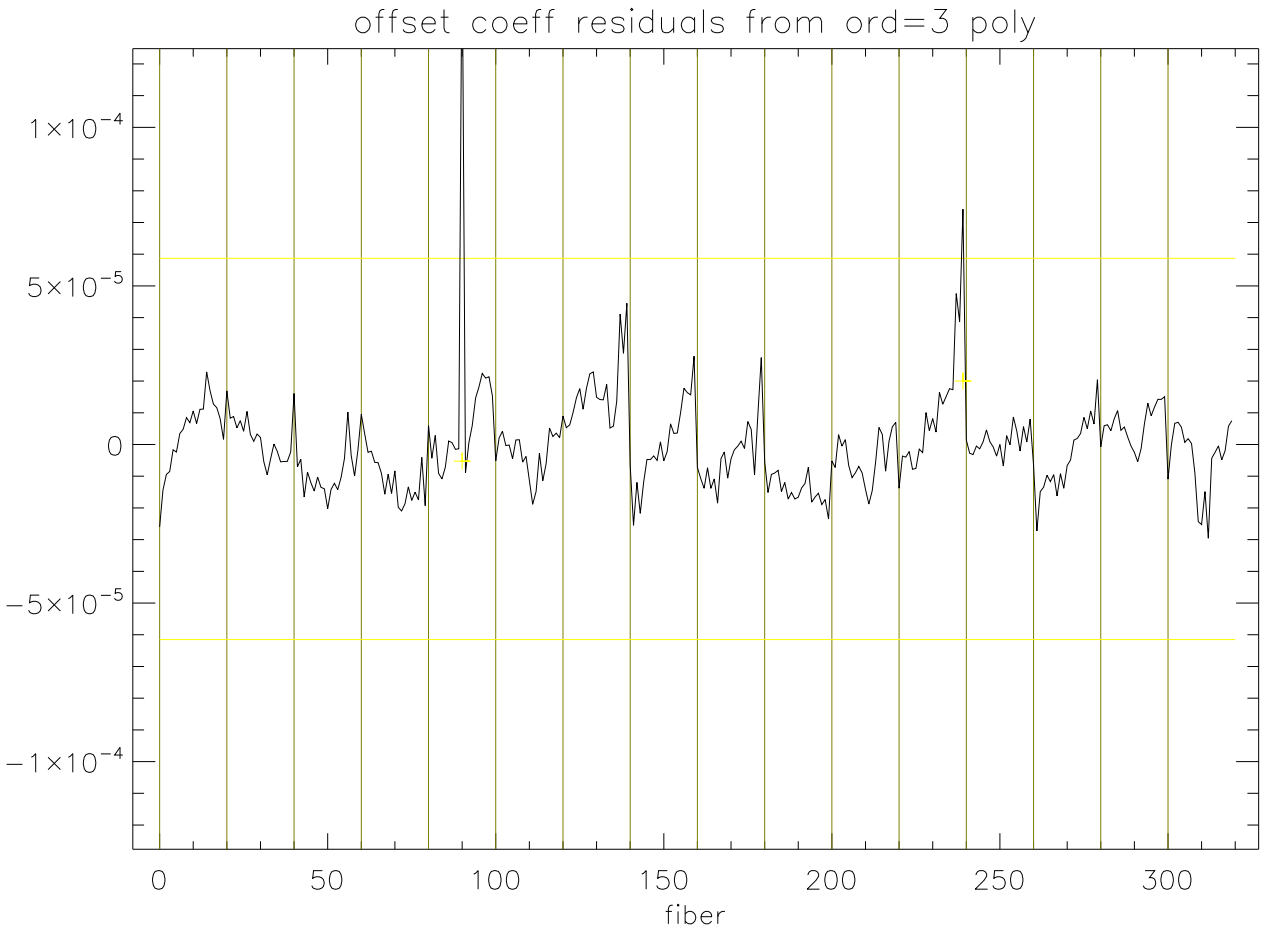
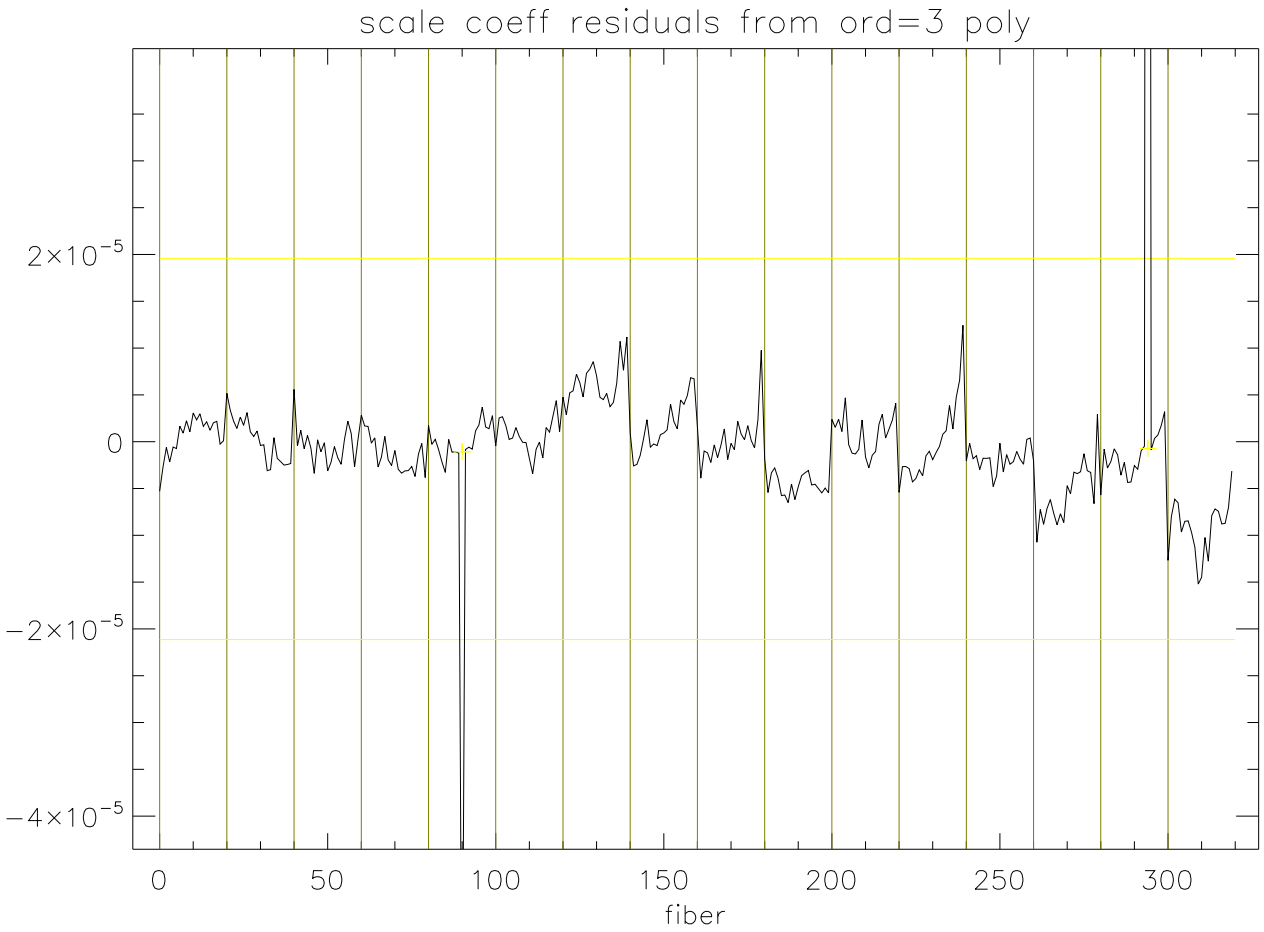
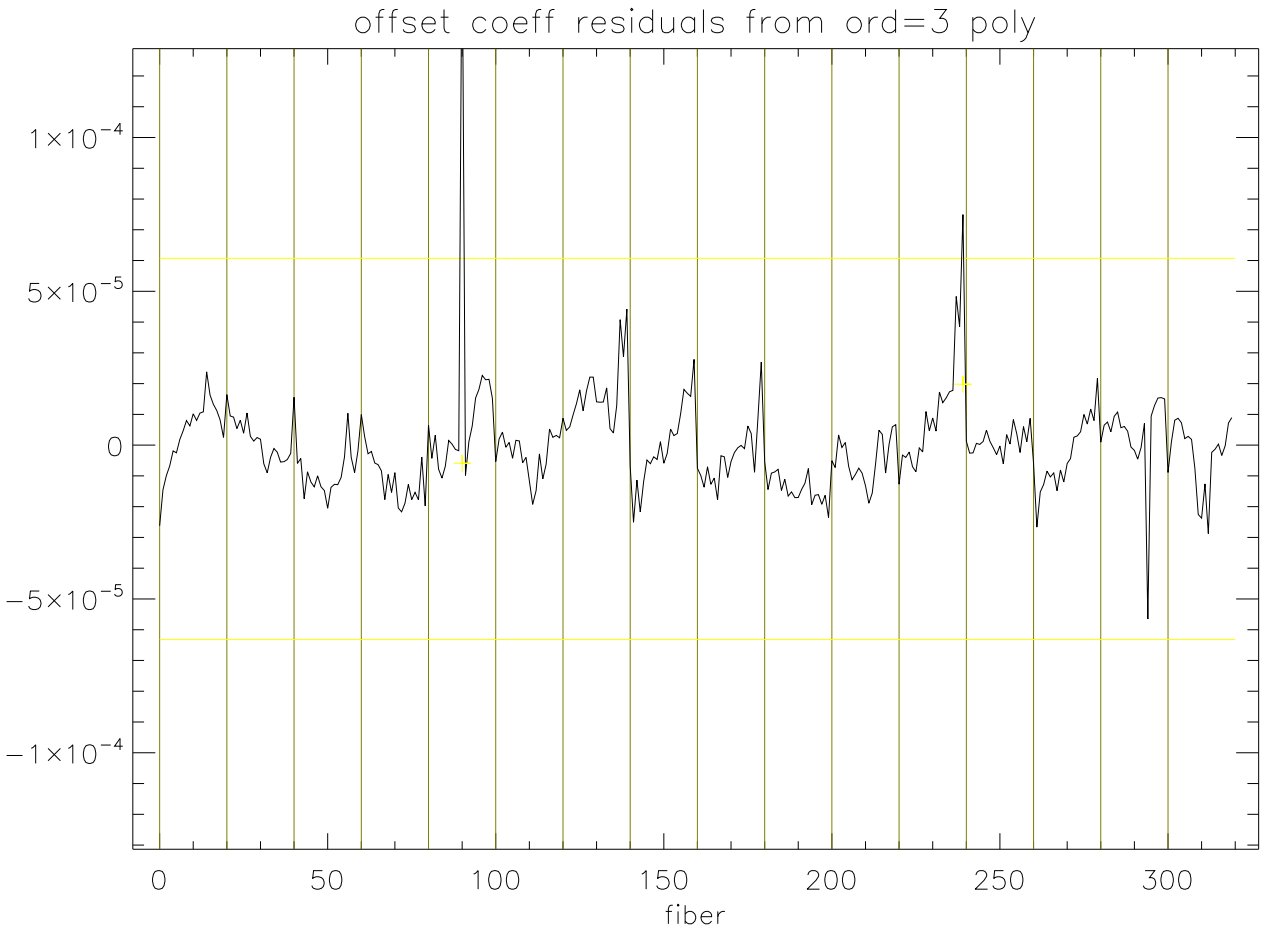
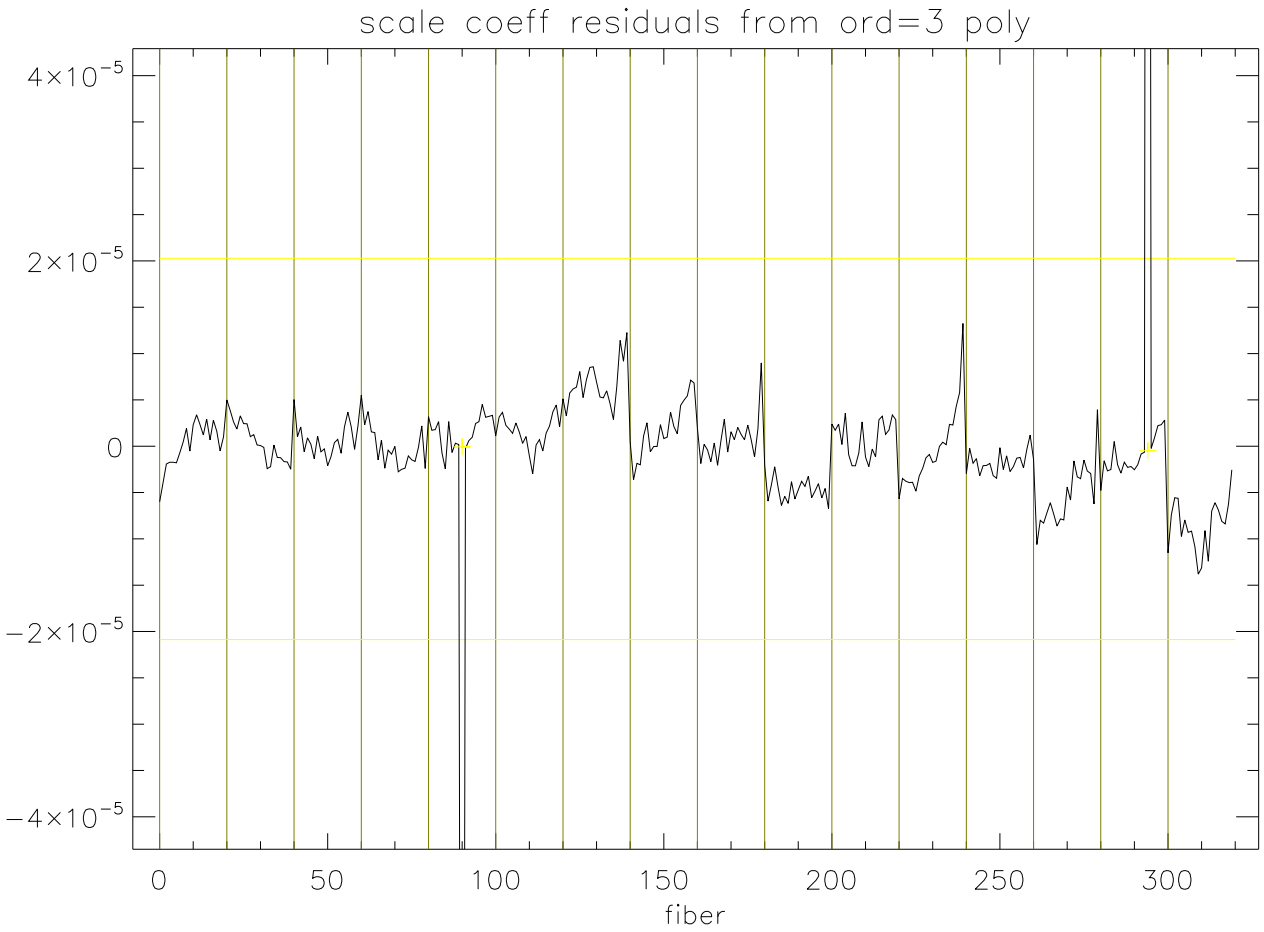
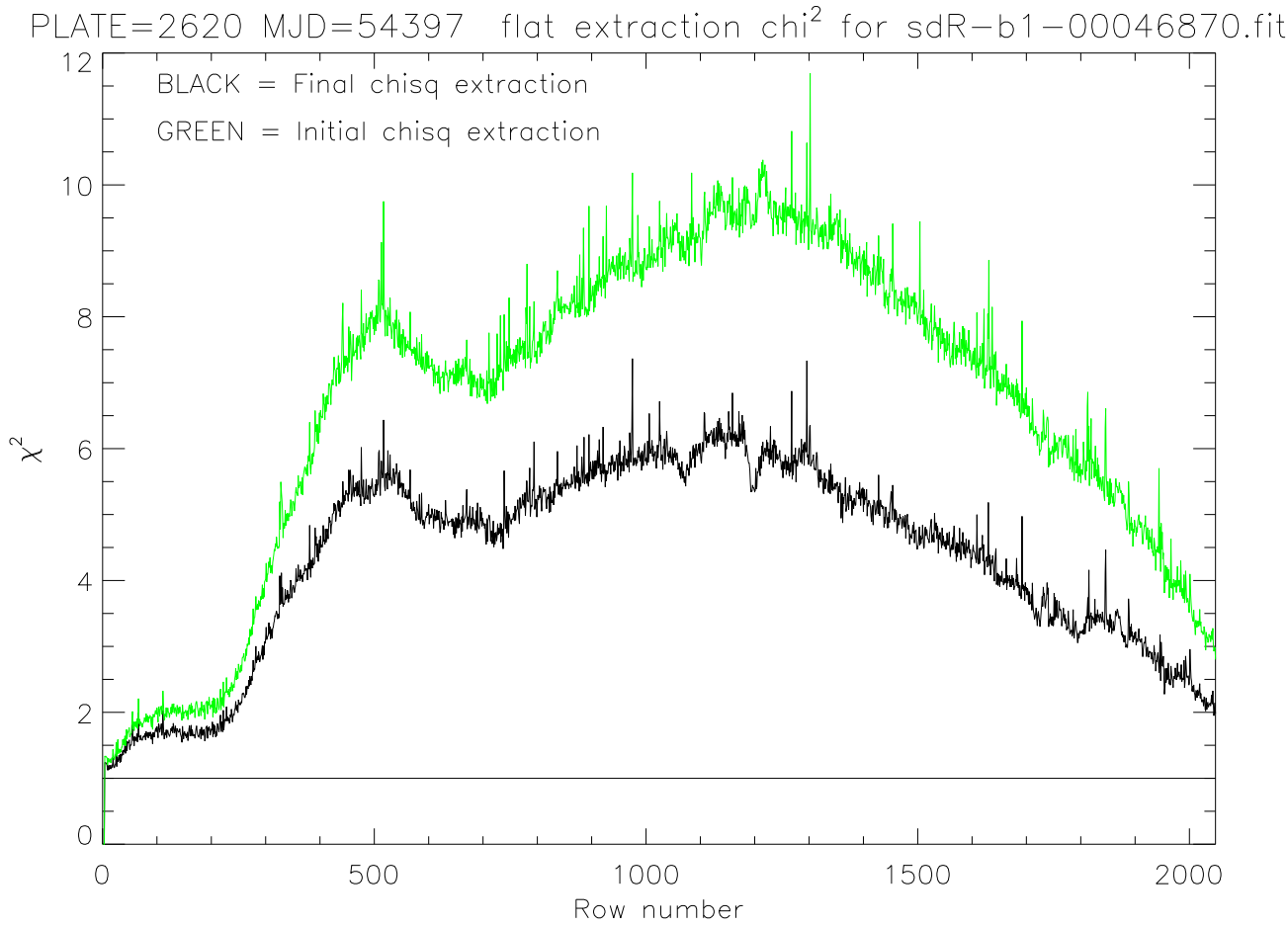
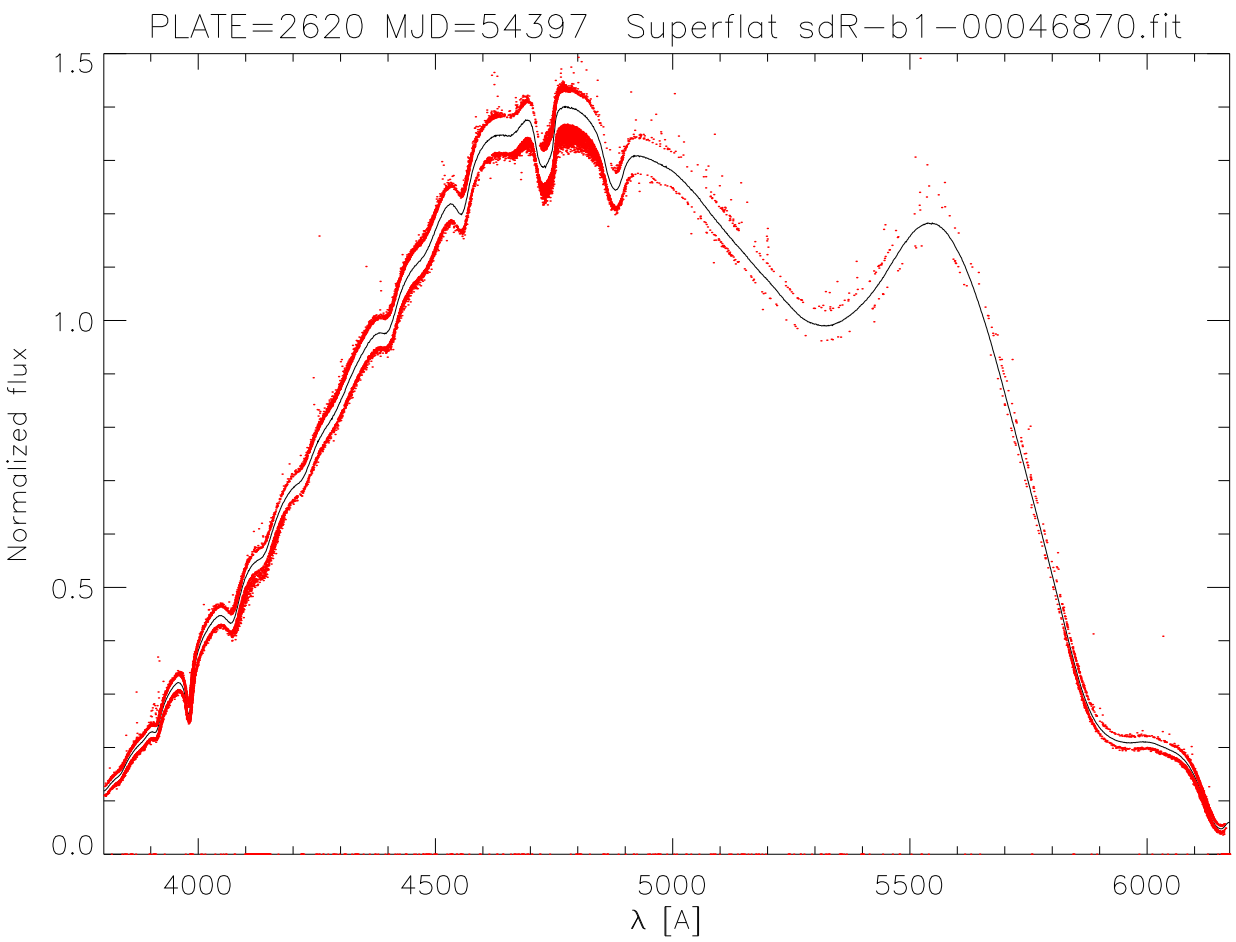

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

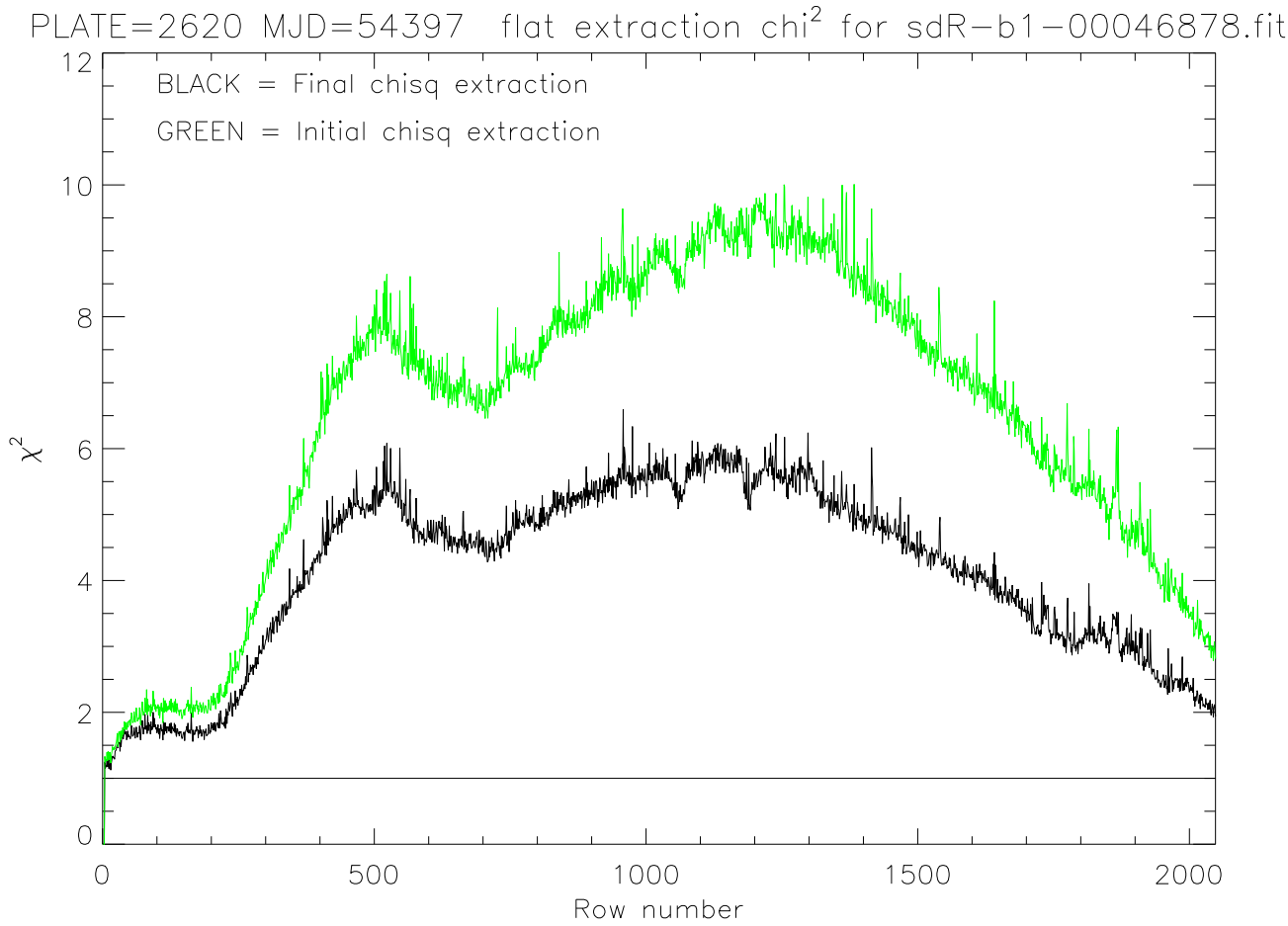

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

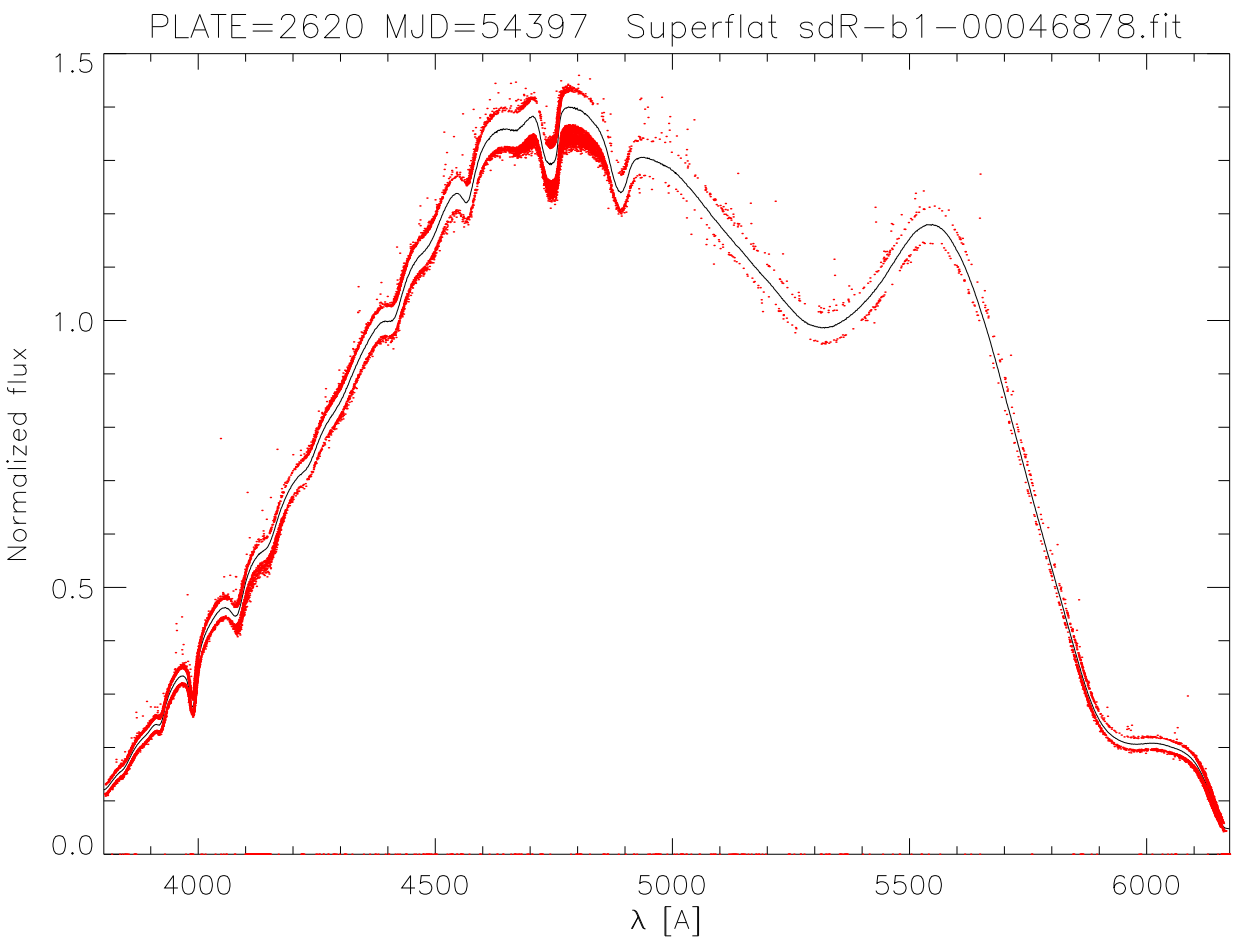

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

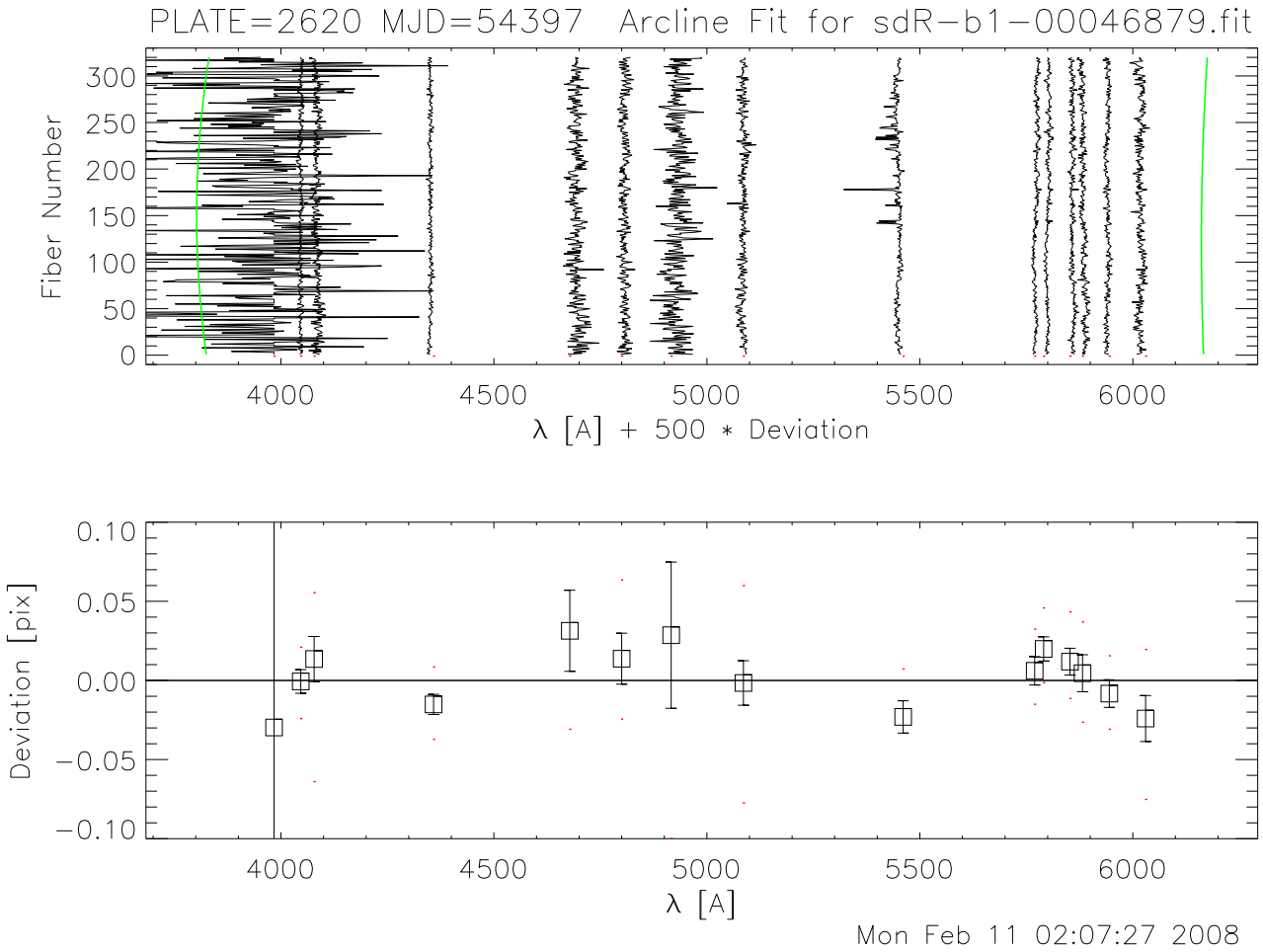

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

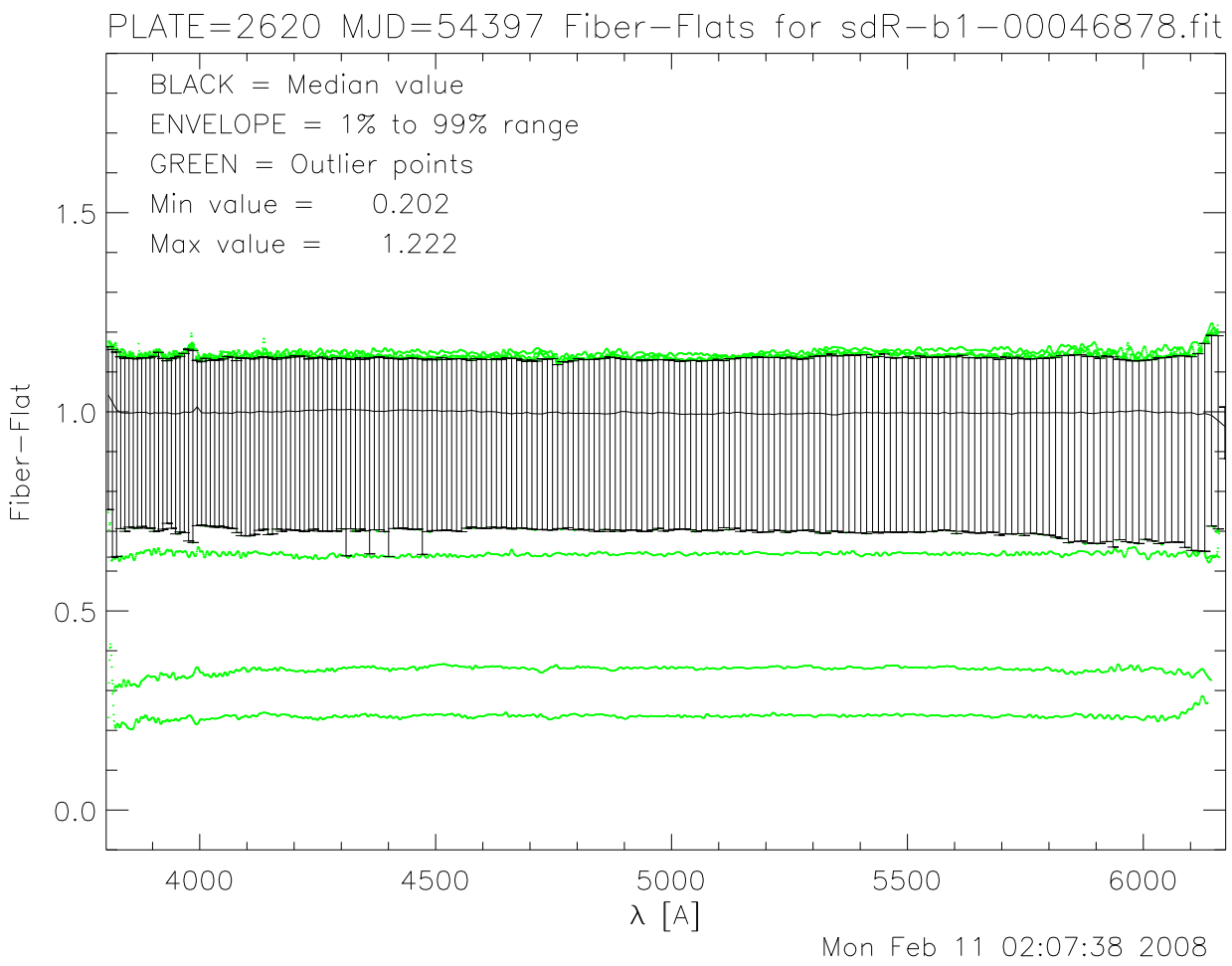

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−b1−00046870.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

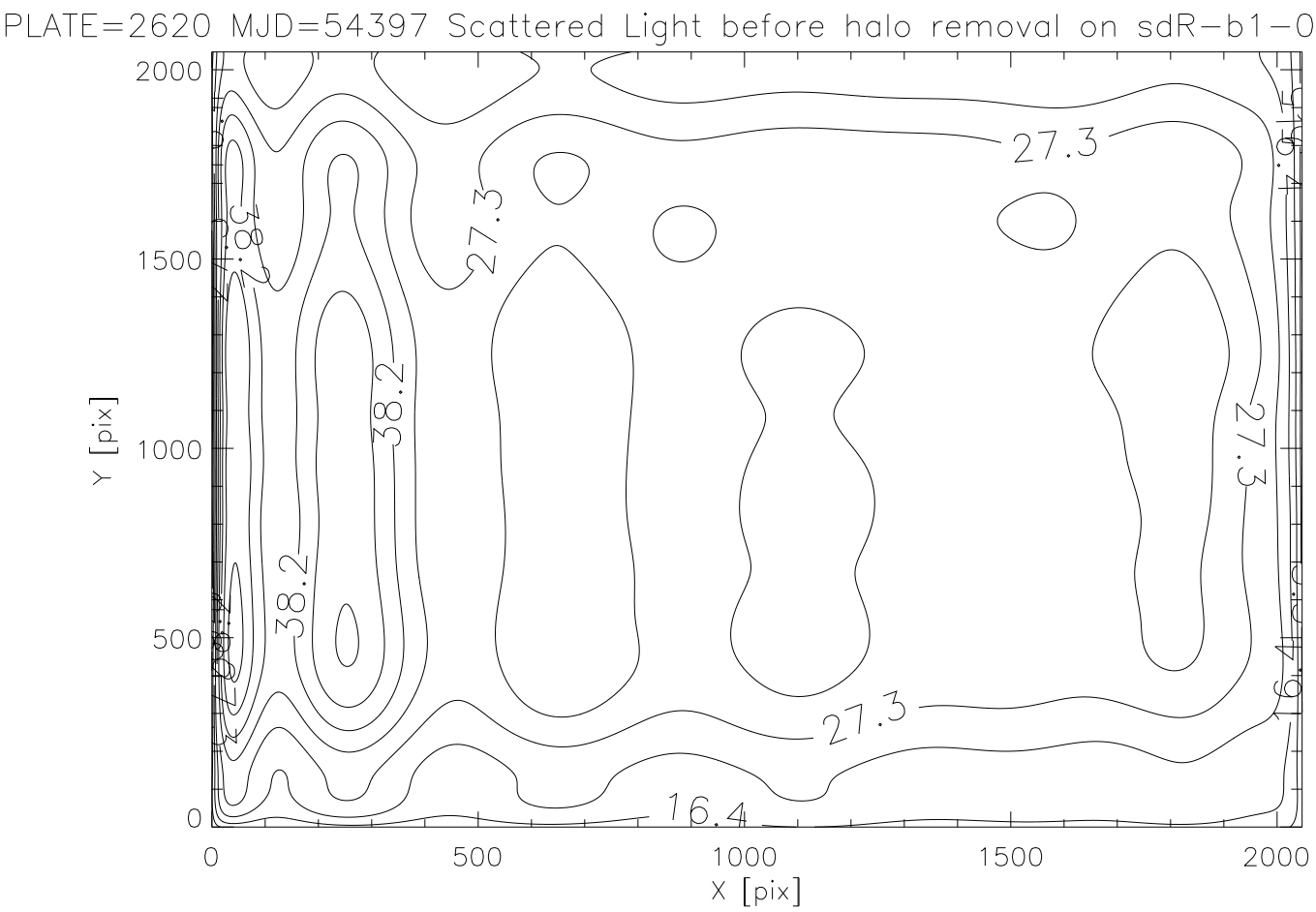

PLATE=2620 MJD=54397 Superflat sdR-b1-00046870.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

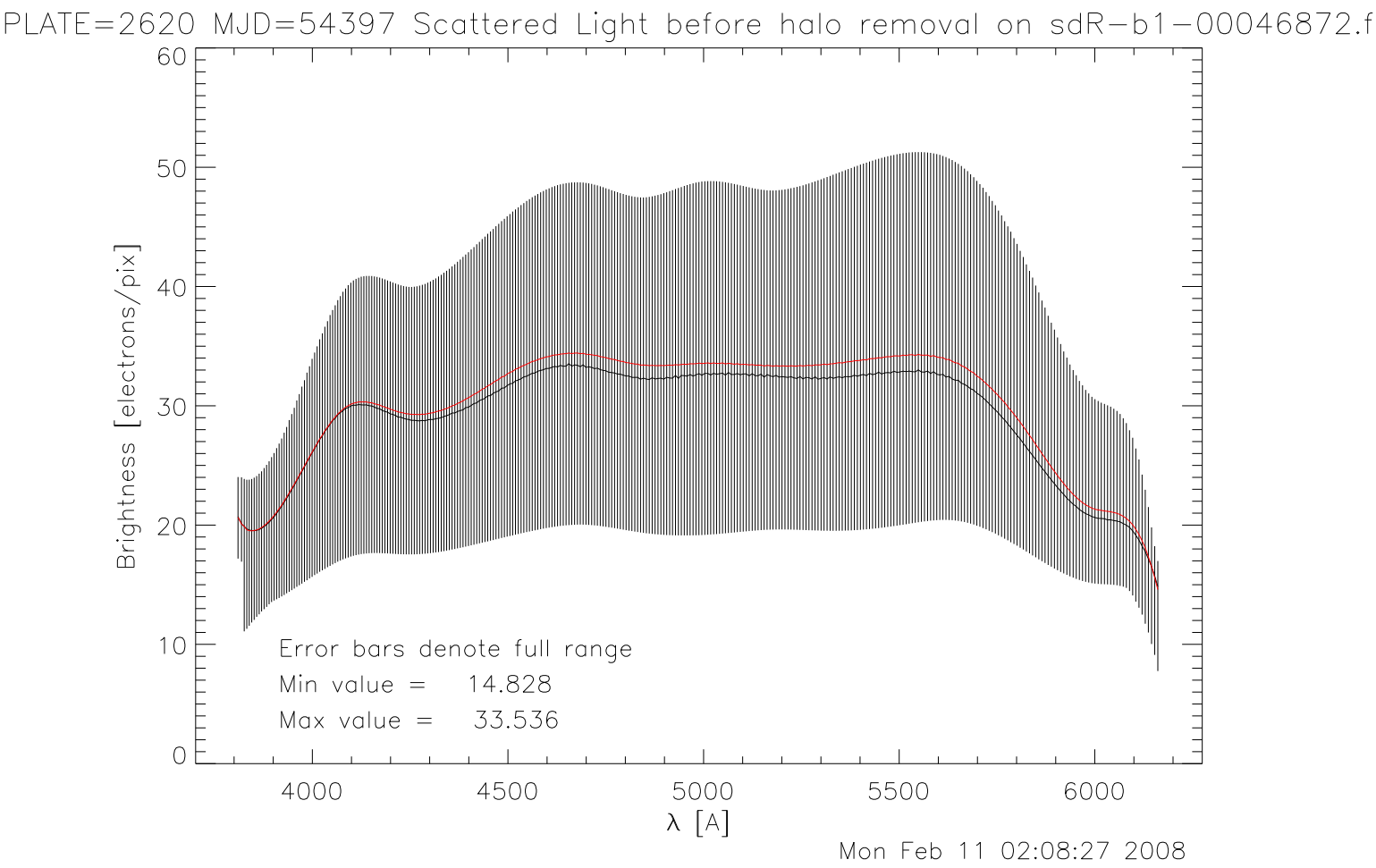

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−b1−00046878.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

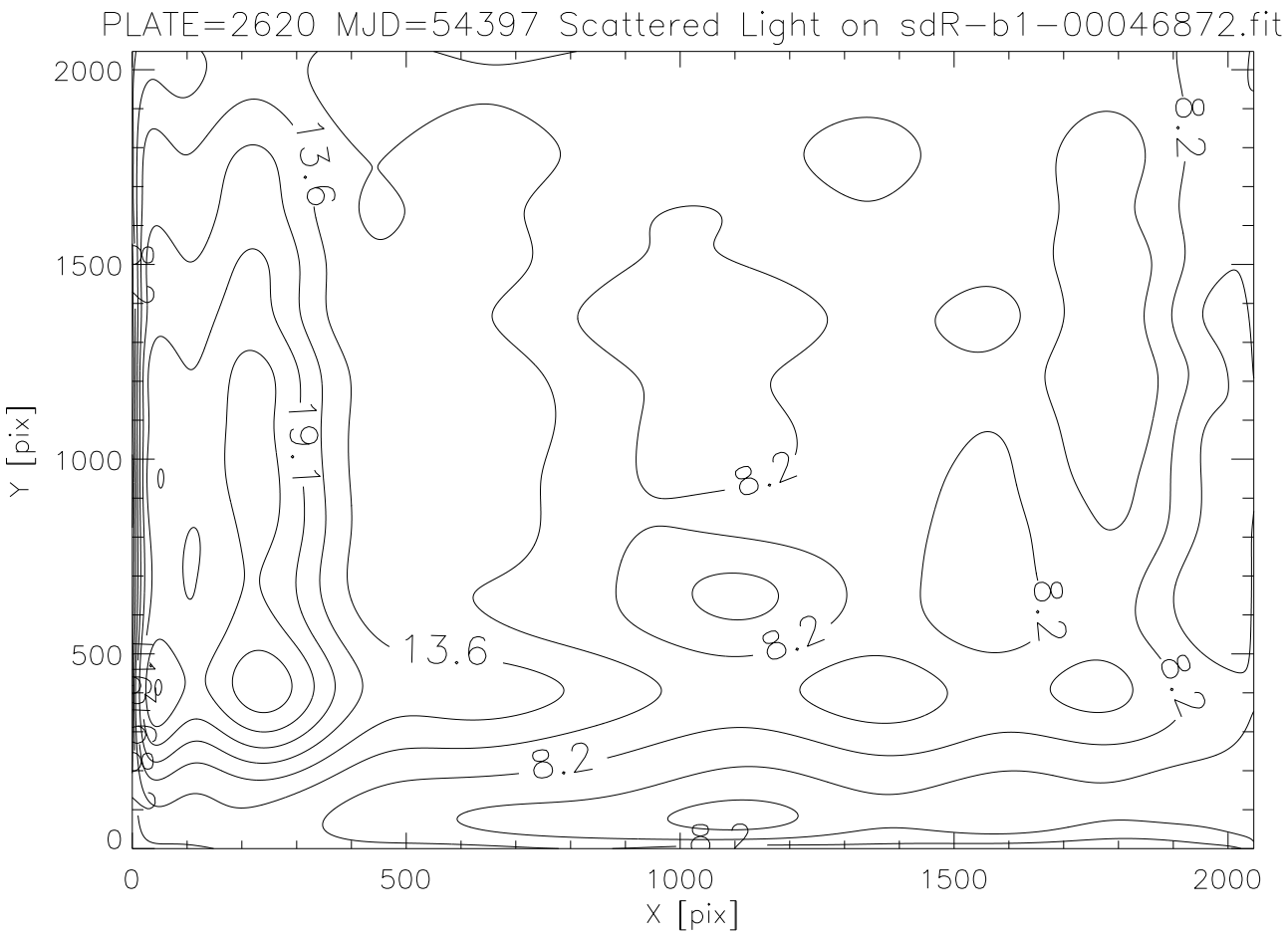

PLATE=2620 MJD=54397 Superflat sdR-b1-00046878.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

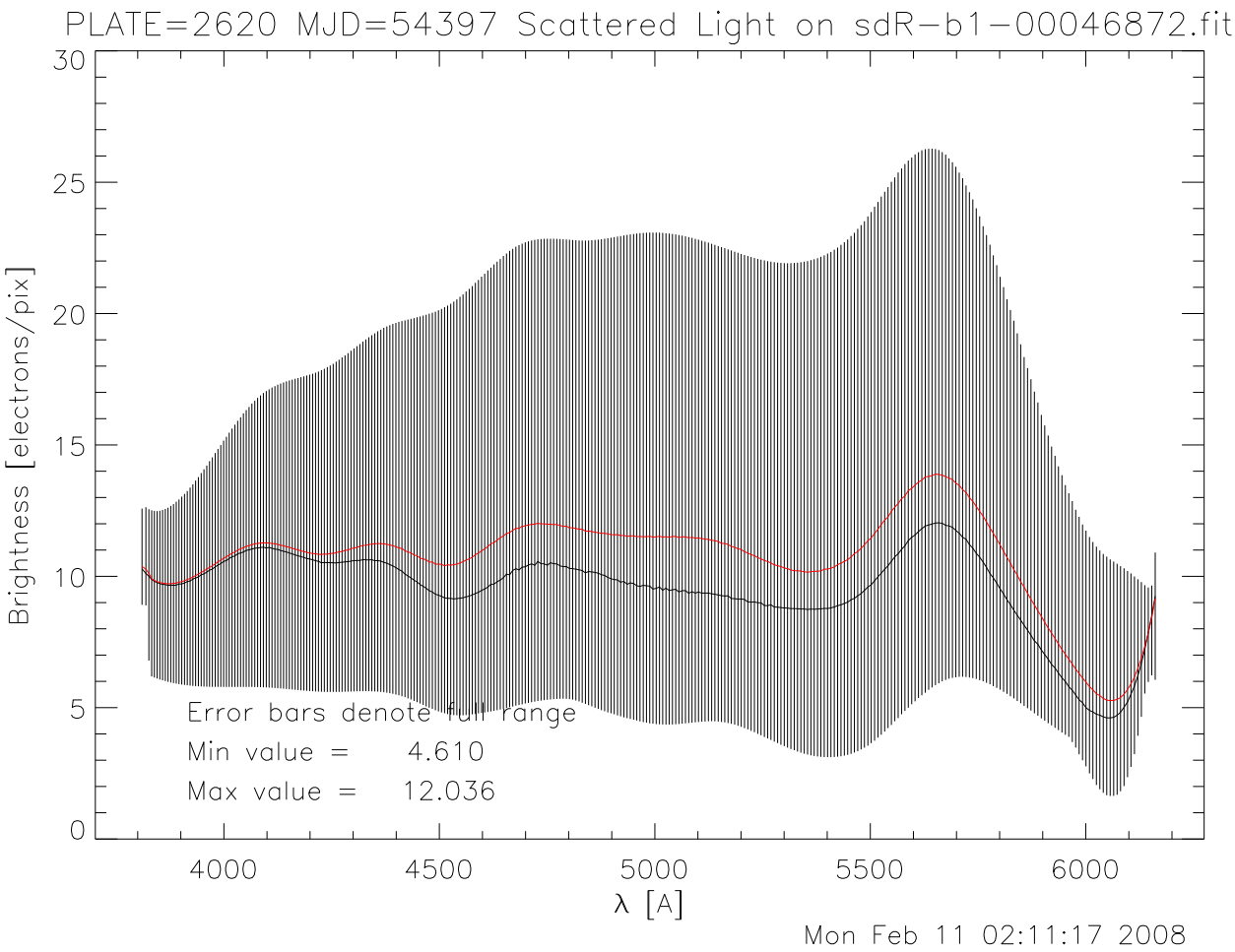

PLATE=2620 MJD=54397 Arcline Fit for sdR-b1-00046879.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:07:27 2008

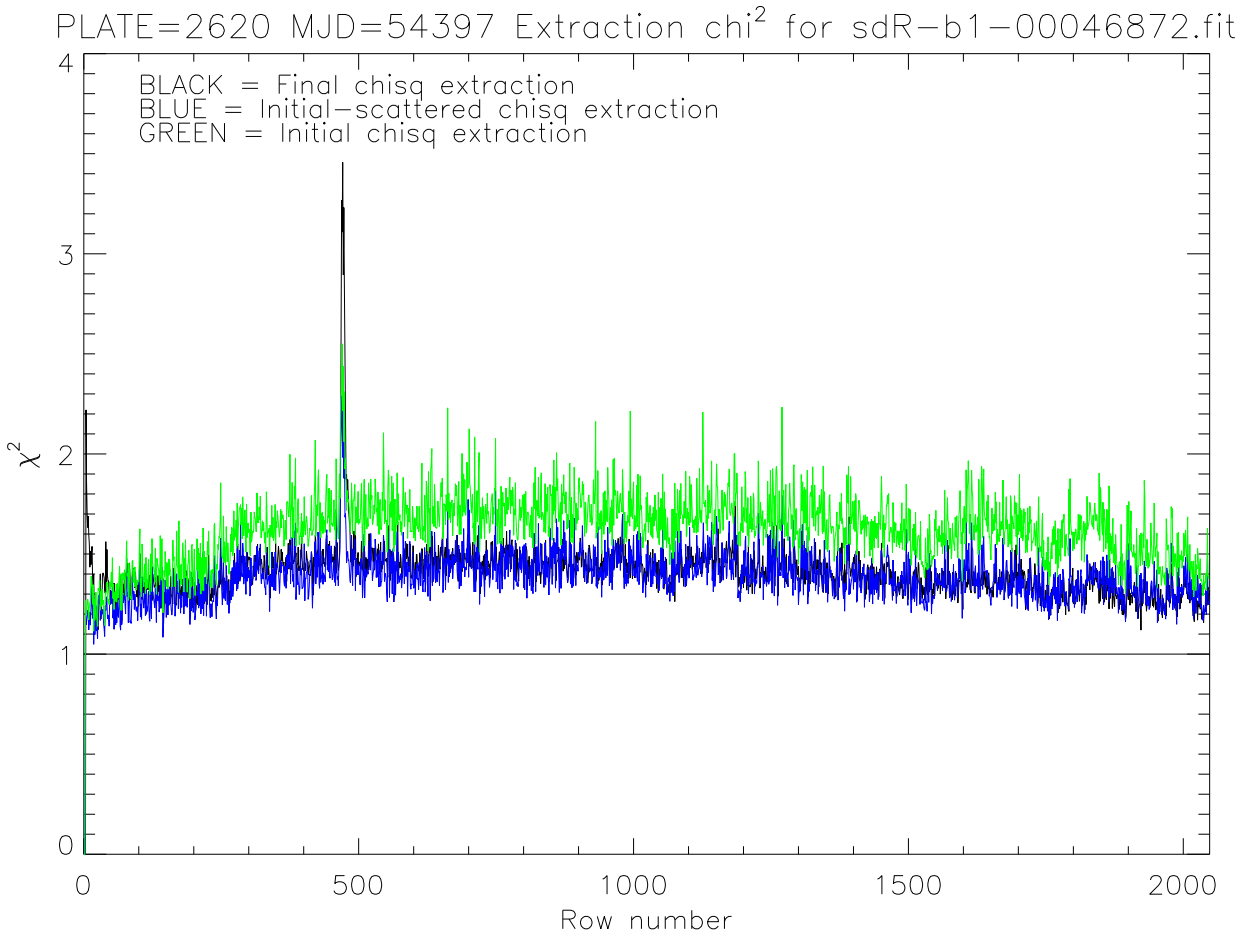

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b1-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:07:38 2008

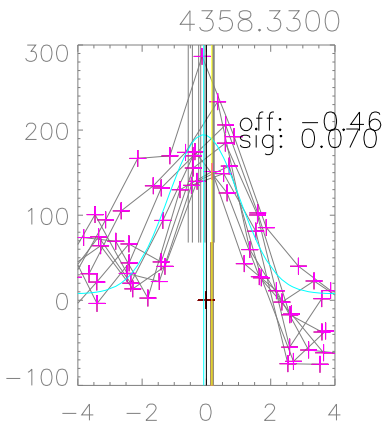

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046872.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
27.3
38.2
16.4

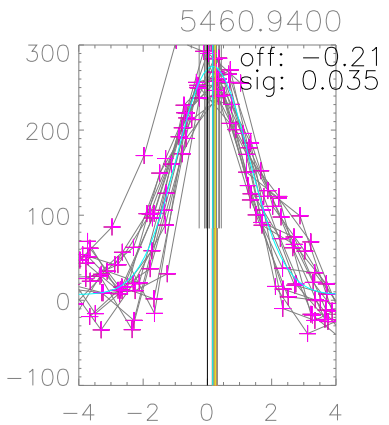

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046872.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 14.828
Max value = 33.536
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:08:27 2008

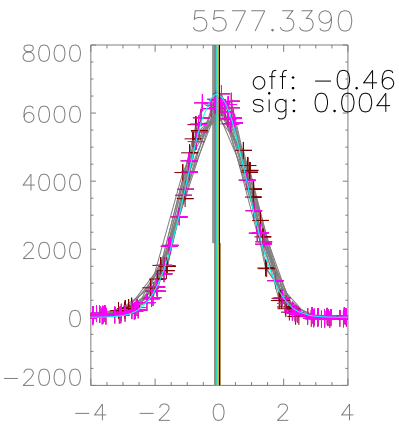

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046872.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

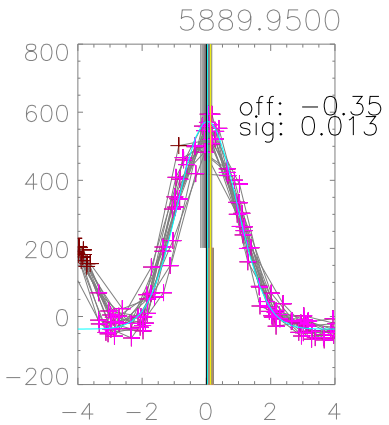

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046872.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.610
Max value = 12.036
Mon Feb 11 02:11:17 2008

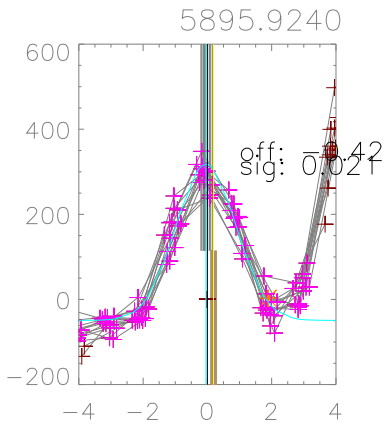

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046872.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

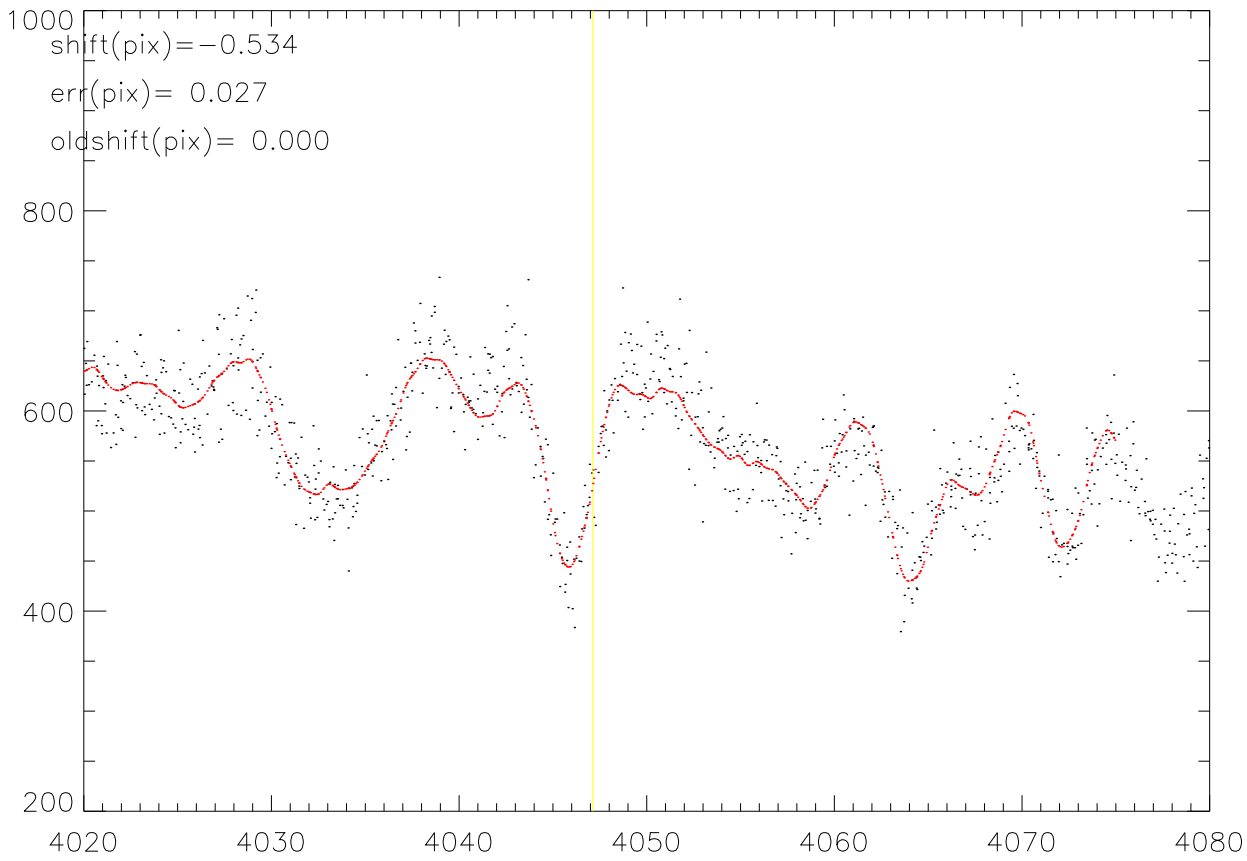

4358.3300
off: −0.46
sig: 0.070

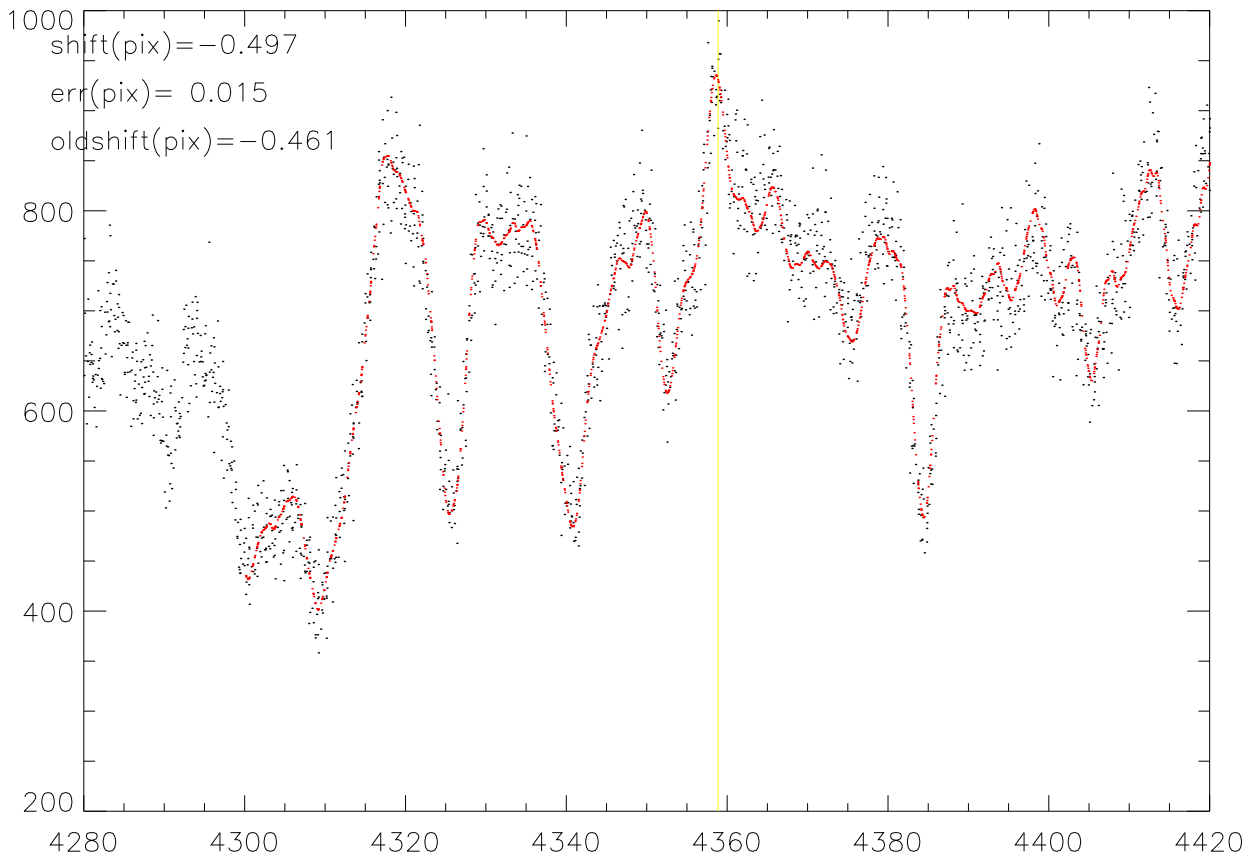

5460.9400
off: −0.21
sig: 0.035

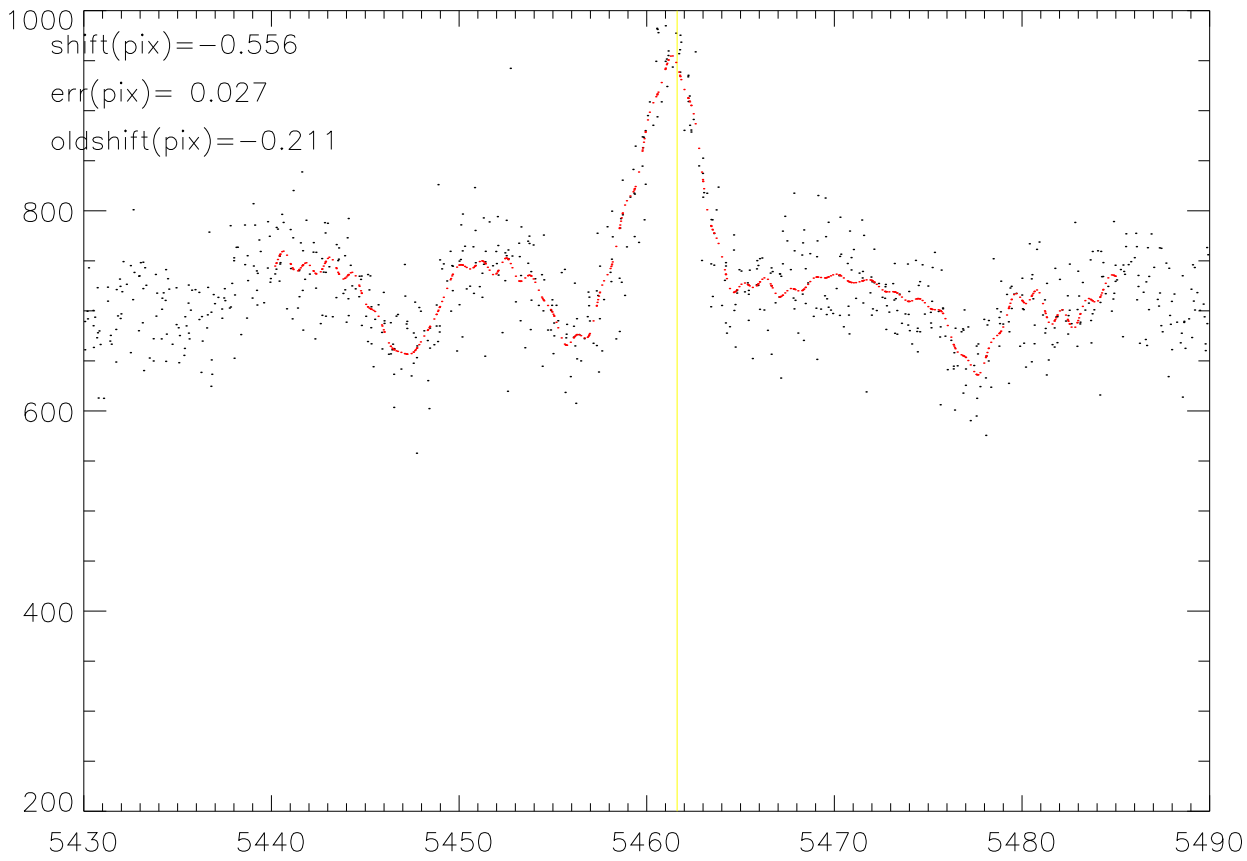

5577.3390
off: −0.46
sig: 0.004

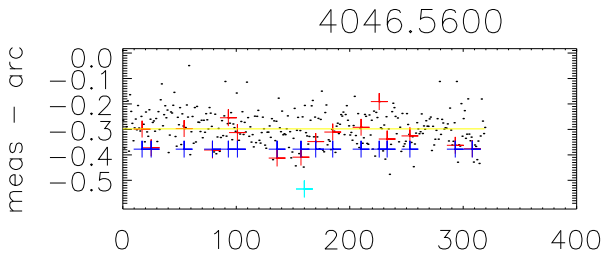

5889.9500
off: −0.35
sig: 0.013

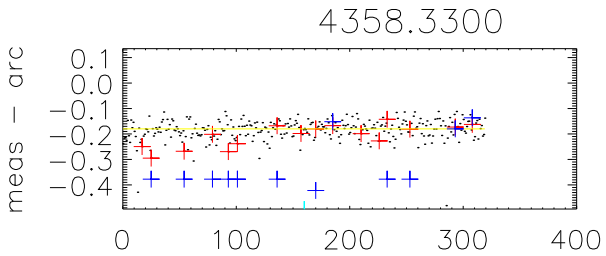

5895.9240
off: −0.42
sig: 0.021

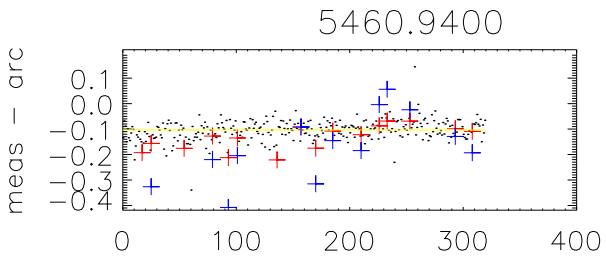

shift(pix)=−0.534
err(pix)= 0.027
oldshift(pix)= 0.000
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

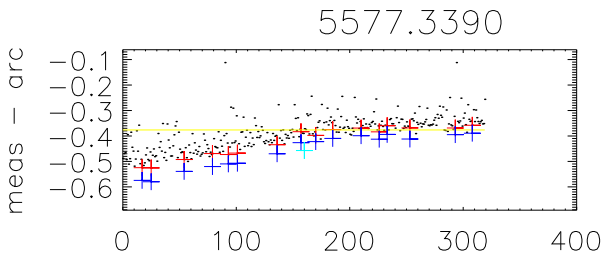

shift(pix)=−0.497
err(pix)= 0.015
oldshift(pix)=−0.461
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

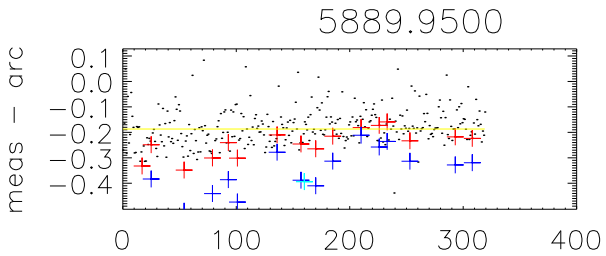

shift(pix)=−0.556
err(pix)= 0.027
oldshift(pix)=−0.211
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

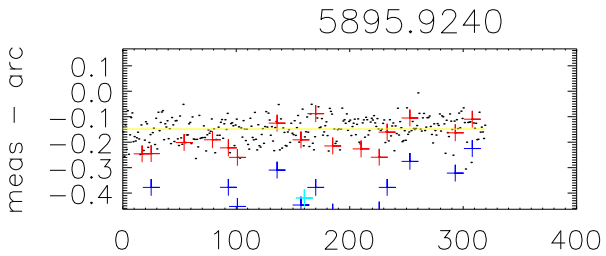

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

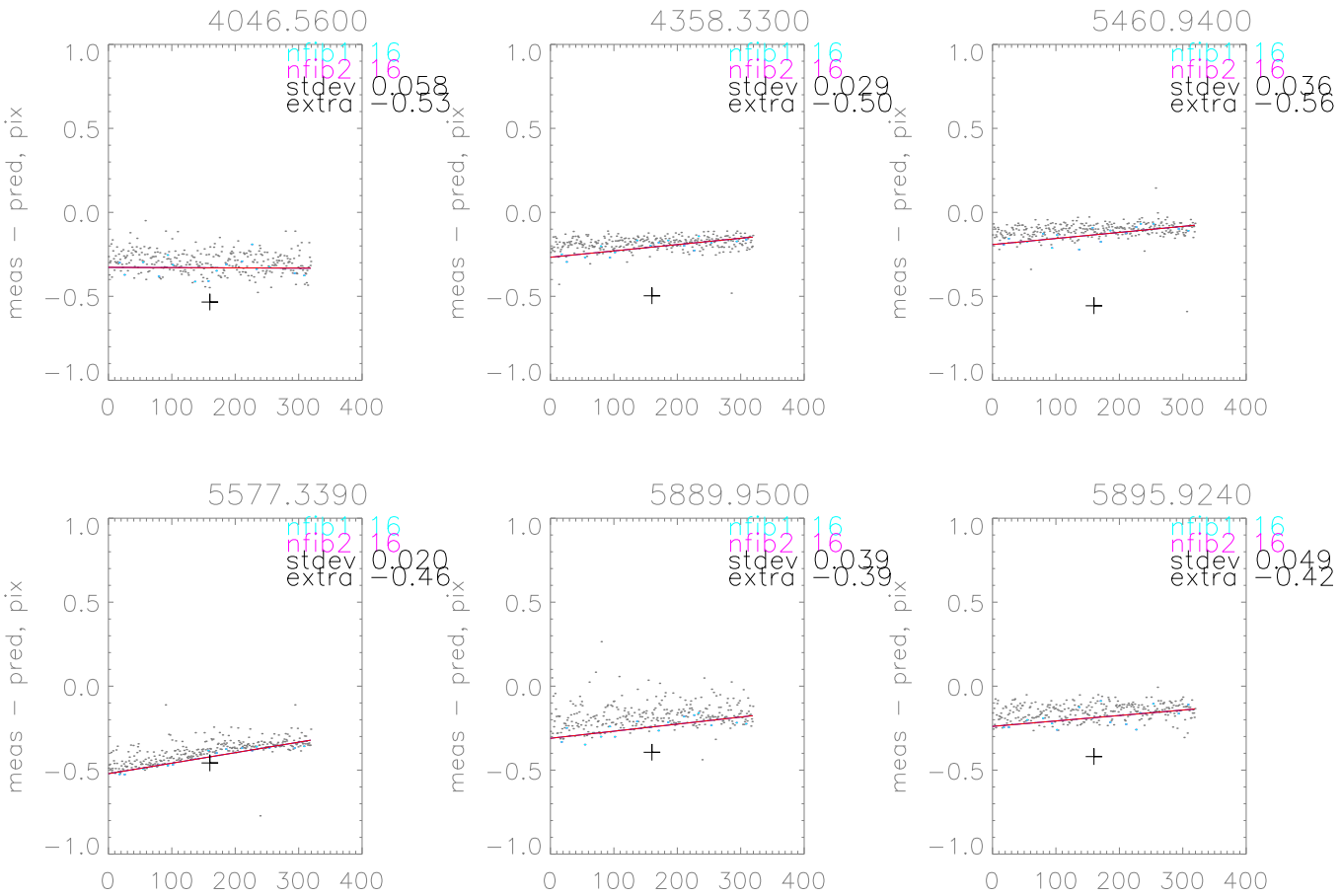

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

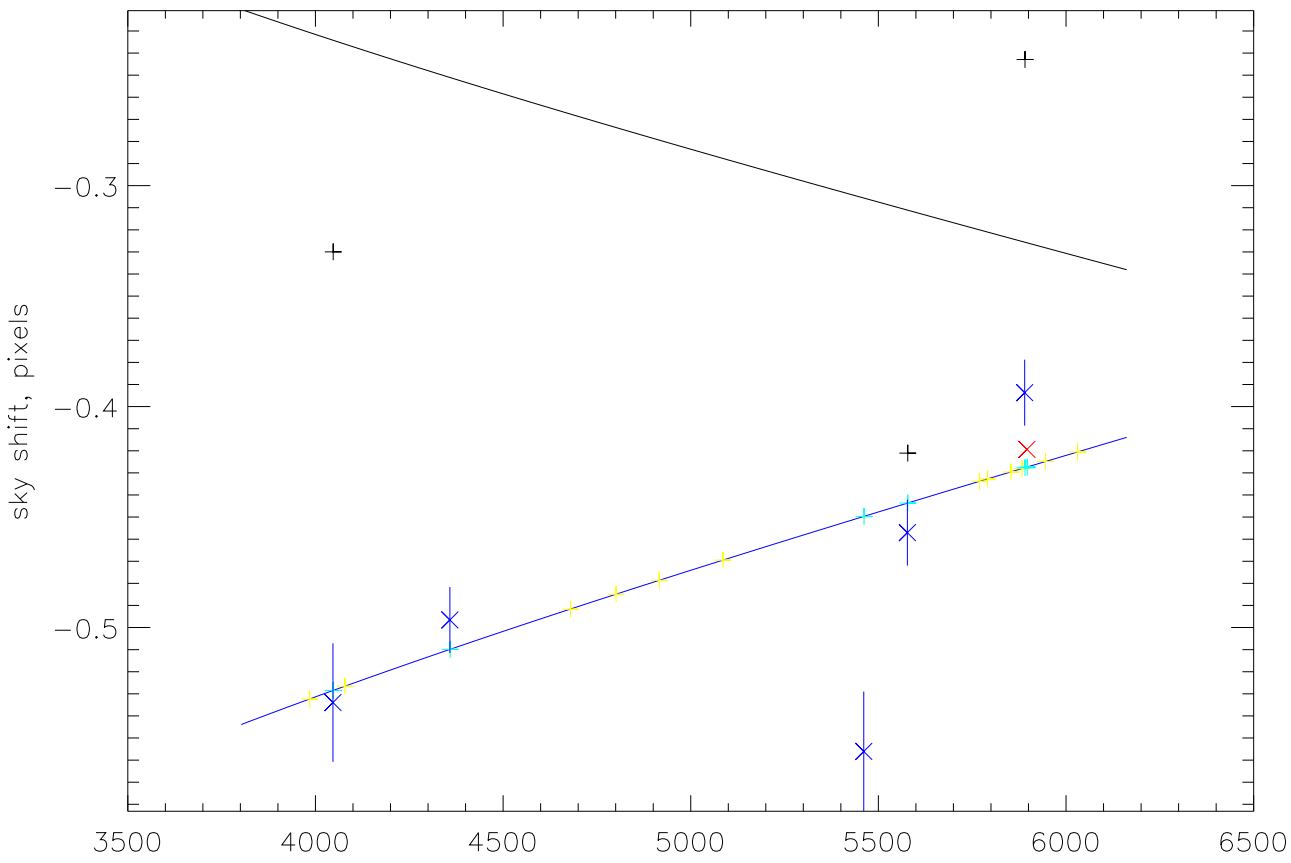

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

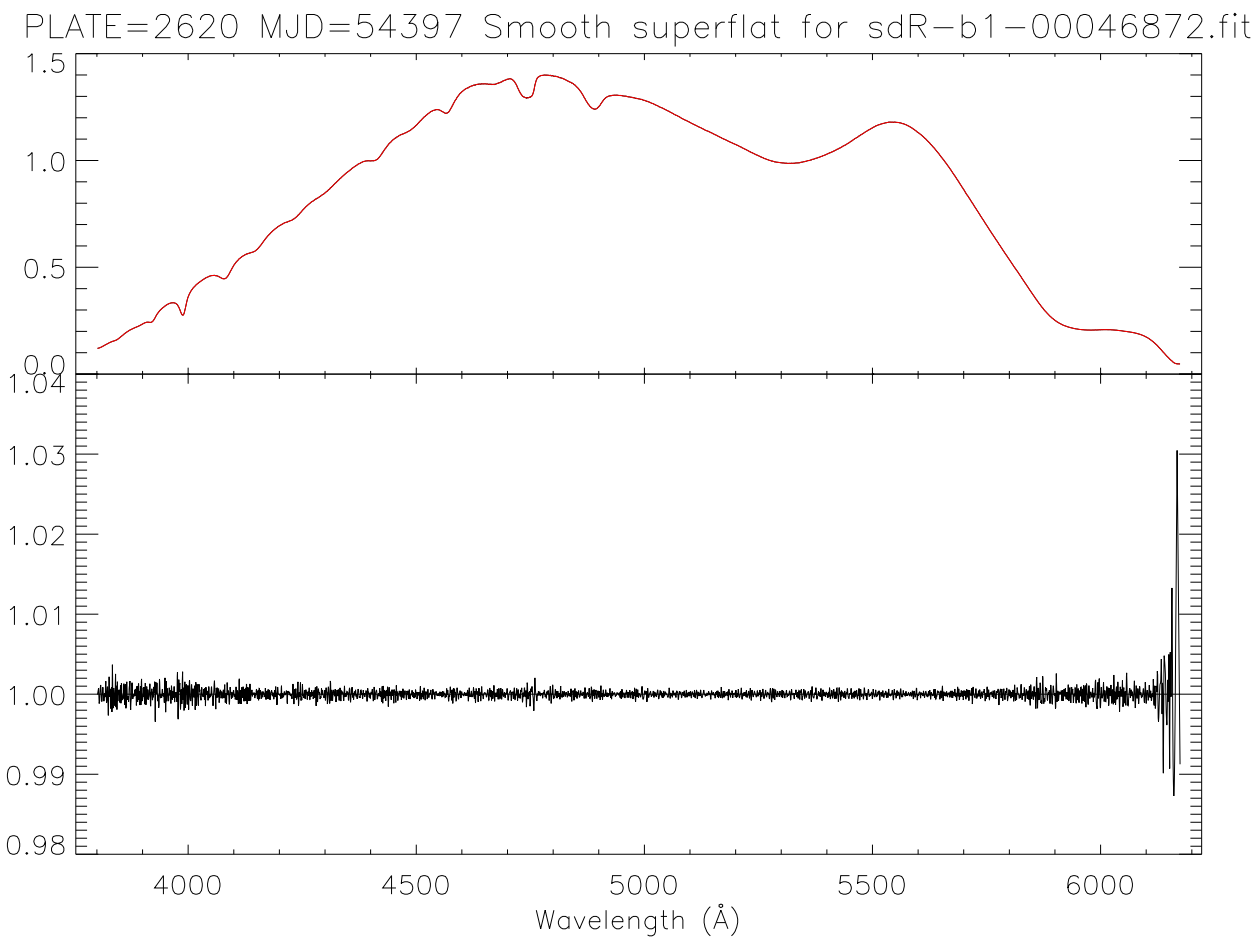

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

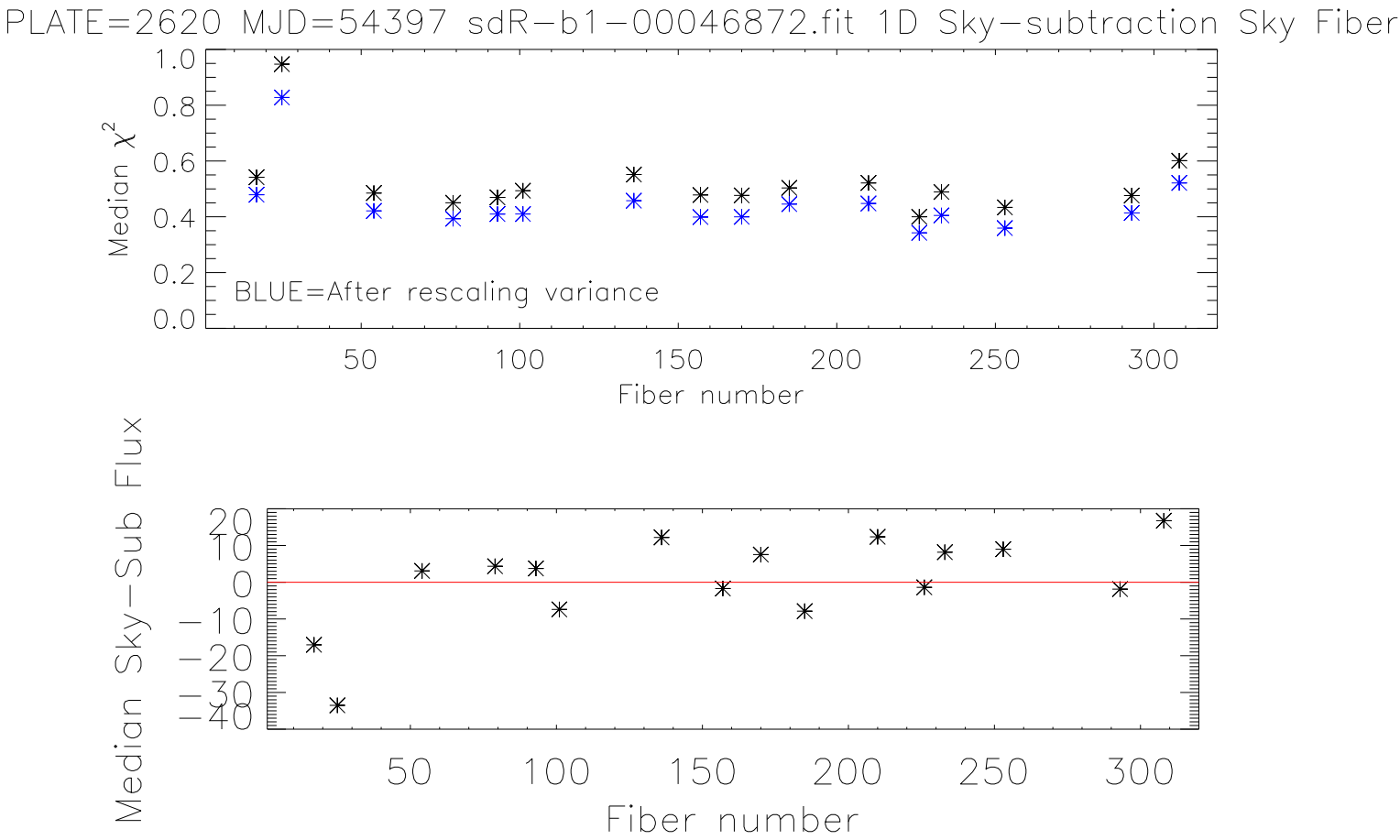

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

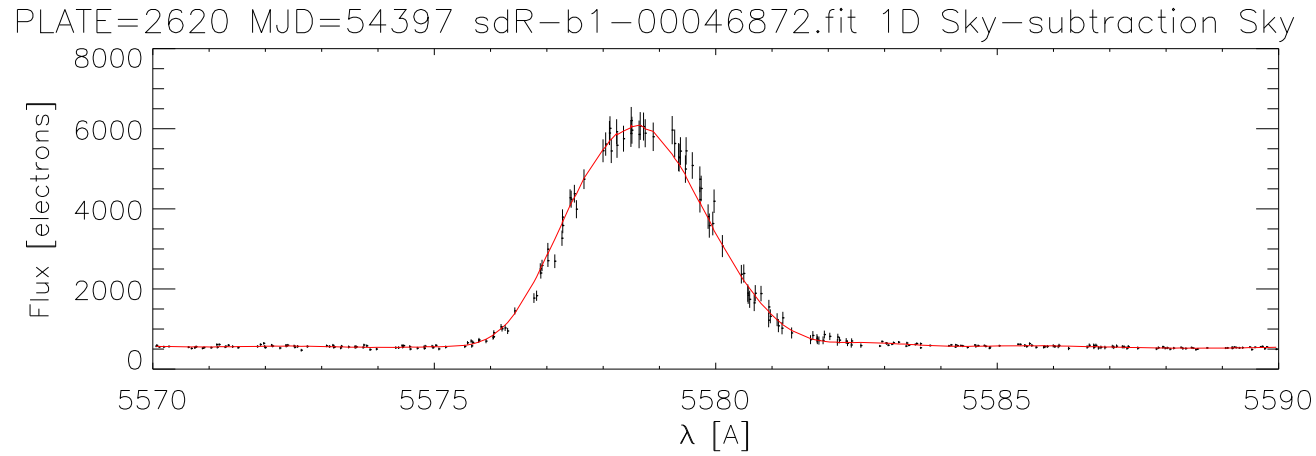

4046.5600
nfib1 16
nfib2 16
stdev 0.058
extra −0.53
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra −0.50
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra −0.56
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.46
5889.9500
nfib1 16
nfib2 16
stdev 0.039
extra −0.39
5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra −0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

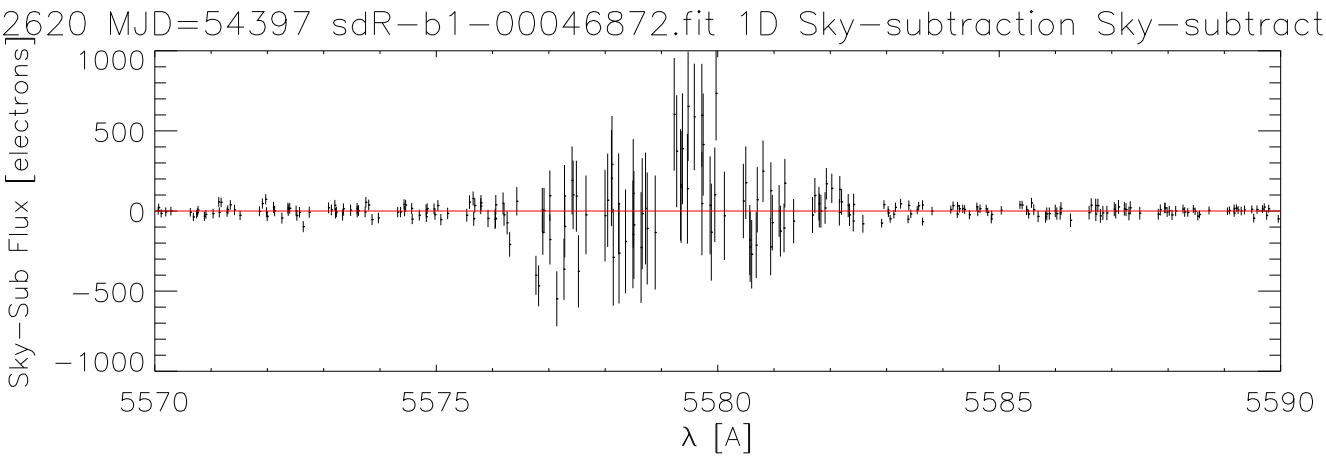

sky shift, pixels
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

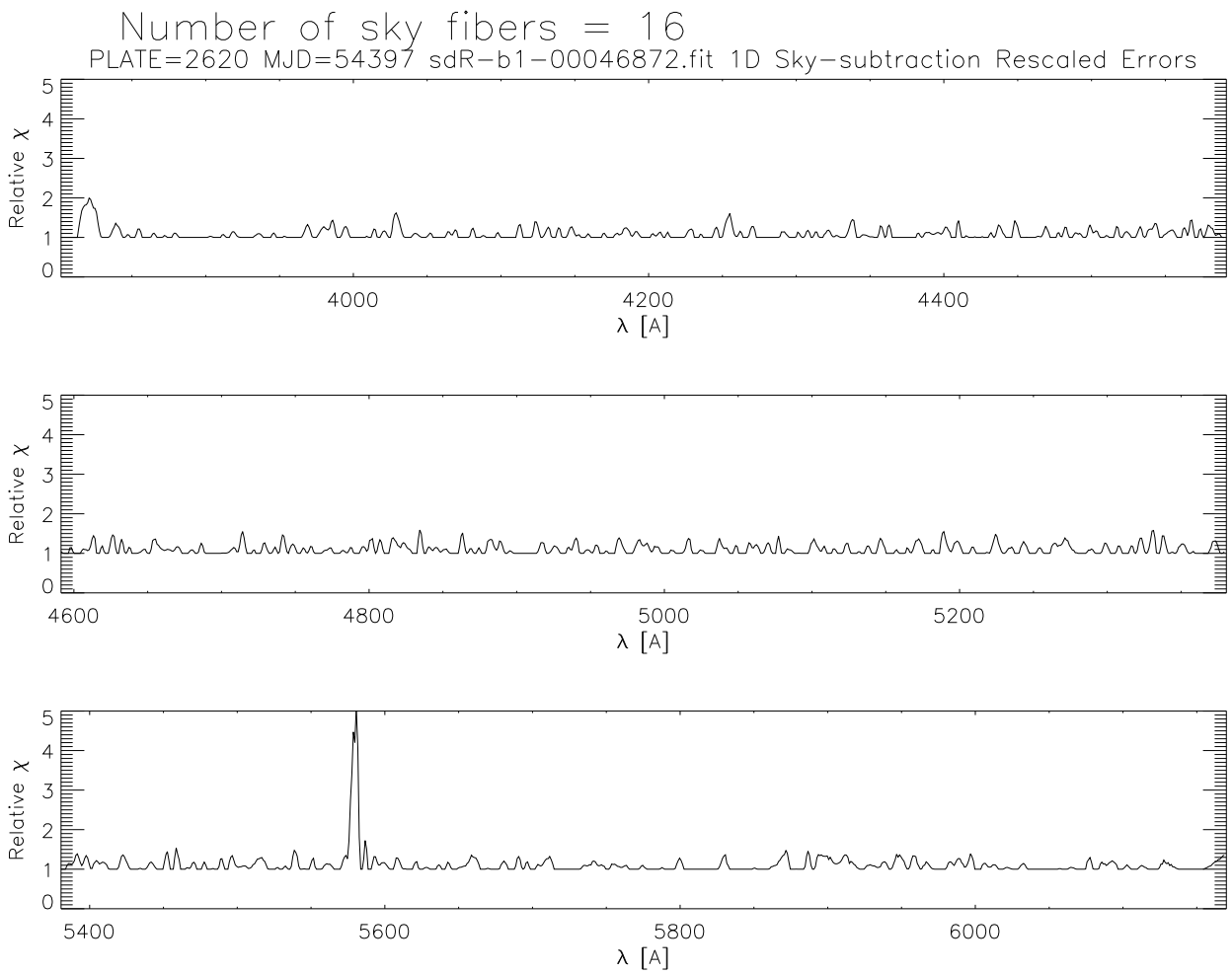
es= −0.0000

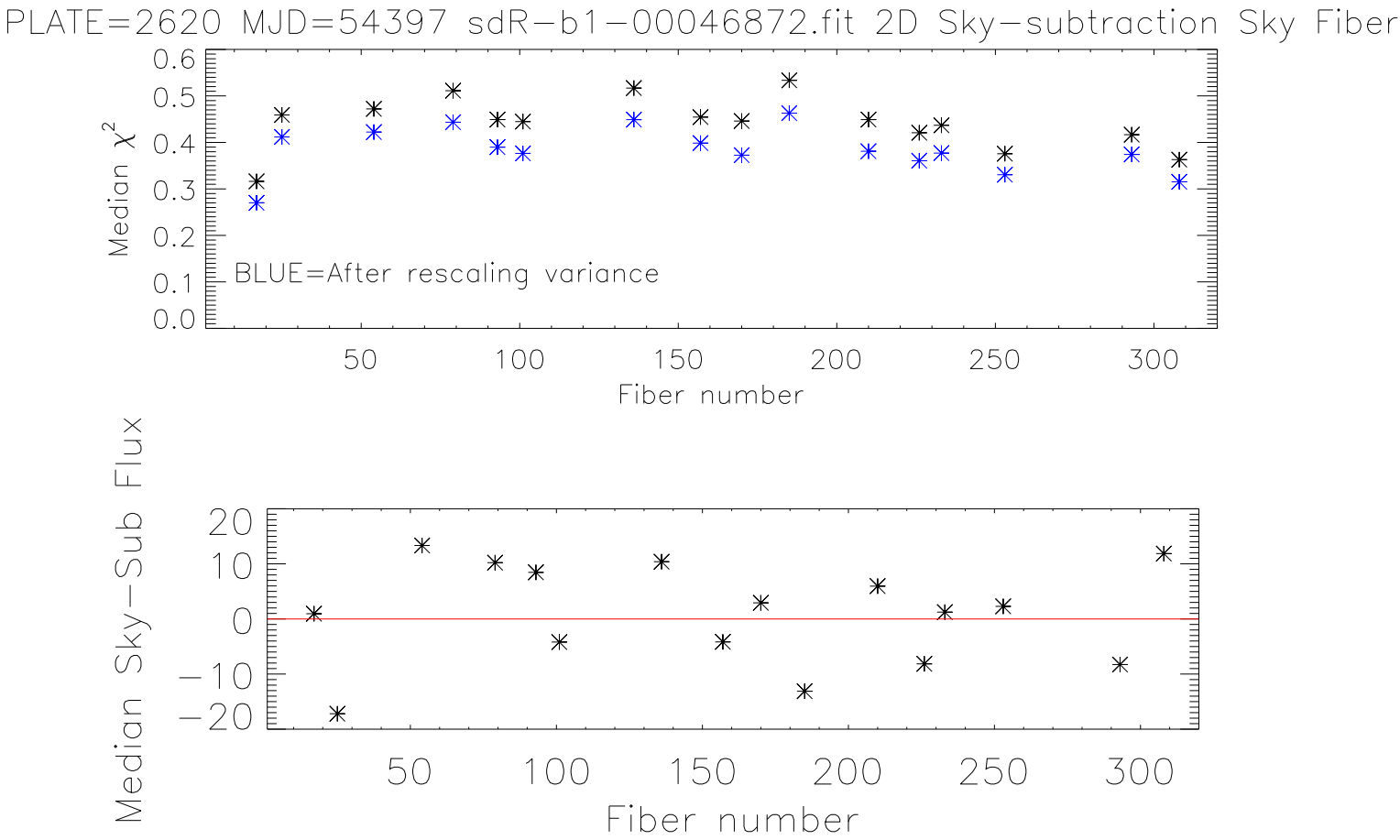

PLATE=2620 MJD=54397 Smooth superflat for sdR−b1−00046872.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

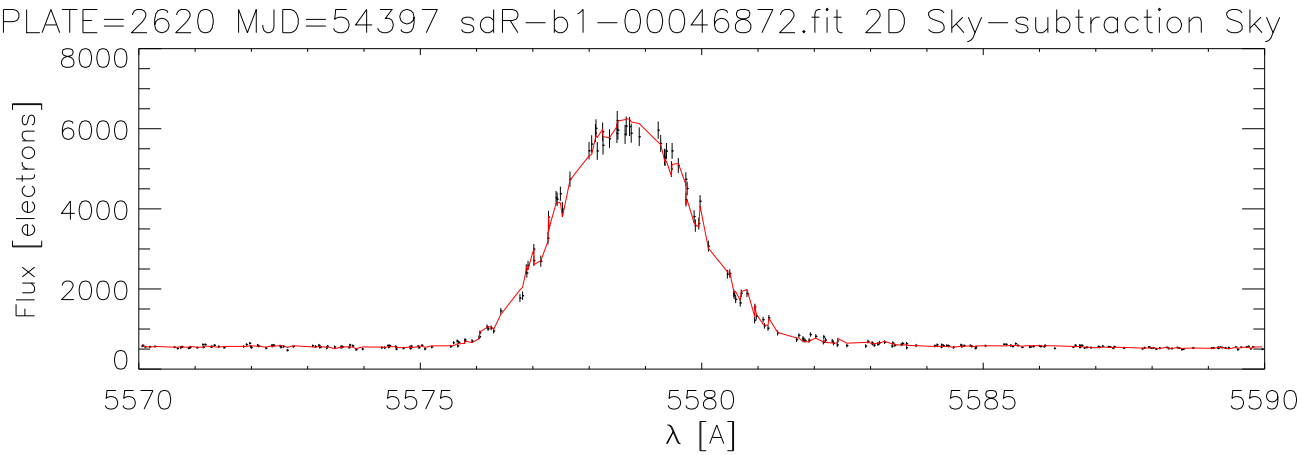

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

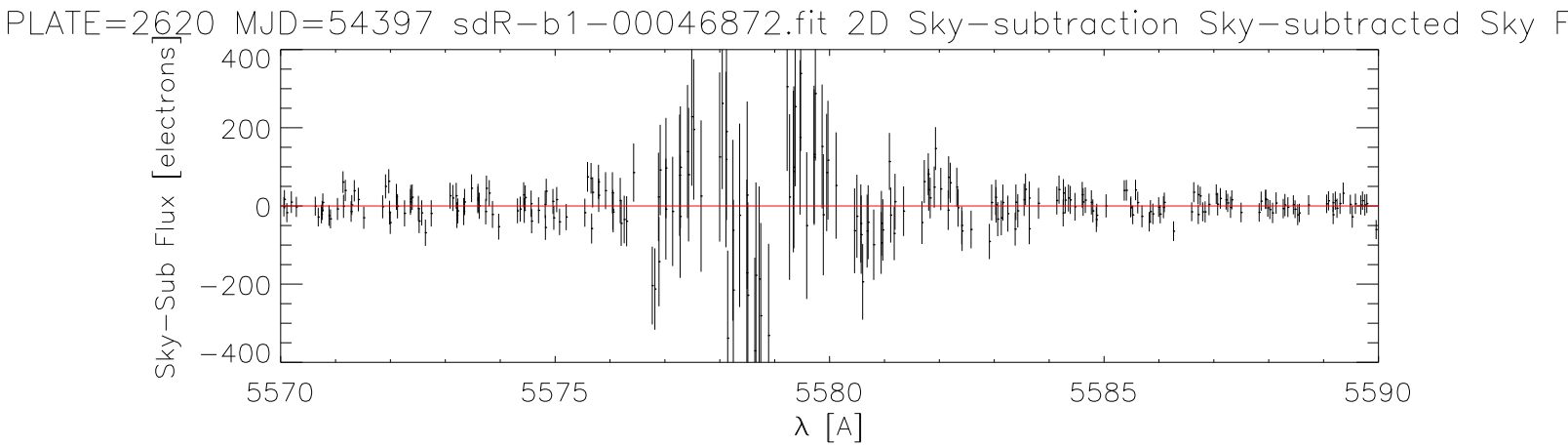

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

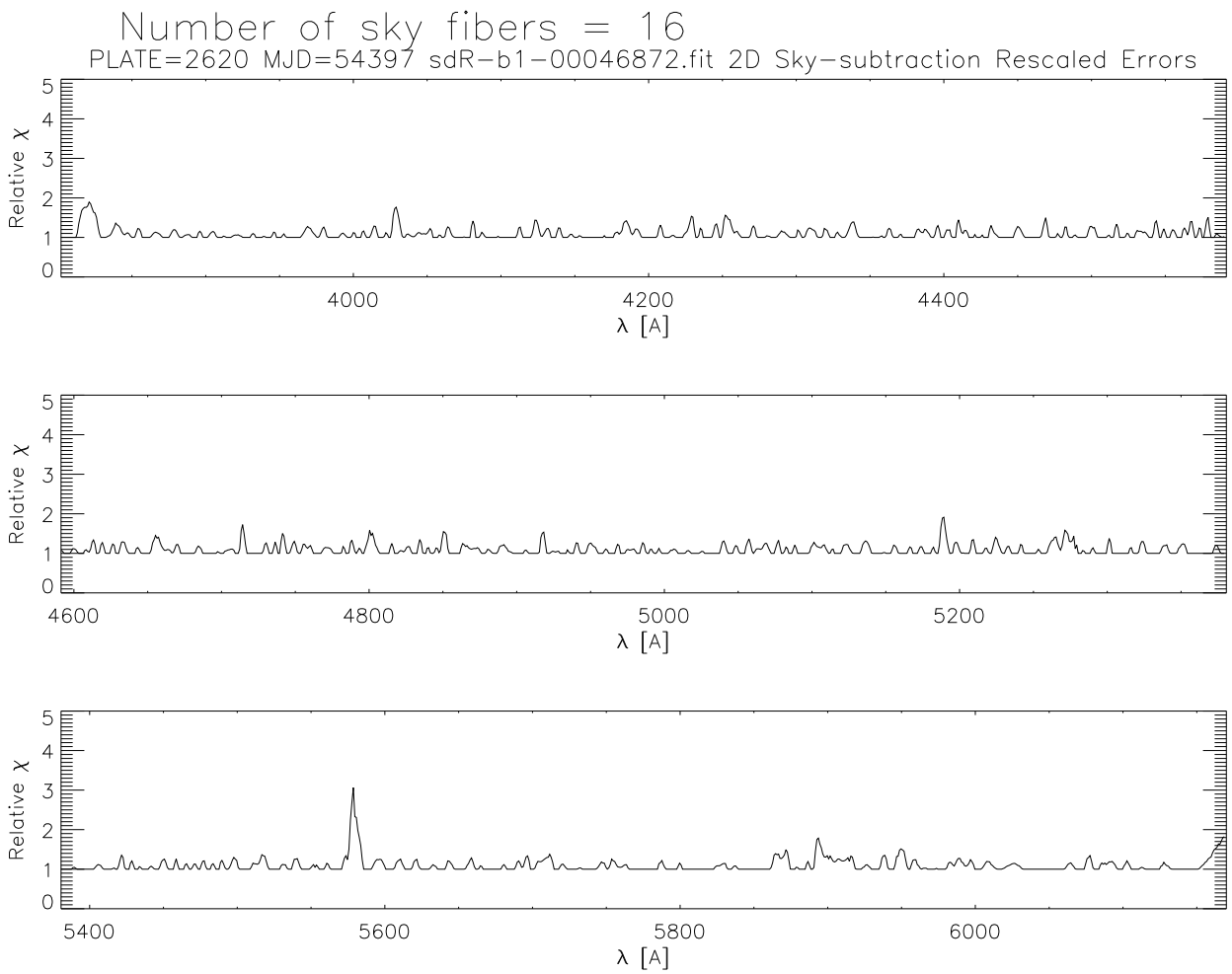

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

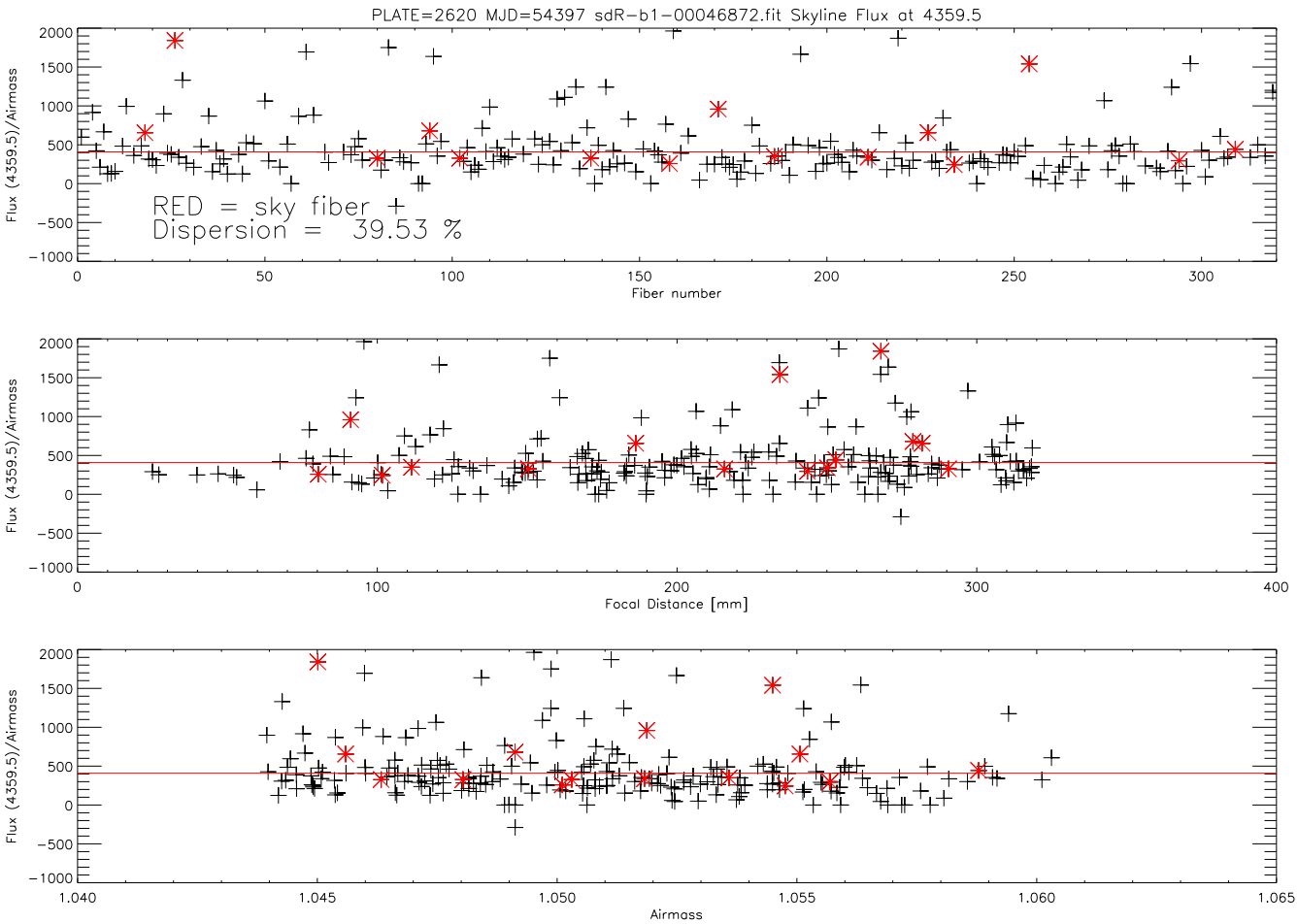

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046872.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

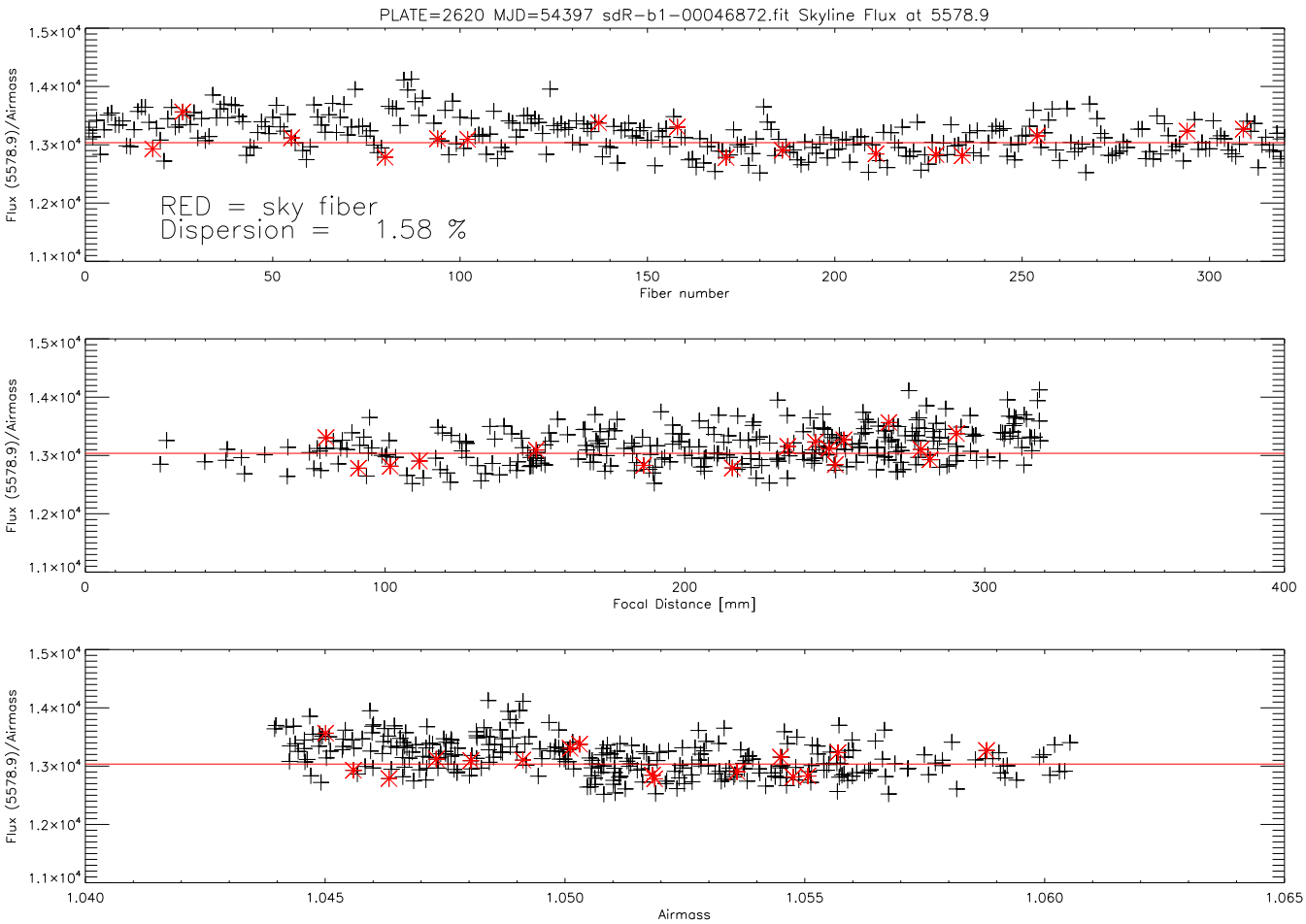

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

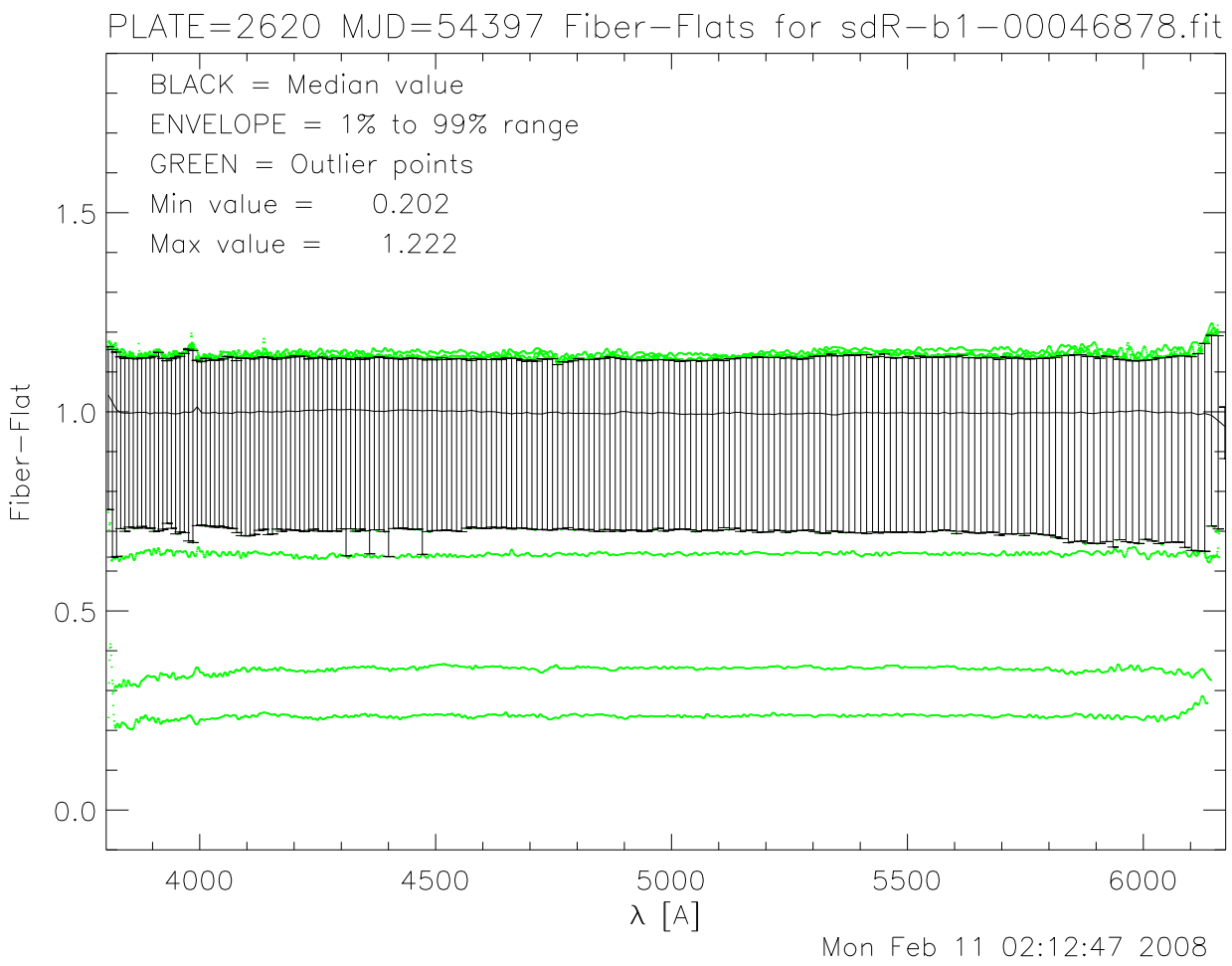

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

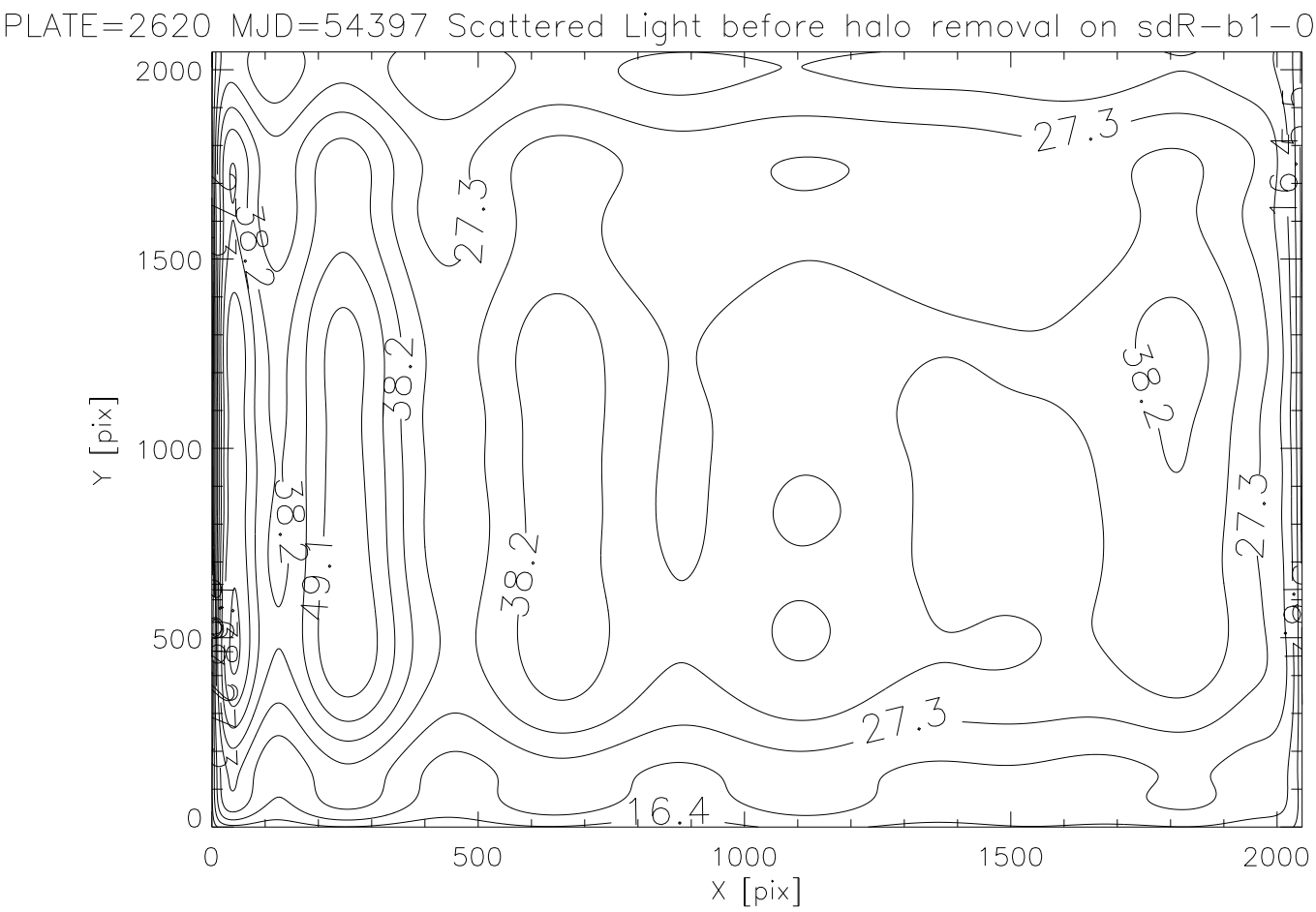

PLATE=2620 MJD=54397 sdR-b1-00046872.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

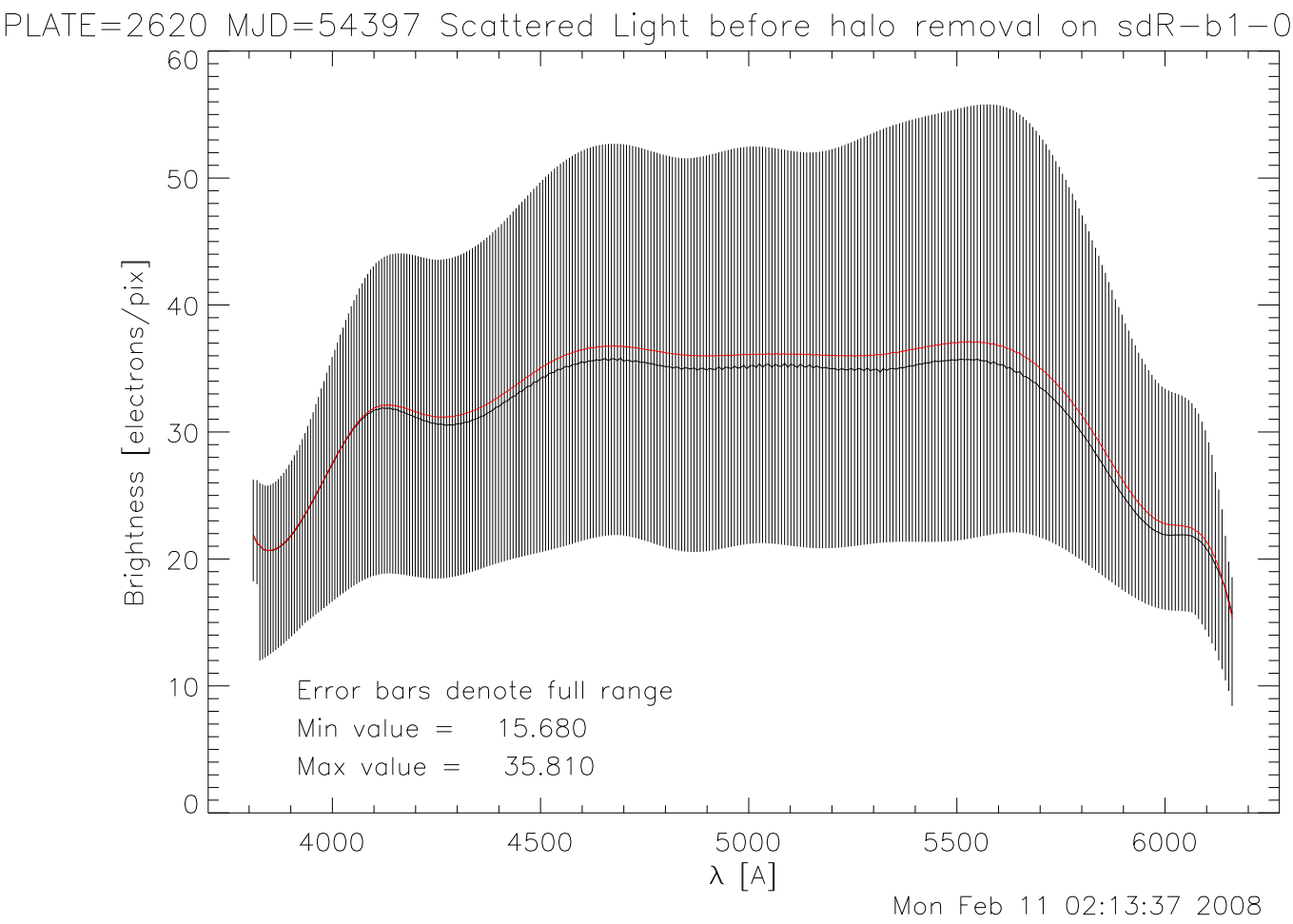

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046872.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

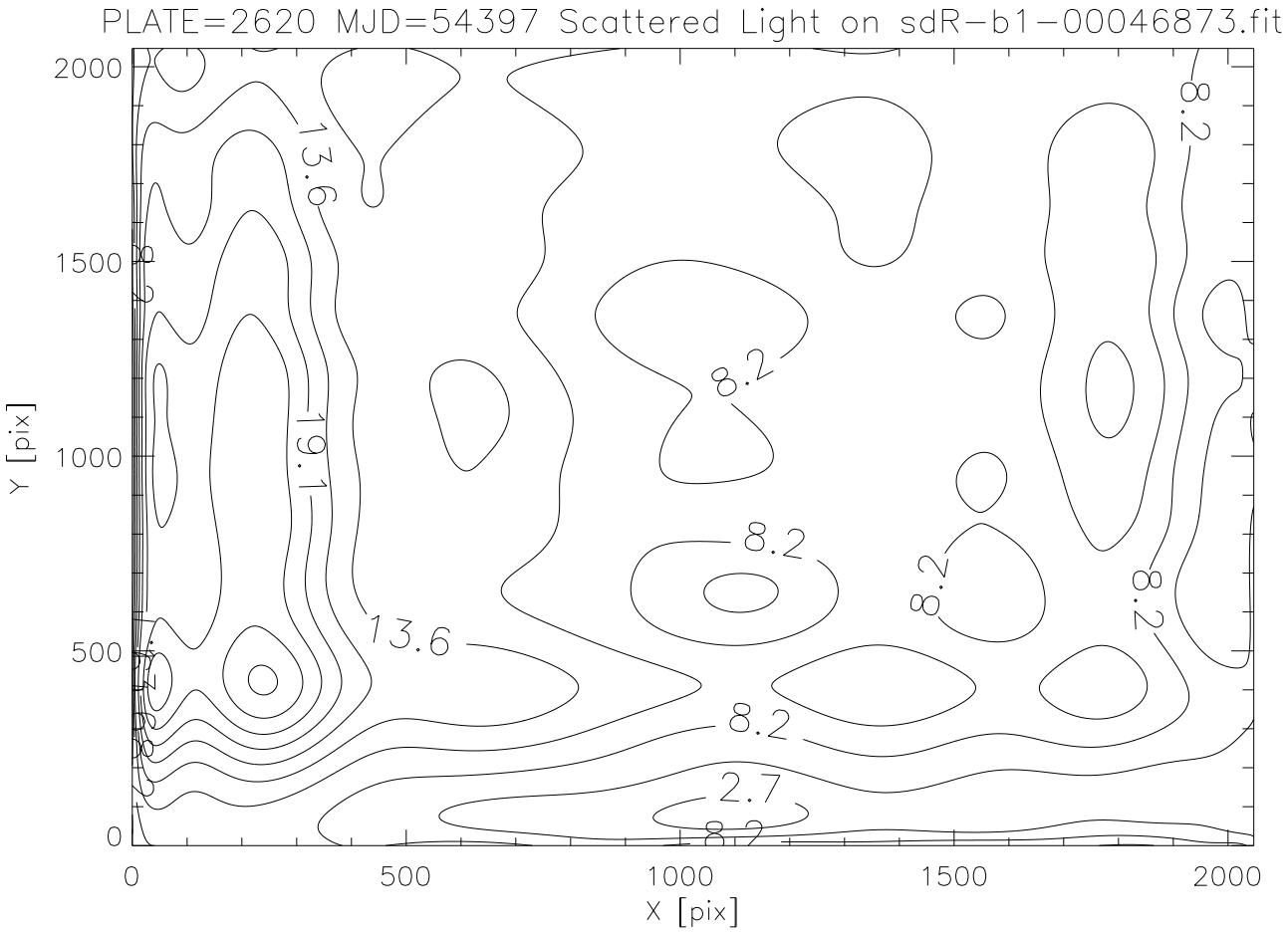

PLATE=2620 MJD=54397 sdR-b1-00046872.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber +
Dispersion = 39.53 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

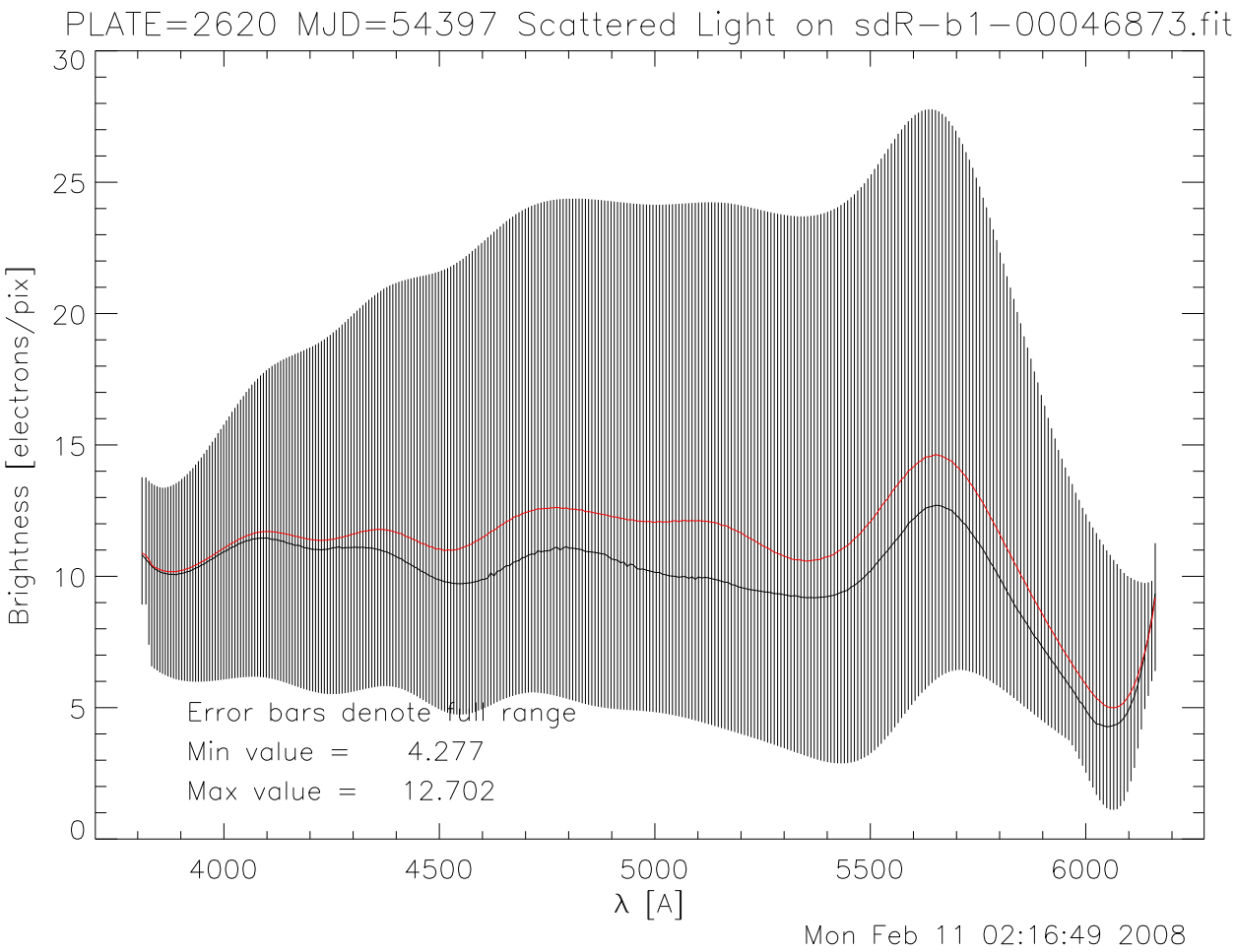

PLATE=2620 MJD=54397 sdR-b1-00046872.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.58 %
Fiber number
Focal Distance [mm]
Airmass

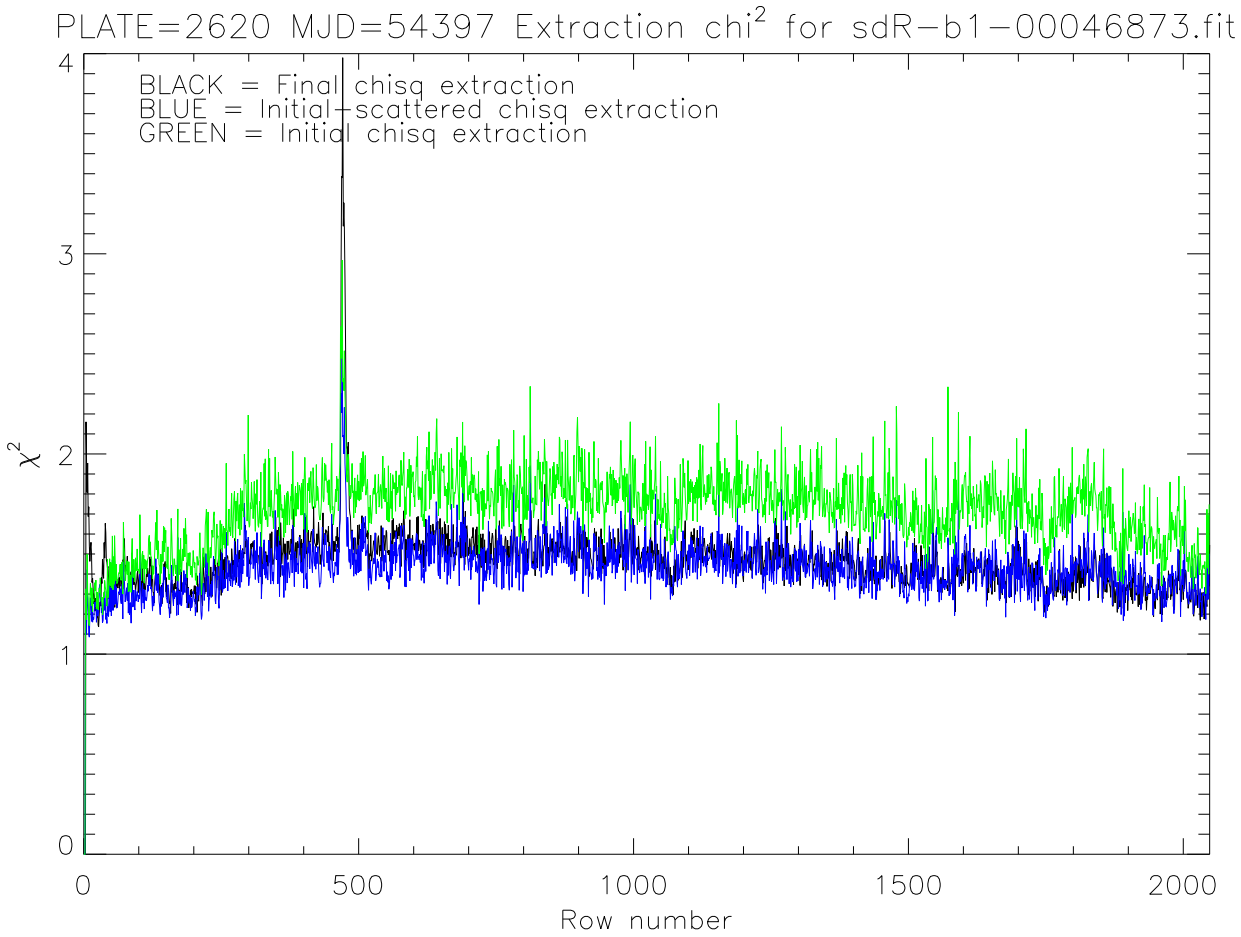

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b1-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:12:47 2008

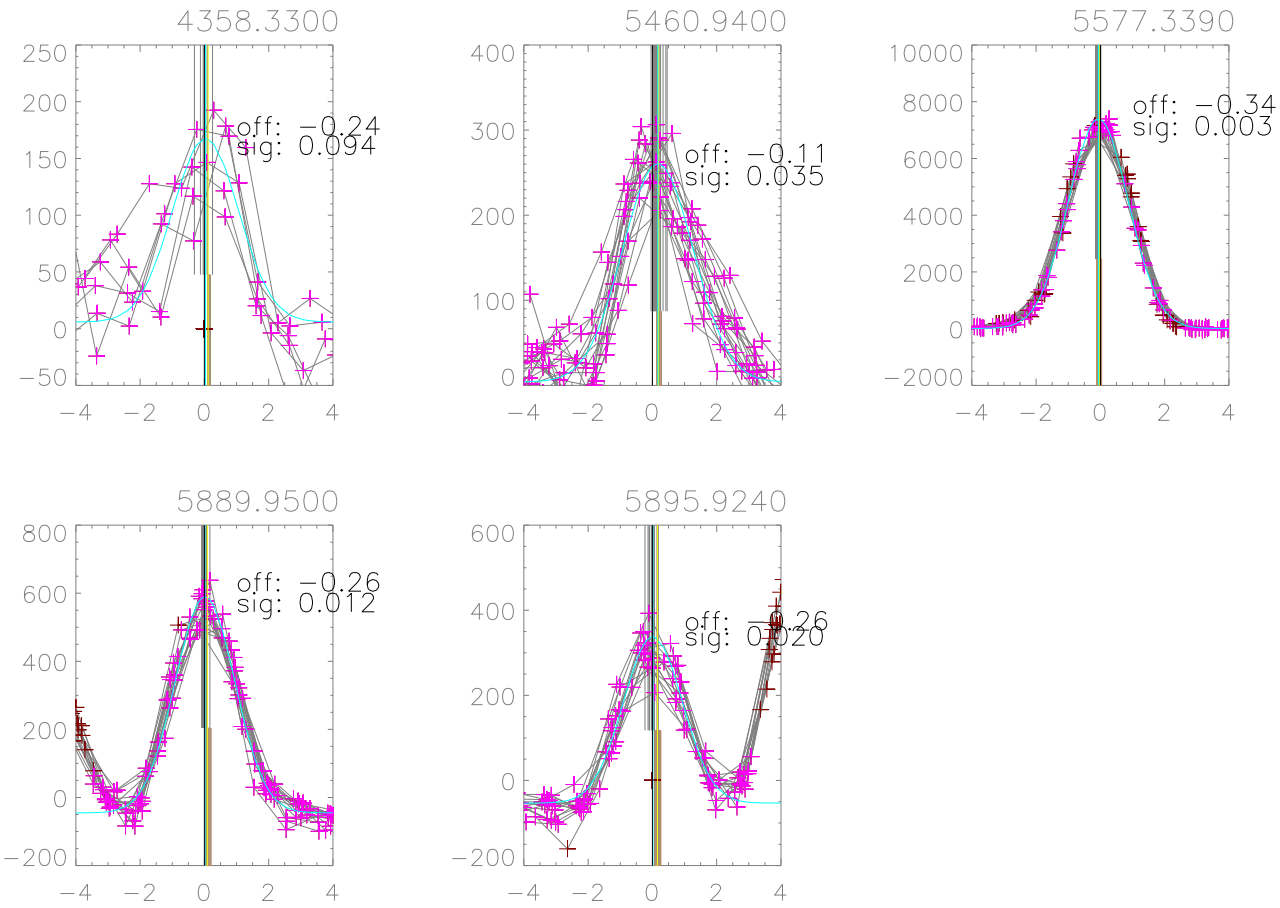

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046873.f
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
38.2
49.1
16.4

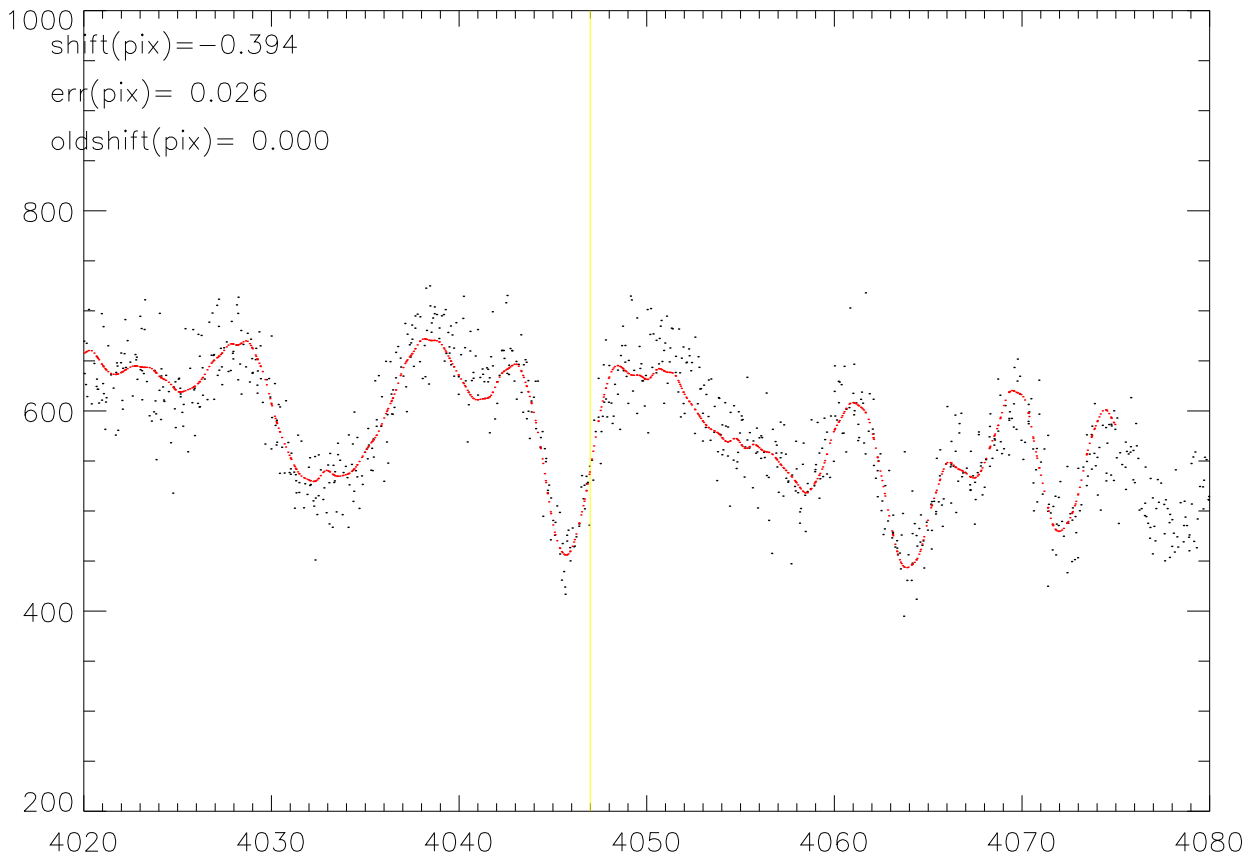

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046873.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 15.680
Max value = 35.810
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:13:37 2008

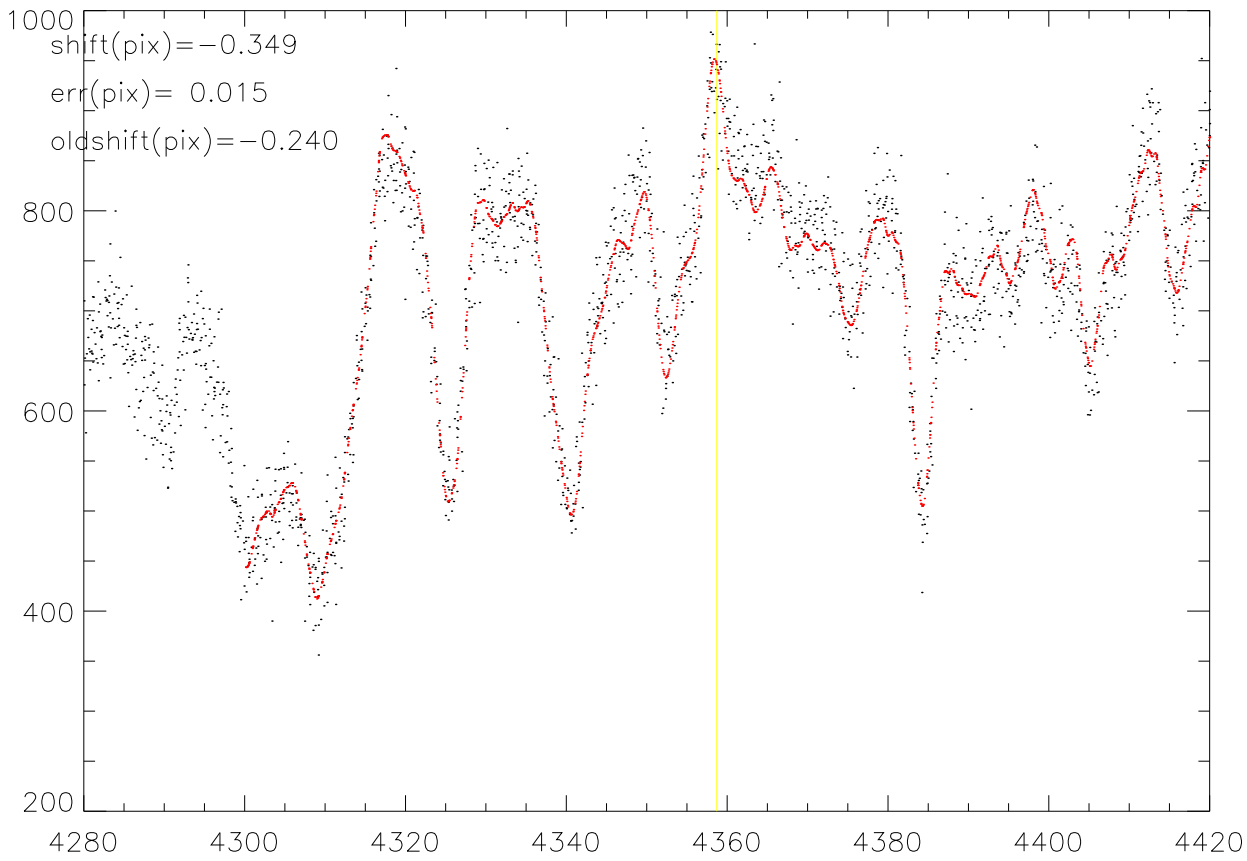

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046873.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2
2.7

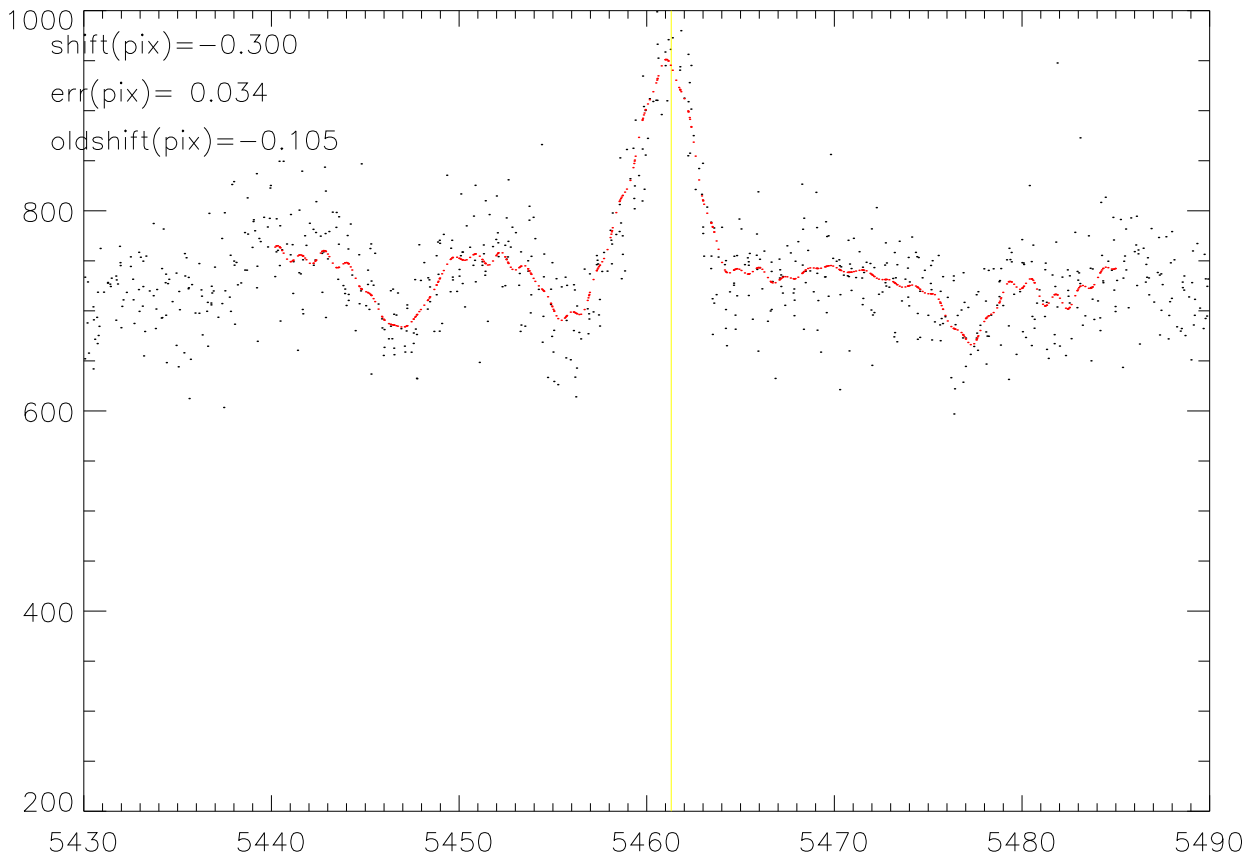

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046873.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.277
Max value = 12.702
Mon Feb 11 02:16:49 2008

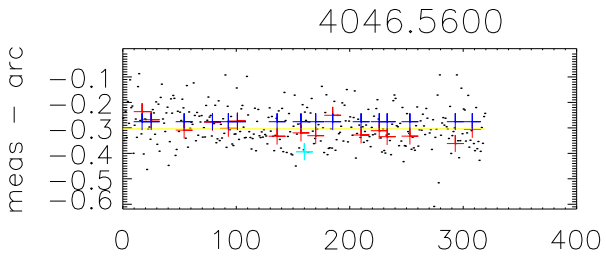

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046873.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

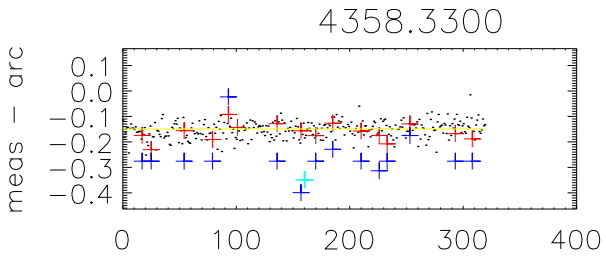

4358.3300
off: −0.24
sig: 0.094
5460.9400
off: −0.11
sig: 0.035
5577.3390
off: −0.34
sig: 0.003
5889.9500
off: −0.26
sig: 0.012
5895.9240
off: −0.26
sig: 0.020

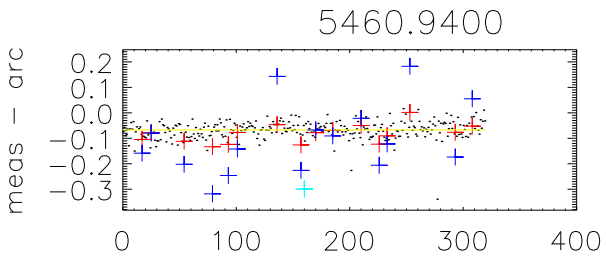

shift(pix)=−0.394
err(pix)= 0.026
oldshift(pix)= 0.000
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

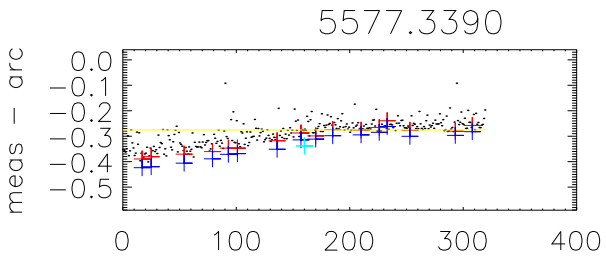

shift(pix)=−0.349
err(pix)= 0.015
oldshift(pix)=−0.240
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

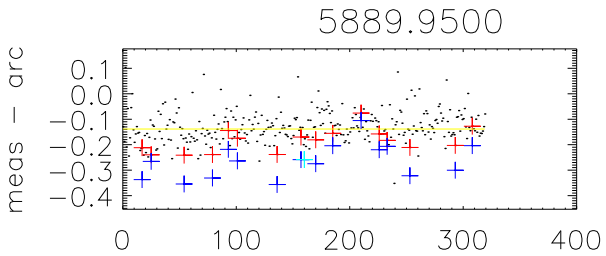

shift(pix)=−0.300
err(pix)= 0.034
oldshift(pix)=−0.105
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

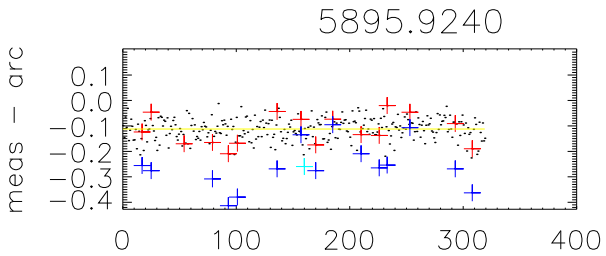

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

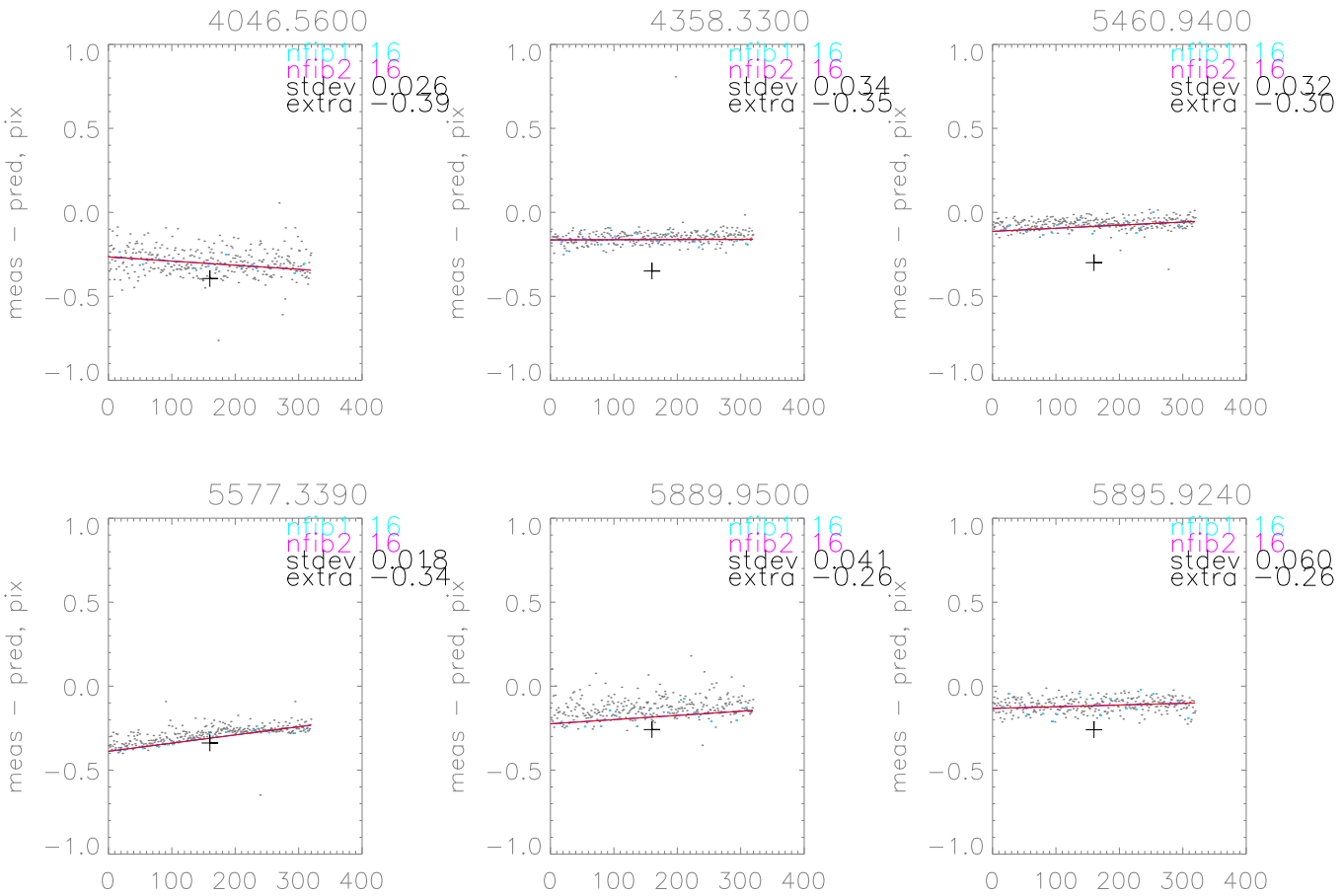

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

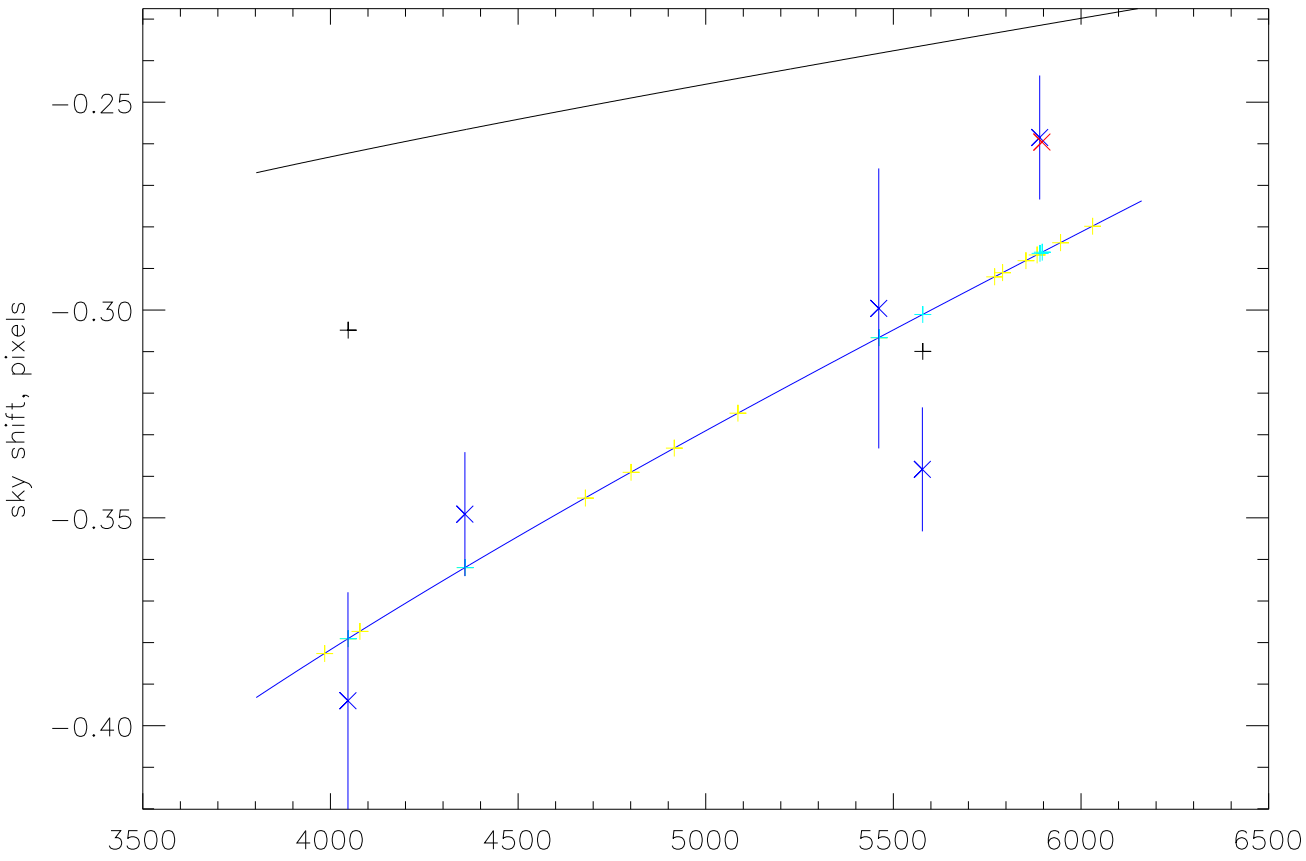

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

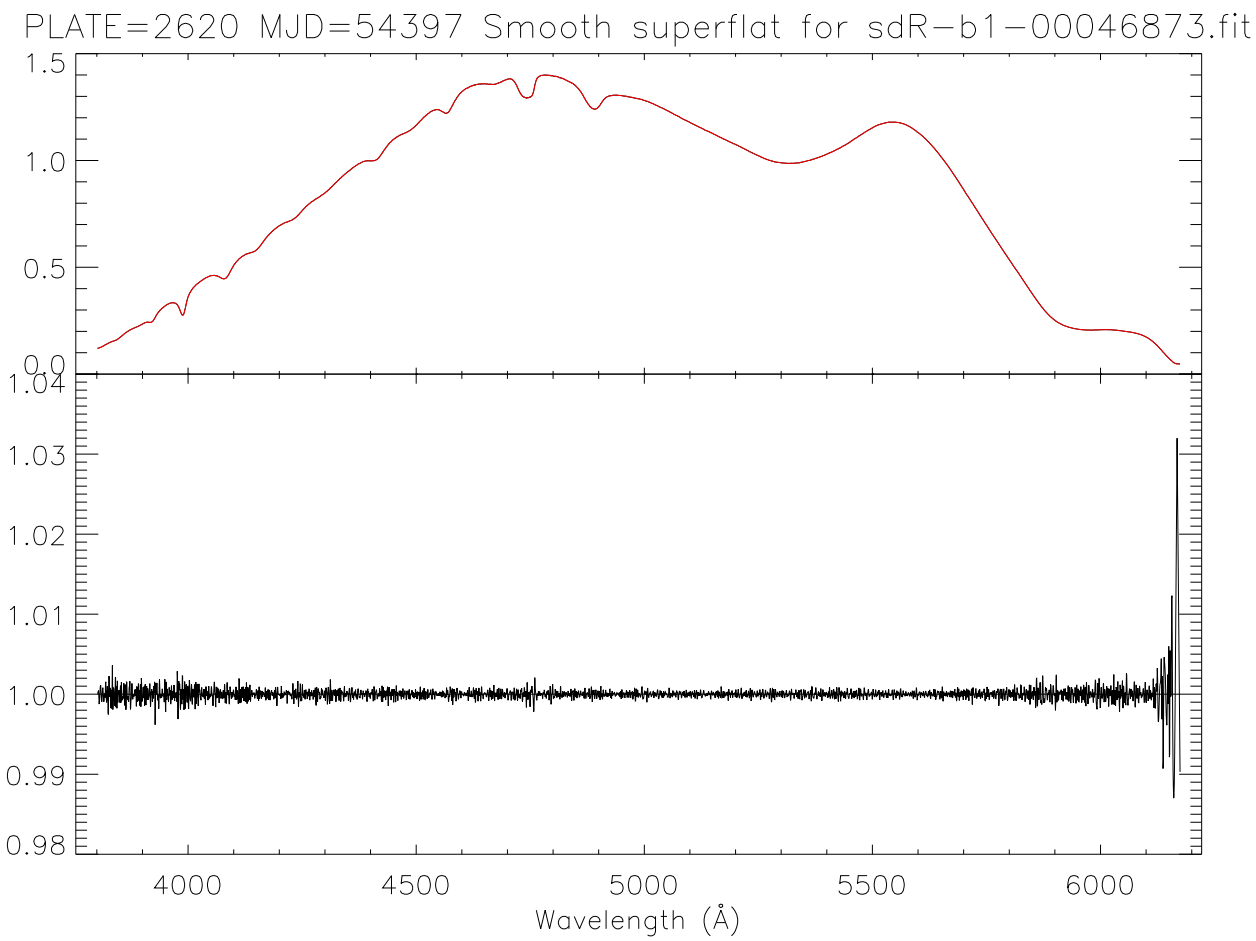

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

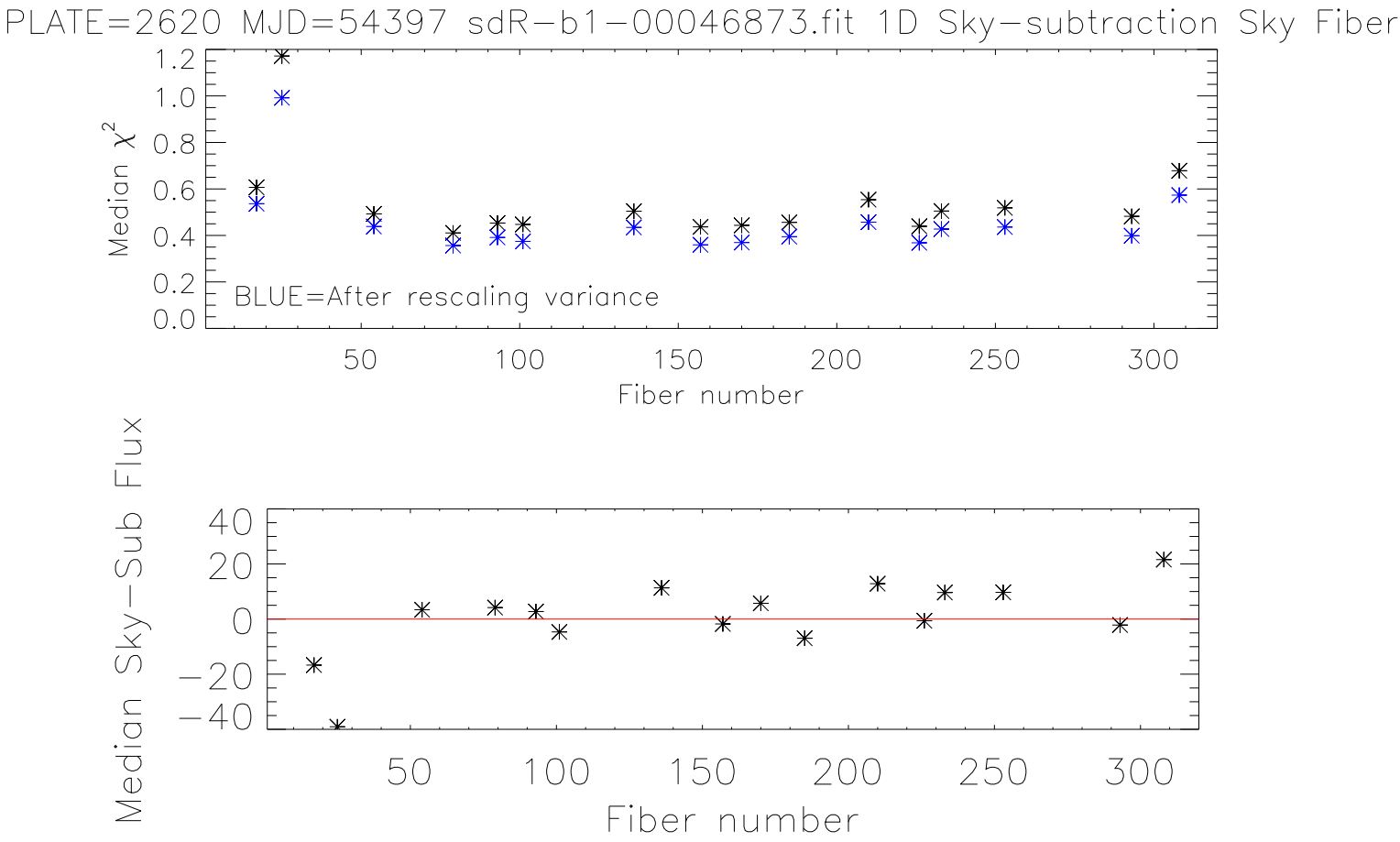

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

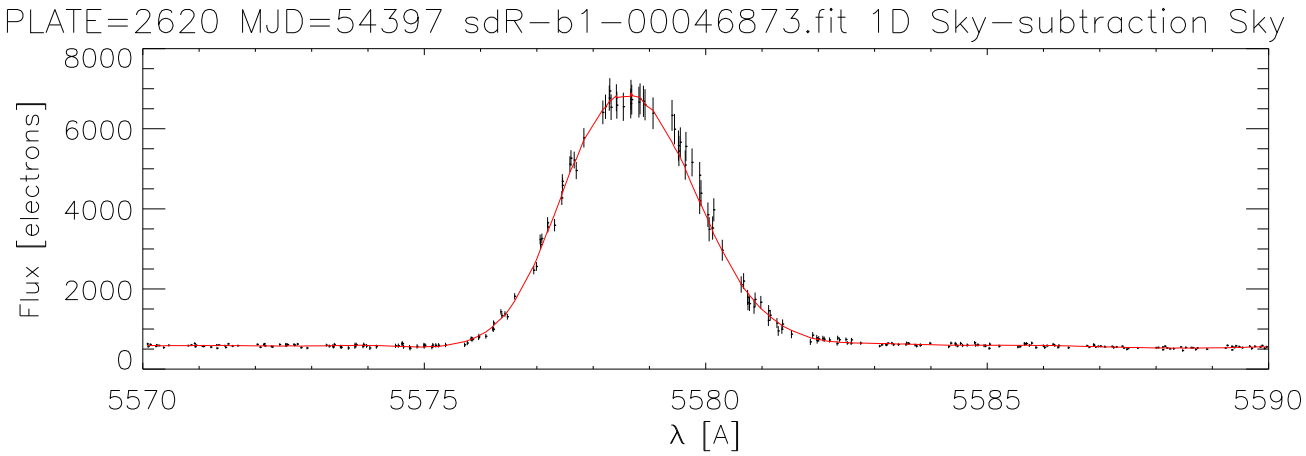

4046.5600
nfib1 16
nfib2 16
stdev 0.026
extra −0.39
4358.3300
nfib1 16
nfib2 16
stdev 0.034
extra −0.35
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.30
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.34
5889.9500
nfib1 16
nfib2 16
stdev 0.041
extra −0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.060
extra −0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

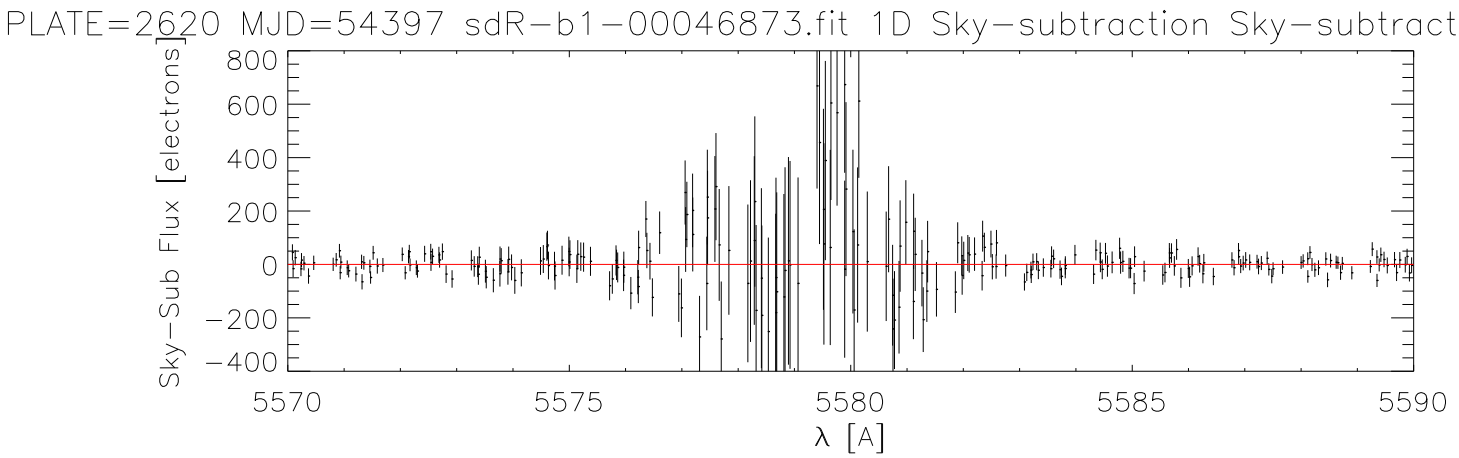

sky shift, pixels
−0.25
−0.30
−0.35
−0.40
3500
4000
4500
5000
5500
6000
6500

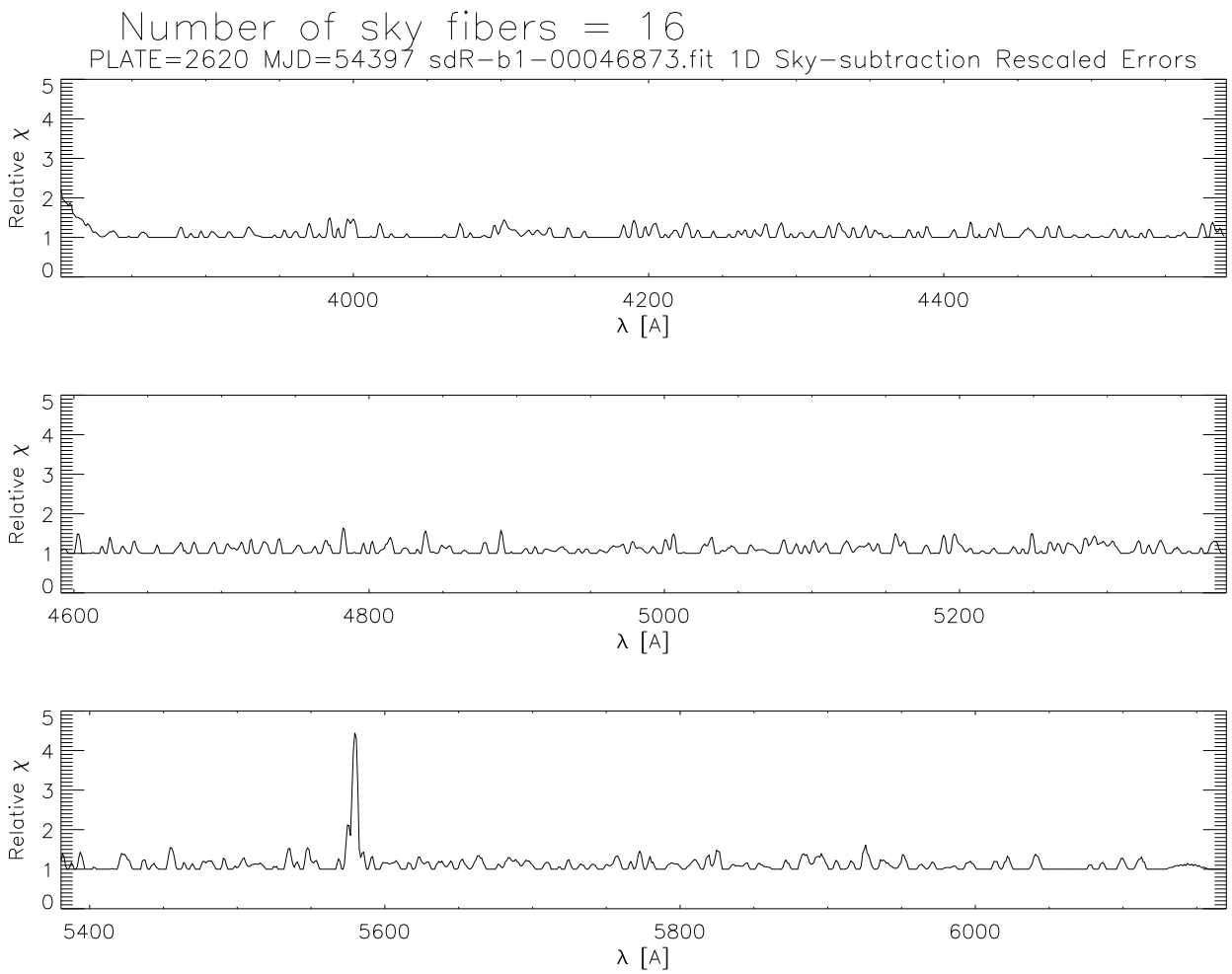
es= −0.0000

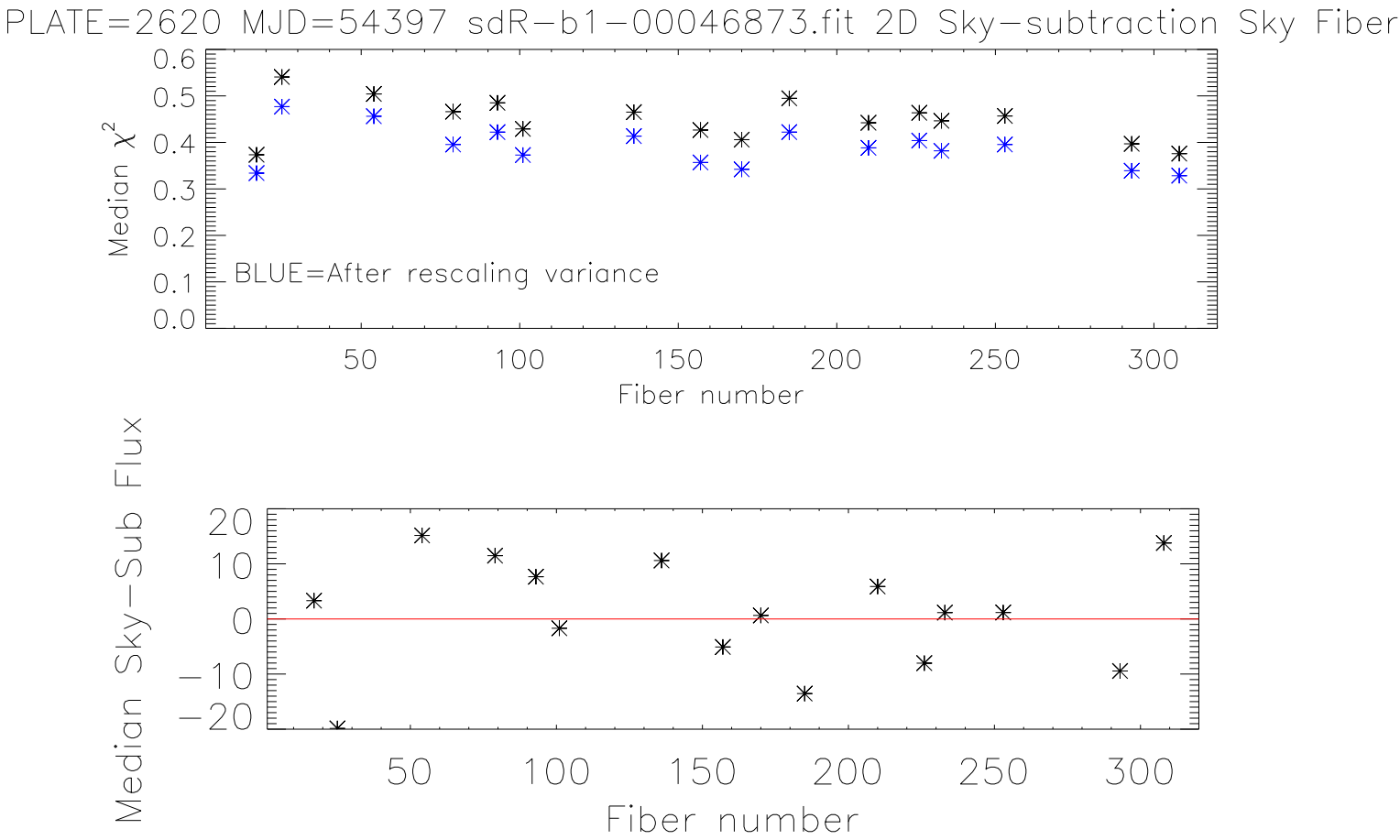

PLATE=2620 MJD=54397 Smooth superflat for sdR−b1−00046873.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

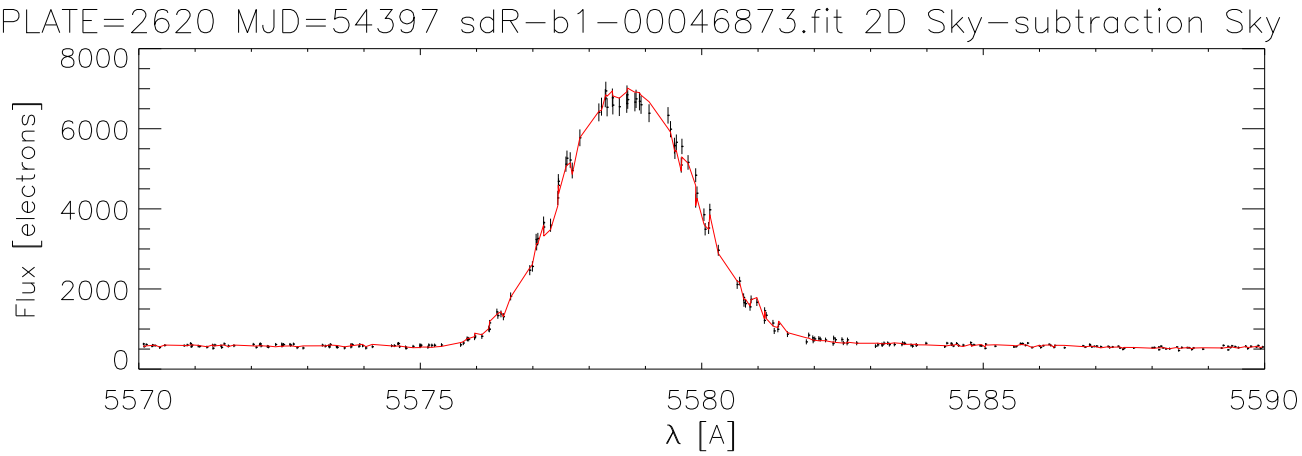

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

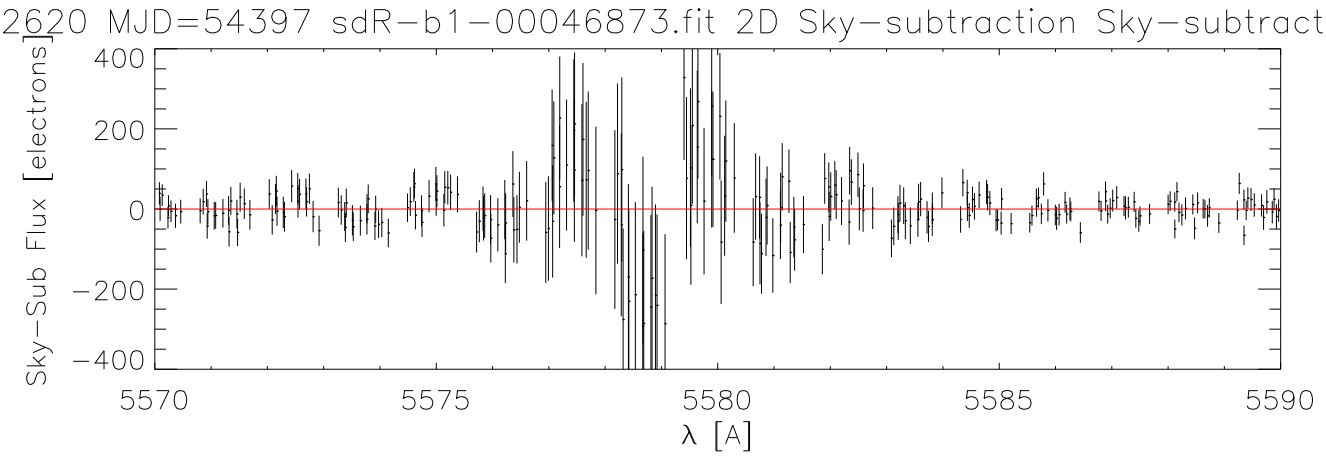

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

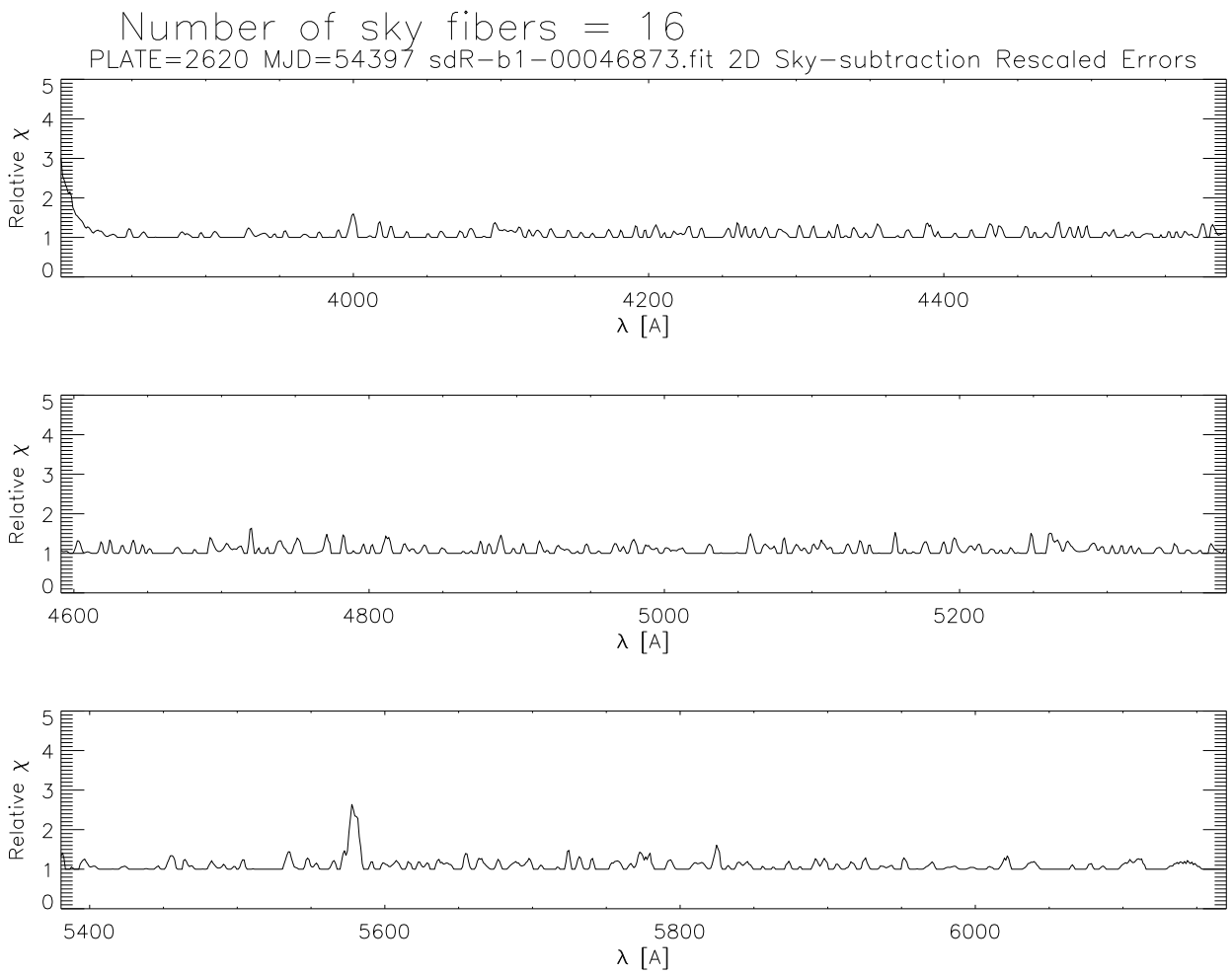

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

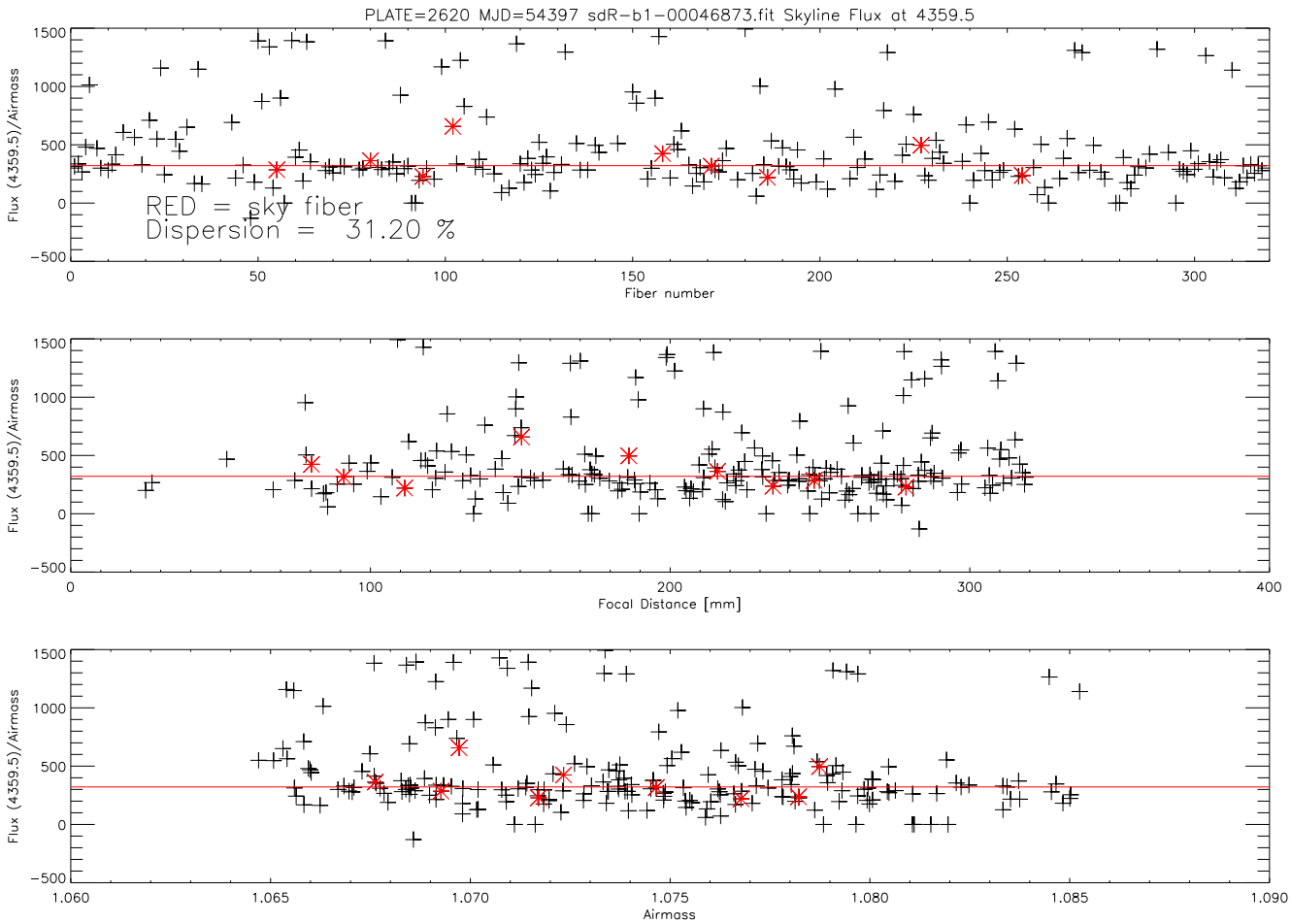

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046873.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

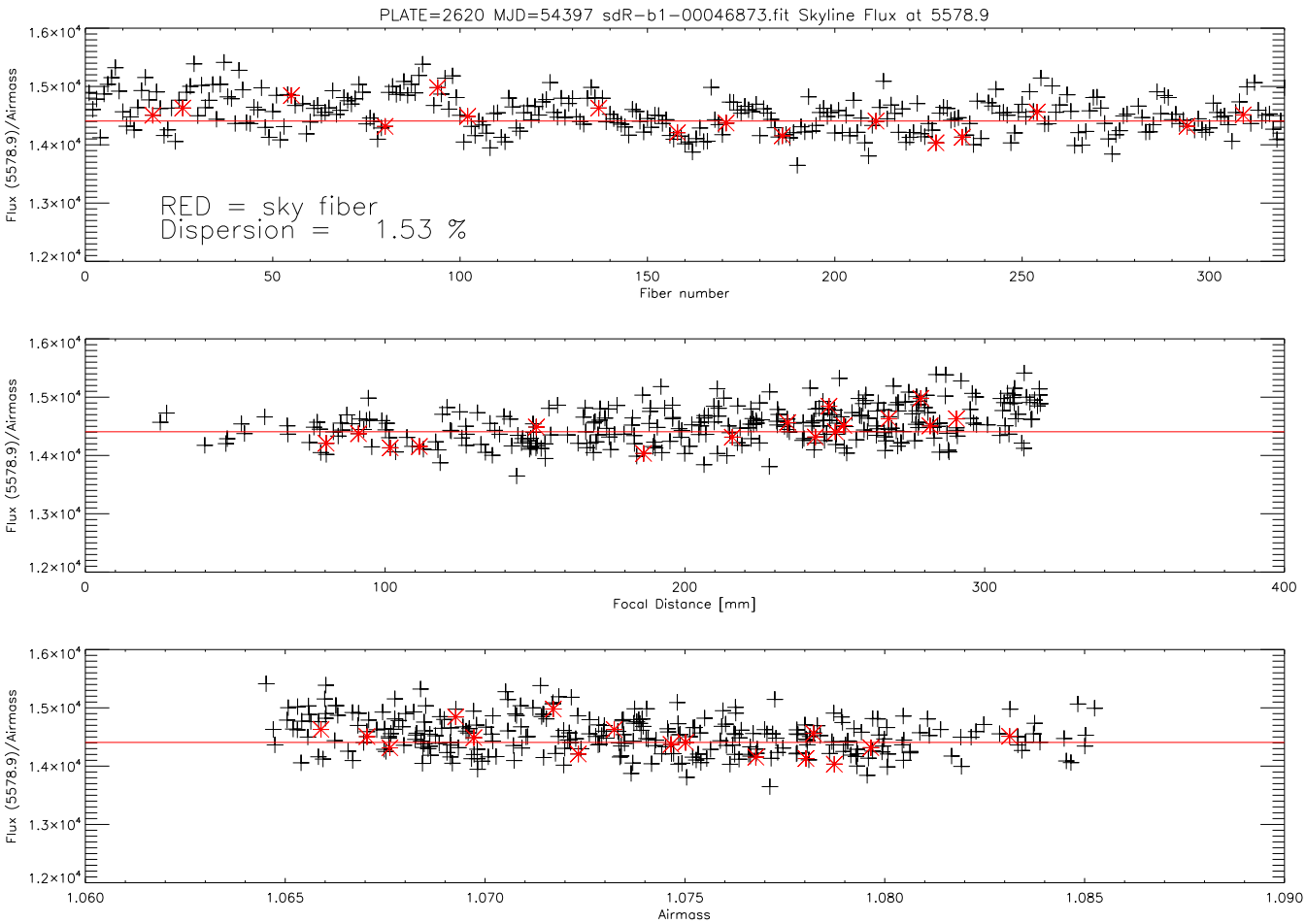

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

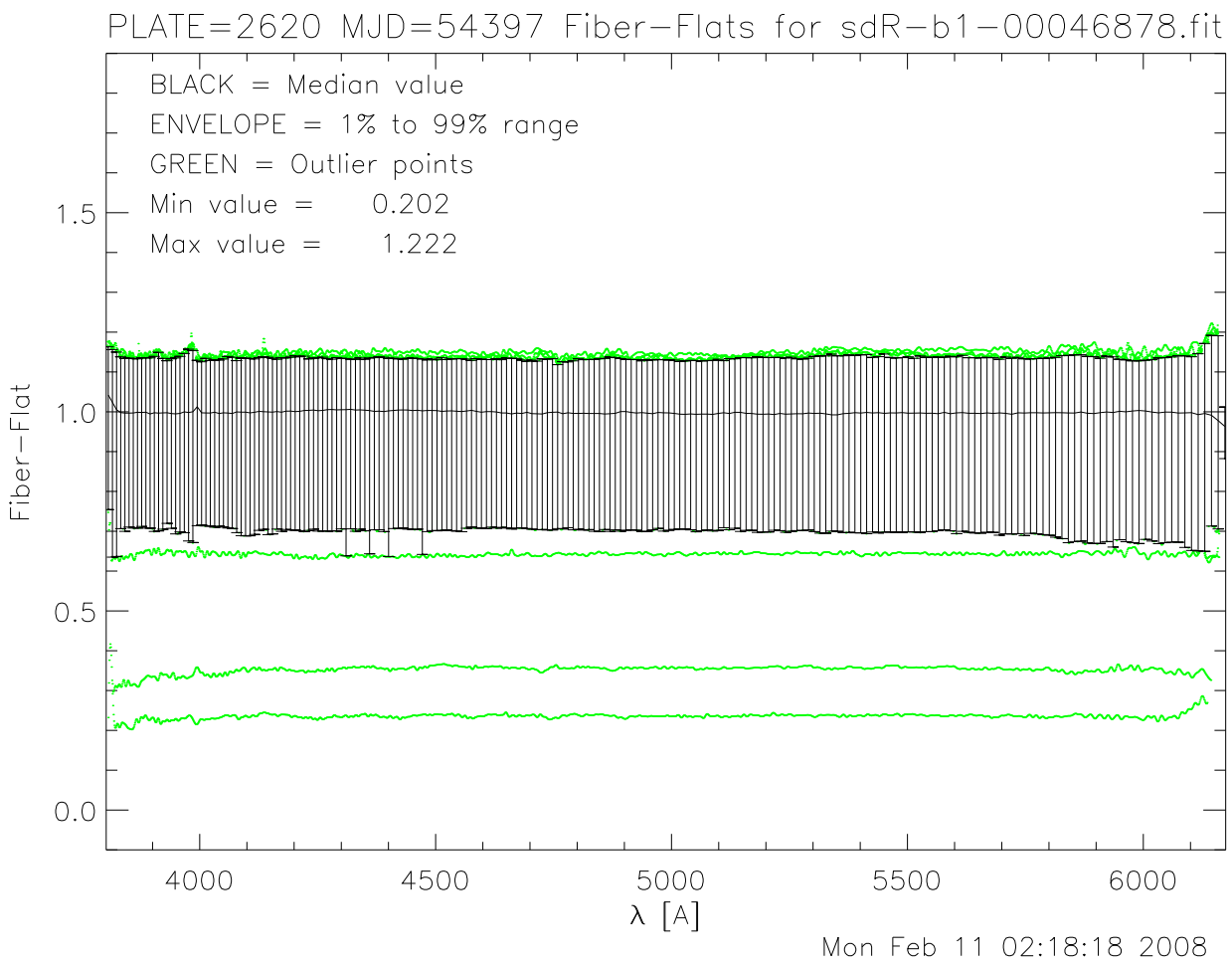

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

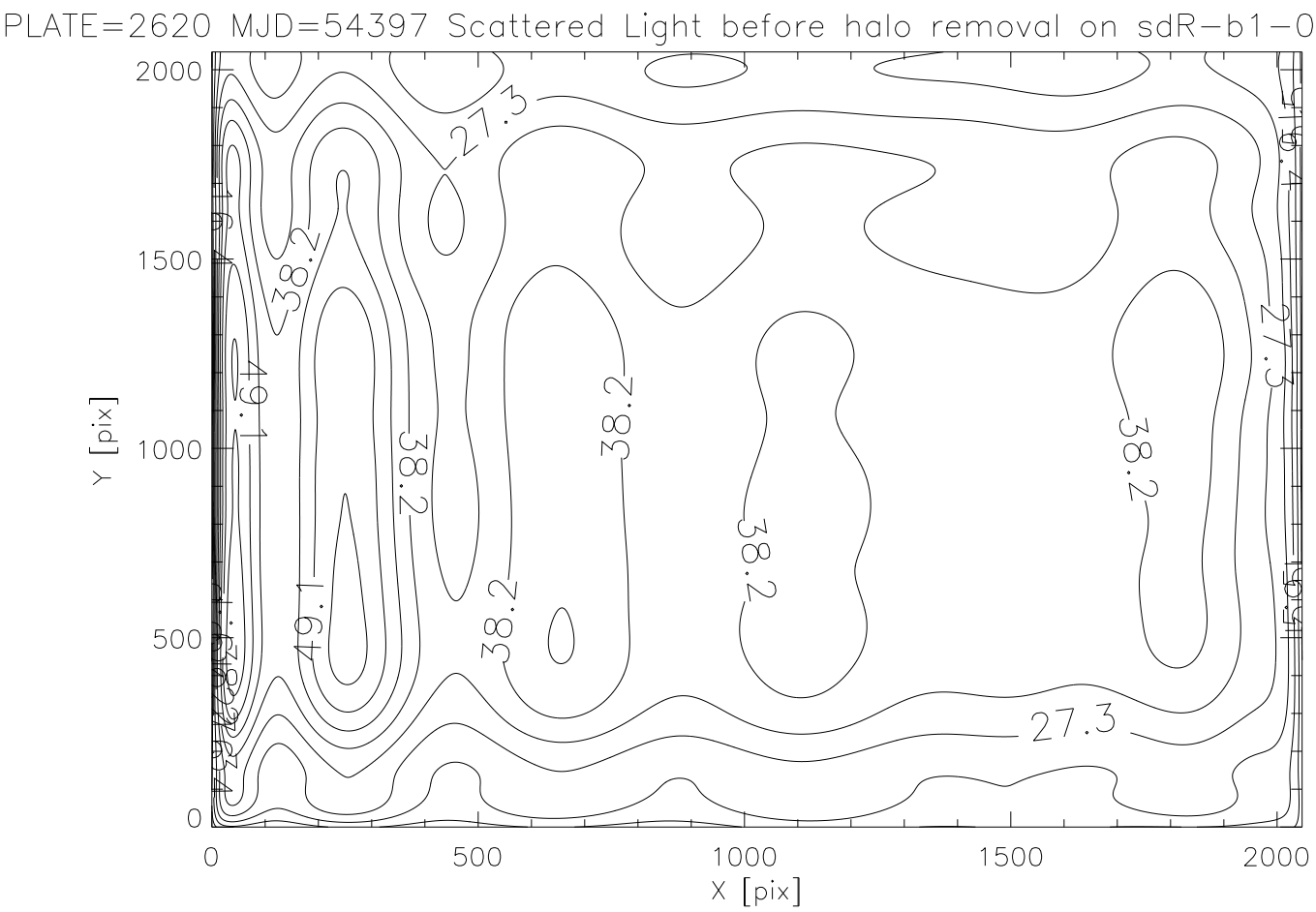

PLATE=2620 MJD=54397 sdR-b1-00046873.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

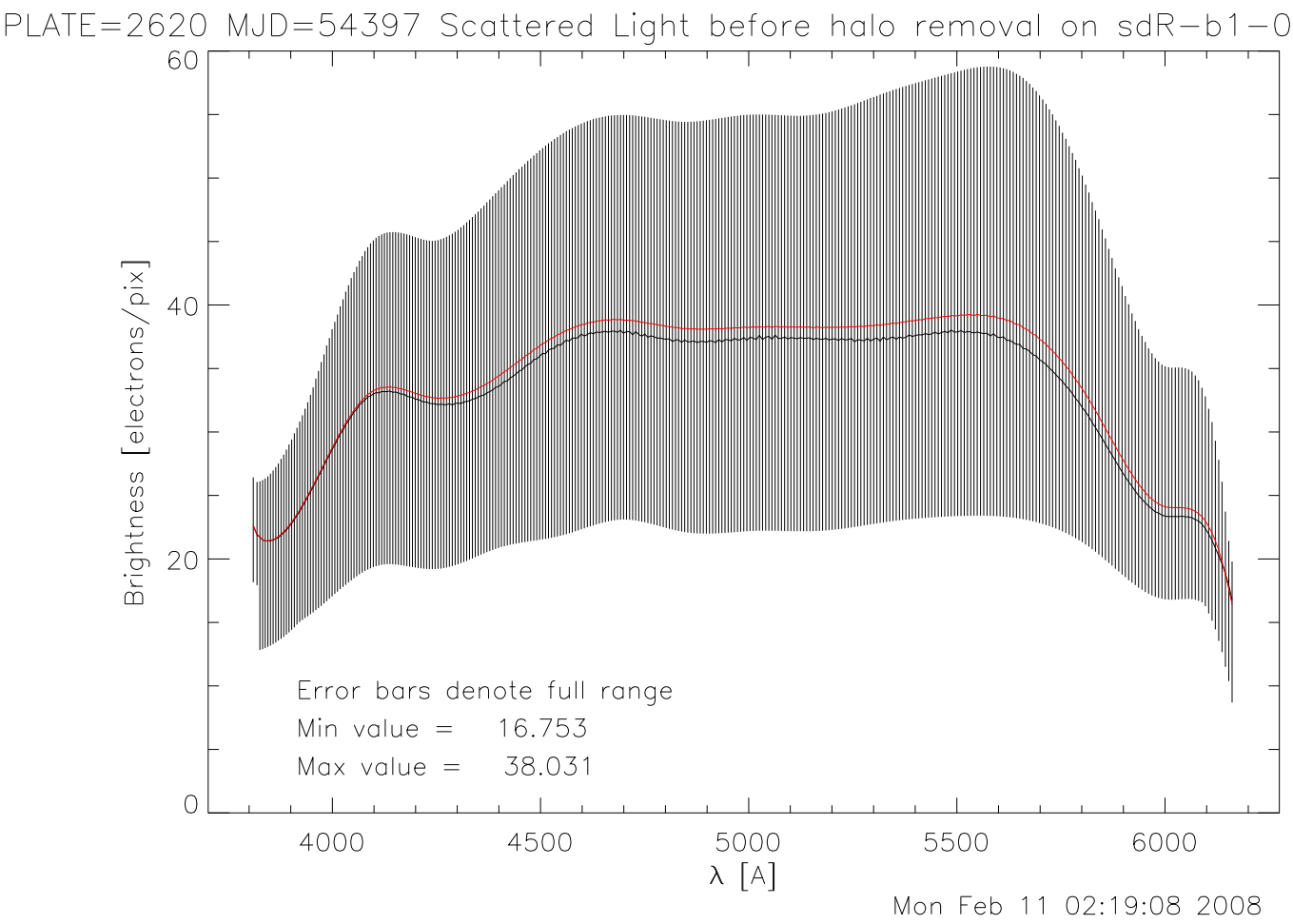

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046873.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

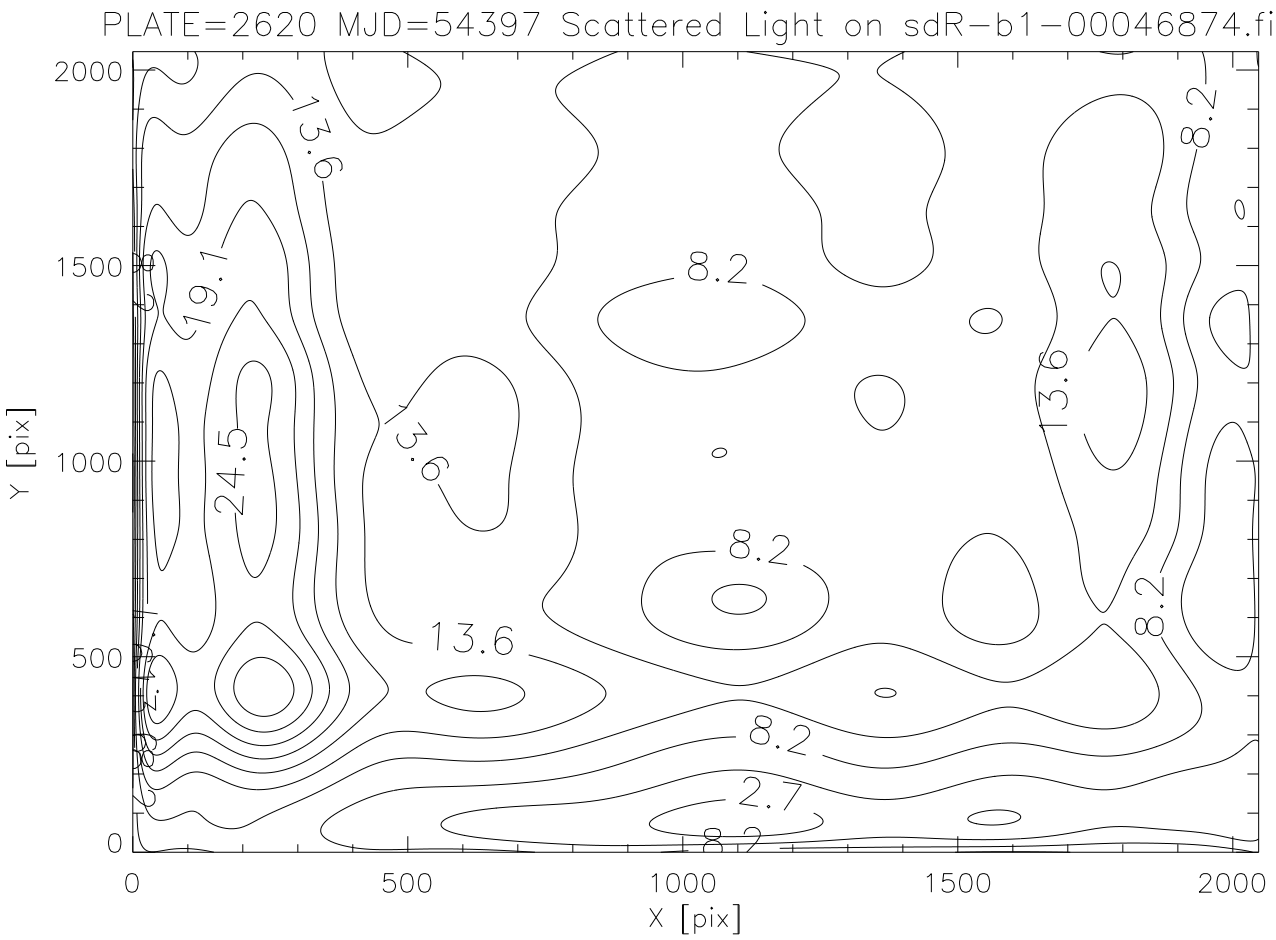

PLATE=2620 MJD=54397 sdR-b1-00046873.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 31.20 %
Fiber number
Focal Distance [mm]
Airmass

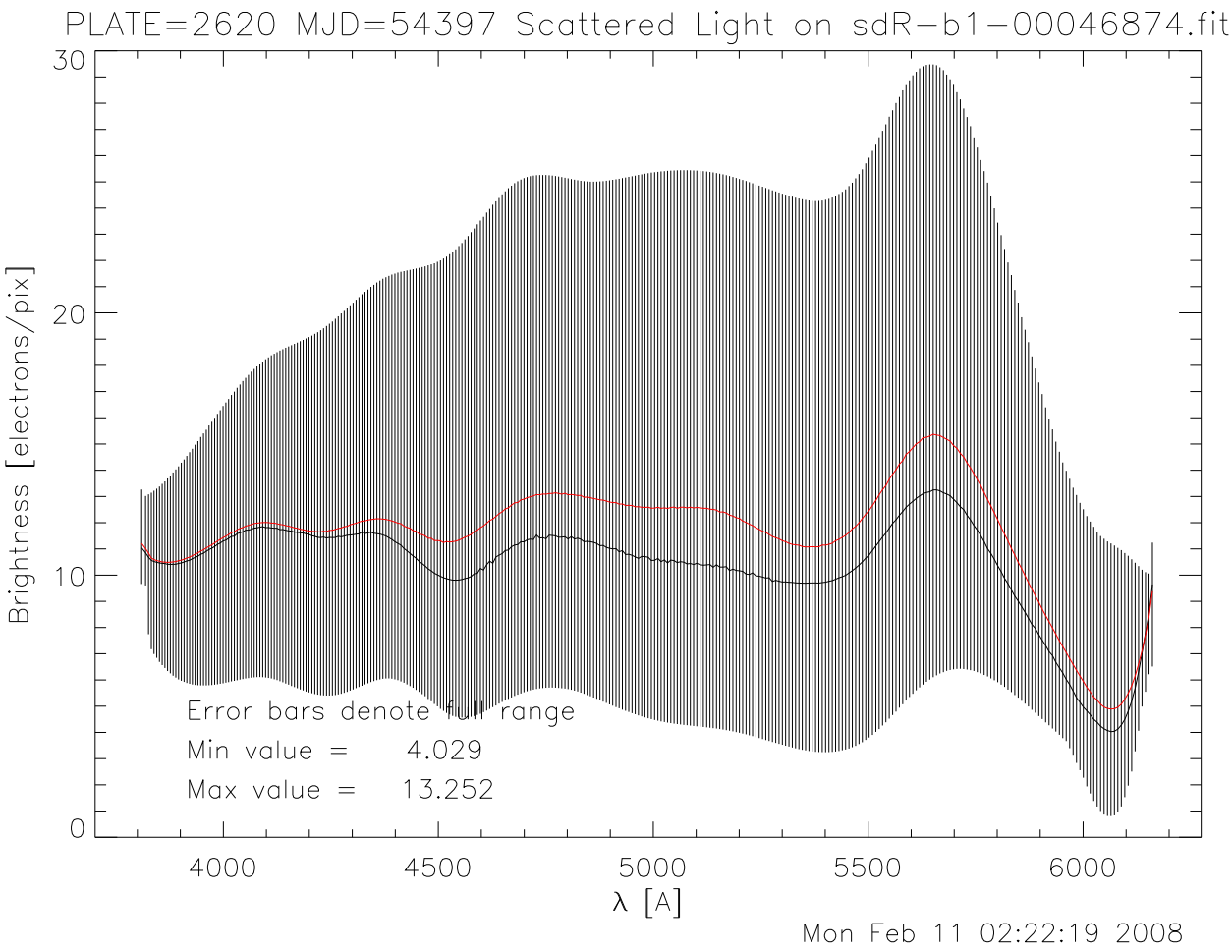

PLATE=2620 MJD=54397 sdR-b1-00046873.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.53 %
Fiber number
Focal Distance [mm]
Airmass

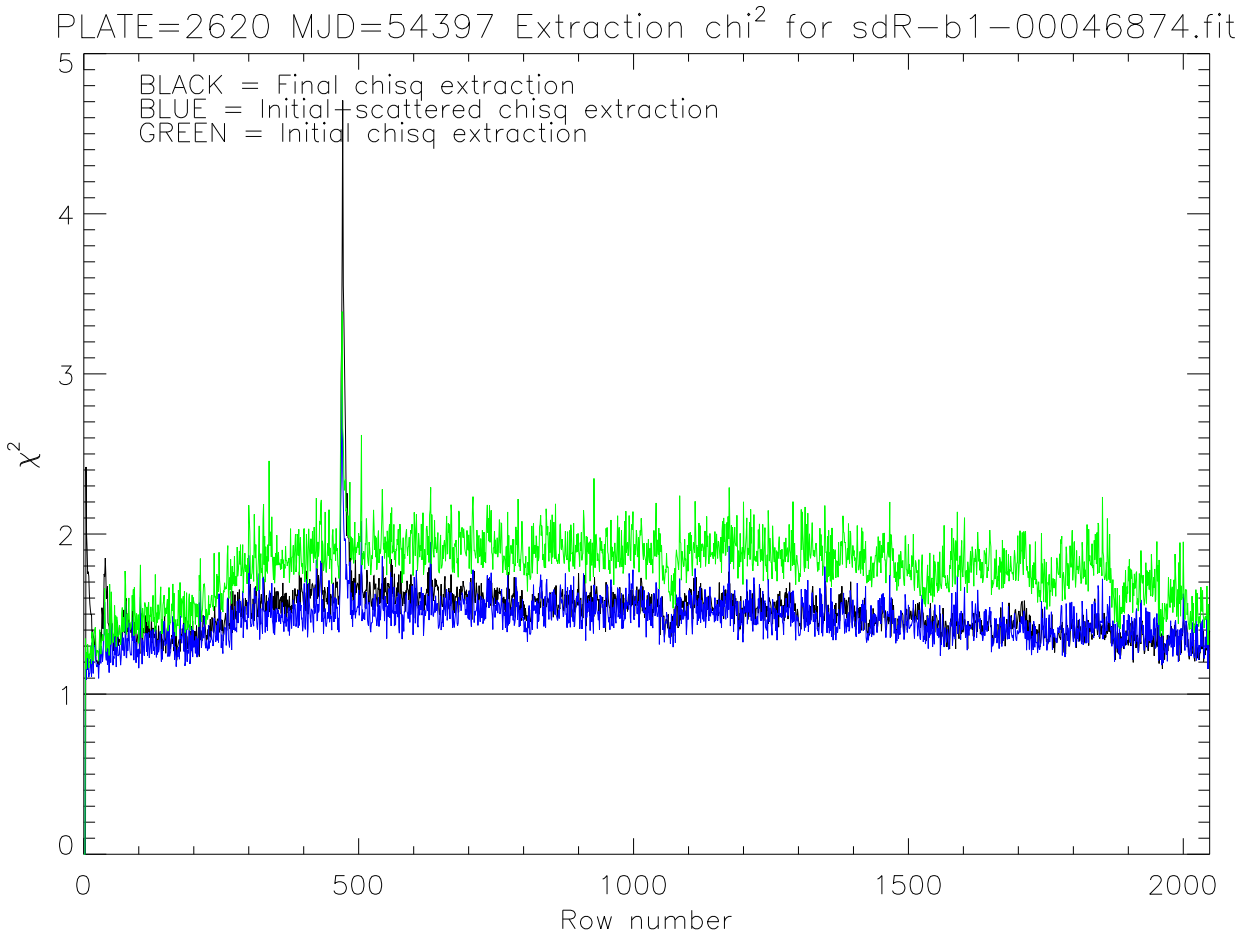

PLATE=2620 MJD=54397 Fiber−Flats for sdR−b1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:18:18 2008

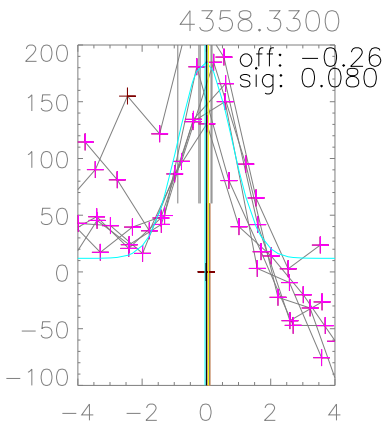

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR−b1−00046874.f
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
38.2
49.1

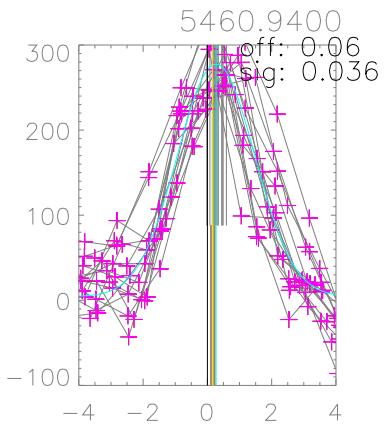

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046874.f
Brightness [electrons/pix]
60
40
20
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 16.753
Max value = 38.031
Mon Feb 11 02:19:08 2008

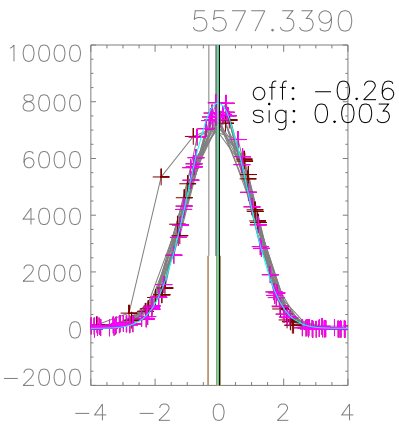

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046874.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
24.5
8.2
2.7

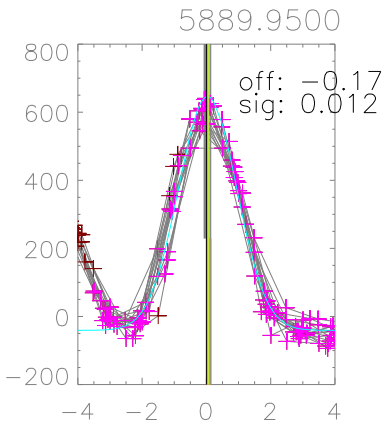

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046874.fit
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 4.029
Max value = 13.252
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:22:19 2008

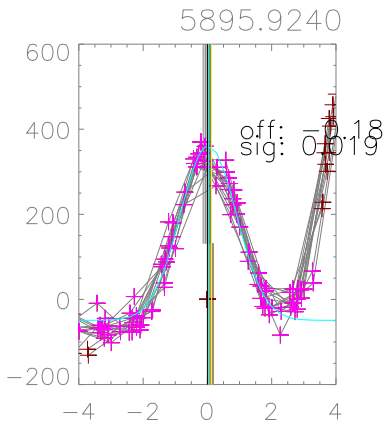

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046874.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

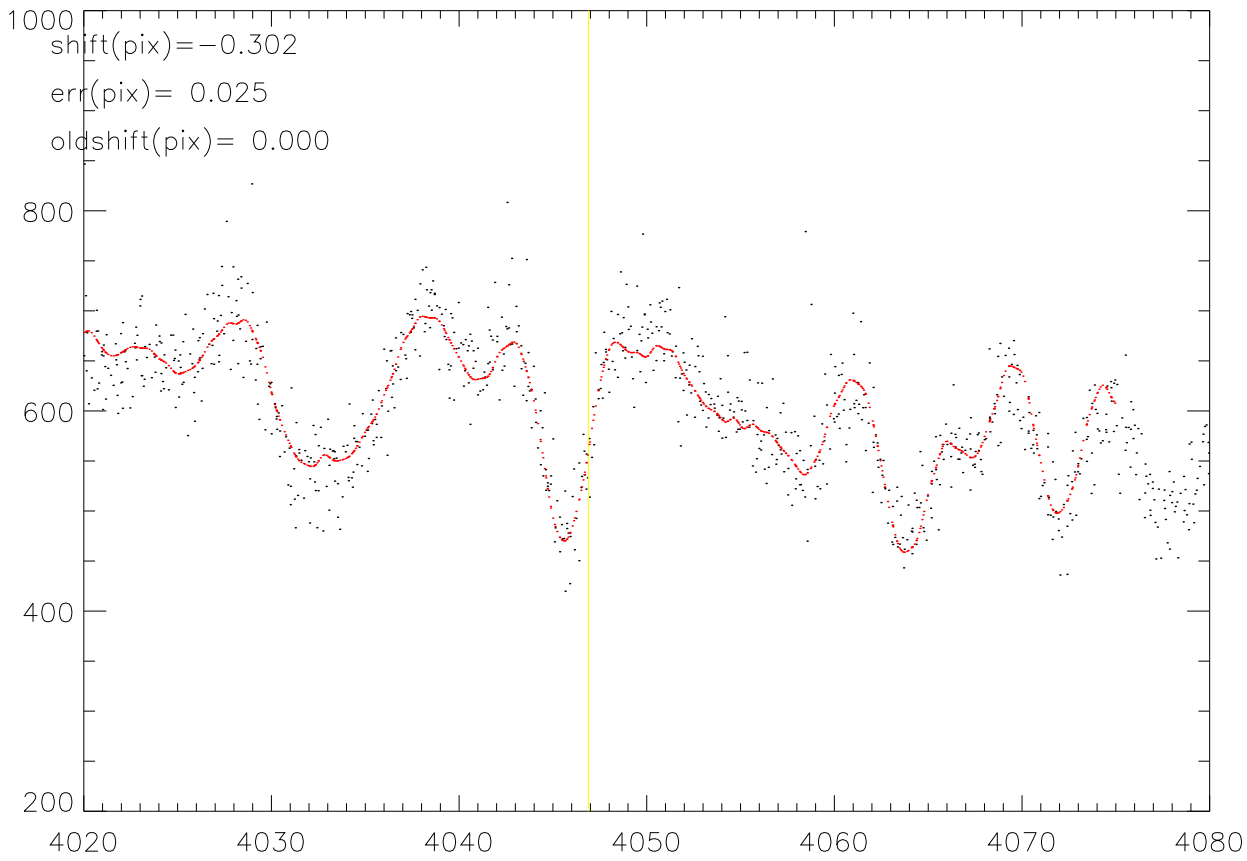

4358.3300
off: −0.26
sig: 0.080

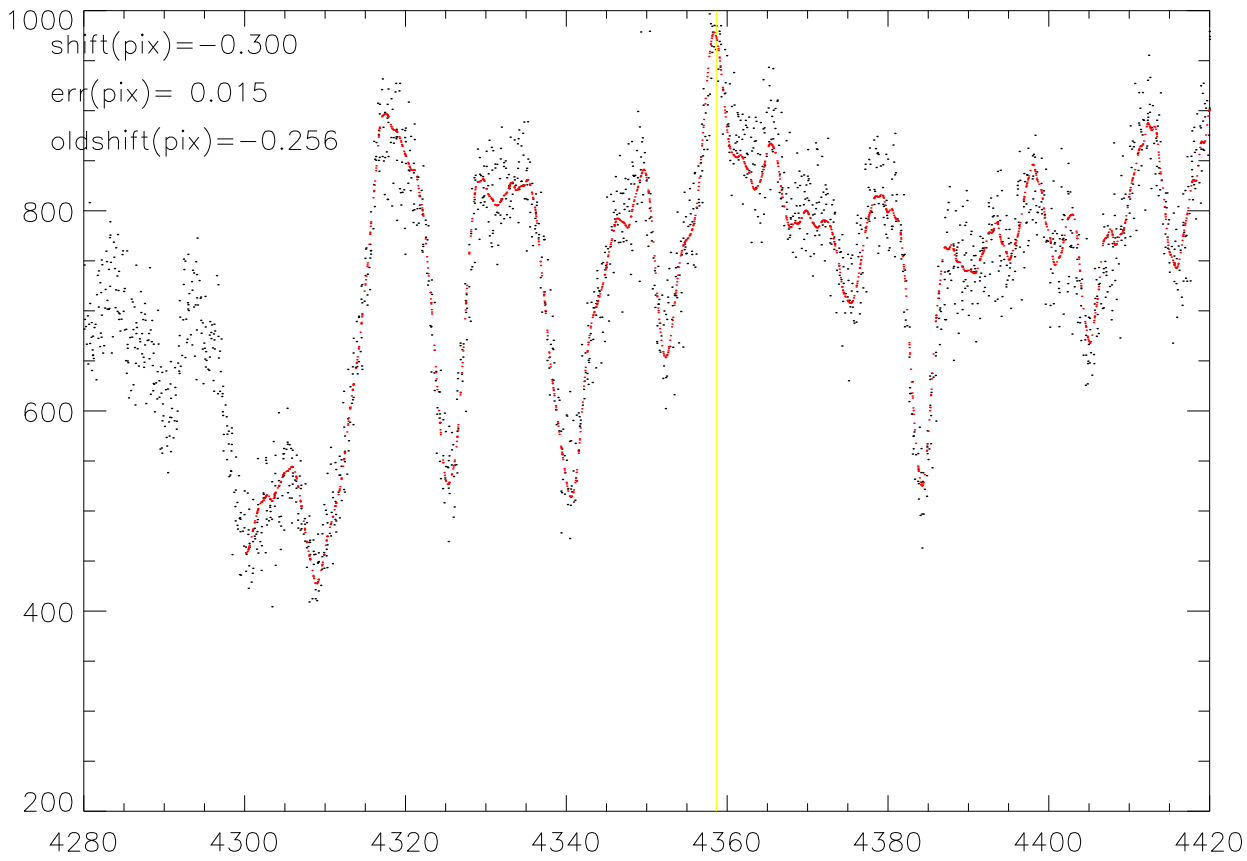

5460.9400
off: 0.06
sig: 0.036

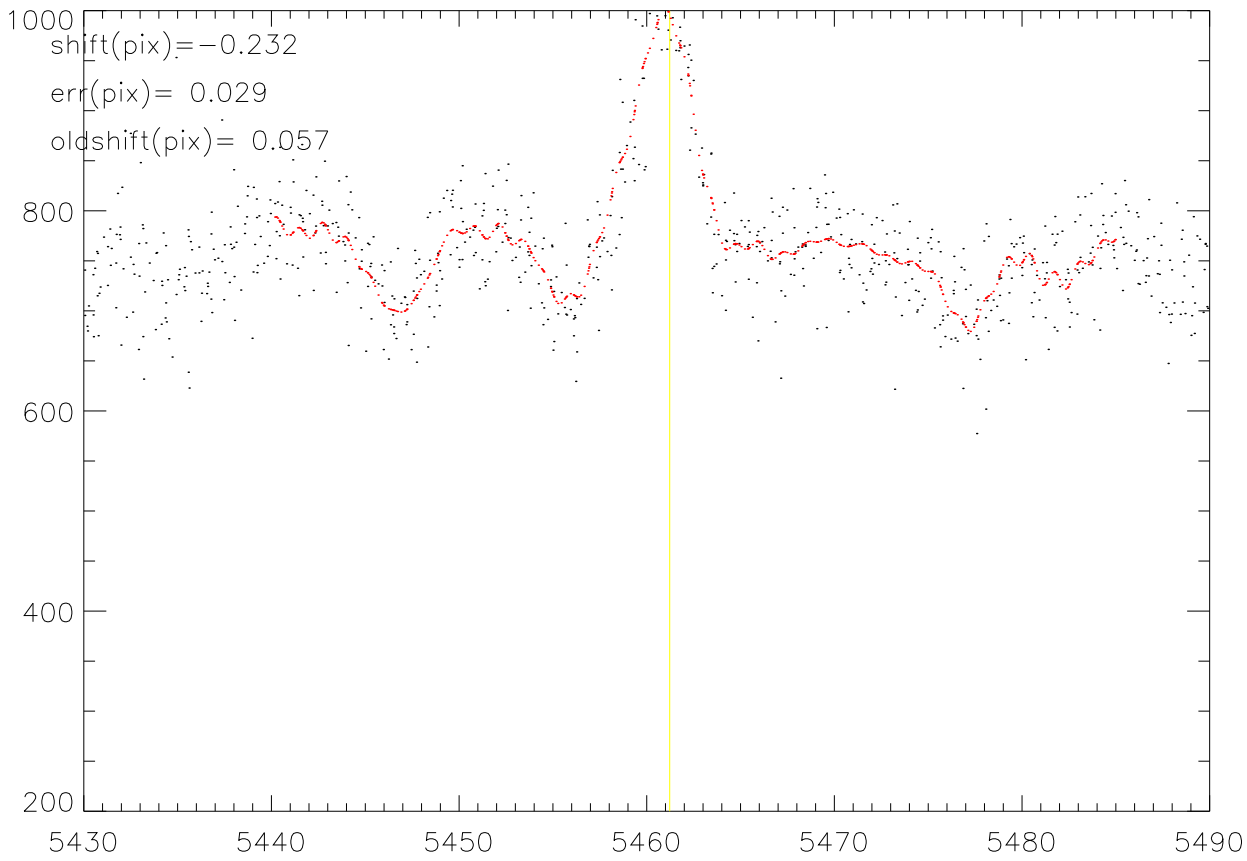

5577.3390
off: −0.26
sig: 0.003

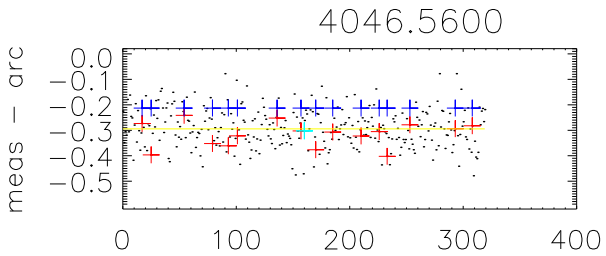

5889.9500
off: −0.17
sig: 0.012

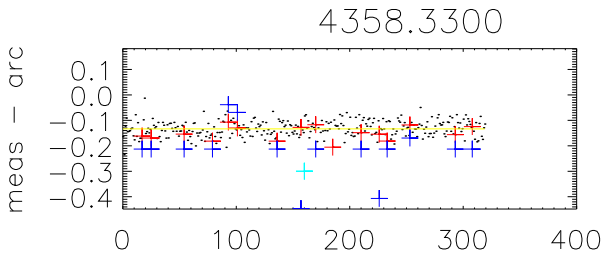

5895.9240
off: −0.18
sig: 0.019

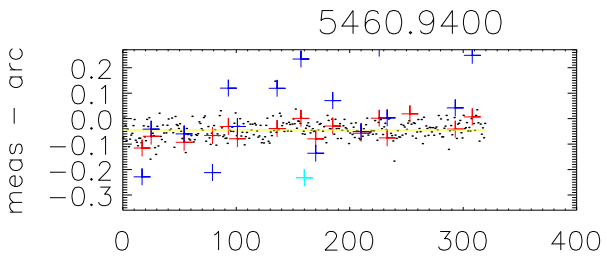

shift(pix)=−0.302
err(pix)= 0.025
oldshift(pix)= 0.000
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

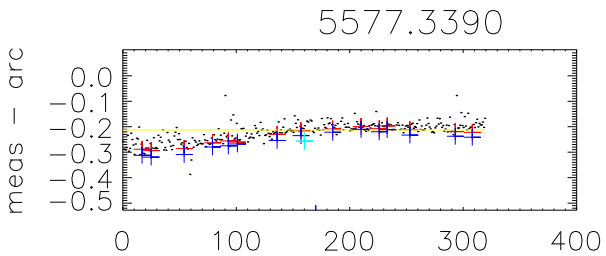

shift(pix)=−0.300
err(pix)= 0.015
oldshift(pix)=−0.256
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

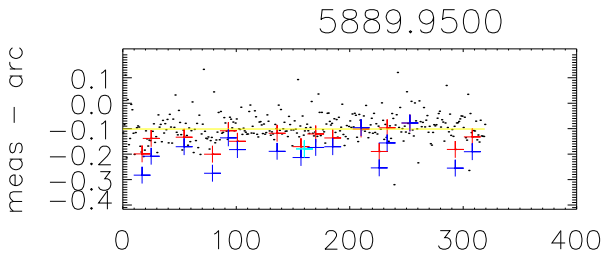

shift(pix)=−0.232
err(pix)= 0.029
oldshift(pix)= 0.057
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

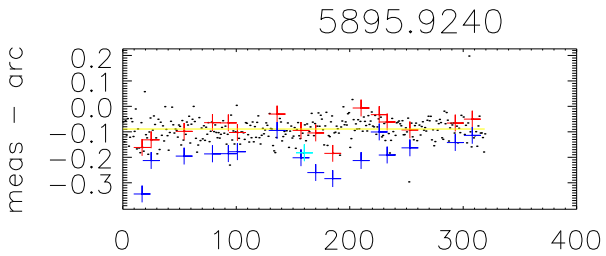

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

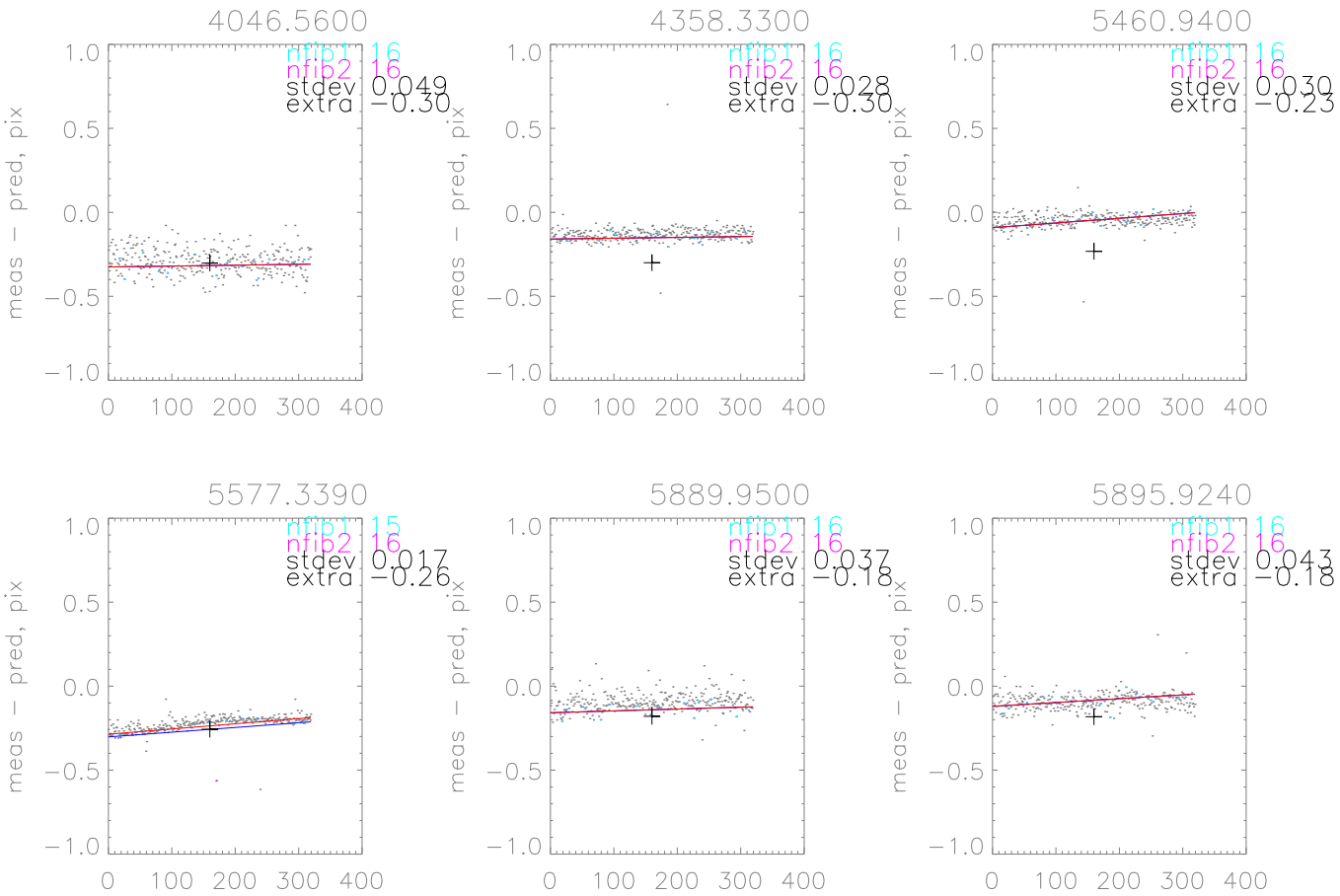

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

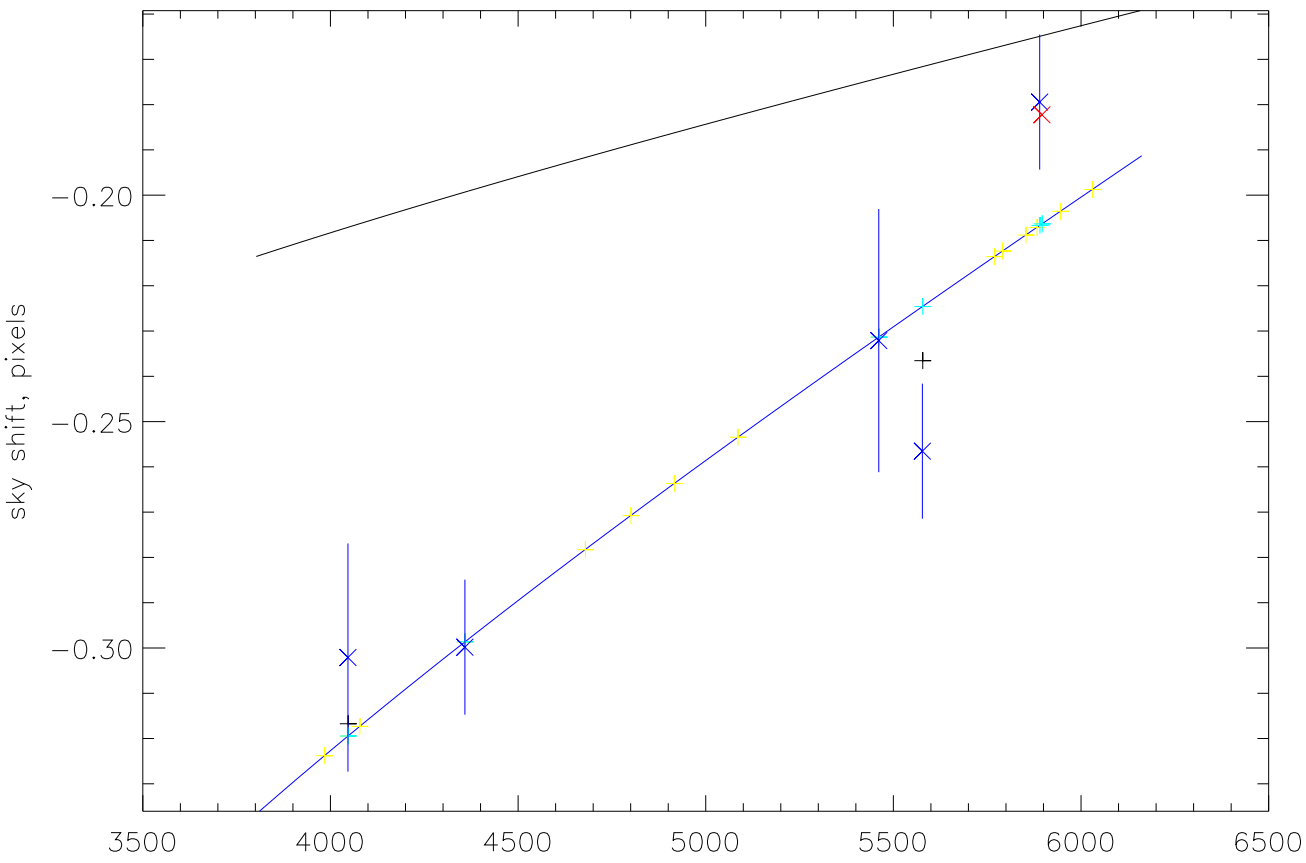

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

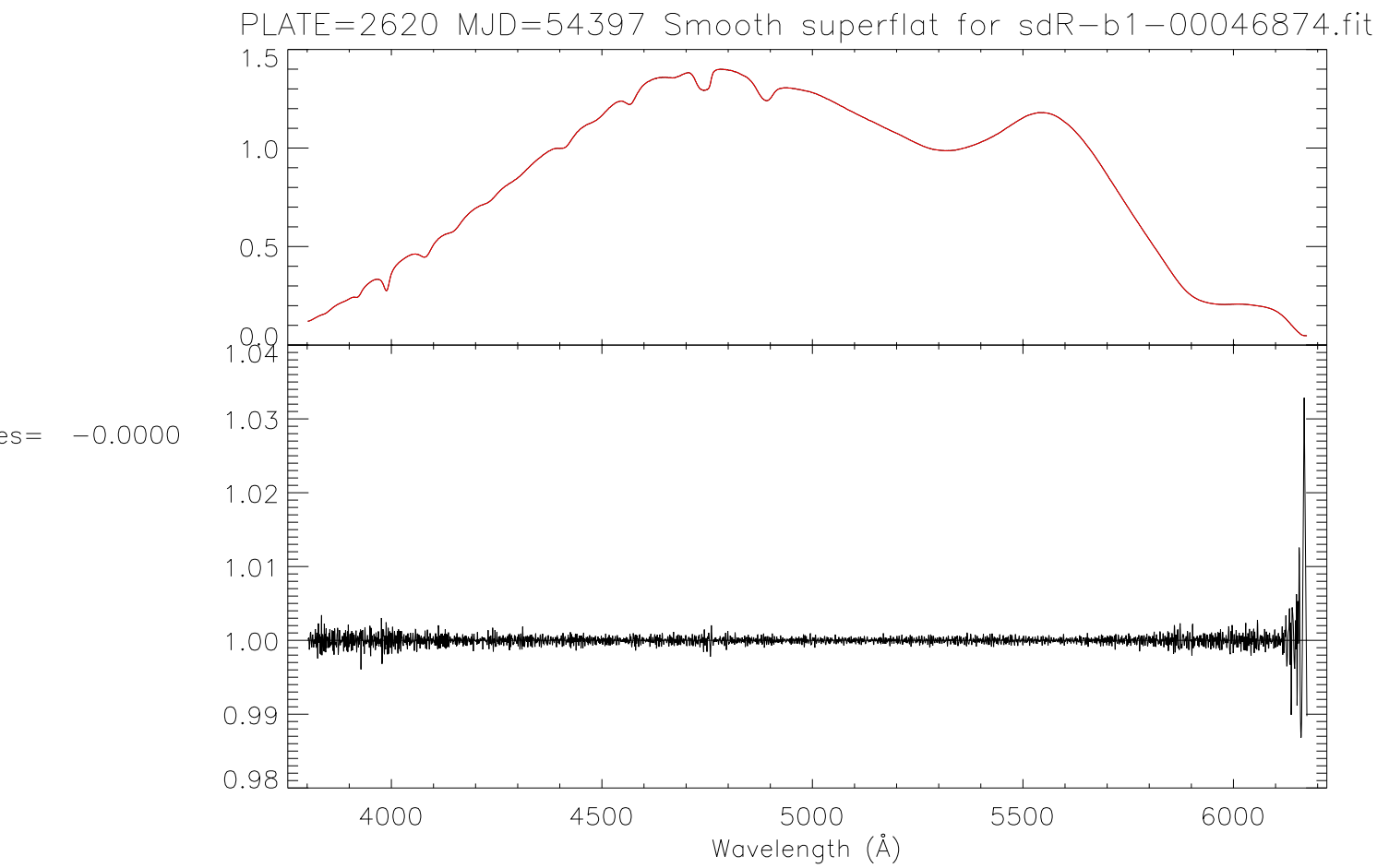

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

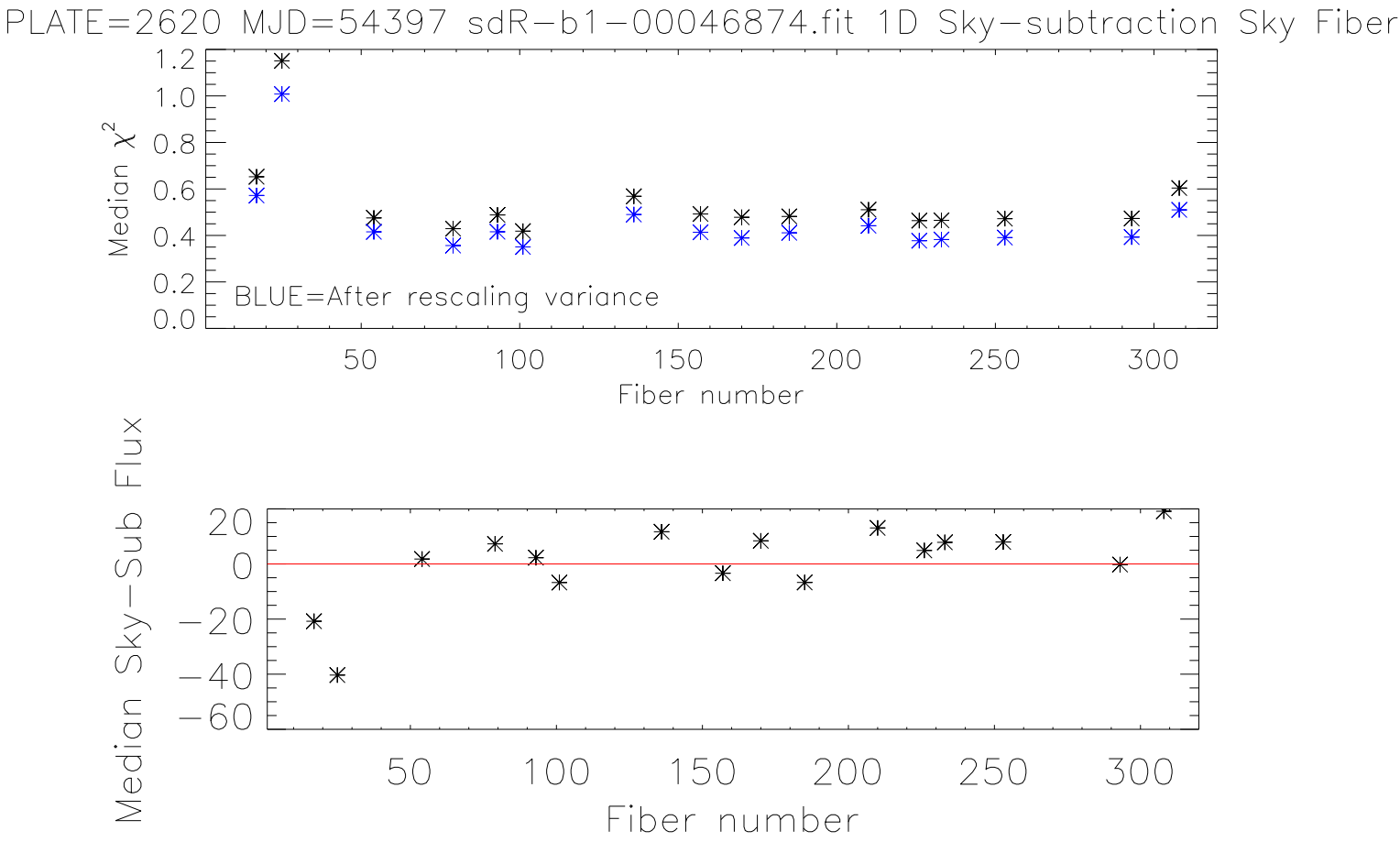

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

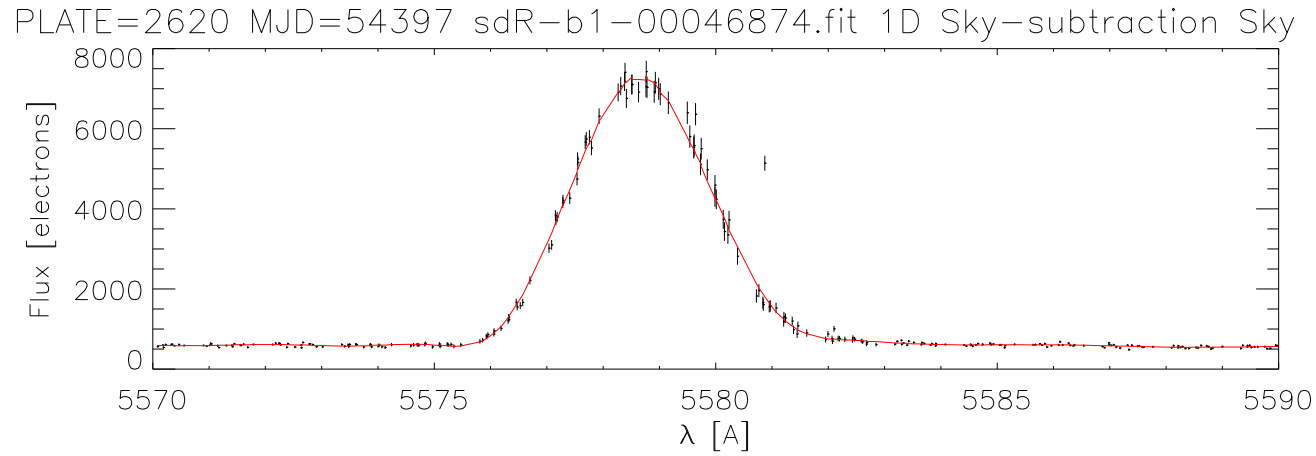

4046.5600
nfib1 16
nfib2 16
stdev 0.049
extra −0.30
4358.3300
nfib1 16
nfib2 16
stdev 0.028
extra −0.30
5460.9400
nfib1 16
nfib2 16
stdev 0.030
extra −0.23
5577.3390
nfib1 15
nfib2 16
stdev 0.017
extra −0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra −0.18
5895.9240
nfib1 16
nfib2 16
stdev 0.043
extra −0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

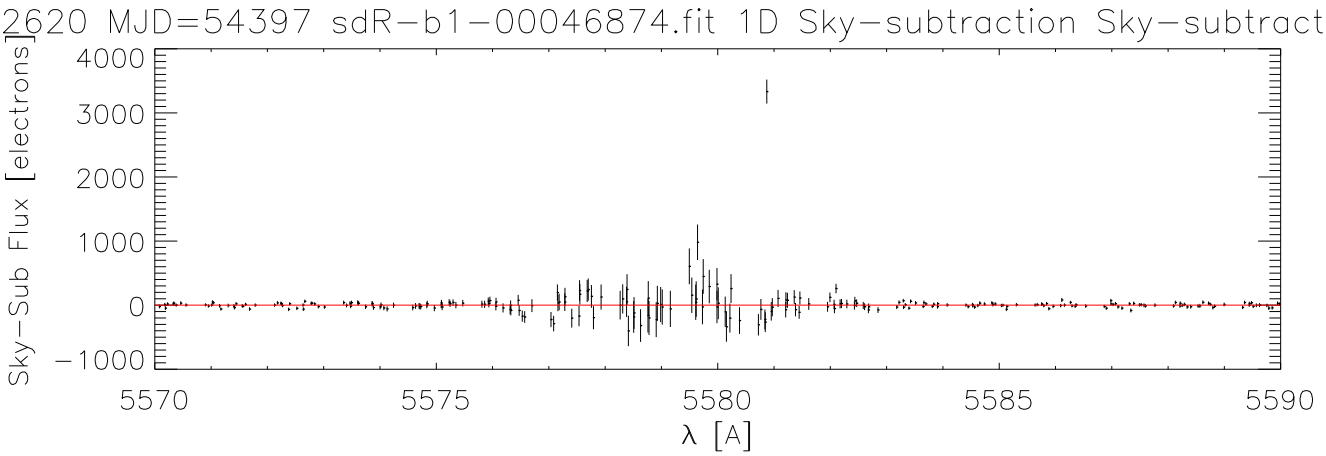

sky shift, pixels
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

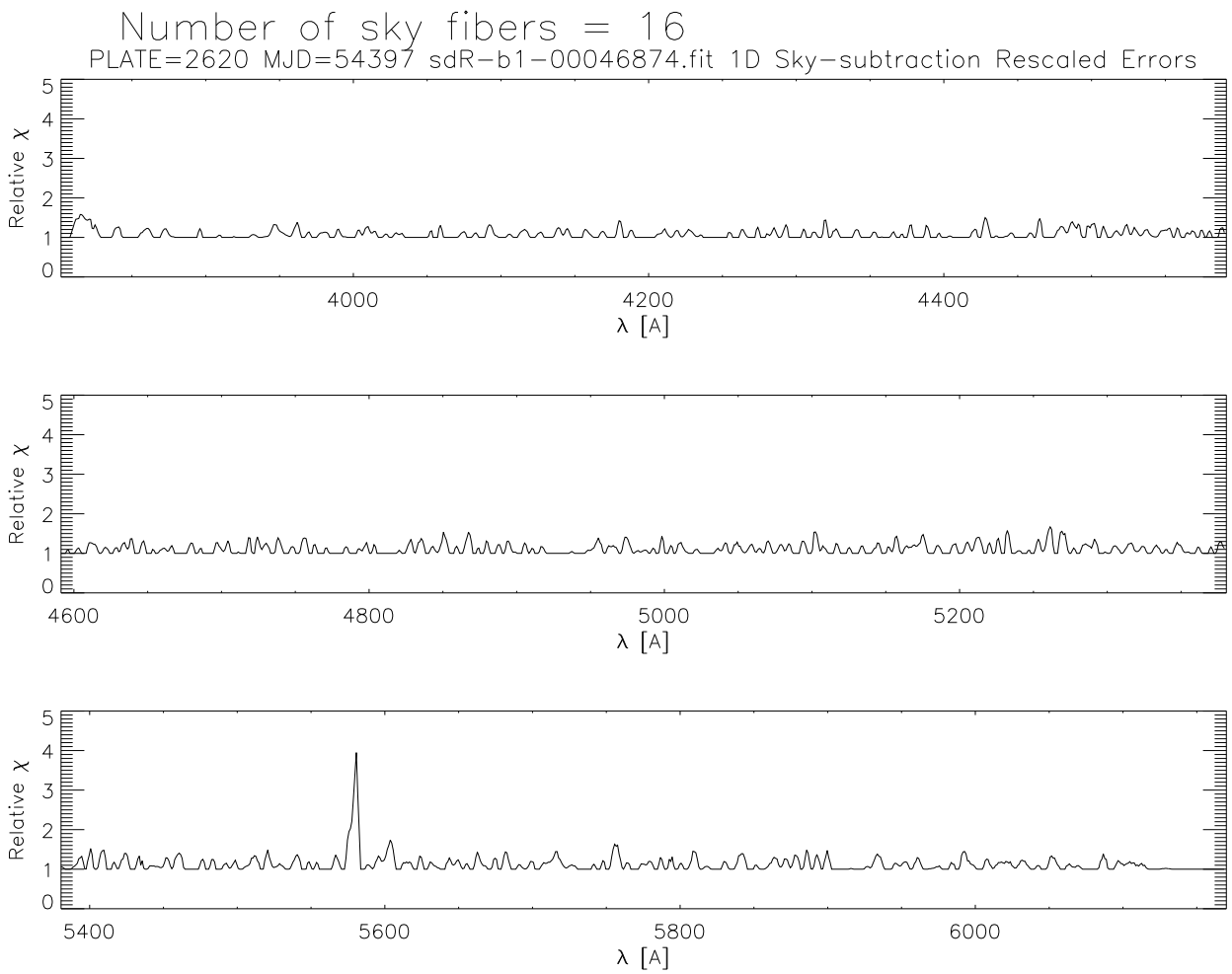

PLATE=2620 MJD=54397 Smooth superflat for sdR-b1-00046874.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

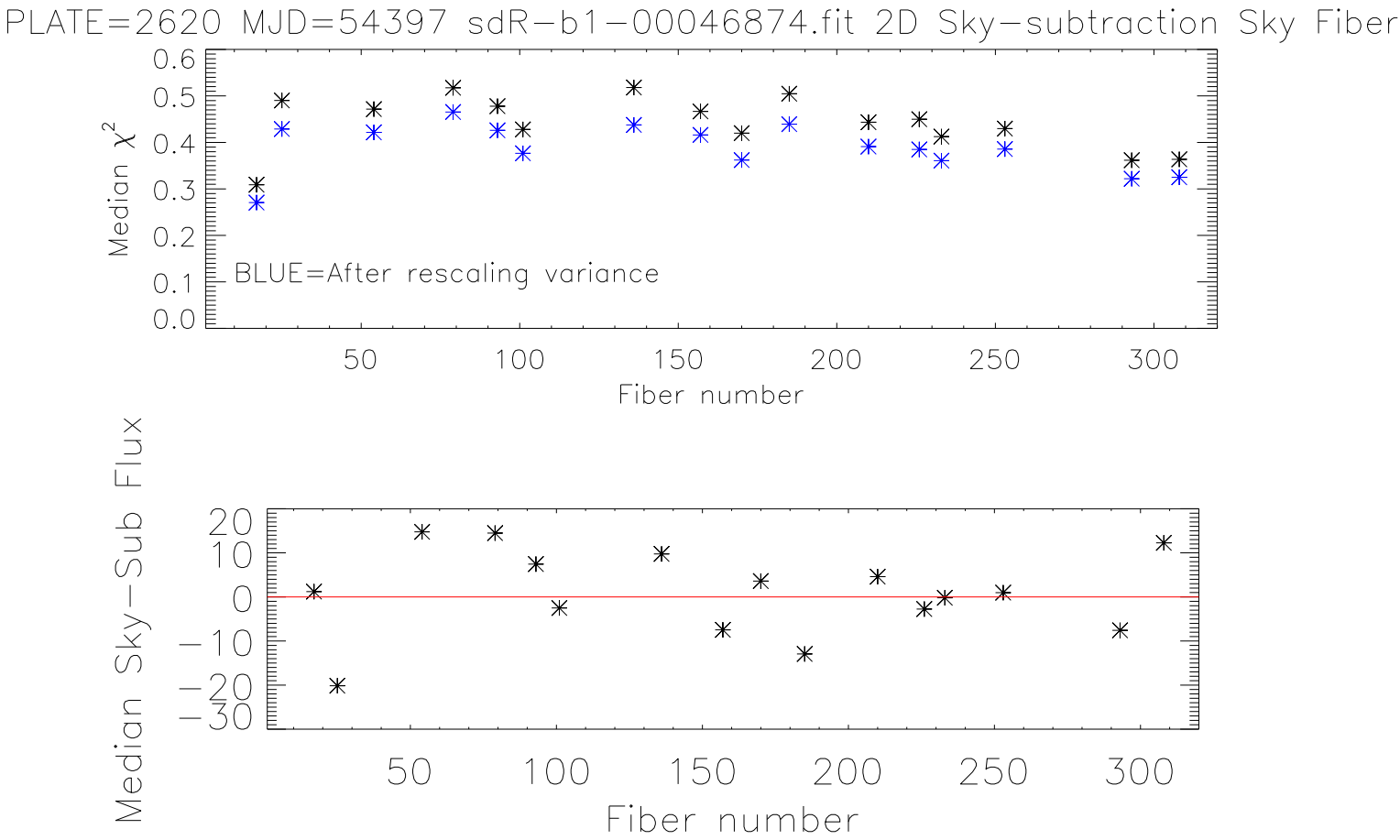
es= −0.0000

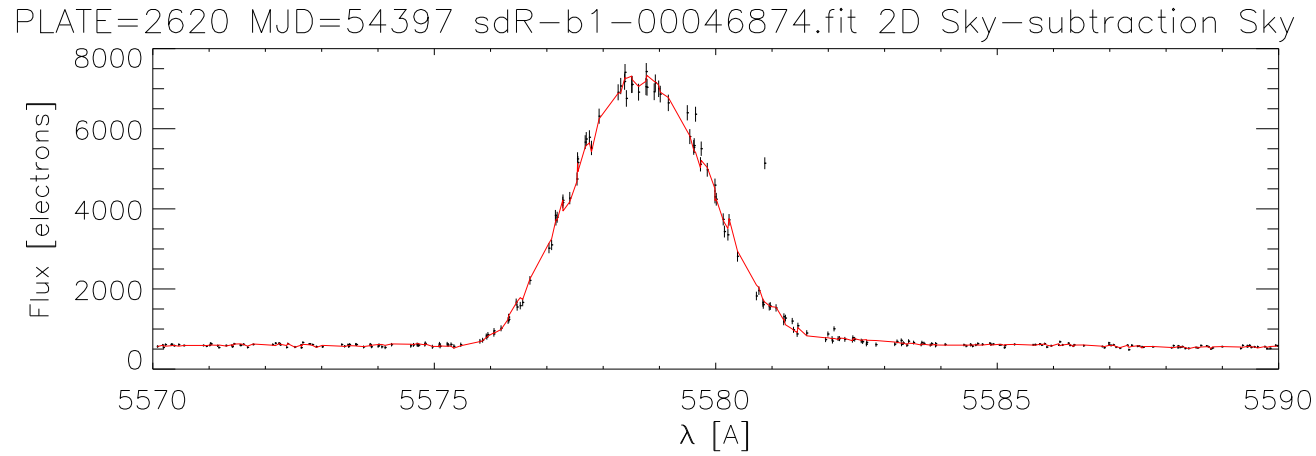

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

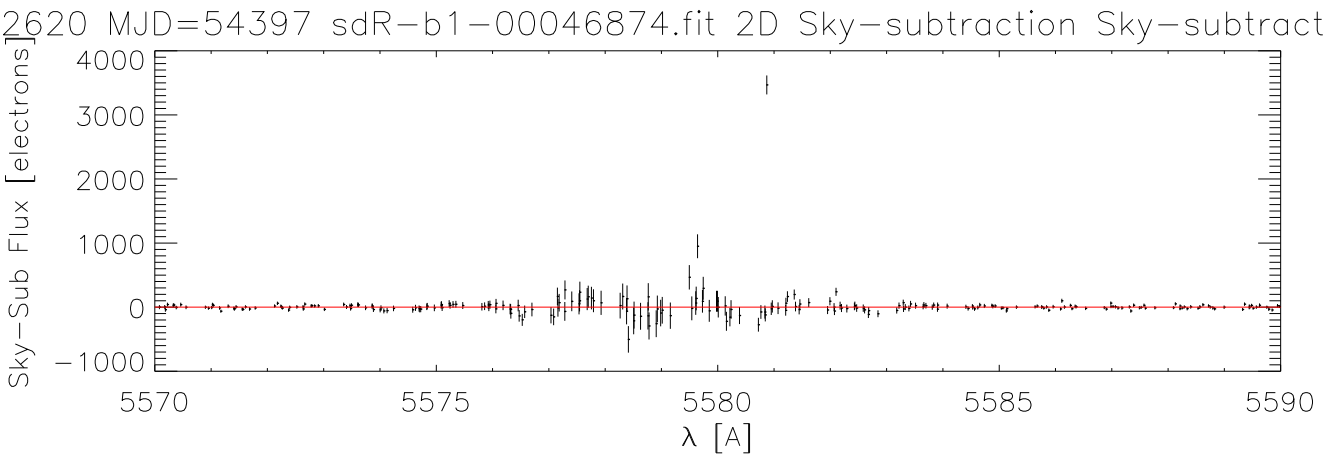

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

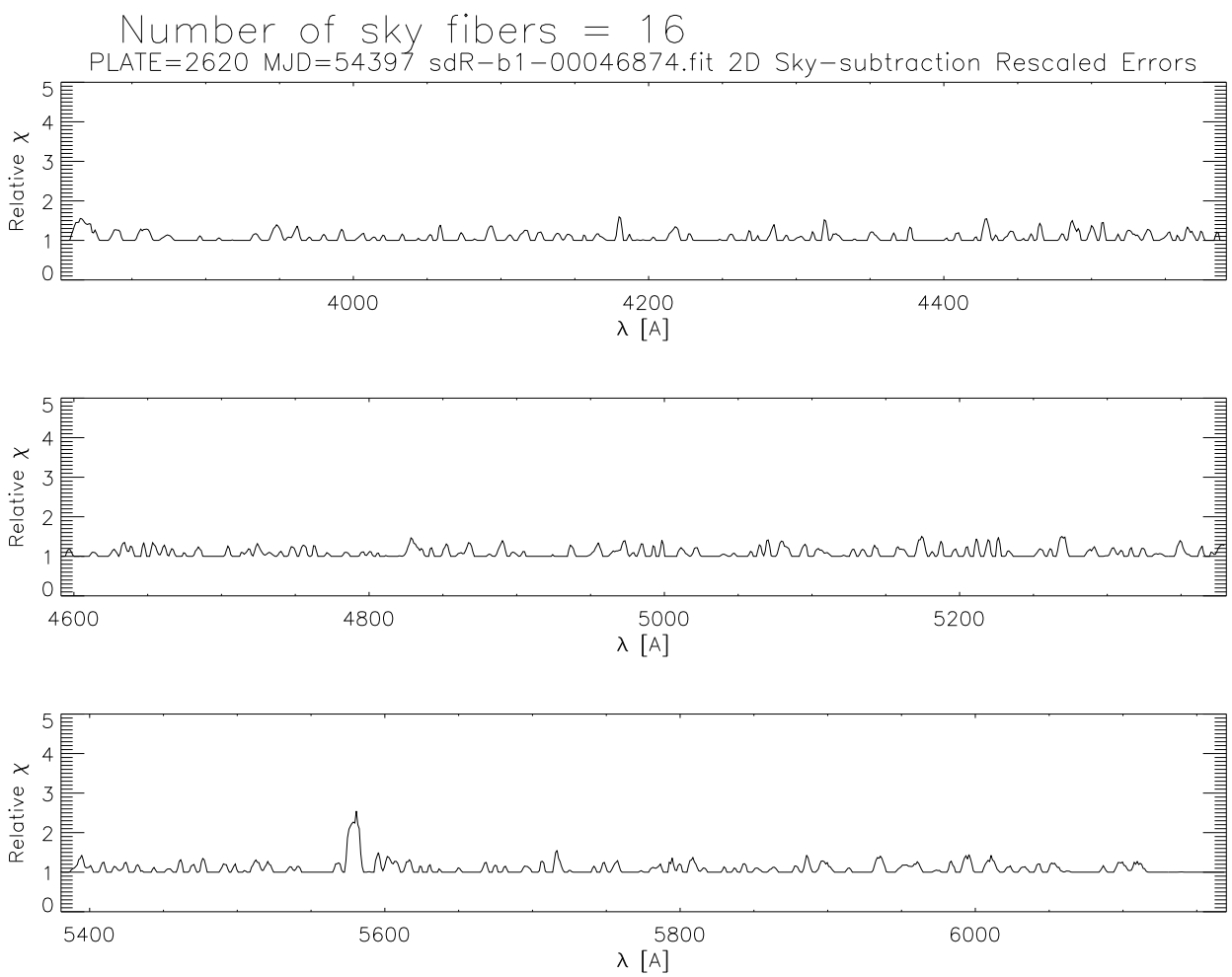

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

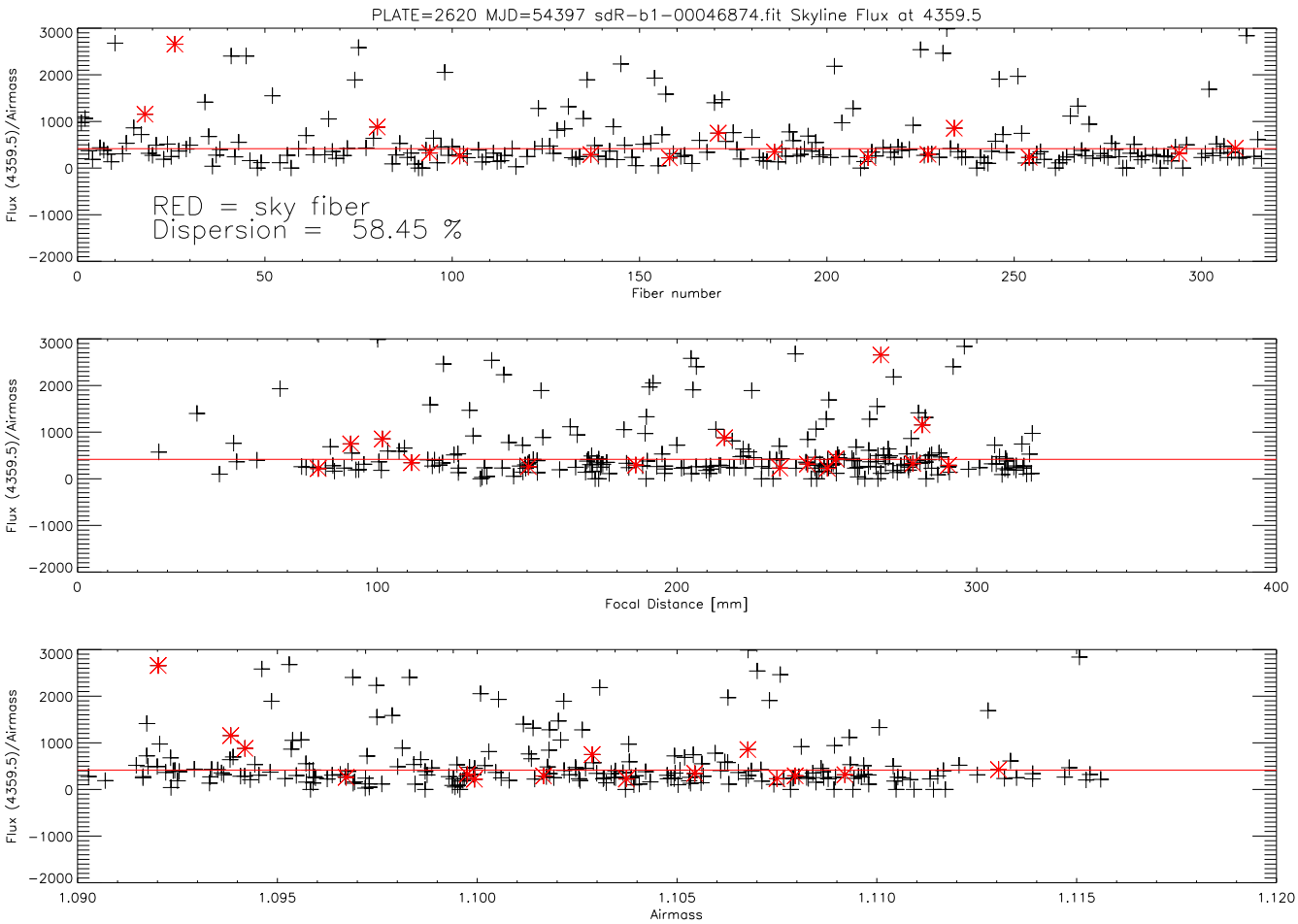

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046874.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

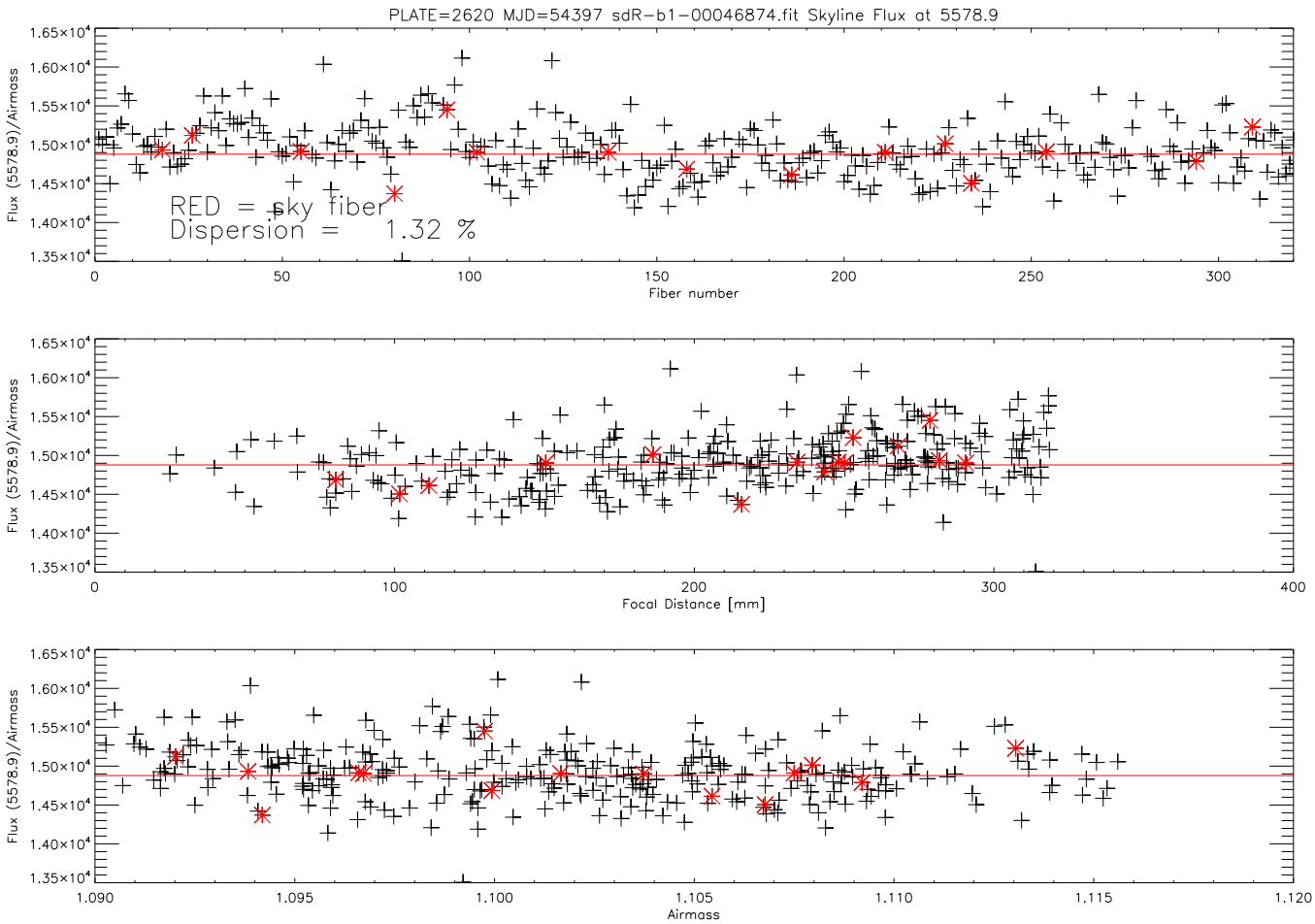

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

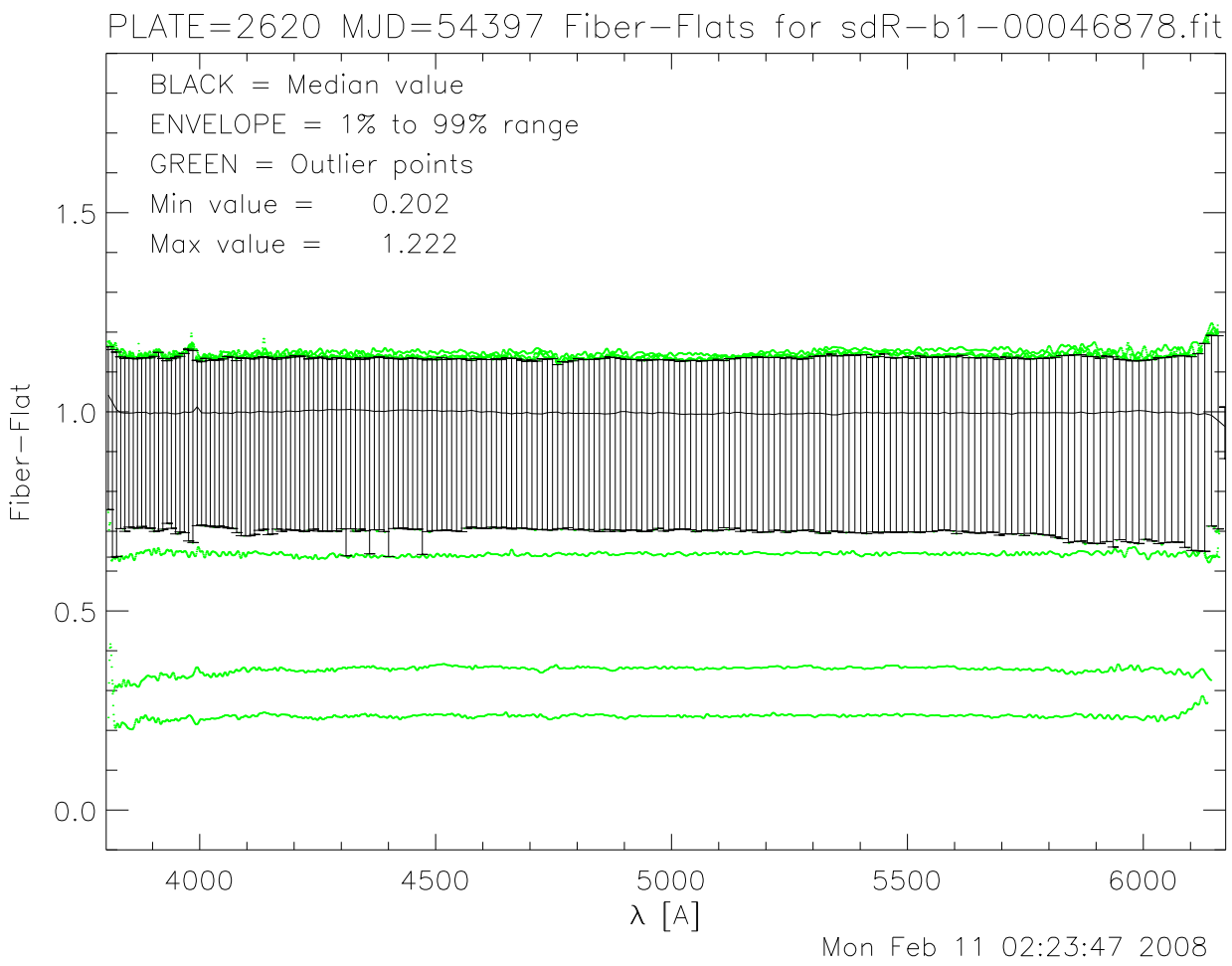

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

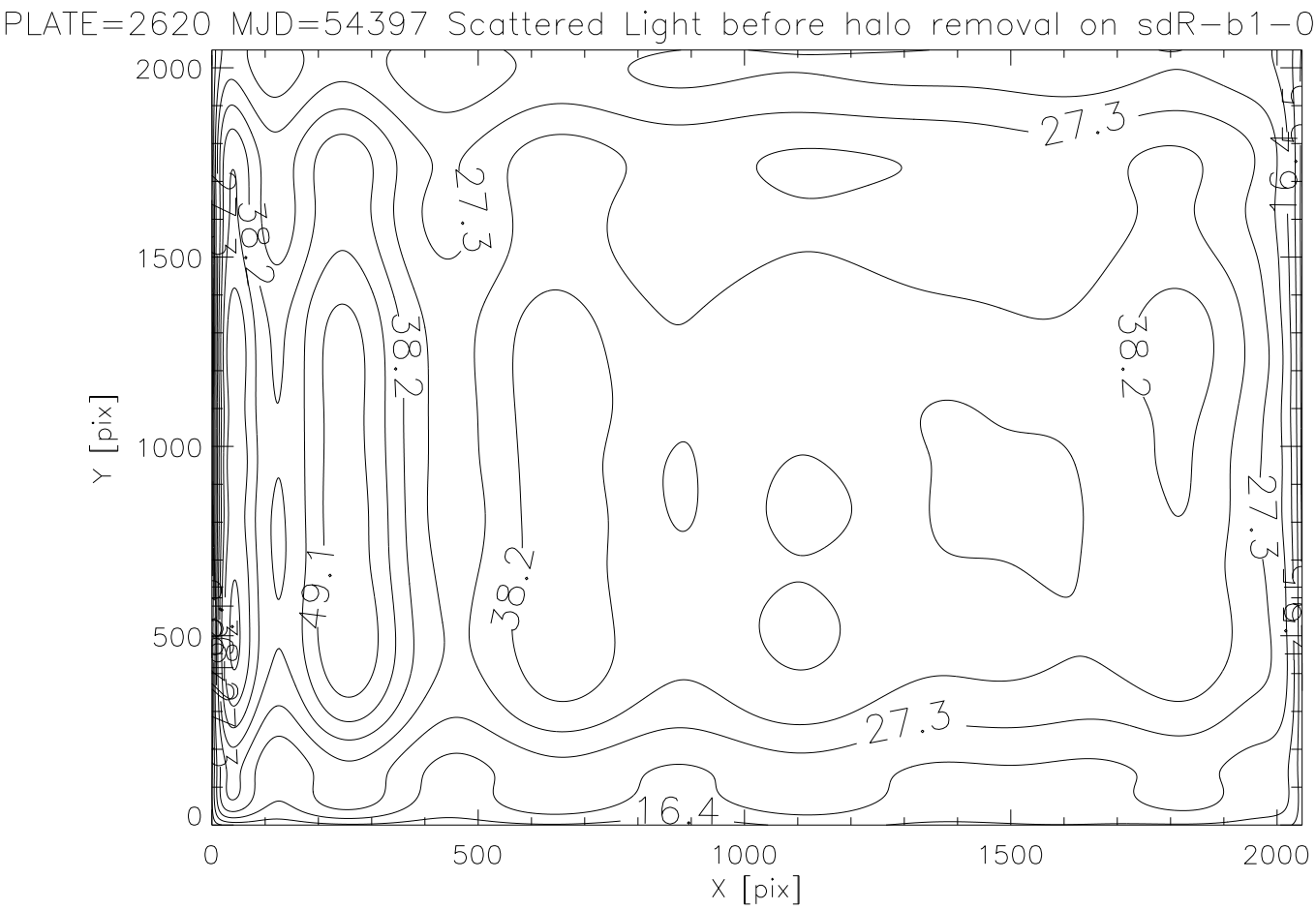

PLATE=2620 MJD=54397 sdR-b1-00046874.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

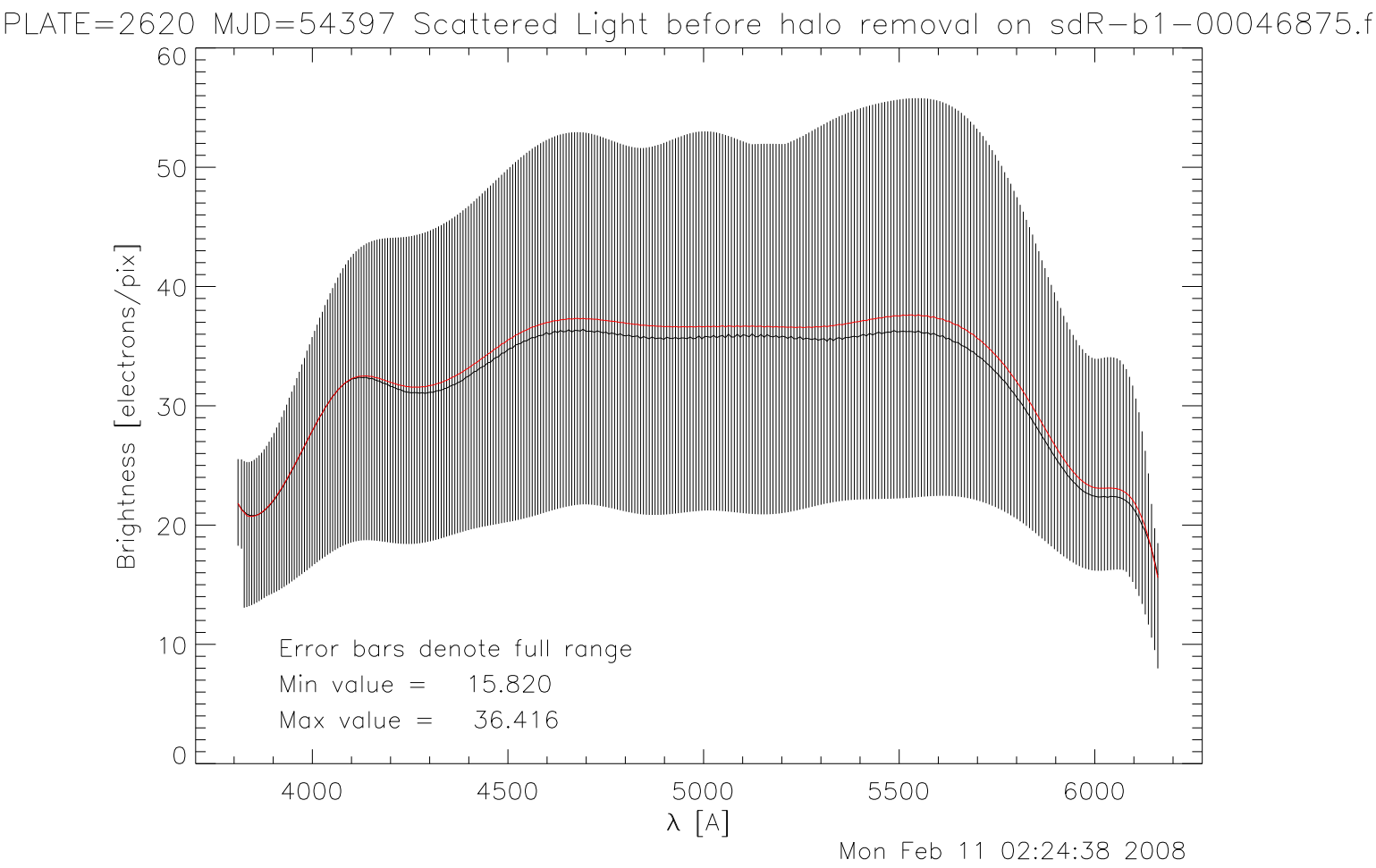

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046874.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

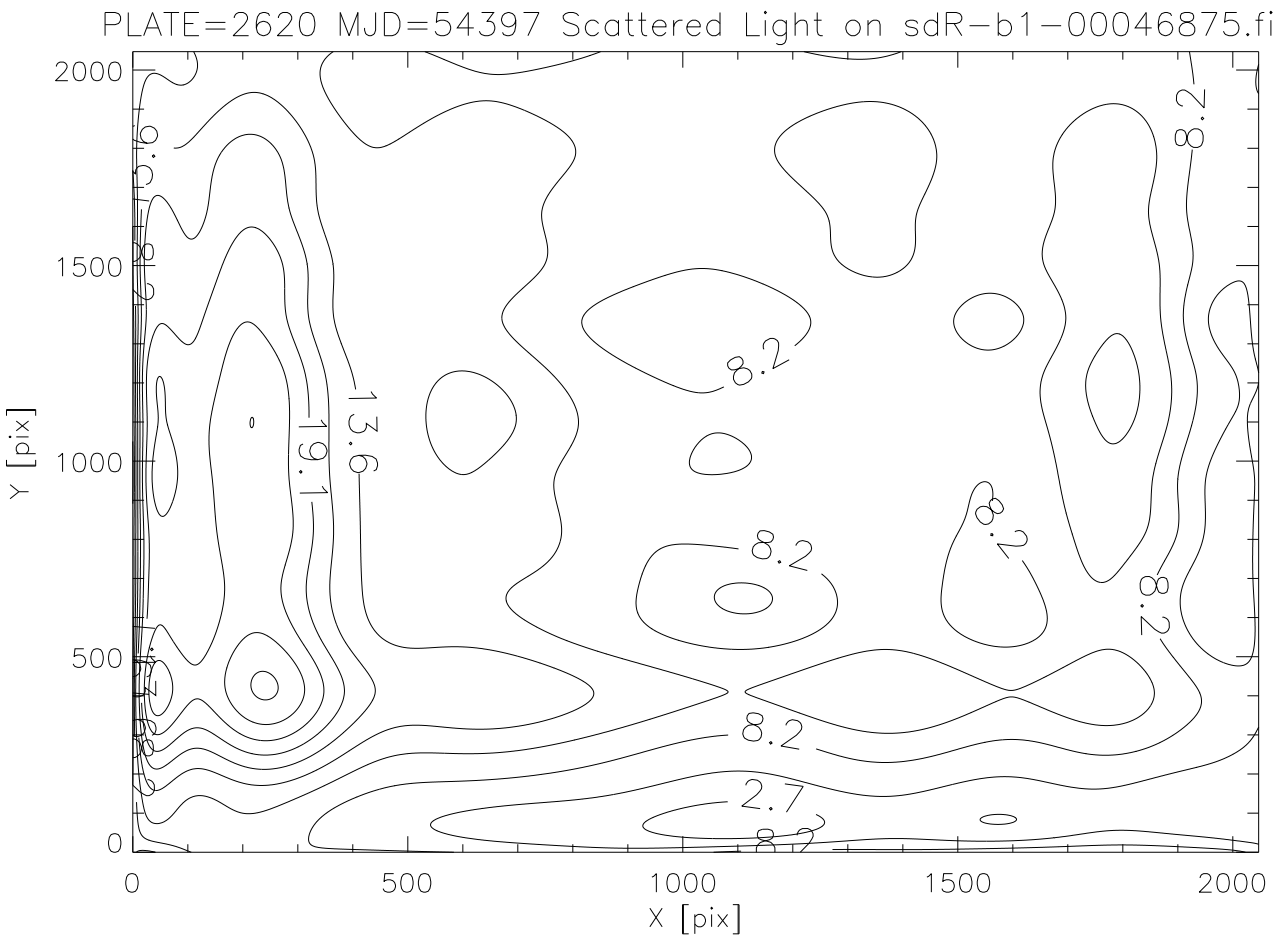

PLATE=2620 MJD=54397 sdR-b1-00046874.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 58.45 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

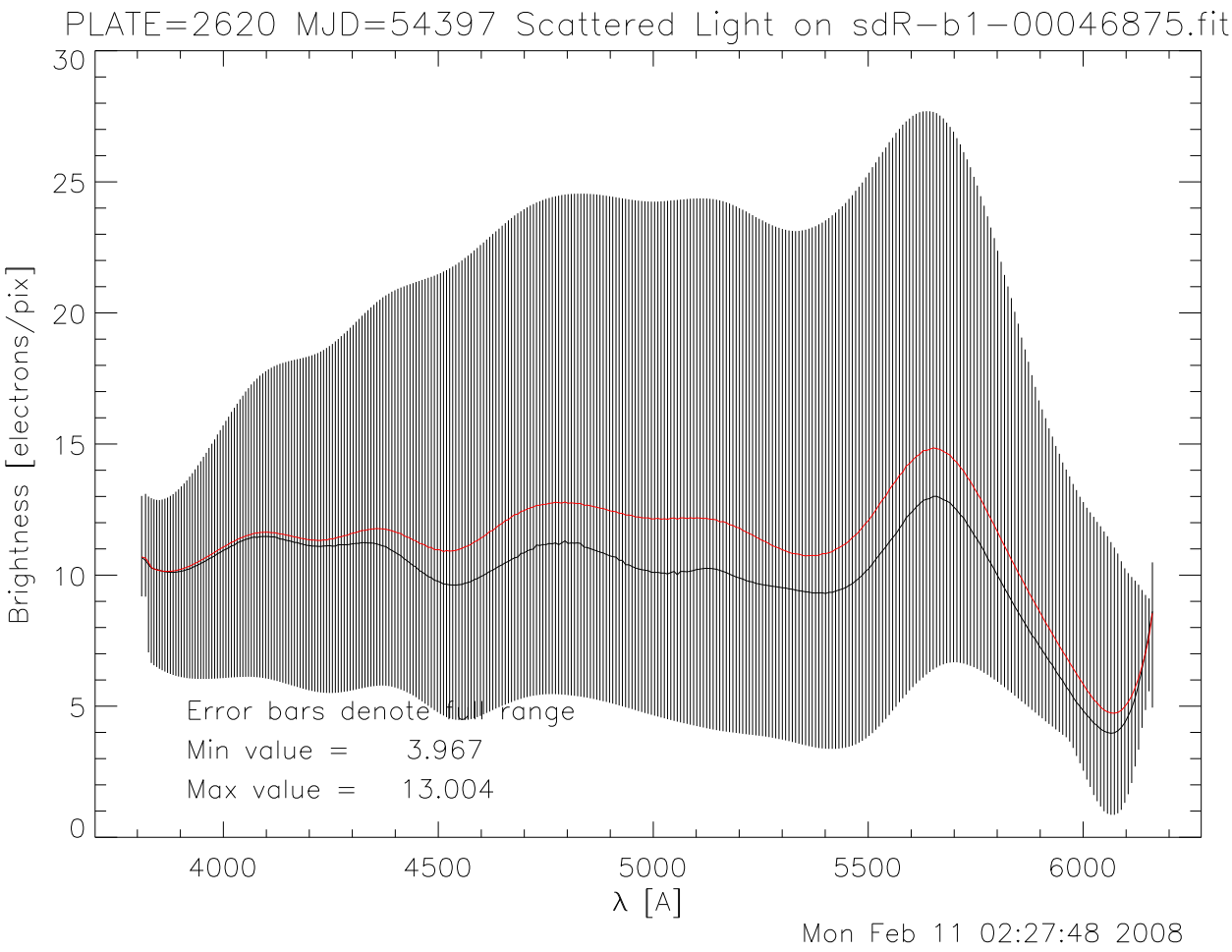

PLATE=2620 MJD=54397 sdR-b1-00046874.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.65×10⁴
1.60×10⁴
1.55×10⁴
1.50×10⁴
1.45×10⁴
1.40×10⁴
1.35×10⁴
RED = sky fiber
Dispersion = 1.32 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.65×10⁴
1.60×10⁴
1.55×10⁴
1.50×10⁴
1.45×10⁴
1.40×10⁴
1.35×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.65×10⁴
1.60×10⁴
1.55×10⁴
1.50×10⁴
1.45×10⁴
1.40×10⁴
1.35×10⁴
1.090
1.095
1.100
1.105
1.110
1.115
1.120
Airmass

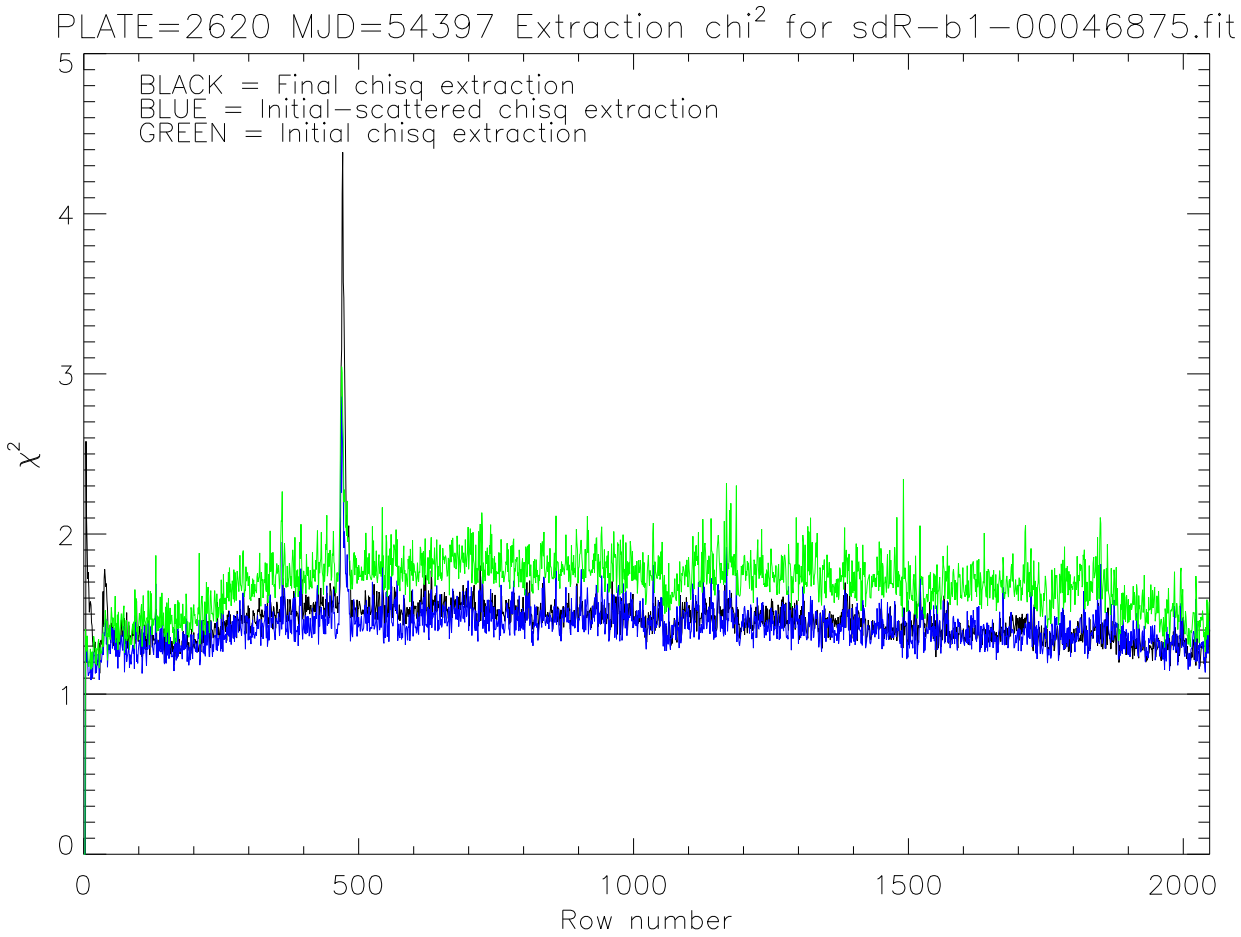

PLATE=2620 MJD=54397 Fiber−Flats for sdR−b1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:23:47 2008

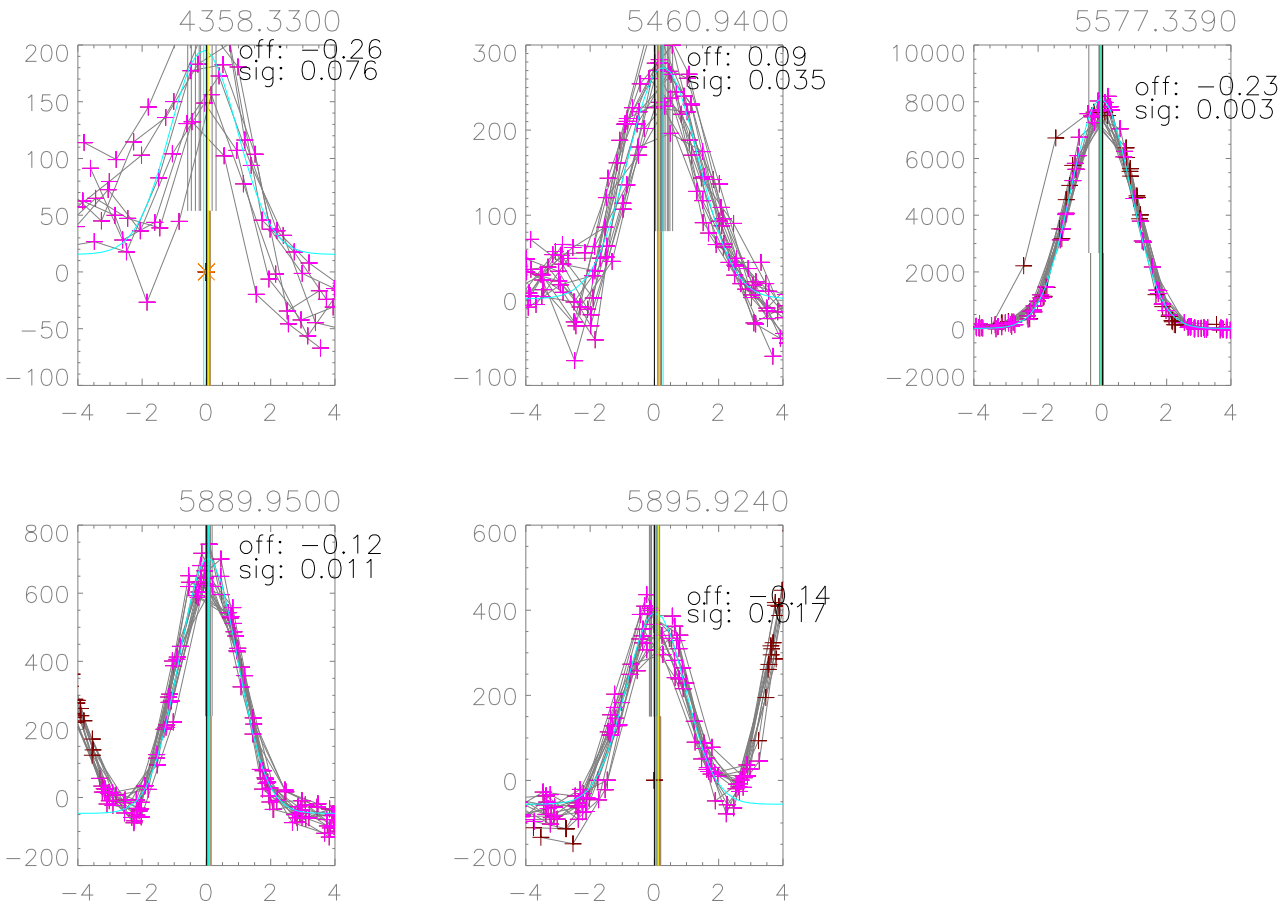

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR−b1−00046875.f
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
38.2
49.1
16.4

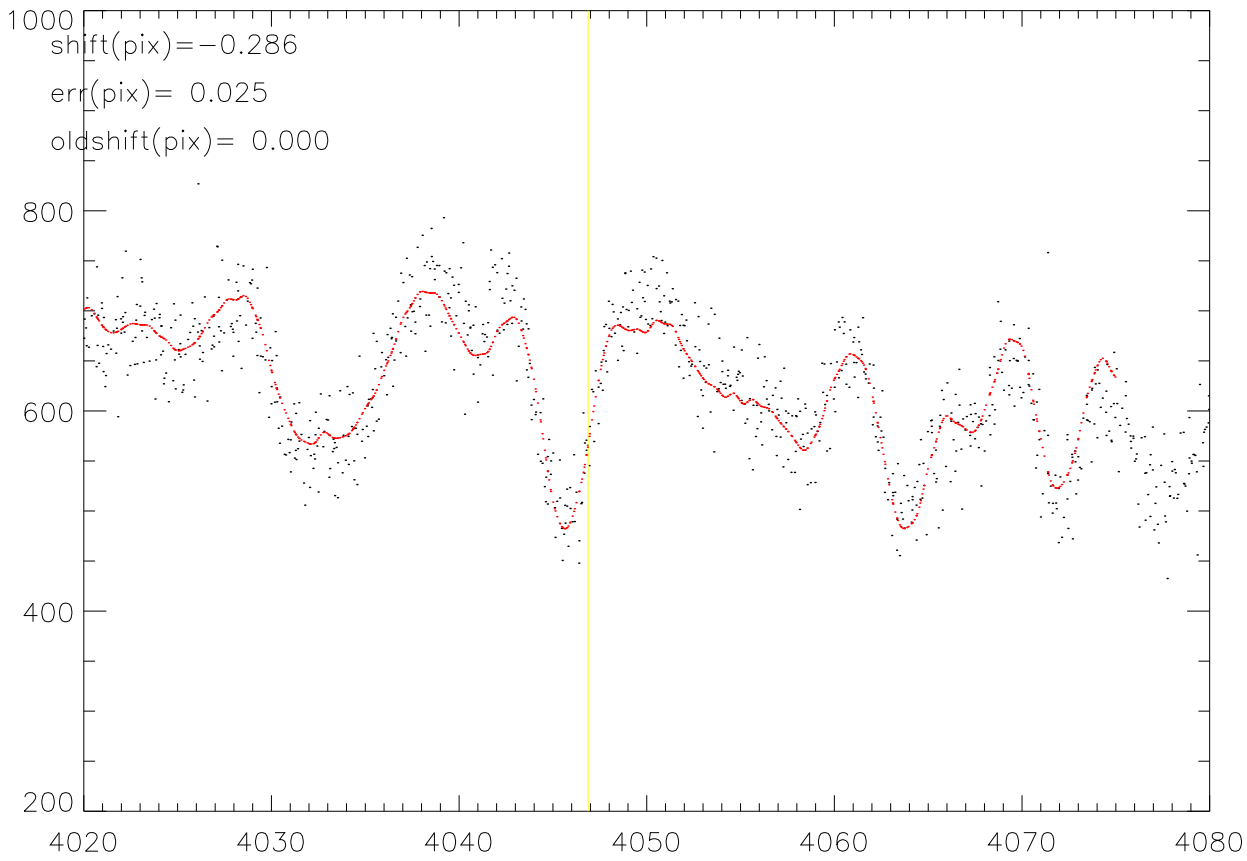

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046875.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 15.820
Max value = 36.416
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:24:38 2008

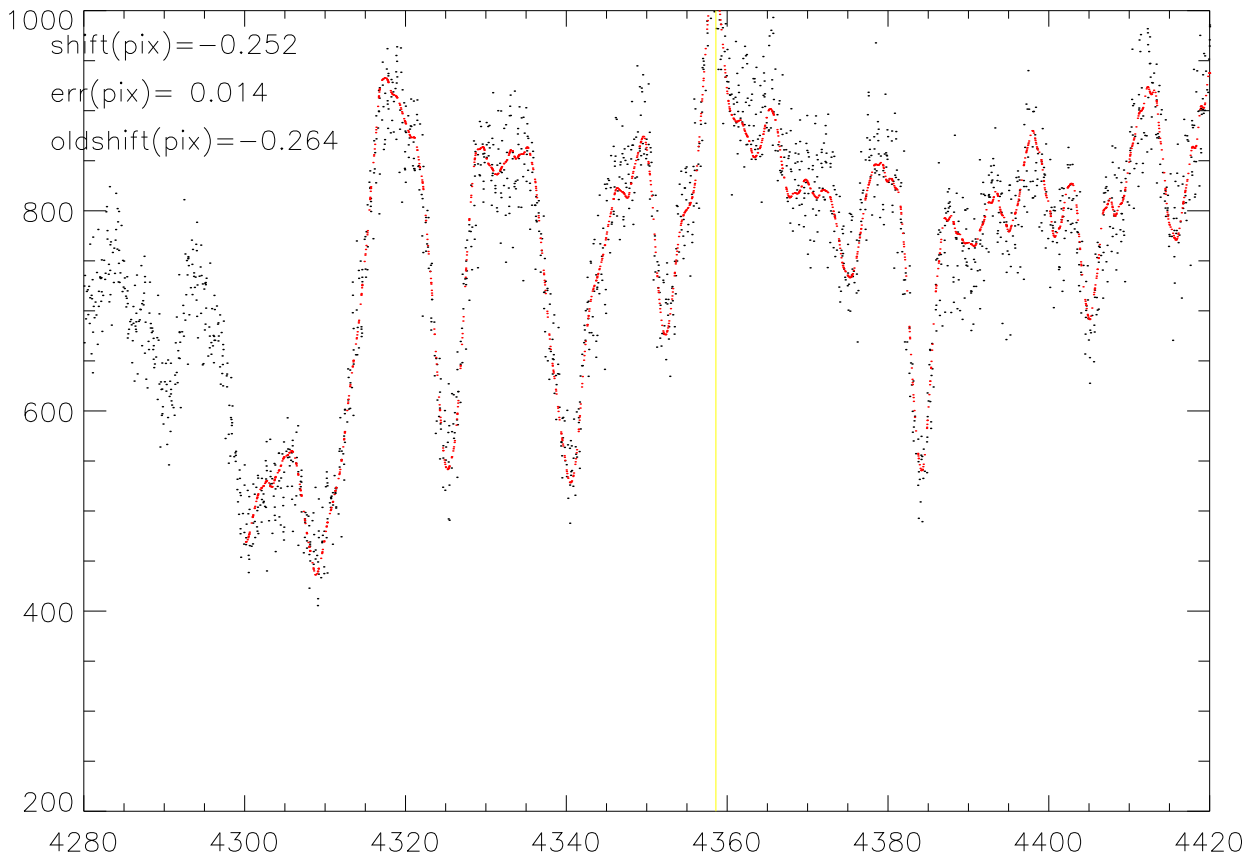

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046875.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
19.1
2.7

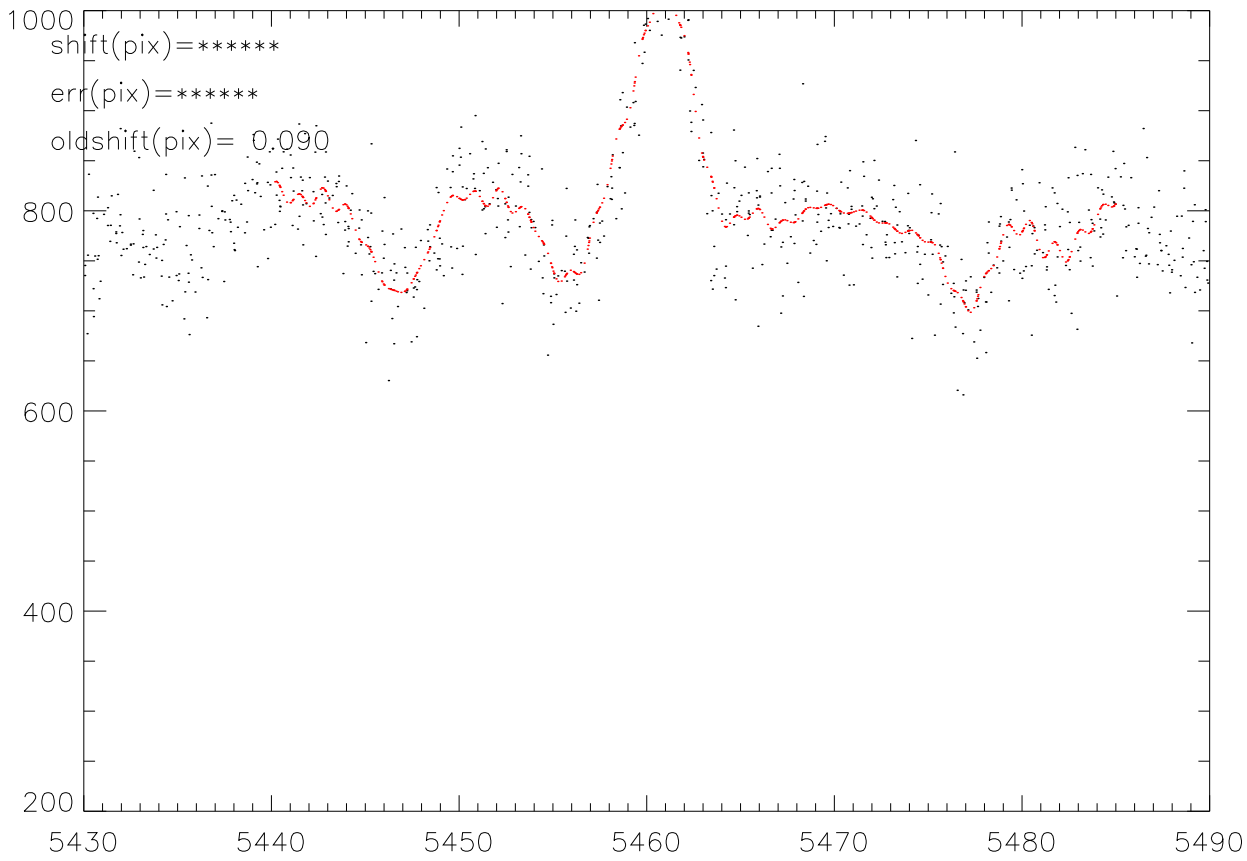

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046875.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 3.967
Max value = 13.004
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:27:48 2008

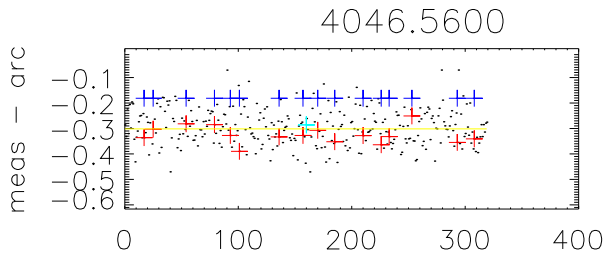

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046875.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

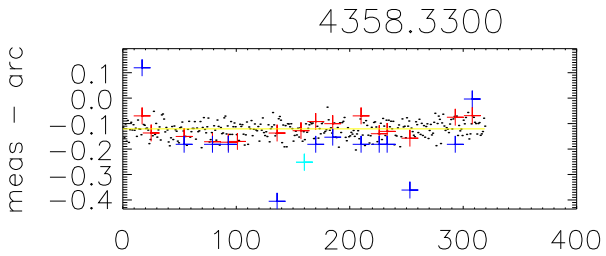

4358.3300
off: −0.26
sig: 0.076
5460.9400
off: 0.09
sig: 0.035
5577.3390
off: −0.23
sig: 0.003
5889.9500
off: −0.12
sig: 0.011
5895.9240
off: −0.14
sig: 0.017

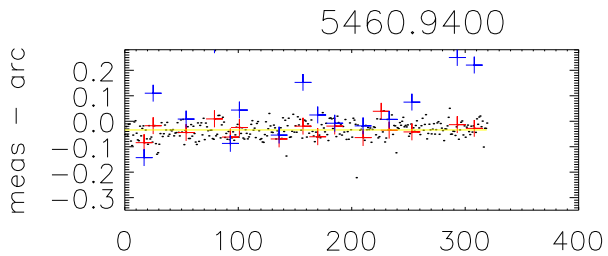

shift(pix)=−0.286
err(pix)= 0.025
oldshift(pix)= 0.000
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

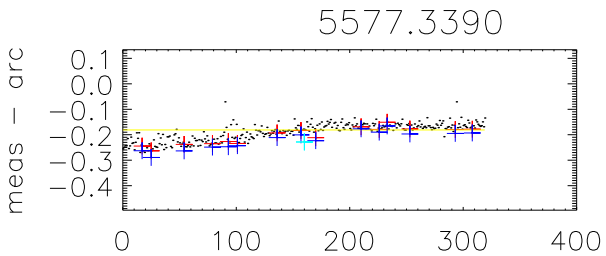

shift(pix)=−0.252
err(pix)= 0.014
oldshift(pix)=−0.264
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

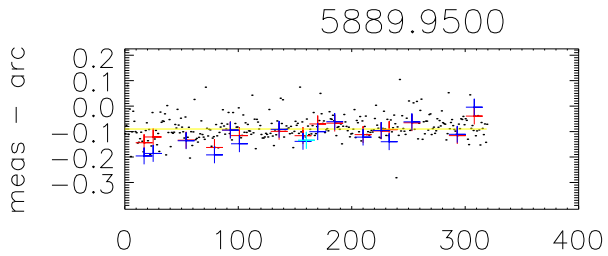

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.090
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

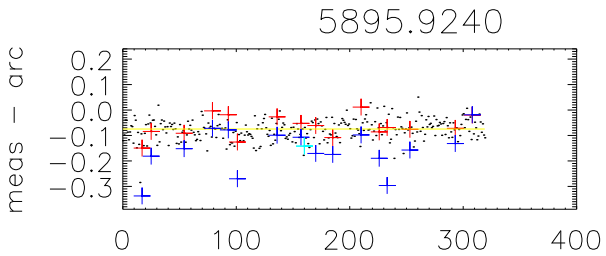

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

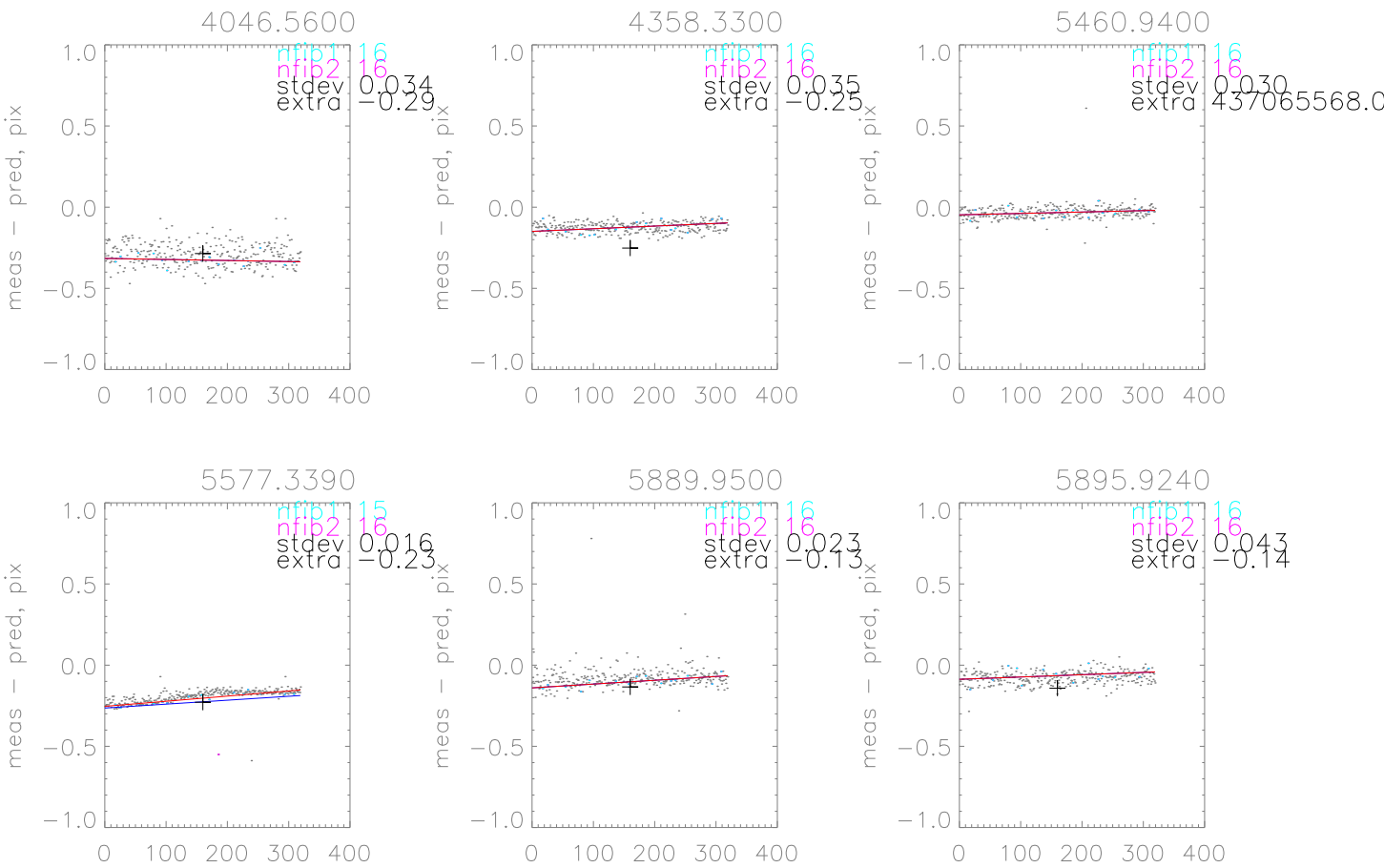

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

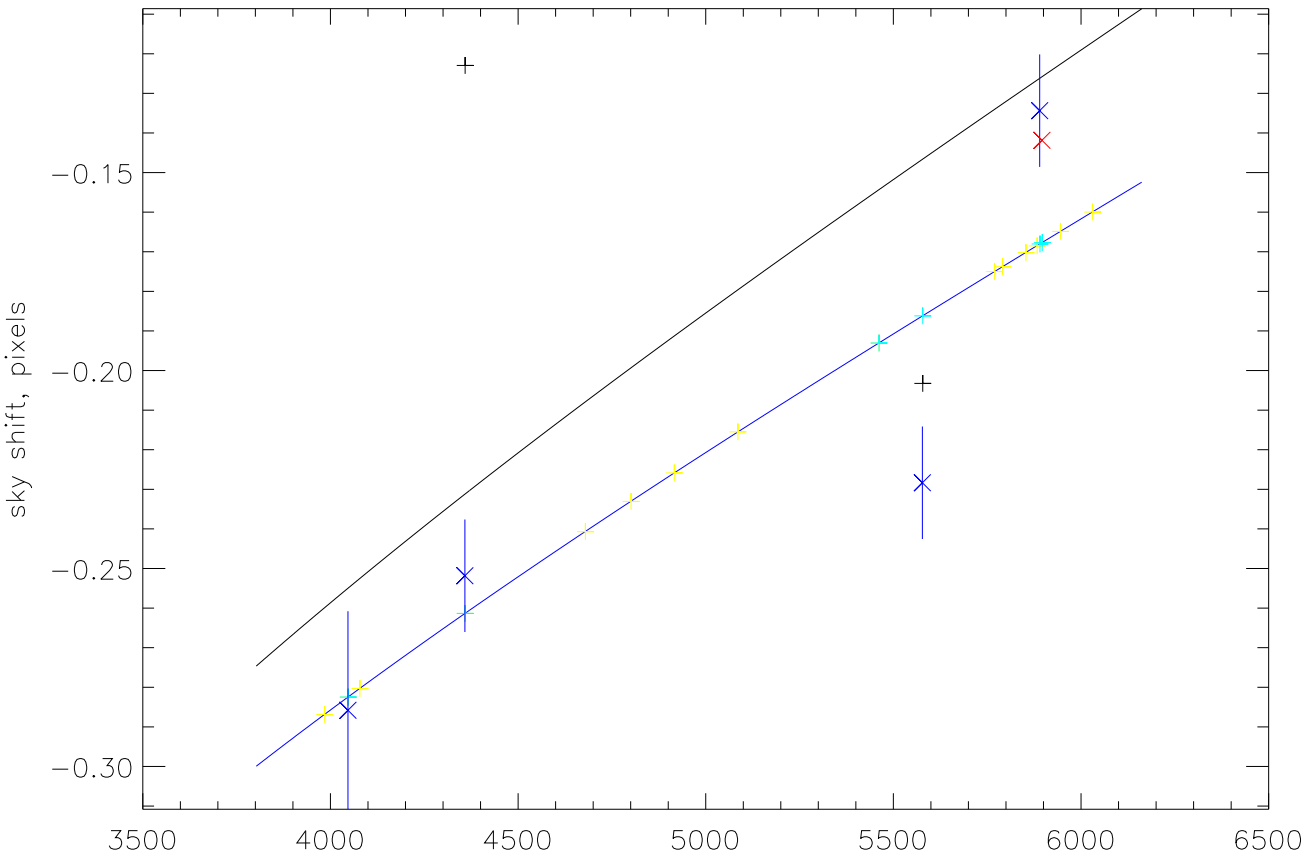

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

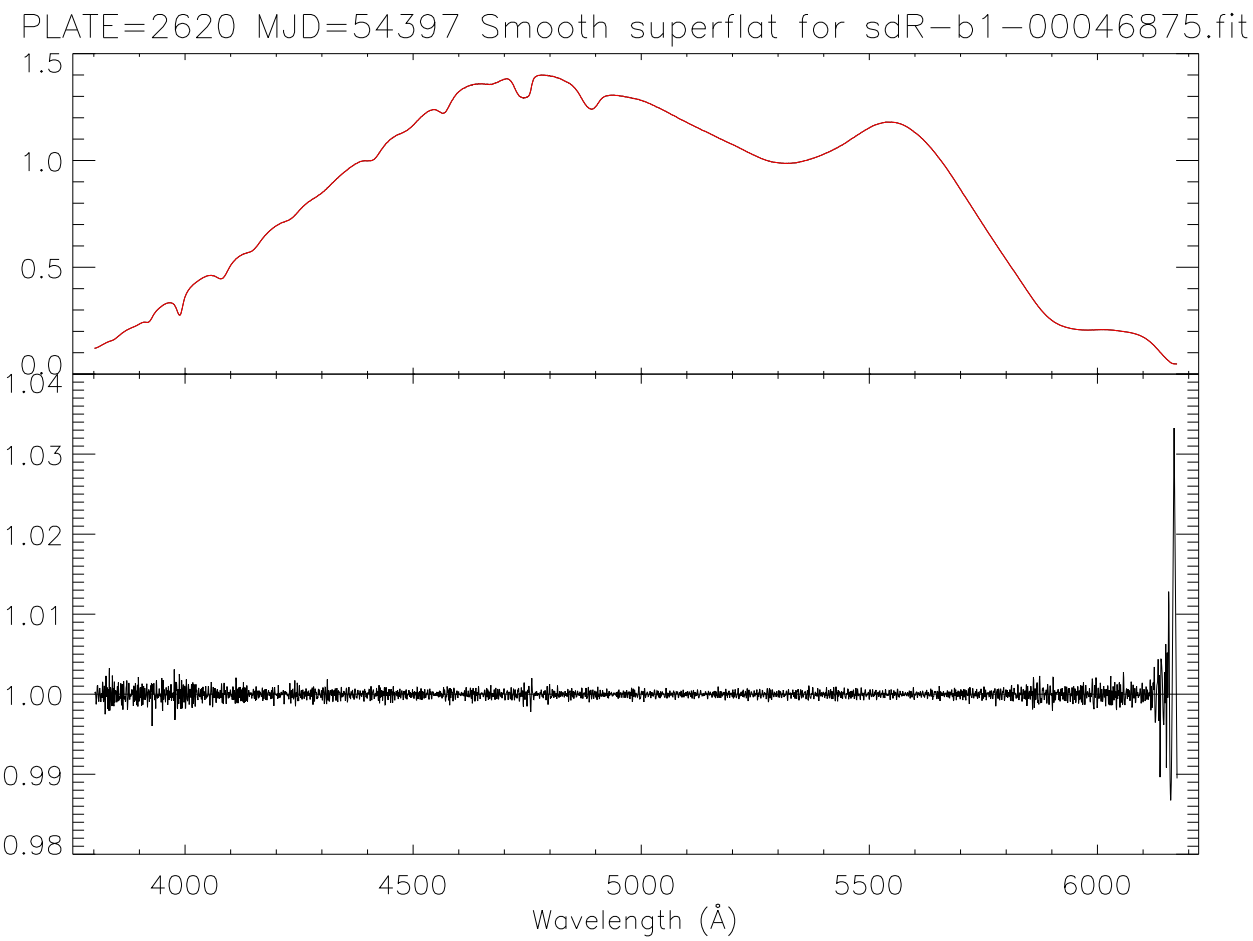

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

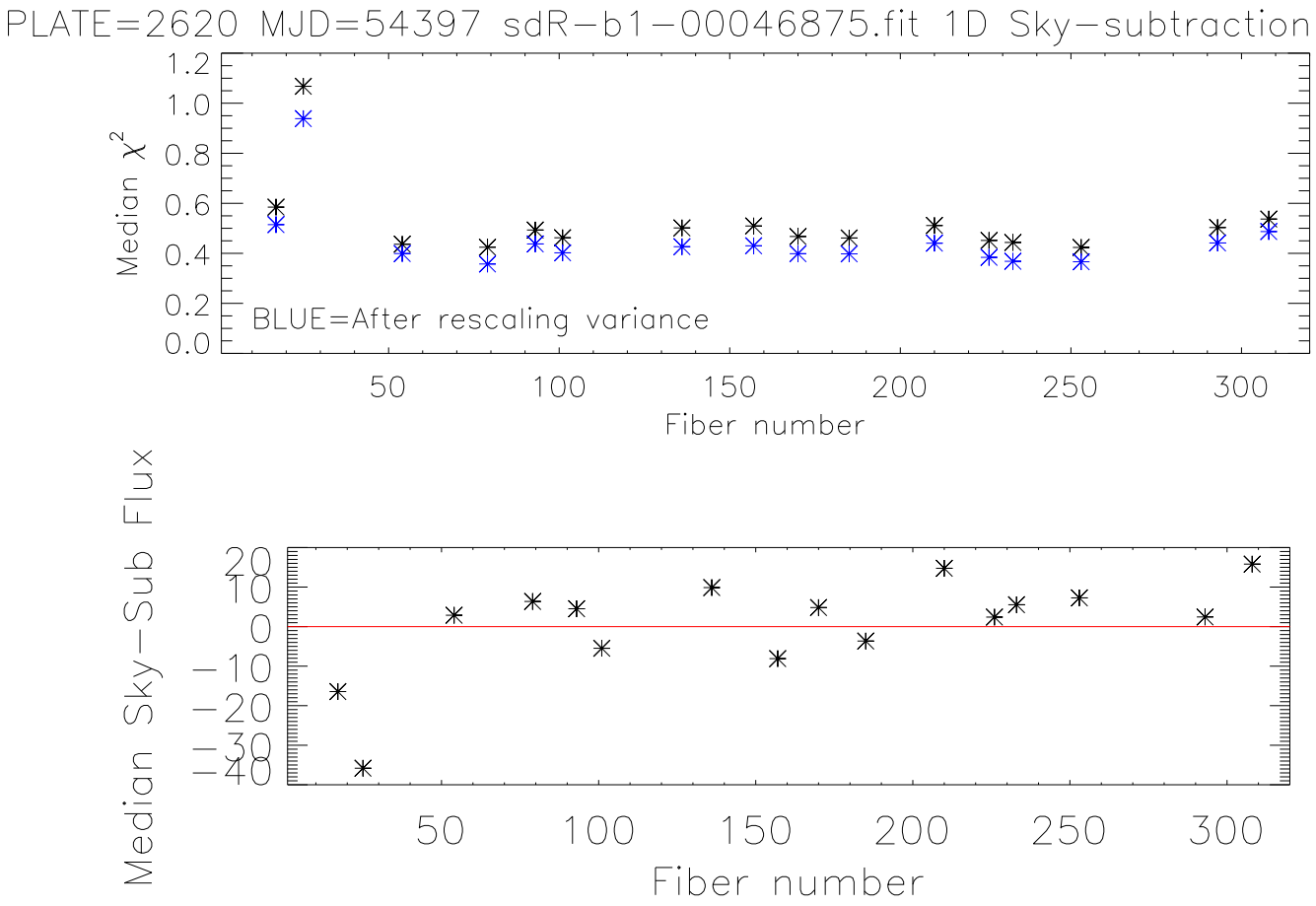

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

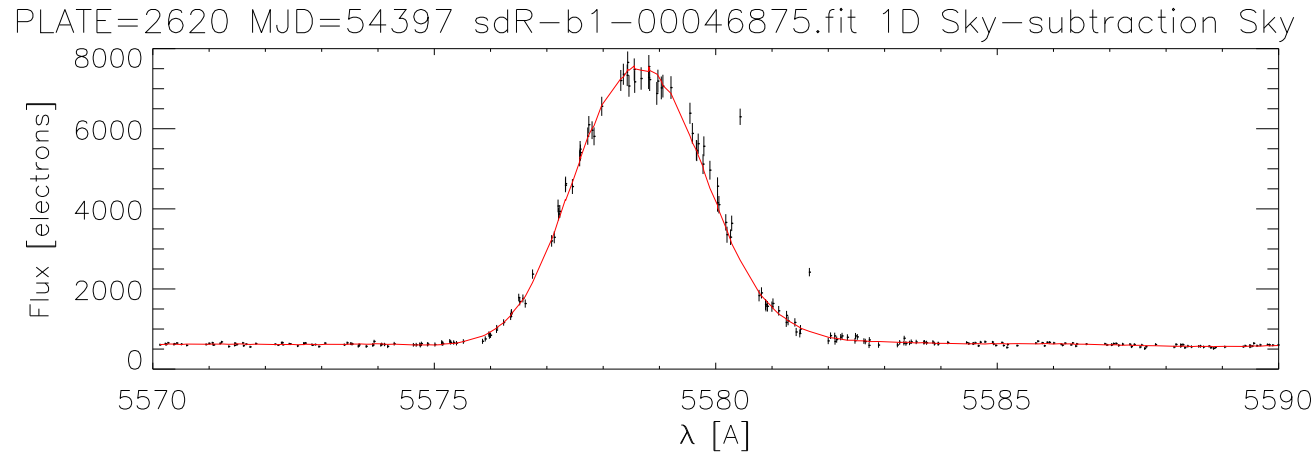

4046.5600
nfib1 16
nfib2 16
stdev 0.034
extra −0.29
4358.3300
nfib1 16
nfib2 16
stdev 0.035
extra −0.25
5460.9400
nfib1 16
nfib2 16
stdev 0.030
extra 437065568.0
5577.3390
nfib1 15
nfib2 16
stdev 0.016
extra −0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra −0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.043
extra −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

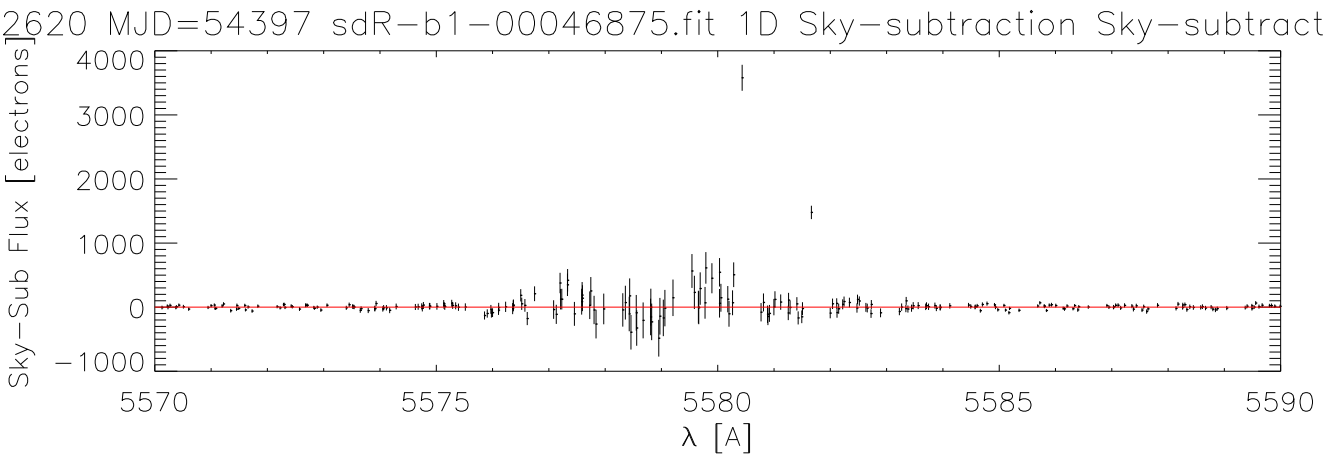

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

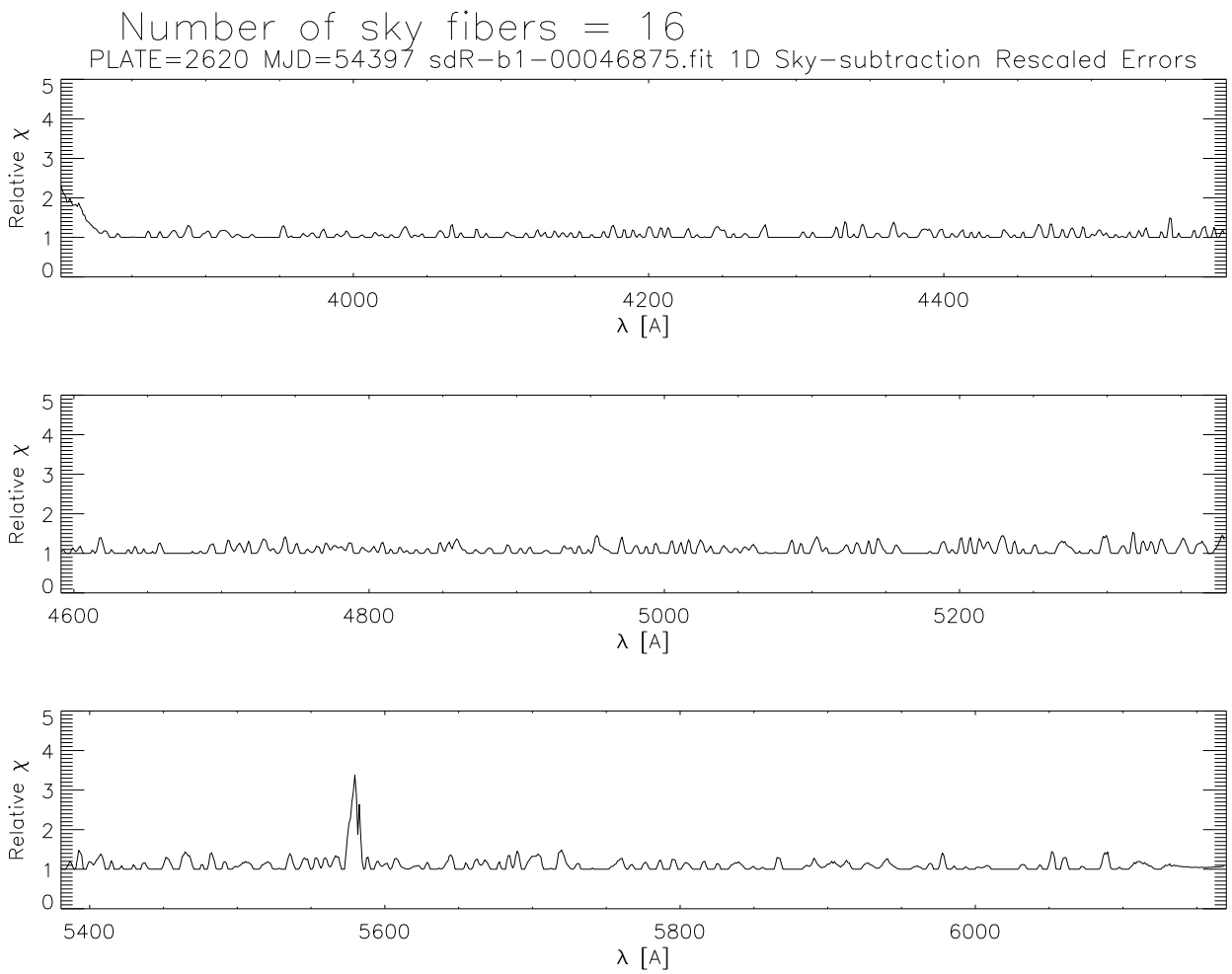
es= −0.0000

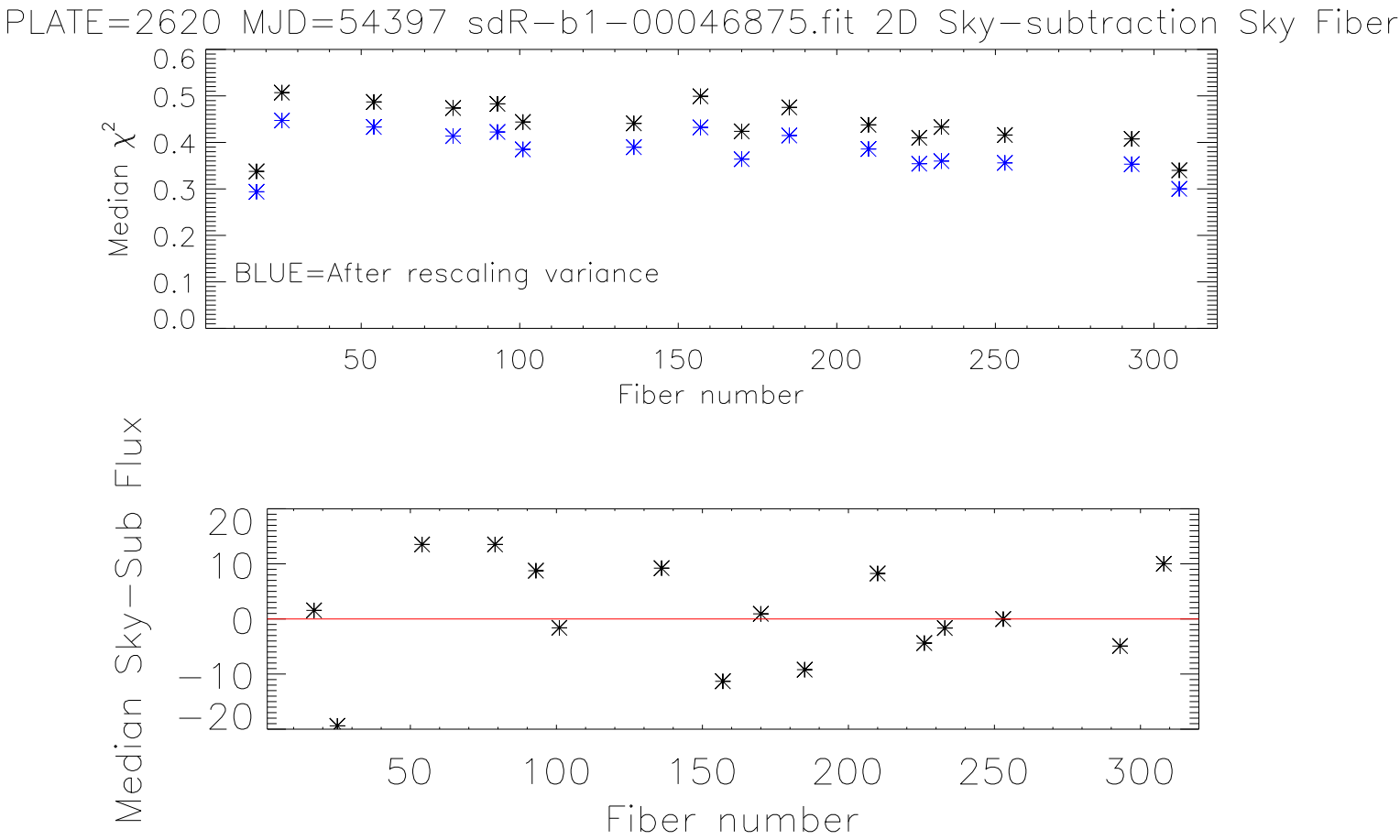

PLATE=2620 MJD=54397 Smooth superflat for sdR−b1−00046875.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

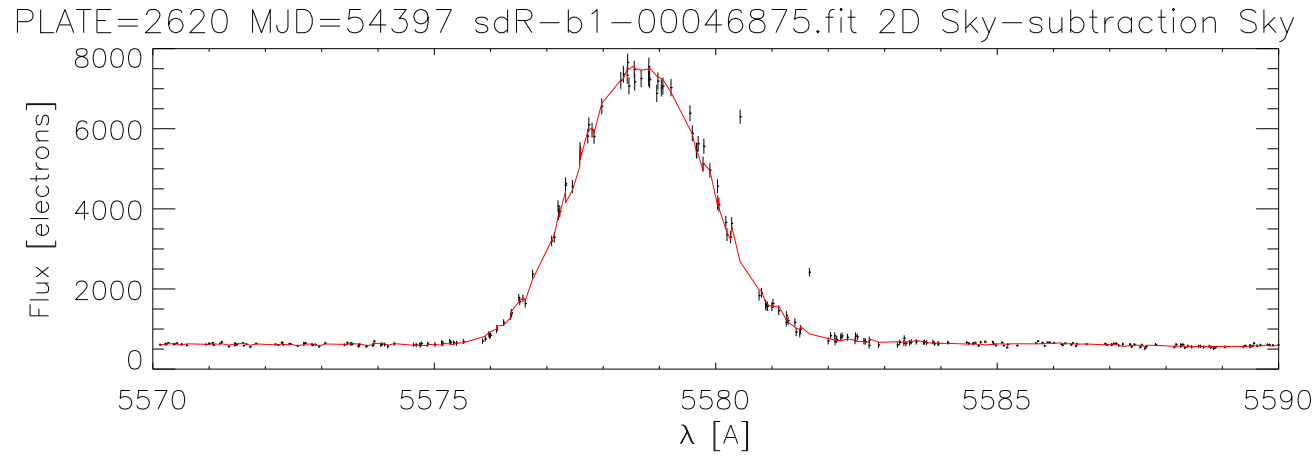

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

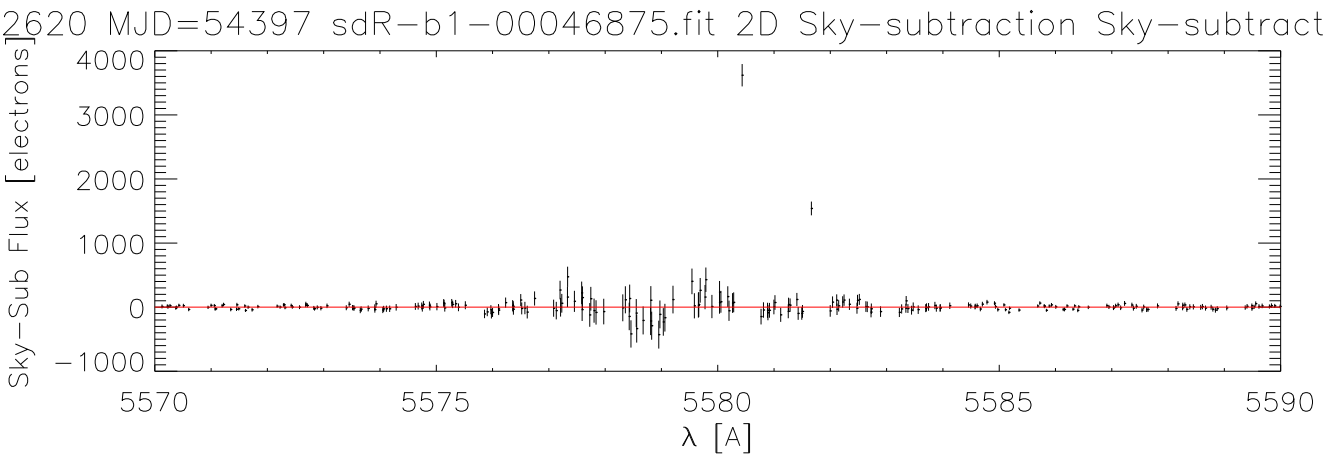

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

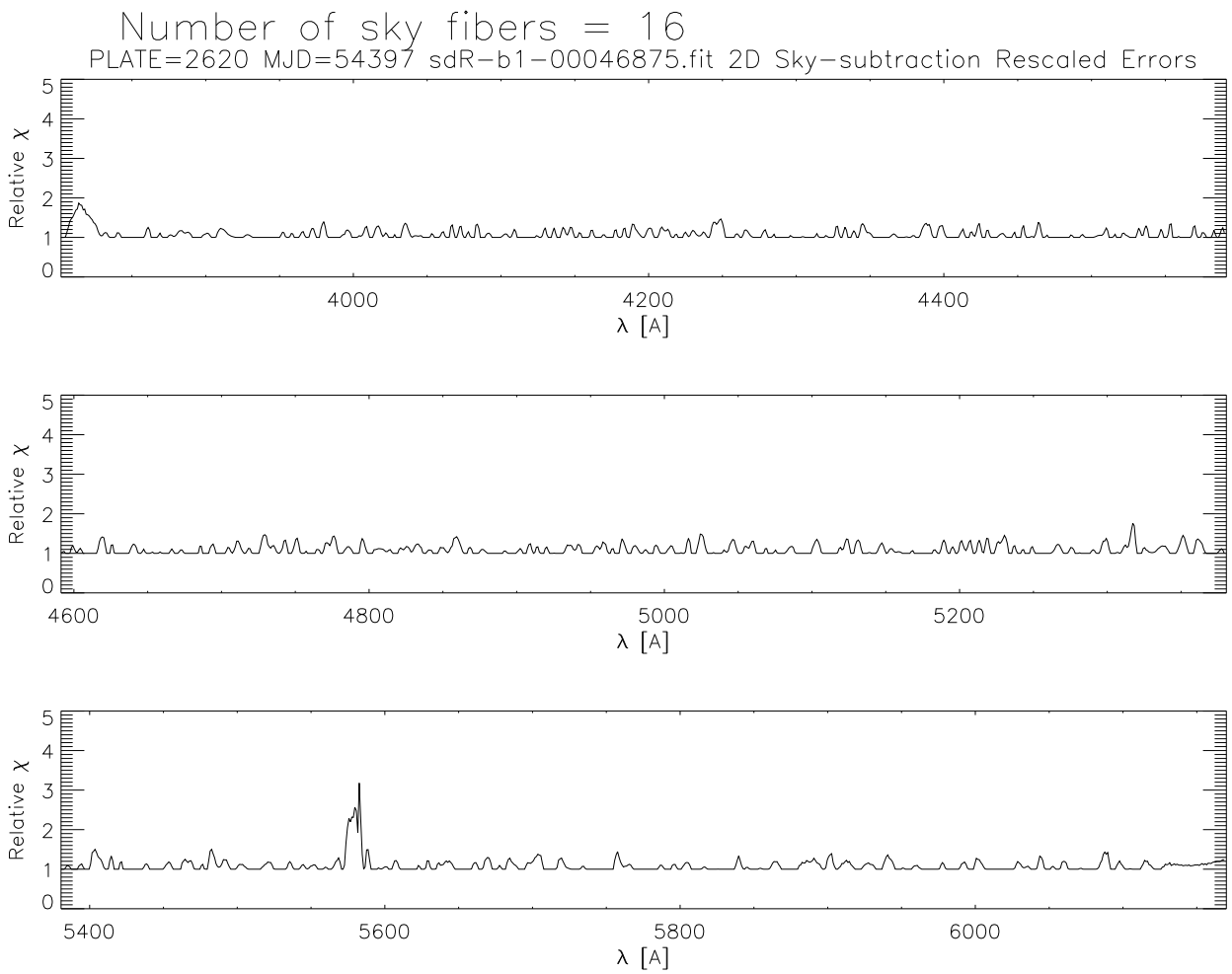

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

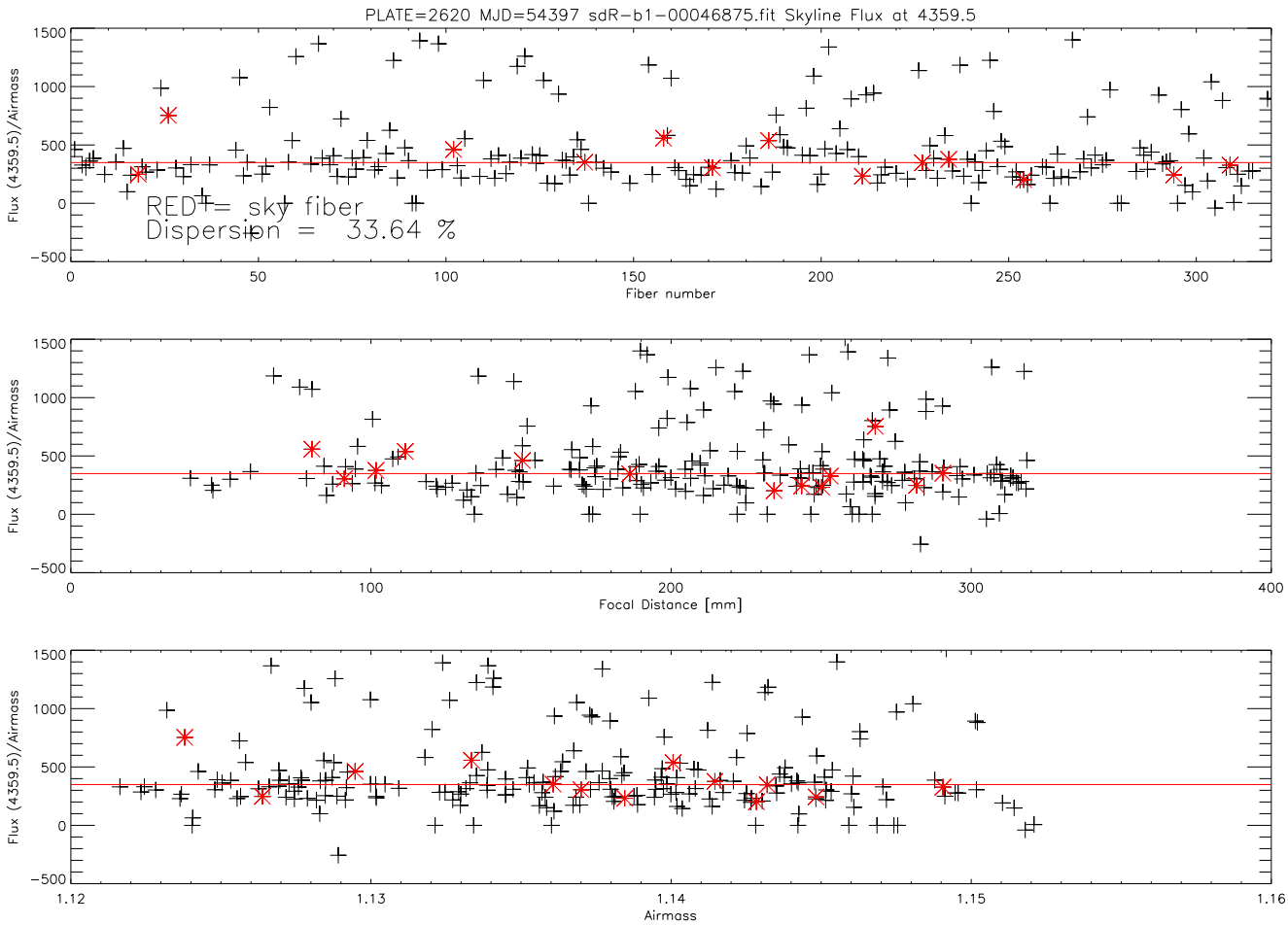

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046875.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

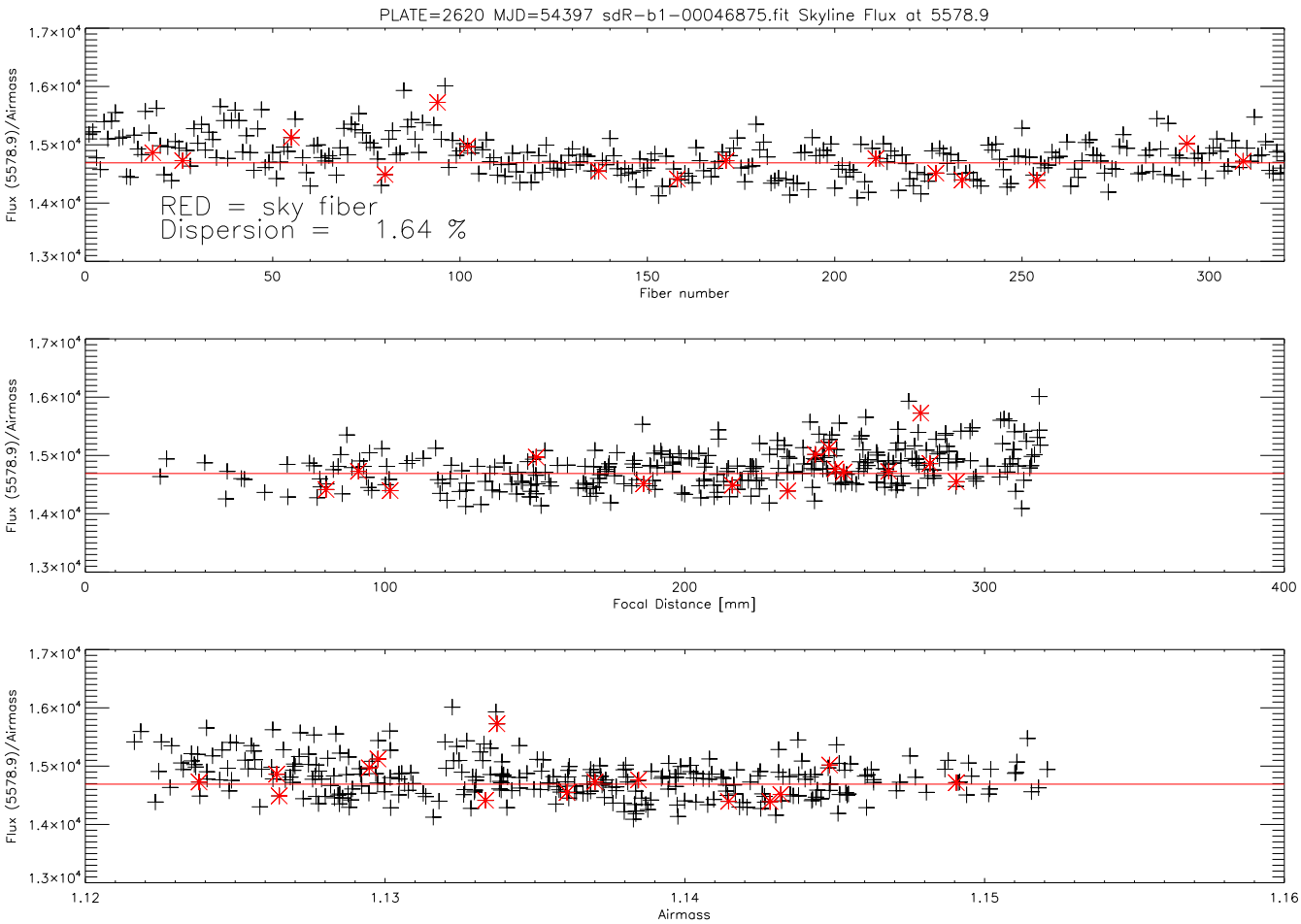

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

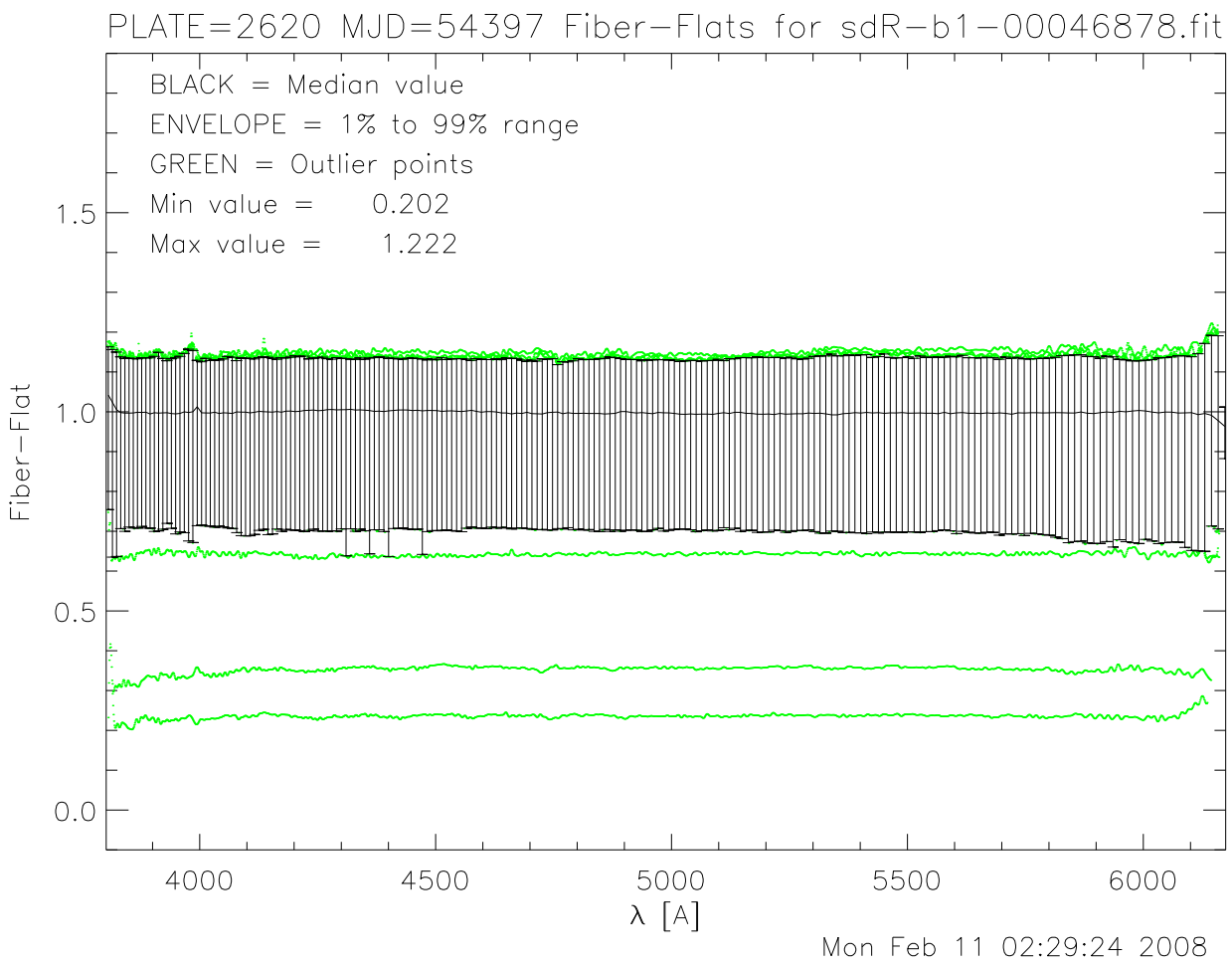

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

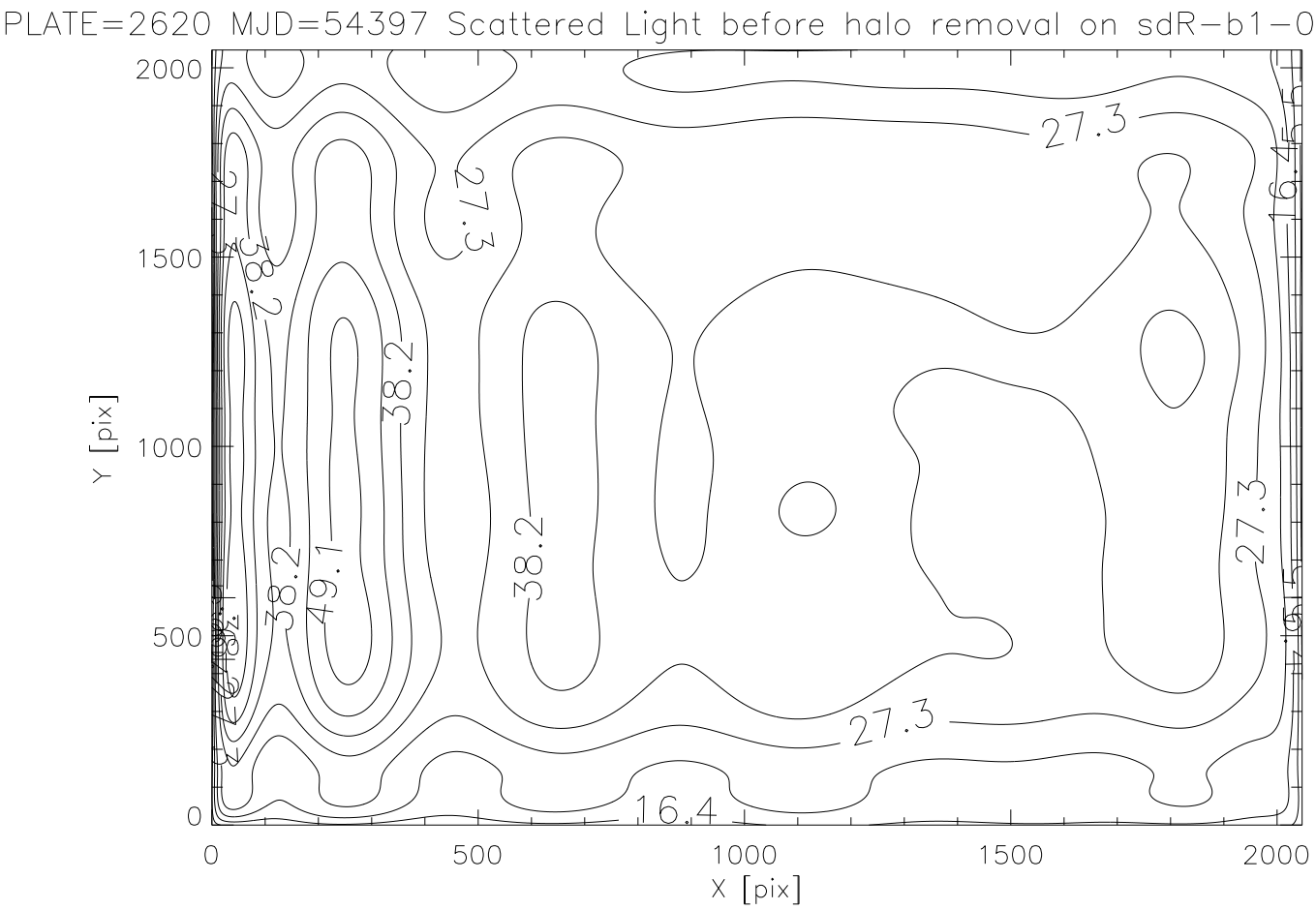

PLATE=2620 MJD=54397 sdR-b1-00046875.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

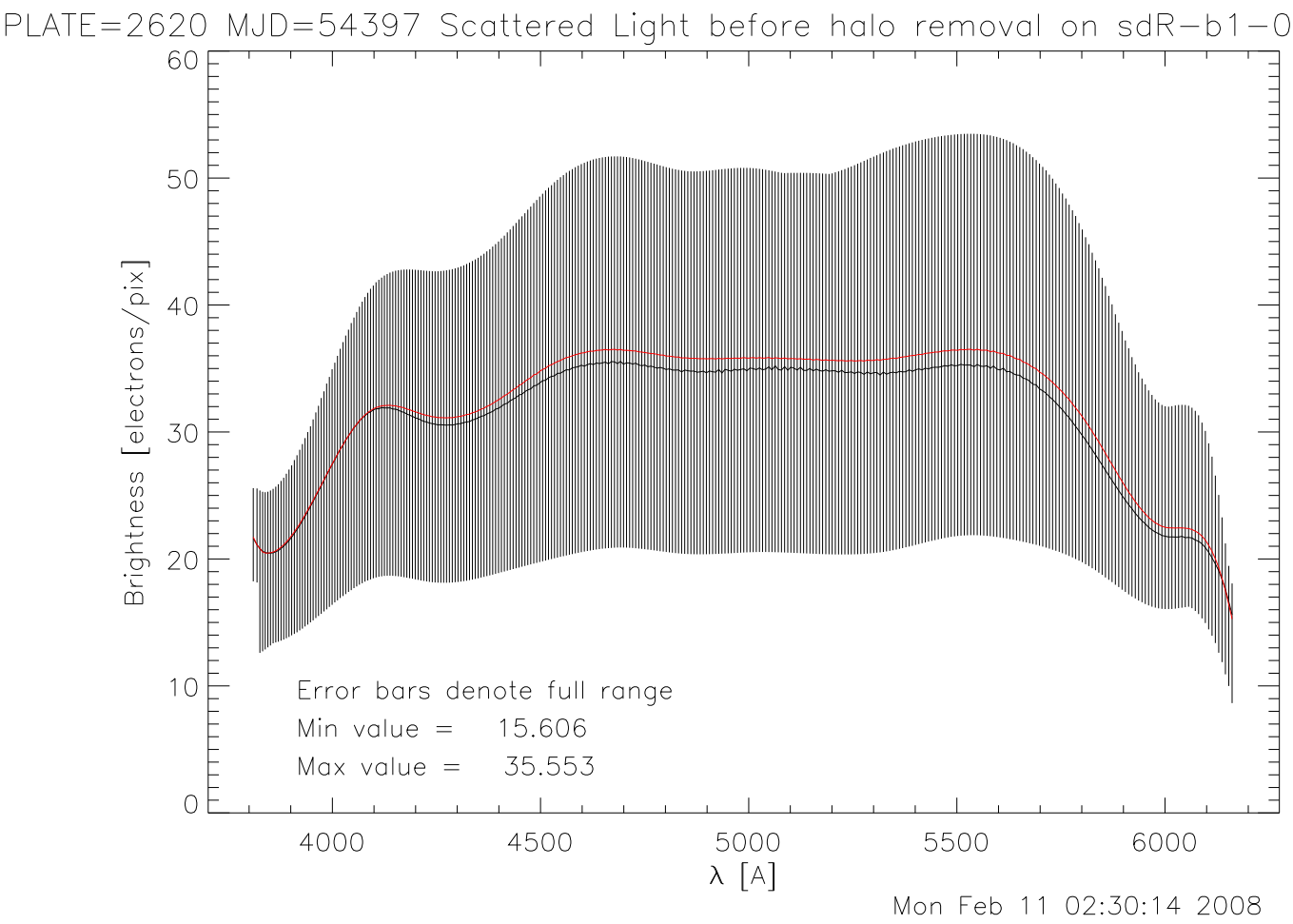

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046875.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

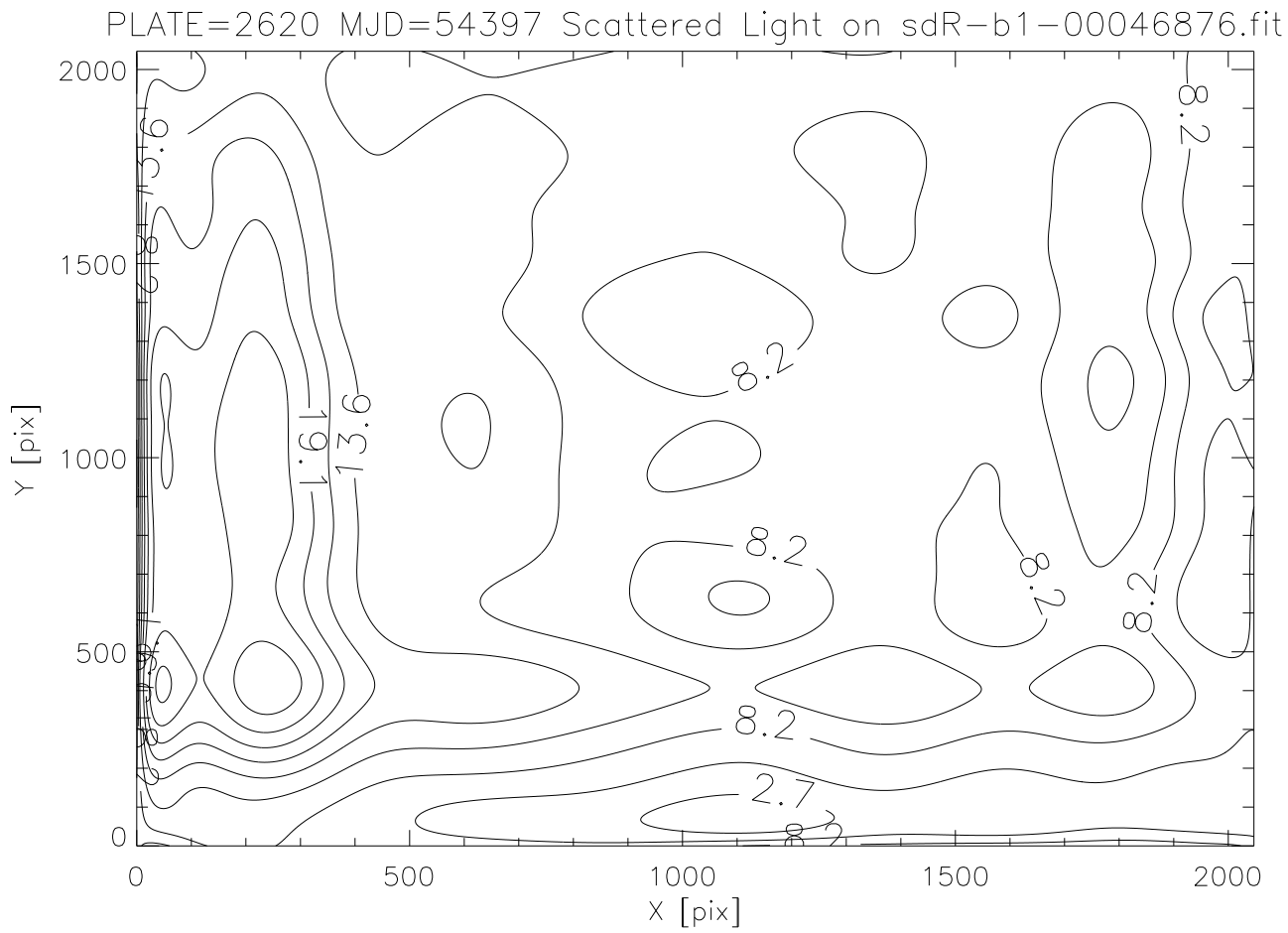

PLATE=2620 MJD=54397 sdR-b1-00046875.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED= sky fiber
Dispersion = 33.64 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

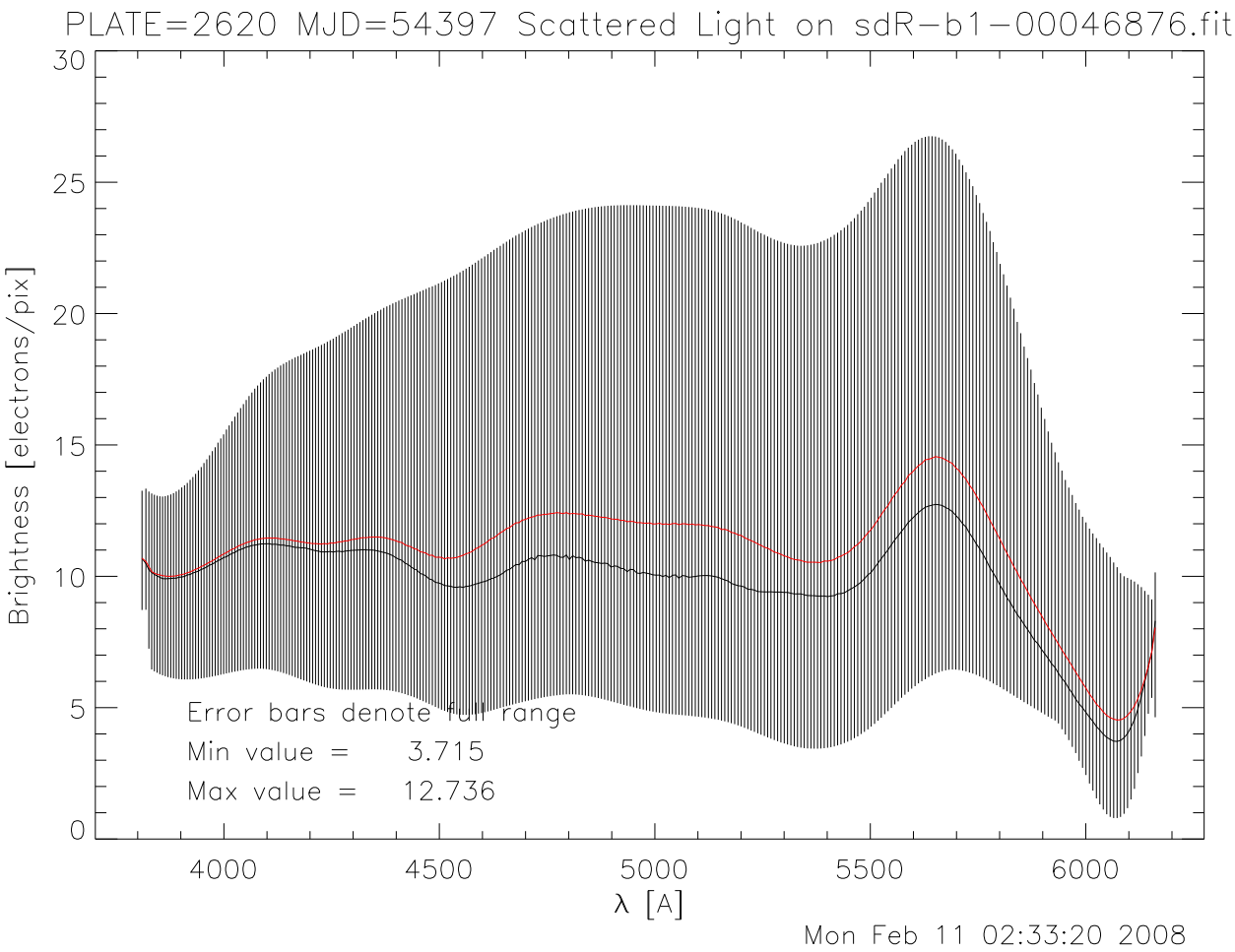

PLATE=2620 MJD=54397 sdR-b1-00046875.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.64 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.12
1.13
1.14
1.15
1.16
Airmass

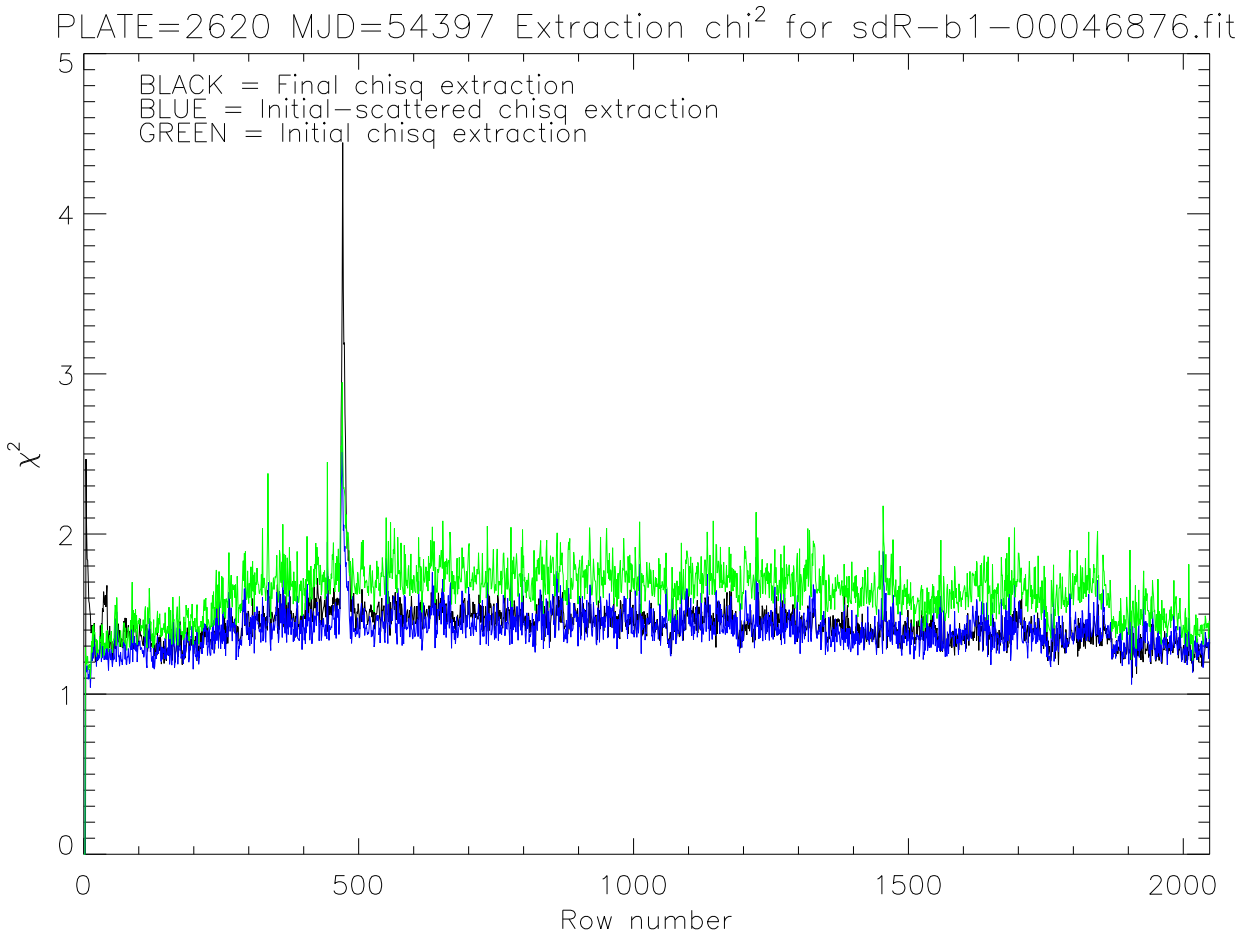

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b1-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:29:24 2008

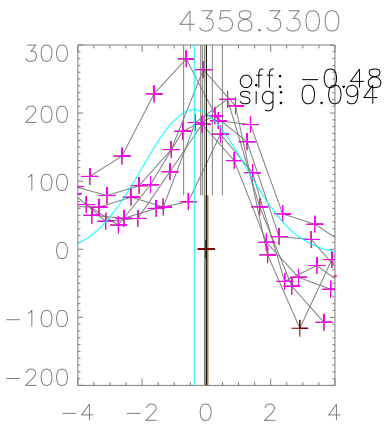

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046876.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
27.3
38.2
49.1
16.4

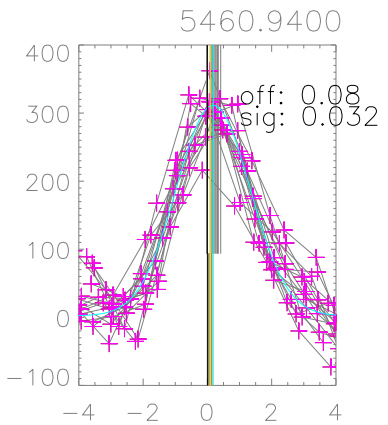

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046876.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 15.606
Max value = 35.553
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:30:14 2008

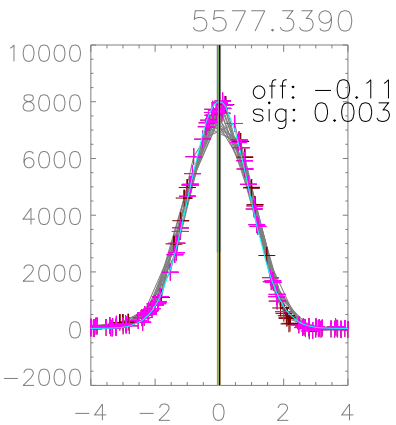

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046876.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
19.1
2.7

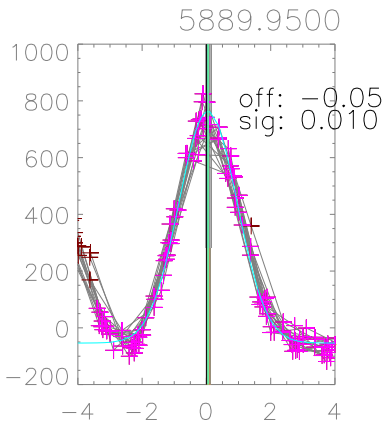

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046876.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.715
Max value = 12.736
Mon Feb 11 02:33:20 2008

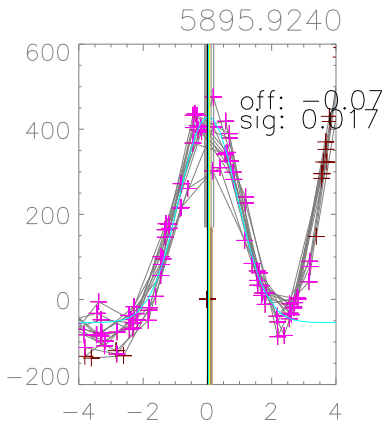

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046876.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

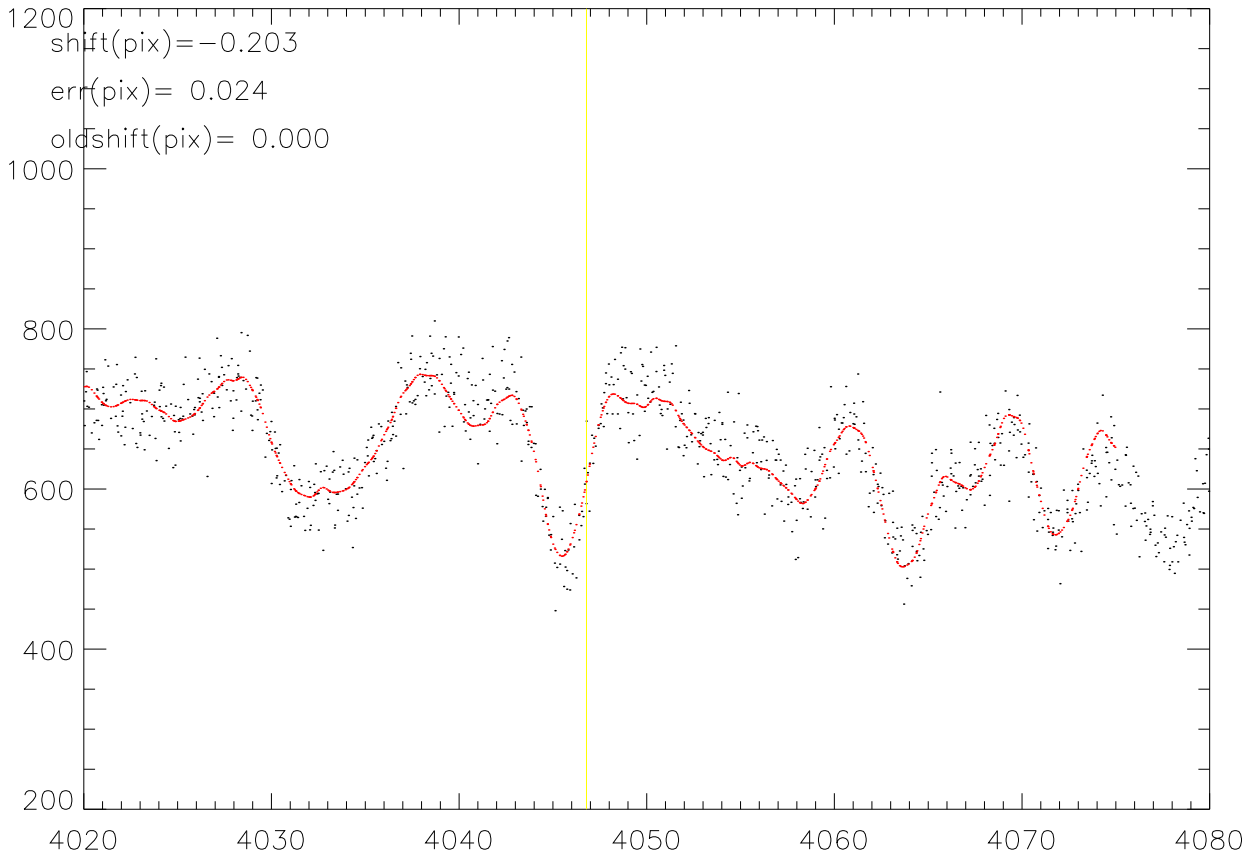

4358.3300
off: −0.48
sig: 0.094

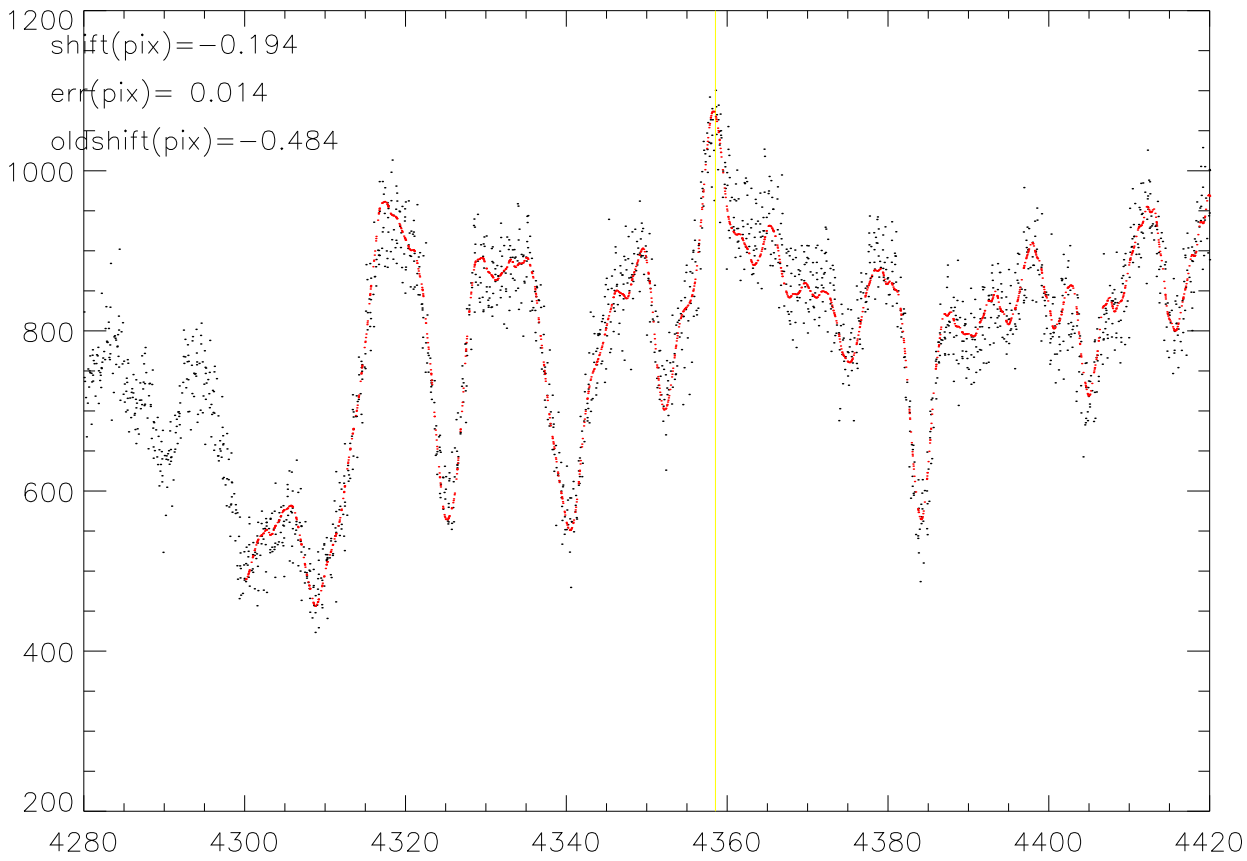

5460.9400
off: 0.08
sig: 0.032

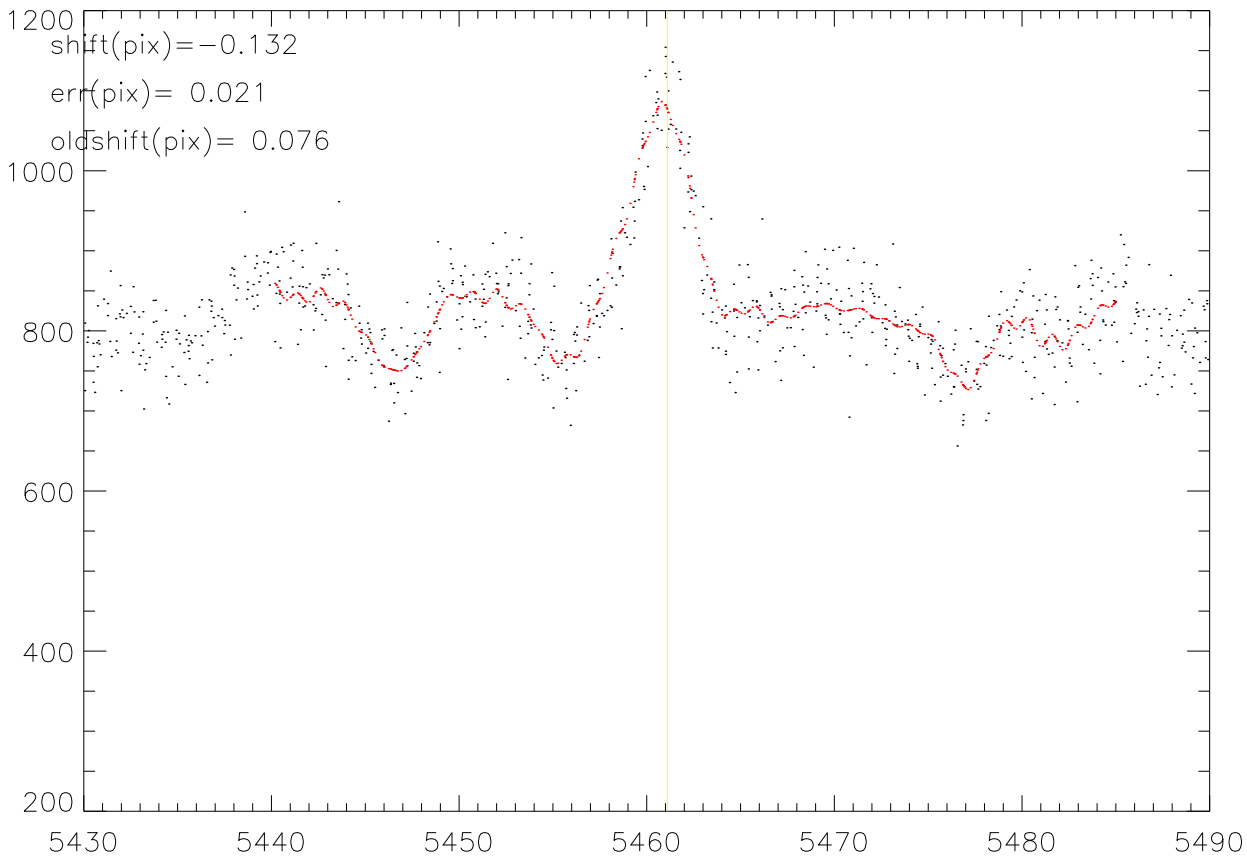

5577.3390
off: −0.11
sig: 0.003

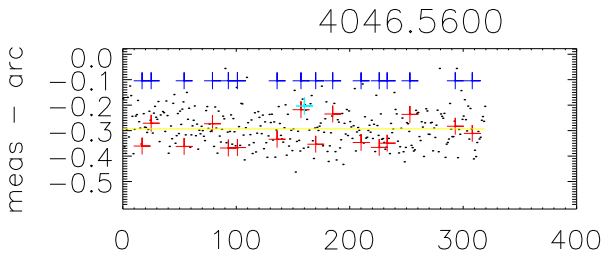

5889.9500
off: −0.05
sig: 0.010

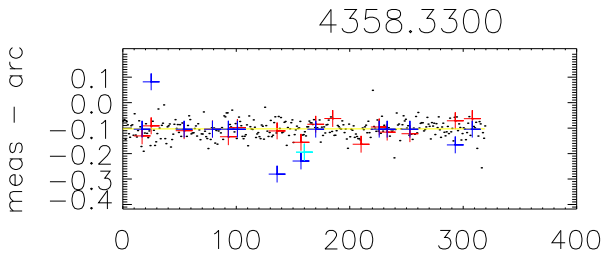

5895.9240
off: −0.07
sig: 0.017

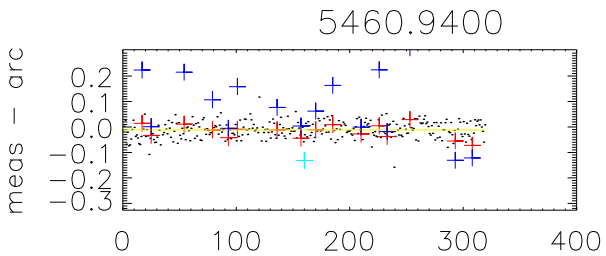

shift(pix)=−0.203
err(pix)= 0.024
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

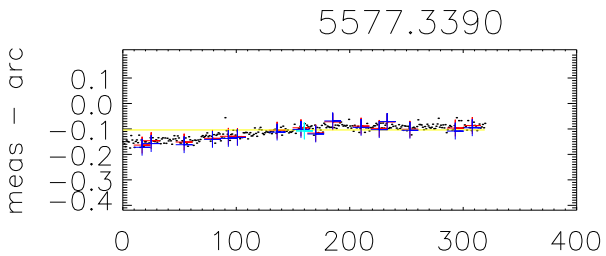

shift(pix)=−0.194
err(pix)= 0.014
oldshift(pix)=−0.484
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

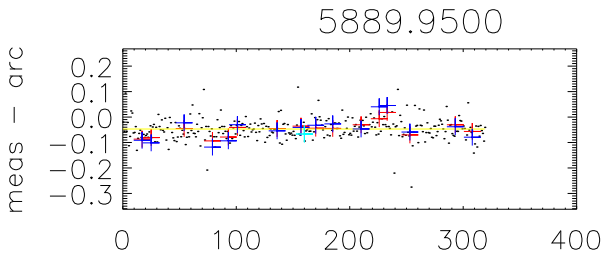

shift(pix)=−0.132
err(pix)= 0.021
oldshift(pix)= 0.076
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

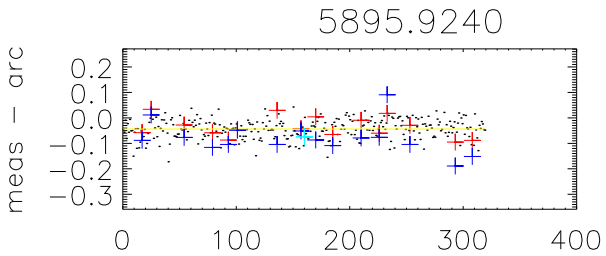

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

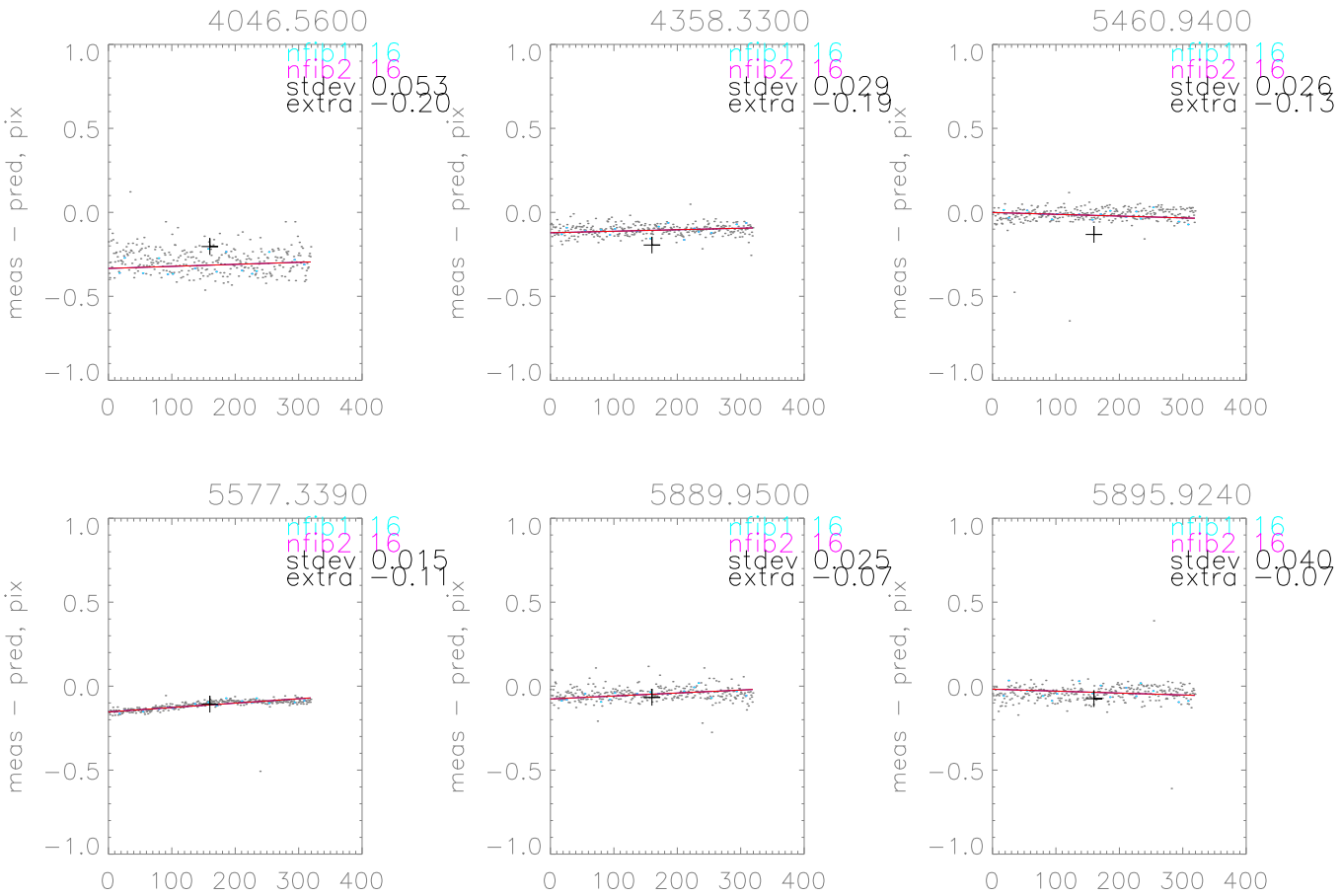

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

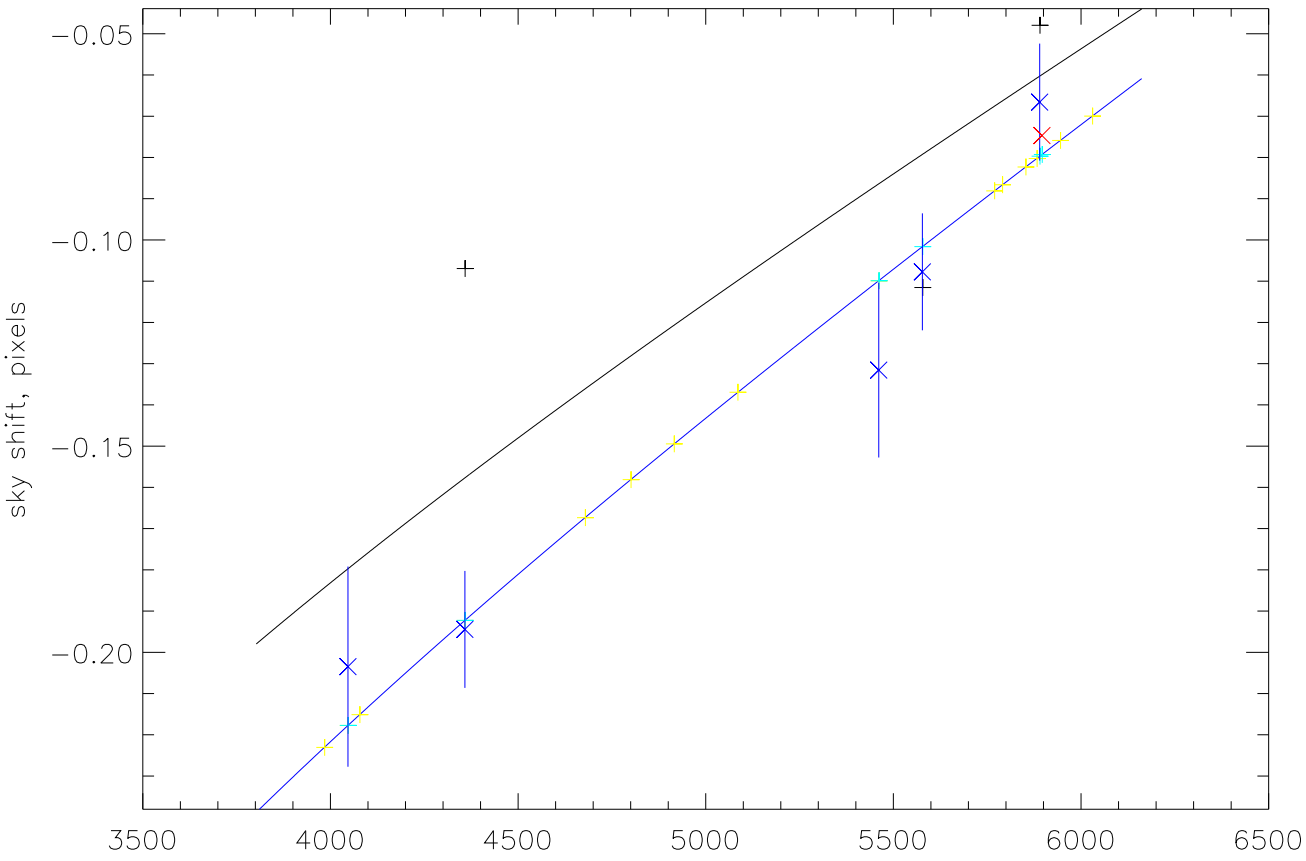

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

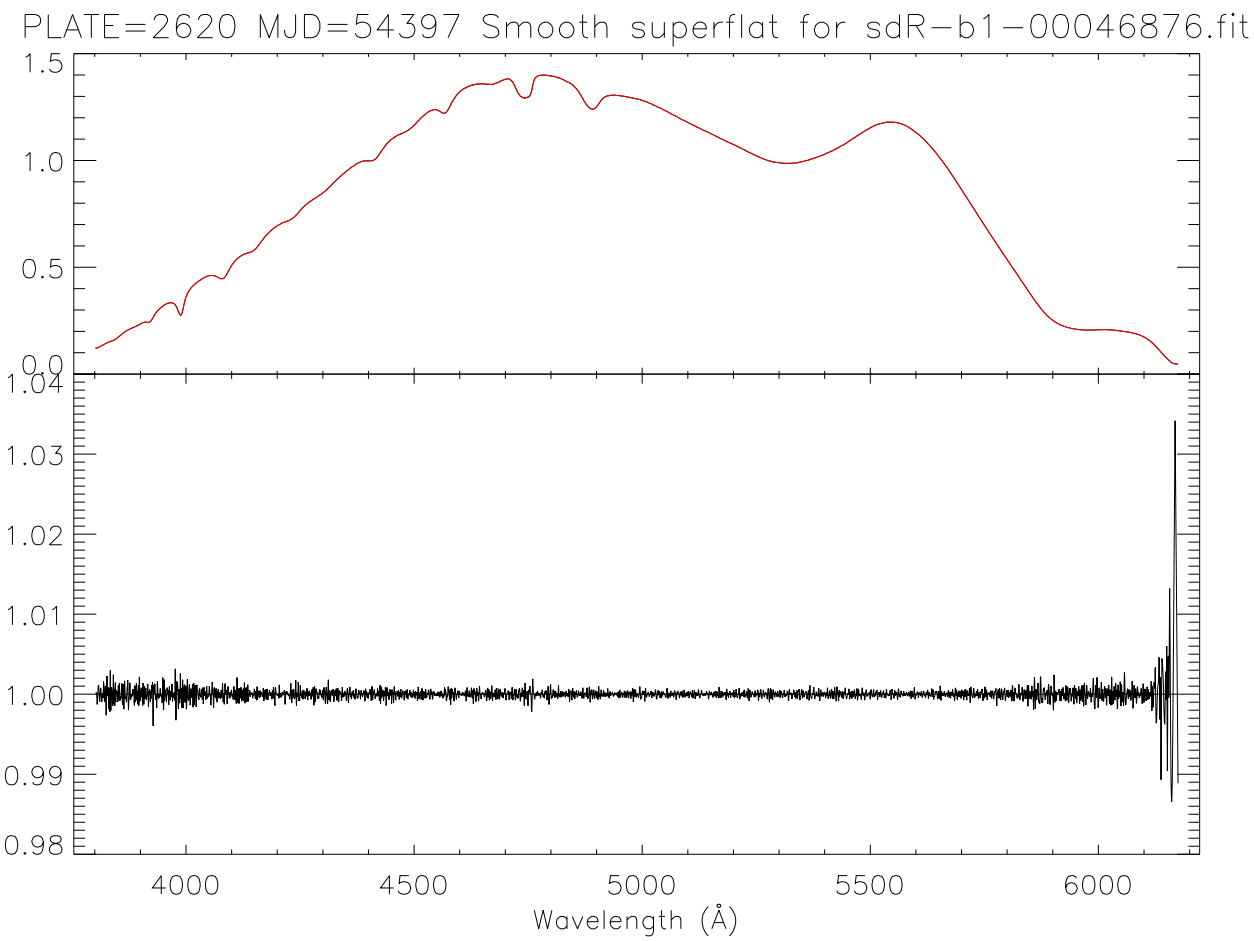

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

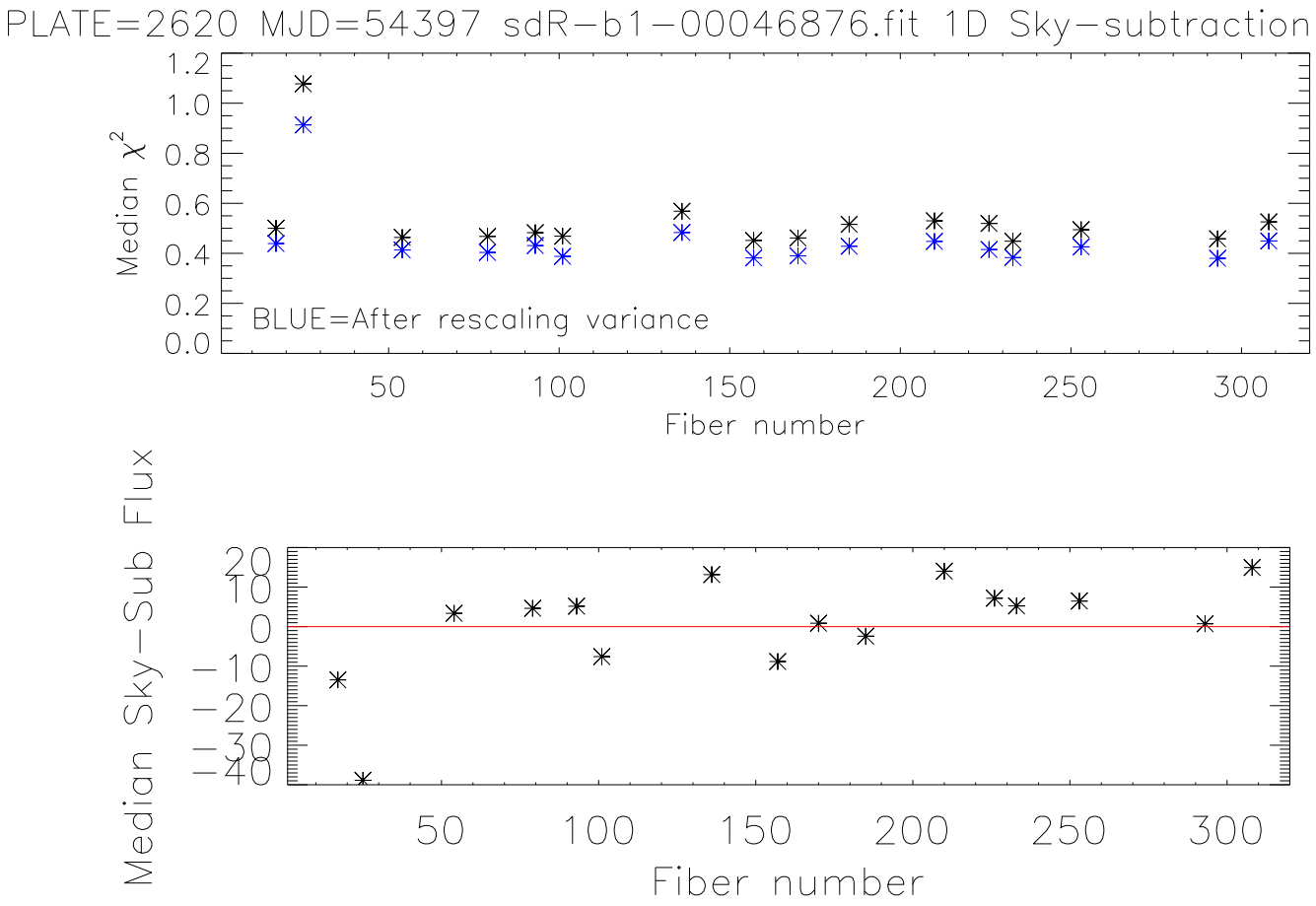

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

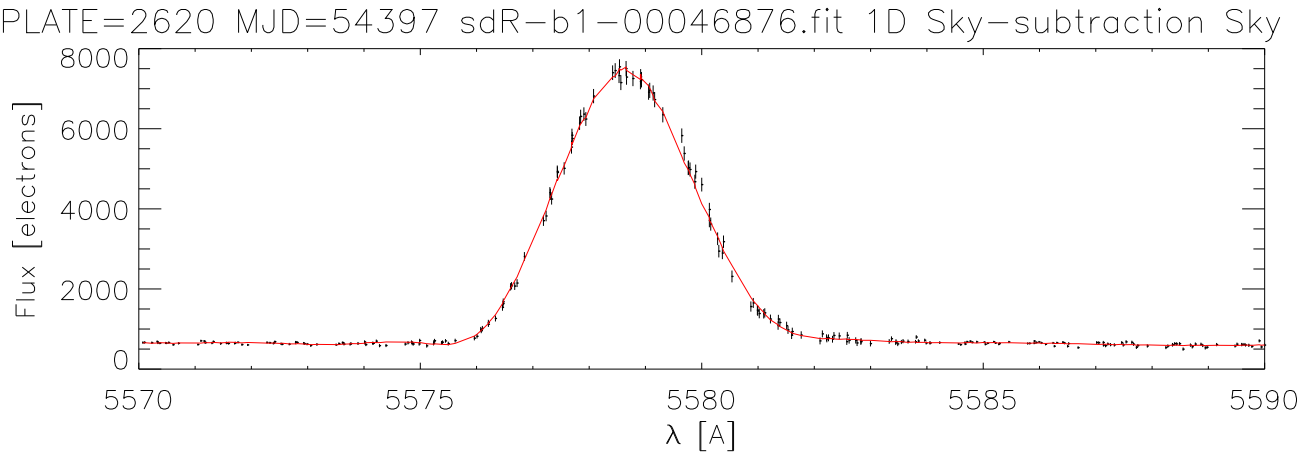

4046.5600
nfib1 16
nfib2 16
stdev 0.053
extra −0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra −0.19
5460.9400
nfib1 16
nfib2 16
stdev 0.026
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra −0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra −0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

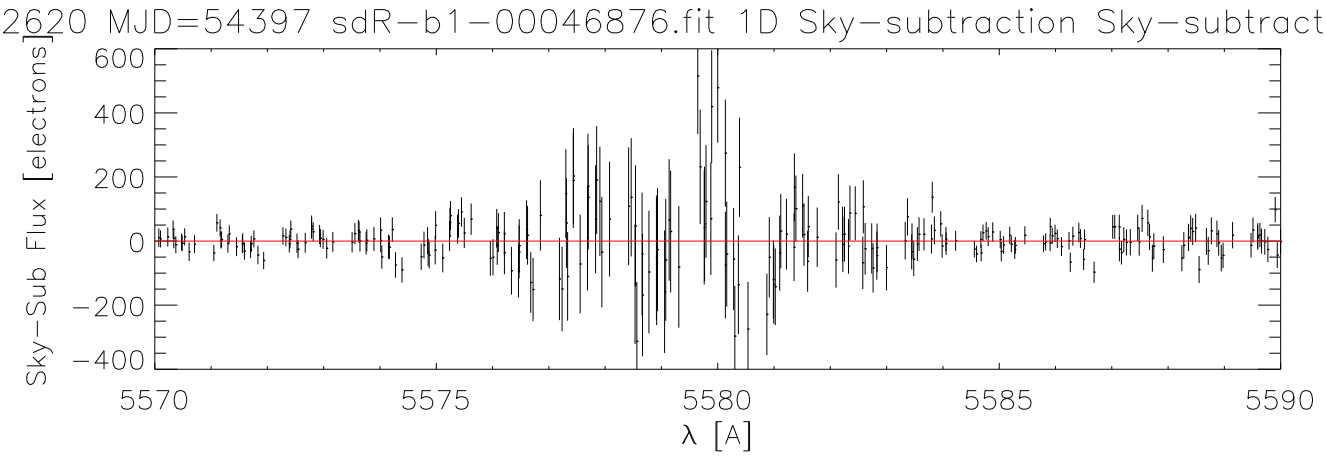

−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

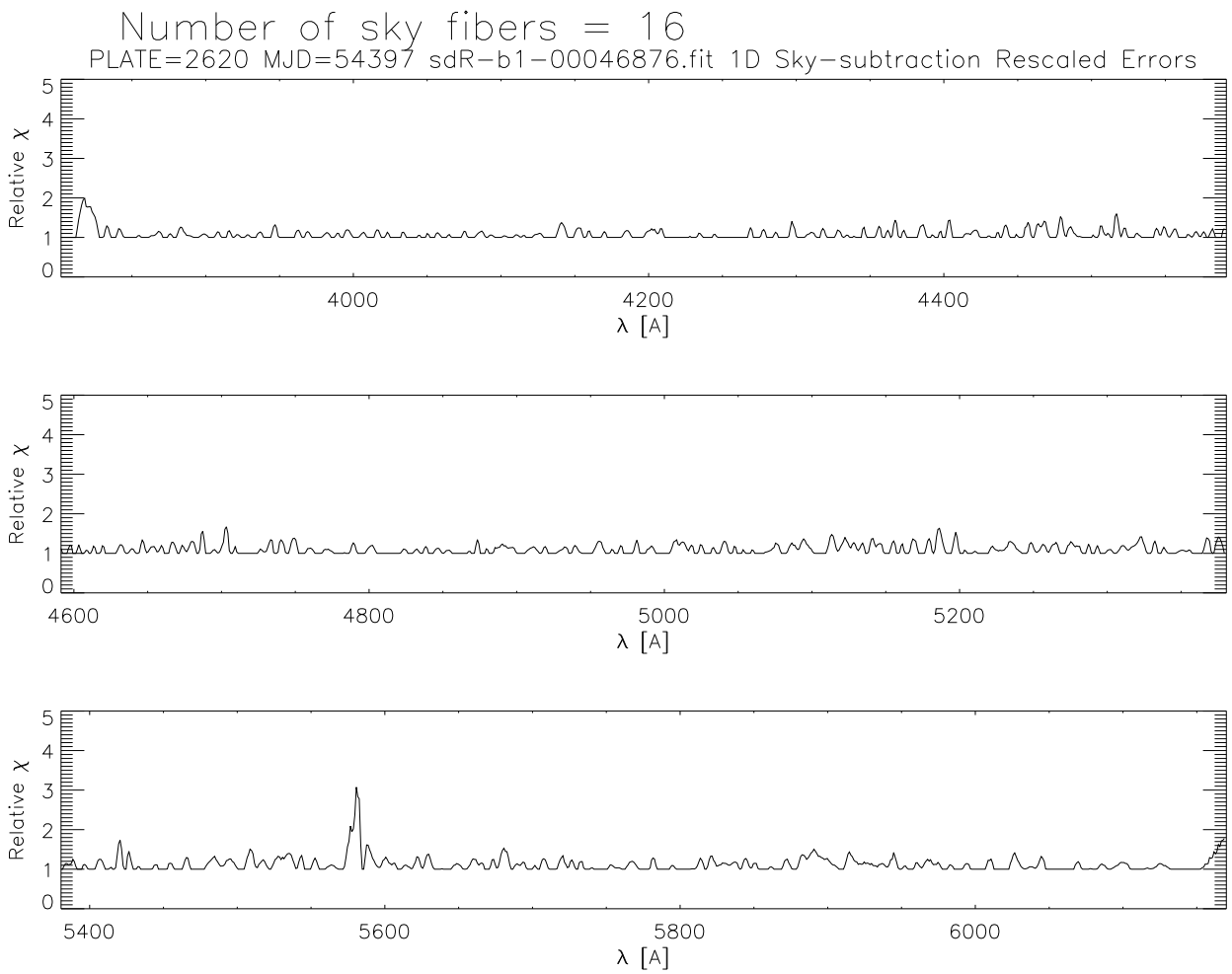
es= −0.0000

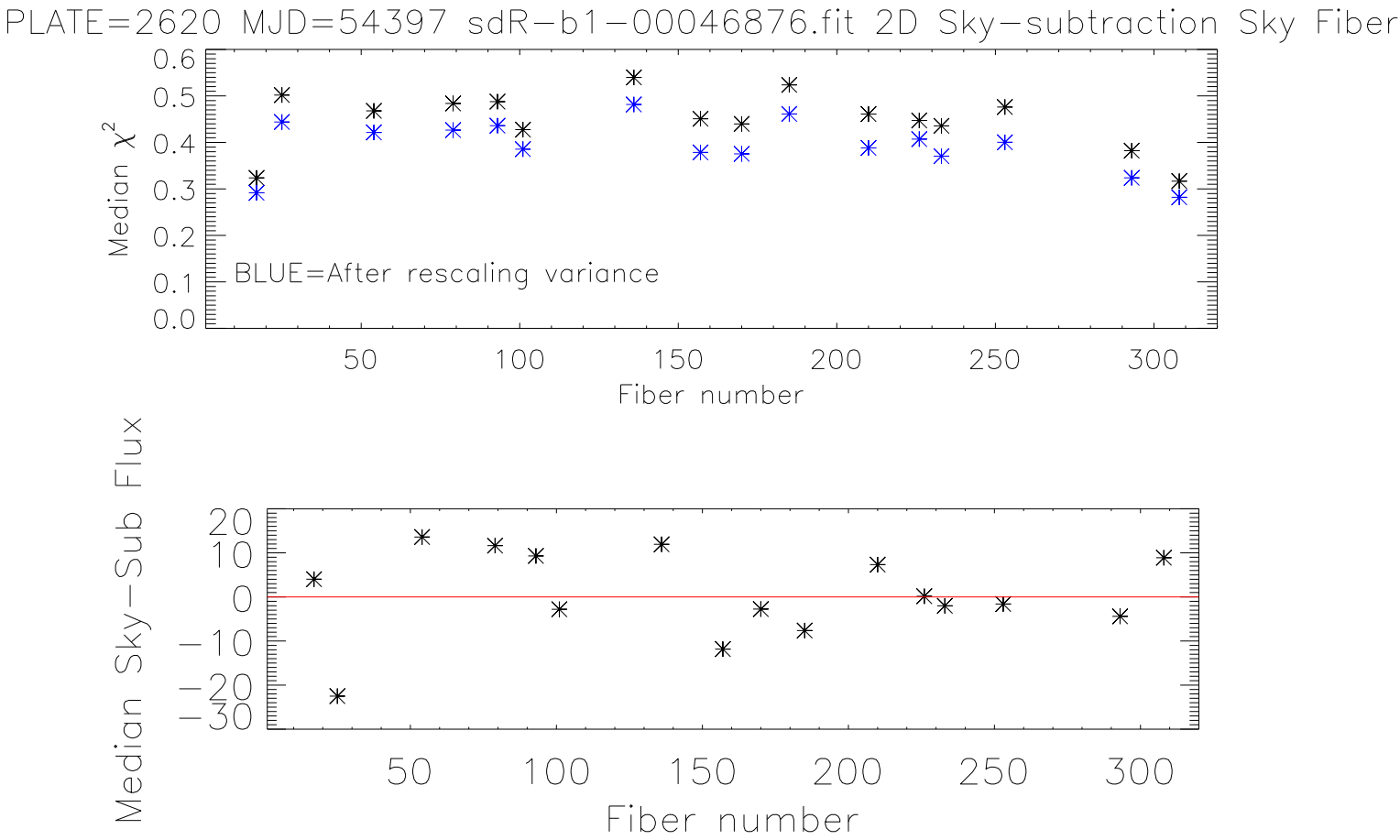

PLATE=2620 MJD=54397 Smooth superflat for sdR−b1−00046876.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

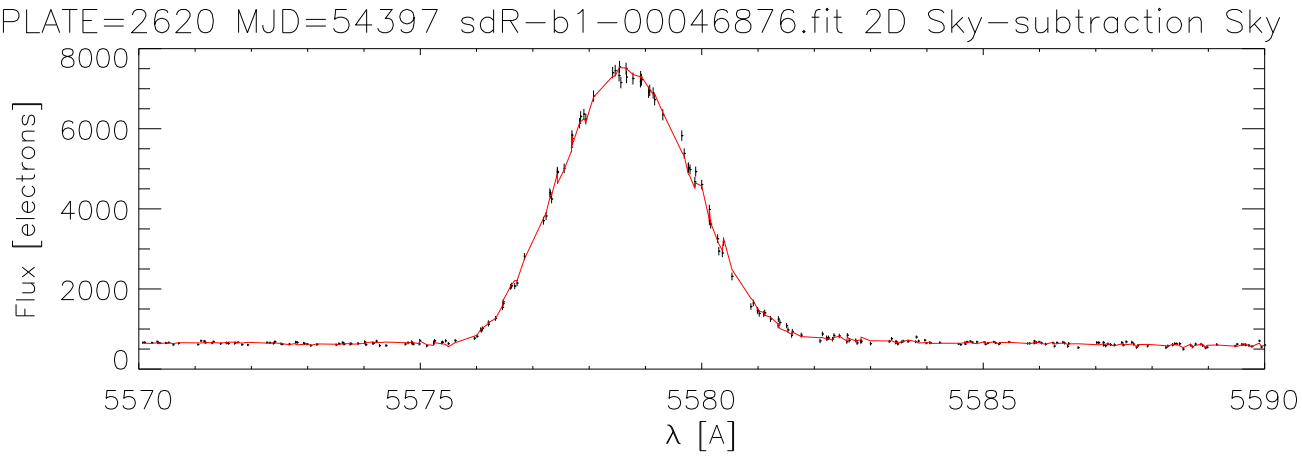

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

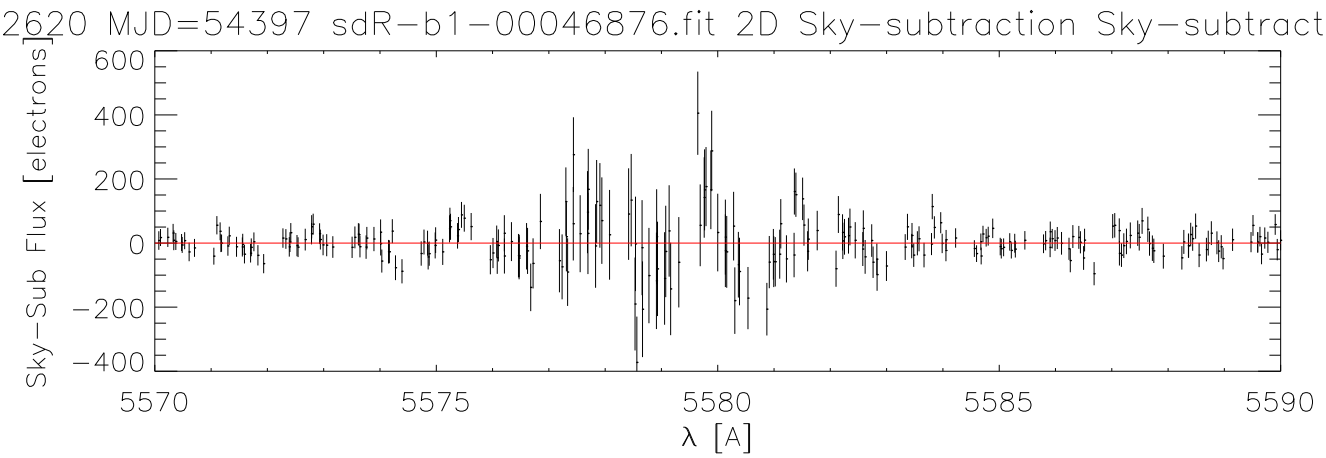

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

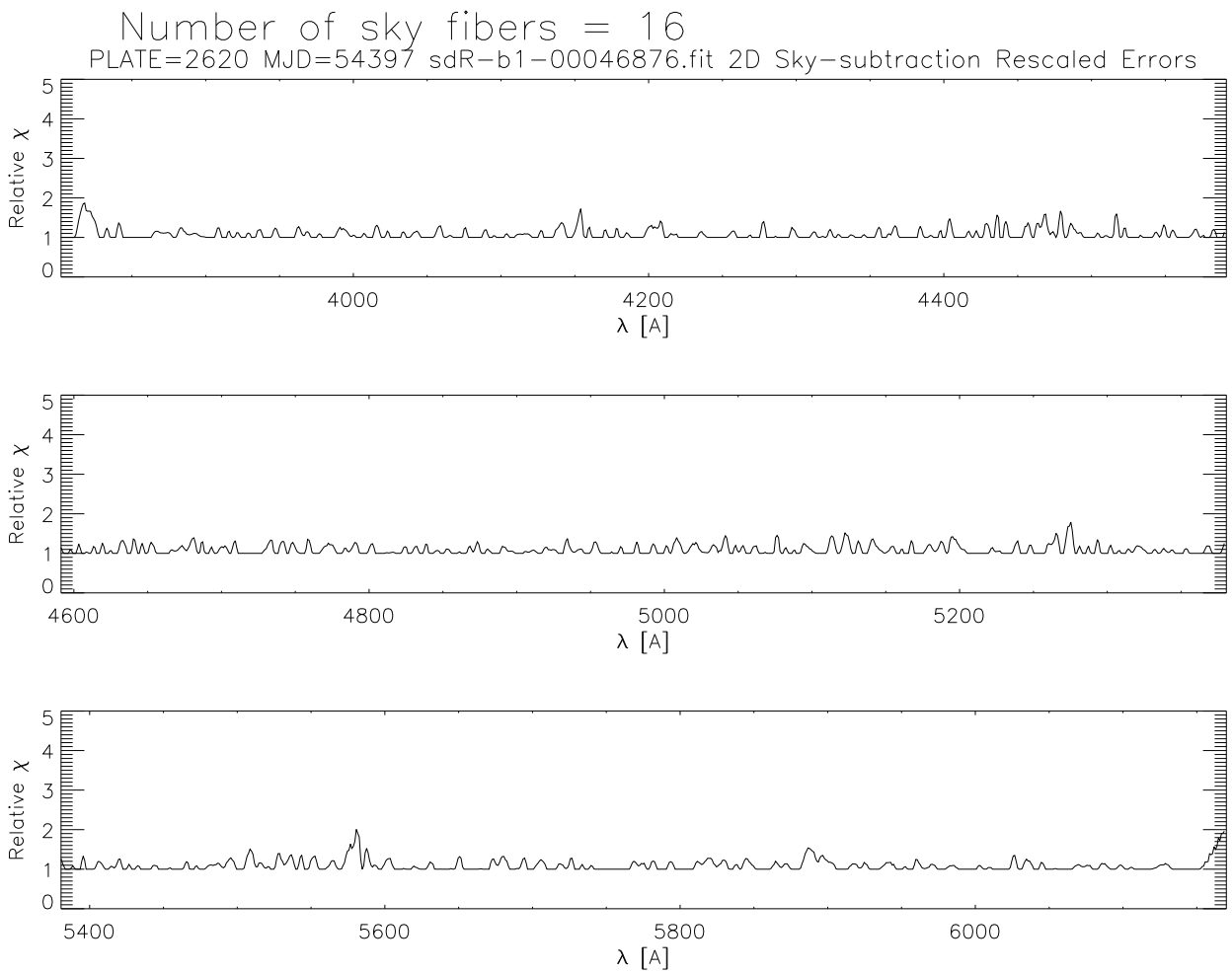

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

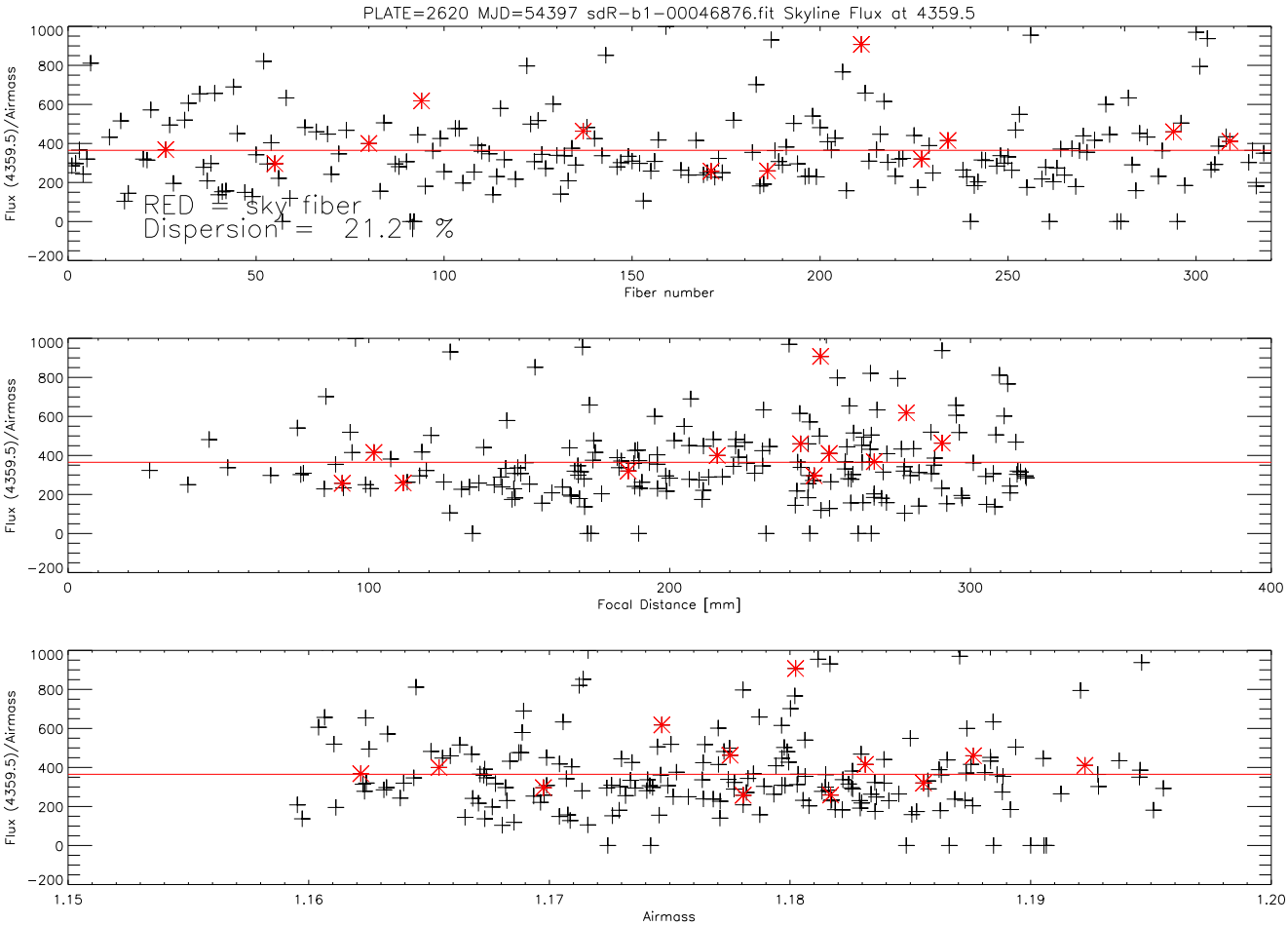

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046876.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

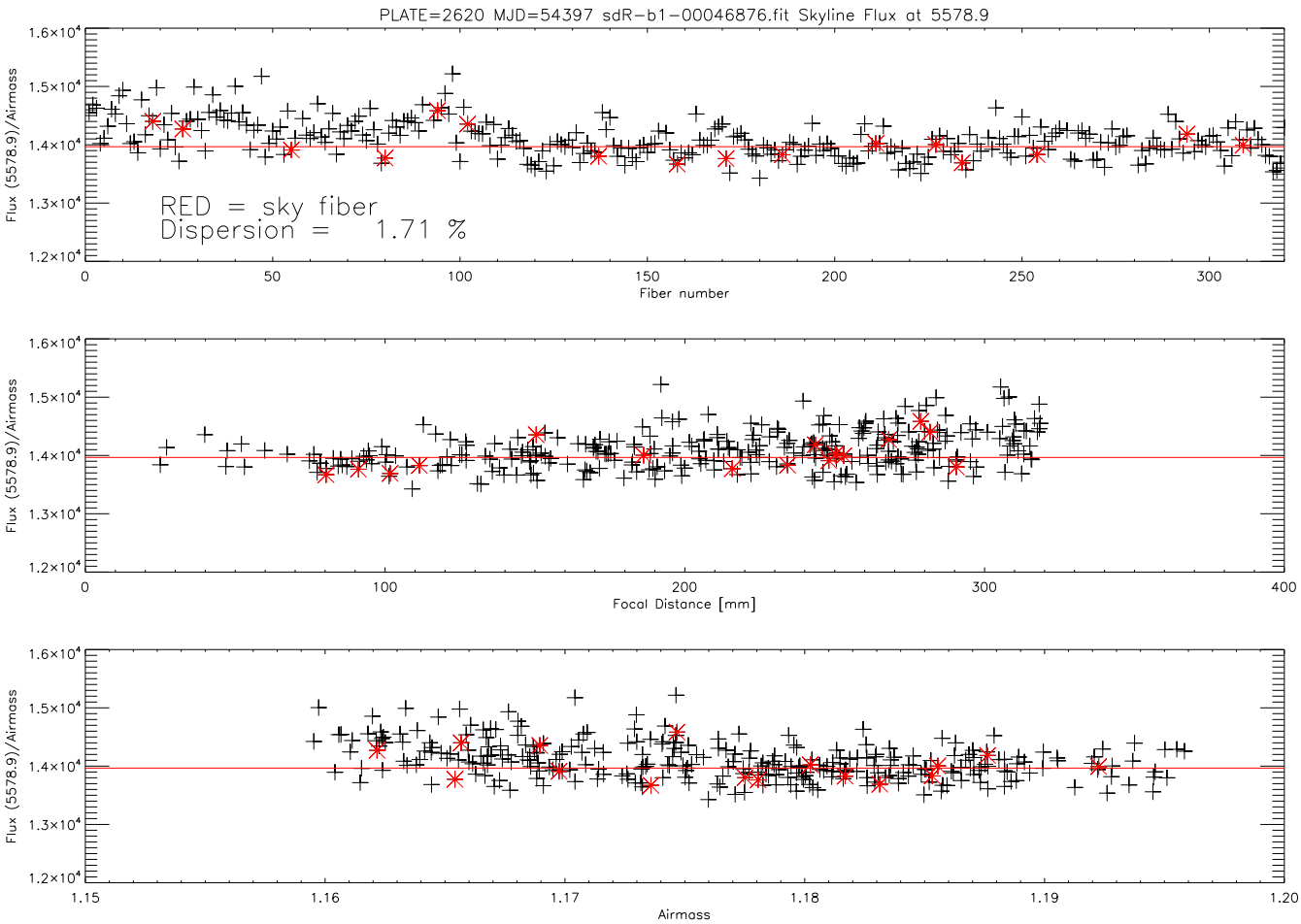

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

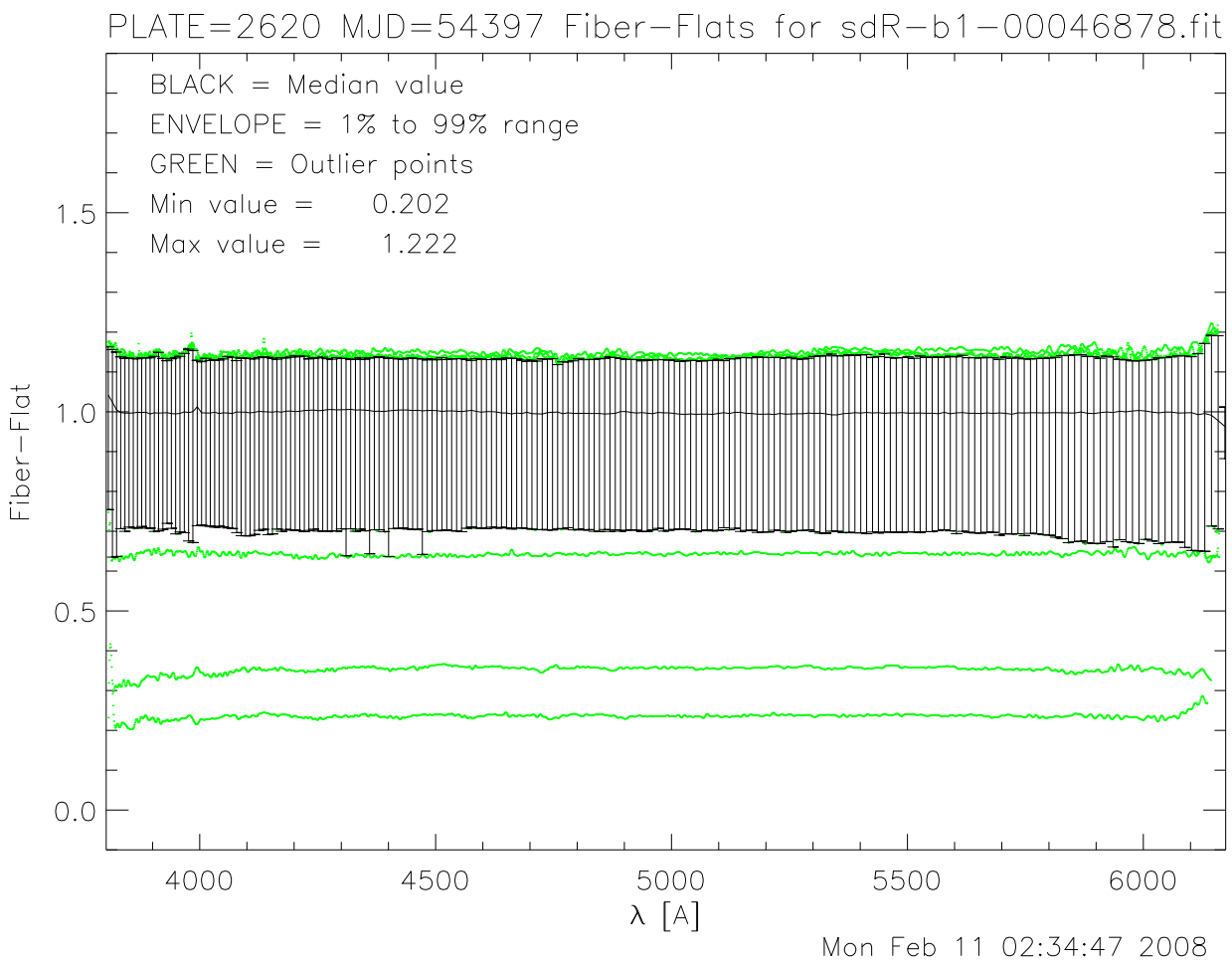

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

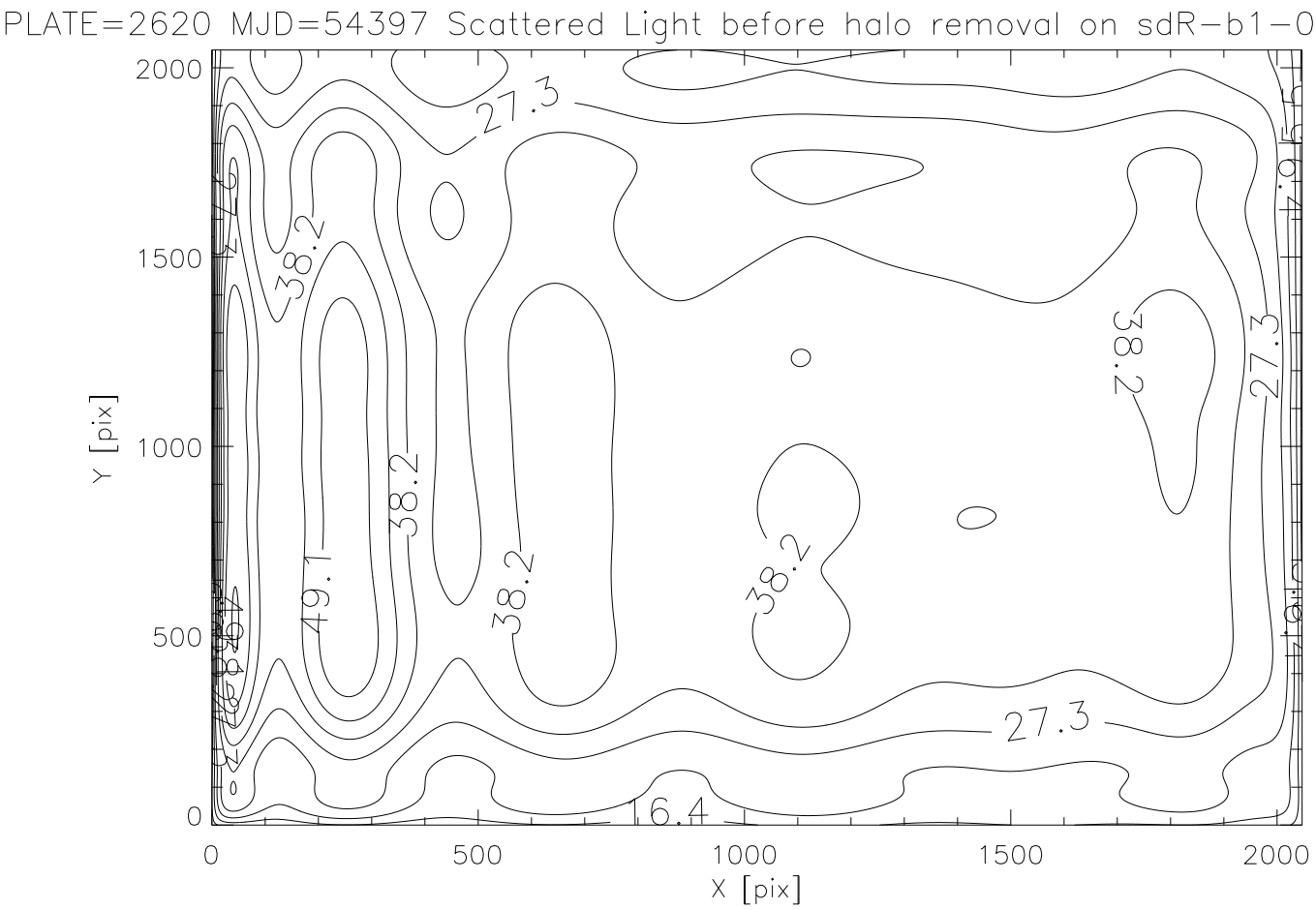

PLATE=2620 MJD=54397 sdR-b1-00046876.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

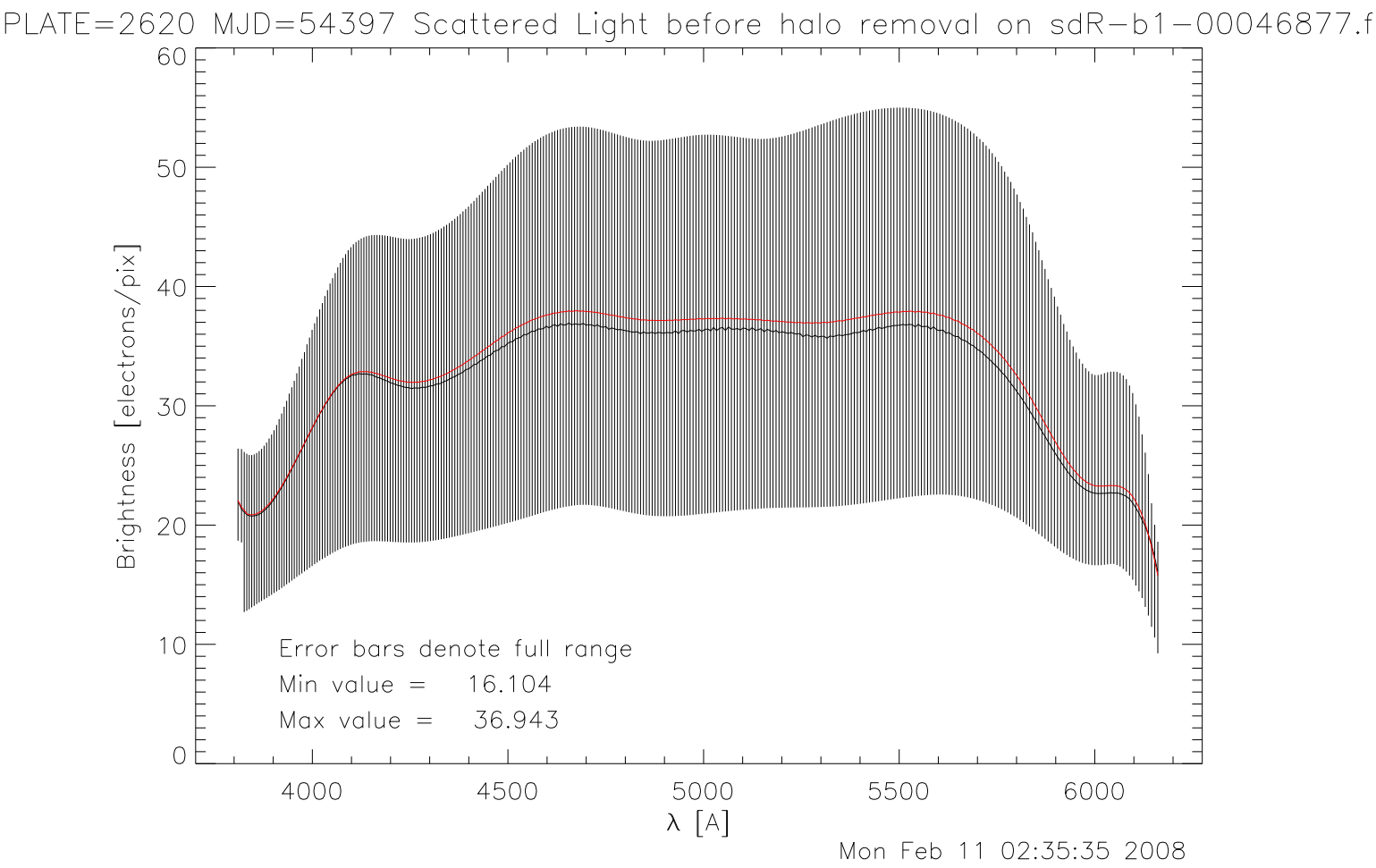

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b1-00046876.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

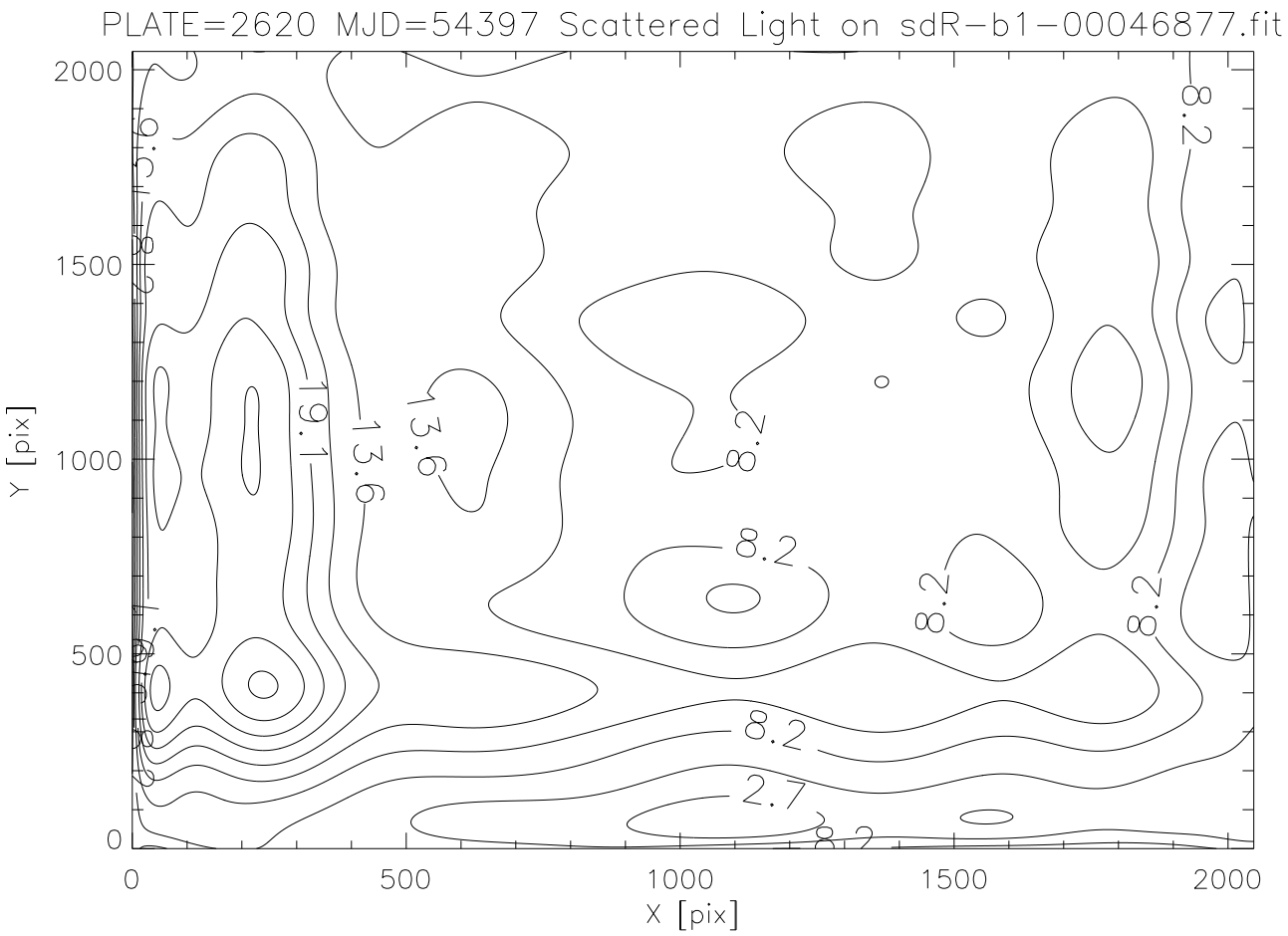

PLATE=2620 MJD=54397 sdR-b1-00046876.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 21.2 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

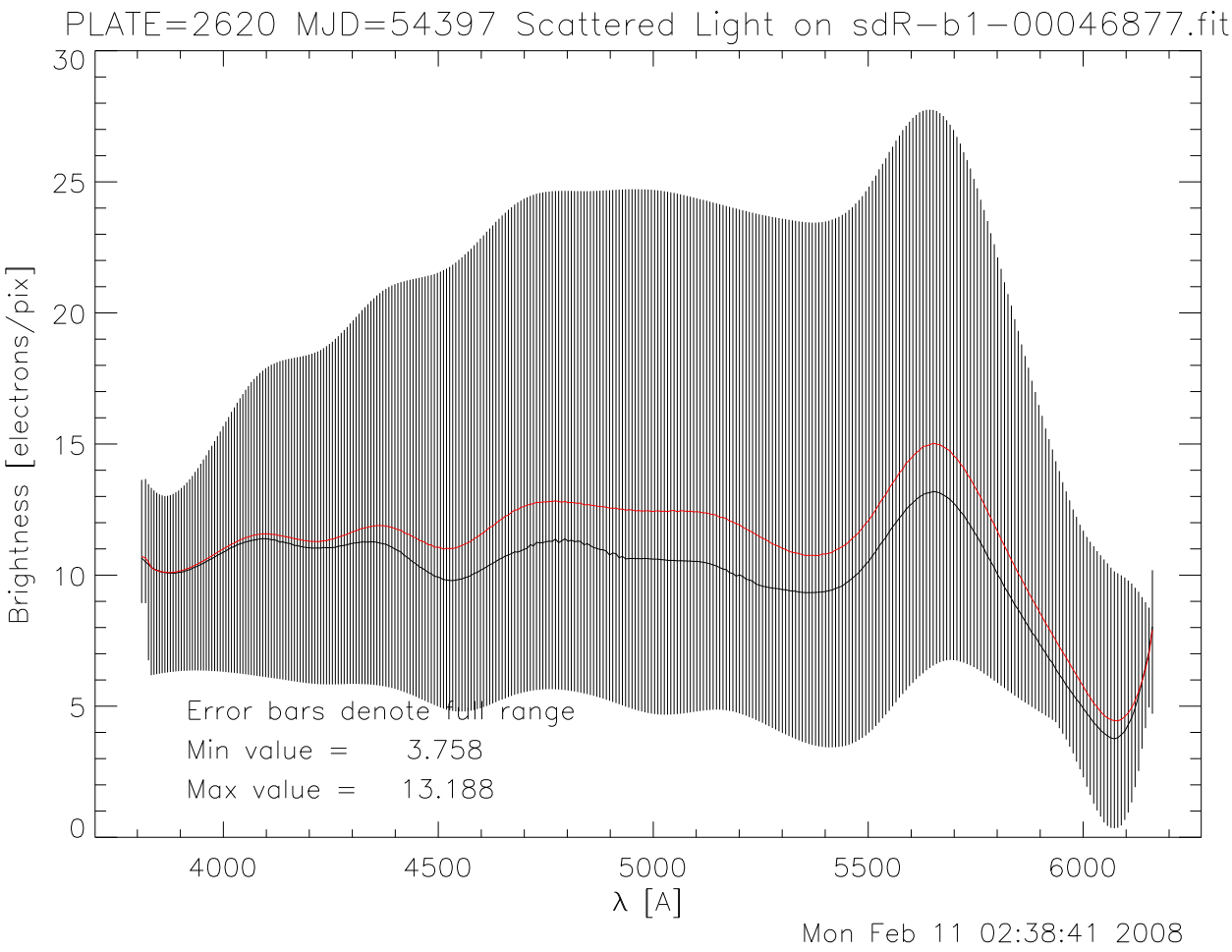

PLATE=2620 MJD=54397 sdR-b1-00046876.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Focal Distance [mm]
Airmass

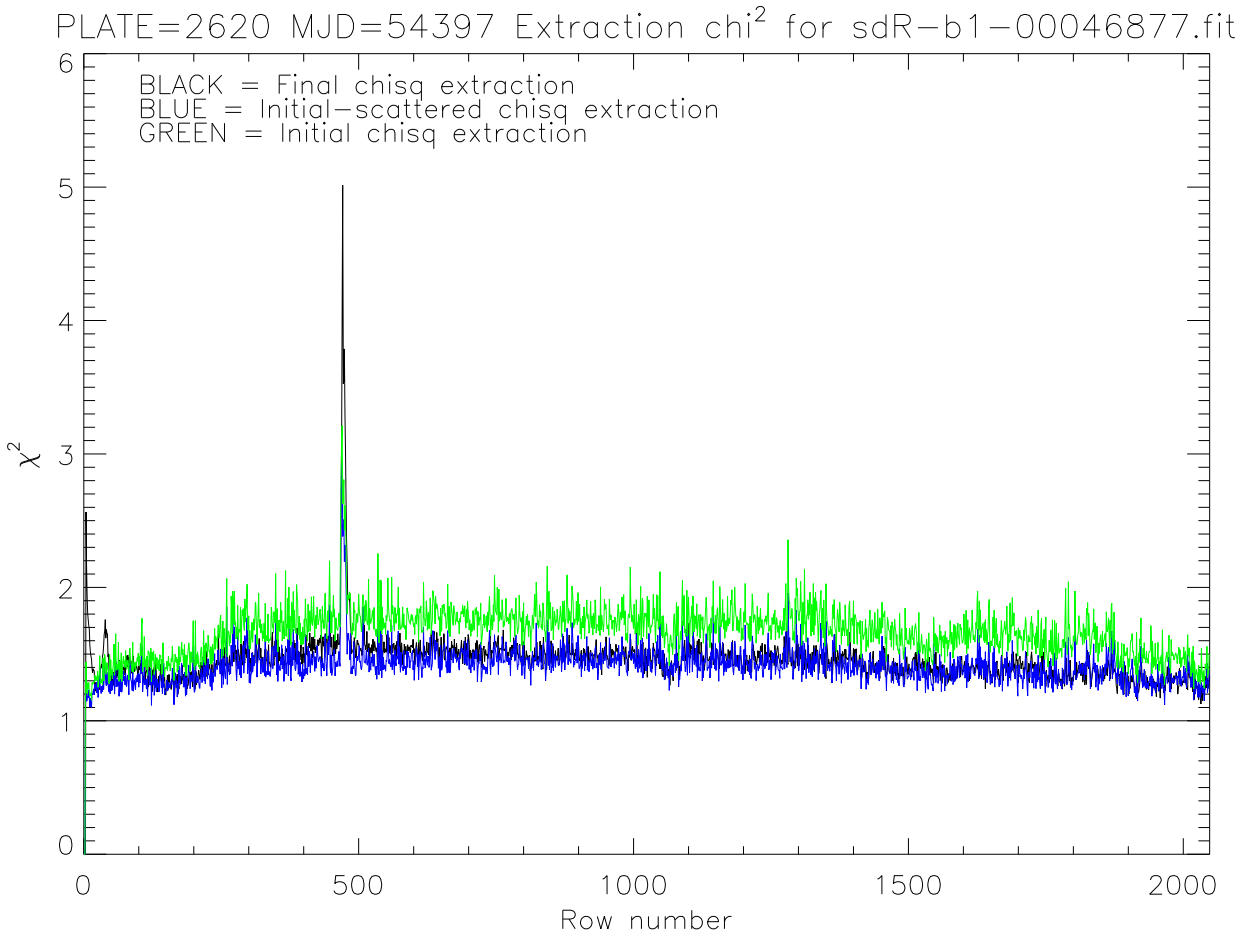

PLATE=2620 MJD=54397 Fiber−Flats for sdR−b1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.222
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:34:47 2008

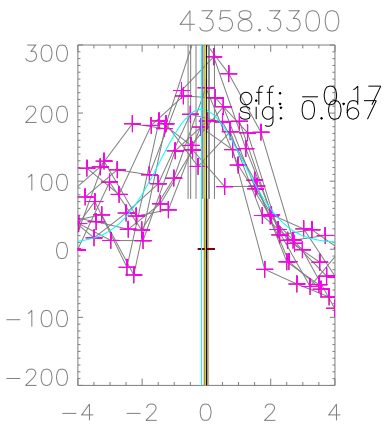

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR−b1−00046877.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
27.3
38.2
49.1
38.2
38.2
38.2
27.3
27.3
16.4

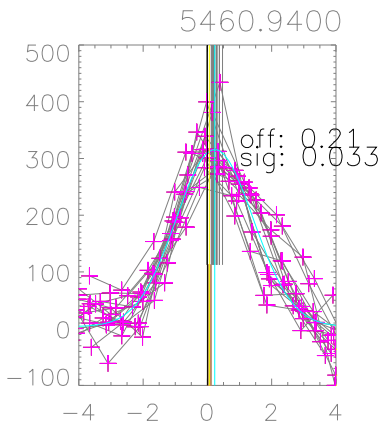

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b1-00046877.f
Brightness [electrons/pix]
60
50
40
30
20
10
0
Error bars denote full range
Min value = 16.104
Max value = 36.943
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:35:35 2008

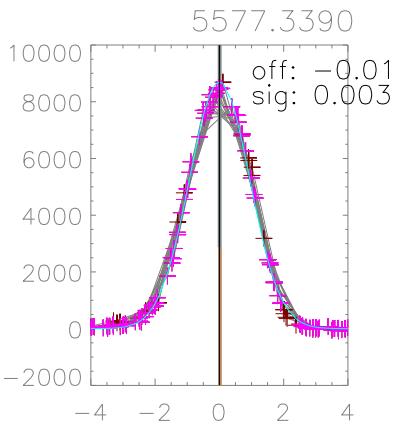

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046877.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
19.1
13.6
8.2
2.7

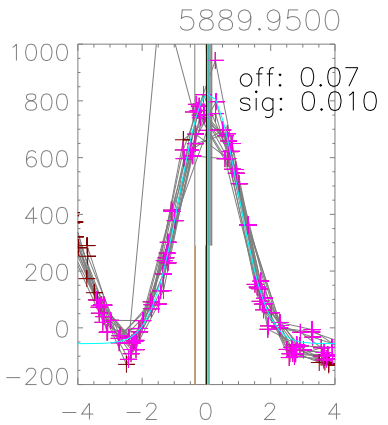

PLATE=2620 MJD=54397 Scattered Light on sdR-b1-00046877.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.758
Max value = 13.188
Mon Feb 11 02:38:41 2008

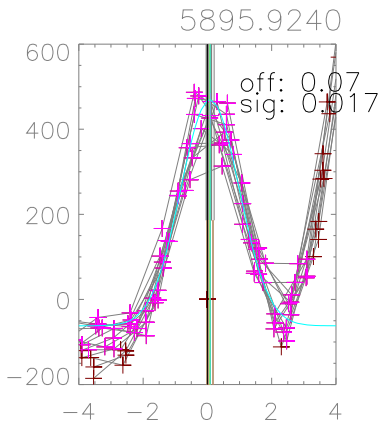

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b1-00046877.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

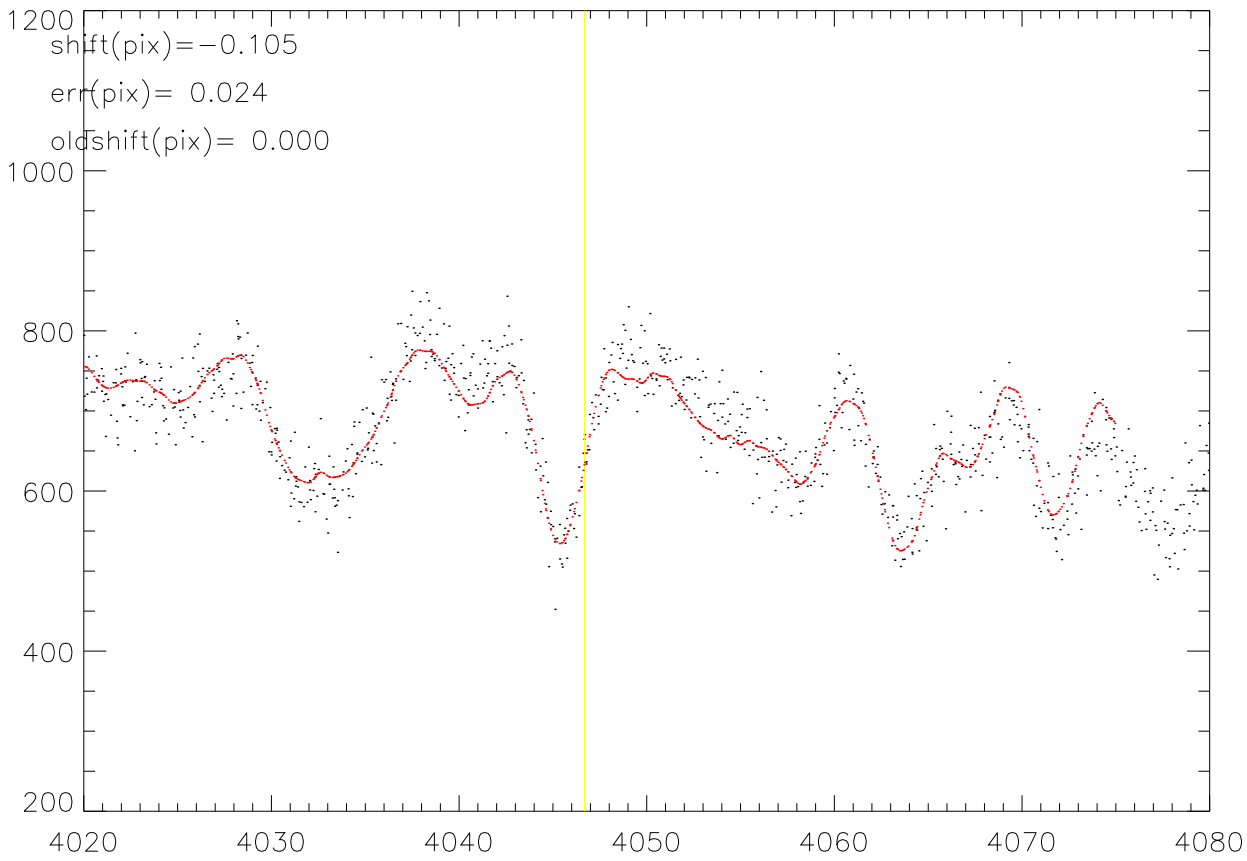

4358.3300
off: −0.17
sig: 0.067

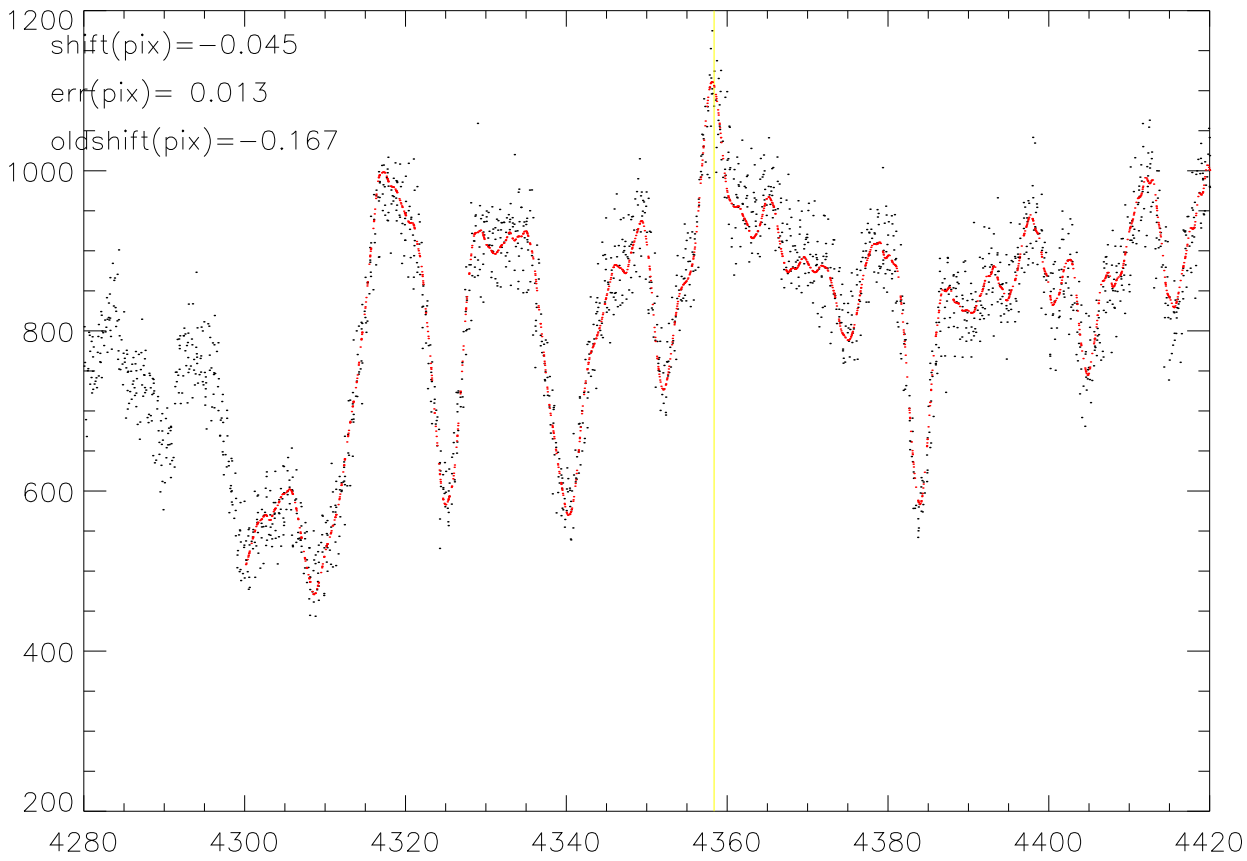

5460.9400
off: 0.21
sig: 0.033

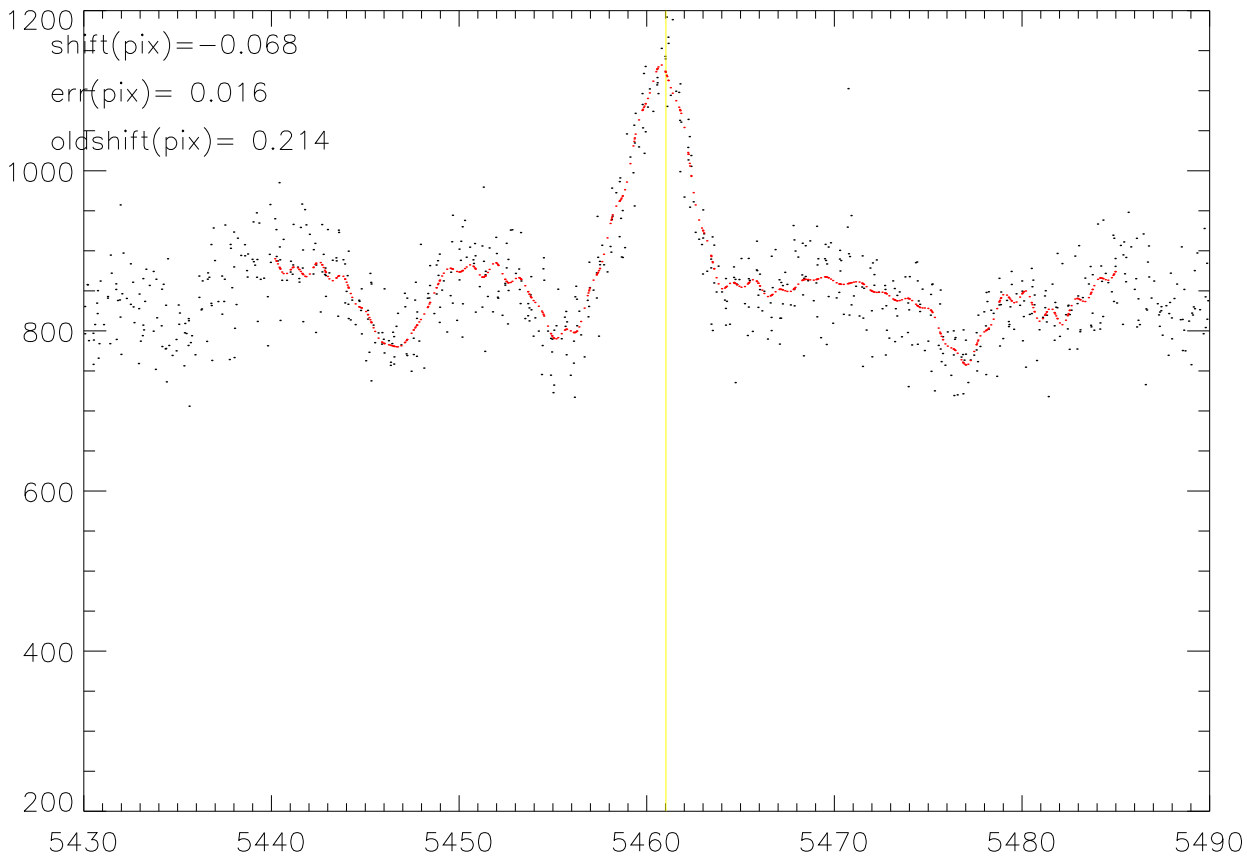

5577.3390
off: −0.01
sig: 0.003

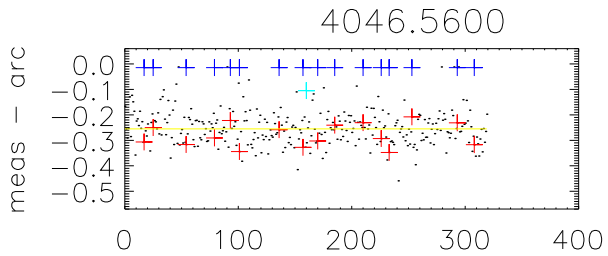

5889.9500
off: 0.07
sig: 0.010

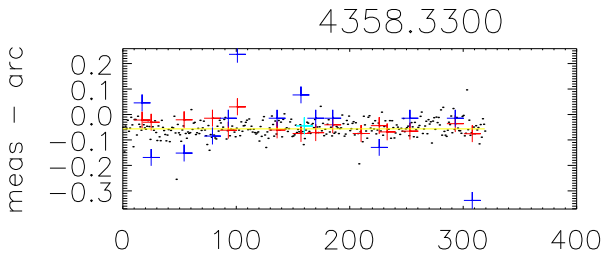

5895.9240
off: 0.07
sig: 0.017

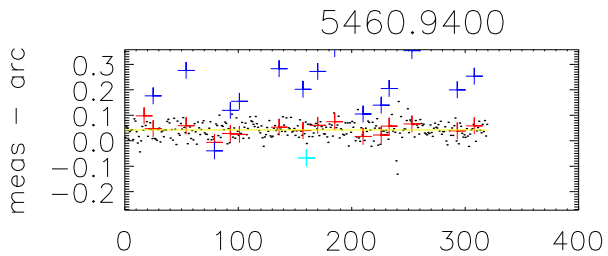

shift(pix)=−0.105
err(pix)= 0.024
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

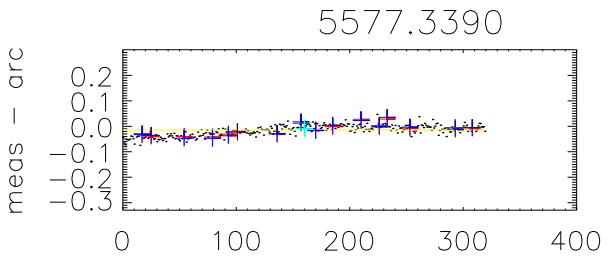

shift(pix)=−0.045
err(pix)= 0.013
oldshift(pix)=−0.167
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

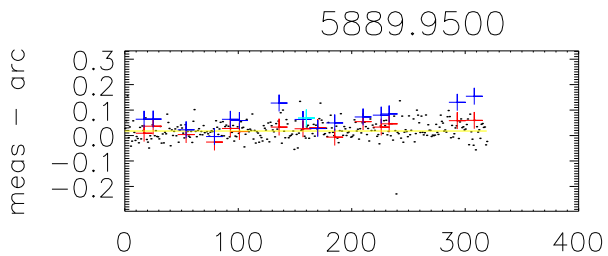

shift(pix)=−0.068
err(pix)= 0.016
oldshift(pix)= 0.214
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

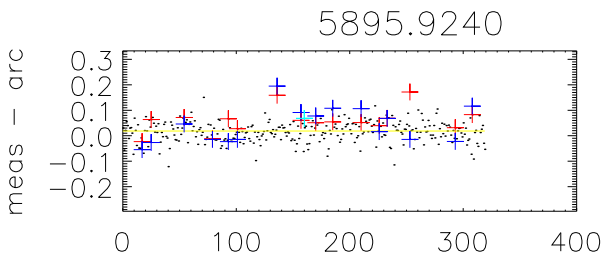

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

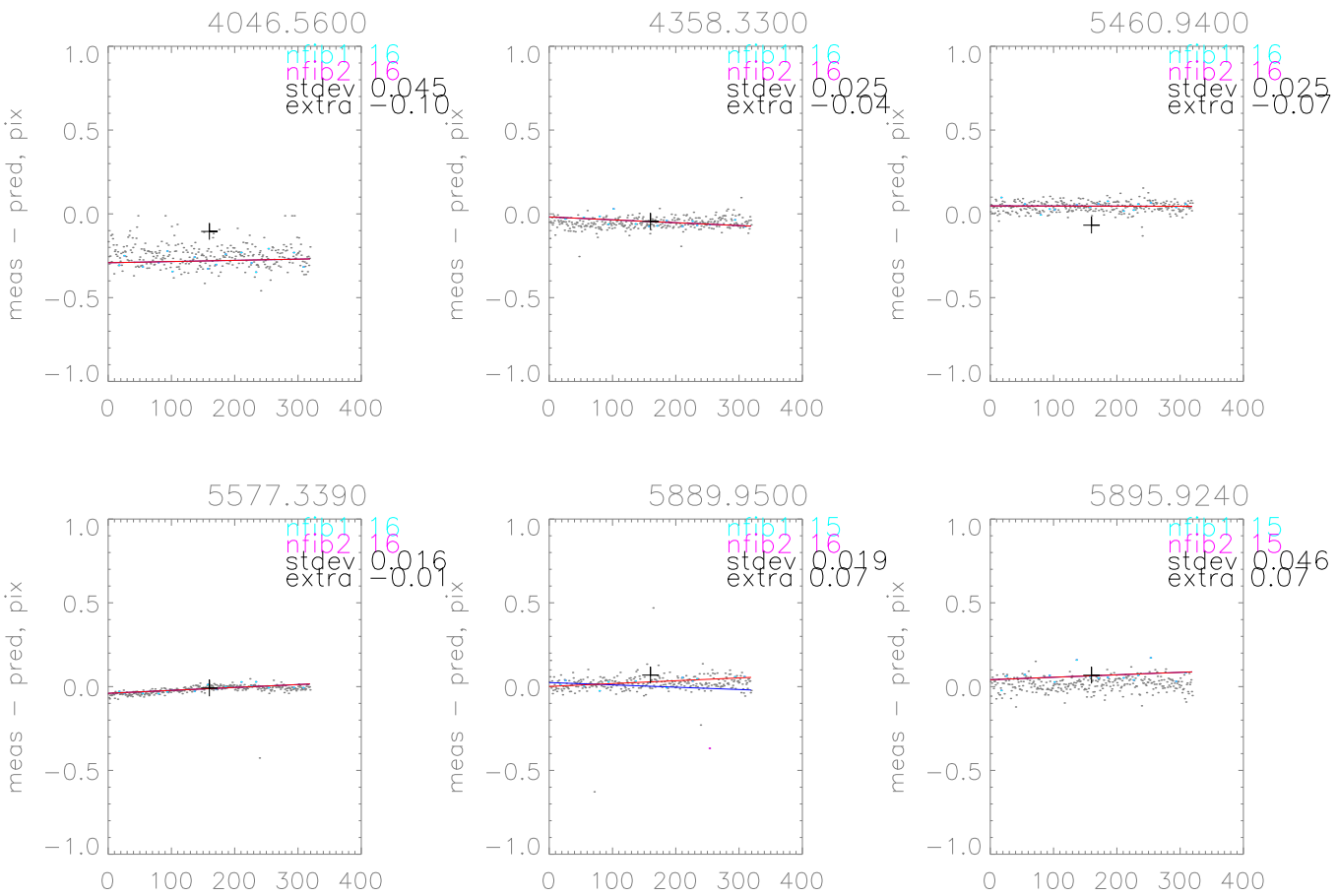

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

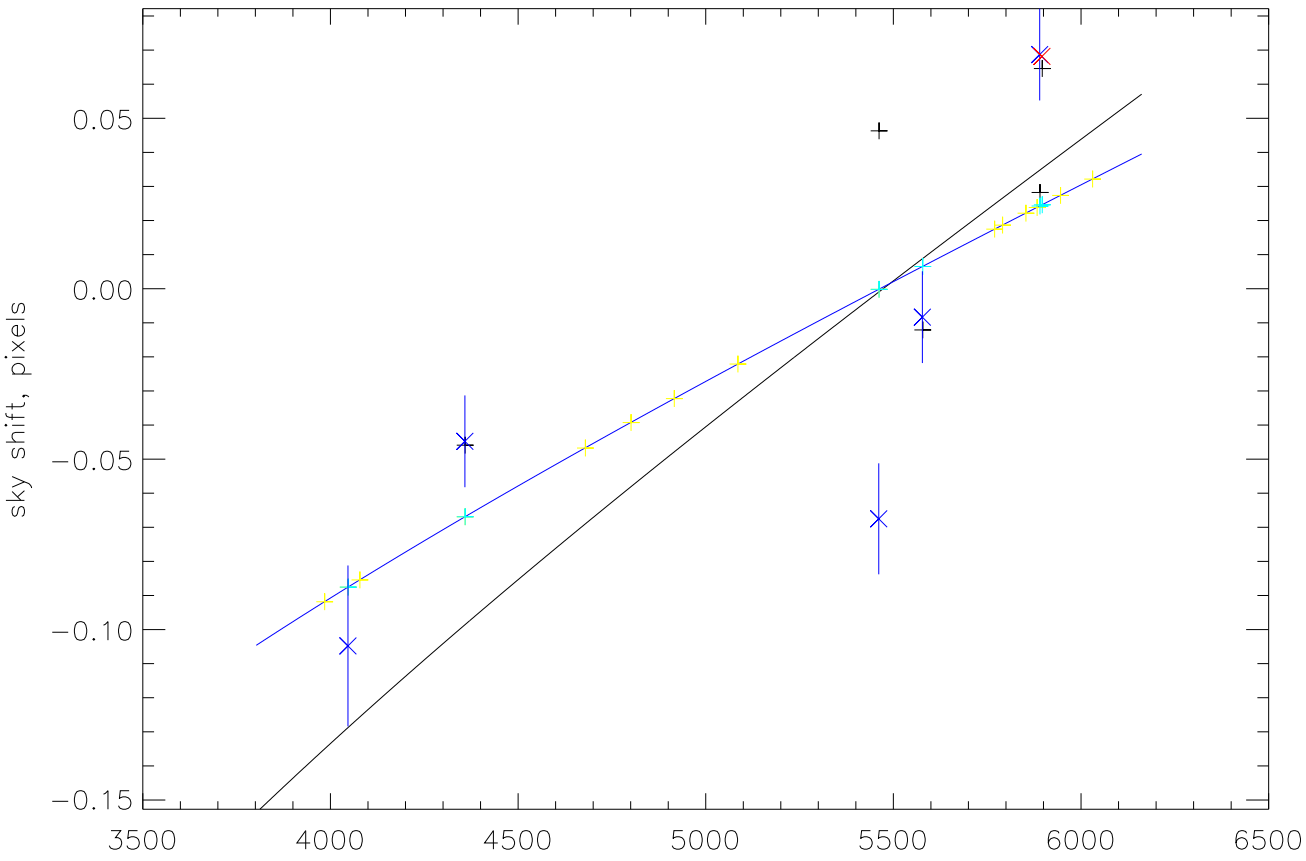

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

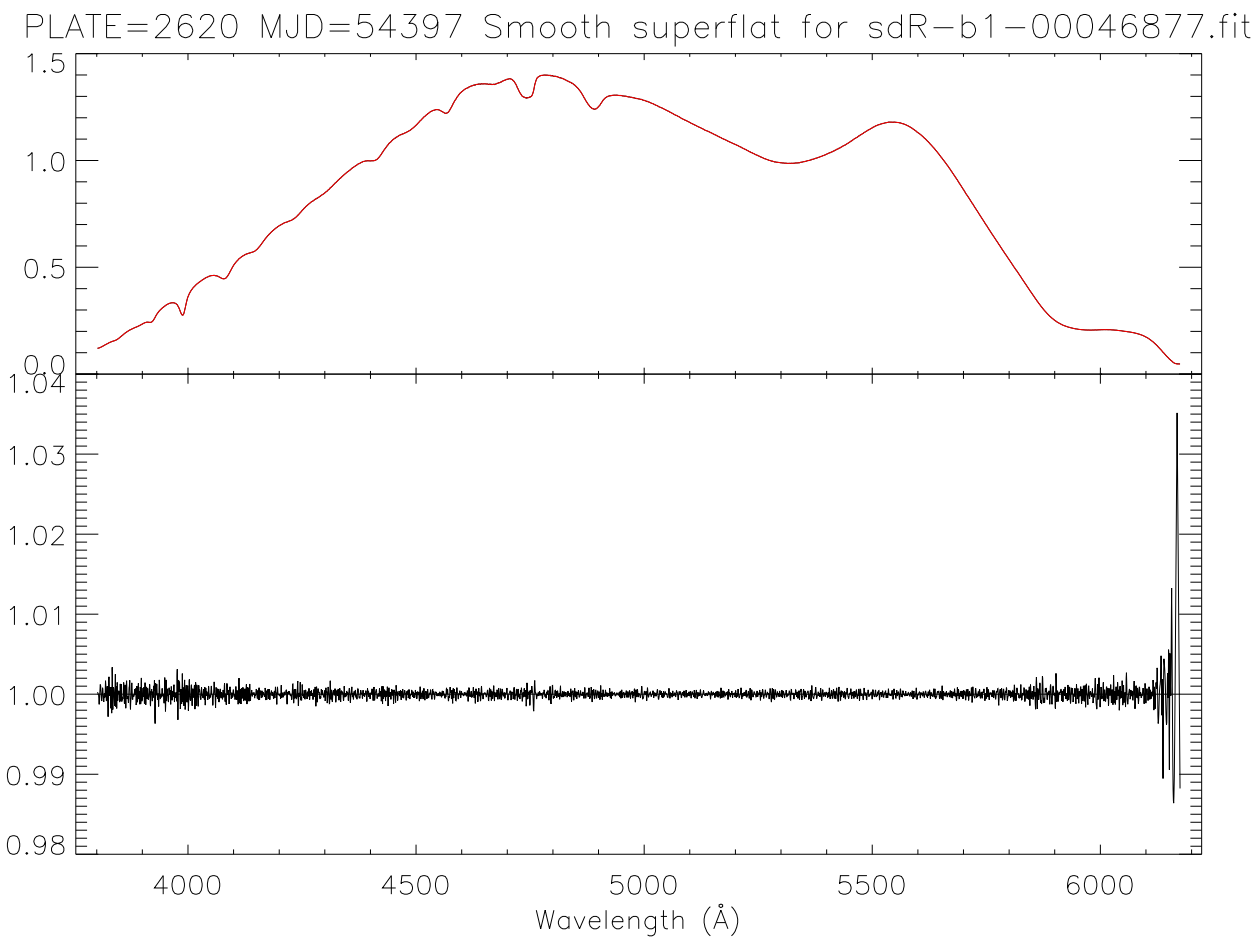

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

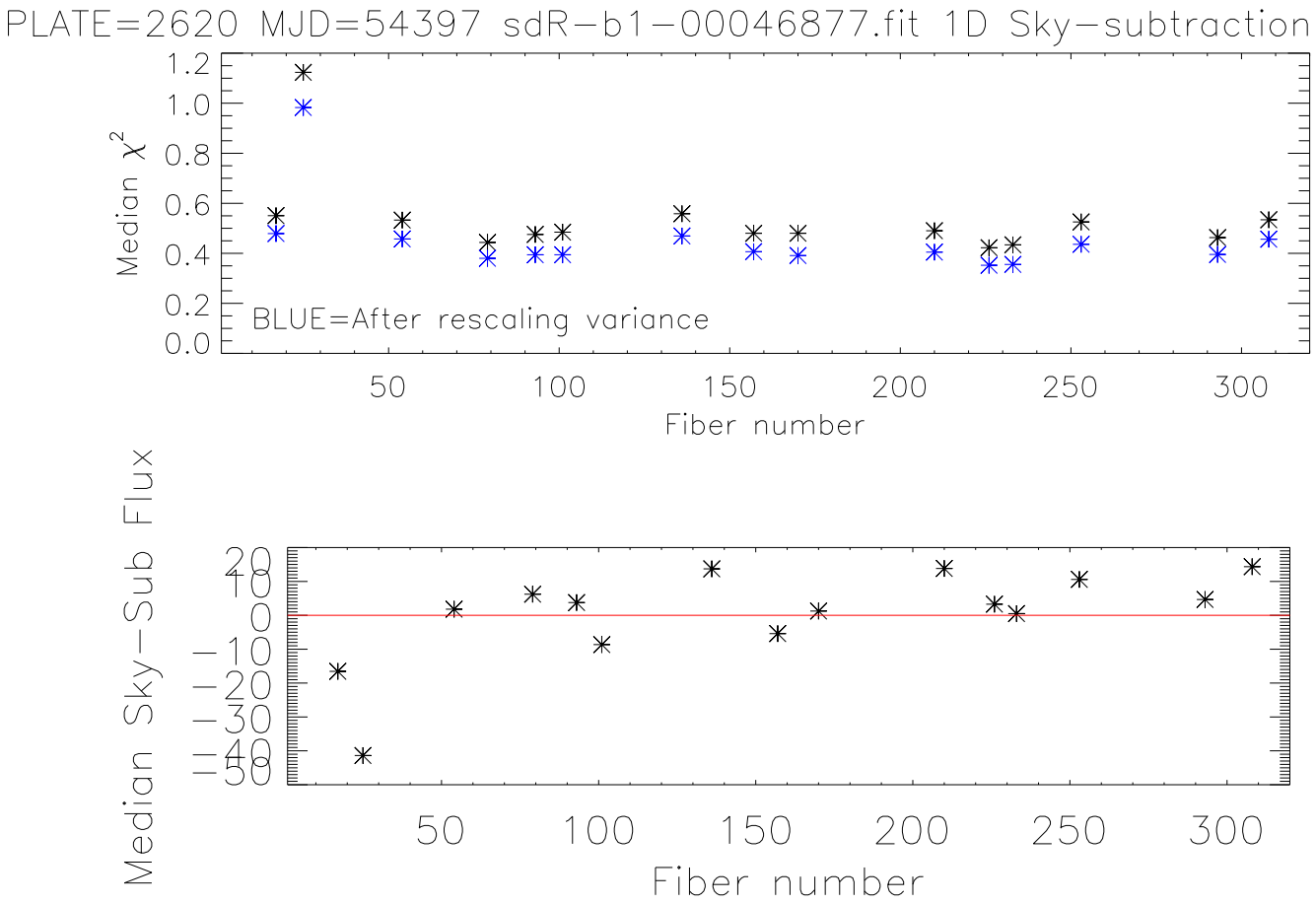

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

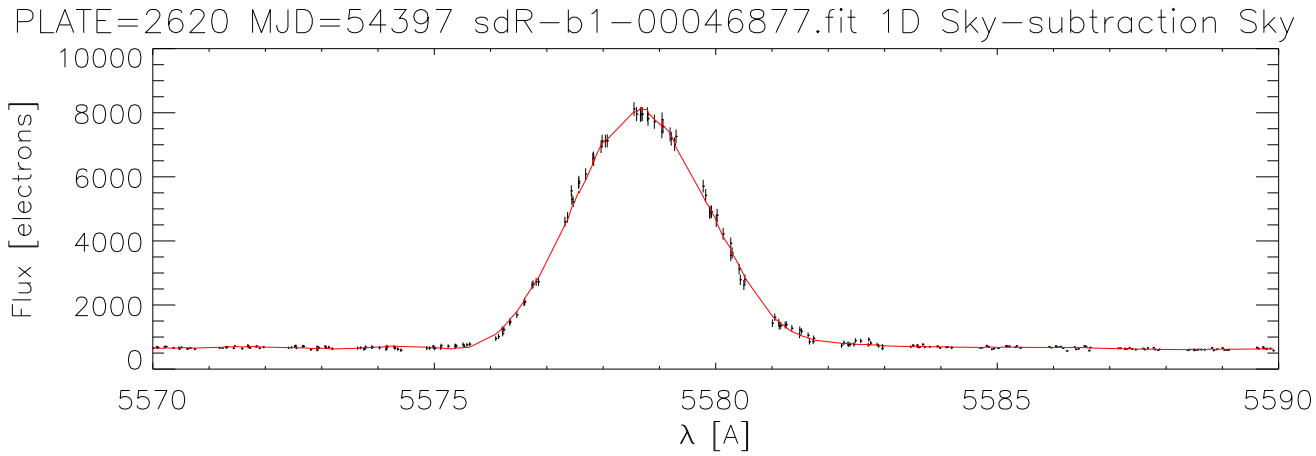

4046.5600
nfib1 16
nfib2 16
stdev 0.045
extra −0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.025
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.025
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.01
5889.9500
nfib1 15
nfib2 16
stdev 0.019
extra 0.07
5895.9240
nfib1 15
nfib2 15
stdev 0.046
extra 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

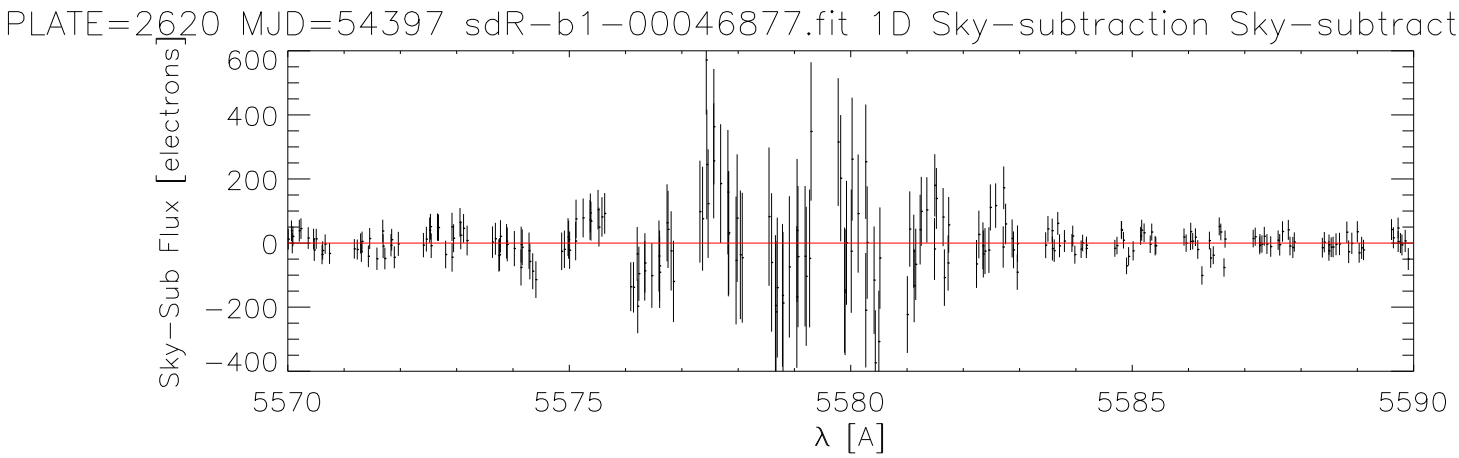

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

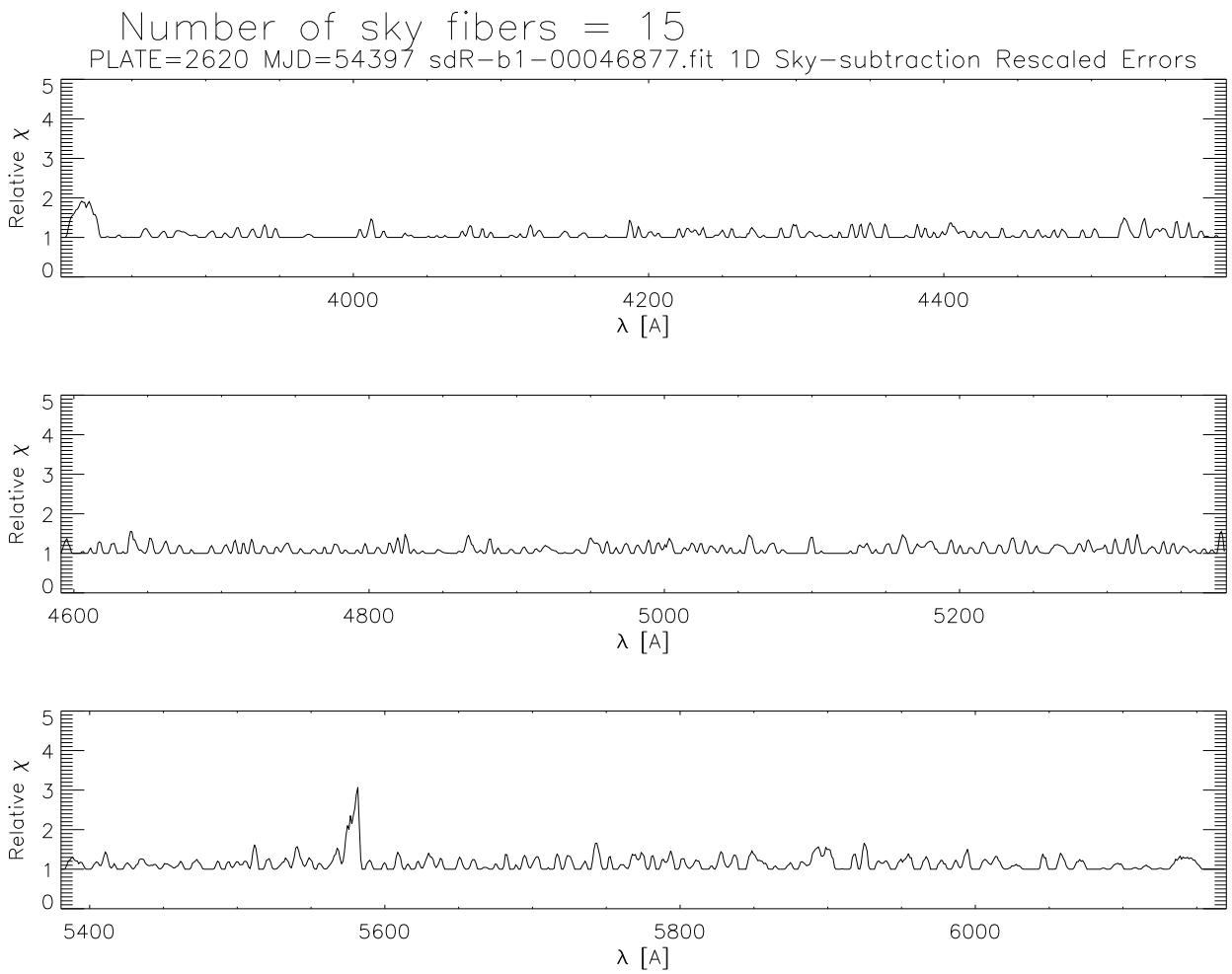
es= −0.0000

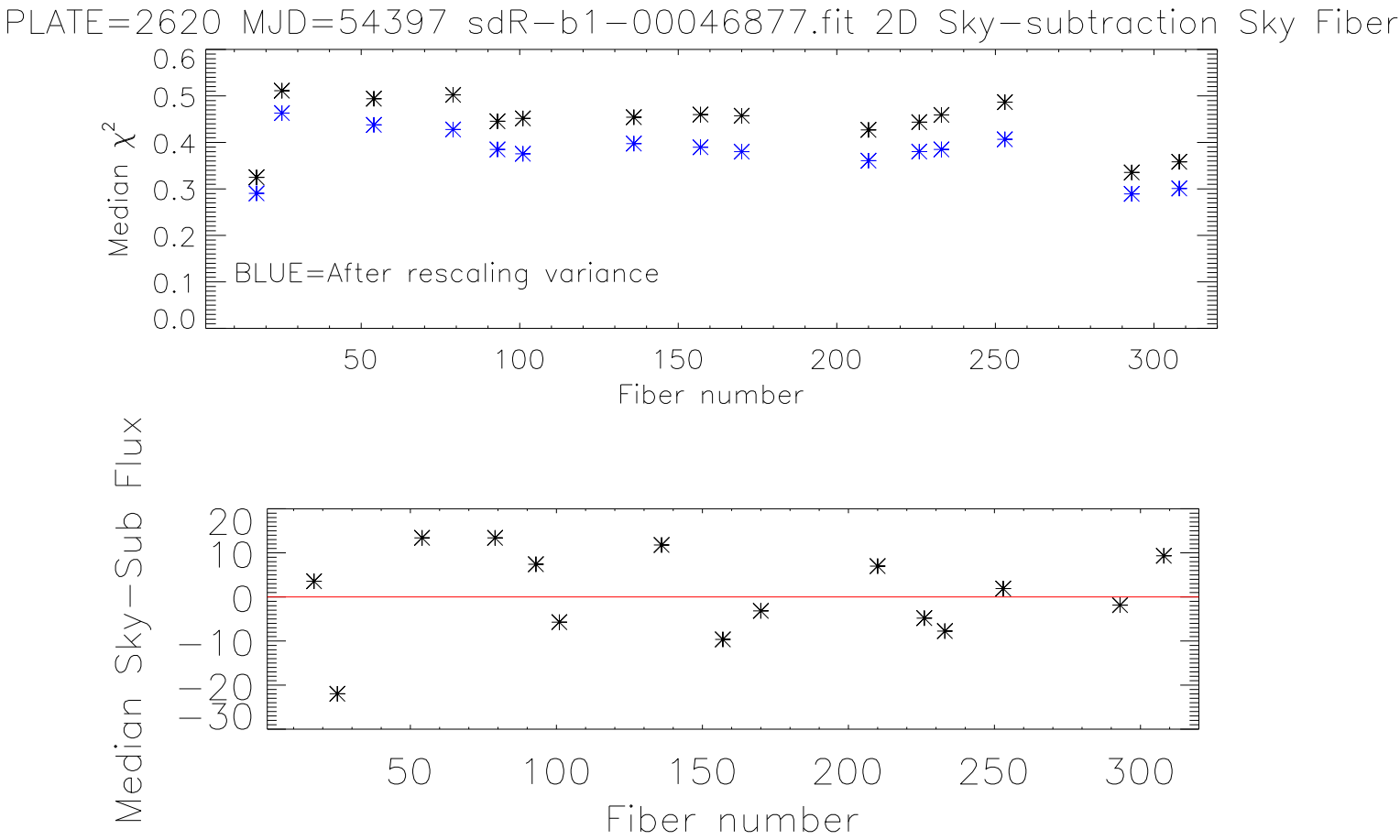

PLATE=2620 MJD=54397 Smooth superflat for sdR−b1−00046877.fit
1.5
1.0
0.5
0.0
1.04
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

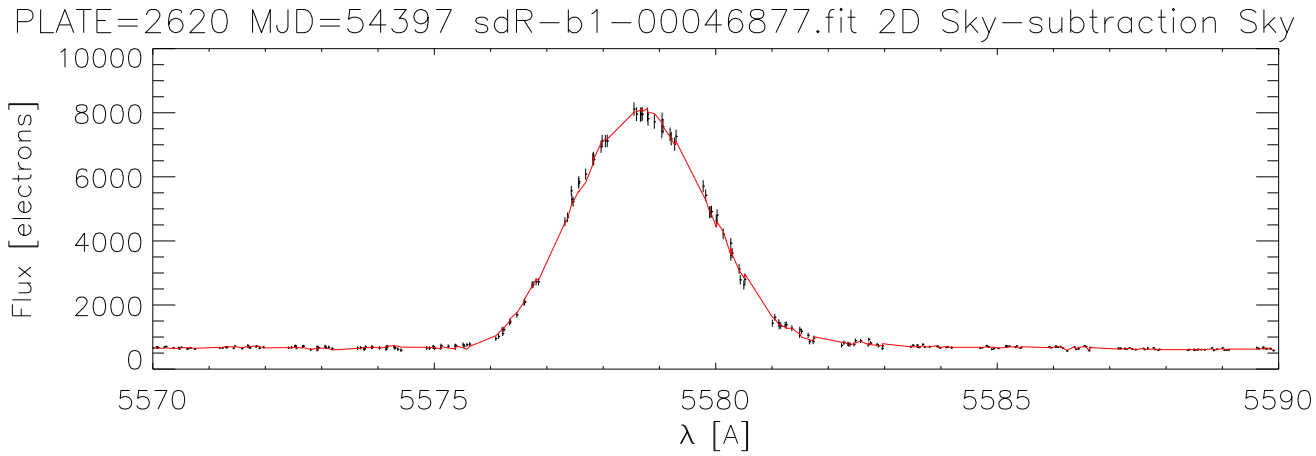

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
-40
-50
50
100
150
200
250
300
Fiber number

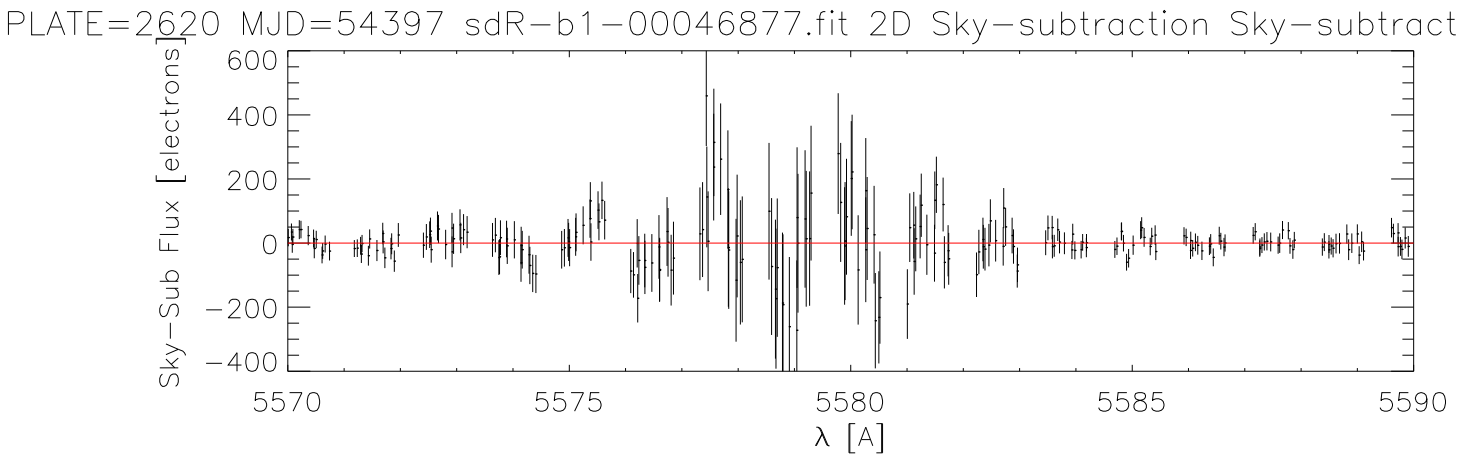

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

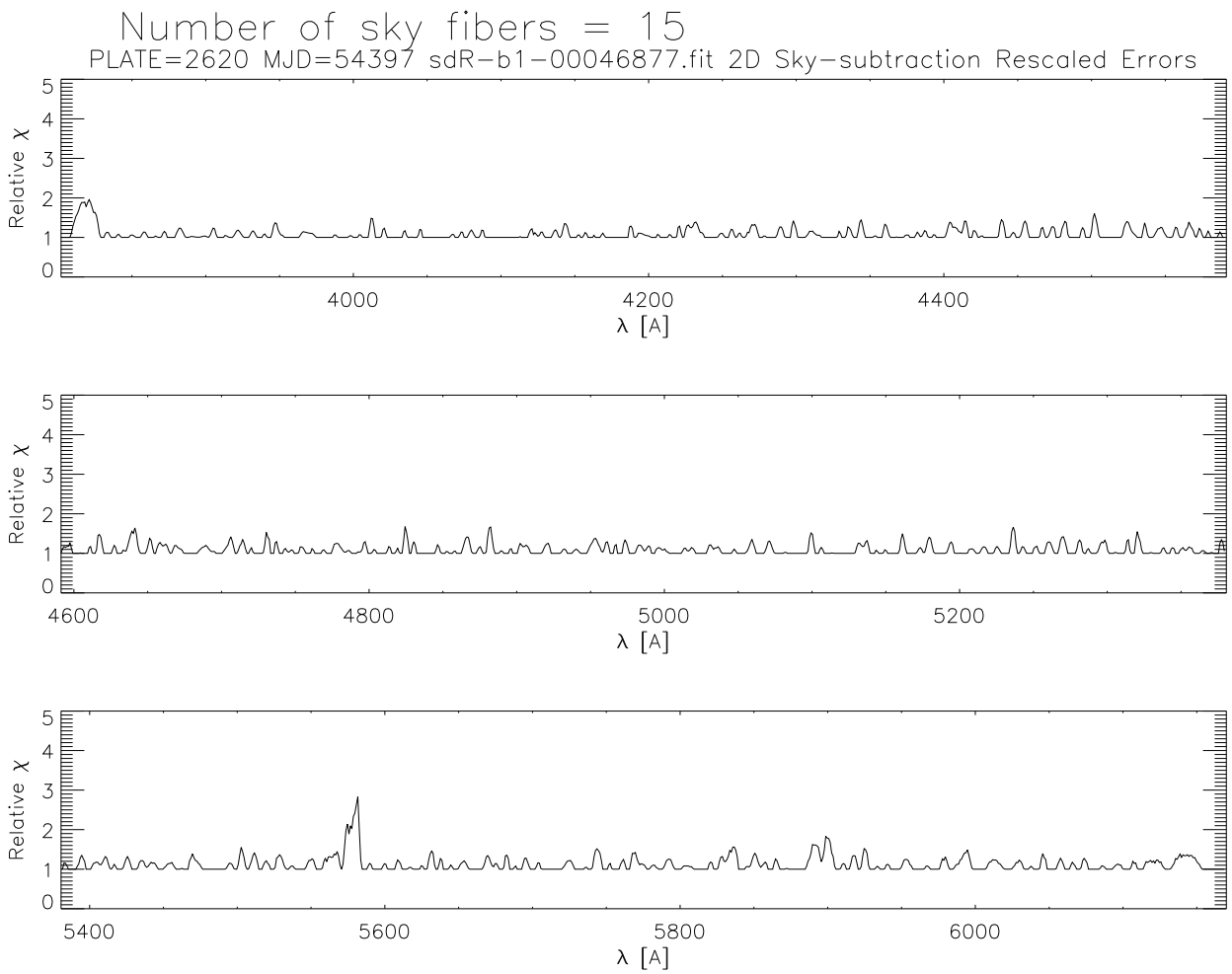

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

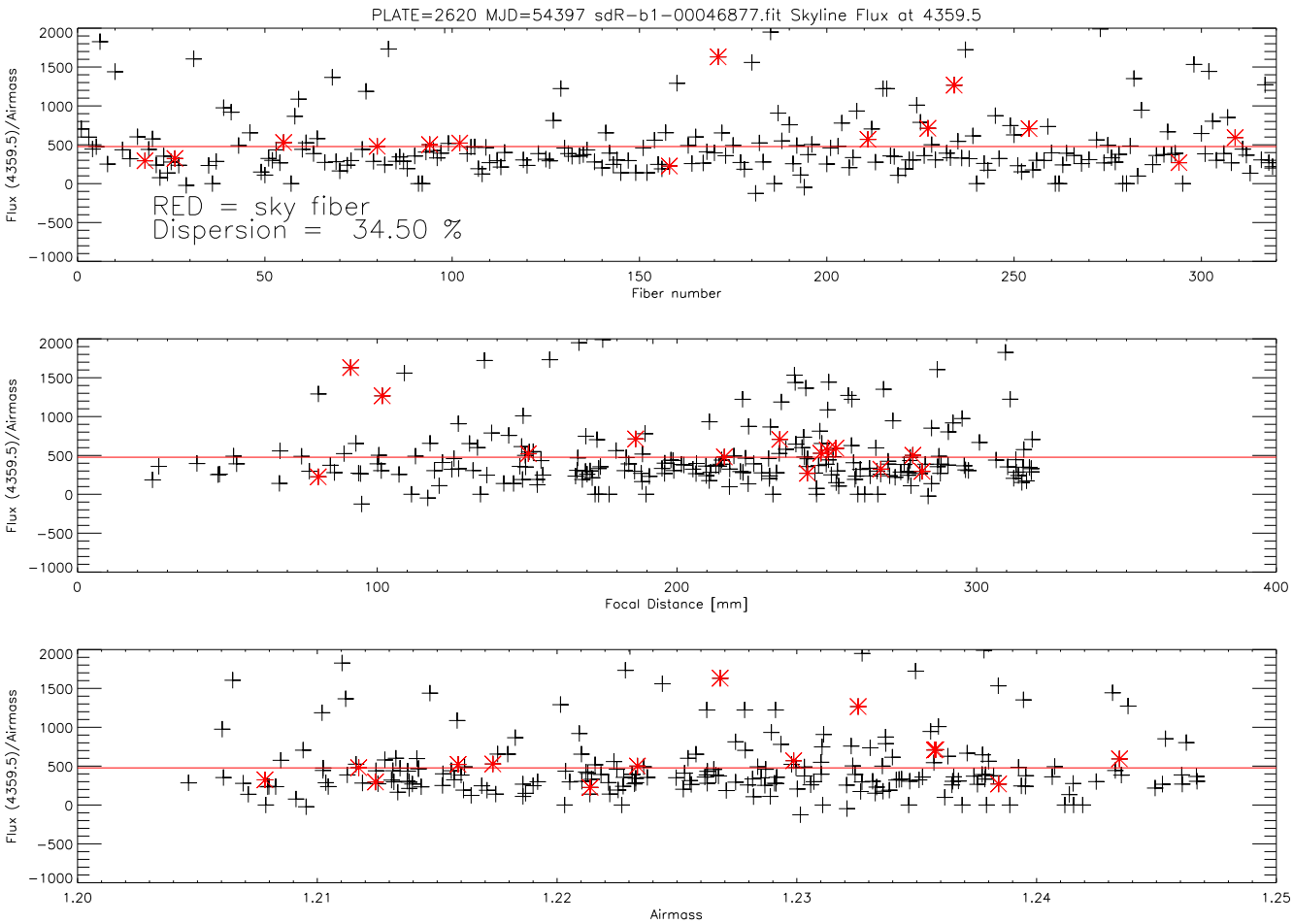

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b1-00046877.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

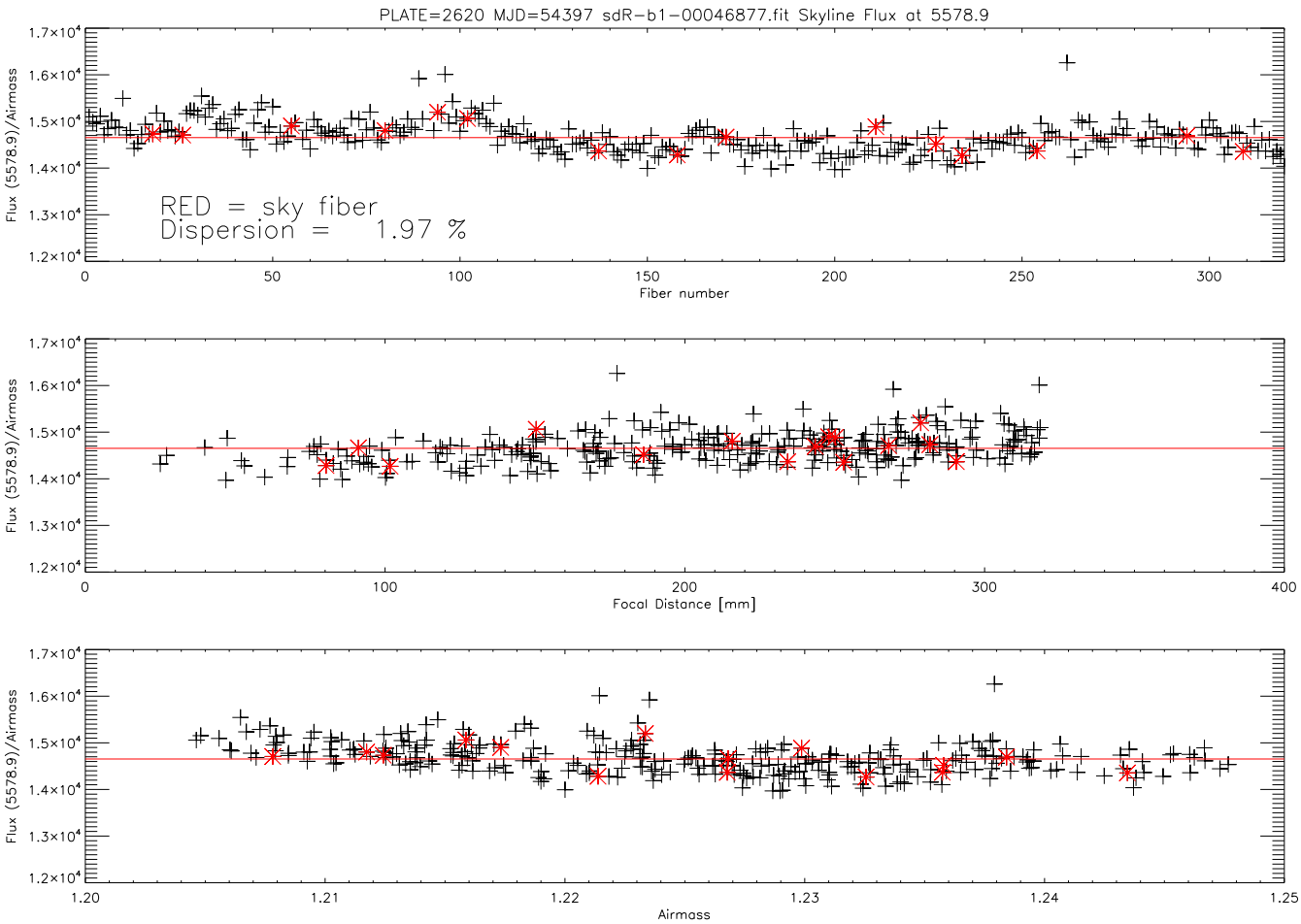

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

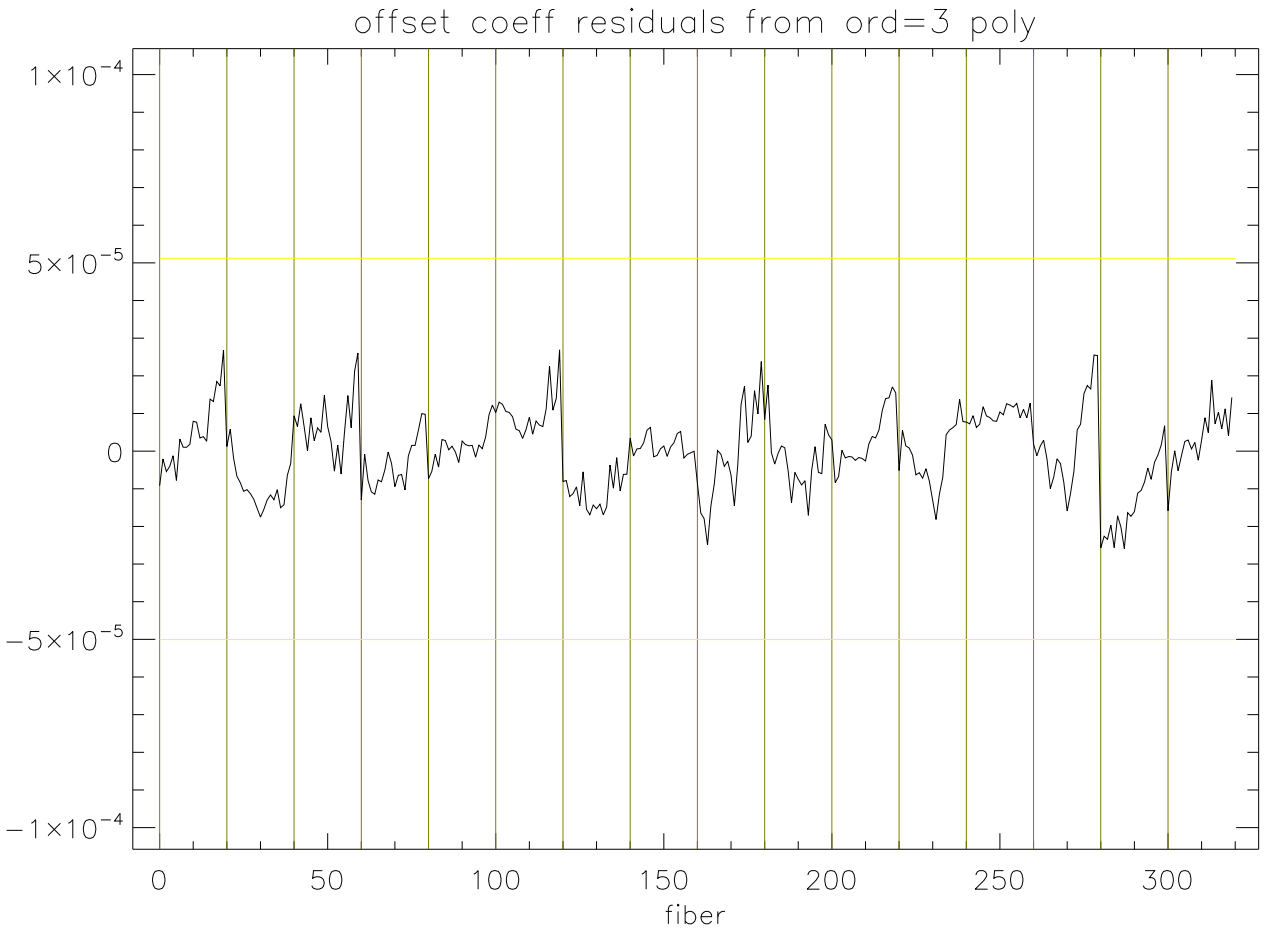

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

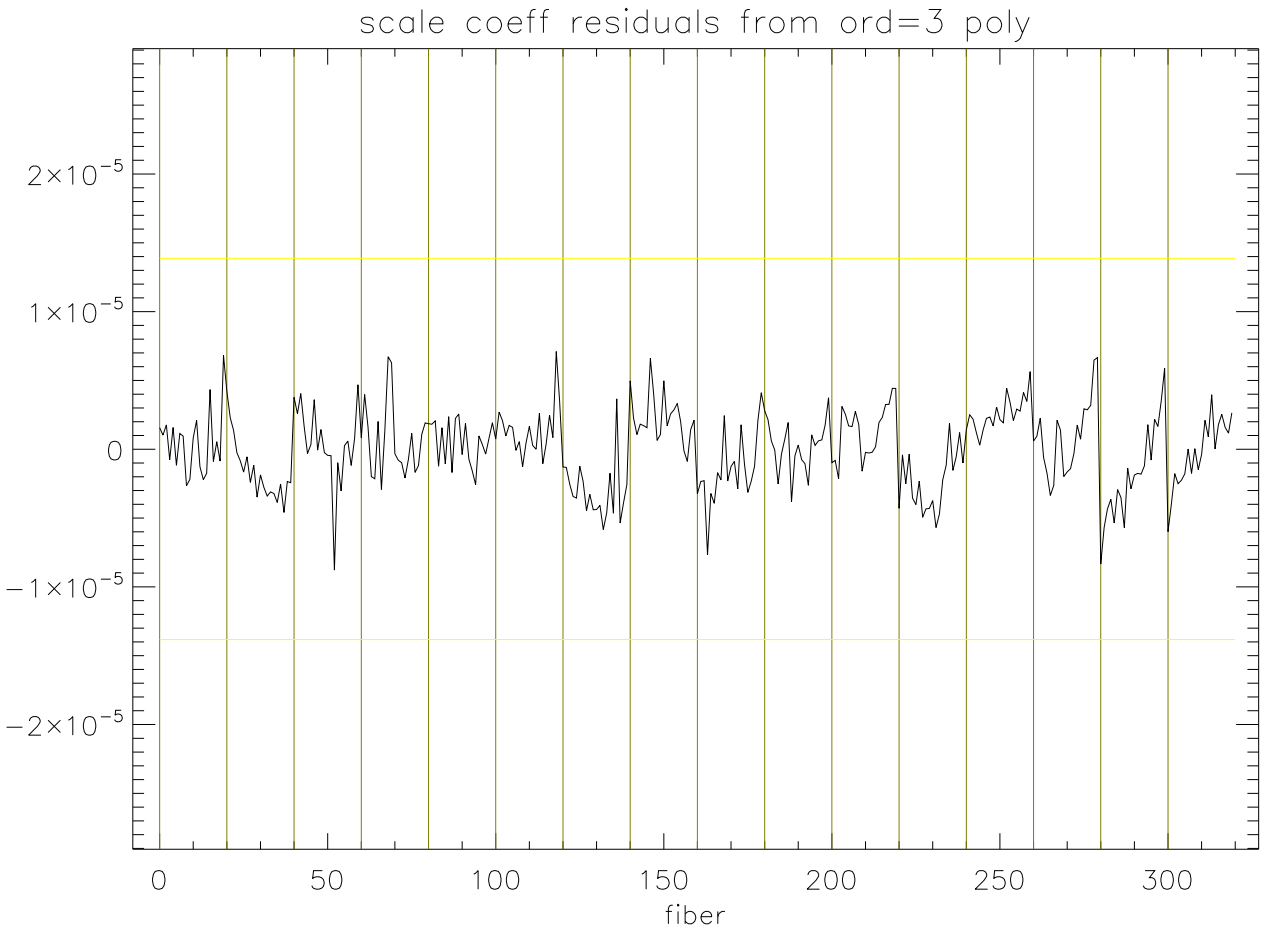

PLATE=2620 MJD=54397 sdR-b1-00046877.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

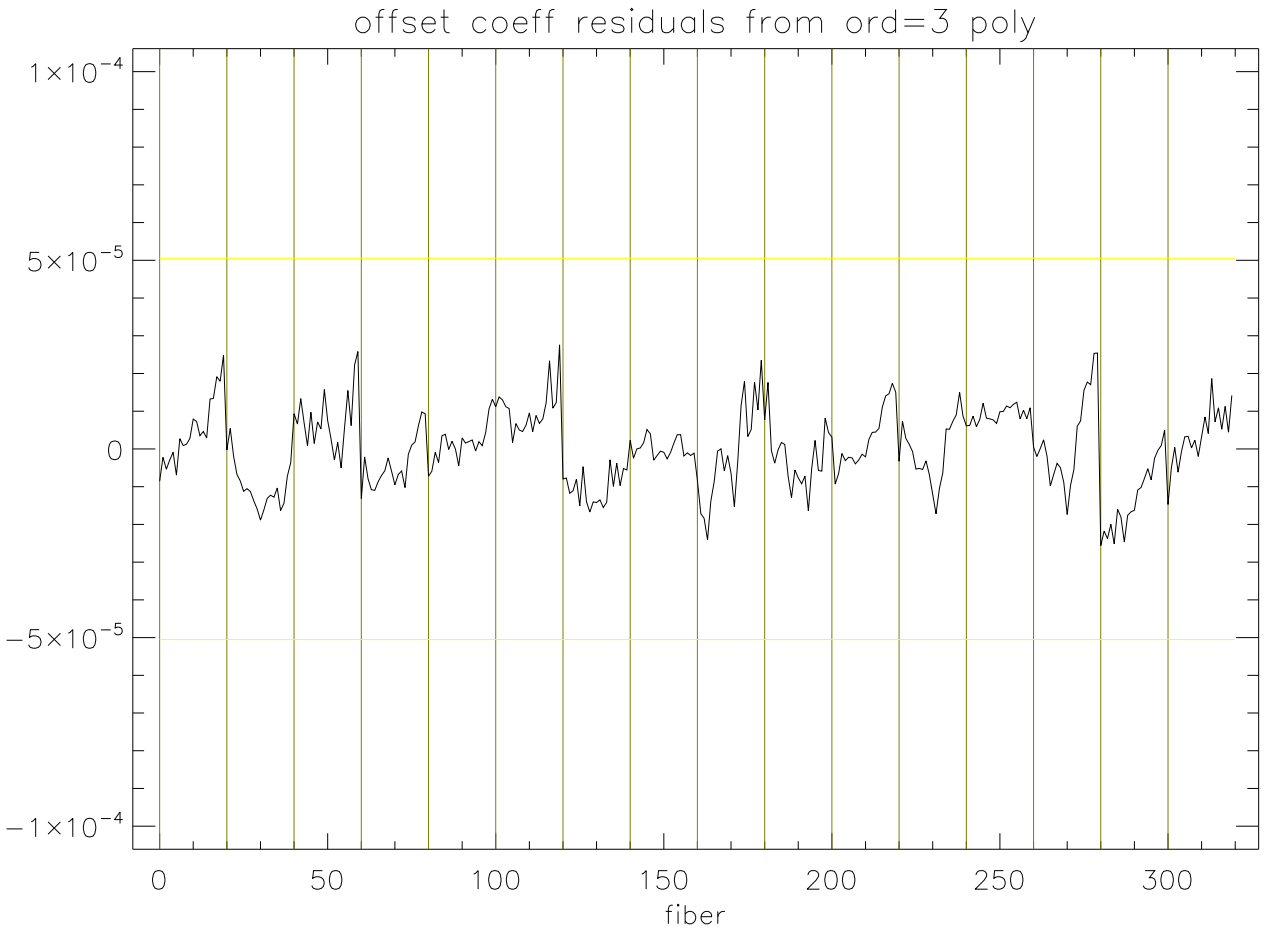

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b1-00046877.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

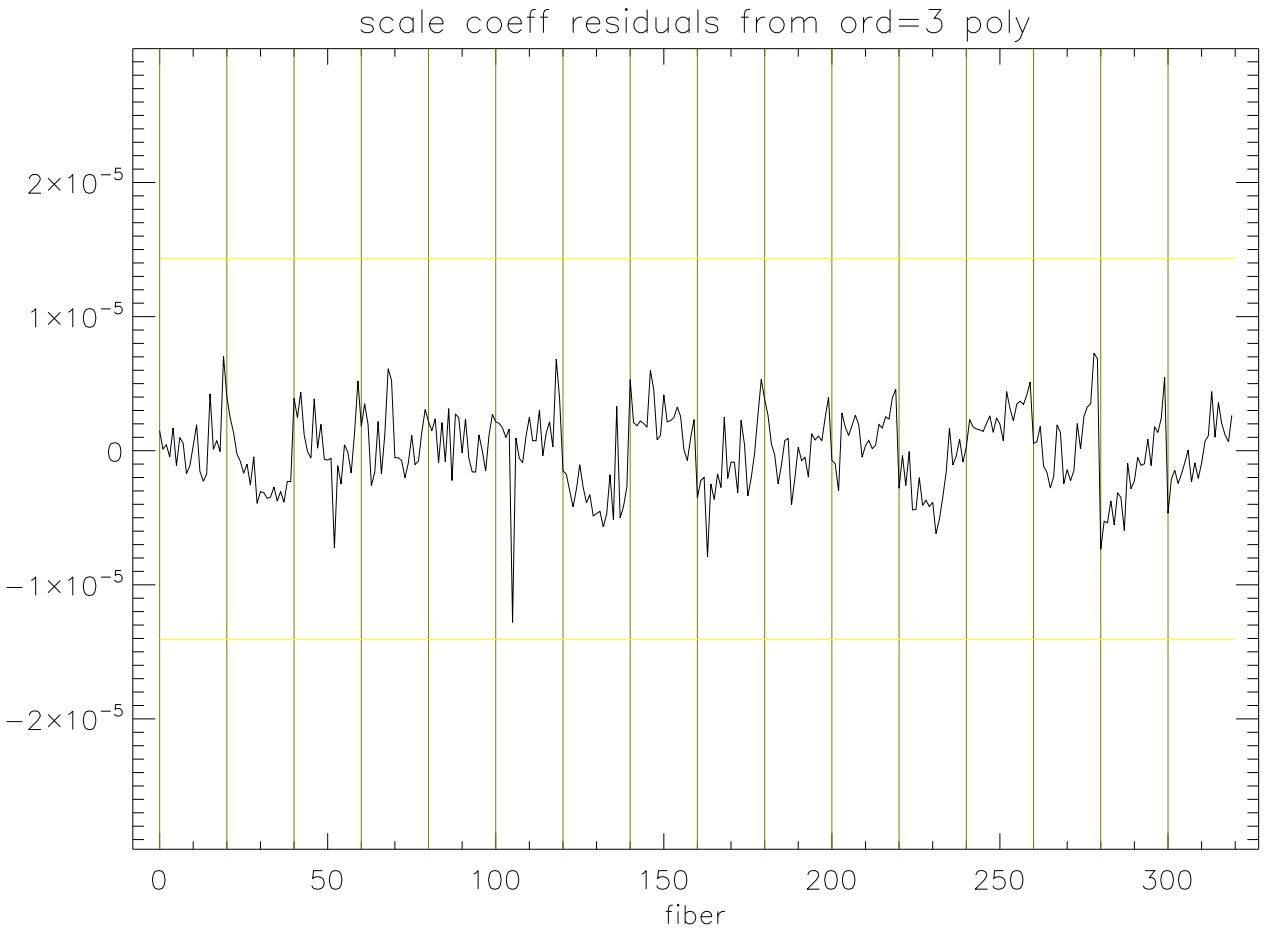

PLATE=2620 MJD=54397 sdR-b1-00046877.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 34.50 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

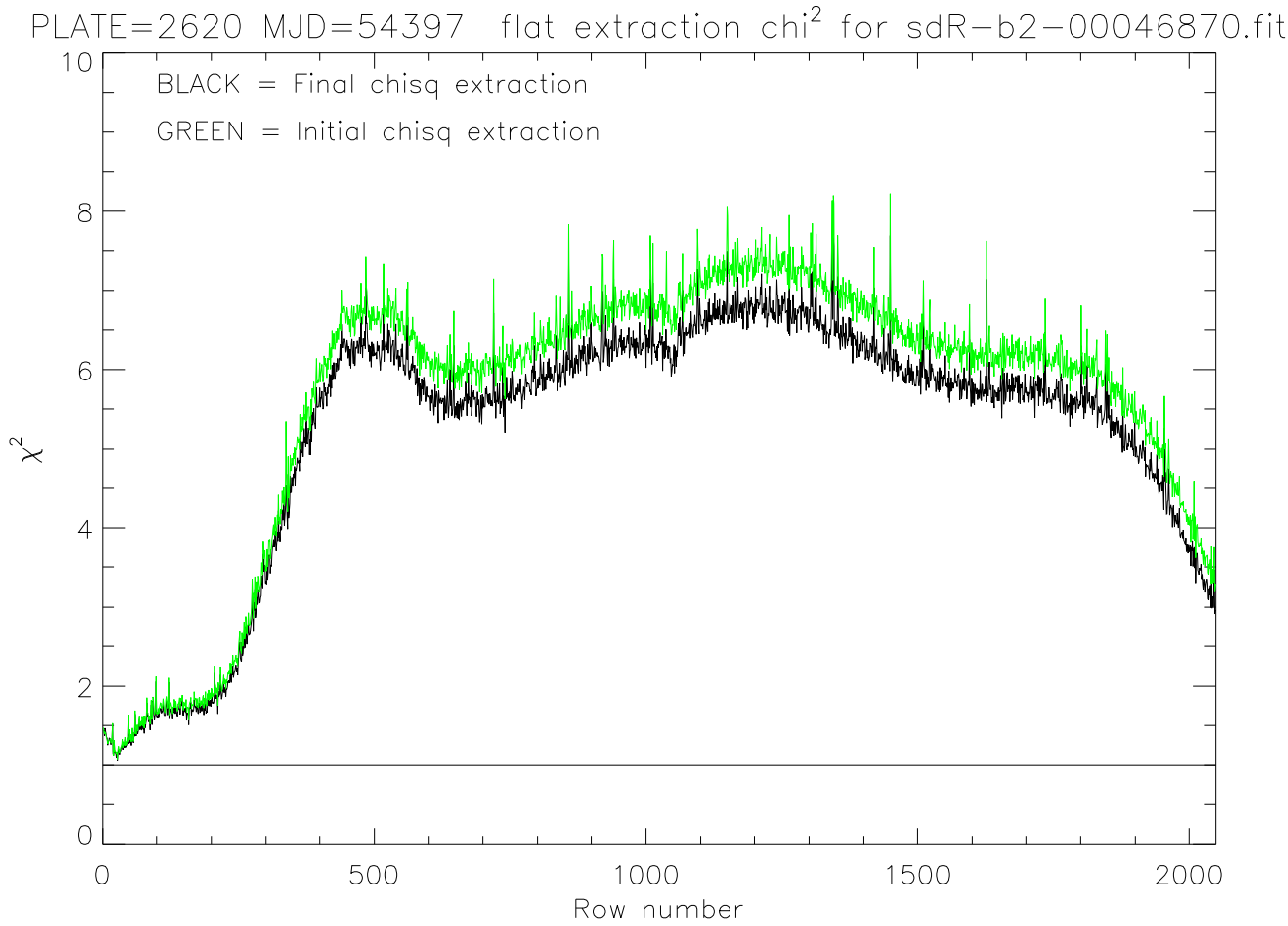

PLATE=2620 MJD=54397 sdR-b1-00046877.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.97 %
Fiber number
Focal Distance [mm]
Airmass

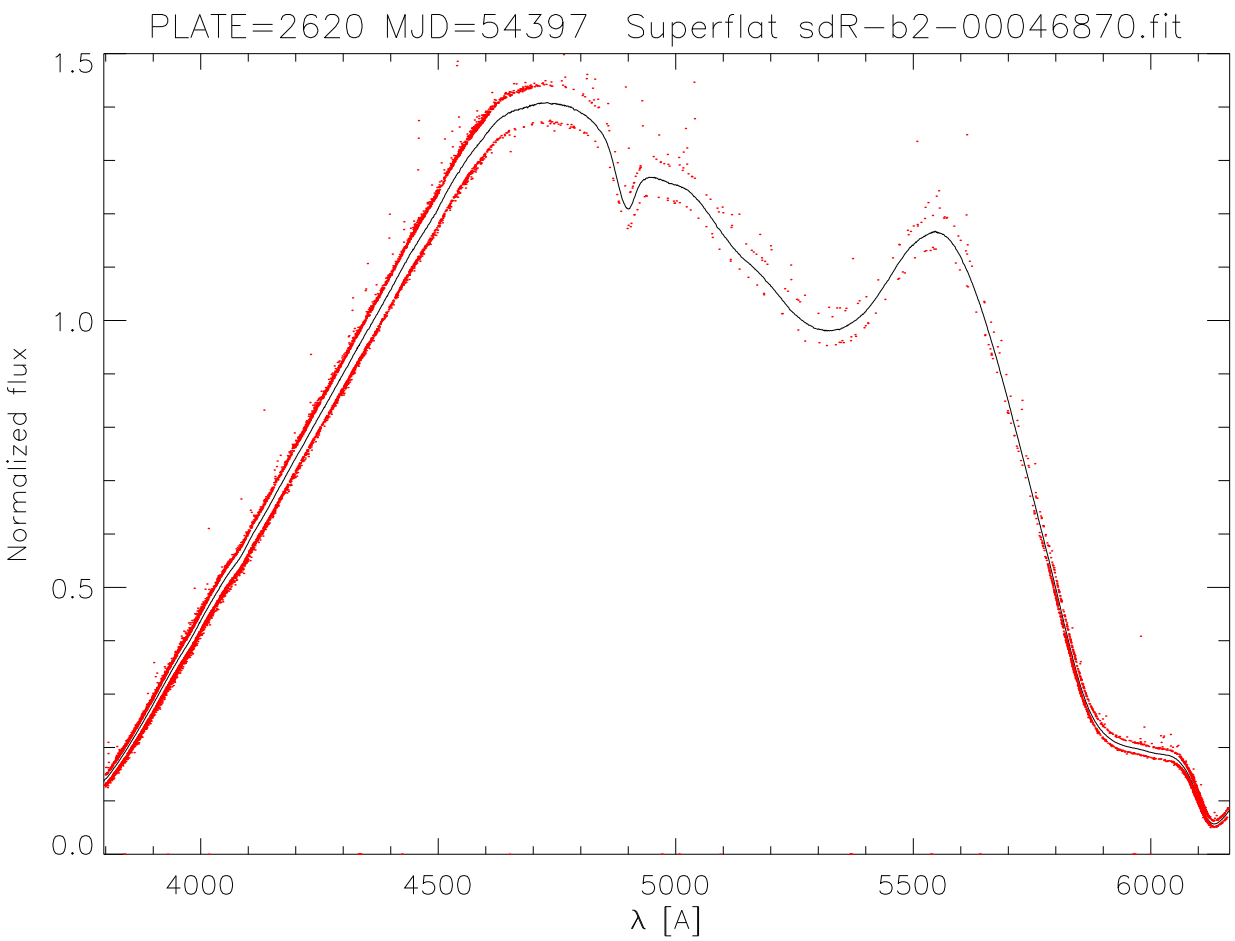

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

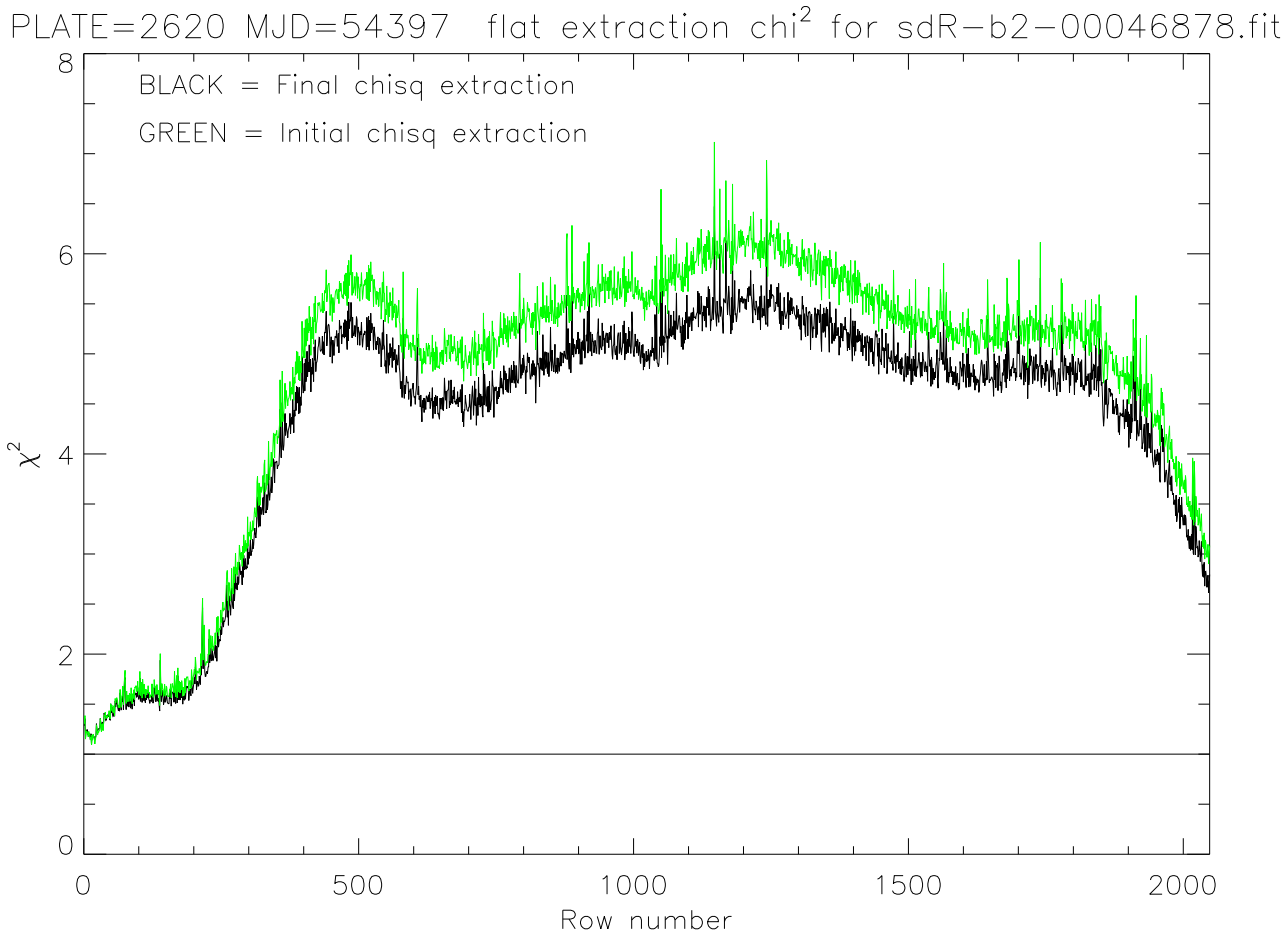

scale coeff residuals from ord=3 poly
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
0
50
100
150
200
250
300
fiber

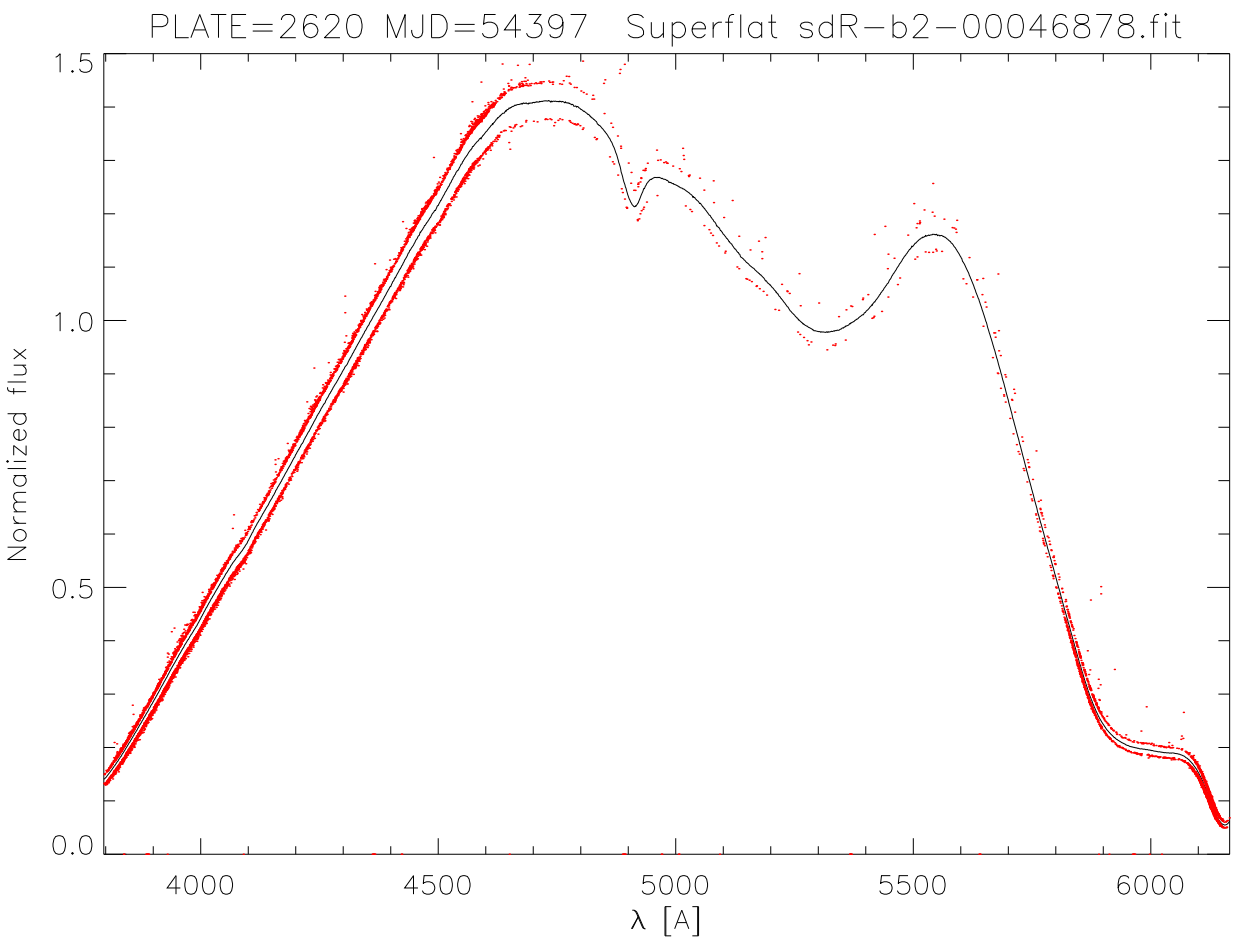

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

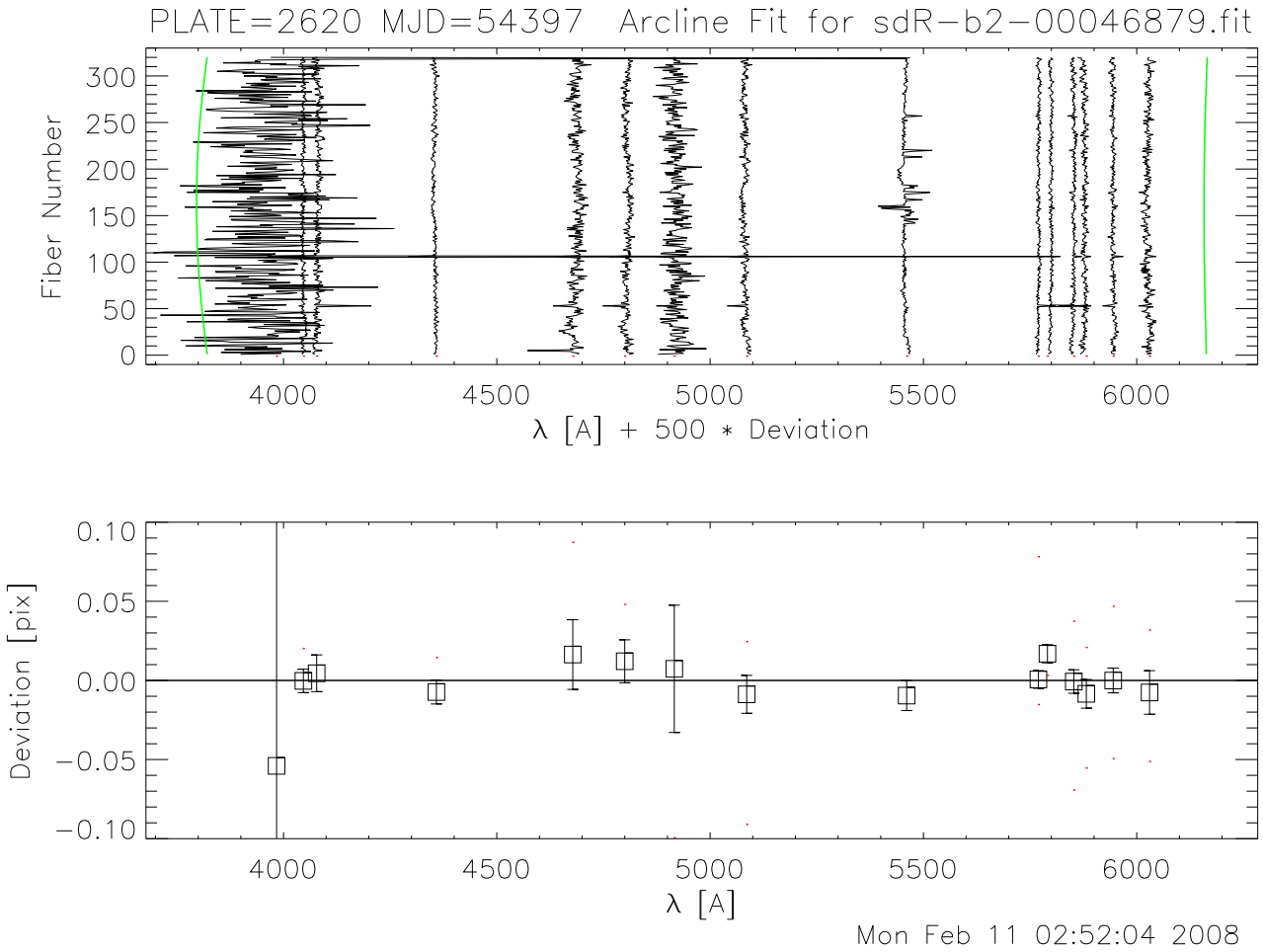

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

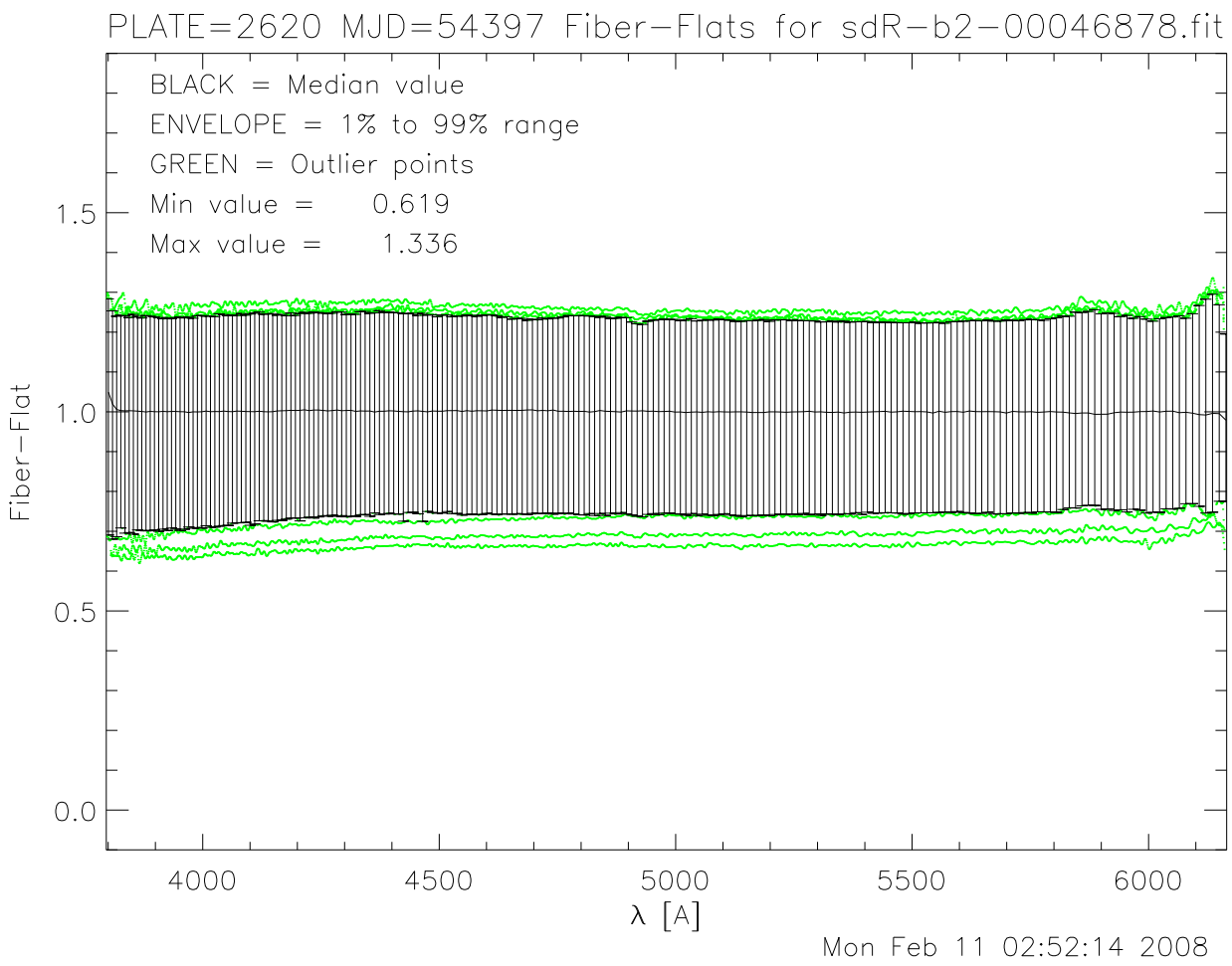

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−b2−00046870.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

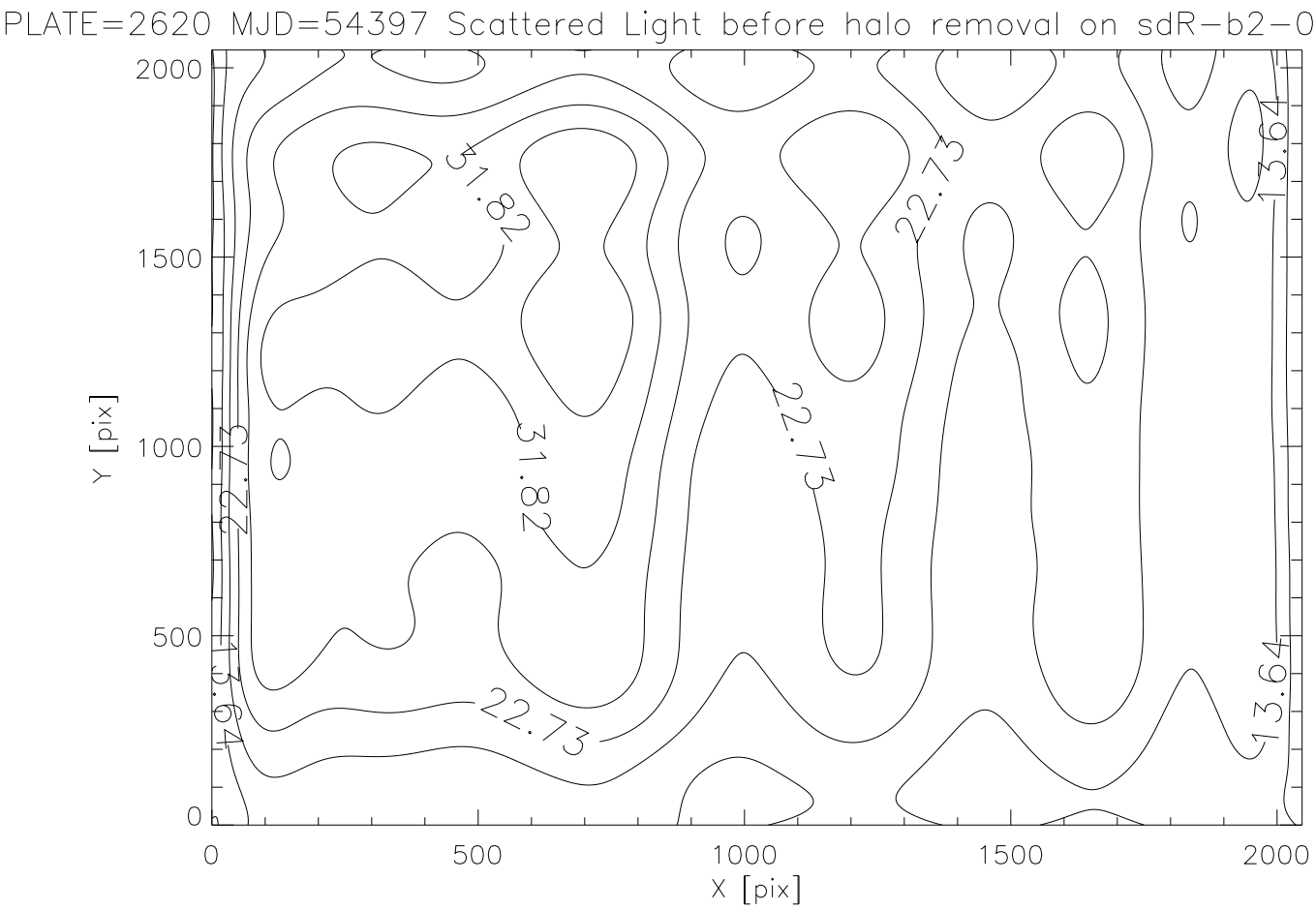

PLATE=2620 MJD=54397 Superflat sdR-b2-00046870.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

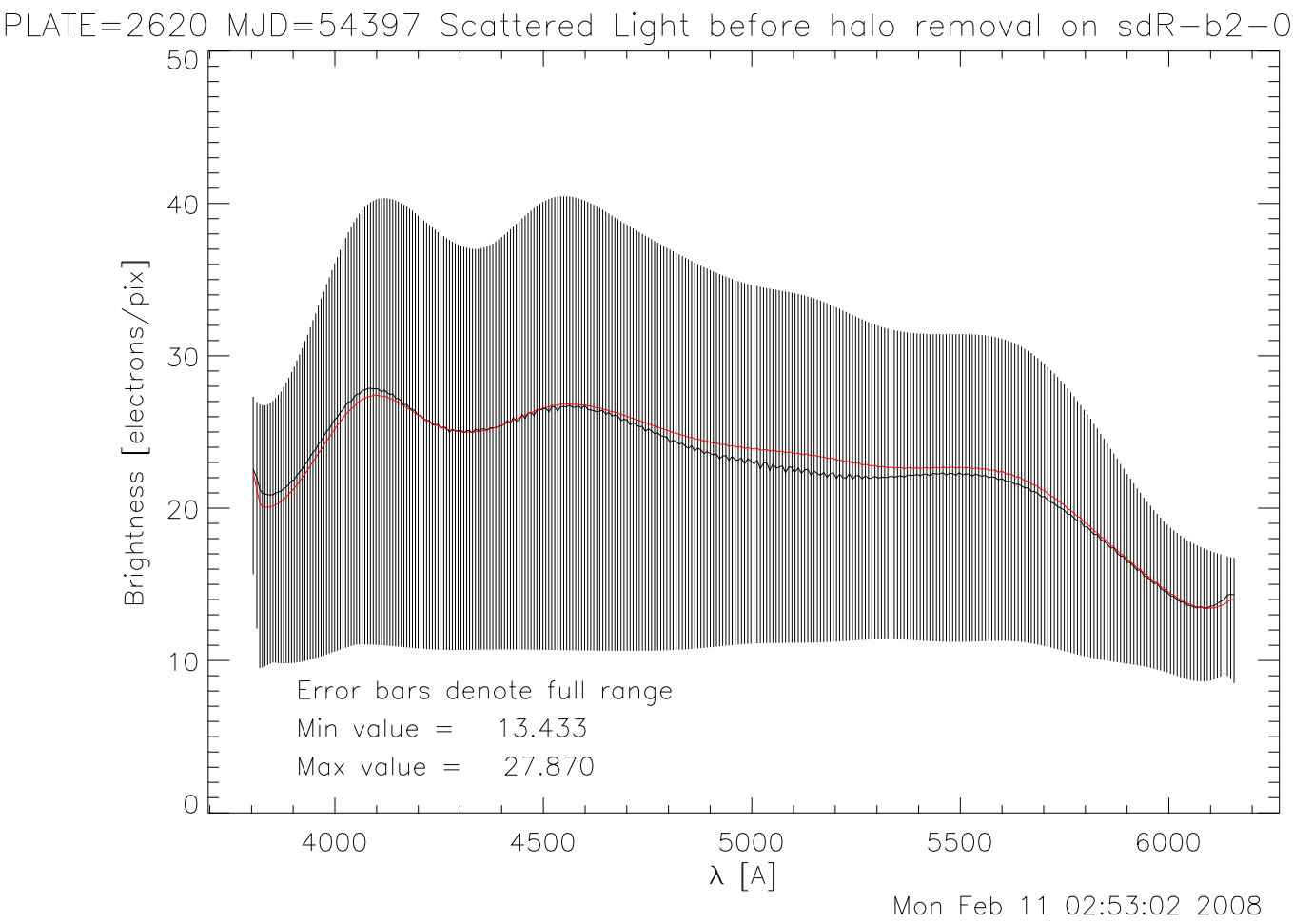

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−b2−00046878.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

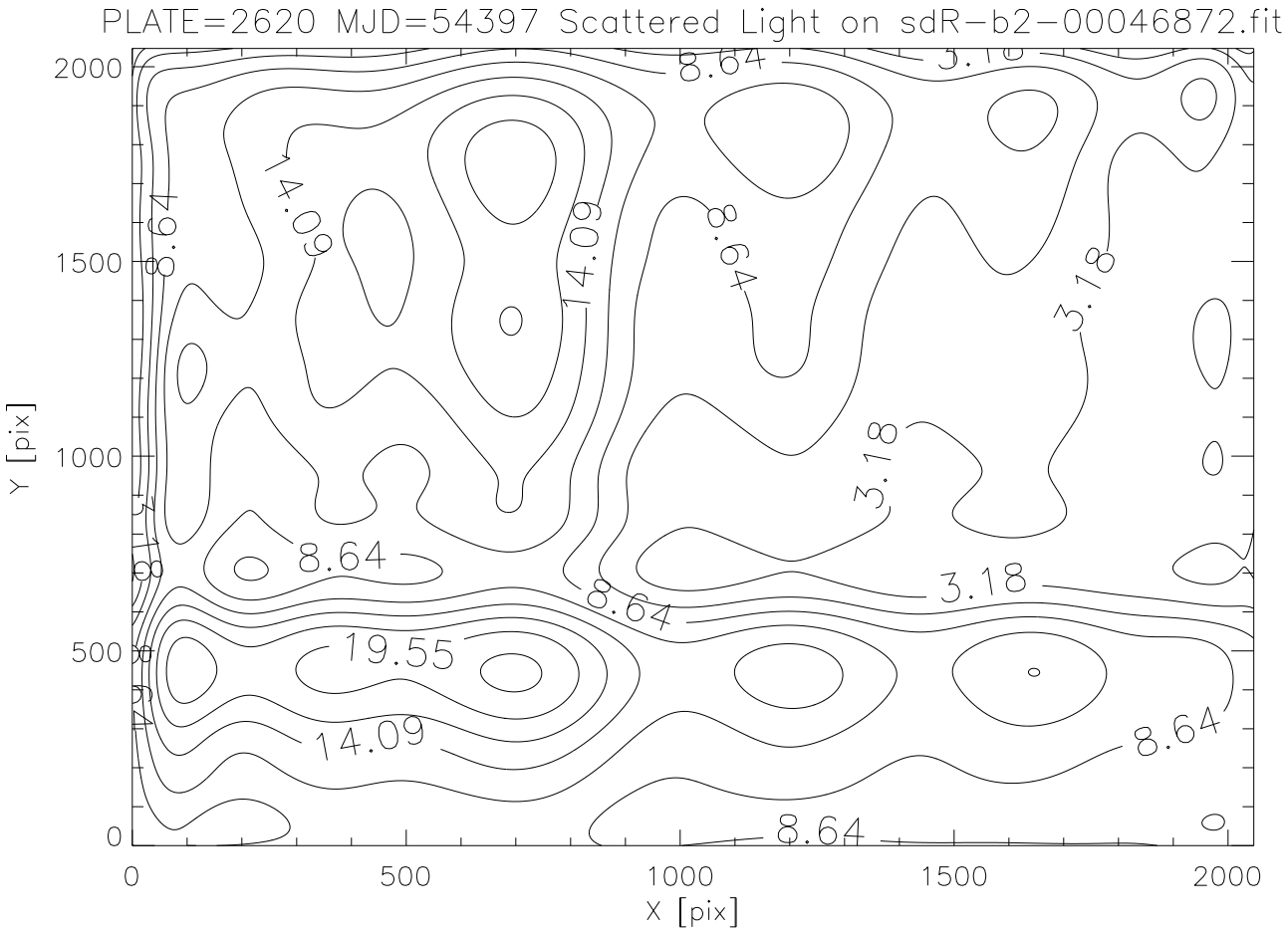

PLATE=2620 MJD=54397 Superflat sdR-b2-00046878.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

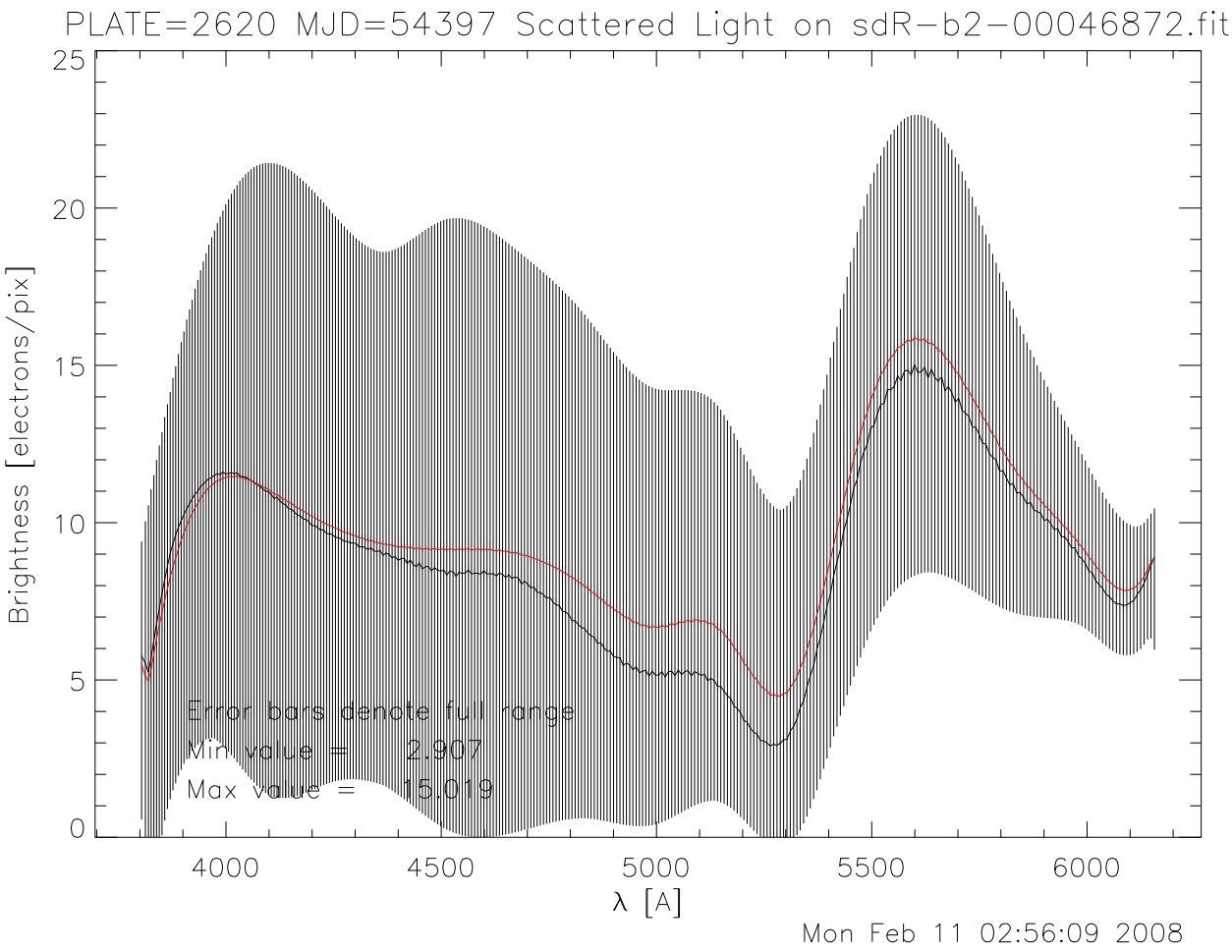

PLATE=2620 MJD=54397 Arcline Fit for sdR-b2-00046879.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:52:04 2008

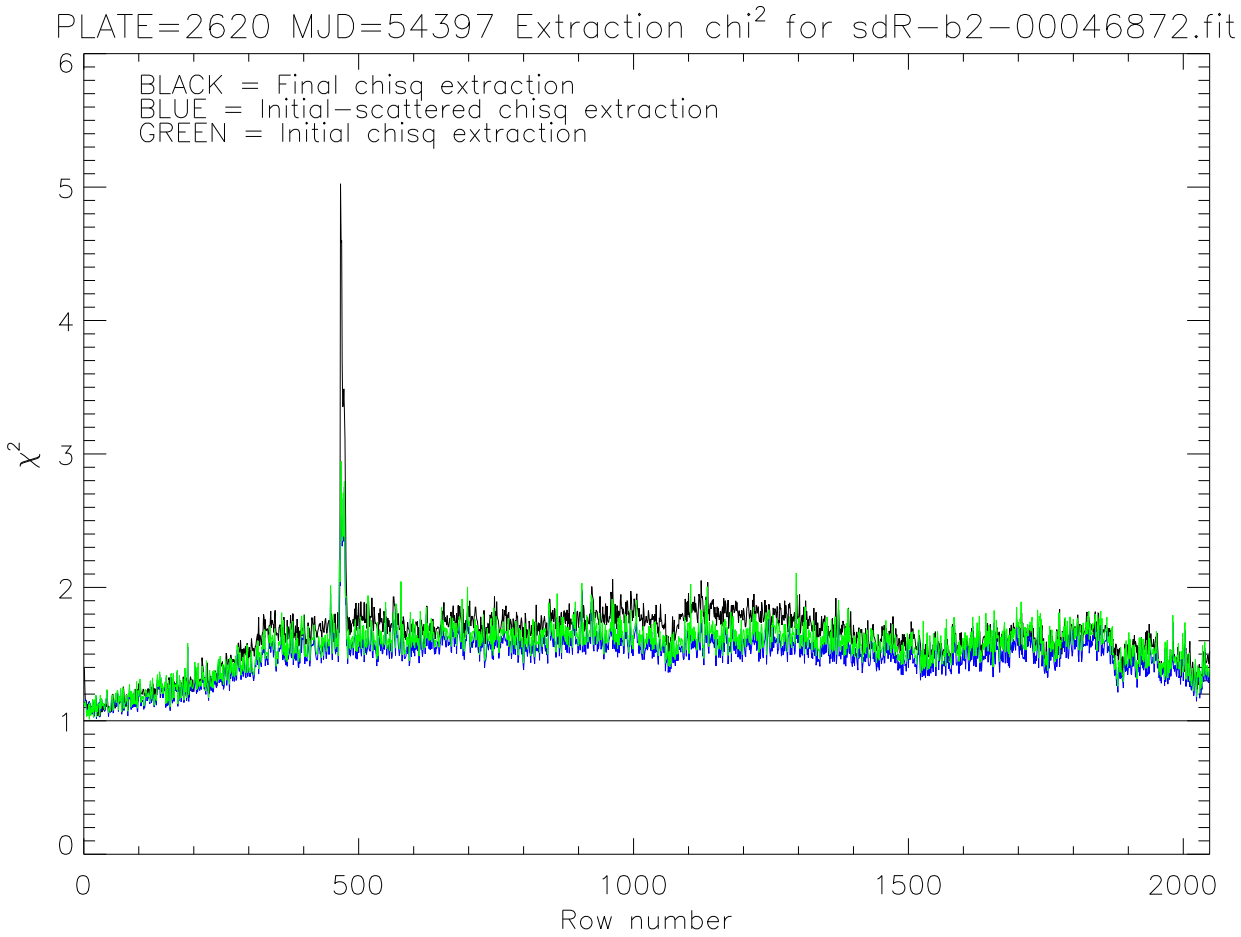

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:52:14 2008

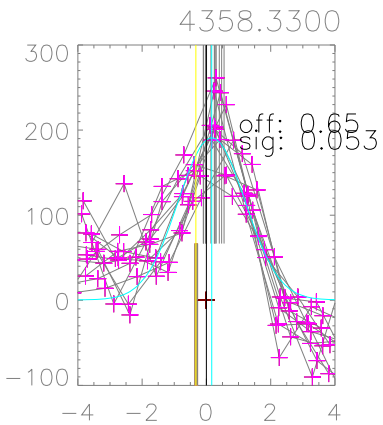

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046872.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
31.82
22.73
13.64

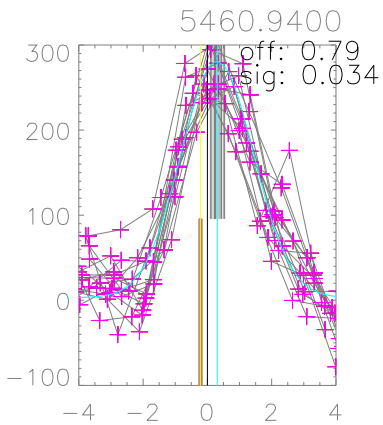

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046872.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.433
Max value = 27.870
Mon Feb 11 02:53:02 2008

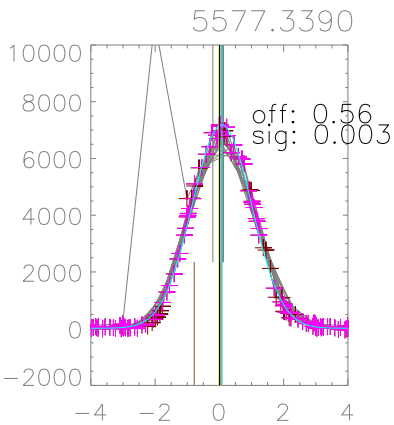

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046872.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.64
14.09
3.18
19.55

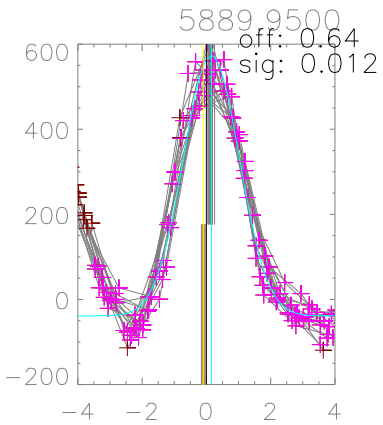

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046872.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.907
Max value = 15.019
Mon Feb 11 02:56:09 2008

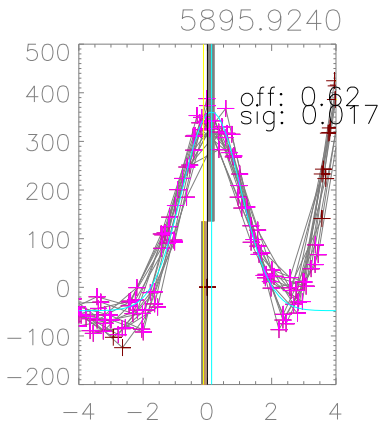

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046872.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

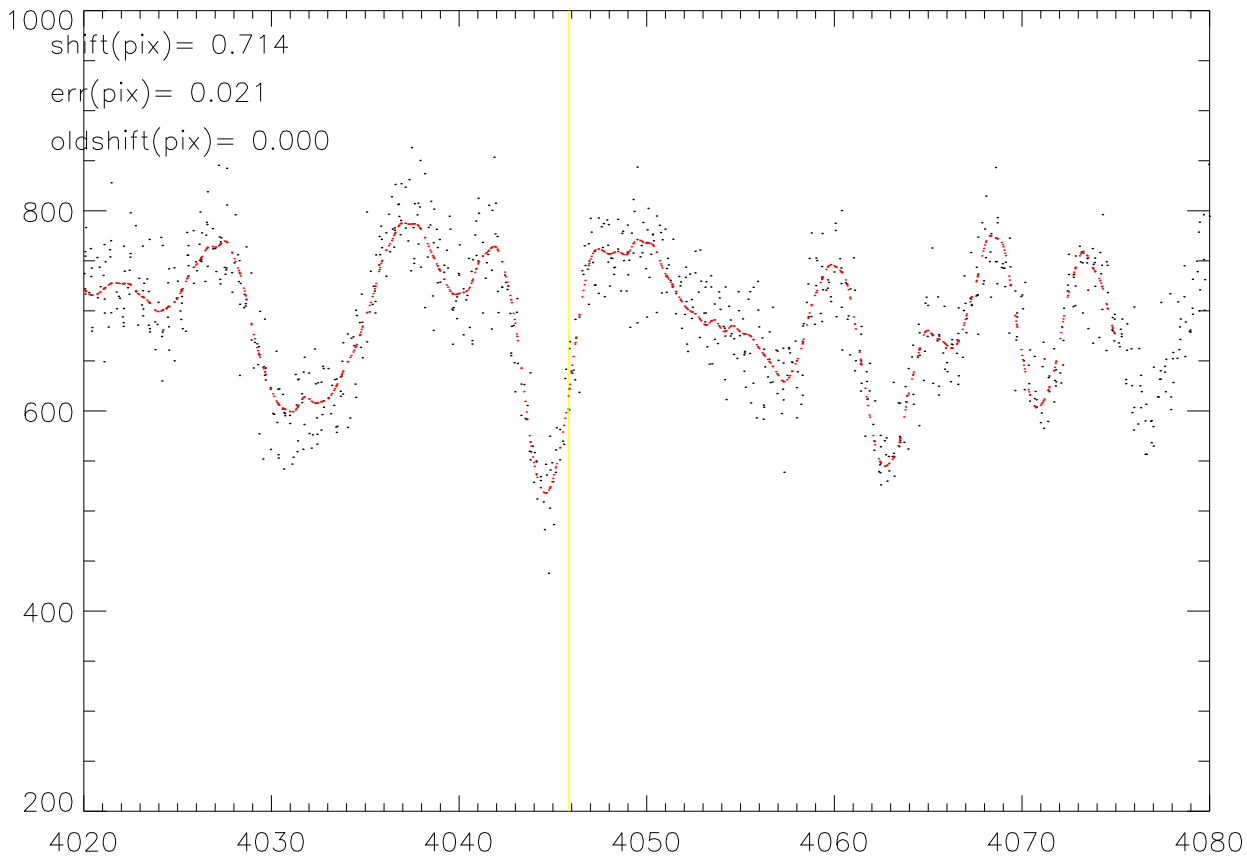

4358.3300
off: 0.65
sig: 0.053

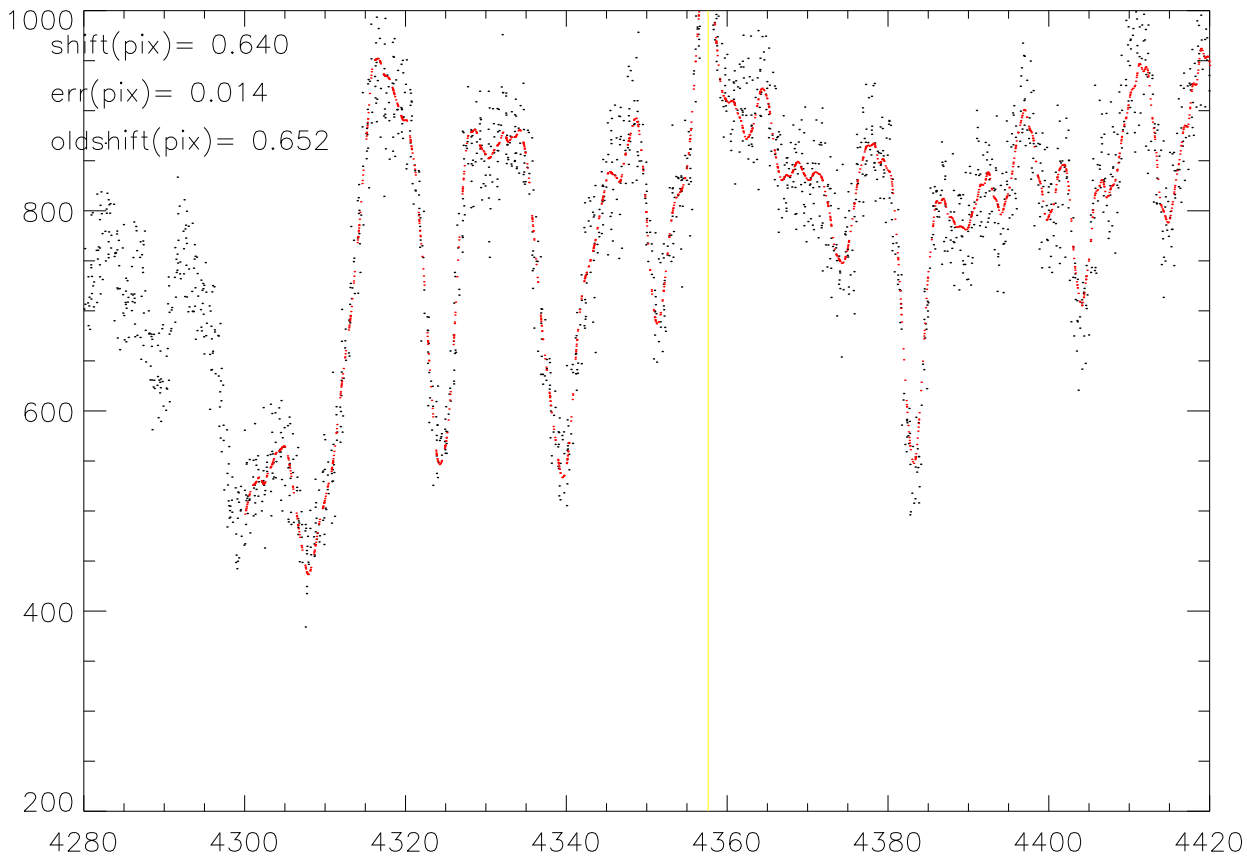

5460.9400
off: 0.79
sig: 0.034

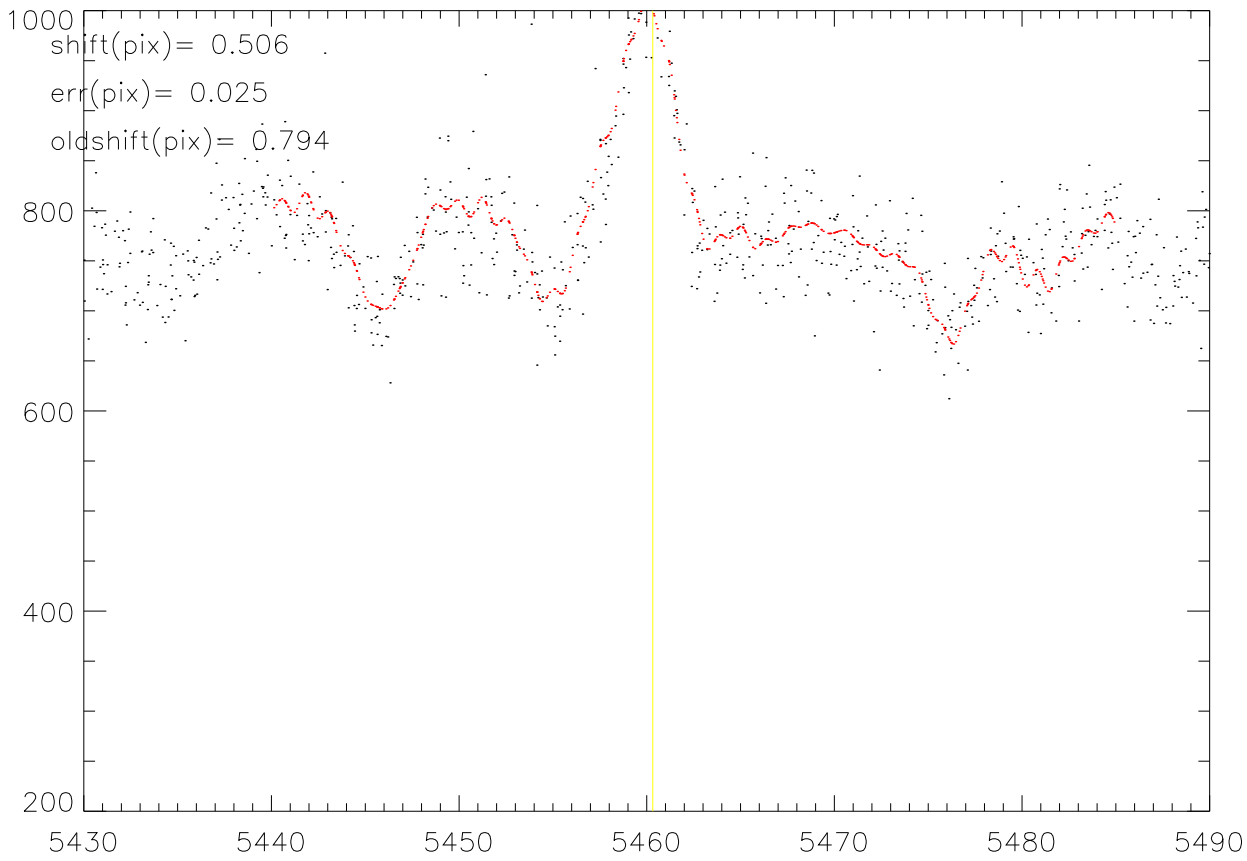

5577.3390
off: 0.56
sig: 0.003

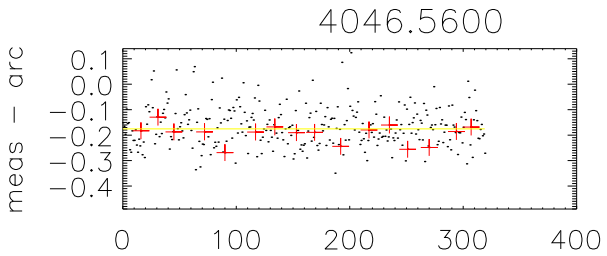

5889.9500
off: 0.64
sig: 0.012

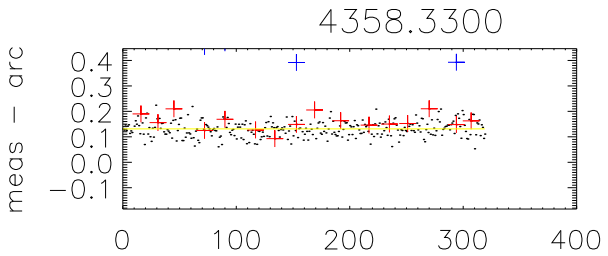

5895.9240
off: 0.62
sig: 0.017

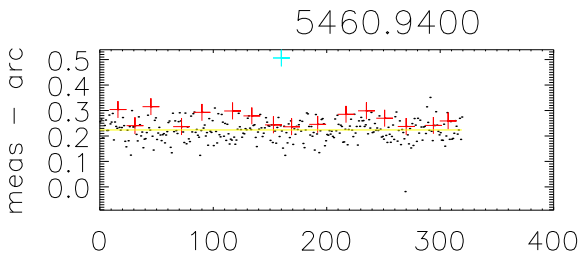

shift(pix)= 0.714
err(pix)= 0.021
oldshift(pix)= 0.000
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

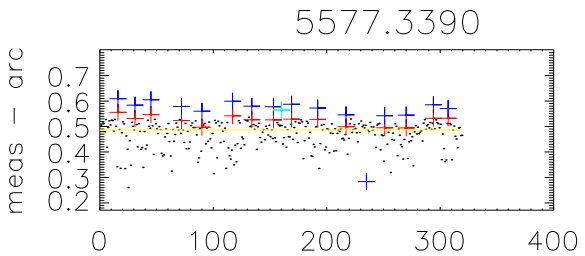

shift(pix)= 0.640
err(pix)= 0.014
oldshift(pix)= 0.652
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

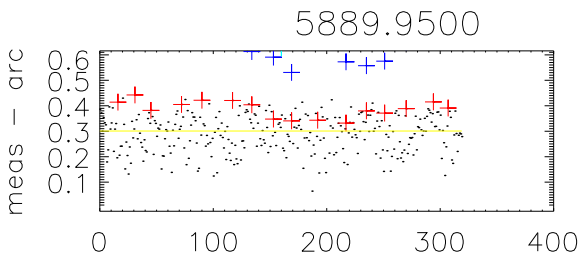

shift(pix)= 0.506
err(pix)= 0.025
oldshift(pix)= 0.794
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

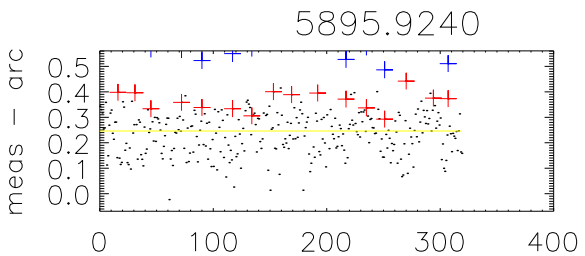

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

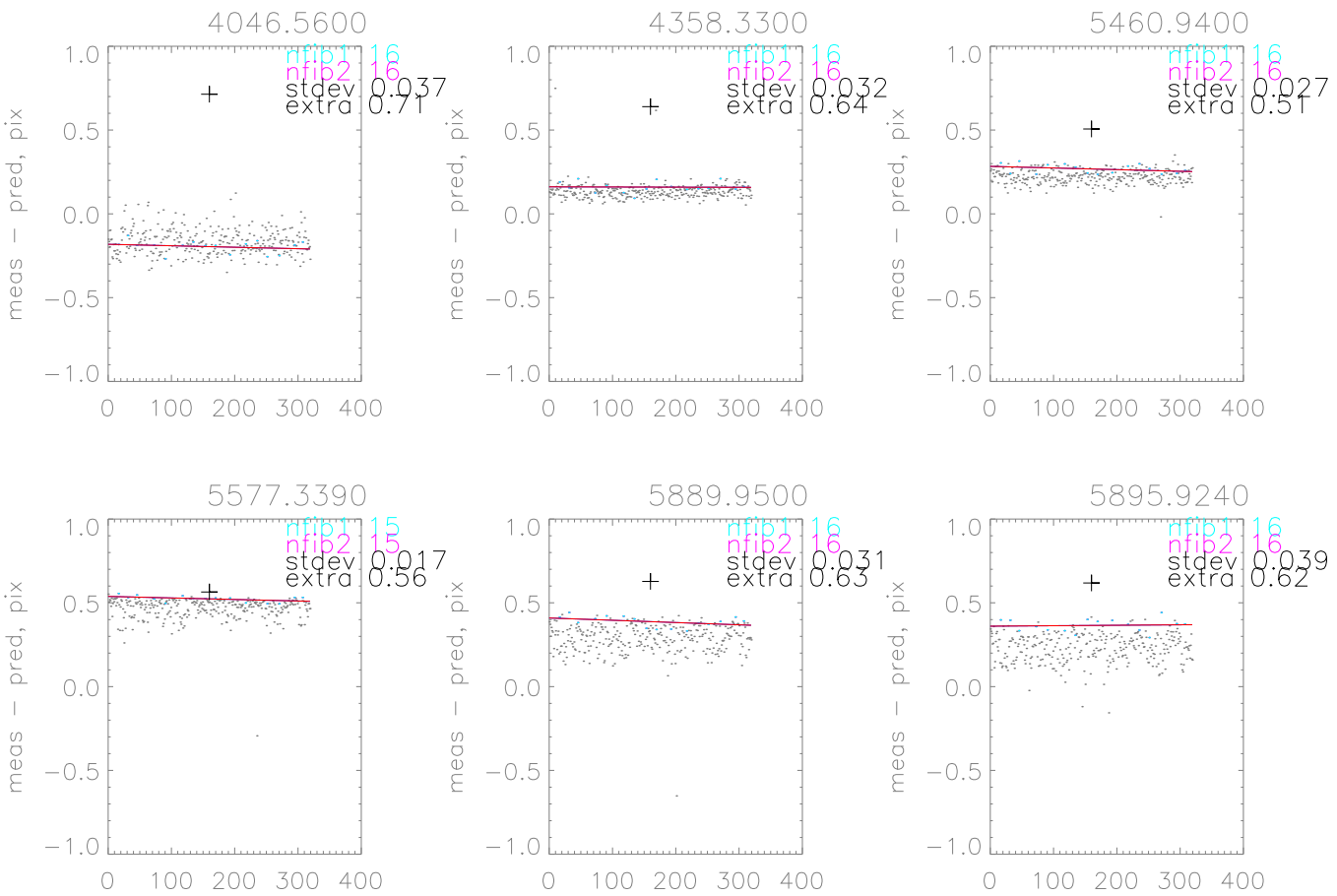

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

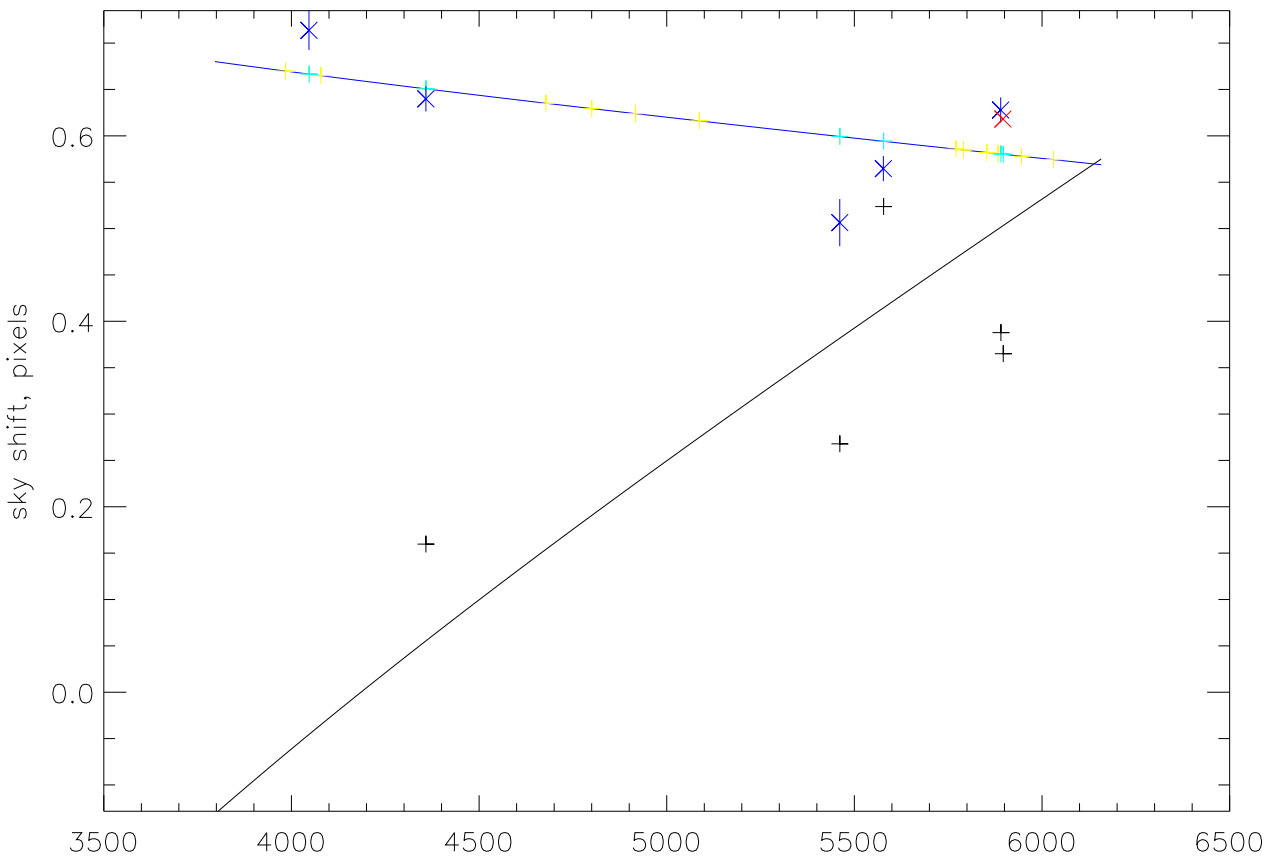

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

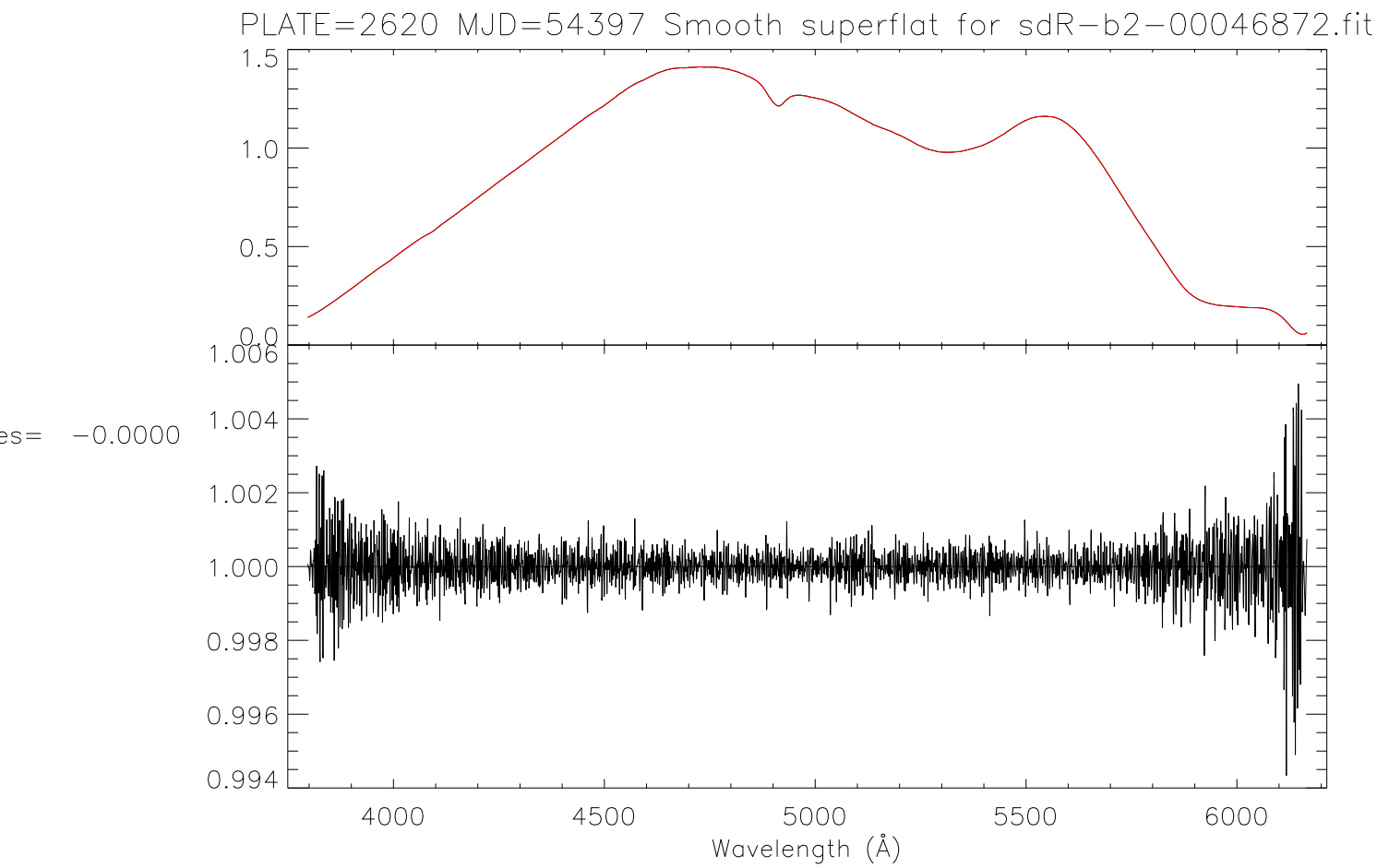

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


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

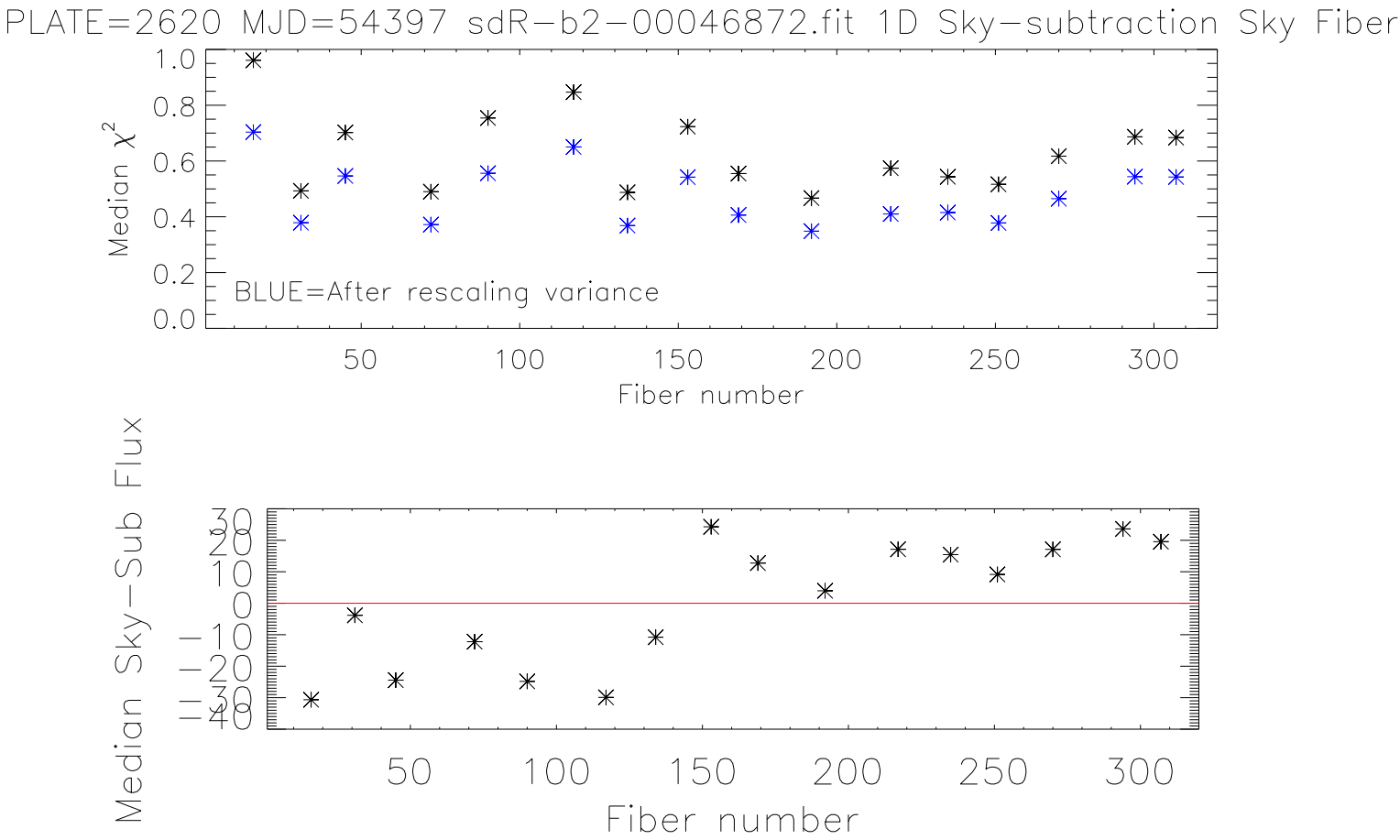

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

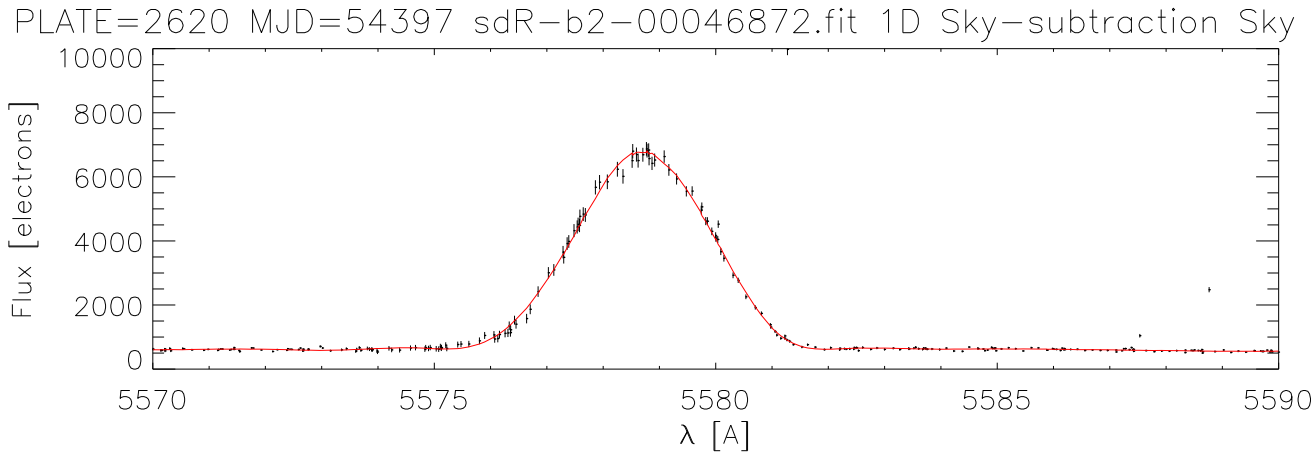

4046.5600
nfib1 16
nfib2 16
stdev 0.037
extra 0.71
4358.3300
nfib1 16
nfib2 16
stdev 0.032
extra 0.64
5460.9400
nfib1 16
nfib2 16
stdev 0.027
extra 0.51
5577.3390
nfib1 15
nfib2 15
stdev 0.017
extra 0.56
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra 0.63
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.62
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

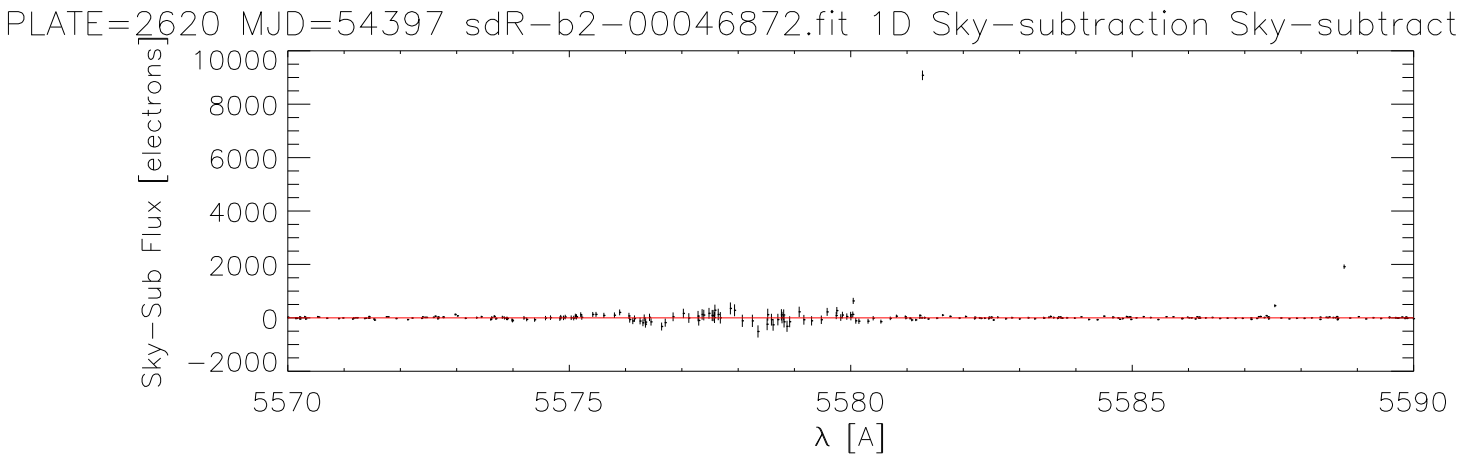

sky shift, pixels
0.0
0.2
0.4
0.6
3500
4000
4500
5000
5500
6000
6500

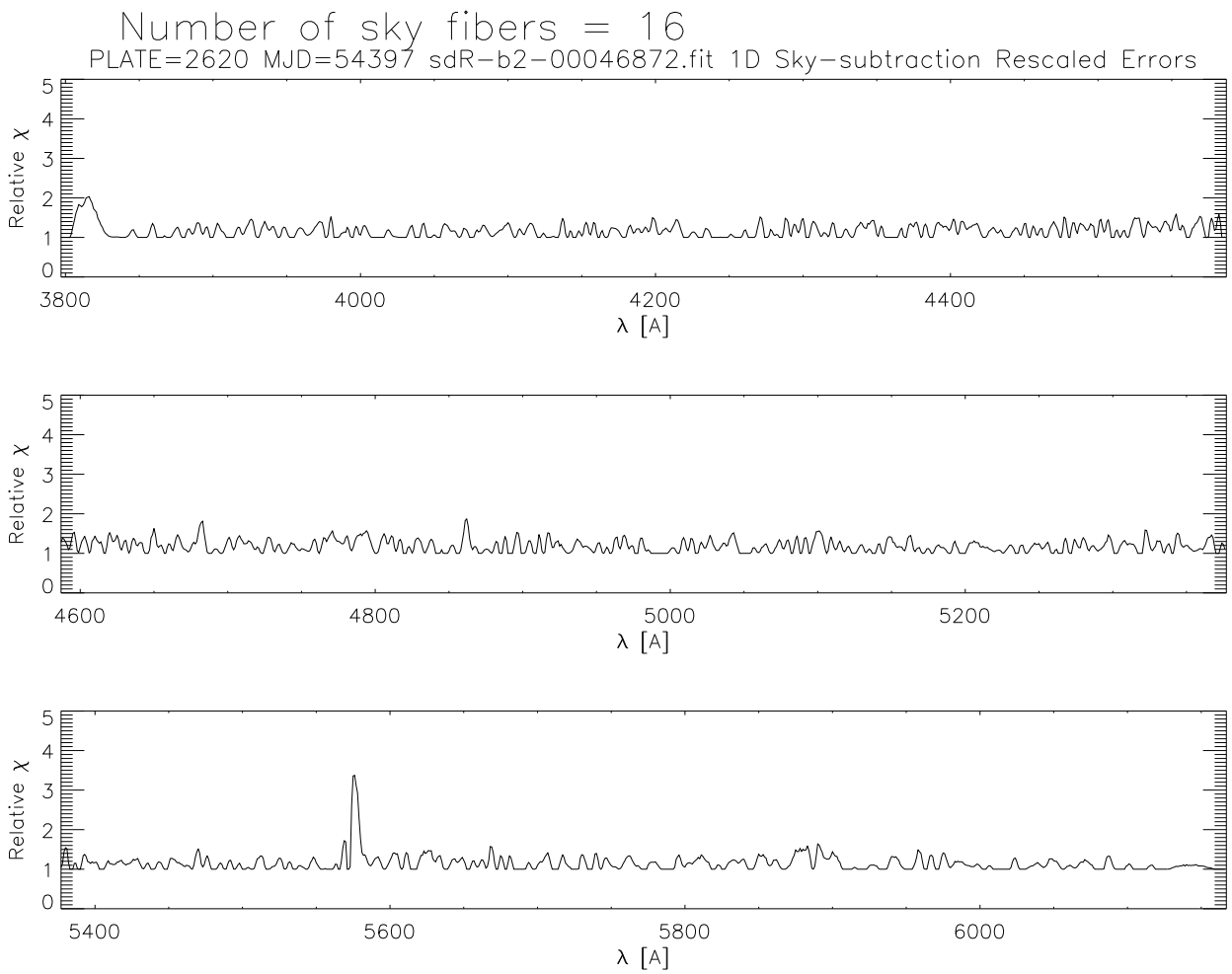

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046872.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

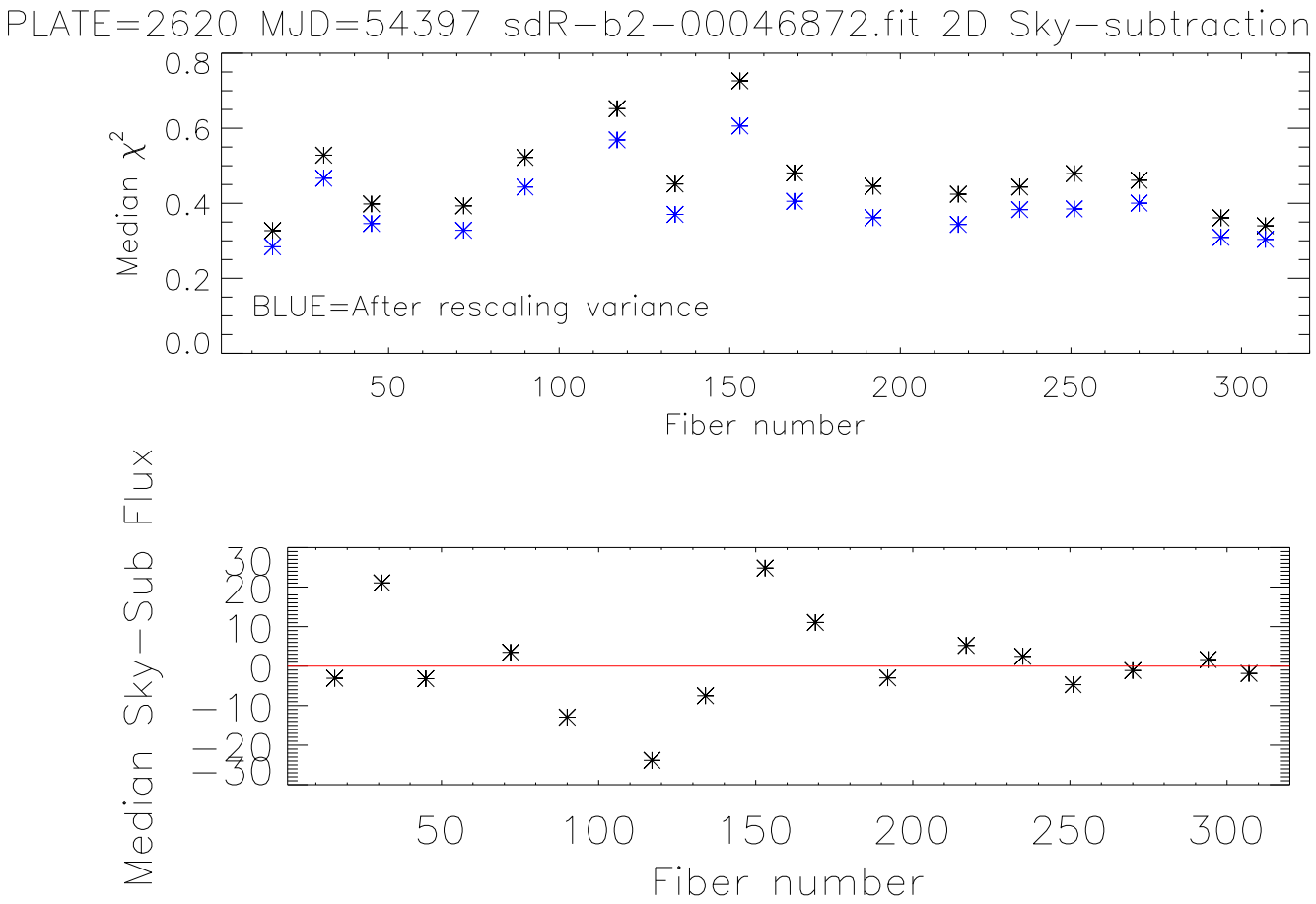
es= −0.0000

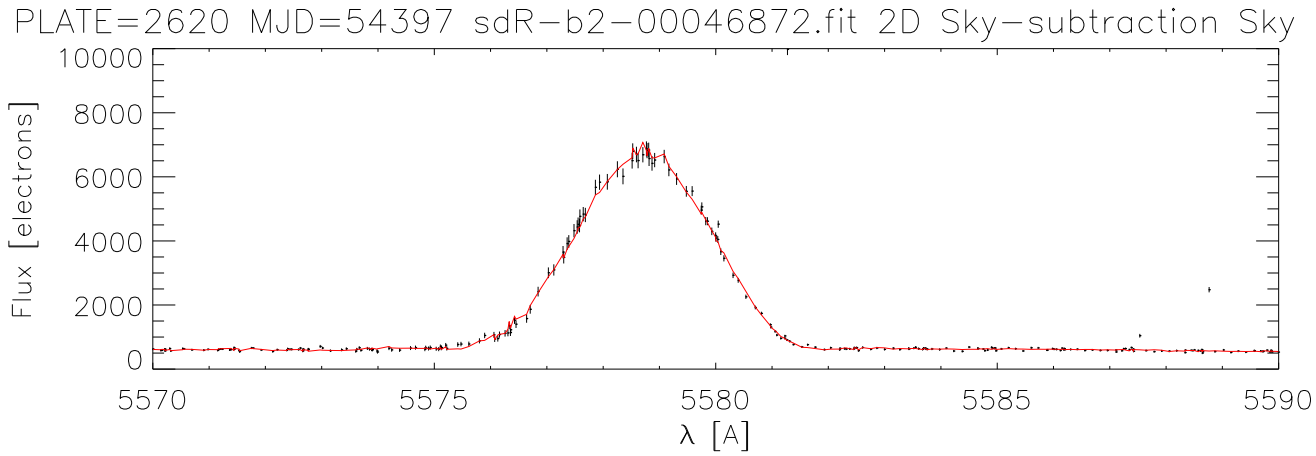

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

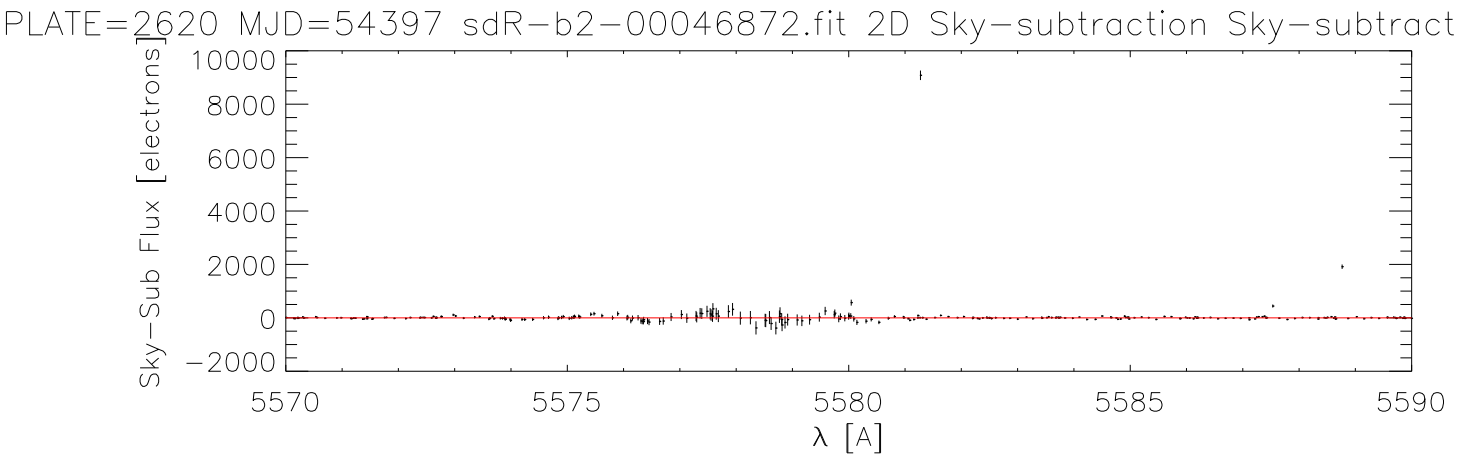

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

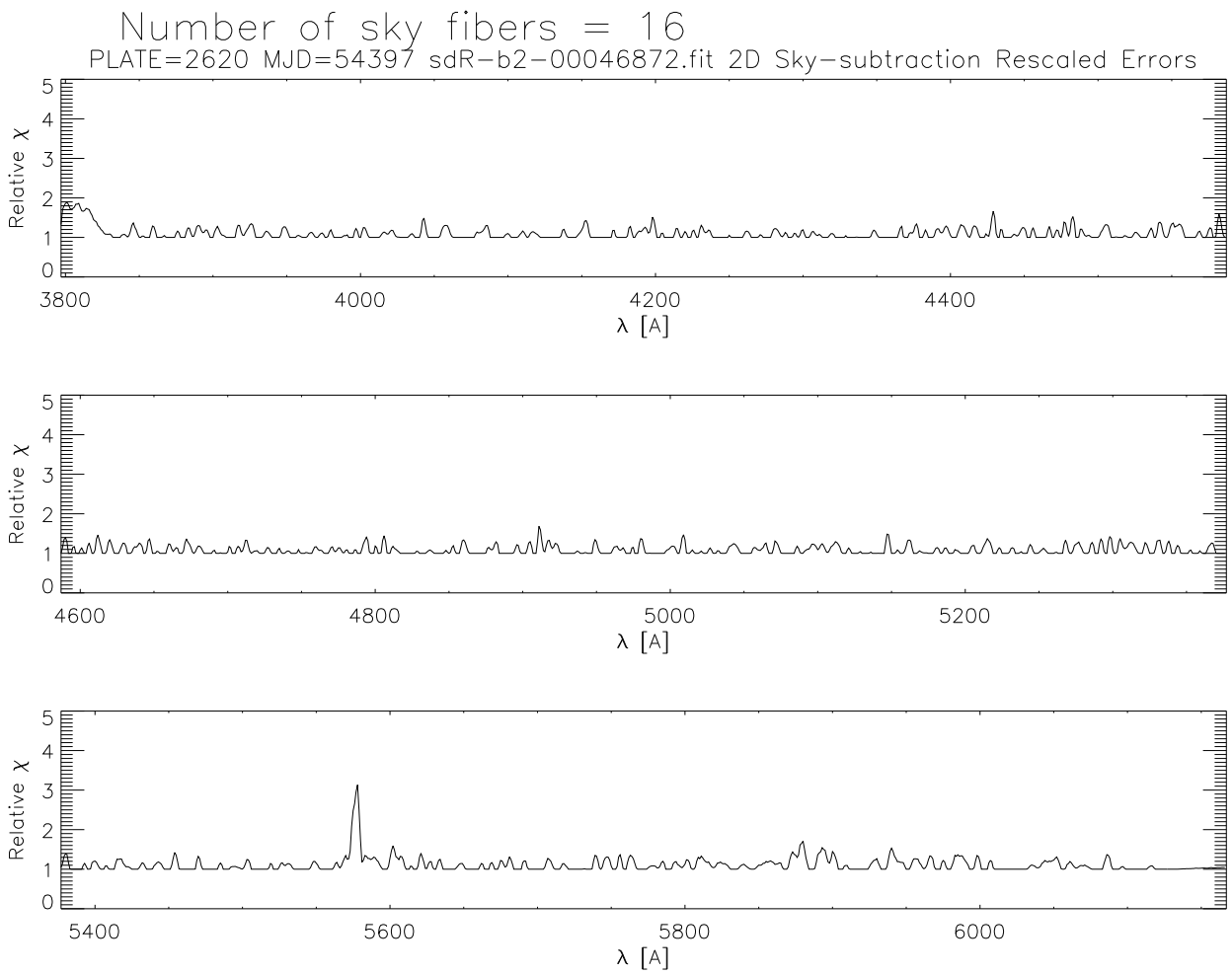

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
5570
5575
5580
5585
5590
λ [A]

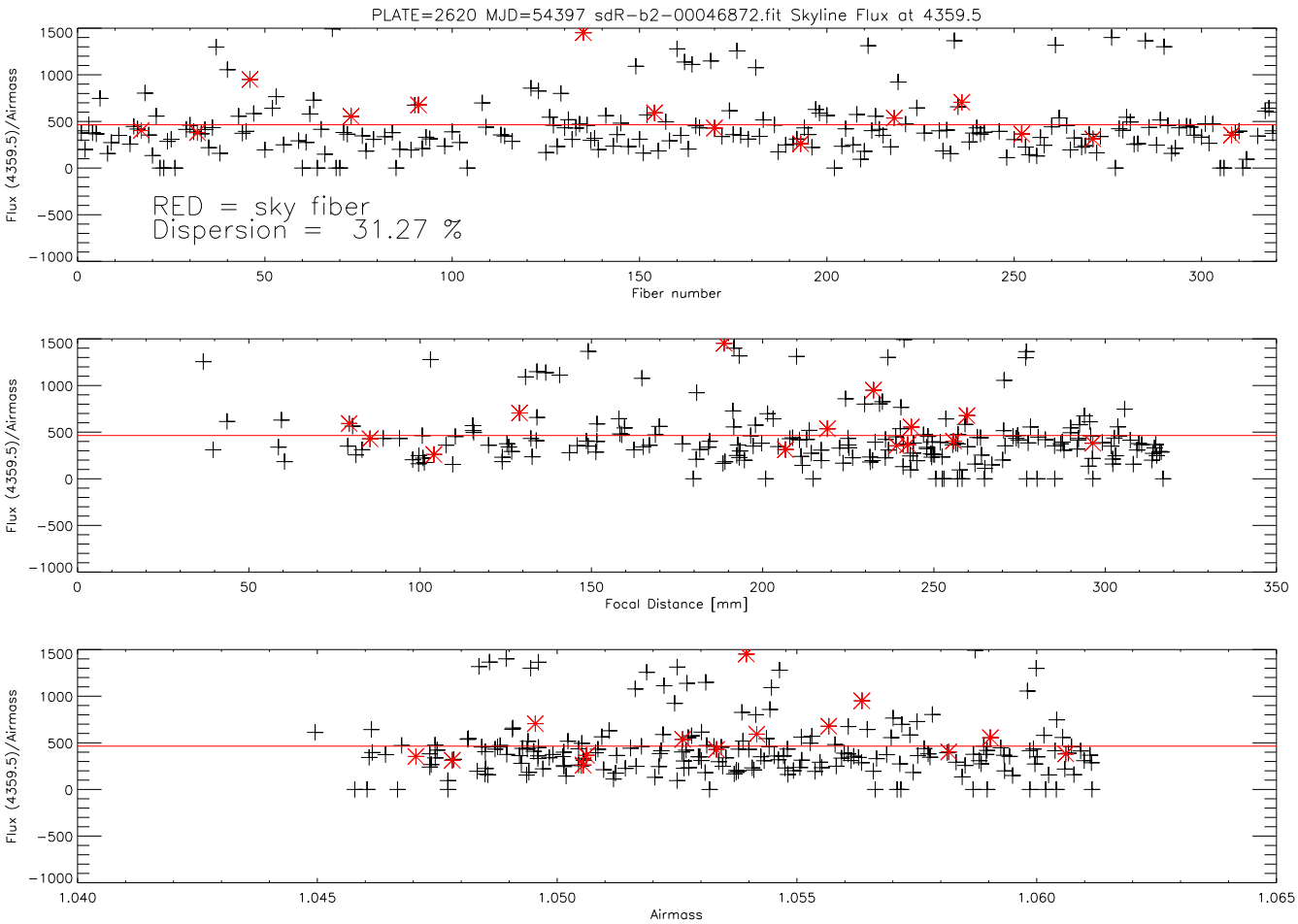

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046872.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

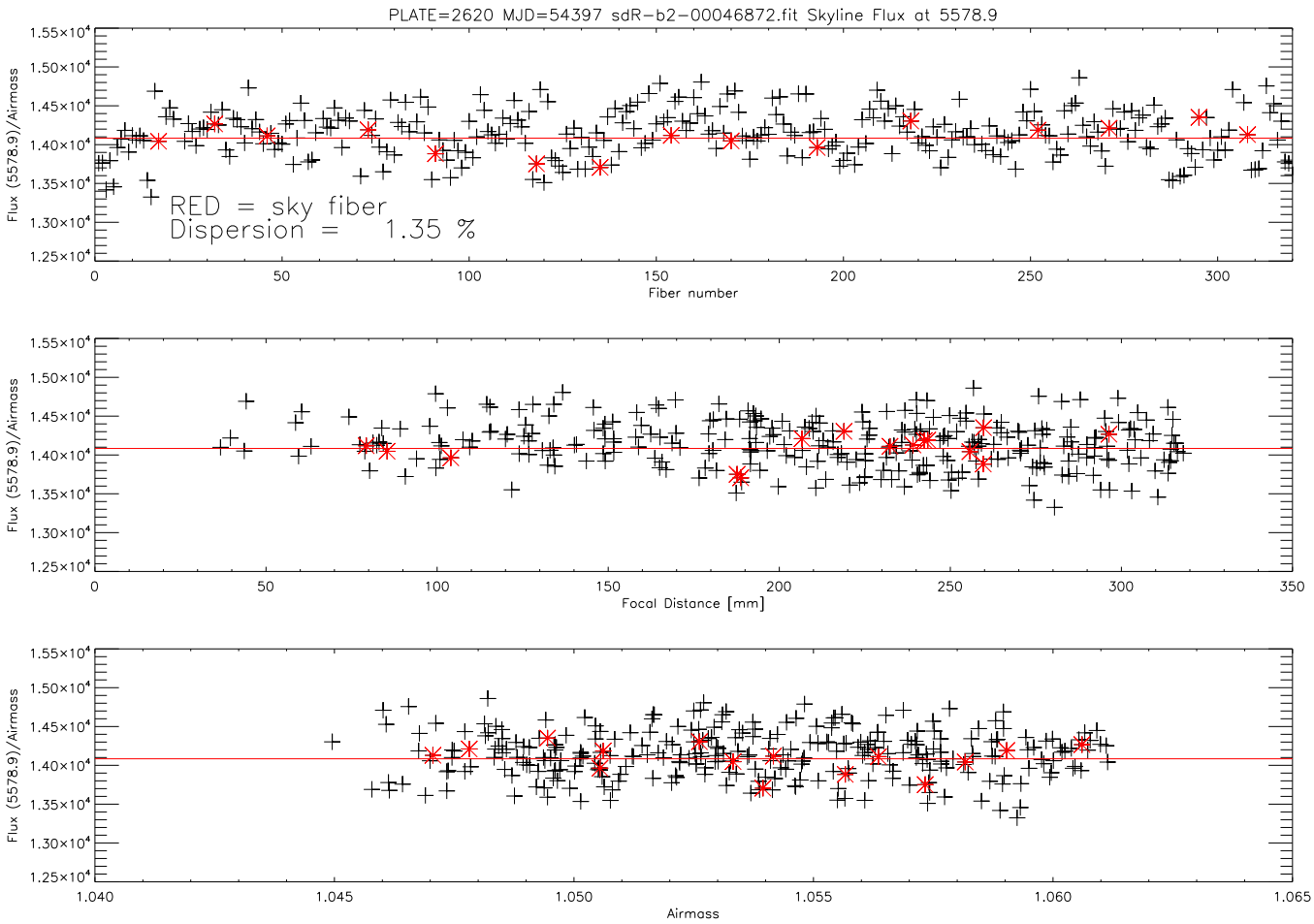

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

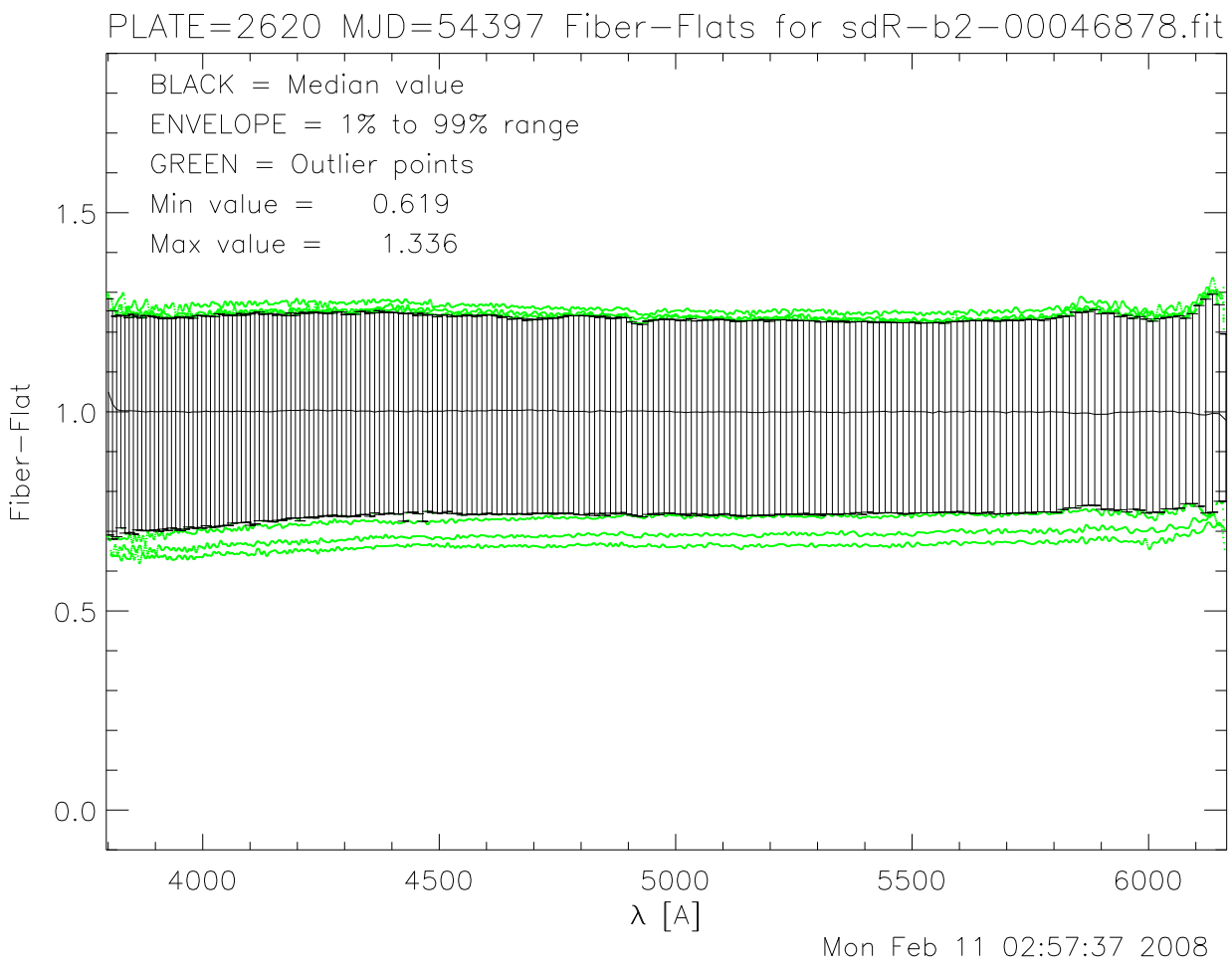

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

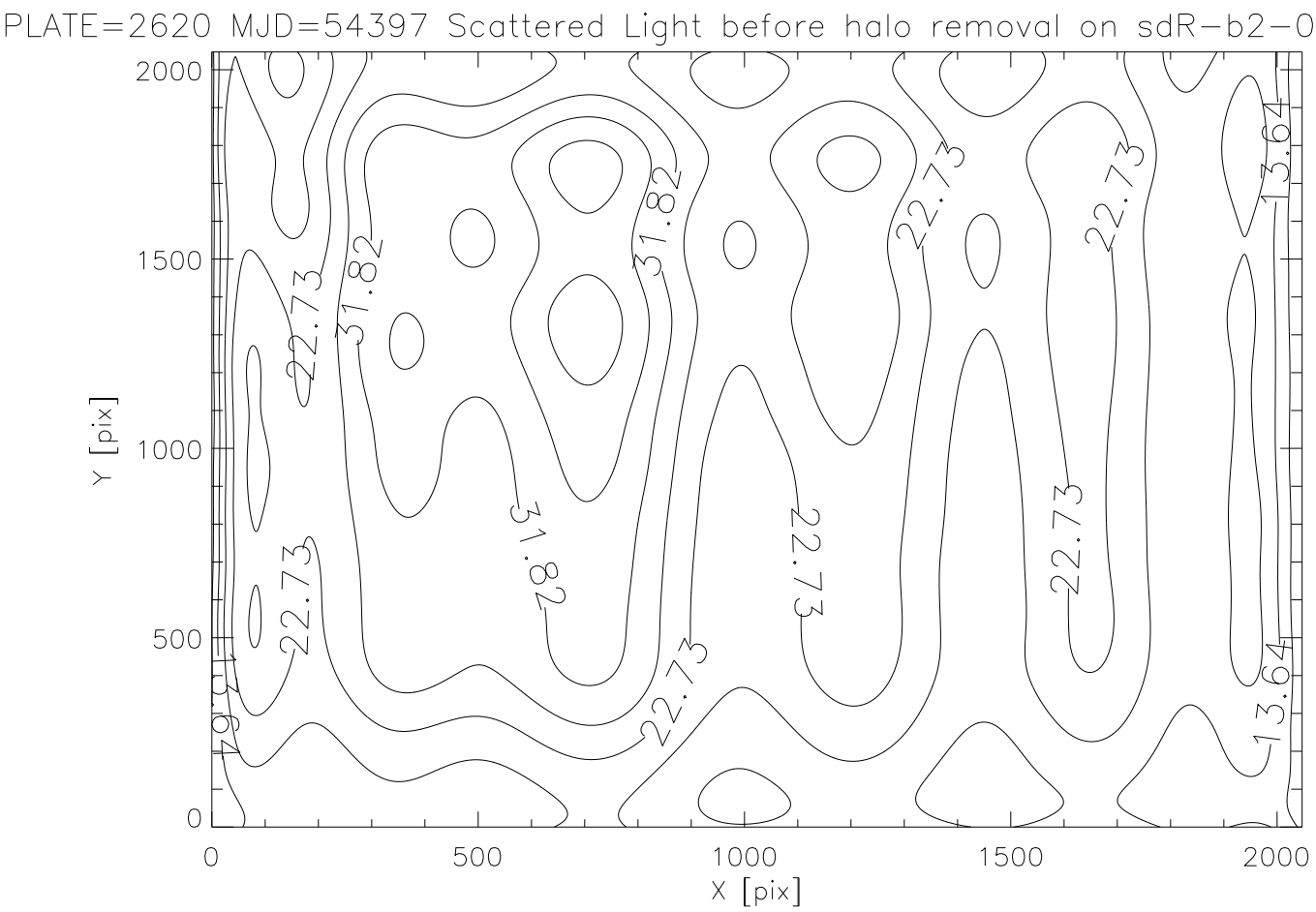

PLATE=2620 MJD=54397 sdR-b2-00046872.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
10000
8000
6000
4000
2000
0
-2000
5570
5575
5580
5585
5590
λ [A]

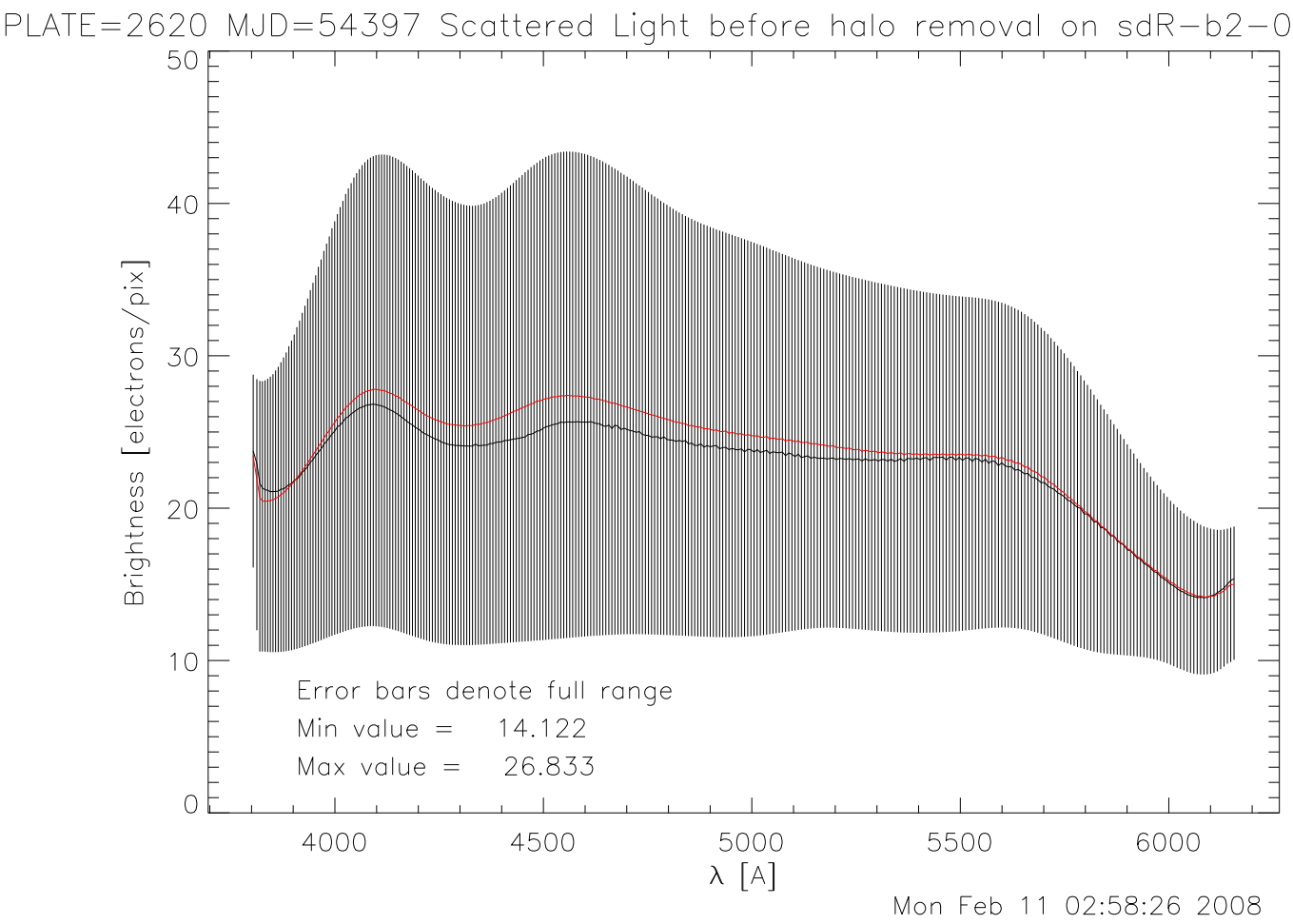

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046872.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

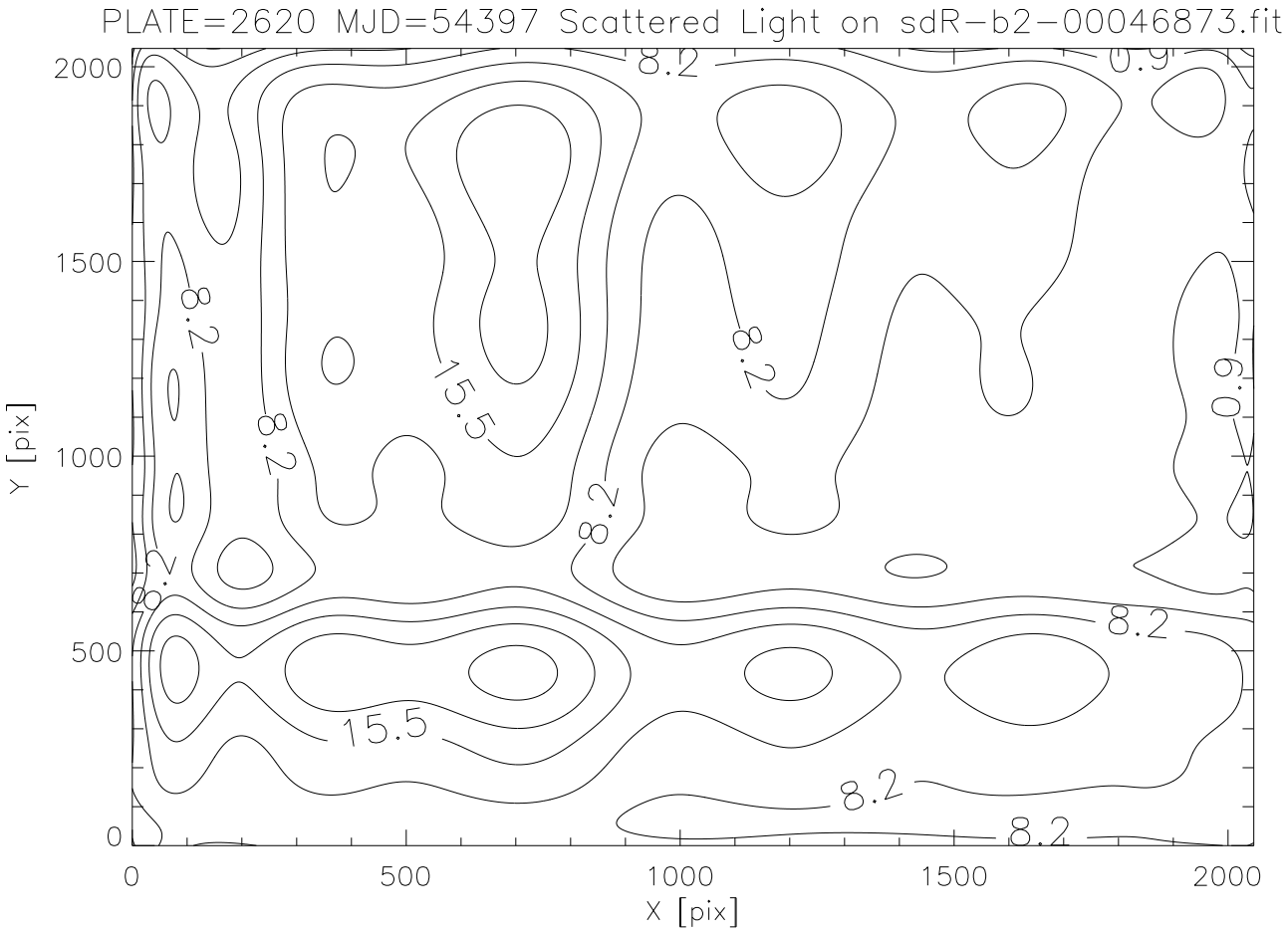

PLATE=2620 MJD=54397 sdR-b2-00046872.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 31.27 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

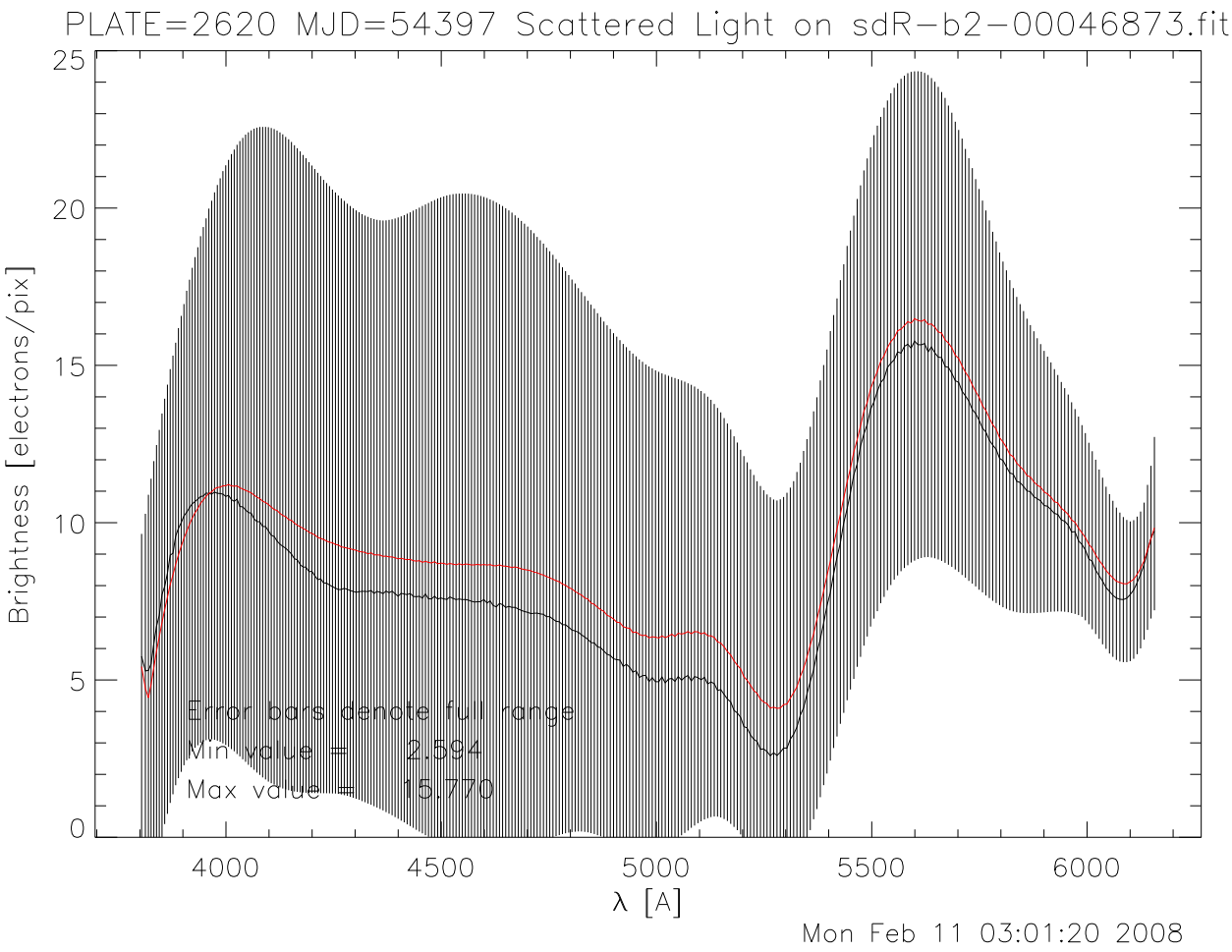

PLATE=2620 MJD=54397 sdR-b2-00046872.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.35 %
Fiber number
Focal Distance [mm]
Airmass

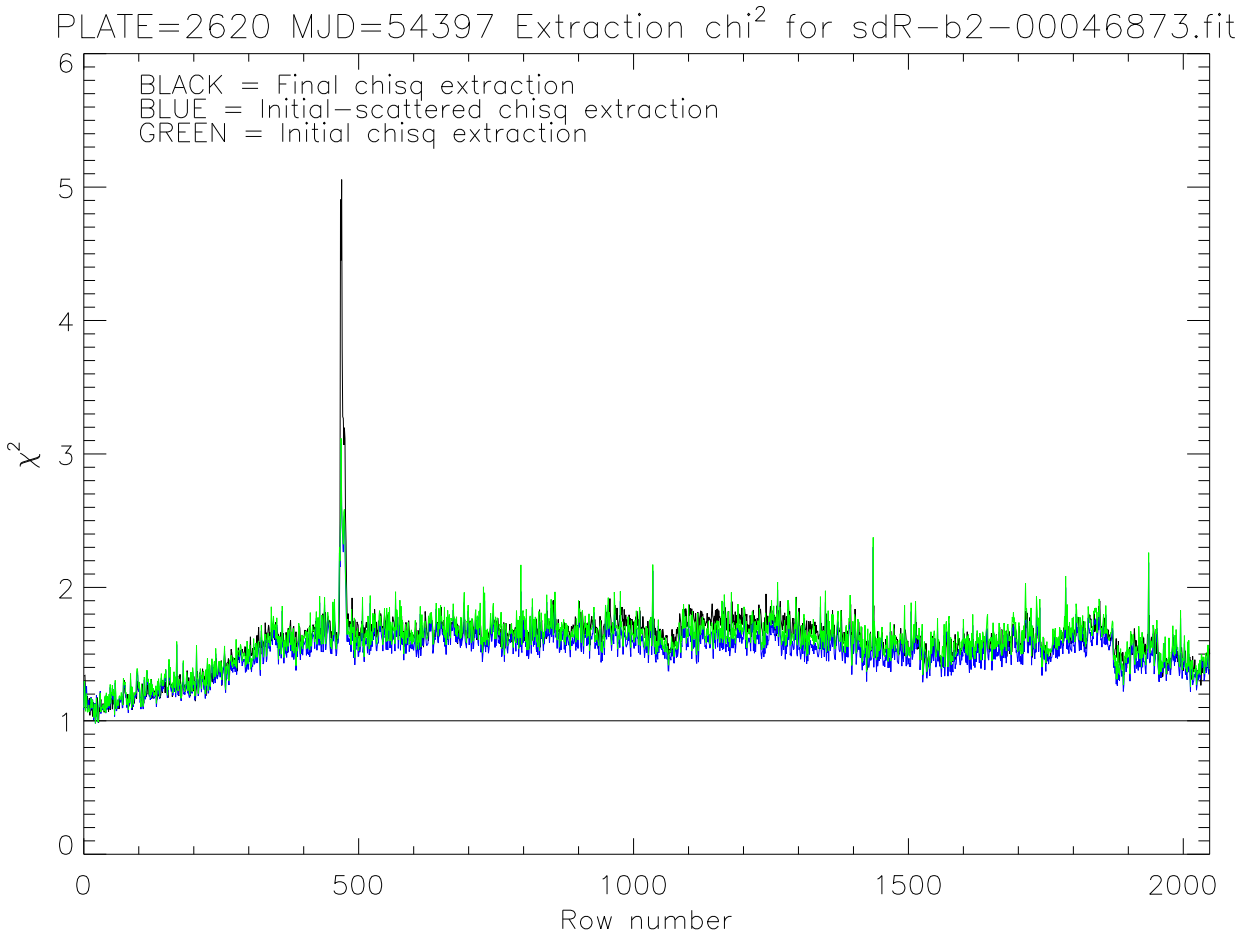

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 02:57:37 2008

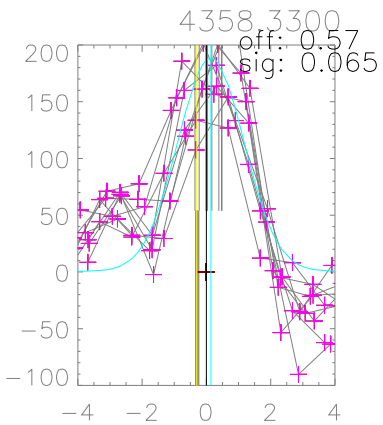

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR−b2−00046873.f
Y [pix]
X [pix]
0
500
1000
1500
2000
31.82
22.73
13.64

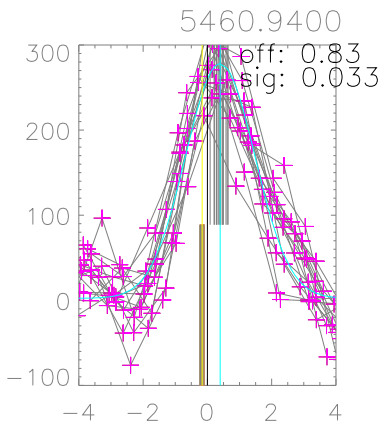

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046873.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 14.122
Max value = 26.833
Mon Feb 11 02:58:26 2008

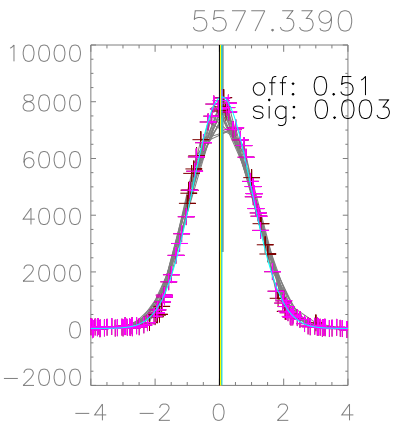

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046873.fit
8.2
0.9
8.2
15.5
8.2
8.2
8.2
6.0
8.2
8.2
15.5
8.2
8.2
Y [pix]
X [pix]
0
500
1000
1500
2000

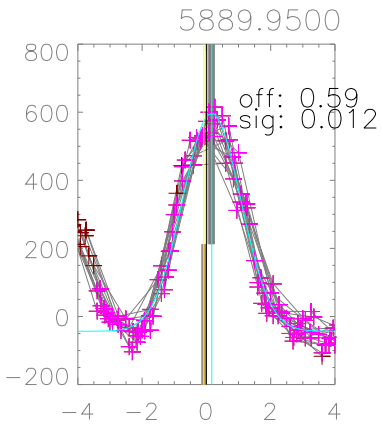

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046873.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.564
Max value = 15.770
Mon Feb 11 03:01:20 2008

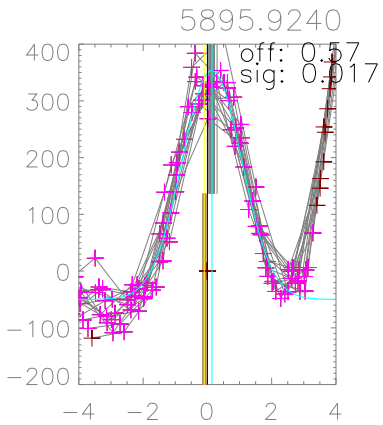

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046873.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

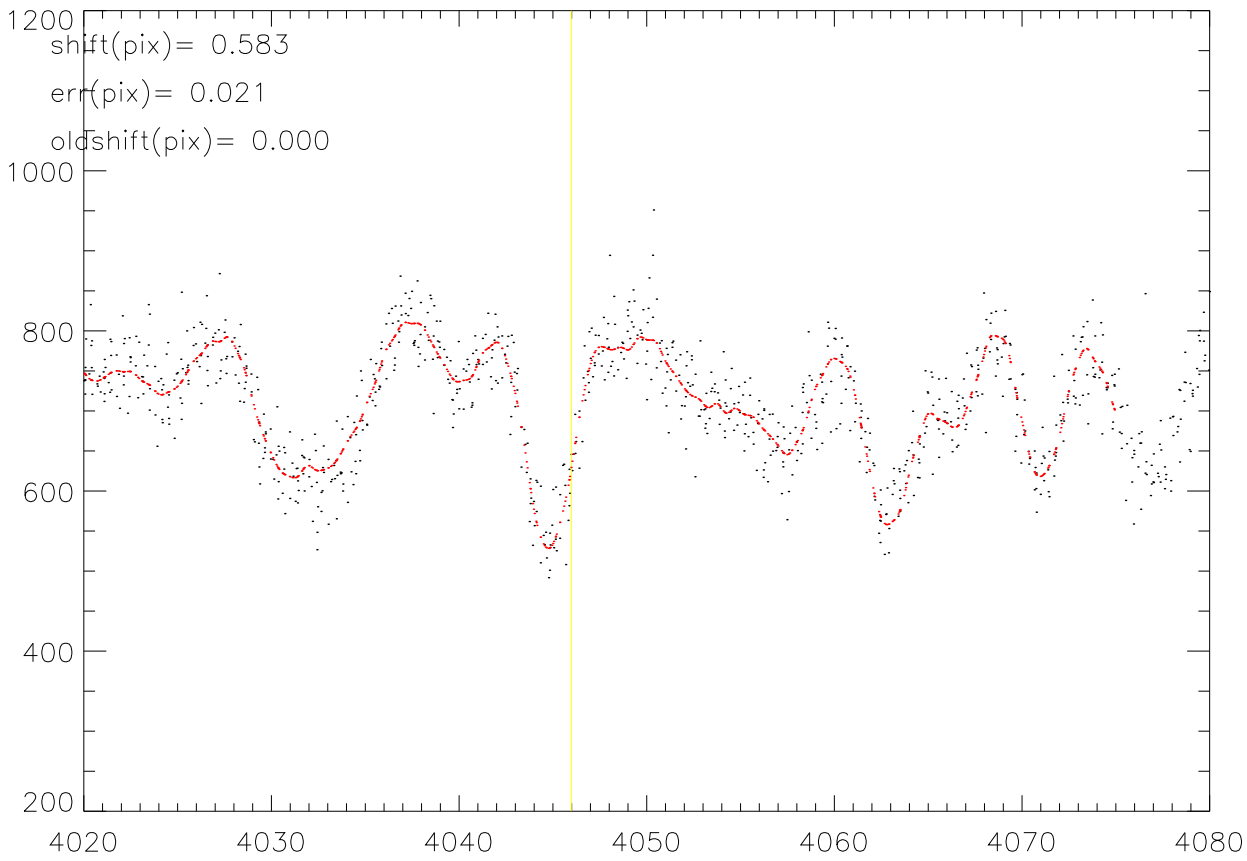

4358.3300
off: 0.57
sig: 0.065

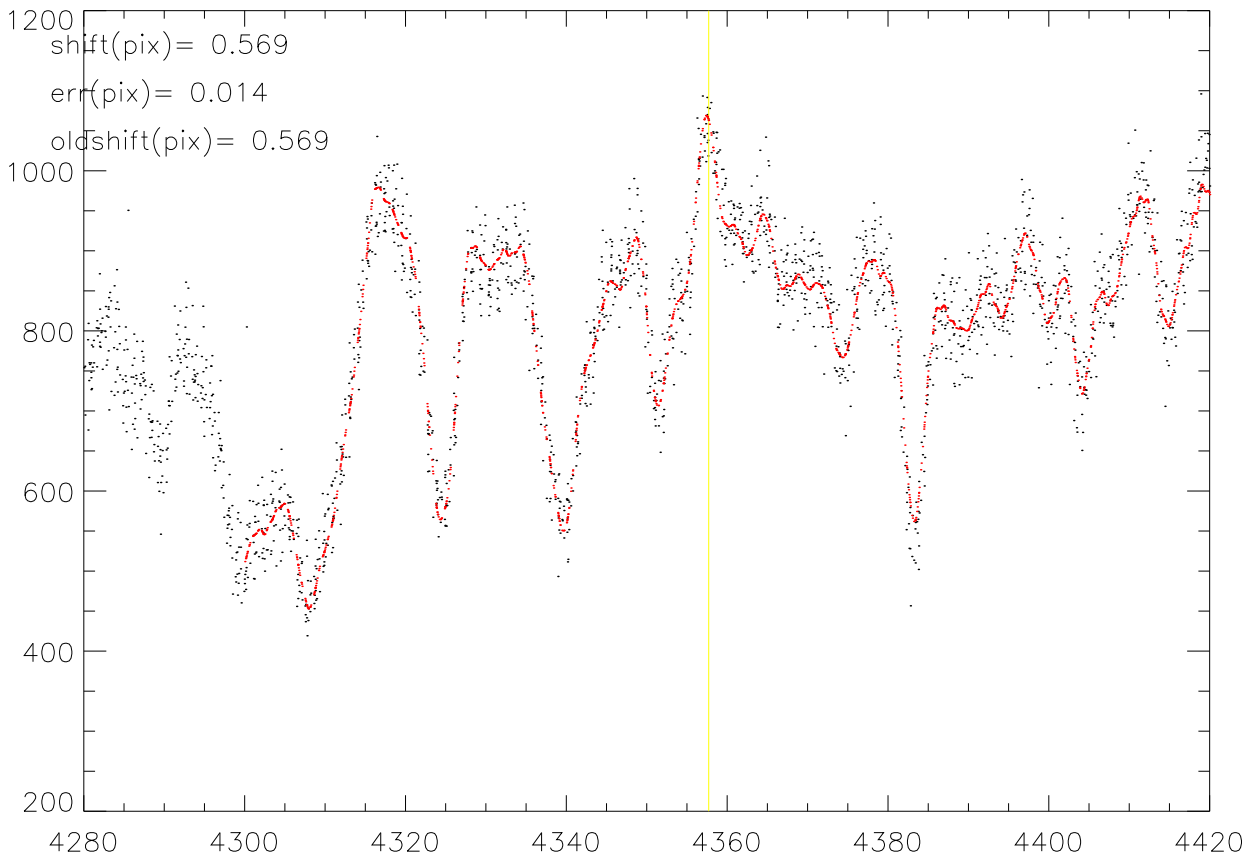

5460.9400
off: 0.83
sig: 0.033

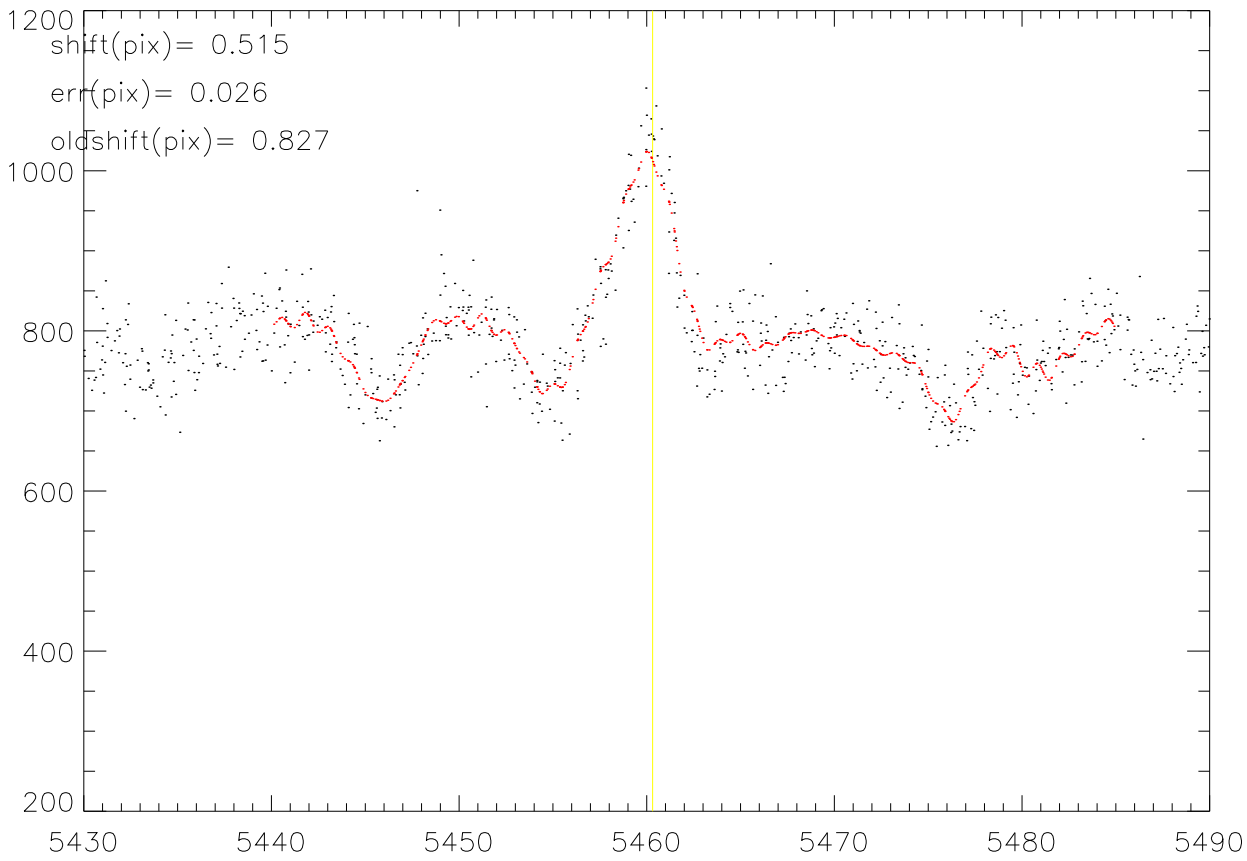

5577.3390
off: 0.51
sig: 0.003

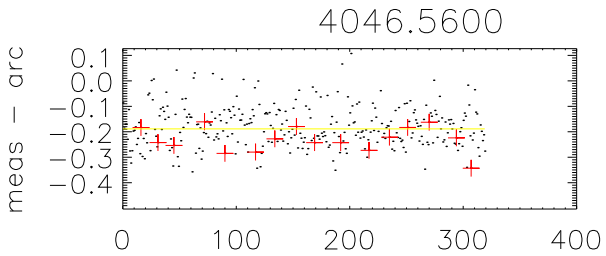

5889.9500
off: 0.59
sig: 0.012

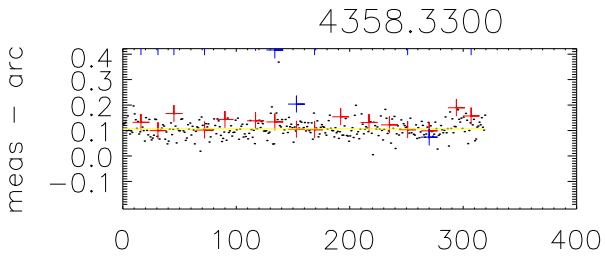

5895.9240
off: 0.57
sig: 0.017

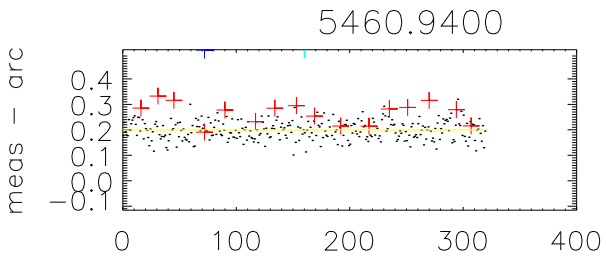

shift(pix)= 0.583
err(pix)= 0.021
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

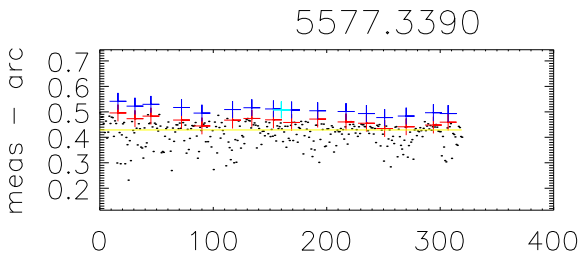

shift(pix)= 0.569
err(pix)= 0.014
oldshift(pix)= 0.569
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

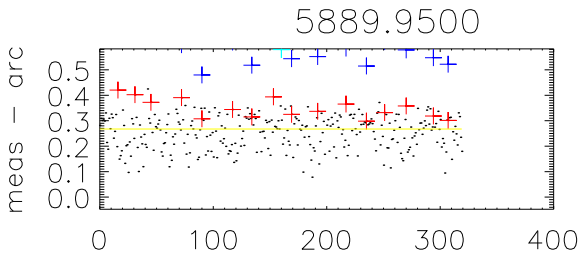

shift(pix)= 0.515
err(pix)= 0.026
oldshift(pix)= 0.827
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

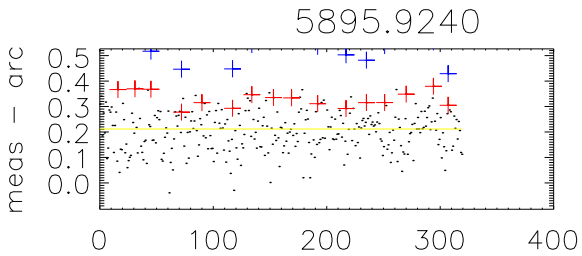

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

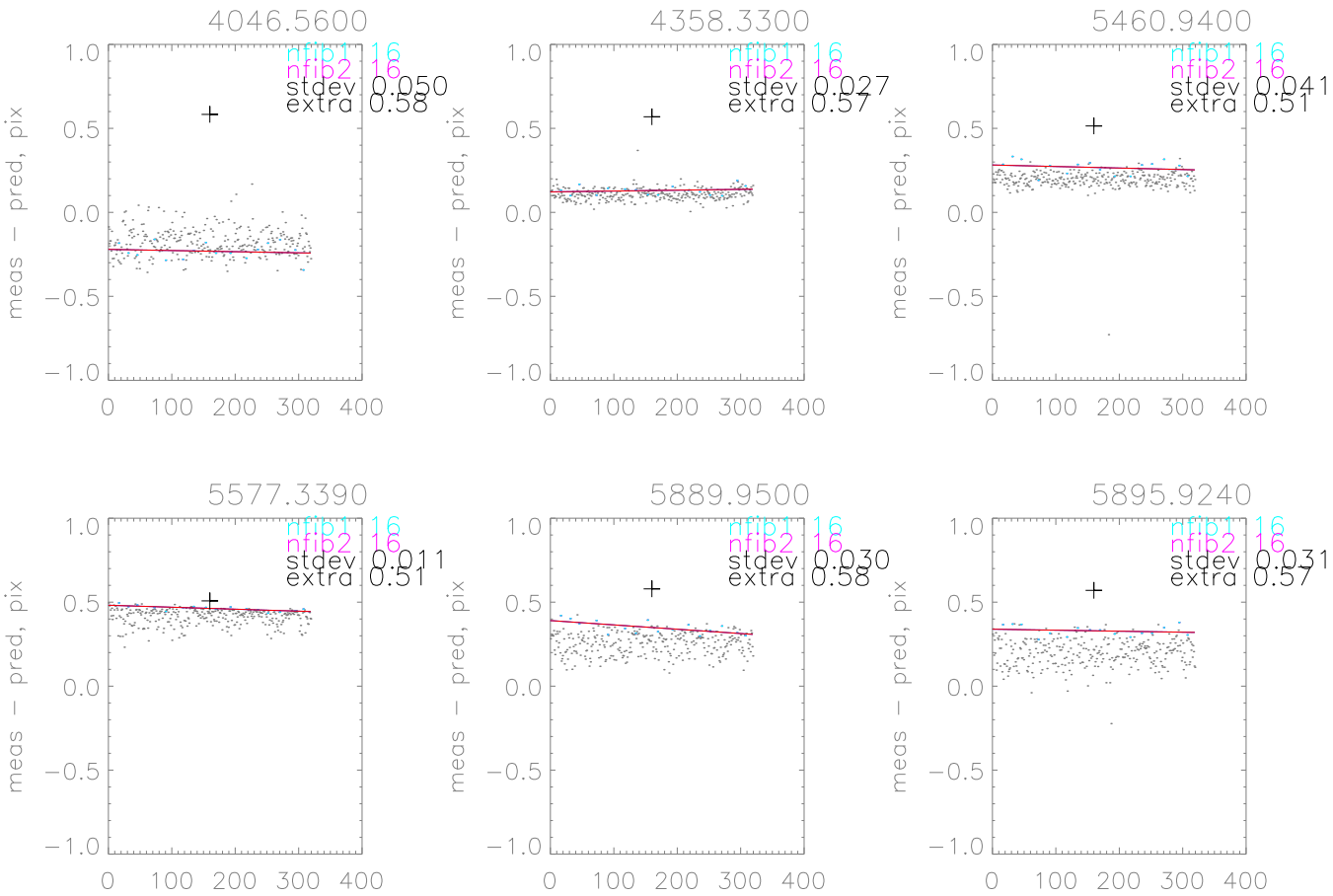

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

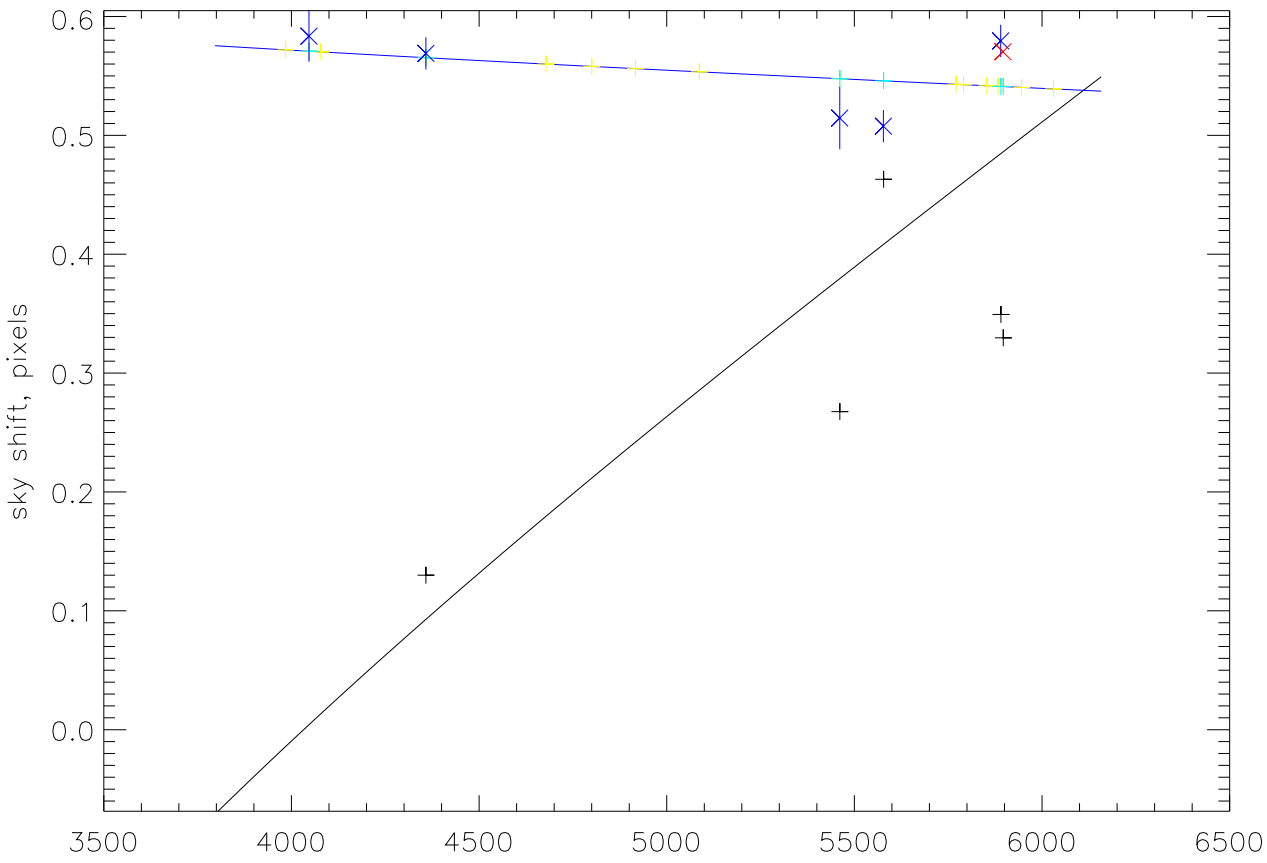

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

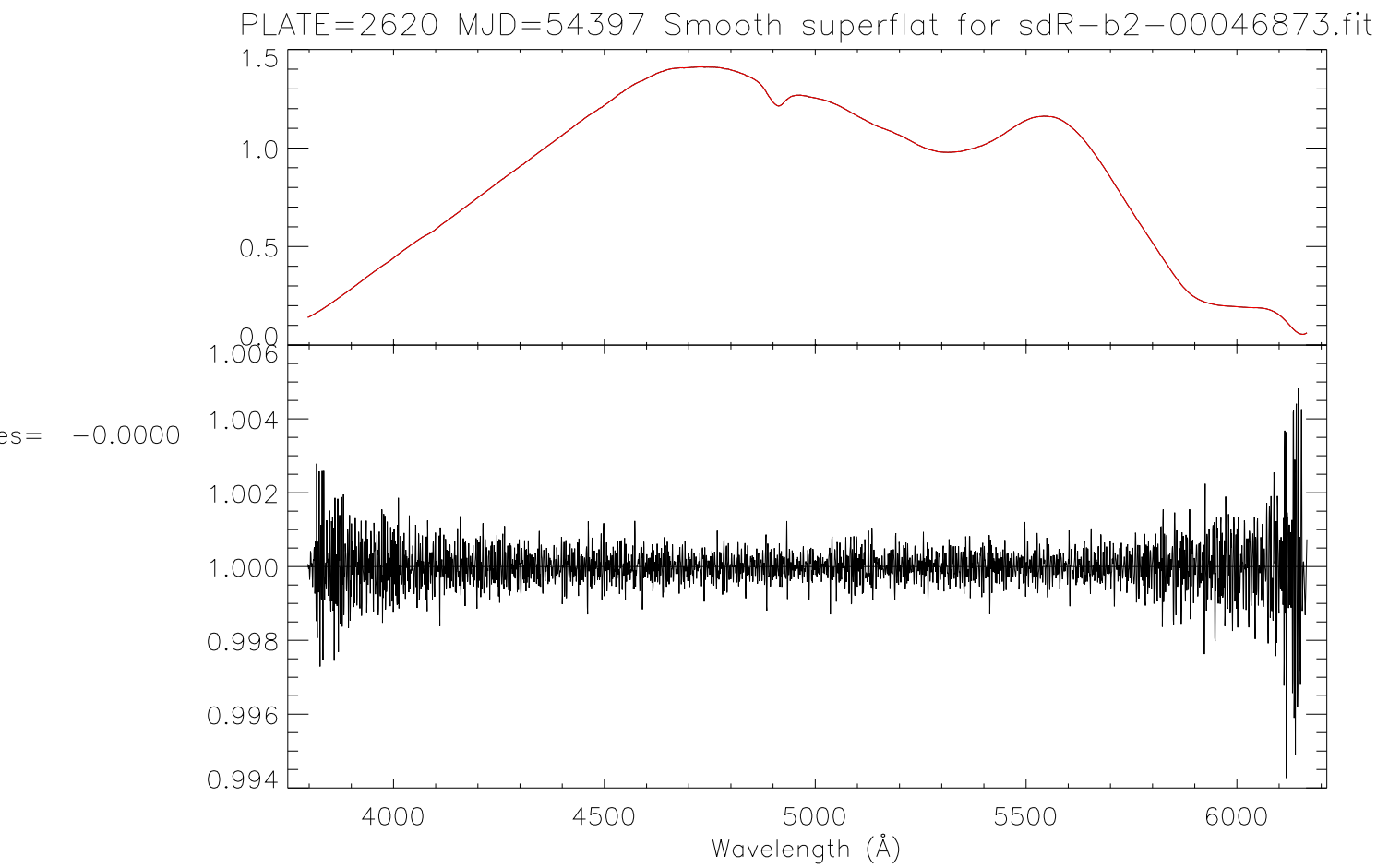

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


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

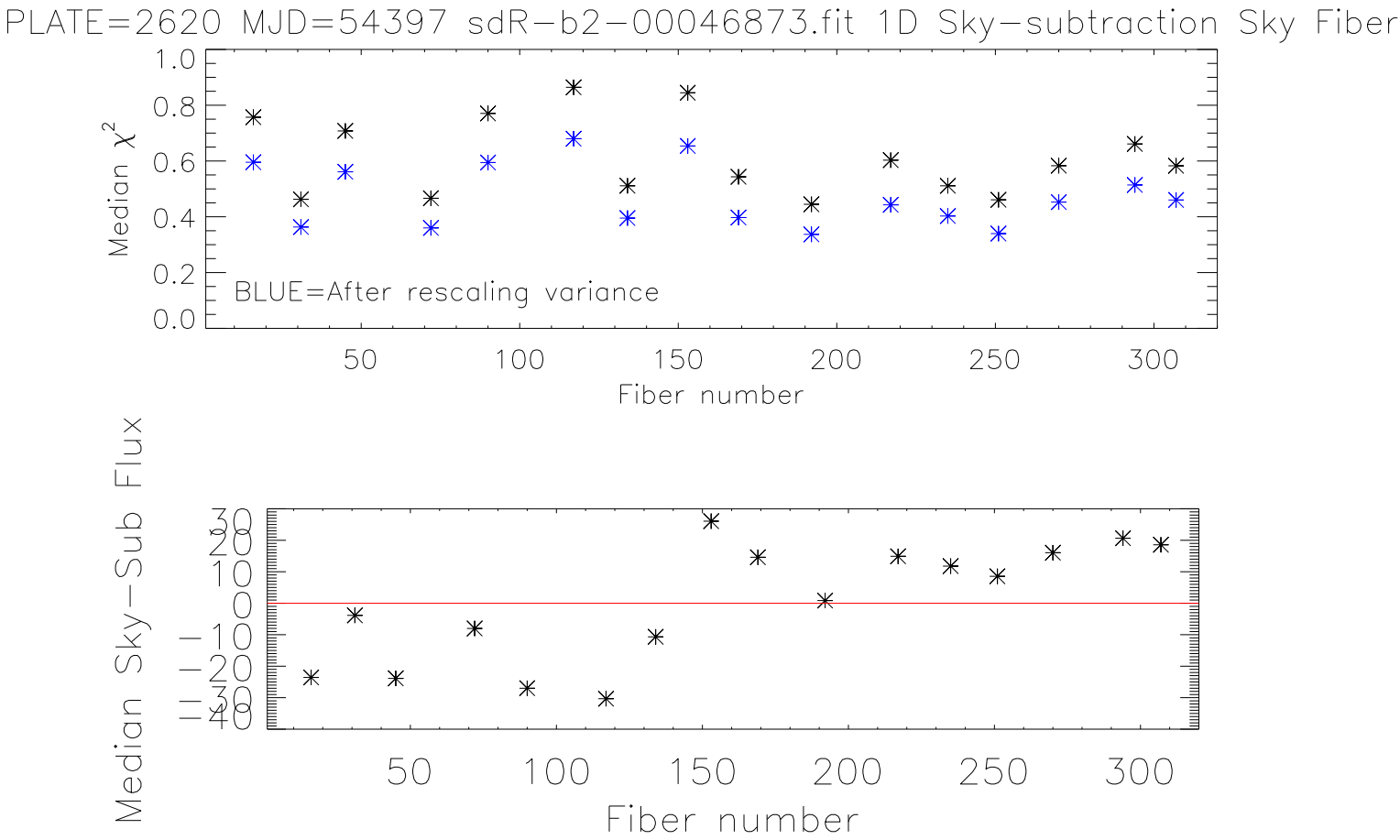

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

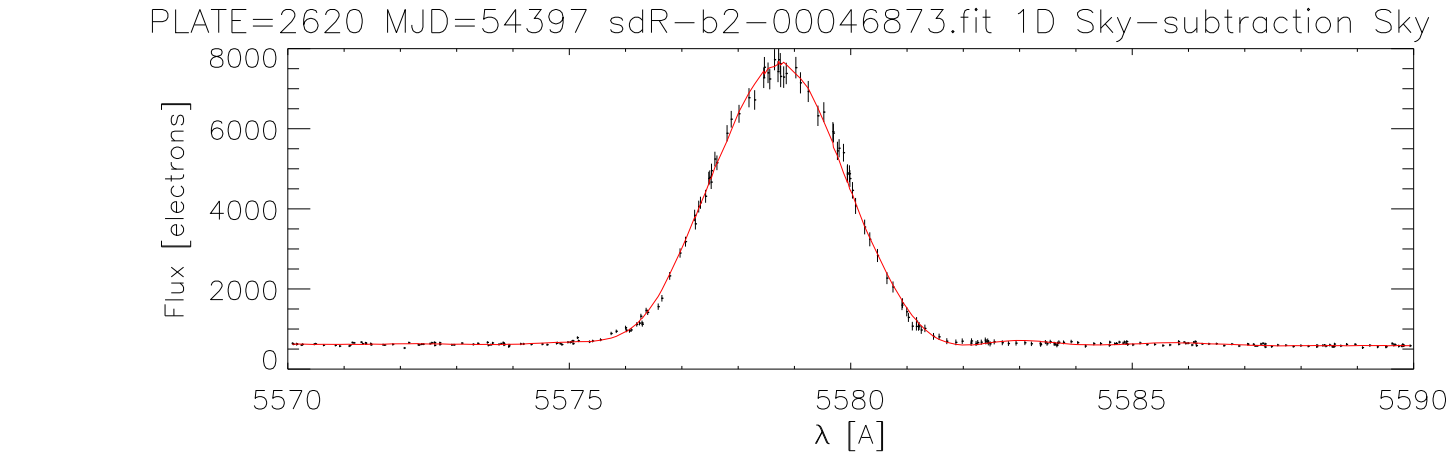

4046.5600
nfib1 16
nfib2 16
stdev 0.050
extra 0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.027
extra 0.57
5460.9400
nfib1 16
nfib2 16
stdev 0.041
extra 0.51
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.51
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.58
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.57
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

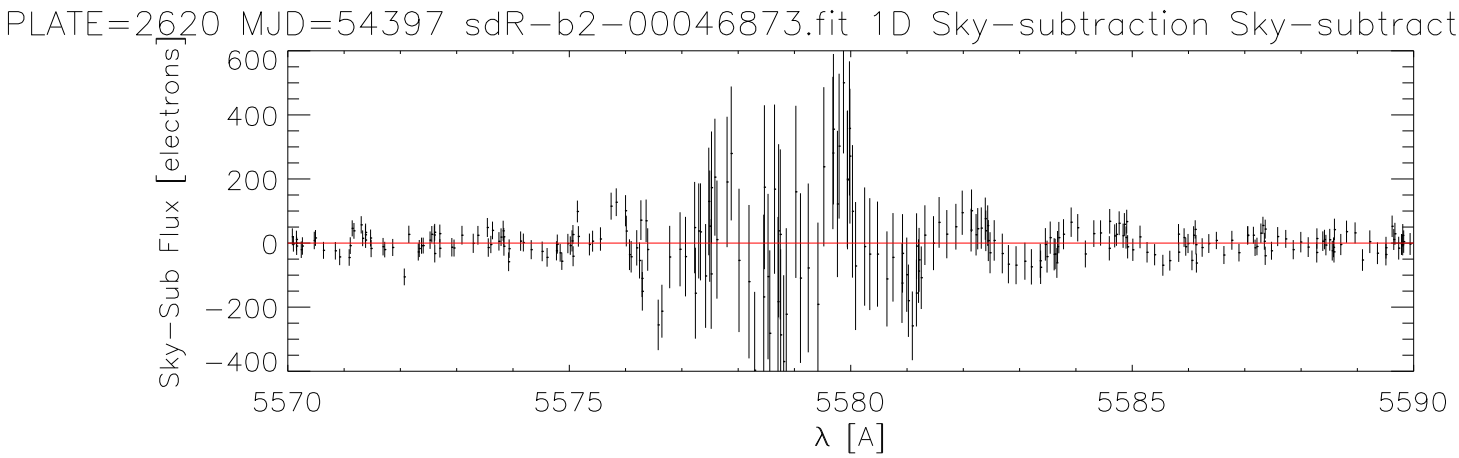

sky shift, pixels
0.6
0.5
0.4
0.3
0.2
0.1
0.0
3500
4000
4500
5000
5500
6000
6500

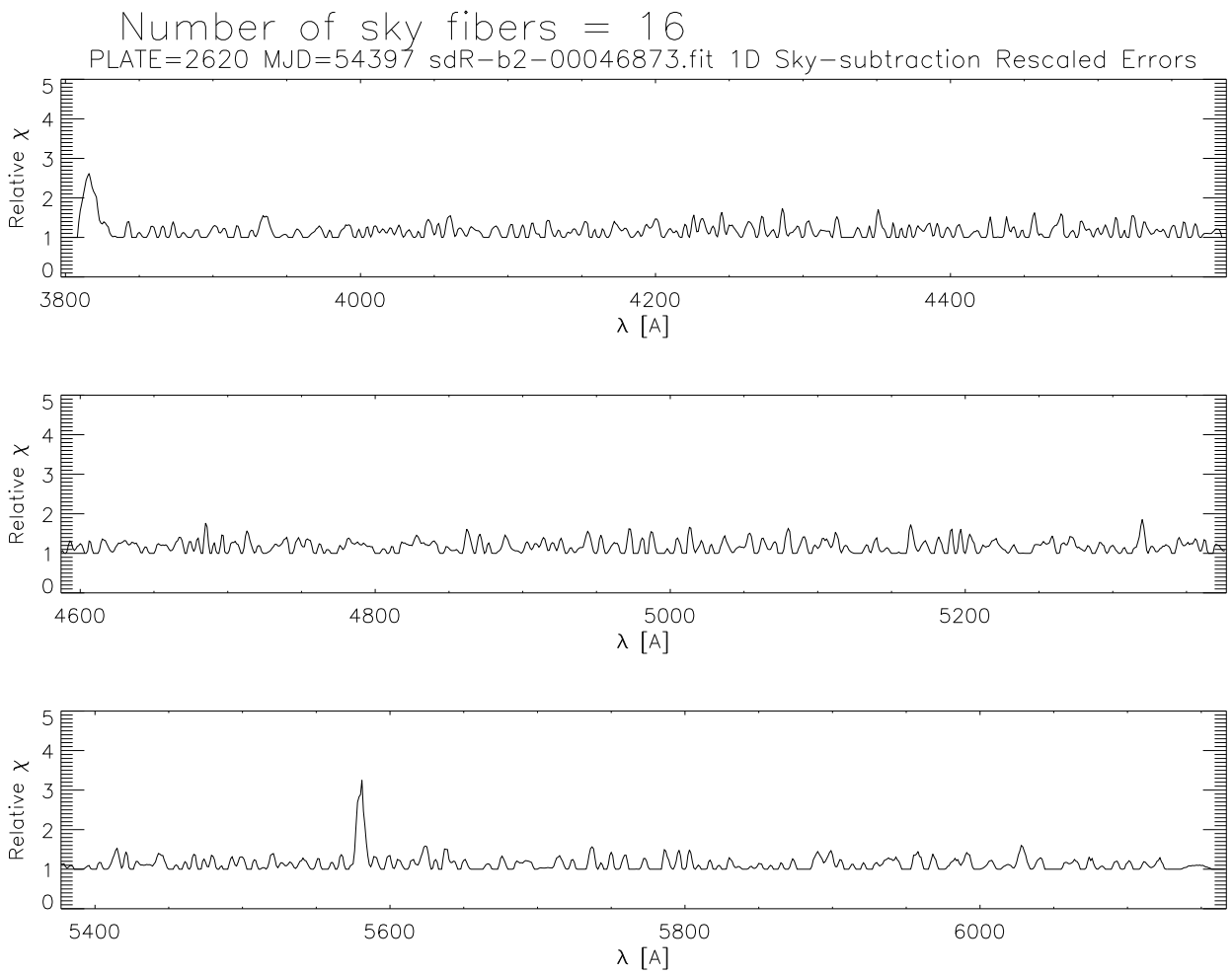

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046873.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

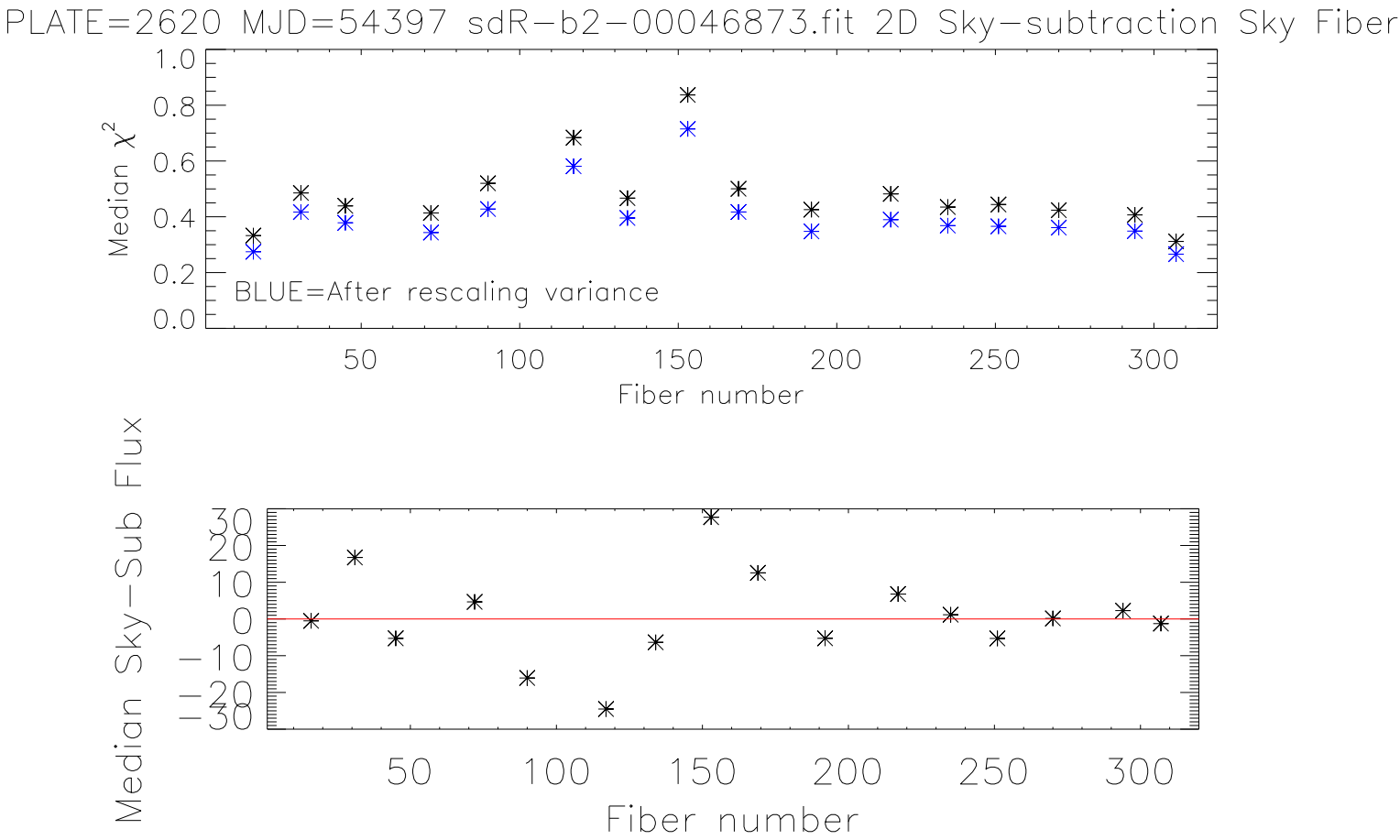
es= −0.0000

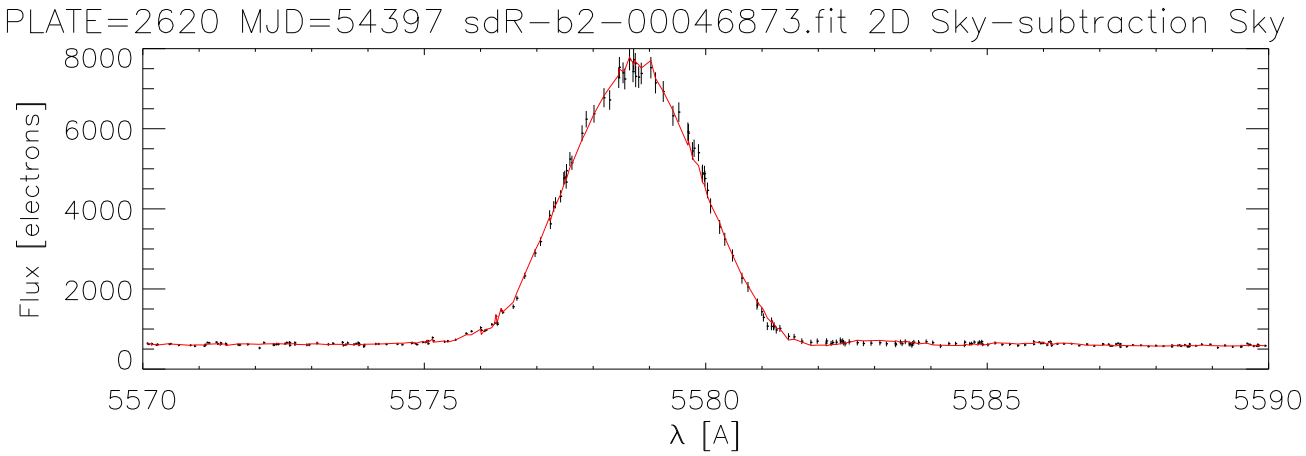

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

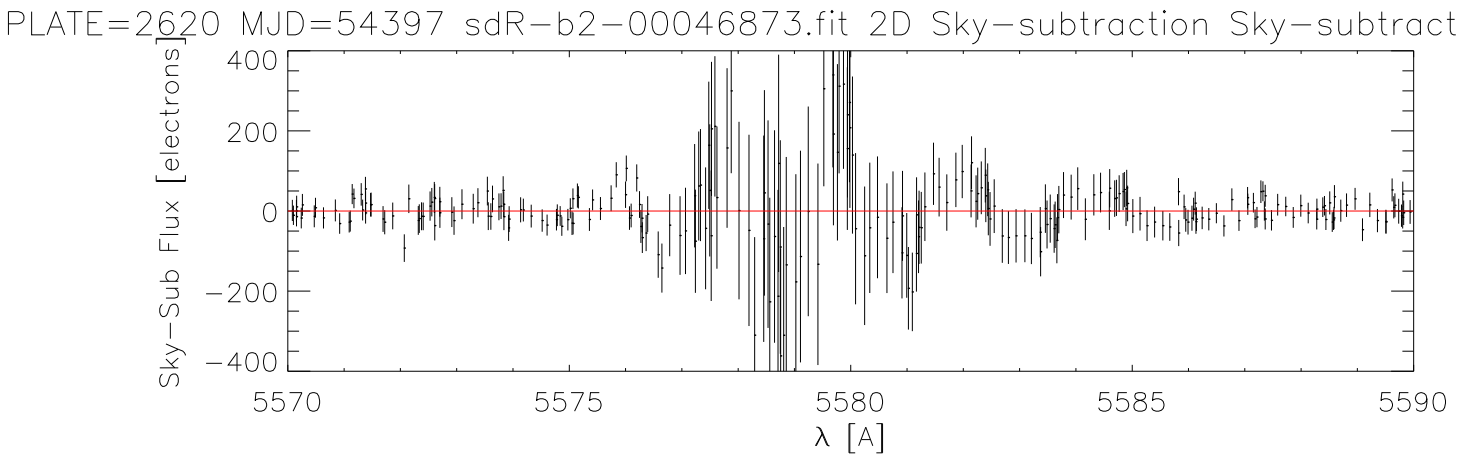

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

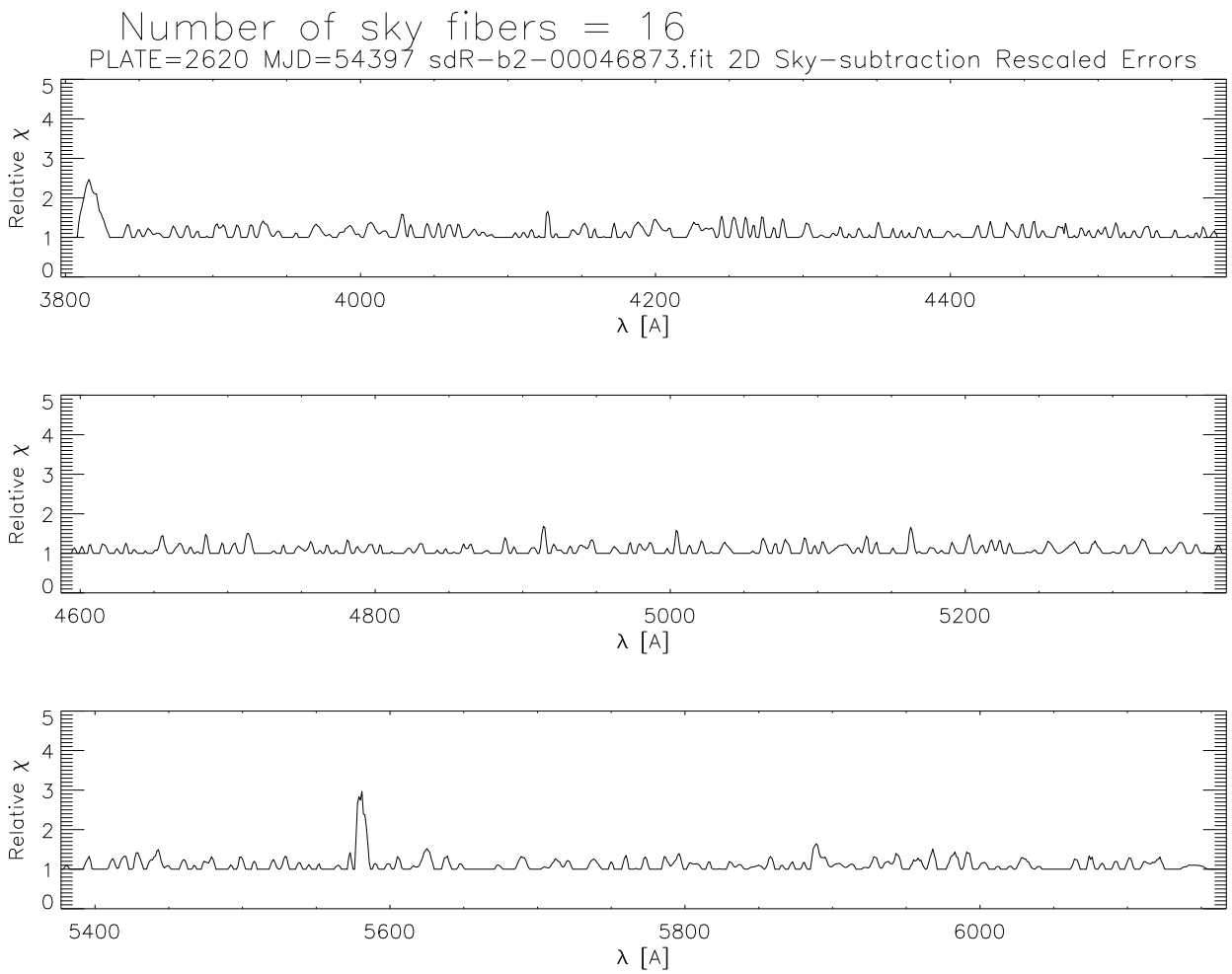

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

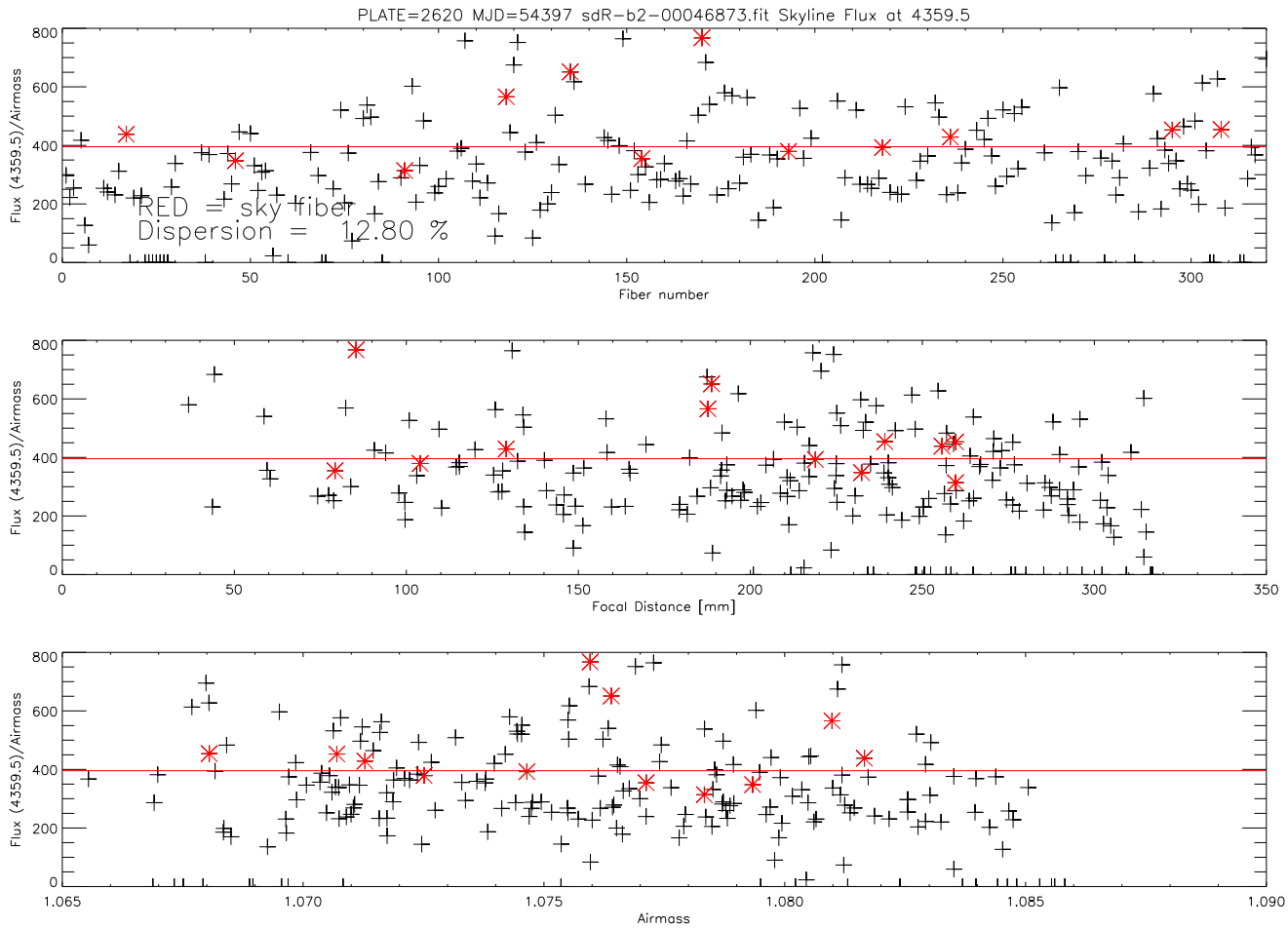

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046873.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

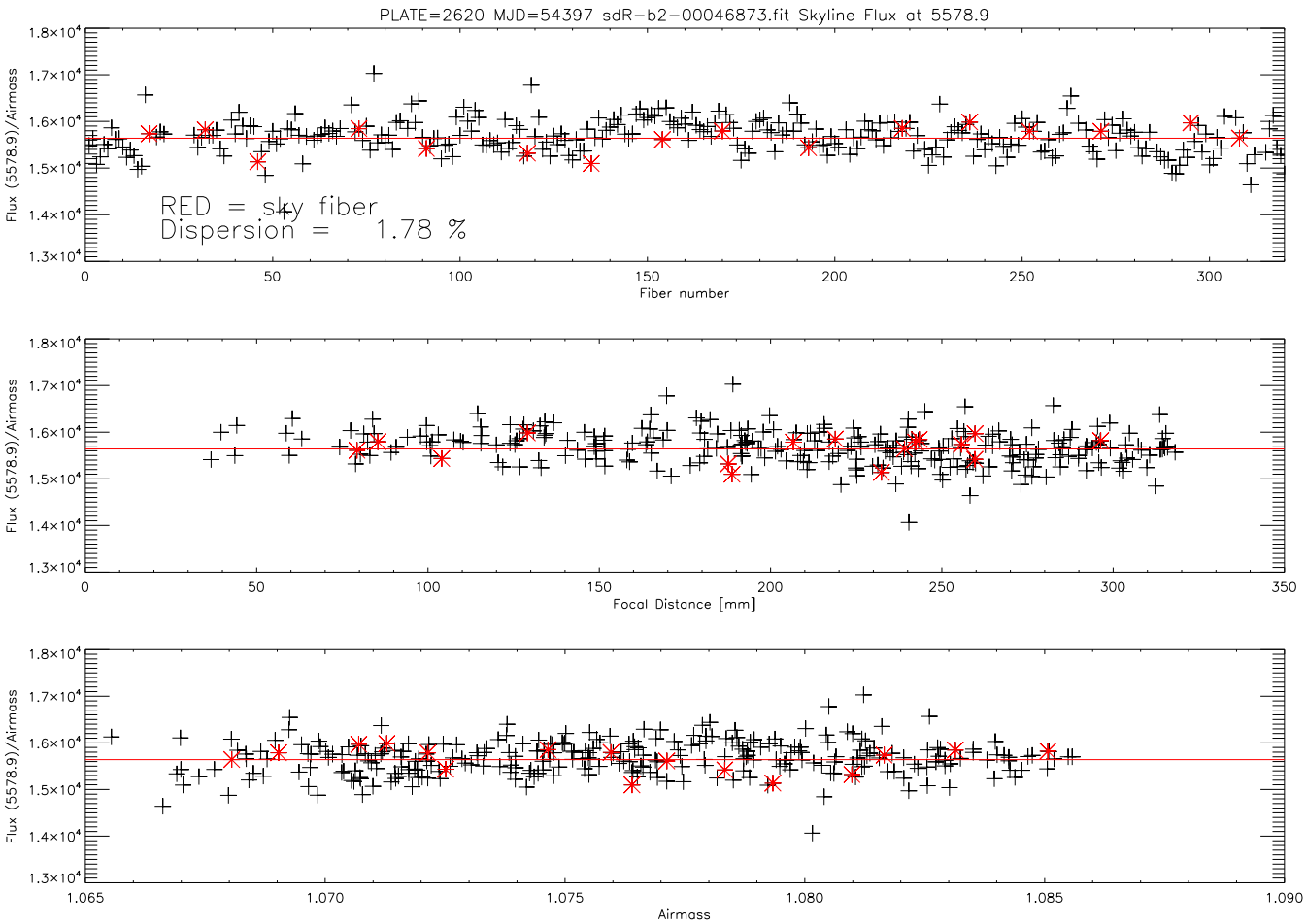

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

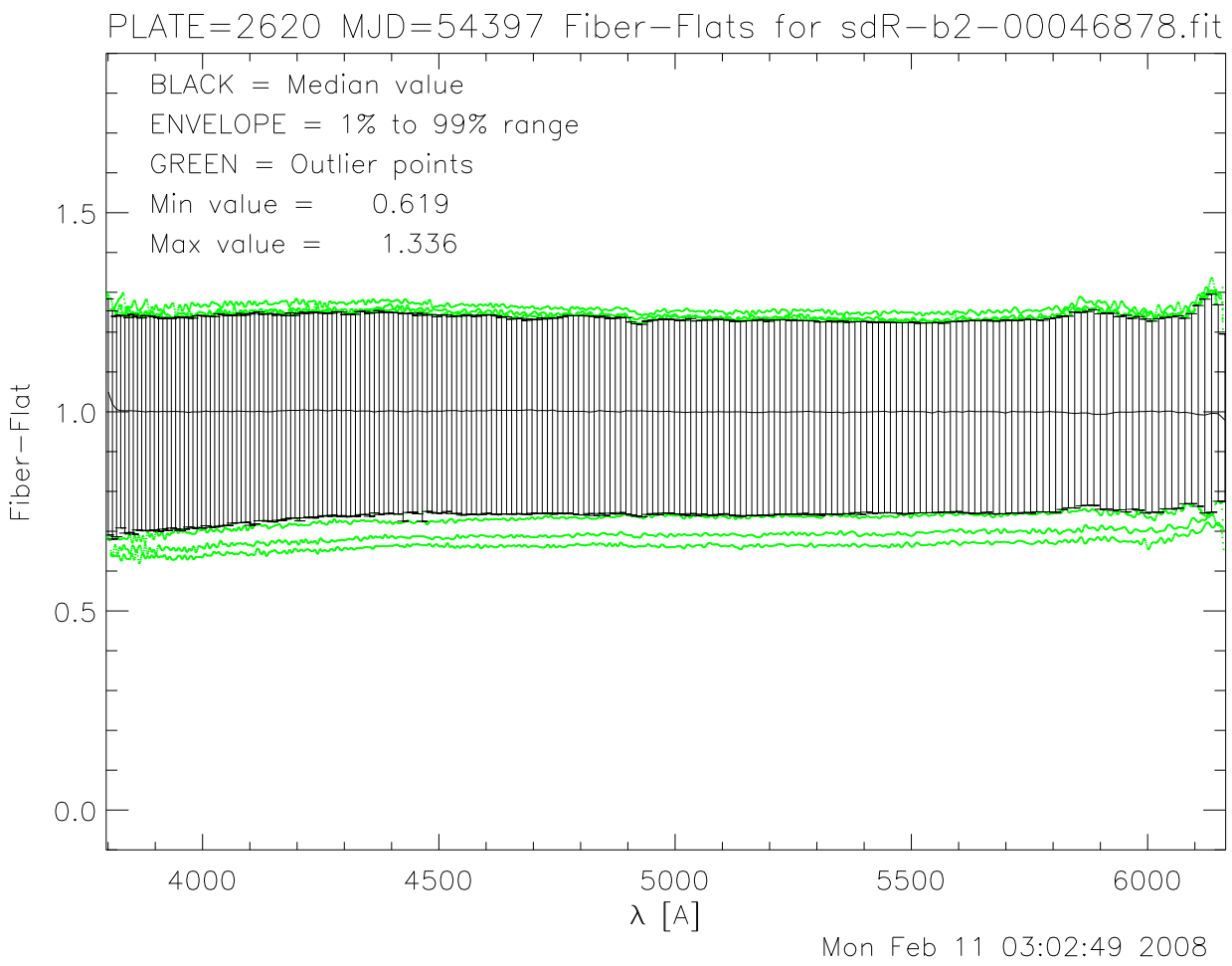

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

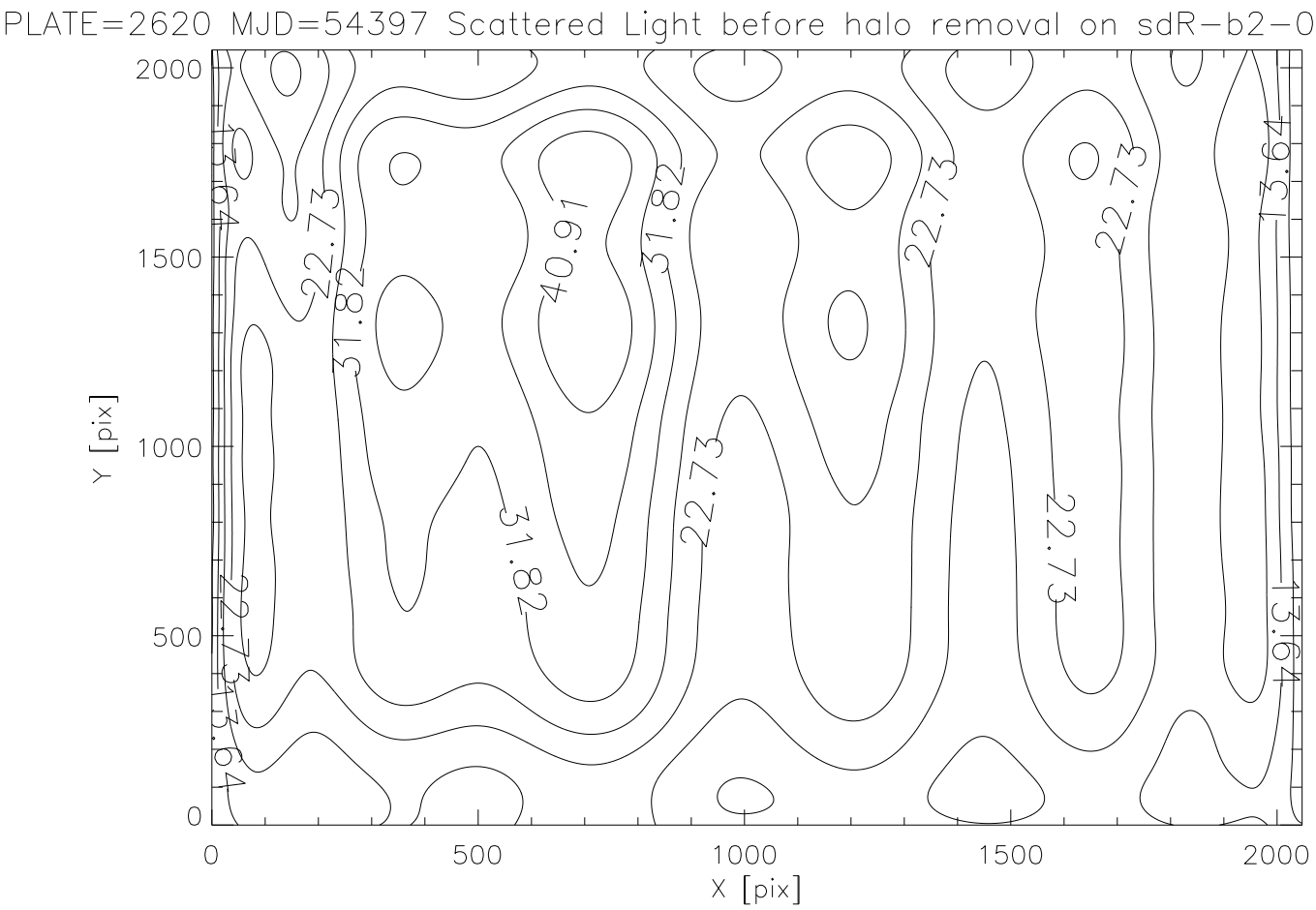

PLATE=2620 MJD=54397 sdR-b2-00046873.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

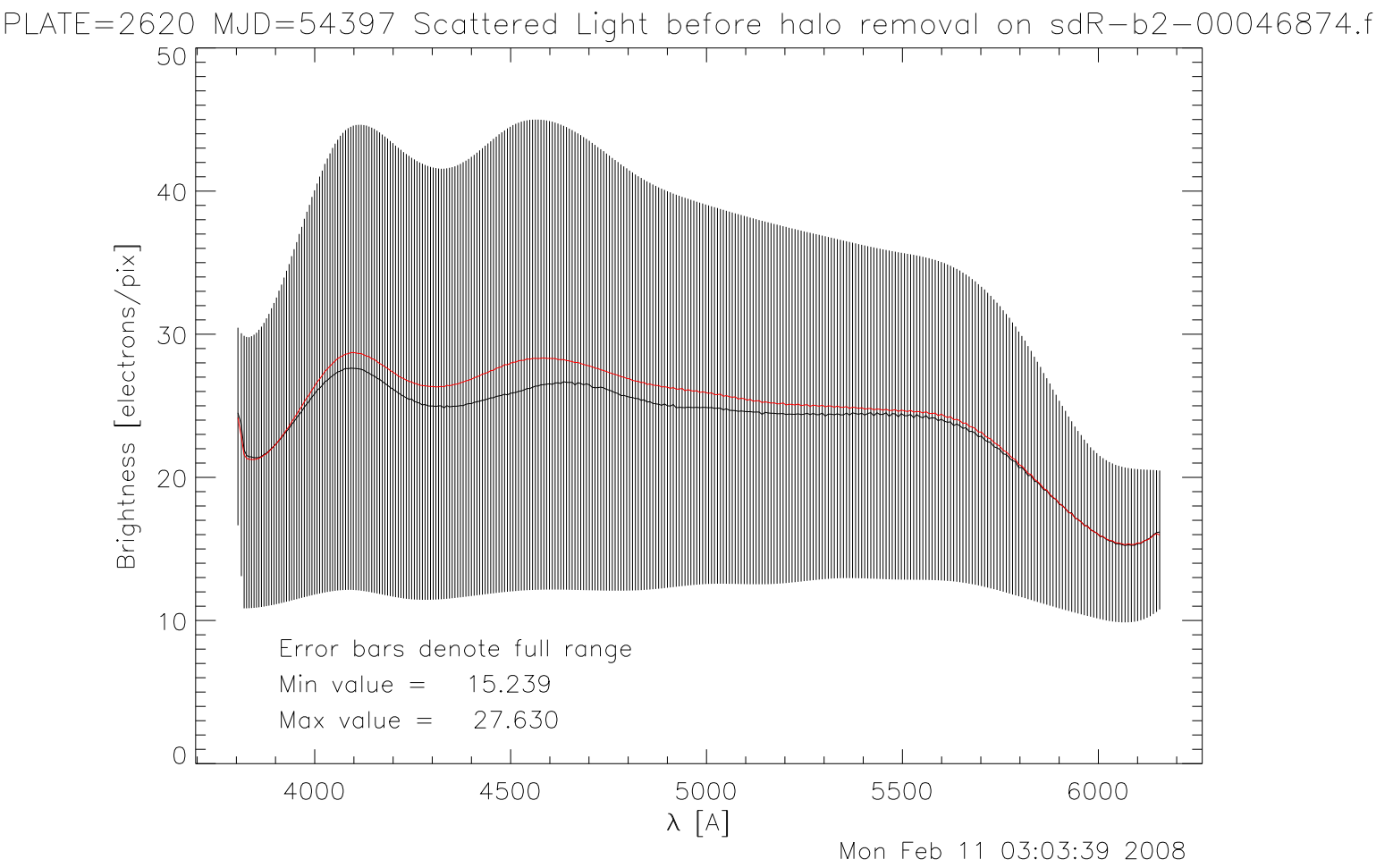

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046873.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

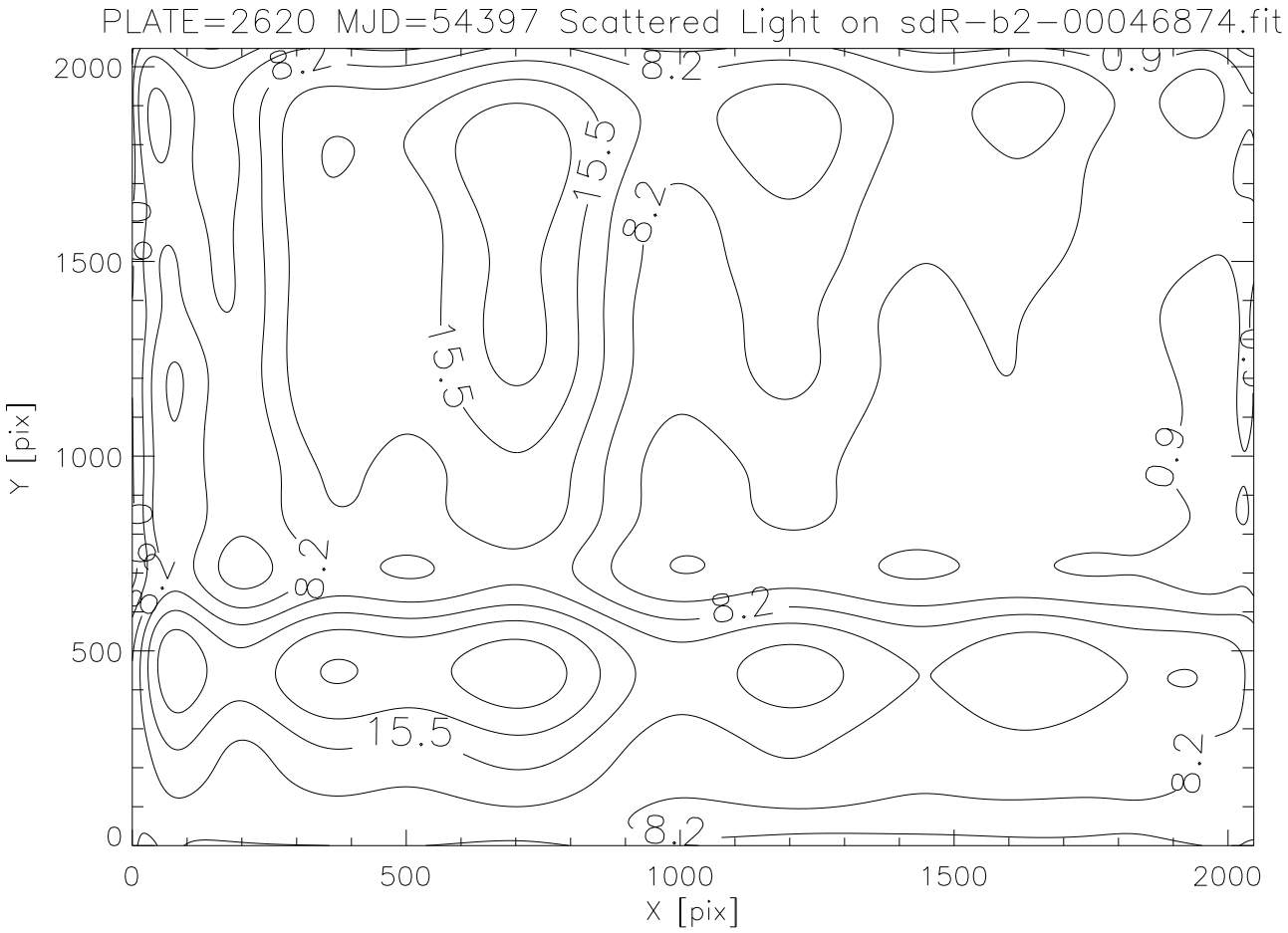

PLATE=2620 MJD=54397 sdR-b2-00046873.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 12.80 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

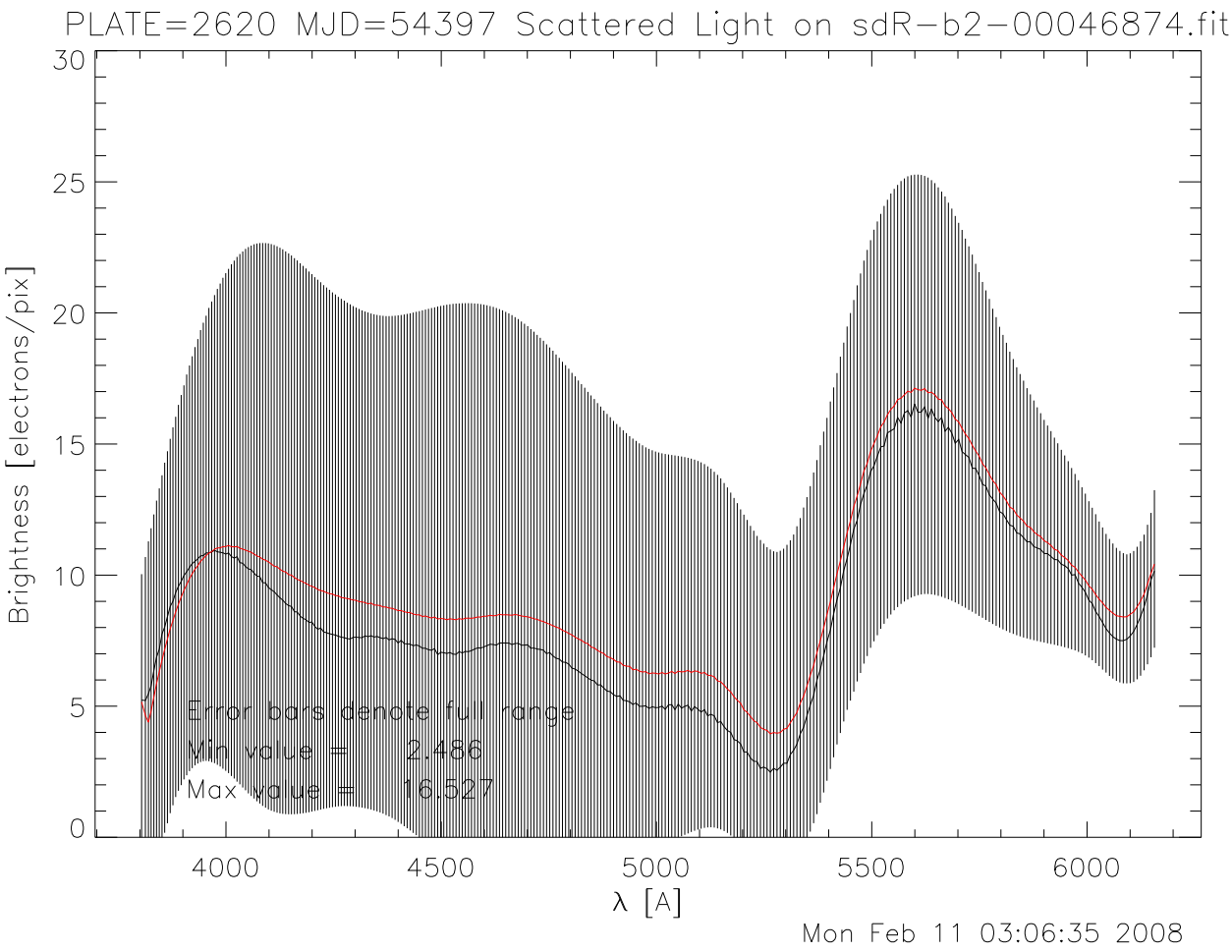

PLATE=2620 MJD=54397 sdR-b2-00046873.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Focal Distance [mm]
Airmass

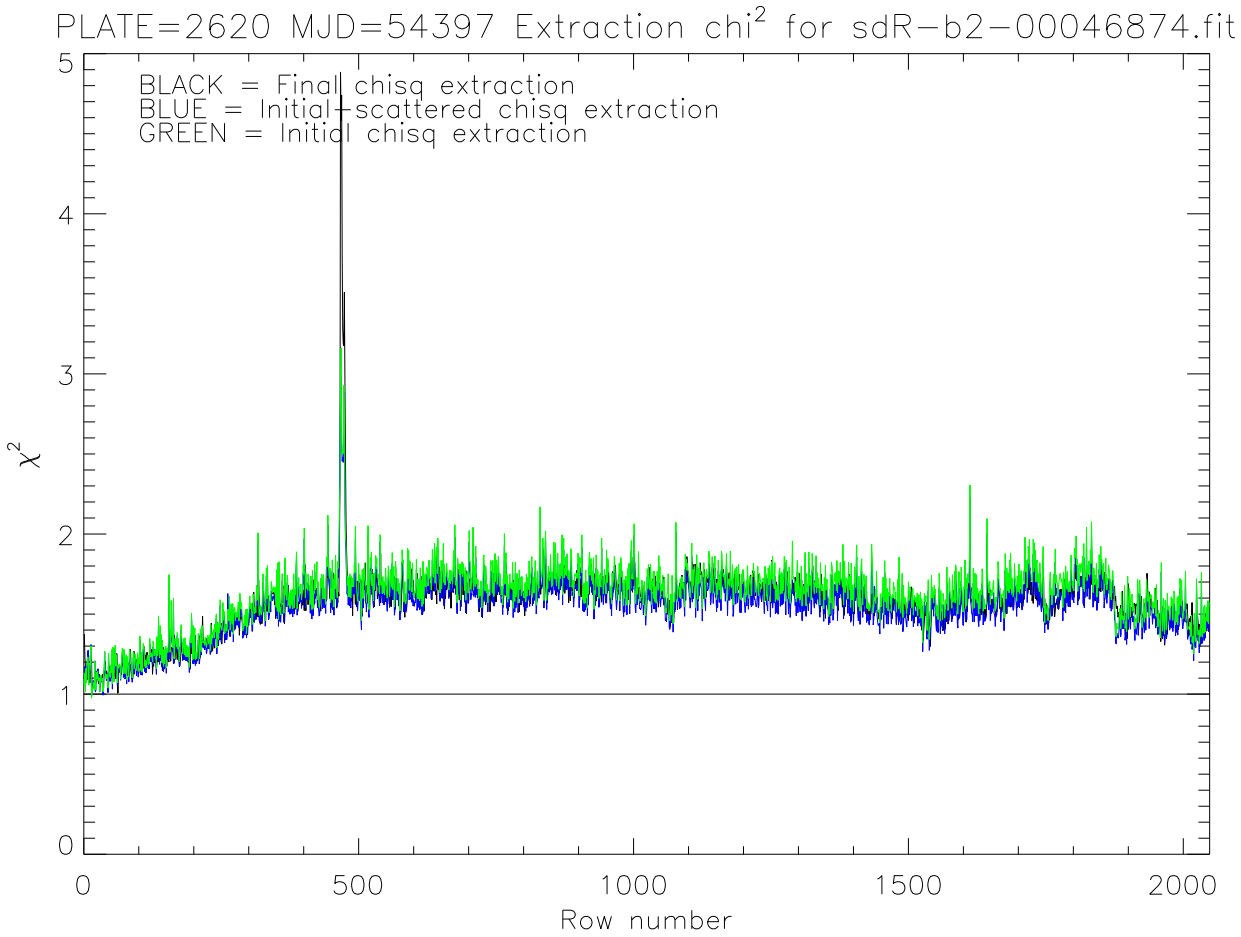

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 03:02:49 2008

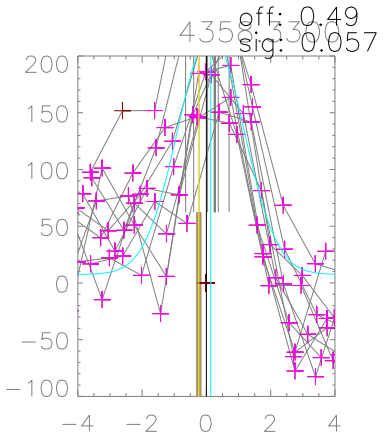

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046874.f
Y [pix]
X [pix]
0
500
1000
1500
2000
13.64
22.73
31.82
40.91
49.3

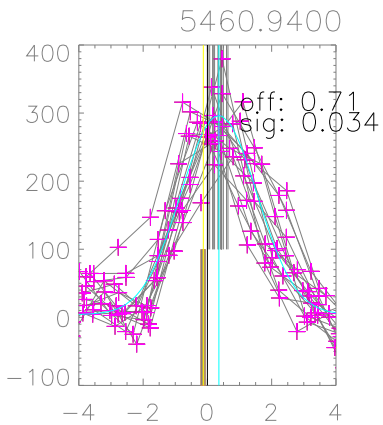

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046874.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 15.239
Max value = 27.630
Mon Feb 11 03:03:39 2008

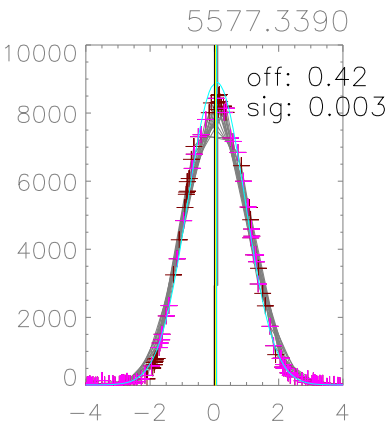

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046874.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
15.5
0.9

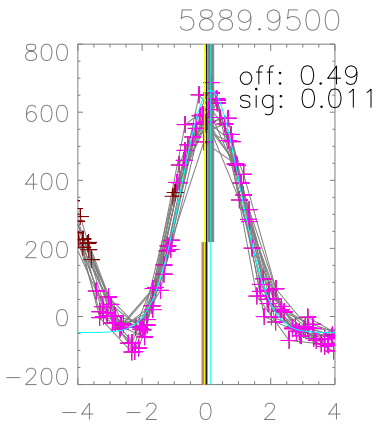

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046874.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.486
Max value = 16.527
Mon Feb 11 03:06:35 2008

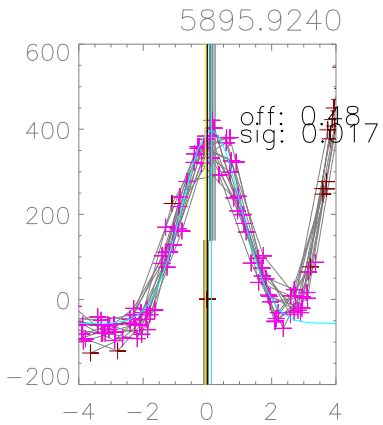

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046874.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

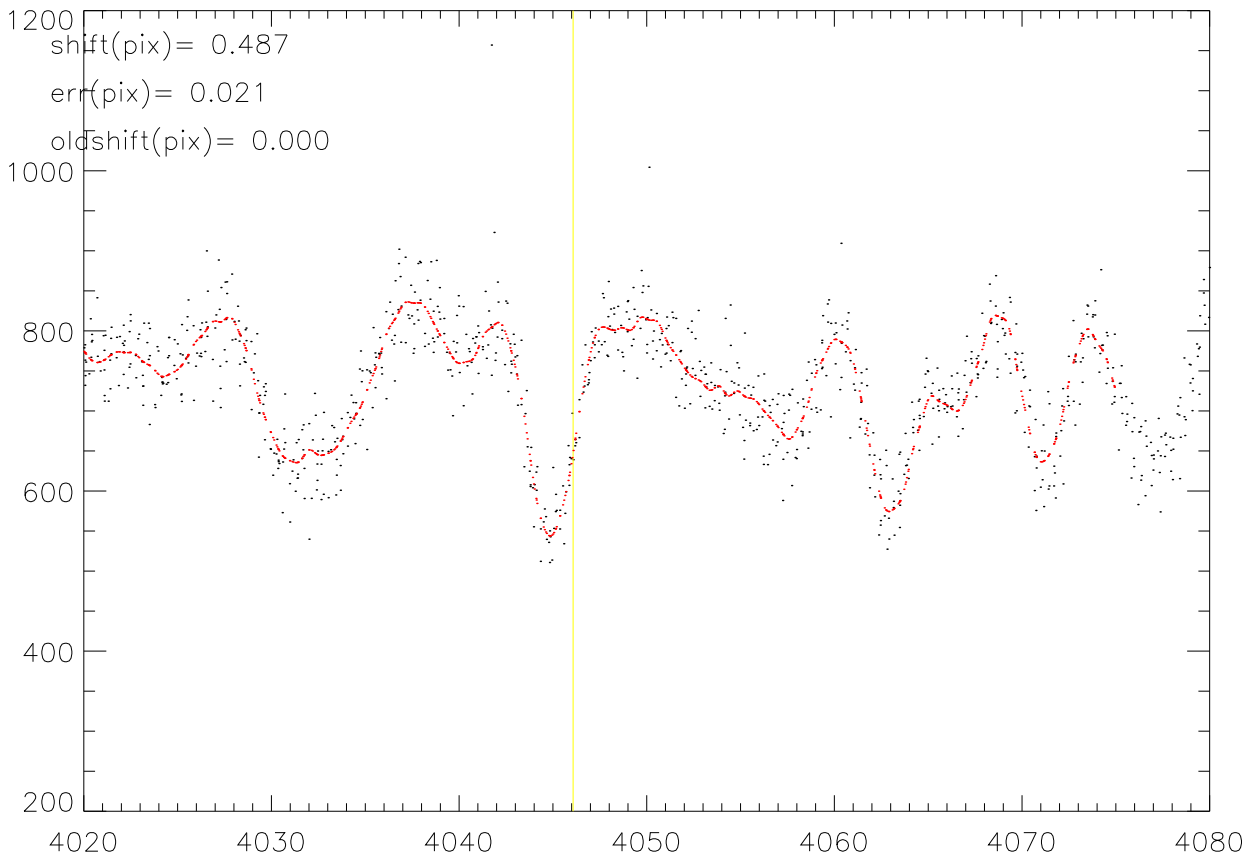

4358.3500
off: 0.49
sig: 0.057

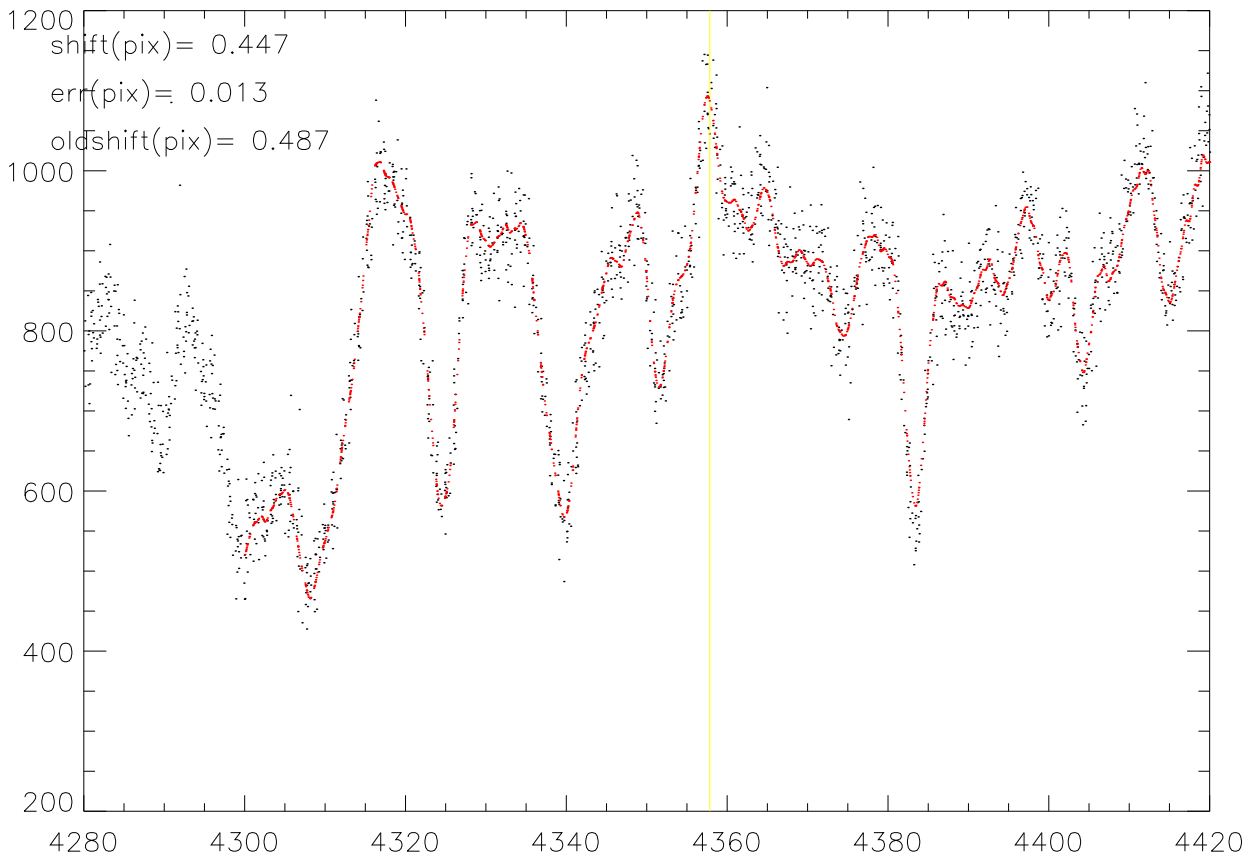

5460.9400
off: 0.71
sig: 0.034

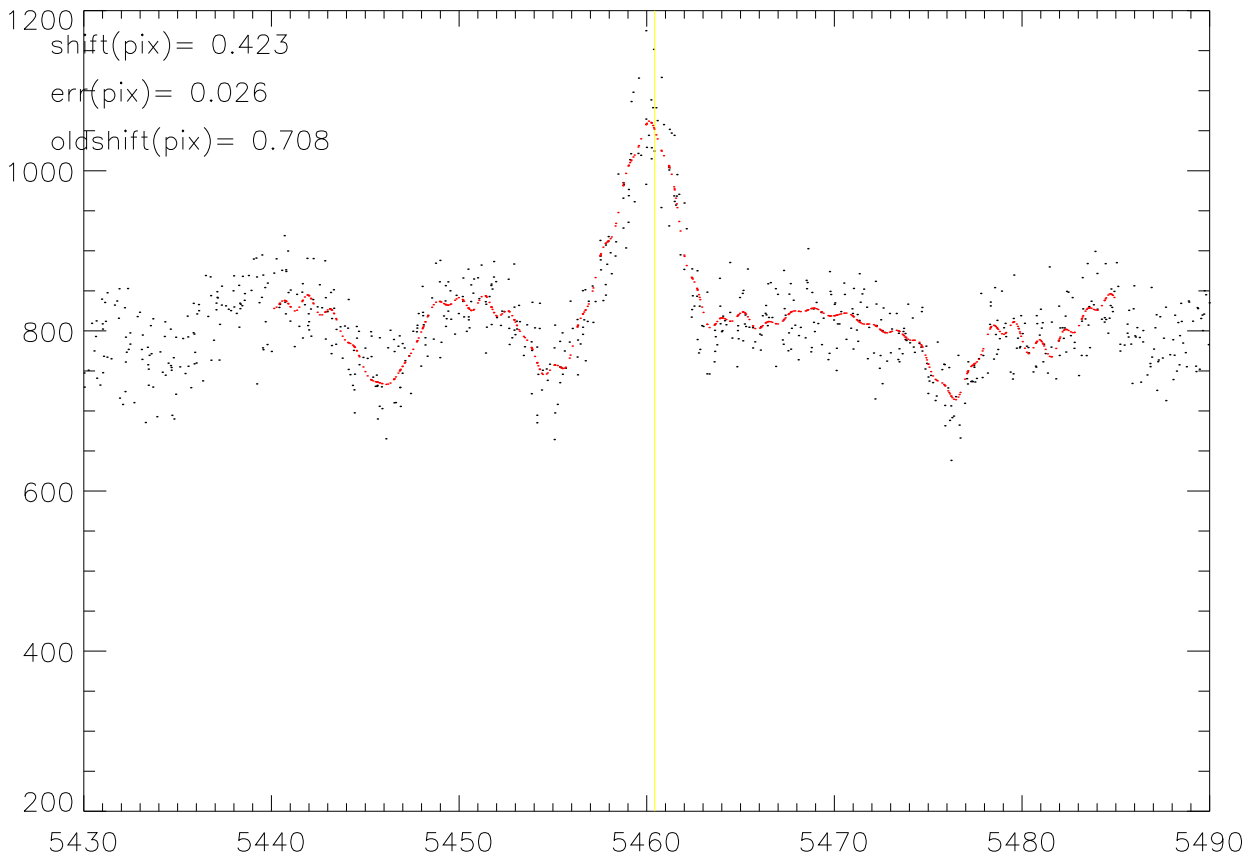

5577.3390
off: 0.42
sig: 0.003

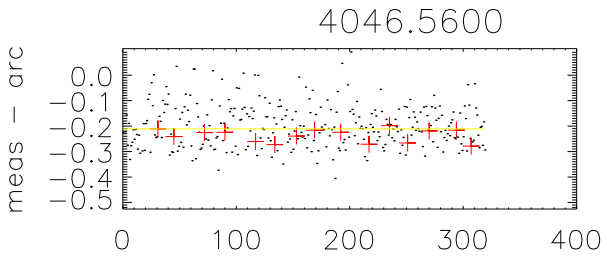

5889.9500
off: 0.49
sig: 0.011

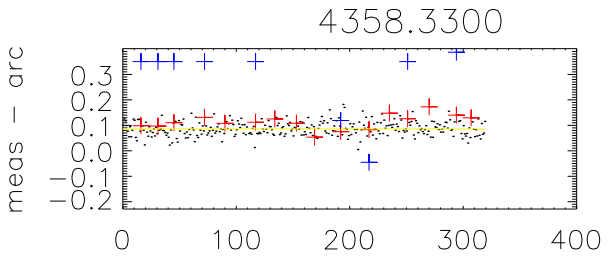

5895.9240
off: 0.48
sig: 0.017

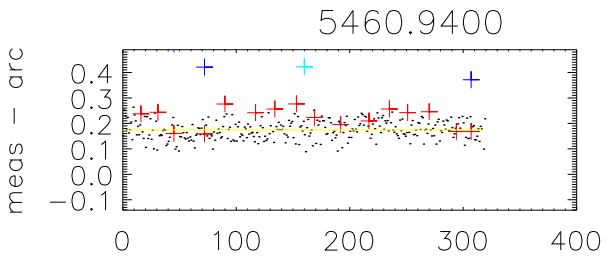

shift(pix)= 0.487
err(pix)= 0.021
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

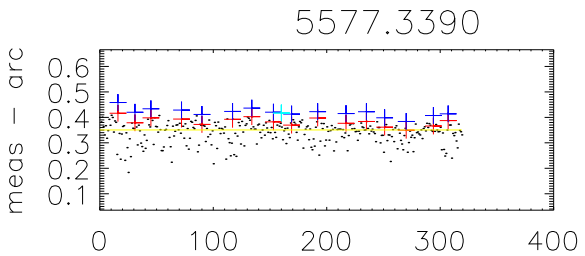

shift(pix)= 0.447
err(pix)= 0.013
oldshift(pix)= 0.487
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

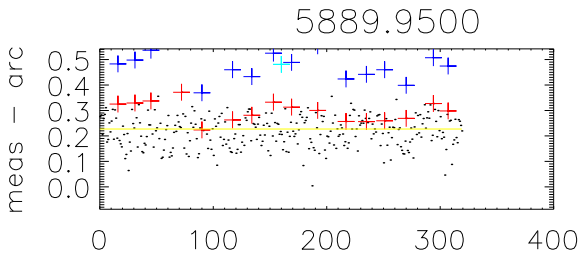

shift(pix)= 0.423
err(pix)= 0.026
oldshift(pix)= 0.708
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

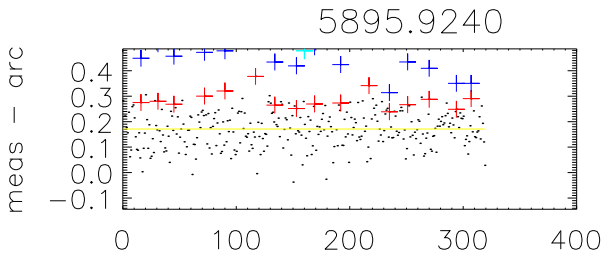

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

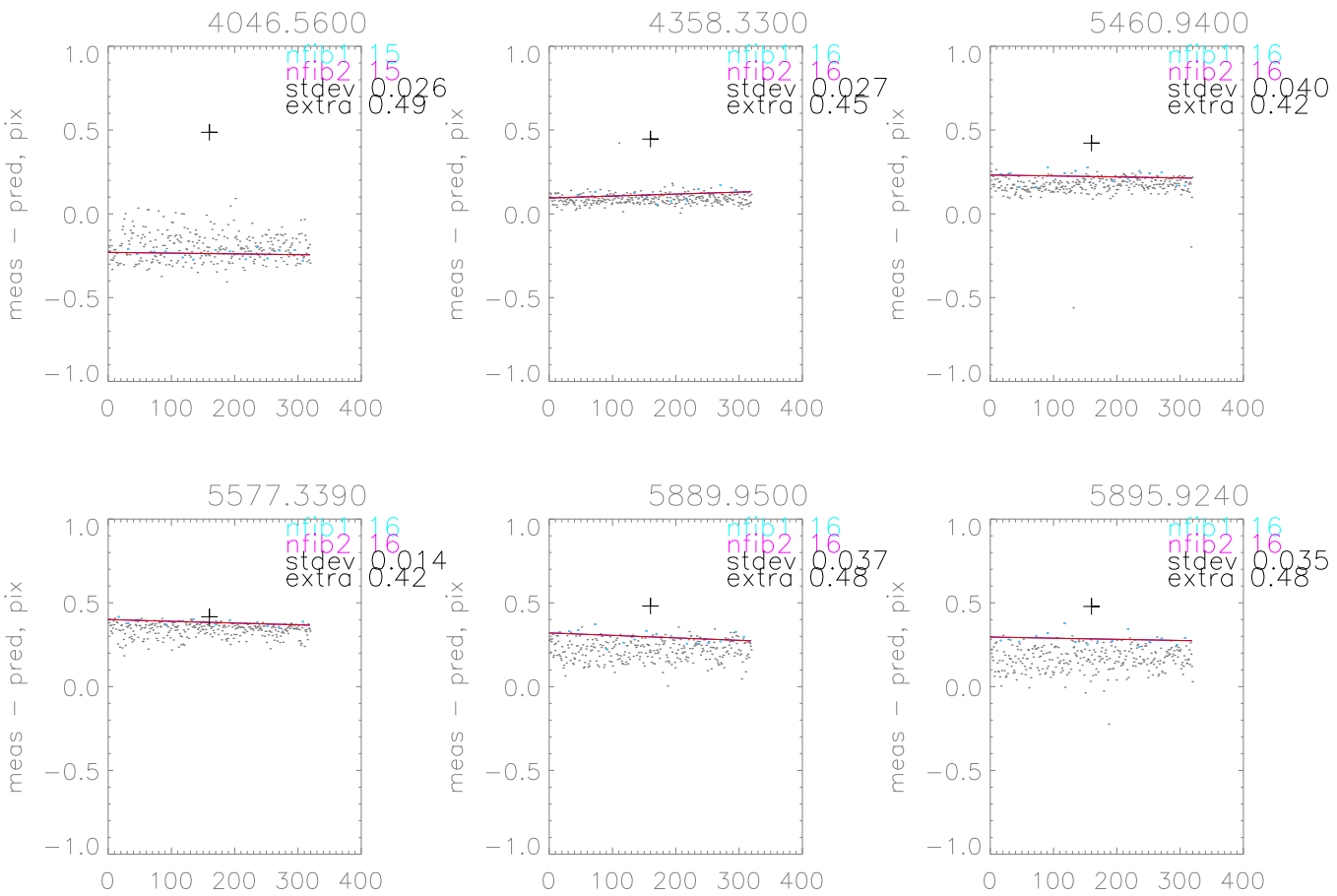

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

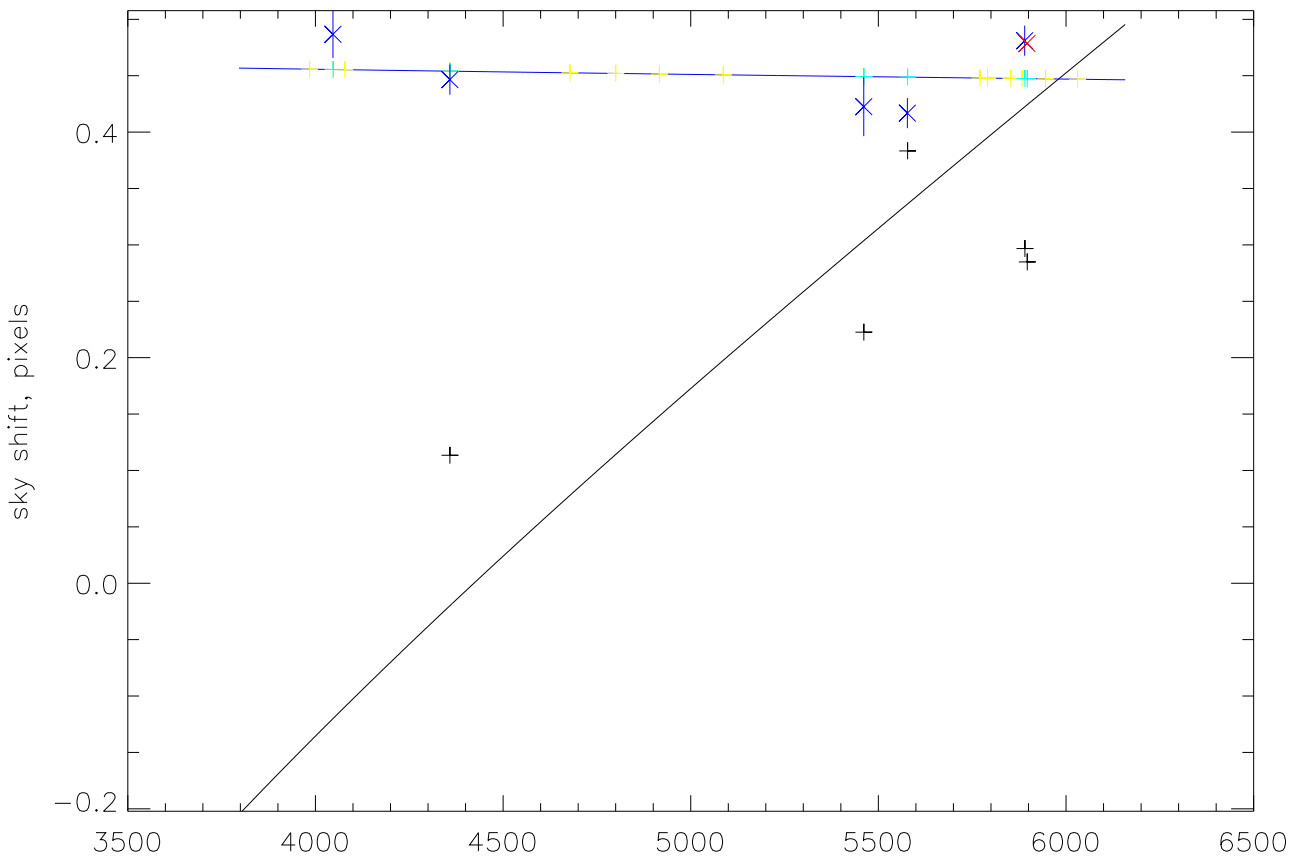

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

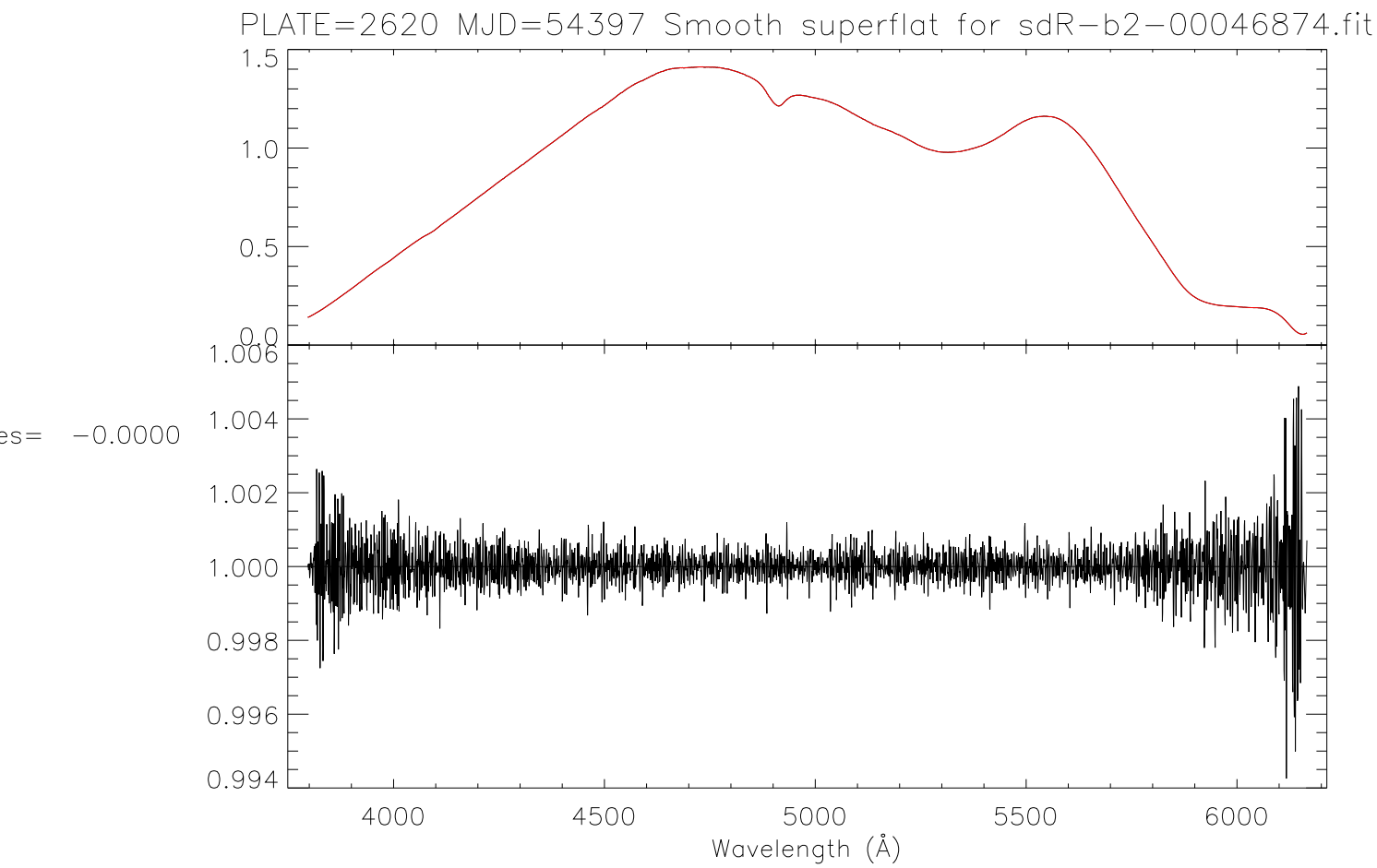

5577.3390
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


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

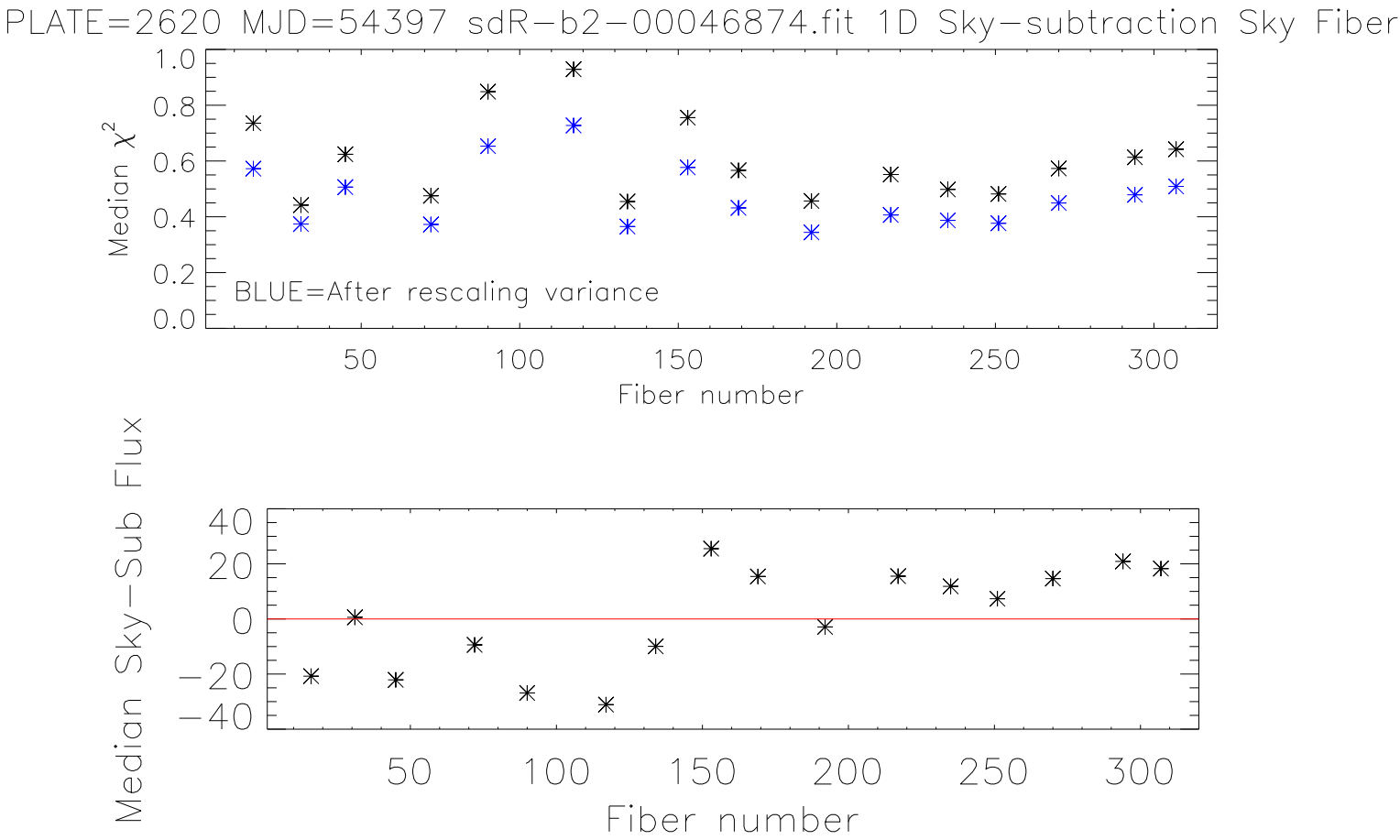

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

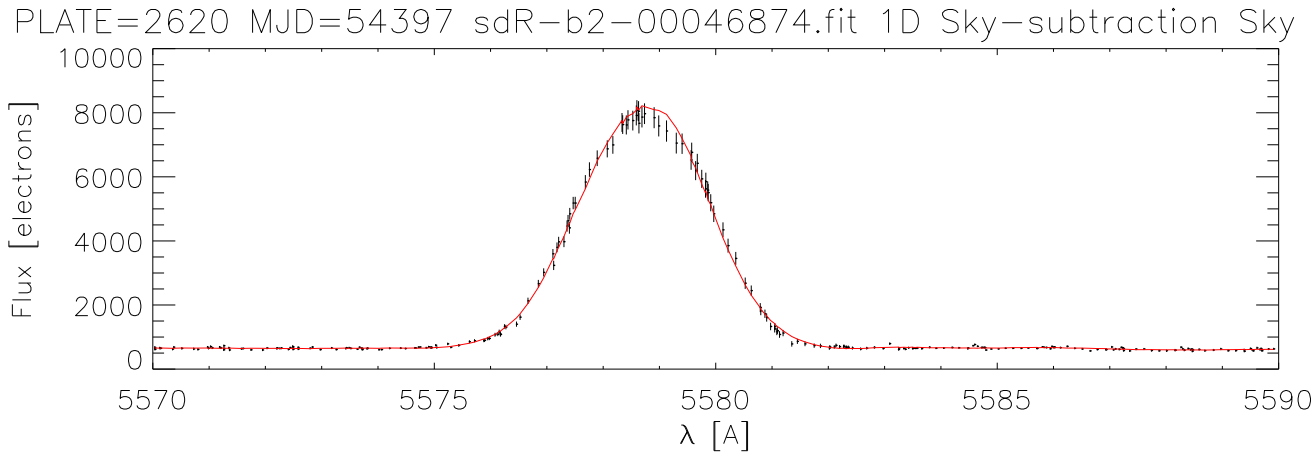

4046.5600
nfib1 15
nfib2 15
stdev 0.026
extra 0.49
4358.3300
nfib1 16
nfib2 16
stdev 0.027
extra 0.45
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra 0.42
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.42
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra 0.48
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra 0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

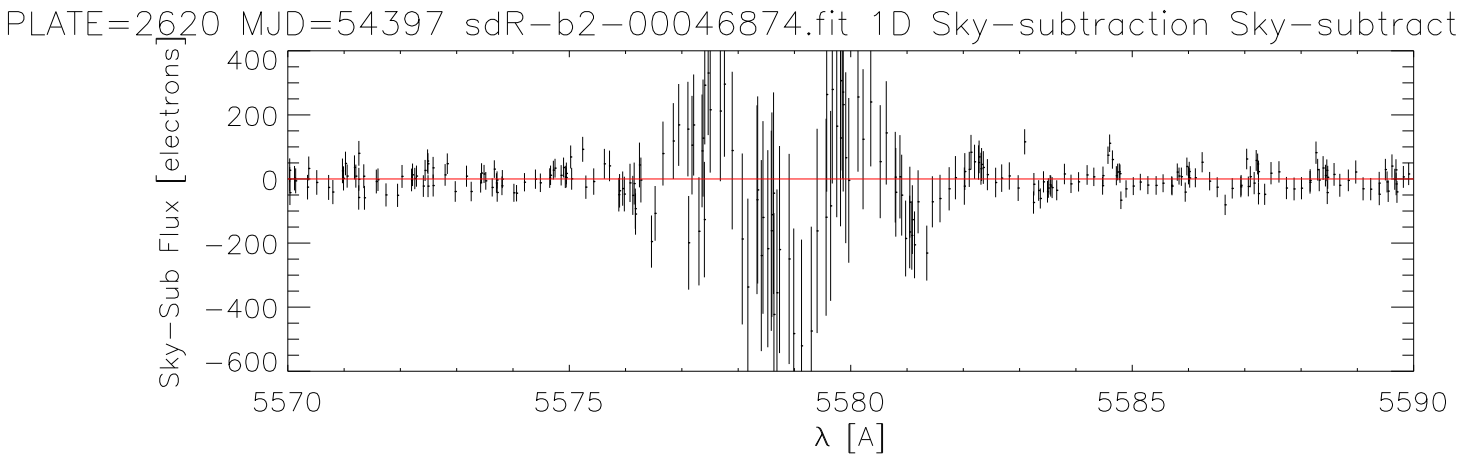

sky shift, pixels
0.4
0.2
0.0
−0.2
3500
4000
4500
5000
5500
6000
6500

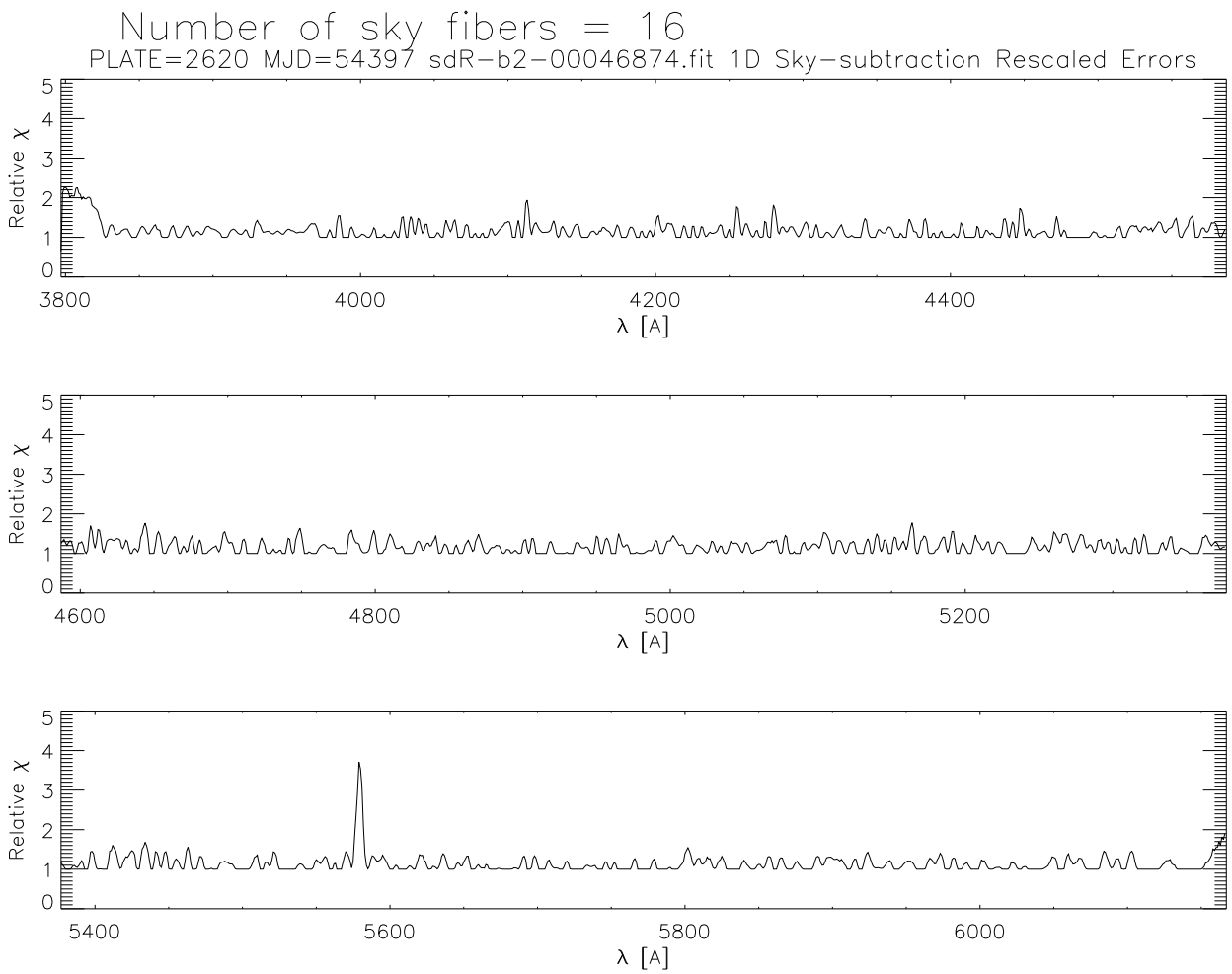

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046874.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

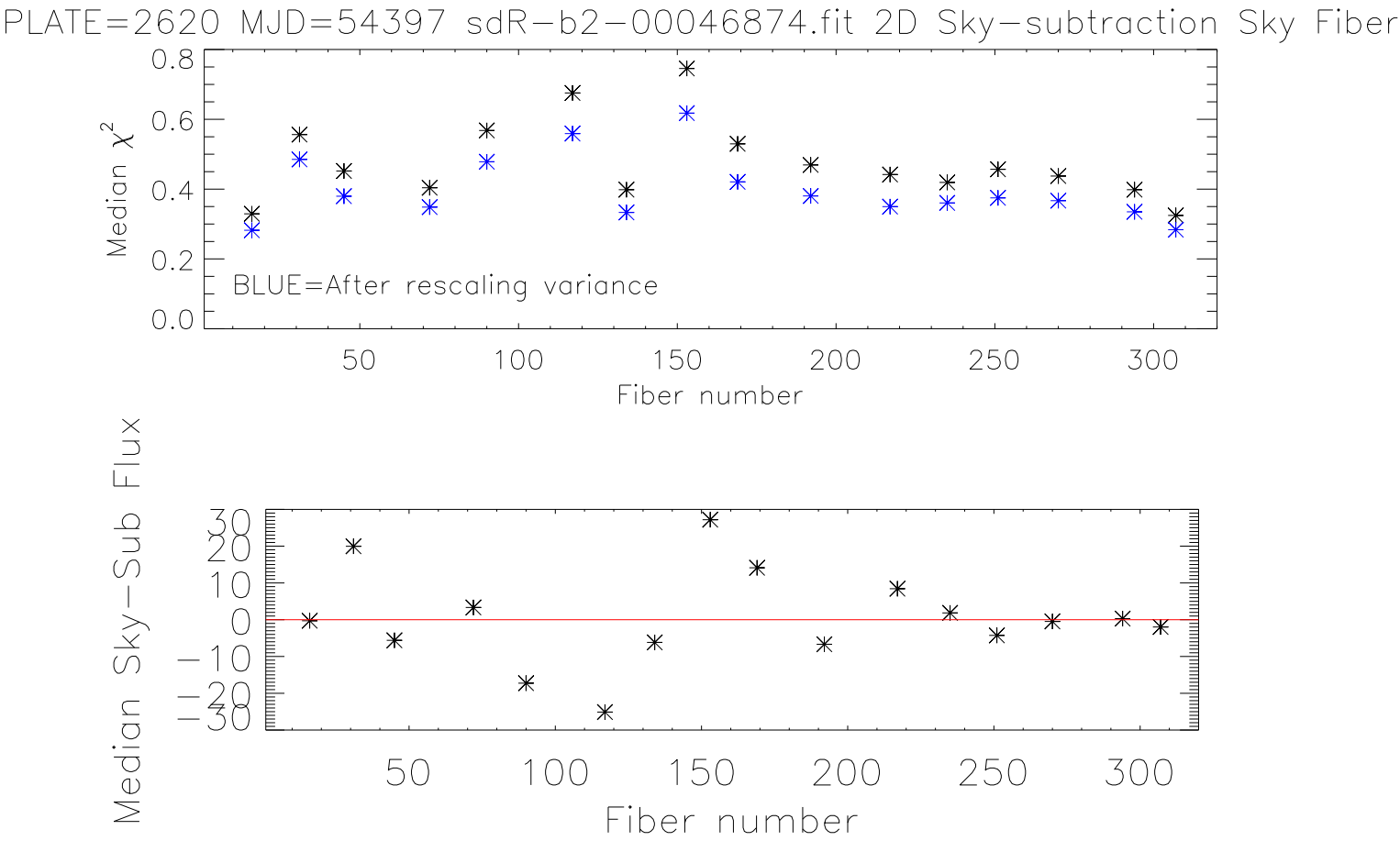
es= −0.0000

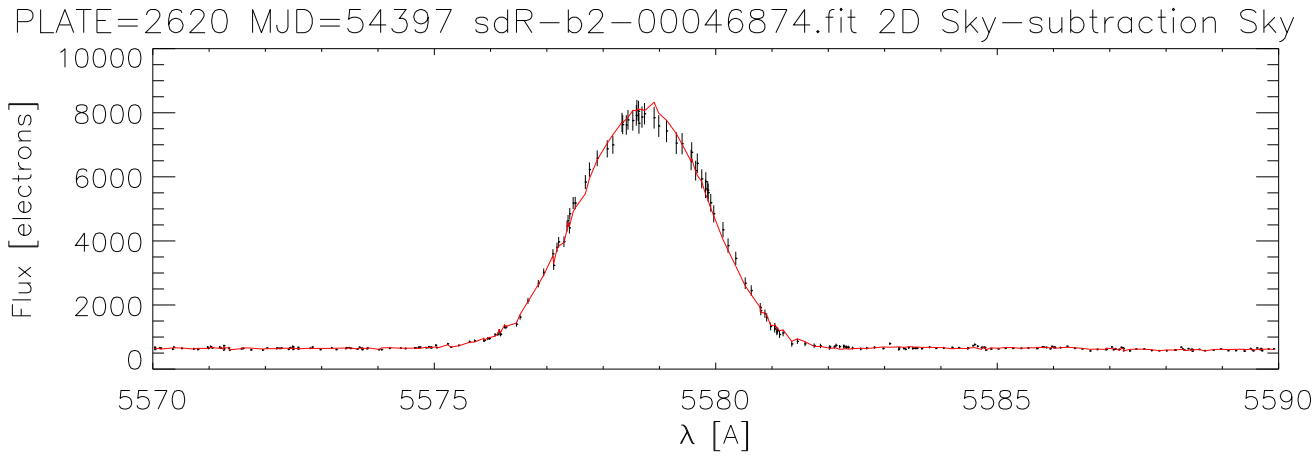

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

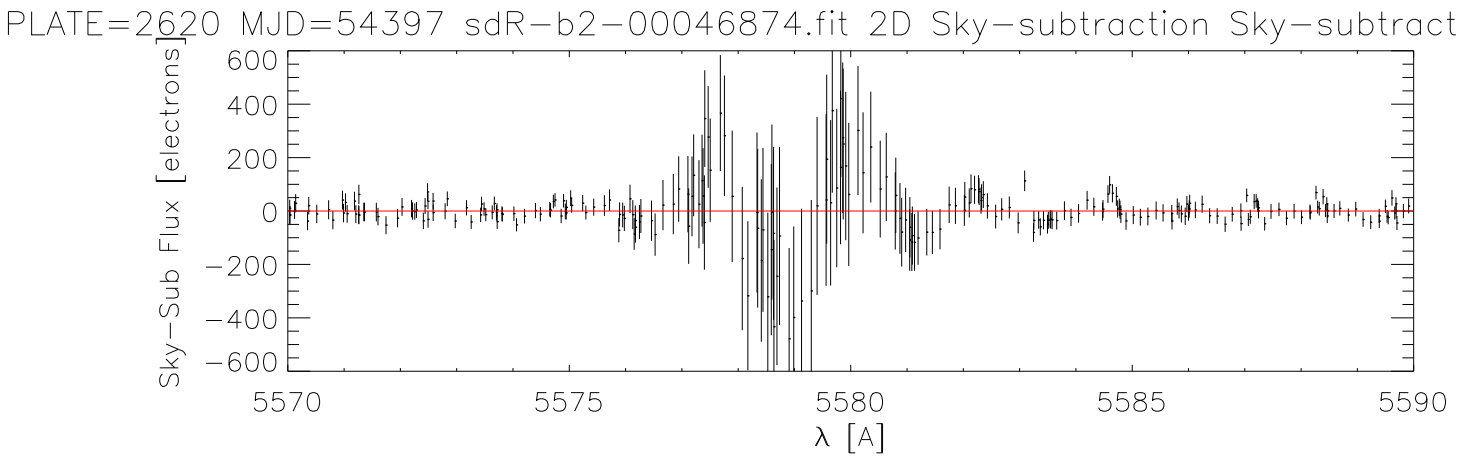

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

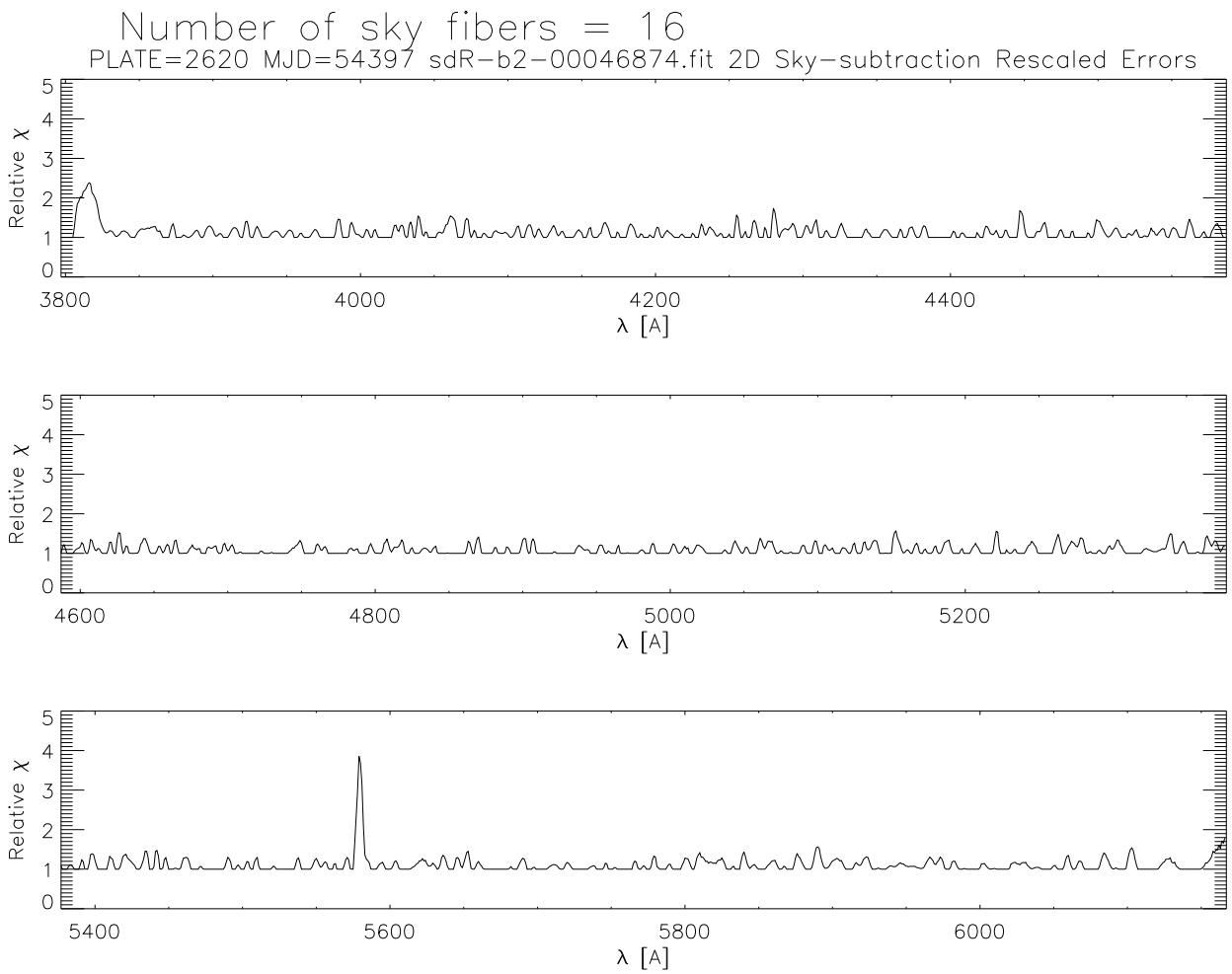

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

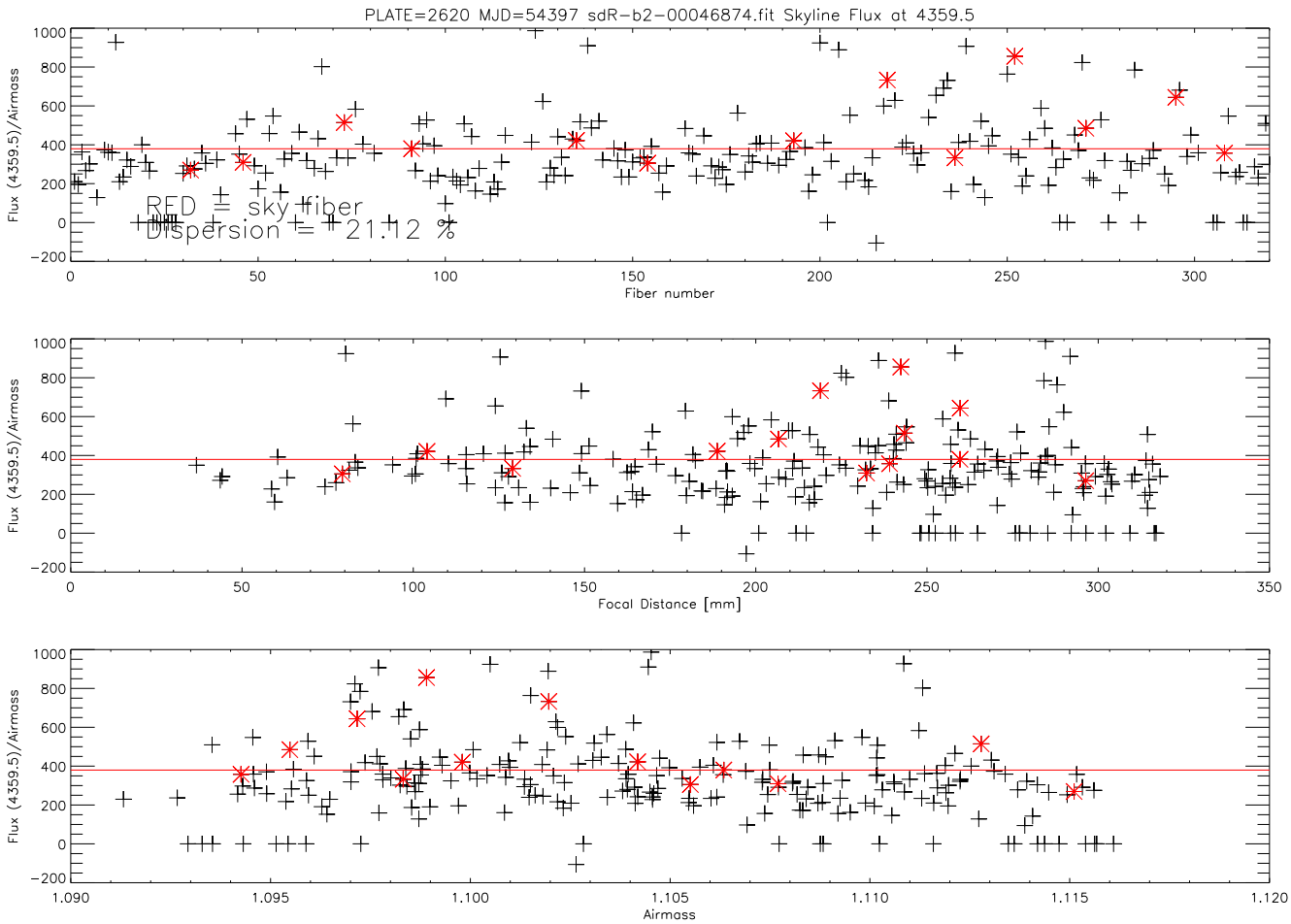

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046874.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

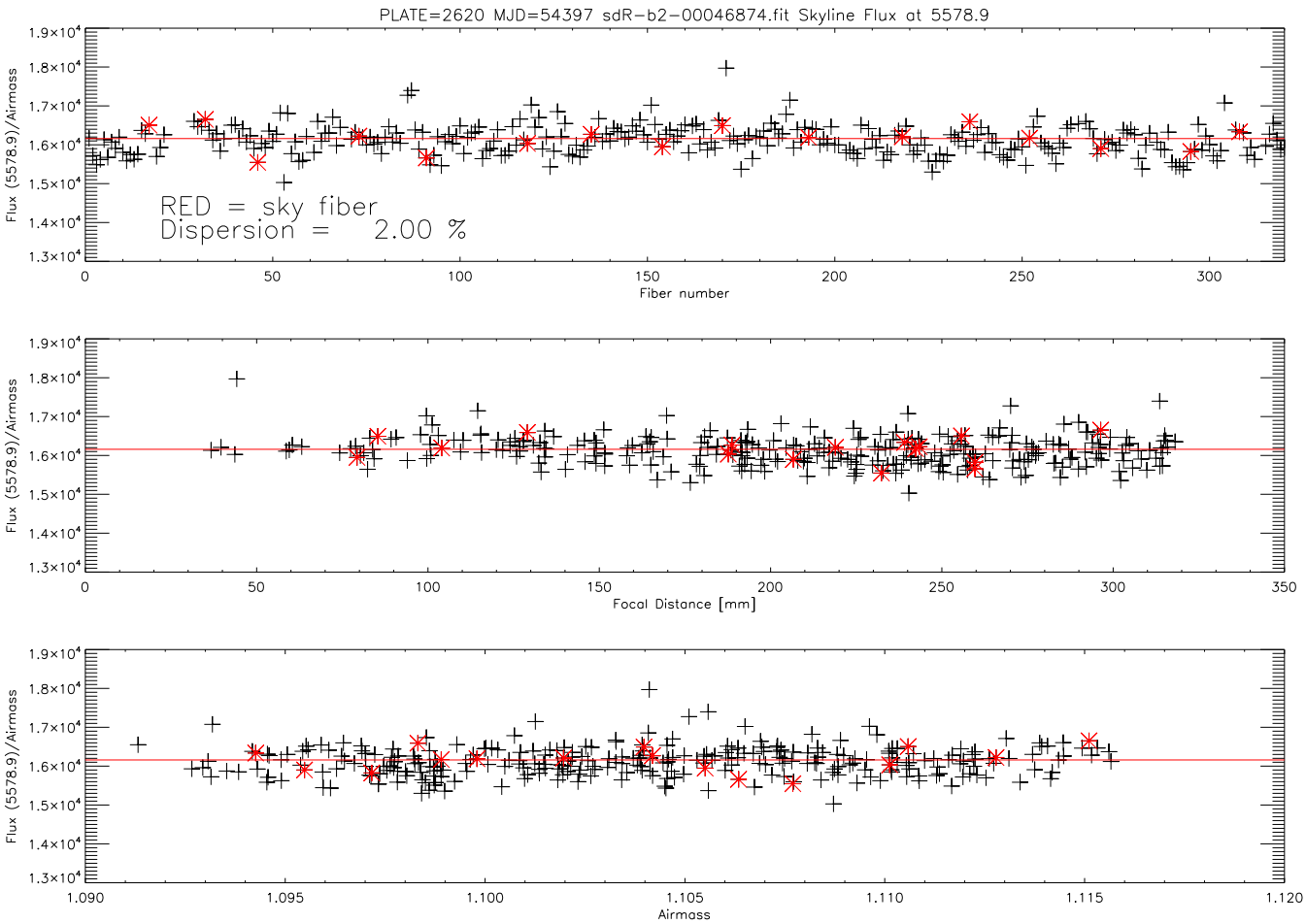

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

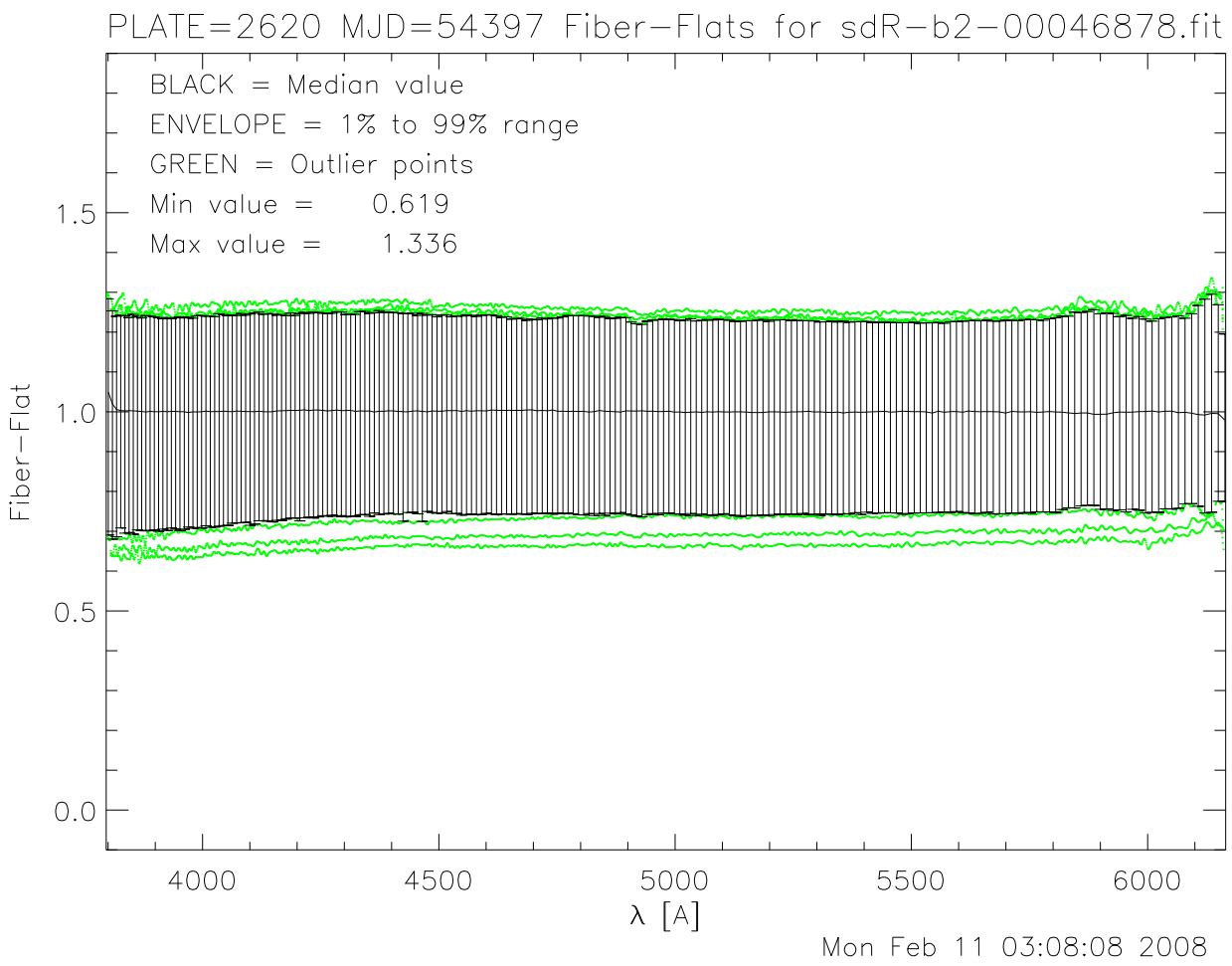

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

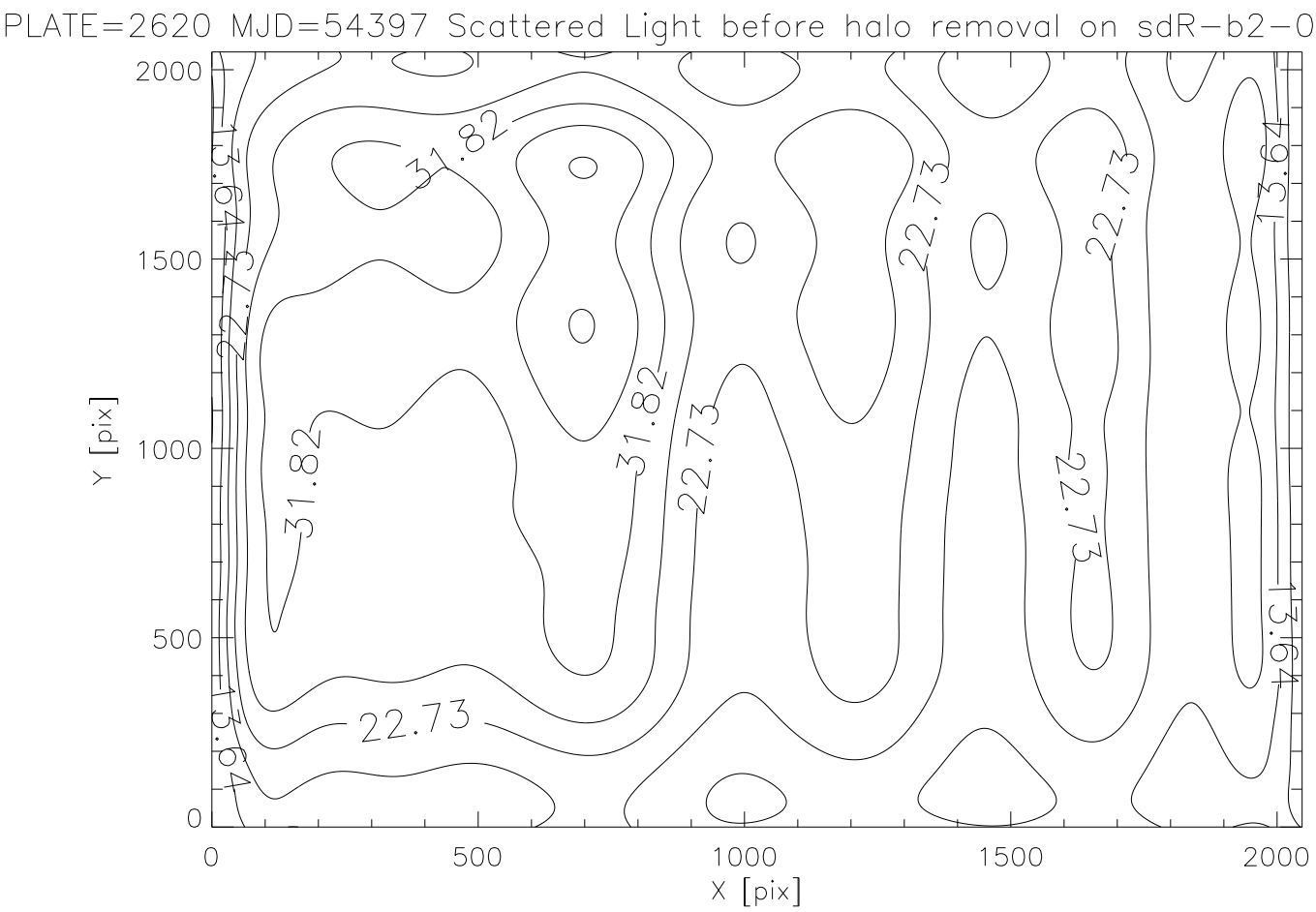

PLATE=2620 MJD=54397 sdR-b2-00046874.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

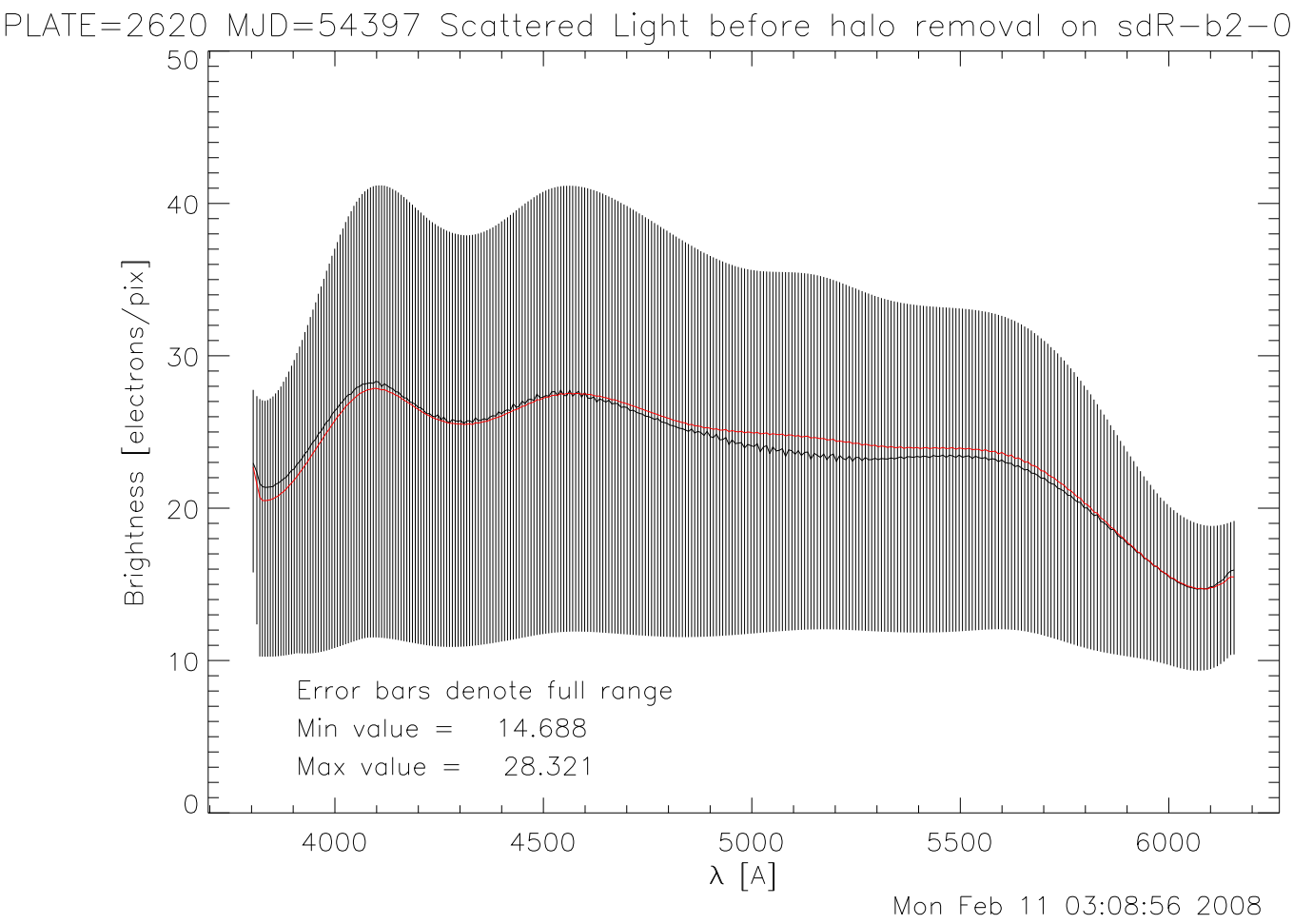

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046874.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

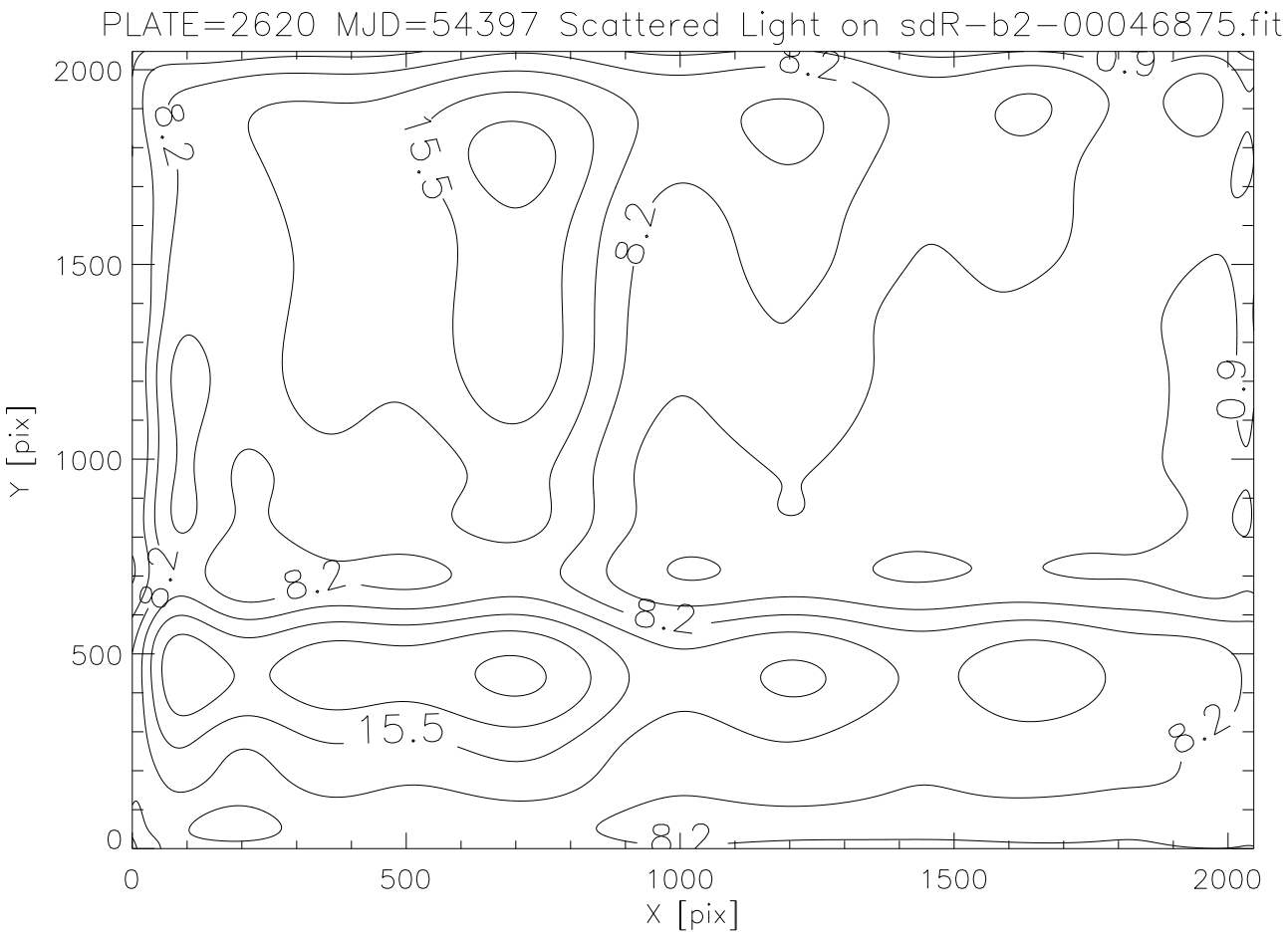

PLATE=2620 MJD=54397 sdR-b2-00046874.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 21.12 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

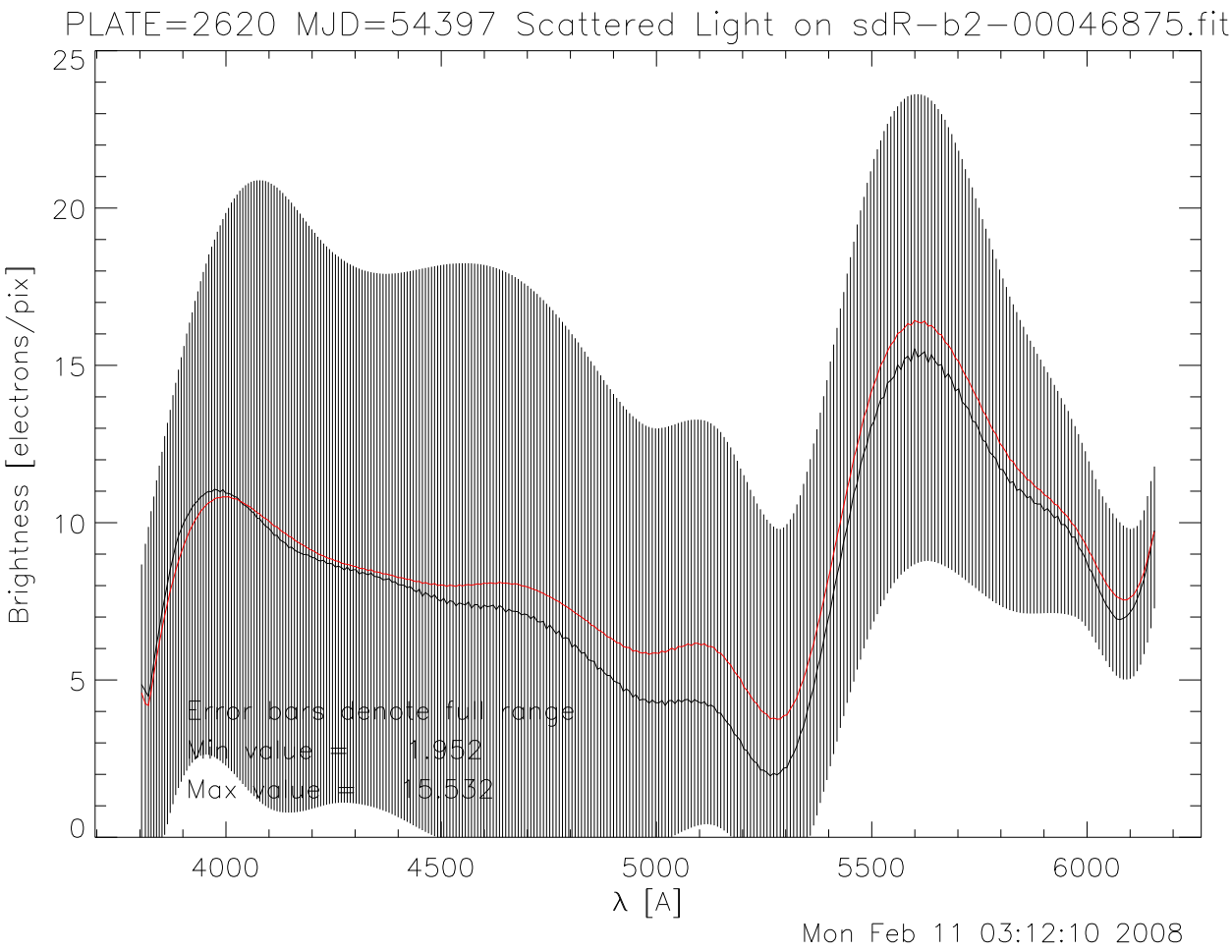

PLATE=2620 MJD=54397 sdR-b2-00046874.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Focal Distance [mm]
Airmass

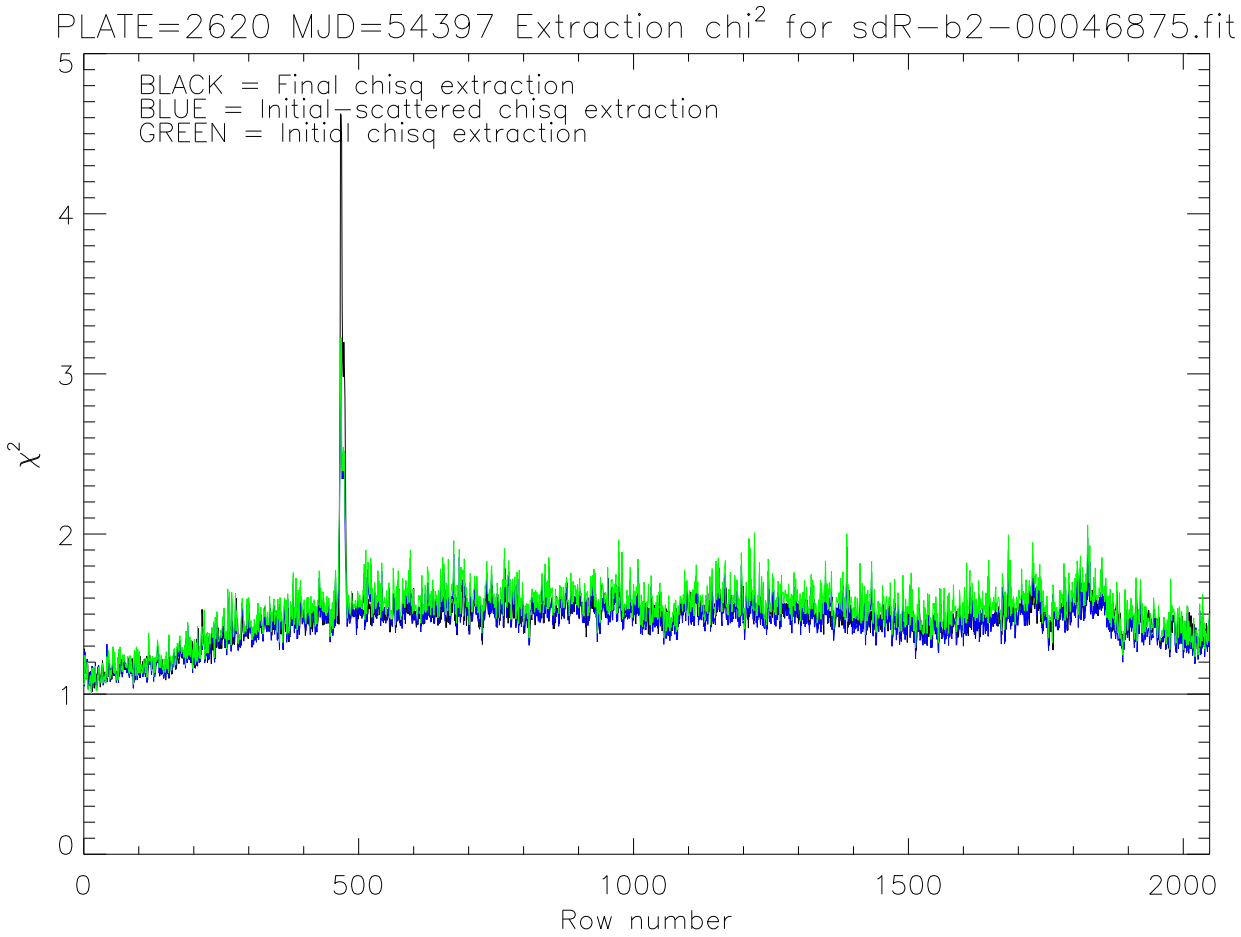

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 03:08:08 2008

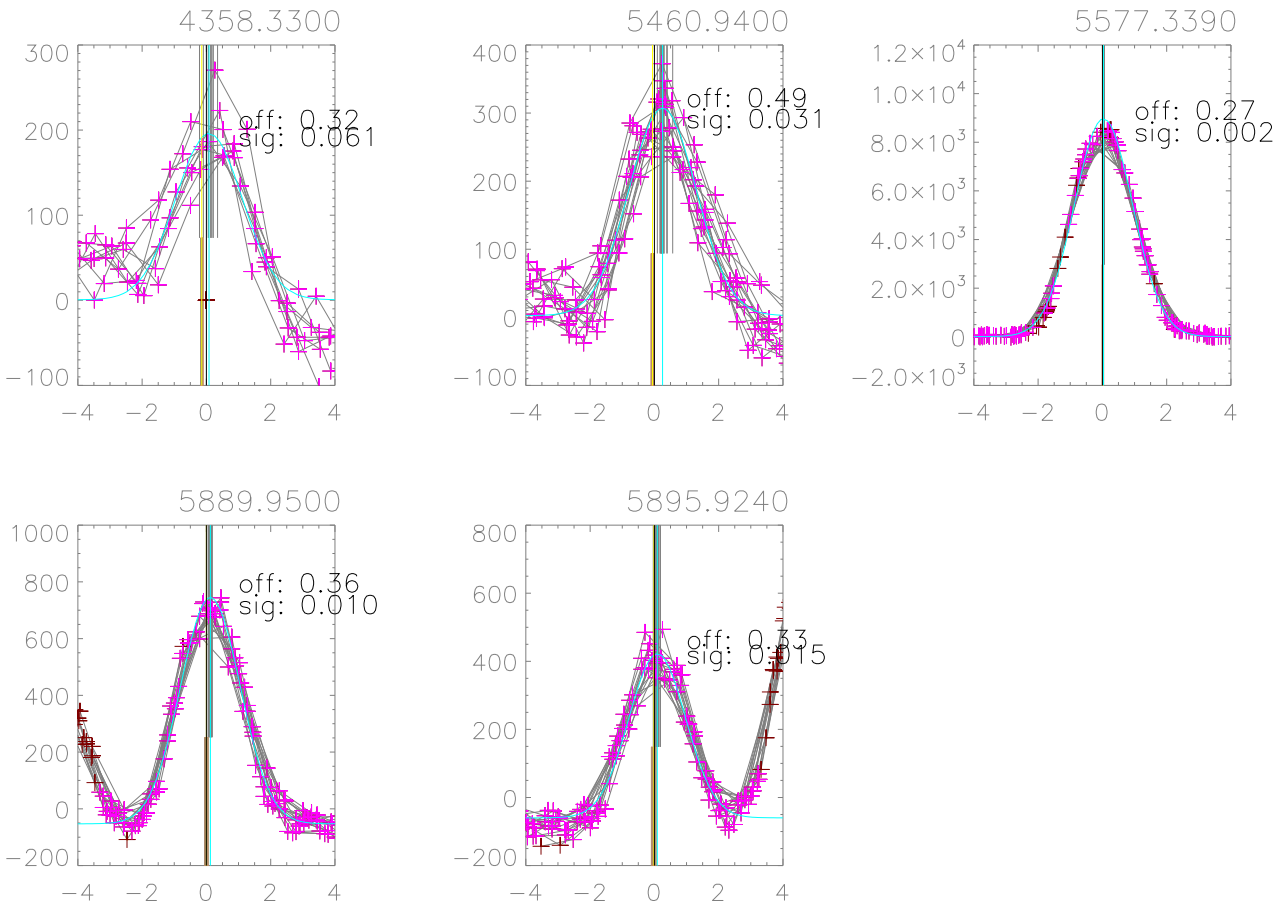

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046875.f
Y [pix]
X [pix]
0
500
1000
1500
2000
31.82
22.73
13.64

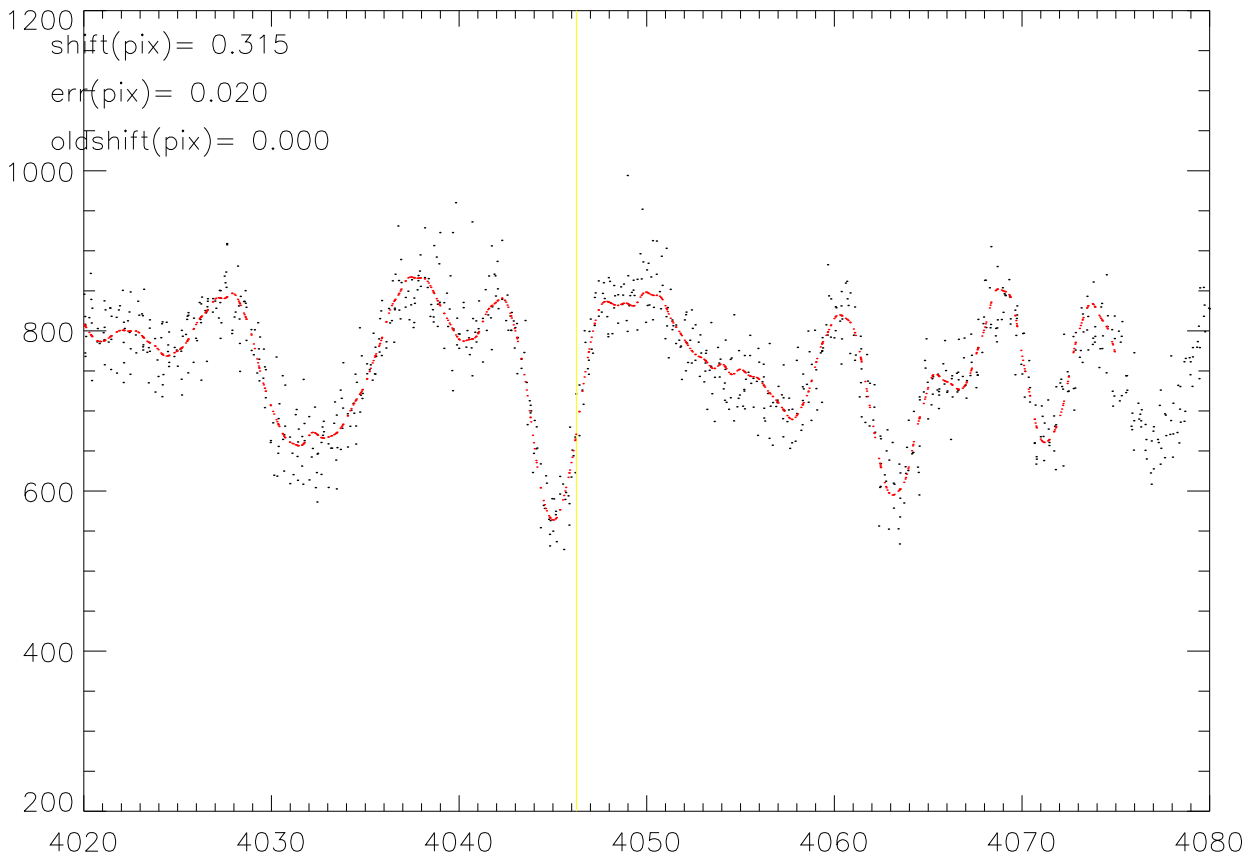

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046875.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 14.688
Max value = 28.321
Mon Feb 11 03:08:56 2008

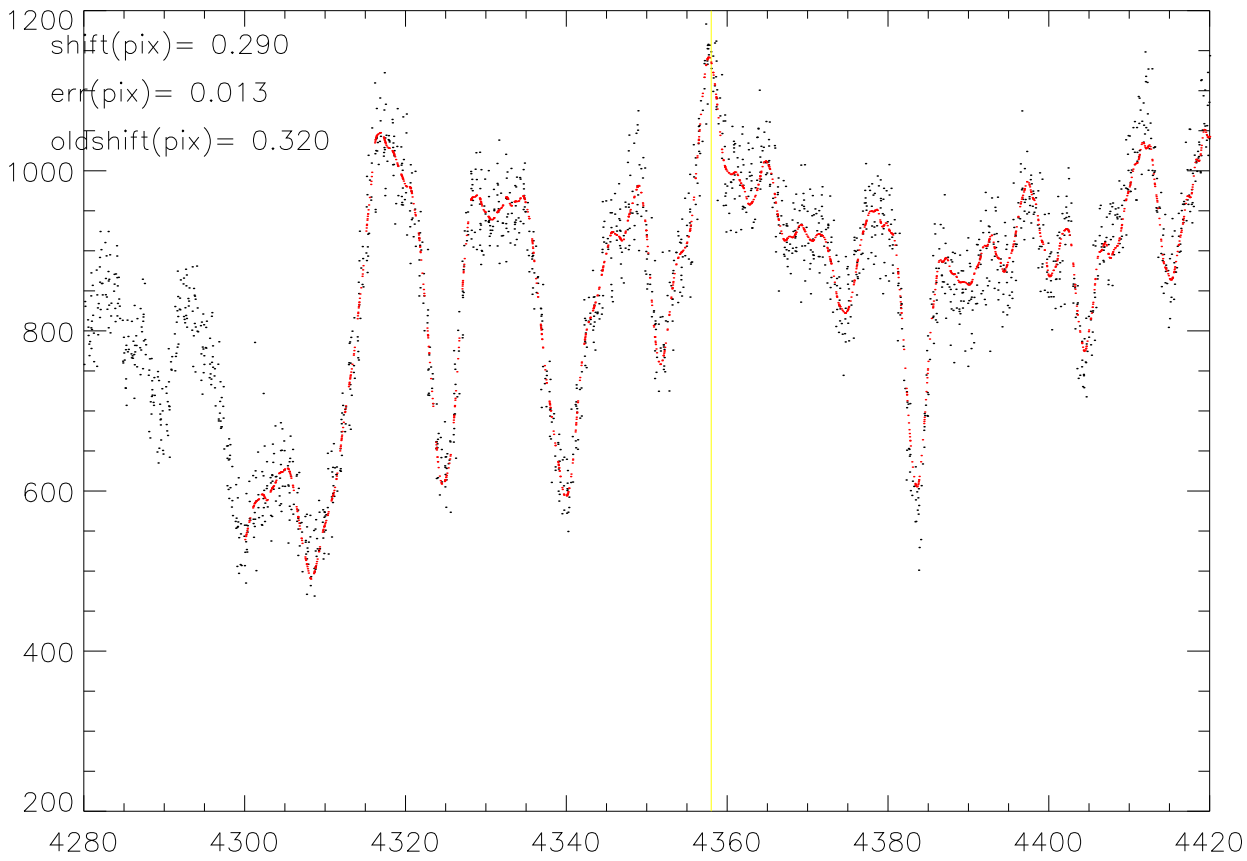

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046875.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
15.5
0.9

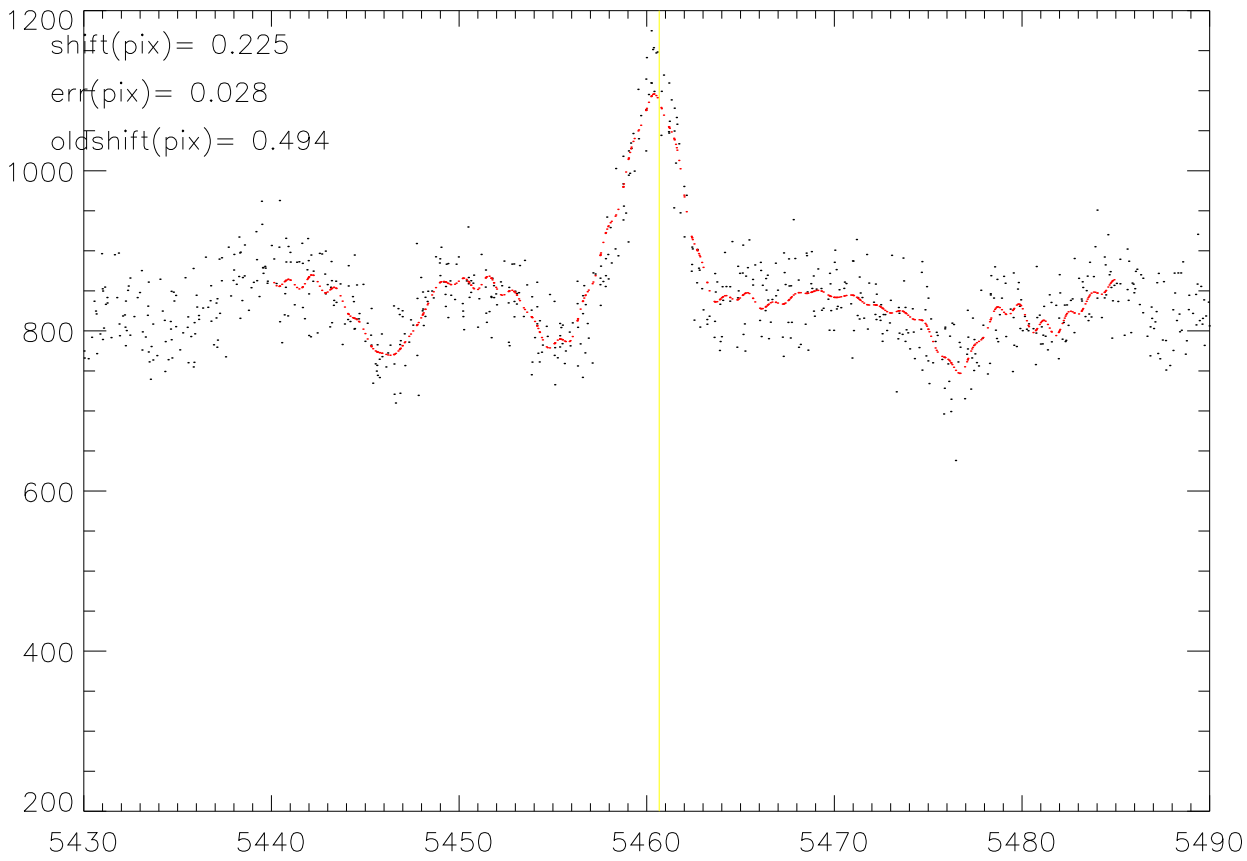

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046875.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.952
Max value = 15.532
Mon Feb 11 03:12:10 2008

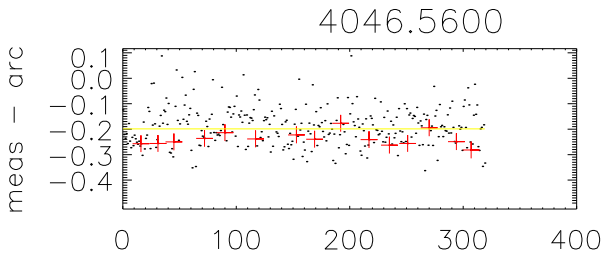

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046875.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

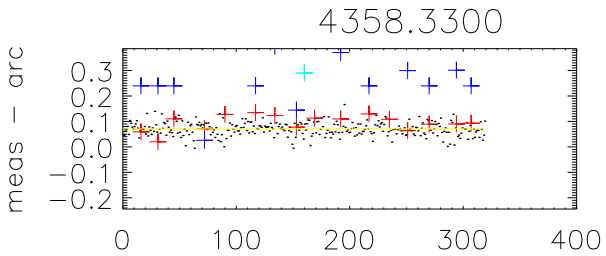

4358.3300
off: 0.32
sig: 0.061
5460.9400
off: 0.49
sig: 0.031
5577.3390
off: 0.27
sig: 0.002
5889.9500
off: 0.36
sig: 0.010
5895.9240
off: 0.33
sig: 0.015

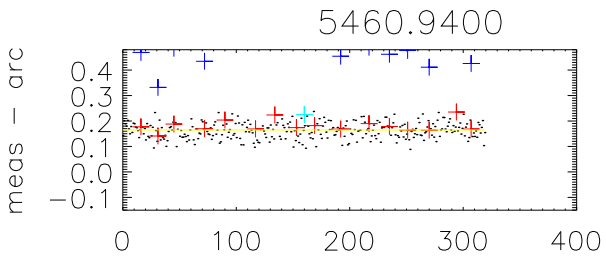

shift(pix)= 0.315
err(pix)= 0.020
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

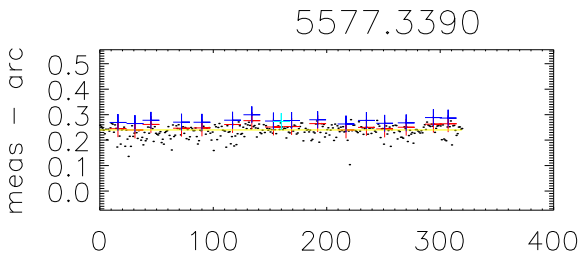

shift(pix)= 0.290
err(pix)= 0.013
oldshift(pix)= 0.320
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

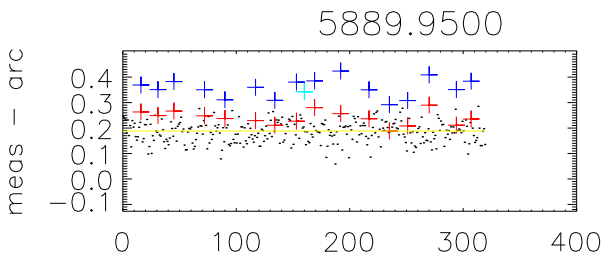

shift(pix)= 0.225
err(pix)= 0.028
oldshift(pix)= 0.494
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

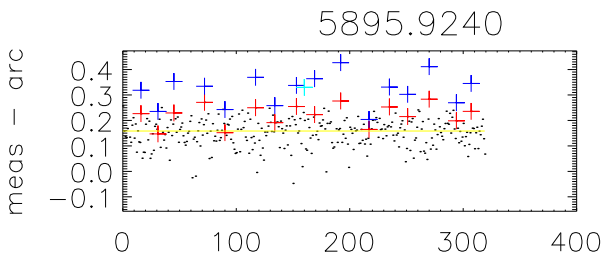

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

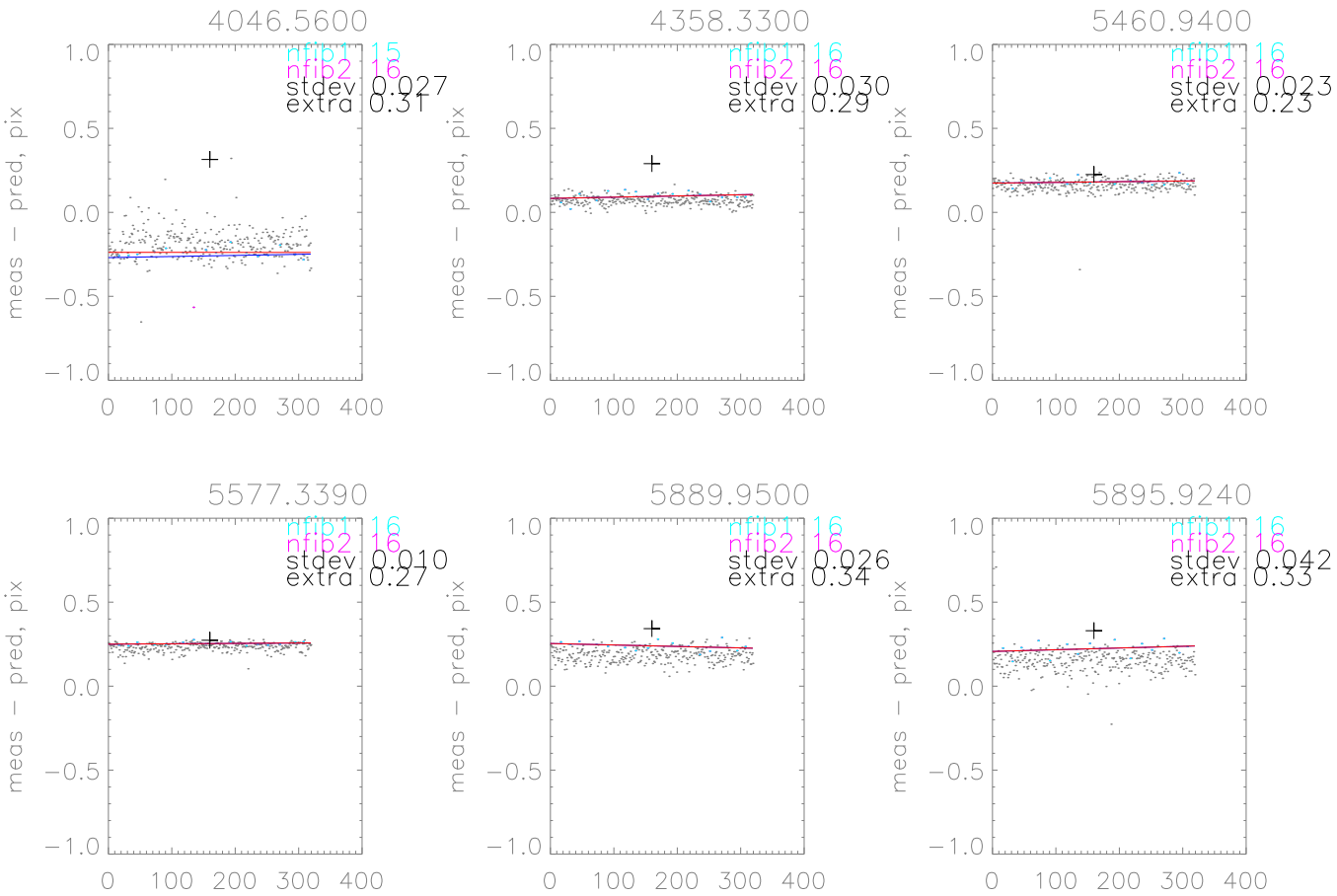

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

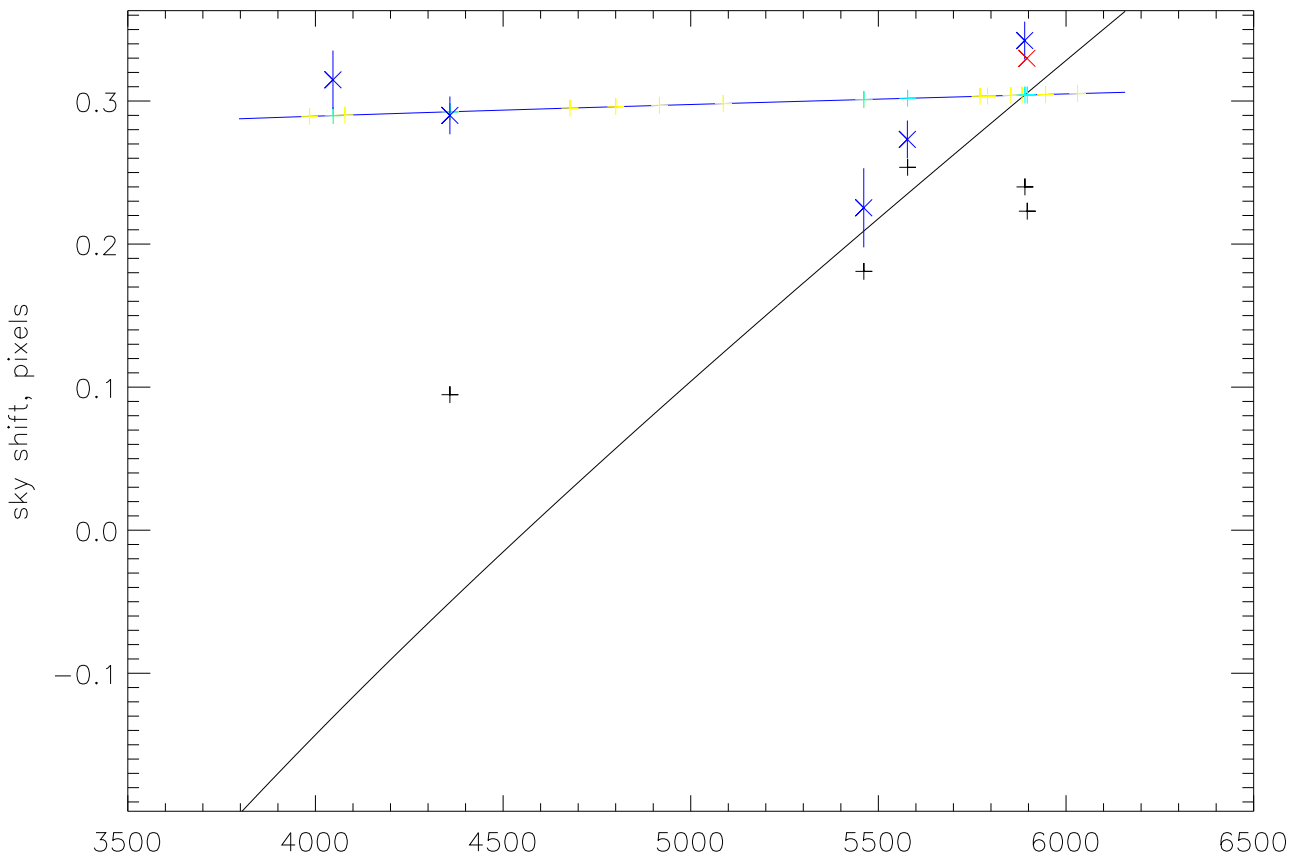

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

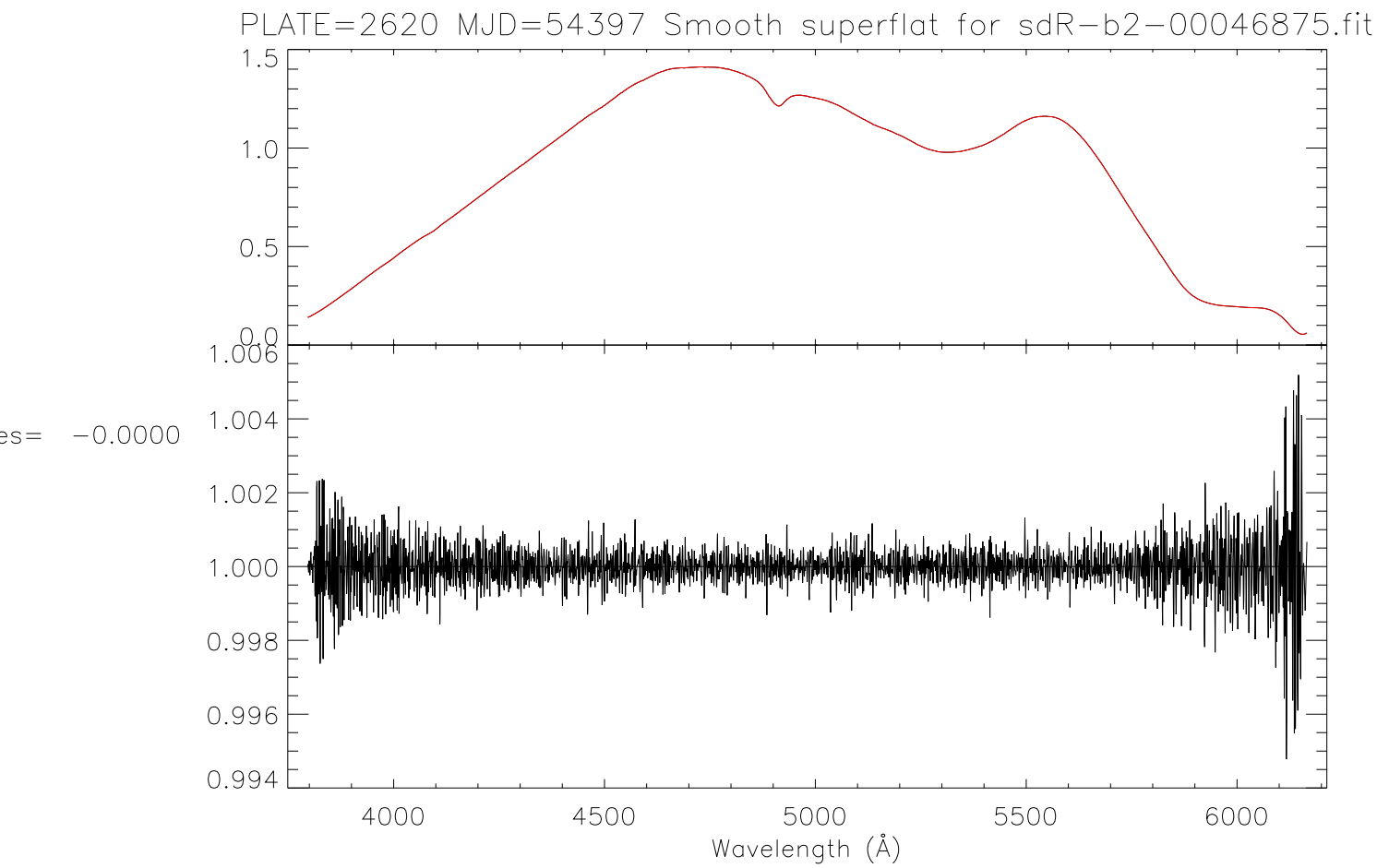

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

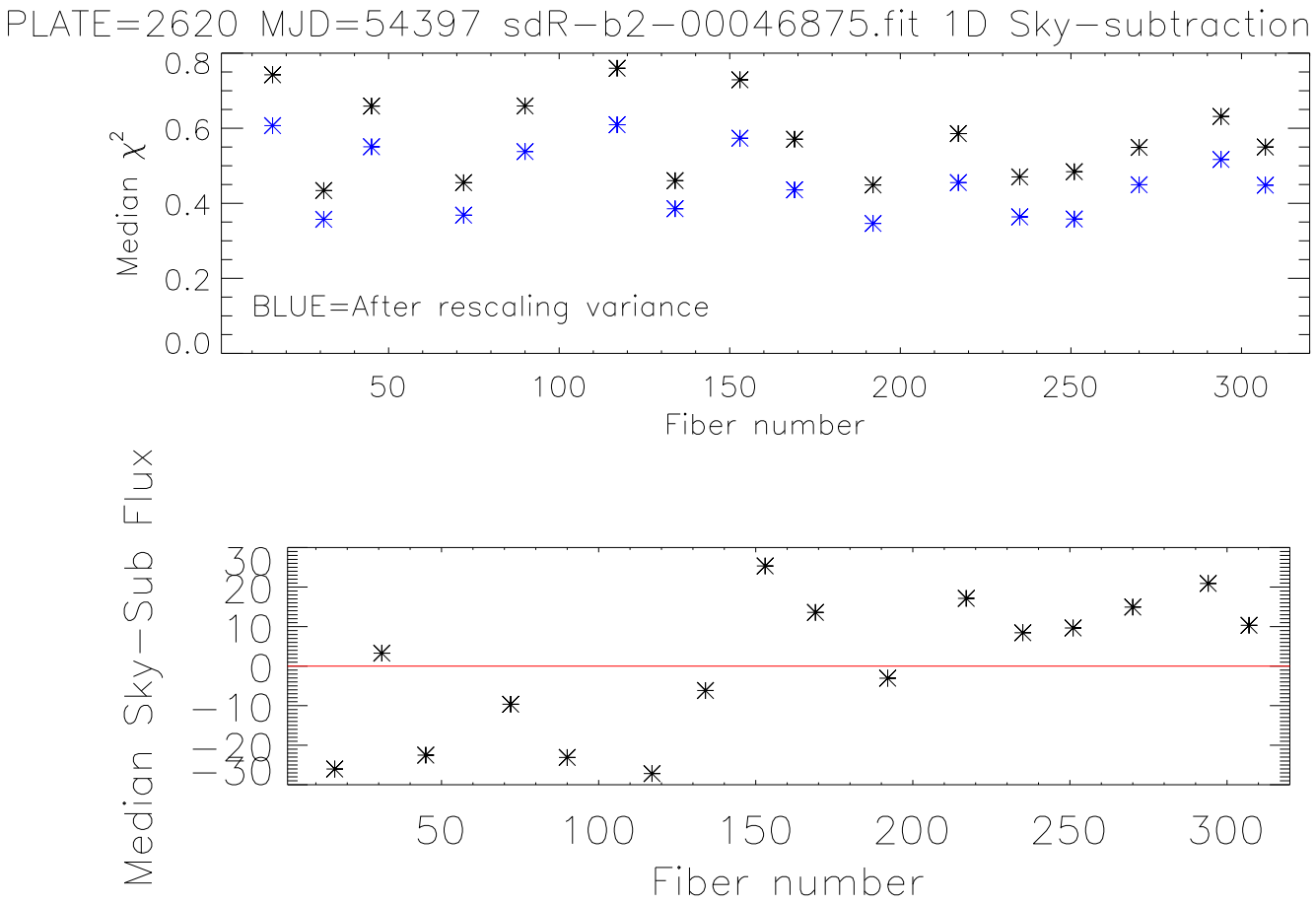

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

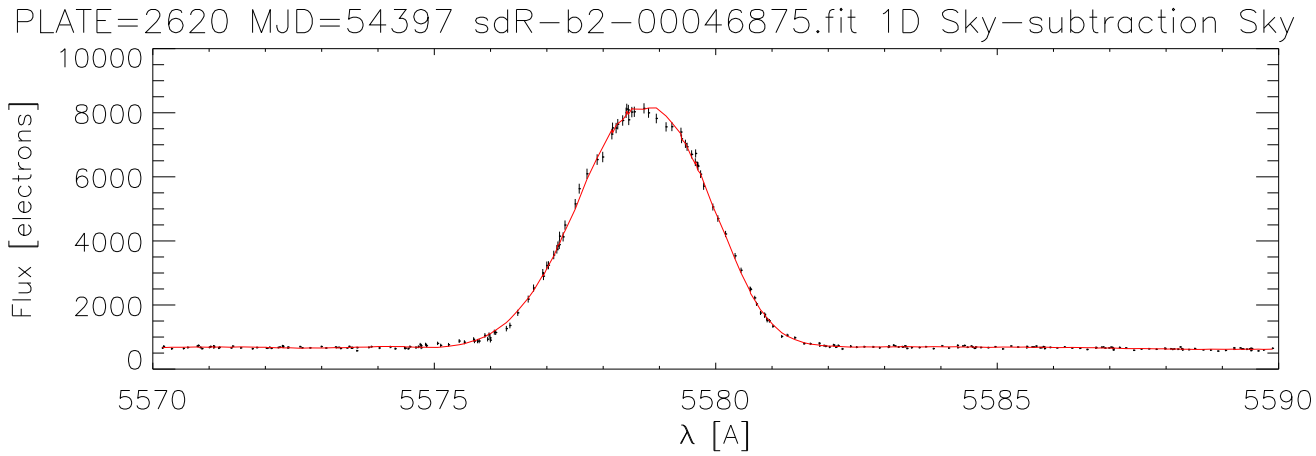

4046.5600
nfib1 15
nfib2 16
stdev 0.027
extra 0.31
4358.3300
nfib1 16
nfib2 16
stdev 0.030
extra 0.29
5460.9400
nfib1 16
nfib2 16
stdev 0.023
extra 0.23
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra 0.27
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.34
5895.9240
nfib1 16
nfib2 16
stdev 0.042
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

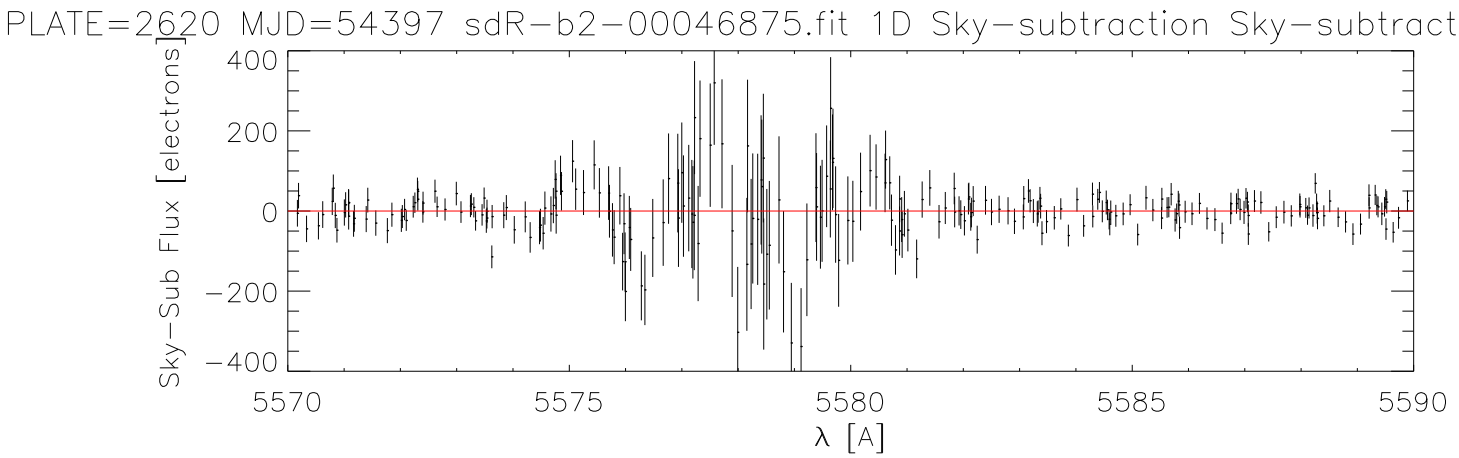

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

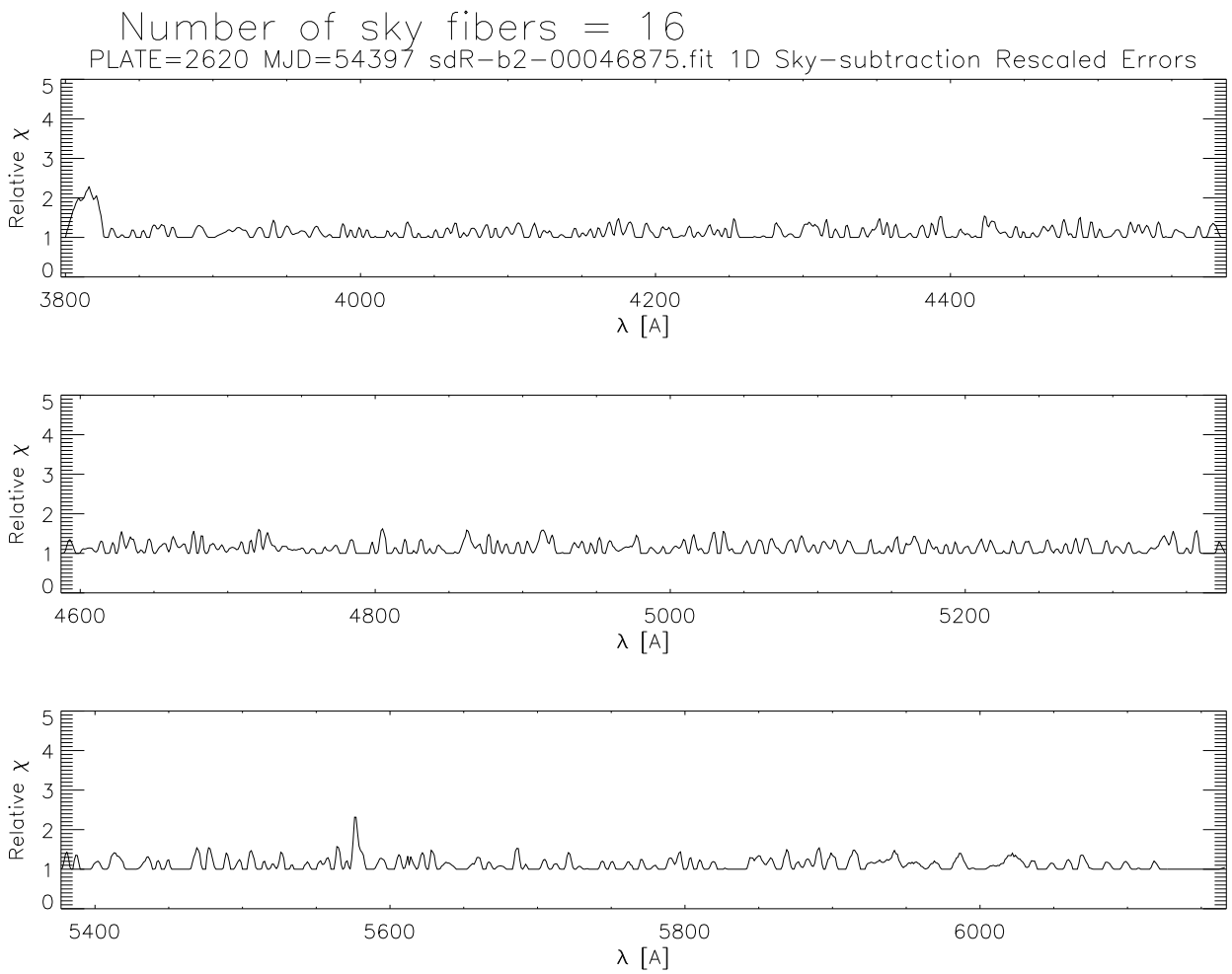

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046875.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

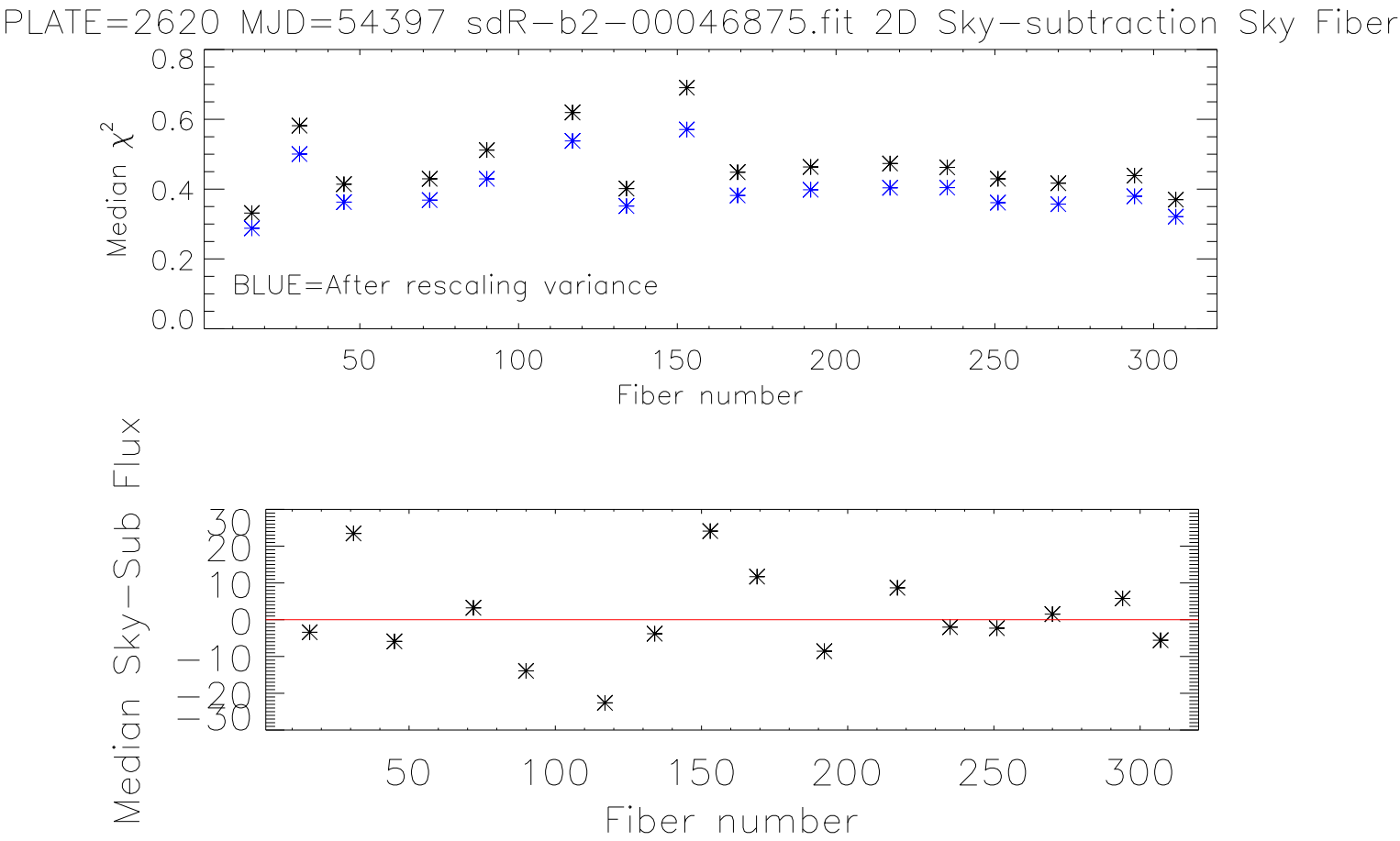
es= −0.0000

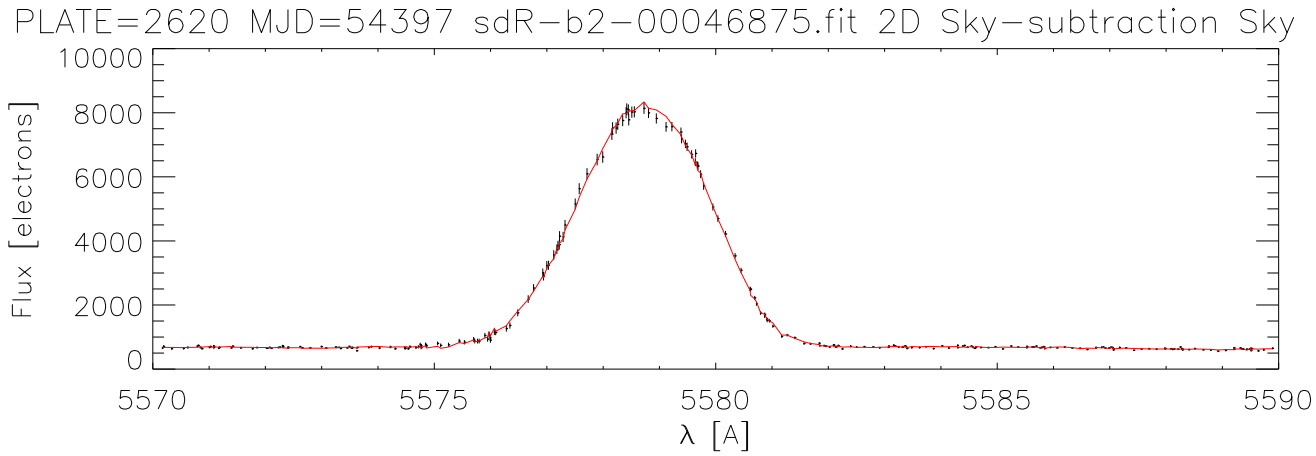

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

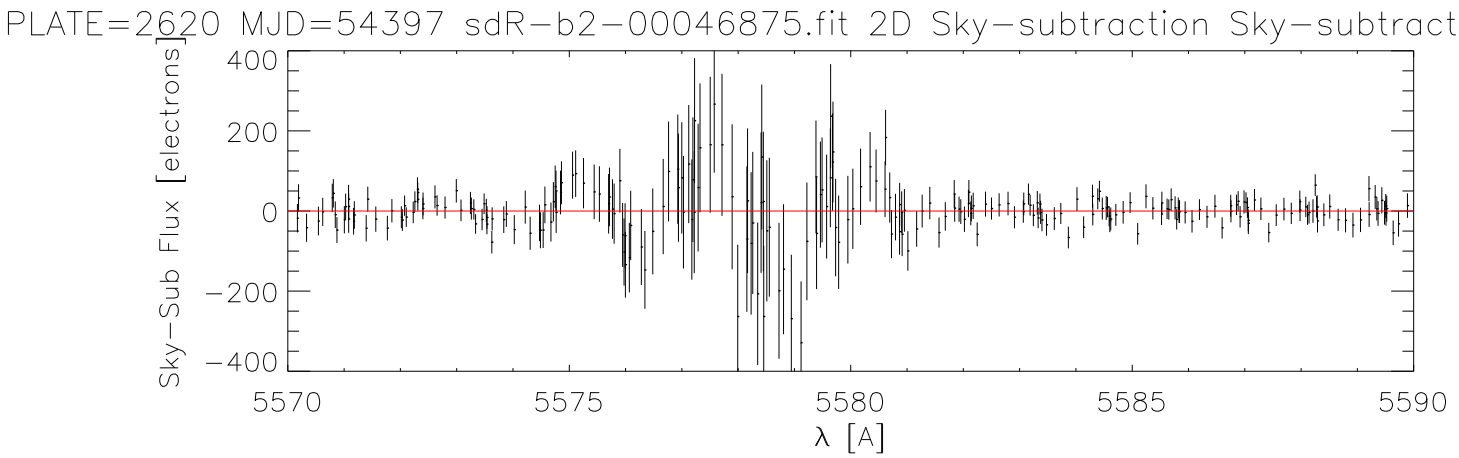

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

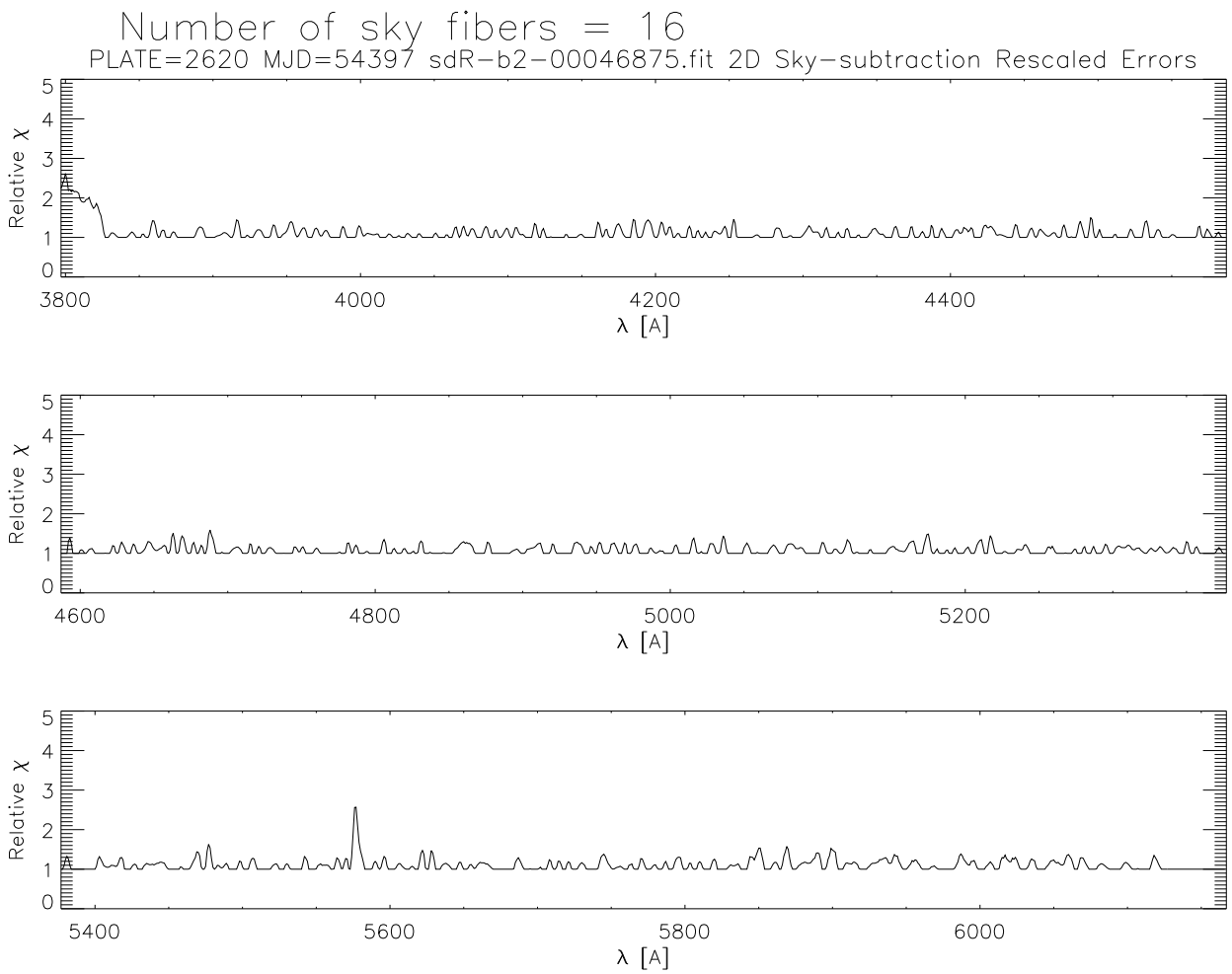

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

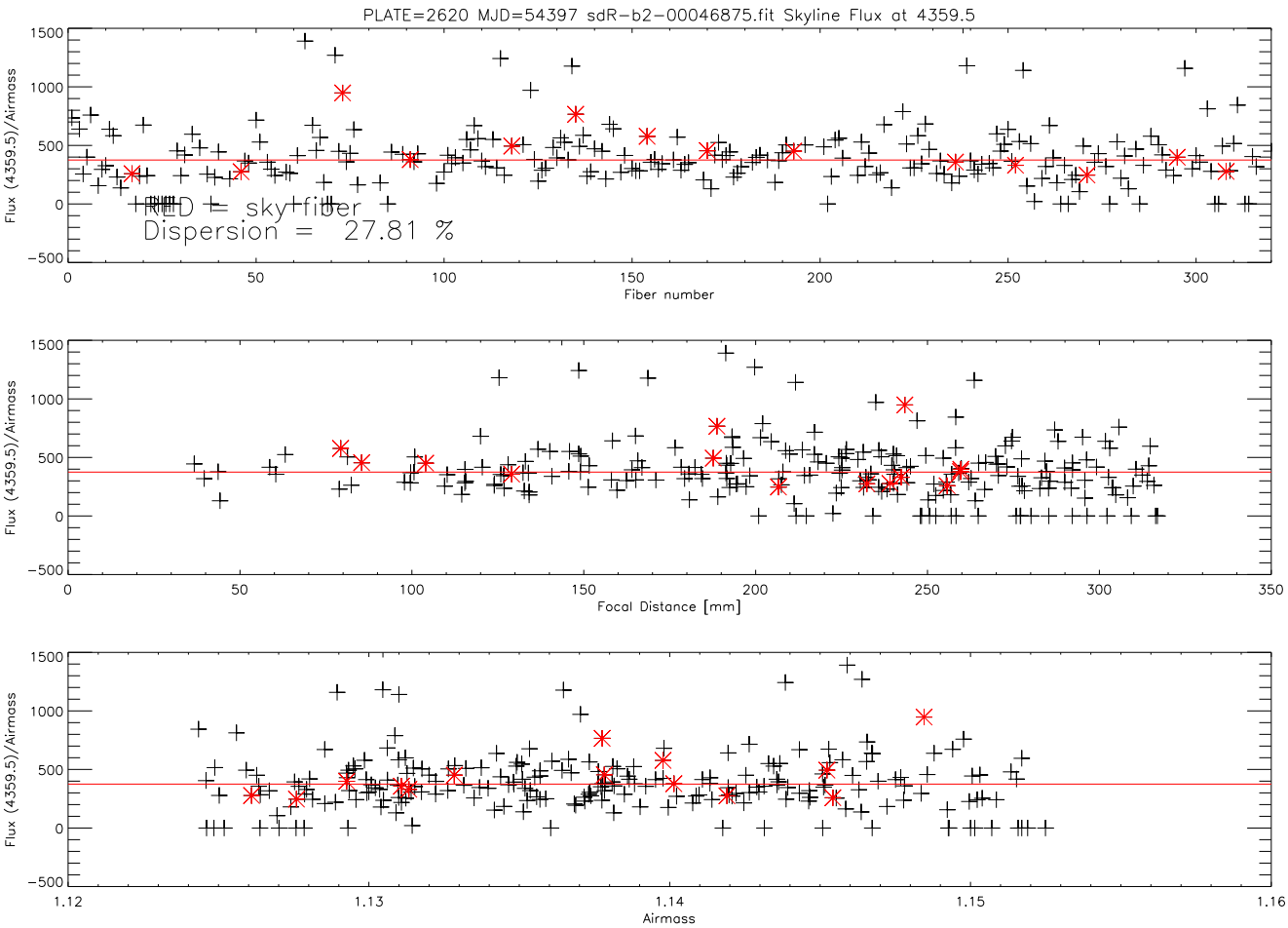

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046875.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

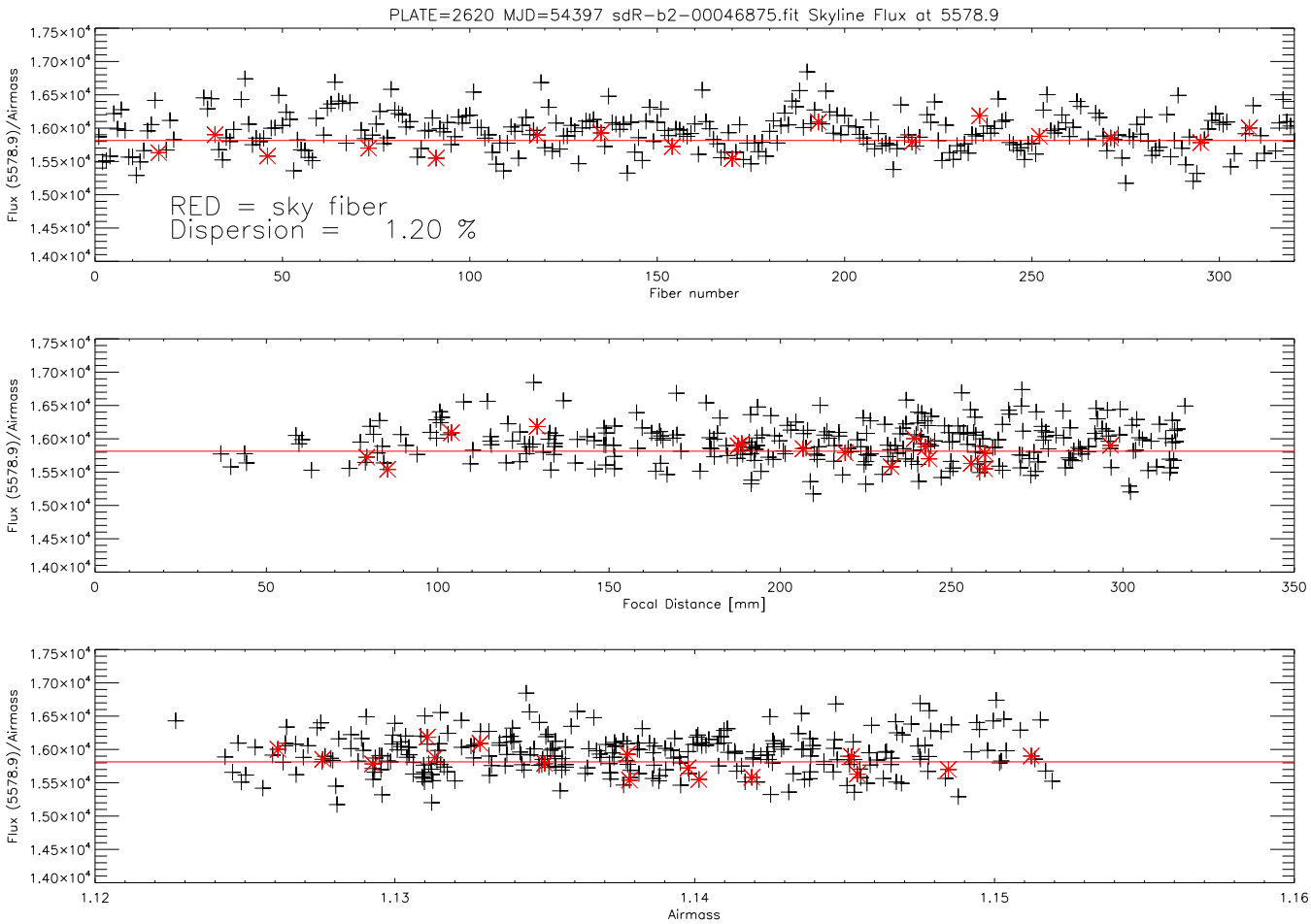

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

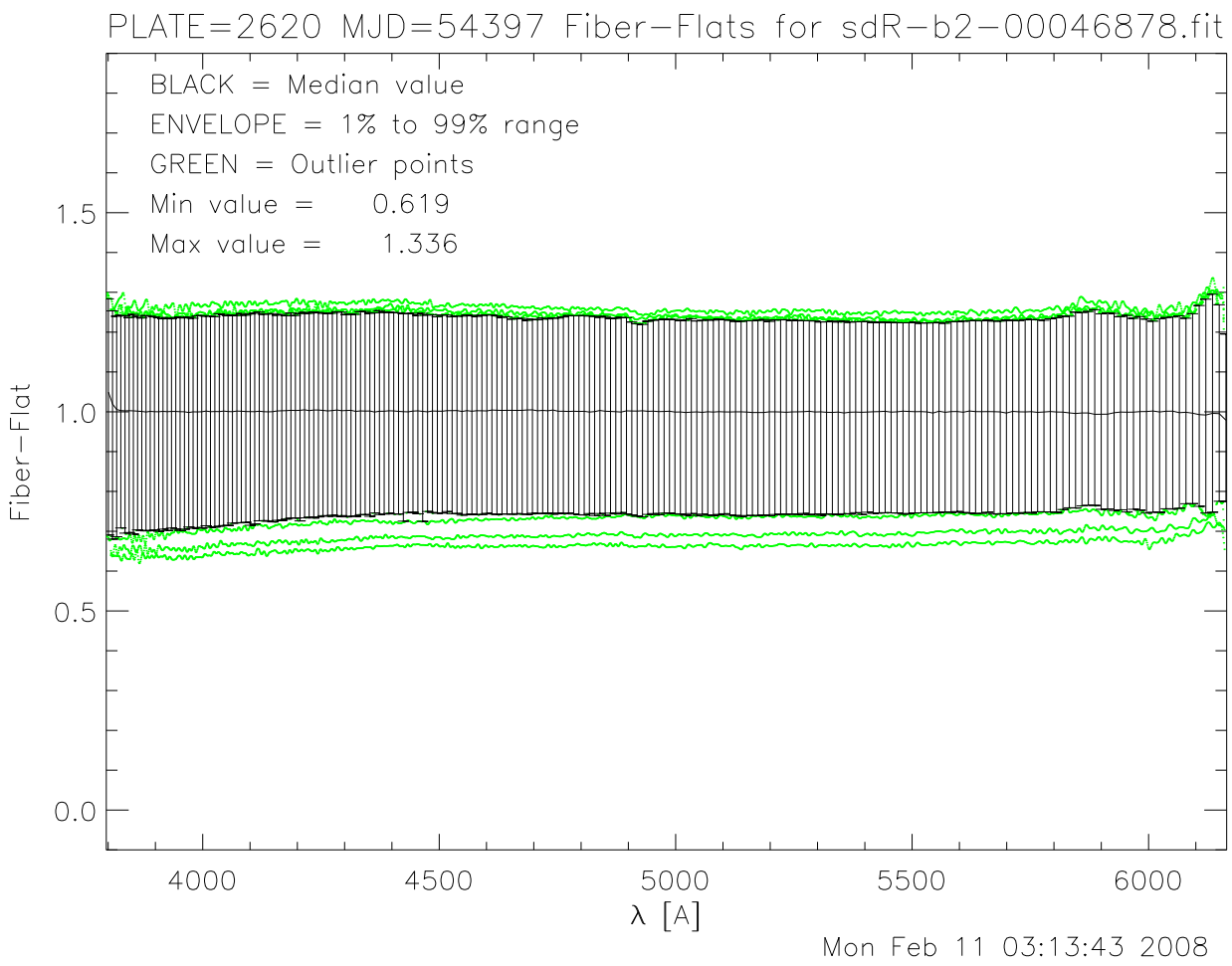

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

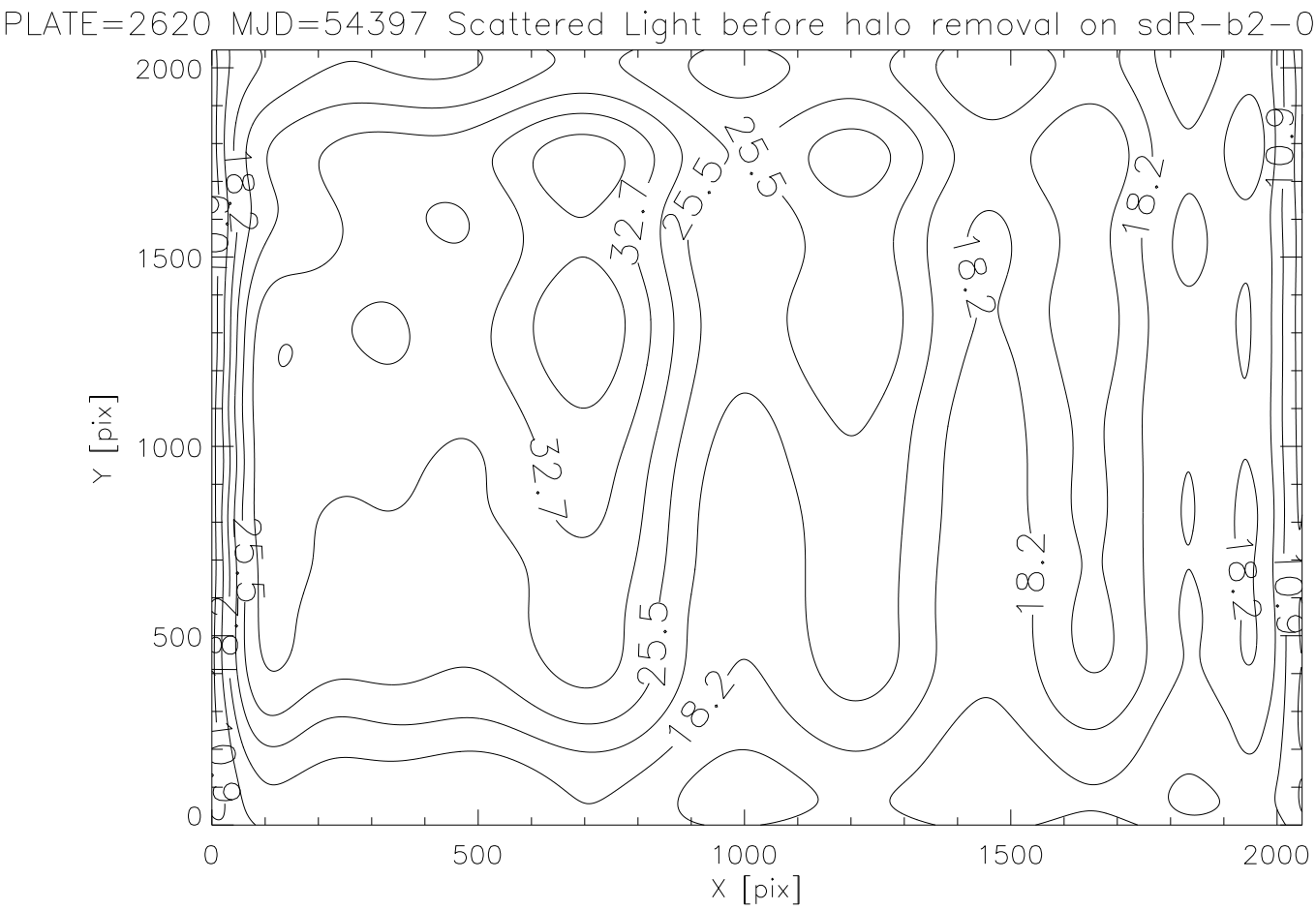

PLATE=2620 MJD=54397 sdR-b2-00046875.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

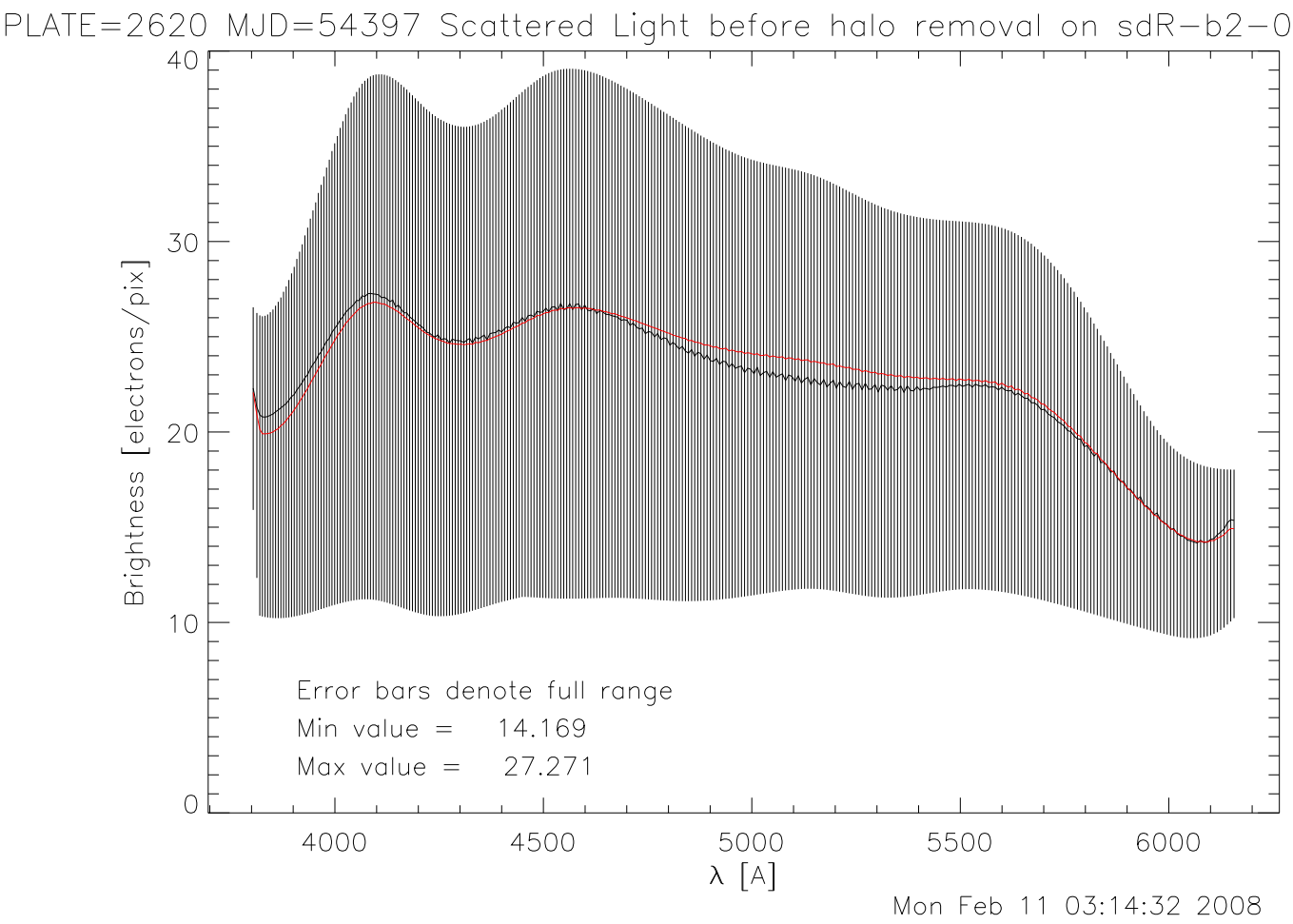

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-b2-00046875.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

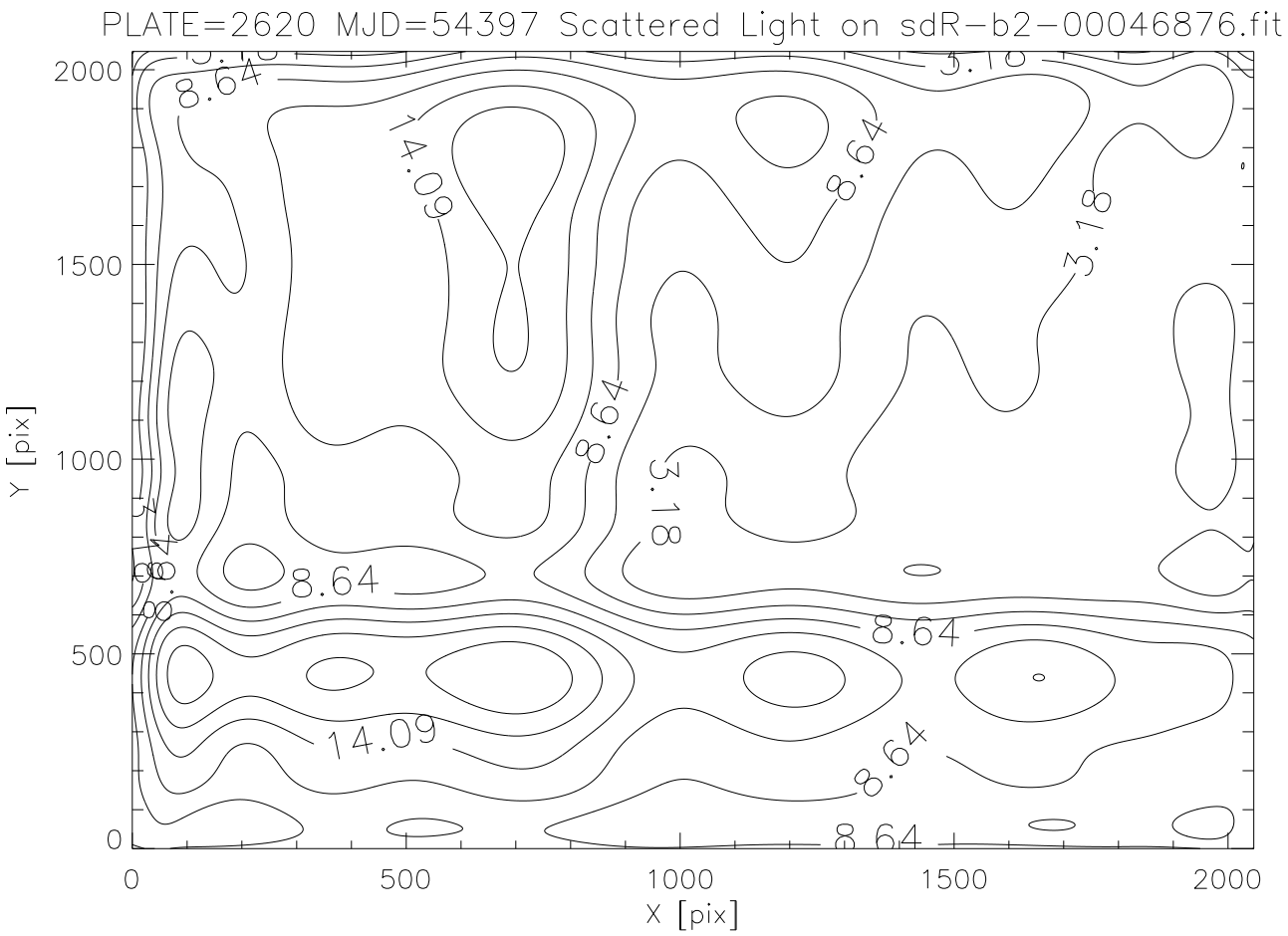

PLATE=2620 MJD=54397 sdR-b2-00046875.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 27.81 %
Flux (4359.5)/Airmass
Fiber number
Focal Distance [mm]
Airmass

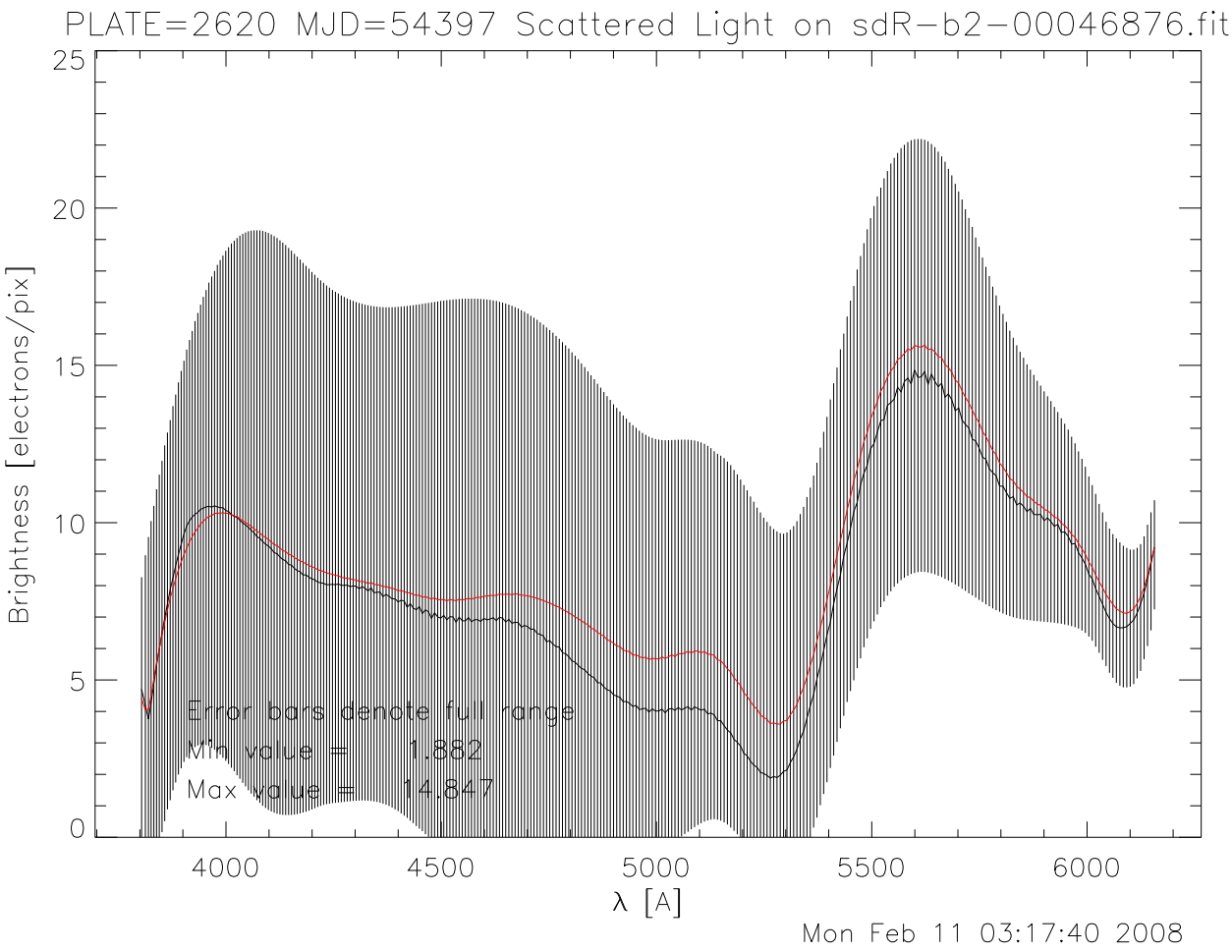

PLATE=2620 MJD=54397 sdR-b2-00046875.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.75×10^4
1.70×10^4
1.65×10^4
1.60×10^4
1.55×10^4
1.50×10^4
1.45×10^4
1.40×10^4
RED = sky fiber
Dispersion = 1.20 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.75×10^4
1.70×10^4
1.65×10^4
1.60×10^4
1.55×10^4
1.50×10^4
1.45×10^4
1.40×10^4
0
50
100
150
200
250
300
350
Focal Distance [mm]
Flux (5578.9)/Airmass
1.75×10^4
1.70×10^4
1.65×10^4
1.60×10^4
1.55×10^4
1.50×10^4
1.45×10^4
1.40×10^4
1.12
1.13
1.14
1.15
1.16
Airmass

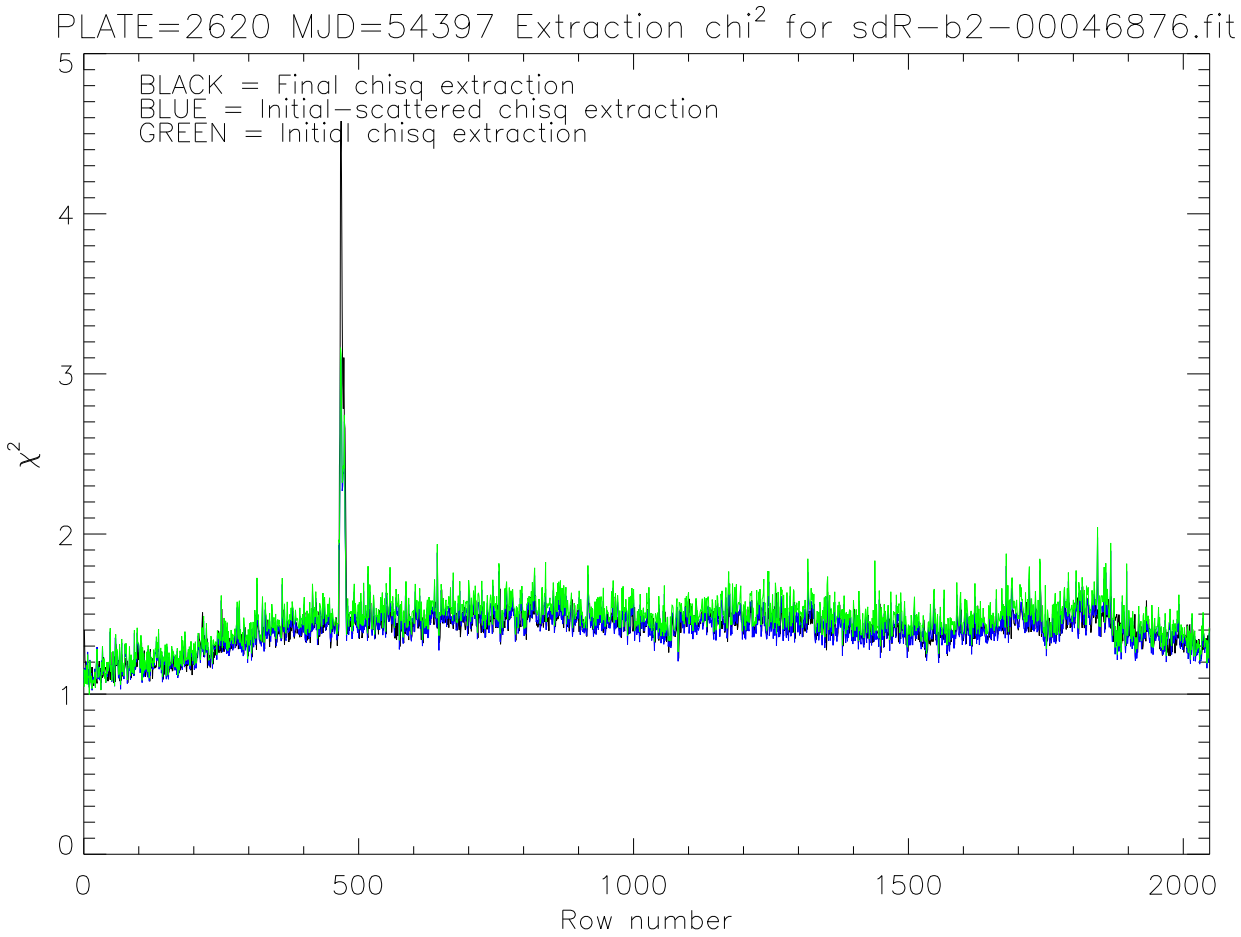

PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 03:13:43 2008

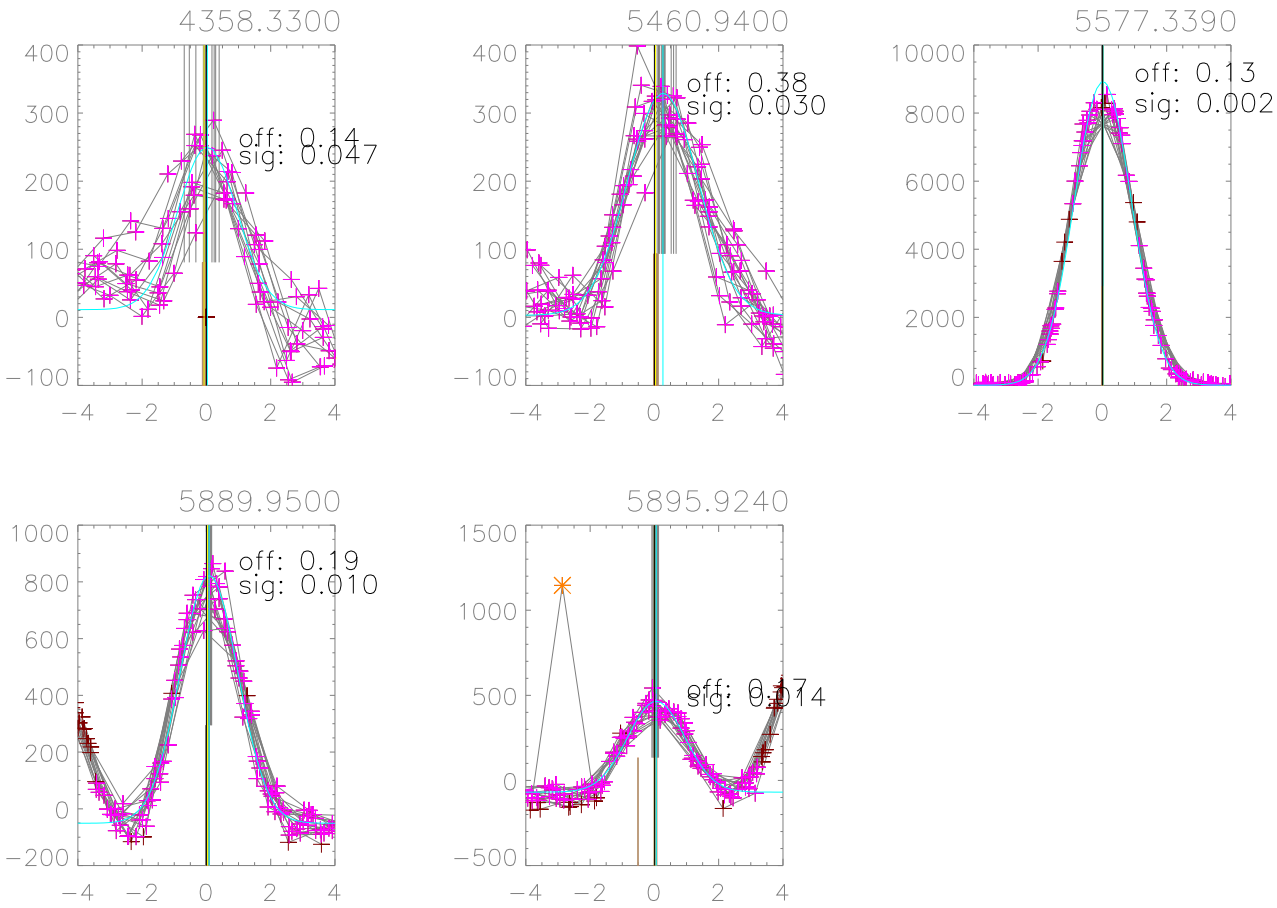

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046876.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
32.7
25.5
18.2
10.9

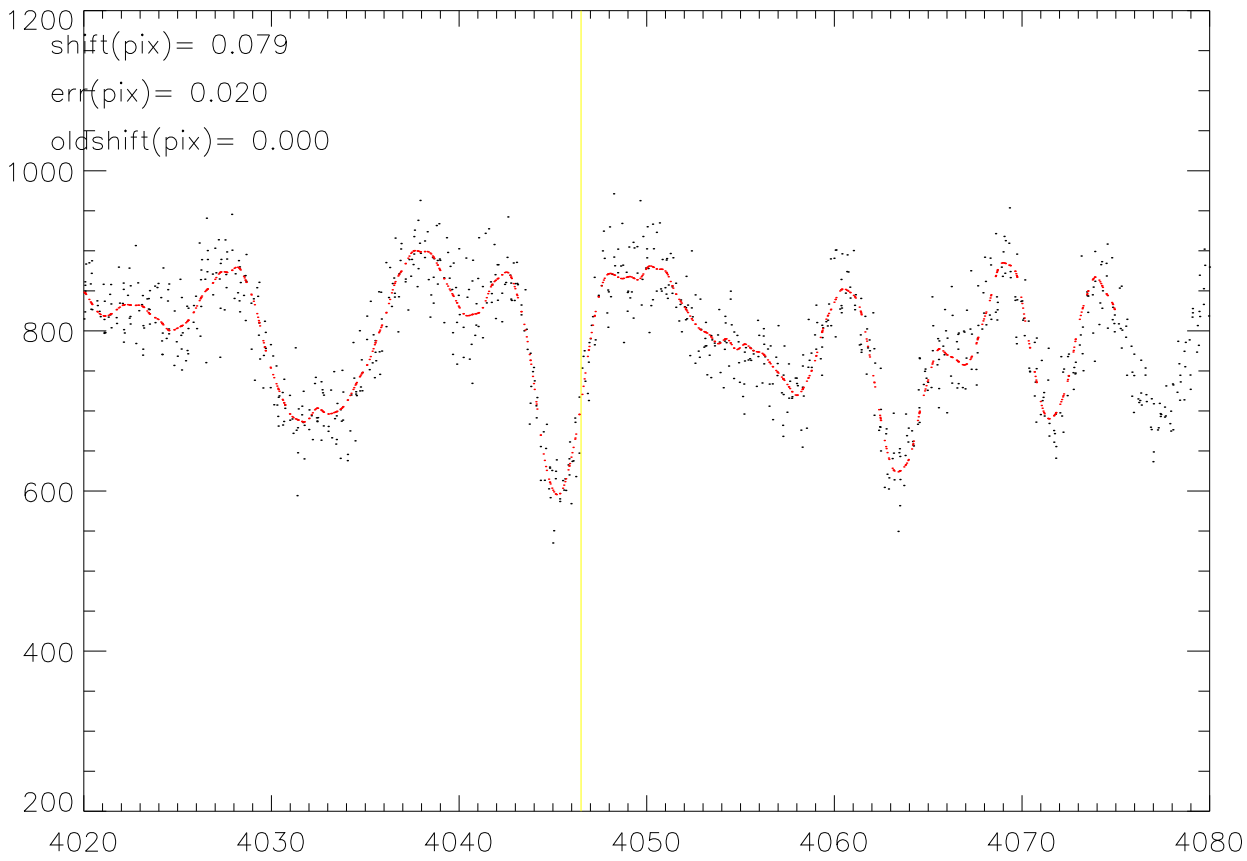

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046876.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 14.169
Max value = 27.271
Mon Feb 11 03:14:32 2008

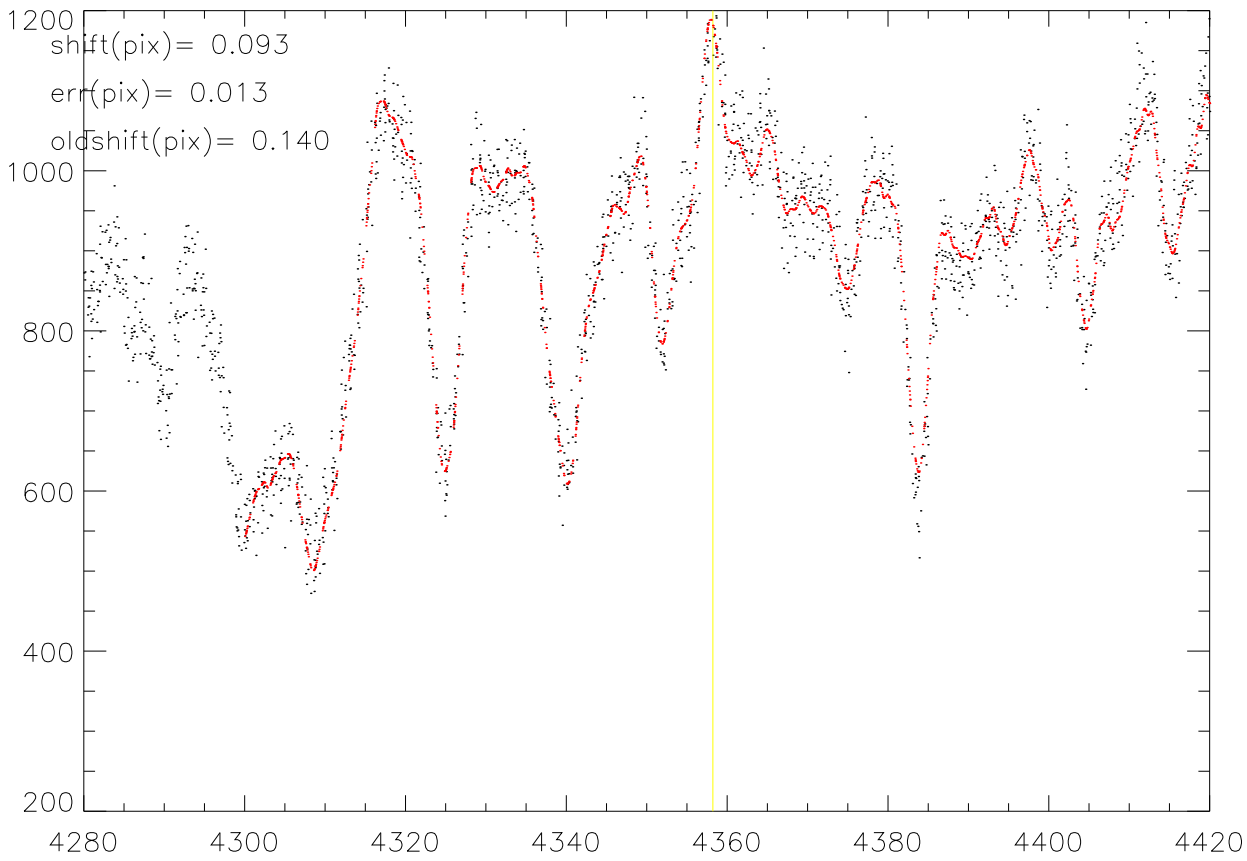

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046876.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.64
14.09
3.18
5.18

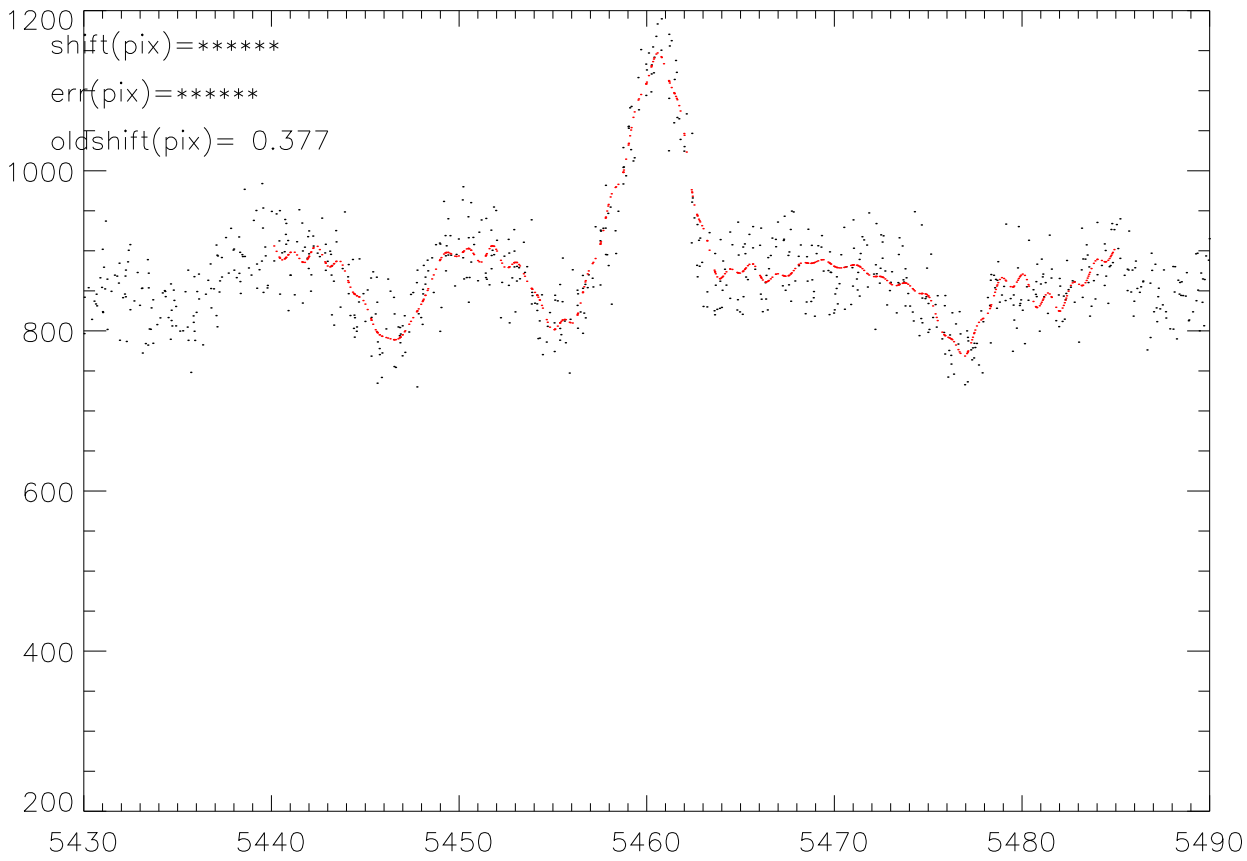

PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046876.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.882
Max value = 14.847
Mon Feb 11 03:17:40 2008

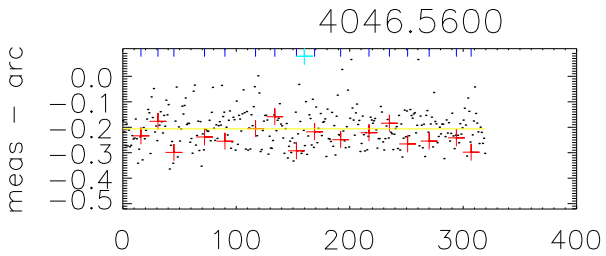

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046876.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

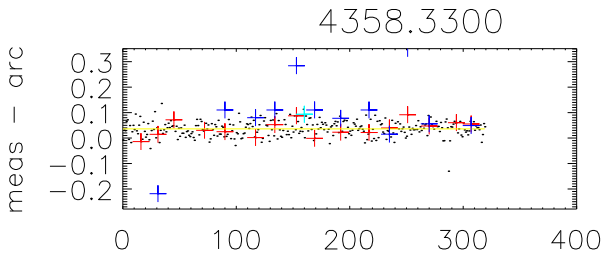

4358.3300
off: 0.14
sig: 0.047
5460.9400
off: 0.38
sig: 0.030
5577.3390
off: 0.13
sig: 0.002
5889.9500
off: 0.19
sig: 0.010
5895.9240
off: 0.17
sig: 0.014

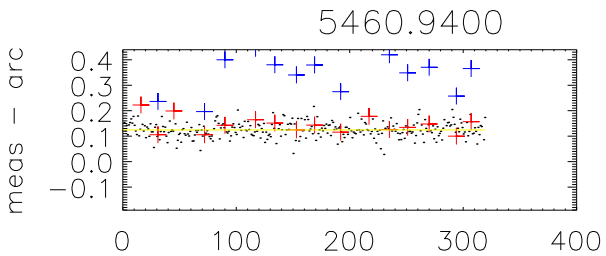

shift(pix)= 0.079
err(pix)= 0.020
oldshift(pix)= 0.000
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

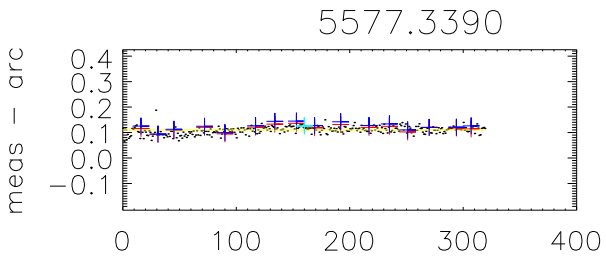

shift(pix)= 0.093
err(pix)= 0.013
oldshift(pix)= 0.140
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

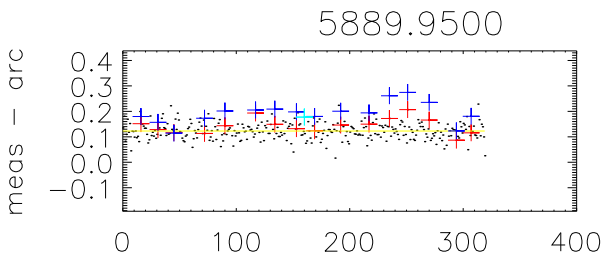

shift(pix)=******
err(pix)=******
oldshift(pix)= 0.377
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

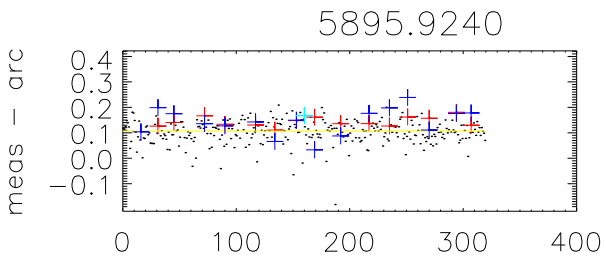

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

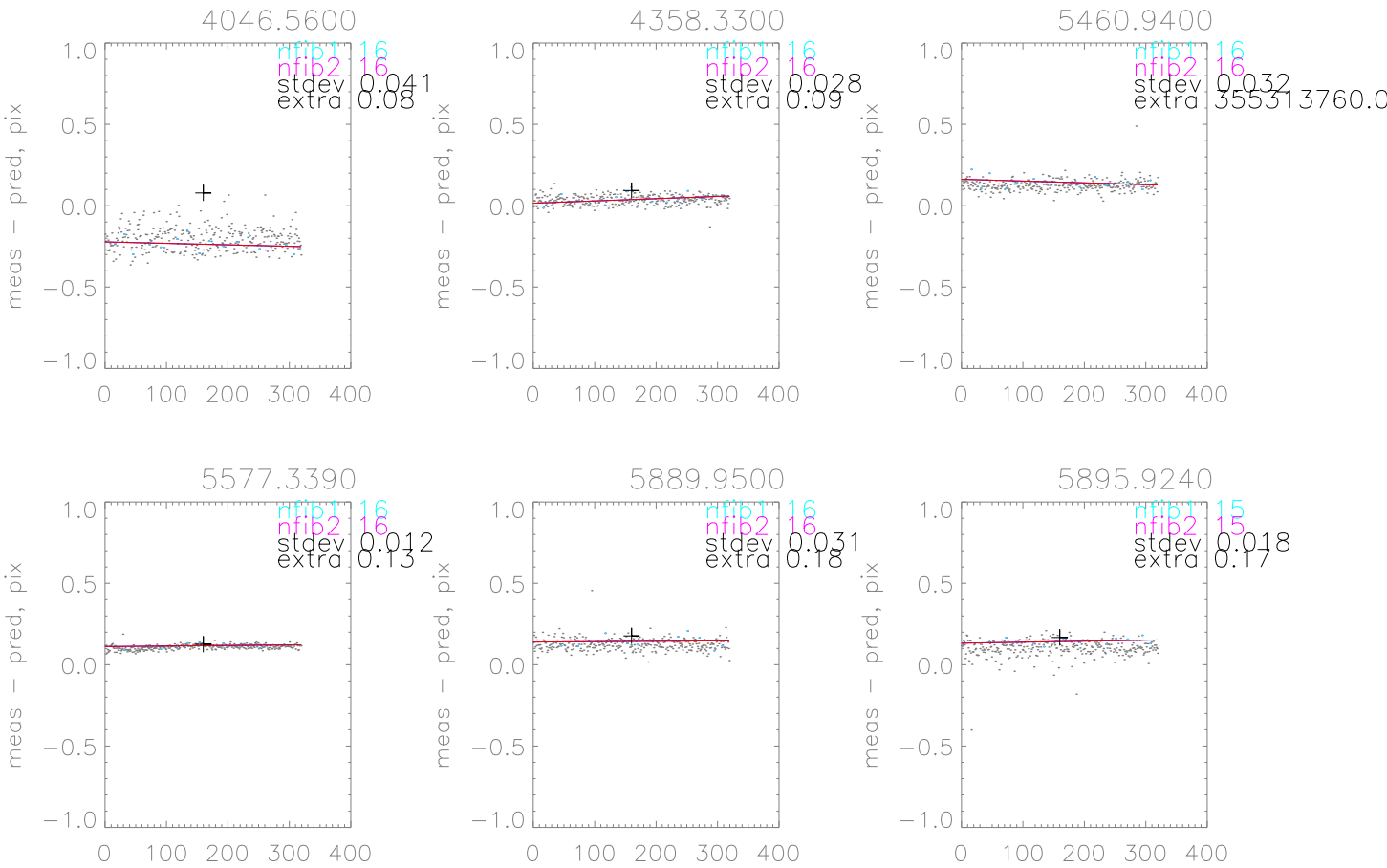

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

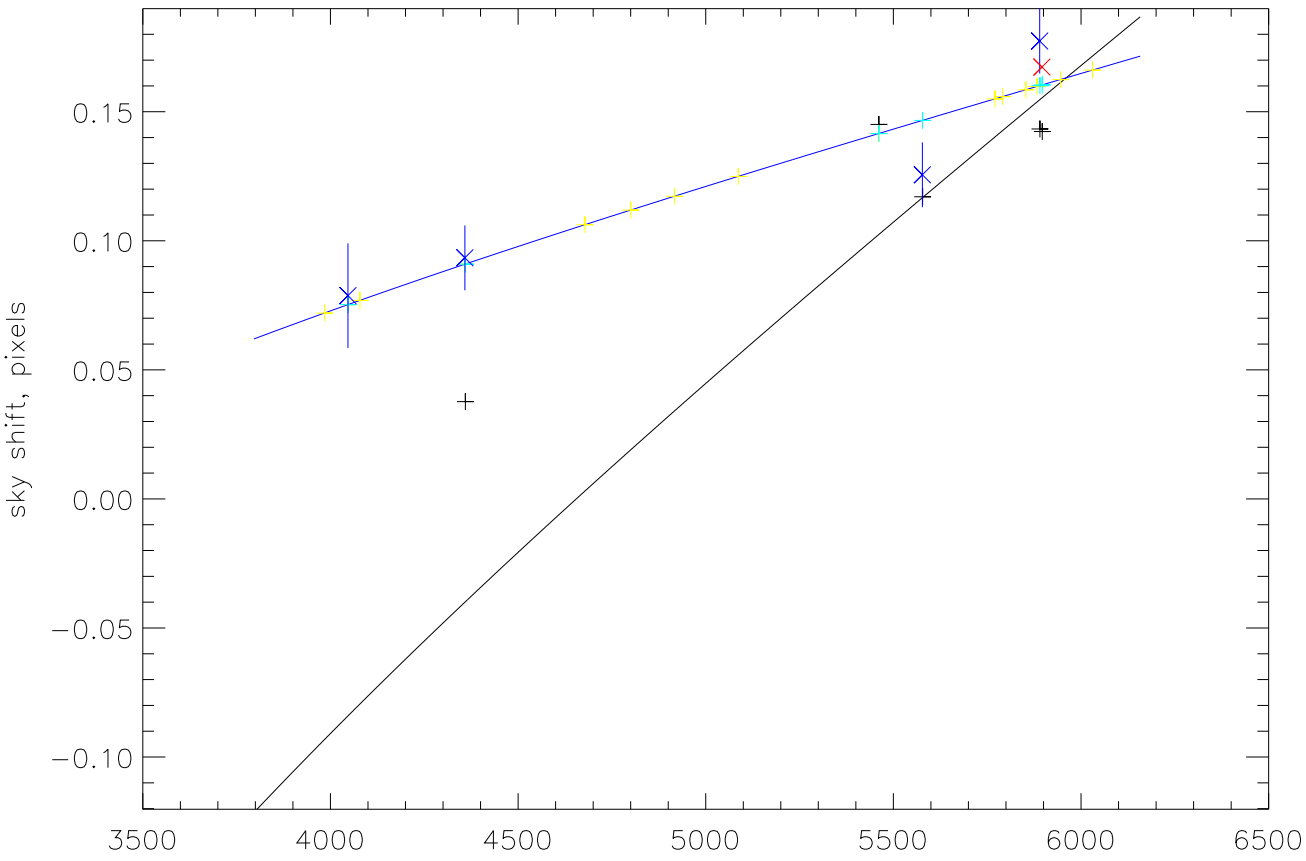

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

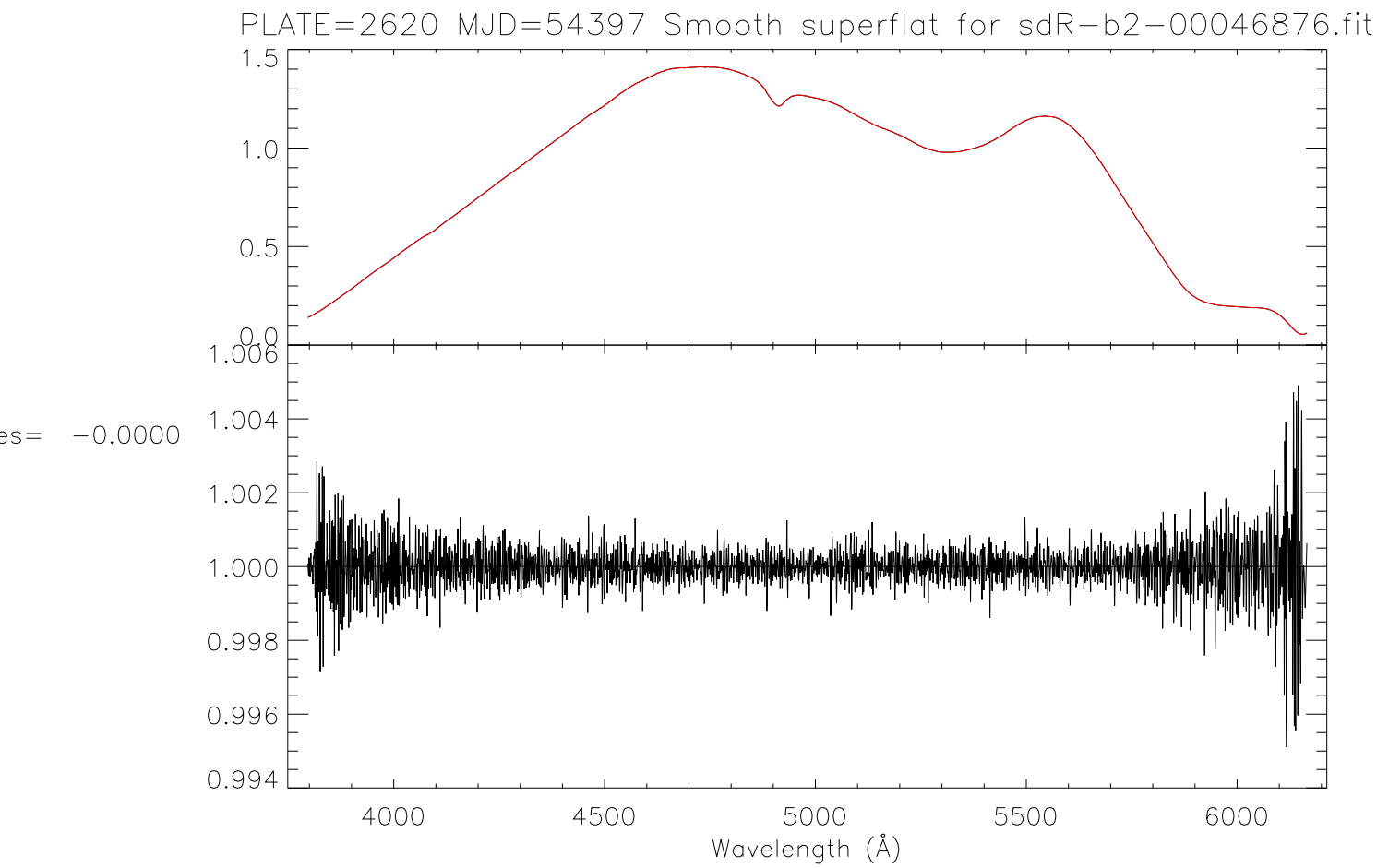

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

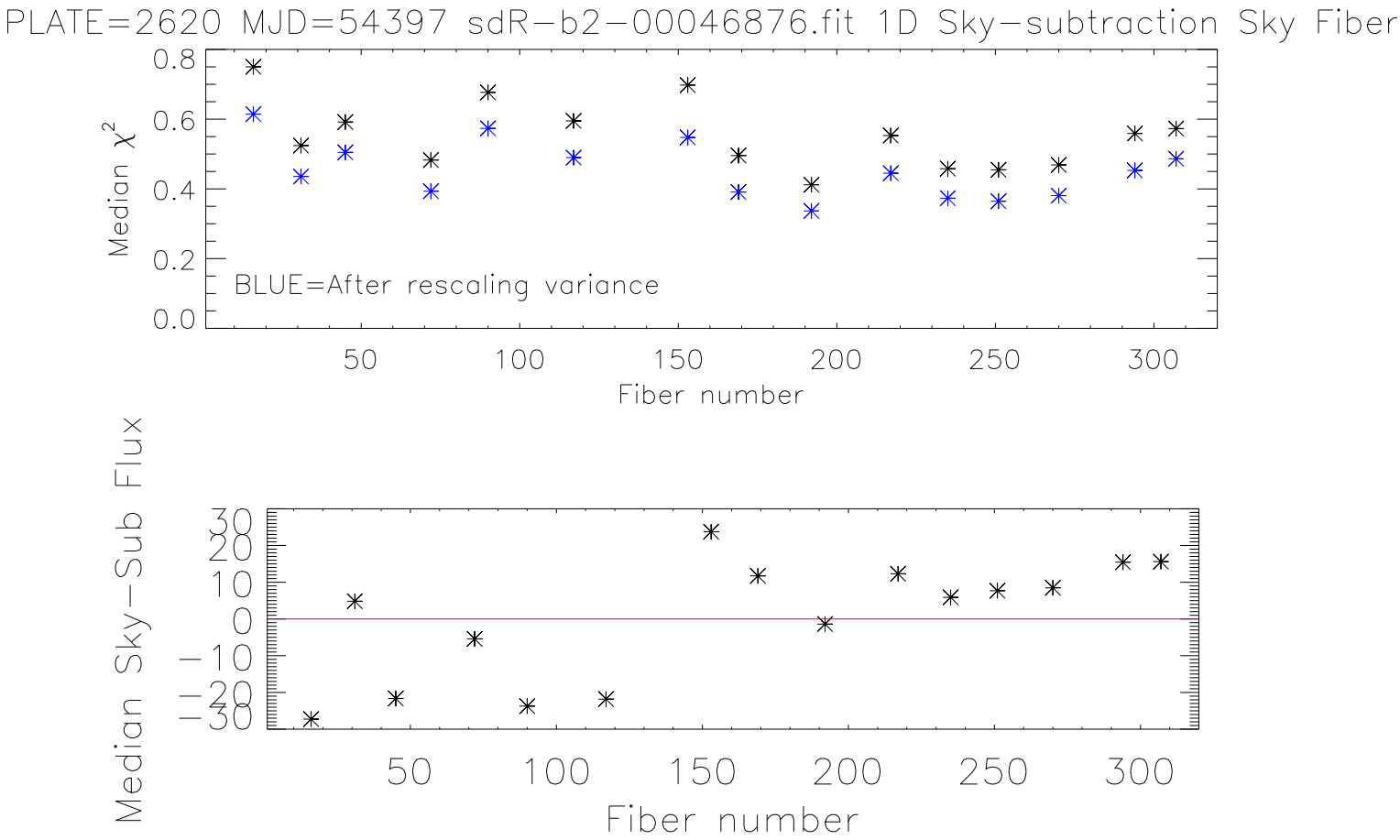

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

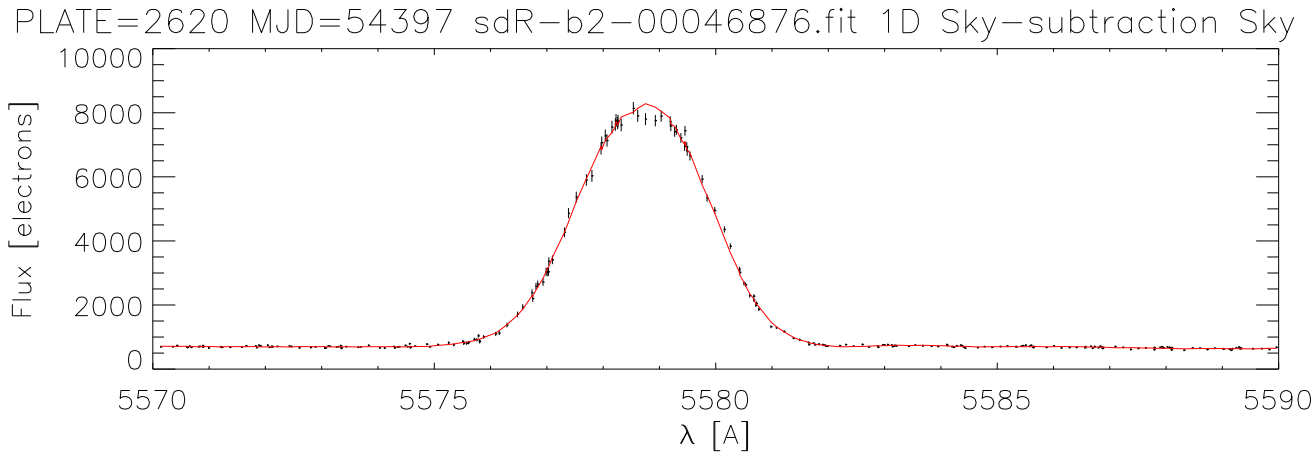

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

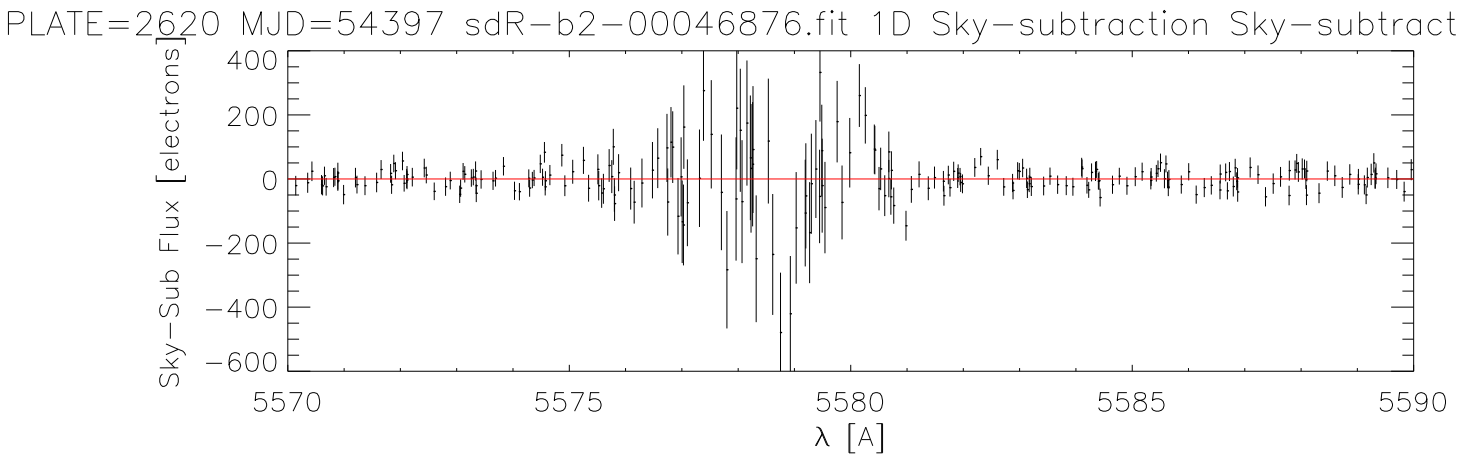

4046.5600
nfib1 16
nfib2 16
stdev 0.041
extra 0.08
4358.3300
nfib1 16
nfib2 16
stdev 0.028
extra 0.09
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra 355513760.0
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.13
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra 0.18
5895.9240
nfib1 15
nfib2 15
stdev 0.018
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

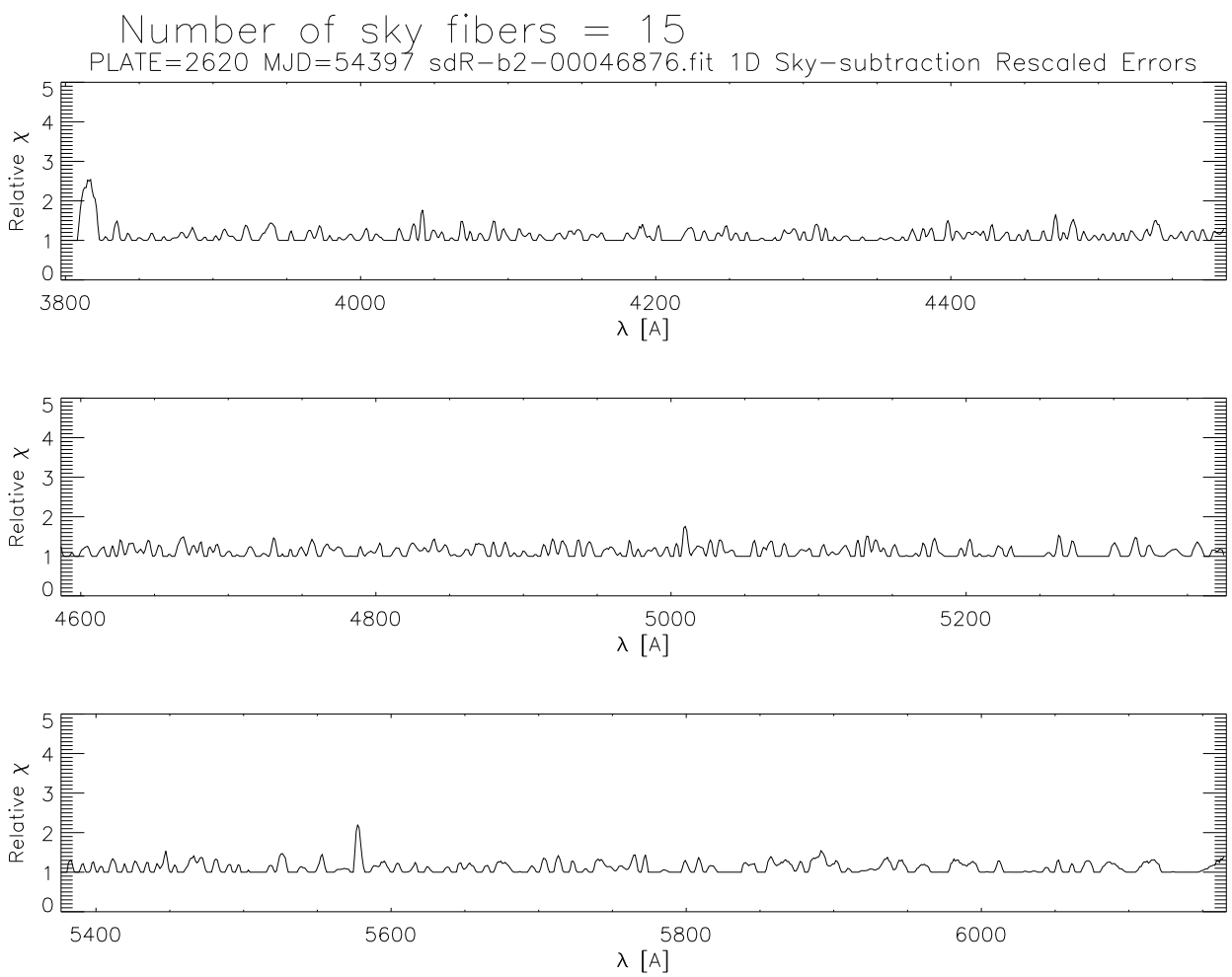

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

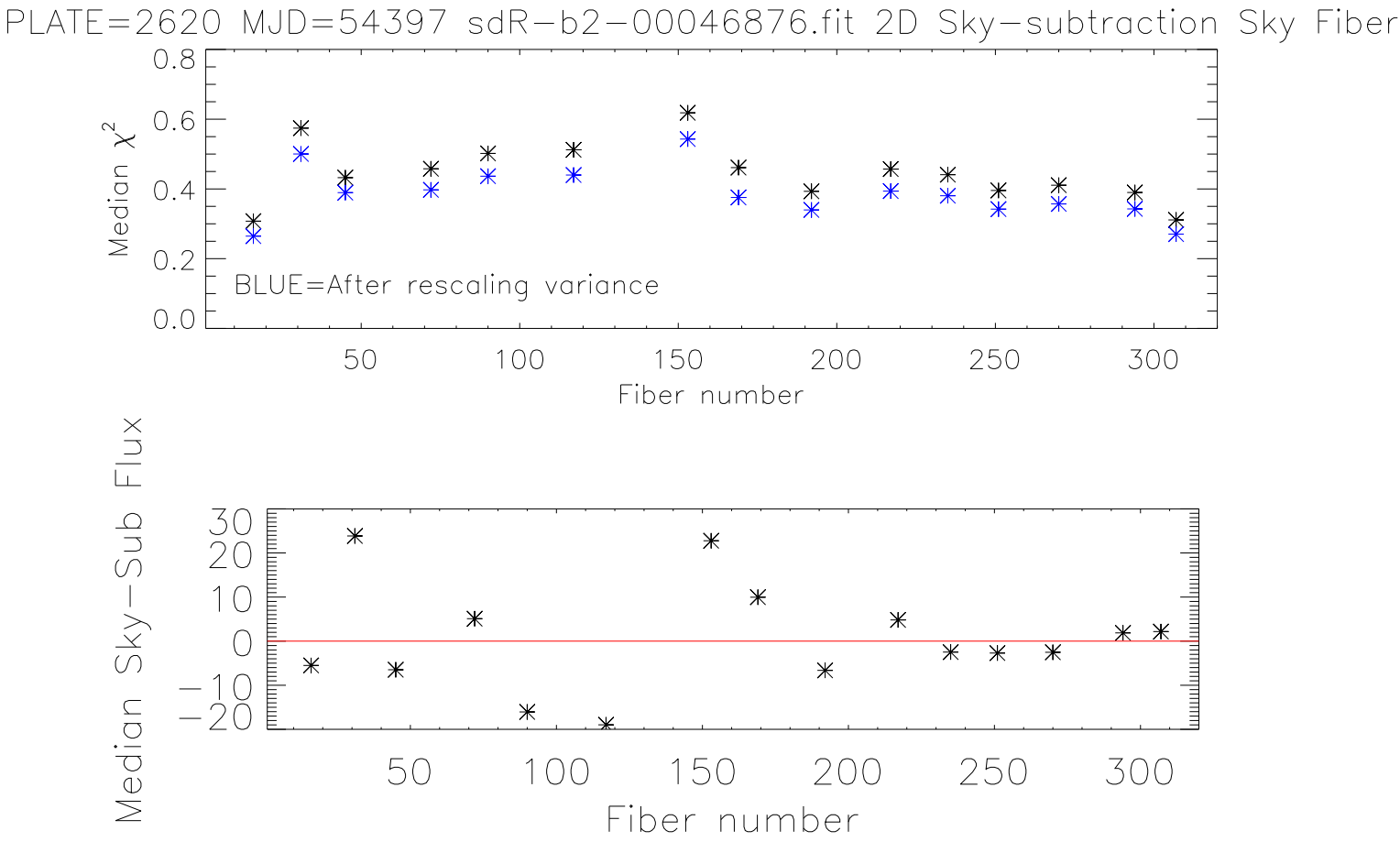

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046876.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

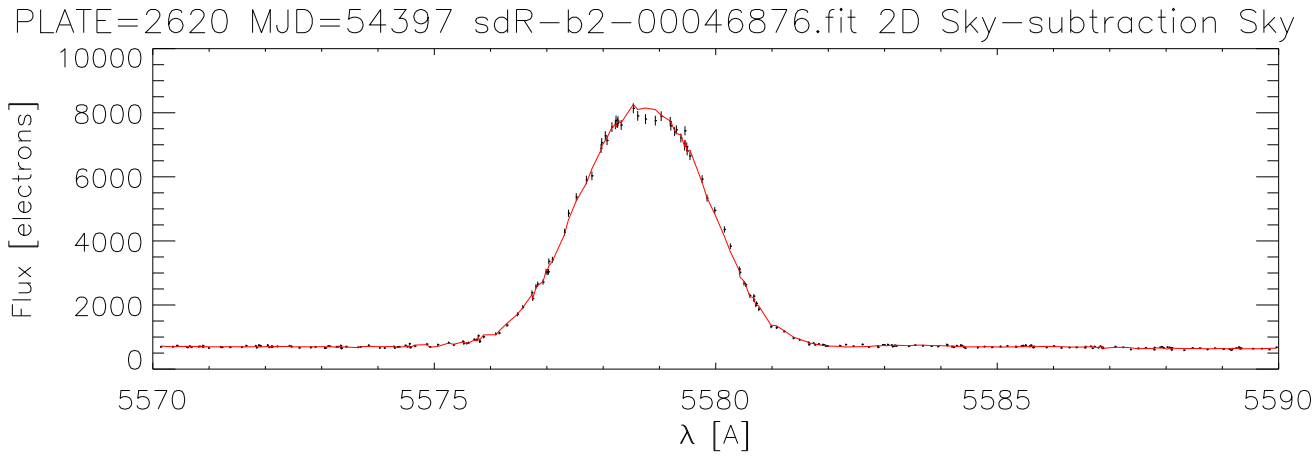

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-30
-20
-10
0
10
20
30
50
100
150
200
250
300
Fiber number

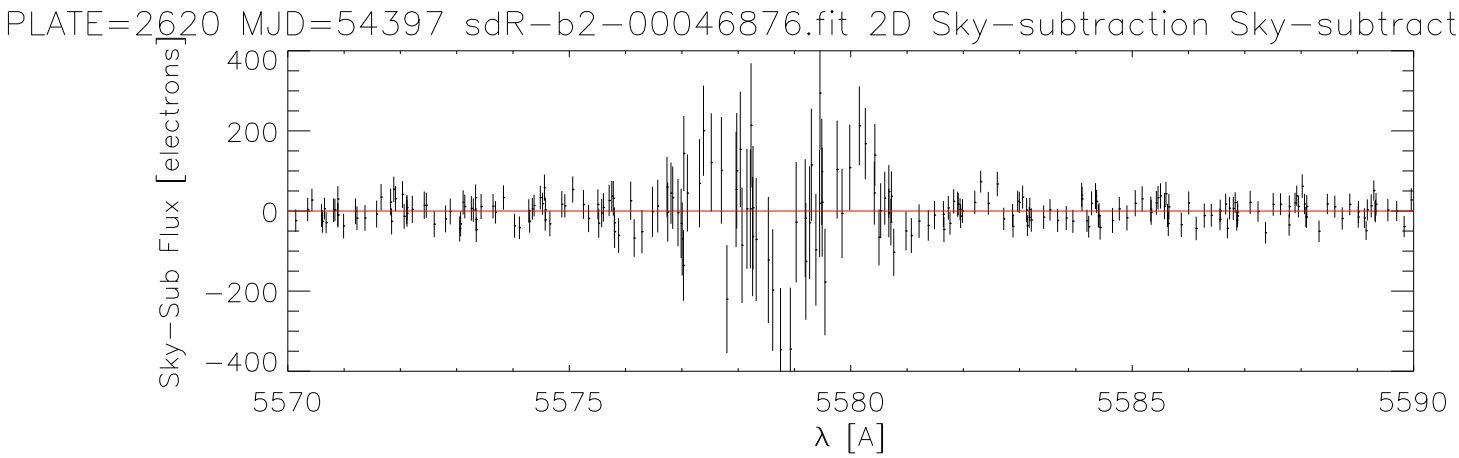

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

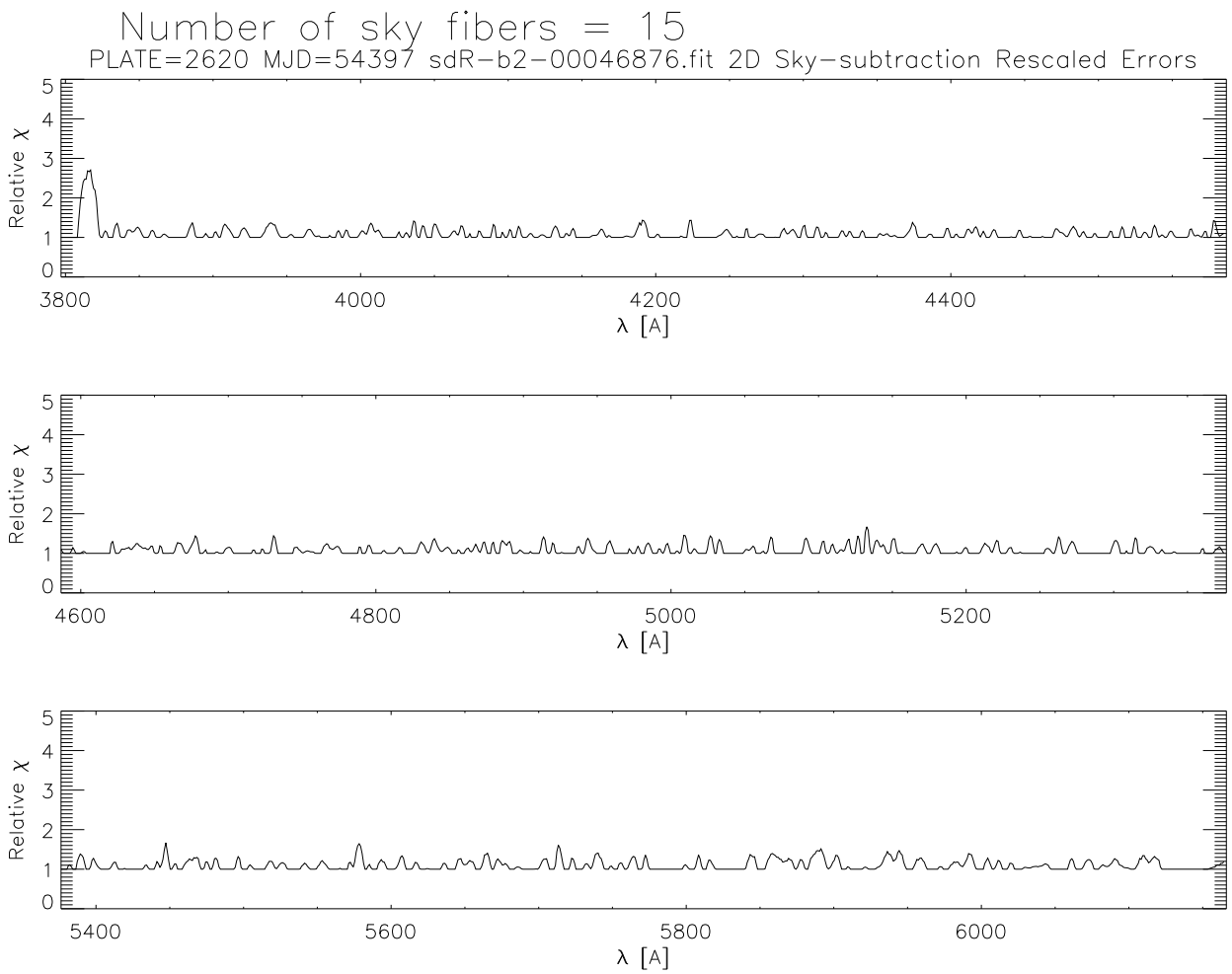

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

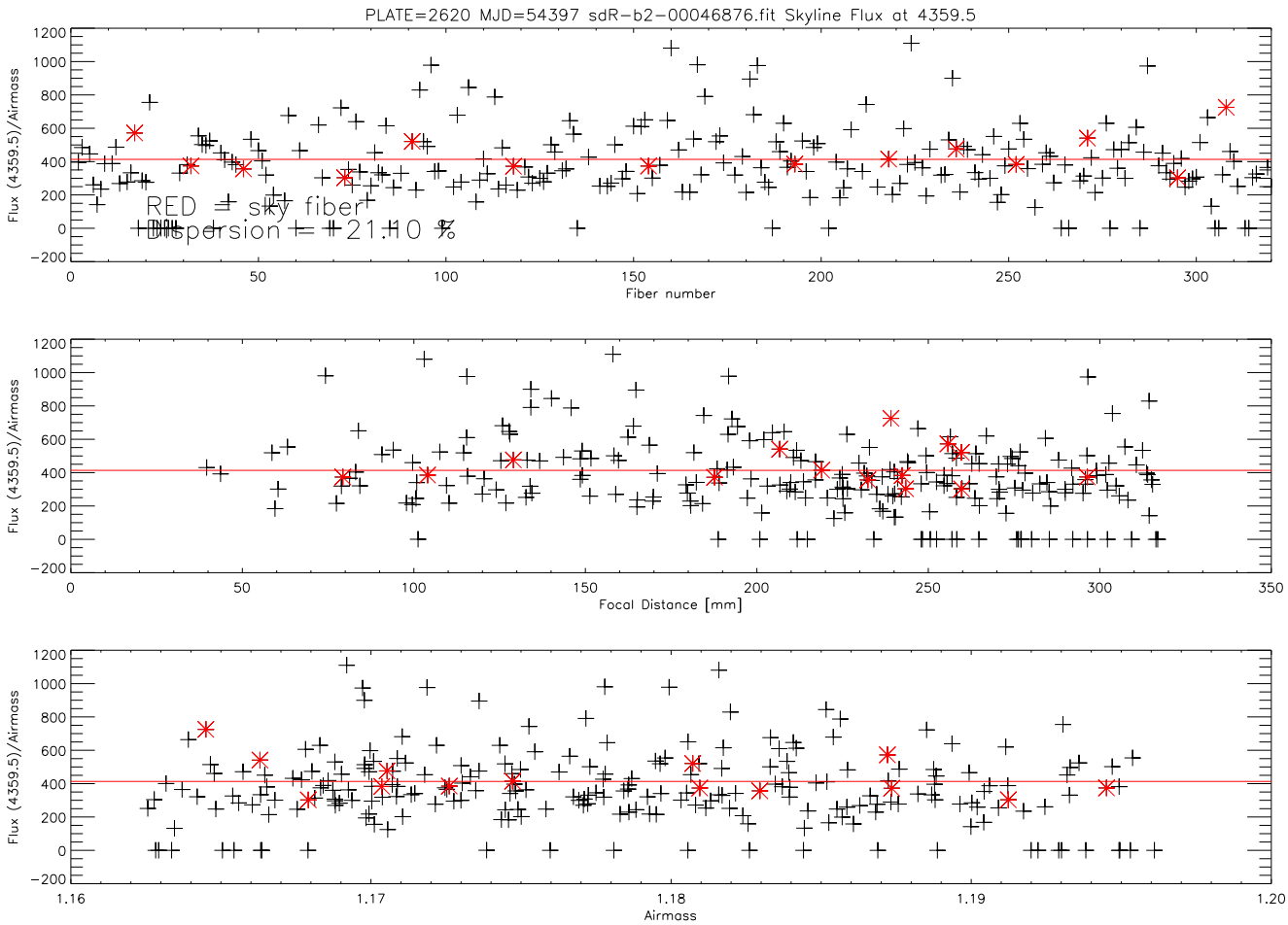

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b2-00046876.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

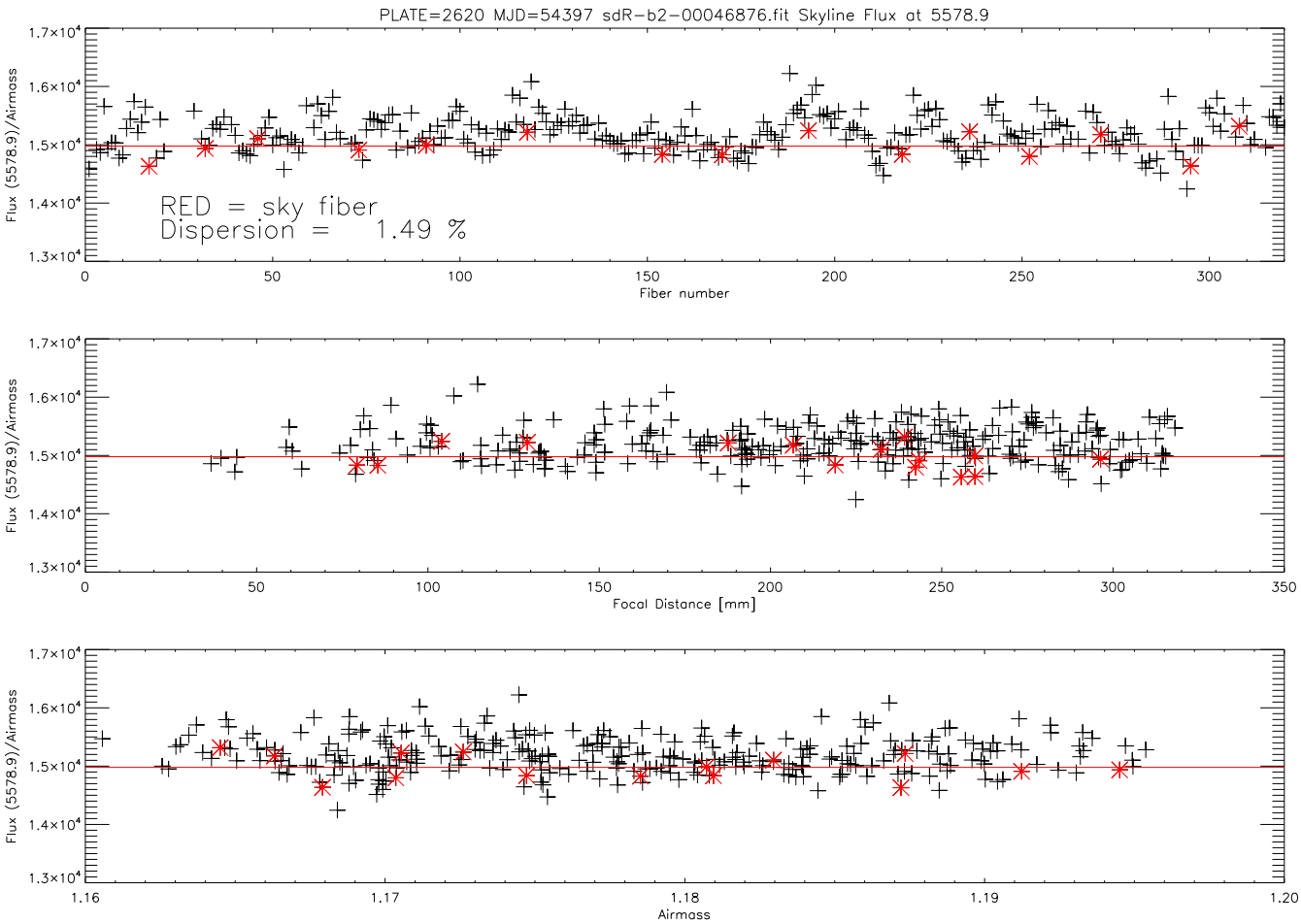

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

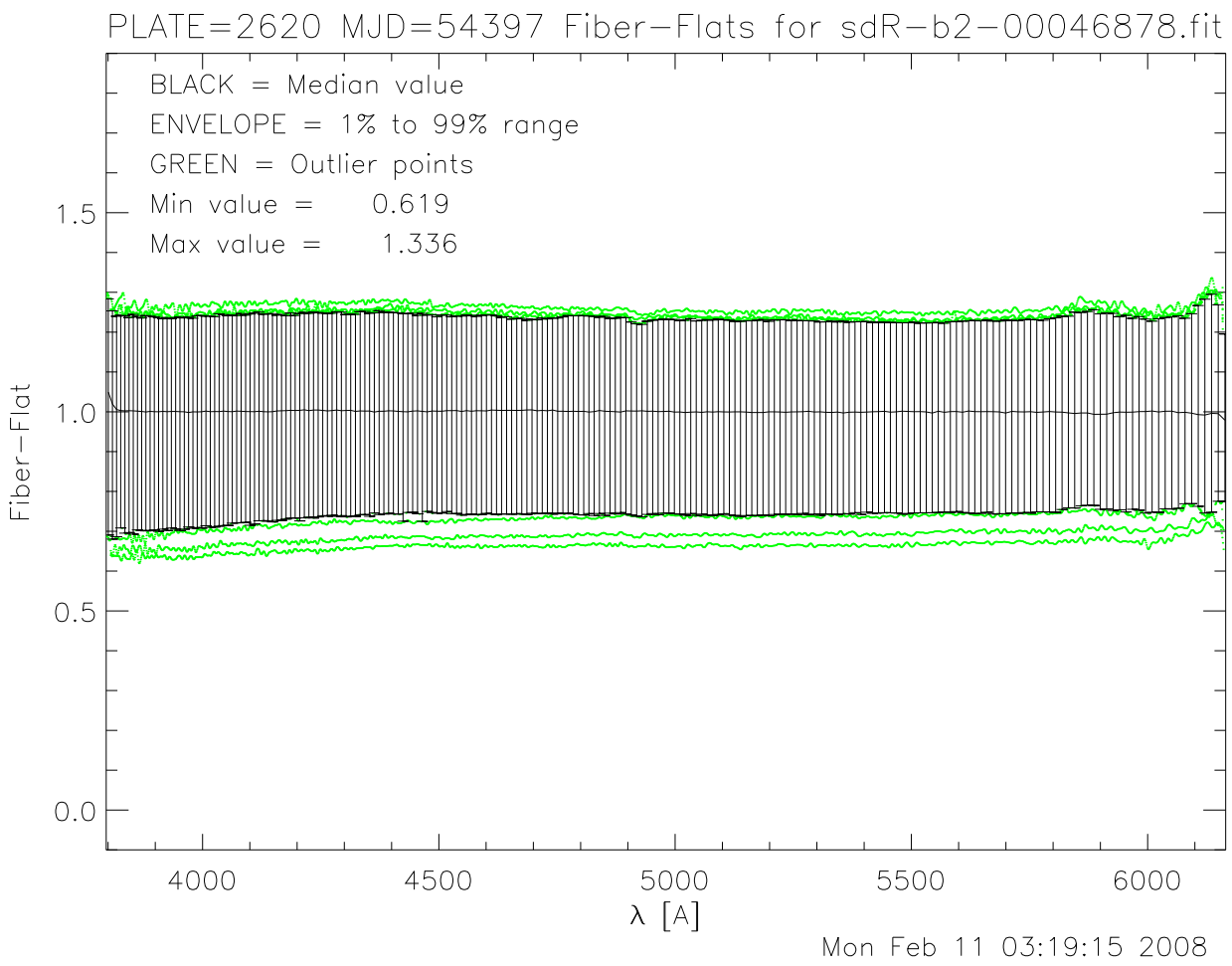

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

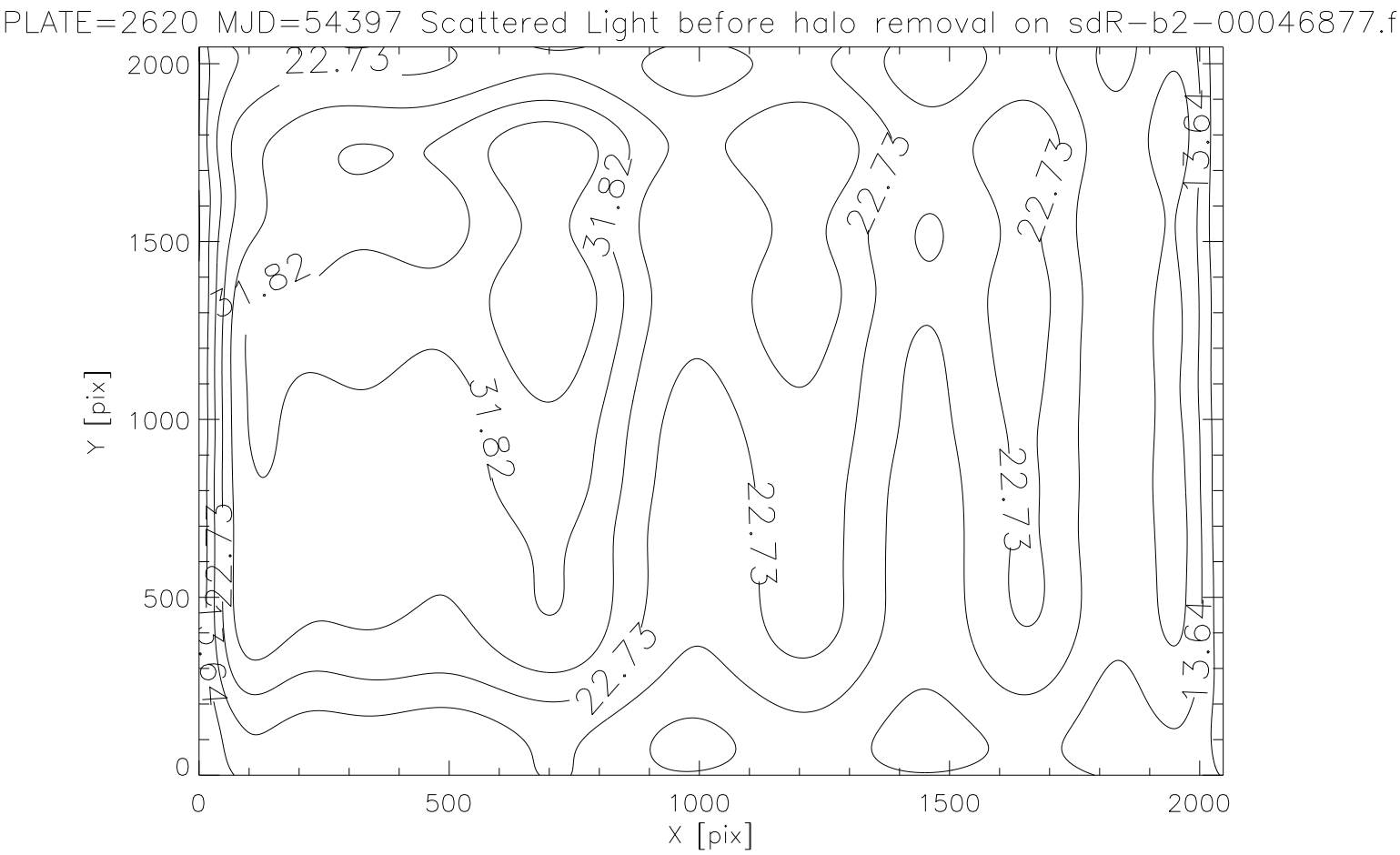

PLATE=2620 MJD=54397 sdR-b2-00046876.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

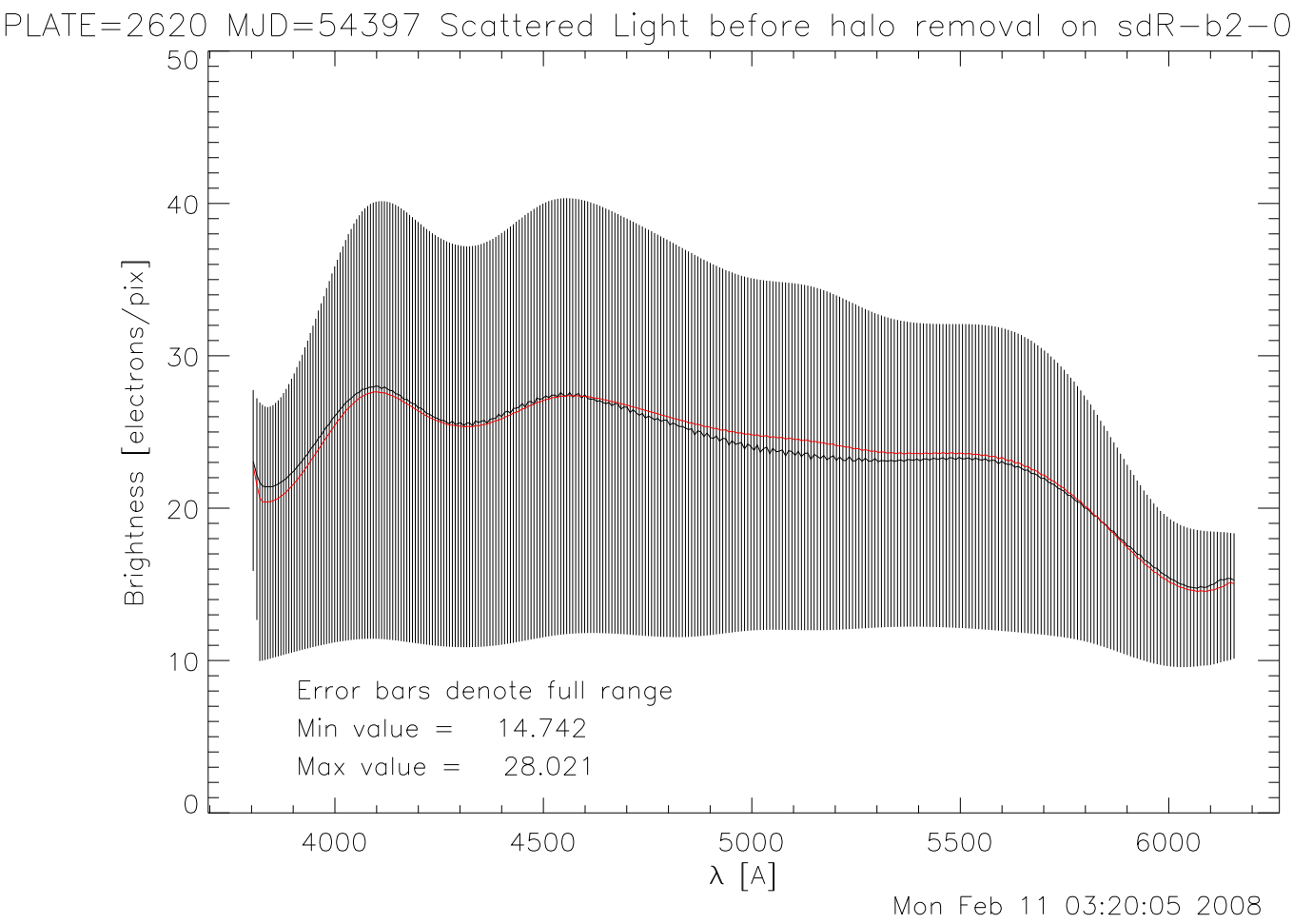

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b2-00046876.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

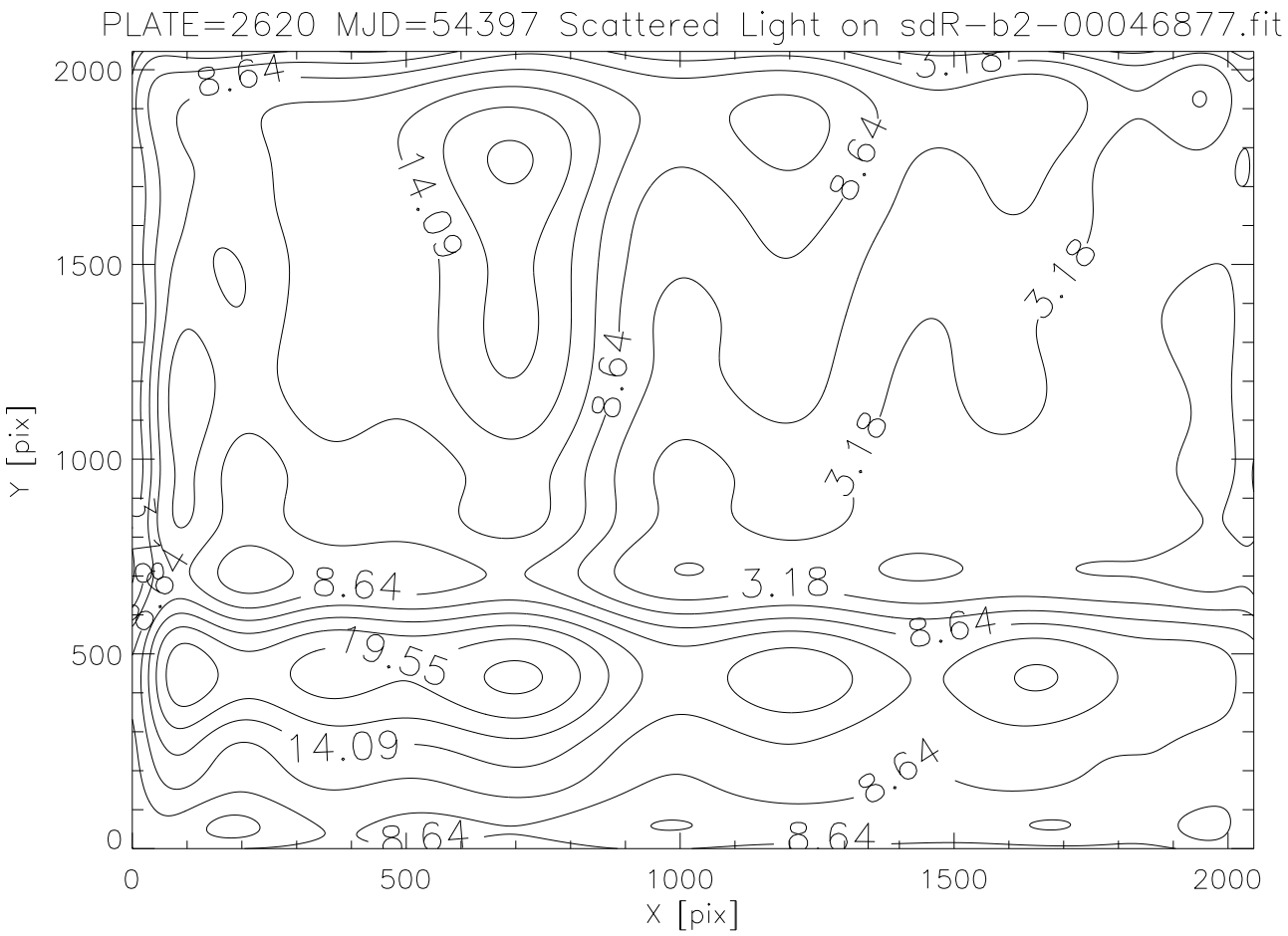

PLATE=2620 MJD=54397 sdR-b2-00046876.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 21.10 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

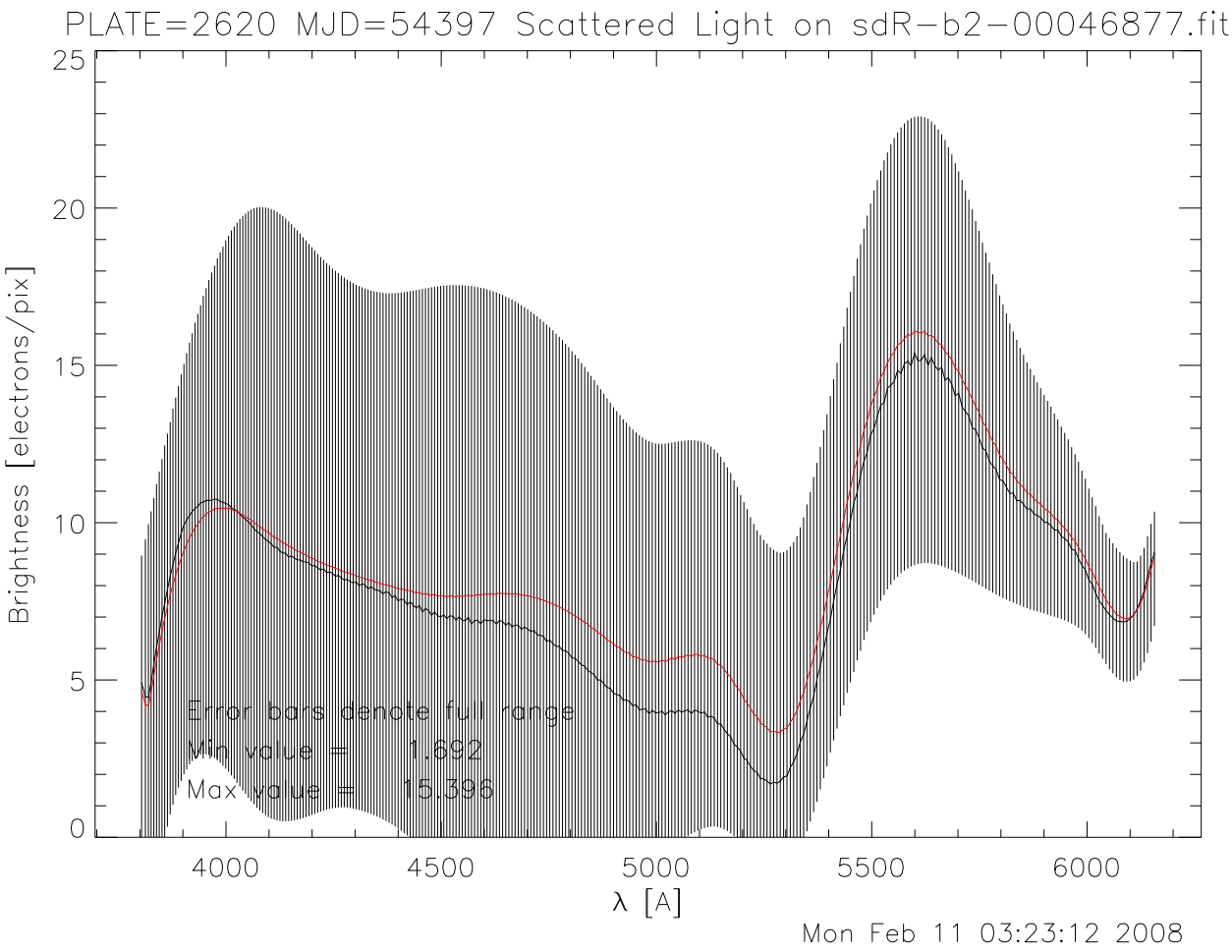

PLATE=2620 MJD=54397 sdR-b2-00046876.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.49 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
50
100
150
200
250
300
350
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.16
1.17
1.18
1.19
1.20
Airmass


PLATE=2620 MJD=54397 Fiber-Flats for sdR-b2-00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.619
Max value = 1.336
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 03:19:15 2008


PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046877.f
22.73
31.82
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-b2-00046877.f
Brightness [electrons/pix]
50
40
30
20
10
0
Error bars denote full range
Min value = 14.742
Max value = 28.021
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 03:20:05 2008


PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046877.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.64
14.09
3.18
19.55
0


PLATE=2620 MJD=54397 Scattered Light on sdR-b2-00046877.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.692
Max value = 15.396
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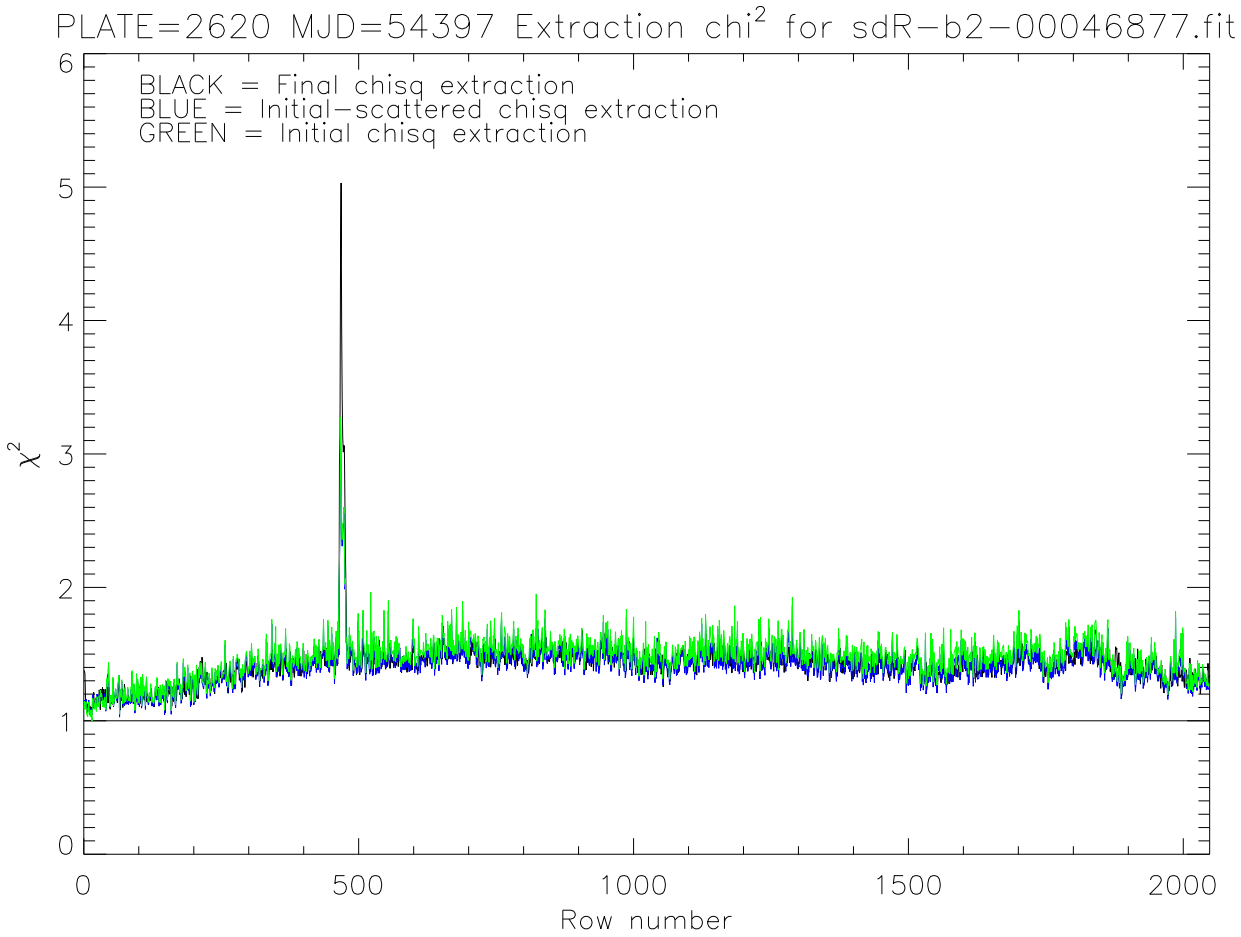
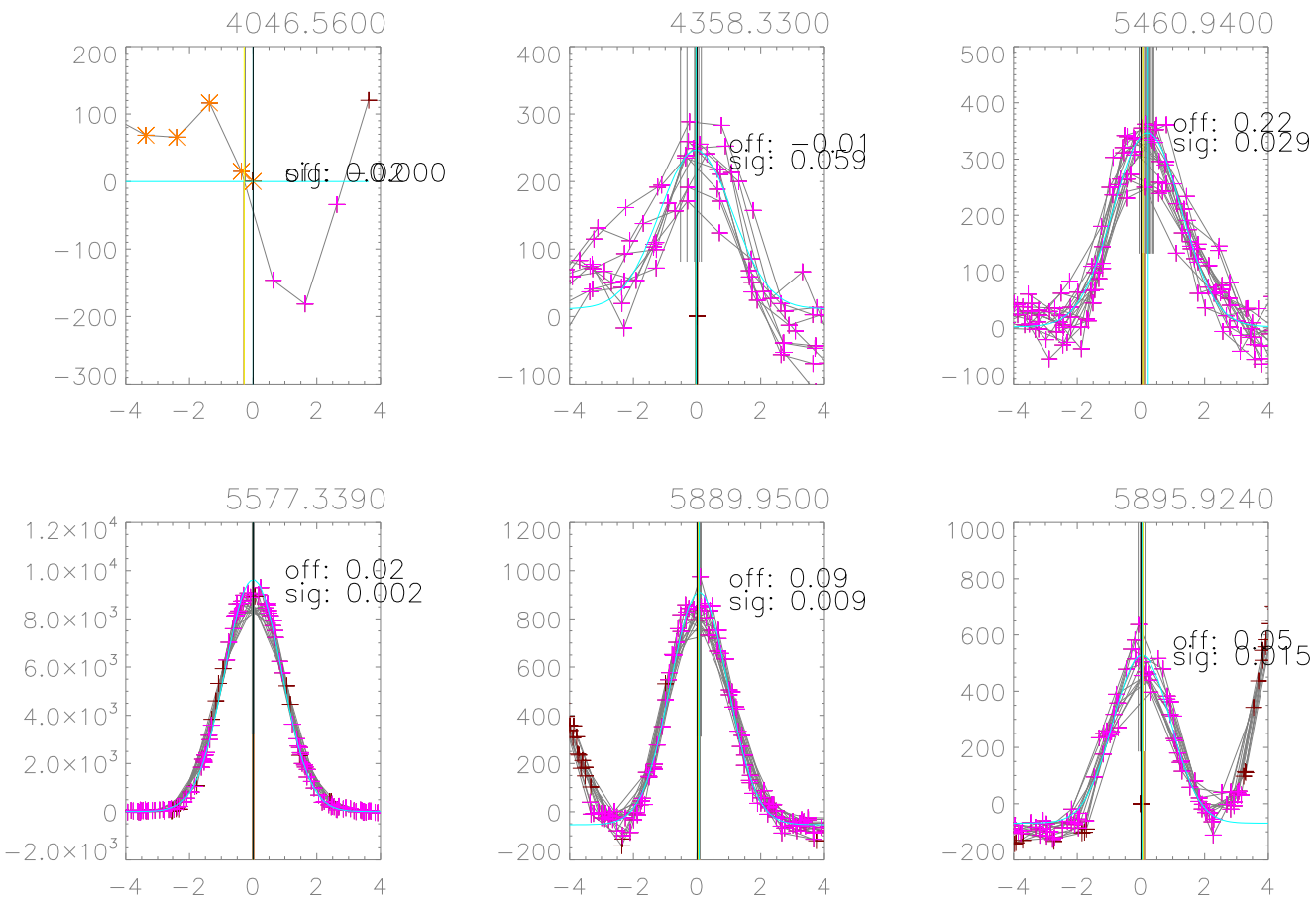
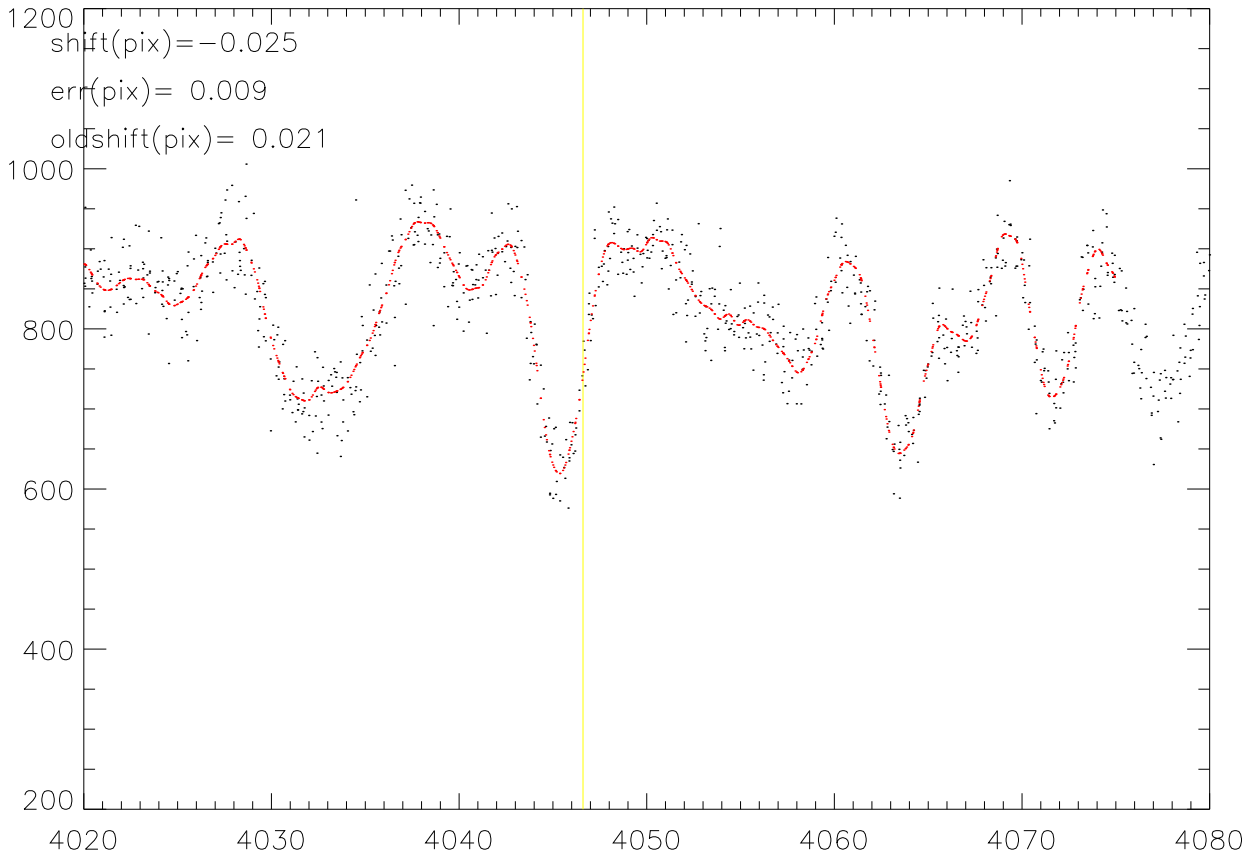
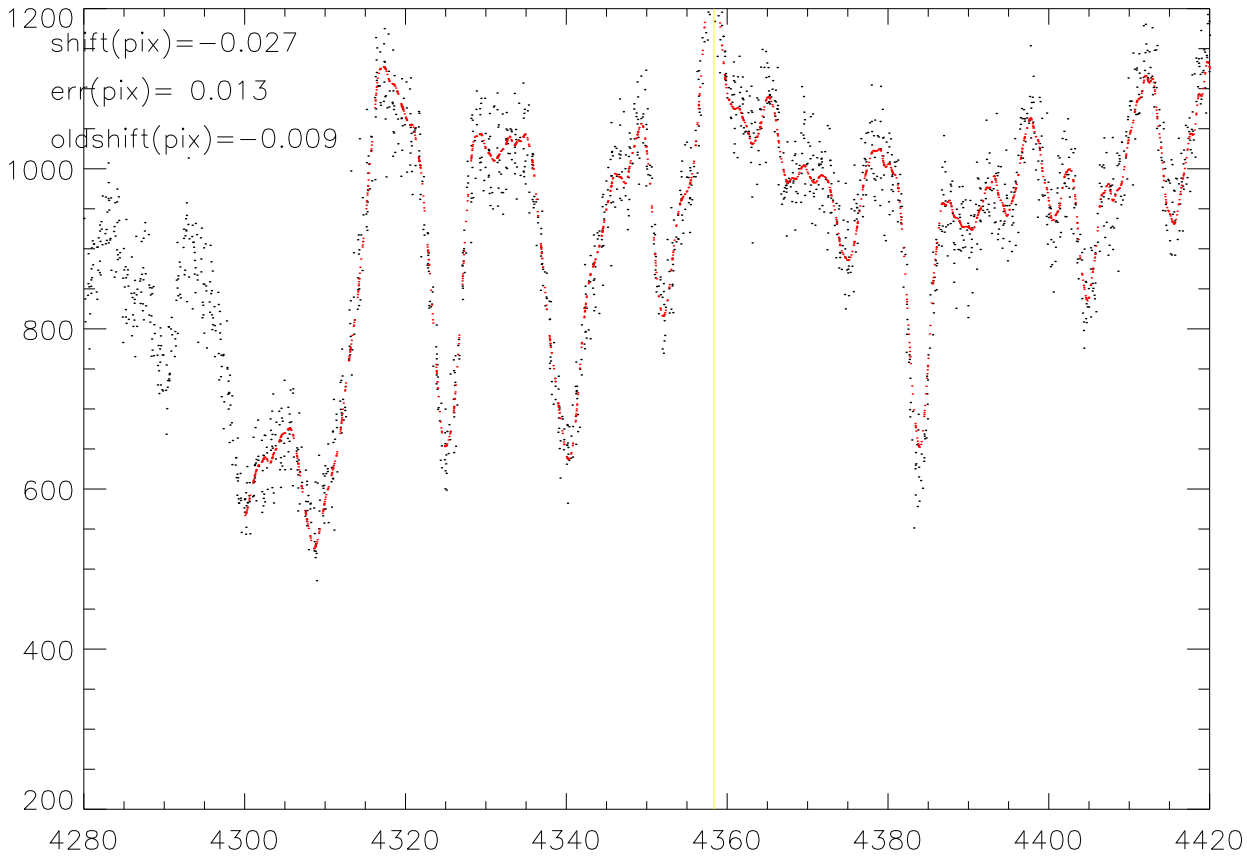
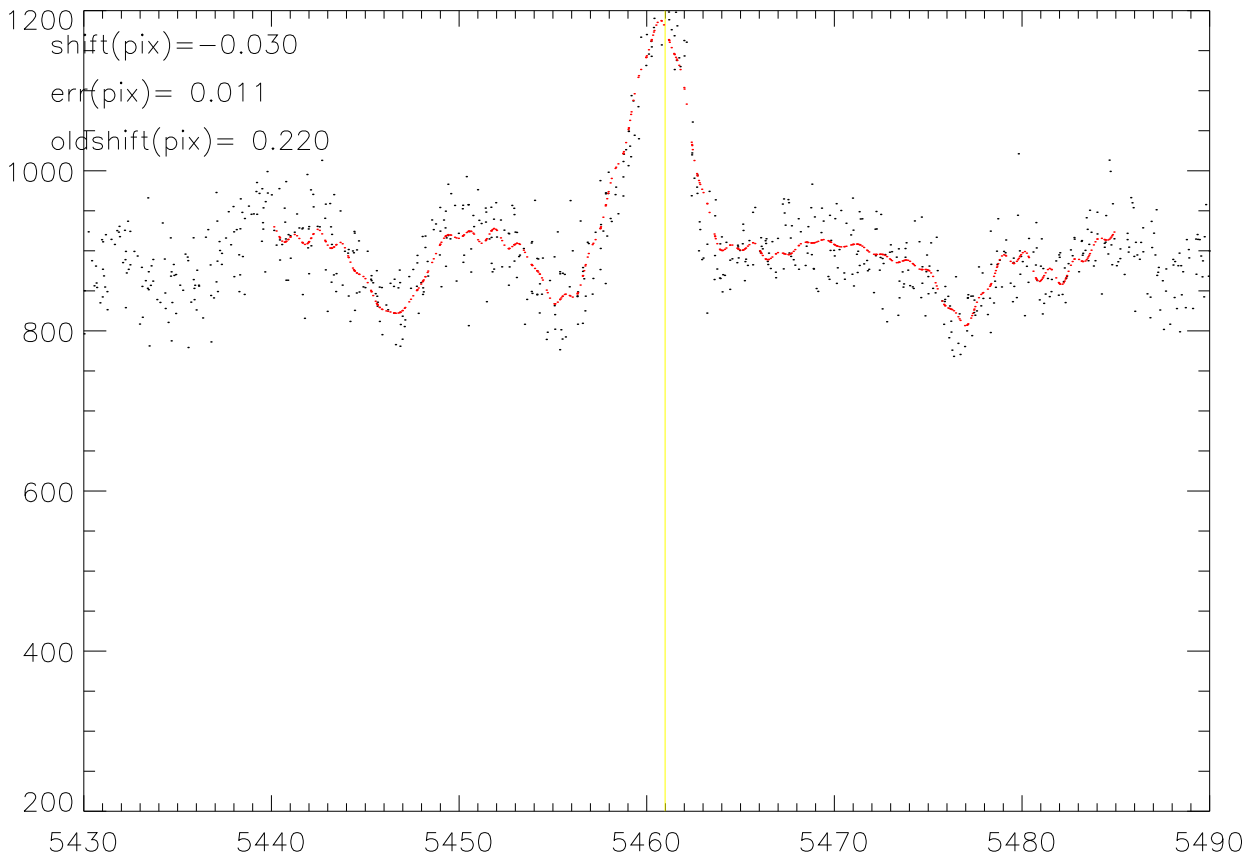
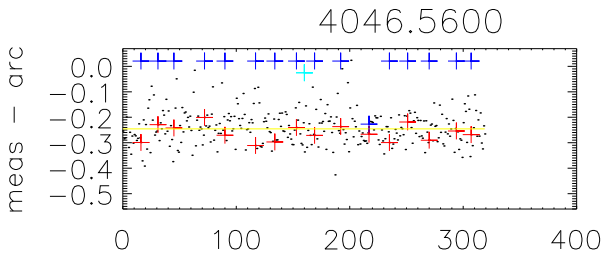

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-b2-00046877.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

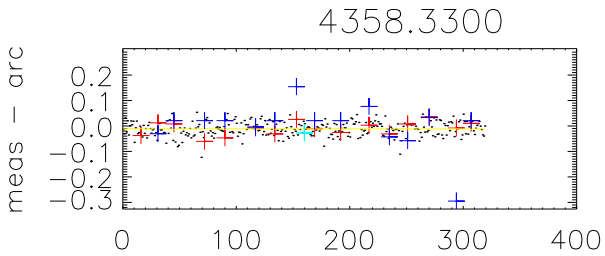

4046.5600
off: 0.02000
sig: 0.02000
4358.3300
off: −0.01
sig: 0.059
5460.9400
off: 0.22
sig: 0.029
5577.3390
off: 0.02
sig: 0.002
5889.9500
off: 0.09
sig: 0.009
5895.9240
off: 0.05
sig: 0.015

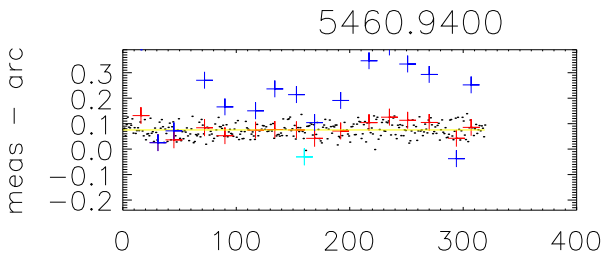

shift(pix)=−0.025
err(pix)= 0.009
oldshift(pix)= 0.021
1200
1000
800
600
400
200
4020
4030
4040
4050
4060
4070
4080

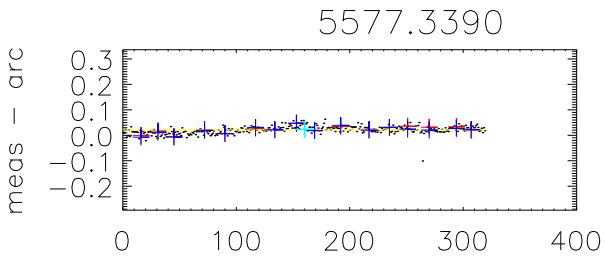

shift(pix)=−0.027
err(pix)= 0.013
oldshift(pix)=−0.009
1200
1000
800
600
400
200
4280
4300
4320
4340
4360
4380
4400
4420

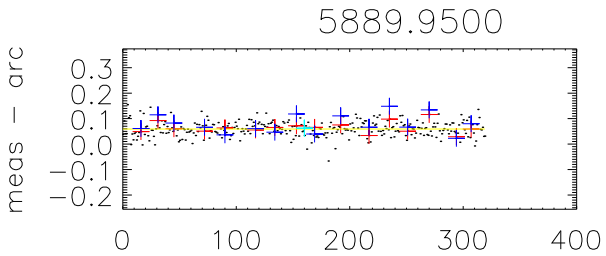

shift(pix)=−0.030
err(pix)= 0.011
oldshift(pix)= 0.220
1200
1000
800
600
400
200
5430
5440
5450
5460
5470
5480
5490

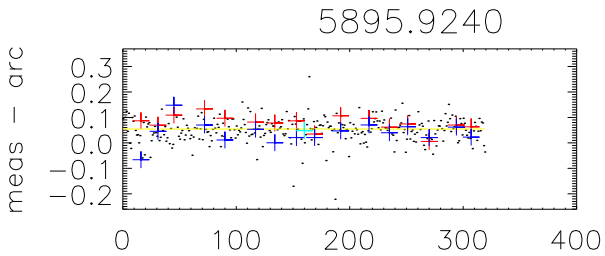

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

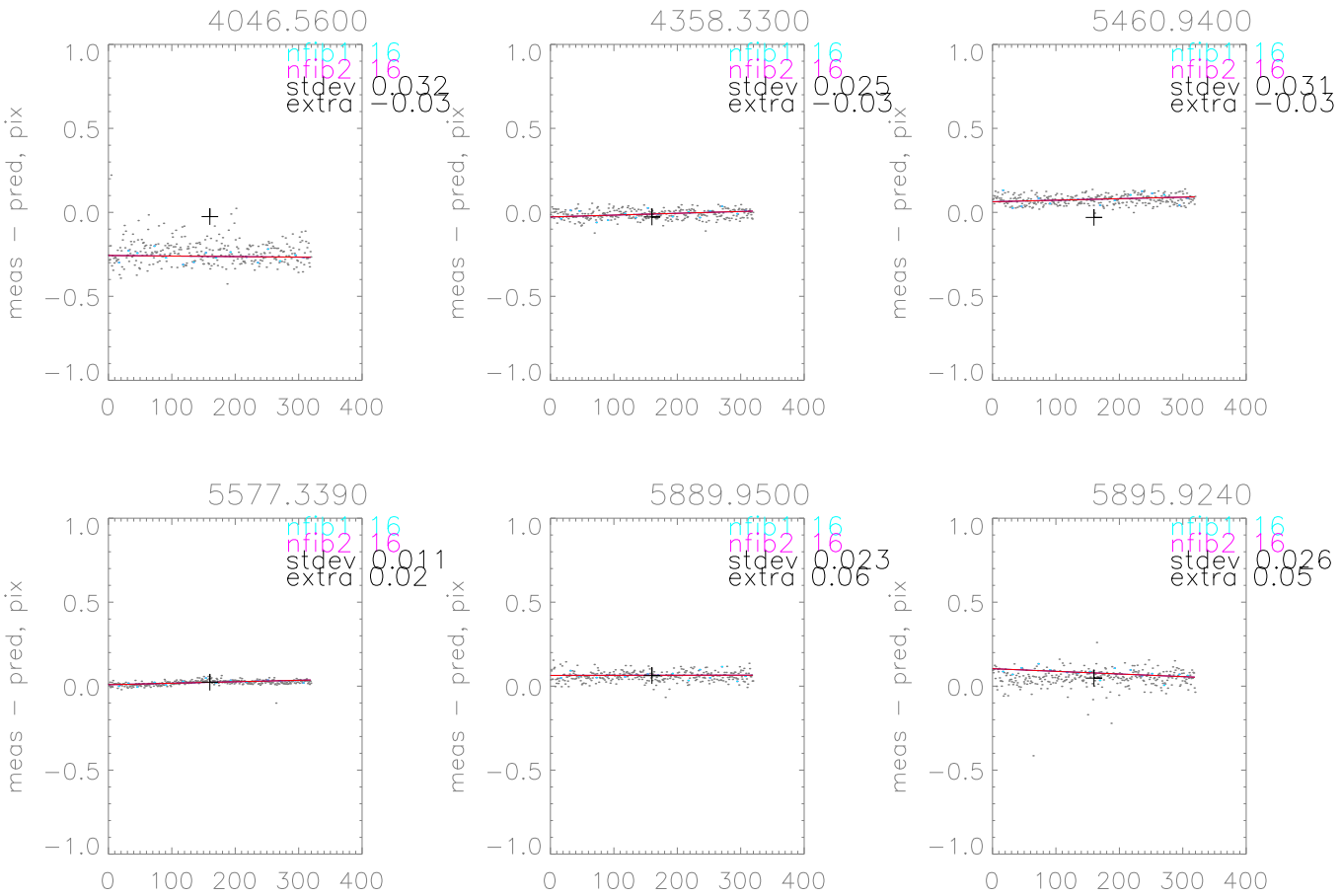

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

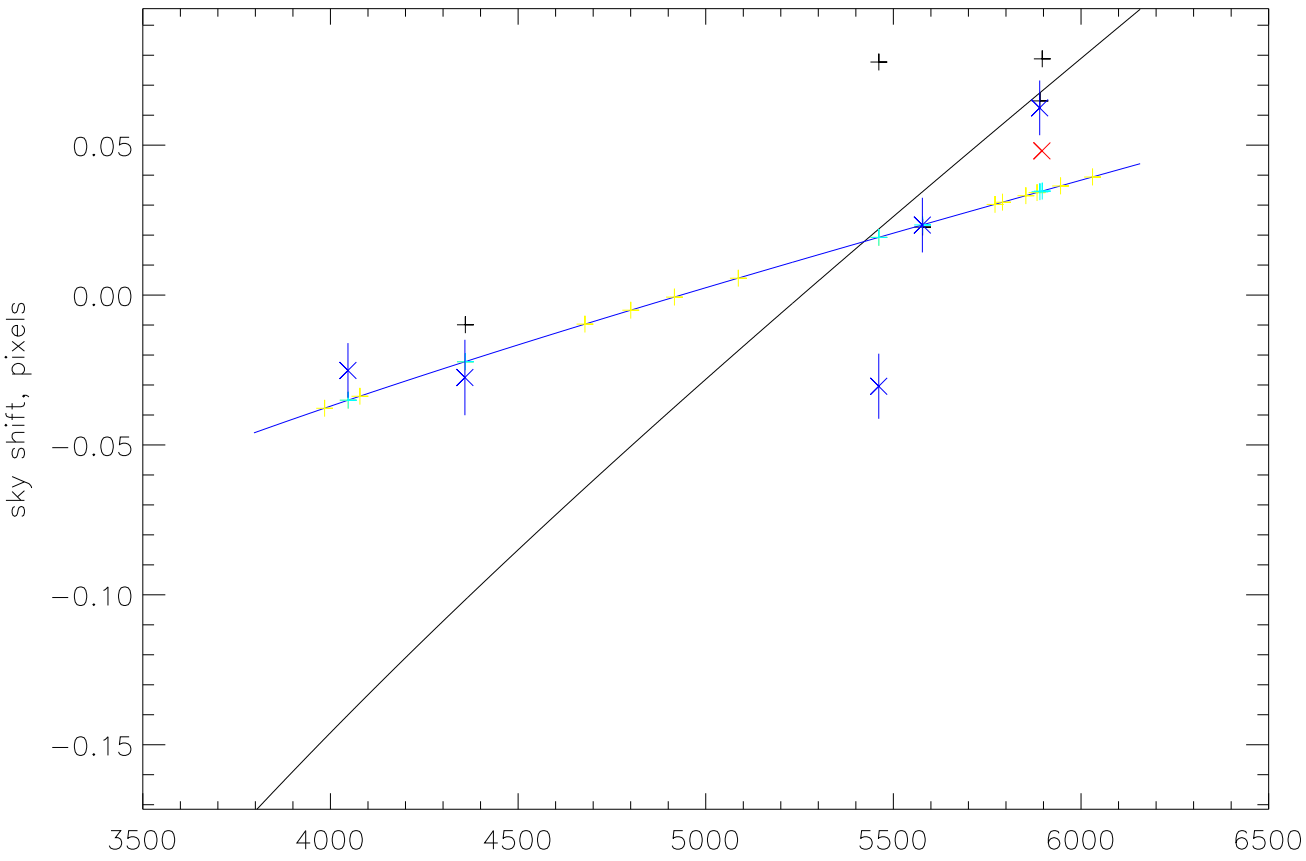

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

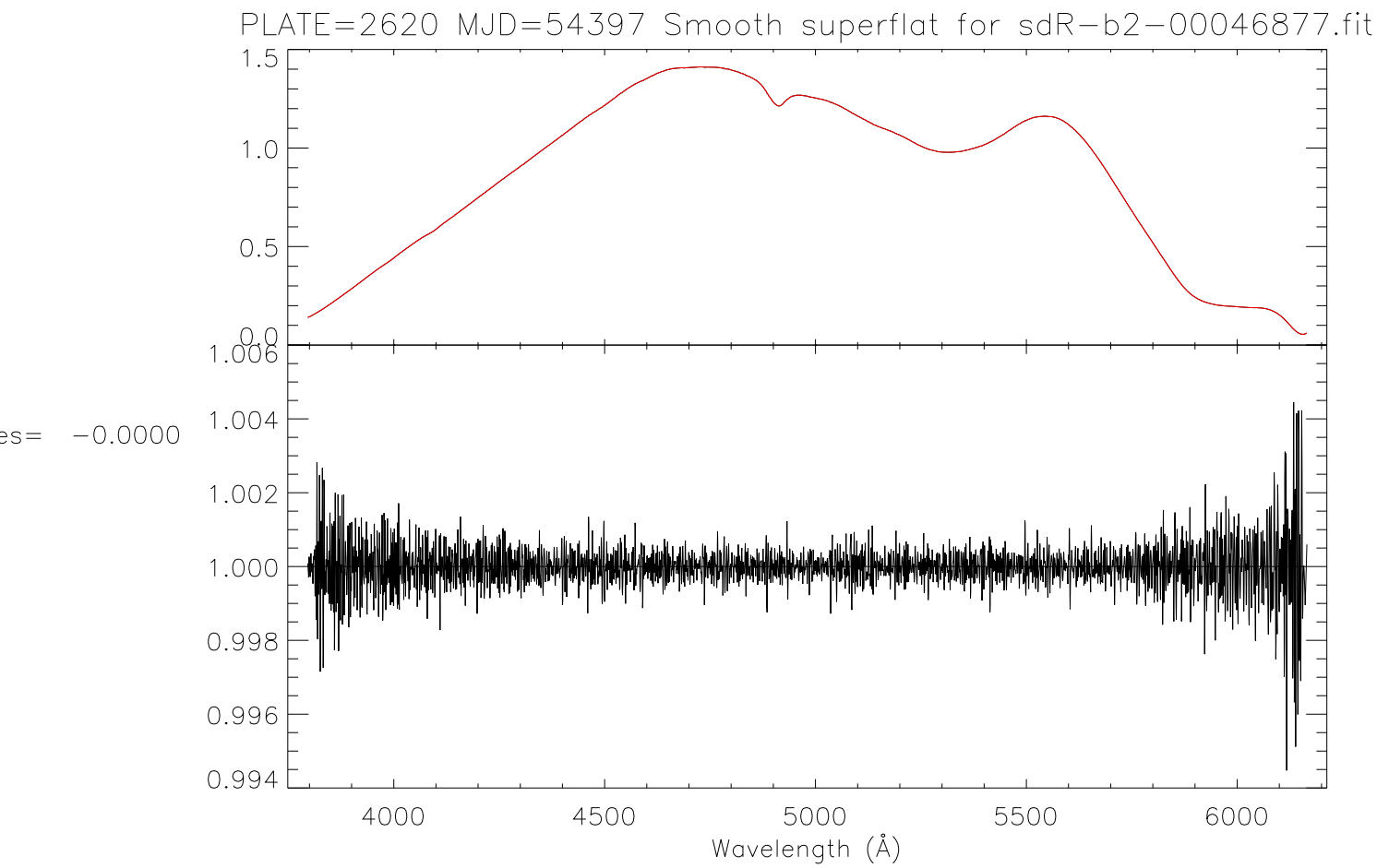

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

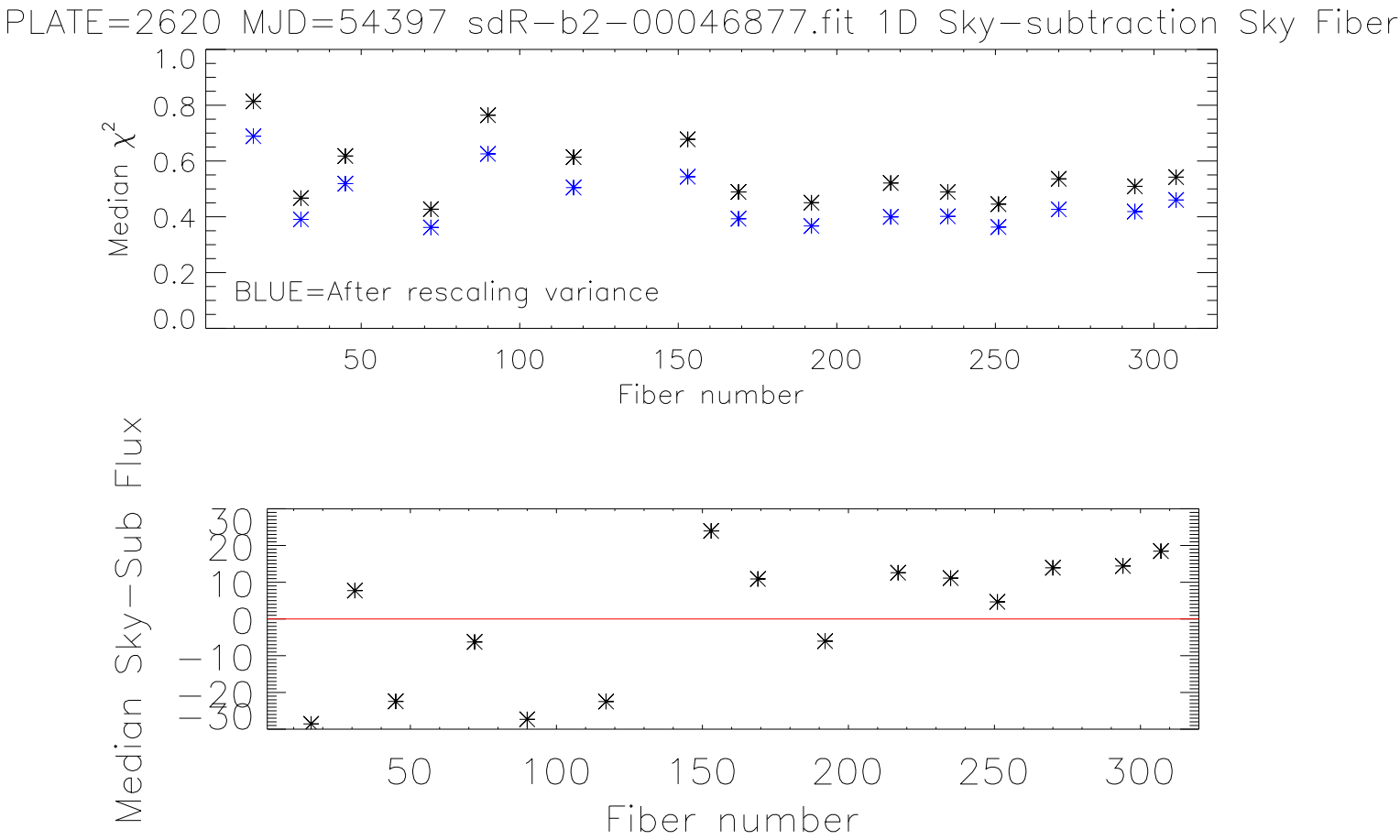

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

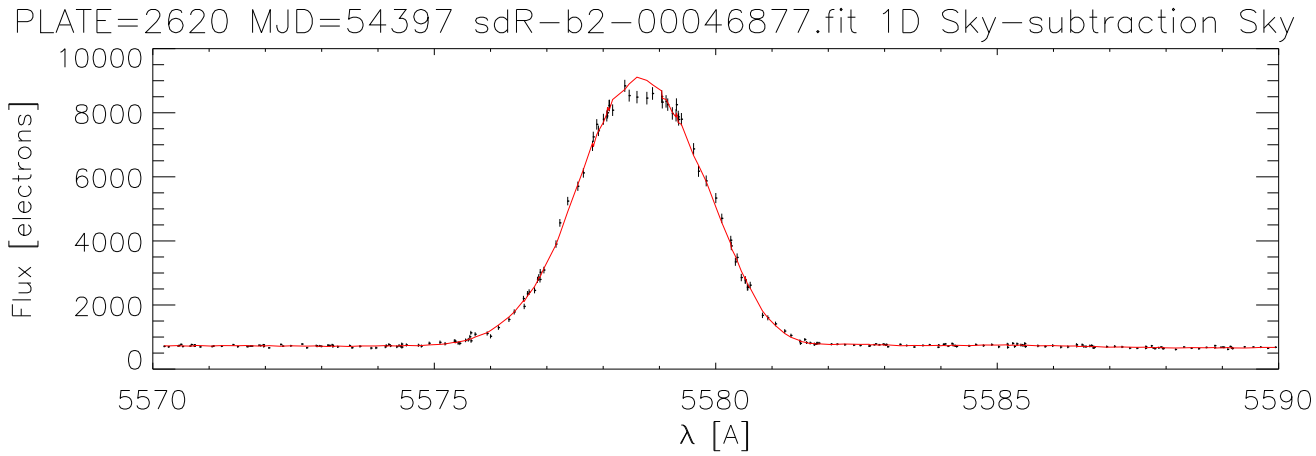

4046.5600
nfib1 16
nfib2 16
stdev 0.032
extra −0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.025
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.031
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

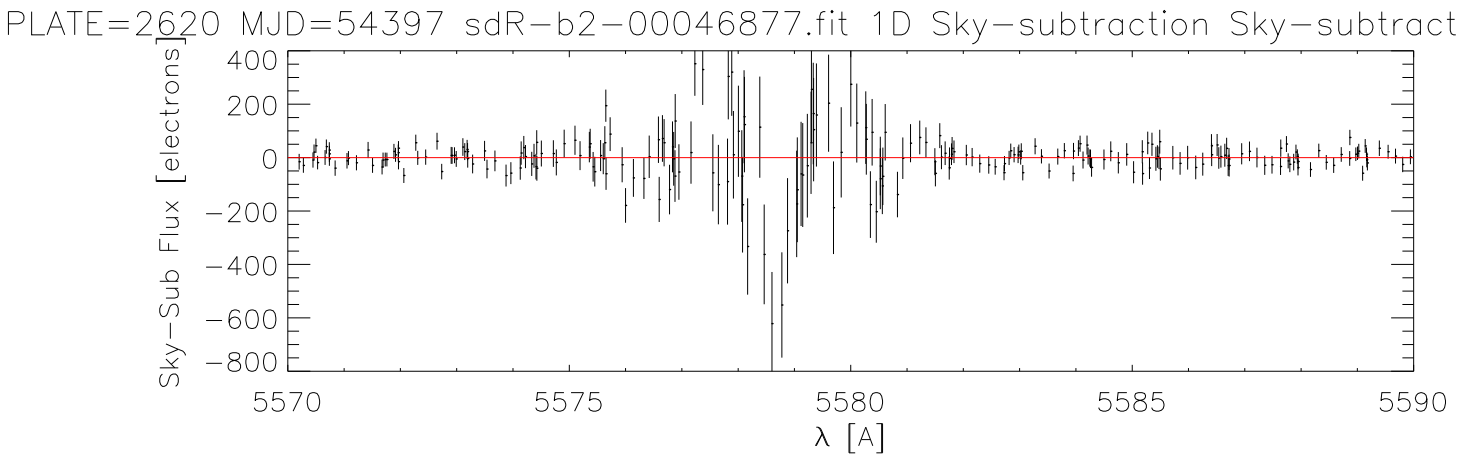

0.05
0.00
−0.05
−0.10
−0.15
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

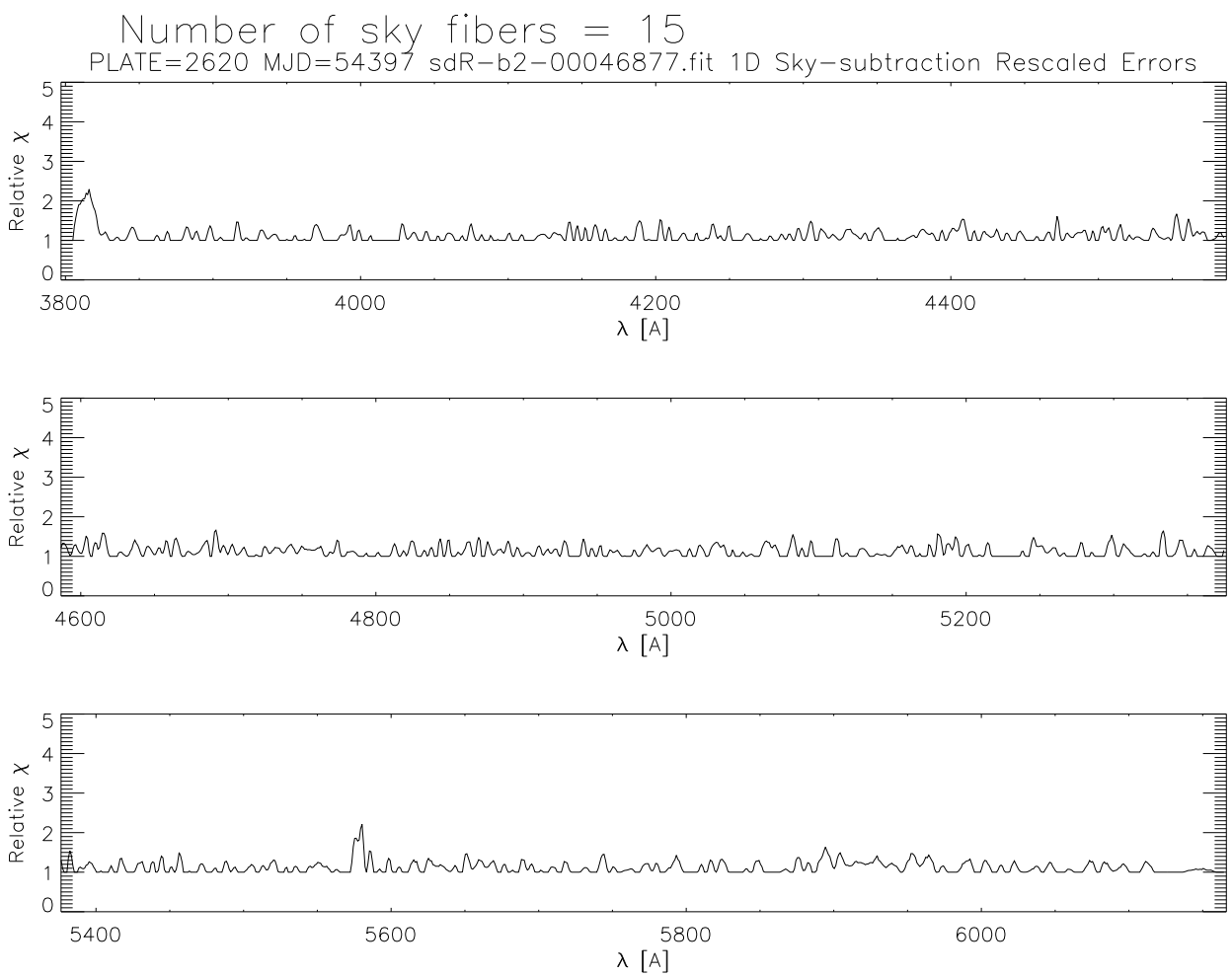

PLATE=2620 MJD=54397 Smooth superflat for sdR-b2-00046877.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)

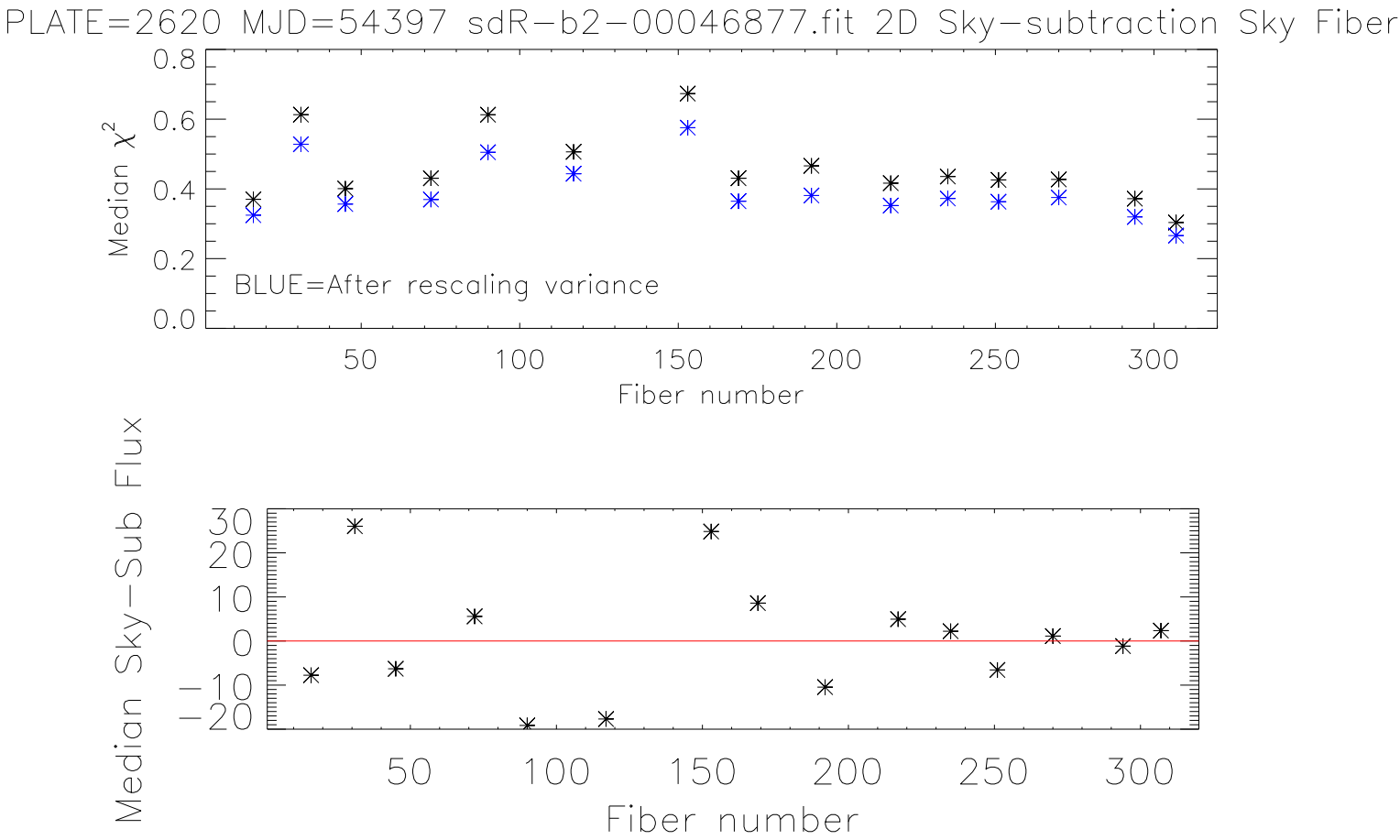
es= −0.0000

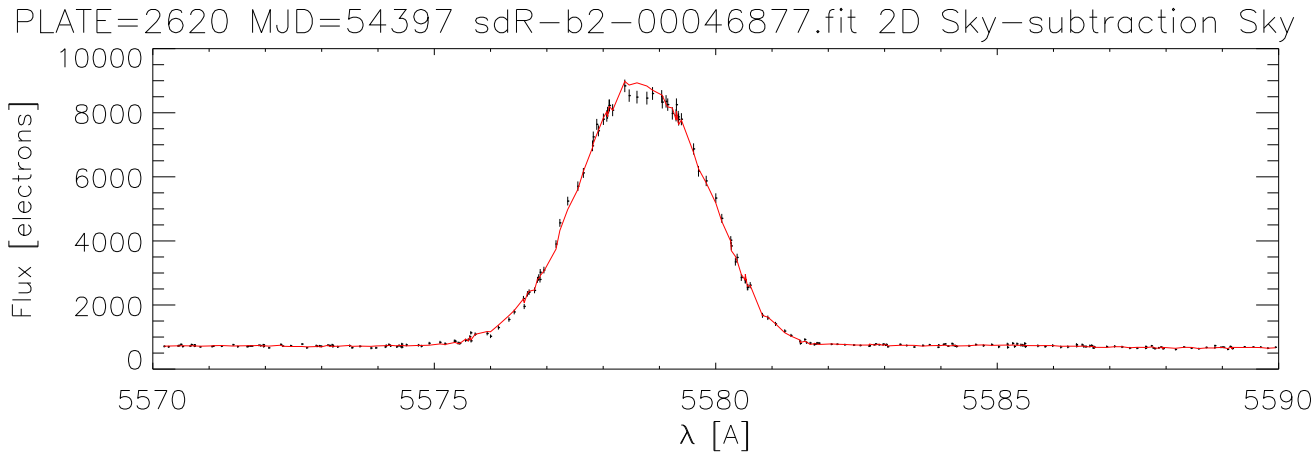

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

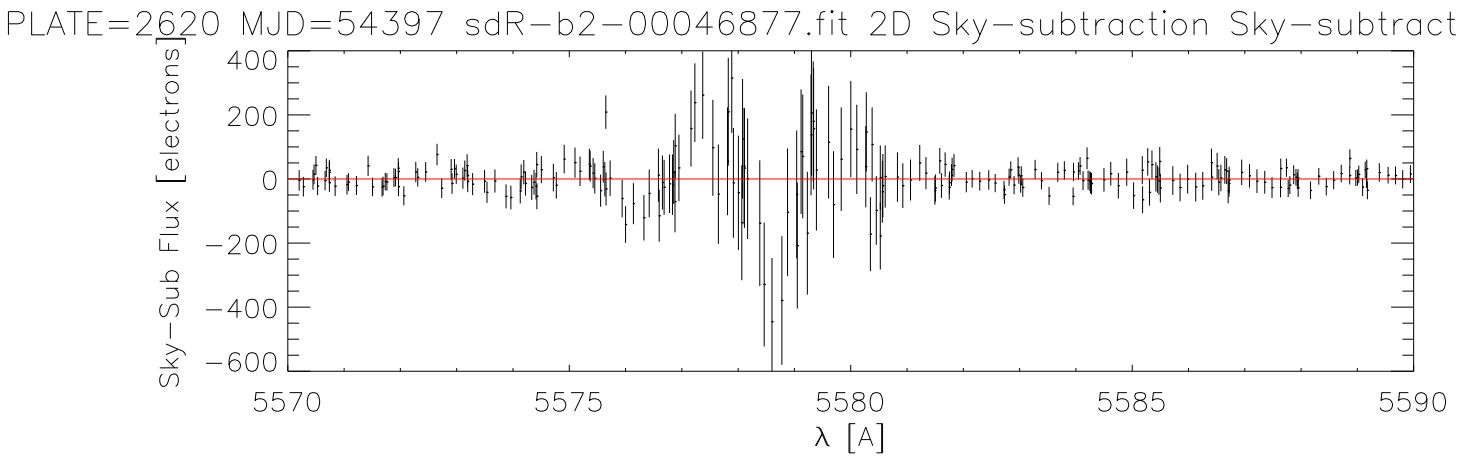

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

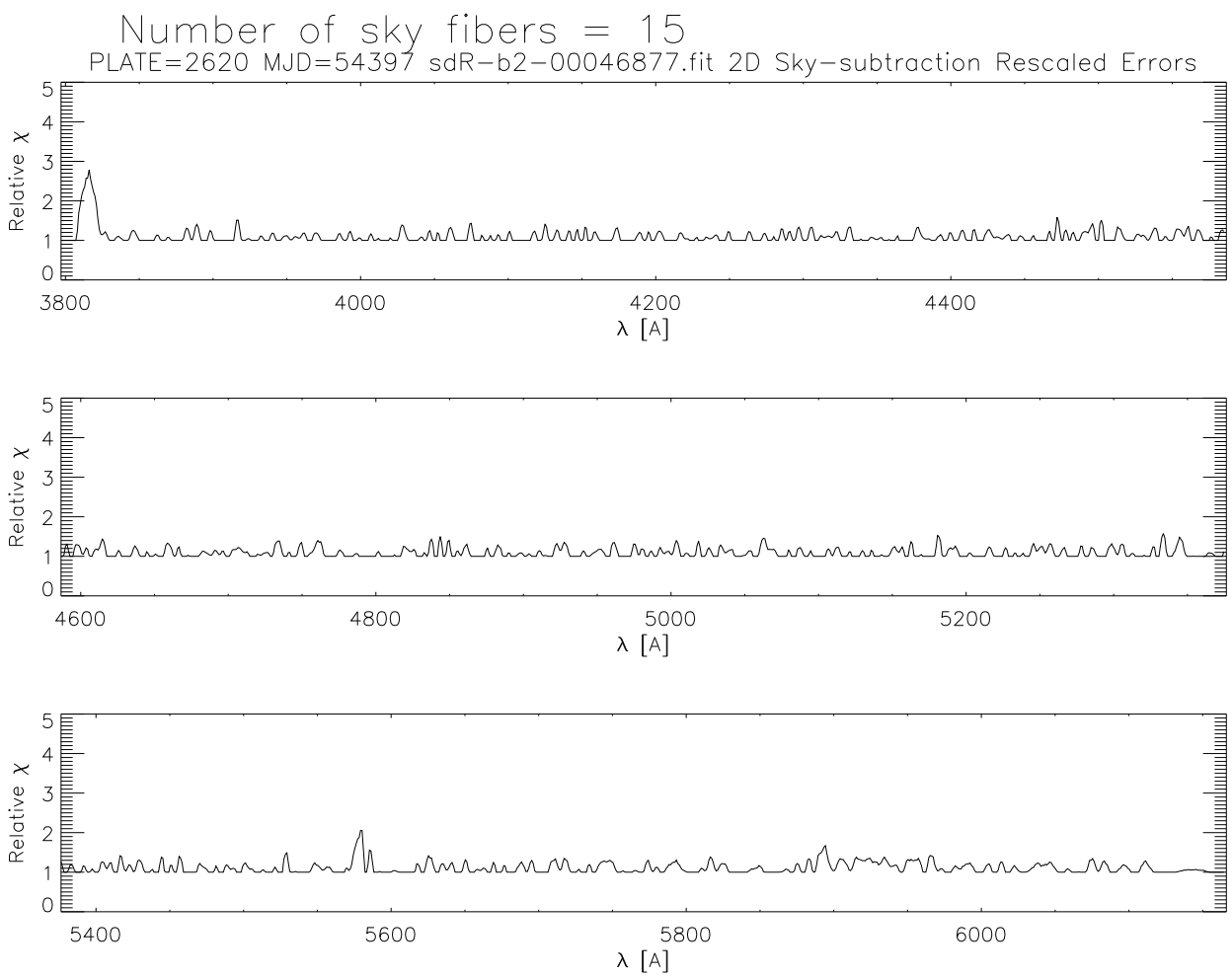

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

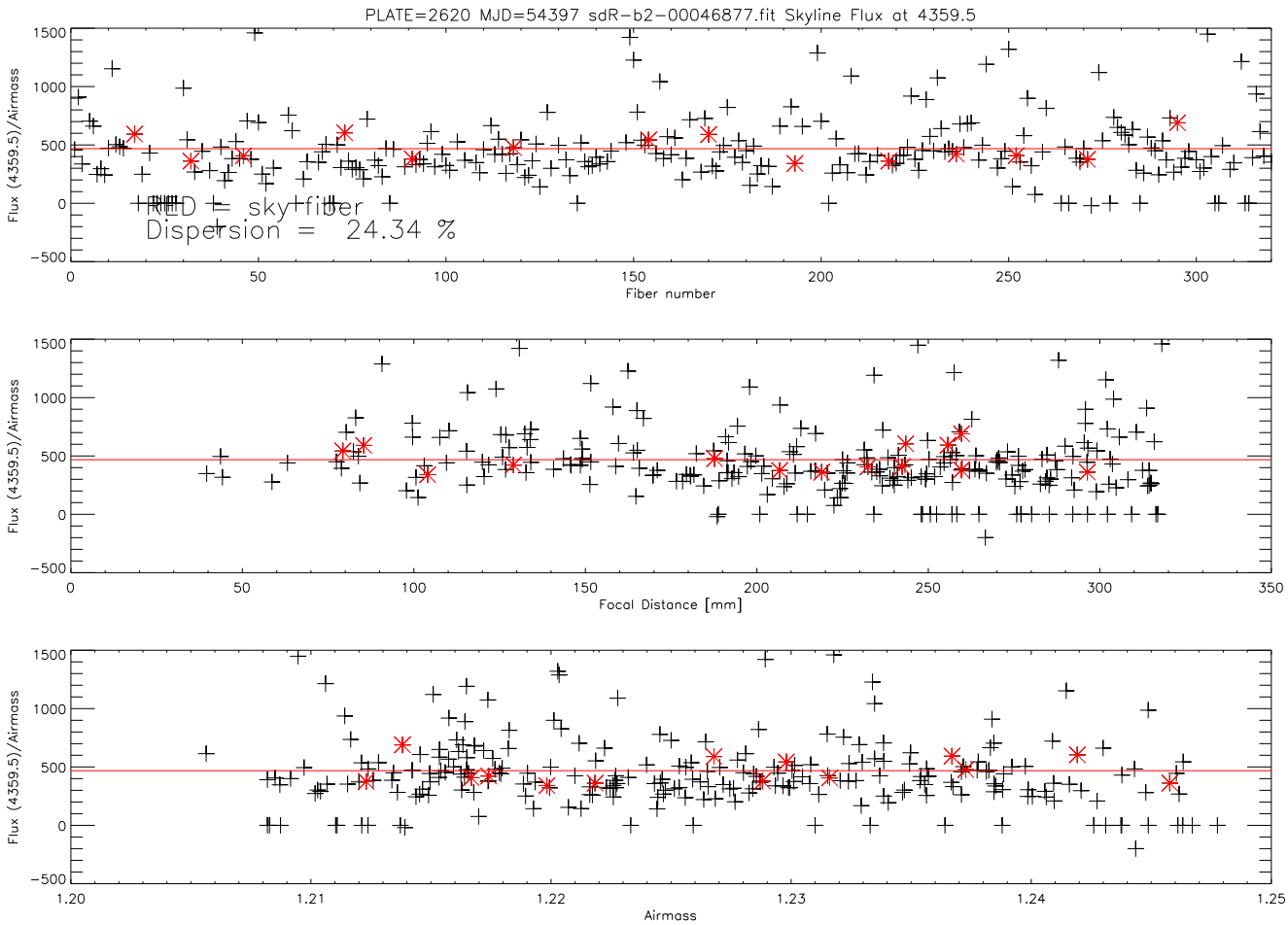

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b2-00046877.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

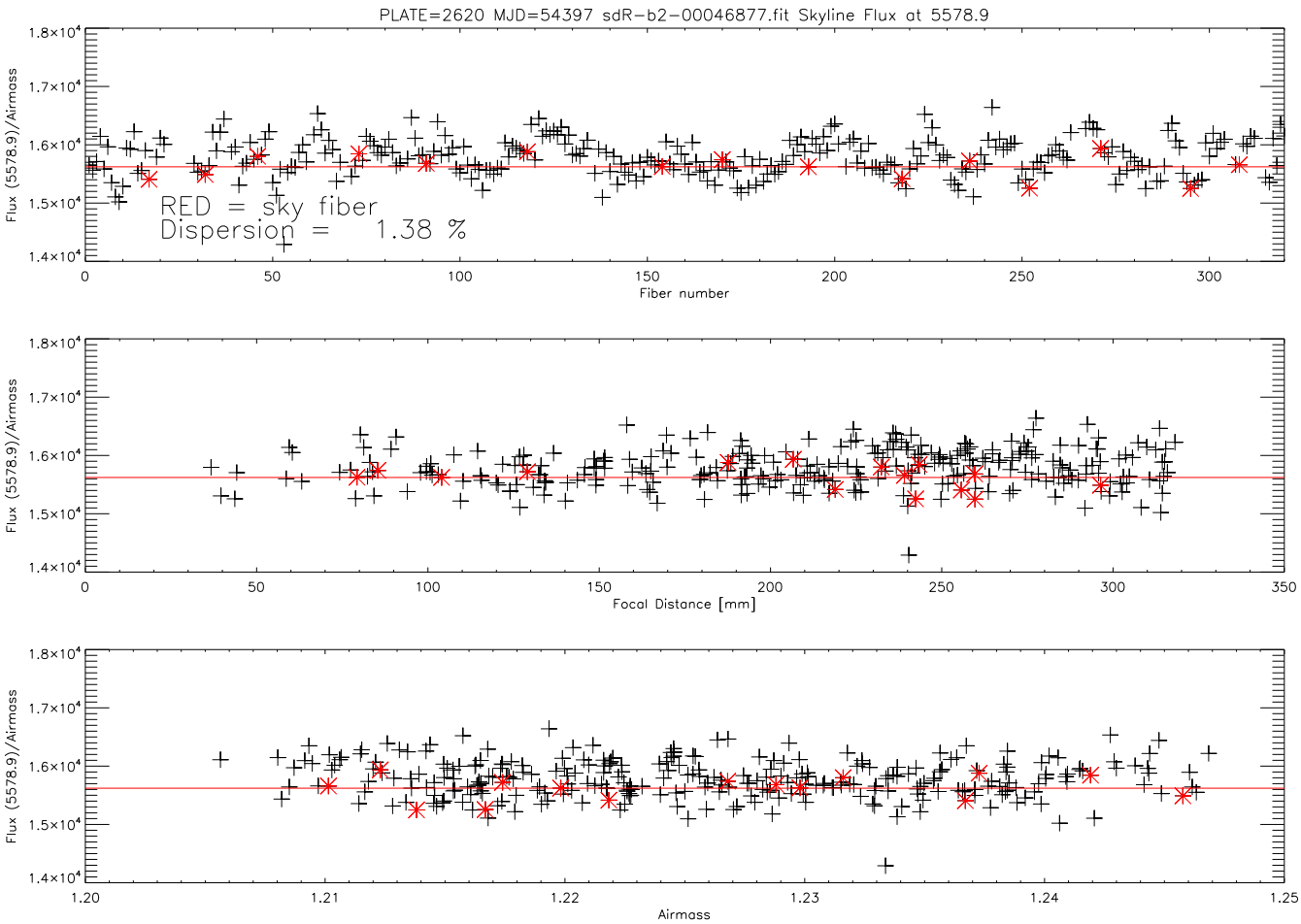

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

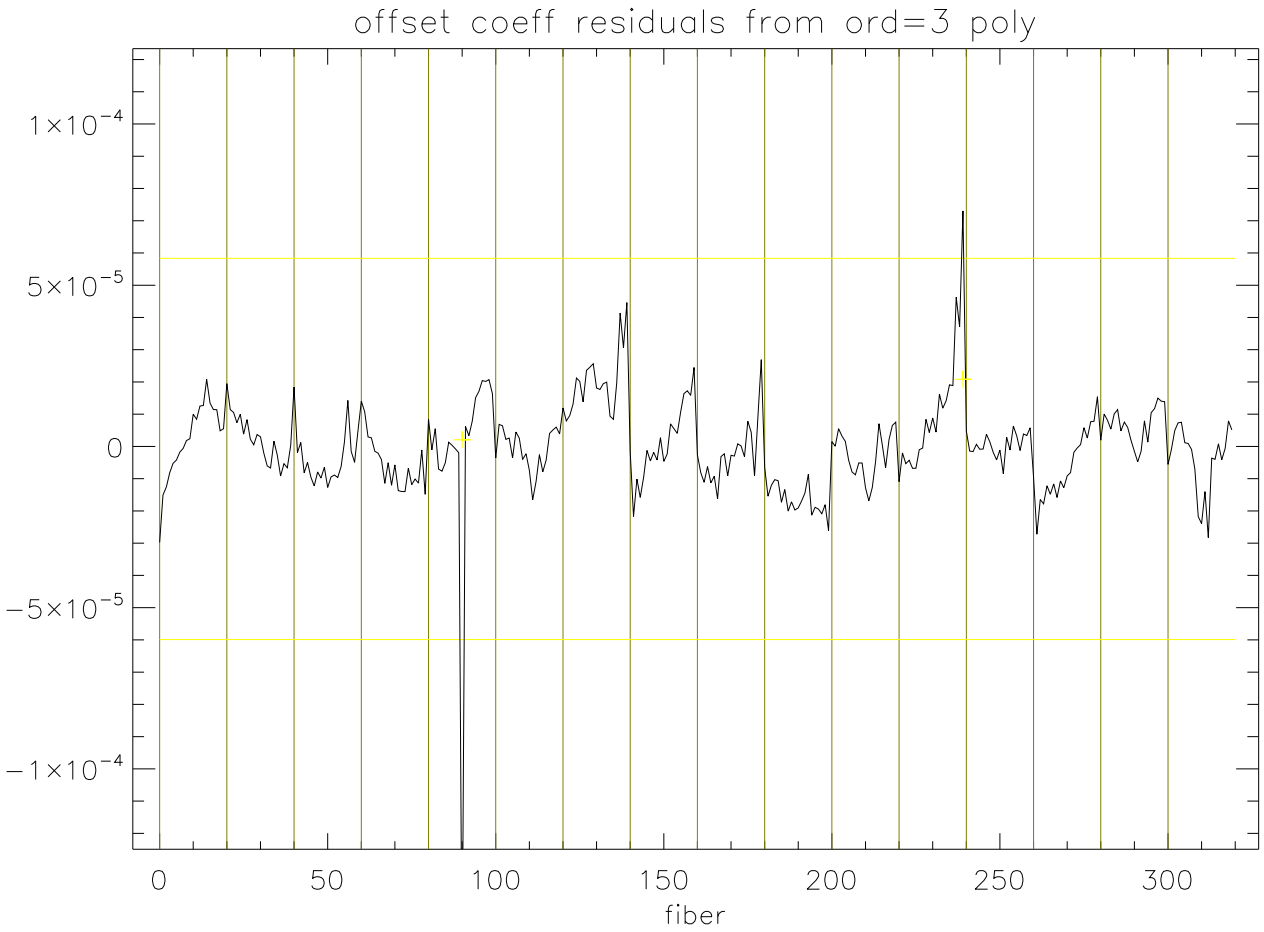

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

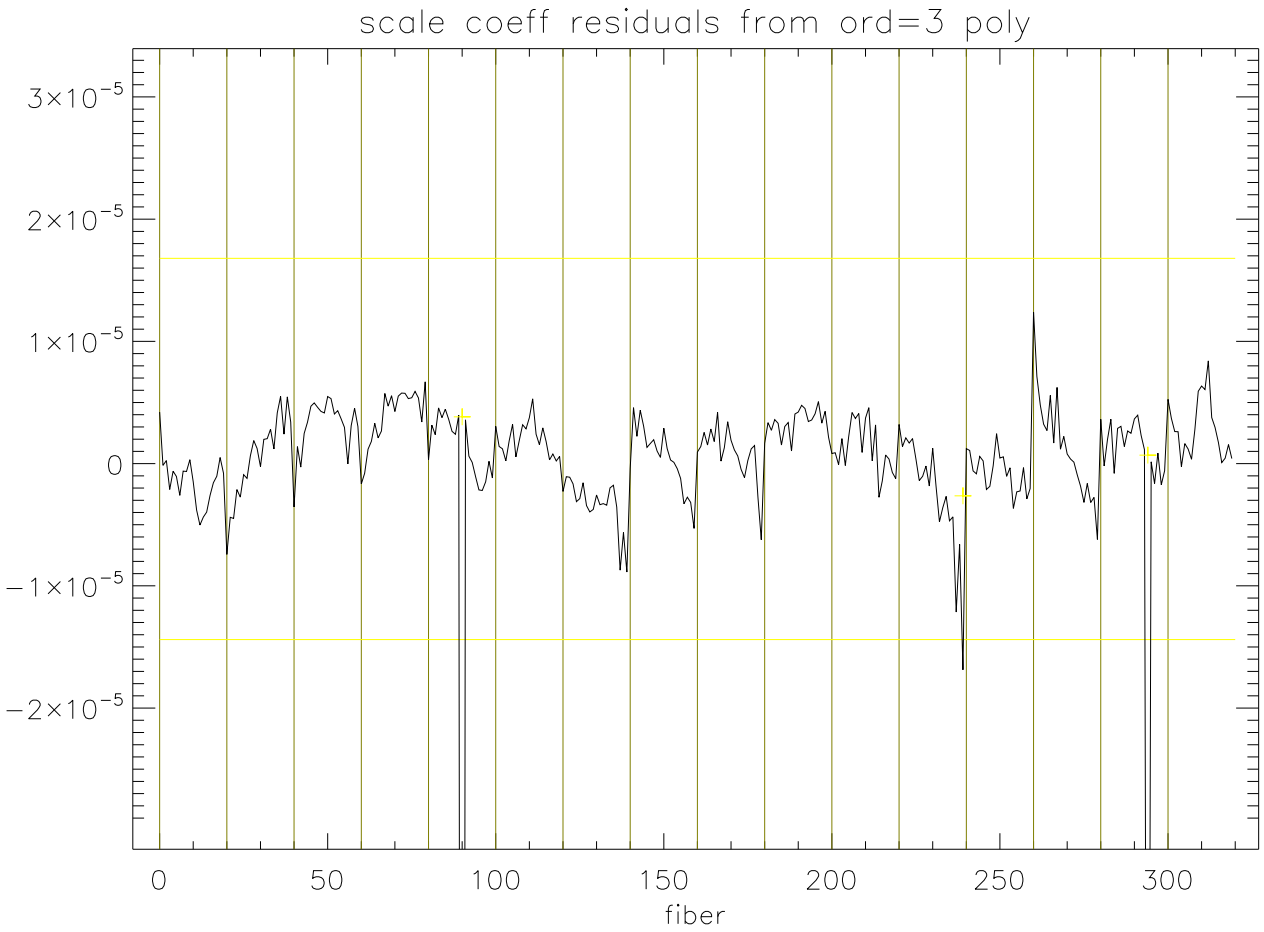

PLATE=2620 MJD=54397 sdR-b2-00046877.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

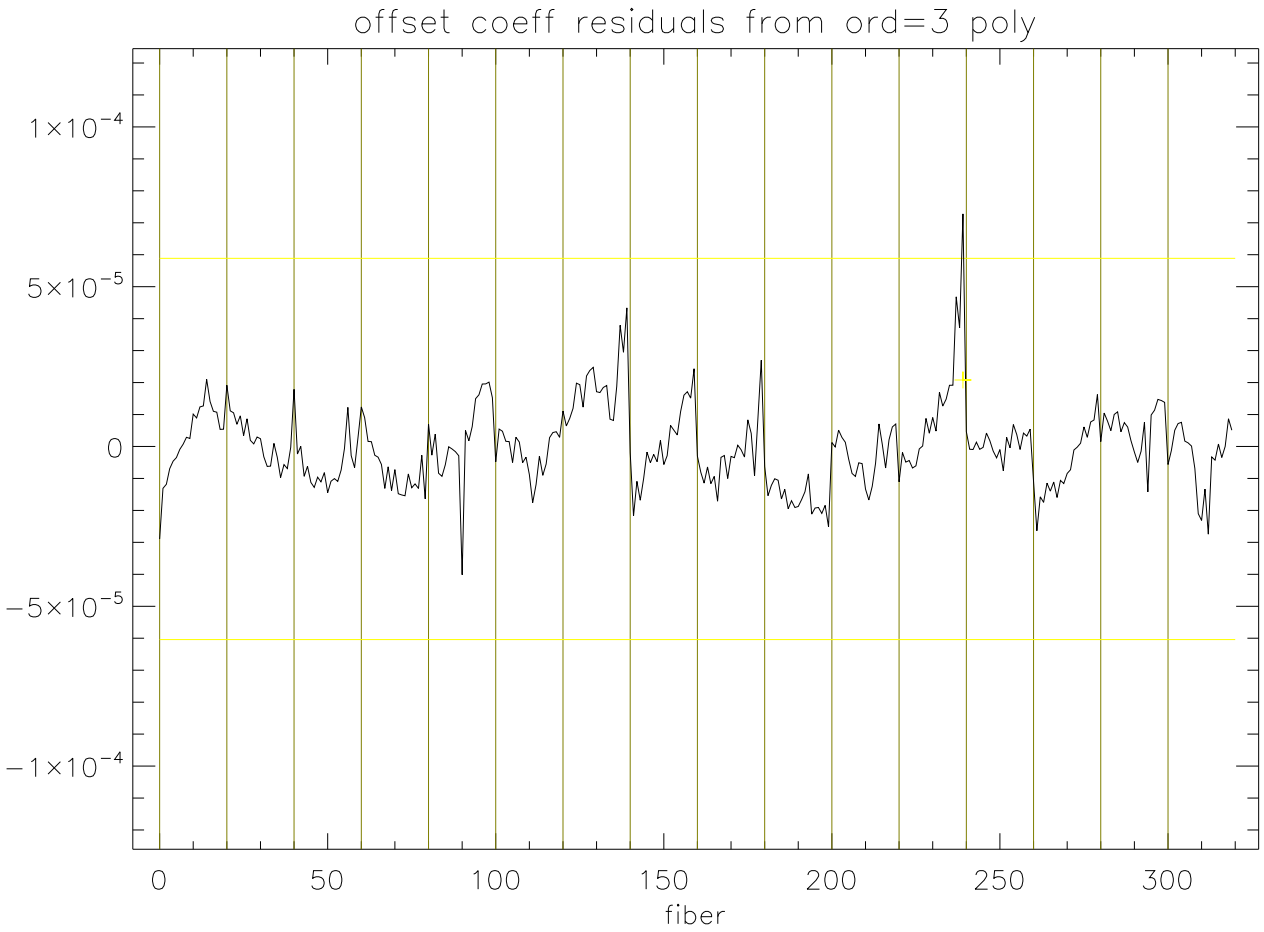

Number of sky fibers = 15
PLATE=2620 MJD=54397 sdR-b2-00046877.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

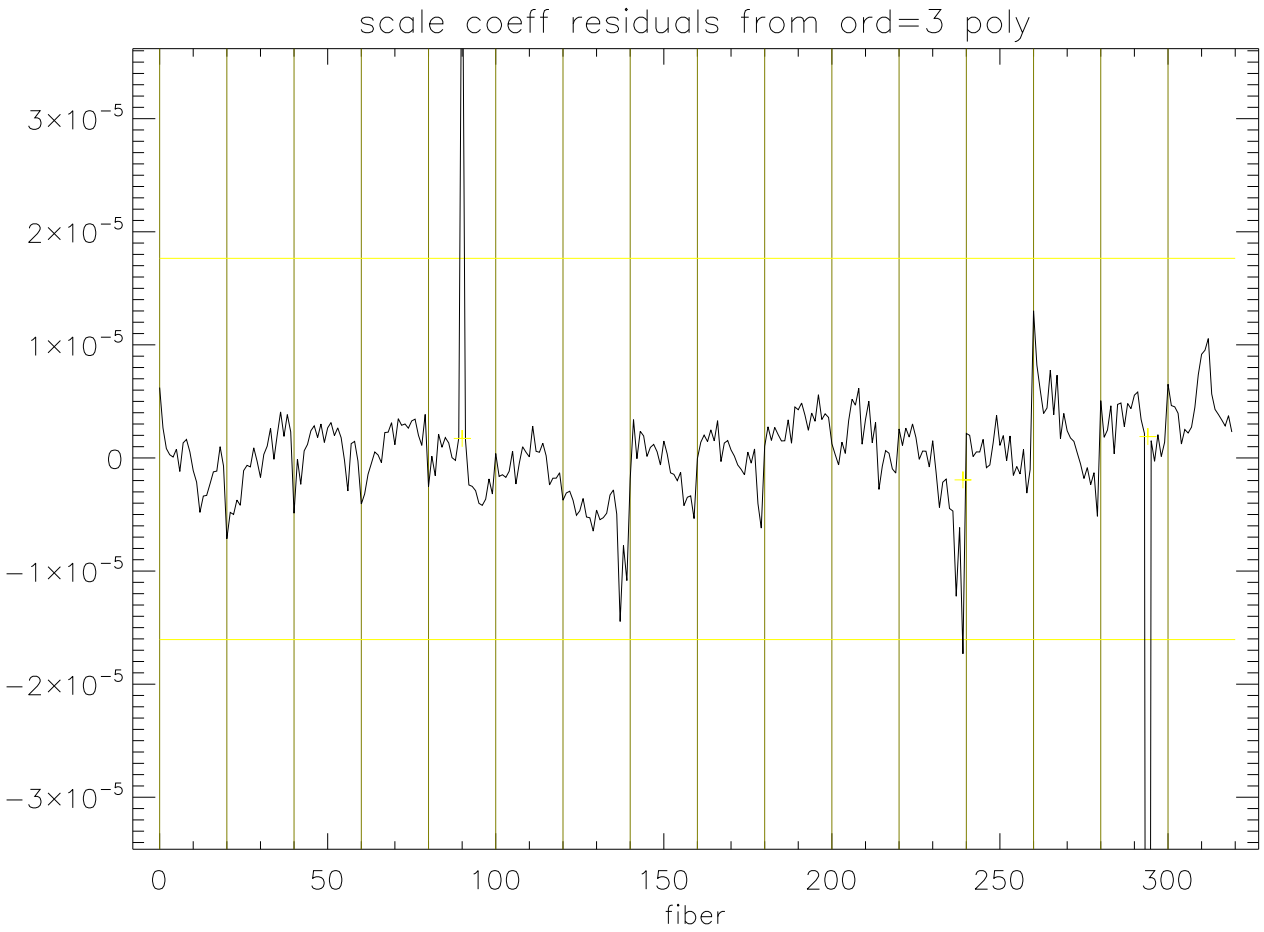

PLATE=2620 MJD=54397 sdR-b2-00046877.fit Skyline Flux at 4359.5
RED = skyfiber
Dispersion = 24.34 %
Flux (4359.5)/Airmass
Fiber number
Focal Distance [mm]
Airmass

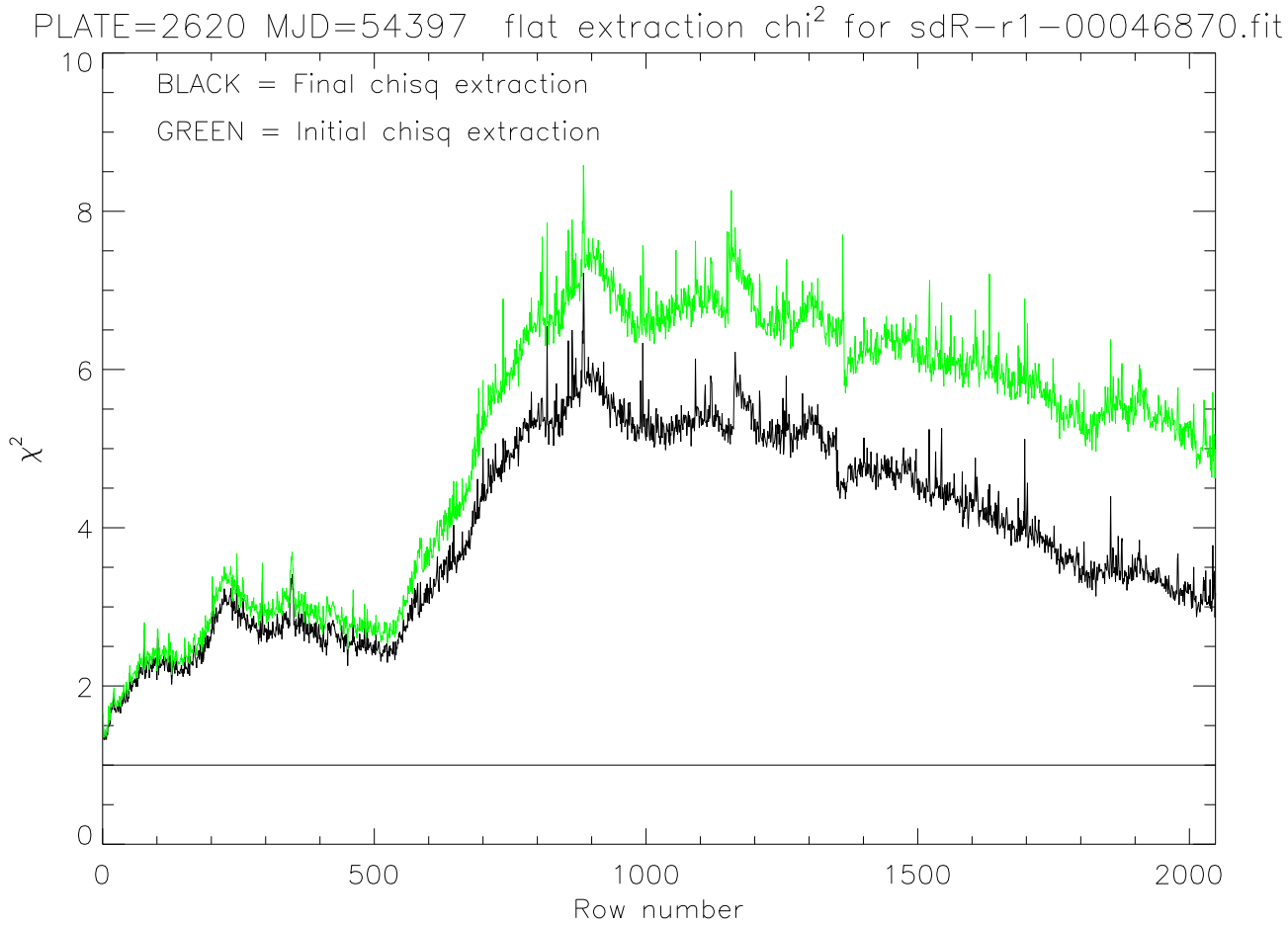

PLATE=2620 MJD=54397 sdR-b2-00046877.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
RED = sky fiber
Dispersion = 1.38 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
0
50
100
150
200
250
300
350
Focal Distance [mm]
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.20
1.21
1.22
1.23
1.24
1.25
Airmass

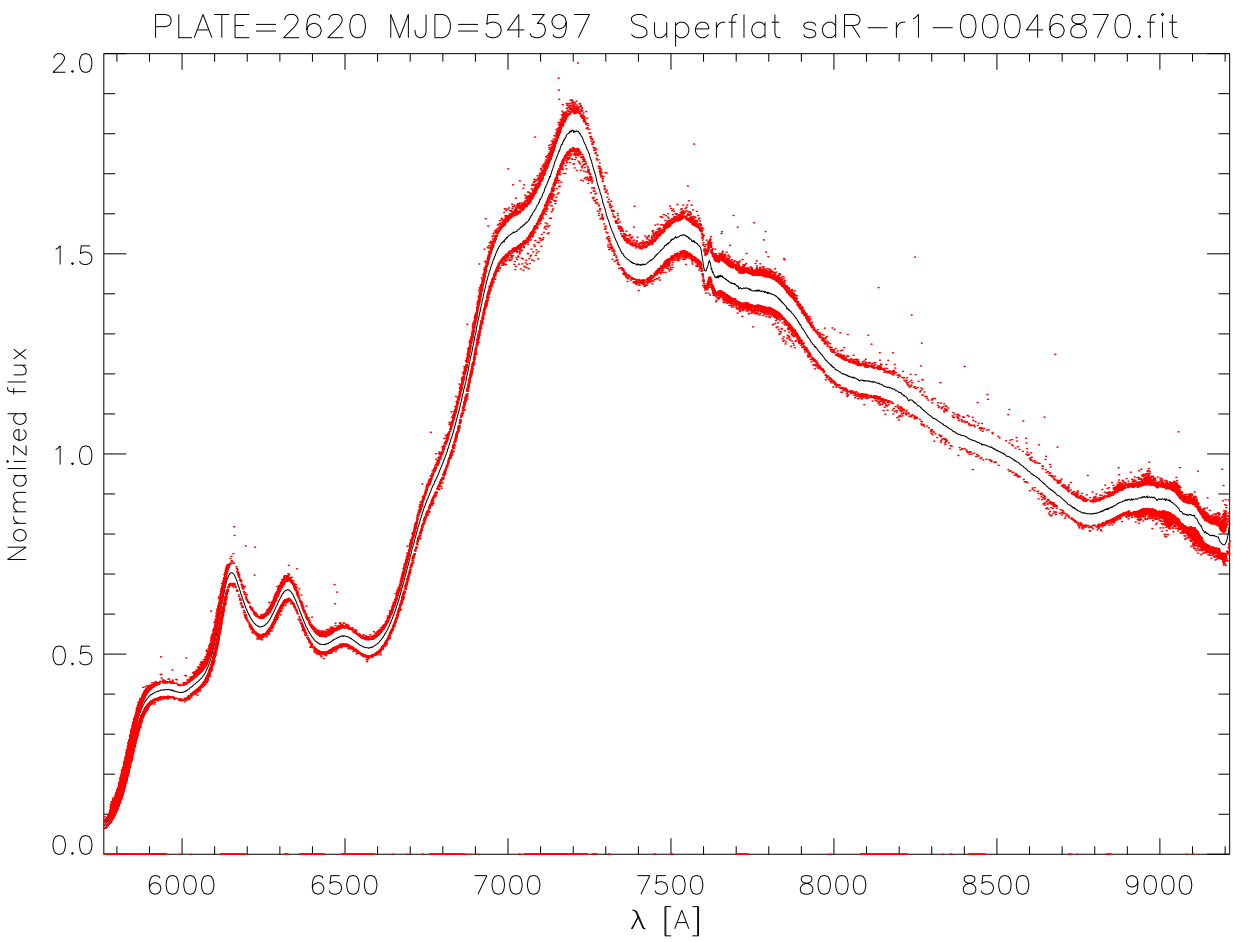

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

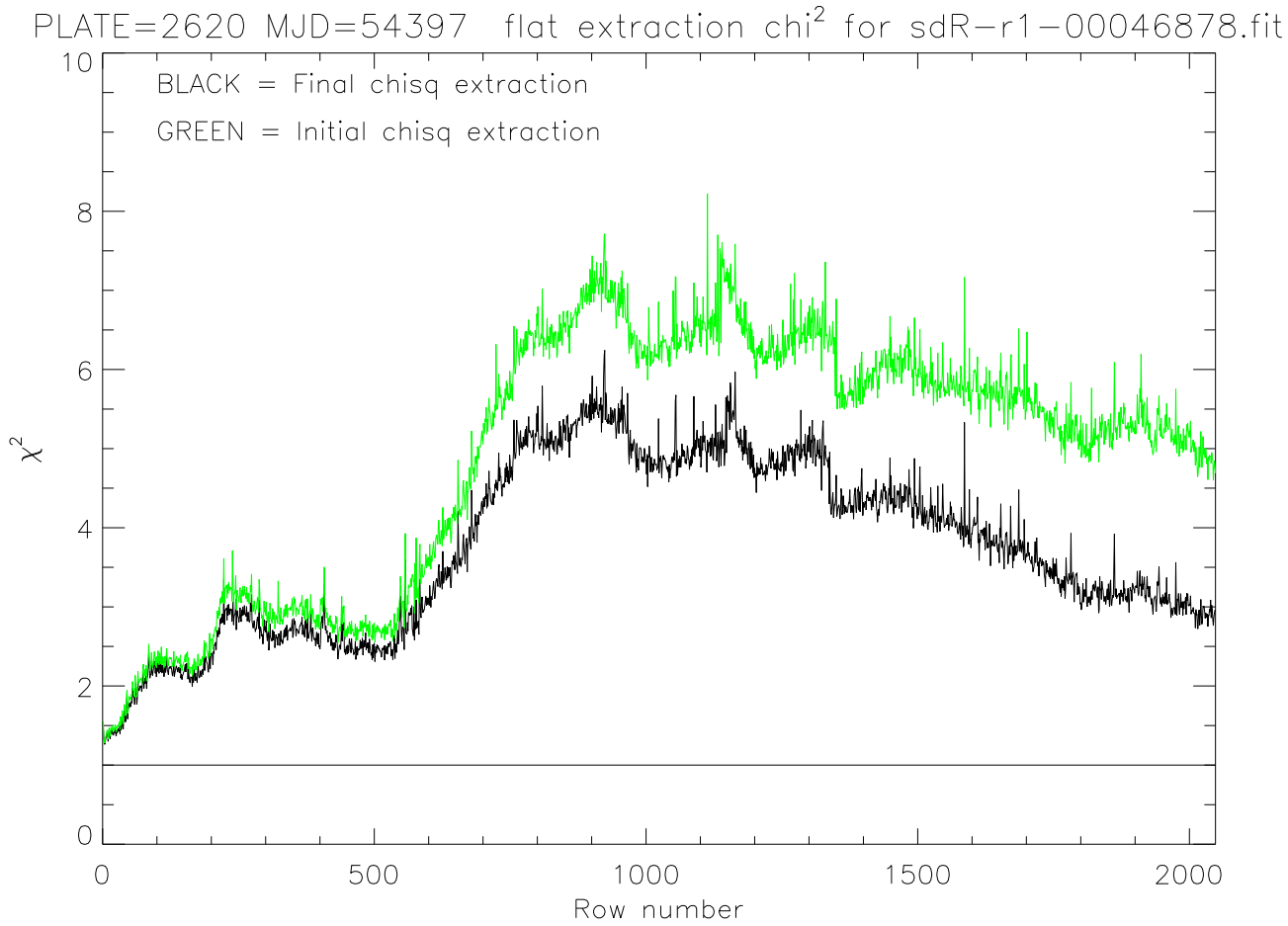

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

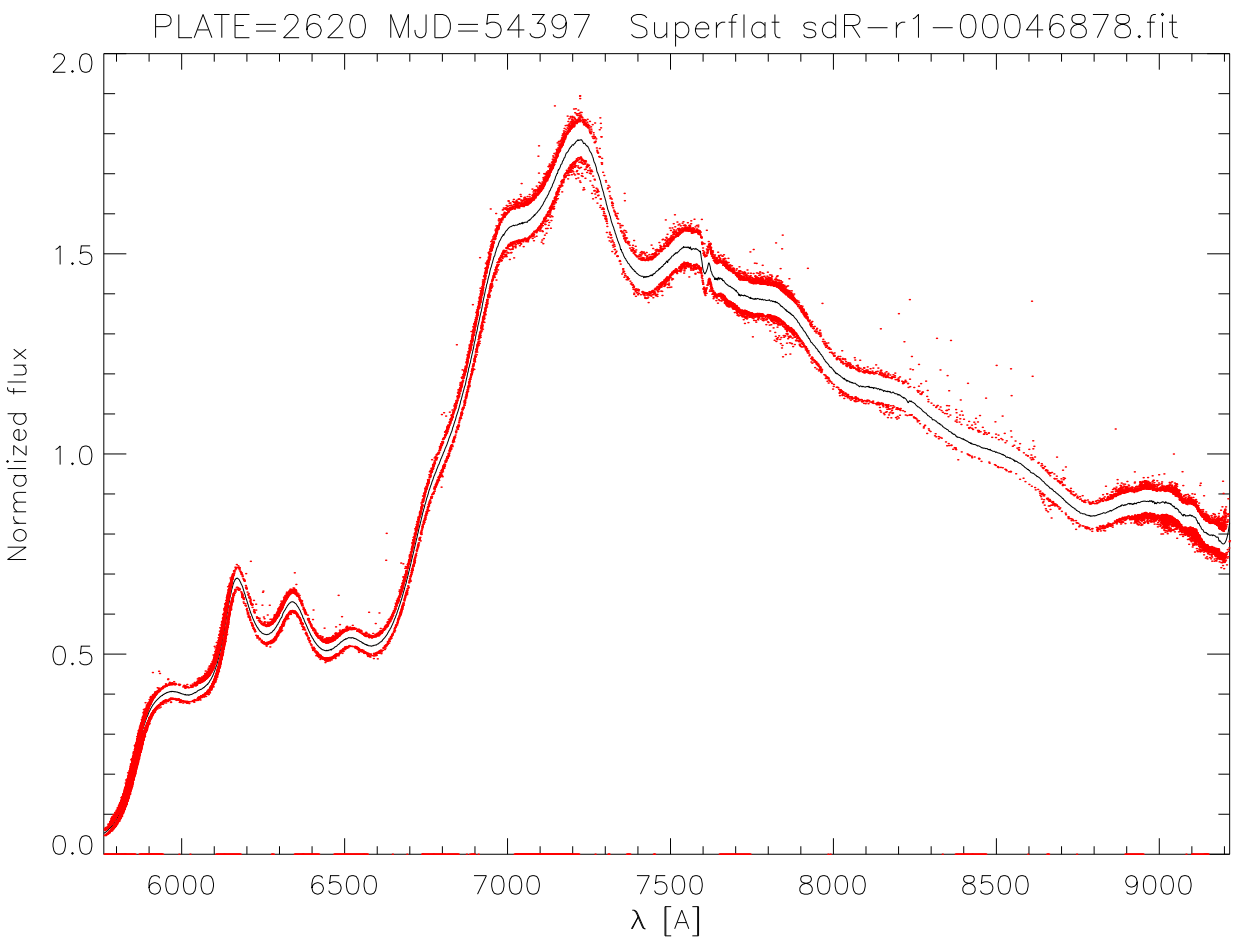

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

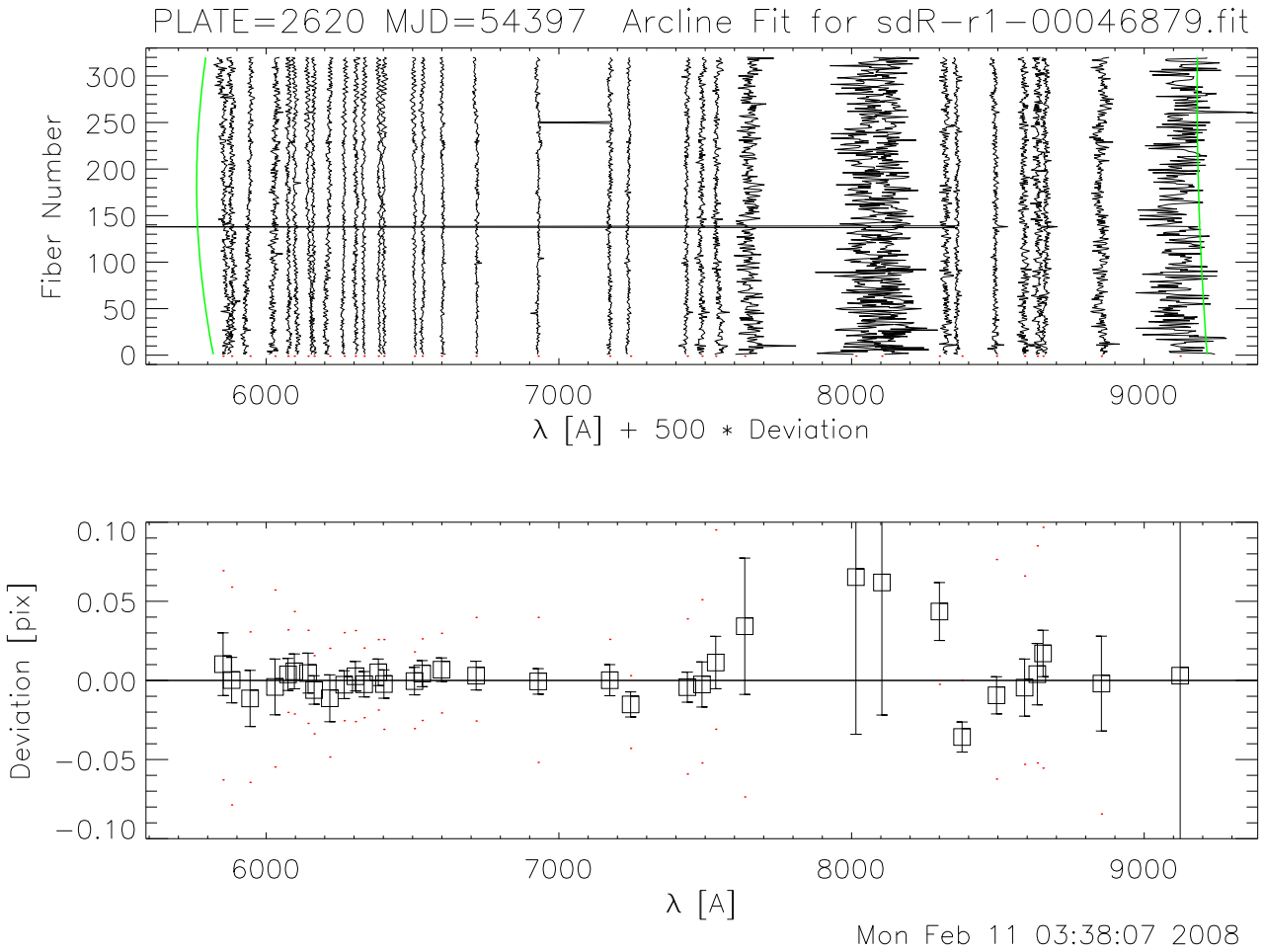

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

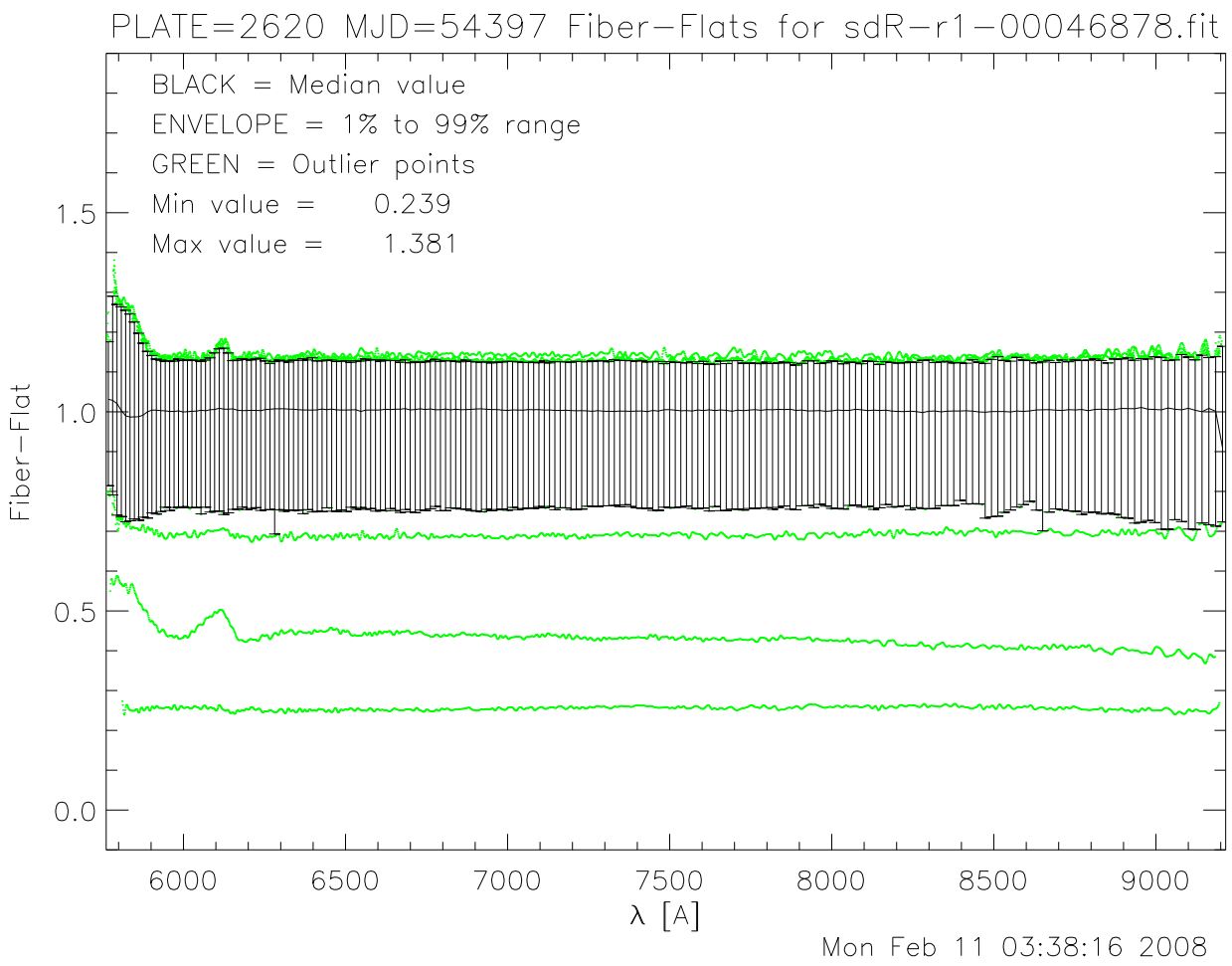

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−r1−00046870.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

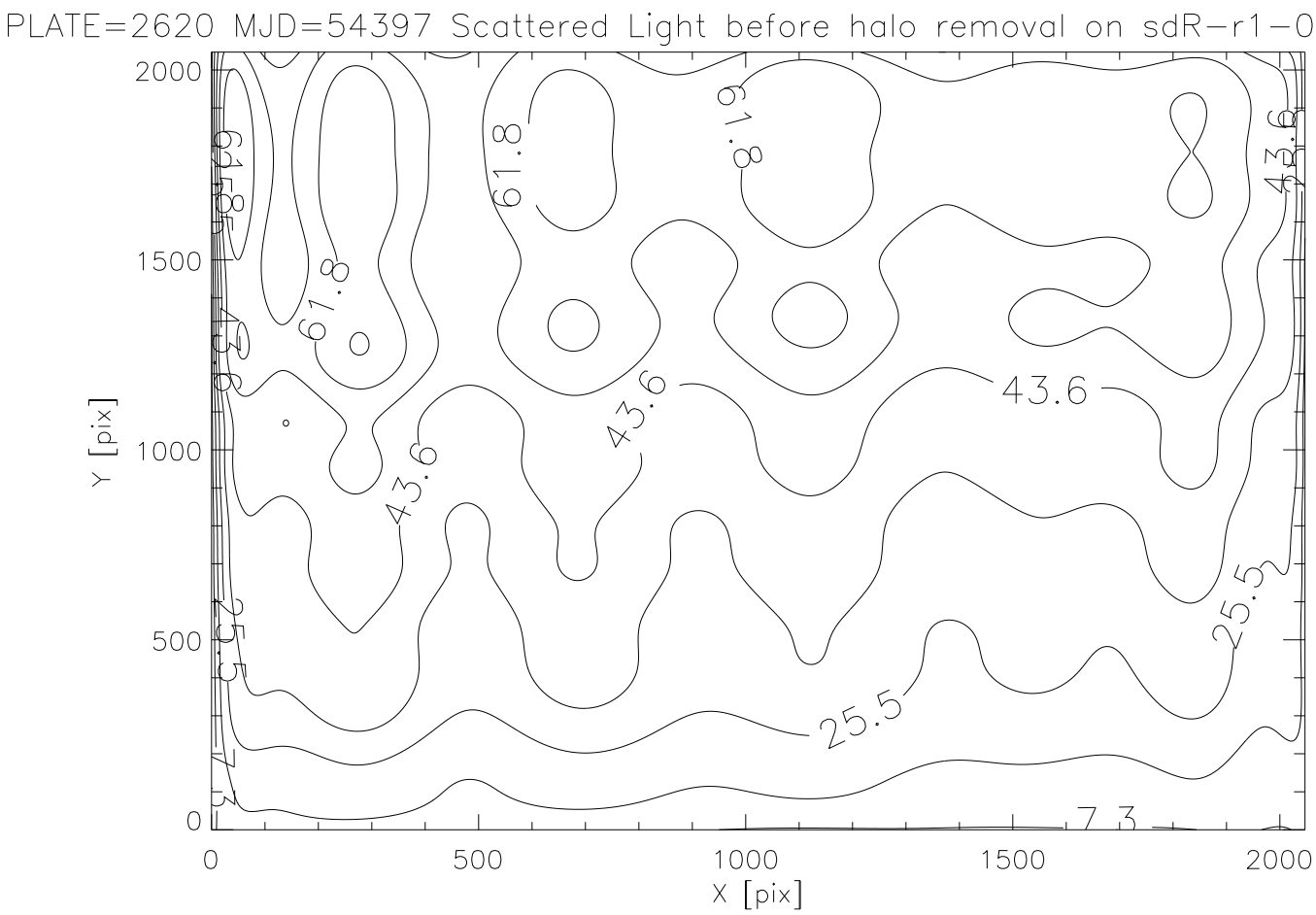

PLATE=2620 MJD=54397 Superflat sdR-r1-00046870.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

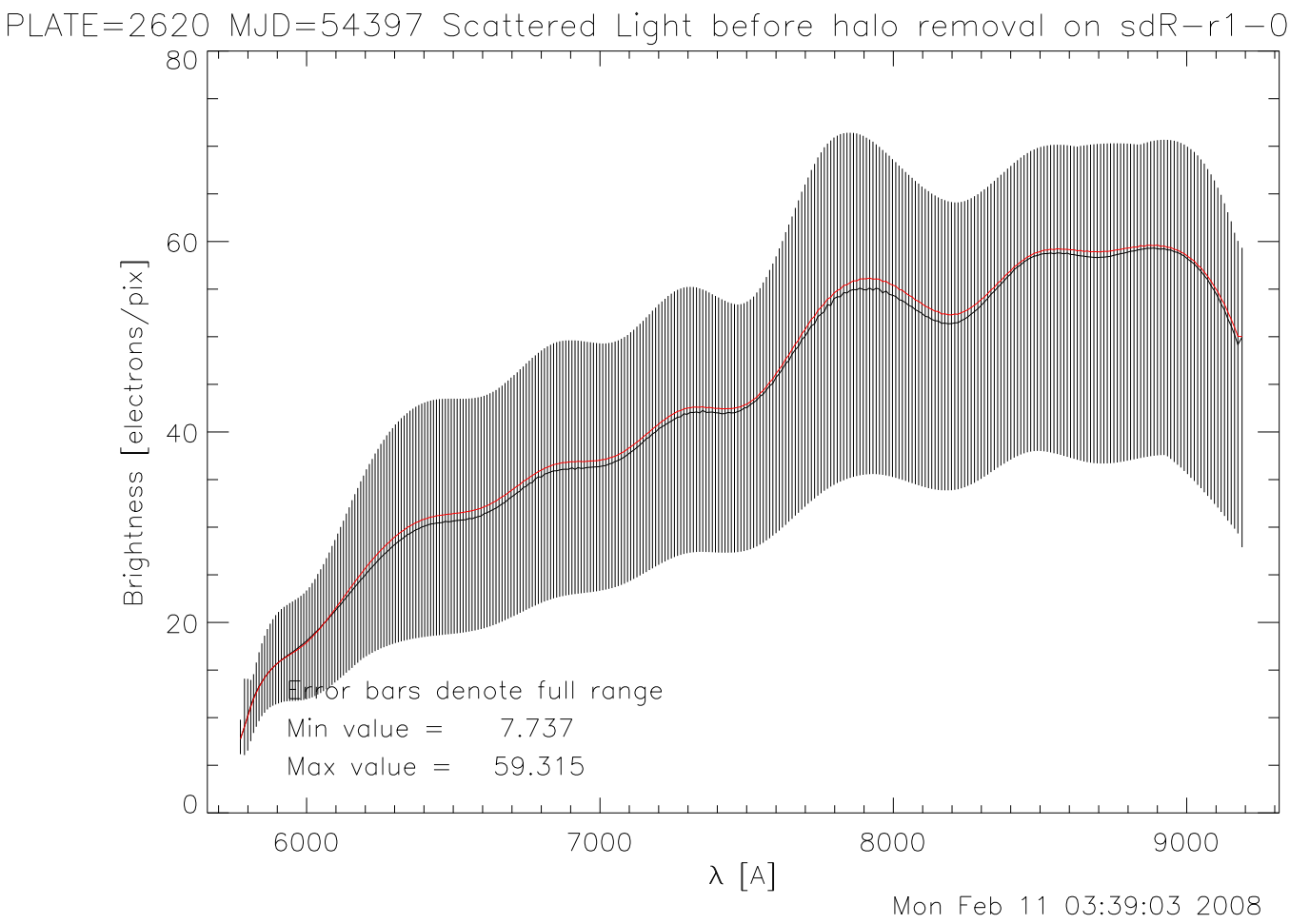

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−r1−00046878.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

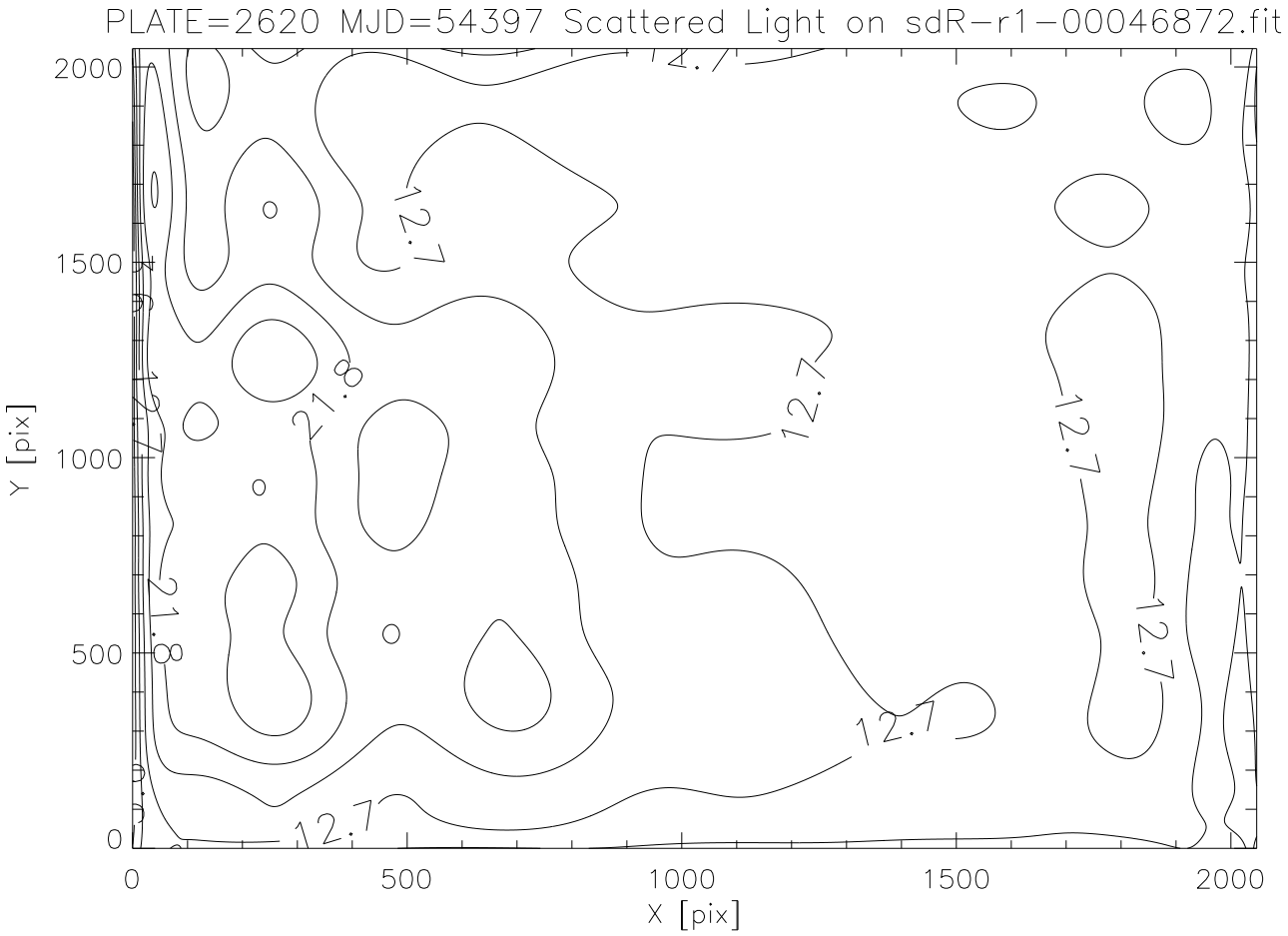

PLATE=2620 MJD=54397 Superflat sdR-r1-00046878.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

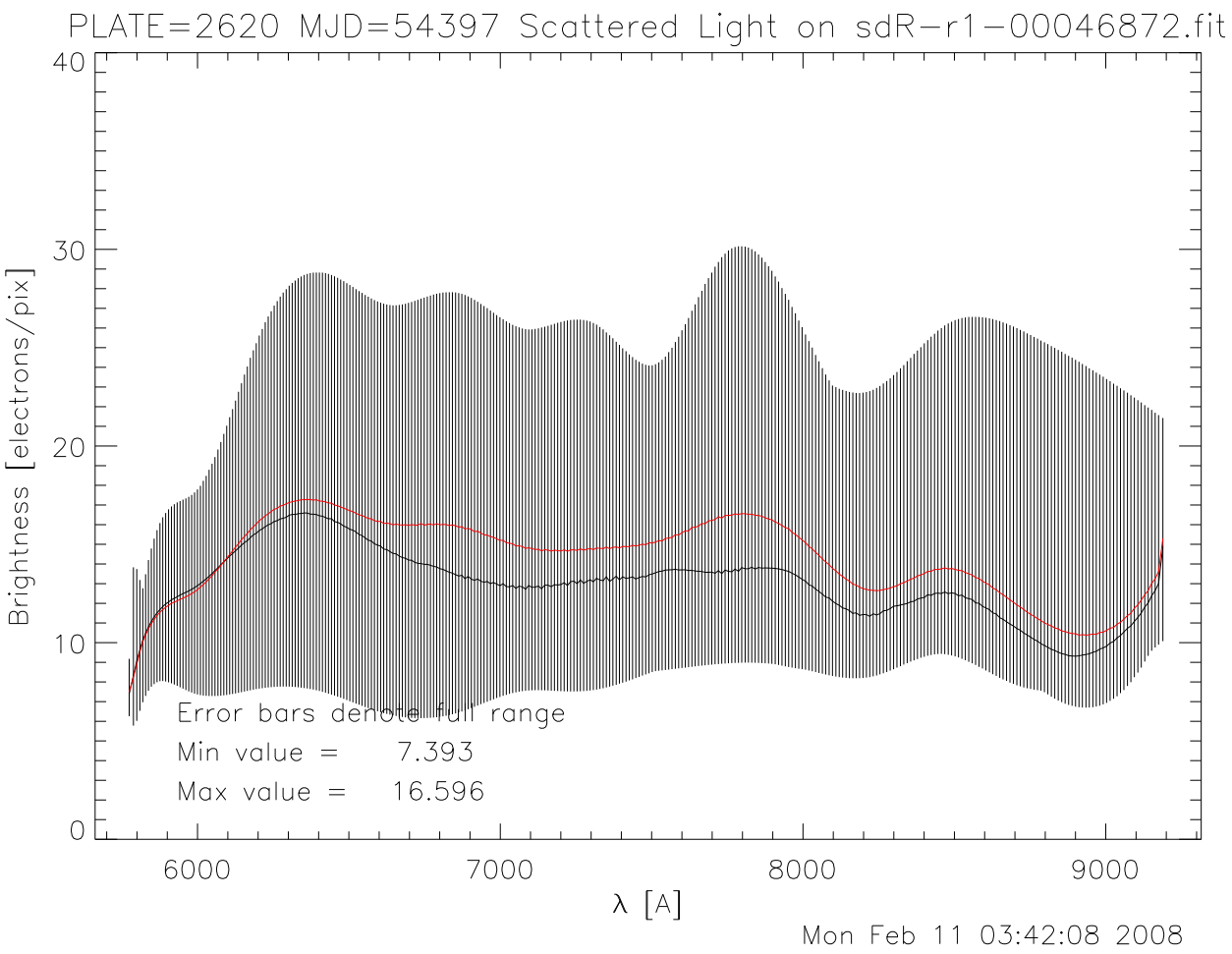

PLATE=2620 MJD=54397 Arcline Fit for sdR-r1-00046879.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
6000
7000
8000
9000
λ [A]
Mon Feb 11 03:38:07 2008

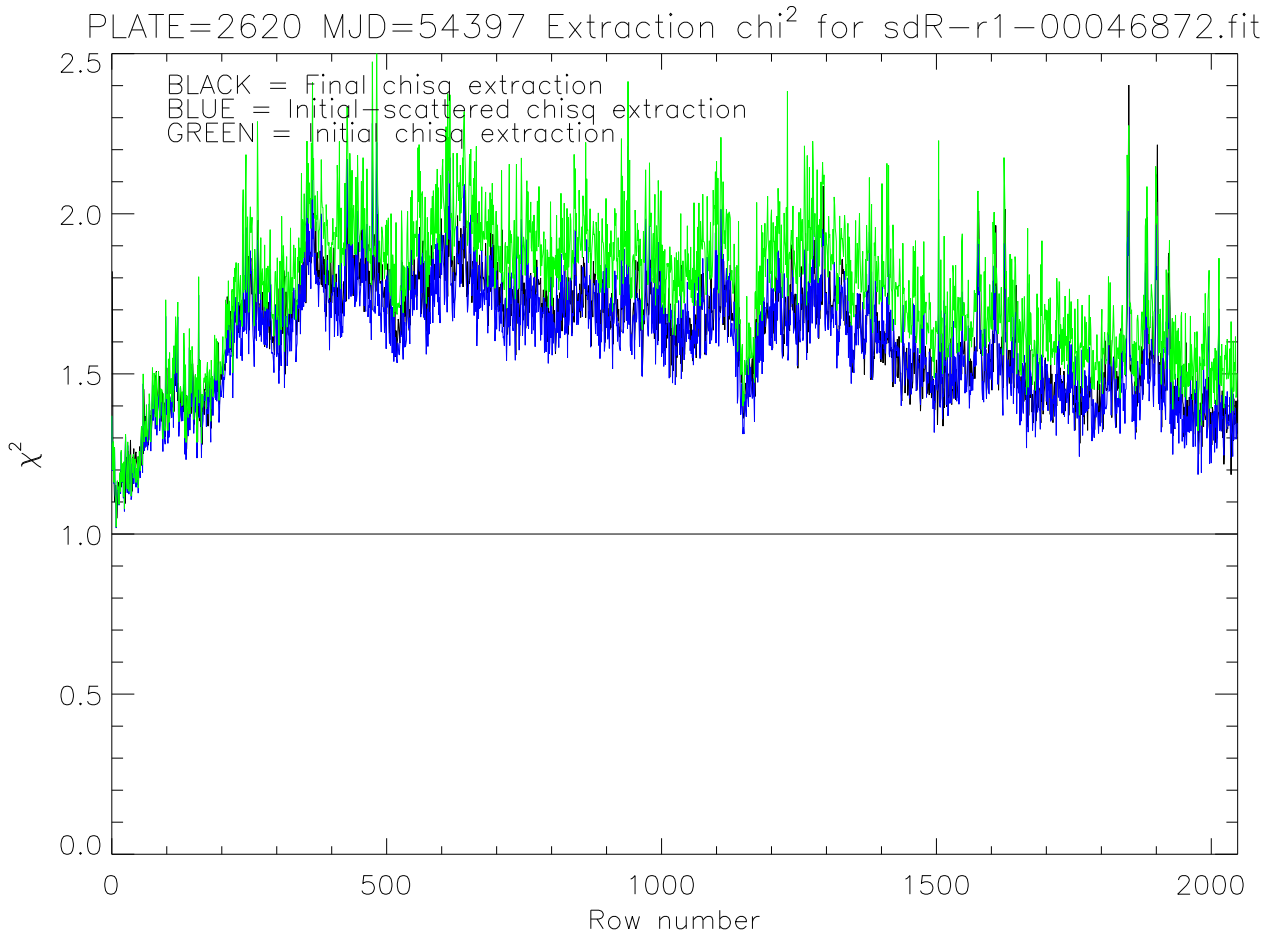

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 03:38:16 2008

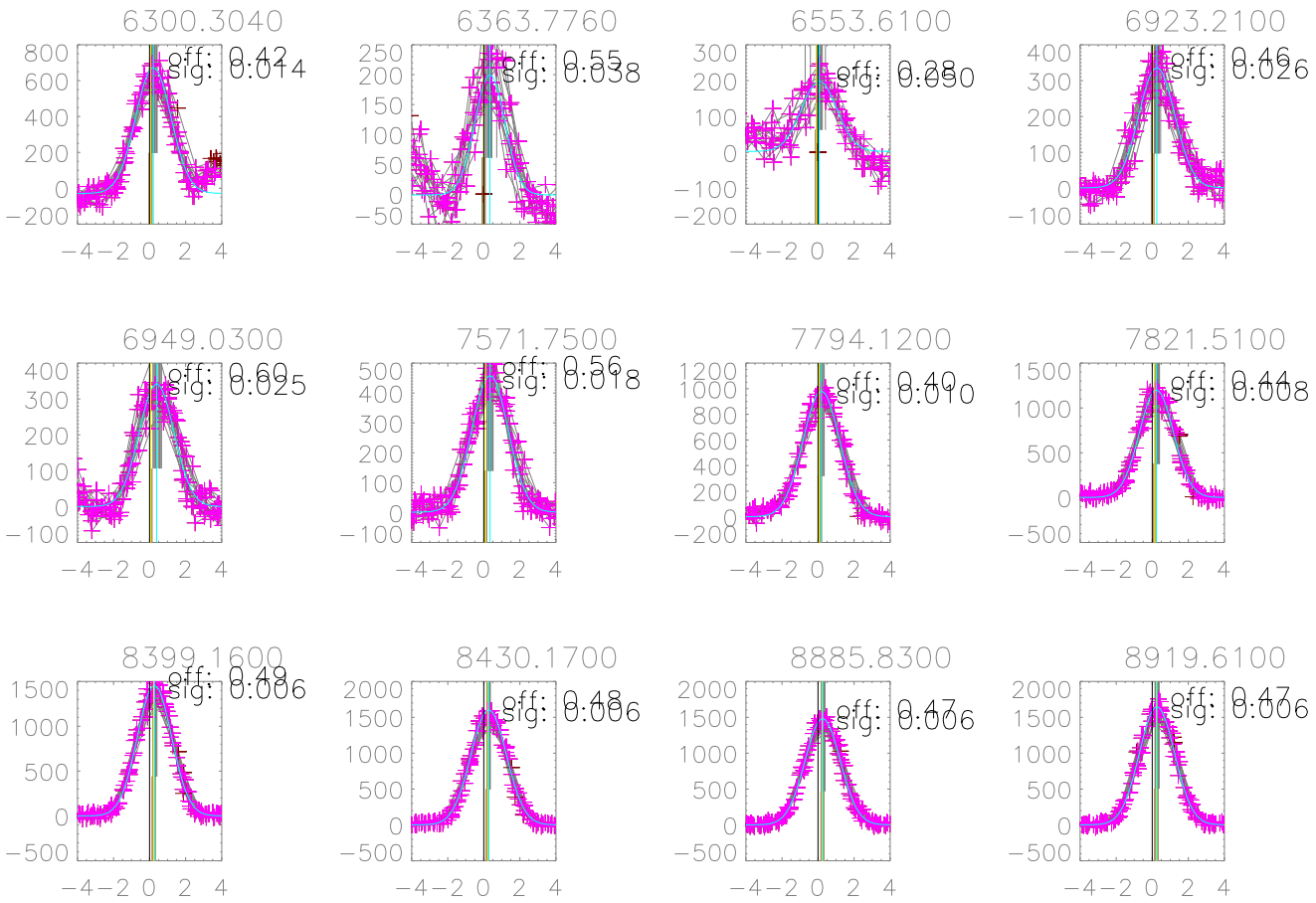

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046872.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
61.8
43.6
25.5
7.3

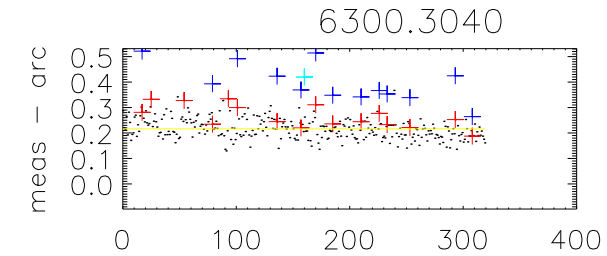

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046872.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.737
Max value = 59.315
Mon Feb 11 03:39:03 2008

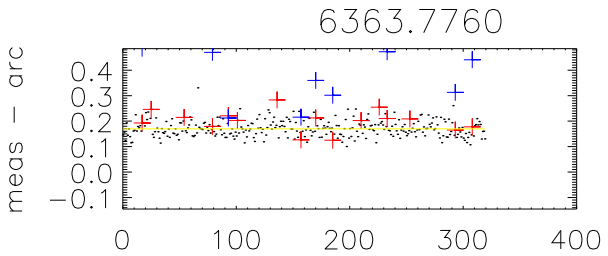

PLATE=2620 MJD=54397 Scattered Light on sdR−r1−00046872.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8

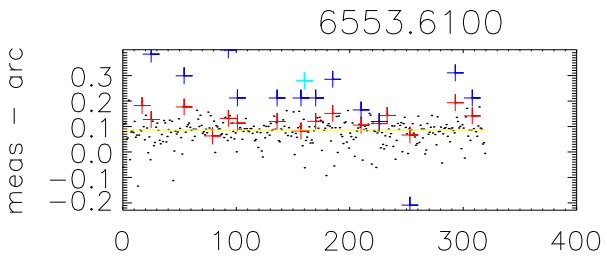

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046872.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.393
Max value = 16.596
Mon Feb 11 03:42:08 2008

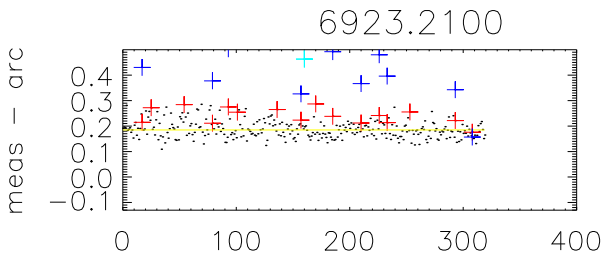

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046872.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

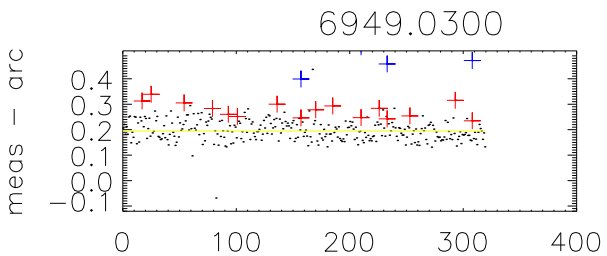

6300.3040
off: 0.42
sig: 0.014
6363.7760
off: 0.55
sig: 0.038
6553.6100
off: 0.28
sig: 0.050
6923.2100
off: 0.46
sig: 0.026
6949.0300
off: 0.60
sig: 0.025
7571.7500
off: 0.56
sig: 0.018
7794.1200
off: 0.40
sig: 0.010
7821.5100
off: 0.44
sig: 0.008
8399.1600
off: 0.49
sig: 0.006
8430.1700
off: 0.48
sig: 0.006
8885.8300
off: 0.47
sig: 0.006
8919.6100
off: 0.47
sig: 0.006

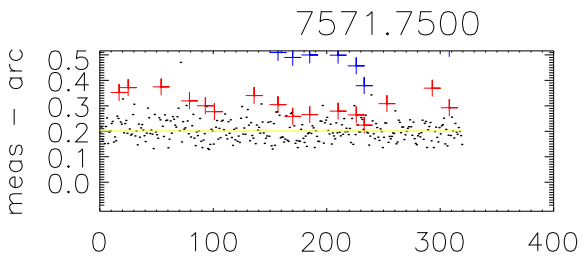

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

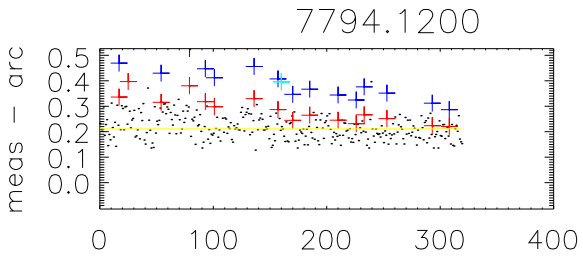

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

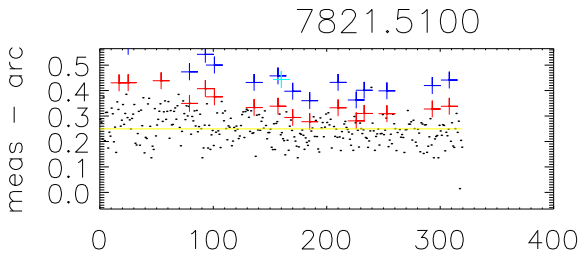

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

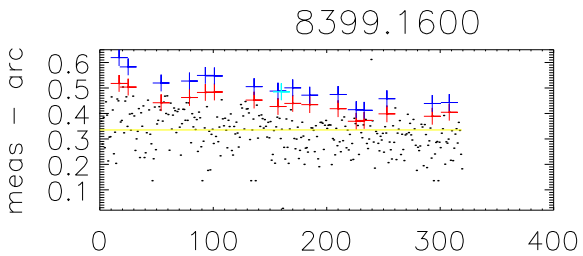

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

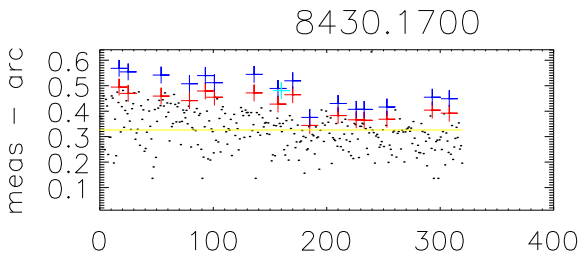

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

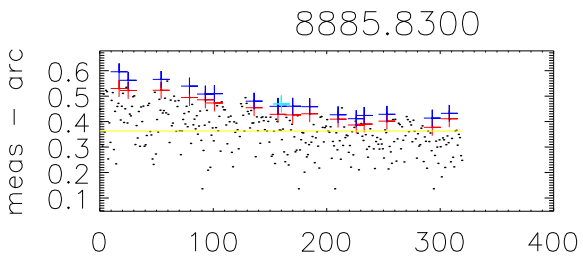

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

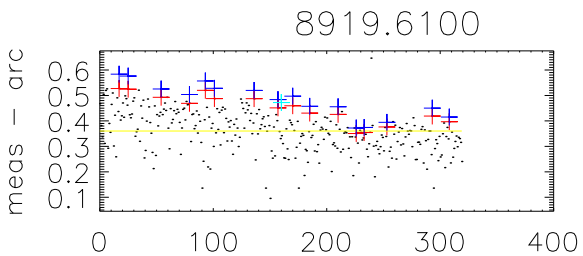

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

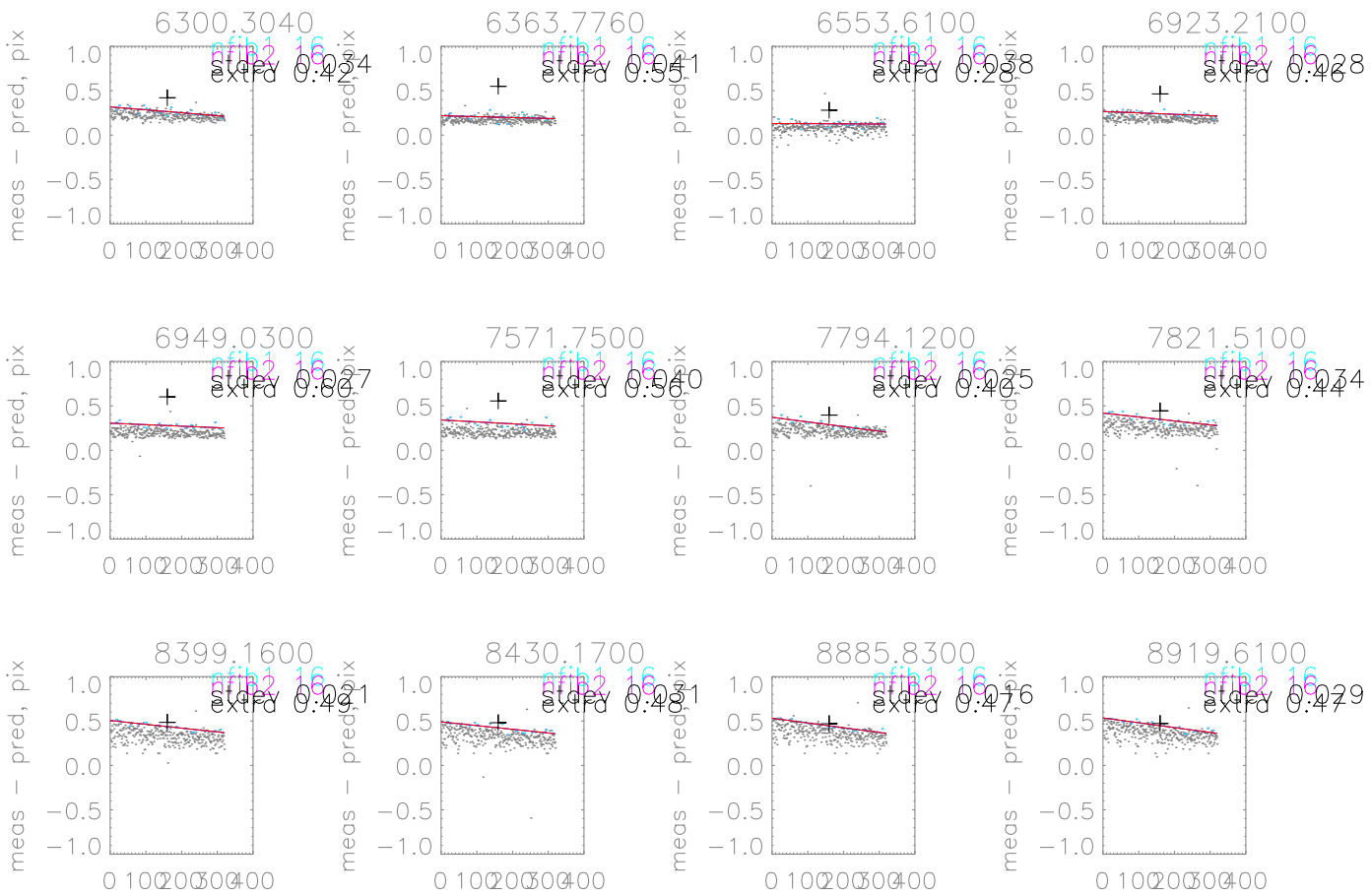

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

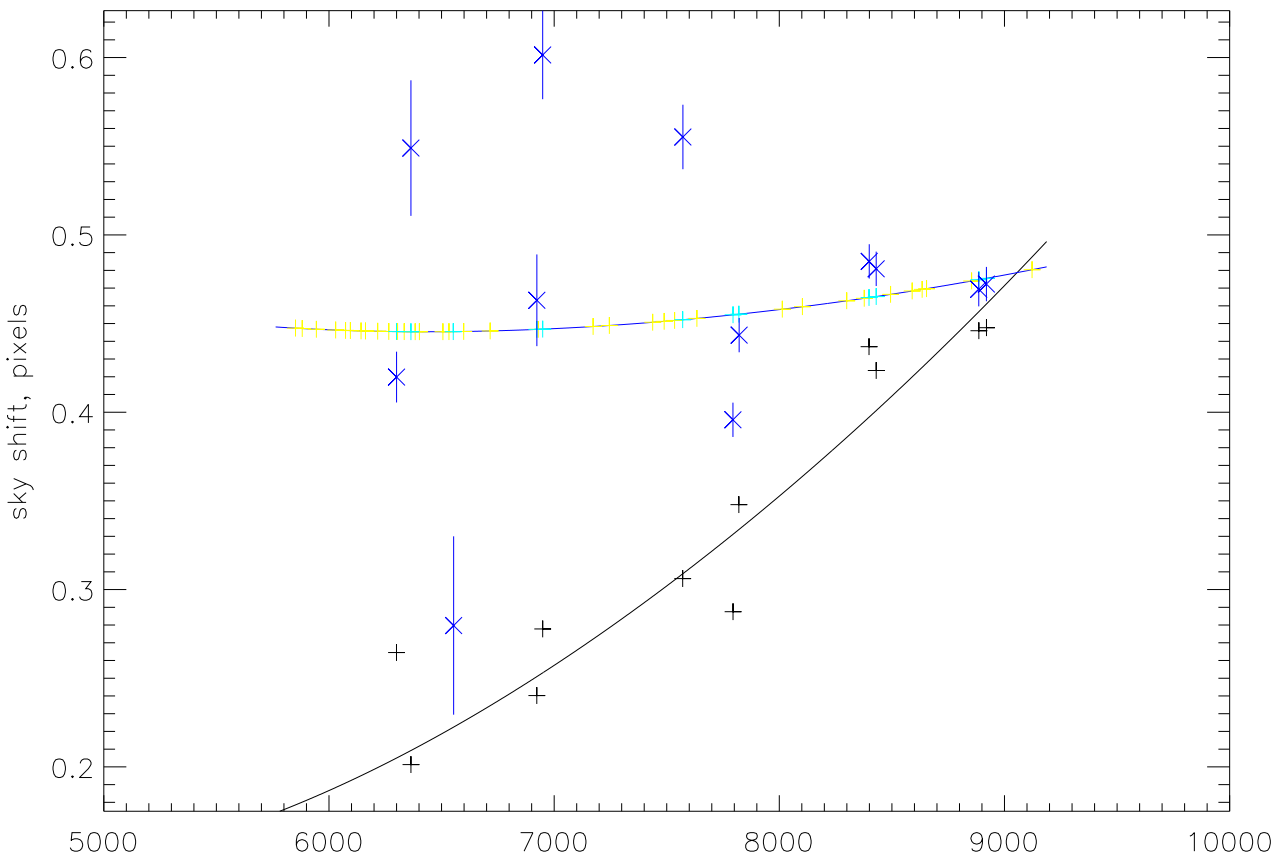

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

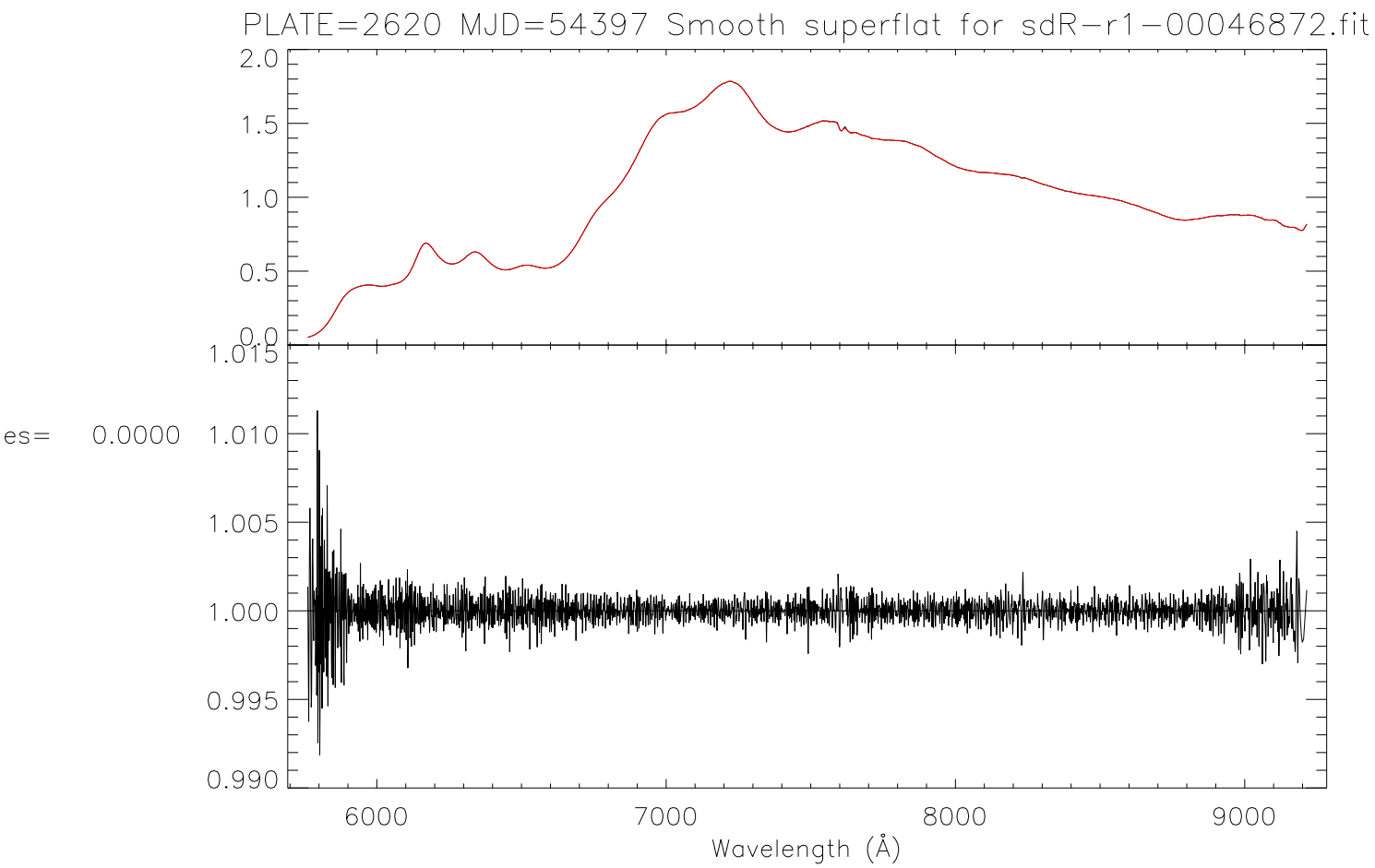

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

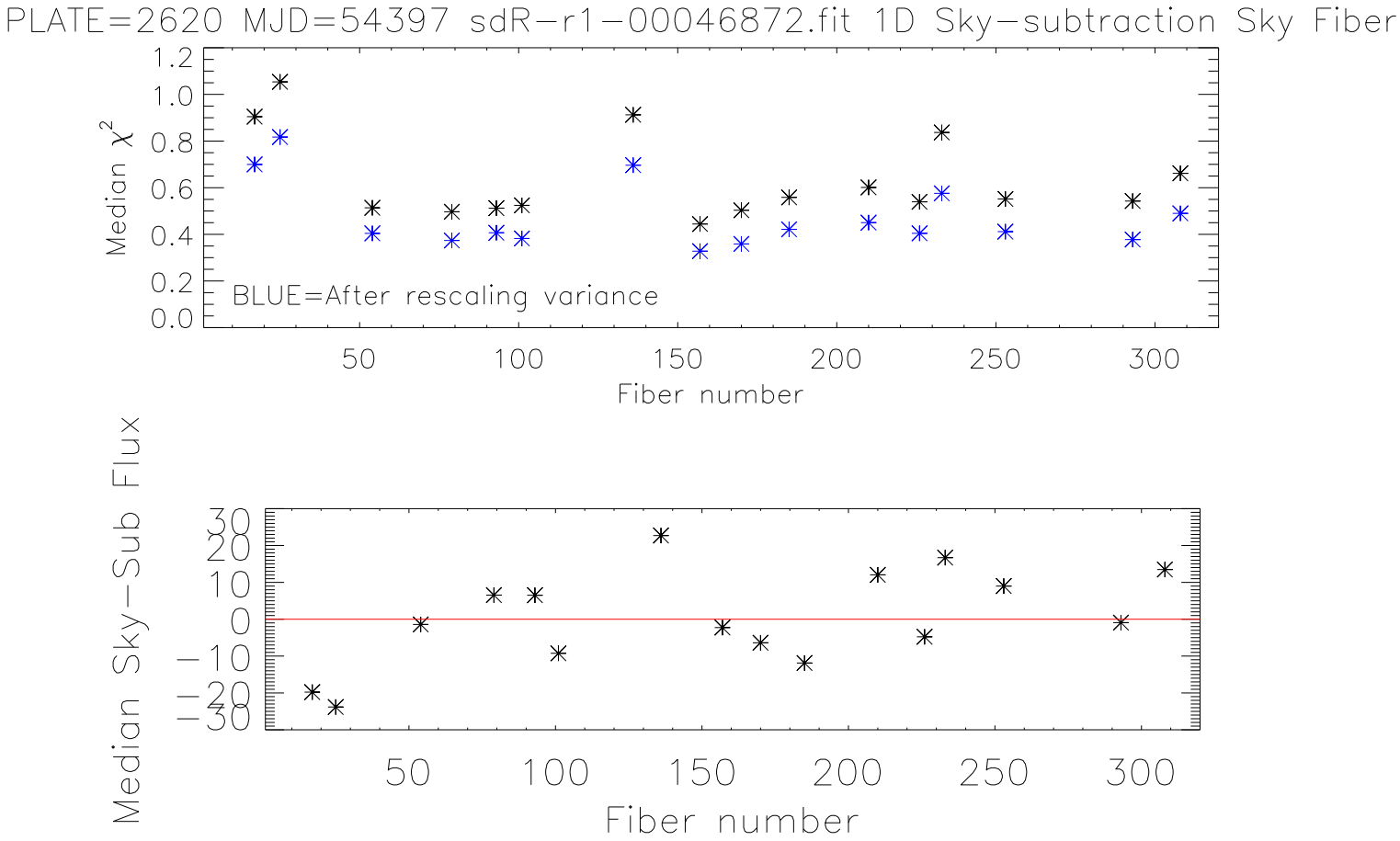

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

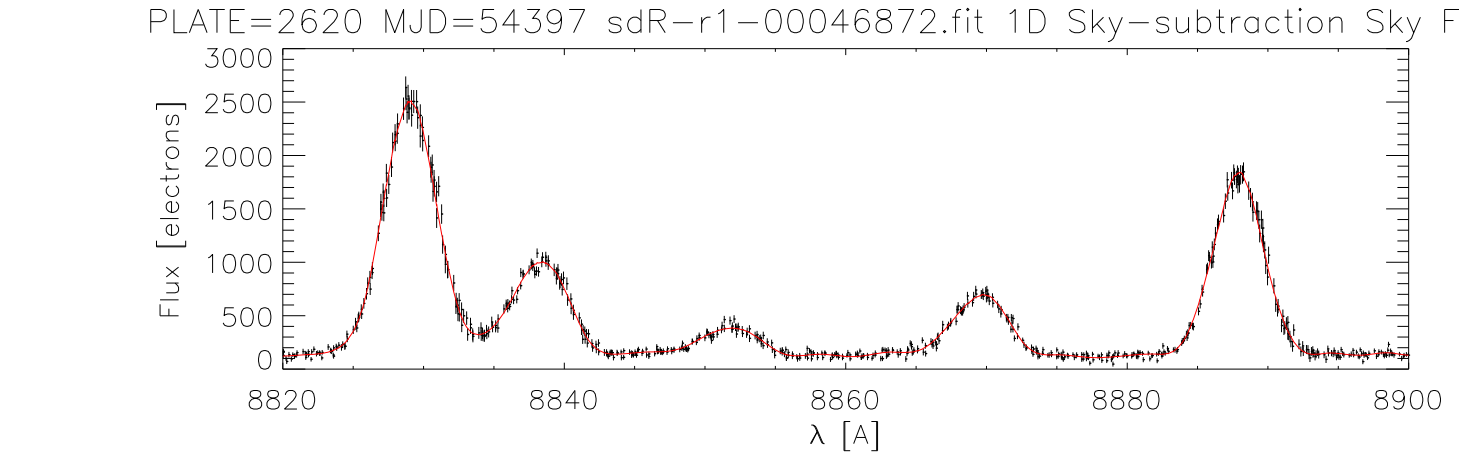

6300.3040
stdev 0.034
extra 0.42
6363.7760
stdev 0.041
extra 0.55
6553.6100
stdev 0.038
extra 0.28
6923.2100
stdev 0.028
extra 0.46
6949.0300
stdev 0.027
extra 0.60
7571.7500
stdev 0.040
extra 0.56
7794.1200
stdev 0.035
extra 0.46
7821.5100
stdev 0.034
extra 0.44
8399.1600
stdev 0.031
extra 0.49
8430.1700
stdev 0.031
extra 0.48
8885.8300
stdev 0.076
extra 0.47
8919.6100
stdev 0.029
extra 0.47
meas − pred, pix
mfhd2 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

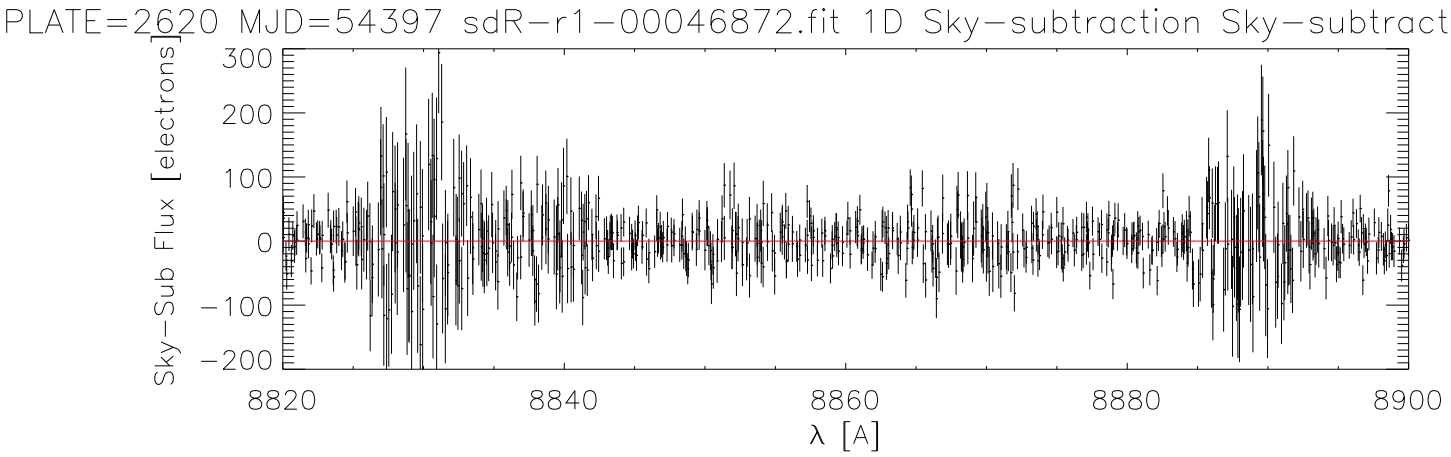

sky shift, pixels
0.6
0.5
0.4
0.3
0.2
5000
6000
7000
8000
9000
10000

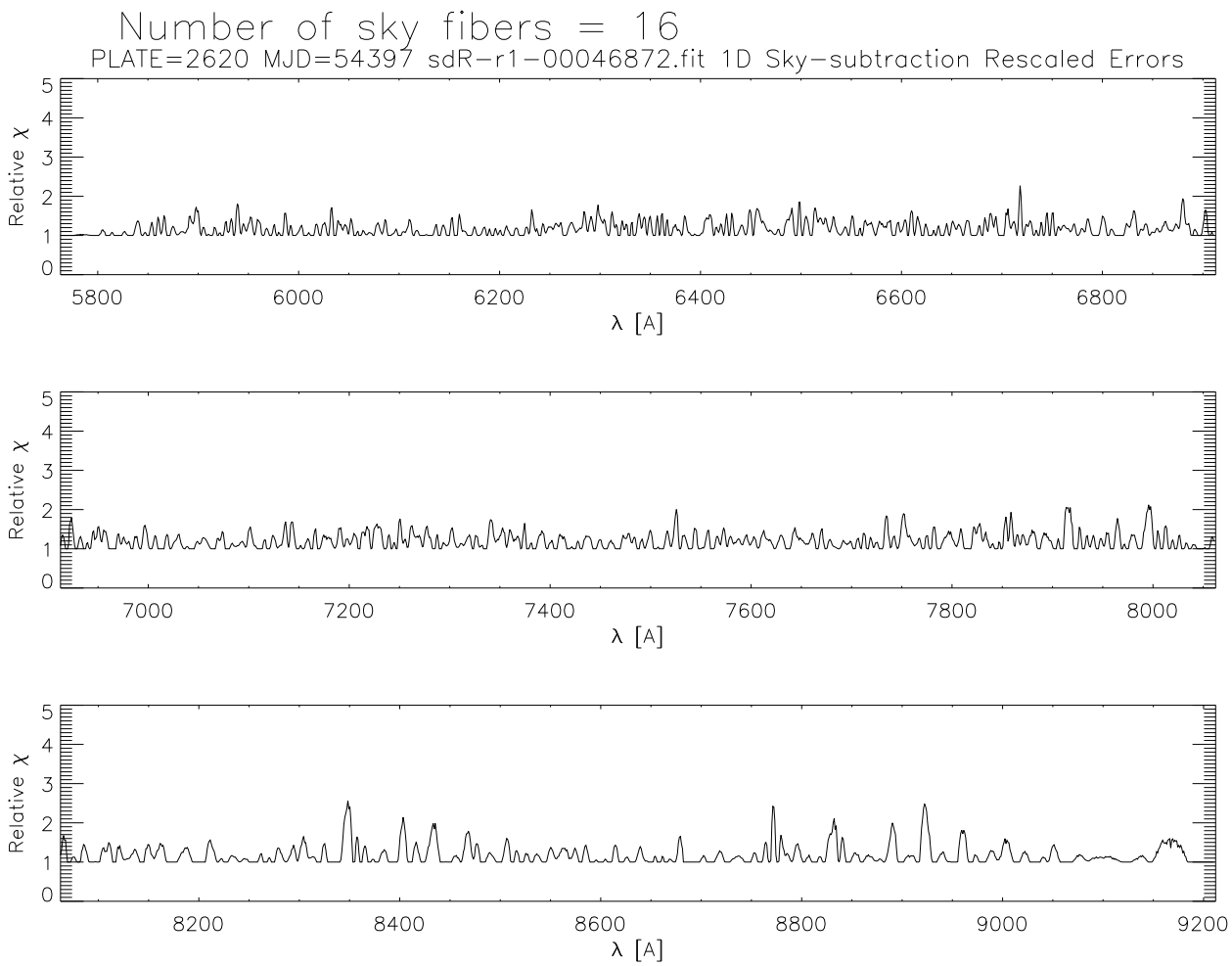

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046872.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

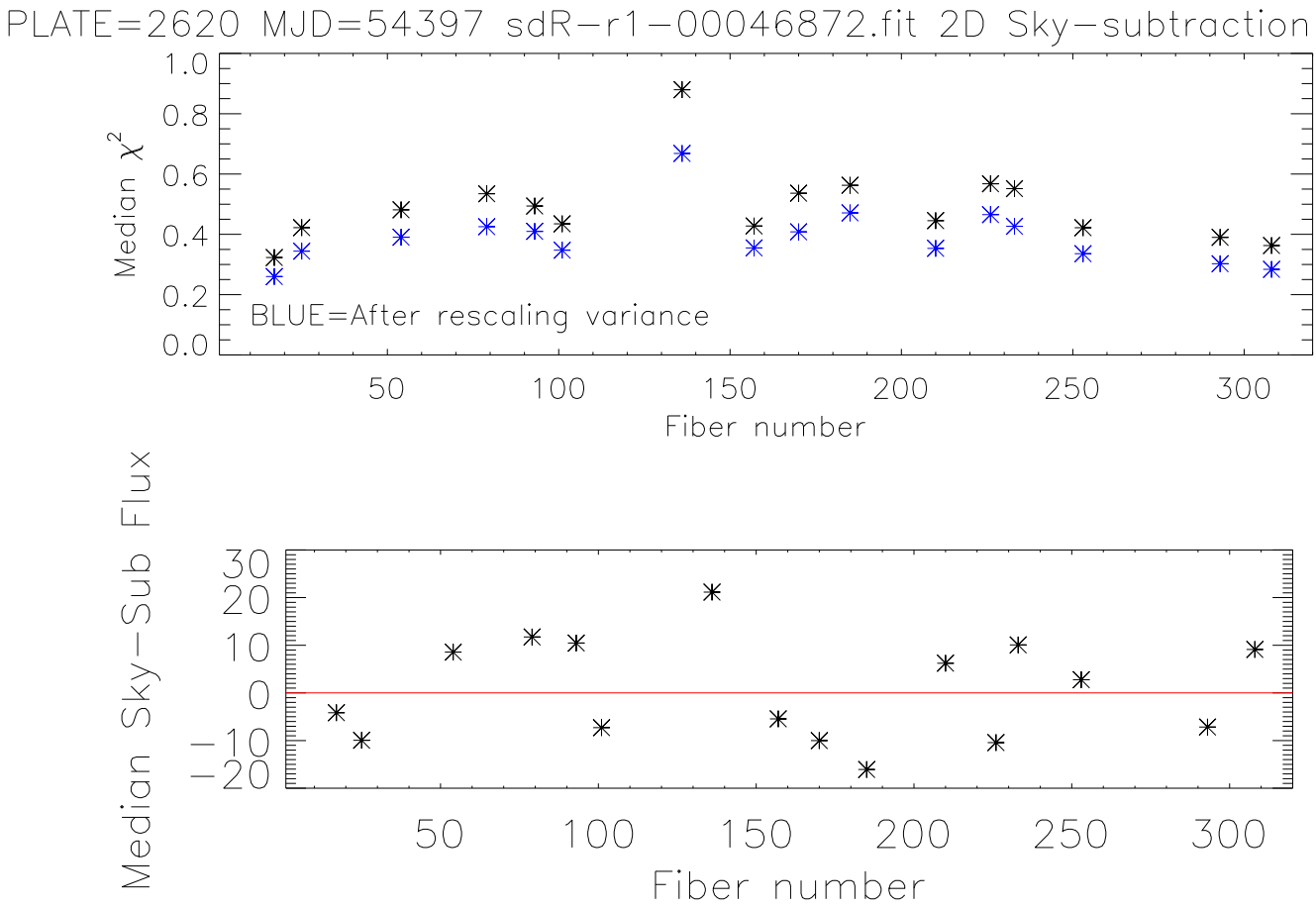
es= 0.0000

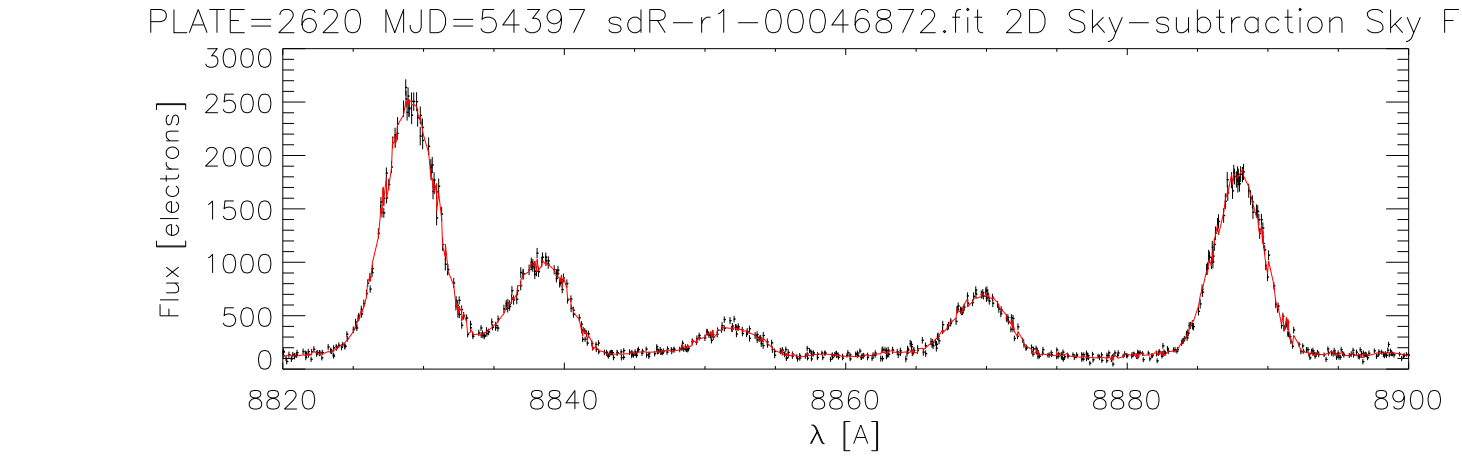

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

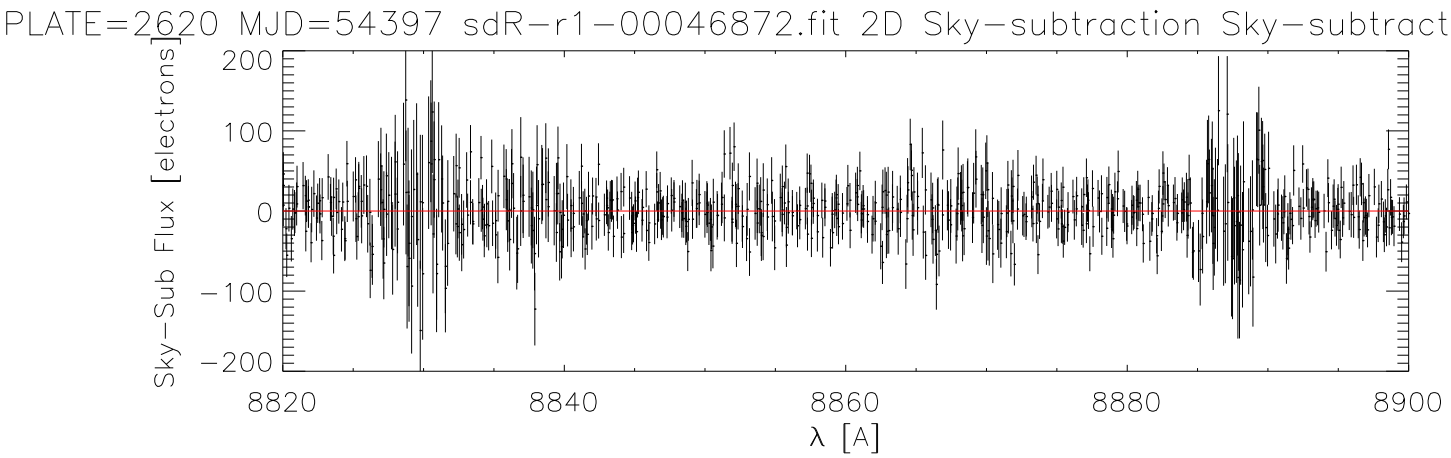

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

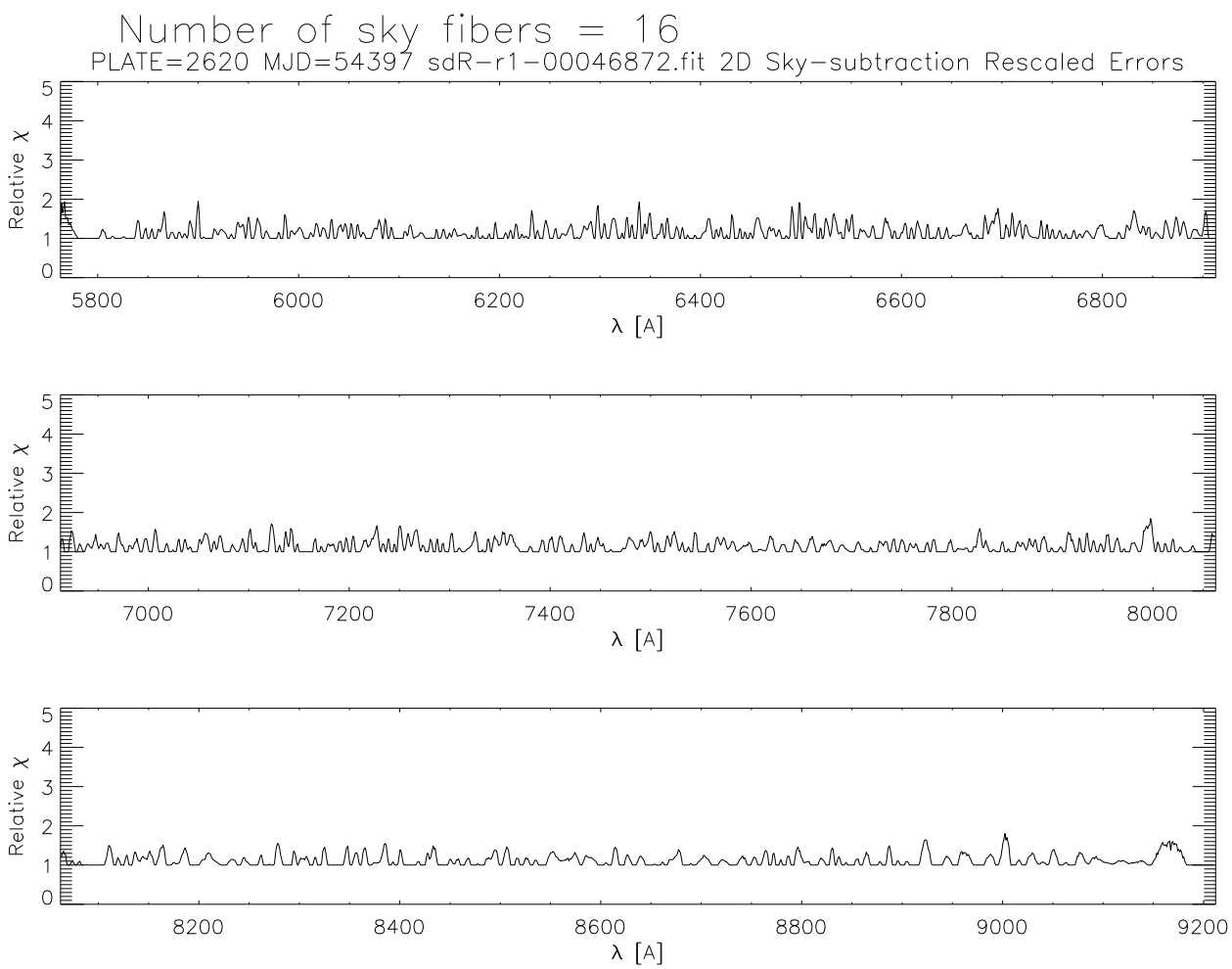

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

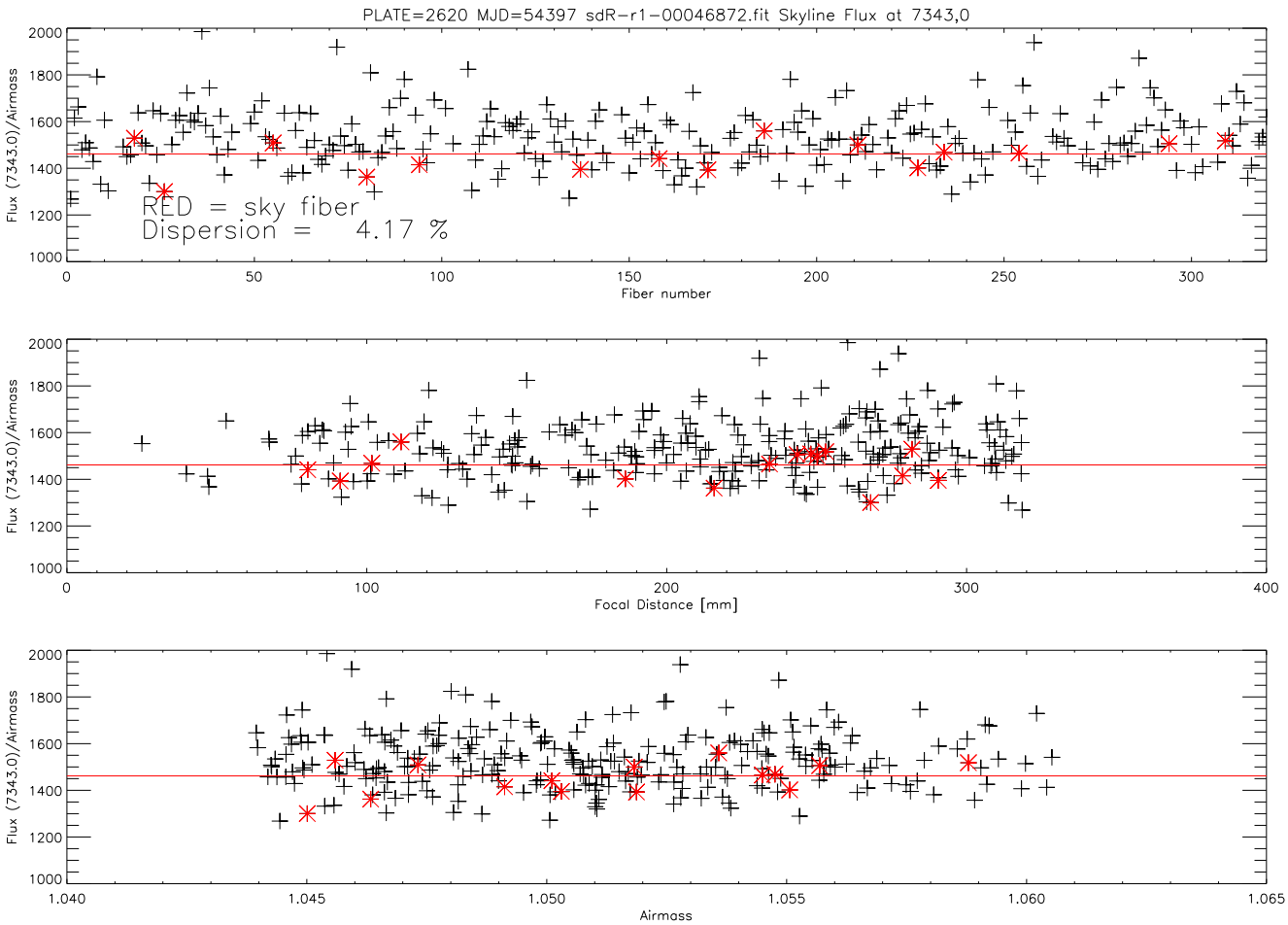

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046872.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

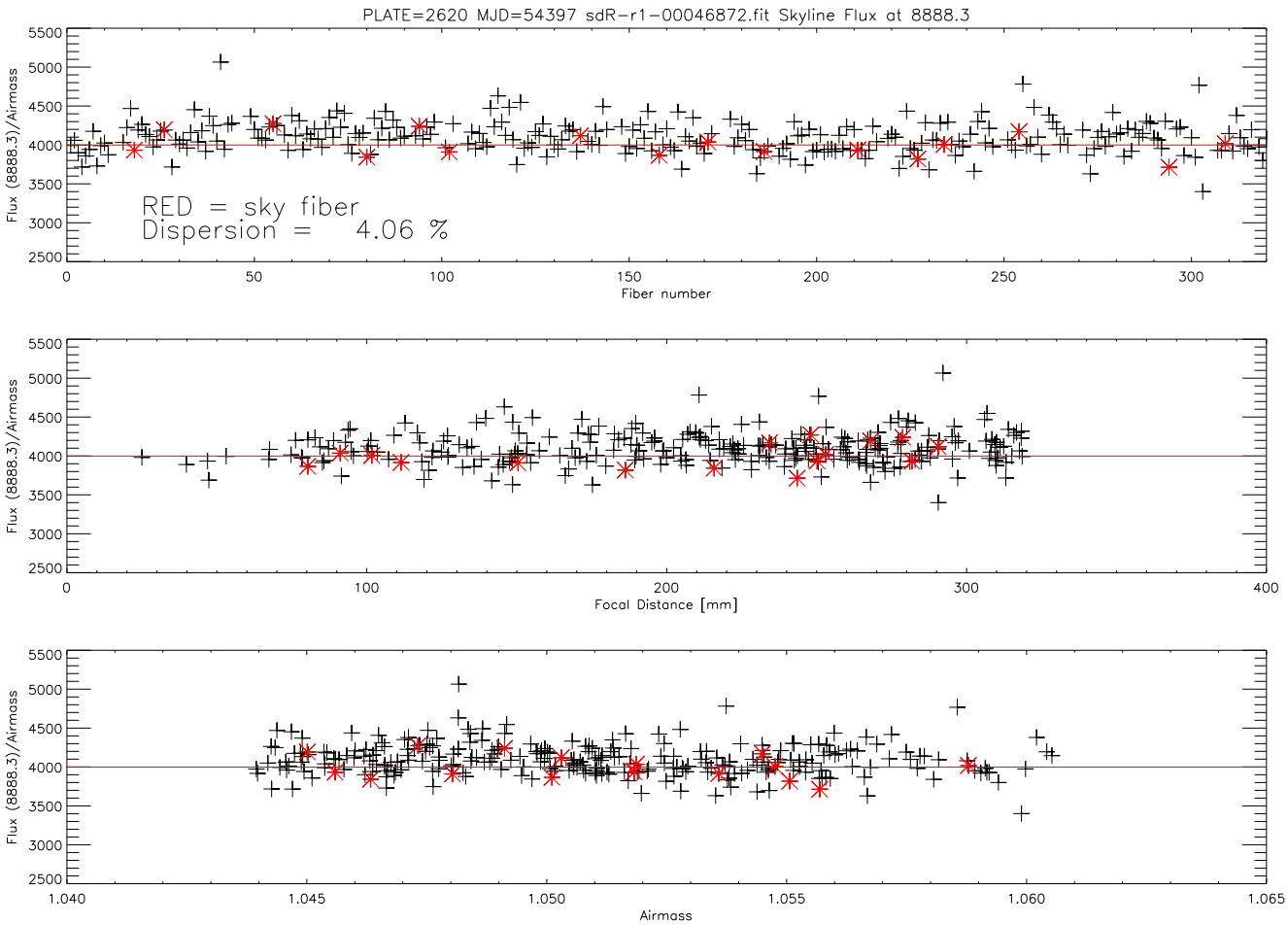

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

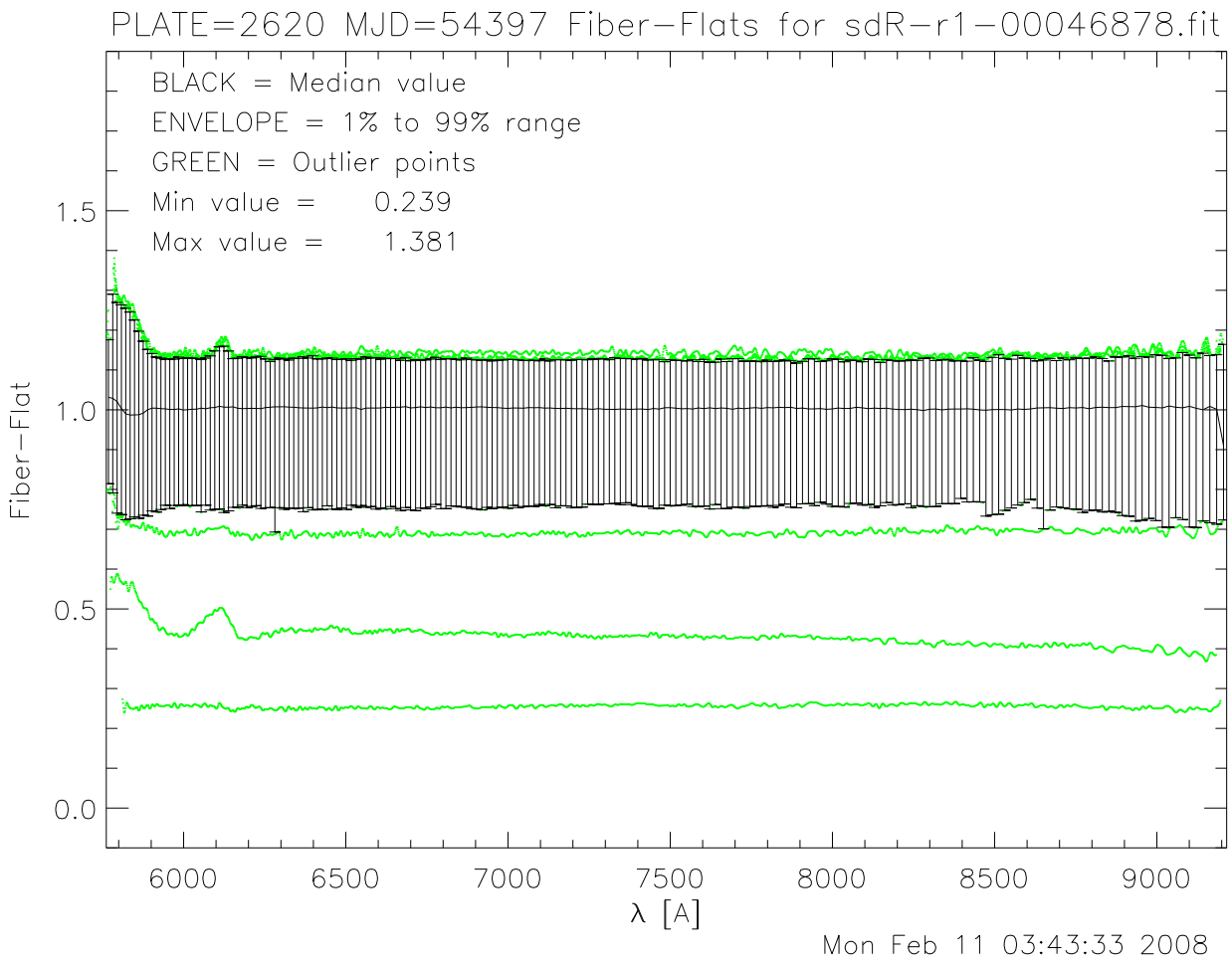

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

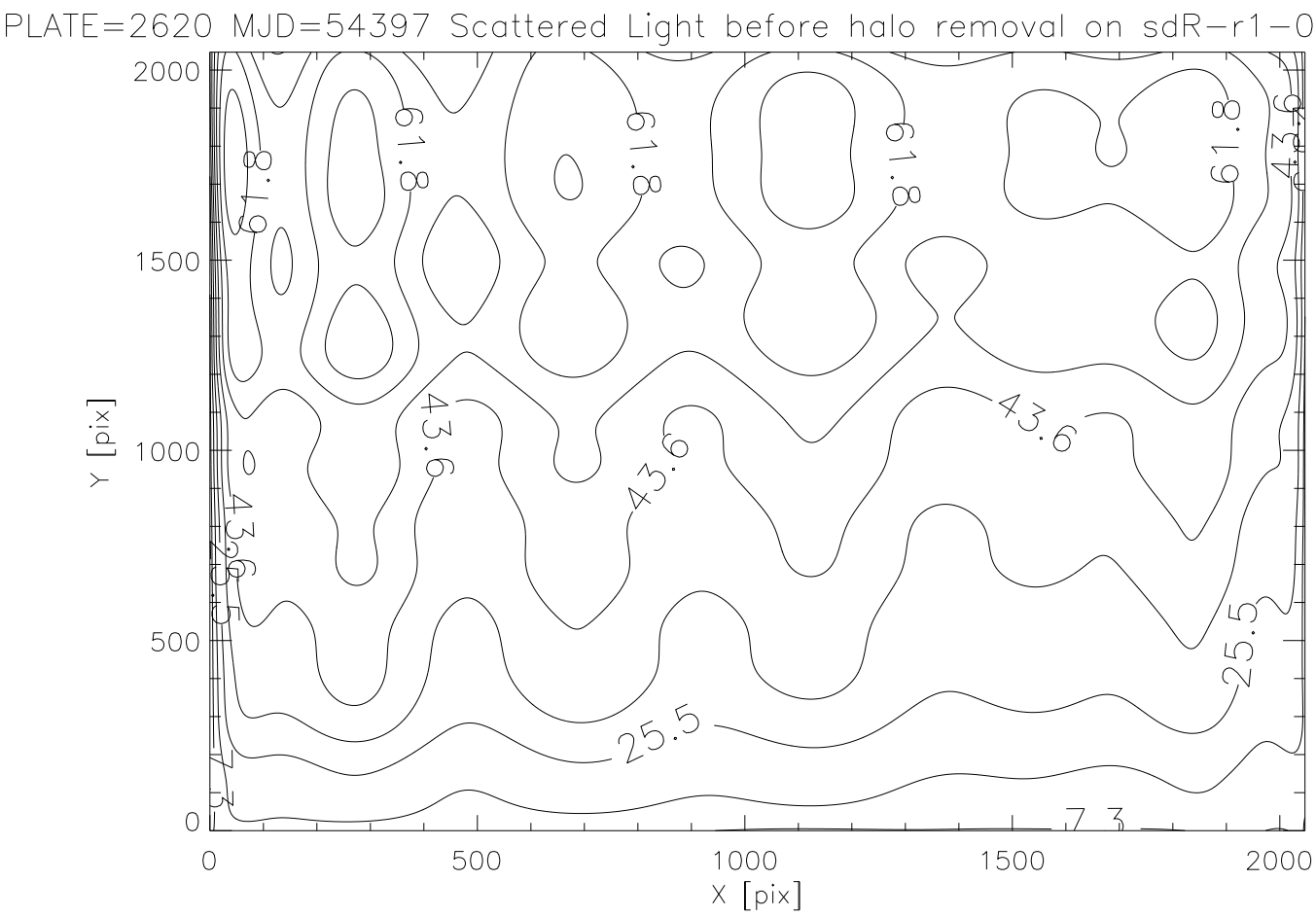

PLATE=2620 MJD=54397 sdR-r1-00046872.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

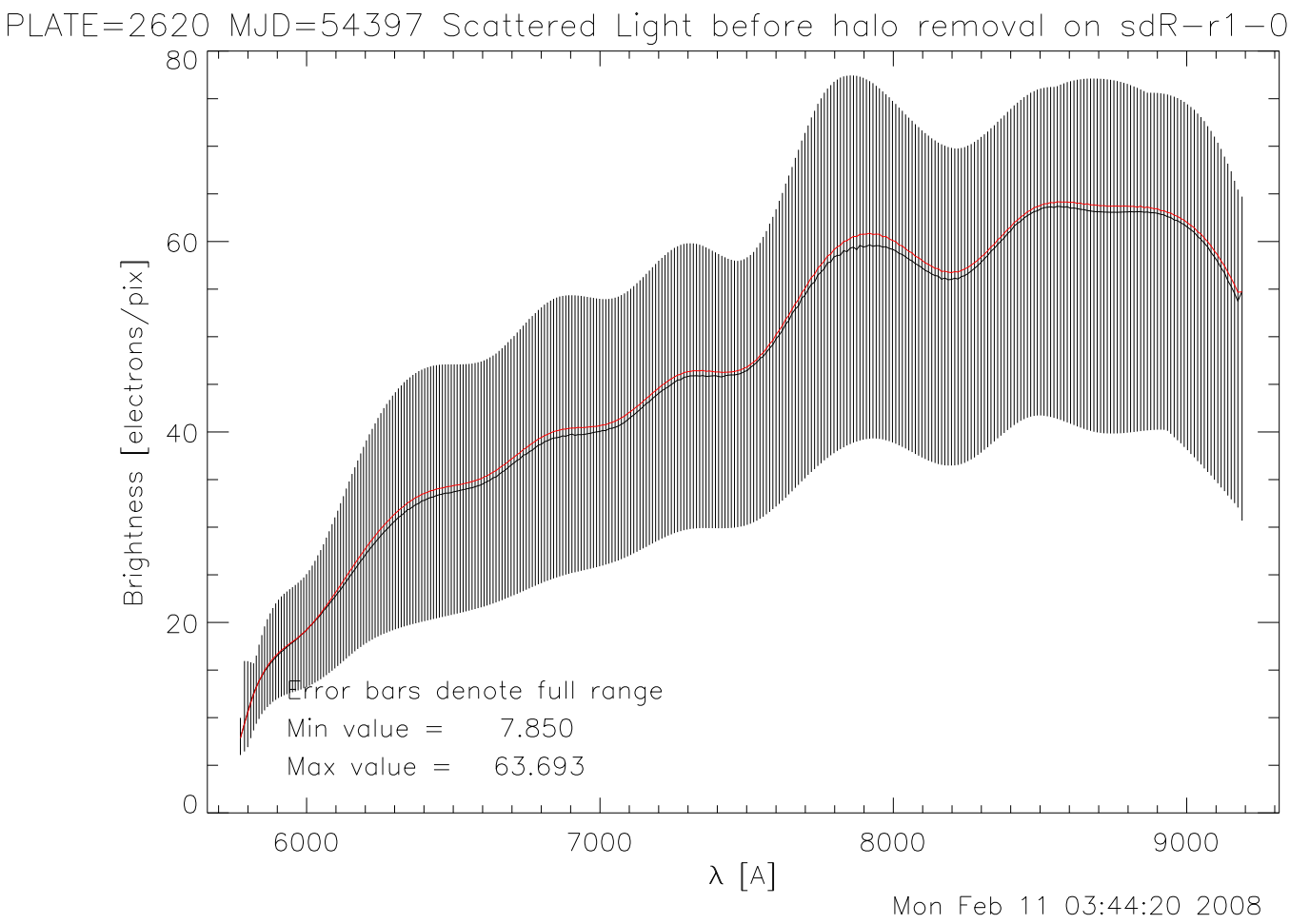

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046872.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

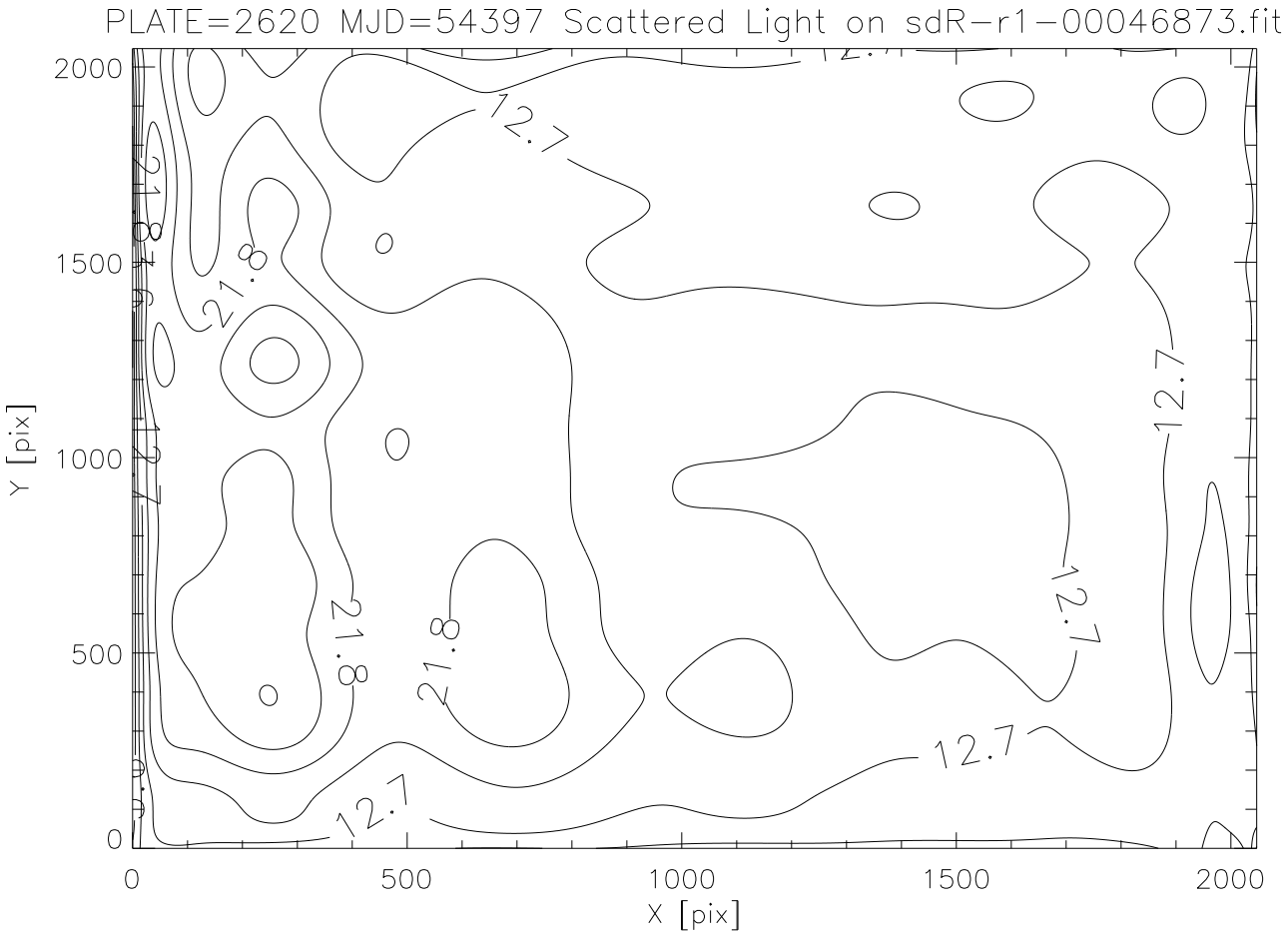

PLATE=2620 MJD=54397 sdR-r1-00046872.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.17 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

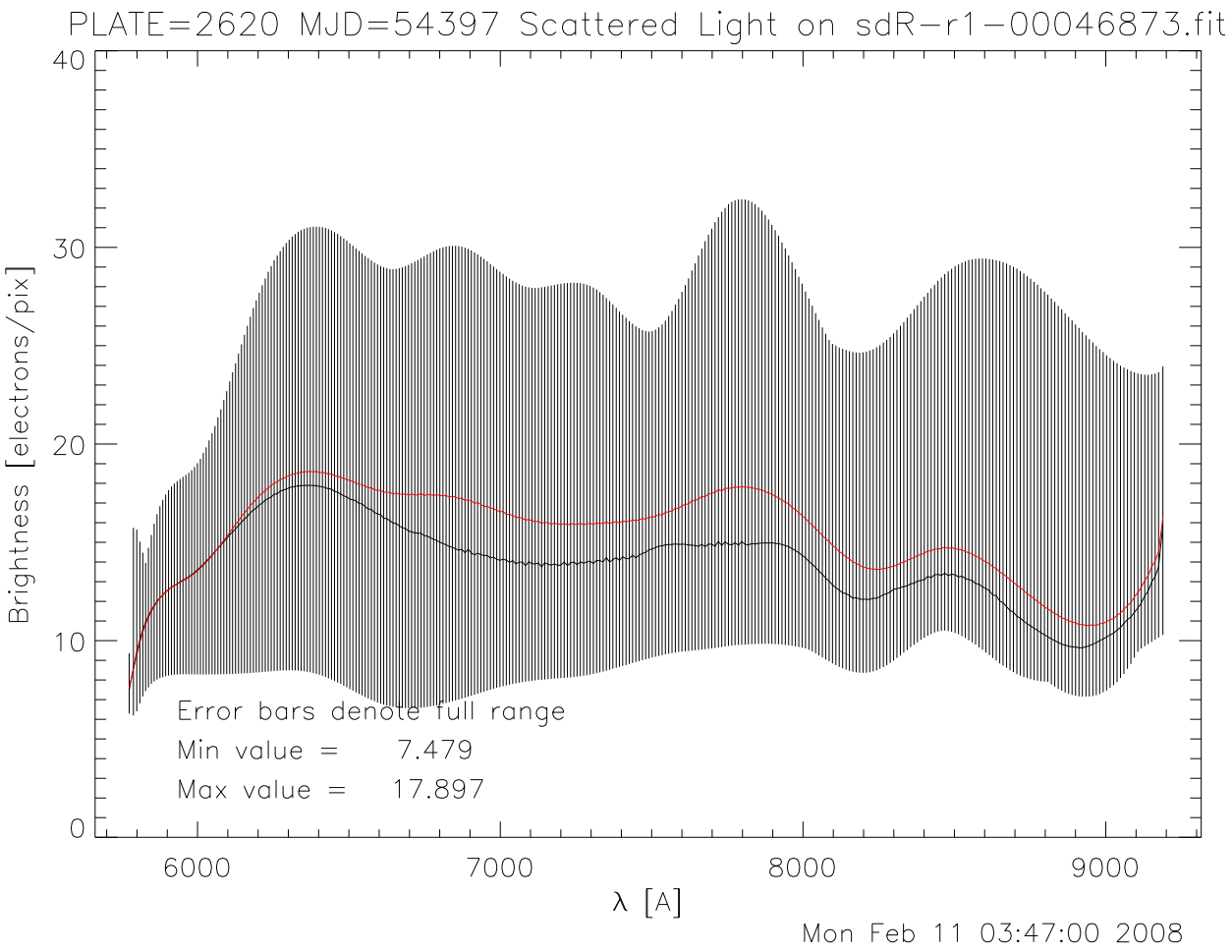

PLATE=2620 MJD=54397 sdR-r1-00046872.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.06 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

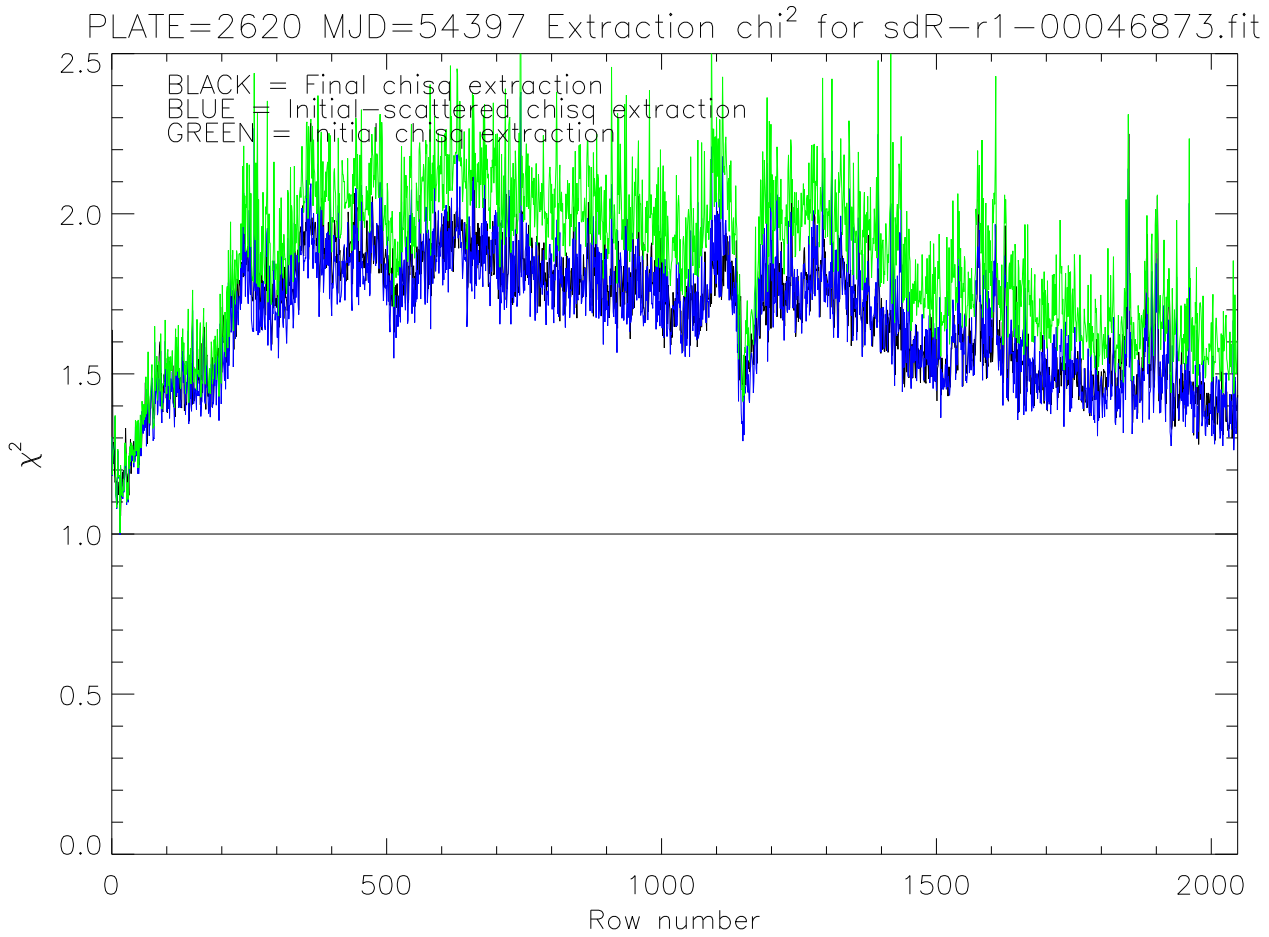

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 03:43:33 2008

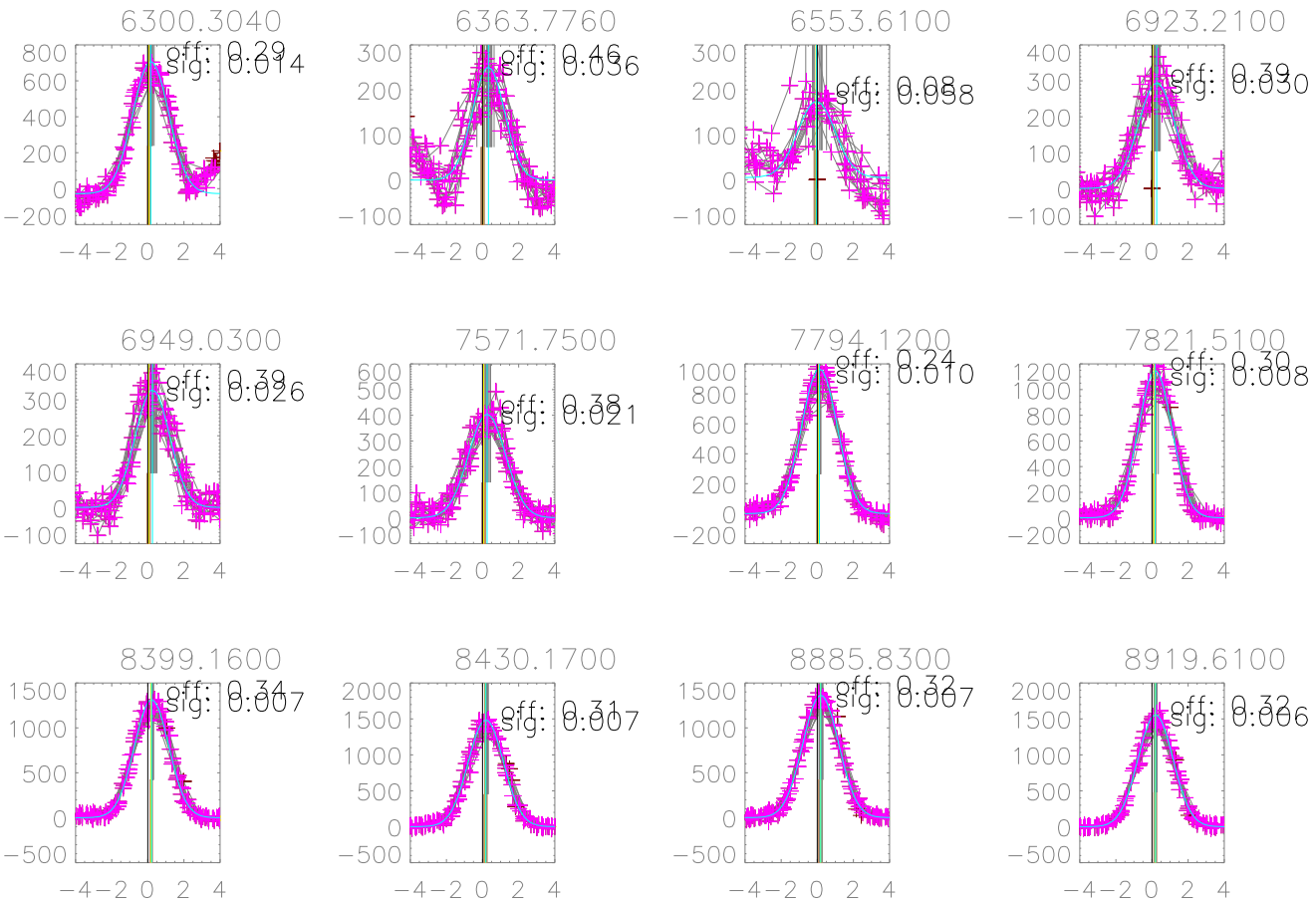

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046873.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
61.8
43.6
25.5
7.3

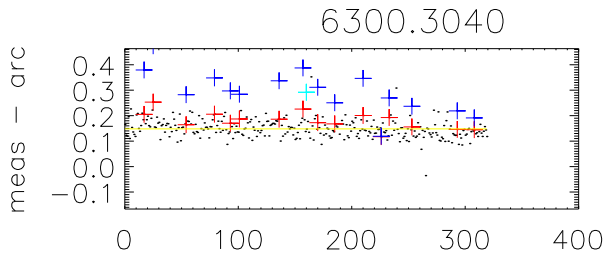

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046873.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.850
Max value = 63.693
Mon Feb 11 03:44:20 2008

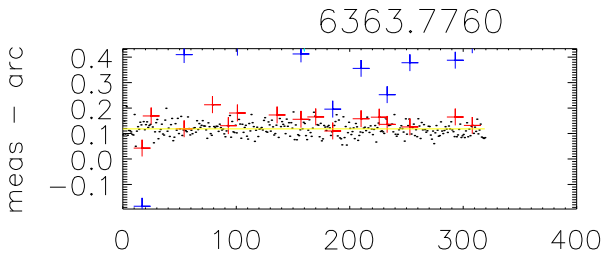

PLATE=2620 MJD=54397 Scattered Light on sdR−r1−00046873.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8
0

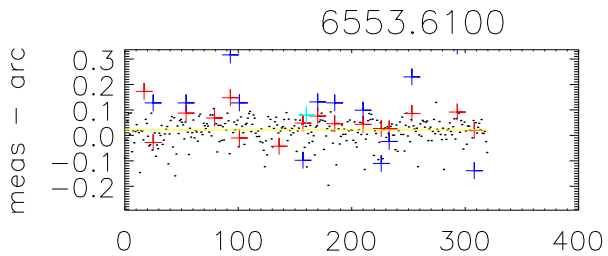

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046873.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.479
Max value = 17.897
Mon Feb 11 03:47:00 2008

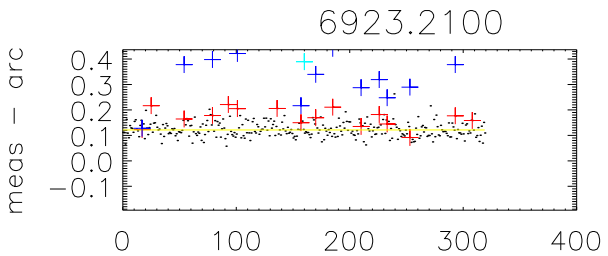

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046873.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

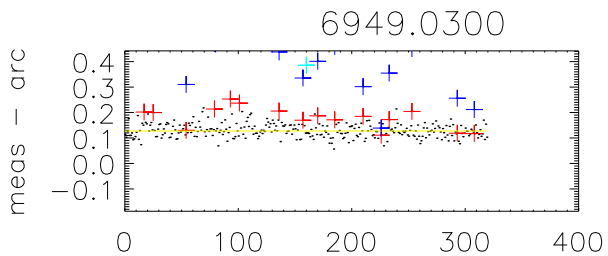

6300.3040
off: 0.29
sig: 0.014
6363.7760
off: 0.46
sig: 0.036
6553.6100
off: 0.08
sig: 0.058
6923.2100
off: 0.39
sig: 0.030
6949.0300
off: 0.39
sig: 0.026
7571.7500
off: 0.38
sig: 0.021
7794.1200
off: 0.24
sig: 0.010
7821.5100
off: 0.30
sig: 0.008
8399.1600
off: 0.34
sig: 0.007
8430.1700
off: 0.31
sig: 0.007
8885.8300
off: 0.32
sig: 0.007
8919.6100
off: 0.32
sig: 0.006

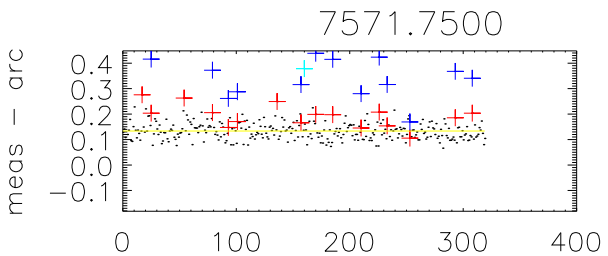

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

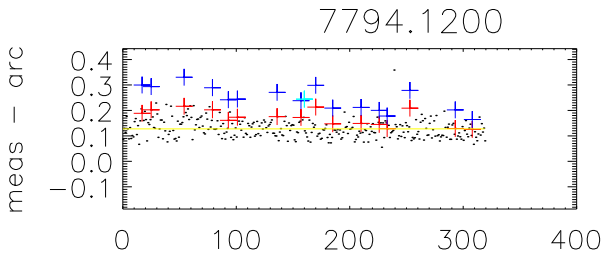

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

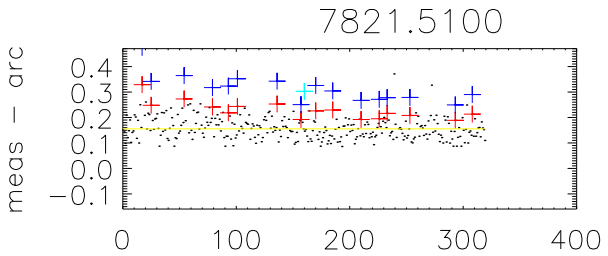

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

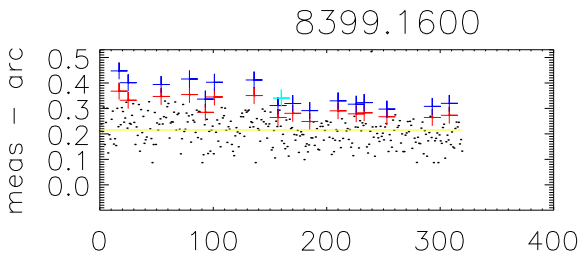

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

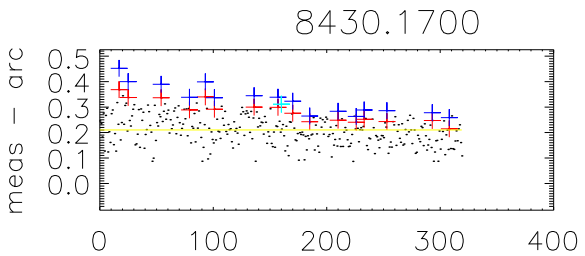

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

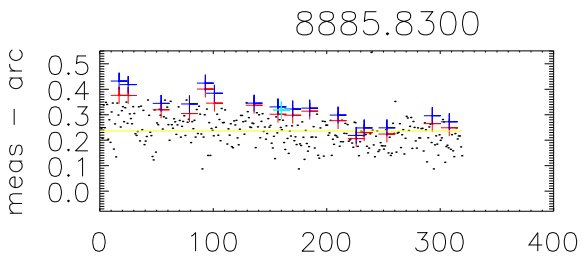

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

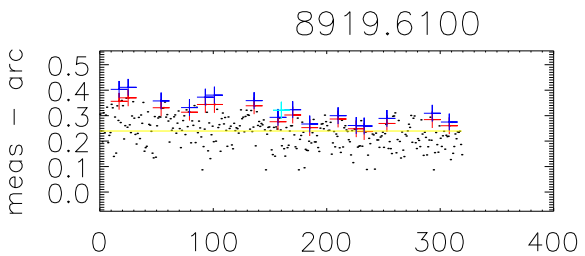

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

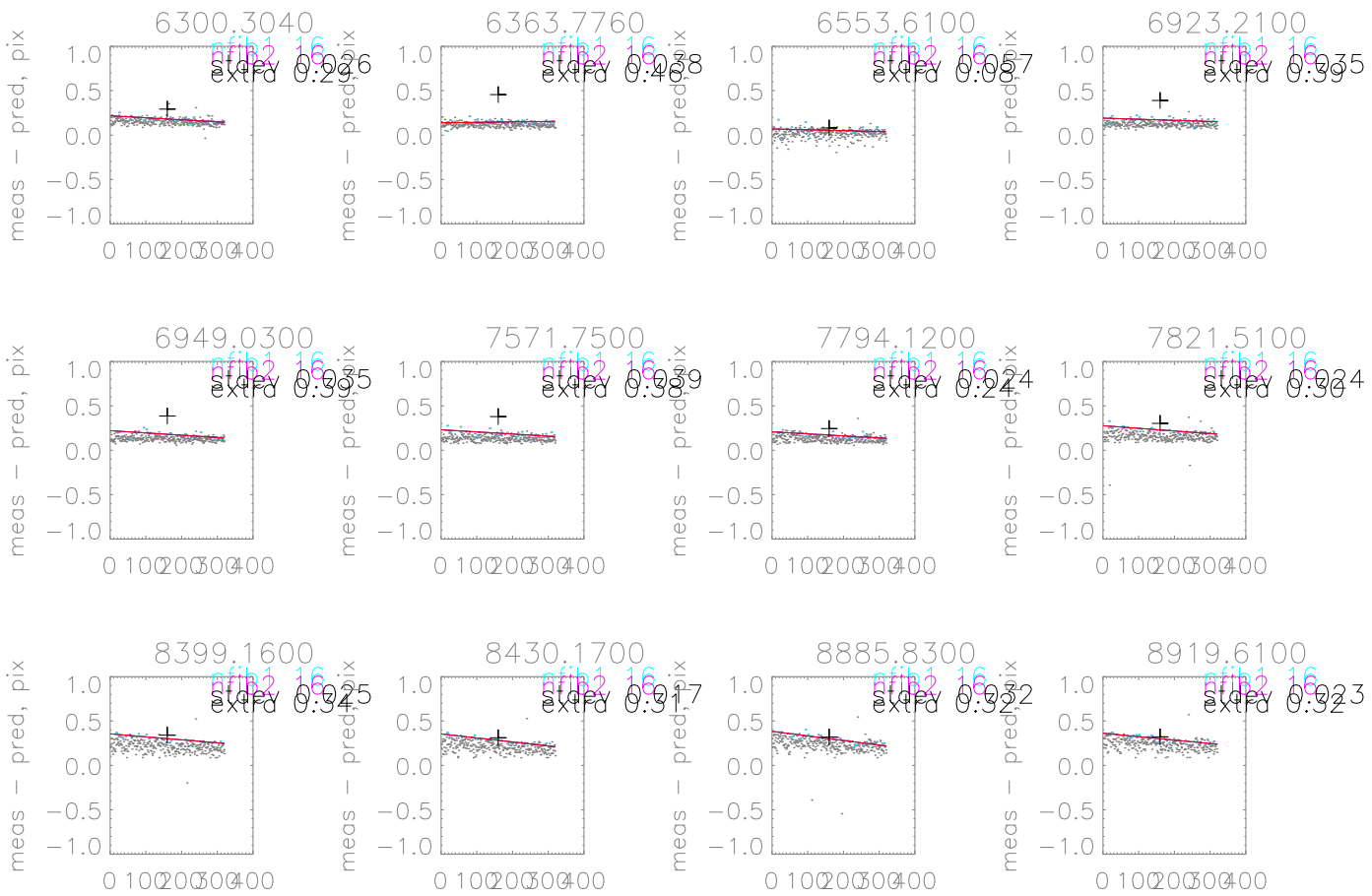

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

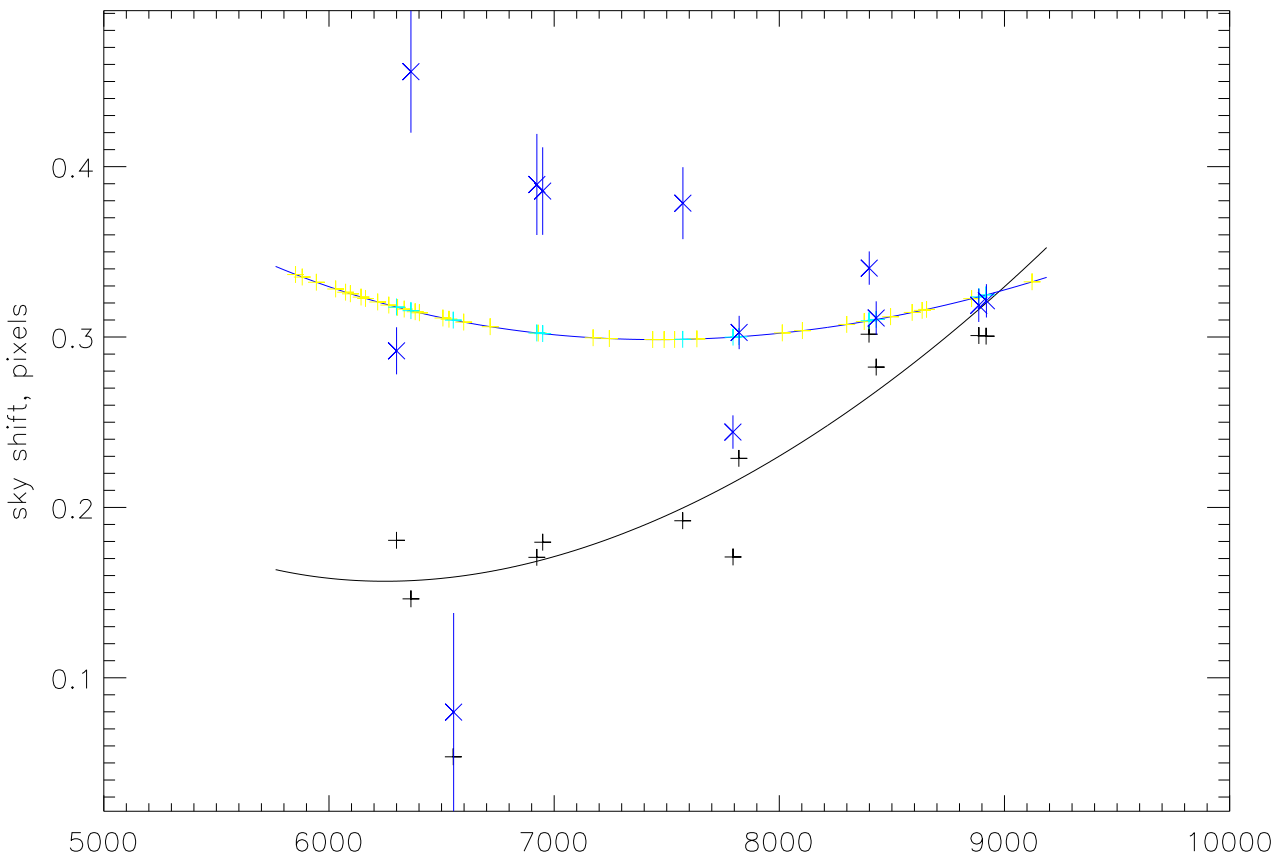

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

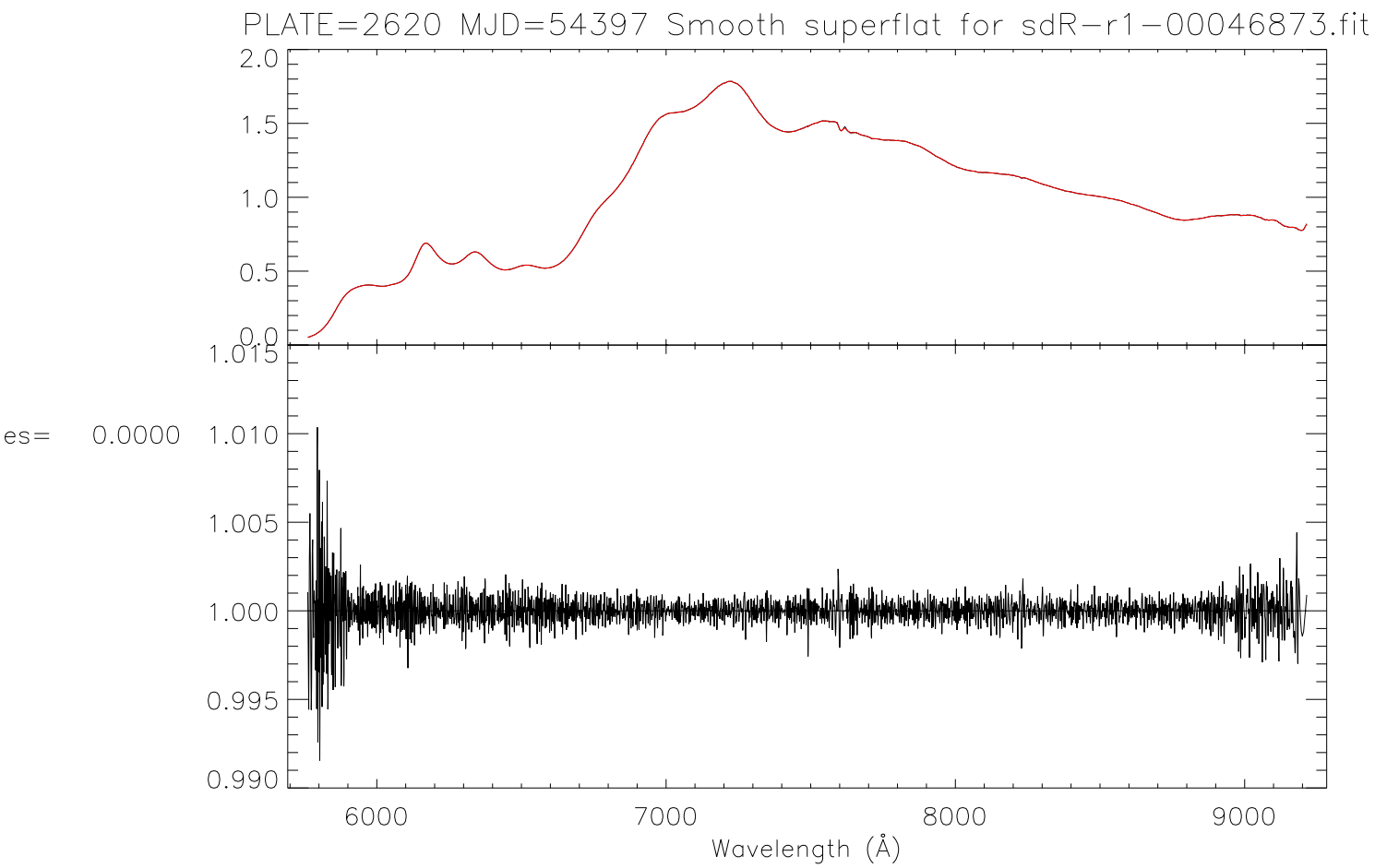

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

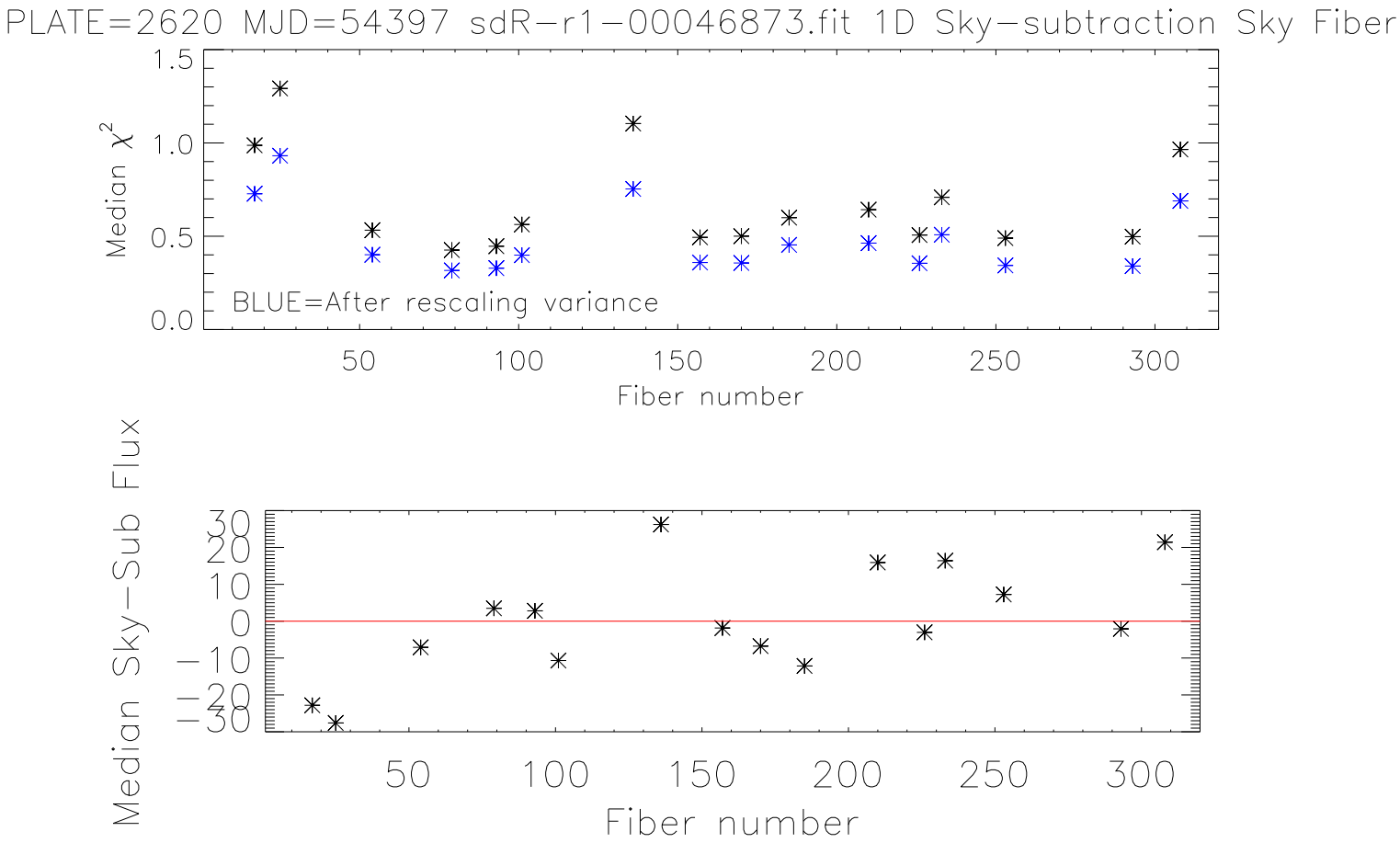

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

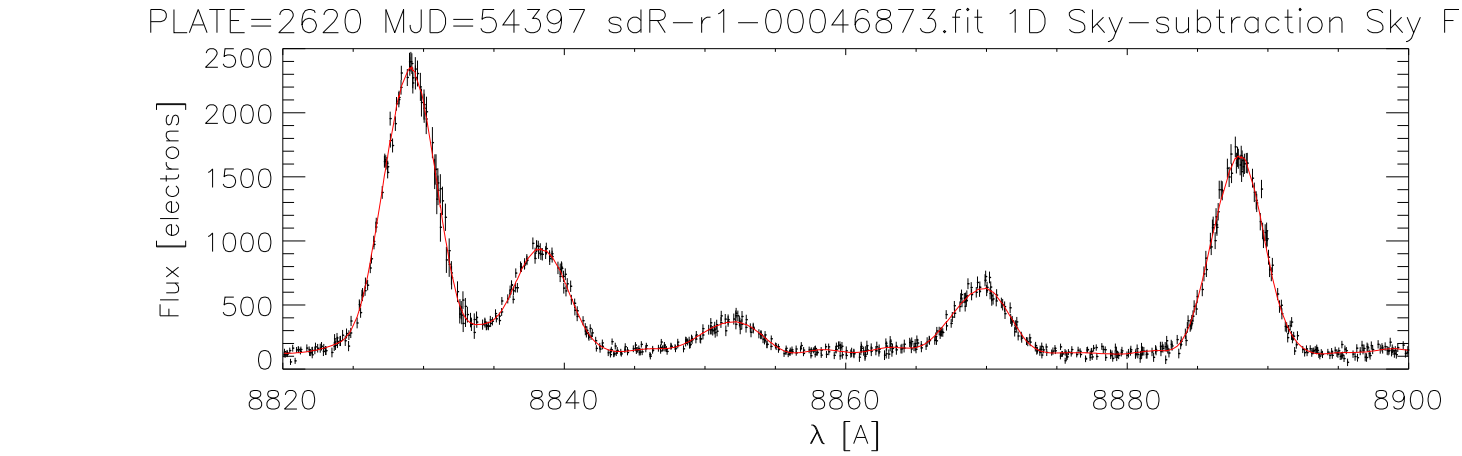

6300.3040
stdev 0.026
extra 0.24
6363.7760
stdev 0.038
extra 0.46
6553.6100
stdev 0.057
extra 0.08
6923.2100
stdev 0.035
extra 0.39
6949.0300
stdev 0.035
extra 0.39
7571.7500
stdev 0.039
extra 0.38
7794.1200
stdev 0.024
extra 0.24
7821.5100
stdev 0.024
extra 0.30
8399.1600
stdev 0.025
extra 0.34
8430.1700
stdev 0.017
extra 0.31
8885.8300
stdev 0.032
extra 0.32
8919.6100
stdev 0.023
extra 0.32
meas − pred, pix
mfhd2 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

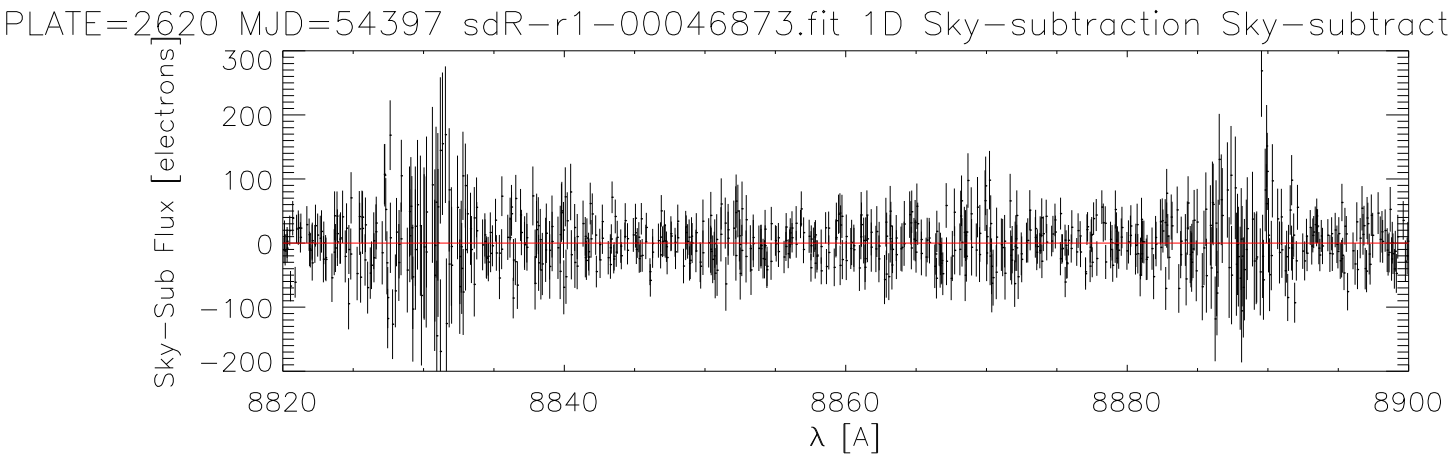

sky shift, pixels
0.4
0.3
0.2
0.1
5000
6000
7000
8000
9000
10000

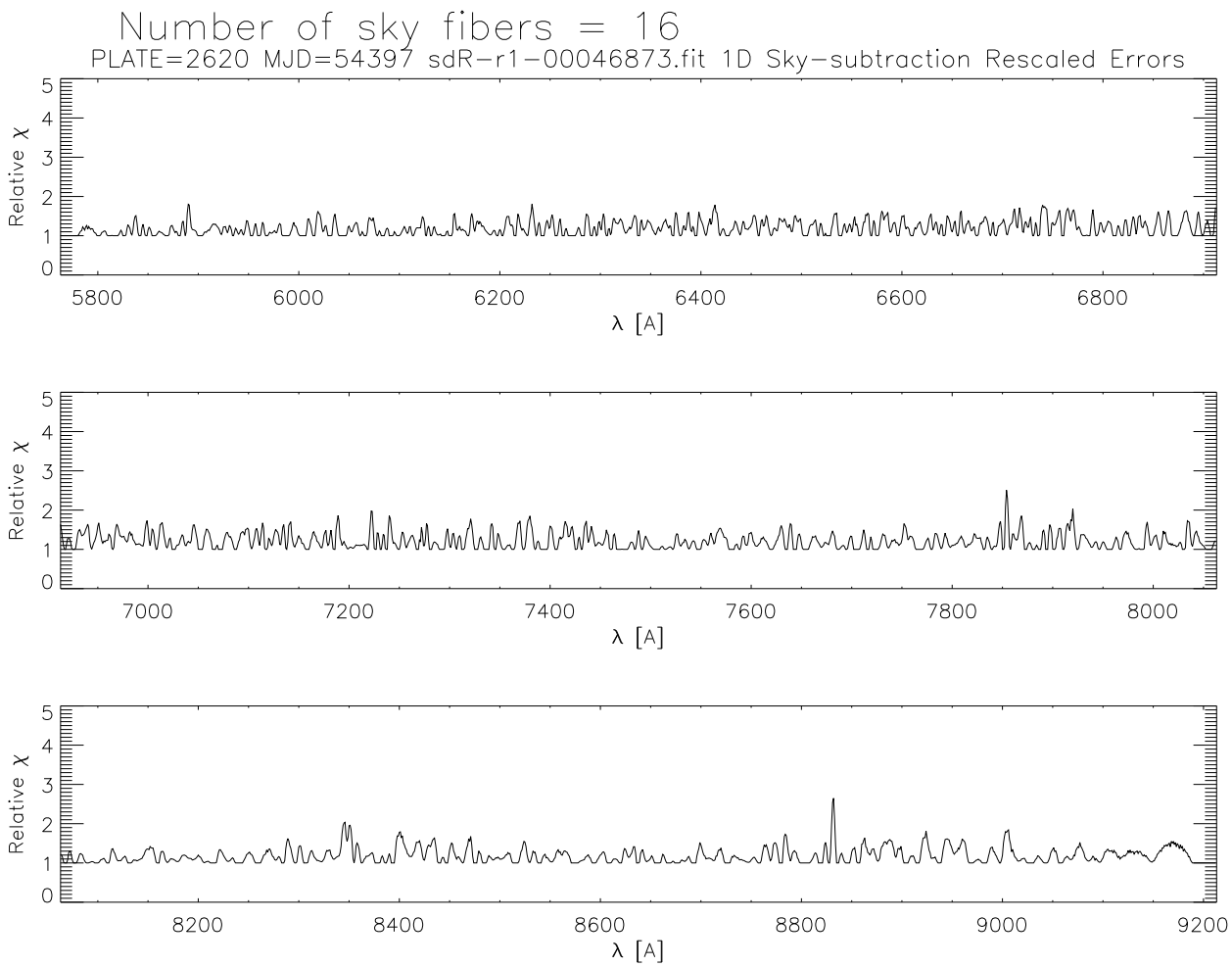

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046873.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

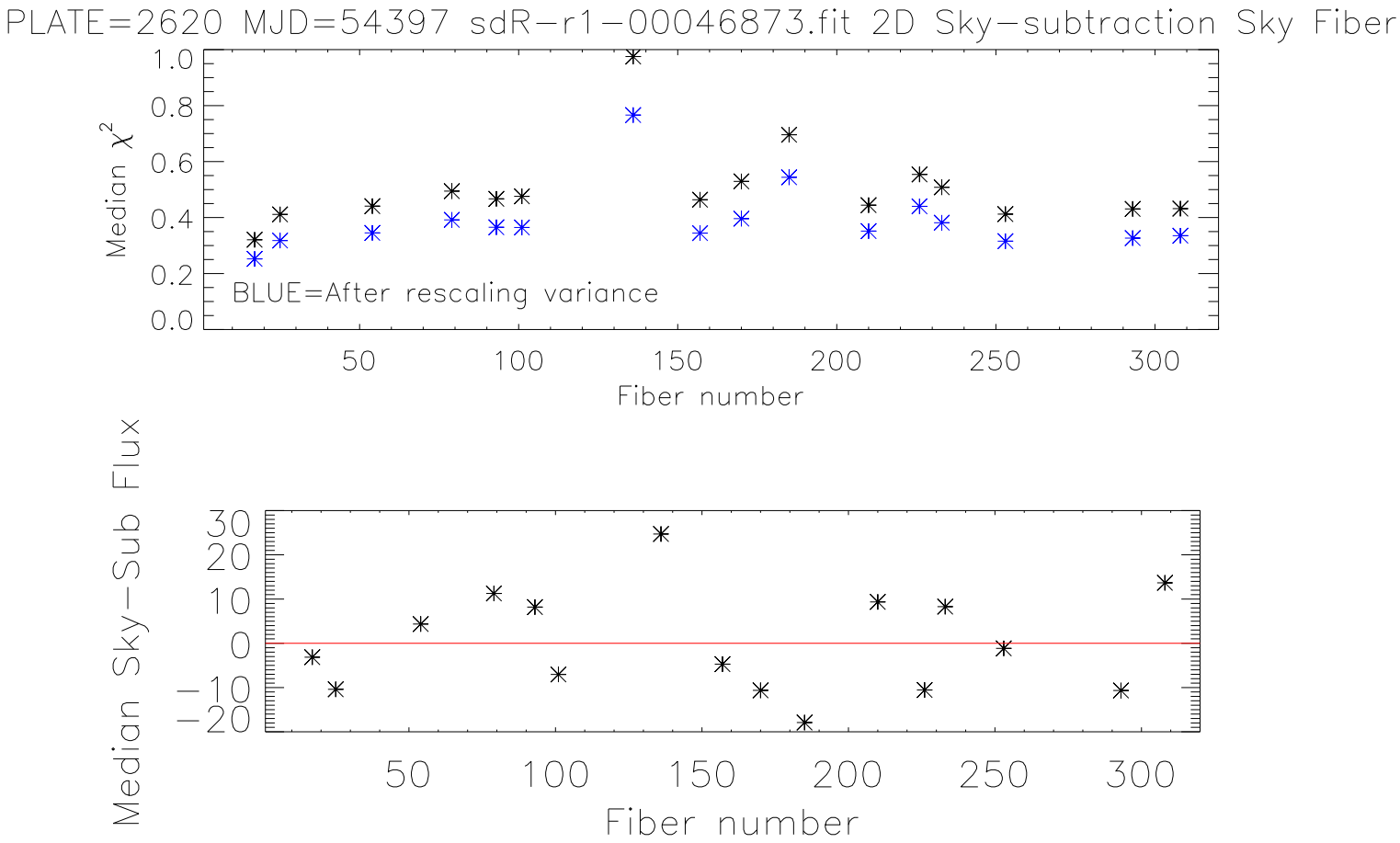
es= 0.0000

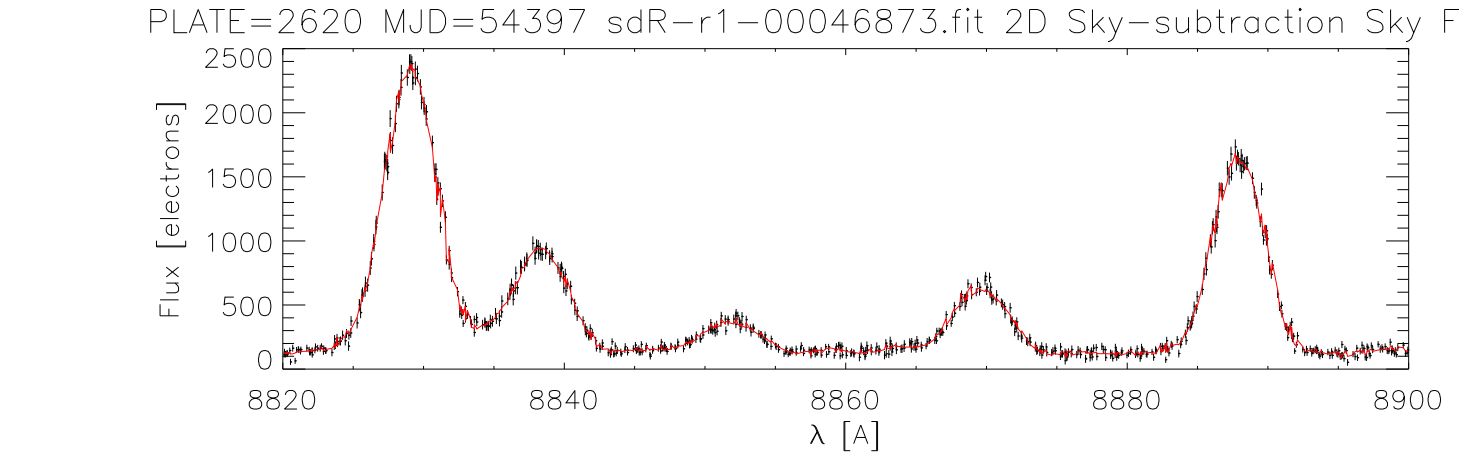

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

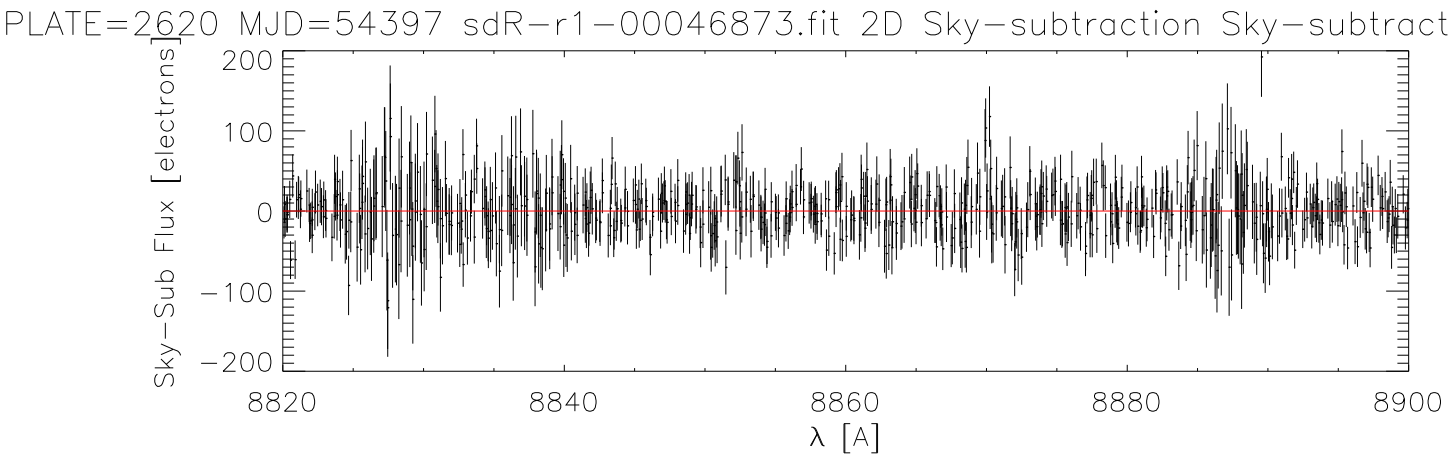

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

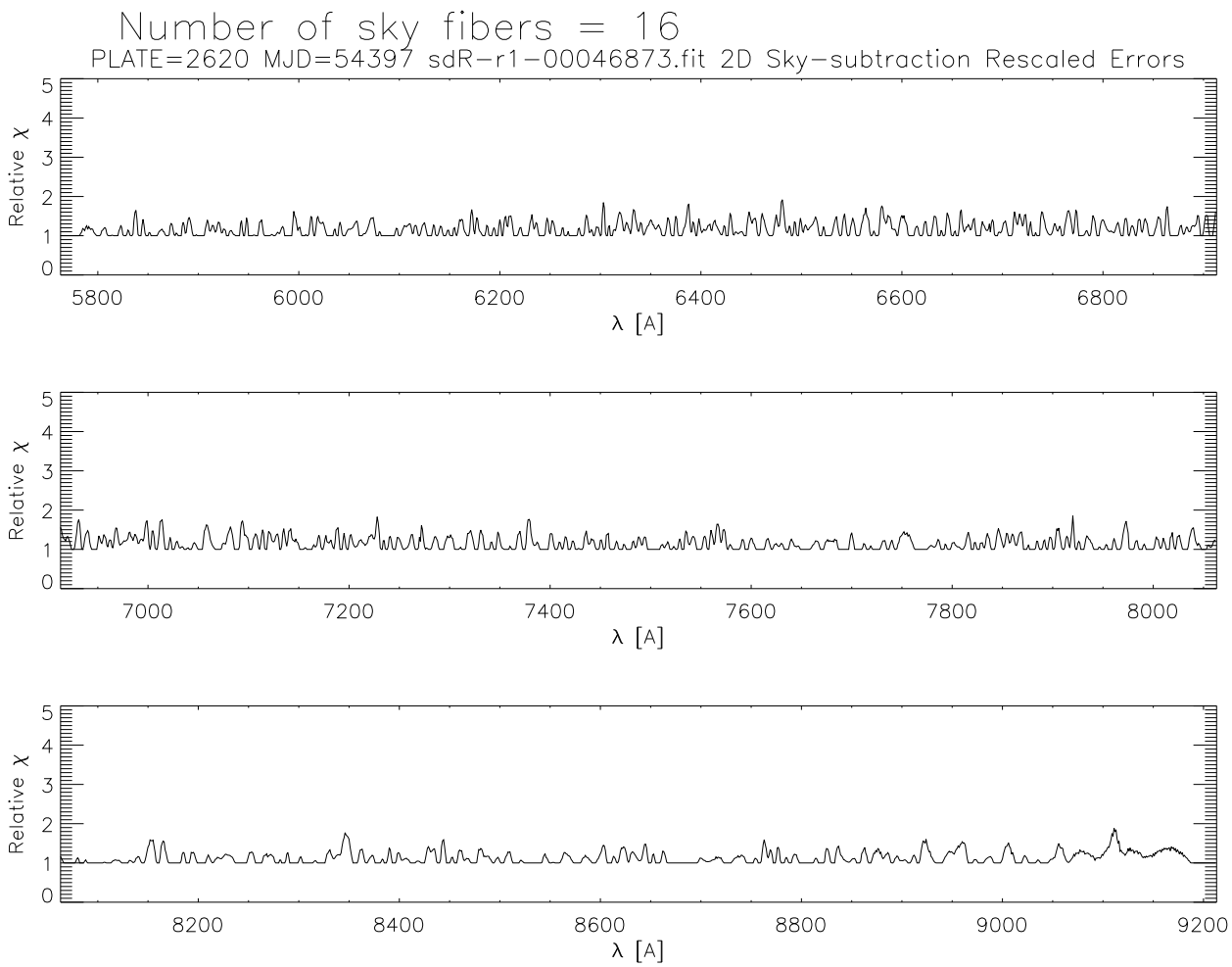

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

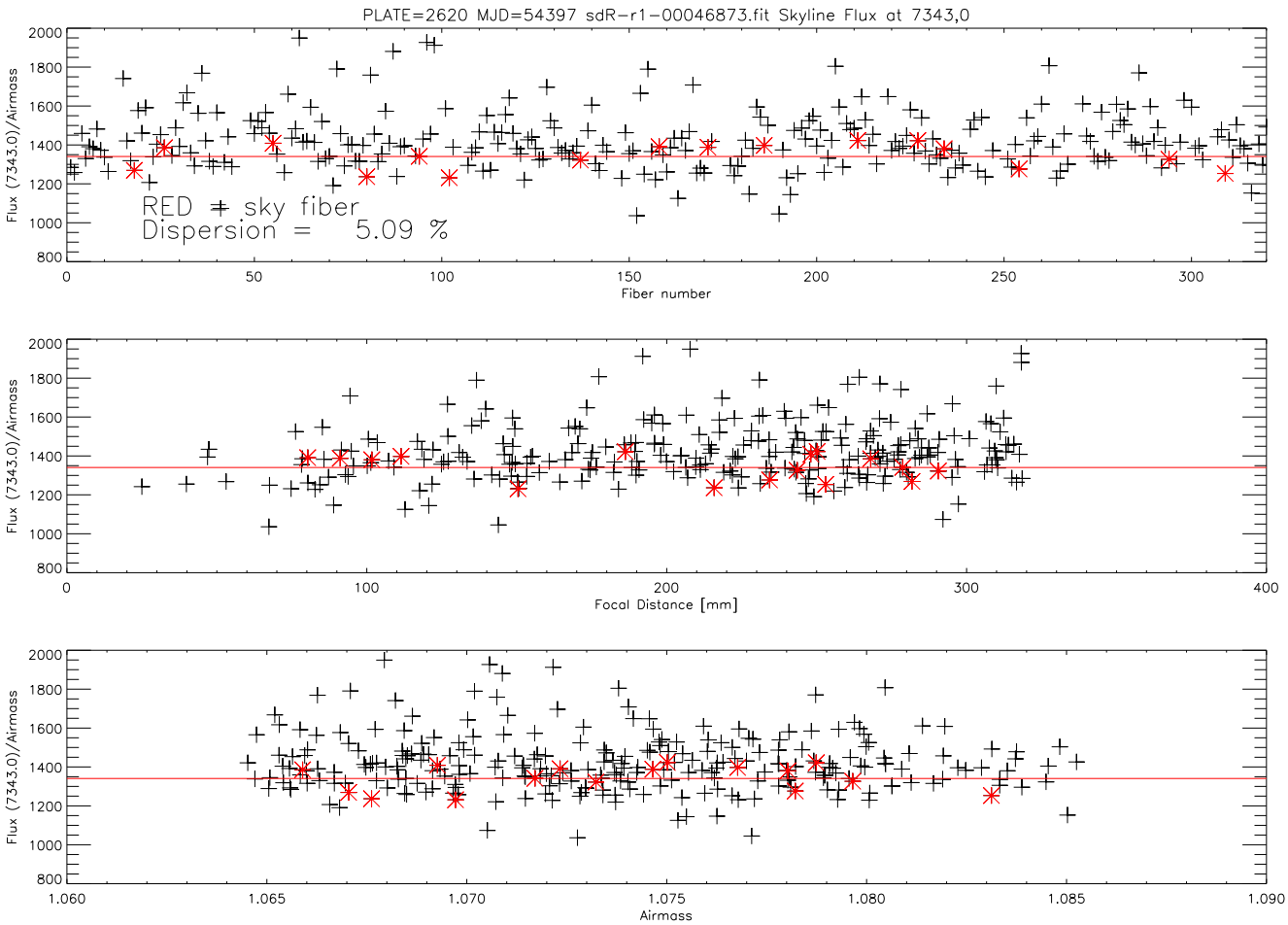

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046873.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

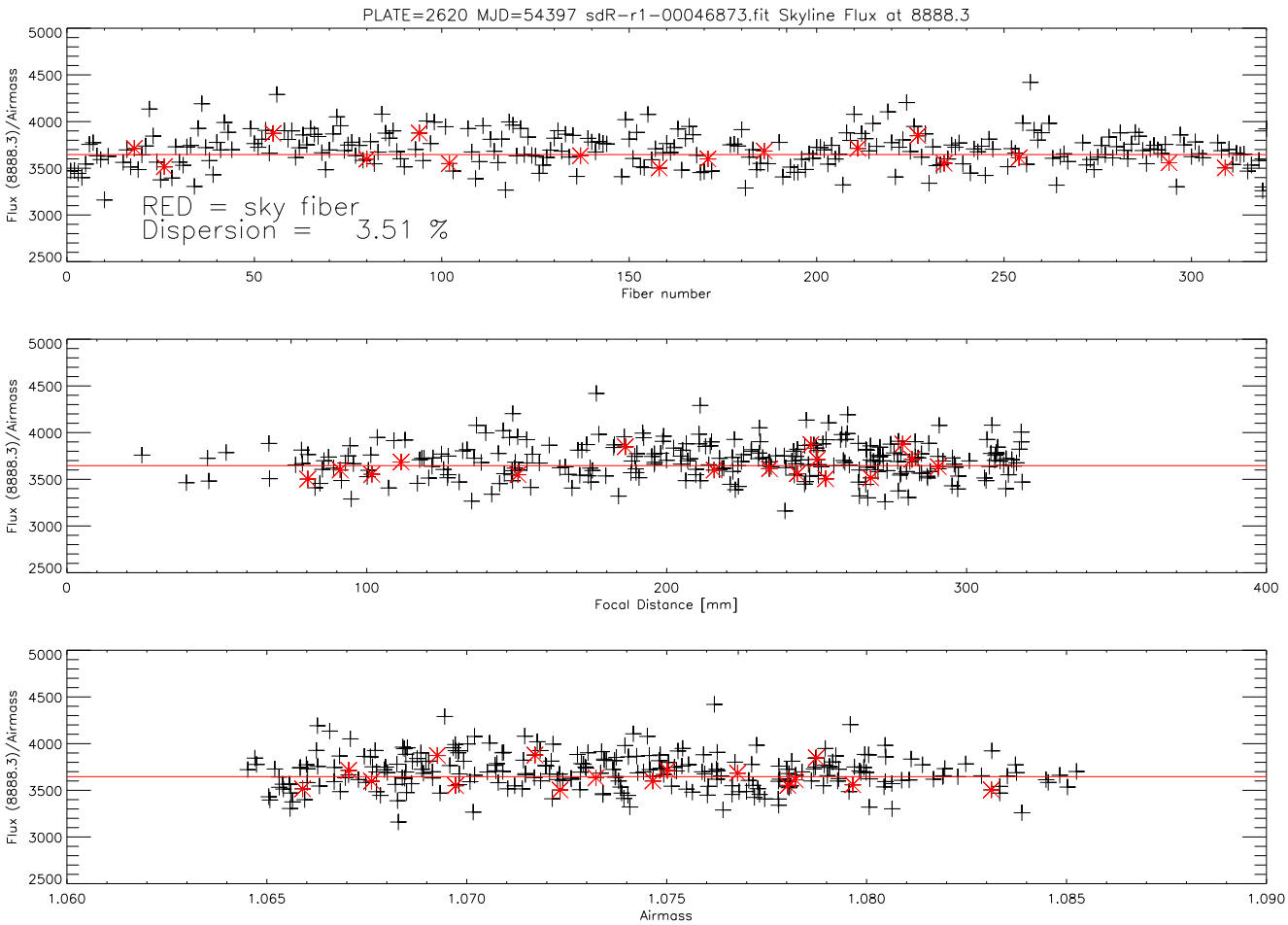

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

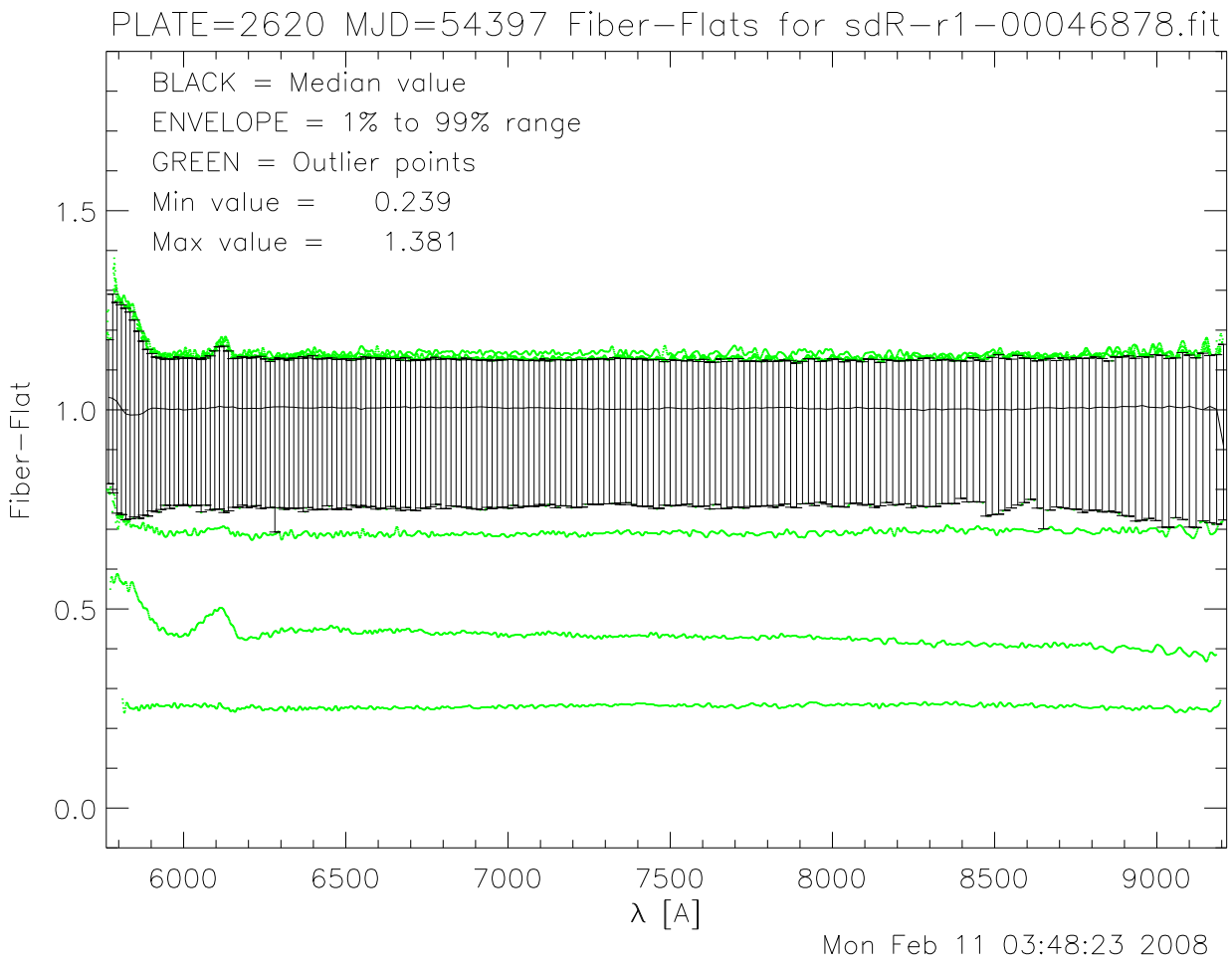

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

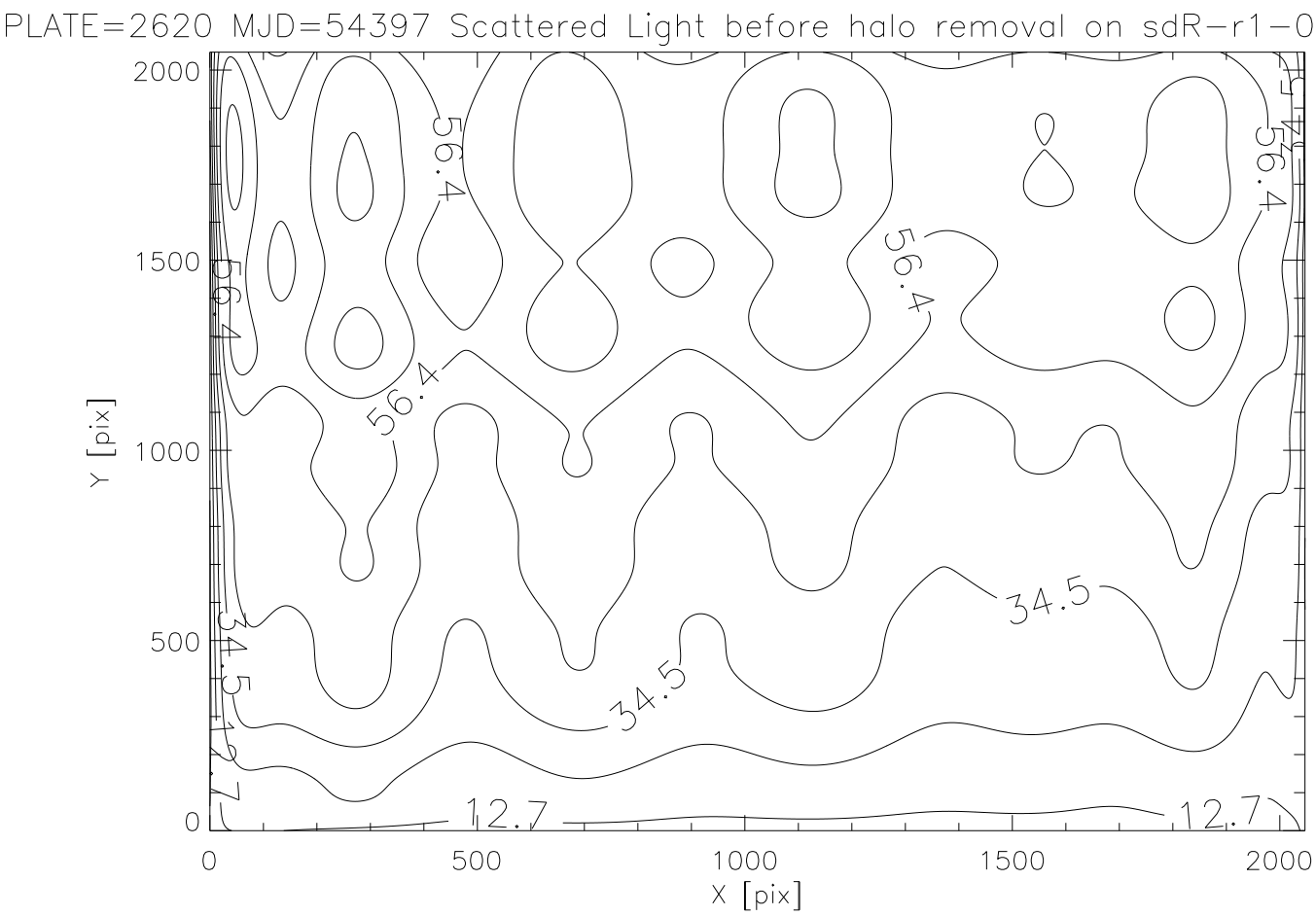

PLATE=2620 MJD=54397 sdR-r1-00046873.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

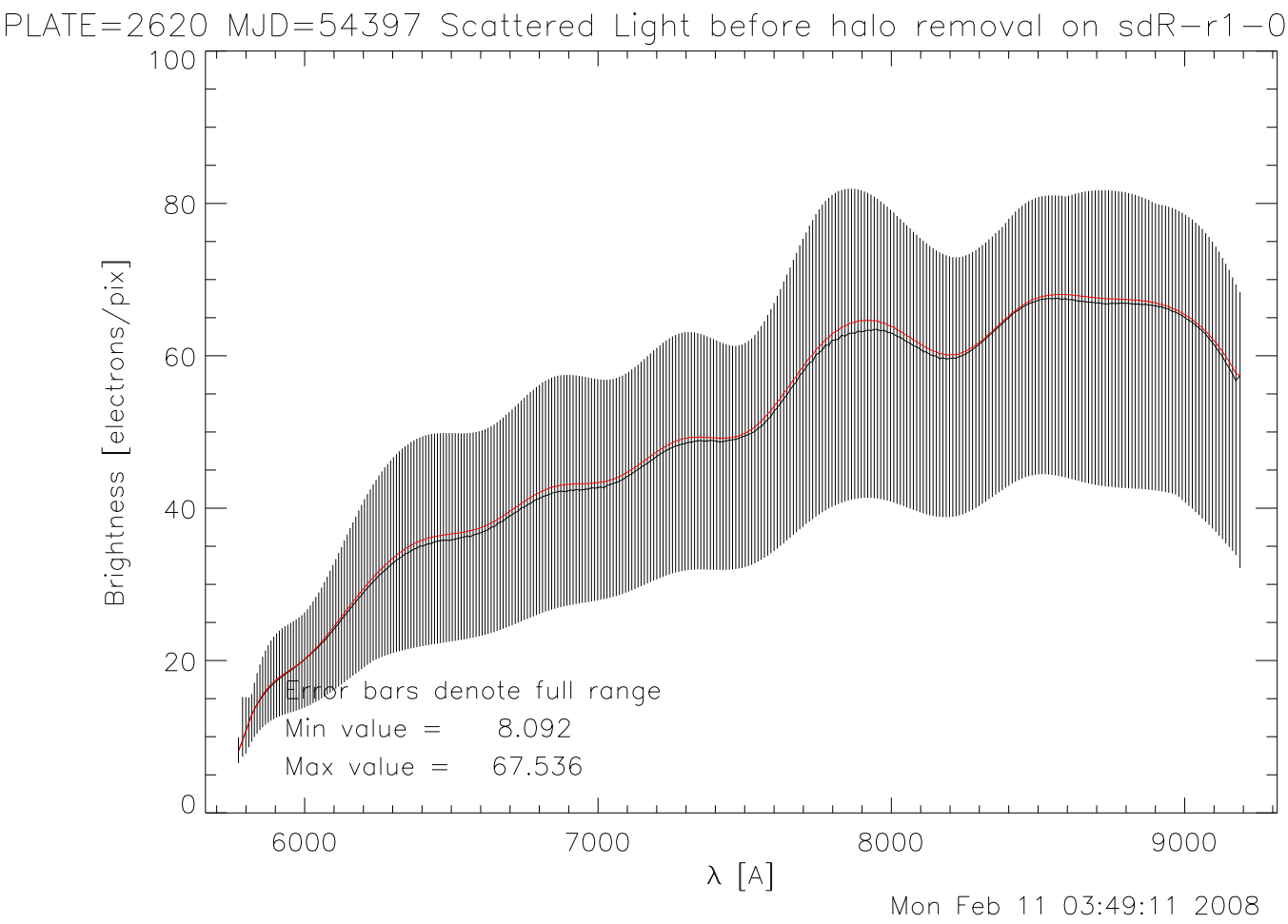

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046873.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

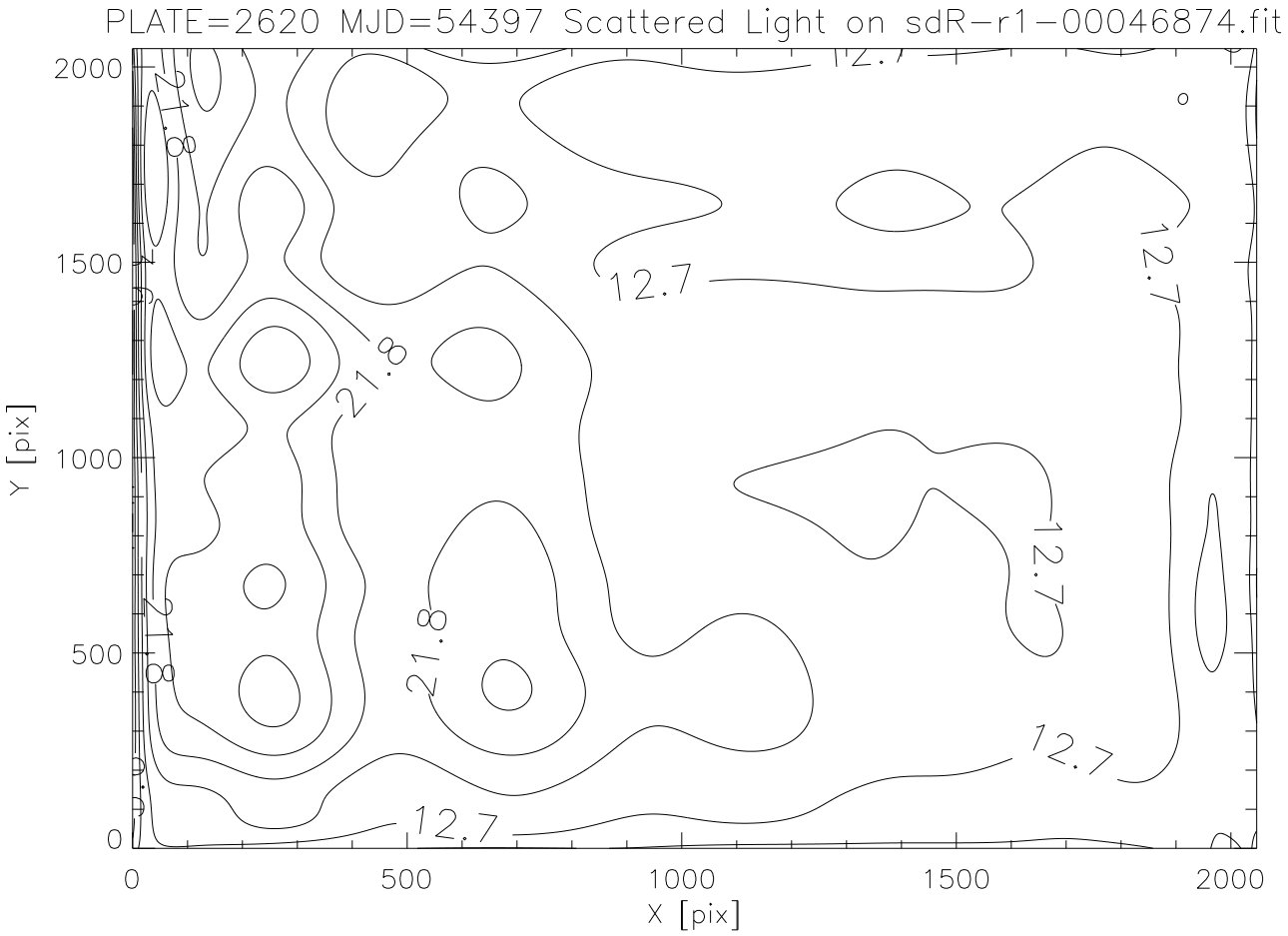

PLATE=2620 MJD=54397 sdR-r1-00046873.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.09 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

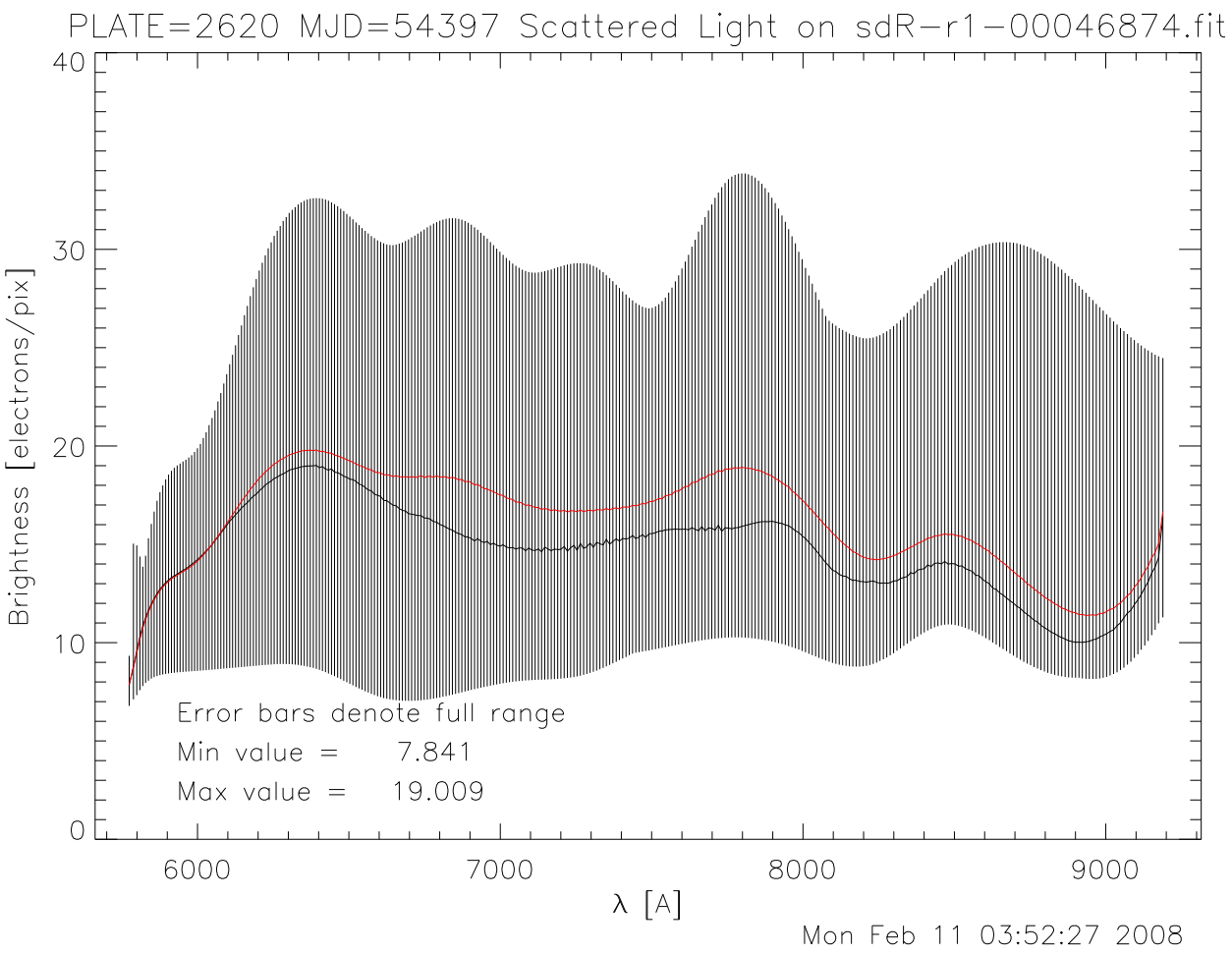

PLATE=2620 MJD=54397 sdR-r1-00046873.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.51 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

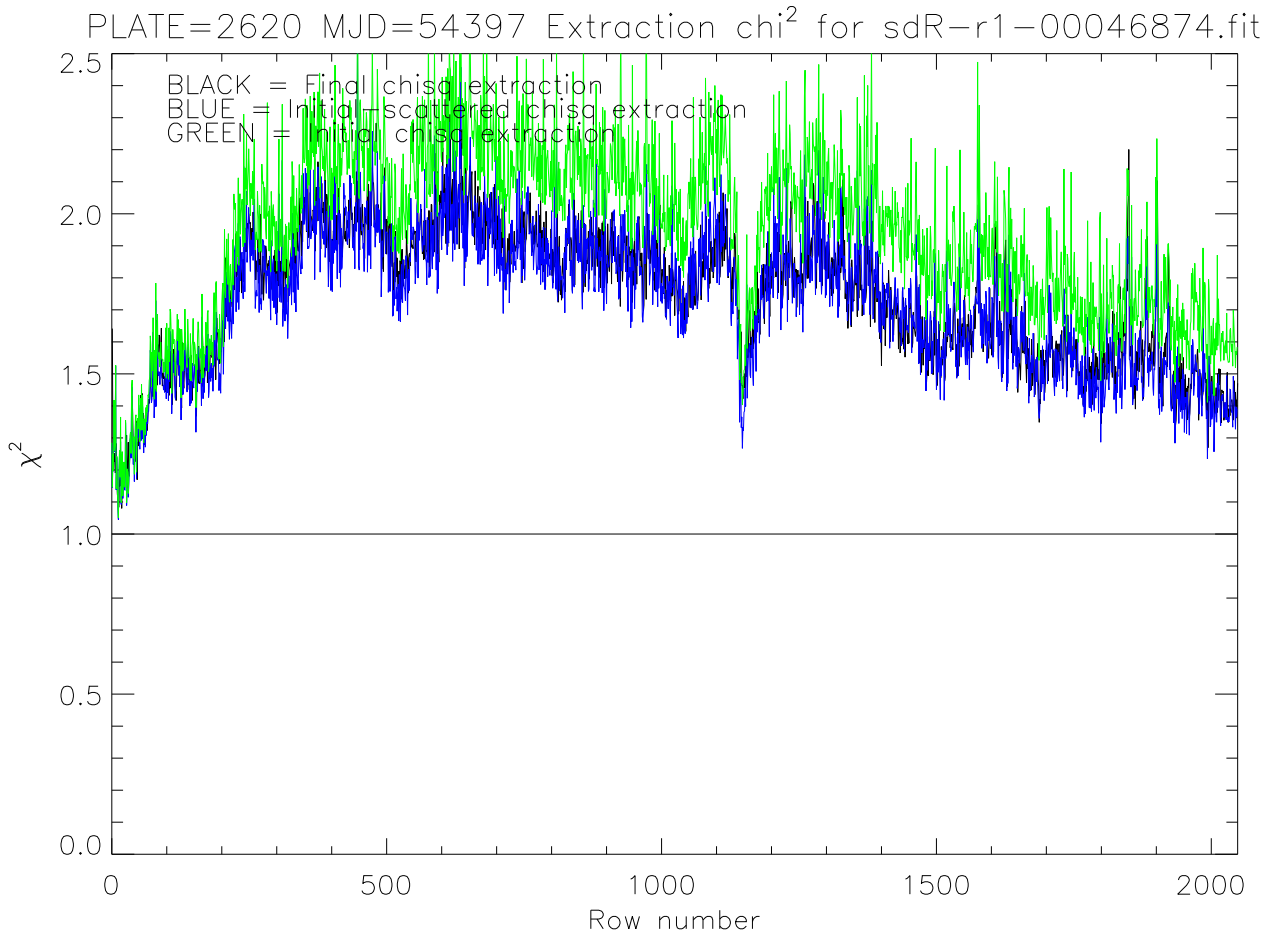

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 03:48:23 2008

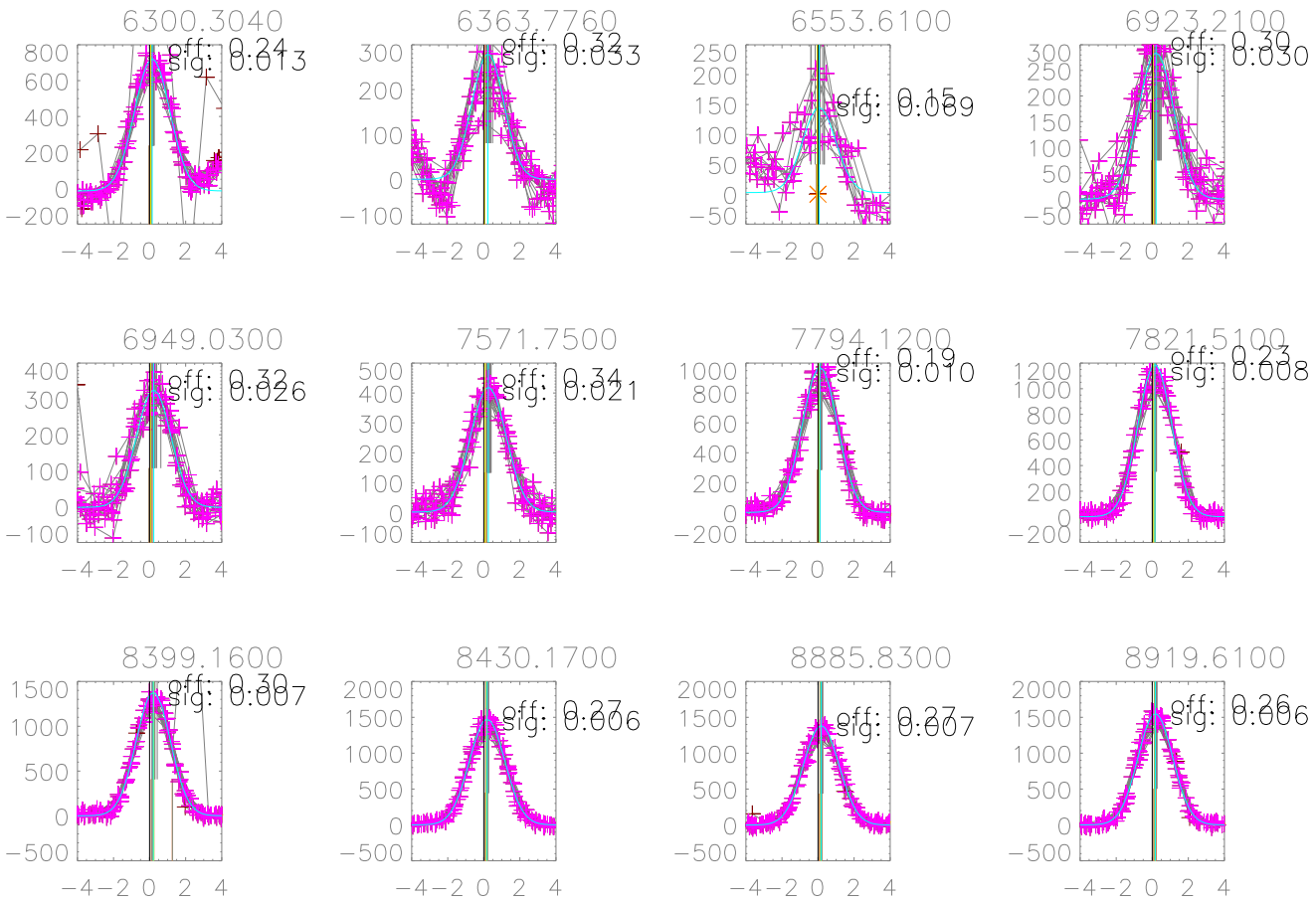

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046874.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
56.4
34.5
12.7

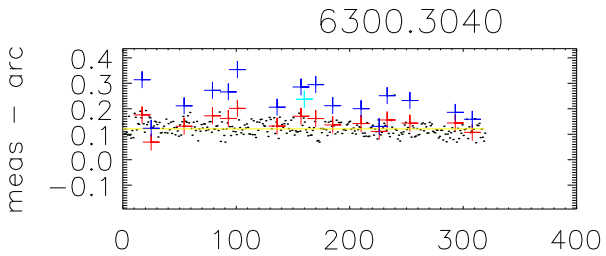

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046874.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.092
Max value = 67.536
Mon Feb 11 03:49:11 2008

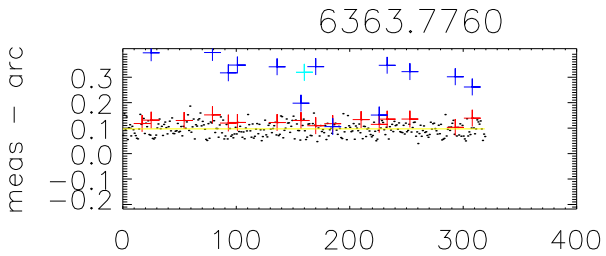

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046874.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8

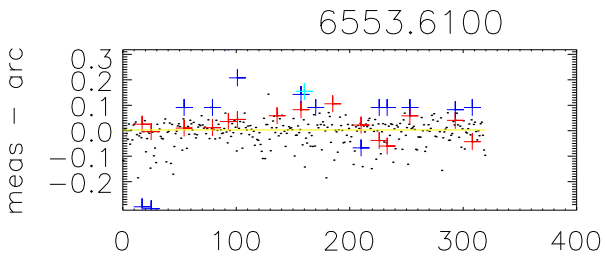

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046874.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.841
Max value = 19.009
Mon Feb 11 03:52:27 2008

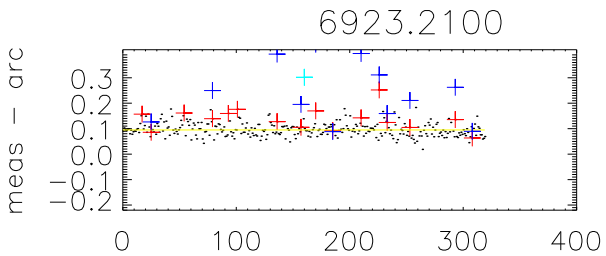

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046874.fit
BLACK = Final chisq extraction
BLUE = Initial scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

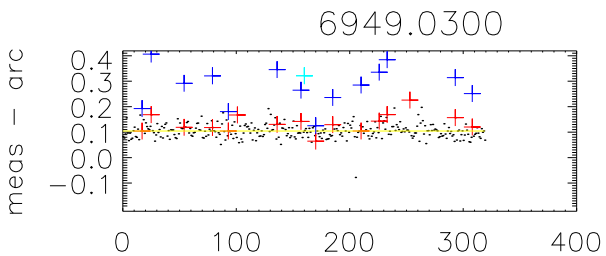

6300.3040
off: 0.24
sig: 0.013
6363.7760
off: 0.32
sig: 0.033
6553.6100
off: 0.15
sig: 0.089
6923.2100
off: 0.30
sig: 0.030
6949.0300
off: 0.32
sig: 0.026
7571.7500
off: 0.34
sig: 0.021
7794.1200
off: 0.19
sig: 0.010
7821.5100
off: 0.23
sig: 0.008
8399.1600
off: 0.30
sig: 0.007
8430.1700
off: 0.27
sig: 0.006
8885.8300
off: 0.27
sig: 0.007
8919.6100
off: 0.26
sig: 0.006

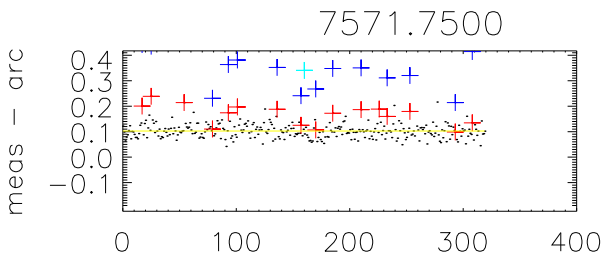

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

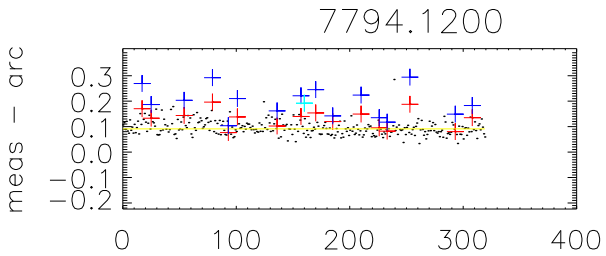

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

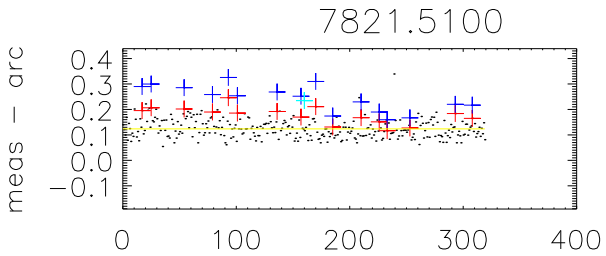

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

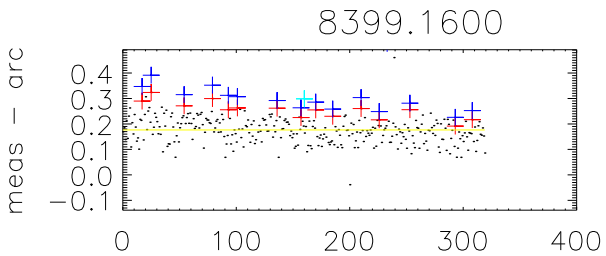

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

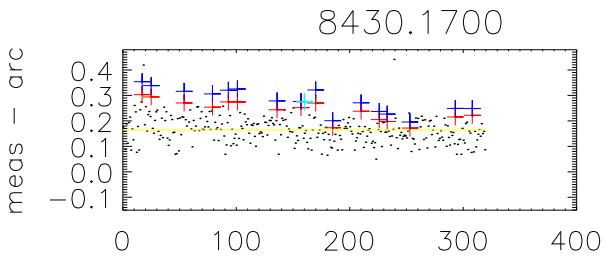

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

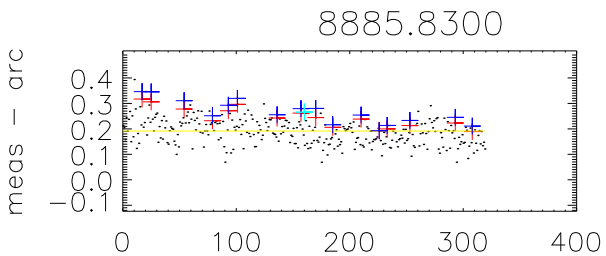

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

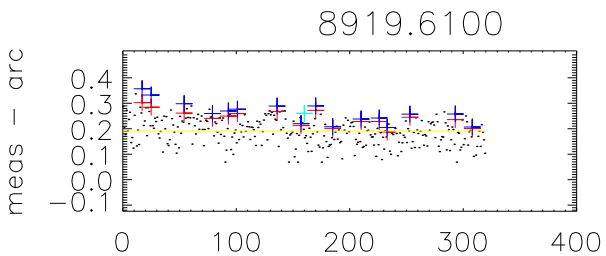

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

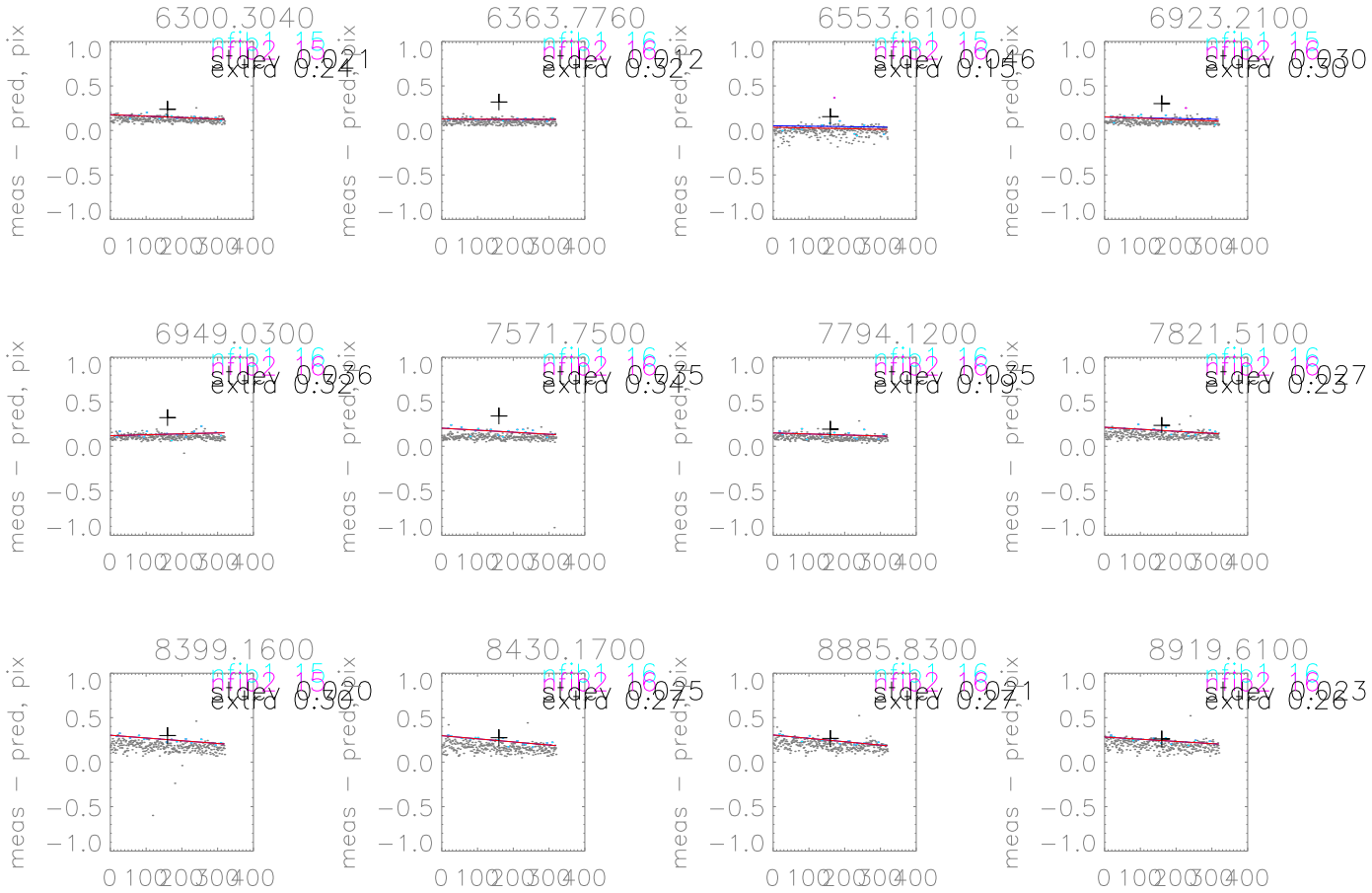

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

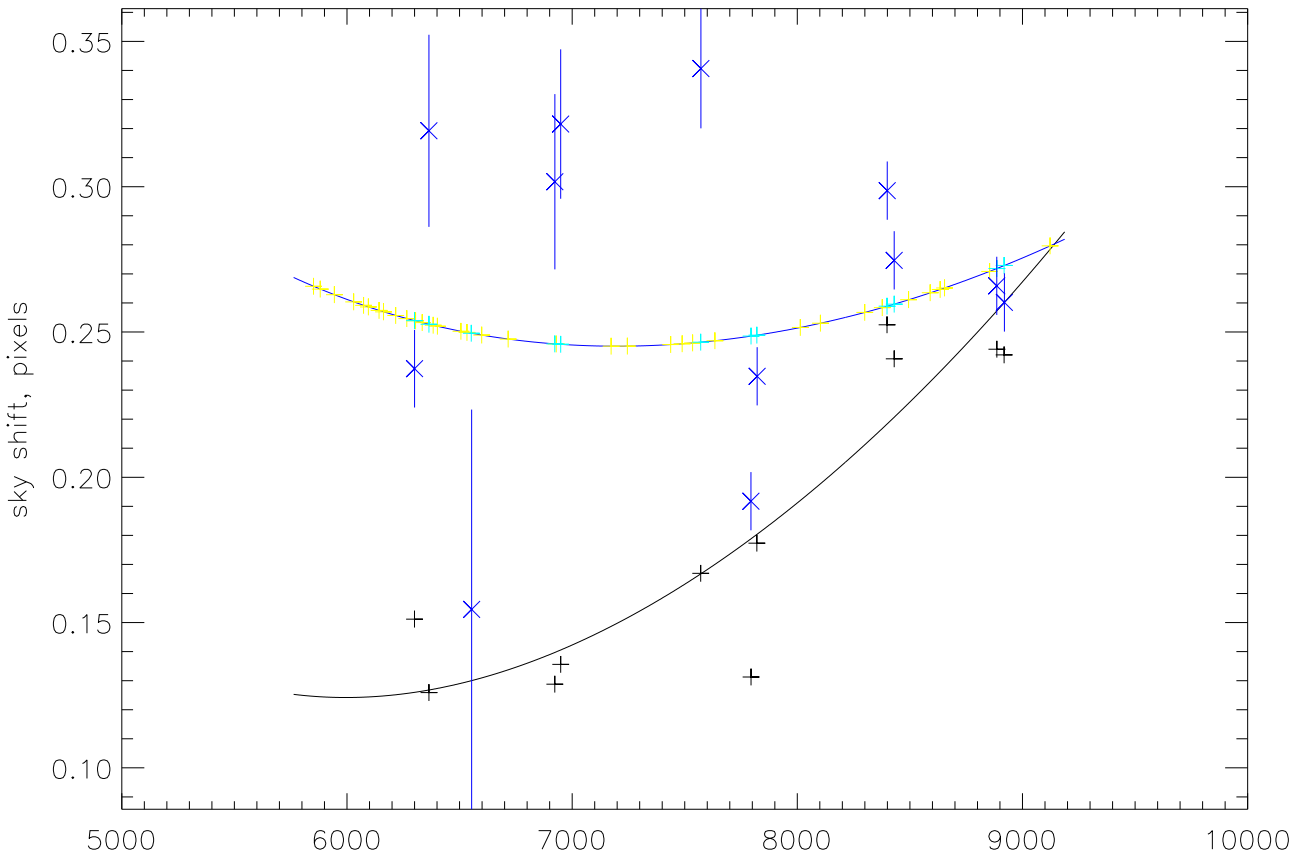

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

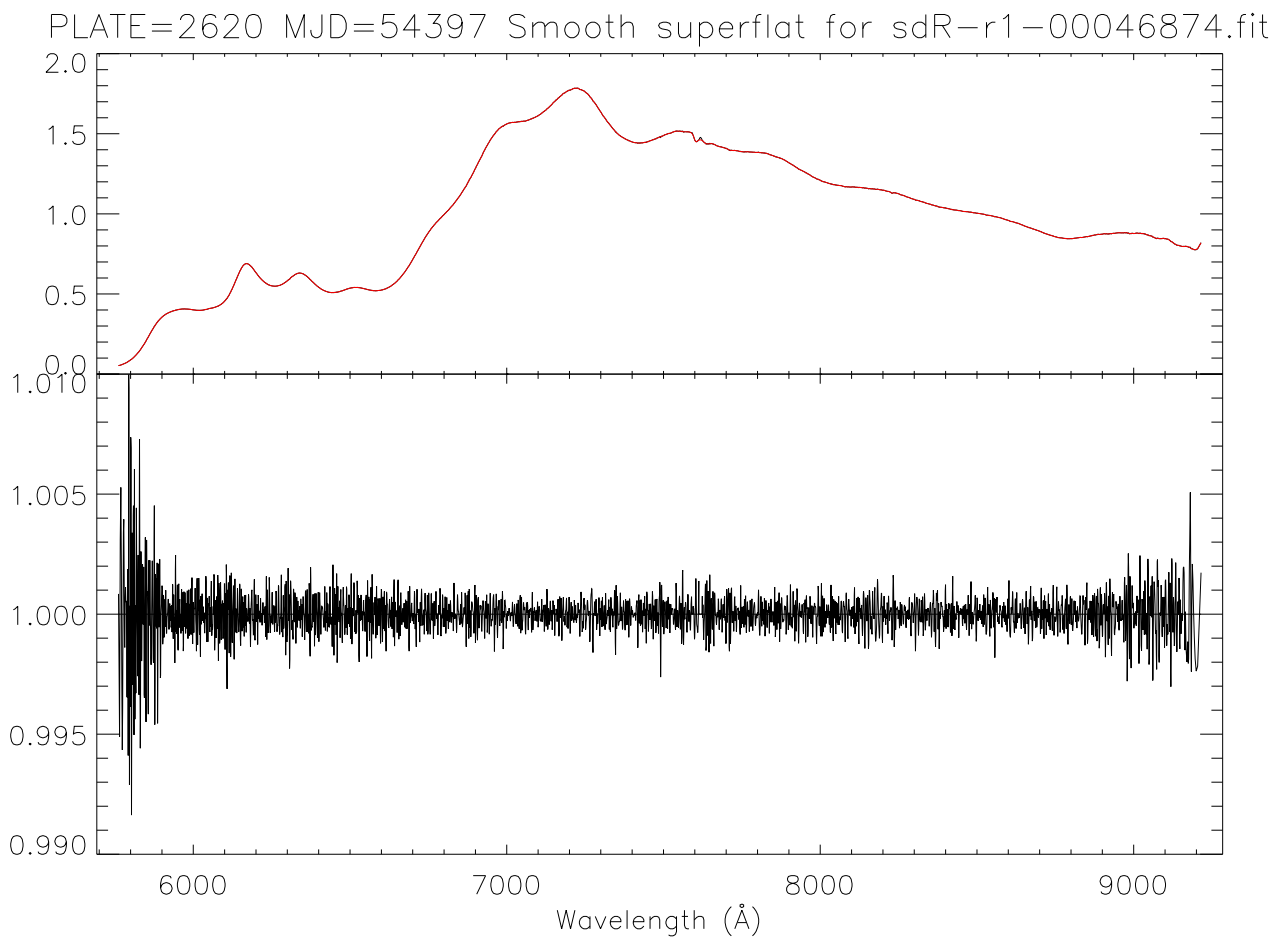

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

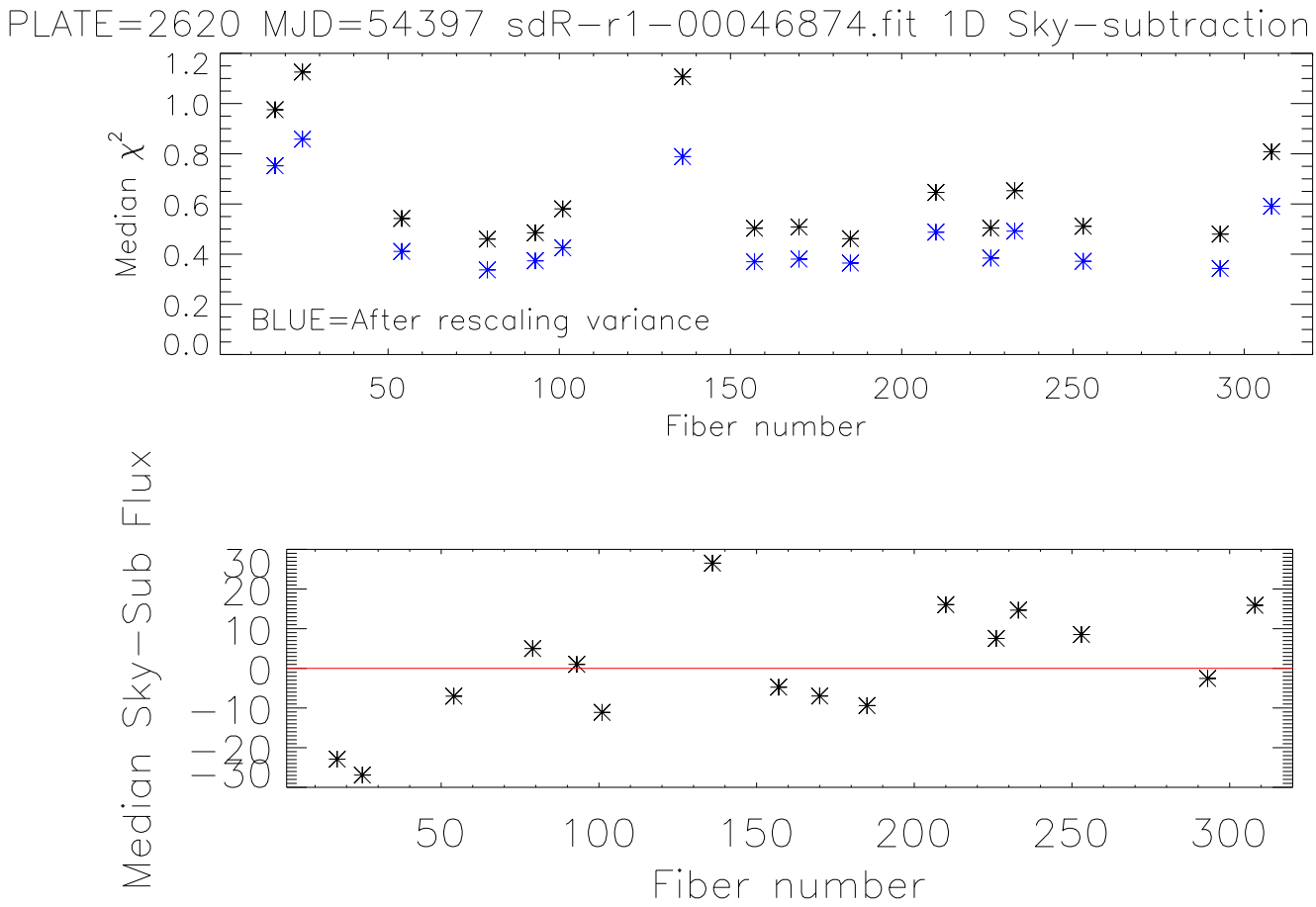

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

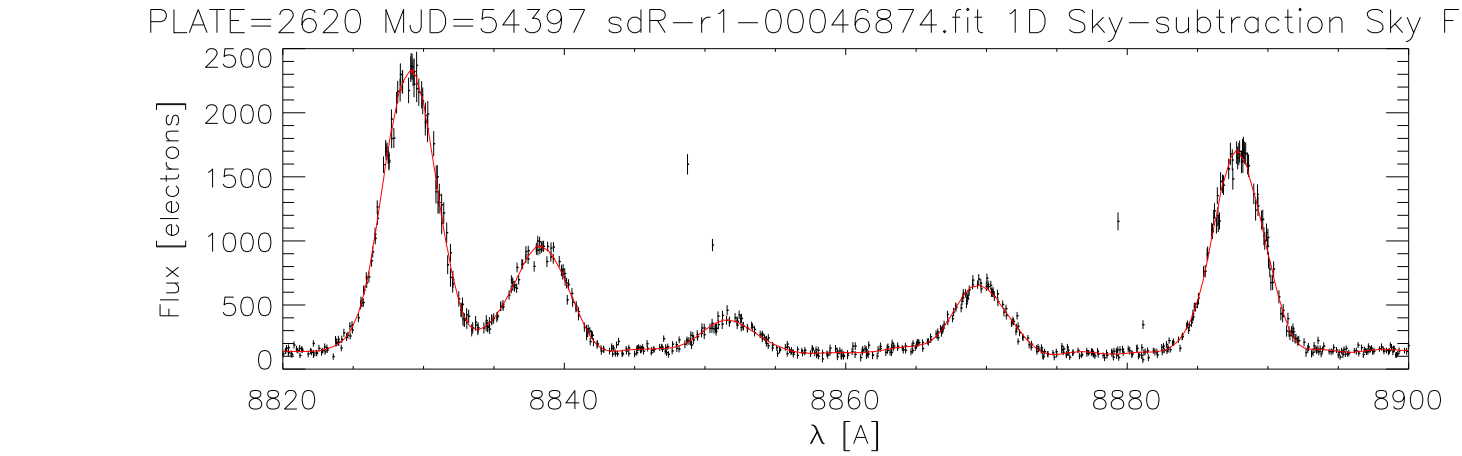

6300.3040
stdev 0.021
extra 0.24
6363.7760
stdev 0.022
extra 0.32
6553.6100
stdev 0.046
extra 0.15
6923.2100
stdev 0.030
extra 0.30
6949.0300
stdev 0.036
extra 0.32
7571.7500
stdev 0.035
extra 0.34
7794.1200
stdev 0.035
extra 0.19
7821.5100
stdev 0.027
extra 0.23
8399.1600
stdev 0.030
extra 0.36
8430.1700
stdev 0.025
extra 0.27
8885.8300
stdev 0.021
extra 0.27
8919.6100
stdev 0.023
extra 0.26
meas − pred, pix
mfib1 15
mfib2 16

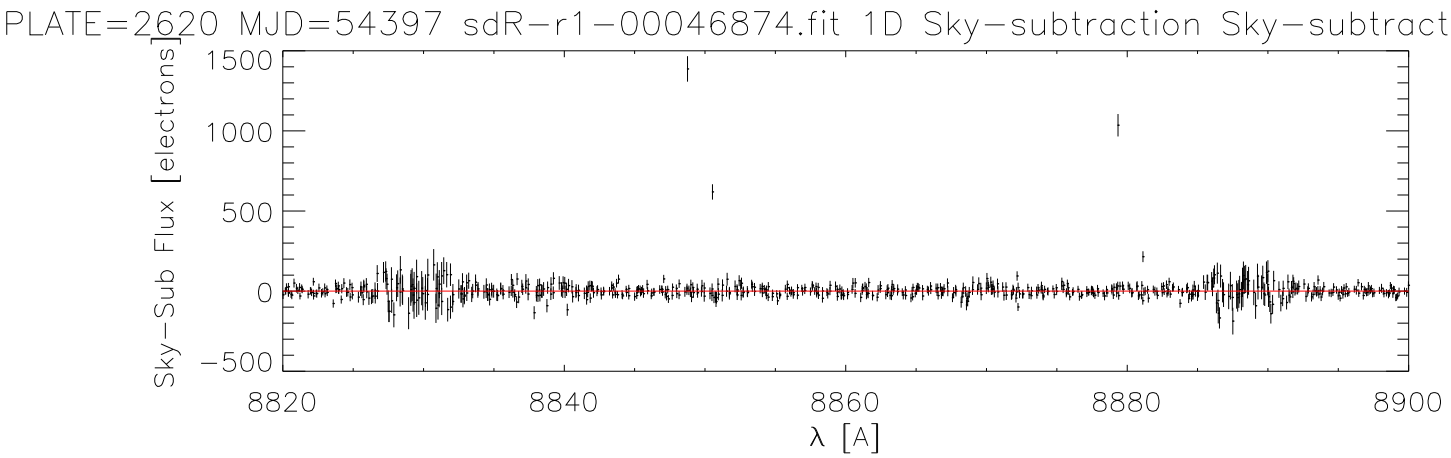

sky shift, pixels
0.35
0.30
0.25
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

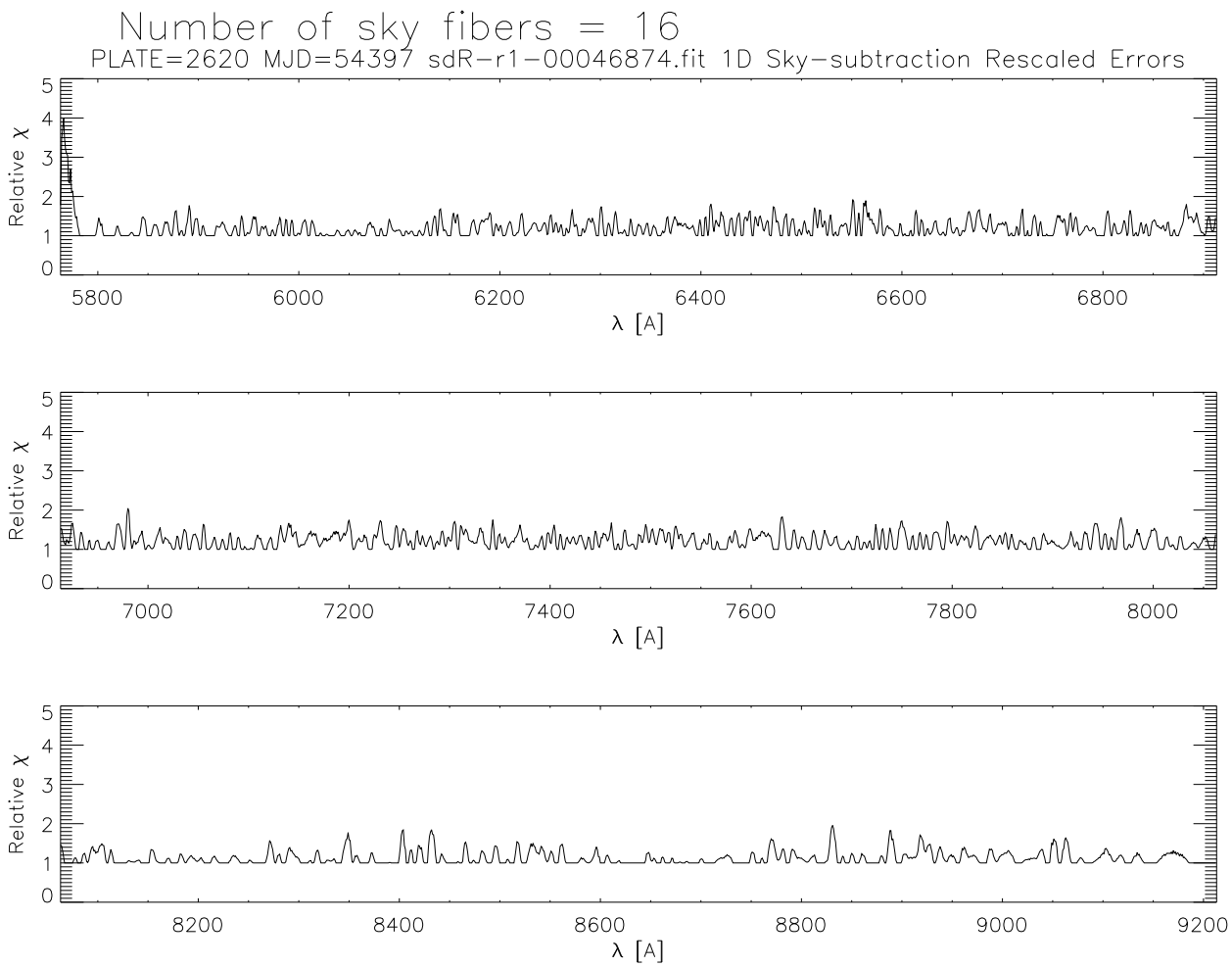
es= 0.0000

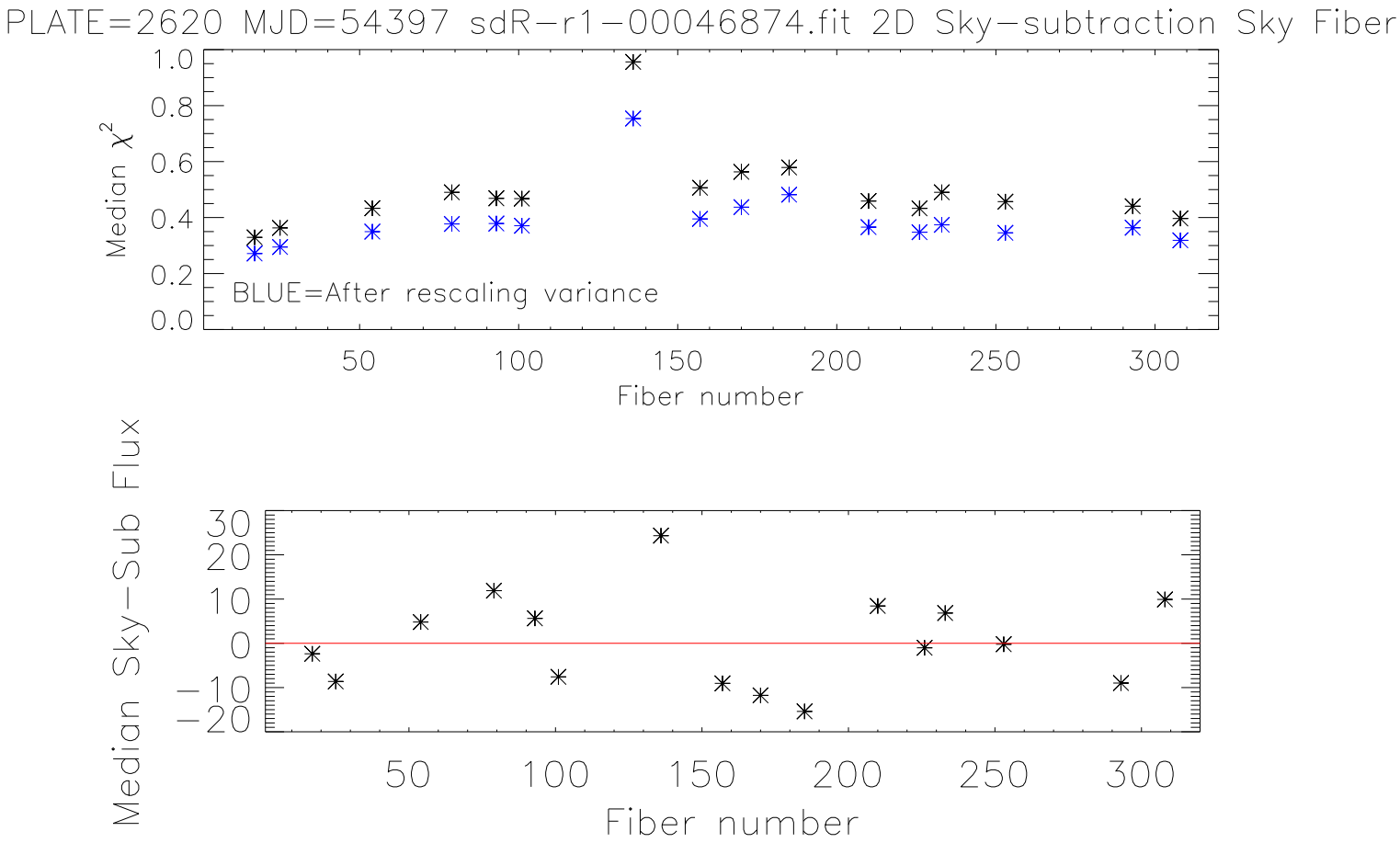

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046874.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

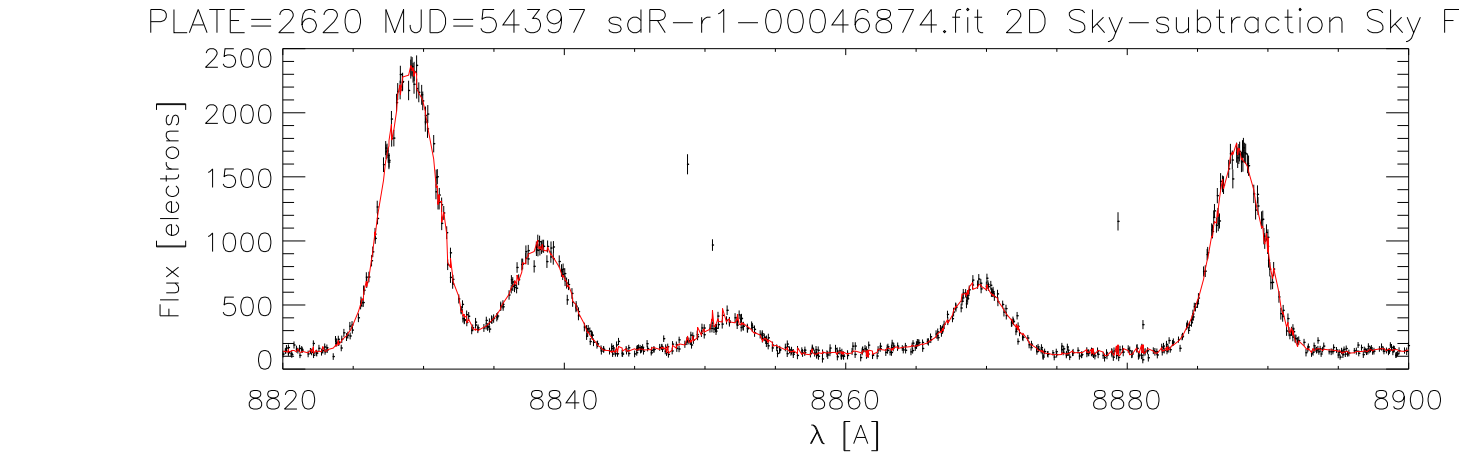

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

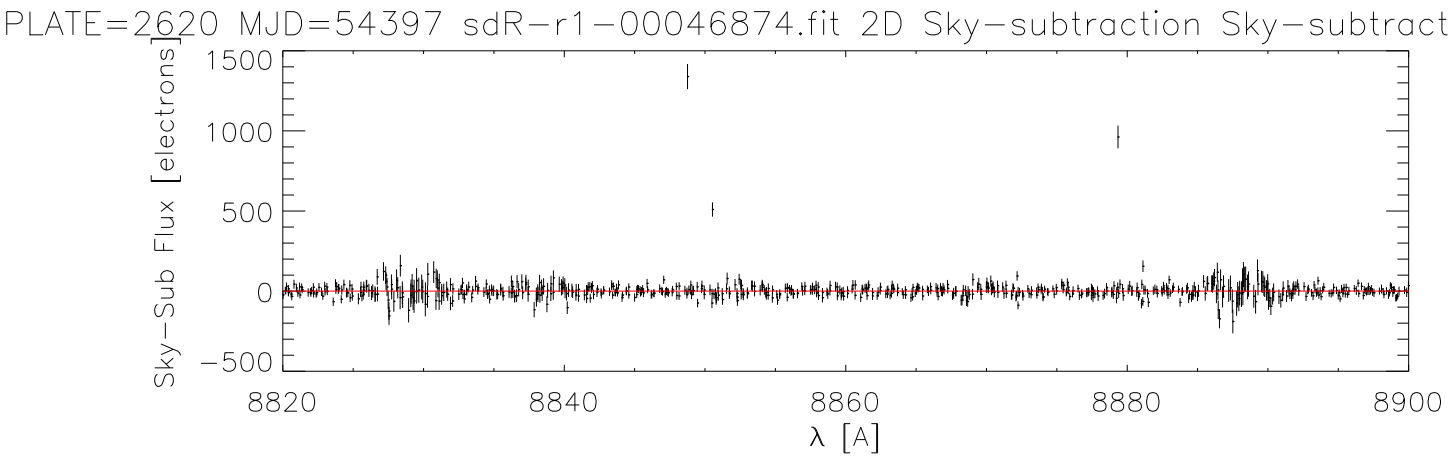

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

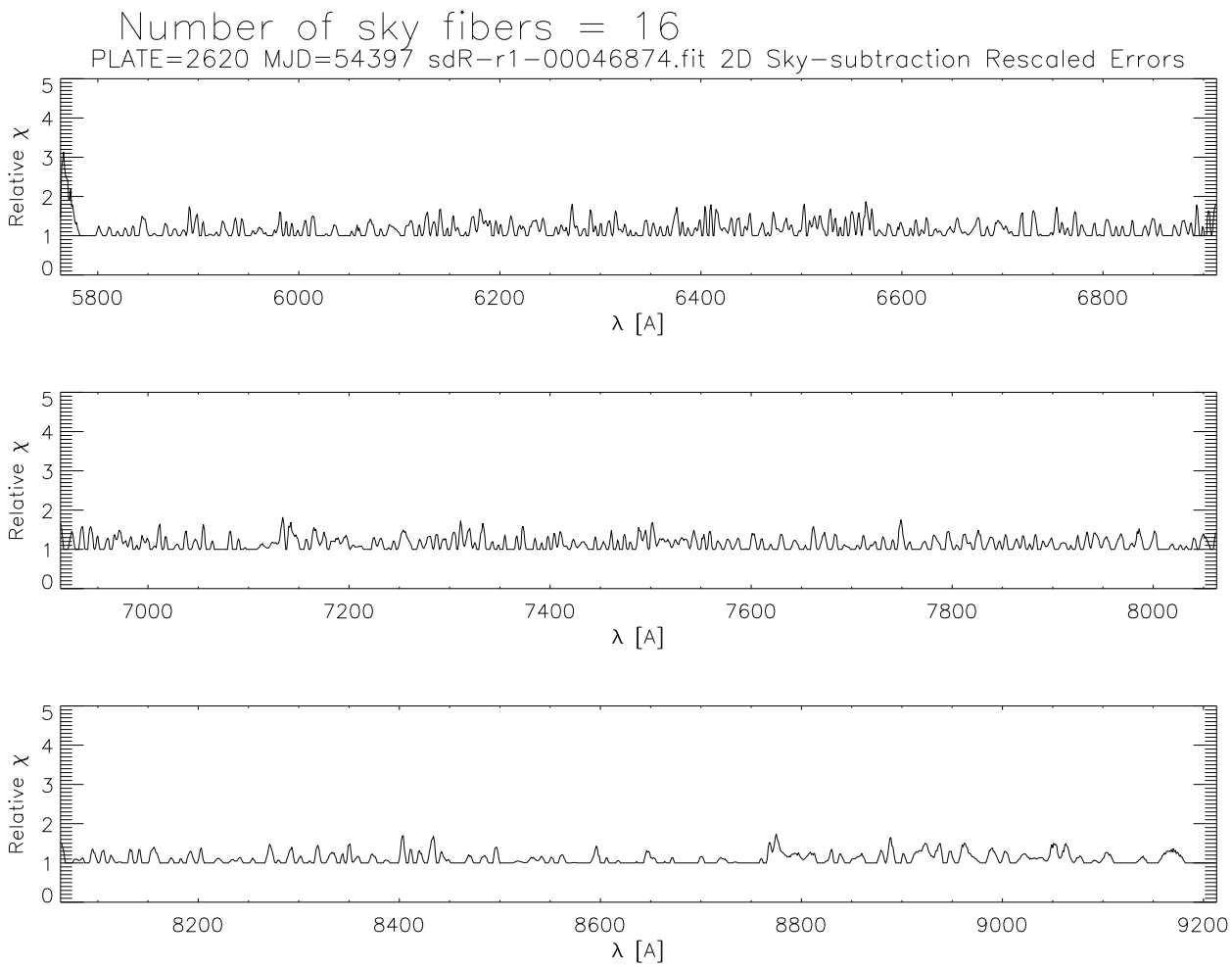

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

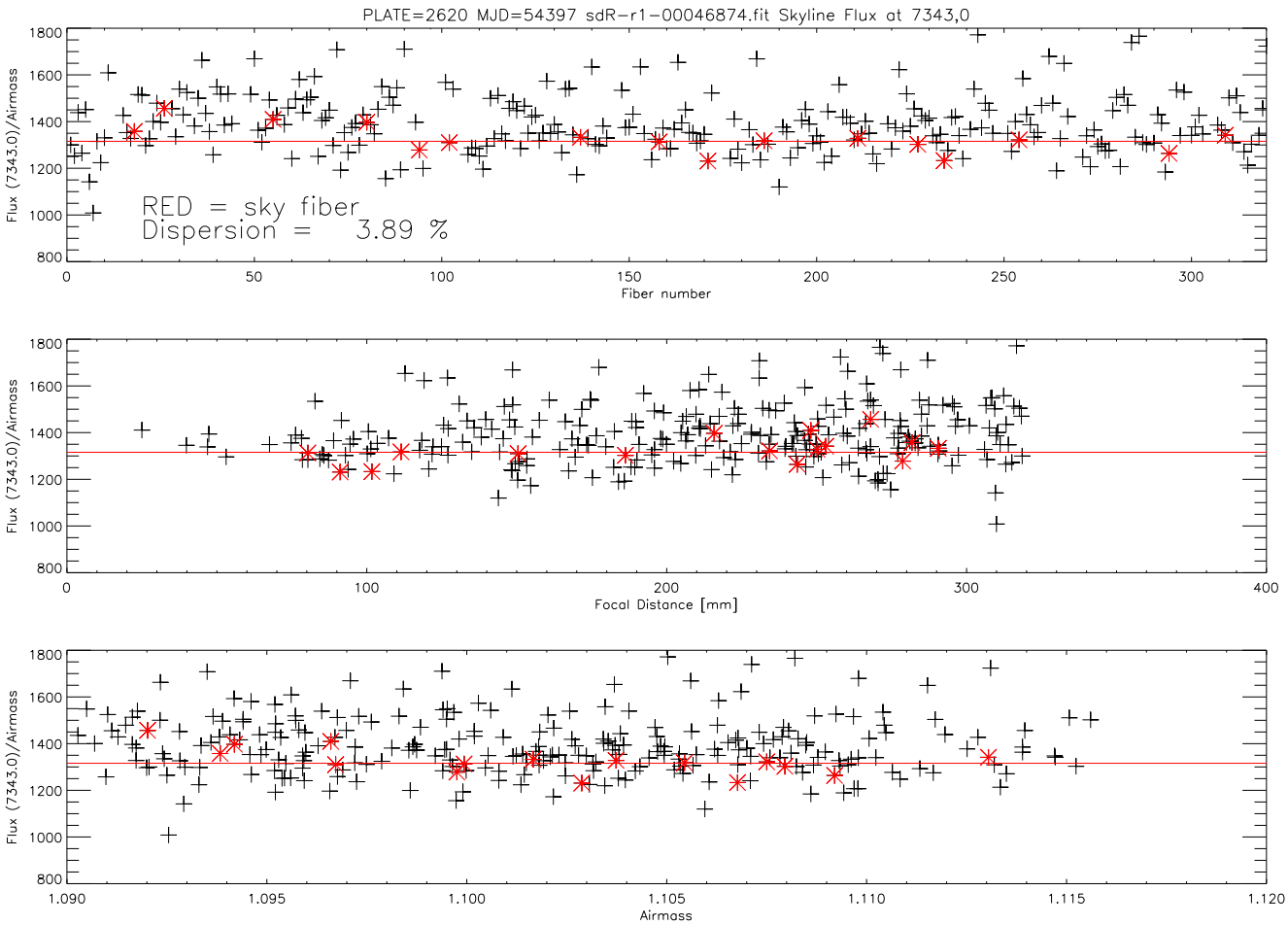

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046874.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

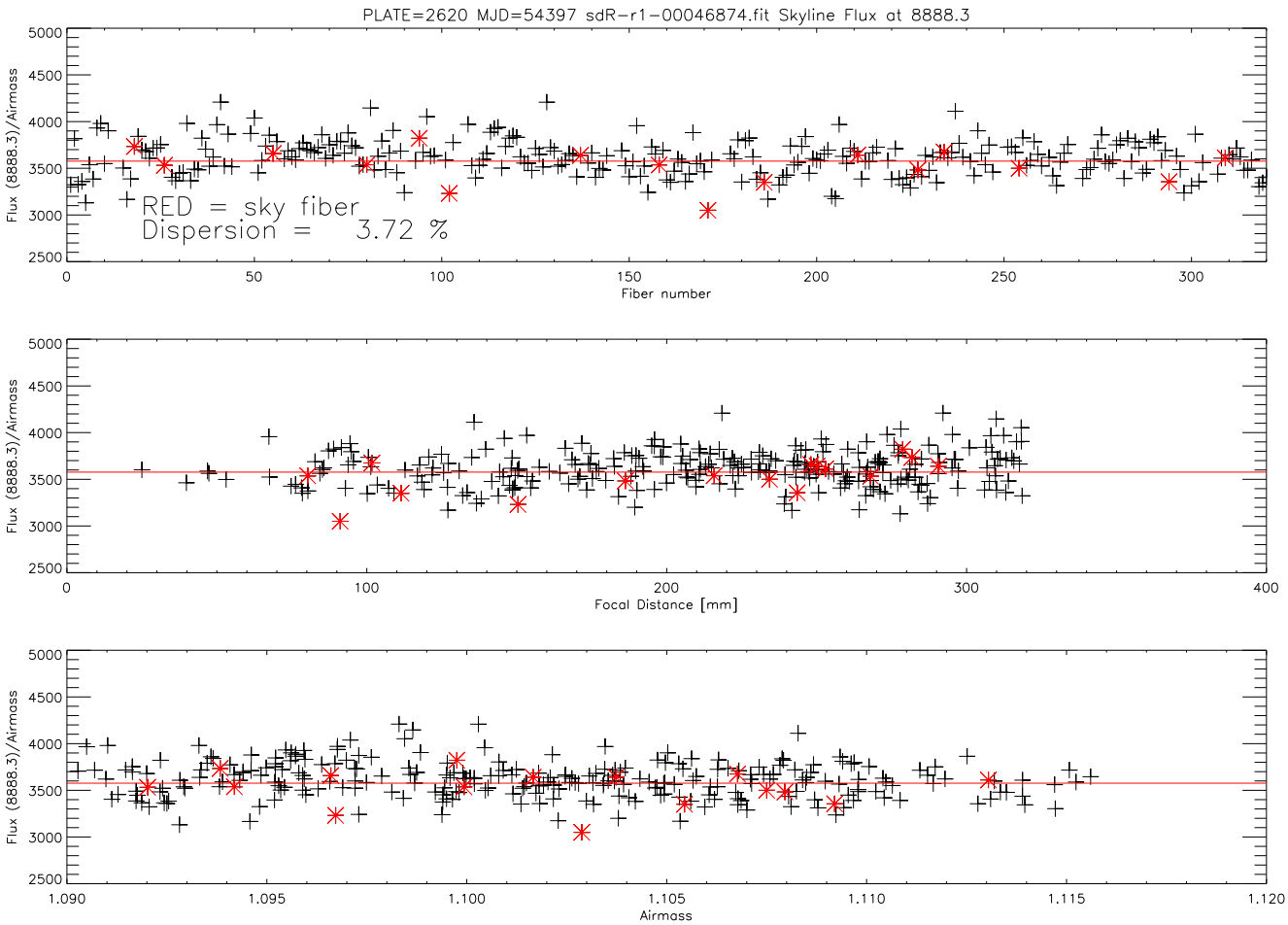

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

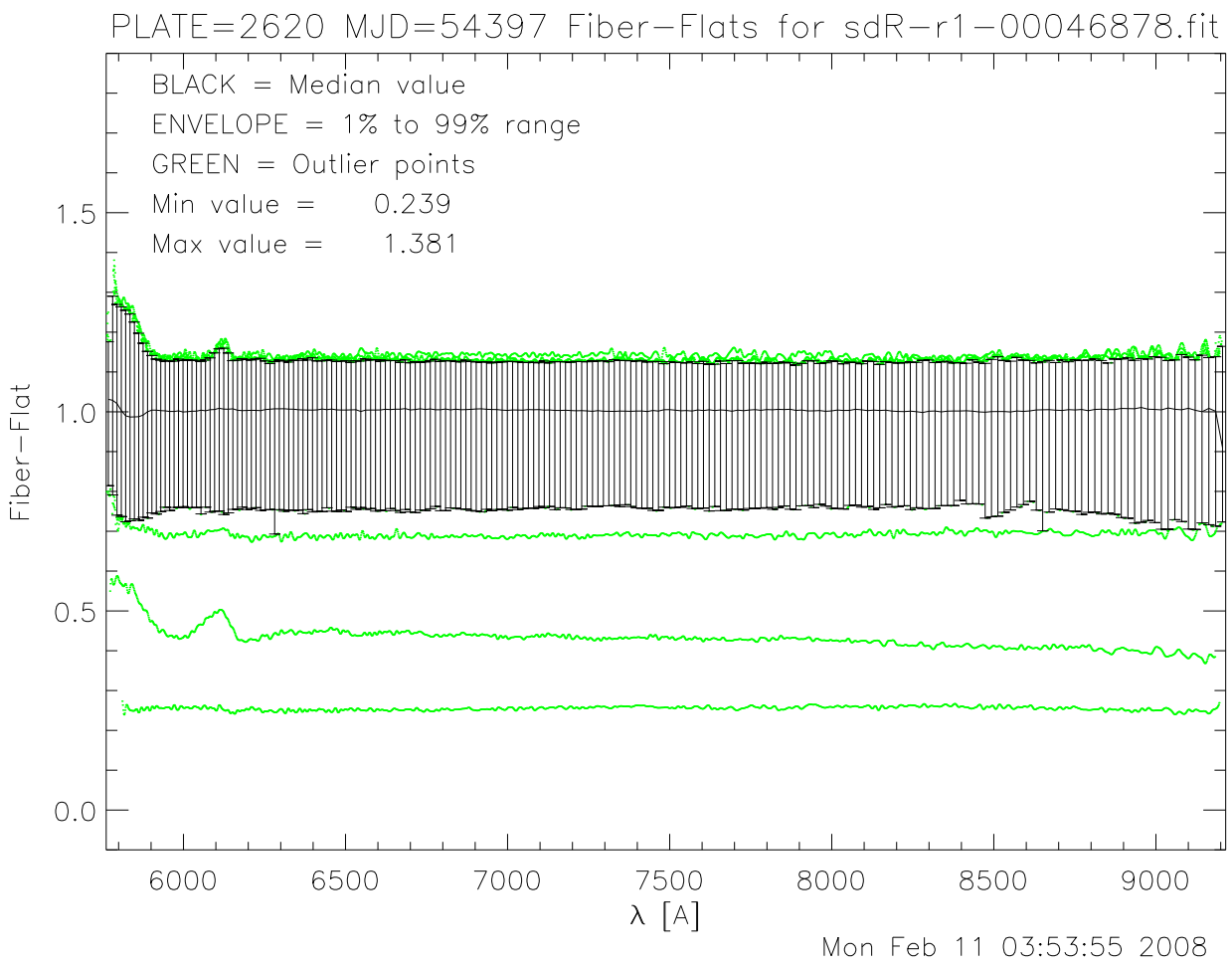

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

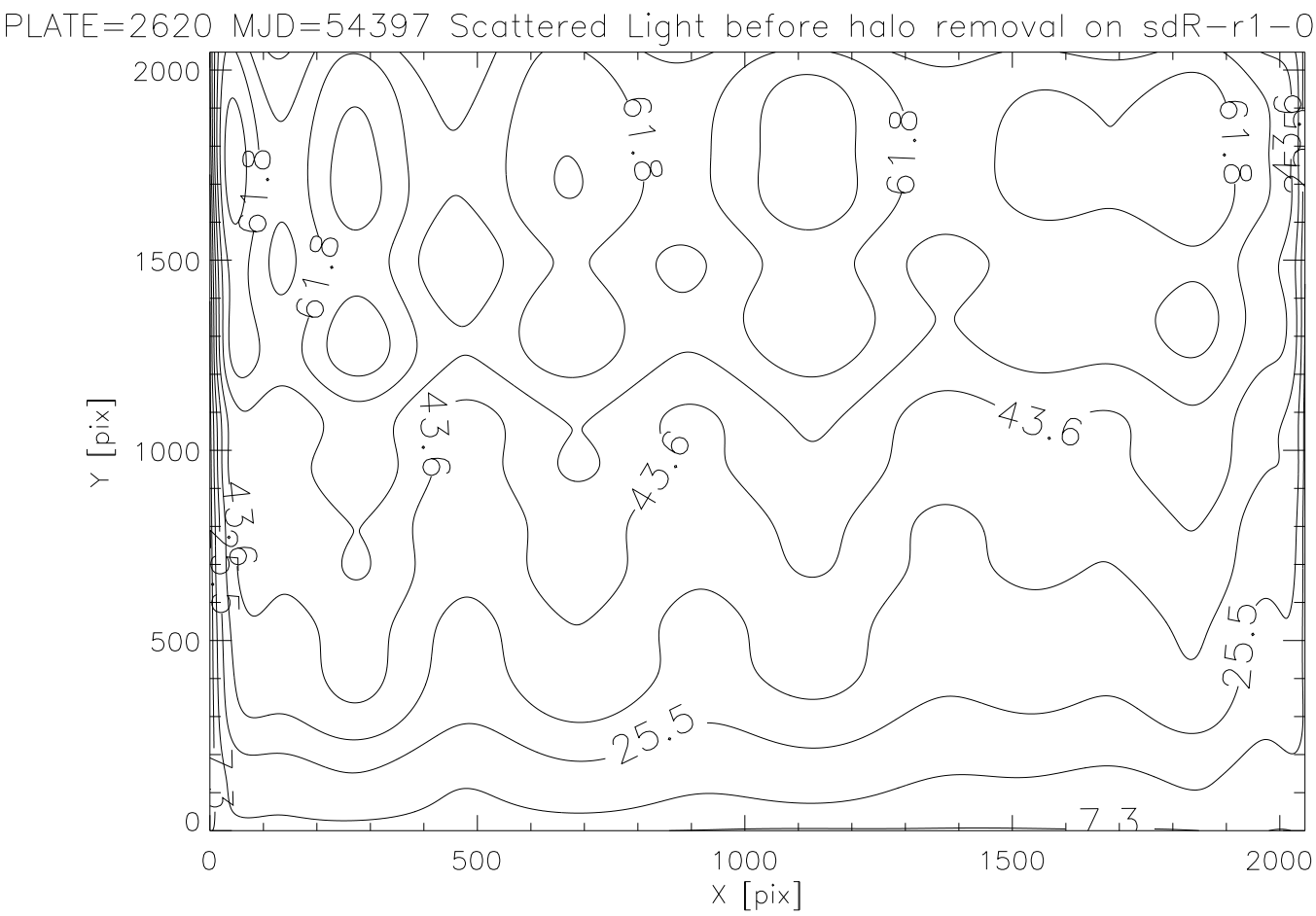

PLATE=2620 MJD=54397 sdR-r1-00046874.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

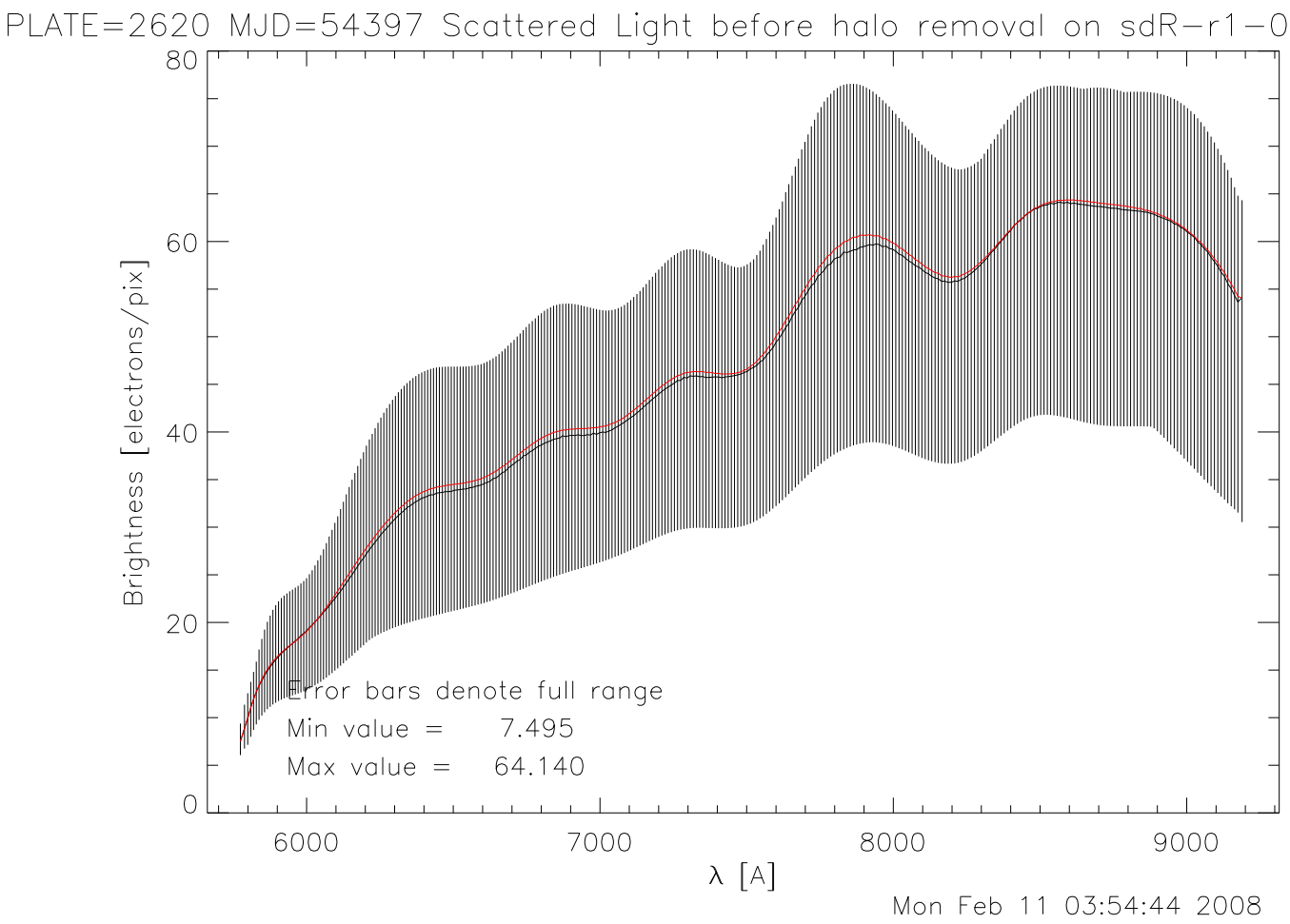

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046874.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

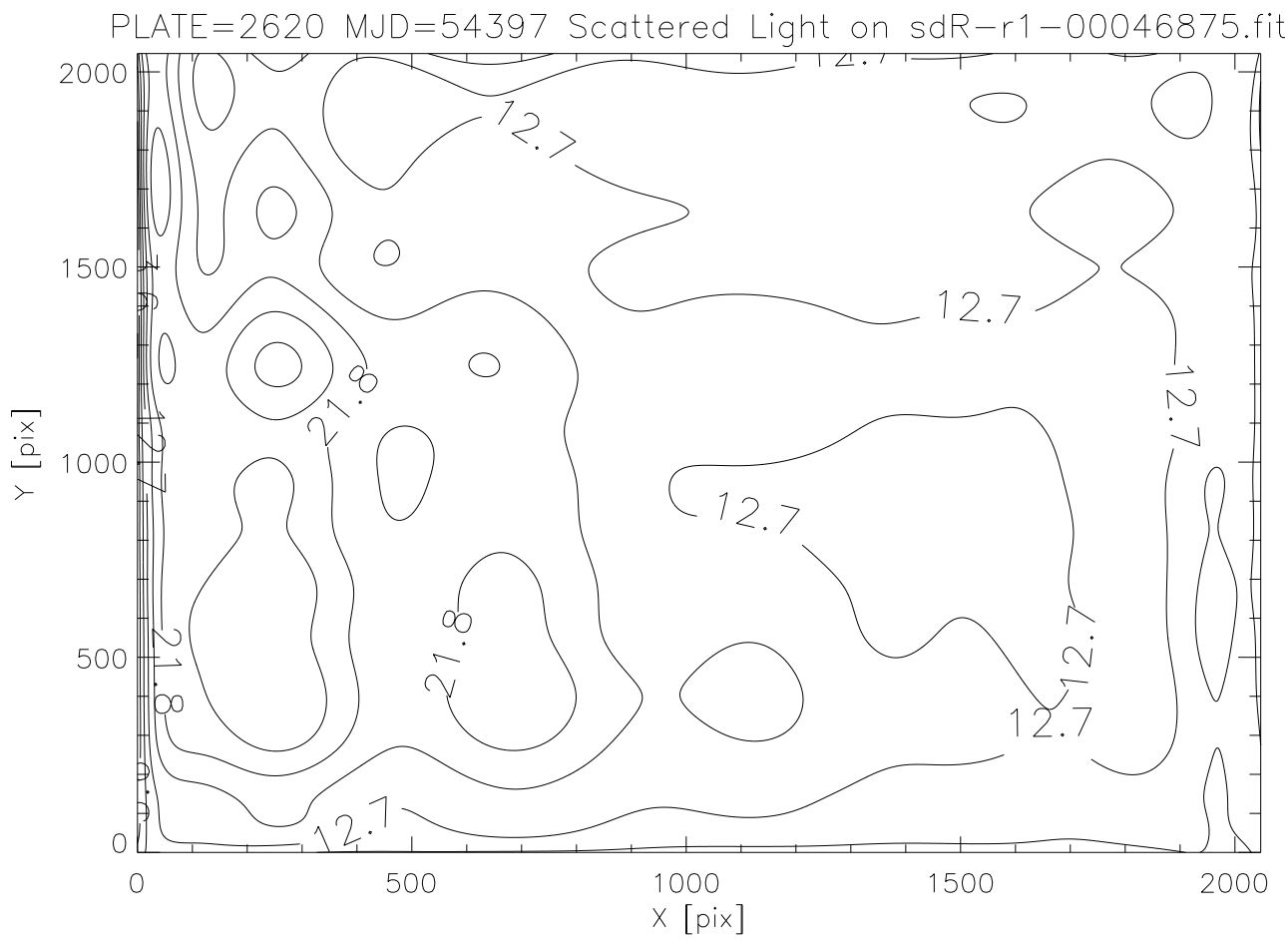

PLATE=2620 MJD=54397 sdR-r1-00046874.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.89 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

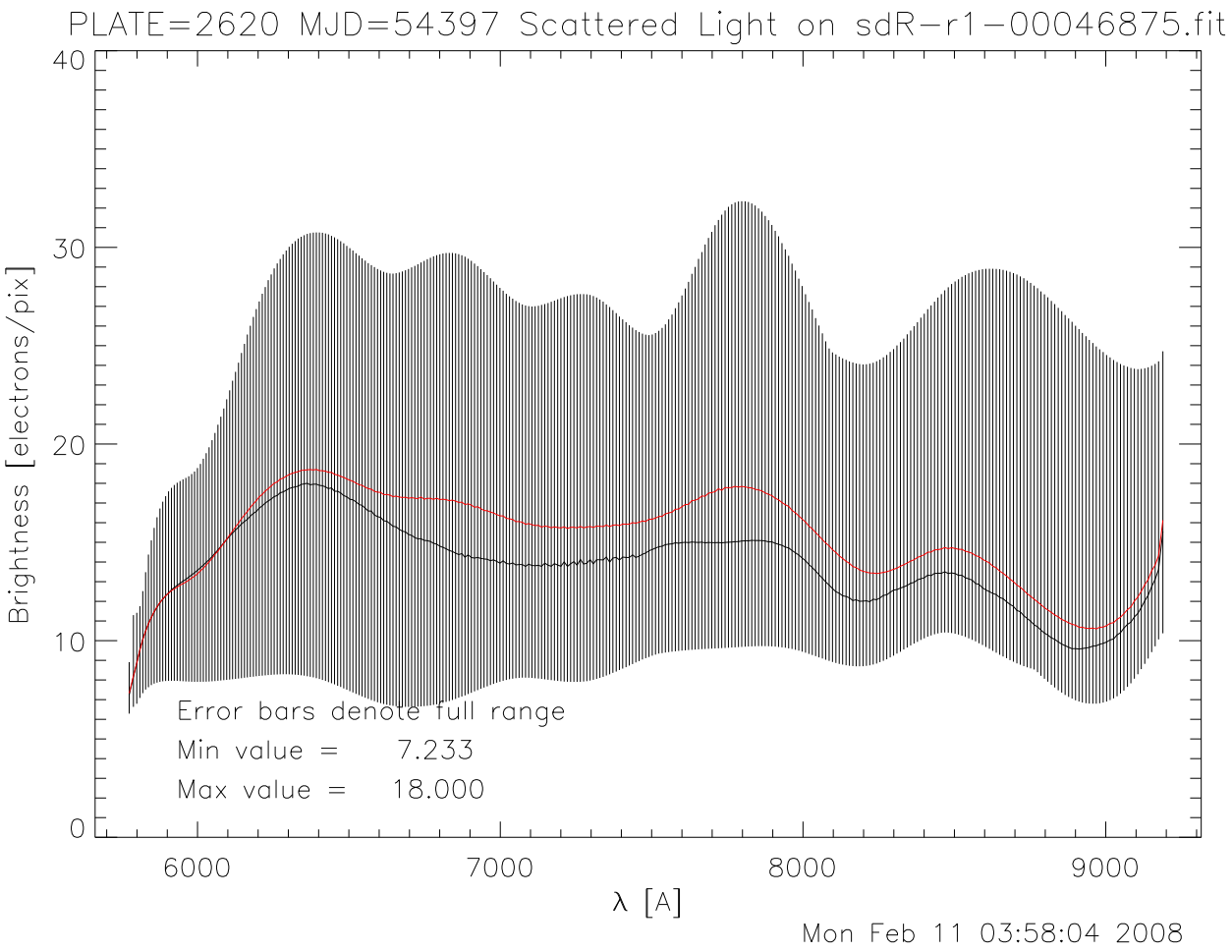

PLATE=2620 MJD=54397 sdR-r1-00046874.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.72 %
Fiber number
Focal Distance [mm]
Airmass

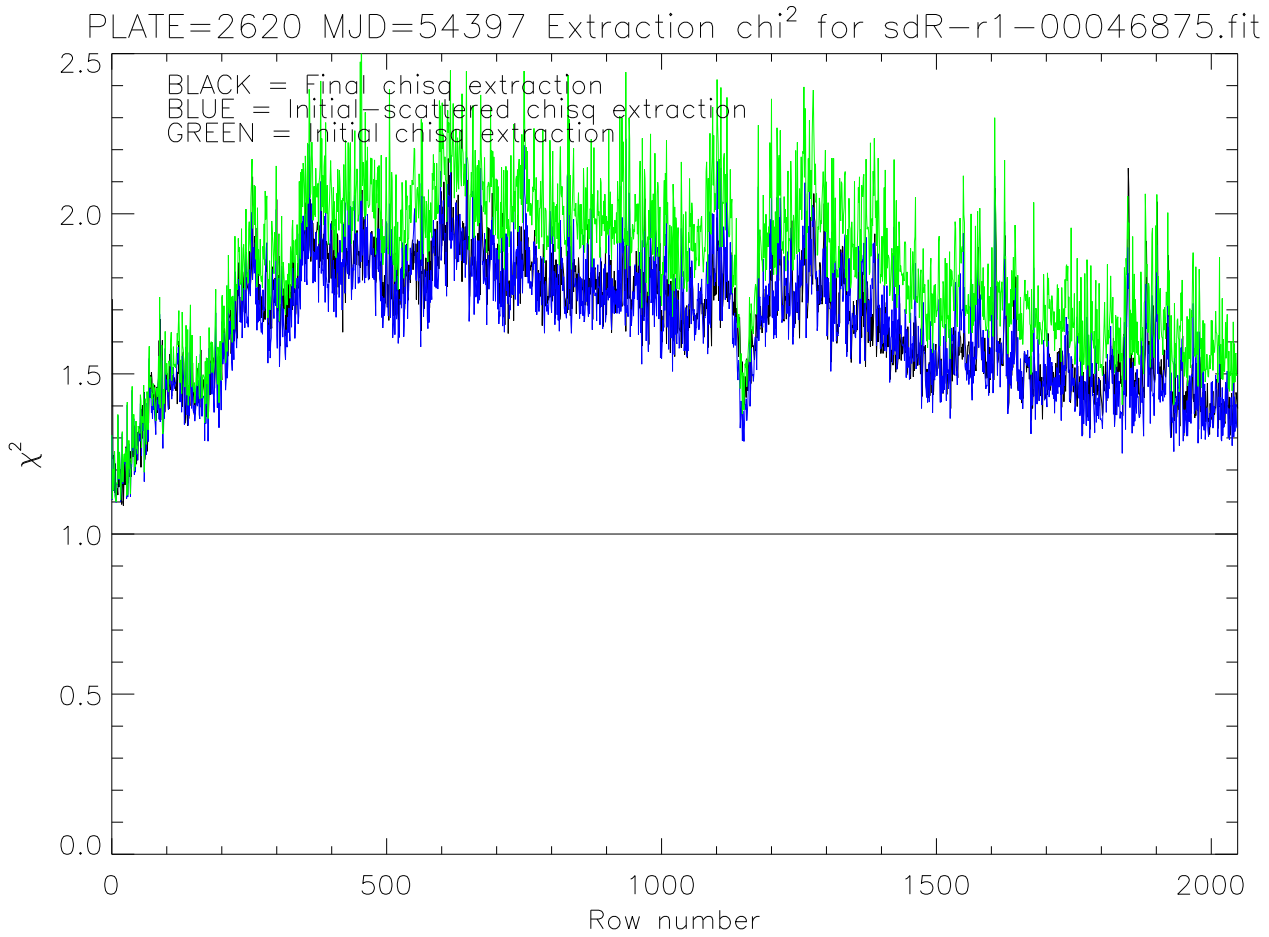

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 03:53:55 2008

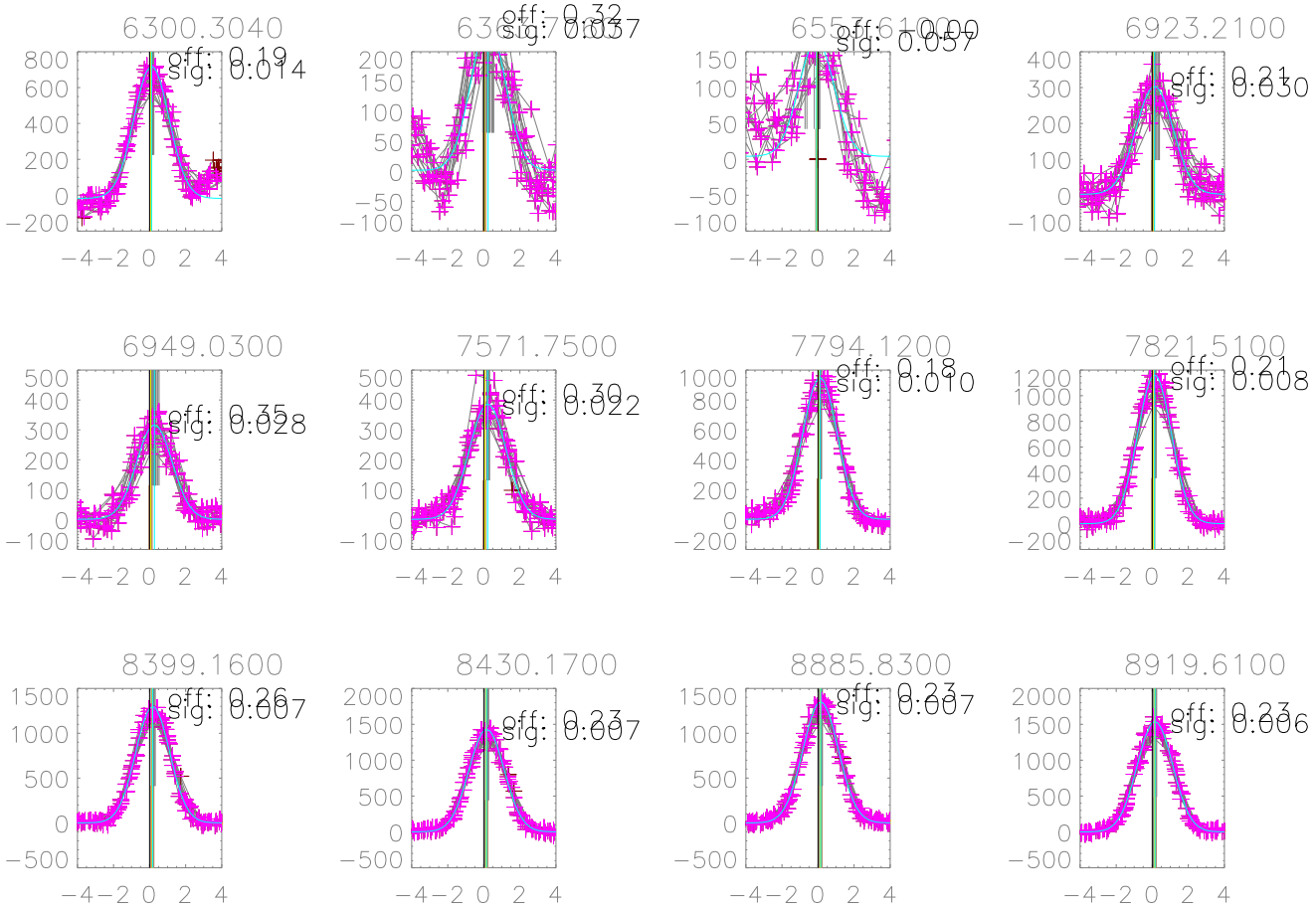

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046875.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
61.8
43.6
25.5
7.3

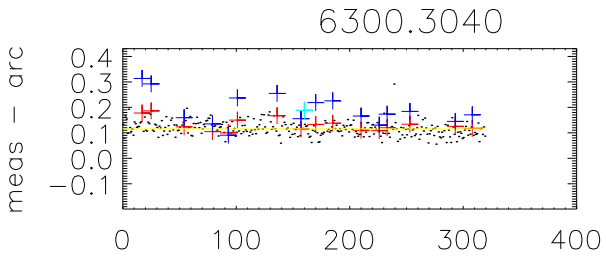

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046875.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.495
Max value = 64.140
Mon Feb 11 03:54:44 2008

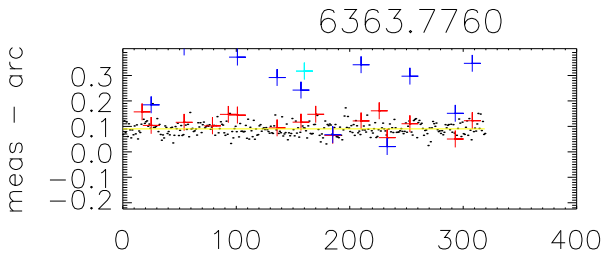

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046875.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8

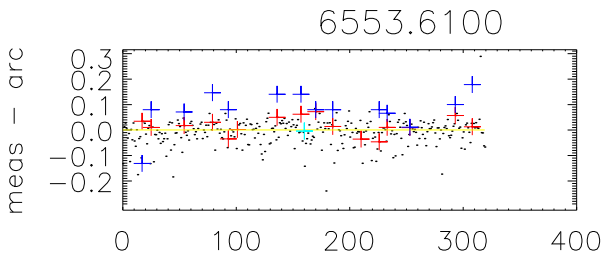

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046875.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.233
Max value = 18.000
Mon Feb 11 03:58:04 2008

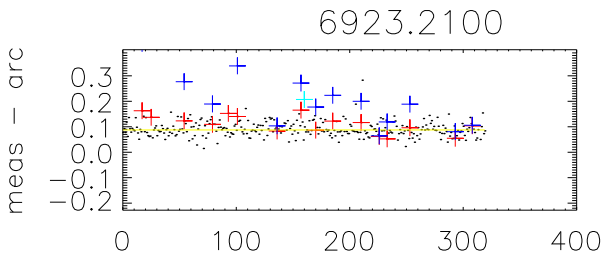

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046875.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

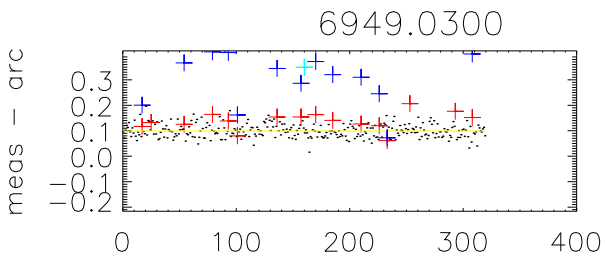

6300.3040
off: 0.19
sig: 0.014
off: 0.32
sig: 0.037
sig: 0.057
6923.2100
off: 0.21
sig: 0.030
6949.0300
off: 0.35
sig: 0.028
7571.7500
off: 0.30
sig: 0.022
7794.1200
off: 0.18
sig: 0.010
7821.5100
off: 0.21
sig: 0.008
8399.1600
off: 0.26
sig: 0.007
8430.1700
off: 0.23
sig: 0.007
8885.8300
off: 0.23
sig: 0.007
8919.6100
off: 0.23
sig: 0.006

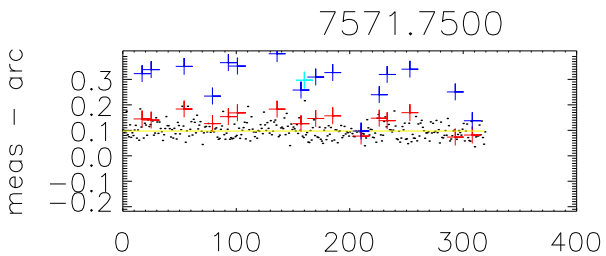

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

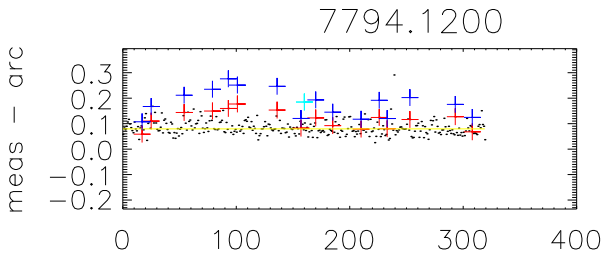

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

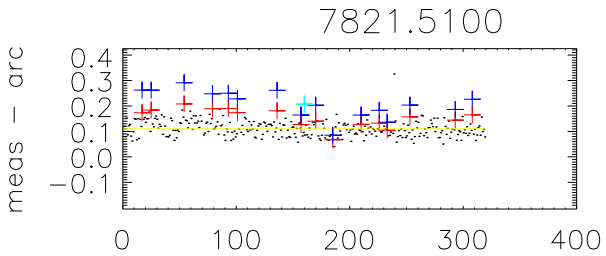

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

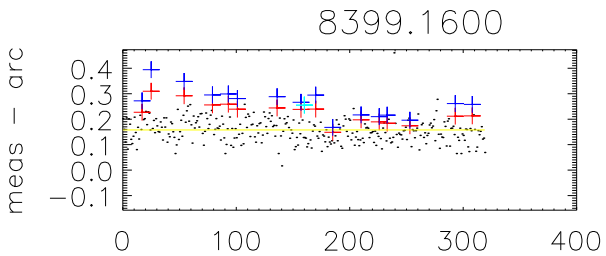

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

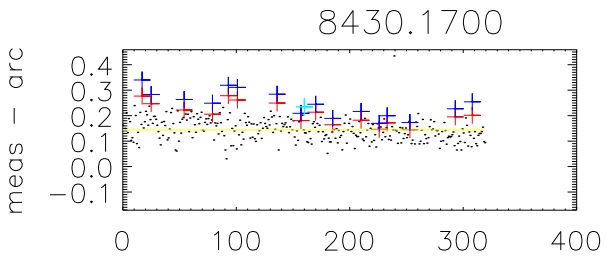

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

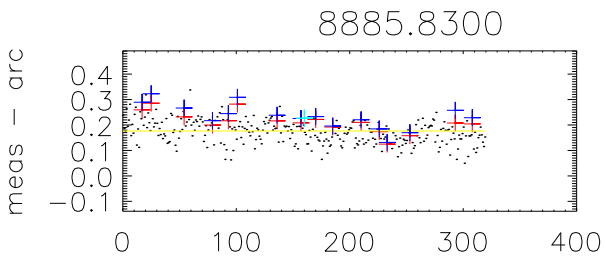

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

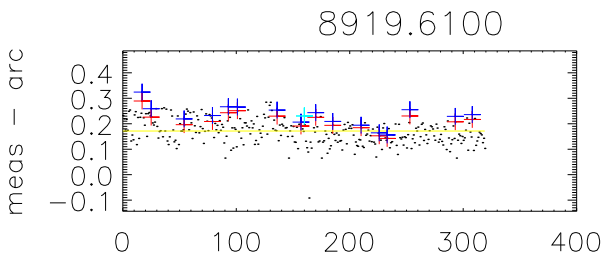

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

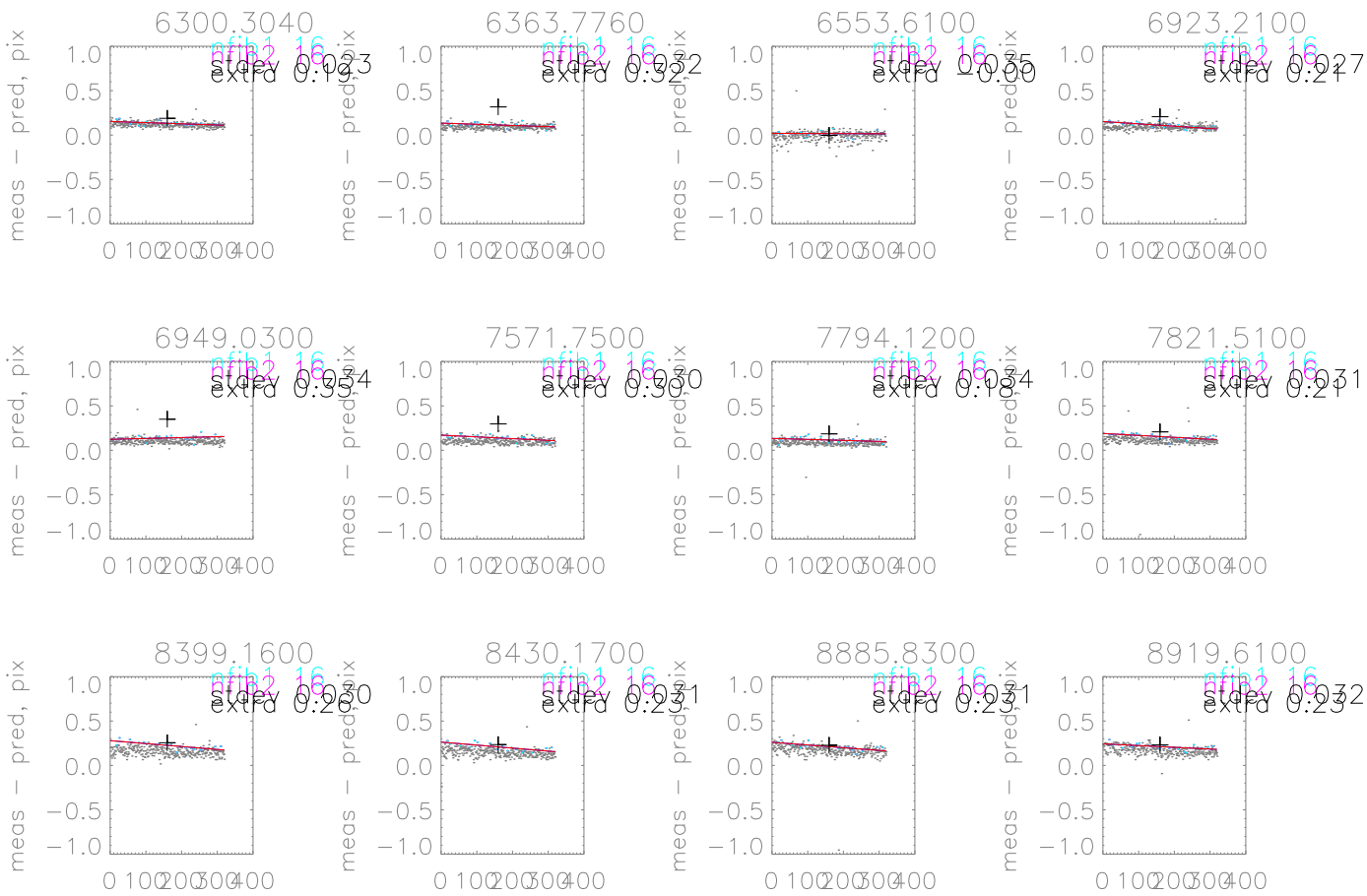

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

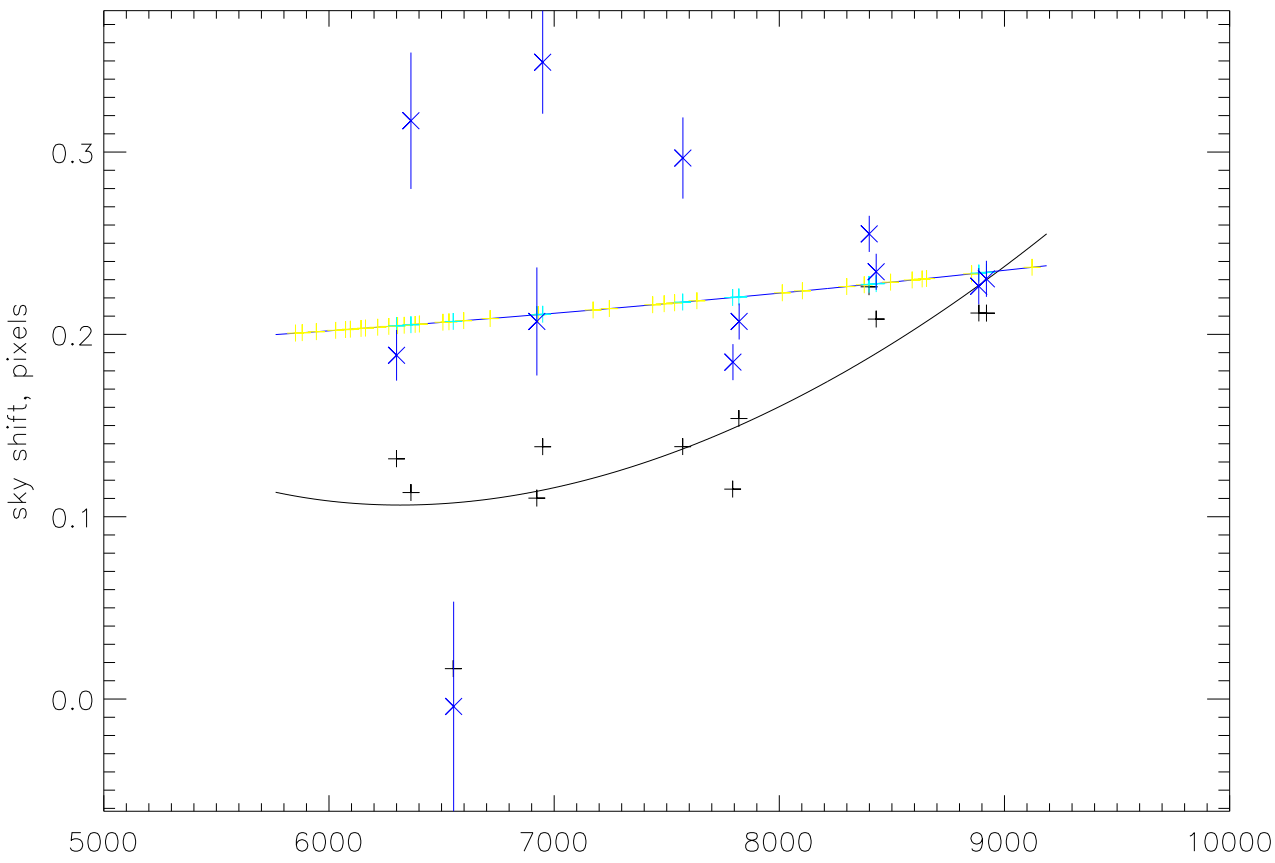

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

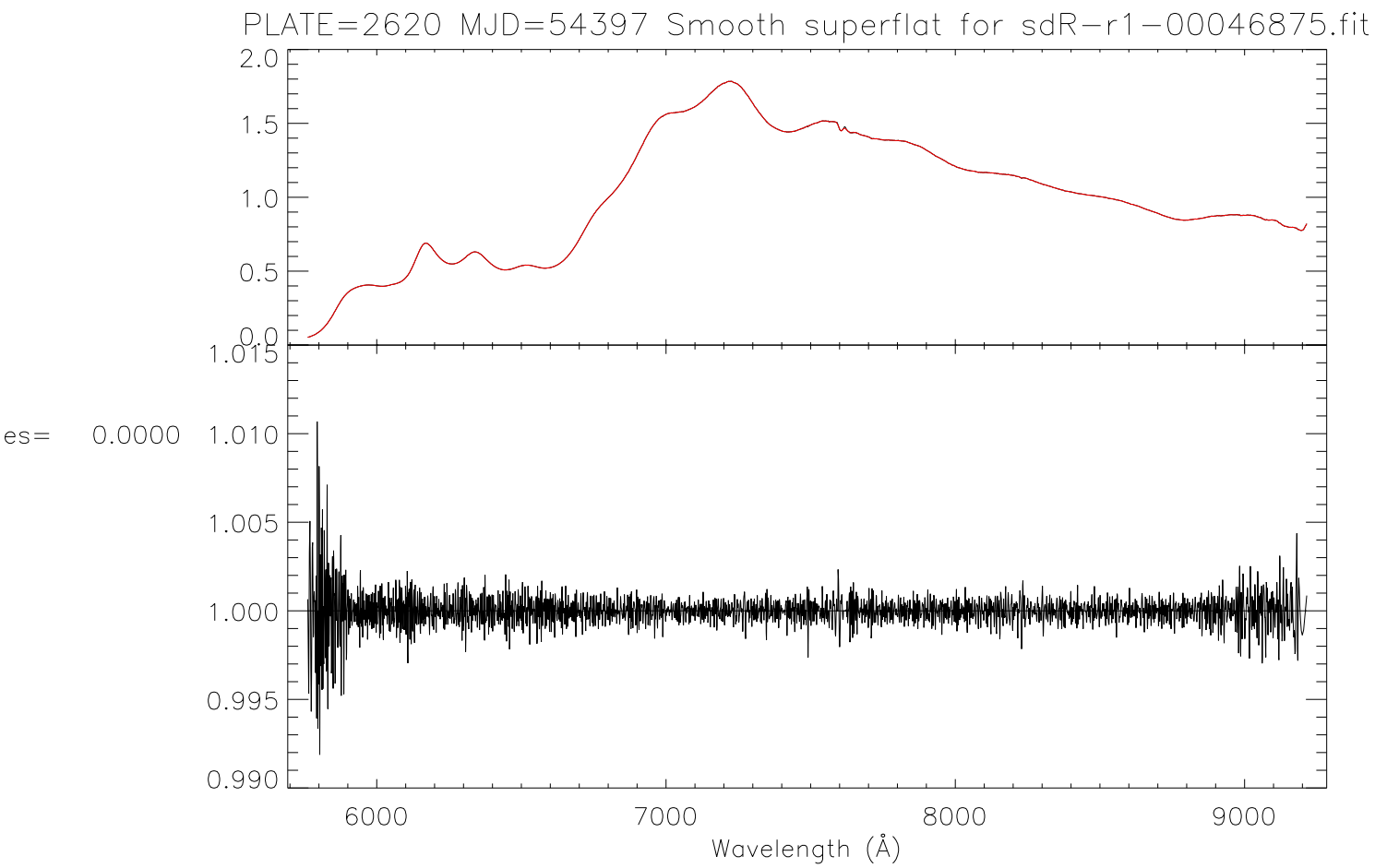

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

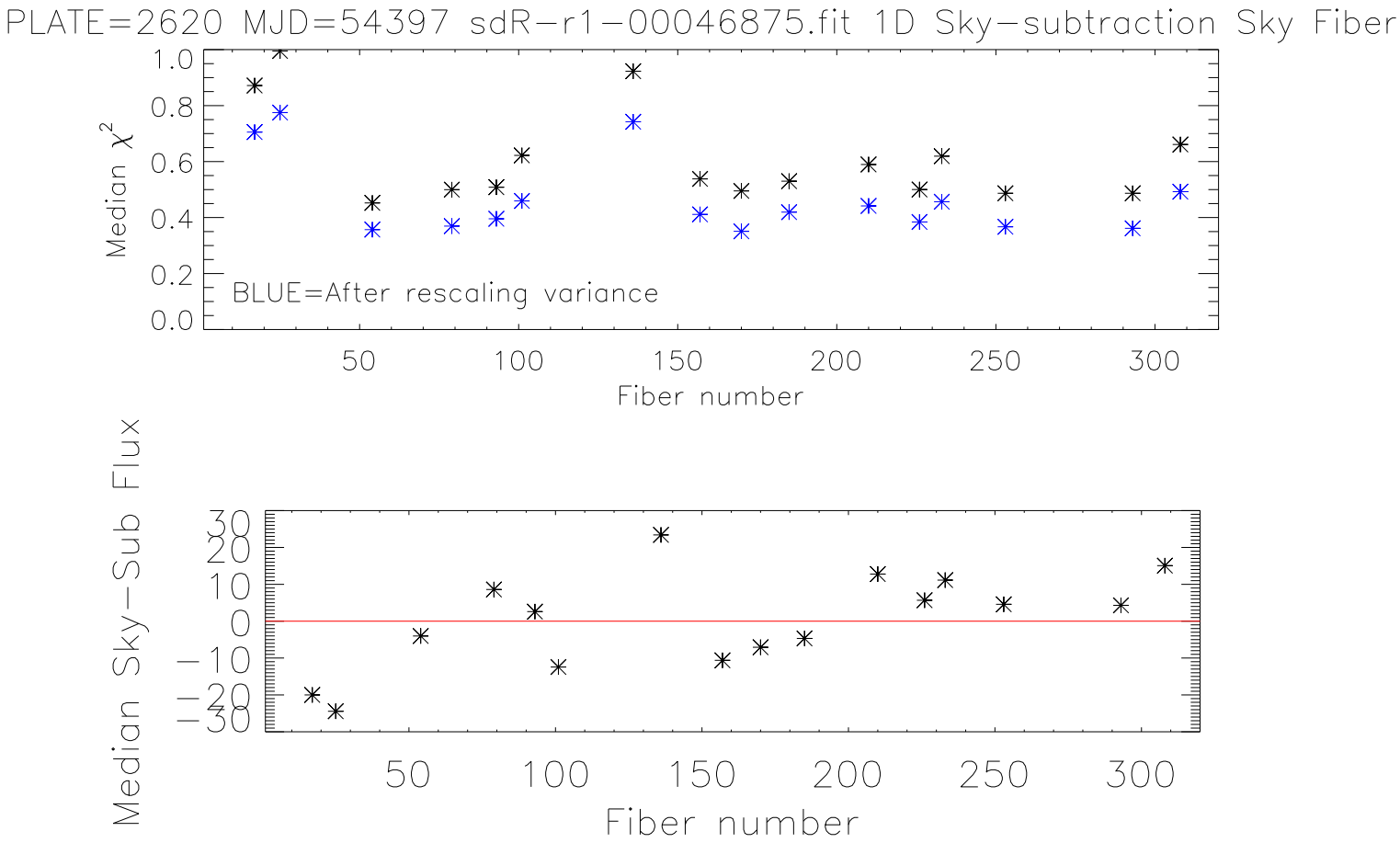

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

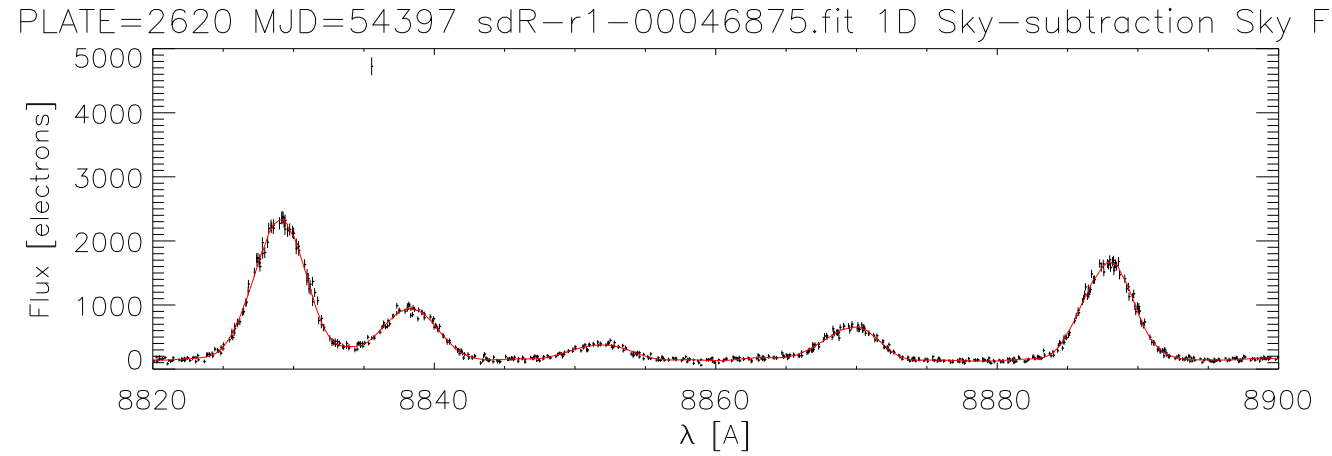

6300.3040
stdev 0.023
extra 0.19
6363.7760
stdev 0.032
extra 0.32
6553.6100
stdev 0.035
extra −0.00
6923.2100
stdev 0.027
extra 0.21
6949.0300
stdev 0.034
extra 0.35
7571.7500
stdev 0.030
extra 0.30
7794.1200
stdev 0.034
extra 0.18
7821.5100
stdev 0.031
extra 0.21
8399.1600
stdev 0.030
extra 0.26
8430.1700
stdev 0.031
extra 0.23
8885.8300
stdev 0.031
extra 0.23
8919.6100
stdev 0.032
extra 0.23
meas − pred, pix
mfhd2 16

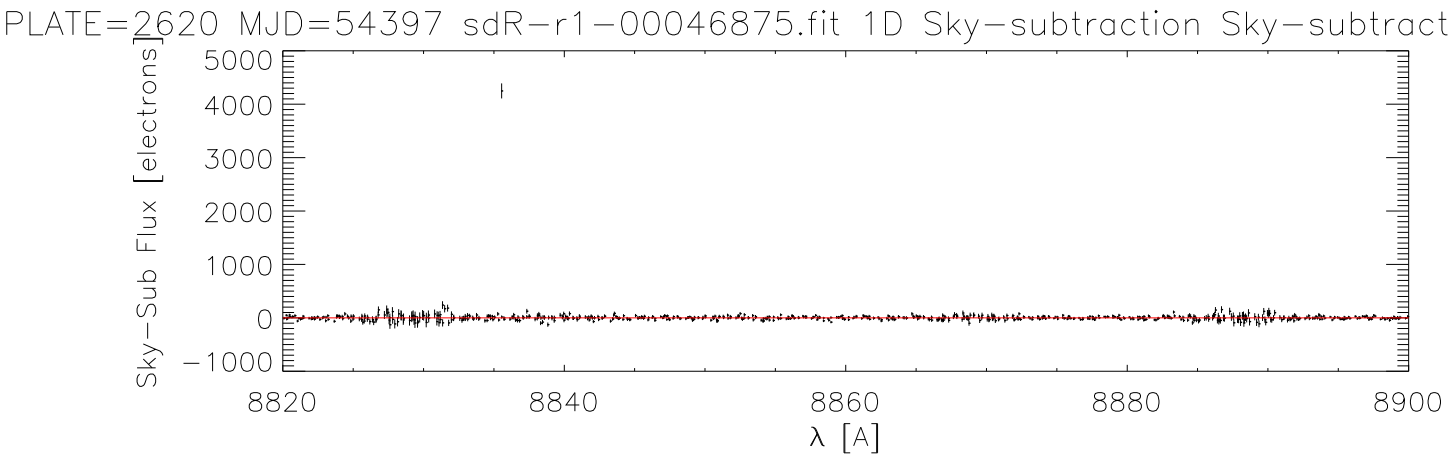

sky shift, pixels
0.3
0.2
0.1
0.0
5000
6000
7000
8000
9000
10000

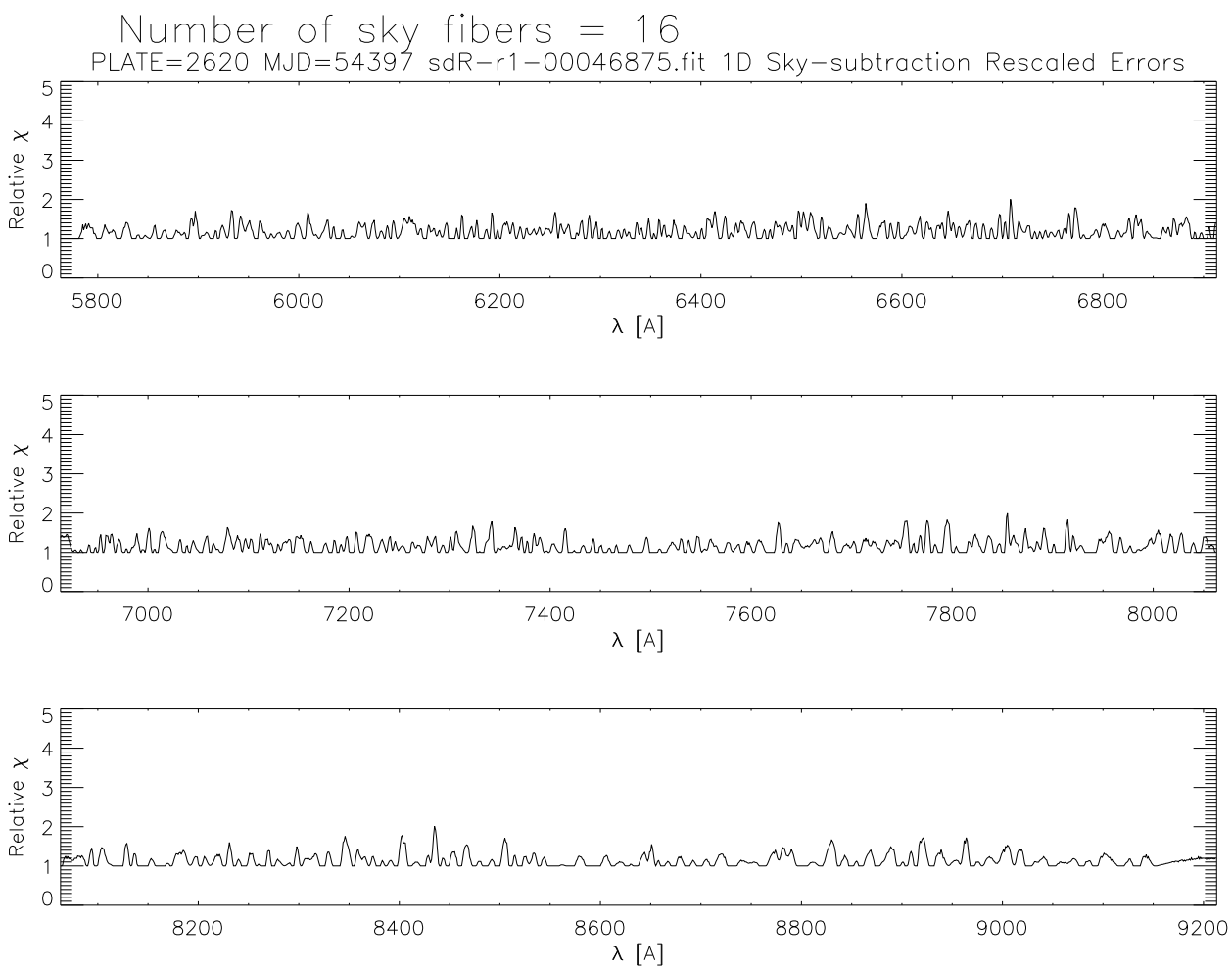

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046875.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

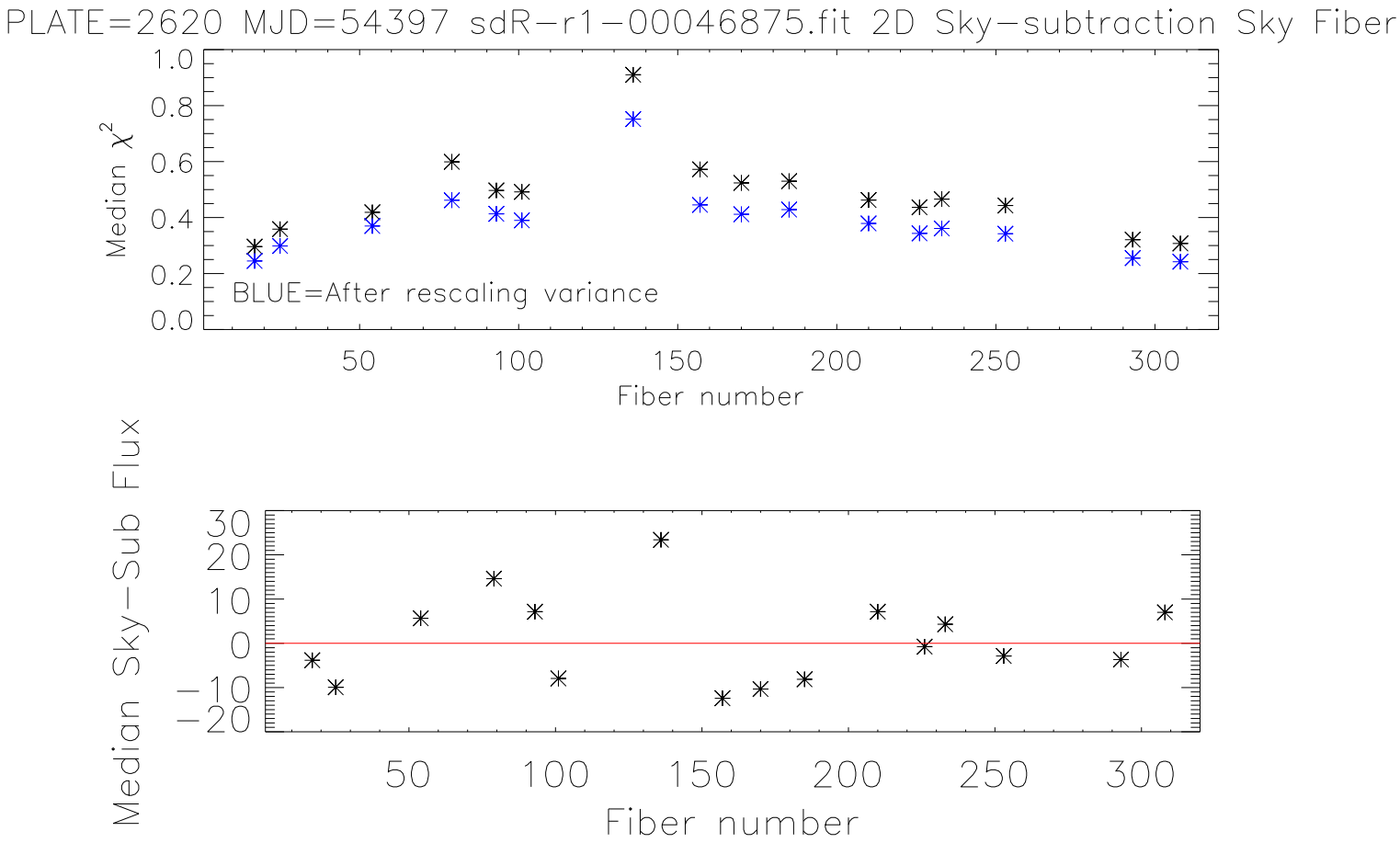
es= 0.0000

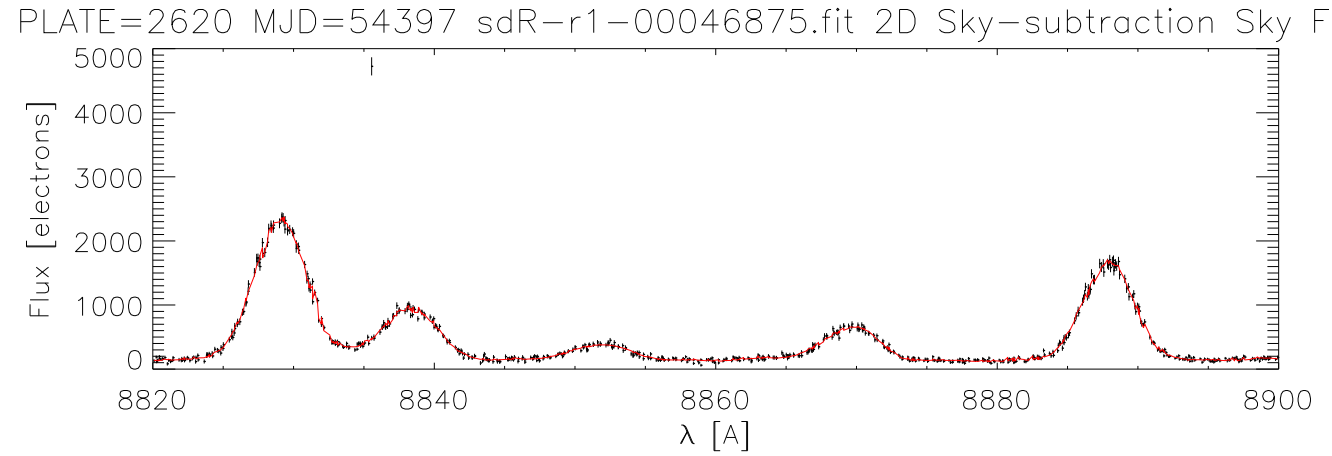

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

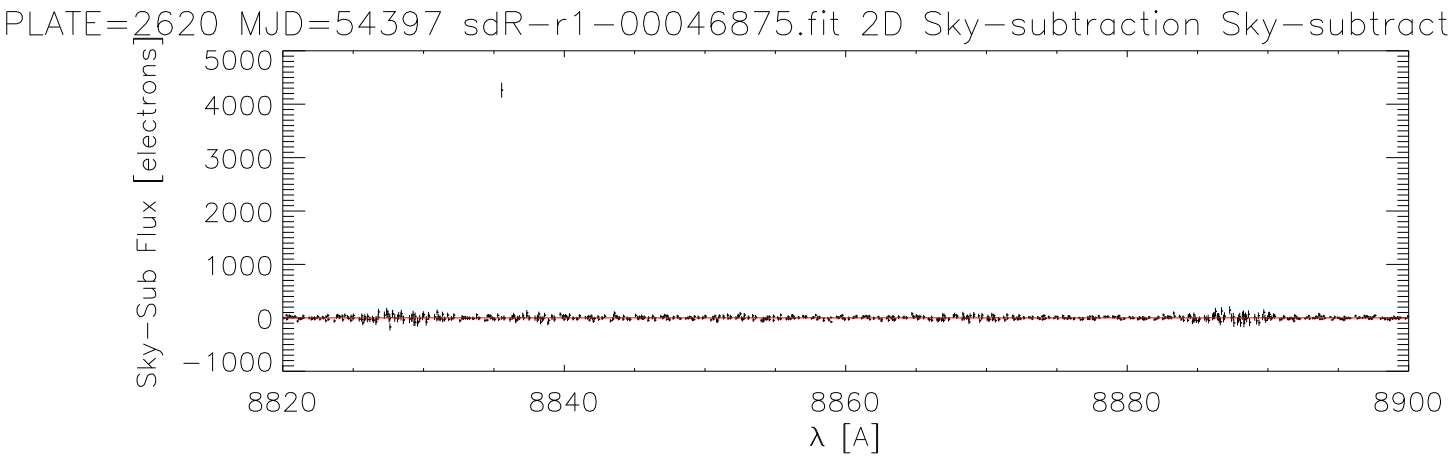

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

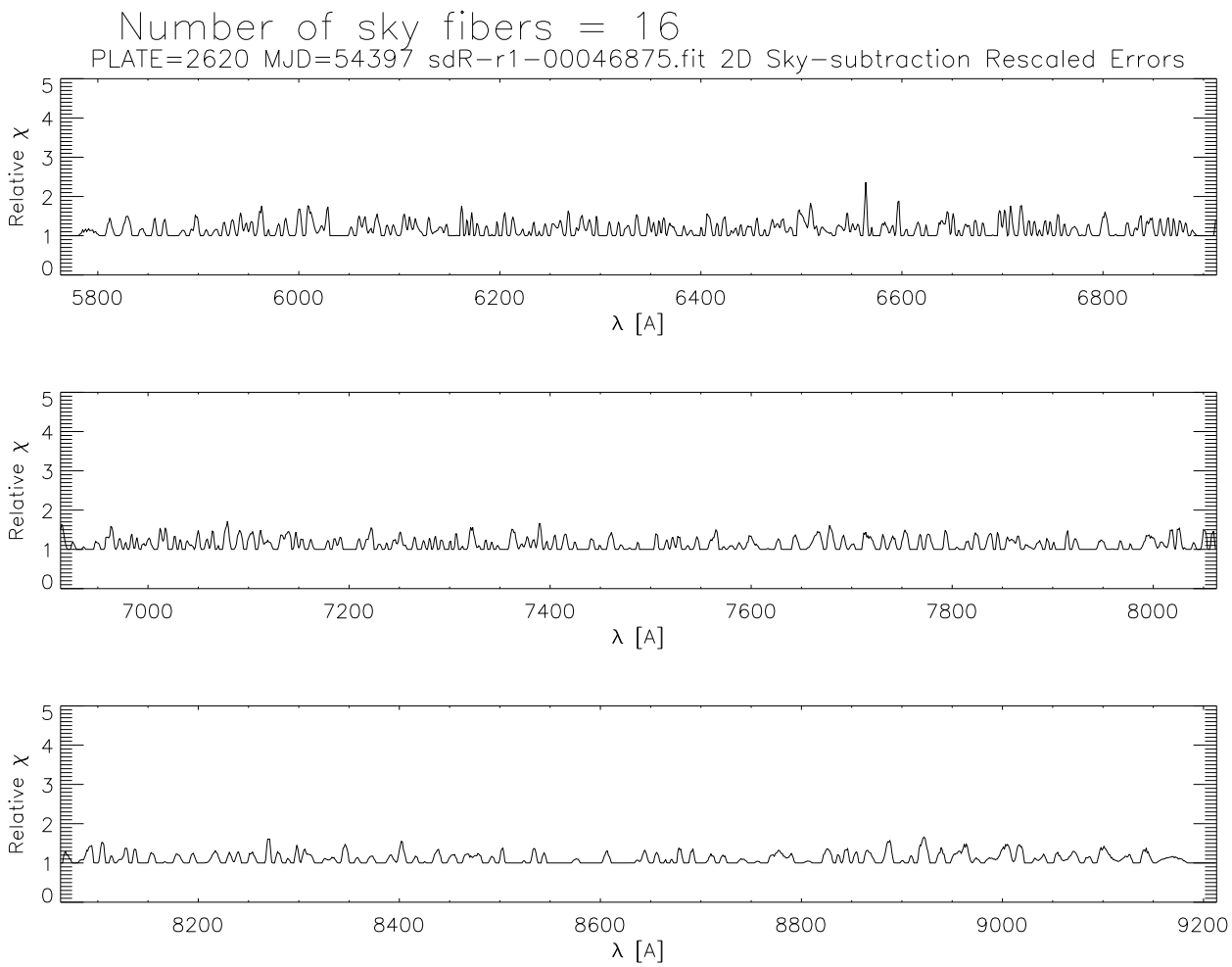

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

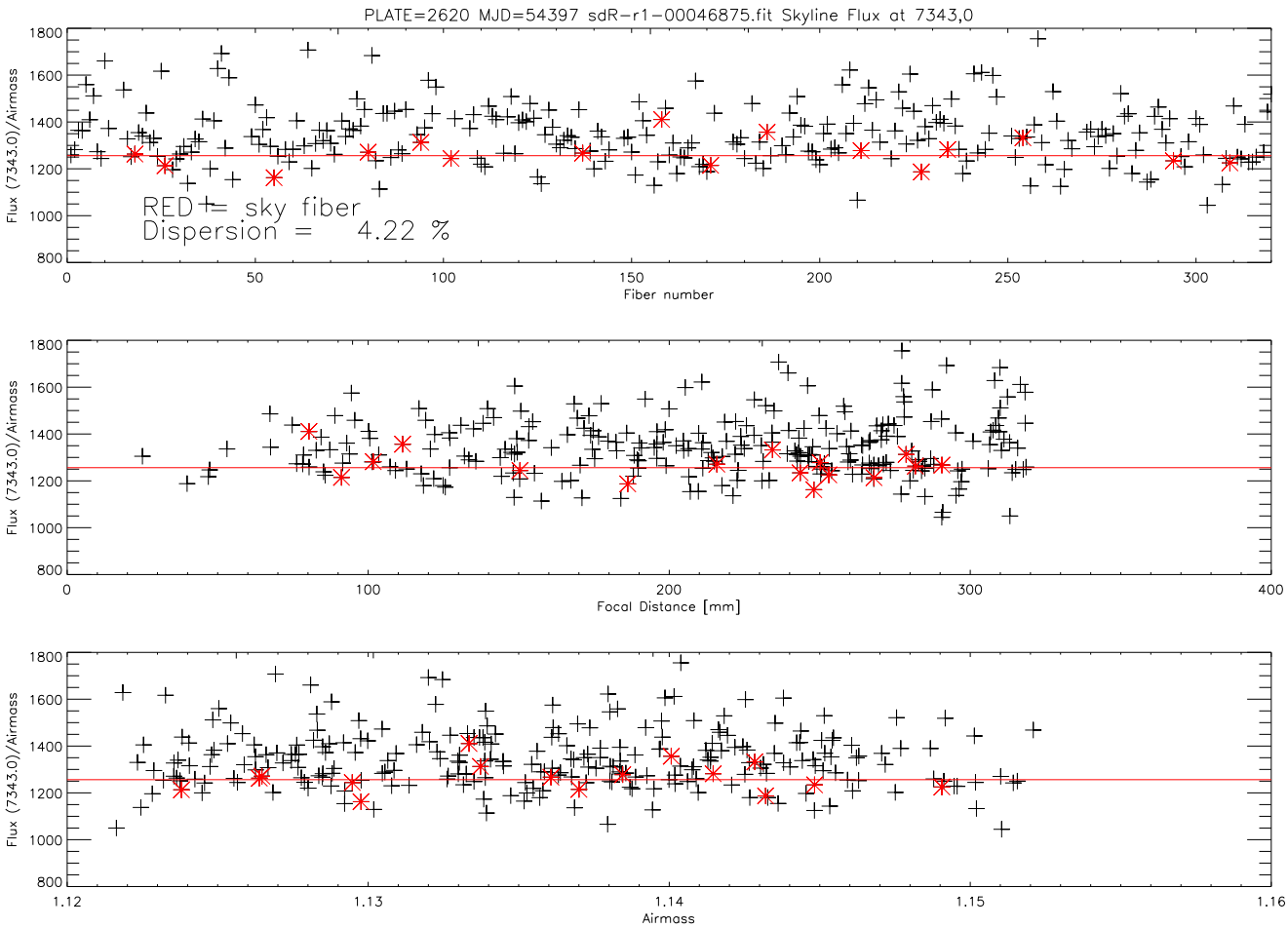

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046875.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

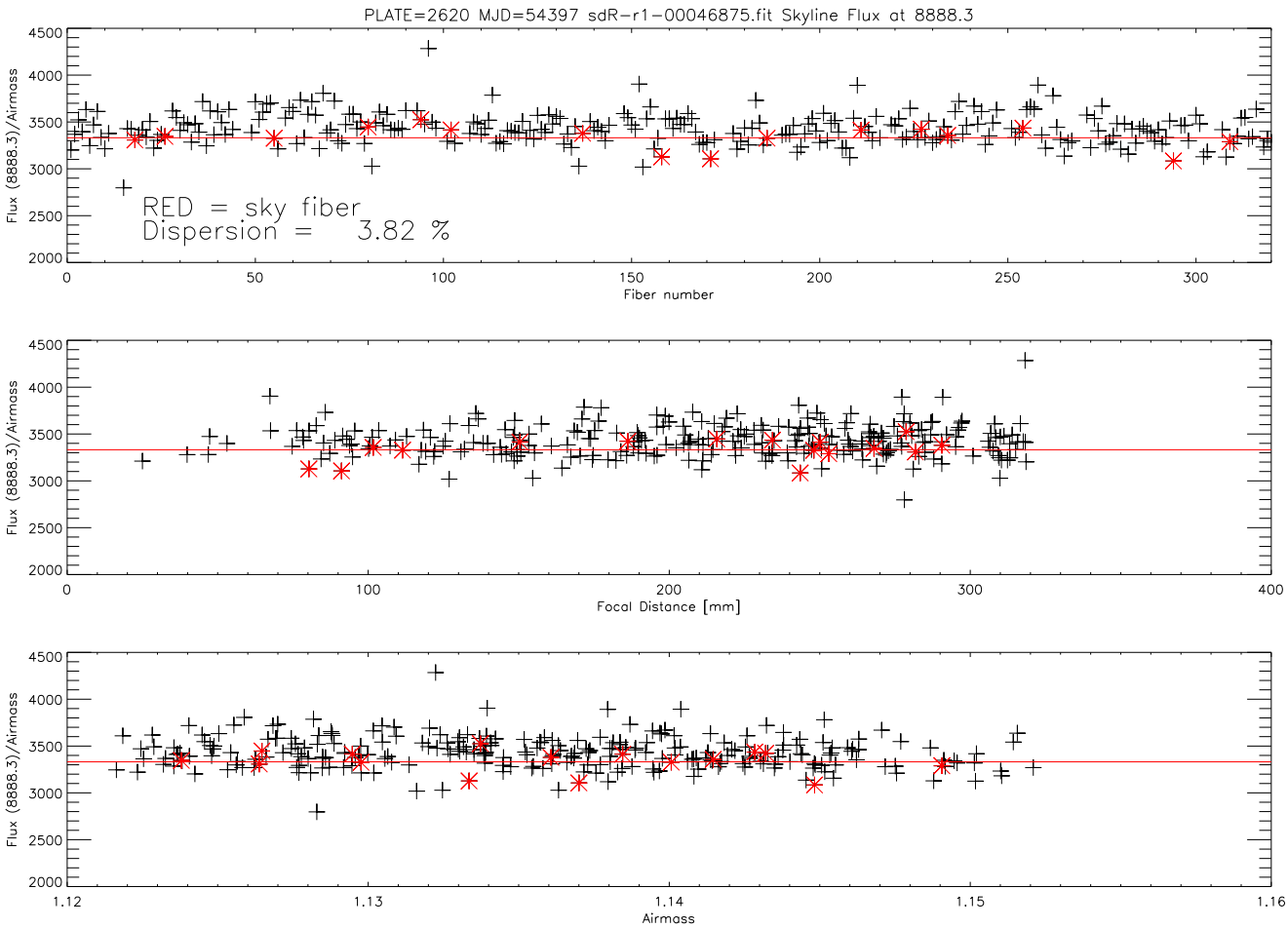

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

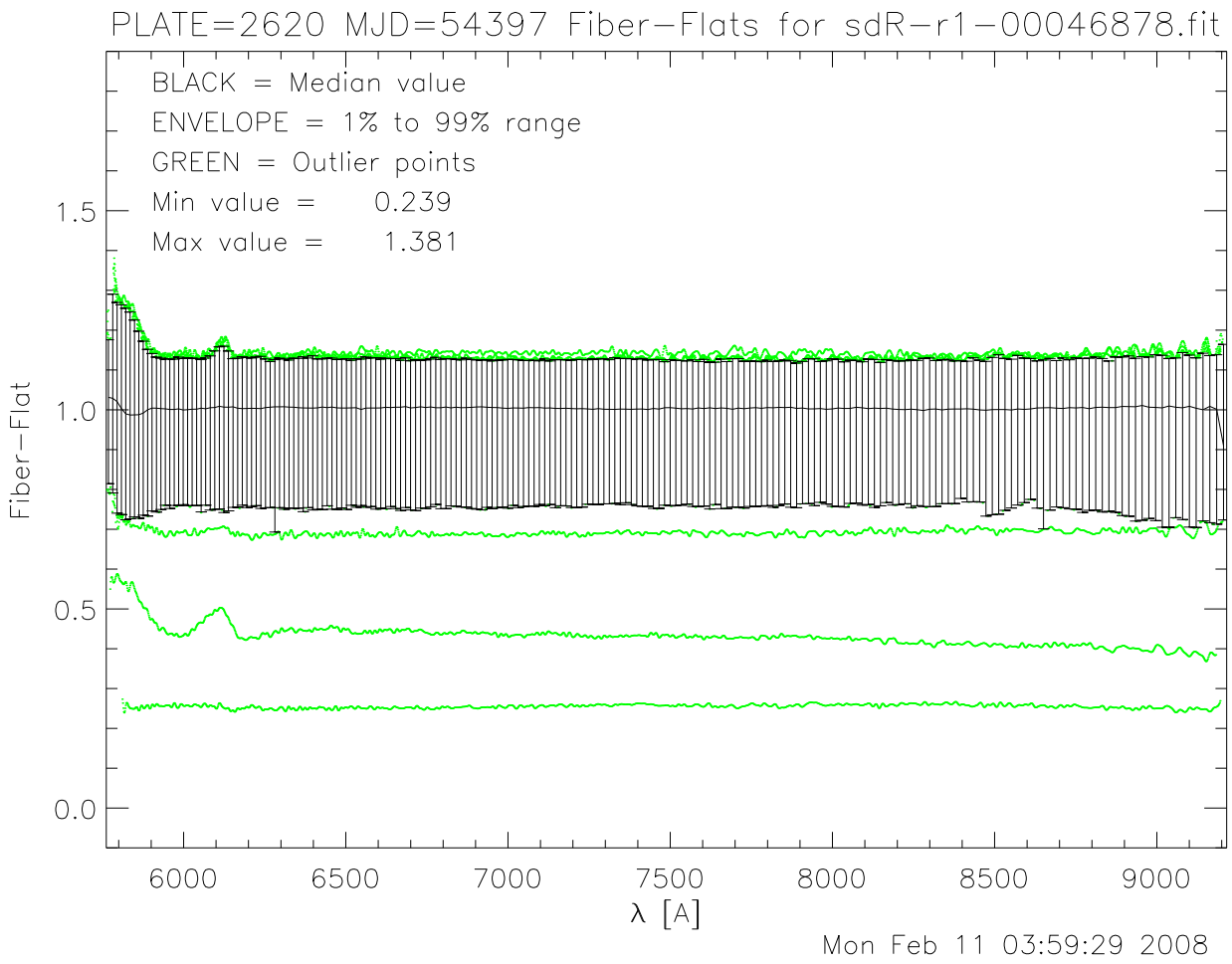

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

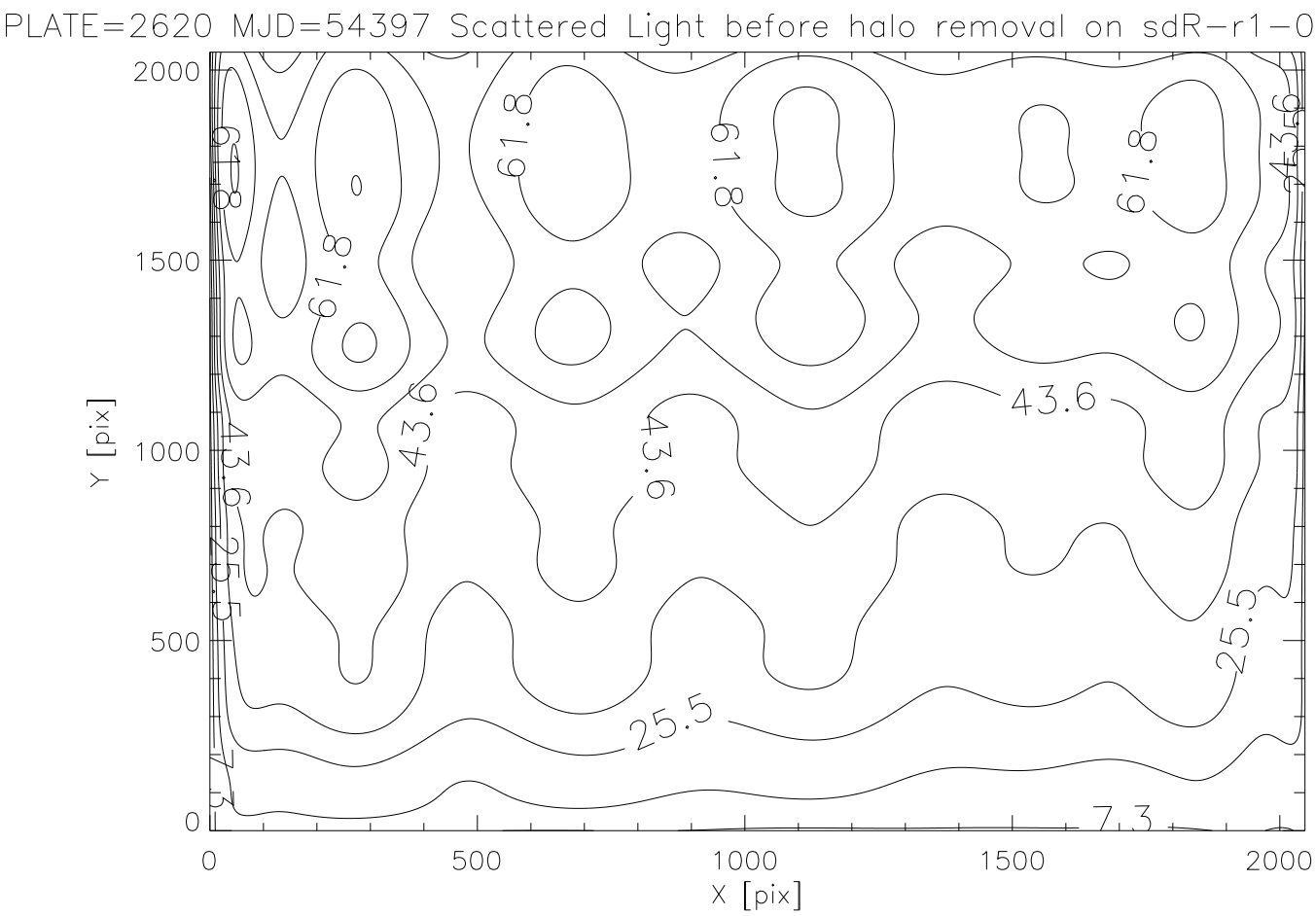

PLATE=2620 MJD=54397 sdR-r1-00046875.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

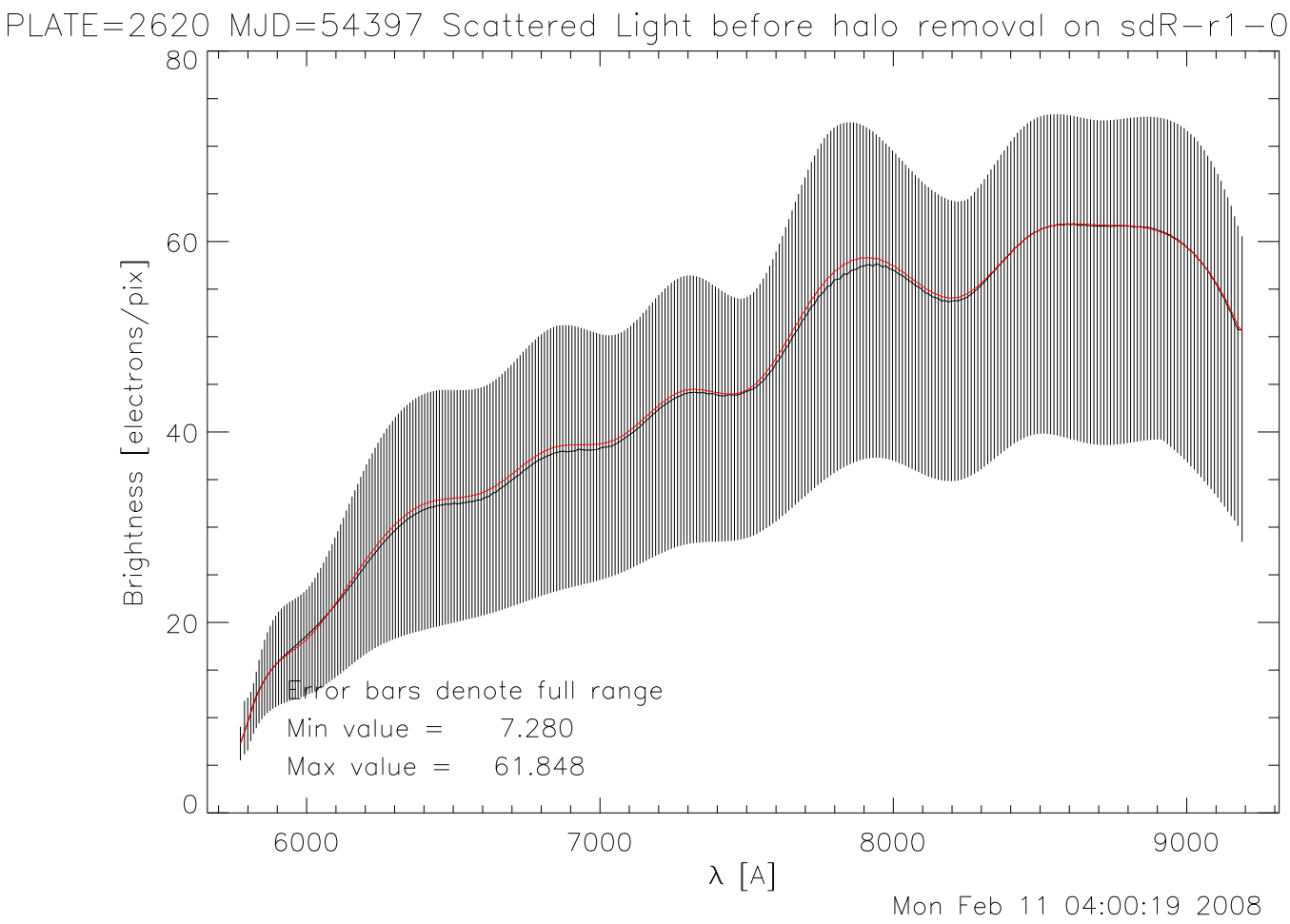

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046875.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

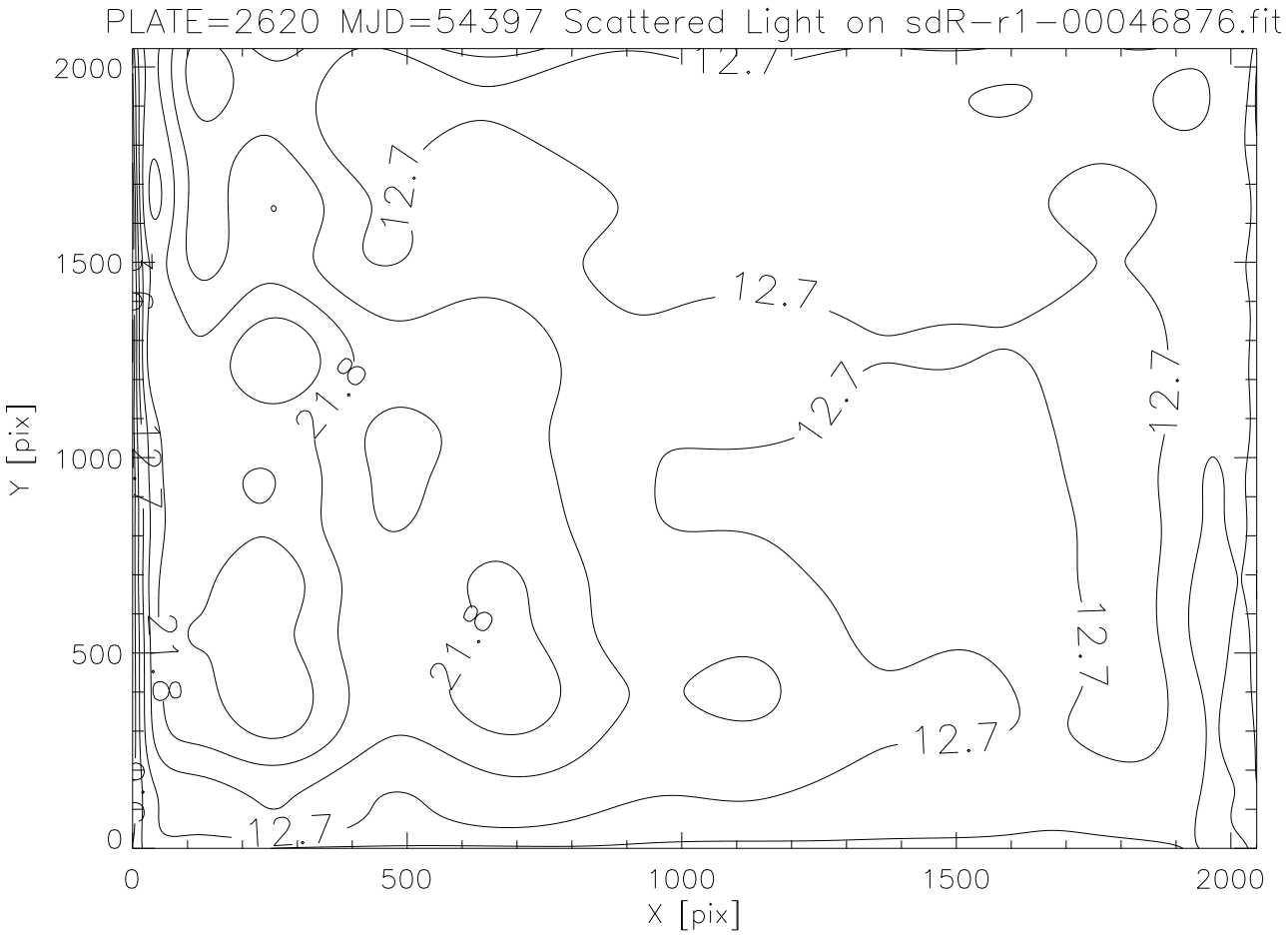

PLATE=2620 MJD=54397 sdR-r1-00046875.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.22 %
Fiber number
Focal Distance [mm]
Airmass

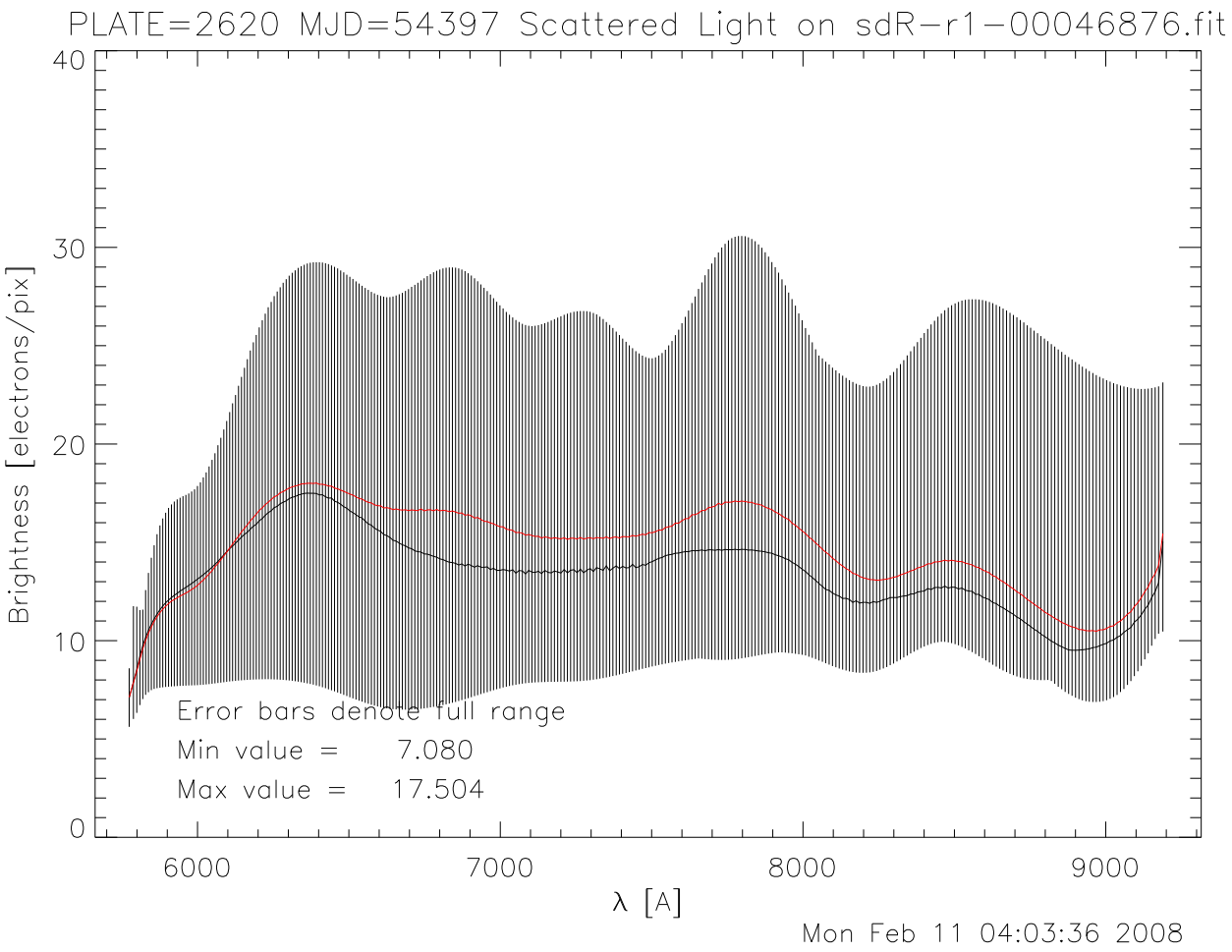

PLATE=2620 MJD=54397 sdR-r1-00046875.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.82 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

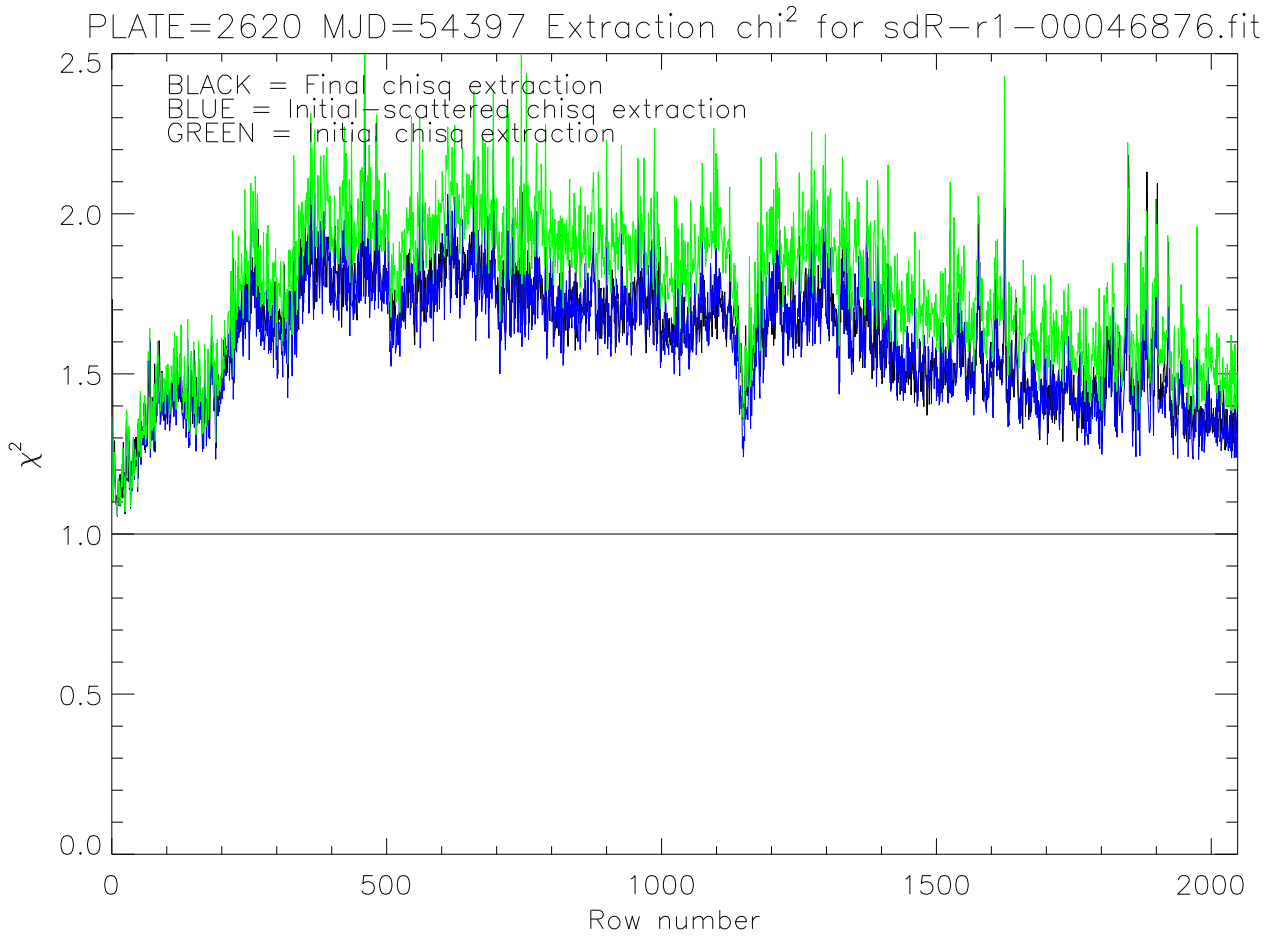

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 03:59:29 2008

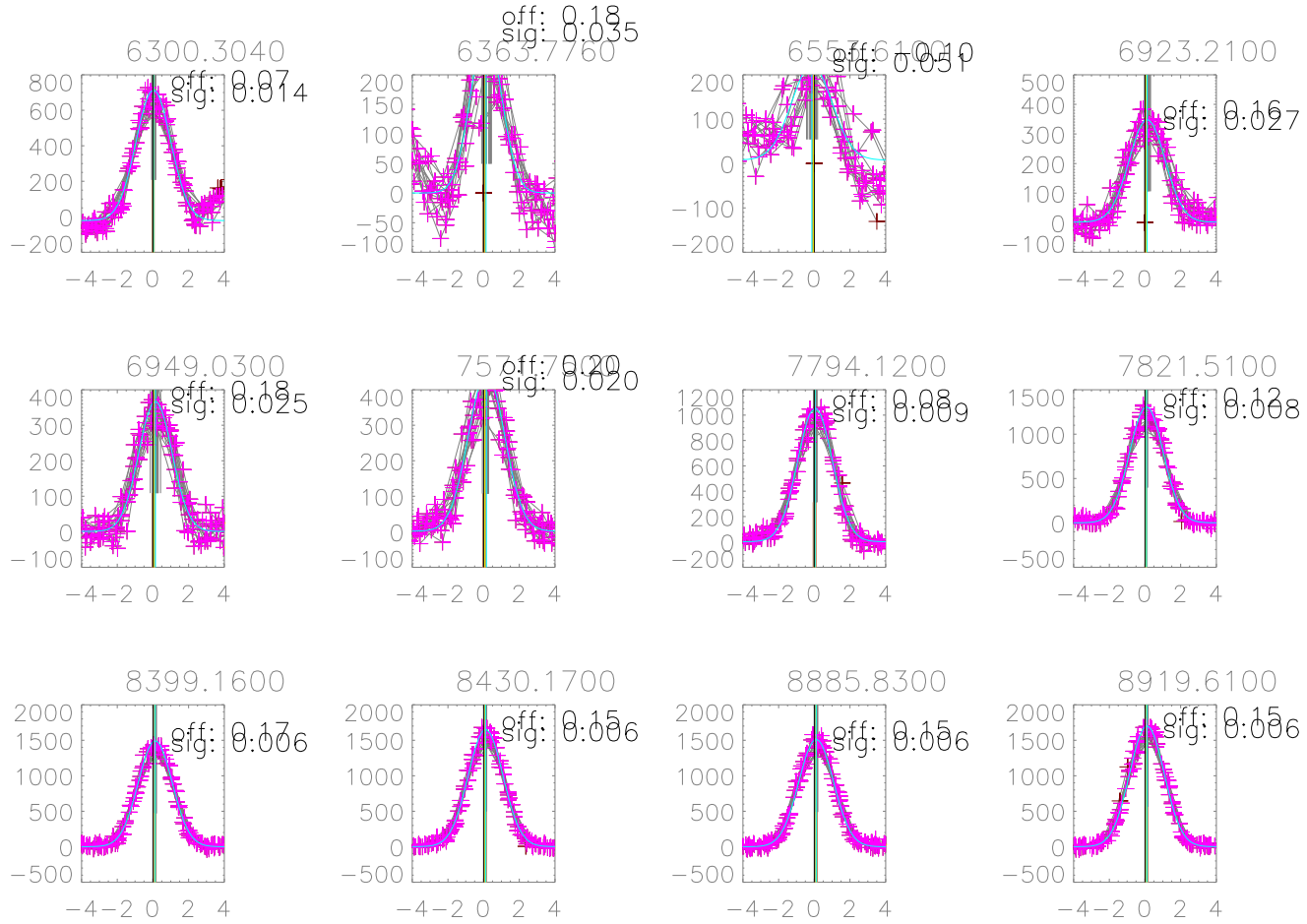

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046876.fi
61.8
43.6
25.5
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

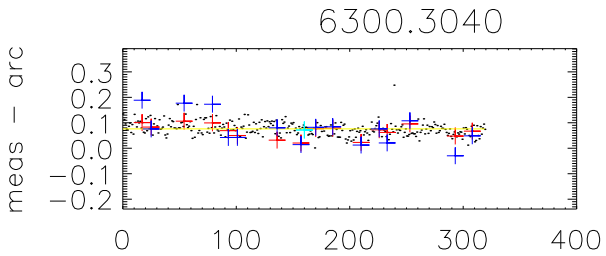

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046876.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.280
Max value = 61.848
Mon Feb 11 04:00:19 2008

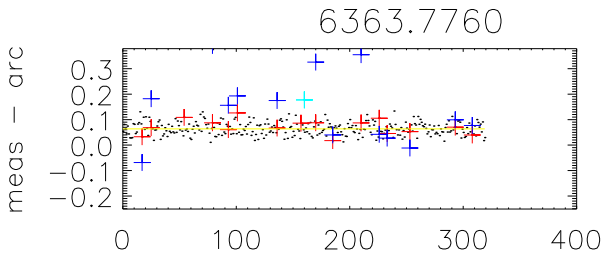

PLATE=2620 MJD=54397 Scattered Light on sdR−r1−00046876.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8

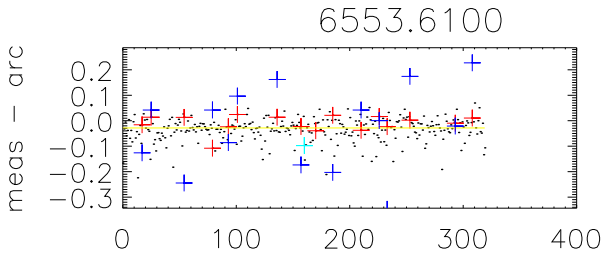

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046876.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.080
Max value = 17.504
Mon Feb 11 04:03:36 2008

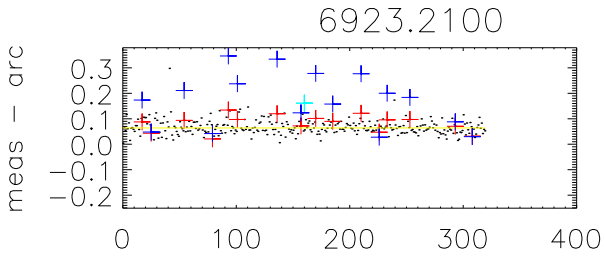

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046876.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

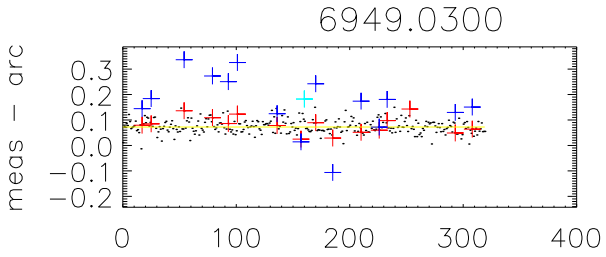

6300.3040
off: 0.07
sig: 0.014
6363.7760
off: 0.18
sig: 0.035
6557.6100
sig: 0.051
6923.2100
off: 0.16
sig: 0.027
6949.0300
off: 0.18
sig: 0.025
7794.1200
off: 0.08
sig: 0.009
7821.5100
off: 0.12
sig: 0.008
8399.1600
off: 0.17
sig: 0.006
8430.1700
off: 0.15
sig: 0.006
8885.8300
off: 0.15
sig: 0.006
8919.6100
off: 0.15
sig: 0.006

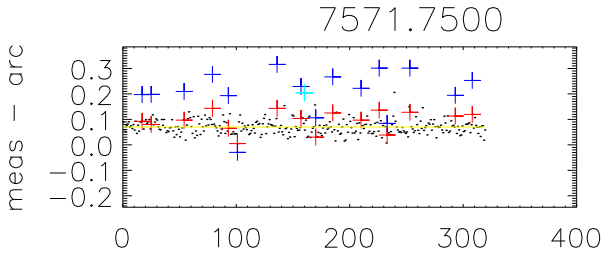

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

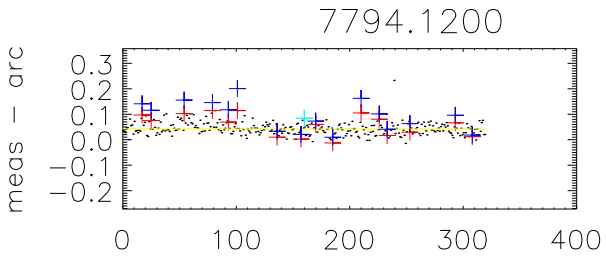

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

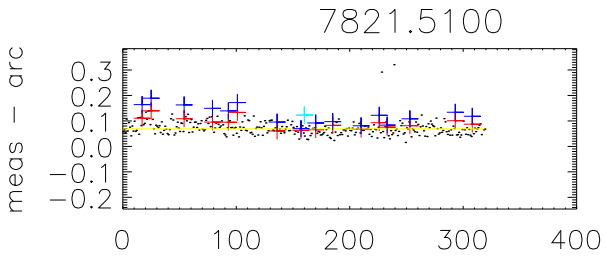

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

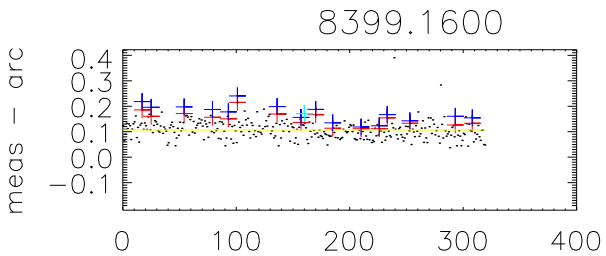

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

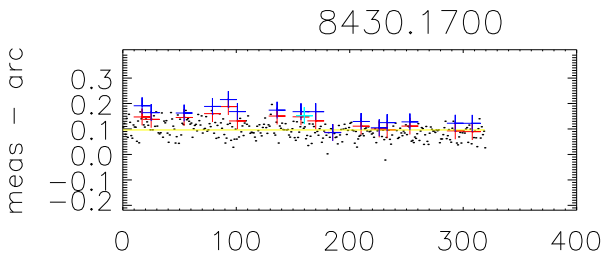

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

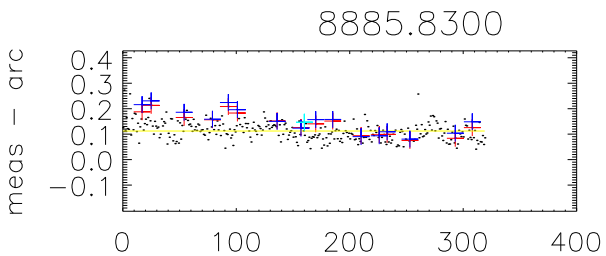

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

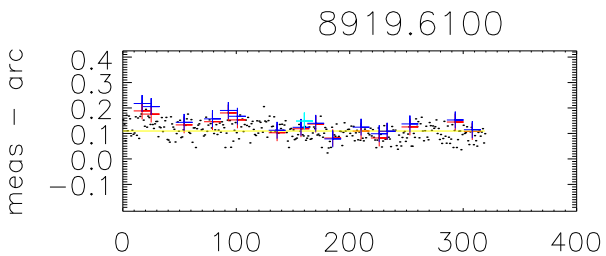

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

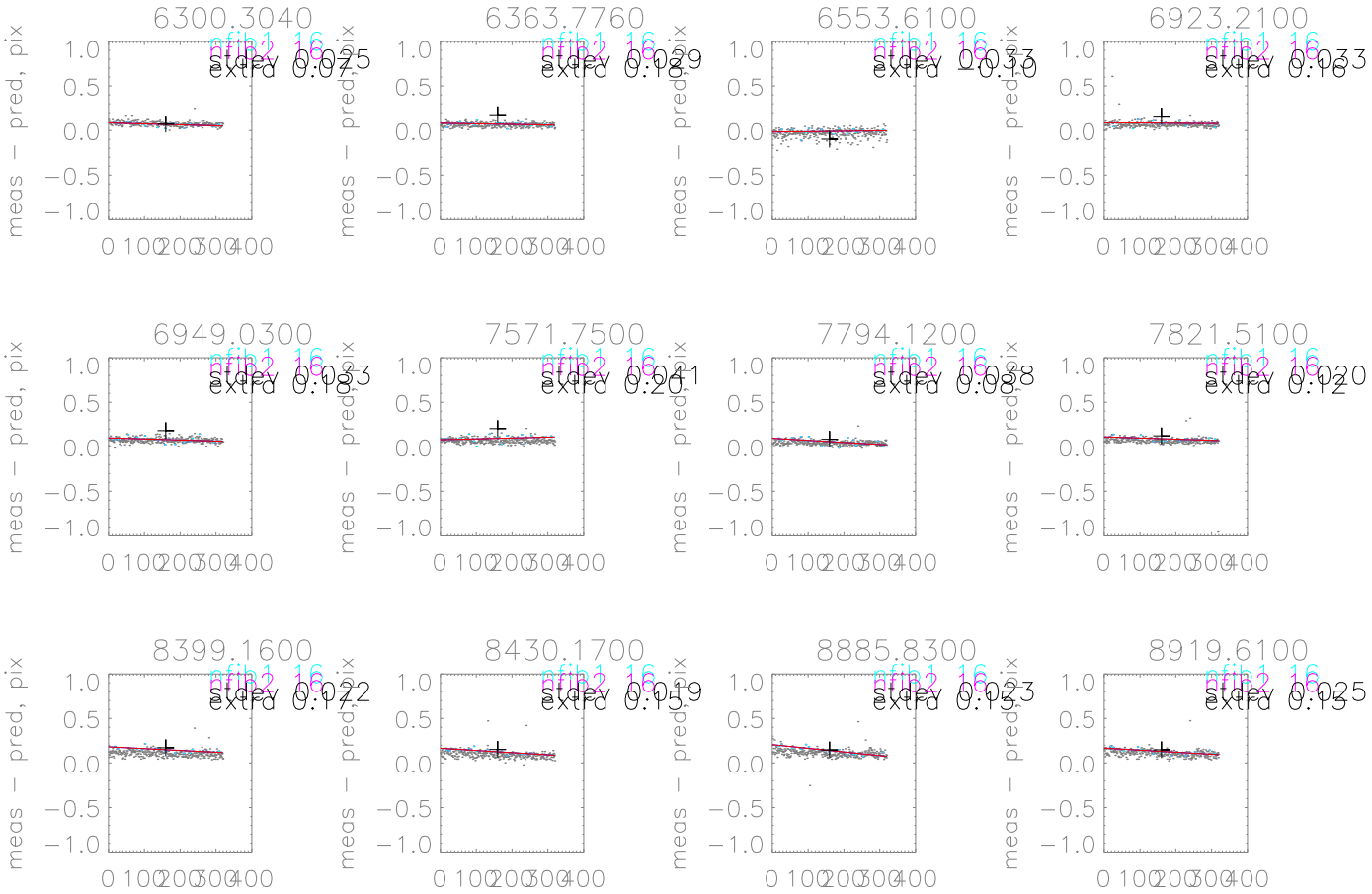

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

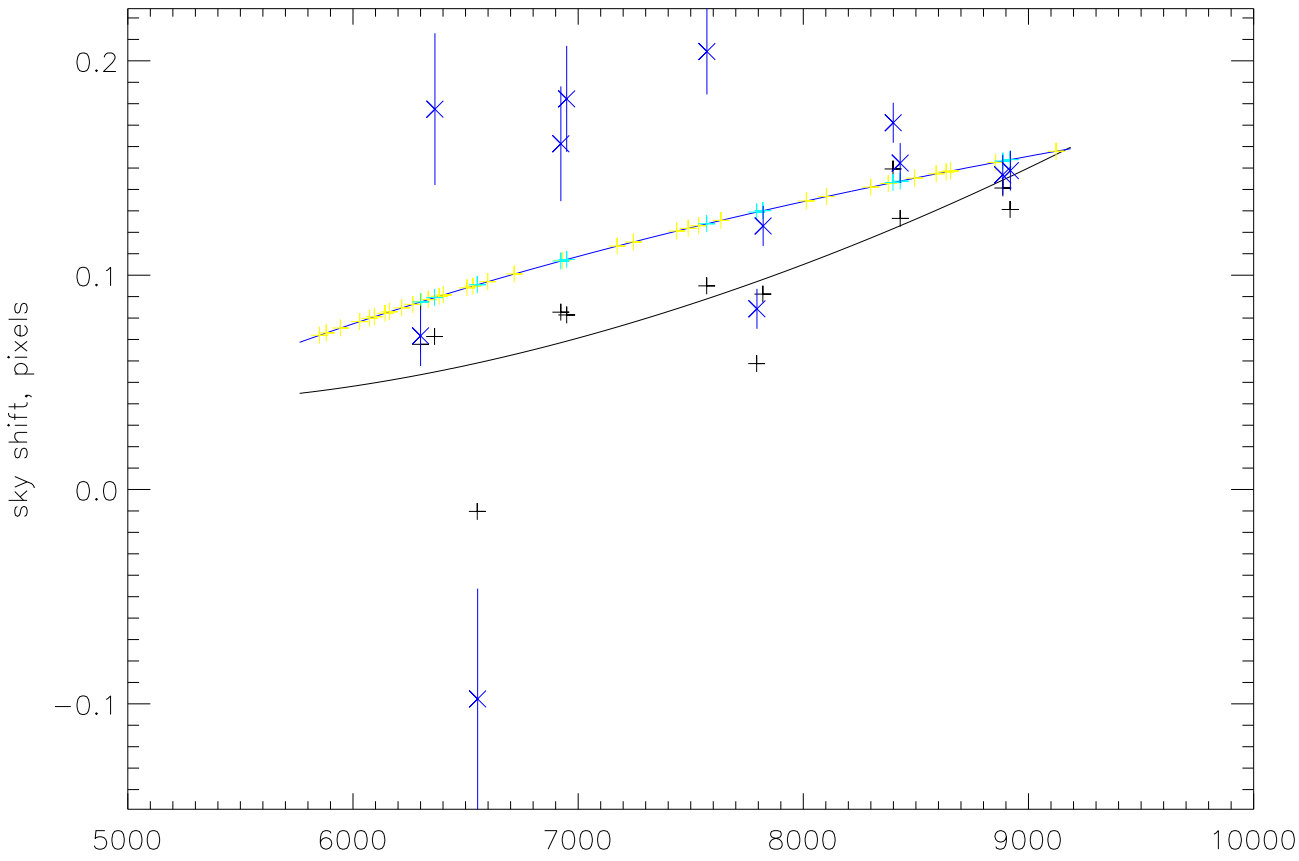

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

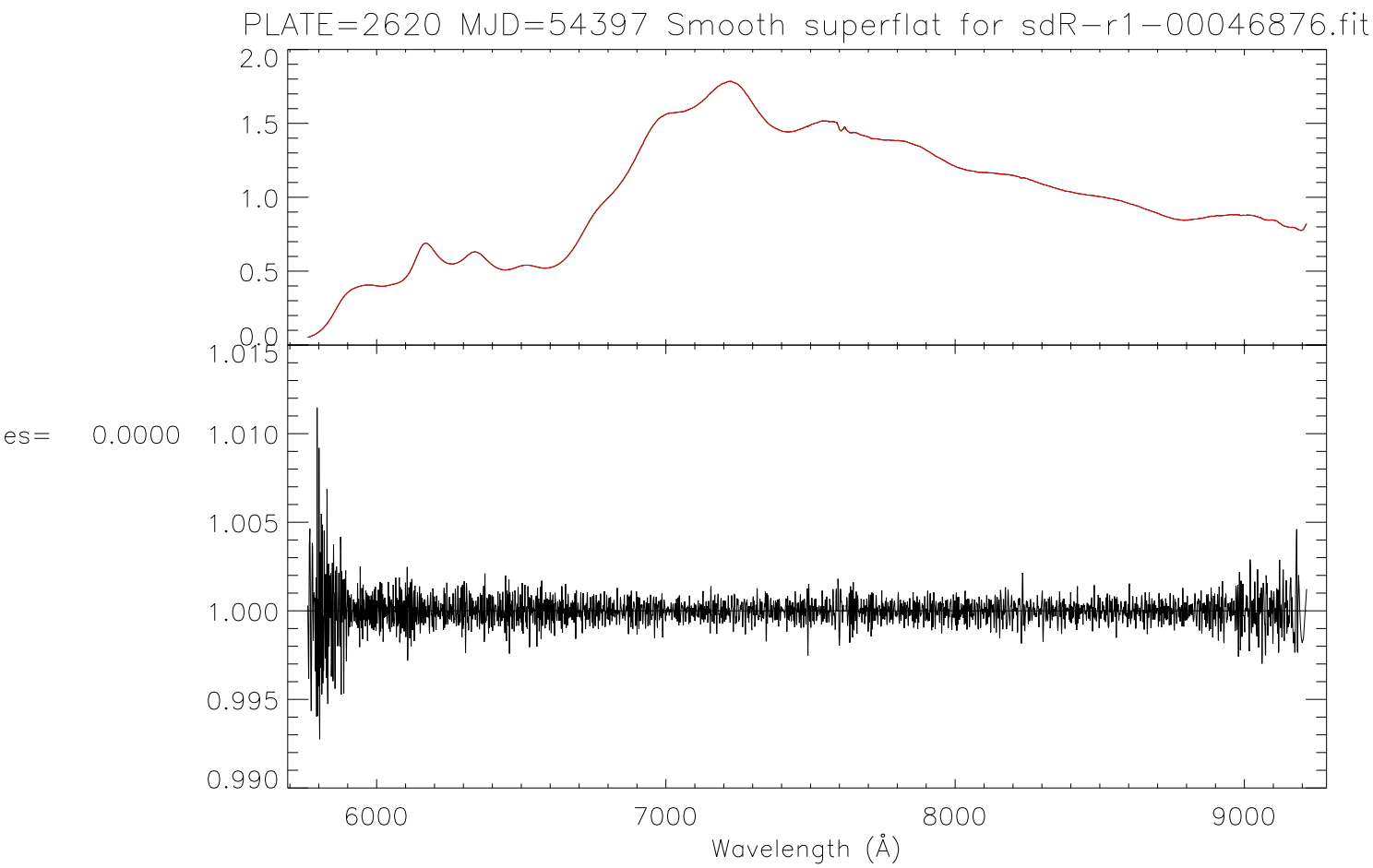

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

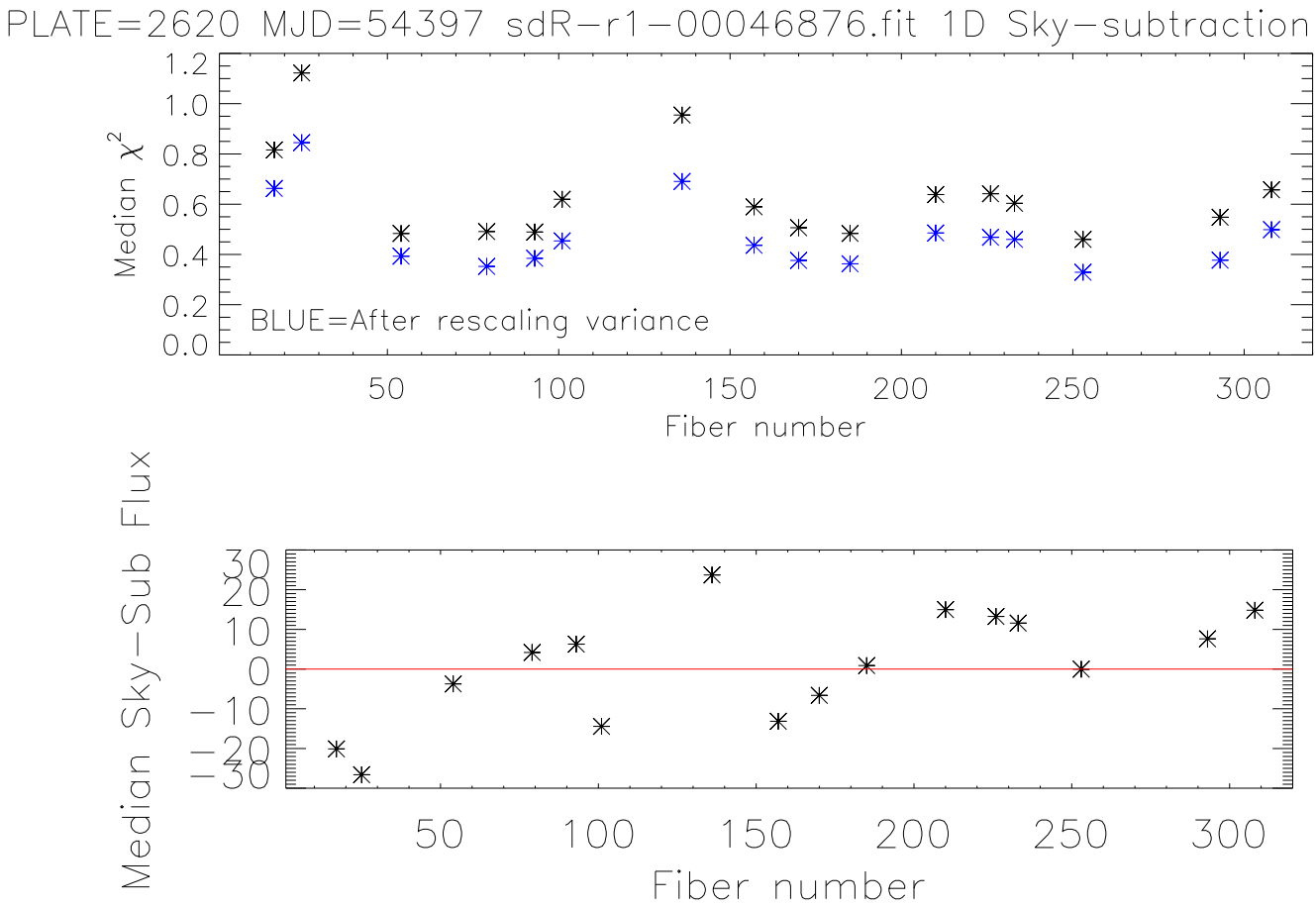

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

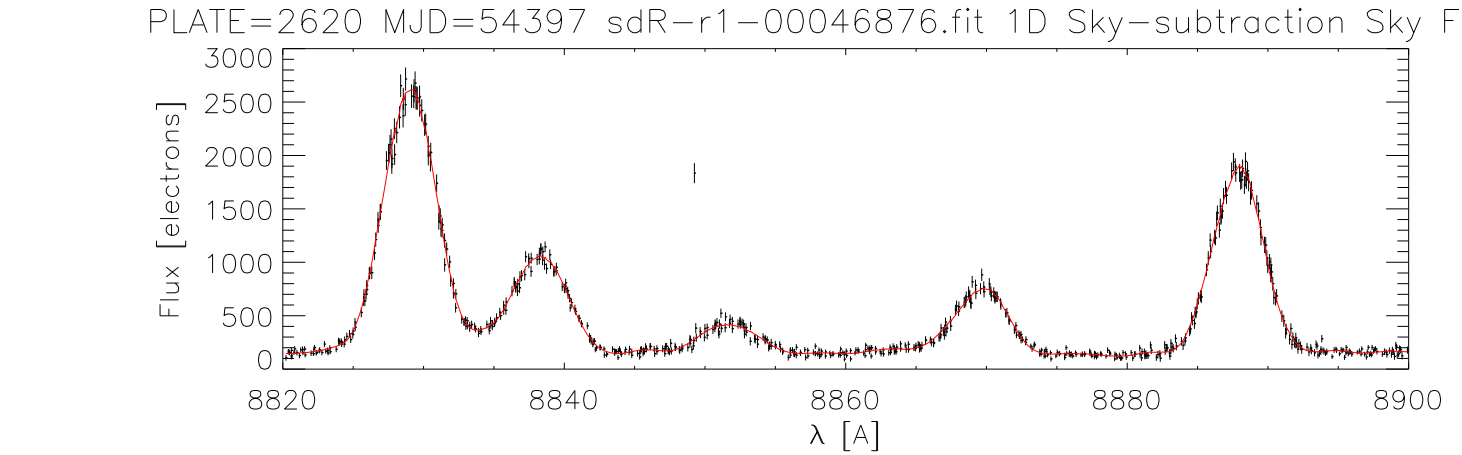

6300.3040
stdev 0.025
extra 0.07
6363.7760
stdev 0.029
extra 0.18
6553.6100
stdev 0.033
extra −0.10
6923.2100
stdev 0.033
extra 0.16
6949.0300
stdev 0.033
extra 0.18
7571.7500
stdev 0.041
extra 0.20
7794.1200
stdev 0.038
extra 0.08
7821.5100
stdev 0.020
extra 0.12
8399.1600
stdev 0.022
extra 0.17
8430.1700
stdev 0.019
extra 0.15
8885.8300
stdev 0.023
extra 0.13
8919.6100
stdev 0.025
extra 0.13
meas − pred, pix
mfhs2 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

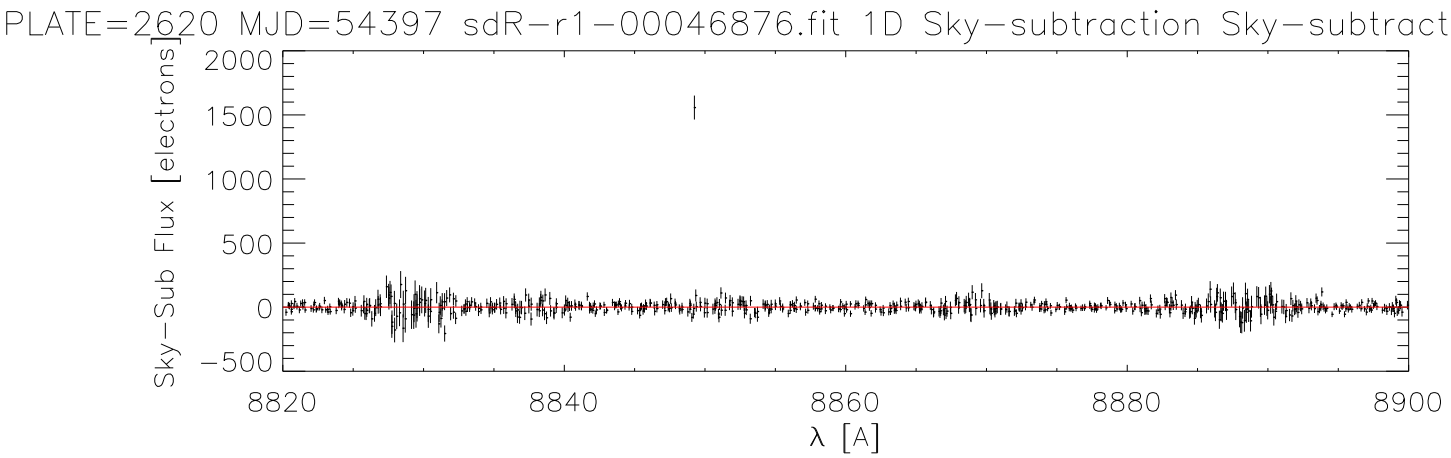

sky shift, pixels
0.2
0.1
0.0
−0.1
5000
6000
7000
8000
9000
10000

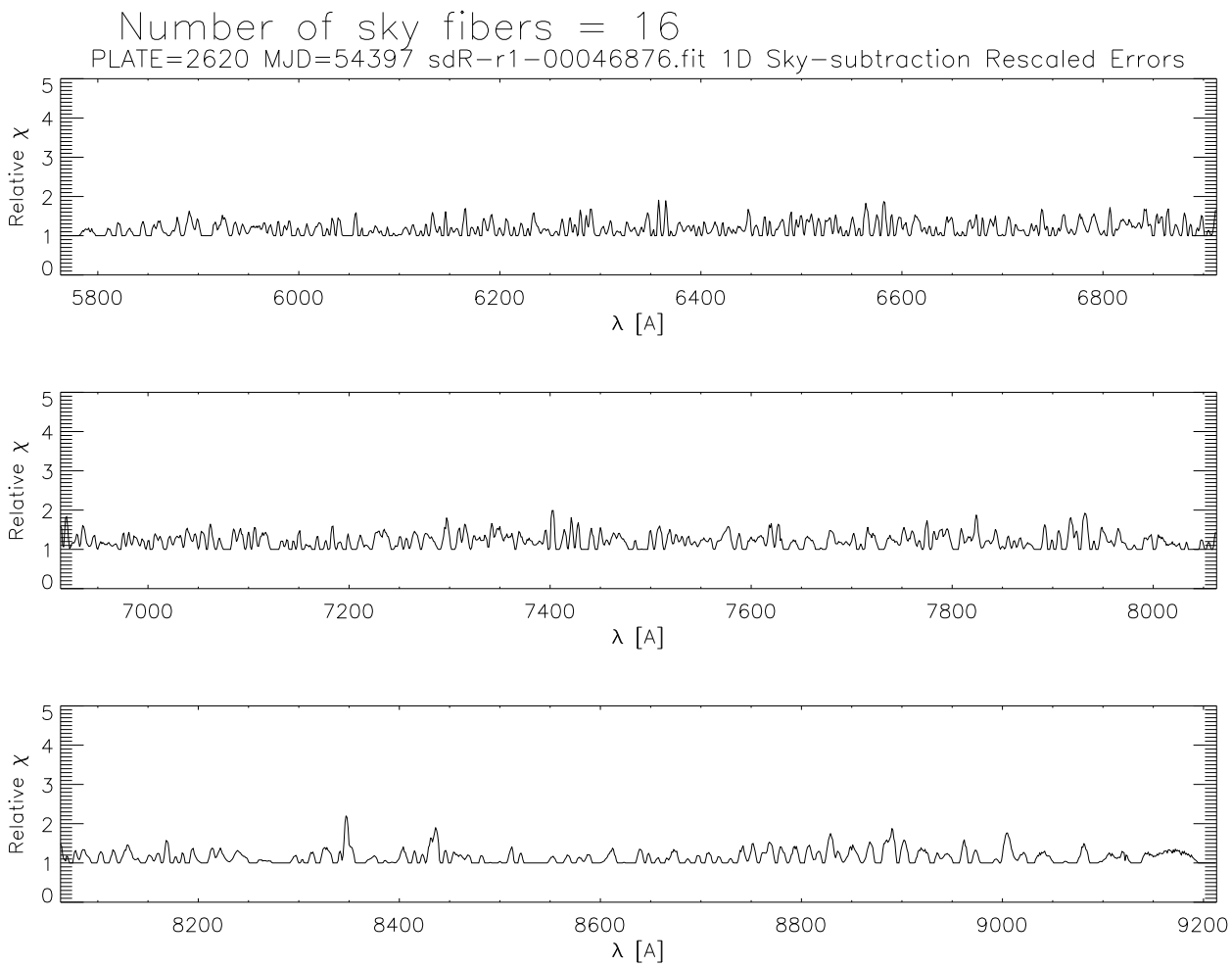

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046876.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

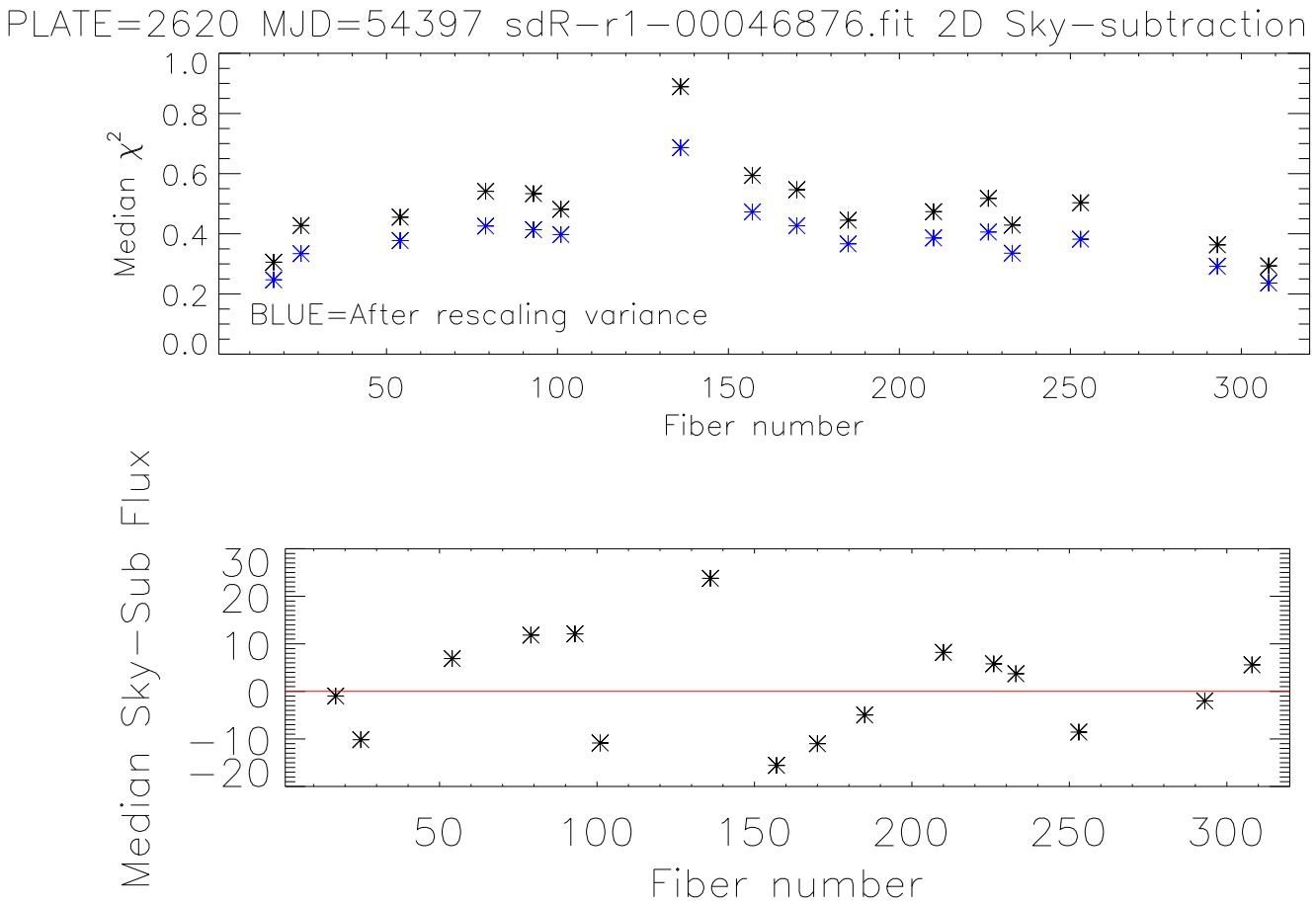
es= 0.0000

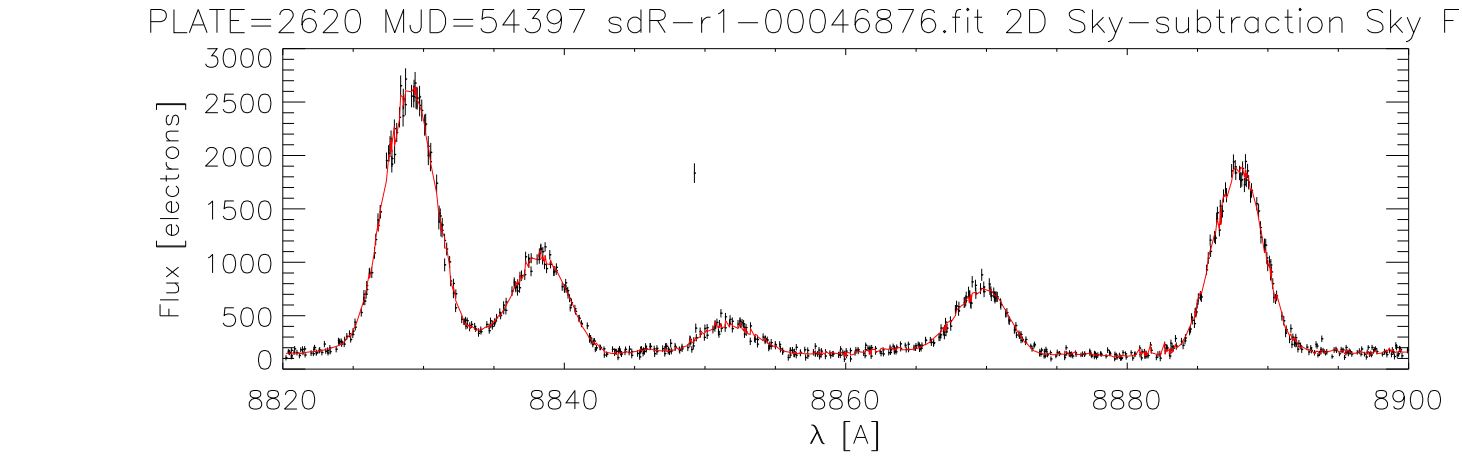

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

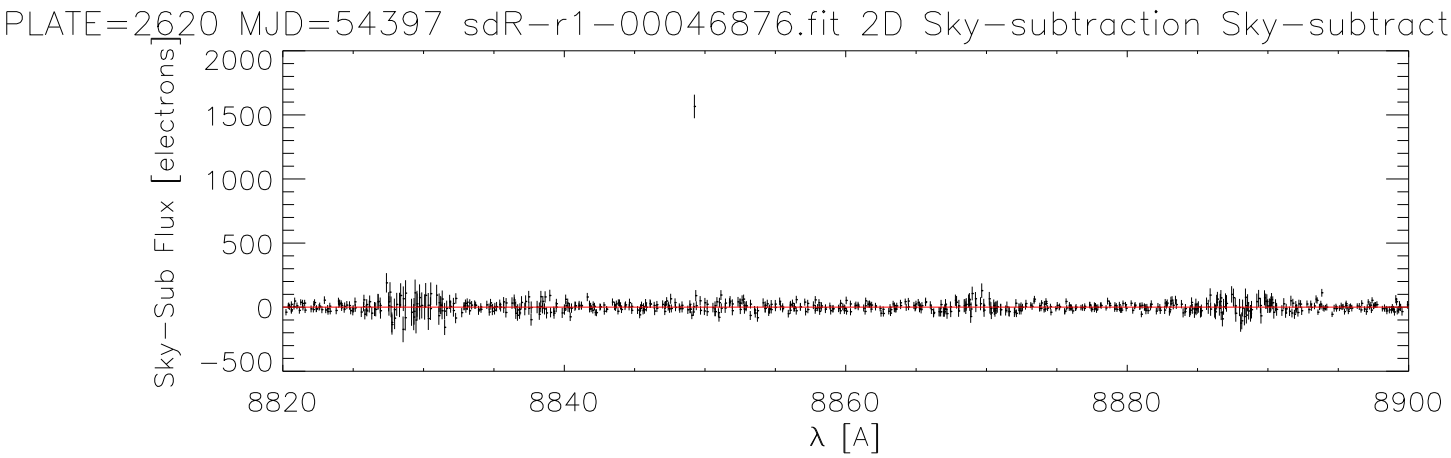

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

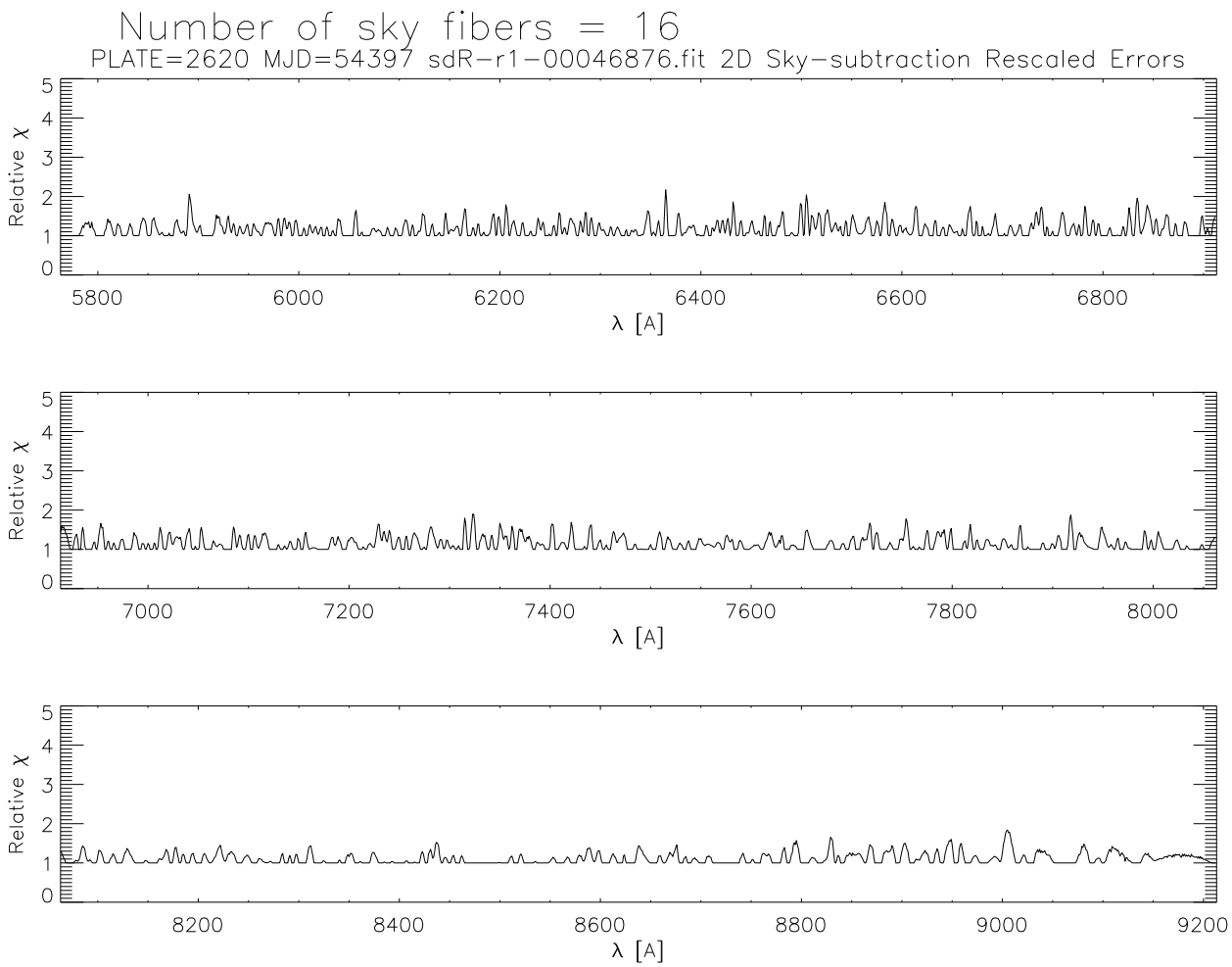

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

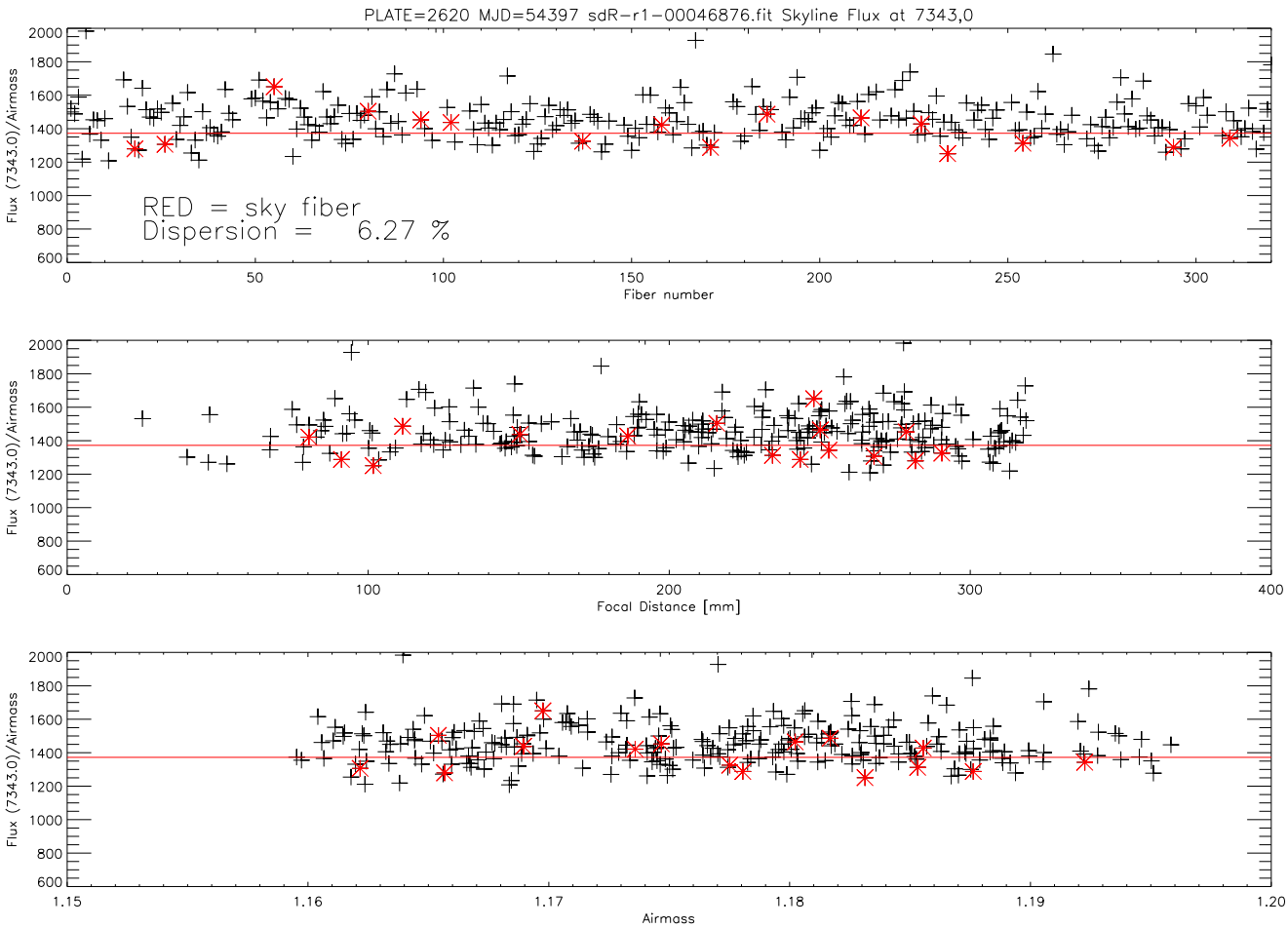

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046876.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

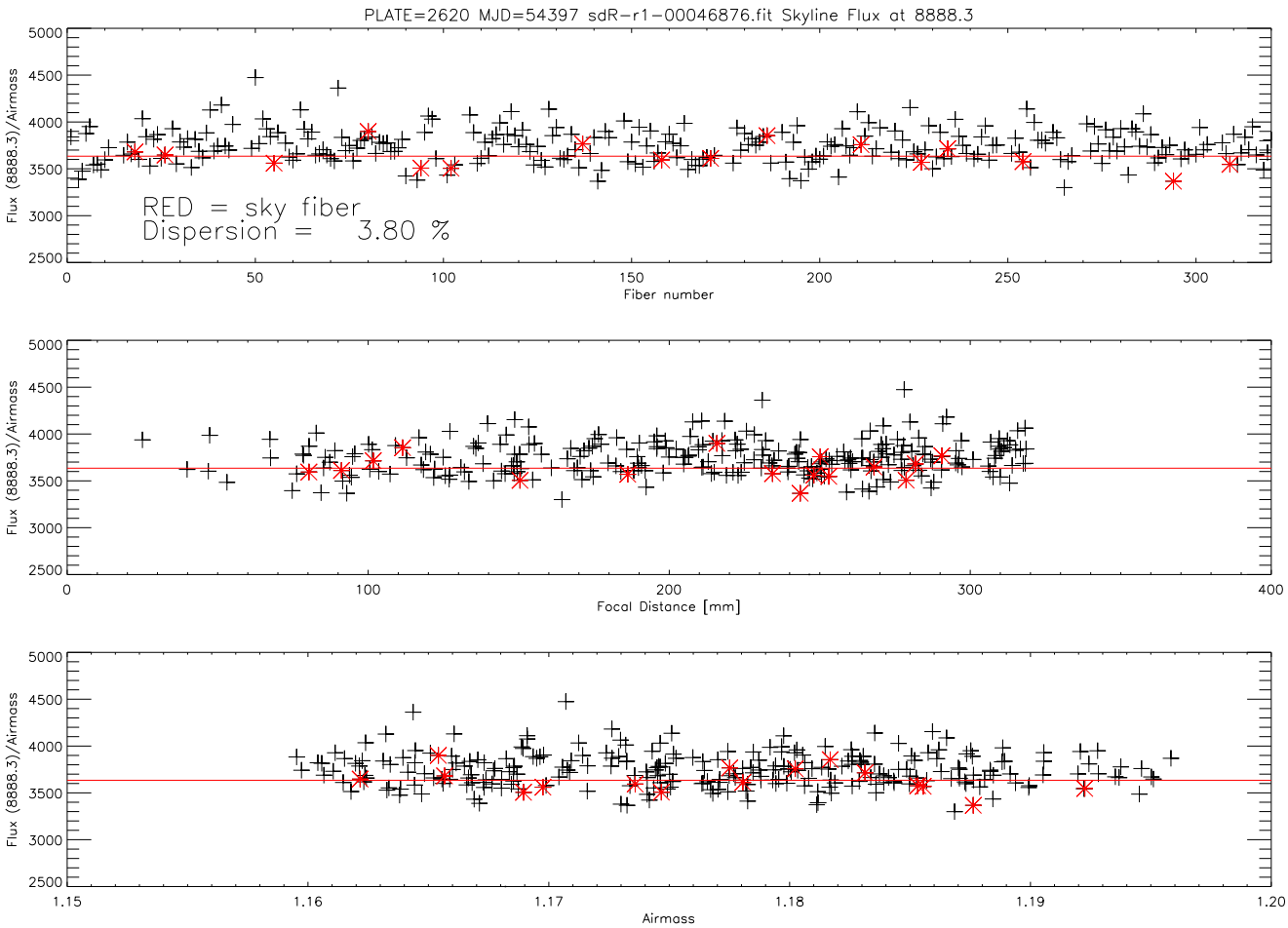

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

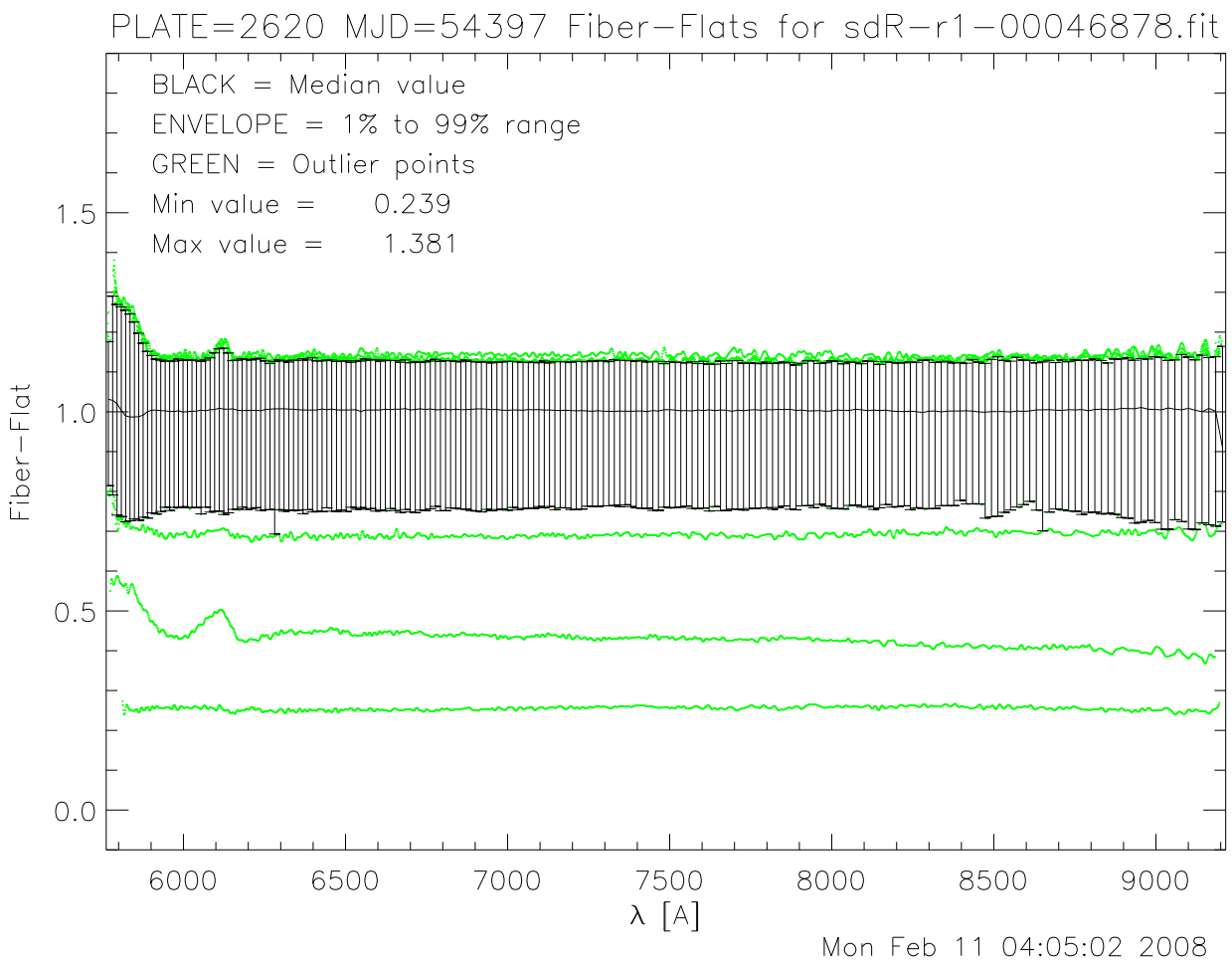

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

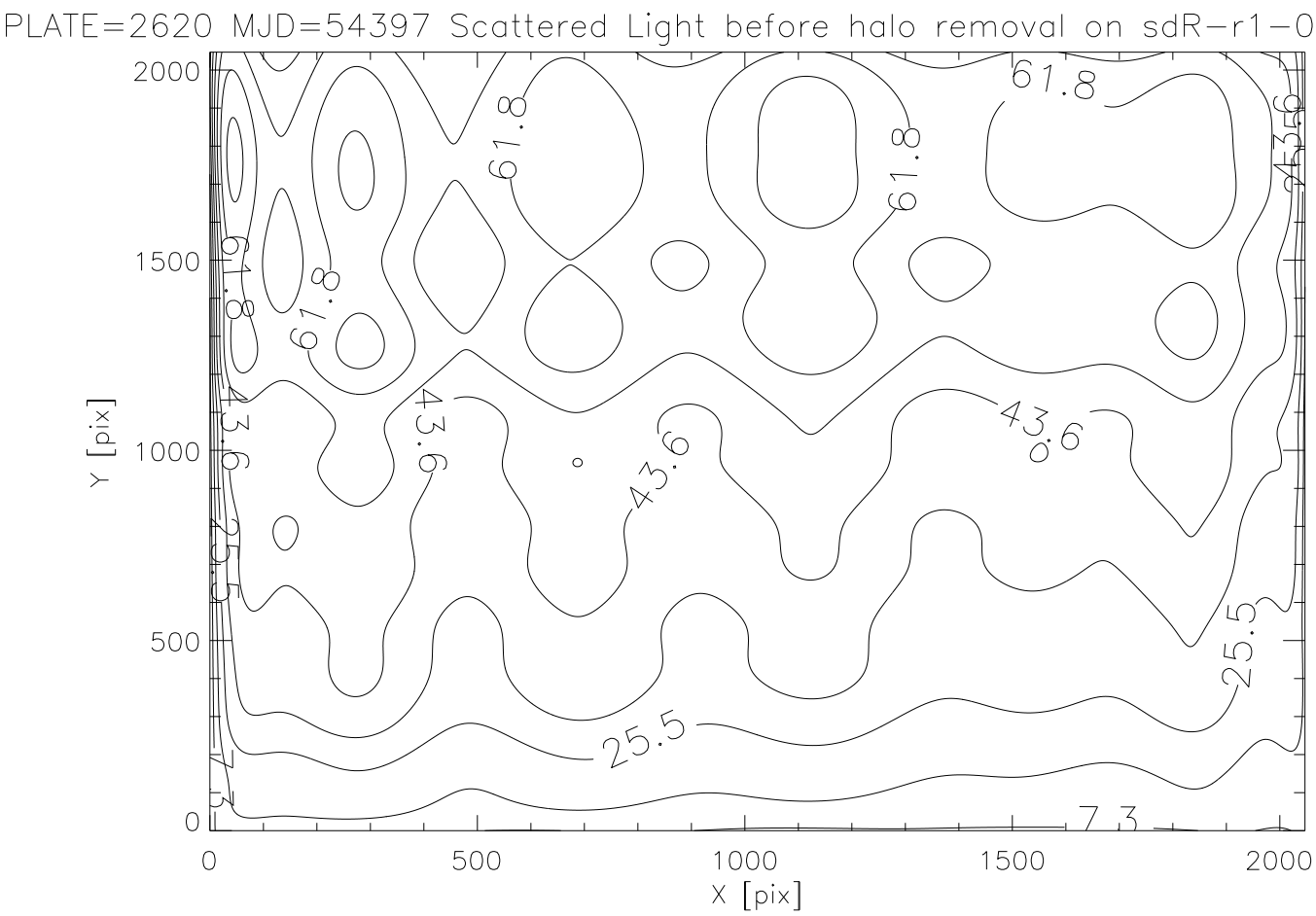

PLATE=2620 MJD=54397 sdR-r1-00046876.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

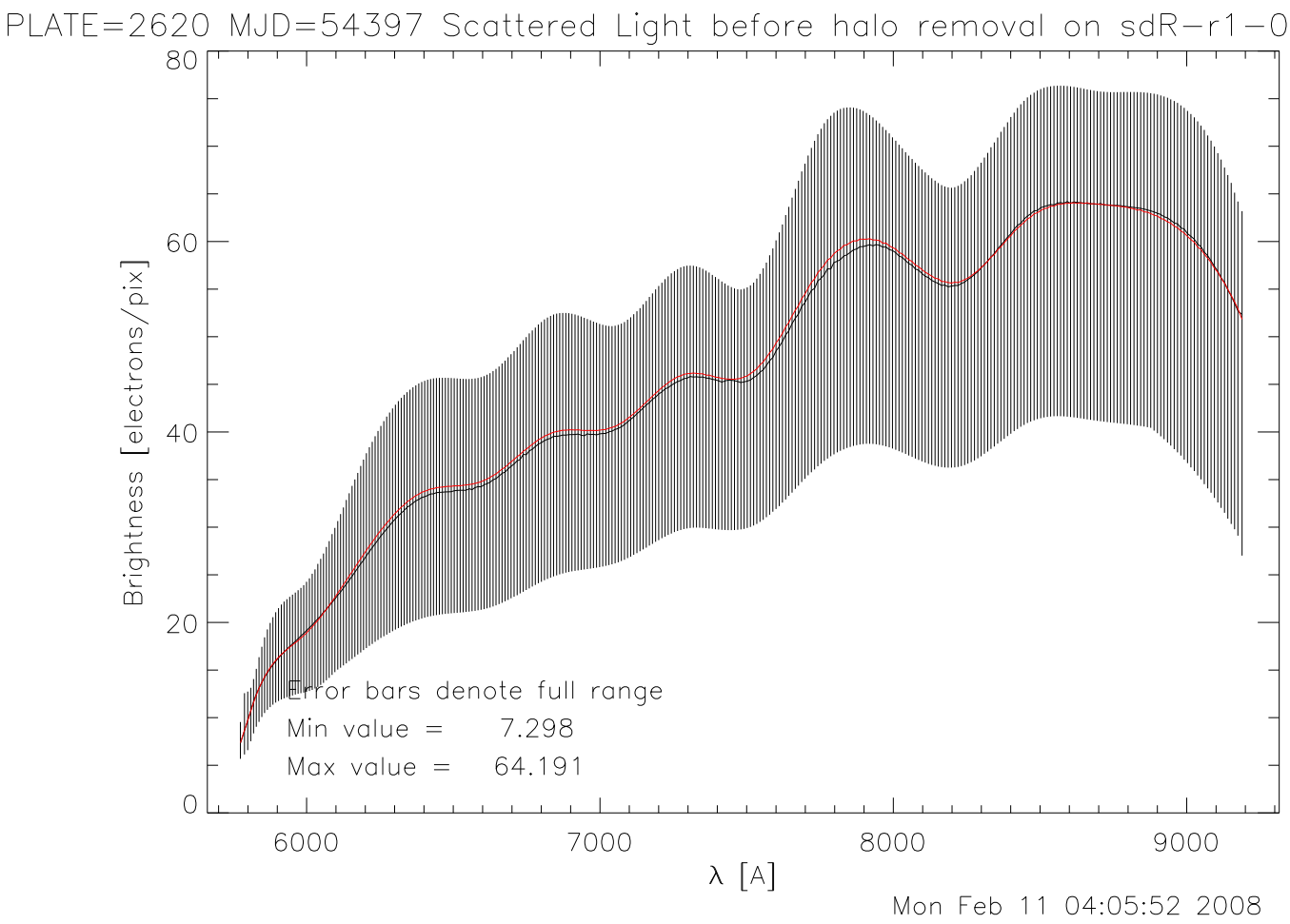

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046876.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

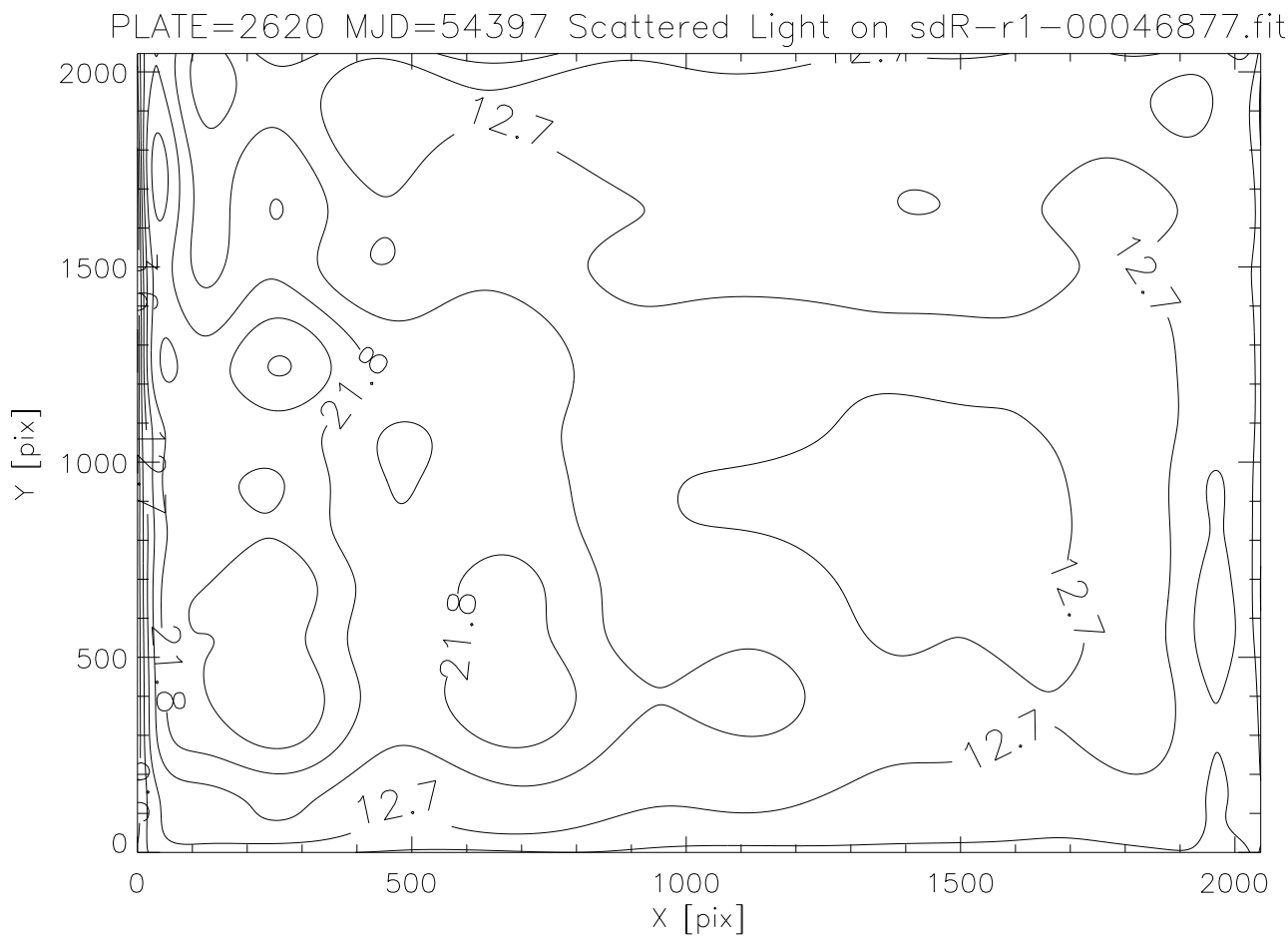

PLATE=2620 MJD=54397 sdR-r1-00046876.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 6.27 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

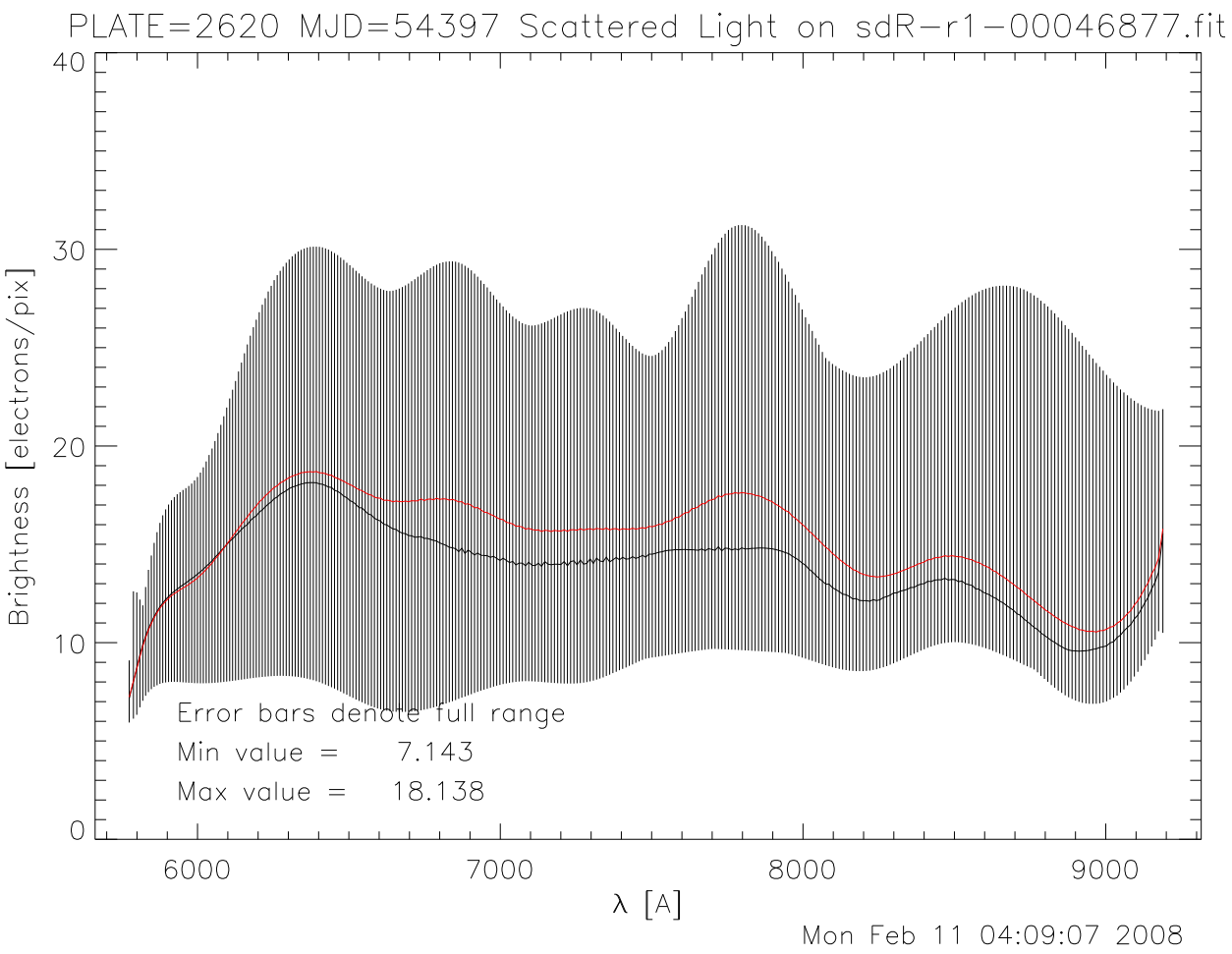

PLATE=2620 MJD=54397 sdR-r1-00046876.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.80 %
Fiber number
Focal Distance [mm]
Airmass

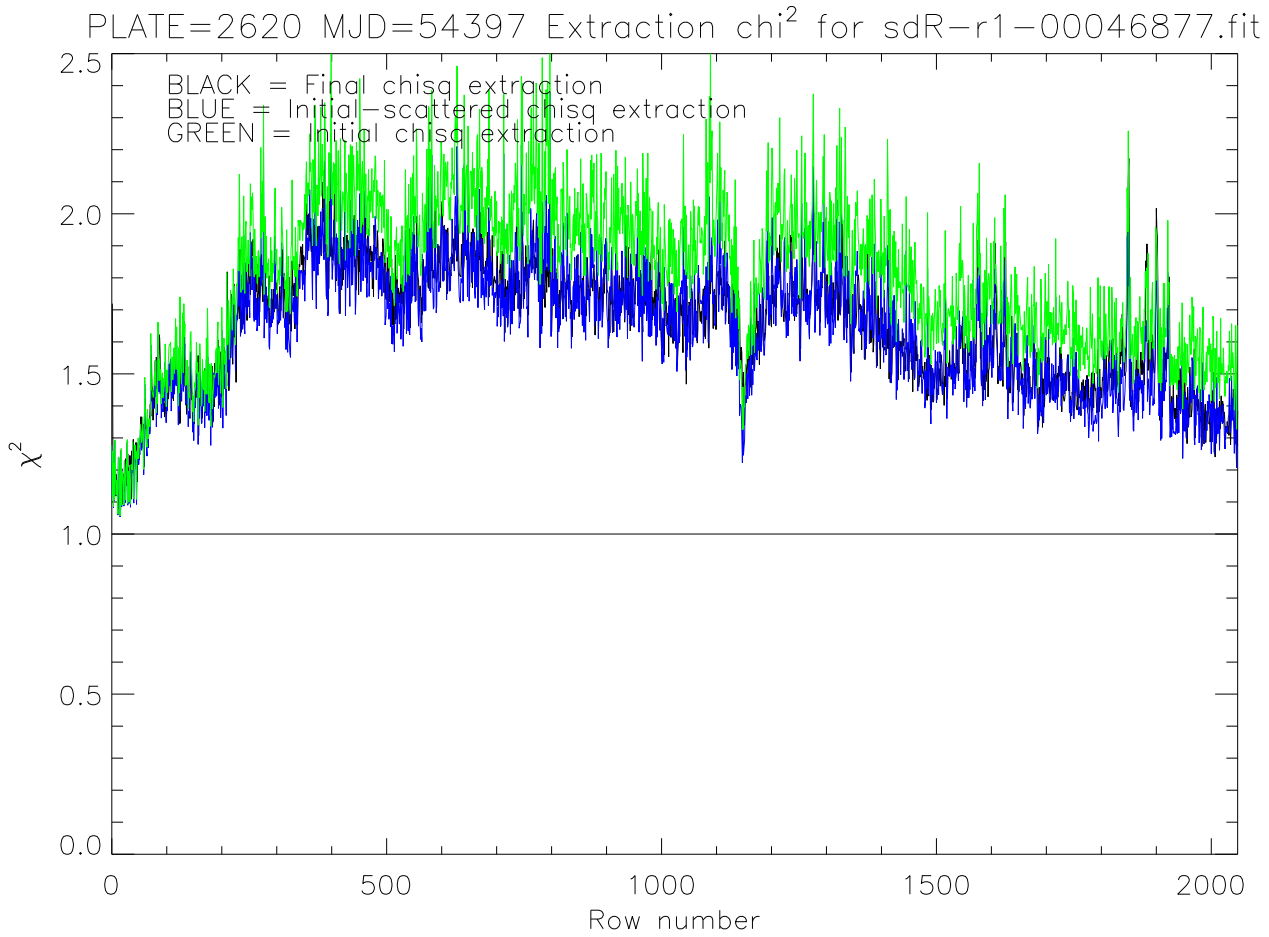

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r1−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.381
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:05:02 2008

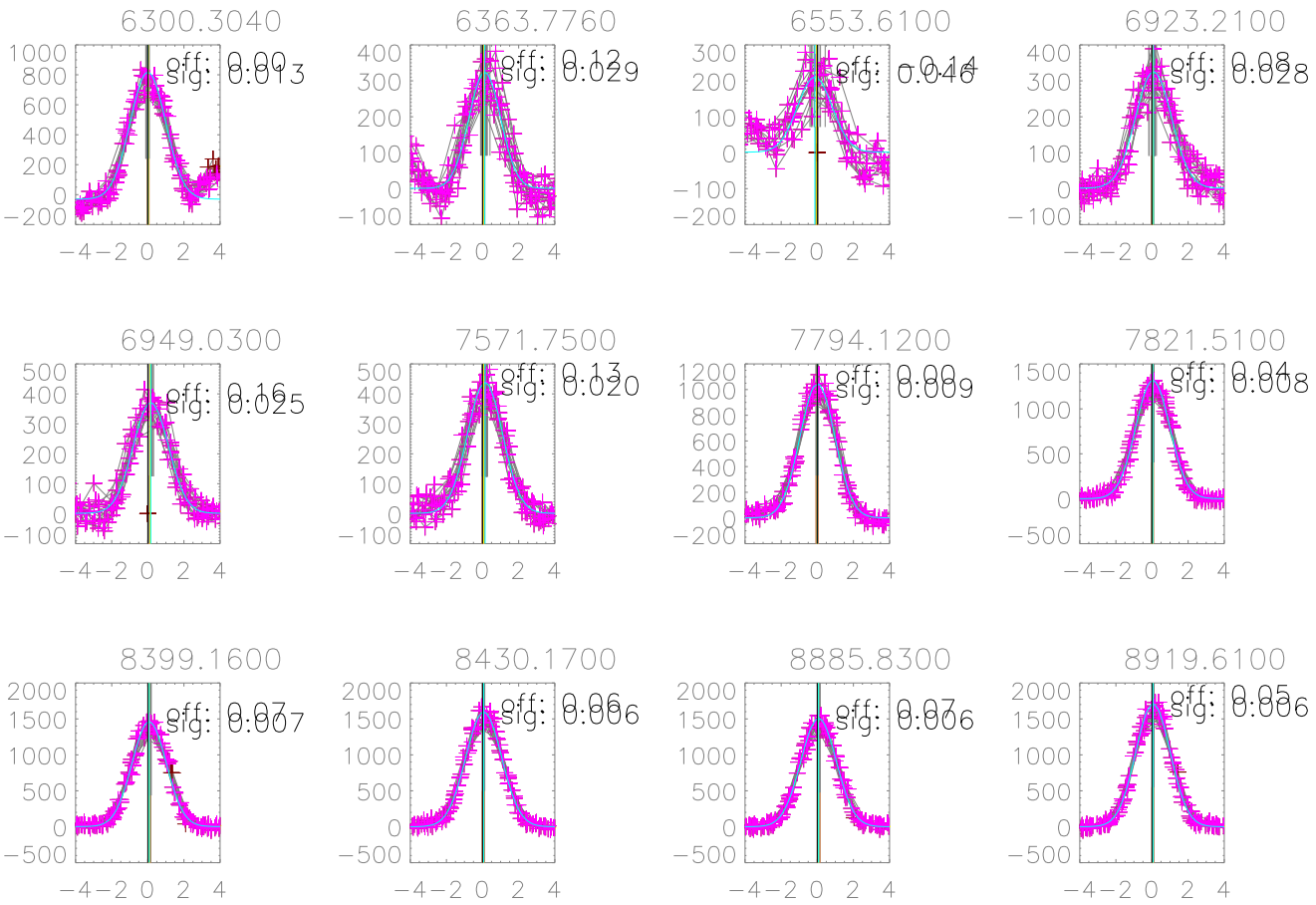

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046877.fi
61.8
43.6
25.5
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

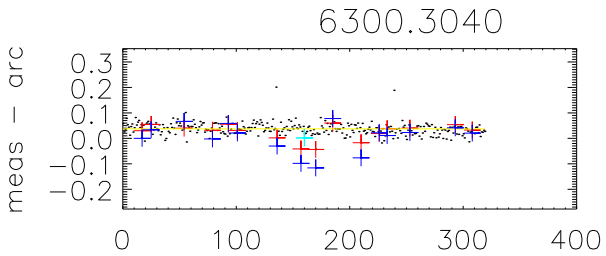

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r1-00046877.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.298
Max value = 64.191
Mon Feb 11 04:05:52 2008

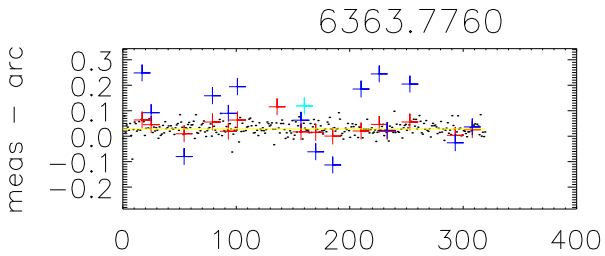

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046877.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
21.8
0

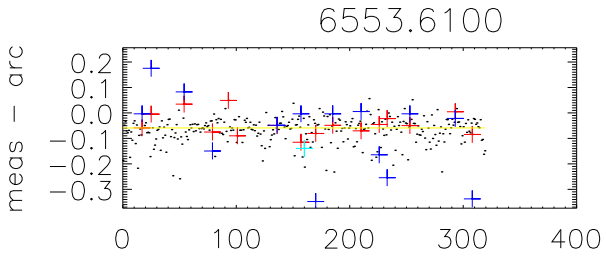

PLATE=2620 MJD=54397 Scattered Light on sdR-r1-00046877.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.143
Max value = 18.138
Mon Feb 11 04:09:07 2008

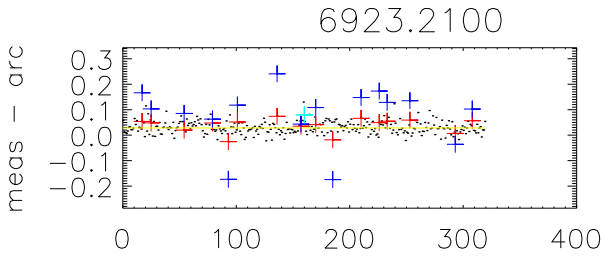

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r1-00046877.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

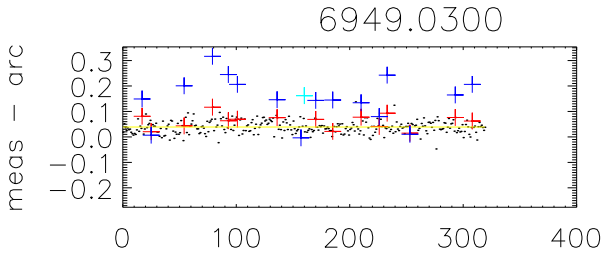

6300.3040
off: 0.00
sig: 0.013
6363.7760
off: 0.12
sig: 0.029
6553.6100
off: 0.14
sig: 0.046
6923.2100
off: 0.08
sig: 0.028
6949.0300
off: 0.16
sig: 0.025
7571.7500
off: 0.13
sig: 0.020
7794.1200
off: 0.00
sig: 0.009
7821.5100
off: 0.04
sig: 0.008
8399.1600
off: 0.07
sig: 0.007
8430.1700
off: 0.06
sig: 0.006
8885.8300
off: 0.07
sig: 0.006
8919.6100
off: 0.05
sig: 0.006

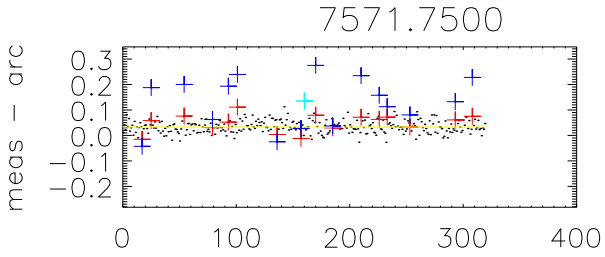

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

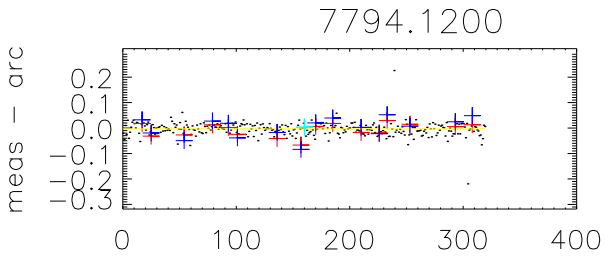

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

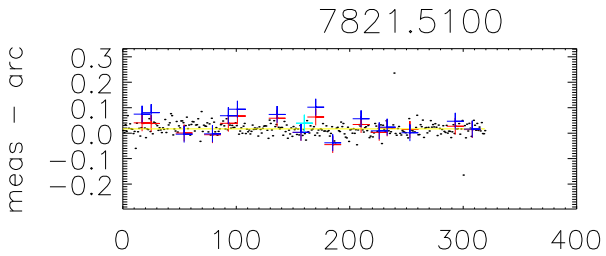

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

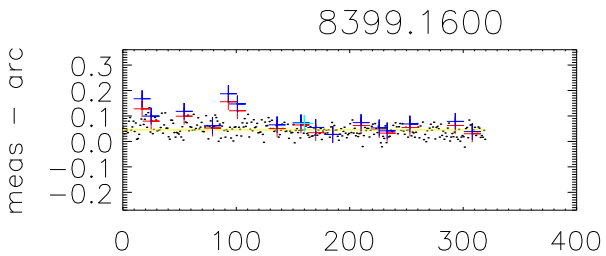

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

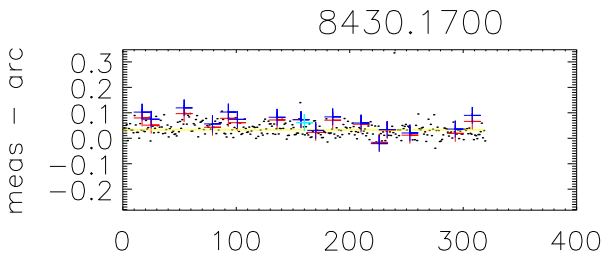

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

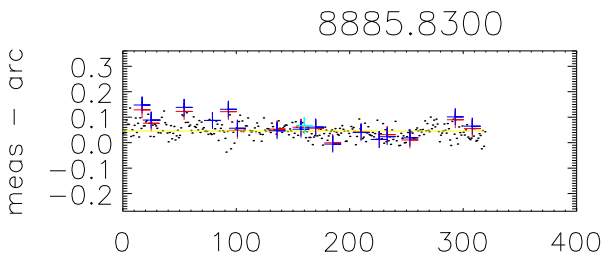

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

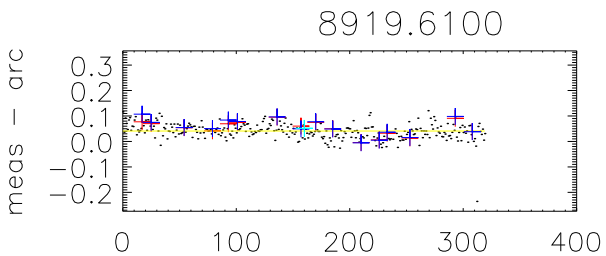

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

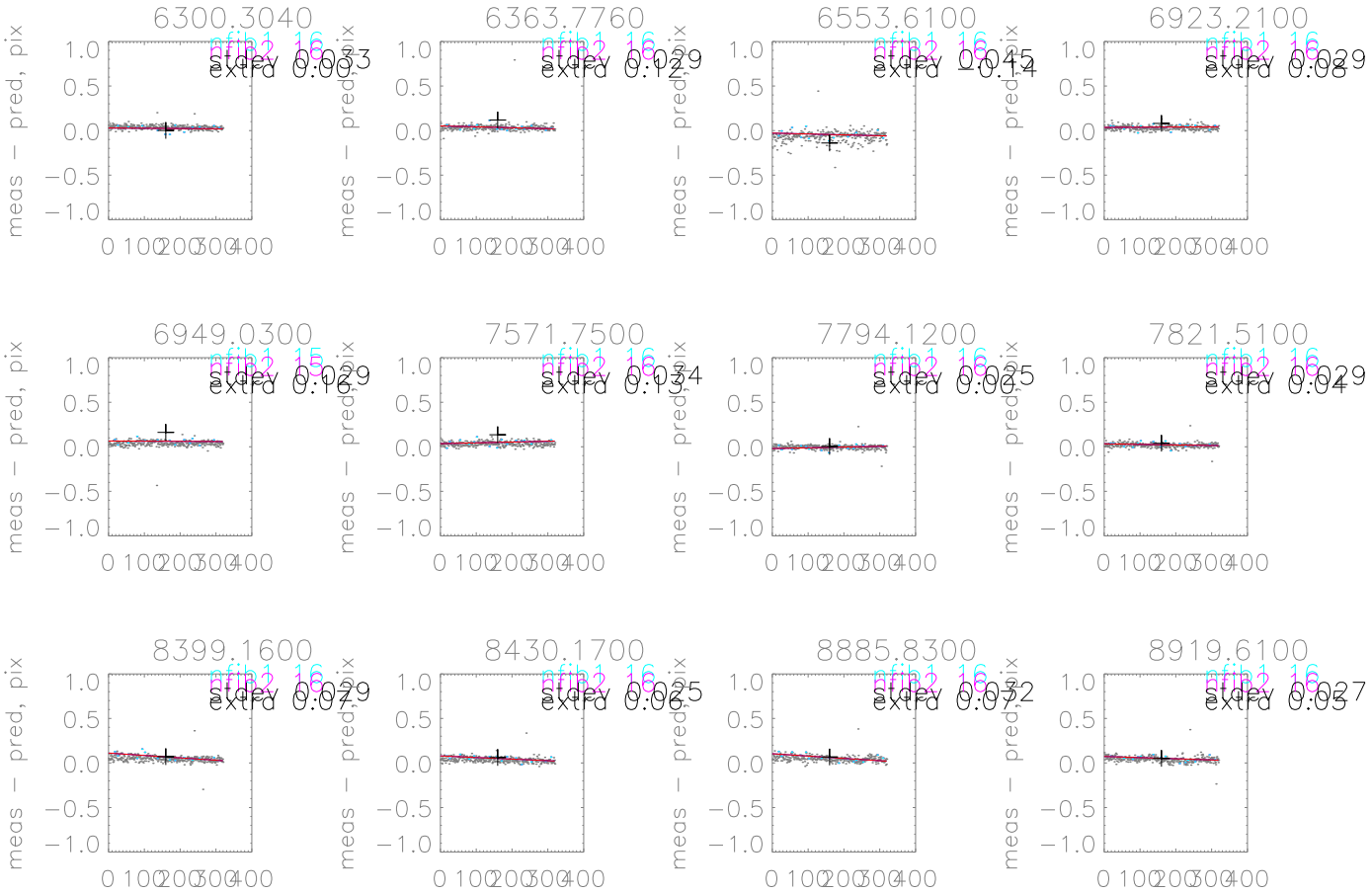

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

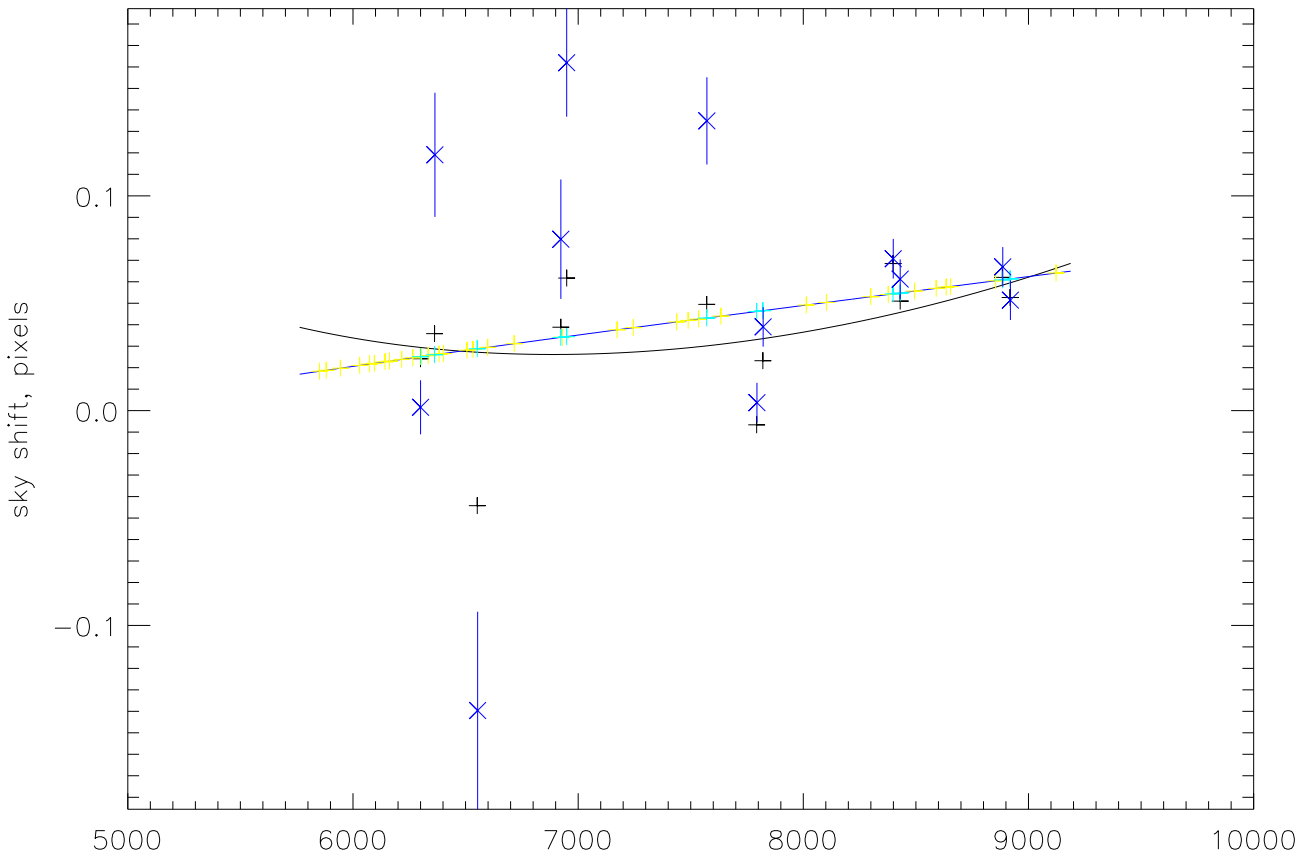

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

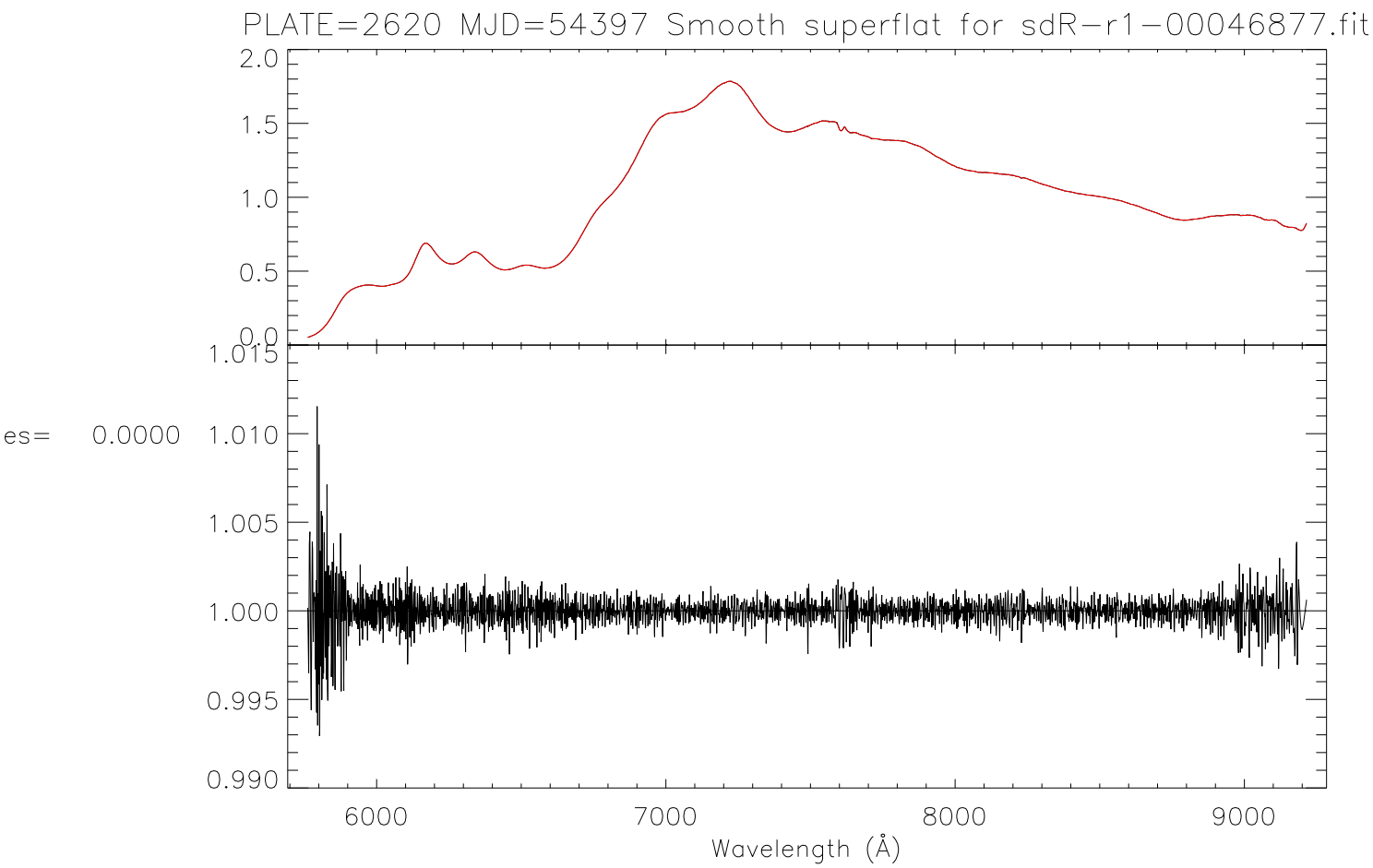

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

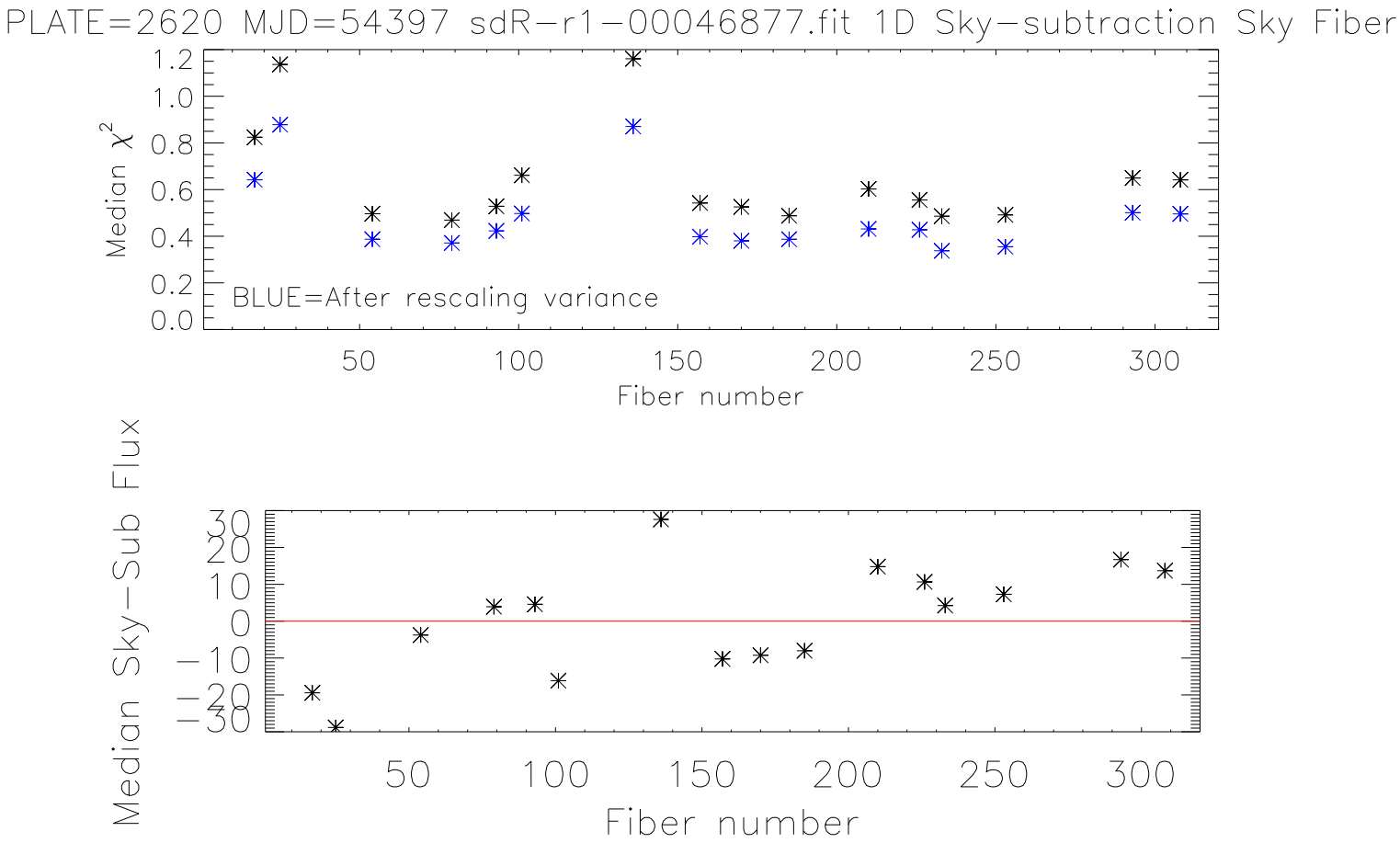

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

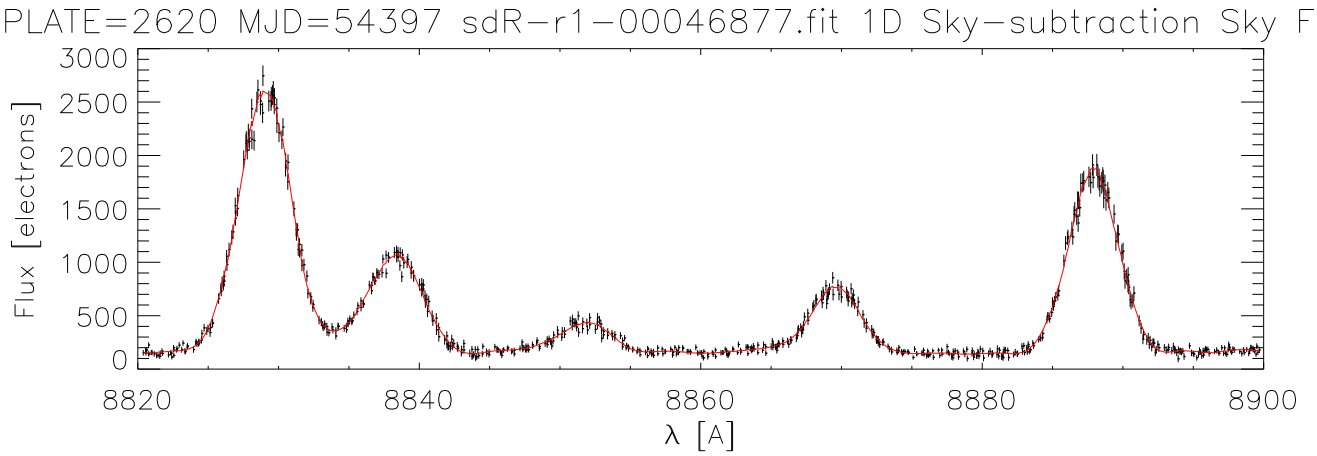

6300.3040
mfhi1 16
stdev 0.033
extra 0.00
6363.7760
mfhi1 16
stdev 0.029
extra 0.12
6553.6100
mfhi1 16
stdev 0.045
extra −0.14
6923.2100
mfhi1 16
stdev 0.029
extra 0.08
6949.0300
mfhi1 15
stdev 0.029
extra 0.16
7571.7500
mfhi1 16
stdev 0.034
extra 0.13
7794.1200
mfhi1 16
stdev 0.025
extra 0.06
7821.5100
mfhi1 16
stdev 0.029
extra 0.04
8399.1600
mfhi1 16
stdev 0.029
extra 0.07
8430.1700
mfhi1 16
stdev 0.025
extra 0.06
8885.8300
mfhi1 16
stdev 0.032
extra 0.07
8919.6100
mfhi1 16
stdev 0.027
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

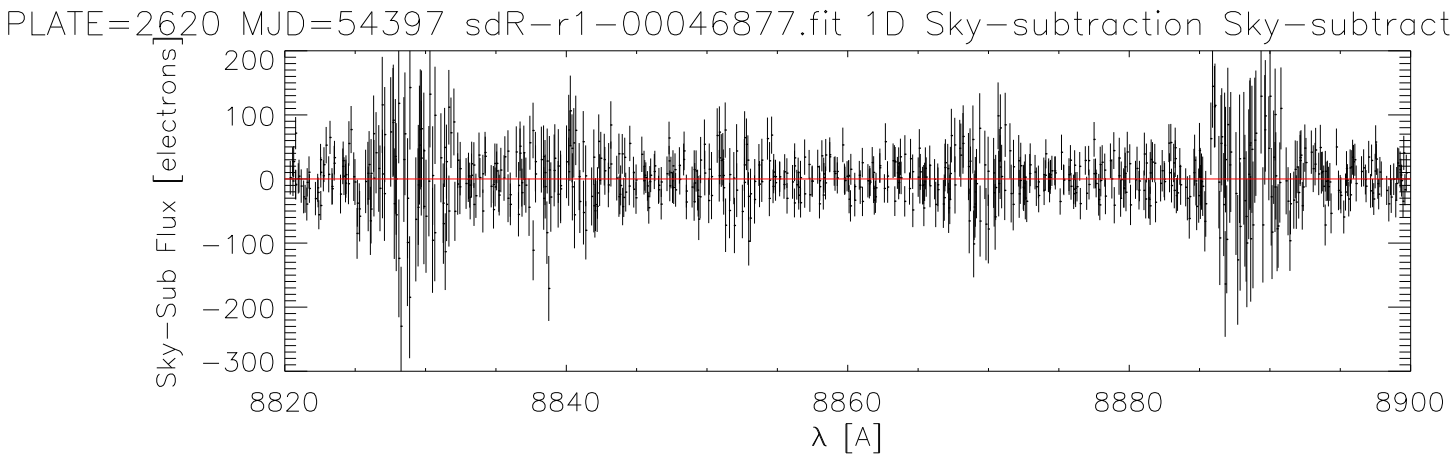

sky shift, pixels
0.1
0.0
−0.1
5000
6000
7000
8000
9000
10000

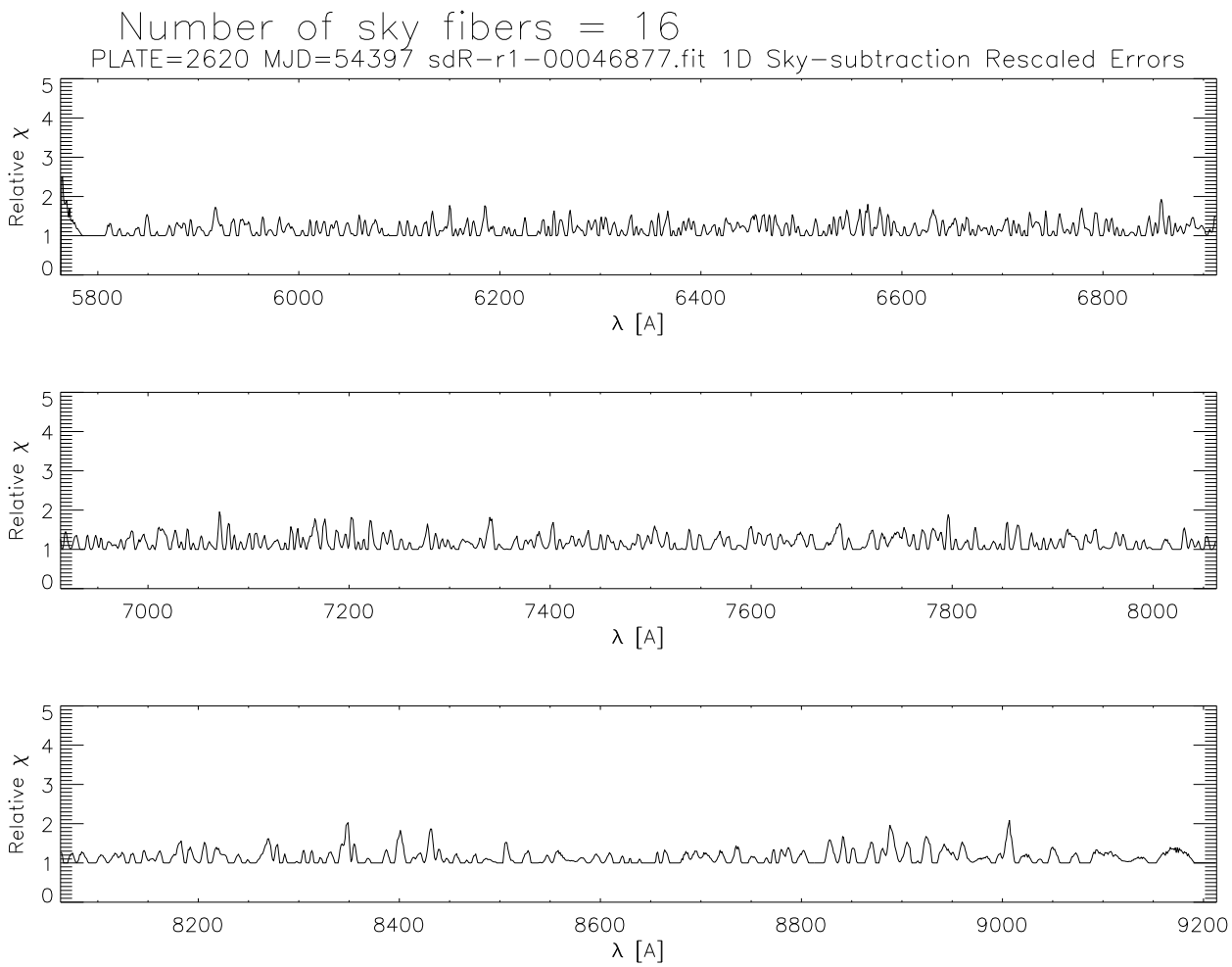

PLATE=2620 MJD=54397 Smooth superflat for sdR-r1-00046877.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

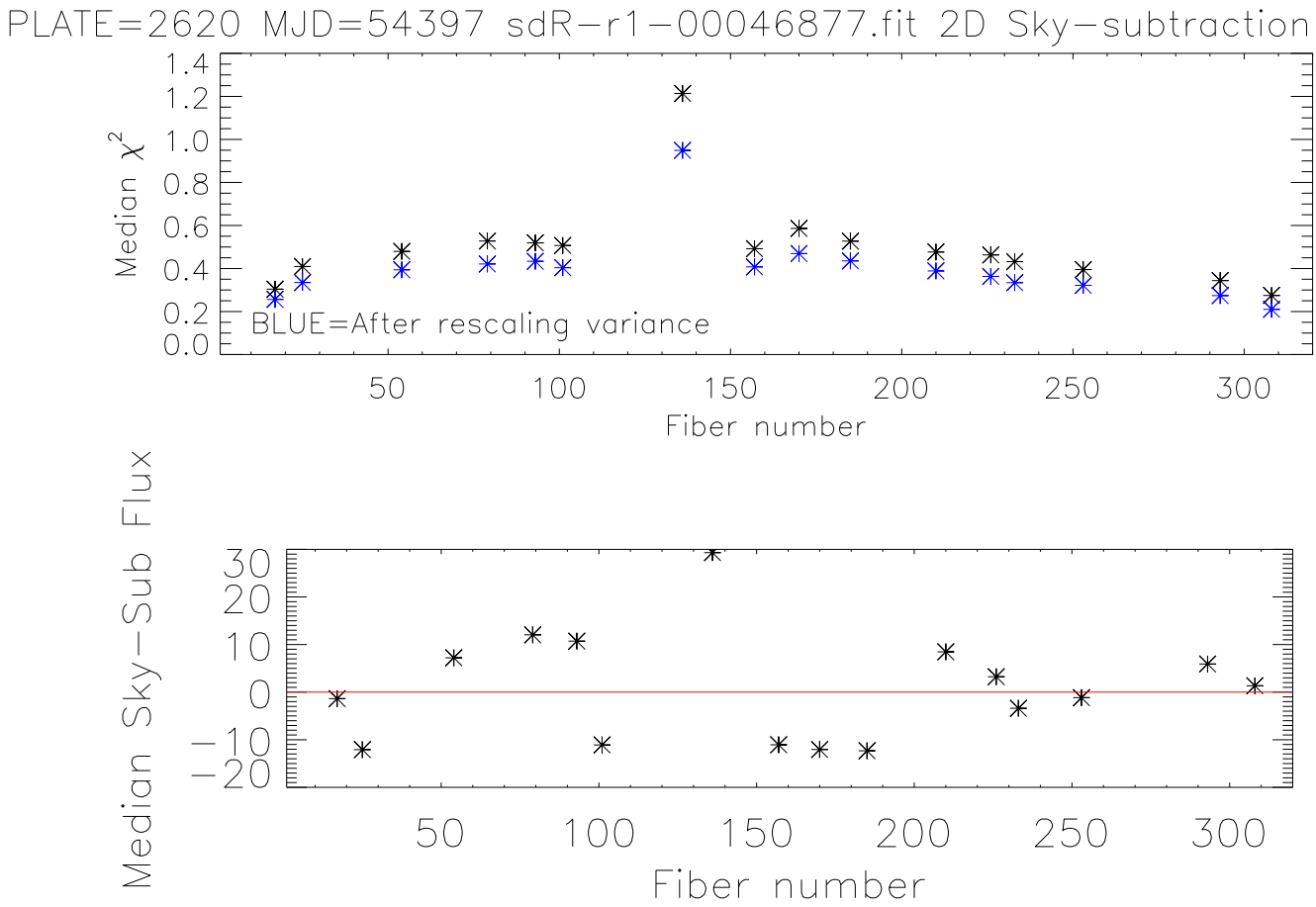
es= 0.0000

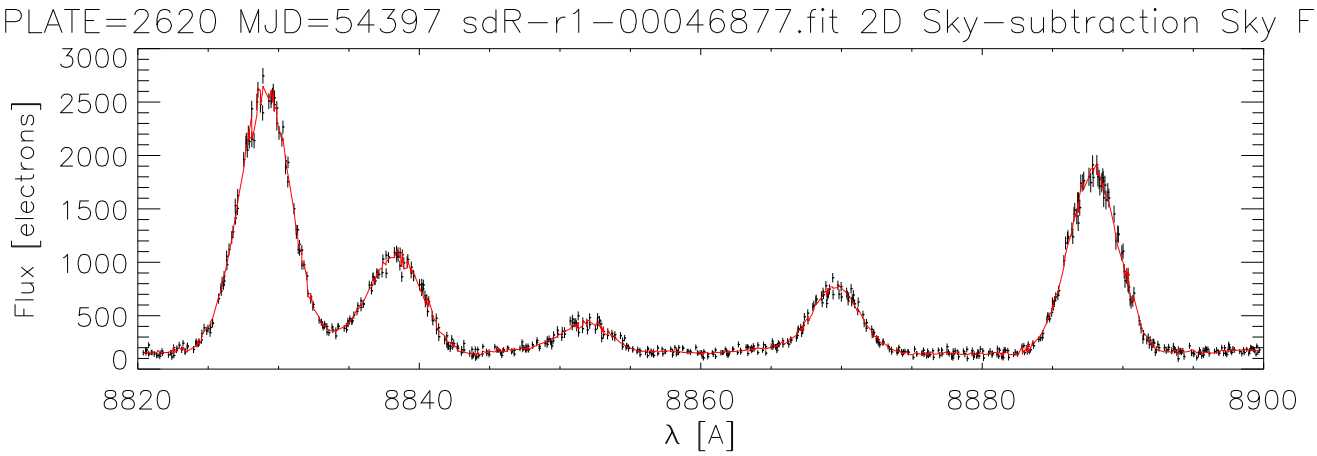

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

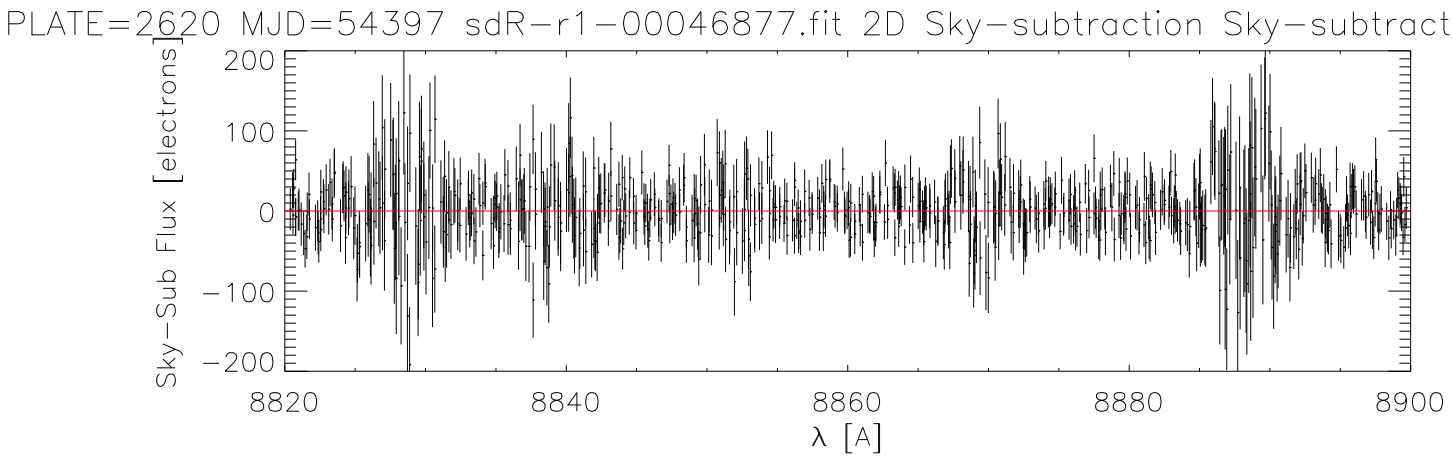

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

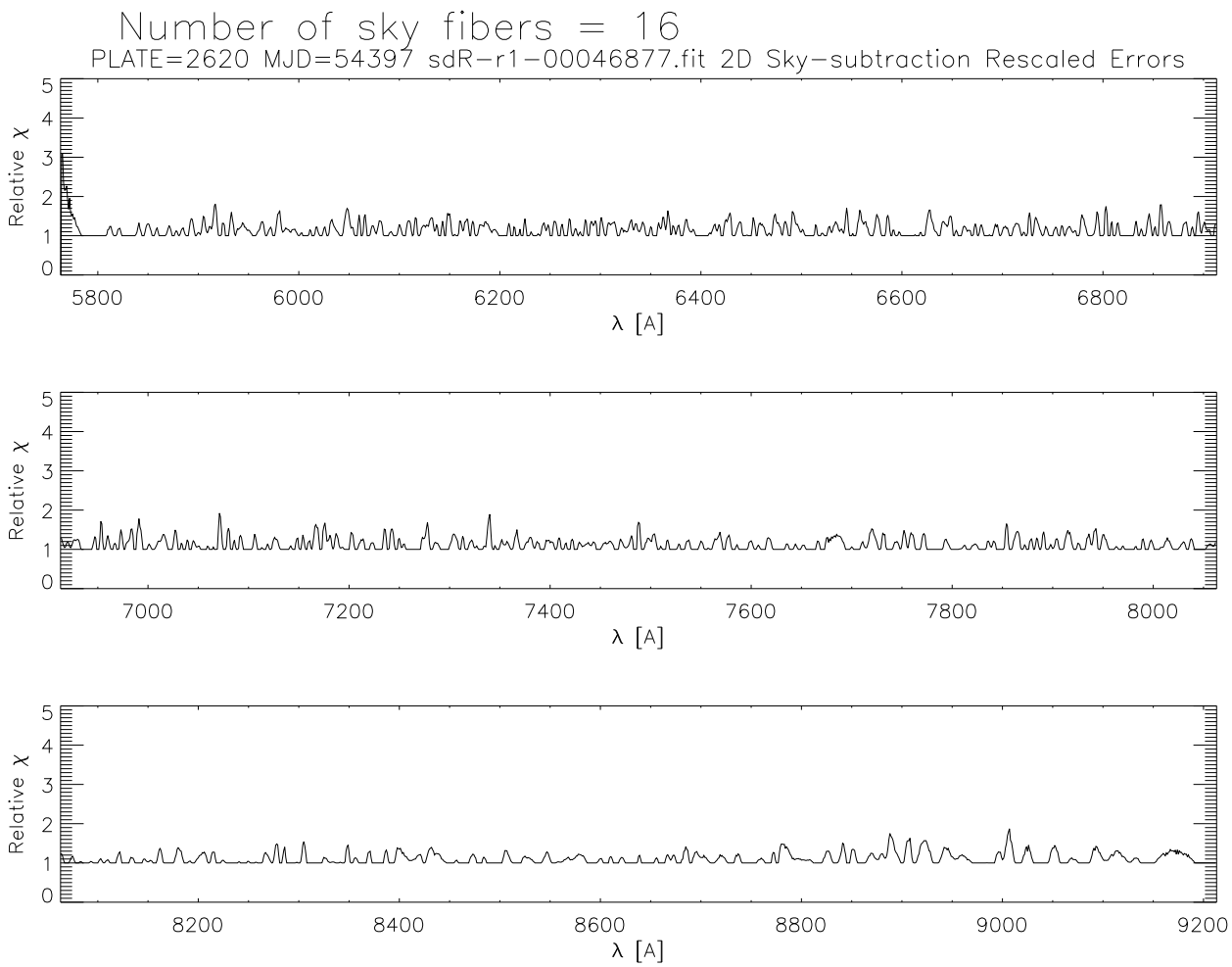

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

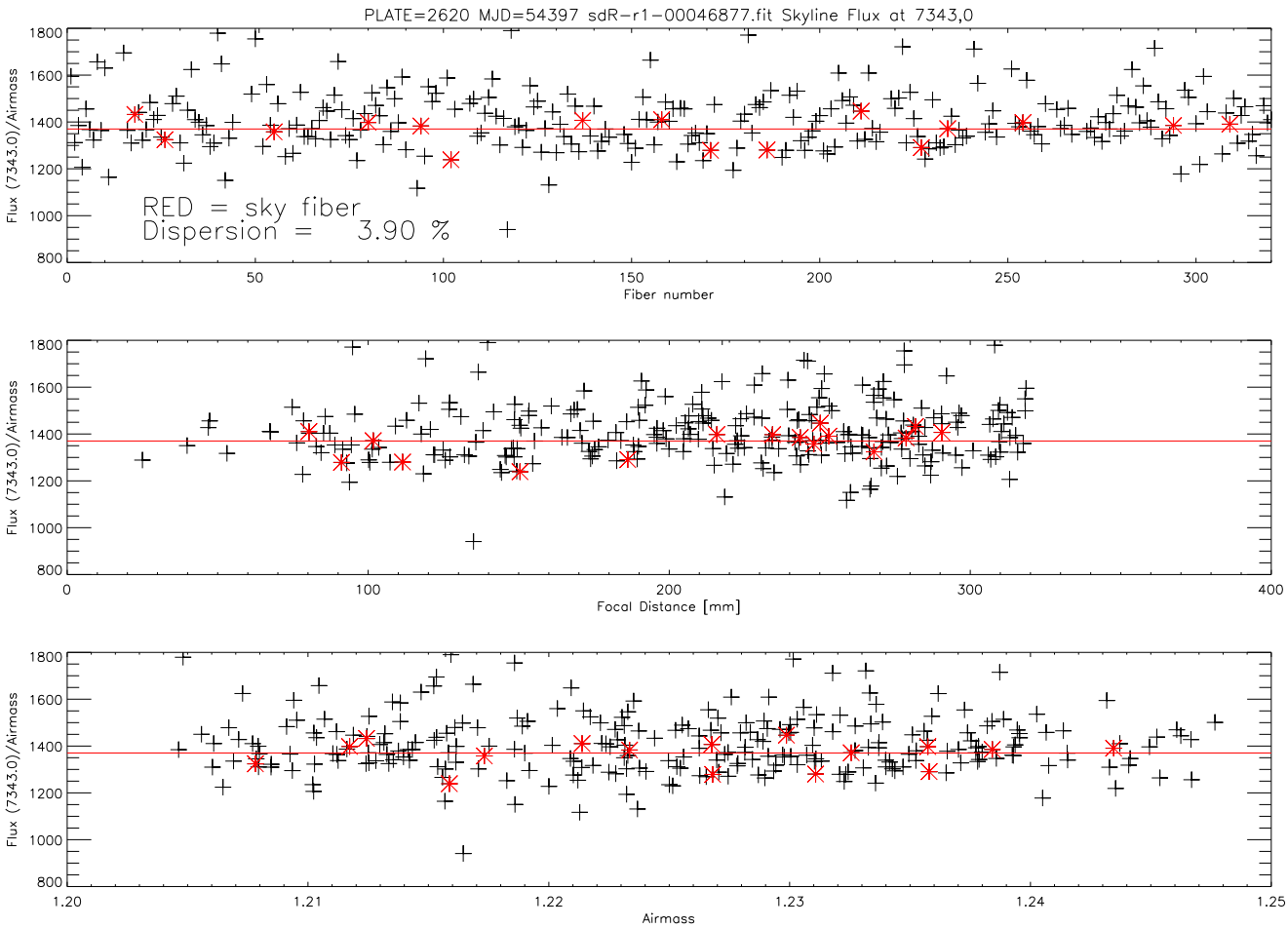

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046877.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

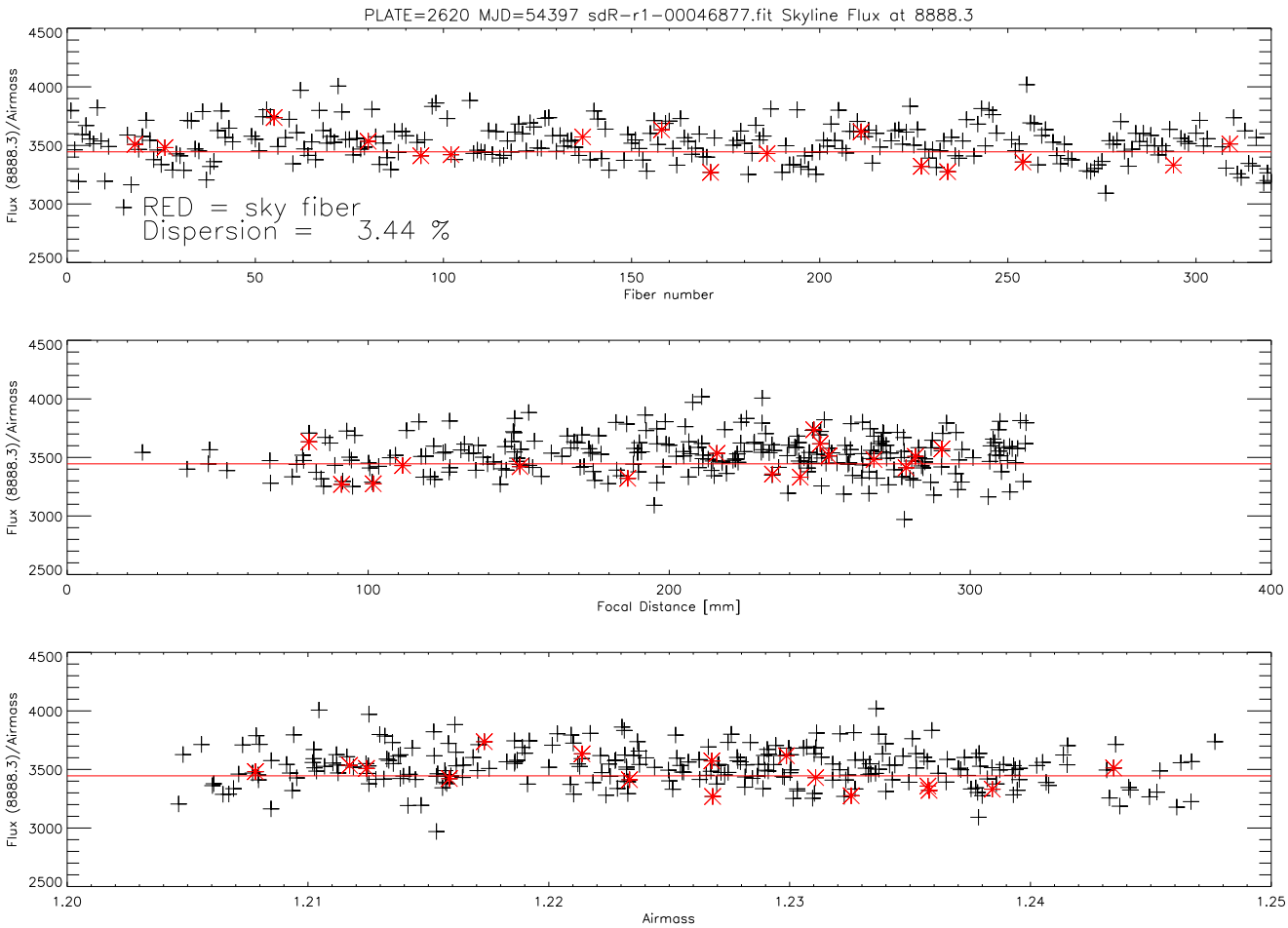

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

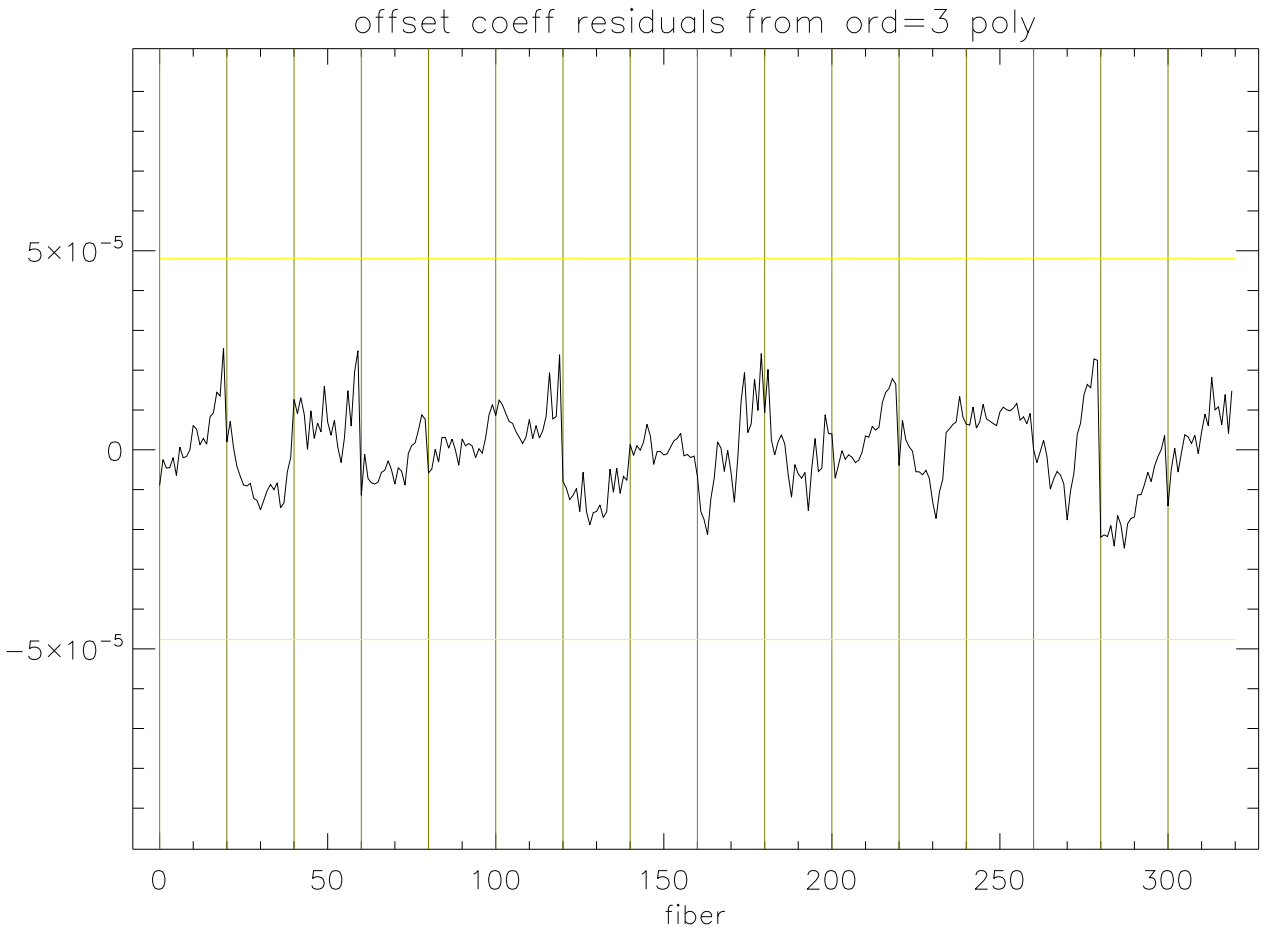

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

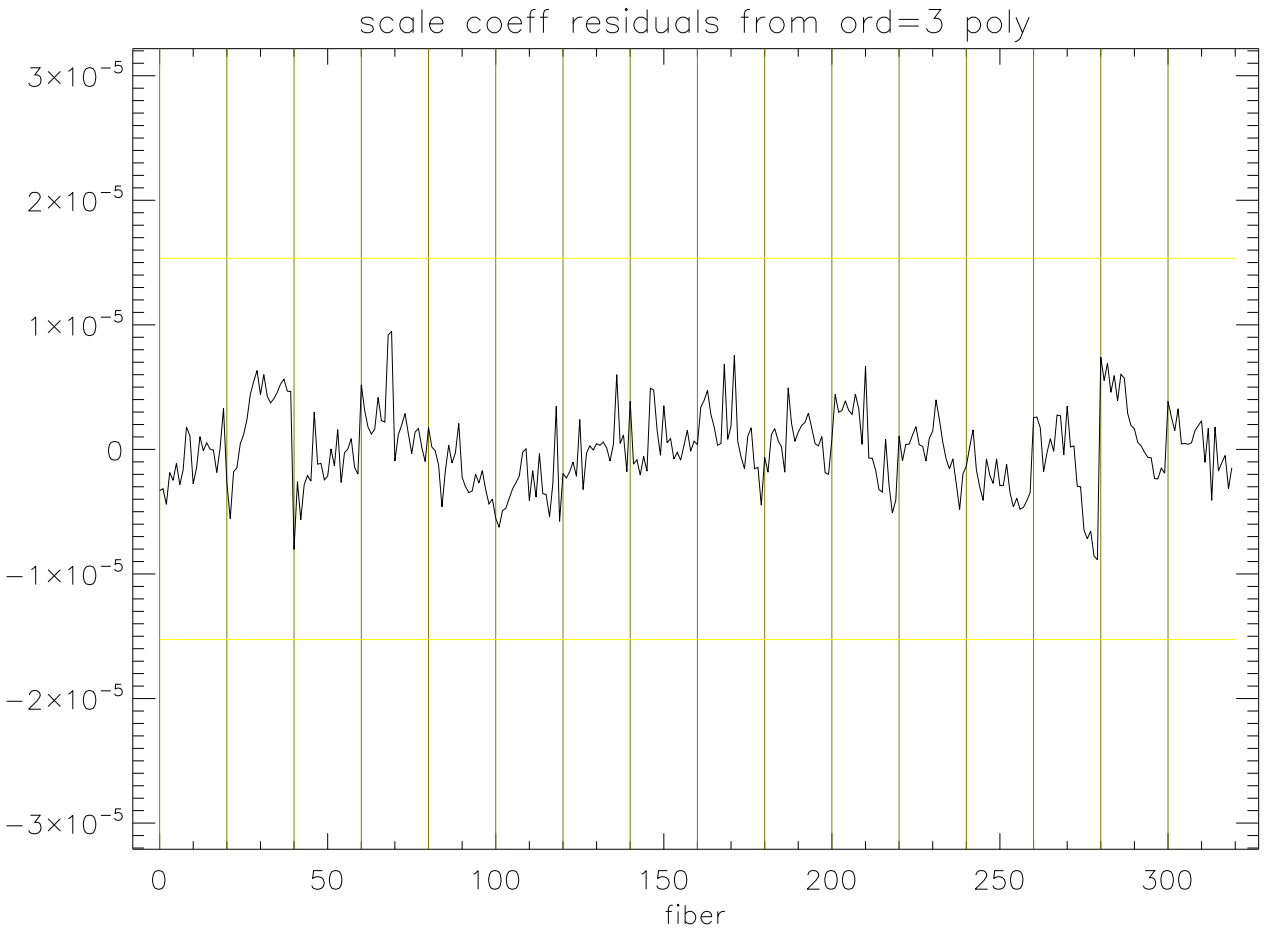

PLATE=2620 MJD=54397 sdR-r1-00046877.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

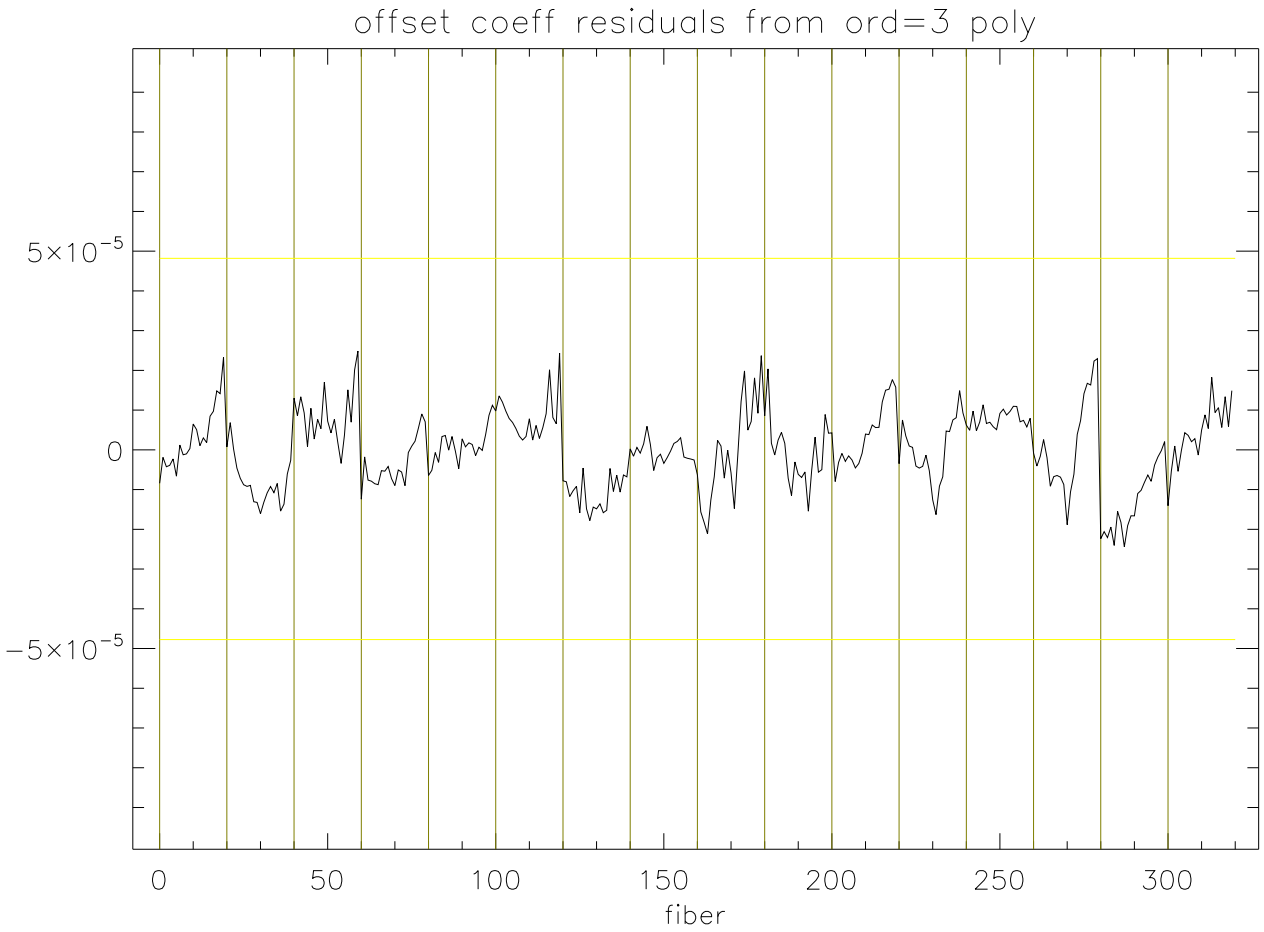

Number of sky fibers = 16
PLATE=2620 MJD=54397 sdR-r1-00046877.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

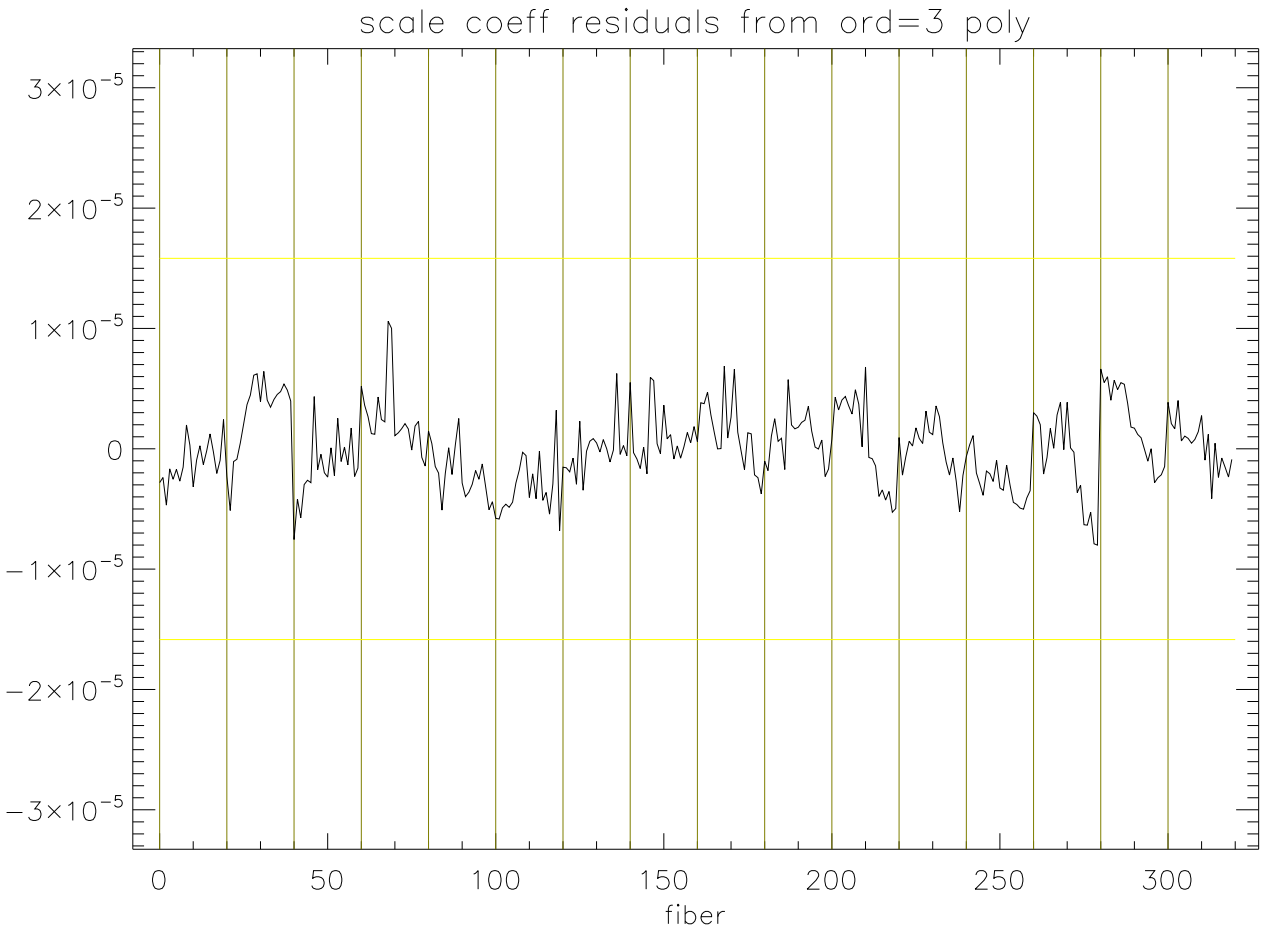

PLATE=2620 MJD=54397 sdR-r1-00046877.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.90 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

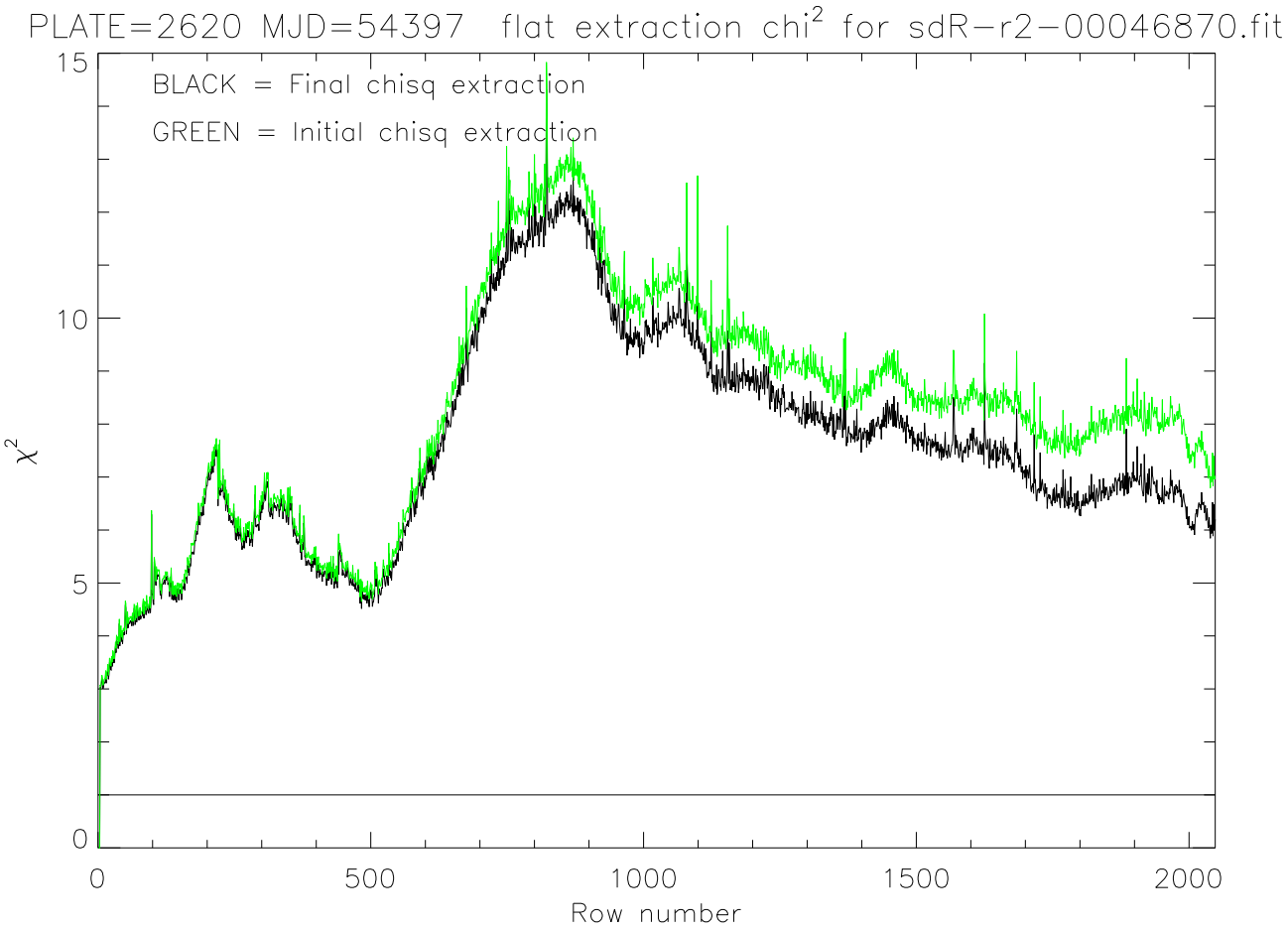

PLATE=2620 MJD=54397 sdR-r1-00046877.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
+ RED = sky fiber
Dispersion = 3.44 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

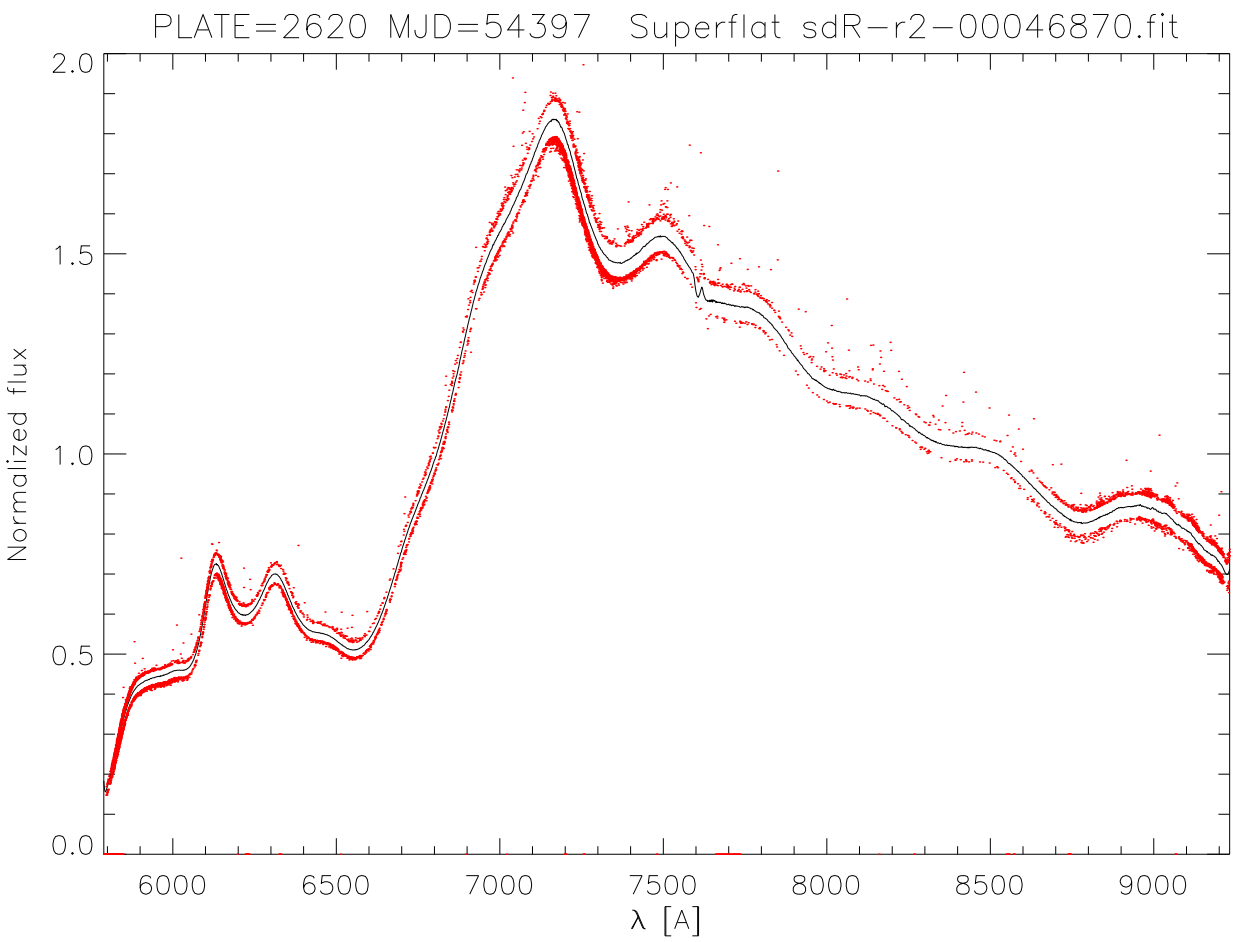

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

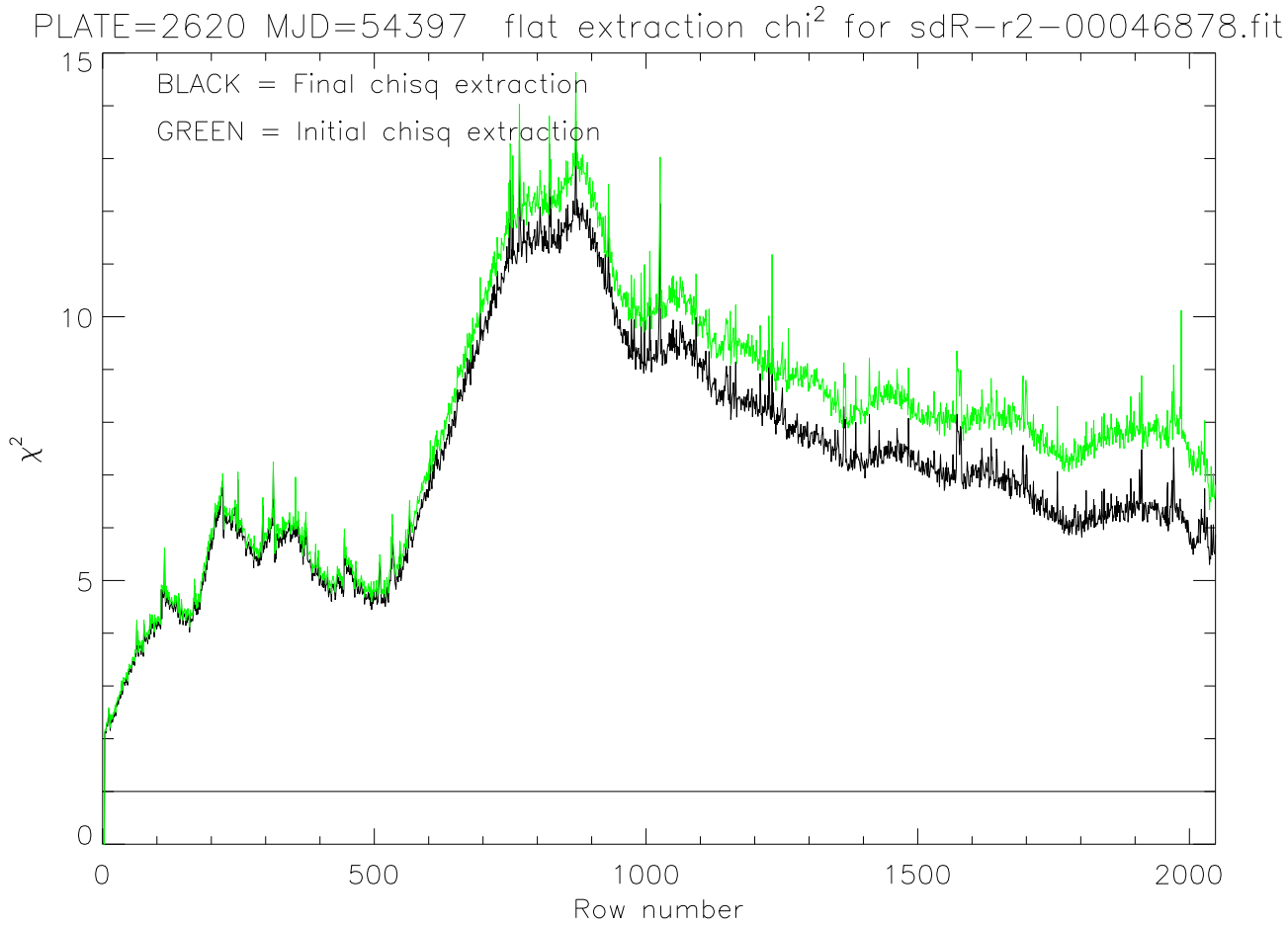

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

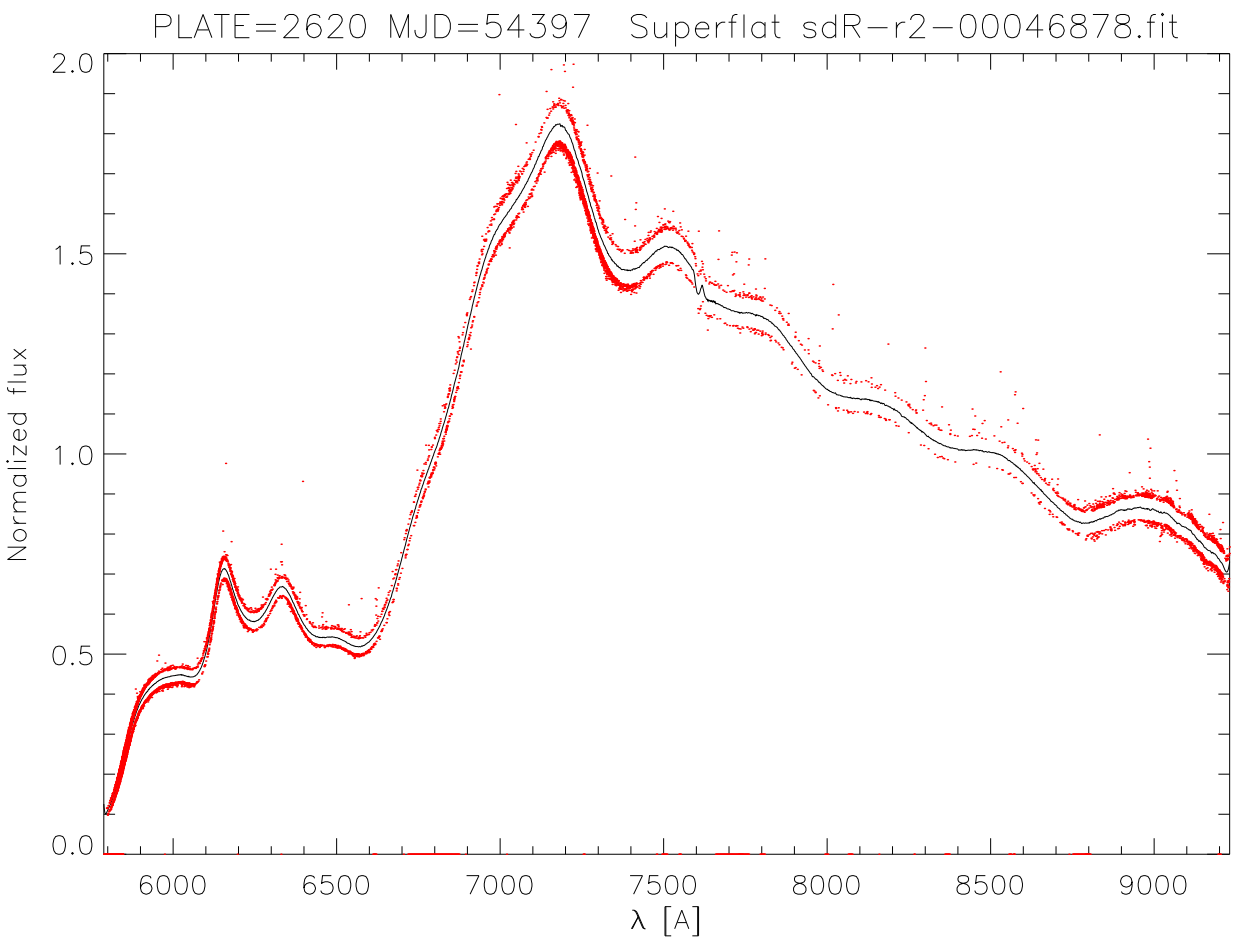

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

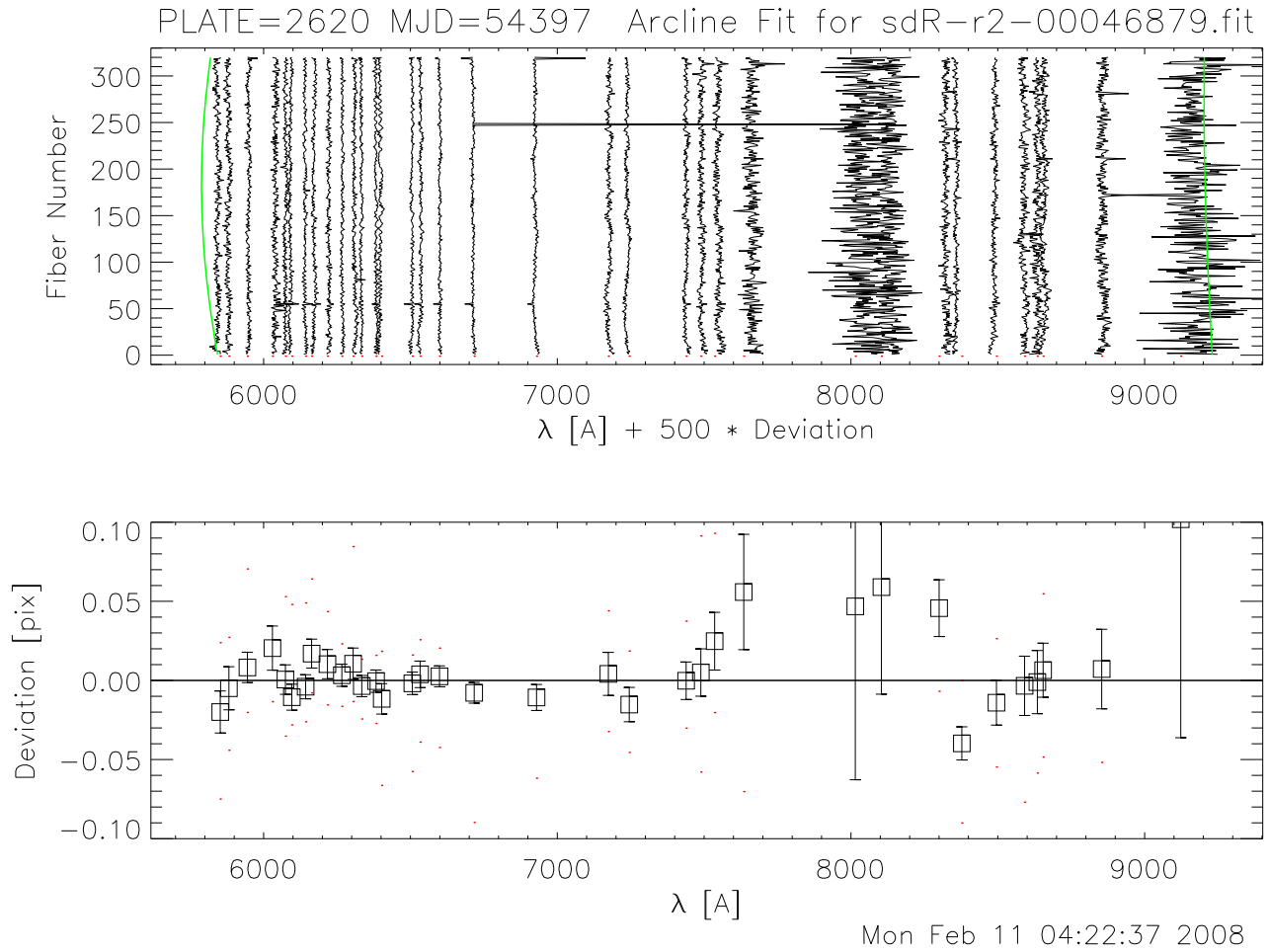

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

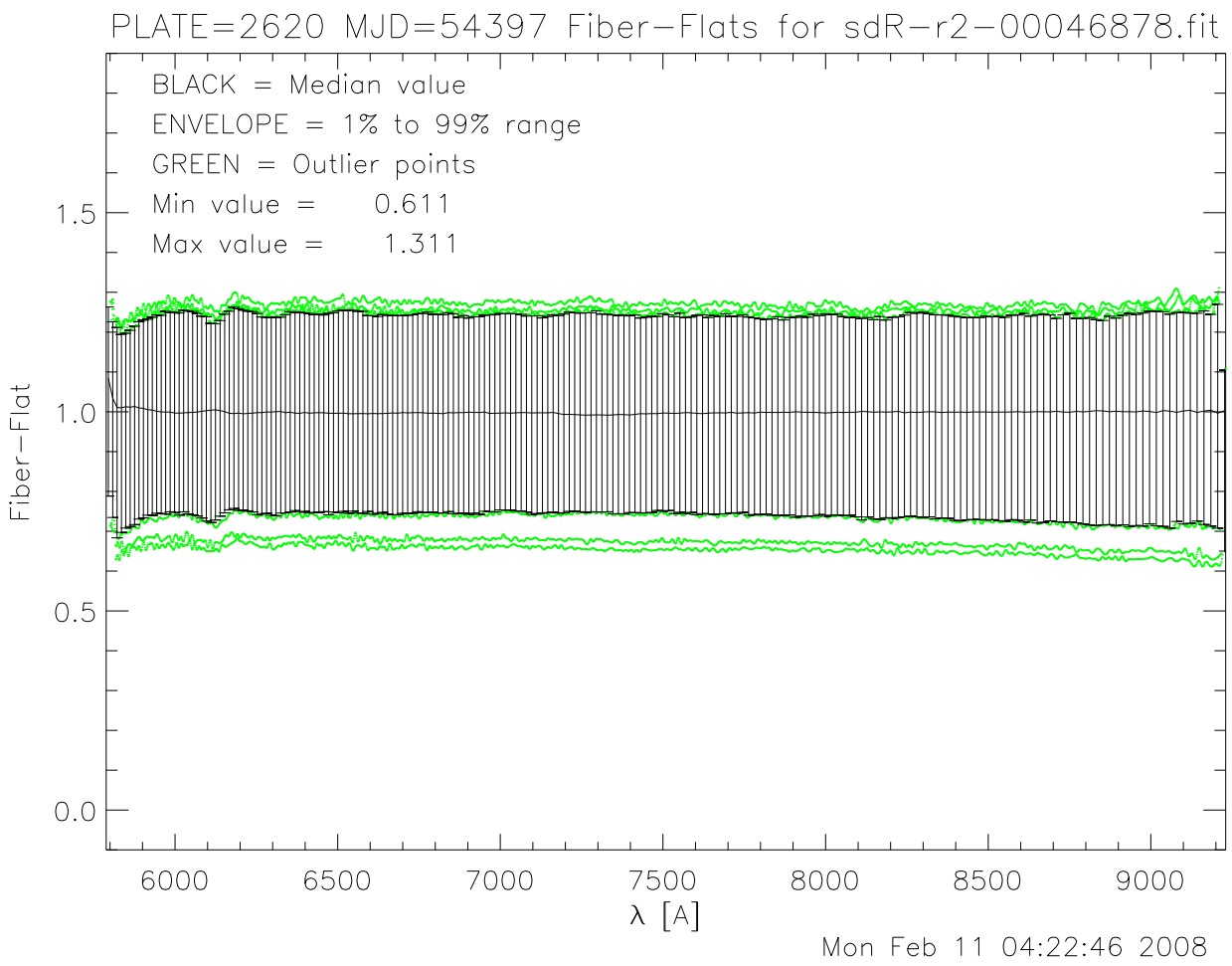

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR-r2-00046870.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

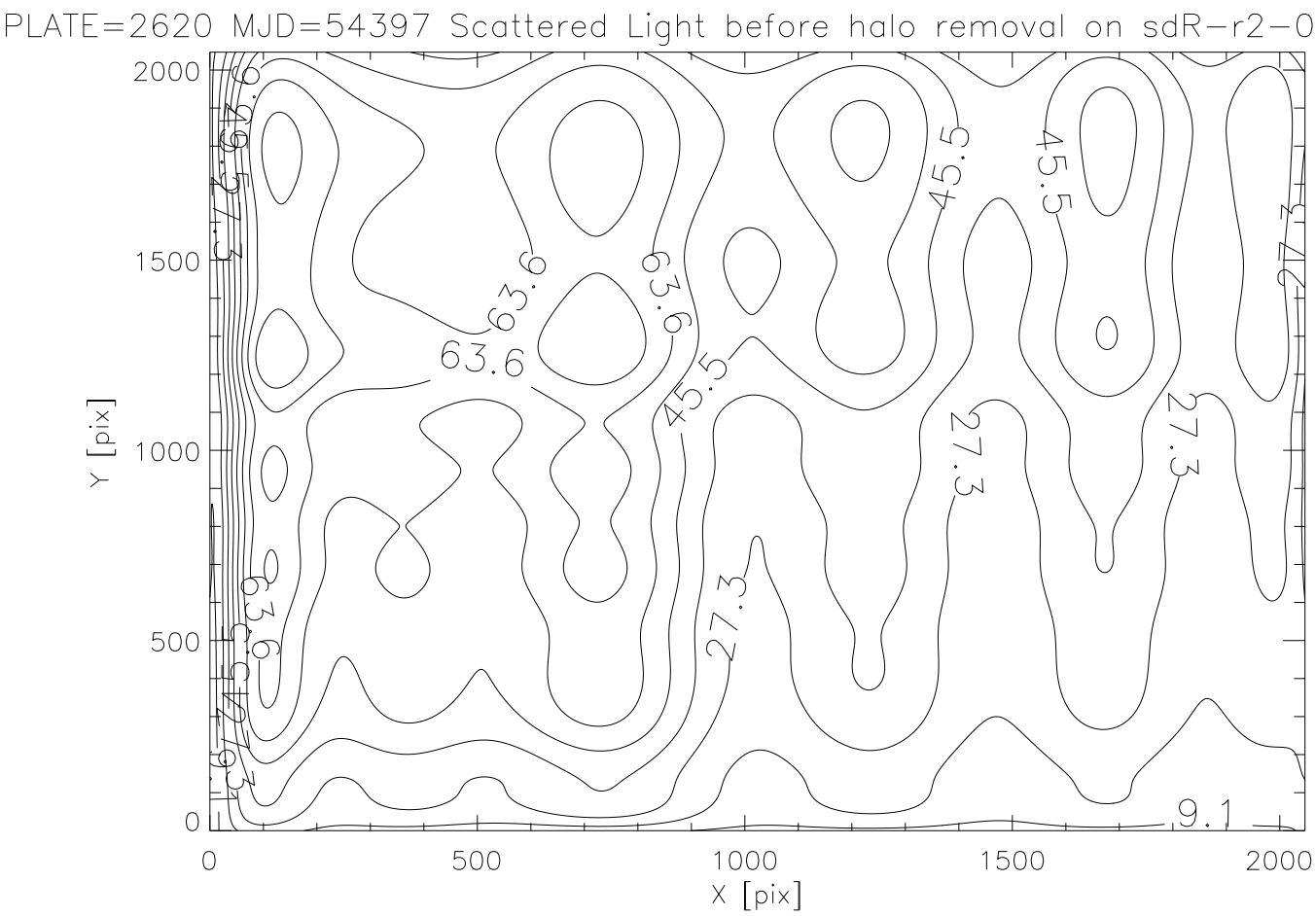

PLATE=2620 MJD=54397 Superflat sdR-r2-00046870.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

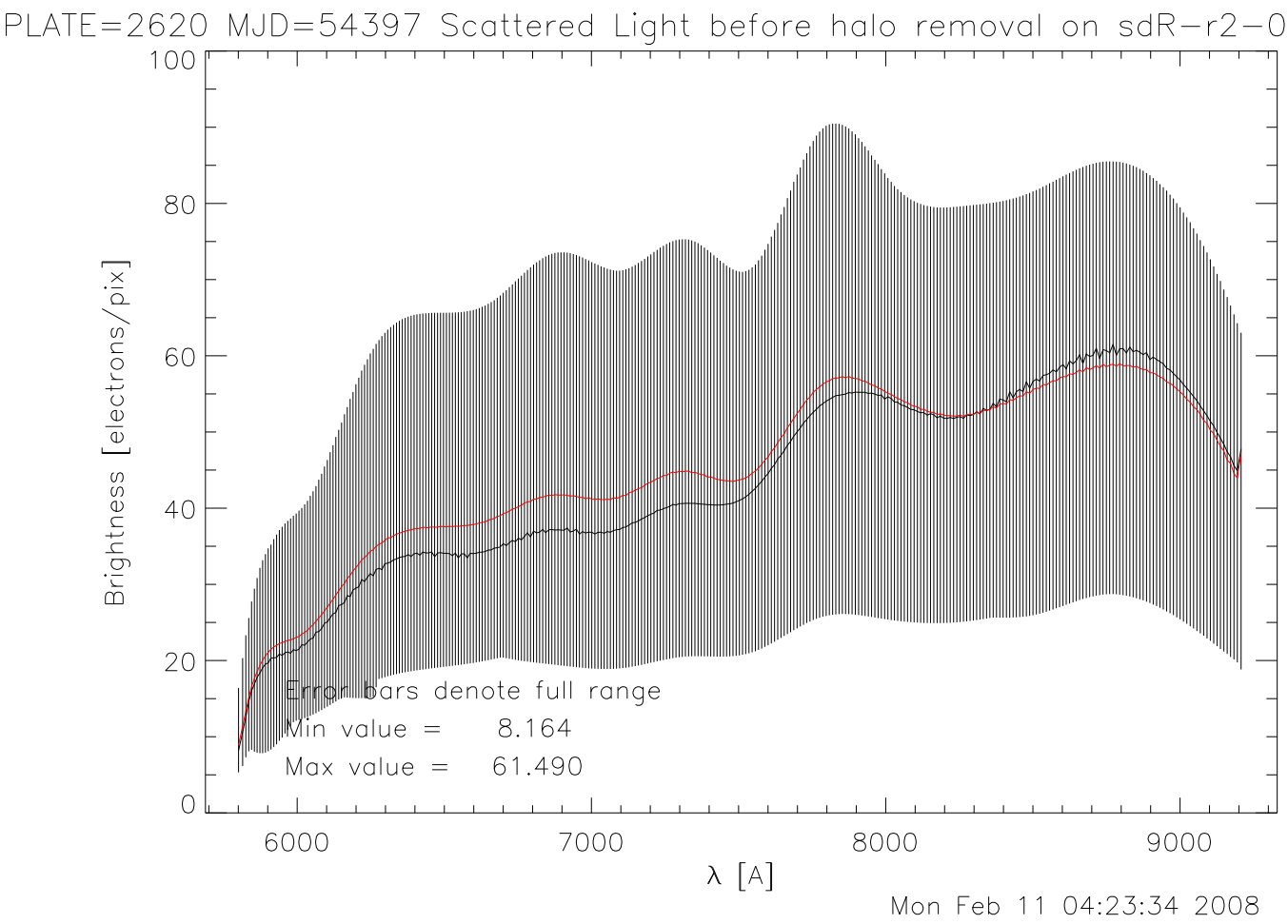

PLATE=2620 MJD=54397 flat extraction chi^2 for sdR−r2−00046878.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

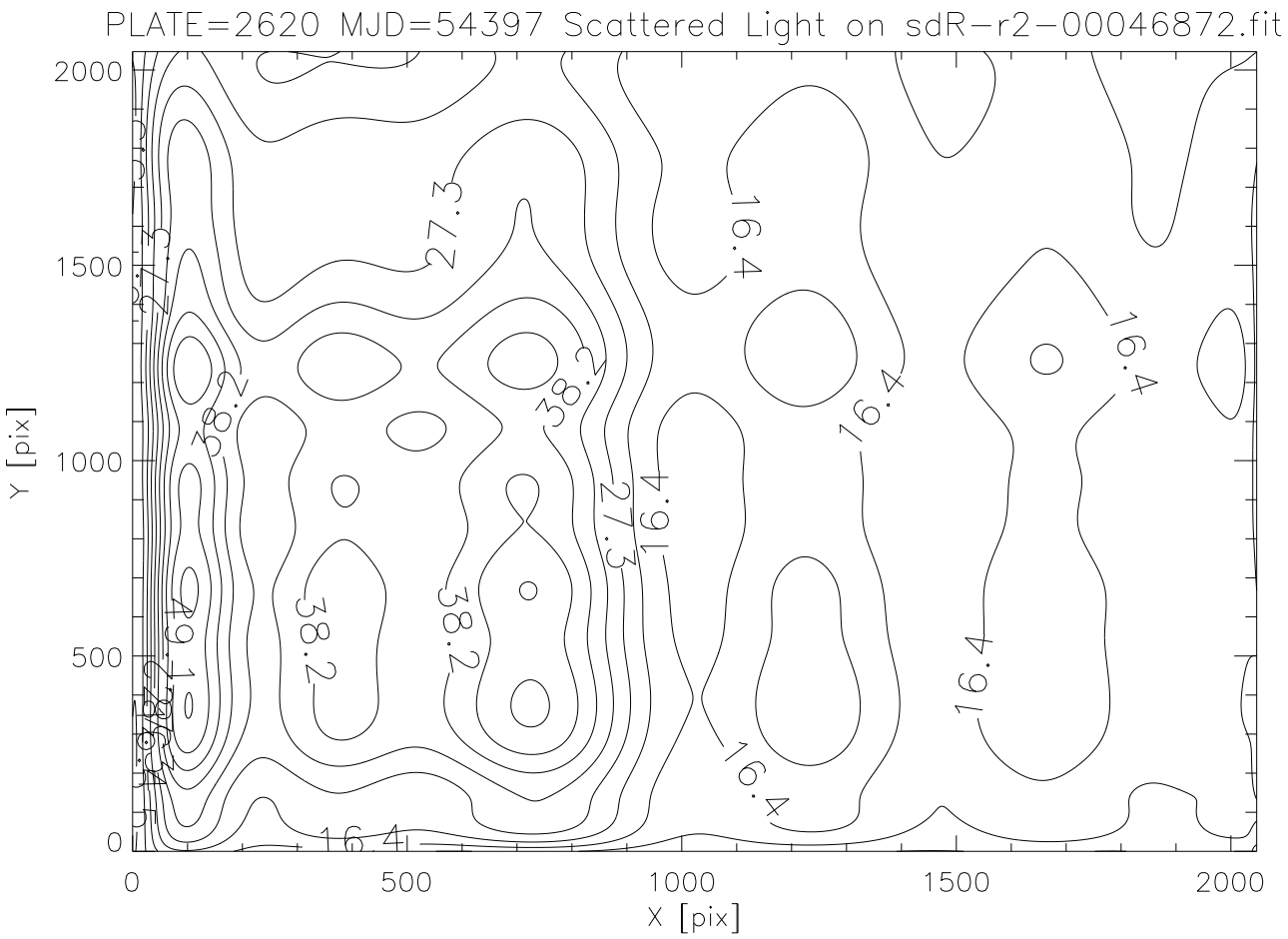

PLATE=2620 MJD=54397 Superflat sdR-r2-00046878.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

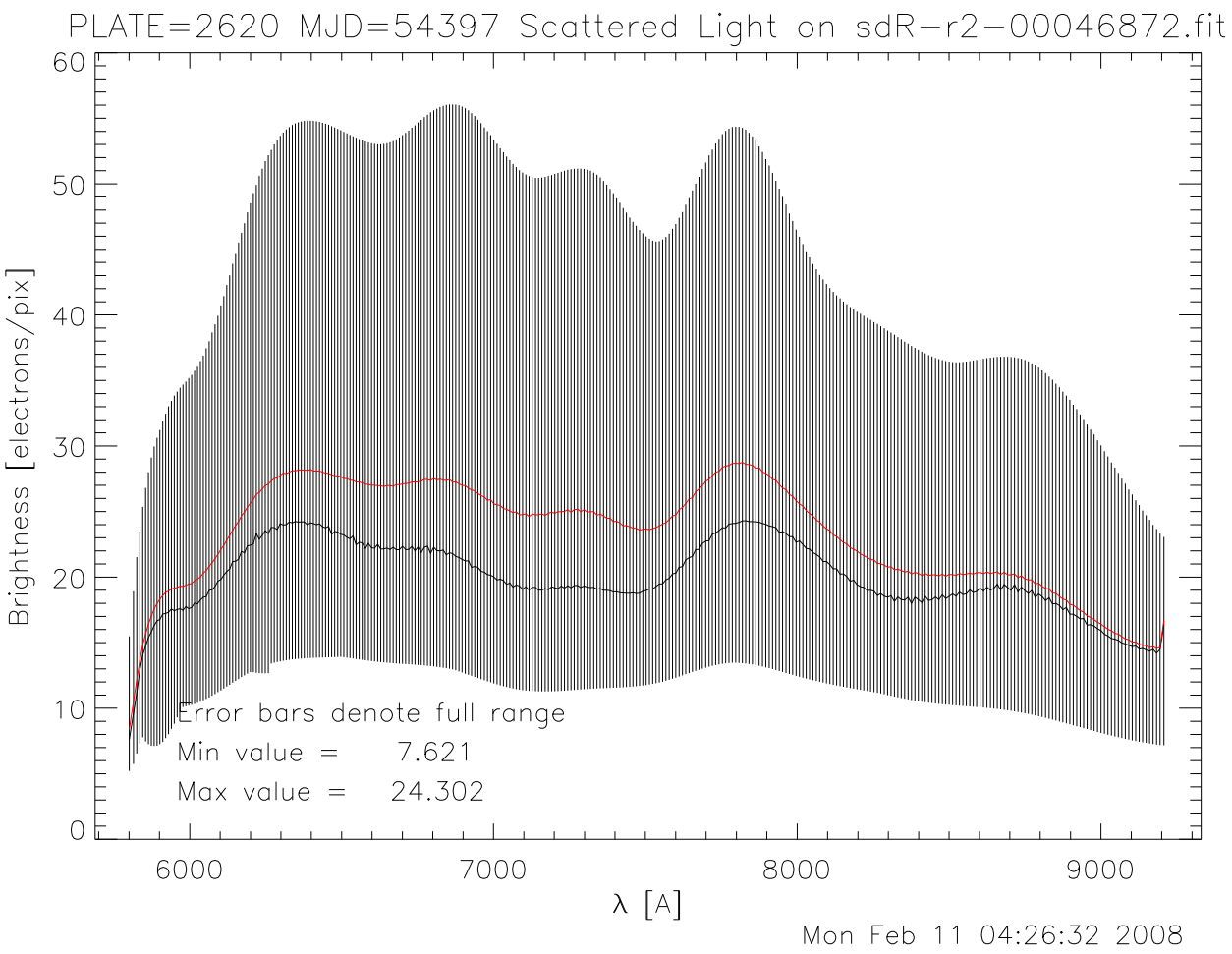

PLATE=2620 MJD=54397 Arcline Fit for sdR-r2-00046879.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 04:22:37 2008

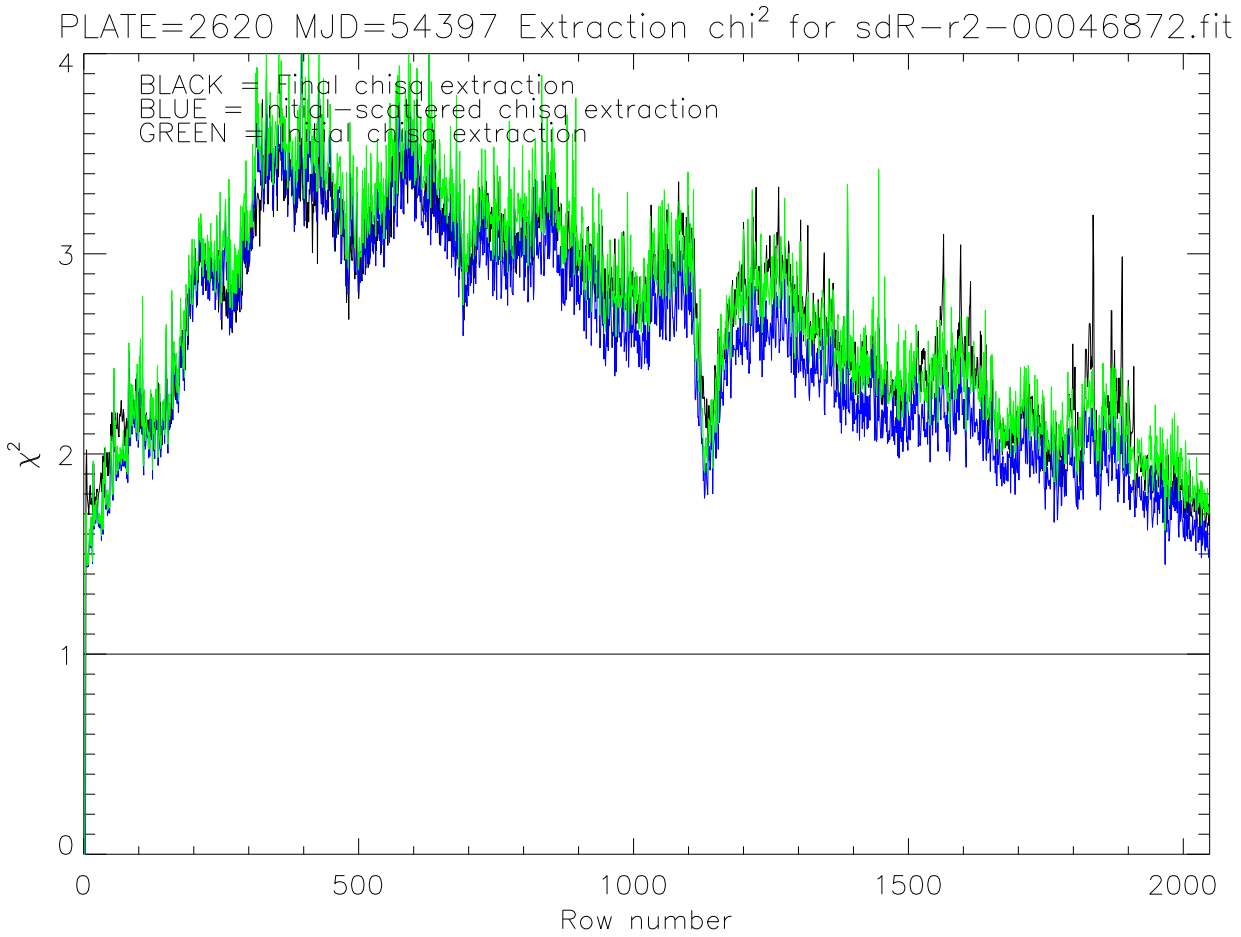

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:22:46 2008

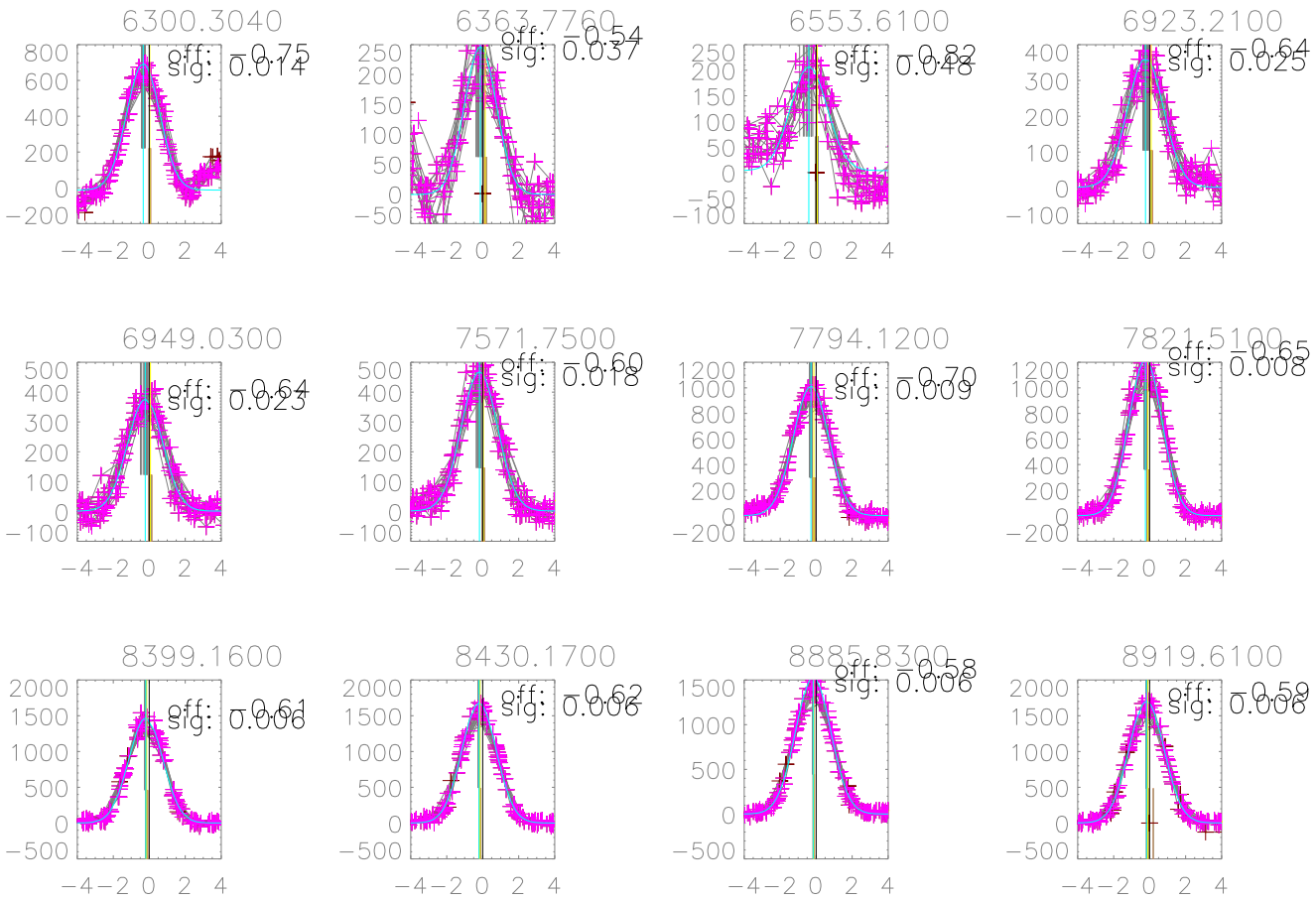

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046872.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
63.6
45.5
27.3
9.1

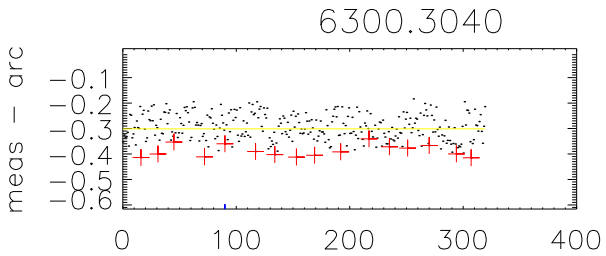

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046872.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.164
Max value = 61.490
Mon Feb 11 04:23:34 2008

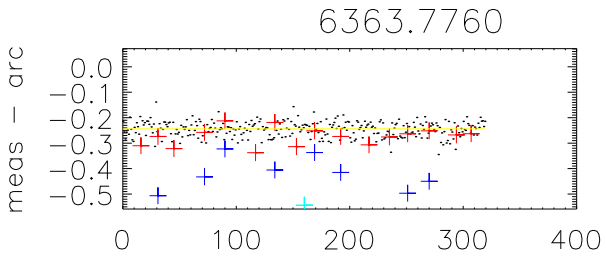

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046872.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
16.4
38.2
49.1

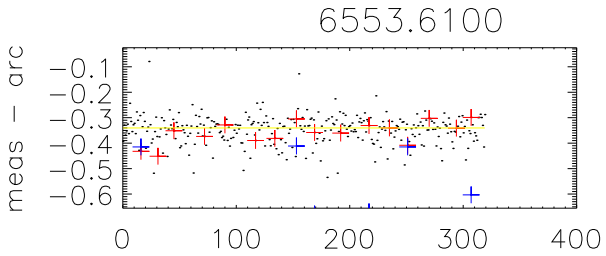

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046872.fit
Brightness [electrons/pix]
60
50
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.621
Max value = 24.302
Mon Feb 11 04:26:32 2008

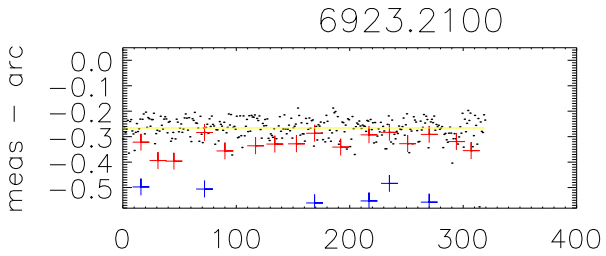

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046872.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

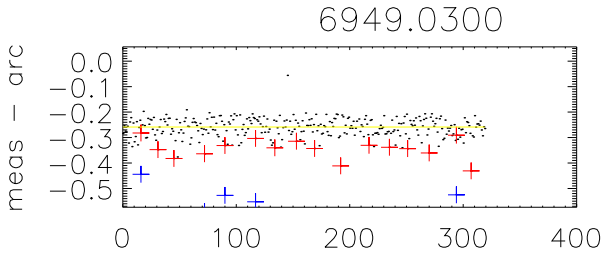

6300.3040
off: −0.75
sig: 0.014
6363.7760
off: −0.54
sig: 0.037
6553.6100
off: −0.82
sig: 0.048
6923.2100
off: −0.64
sig: 0.025
6949.0300
off: −0.64
sig: 0.023
7571.7500
off: −0.60
sig: 0.018
7794.1200
off: −0.70
sig: 0.009
7821.5100
off: −0.65
sig: 0.008
8399.1600
off: −0.61
sig: 0.006
8430.1700
off: −0.62
sig: 0.006
8885.8300
off: −0.58
sig: 0.006
8919.6100
off: −0.59
sig: 0.006

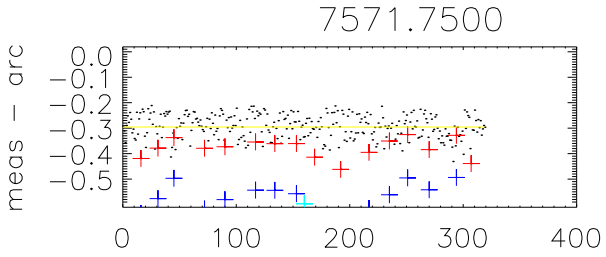

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

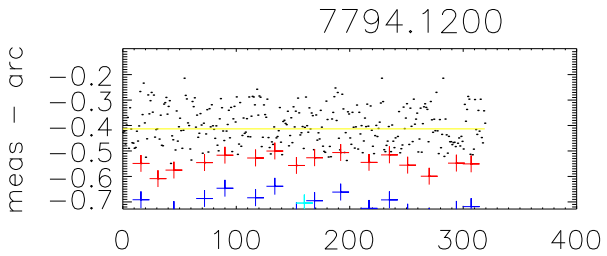

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

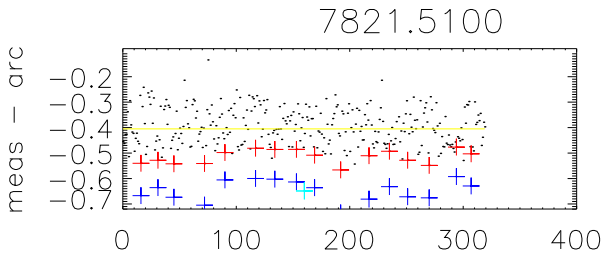

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

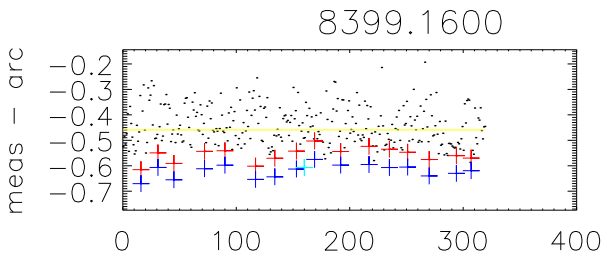

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

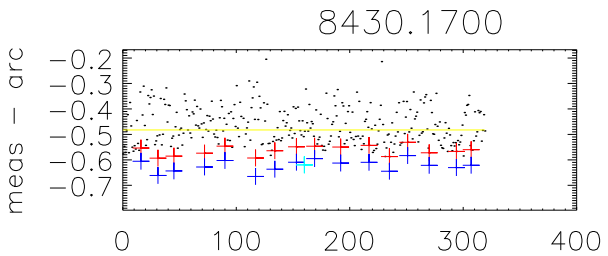

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

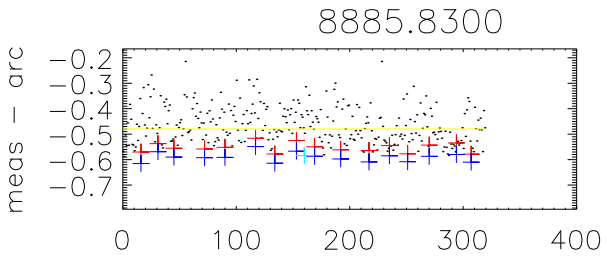

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

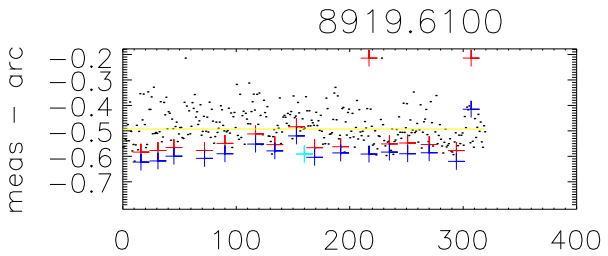

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

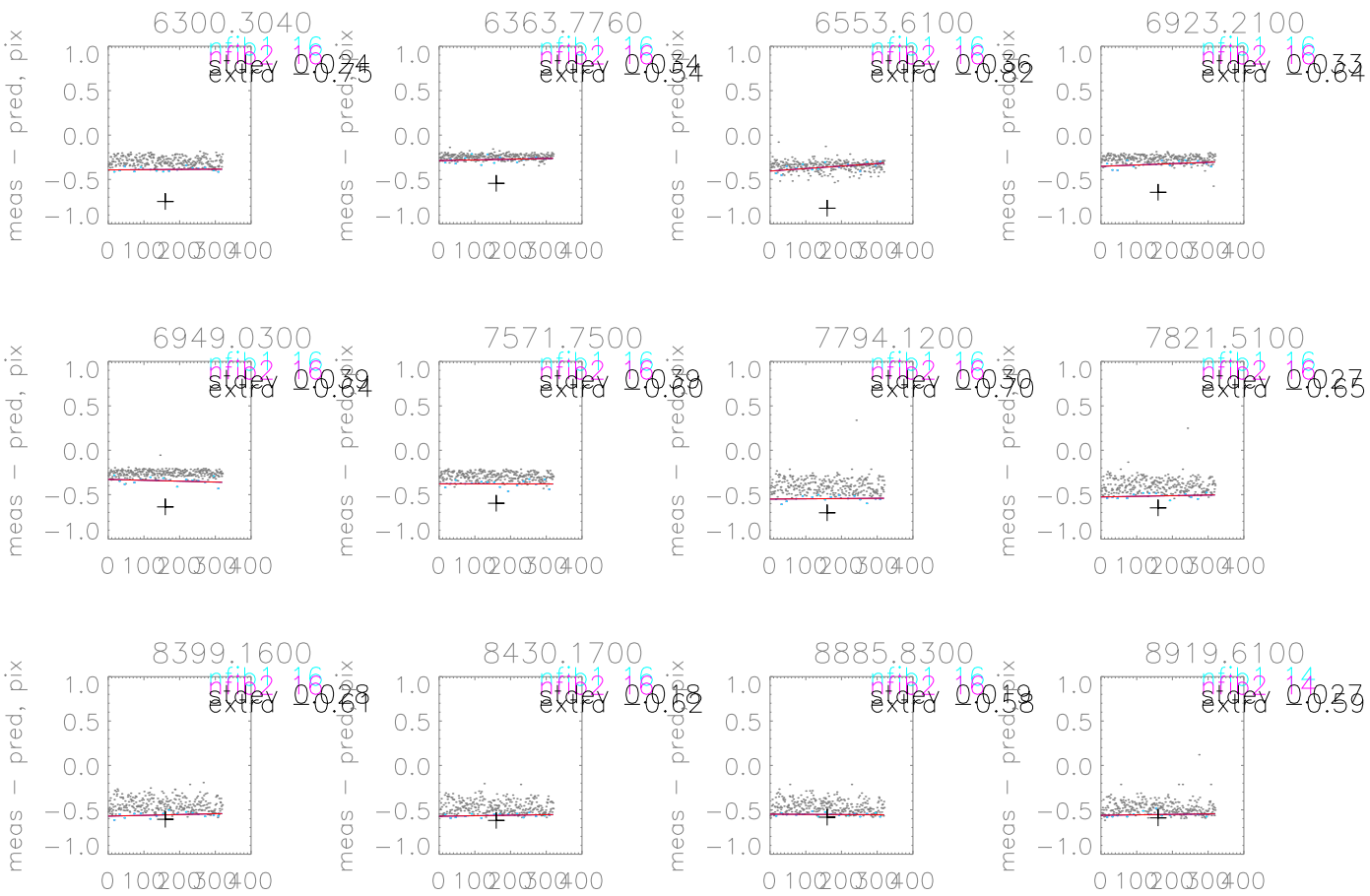

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

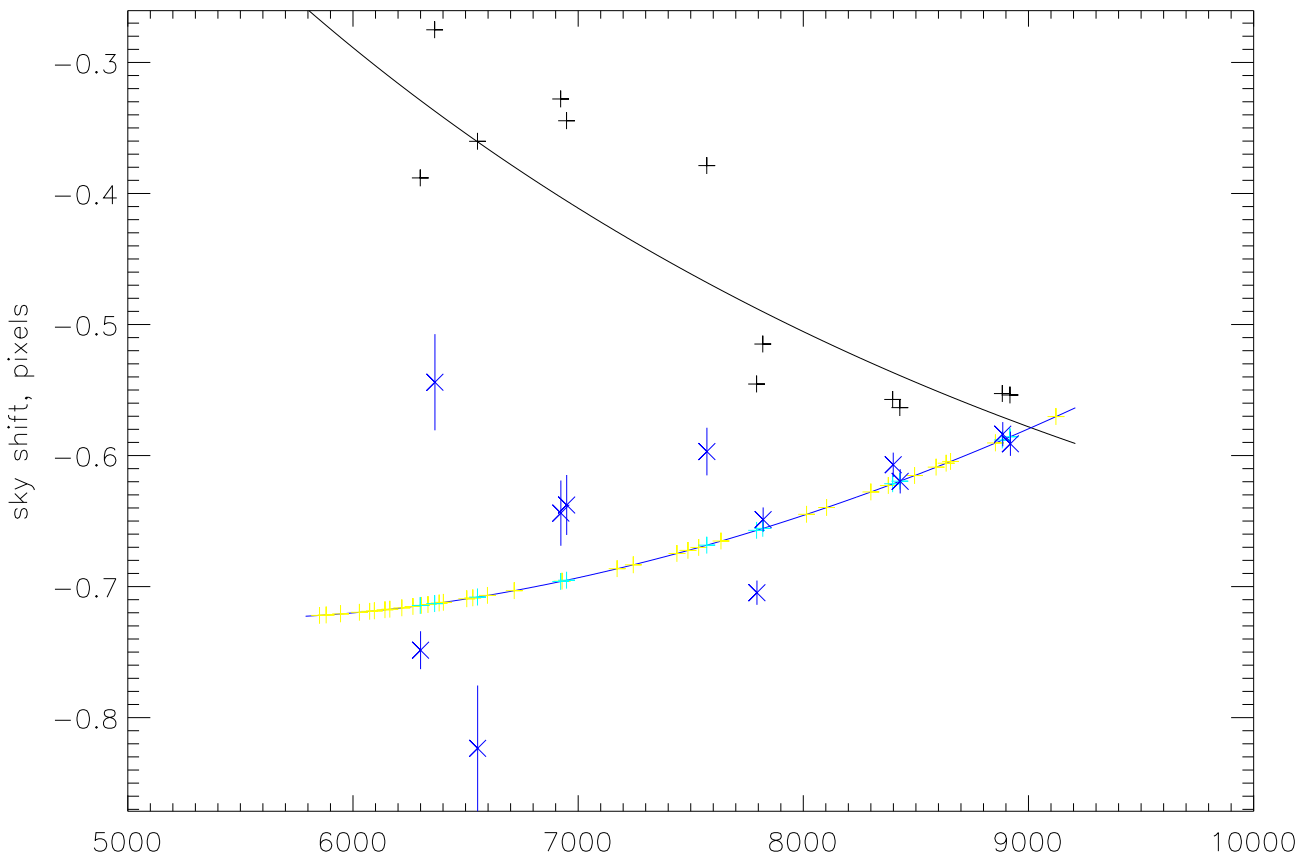

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

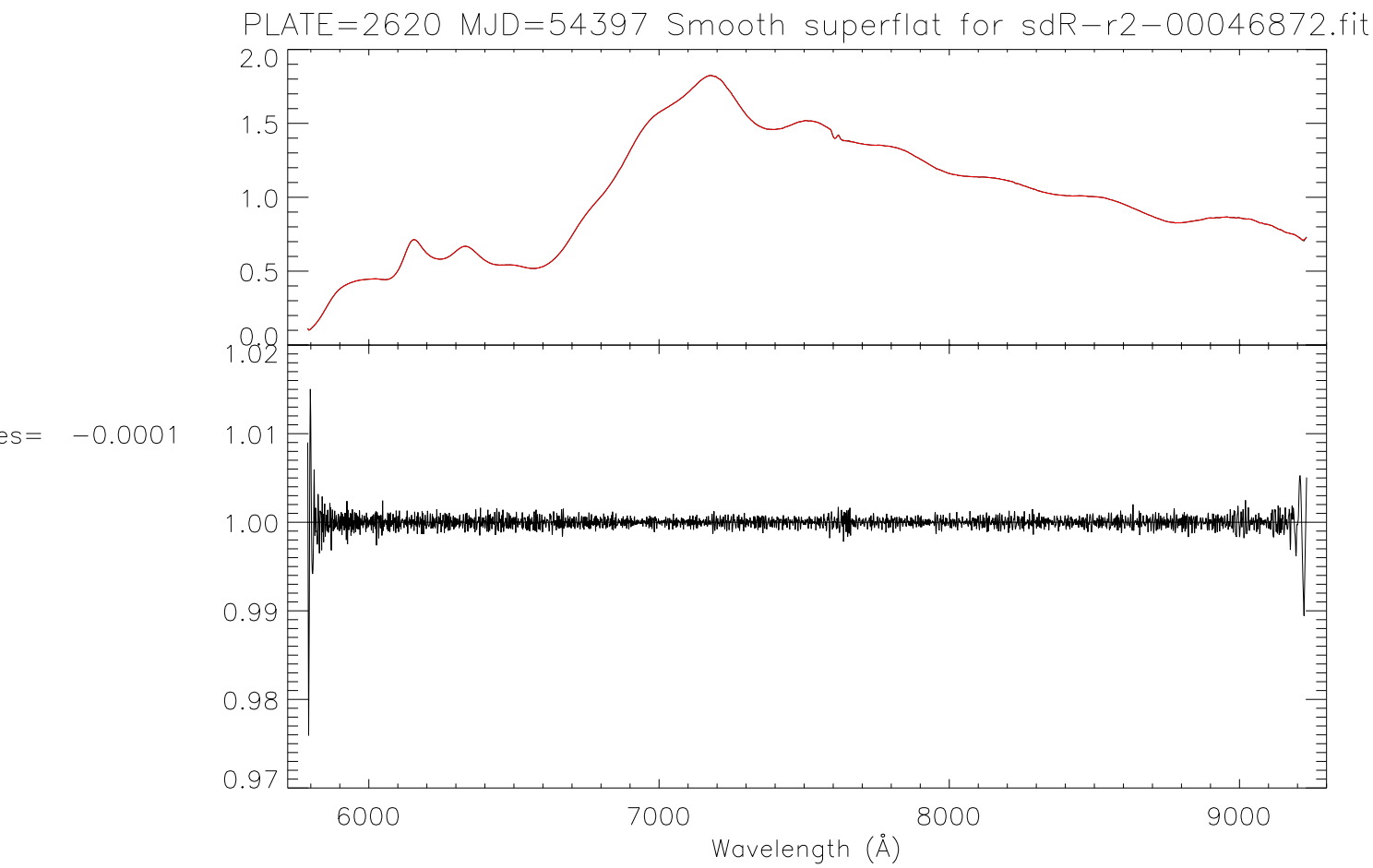

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

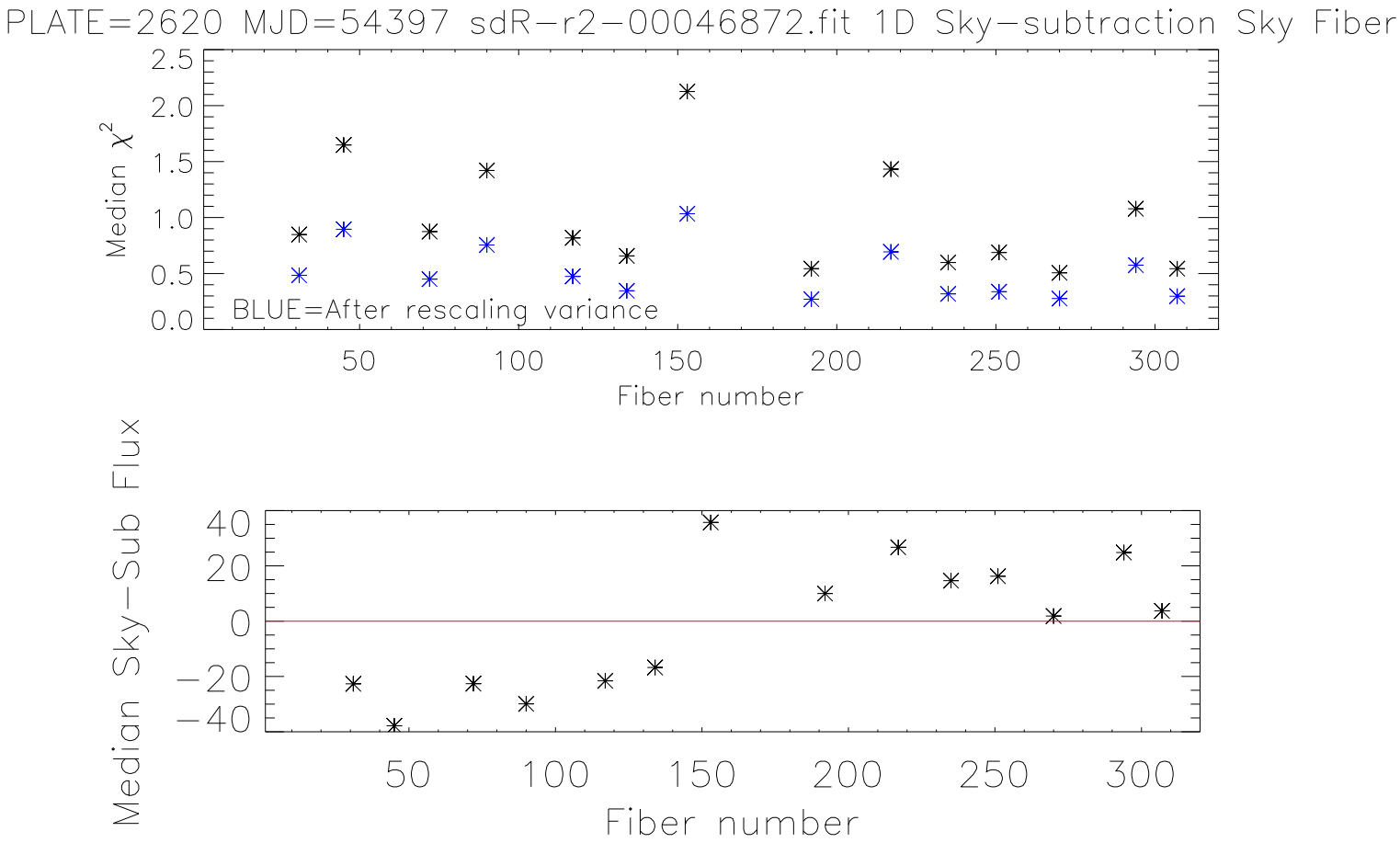

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

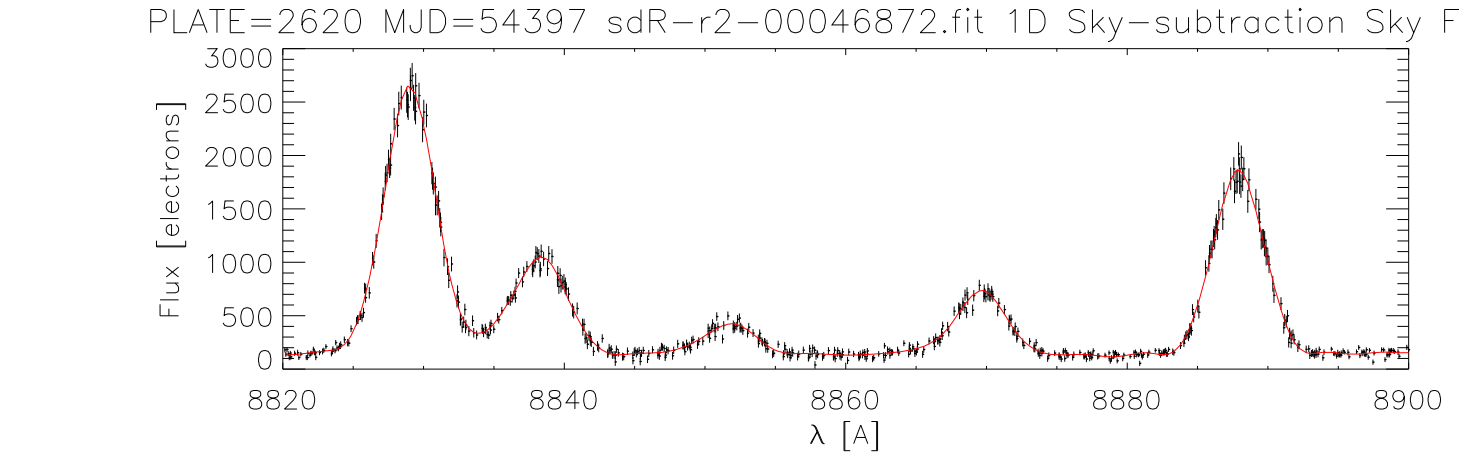

6300.3040
mfib1 16
mfib2 16
stdev 0.024
extrd 0.75
6363.7760
mfib1 16
mfib2 16
stdev 0.034
extrd 0.54
6553.6100
mfib1 16
mfib2 16
stdev 0.036
extrd 0.82
6923.2100
mfib1 16
mfib2 16
stdev 0.033
extrd 0.64
6949.0300
mfib1 16
mfib2 16
stdev 0.039
extrd 0.64
7571.7500
mfib1 16
mfib2 16
stdev 0.039
extrd 0.60
7794.1200
mfib1 16
mfib2 16
stdev 0.030
extrd 0.70
7821.5100
mfib1 16
mfib2 16
stdev 0.027
extrd 0.65
8399.1600
mfib1 16
mfib2 16
stdev 0.028
extrd 0.61
8430.1700
mfib1 16
mfib2 16
stdev 0.018
extrd 0.62
8885.8300
mfib1 16
mfib2 16
stdev 0.019
extrd 0.58
8919.6100
mfib1 14
mfib2 16
stdev 0.027
extrd 0.59
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

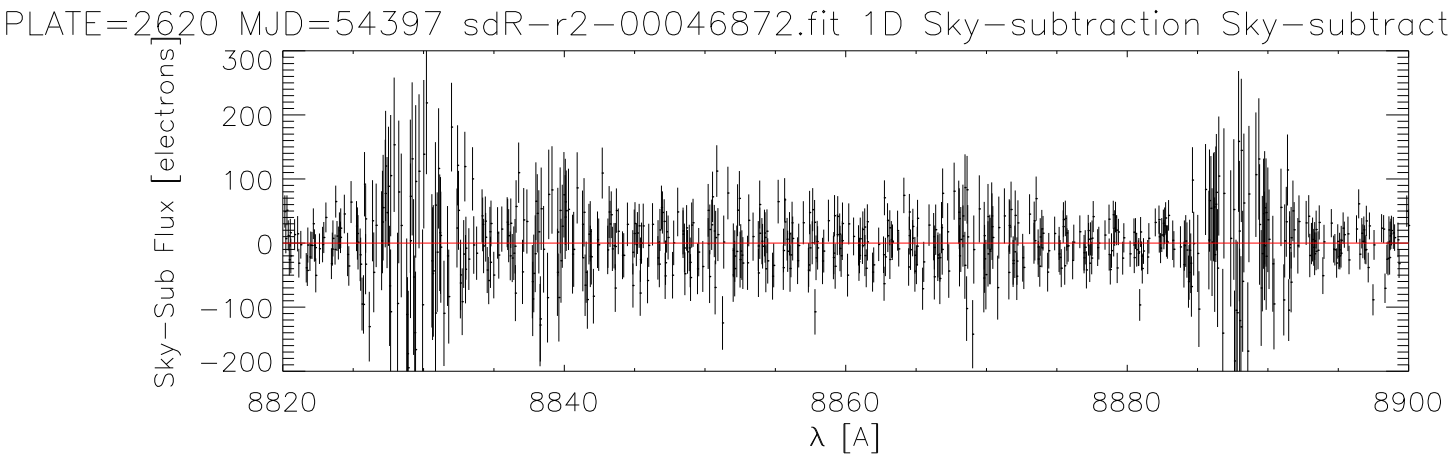

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
5000
6000
7000
8000
9000
10000

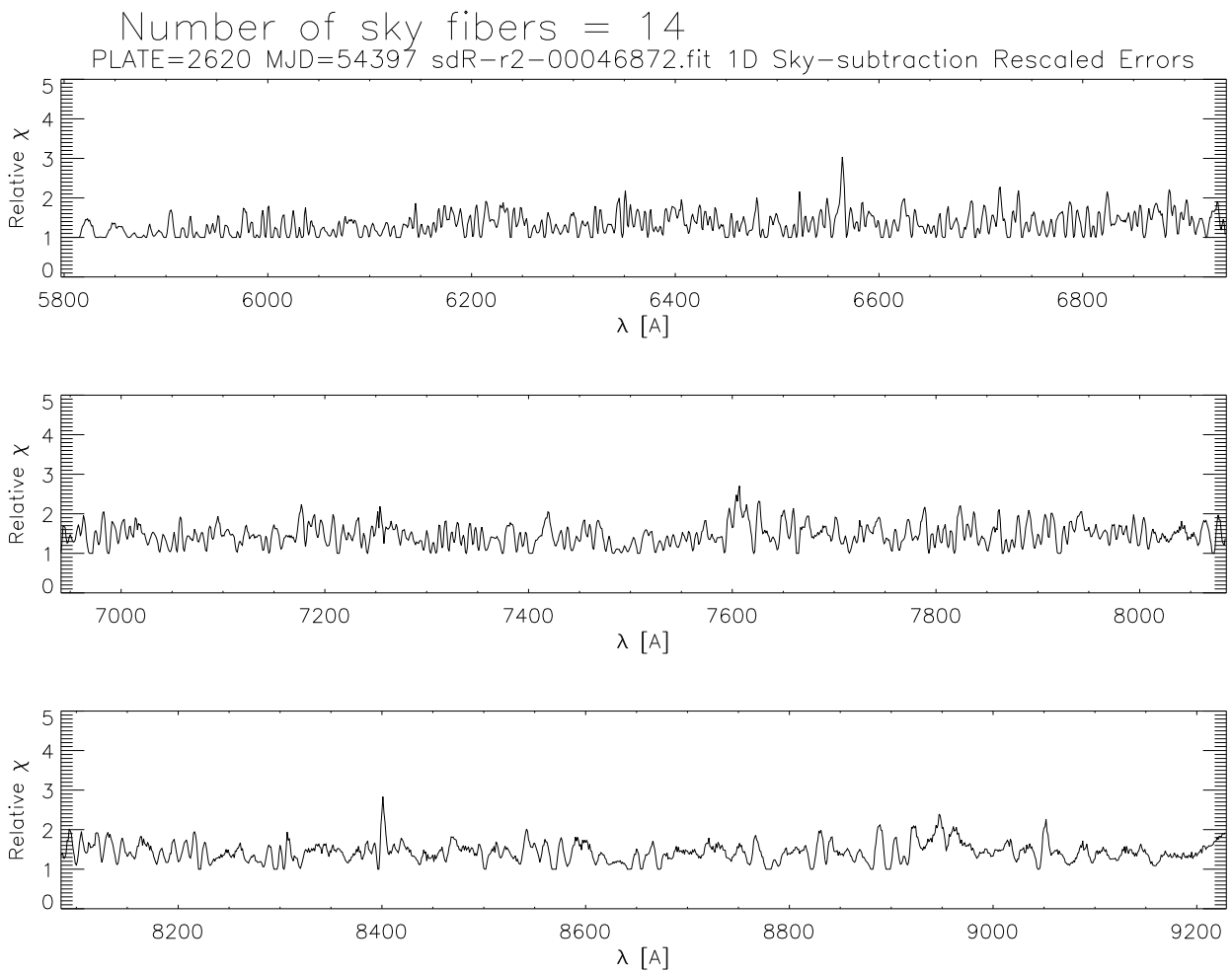

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046872.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

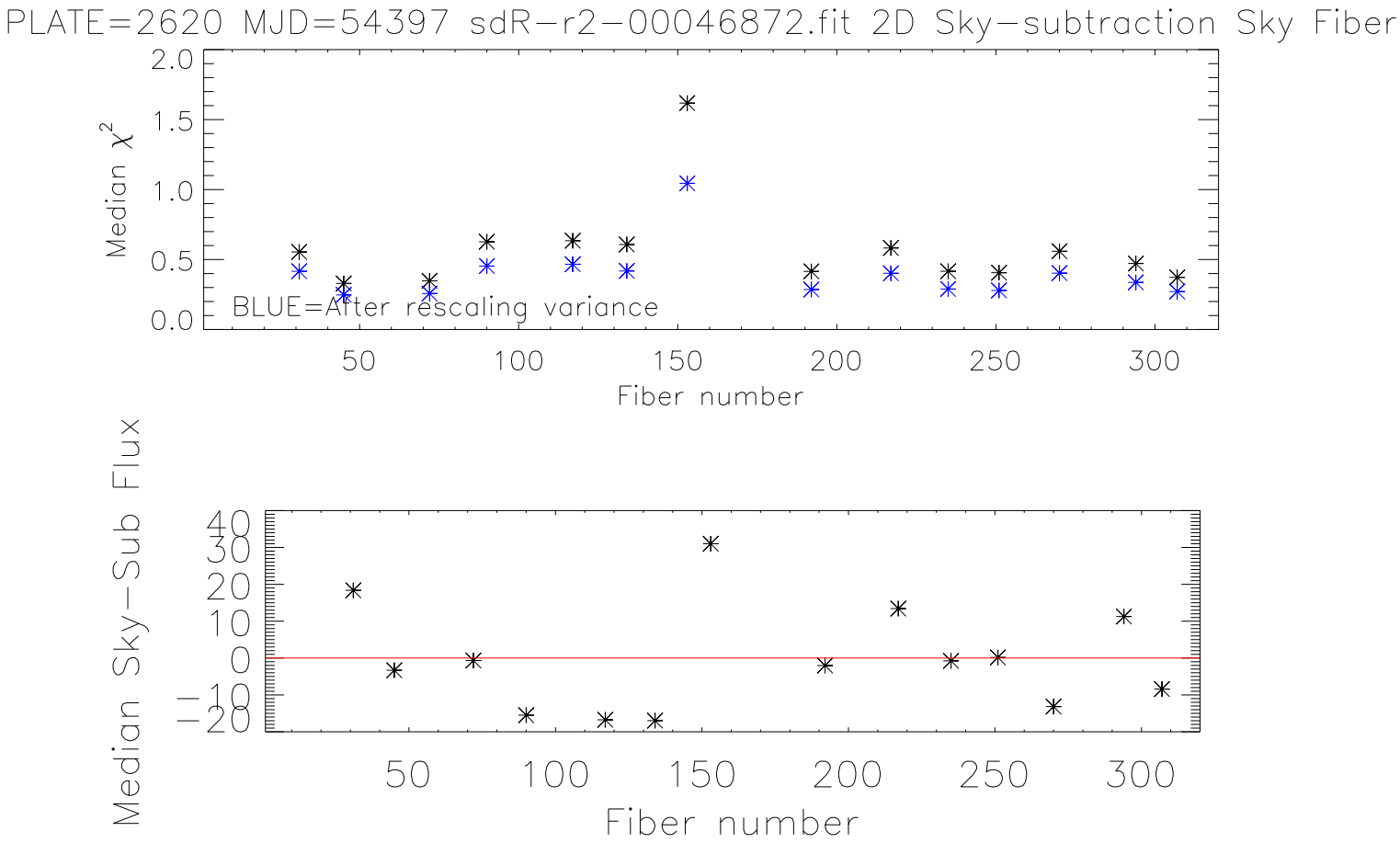
es= −0.0001

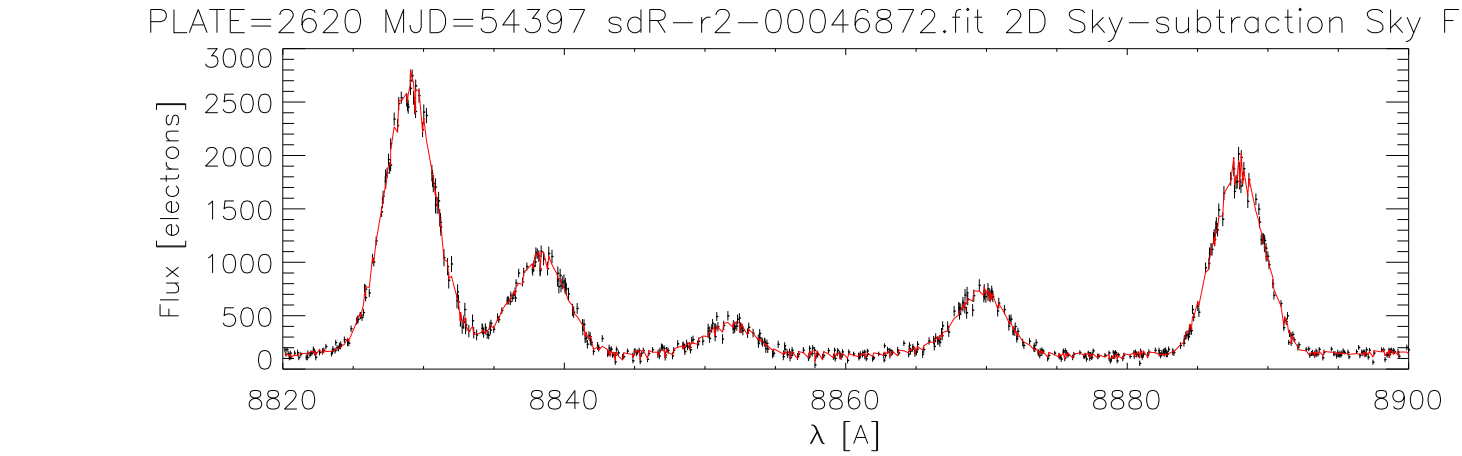

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

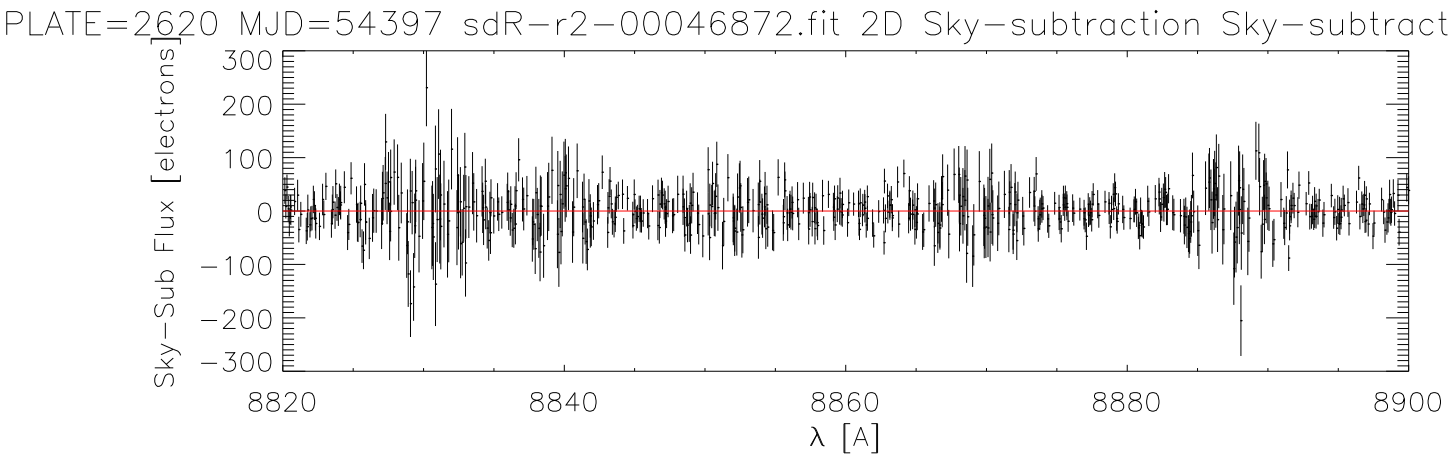

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

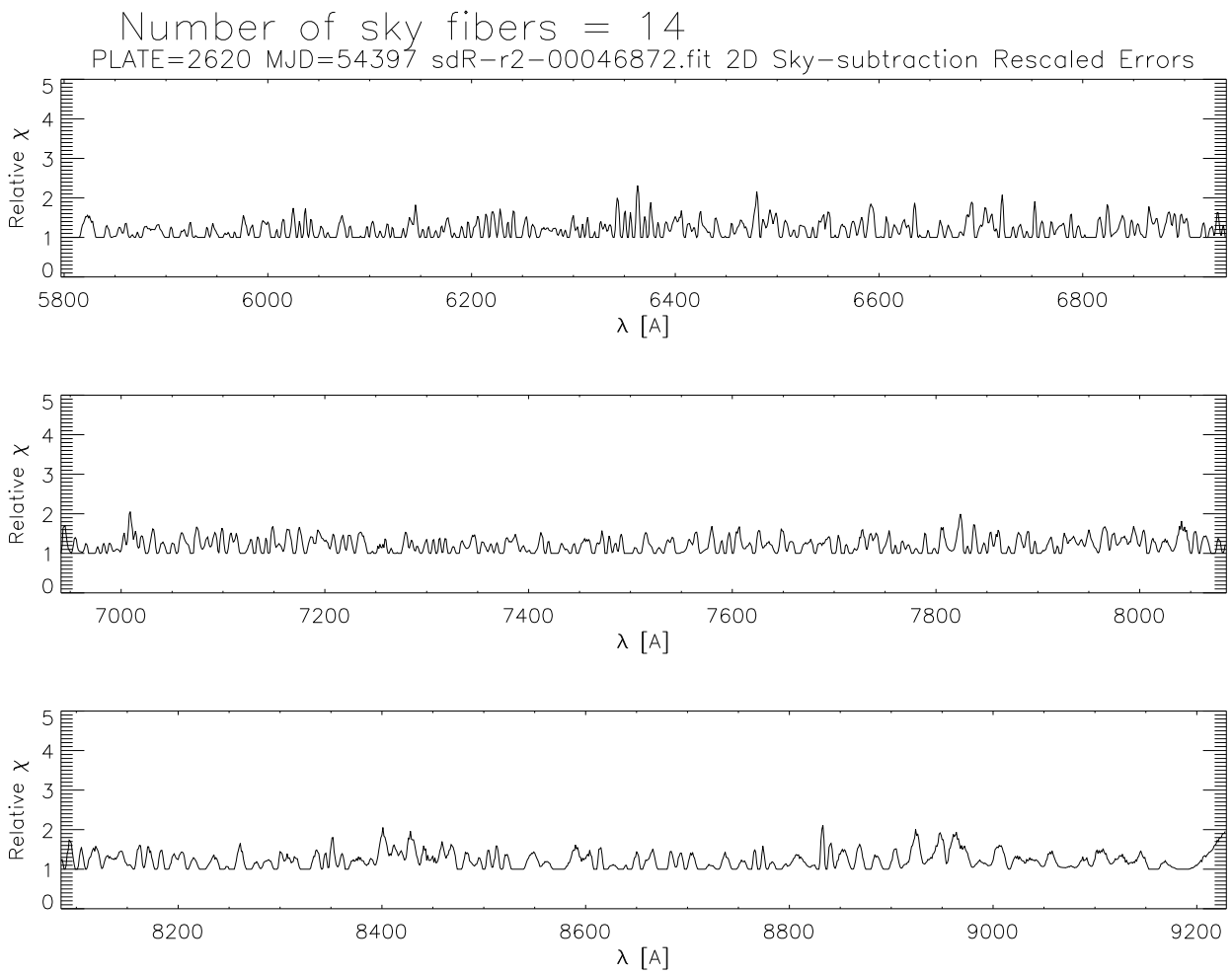

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

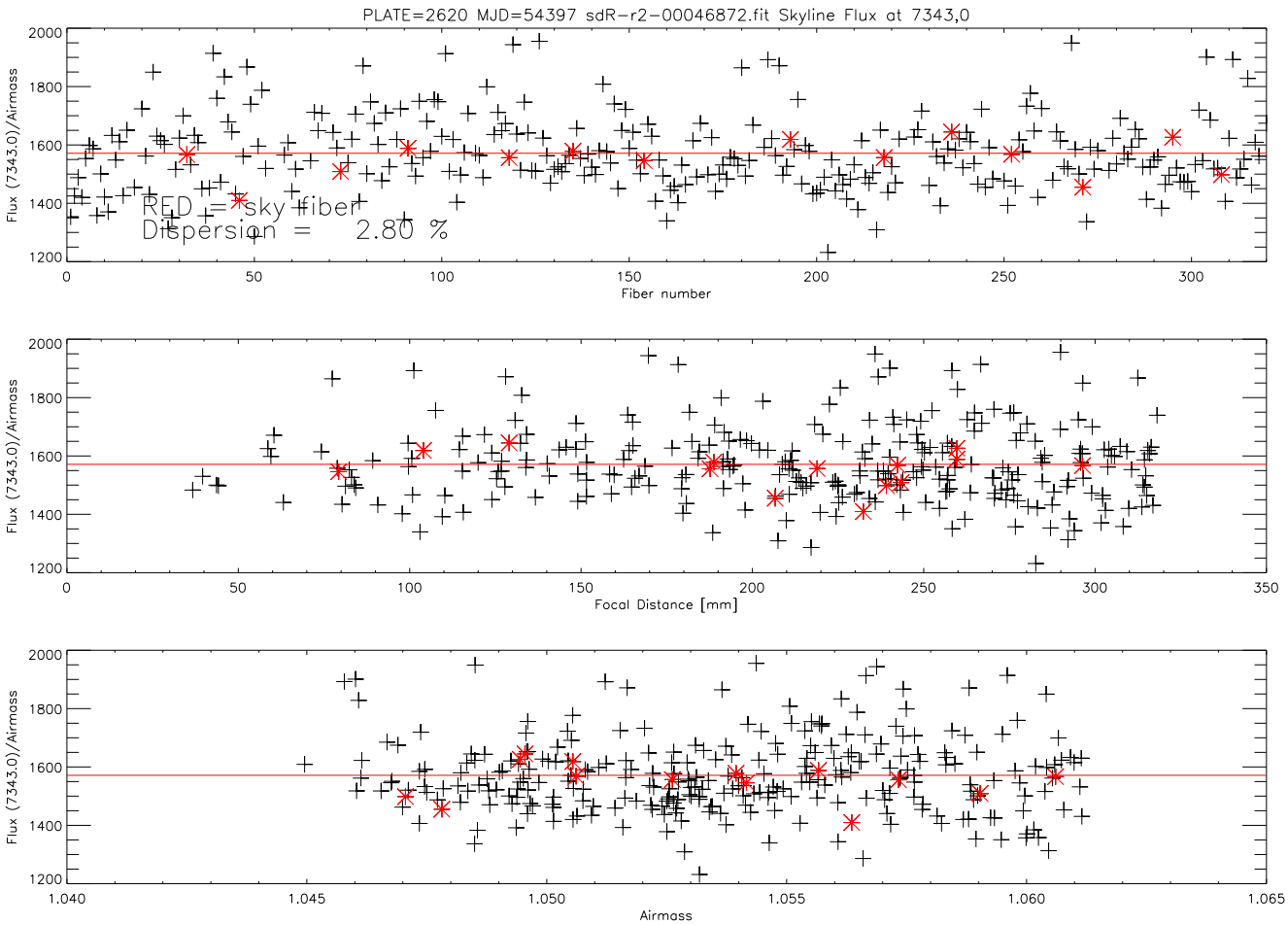

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046872.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

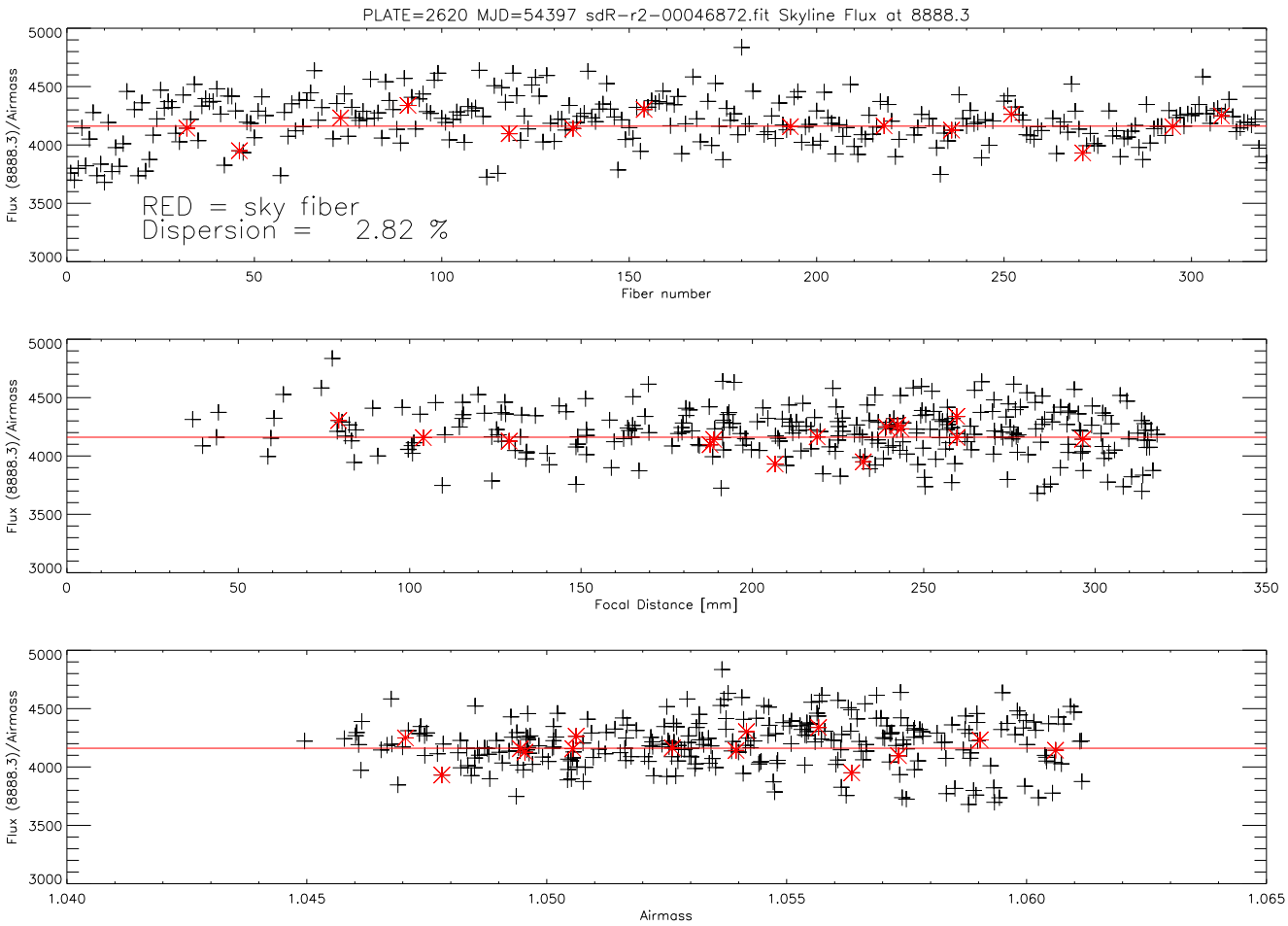

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 2D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

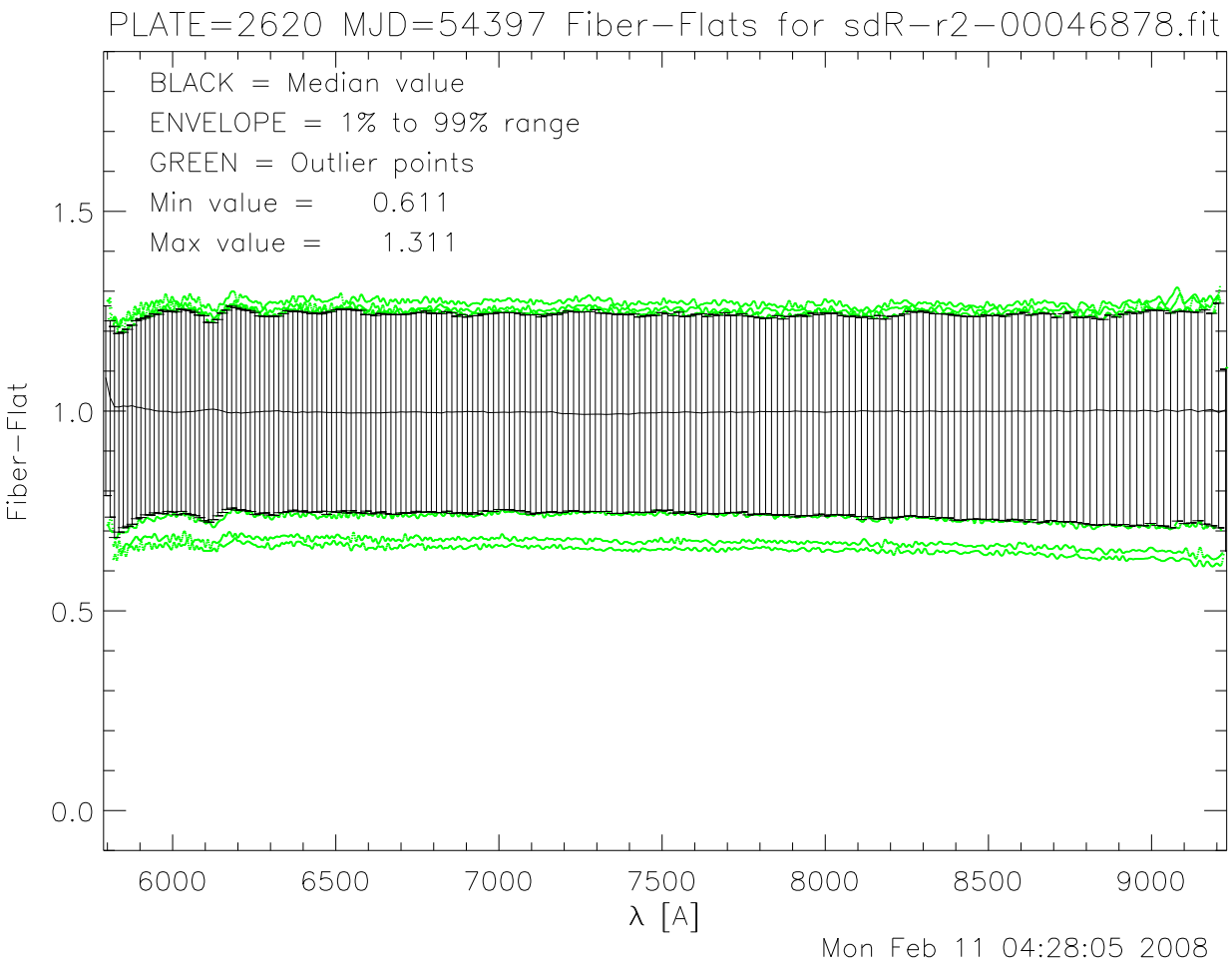

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

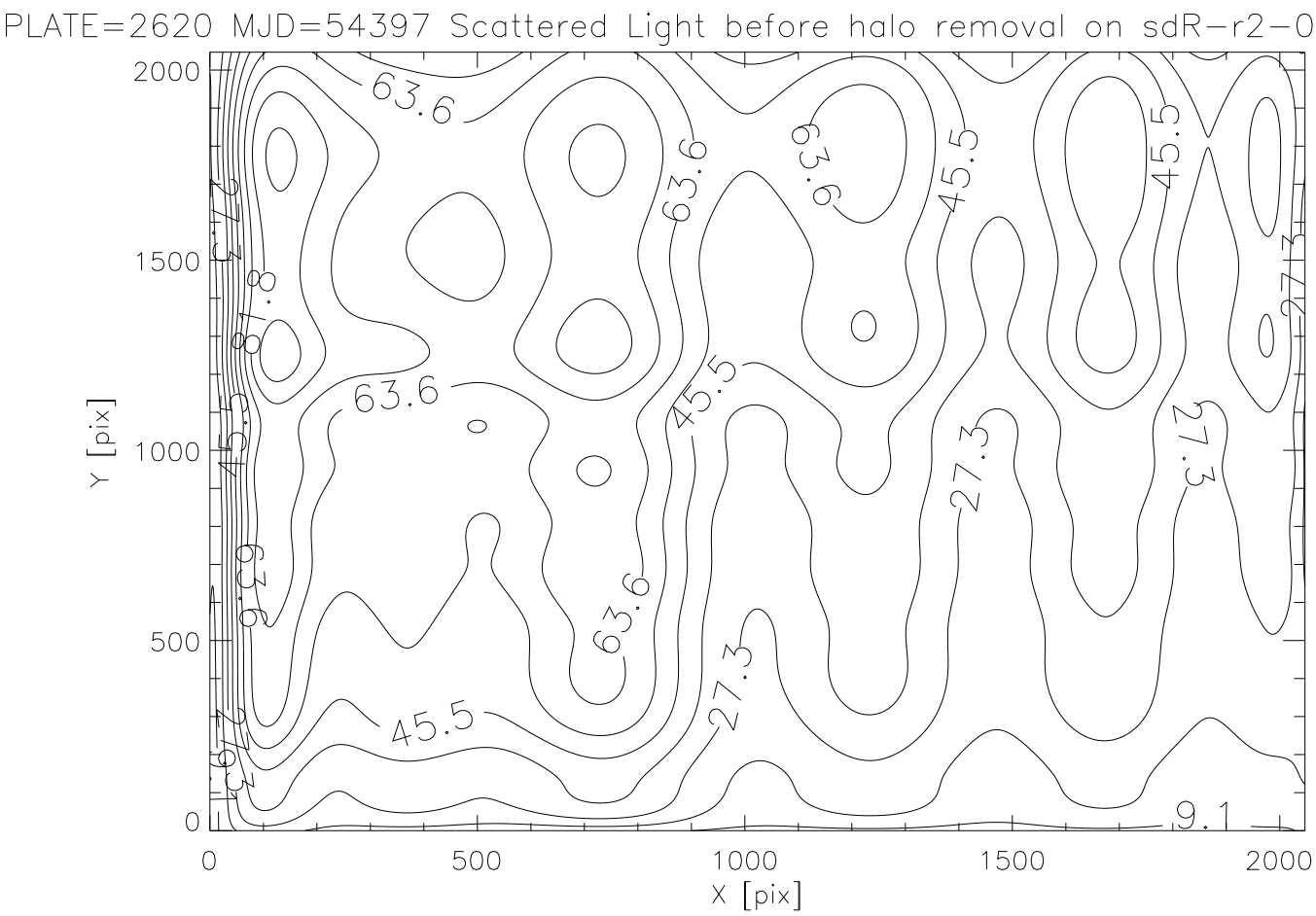

PLATE=2620 MJD=54397 sdR-r2-00046872.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

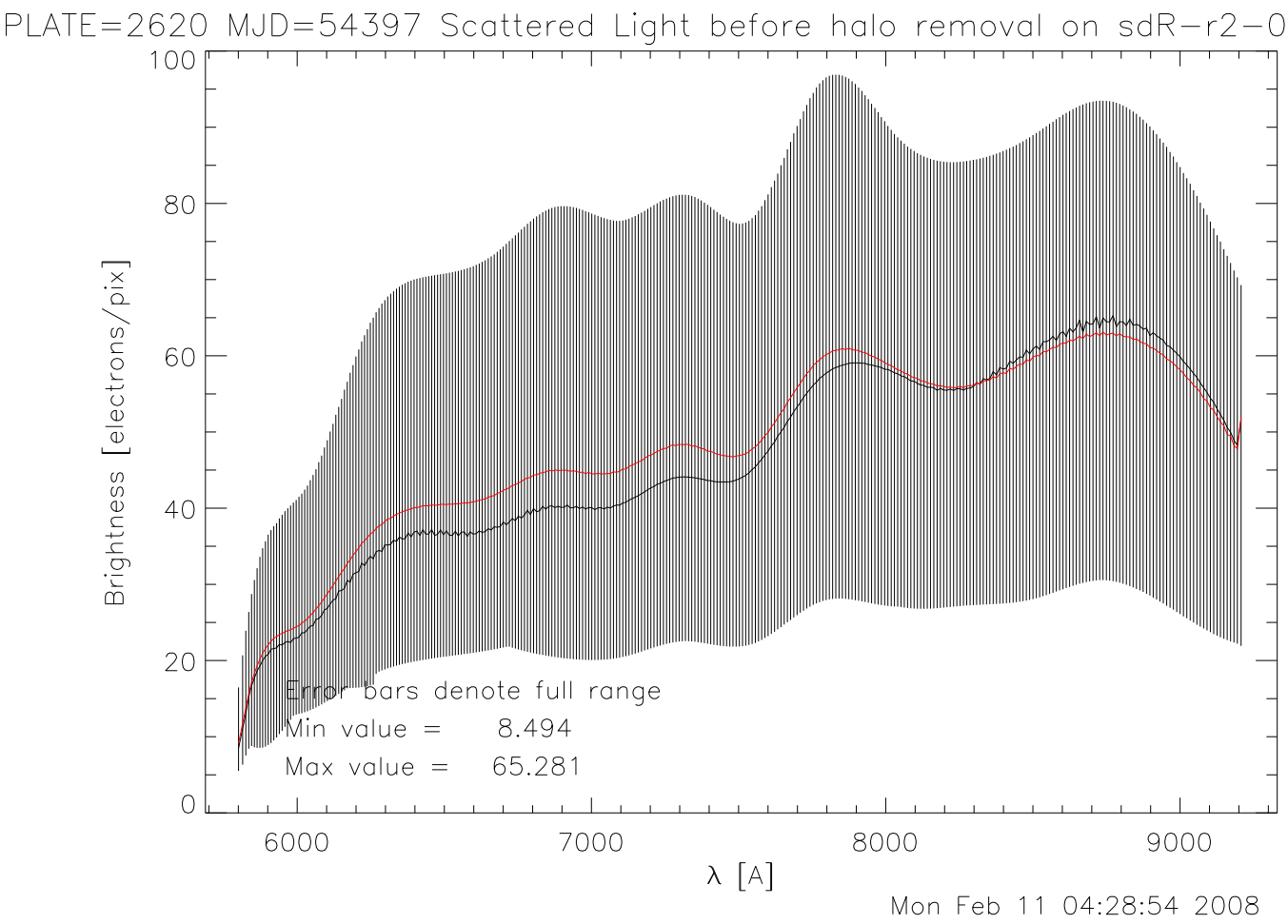

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046872.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

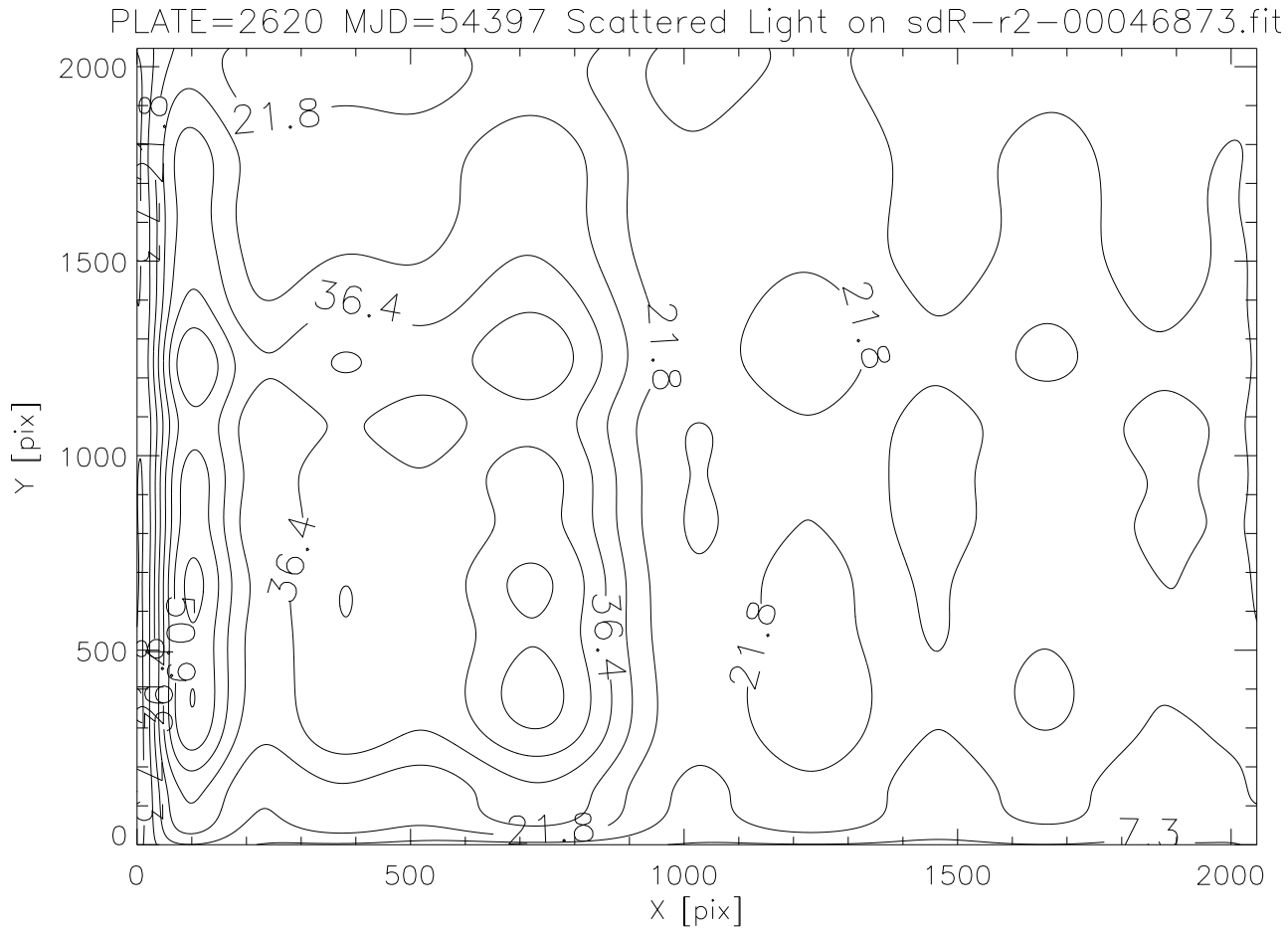

PLATE=2620 MJD=54397 sdR-r2-00046872.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.80 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

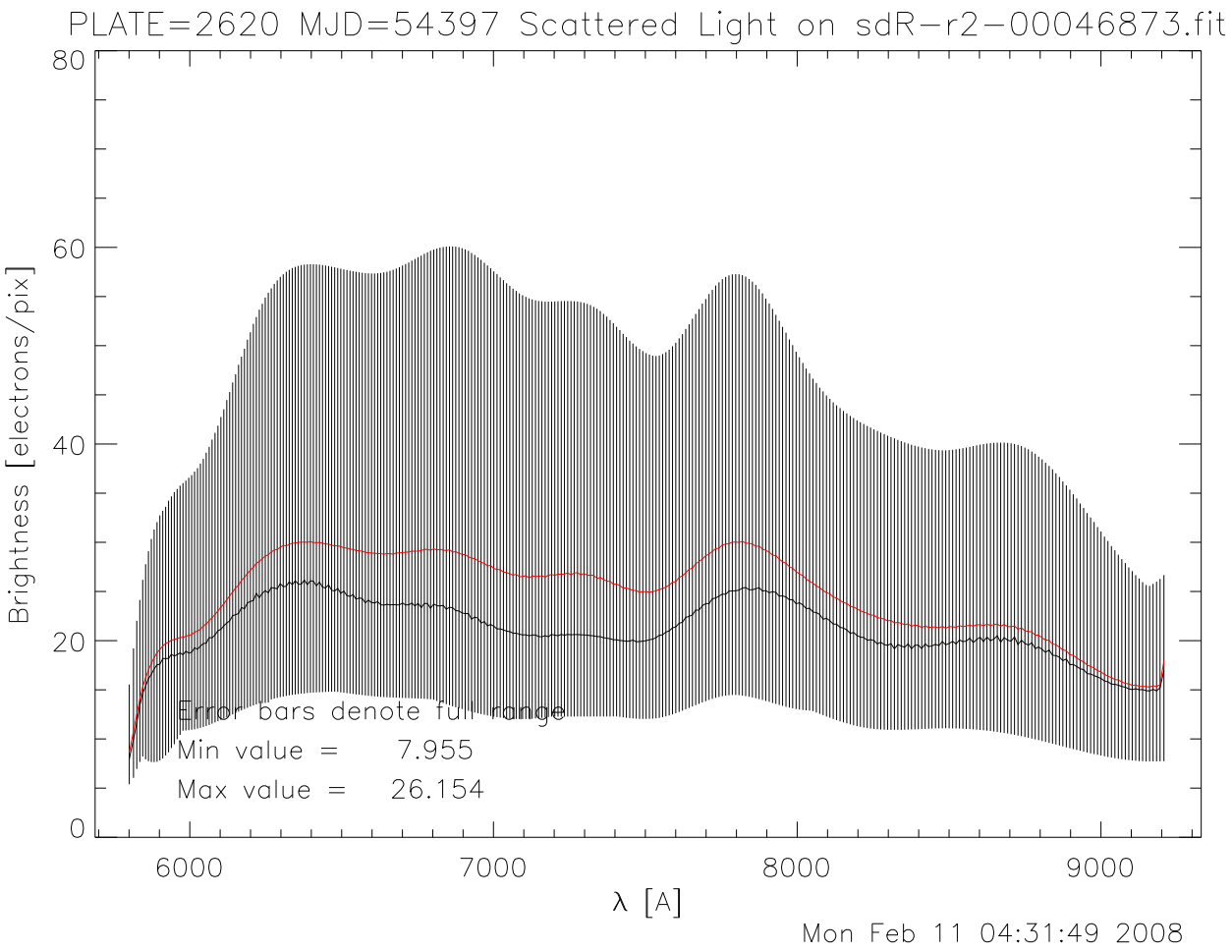

PLATE=2620 MJD=54397 sdR-r2-00046872.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.82 %
Fiber number
Focal Distance [mm]
Airmass

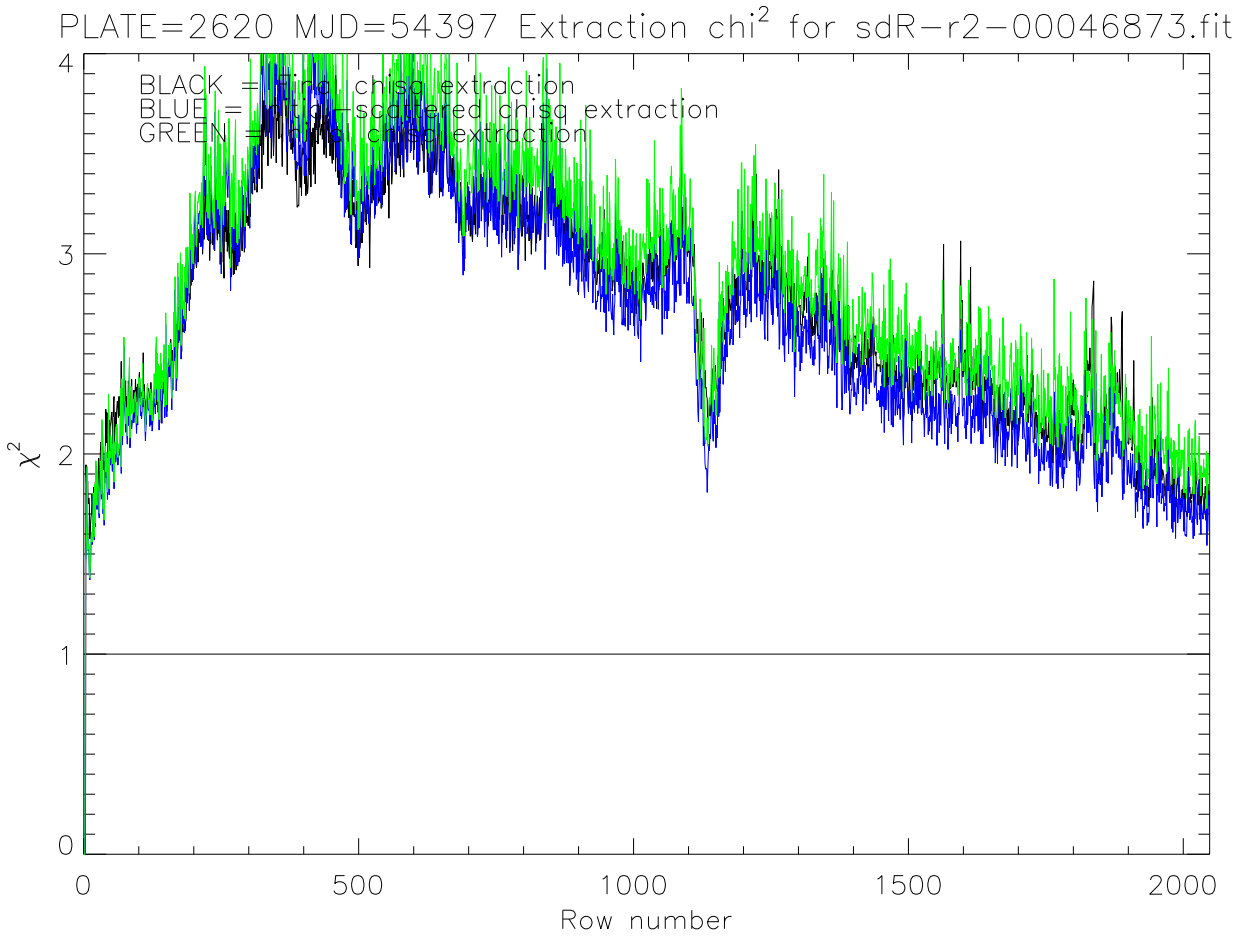

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:28:05 2008

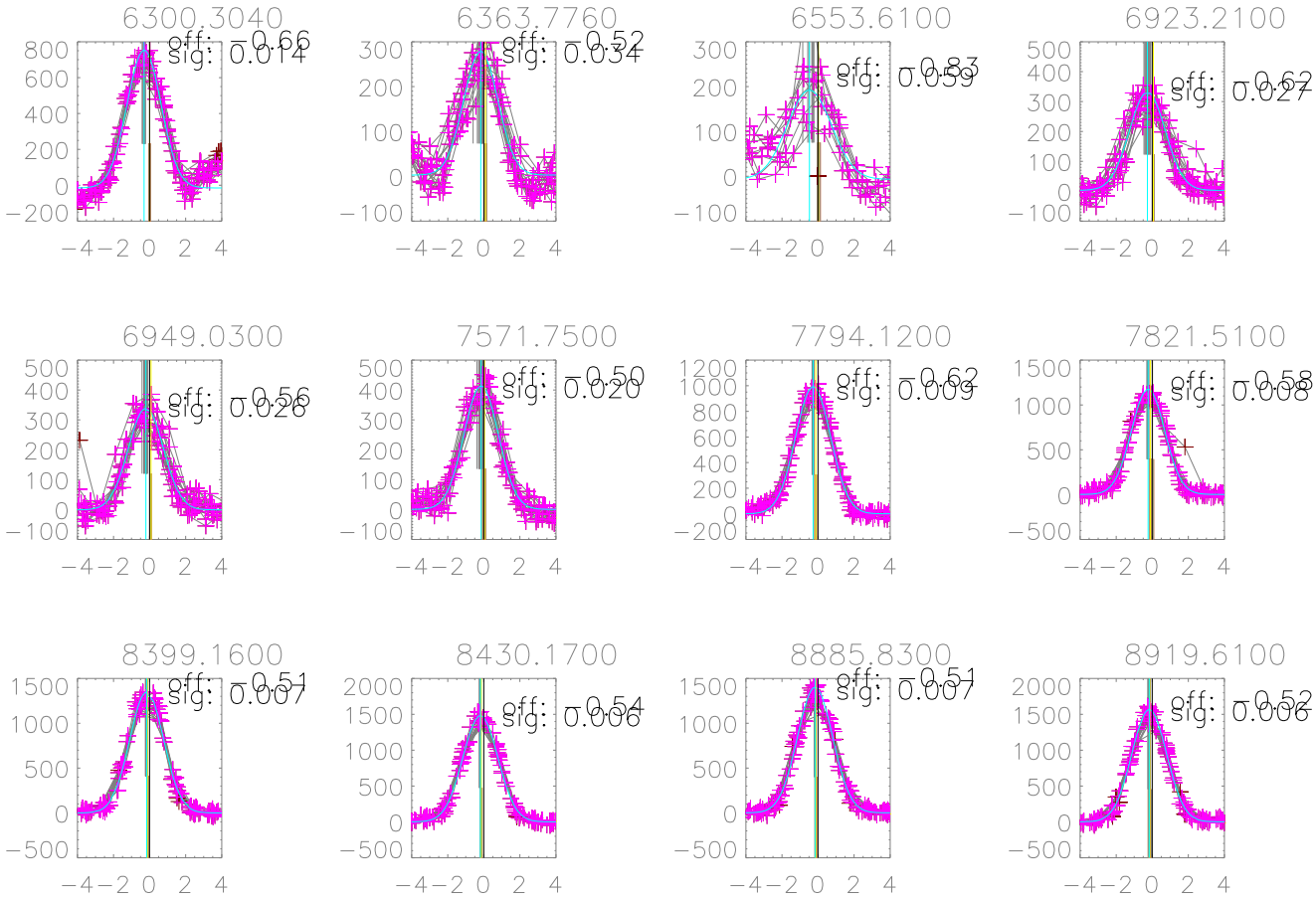

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046873.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
63.6
45.5
27.3
9.1

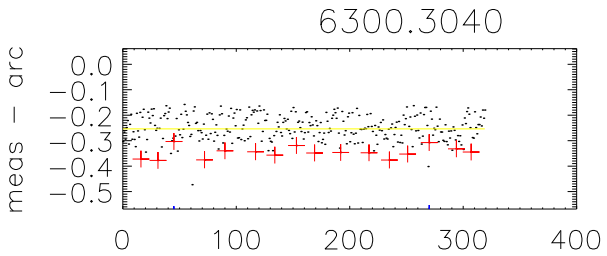

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046873.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.494
Max value = 65.281
Mon Feb 11 04:28:54 2008

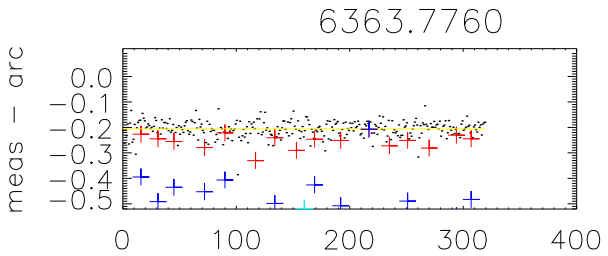

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046873.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
21.8
36.4
0
50.9
7.3

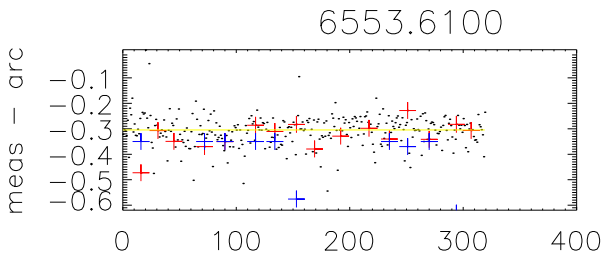

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046873.fit
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.955
Max value = 26.154
Mon Feb 11 04:31:49 2008

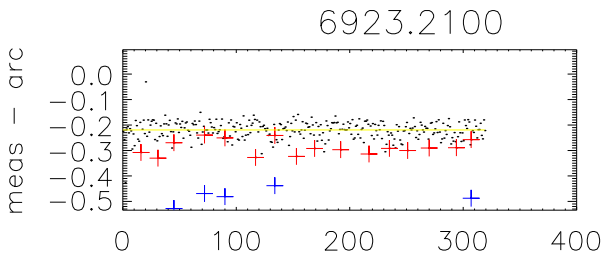

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046873.fit
BLACK = final chi^2 extraction
BLUE = first scattered chi^2 extraction
GREEN = final chi^2 extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

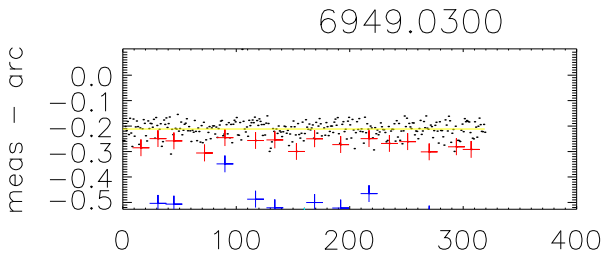

6300.3040
off: -0.66
sig: 0.014
6363.7760
off: -0.52
sig: 0.034
6553.6100
off: -0.83
sig: 0.059
6923.2100
off: -0.62
sig: 0.027
6949.0300
off: -0.56
sig: 0.028
7571.7500
off: -0.50
sig: 0.020
7794.1200
off: -0.62
sig: 0.009
7821.5100
off: -0.58
sig: 0.008
8399.1600
off: -0.51
sig: 0.007
8430.1700
off: -0.54
sig: 0.006
8885.8300
off: -0.51
sig: 0.007
8919.6100
off: -0.52
sig: 0.006

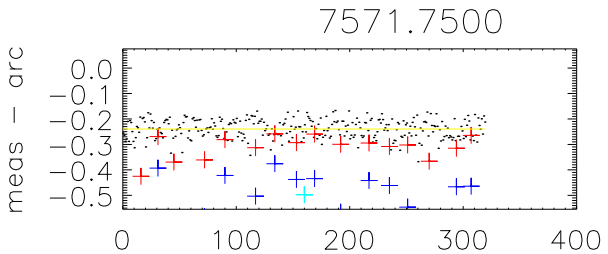

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

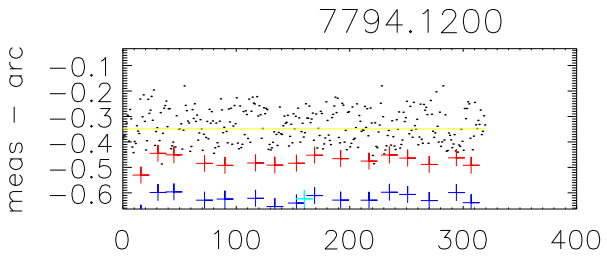

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

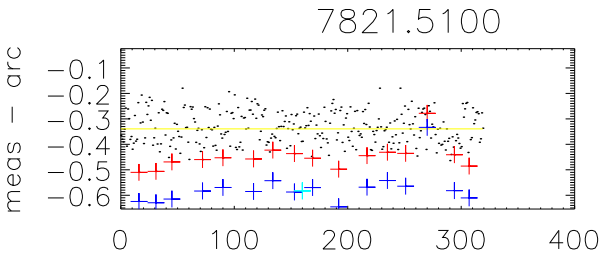

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

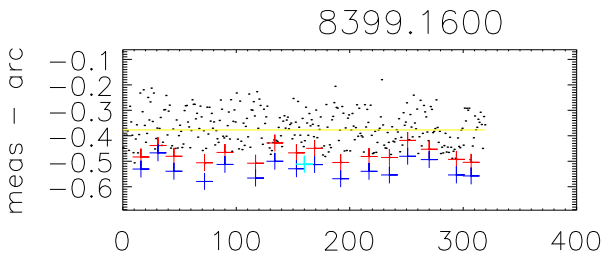

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

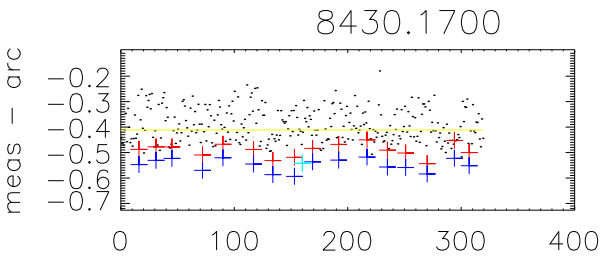

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

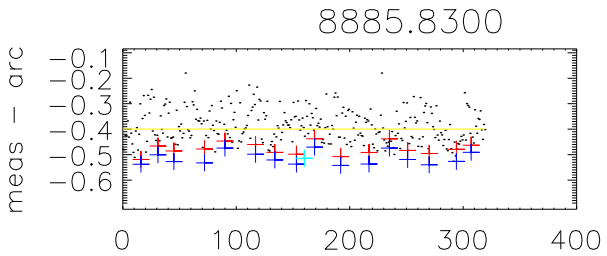

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

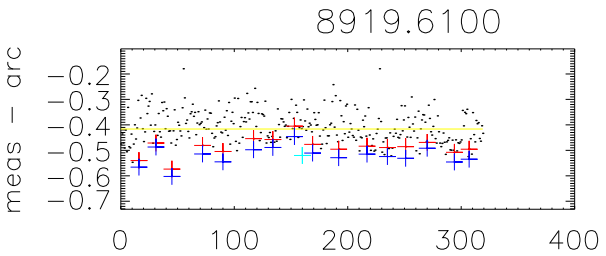

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

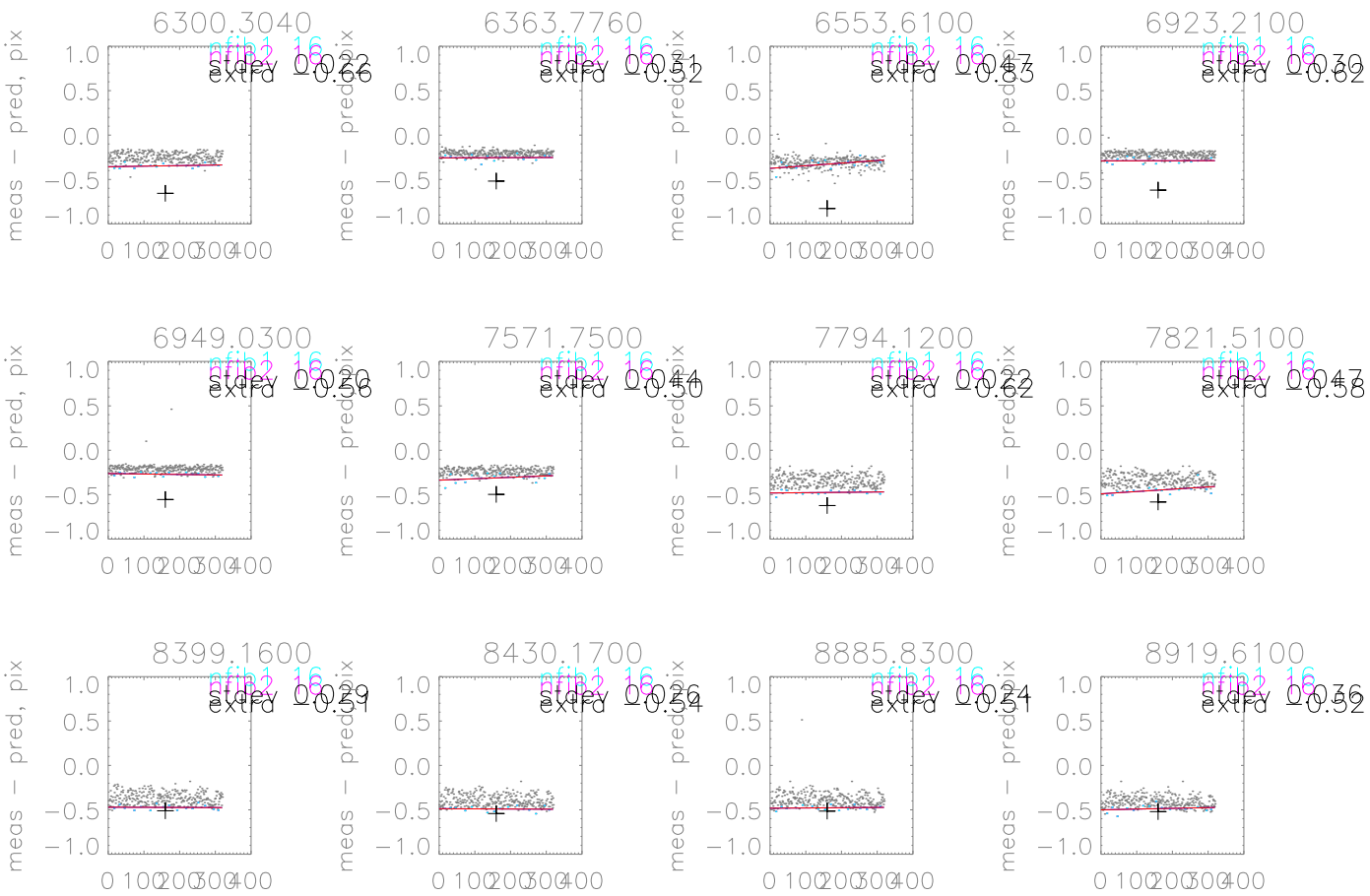

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

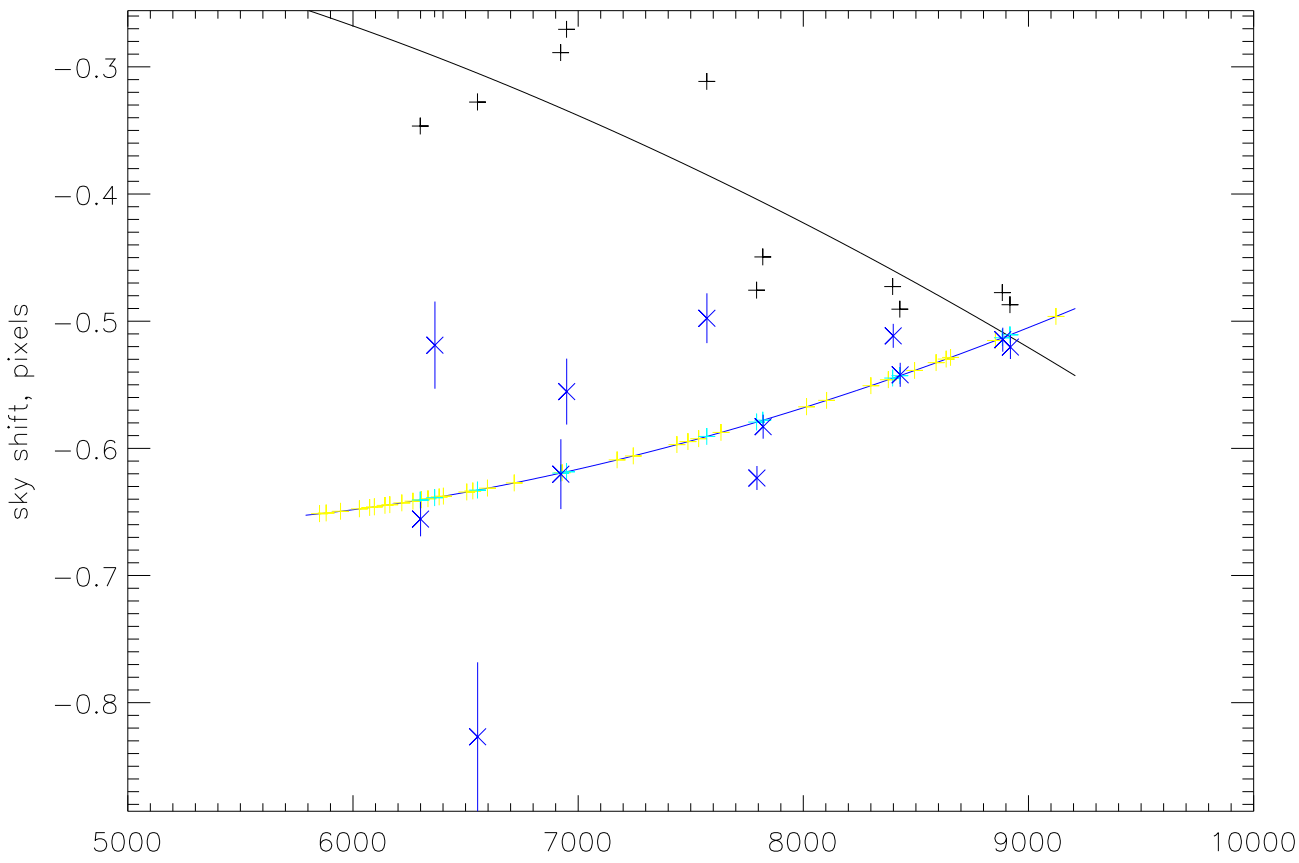

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

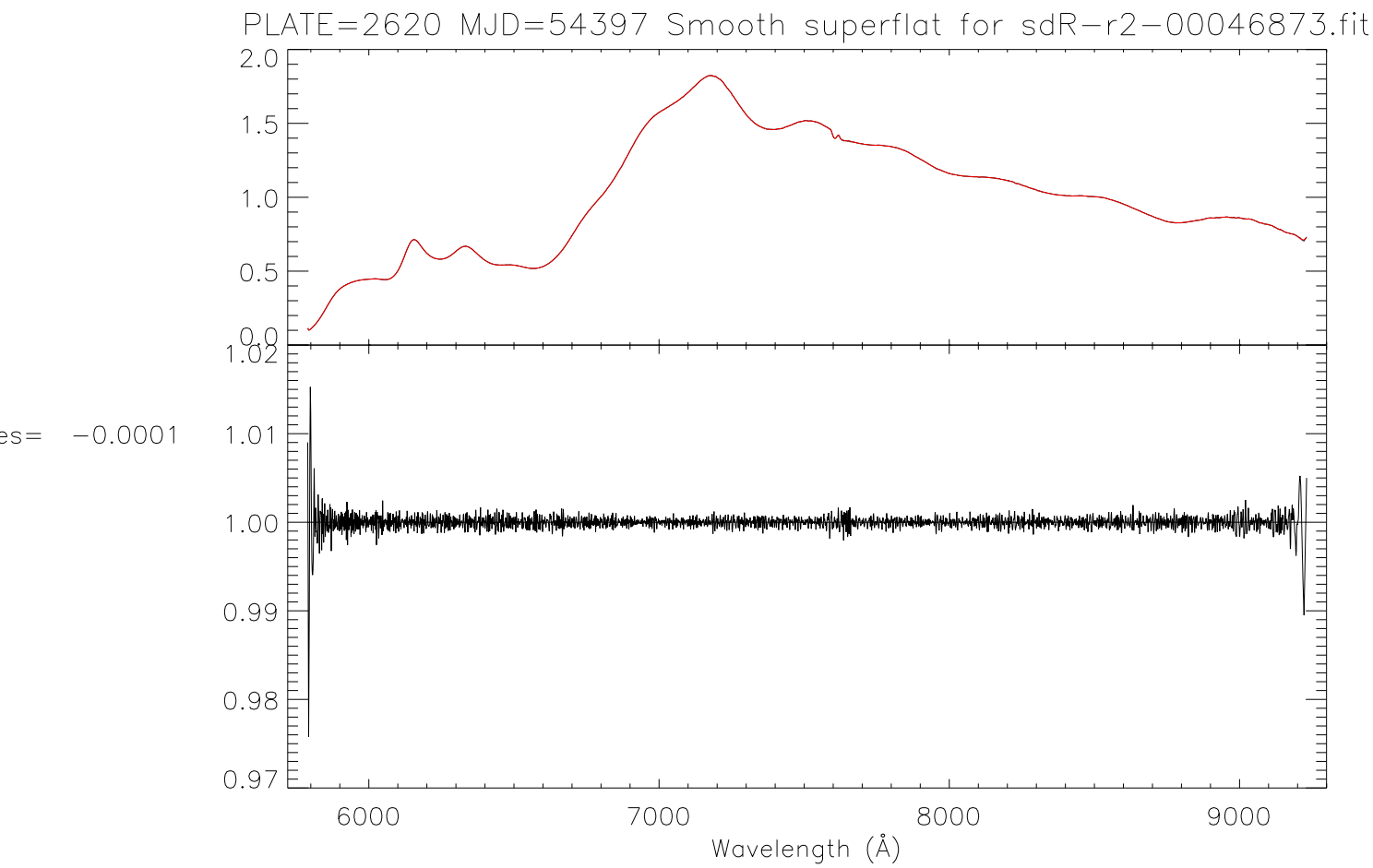

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

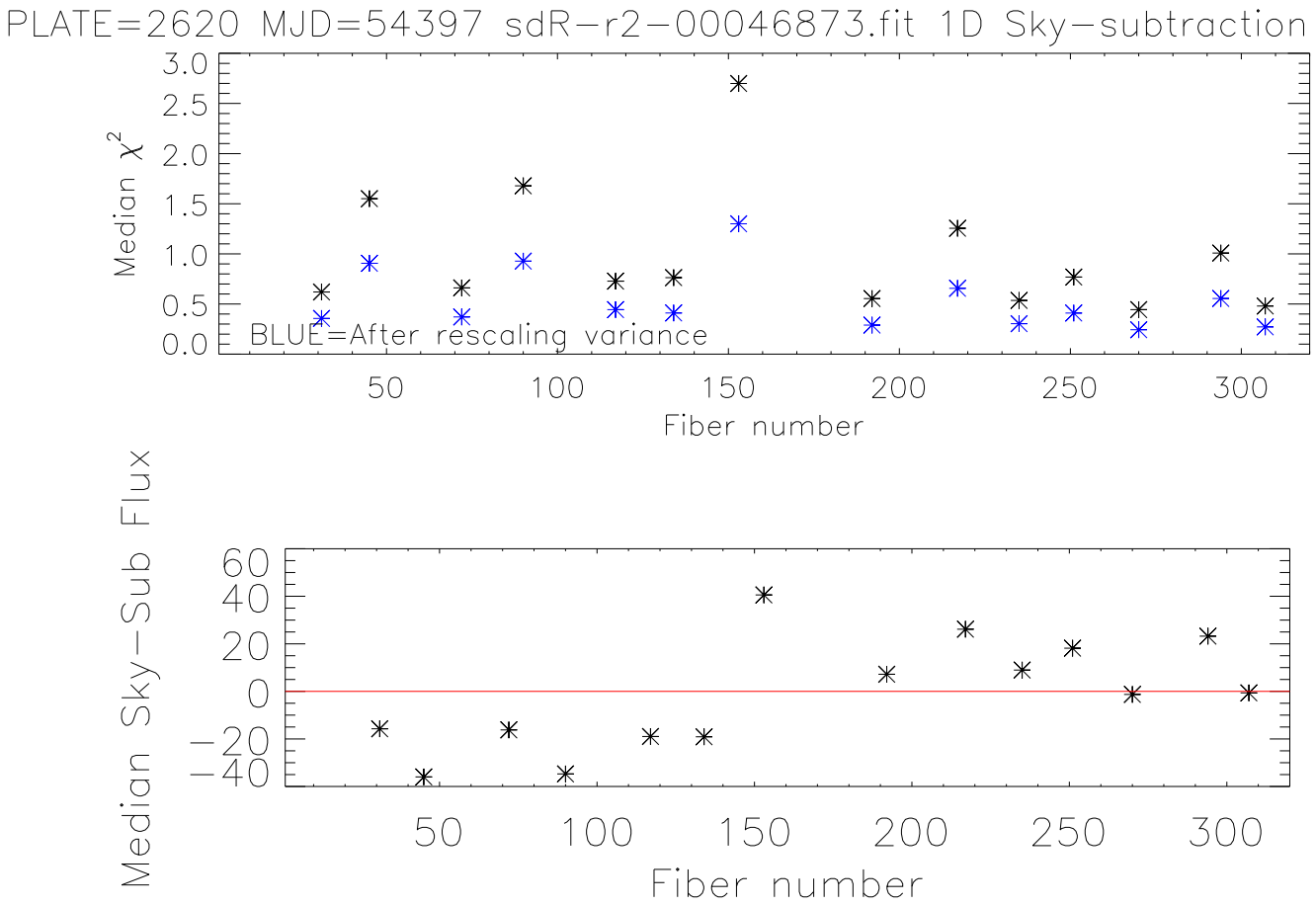

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

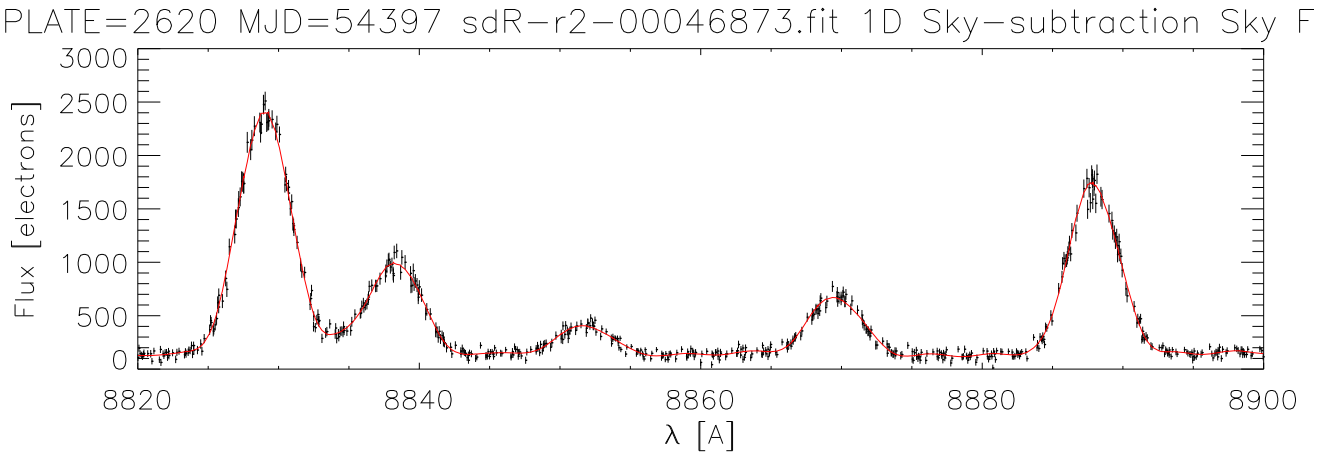

6300.3040
stdev 0.22
extra −0.66
6363.7760
stdev 0.31
extra −0.52
6553.6100
stdev 0.47
extra −0.83
6923.2100
stdev 0.30
extra −0.62
6949.0300
stdev 0.20
extra −0.56
7571.7500
stdev 0.44
extra −0.50
7794.1200
stdev 0.22
extra −0.62
7821.5100
stdev 0.47
extra −0.58
8399.1600
stdev 0.29
extra −0.51
8430.1700
stdev 0.26
extra −0.54
8885.8300
stdev 0.24
extra −0.51
8919.6100
stdev 0.36
extra −0.52
meas − pred, pix
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

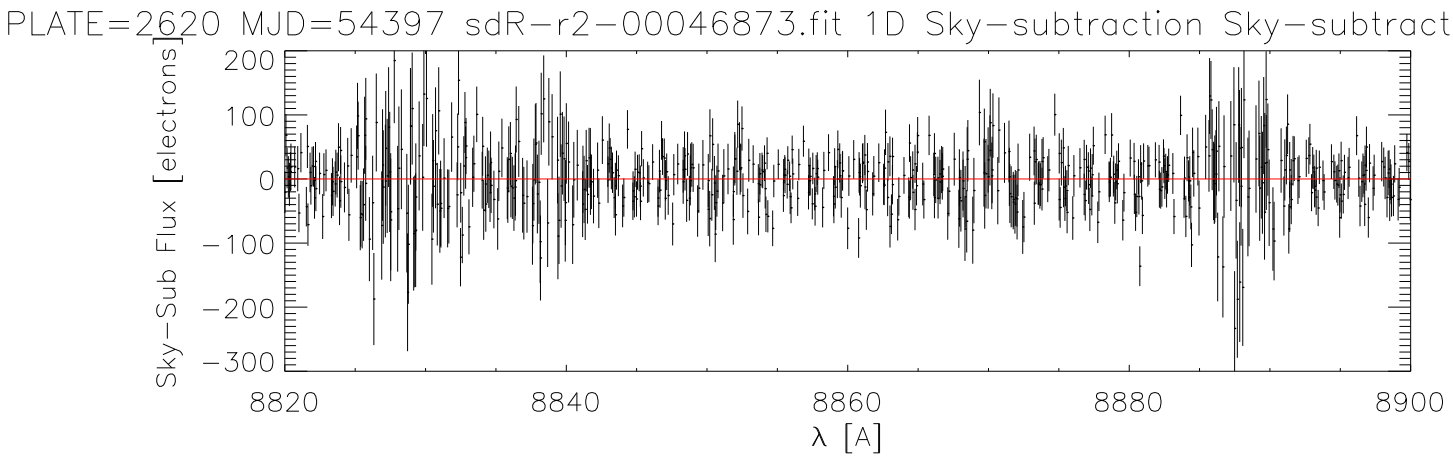

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
5000
6000
7000
8000
9000
10000

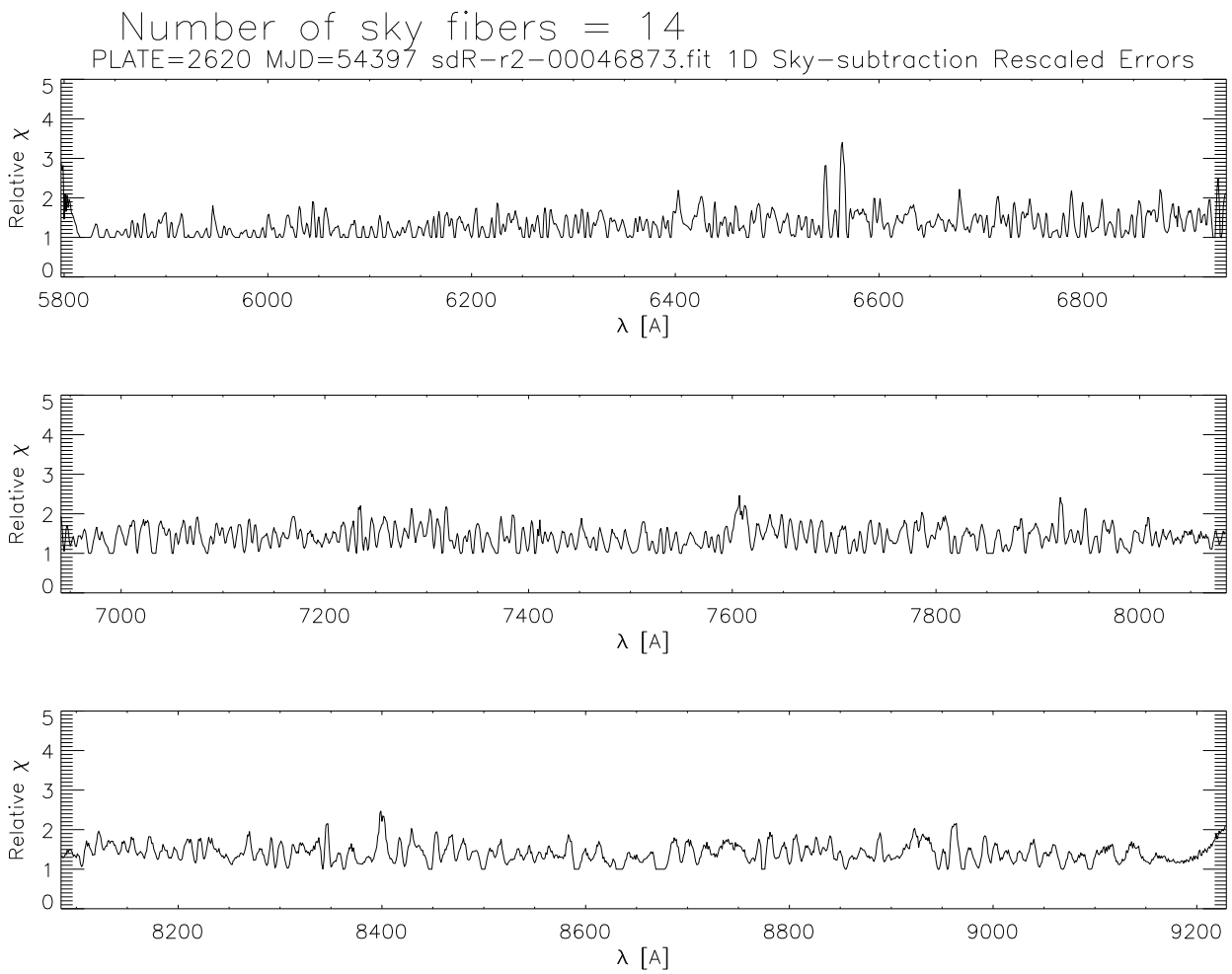

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046873.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

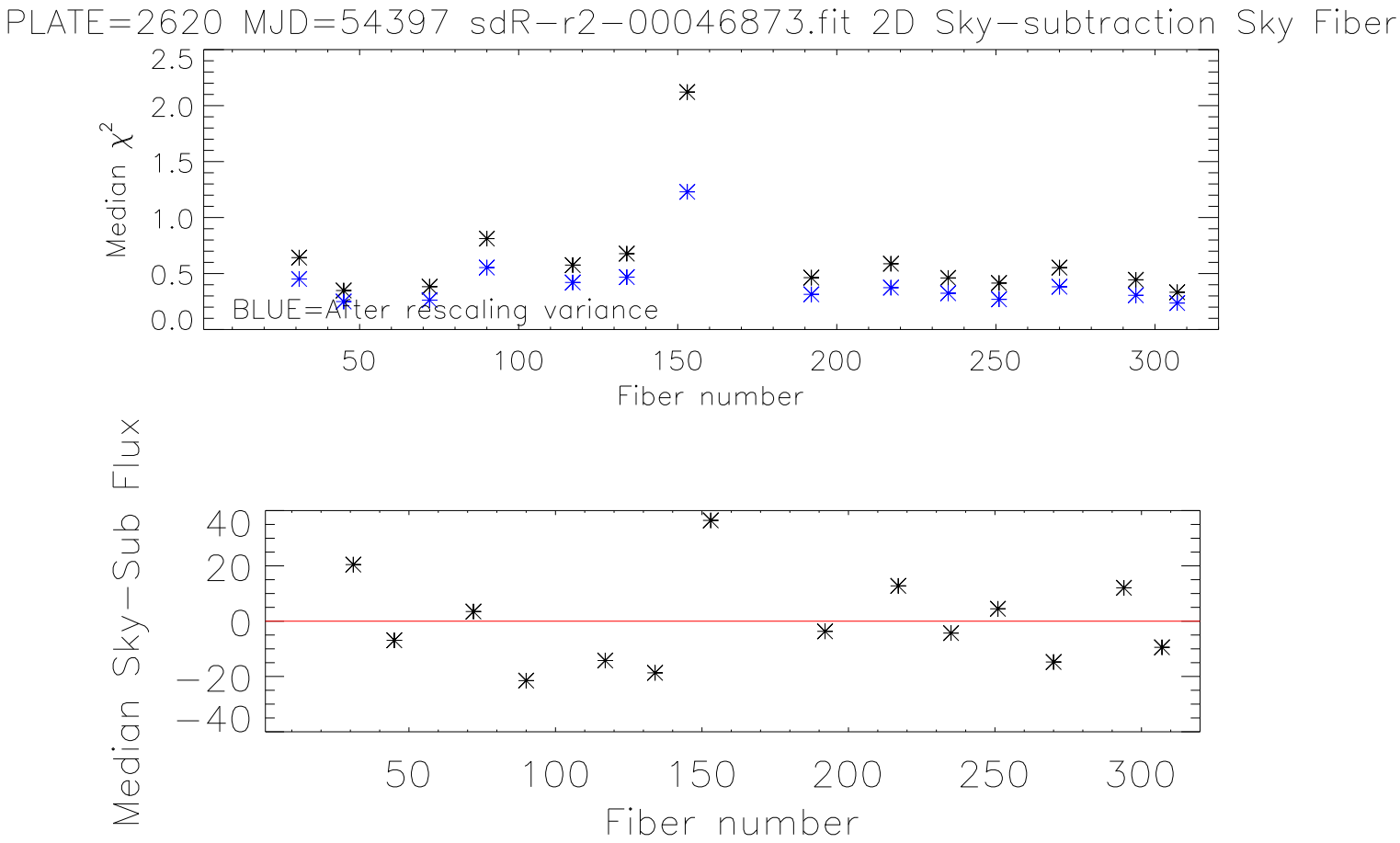
es= −0.0001

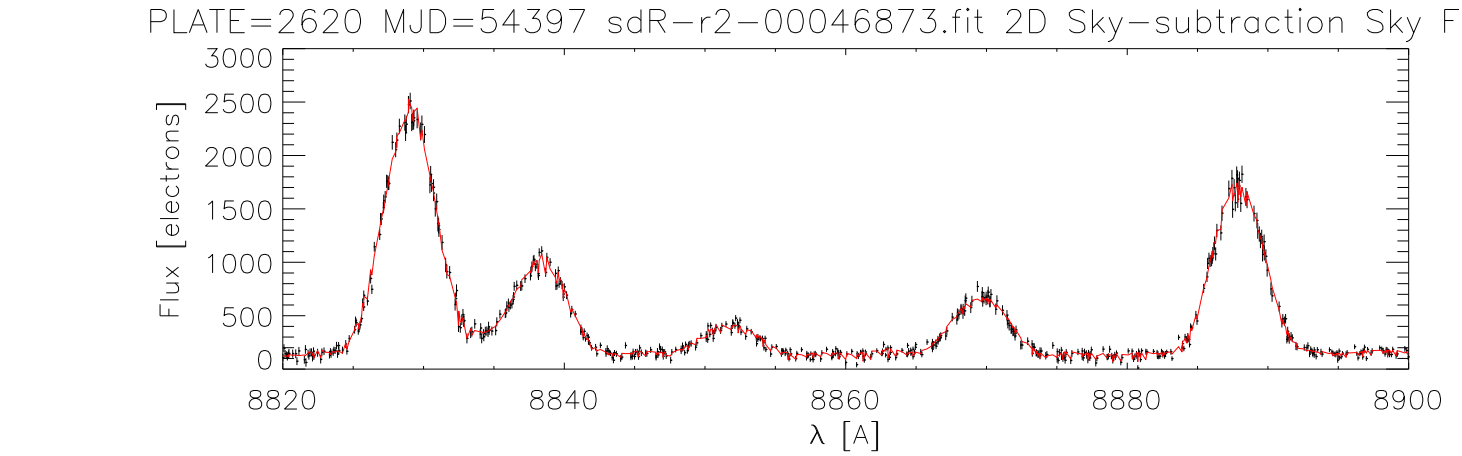

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 1D Sky-subtraction Sky Fibers
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
60
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

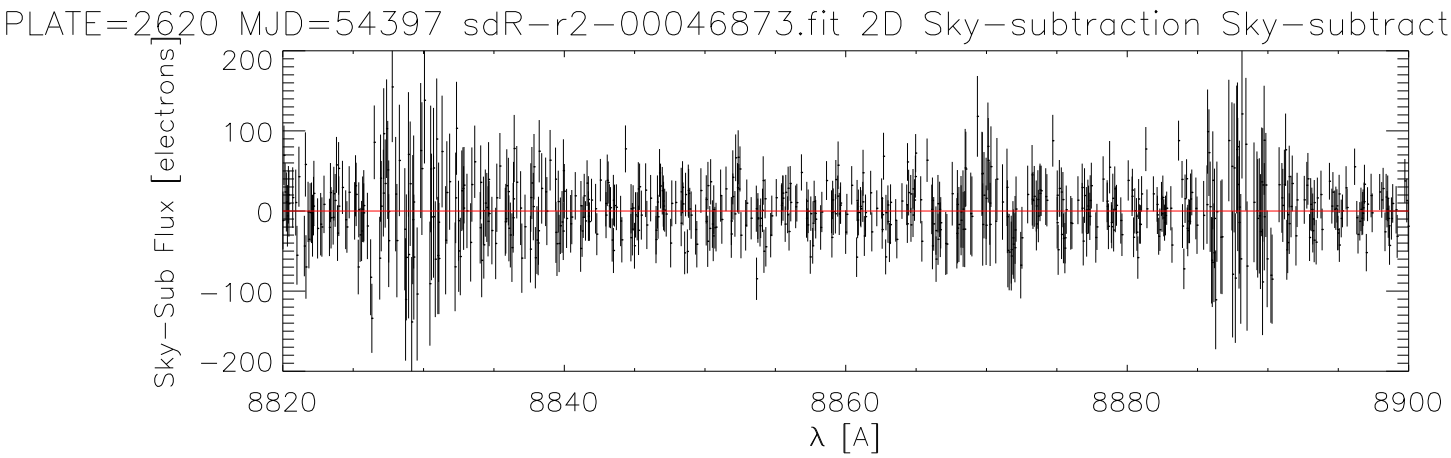

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

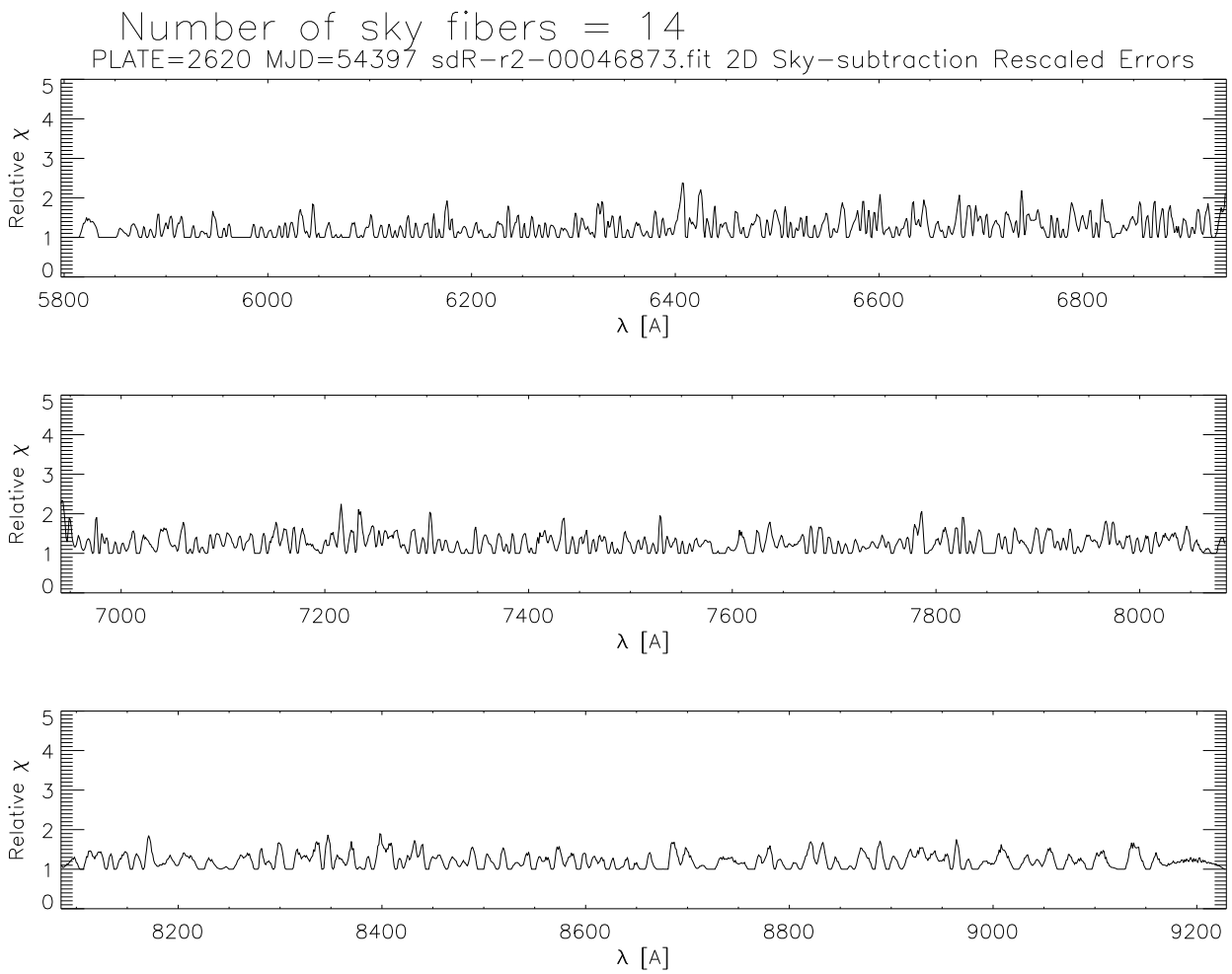

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

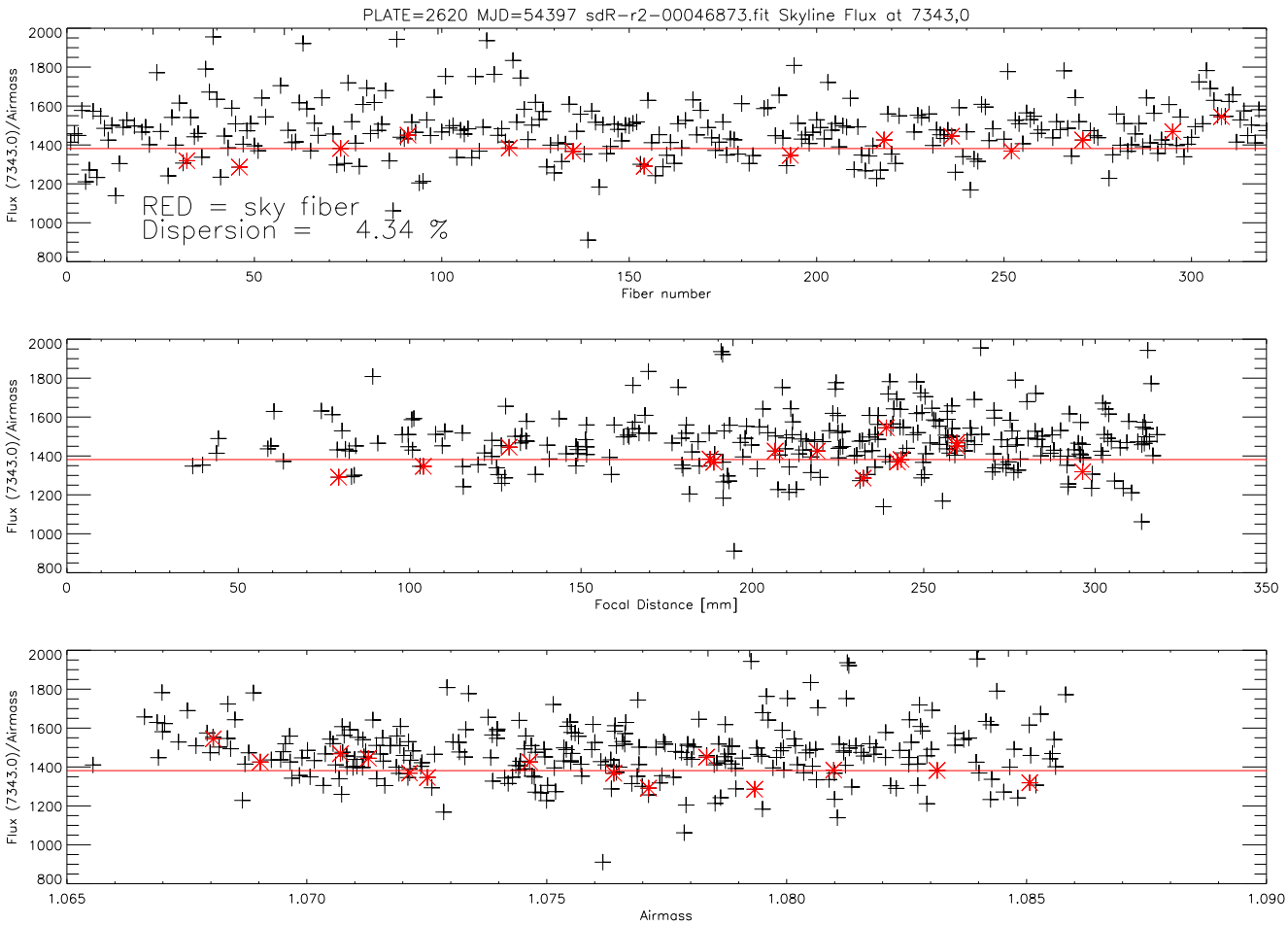

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046873.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

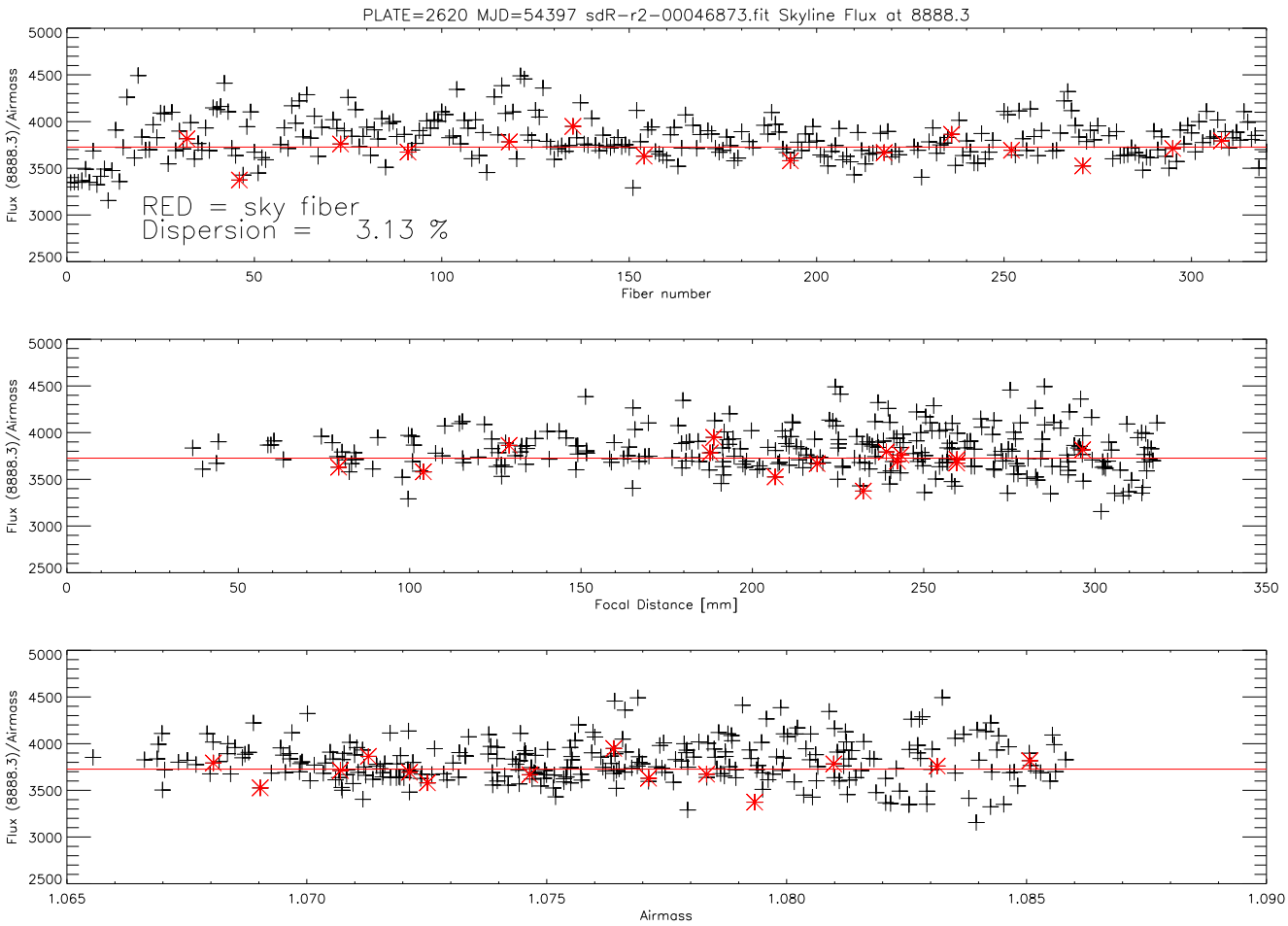

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

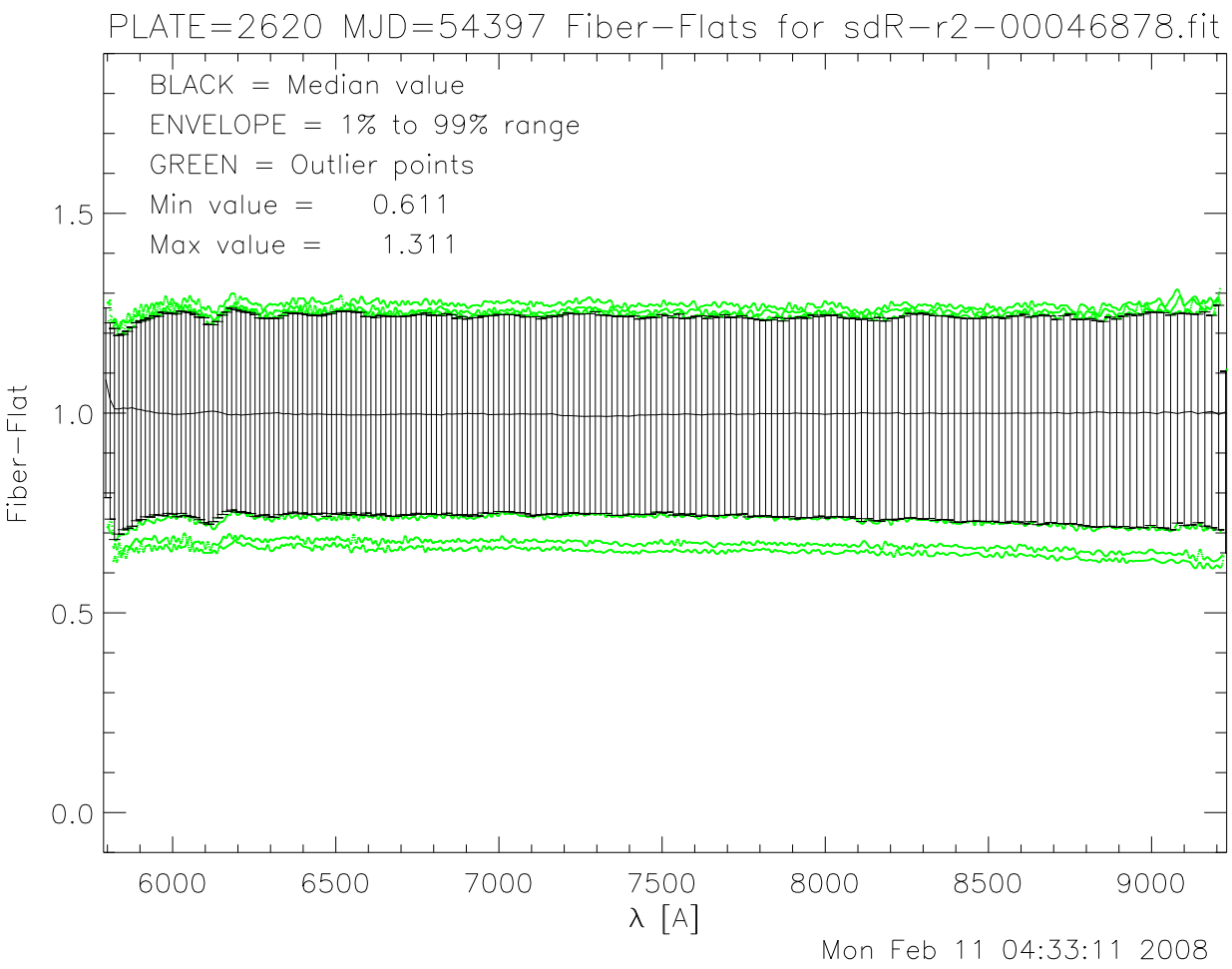

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

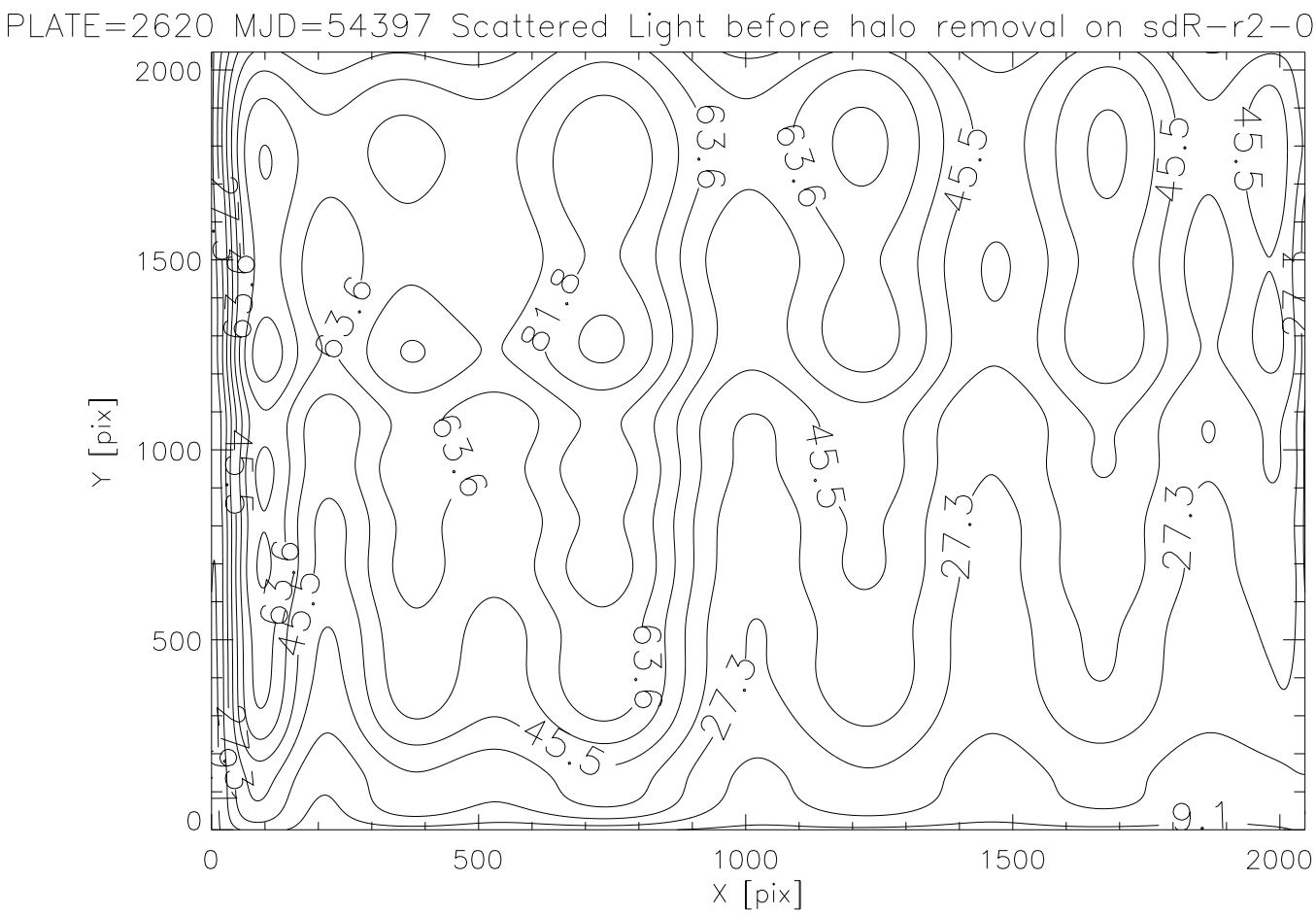

PLATE=2620 MJD=54397 sdR-r2-00046873.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

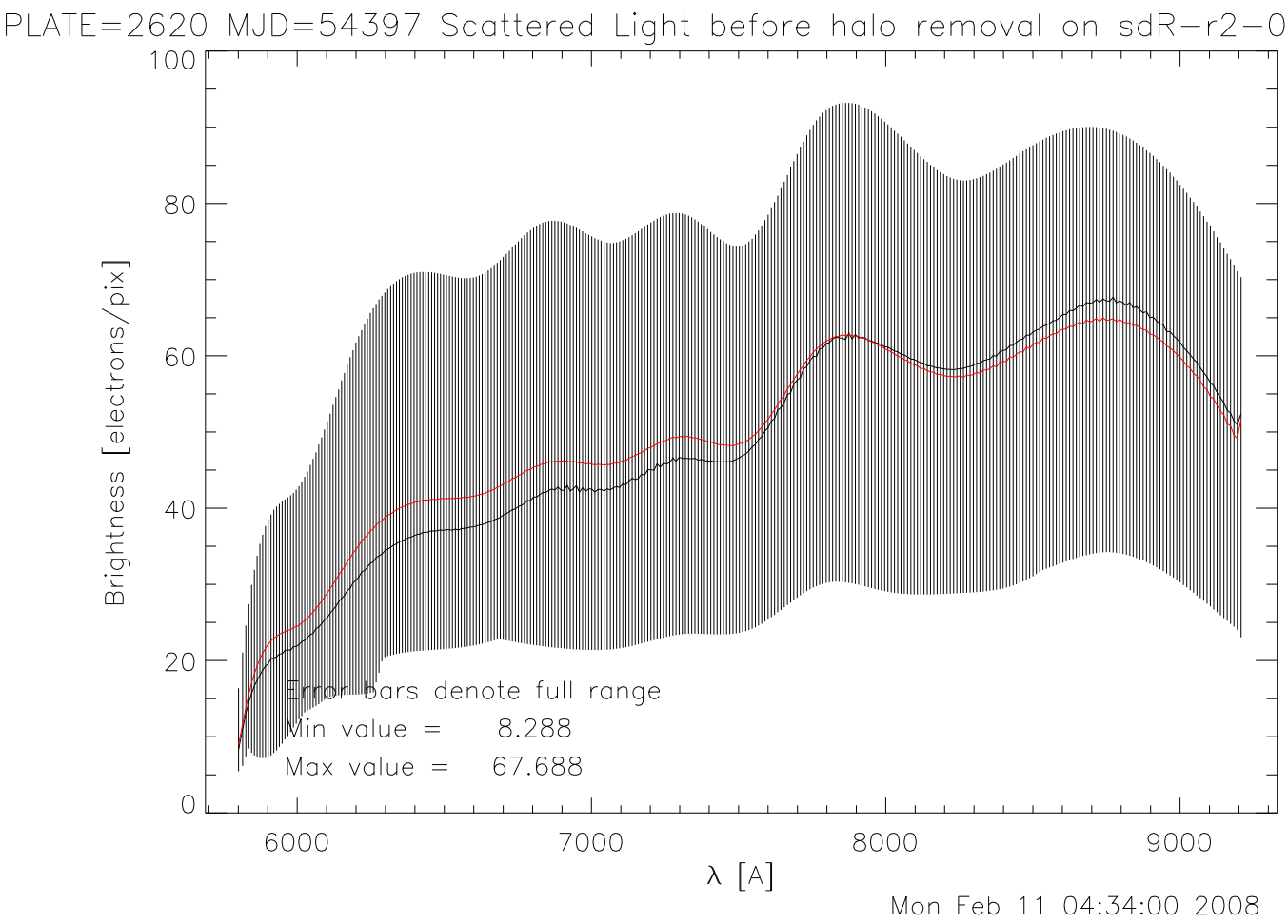

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046873.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

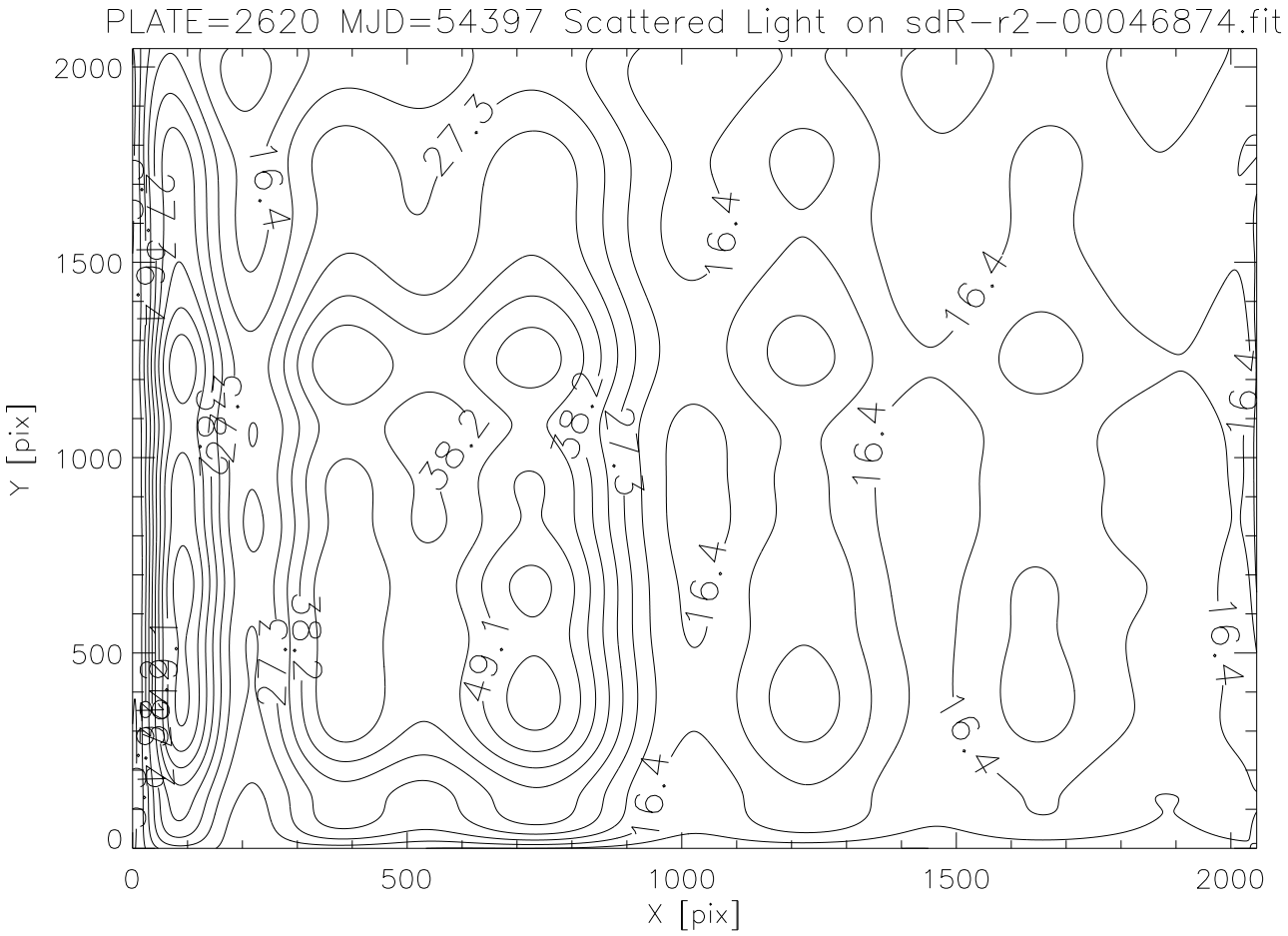

PLATE=2620 MJD=54397 sdR-r2-00046873.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.34 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

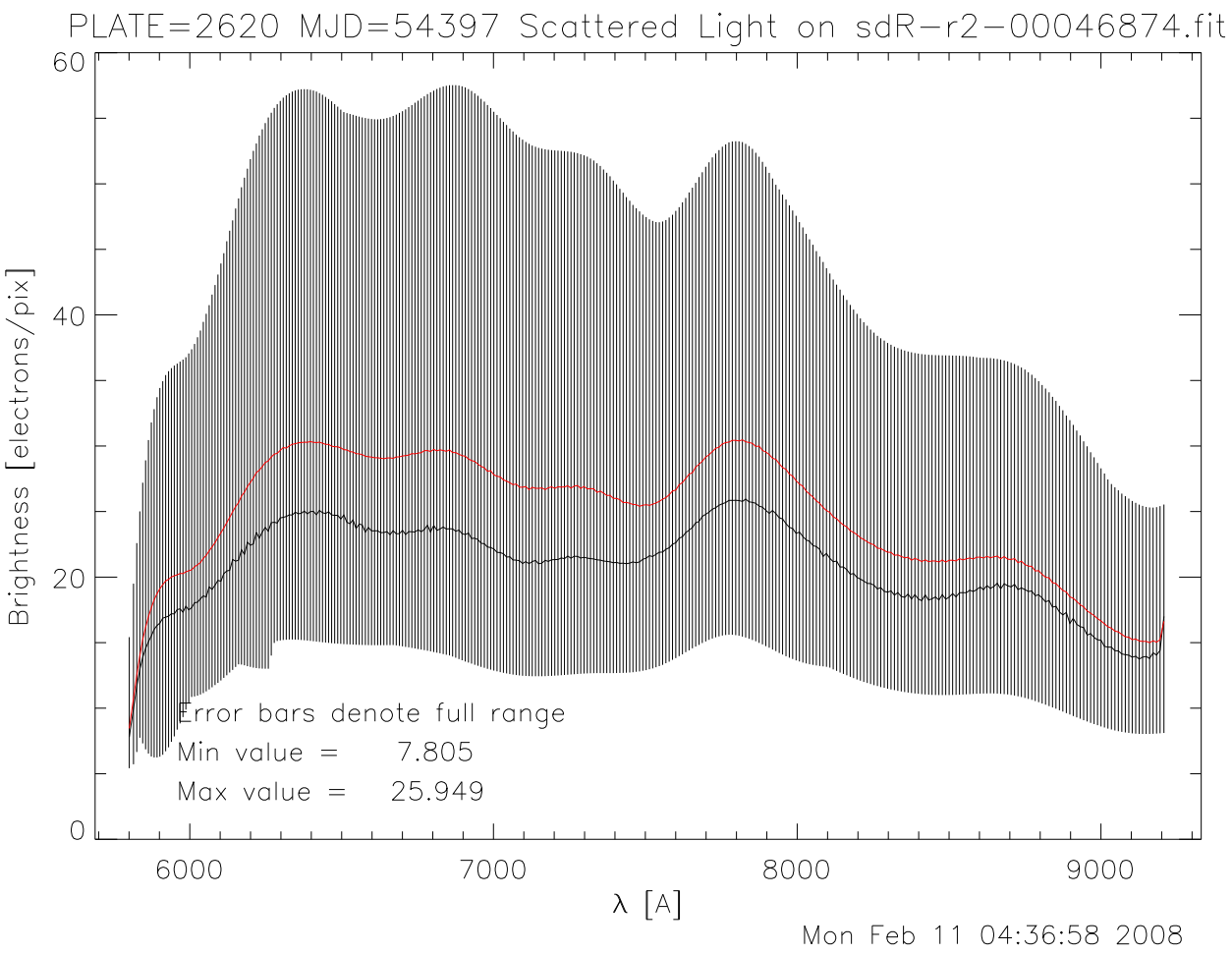

PLATE=2620 MJD=54397 sdR-r2-00046873.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.13 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

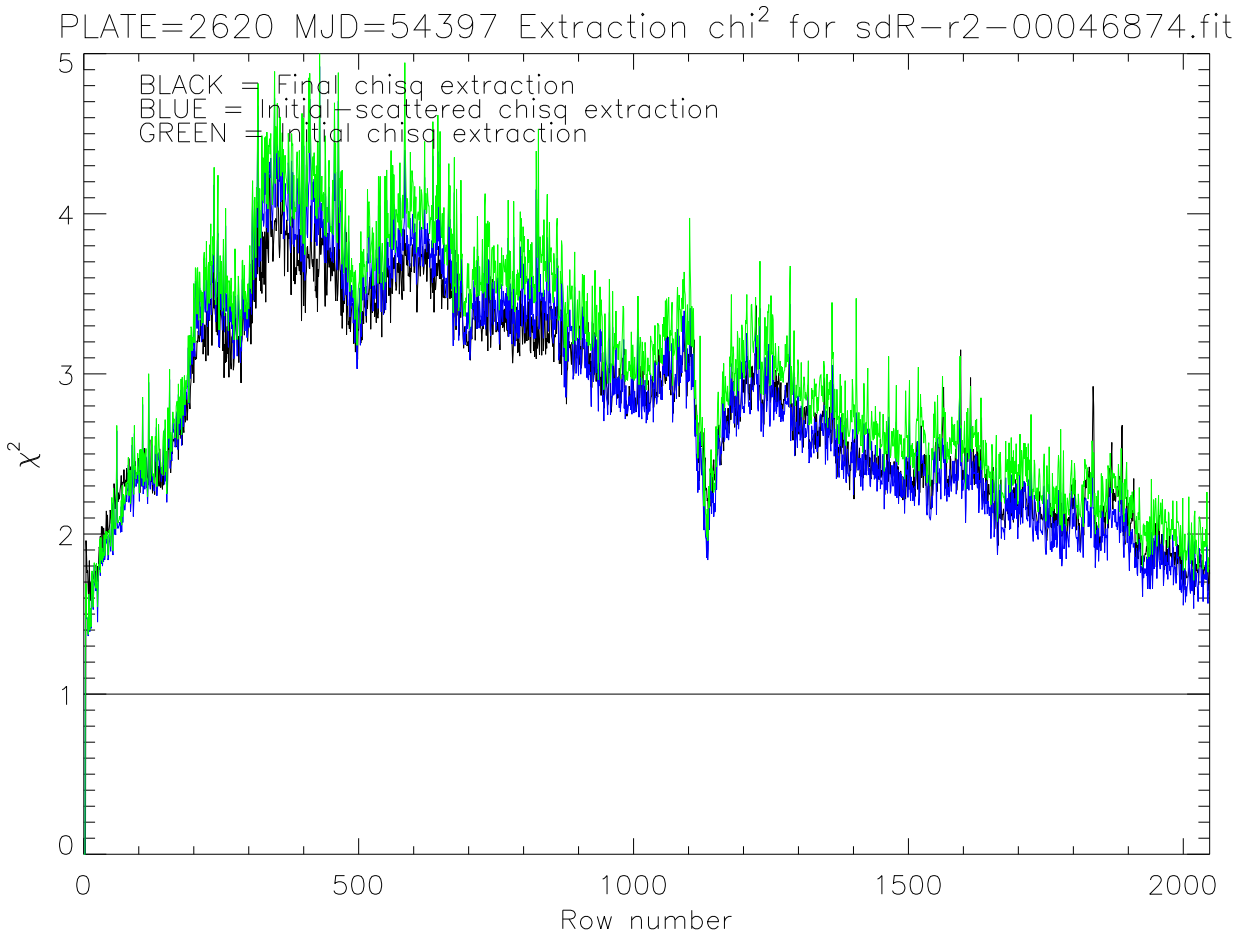

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:33:11 2008

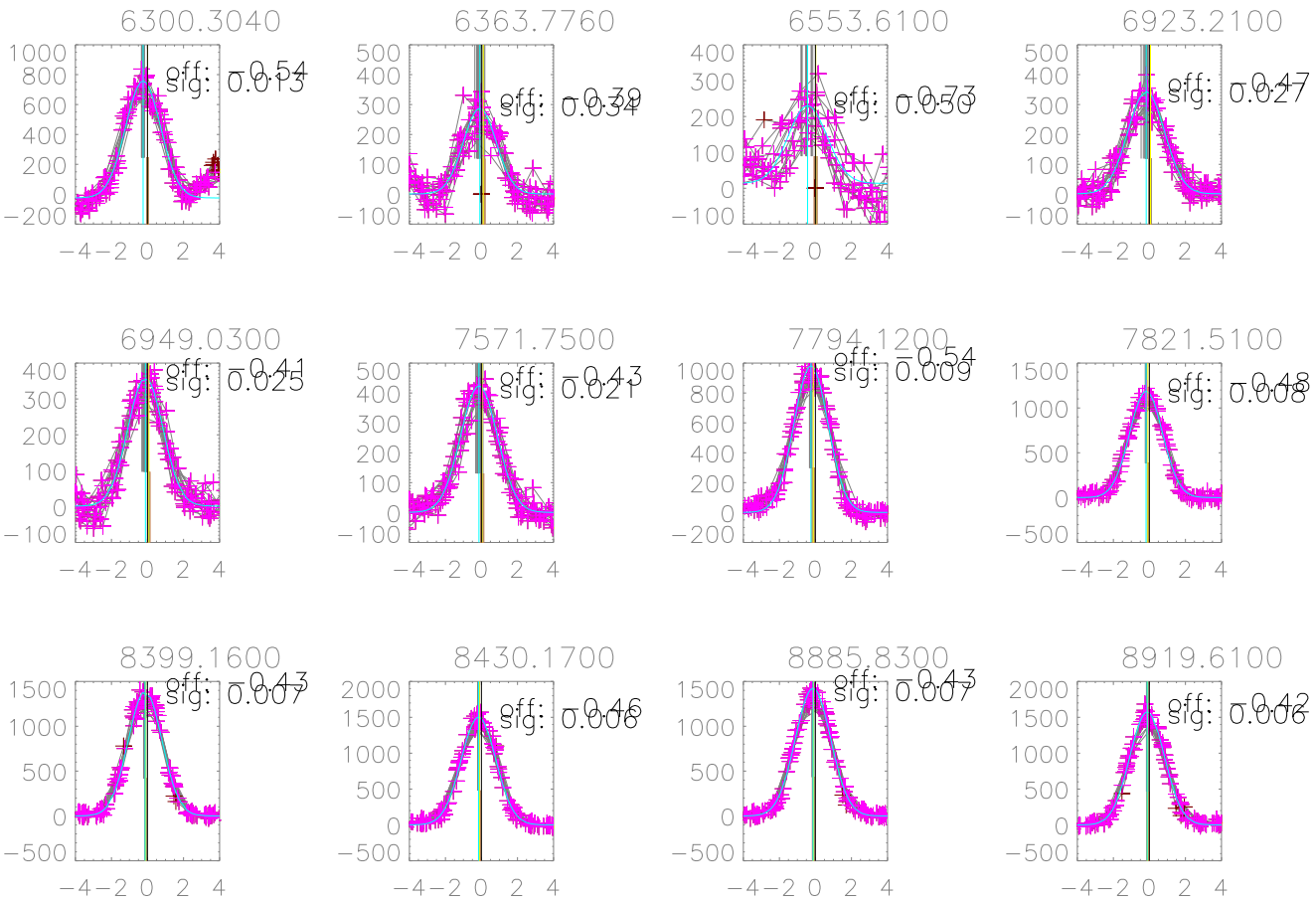

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046874.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
63.6
45.5
27.3
81.8
9.1

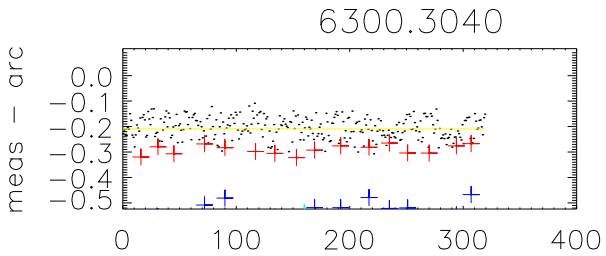

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046874.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.288
Max value = 67.688
Mon Feb 11 04:34:00 2008

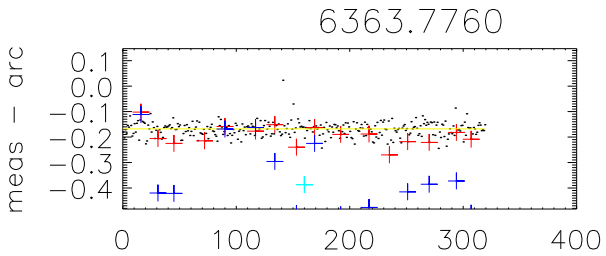

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046874.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
27.3
38.2
49.1

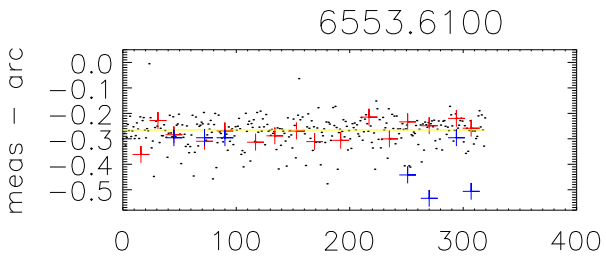

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046874.fit
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.805
Max value = 25.949
Mon Feb 11 04:36:58 2008

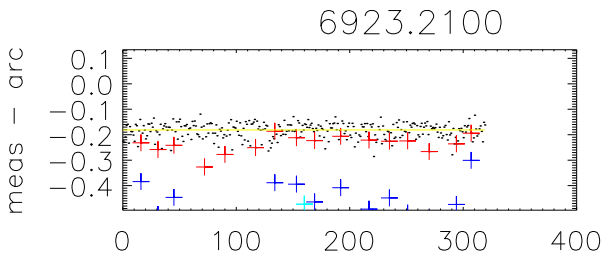

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046874.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

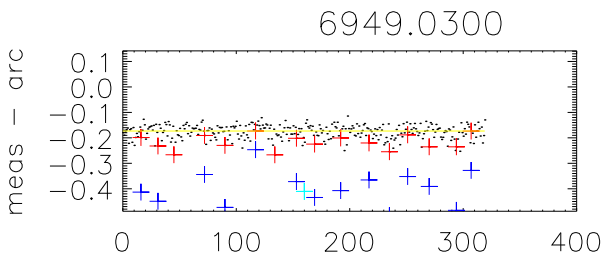

6300.3040
off: −0.54
sig: 0.013
6363.7760
off: −0.39
sig: 0.034
6553.6100
off: −0.73
sig: 0.050
6923.2100
off: −0.47
sig: 0.027
6949.0300
off: −0.41
sig: 0.025
7571.7500
off: −0.43
sig: 0.021
7794.1200
off: −0.54
sig: 0.009
7821.5100
off: −0.48
sig: 0.008
8399.1600
off: −0.43
sig: 0.007
8430.1700
off: −0.46
sig: 0.006
8885.8300
off: −0.43
sig: 0.007
8919.6100
off: −0.42
sig: 0.006

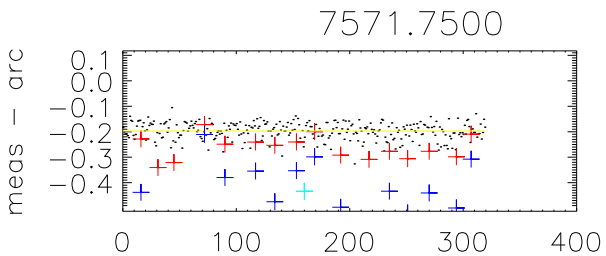

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

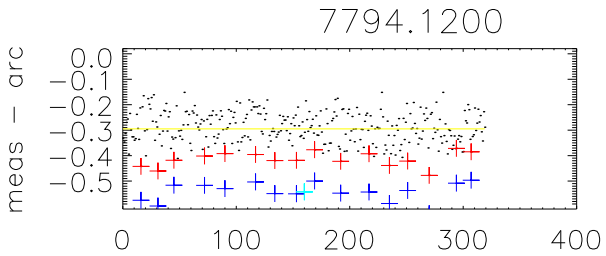

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

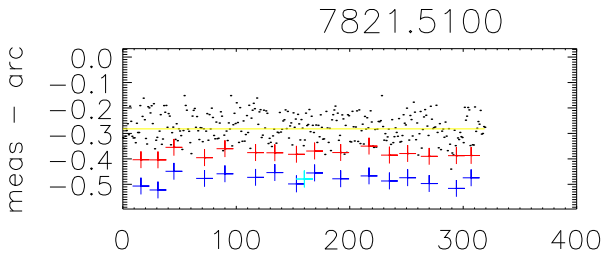

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

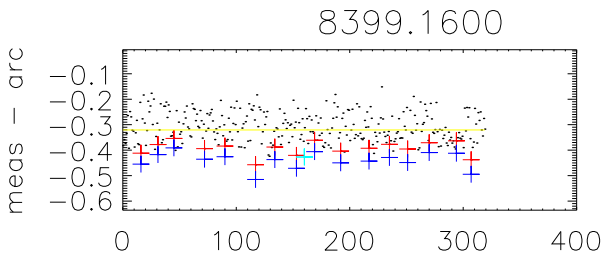

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

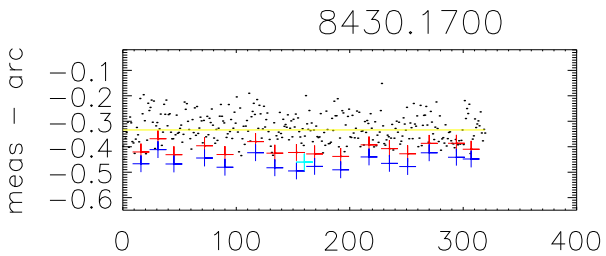

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

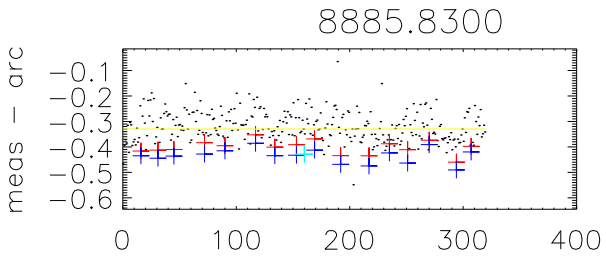

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

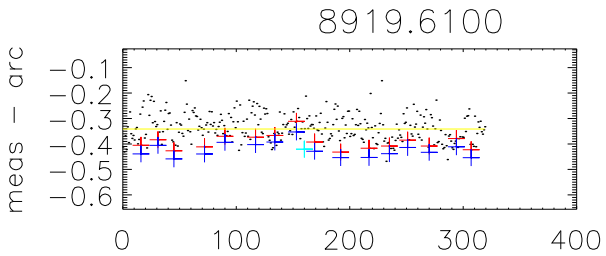

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

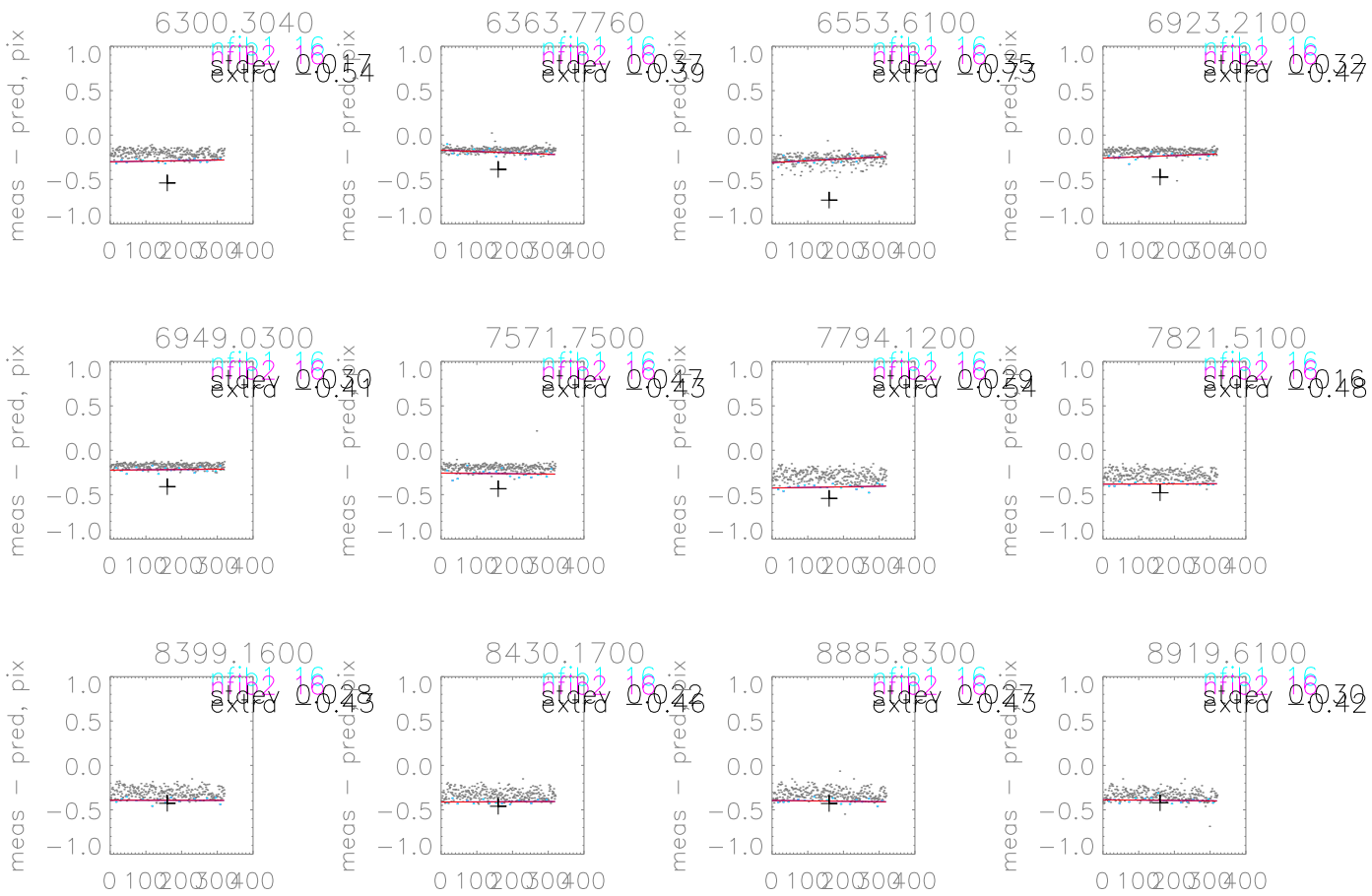

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

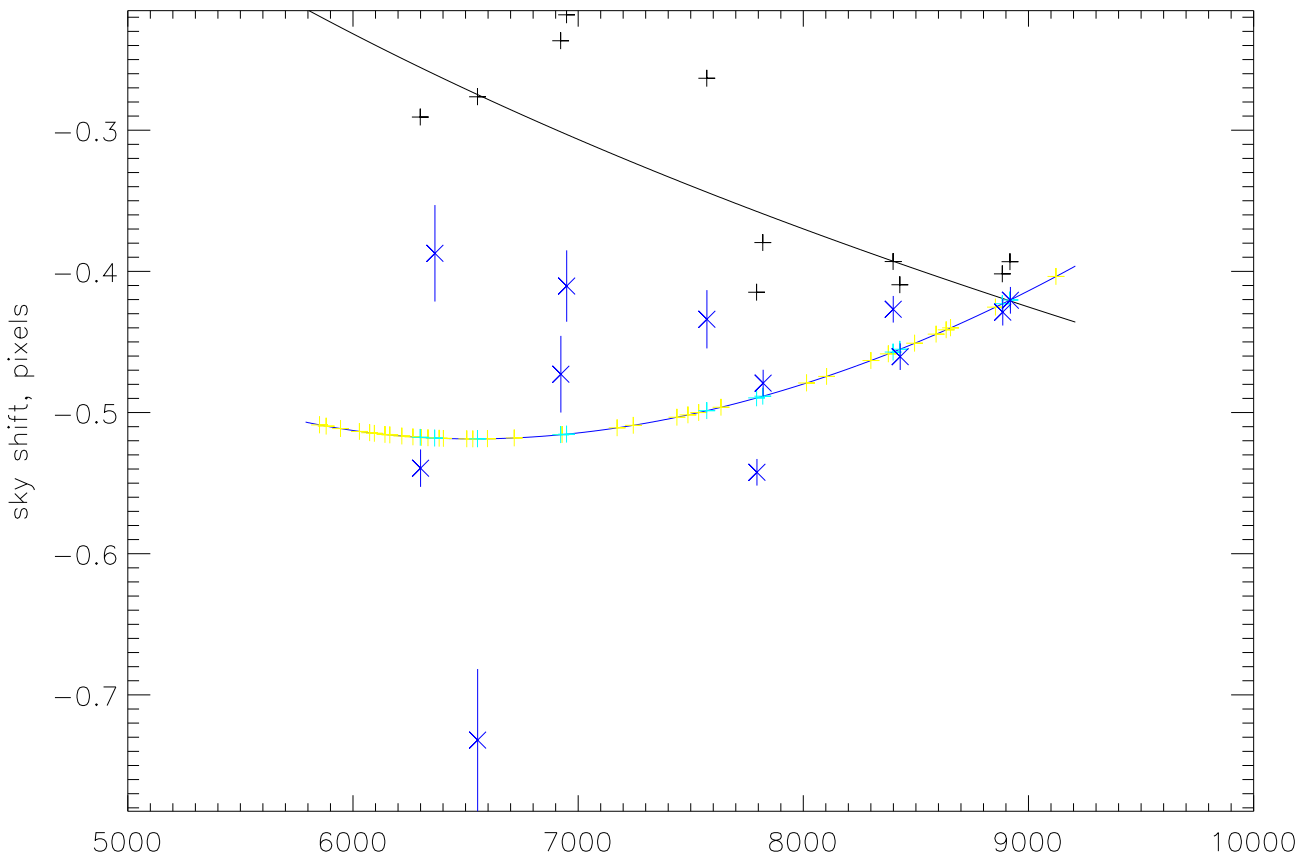

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

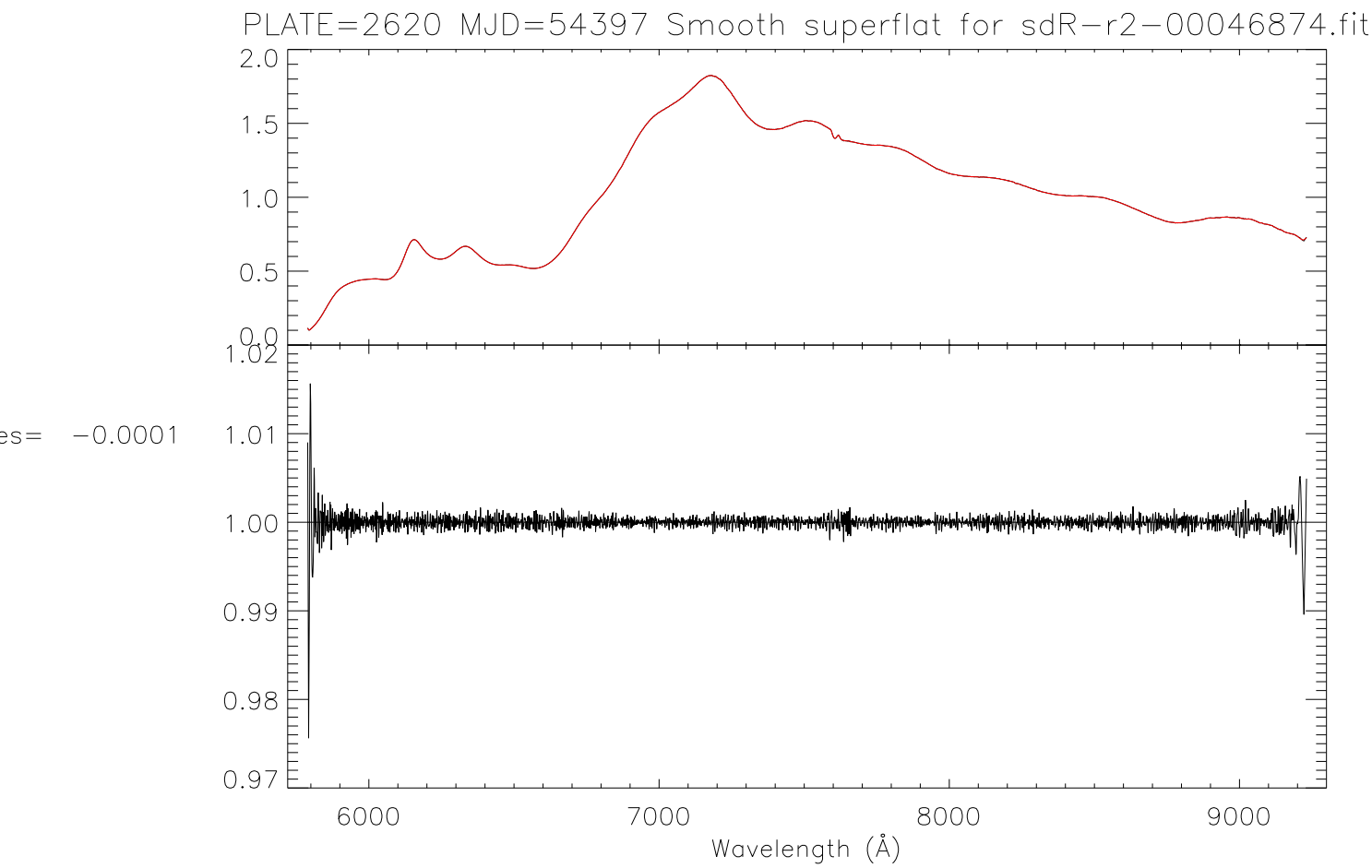

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

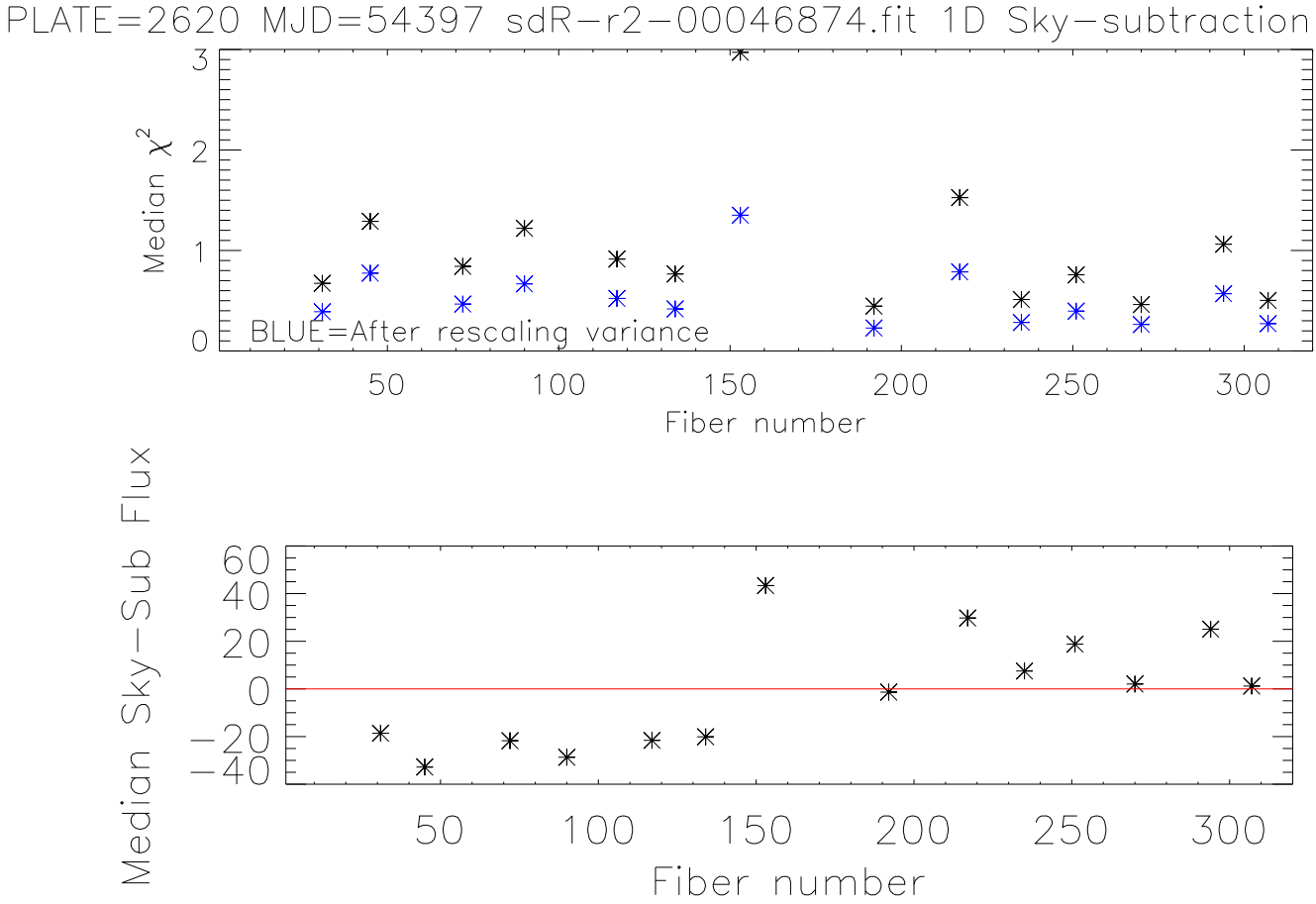

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

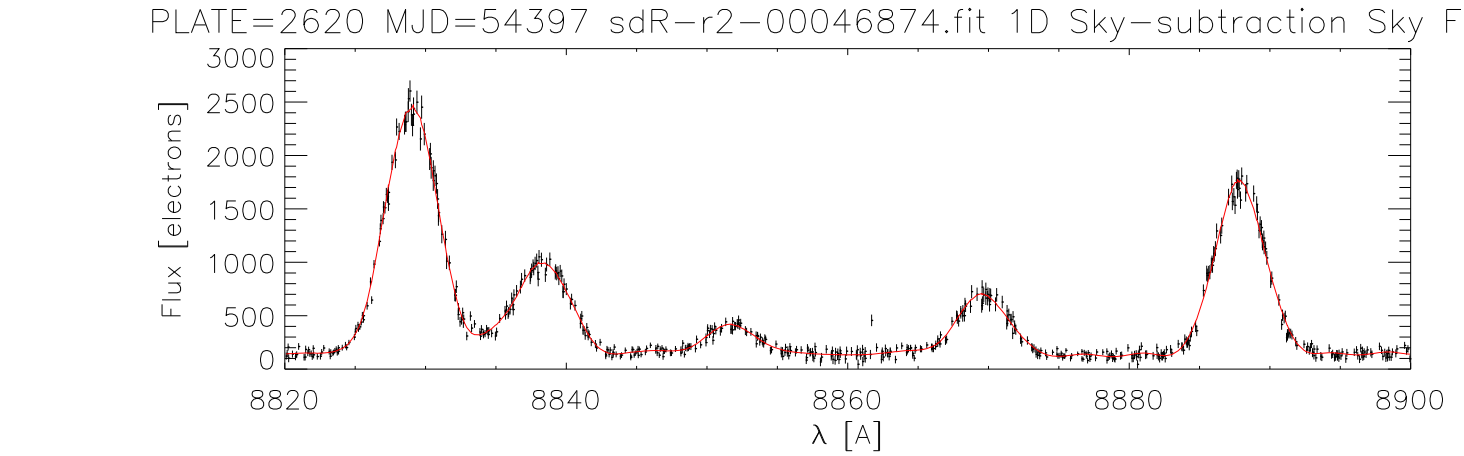

6300.3040
stdev 0.017
extra 0.54
6363.7760
stdev 0.037
extra 0.39
6553.6100
stdev 0.035
extra 0.73
6923.2100
stdev 0.032
extra 0.47
6949.0300
stdev 0.030
extra 0.41
7571.7500
stdev 0.047
extra 0.43
7794.1200
stdev 0.029
extra 0.54
7821.5100
stdev 0.016
extra 0.48
8399.1600
stdev 0.028
extra 0.43
8430.1700
stdev 0.022
extra 0.46
8885.8300
stdev 0.027
extra 0.43
8919.6100
stdev 0.030
extra 0.42
meas − pred, pix
meas − pred, pix

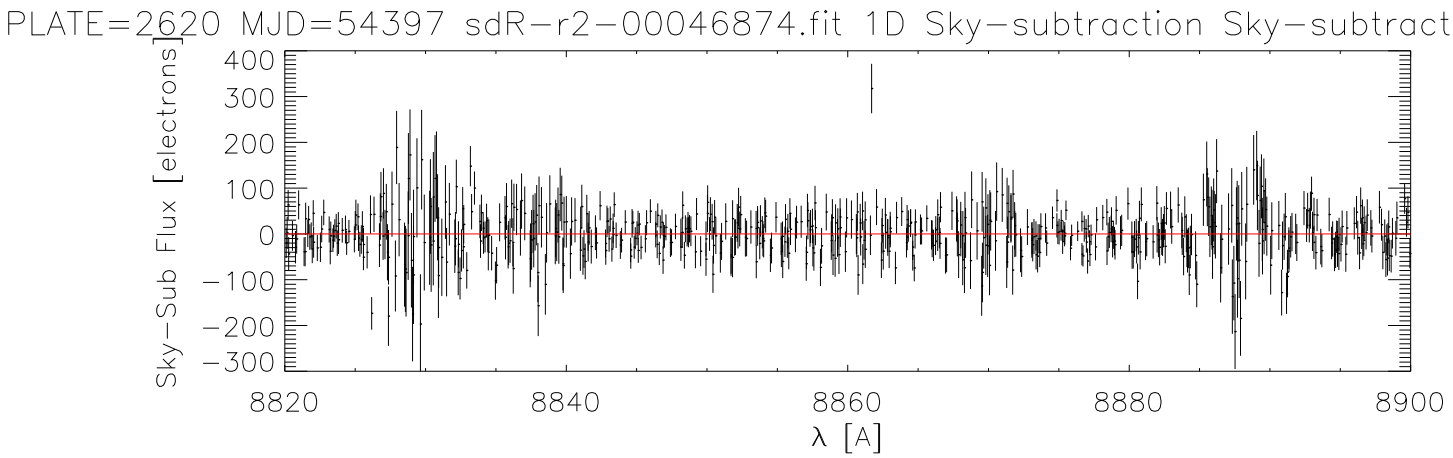

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
−0.7
5000
6000
7000
8000
9000
10000

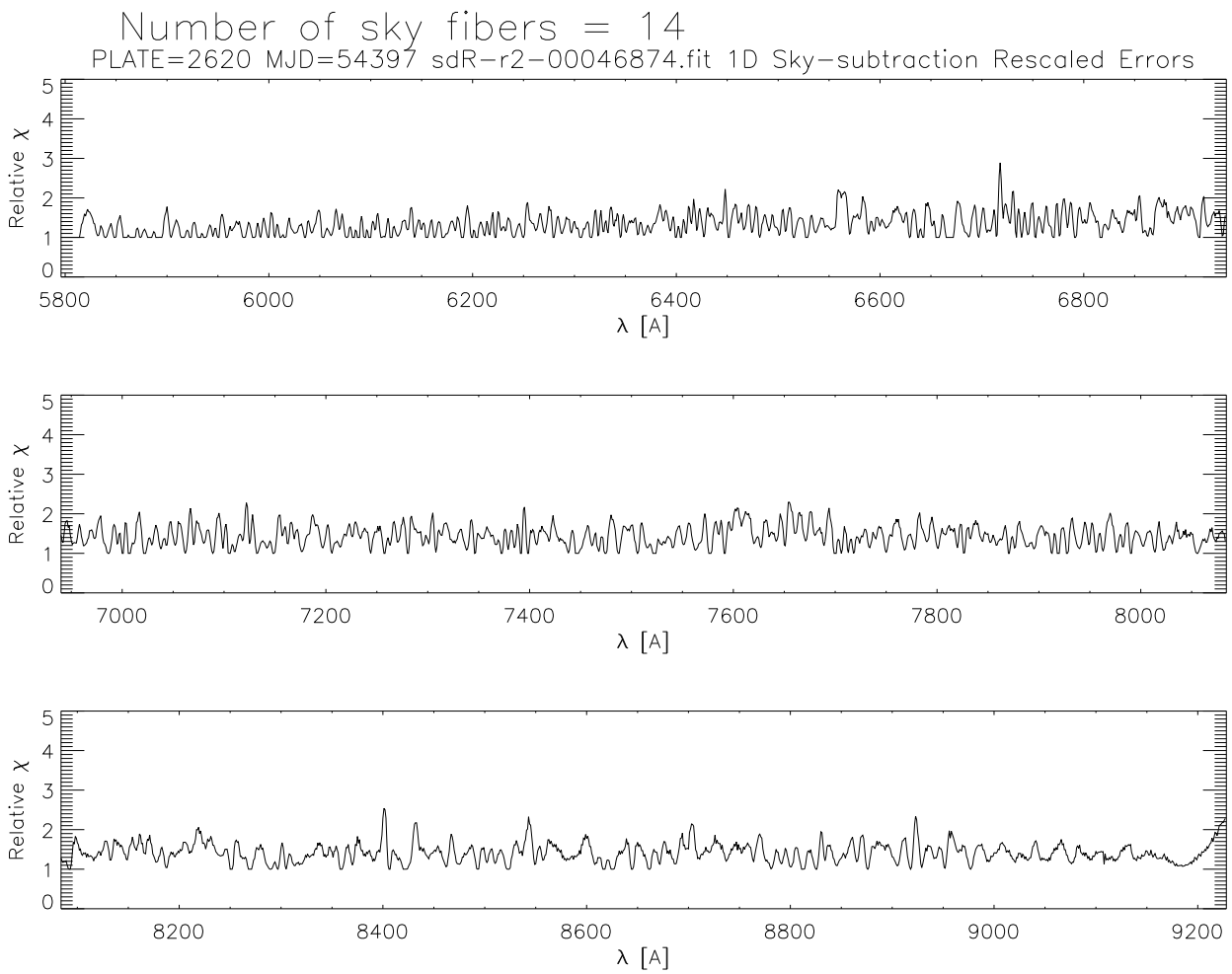

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046874.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

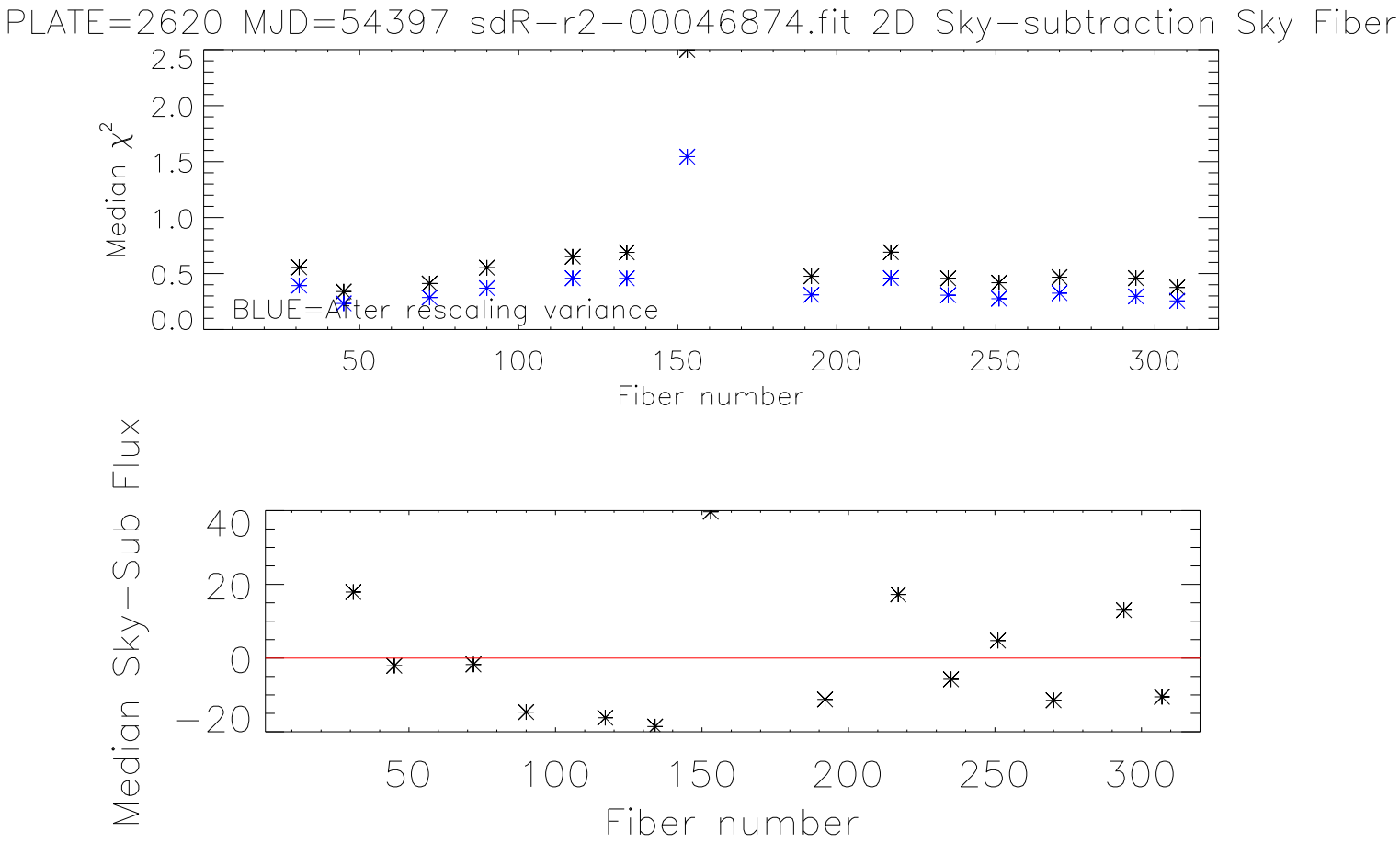
es= −0.0001

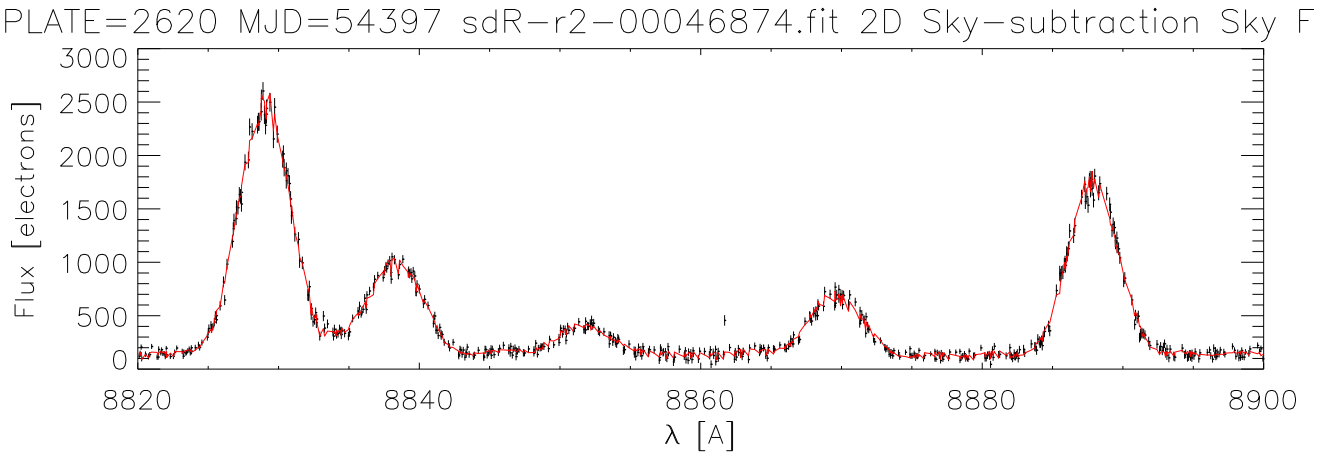

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

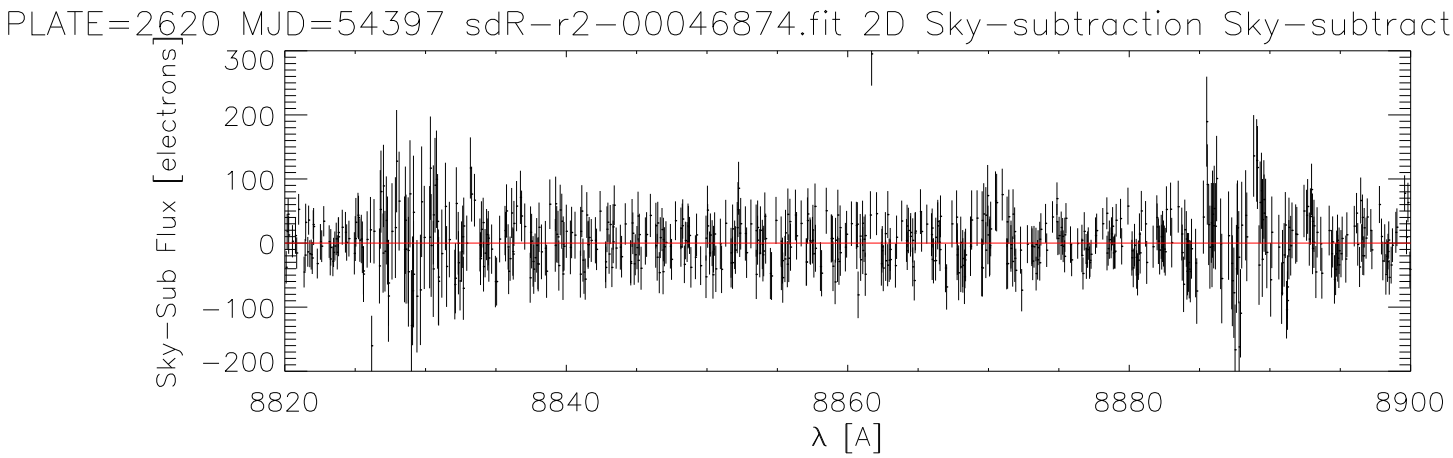

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

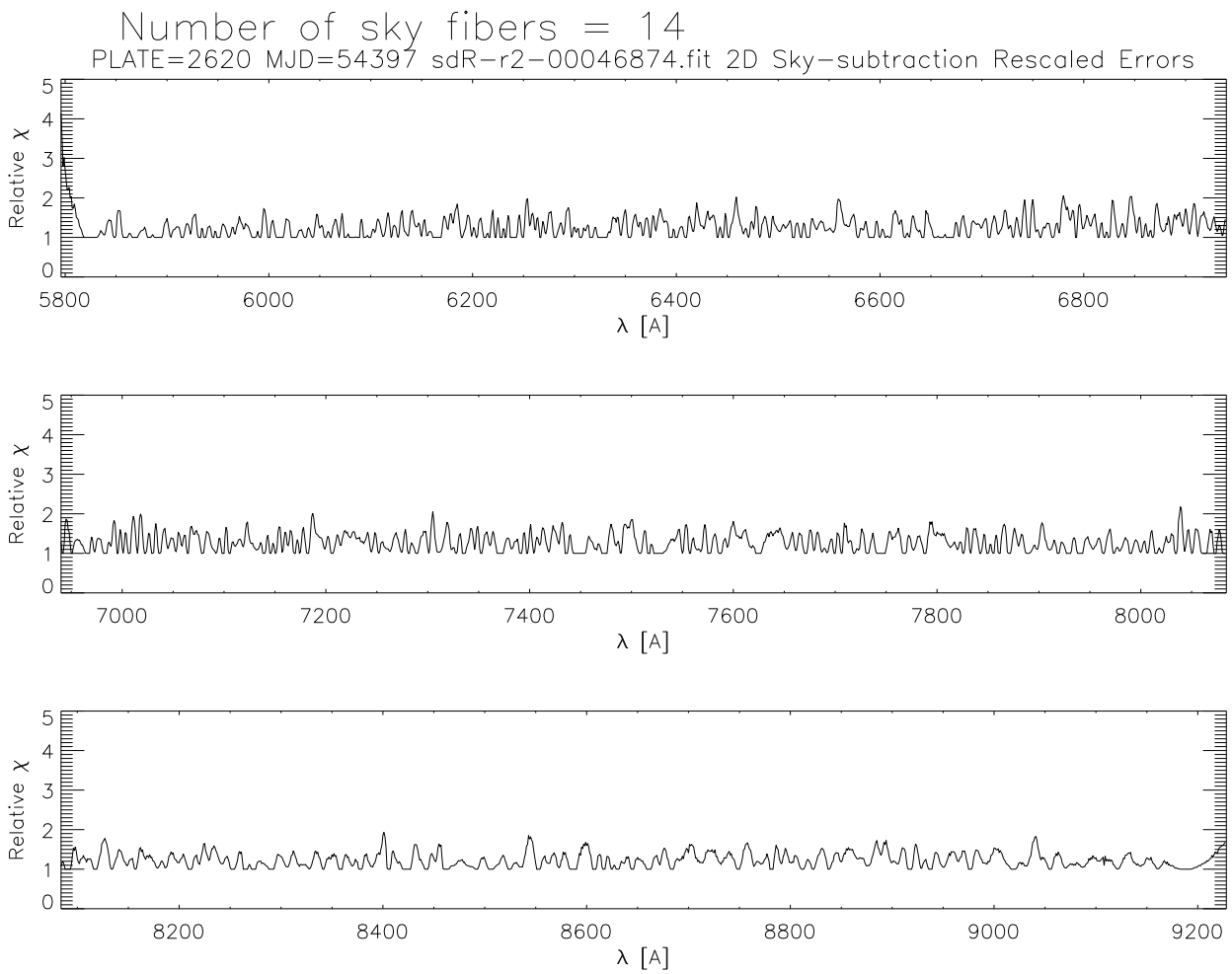

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

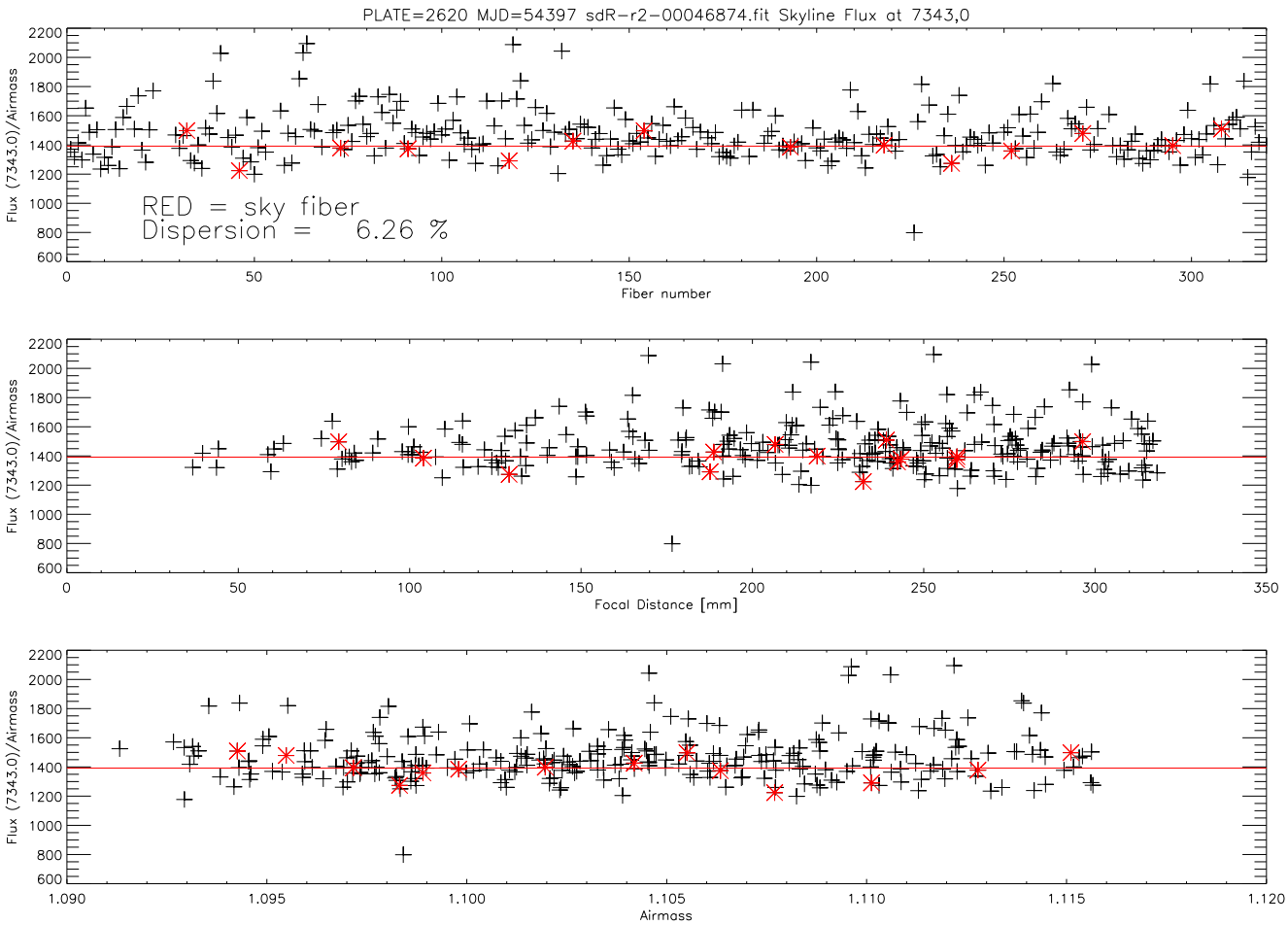

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046874.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

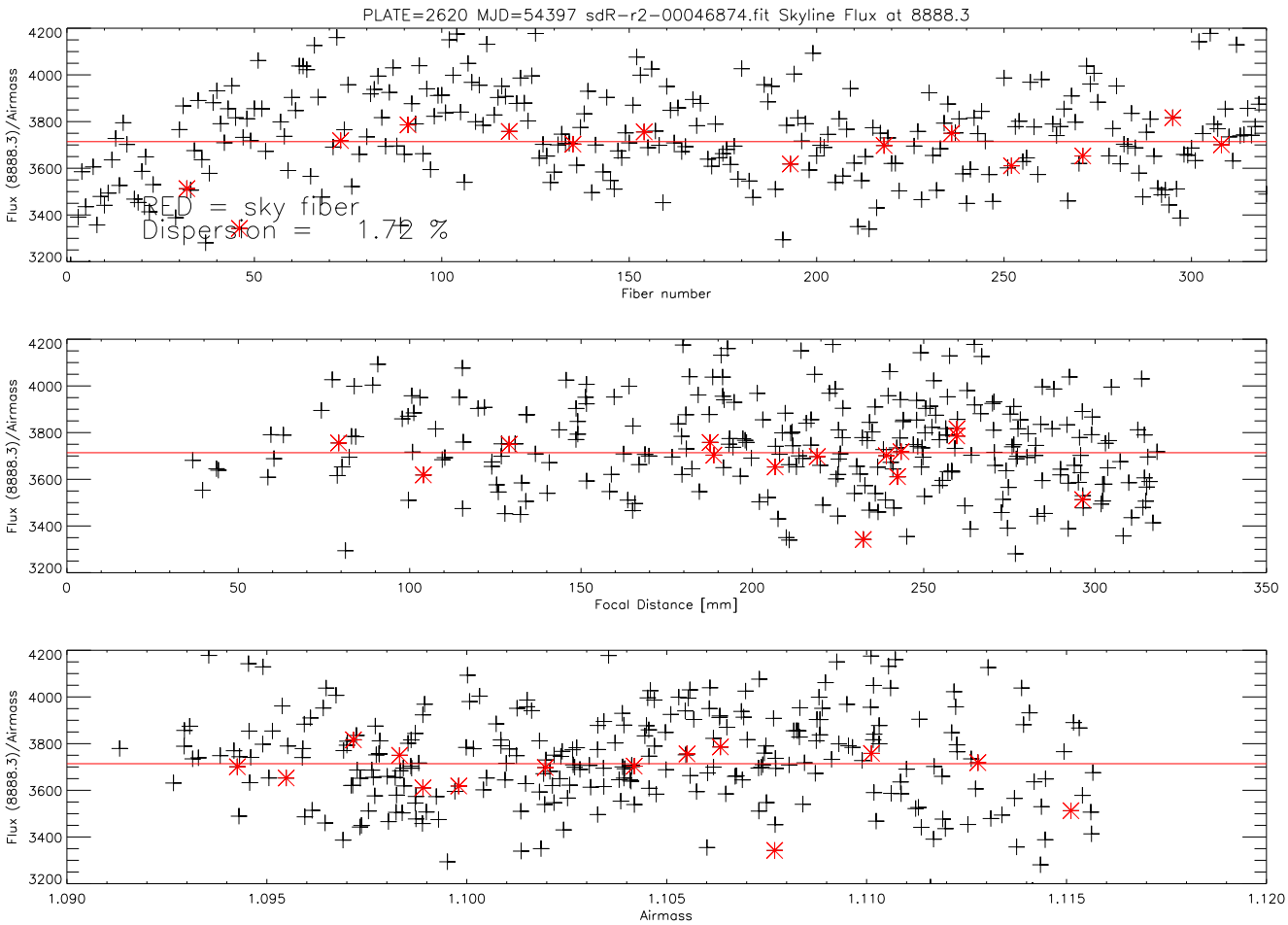

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

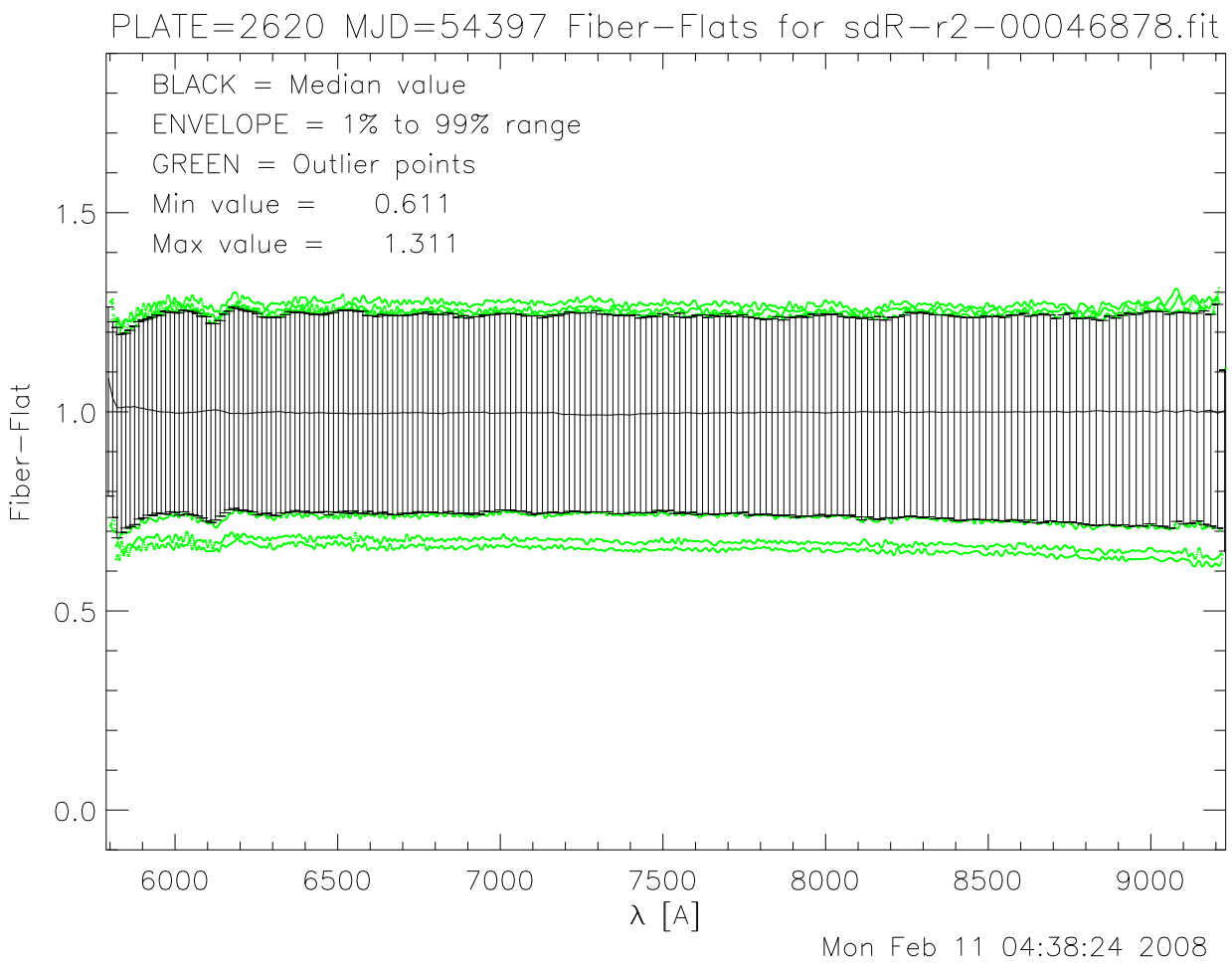

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

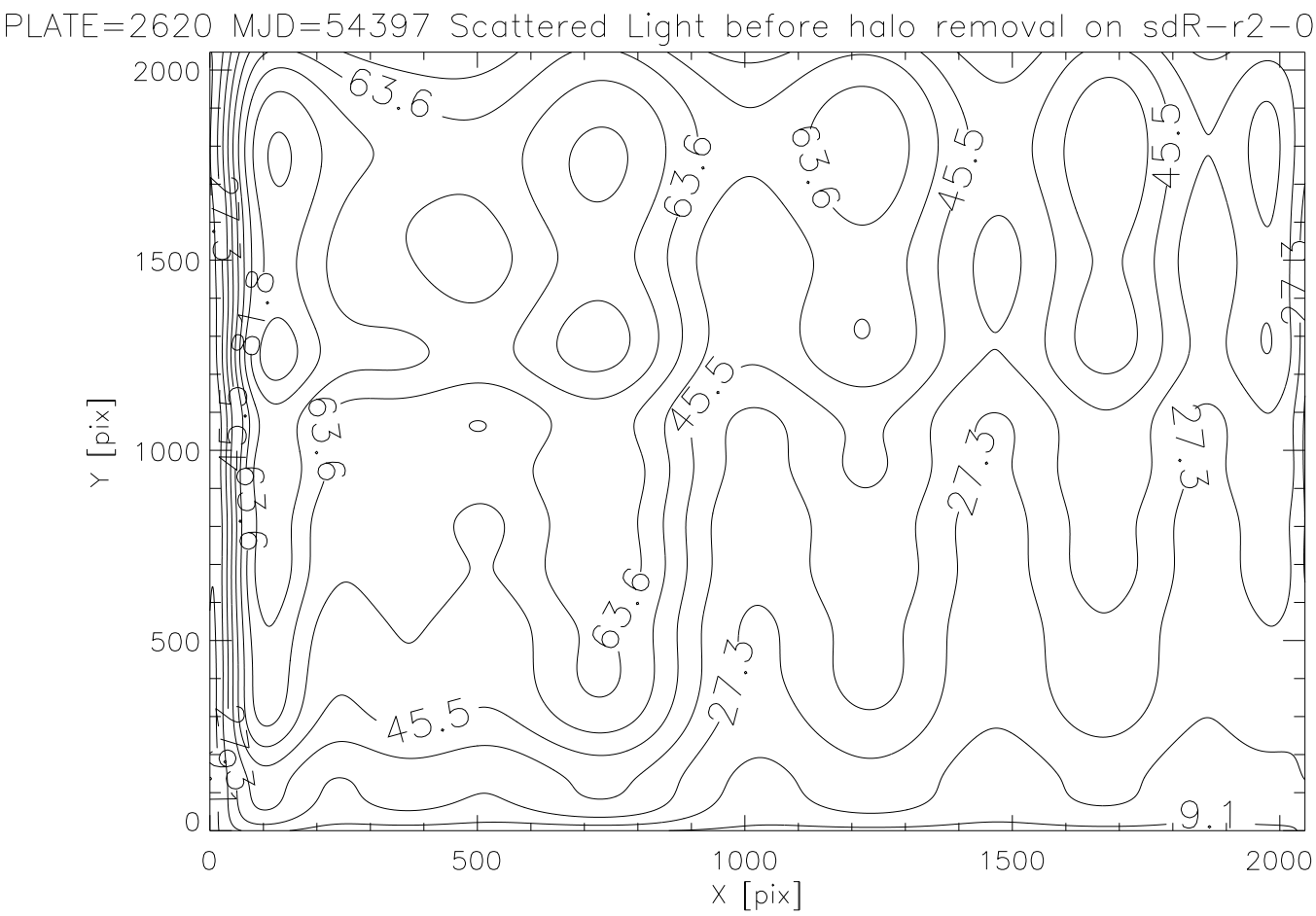

PLATE=2620 MJD=54397 sdR-r2-00046874.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

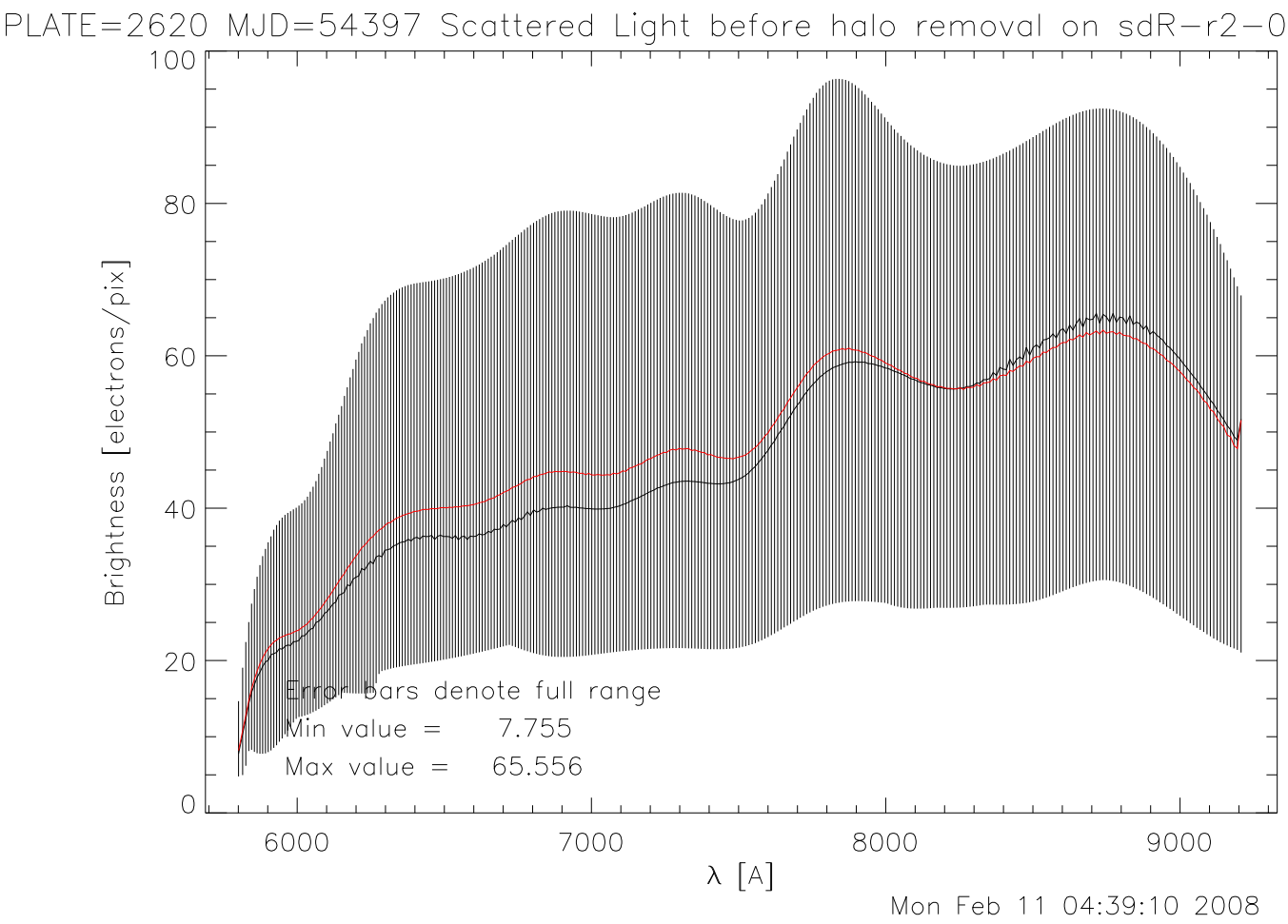

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046874.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

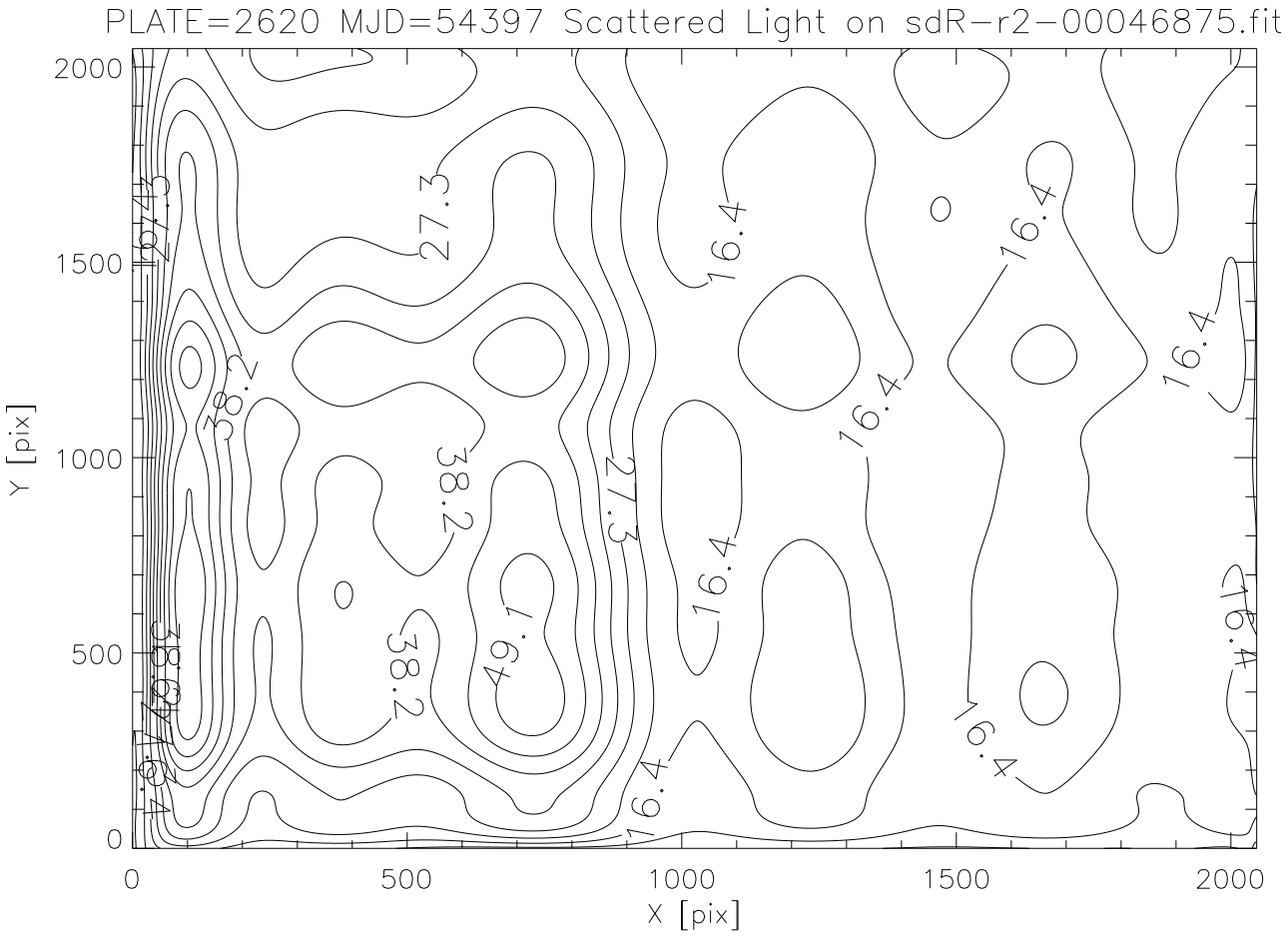

PLATE=2620 MJD=54397 sdR-r2-00046874.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 6.26 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

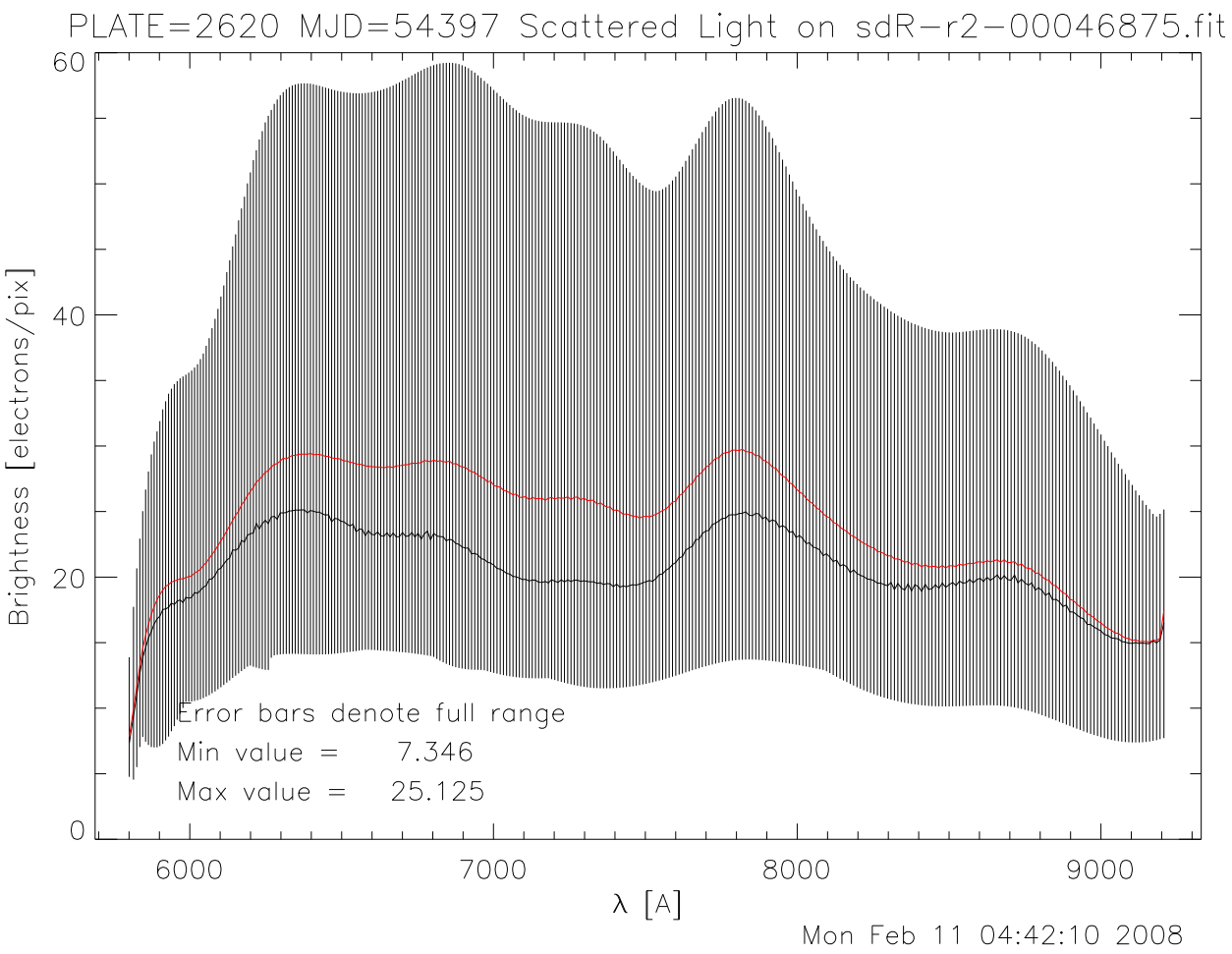

PLATE=2620 MJD=54397 sdR-r2-00046874.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.72 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

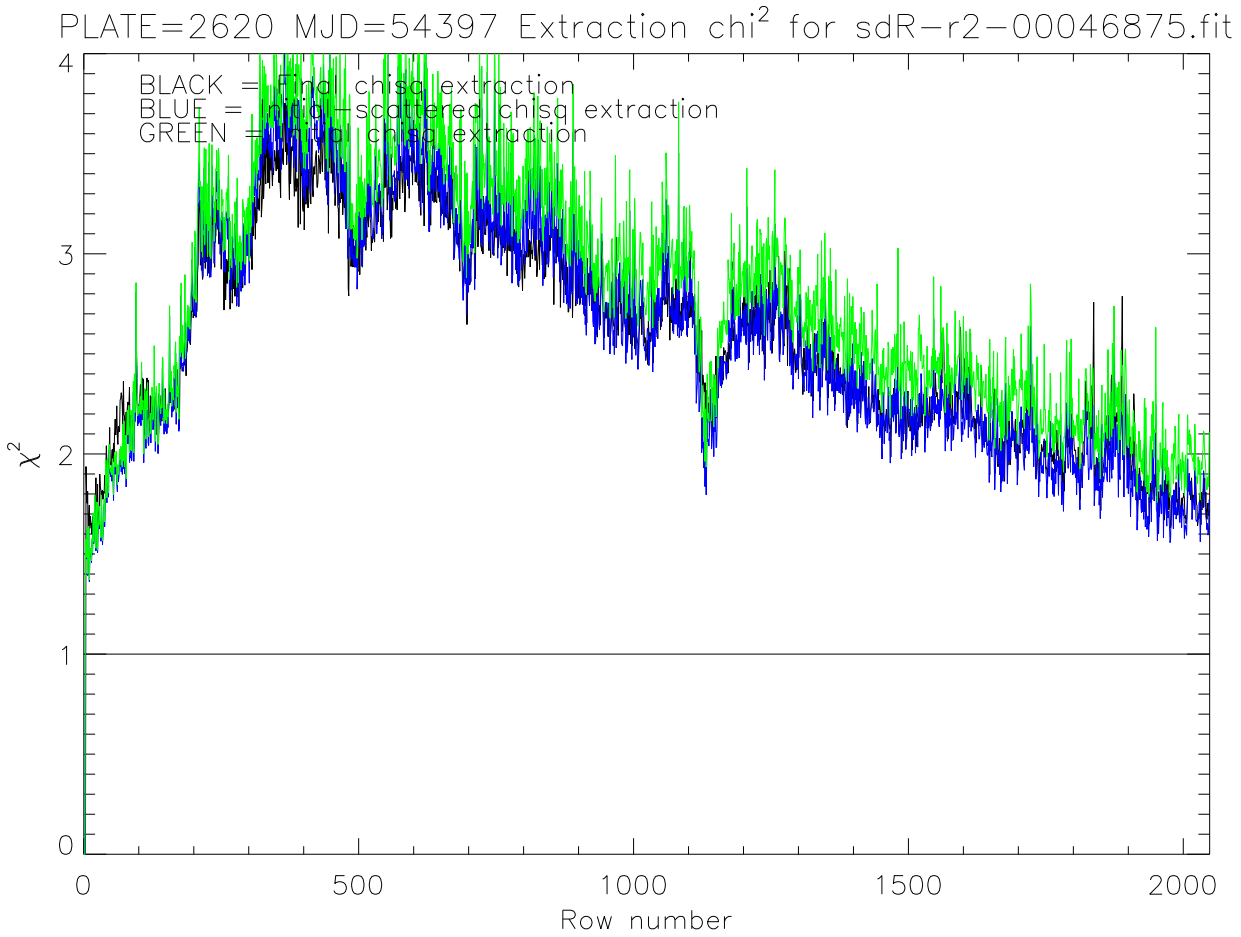

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:38:24 2008

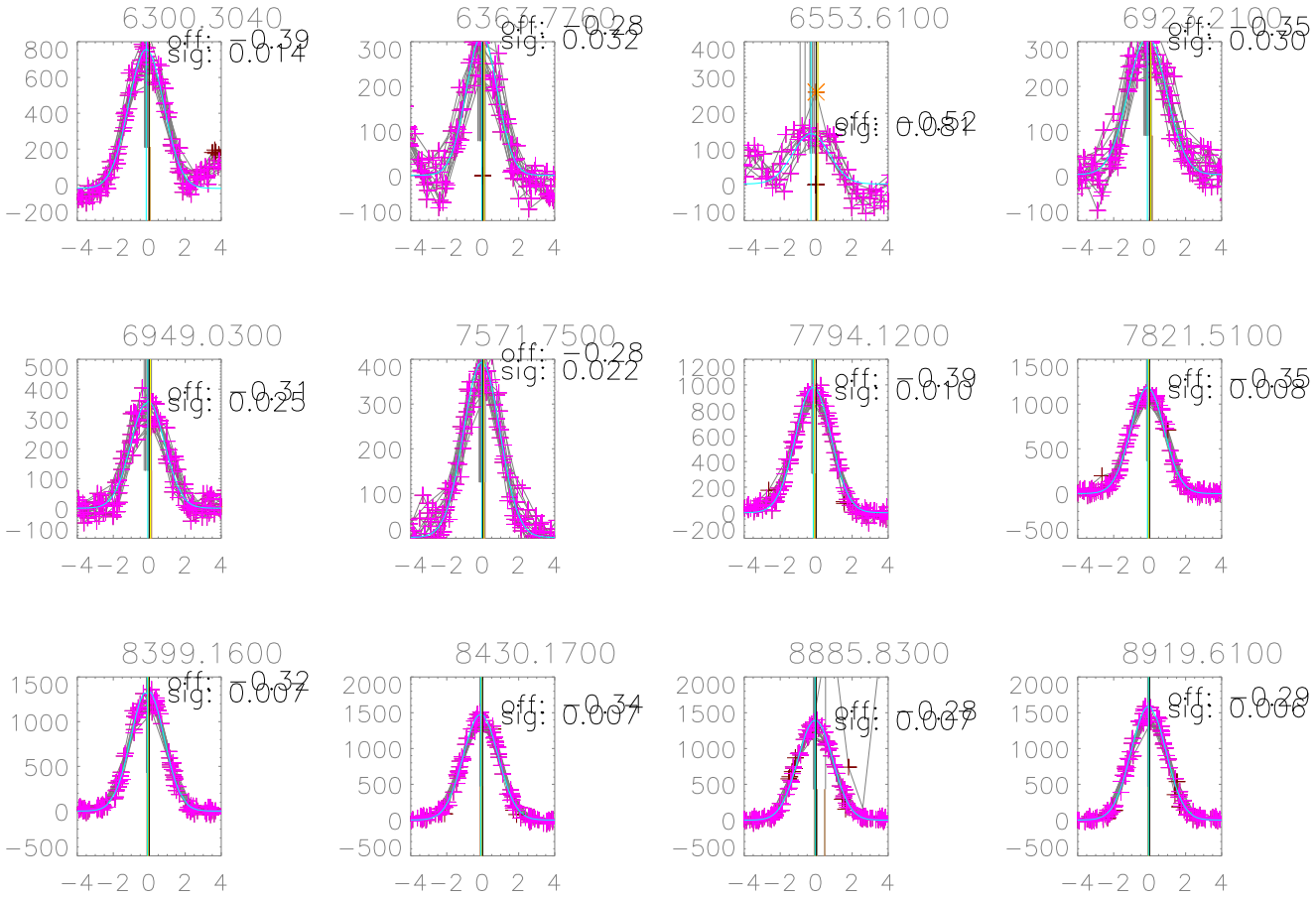

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046875.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
63.6
45.5
27.3
9.1

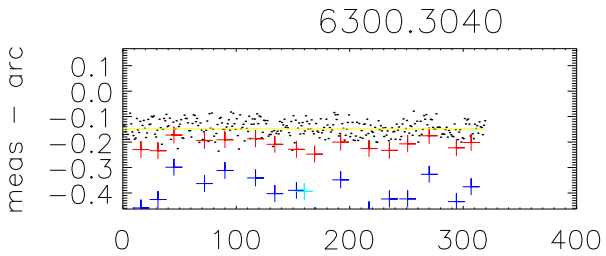

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046875.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.755
Max value = 65.556
Mon Feb 11 04:39:10 2008

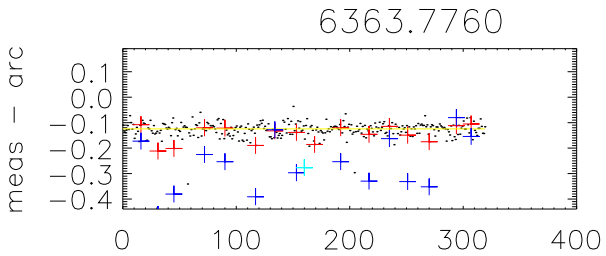

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046875.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
16.4
38.2
49.1
0

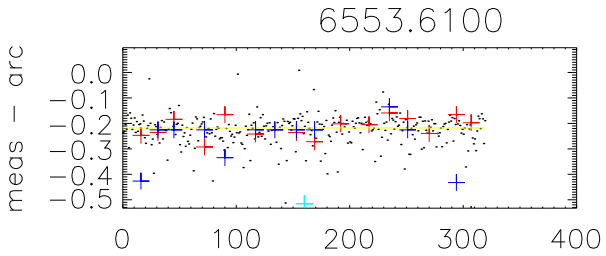

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046875.fit
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.346
Max value = 25.125
Mon Feb 11 04:42:10 2008

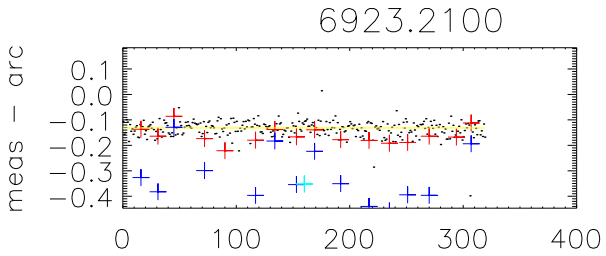

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046875.fit
BLACK = Final chisq extraction
BLUE = Initial scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

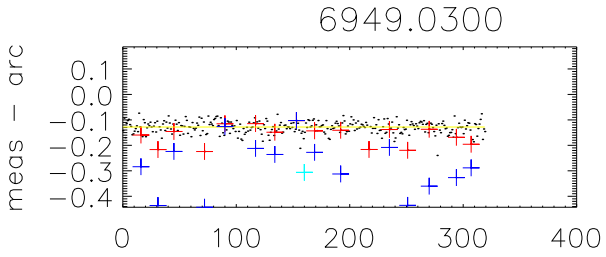

6300.3040
off: −0.39
sig: 0.014
6363.7600
off: −0.28
sig: 0.032
6553.6100
off: −0.52
sig: 0.031
6923.2100
off: −0.35
sig: 0.030
6949.0300
off: −0.31
sig: 0.025
7571.7500
off: −0.28
sig: 0.022
7794.1200
off: −0.39
sig: 0.010
7821.5100
off: −0.35
sig: 0.008
8399.1600
off: −0.32
sig: 0.007
8430.1700
off: −0.34
sig: 0.007
8885.8300
off: −0.28
sig: 0.007
8919.6100
off: −0.29
sig: 0.008

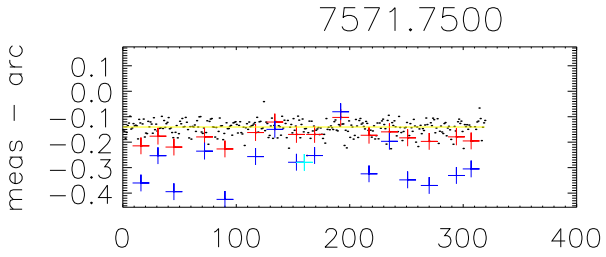

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

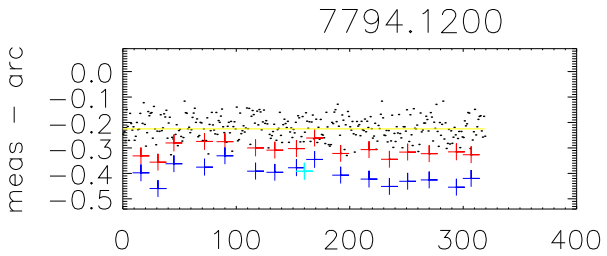

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

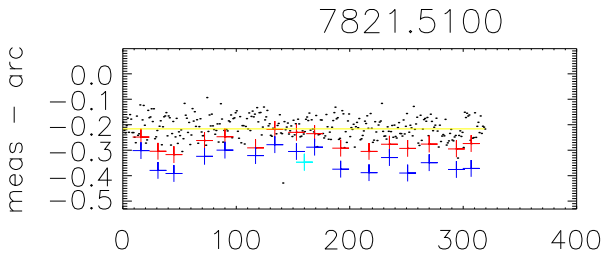

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

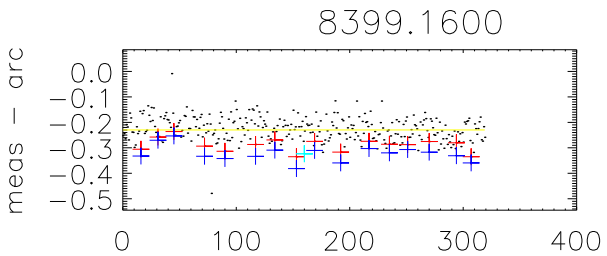

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

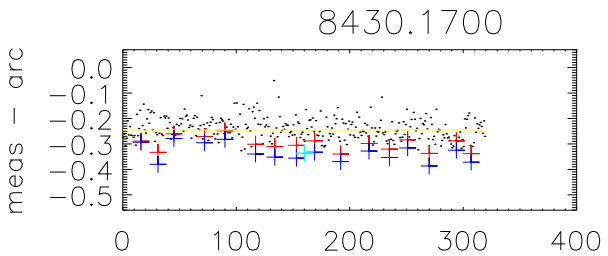

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

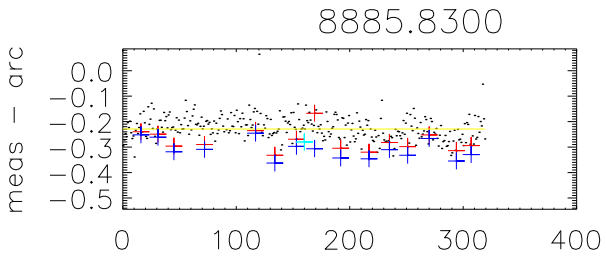

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

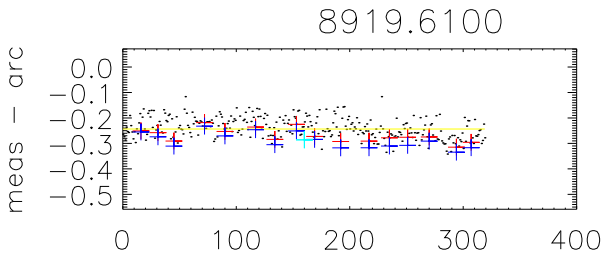

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

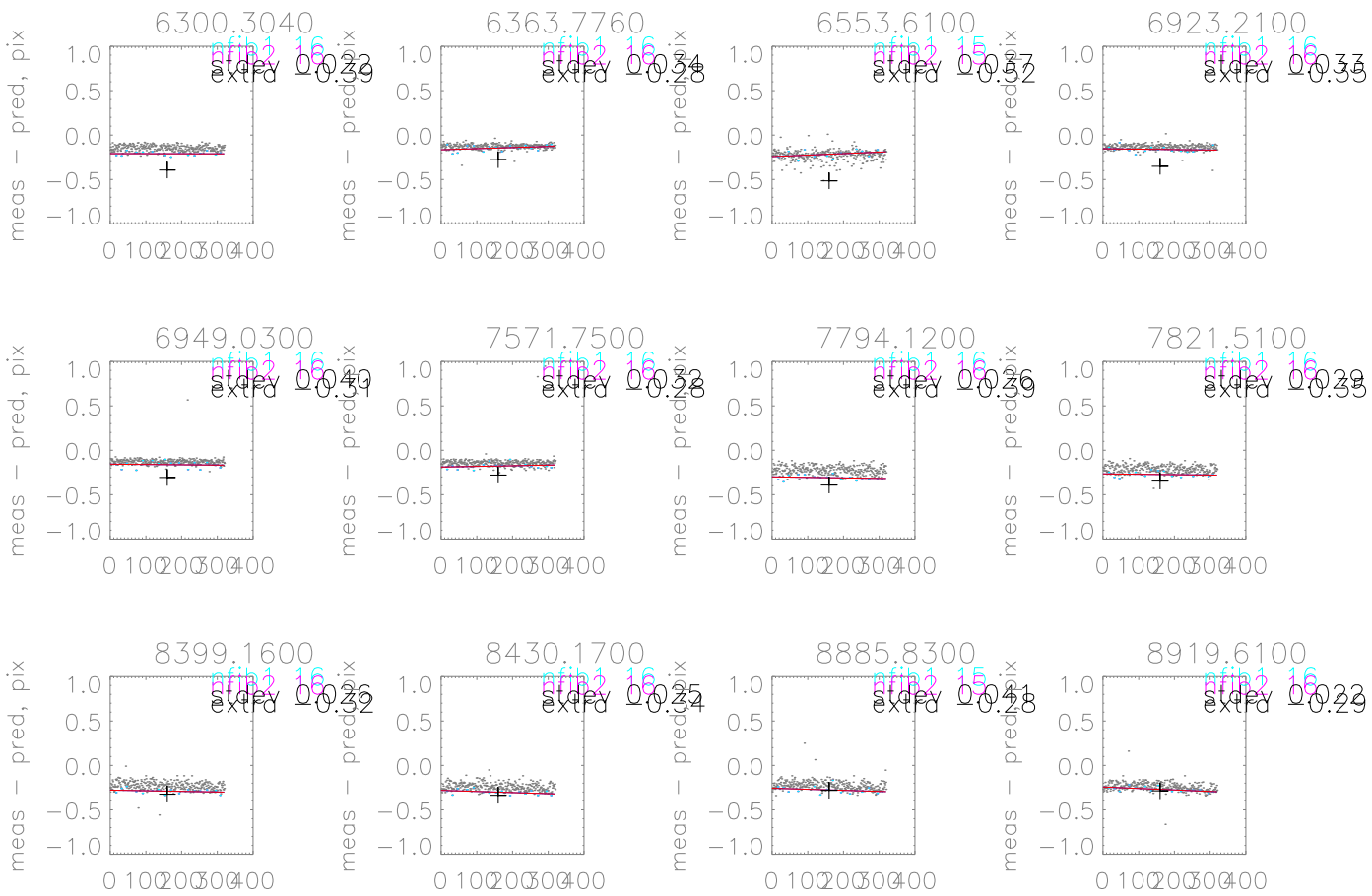

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

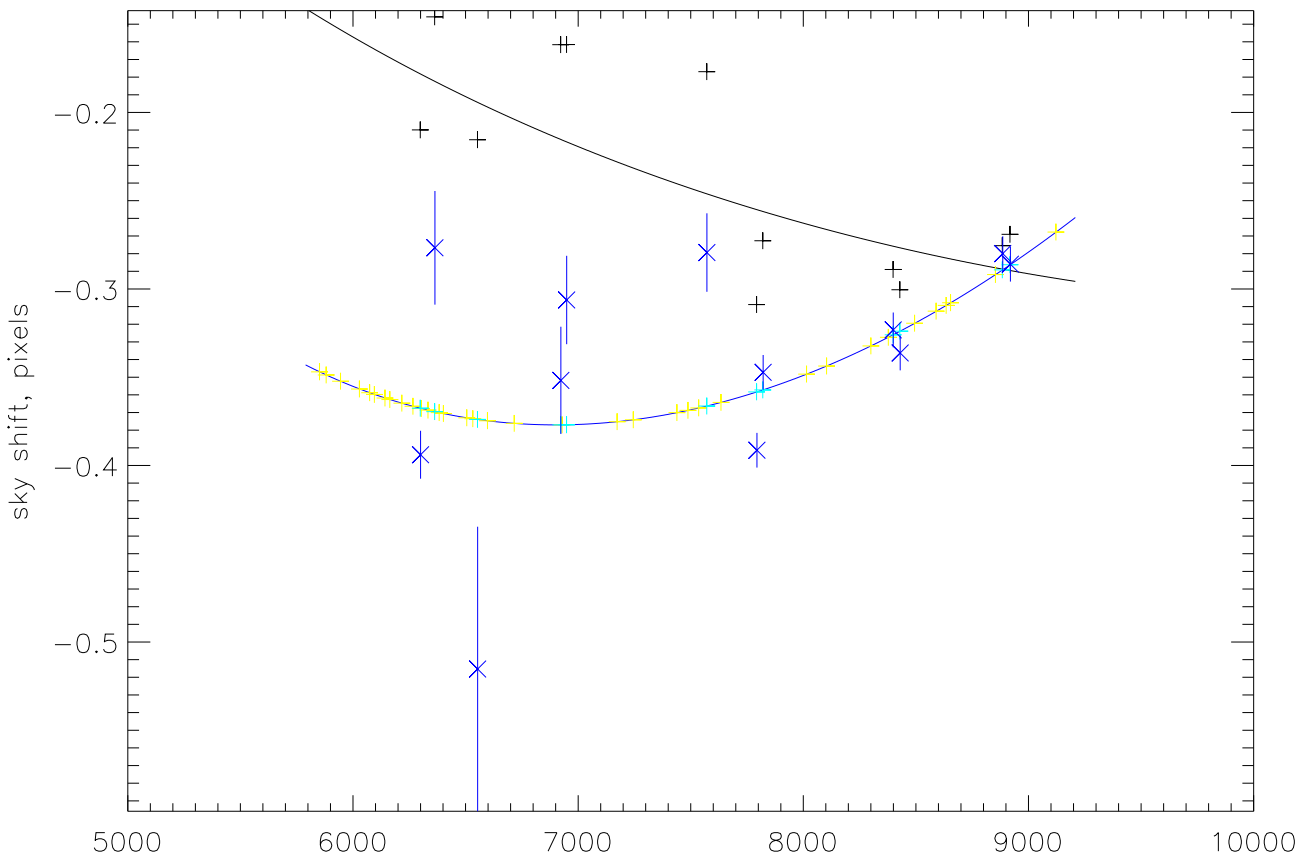

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

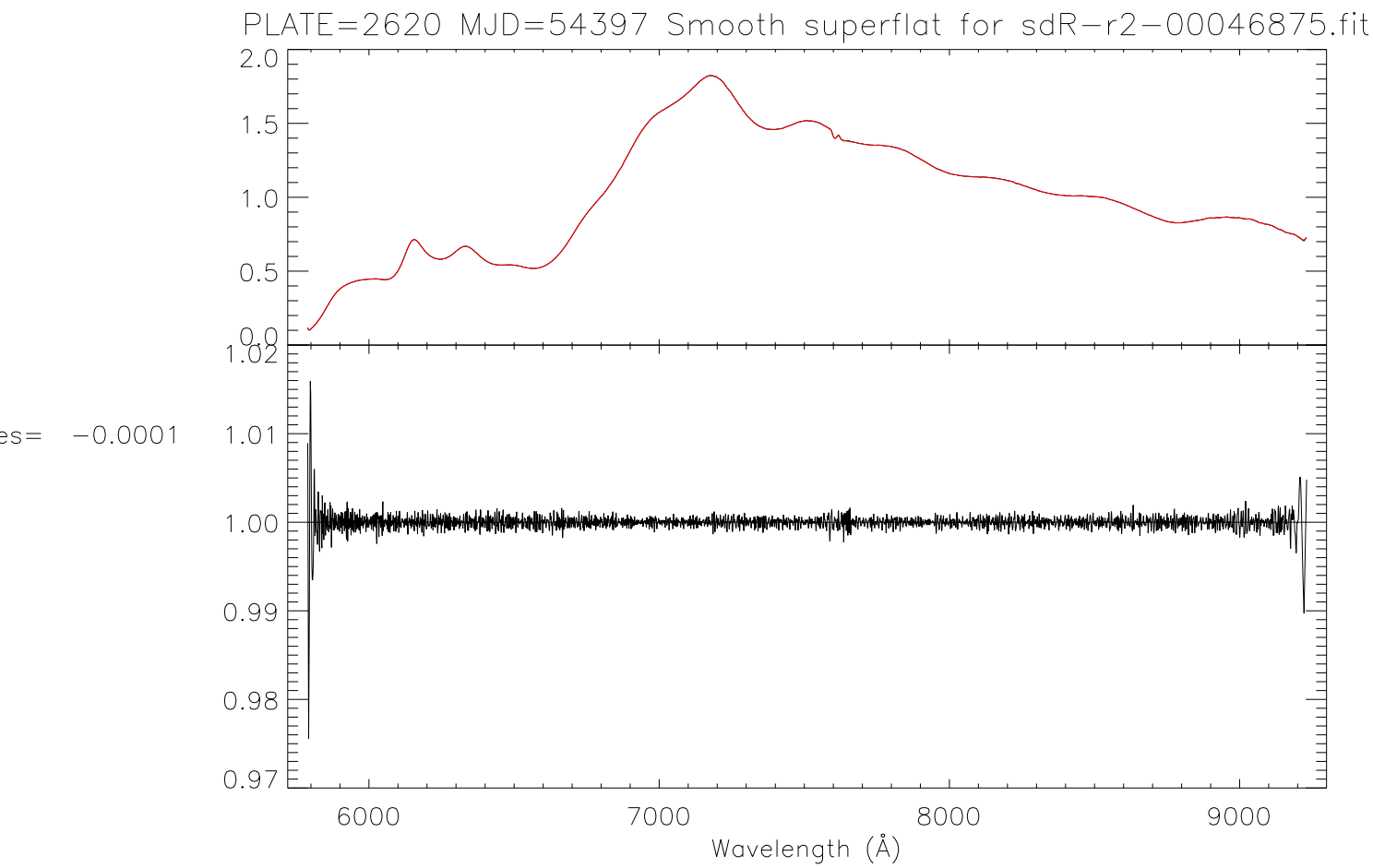

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

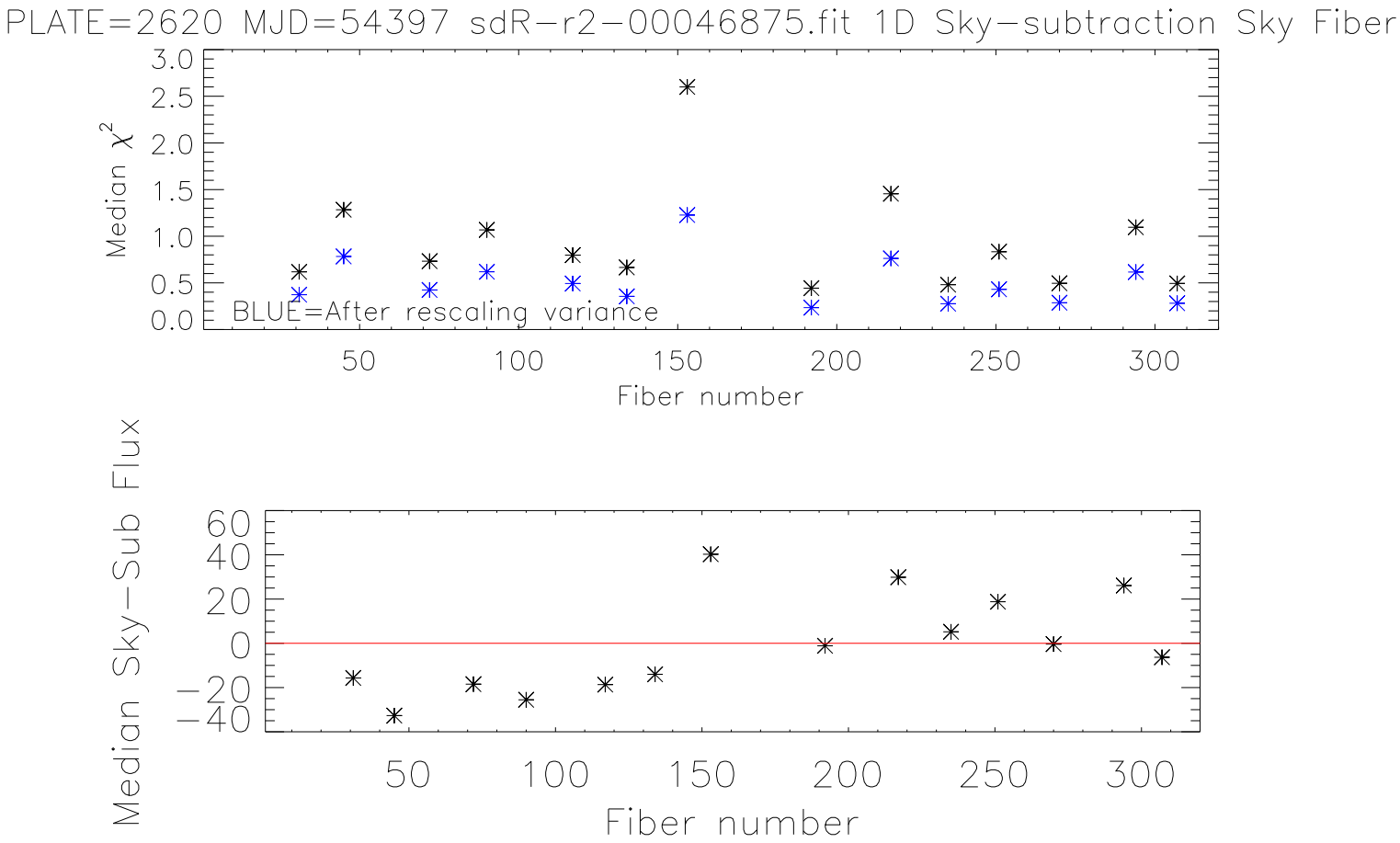

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

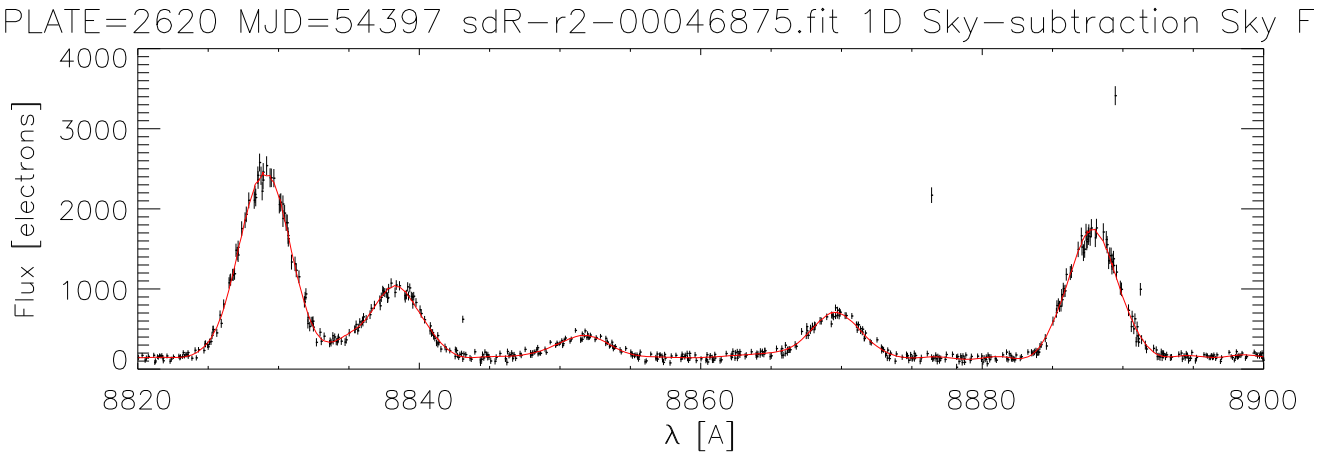

6300.3040
stdev 0.032
extrd −0.39
6363.7760
stdev 0.034
extrd −0.28
6553.6100
stdev 0.037
extrd −0.52
6923.2100
stdev 0.033
extrd −0.35
6949.0300
stdev 0.040
extrd −0.51
7571.7500
stdev 0.032
extrd −0.28
7794.1200
stdev 0.036
extrd −0.39
7821.5100
stdev 0.029
extrd −0.35
8399.1600
stdev 0.036
extrd −0.32
8430.1700
stdev 0.035
extrd −0.34
8885.8300
stdev 0.041
extrd −0.28
8919.6100
stdev 0.022
extrd −0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

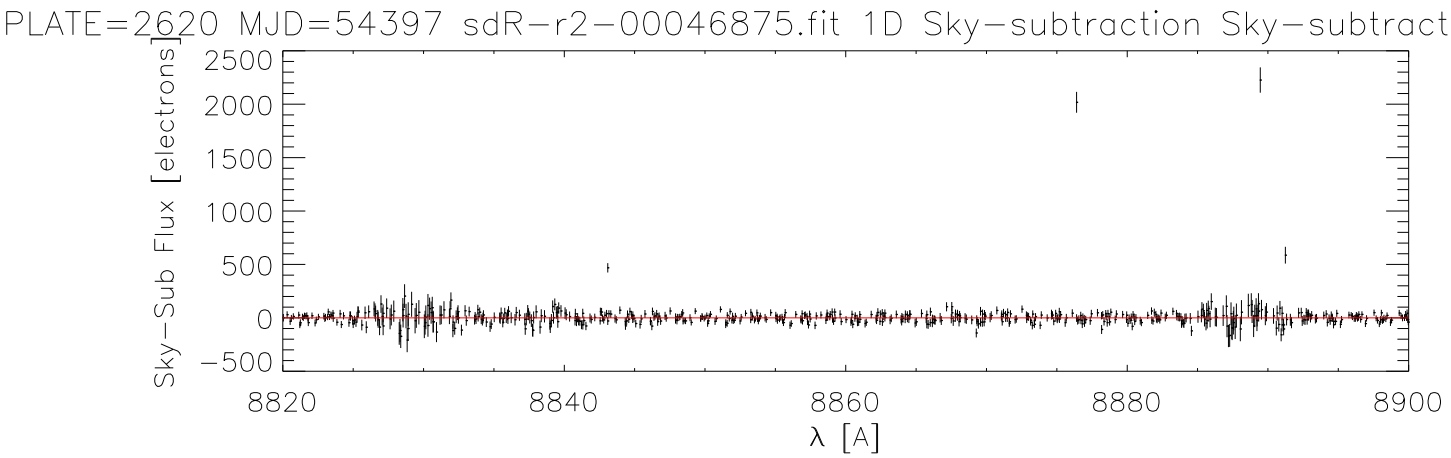

sky shift, pixels
−0.2
−0.3
−0.4
−0.5
5000
6000
7000
8000
9000
10000

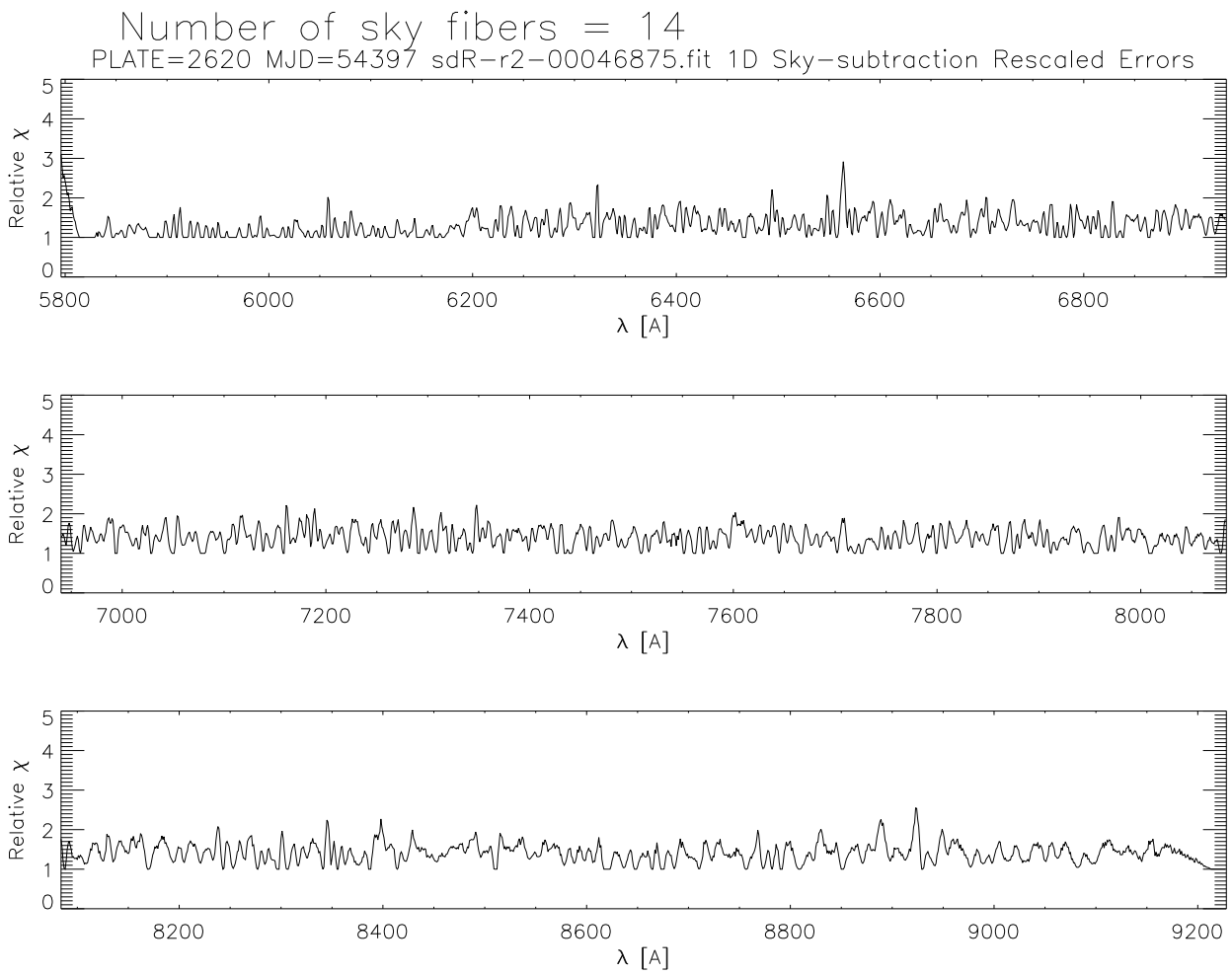

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046875.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

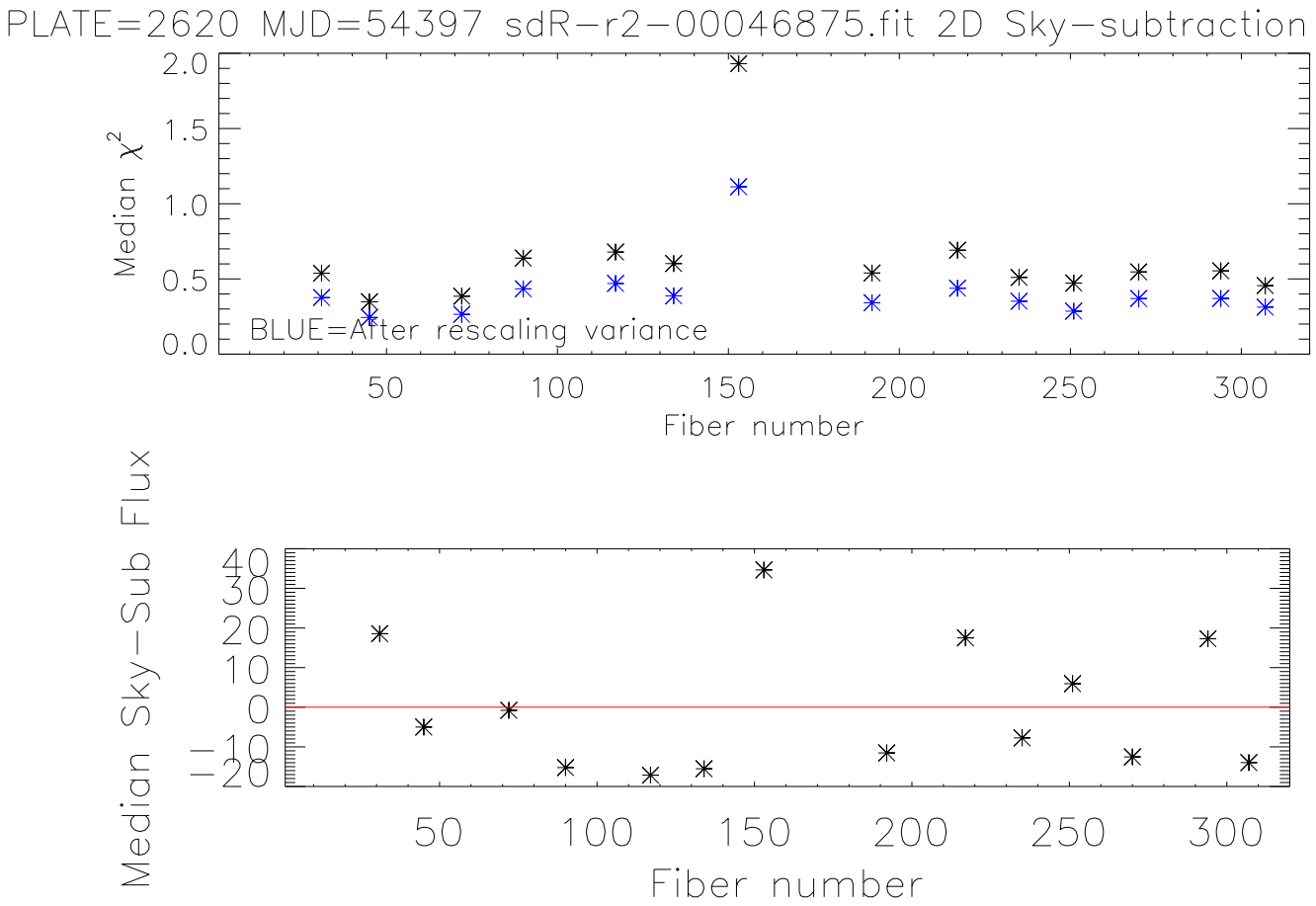
es= −0.0001

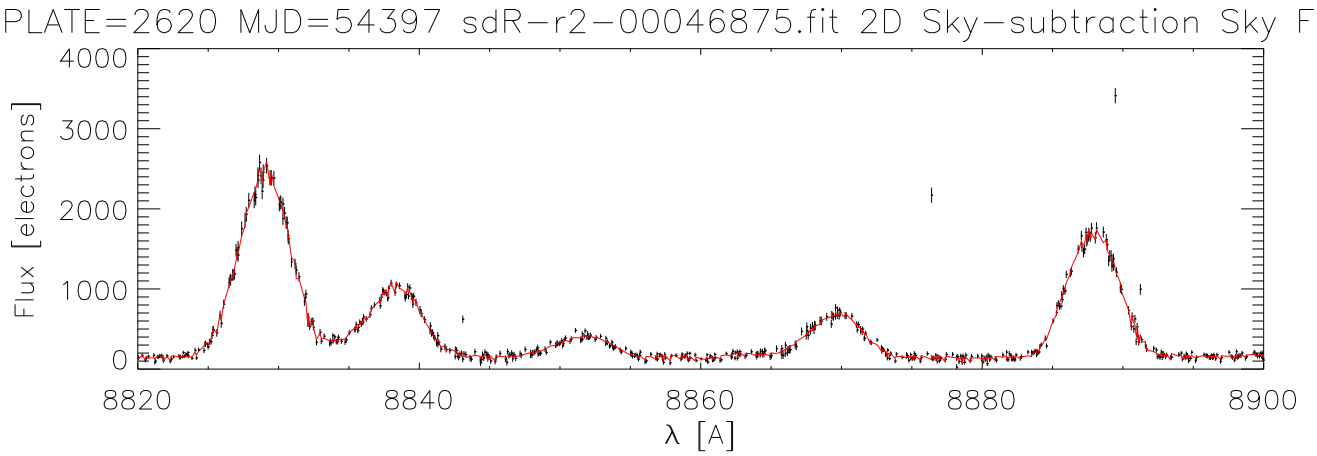

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 1D Sky-subtraction Sky Fibers
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
60
40
20
0
-20
-40
50
100
150
200
250
300
Fiber number

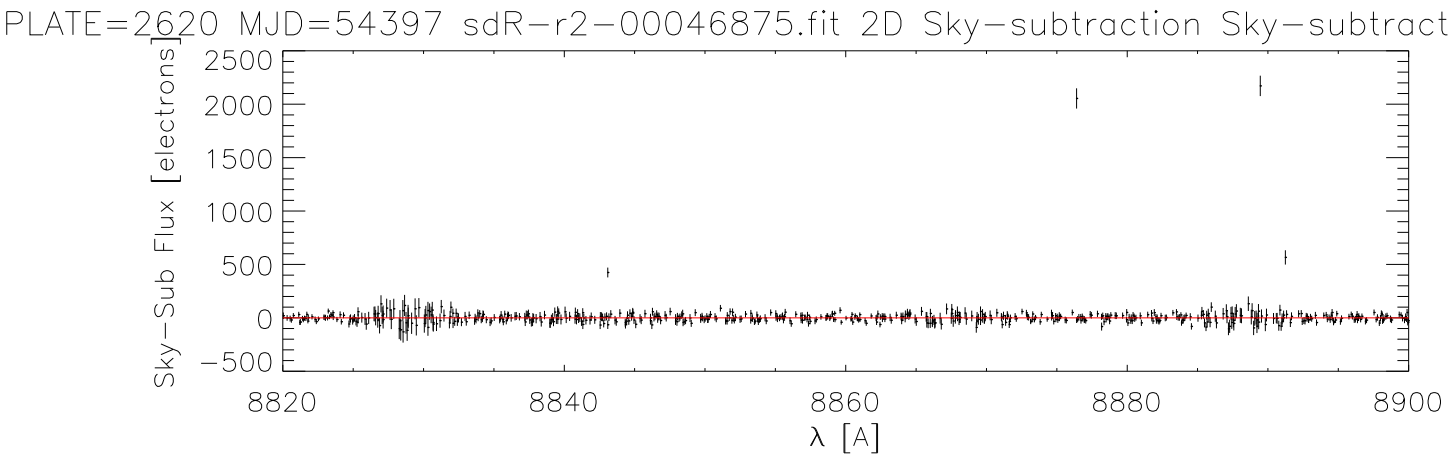

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

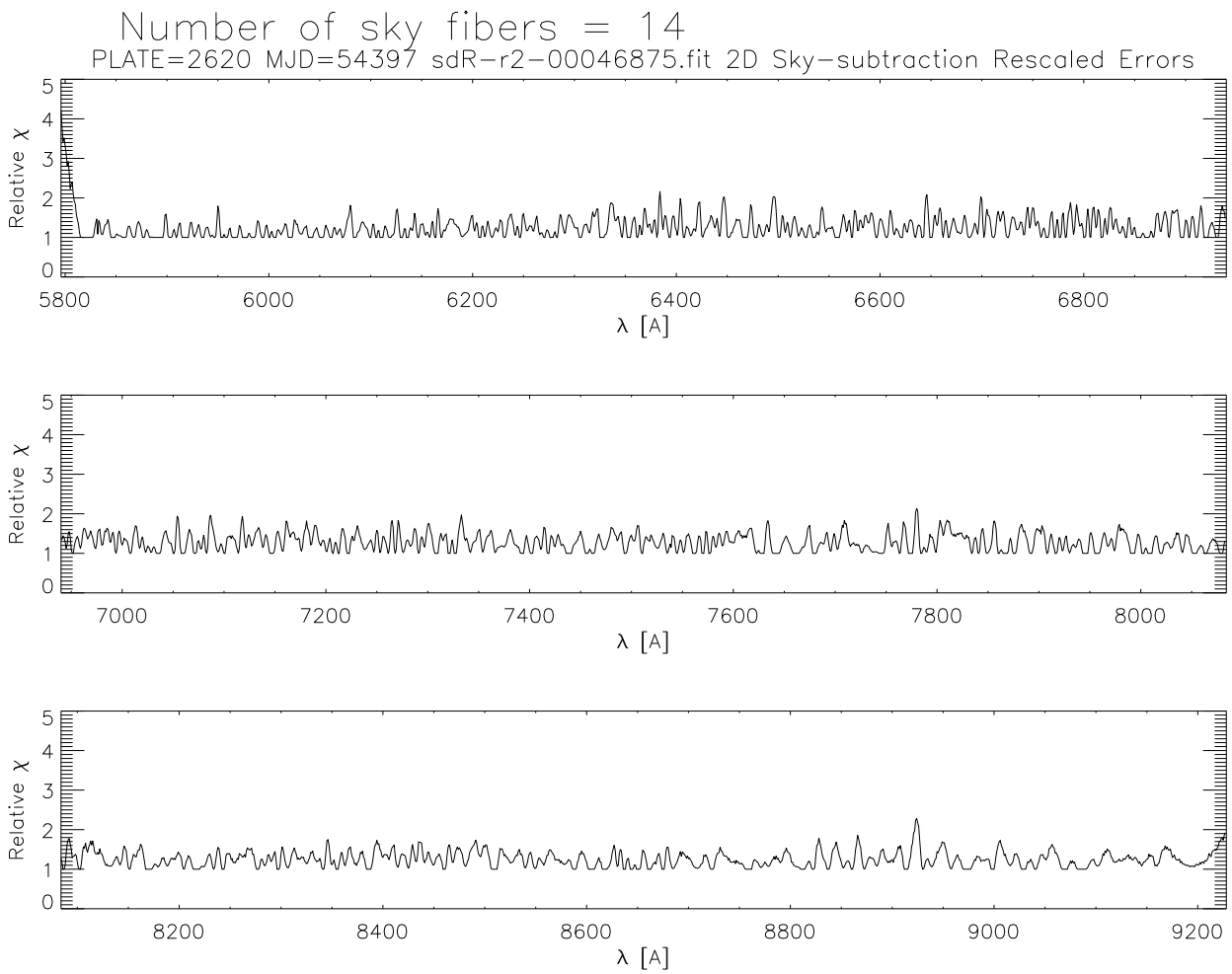

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

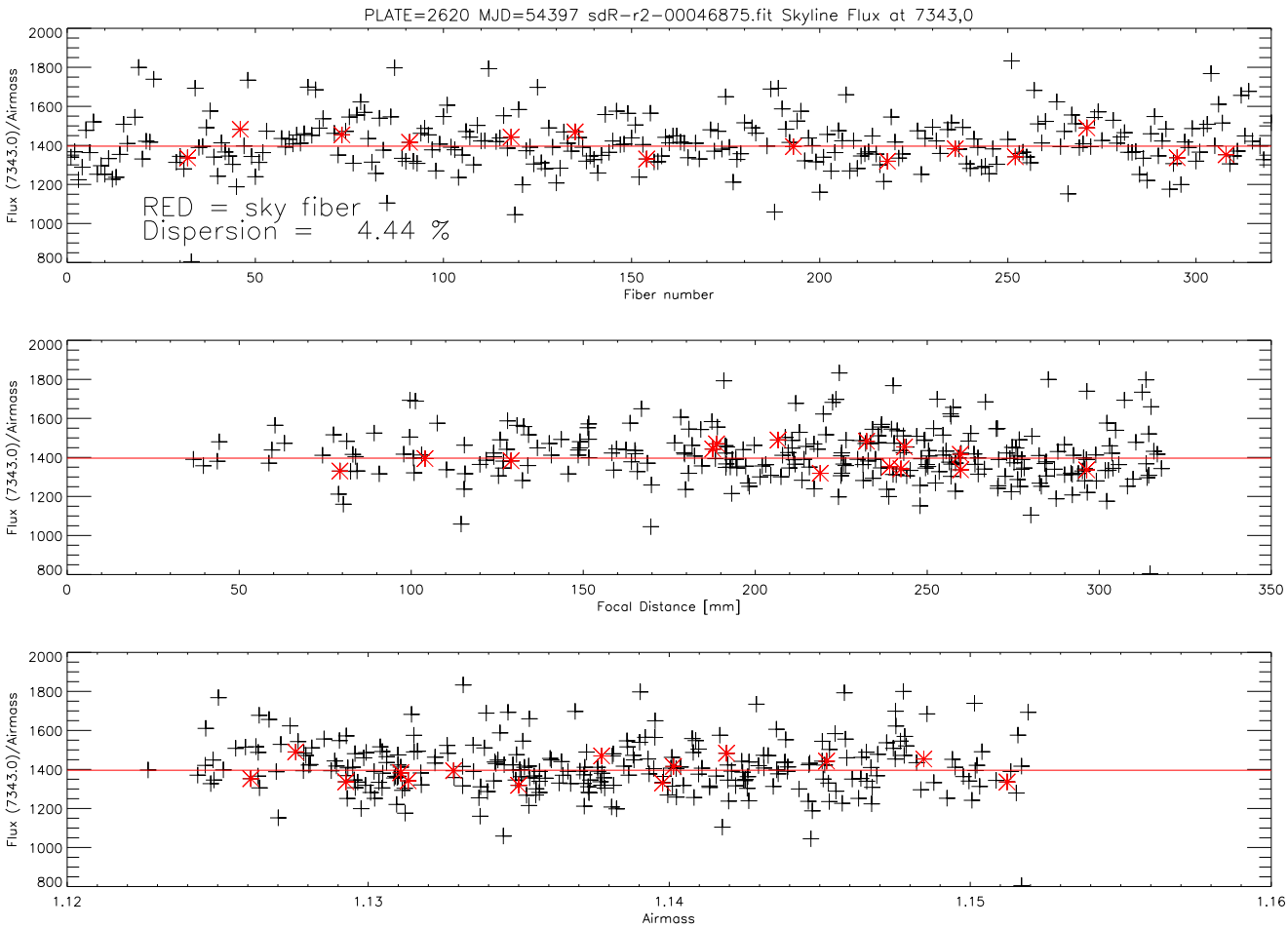

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046875.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

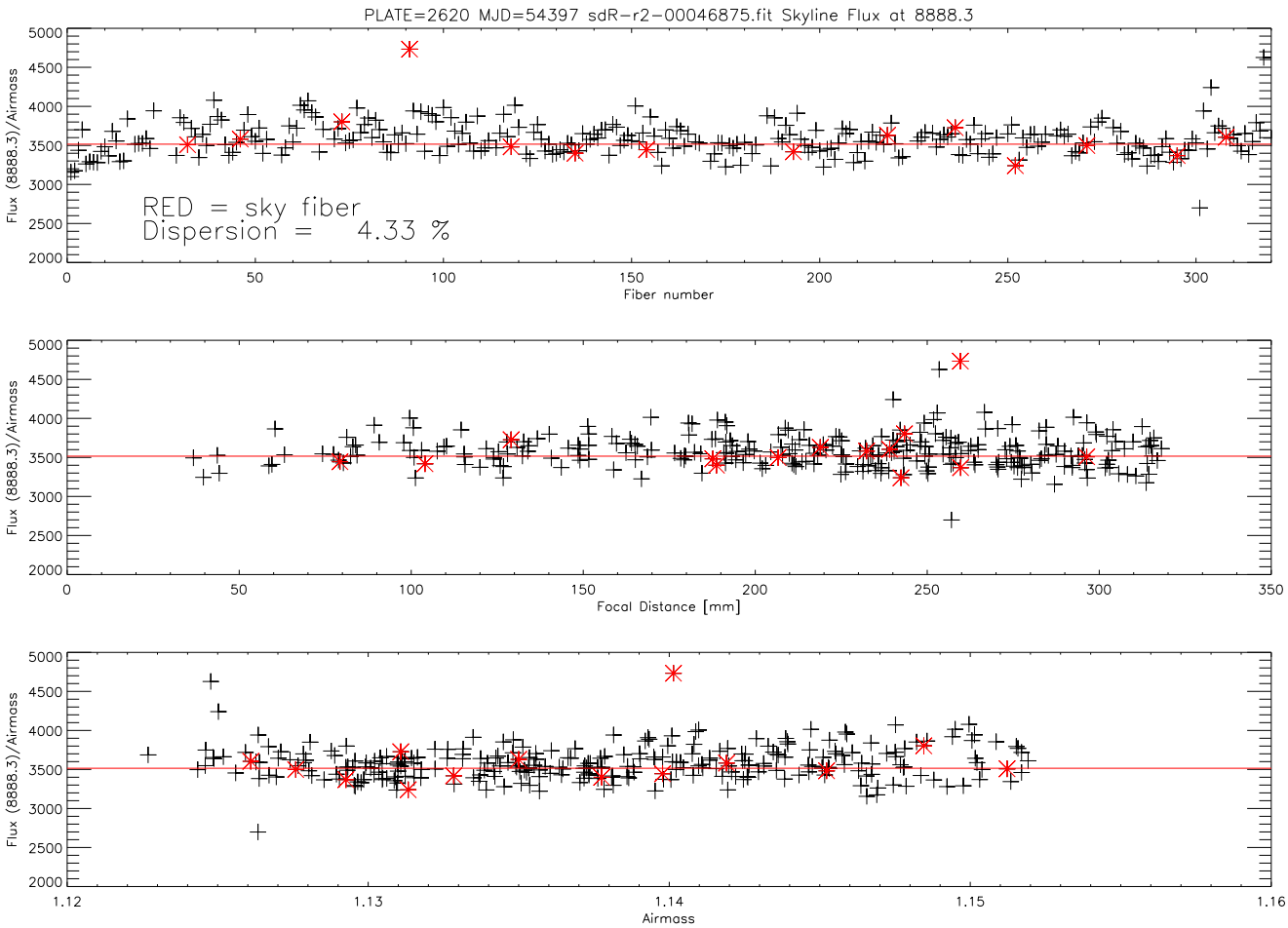

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

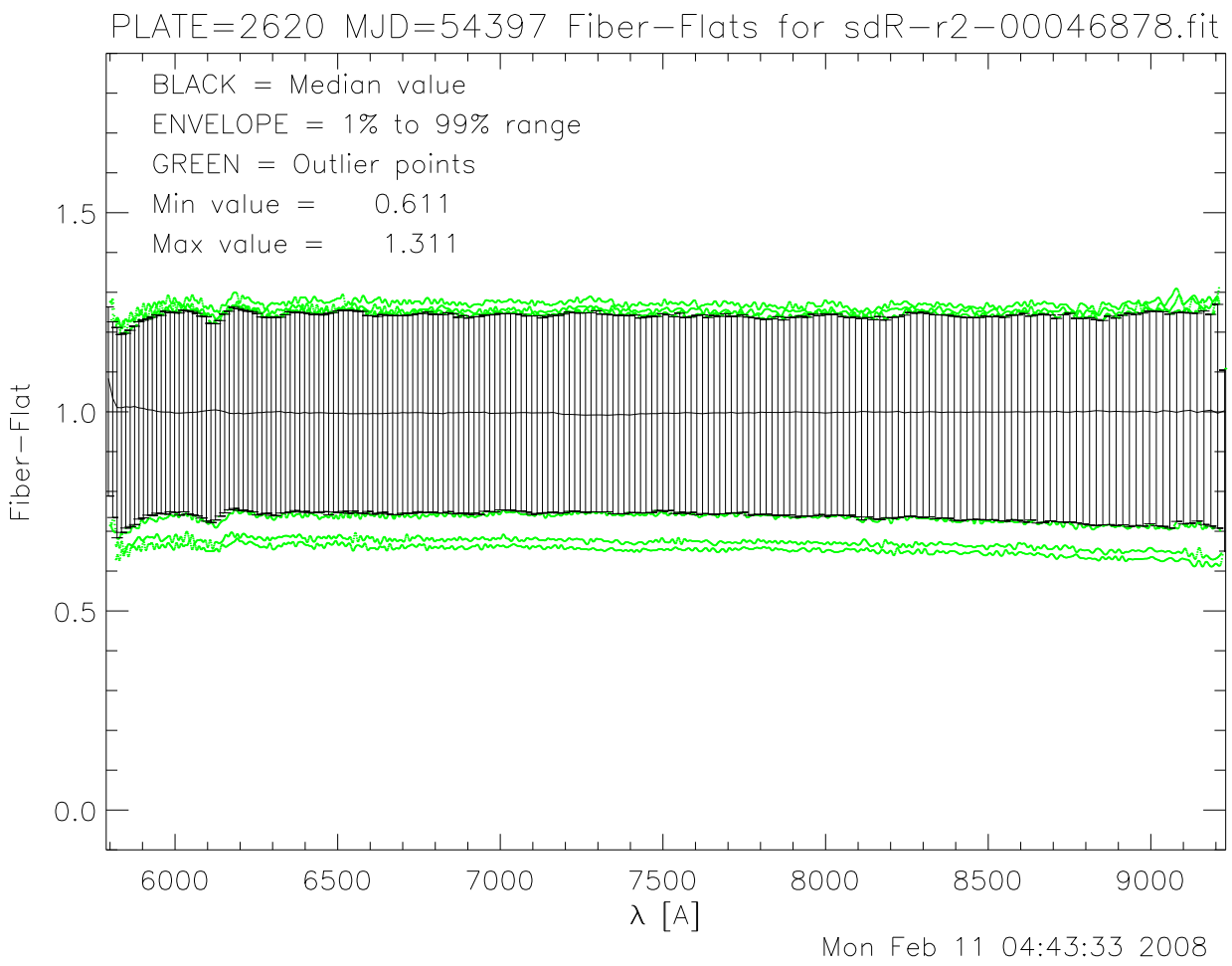

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

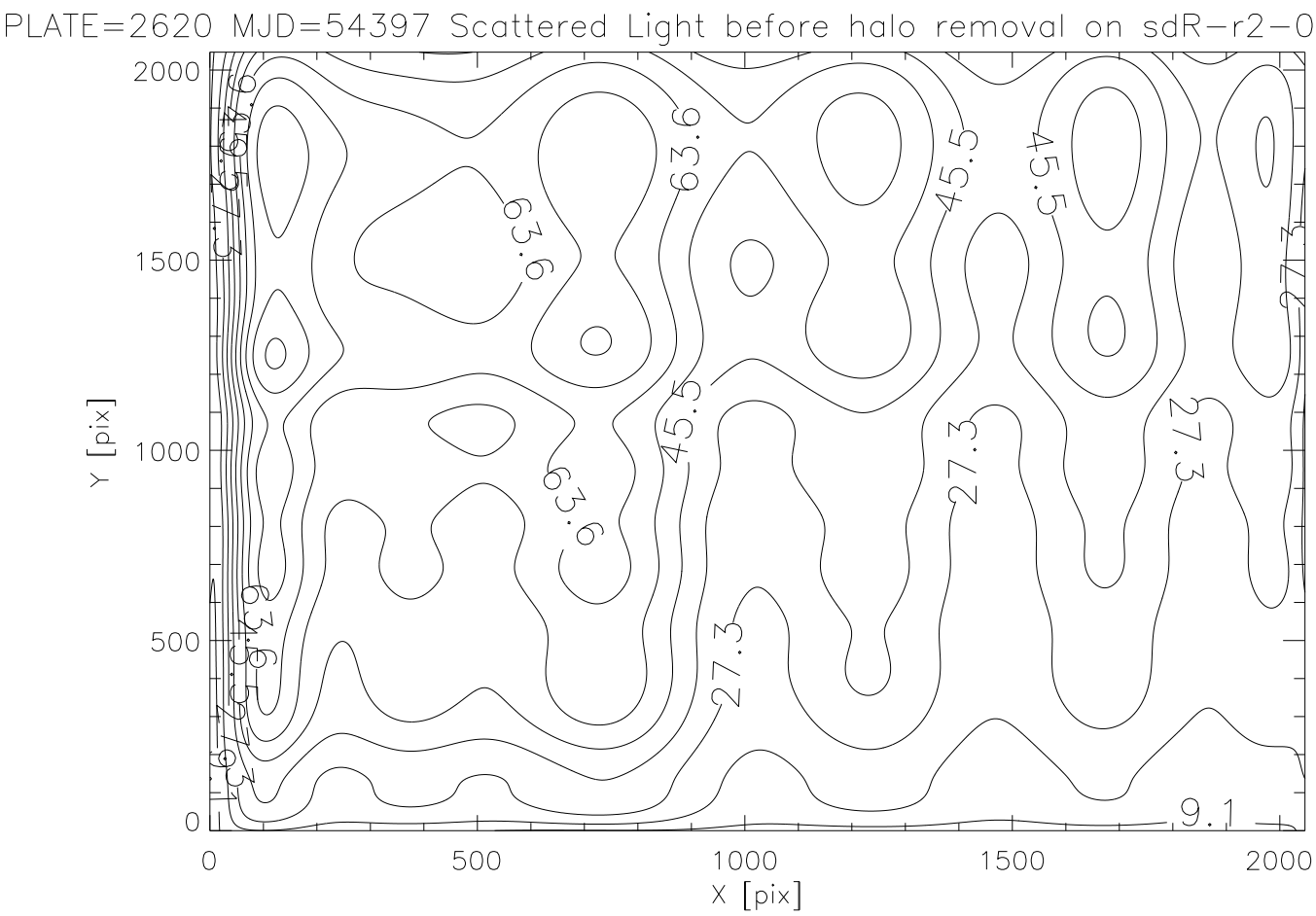

PLATE=2620 MJD=54397 sdR-r2-00046875.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

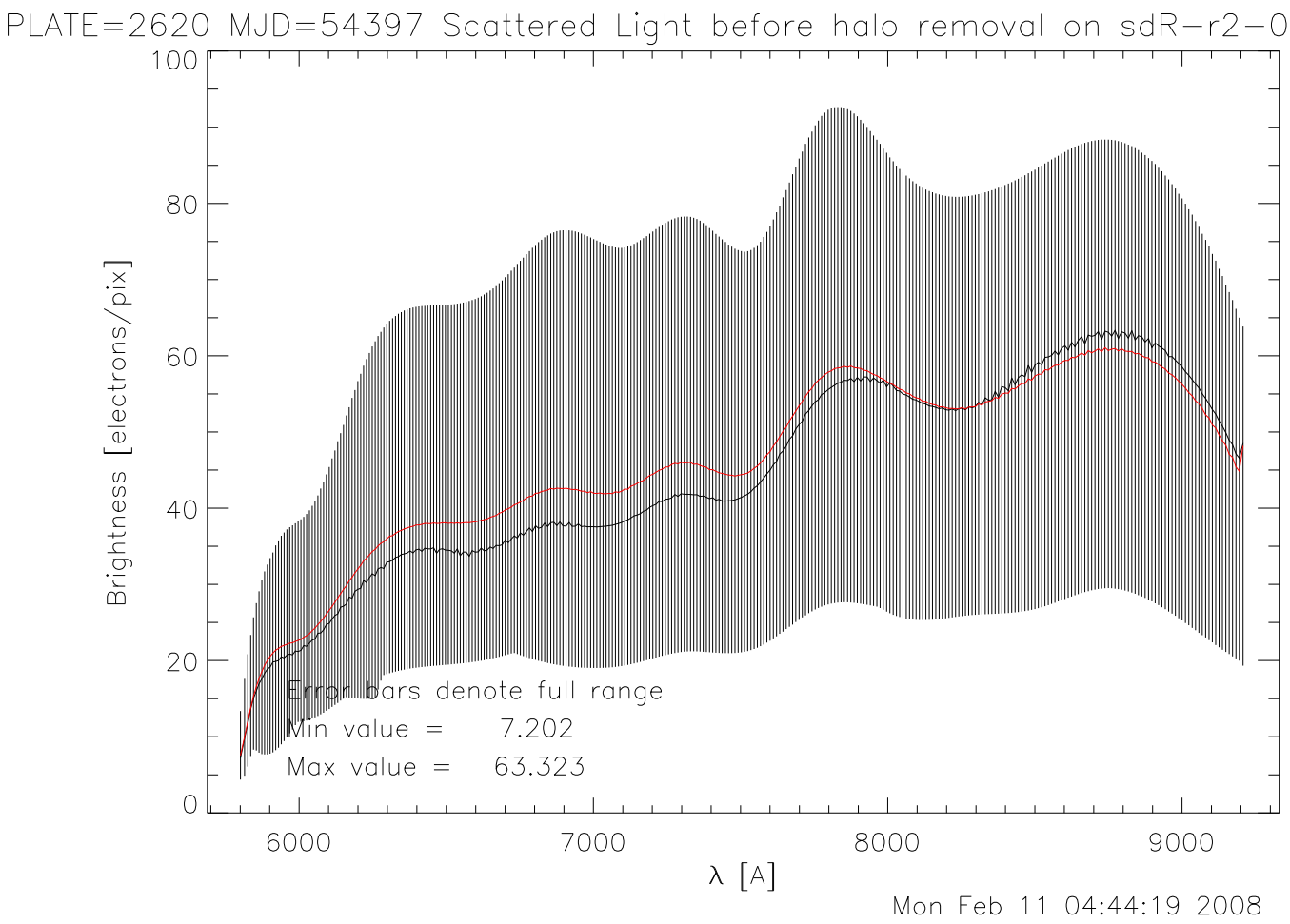

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046875.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

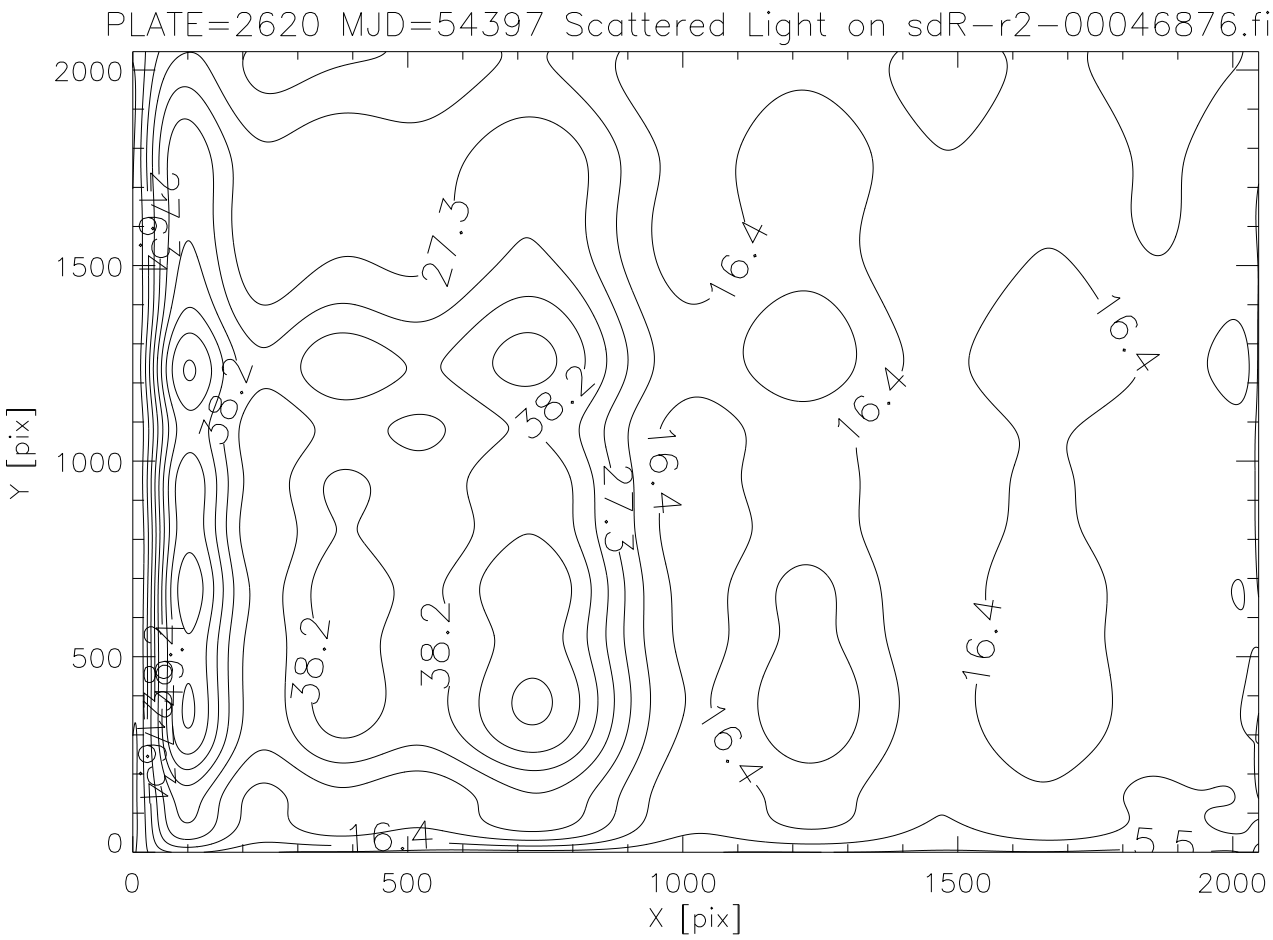

PLATE=2620 MJD=54397 sdR-r2-00046875.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.44 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

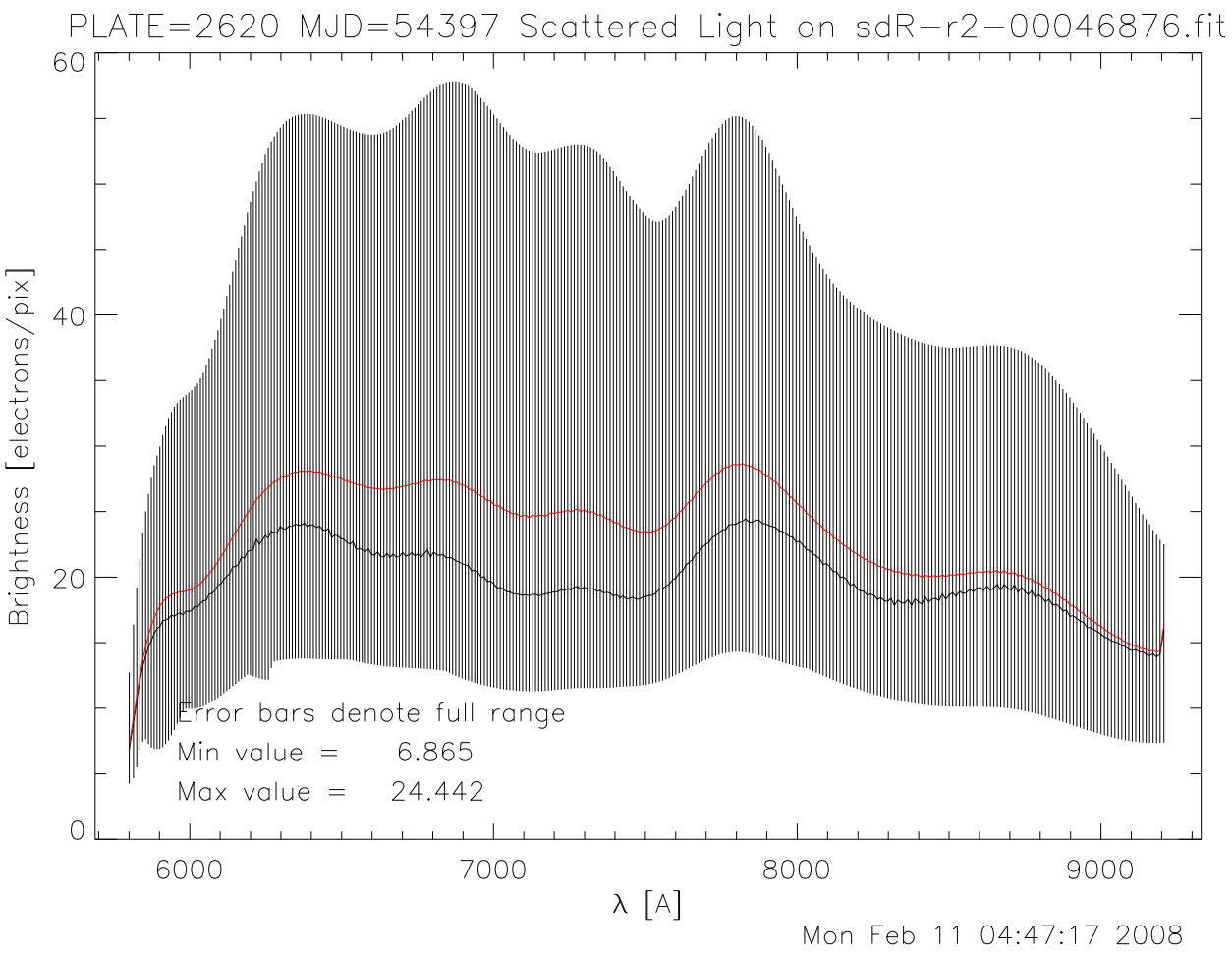

PLATE=2620 MJD=54397 sdR-r2-00046875.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.33 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

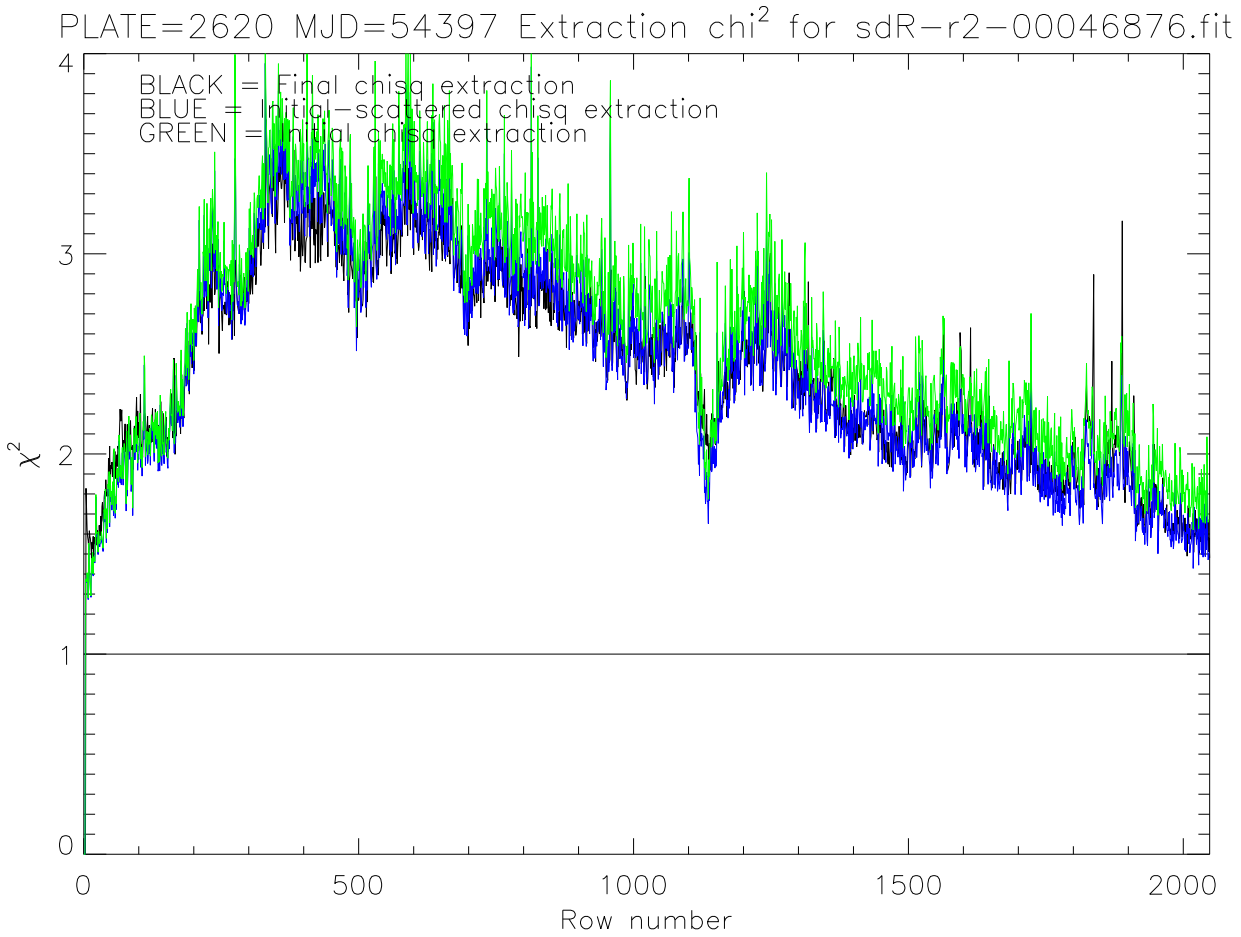

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:43:33 2008

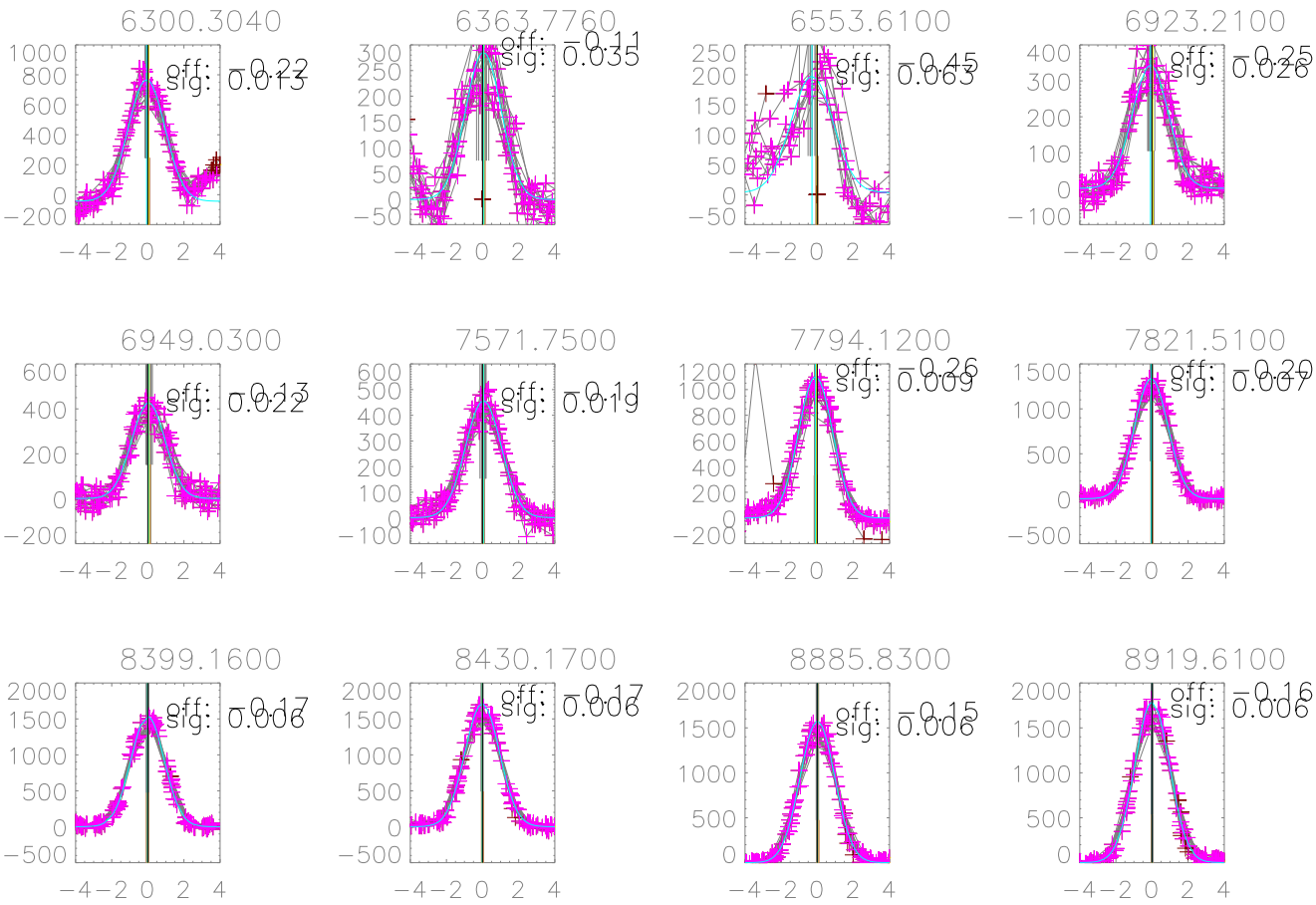

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046876.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
63.6
45.5
27.3
9.1

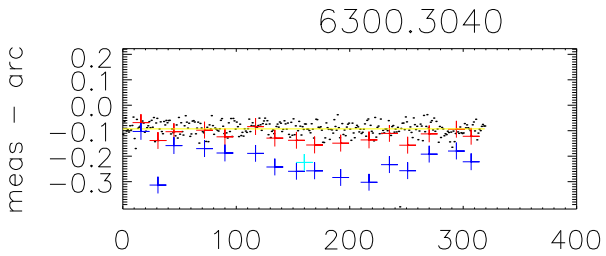

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046876.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.202
Max value = 63.323
Mon Feb 11 04:44:19 2008

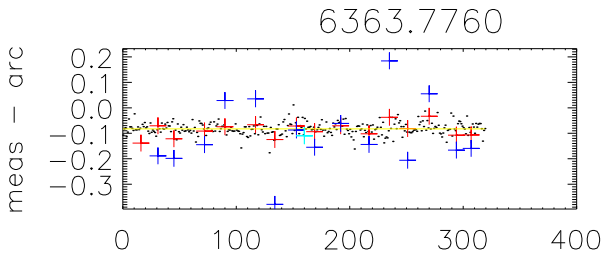

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046876.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
38.2
27.3
16.4
5.5

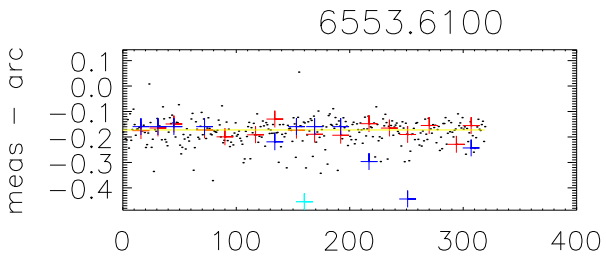

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046876.fit
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.865
Max value = 24.442
Mon Feb 11 04:47:17 2008

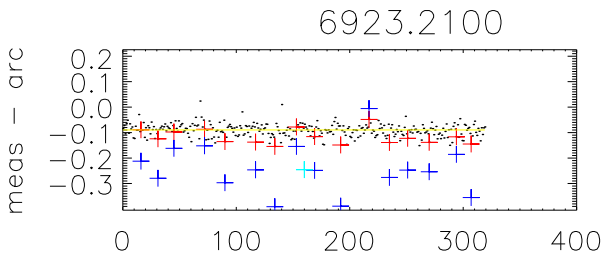

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046876.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

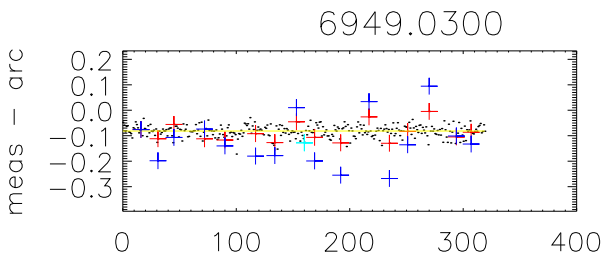

6300.3040
off: −0.22
sig: 0.013
6363.7760
off: −0.11
sig: 0.035
6553.6100
off: −0.45
sig: 0.063
6923.2100
off: −0.25
sig: 0.026
6949.0300
off: −0.13
sig: 0.022
7571.7500
off: −0.11
sig: 0.019
7794.1200
off: −0.26
sig: 0.069
7821.5100
off: −0.20
sig: 0.007
8399.1600
off: −0.17
sig: 0.006
8430.1700
off: −0.17
sig: 0.006
8885.8300
off: −0.15
sig: 0.006
8919.6100
off: −0.16
sig: 0.006

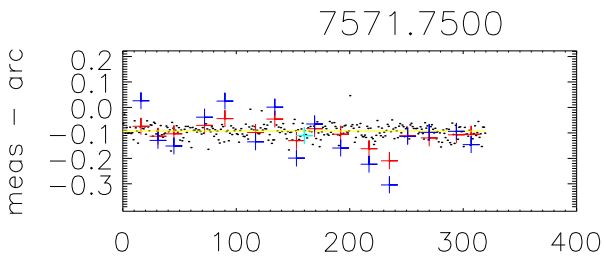

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

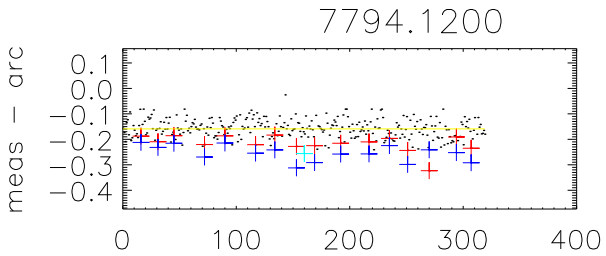

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

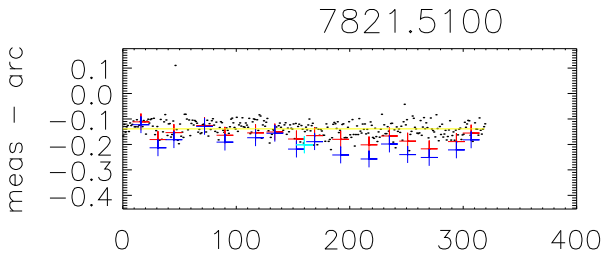

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

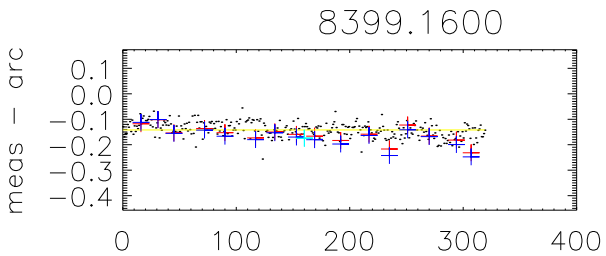

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

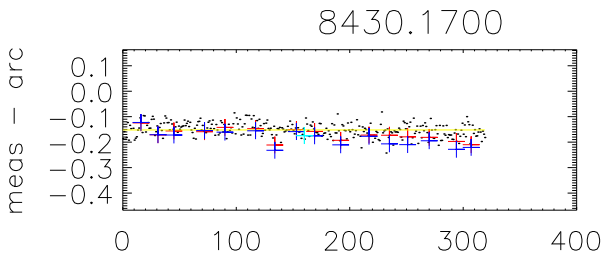

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

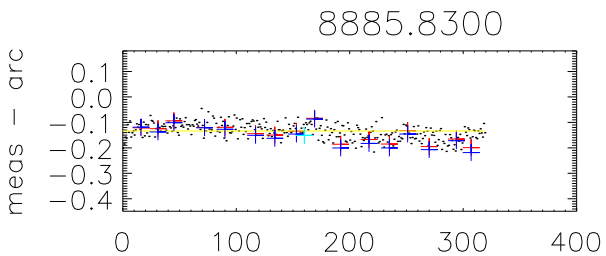

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

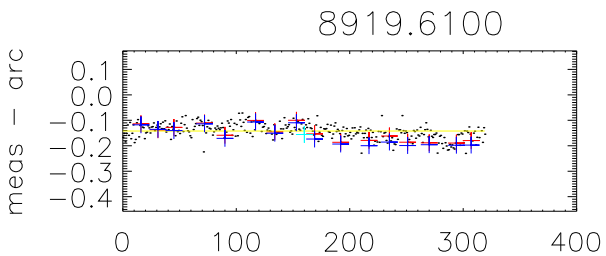

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

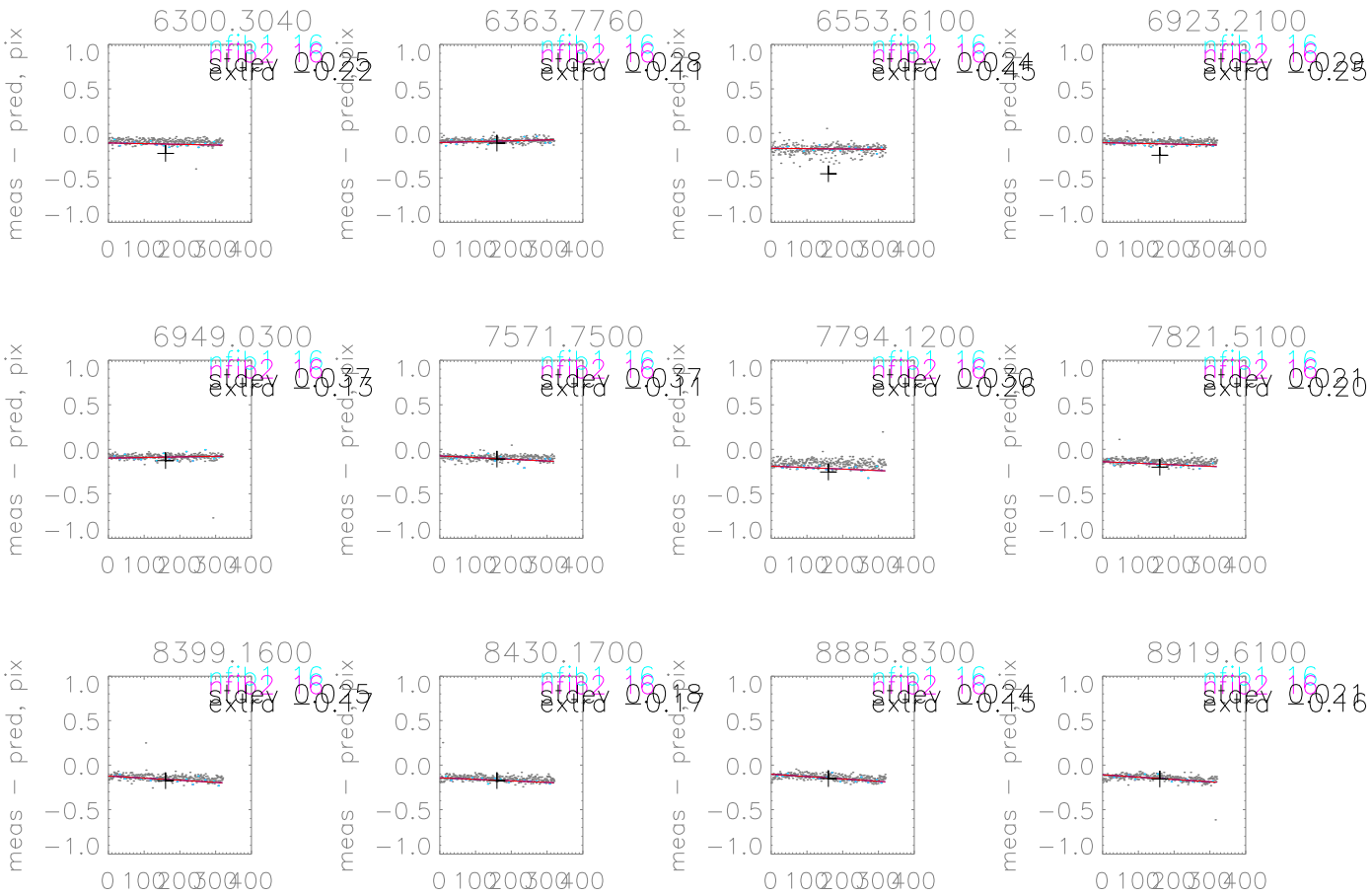

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

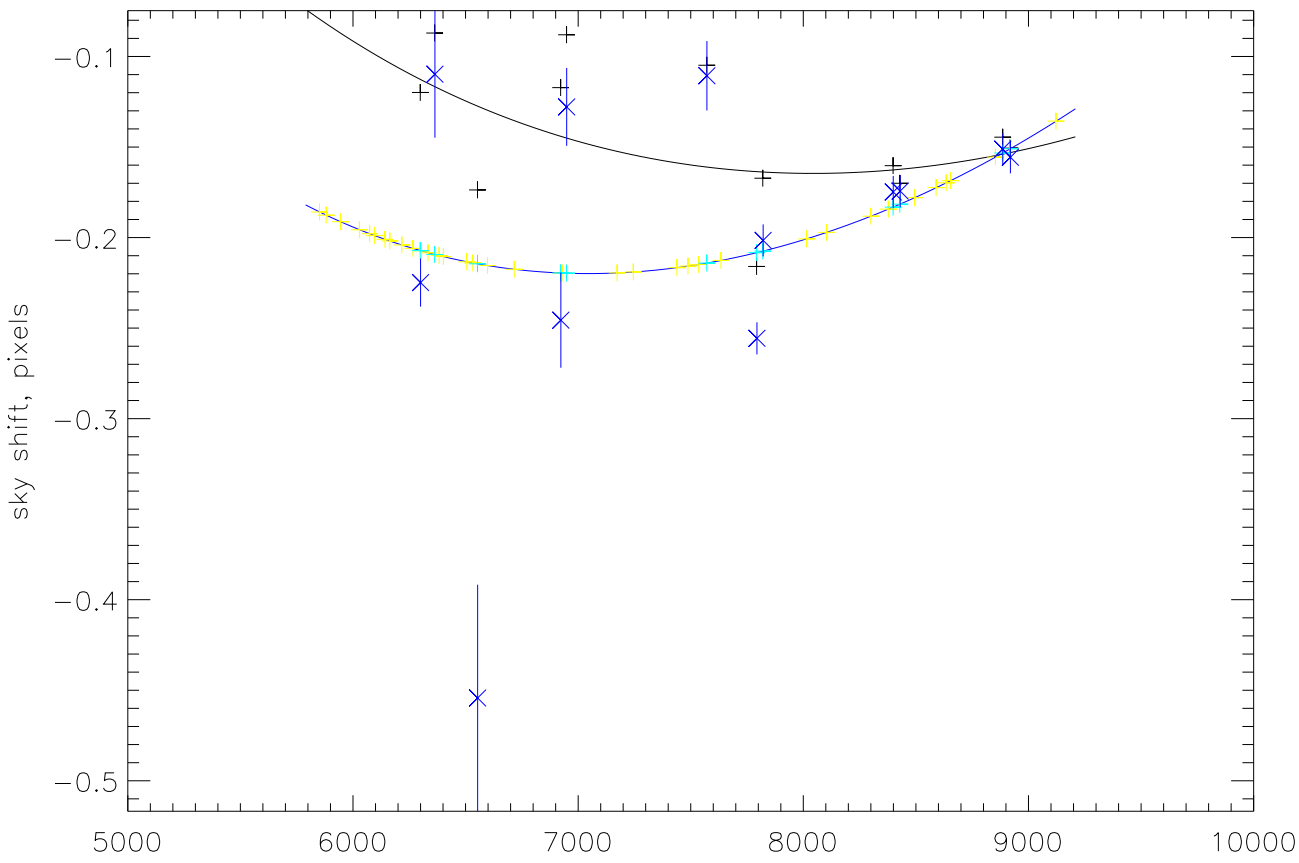

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

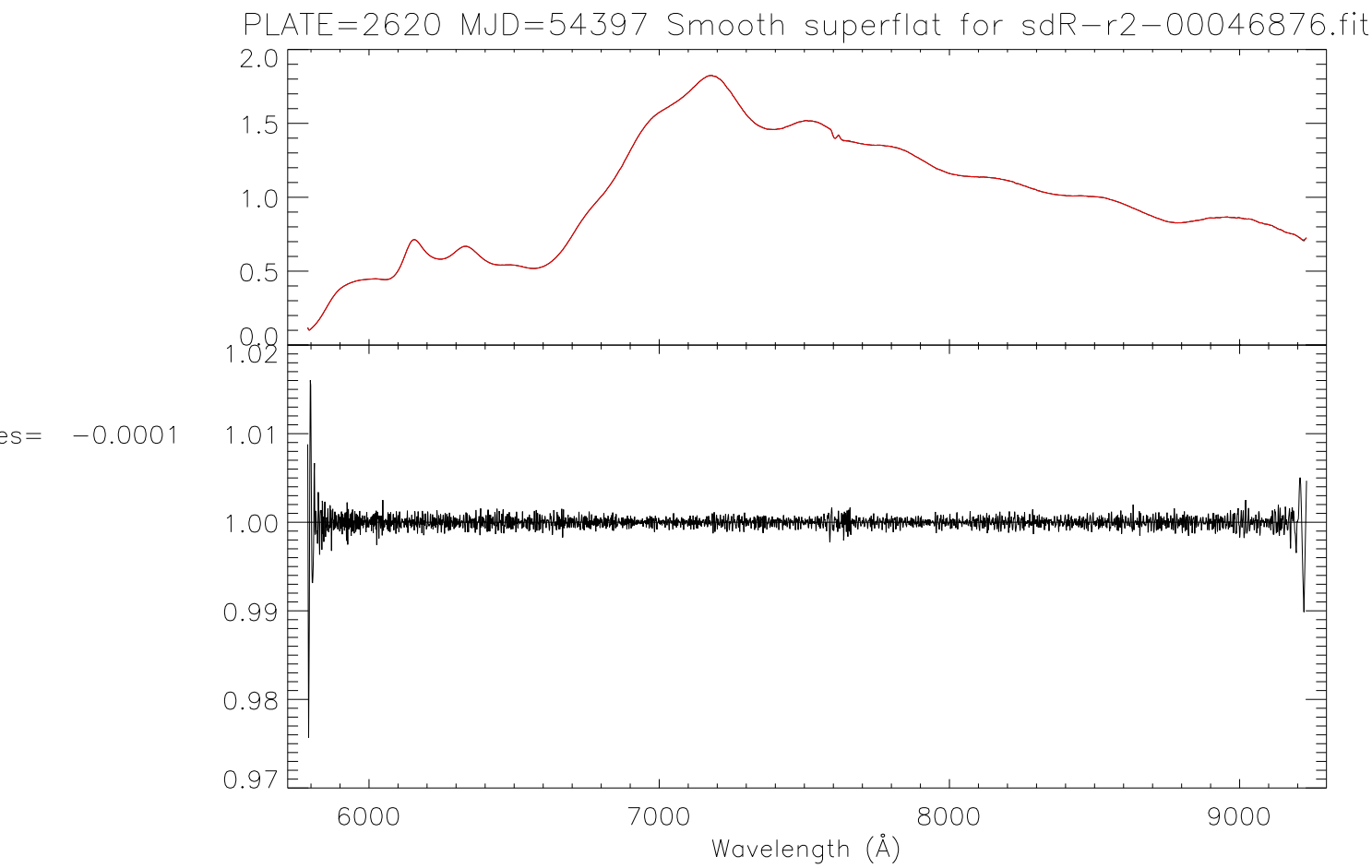

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

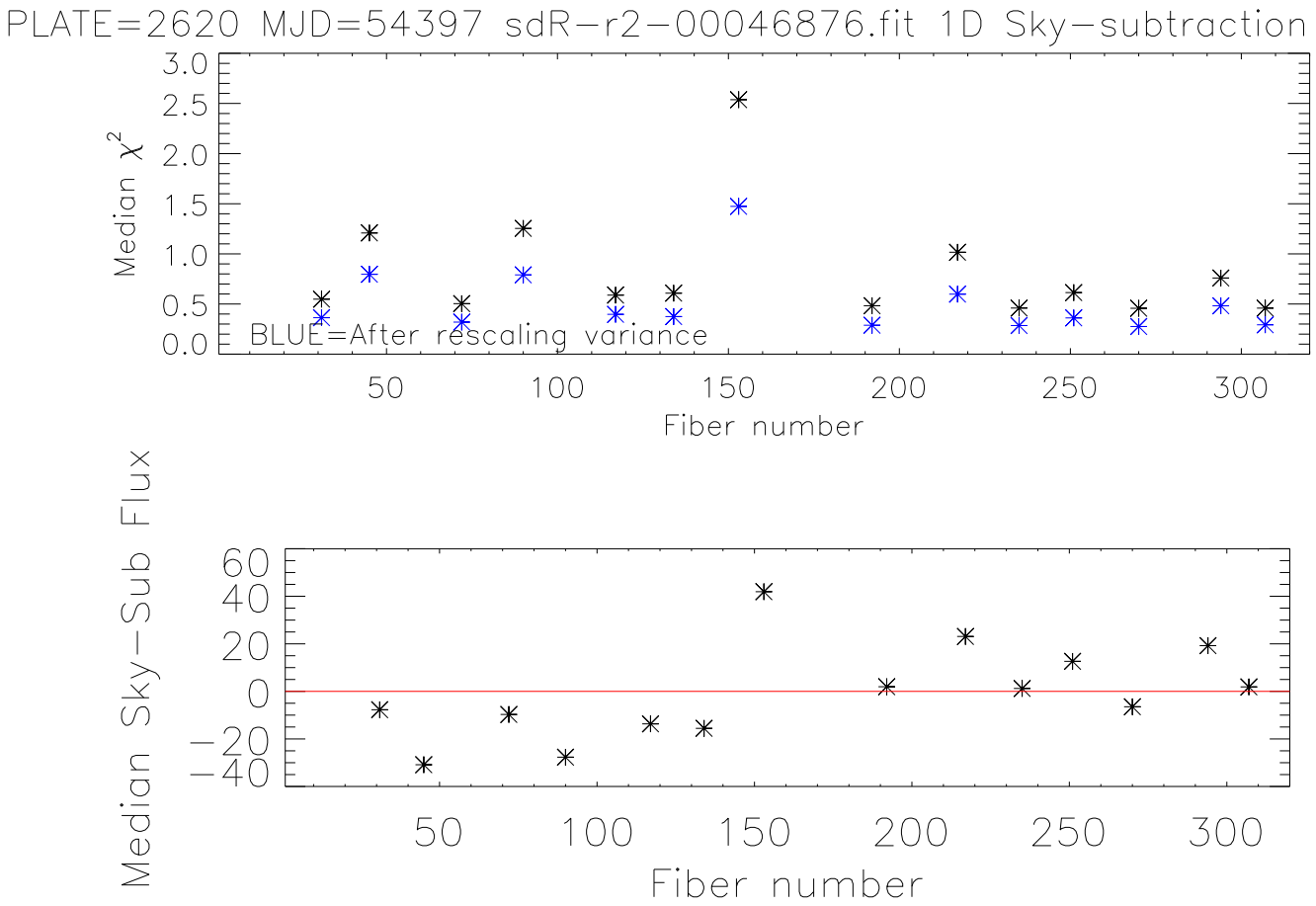

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

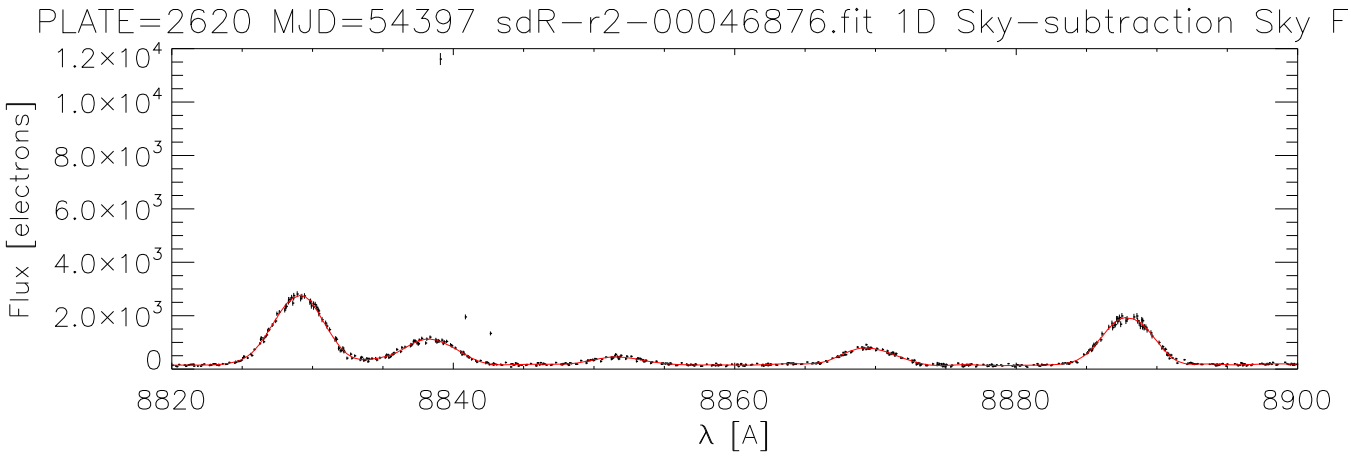

6300.3040
stdev 0.025
extra 0.22
6363.7760
stdev 0.028
extra 0.41
6553.6100
stdev 0.024
extra 0.45
6923.2100
stdev 0.029
extra 0.25
6949.0300
stdev 0.037
extra 0.13
7571.7500
stdev 0.037
extra 0.11
7794.1200
stdev 0.030
extra 0.26
7821.5100
stdev 0.021
extra 0.20
8399.1600
stdev 0.025
extra 0.47
8430.1700
stdev 0.018
extra 0.17
8885.8300
stdev 0.024
extra 0.45
8919.6100
stdev 0.021
extra 0.46
meas − pred, pix
mfhd2 16

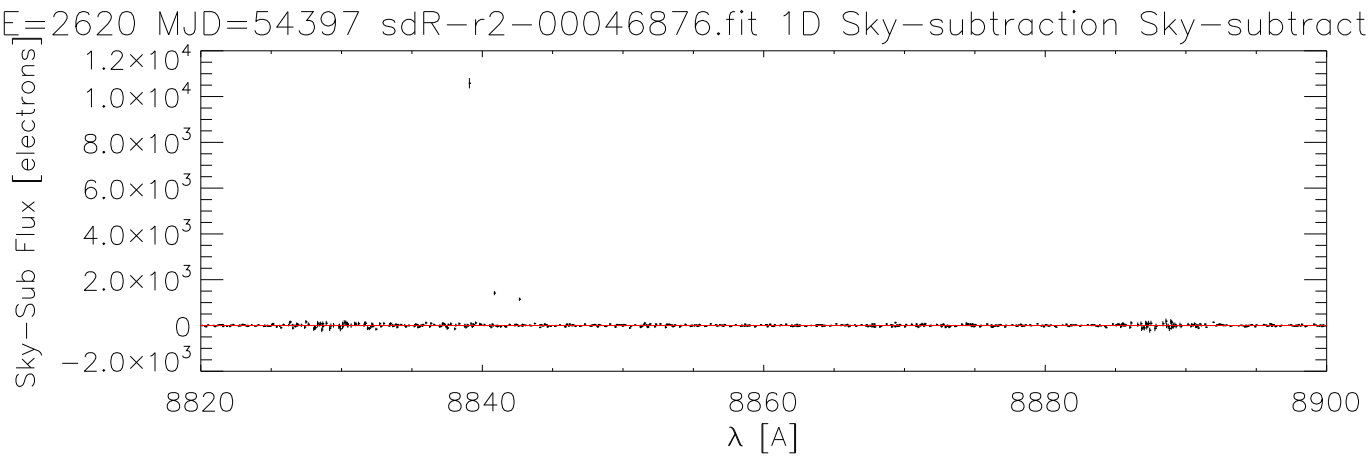

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
−0.5
5000
6000
7000
8000
9000
10000

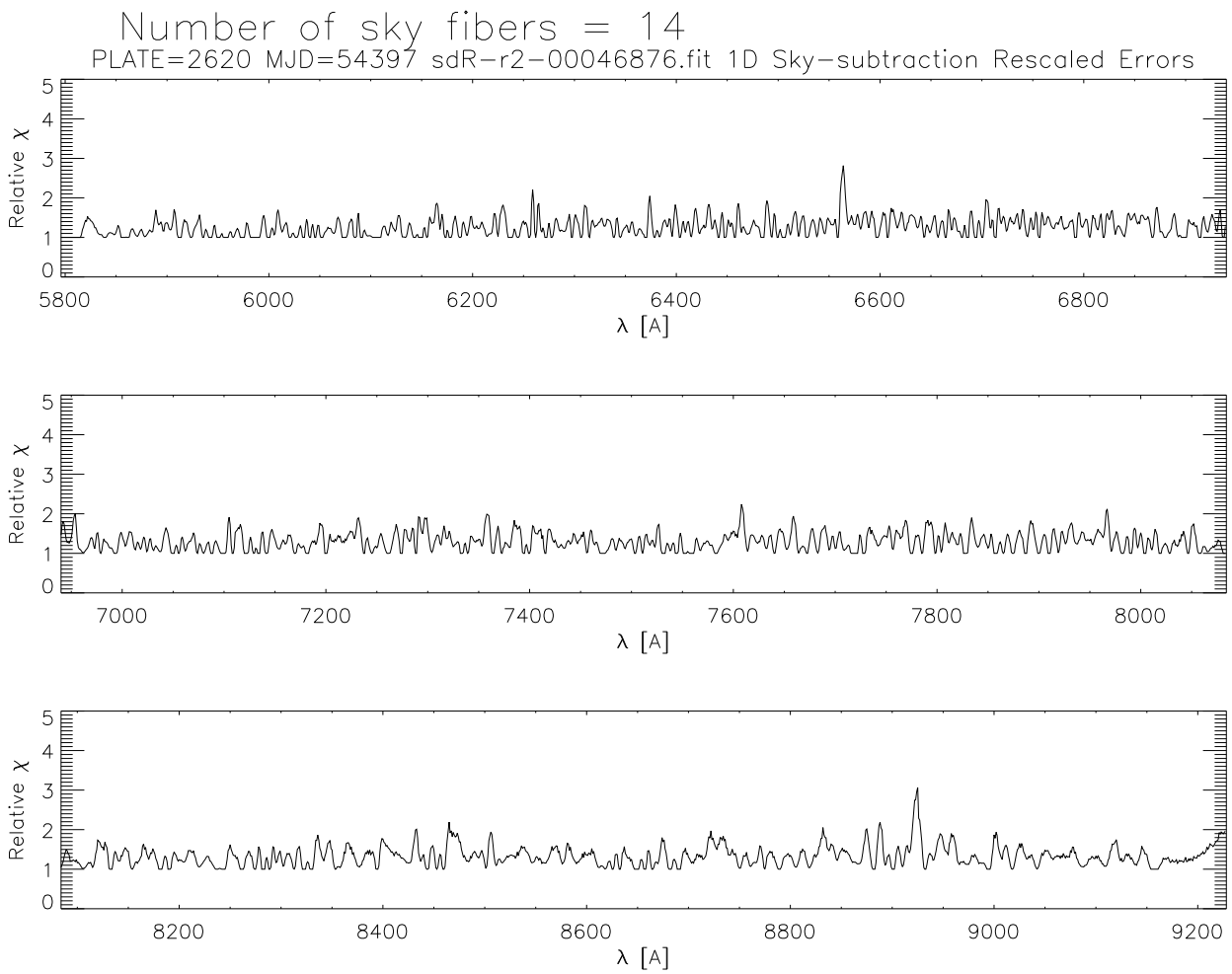

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046876.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

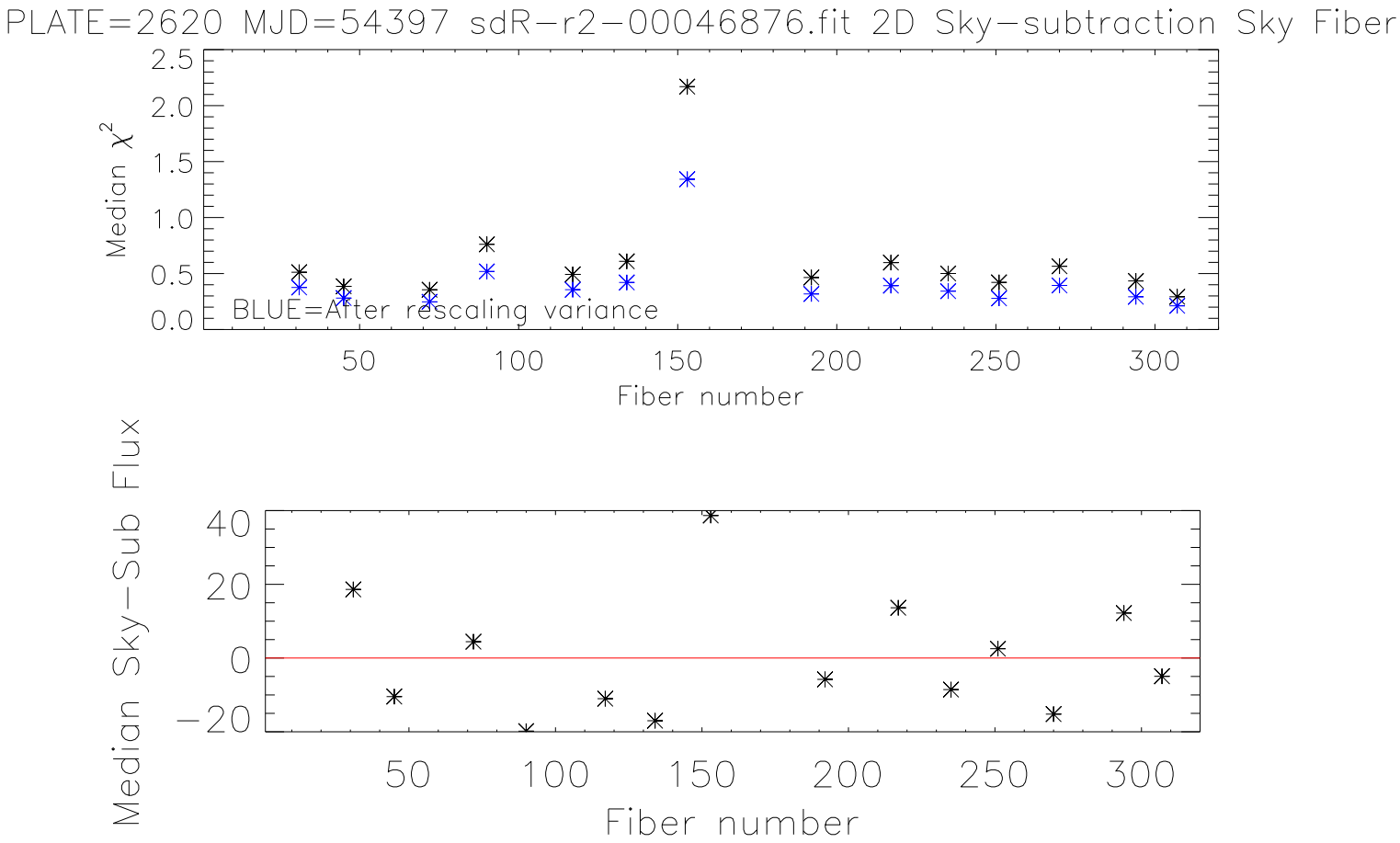
es= −0.0001

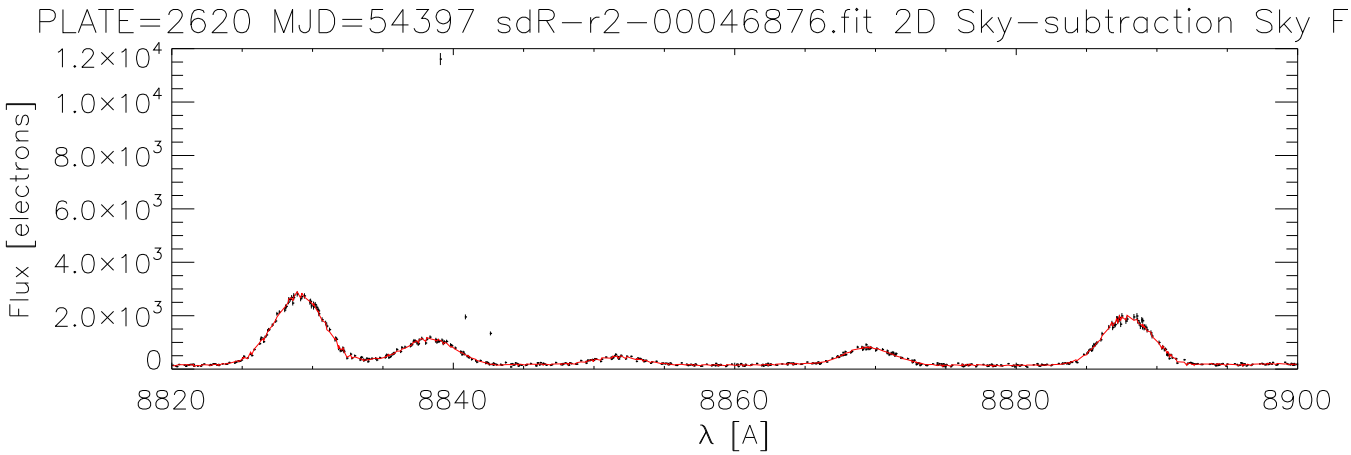

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

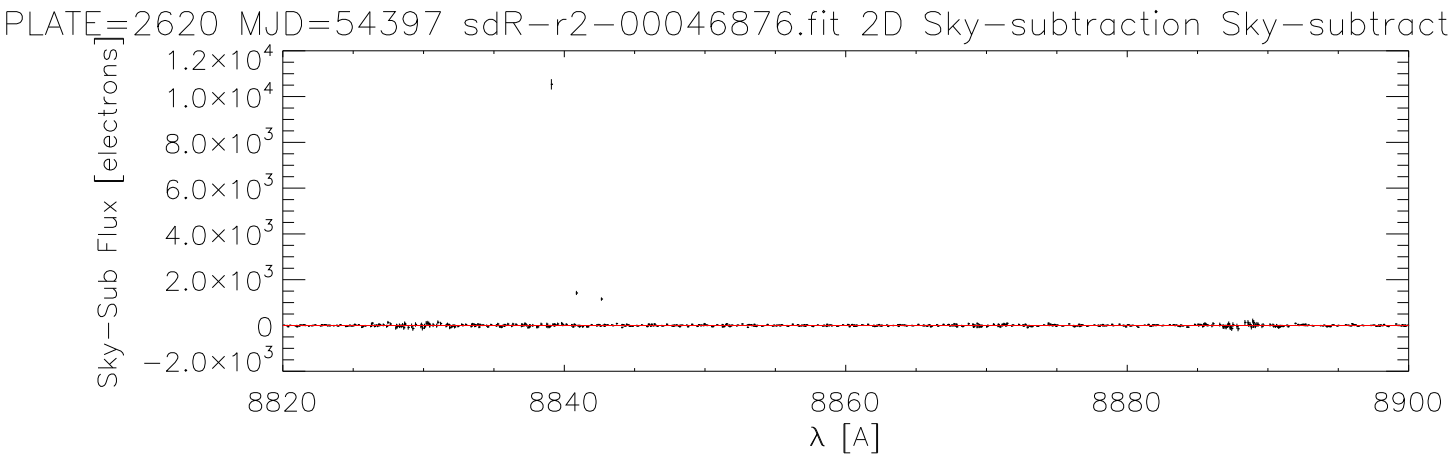

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

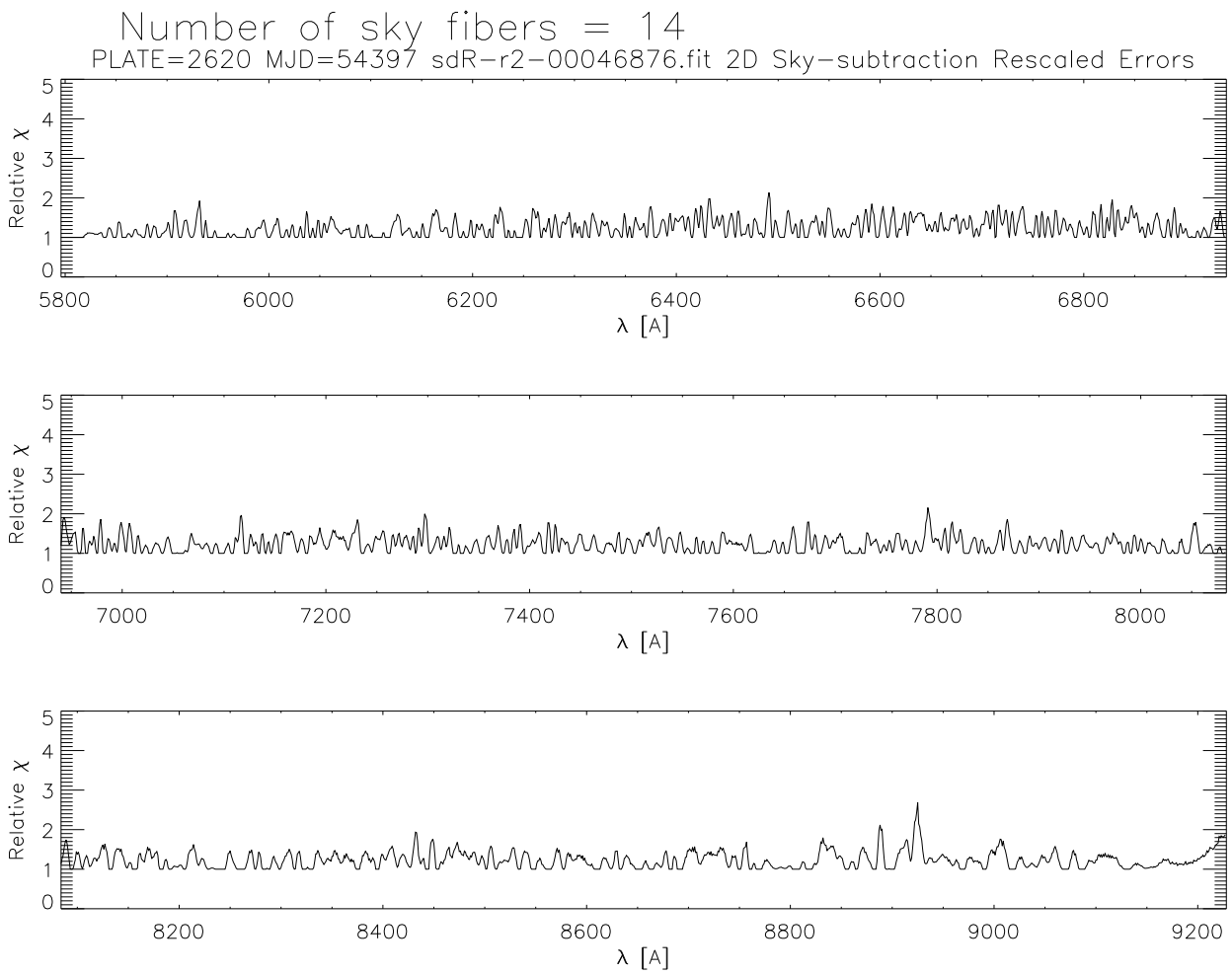

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

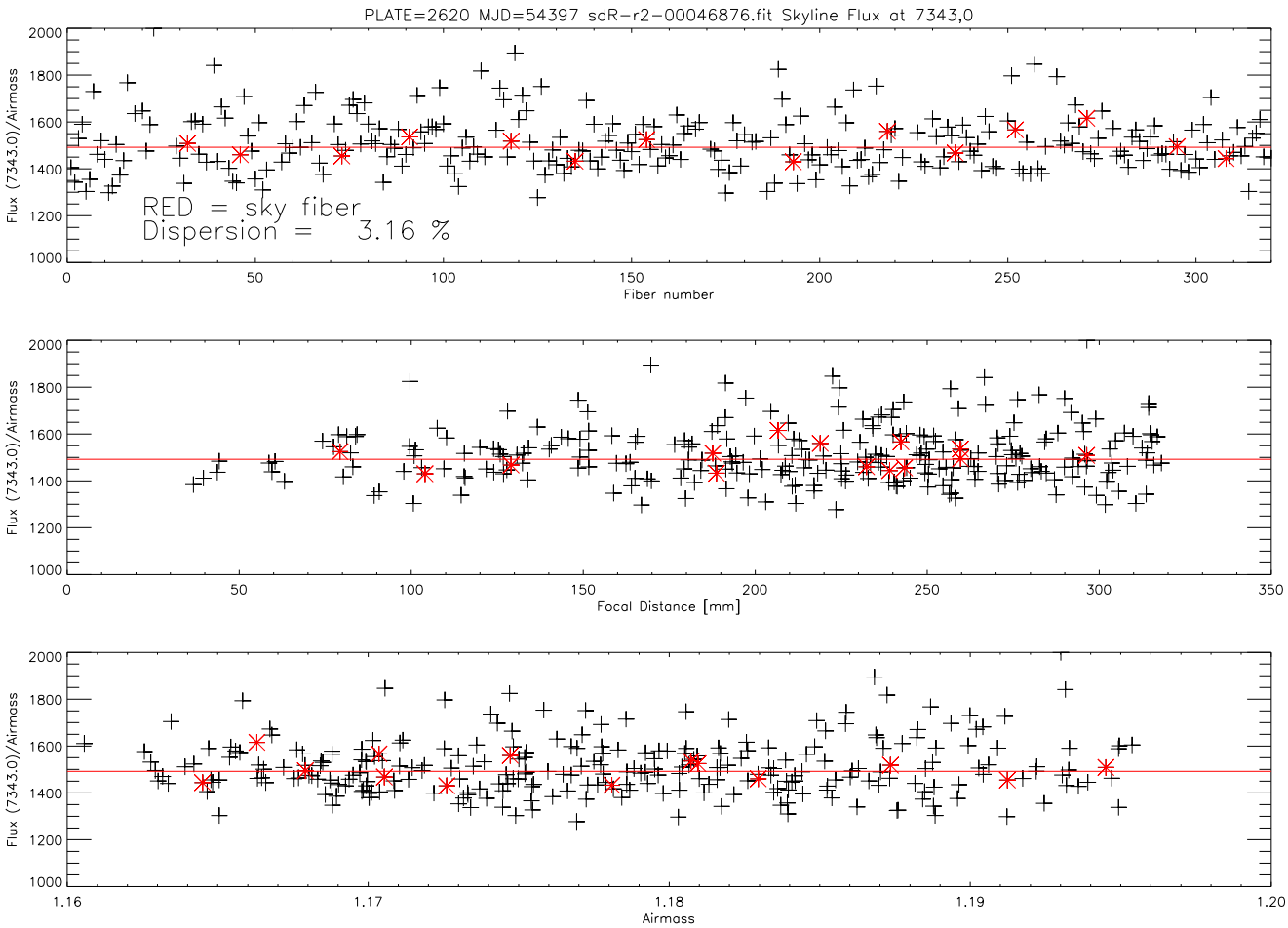

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046876.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

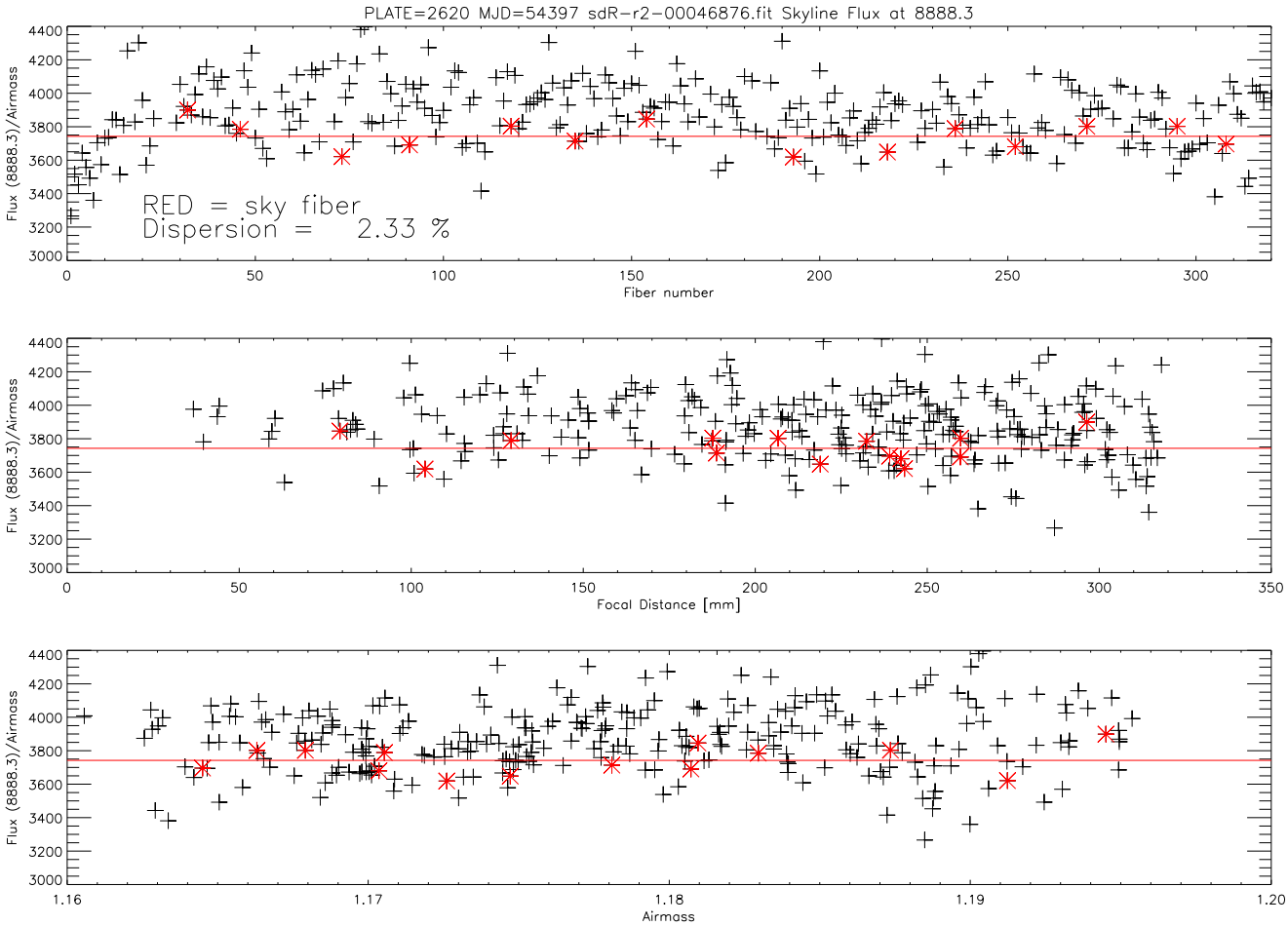

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

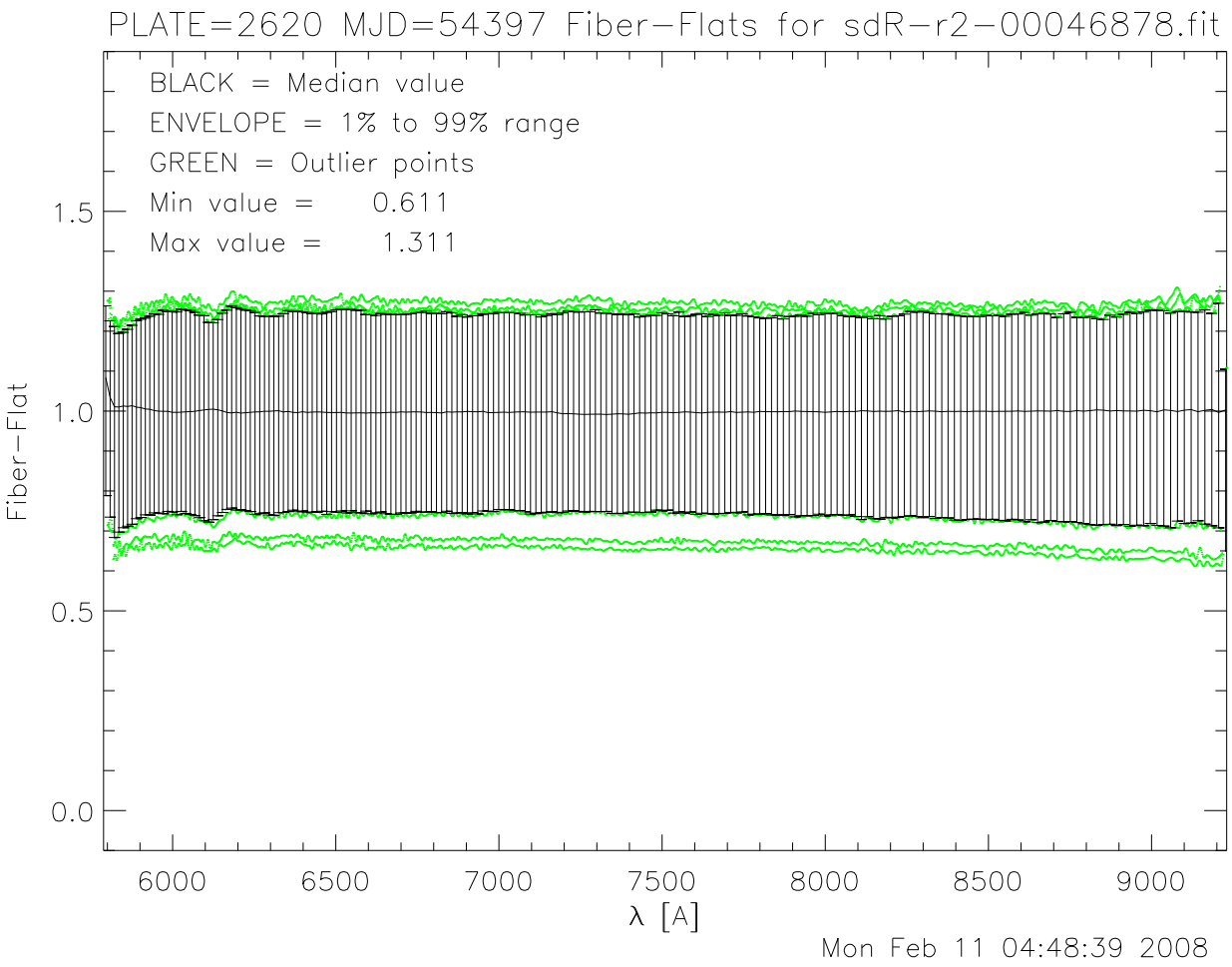

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

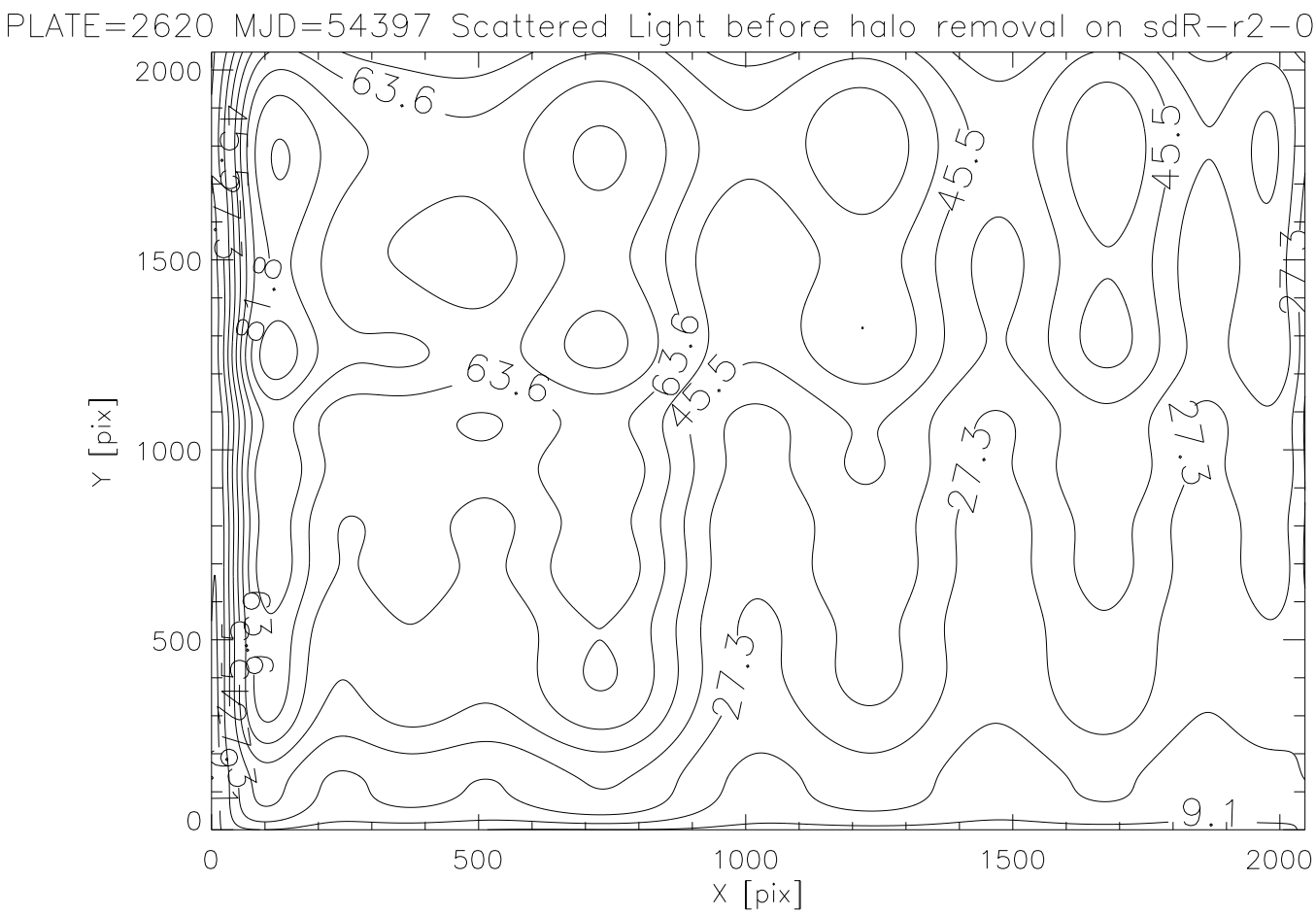

PLATE=2620 MJD=54397 sdR-r2-00046876.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

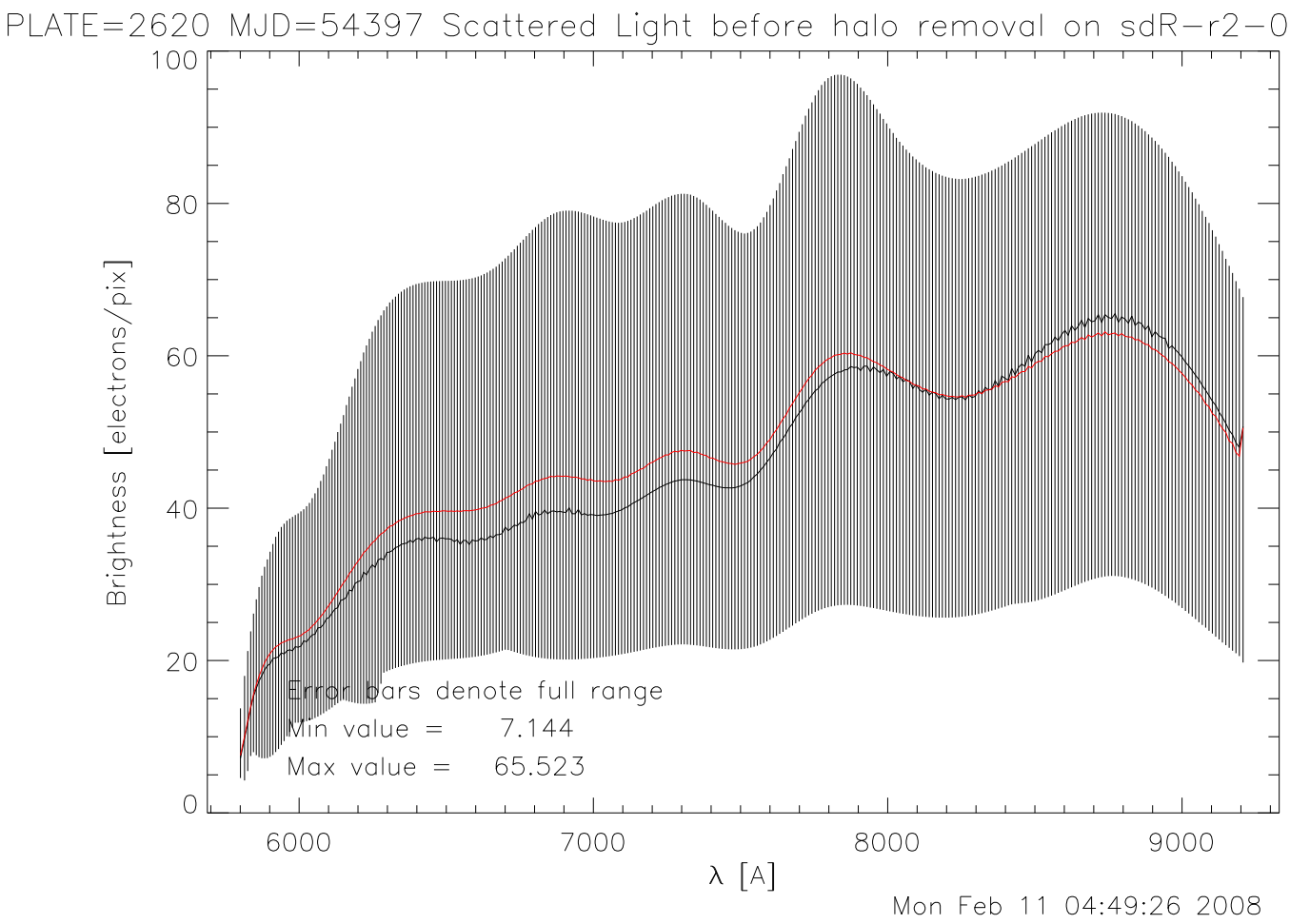

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046876.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

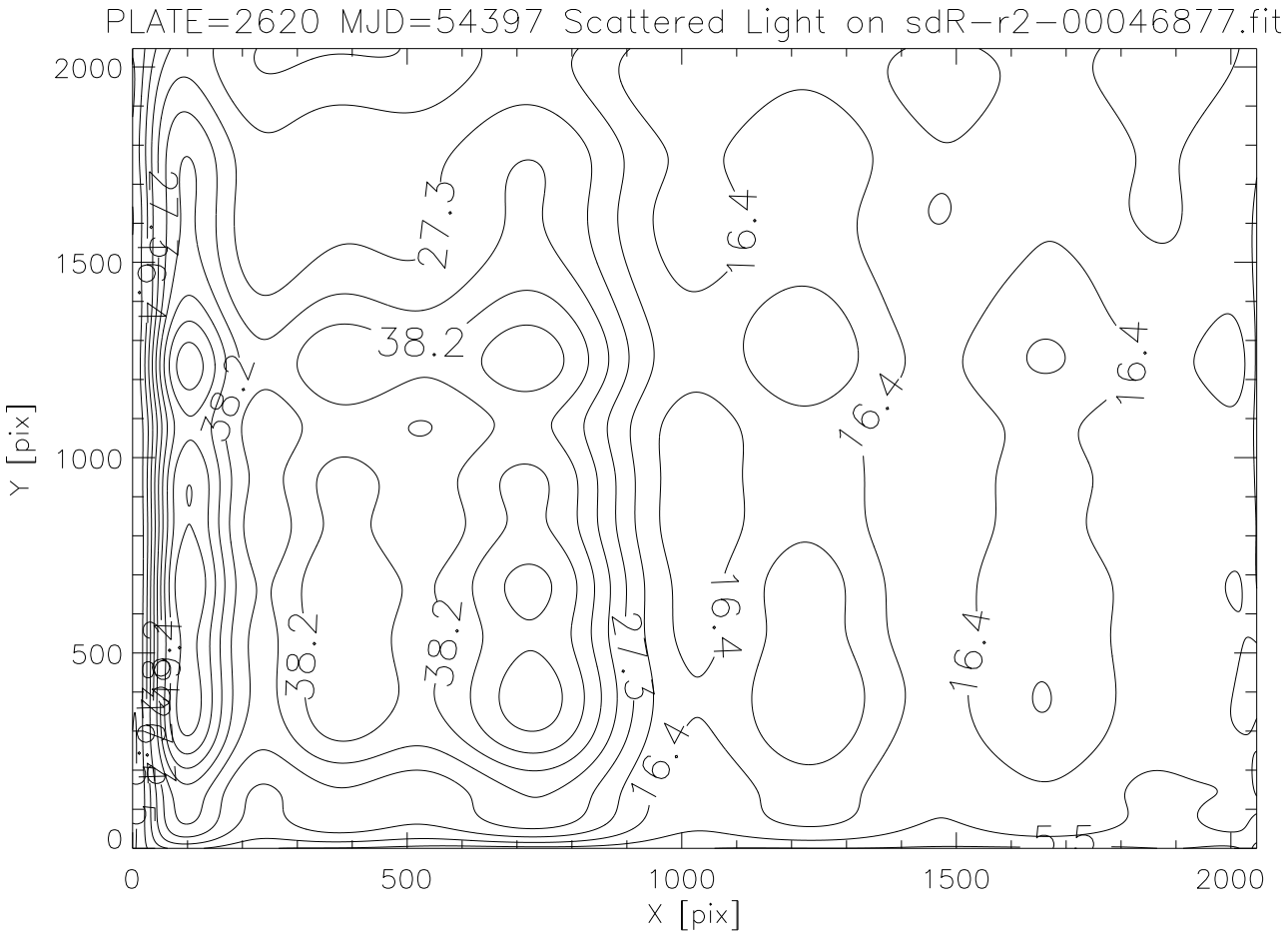

PLATE=2620 MJD=54397 sdR-r2-00046876.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.16 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

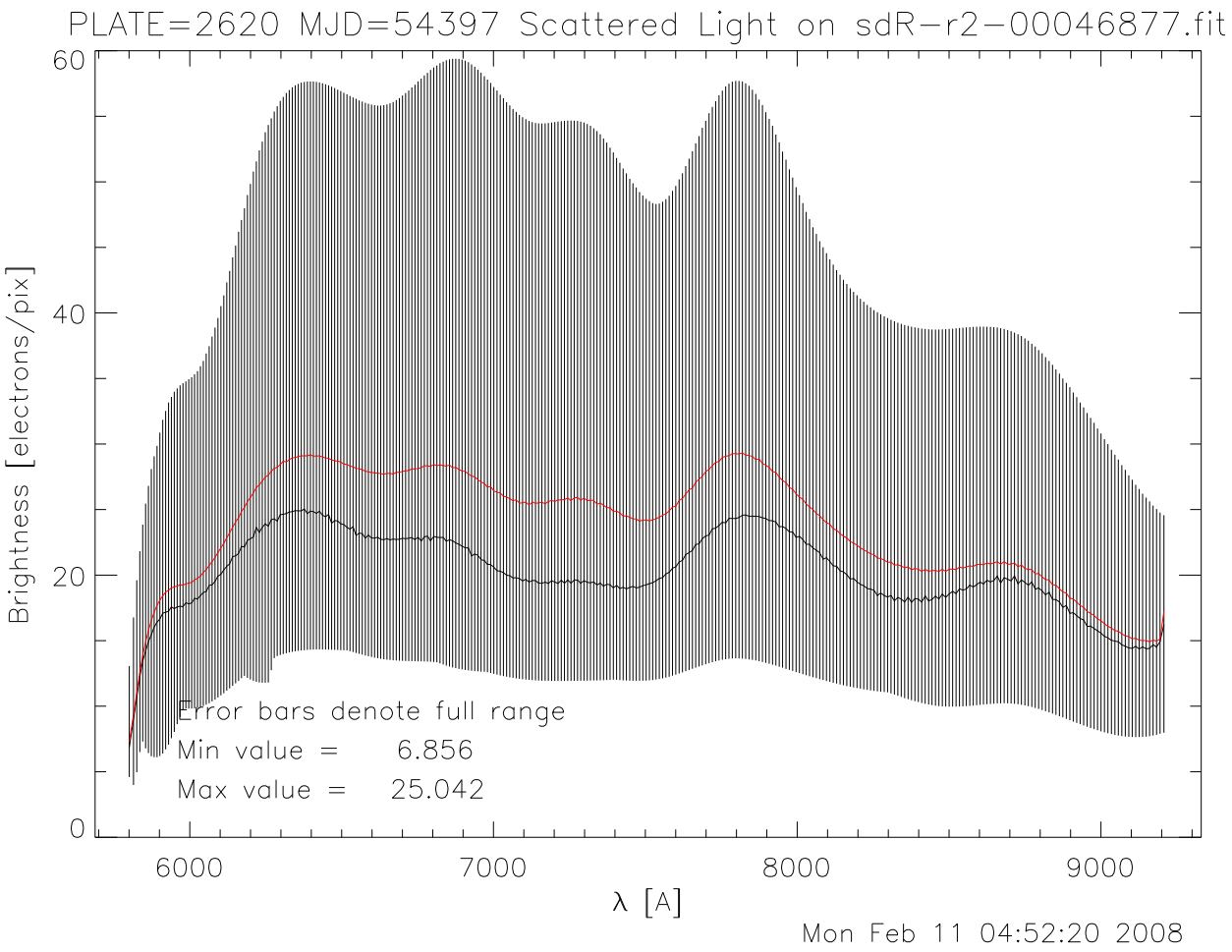

PLATE=2620 MJD=54397 sdR-r2-00046876.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.33 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

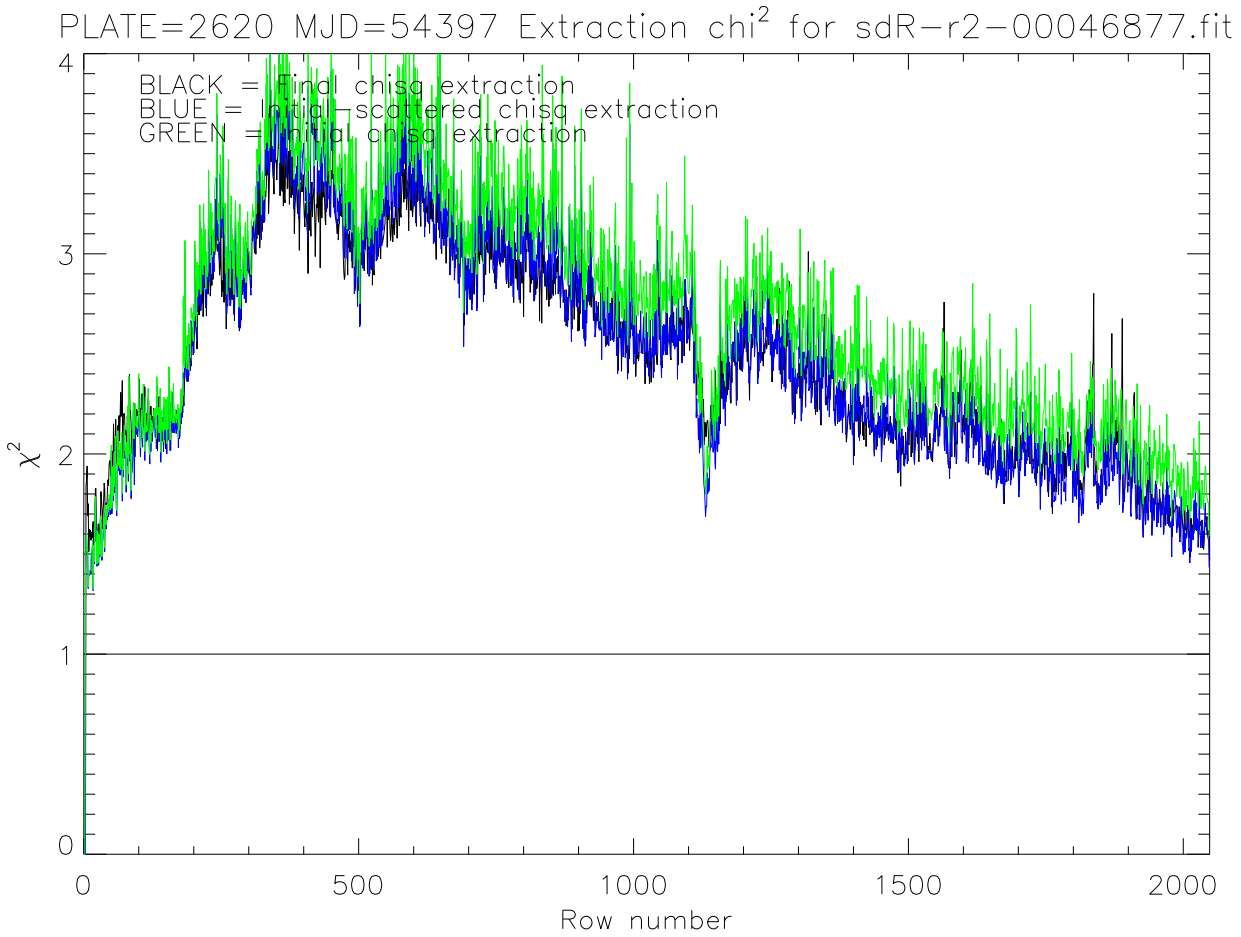

PLATE=2620 MJD=54397 Fiber−Flats for sdR−r2−00046878.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.611
Max value = 1.311
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 04:48:39 2008

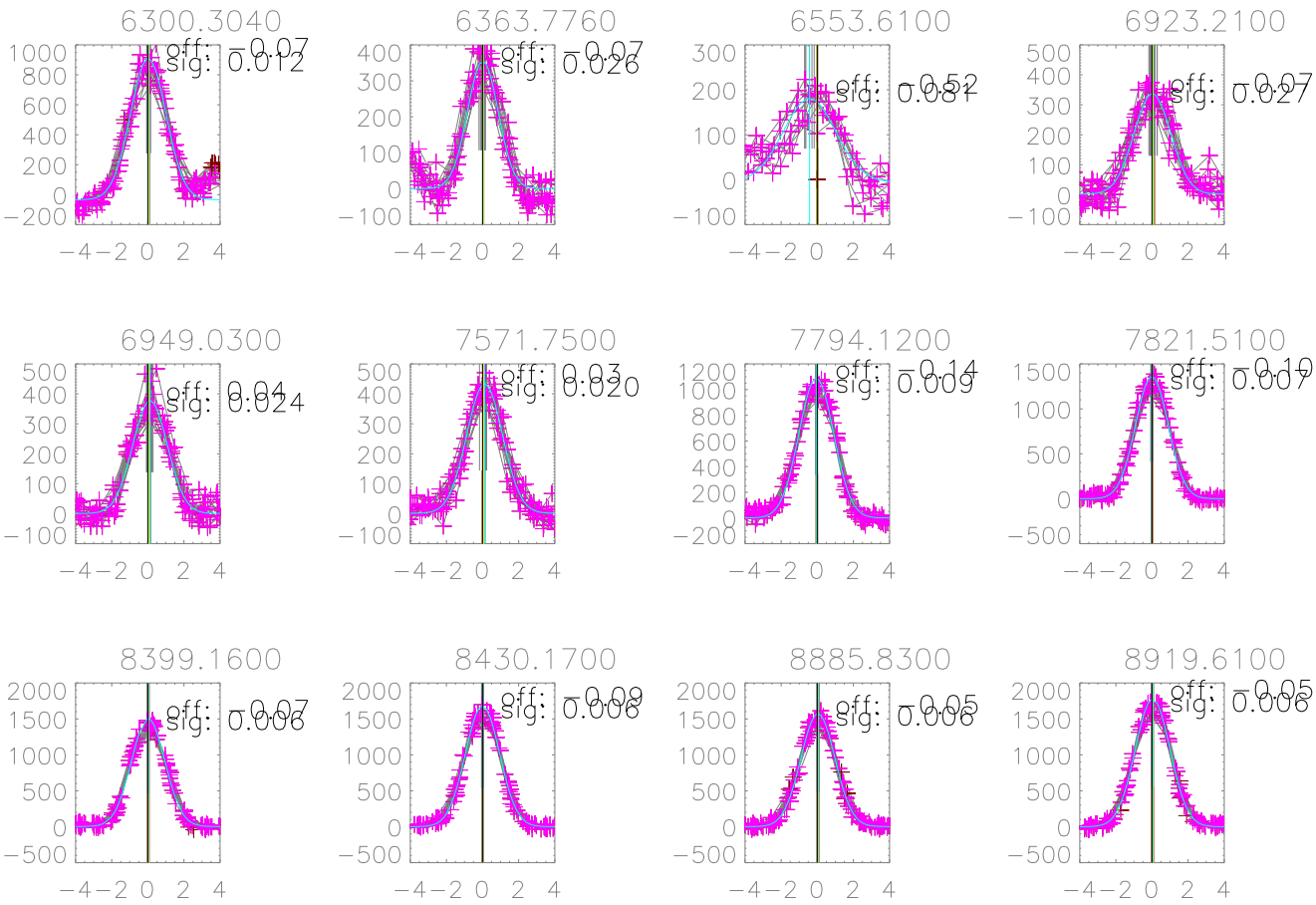

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046877.fi
63.6
45.5
27.3
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

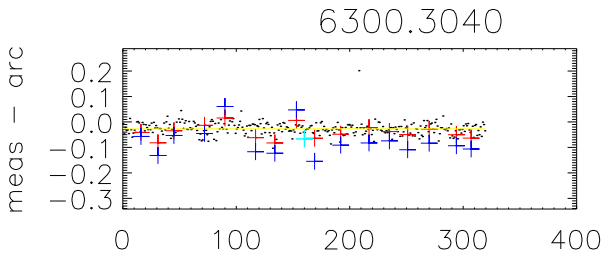

PLATE=2620 MJD=54397 Scattered Light before halo removal on sdR-r2-00046877.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.144
Max value = 65.523
Mon Feb 11 04:49:26 2008

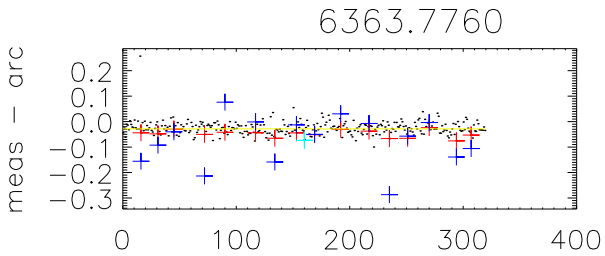

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046877.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
38.2
27.3
16.4
5.5

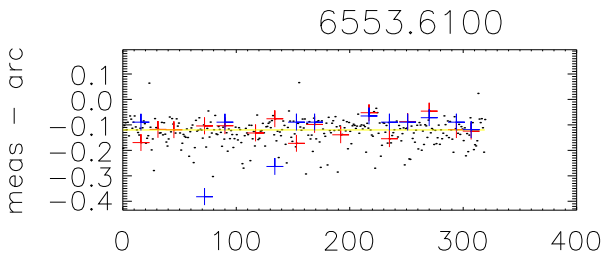

PLATE=2620 MJD=54397 Scattered Light on sdR-r2-00046877.fit
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.856
Max value = 25.042
Mon Feb 11 04:52:20 2008

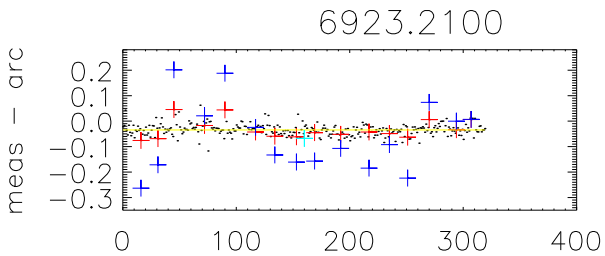

PLATE=2620 MJD=54397 Extraction chi^2 for sdR-r2-00046877.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

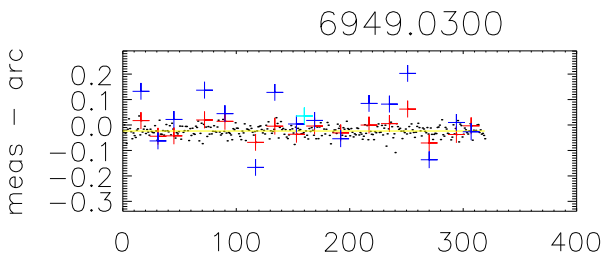

6300.3040
off: −0.07
sig: 0.012
6363.7760
off: −0.07
sig: 0.026
6553.6100
off: −0.52
sig: 0.081
6923.2100
off: −0.07
sig: 0.027
6949.0300
off: 0.04
sig: 0.024
7571.7500
off: 0.03
sig: 0.020
7794.1200
off: −0.14
sig: 0.009
7821.5100
off: −0.10
sig: 0.007
8399.1600
off: −0.07
sig: 0.006
8430.1700
off: −0.09
sig: 0.006
8885.8300
off: −0.05
sig: 0.006
8919.6100
off: −0.05
sig: 0.006

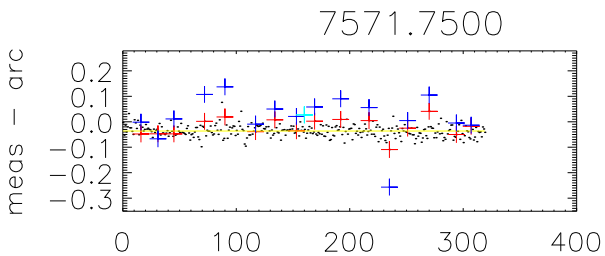

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

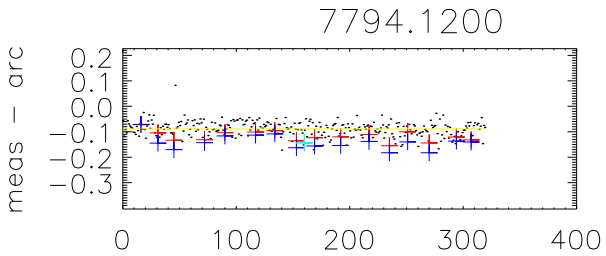

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

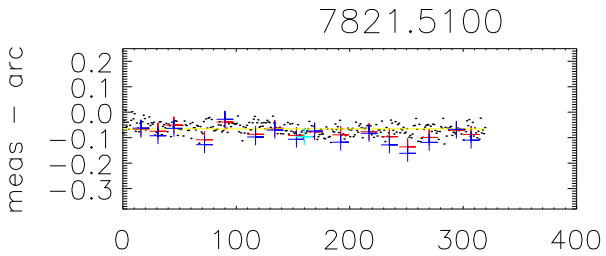

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

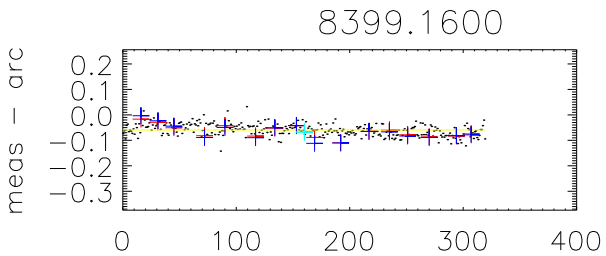

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

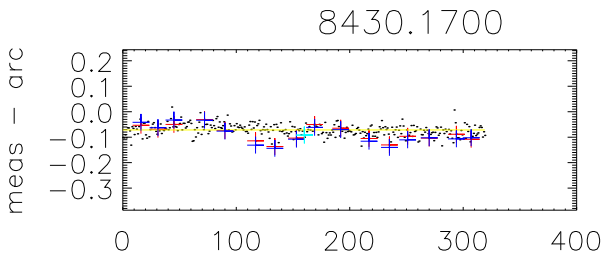

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

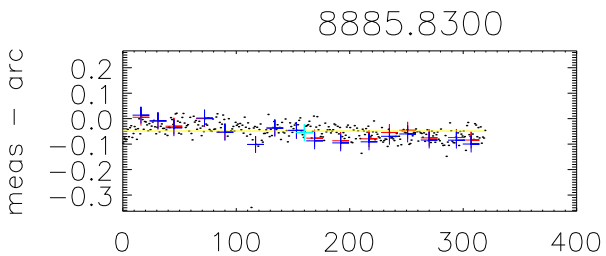

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

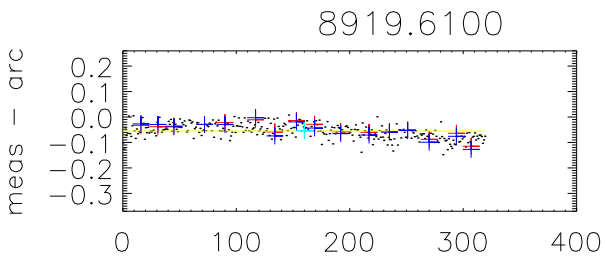

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

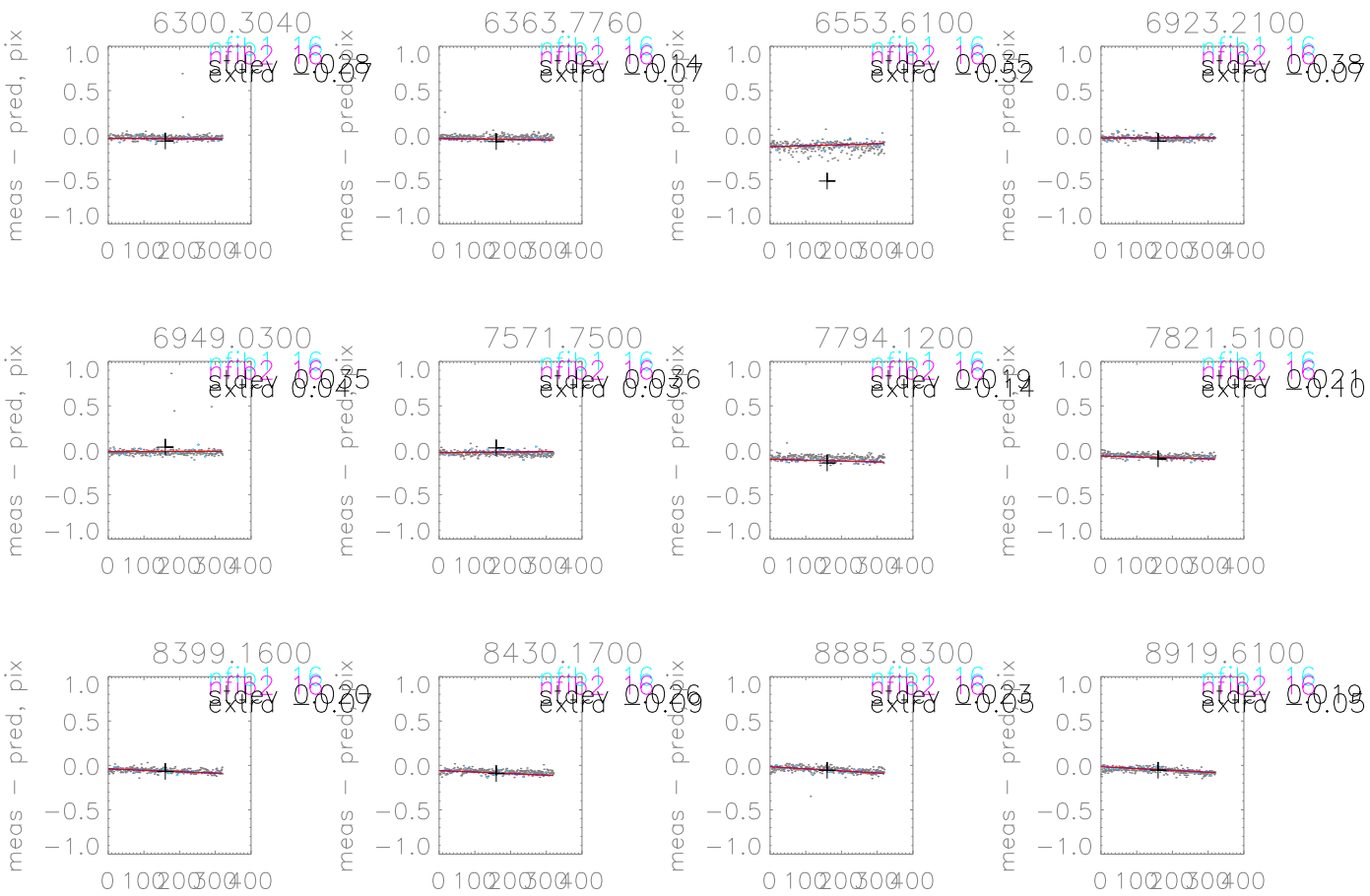

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

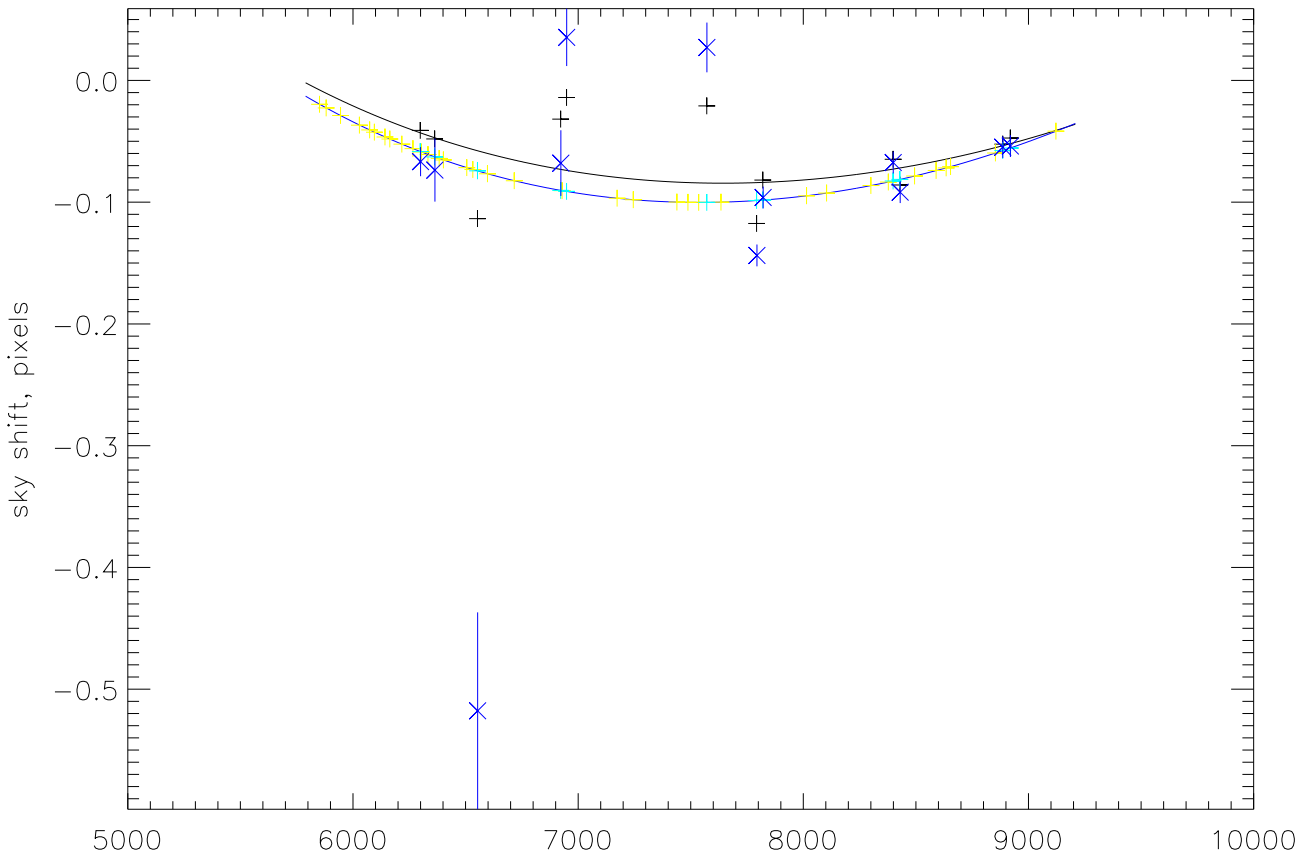

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

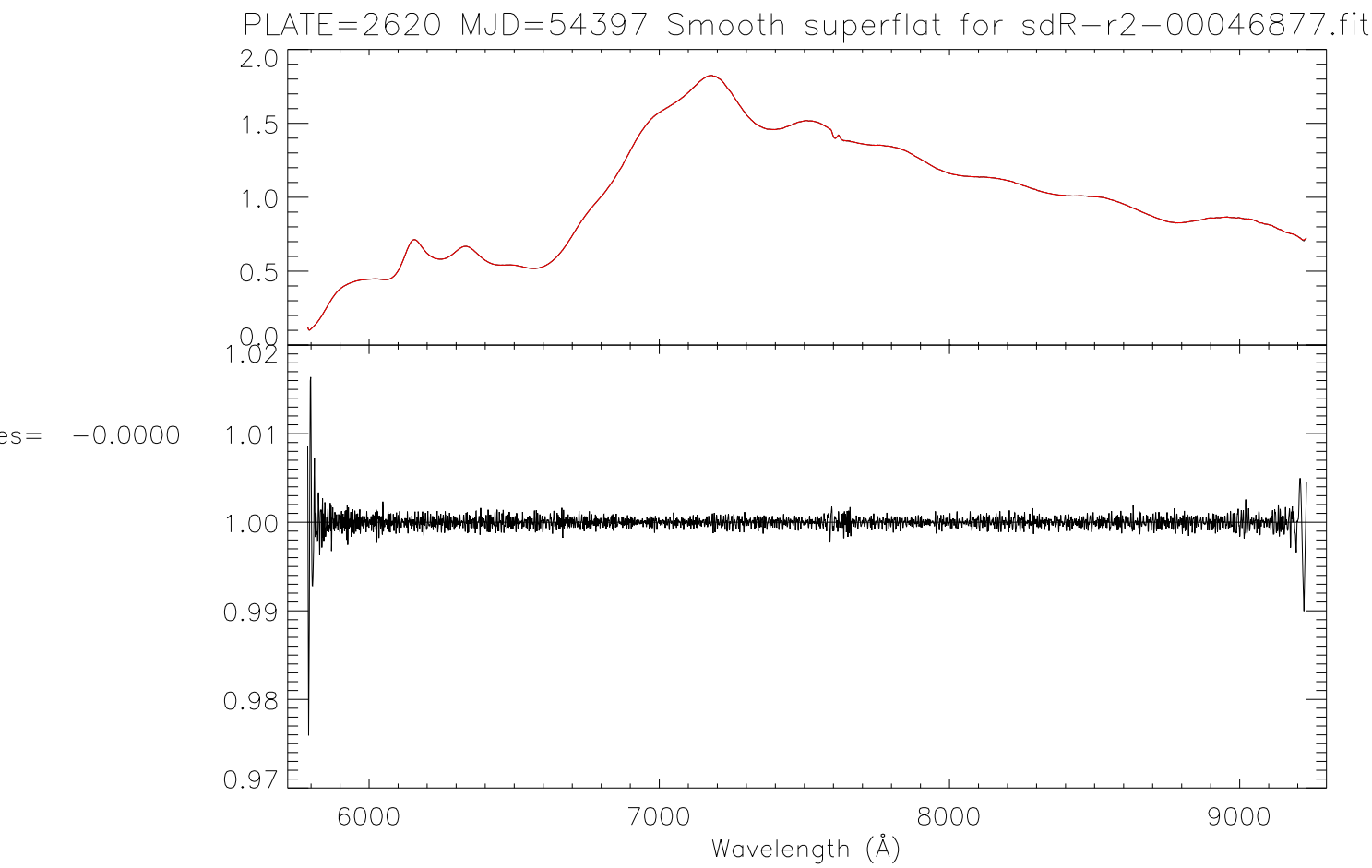

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

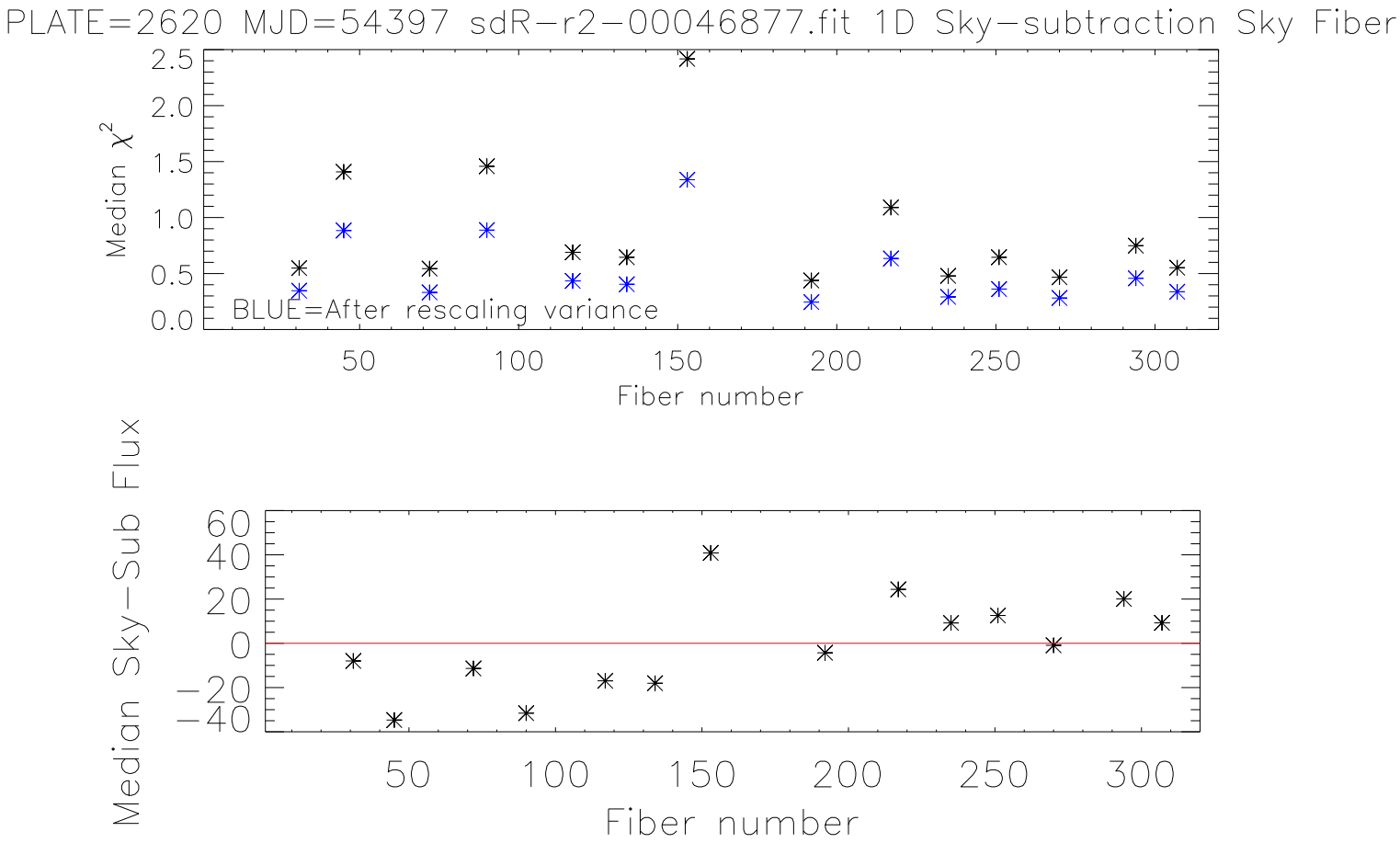

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

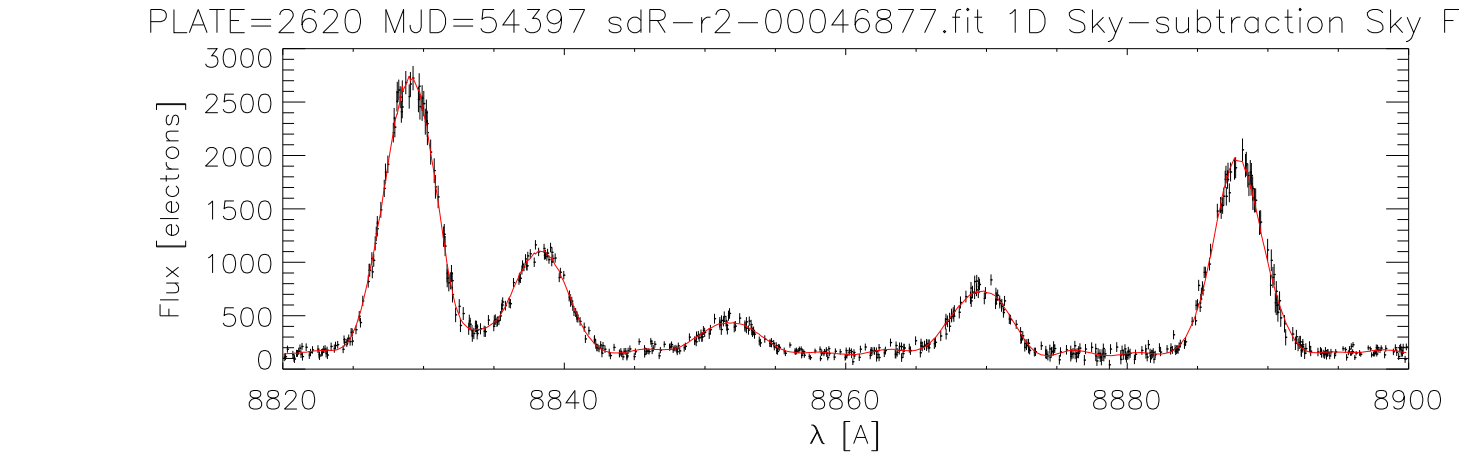

6300.3040
stdev 0.028
extra 0.07
6363.7760
stdev 0.014
extra 0.07
6553.6100
stdev 0.035
extra 0.52
6923.2100
stdev 0.038
extra 0.07
6949.0300
stdev 0.035
extra 0.04
7571.7500
stdev 0.036
extra 0.03
7794.1200
stdev 0.019
extra 0.14
7821.5100
stdev 0.021
extra 0.40
8399.1600
stdev 0.020
extra 0.07
8430.1700
stdev 0.026
extra 0.09
8885.8300
stdev 0.023
extra 0.05
8919.6100
stdev 0.019
extra 0.05
meas − pred, pix
mfhd2 16

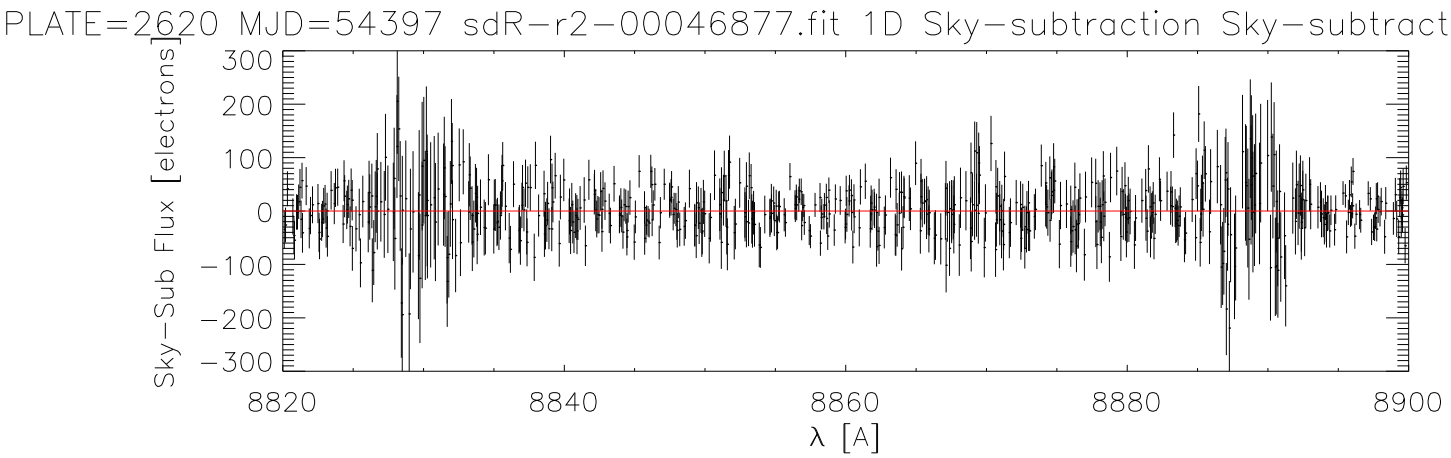

sky shift, pixels
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
5000
6000
7000
8000
9000
10000

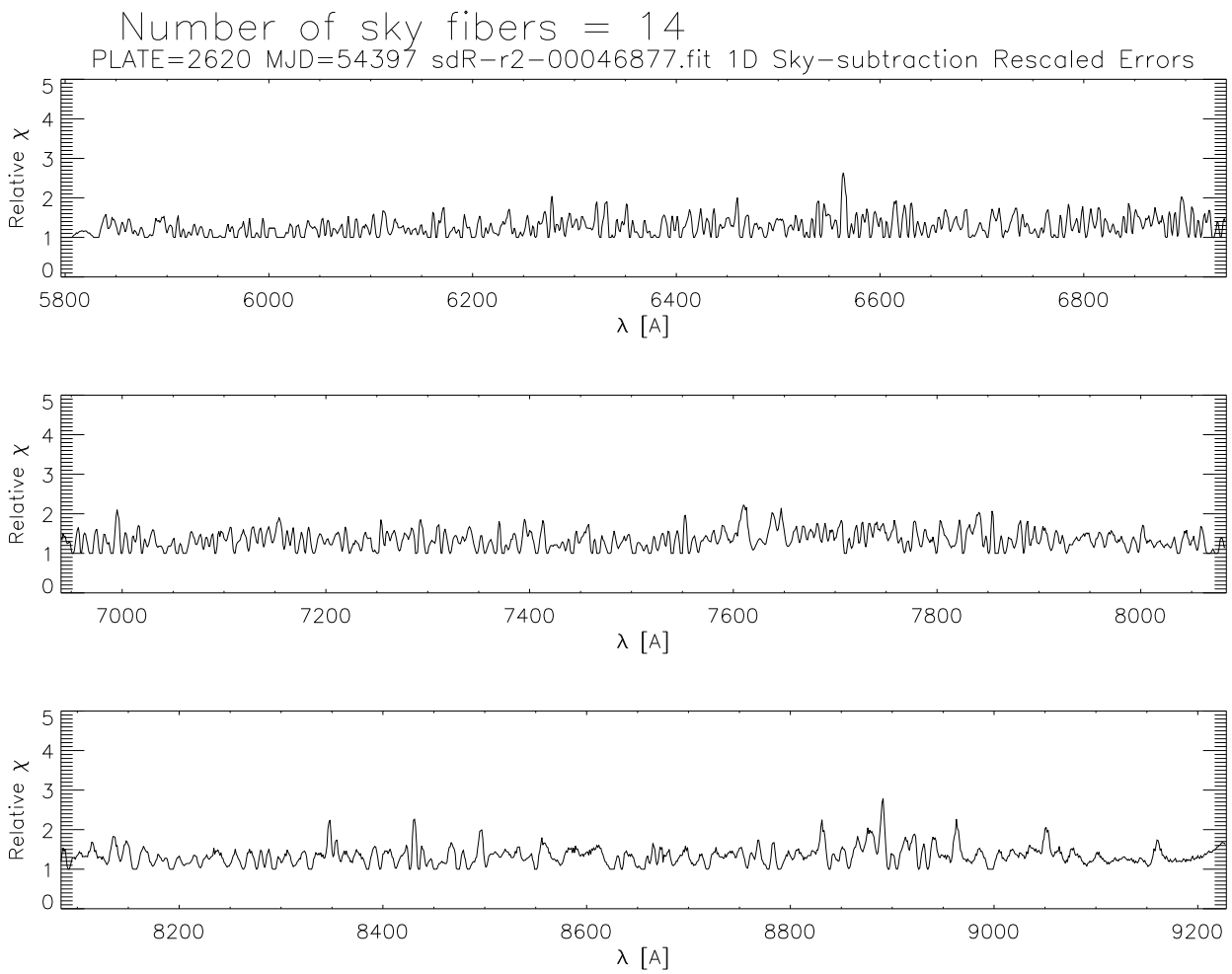

PLATE=2620 MJD=54397 Smooth superflat for sdR-r2-00046877.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

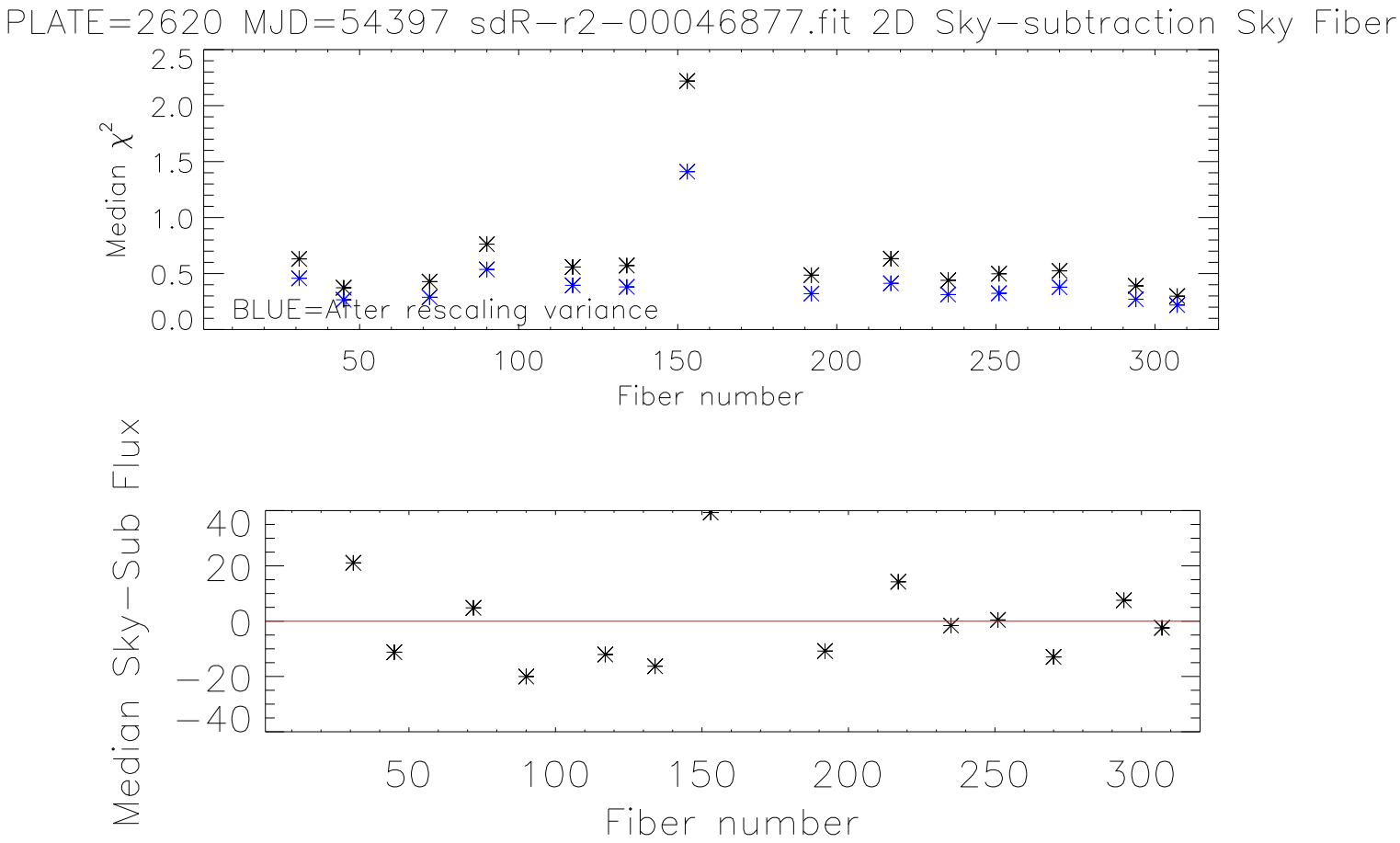
es= −0.0000

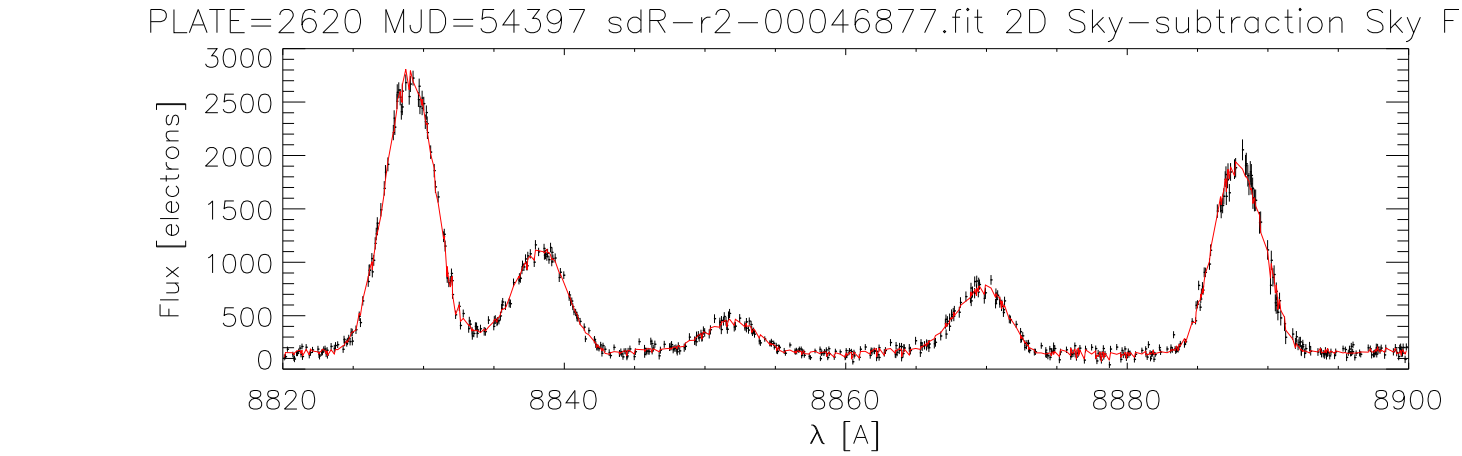

PLATE=2620 MJD=54397 sdR-r2-00046877.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

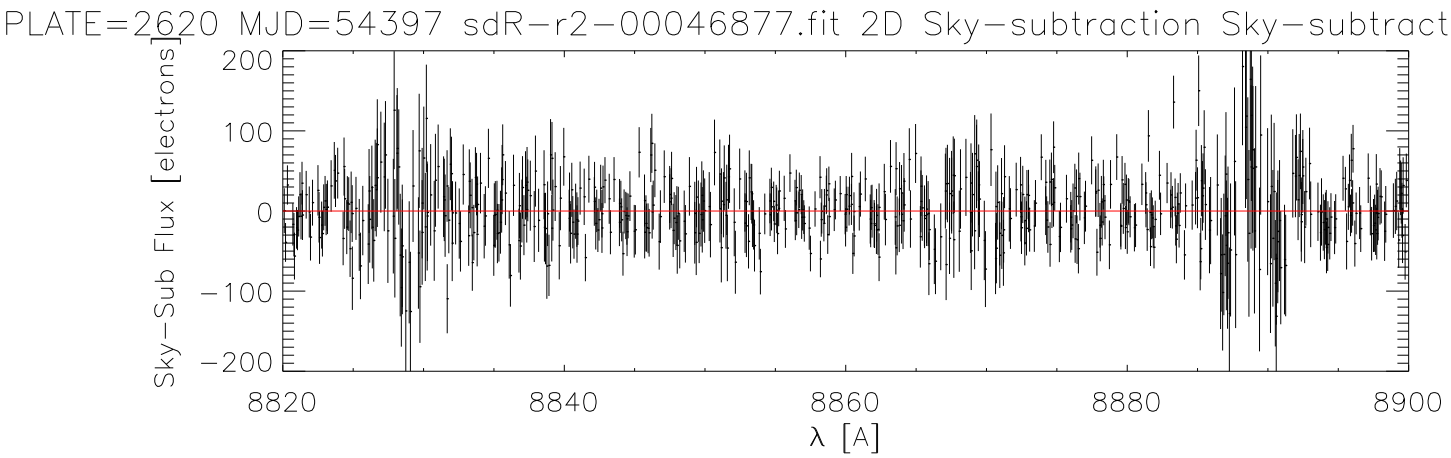

PLATE=2620 MJD=54397 sdR-r2-00046877.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

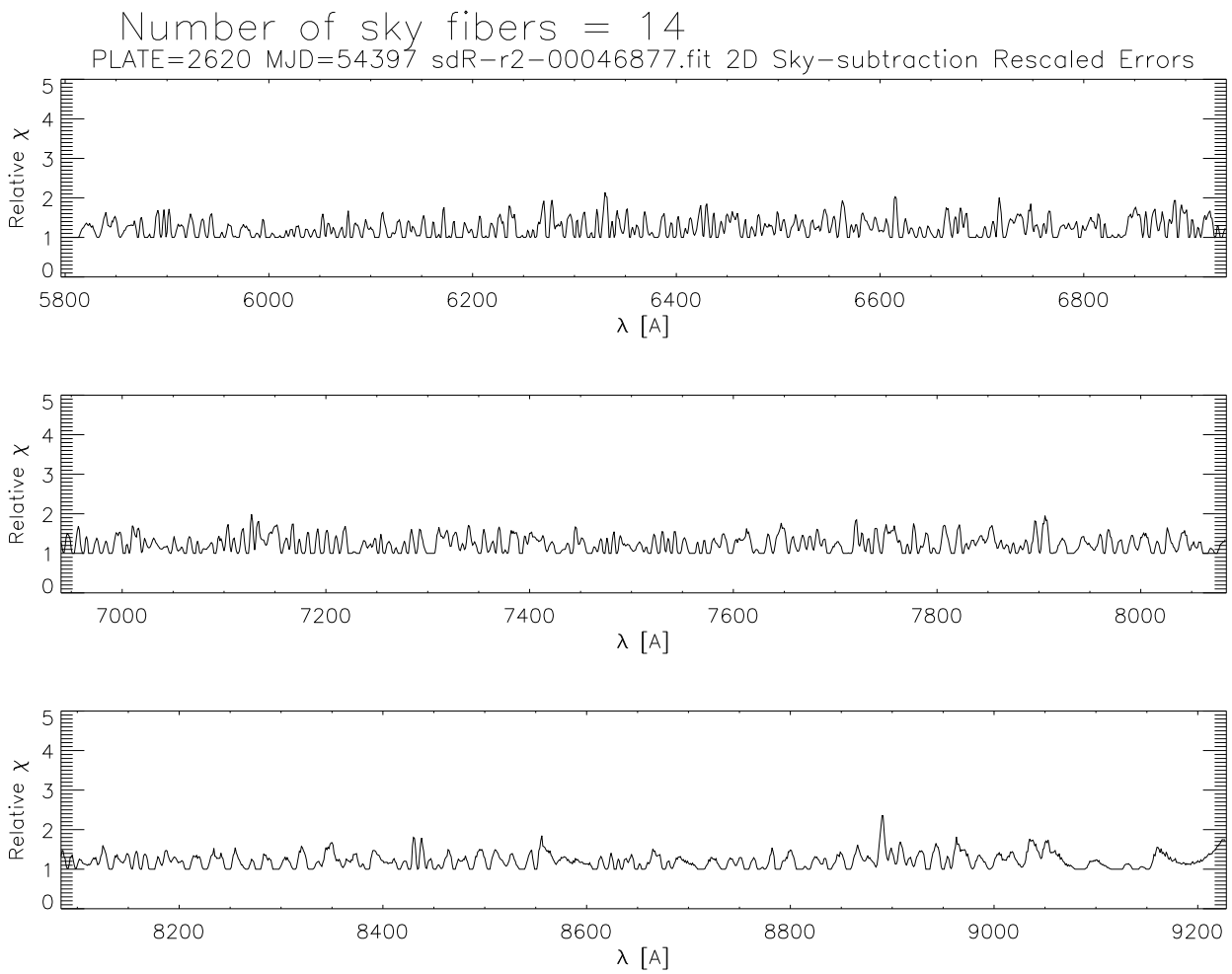

PLATE=2620 MJD=54397 sdR-r2-00046877.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

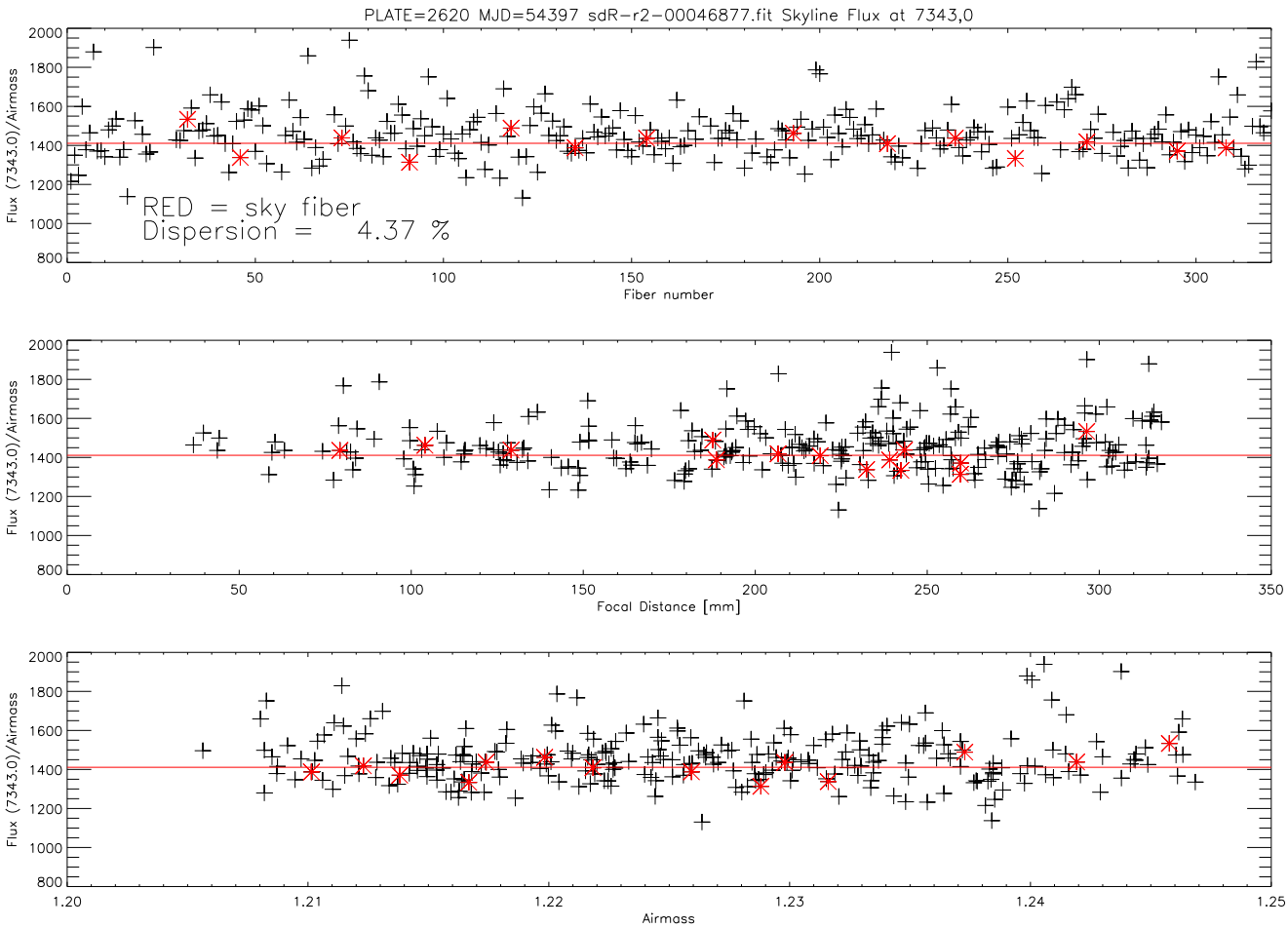

Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046877.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

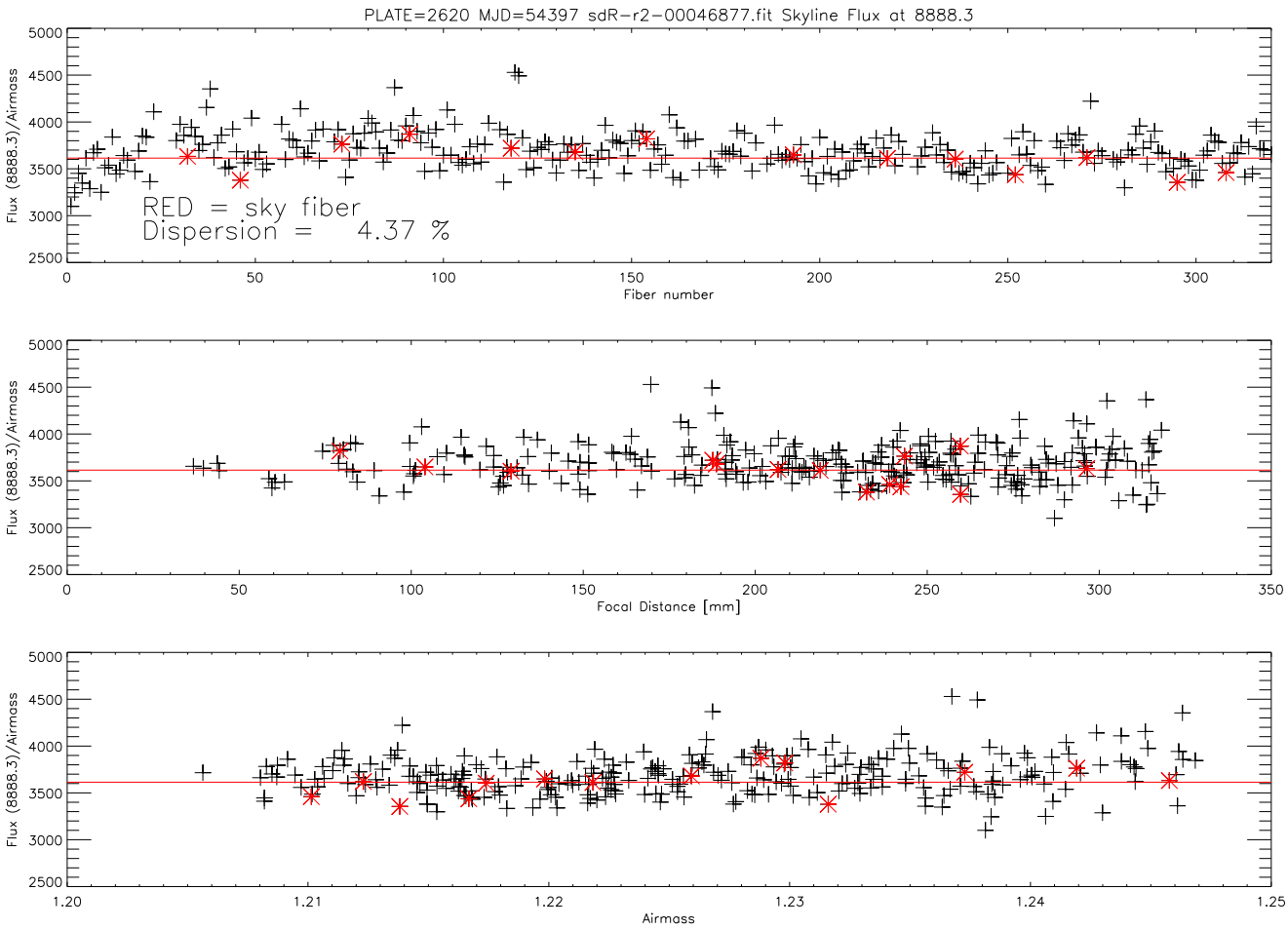

PLATE=2620 MJD=54397 sdR-r2-00046877.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=2620 MJD=54397 sdR-r2-00046877.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2620 MJD=54397 sdR-r2-00046877.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=2620 MJD=54397 sdR-r2-00046877.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=2620 MJD=54397 sdR-r2-00046877.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 4.37 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2620 MJD=54397 sdR-r2-00046877.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.37 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass