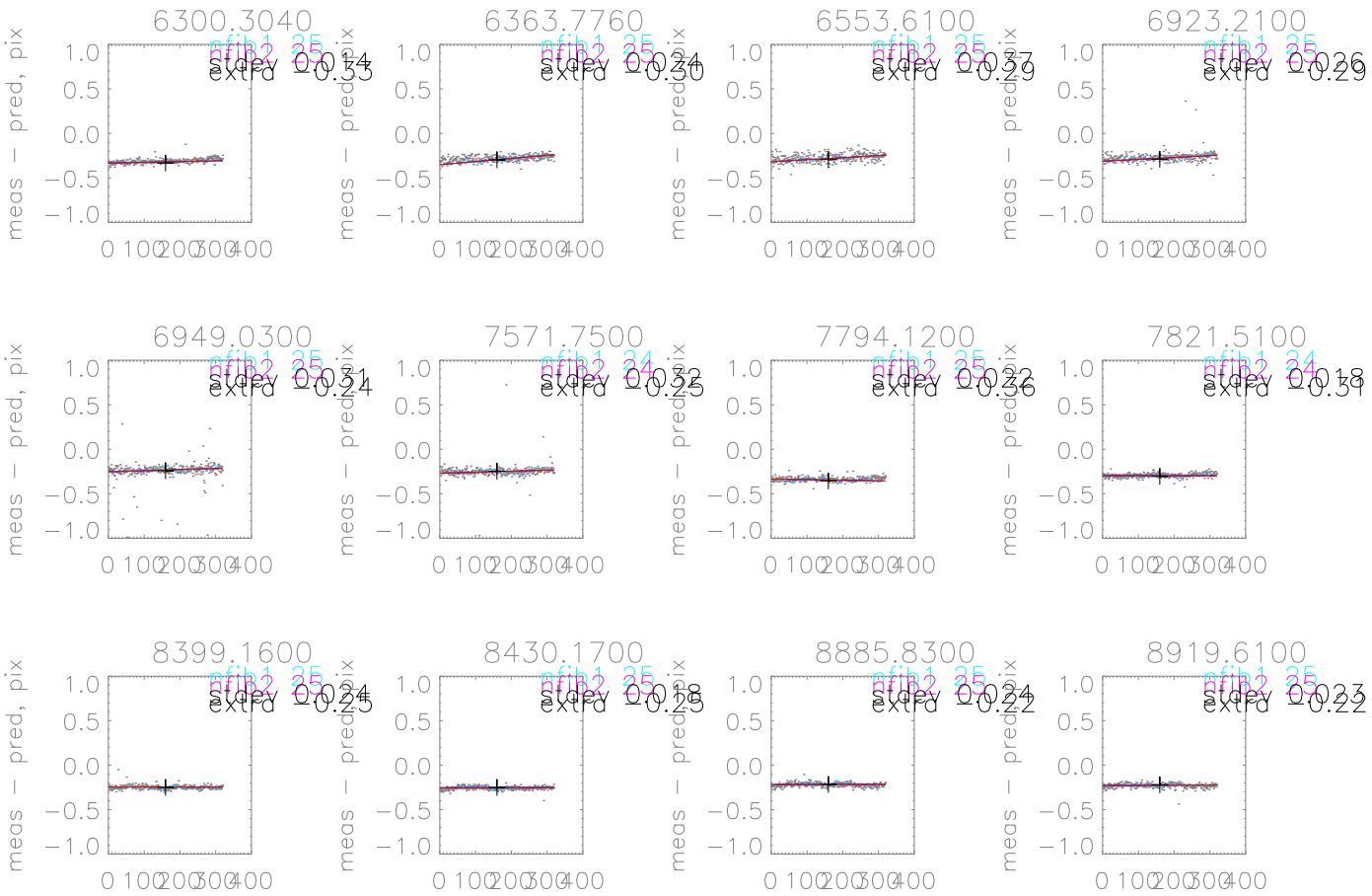

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

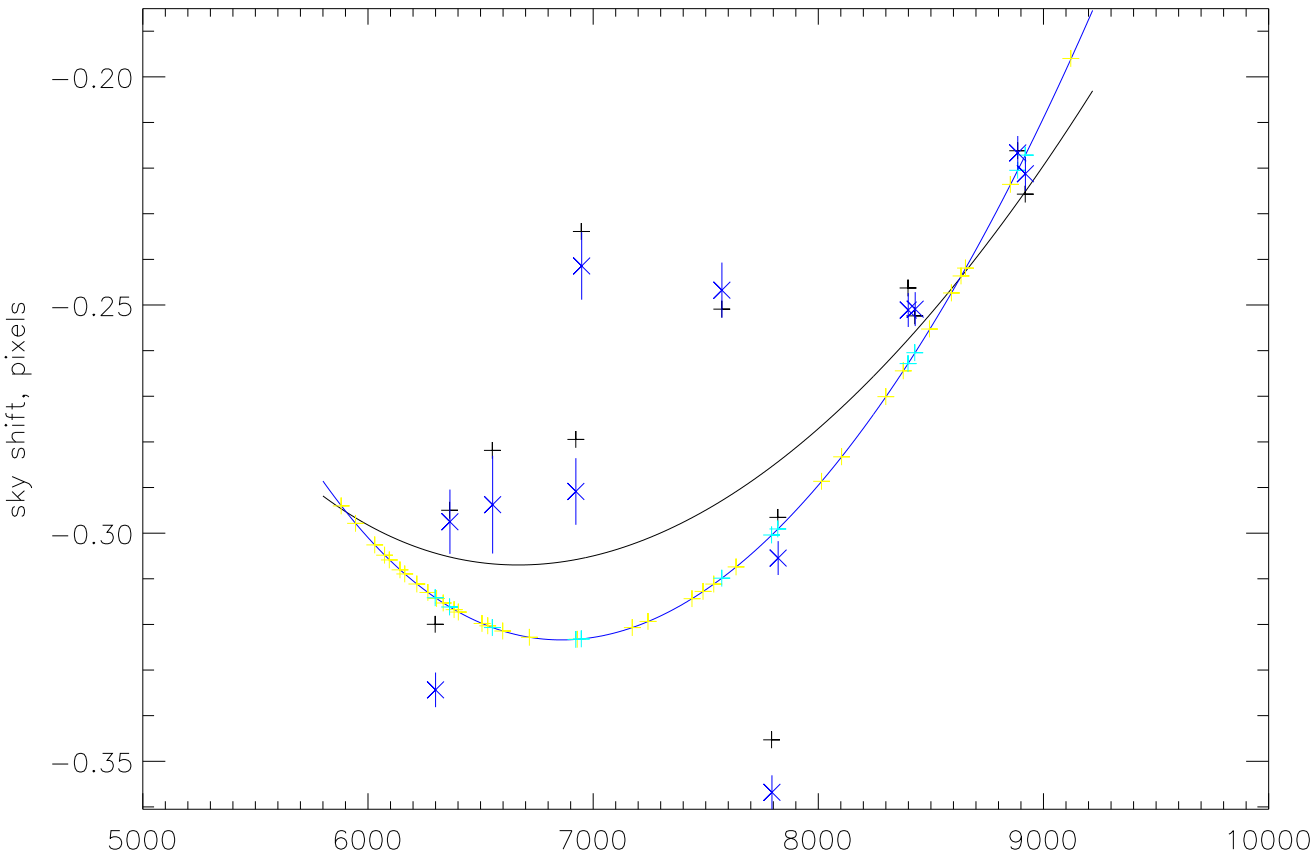

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

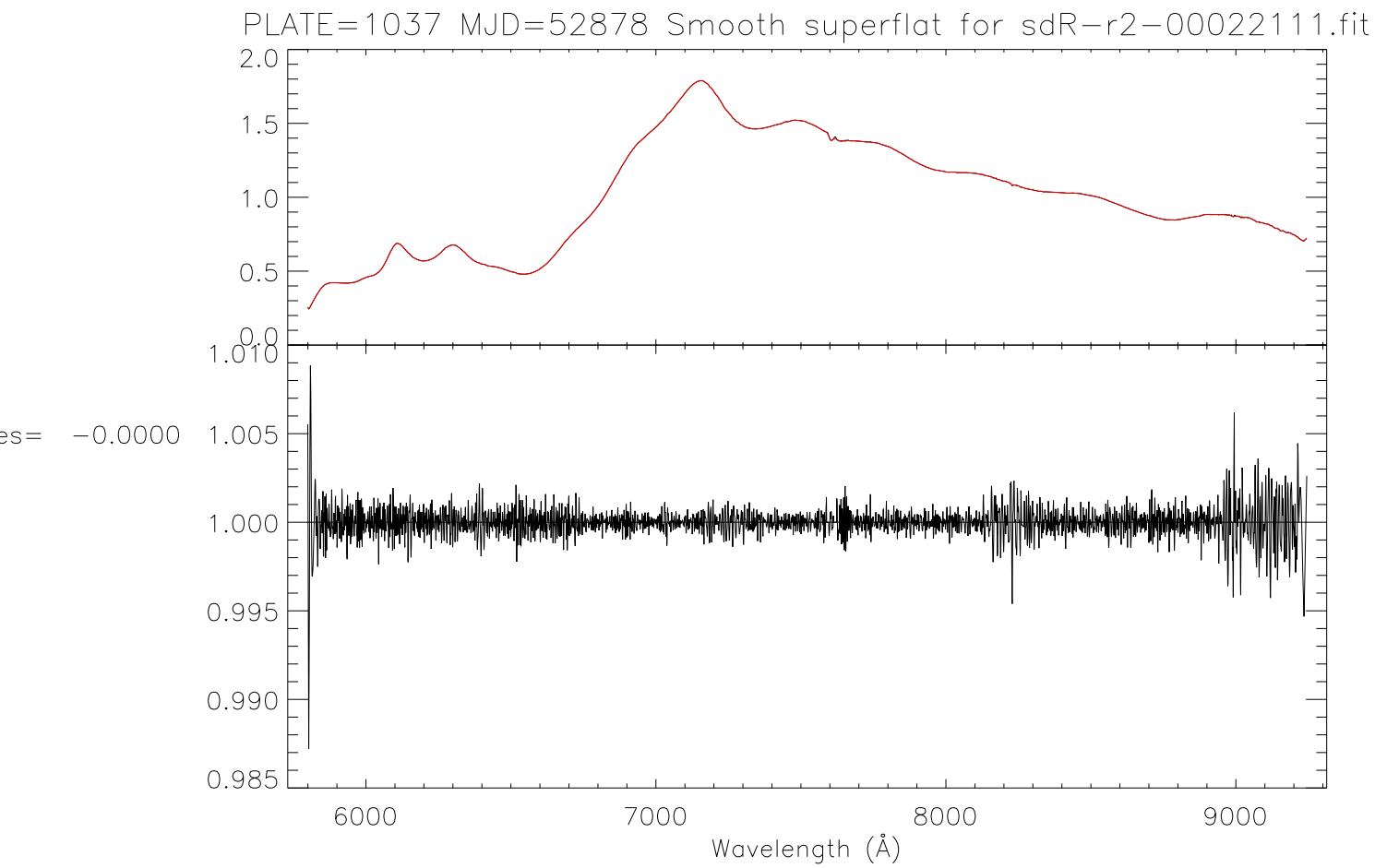

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

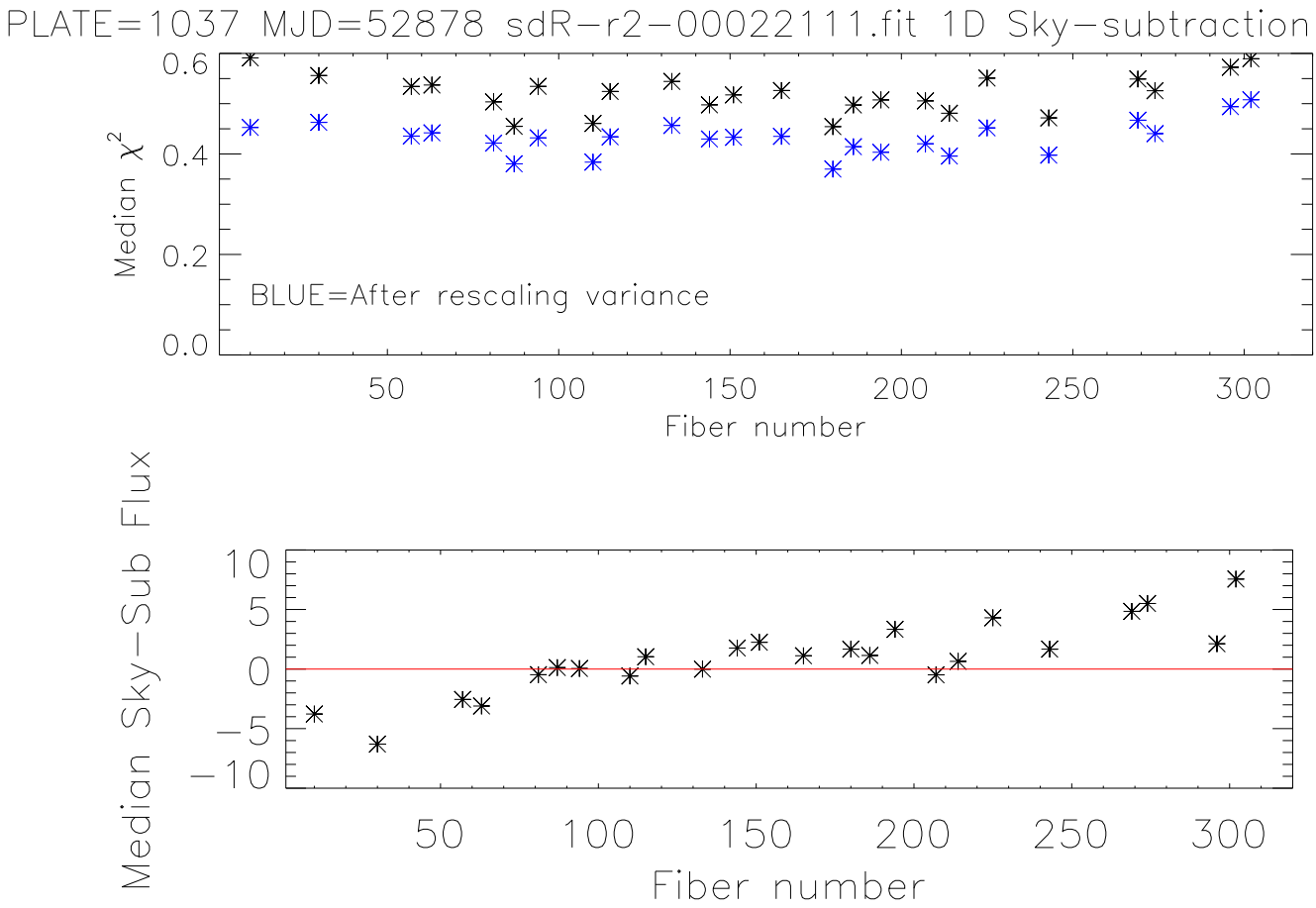

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

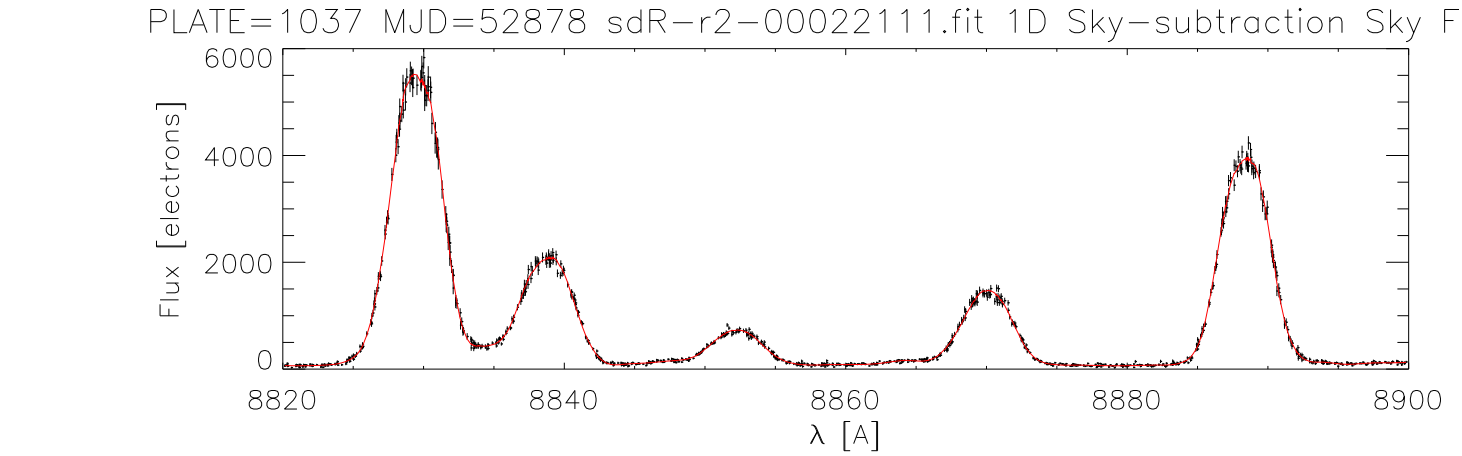

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

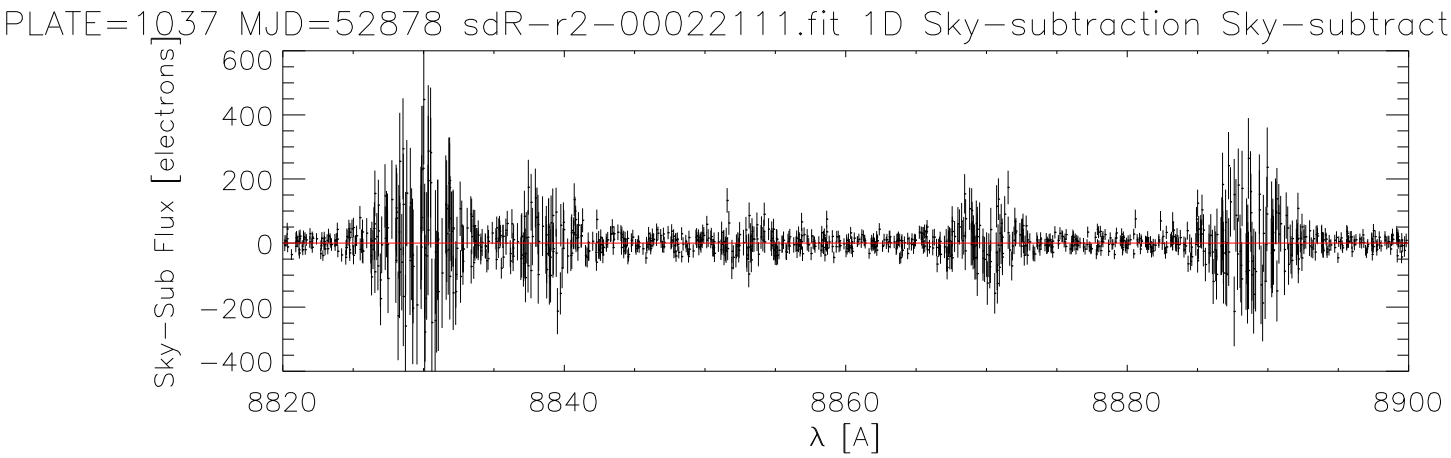

6300.3040
mfib1 25
mfib2 25
stdev 0.024
extra 0.33
6363.7760
mfib1 25
mfib2 25
stdev 0.024
extra 0.30
6553.6100
mfib1 25
mfib2 25
stdev 0.027
extra 0.29
6923.2100
mfib1 25
mfib2 25
stdev 0.026
extra 0.29
6949.0300
mfib1 25
mfib2 25
stdev 0.031
extra 0.24
7571.7500
mfib1 24
mfib2 25
stdev 0.032
extra 0.25
7794.1200
mfib1 25
mfib2 25
stdev 0.022
extra 0.36
7821.5100
mfib1 24
mfib2 25
stdev 0.018
extra 0.31
8399.1600
mfib1 25
mfib2 25
stdev 0.024
extra 0.25
8430.1700
mfib1 25
mfib2 25
stdev 0.018
extra 0.25
8885.8300
mfib1 25
mfib2 25
stdev 0.024
extra 0.22
8919.6100
mfib1 25
mfib2 25
stdev 0.023
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

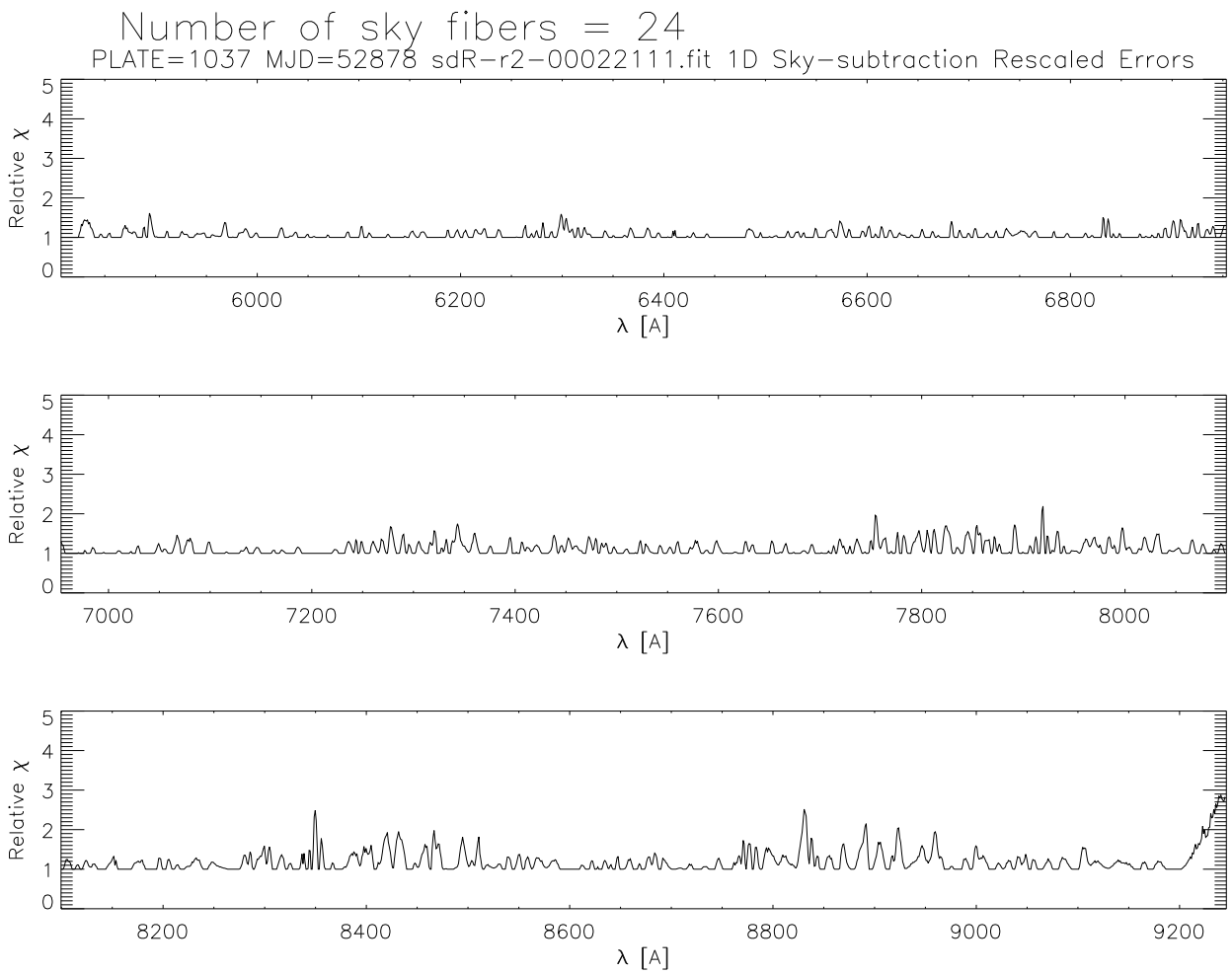

−0.20
−0.25
−0.30
−0.35
sky shift, pixels
5000
6000
7000
8000
9000
10000

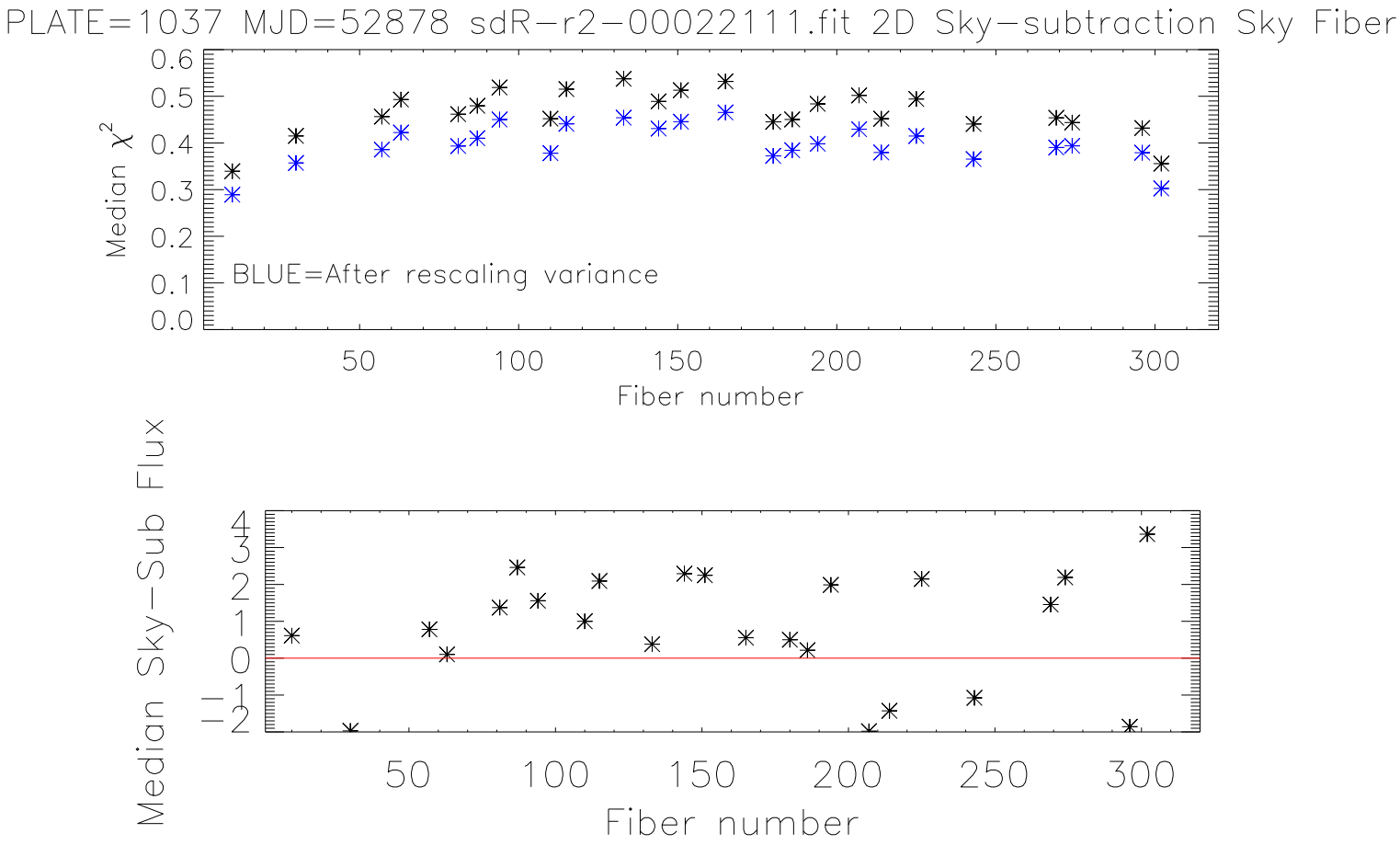

PLATE=1037 MJD=52878 Smooth superflat for sdR-r2-00022111.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

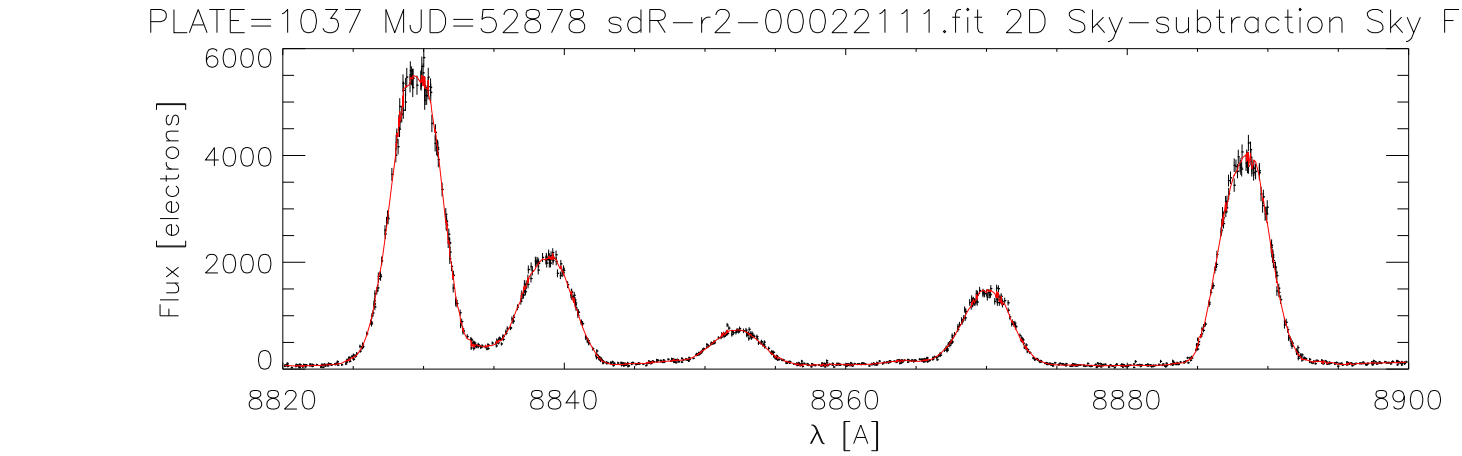

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

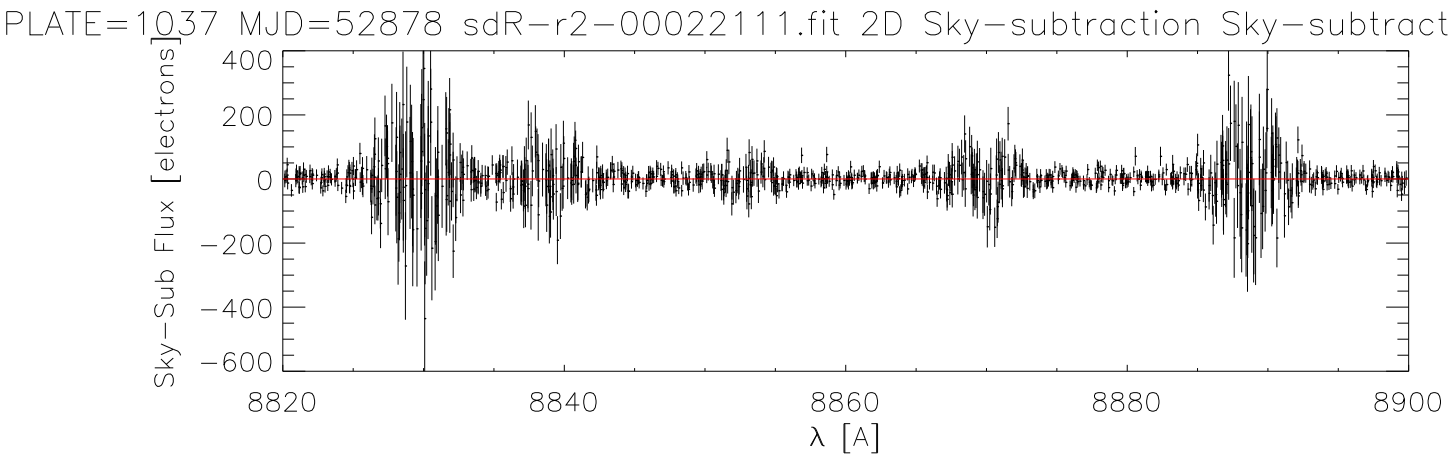

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

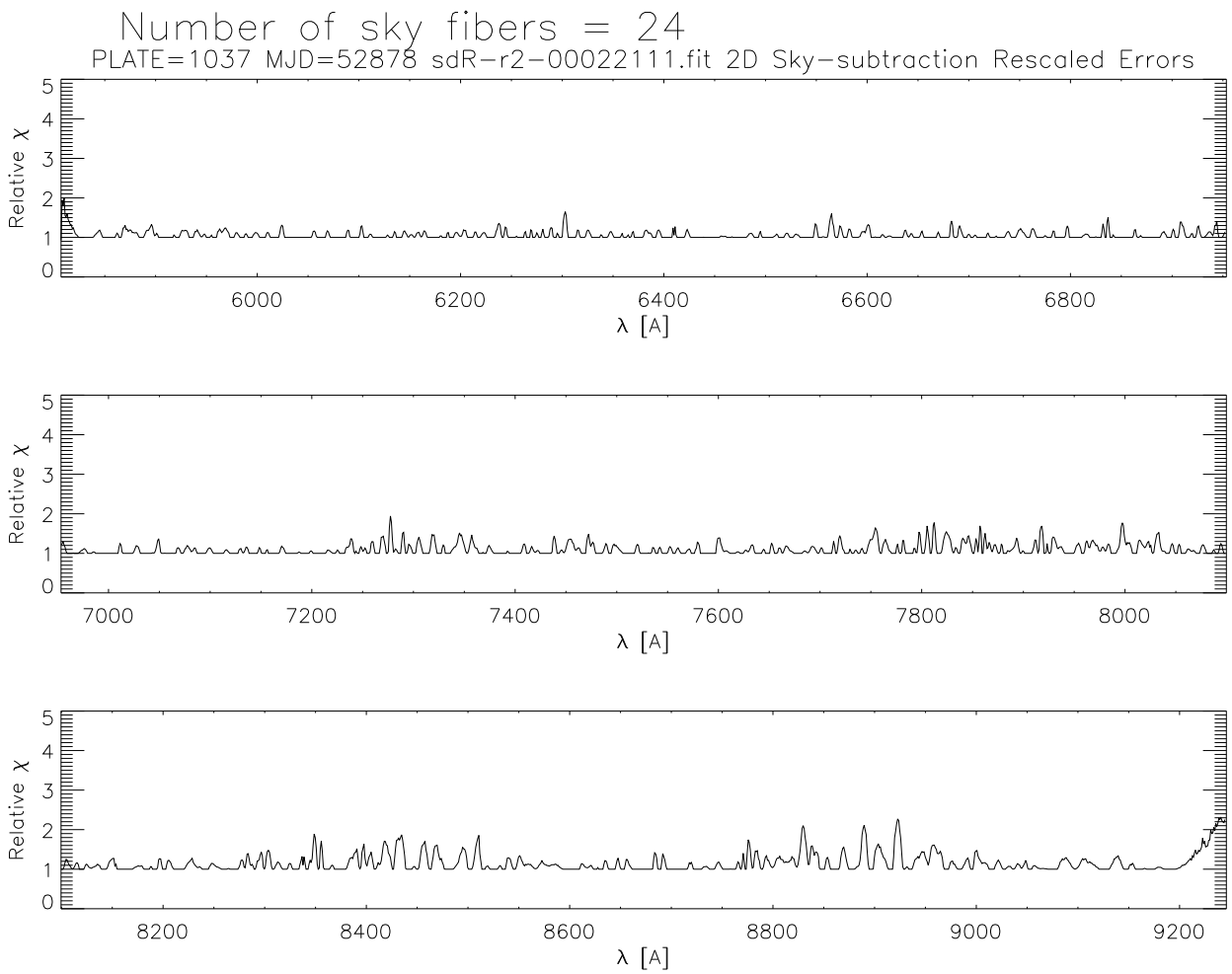

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

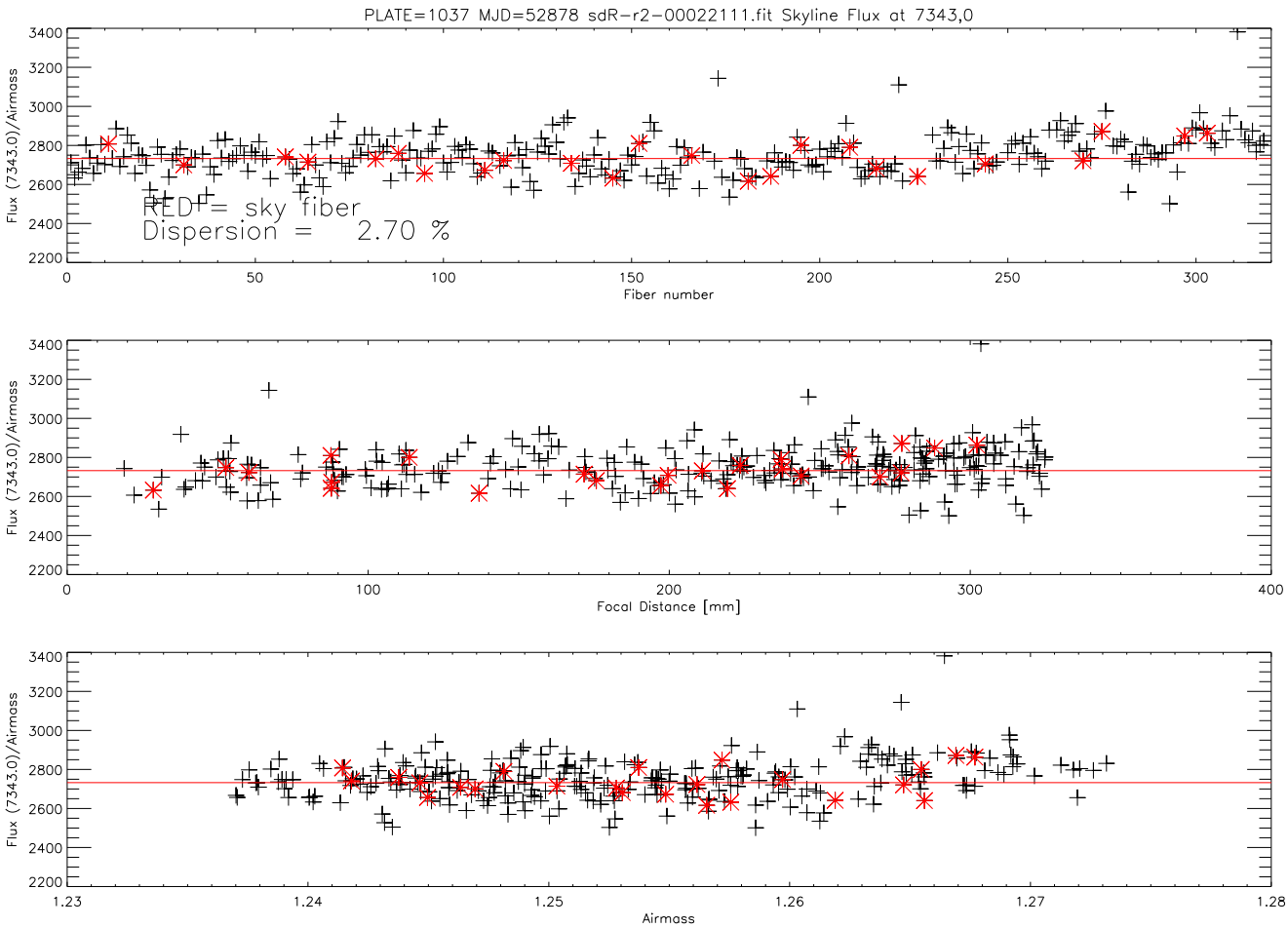

Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022111.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

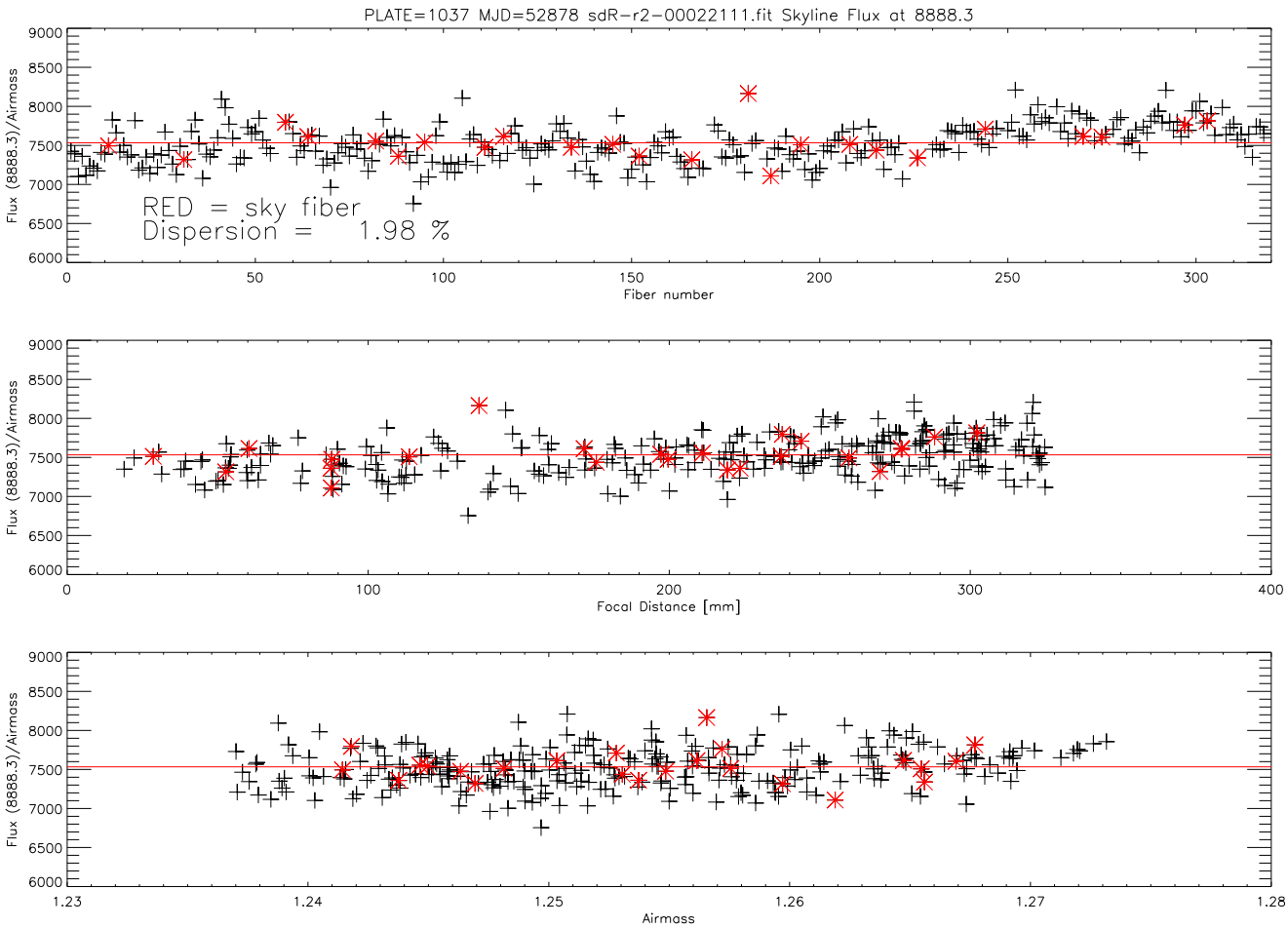

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

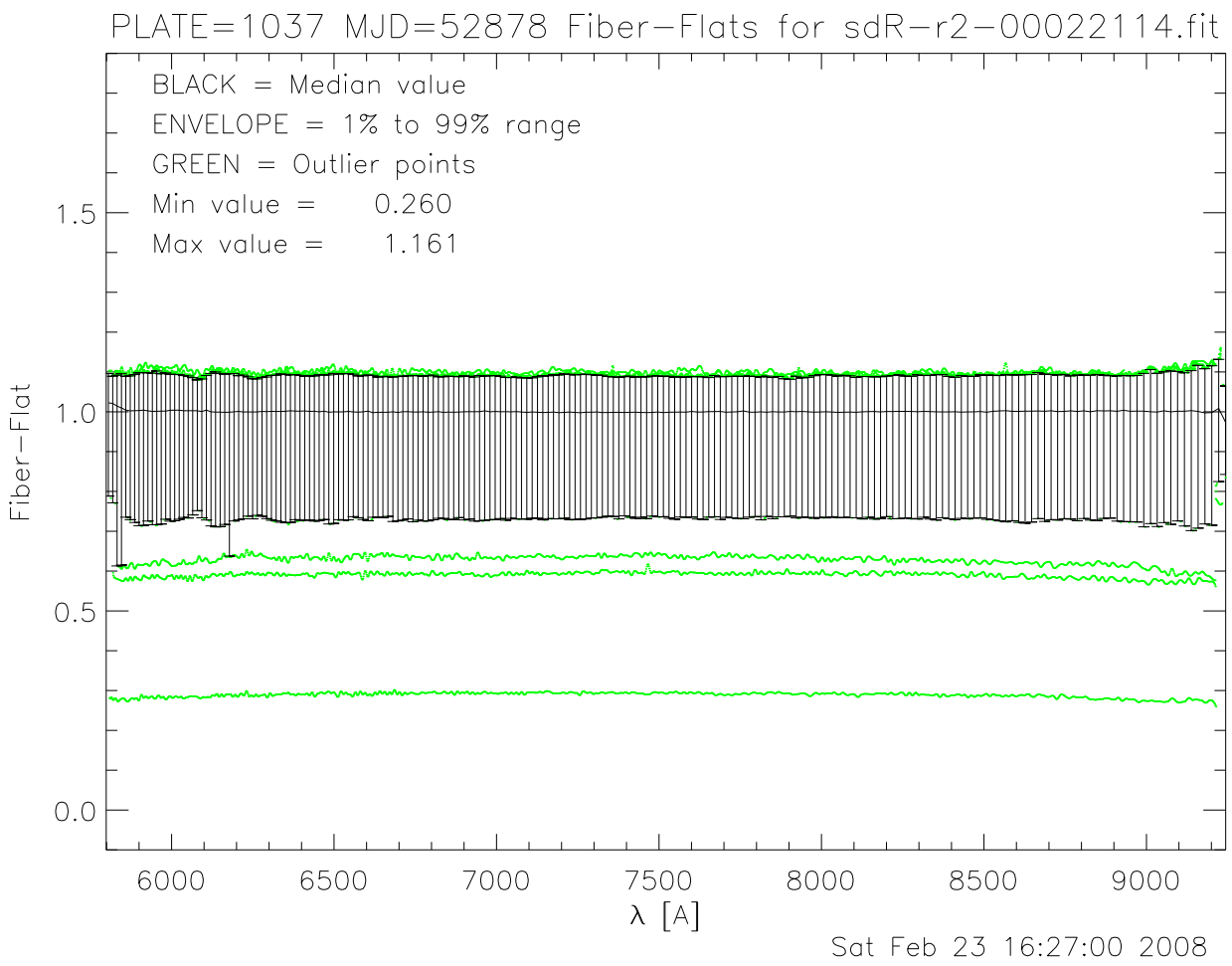

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

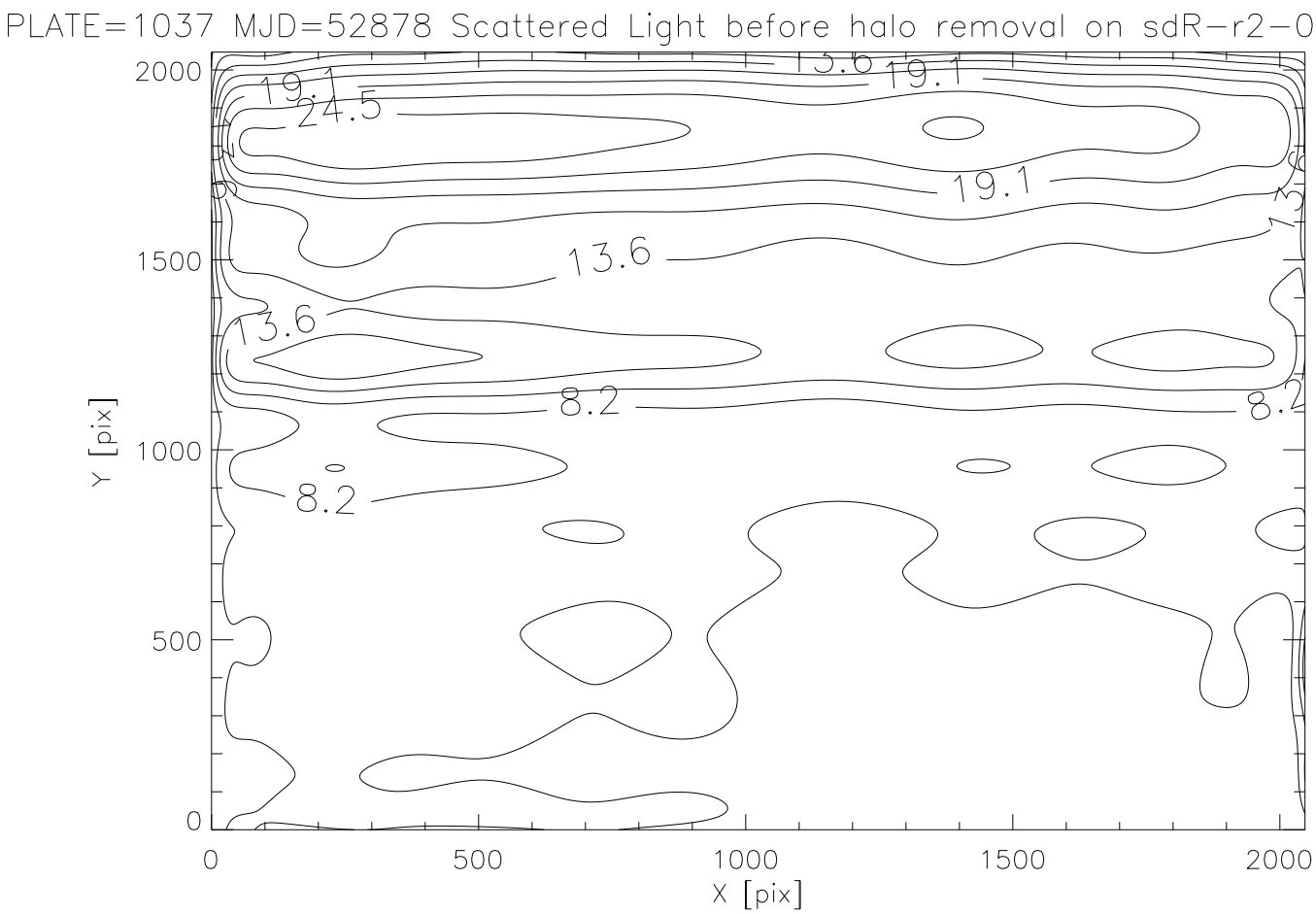

PLATE=1037 MJD=52878 sdR-r2-00022111.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

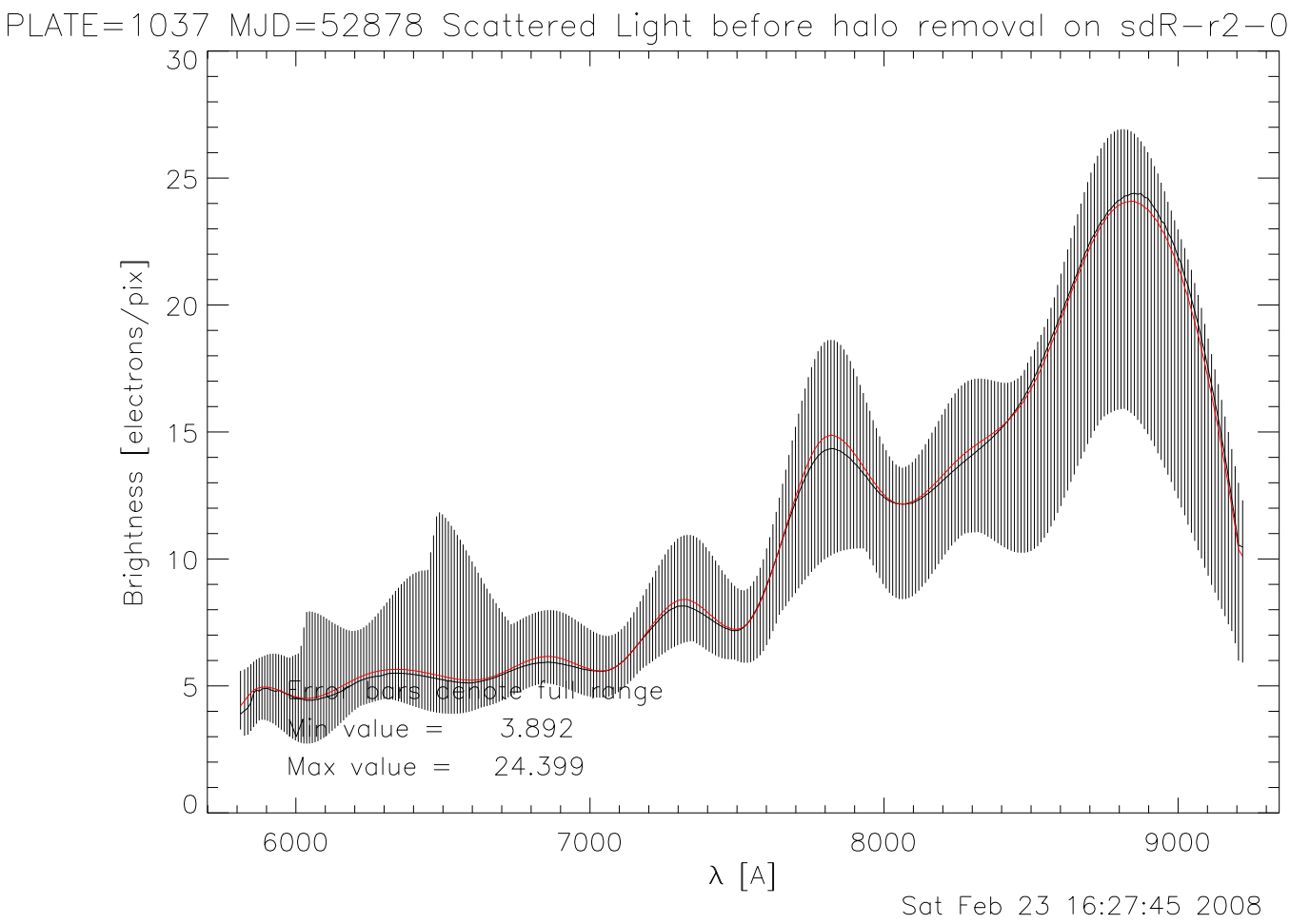

Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022111.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

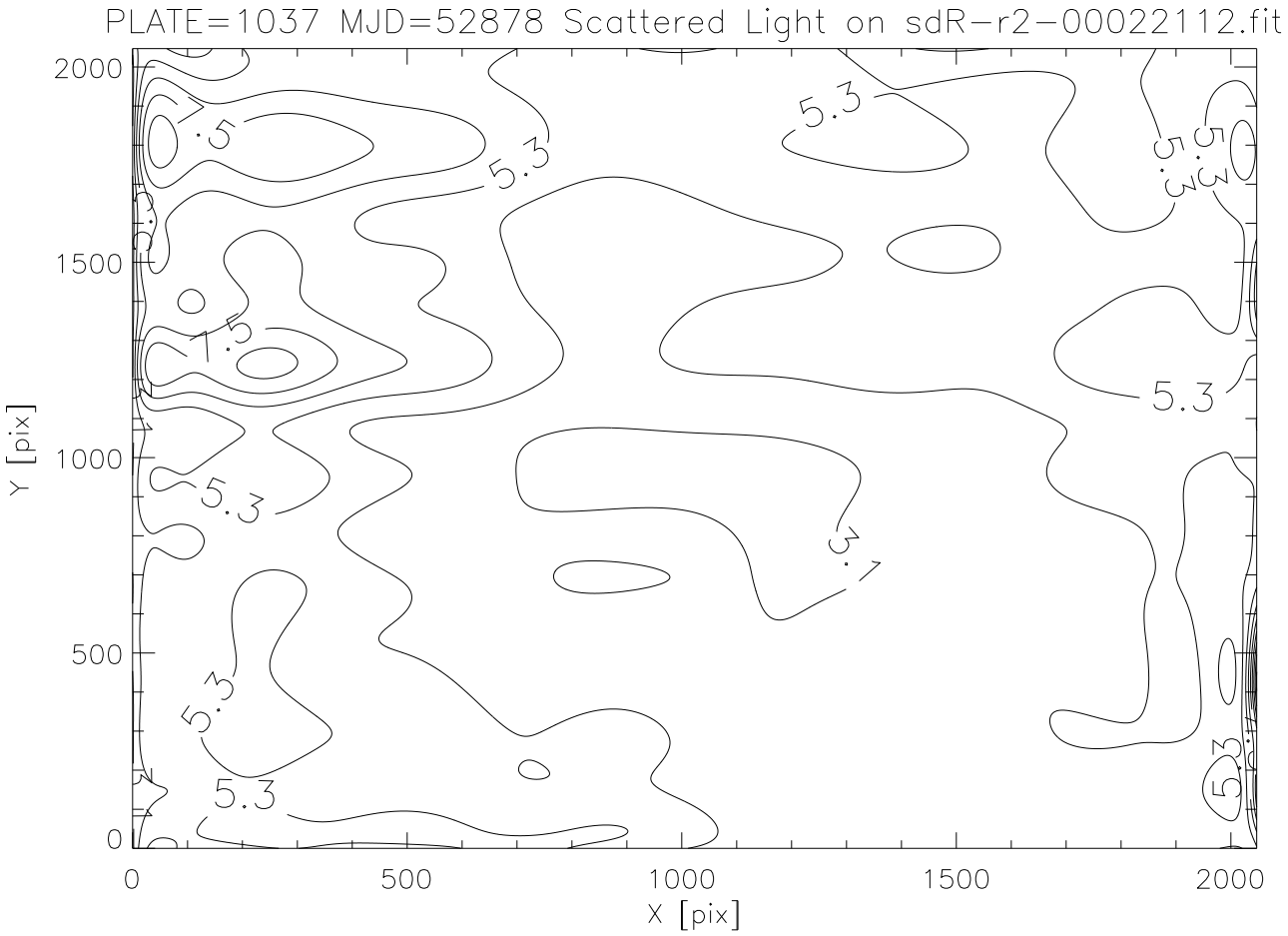

PLATE=1037 MJD=52878 sdR-r2-00022111.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED= sky fiber
Dispersion = 2.70 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

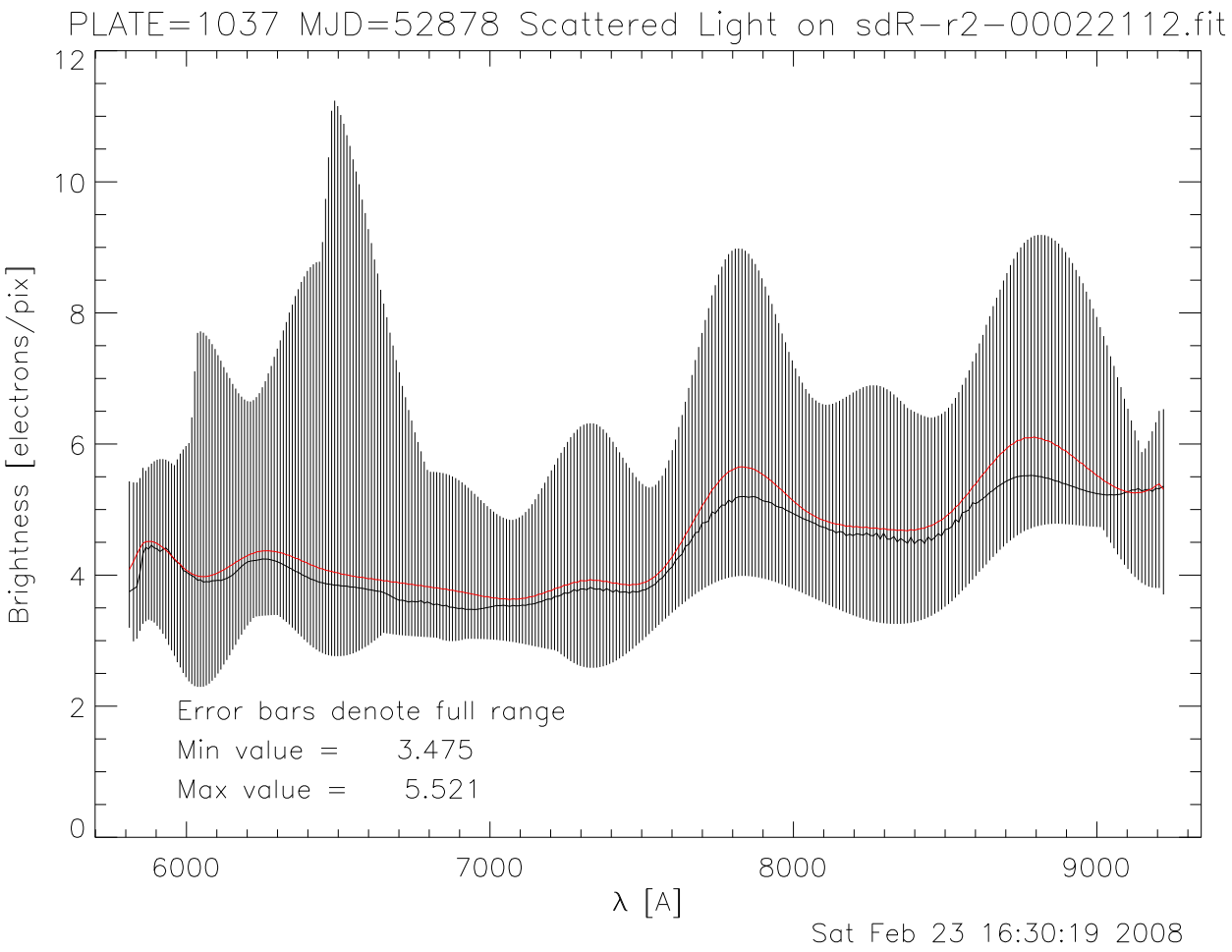

PLATE=1037 MJD=52878 sdR-r2-00022111.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.98 %
Fiber number
Focal Distance [mm]
Airmass

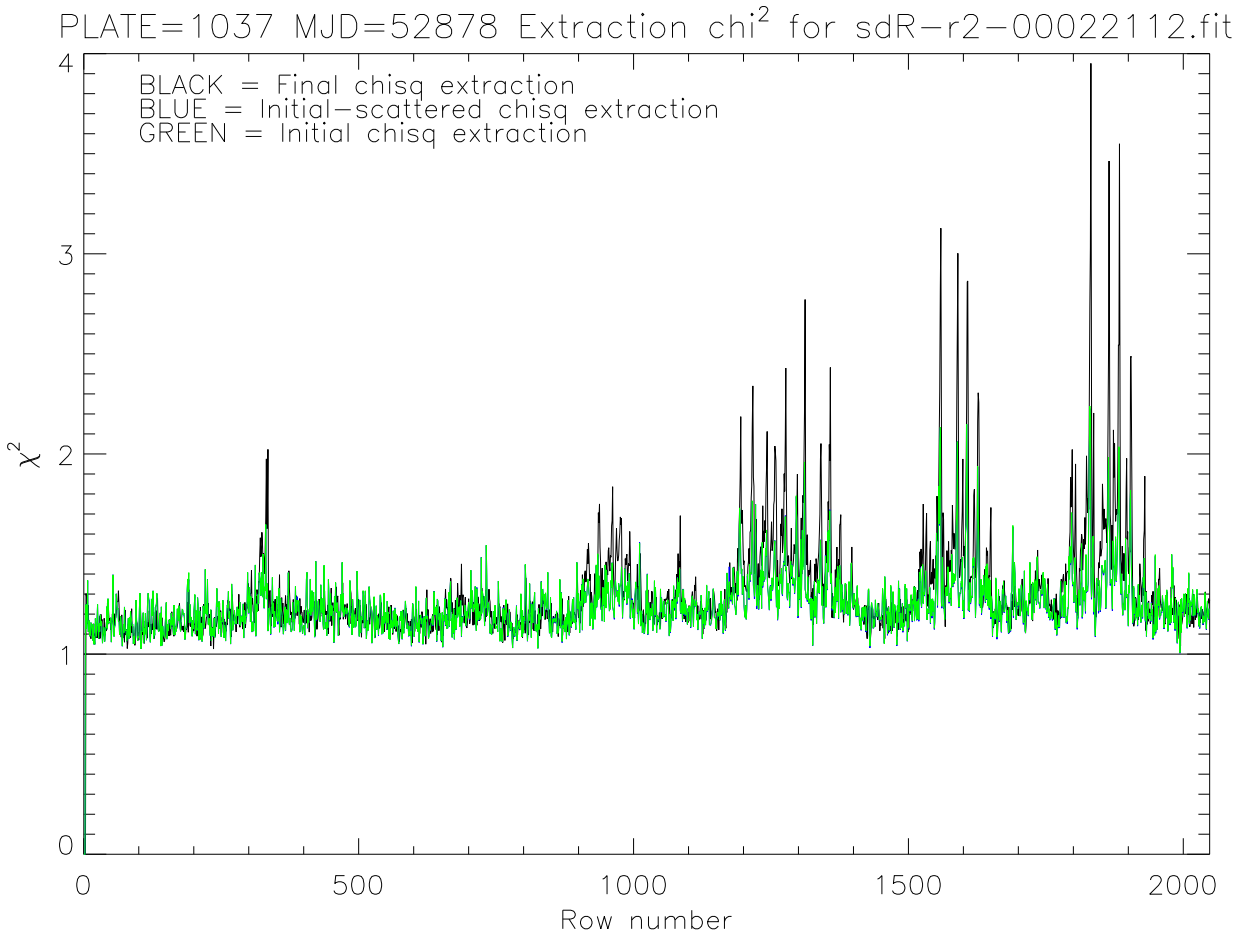

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.161
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:27:00 2008

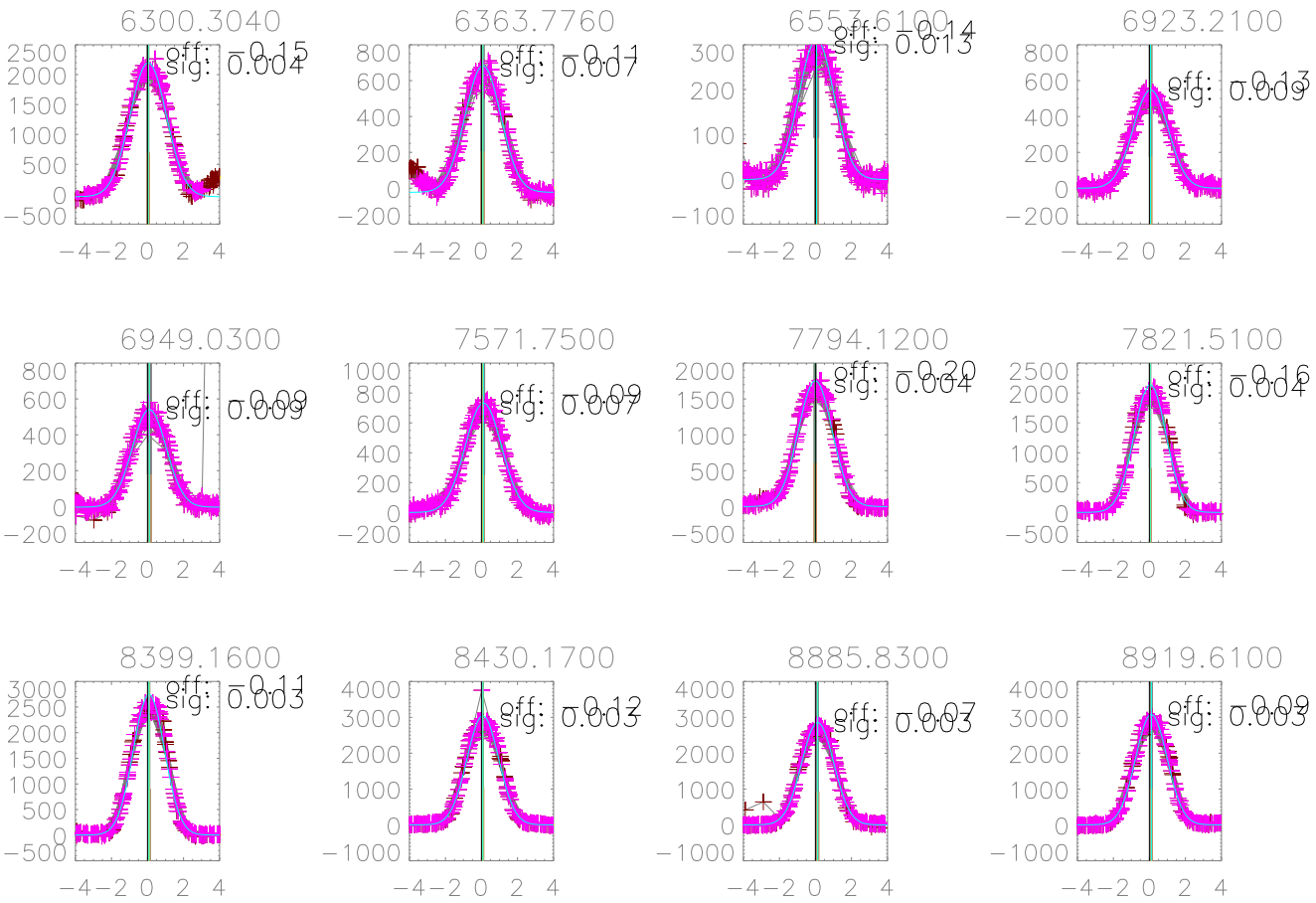

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022112.fi
19.1
24.5
13.6
19.1
19.1
13.6
13.6
8.2
8.2
8.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

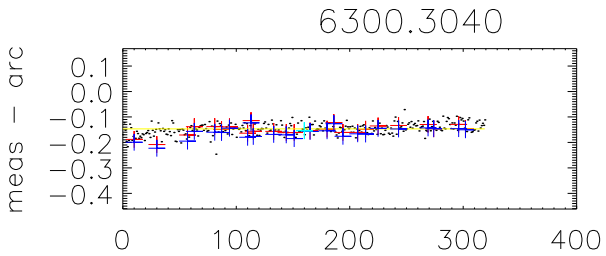

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022112.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.892
Max value = 24.399
Sat Feb 23 16:27:45 2008

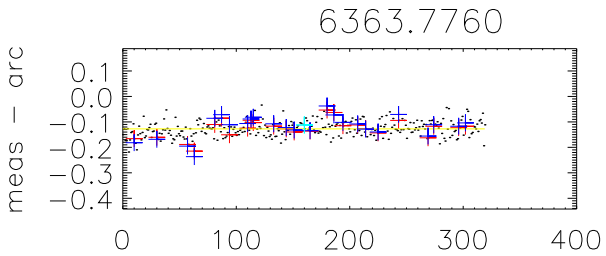

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022112.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.3
7.5
3.1

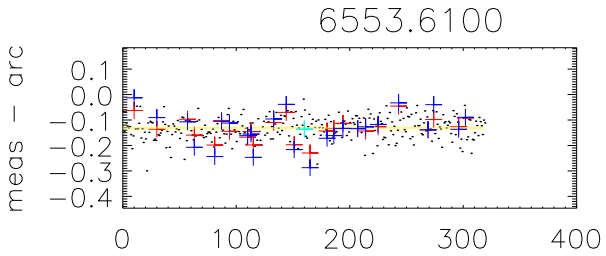

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022112.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.475
Max value = 5.521
Sat Feb 23 16:30:19 2008

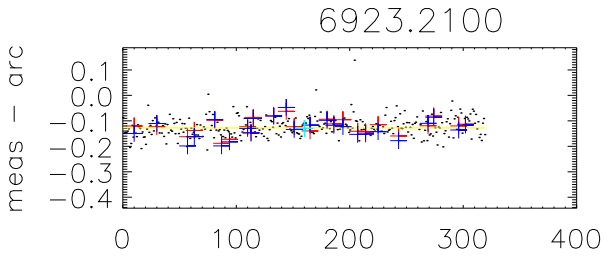

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r2−00022112.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

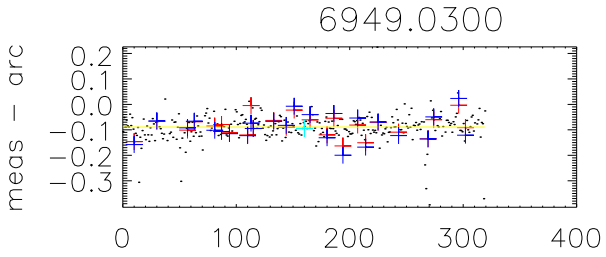

6300.3040
off: −0.15
sig: 0.004
6363.7760
off: −0.11
sig: 0.007
6553.6100
off: −0.14
sig: 0.013
6923.2100
off: −0.13
sig: 0.009
6949.0300
off: −0.09
sig: 0.009
7571.7500
off: −0.09
sig: 0.007
7794.1200
off: −0.20
sig: 0.004
7821.5100
off: −0.16
sig: 0.004
8399.1600
off: −0.11
sig: 0.003
8430.1700
off: −0.12
sig: 0.003
8885.8300
off: −0.07
sig: 0.003
8919.6100
off: −0.09
sig: 0.003

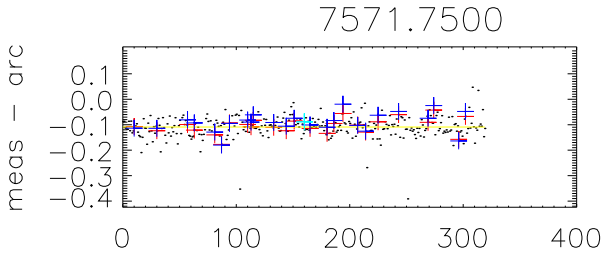

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

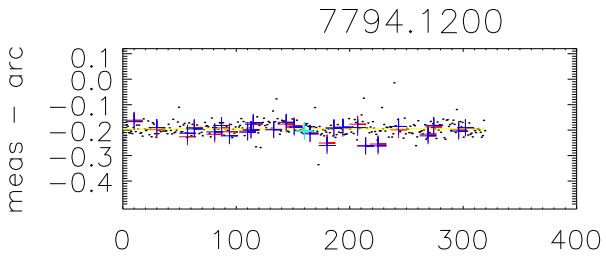

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

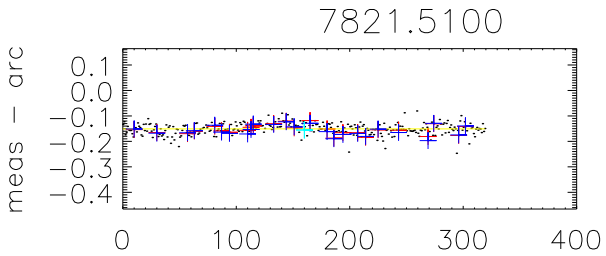

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

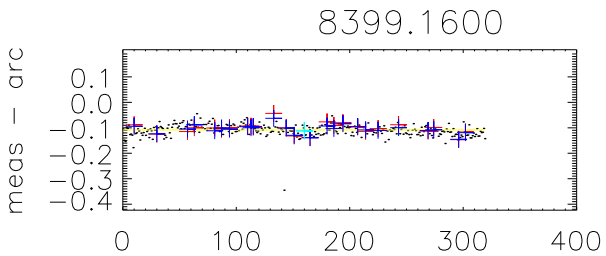

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

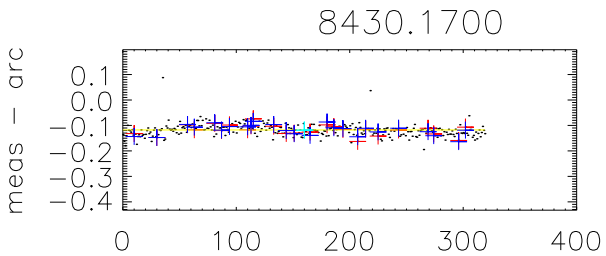

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

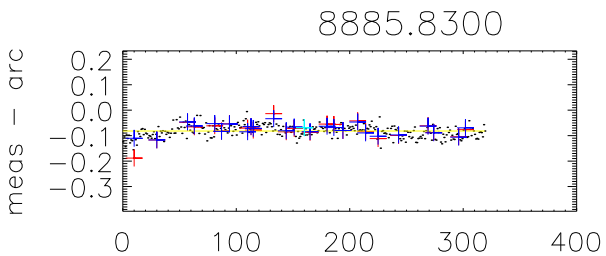

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

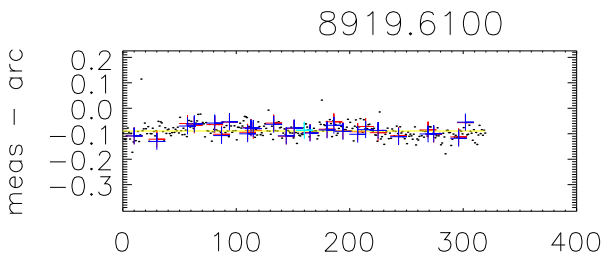

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

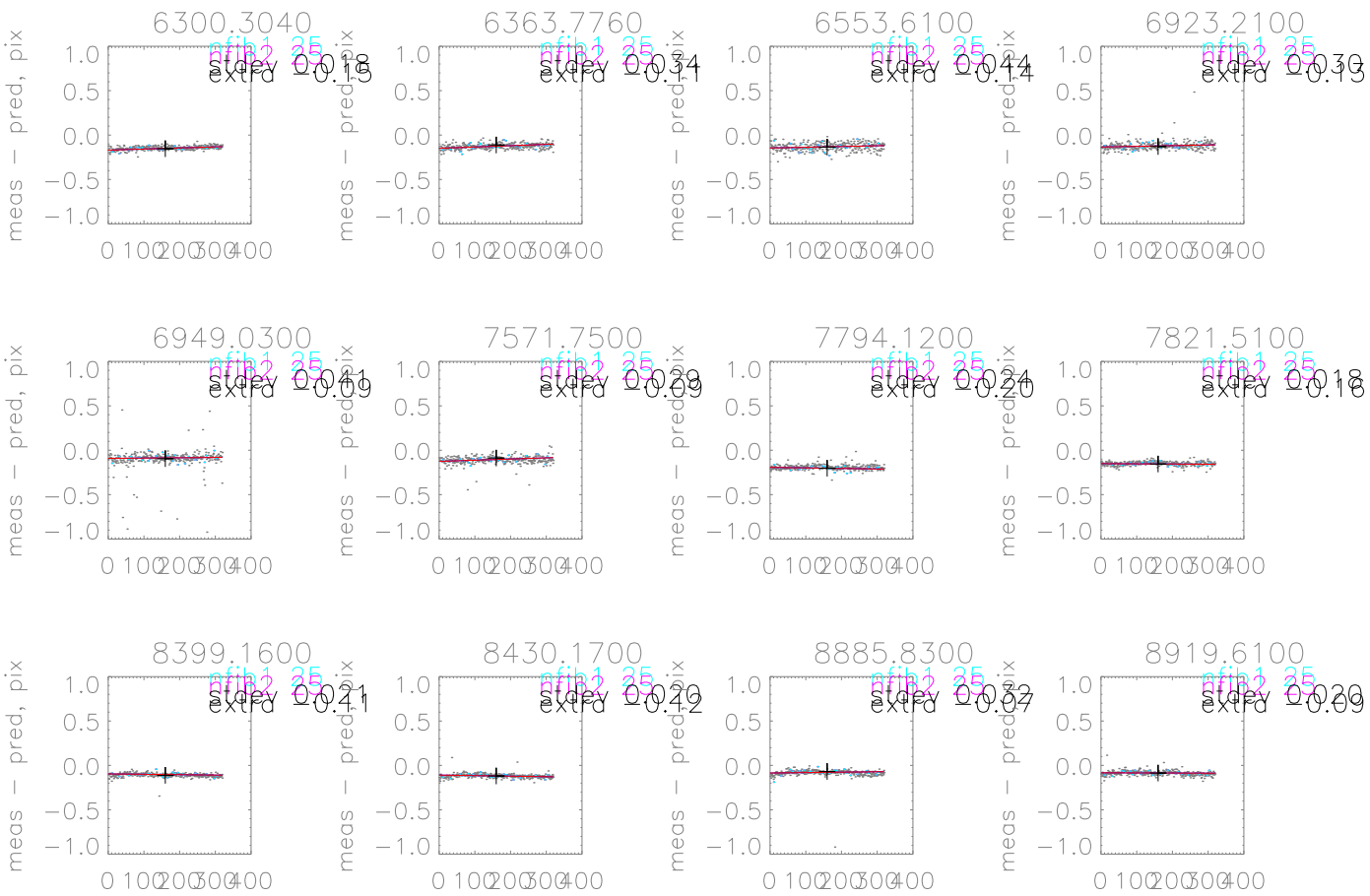

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

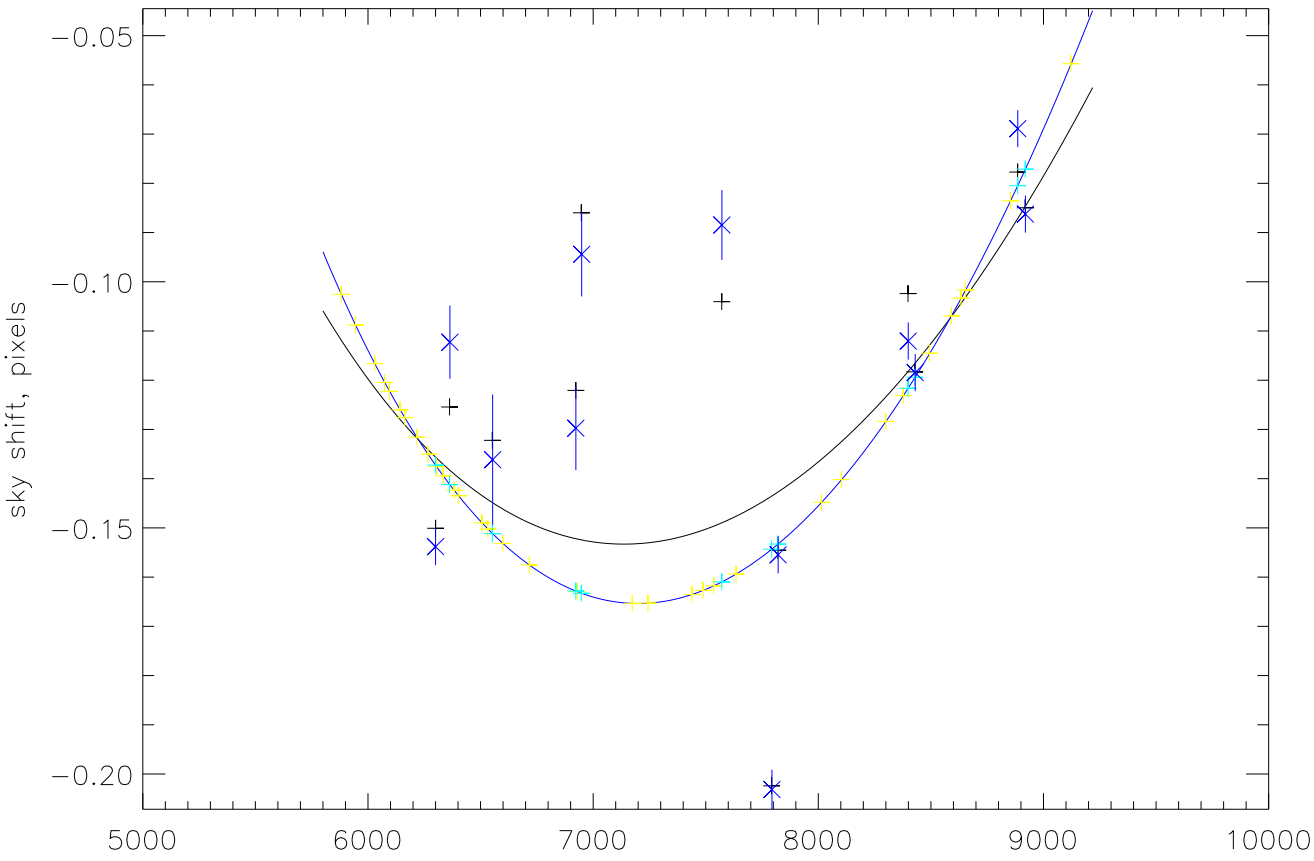

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

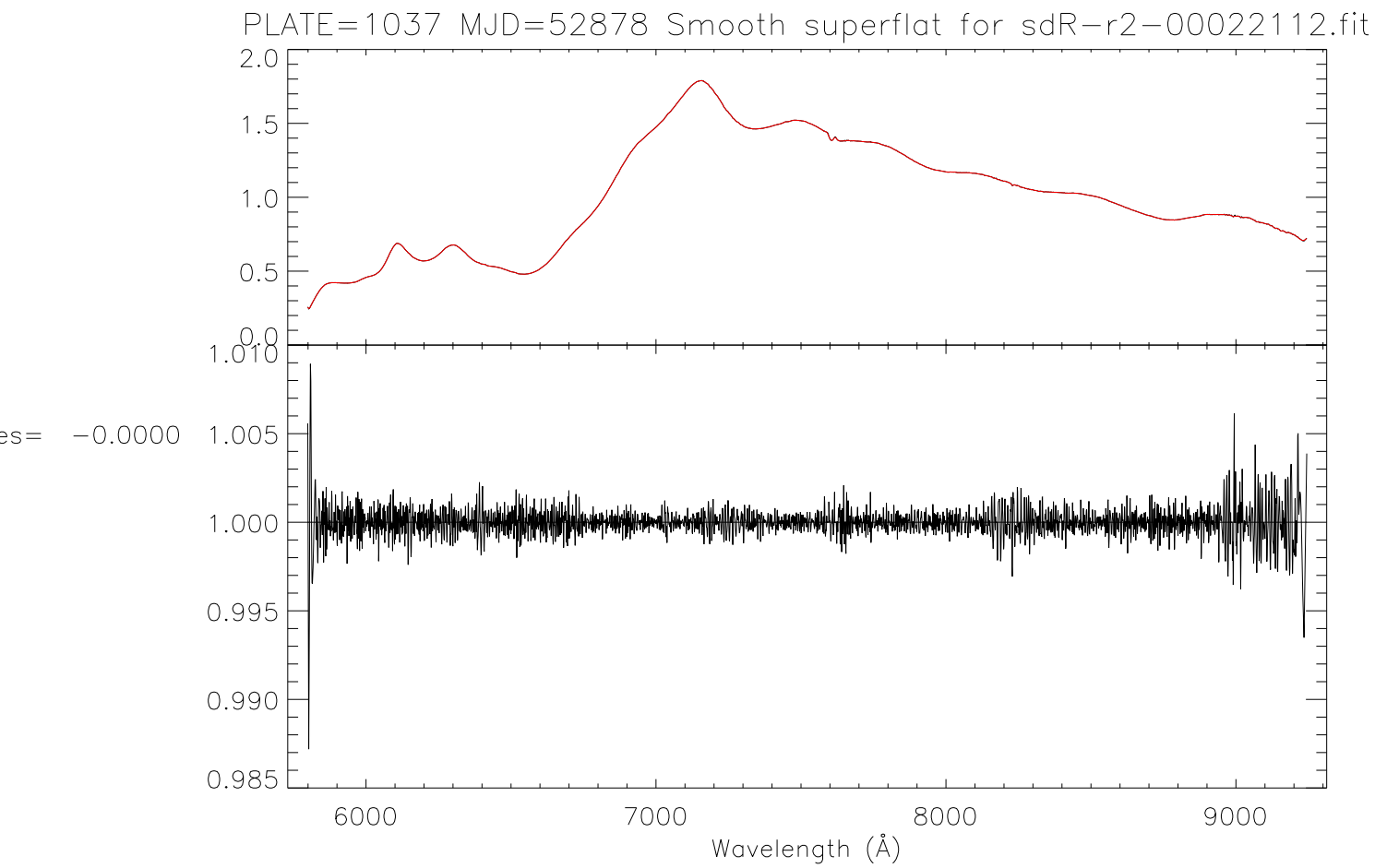

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

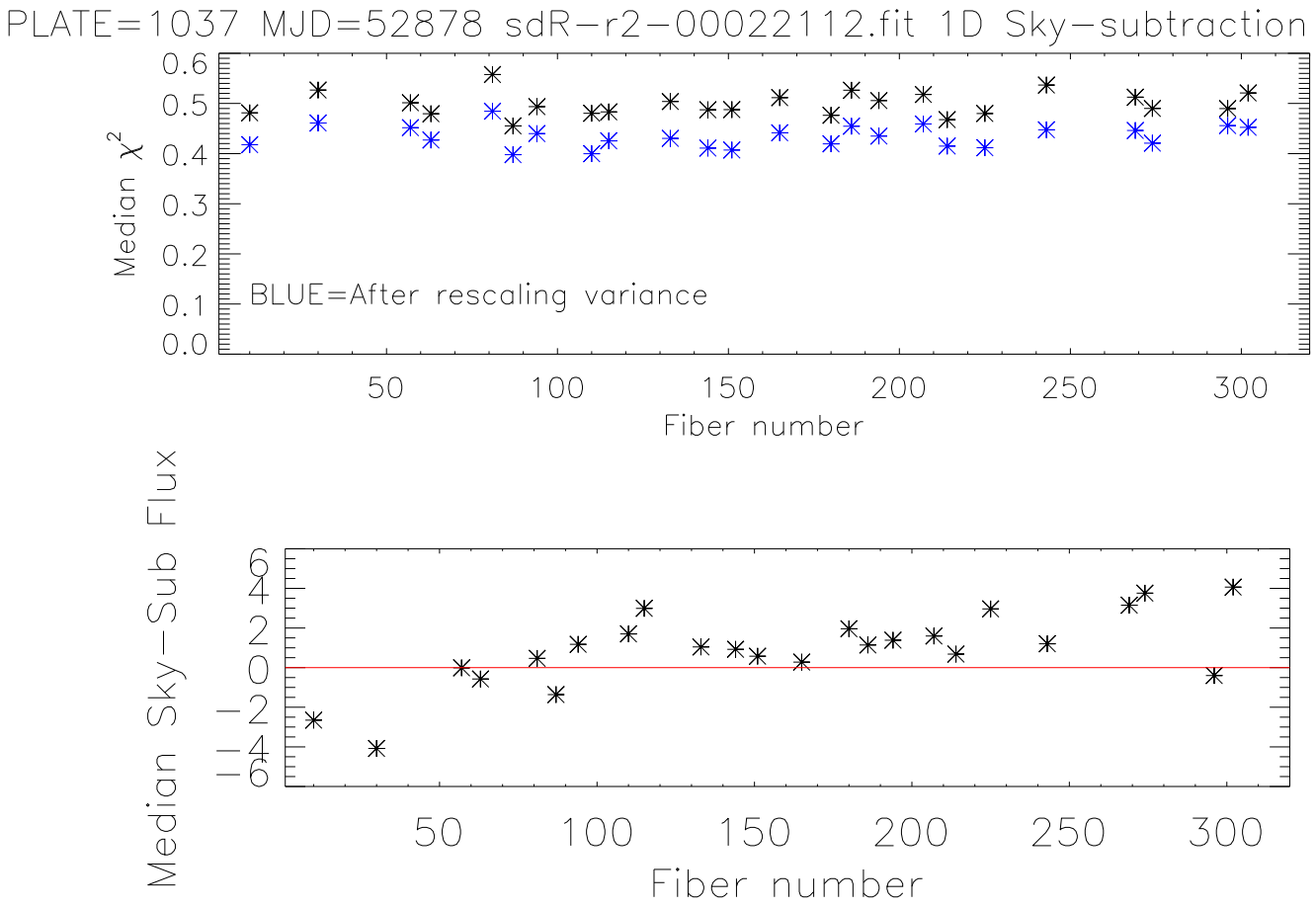

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

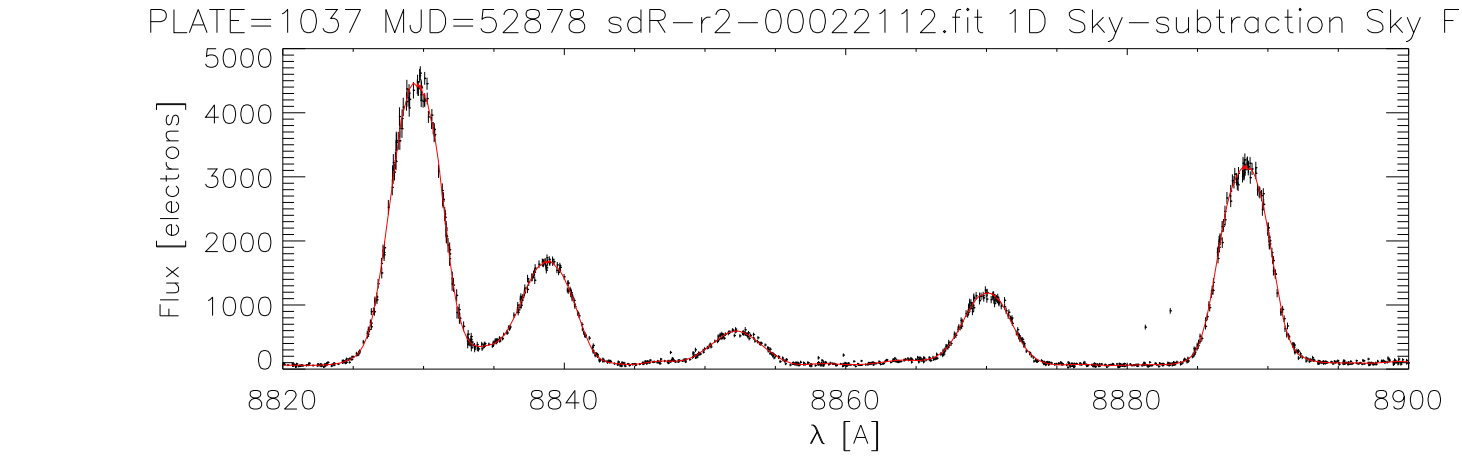

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

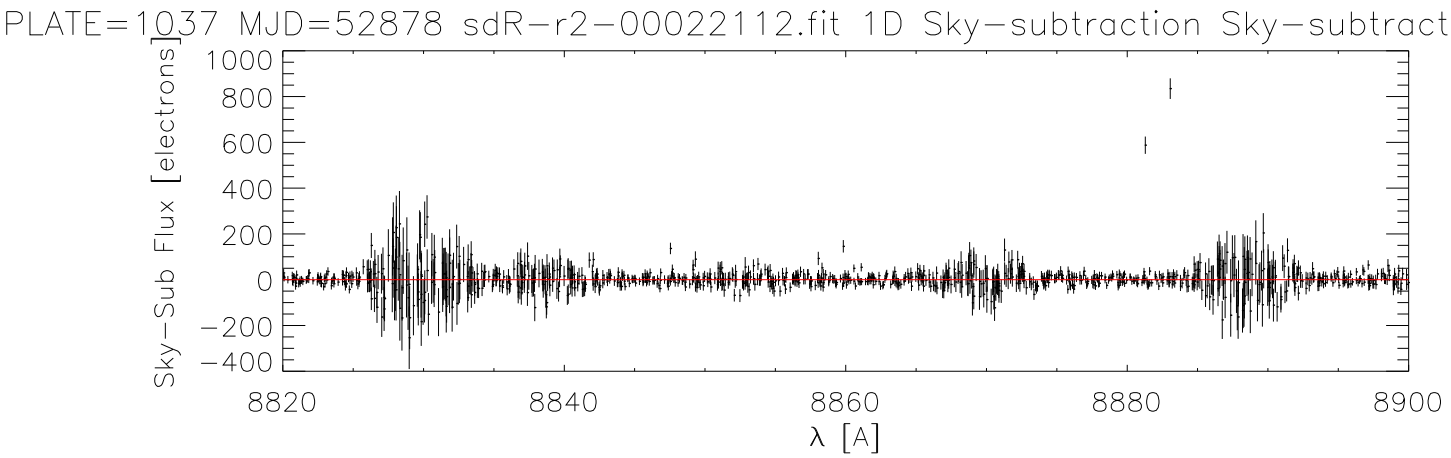

6300.3040
mfhd1 25
mfhd2 25
stdev 0.018
extra −0.15
6363.7760
mfhd1 25
mfhd2 25
stdev 0.034
extra −0.11
6553.6100
mfhd1 25
mfhd2 25
stdev 0.044
extra −0.14
6923.2100
mfhd1 25
mfhd2 25
stdev 0.030
extra −0.13
6949.0300
mfhd1 25
mfhd2 25
stdev 0.041
extra −0.09
7571.7500
mfhd1 25
mfhd2 25
stdev 0.029
extra −0.09
7794.1200
mfhd1 25
mfhd2 25
stdev 0.034
extra −0.20
7821.5100
mfhd1 25
mfhd2 25
stdev 0.018
extra −0.16
8399.1600
mfhd1 25
mfhd2 25
stdev 0.021
extra −0.41
8430.1700
mfhd1 25
mfhd2 25
stdev 0.020
extra −0.42
8885.8300
mfhd1 25
mfhd2 25
stdev 0.032
extra −0.07
8919.6100
mfhd1 25
mfhd2 25
stdev 0.020
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

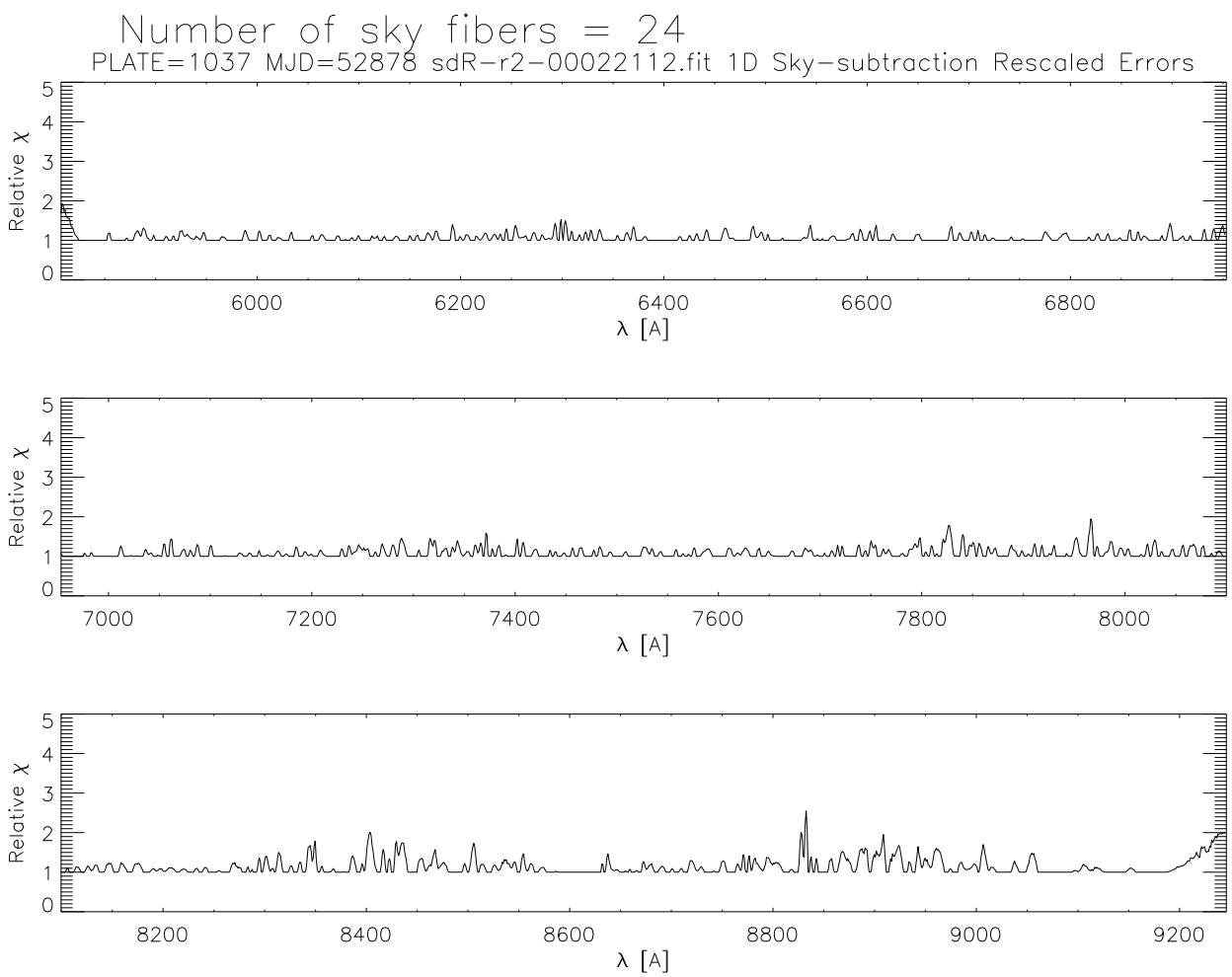

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

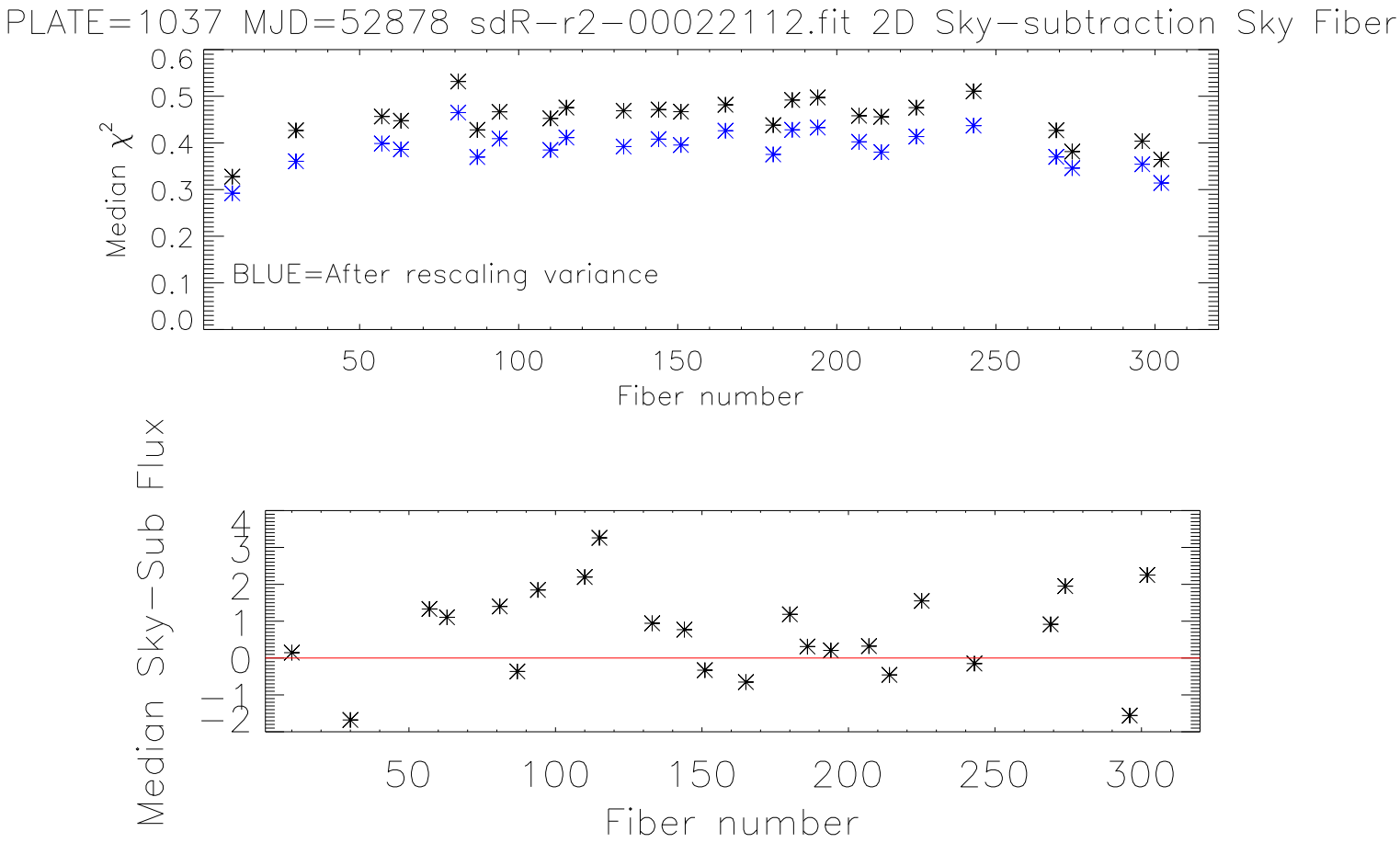

PLATE=1037 MJD=52878 Smooth superflat for sdR-r2-00022112.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

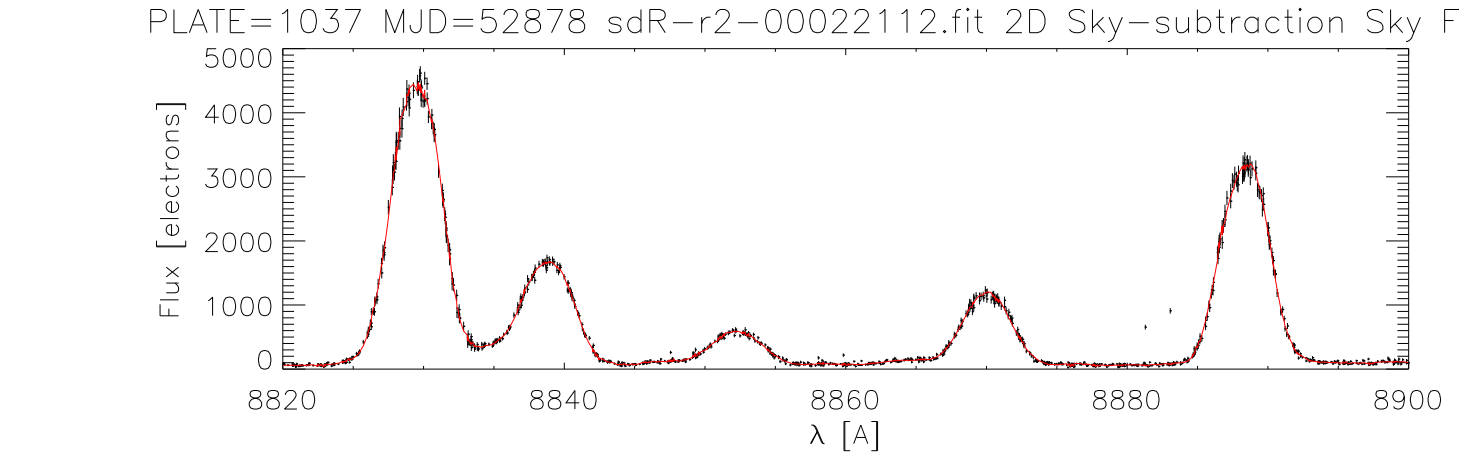

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

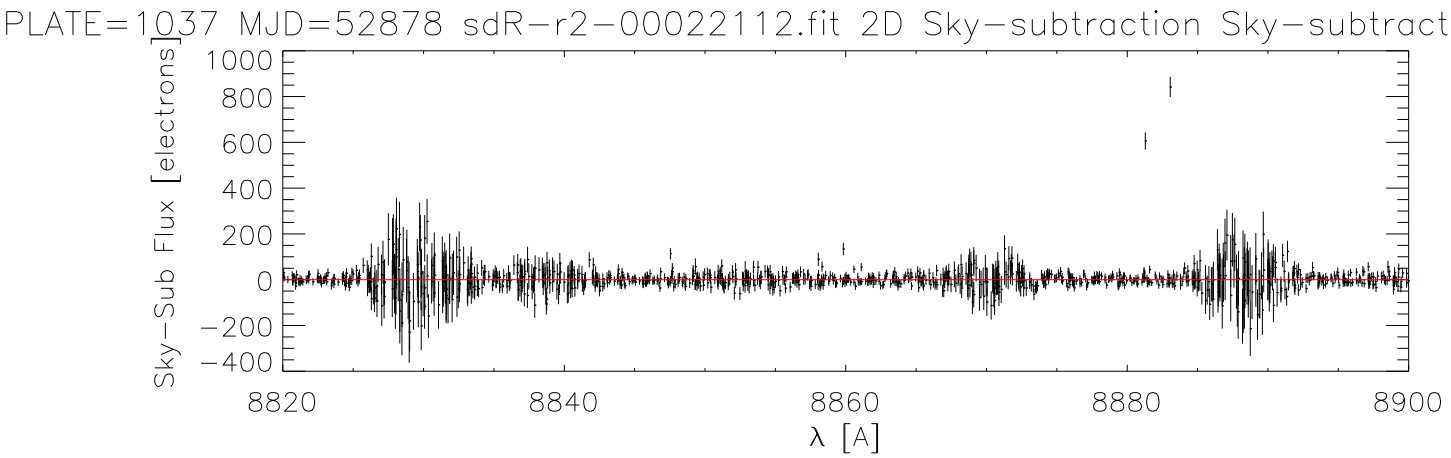

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

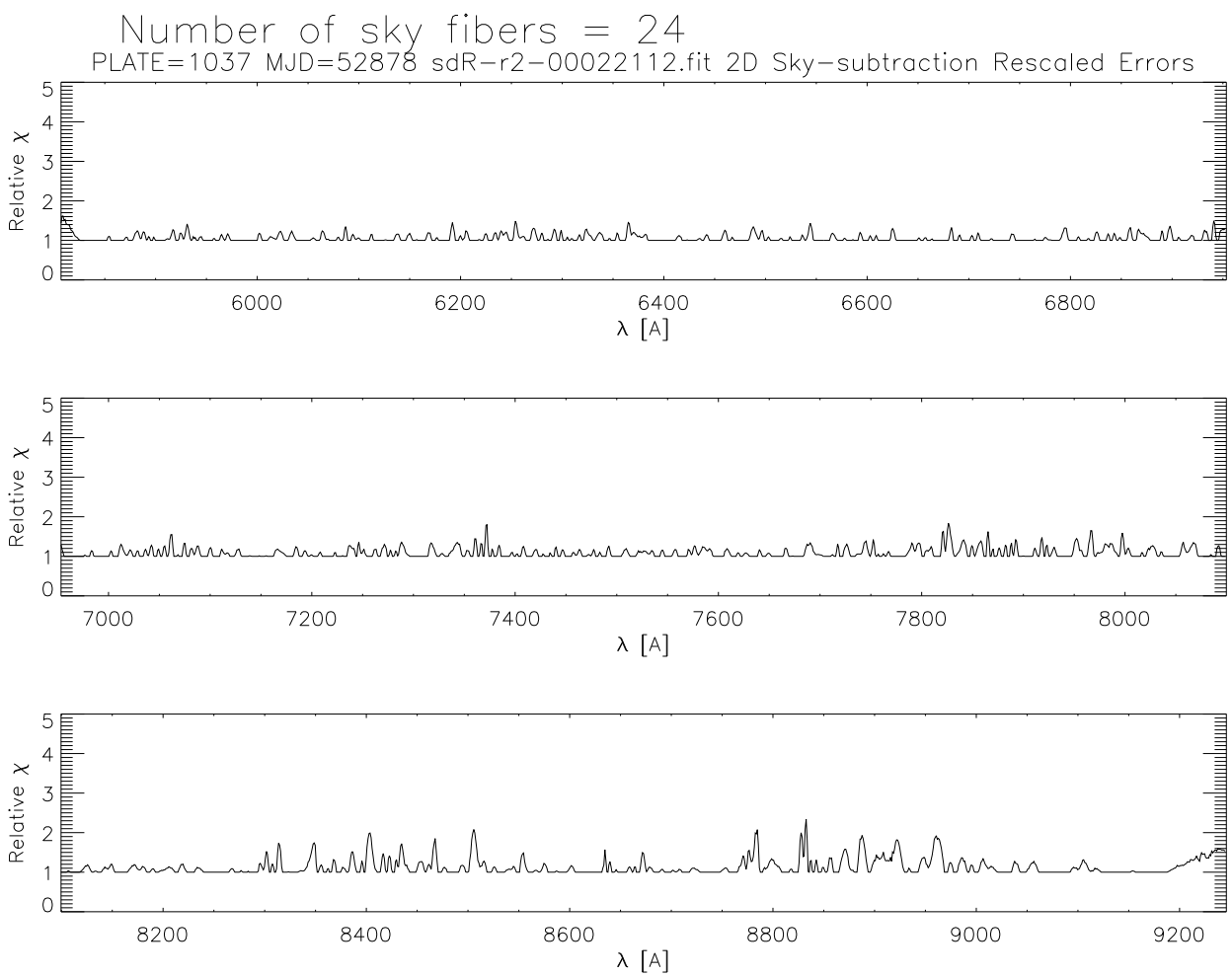

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

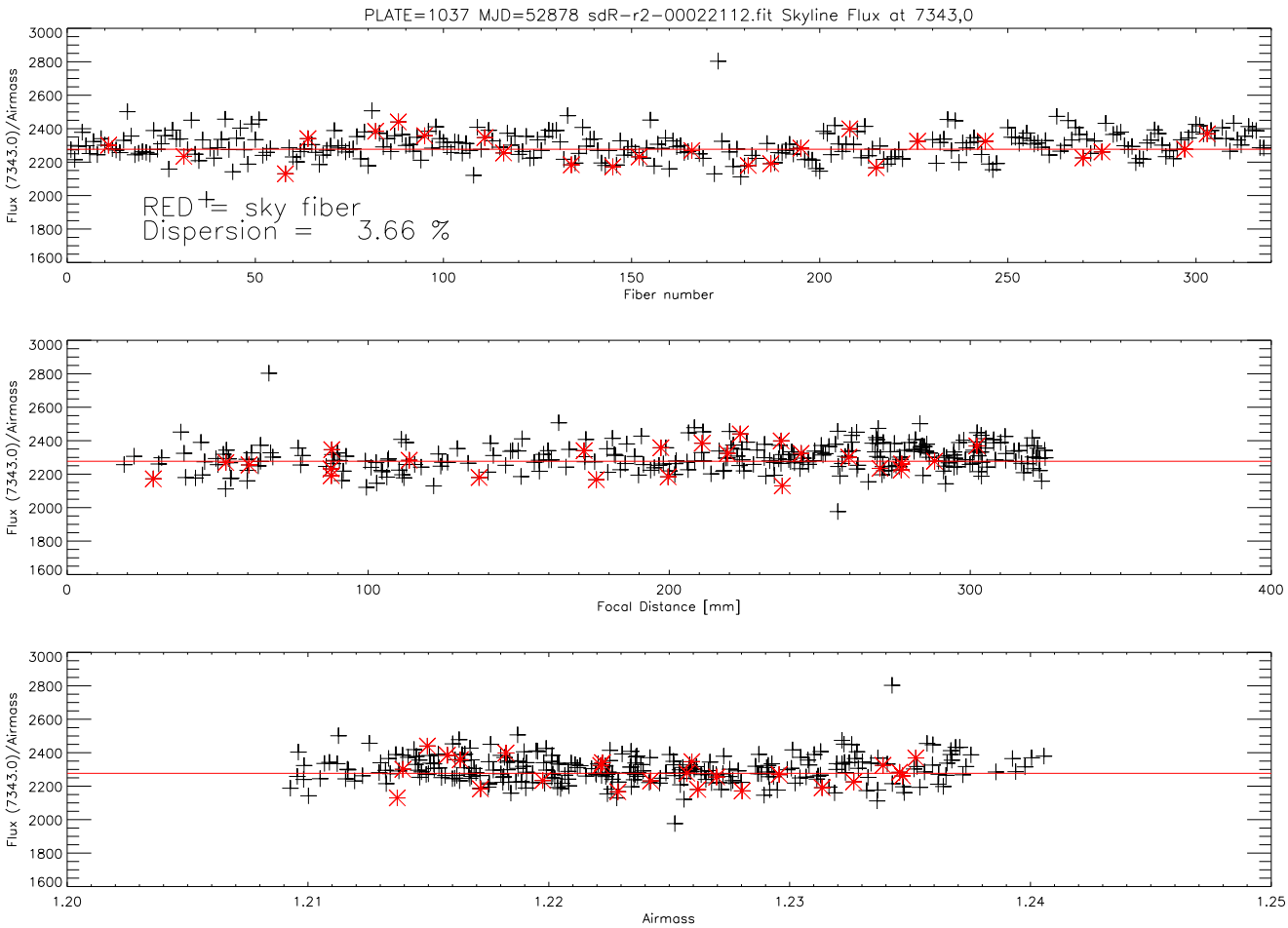

Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022112.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

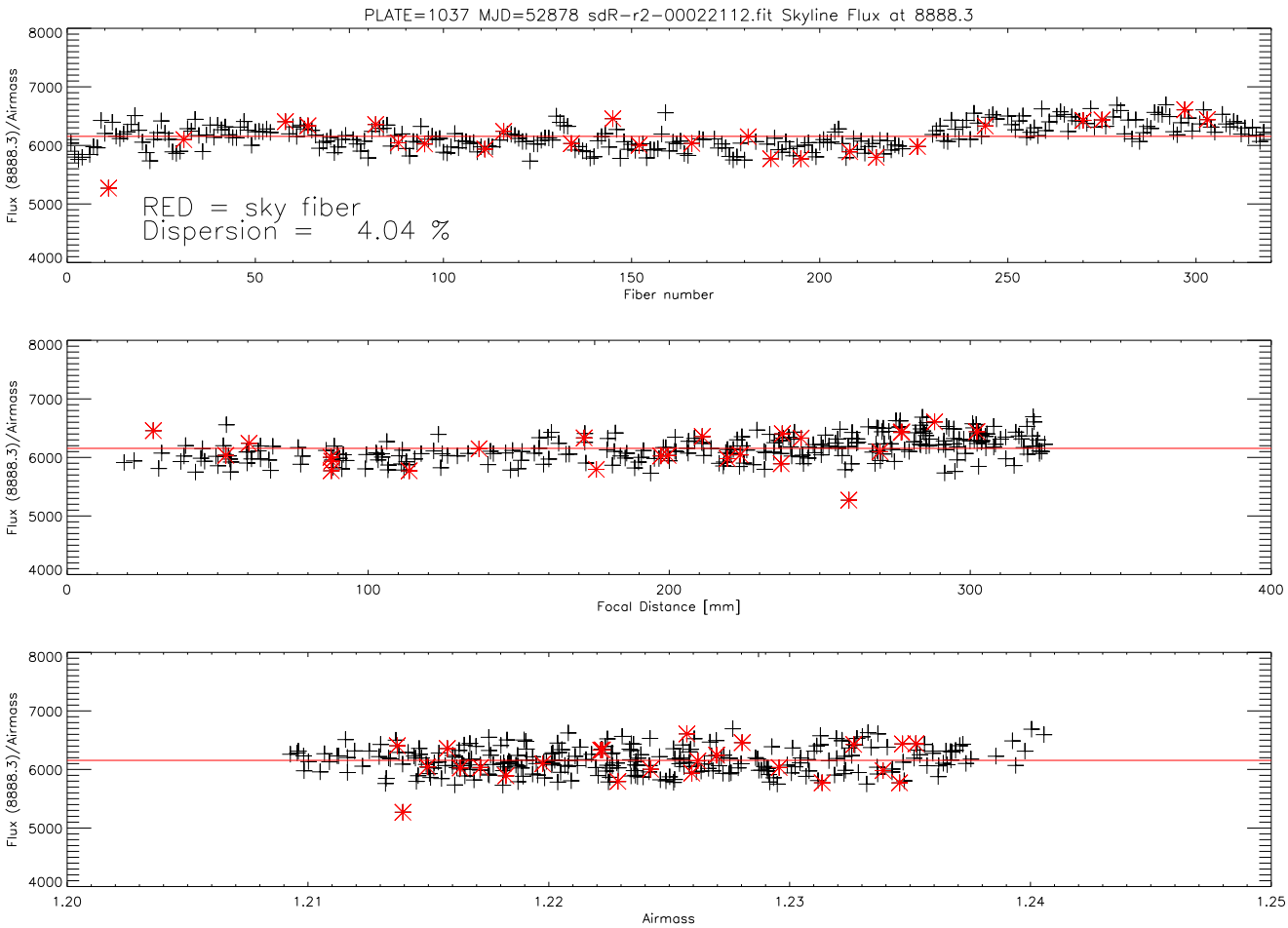

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

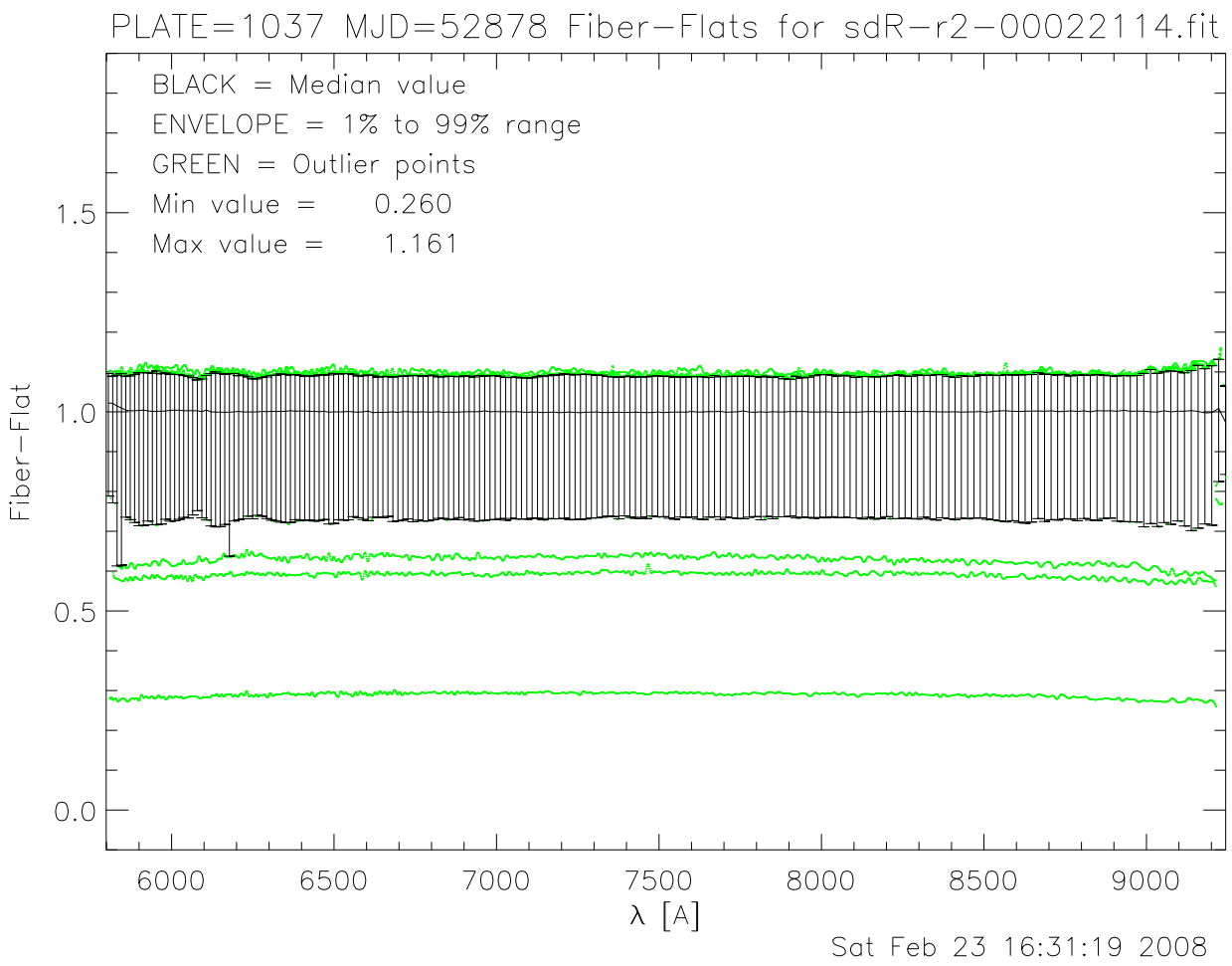

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

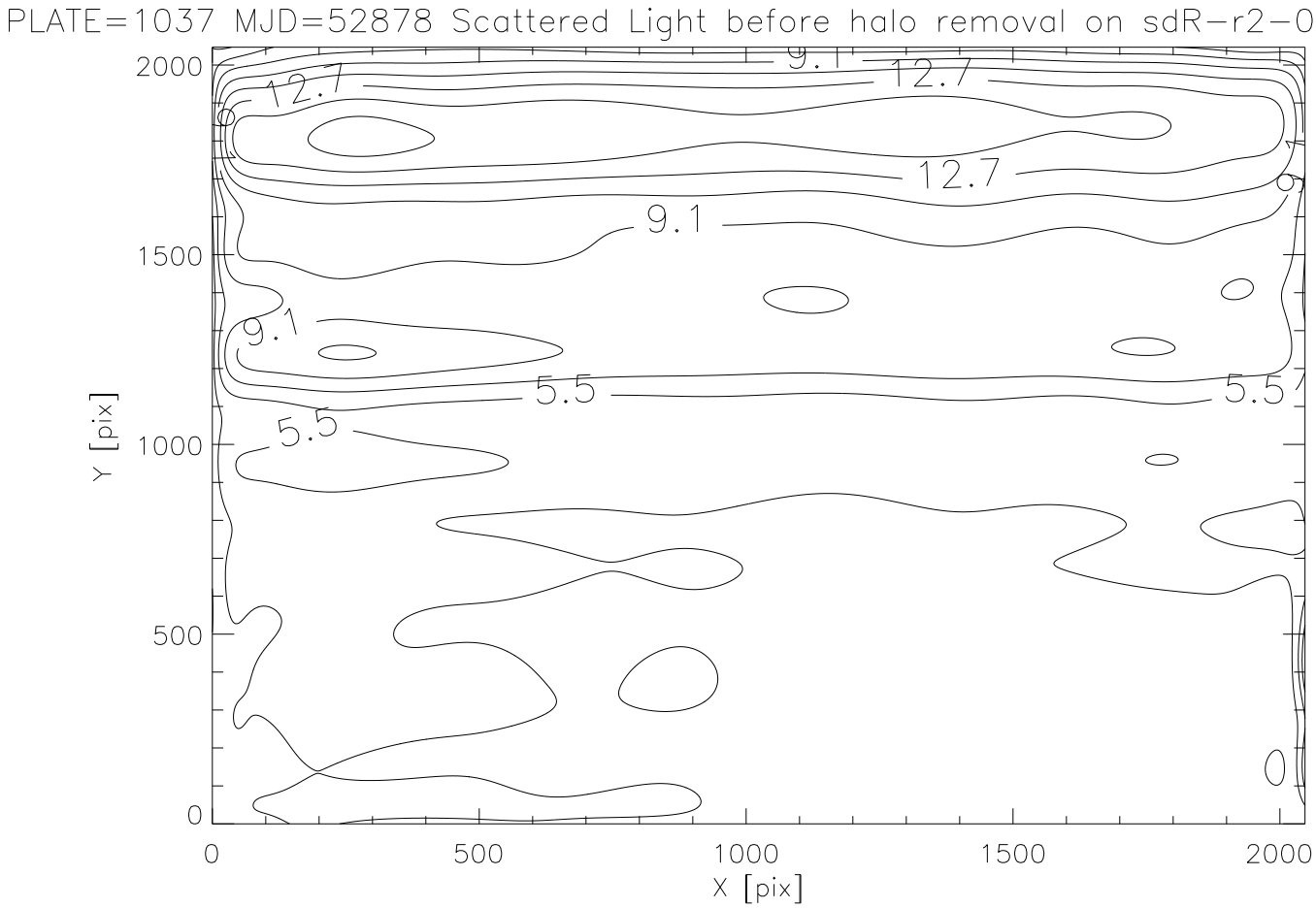

PLATE=1037 MJD=52878 sdR-r2-00022112.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

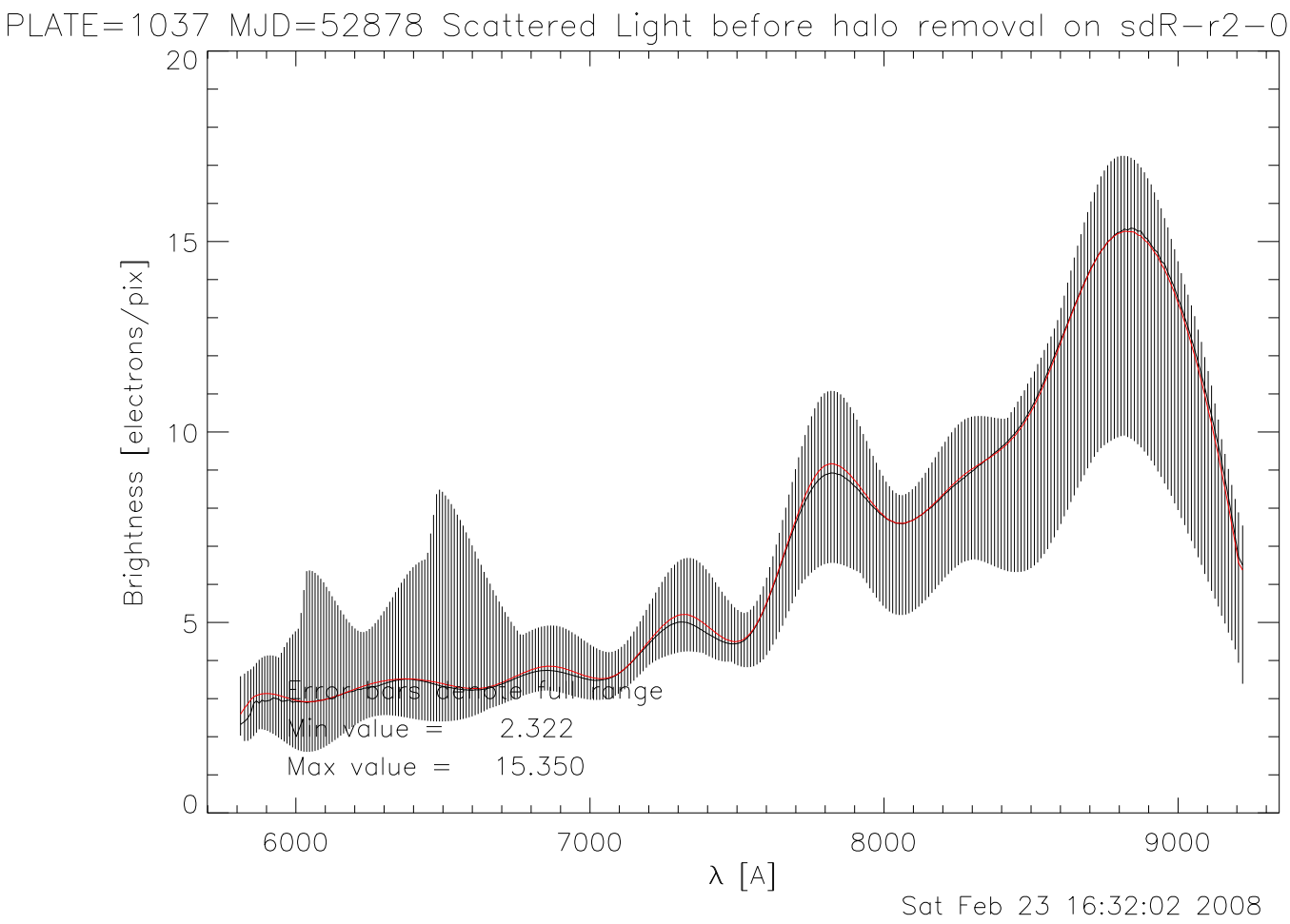

Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022112.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

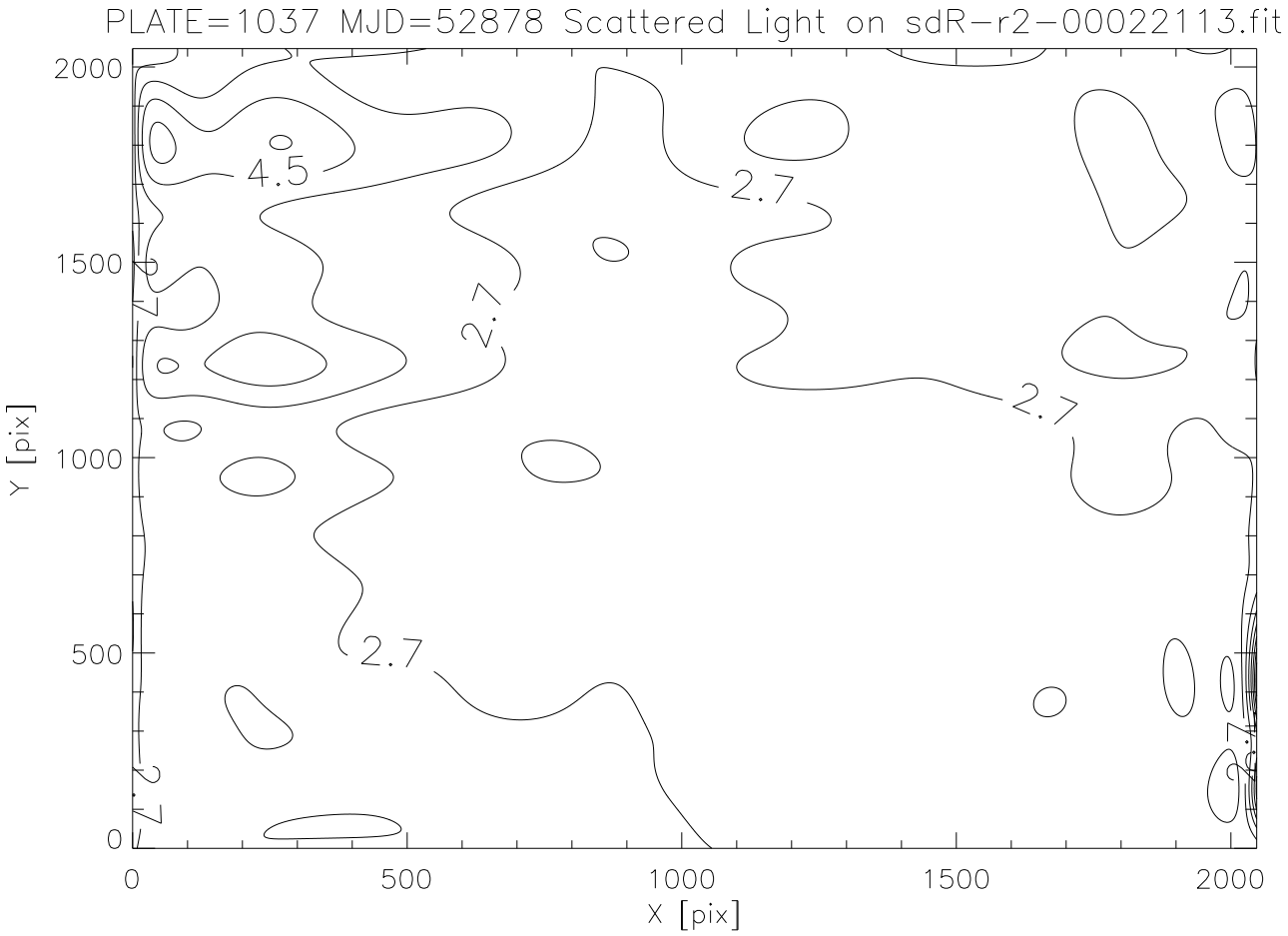

PLATE=1037 MJD=52878 sdR-r2-00022112.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED += sky fiber
Dispersion = 3.66 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

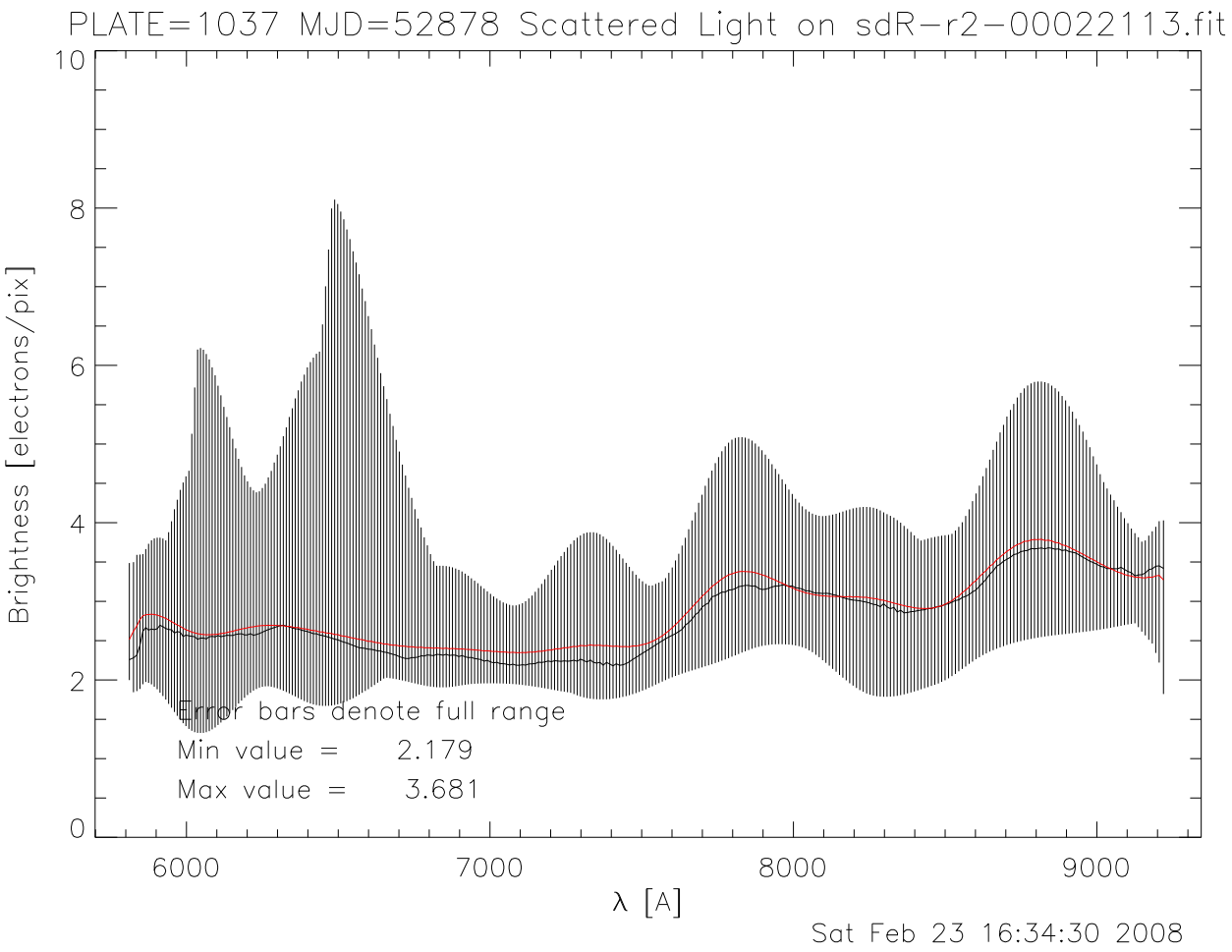

PLATE=1037 MJD=52878 sdR-r2-00022112.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.04 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

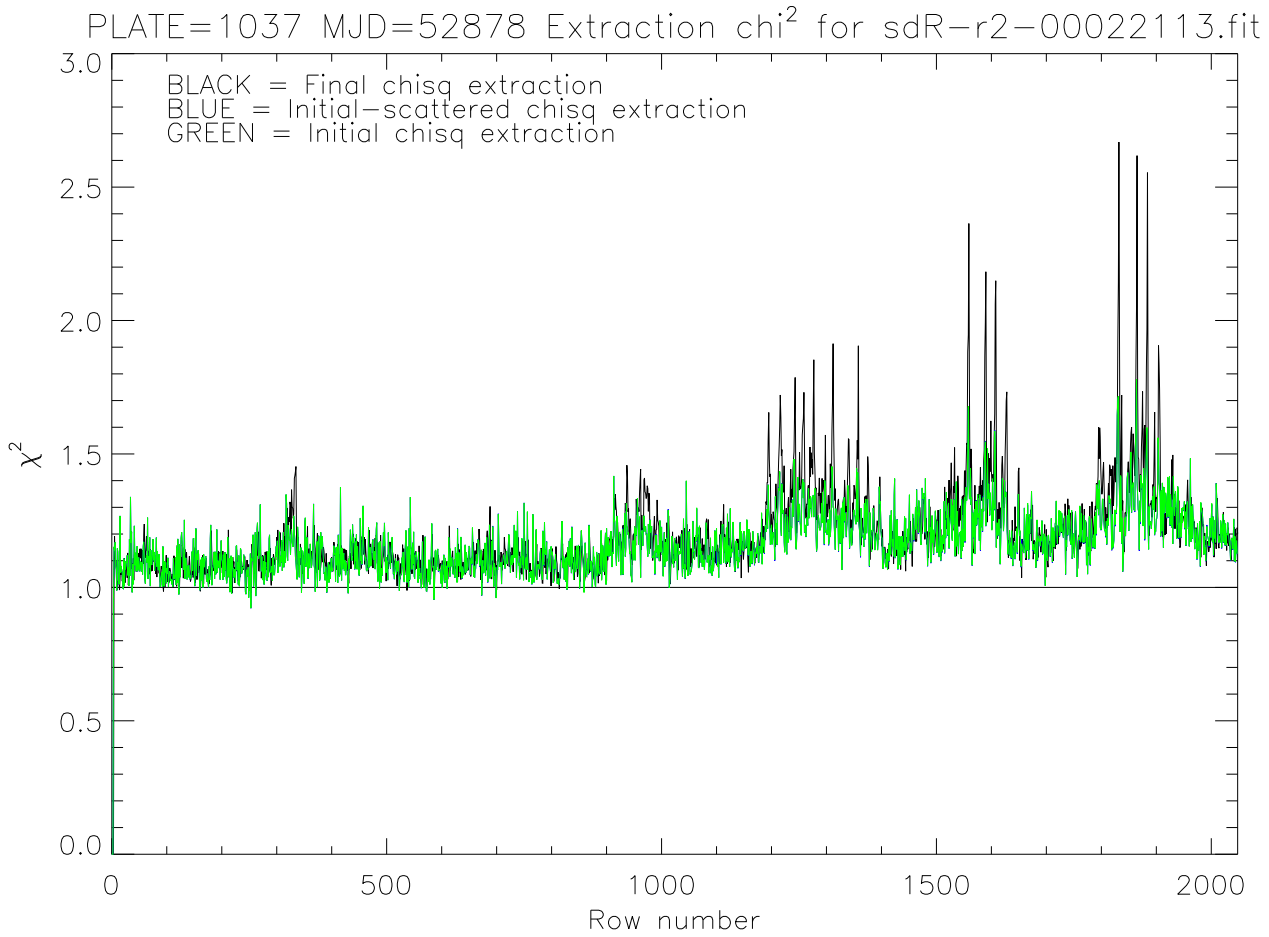

PLATE=1037 MJD=52878 Fiber−Flats for sdR−r2−00022114.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.260
Max value = 1.161
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 23 16:31:19 2008

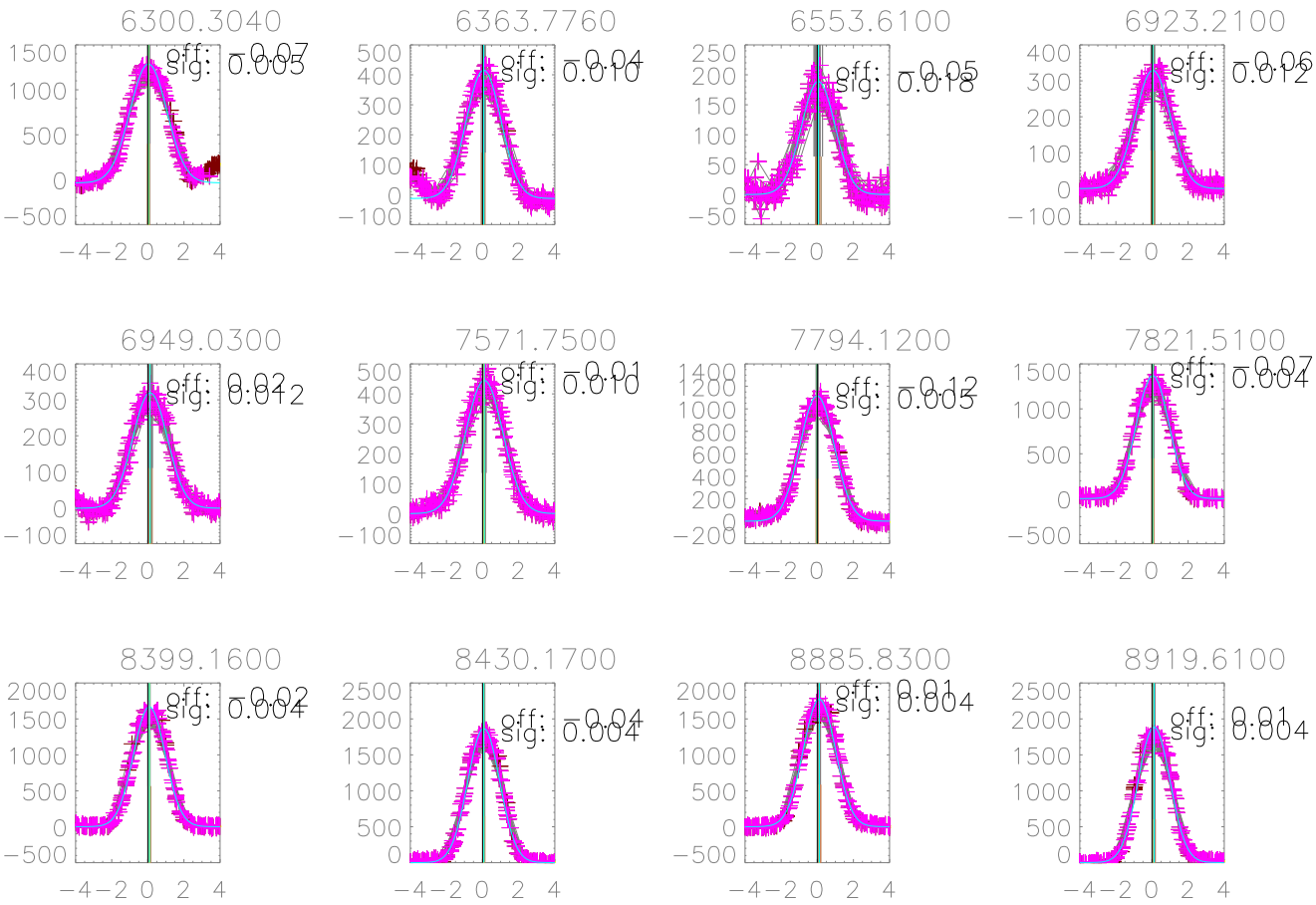

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022113.fi
12.7
9.1
5.5
0
Y [pix]
X [pix]
0
500
1000
1500
2000

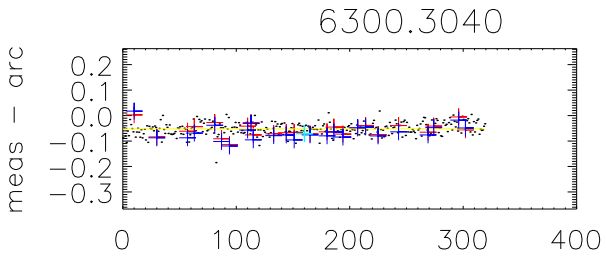

PLATE=1037 MJD=52878 Scattered Light before halo removal on sdR-r2-00022113.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.322
Max value = 15.350
Sat Feb 23 16:32:02 2008

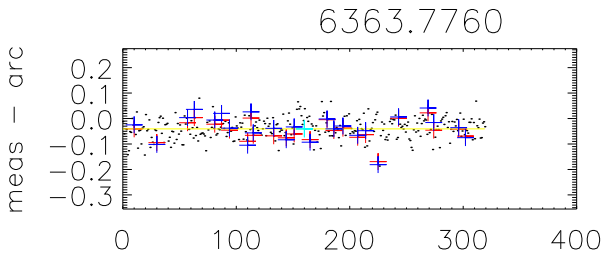

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022113.fit
4.5
2.7
2.7
2.7
2.7
2.7
2.7
Y [pix]
X [pix]
0
500
1000
1500
2000

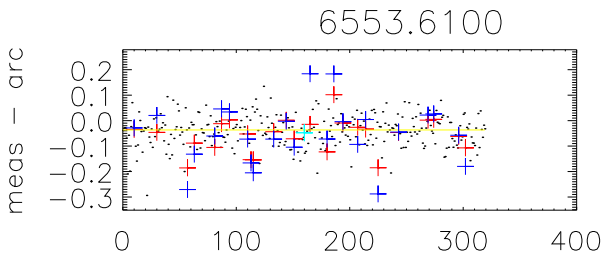

PLATE=1037 MJD=52878 Scattered Light on sdR-r2-00022113.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.179
Max value = 3.681
Sat Feb 23 16:34:30 2008

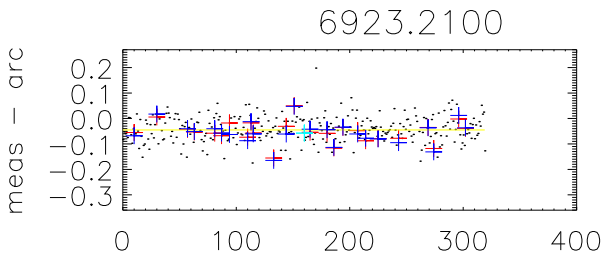

PLATE=1037 MJD=52878 Extraction chi^2 for sdR−r2−00022113.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

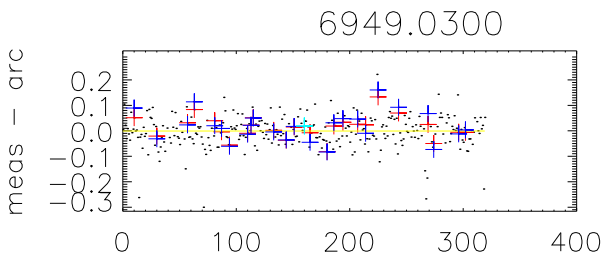

6300.3040
off: −0.07
sig: 0.005
6363.7760
off: −0.04
sig: 0.010
6553.6100
off: −0.05
sig: 0.018
6923.2100
off: −0.06
sig: 0.012
6949.0300
off: 0.02
sig: 0.012
7571.7500
off: −0.01
sig: 0.010
7794.1200
off: −0.12
sig: 0.005
7821.5100
off: −0.07
sig: 0.004
8399.1600
off: −0.02
sig: 0.004
8430.1700
off: −0.04
sig: 0.004
8885.8300
off: 0.01
sig: 0.004
8919.6100
off: 0.01
sig: 0.004

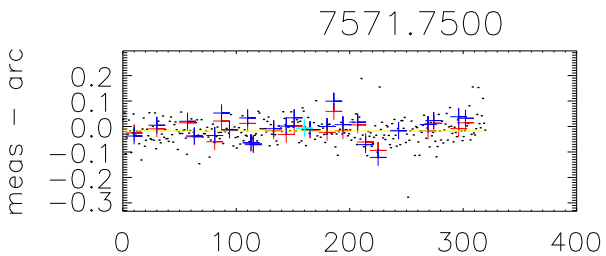

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

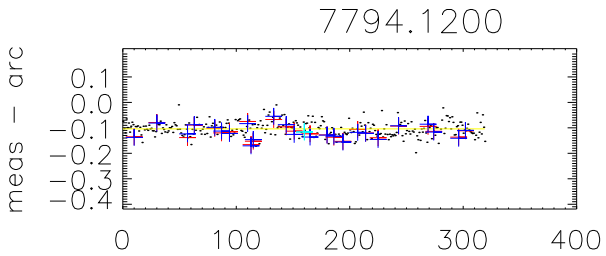

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

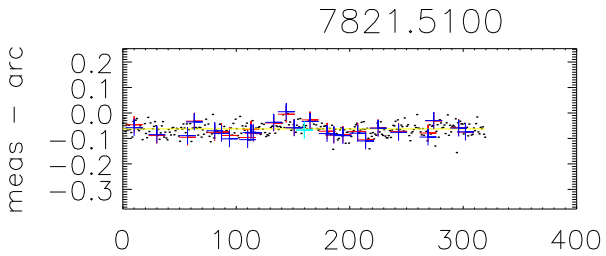

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

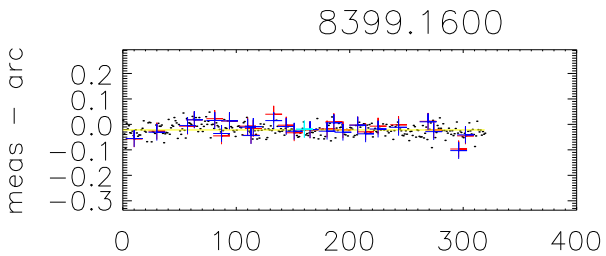

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

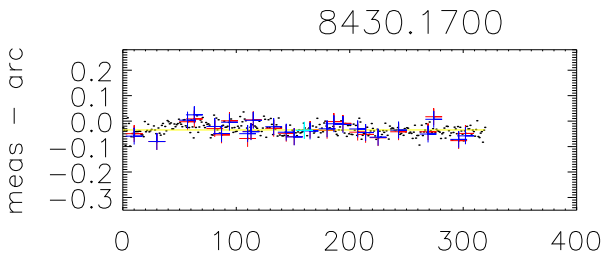

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

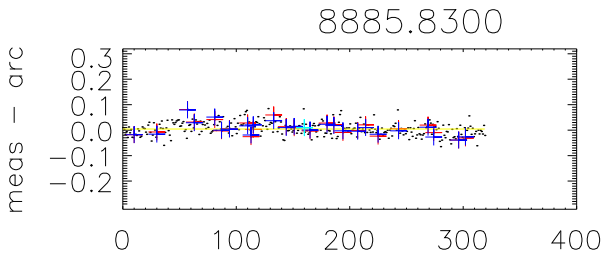

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

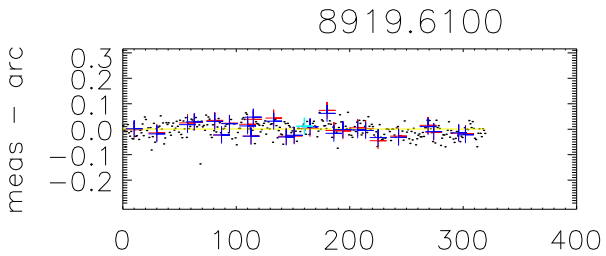

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

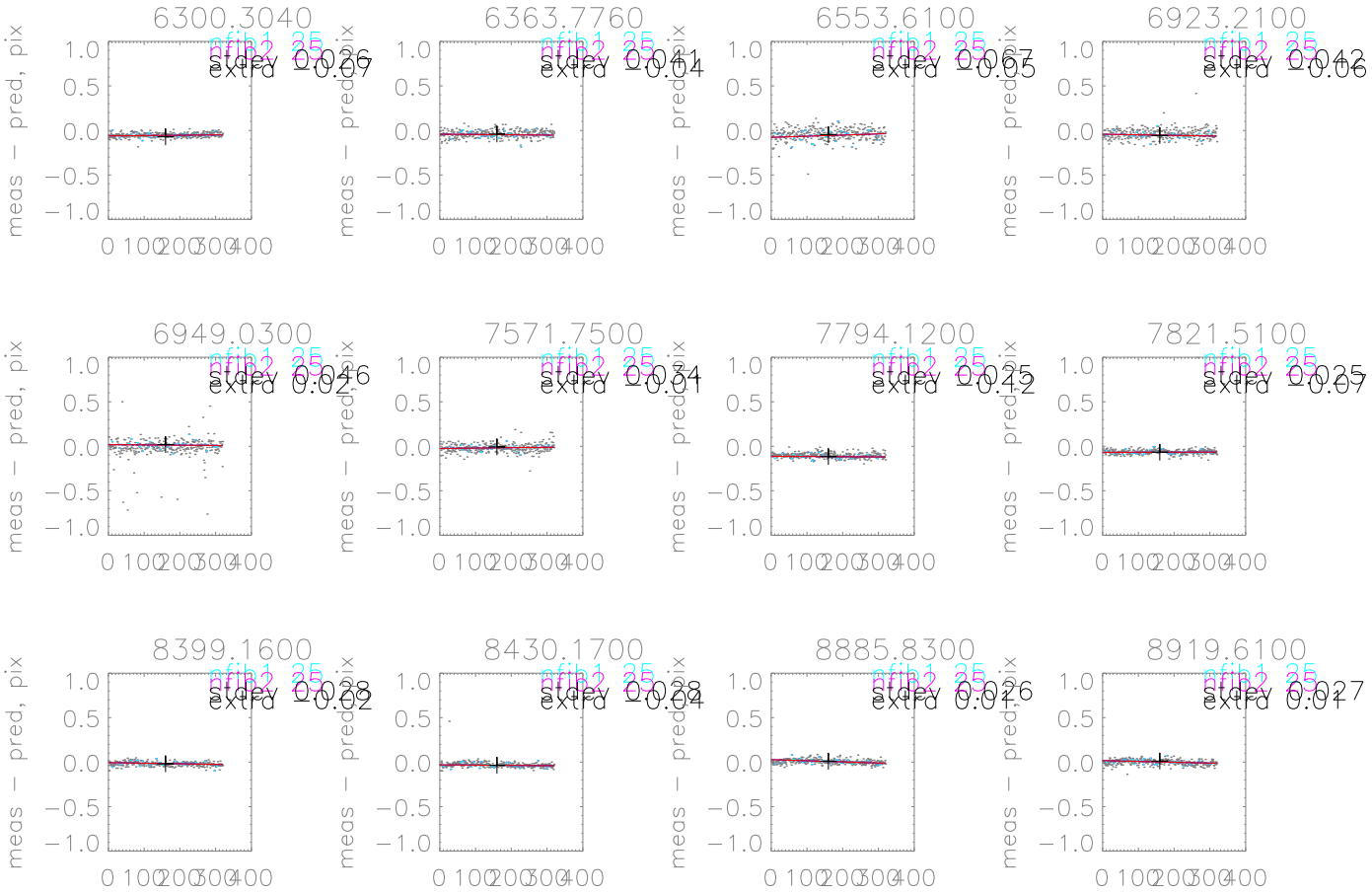

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

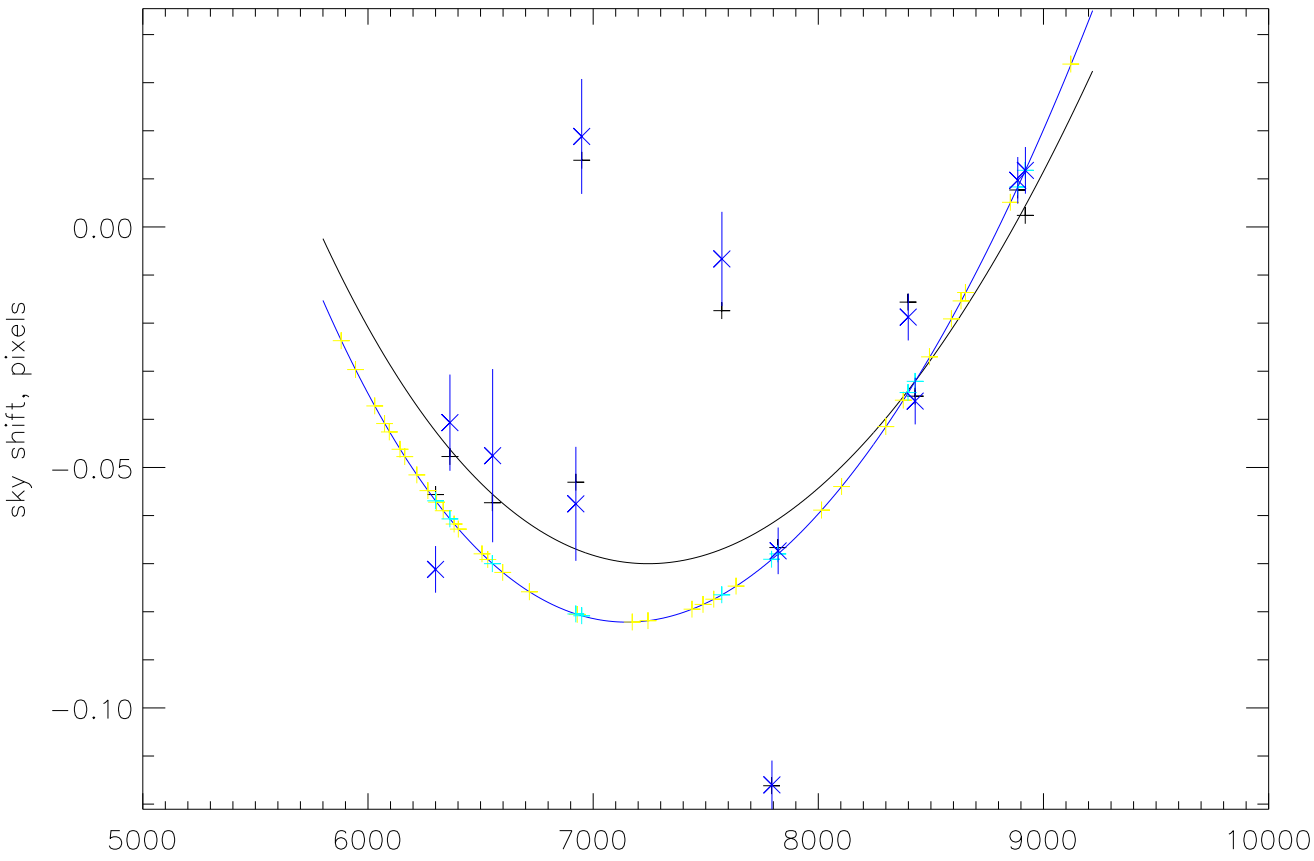

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

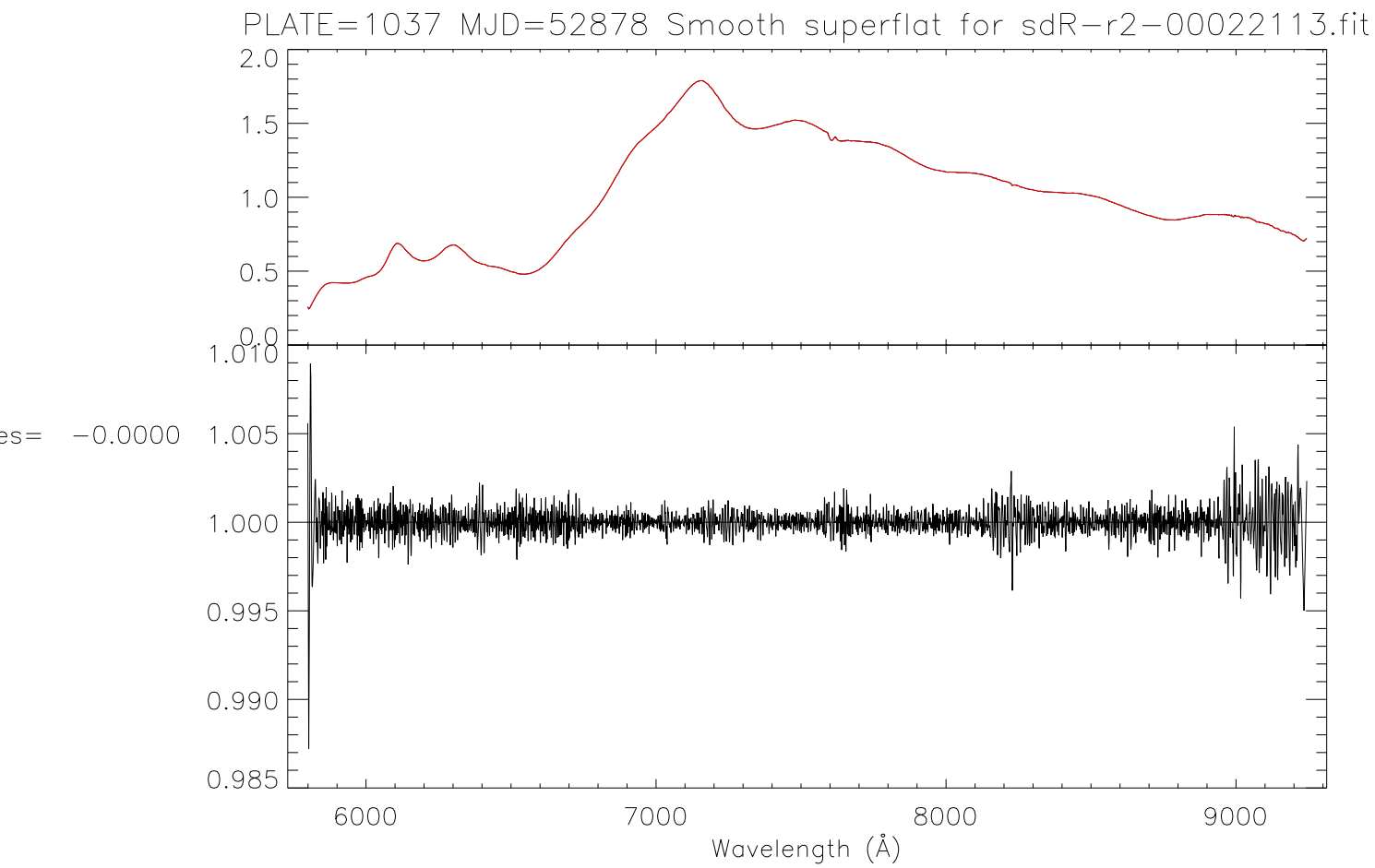

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

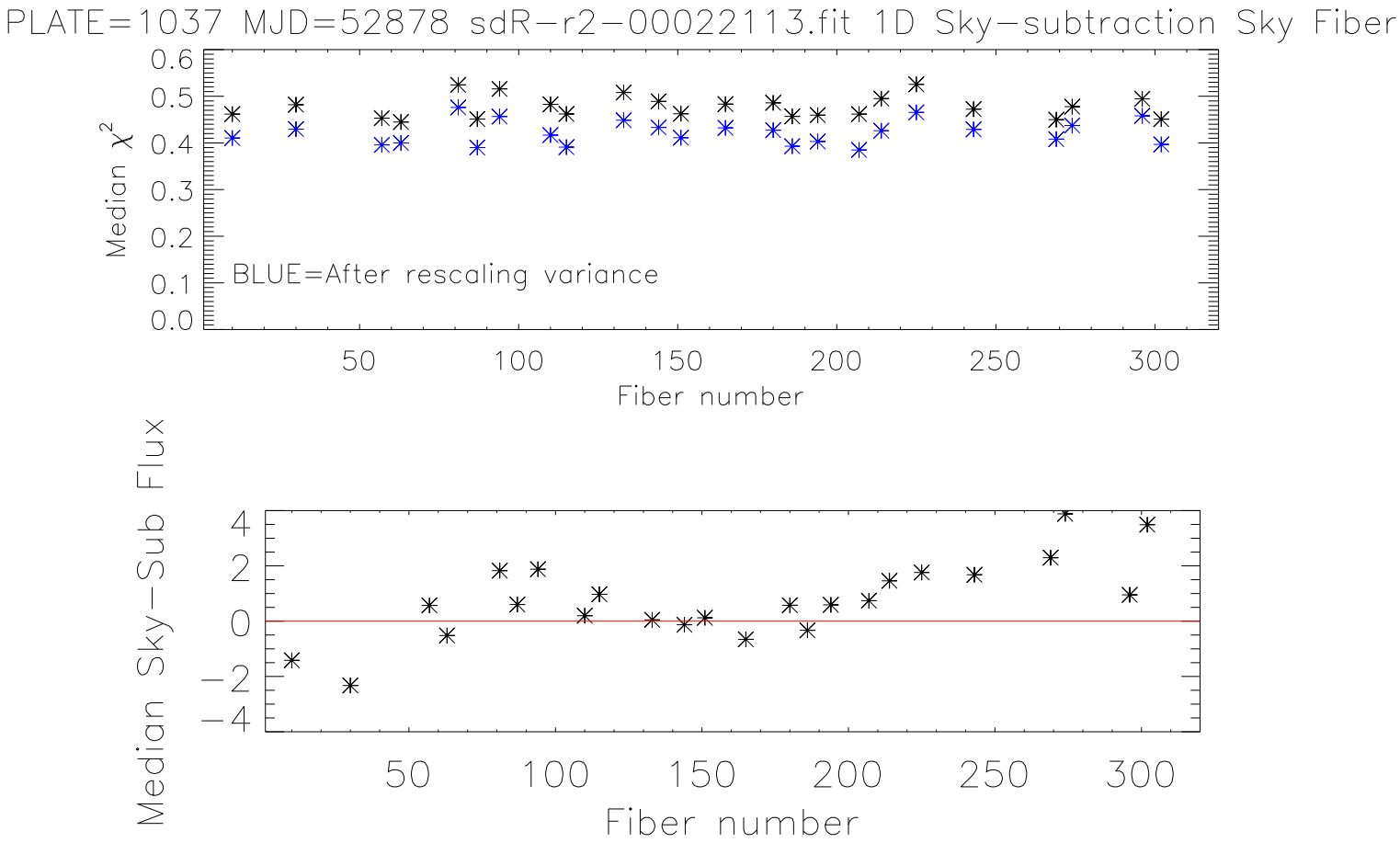

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

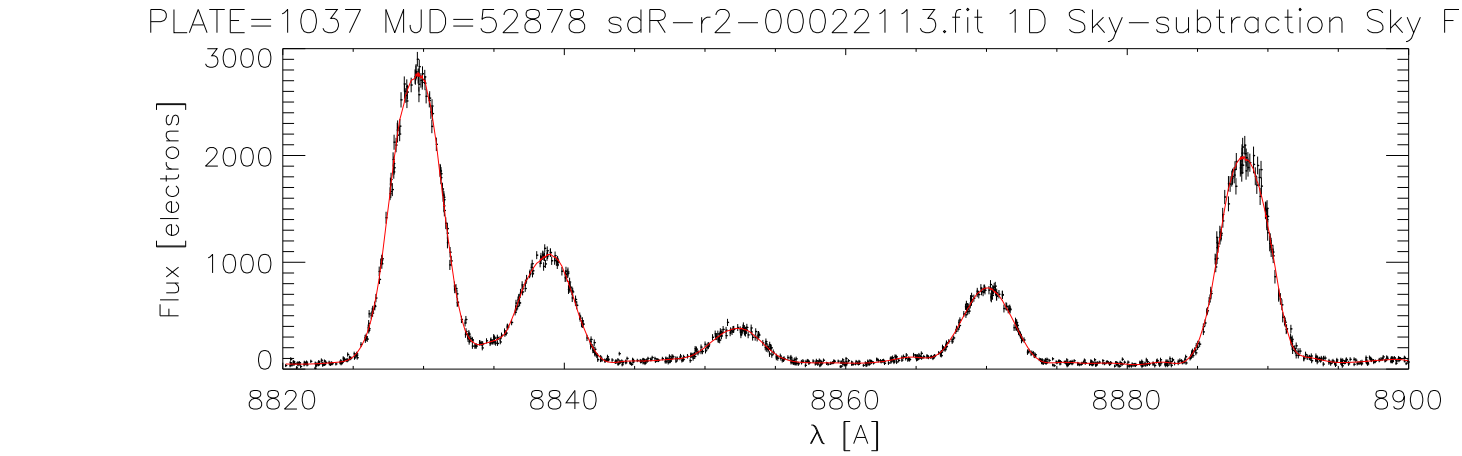

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

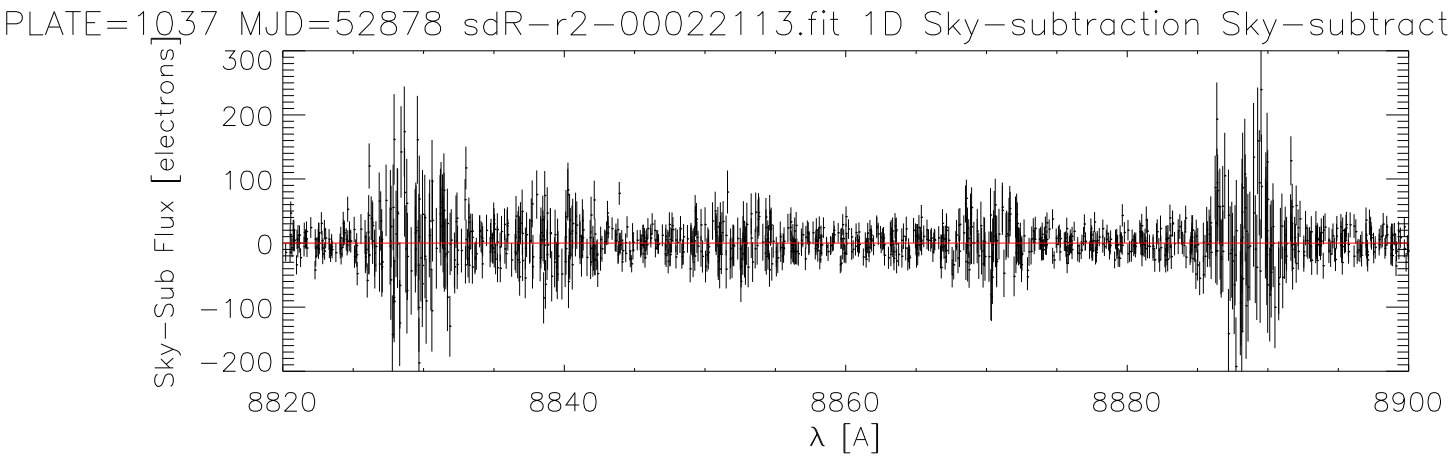

6300.3040
stdev 0.026
extra −0.07
6363.7760
stdev 0.041
extra −0.04
6553.6100
stdev 0.067
extra −0.05
6923.2100
stdev 0.042
extra −0.06
6949.0300
stdev 0.046
extra 0.02
7571.7500
stdev 0.034
extra −0.01
7794.1200
stdev 0.025
extra −0.42
7821.5100
stdev 0.025
extra −0.07
8399.1600
stdev 0.028
extra −0.02
8430.1700
stdev 0.028
extra −0.04
8885.8300
stdev 0.026
extra 0.01
8919.6100
stdev 0.027
extra 0.01
meas − pred, pix
mfhd1 25
mfhd2 25

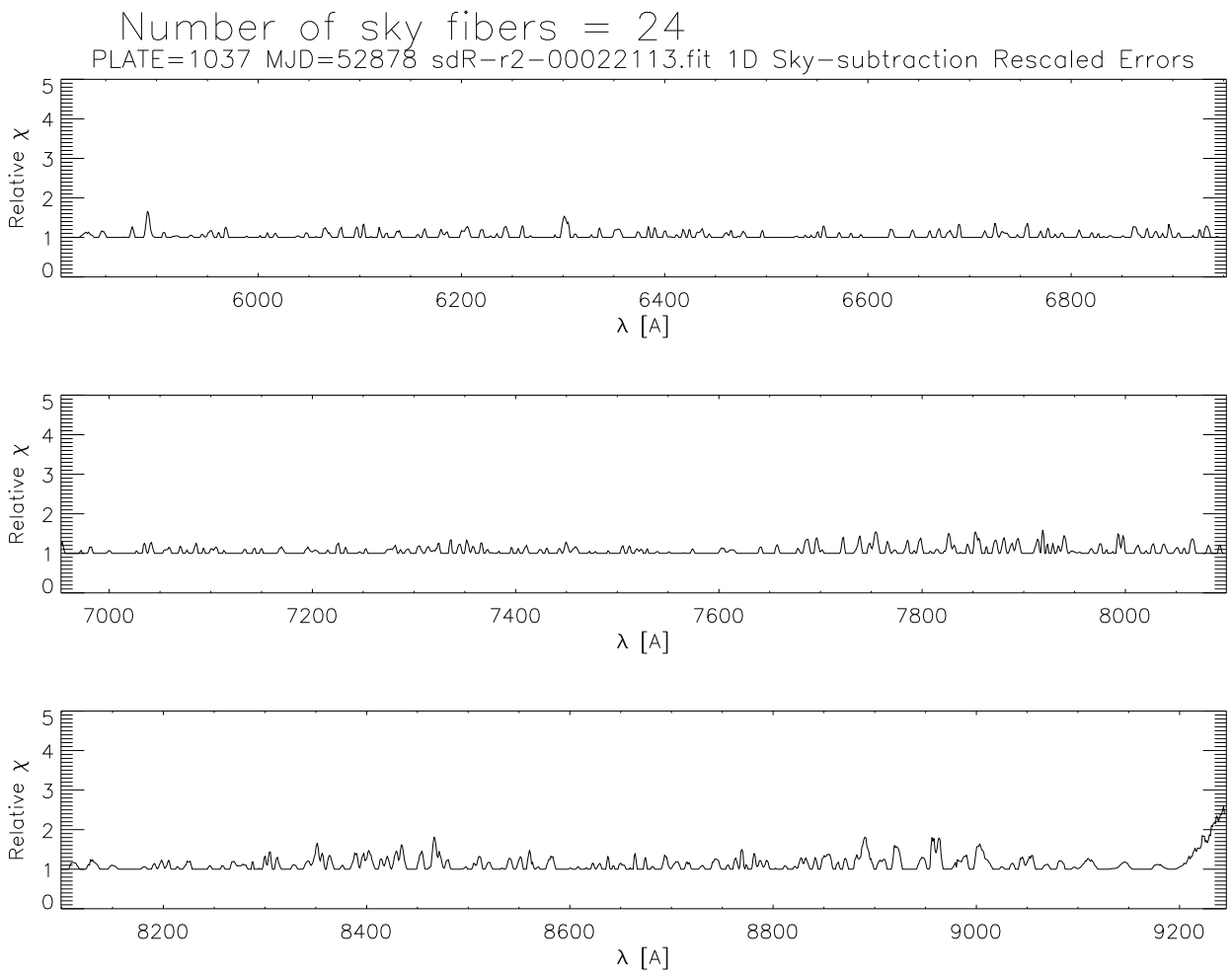

sky shift, pixels
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

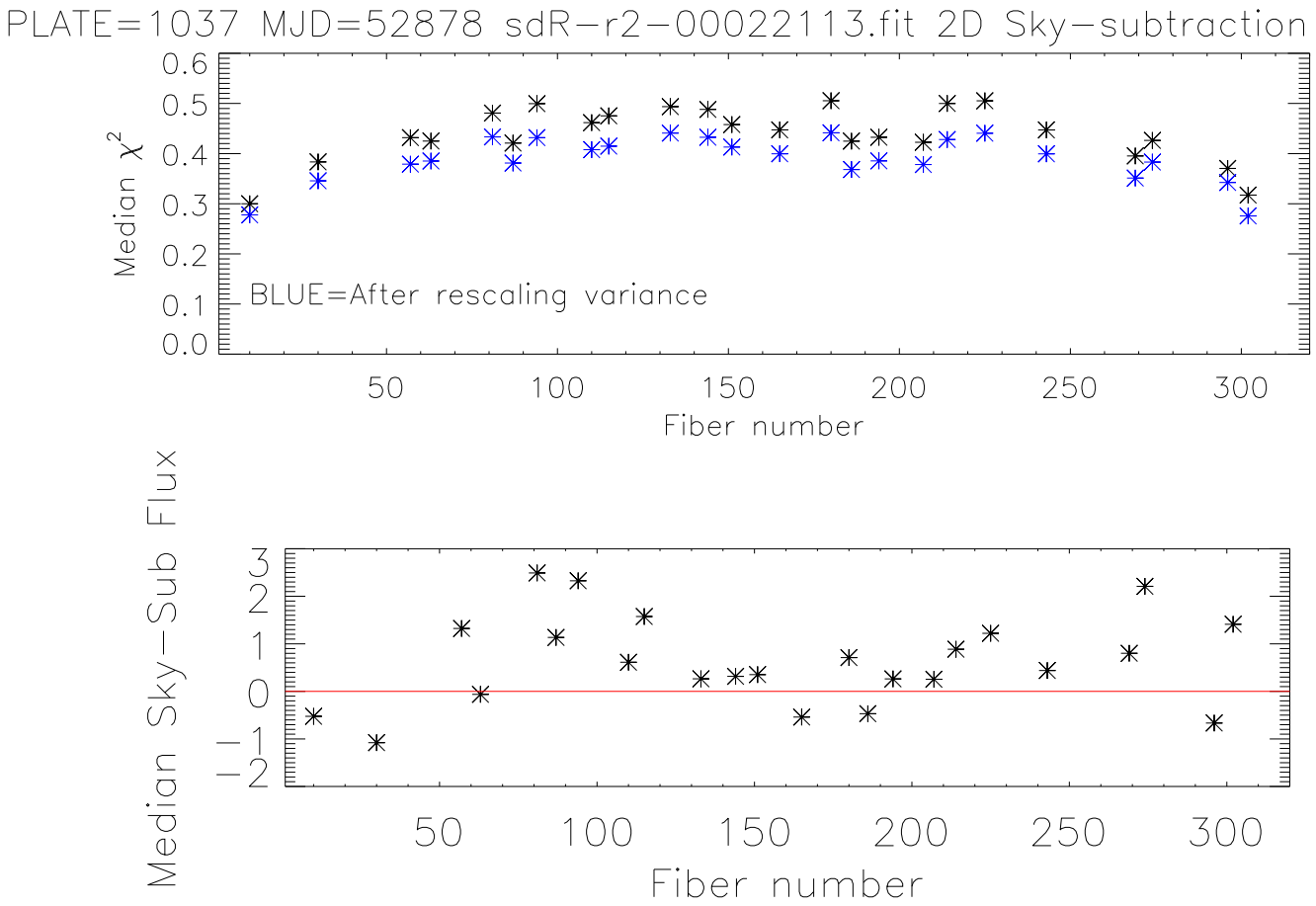

PLATE=1037 MJD=52878 Smooth superflat for sdR-r2-00022113.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

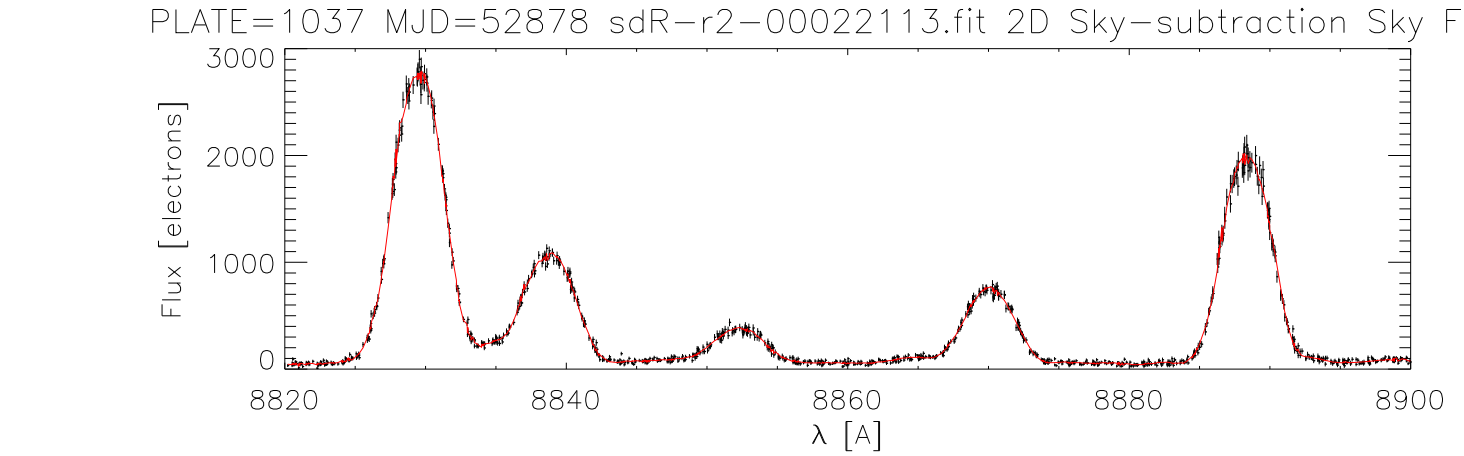

PLATE=1037 MJD=52878 sdR-r2-00022113.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

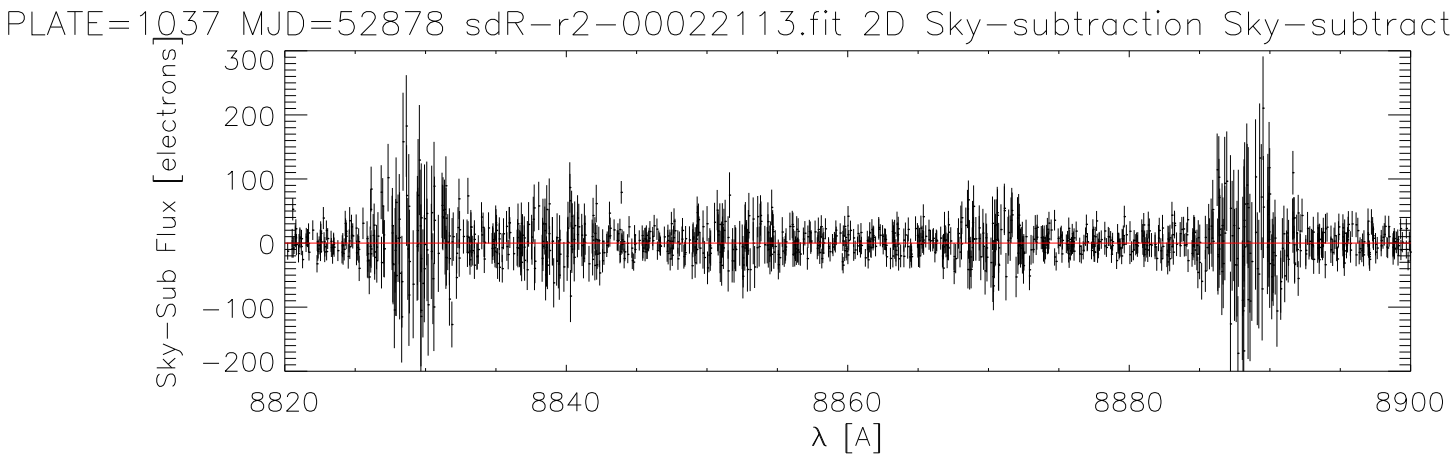

PLATE=1037 MJD=52878 sdR-r2-00022113.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

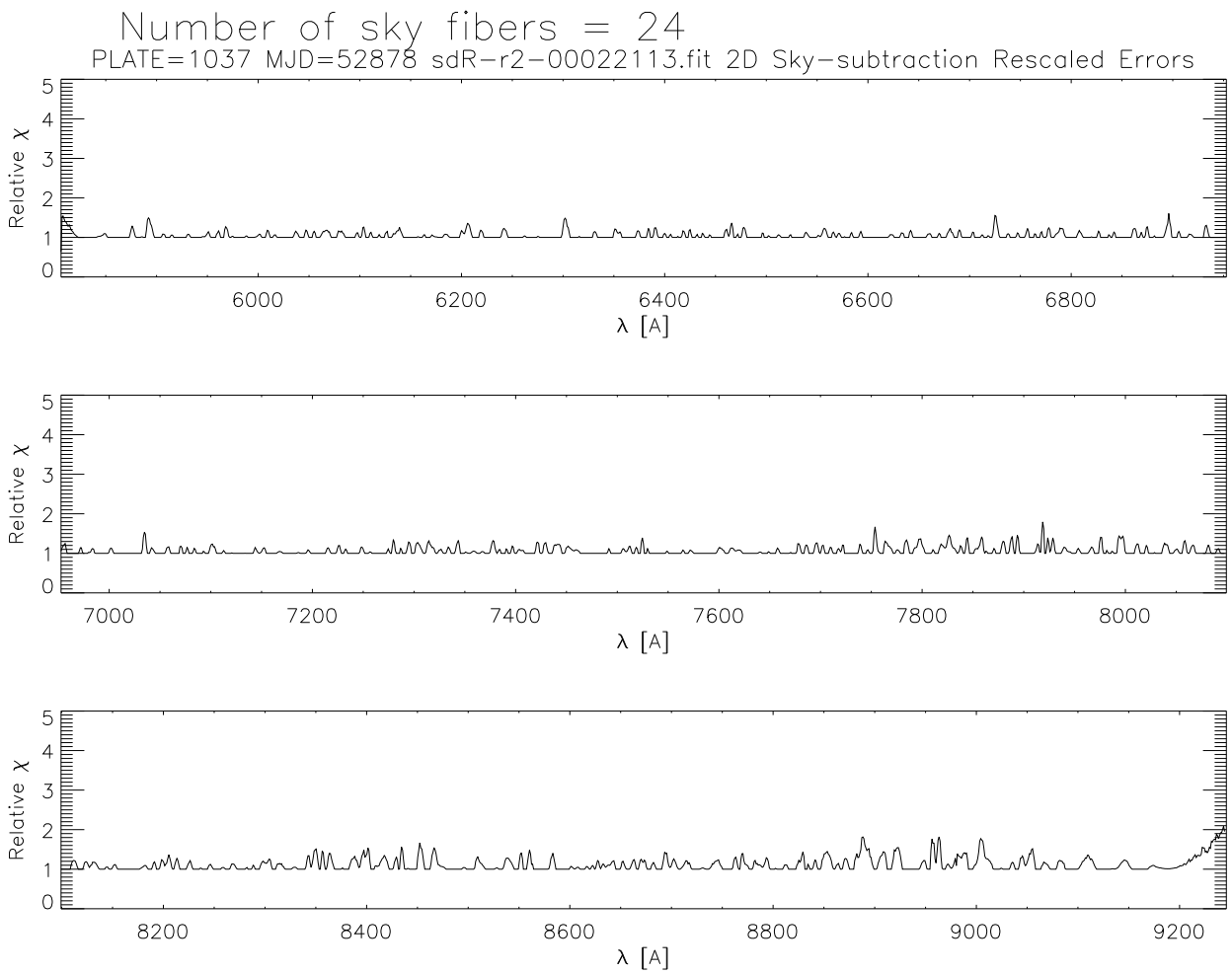

PLATE=1037 MJD=52878 sdR-r2-00022113.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

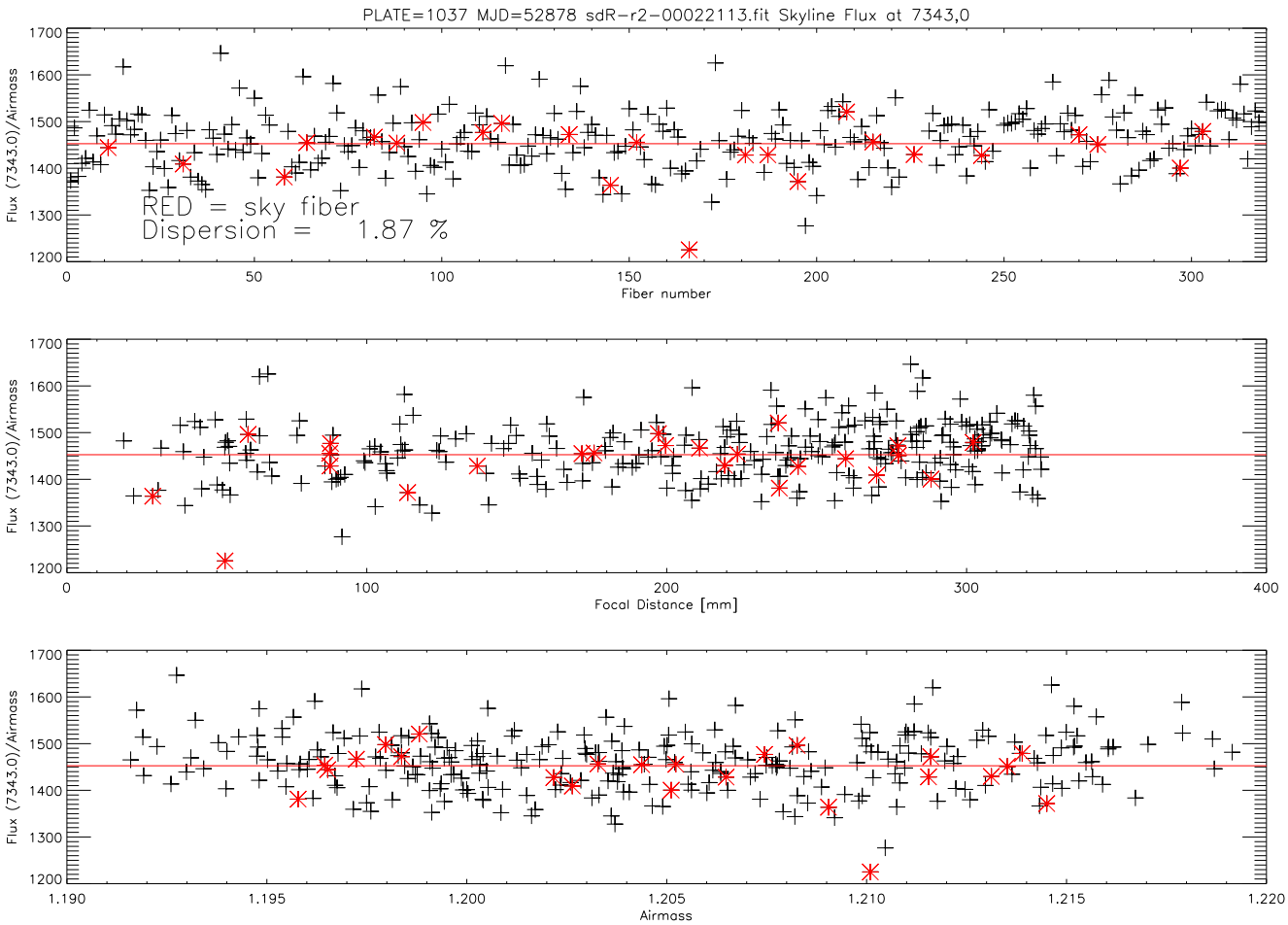

Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022113.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

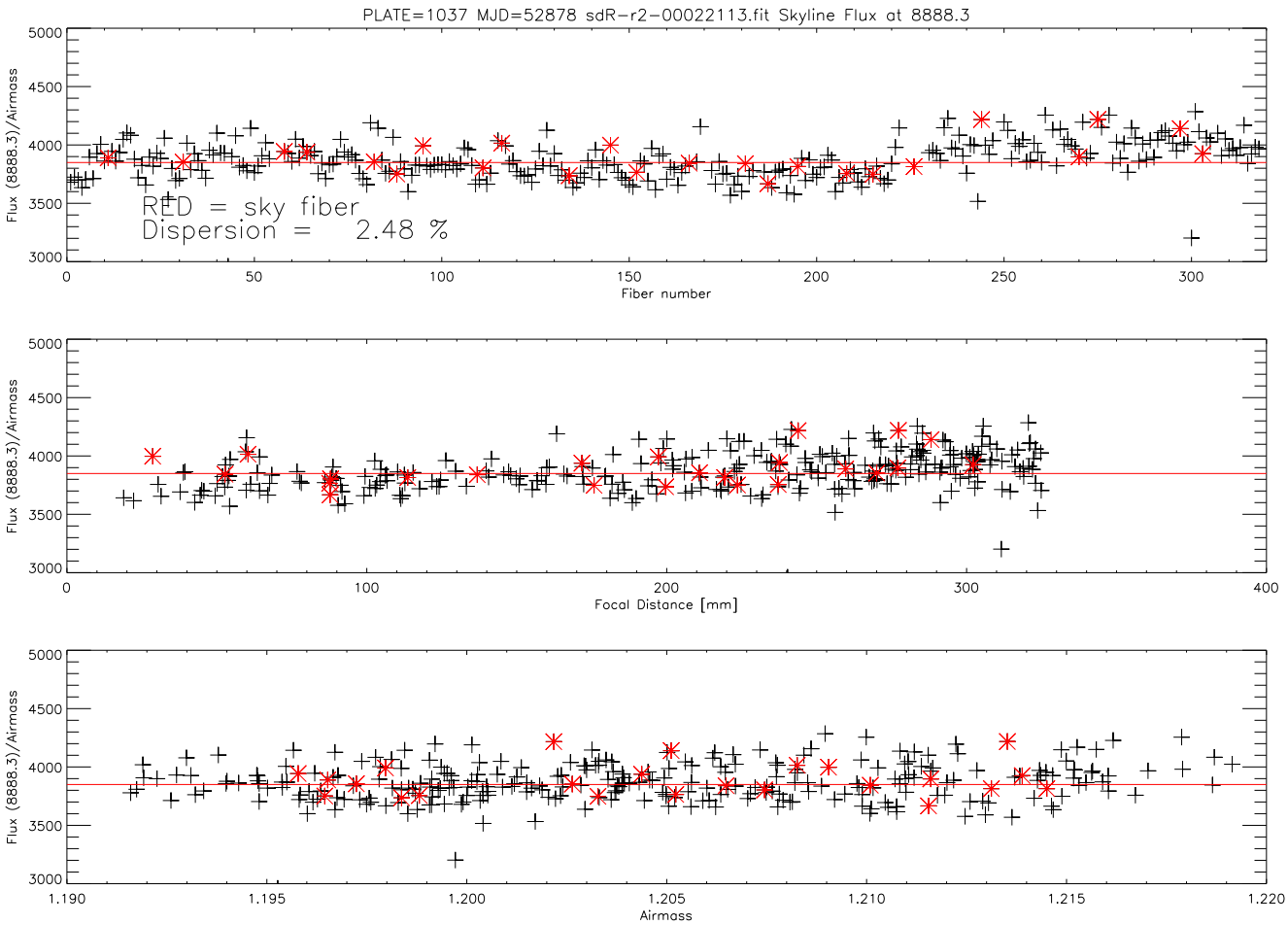

PLATE=1037 MJD=52878 sdR-r2-00022113.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1037 MJD=52878 sdR-r2-00022113.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1037 MJD=52878 sdR-r2-00022113.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 24
PLATE=1037 MJD=52878 sdR-r2-00022113.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=1037 MJD=52878 sdR-r2-00022113.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.87 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1037 MJD=52878 sdR-r2-00022113.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.48 %
Fiber number
Focal Distance [mm]
Airmass