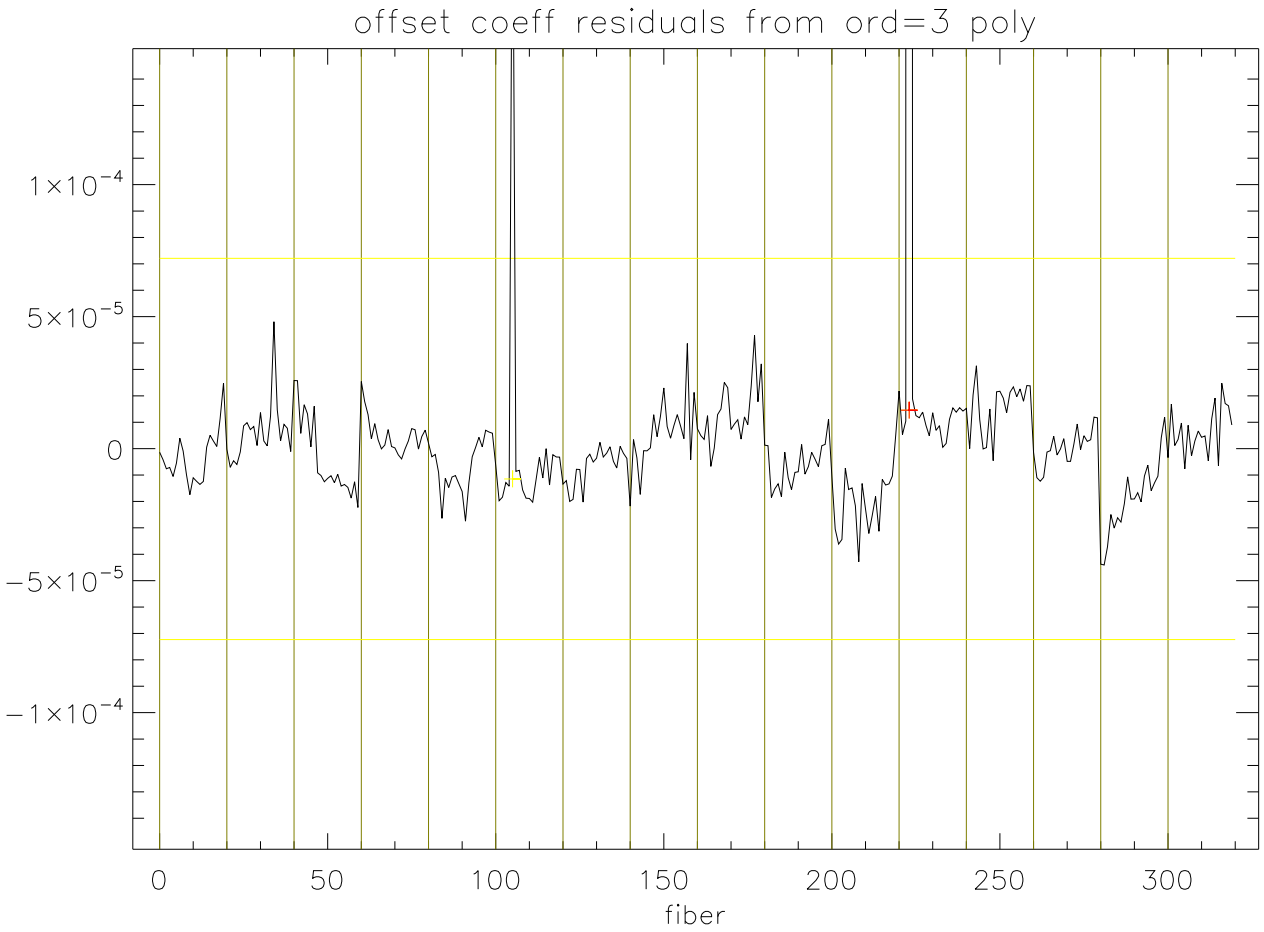
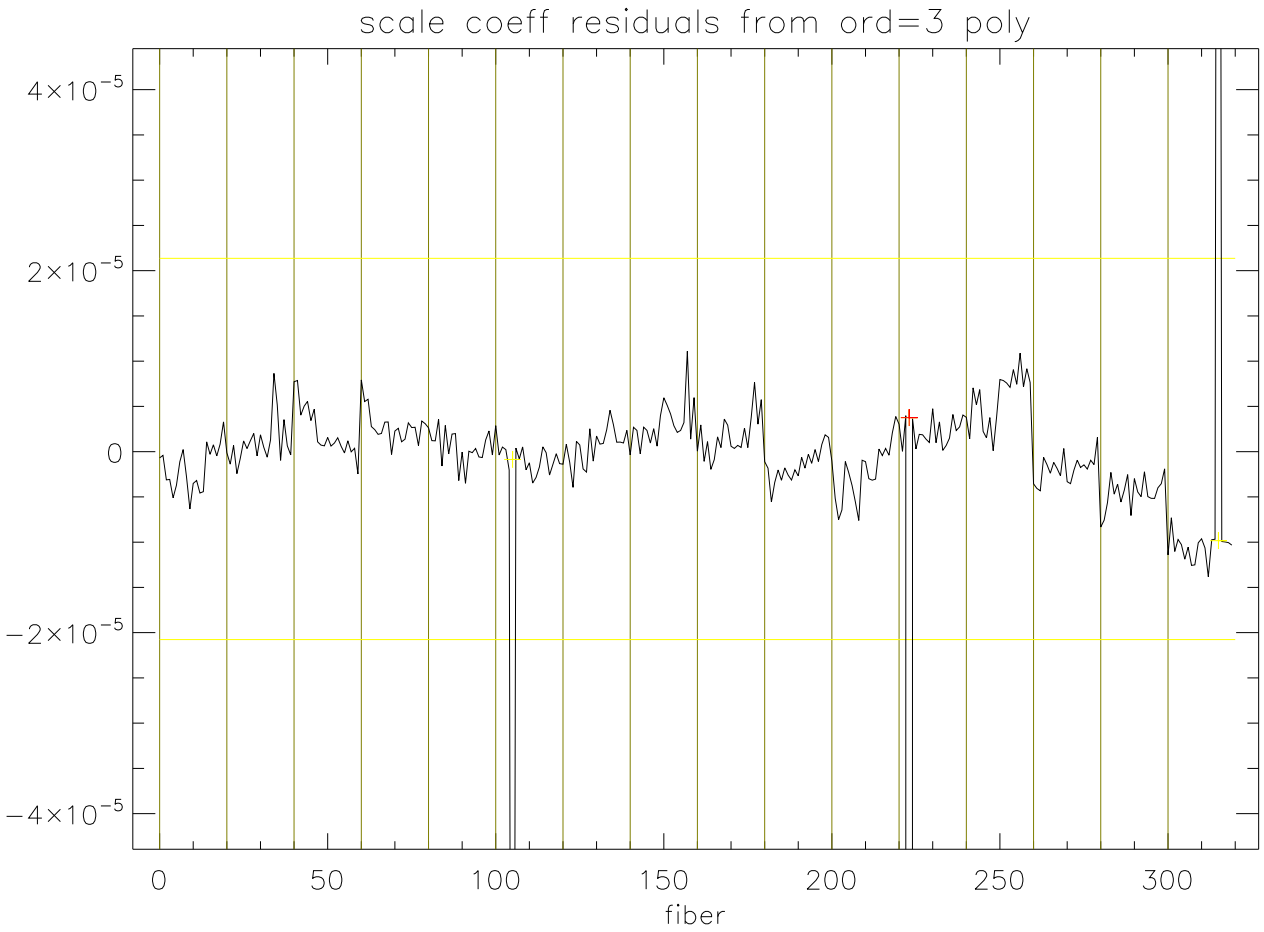
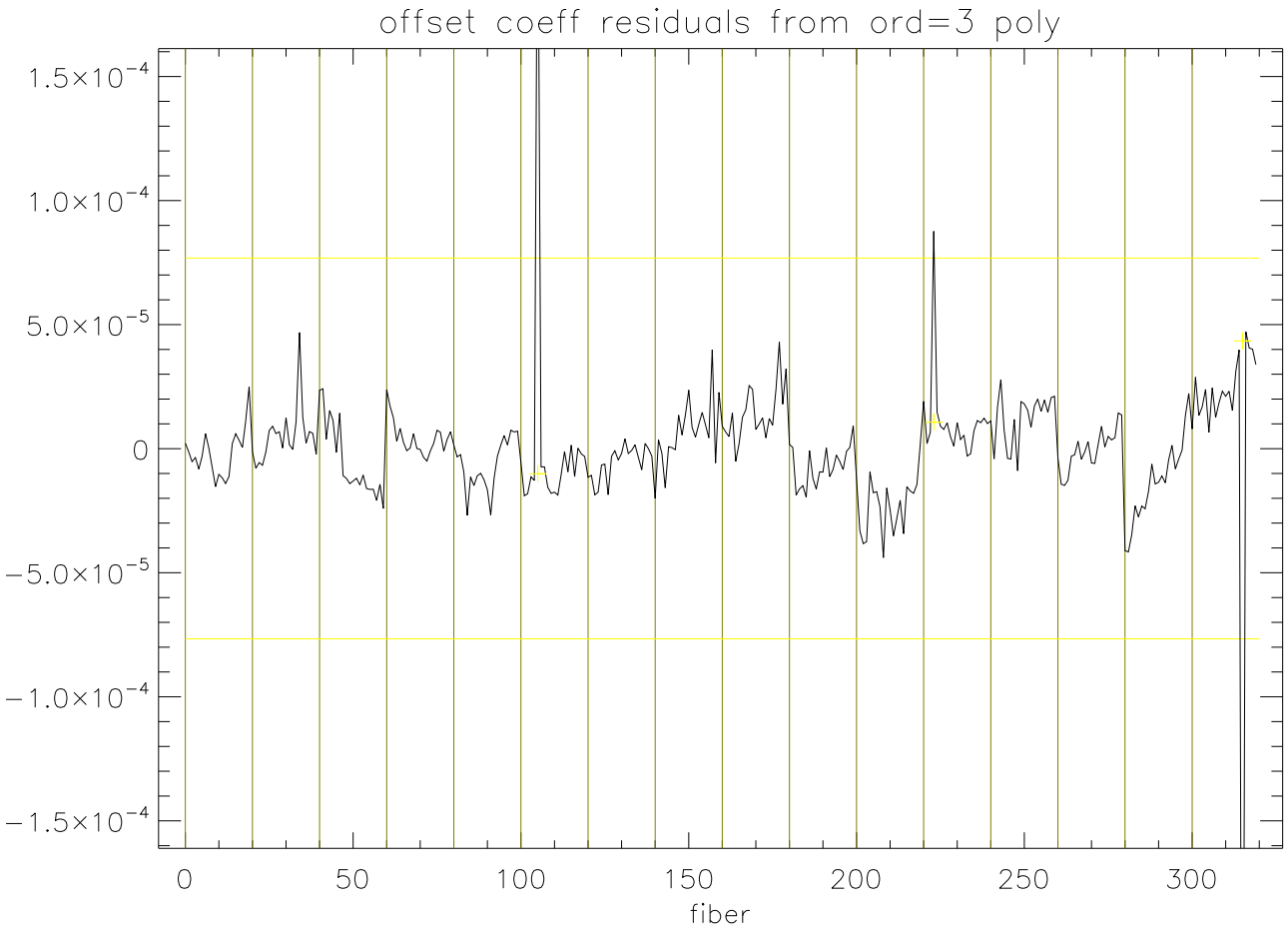
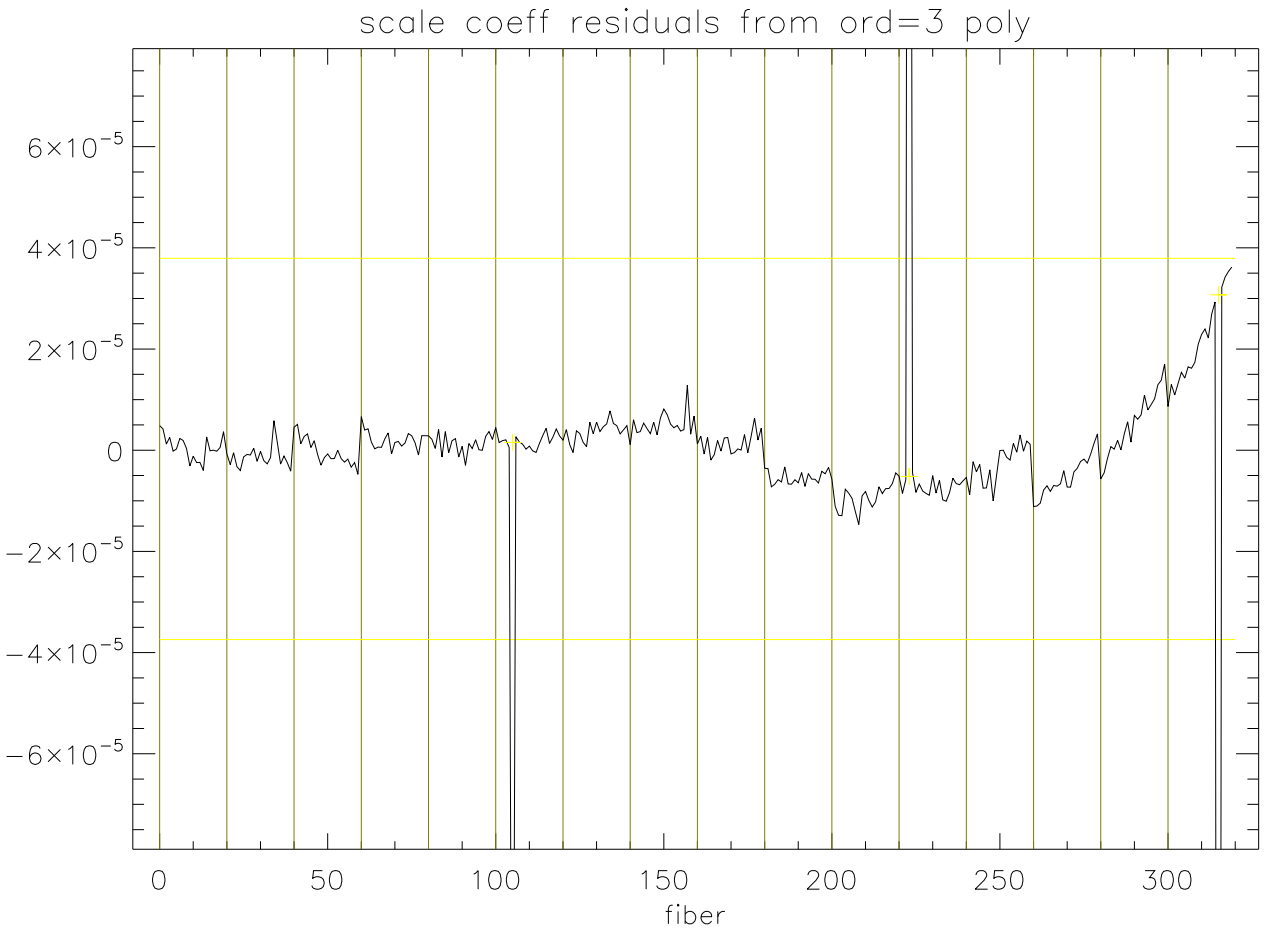
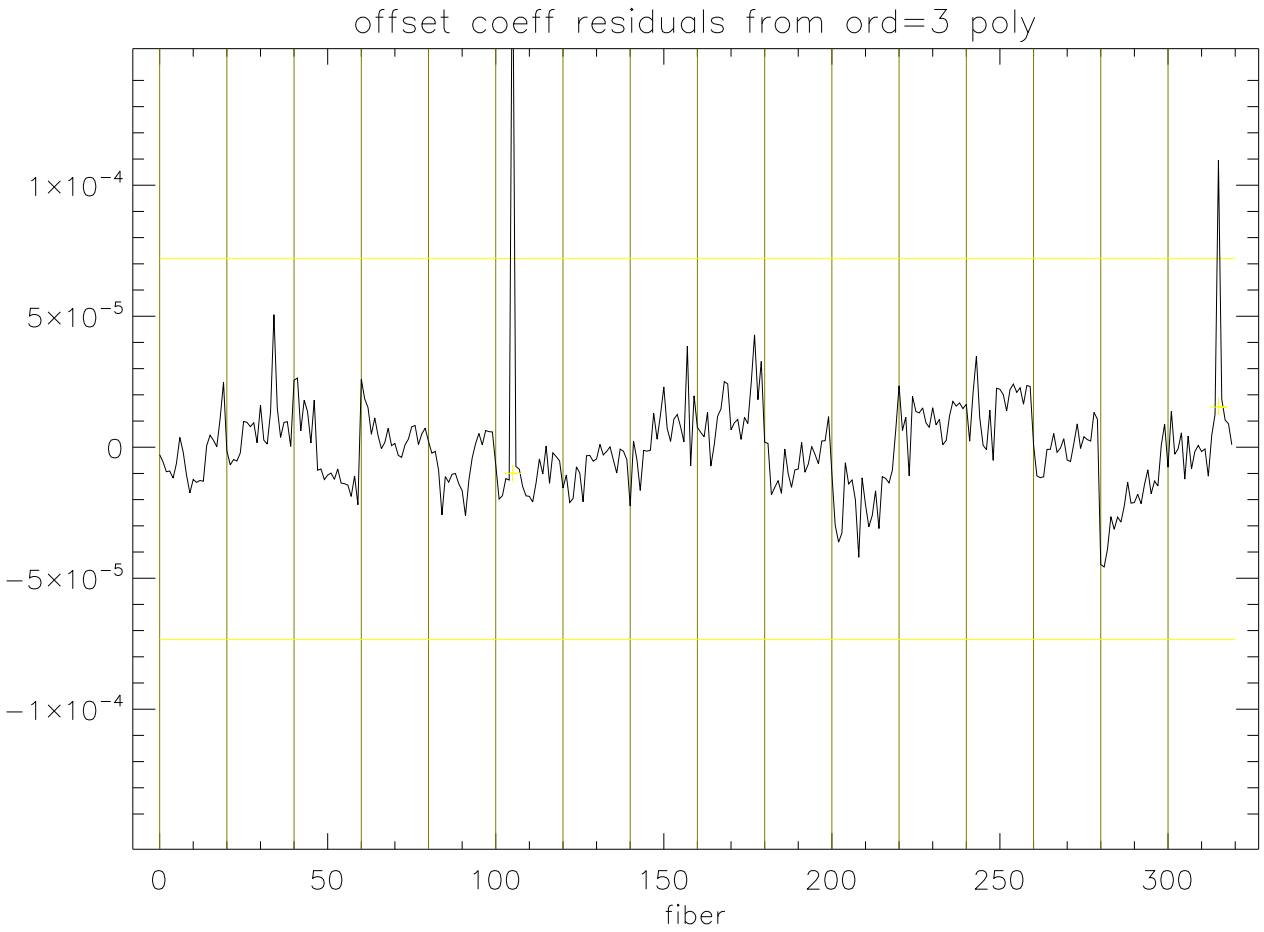
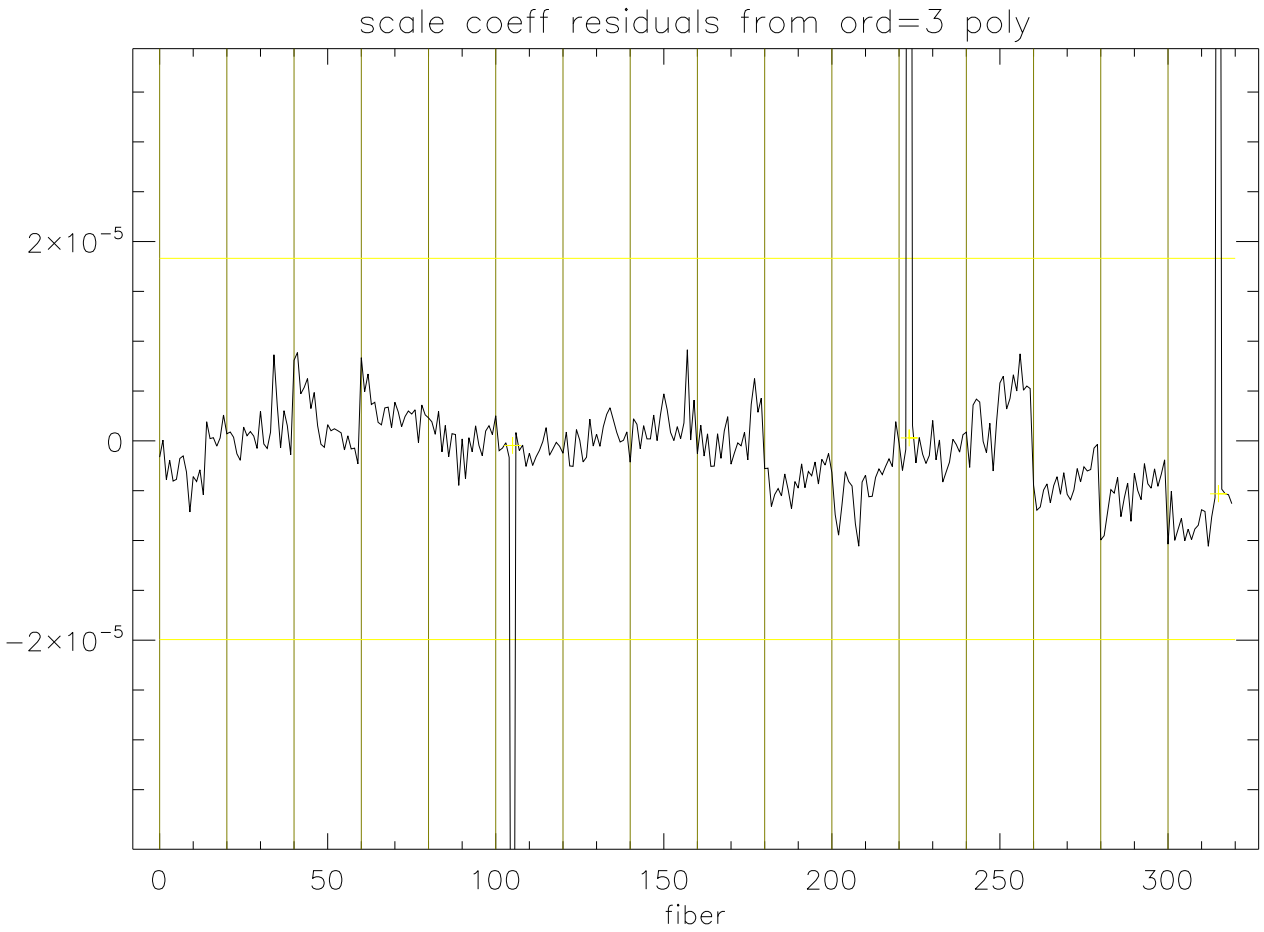

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

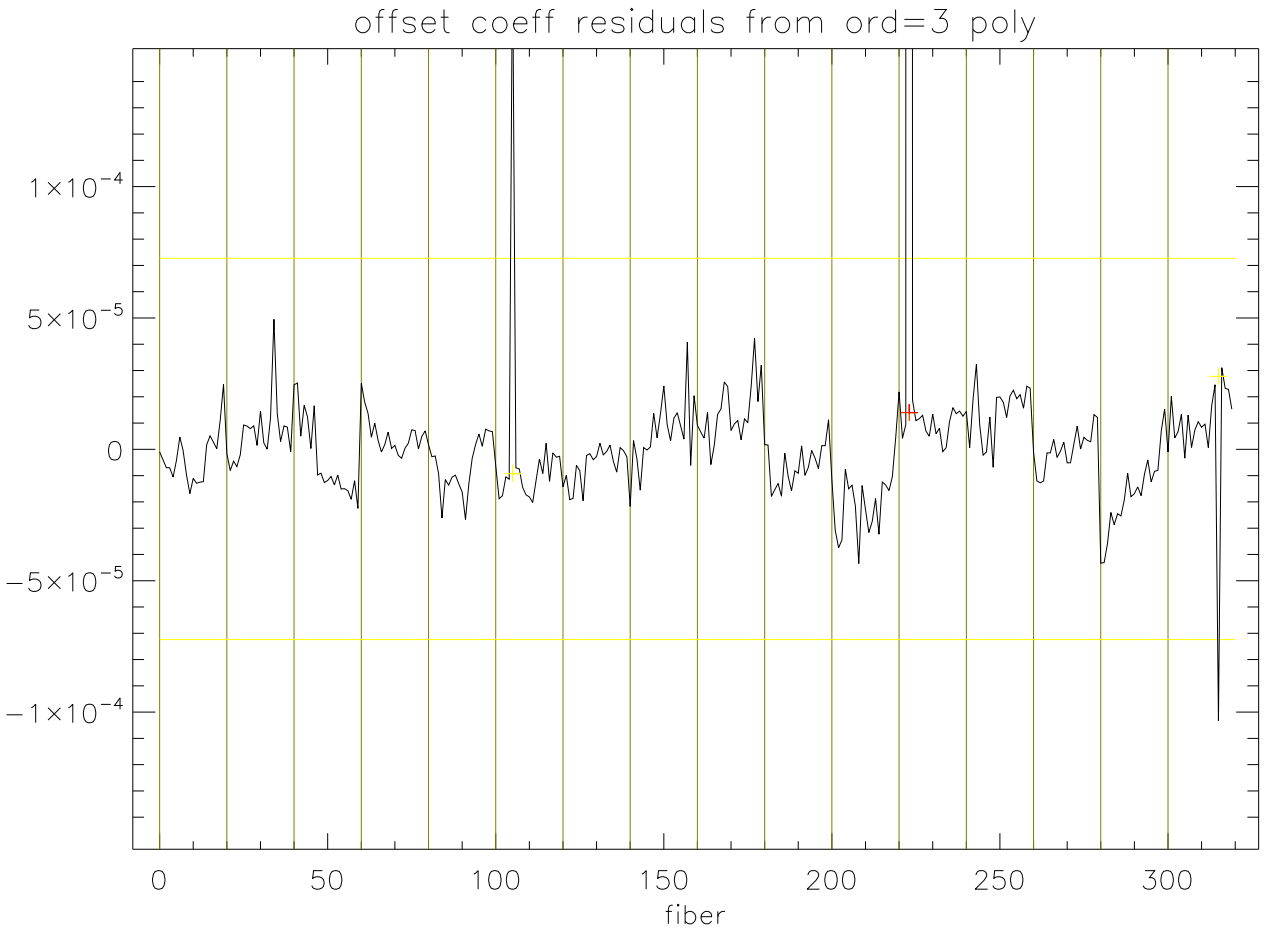

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

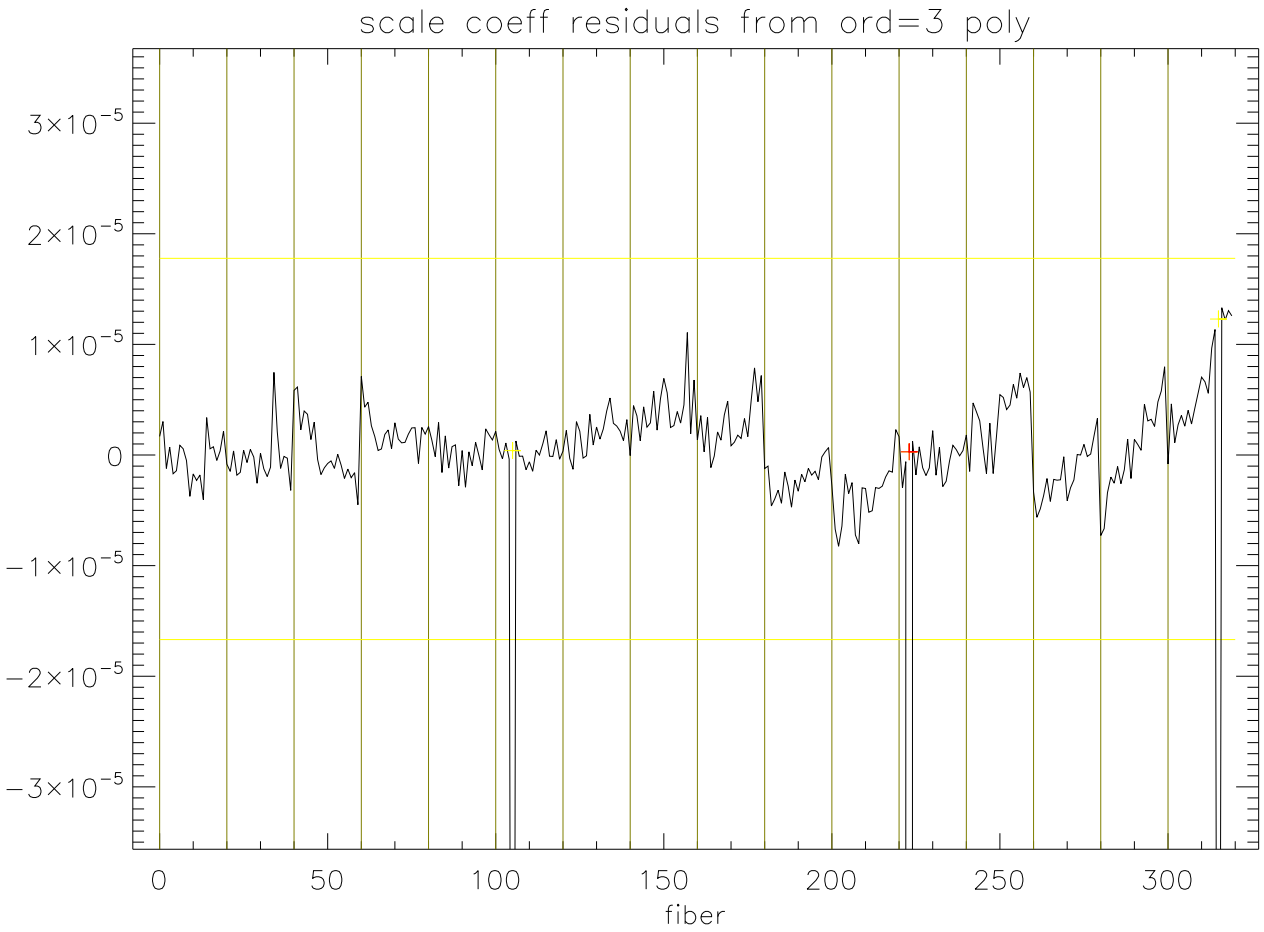

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

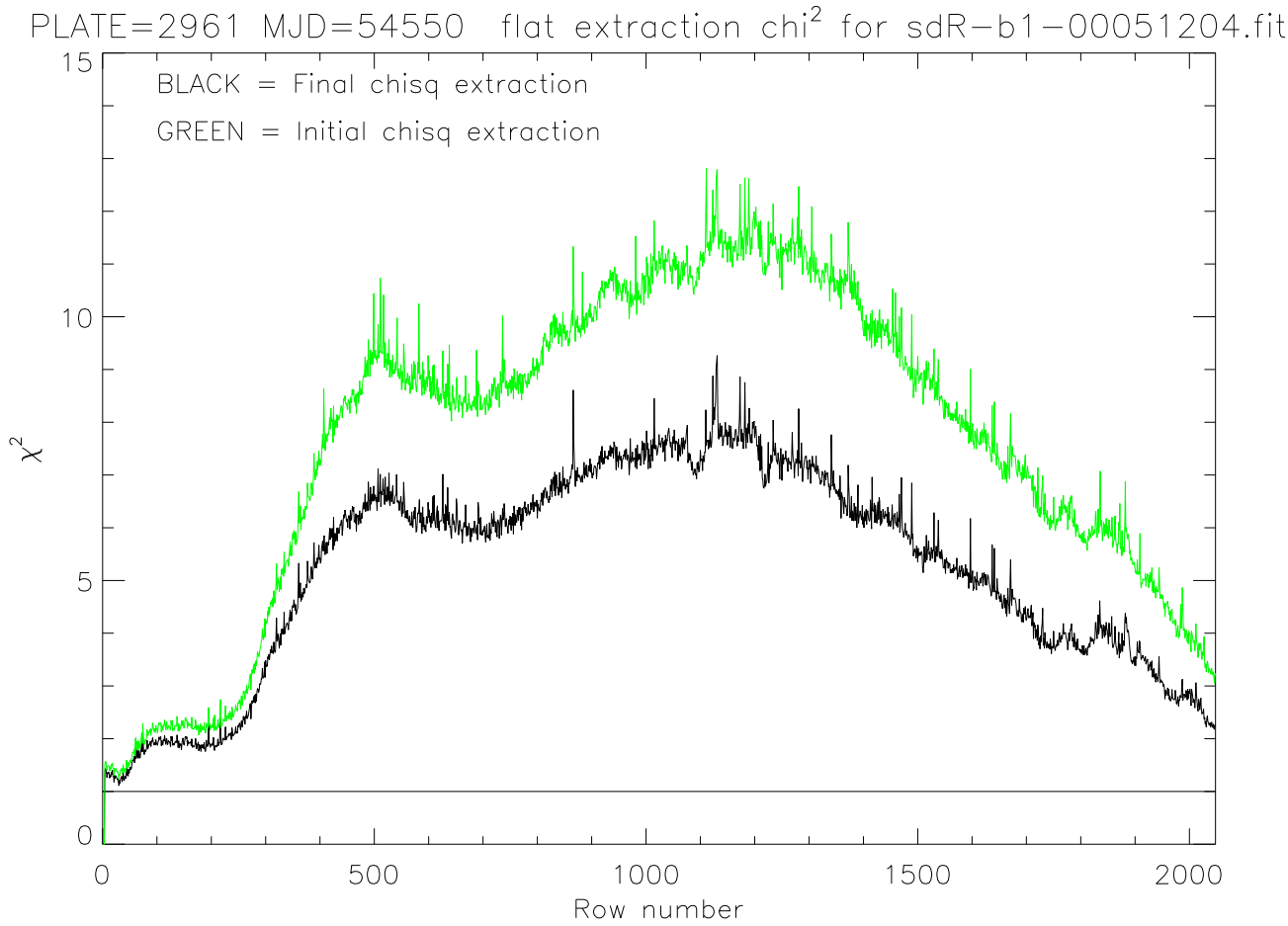

scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber

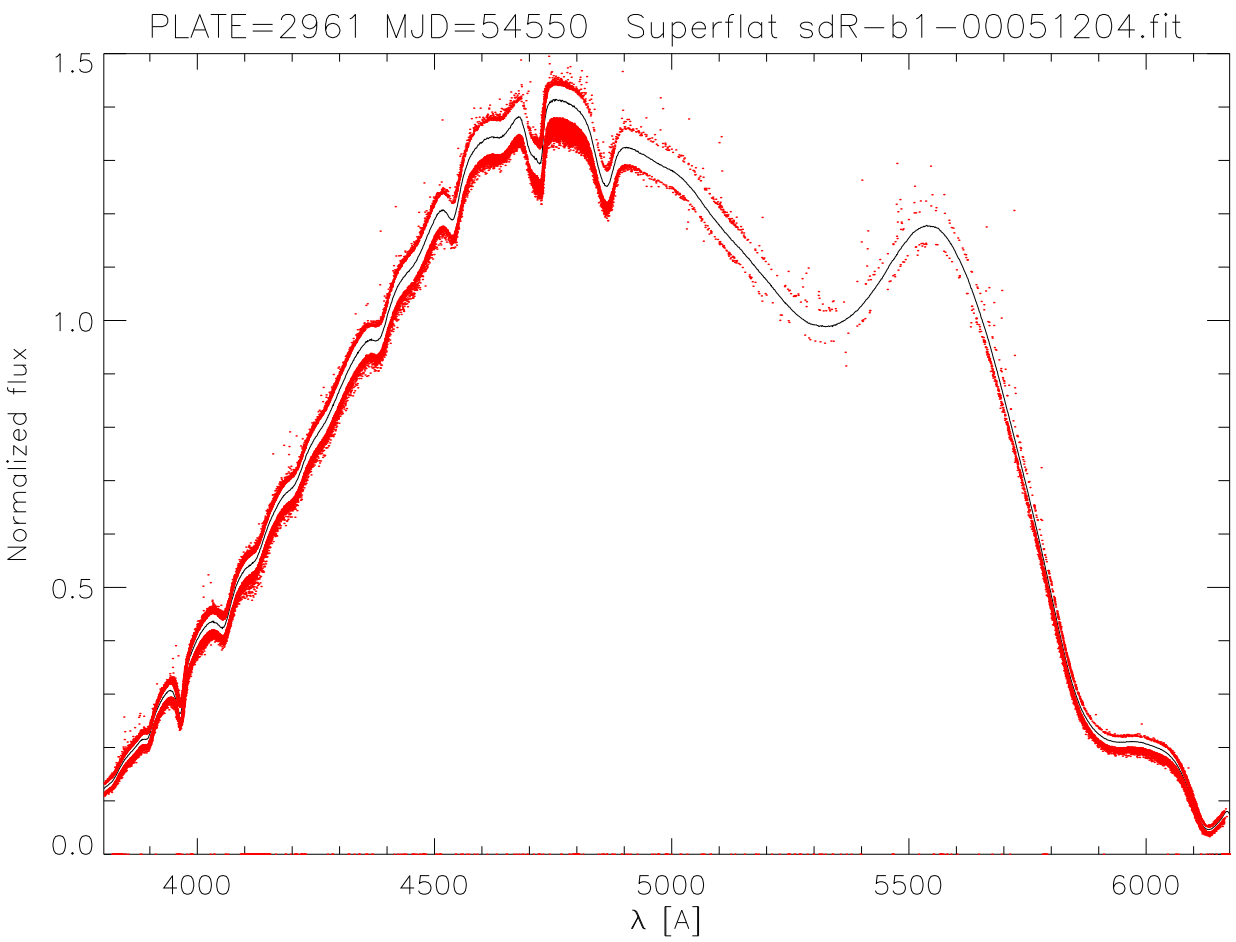

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

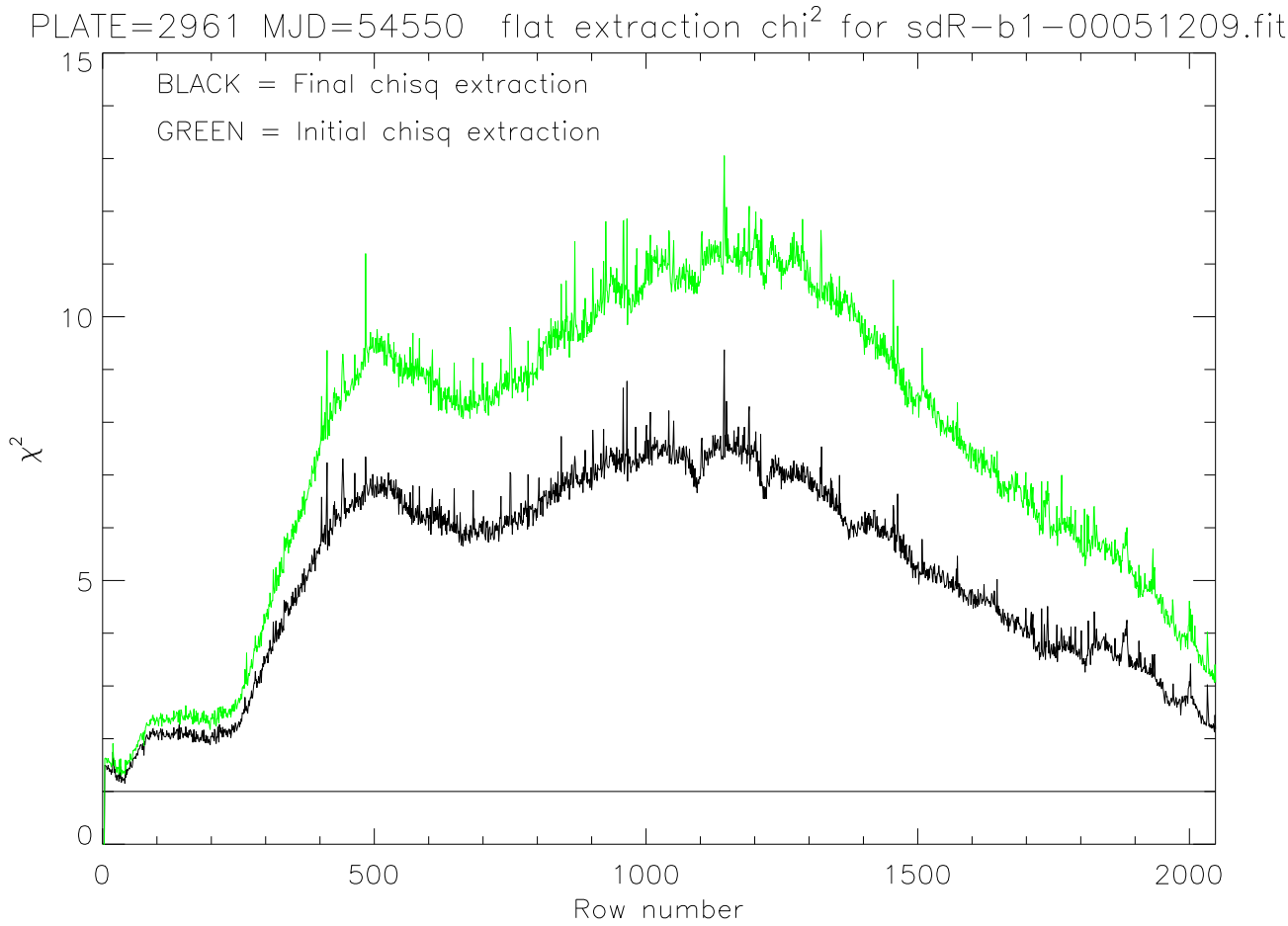

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

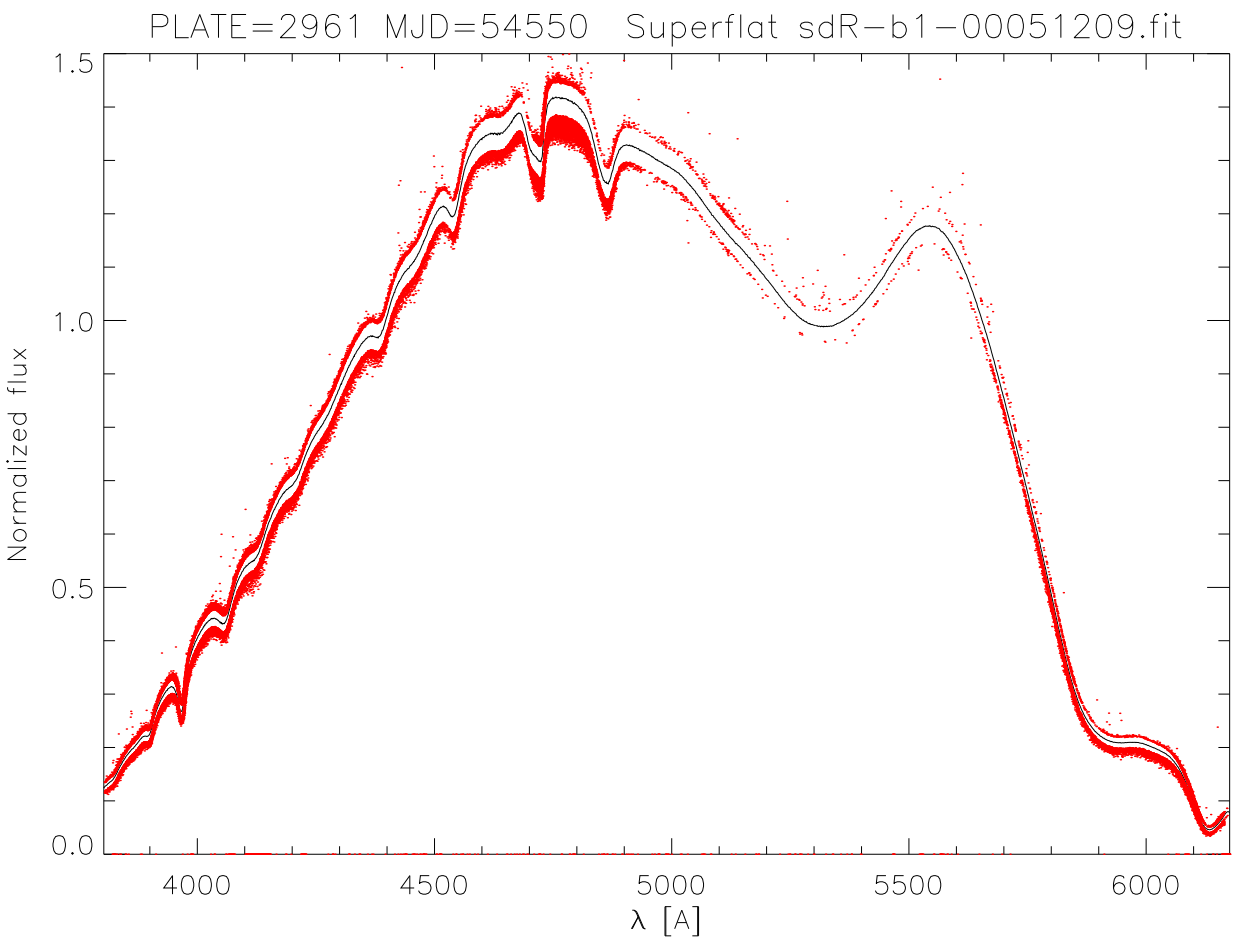

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

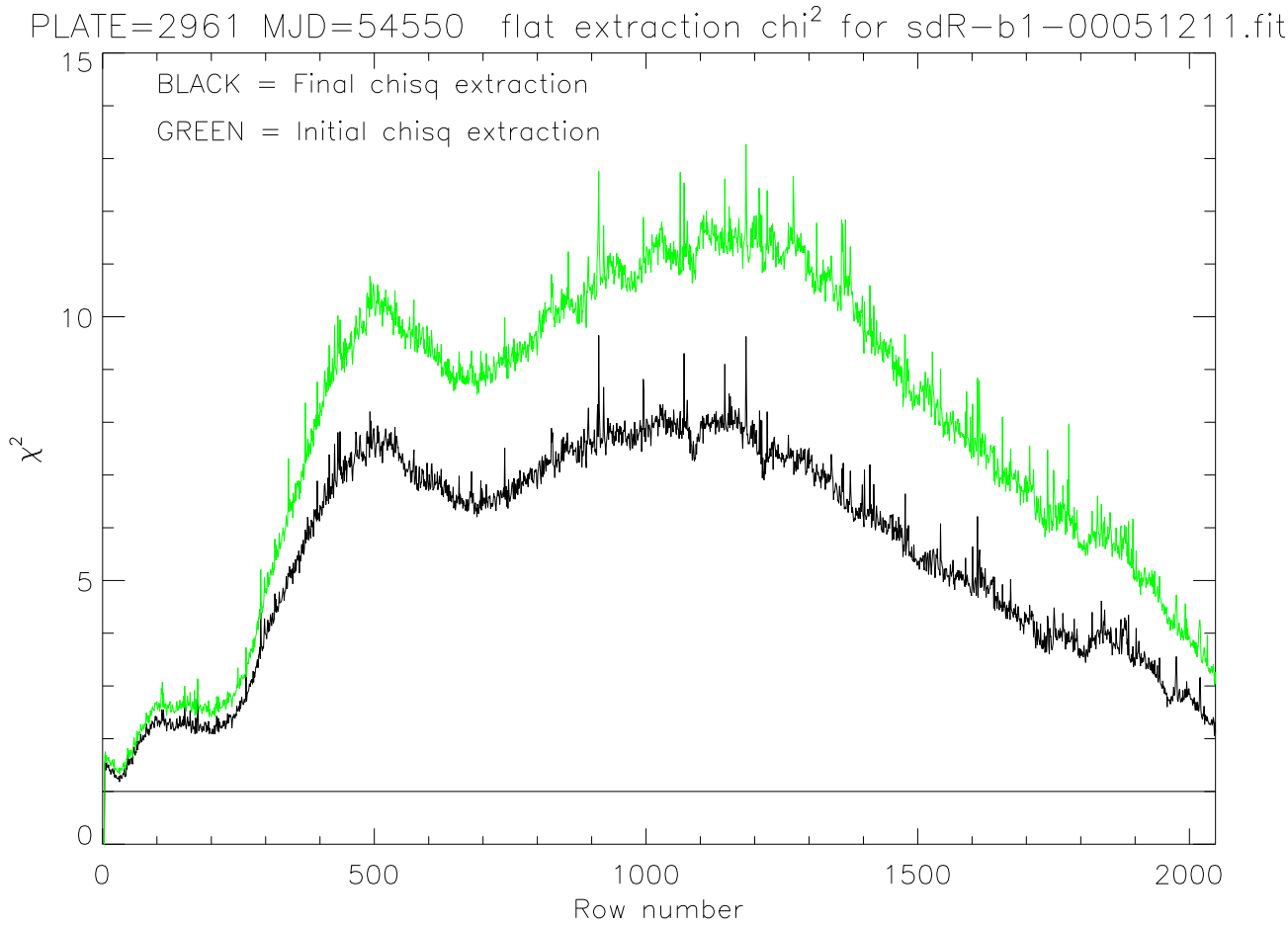

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

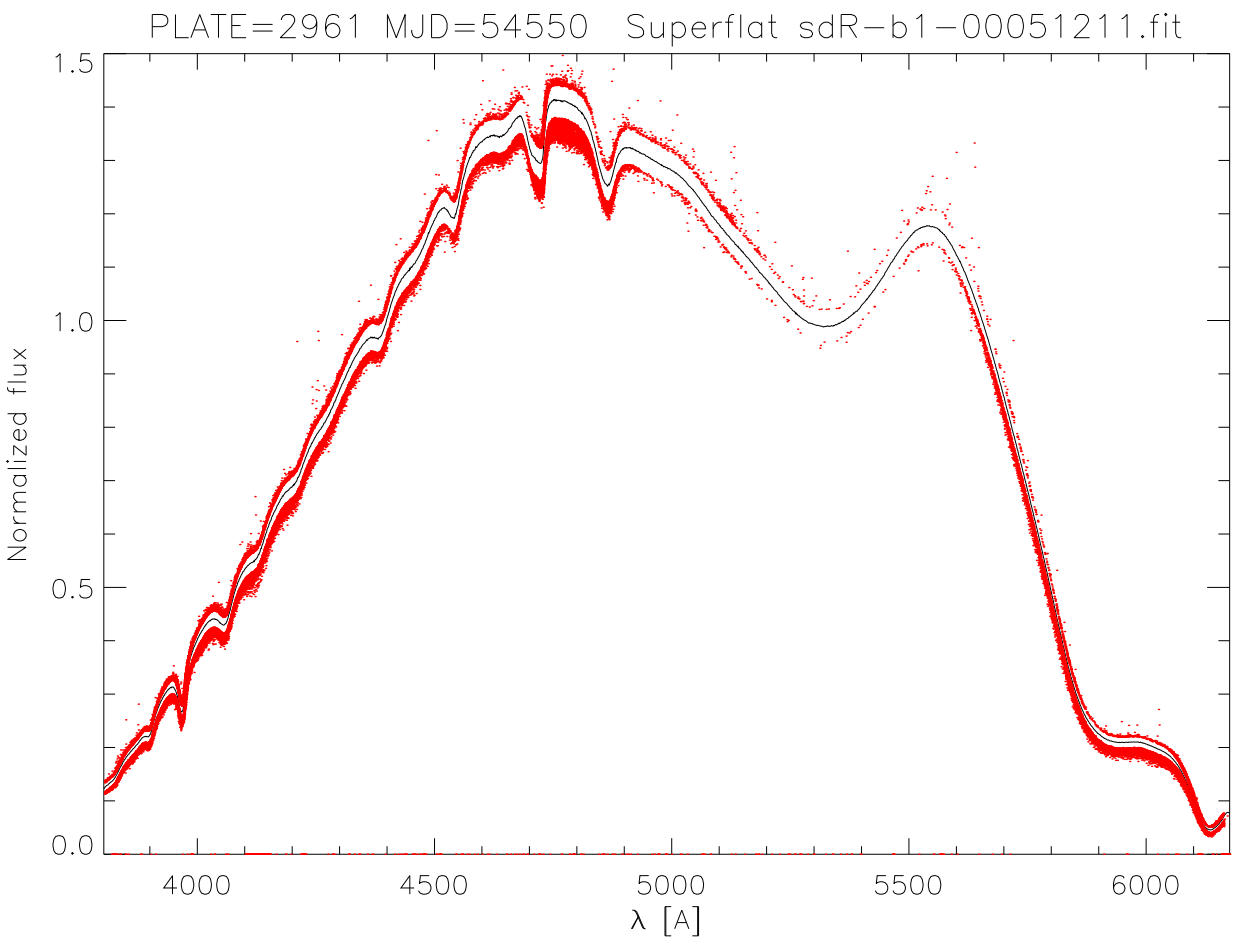

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b1−00051204.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

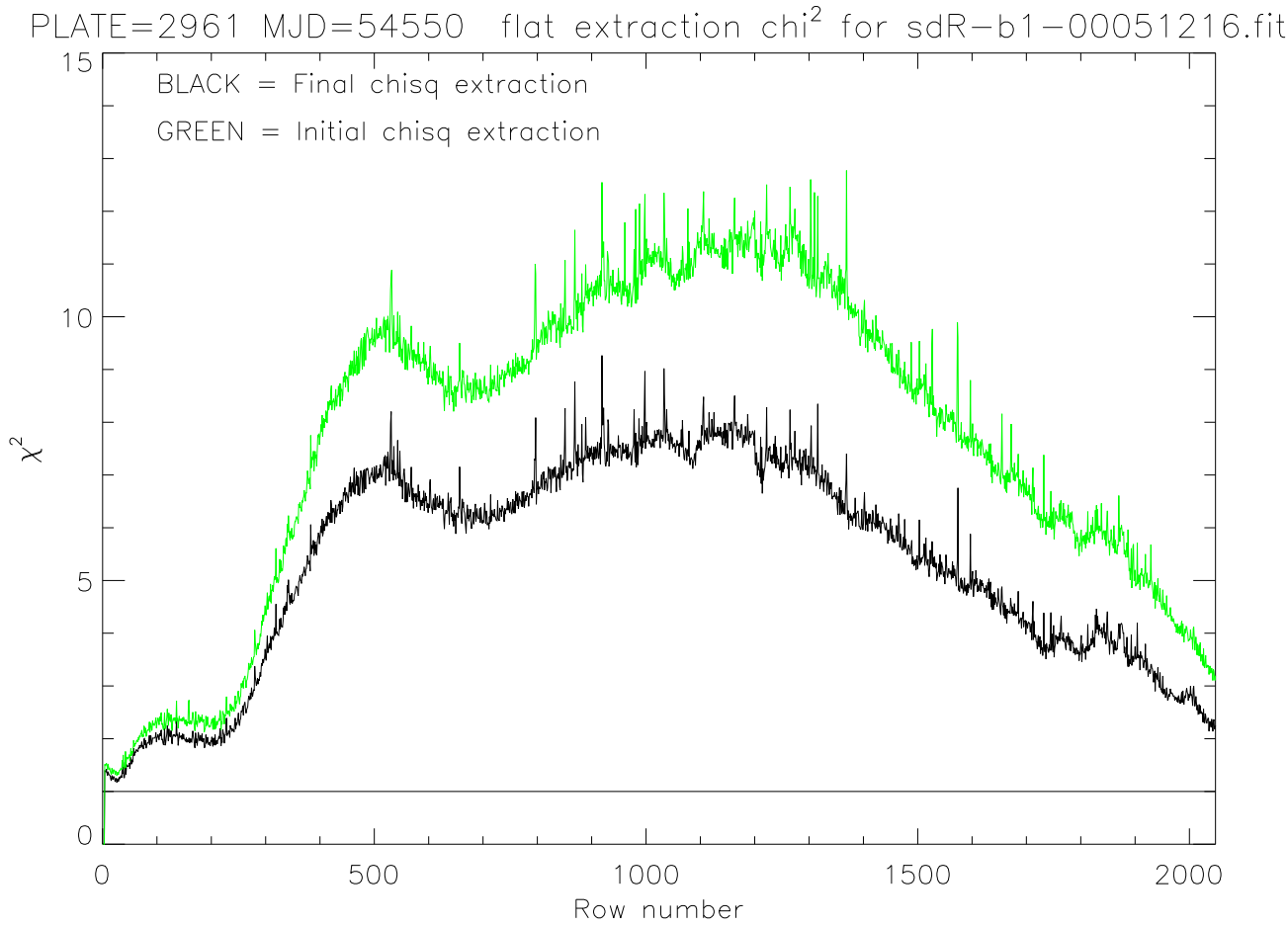

PLATE=2961 MJD=54550 Superflat sdR-b1-00051204.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

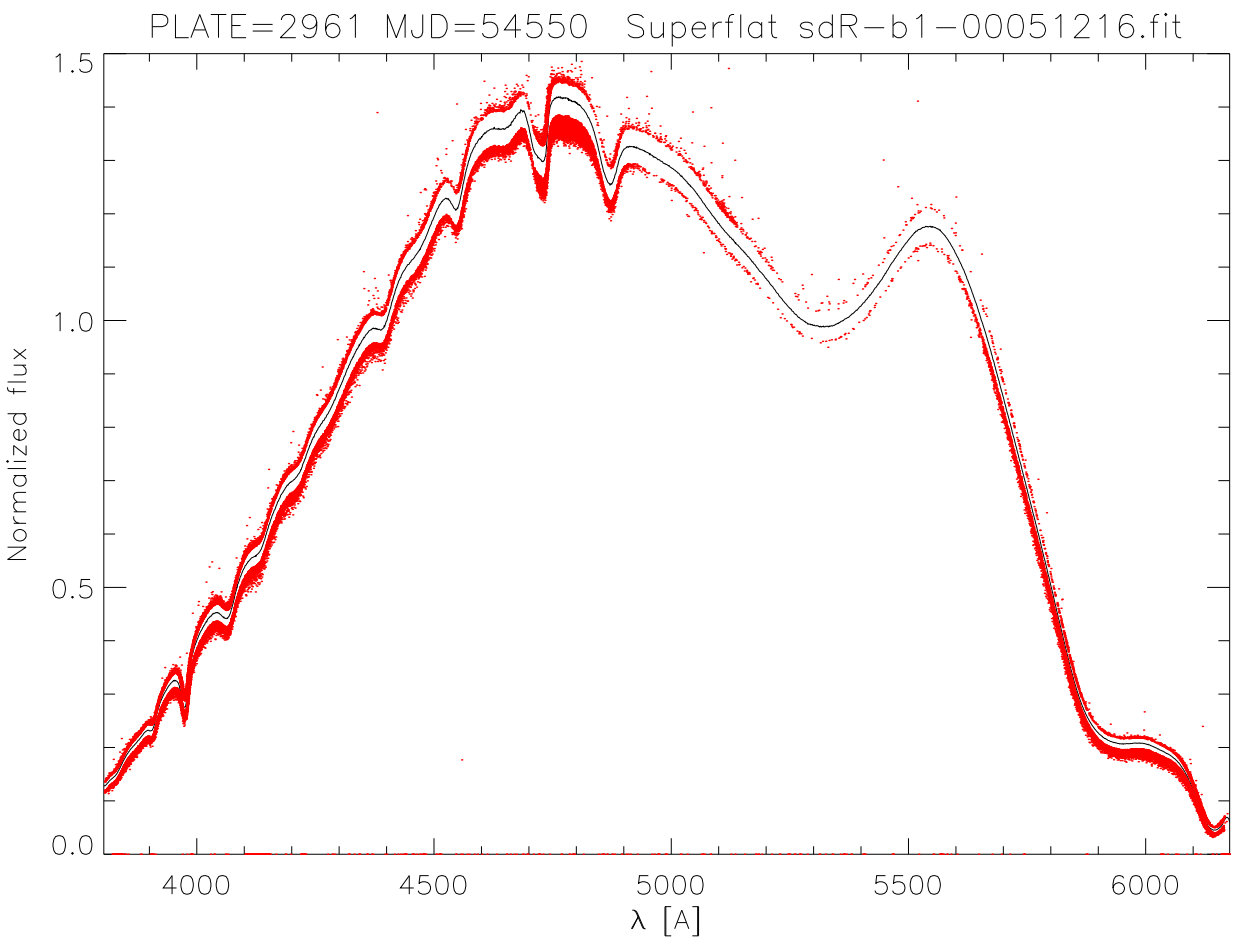

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b1−00051209.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

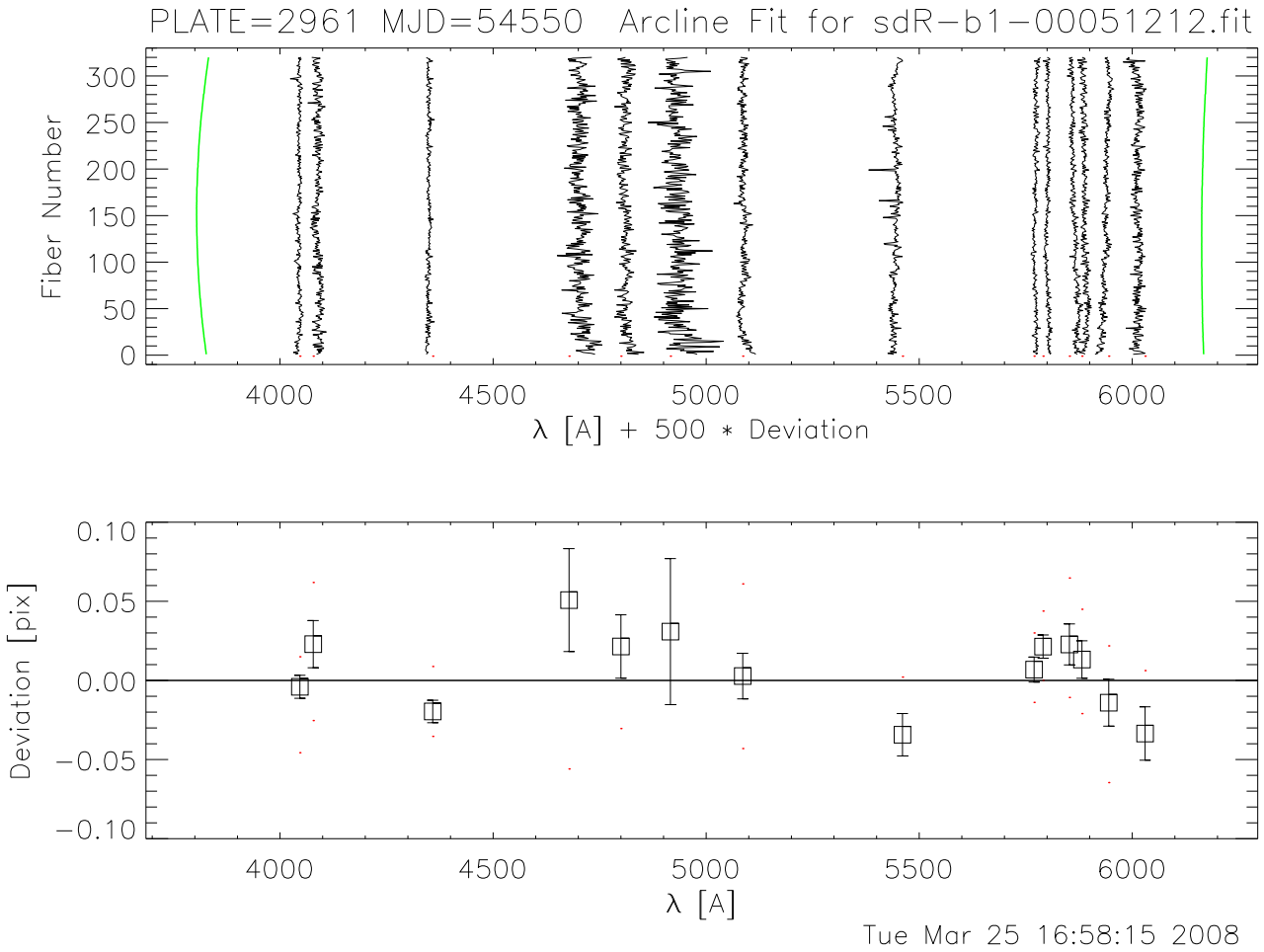

PLATE=2961 MJD=54550 Superflat sdR-b1-00051209.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

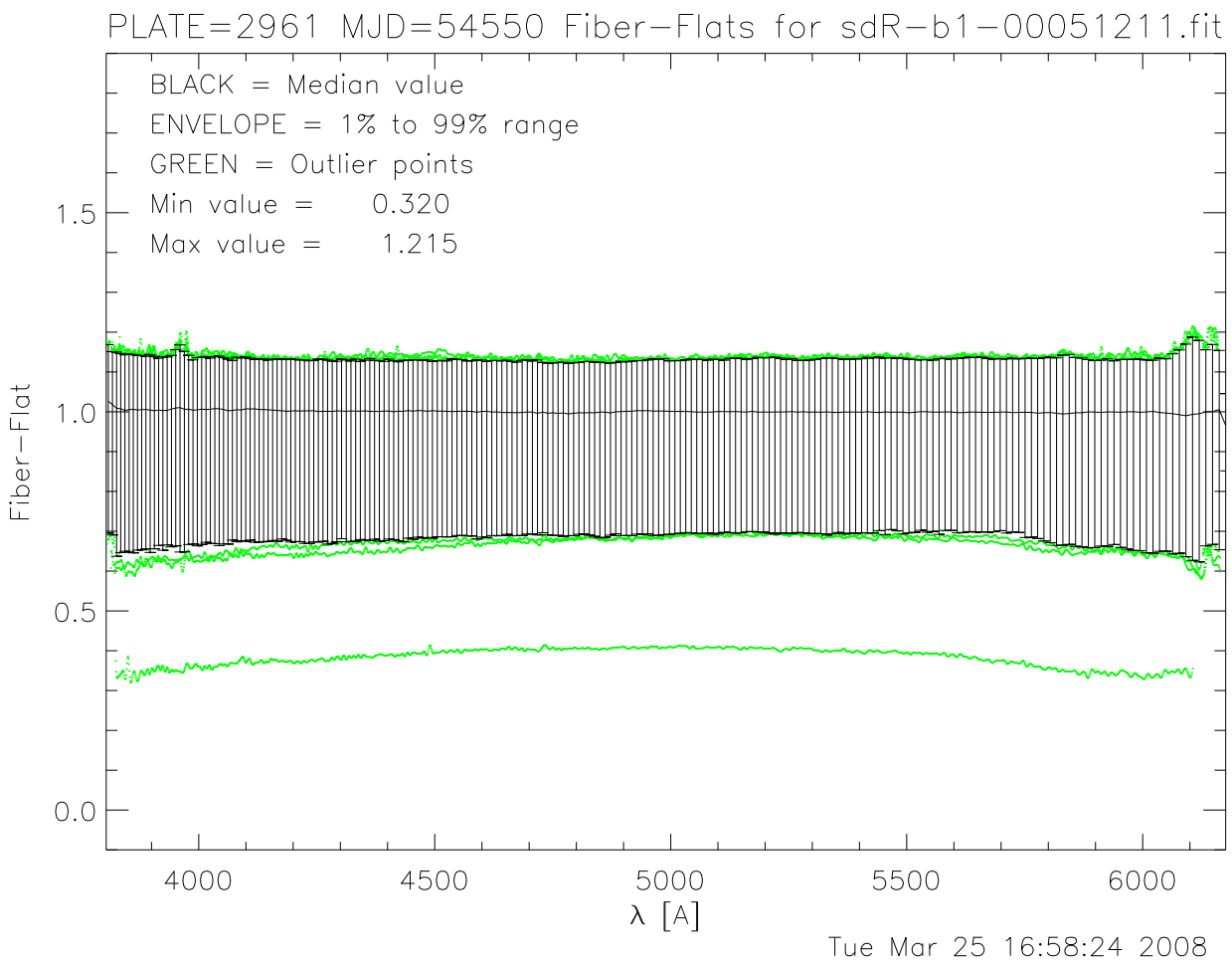

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b1−00051211.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

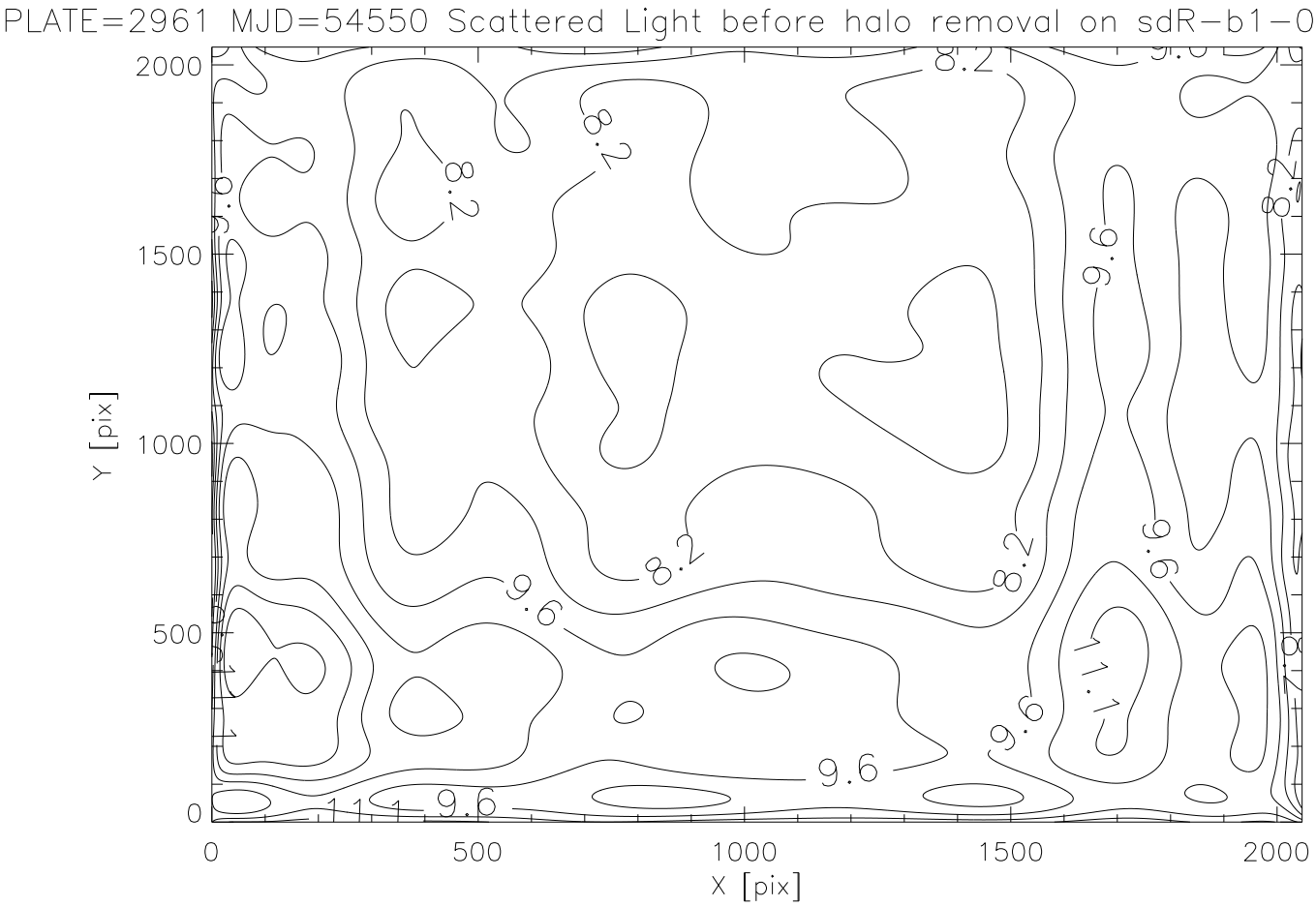

PLATE=2961 MJD=54550 Superflat sdR-b1-00051211.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

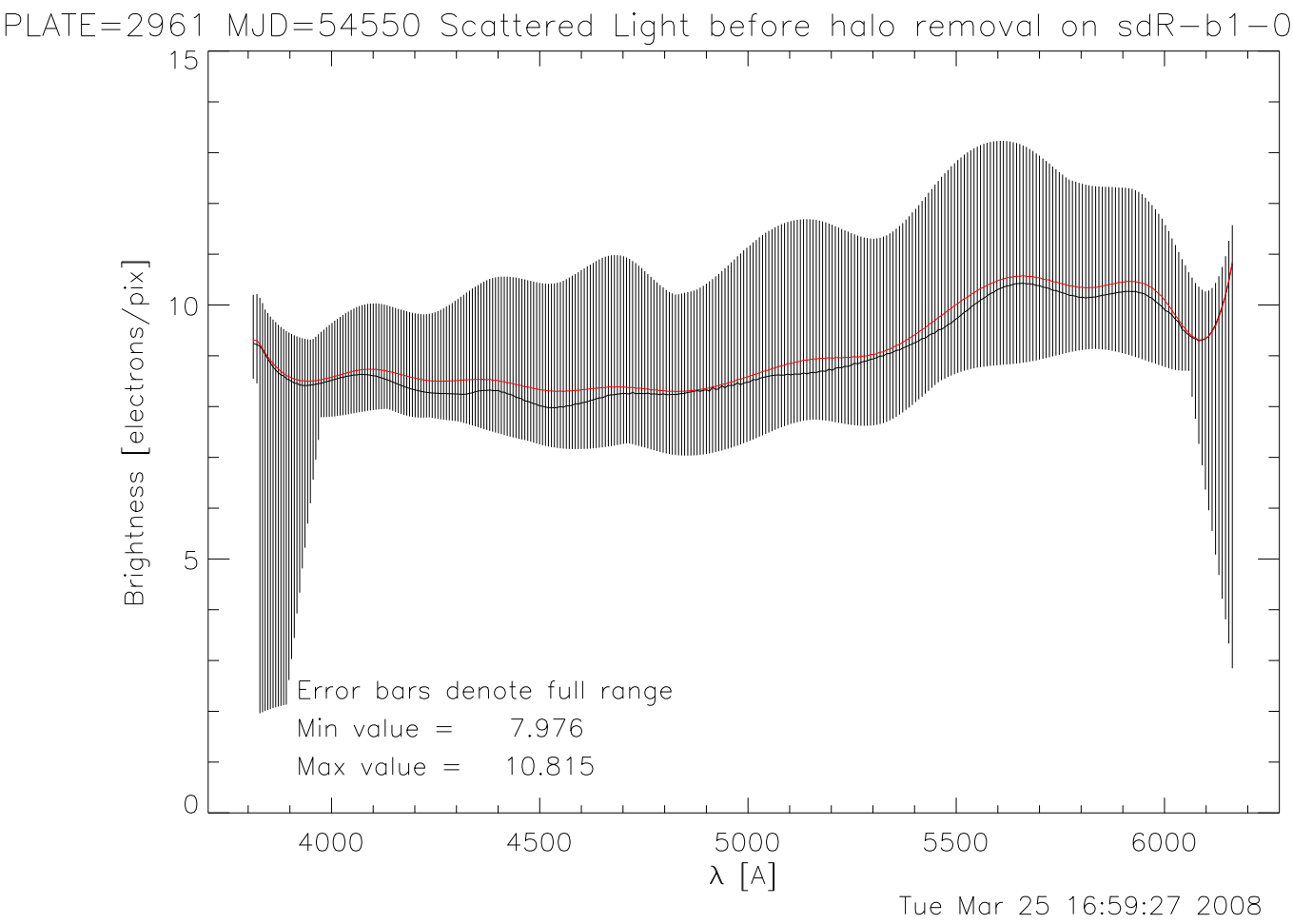

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b1−00051216.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

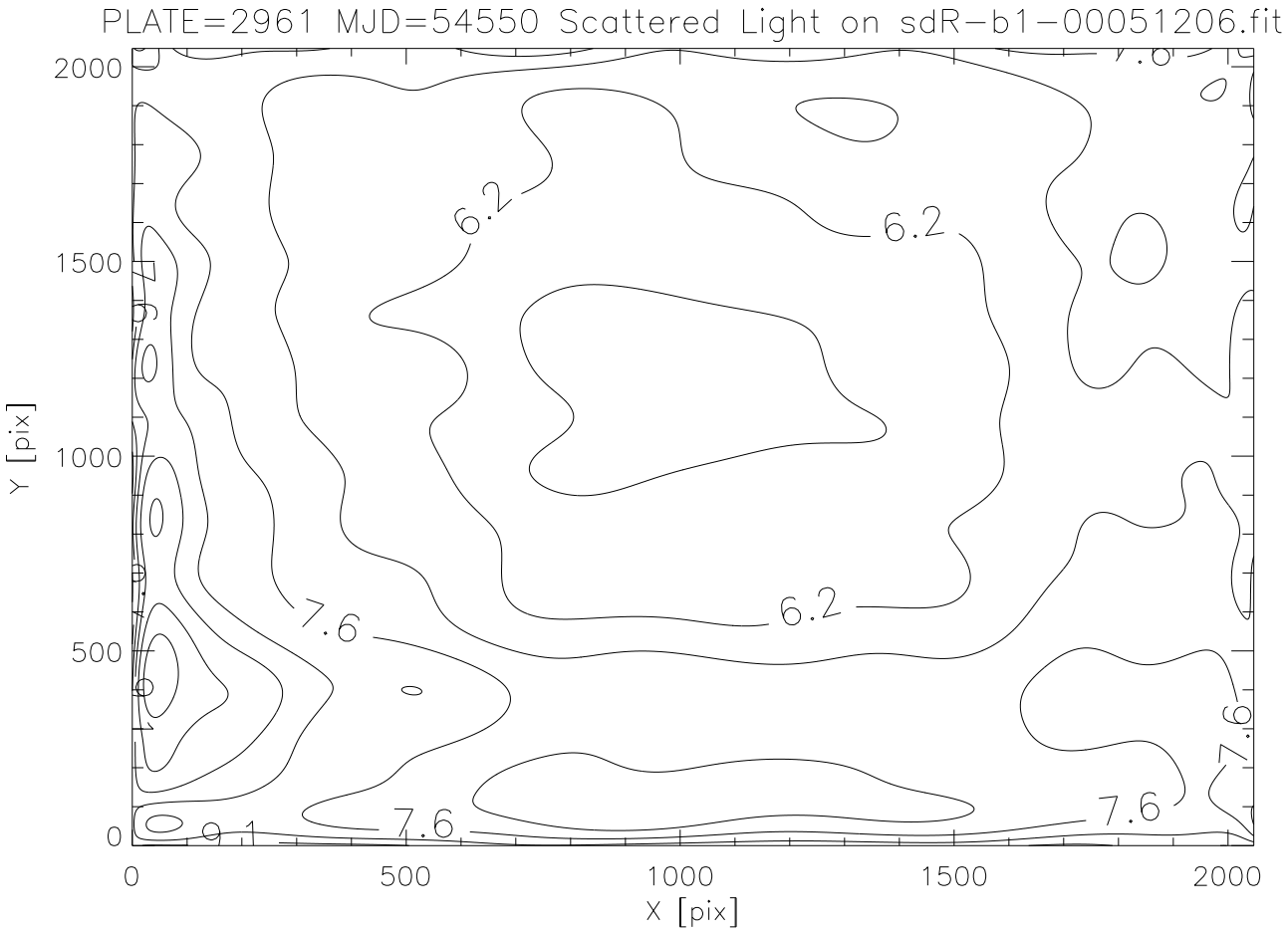

PLATE=2961 MJD=54550 Superflat sdR-b1-00051216.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

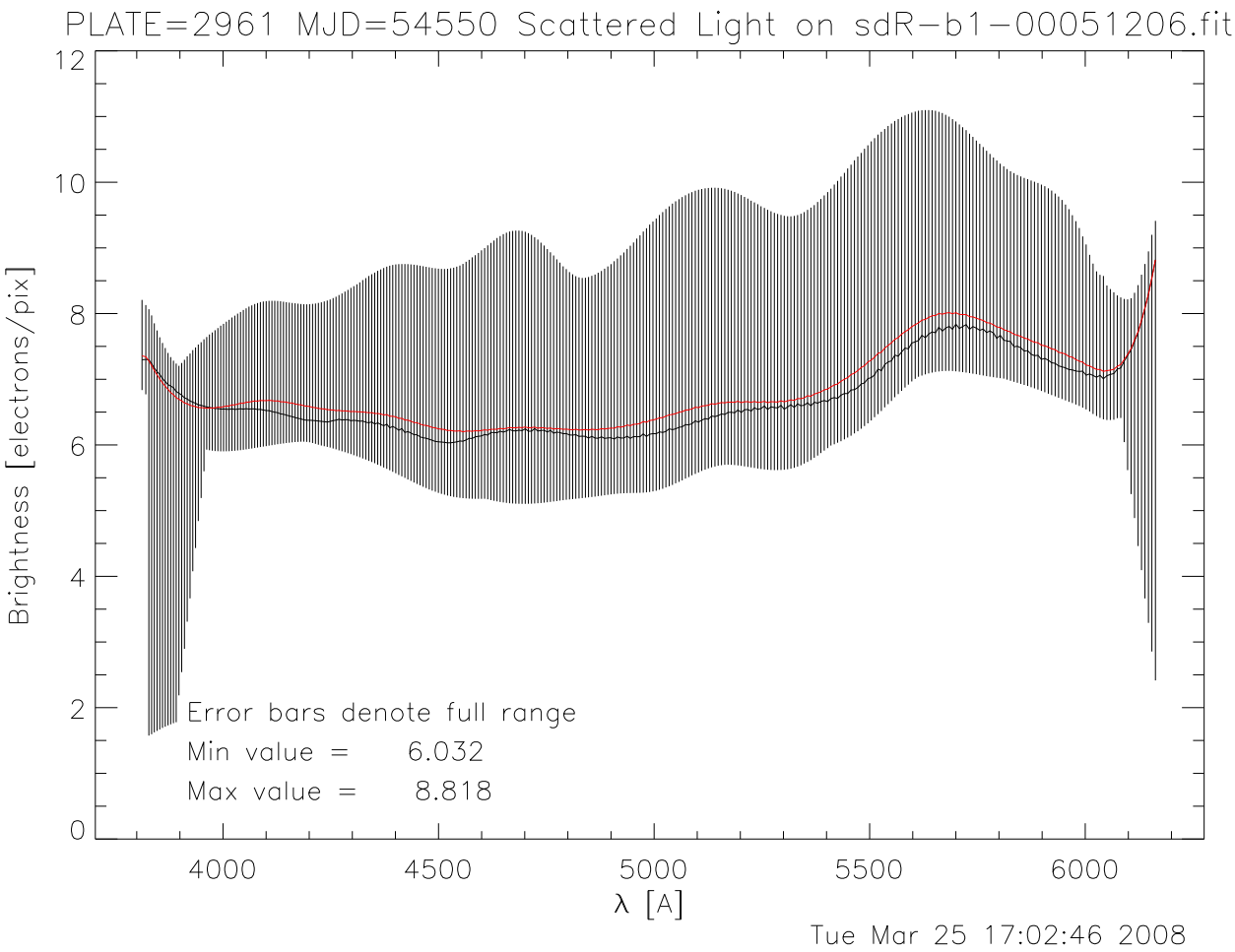

PLATE=2961 MJD=54550 Arcline Fit for sdR-b1-00051212.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 16:58:15 2008

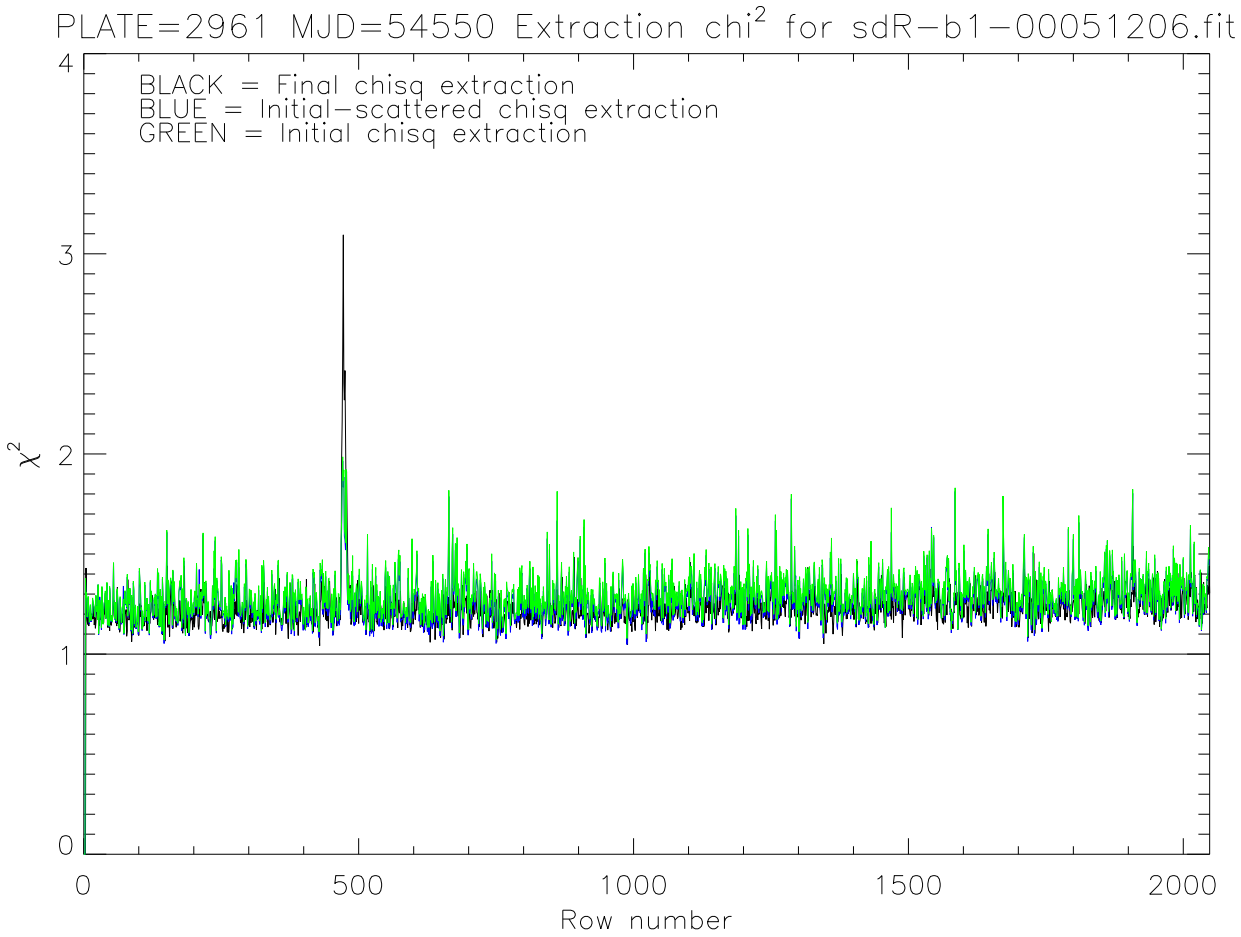

PLATE=2961 MJD=54550 Fiber−Flats for sdR−b1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 16:58:24 2008

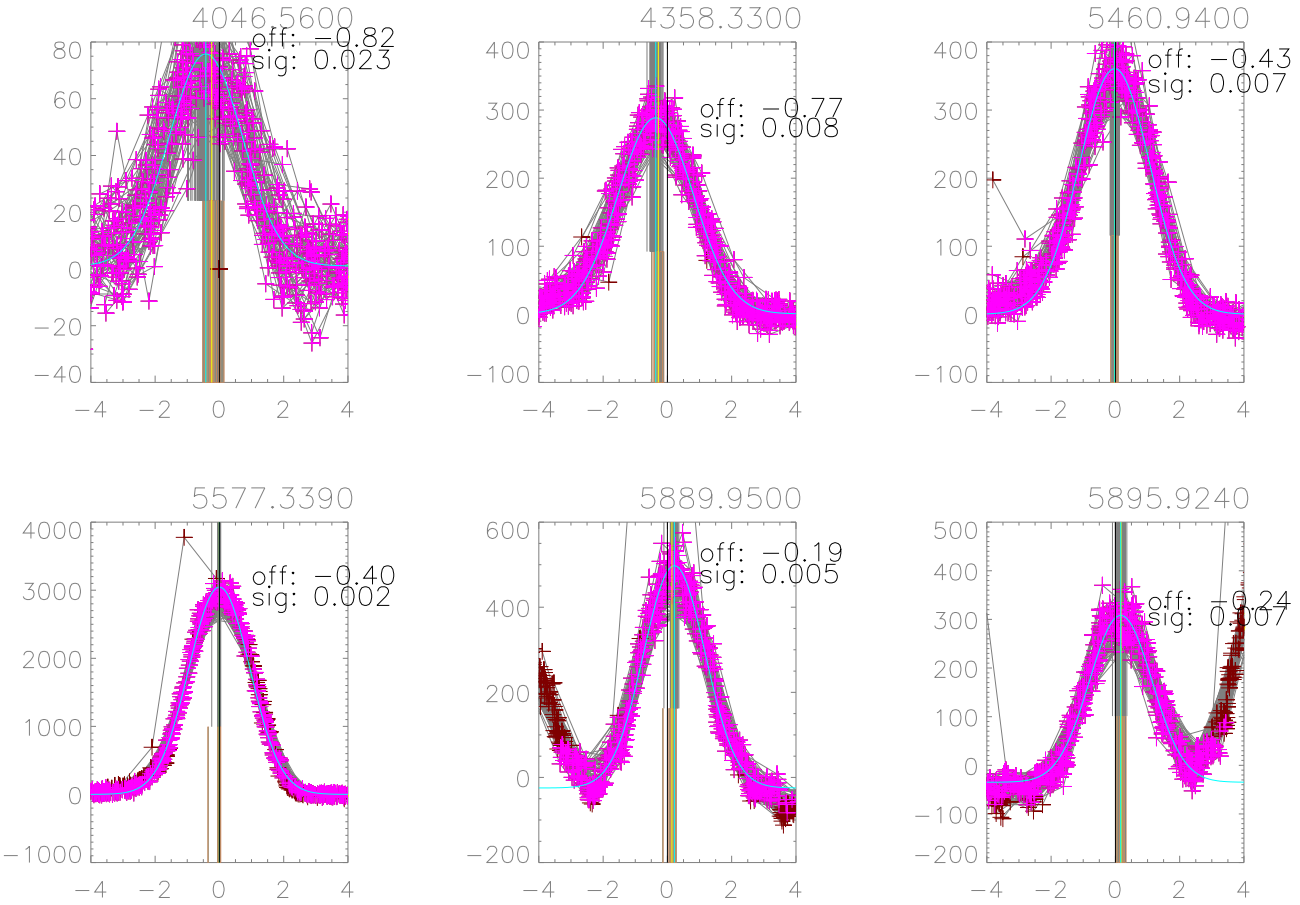

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051206.f
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
9.6
11.1

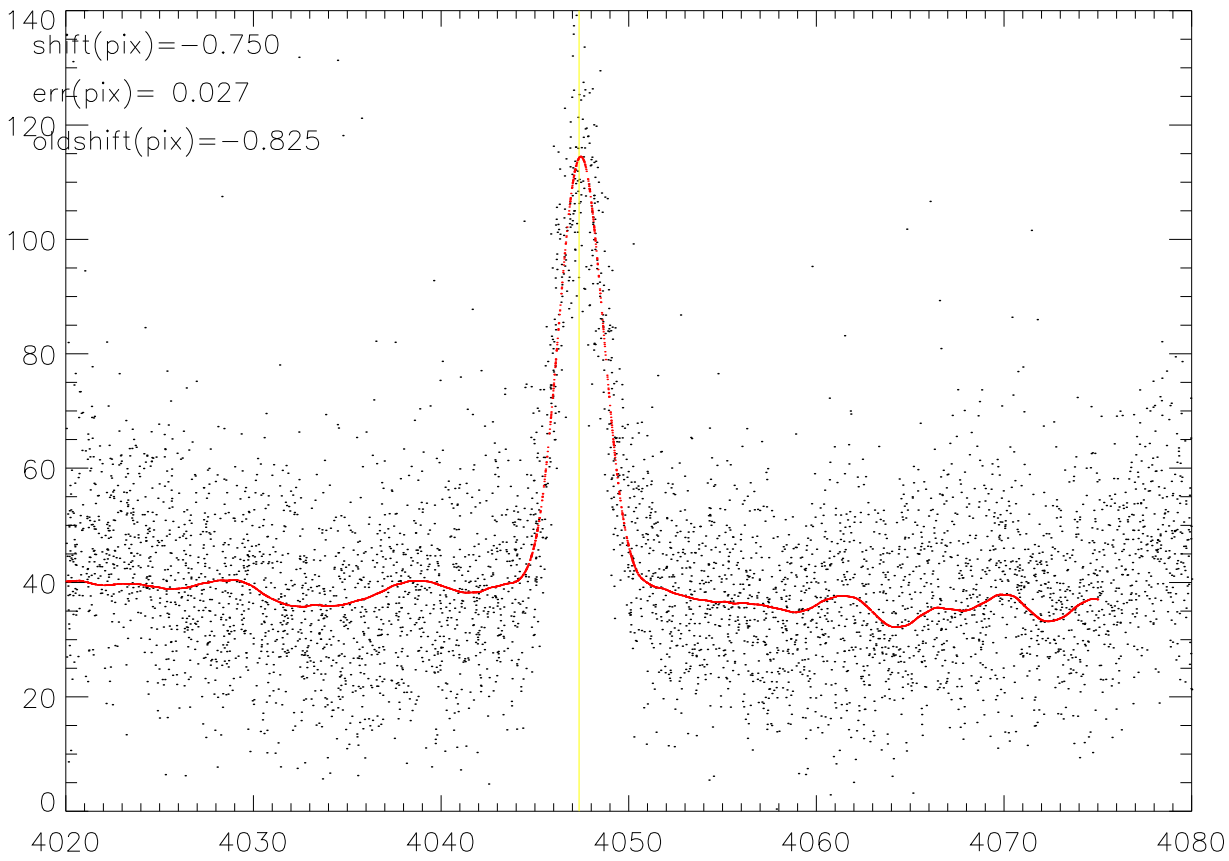

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b1-00051206.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.976
Max value = 10.815
Tue Mar 25 16:59:27 2008

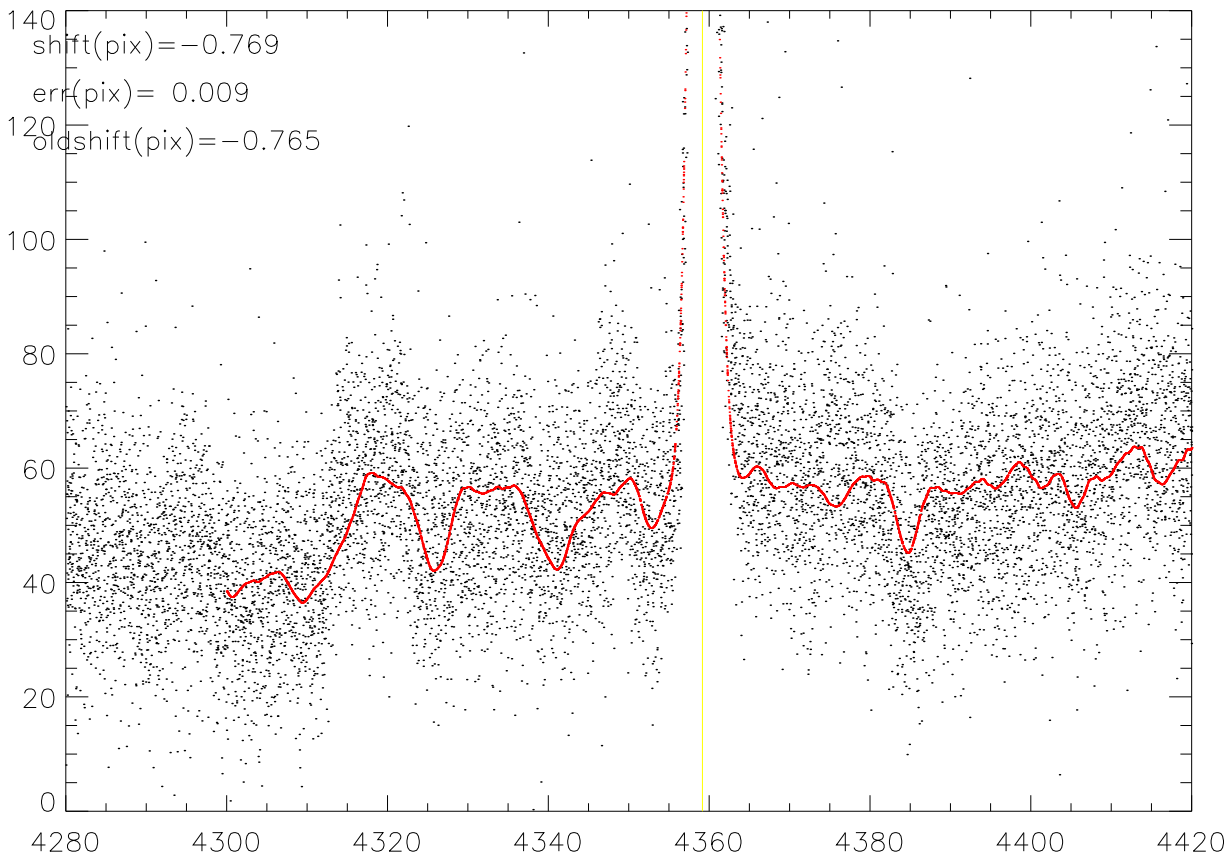

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051206.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6

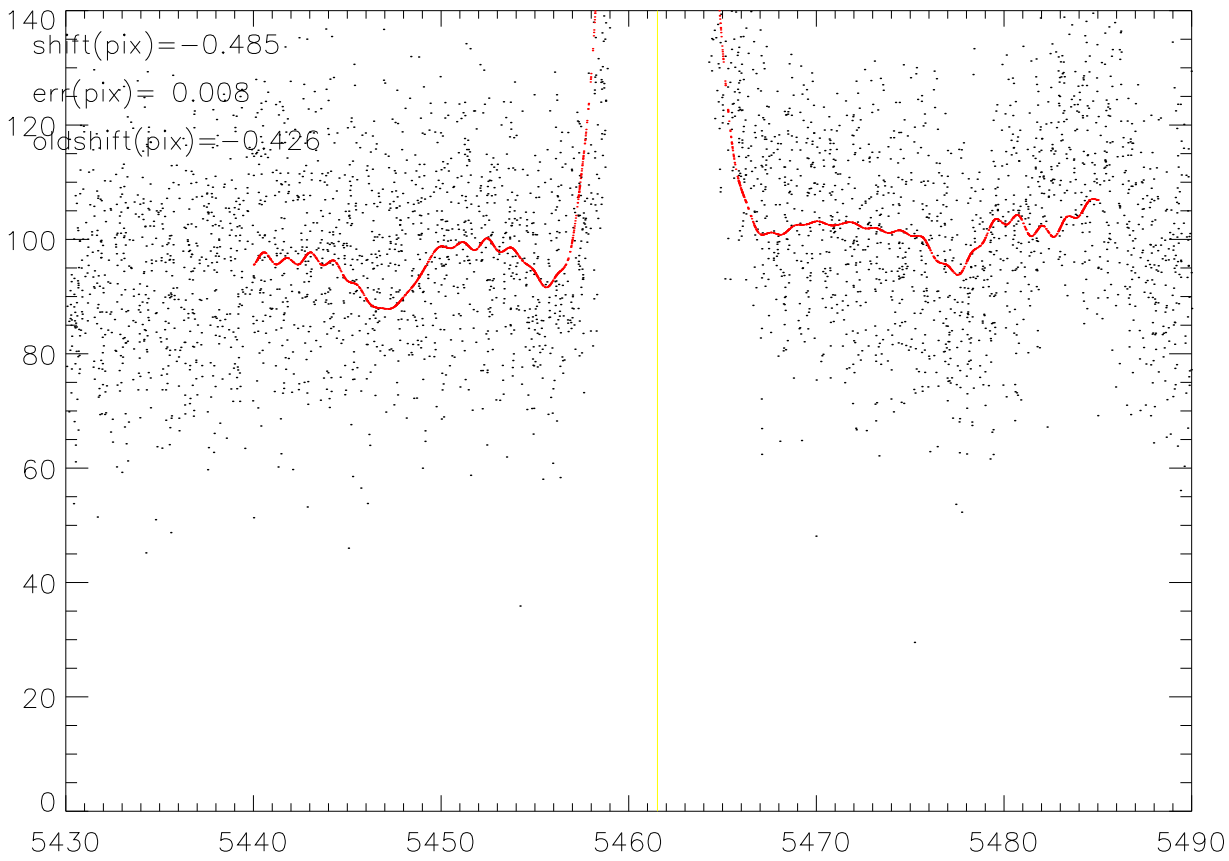

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051206.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.032
Max value = 8.818
Tue Mar 25 17:02:46 2008

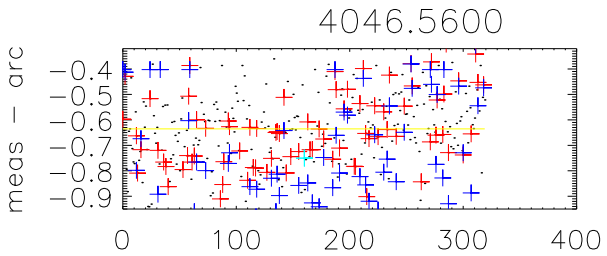

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−b1−00051206.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

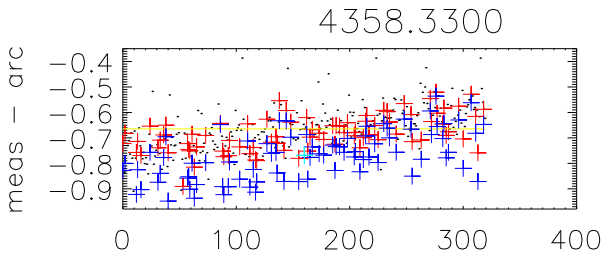

4046.5600
off: −0.82
sig: 0.023
4358.3300
off: −0.77
sig: 0.008
5460.9400
off: −0.43
sig: 0.007
5577.3390
off: −0.40
sig: 0.002
5889.9500
off: −0.19
sig: 0.005
5895.9240
off: −0.24
sig: 0.007

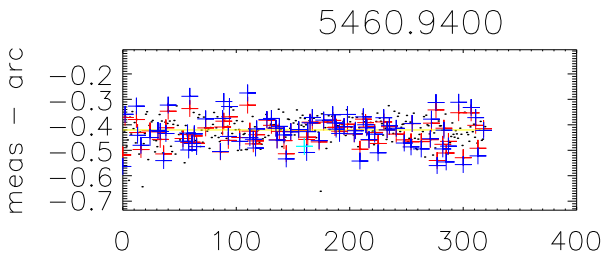

shift(pix)=−0.750
err(pix)= 0.027
oldshift(pix)=−0.825
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

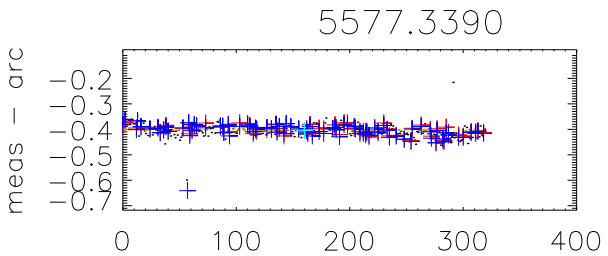

shift(pix)=−0.769
err(pix)= 0.009
oldshift(pix)=−0.765
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

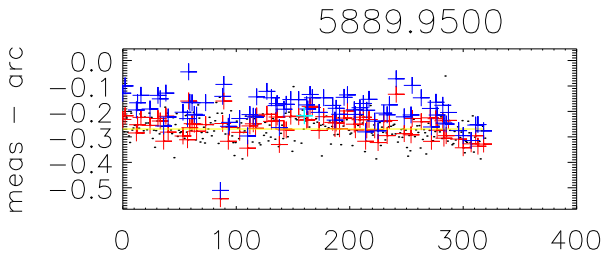

shift(pix)=−0.485
err(pix)= 0.008
oldshift(pix)=−0.426
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

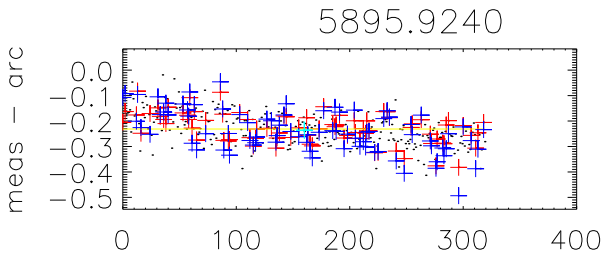

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

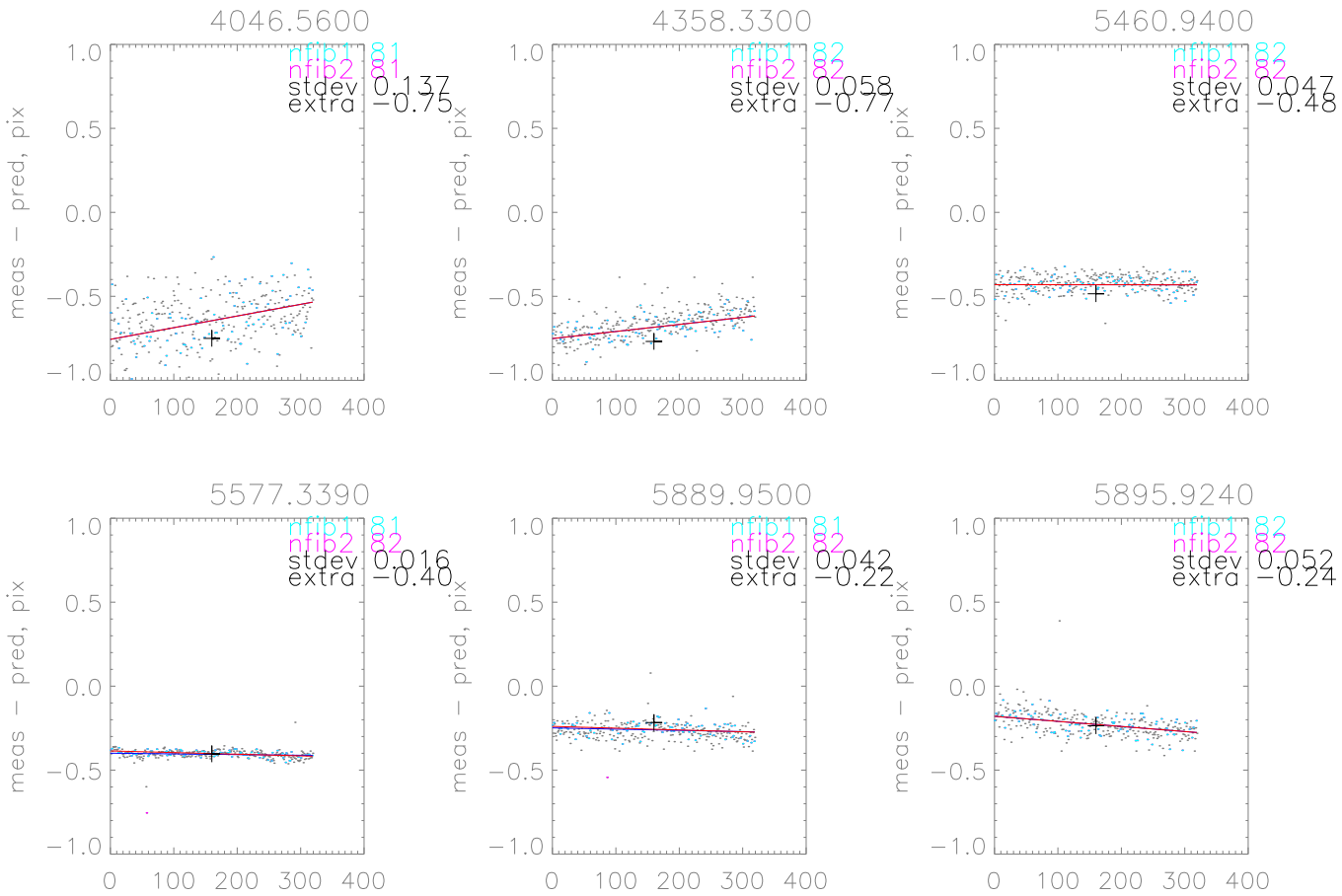

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

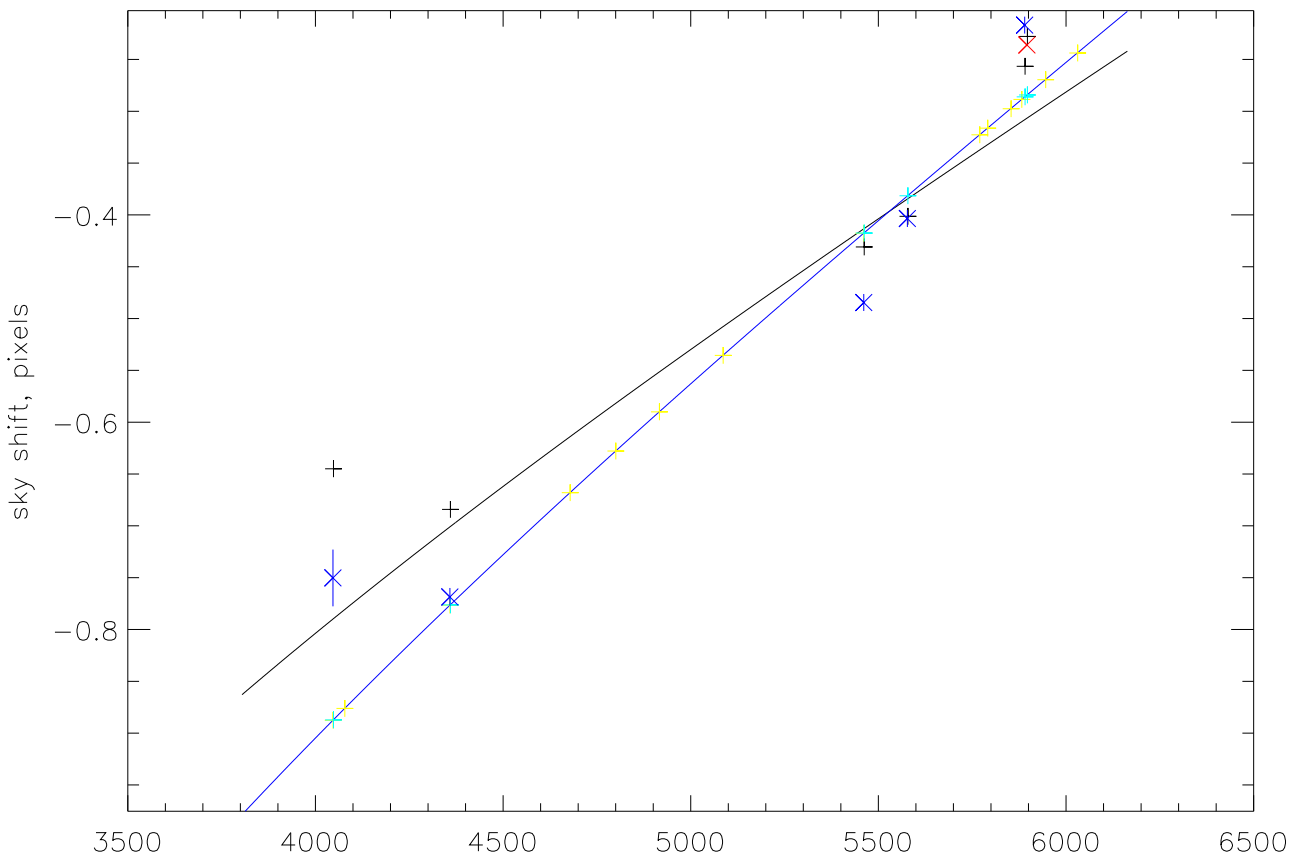

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

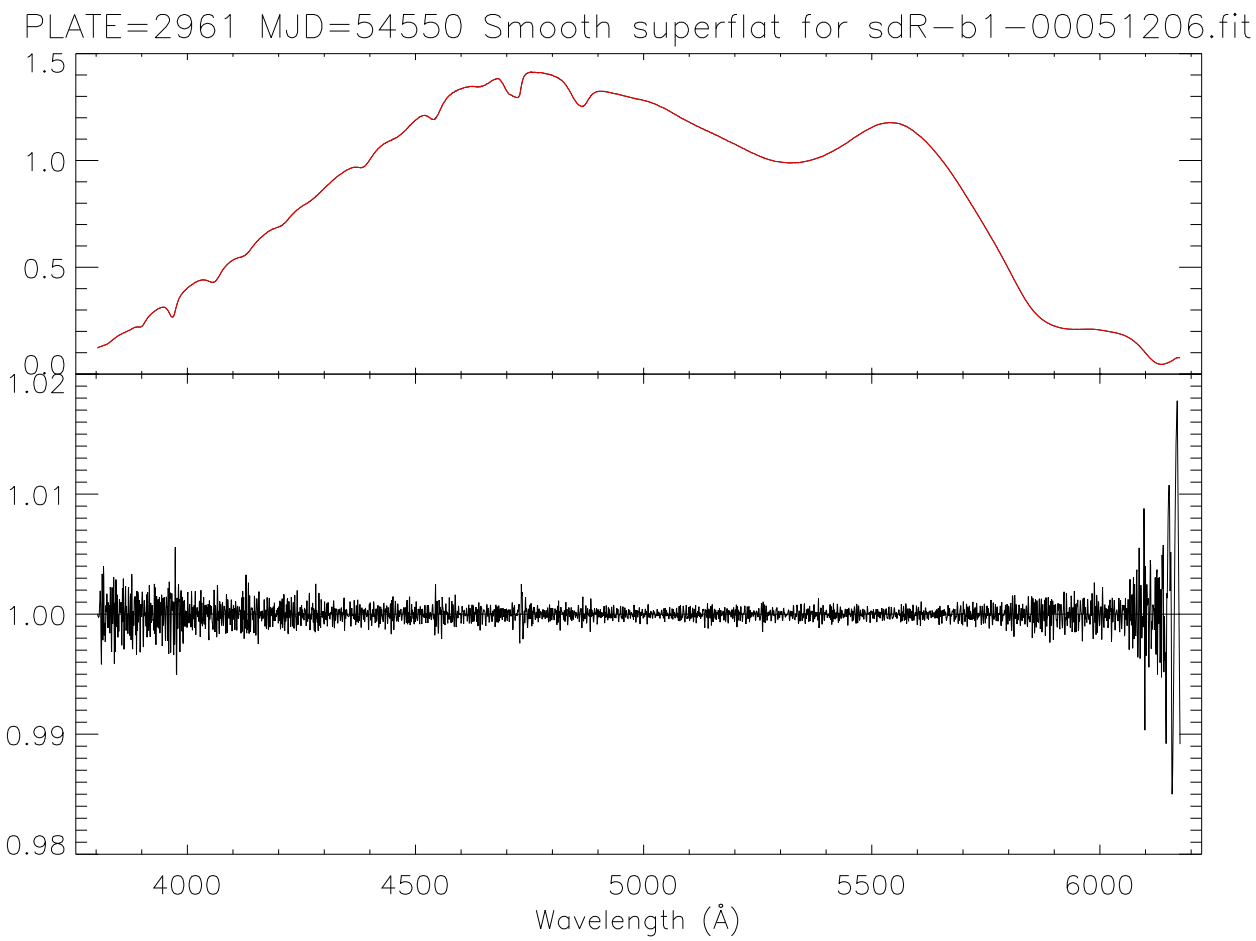

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

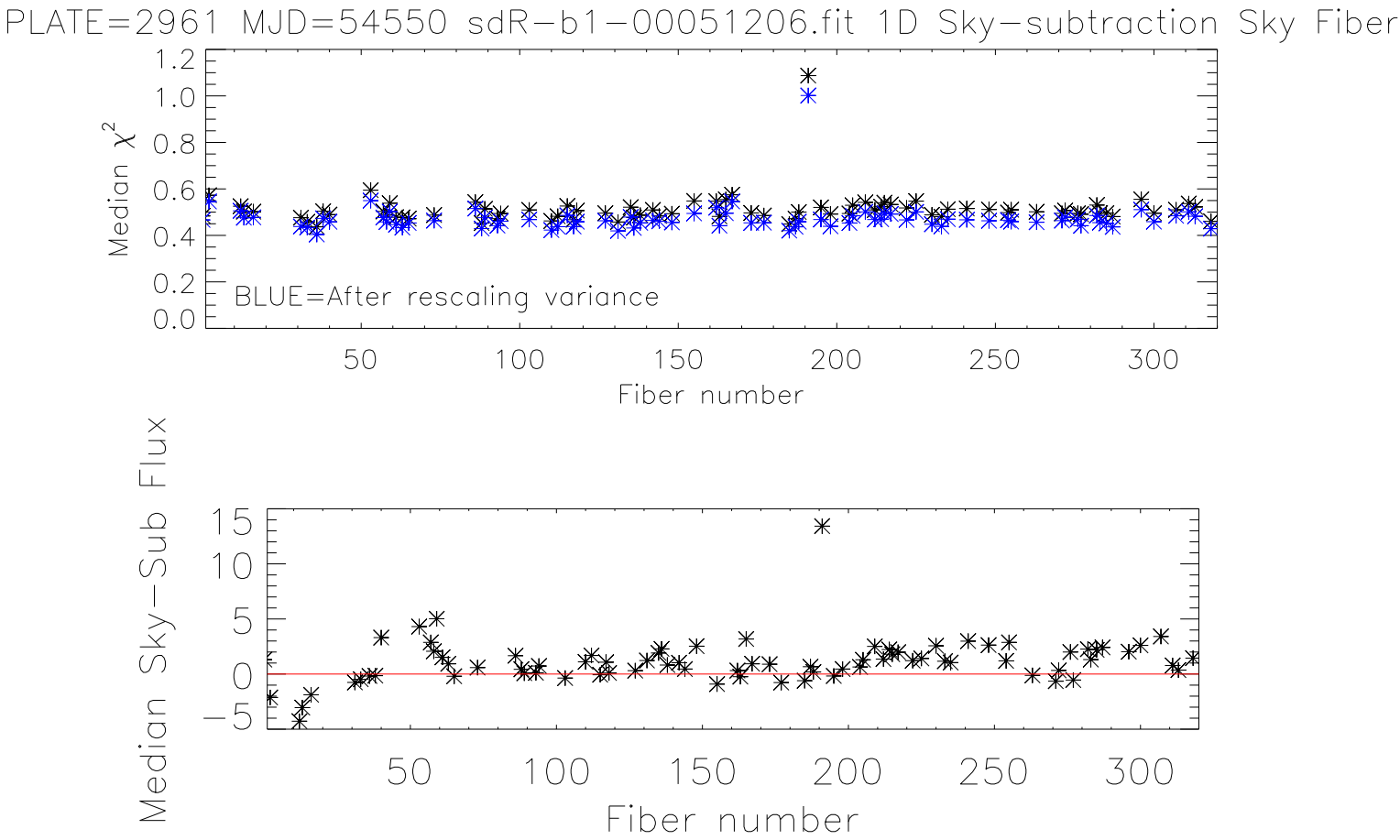

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

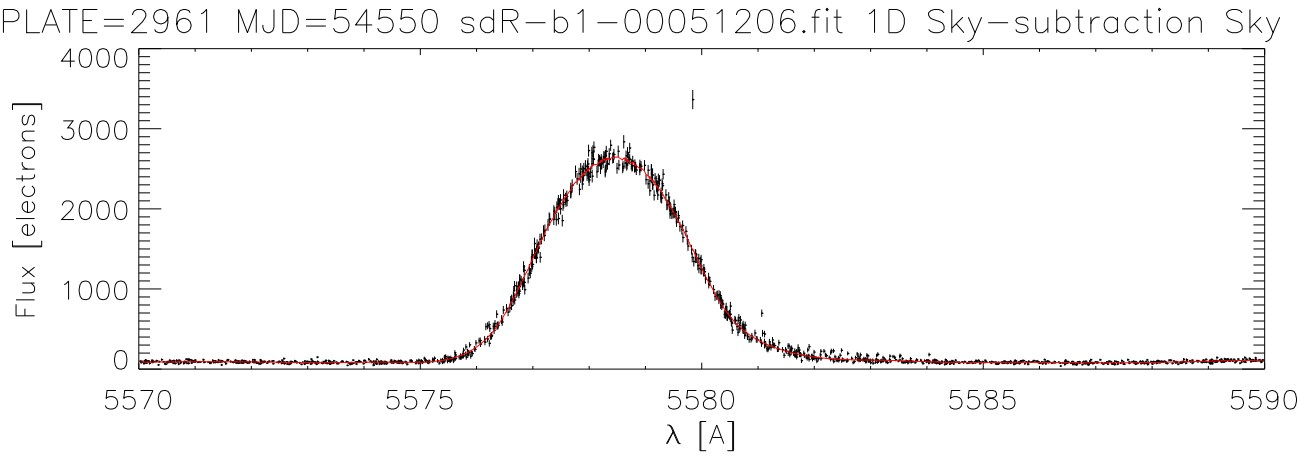

4046.5600
nfib1 81
nfib2 81
stdev 0.137
extra −0.75
4358.3300
nfib1 82
nfib2 82
stdev 0.058
extra −0.77
5460.9400
nfib1 82
nfib2 82
stdev 0.047
extra −0.48
5577.3390
nfib1 81
nfib2 82
stdev 0.016
extra −0.40
5889.9500
nfib1 81
nfib2 82
stdev 0.042
extra −0.22
5895.9240
nfib1 82
nfib2 82
stdev 0.052
extra −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

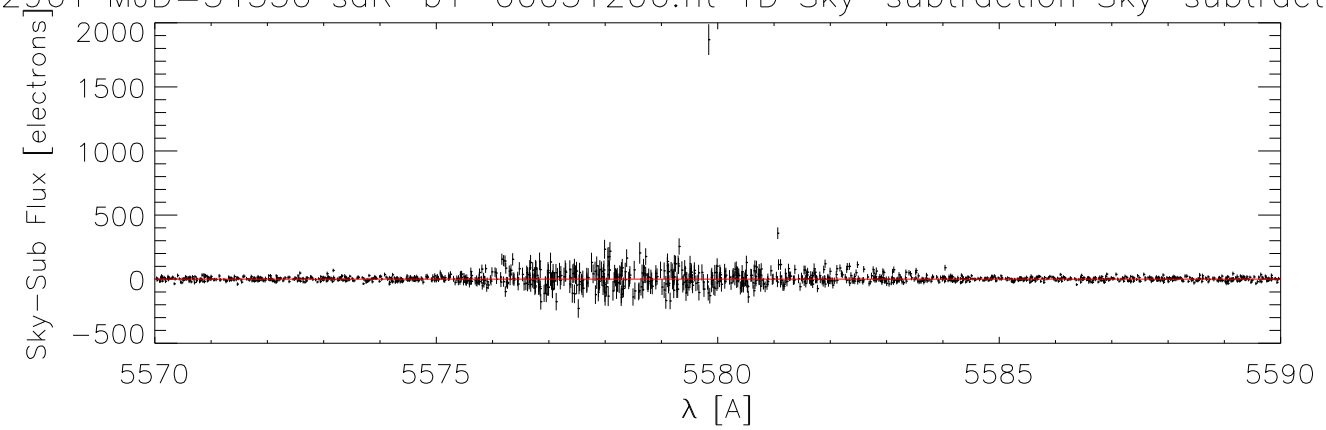

sky shift, pixels
−0.4
−0.6
−0.8
3500
4000
4500
5000
5500
6000
6500

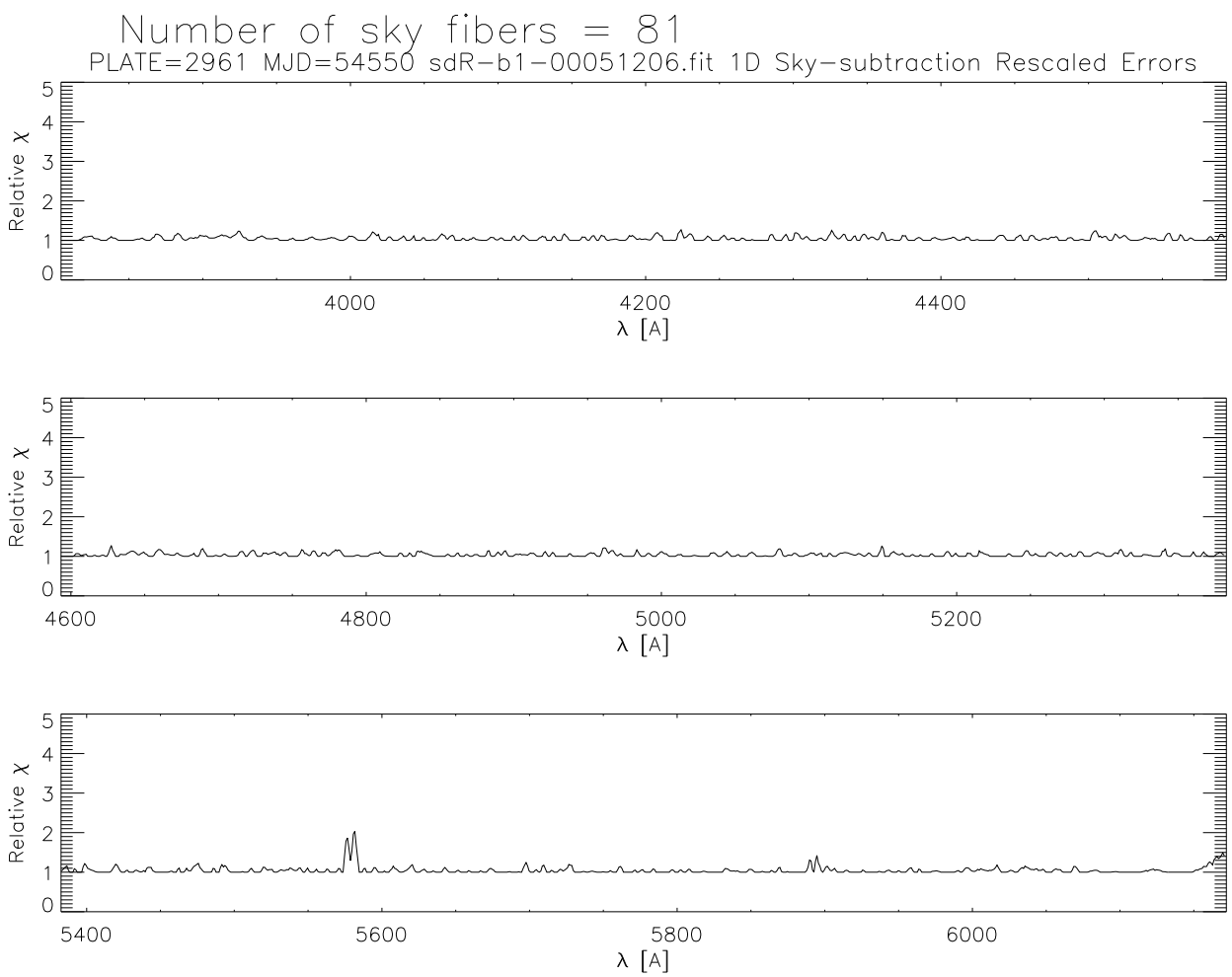
es= 0.0000

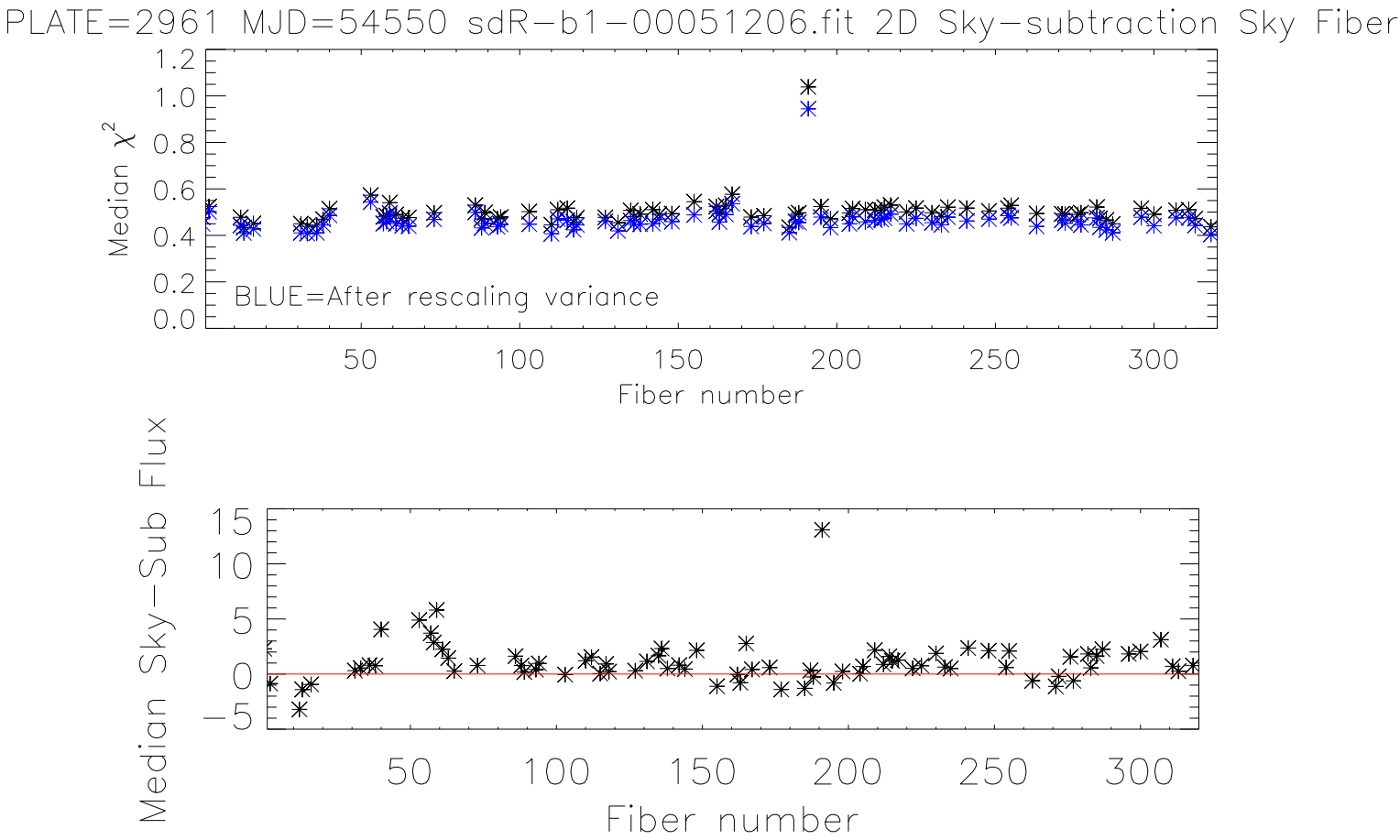

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051206.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

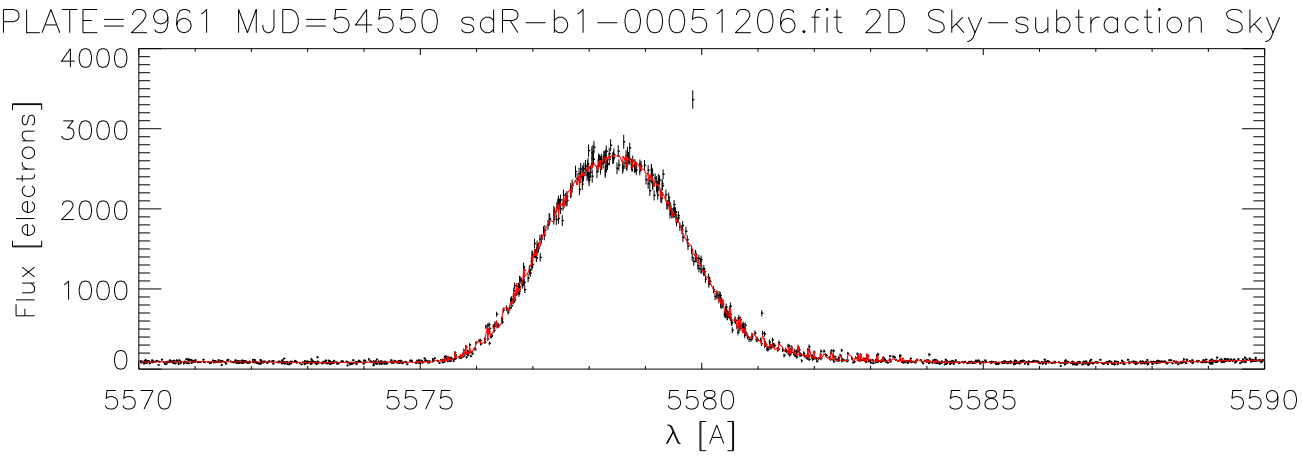

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

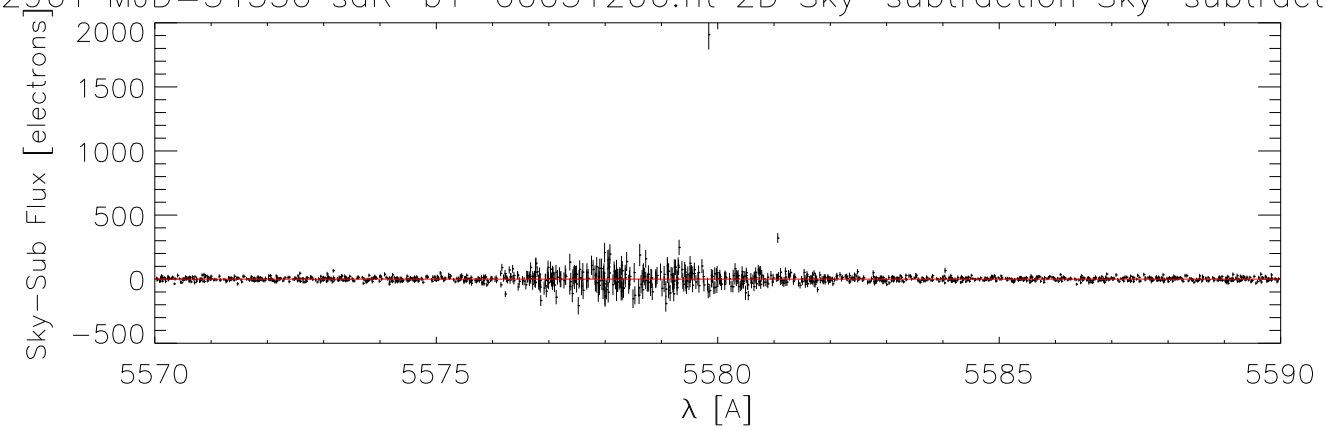

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

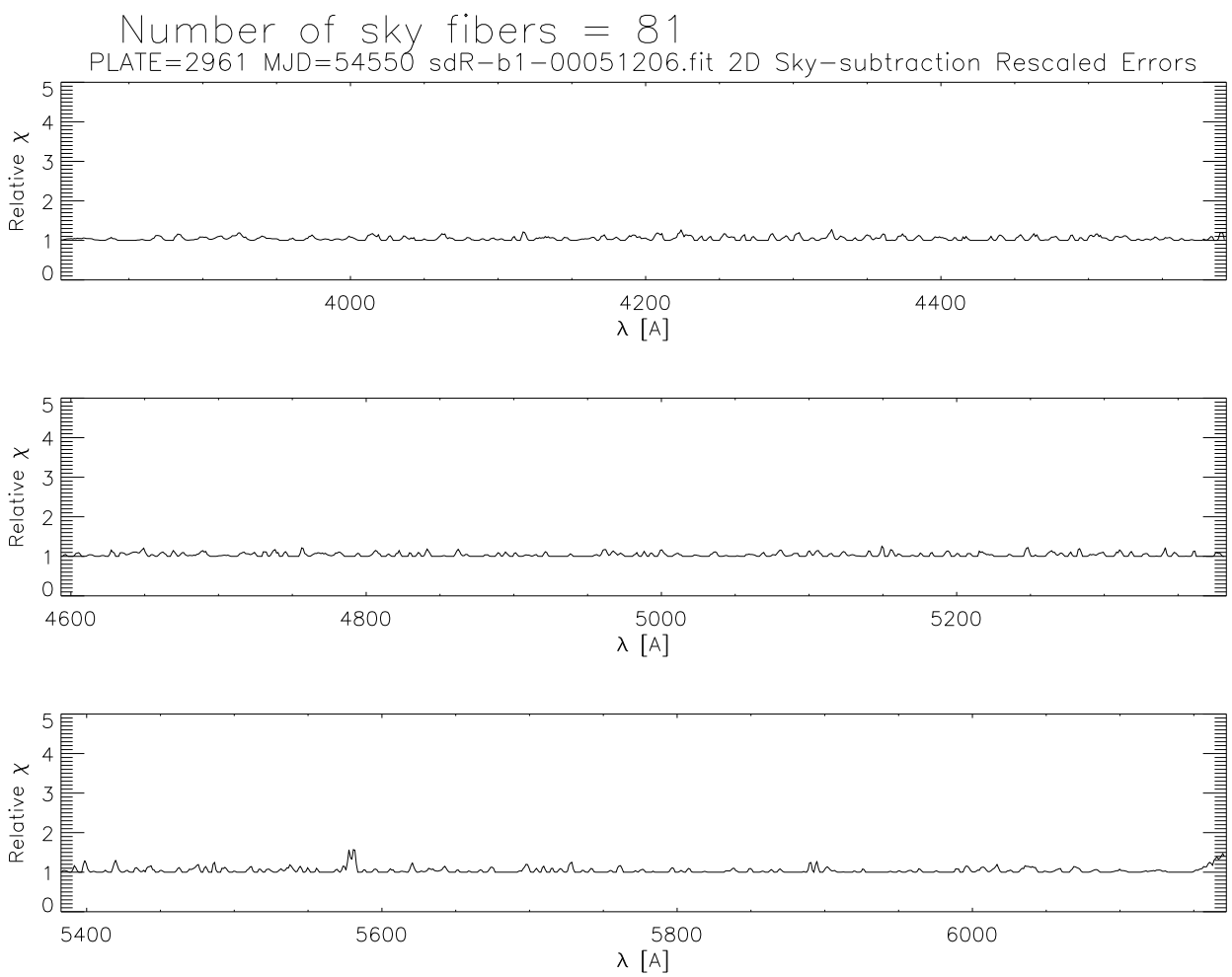

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

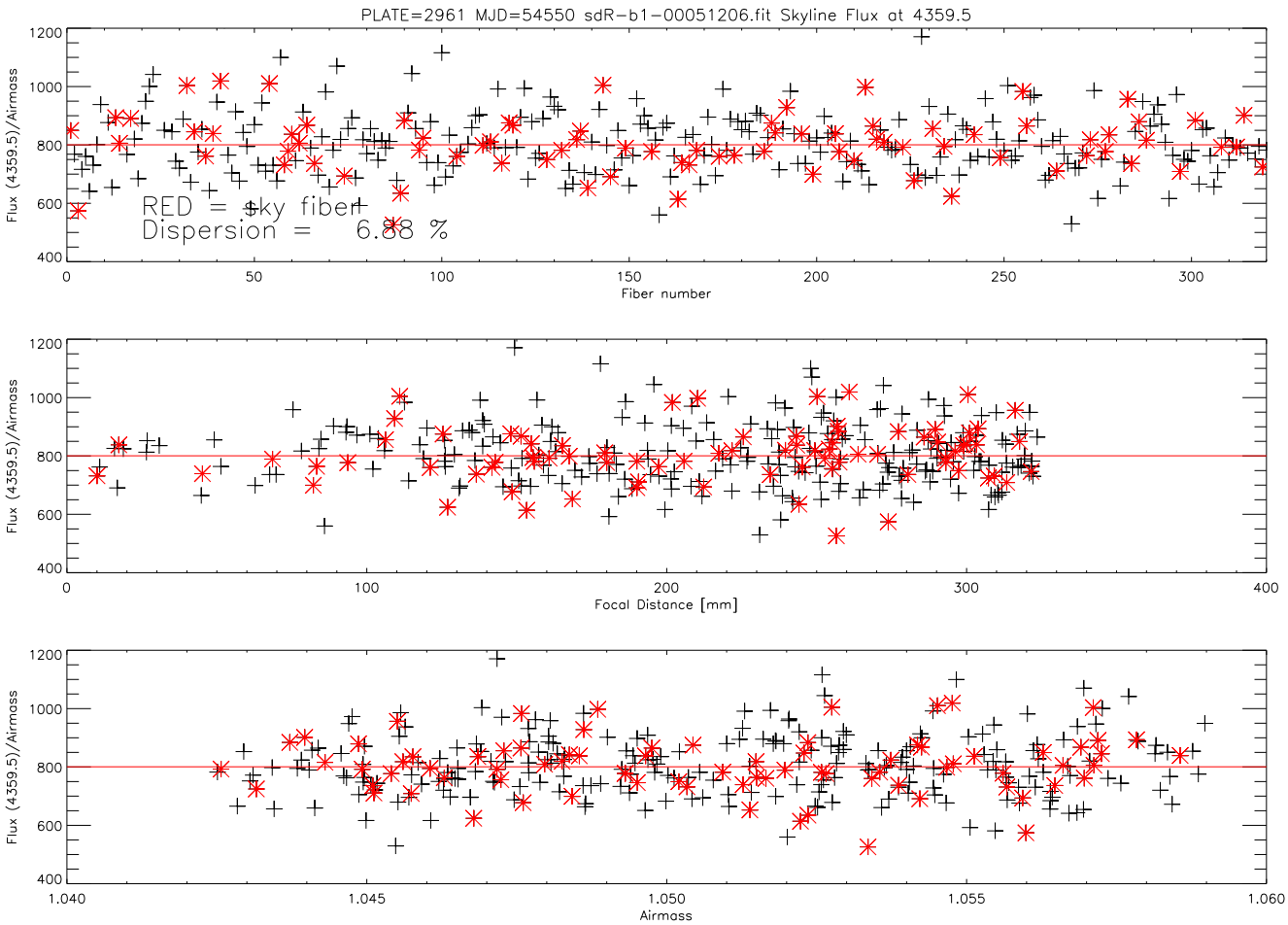

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051206.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

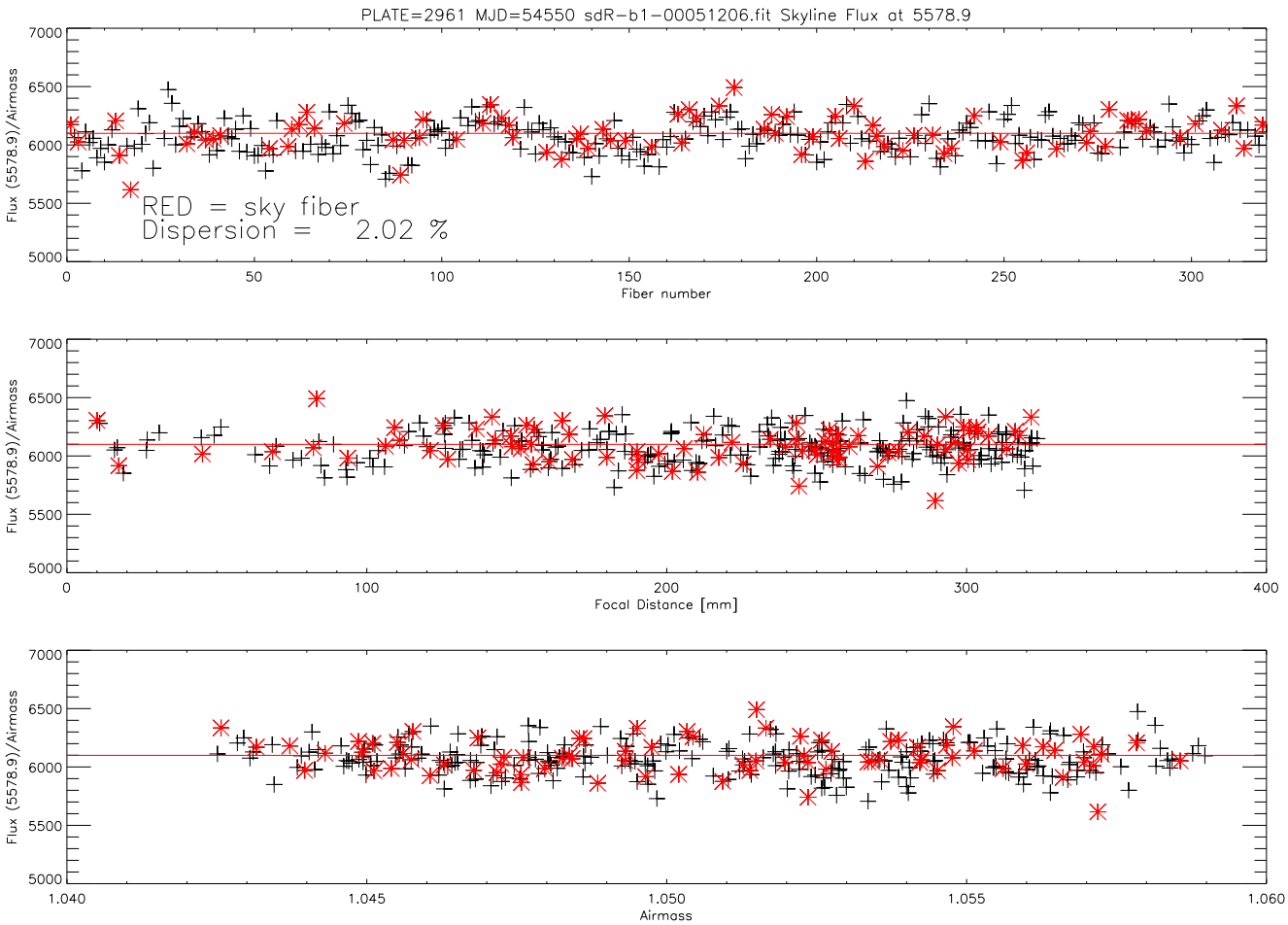

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

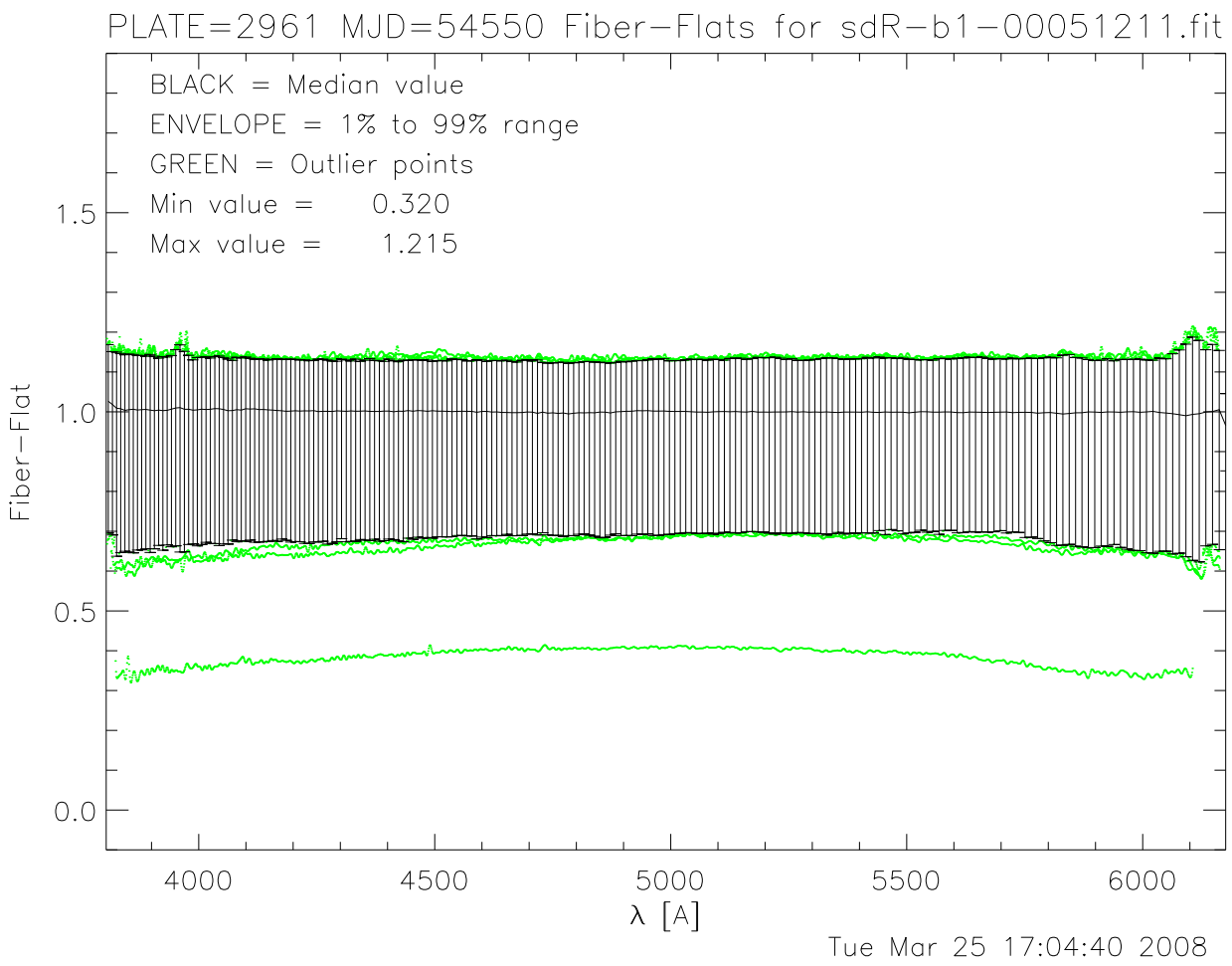

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

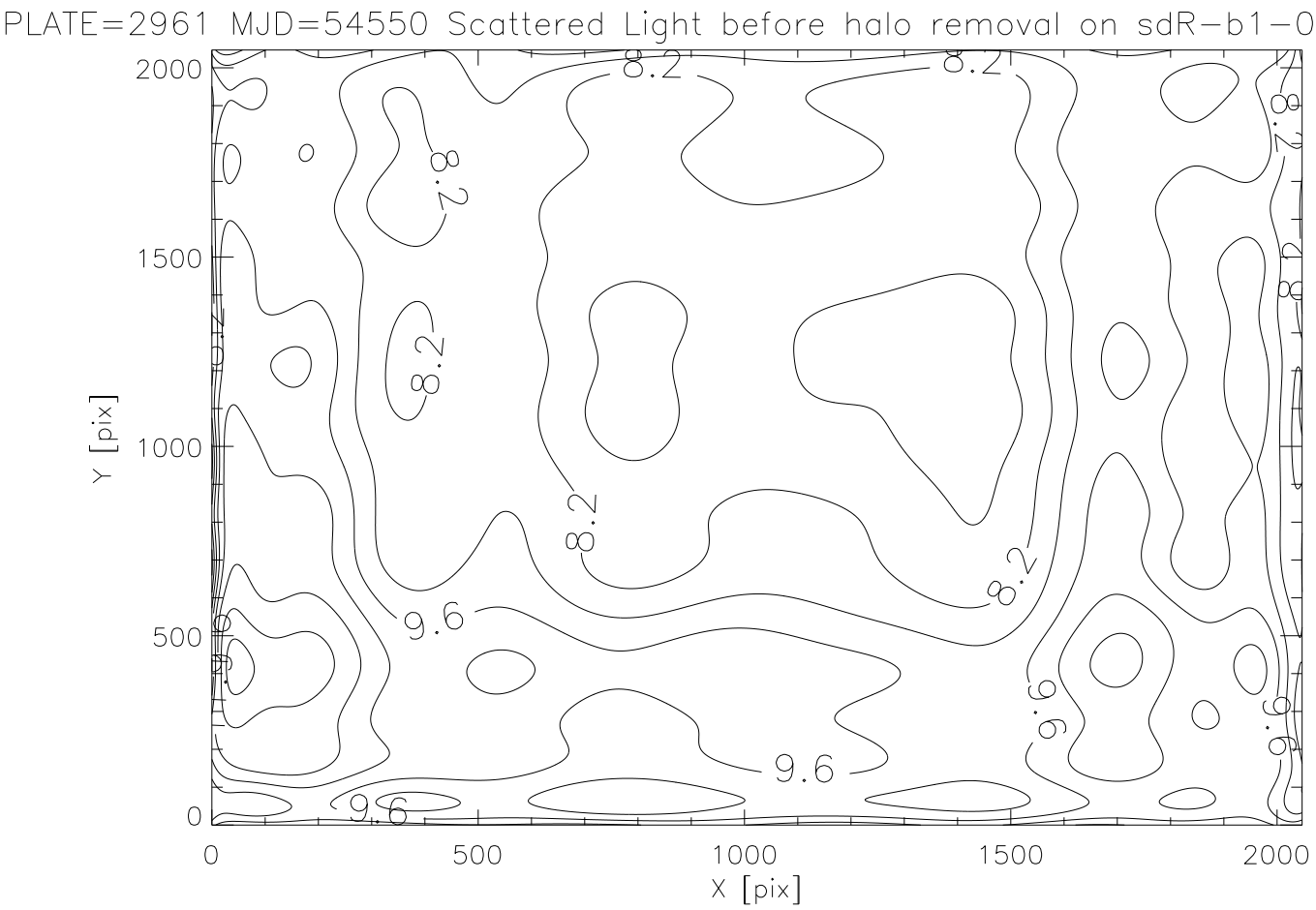

PLATE=2961 MJD=54550 sdR-b1-00051206.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

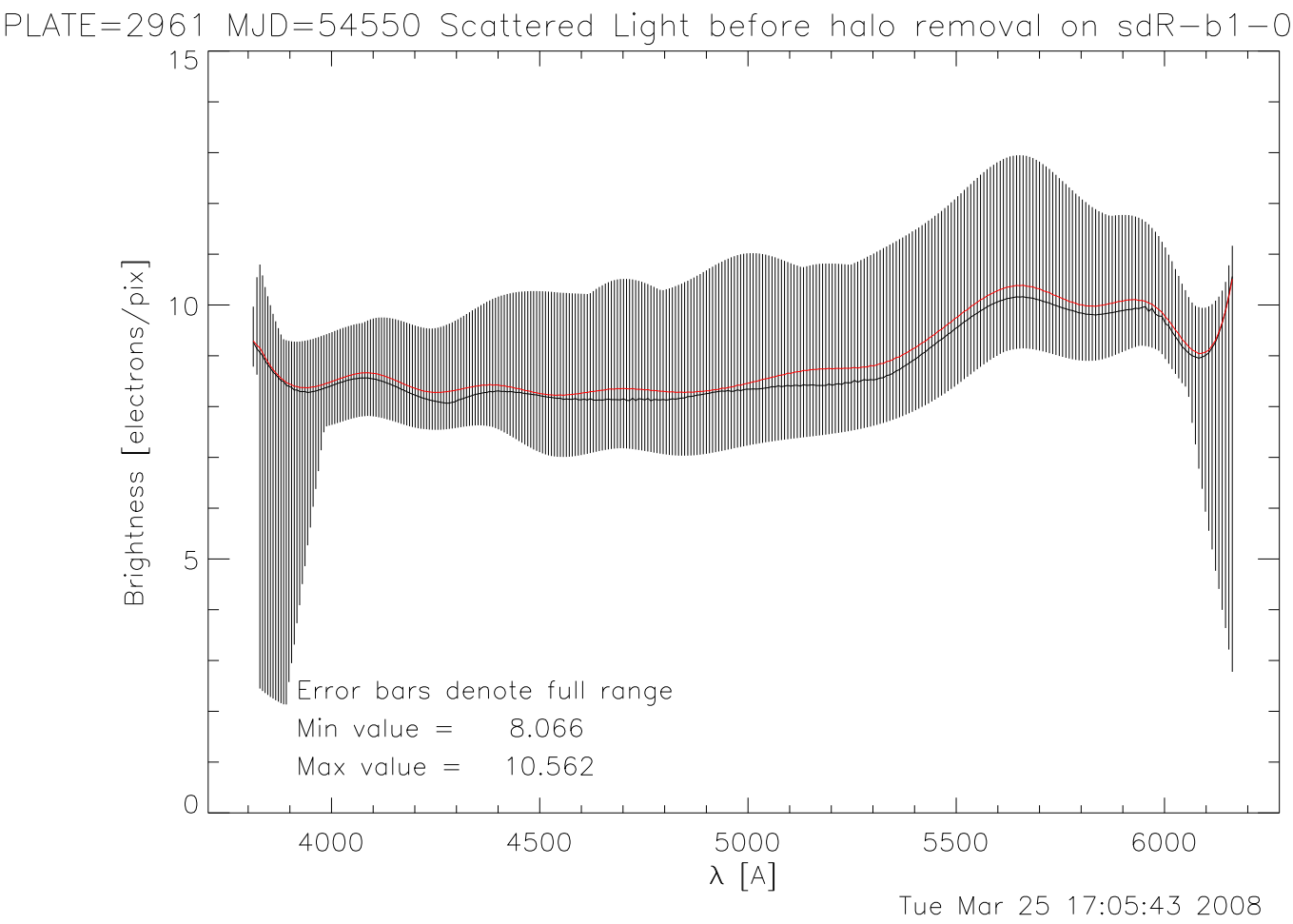

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051206.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

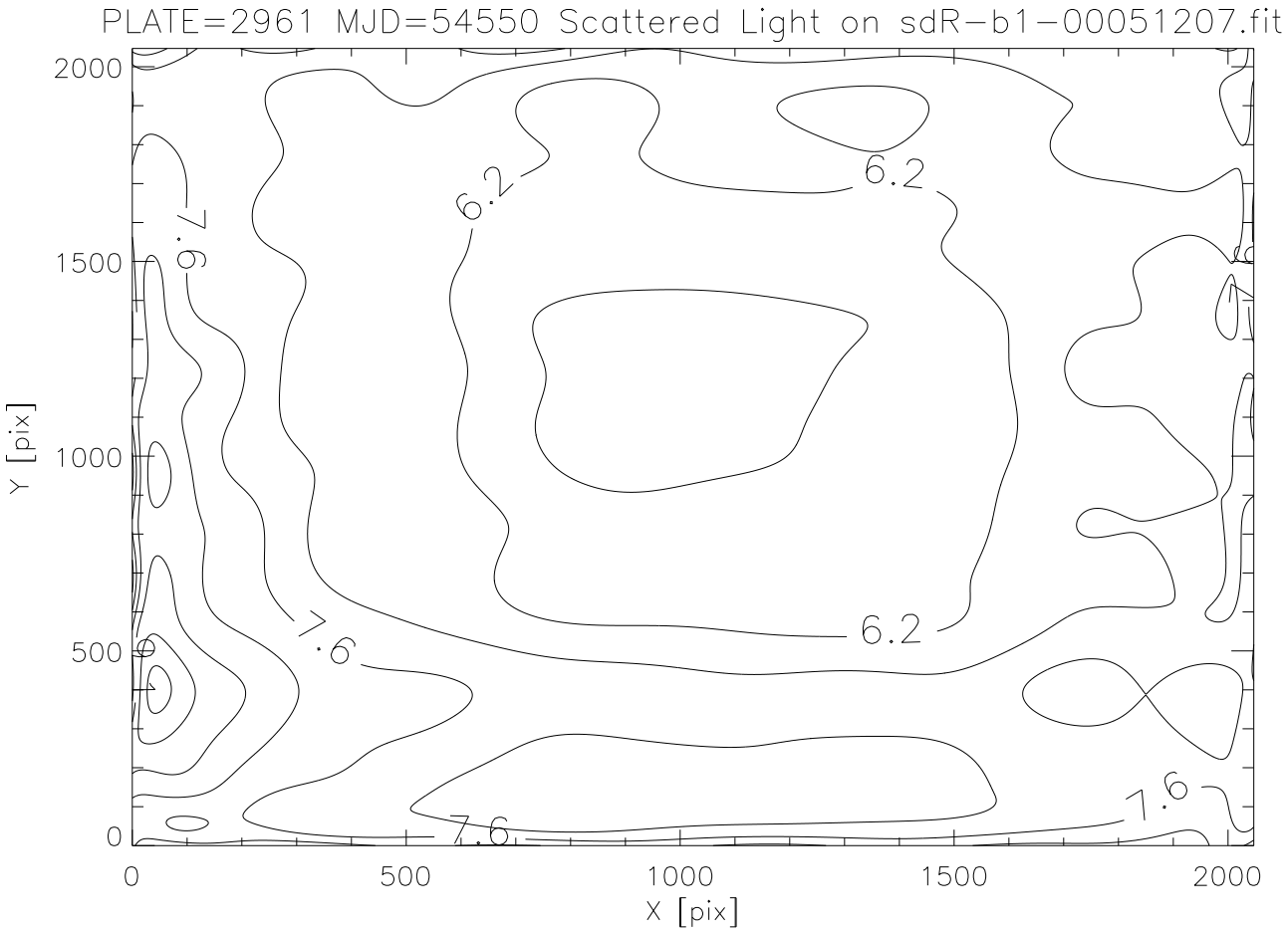

PLATE=2961 MJD=54550 sdR-b1-00051206.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.88 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

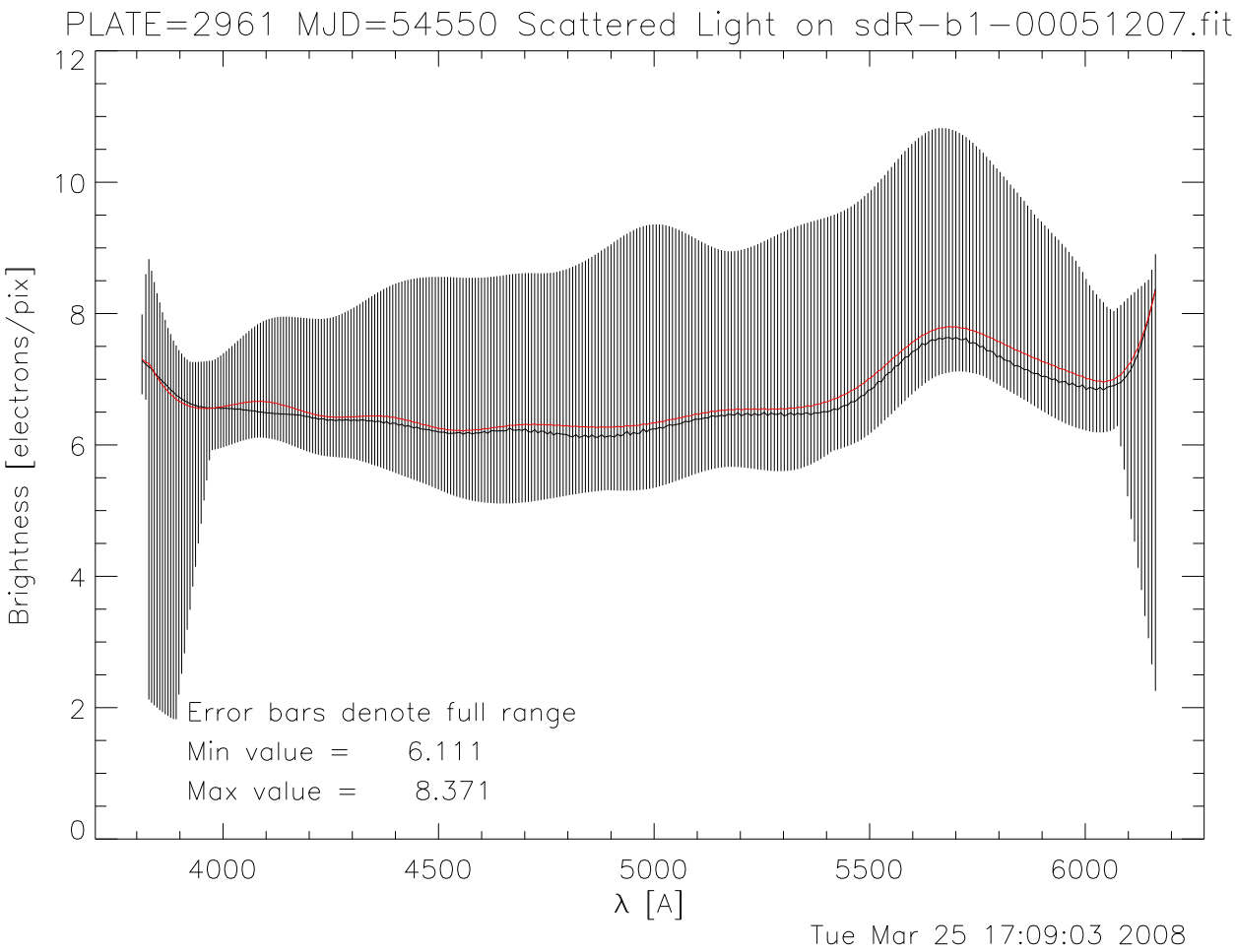

PLATE=2961 MJD=54550 sdR-b1-00051206.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.02 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

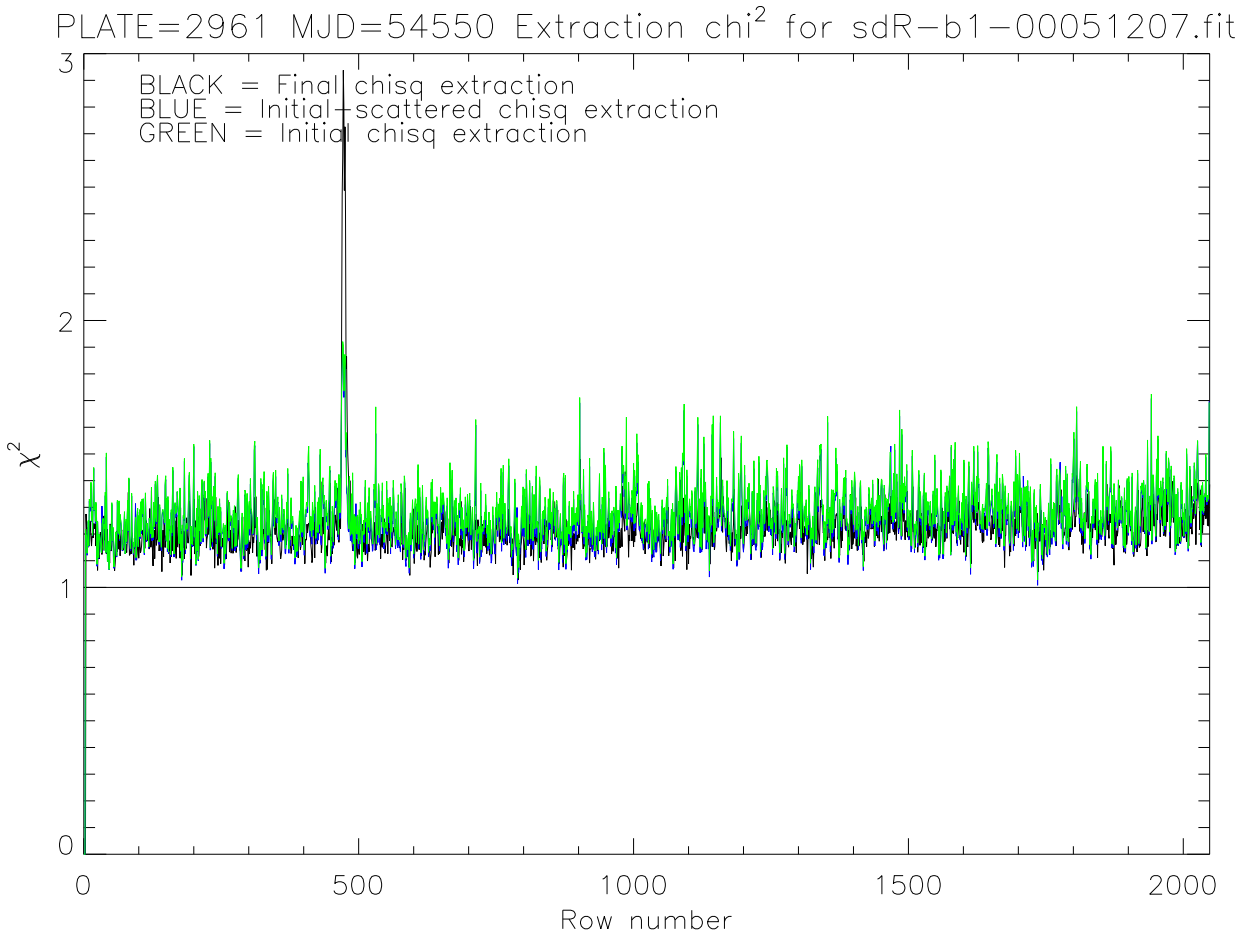

PLATE=2961 MJD=54550 Fiber−Flats for sdR−b1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:04:40 2008

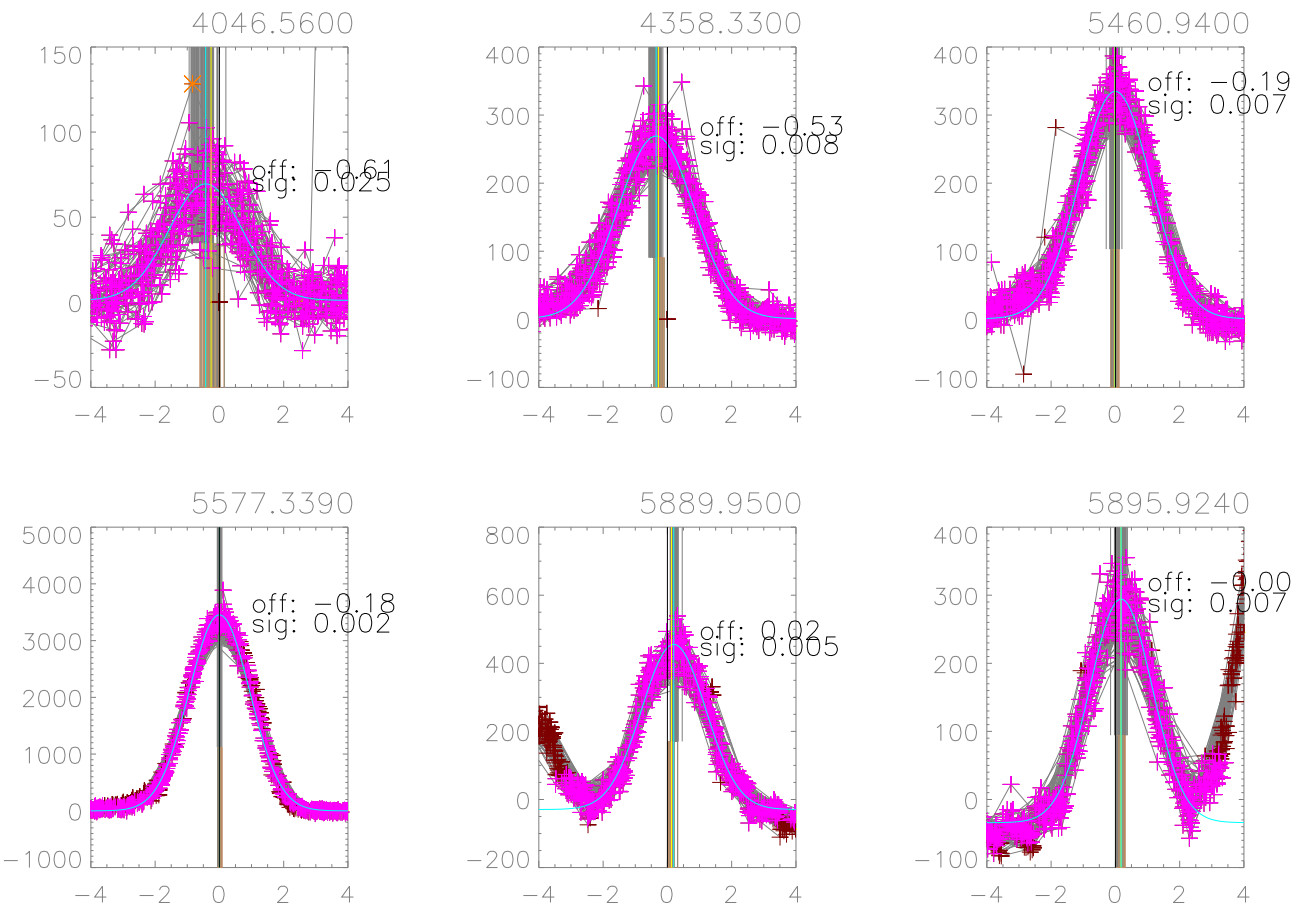

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051207.f
8.2
9.6
Y [pix]
X [pix]
0
500
1000
1500
2000

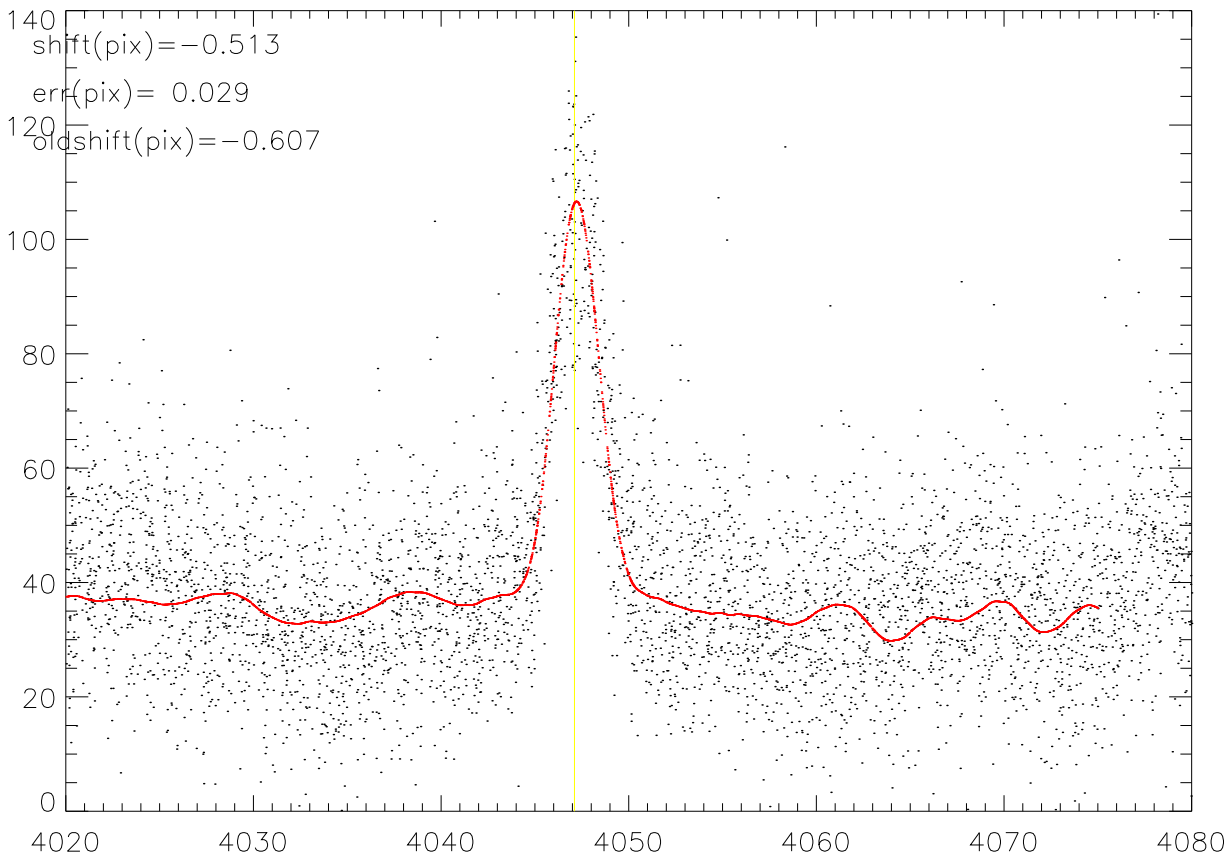

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051207.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.066
Max value = 10.562
Tue Mar 25 17:05:43 2008

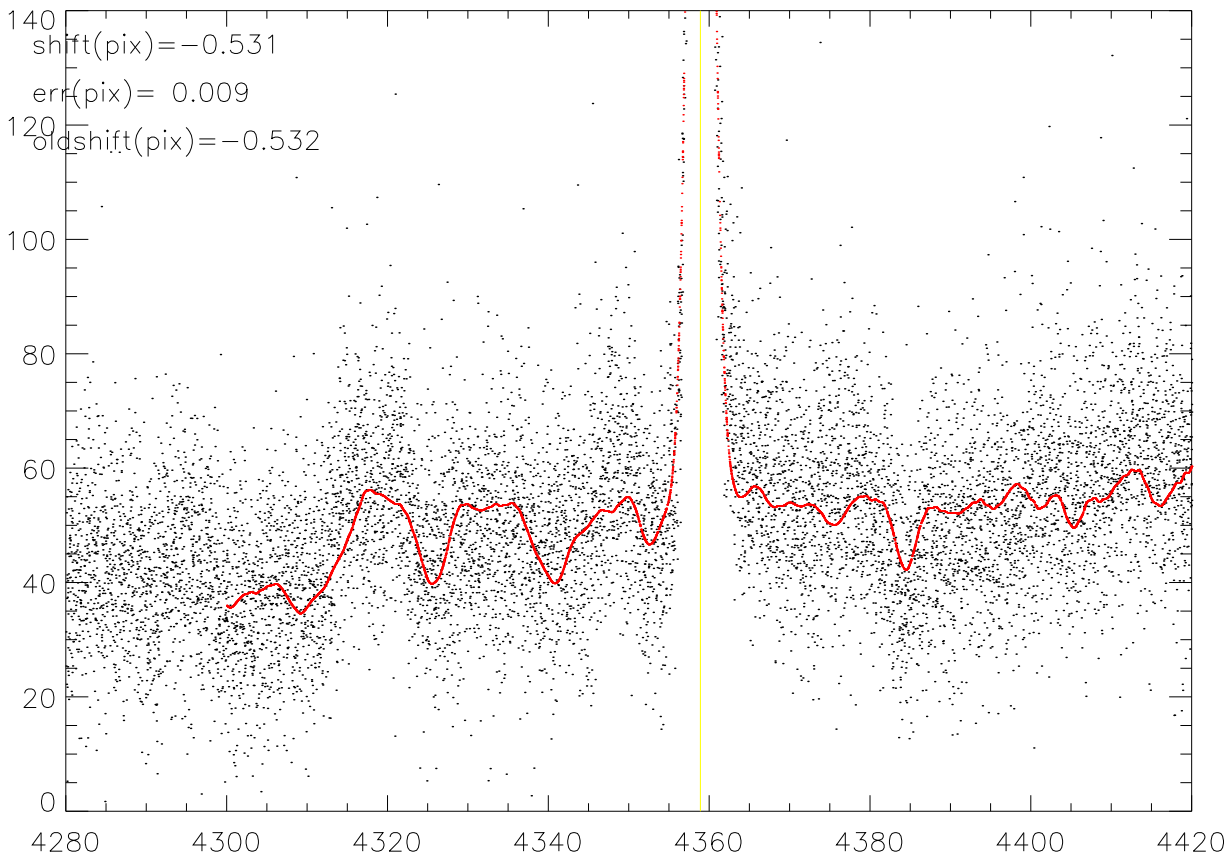

PLATE=2961 MJD=54550 Scattered Light on sdR−b1−00051207.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.2
6.2
6.2
7.6
7.6
7.6
7.6

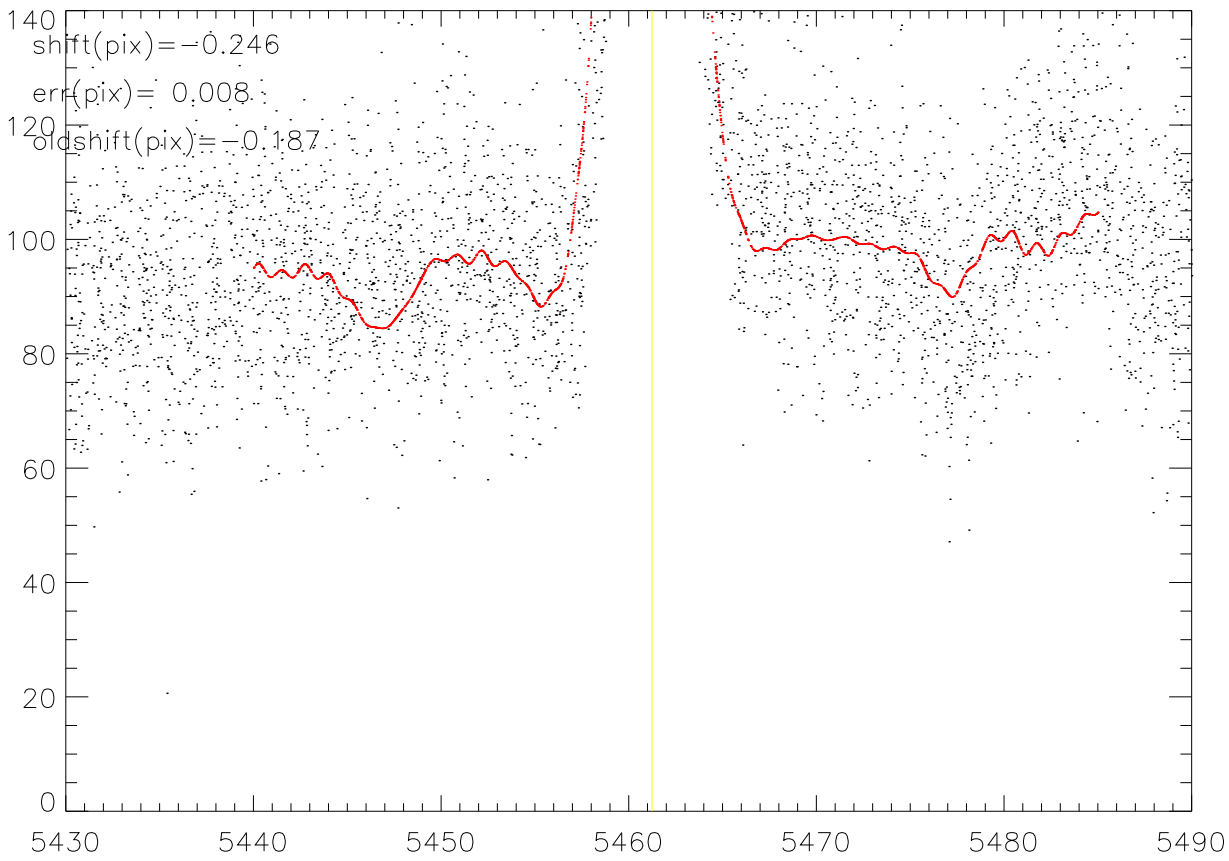

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051207.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.111
Max value = 8.371
Tue Mar 25 17:09:03 2008

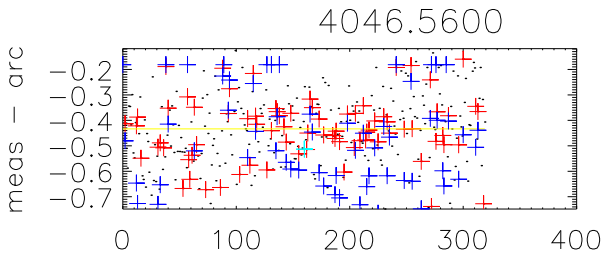

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b1-00051207.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

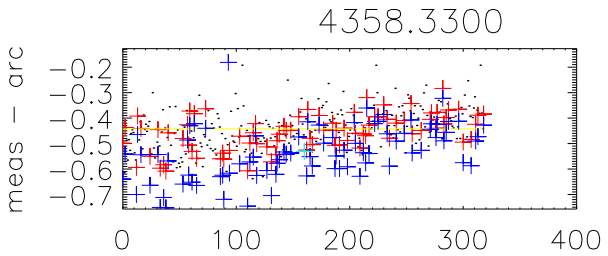

4046.5600
off: −0.61
sig: 0.025
4358.3300
off: −0.53
sig: 0.008
5460.9400
off: −0.19
sig: 0.007
5577.3390
off: −0.18
sig: 0.002
5889.9500
off: 0.02
sig: 0.005
5895.9240
off: −0.00
sig: 0.007

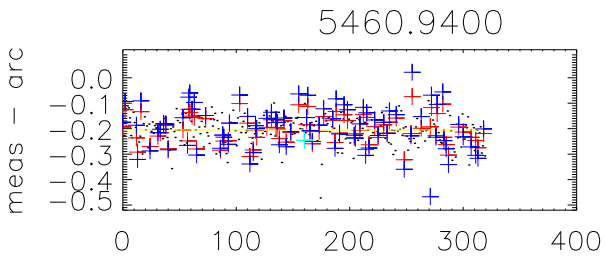

shift(pix)=−0.513
err(pix)= 0.029
oldshift(pix)=−0.607
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

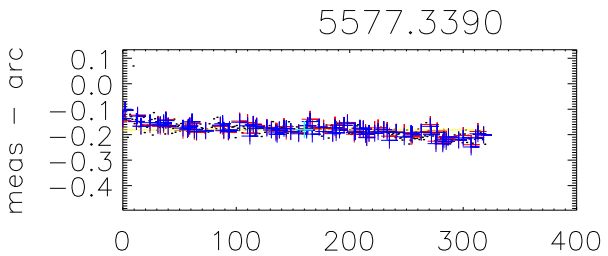

shift(pix)=−0.531
err(pix)= 0.009
oldshift(pix)=−0.532
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

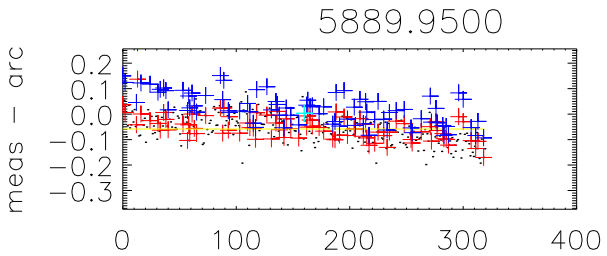

shift(pix)=−0.246
err(pix)= 0.008
oldshift(pix)=−0.187
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

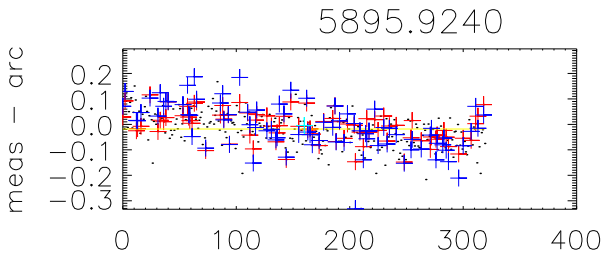

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

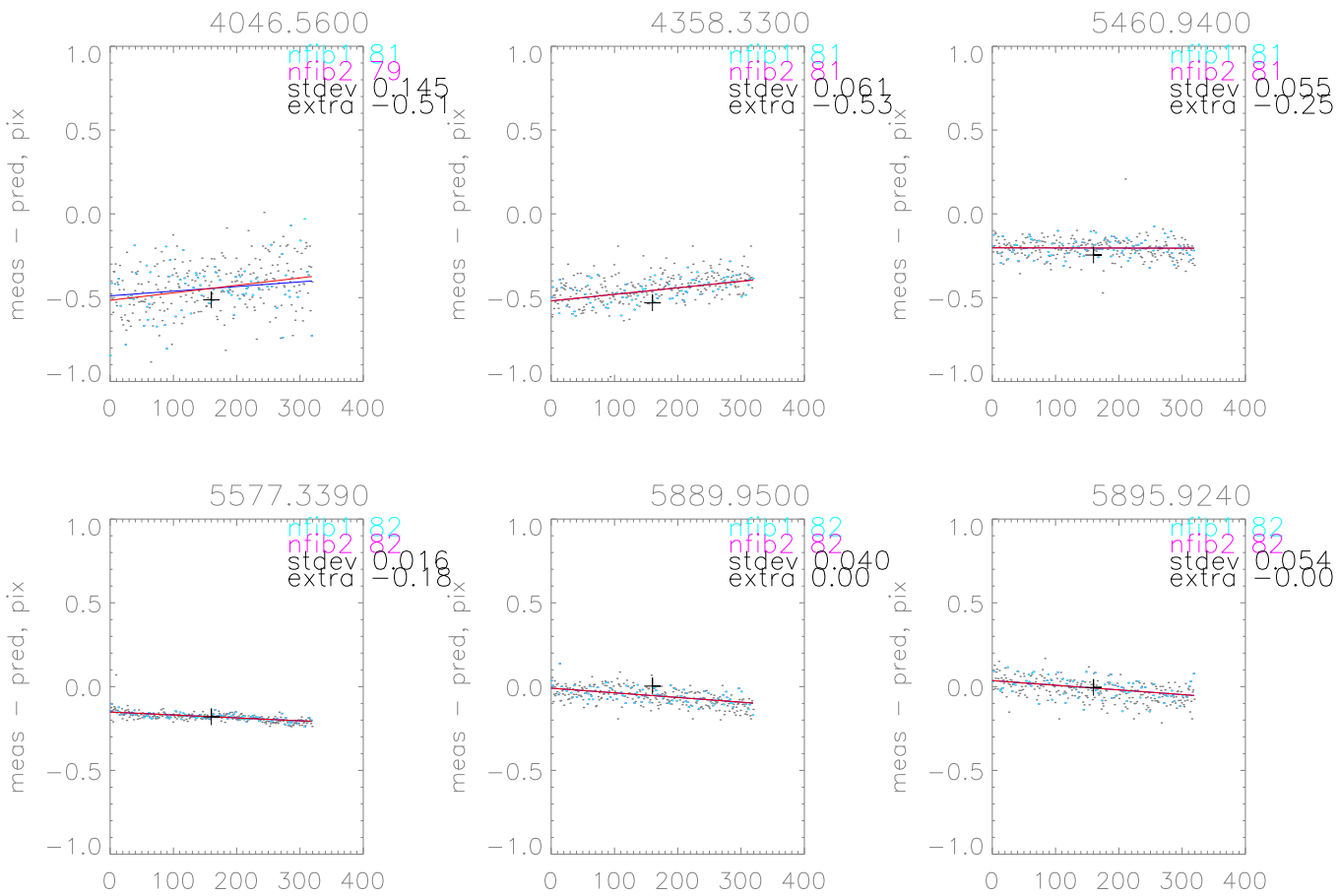

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

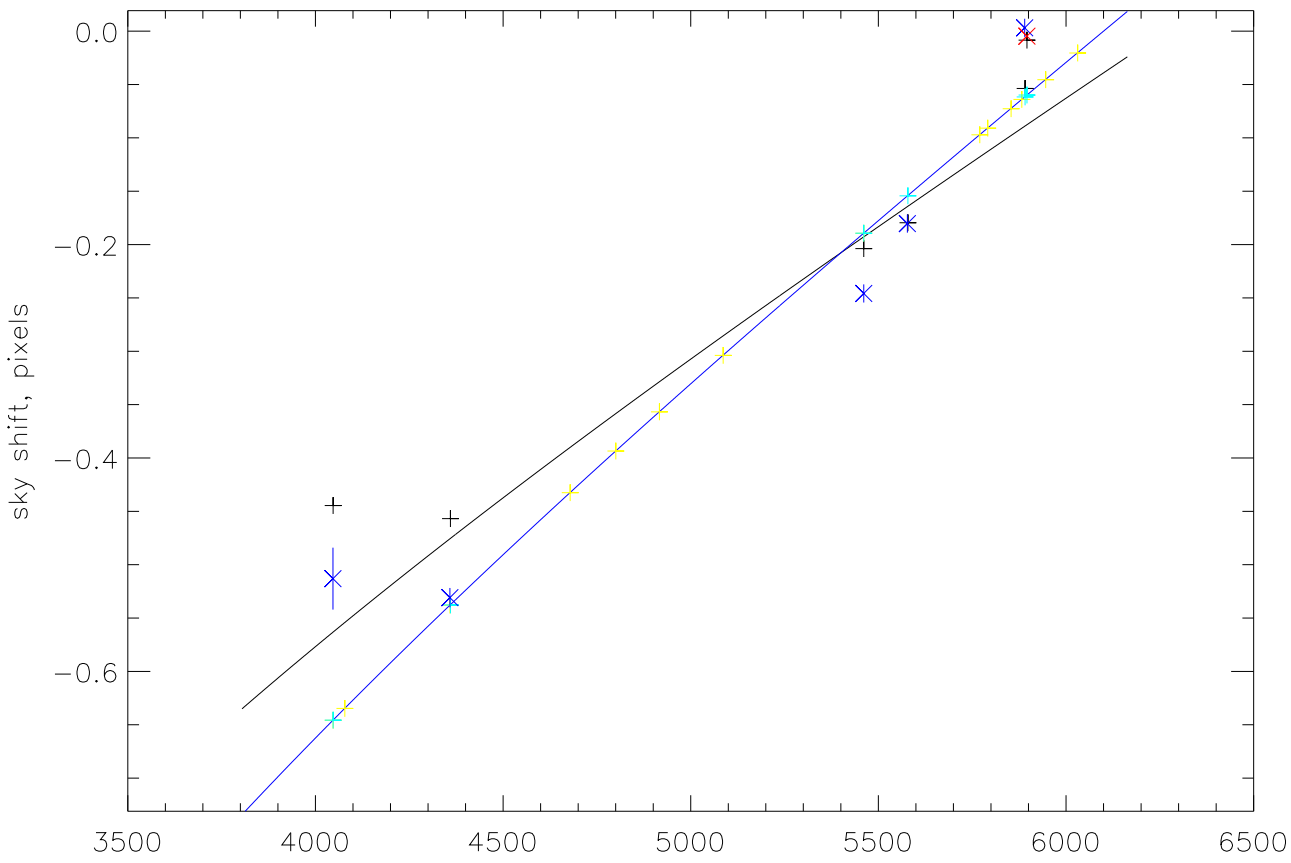

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

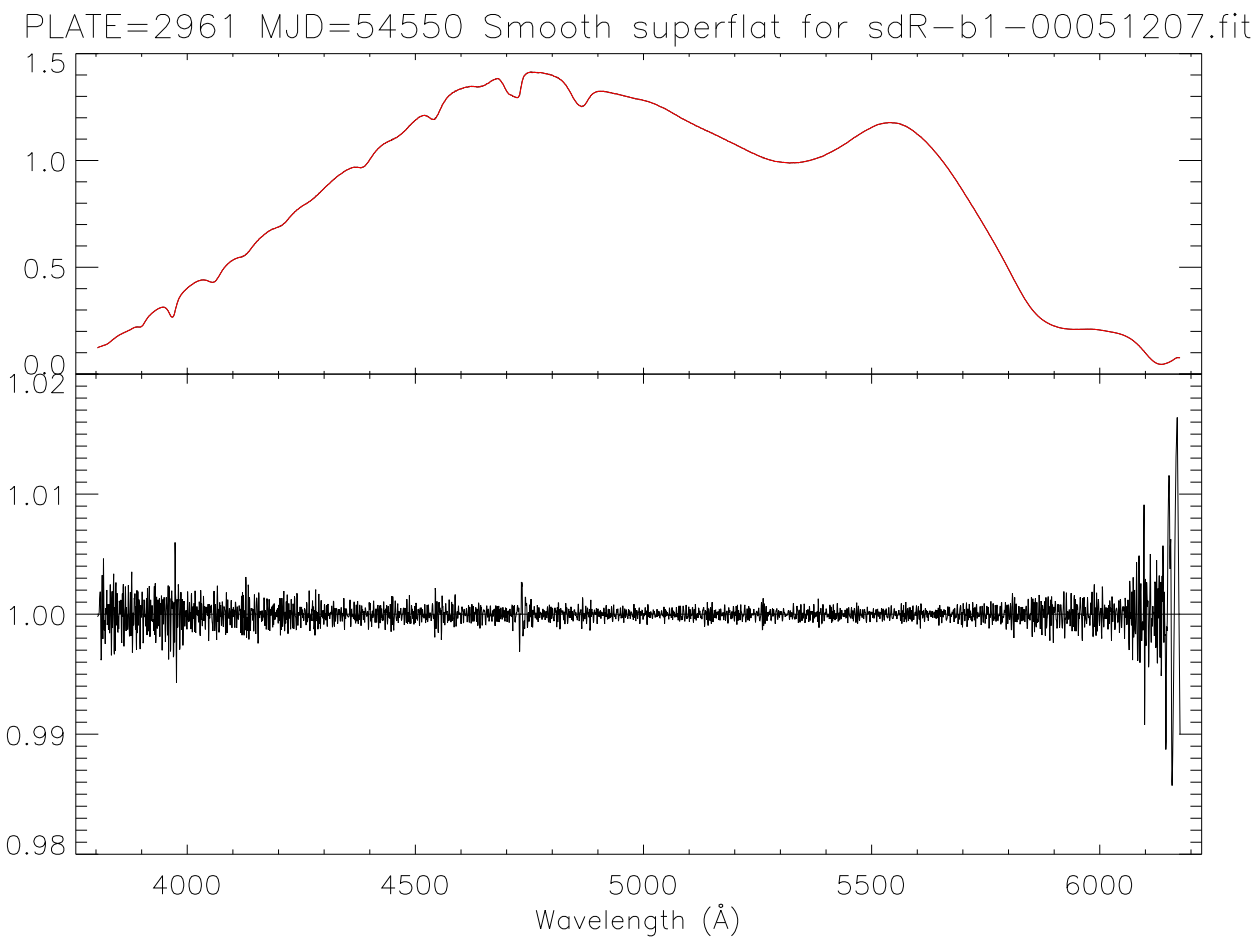

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

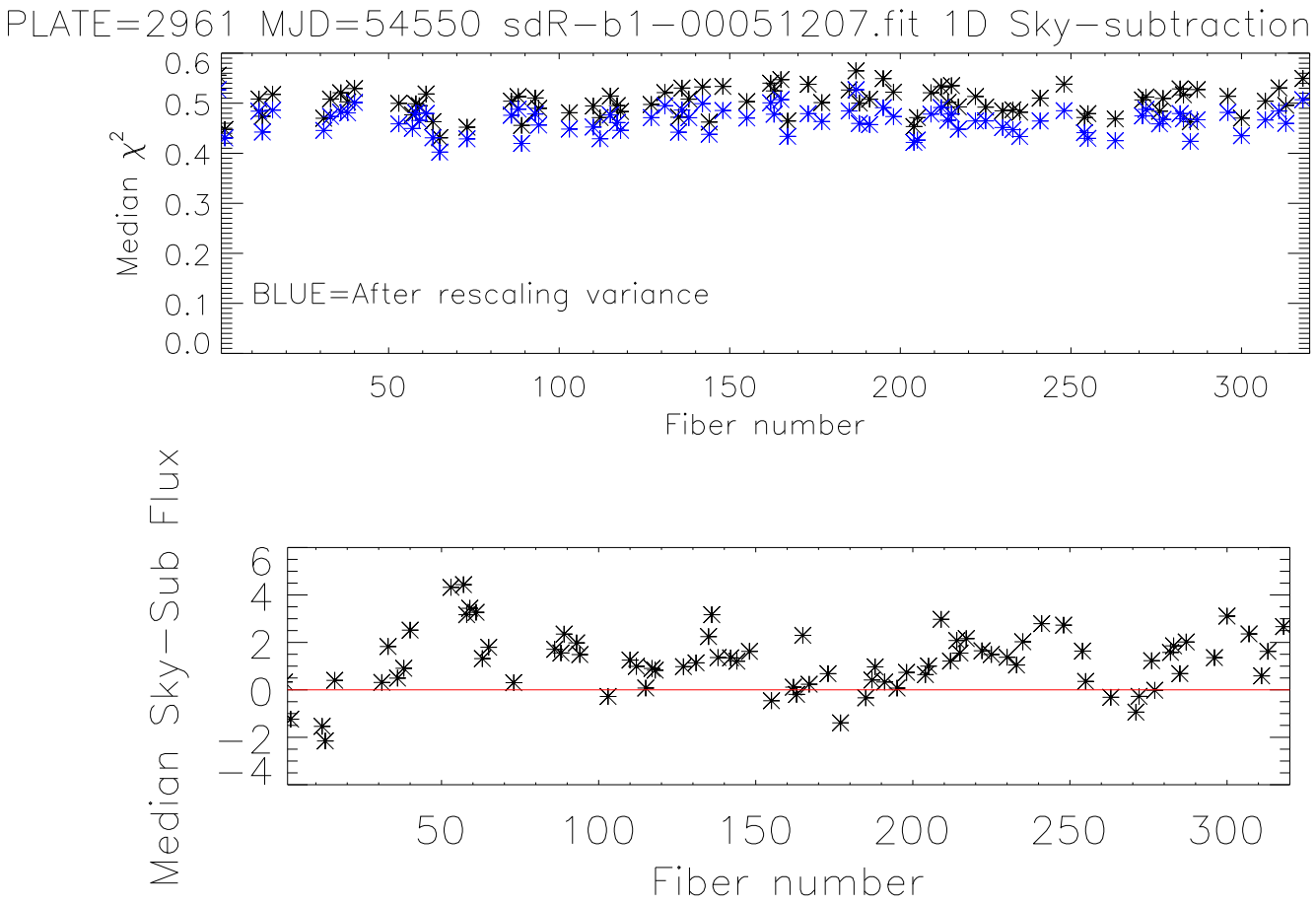

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

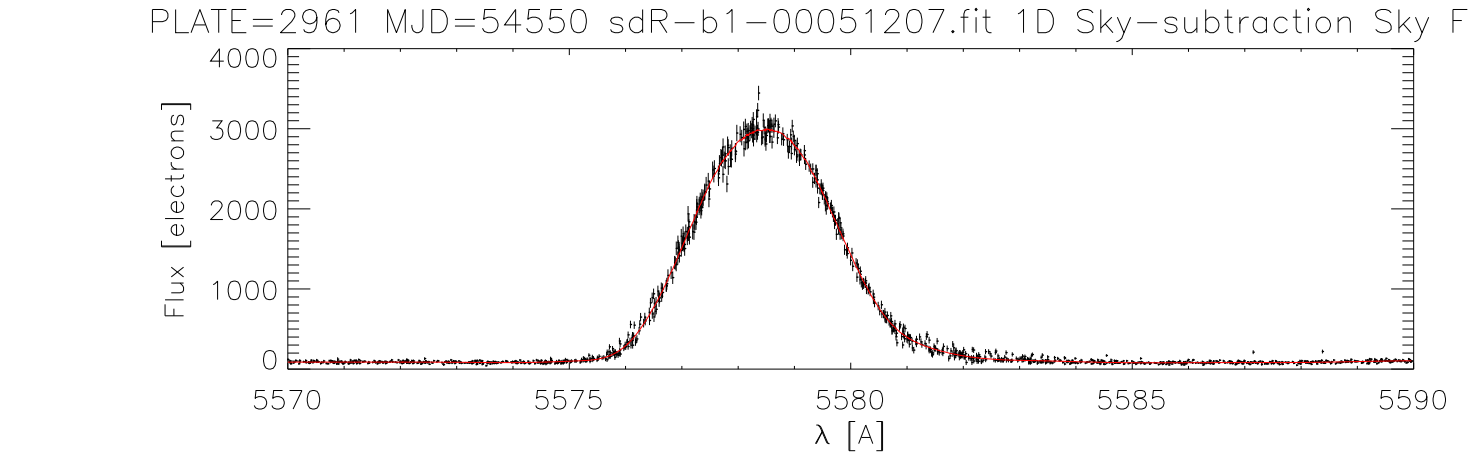

4046.5600
nfib1 81
nfib2 79
stdev 0.145
extra −0.51
4358.3300
nfib1 81
nfib2 81
stdev 0.061
extra −0.53
5460.9400
nfib1 81
nfib2 81
stdev 0.055
extra −0.25
5577.3390
nfib1 82
nfib2 82
stdev 0.016
extra −0.18
5889.9500
nfib1 82
nfib2 82
stdev 0.040
extra 0.00
5895.9240
nfib1 82
nfib2 82
stdev 0.054
extra −0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

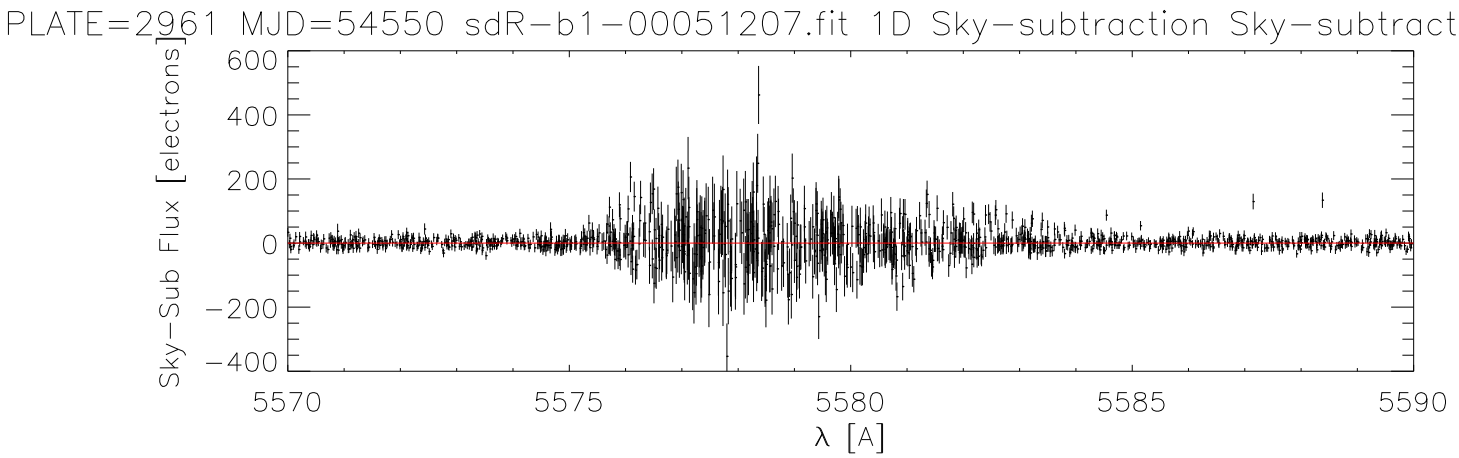

0.0
−0.2
−0.4
−0.6
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

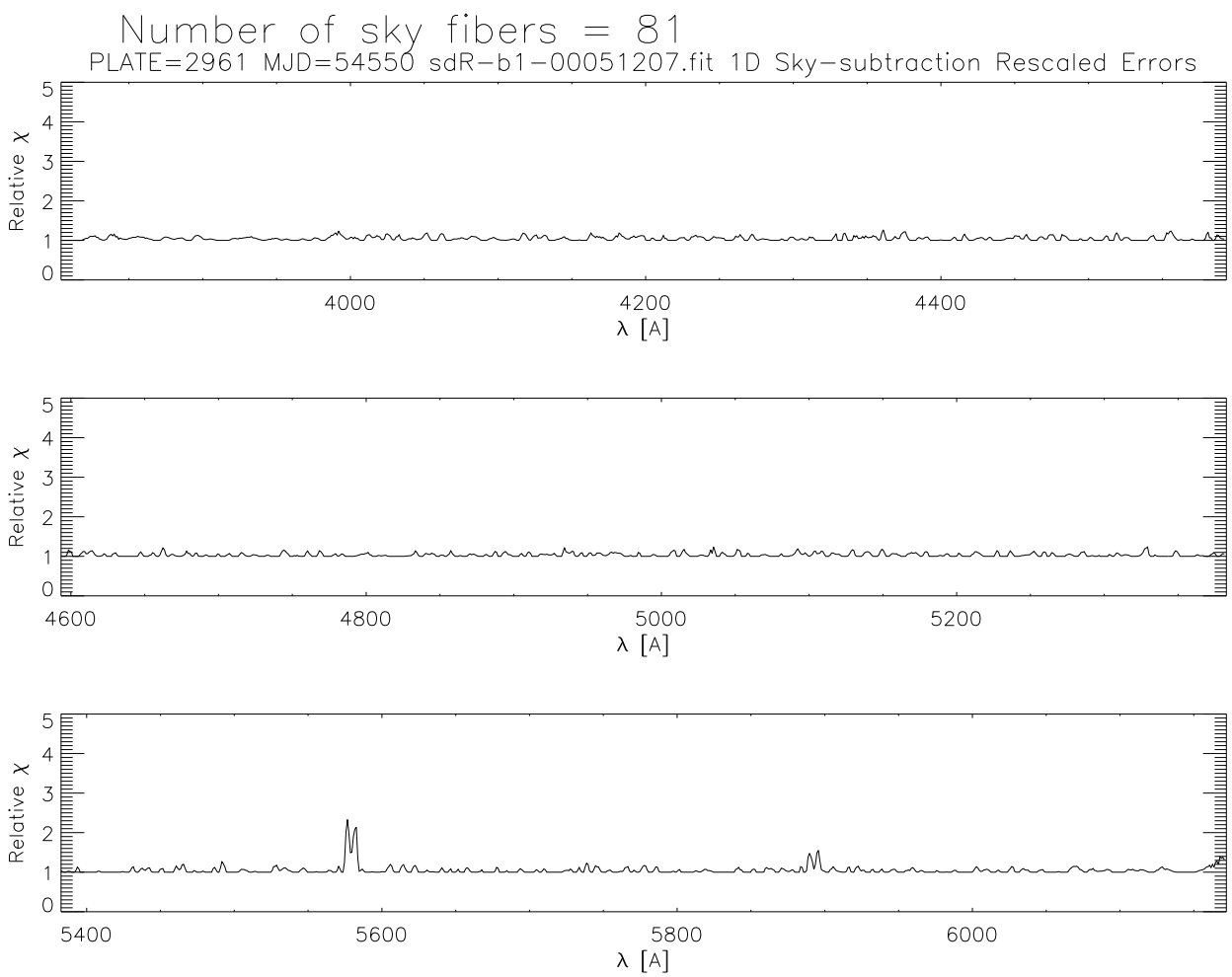
es= 0.0000

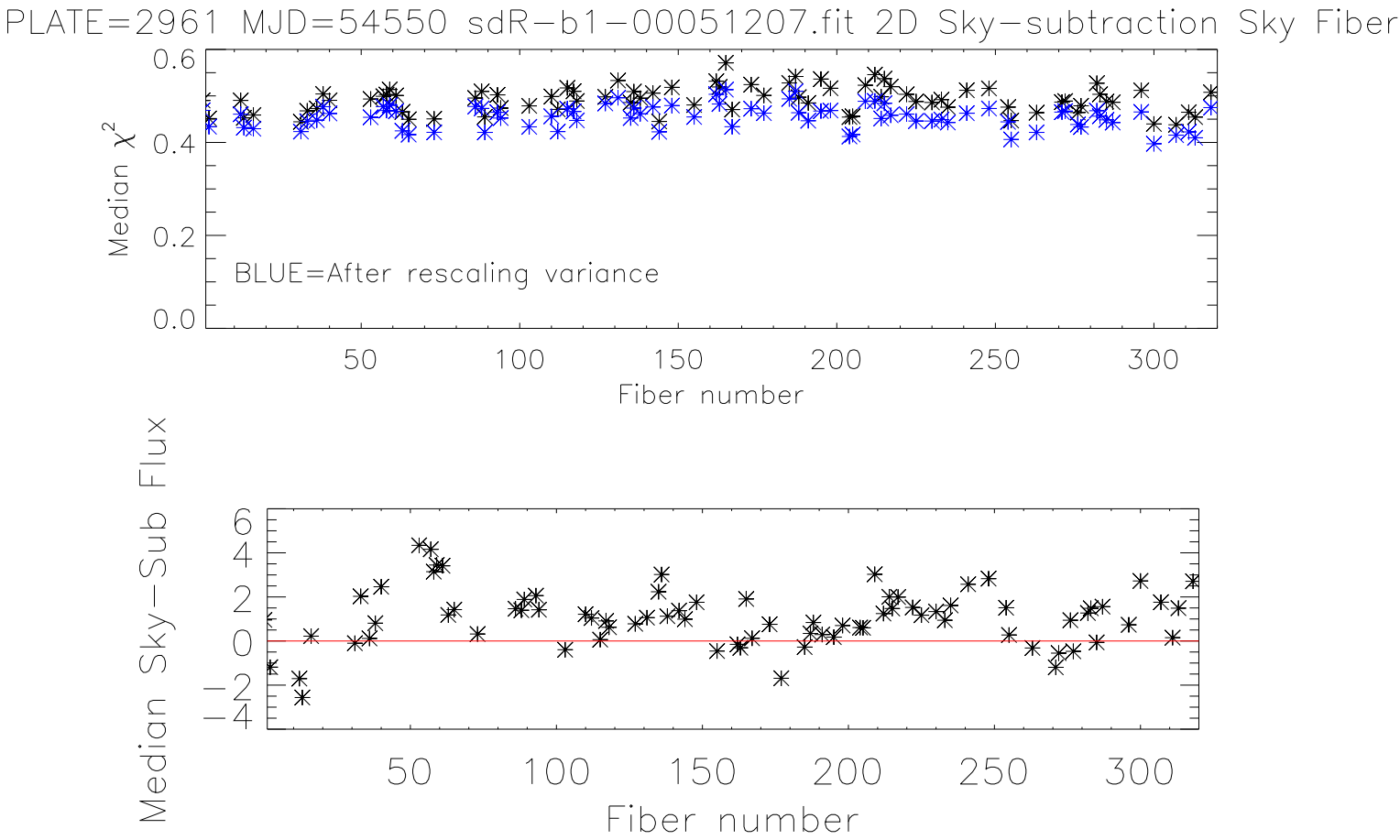

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051207.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

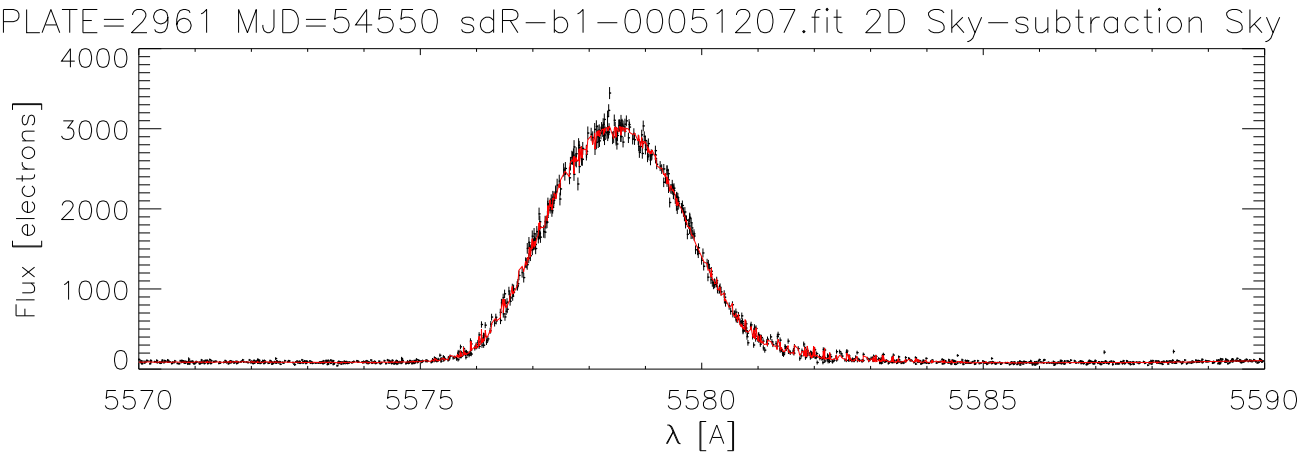

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

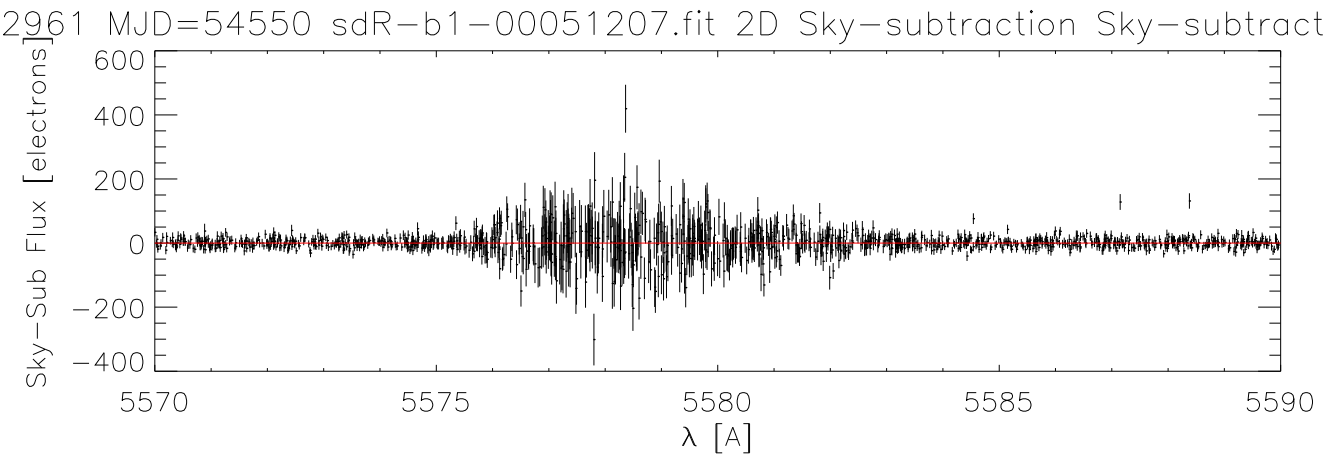

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

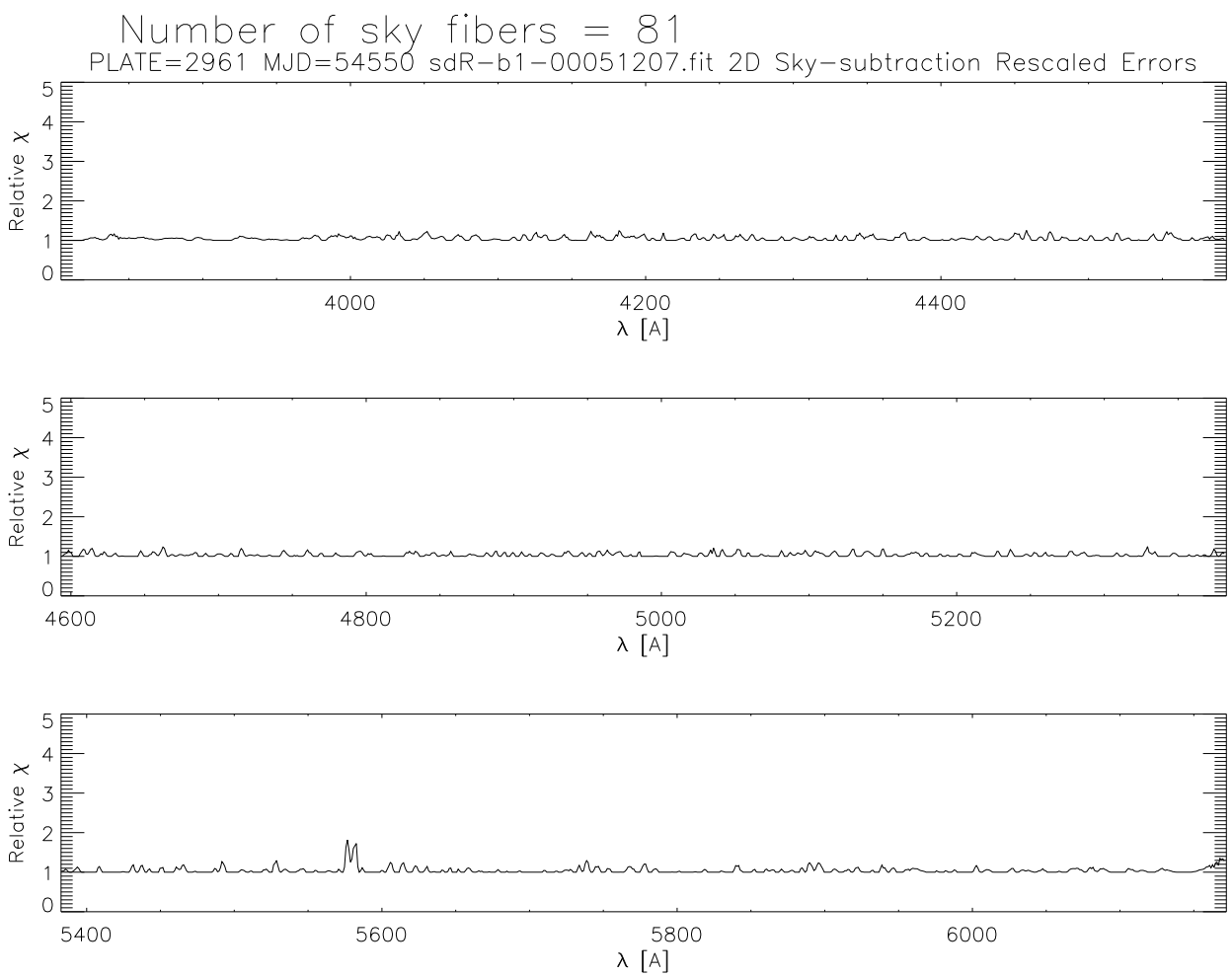

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

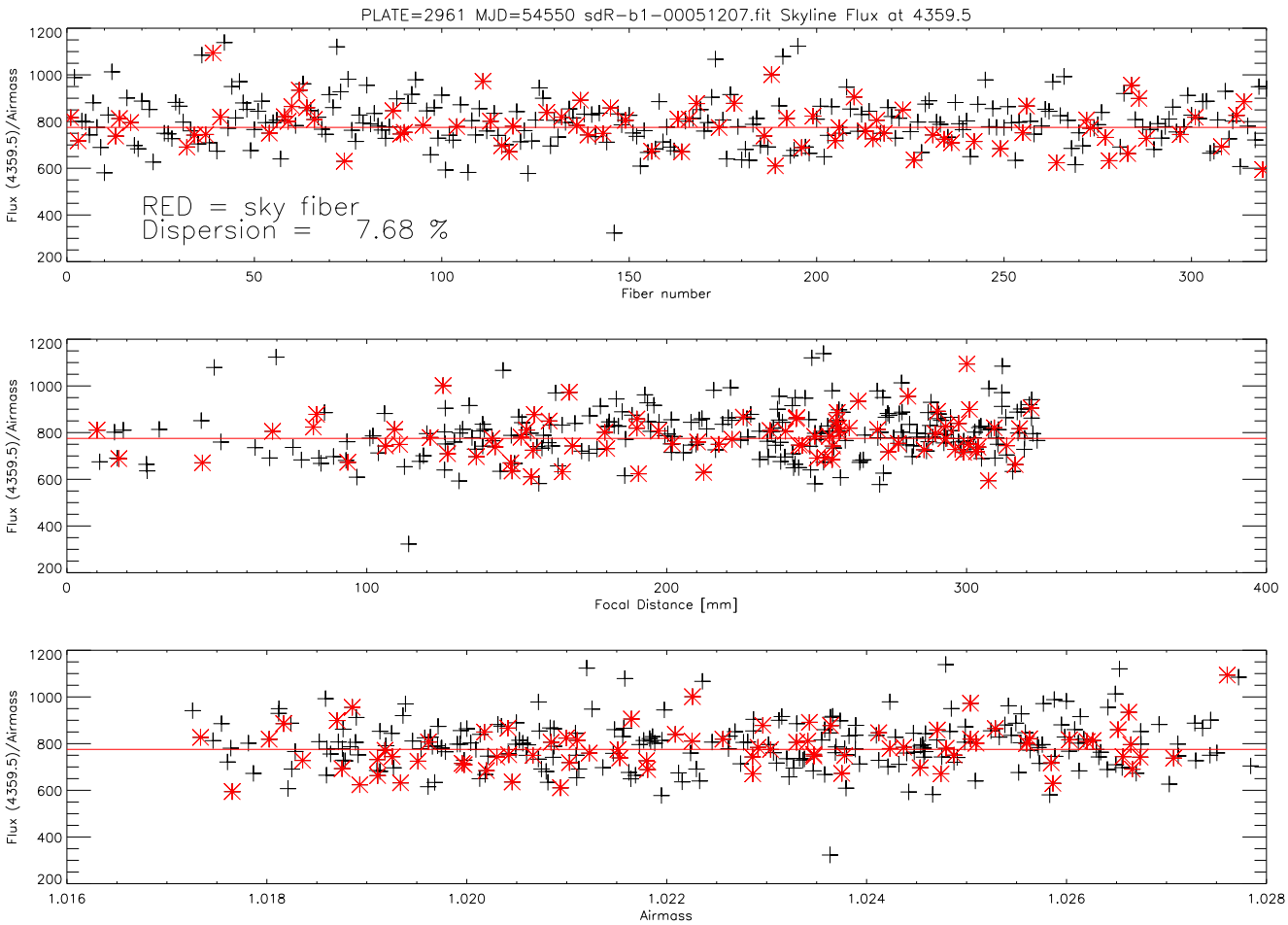

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051207.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

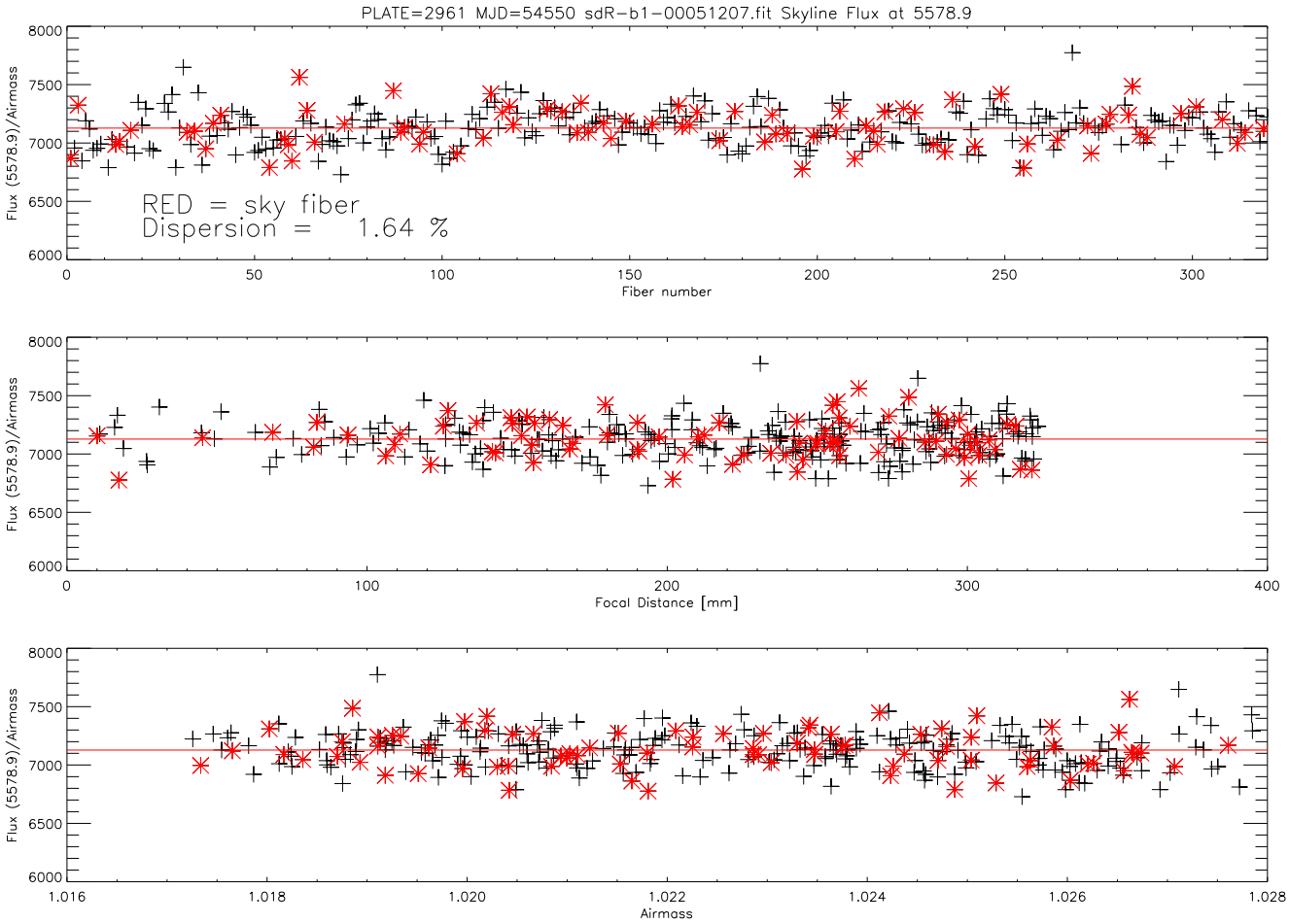

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

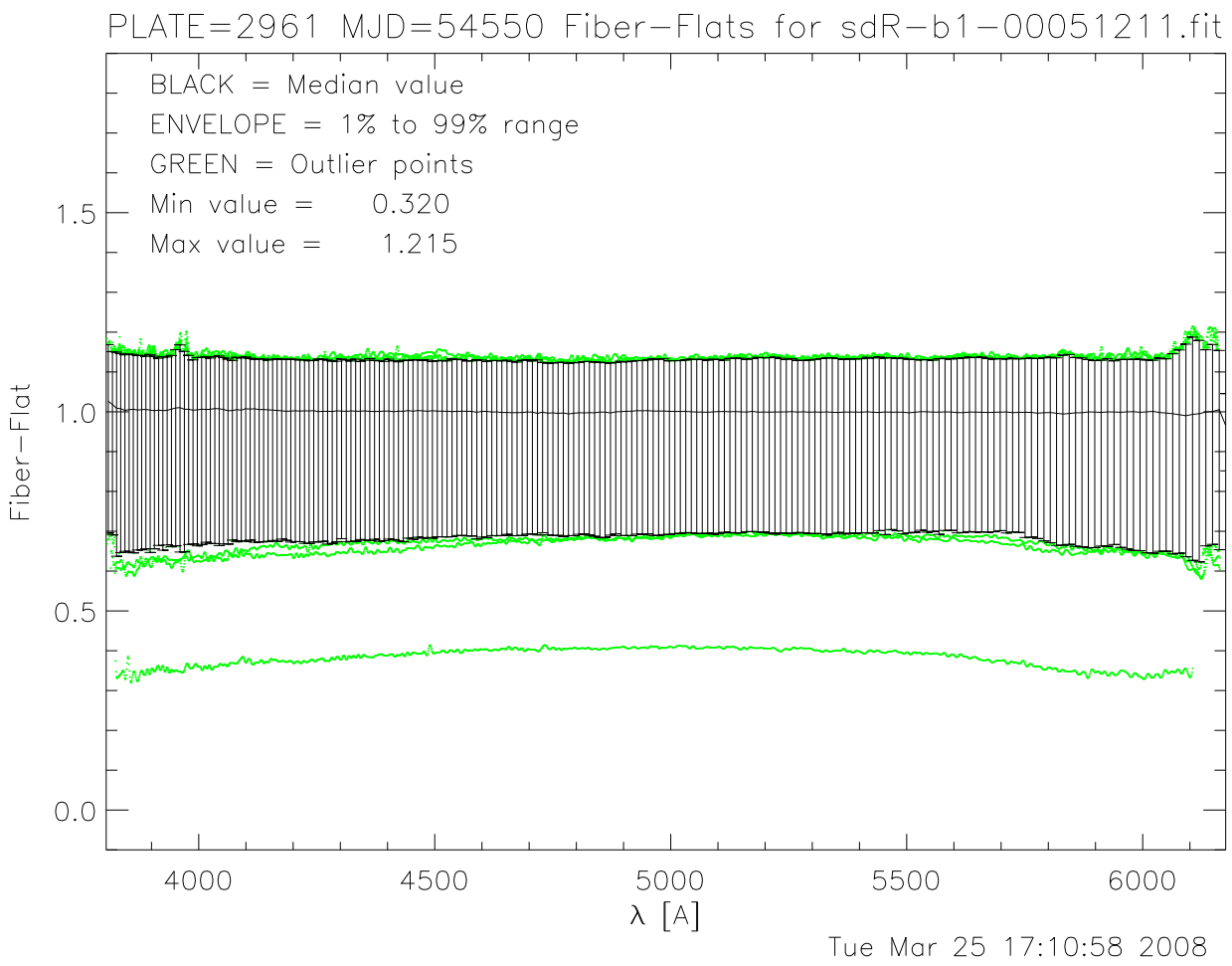

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

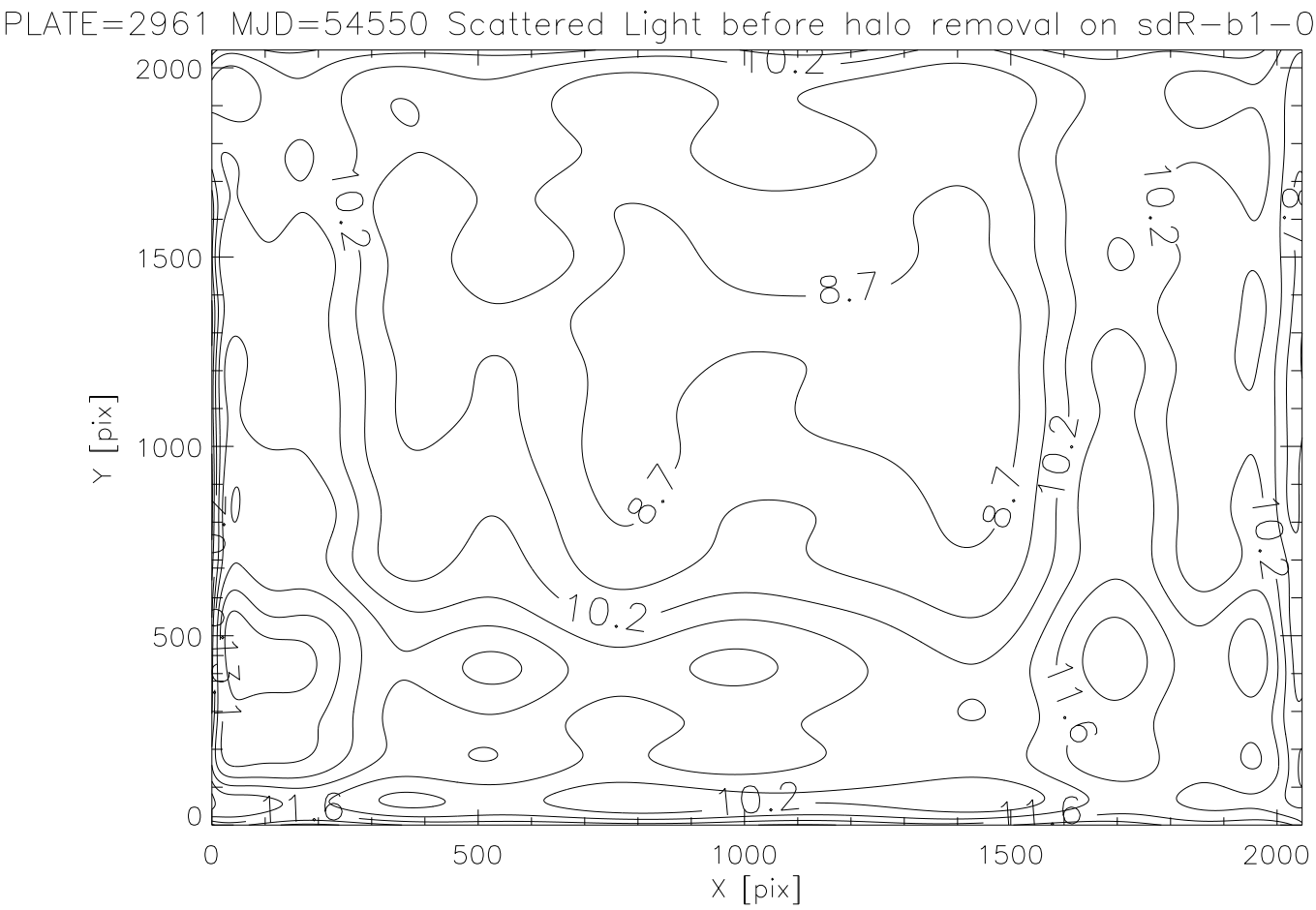

PLATE=2961 MJD=54550 sdR-b1-00051207.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

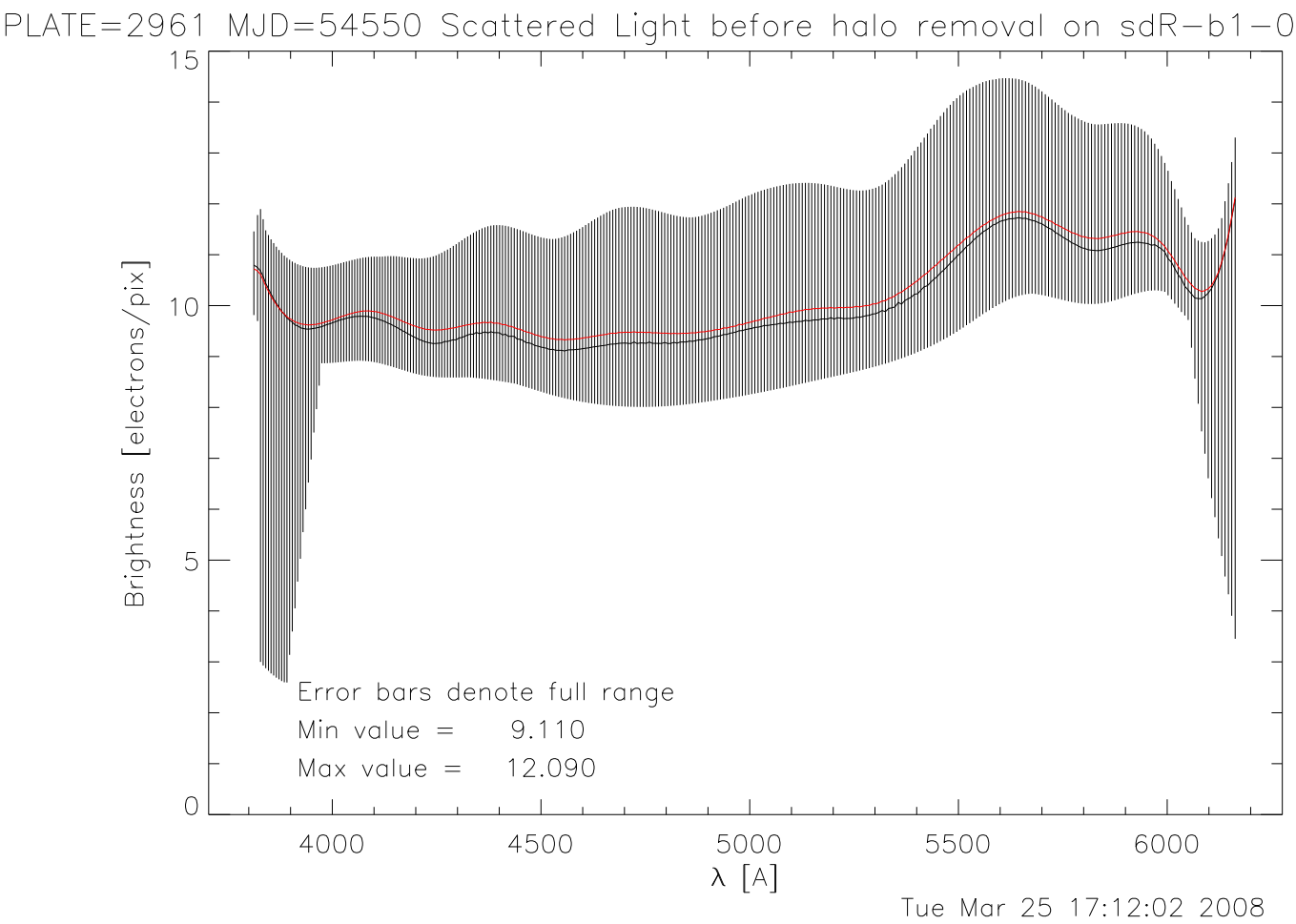

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051207.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

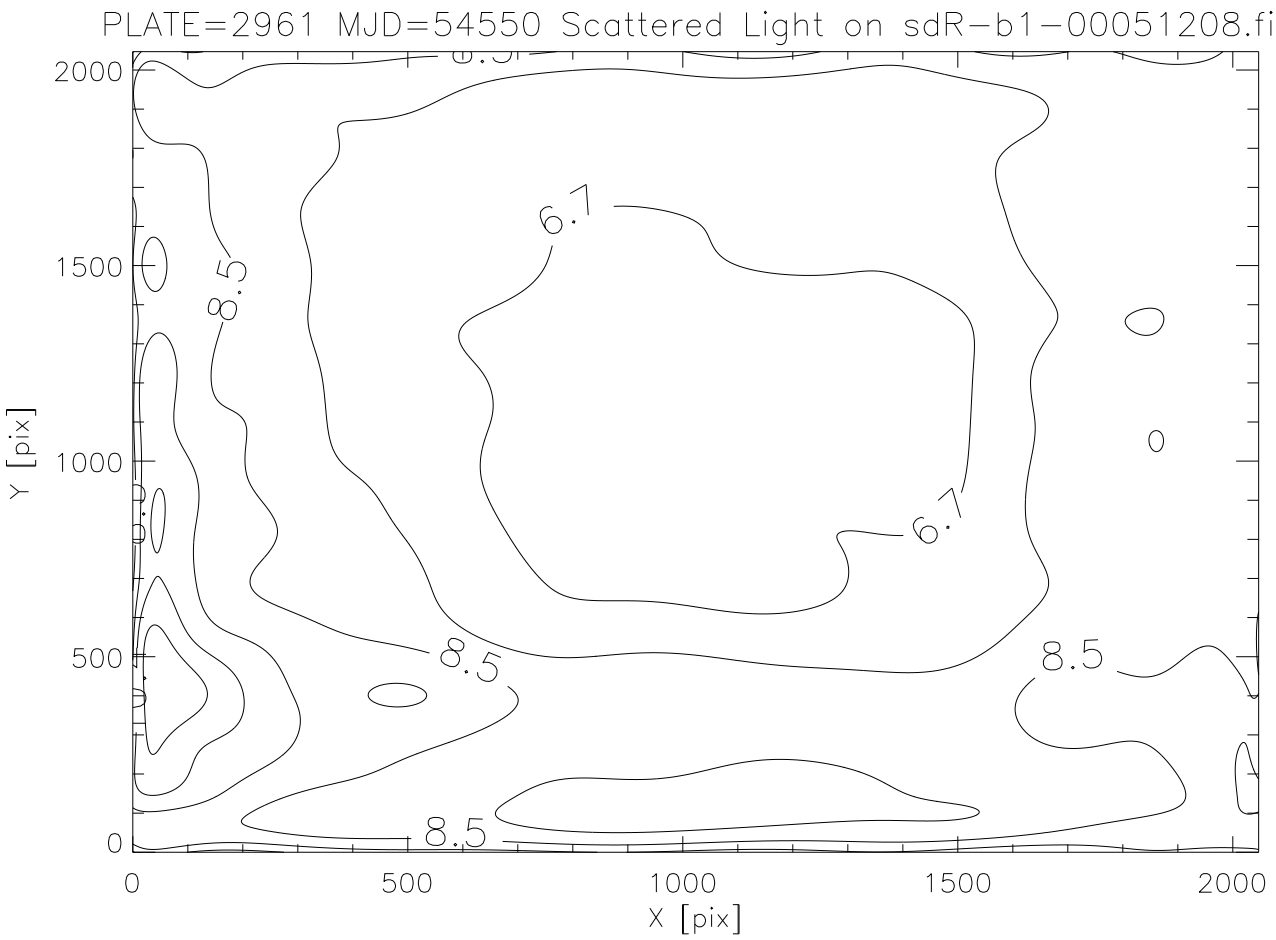

PLATE=2961 MJD=54550 sdR-b1-00051207.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.68 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

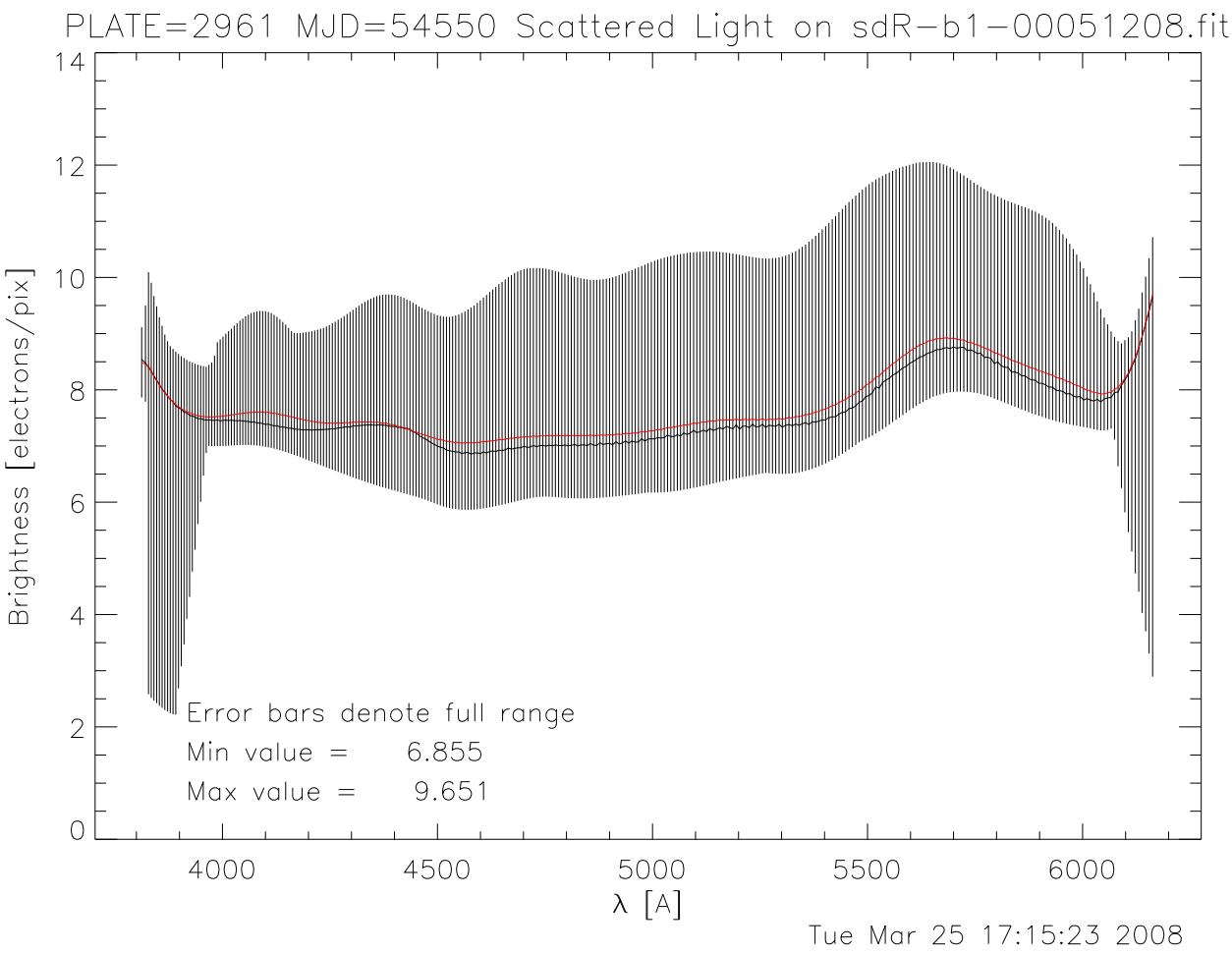

PLATE=2961 MJD=54550 sdR-b1-00051207.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.64 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

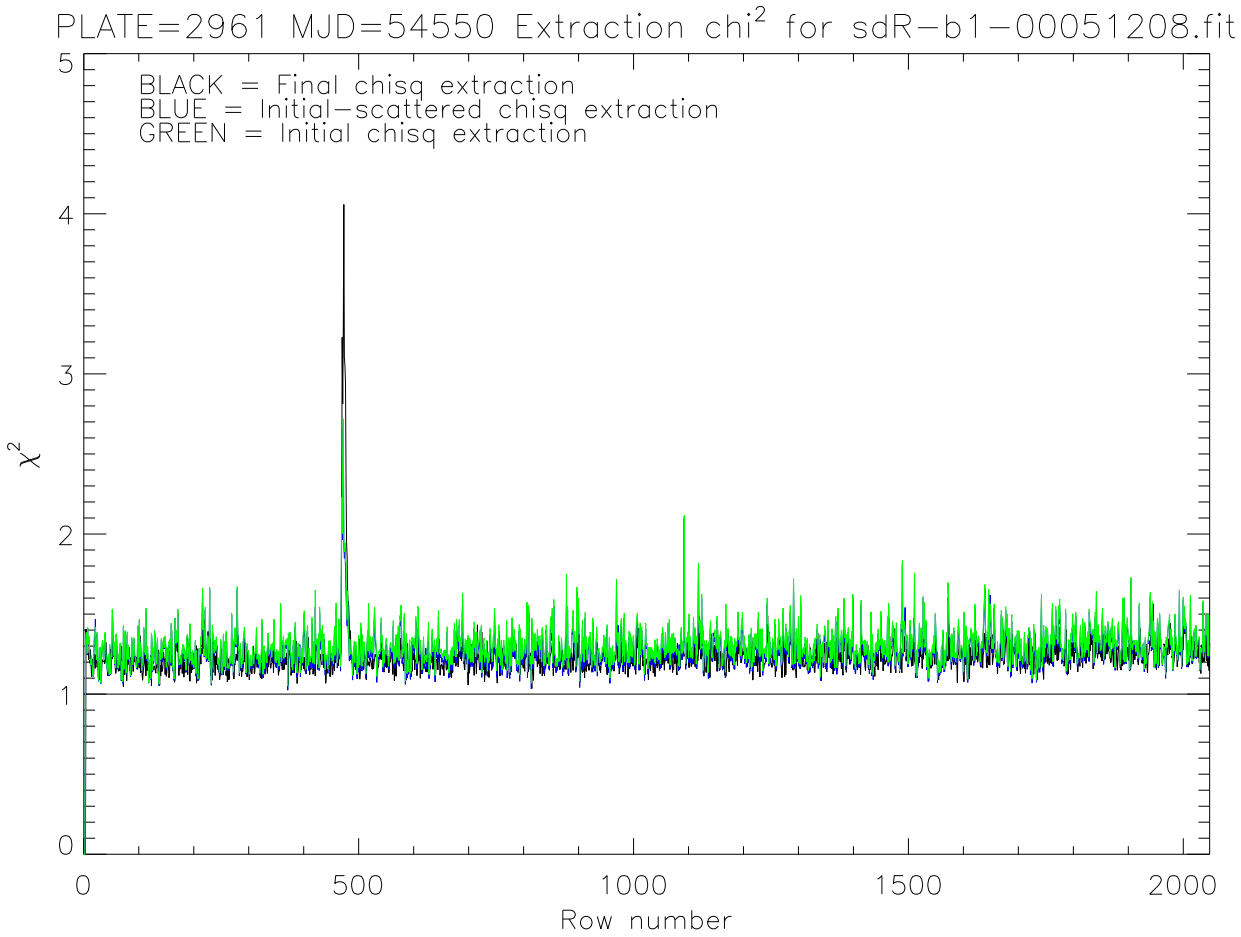

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b1-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:10:58 2008

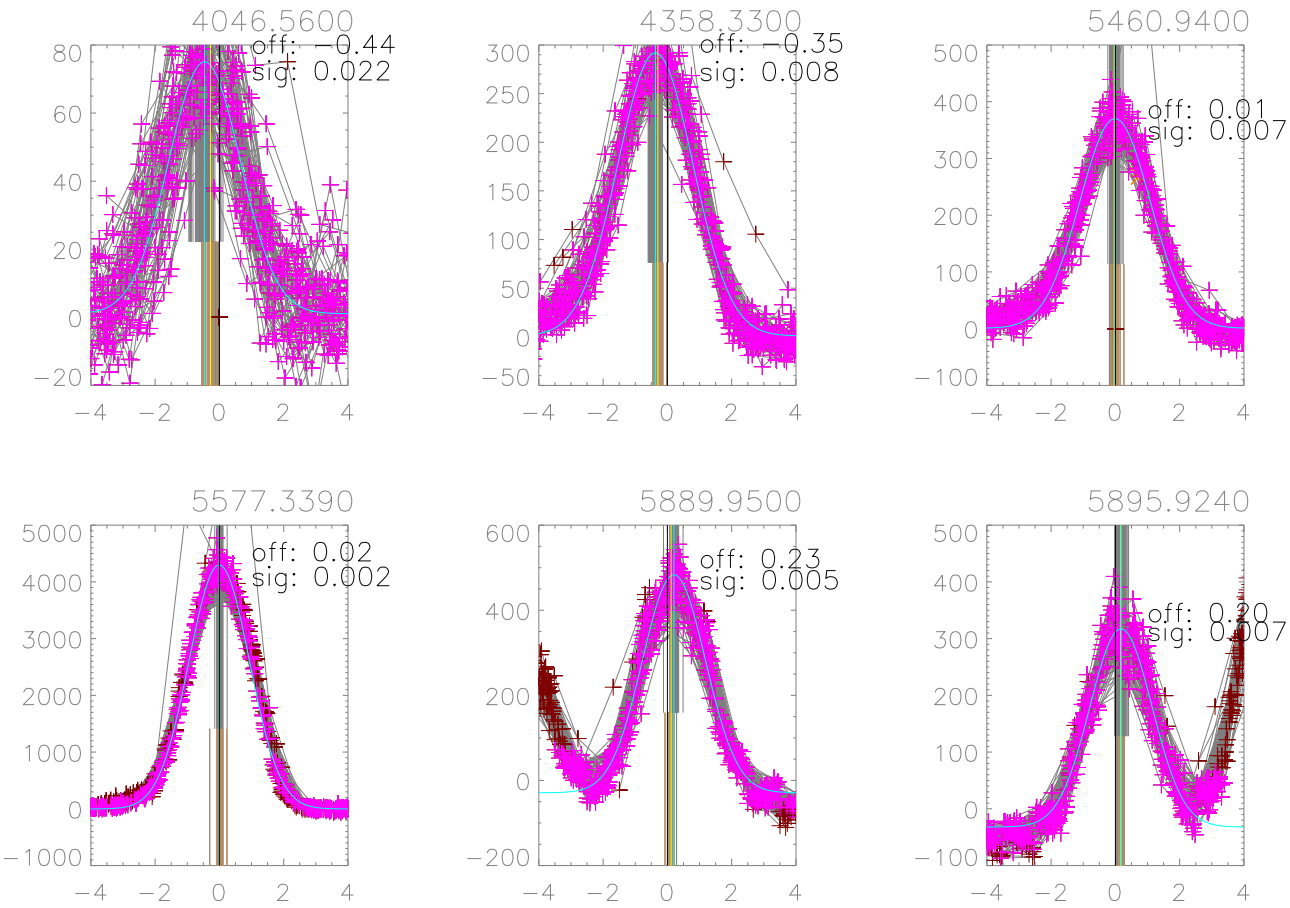

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b1-00051208.f
10.2
8.7
11.6
Y [pix]
X [pix]
0
500
1000
1500
2000

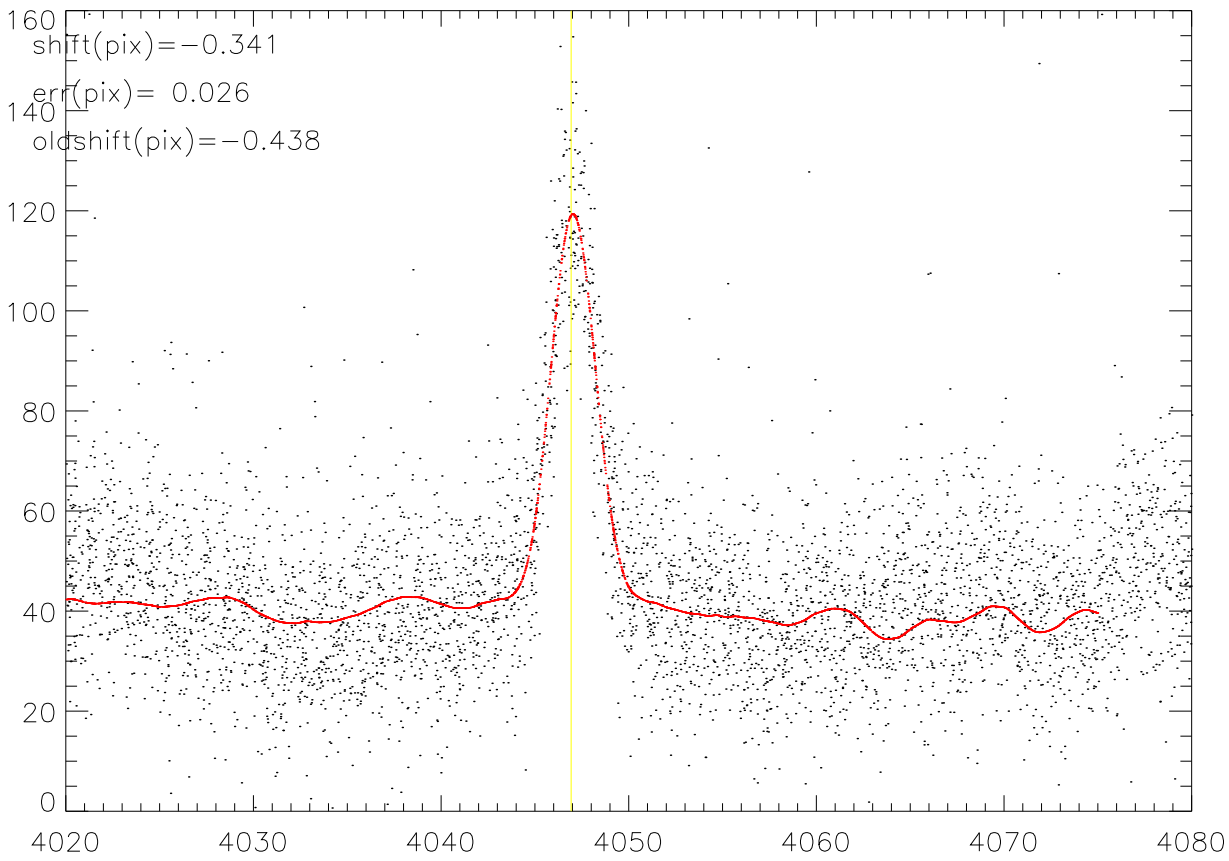

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051208.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 9.110
Max value = 12.090
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:12:02 2008

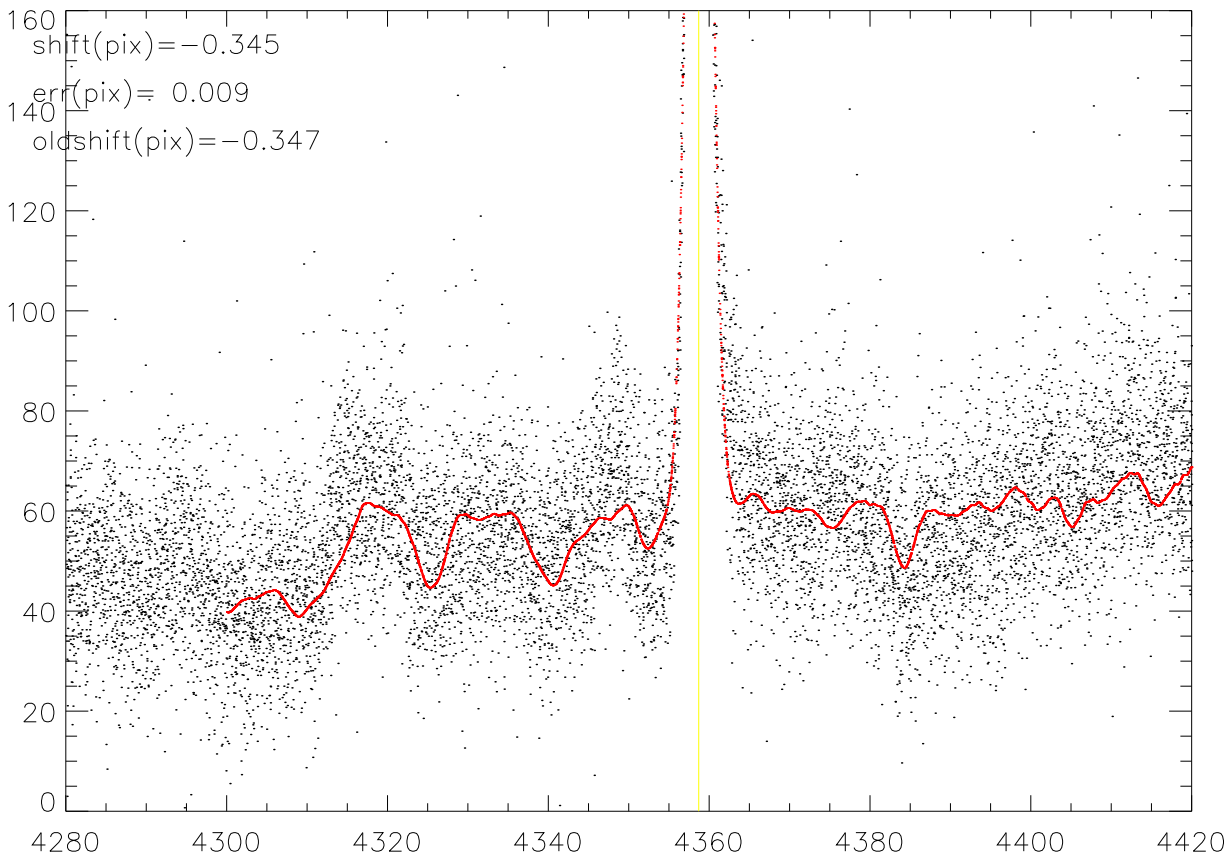

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051208.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.7
8.5
0

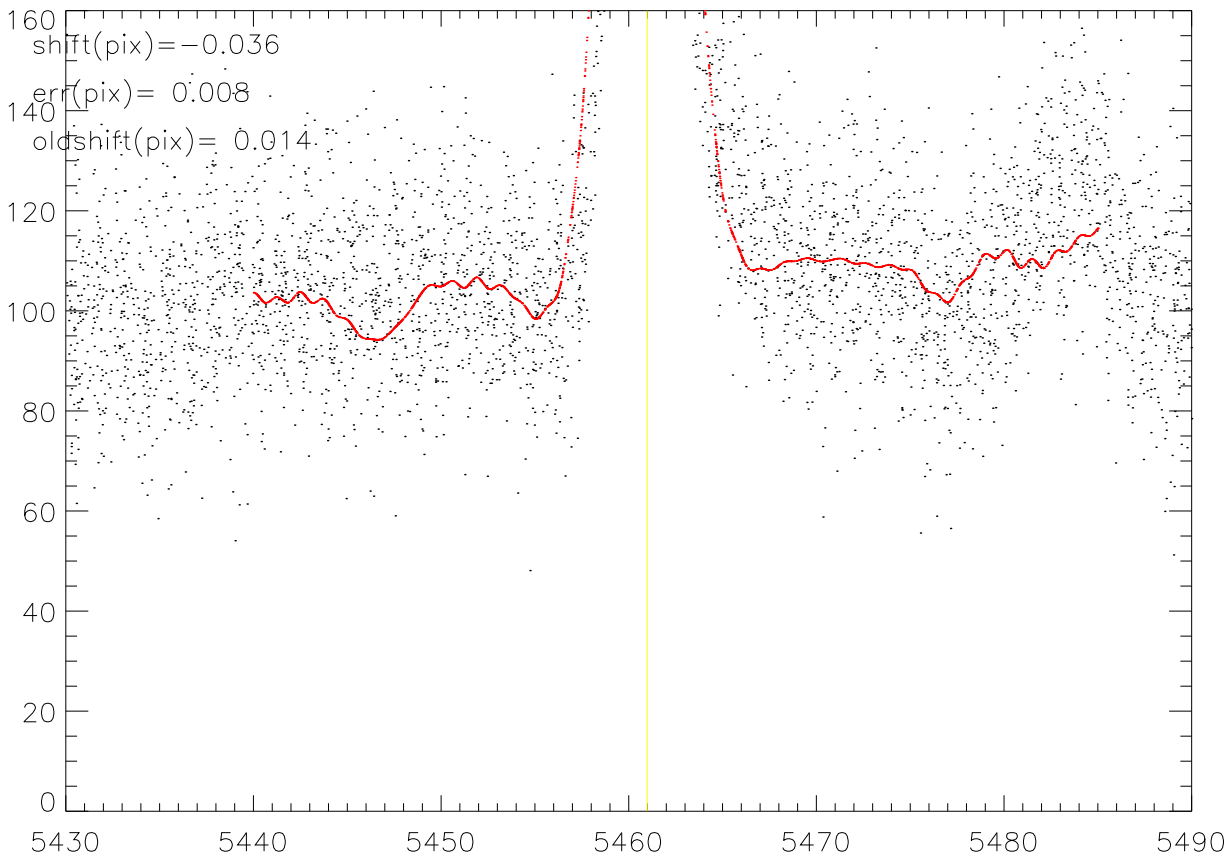

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051208.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.855
Max value = 9.651
Tue Mar 25 17:15:23 2008

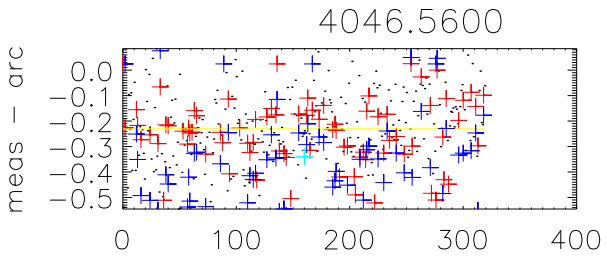

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b1-00051208.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

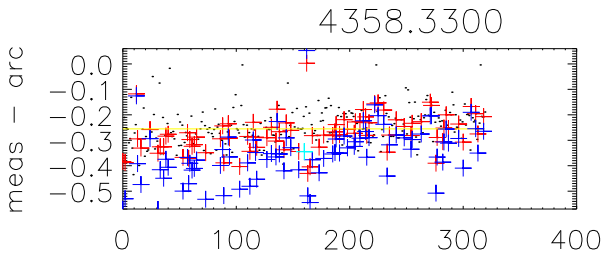

4046.5600
off: −0.44
sig: 0.022
4358.3300
off: −0.35
sig: 0.008
5460.9400
off: 0.01
sig: 0.007
5577.3390
off: 0.02
sig: 0.002
5889.9500
off: 0.23
sig: 0.005
5895.9240
off: 0.20
sig: 0.007

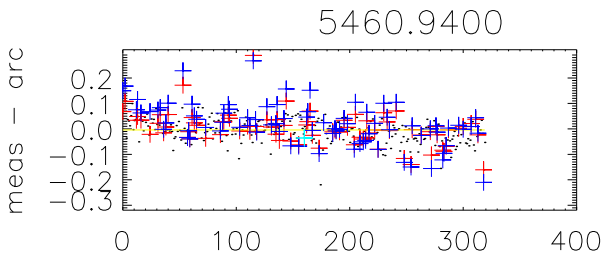

shift(pix)=−0.341
err(pix)= 0.026
oldshift(pix)=−0.438
160
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

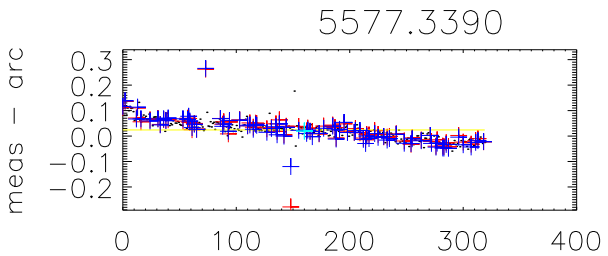

shift(pix)=−0.345
err(pix)= 0.009
oldshift(pix)=−0.347
160
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

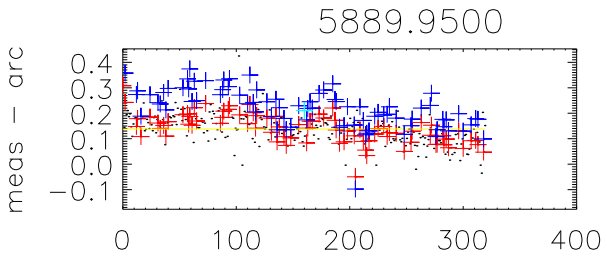

shift(pix)=−0.036
err(pix)= 0.008
oldshift(pix)= 0.014
160
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

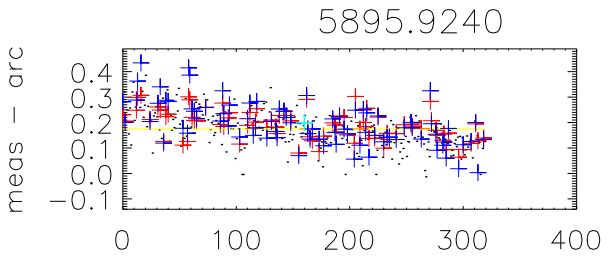

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

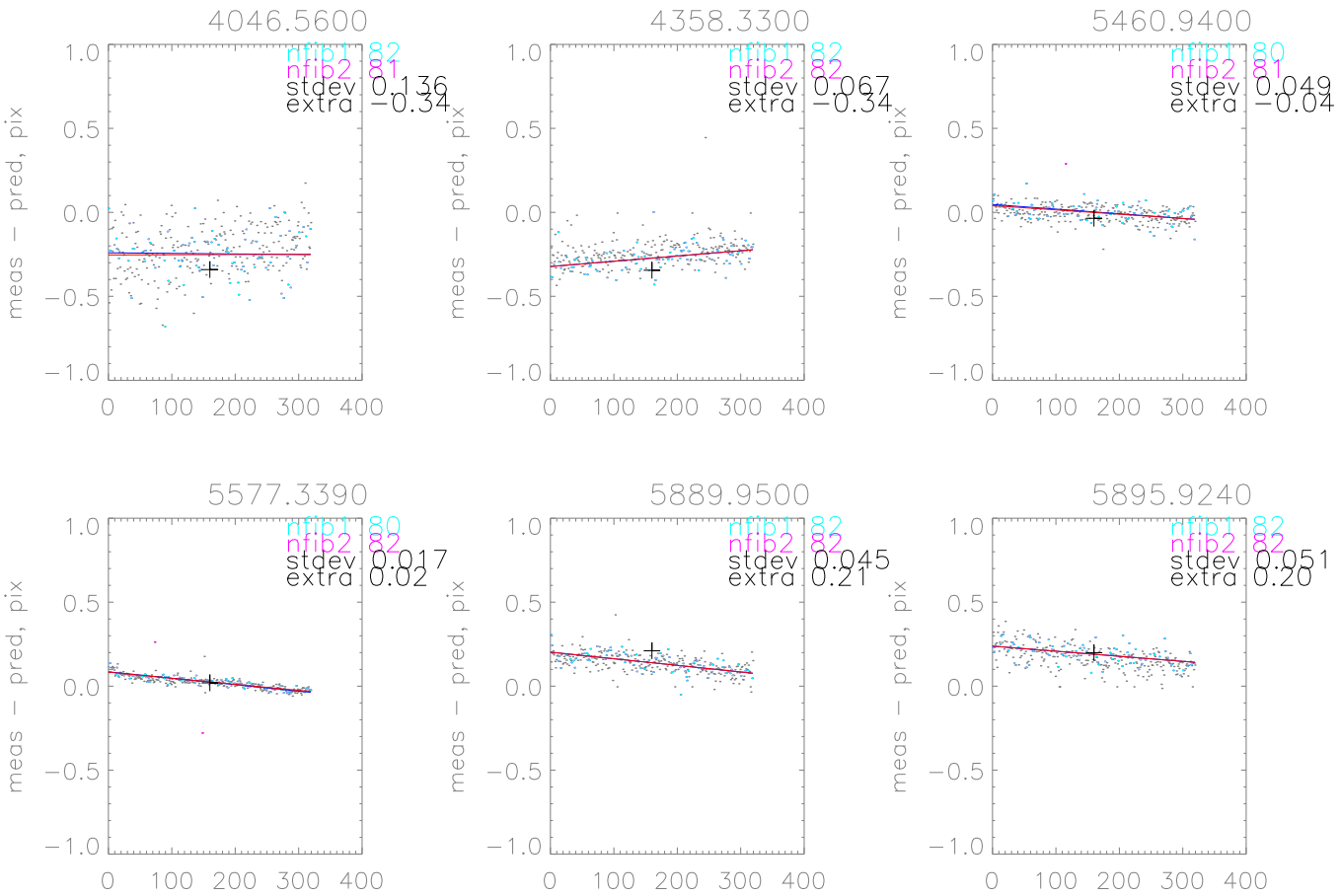

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

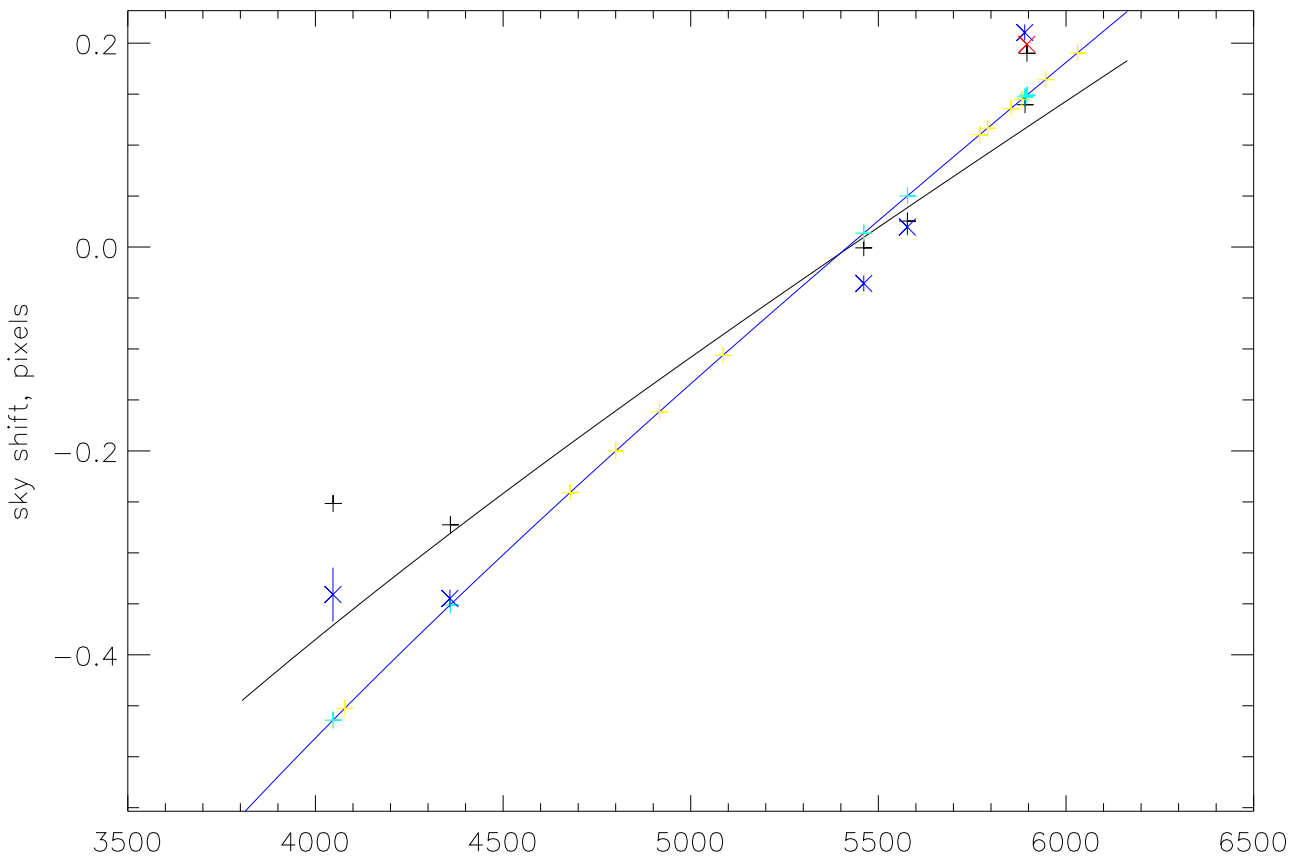

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

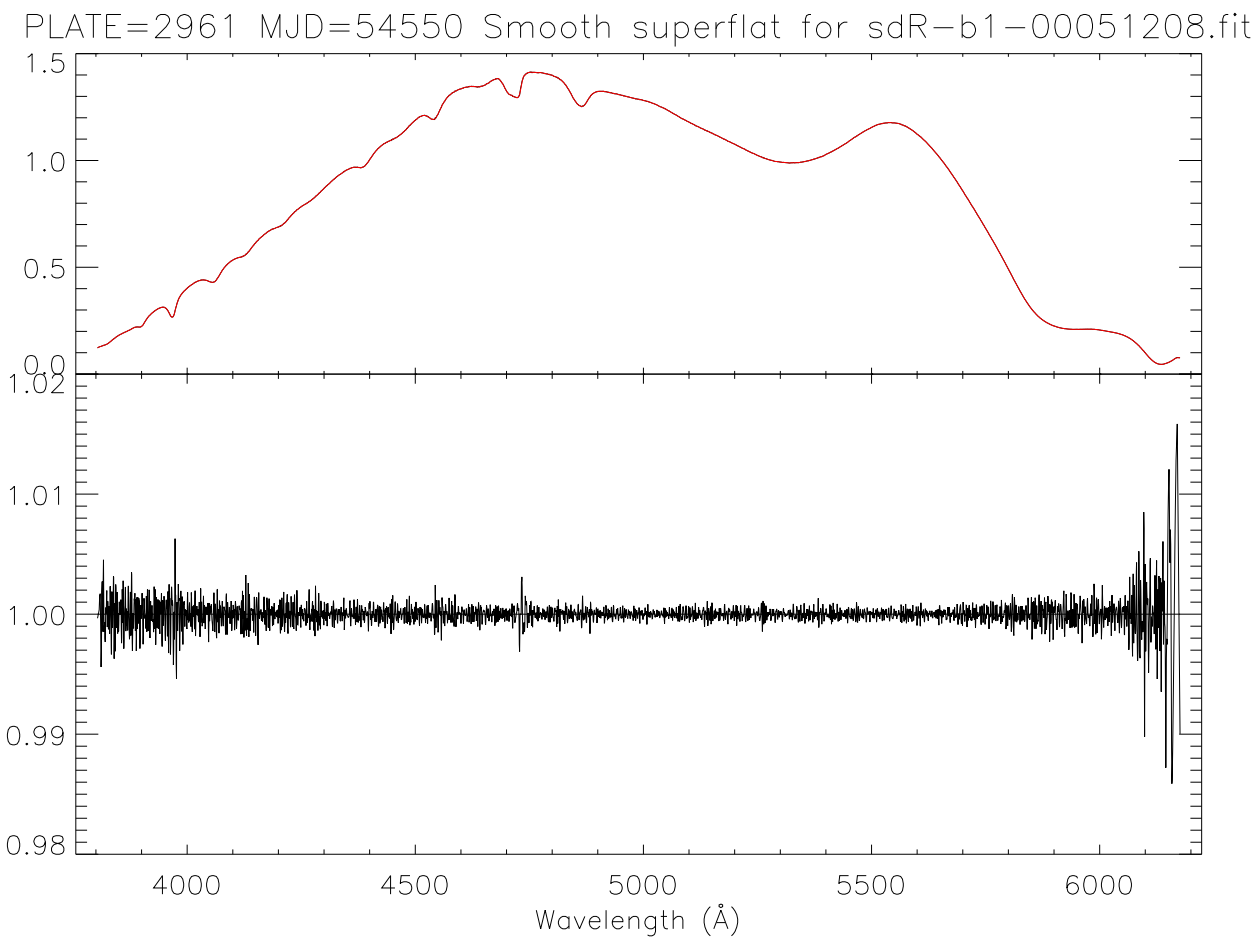

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

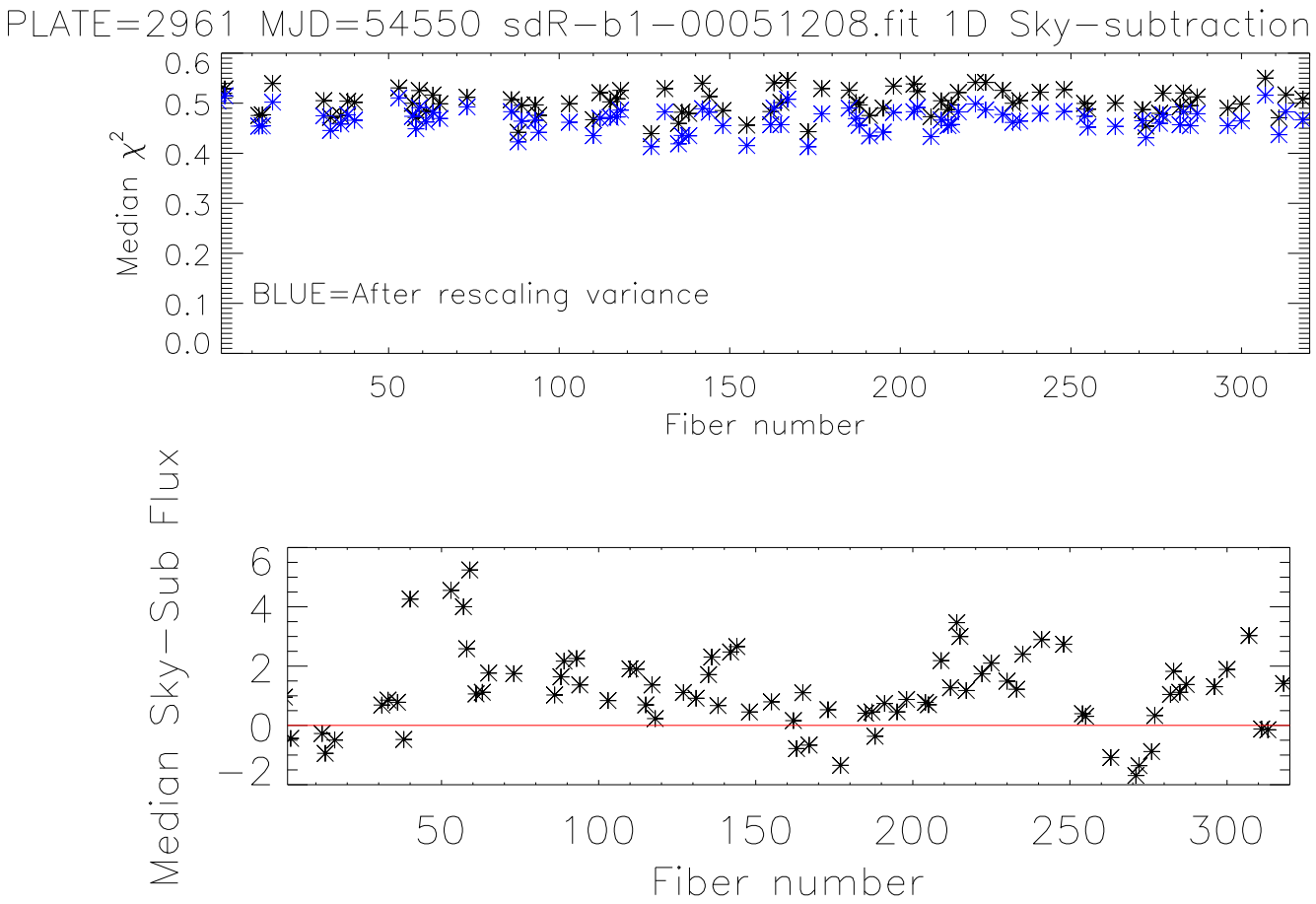

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

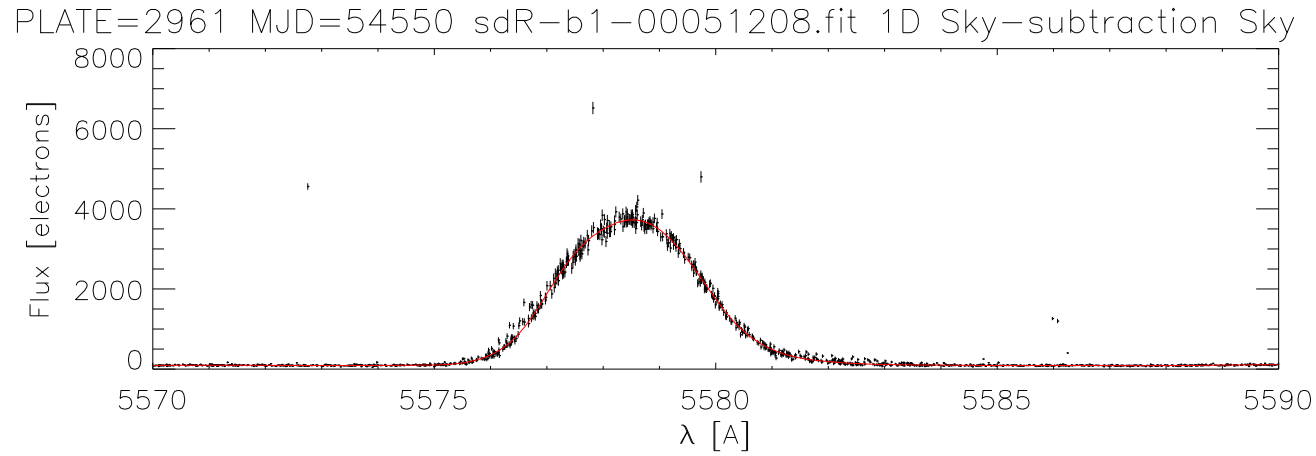

4046.5600
nfib1 82
nfib2 81
stdev 0.136
extra −0.34
4358.3300
nfib1 82
nfib2 82
stdev 0.067
extra −0.34
5460.9400
nfib1 80
nfib2 81
stdev 0.049
extra −0.04
5577.3390
nfib1 80
nfib2 82
stdev 0.017
extra 0.02
5889.9500
nfib1 82
nfib2 82
stdev 0.045
extra 0.21
5895.9240
nfib1 82
nfib2 82
stdev 0.051
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

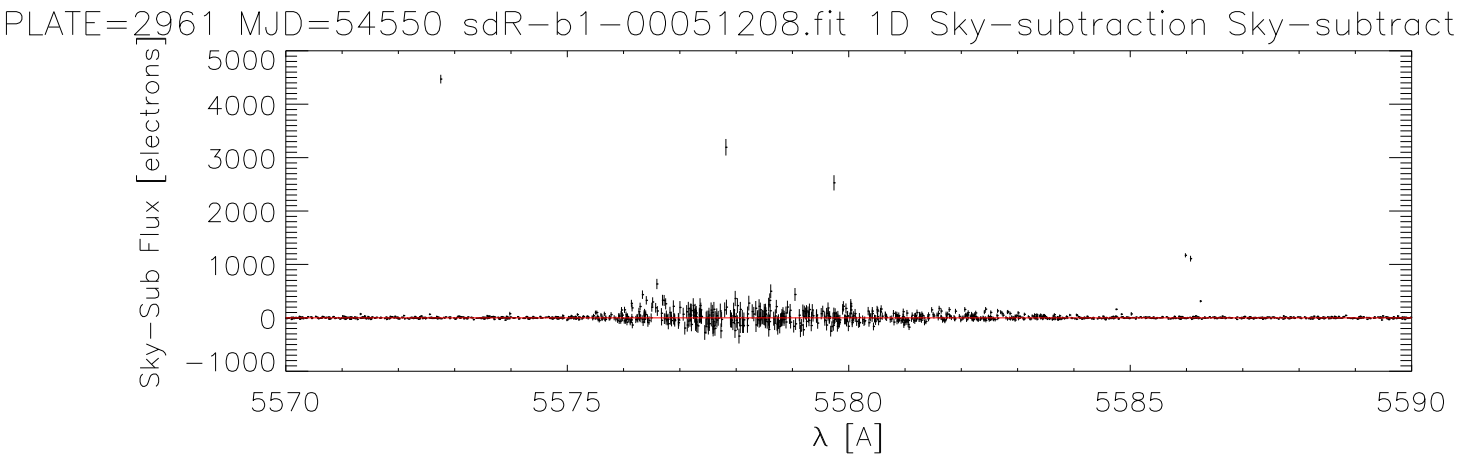

0.2
0.0
−0.2
−0.4
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

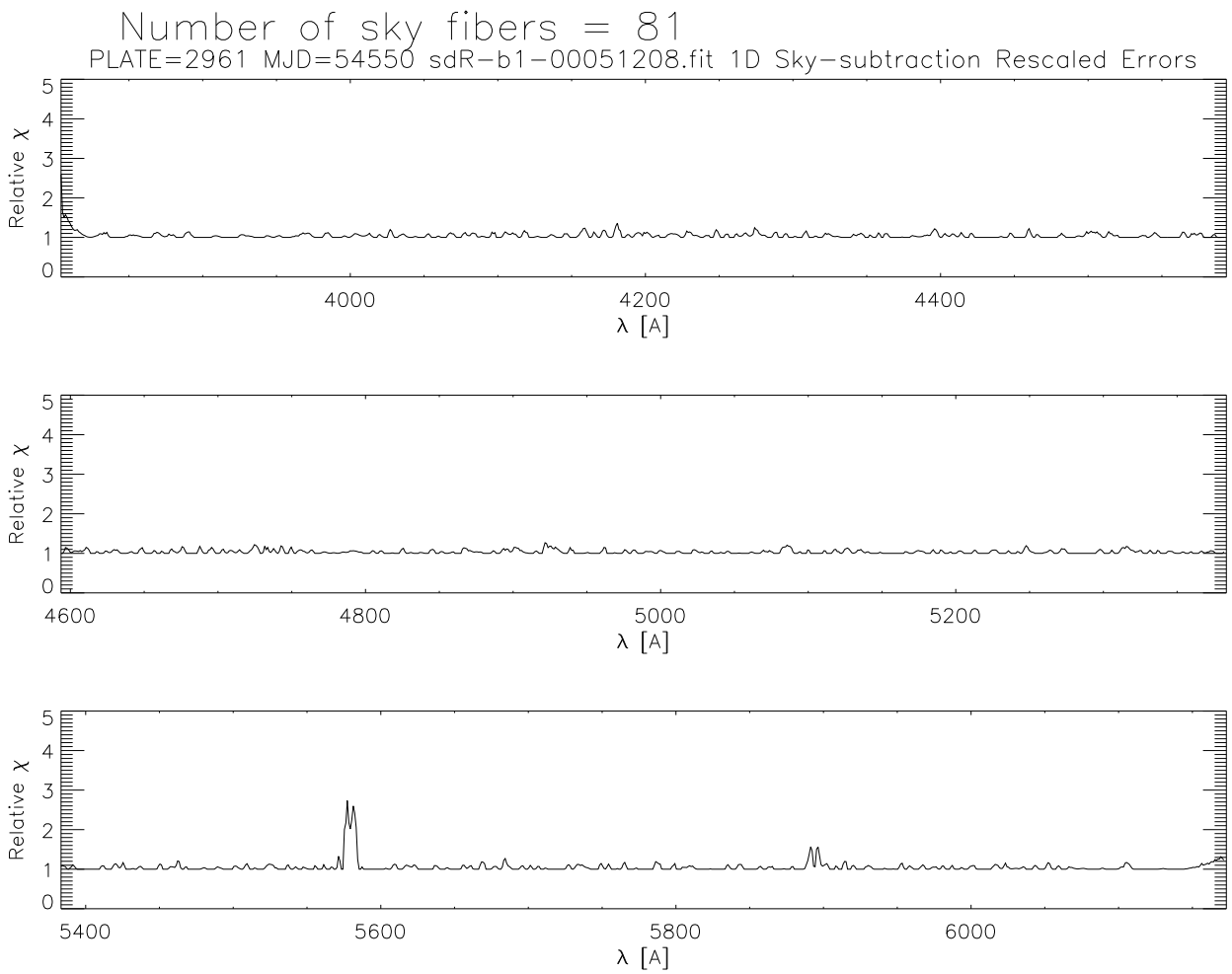
es= 0.0000

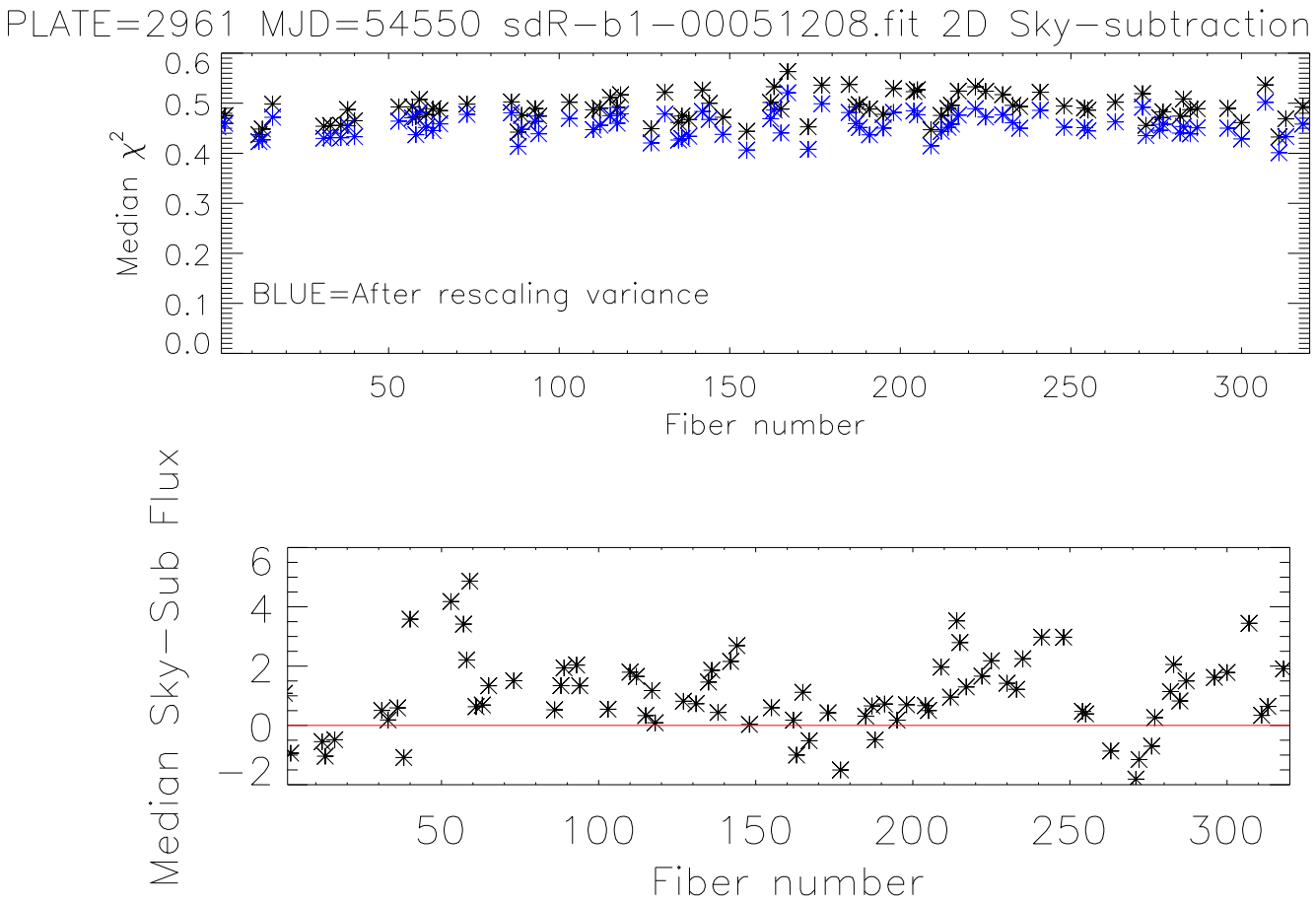

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051208.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

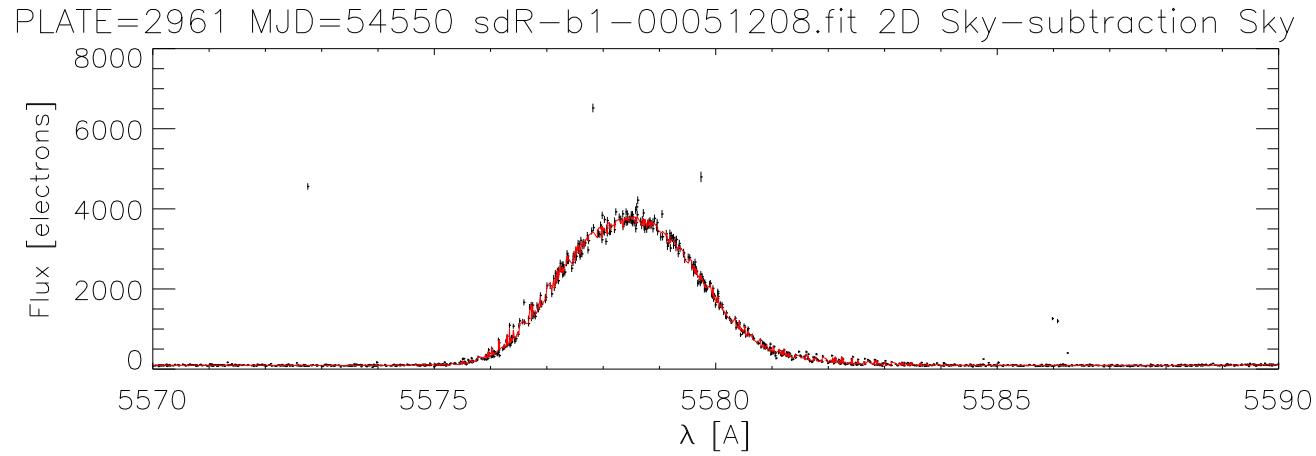

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

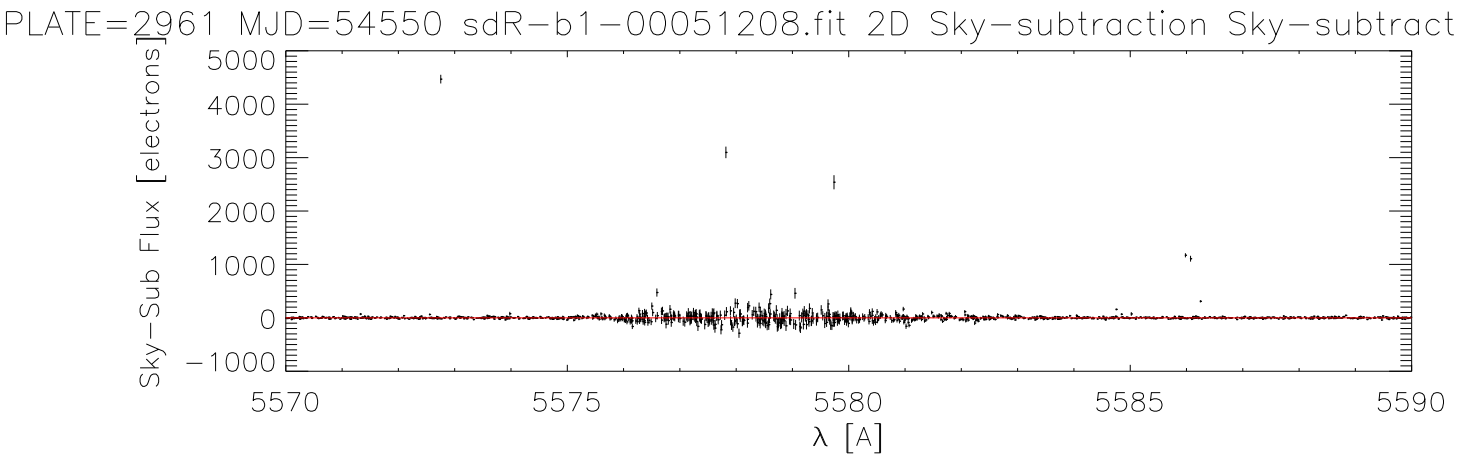

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

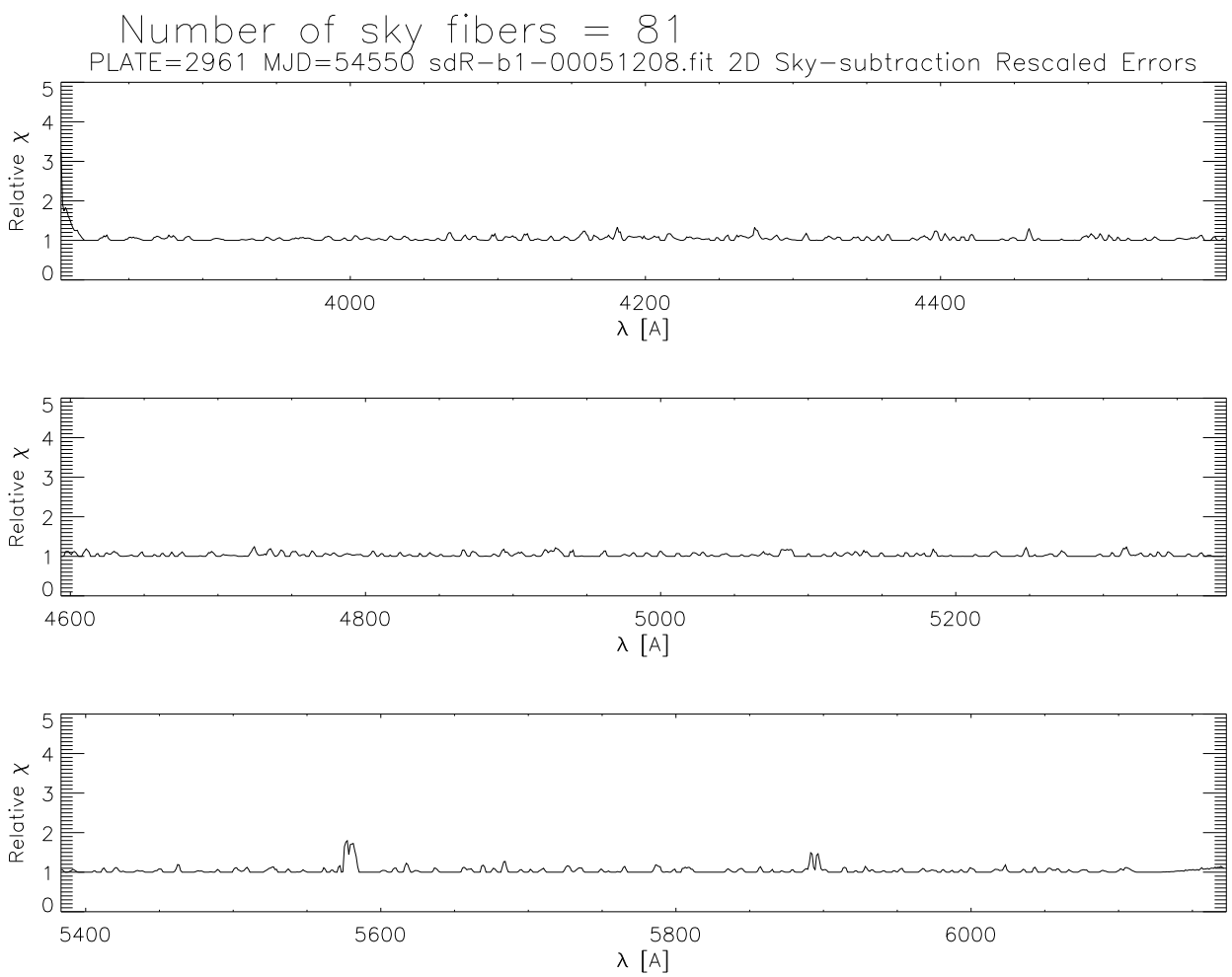

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

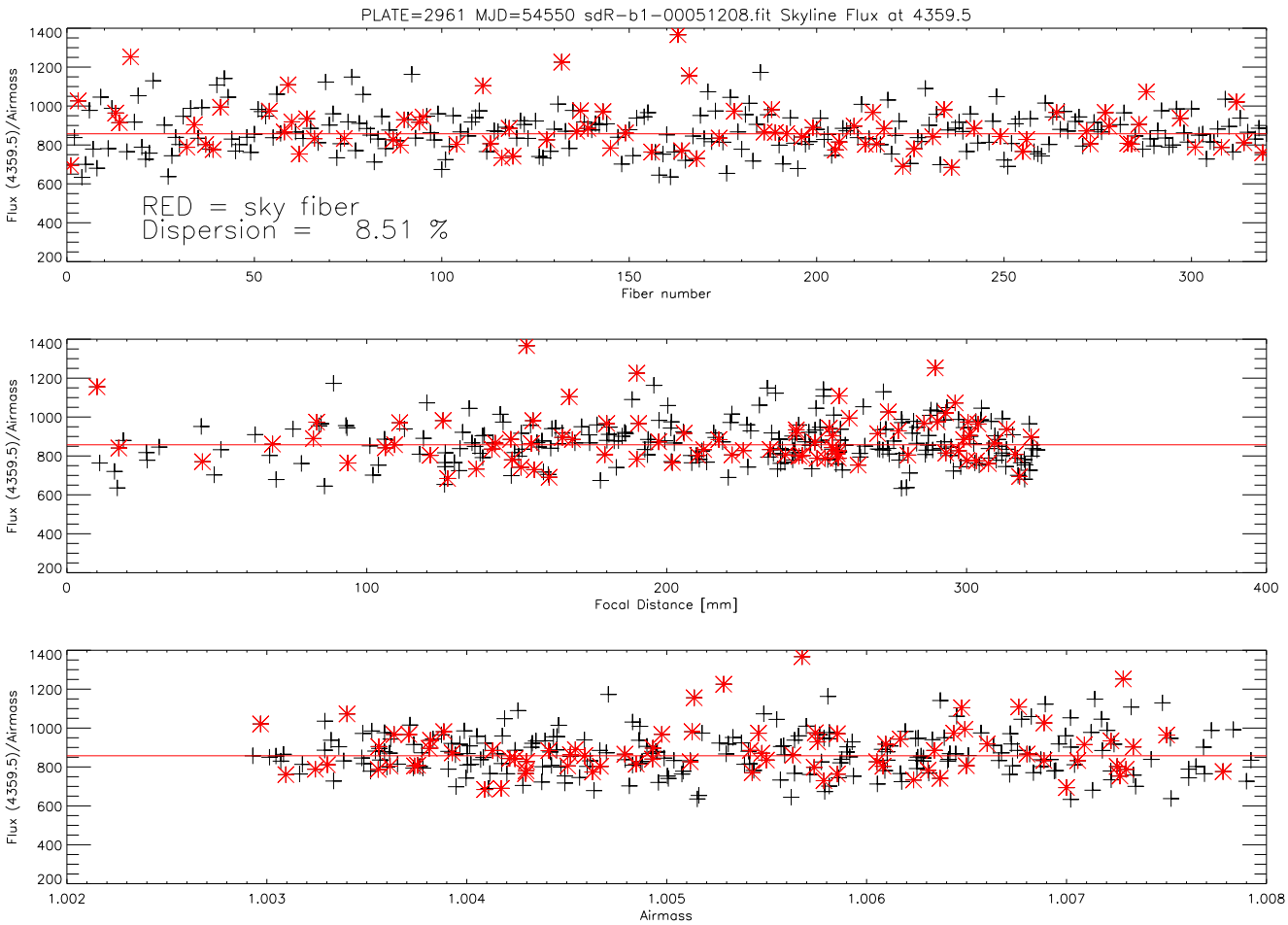

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051208.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

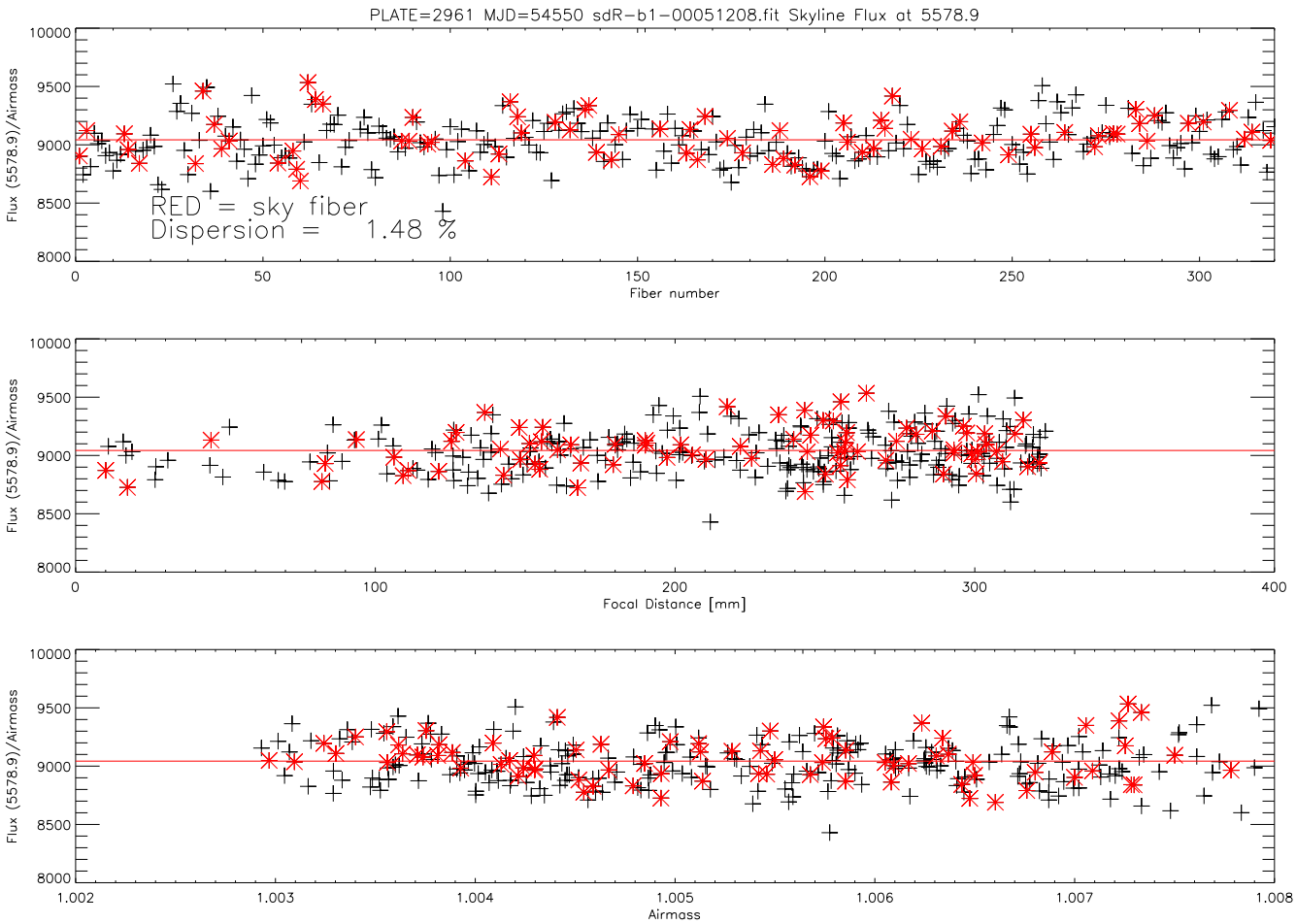

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

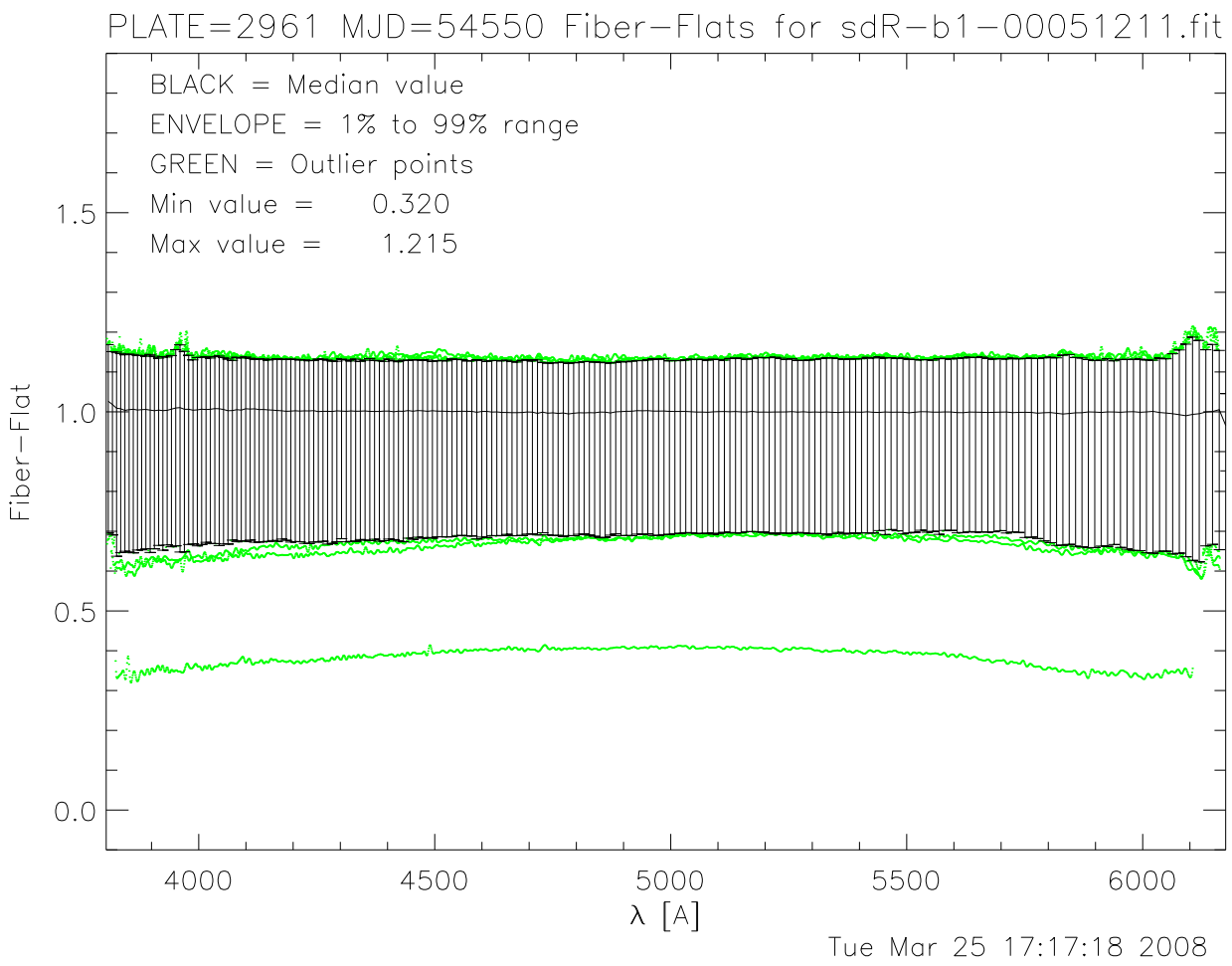

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

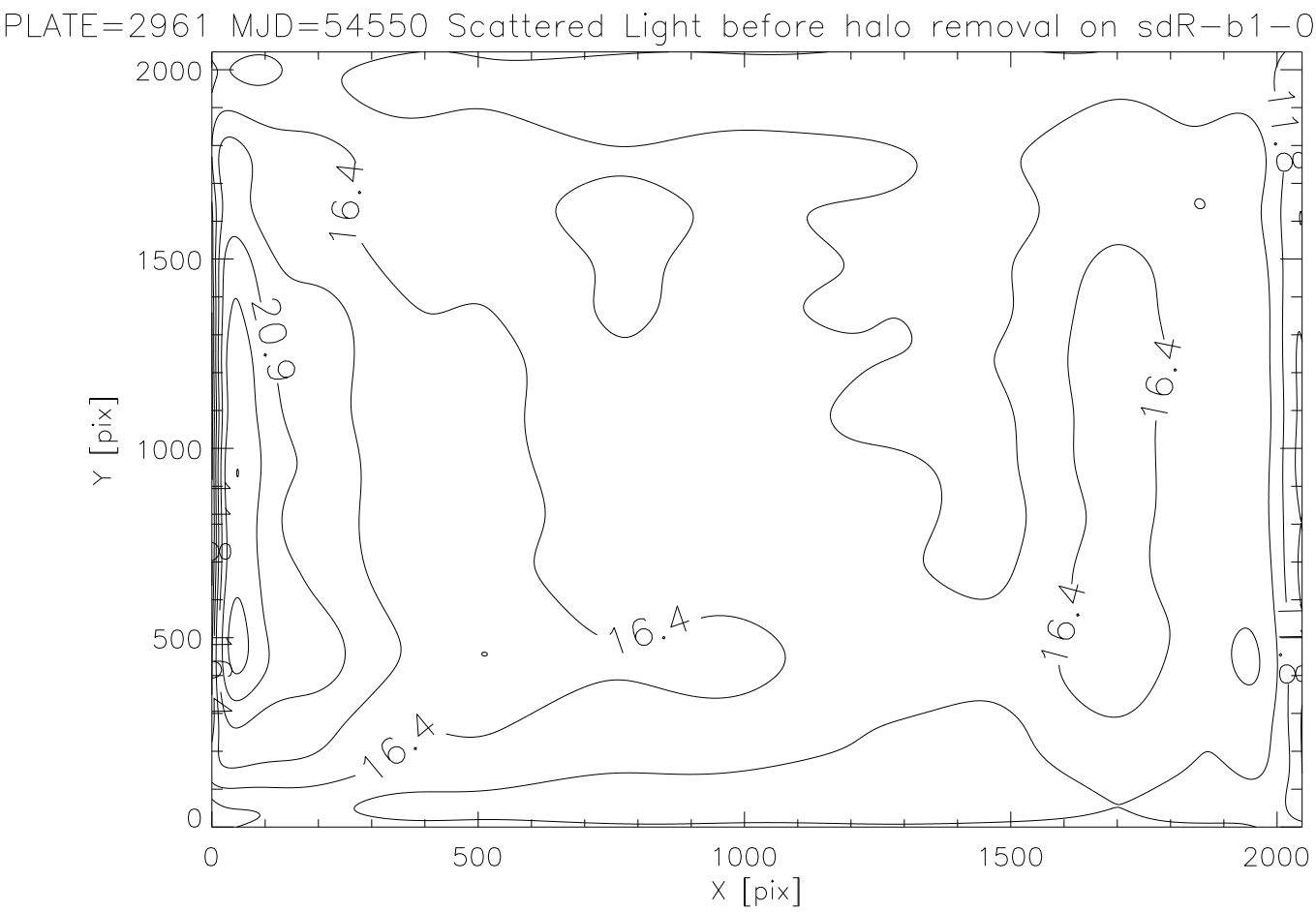

PLATE=2961 MJD=54550 sdR-b1-00051208.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

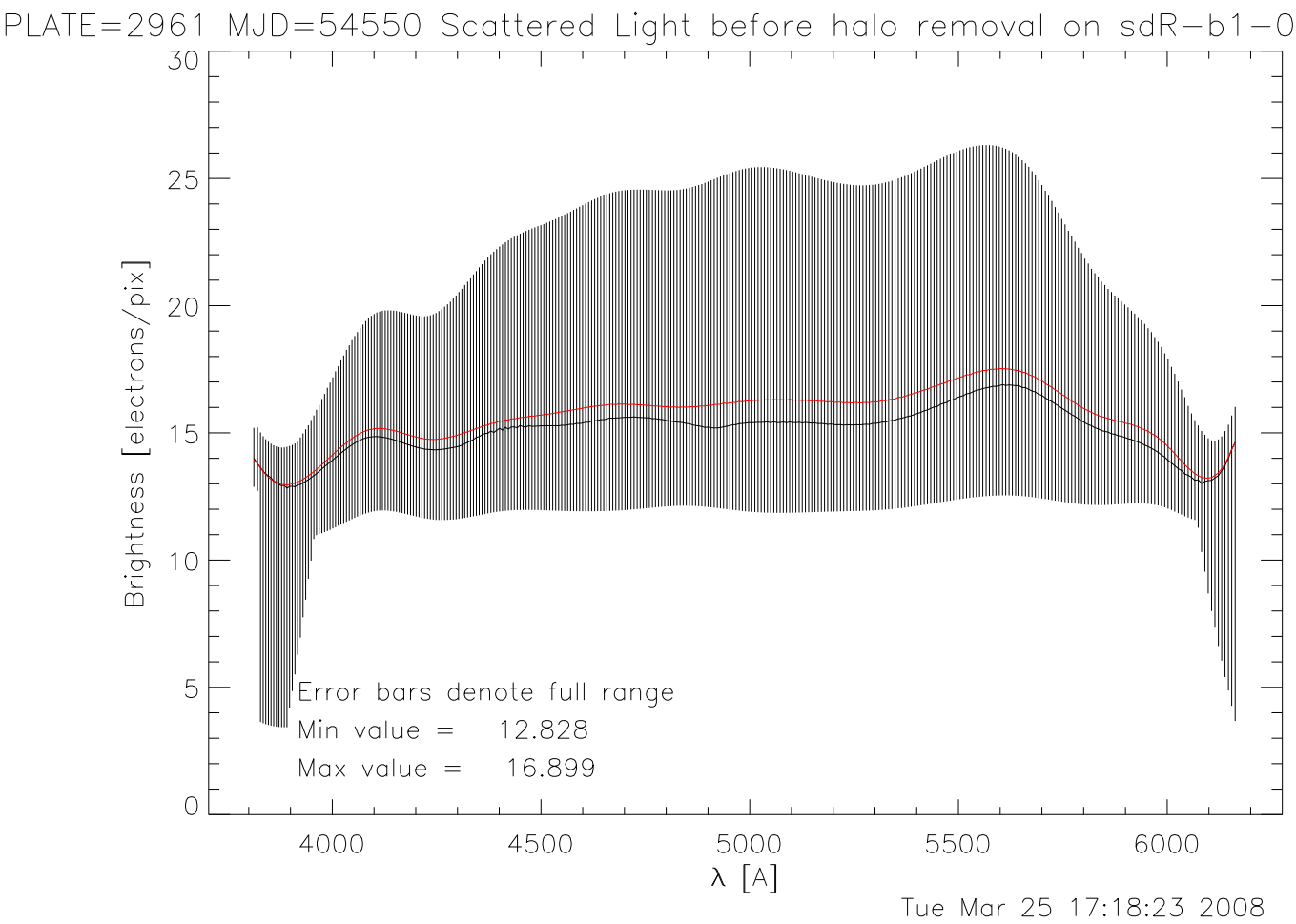

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051208.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

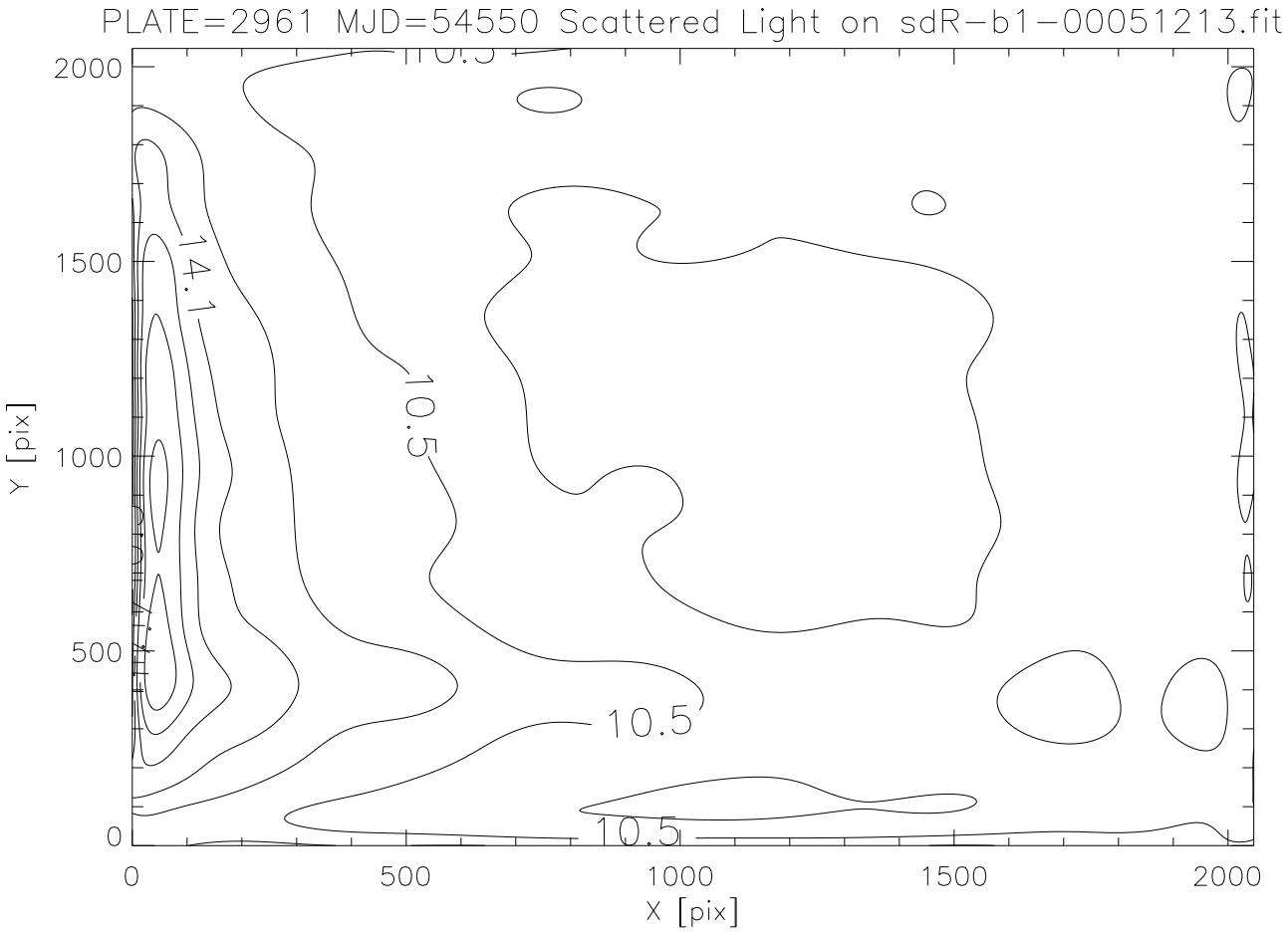

PLATE=2961 MJD=54550 sdR-b1-00051208.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.51 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

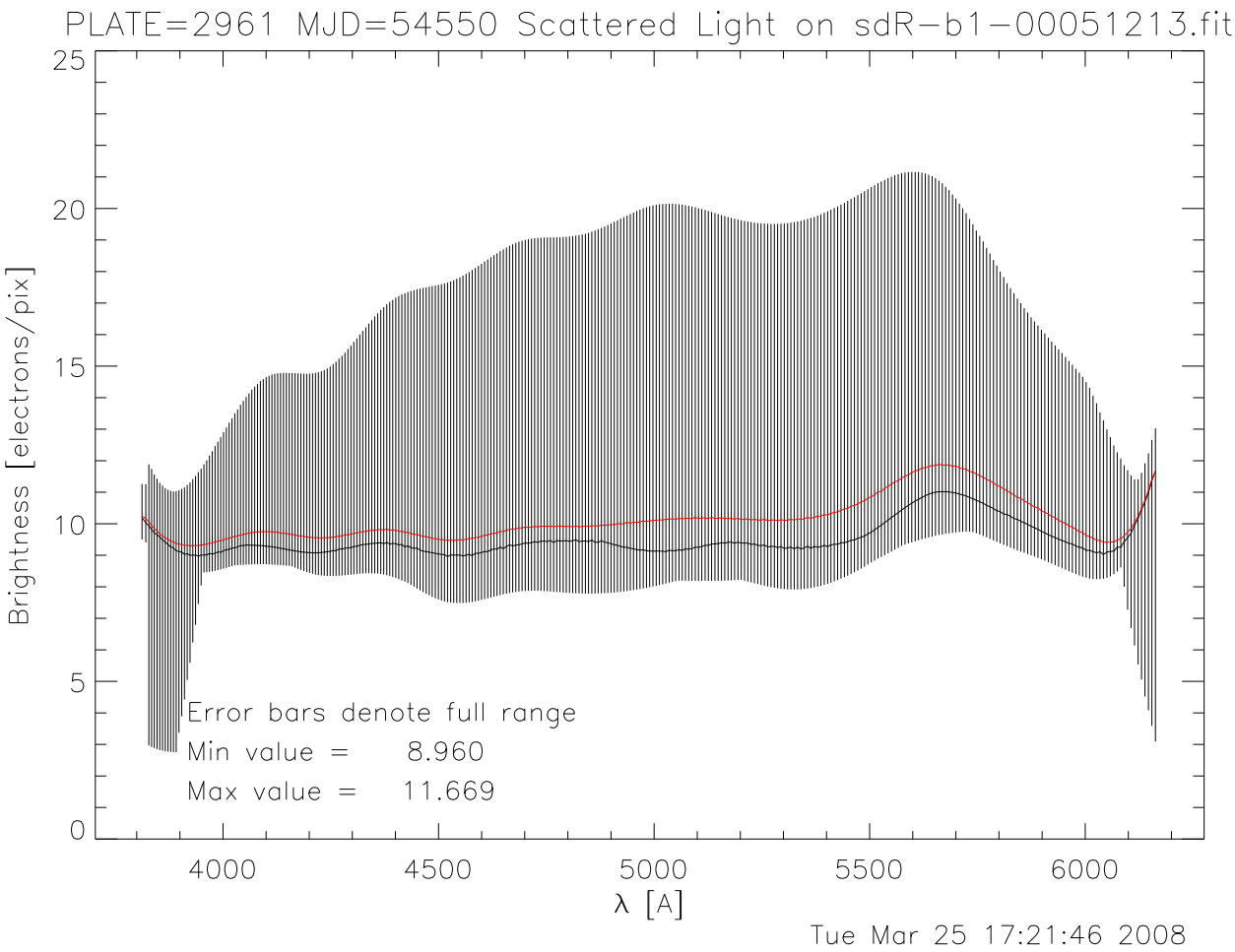

PLATE=2961 MJD=54550 sdR-b1-00051208.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.48 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2961 MJD=54550 Fiber−Flats for sdR−b1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:17:18 2008


PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b1-00051213.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
16.4
20.9
18.1
16.4
16.4
16.4
16.4


PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051213.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 12.828
Max value = 16.899
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:18:23 2008


PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051213.fit
10.5
14.1
10.5
10.5
10.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]


PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051213.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.960
Max value = 11.669
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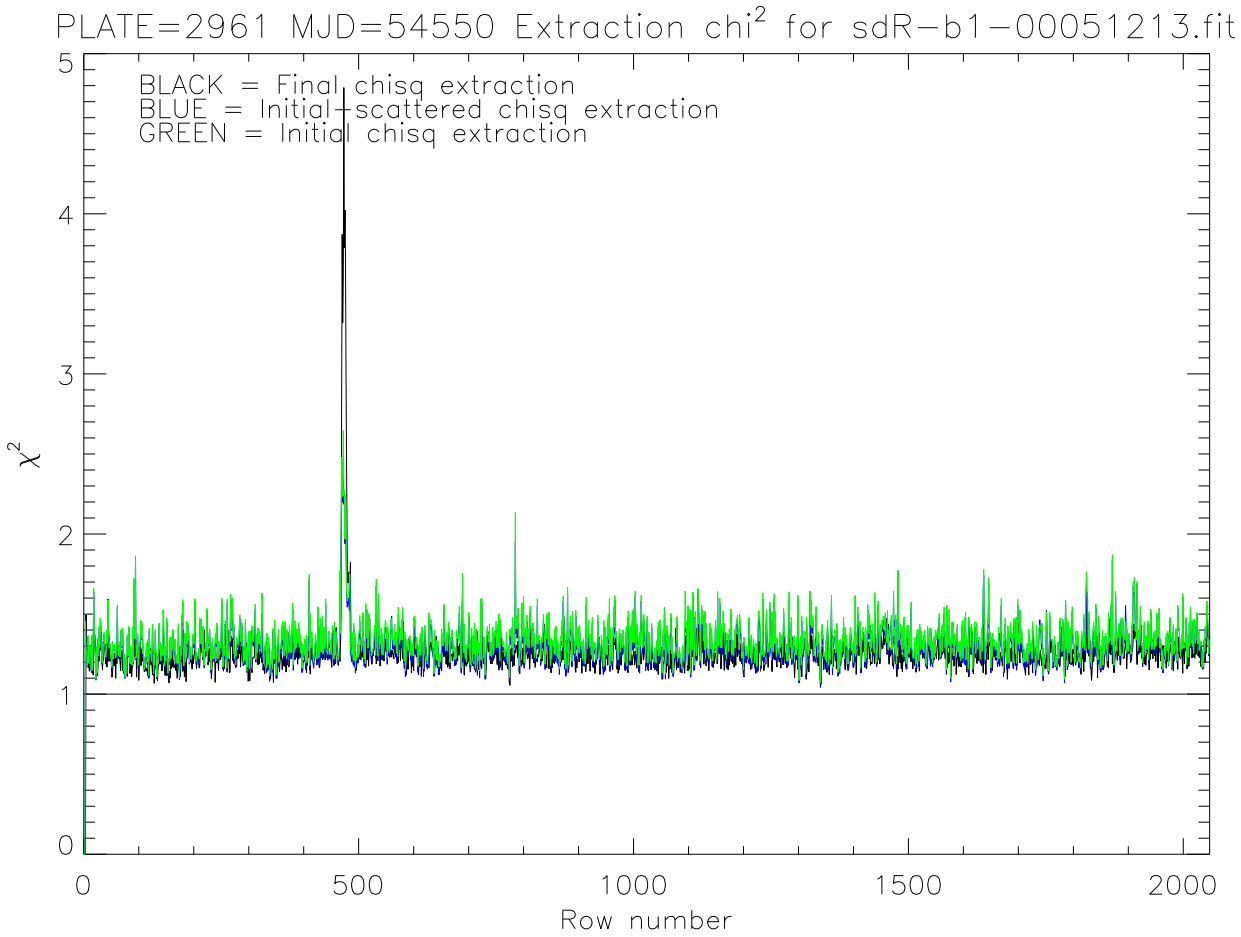
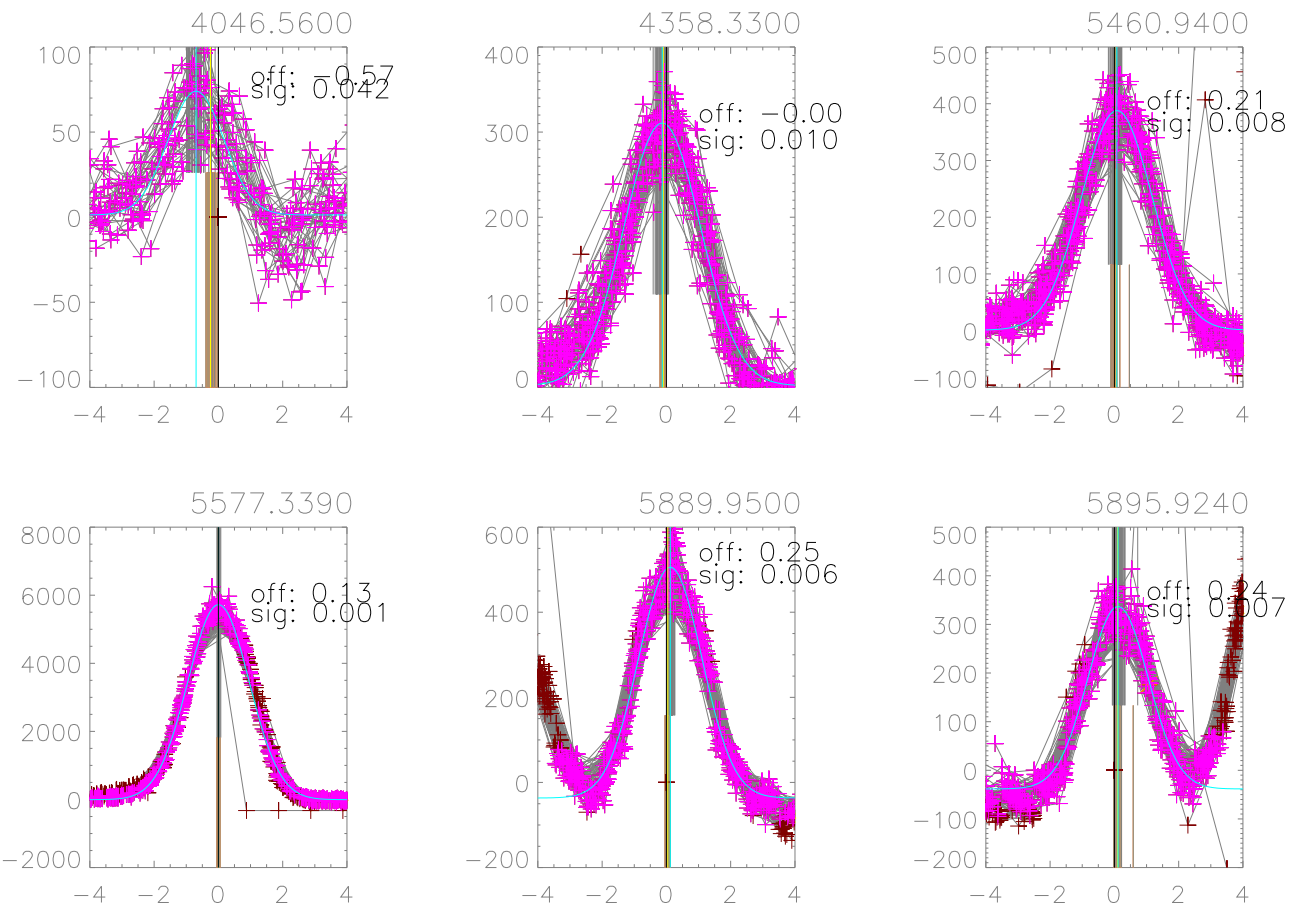
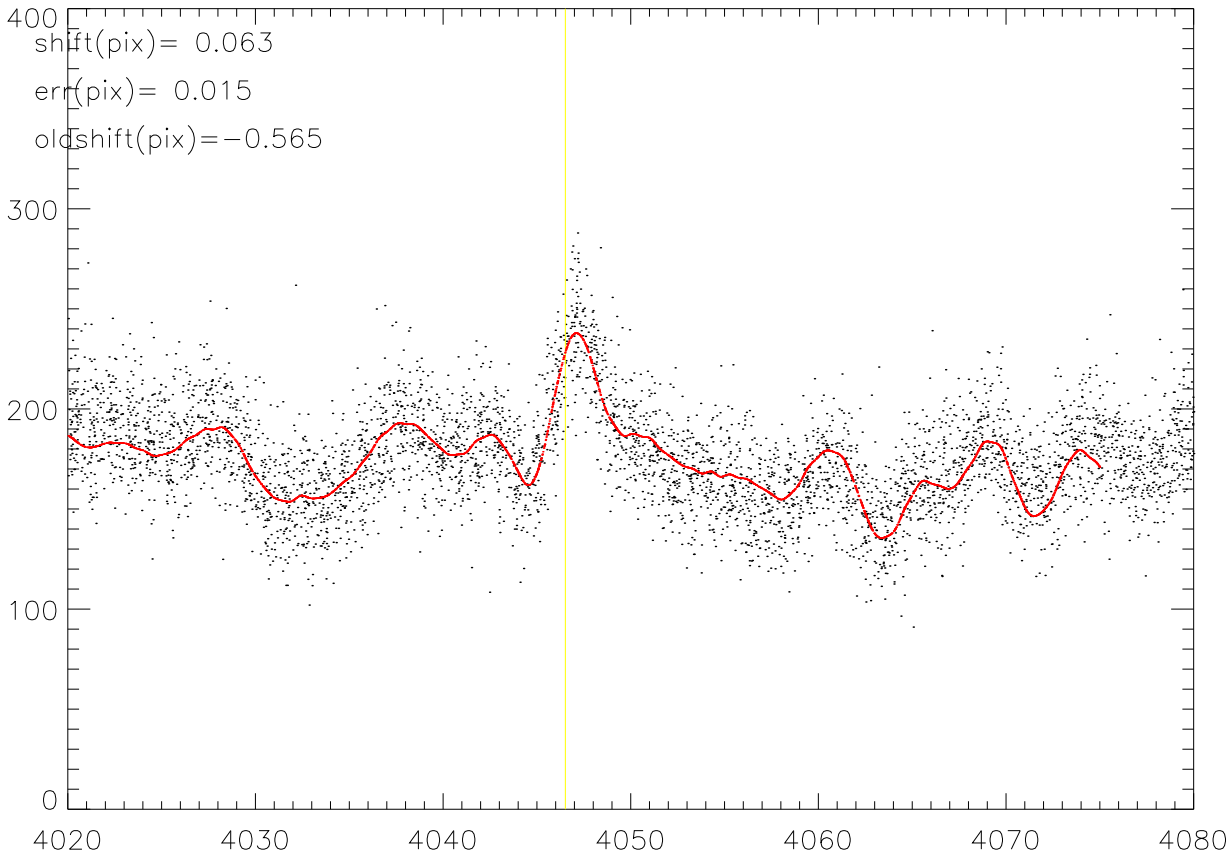
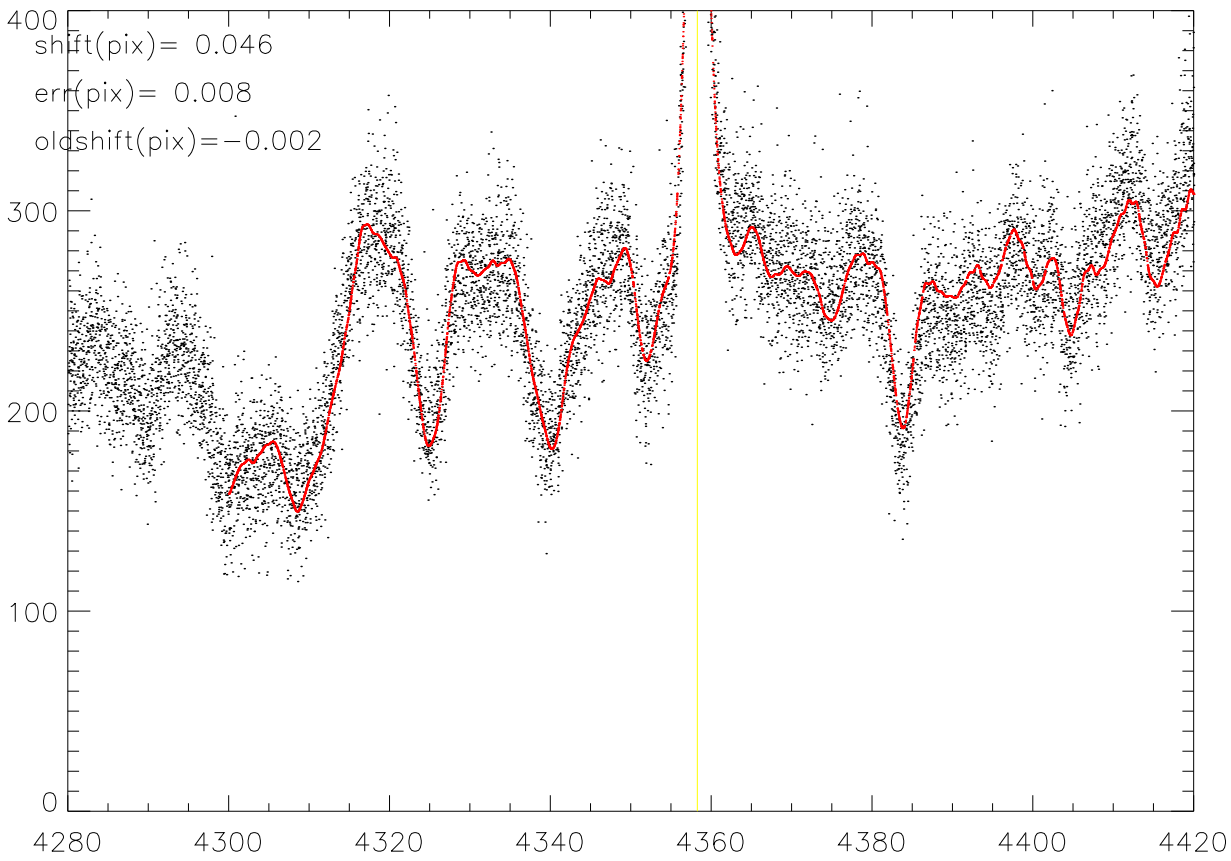
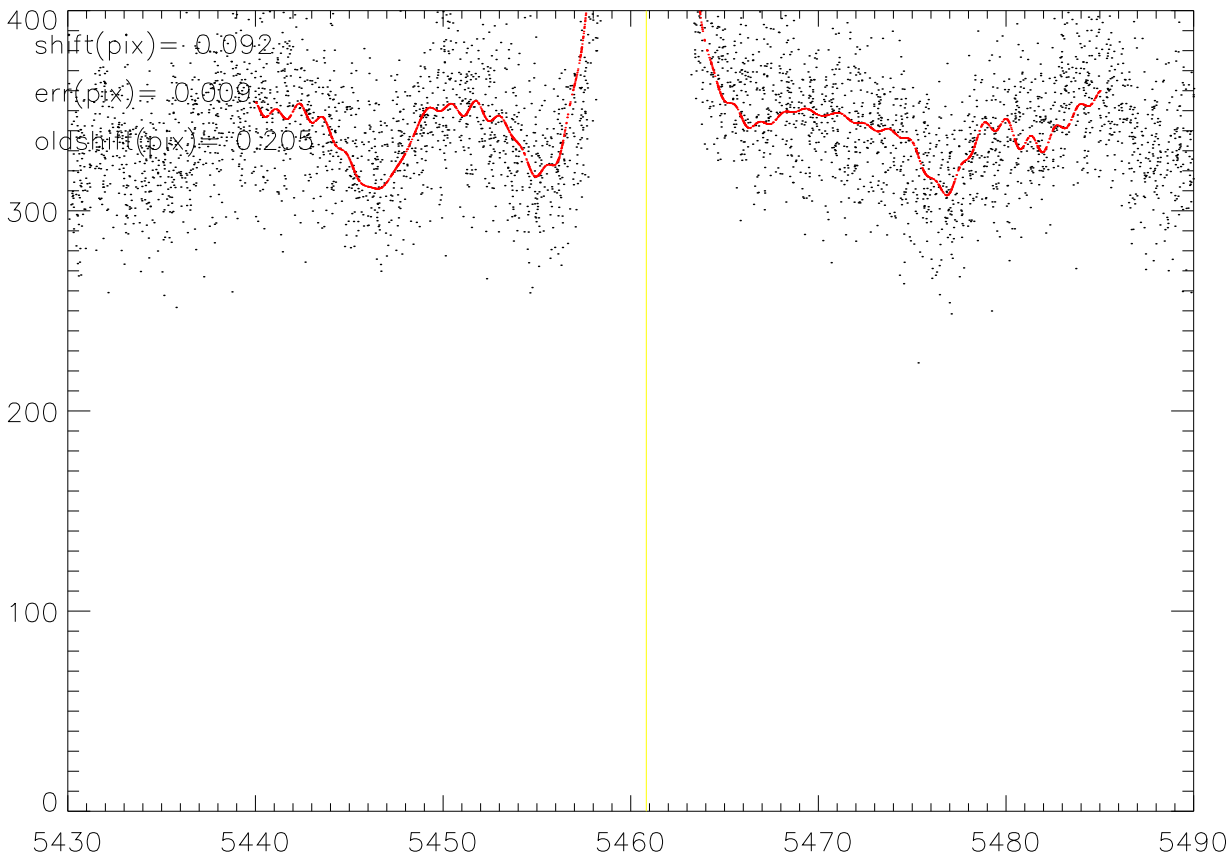
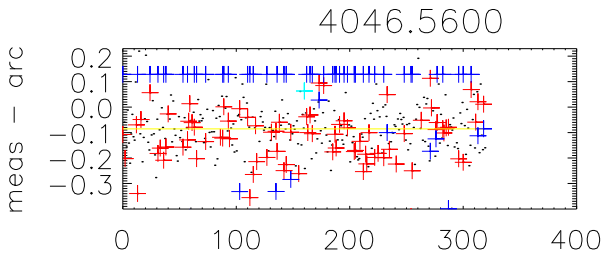

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−b1−00051213.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

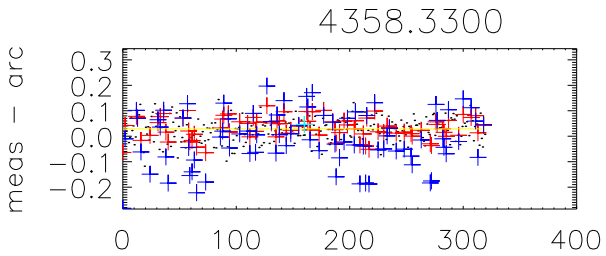

4046.5600
off: −0.57
sig: 0.042
4358.3300
off: −0.00
sig: 0.010
5460.9400
off: 0.21
sig: 0.008
5577.3390
off: 0.13
sig: 0.001
5889.9500
off: 0.25
sig: 0.006
5895.9240
off: 0.24
sig: 0.007

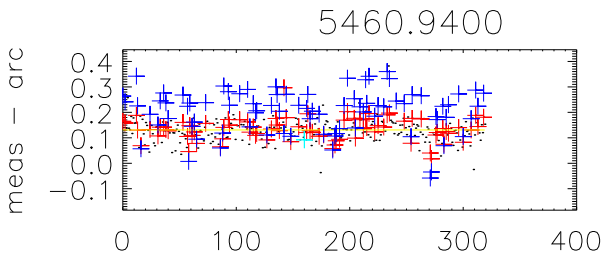

shift(pix)= 0.063
err(pix)= 0.015
oldshift(pix)=−0.565
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

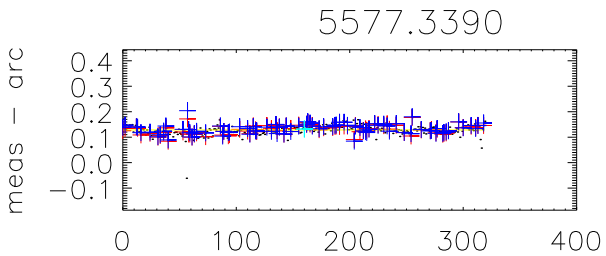

shift(pix)= 0.046
err(pix)= 0.008
oldshift(pix)=−0.002
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

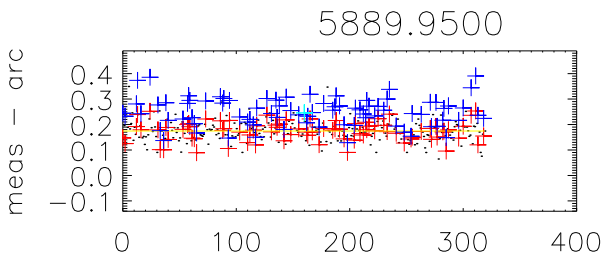

shift(pix)= 0.092
err(pix)= 0.009
oldshift(pix)= 0.205
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

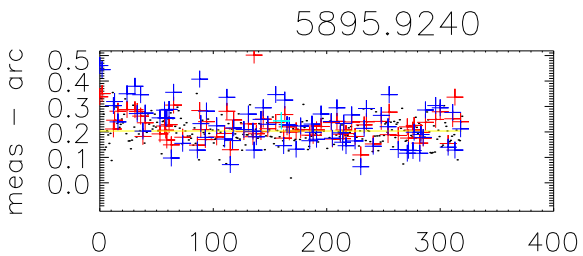

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

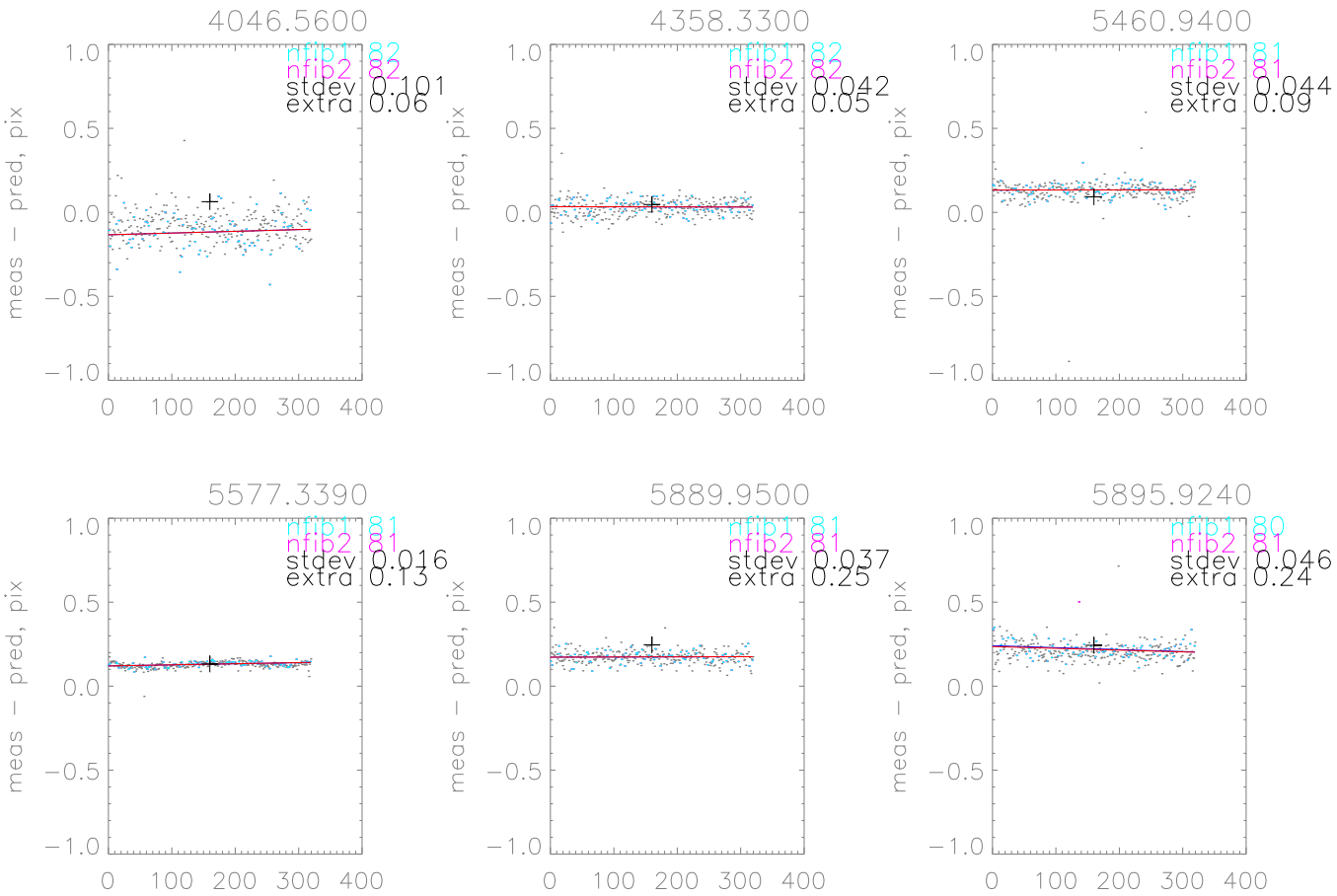

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

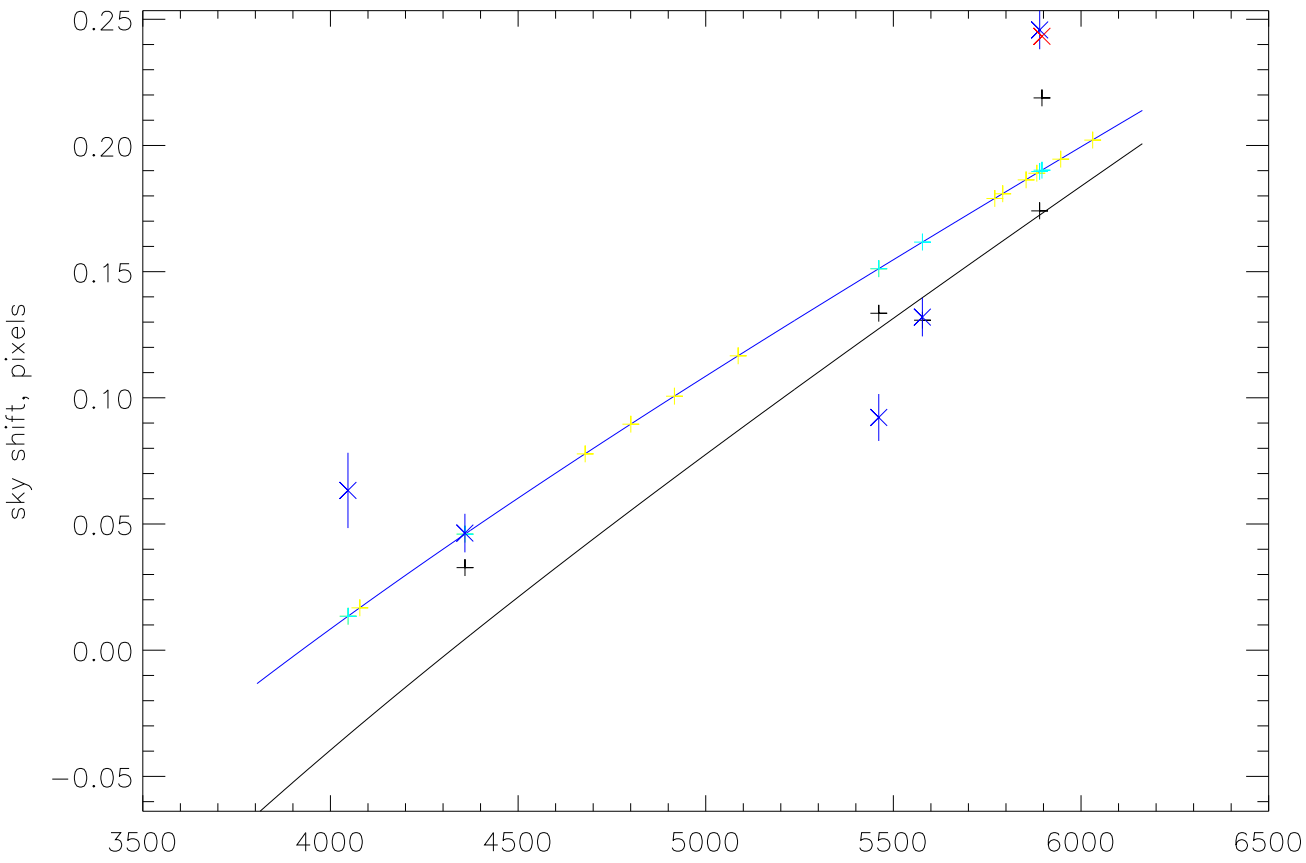

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

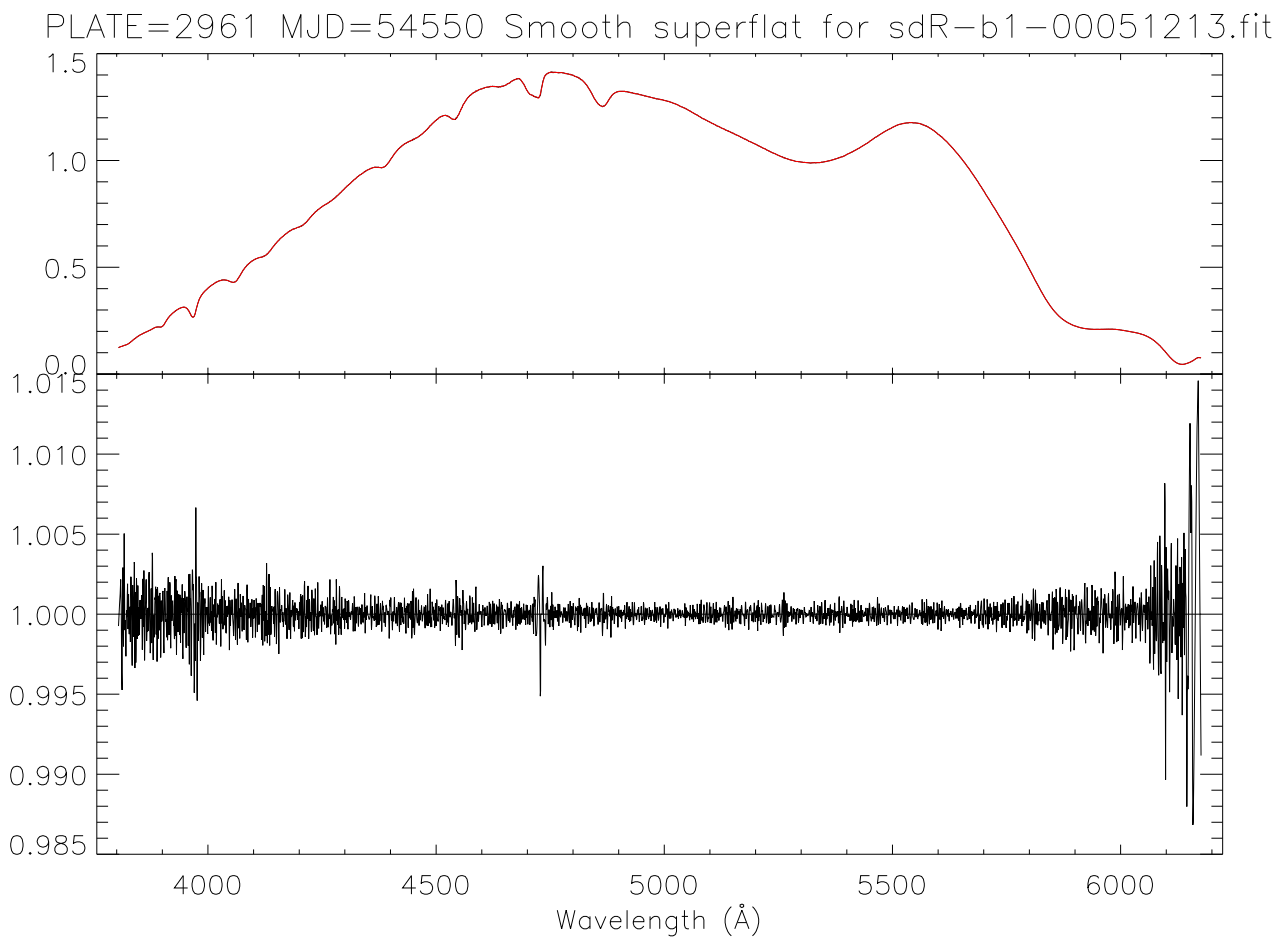

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

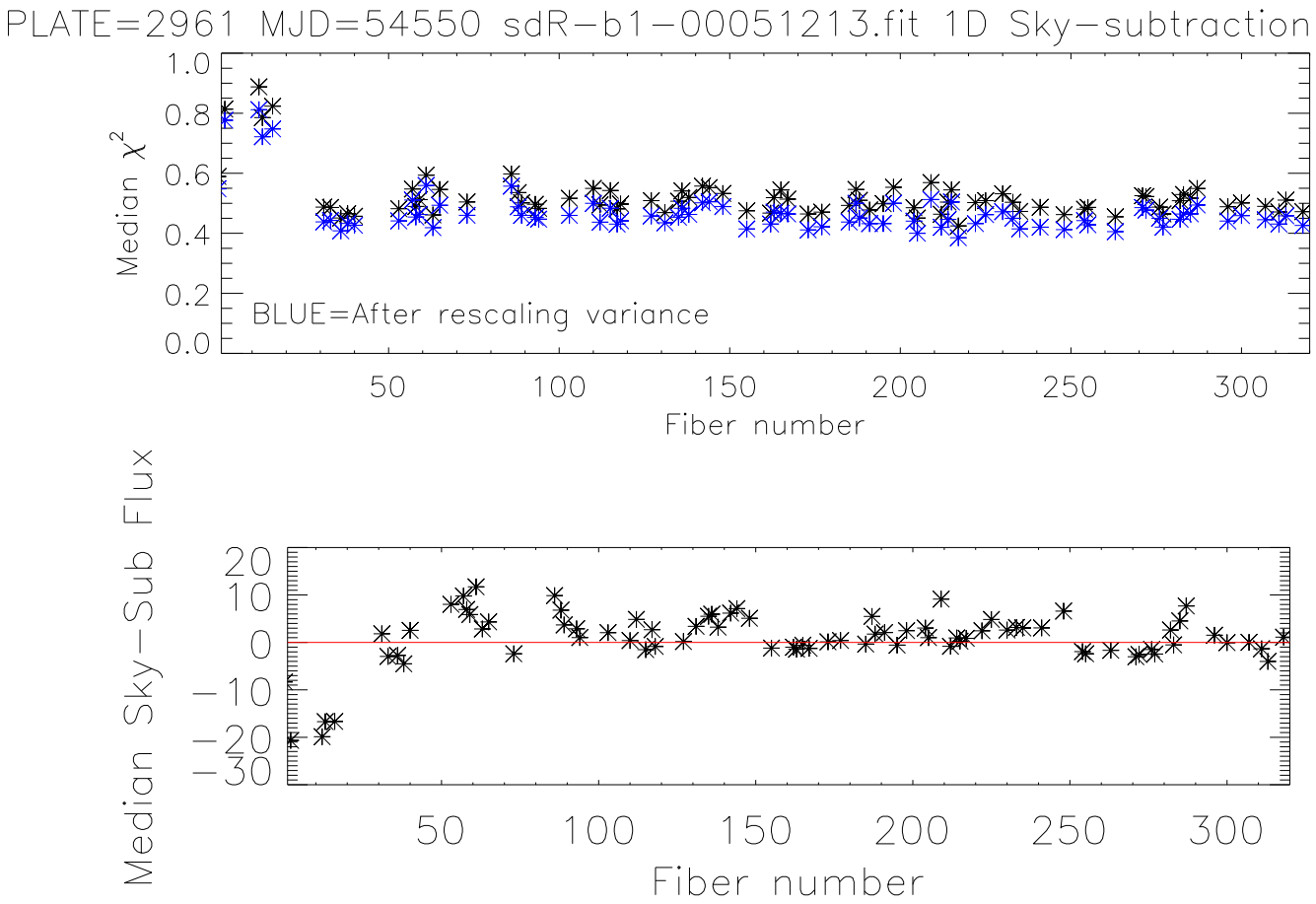

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

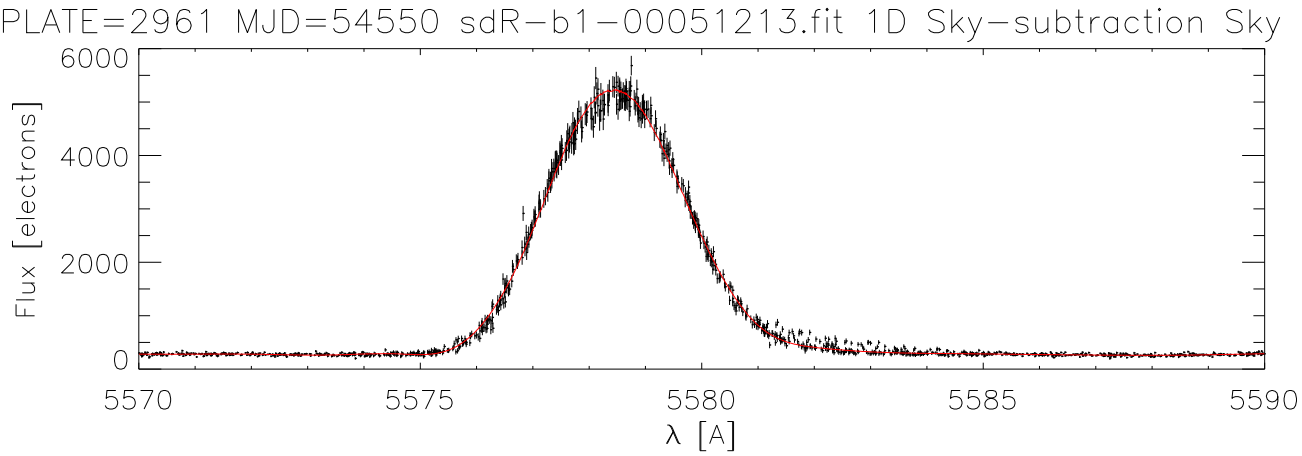

4046.5600
nfib1 82
nfib2 82
stdev 0.101
extra 0.06
4358.3300
nfib1 82
nfib2 82
stdev 0.042
extra 0.05
5460.9400
nfib1 81
nfib2 81
stdev 0.044
extra 0.09
5577.3390
nfib1 81
nfib2 81
stdev 0.016
extra 0.13
5889.9500
nfib1 81
nfib2 81
stdev 0.037
extra 0.25
5895.9240
nfib1 80
nfib2 81
stdev 0.046
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

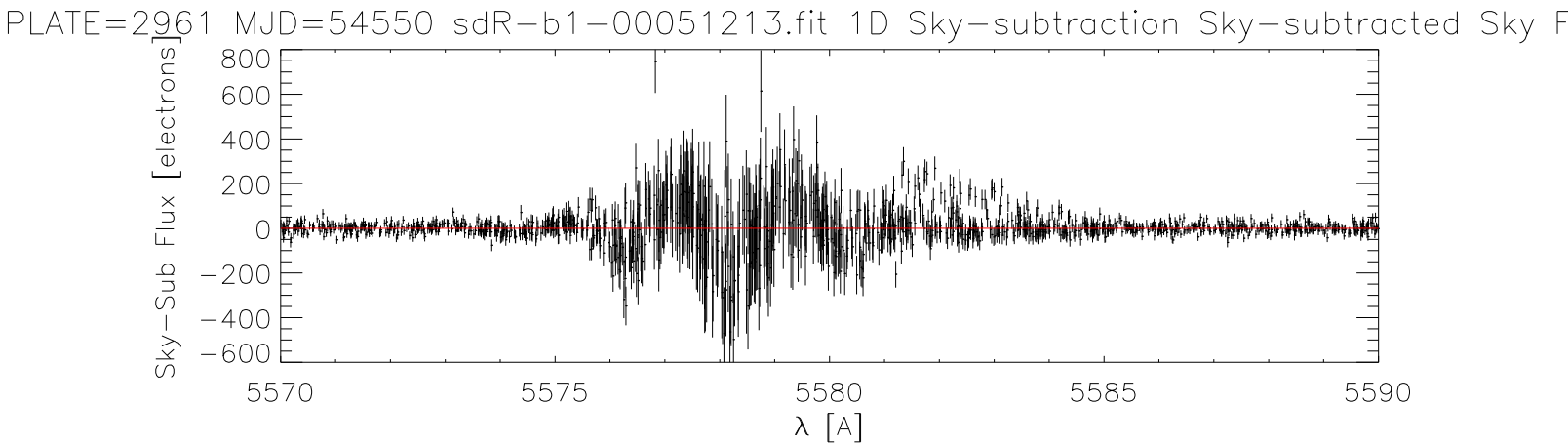

0.25
0.20
0.15
0.10
0.05
0.00
−0.05
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

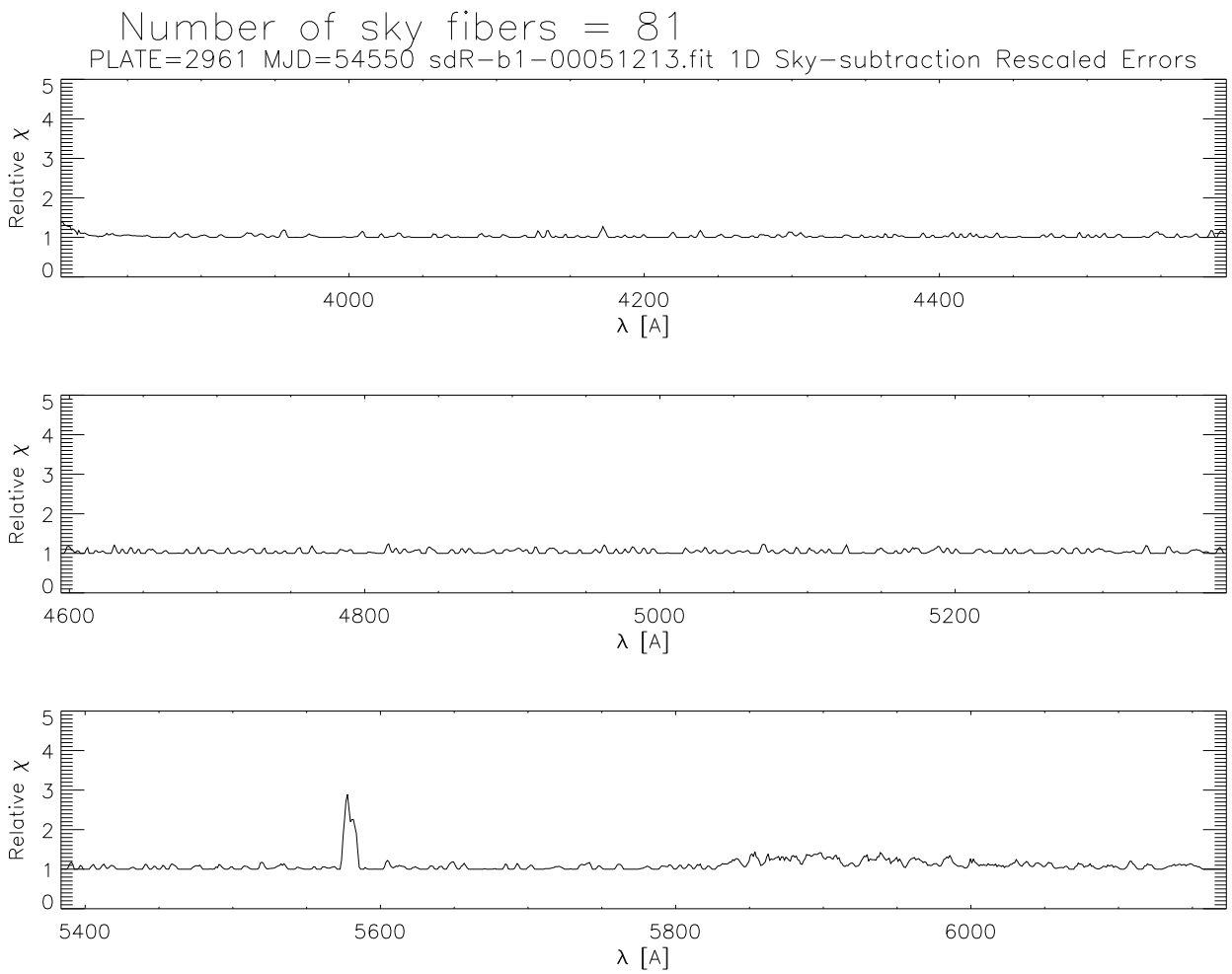
es= 0.0000

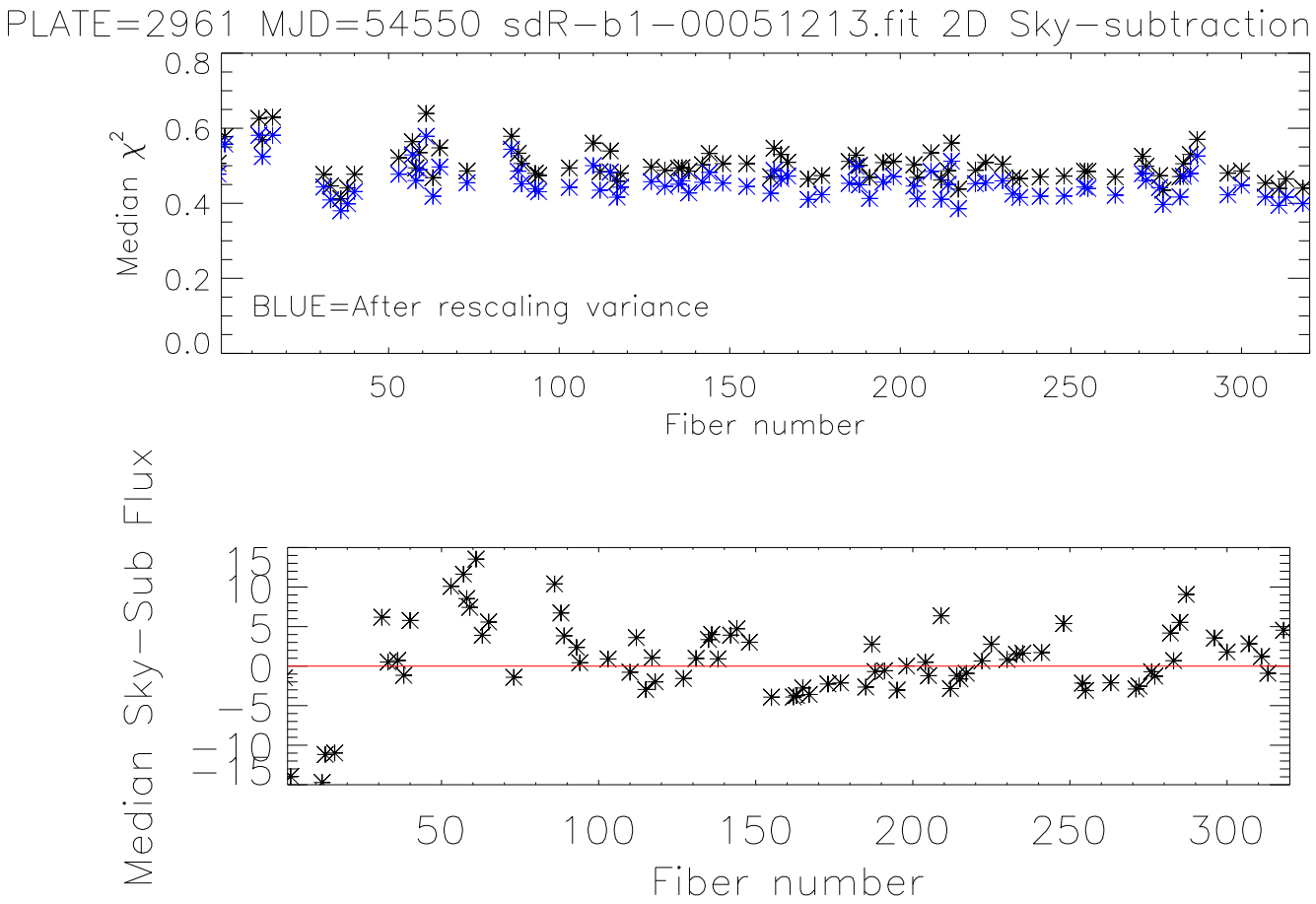

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051213.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

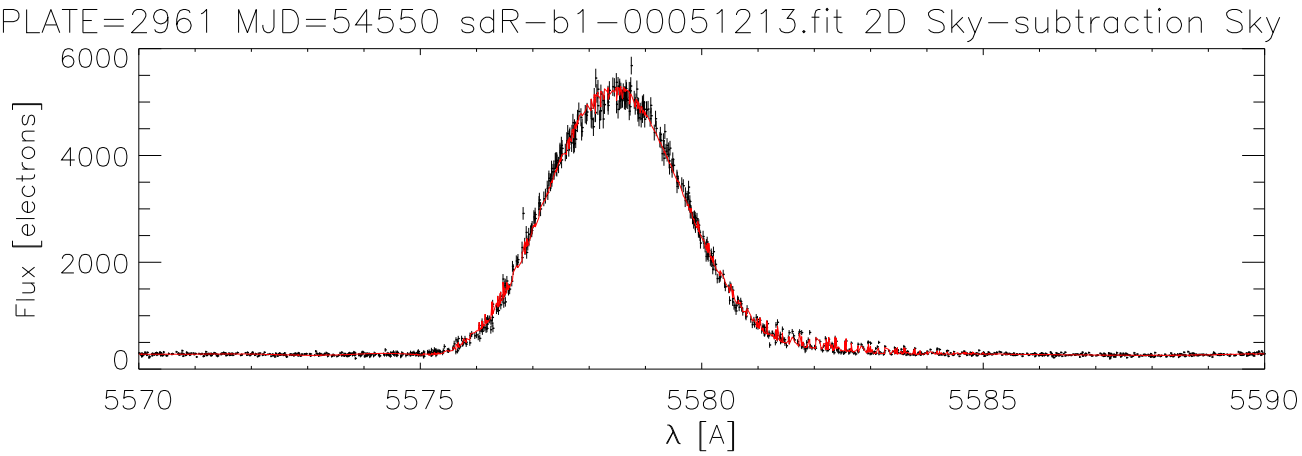

PLATE=2961 MJD=54550 sdR-b1-00051213.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

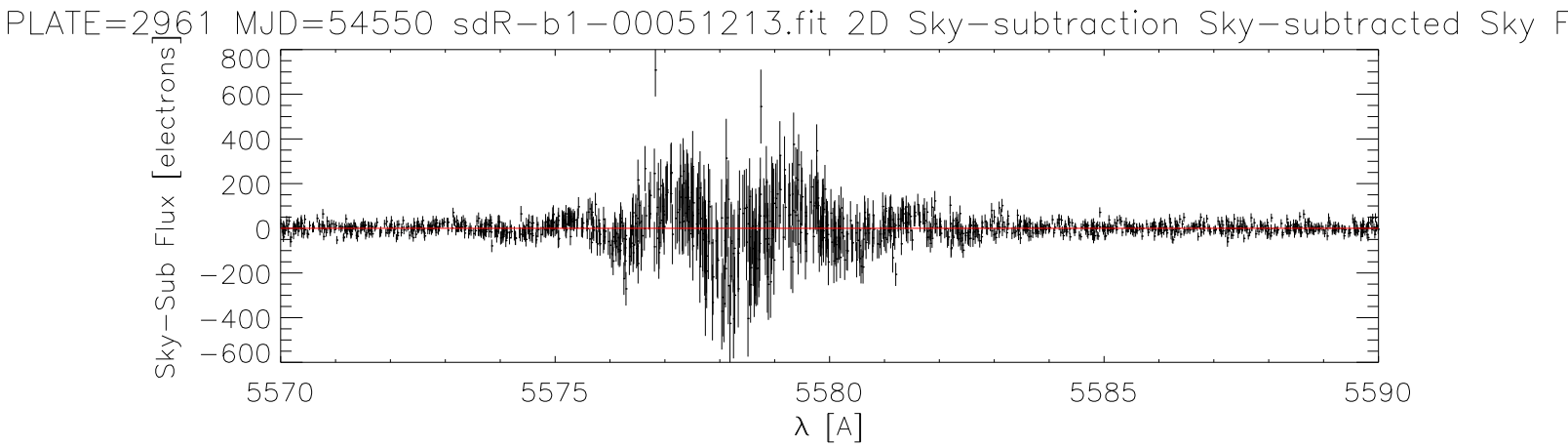

PLATE=2961 MJD=54550 sdR-b1-00051213.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

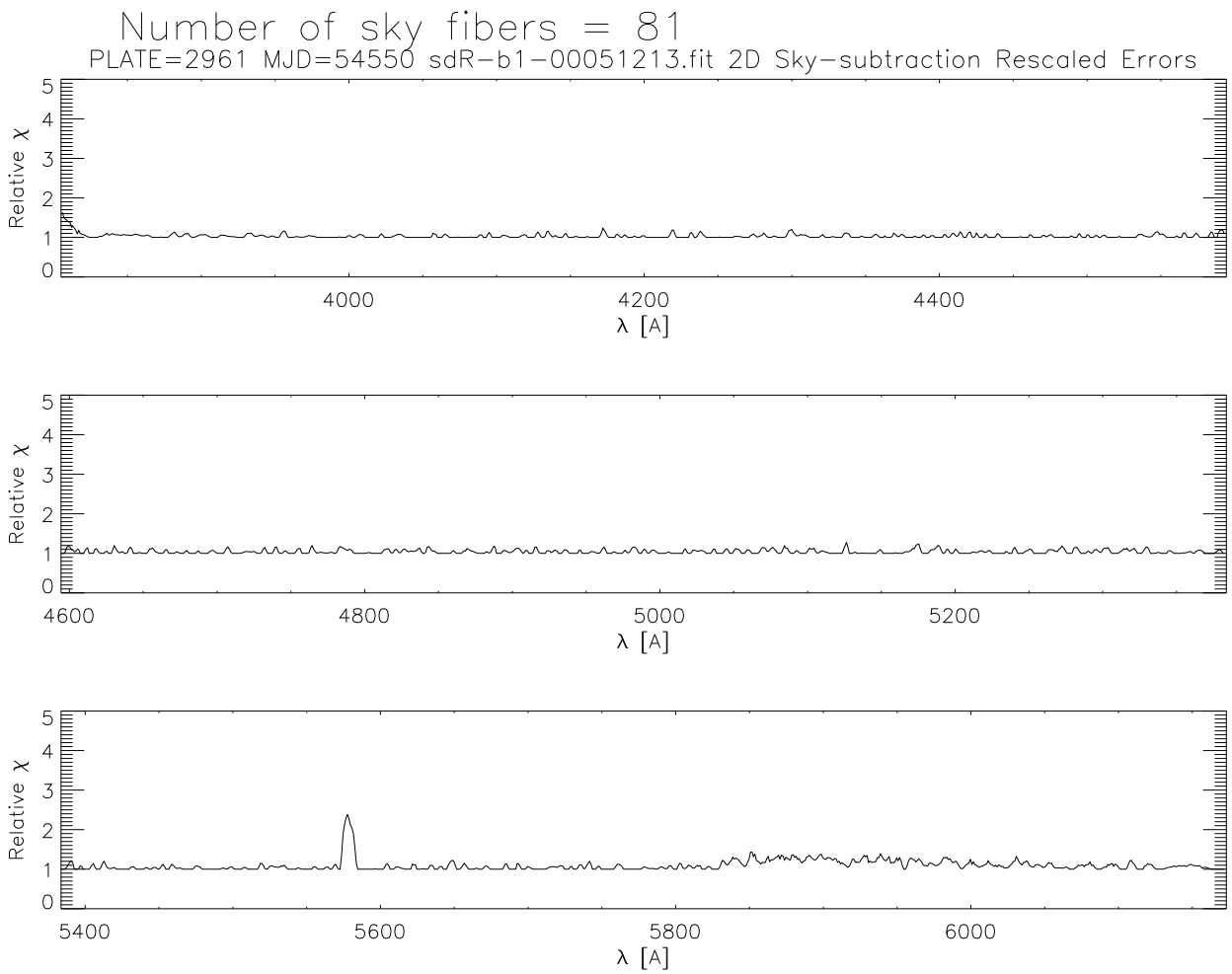

PLATE=2961 MJD=54550 sdR-b1-00051213.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

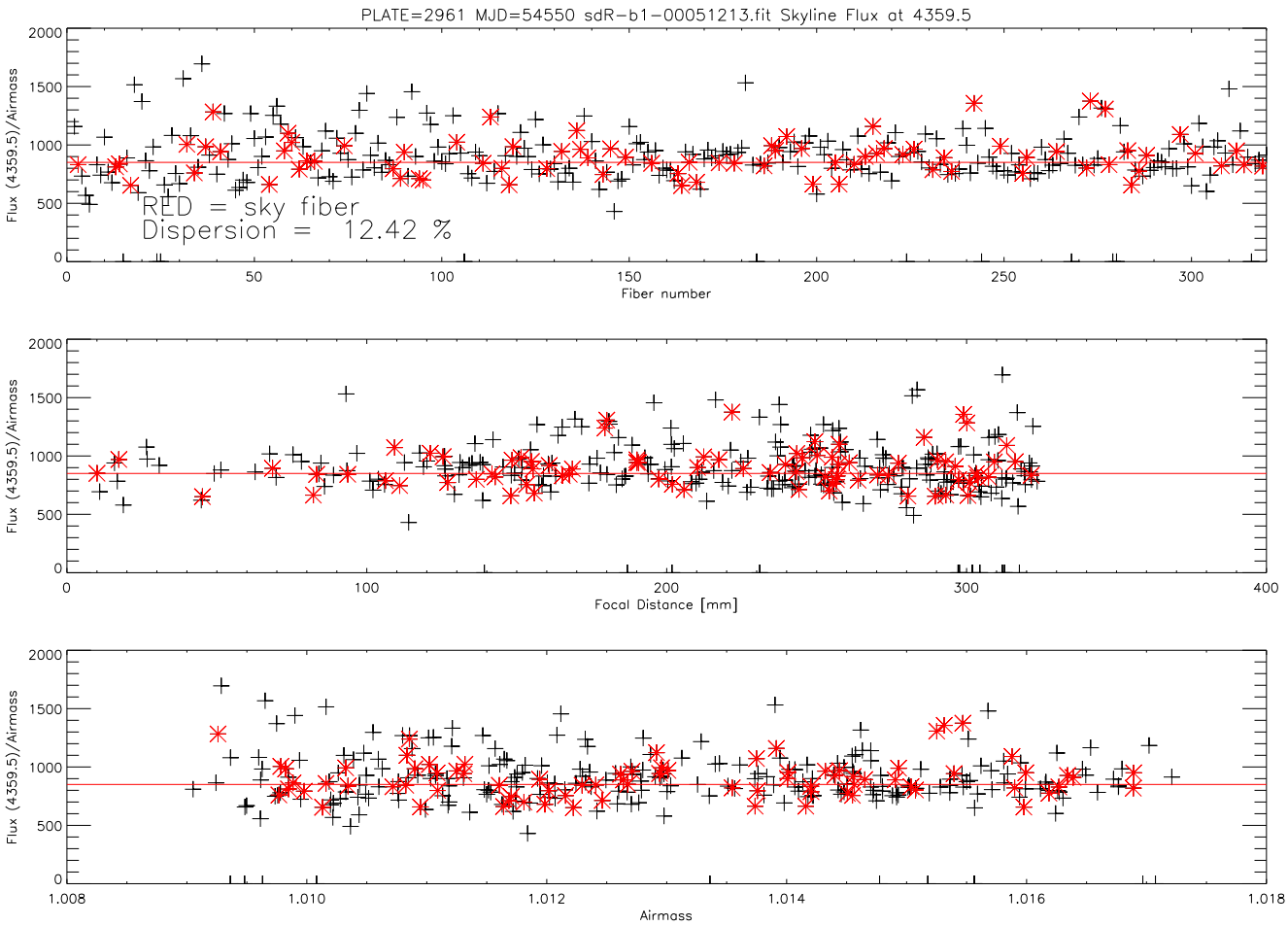

Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051213.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

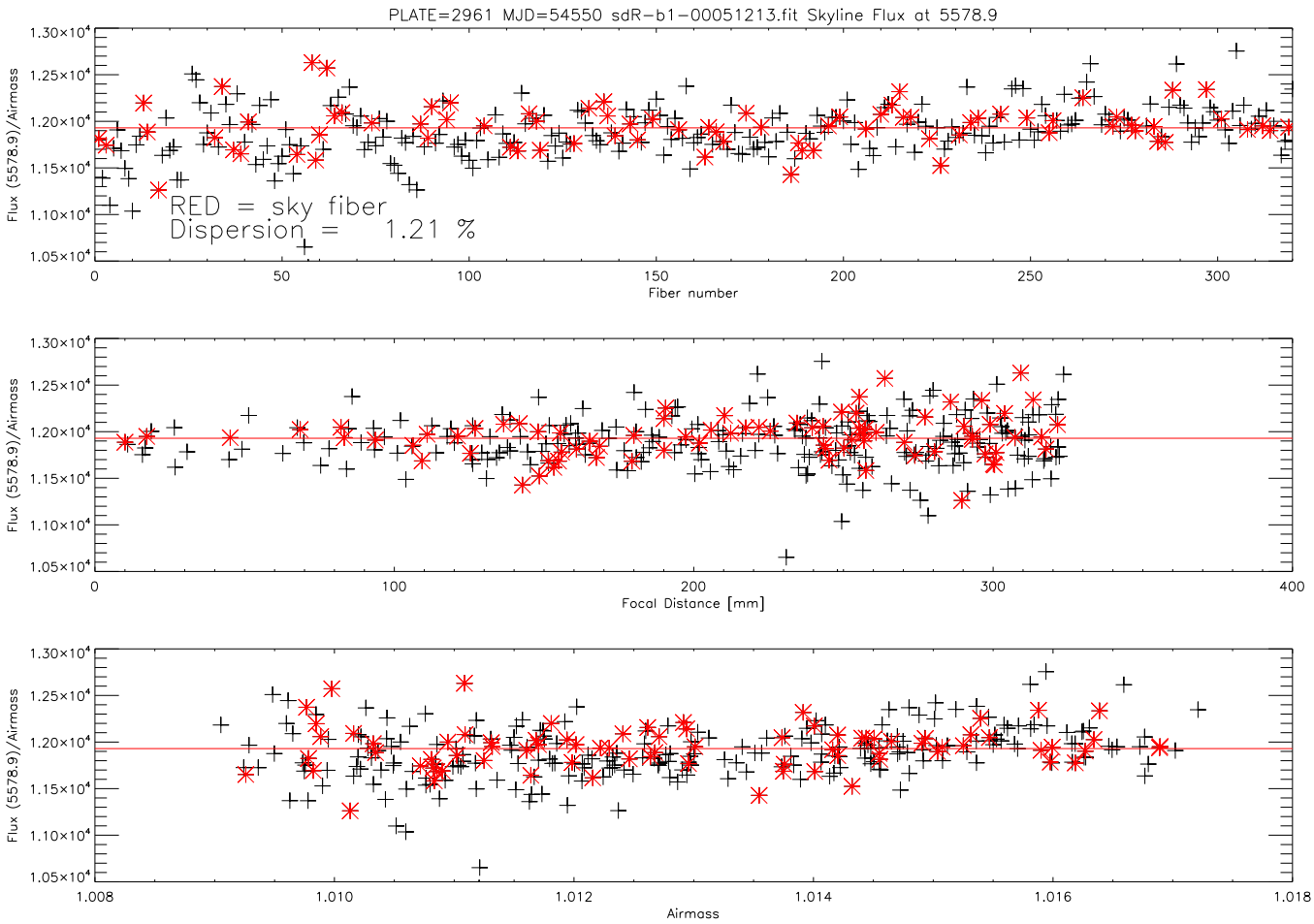

PLATE=2961 MJD=54550 sdR-b1-00051213.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

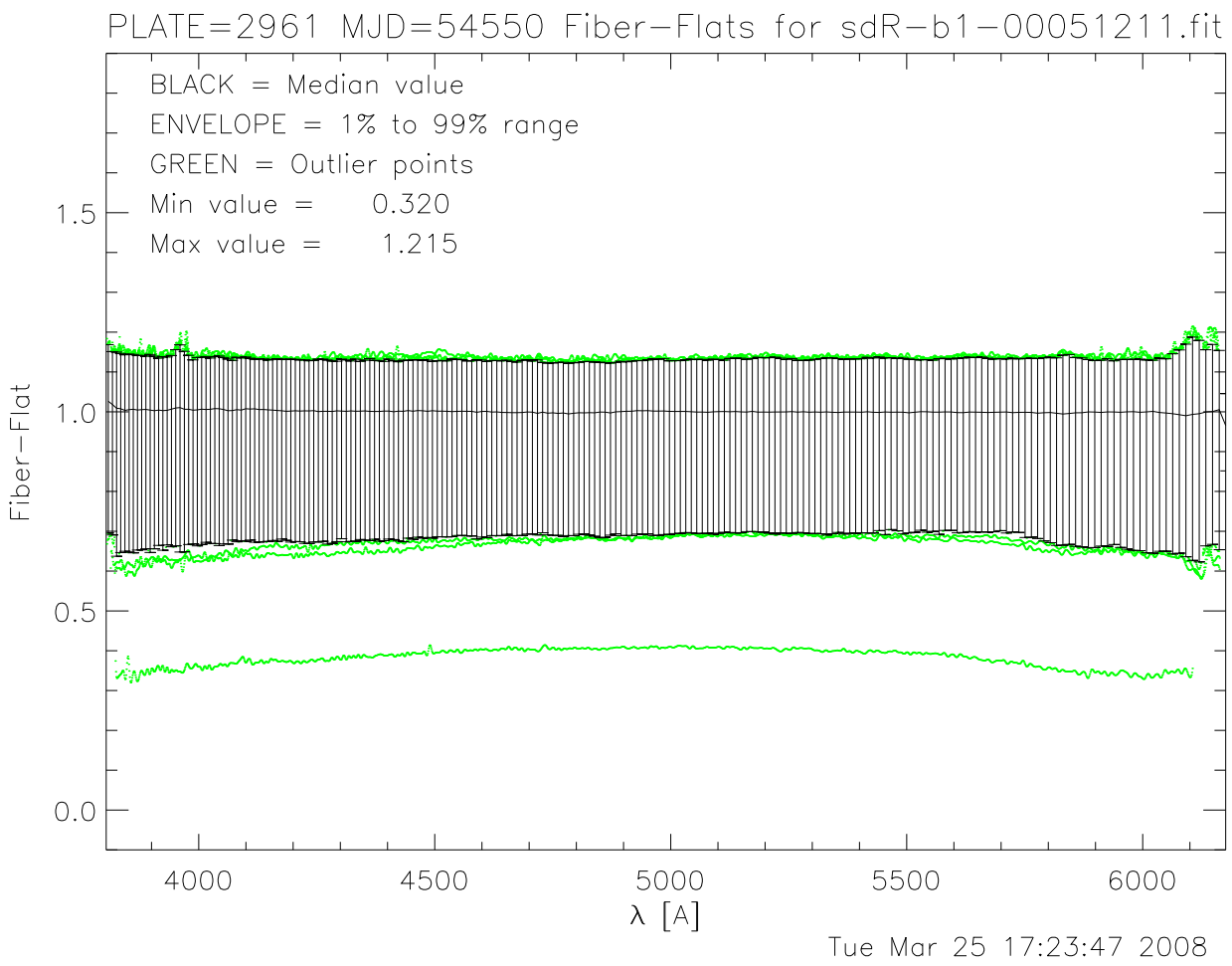

PLATE=2961 MJD=54550 sdR-b1-00051213.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2961 MJD=54550 sdR-b1-00051213.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 81
PLATE=2961 MJD=54550 sdR-b1-00051213.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000


PLATE=2961 MJD=54550 sdR-b1-00051213.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.42 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=2961 MJD=54550 sdR-b1-00051213.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.21 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


PLATE=2961 MJD=54550 Fiber-Flats for sdR-b1-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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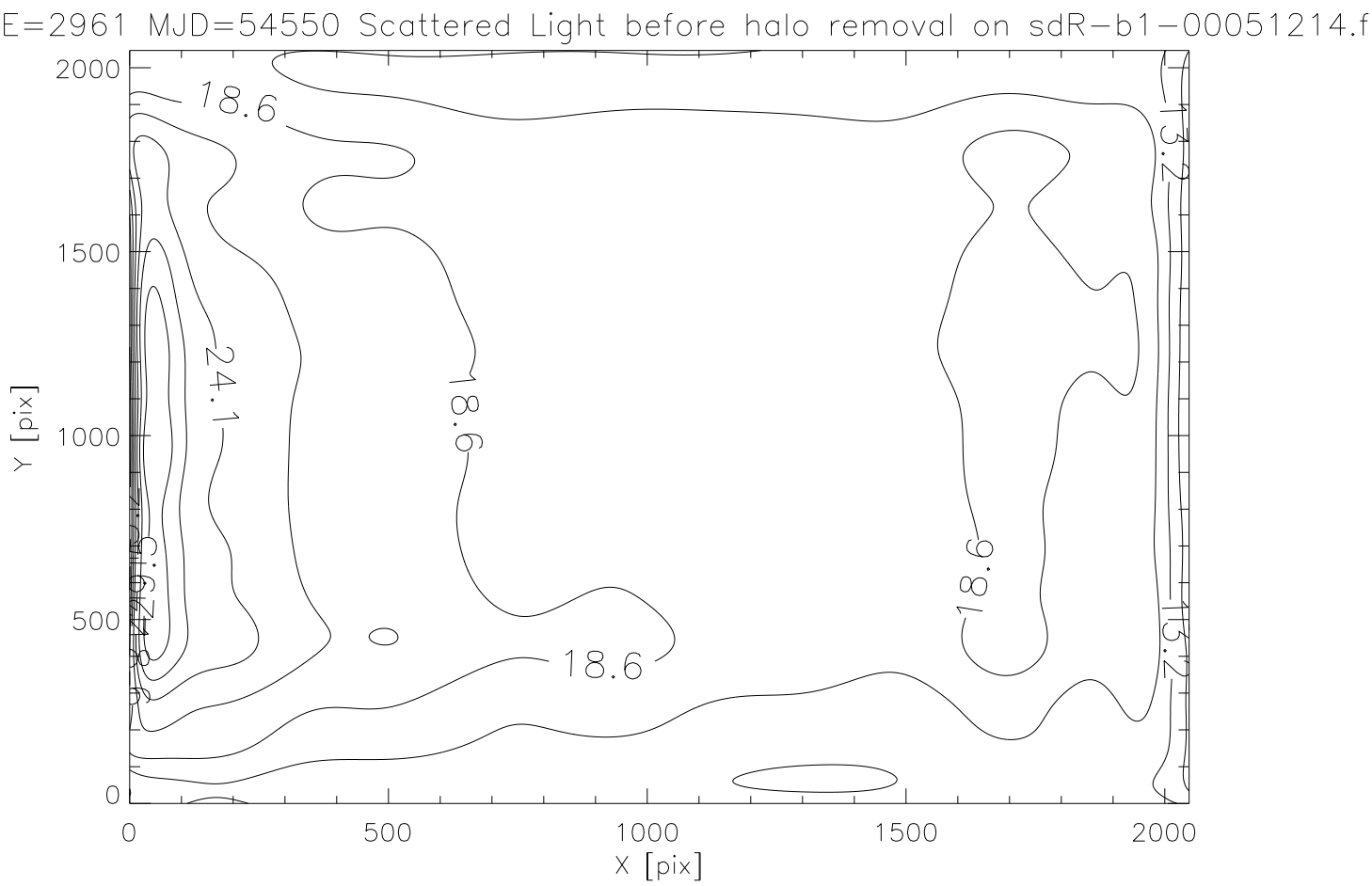
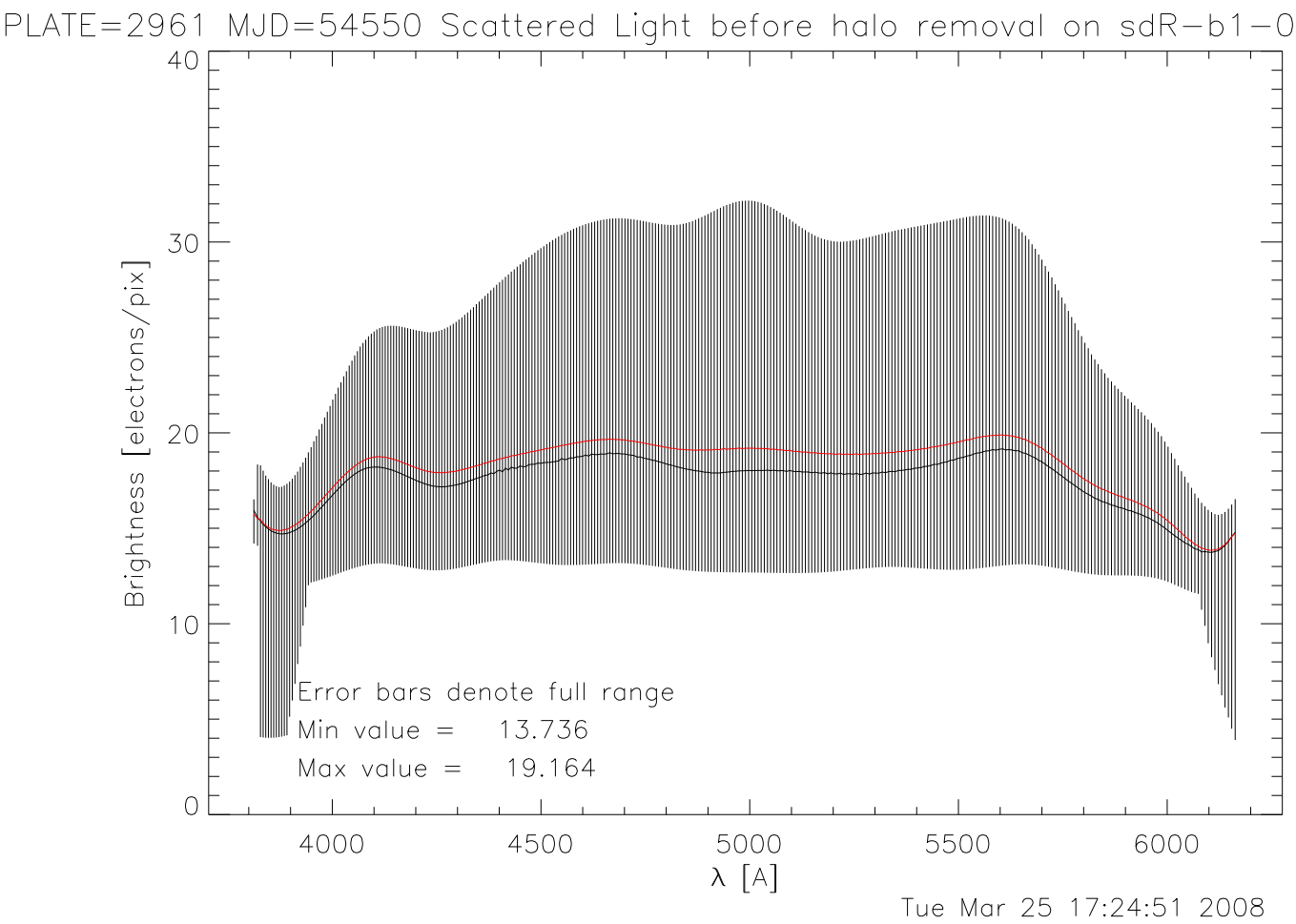

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051214.f
18.6
13.2
24.1
18.6
18.6
0
18.6
13.2
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b1-00051214.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 13.736
Max value = 19.164
4000
4500
5000
5500
6000
λ [A]
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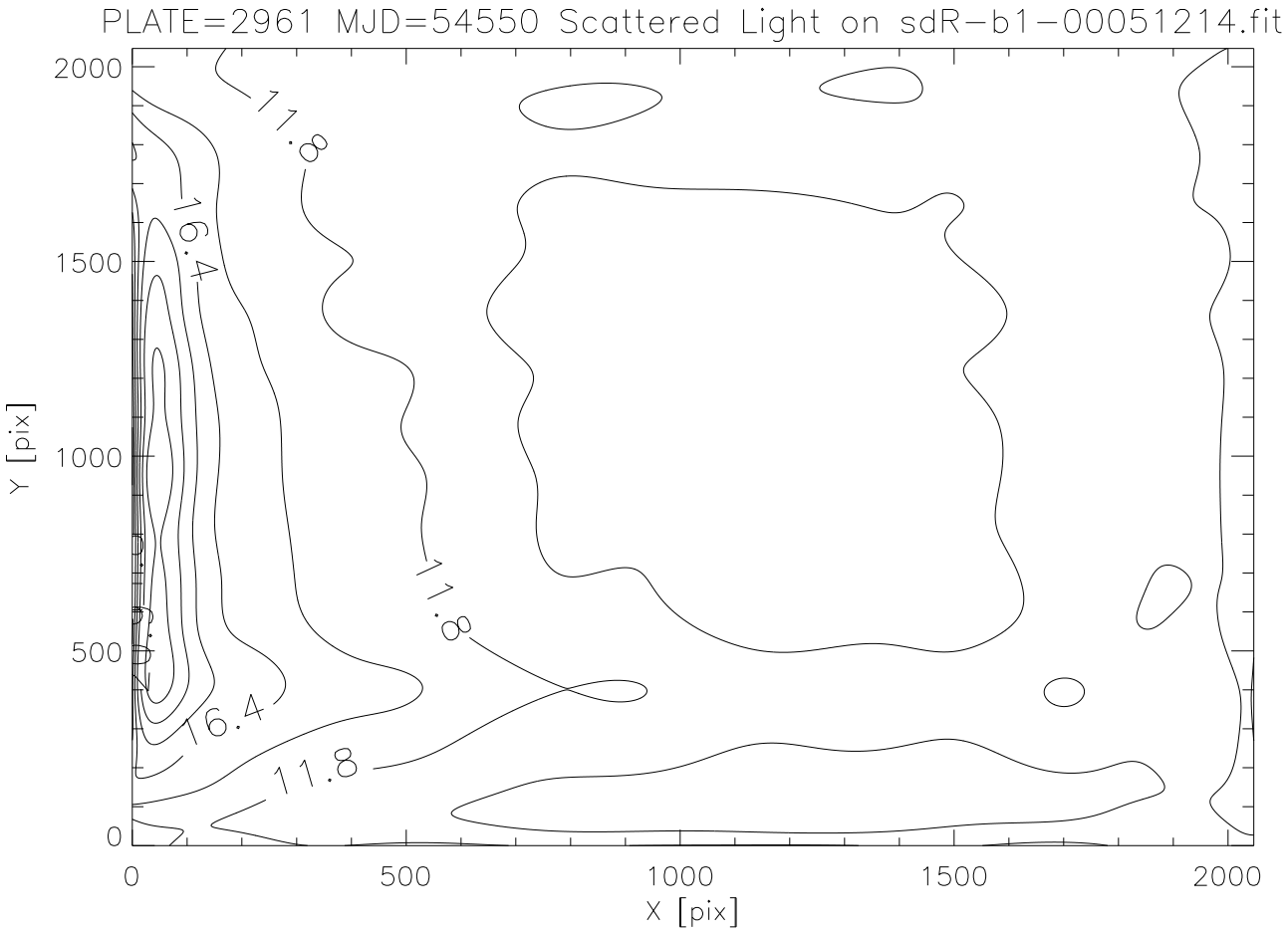
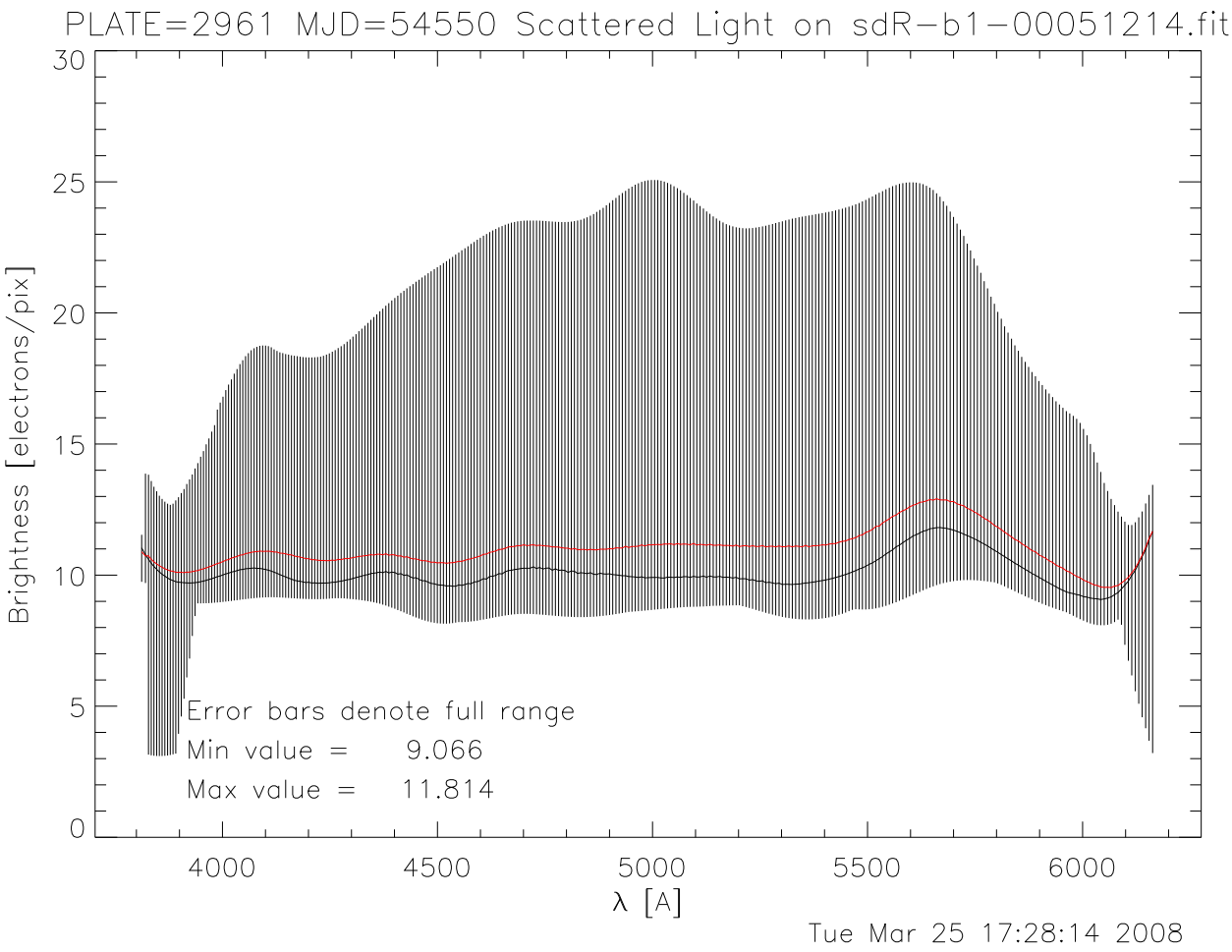

PLATE=2961 MJD=54550 Scattered Light on sdR−b1−00051214.fit
11.8
16.4
11.8
16.4
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051214.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 9.066
Max value = 11.814
4000
4500
5000
5500
6000
λ [A]
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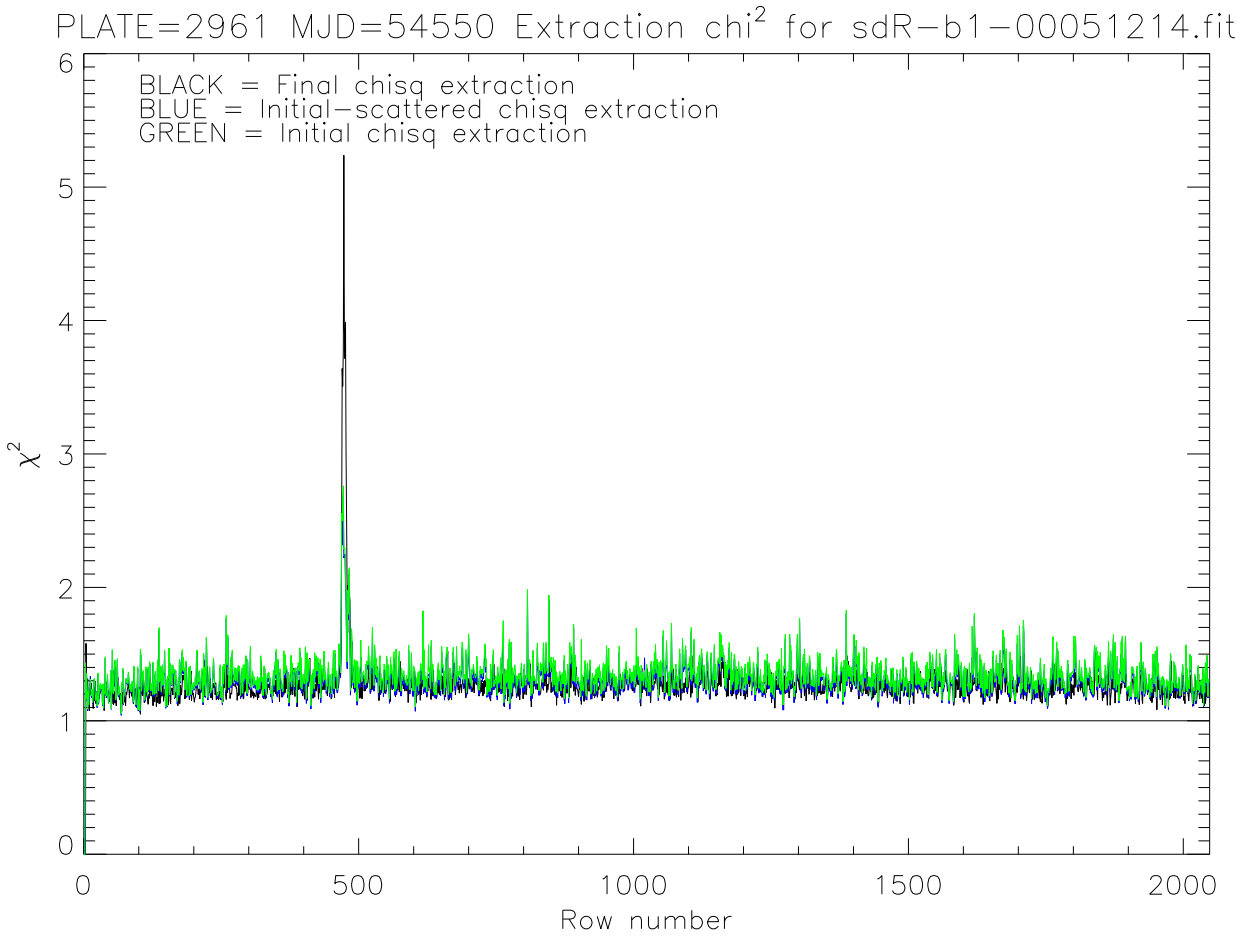
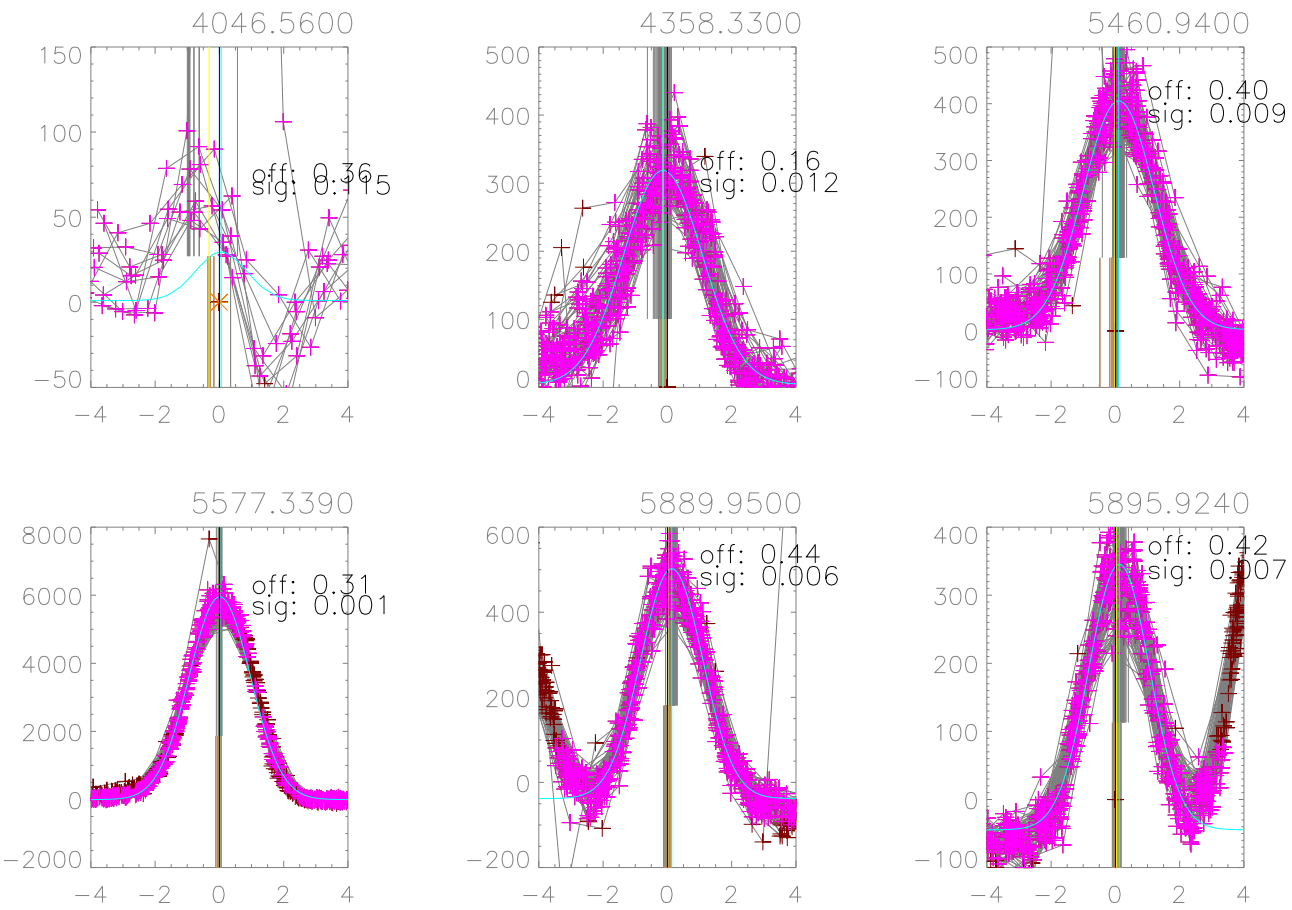
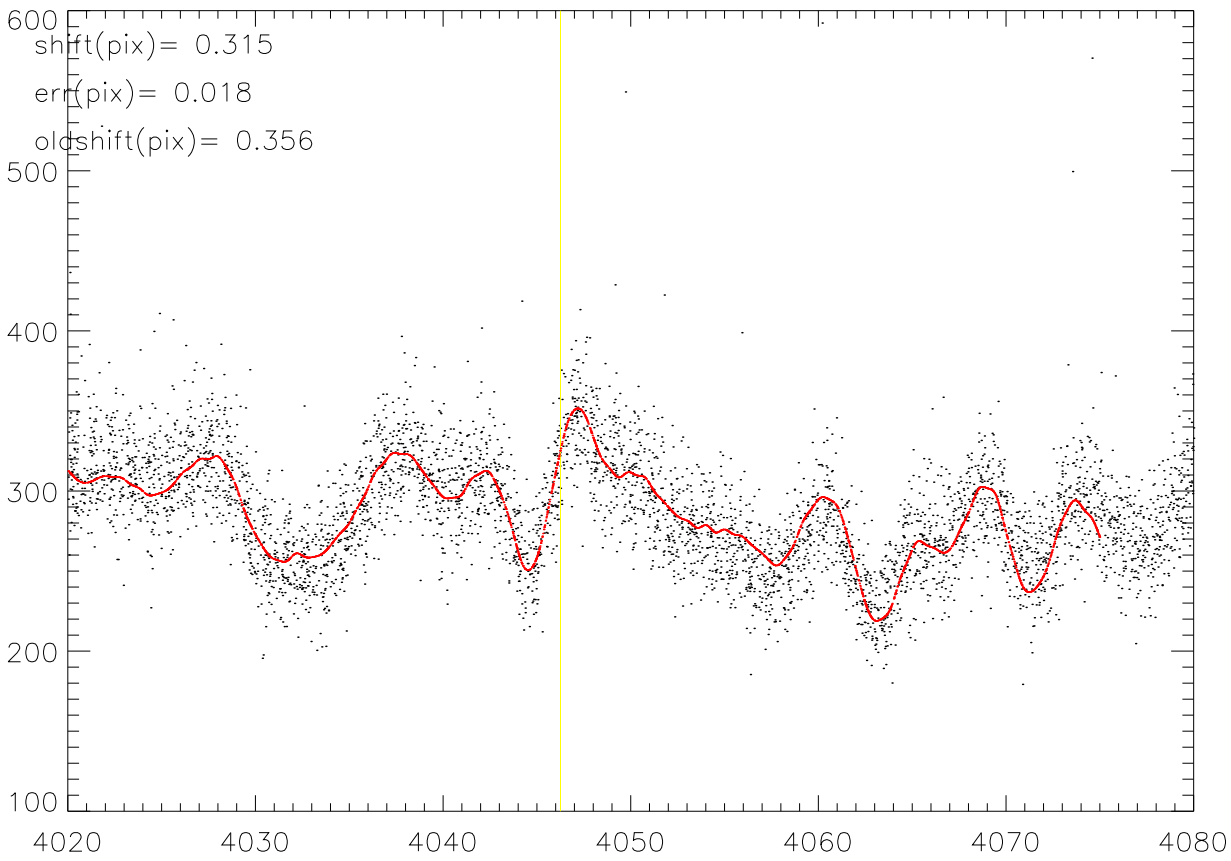
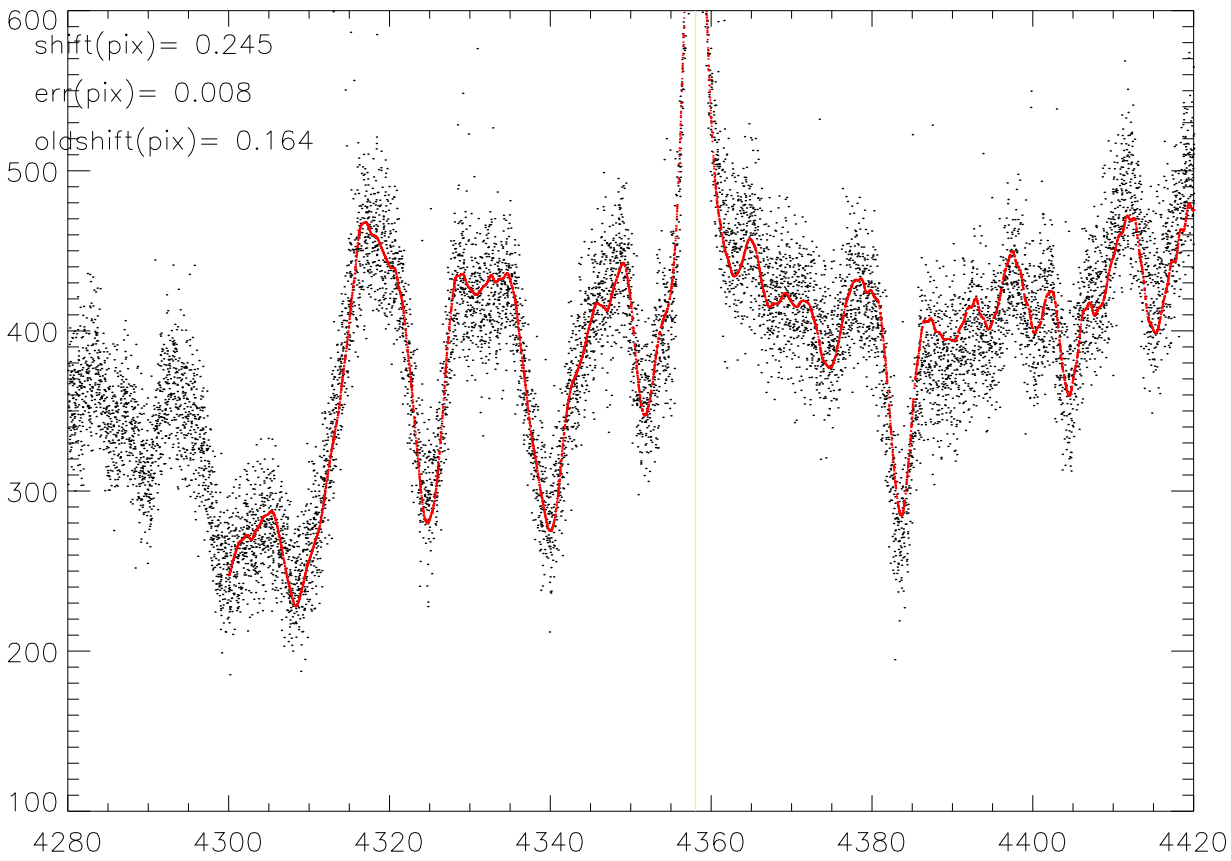
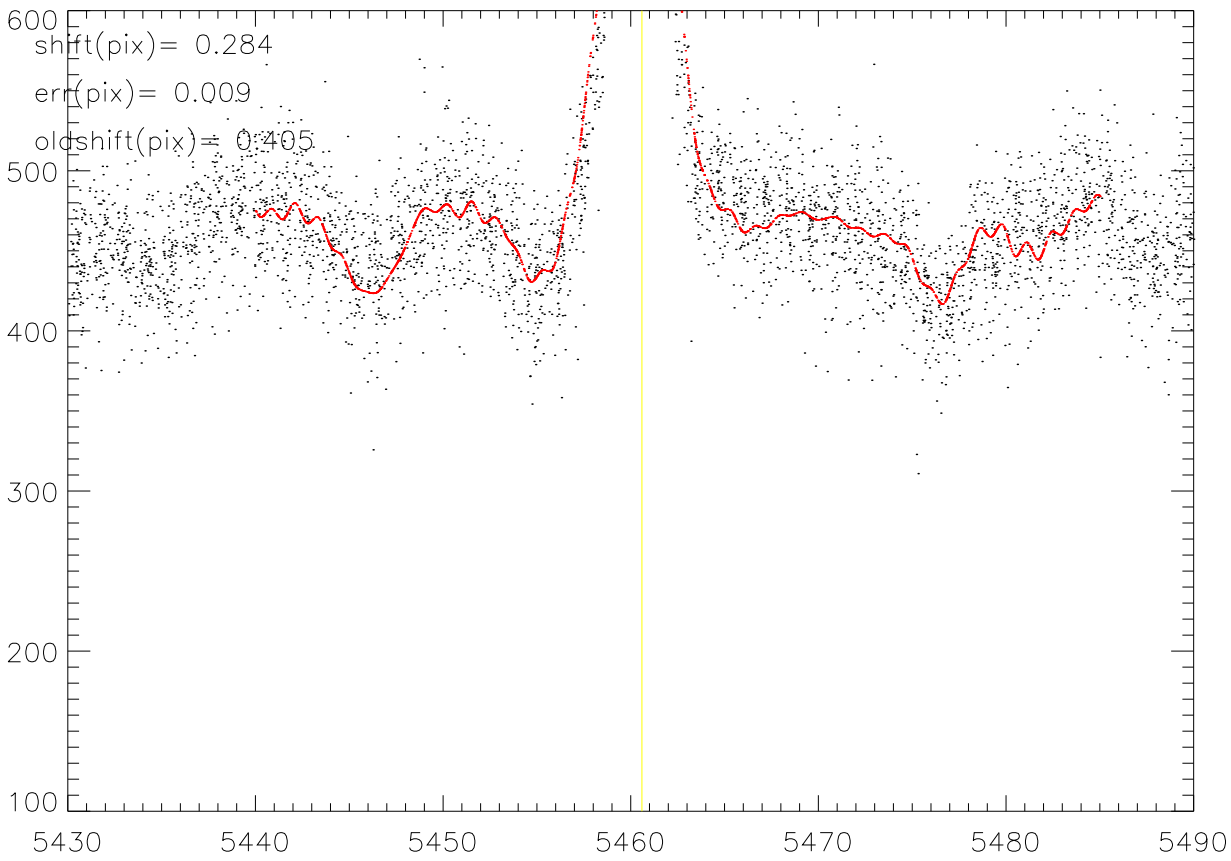
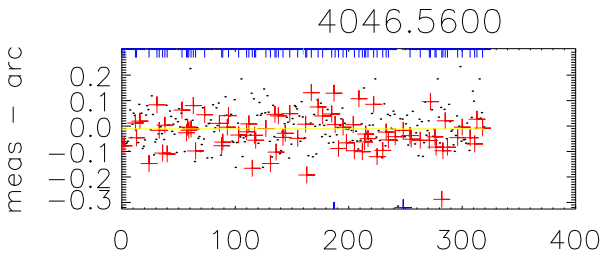

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−b1−00051214.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

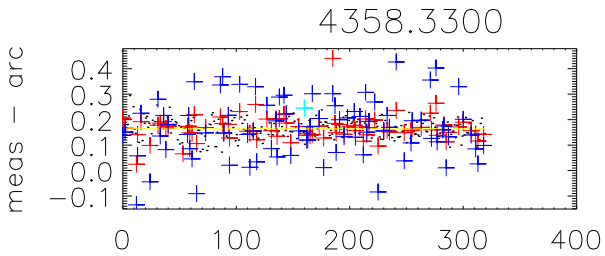

4046.5600
off: 0.36
sig: 0.115
4358.3300
off: 0.16
sig: 0.012
5460.9400
off: 0.40
sig: 0.009
5577.3390
off: 0.31
sig: 0.001
5889.9500
off: 0.44
sig: 0.006
5895.9240
off: 0.42
sig: 0.007

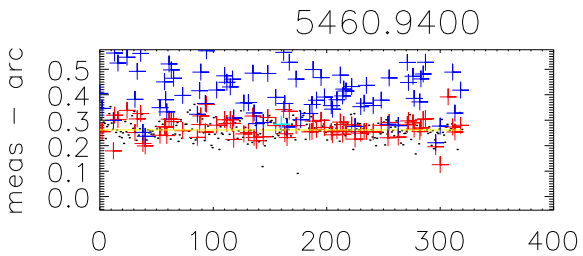

shift(pix)= 0.315
err(pix)= 0.018
oldshift(pix)= 0.356
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

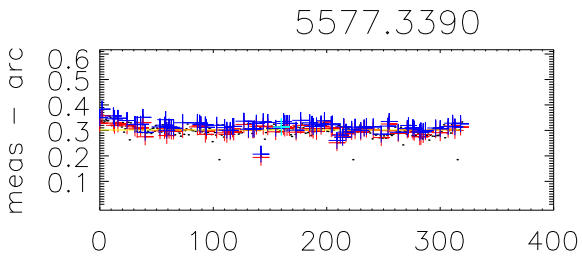

shift(pix)= 0.245
err(pix)= 0.008
oldshift(pix)= 0.164
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

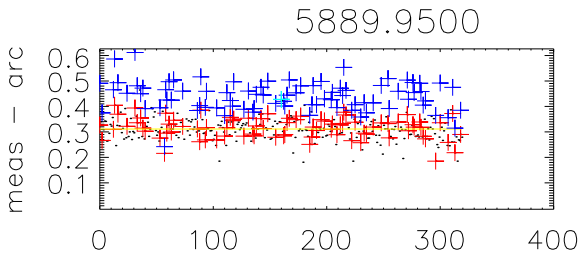

shift(pix)= 0.284
err(pix)= 0.009
oldshift(pix)= 0.405
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

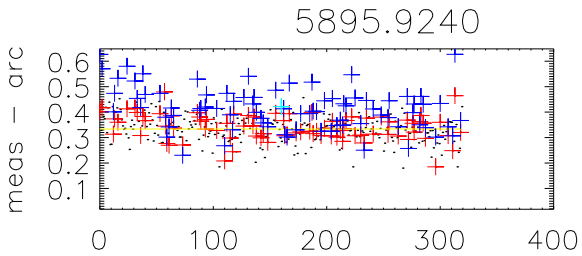

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

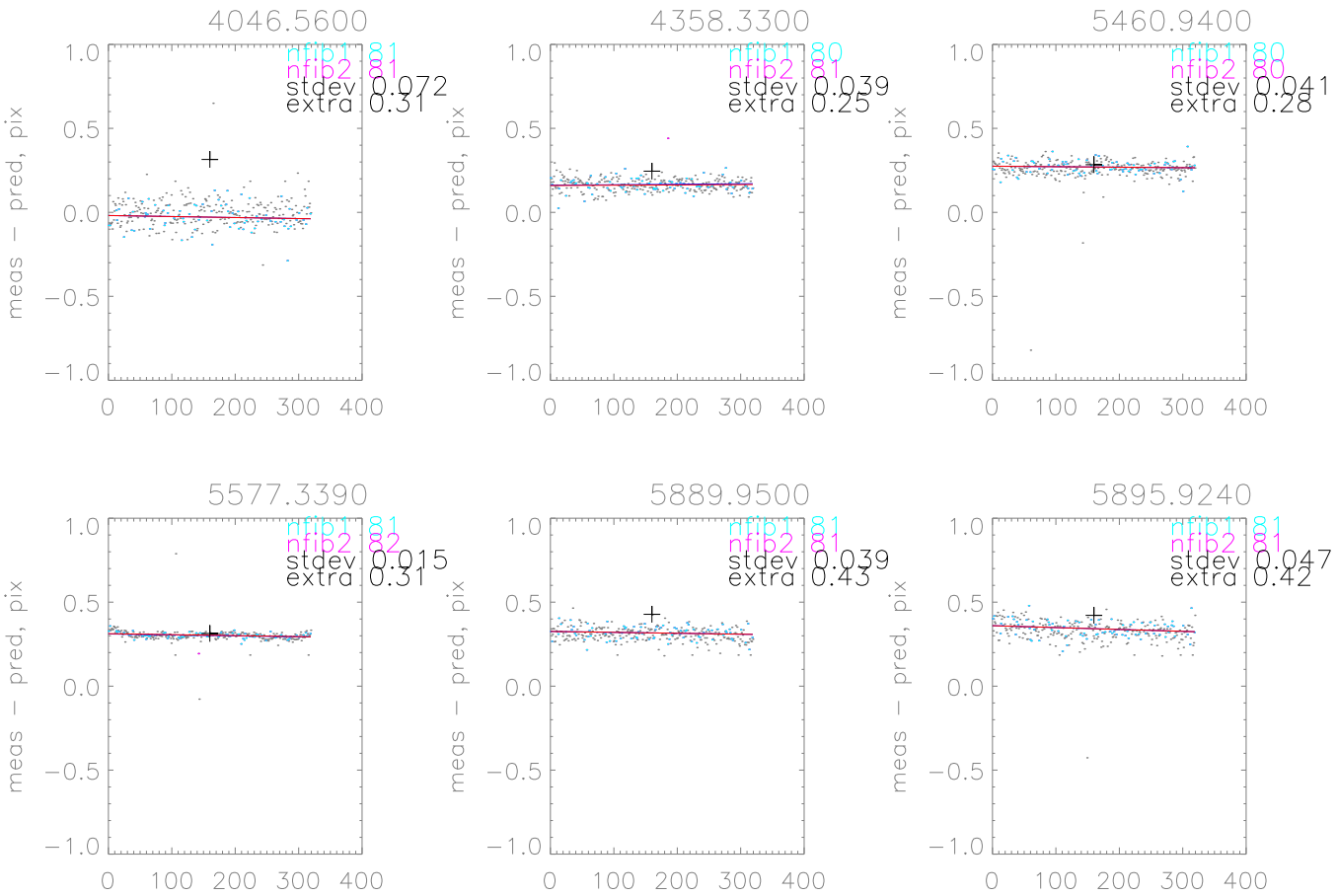

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

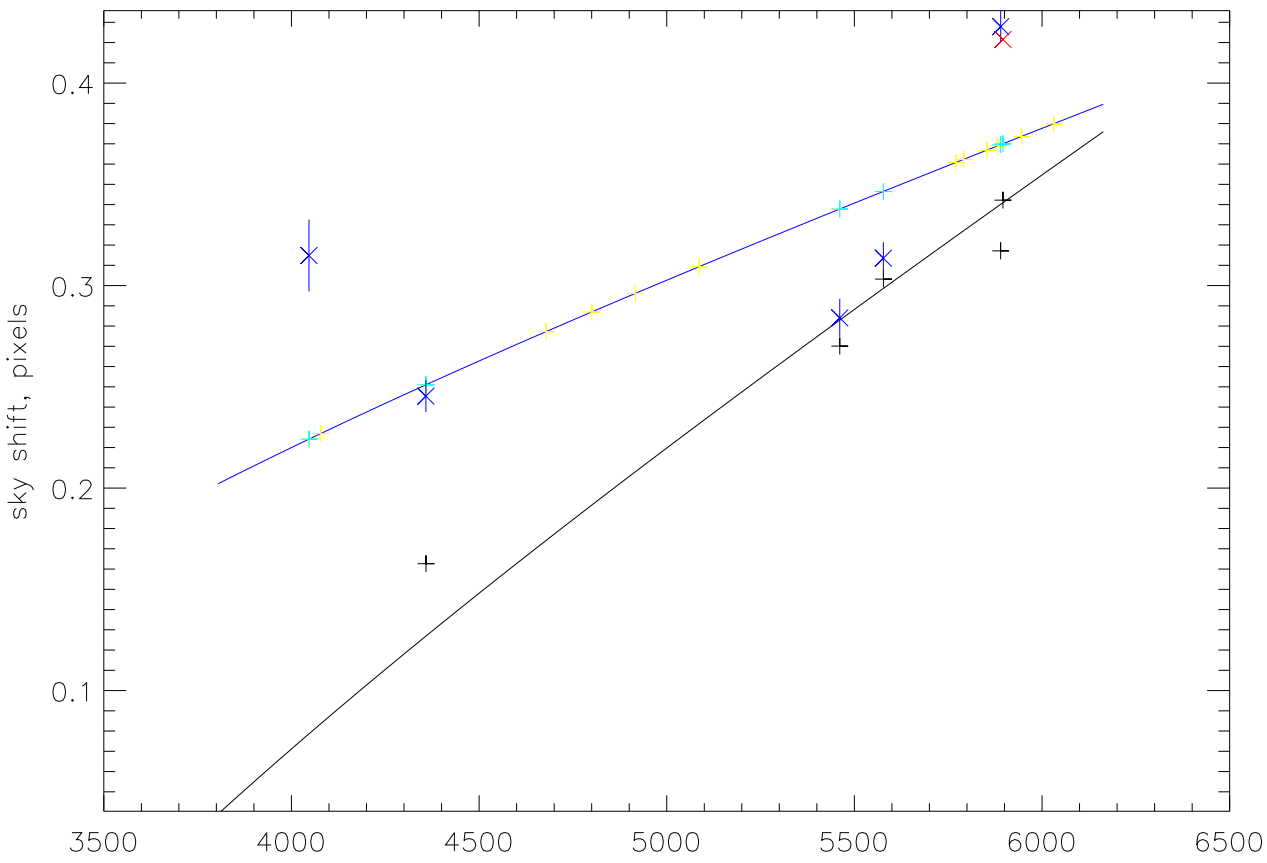

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

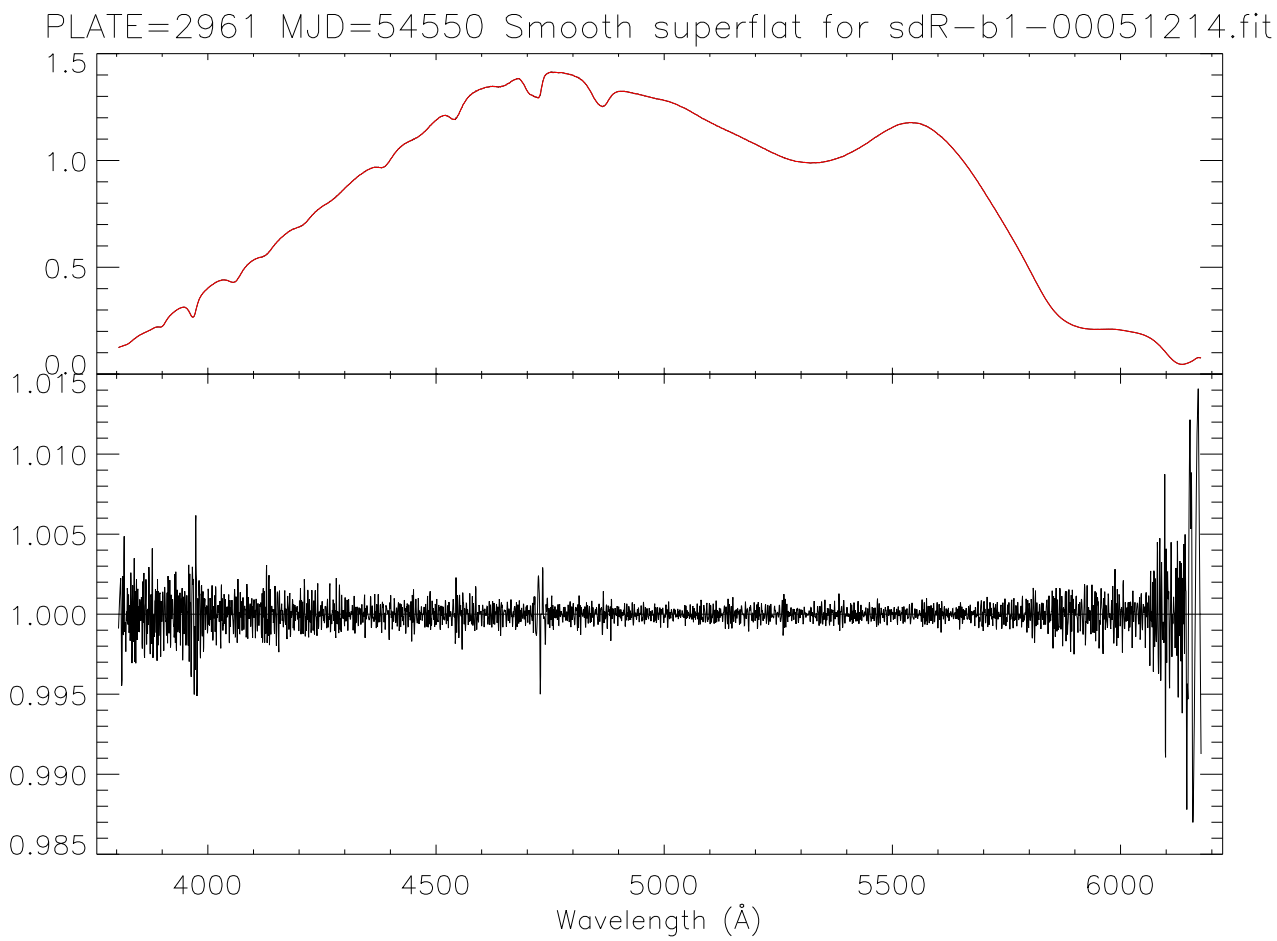

5889.9500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

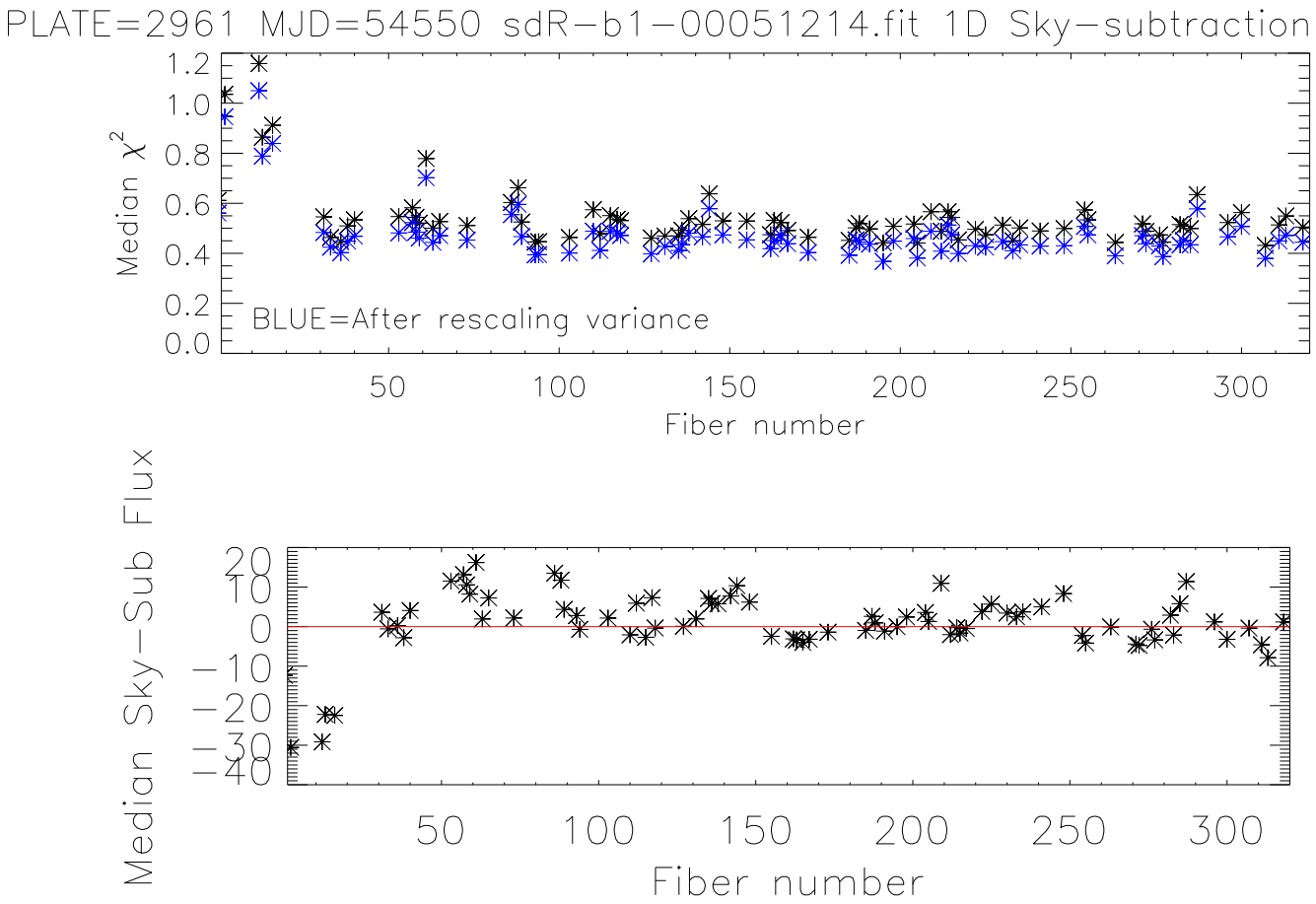

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

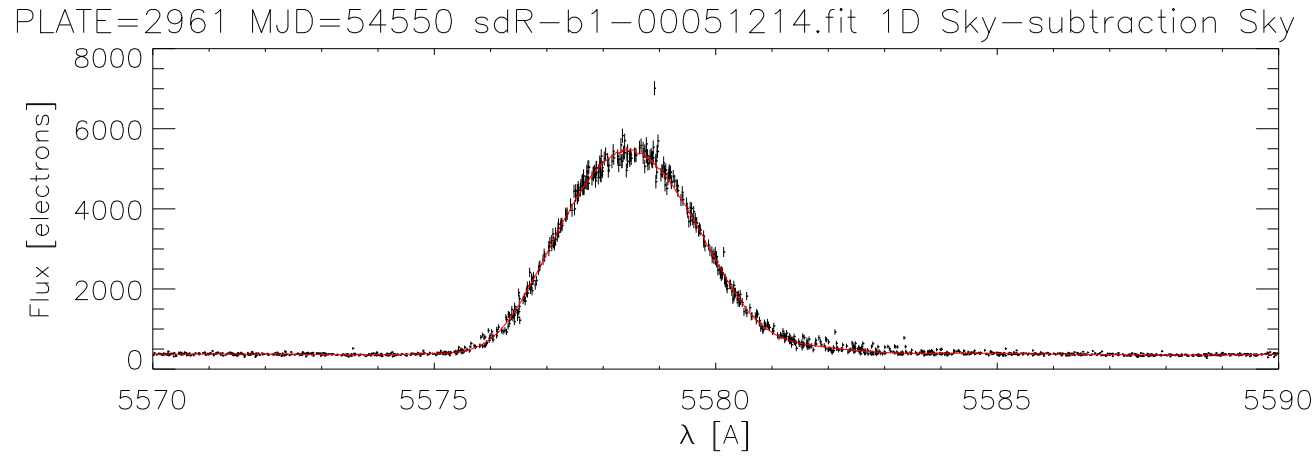

4046.5600
nfib1 81
nfib2 81
stdev 0.072
extra 0.31
4358.3300
nfib1 80
nfib2 81
stdev 0.039
extra 0.25
5460.9400
nfib1 80
nfib2 80
stdev 0.041
extra 0.28
5577.3390
nfib1 81
nfib2 82
stdev 0.015
extra 0.31
5889.9500
nfib1 81
nfib2 81
stdev 0.039
extra 0.43
5895.9240
nfib1 81
nfib2 81
stdev 0.047
extra 0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

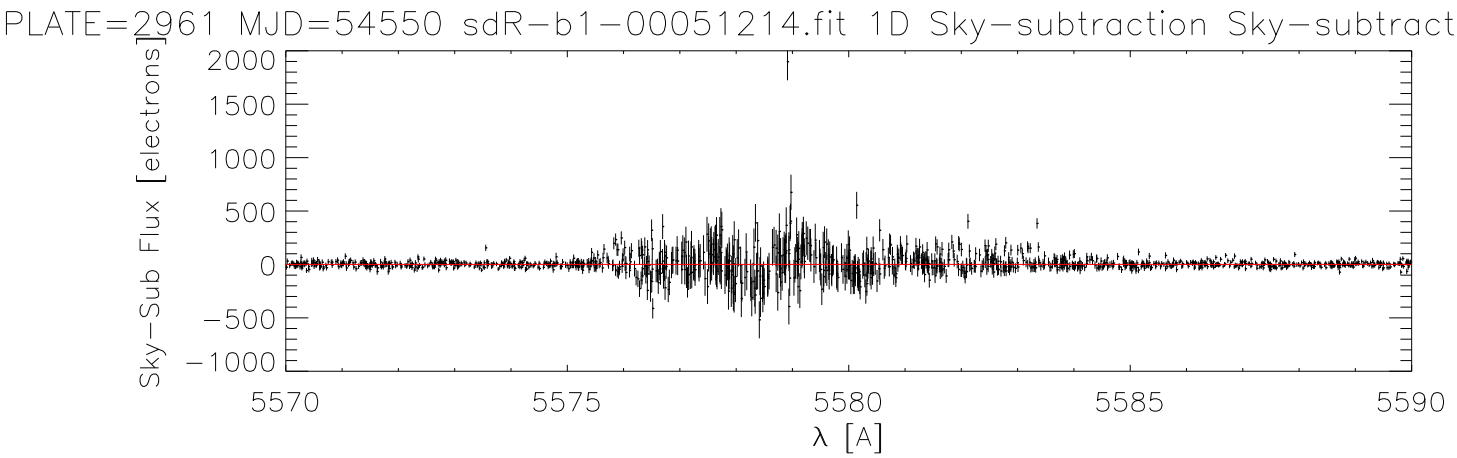

sky shift, pixels
0.4
0.3
0.2
0.1
3500
4000
4500
5000
5500
6000
6500

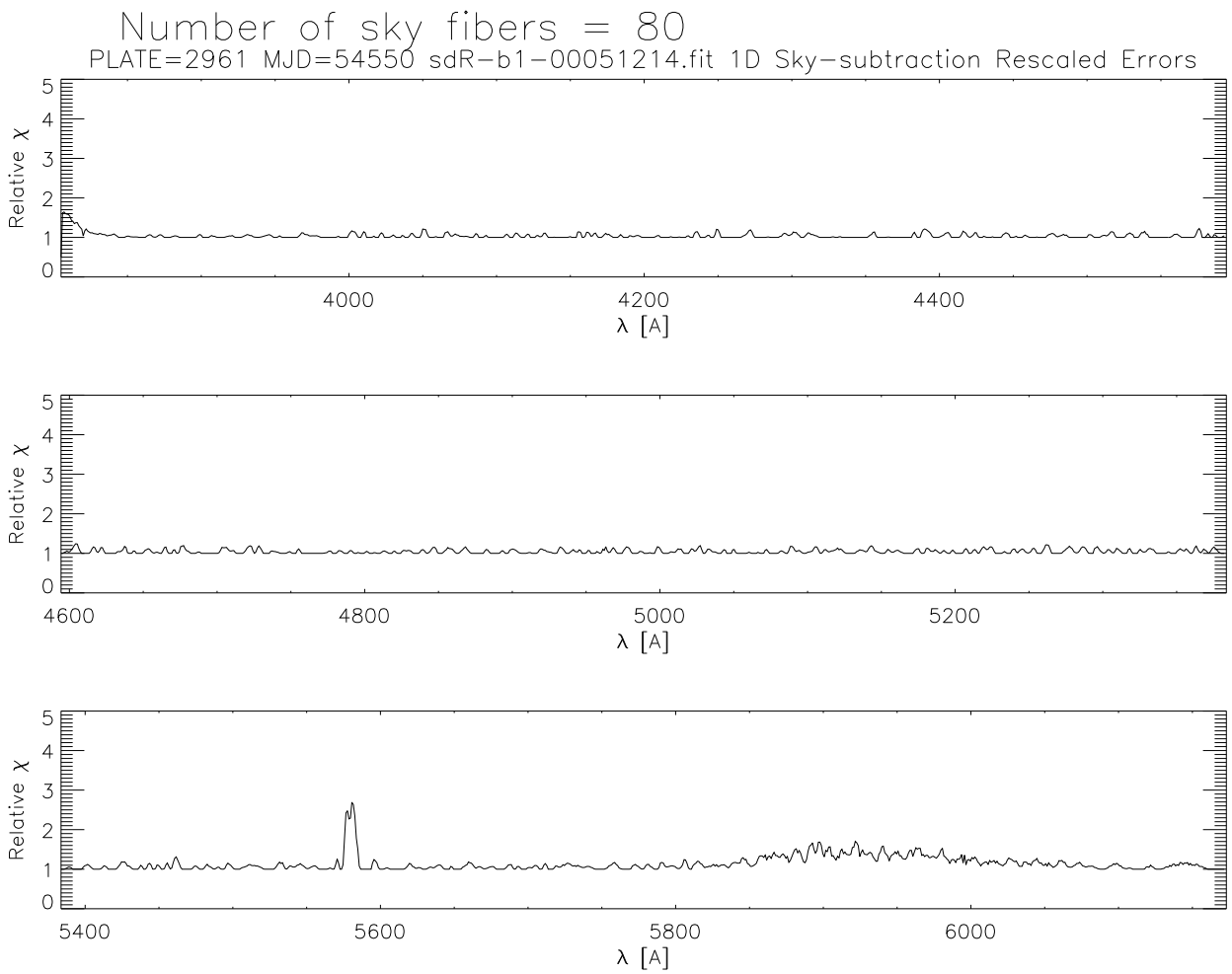
es= 0.0000

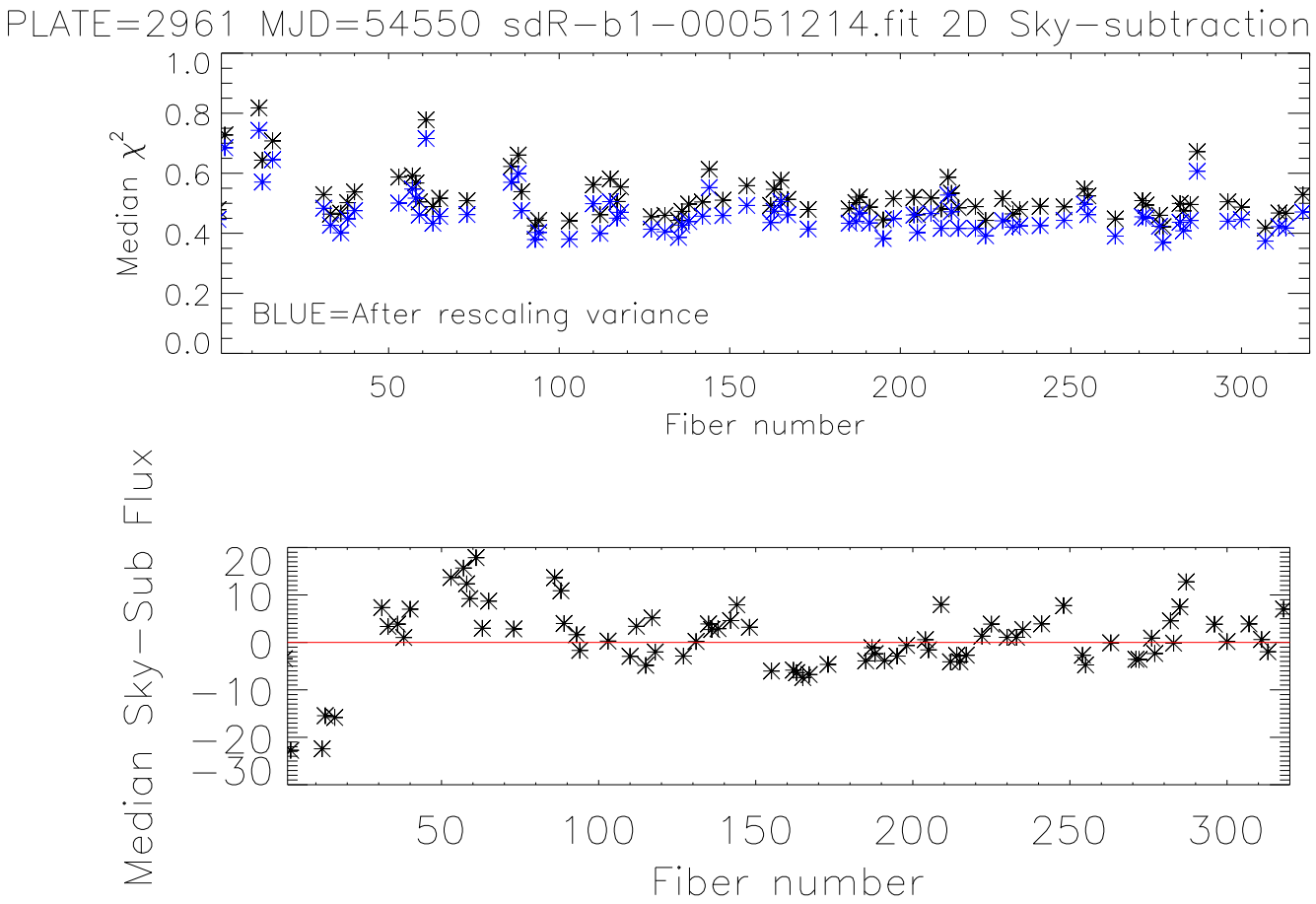

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051214.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

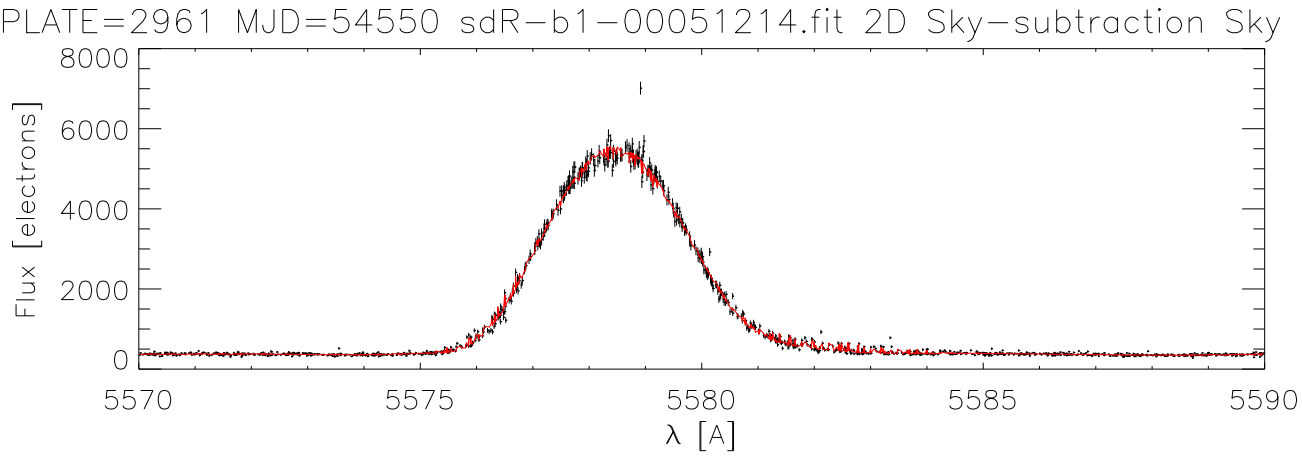

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

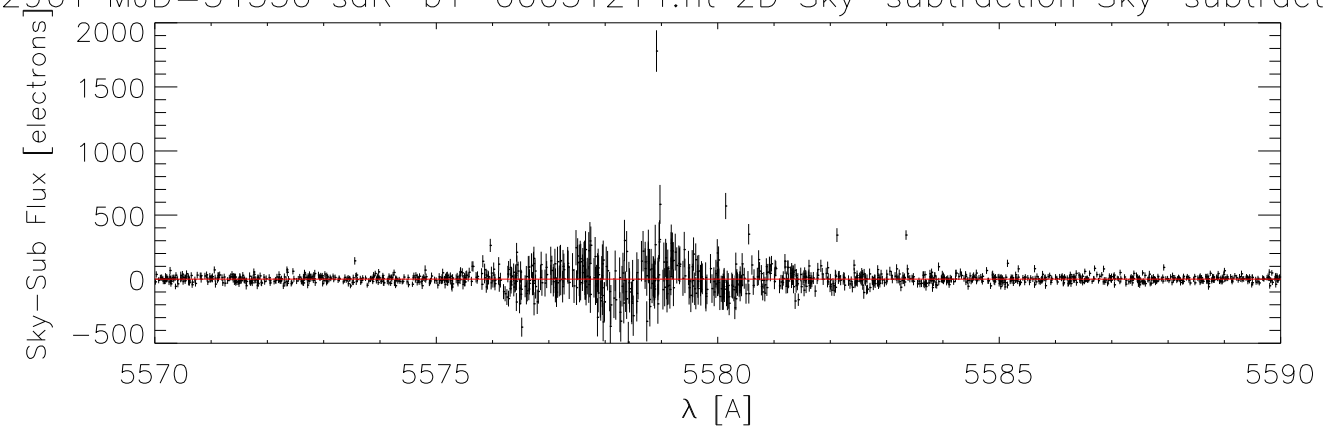

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

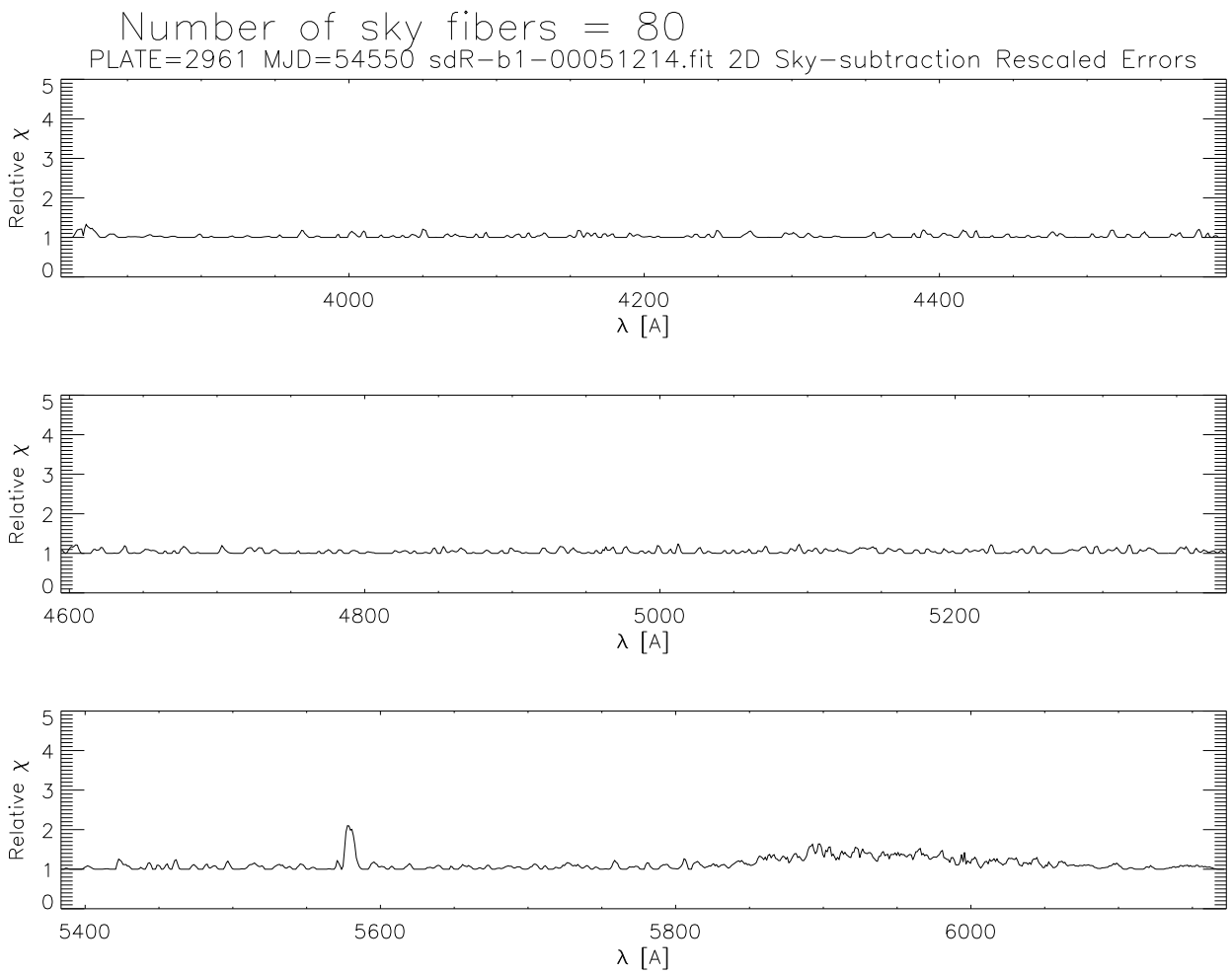

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

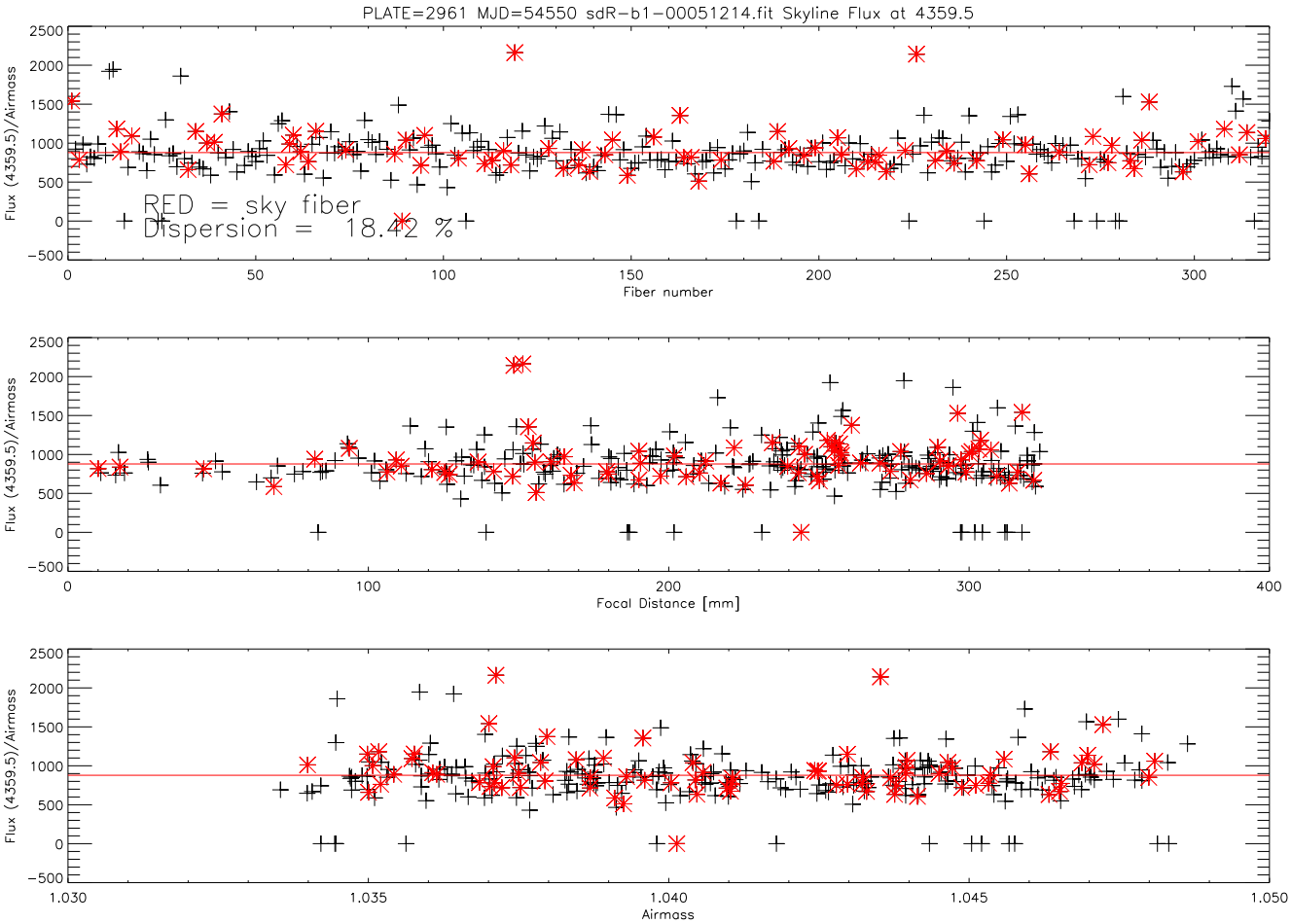

Number of sky fibers = 80
PLATE=2961 MJD=54550 sdR-b1-00051214.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

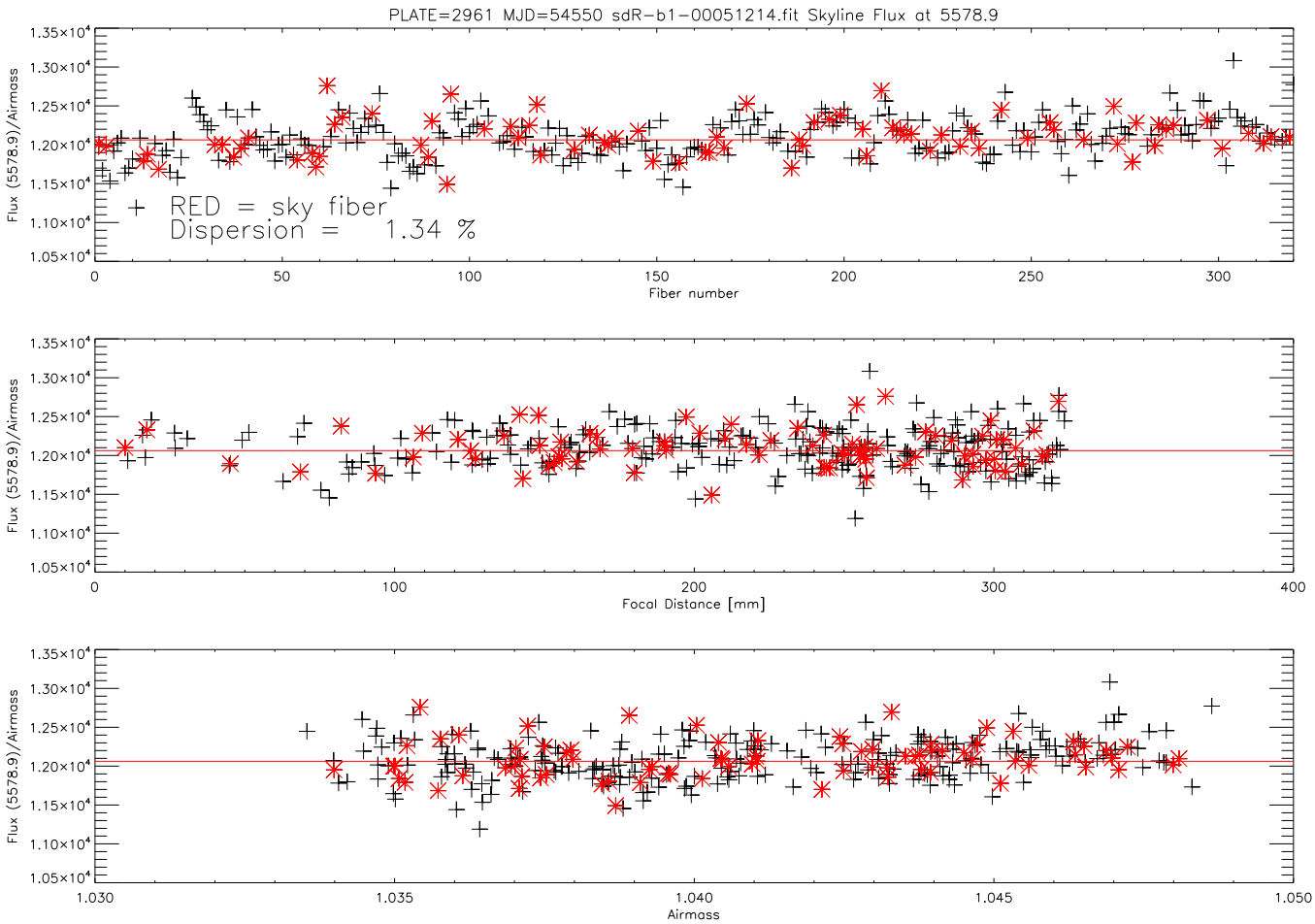

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

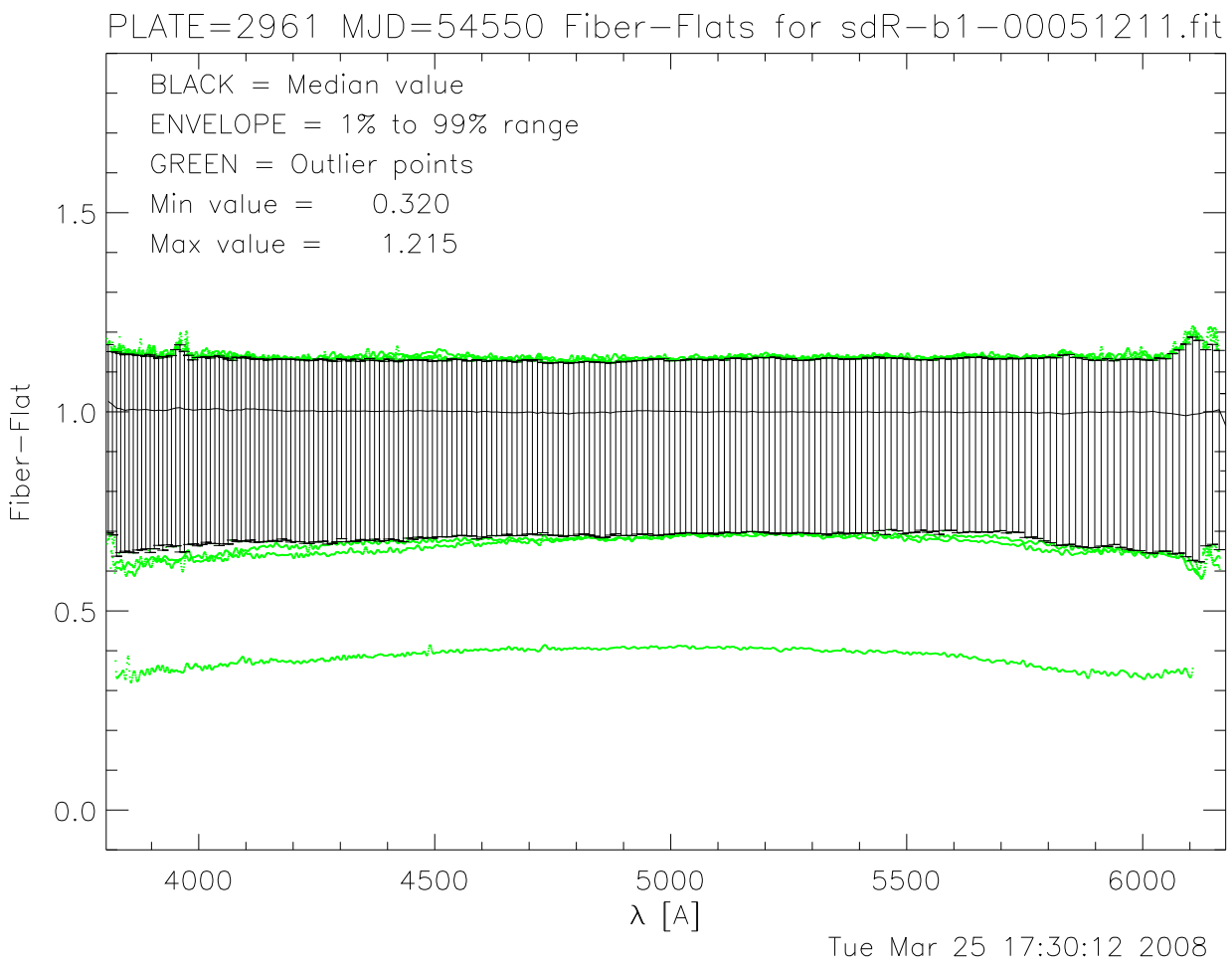

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

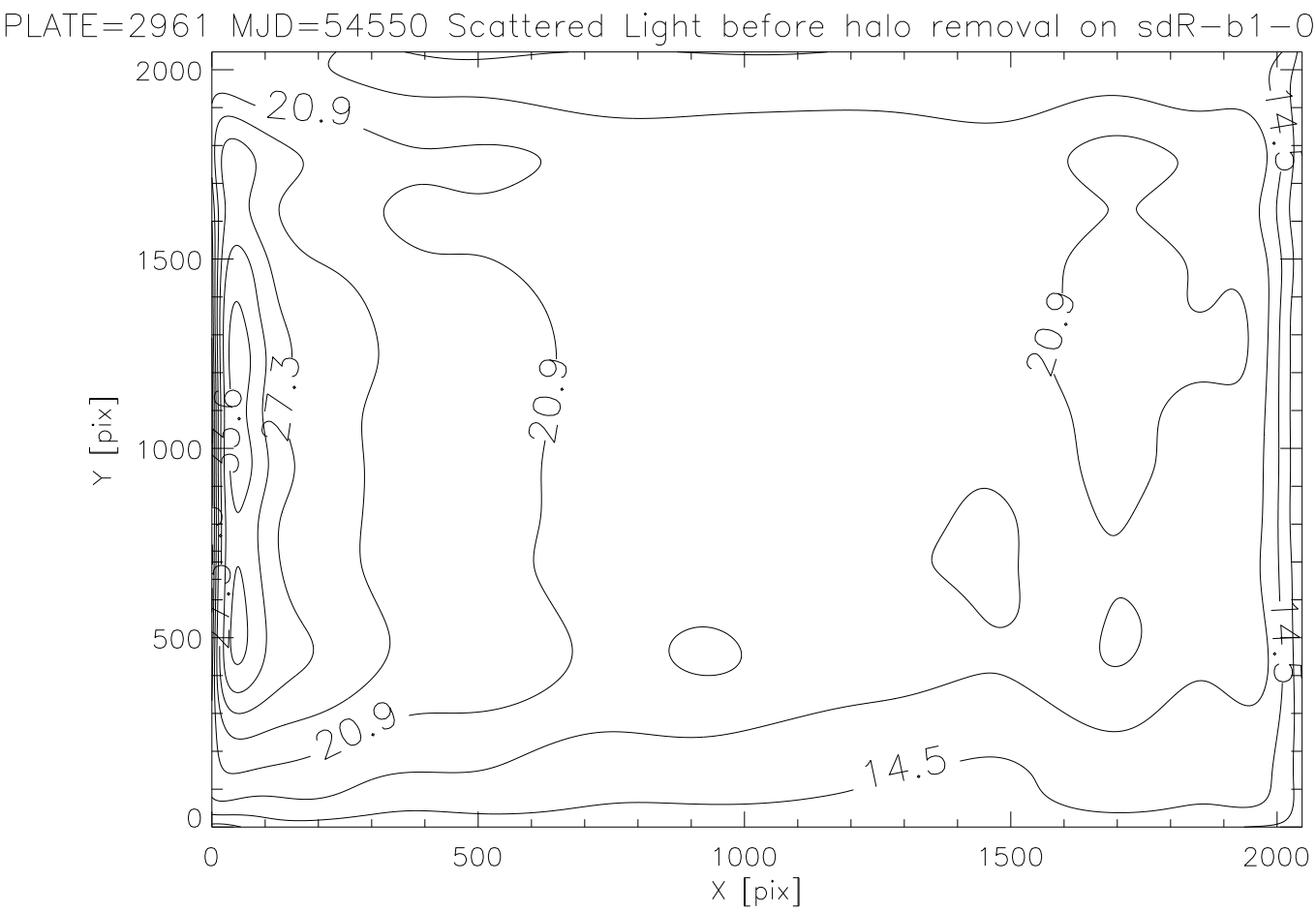

PLATE=2961 MJD=54550 sdR-b1-00051214.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

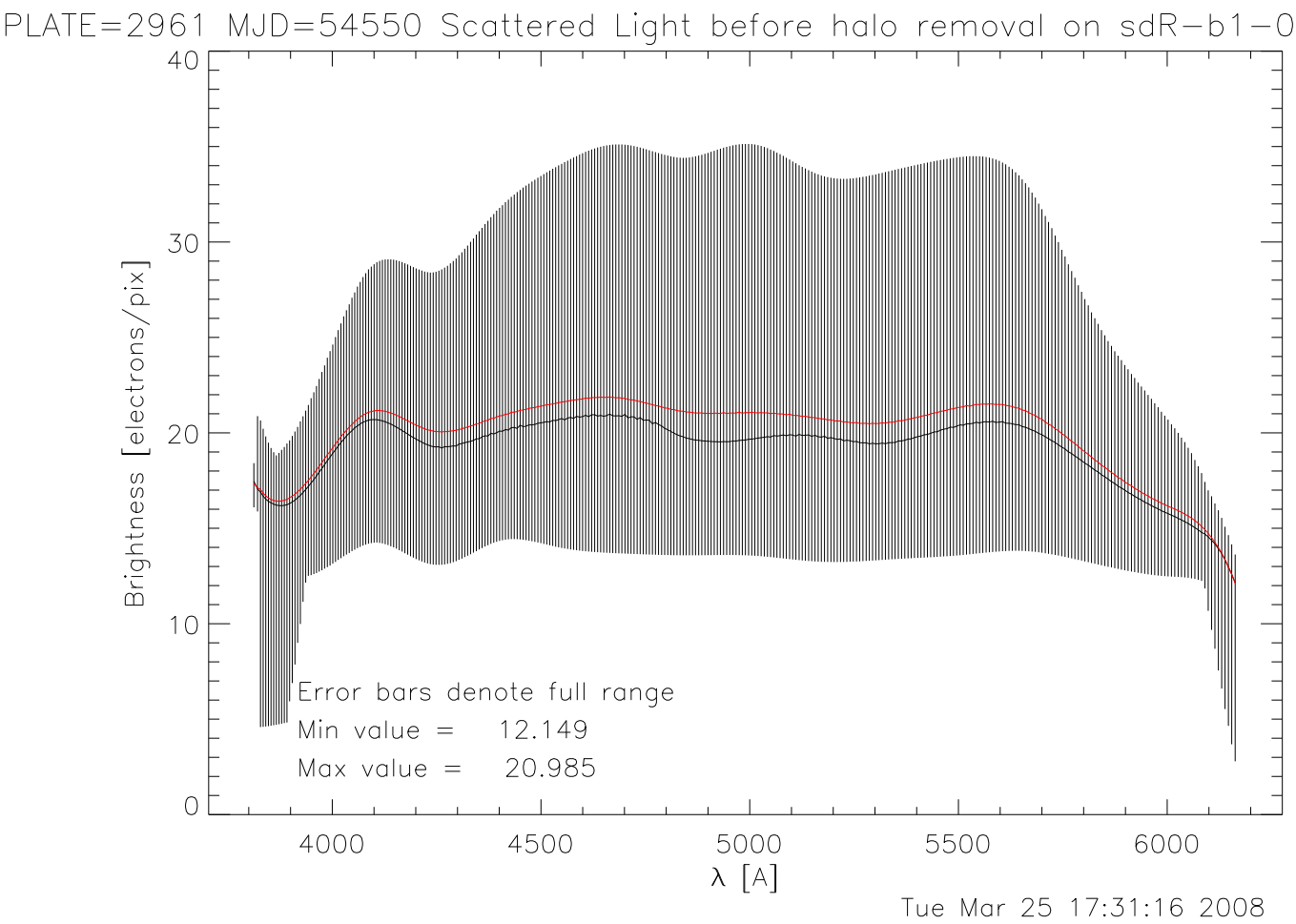

Number of sky fibers = 80
PLATE=2961 MJD=54550 sdR-b1-00051214.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

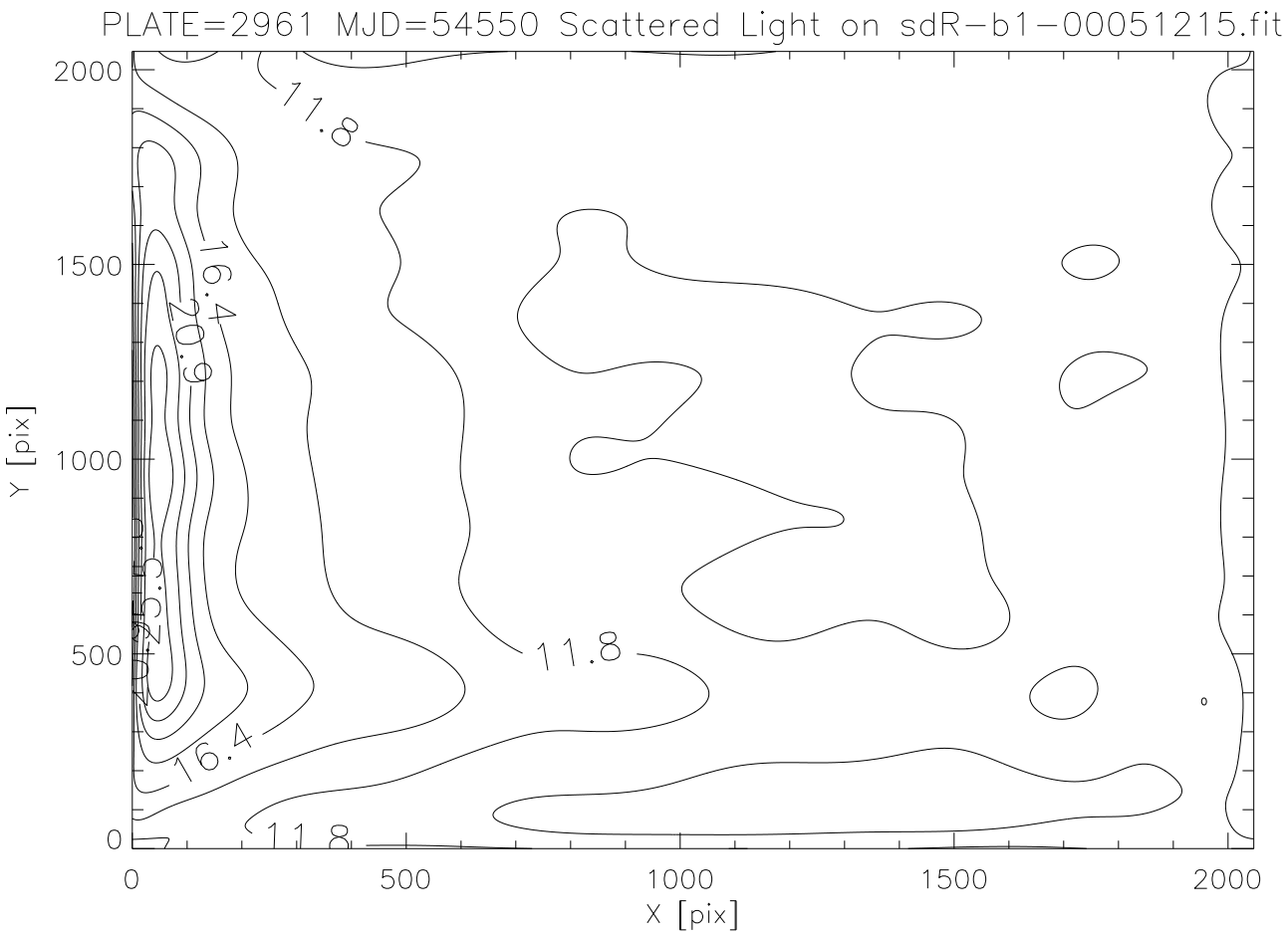

PLATE=2961 MJD=54550 sdR-b1-00051214.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.42 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

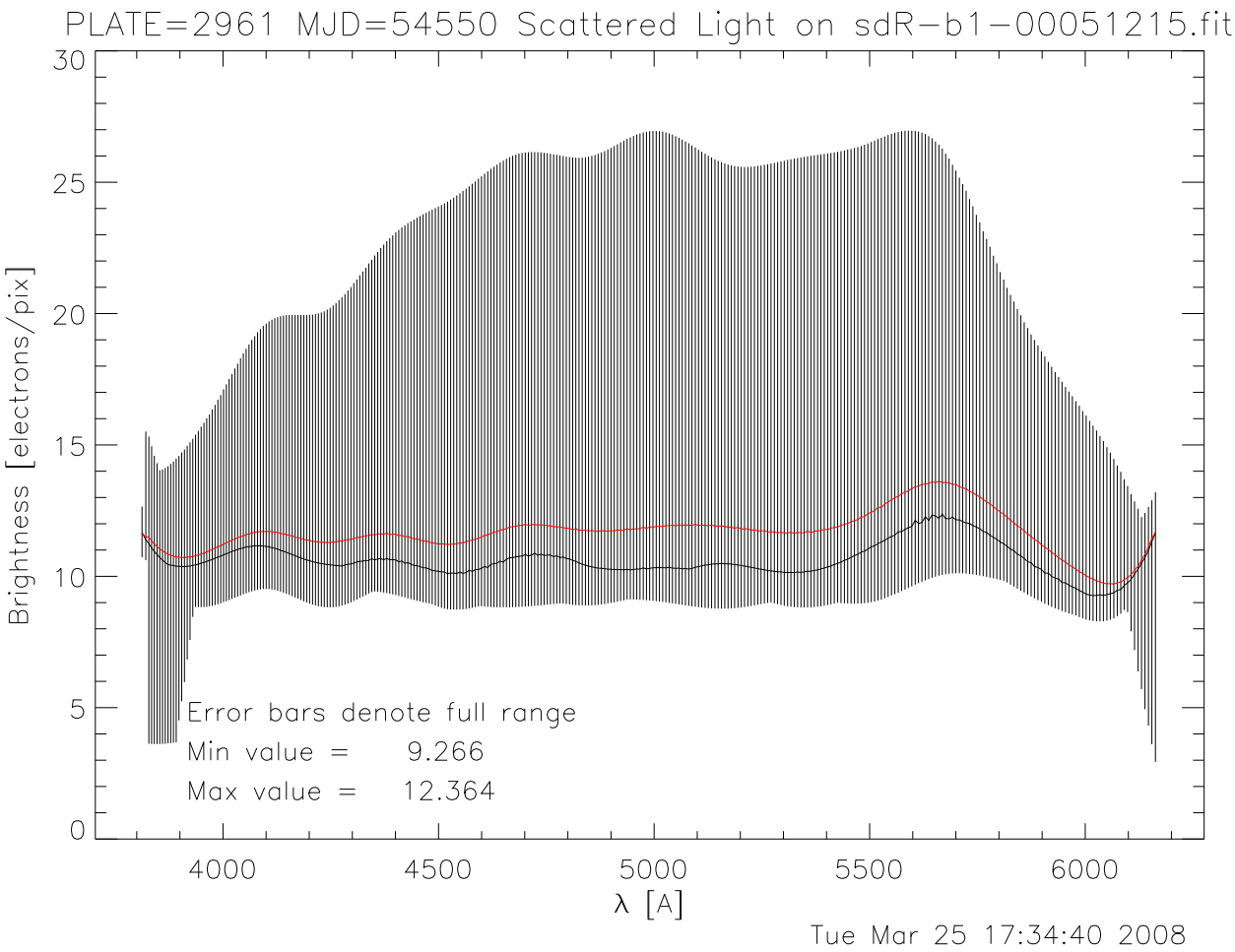

PLATE=2961 MJD=54550 sdR-b1-00051214.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
+ RED = sky fiber
Dispersion = 1.34 %
Fiber number
Focal Distance [mm]
Airmass

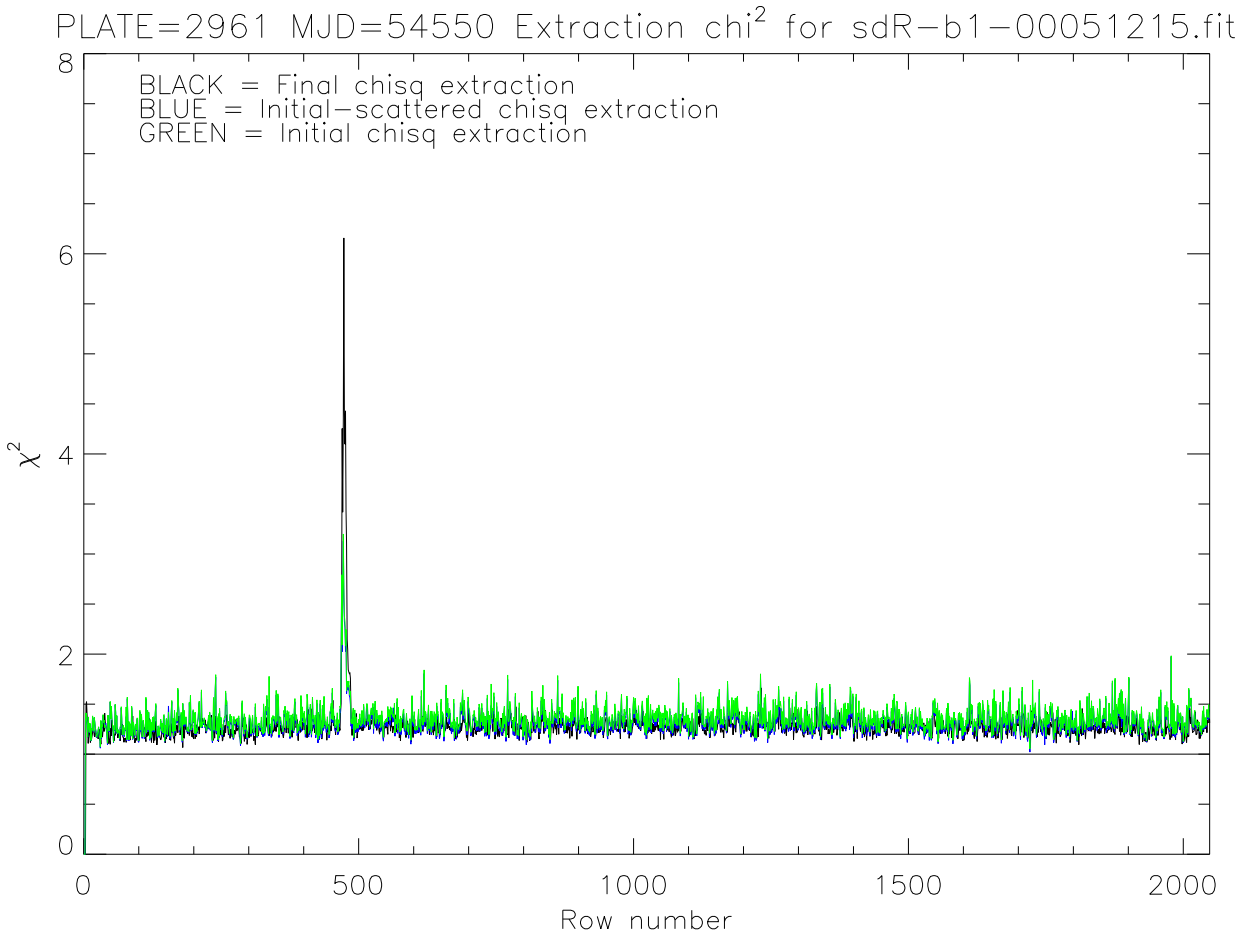

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b1-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.320
Max value = 1.215
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:30:12 2008

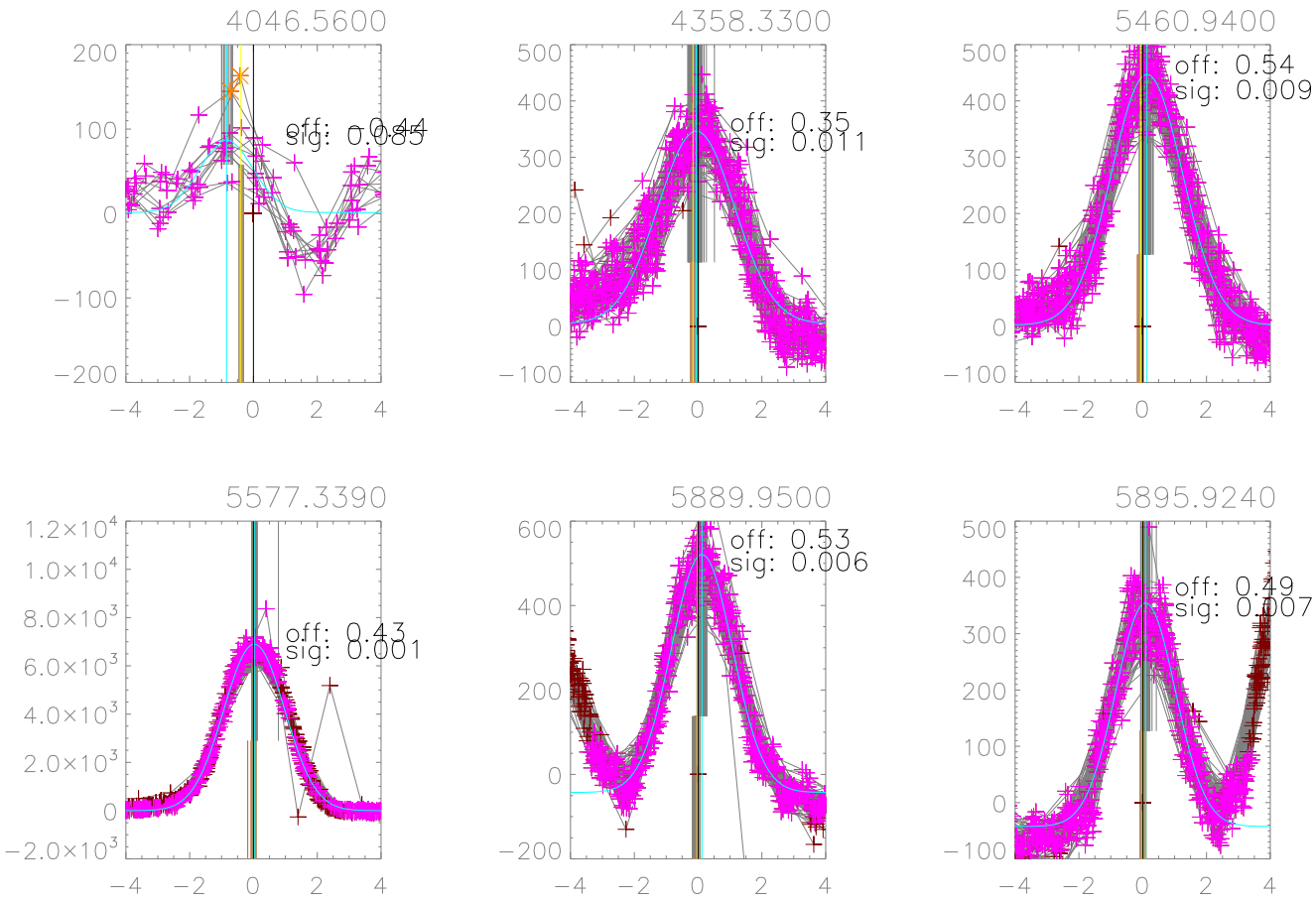

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051215.f
20.9
20.9
20.9
20.9
14.5
14.5
14.5
27.3
36.6
47.2
Y [pix]
X [pix]
0
500
1000
1500
2000

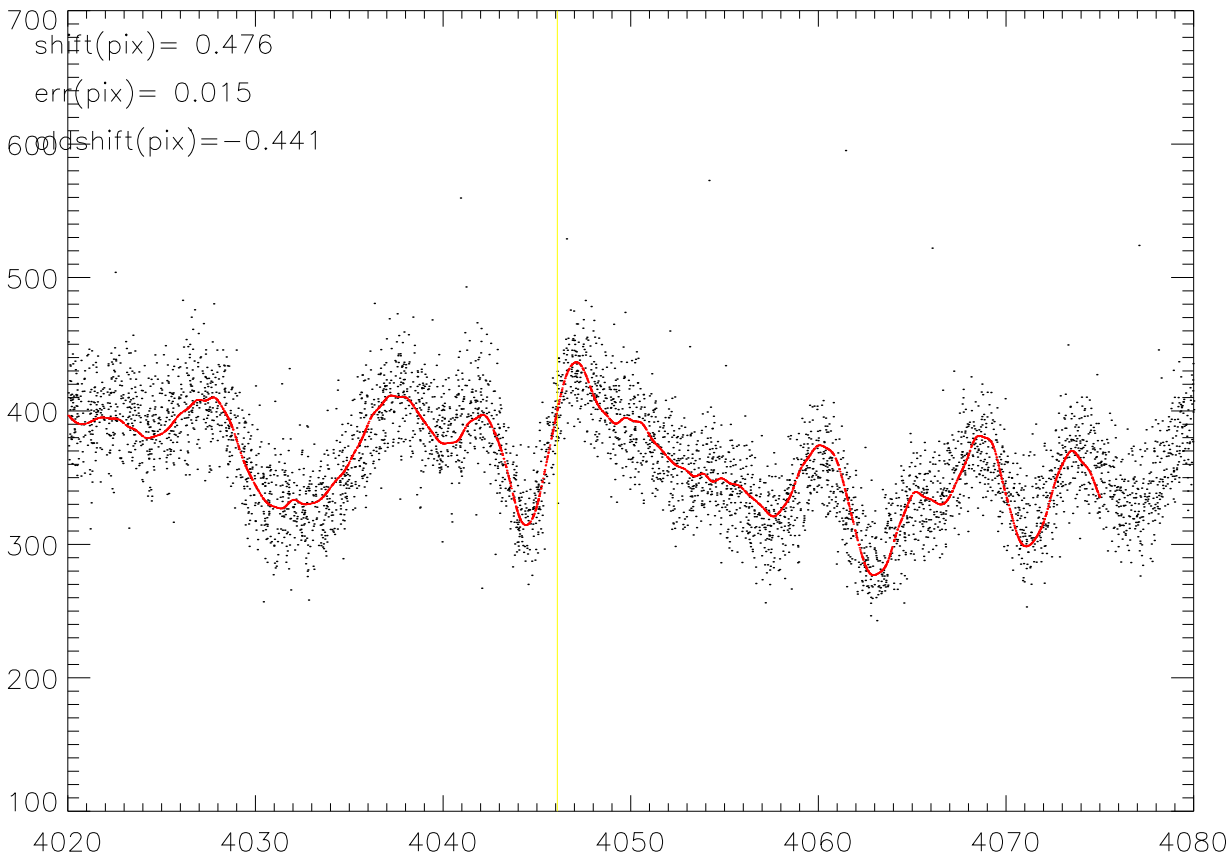

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b1−00051215.f
Brightness [electrons/pix]
40
30
20
10
0
Error bars denote full range
Min value = 12.149
Max value = 20.985
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:31:16 2008

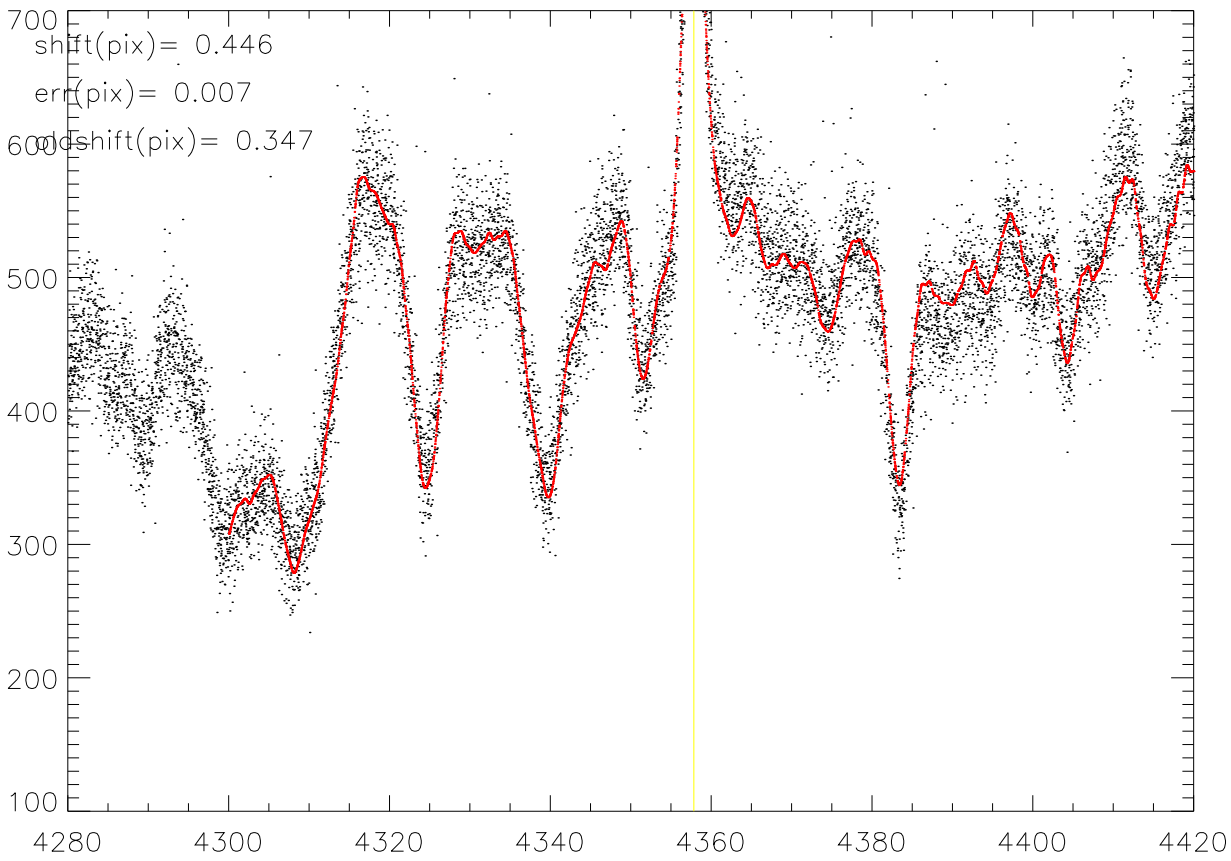

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051215.fit
11.8
16.4
20.9
25.5
16.4
11.8
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000

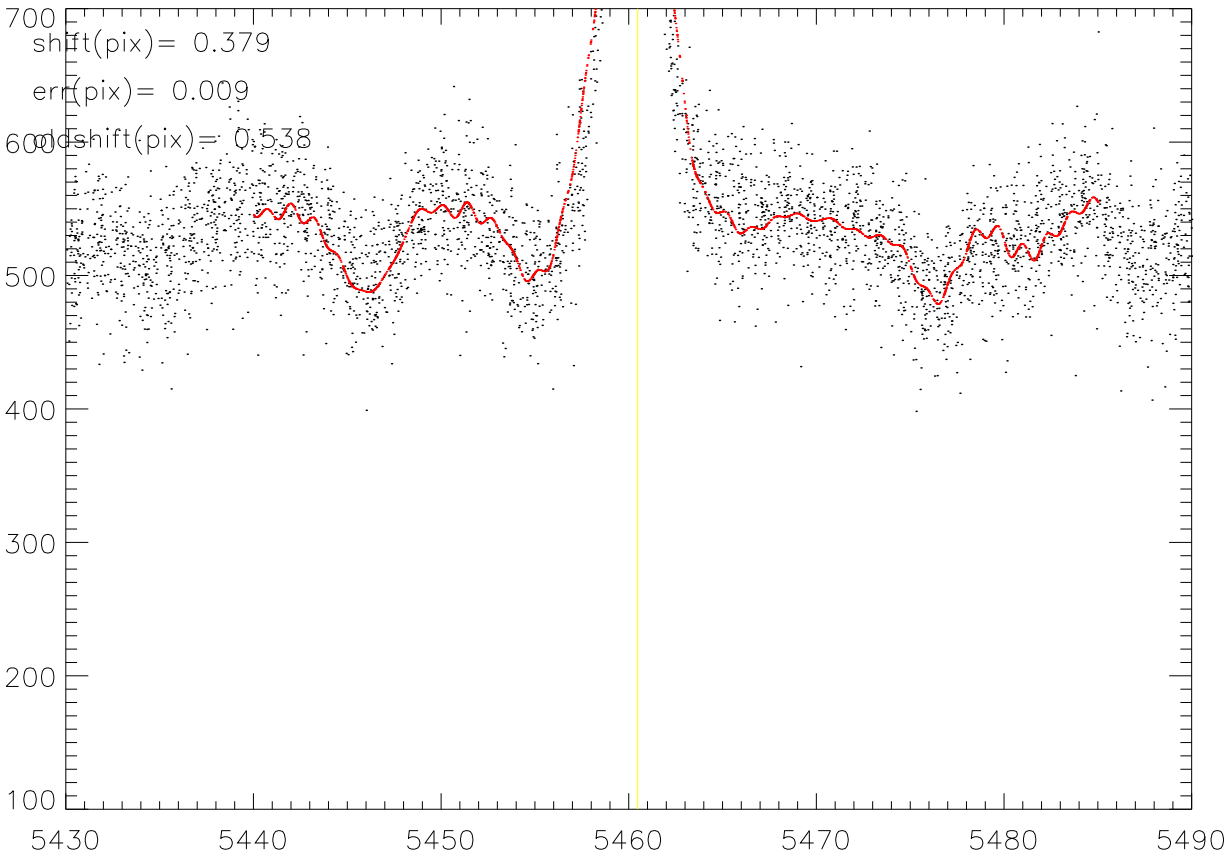

PLATE=2961 MJD=54550 Scattered Light on sdR-b1-00051215.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 9.266
Max value = 12.364
Tue Mar 25 17:34:40 2008

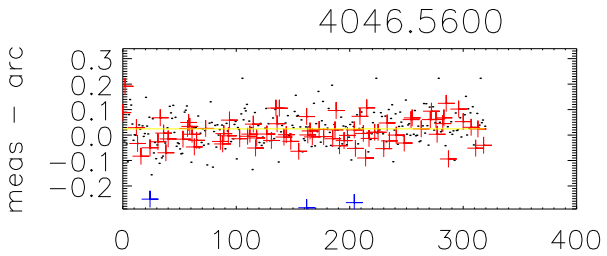

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b1-00051215.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

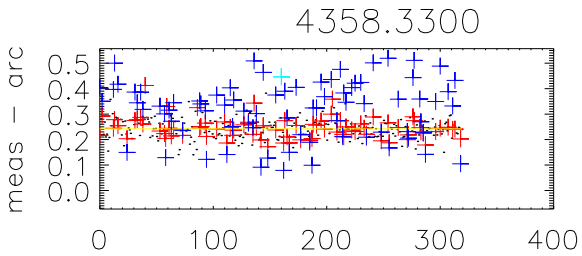

4046.5600
off: -0.44
sig: 0.085
4358.3300
off: 0.35
sig: 0.011
5460.9400
off: 0.54
sig: 0.009
5577.3390
off: 0.43
sig: 0.001
5889.9500
off: 0.53
sig: 0.006
5895.9240
off: 0.49
sig: 0.007

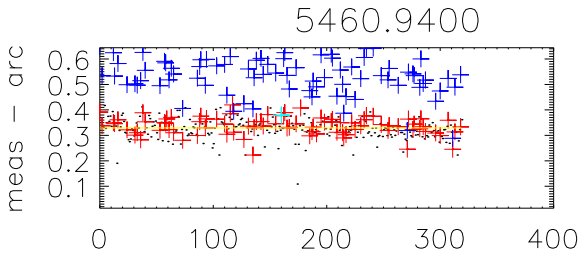

shift(pix)= 0.476
err(pix)= 0.015
oldshift(pix)=−0.441
700
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

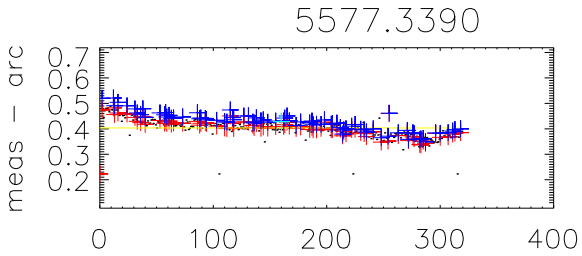

shift(pix)= 0.446
err(pix)= 0.007
oldshift(pix)= 0.347
700
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

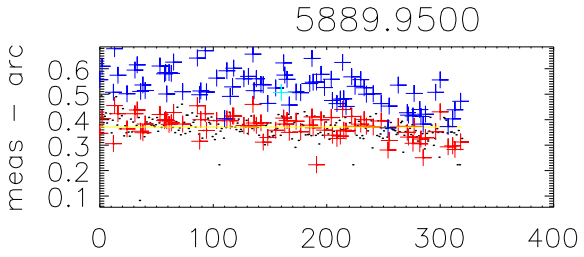

shift(pix)= 0.379
err(pix)= 0.009
oldshift(pix)= 0.538
700
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

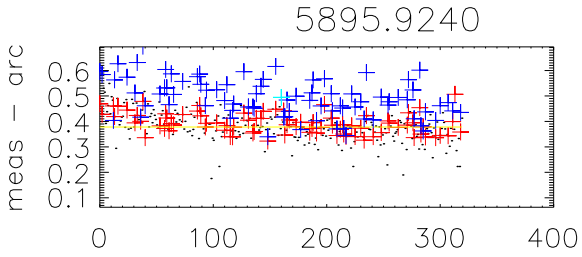

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

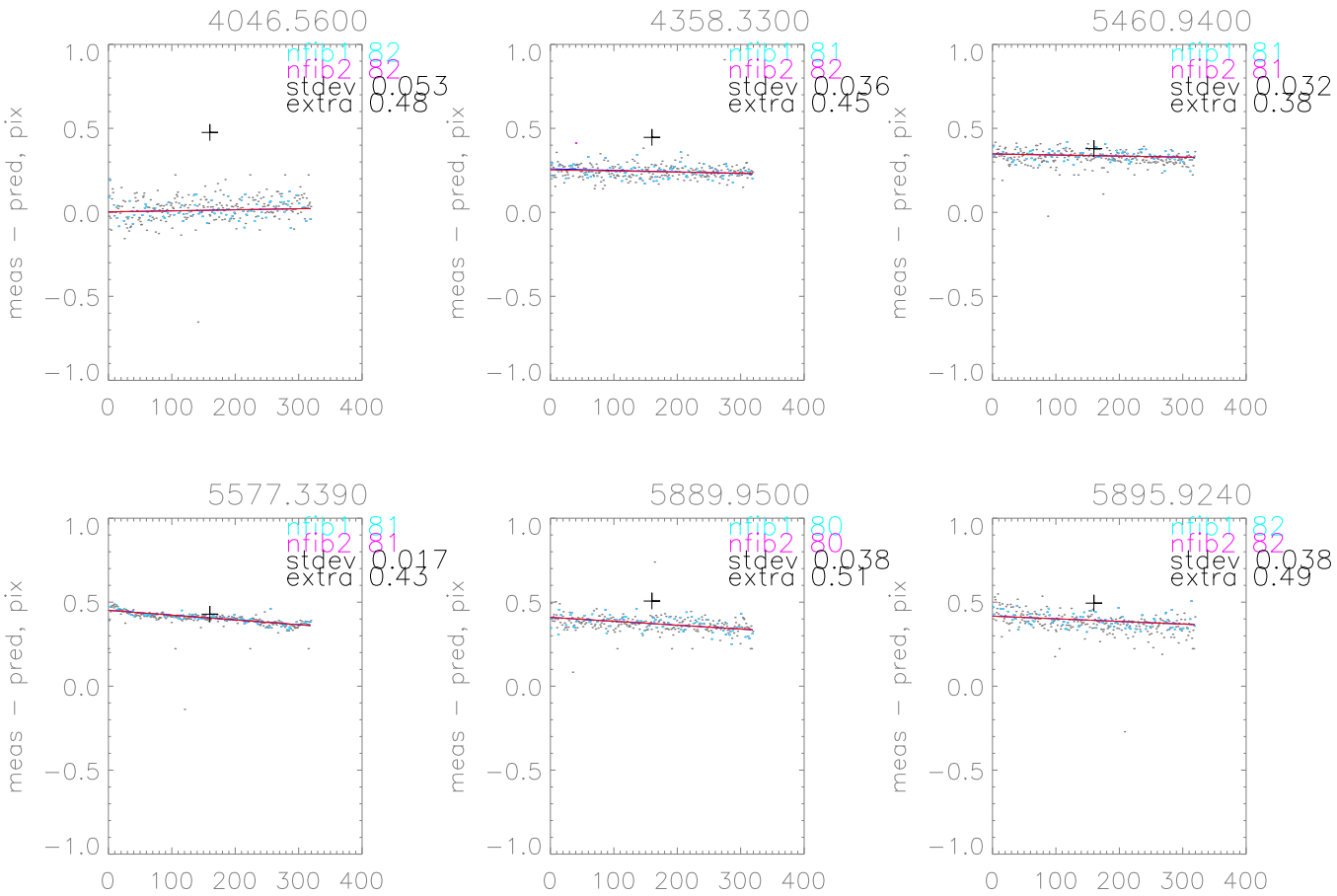

4358.3300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

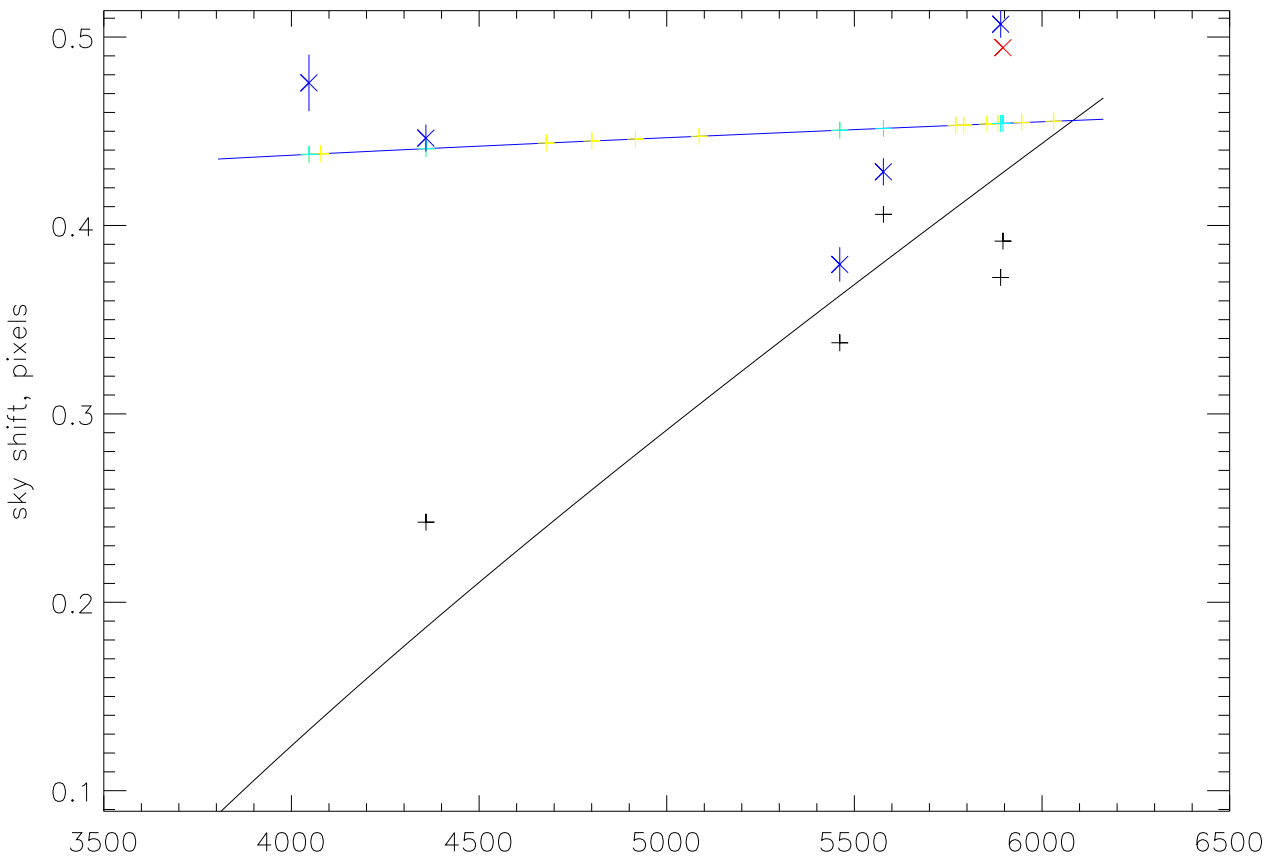

5460.9400
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


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

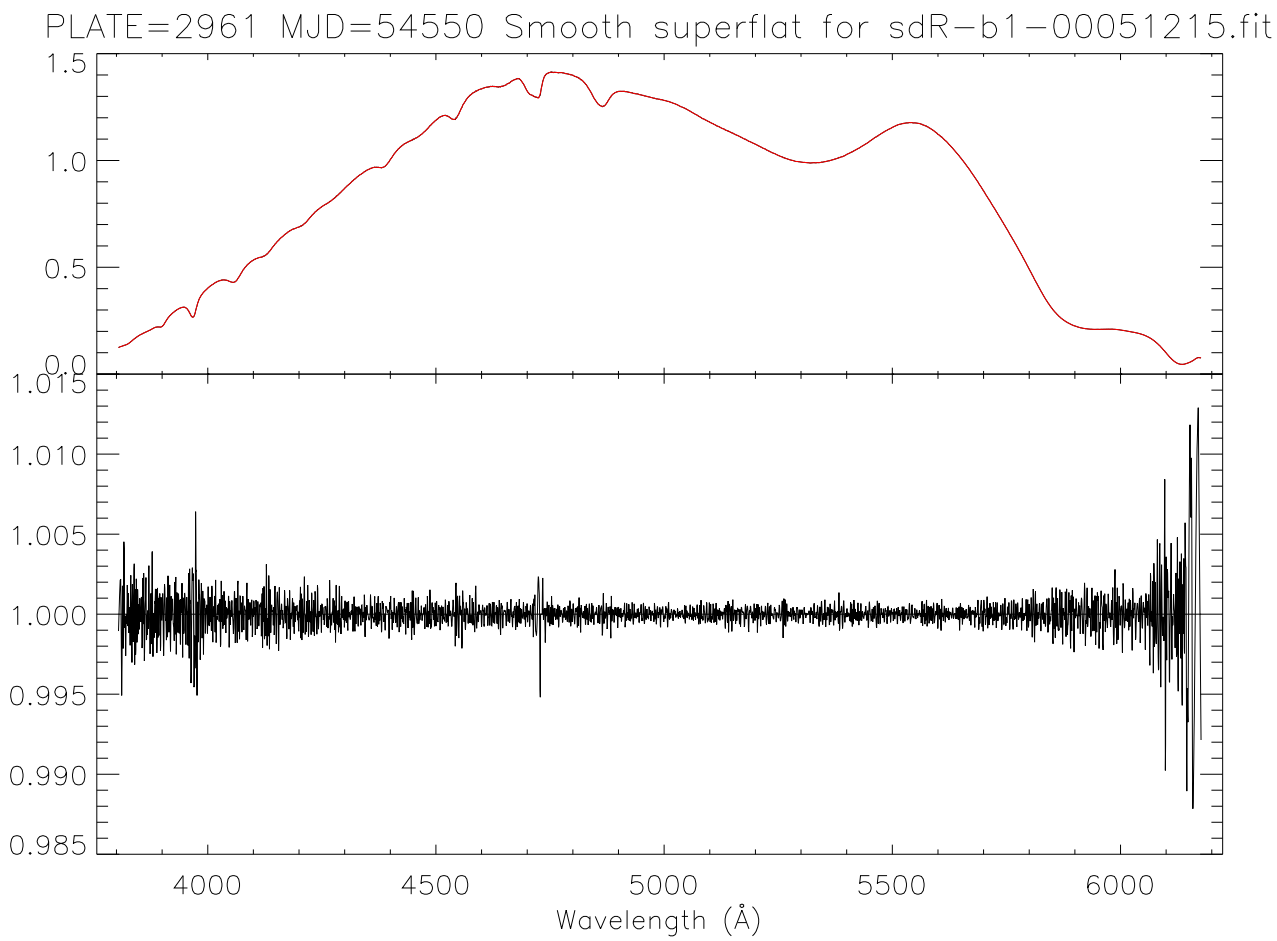

5889.9500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

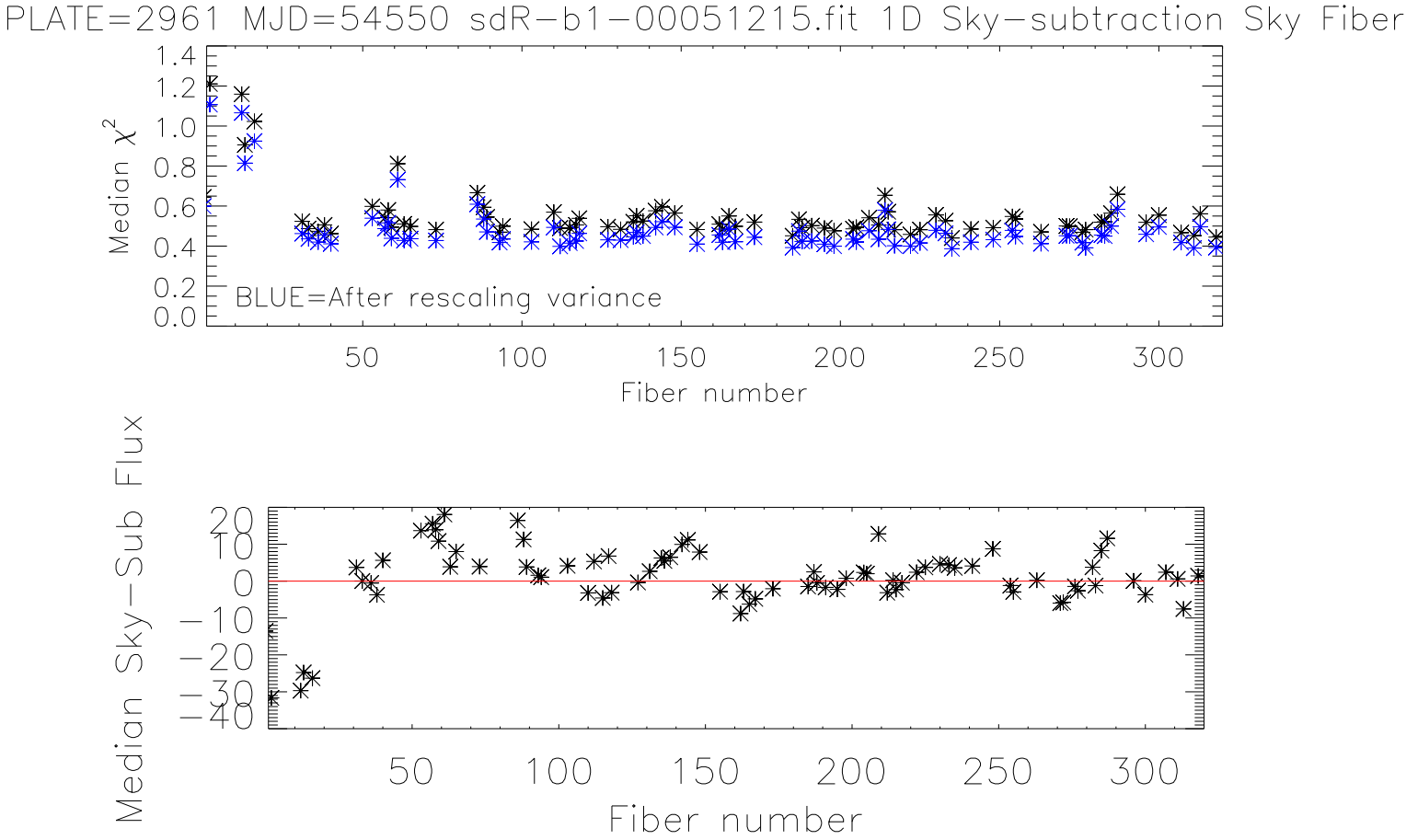

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

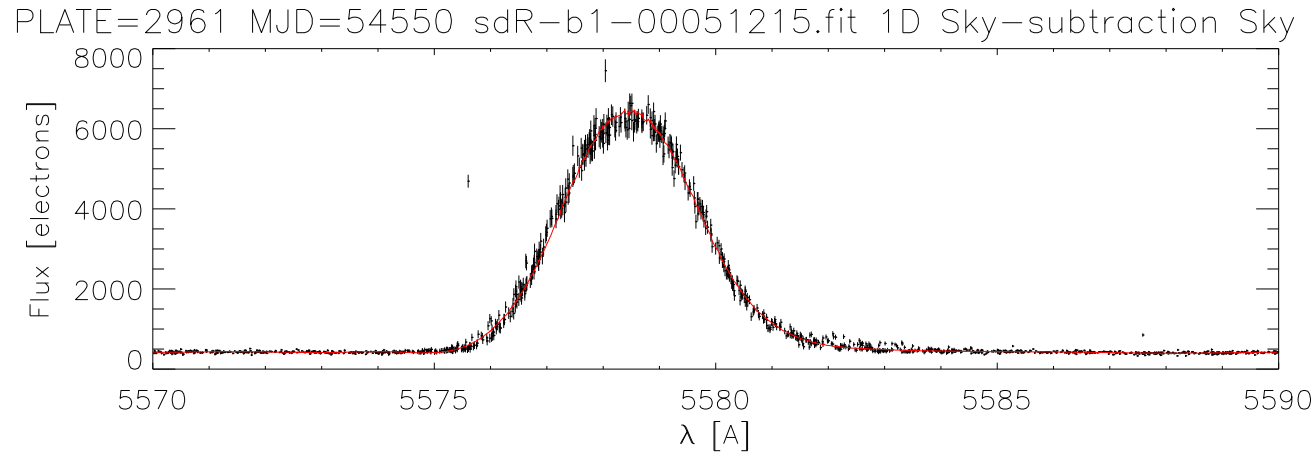

4046.5600
nfib1 82
nfib2 82
stdev 0.053
extra 0.48
4358.3300
nfib1 81
nfib2 82
stdev 0.036
extra 0.45
5460.9400
nfib1 81
nfib2 81
stdev 0.032
extra 0.38
5577.3390
nfib1 81
nfib2 81
stdev 0.017
extra 0.43
5889.9500
nfib1 80
nfib2 80
stdev 0.038
extra 0.51
5895.9240
nfib1 82
nfib2 82
stdev 0.038
extra 0.49
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

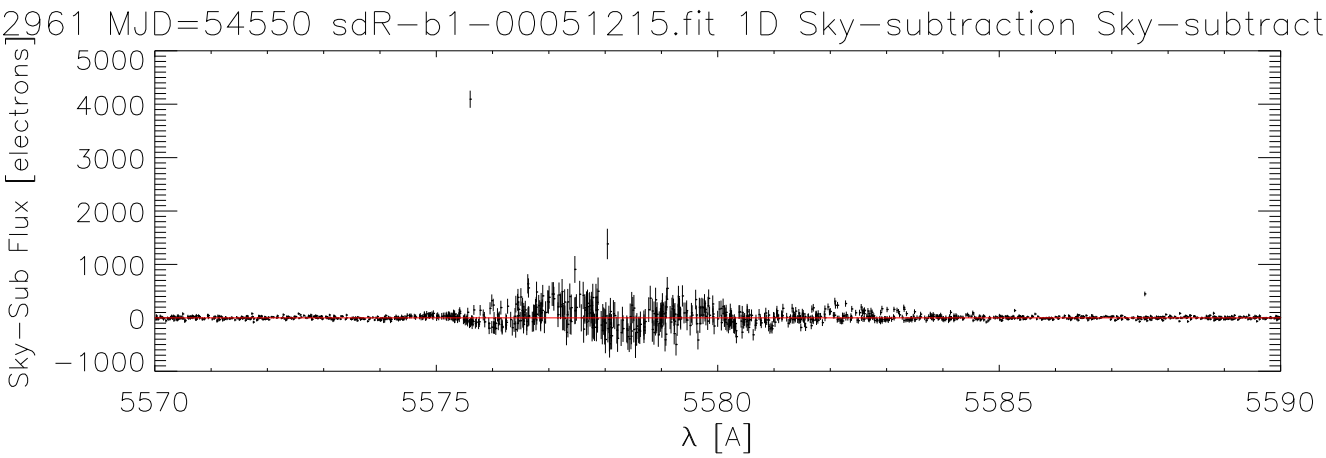

sky shift, pixels
0.5
0.4
0.3
0.2
0.1
3500
4000
4500
5000
5500
6000
6500

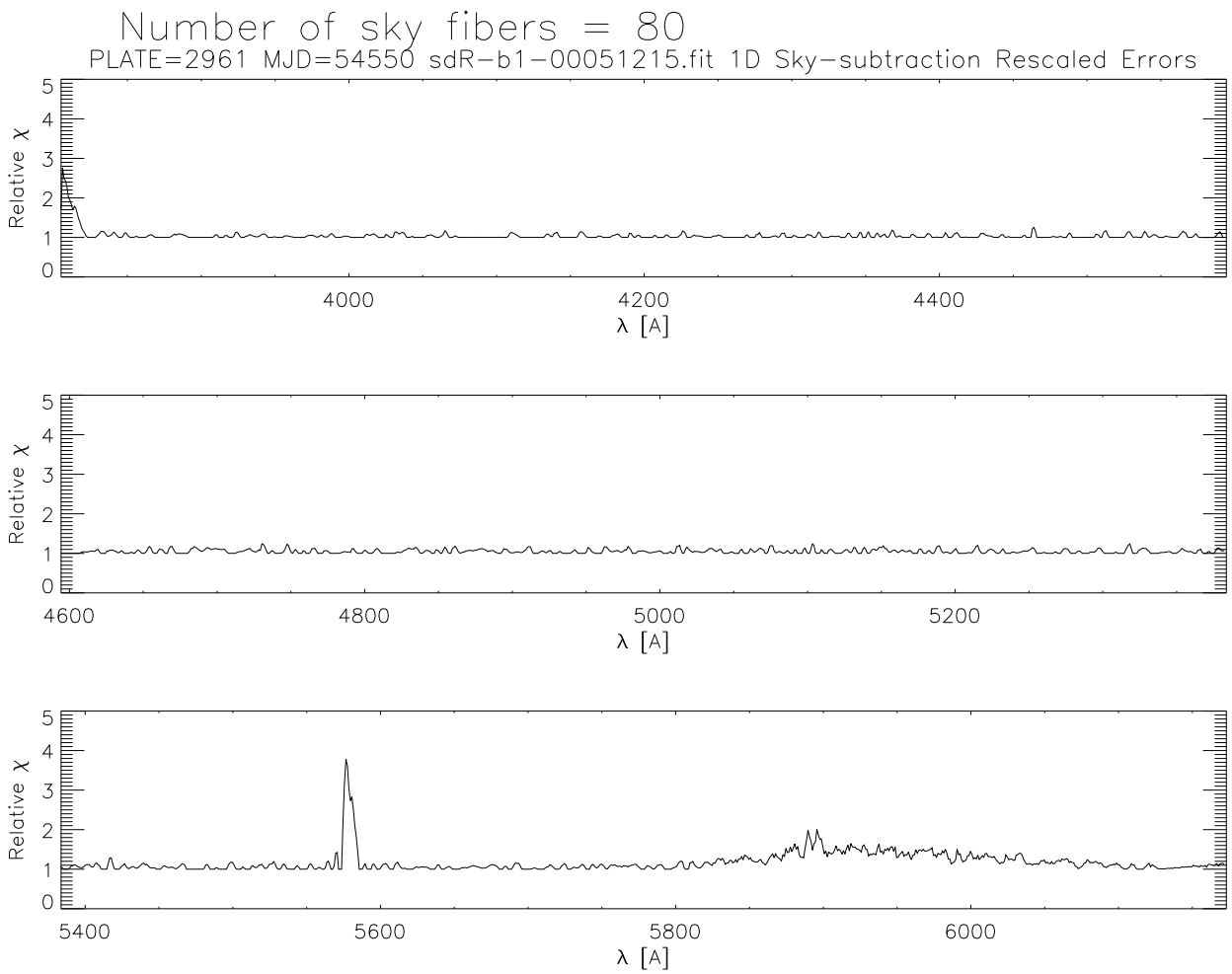
es= 0.0000

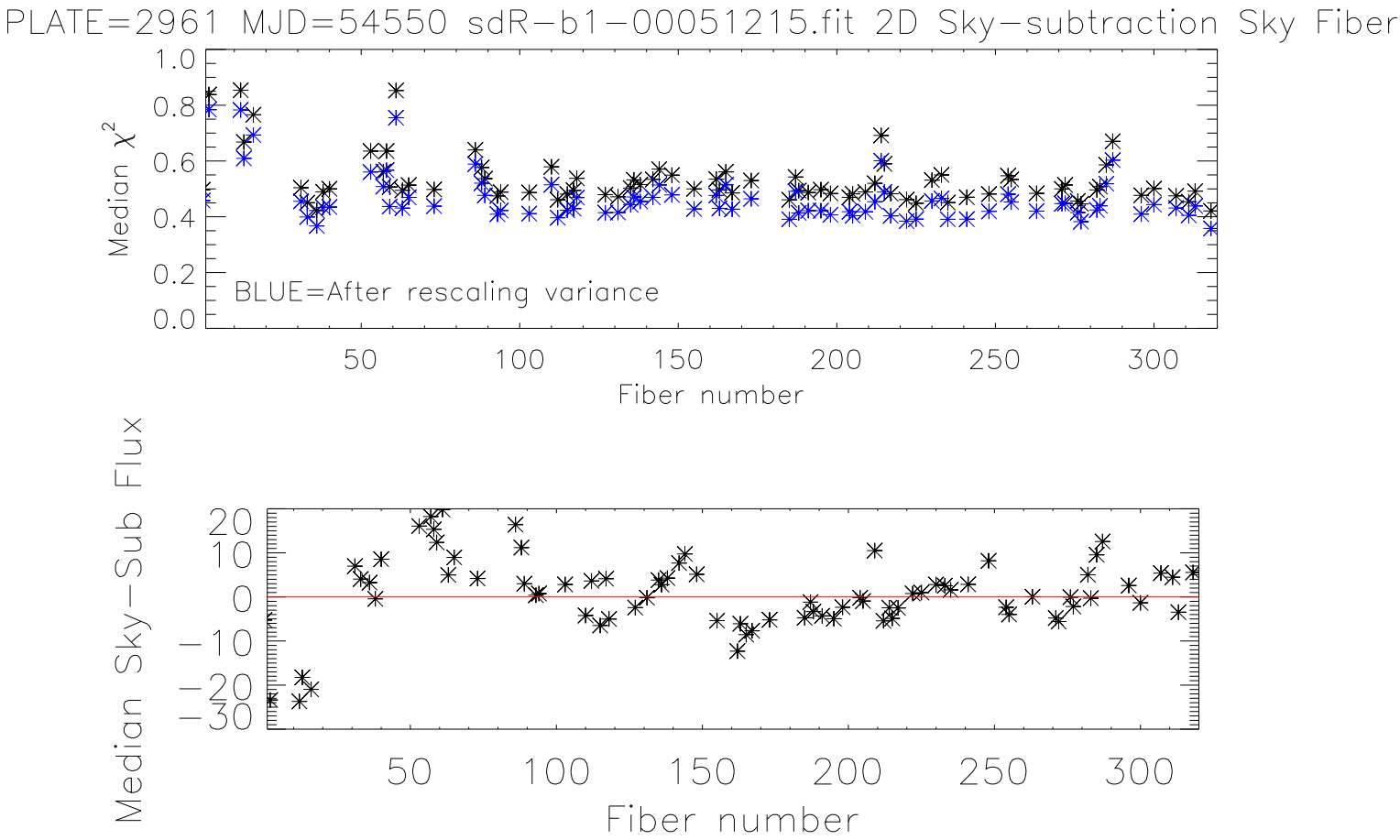

PLATE=2961 MJD=54550 Smooth superflat for sdR-b1-00051215.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

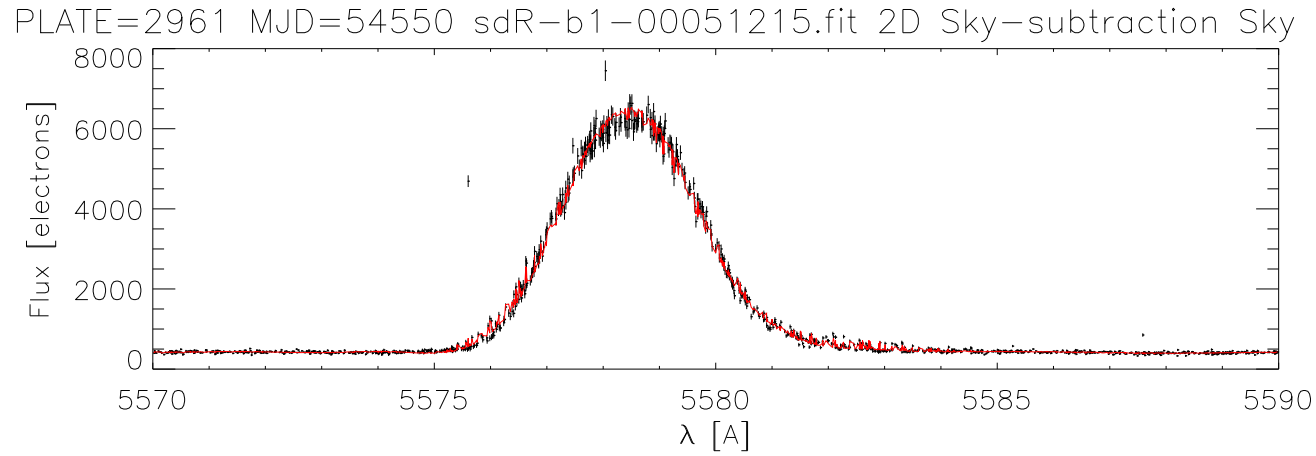

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

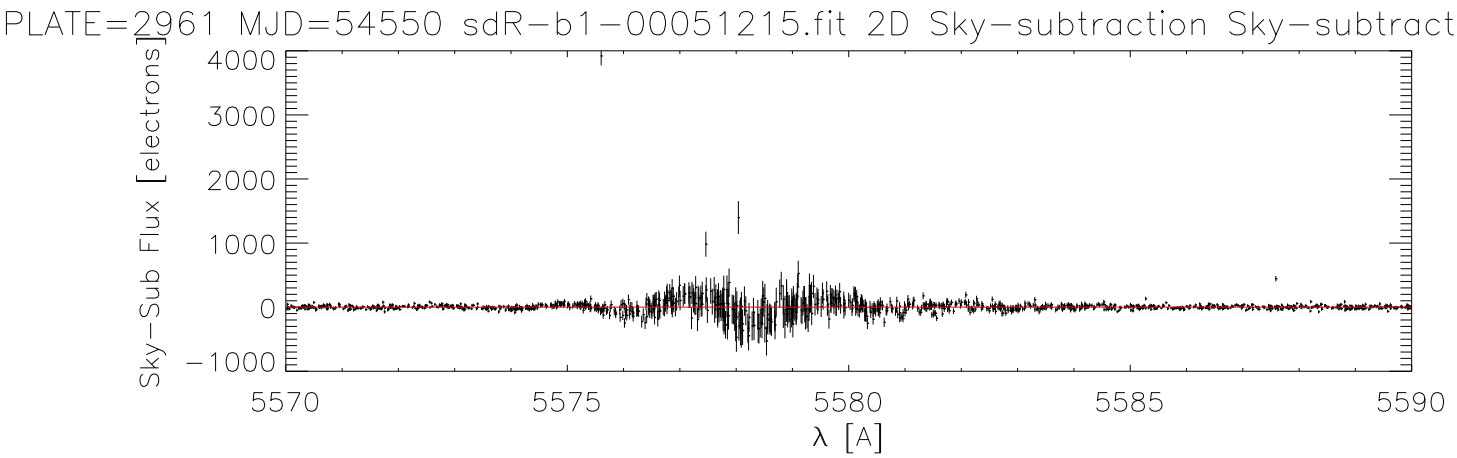

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

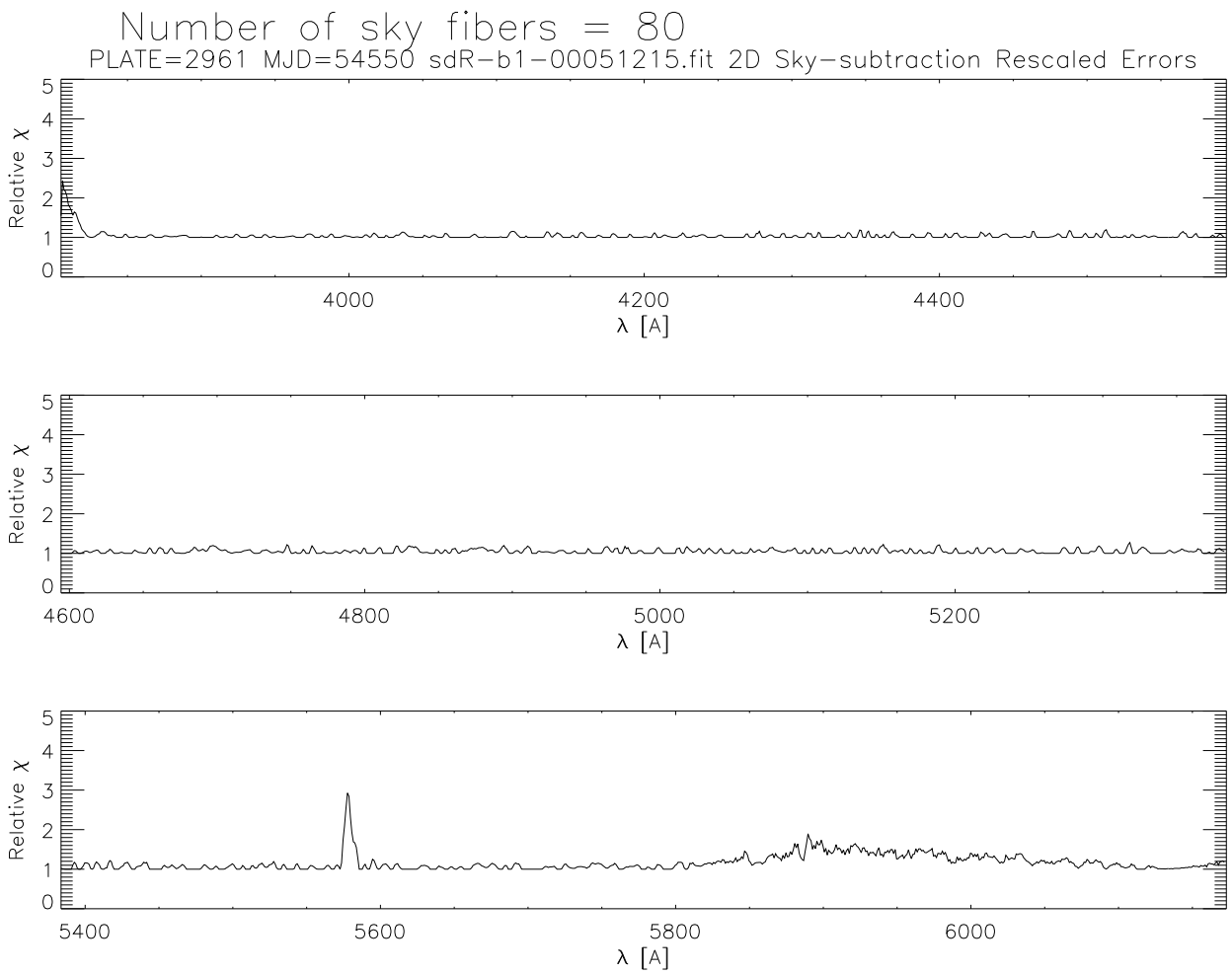

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

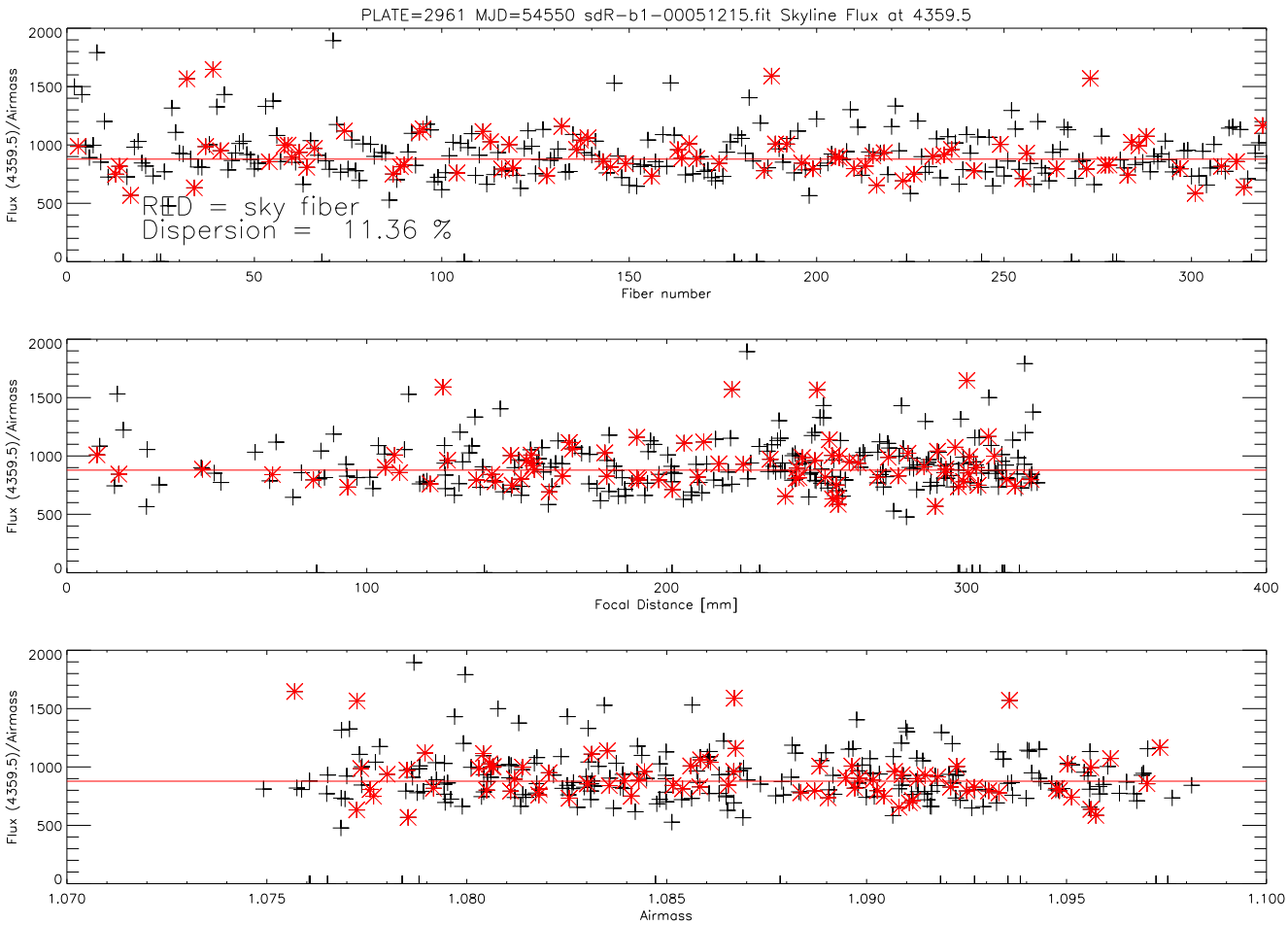

Number of sky fibers = 80
PLATE=2961 MJD=54550 sdR-b1-00051215.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

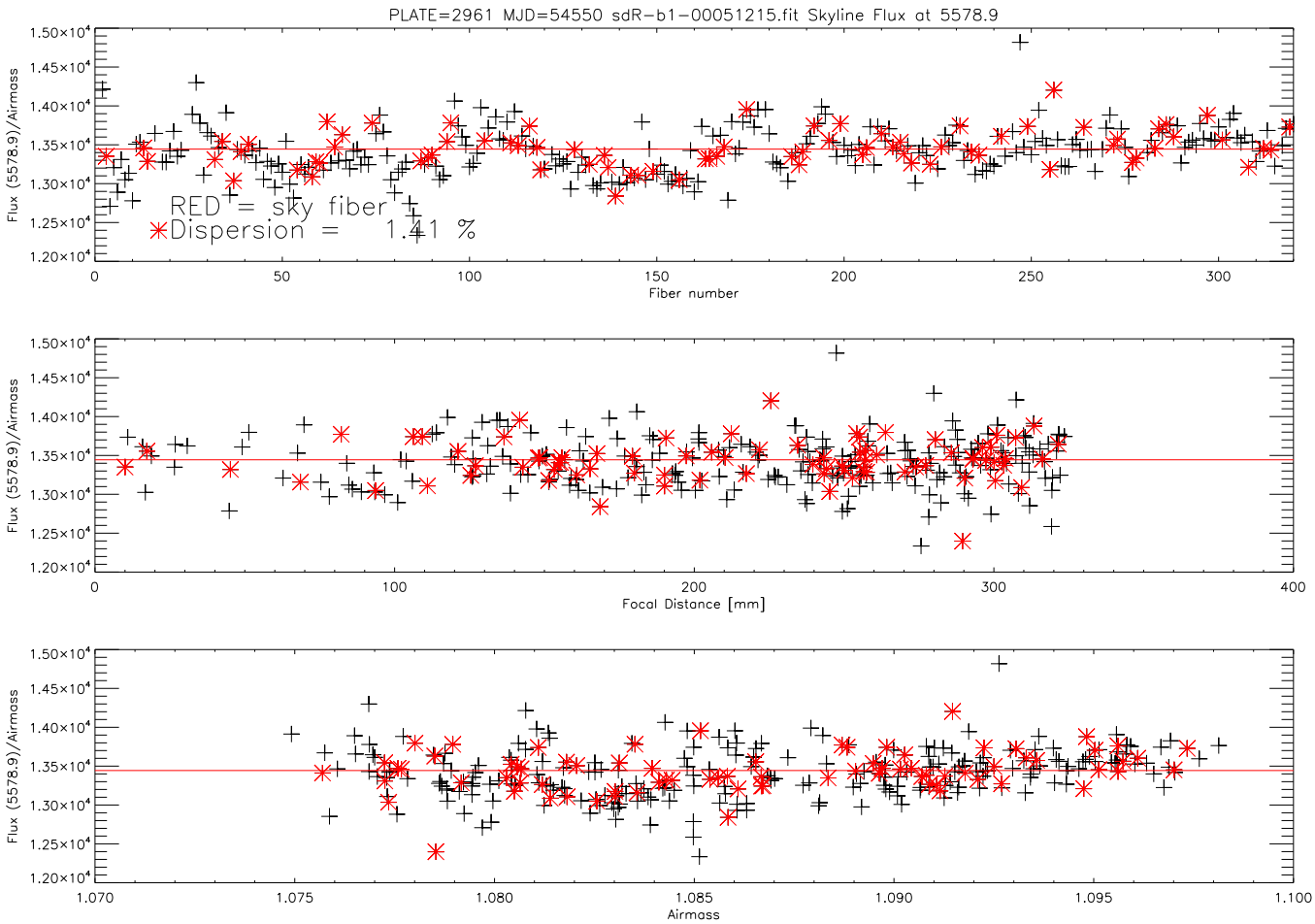

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

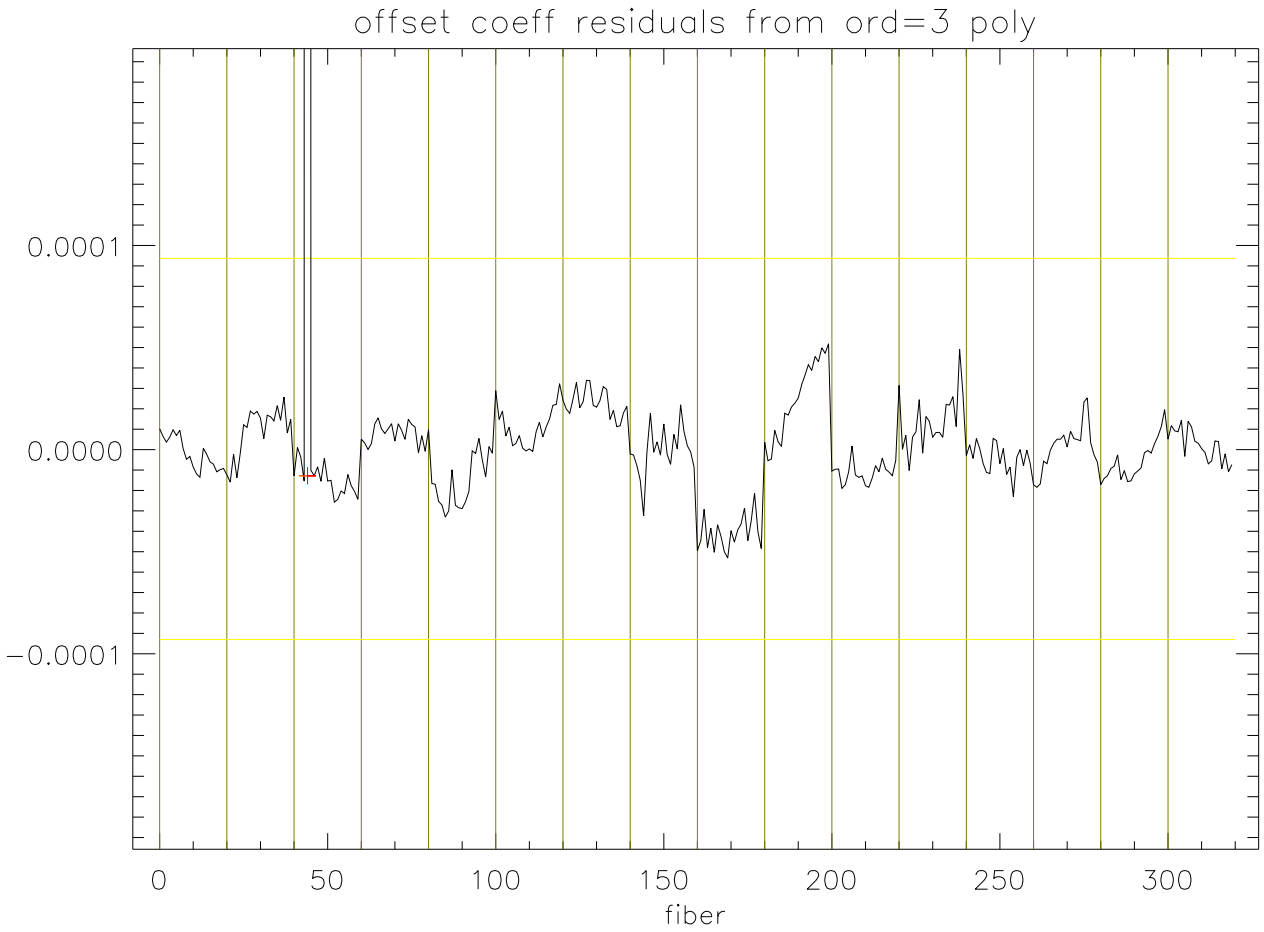

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

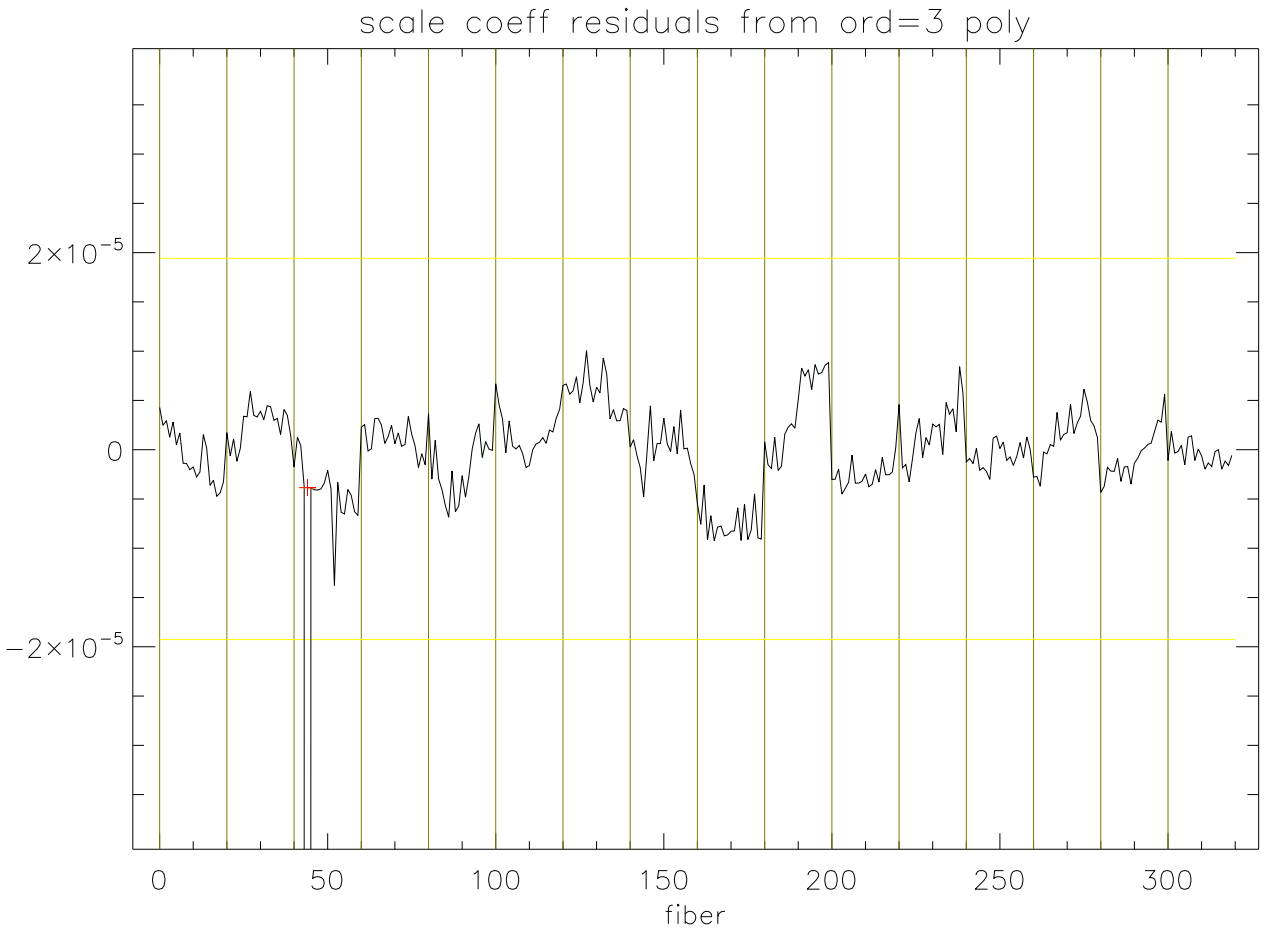

PLATE=2961 MJD=54550 sdR-b1-00051215.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

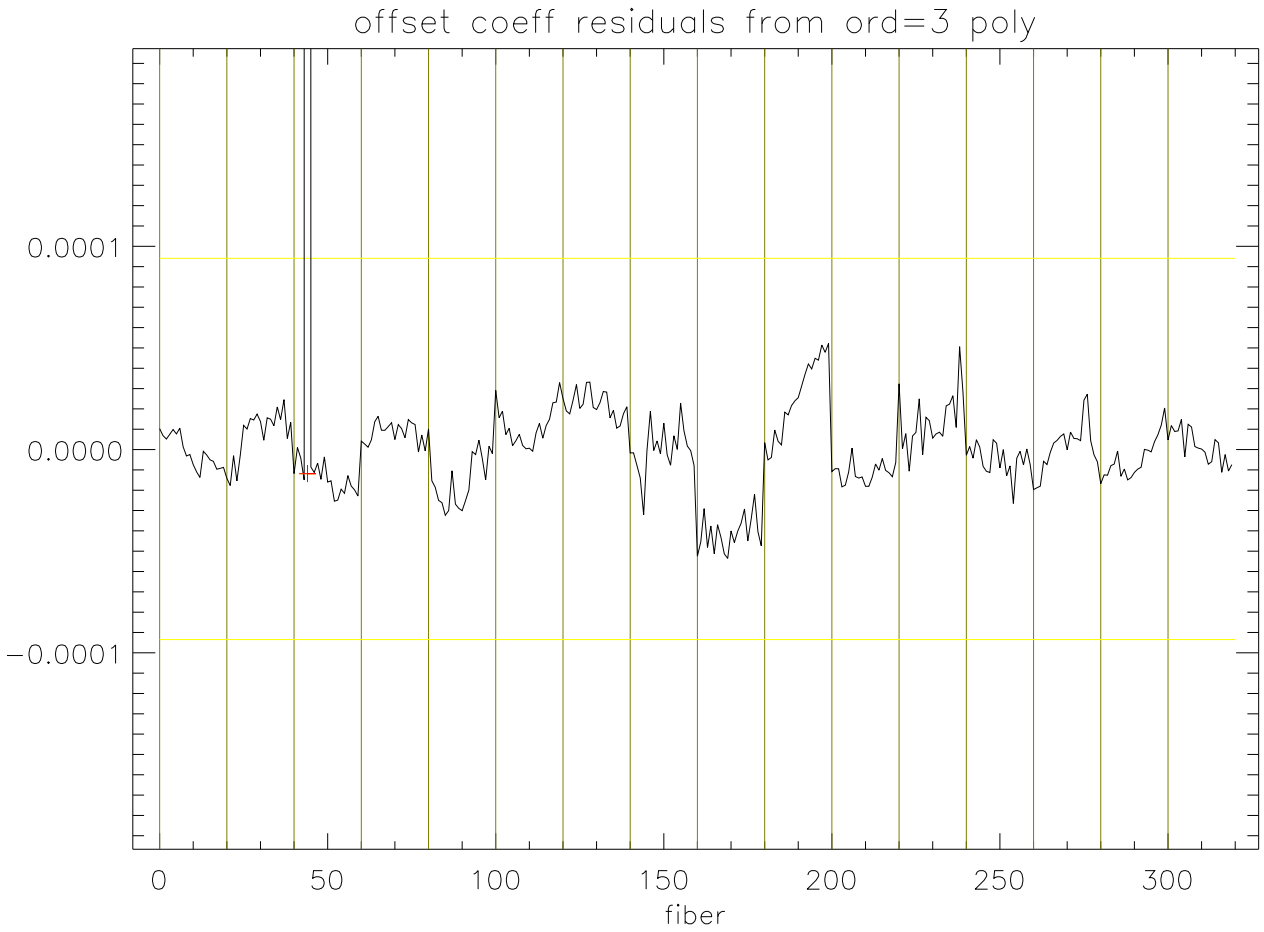

Number of sky fibers = 80
PLATE=2961 MJD=54550 sdR-b1-00051215.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

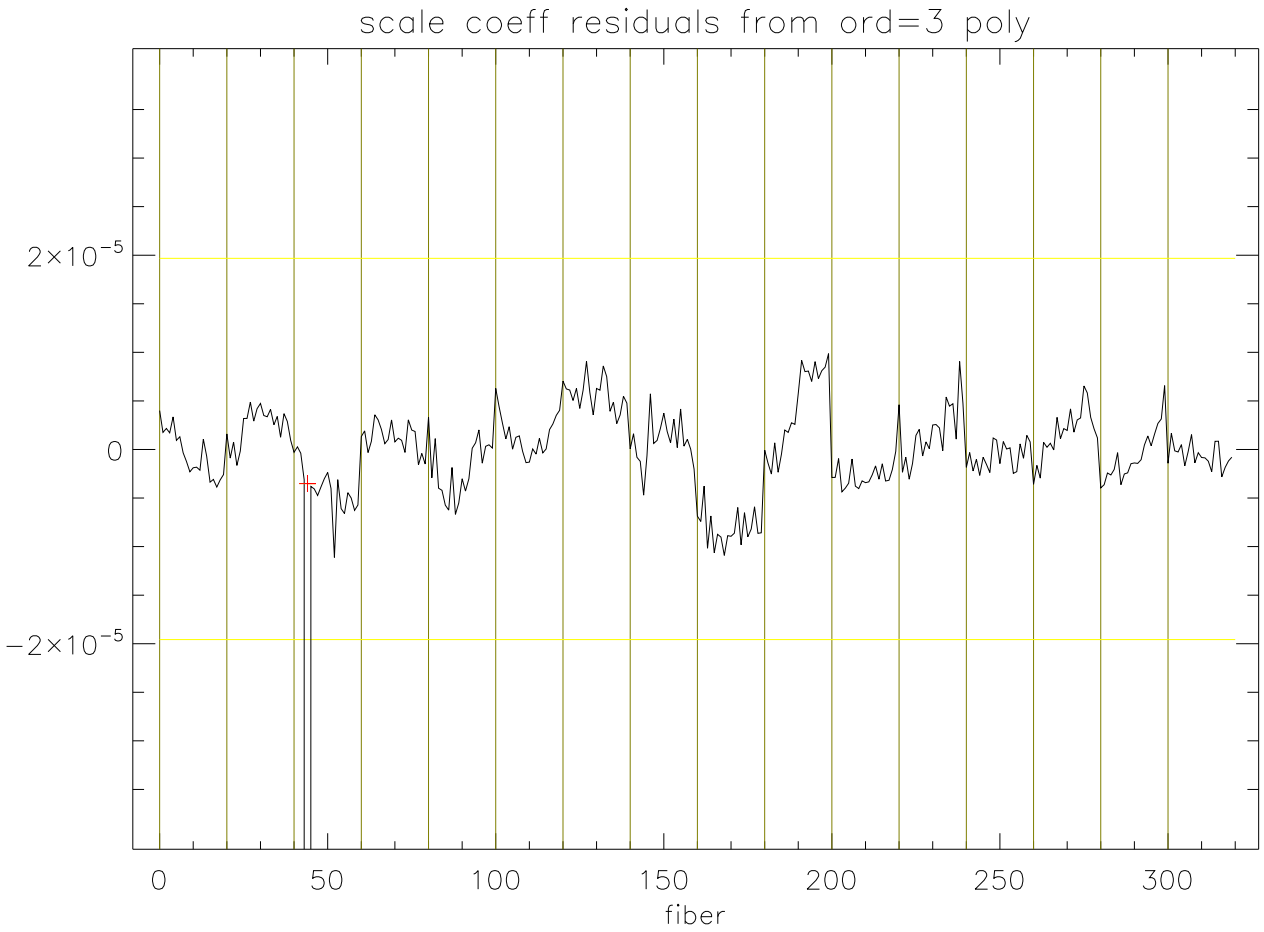

PLATE=2961 MJD=54550 sdR-b1-00051215.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 11.36 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

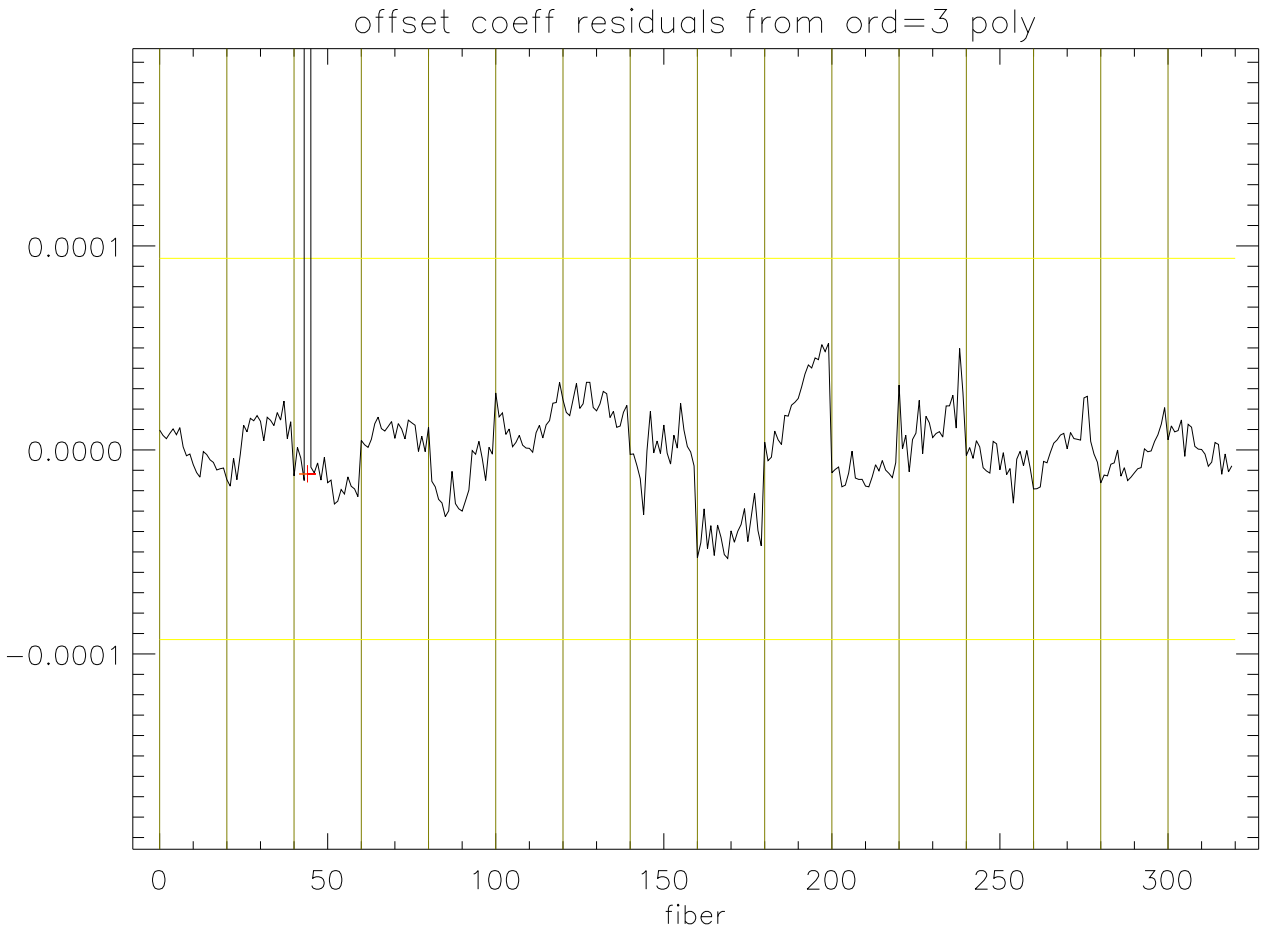

PLATE=2961 MJD=54550 sdR-b1-00051215.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.41 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

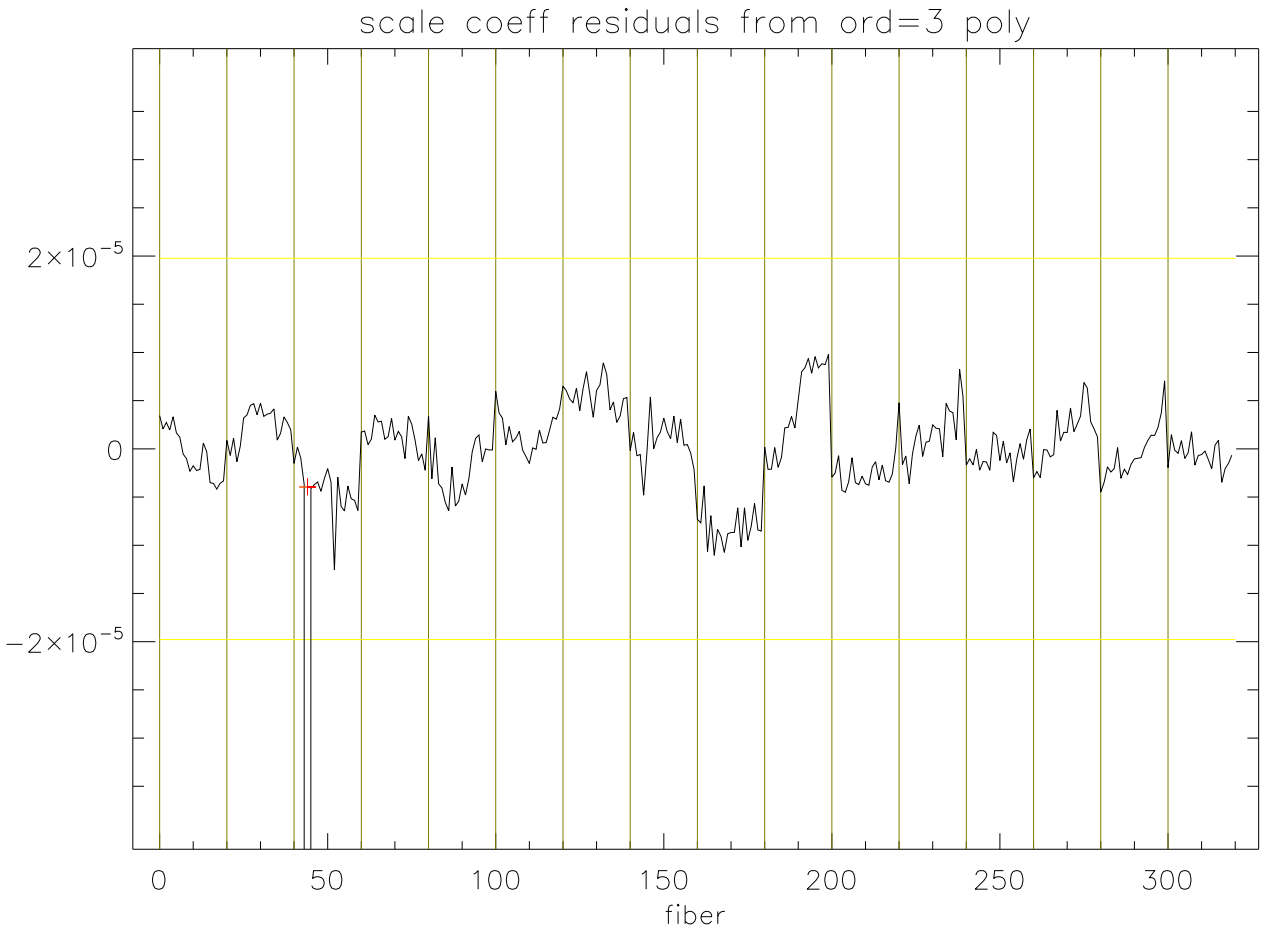

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

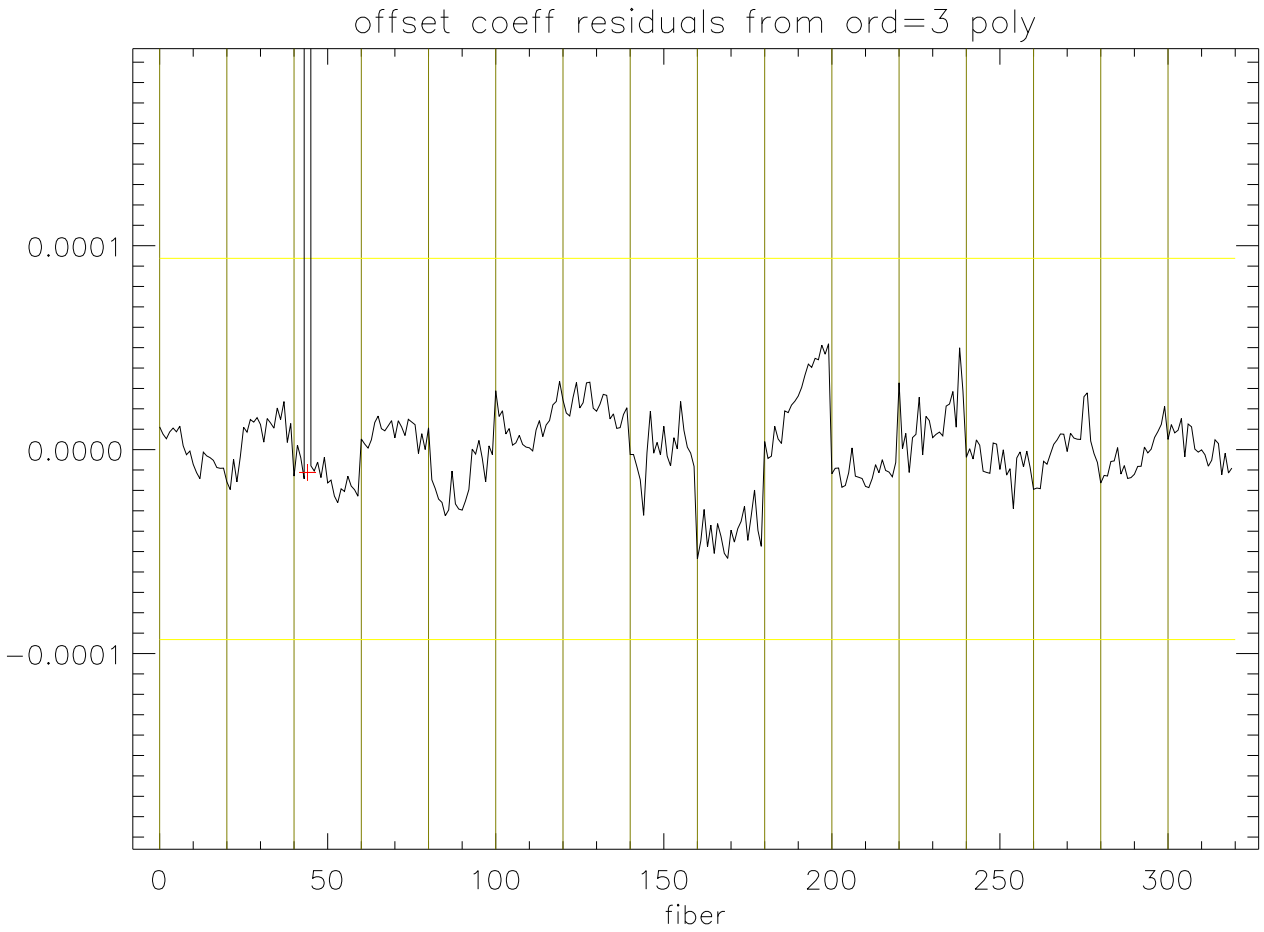

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

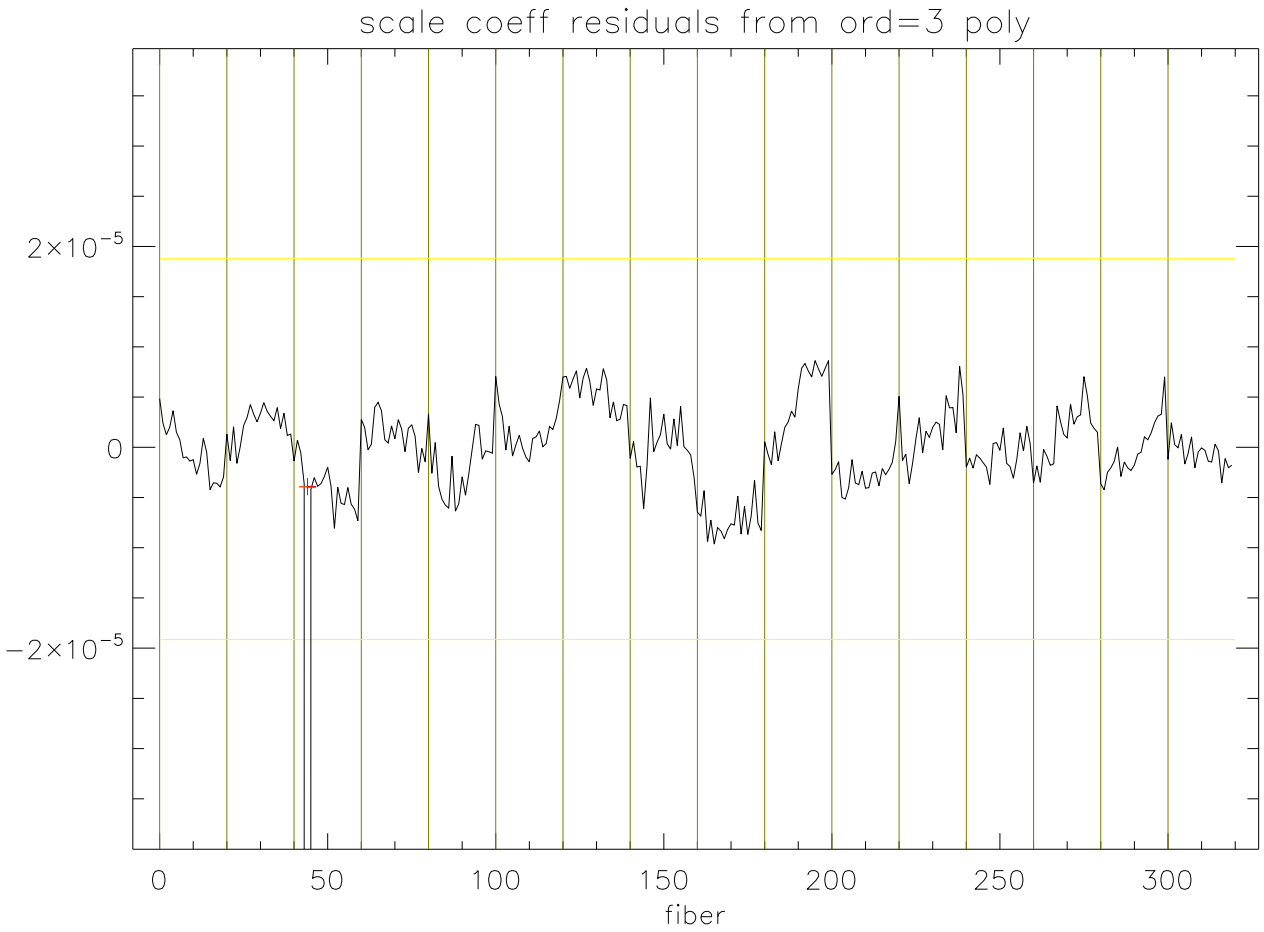

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

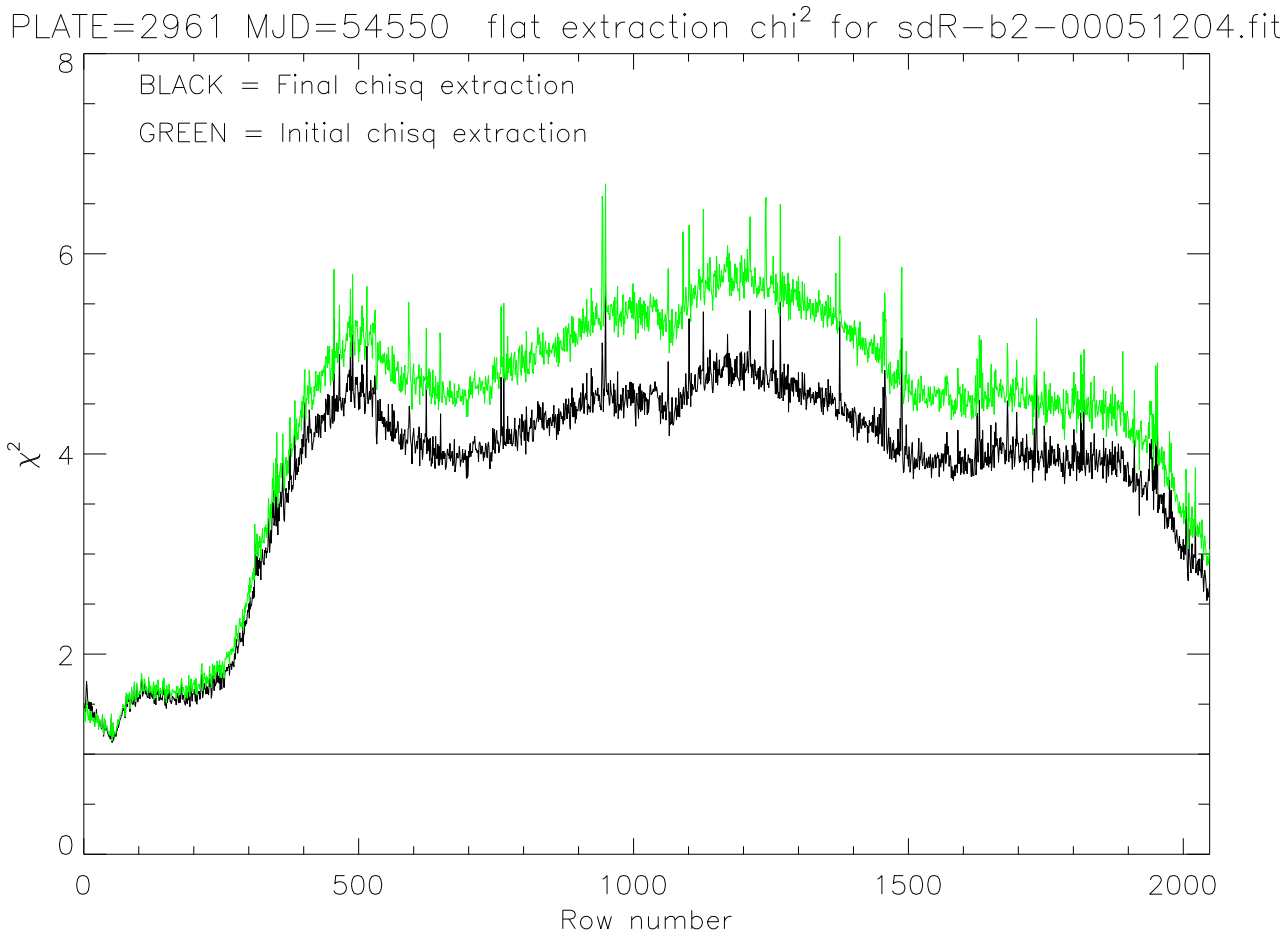

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

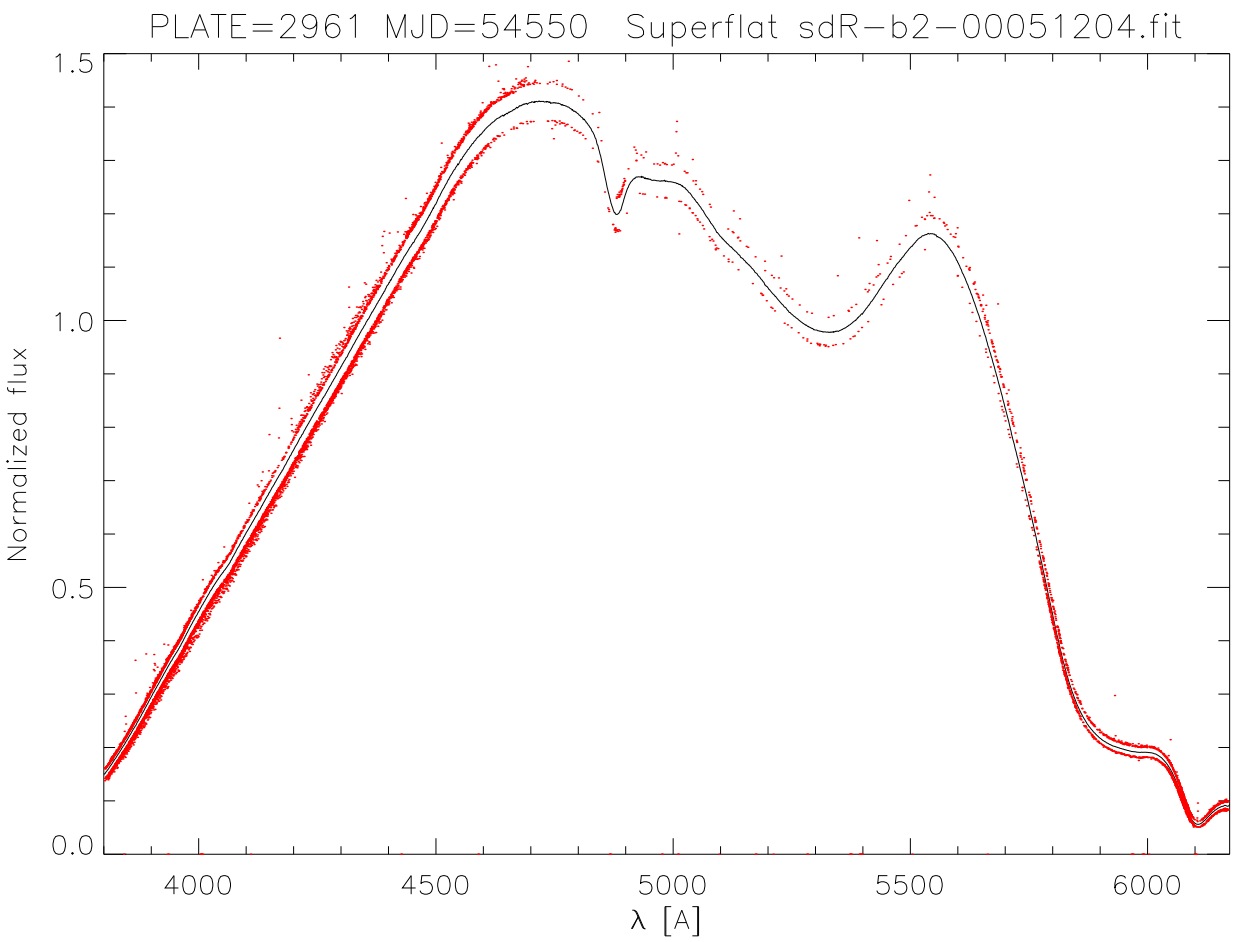

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

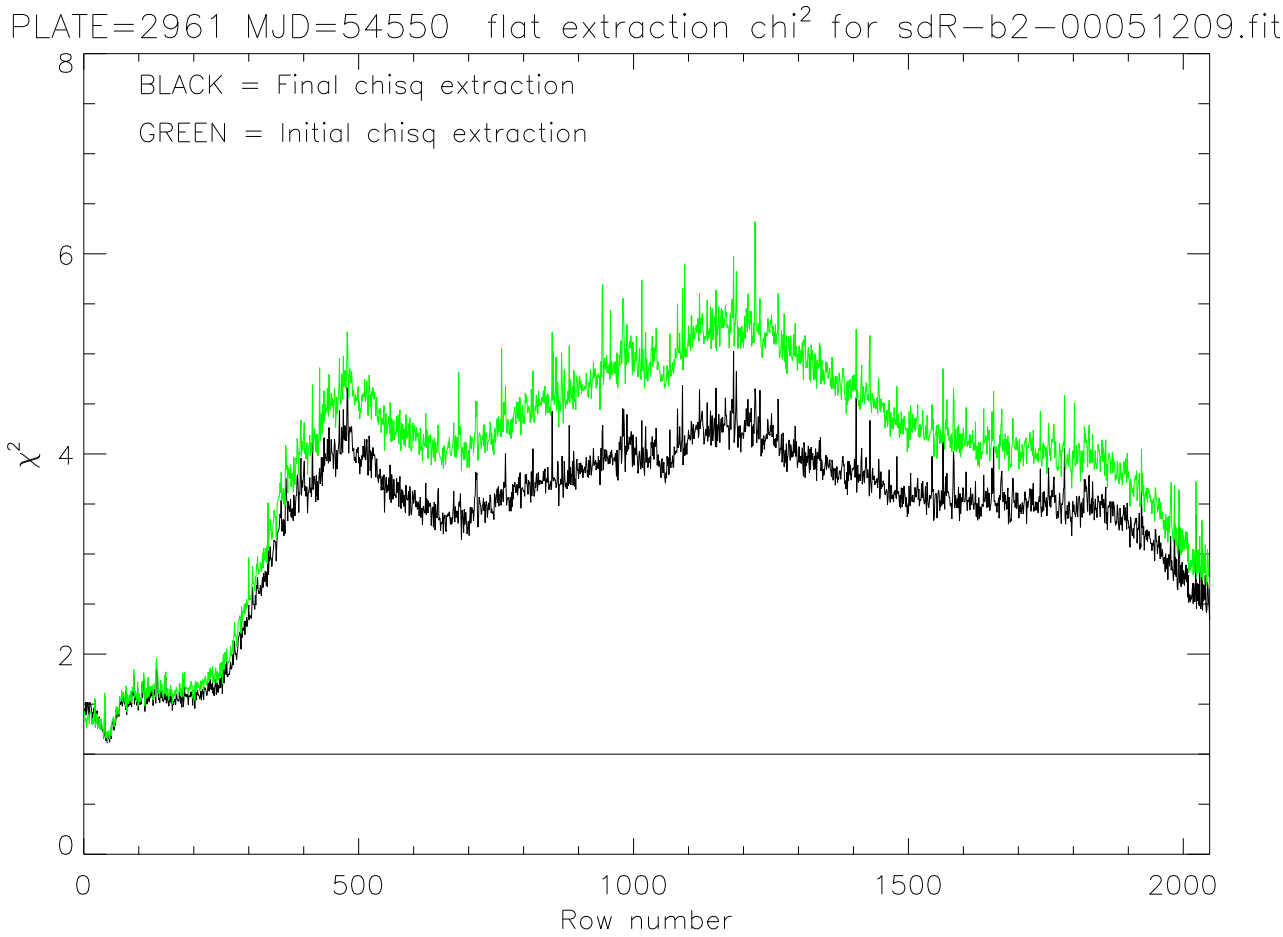

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

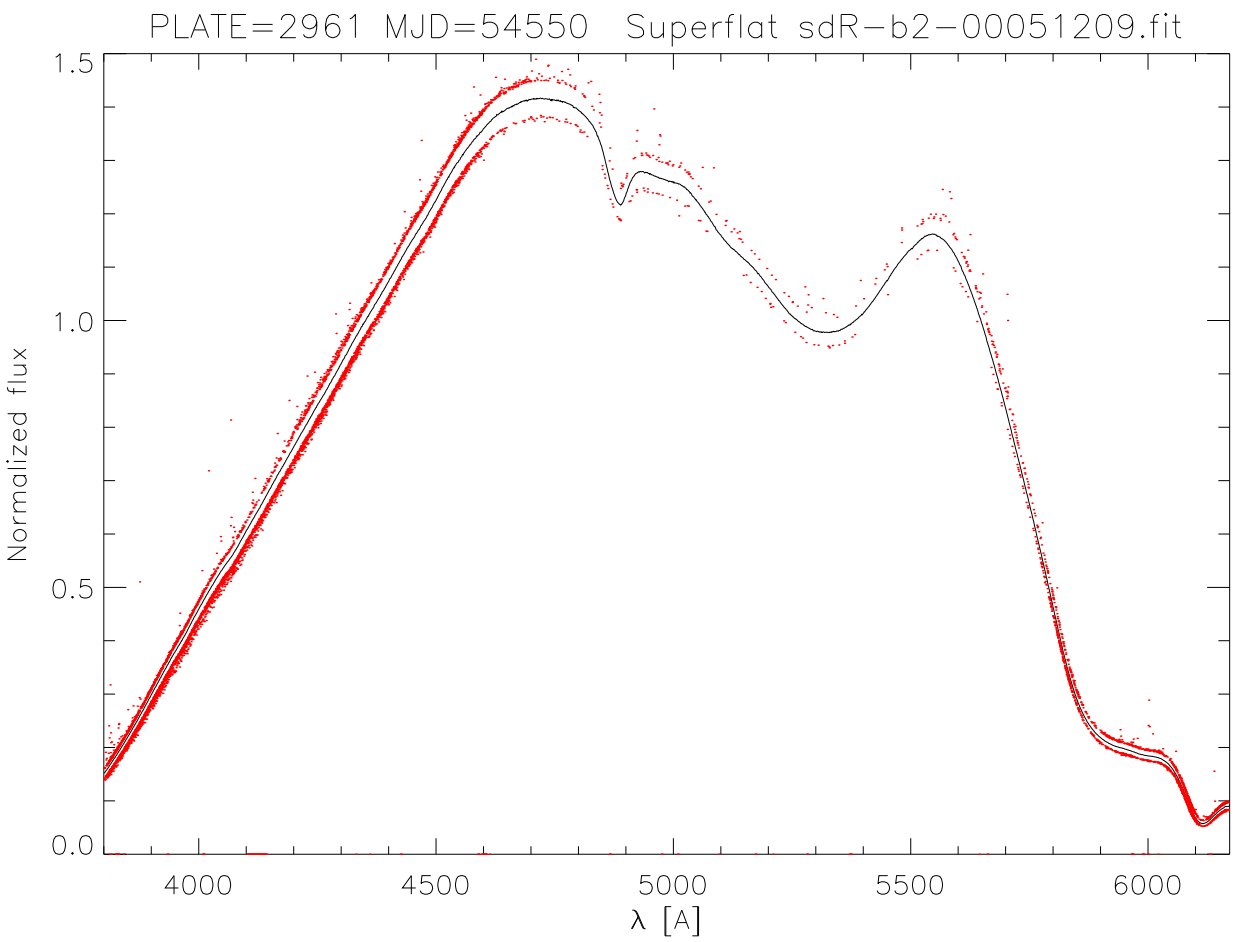

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

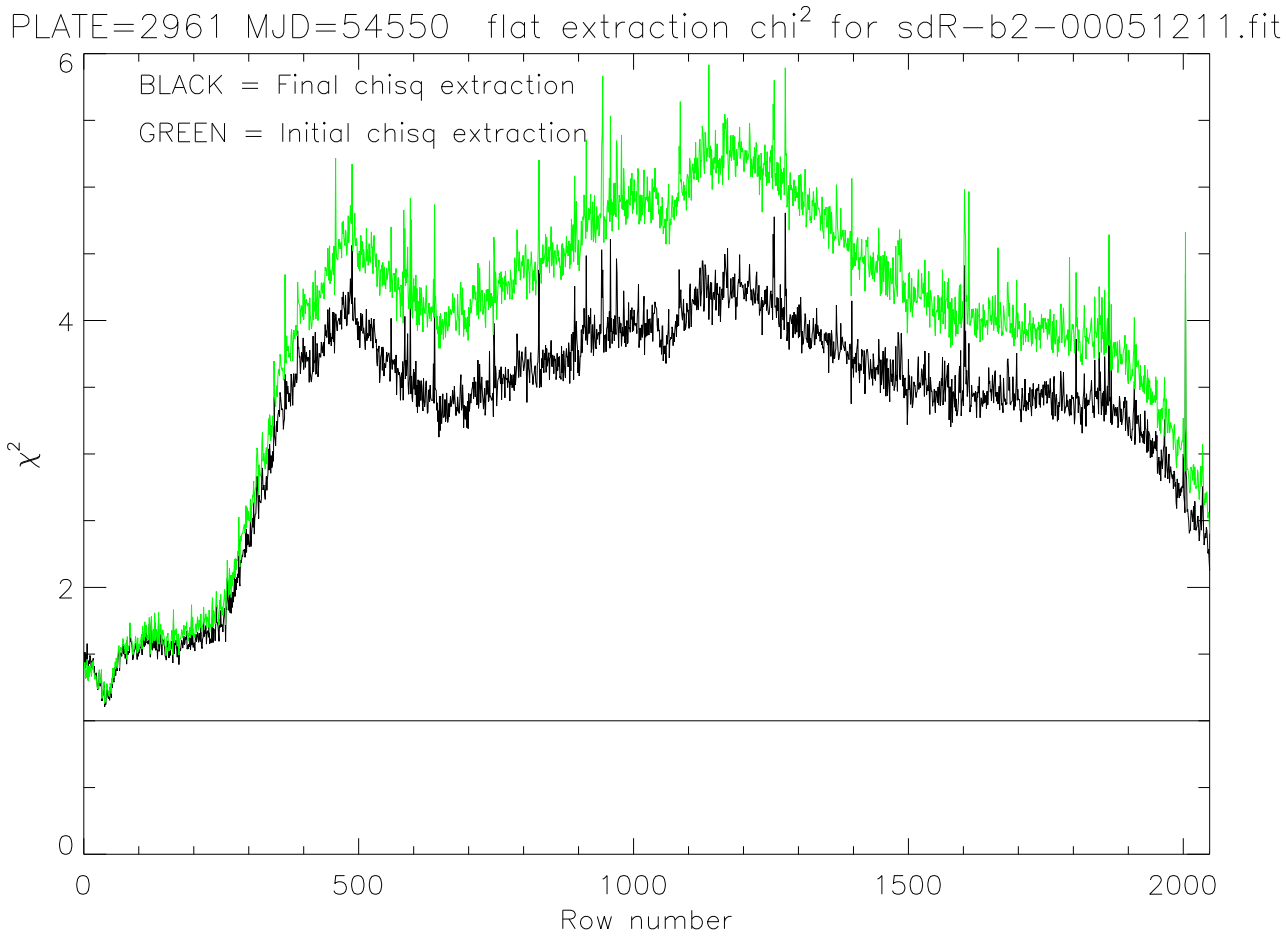

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

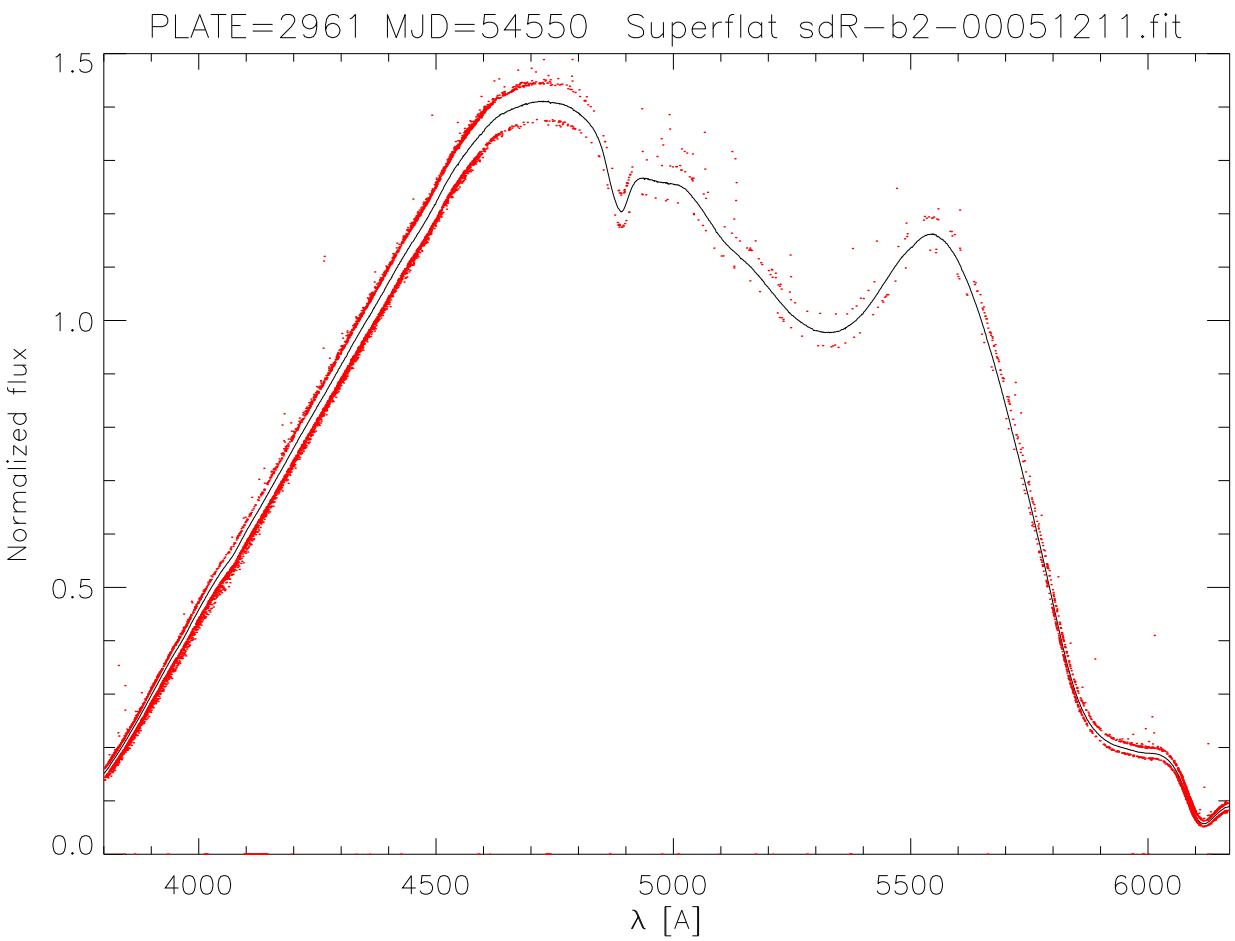

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b2−00051204.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

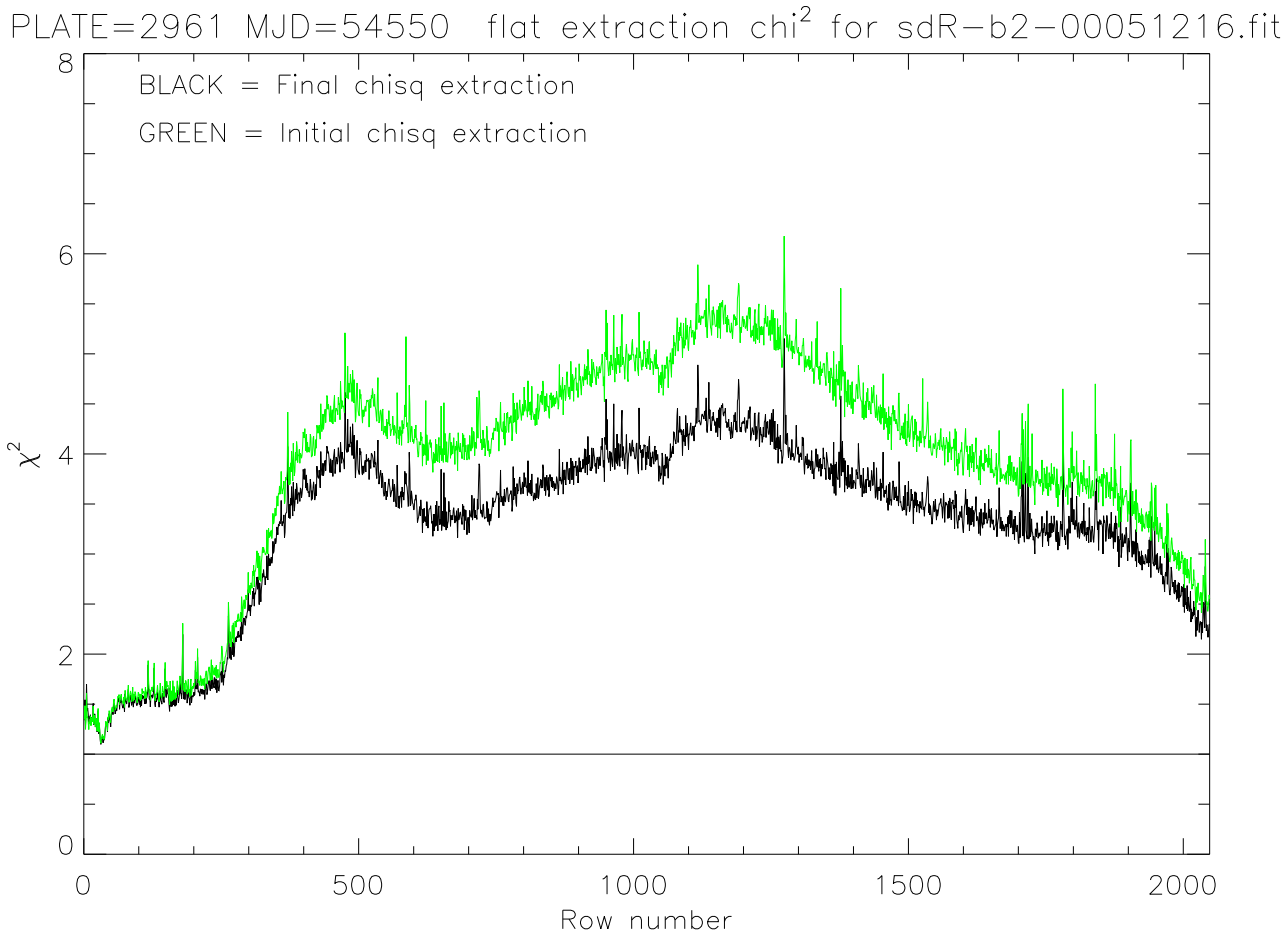

PLATE=2961 MJD=54550 Superflat sdR-b2-00051204.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

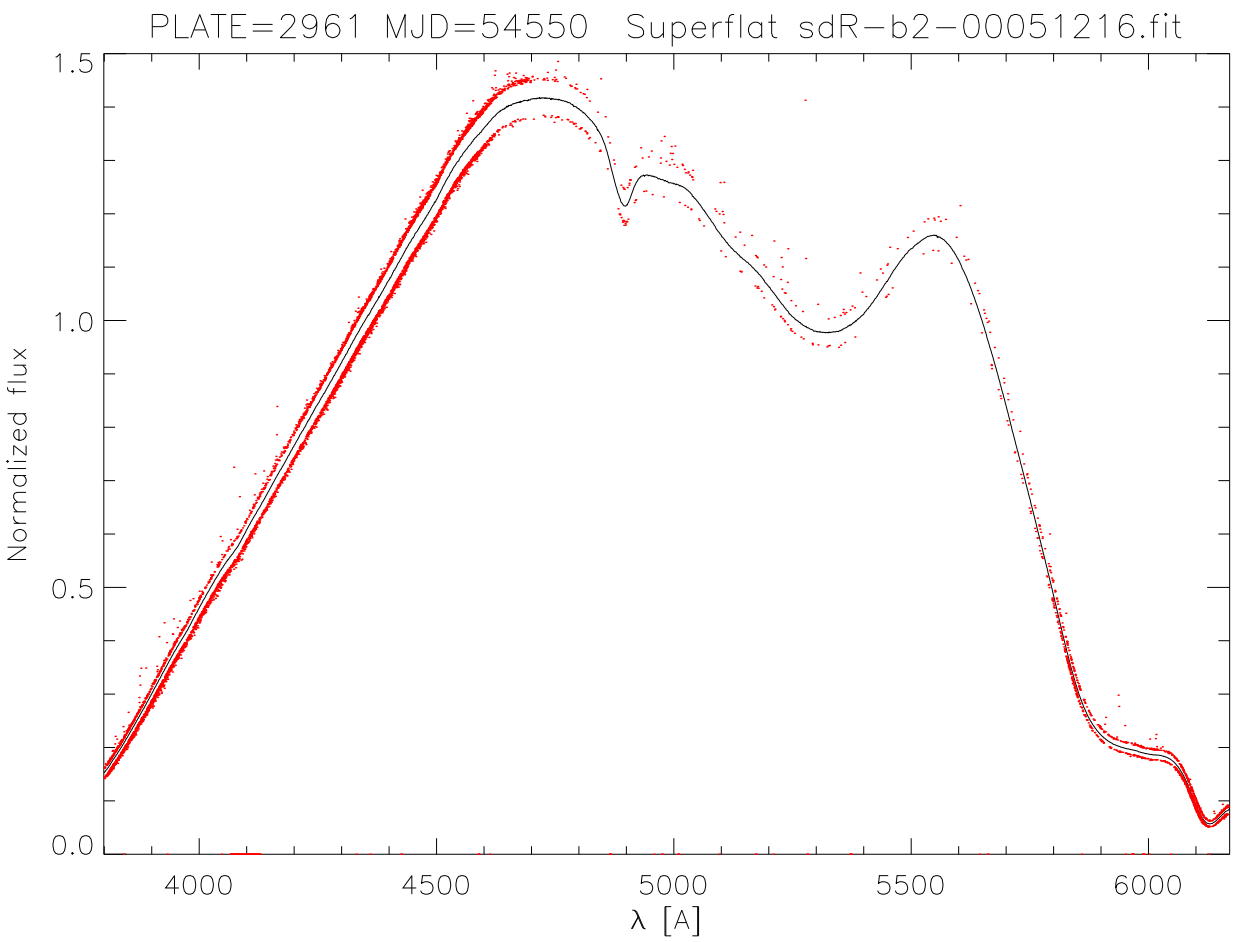

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b2−00051209.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

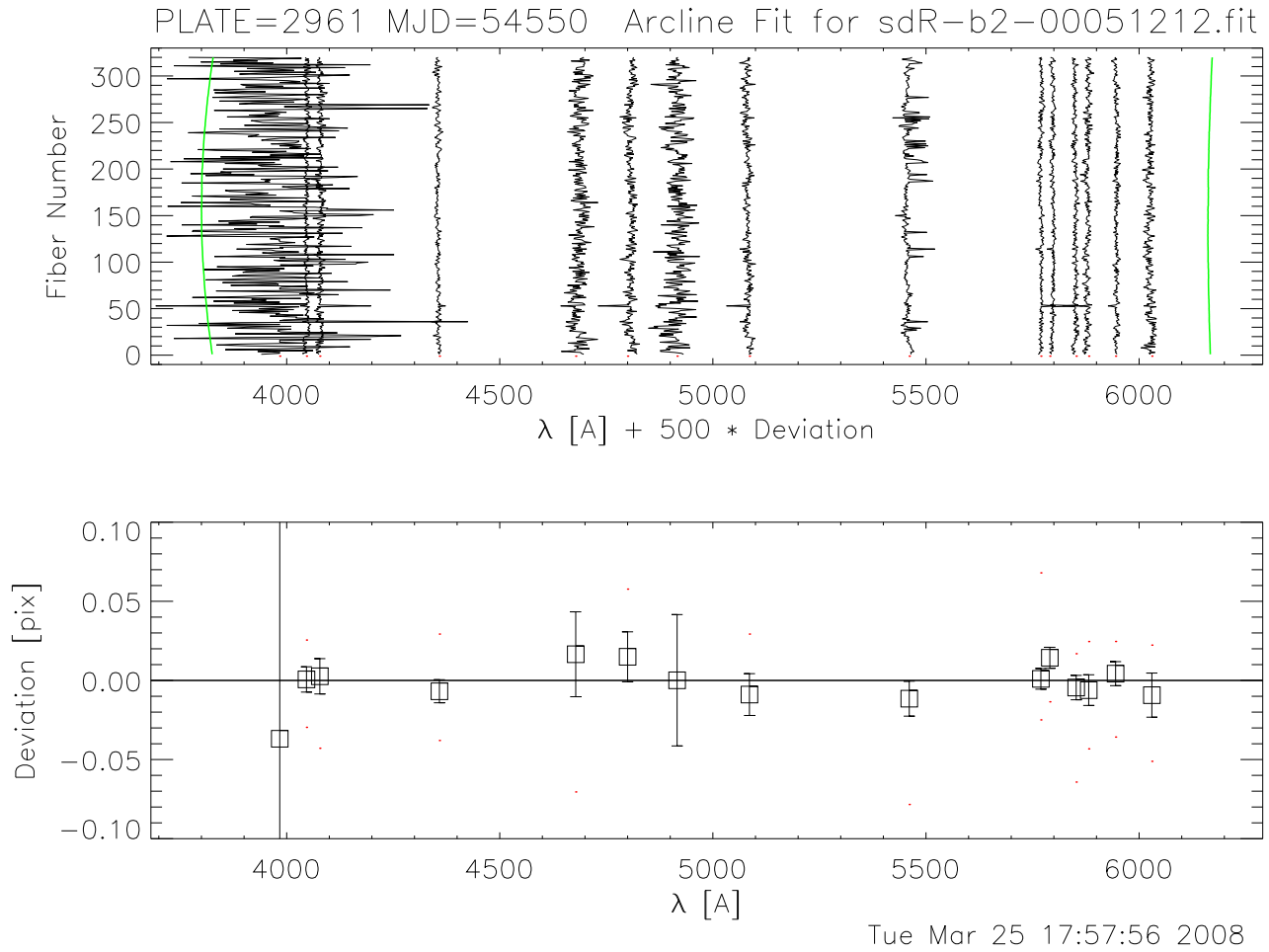

PLATE=2961 MJD=54550 Superflat sdR-b2-00051209.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

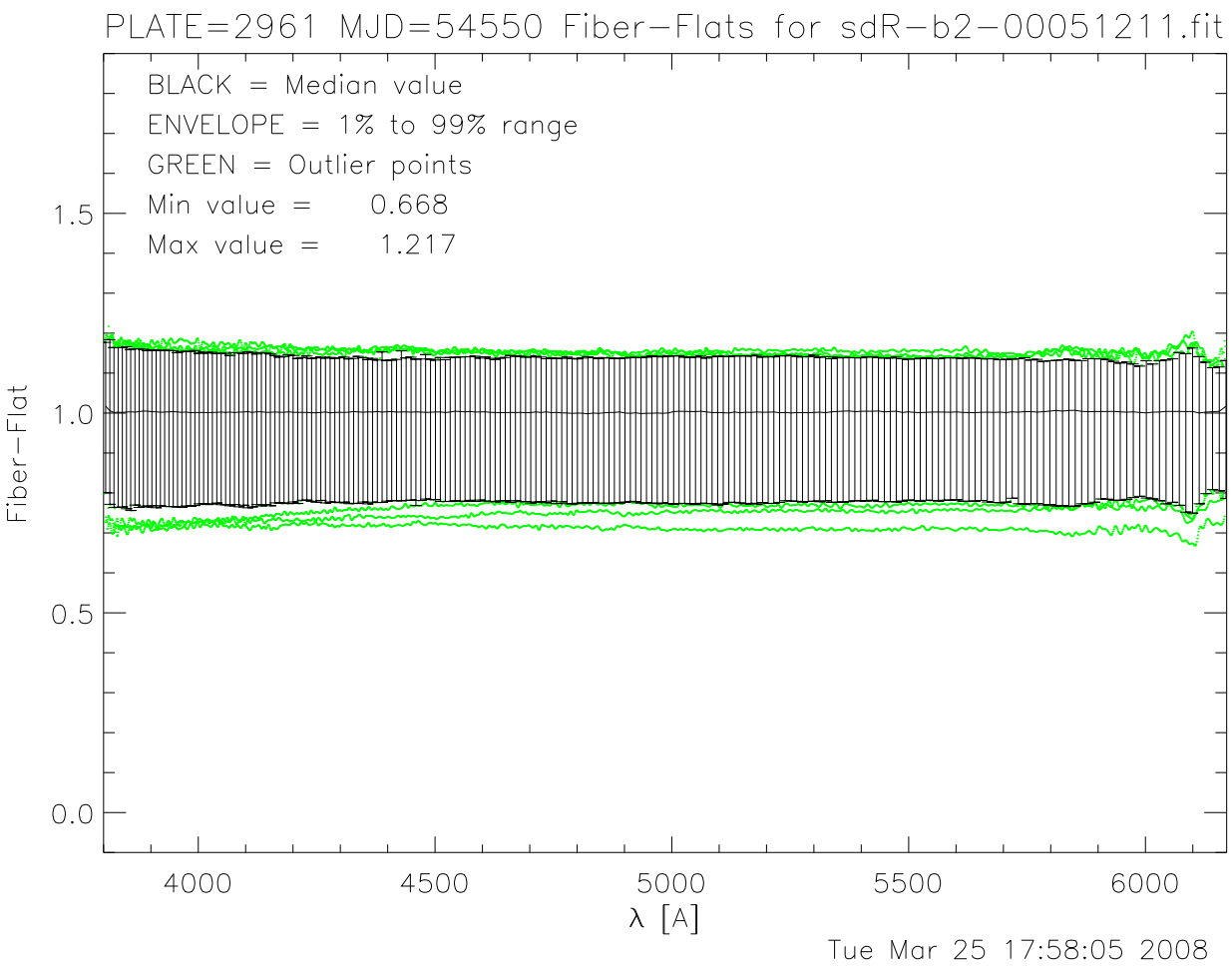

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b2−00051211.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

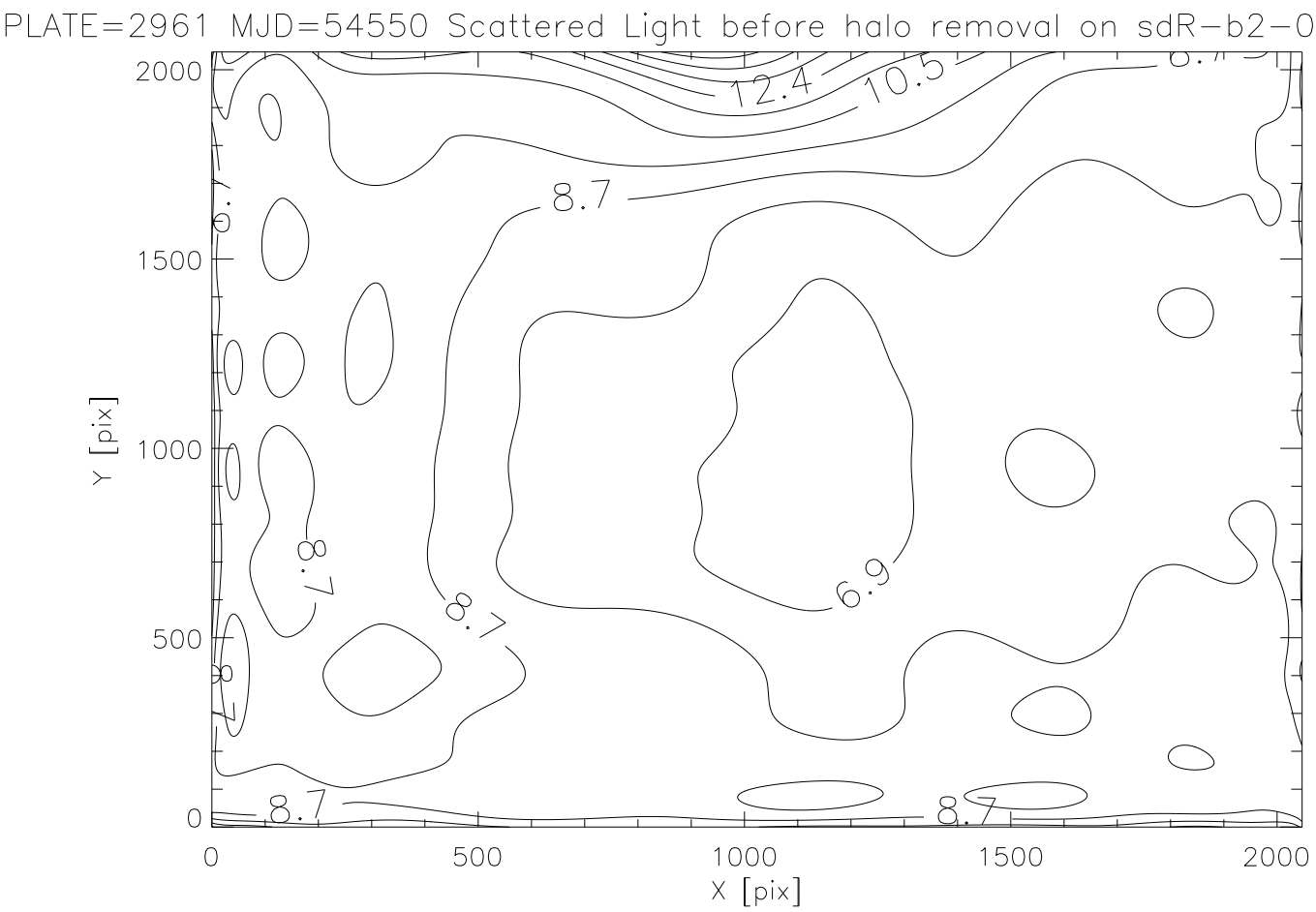

PLATE=2961 MJD=54550 Superflat sdR-b2-00051211.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

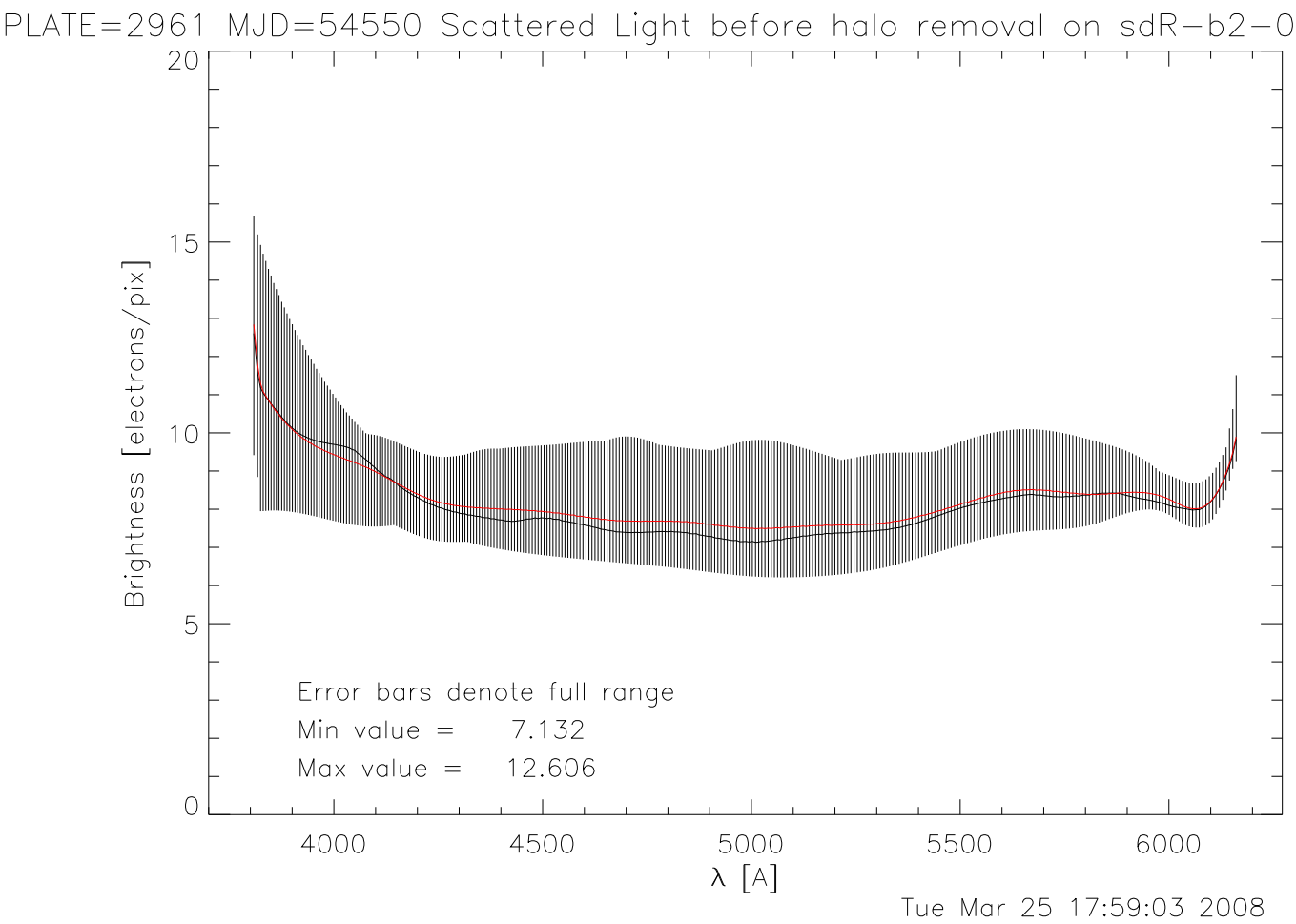

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−b2−00051216.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

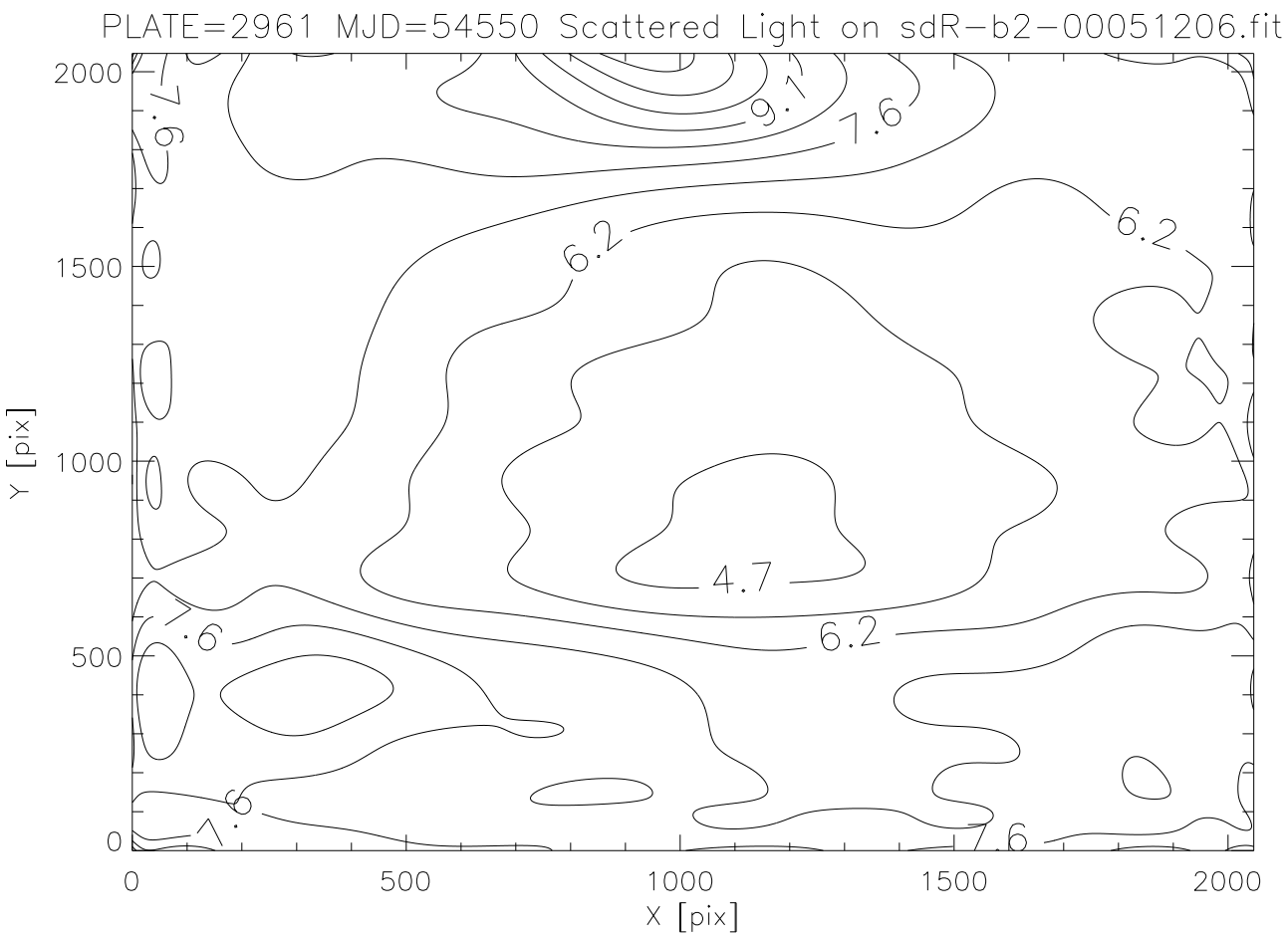

PLATE=2961 MJD=54550 Superflat sdR-b2-00051216.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

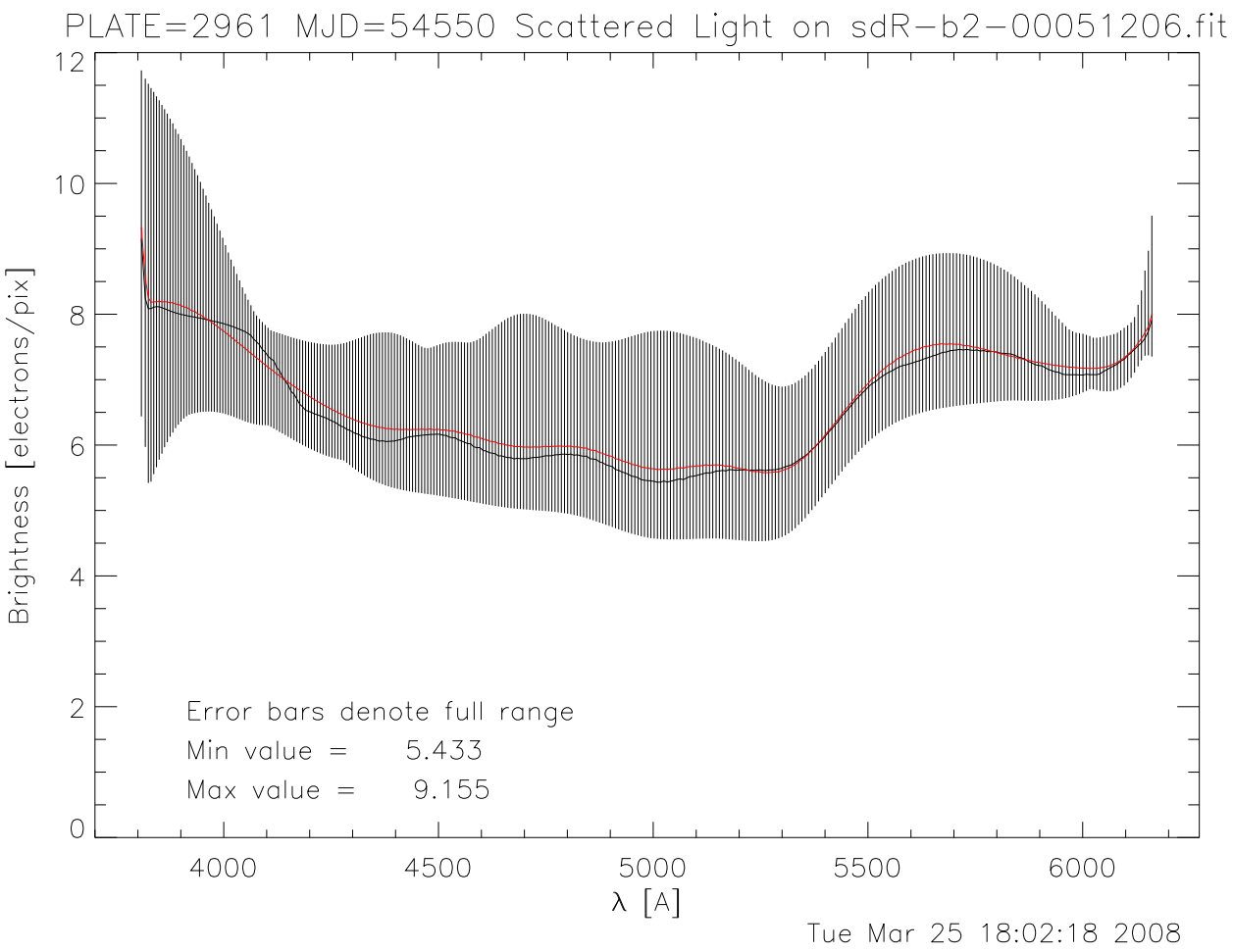

PLATE=2961 MJD=54550 Arcline Fit for sdR-b2-00051212.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:57:56 2008

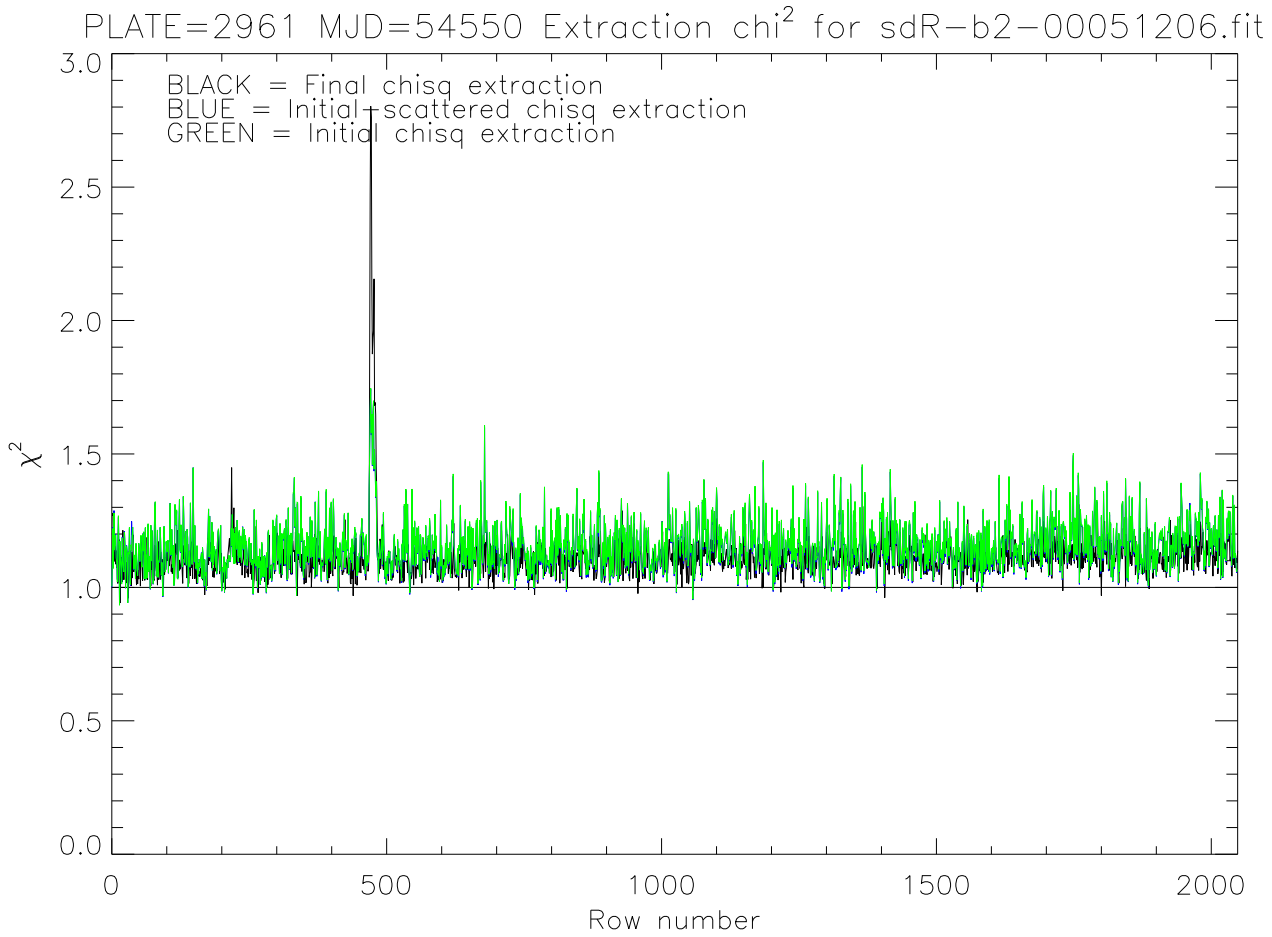

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 17:58:05 2008

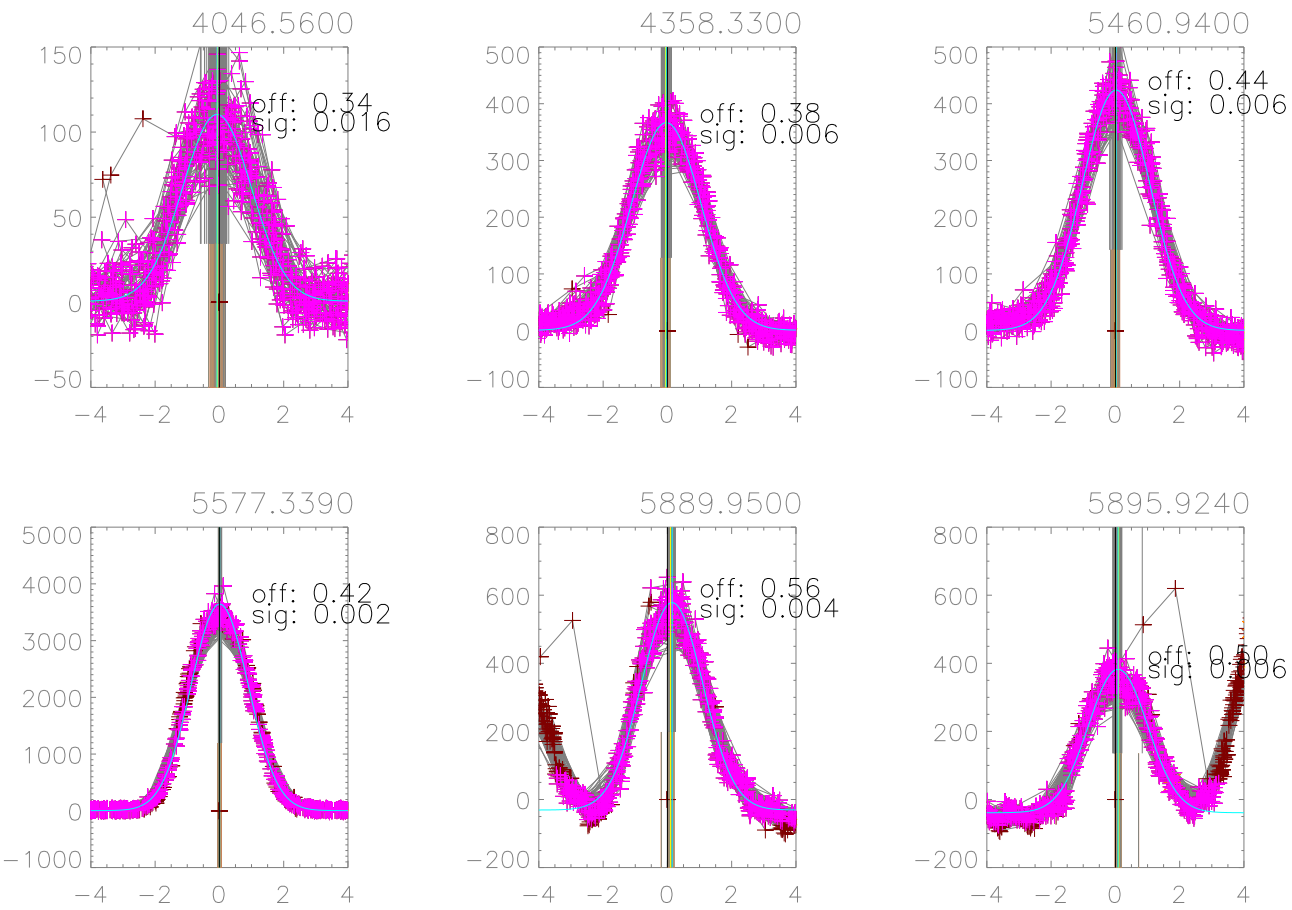

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b2−00051206.f
12.4
10.5
8.7
6.9
Y [pix]
X [pix]
0
500
1000
1500
2000

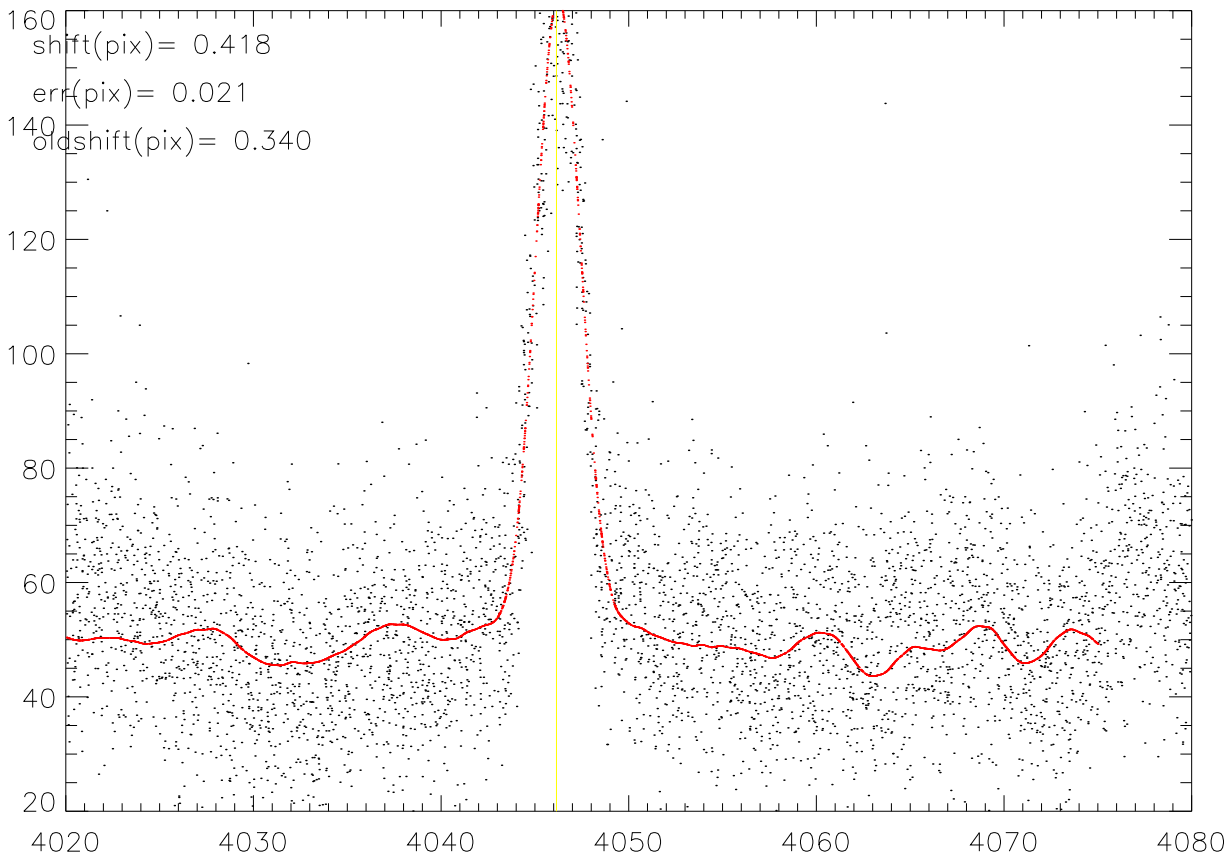

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051206.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.132
Max value = 12.606
Tue Mar 25 17:59:03 2008

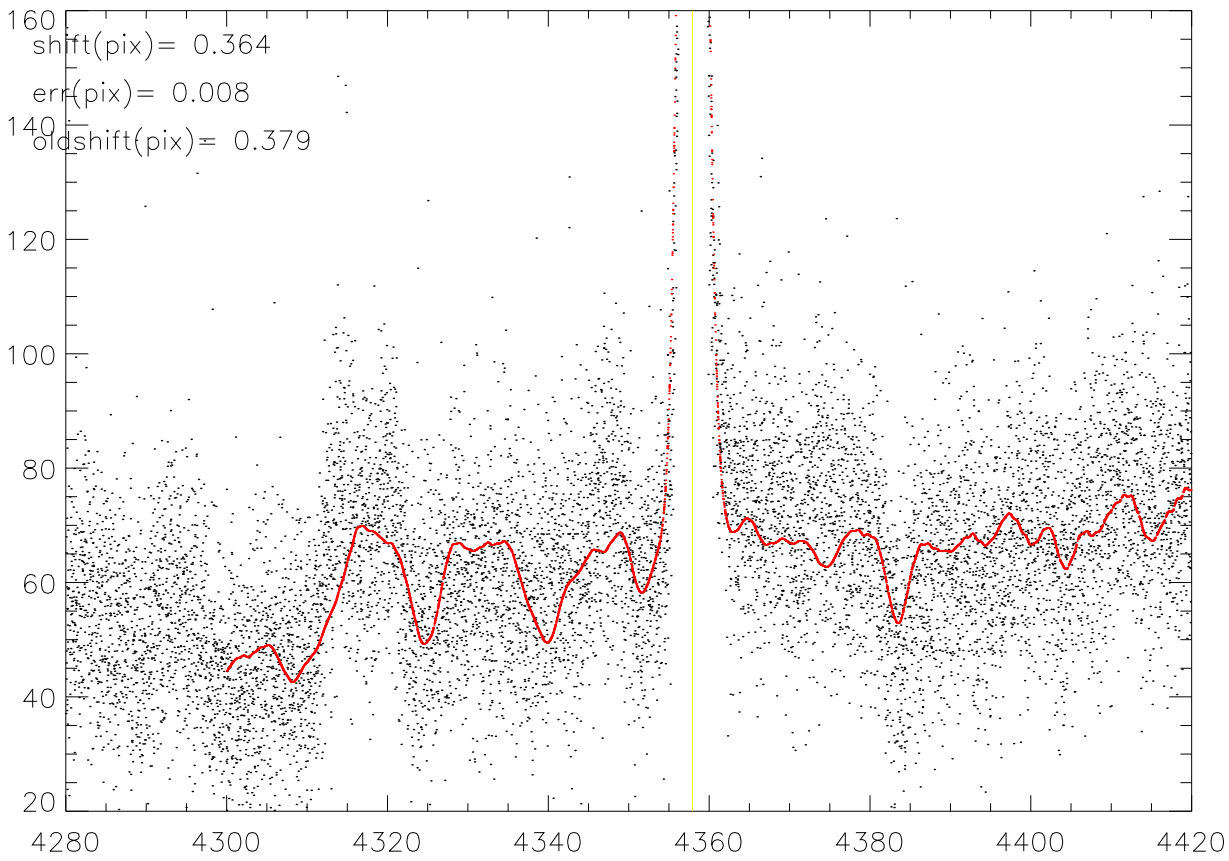

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051206.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
7.6
6.2
4.7

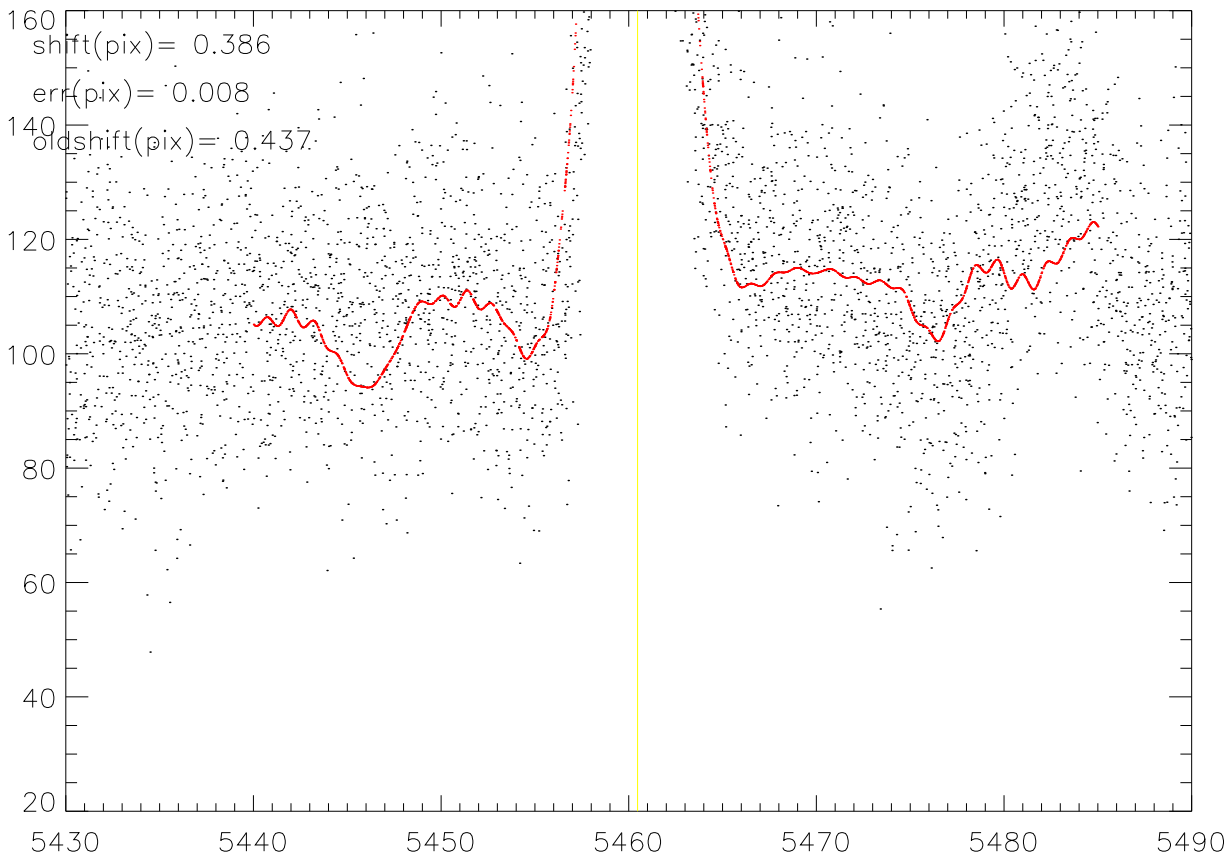

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051206.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.433
Max value = 9.155
Tue Mar 25 18:02:18 2008

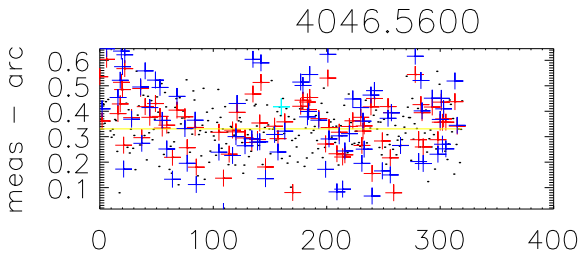

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b2-00051206.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

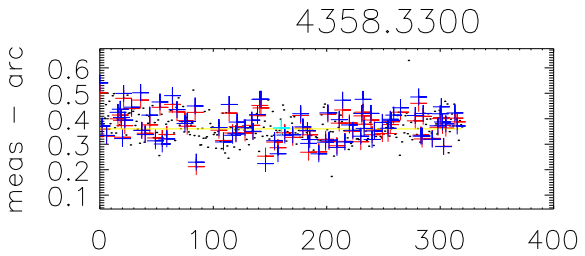

4046.5600
off: 0.34
sig: 0.016
4358.3300
off: 0.38
sig: 0.006
5460.9400
off: 0.44
sig: 0.006
5577.3390
off: 0.42
sig: 0.002
5889.9500
off: 0.56
sig: 0.004
5895.9240
off: 0.50
sig: 0.006

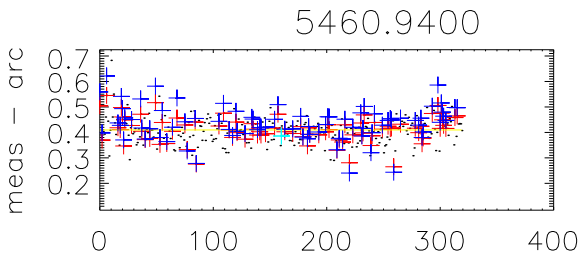

shift(pix)= 0.418
err(pix)= 0.021
oldshift(pix)= 0.340
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

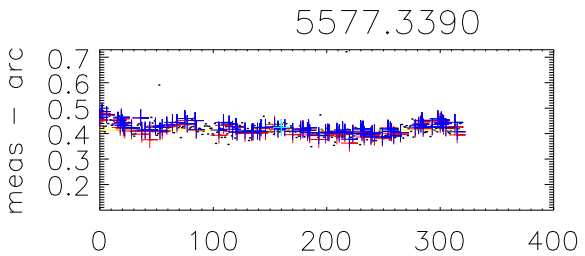

shift(pix)= 0.364
err(pix)= 0.008
oldshift(pix)= 0.379
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

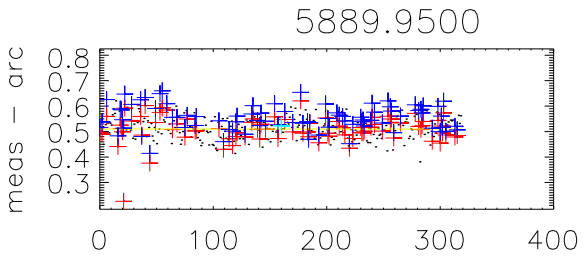

shift(pix)= 0.386
err(pix)= 0.008
oldshift(pix)= 0.437
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

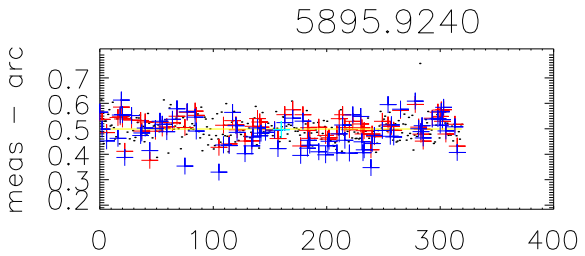

4046.5600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

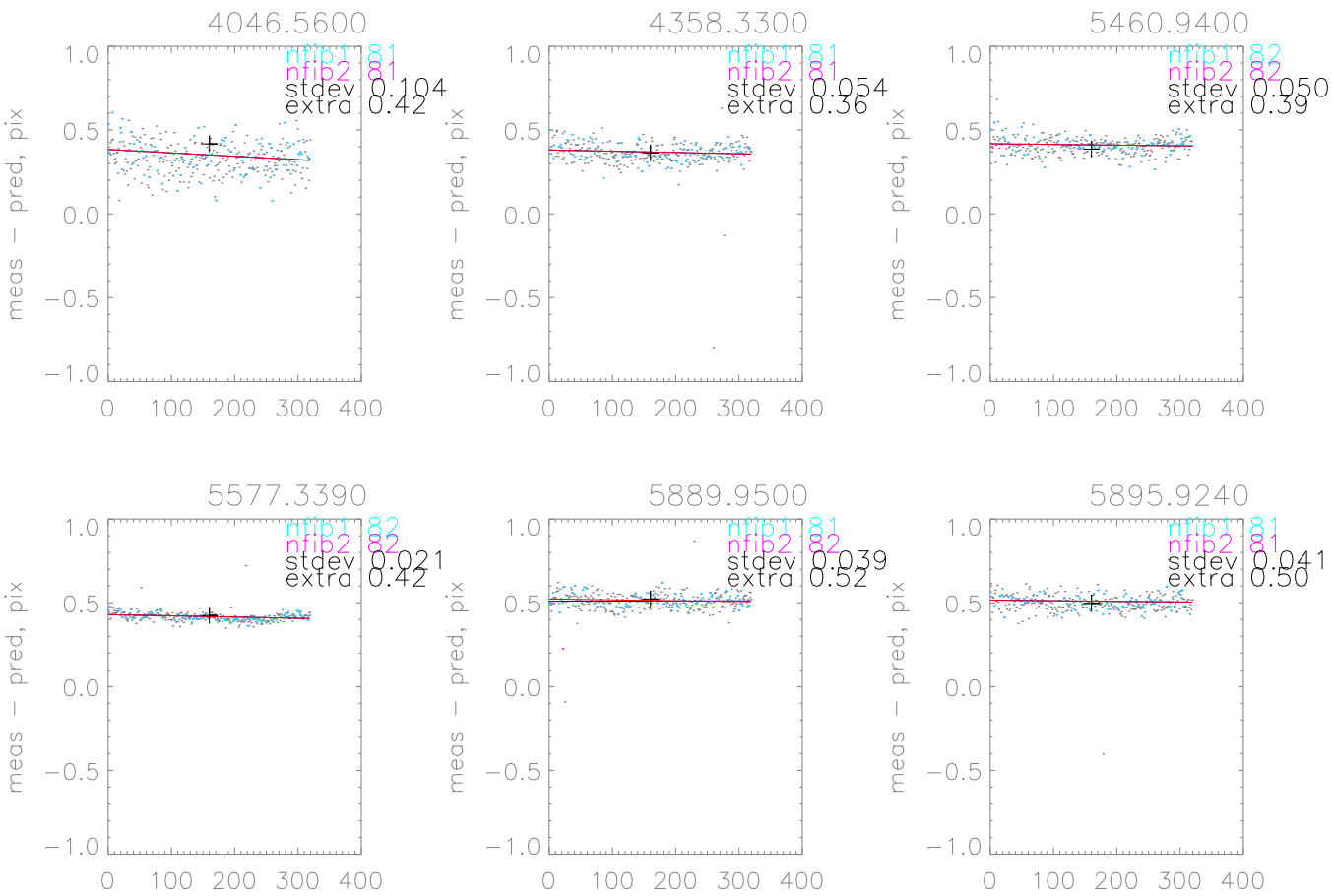

4358.3300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

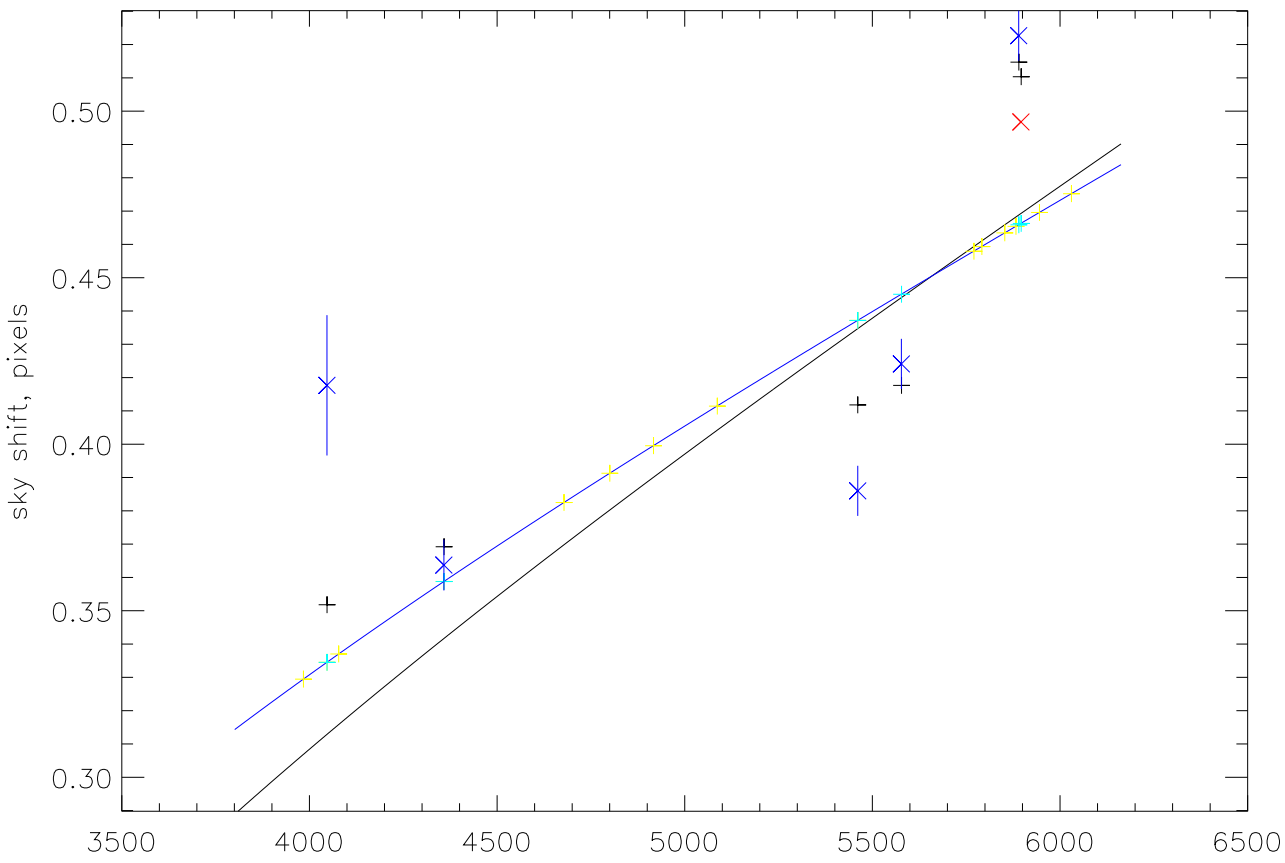

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

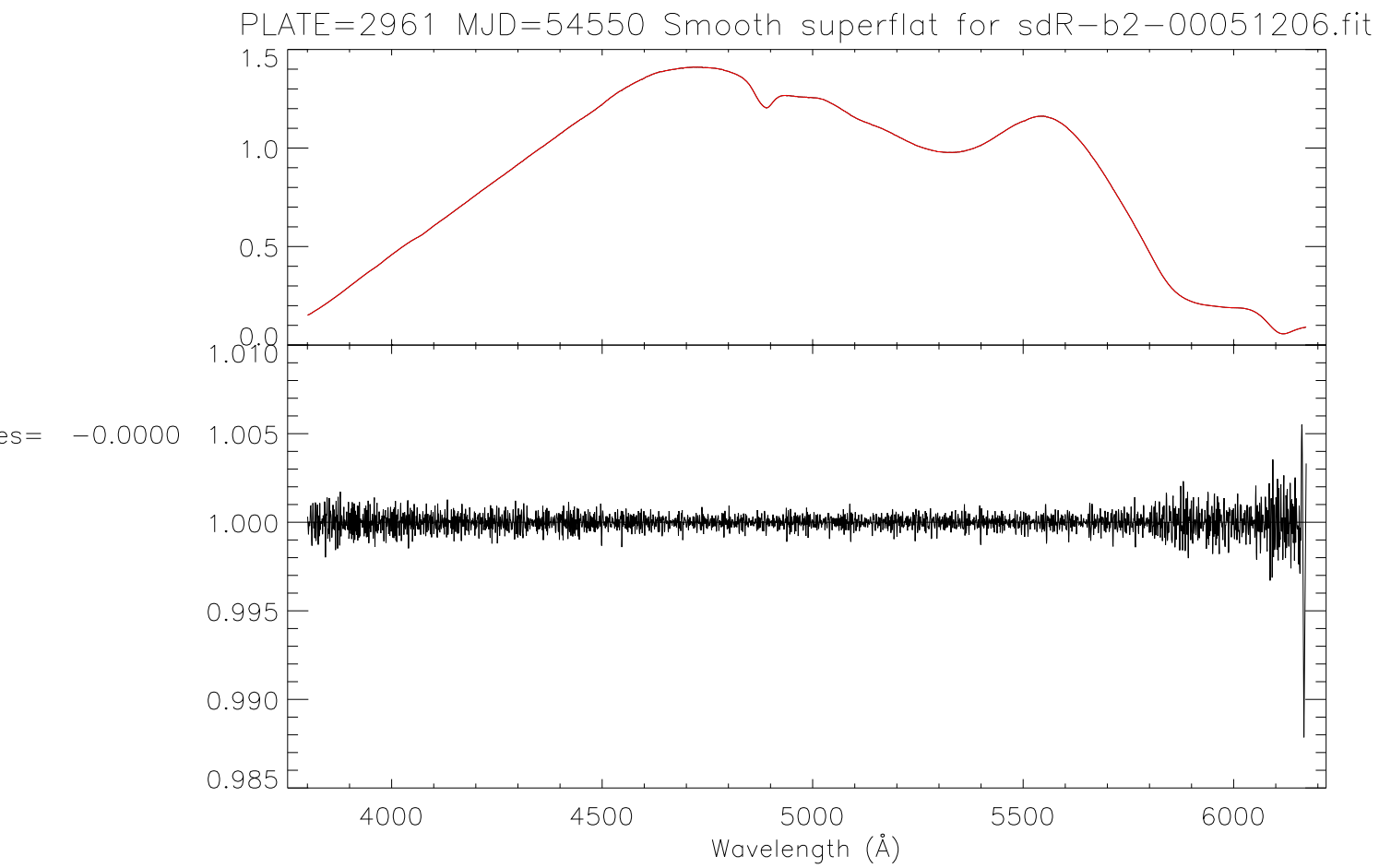

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

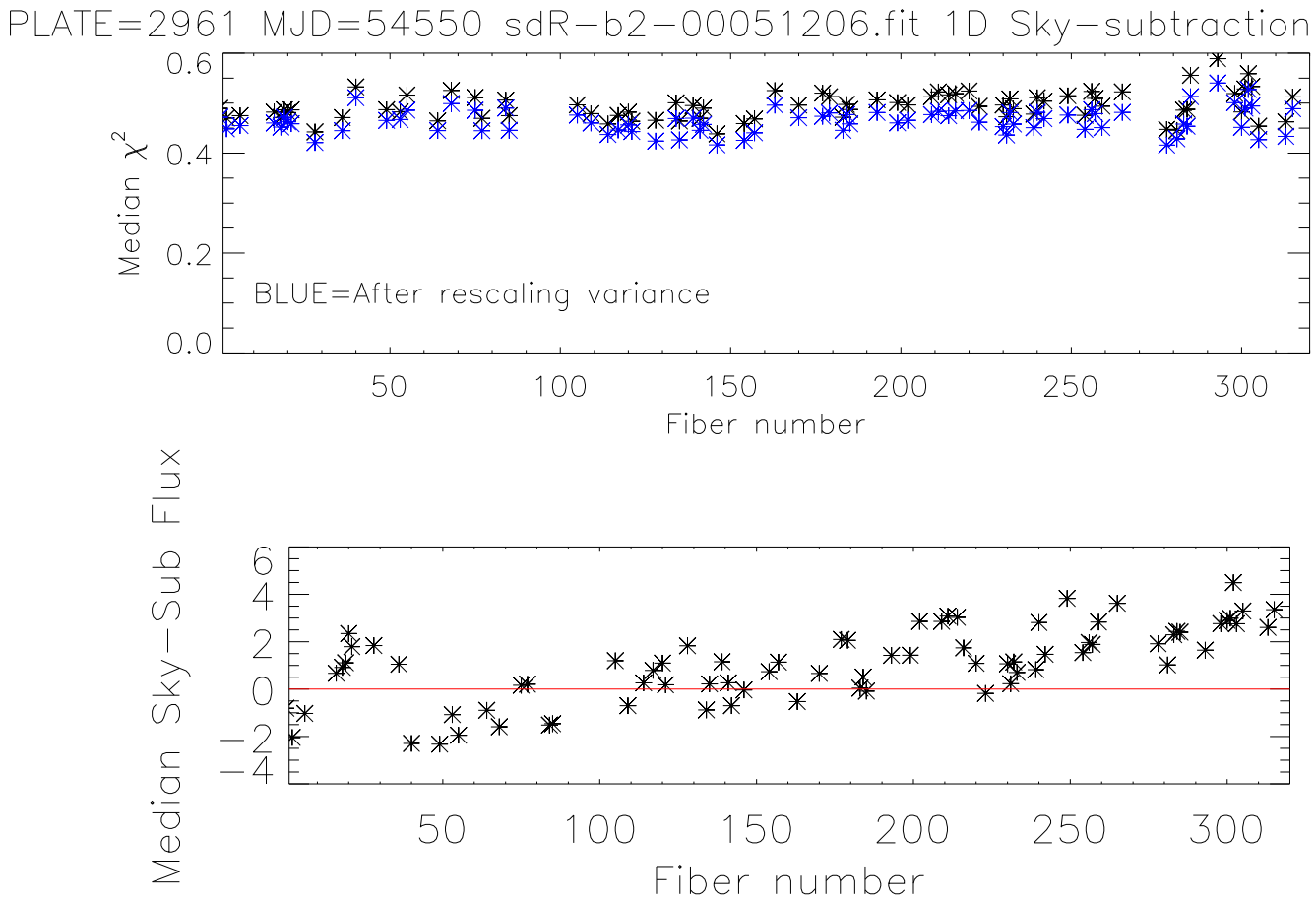

5889.9500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


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

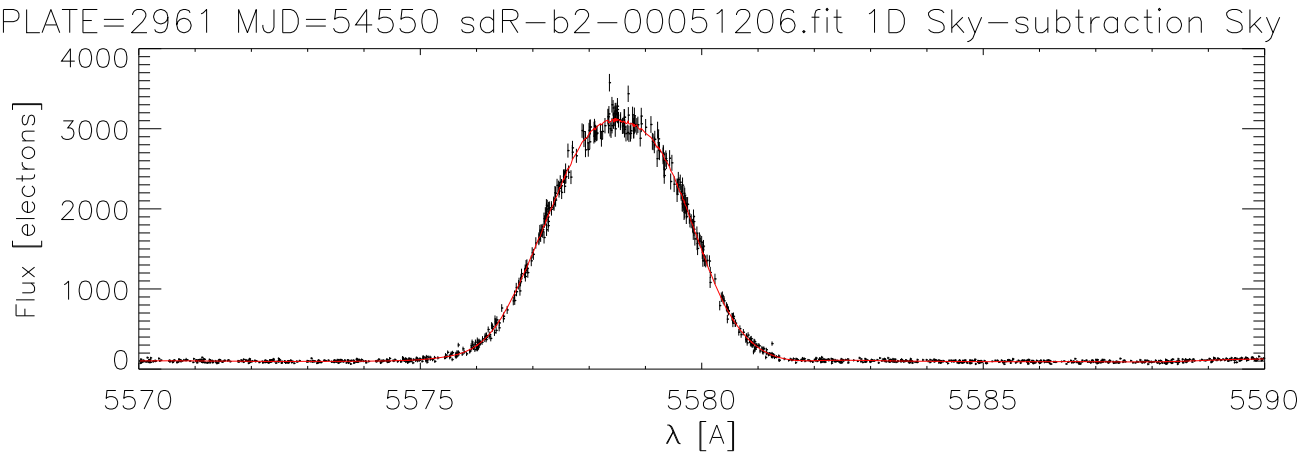

4046.5600
nfib1 81
nfib2 81
stdev 0.104
extra 0.42
4358.3300
nfib1 81
nfib2 81
stdev 0.054
extra 0.36
5460.9400
nfib1 82
nfib2 82
stdev 0.050
extra 0.39
5577.3390
nfib1 82
nfib2 82
stdev 0.021
extra 0.42
5889.9500
nfib1 81
nfib2 82
stdev 0.039
extra 0.52
5895.9240
nfib1 81
nfib2 81
stdev 0.041
extra 0.50
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

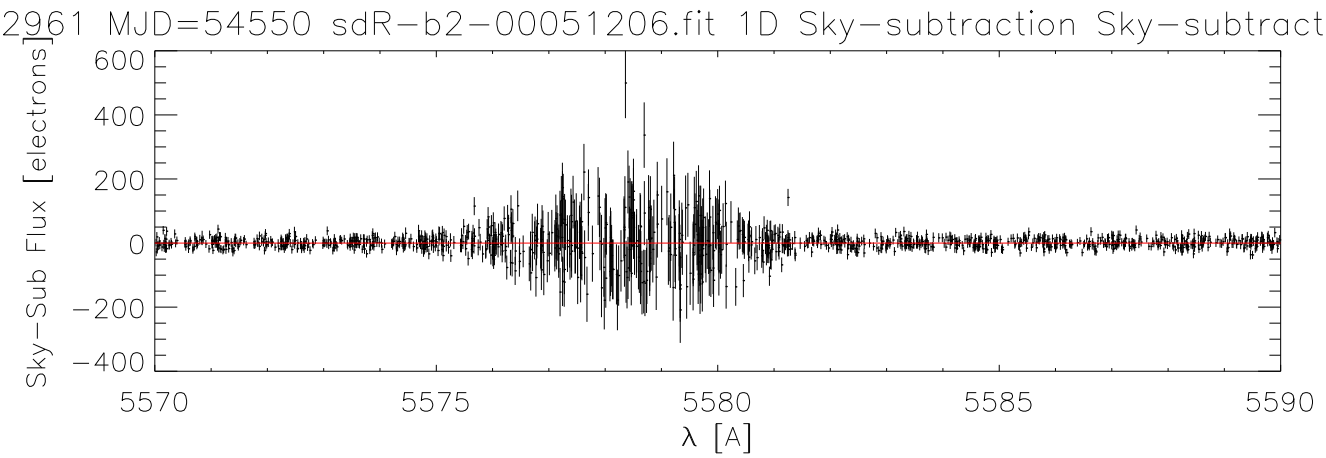

sky shift, pixels
0.50
0.45
0.40
0.35
0.30
3500
4000
4500
5000
5500
6000
6500

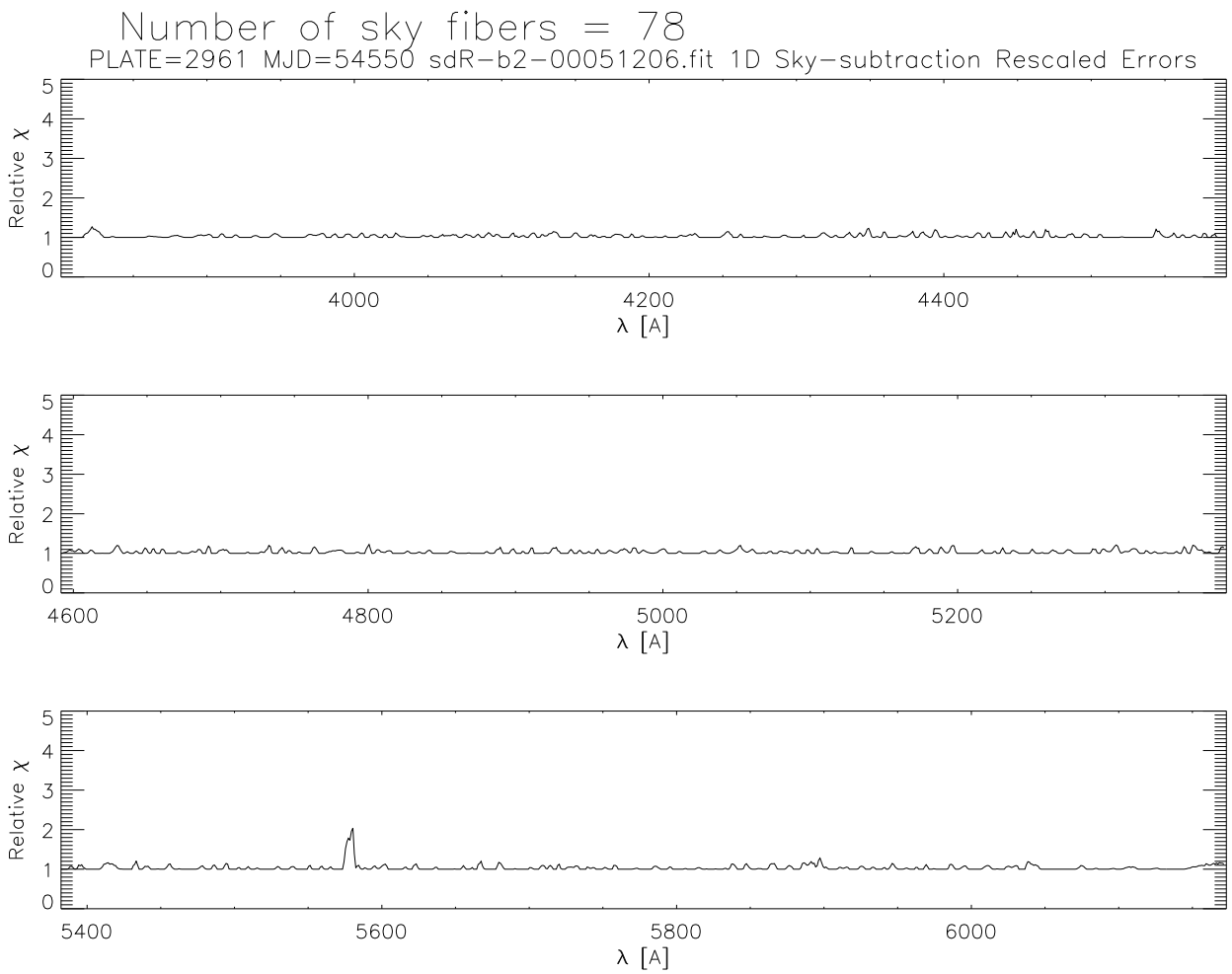

PLATE=2961 MJD=54550 Smooth superflat for sdR-b2-00051206.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

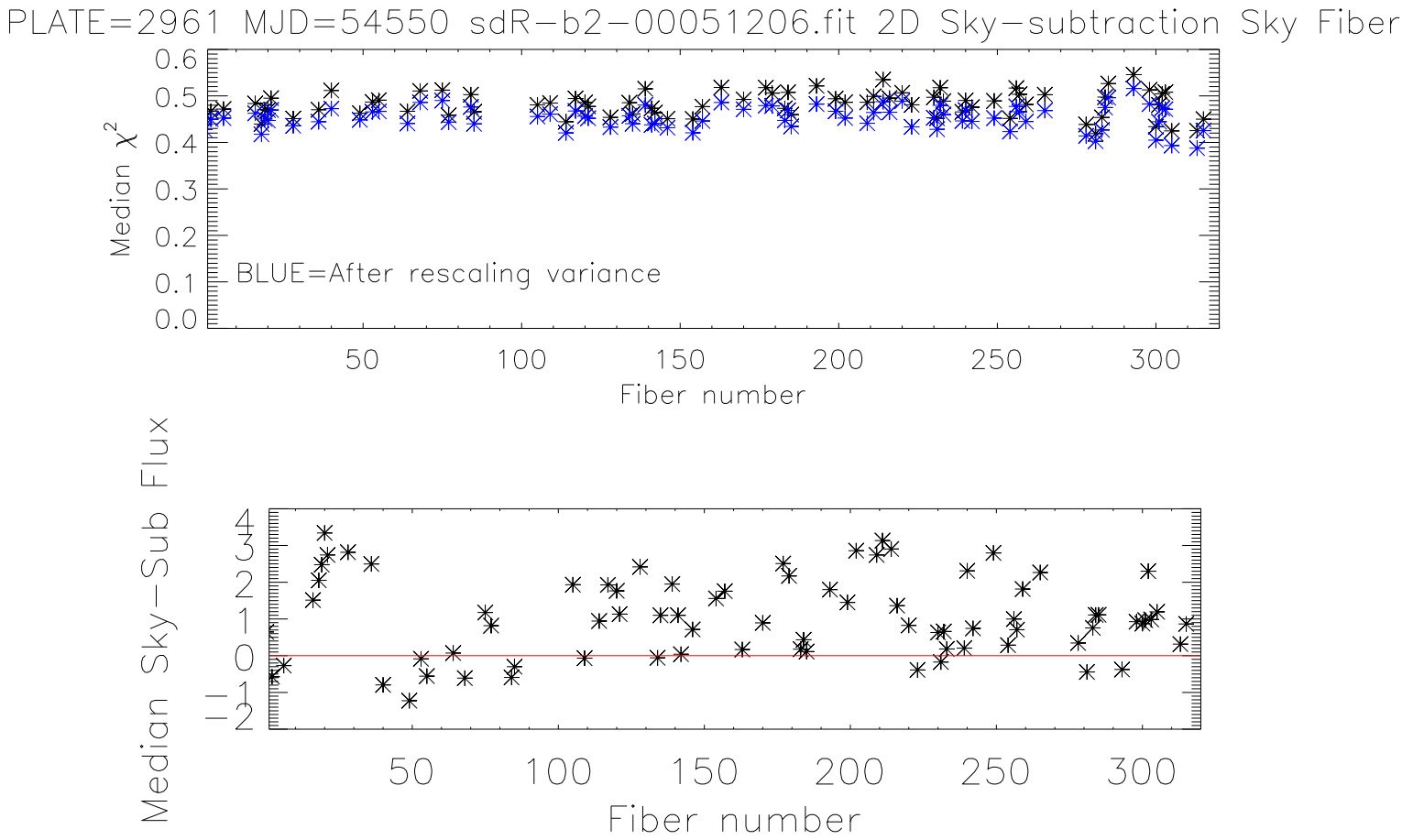

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

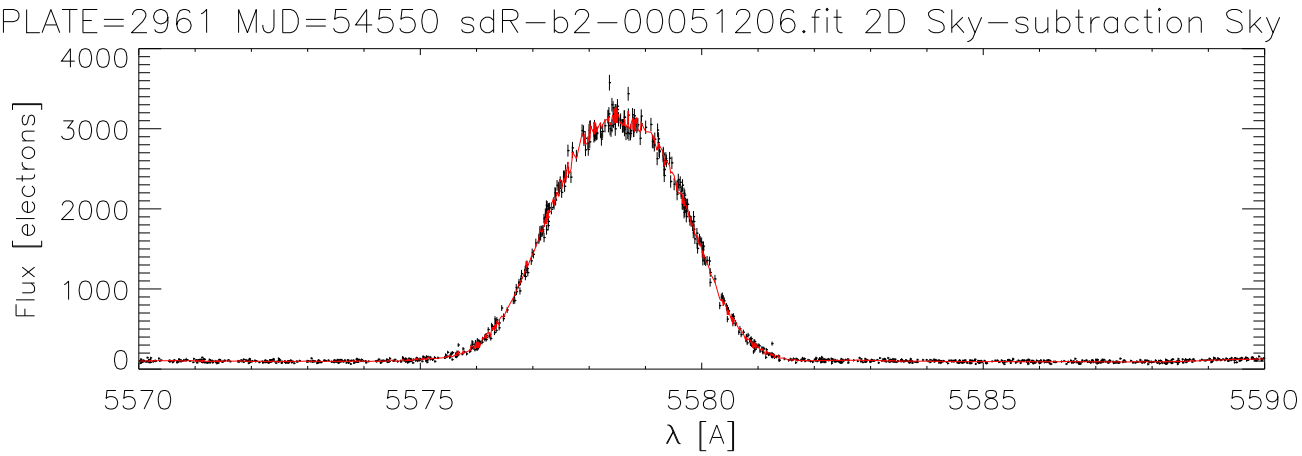
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

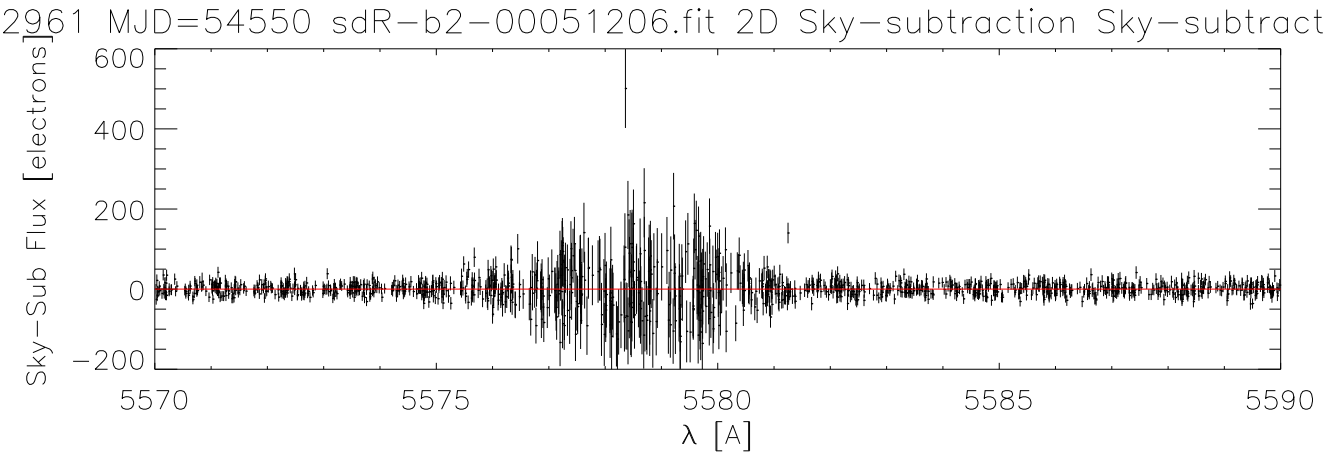

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

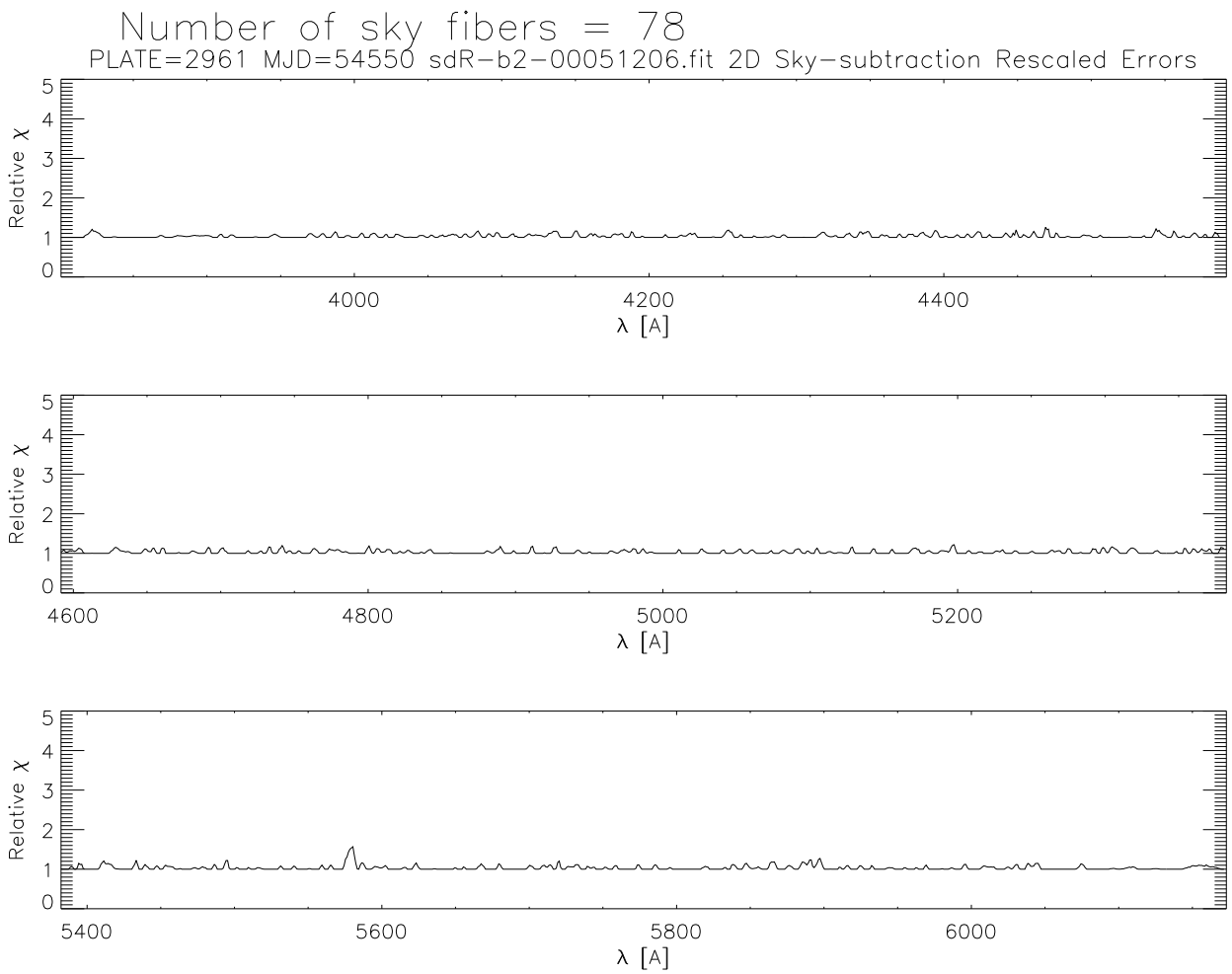

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

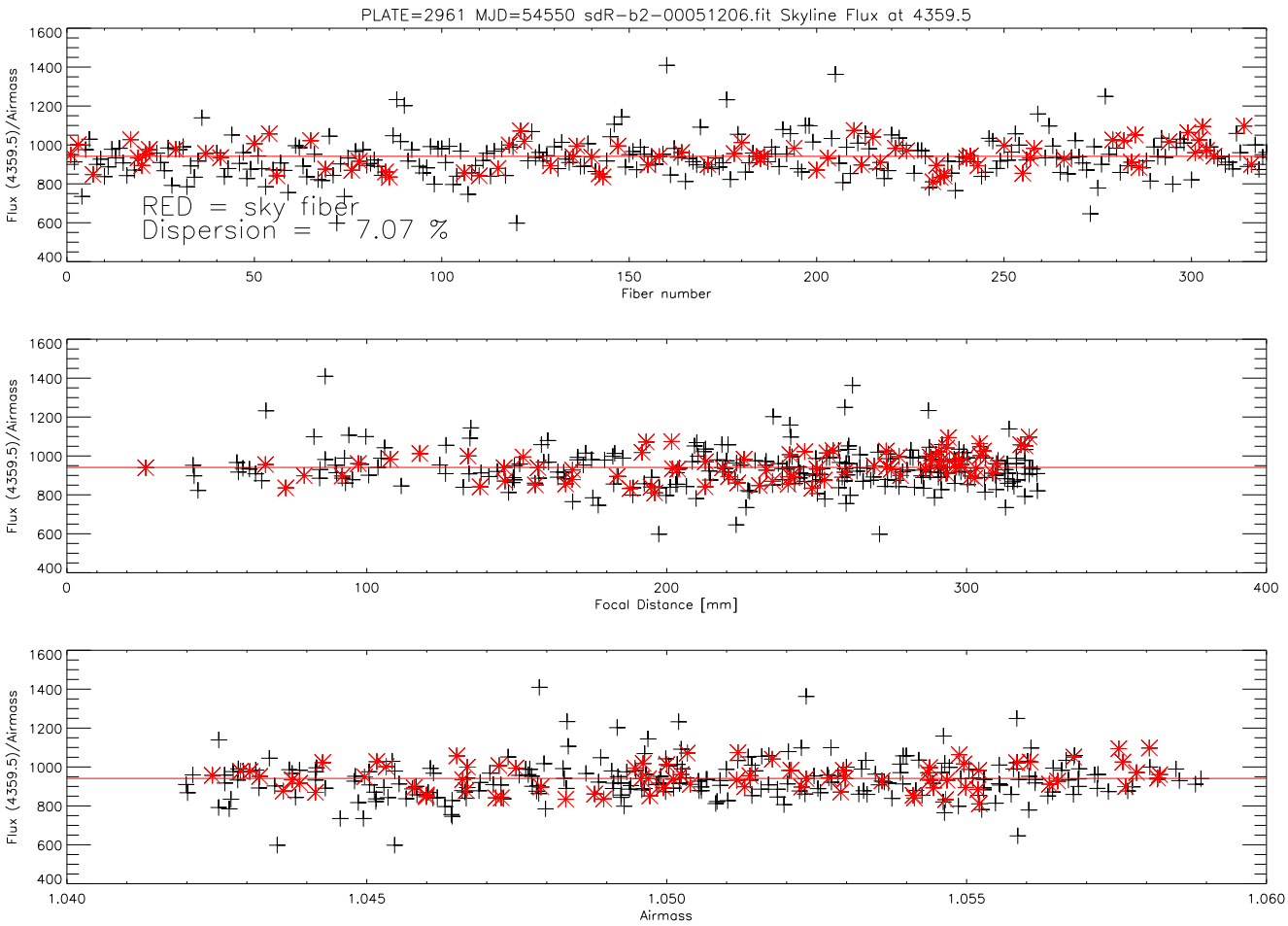

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051206.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

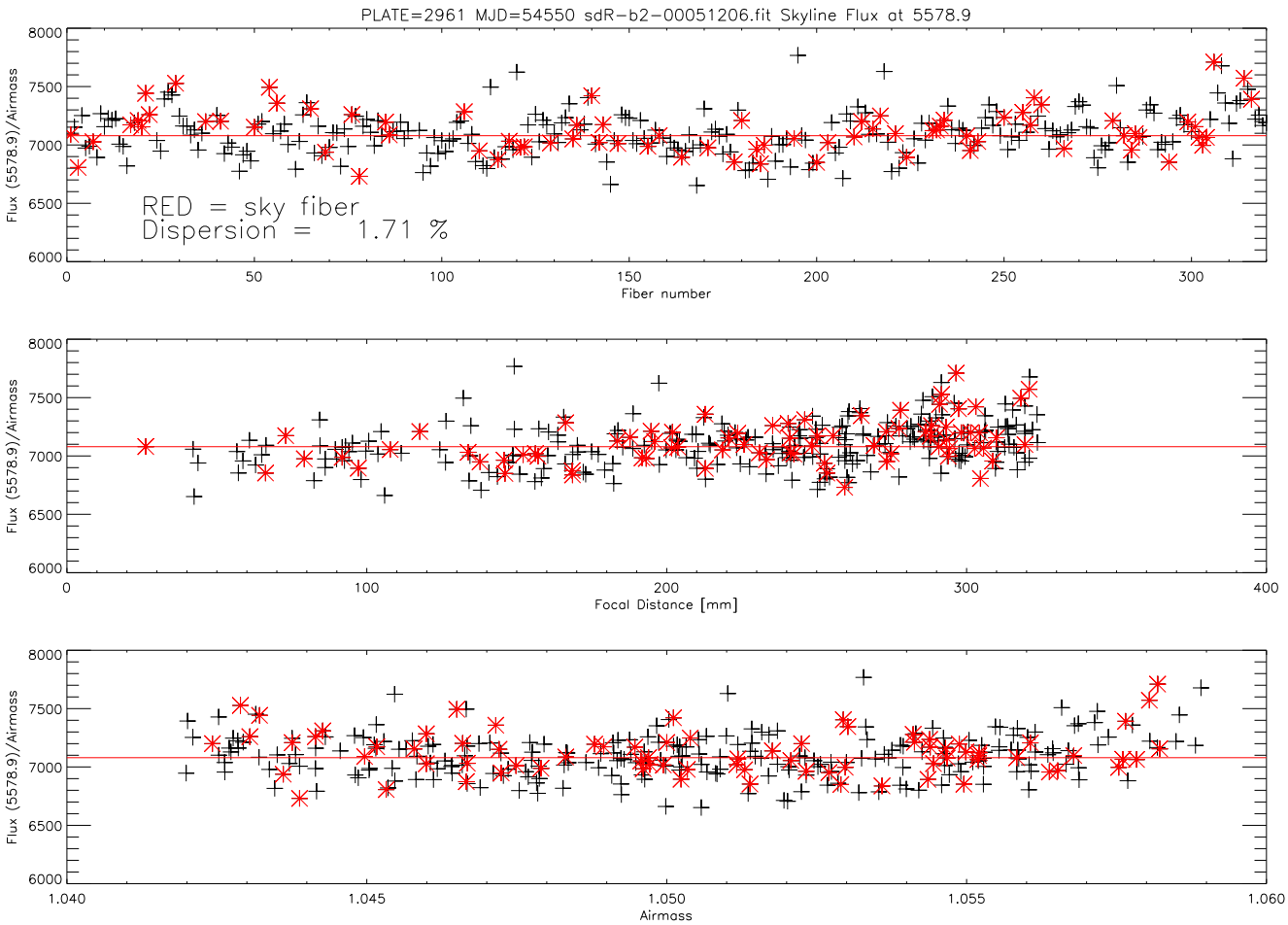

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

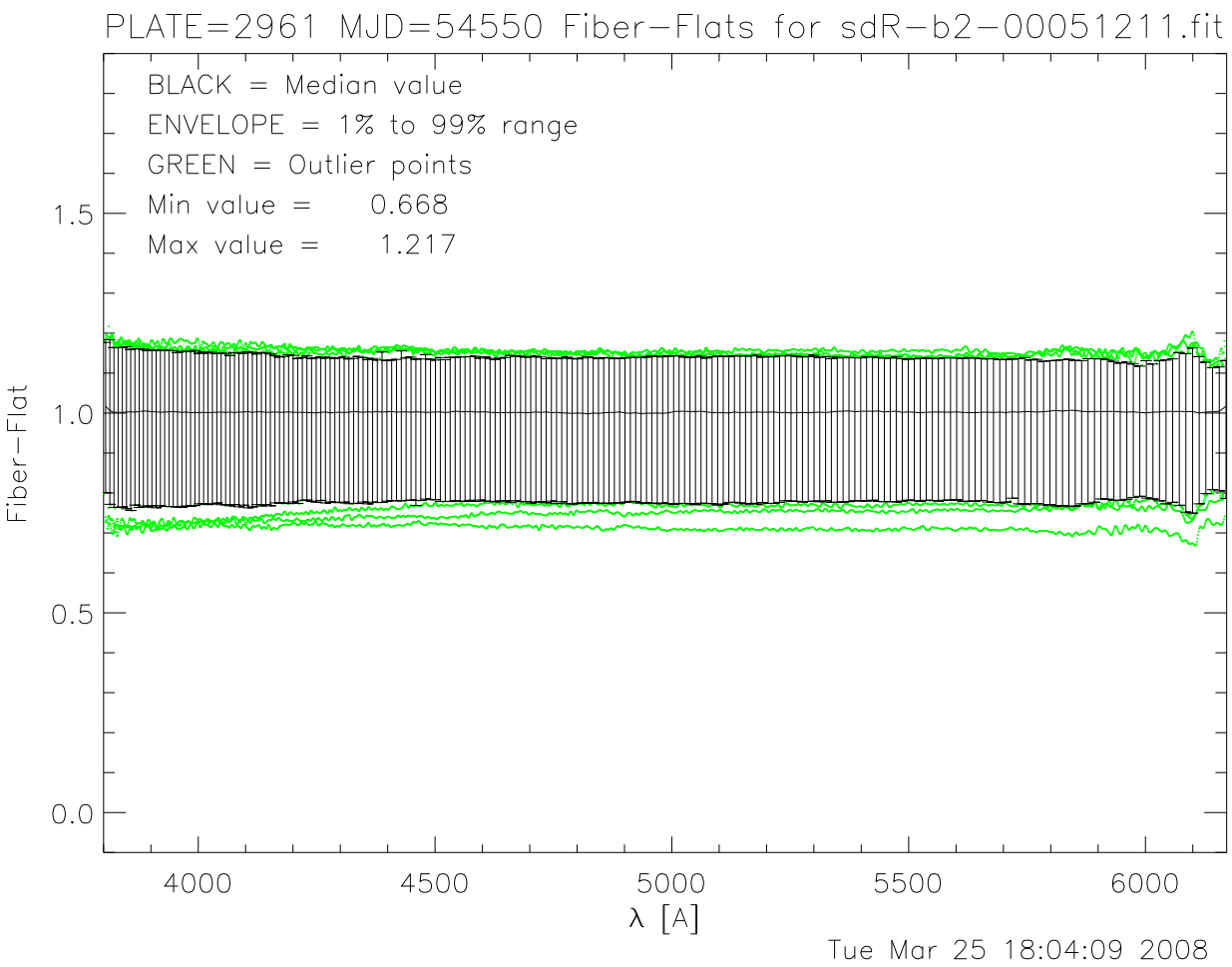

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

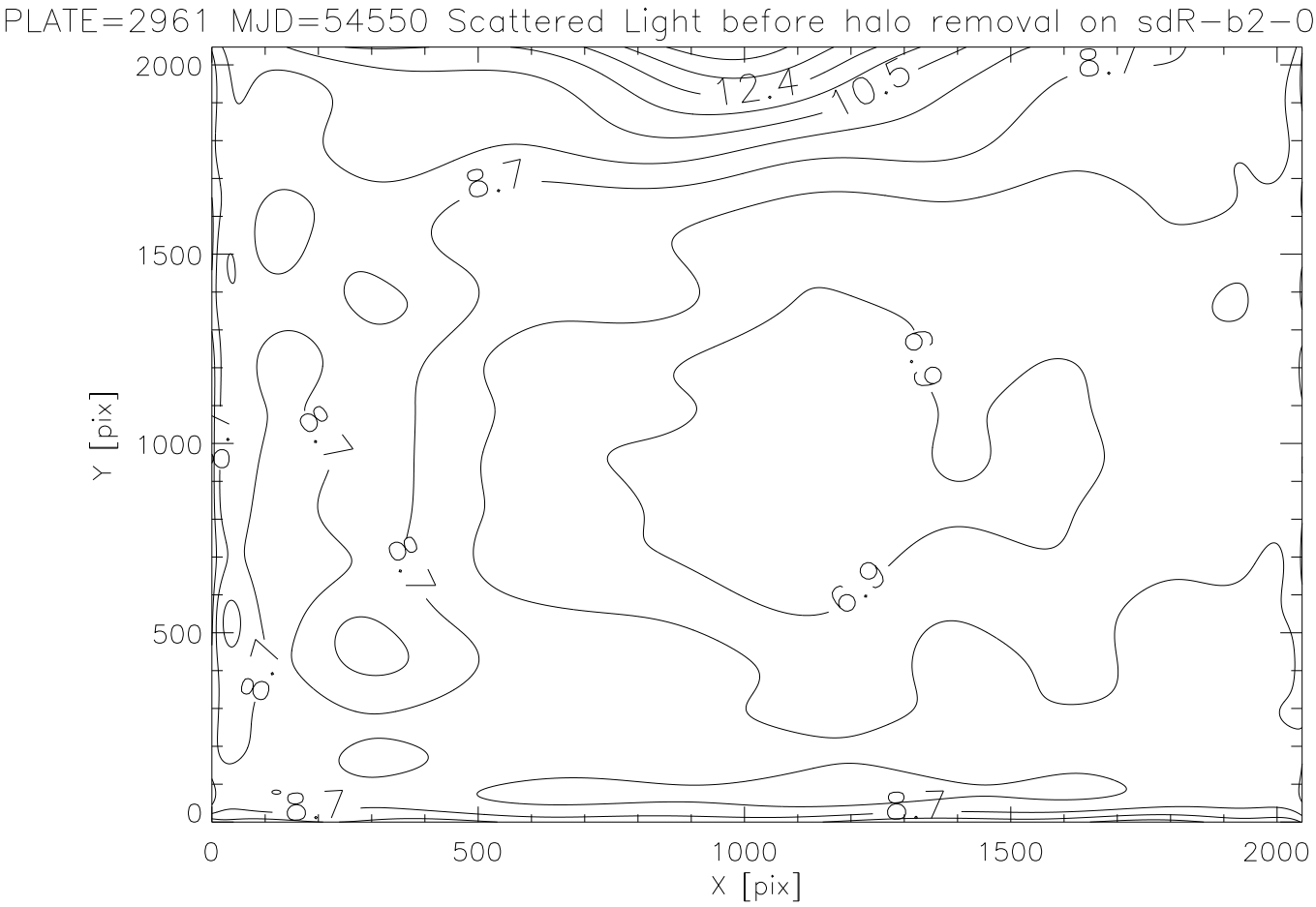

PLATE=2961 MJD=54550 sdR-b2-00051206.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

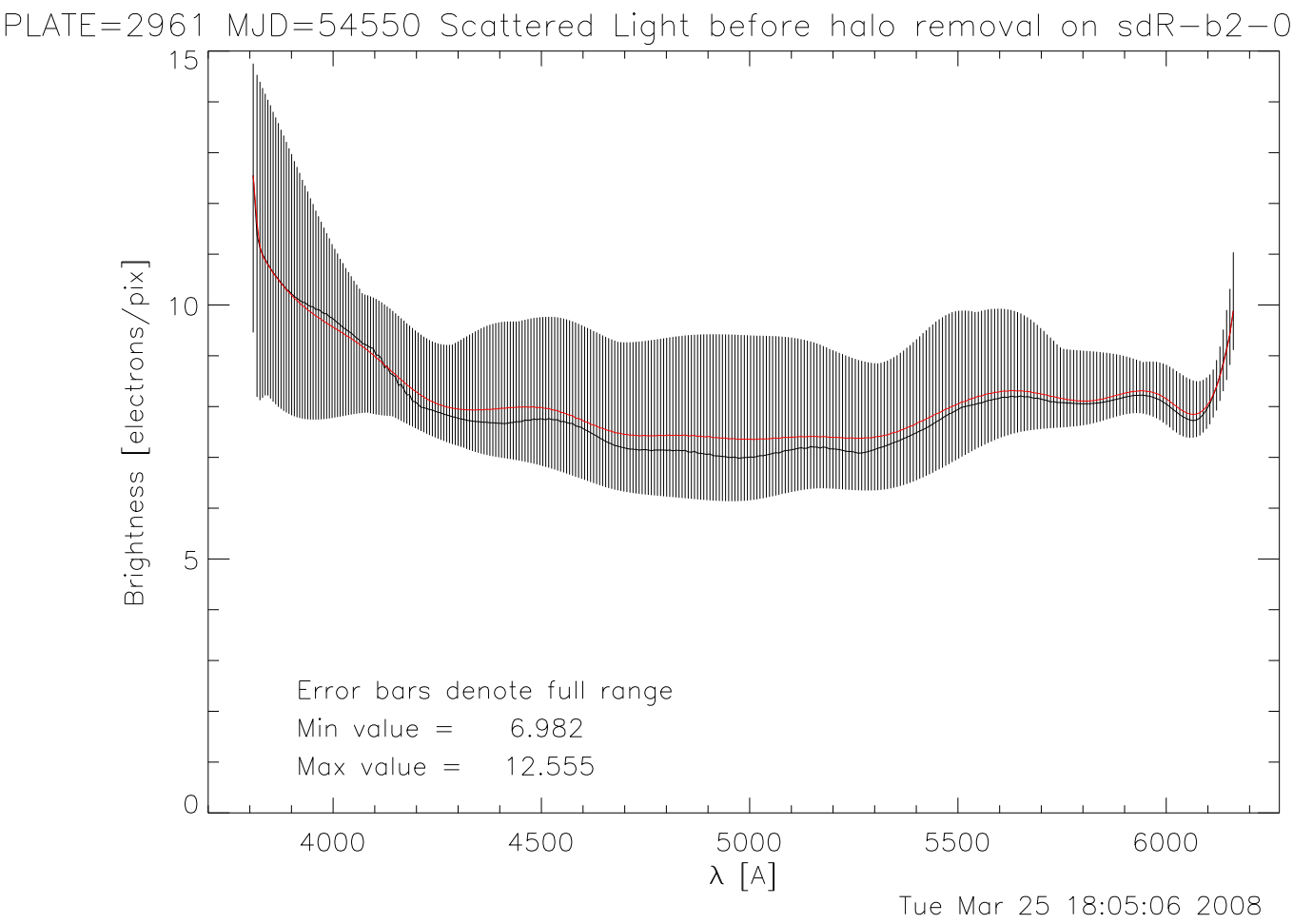

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051206.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

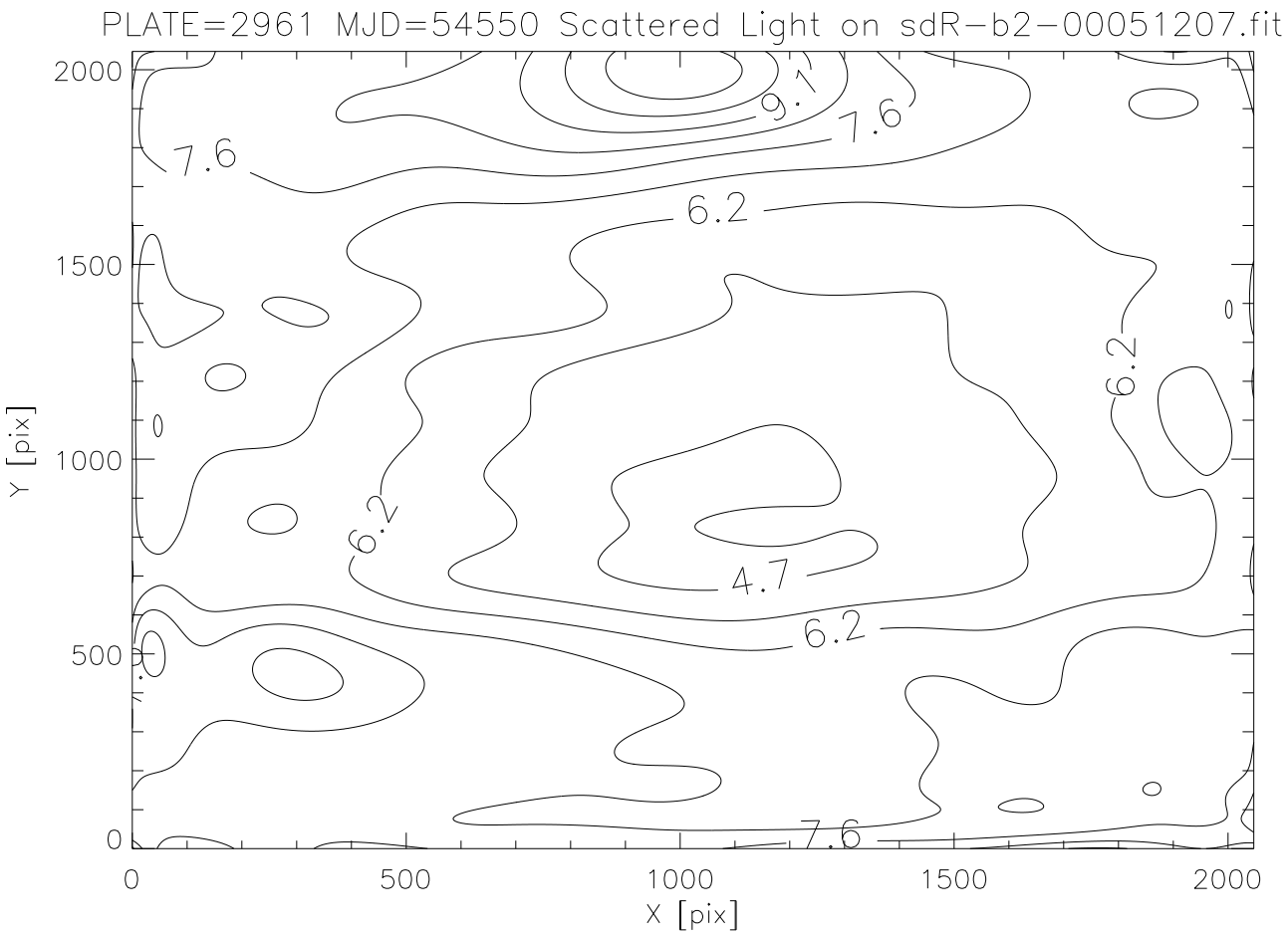

PLATE=2961 MJD=54550 sdR-b2-00051206.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.07 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

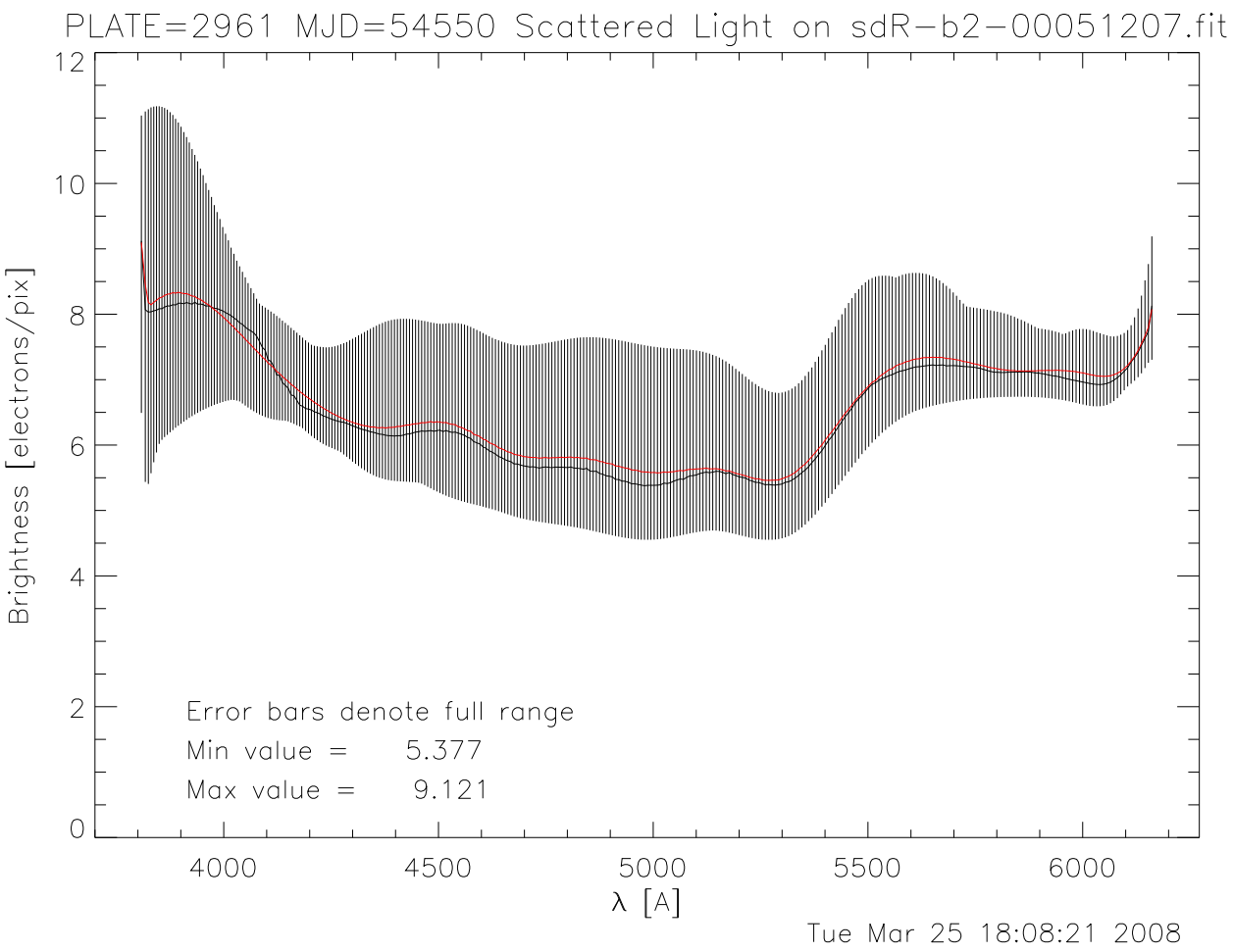

PLATE=2961 MJD=54550 sdR-b2-00051206.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Focal Distance [mm]
Airmass

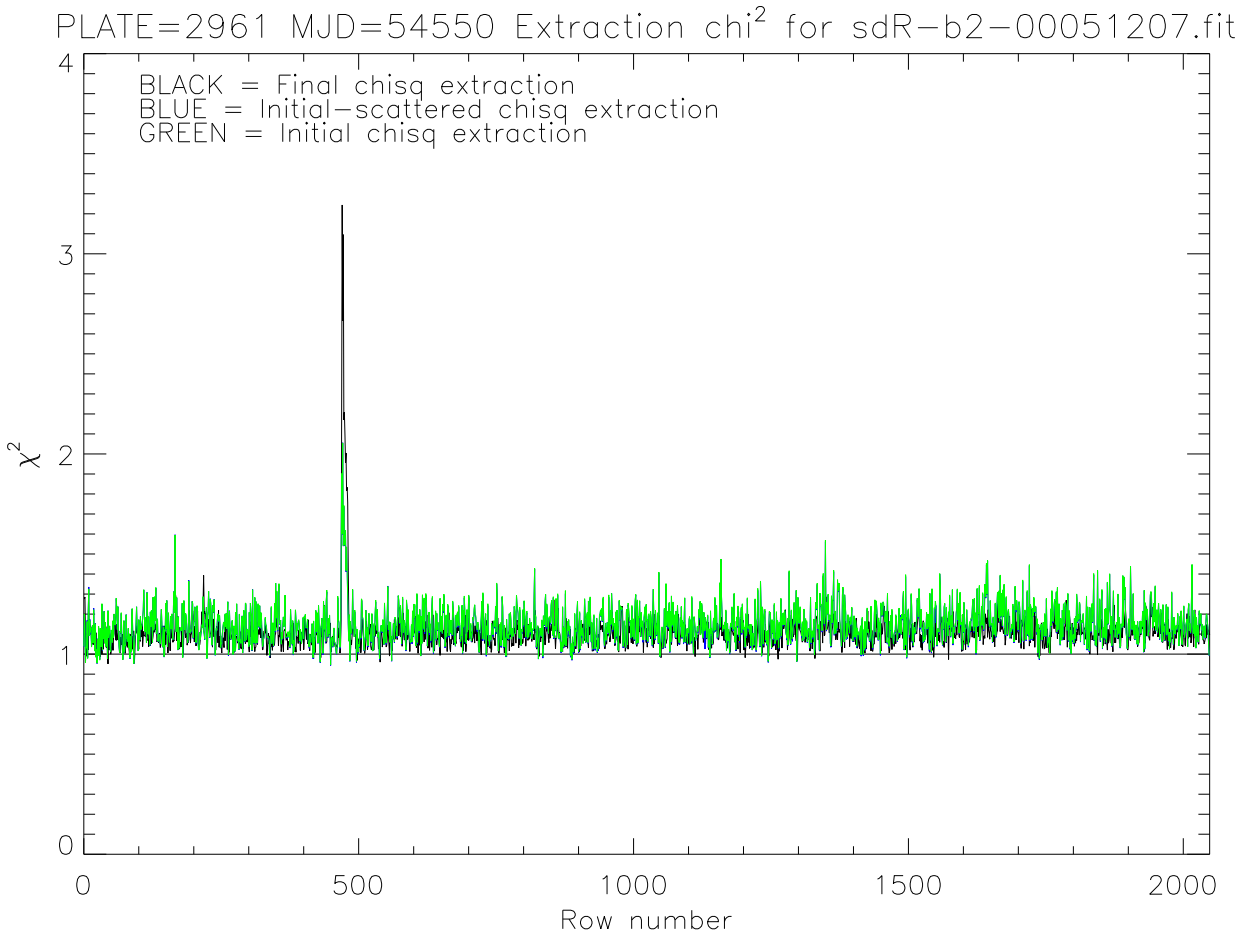

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:04:09 2008

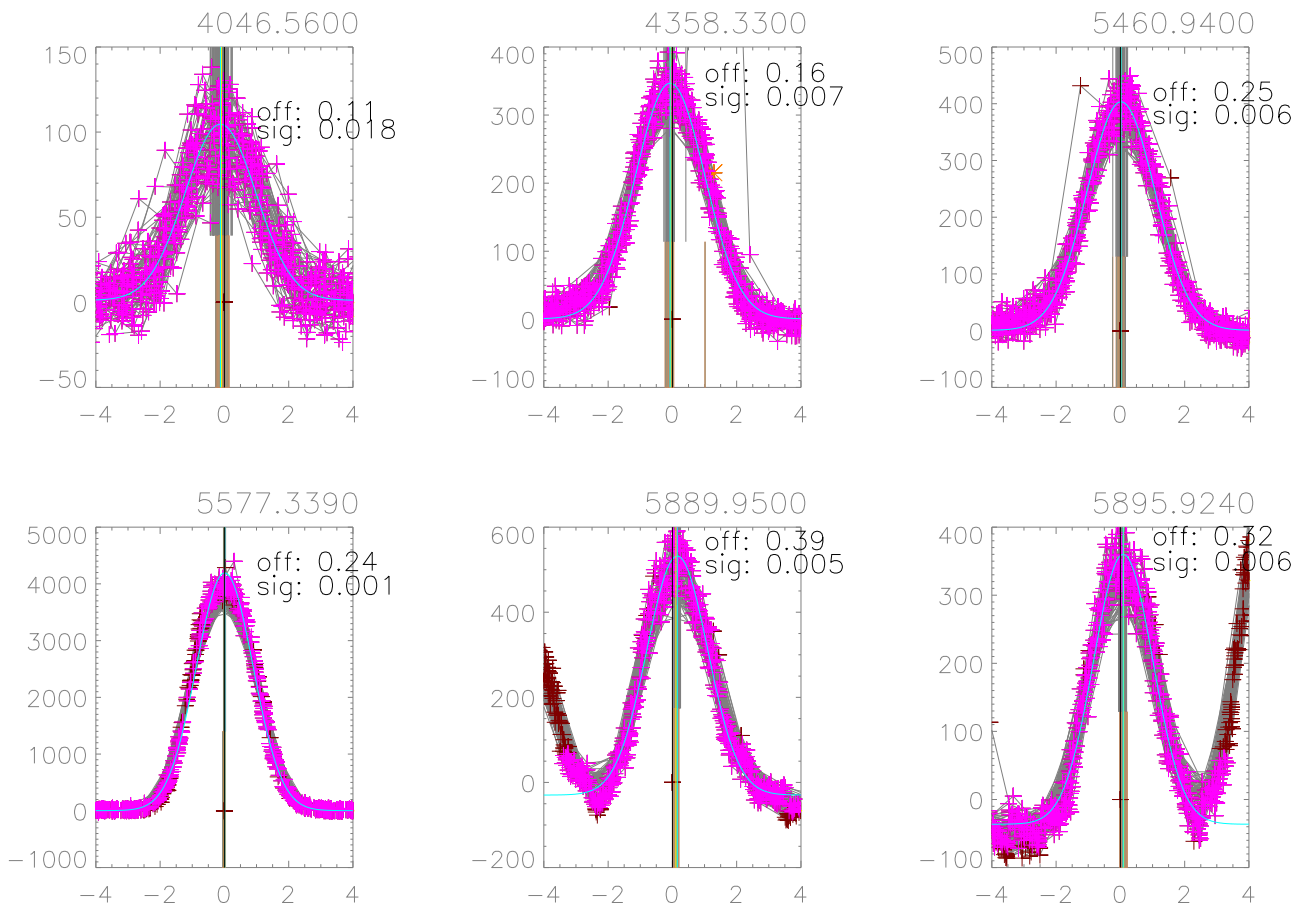

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b2−00051207.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.4
10.5
8.7
8.7
8.7
8.7
8.7
8.7
8.7
8.7
6.9
6.9
6.9

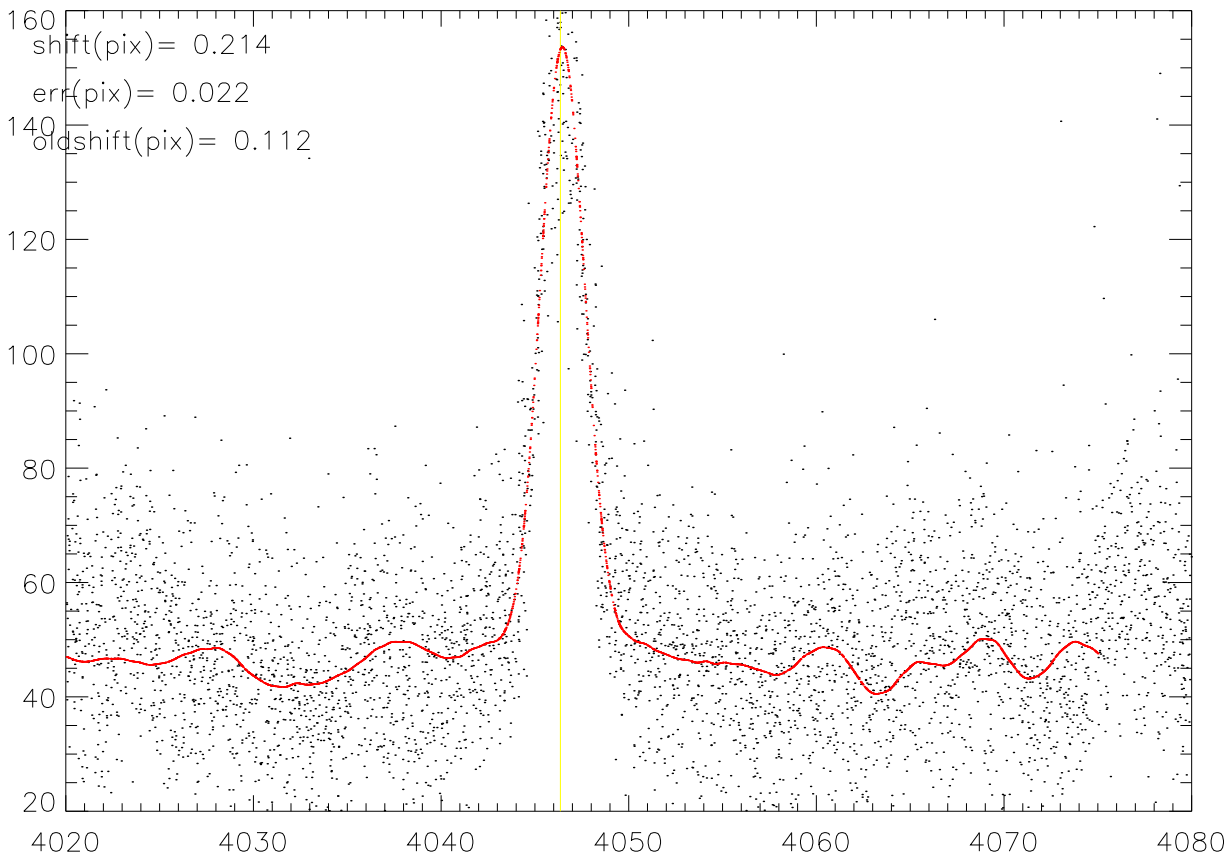

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051207.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.982
Max value = 12.555
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:05:06 2008

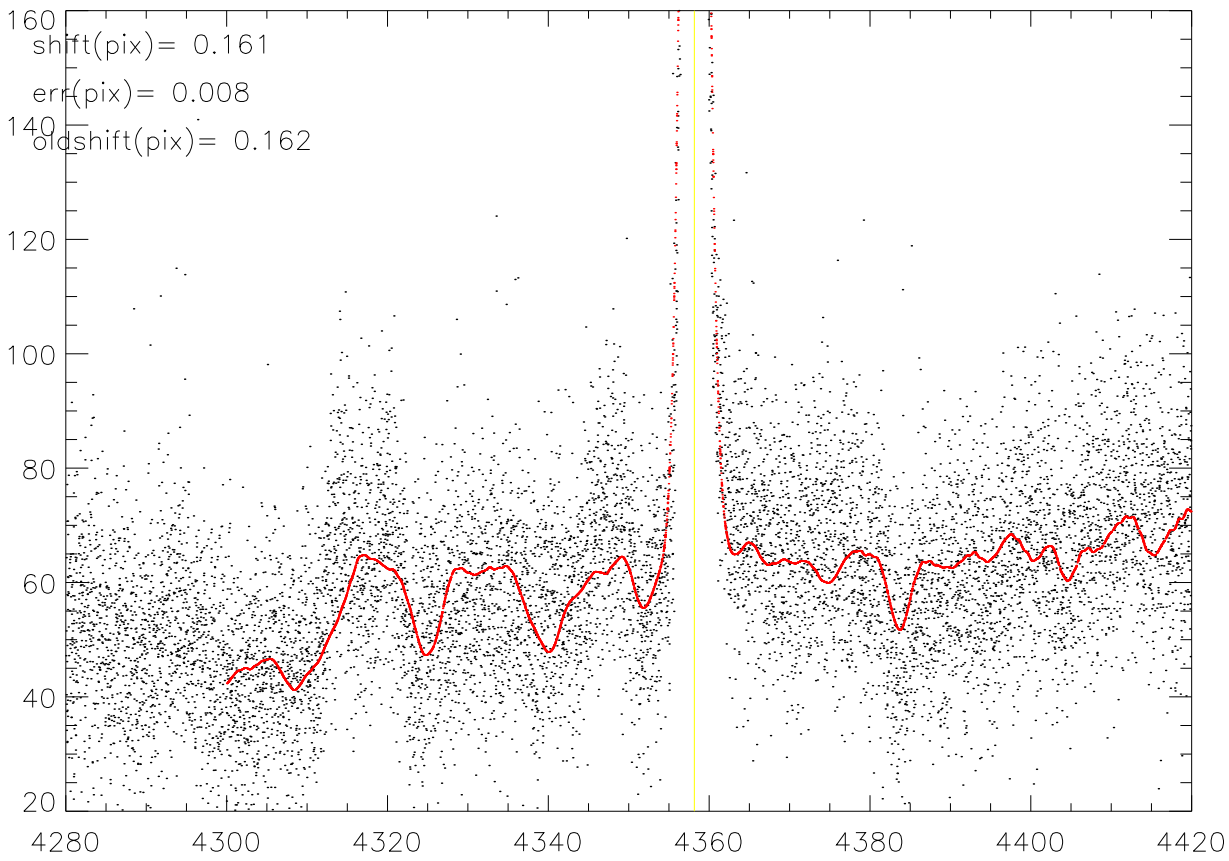

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051207.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
7.6
7.6
6.2
6.2
6.2
4.7
6.2
7.6
0

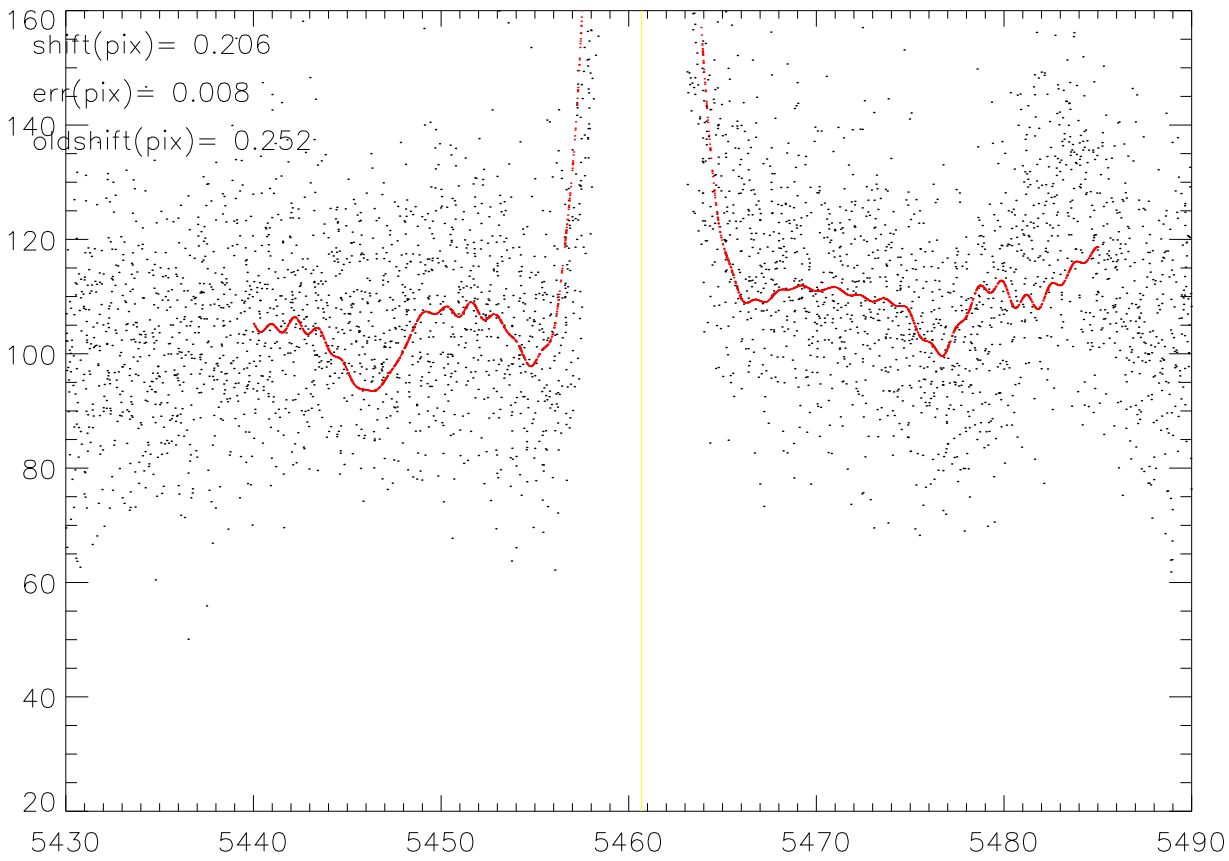

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051207.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.377
Max value = 9.121
Tue Mar 25 18:08:21 2008

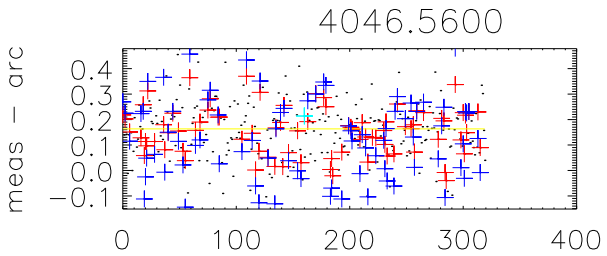

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−b2−00051207.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

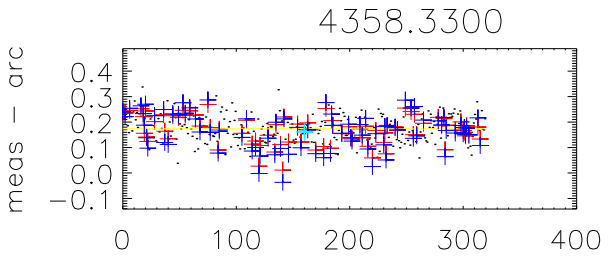

4046.5600
off: 0.11
sig: 0.018
4358.3300
off: 0.16
sig: 0.007
5460.9400
off: 0.25
sig: 0.006
5577.3390
off: 0.24
sig: 0.001
5889.9500
off: 0.39
sig: 0.005
5895.9240
off: 0.32
sig: 0.006

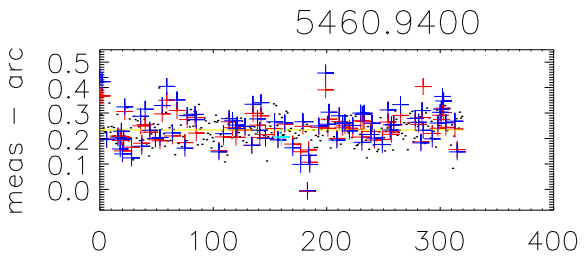

shift(pix)= 0.214
err(pix)= 0.022
oldshift(pix)= 0.112
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

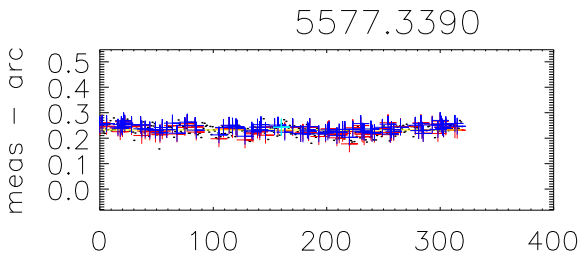

shift(pix)= 0.161
err(pix)= 0.008
oldshift(pix)= 0.162
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

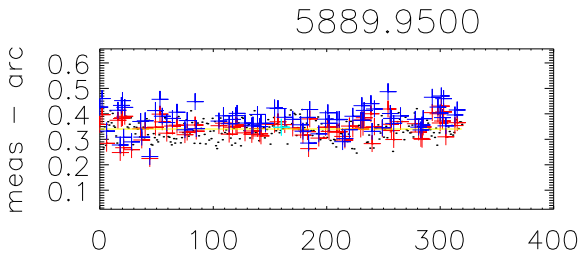

shift(pix)= 0.206
err(pix)= 0.008
oldshift(pix)= 0.252
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

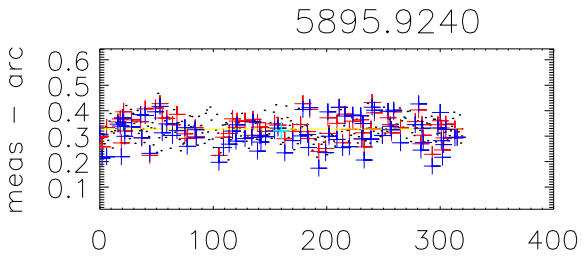

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

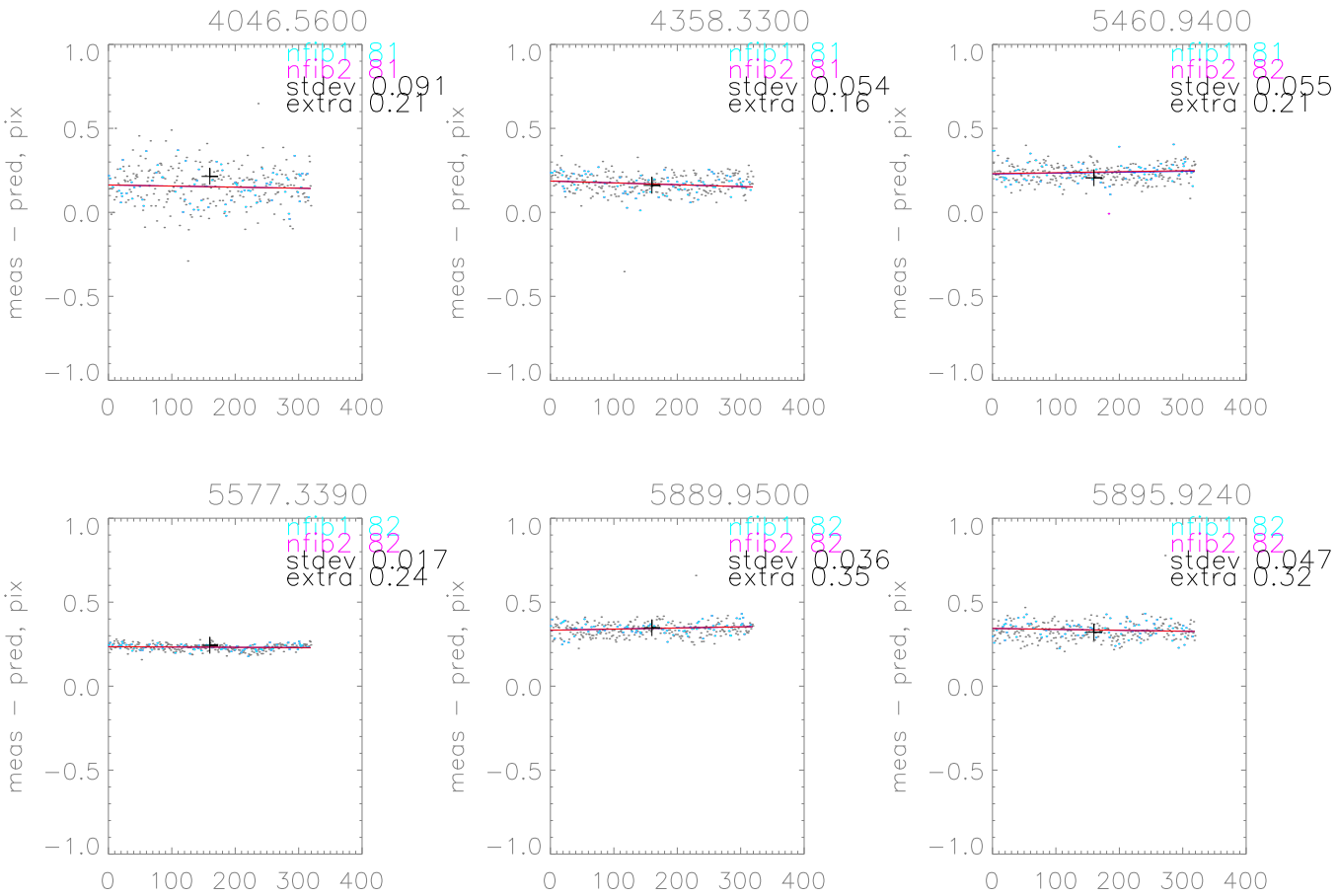

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

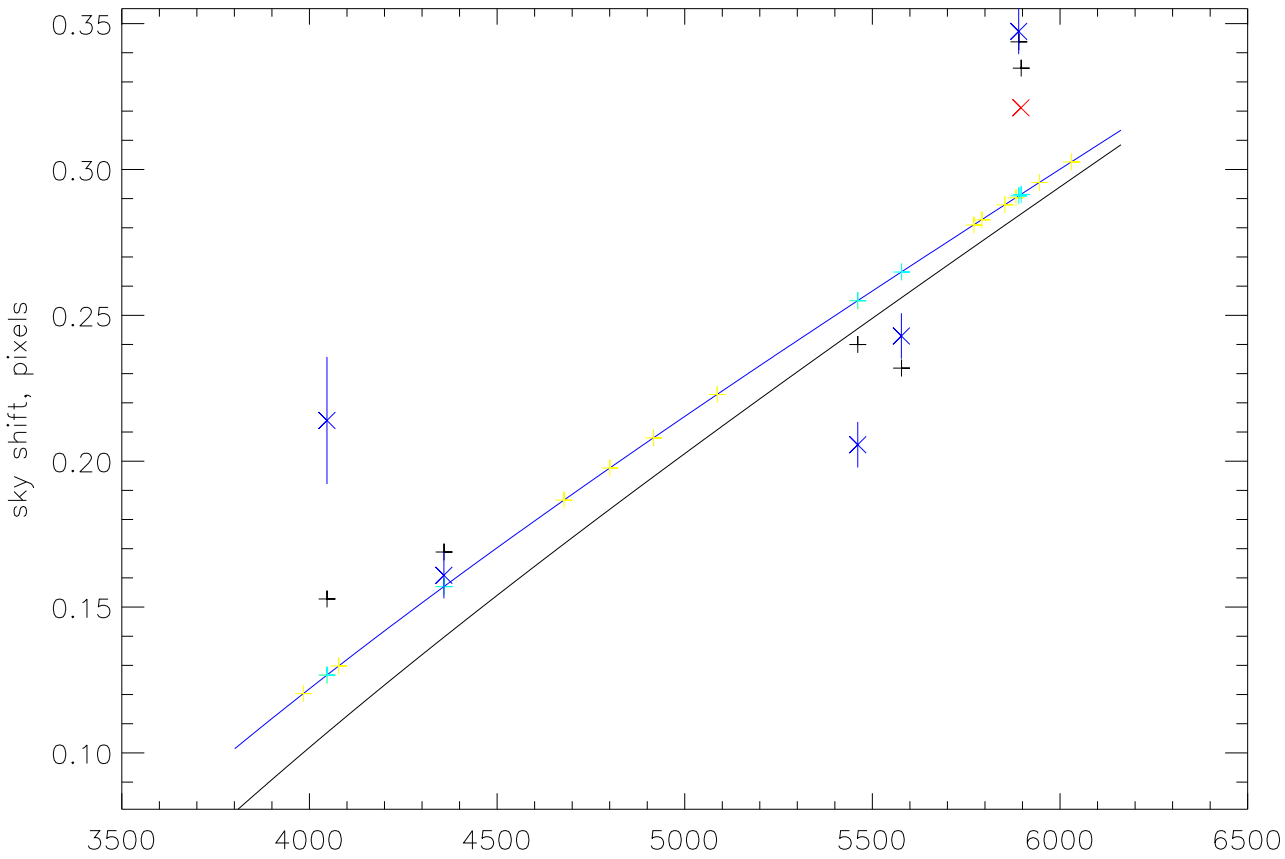

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

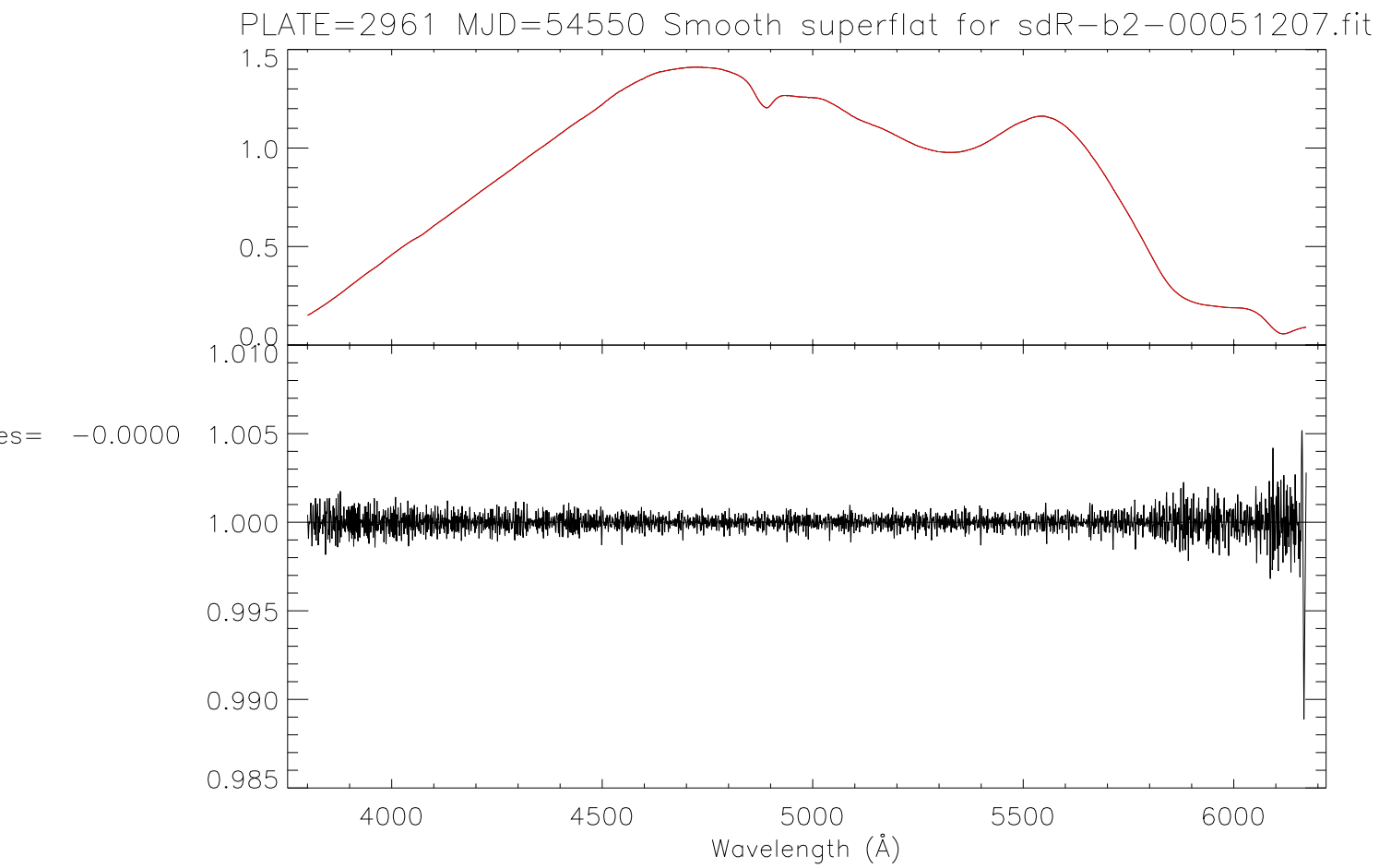

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

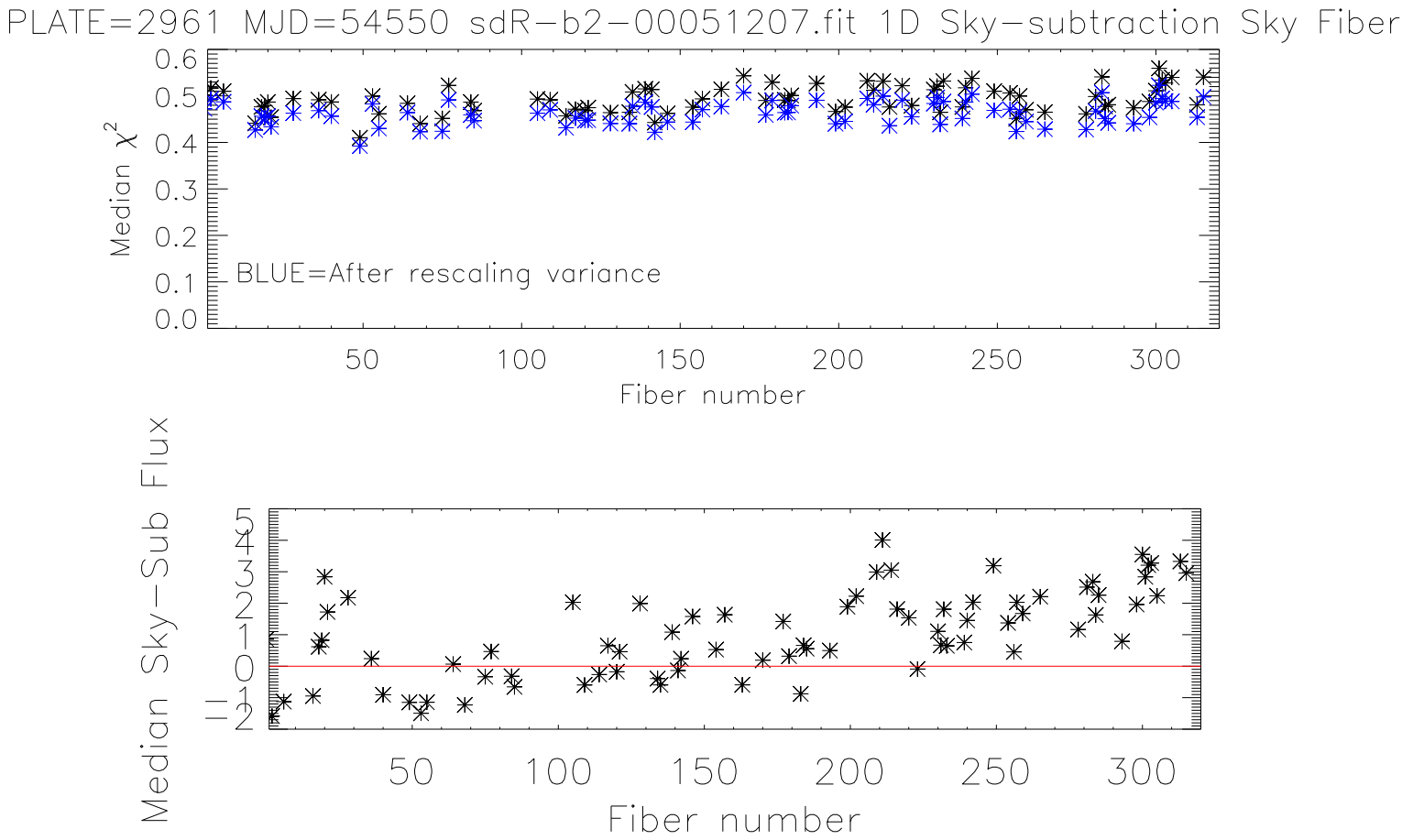

5889.9500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

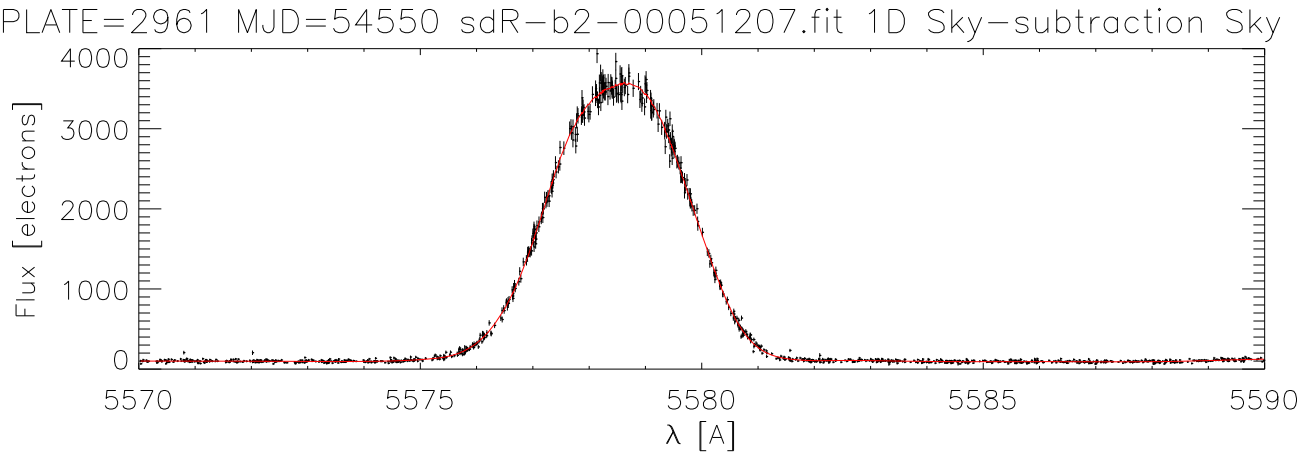

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

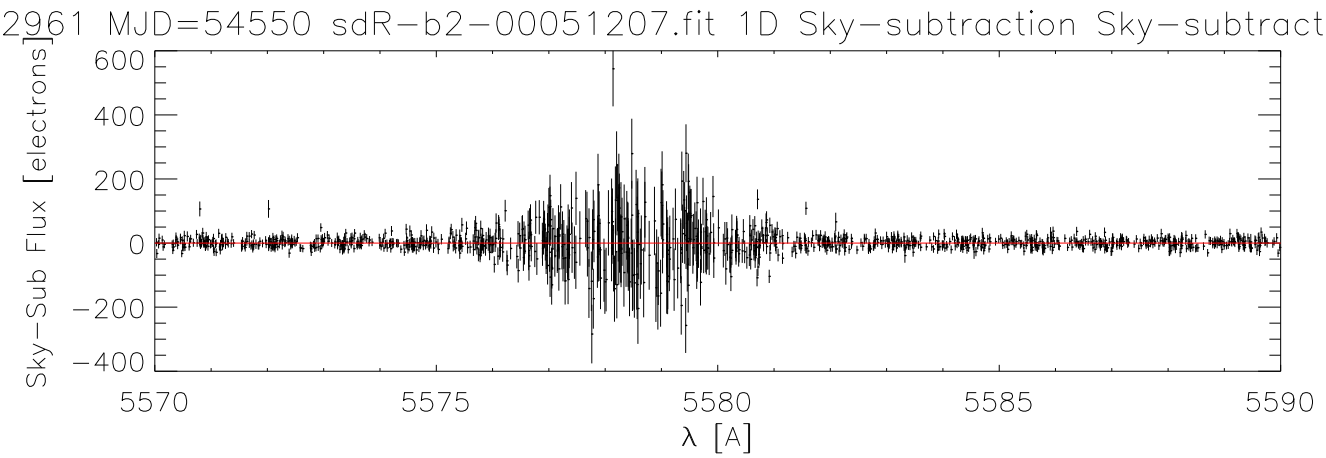

4046.5600
nfib1 81
nfib2 81
stdev 0.091
extra 0.21
4358.3300
nfib1 81
nfib2 81
stdev 0.054
extra 0.16
5460.9400
nfib1 81
nfib2 82
stdev 0.055
extra 0.21
5577.3390
nfib1 82
nfib2 82
stdev 0.017
extra 0.24
5889.9500
nfib1 82
nfib2 82
stdev 0.036
extra 0.35
5895.9240
nfib1 82
nfib2 82
stdev 0.047
extra 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

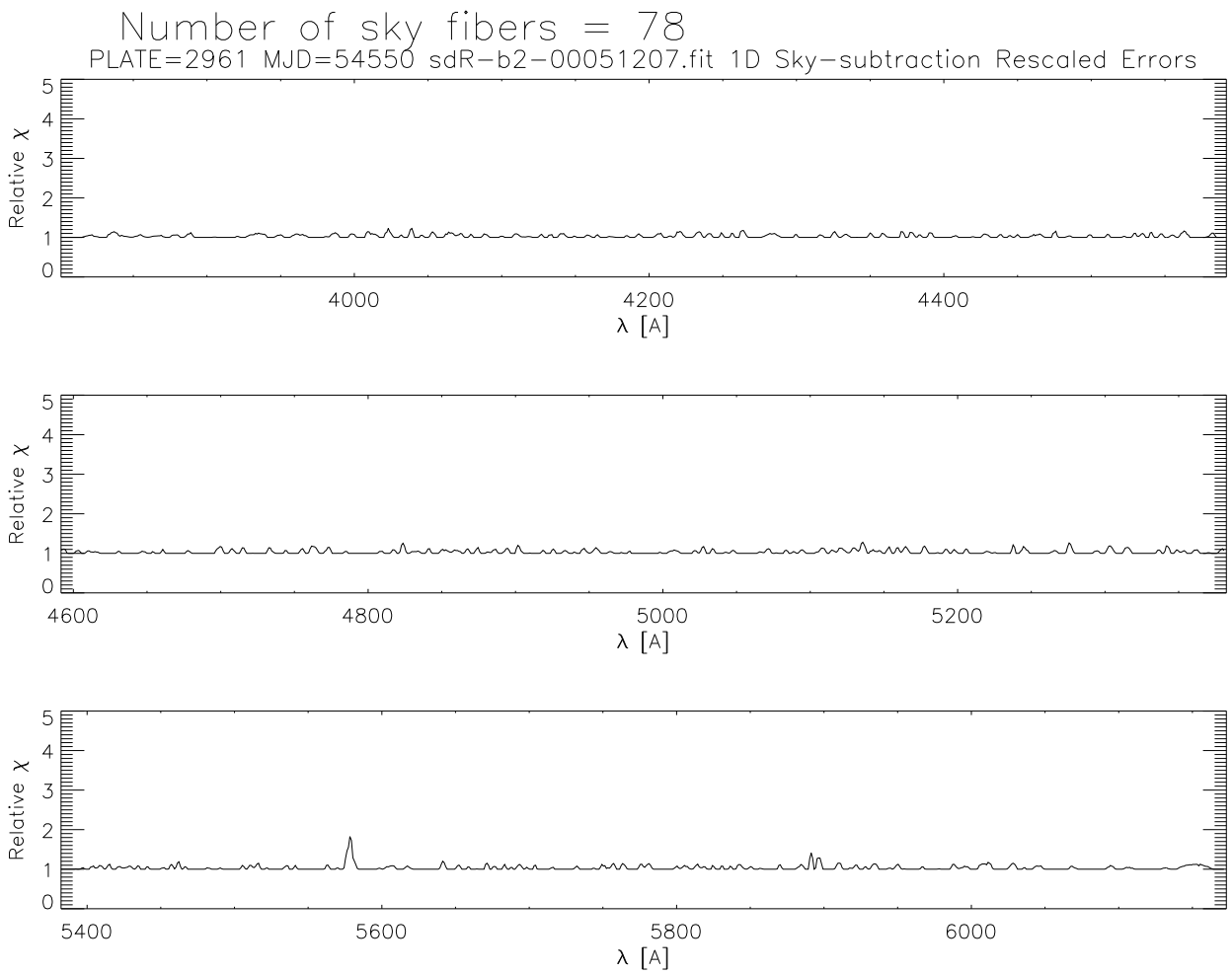

0.35
0.30
0.25
0.20
0.15
0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

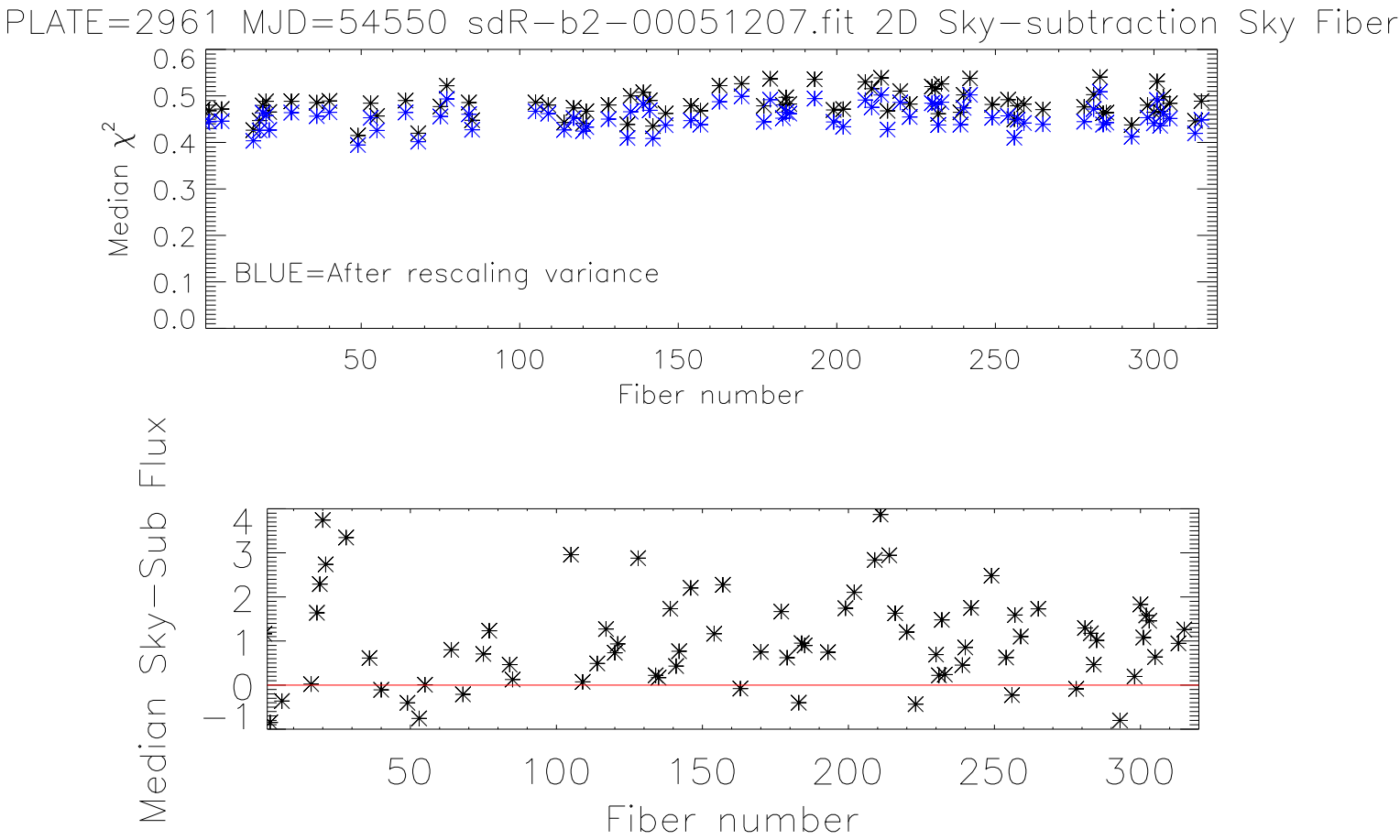

PLATE=2961 MJD=54550 Smooth superflat for sdR-b2-00051207.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

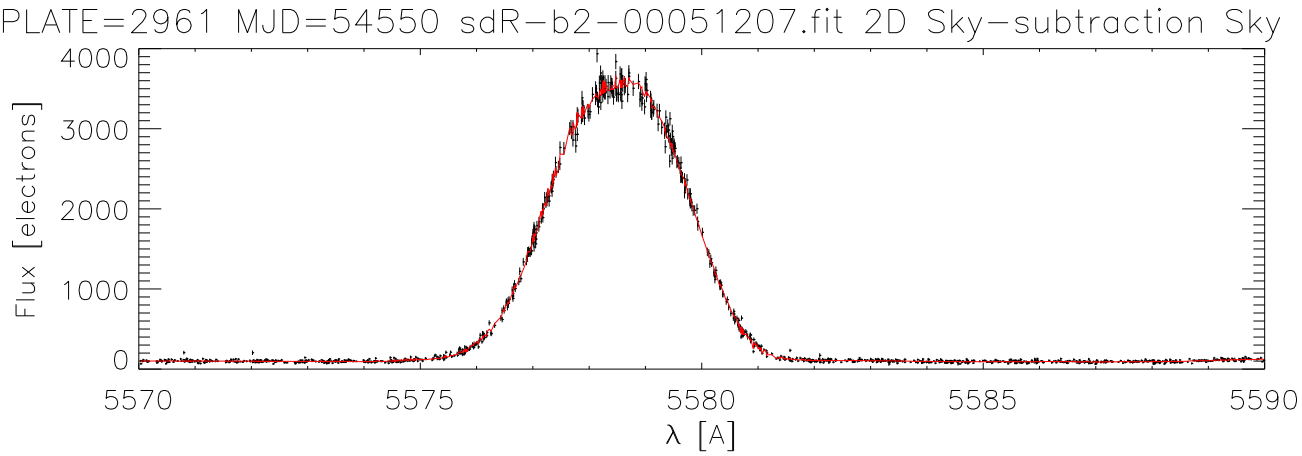

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

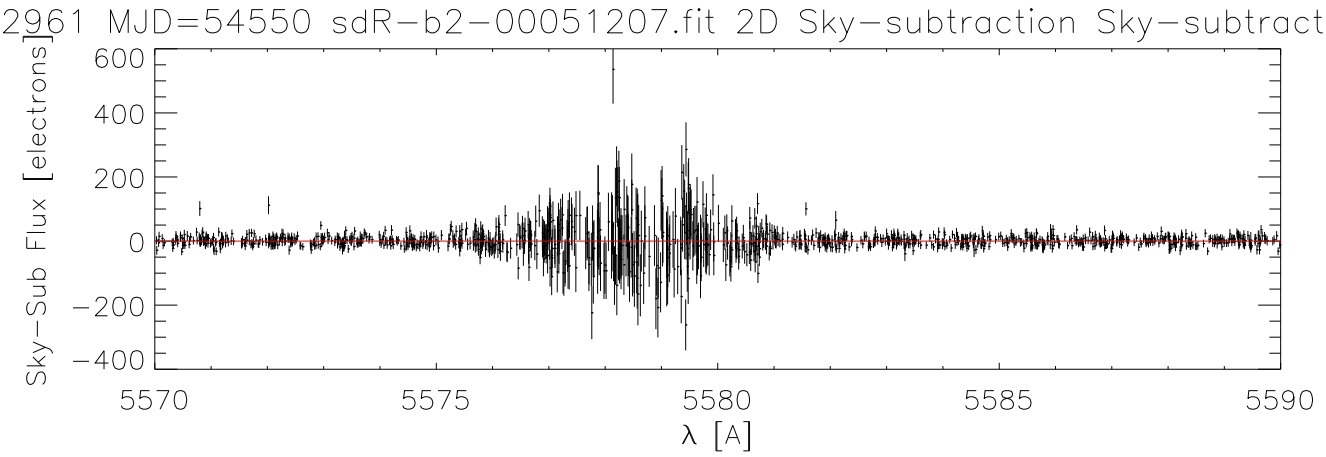

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

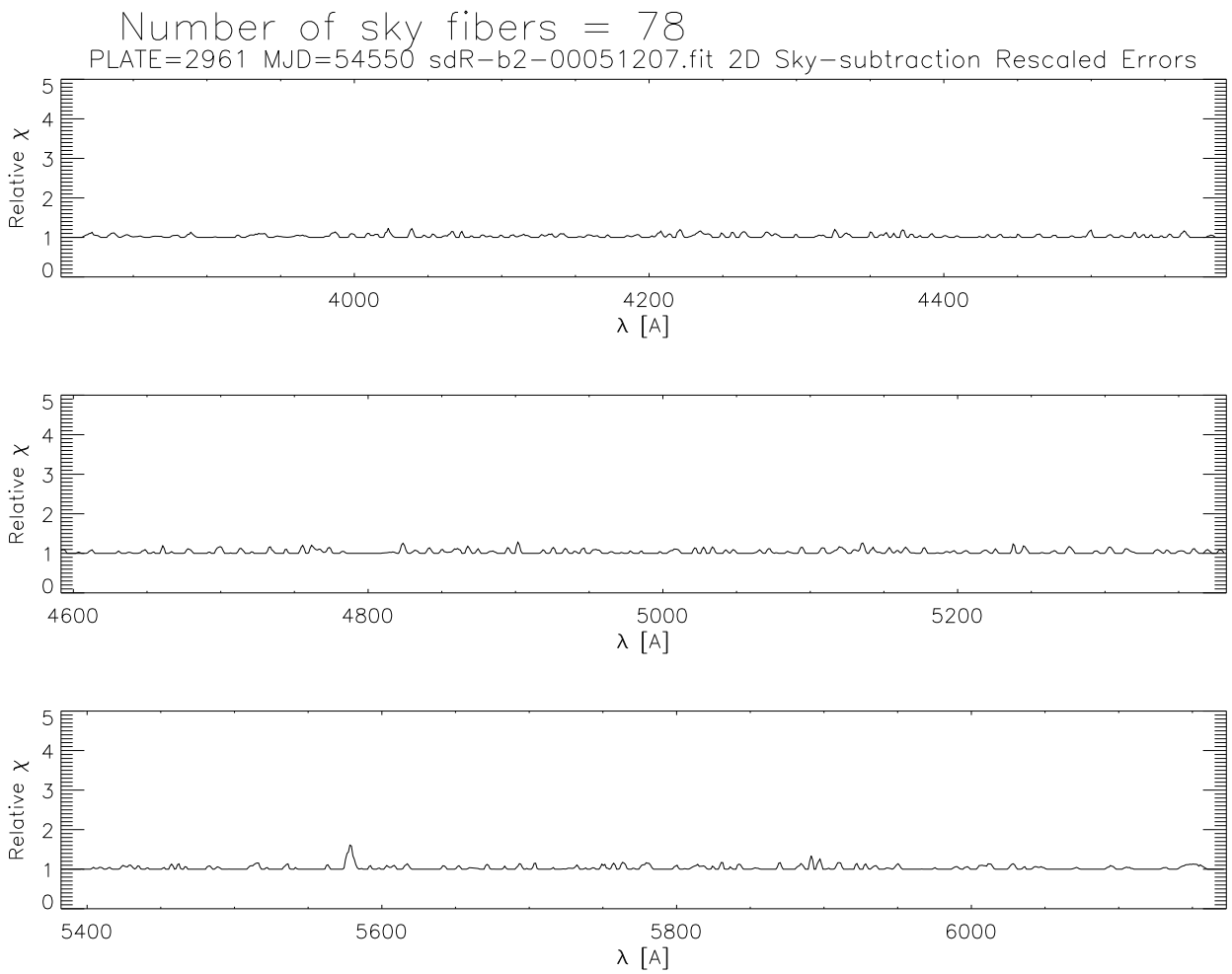

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

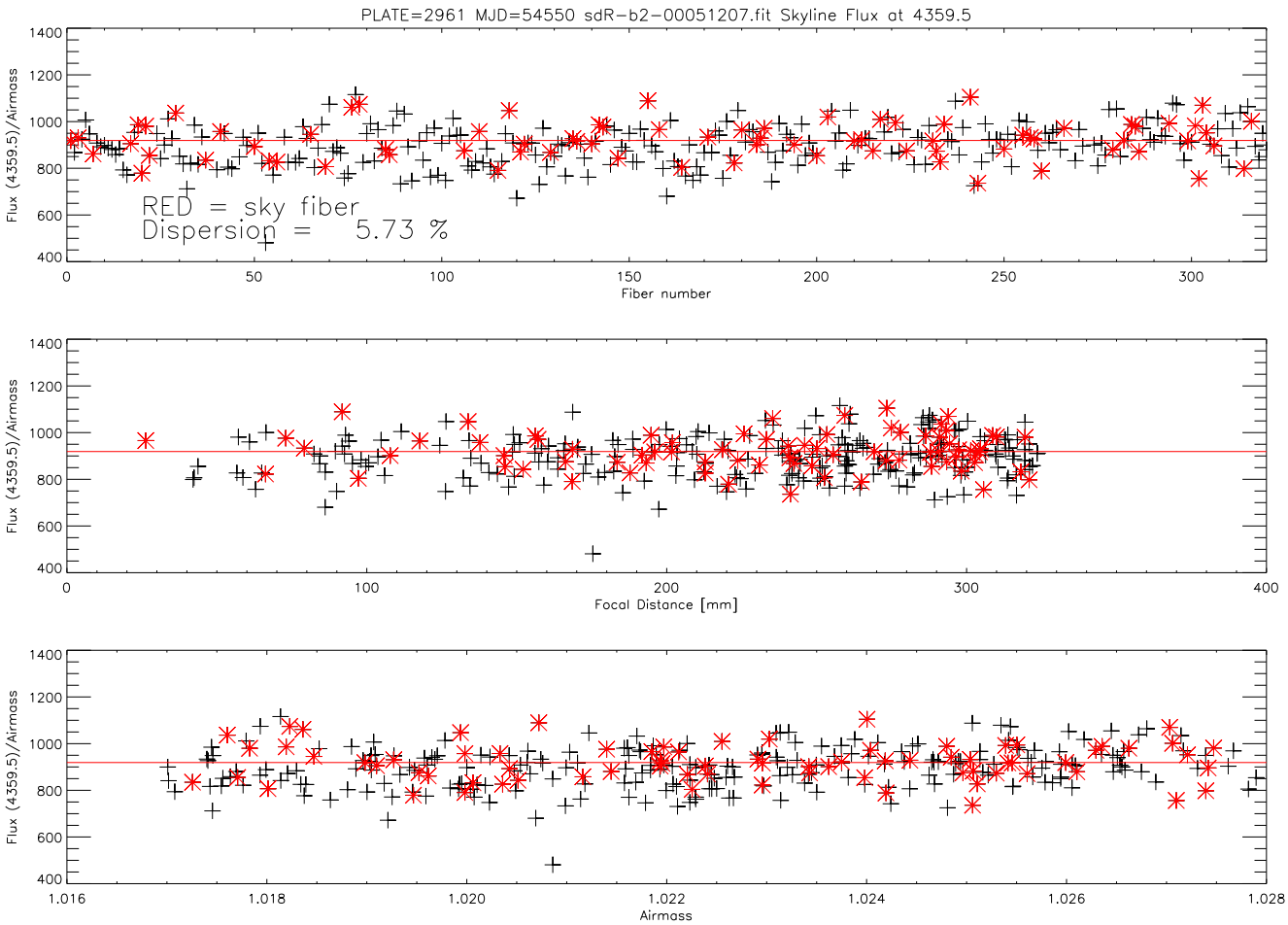

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051207.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

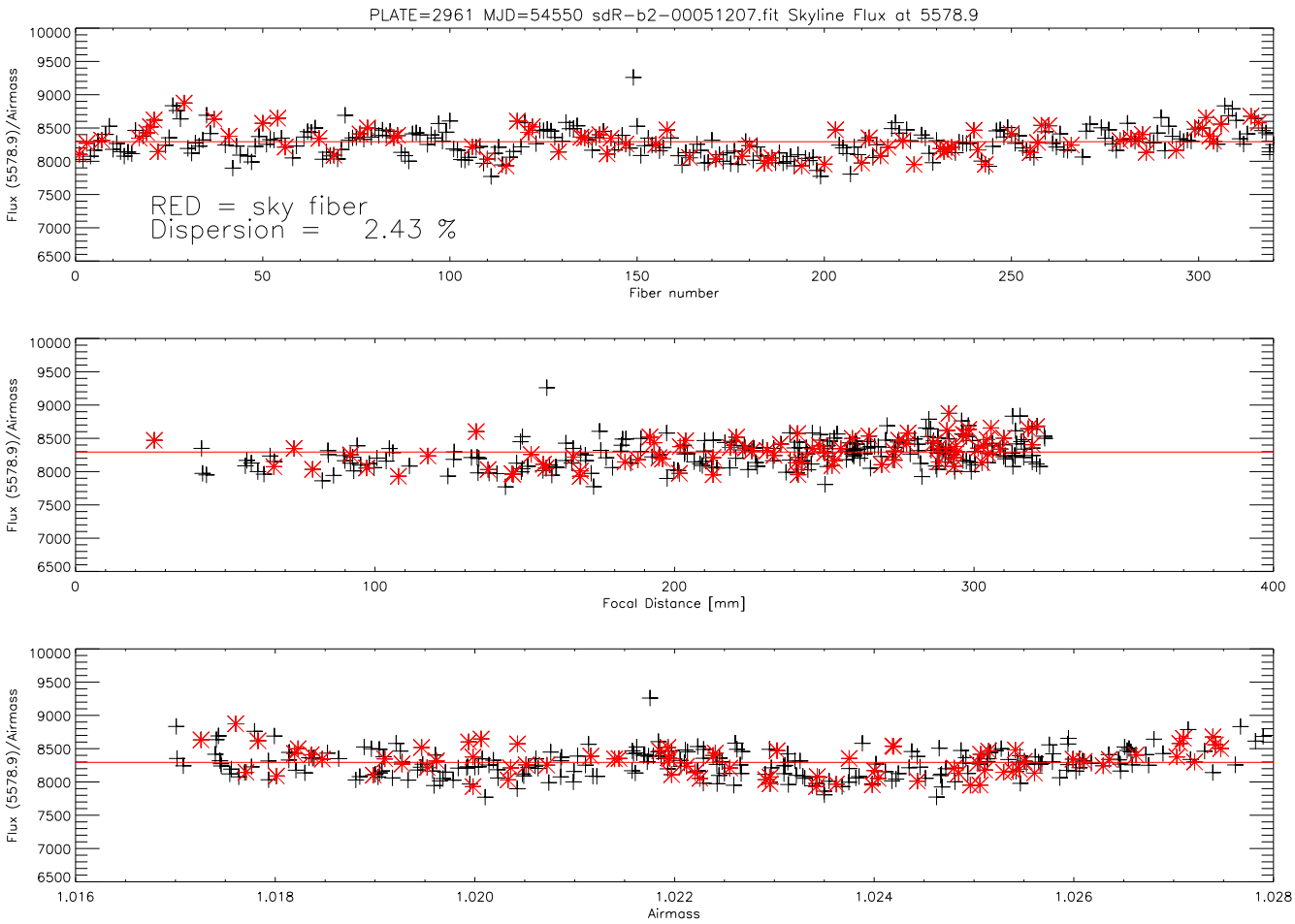

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

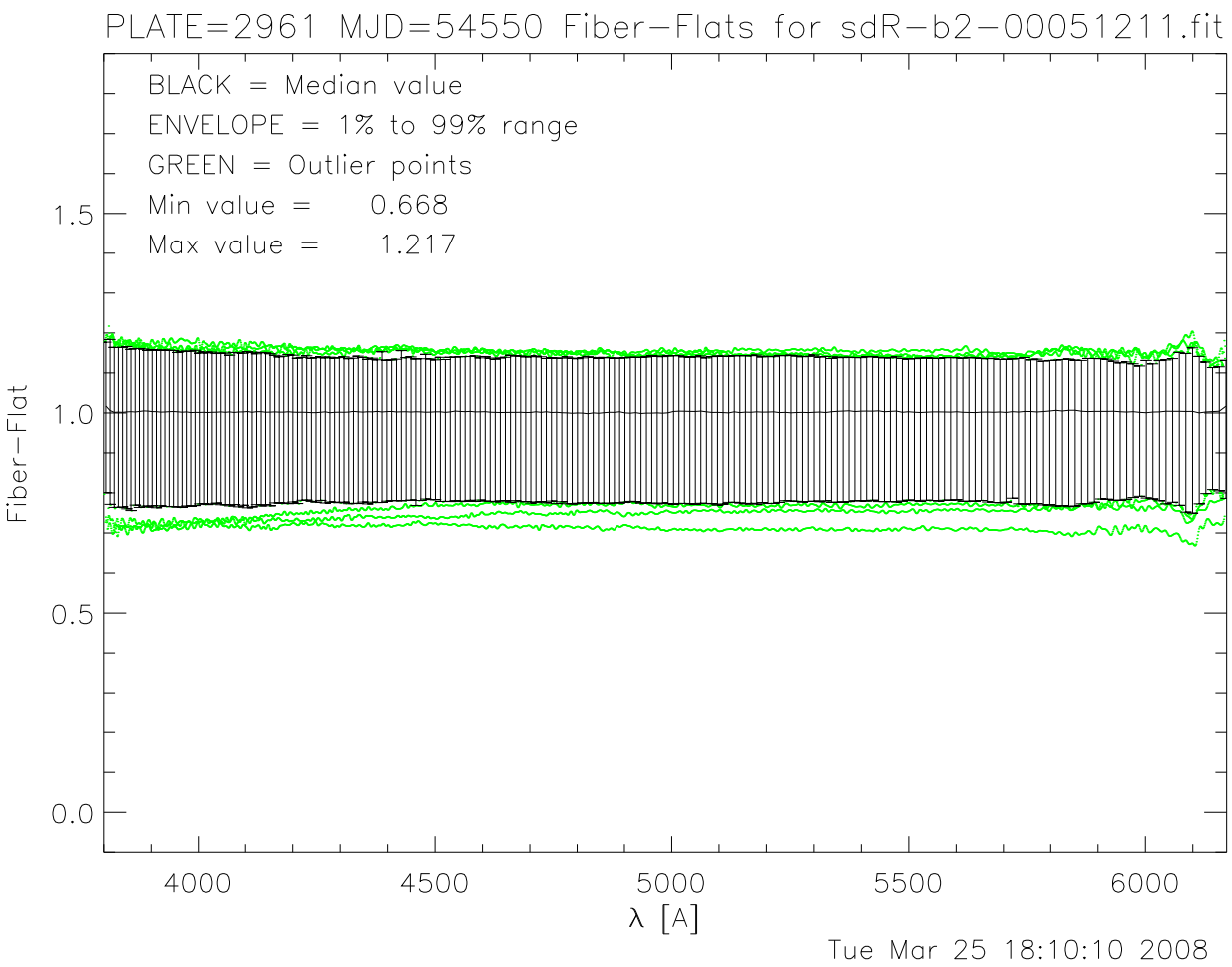

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

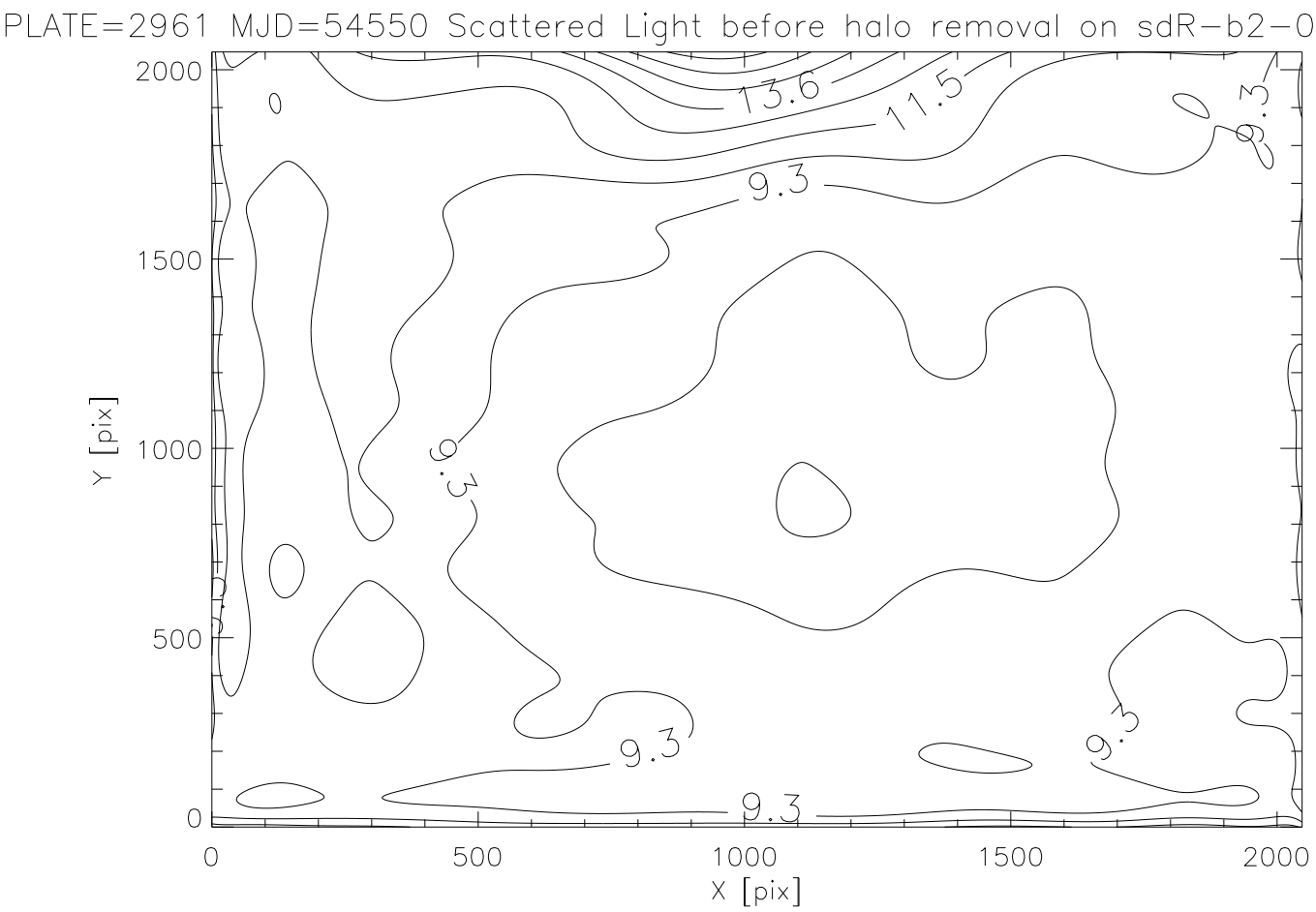

PLATE=2961 MJD=54550 sdR-b2-00051207.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

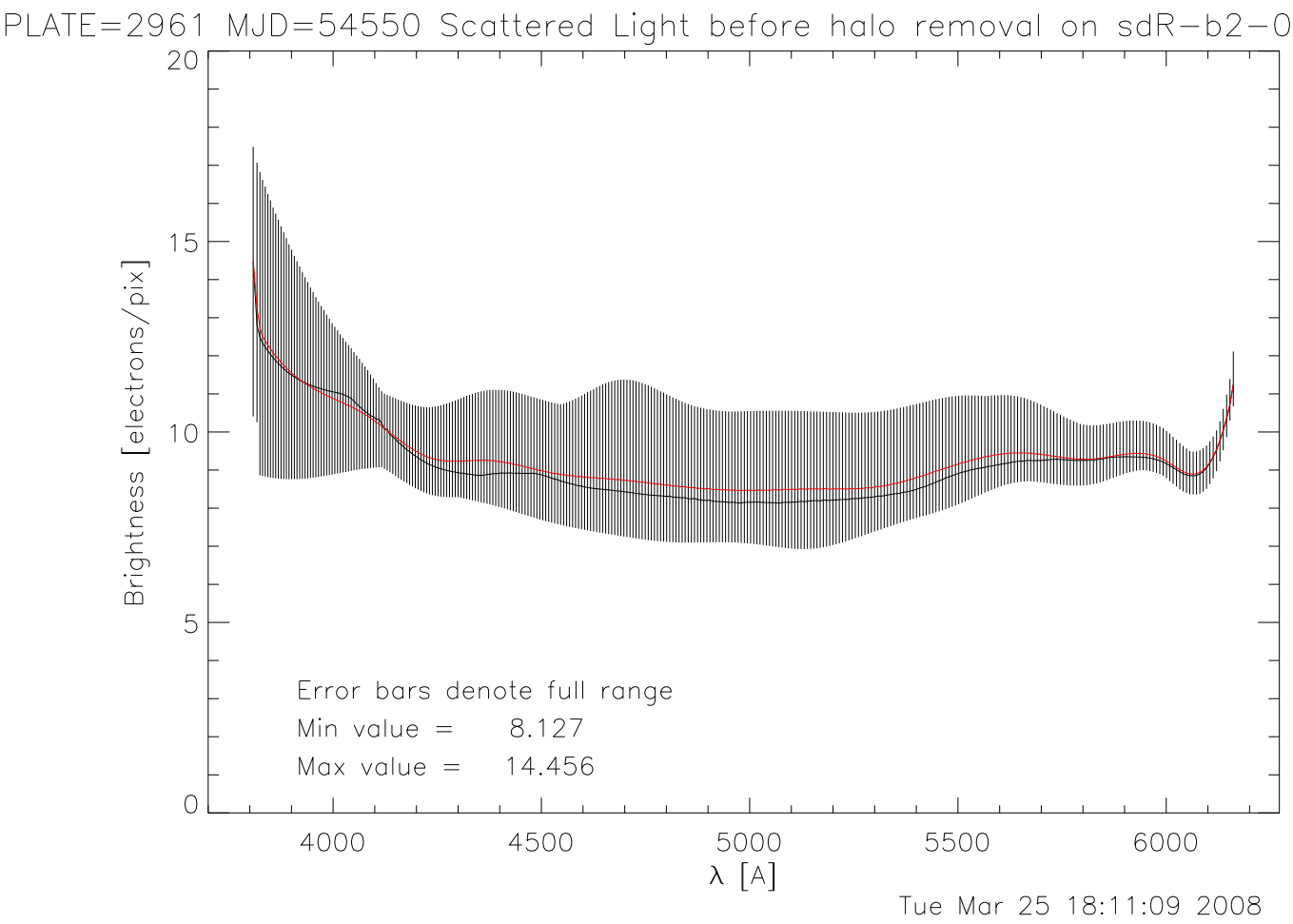

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051207.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

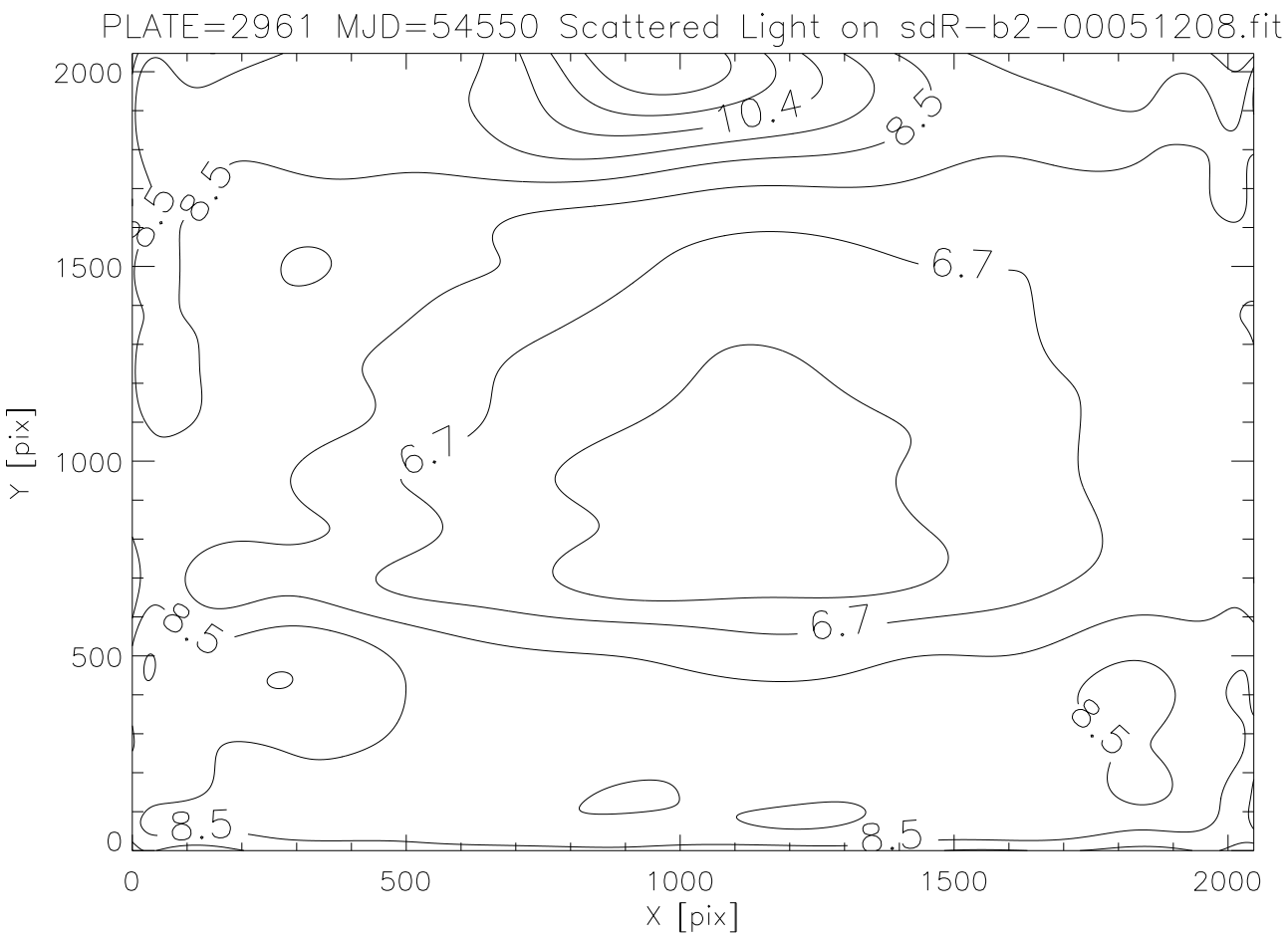

PLATE=2961 MJD=54550 sdR-b2-00051207.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.73 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

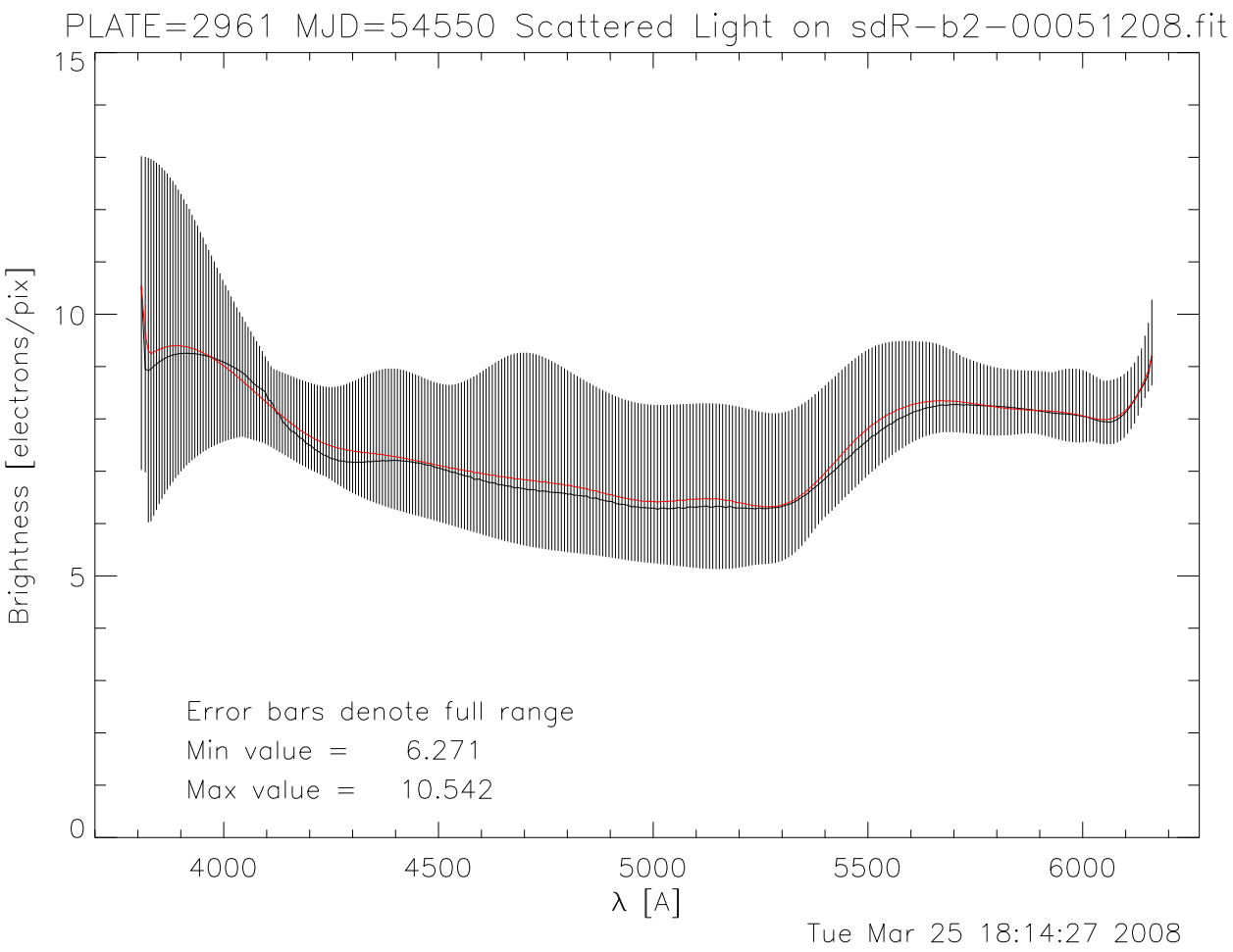

PLATE=2961 MJD=54550 sdR-b2-00051207.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.43 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

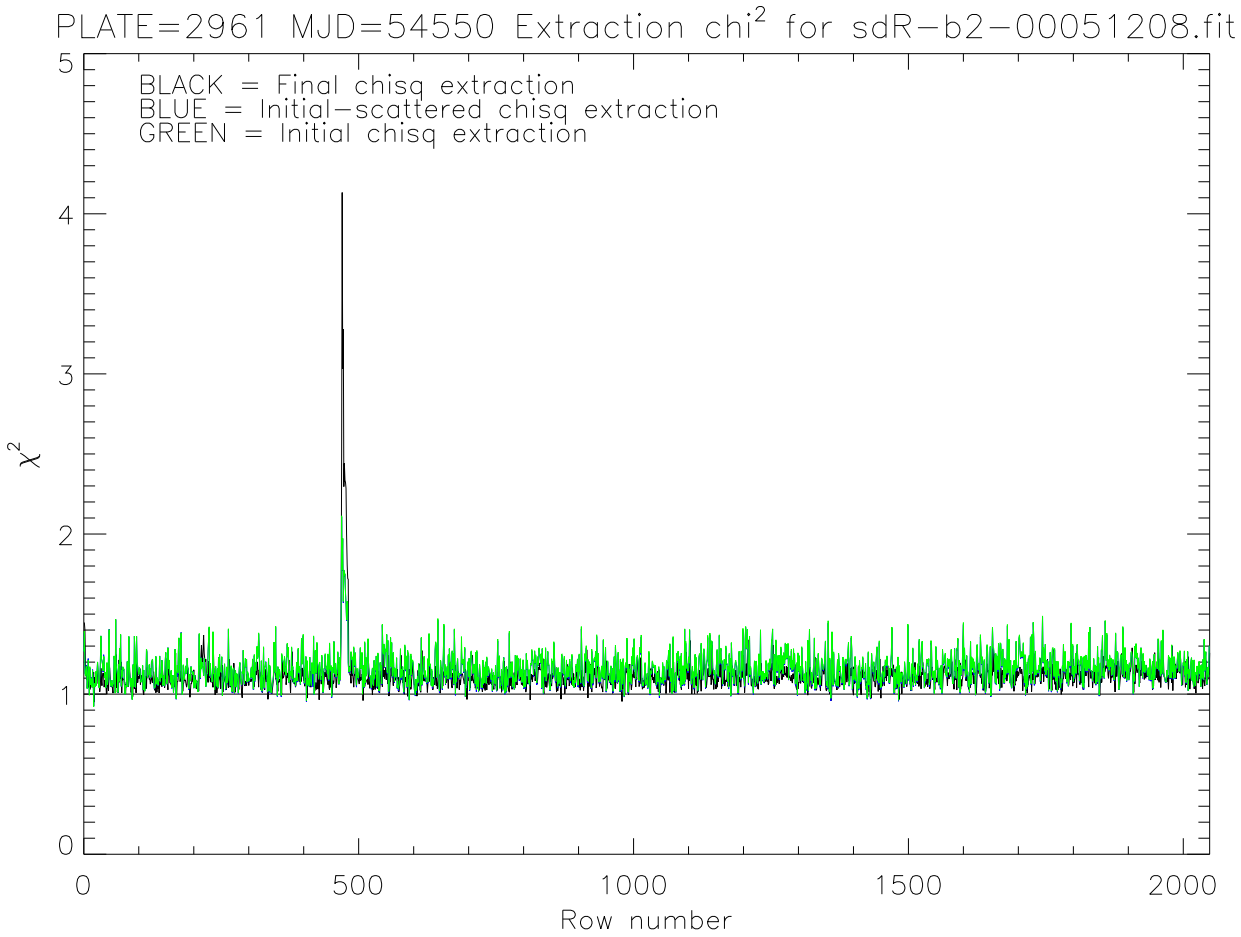

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:10:10 2008

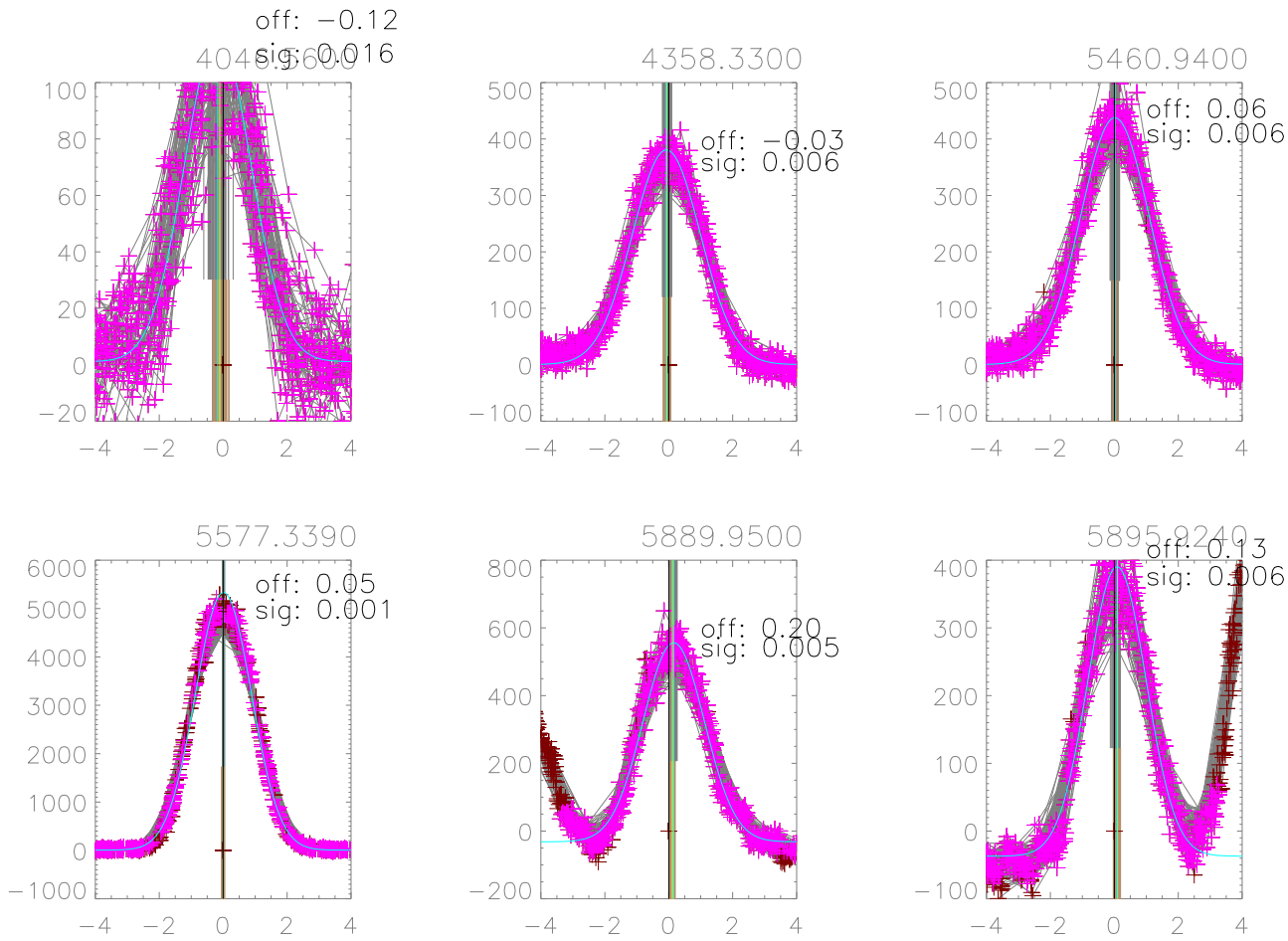

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b2−00051208.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
13.6
11.5
9.3
9.3
9.3
9.3
9.3
9.3

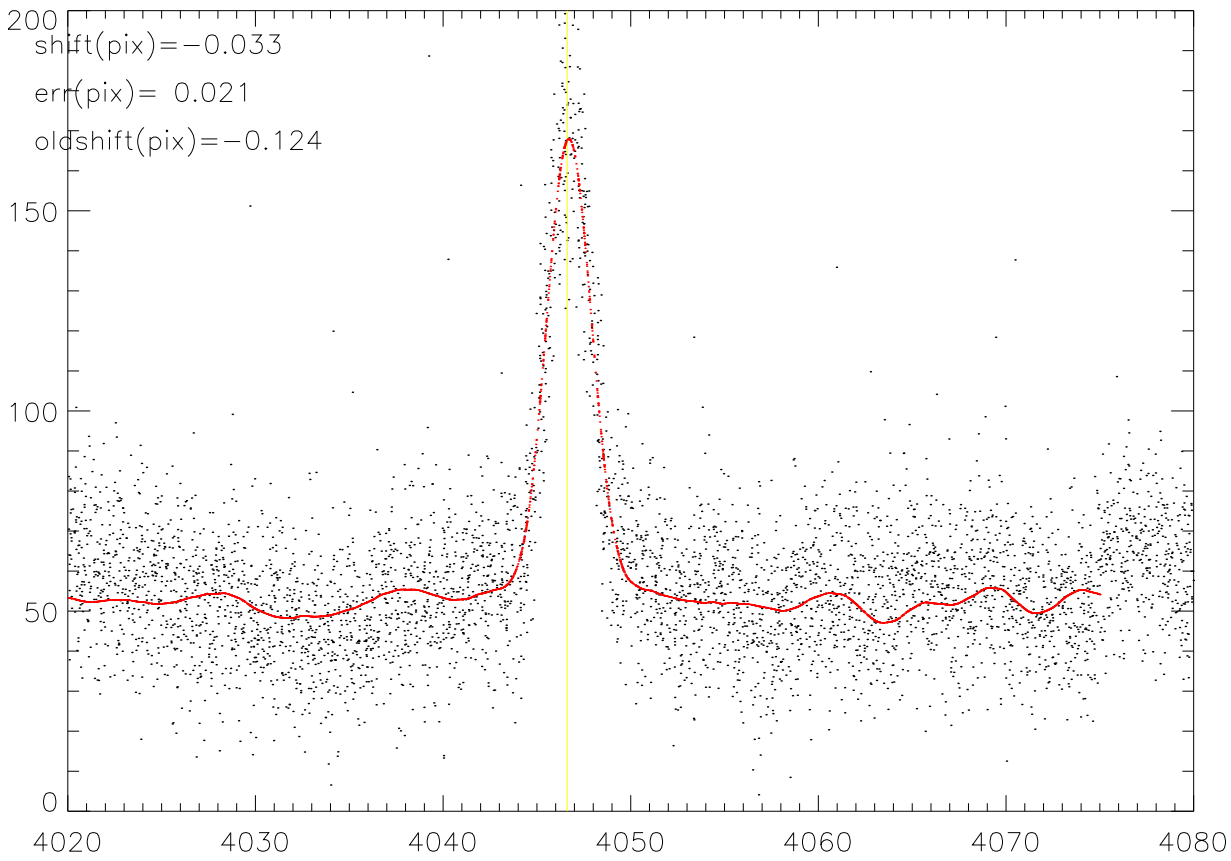

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051208.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.127
Max value = 14.456
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:11:09 2008

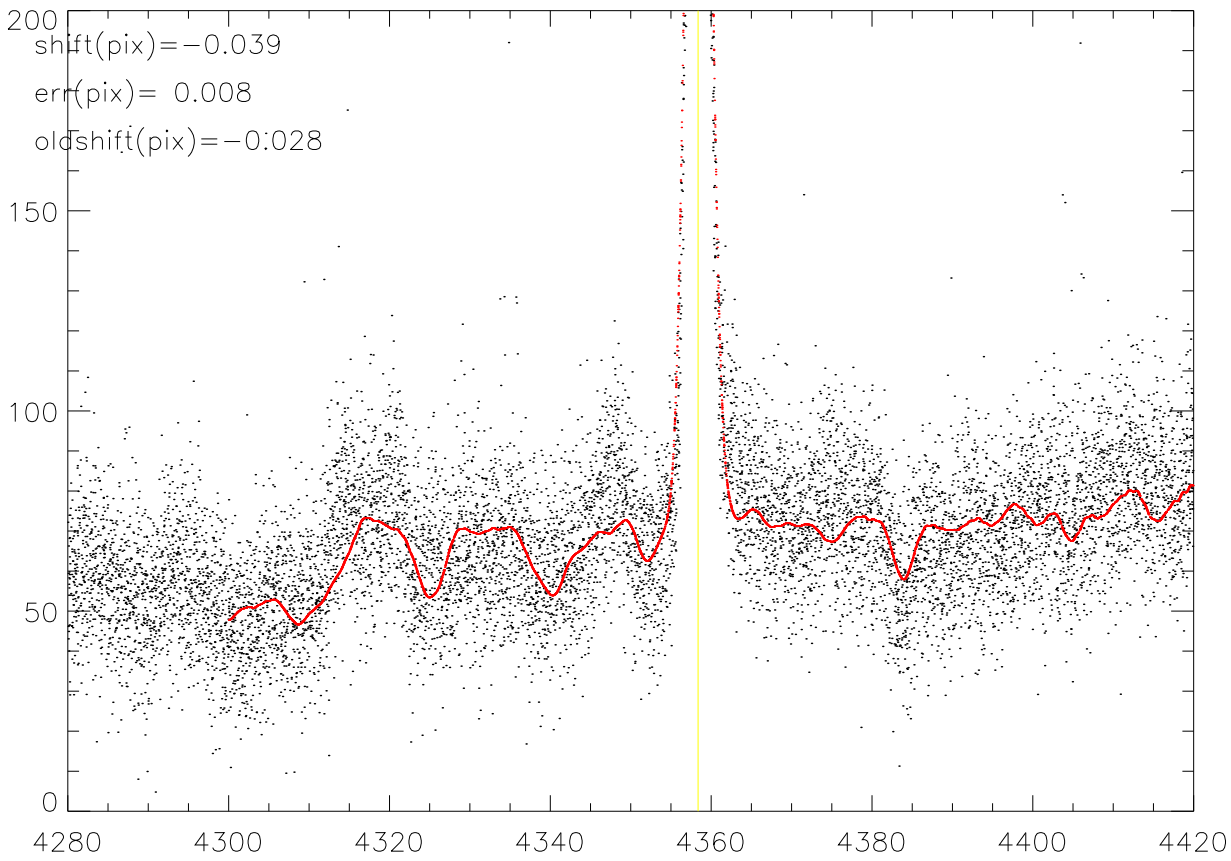

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051208.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.4
8.5
6.7
0

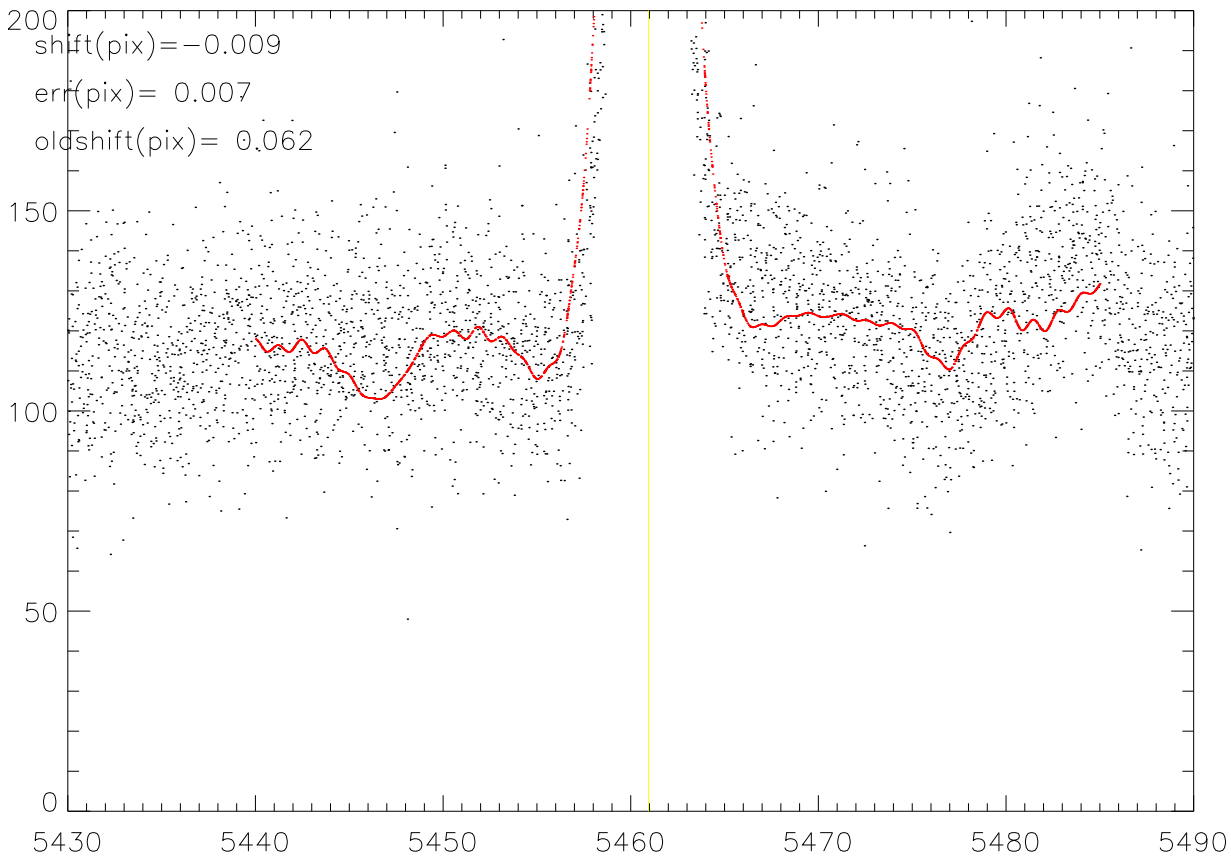

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051208.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.271
Max value = 10.542
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:14:27 2008

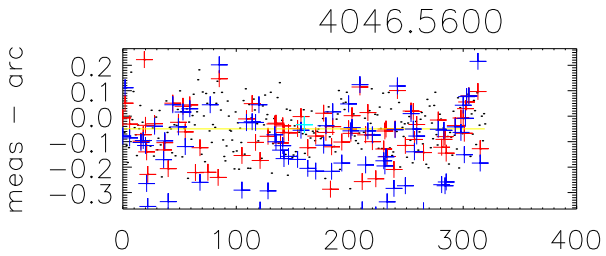

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b2-00051208.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

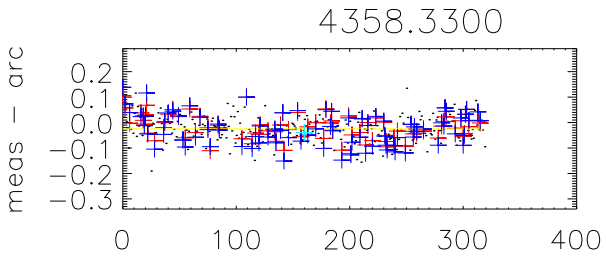

off: −0.12
sig: 0.016
4046.5600
4358.3300
off: −0.03
sig: 0.006
5460.9400
off: 0.06
sig: 0.006
5577.3390
off: 0.05
sig: 0.001
5889.9500
off: 0.20
sig: 0.005
5895.9240
off: 0.13
sig: 0.006

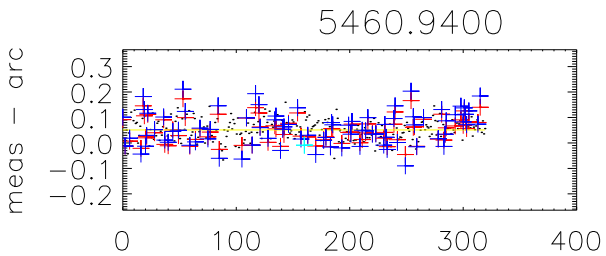

shift(pix)=−0.033
err(pix)= 0.021
oldshift(pix)=−0.124
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

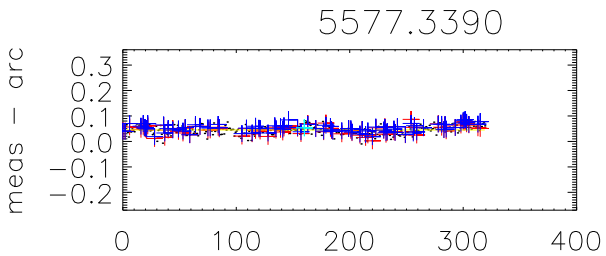

shift(pix)=−0.039
err(pix)= 0.008
oldshift(pix)=−0:028
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

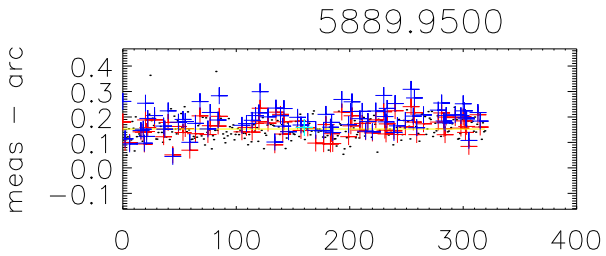

shift(pix)=−0.009
err(pix)= 0.007
oldshift(pix)= 0.062
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

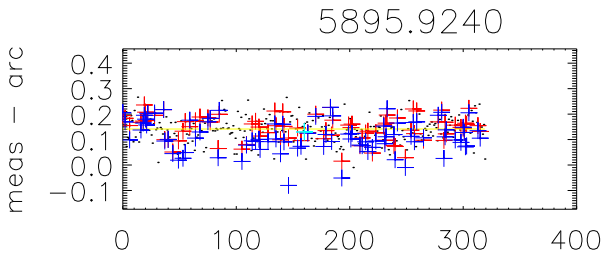

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

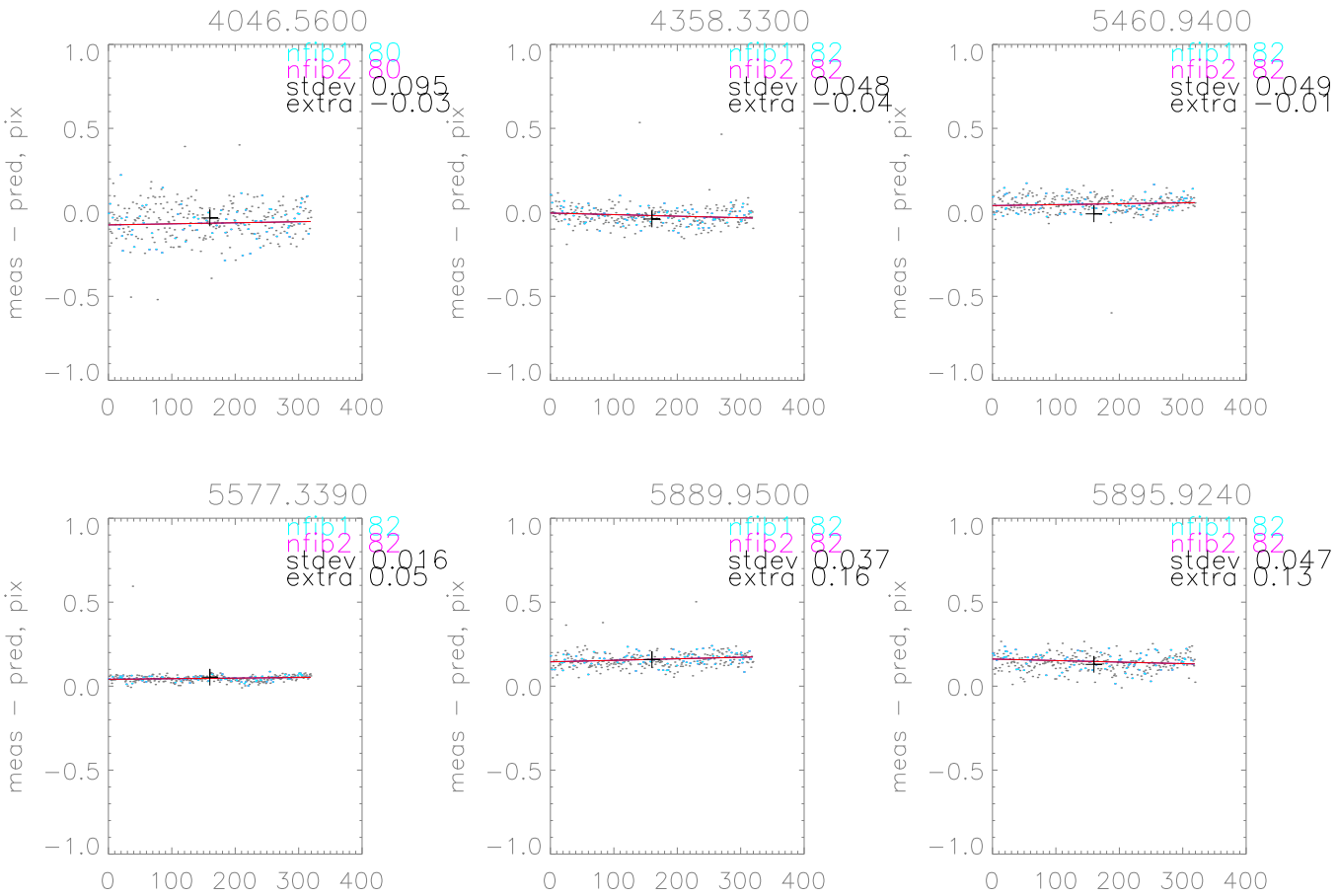

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

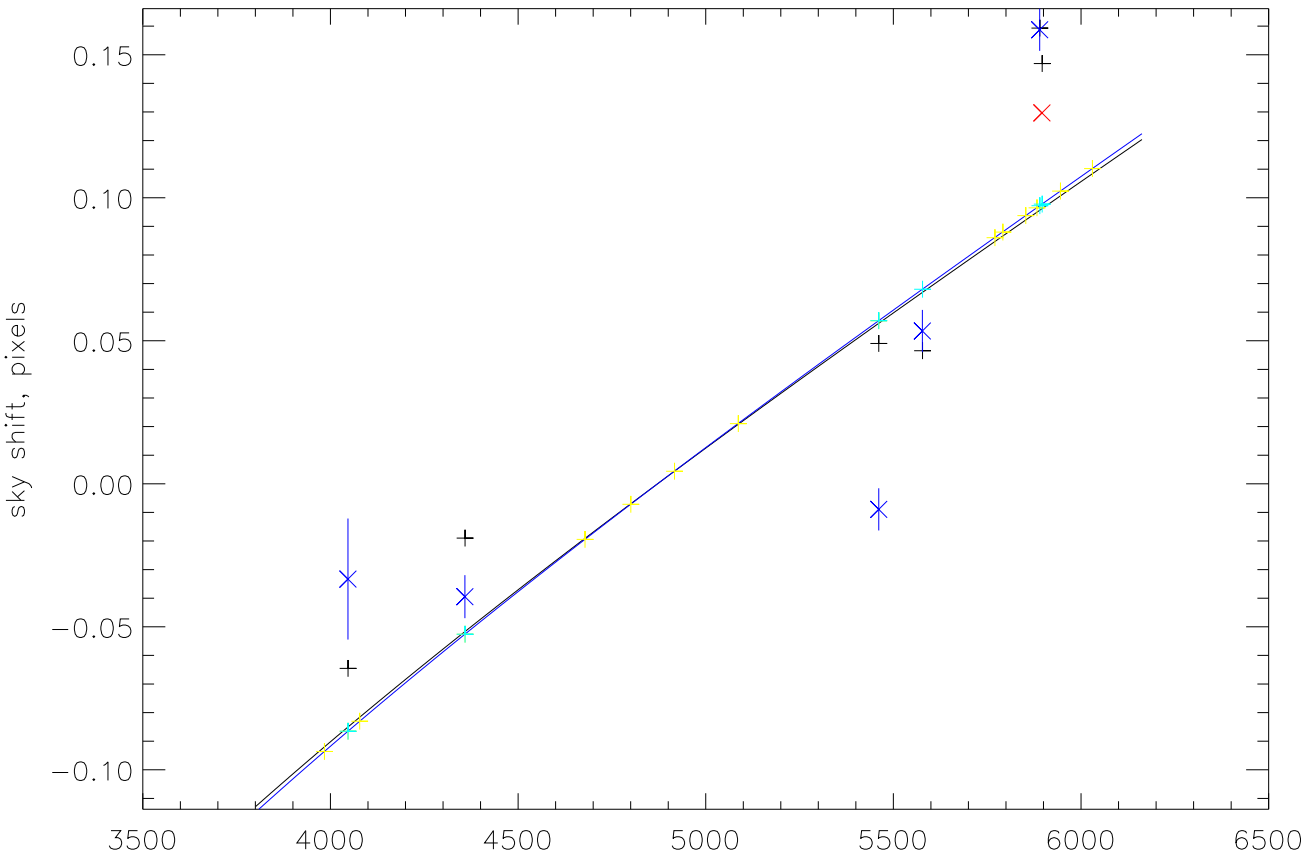

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

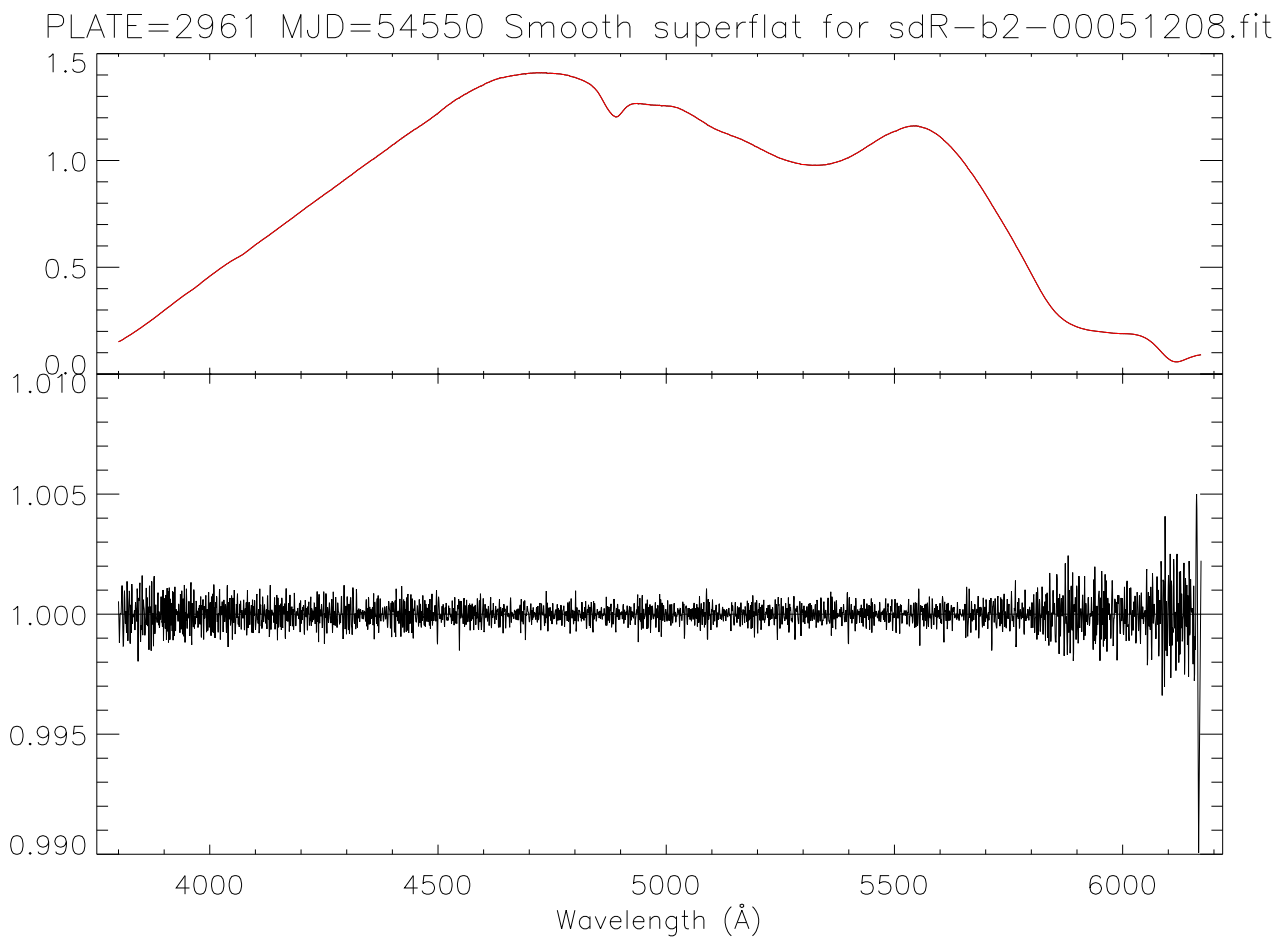

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

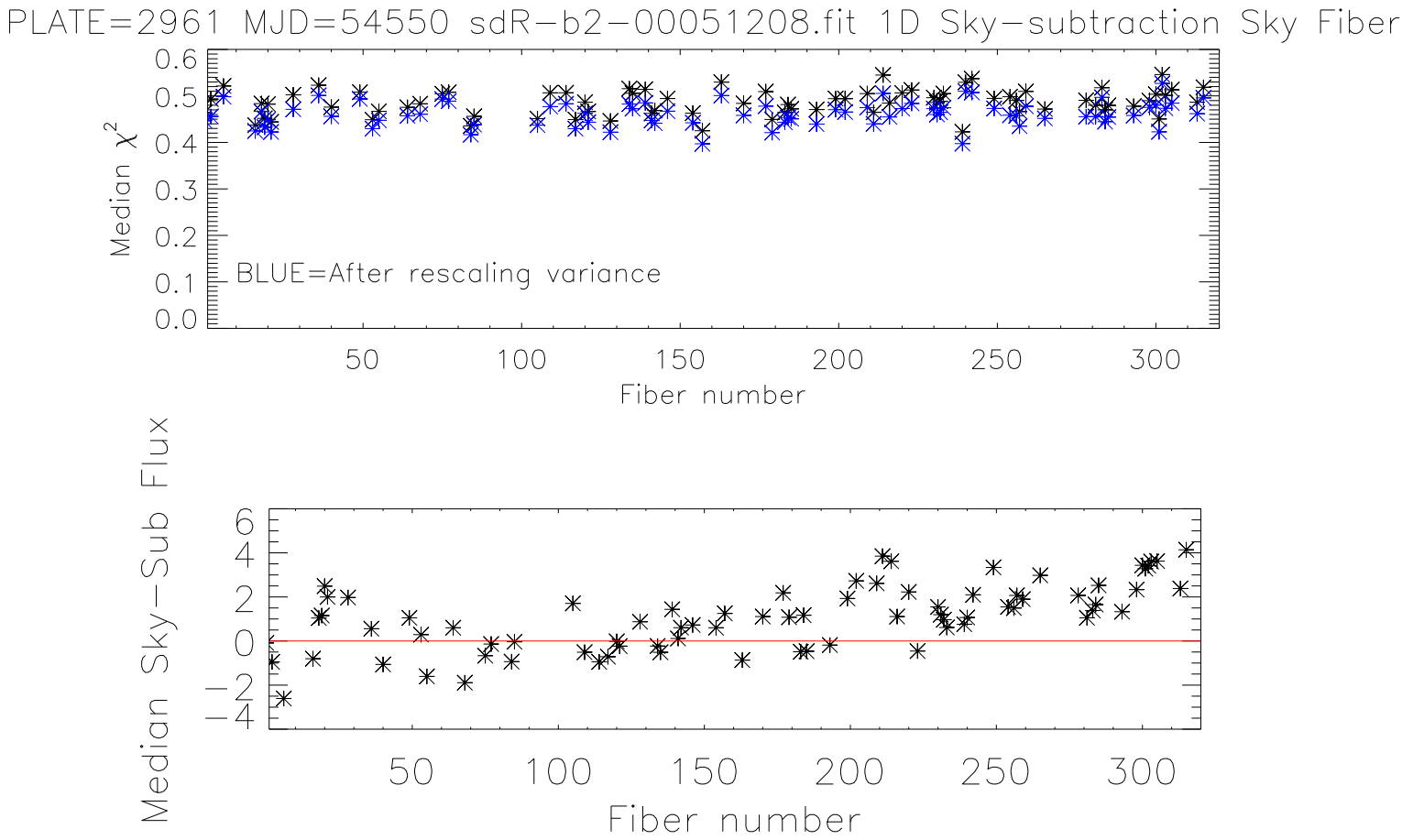

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

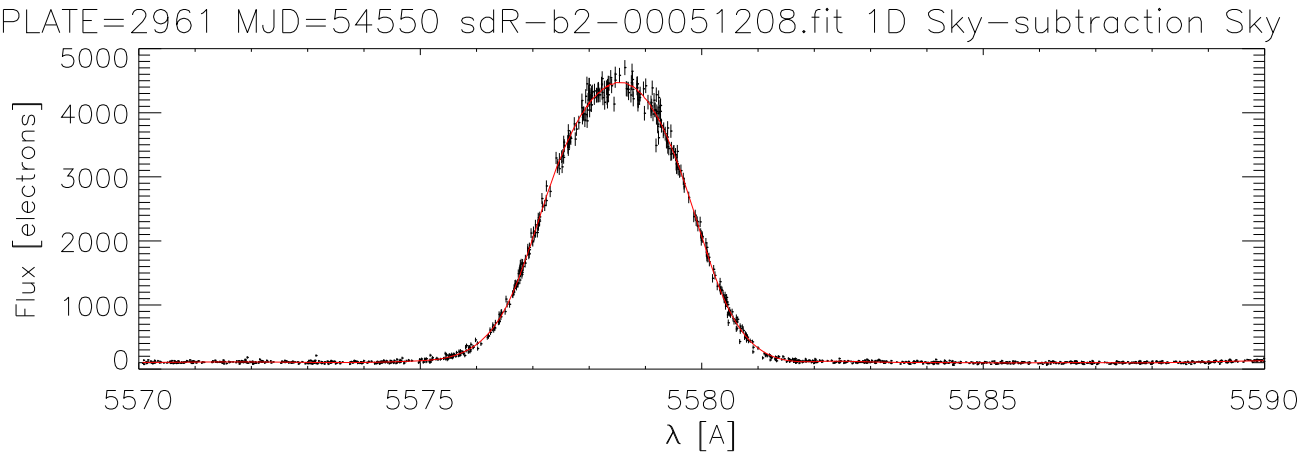

4046.5600
nfib1 80
nfib2 80
stdev 0.095
extra −0.03
4358.3300
nfib1 82
nfib2 82
stdev 0.048
extra −0.04
5460.9400
nfib1 82
nfib2 82
stdev 0.049
extra −0.01
5577.3390
nfib1 82
nfib2 82
stdev 0.016
extra 0.05
5889.9500
nfib1 82
nfib2 82
stdev 0.037
extra 0.16
5895.9240
nfib1 82
nfib2 82
stdev 0.047
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

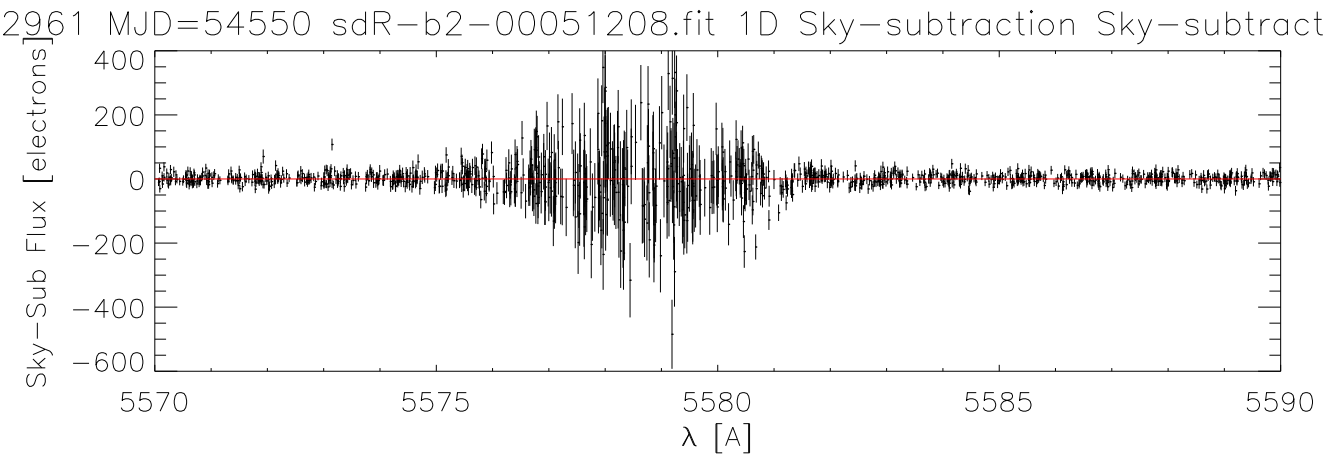

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

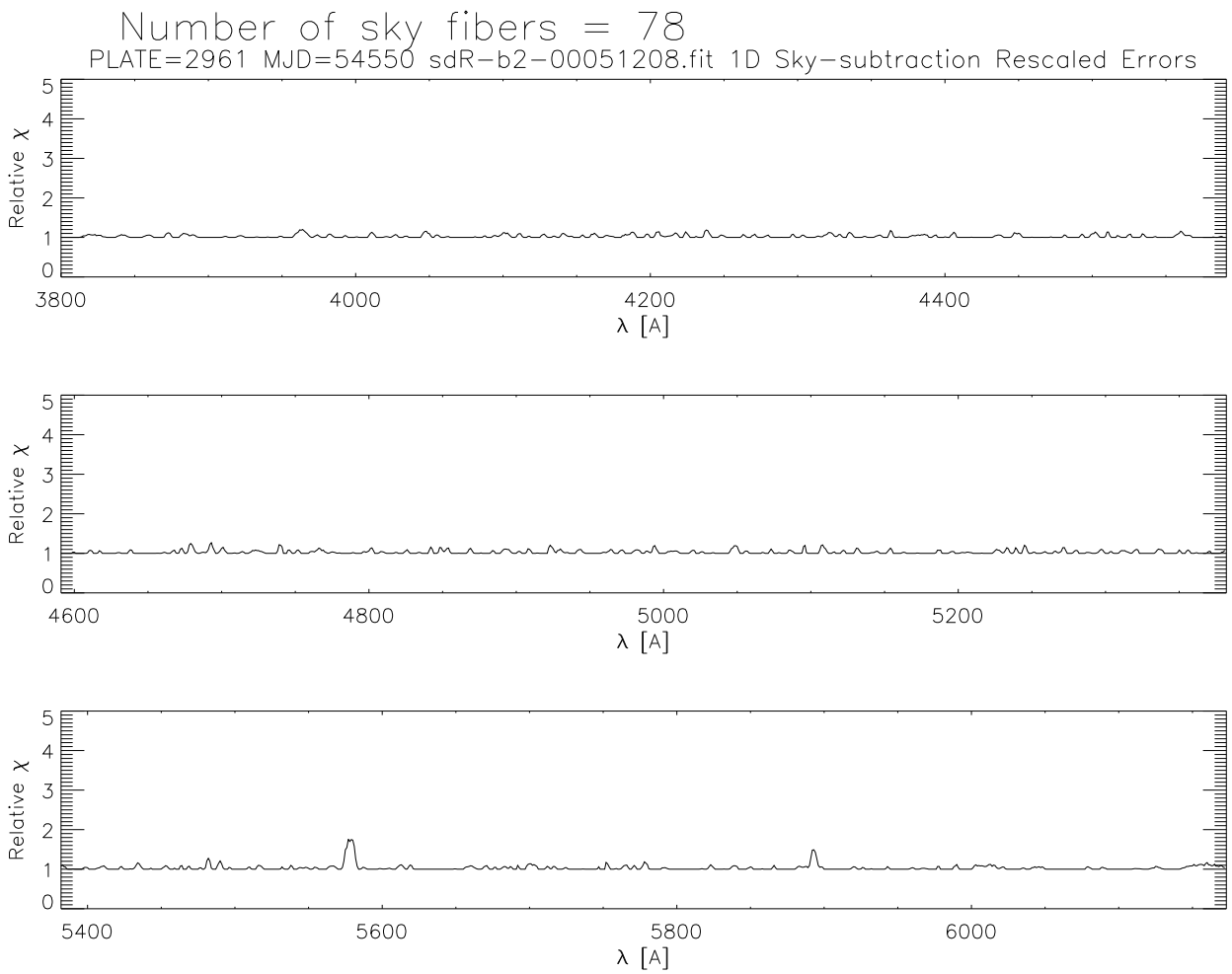
es= −0.0000

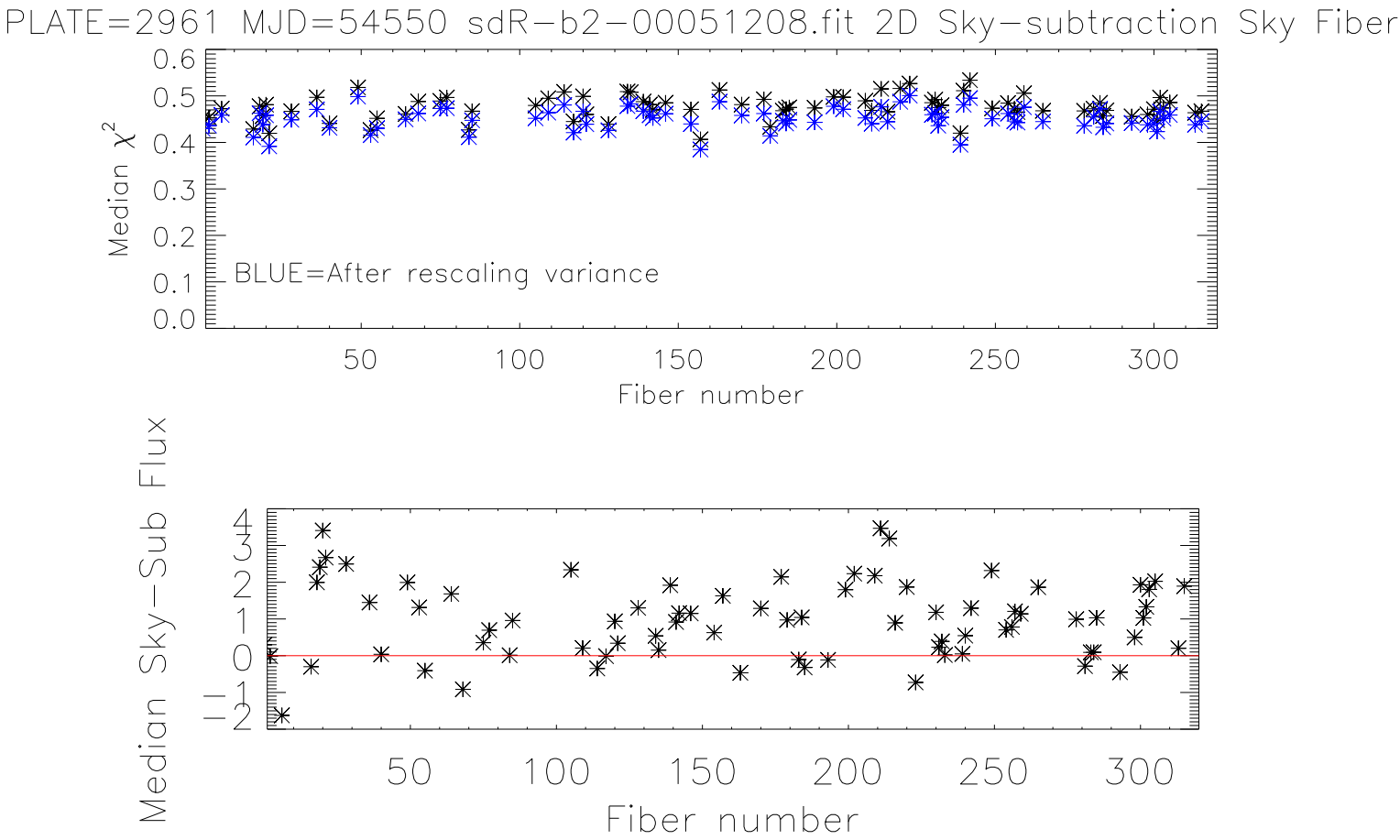

PLATE=2961 MJD=54550 Smooth superflat for sdR−b2−00051208.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

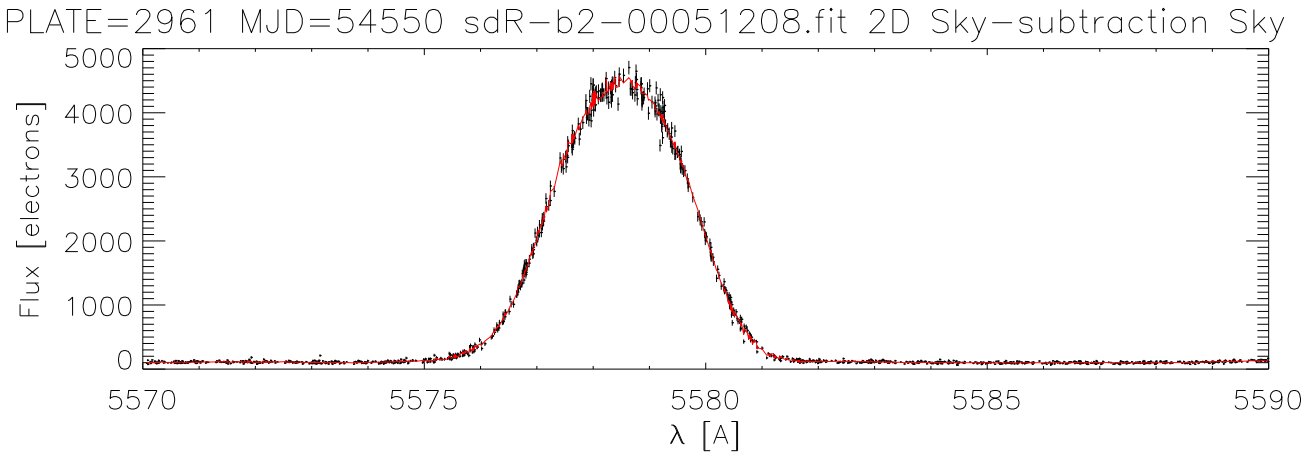

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

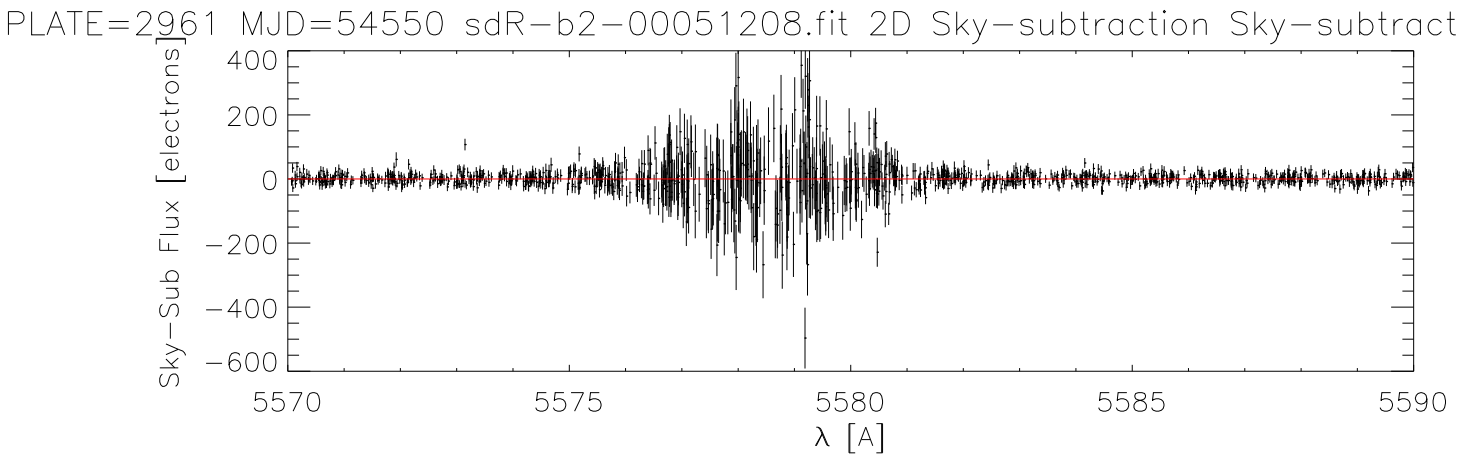

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

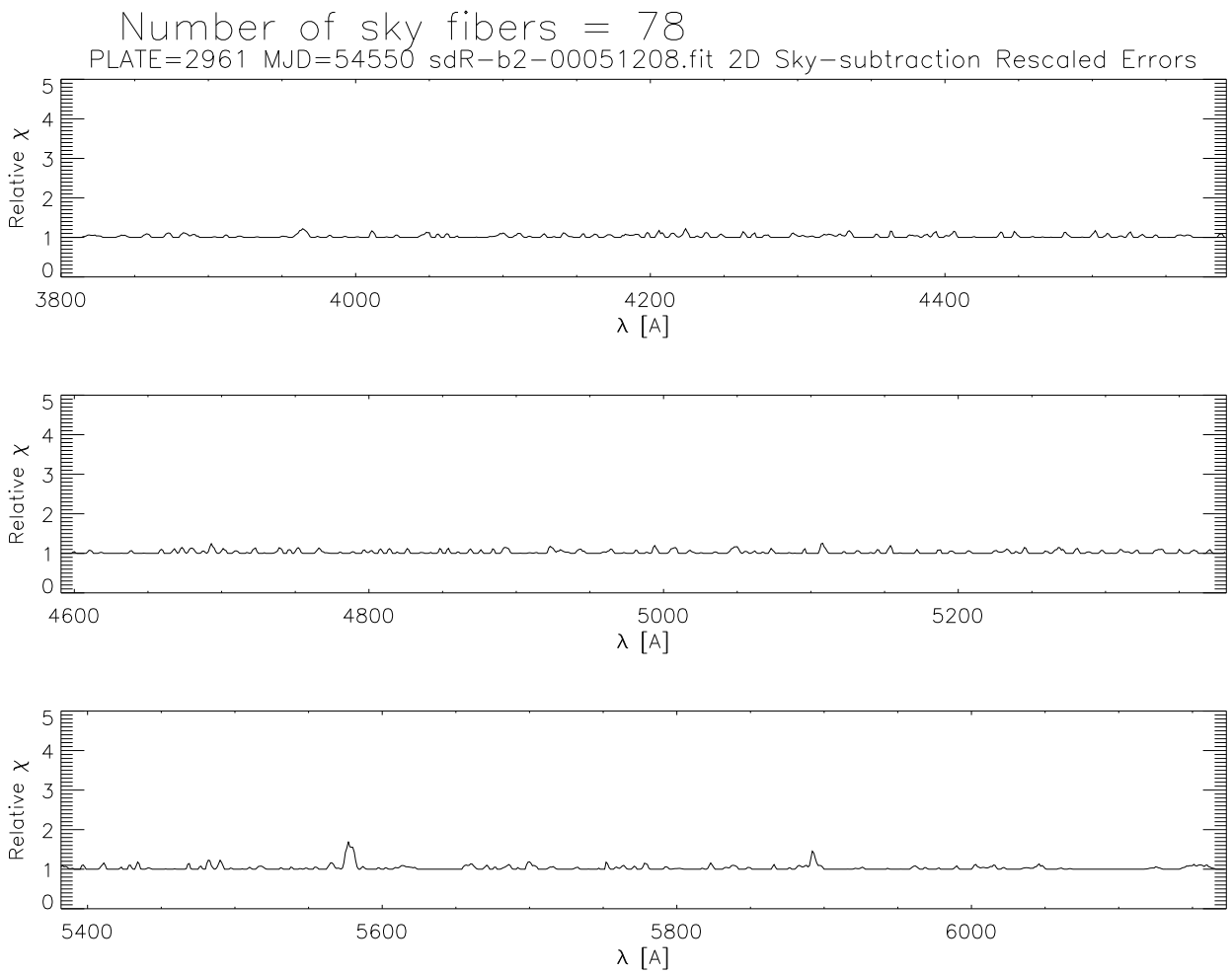

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

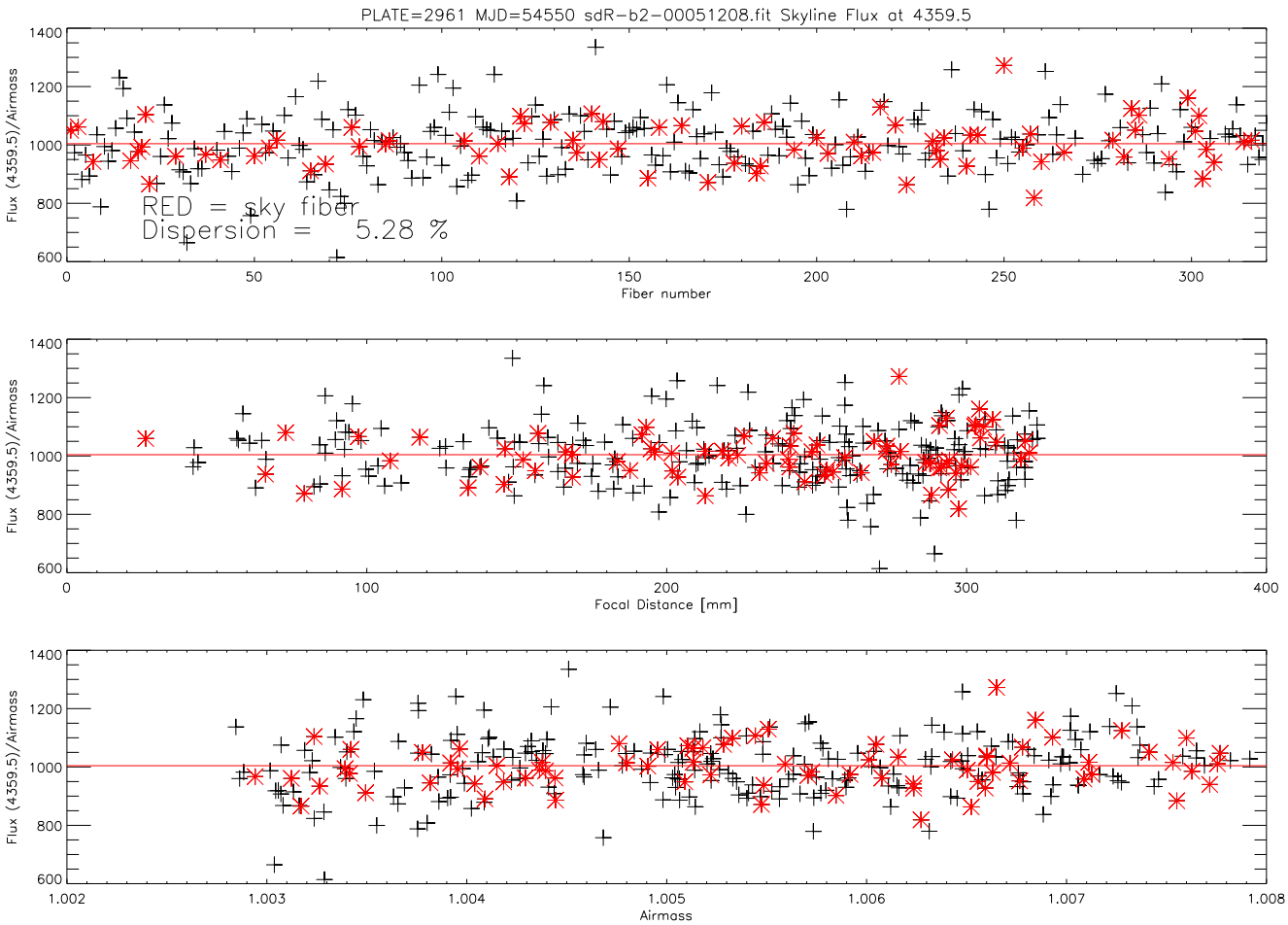

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051208.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

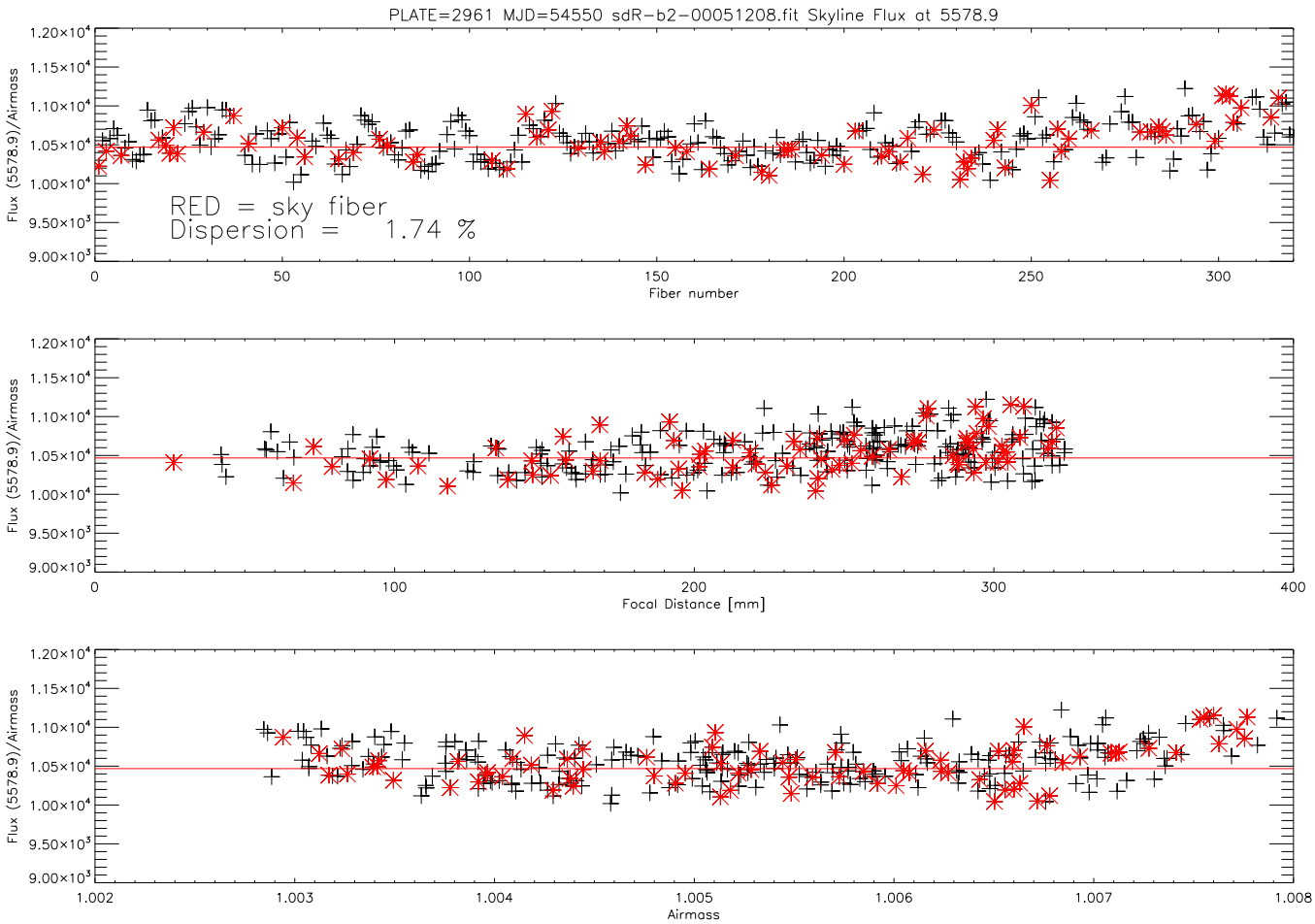

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

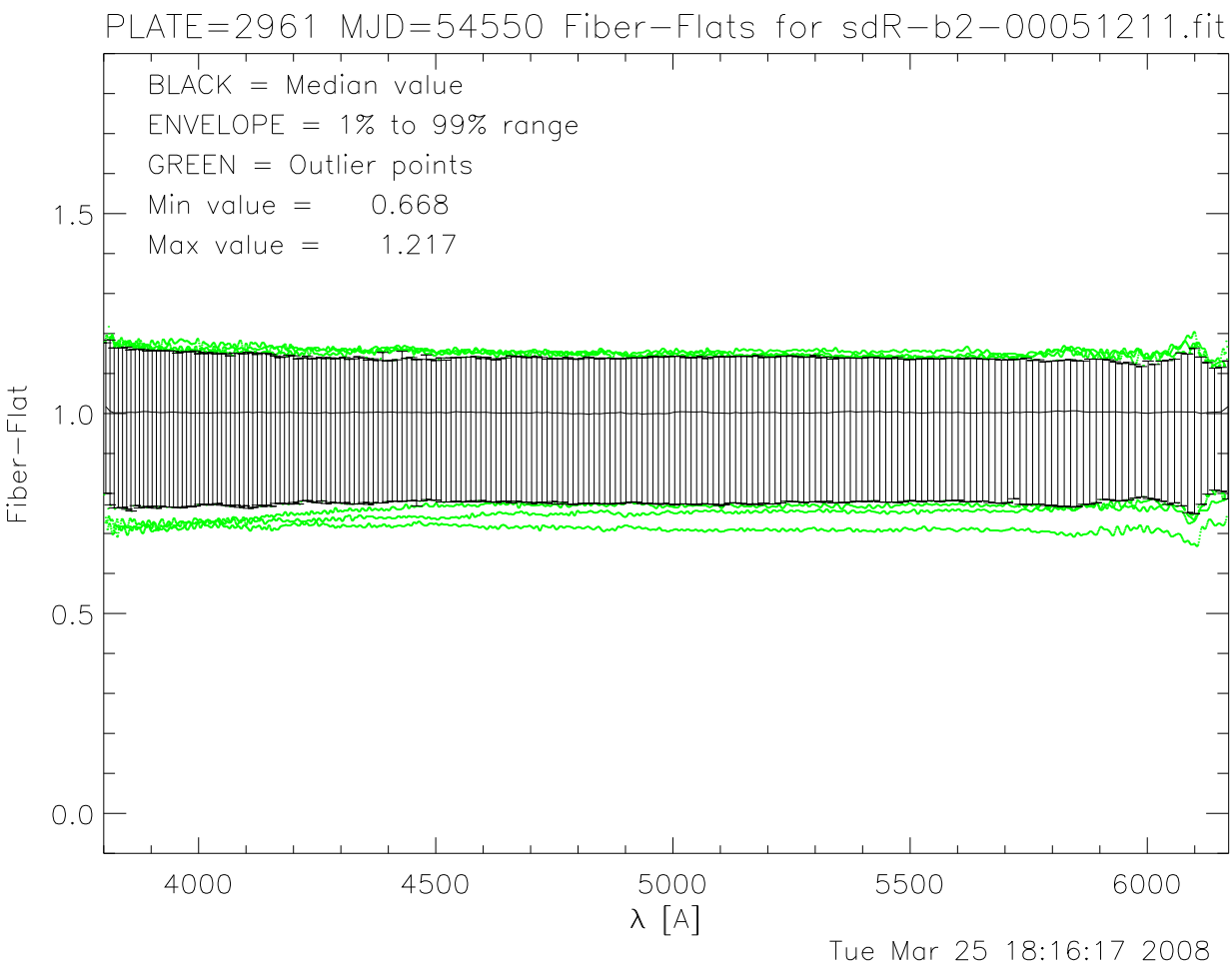

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

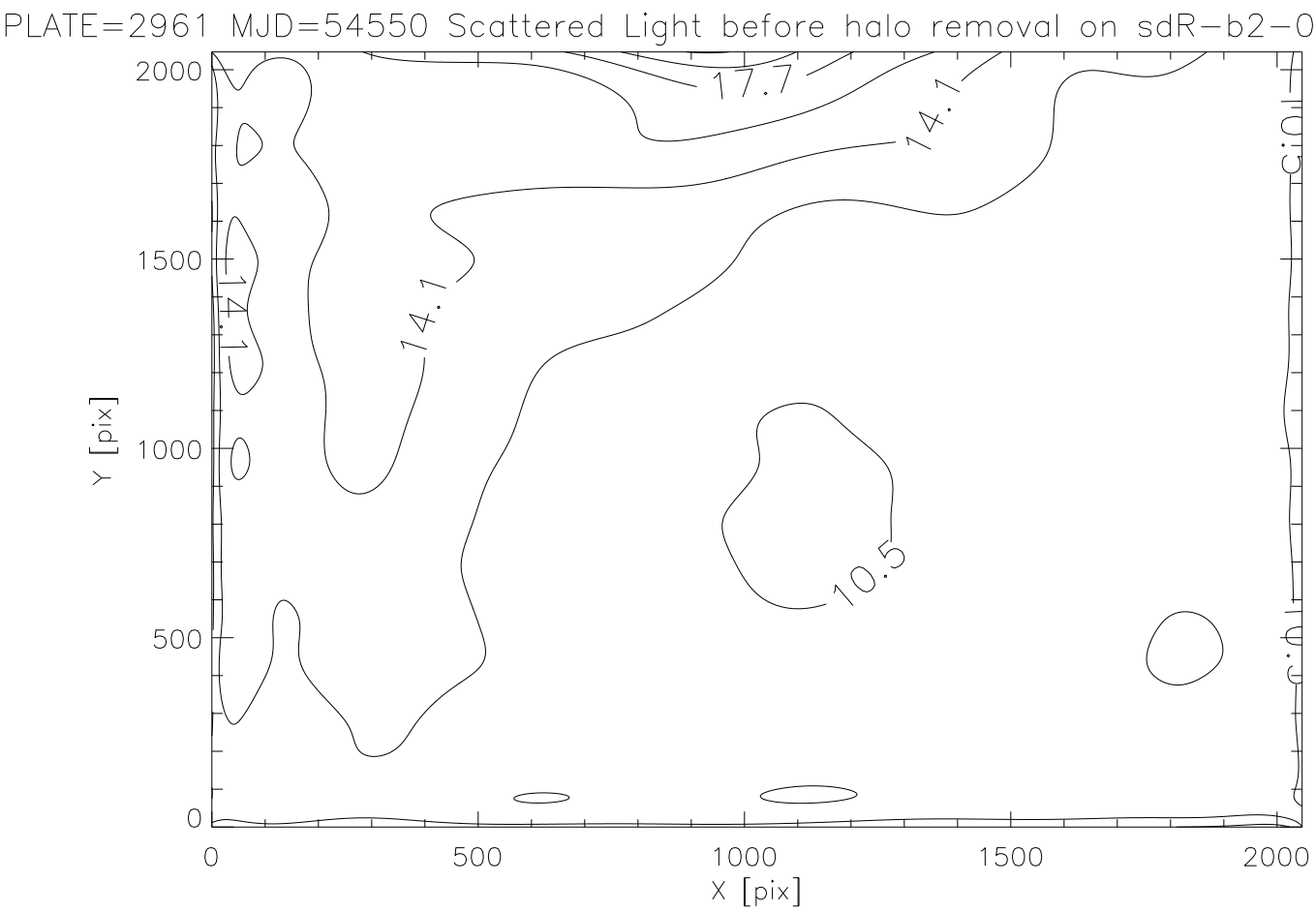

PLATE=2961 MJD=54550 sdR-b2-00051208.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

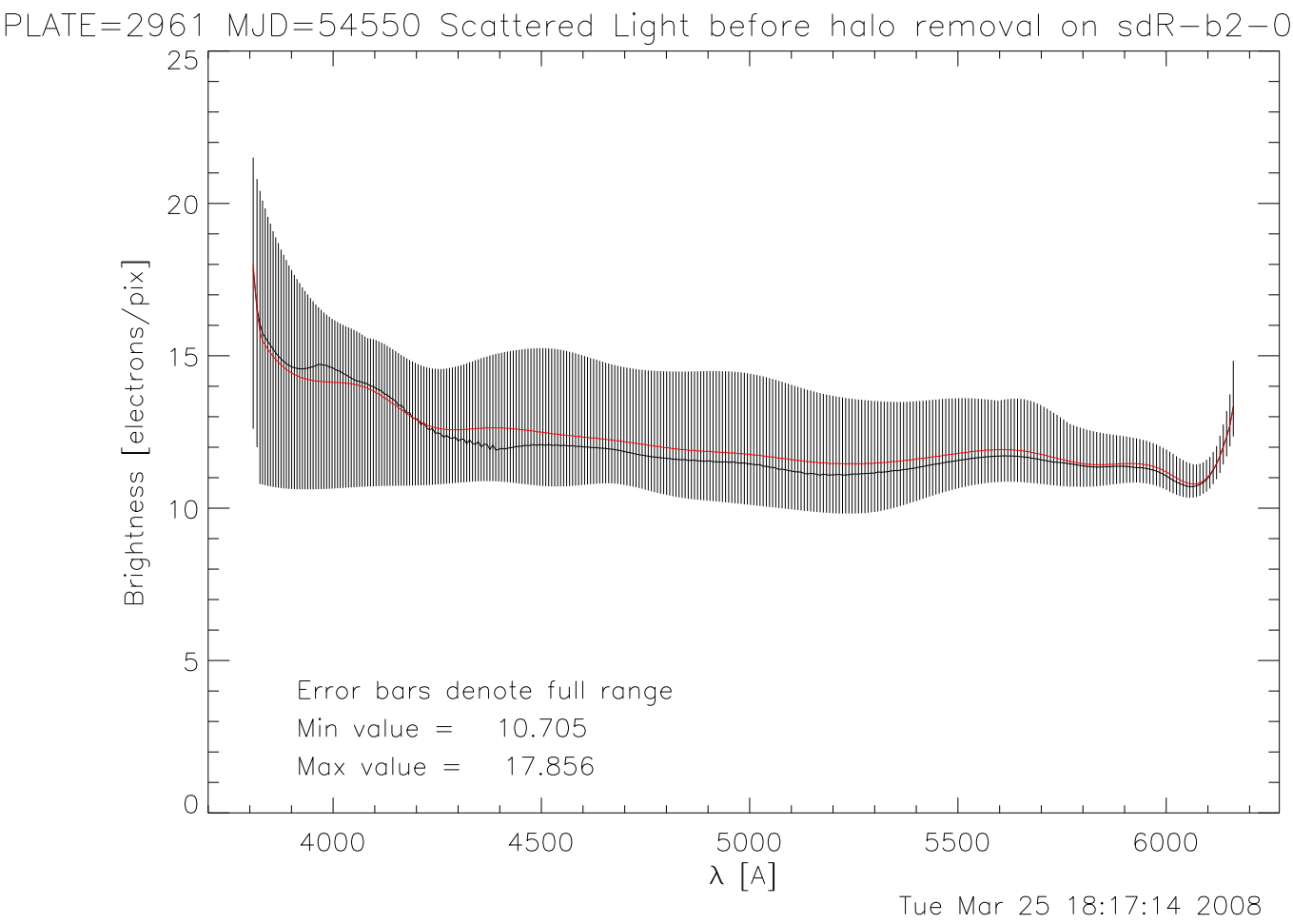

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051208.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

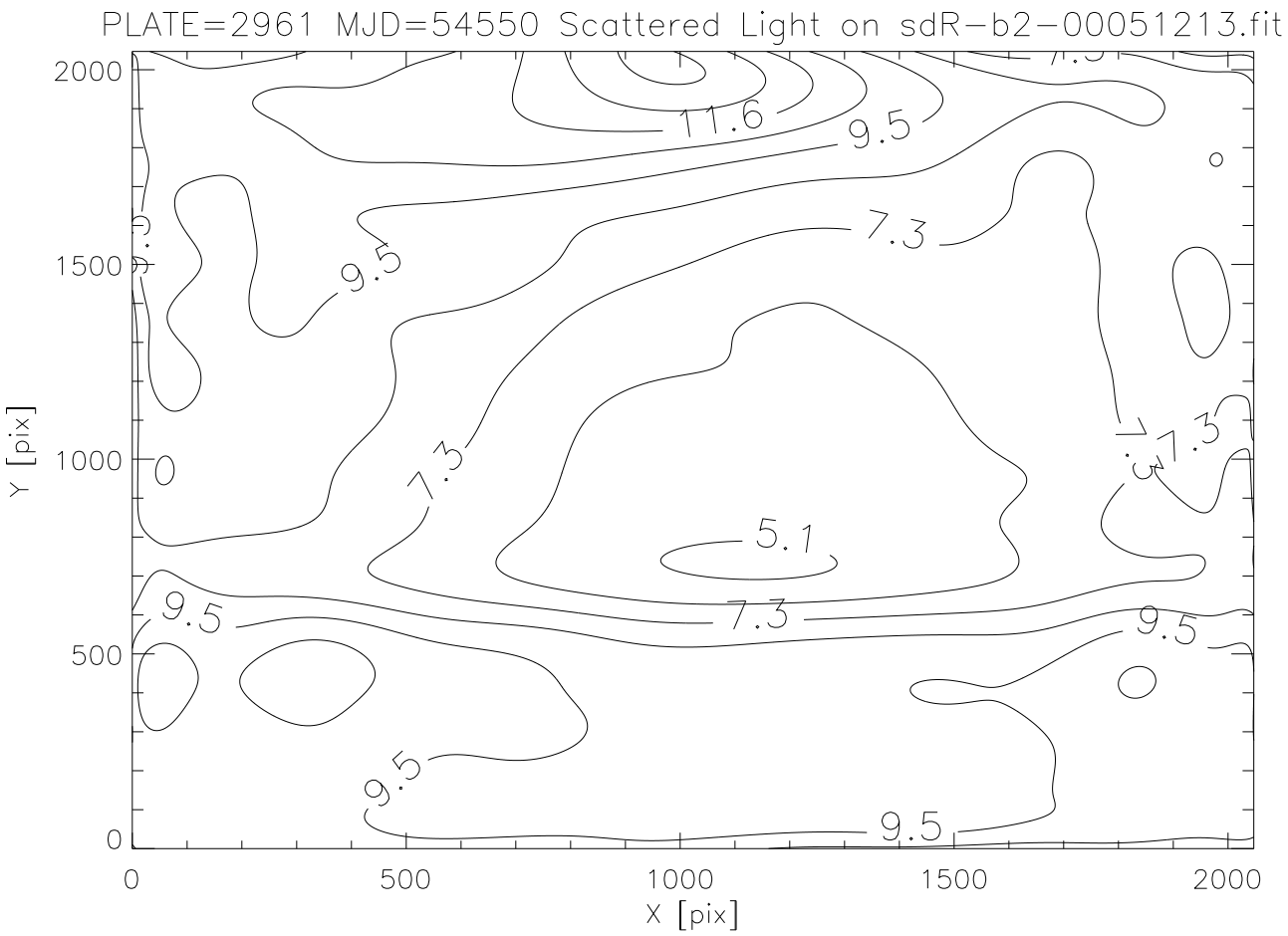

PLATE=2961 MJD=54550 sdR-b2-00051208.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.28 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

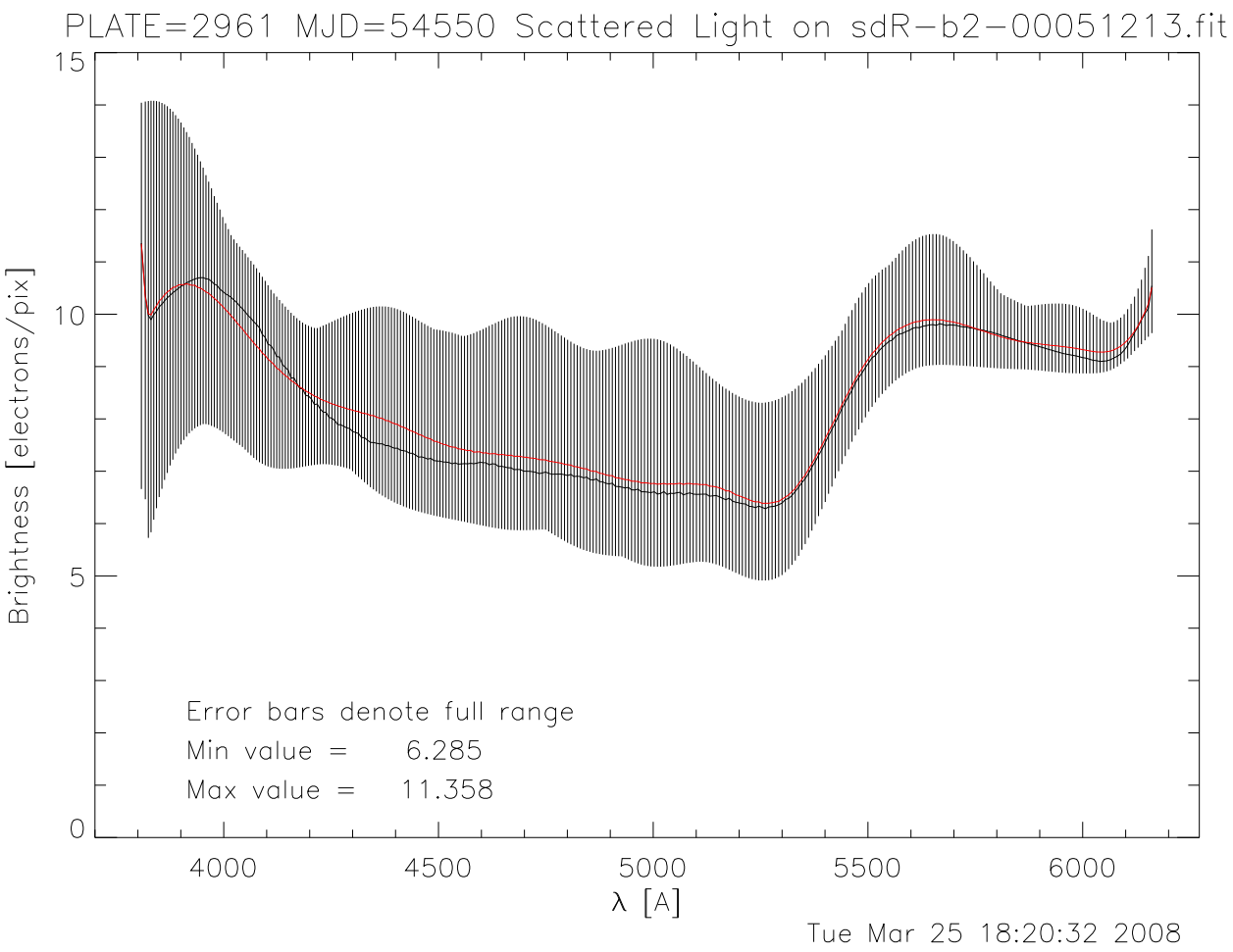

PLATE=2961 MJD=54550 sdR-b2-00051208.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.74 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

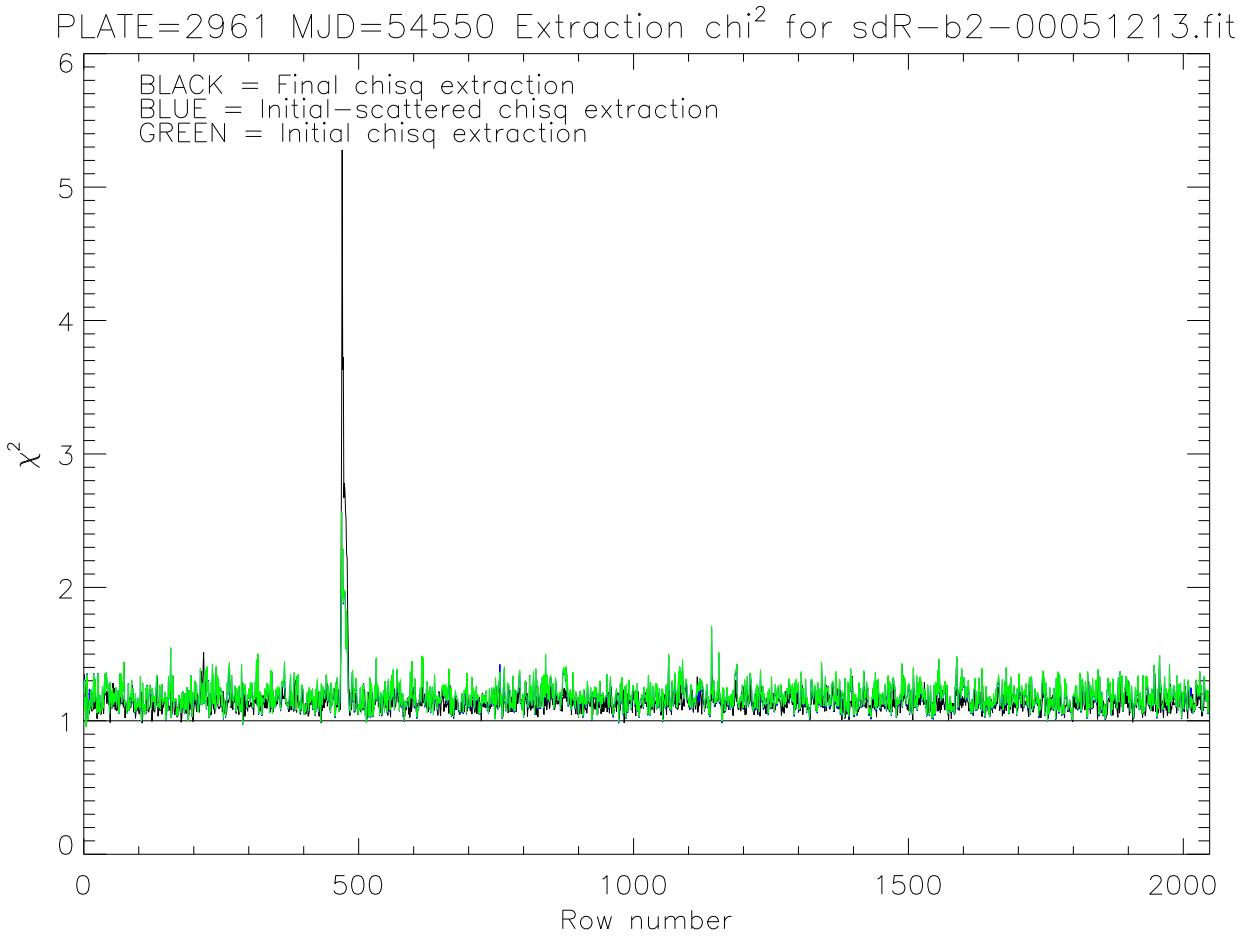

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:16:17 2008

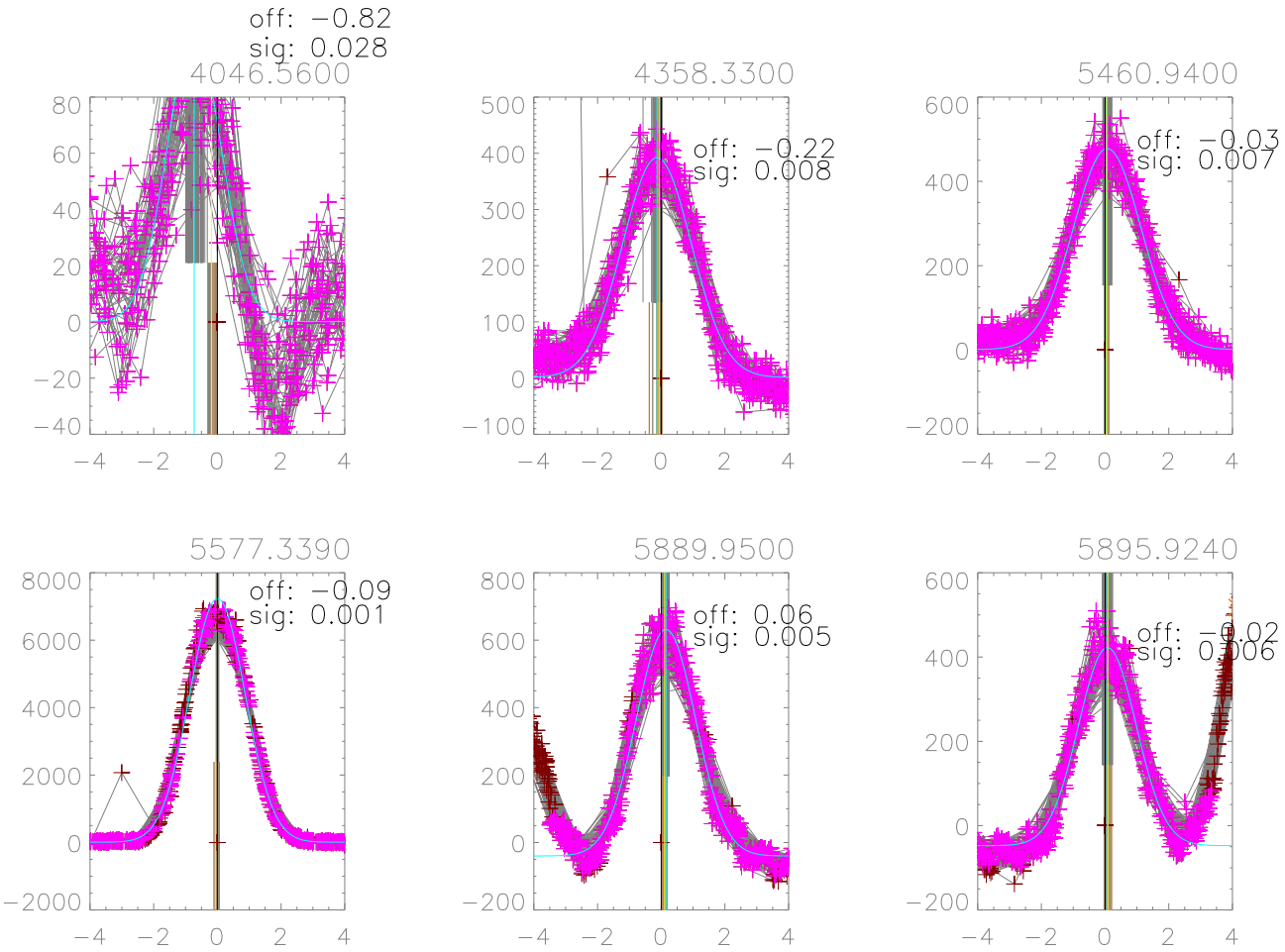

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051213.f
17.7
14.1
14.1
14.1
10.5
Y [pix]
X [pix]
0
500
1000
1500
2000

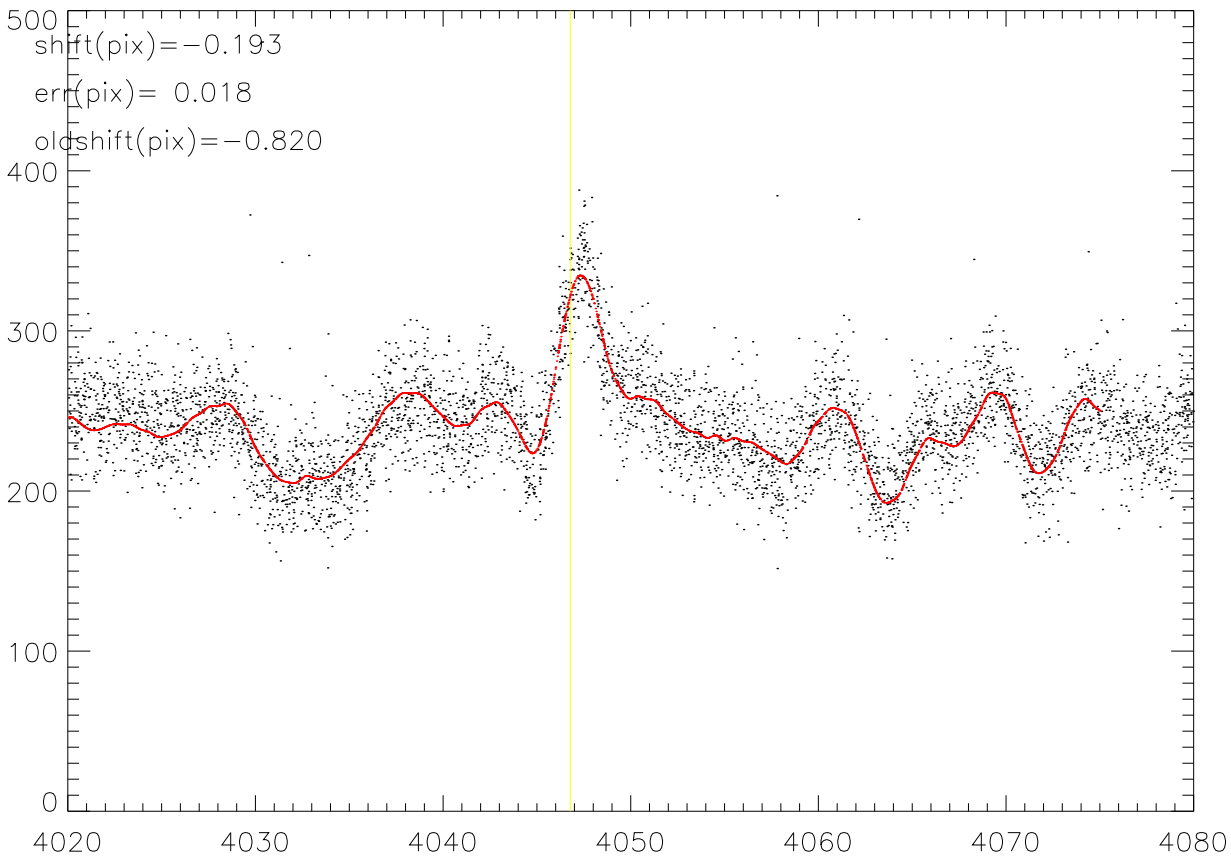

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051213.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 10.705
Max value = 17.856
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:17:14 2008

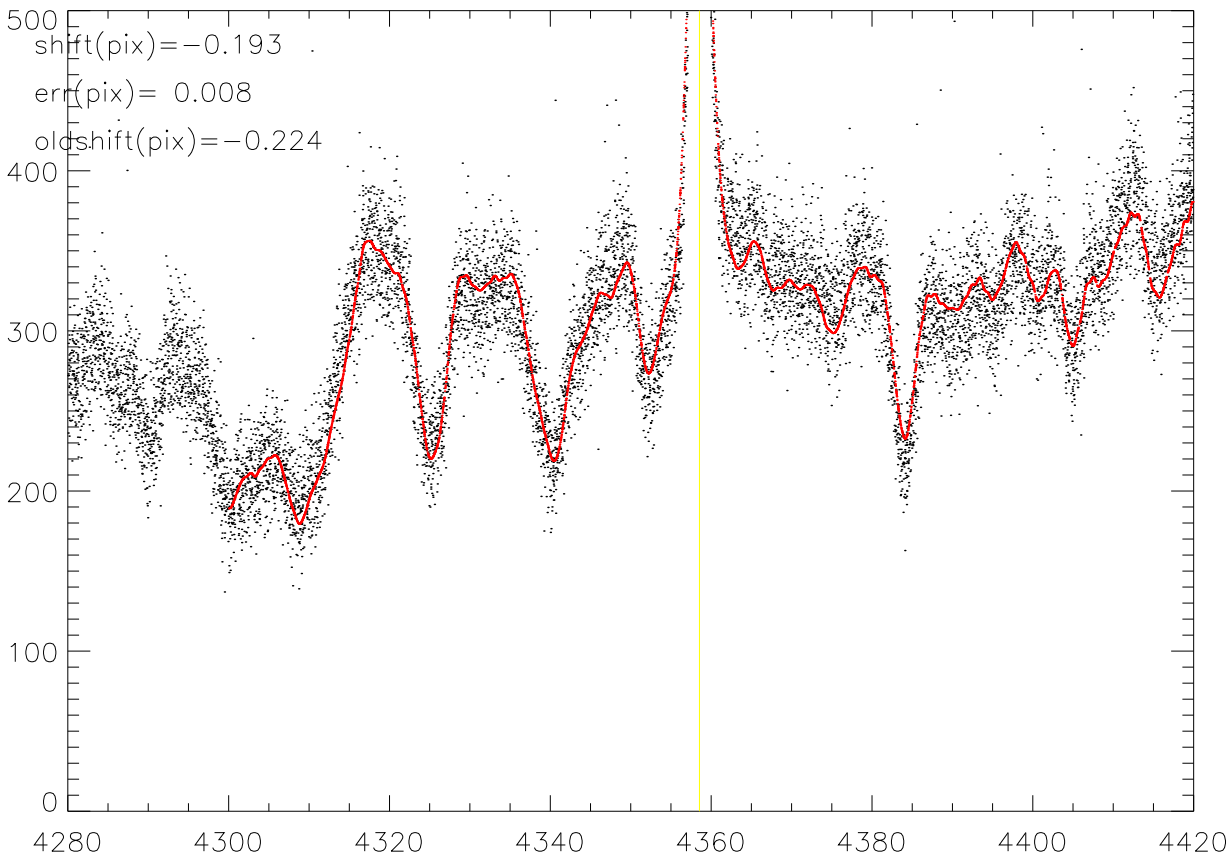

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051213.fit
11.6
9.5
7.3
5.1
0
Y [pix]
X [pix]
0
500
1000
1500
2000

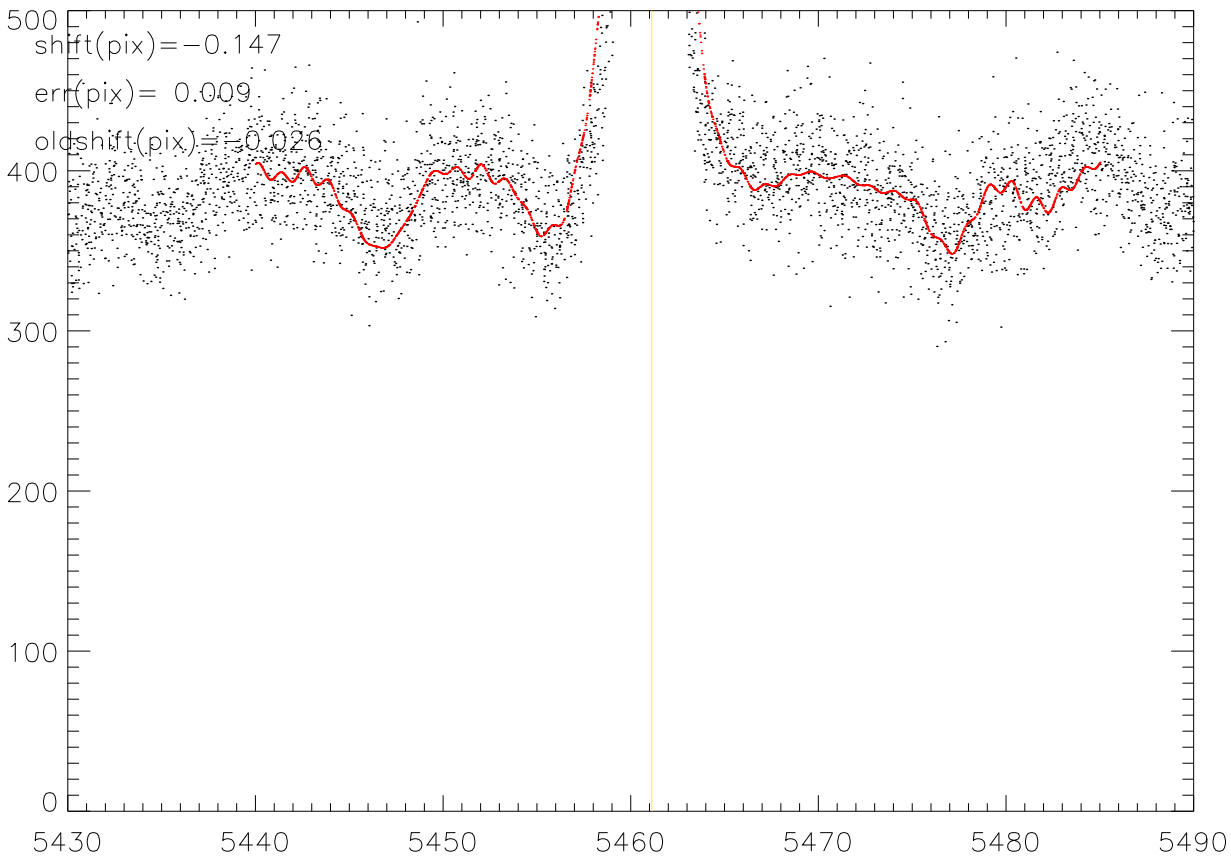

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051213.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.285
Max value = 11.358
Tue Mar 25 18:20:32 2008

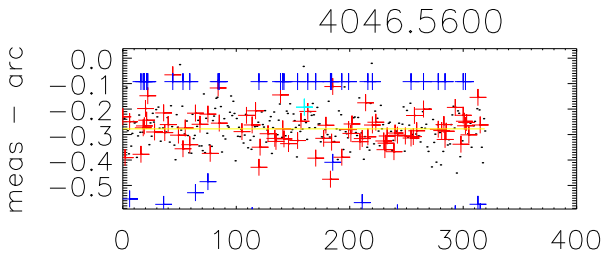

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b2-00051213.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

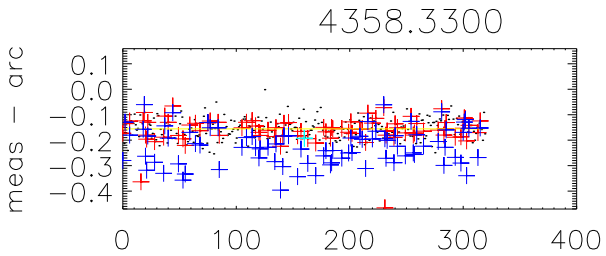

4046.5600
off: −0.82
sig: 0.028
4358.3300
off: −0.22
sig: 0.008
5460.9400
off: −0.03
sig: 0.007
5577.3390
off: −0.09
sig: 0.001
5889.9500
off: 0.06
sig: 0.005
5895.9240
off: −0.02
sig: 0.006

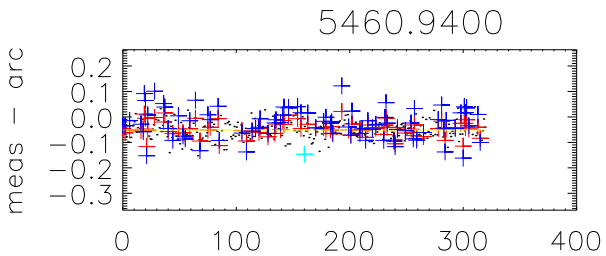

shift(pix)=−0.193
err(pix)= 0.018
oldshift(pix)=−0.820
500
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

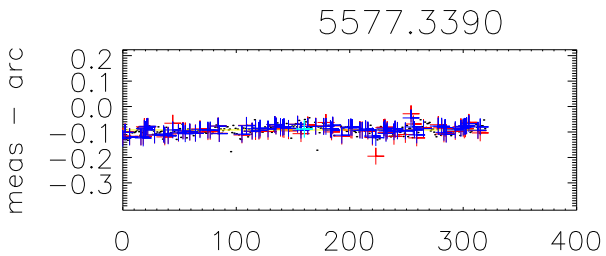

shift(pix)=−0.193
err(pix)= 0.008
oldshift(pix)=−0.224
500
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

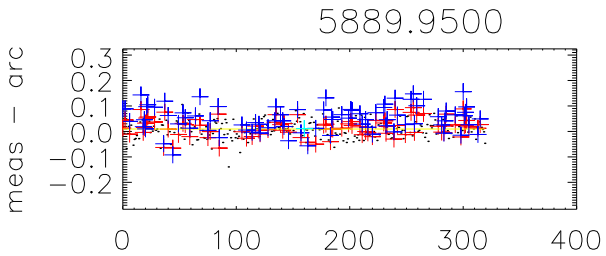

shift(pix)=−0.147
err(pix)= 0.009
oldshift(pix)=−0.026
500
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

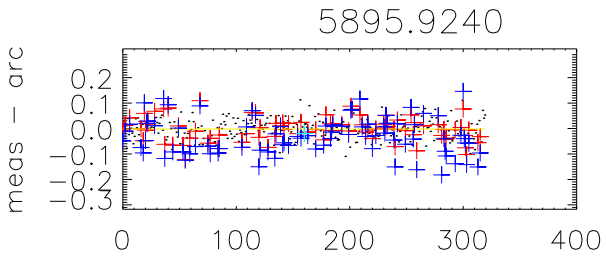

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

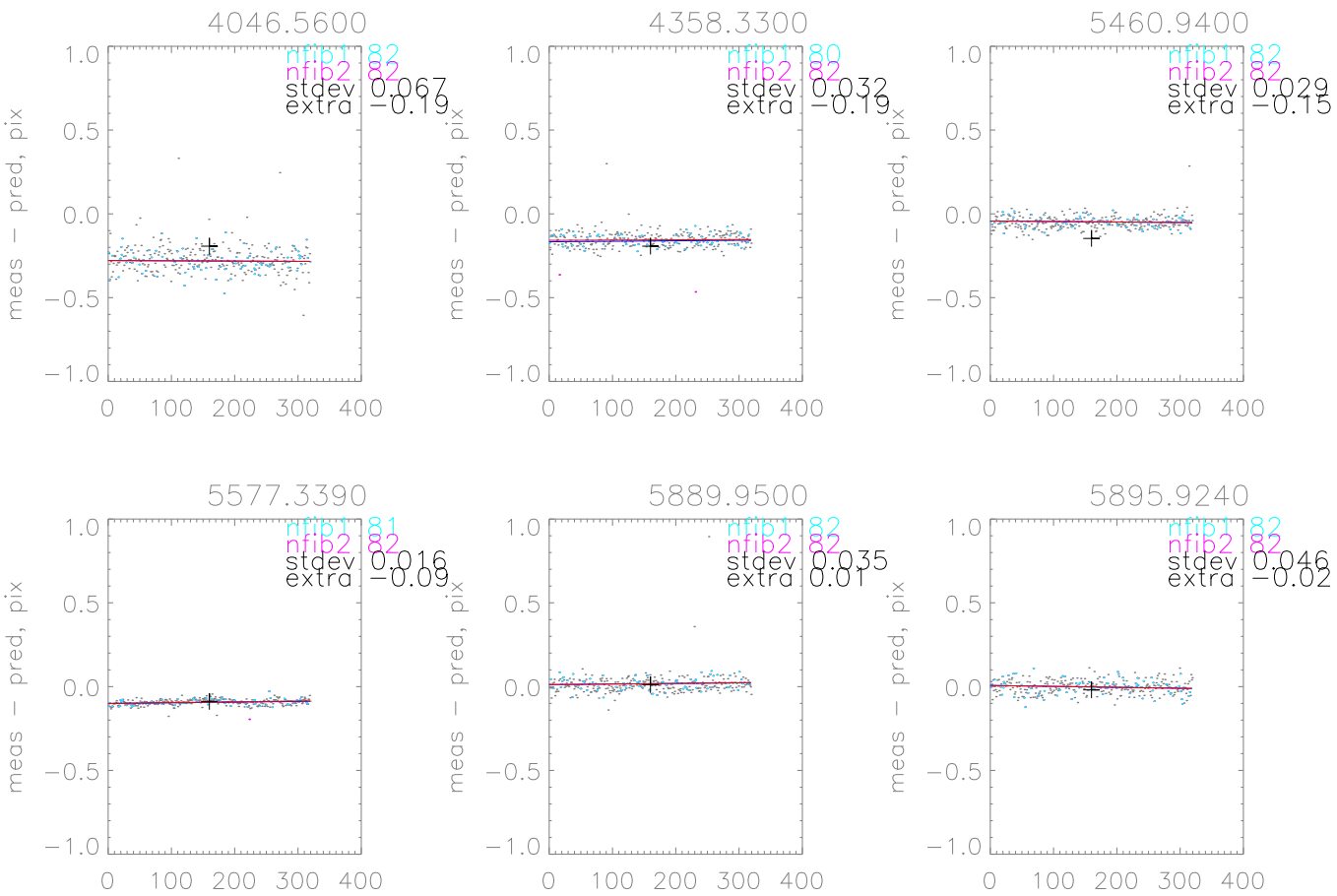

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

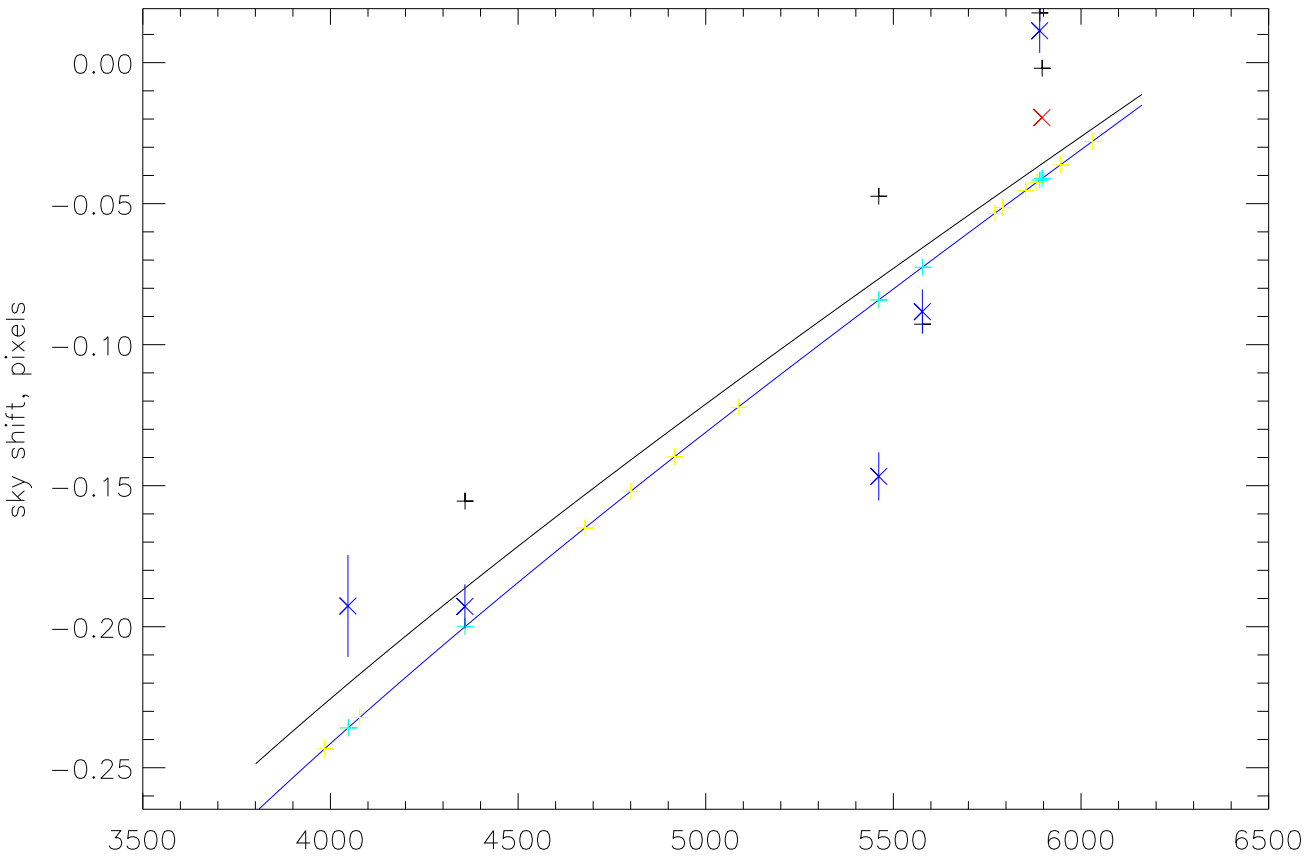

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

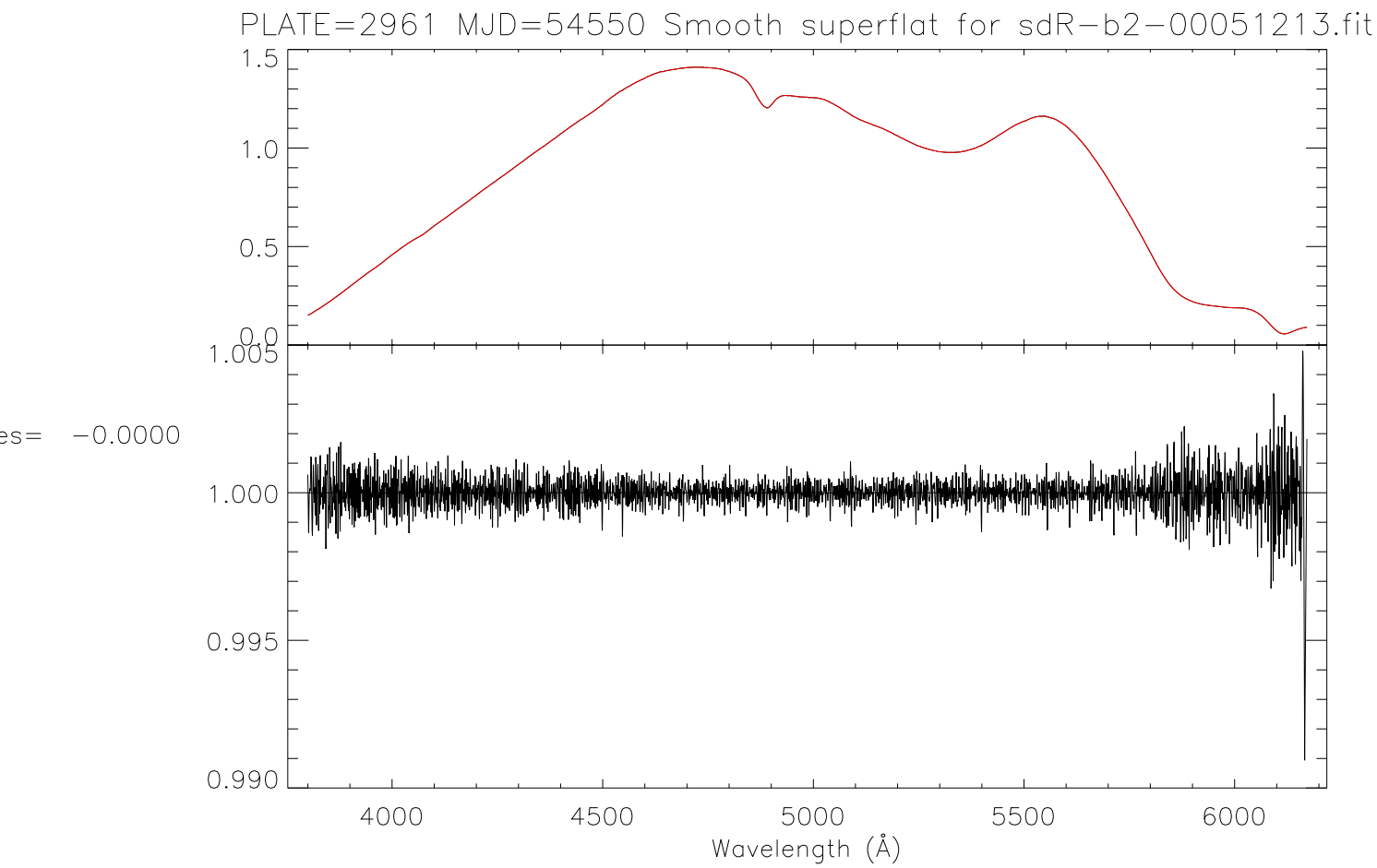

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

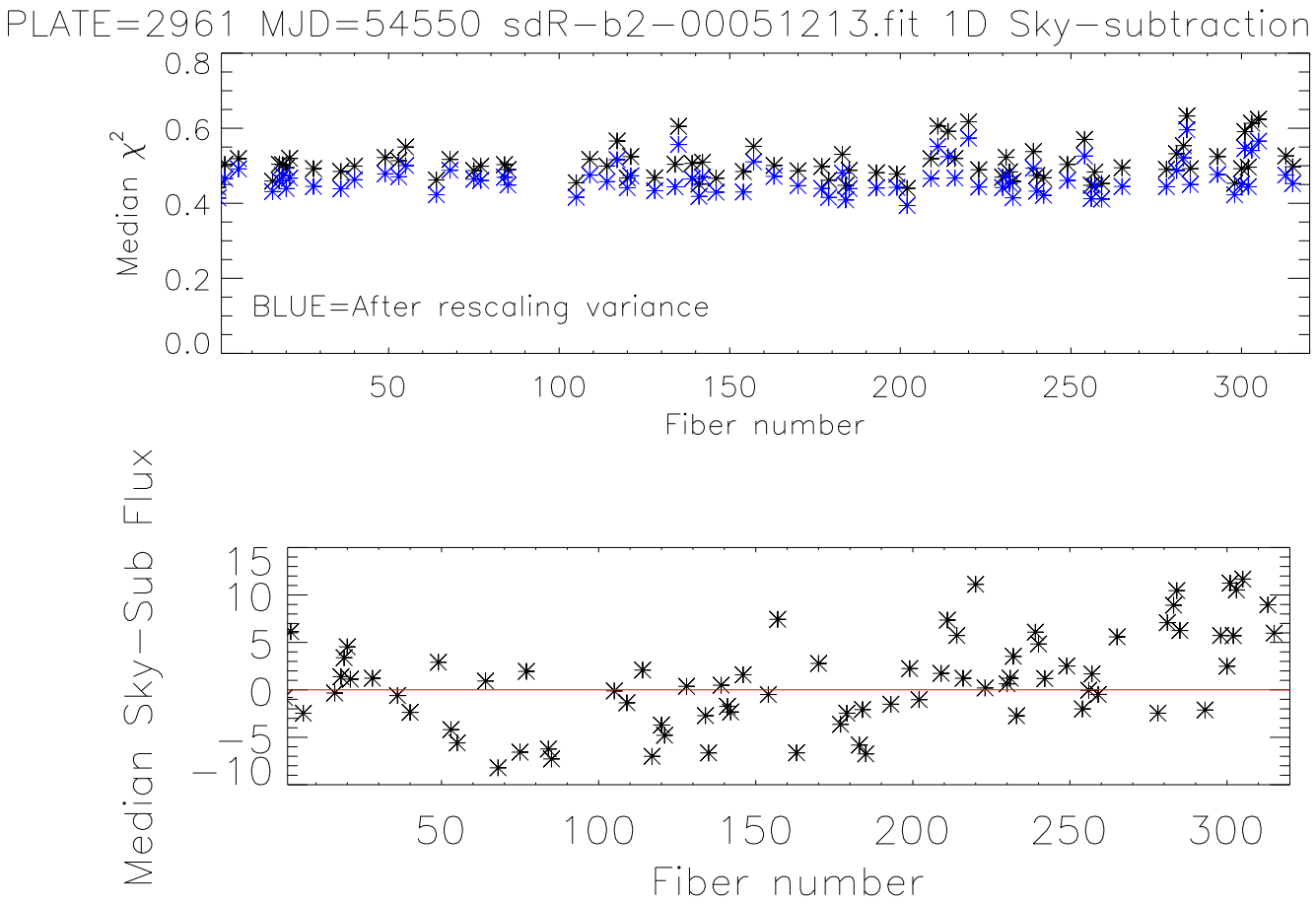

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

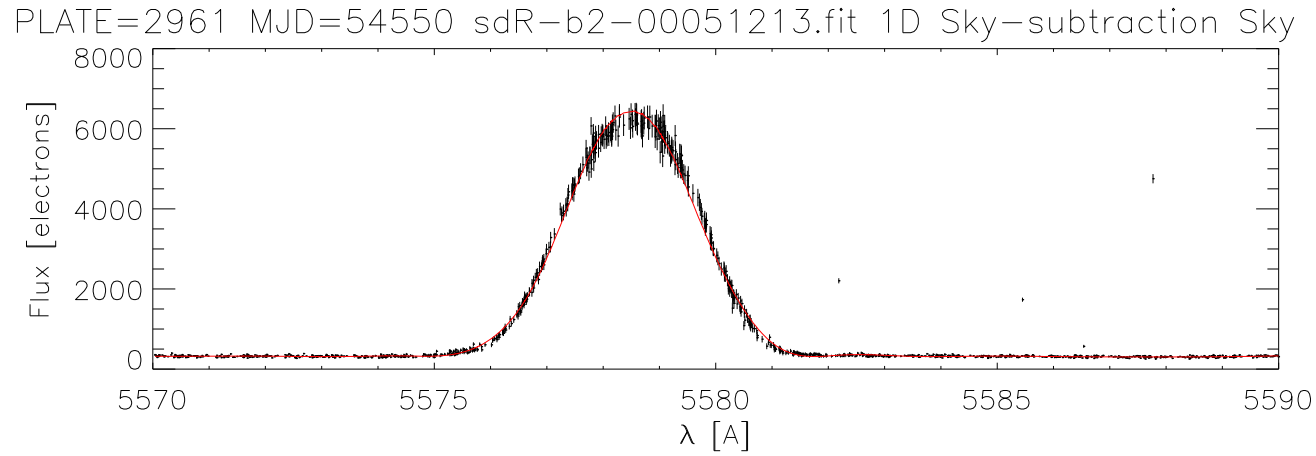

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

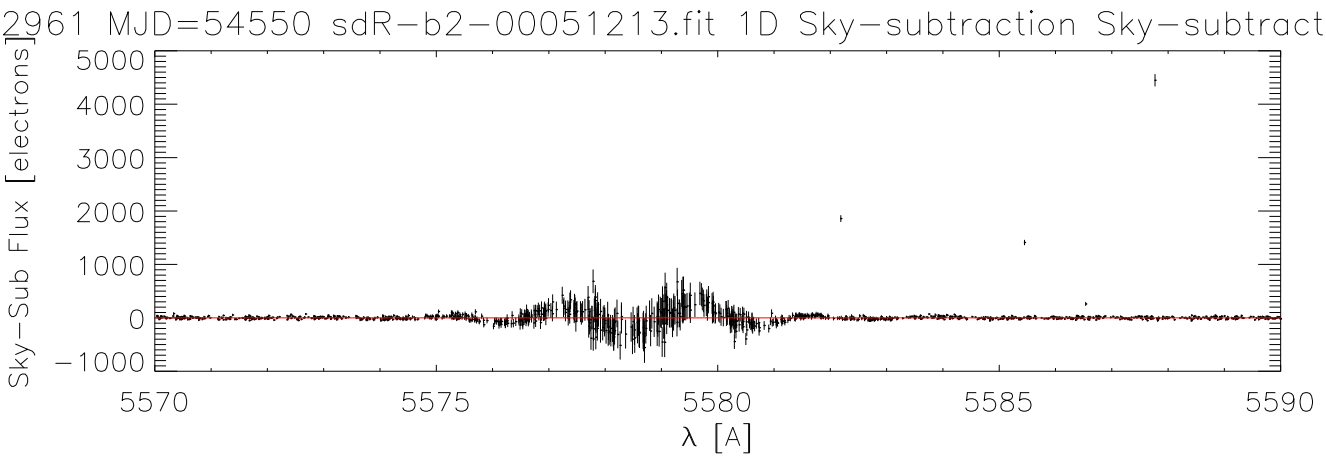

4046.5600
nfib1 82
nfib2 82
stdev 0.067
extra −0.19
4358.3300
nfib1 80
nfib2 82
stdev 0.032
extra −0.19
5460.9400
nfib1 82
nfib2 82
stdev 0.029
extra −0.15
5577.3390
nfib1 81
nfib2 82
stdev 0.016
extra −0.09
5889.9500
nfib1 82
nfib2 82
stdev 0.035
extra 0.01
5895.9240
nfib1 82
nfib2 82
stdev 0.046
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

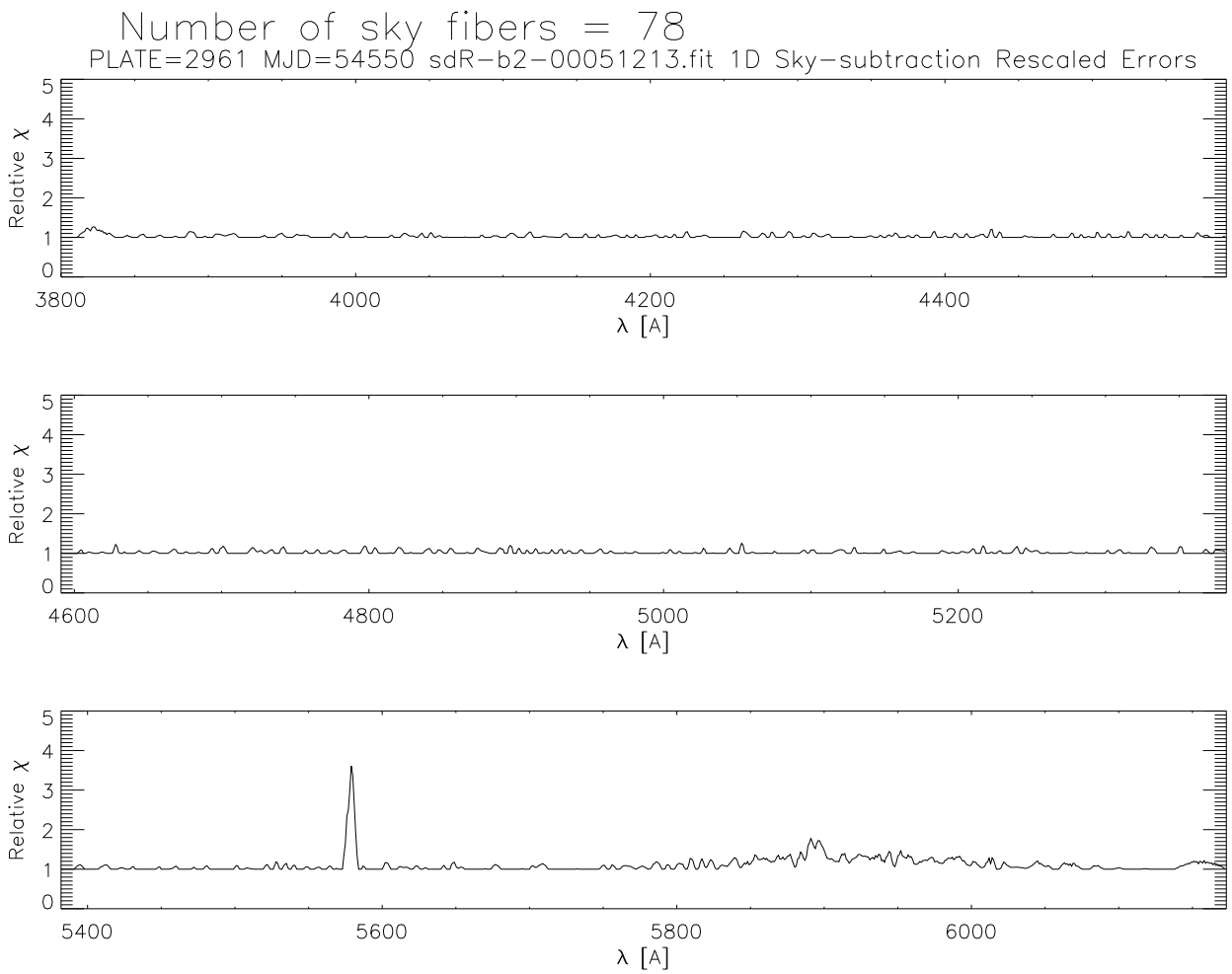

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

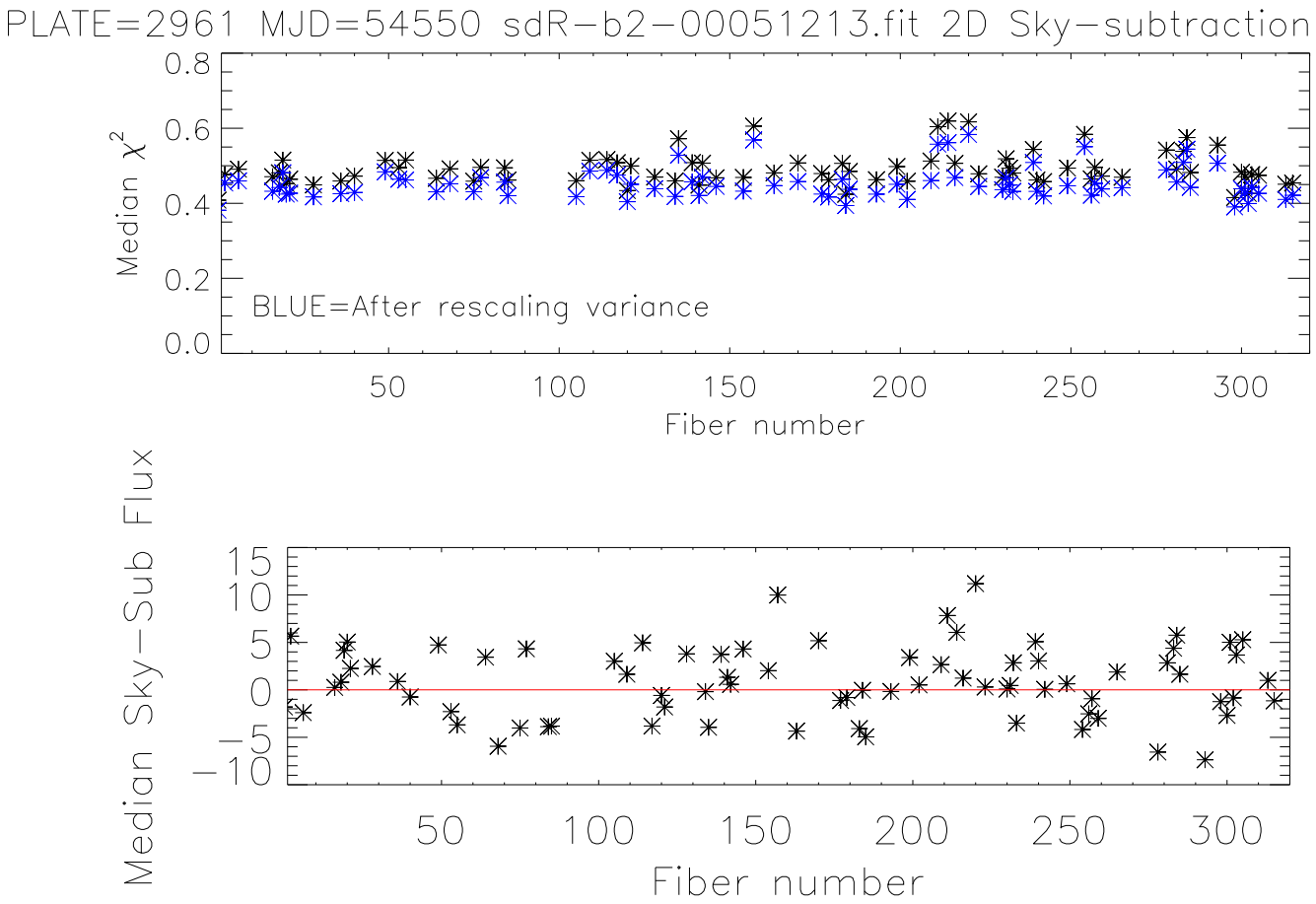

PLATE=2961 MJD=54550 Smooth superflat for sdR-b2-00051213.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

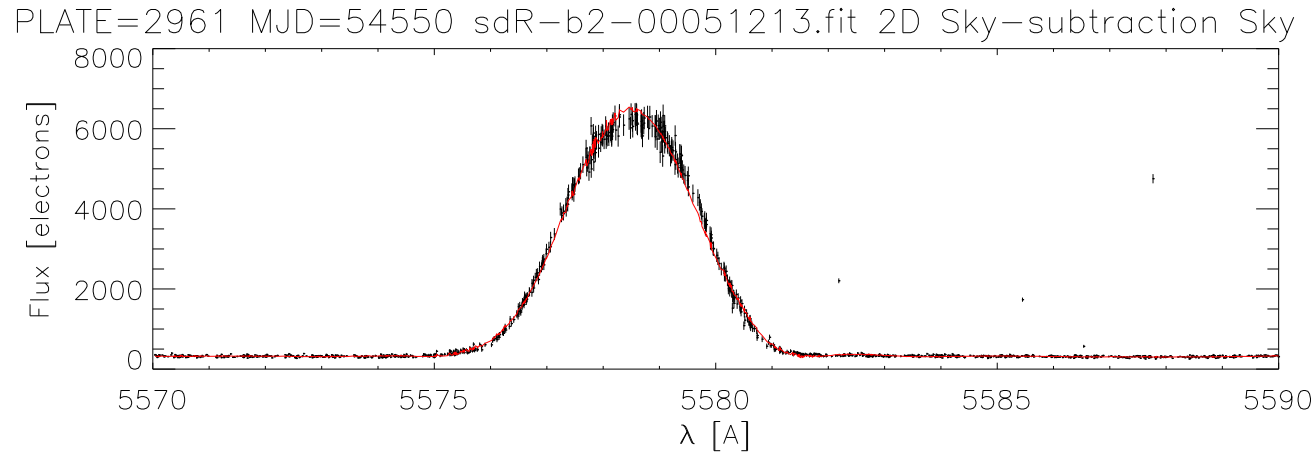

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

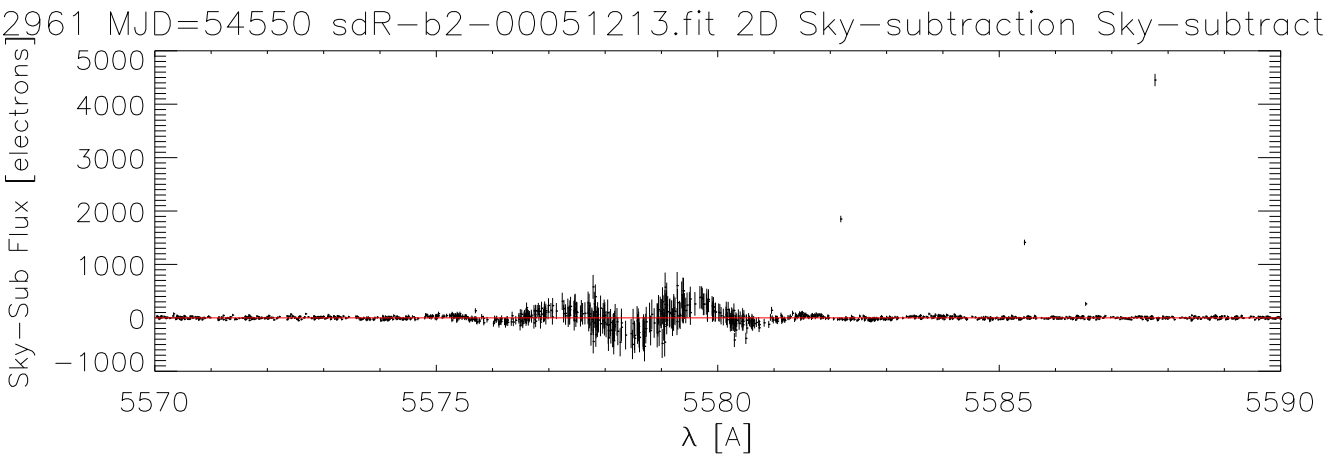

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

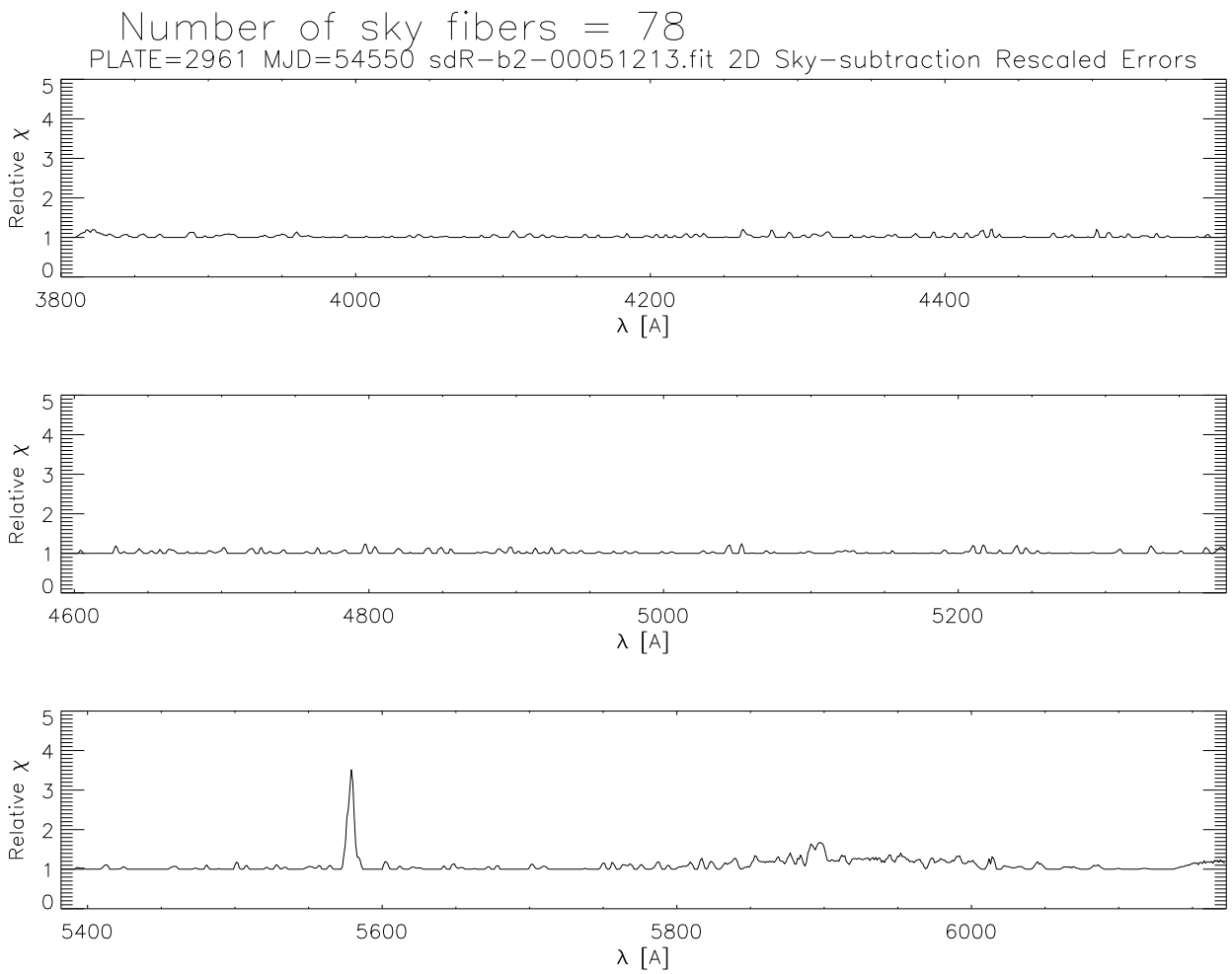

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

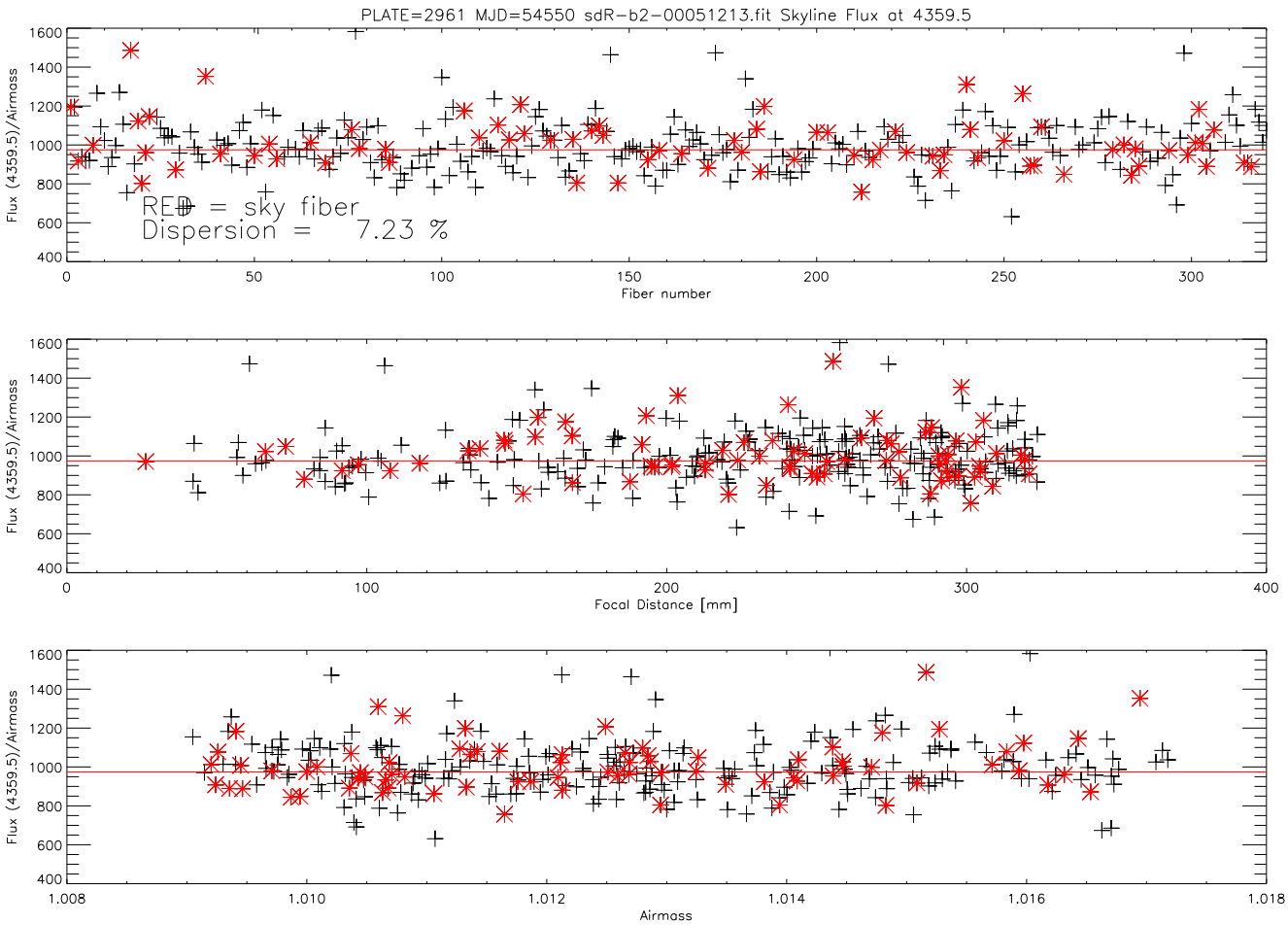

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051213.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

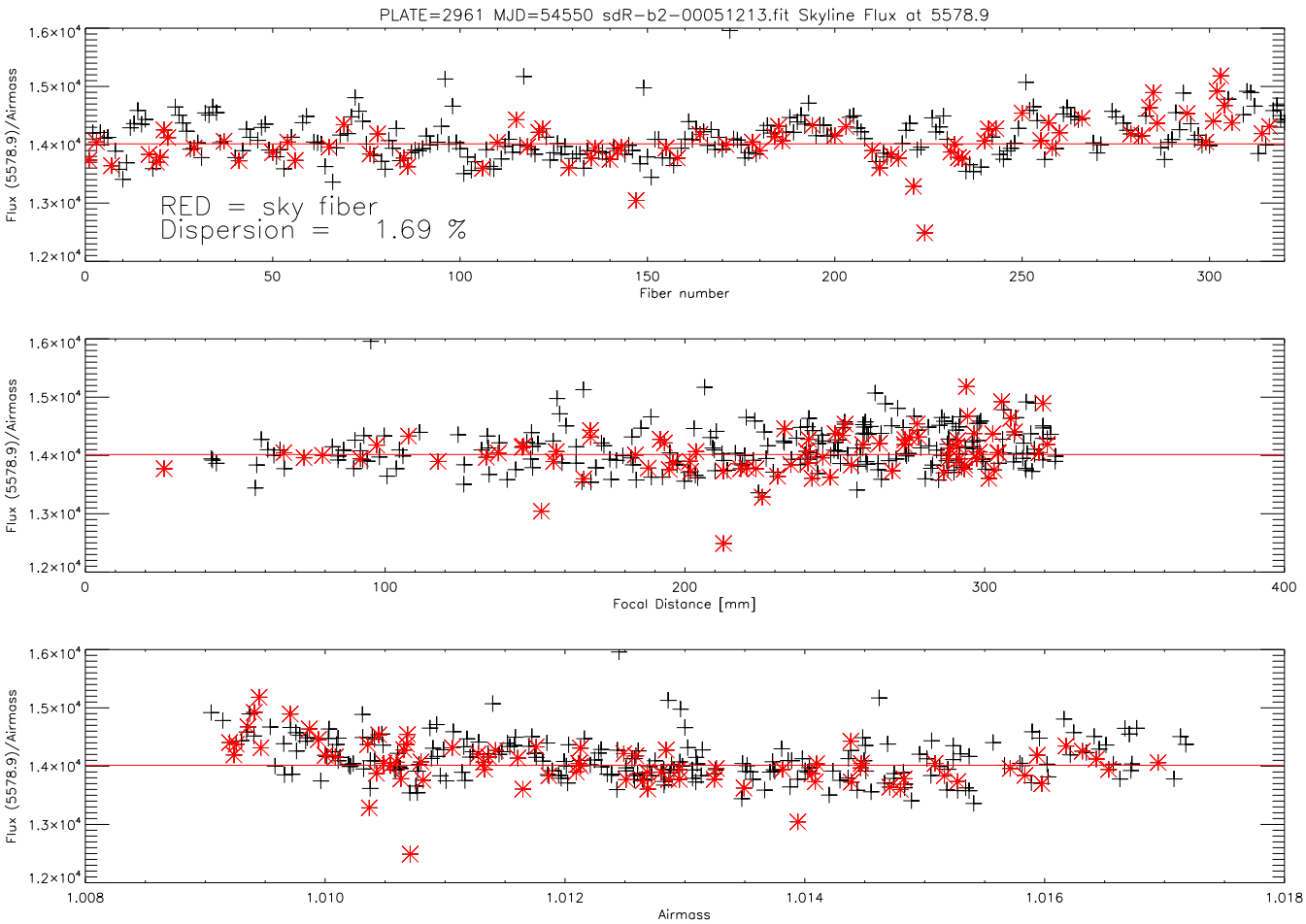

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

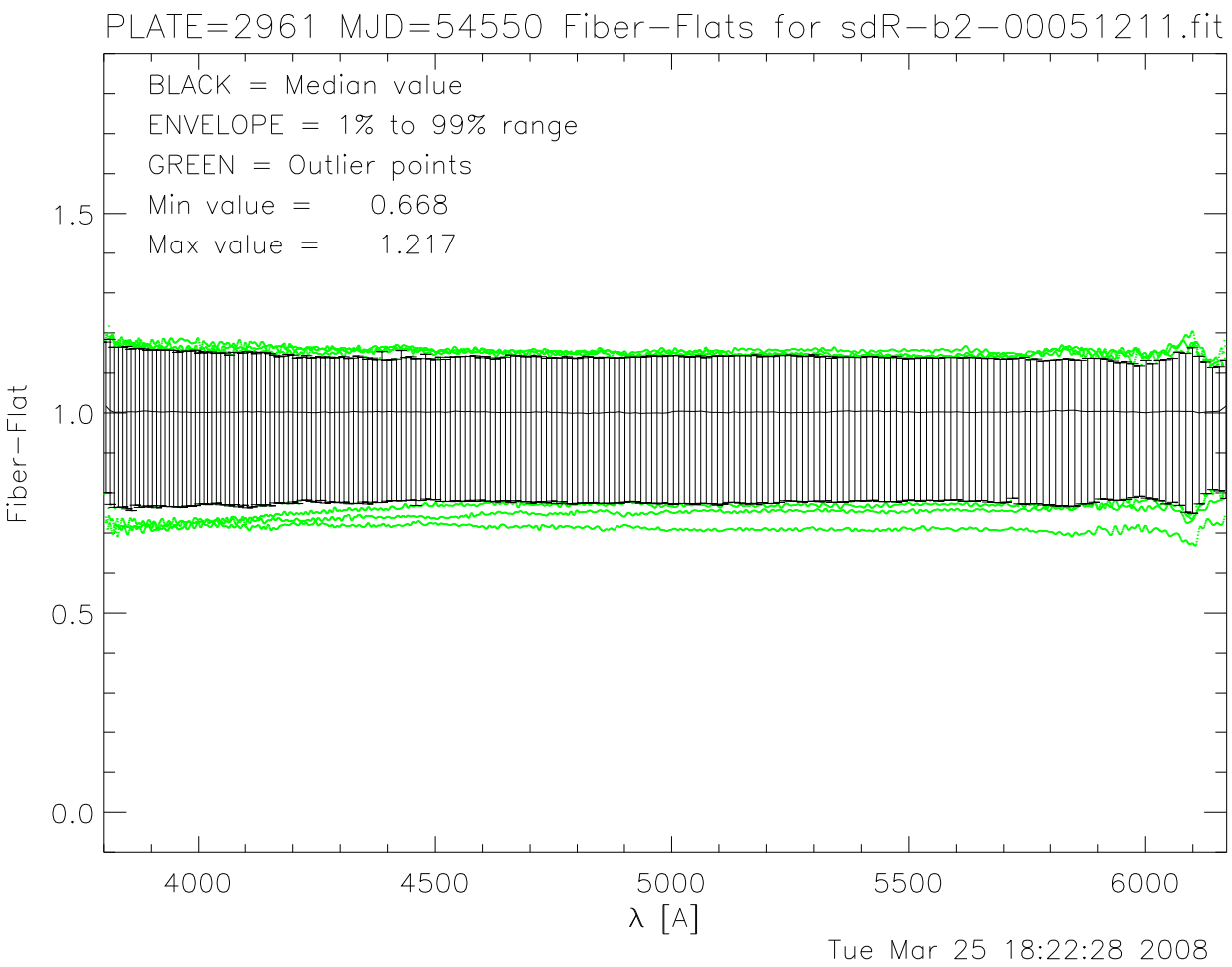

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

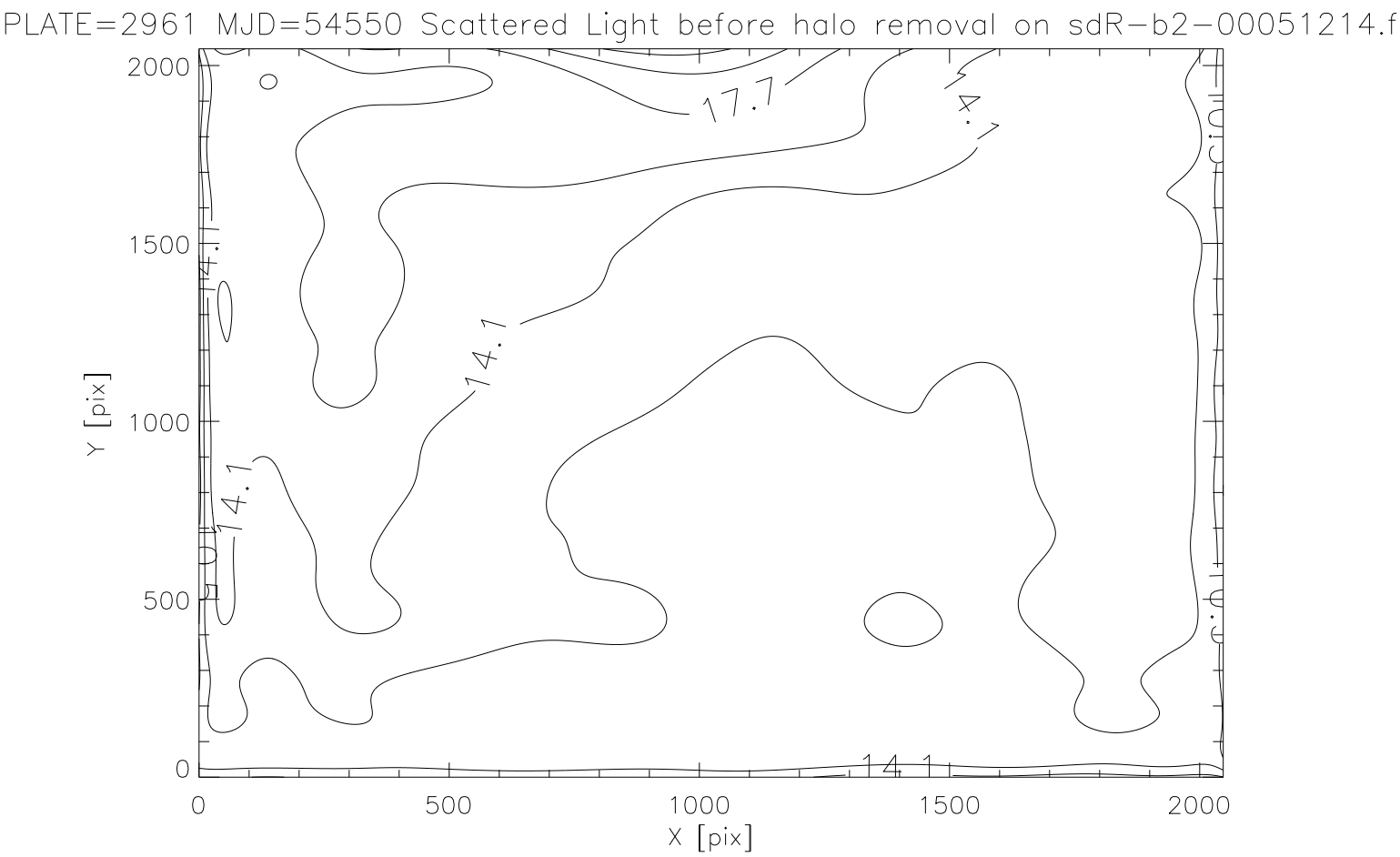

PLATE=2961 MJD=54550 sdR-b2-00051213.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

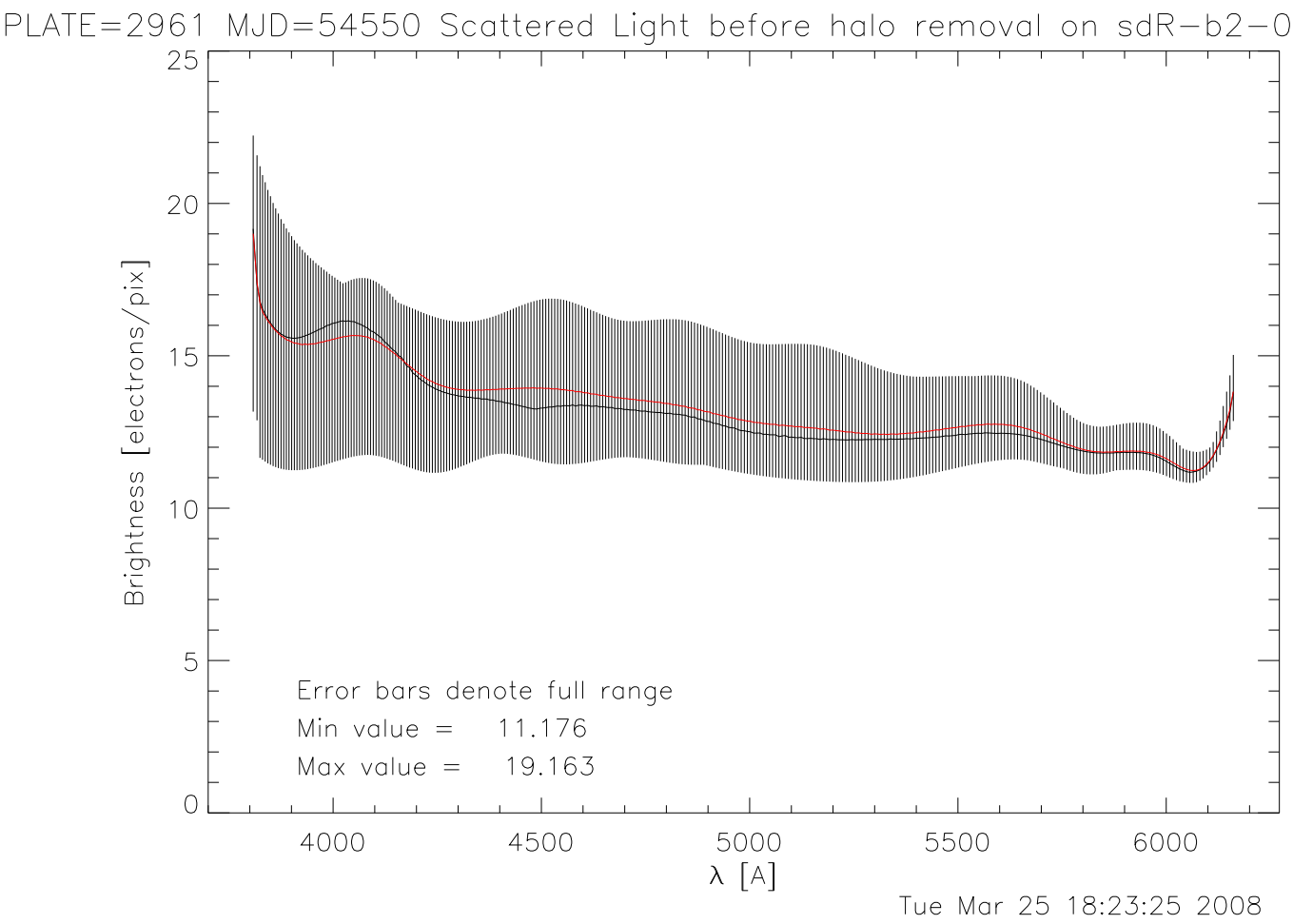

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-b2-00051213.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

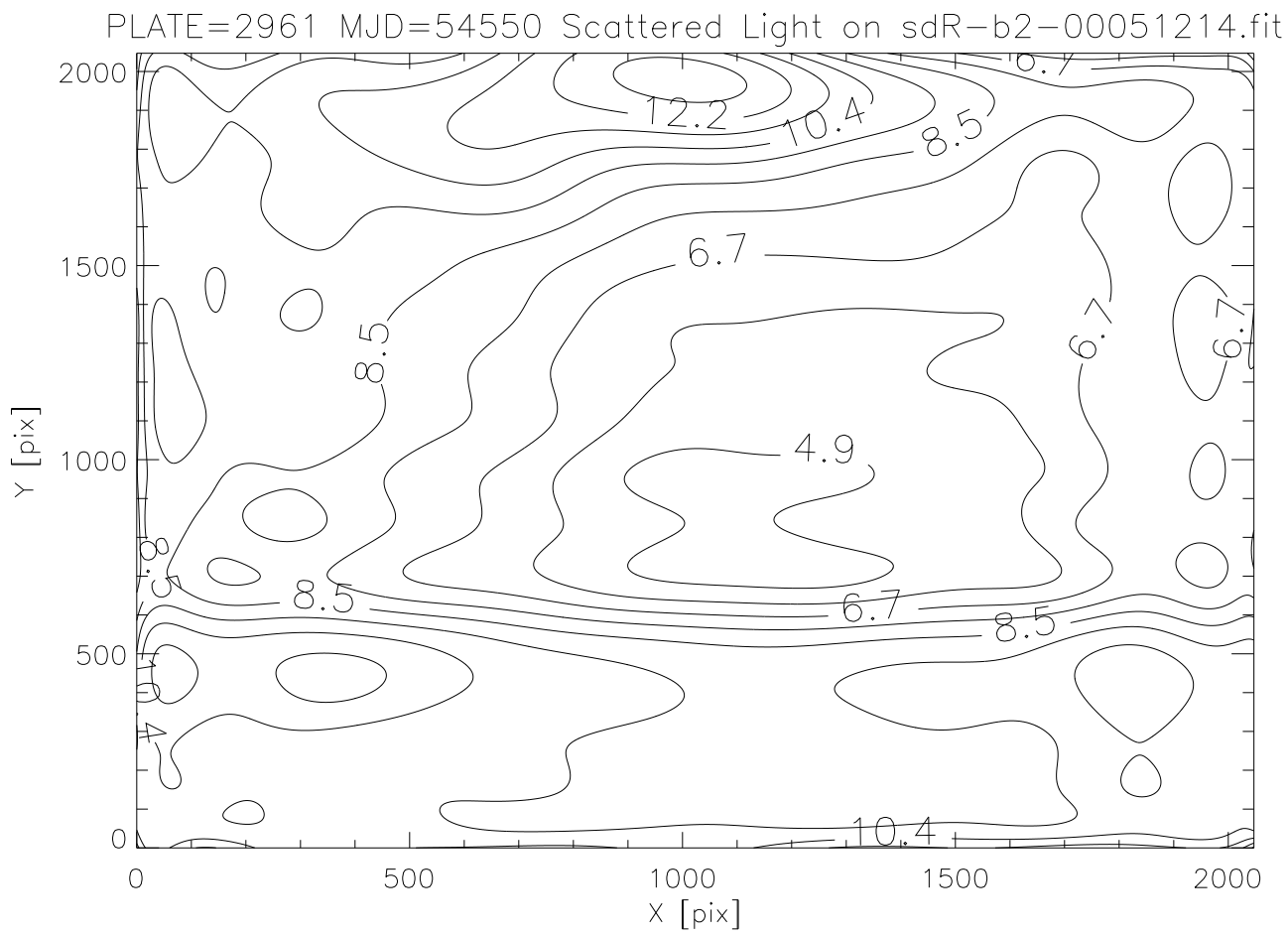

PLATE=2961 MJD=54550 sdR-b2-00051213.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.23 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

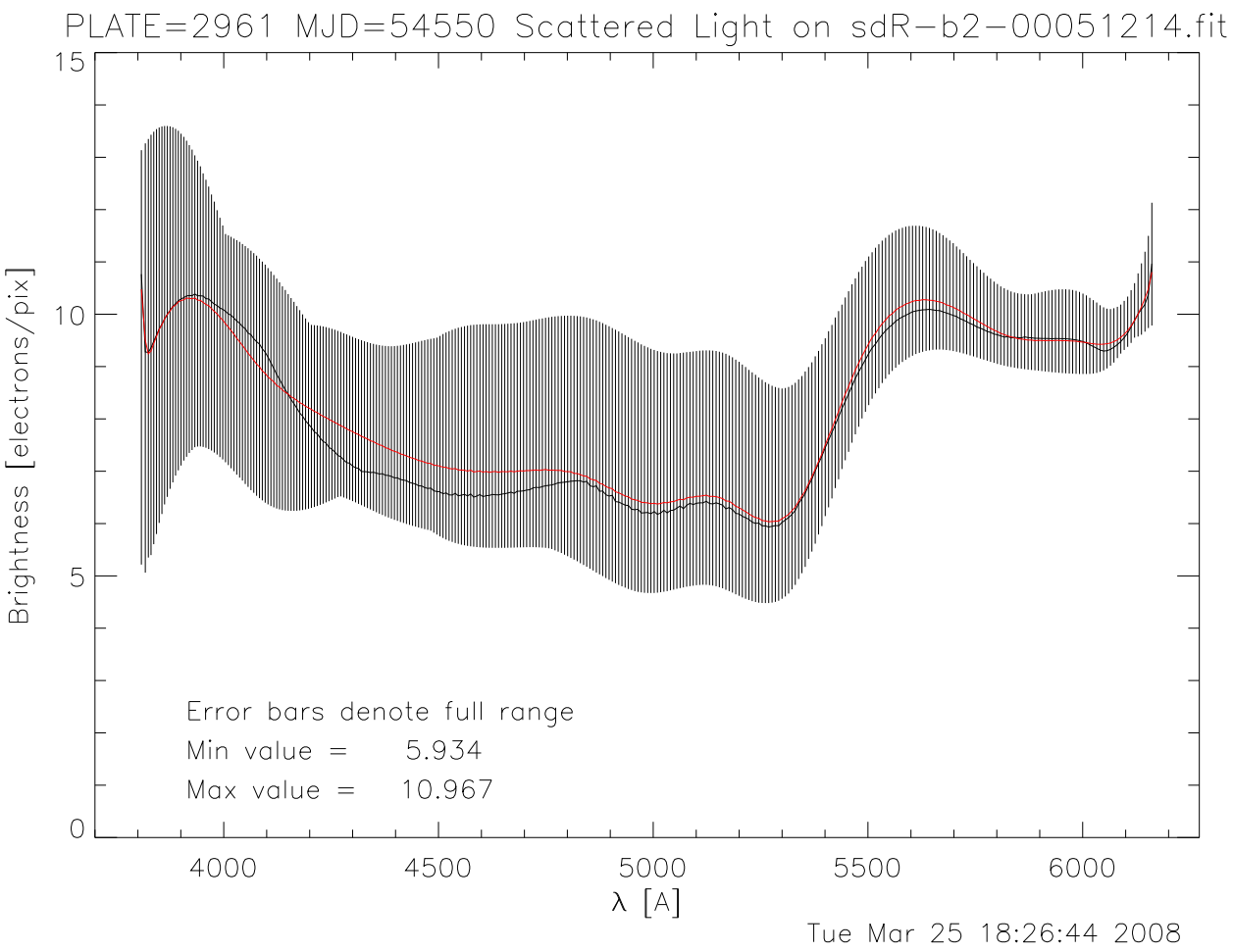

PLATE=2961 MJD=54550 sdR-b2-00051213.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.69 %
Fiber number
Focal Distance [mm]
Airmass

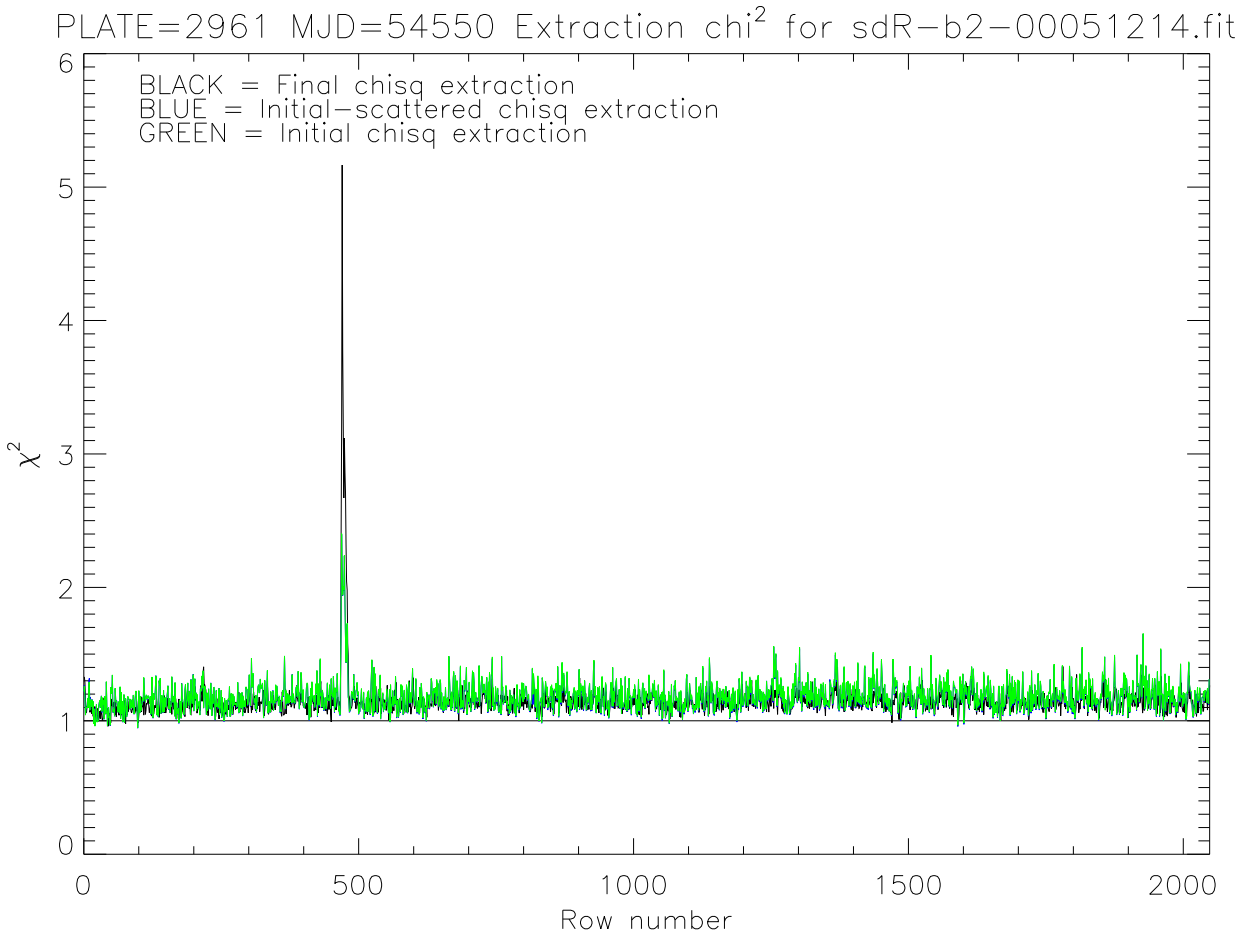

PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:22:28 2008

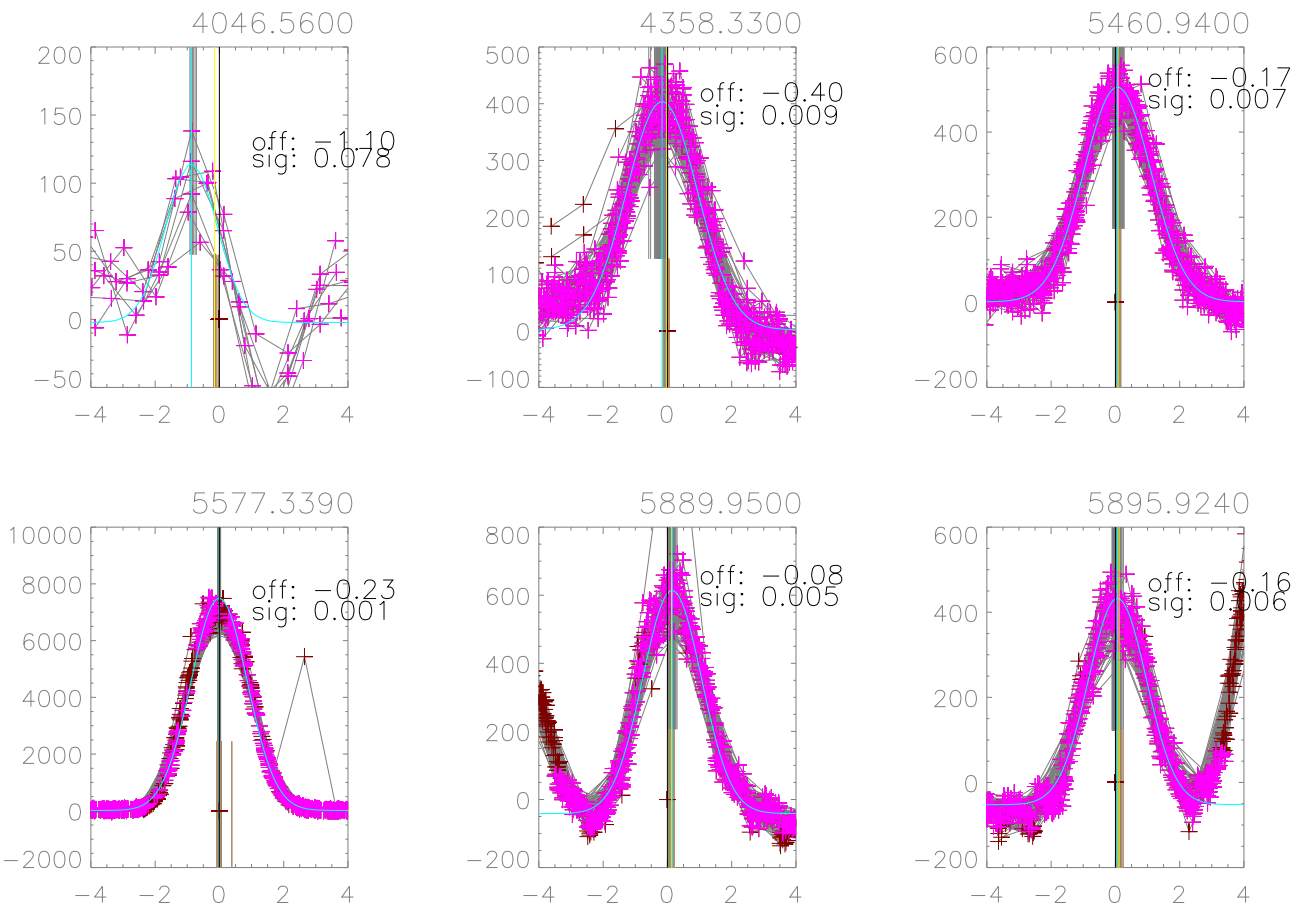

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051214.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
17.7
14.1
14.1
14.1
14.1
14.1

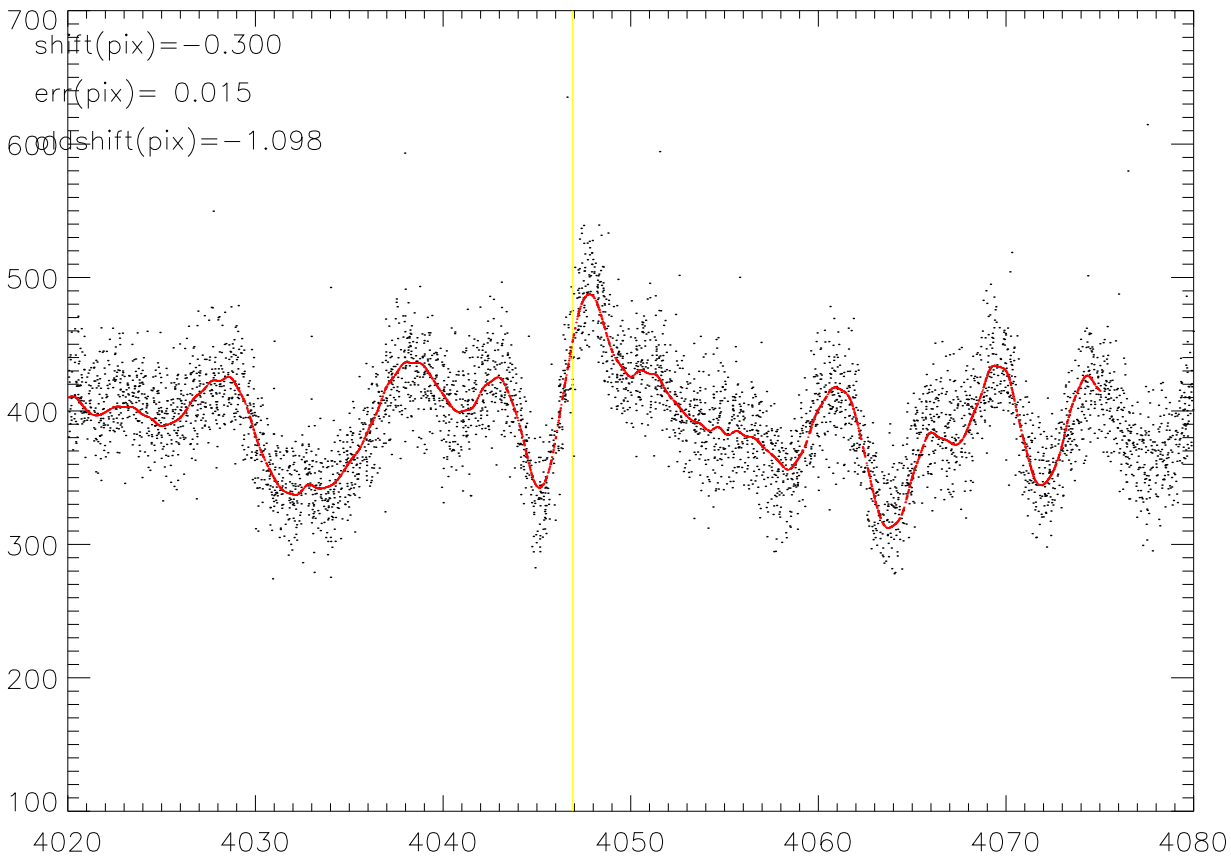

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b2−00051214.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 11.176
Max value = 19.163
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:23:25 2008

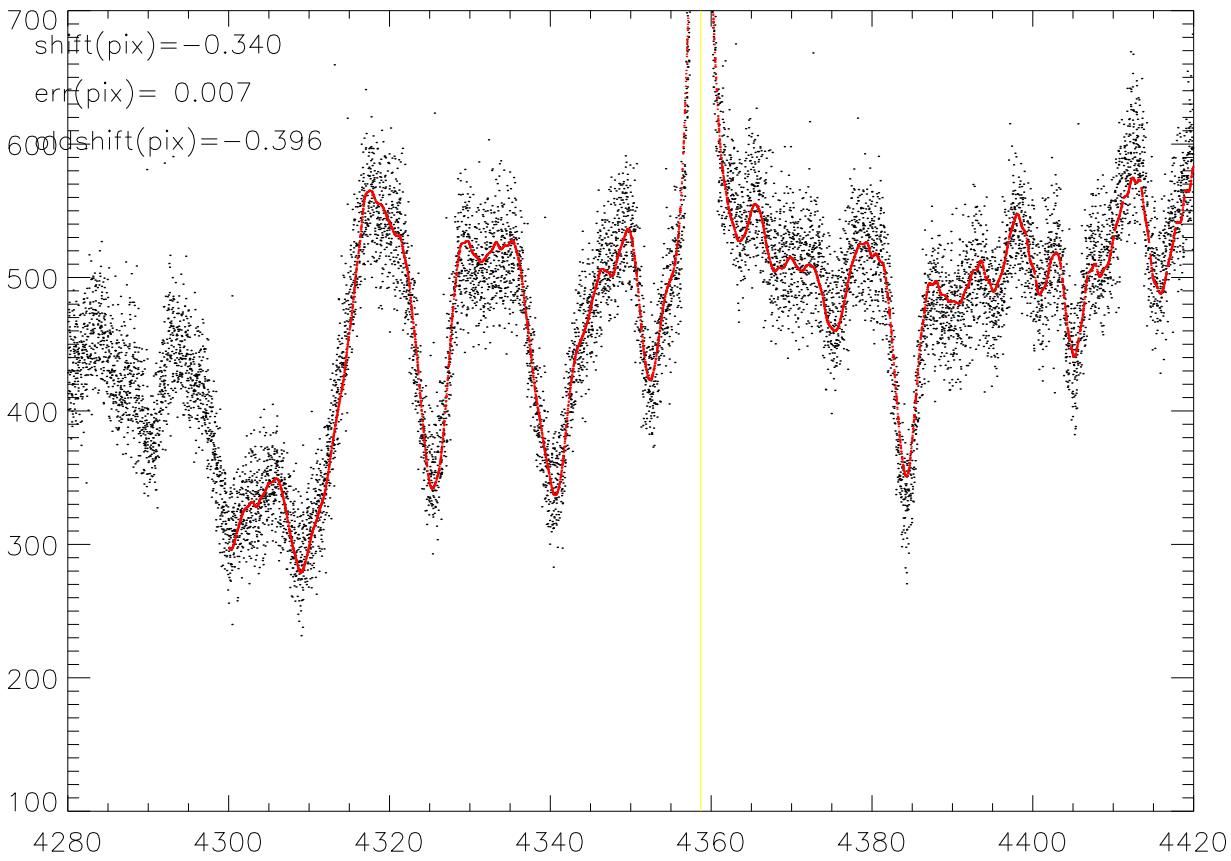

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051214.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.2
10.4
8.5
6.7
4.9

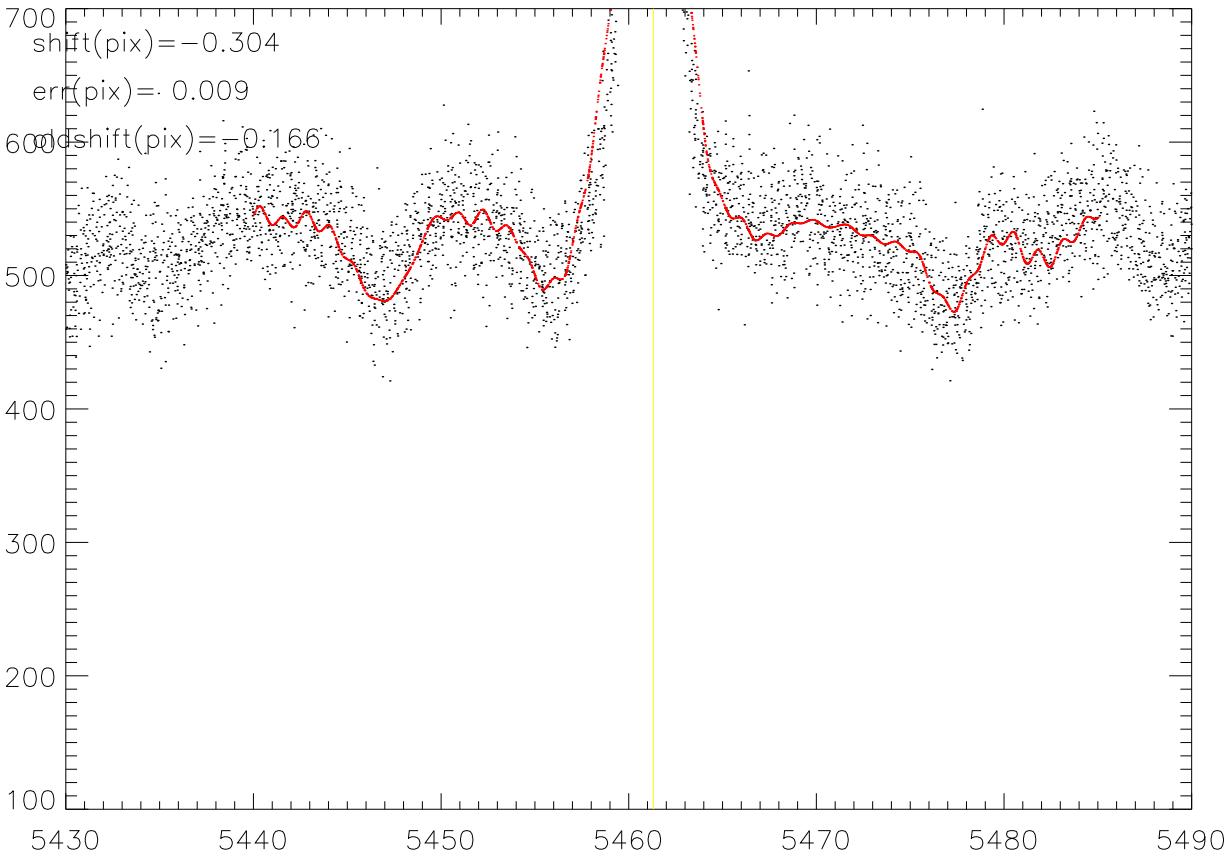

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051214.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.934
Max value = 10.967
Tue Mar 25 18:26:44 2008

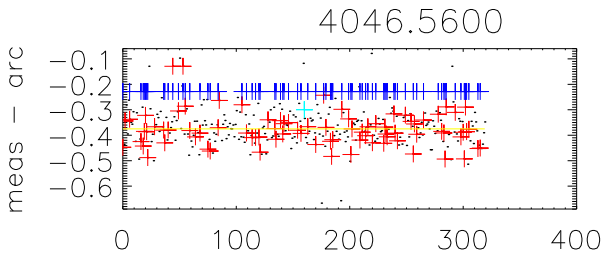

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b2-00051214.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

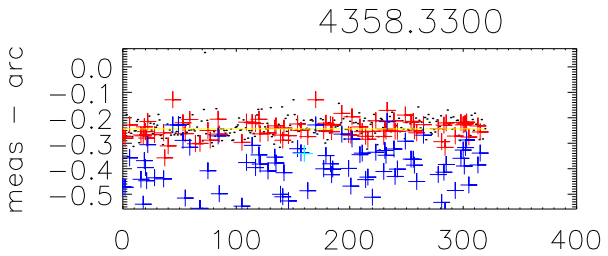

4046.5600
off: −1.10
sig: 0.078
4358.3300
off: −0.40
sig: 0.009
5460.9400
off: −0.17
sig: 0.007
5577.3390
off: −0.23
sig: 0.001
5889.9500
off: −0.08
sig: 0.005
5895.9240
off: −0.16
sig: 0.006

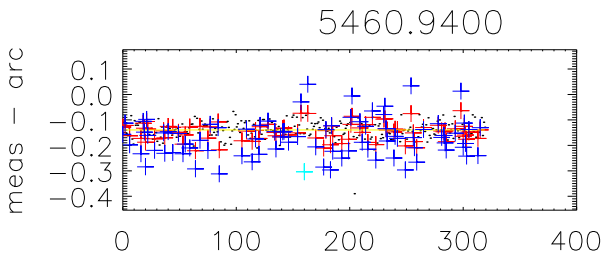

shift(pix)=−0.300
err(pix)= 0.015
oldshift(pix)=−1.098
700
600
500
400
300
200
100
4020
4030
4040
4050
4060
4070
4080

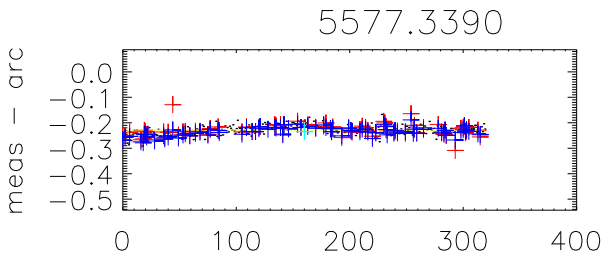

shift(pix)=−0.340
err(pix)= 0.007
oldshift(pix)=−0.396
700
600
500
400
300
200
100
4280
4300
4320
4340
4360
4380
4400
4420

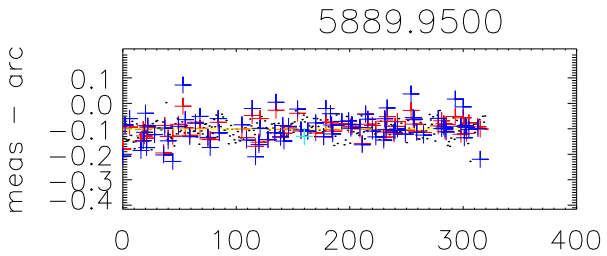

shift(pix)=−0.304
err(pix)= 0.009
oldshift(pix)=−0.166
700
600
500
400
300
200
100
5430
5440
5450
5460
5470
5480
5490

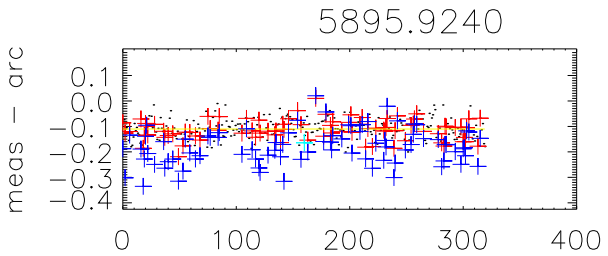

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

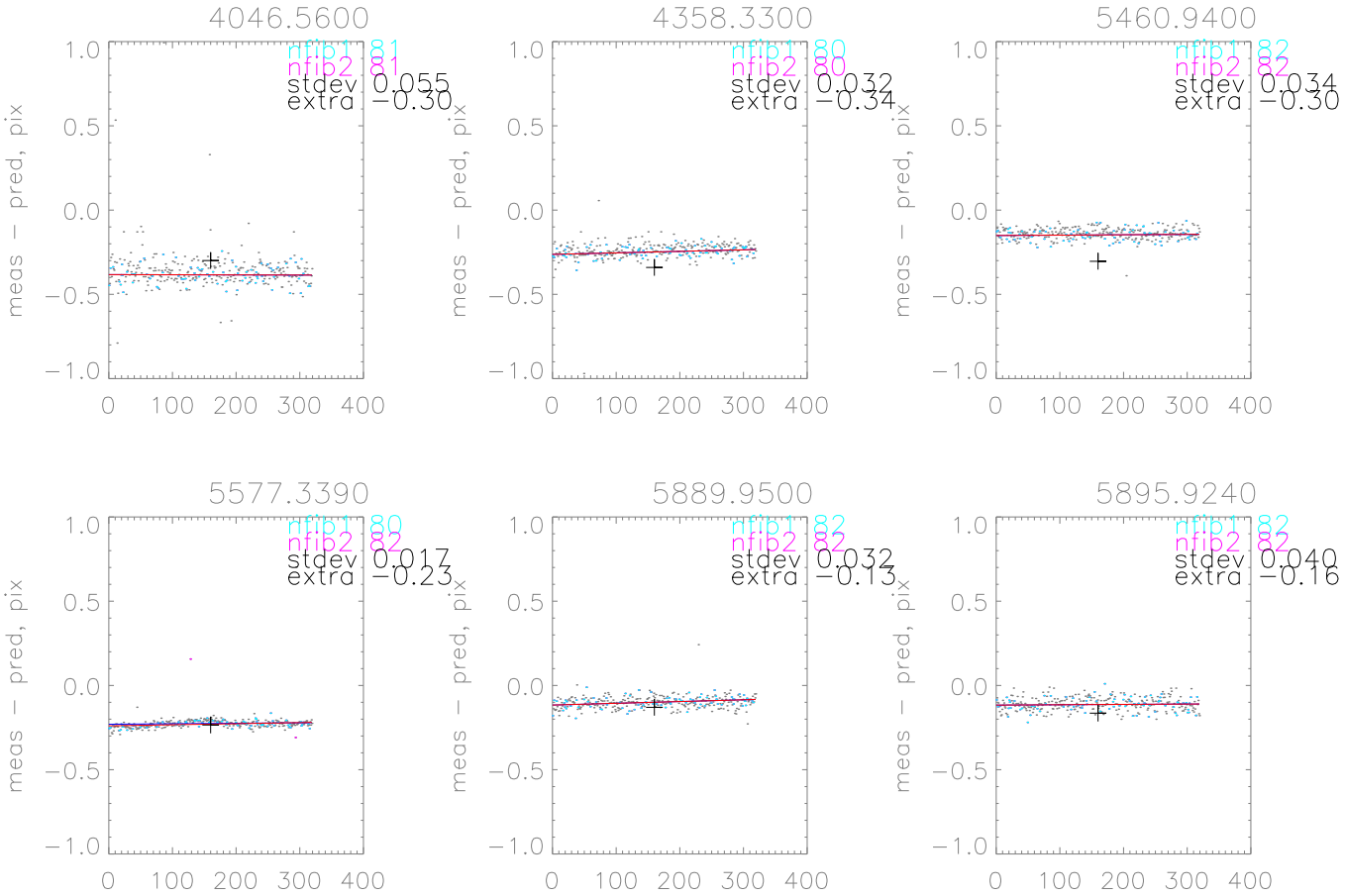

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

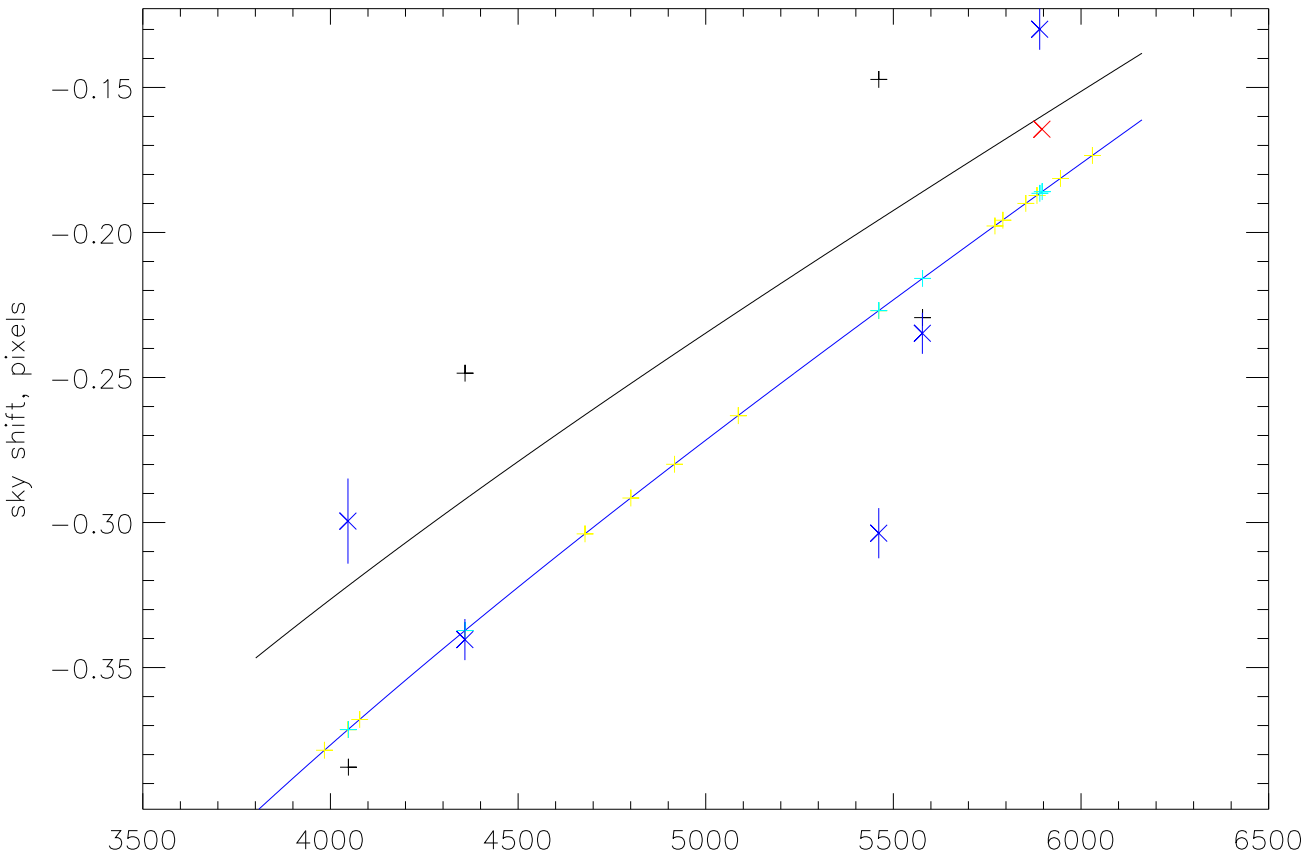

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

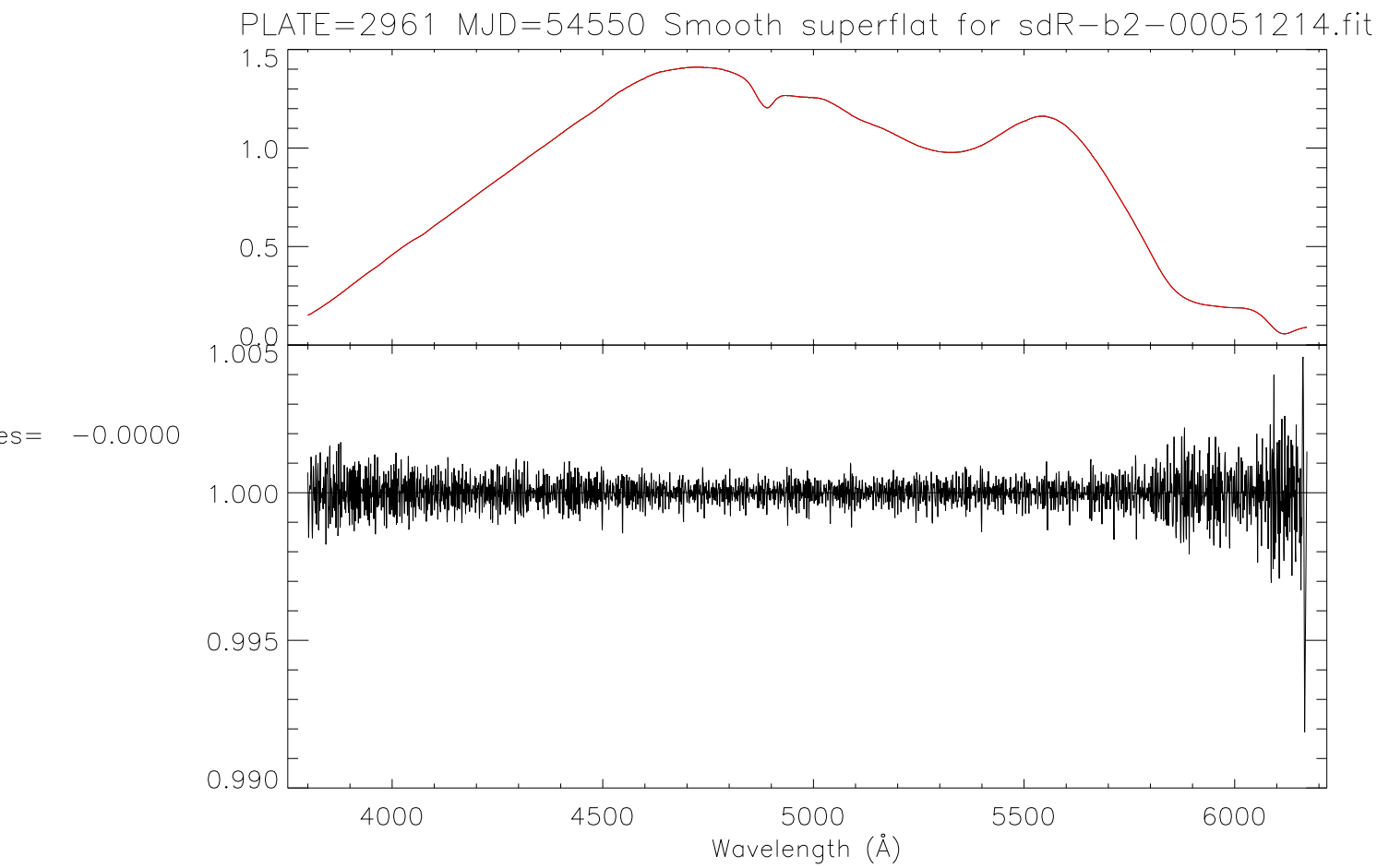

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

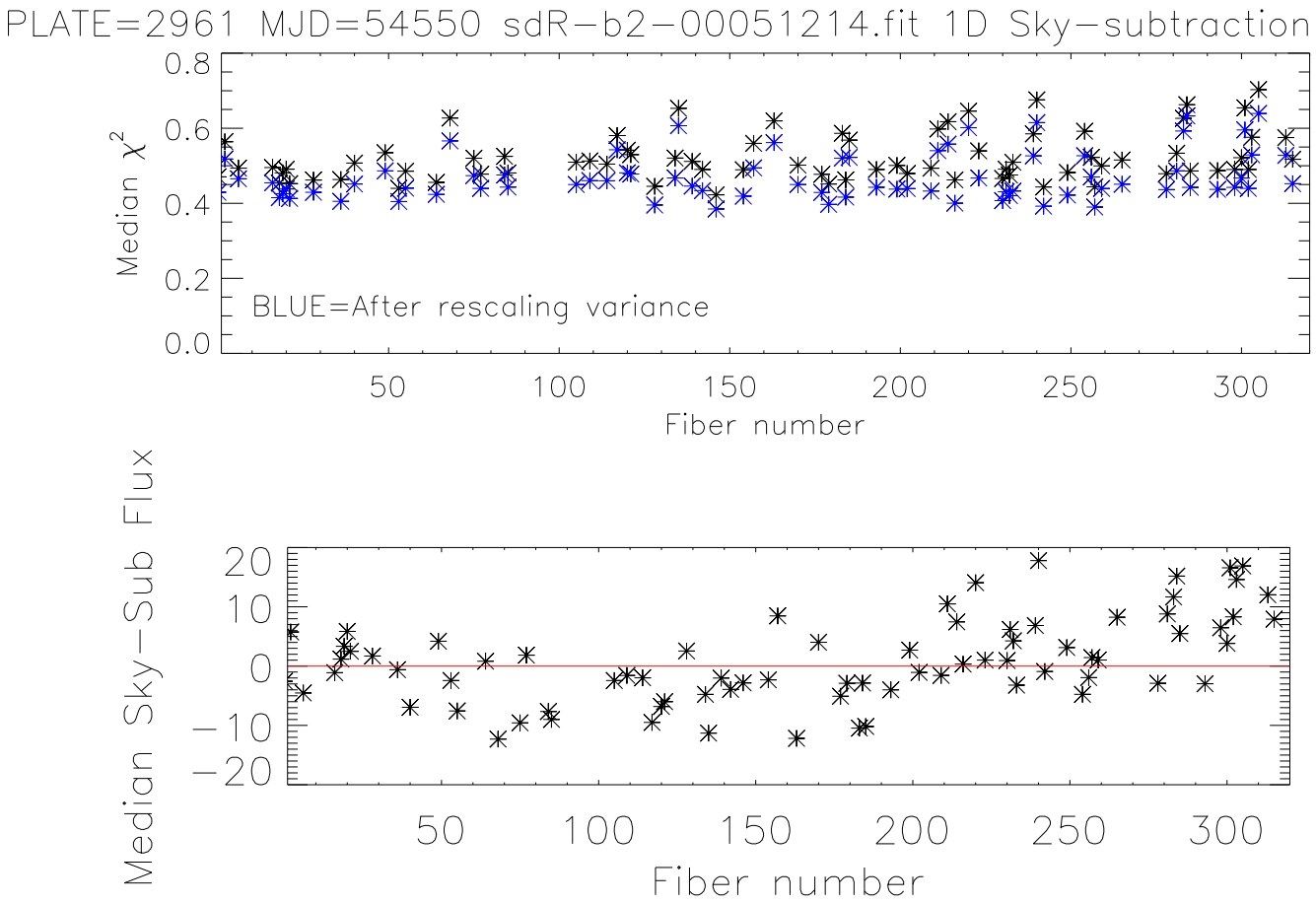

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

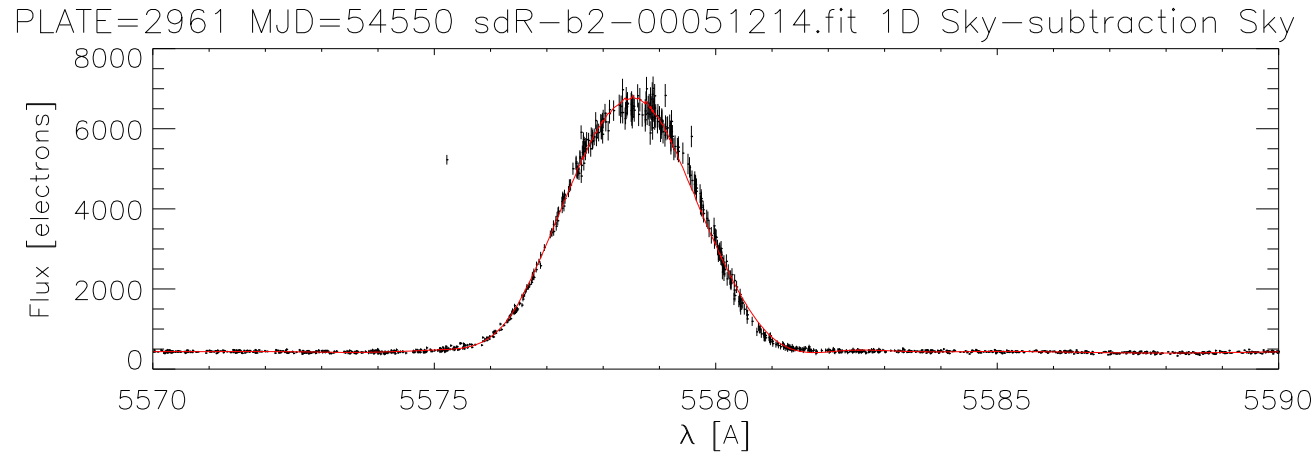

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

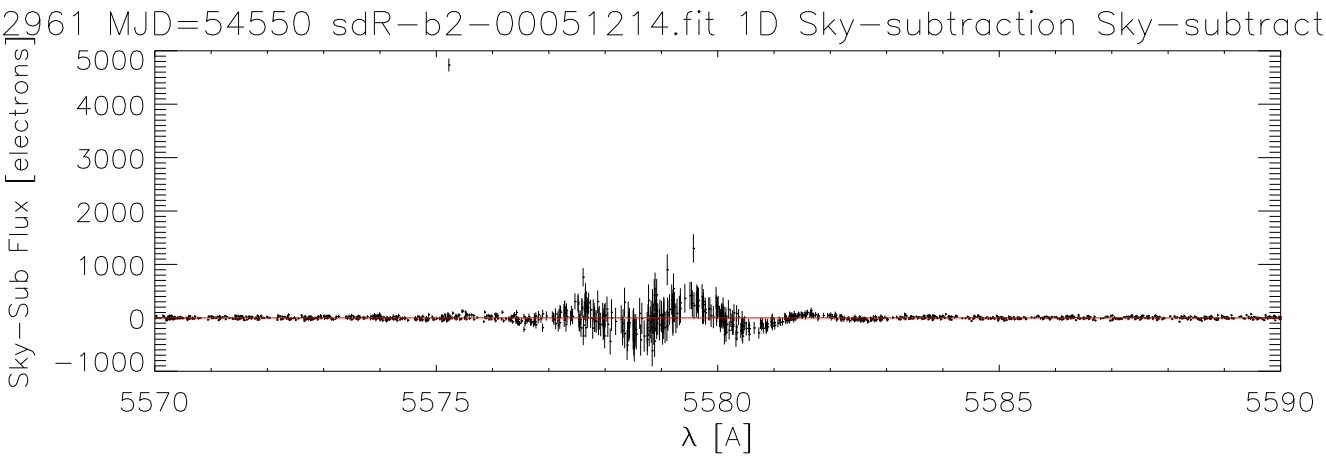

4046.5600
nfib1 81
nfib2 81
stdev 0.055
extra −0.30
4358.3300
nfib1 80
nfib2 80
stdev 0.032
extra −0.34
5460.9400
nfib1 82
nfib2 82
stdev 0.034
extra −0.30
5577.3390
nfib1 80
nfib2 82
stdev 0.017
extra −0.23
5889.9500
nfib1 82
nfib2 82
stdev 0.032
extra −0.13
5895.9240
nfib1 82
nfib2 82
stdev 0.040
extra −0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

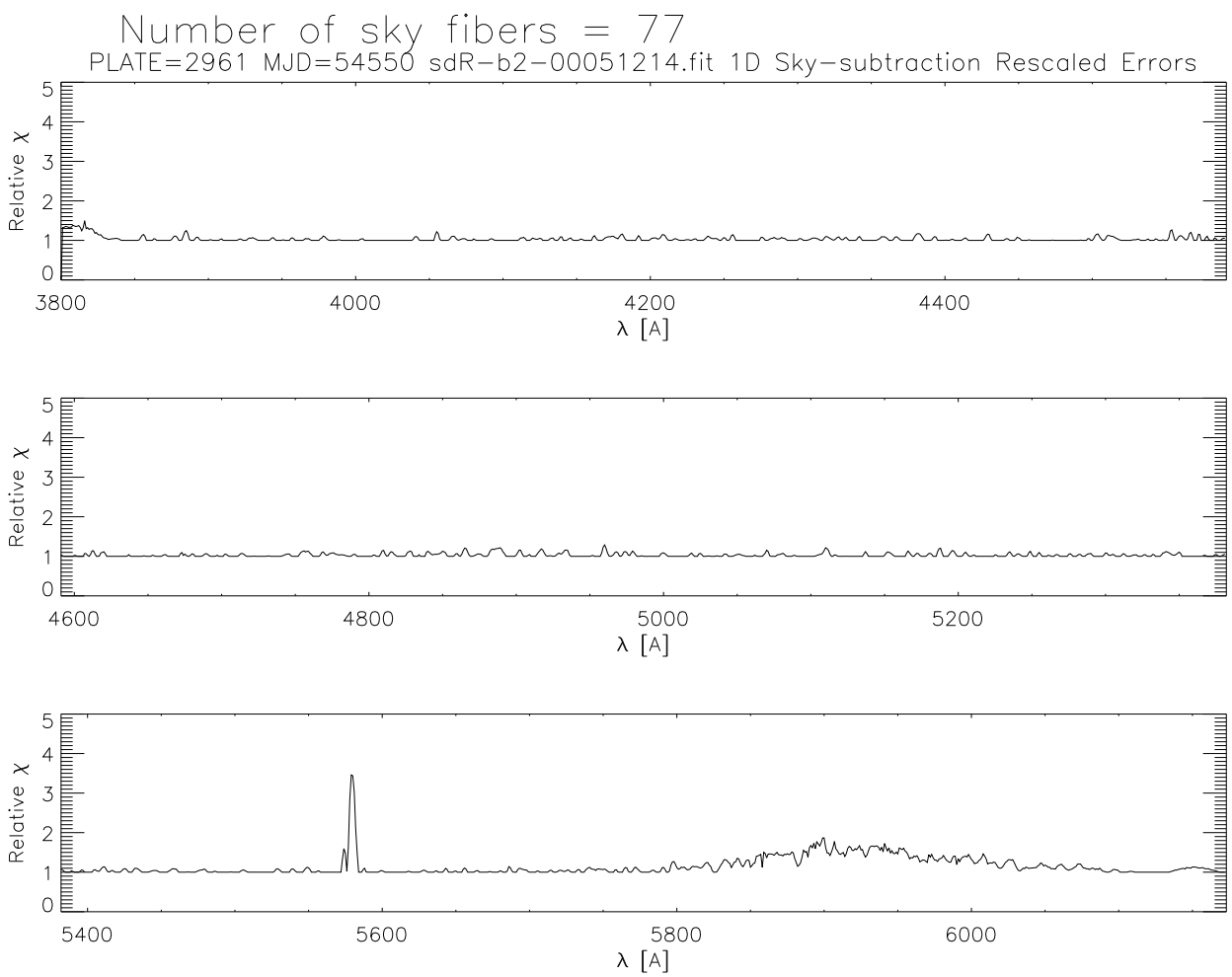

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

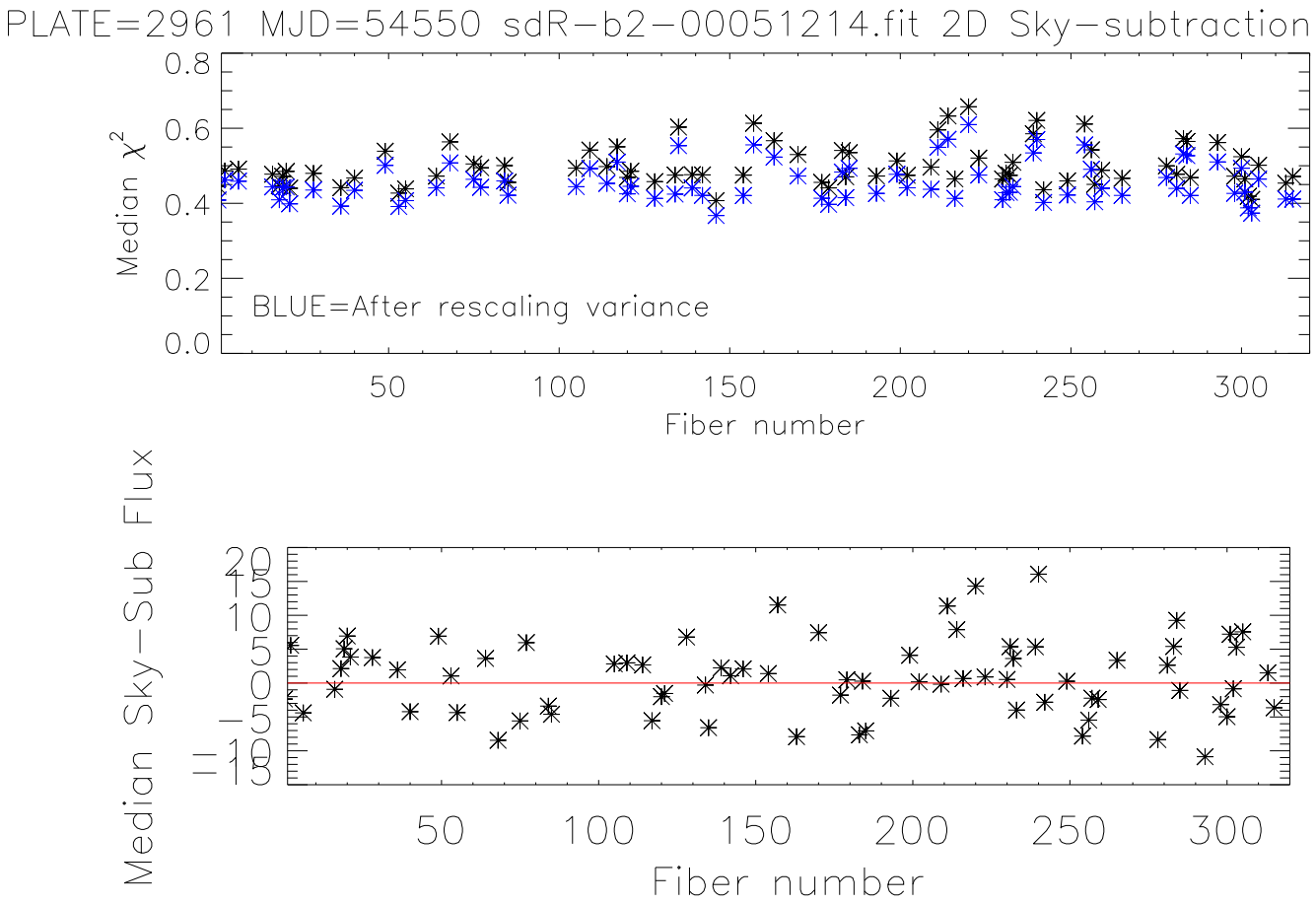

PLATE=2961 MJD=54550 Smooth superflat for sdR-b2-00051214.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

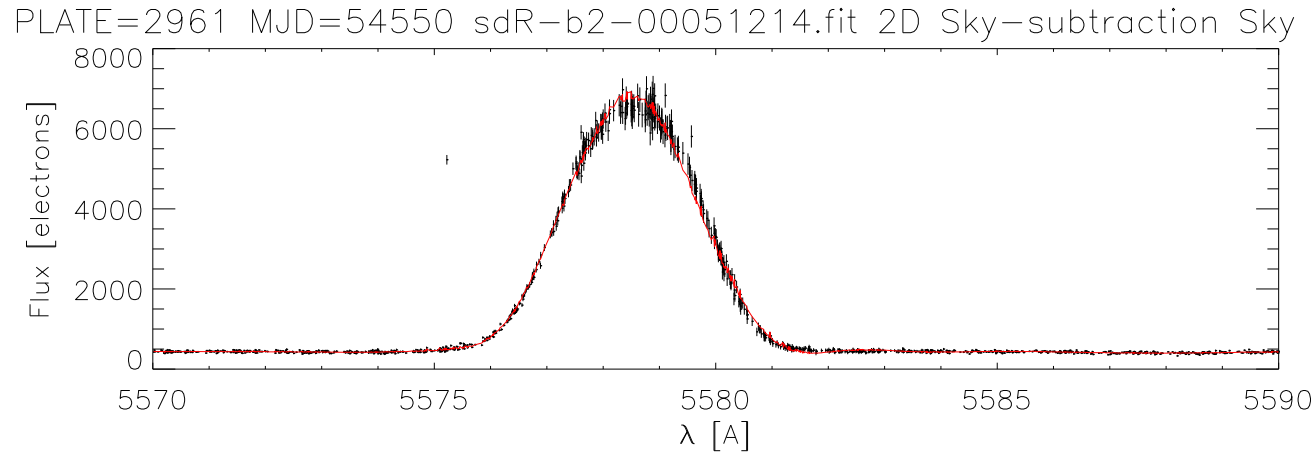

PLATE=2961 MJD=54550 sdR-b2-00051214.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

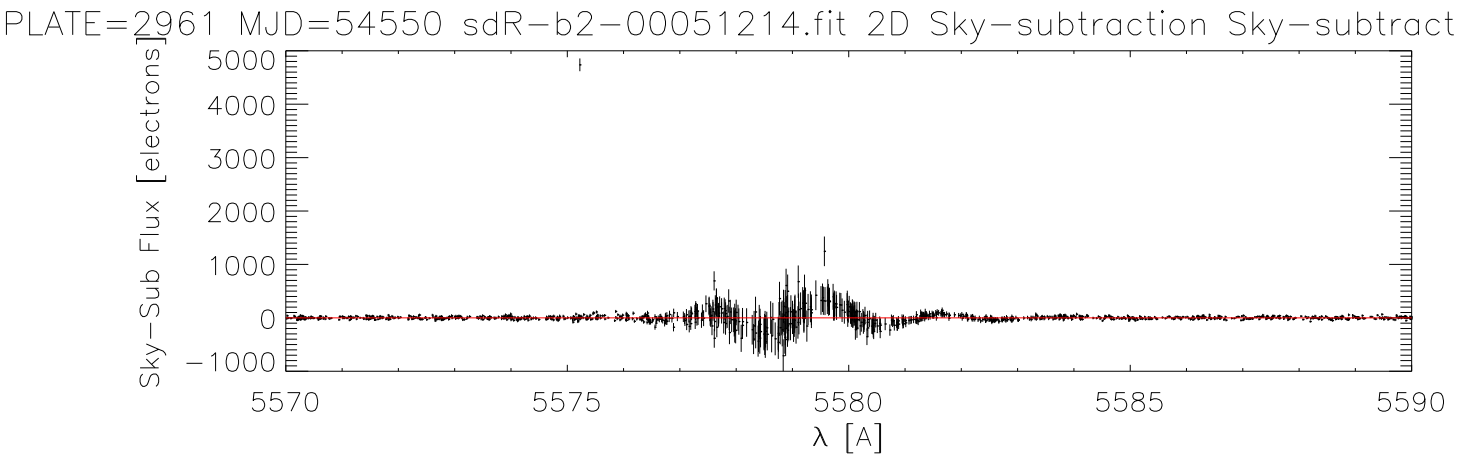

PLATE=2961 MJD=54550 sdR-b2-00051214.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

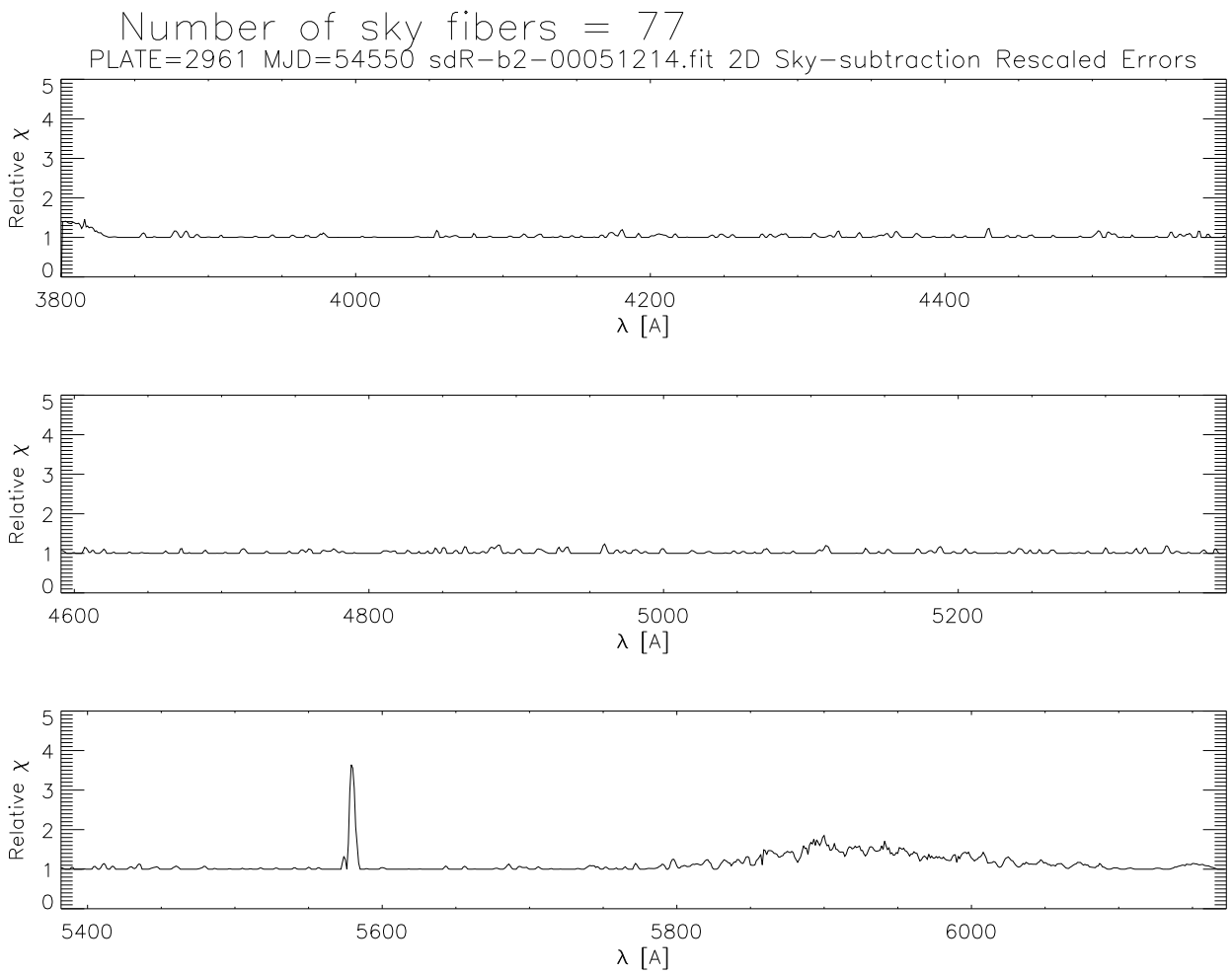

PLATE=2961 MJD=54550 sdR-b2-00051214.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

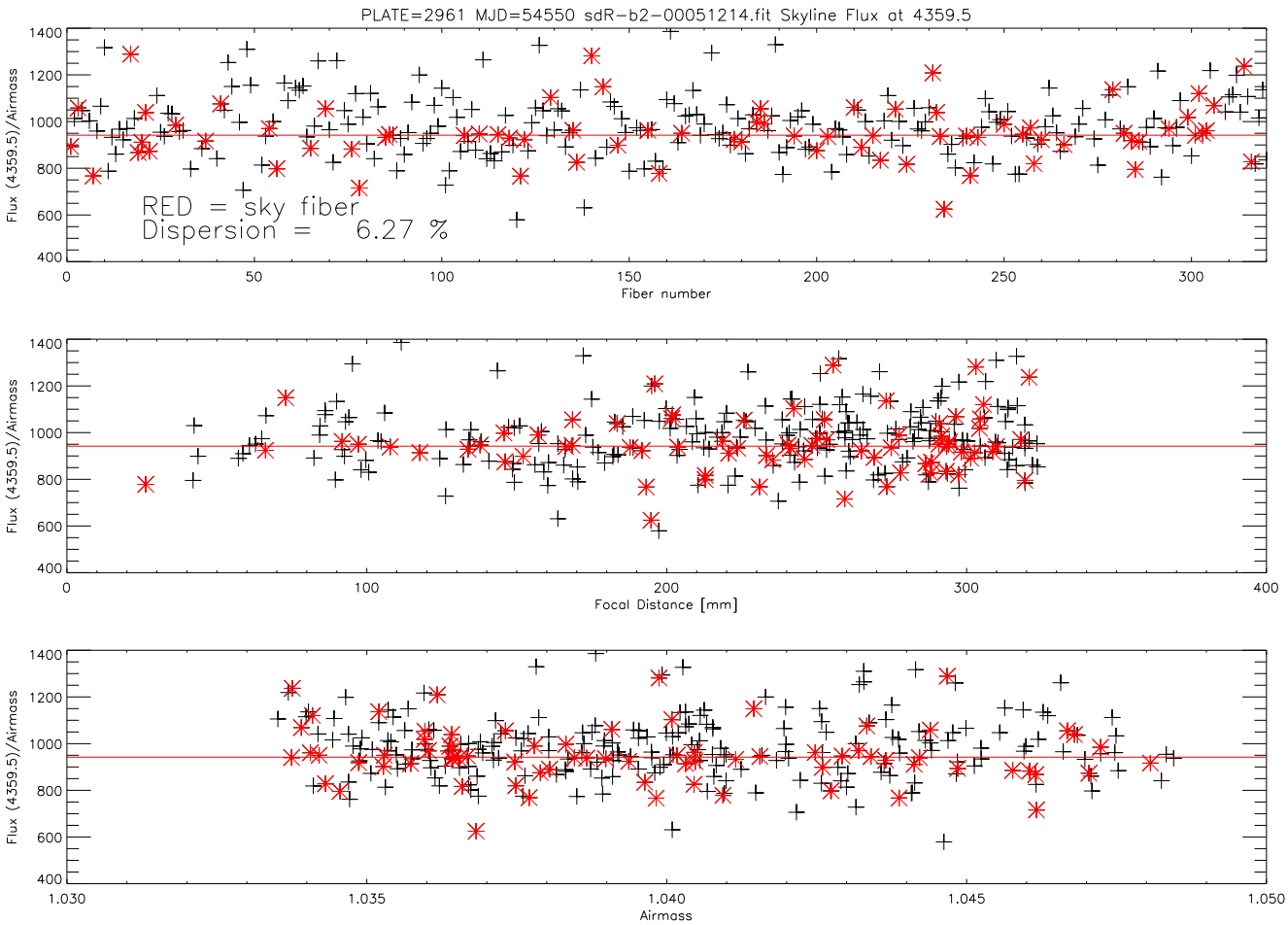

Number of sky fibers = 77
PLATE=2961 MJD=54550 sdR-b2-00051214.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

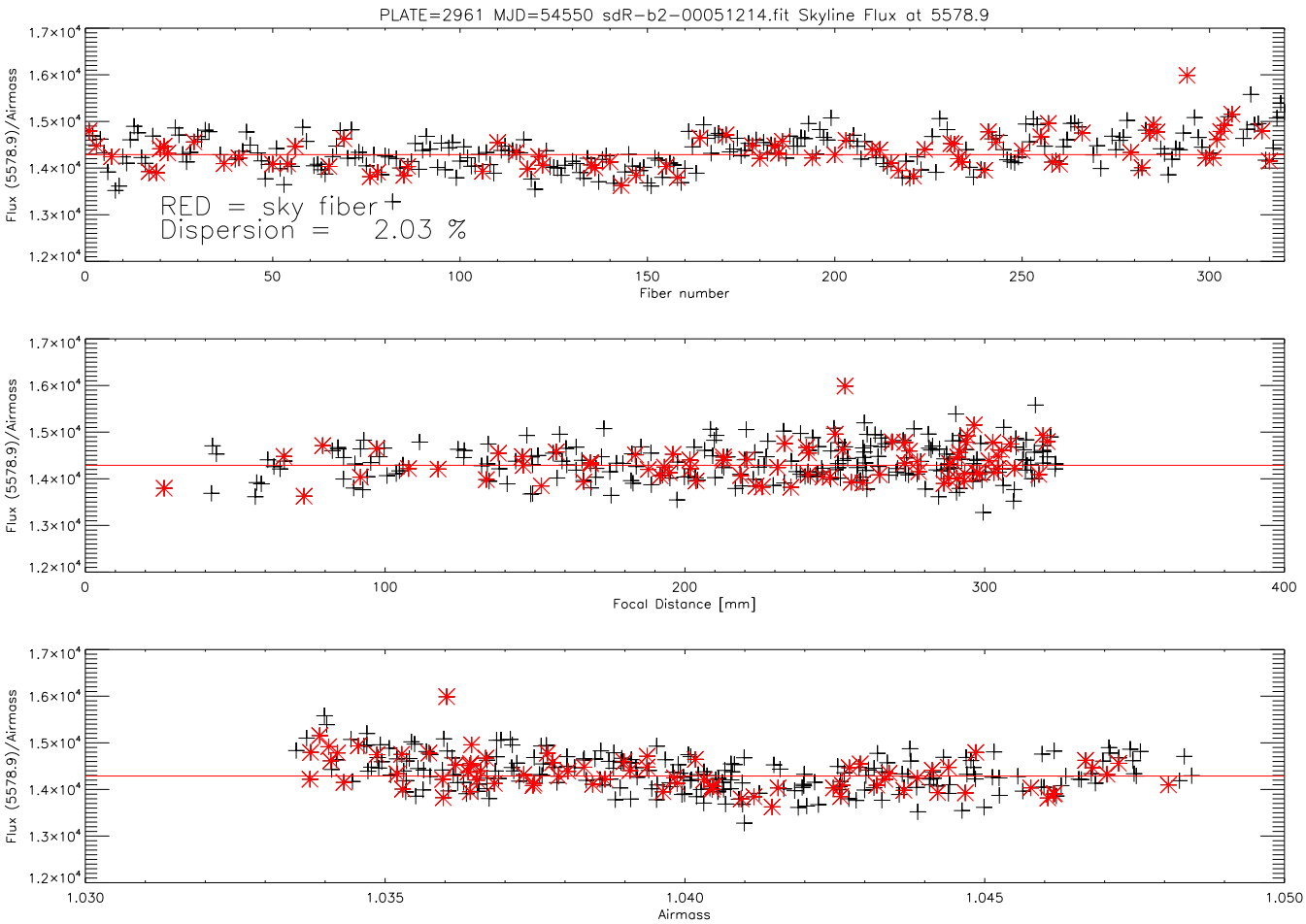

PLATE=2961 MJD=54550 sdR-b2-00051214.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
20
50
100
150
200
250
300
Fiber number

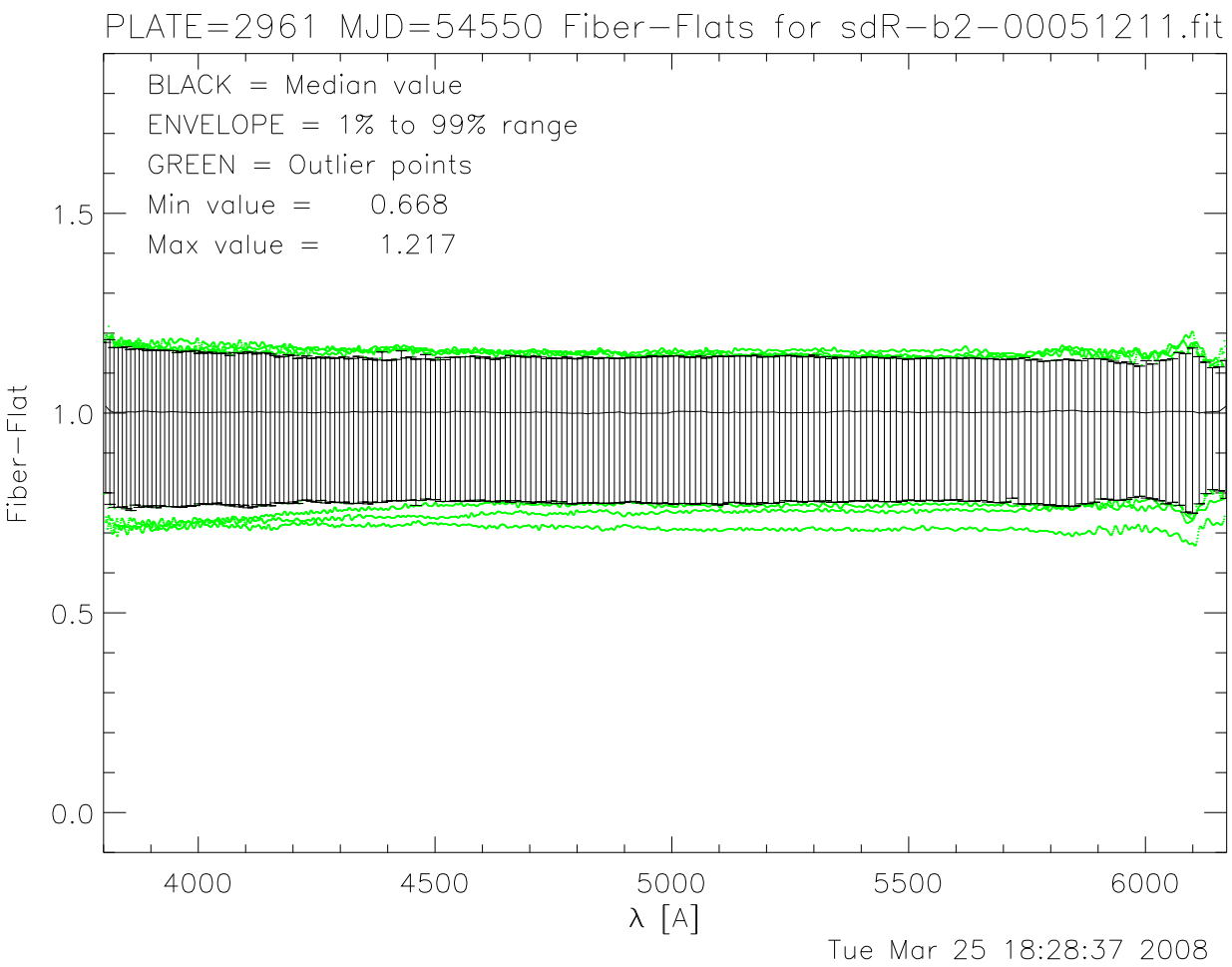

PLATE=2961 MJD=54550 sdR-b2-00051214.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2961 MJD=54550 sdR-b2-00051214.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 77
PLATE=2961 MJD=54550 sdR-b2-00051214.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=2961 MJD=54550 sdR-b2-00051214.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.27 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2961 MJD=54550 sdR-b2-00051214.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
1.2×10^4
RED = sky fiber
Dispersion = 2.03 %
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
1.2×10^4
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
1.2×10^4
1.030
1.035
1.040
1.045
1.050
Airmass


PLATE=2961 MJD=54550 Fiber-Flats for sdR-b2-00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.668
Max value = 1.217
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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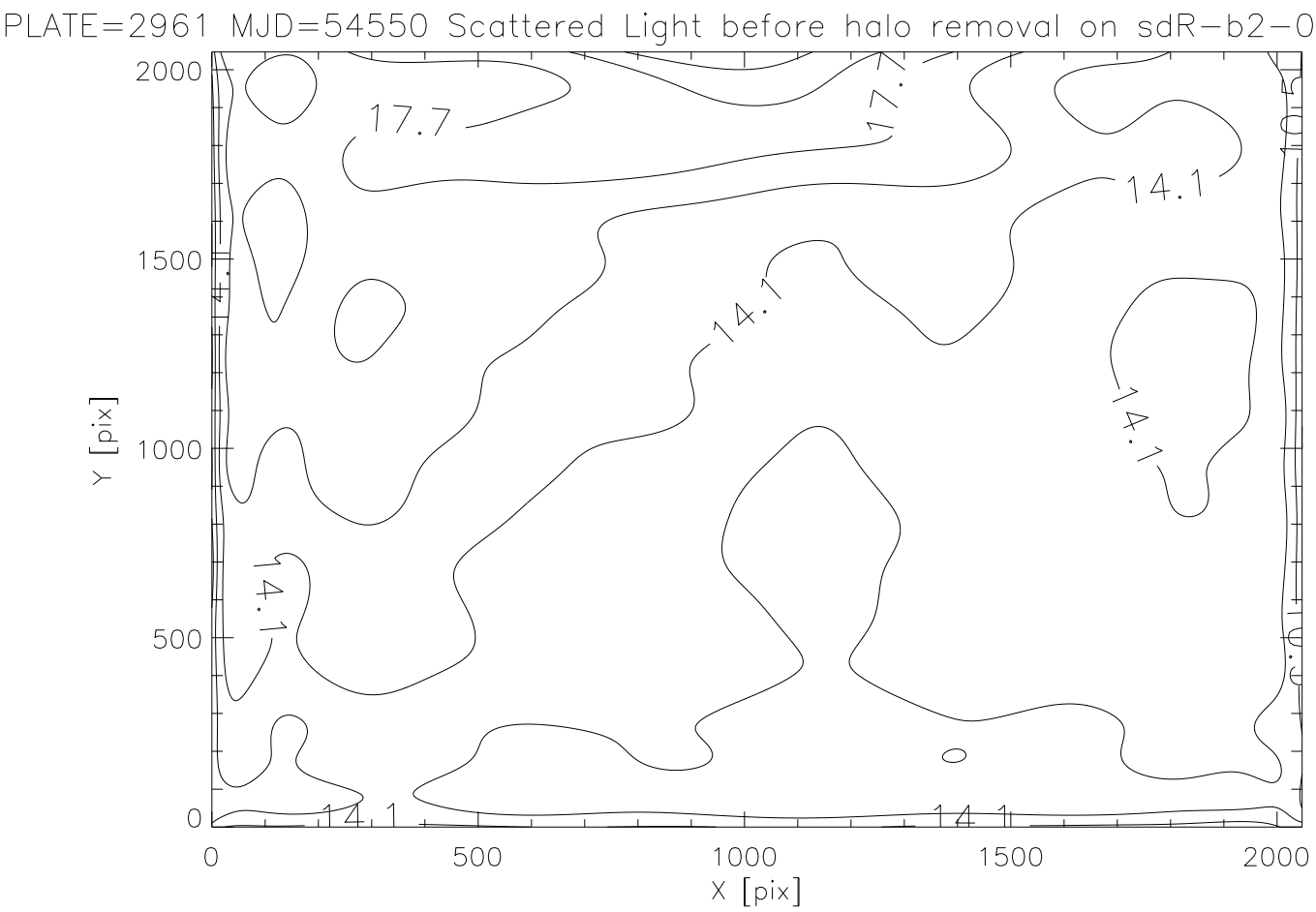
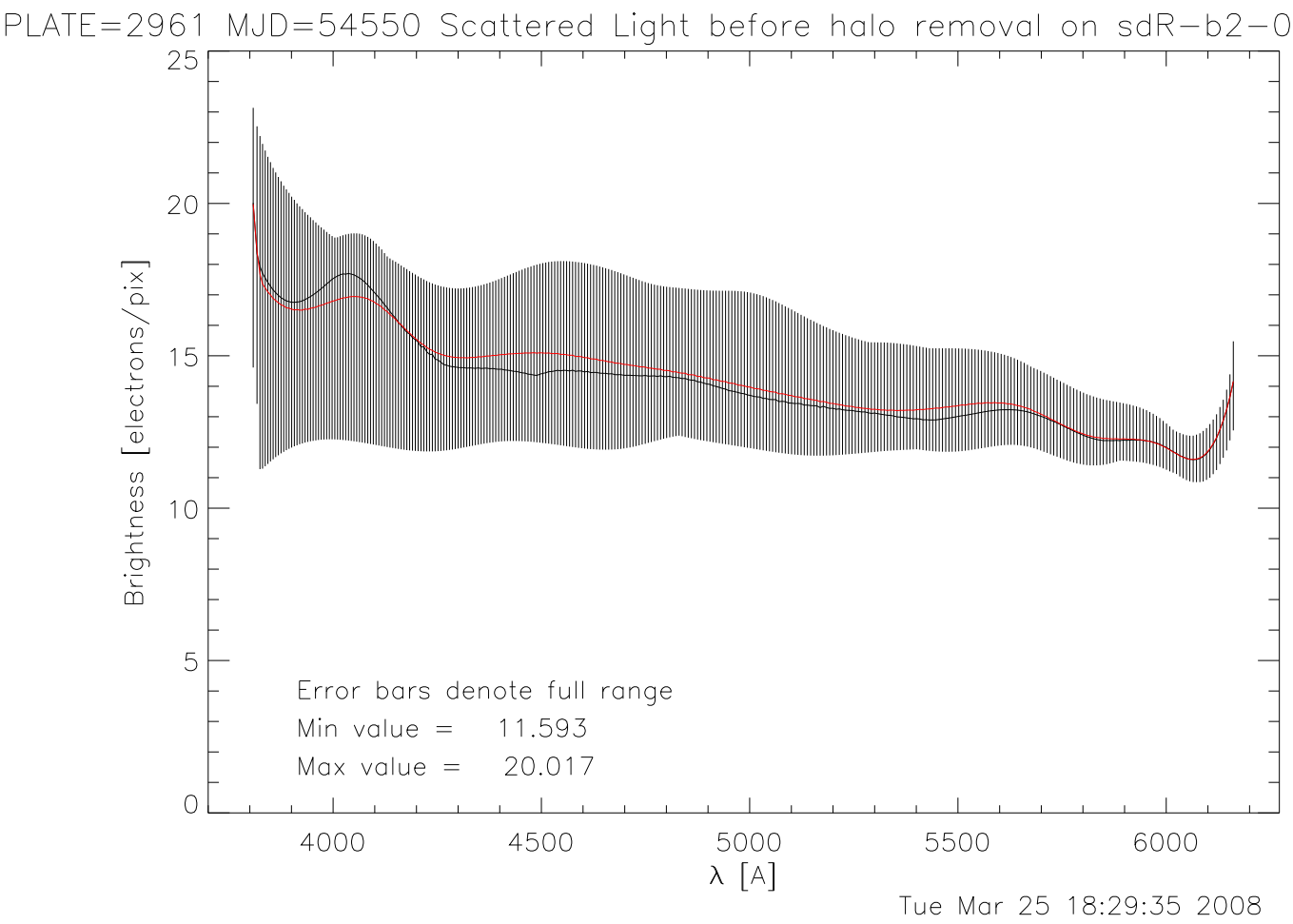

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−b2−00051215.f
17.7
14.1
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-b2-00051215.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 11.593
Max value = 20.017
4000
4500
5000
5500
6000
λ [A]
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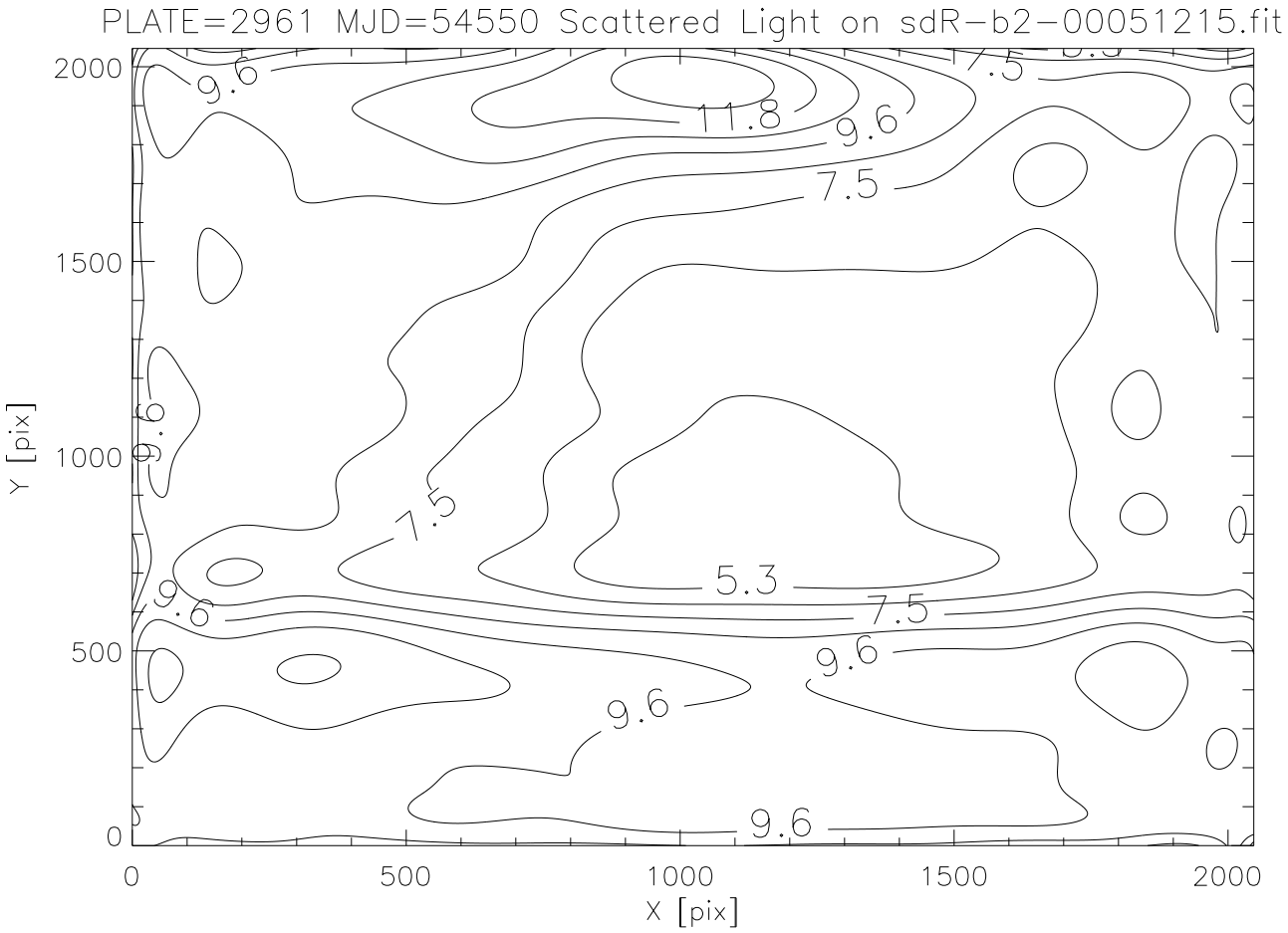
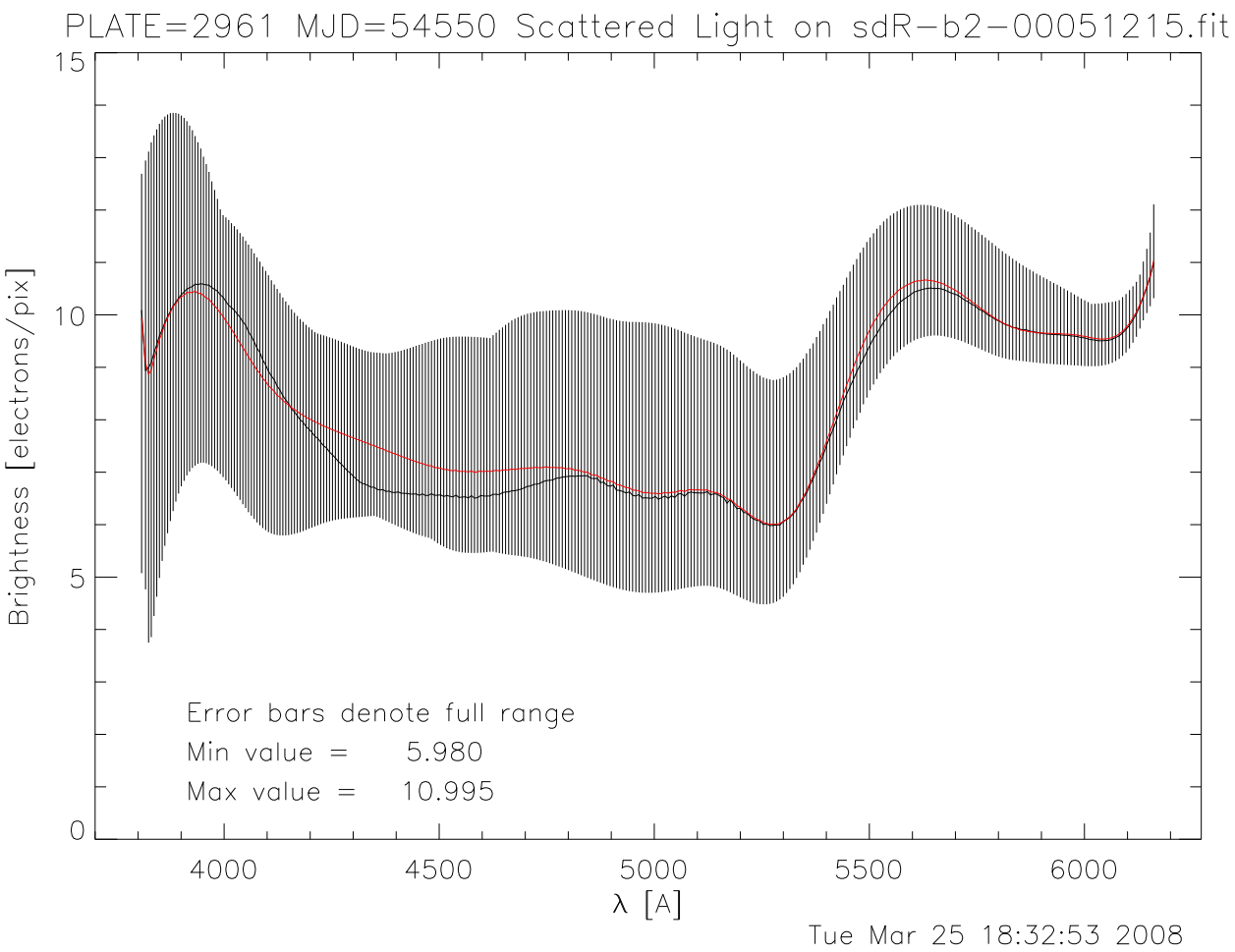
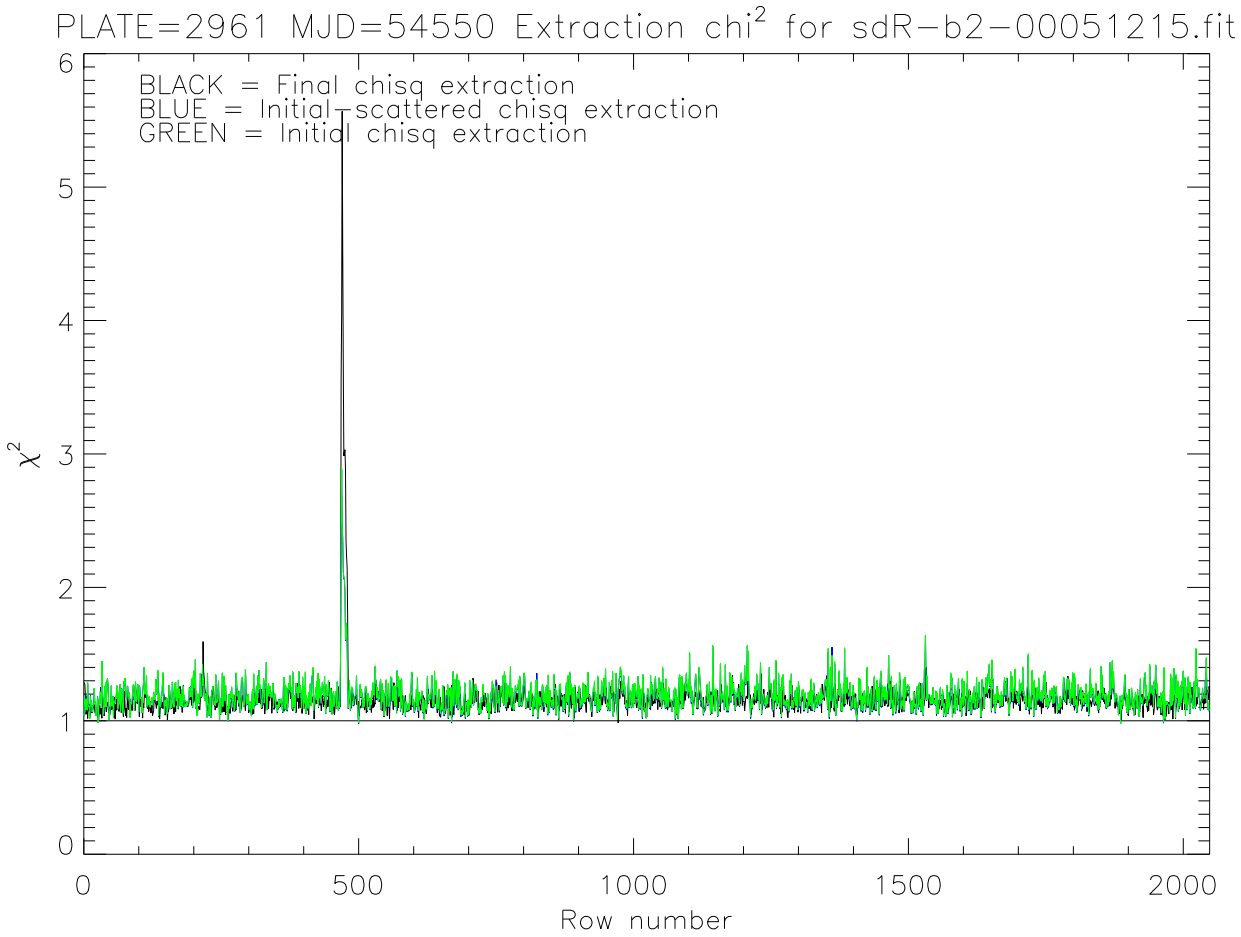
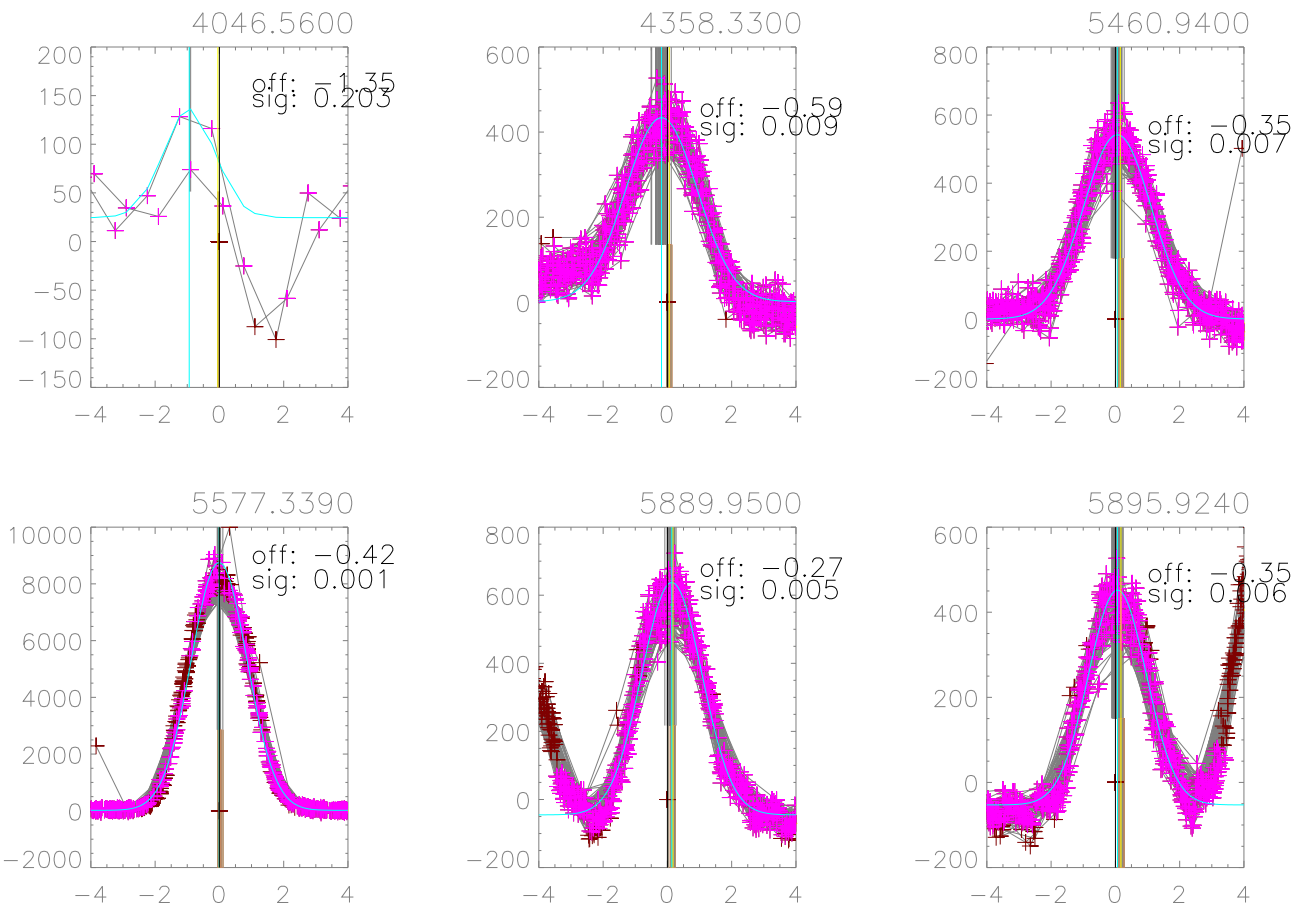
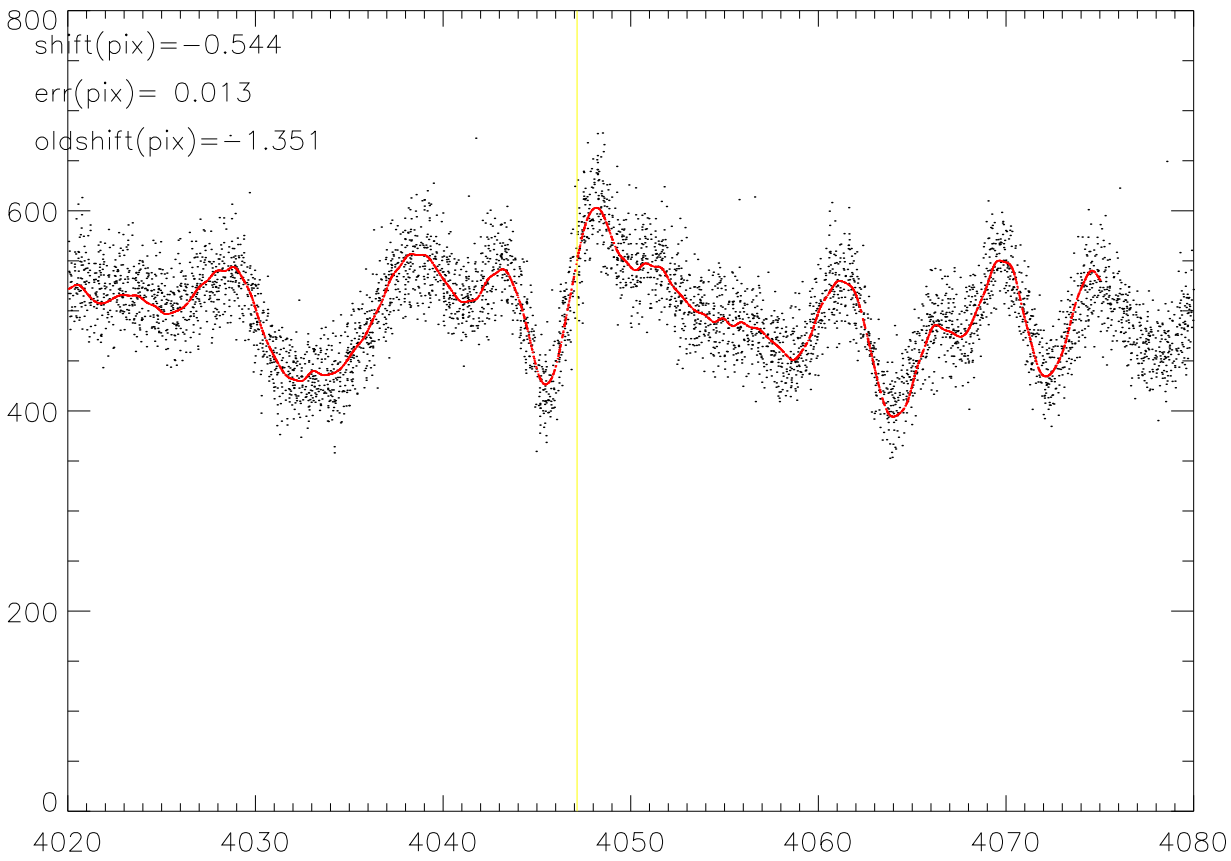
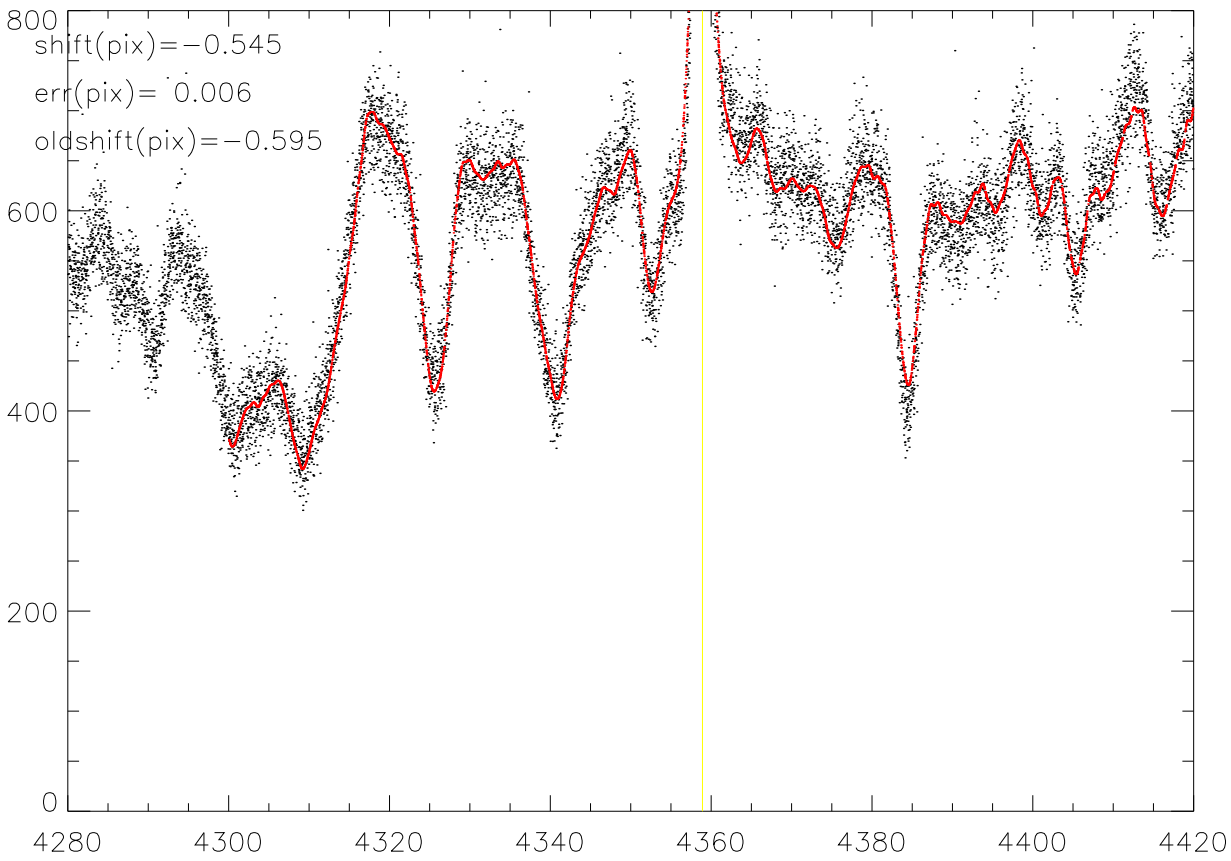

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051215.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.6
11.8
7.5
5.3

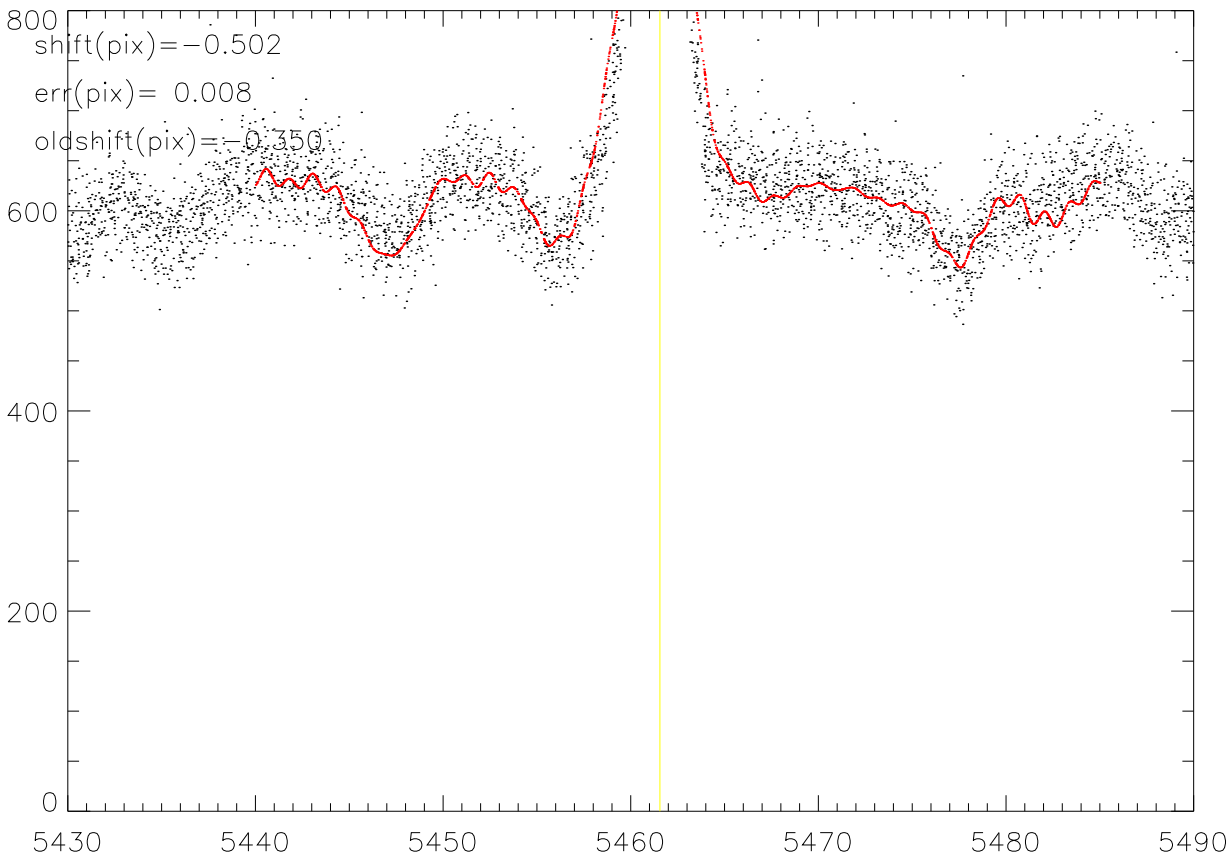

PLATE=2961 MJD=54550 Scattered Light on sdR-b2-00051215.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 5.980
Max value = 10.995
4000
4500
5000
5500
6000
λ [A]
Tue Mar 25 18:32:53 2008

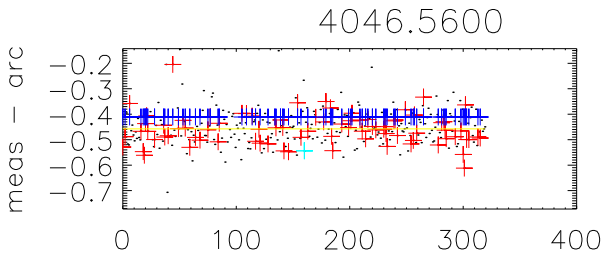

PLATE=2961 MJD=54550 Extraction chi^2 for sdR-b2-00051215.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

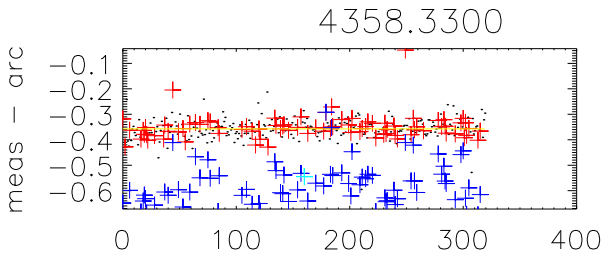

4046.5600
off: −1.35
sig: 0.203
4358.3300
off: −0.59
sig: 0.009
5460.9400
off: −0.35
sig: 0.007
5577.3390
off: −0.42
sig: 0.001
5889.9500
off: −0.27
sig: 0.005
5895.9240
off: −0.35
sig: 0.006

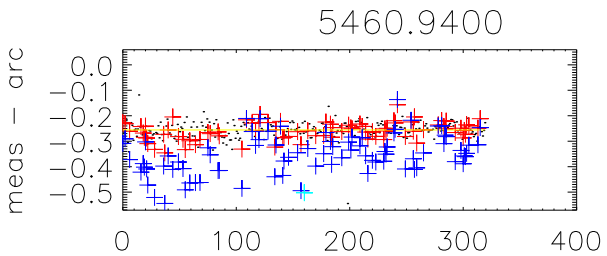

shift(pix)=−0.544
err(pix)= 0.013
oldshift(pix)=−1.351
800
600
400
200
0
4020
4030
4040
4050
4060
4070
4080

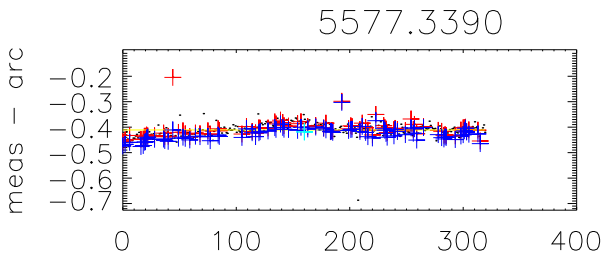

shift(pix)=−0.545
err(pix)= 0.006
oldshift(pix)=−0.595
800
600
400
200
0
4280
4300
4320
4340
4360
4380
4400
4420

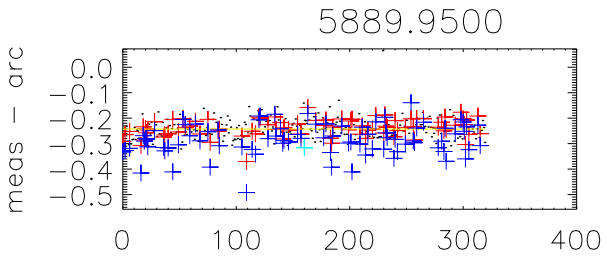

shift(pix)=−0.502
err(pix)= 0.008
oldshift(pix)=−0.350
800
600
400
200
0
5430
5440
5450
5460
5470
5480
5490

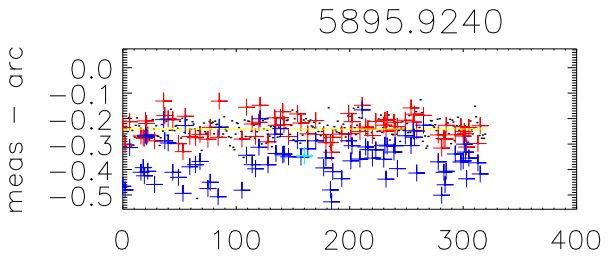

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

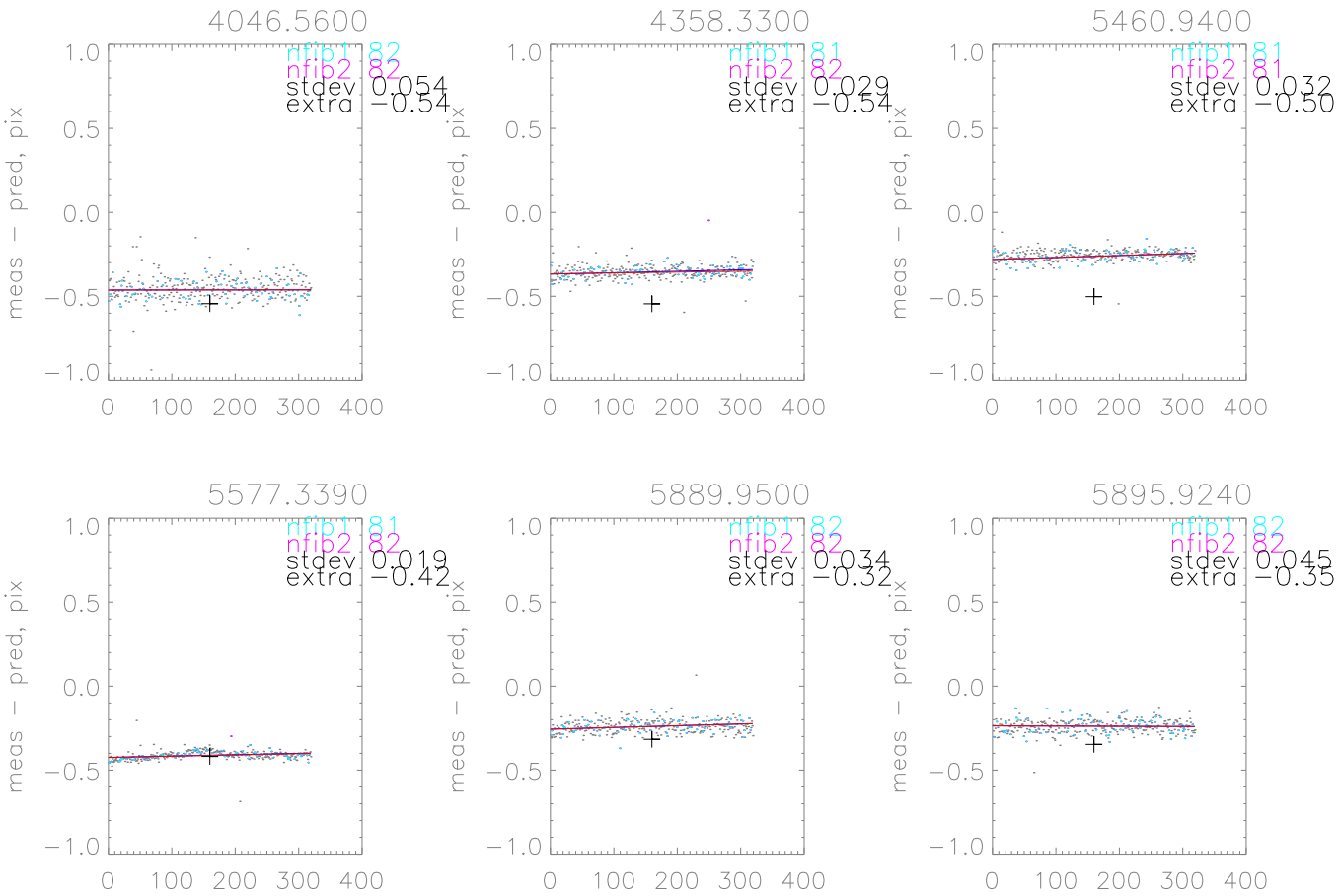

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

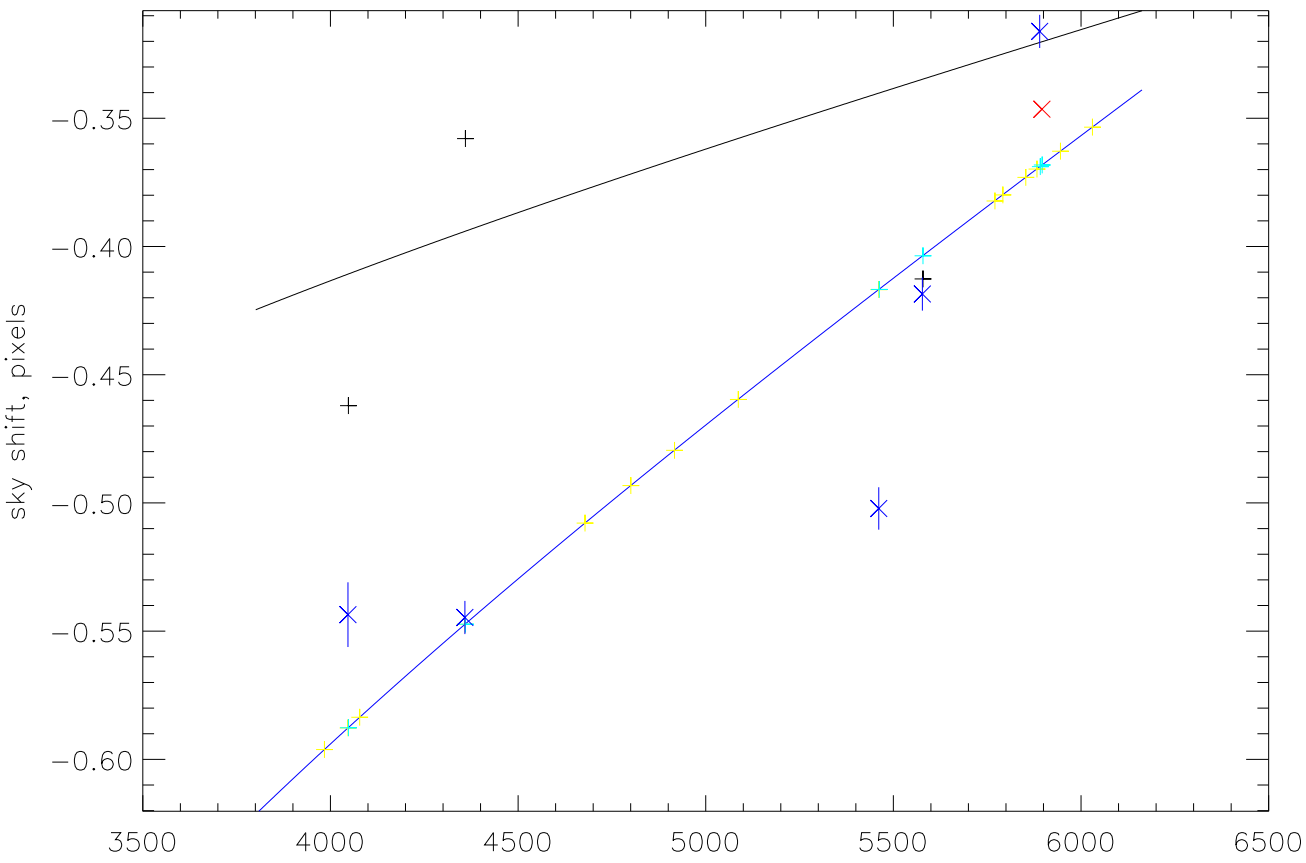

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

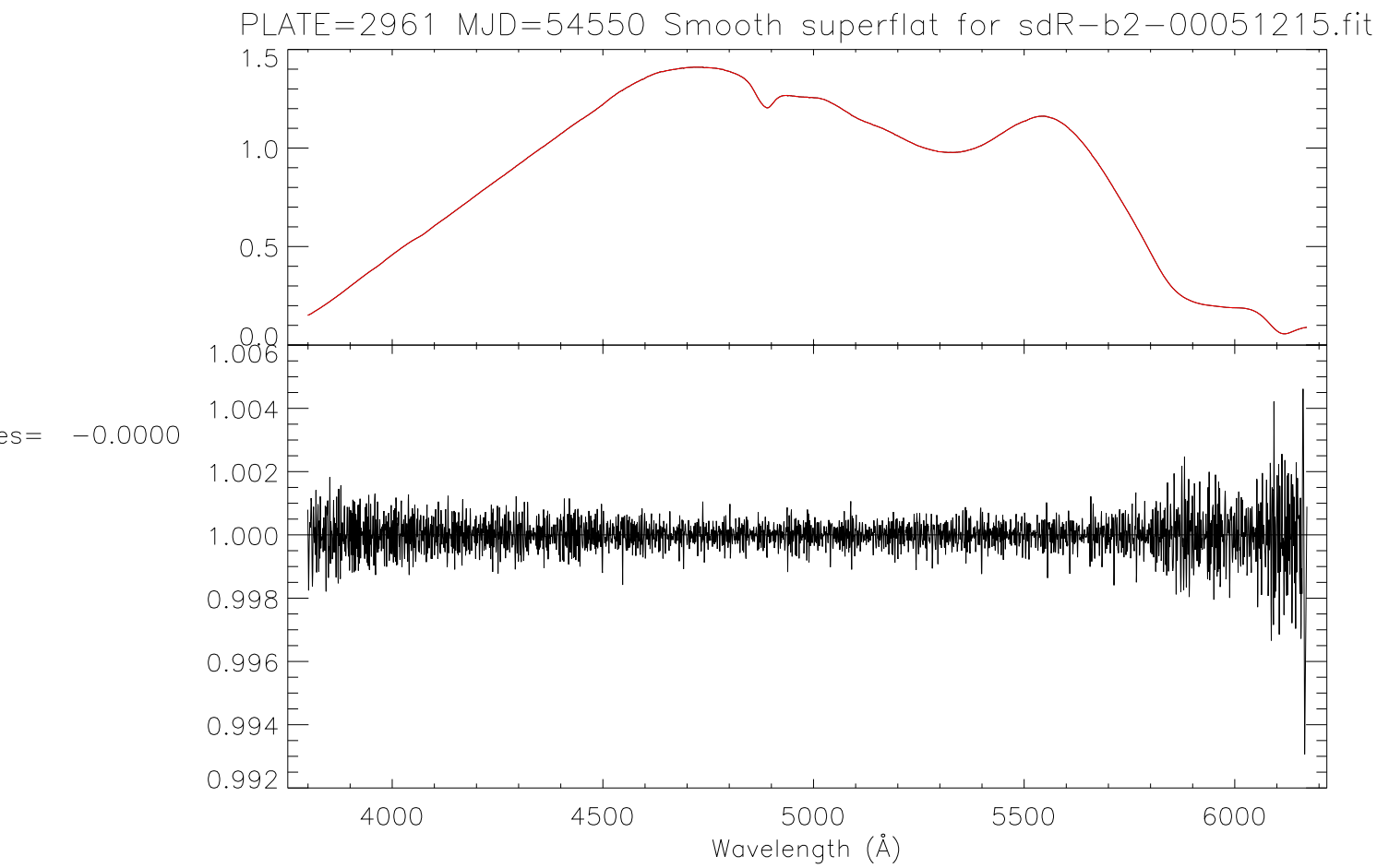

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

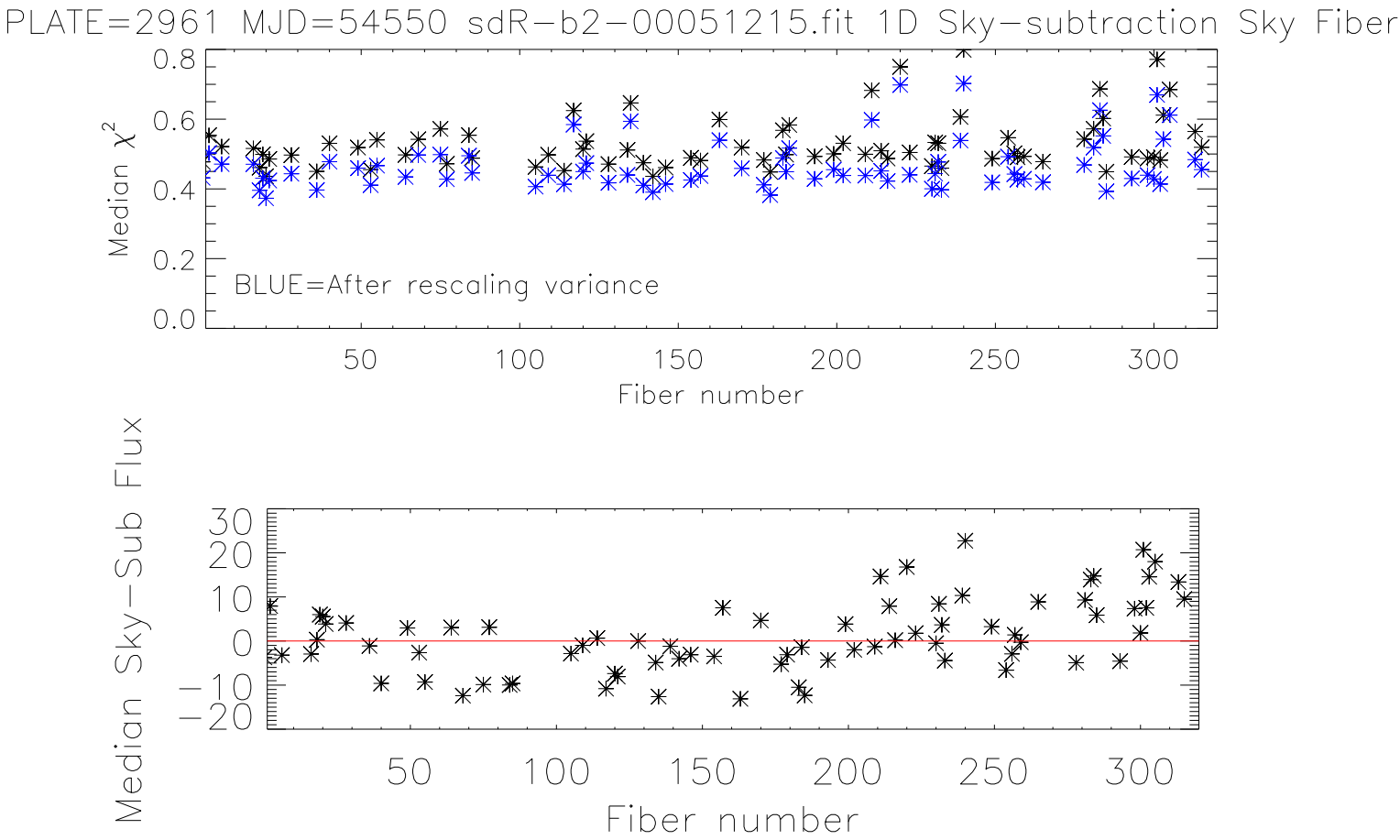

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

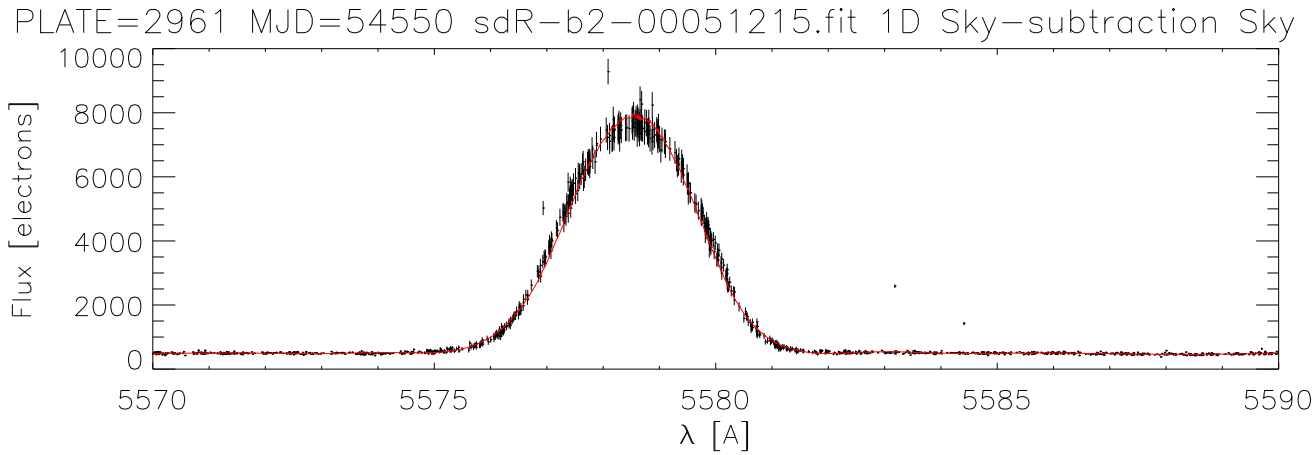

4046.5600
nfib1 82
nfib2 82
stdev 0.054
extra −0.54
4358.3300
nfib1 81
nfib2 82
stdev 0.029
extra −0.54
5460.9400
nfib1 81
nfib2 81
stdev 0.032
extra −0.50
5577.3390
nfib1 81
nfib2 82
stdev 0.019
extra −0.42
5889.9500
nfib1 82
nfib2 82
stdev 0.034
extra −0.32
5895.9240
nfib1 82
nfib2 82
stdev 0.045
extra −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

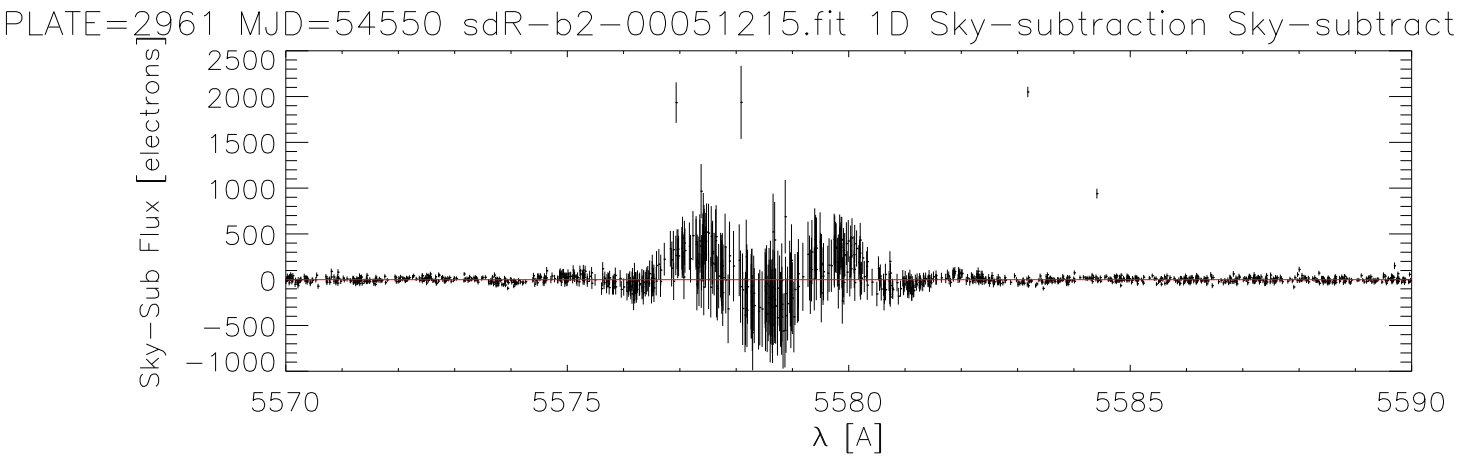

sky shift, pixels
−0.35
−0.40
−0.45
−0.50
−0.55
−0.60
3500
4000
4500
5000
5500
6000
6500

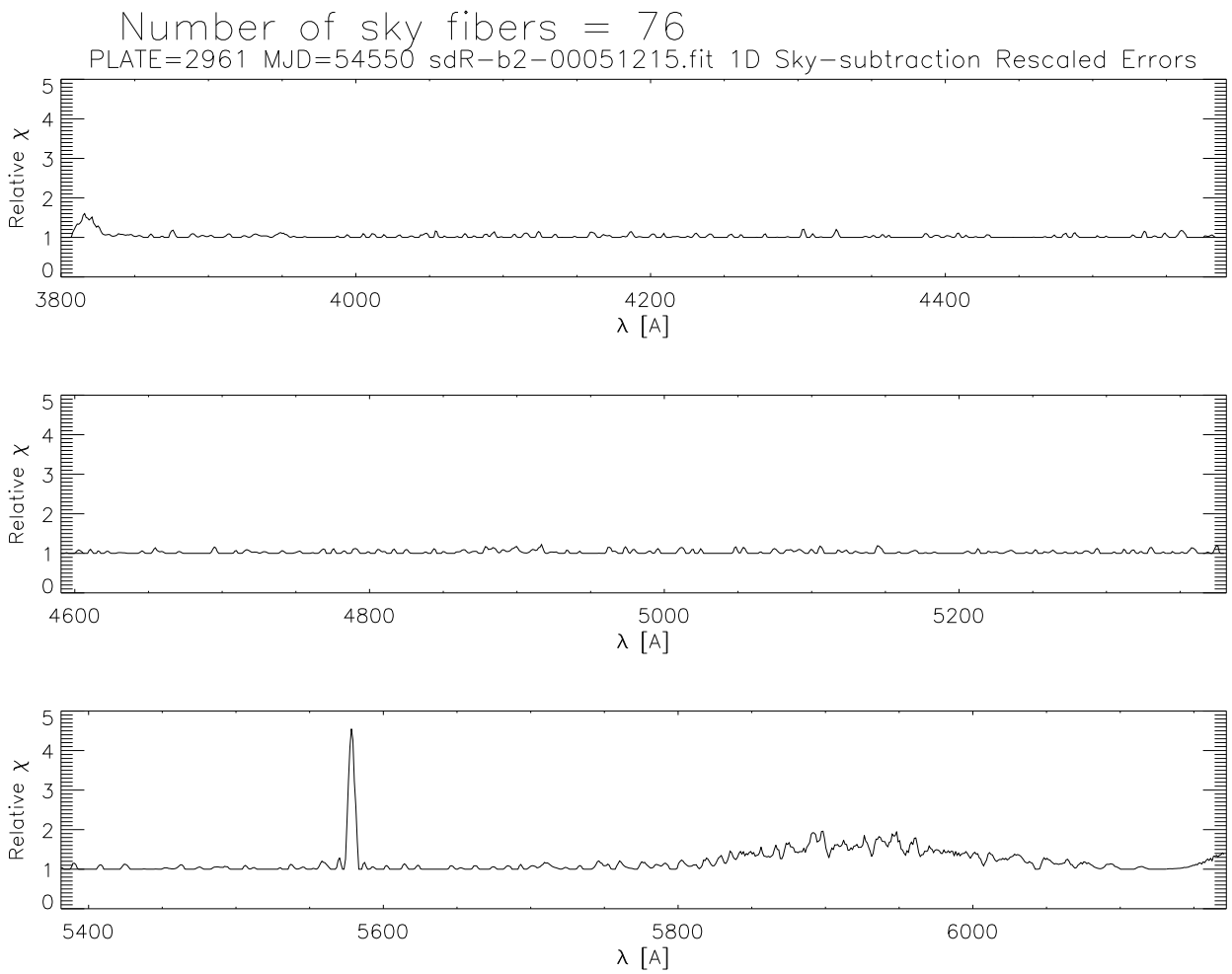

PLATE=2961 MJD=54550 Smooth superflat for sdR-b2-00051215.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

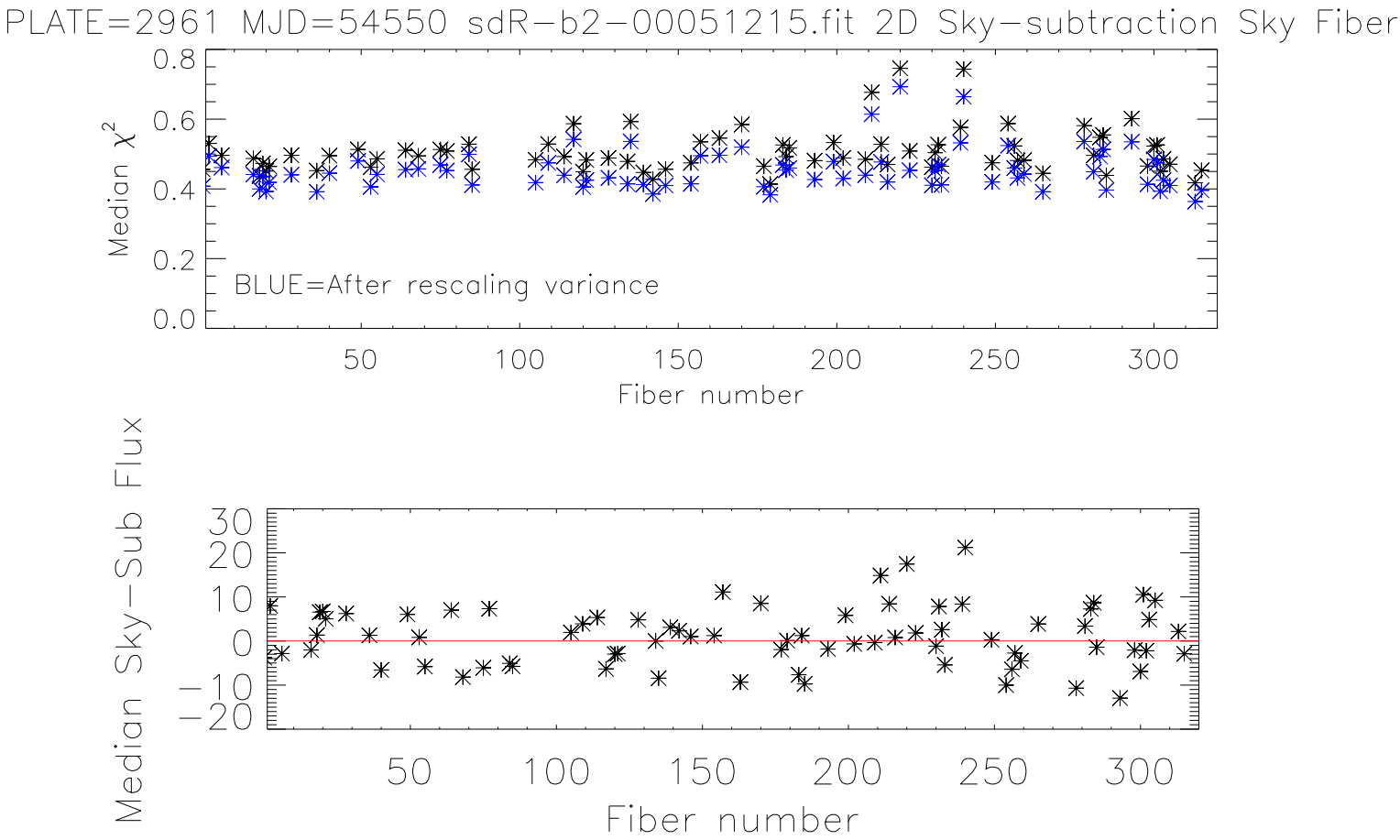
es= −0.0000

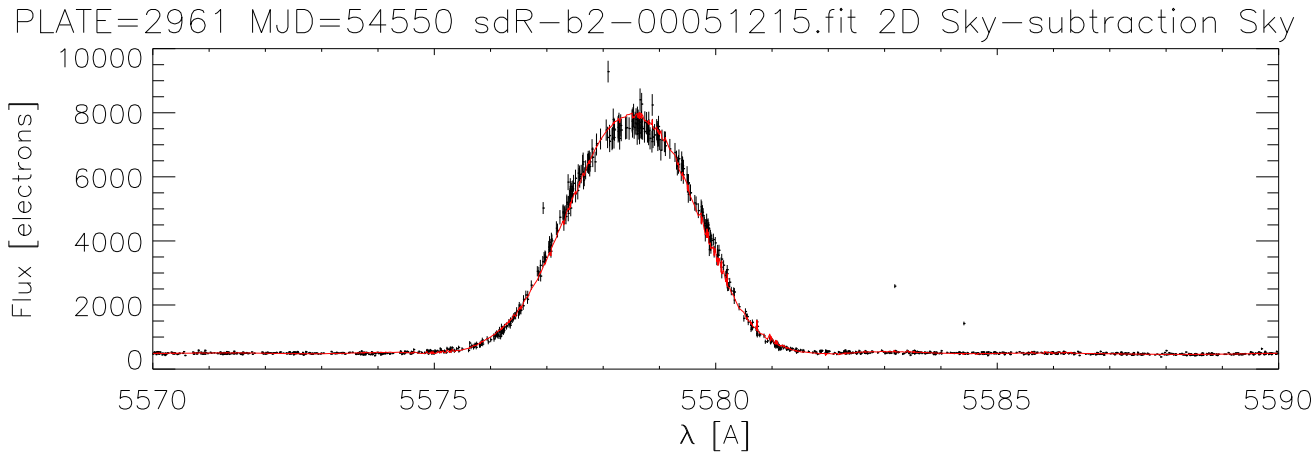

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

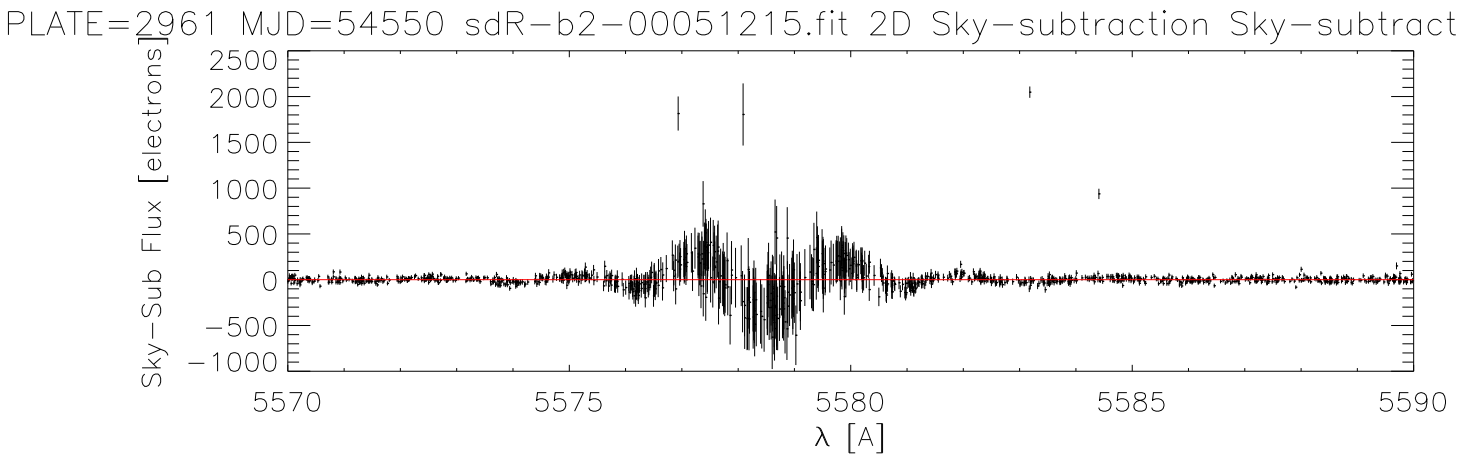

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

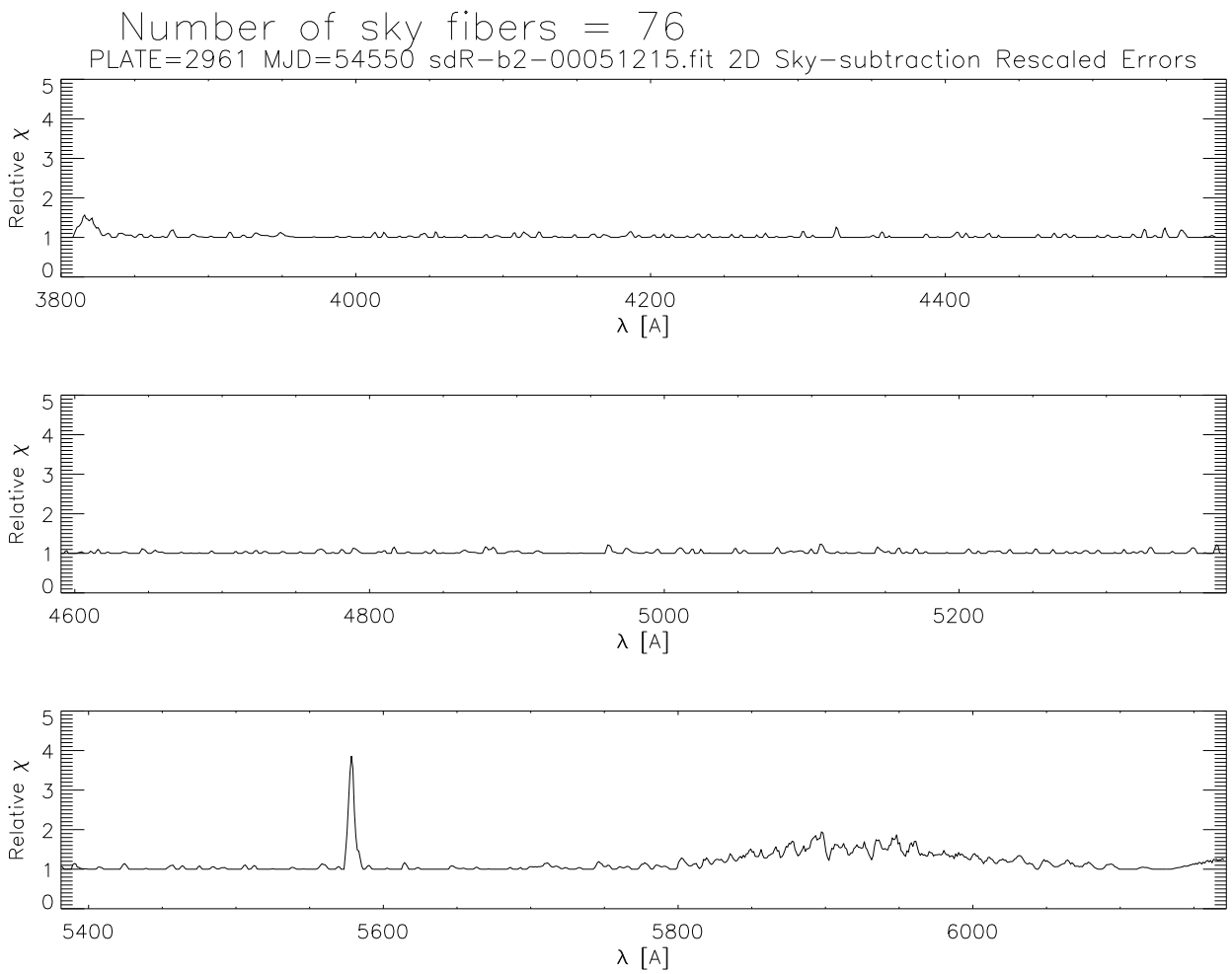

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

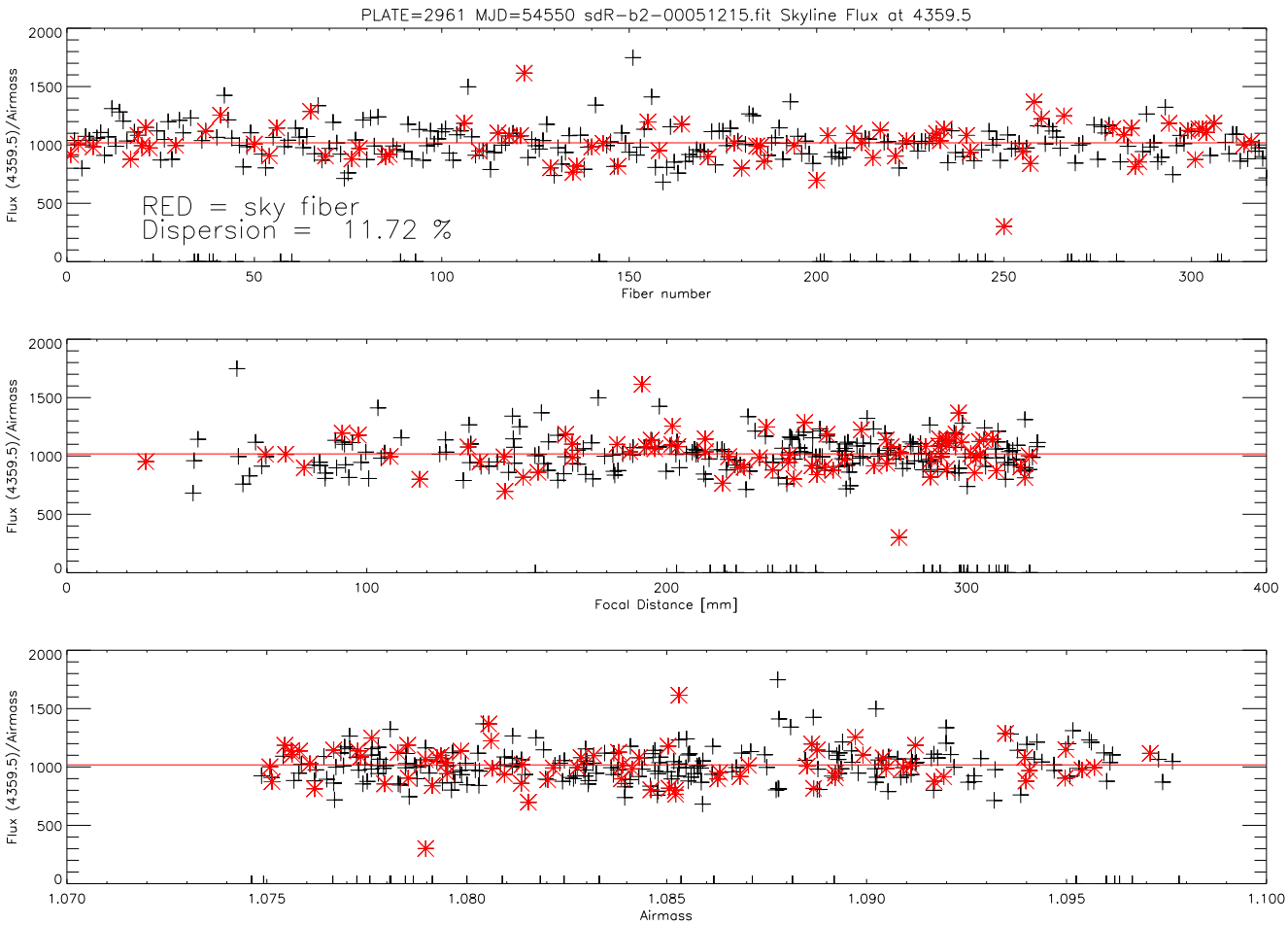

Number of sky fibers = 76
PLATE=2961 MJD=54550 sdR-b2-00051215.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

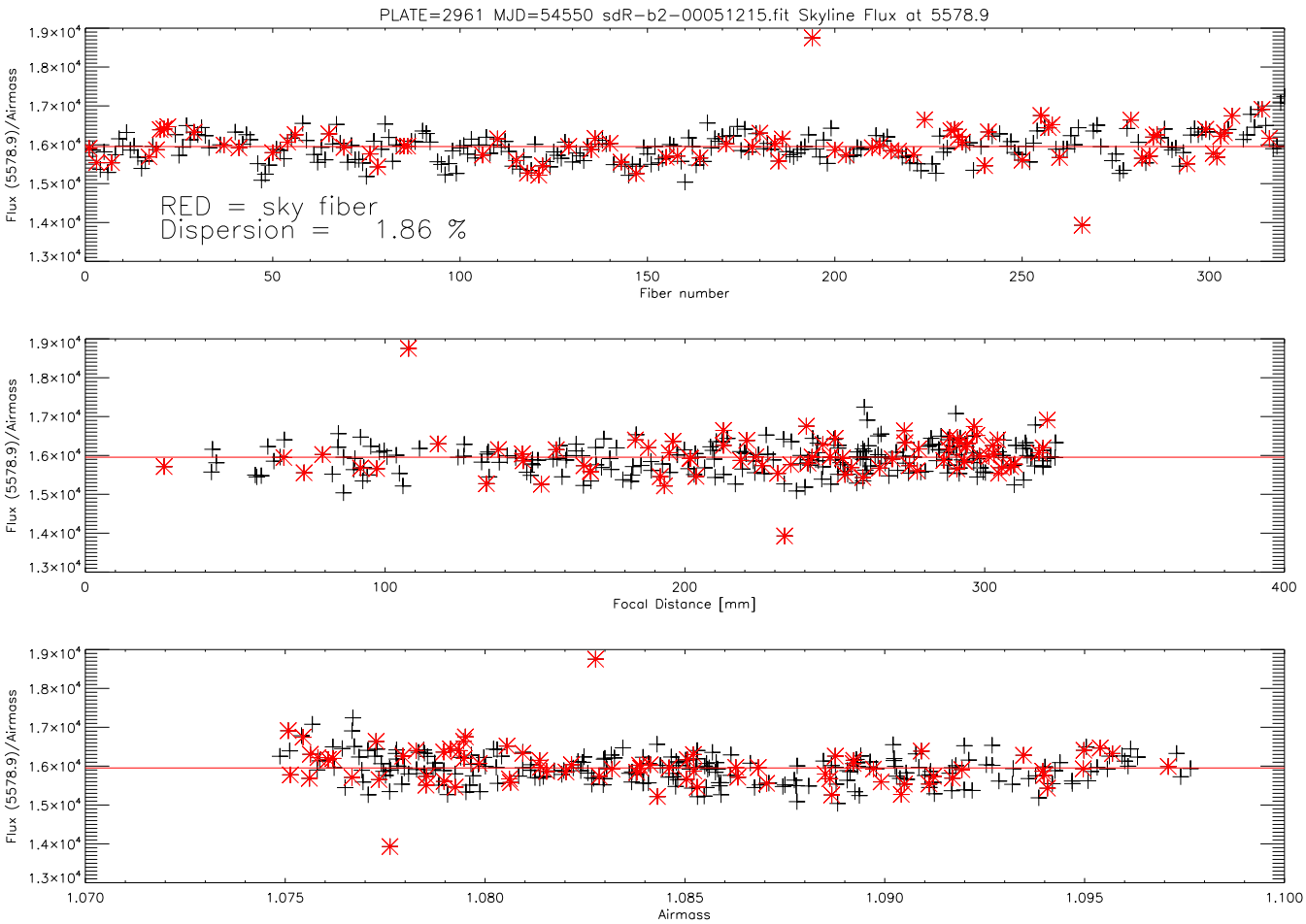

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

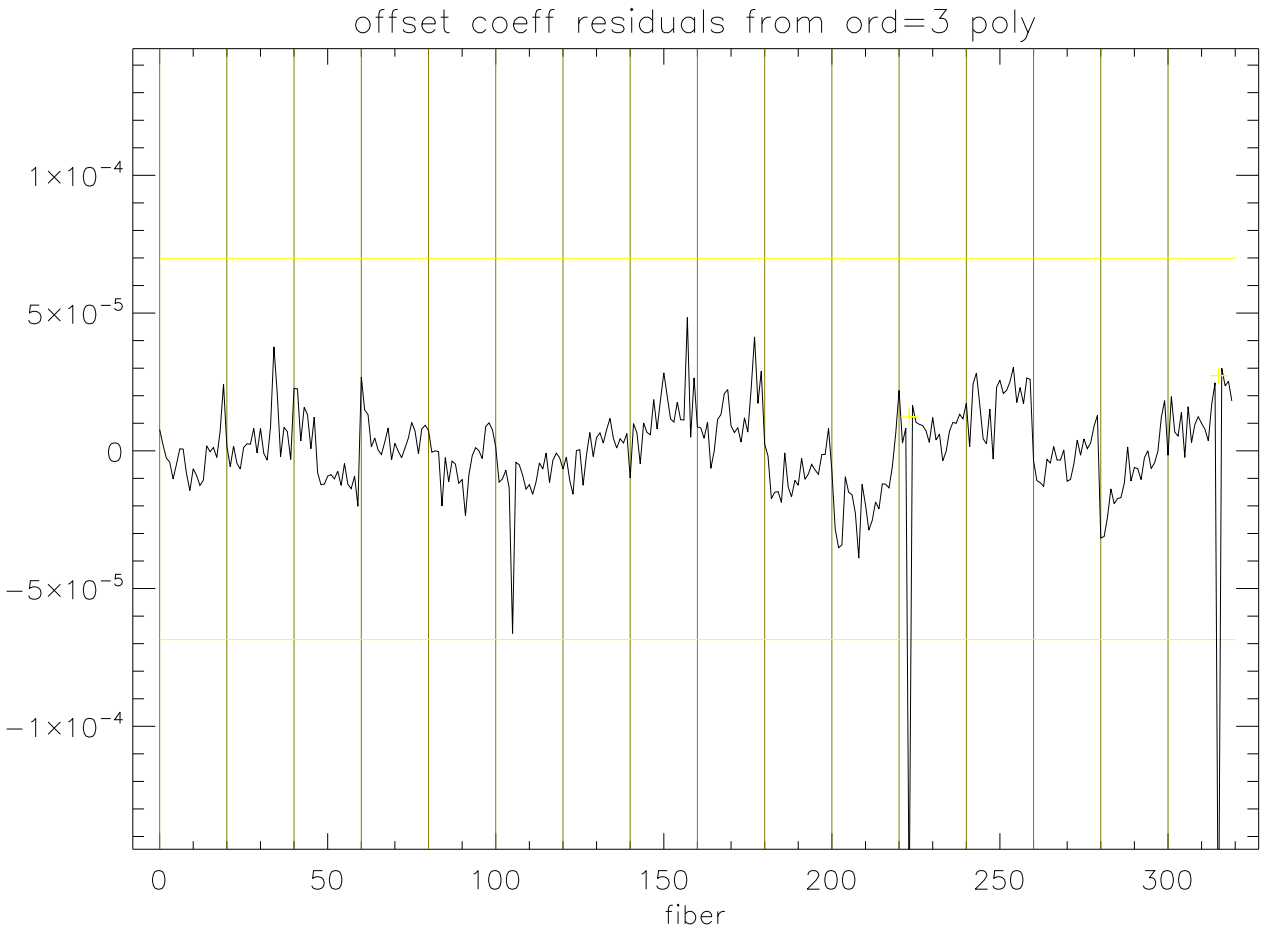

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

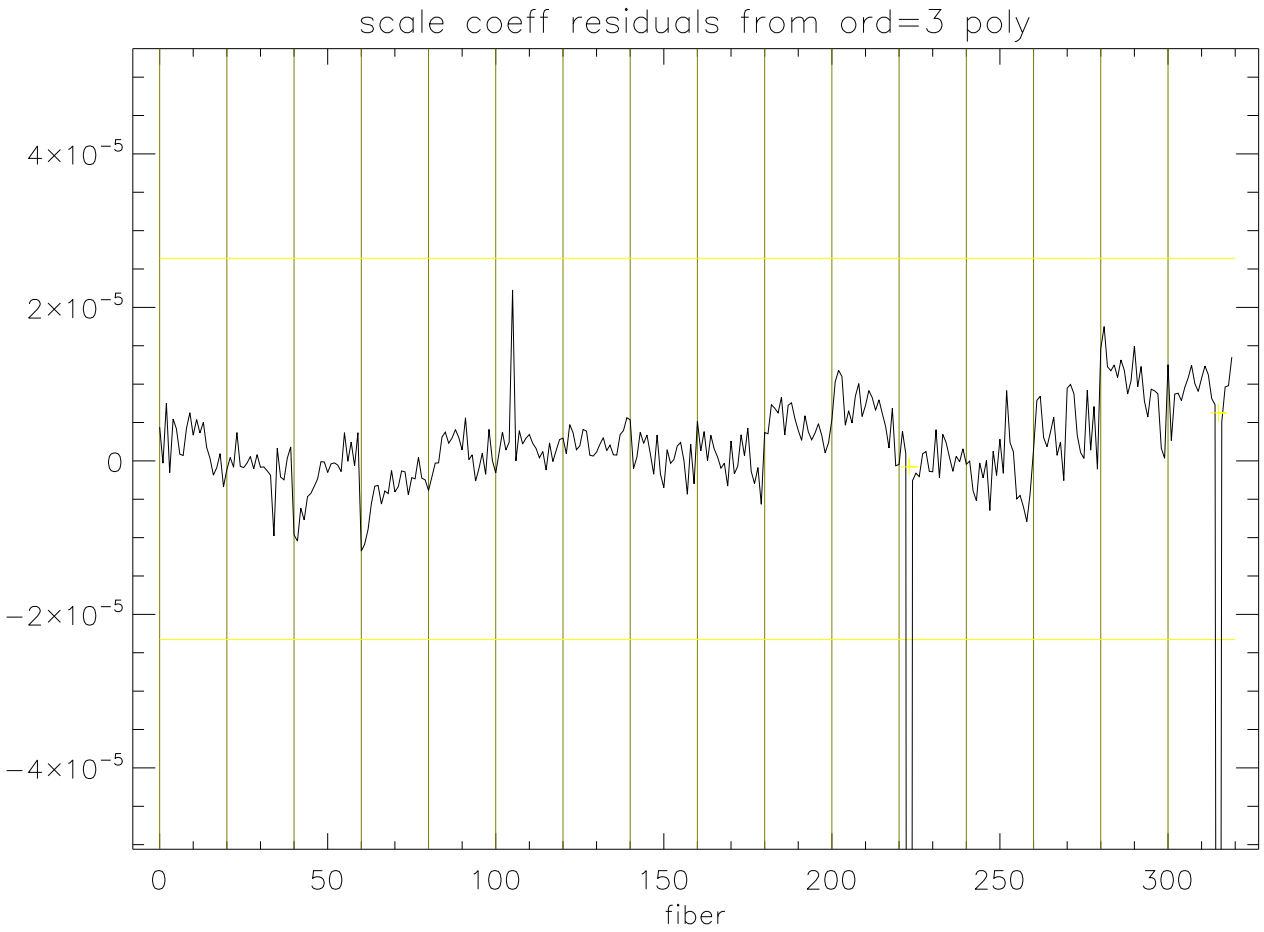

PLATE=2961 MJD=54550 sdR-b2-00051215.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

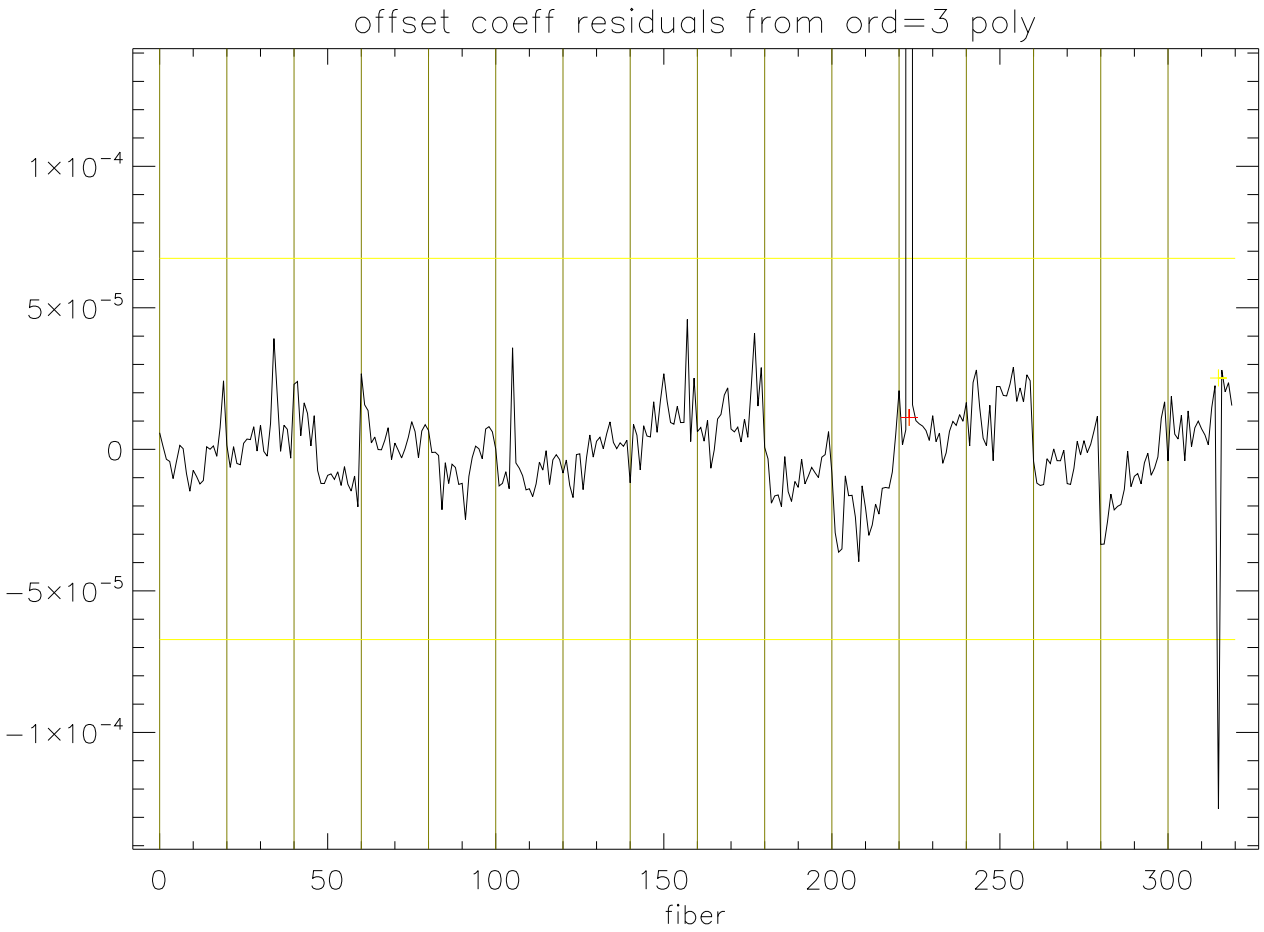

Number of sky fibers = 76
PLATE=2961 MJD=54550 sdR-b2-00051215.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

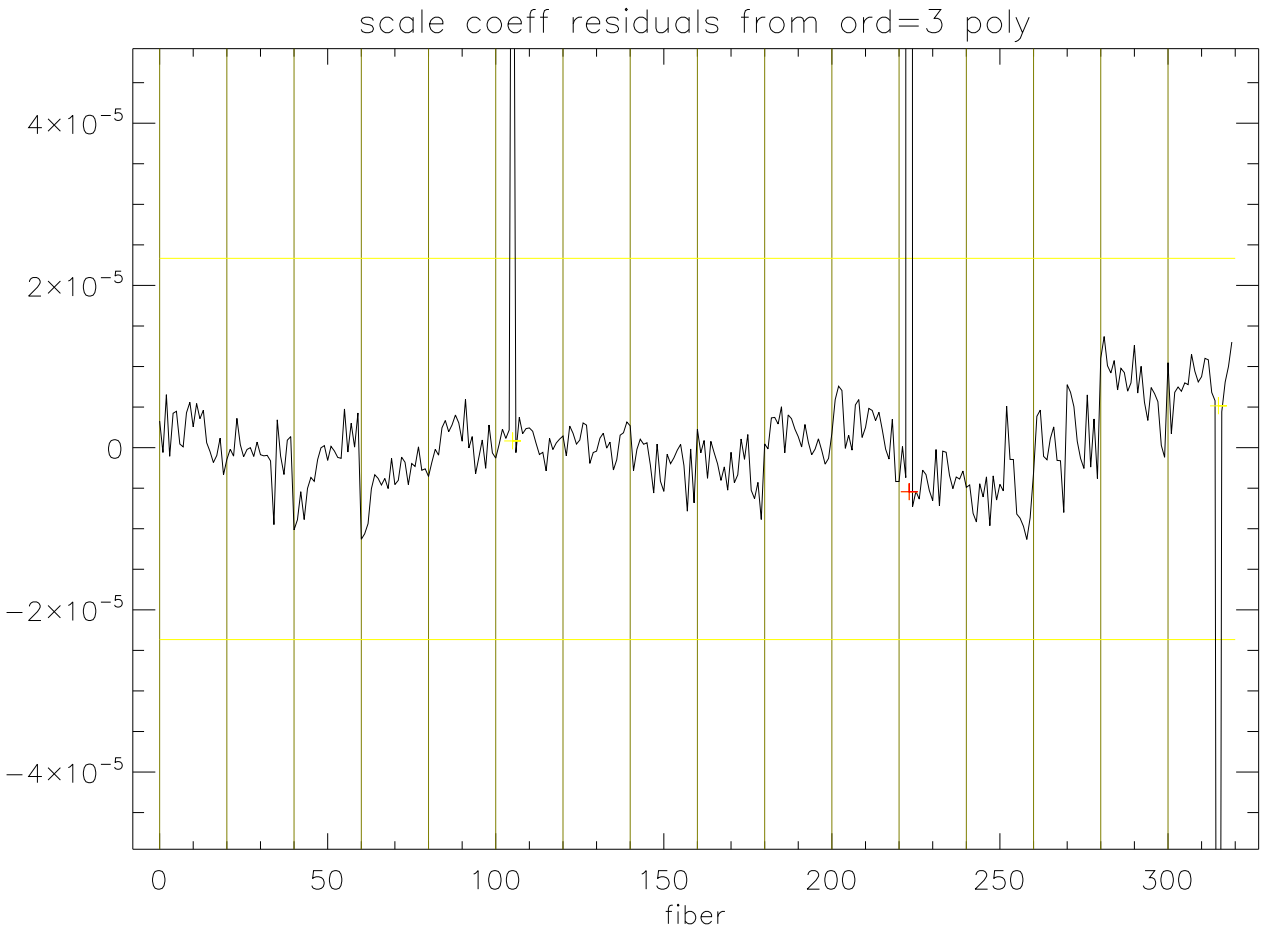

PLATE=2961 MJD=54550 sdR-b2-00051215.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.72 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

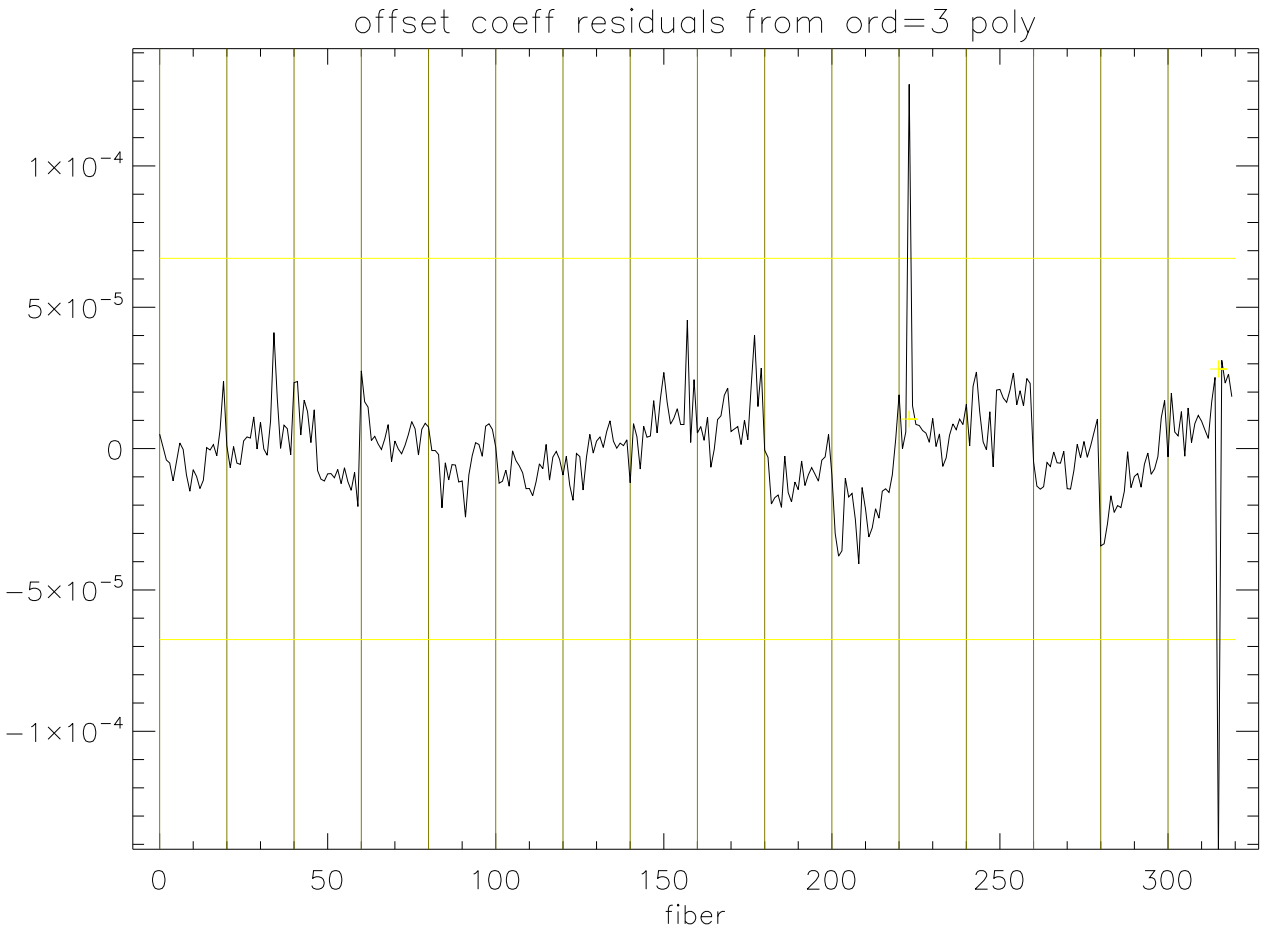

PLATE=2961 MJD=54550 sdR-b2-00051215.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.86 %
Fiber number
Focal Distance [mm]
Airmass

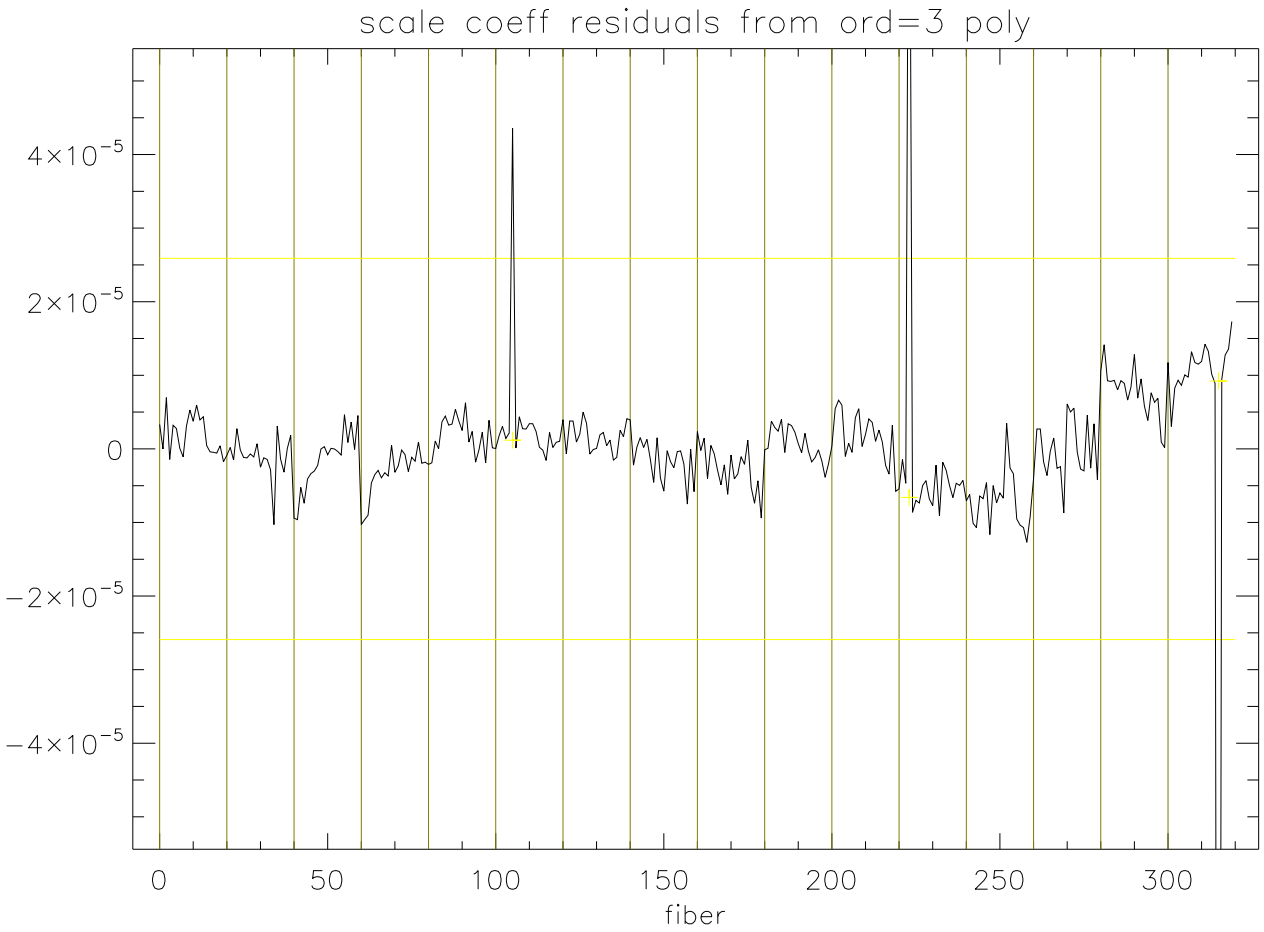

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

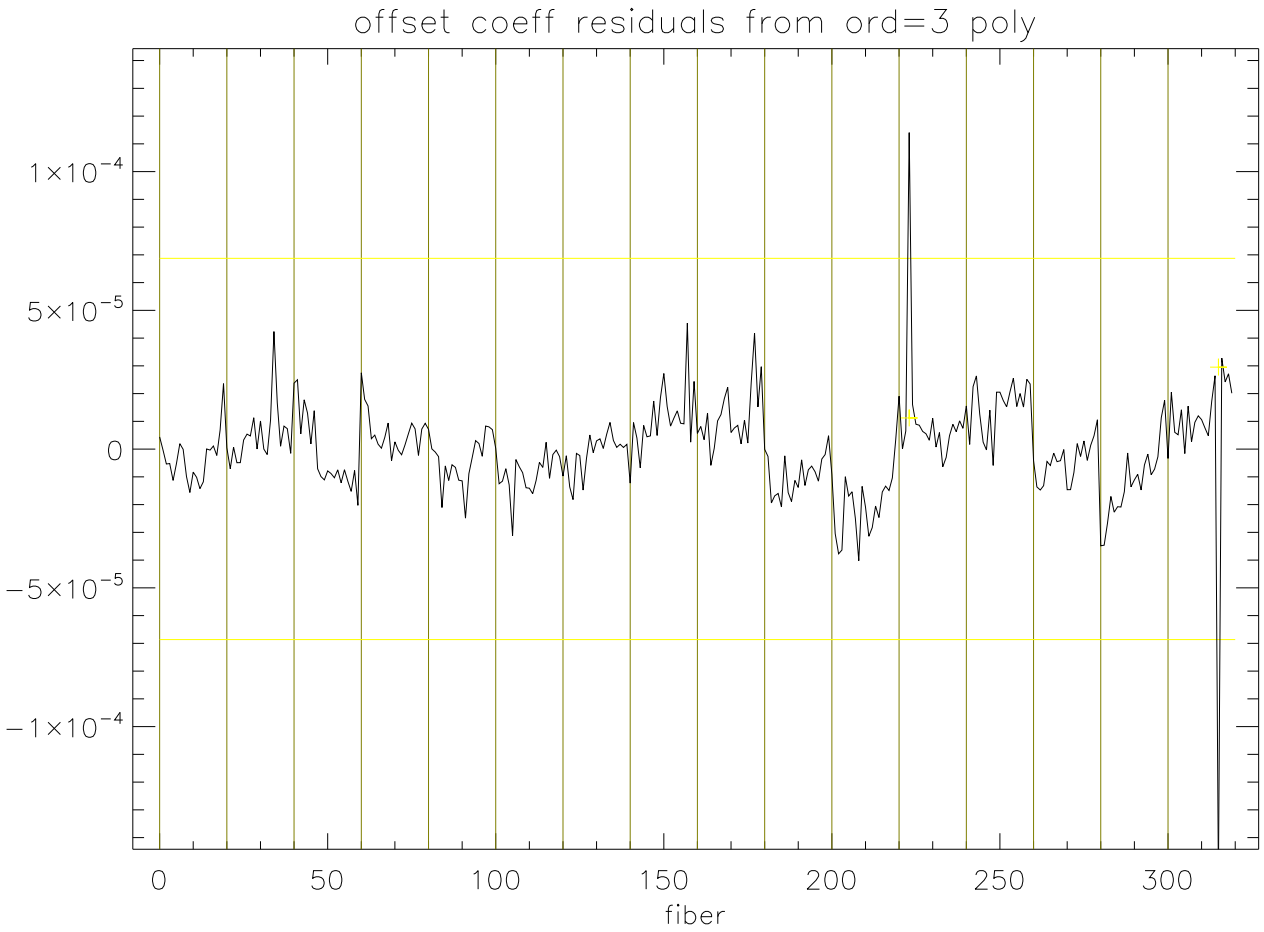

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

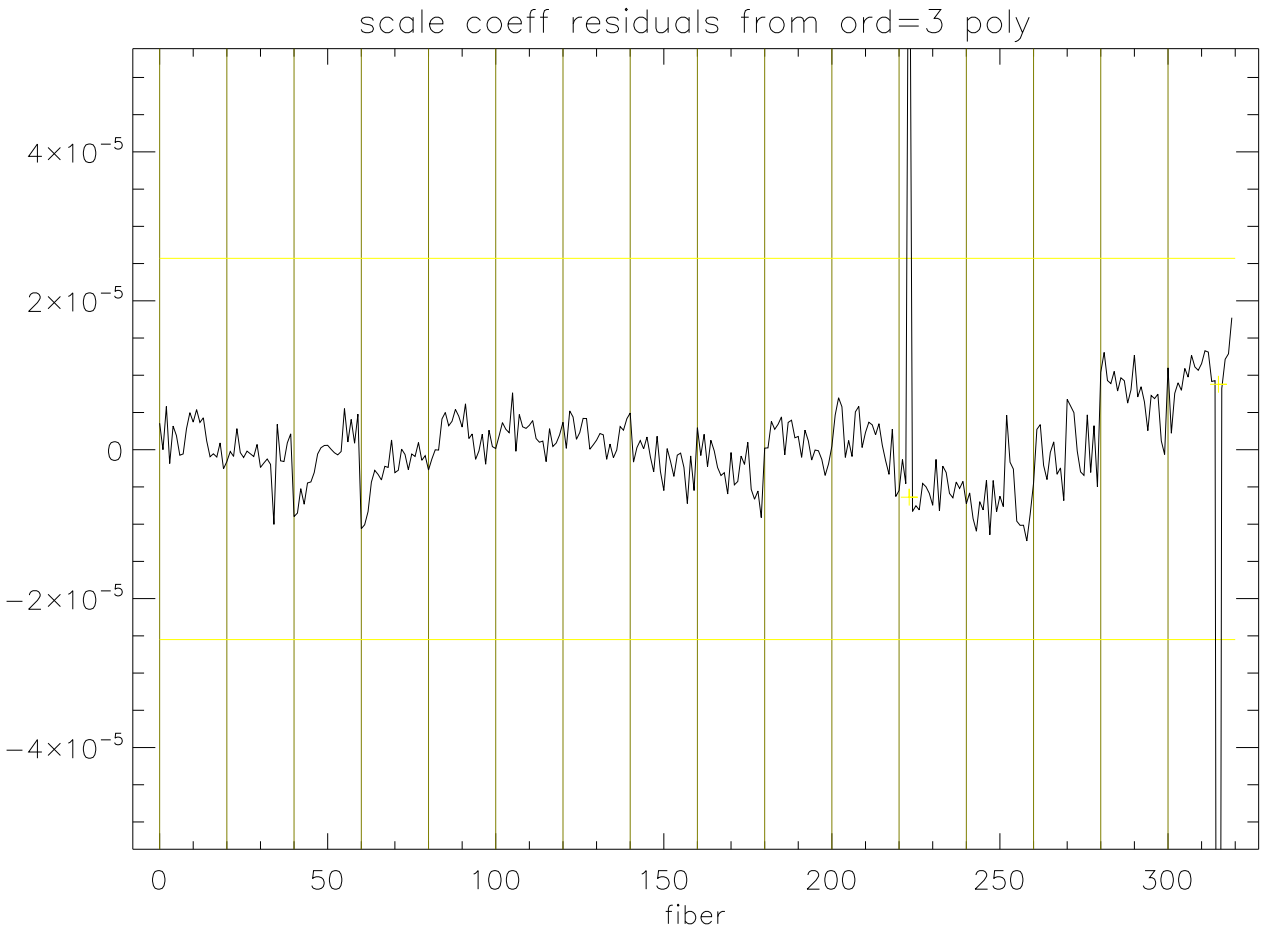

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

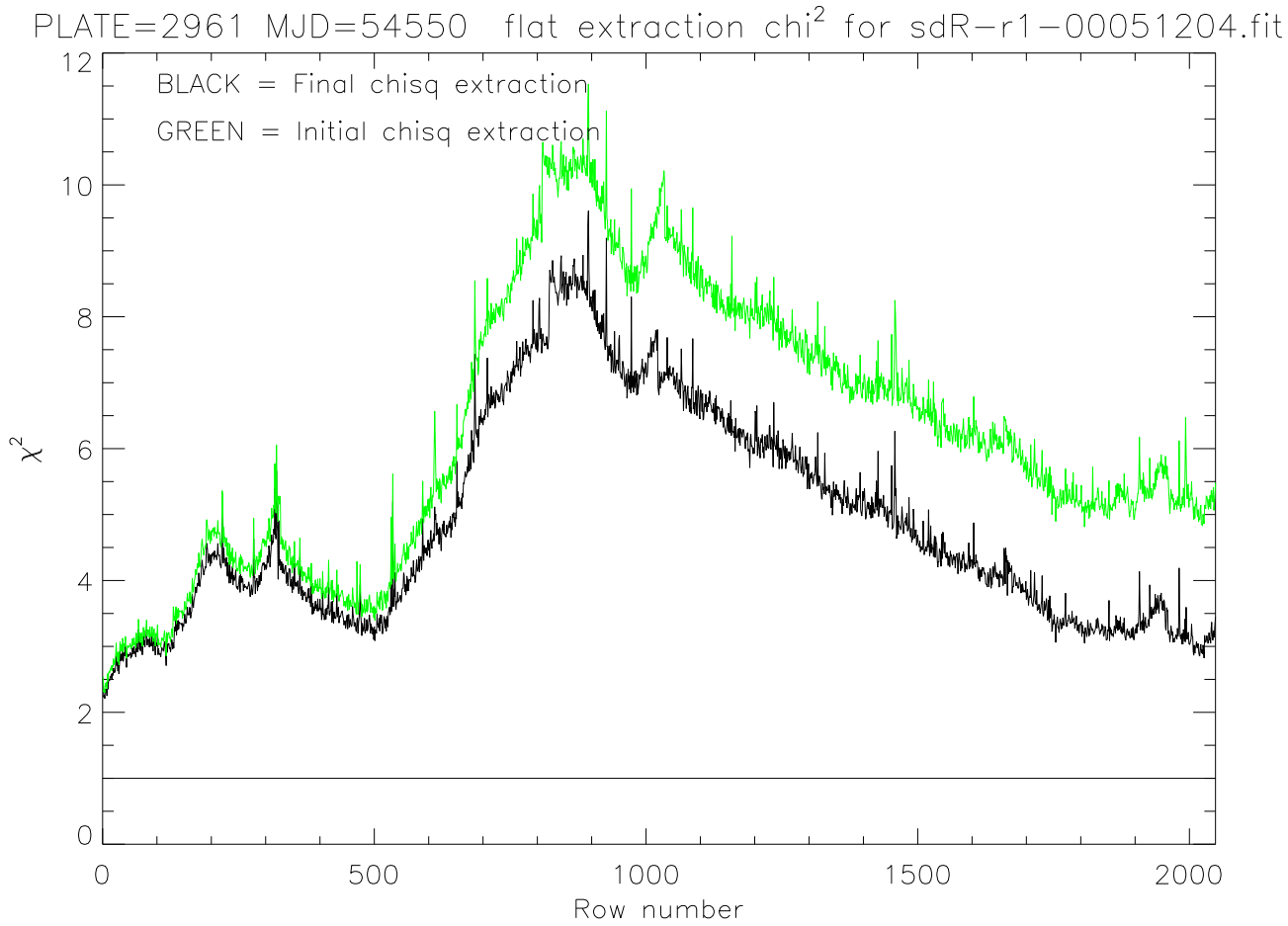

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

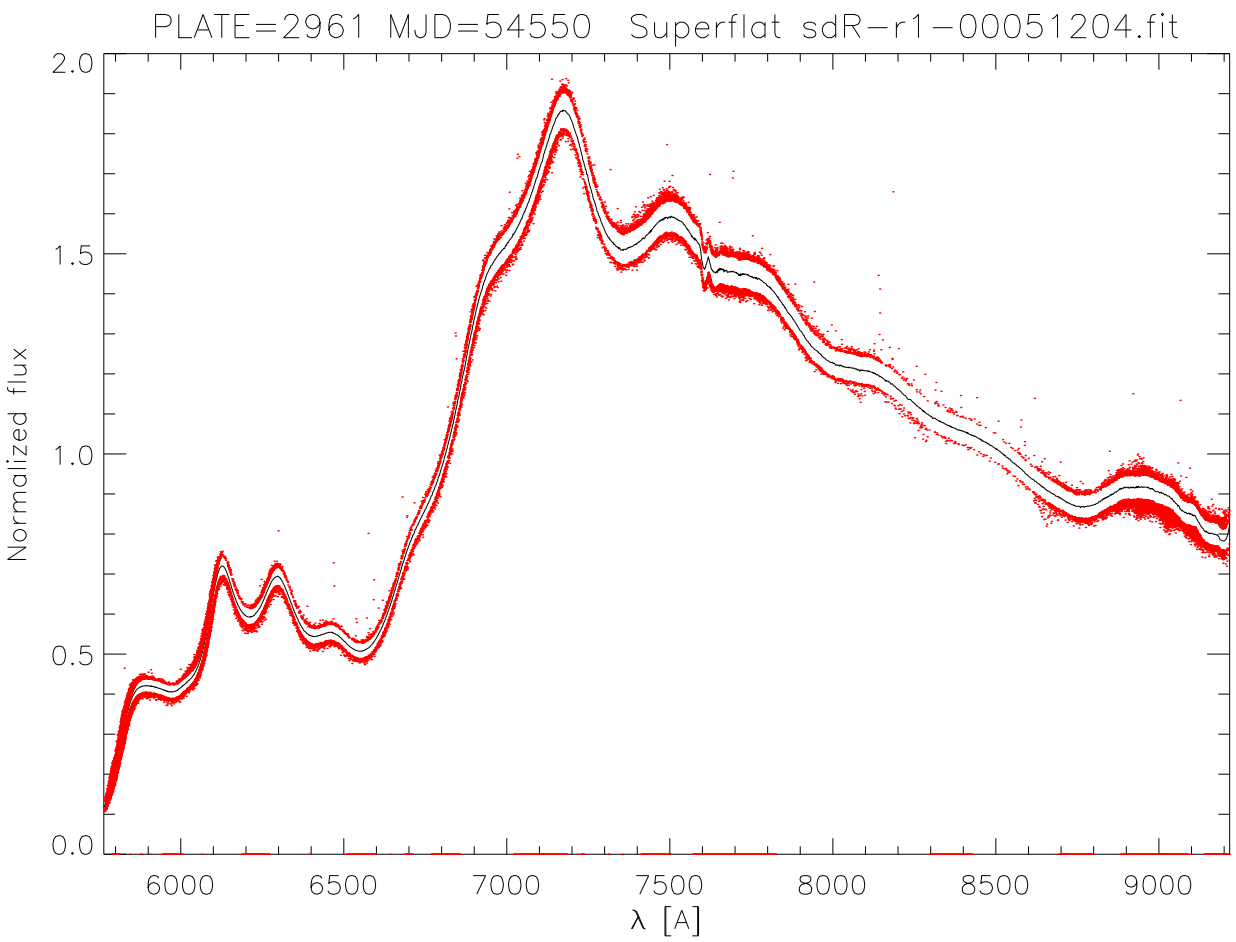

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

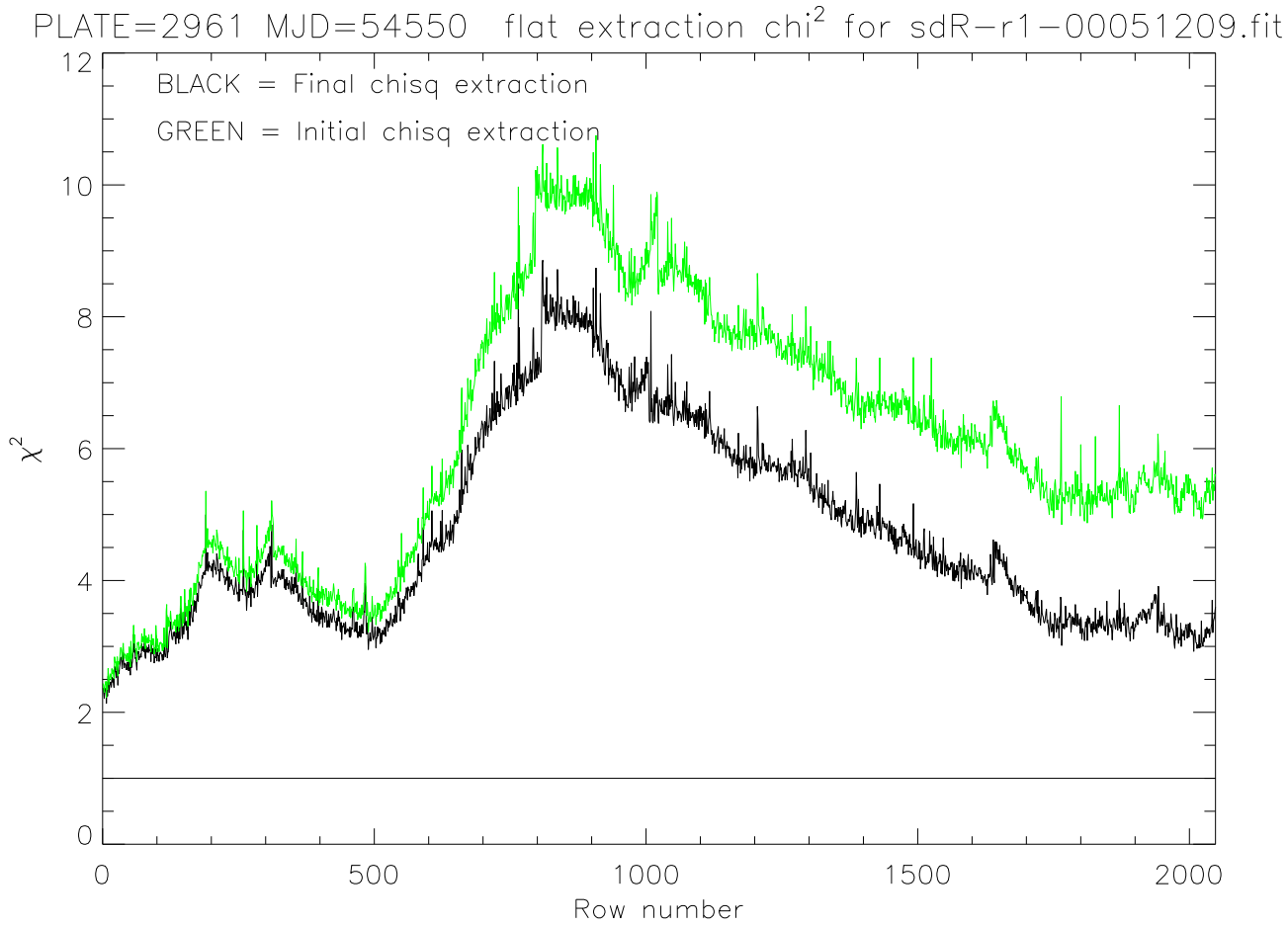

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

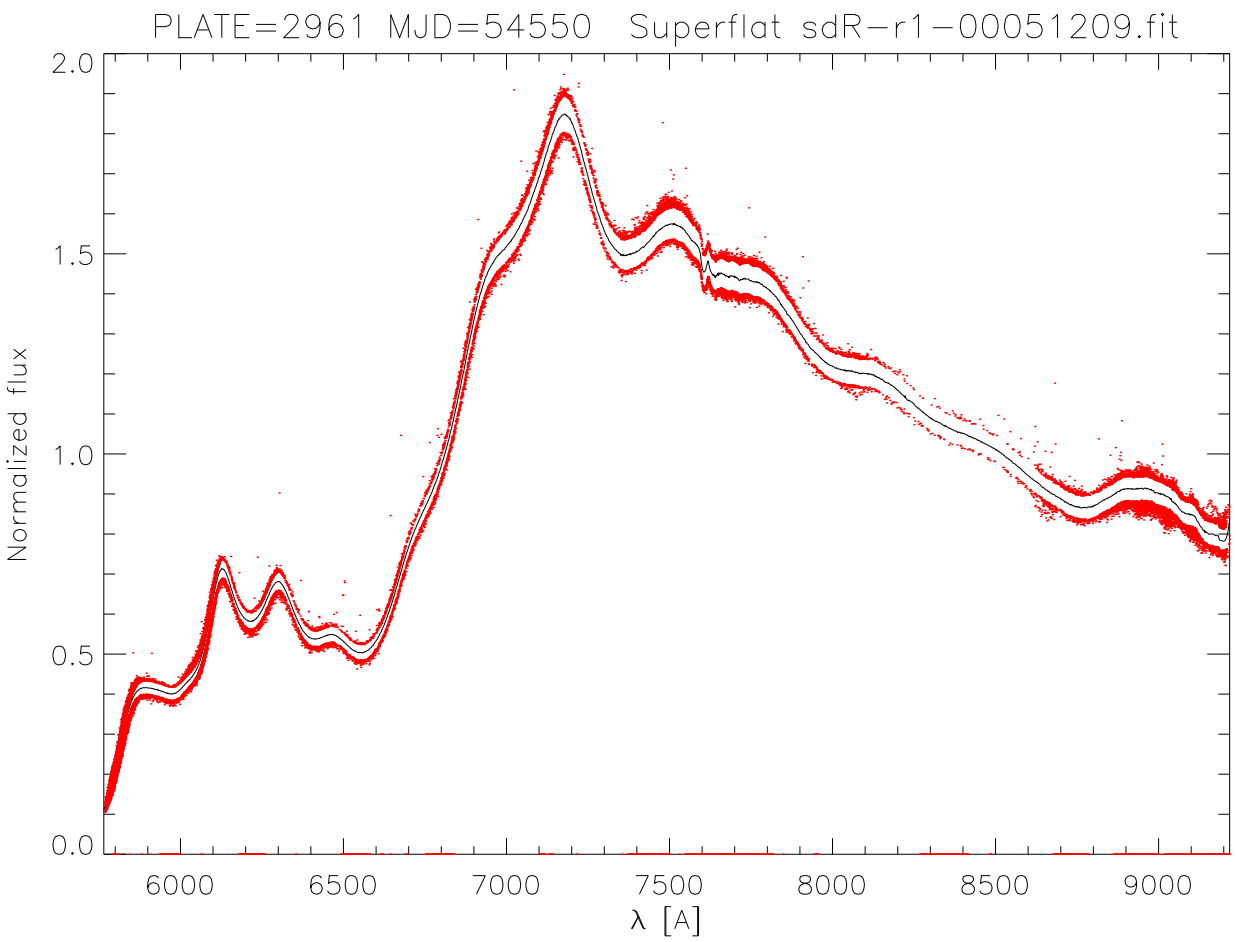

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

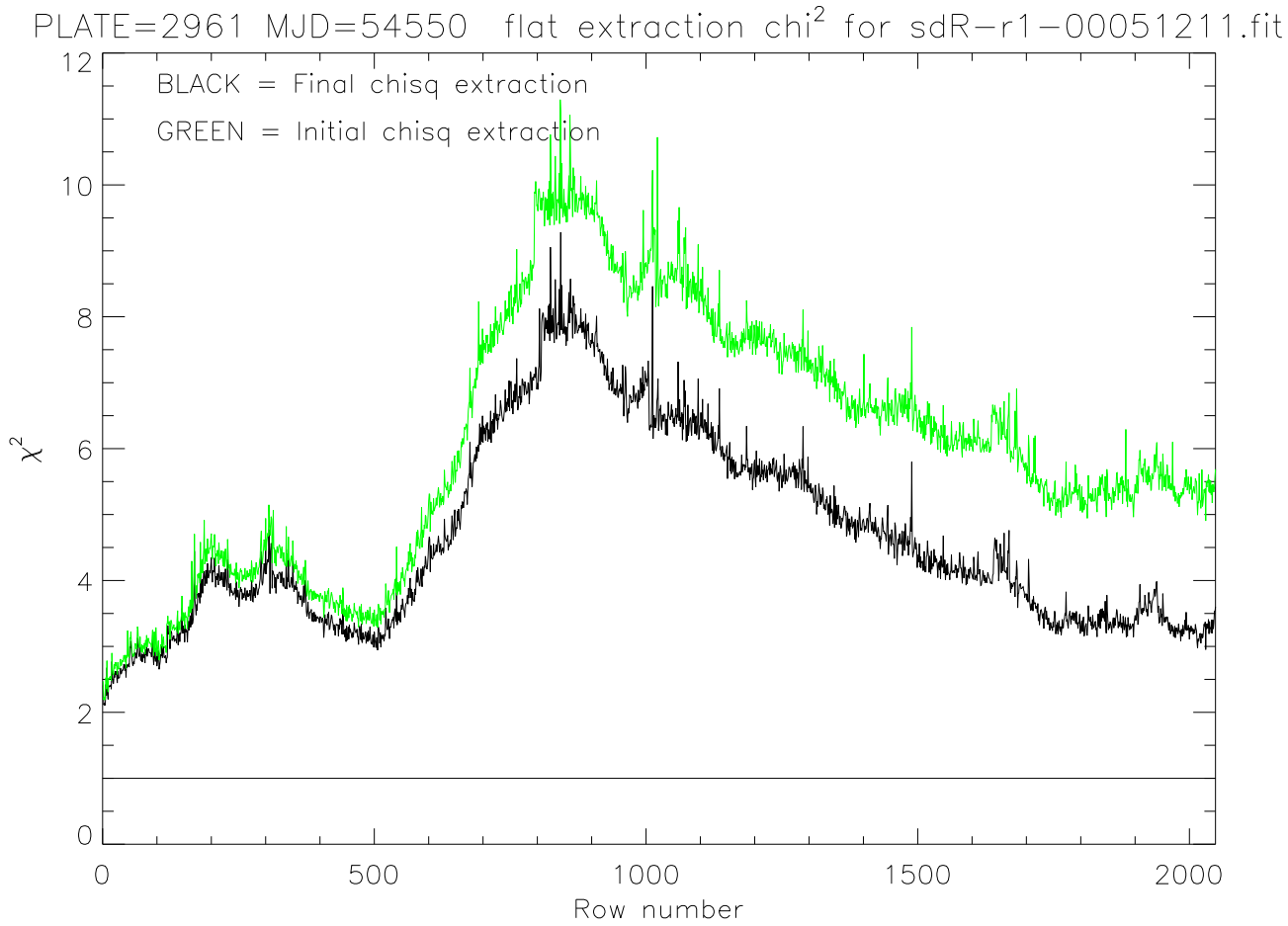

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

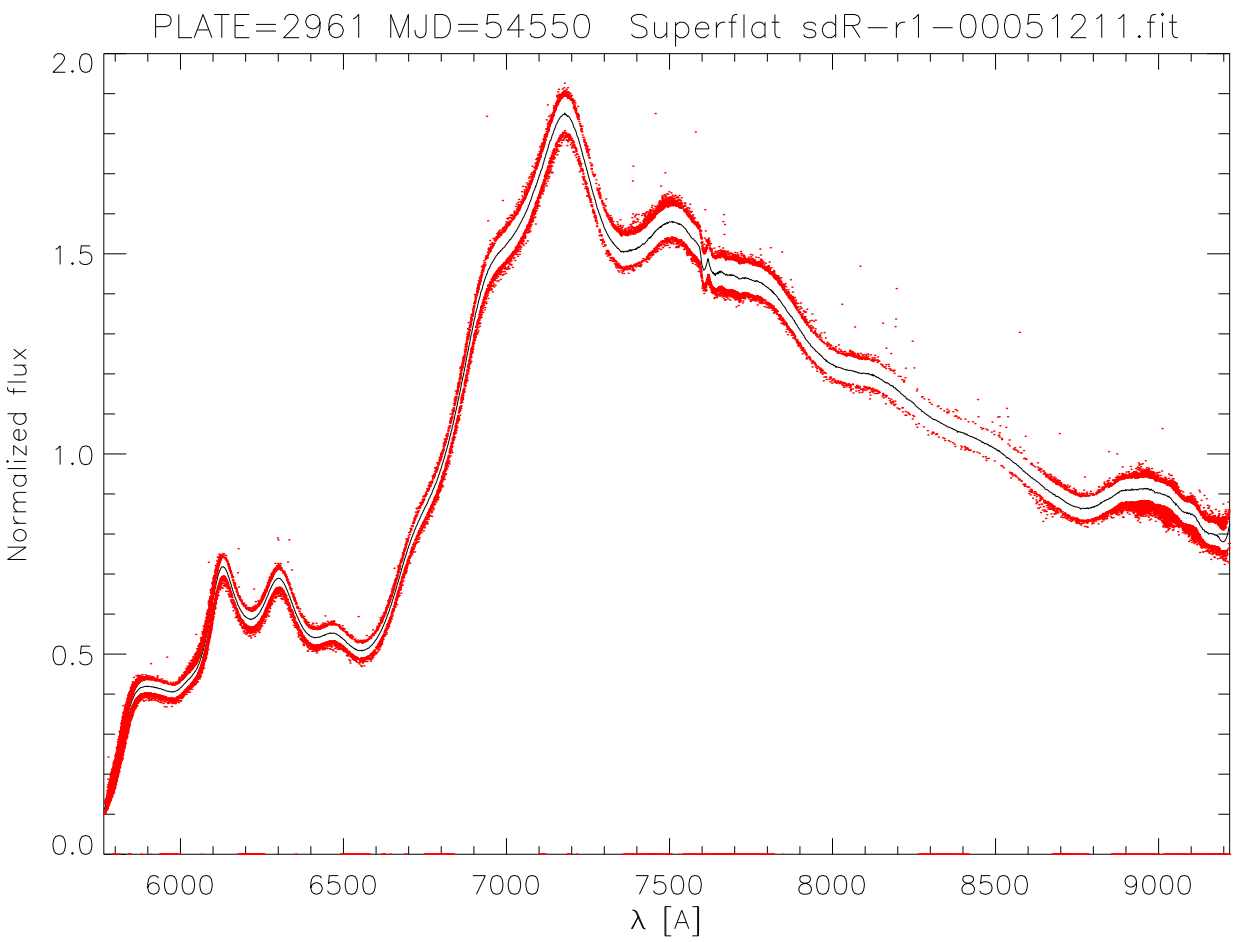

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r1−00051204.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

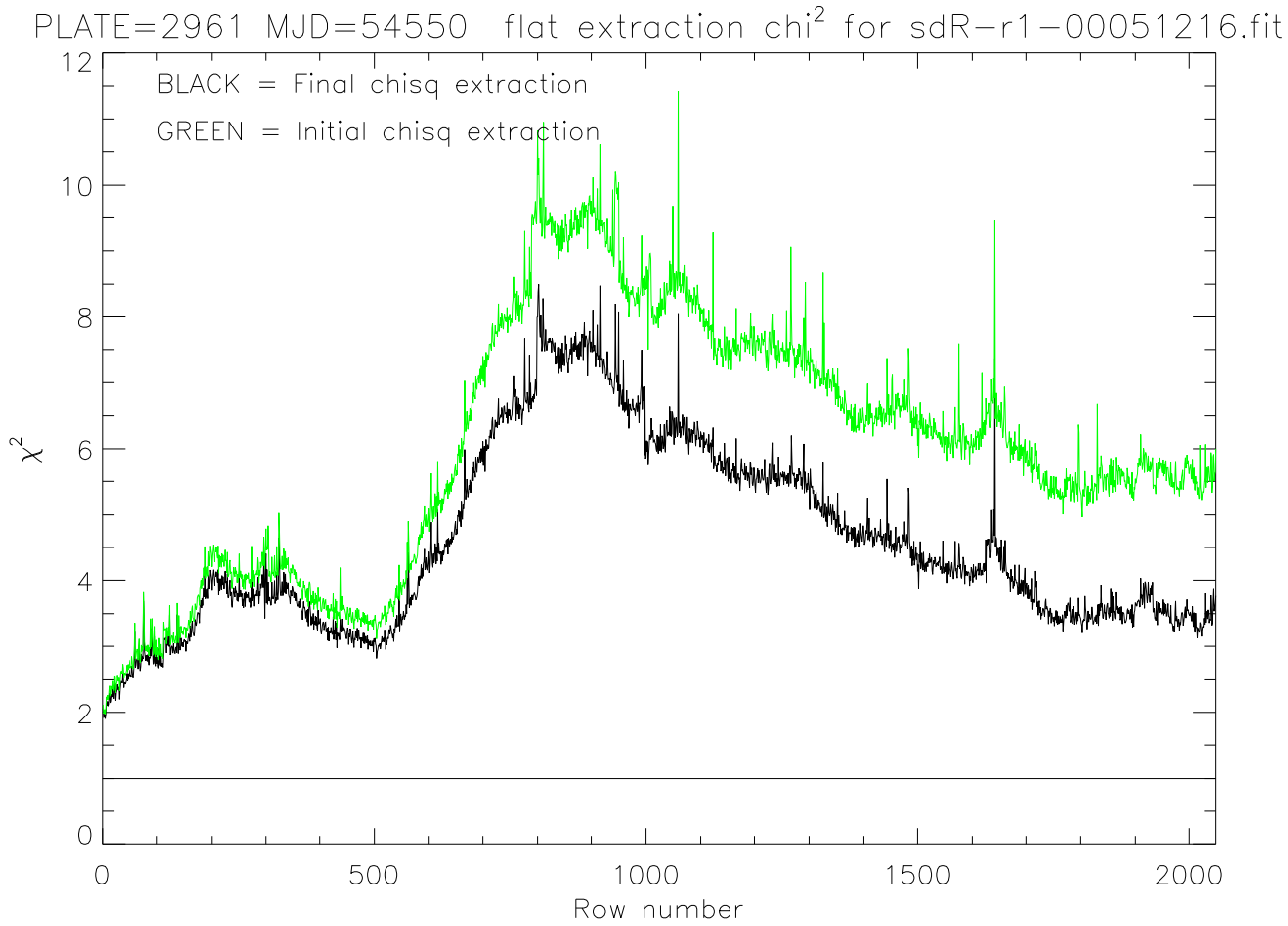

PLATE=2961 MJD=54550 Superflat sdR-r1-00051204.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

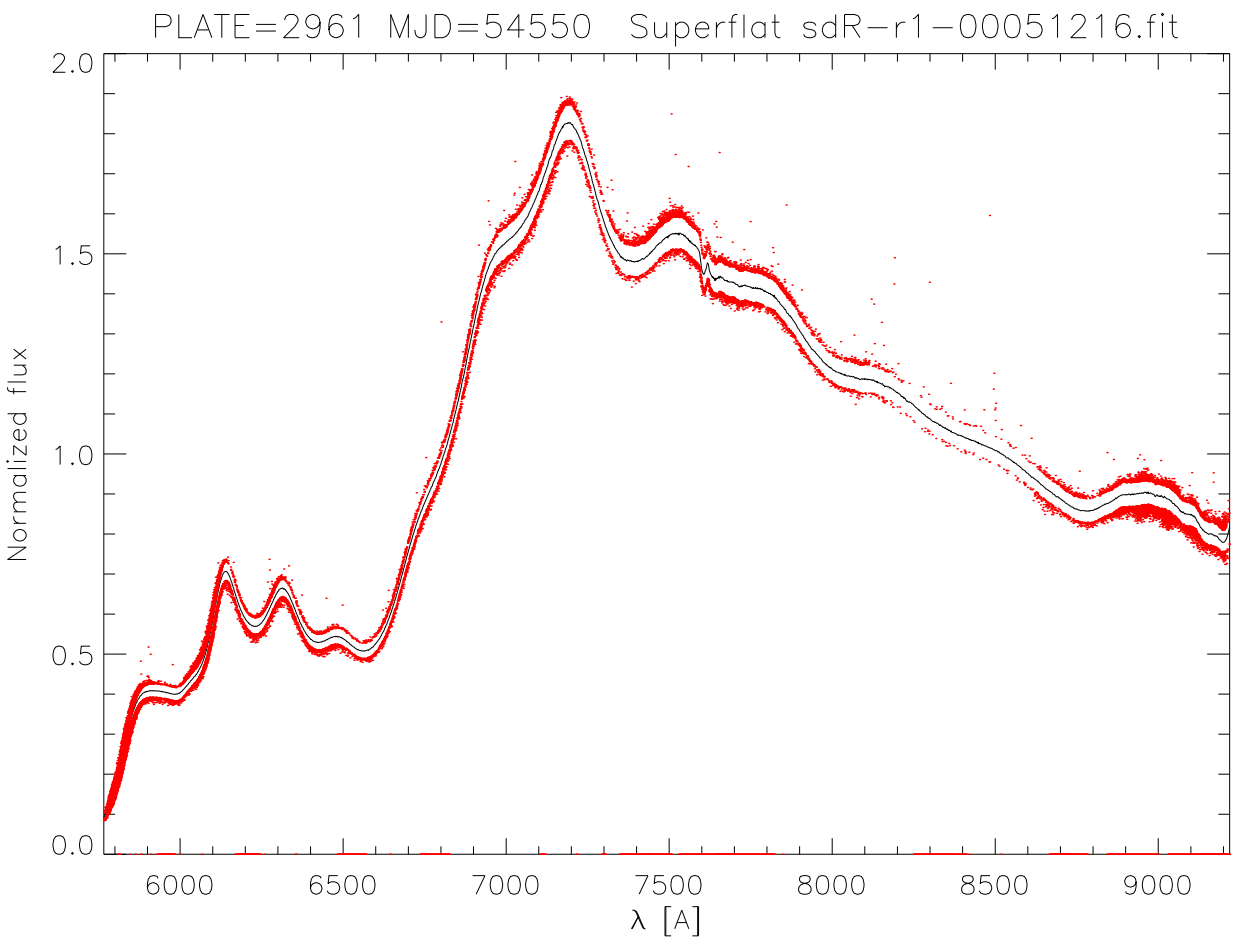

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r1−00051209.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

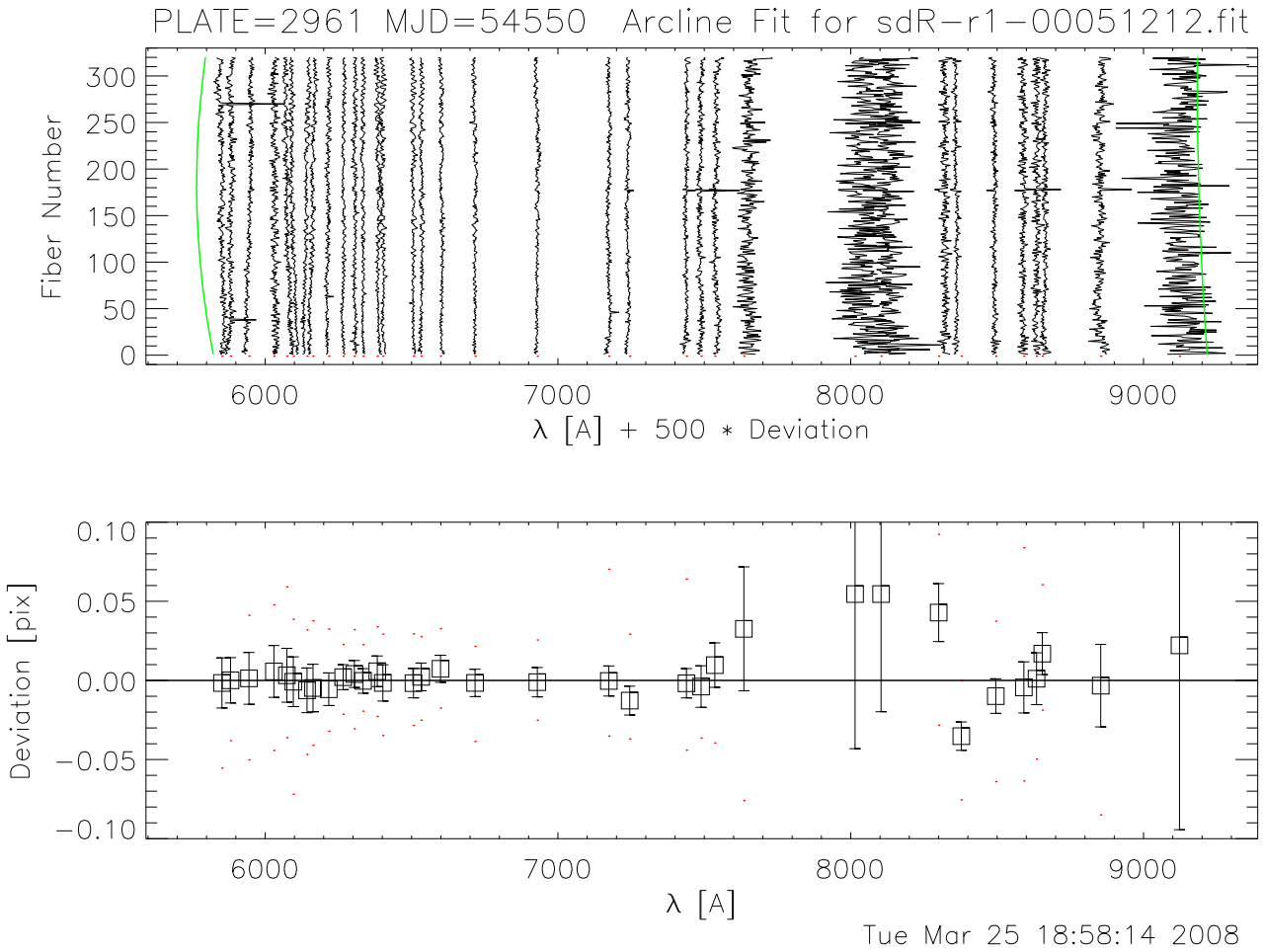

PLATE=2961 MJD=54550 Superflat sdR-r1-00051209.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

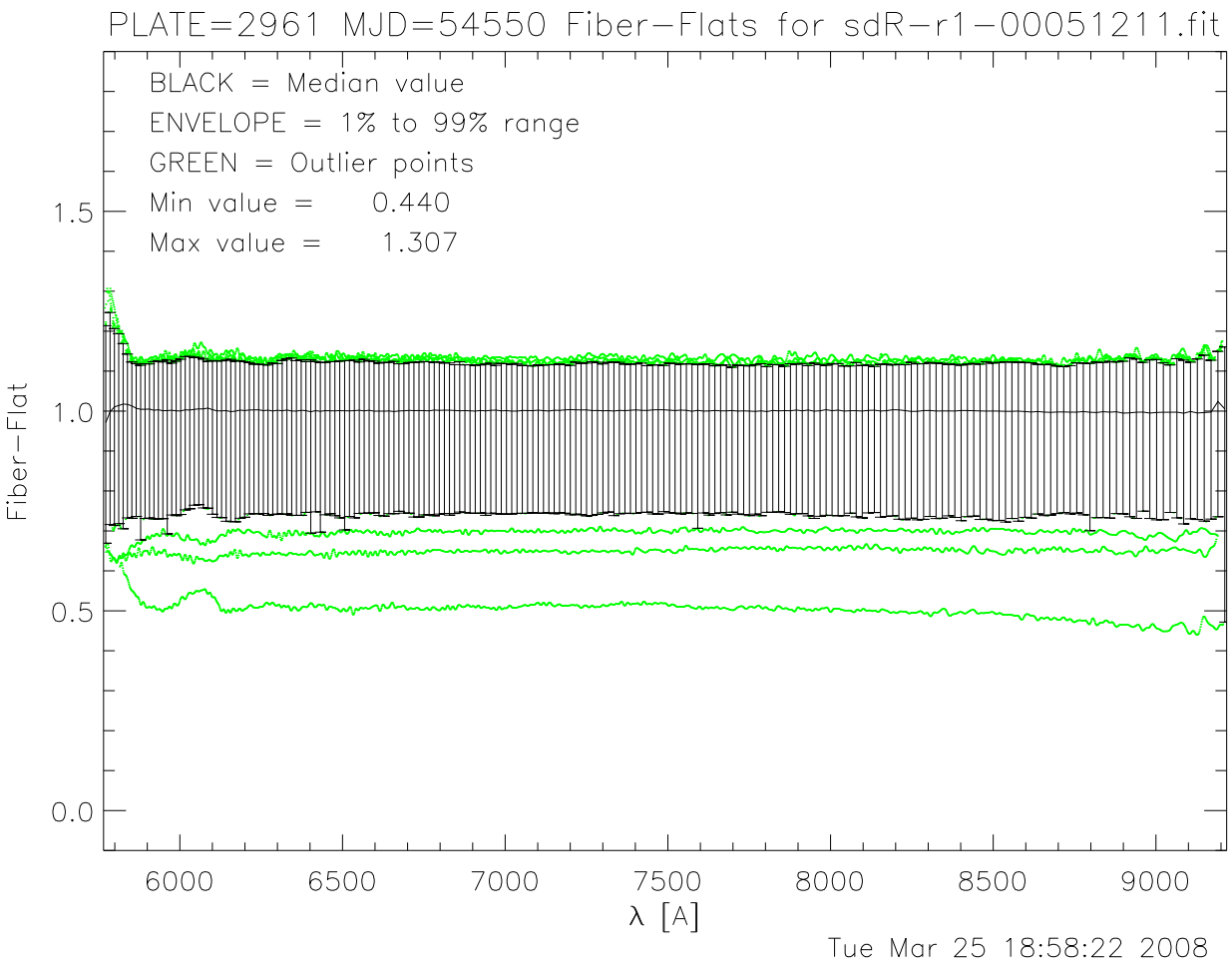

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r1−00051211.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

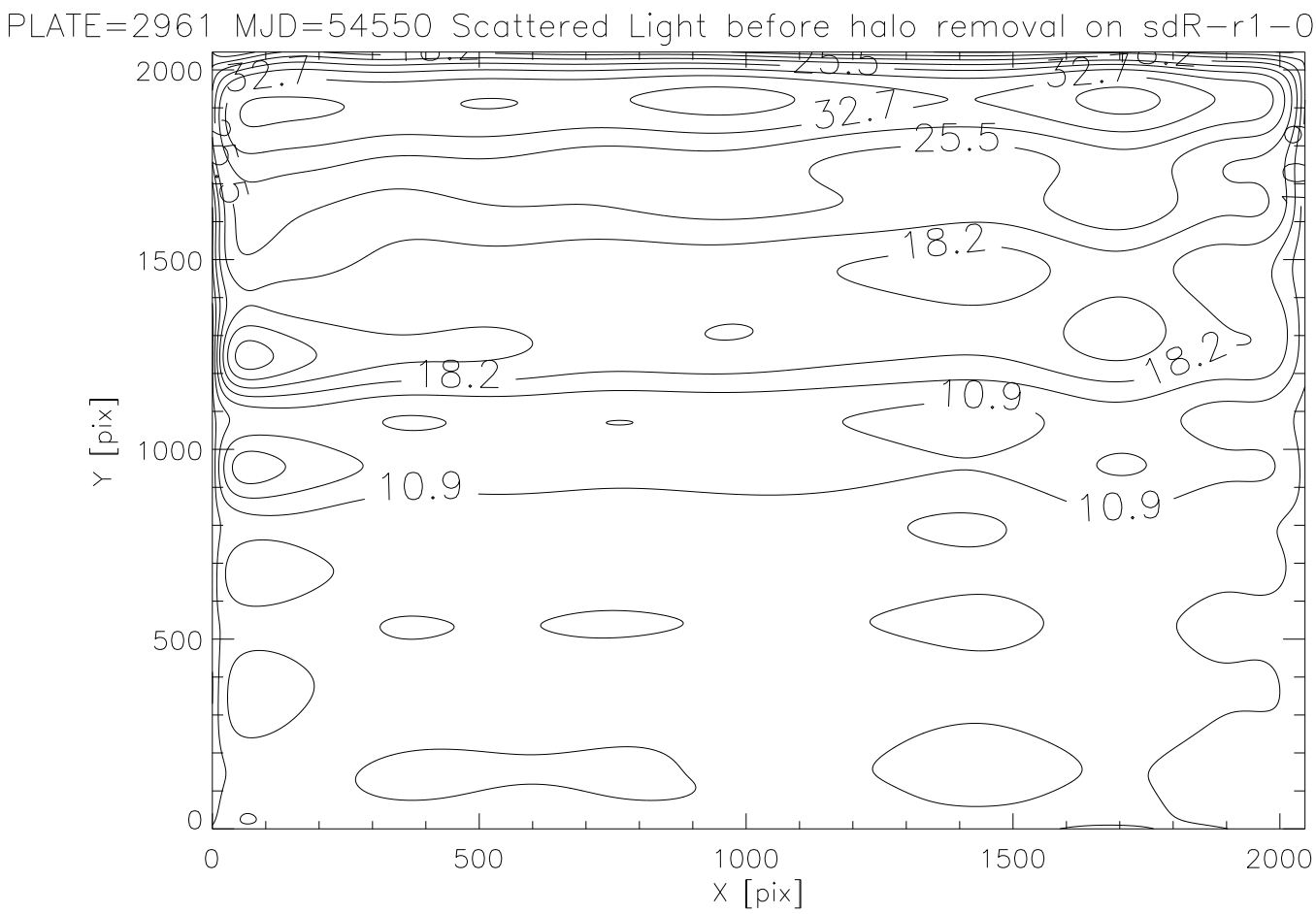

PLATE=2961 MJD=54550 Superflat sdR-r1-00051211.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

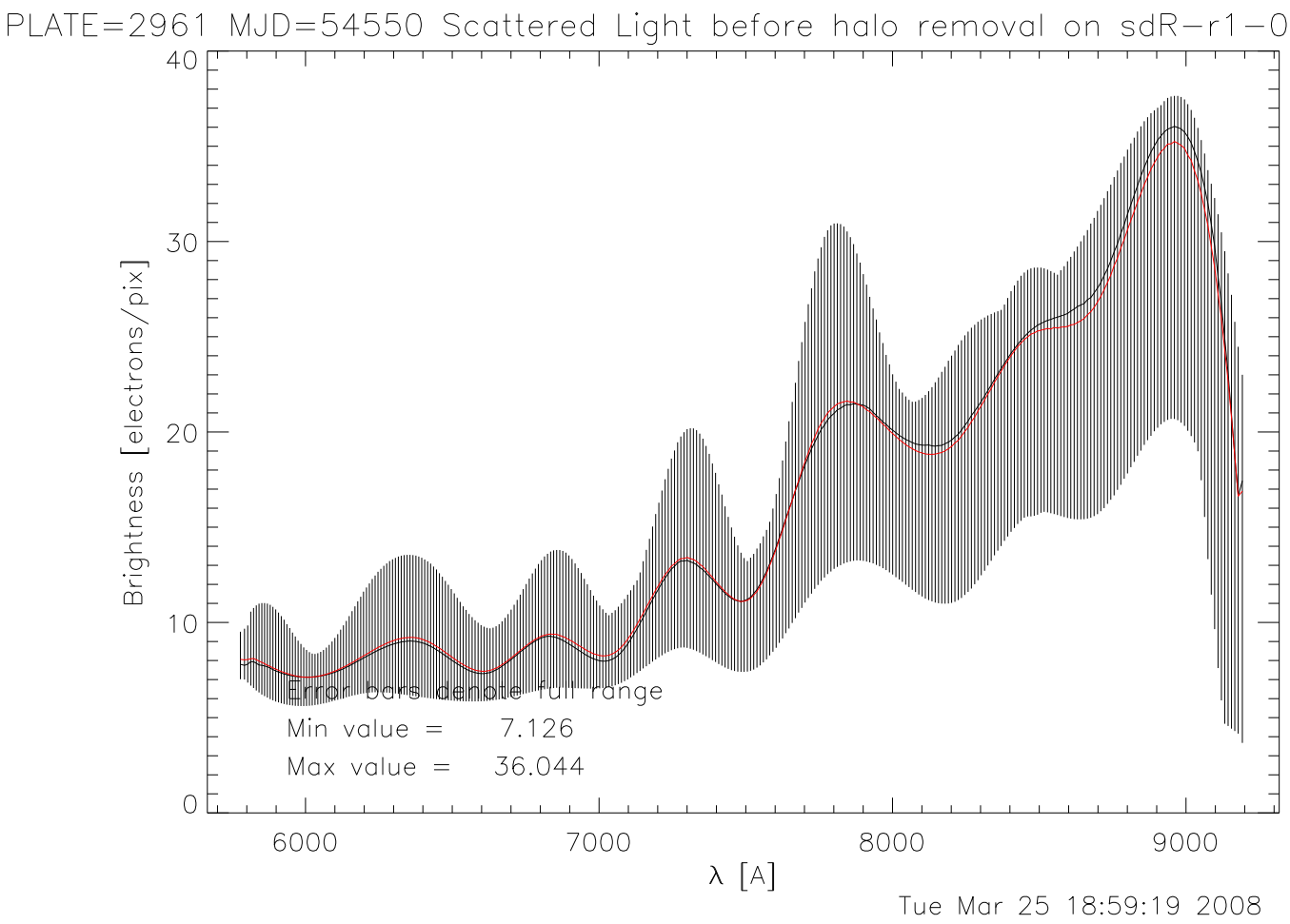

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r1−00051216.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

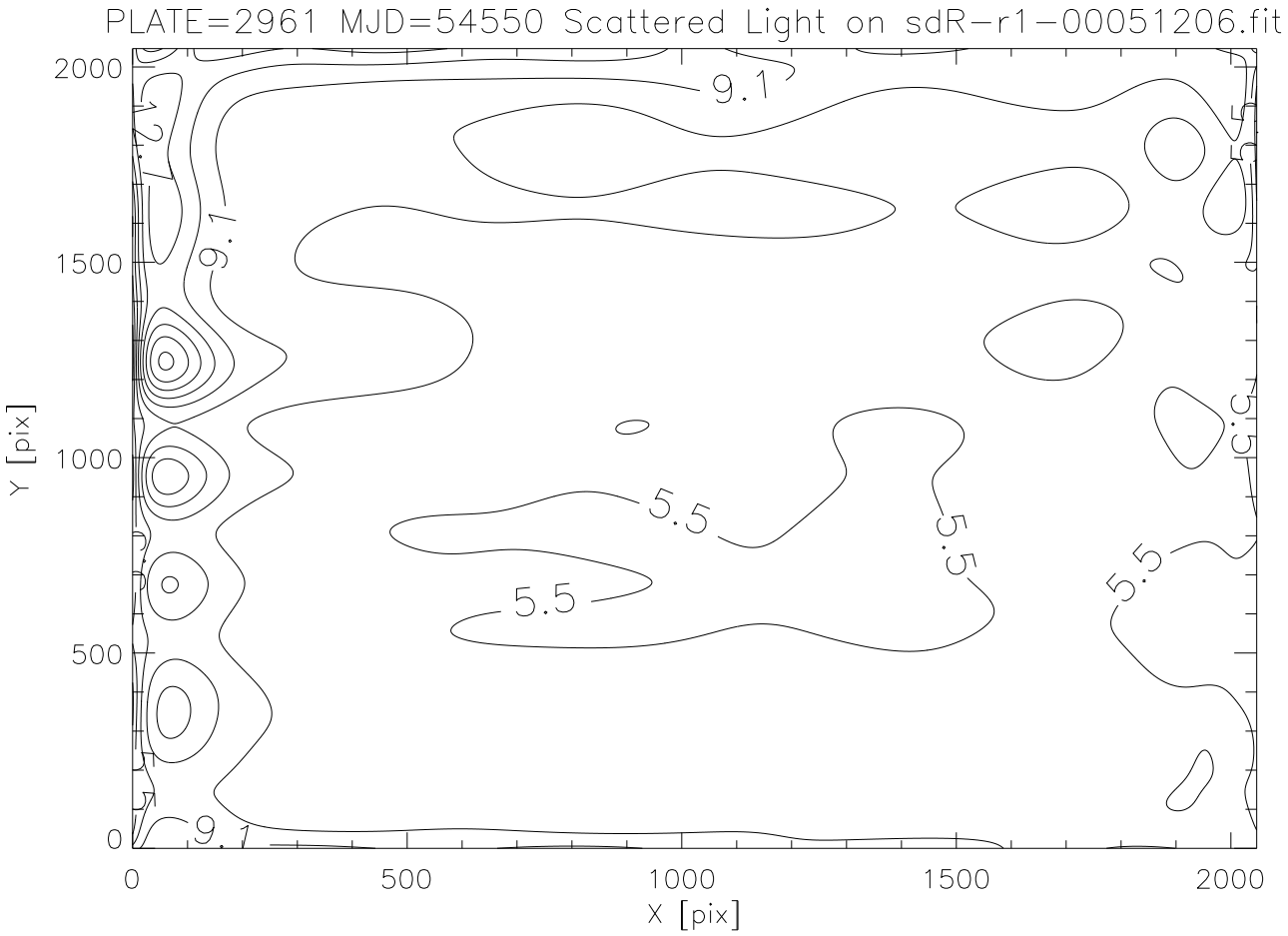

PLATE=2961 MJD=54550 Superflat sdR-r1-00051216.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

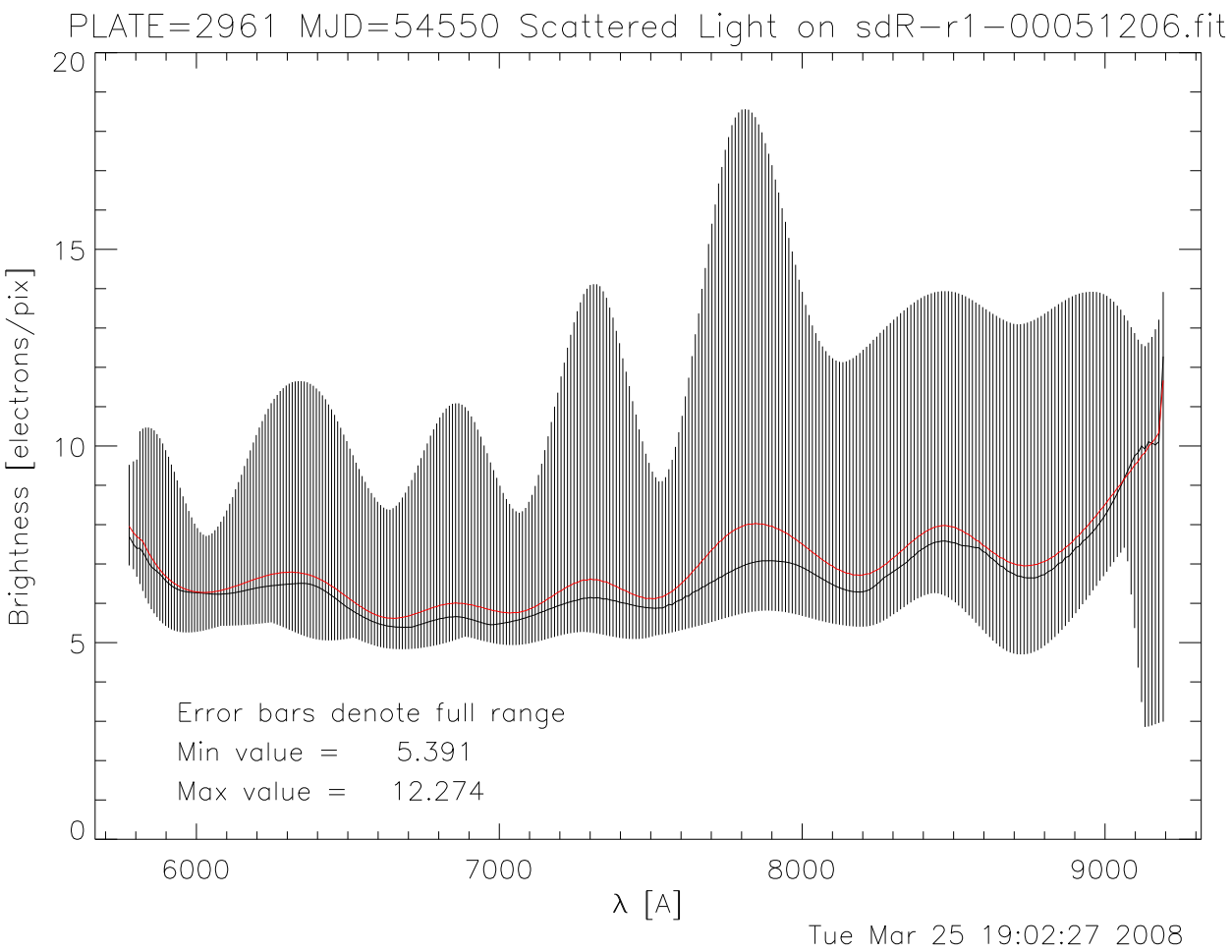

PLATE=2961 MJD=54550 Arcline Fit for sdR-r1-00051212.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Mar 25 18:58:14 2008

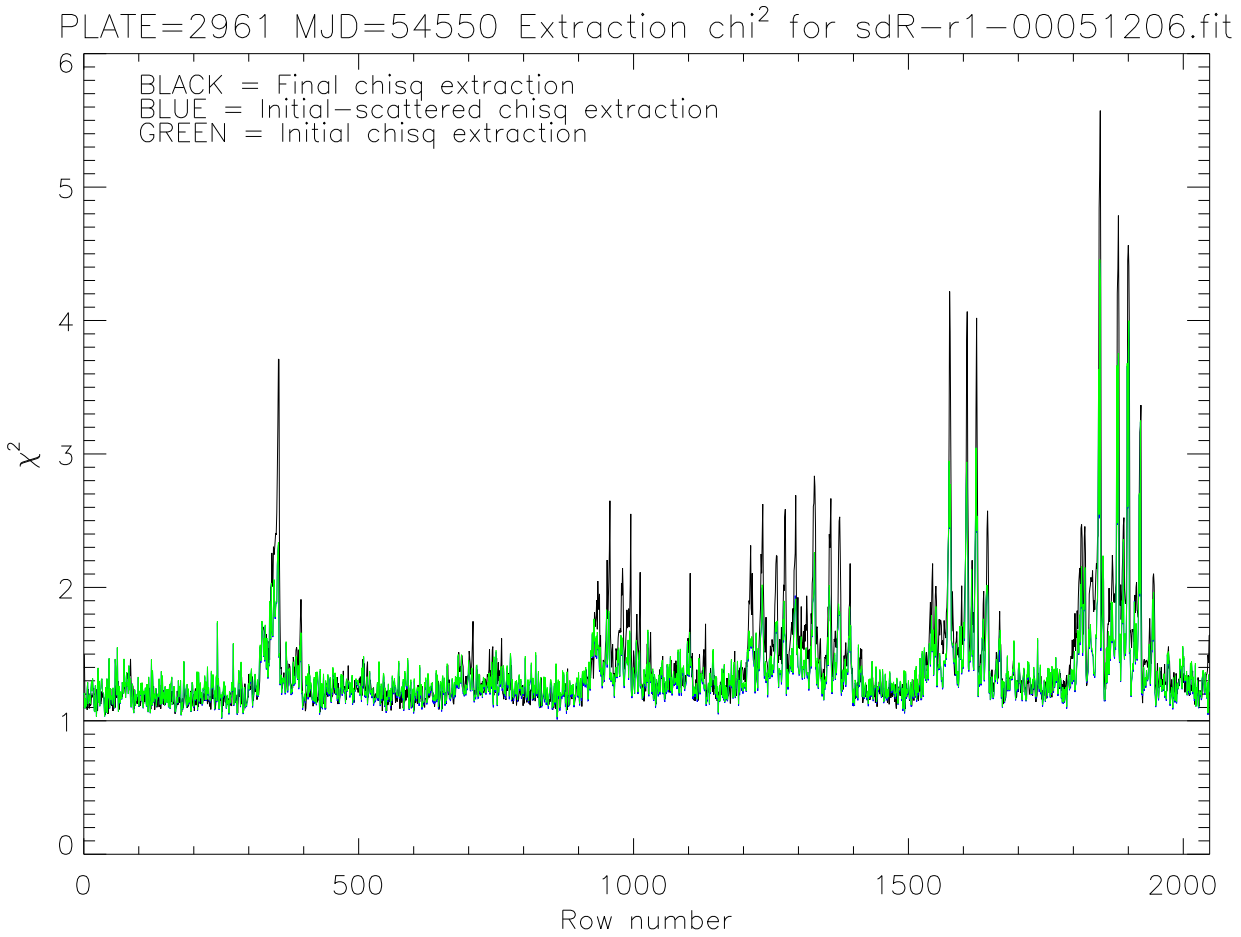

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 18:58:22 2008

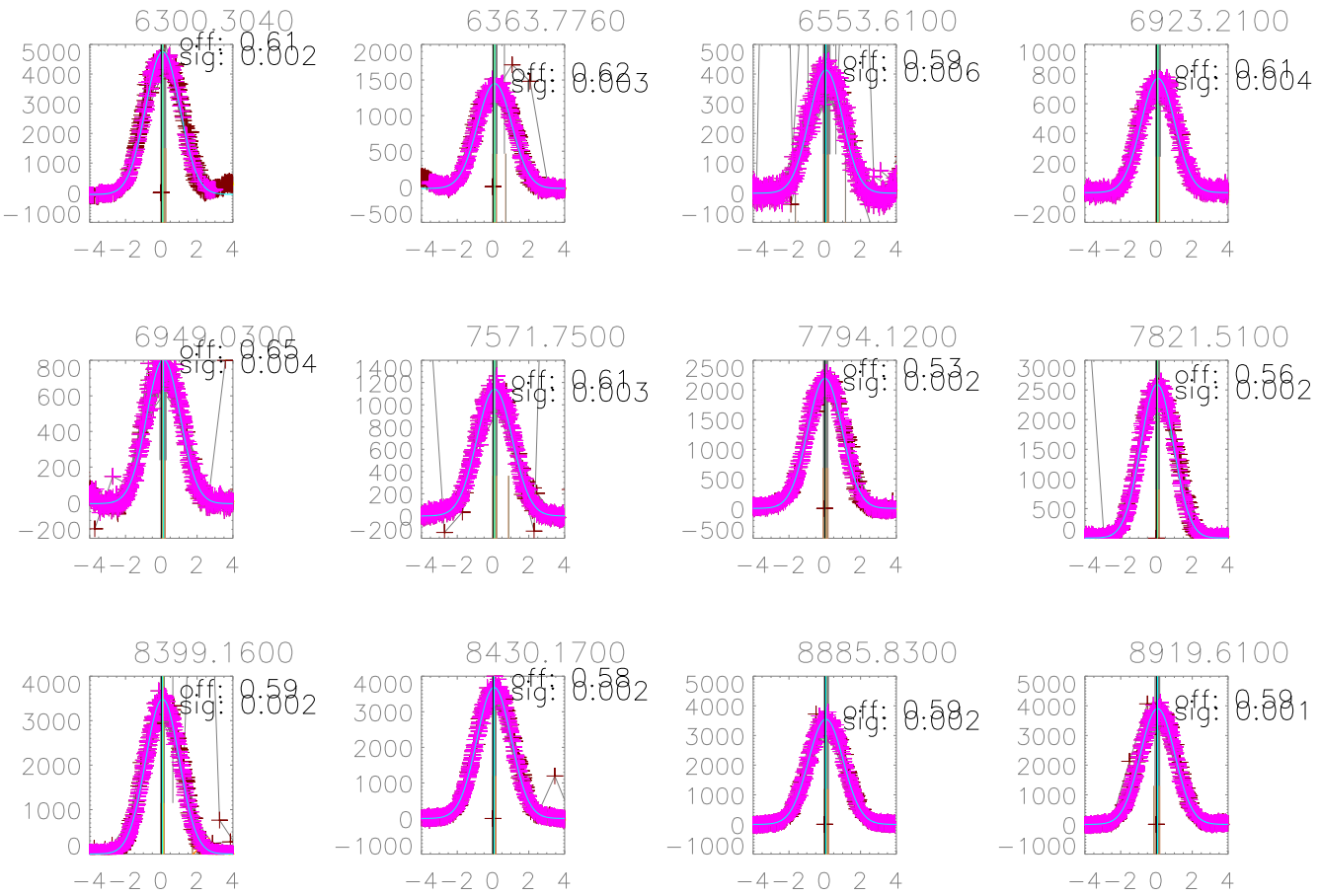

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051206.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

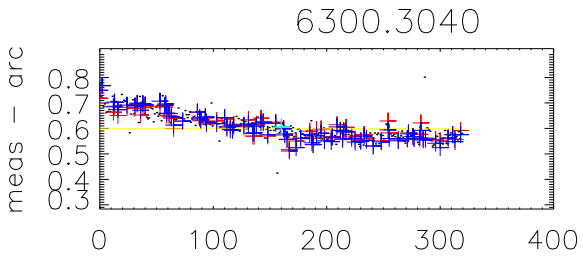

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051206.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.126
Max value = 36.044
Tue Mar 25 18:59:19 2008

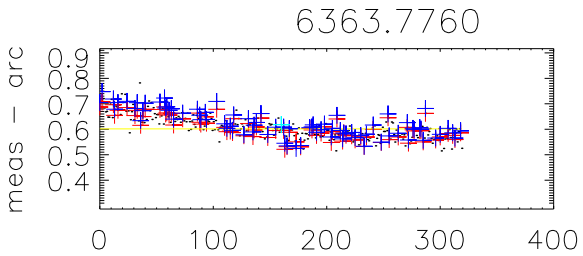

PLATE=2961 MJD=54550 Scattered Light on sdR−r1−00051206.fit
9.1
9.1
9.1
9.1
5.5
5.5
5.5
5.5
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

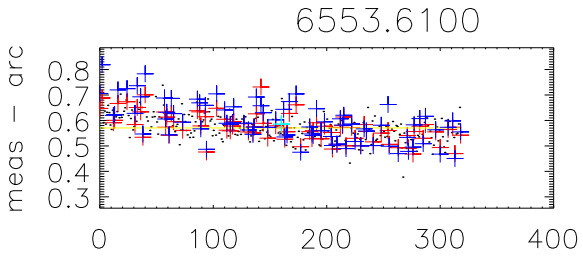

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051206.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.391
Max value = 12.274
Tue Mar 25 19:02:27 2008

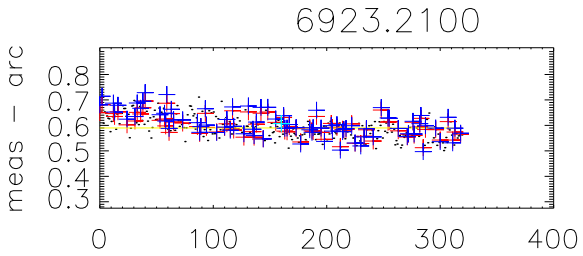

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051206.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

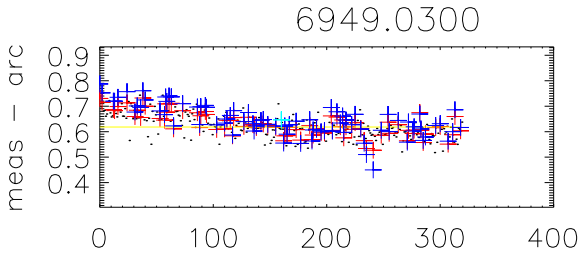

6300.3040
off: 0.61
sig: 0.002
6363.7760
off: 0.62
sig: 0.003
6553.6100
off: 0.58
sig: 0.006
6923.2100
off: 0.61
sig: 0.004
6949.0300
off: 0.65
sig: 0.004
7571.7500
off: 0.61
sig: 0.003
7794.1200
off: 0.53
sig: 0.002
7821.5100
off: 0.56
sig: 0.002
8399.1600
off: 0.59
sig: 0.002
8430.1700
off: 0.58
sig: 0.002
8885.8300
off: 0.58
sig: 0.002
8919.6100
off: 0.59
sig: 0.001

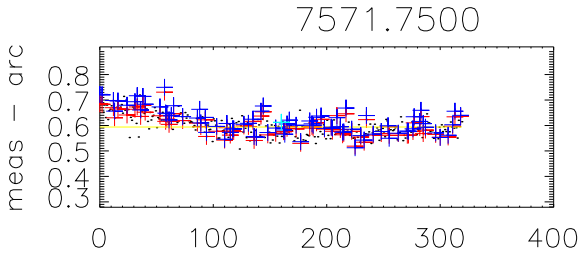

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

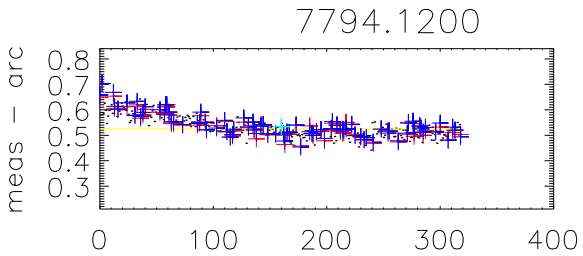

6363.7760
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

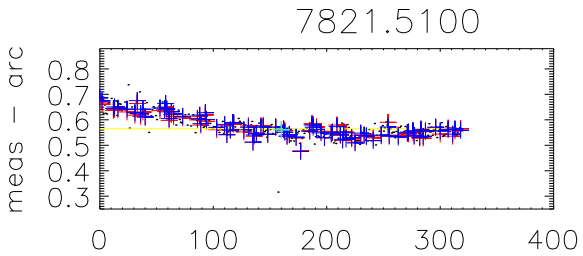

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

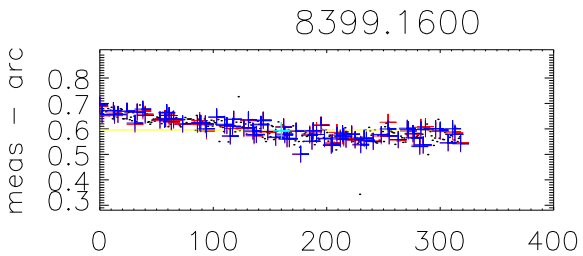

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

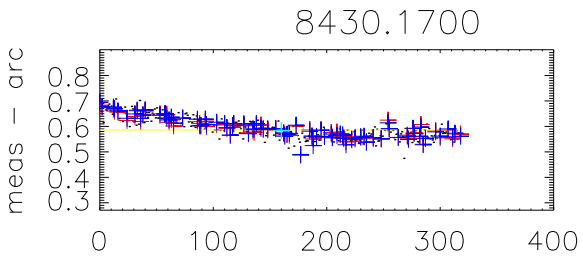

6949.0300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

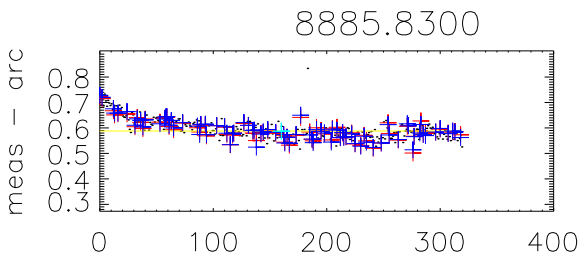

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

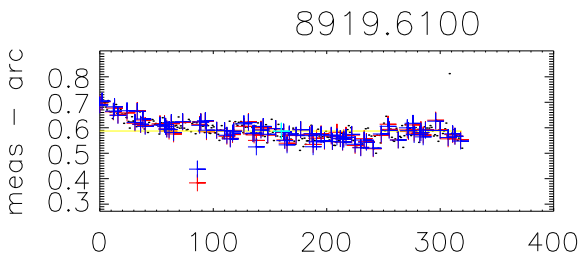

7794.1200
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

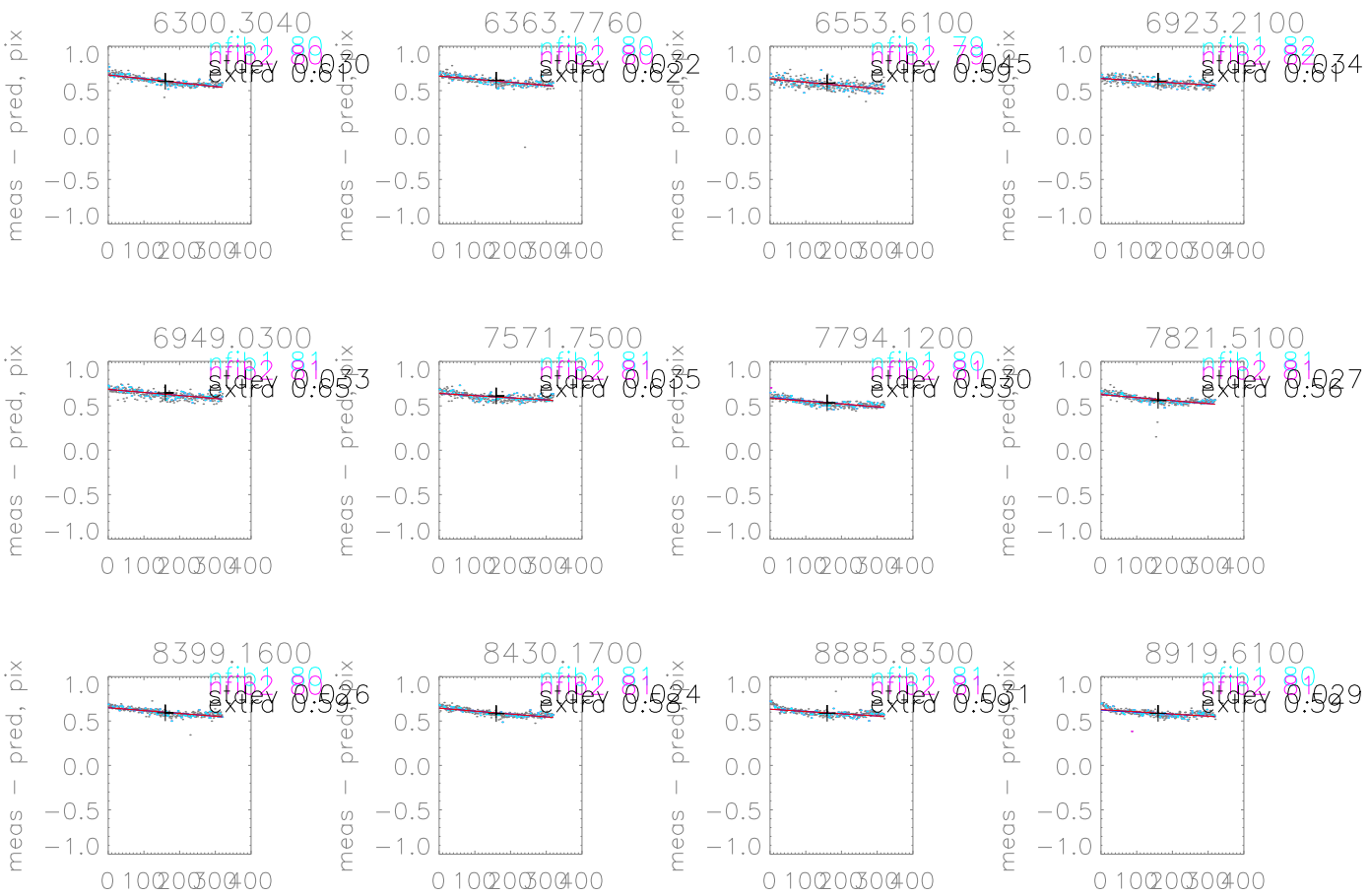

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

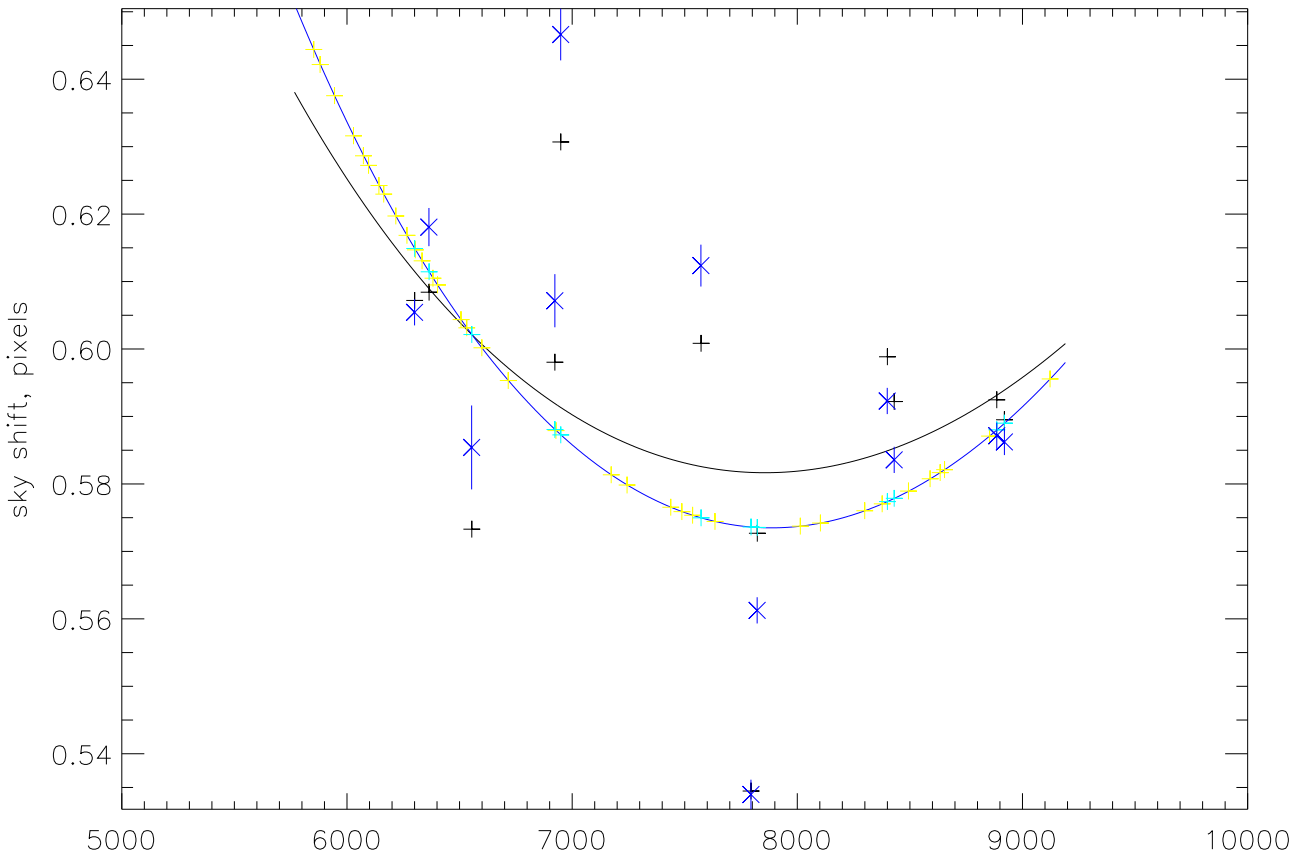

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


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

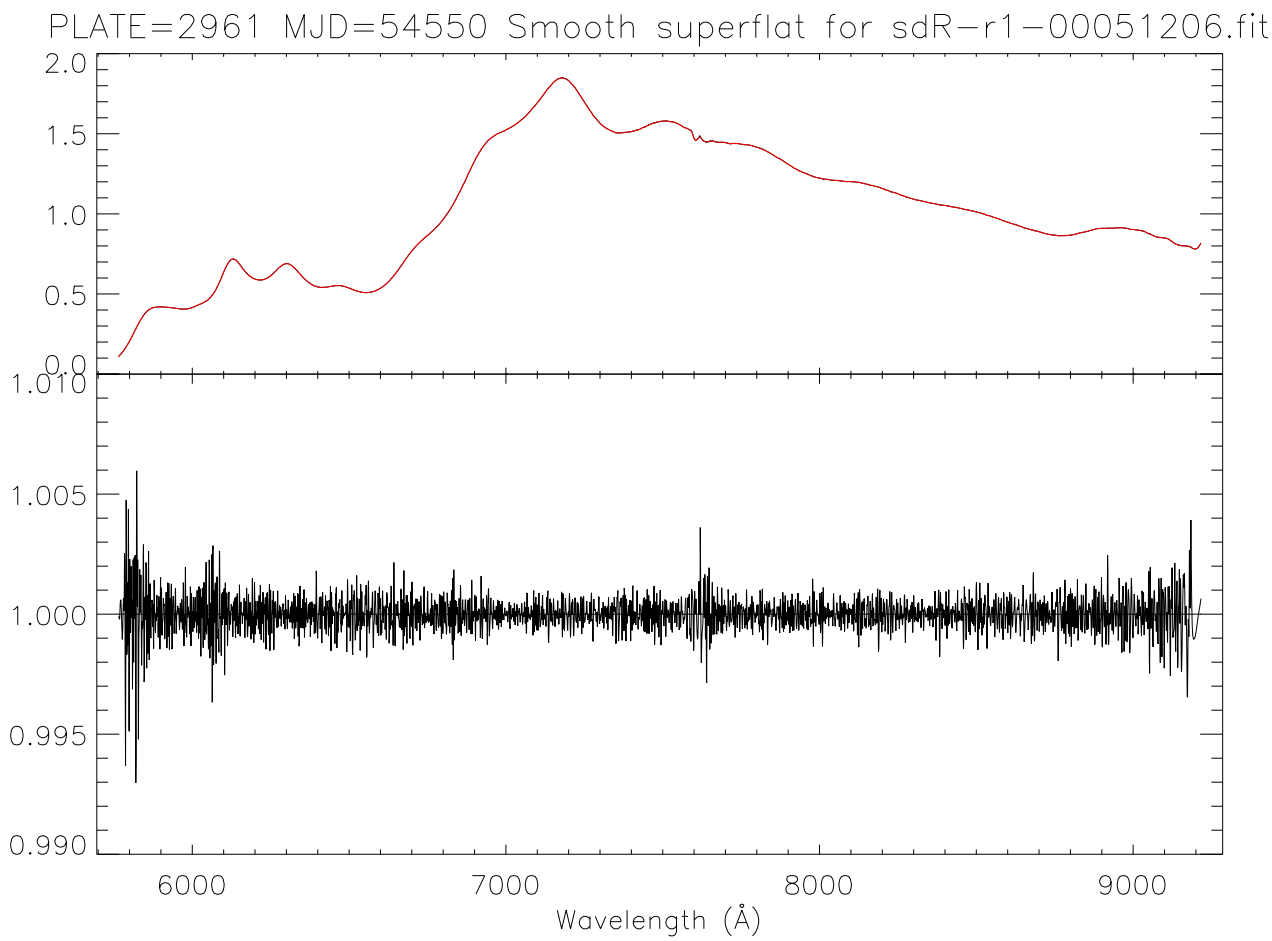

8885.8300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

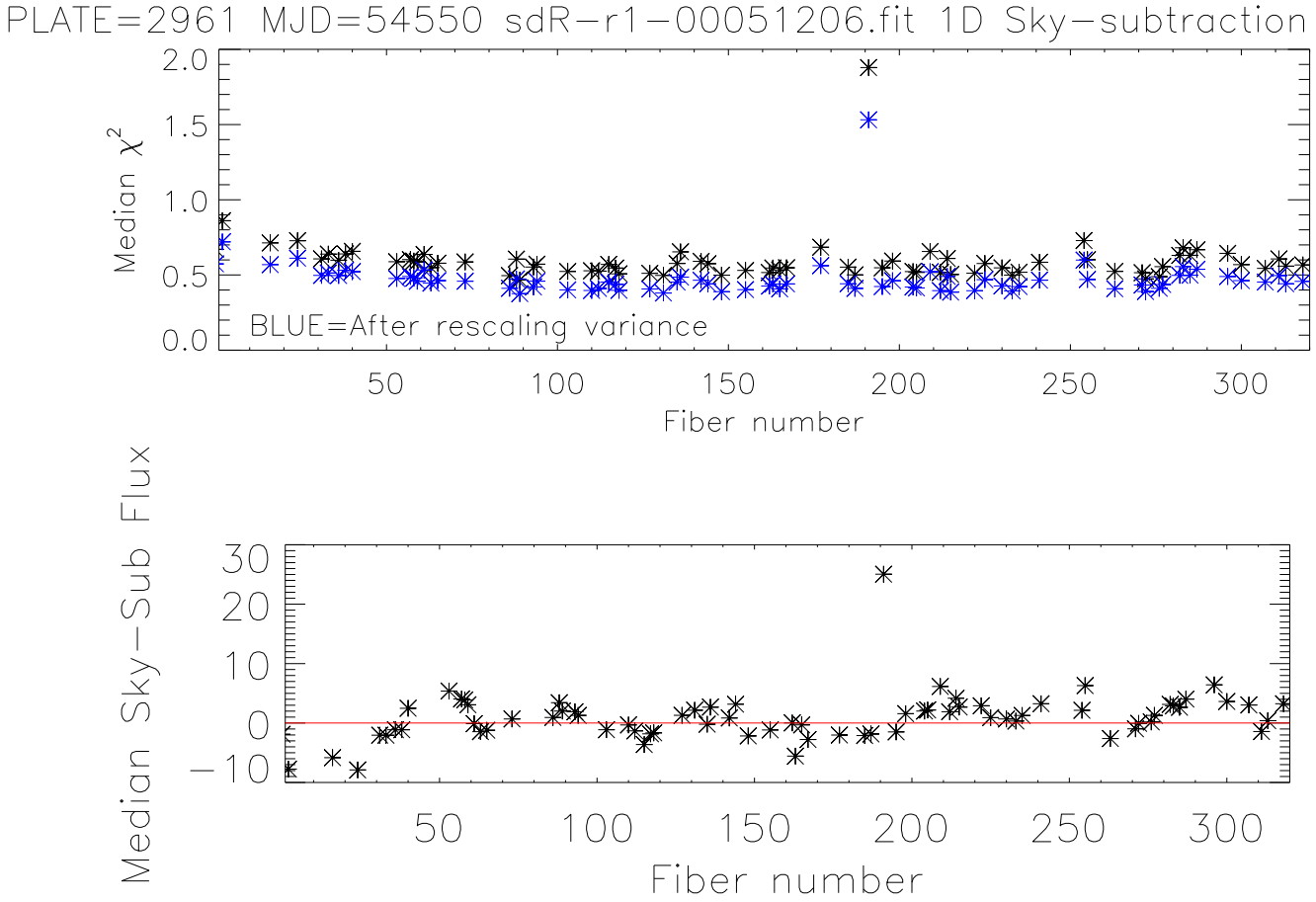

8919.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

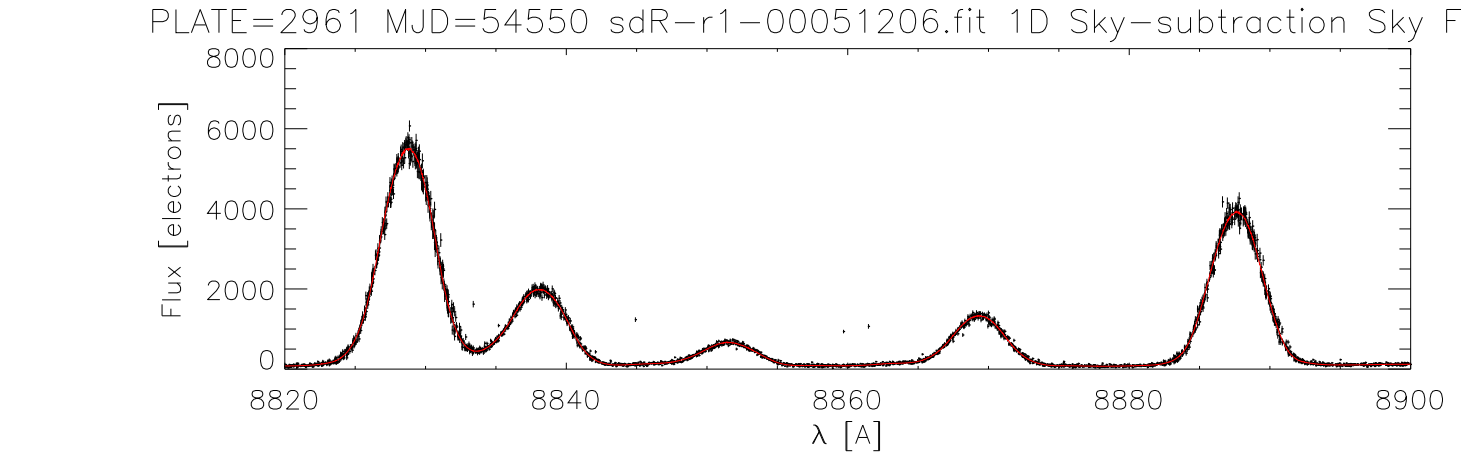

6300.3040
mfhx1 80
mfhx2 80
stdev 0.030
extra 0.61
6363.7760
mfhx1 80
mfhx2 80
stdev 0.032
extra 0.62
6553.6100
mfhx1 79
mfhx2 80
stdev 0.045
extra 0.59
6923.2100
mfhx1 82
mfhx2 82
stdev 0.034
extra 0.61
6949.0300
mfhx1 81
mfhx2 81
stdev 0.033
extra 0.65
7571.7500
mfhx1 81
mfhx2 81
stdev 0.035
extra 0.61
7794.1200
mfhx1 80
mfhx2 80
stdev 0.030
extra 0.53
7821.5100
mfhx1 81
mfhx2 81
stdev 0.027
extra 0.56
8399.1600
mfhx1 80
mfhx2 80
stdev 0.026
extra 0.59
8430.1700
mfhx1 81
mfhx2 81
stdev 0.024
extra 0.58
8885.8300
mfhx1 81
mfhx2 81
stdev 0.031
extra 0.59
8919.6100
mfhx1 80
mfhx2 81
stdev 0.029
extra 0.59
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

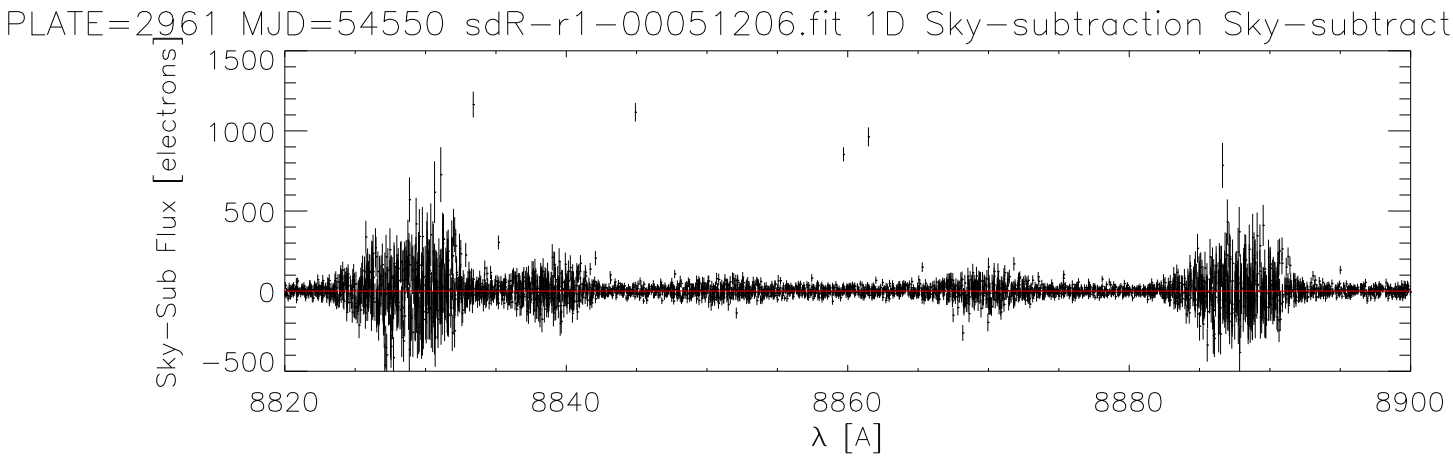

sky shift, pixels
0.64
0.62
0.60
0.58
0.56
0.54
5000
6000
7000
8000
9000
10000

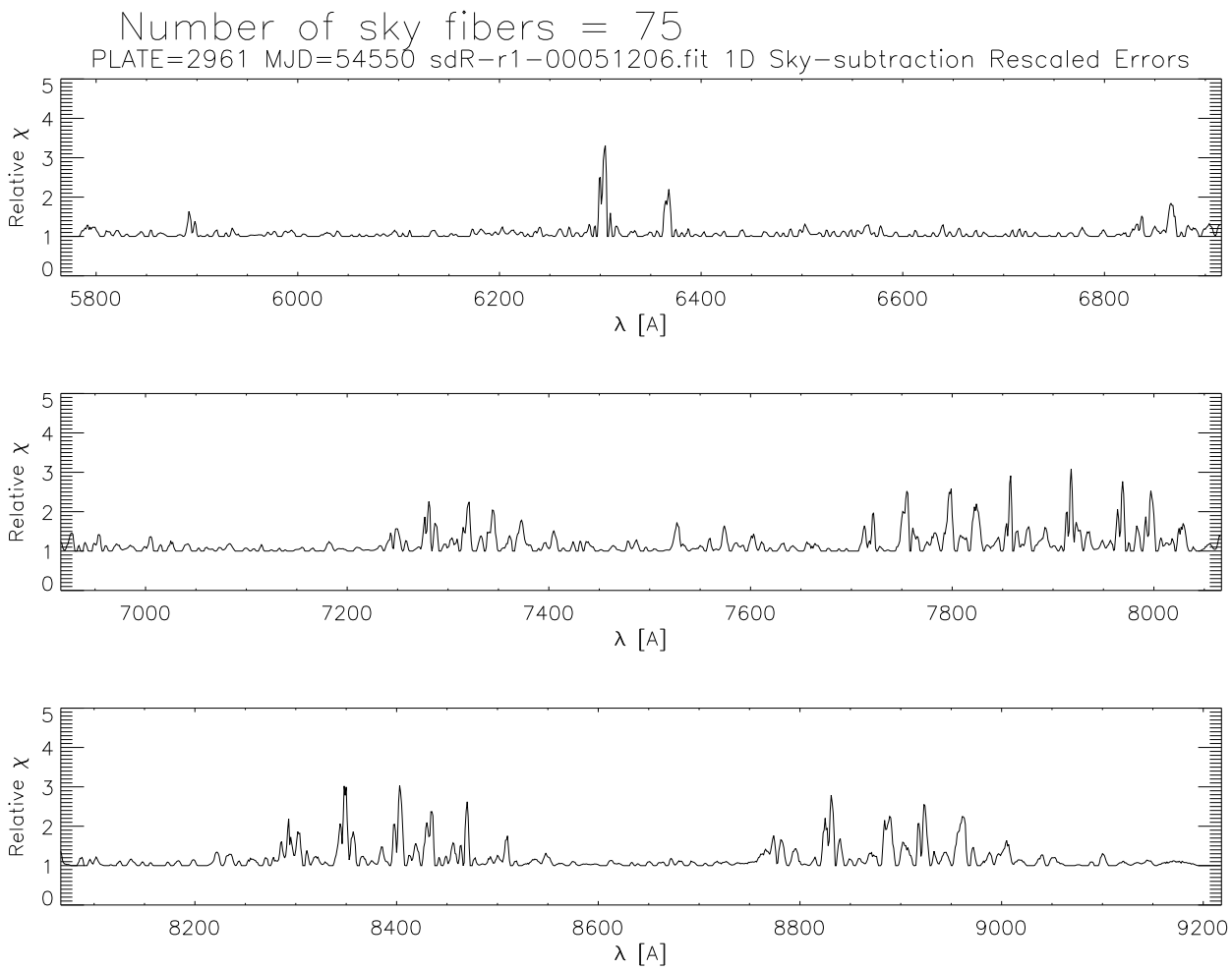
es= 0.0000

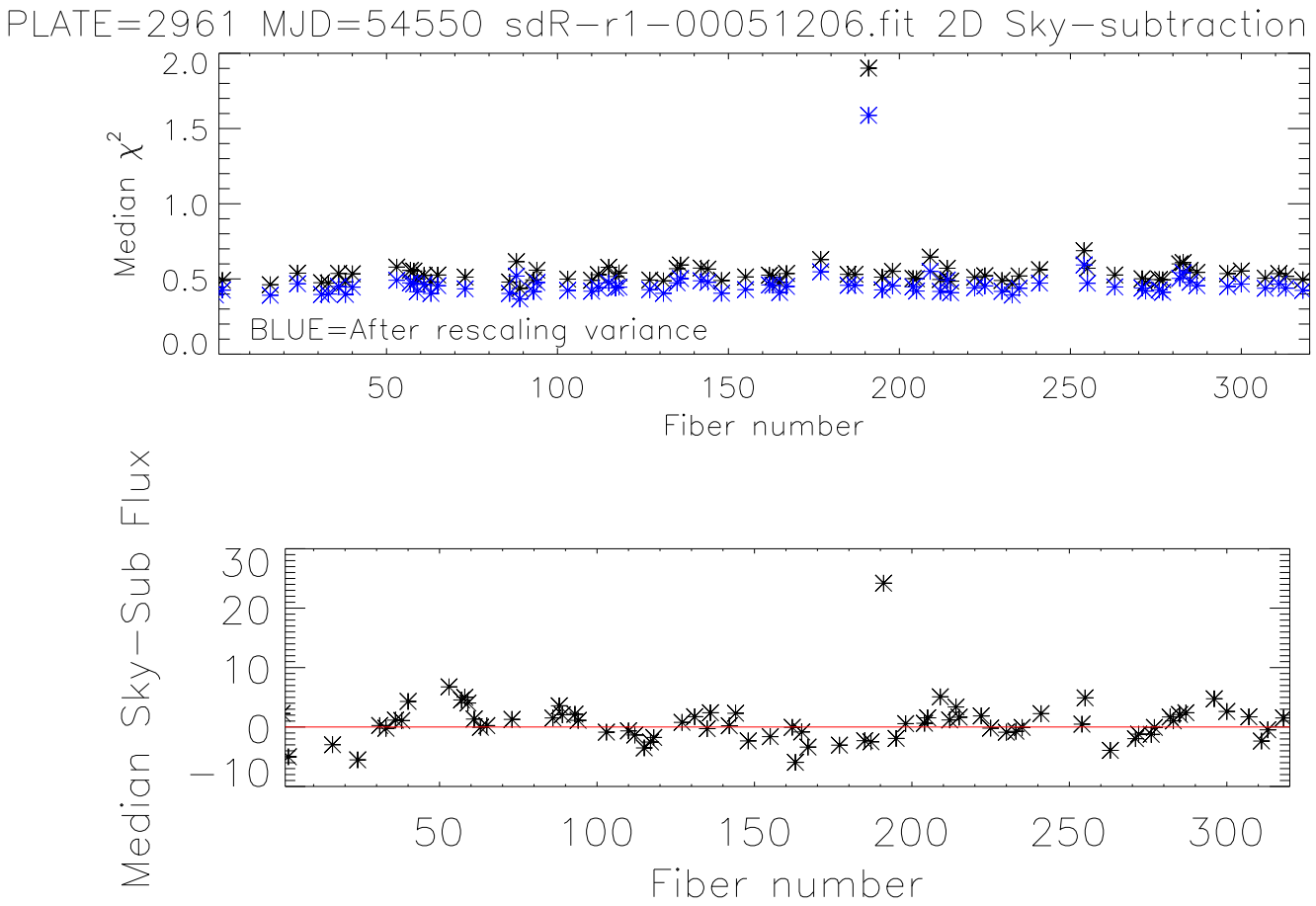

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051206.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

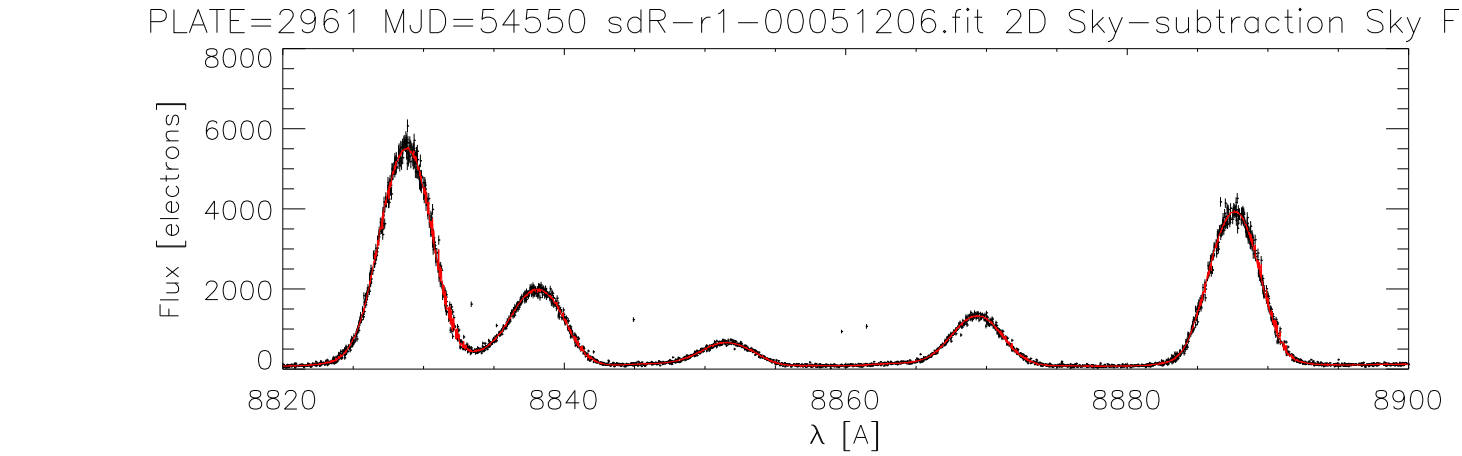

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
50
100
150
200
250
300
Fiber number

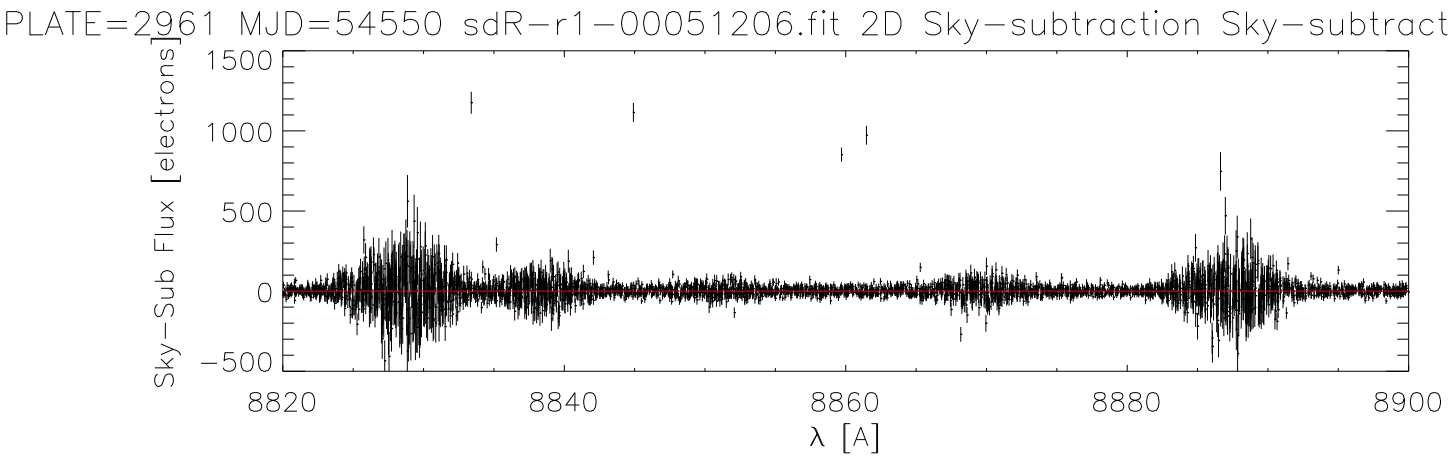

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

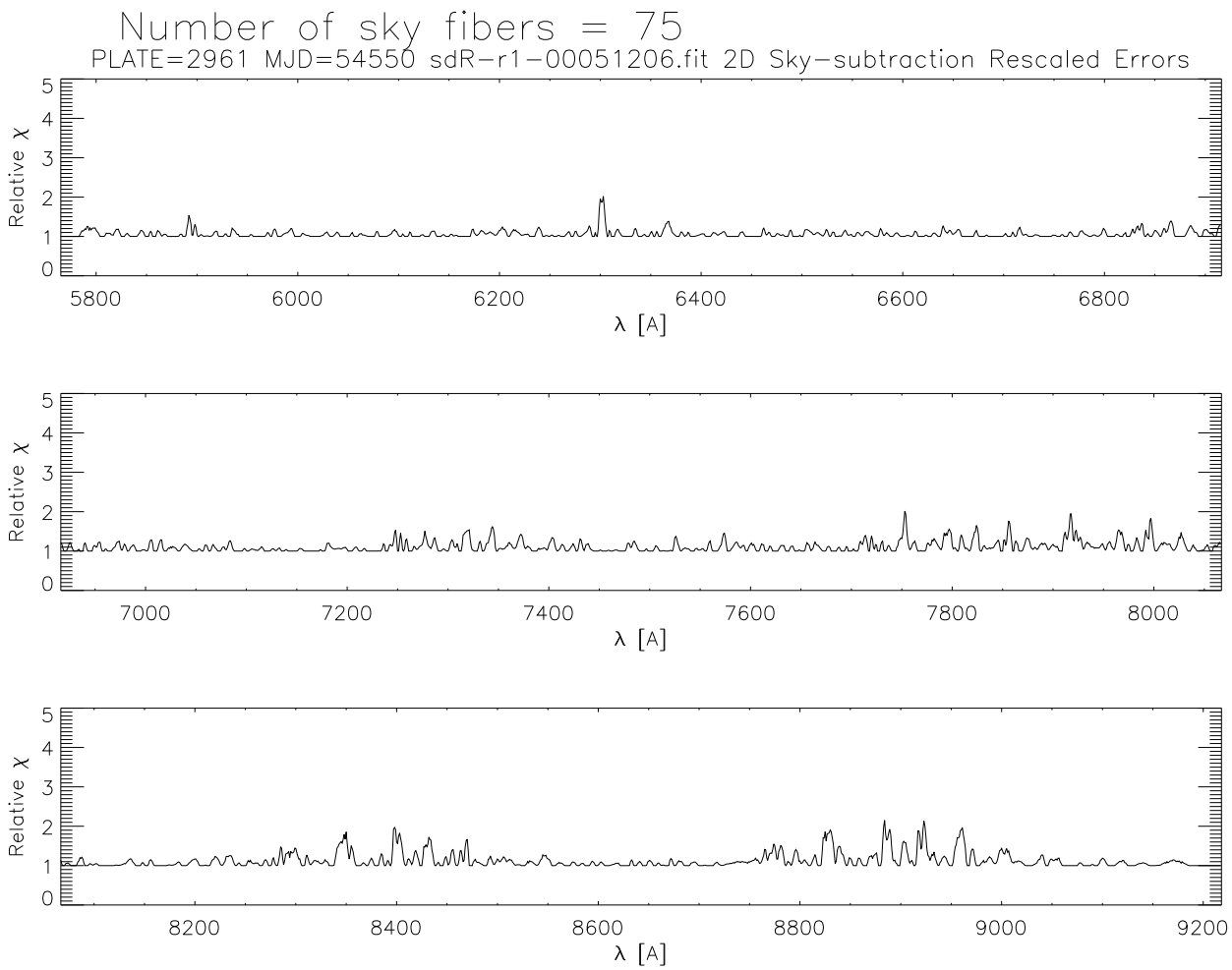

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

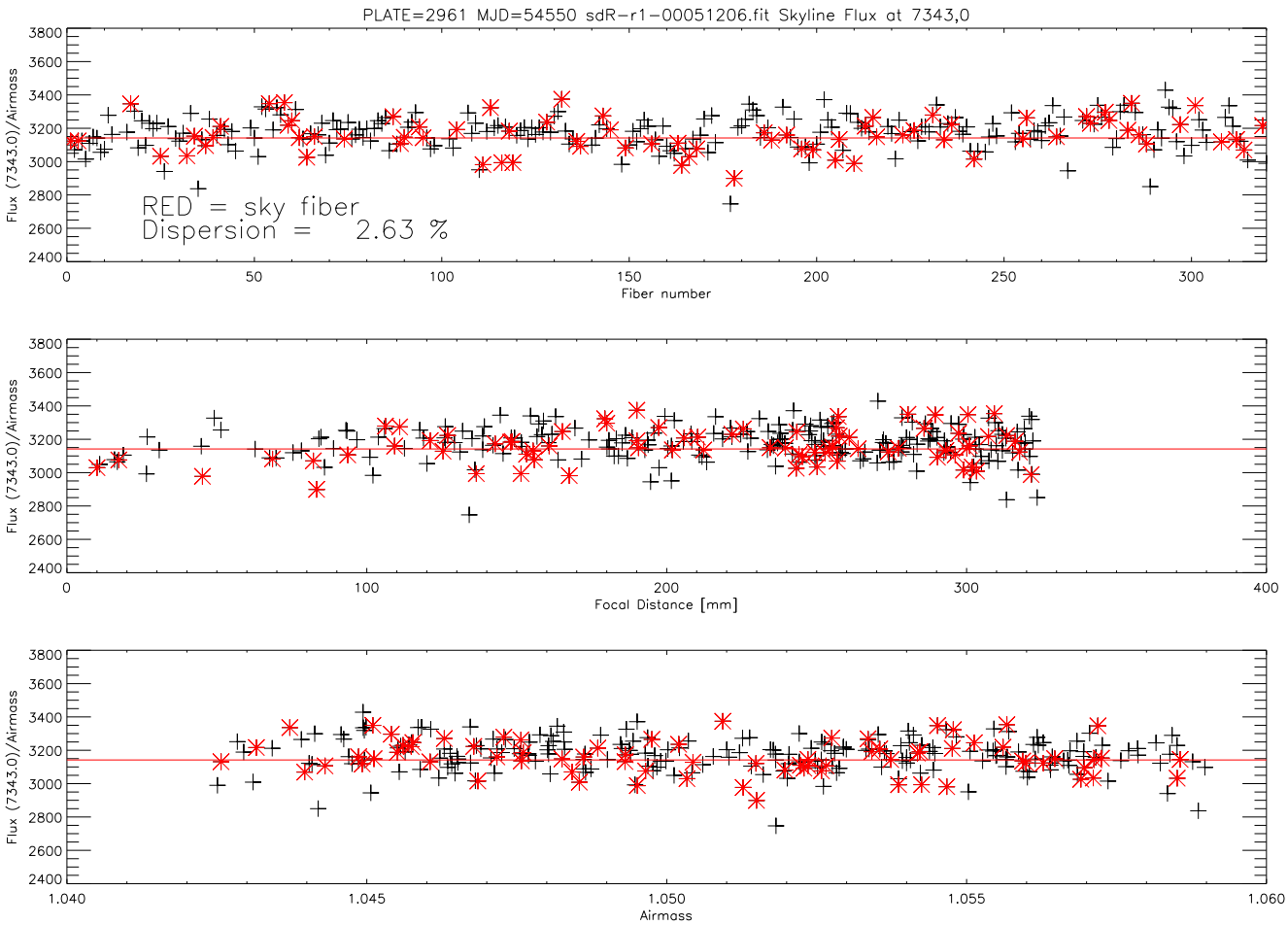

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051206.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

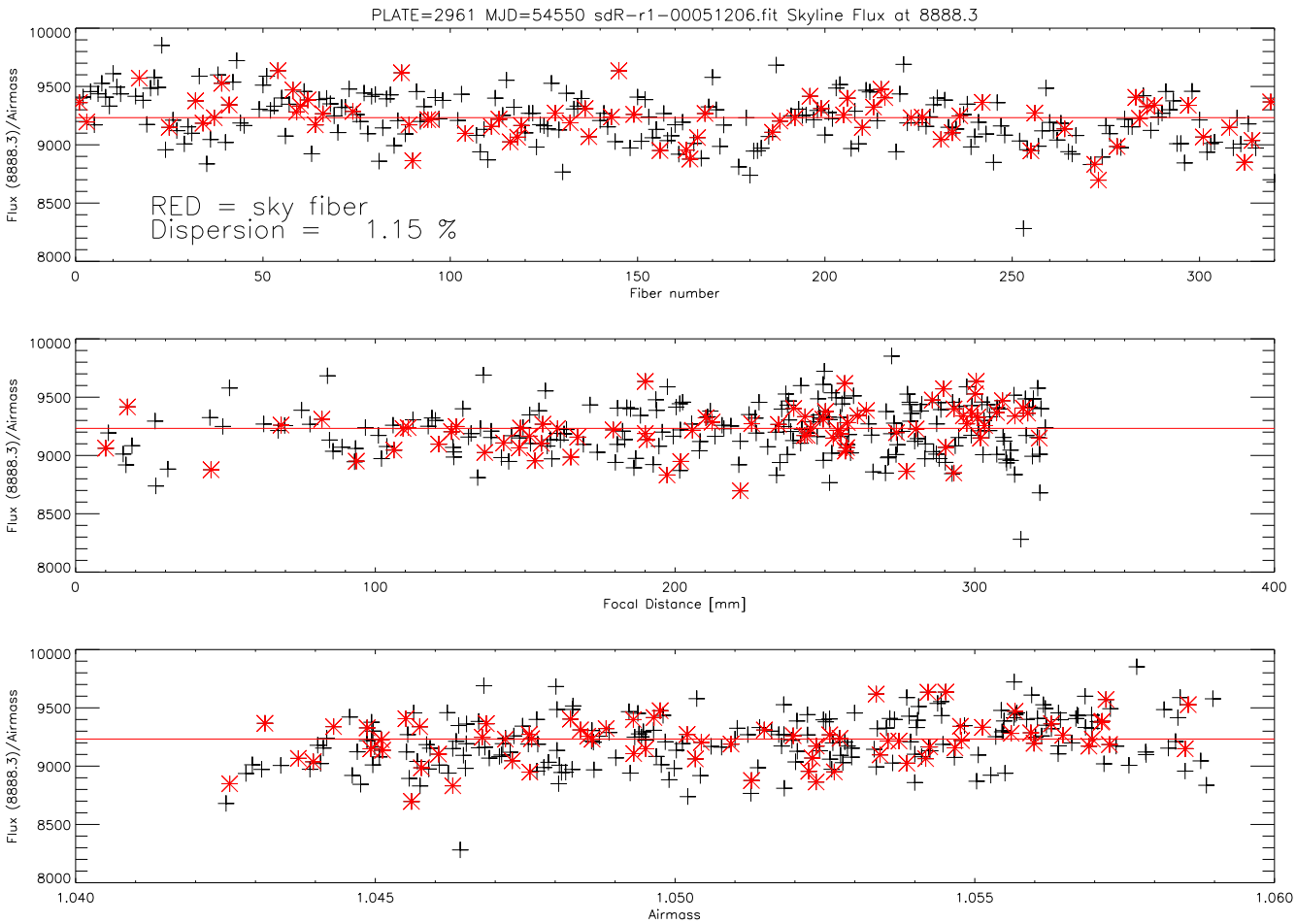

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 2D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
50
100
150
200
250
300
Fiber number

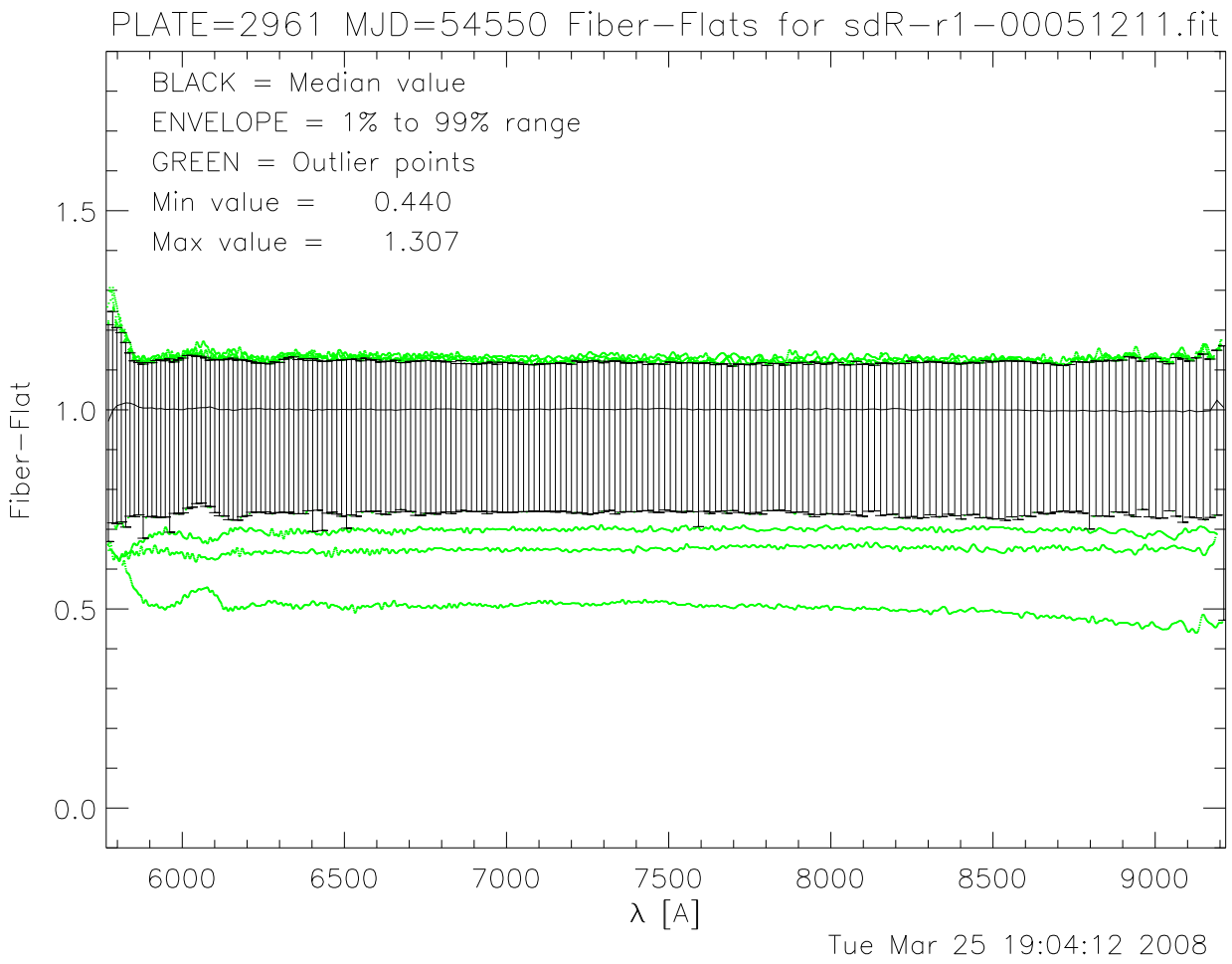

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

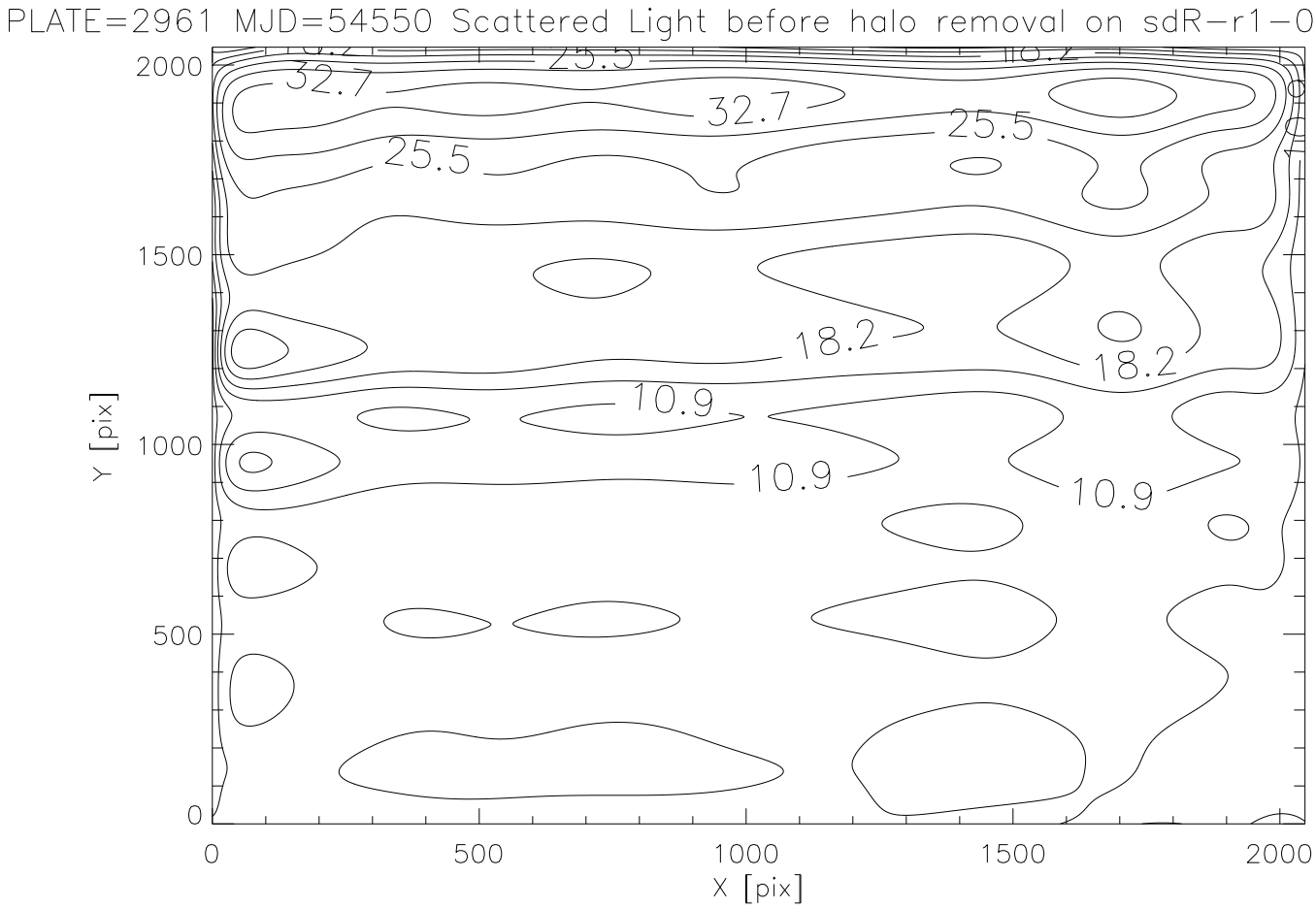

PLATE=2961 MJD=54550 sdR-r1-00051206.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

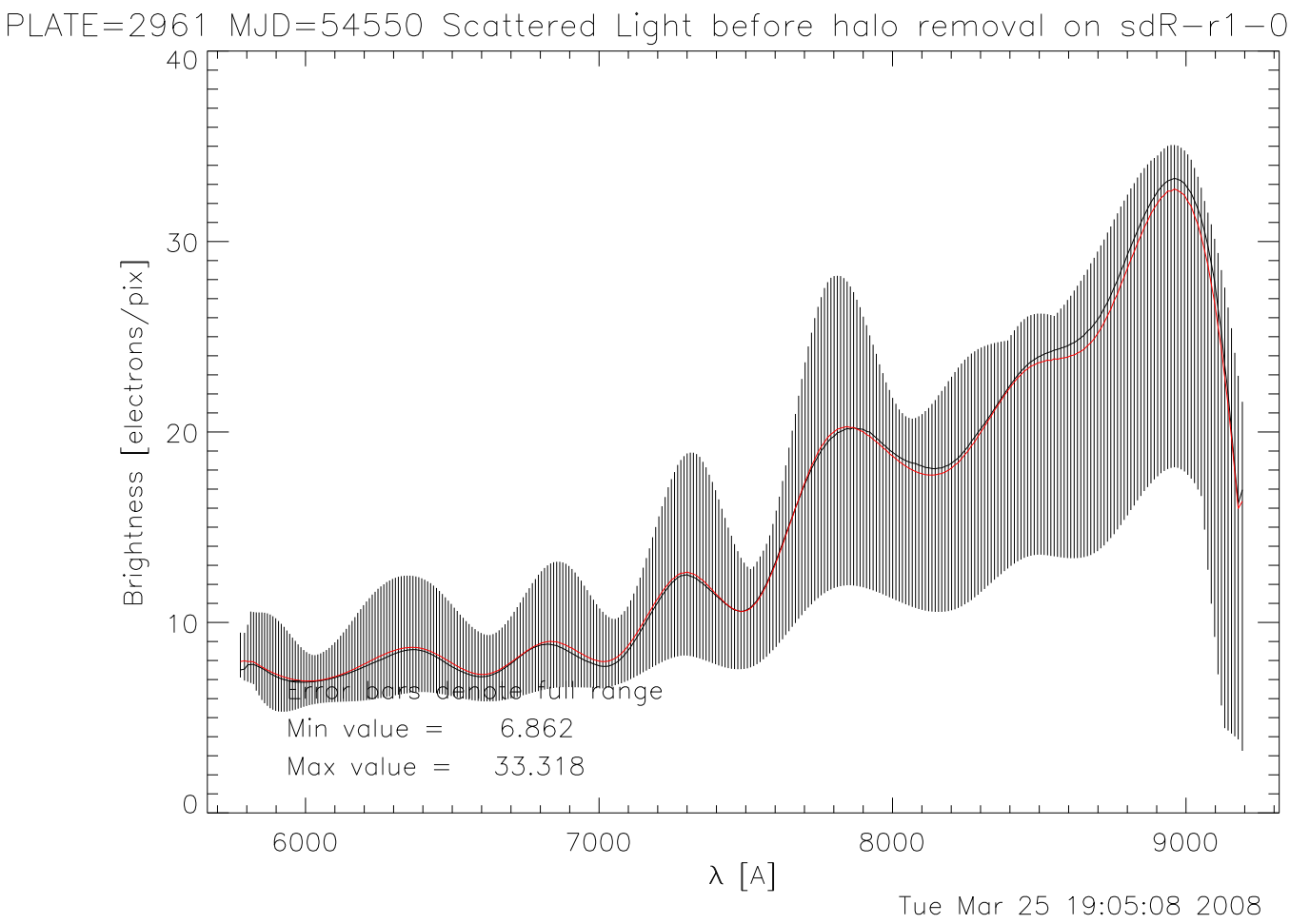

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051206.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

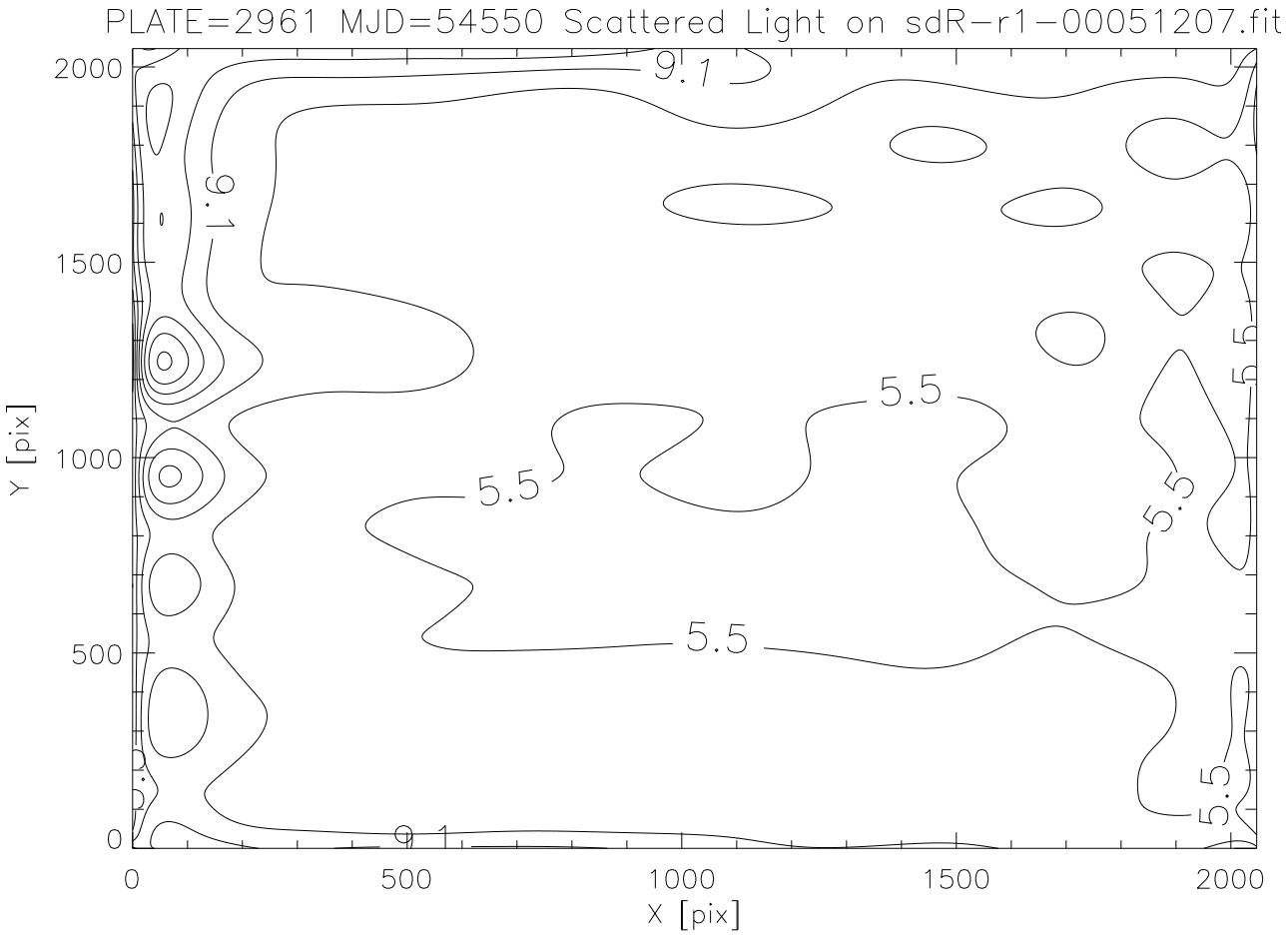

PLATE=2961 MJD=54550 sdR-r1-00051206.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.63 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

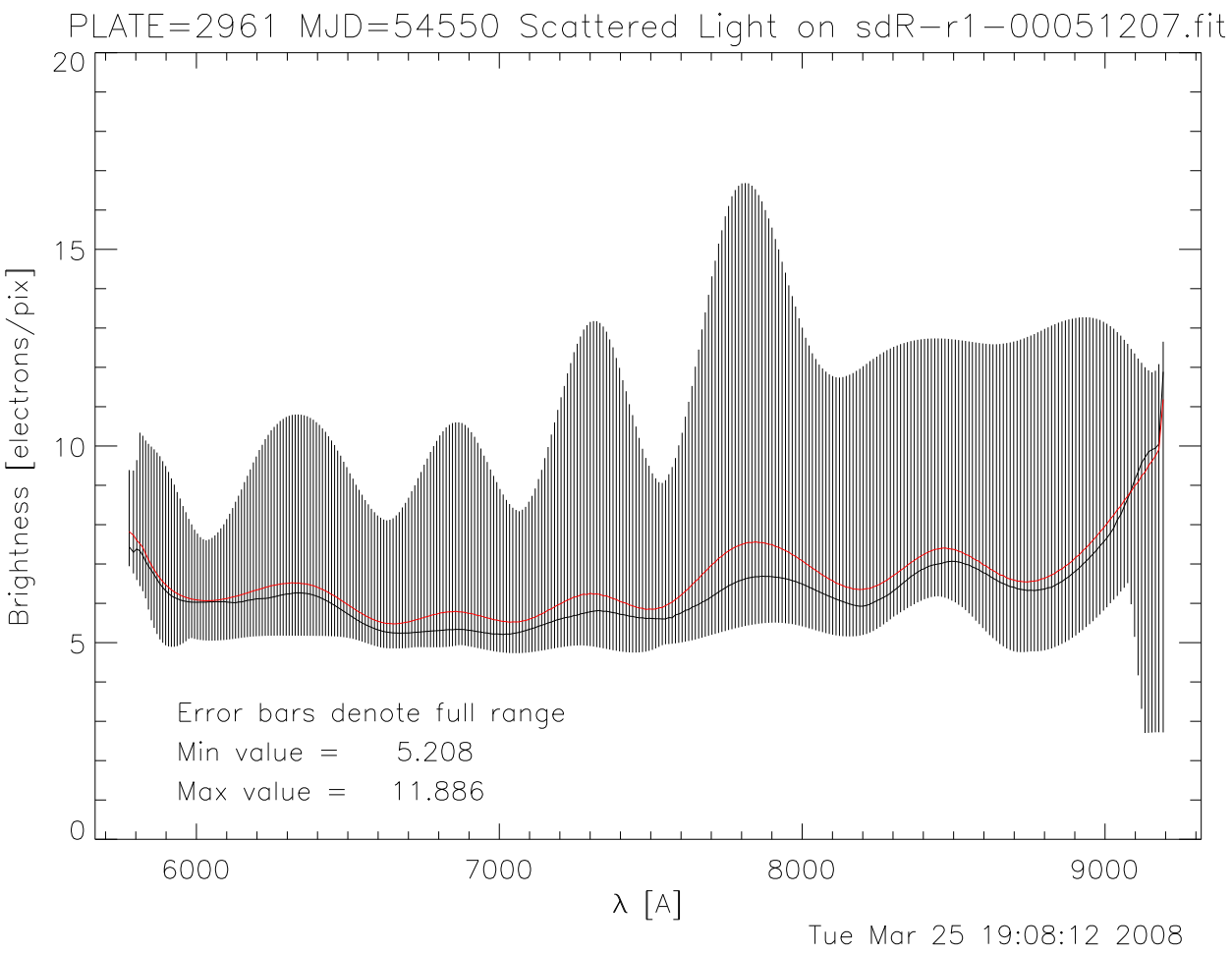

PLATE=2961 MJD=54550 sdR-r1-00051206.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.15 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

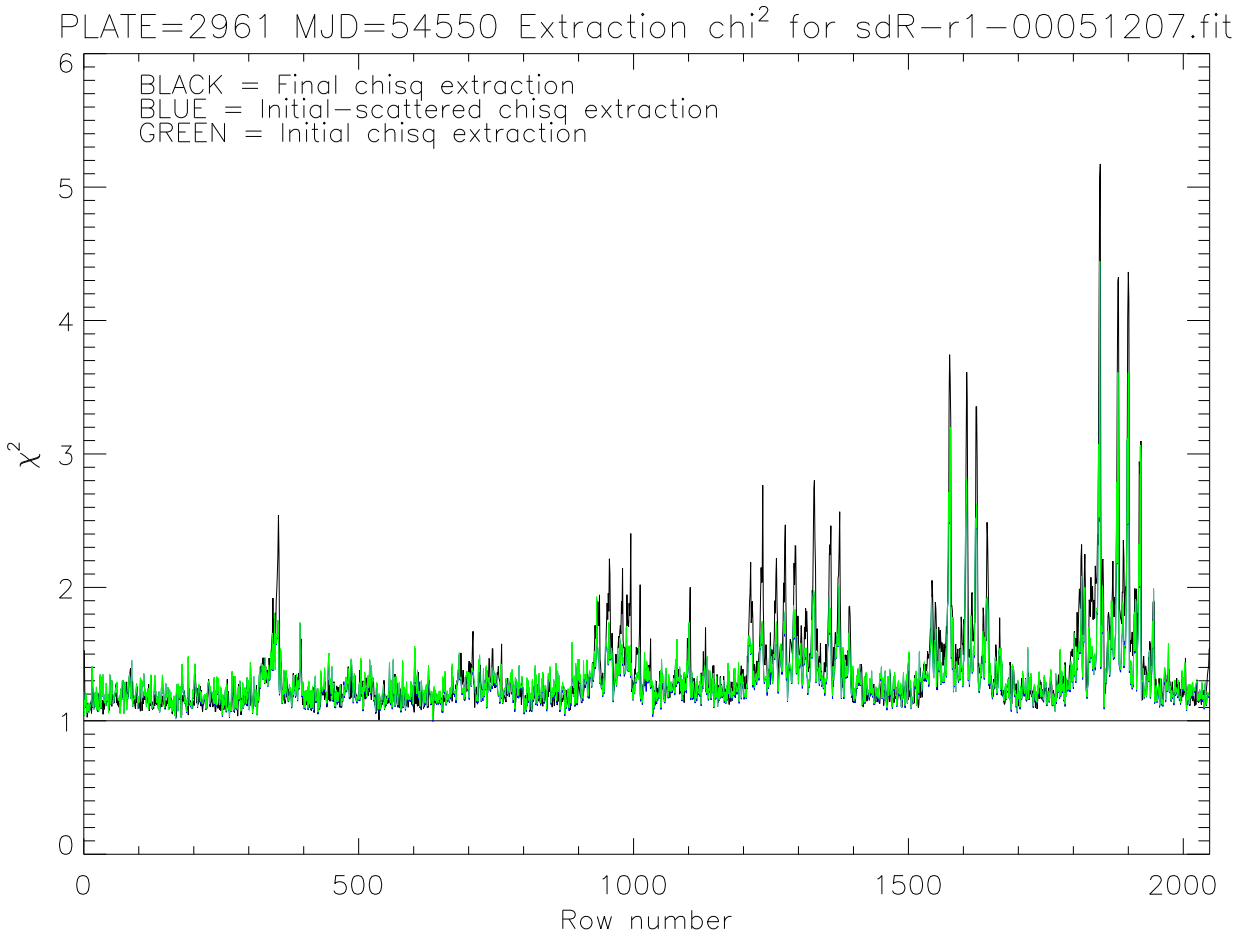

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:04:12 2008

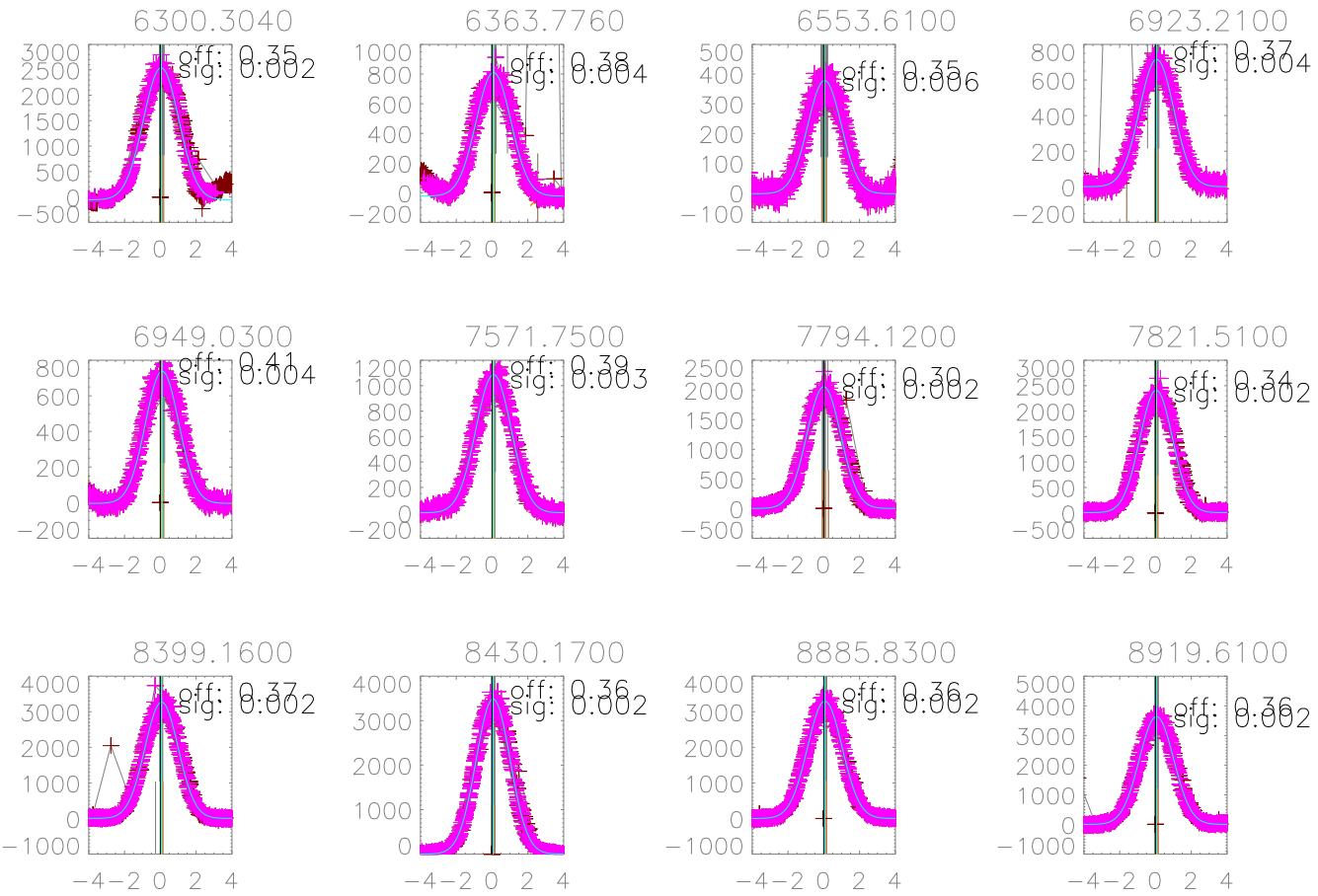

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−r1−00051207.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

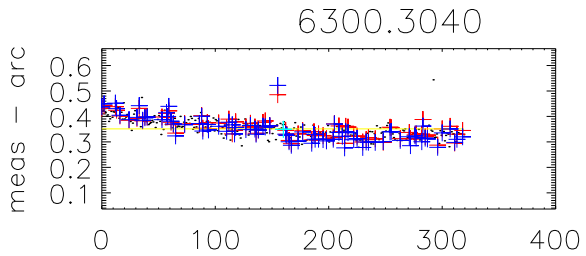

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051207.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.862
Max value = 33.318
Tue Mar 25 19:05:08 2008

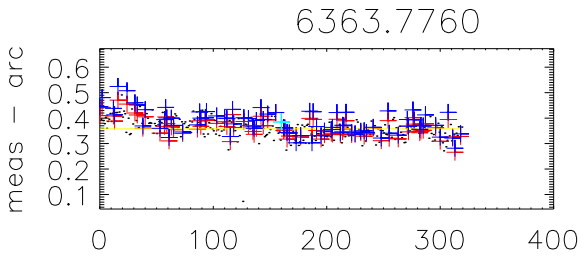

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051207.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
9.1
5.5
5.5
5.5
5.5
5.5
5.5
9.1
9.1

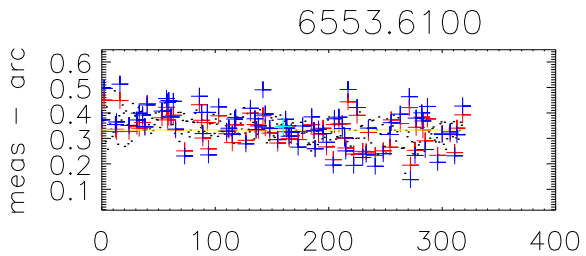

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051207.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.208
Max value = 11.886
Tue Mar 25 19:08:12 2008

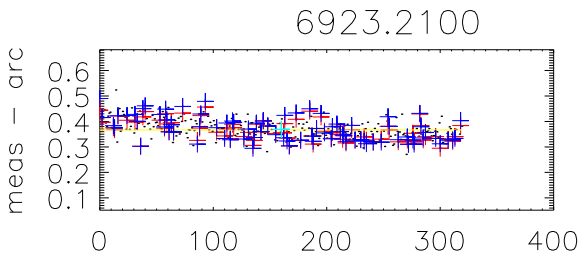

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051207.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

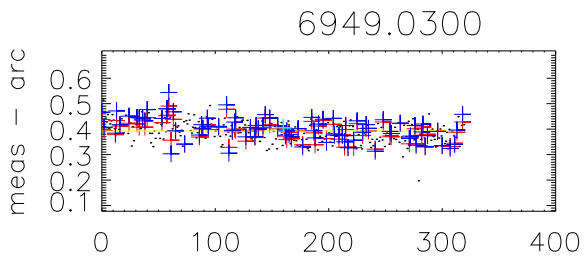

6300.3040
off: 0.35
sig: 0.002
6363.7760
off: 0.38
sig: 0.004
6553.6100
off: 0.35
sig: 0.006
6923.2100
off: 0.37
sig: 0.004
6949.0300
off: 0.41
sig: 0.004
7571.7500
off: 0.39
sig: 0.003
7794.1200
off: 0.30
sig: 0.002
7821.5100
off: 0.34
sig: 0.002
8399.1600
off: 0.37
sig: 0.002
8430.1700
off: 0.36
sig: 0.002
8885.8300
off: 0.36
sig: 0.002
8919.6100
off: 0.36
sig: 0.002

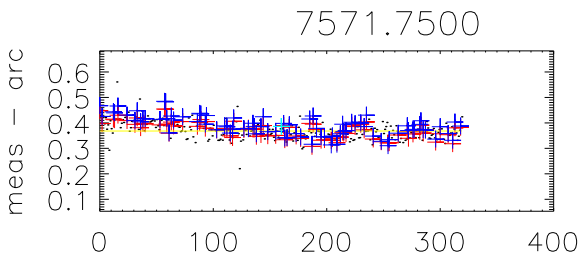

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

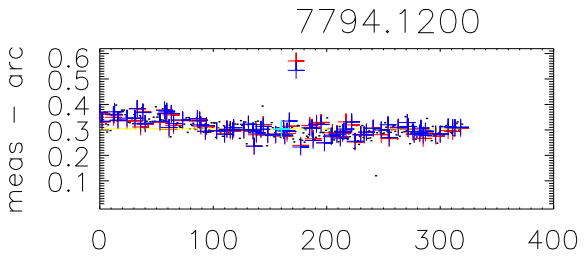

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

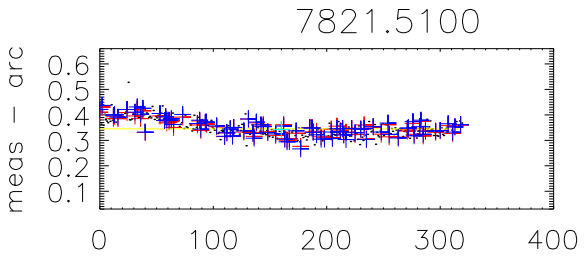

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

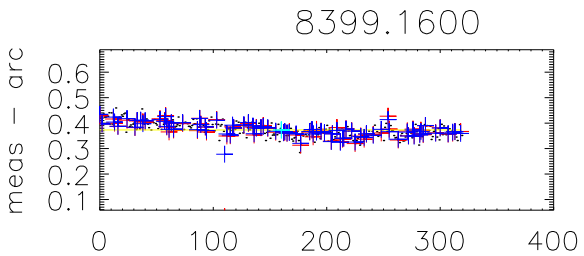

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

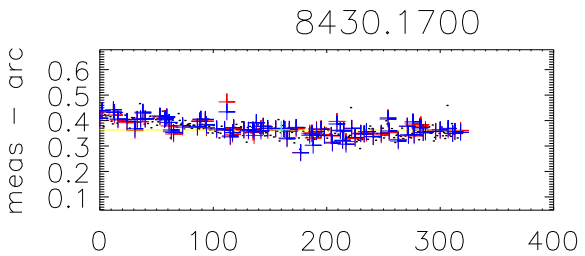

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

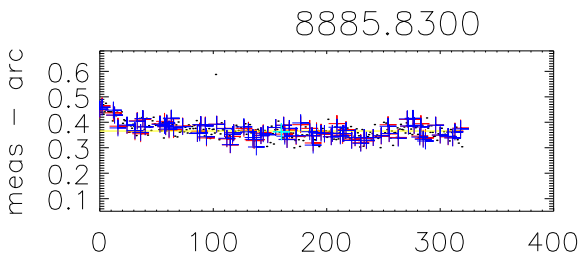

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

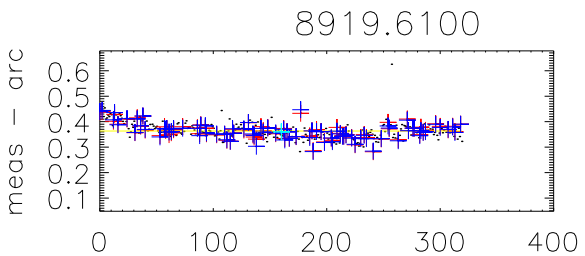

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

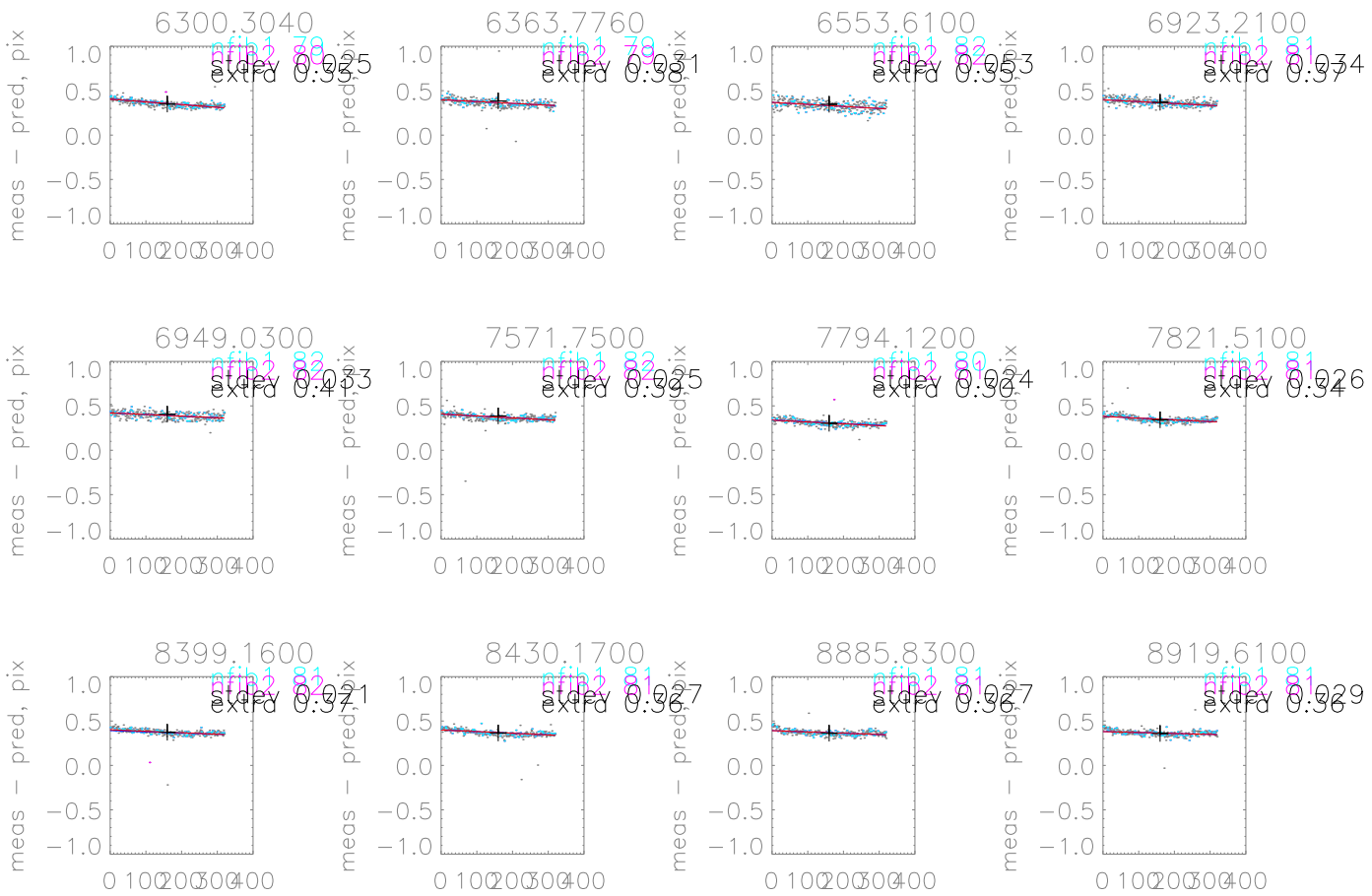

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

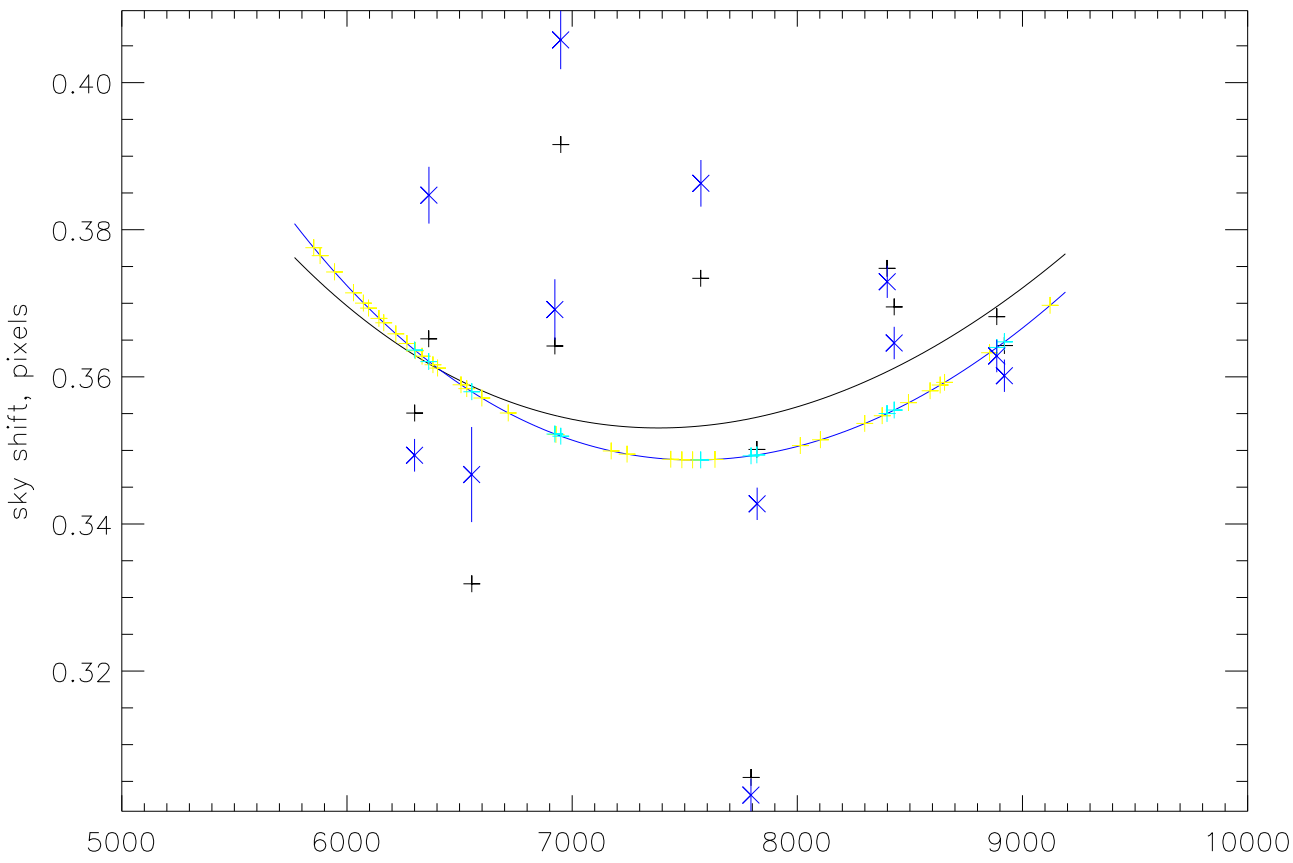

8399.1600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


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

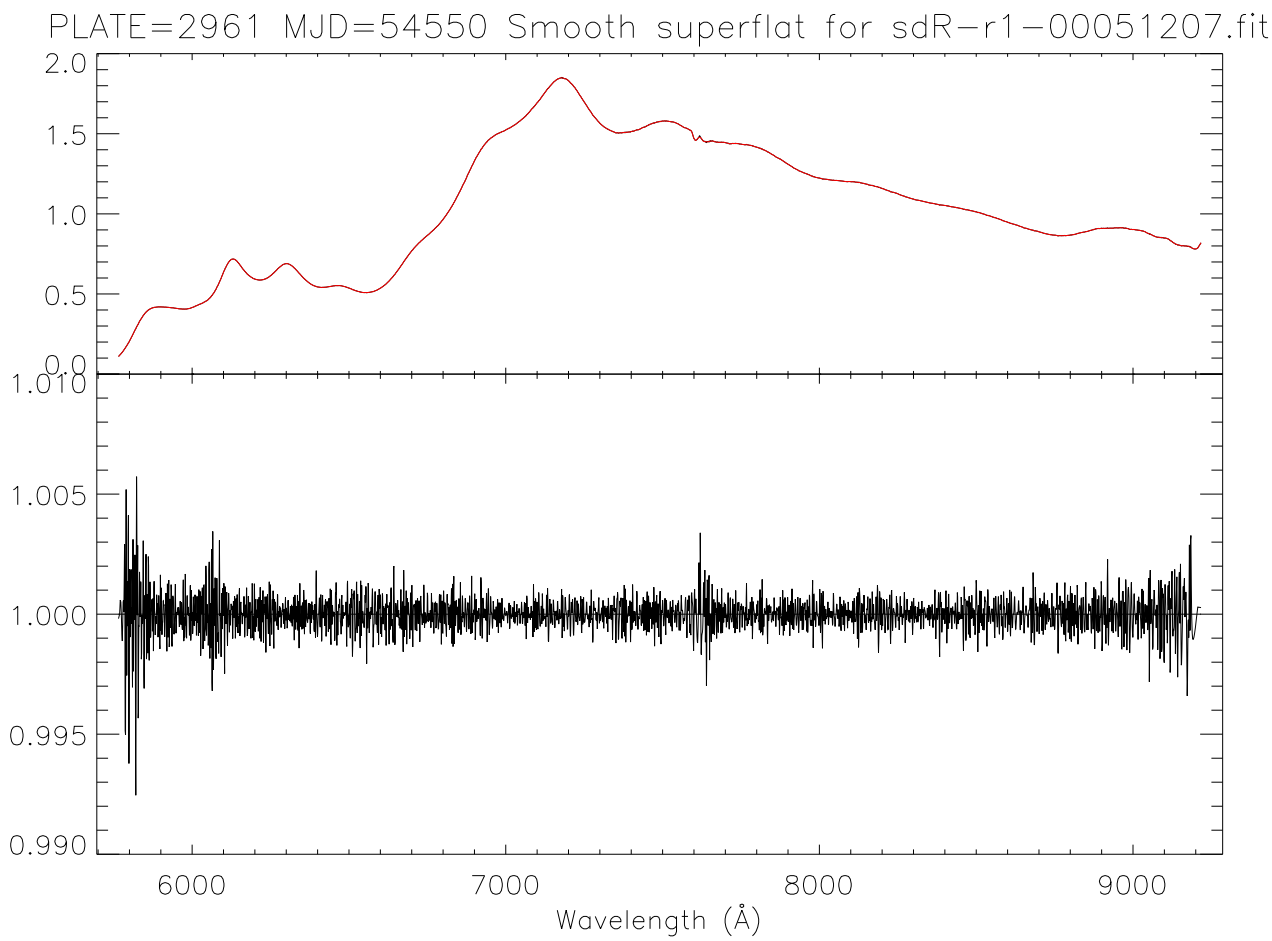

8885.8300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

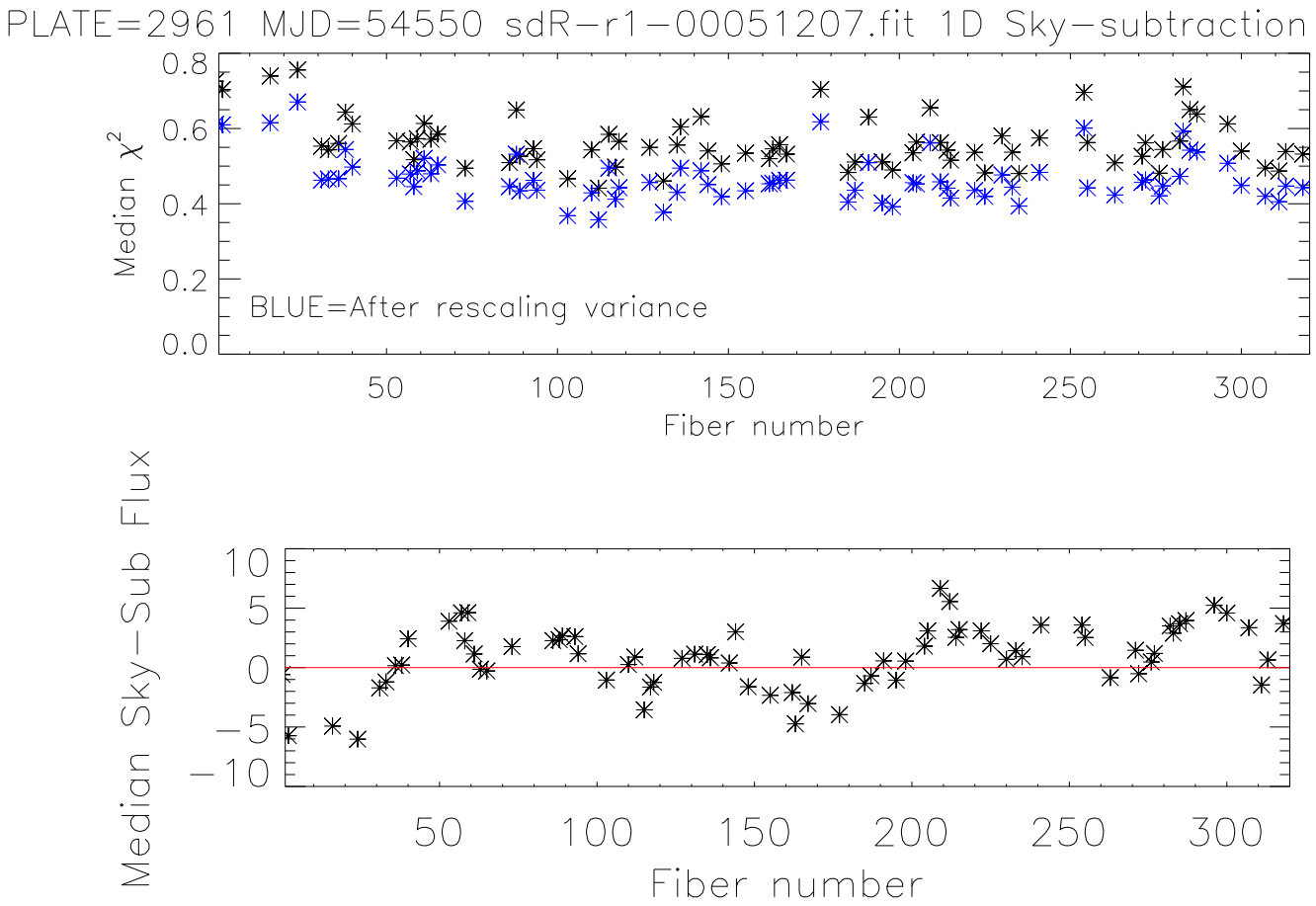

8919.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

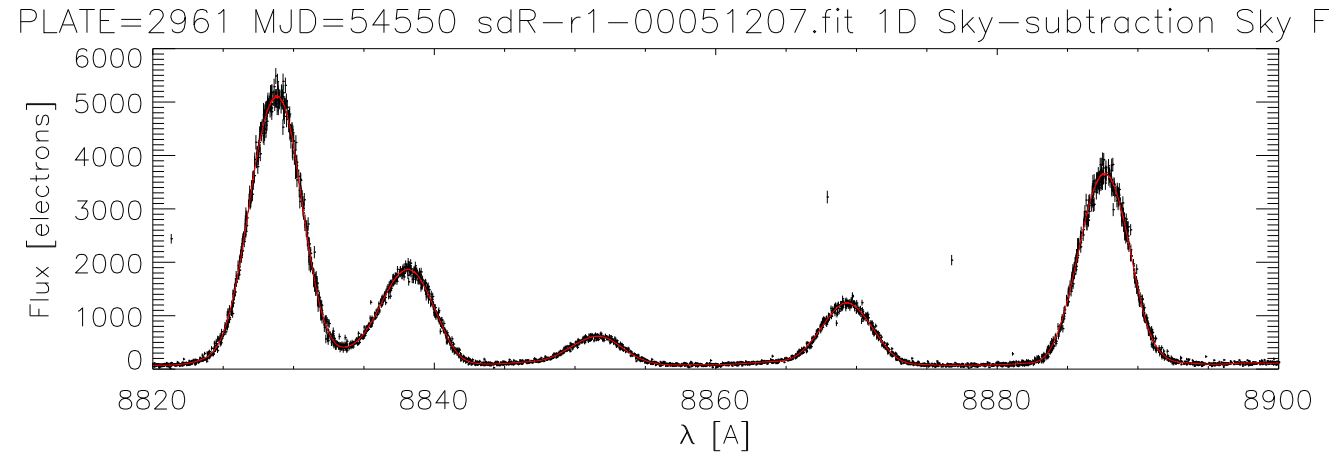

6300.3040
mfhd1 78
mfhd2 78
stdev 0.025
extra 0.35
6363.7760
mfhd1 78
mfhd2 78
stdev 0.031
extra 0.38
6553.6100
mfhd1 82
mfhd2 82
stdev 0.053
extra 0.35
6923.2100
mfhd1 81
mfhd2 81
stdev 0.034
extra 0.37
6949.0300
mfhd1 82
mfhd2 82
stdev 0.033
extra 0.41
7571.7500
mfhd1 82
mfhd2 82
stdev 0.025
extra 0.34
7794.1200
mfhd1 80
mfhd2 80
stdev 0.024
extra 0.36
7821.5100
mfhd1 81
mfhd2 81
stdev 0.026
extra 0.34
8399.1600
mfhd1 81
mfhd2 82
stdev 0.021
extra 0.37
8430.1700
mfhd1 81
mfhd2 81
stdev 0.027
extra 0.36
8885.8300
mfhd1 81
mfhd2 81
stdev 0.027
extra 0.36
8919.6100
mfhd1 81
mfhd2 81
stdev 0.029
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

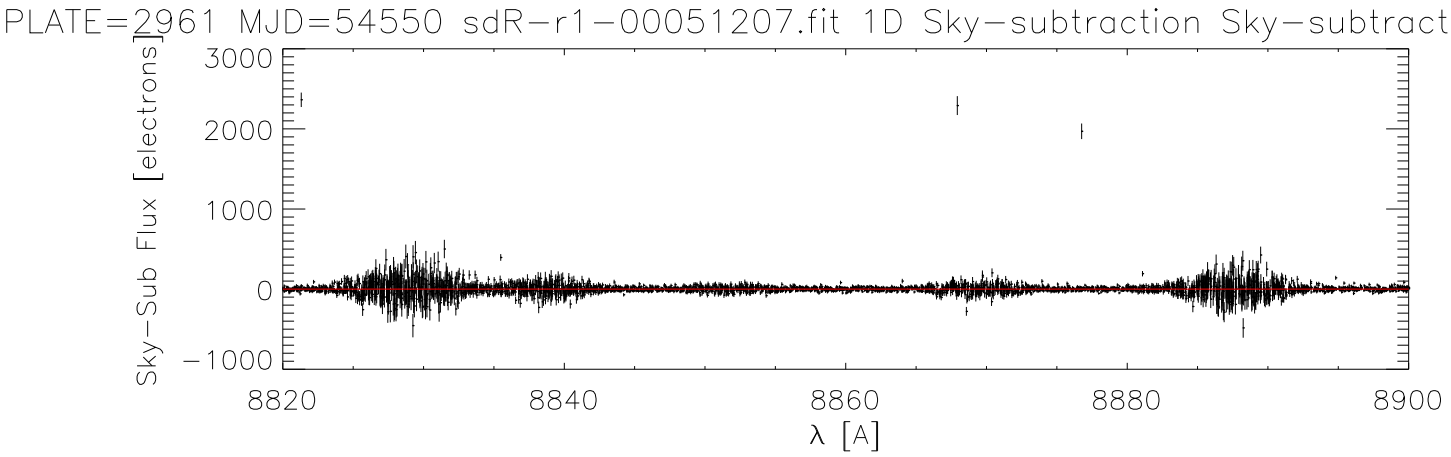

sky shift, pixels
0.40
0.38
0.36
0.34
0.32
5000
6000
7000
8000
9000
10000

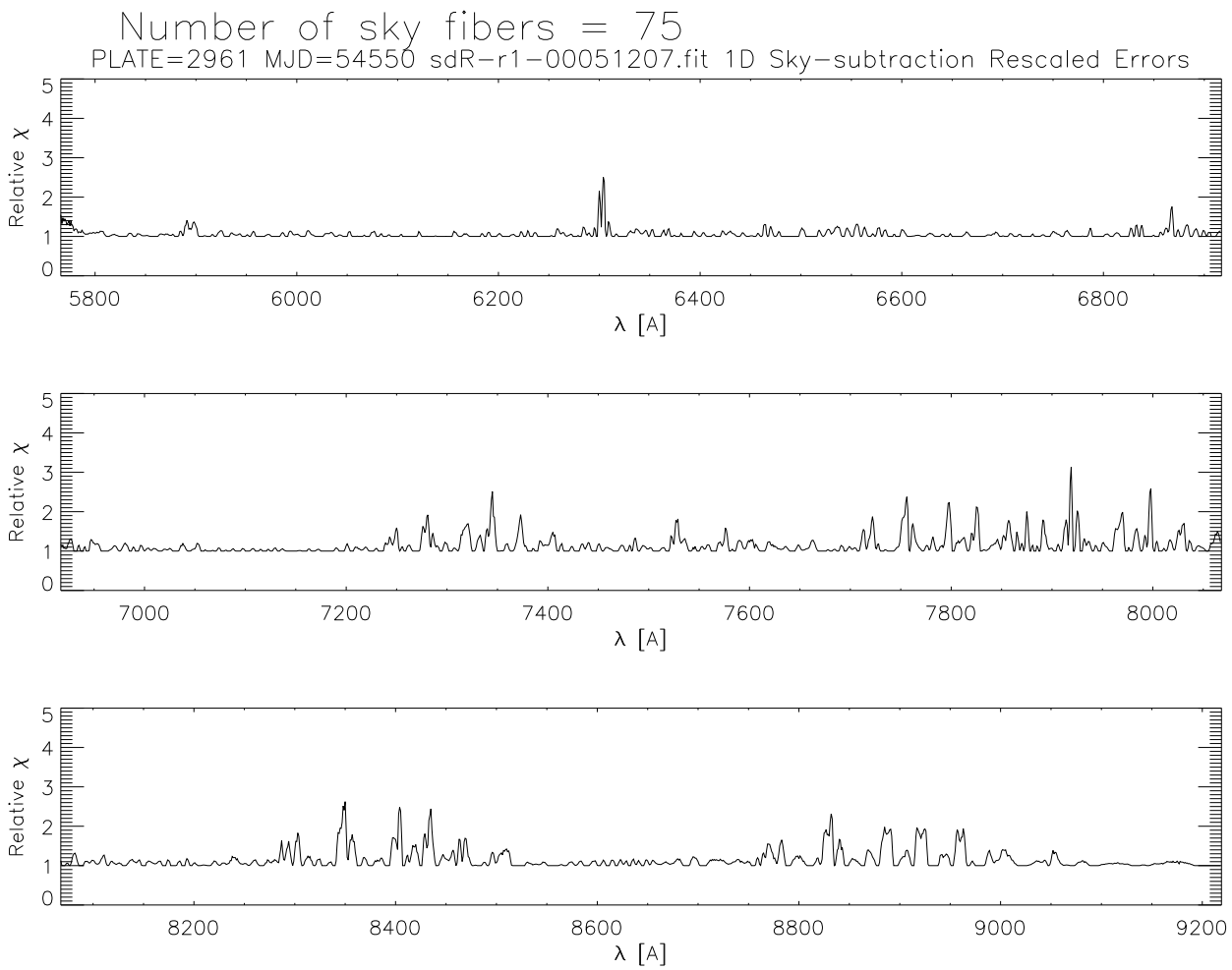
es= 0.0000

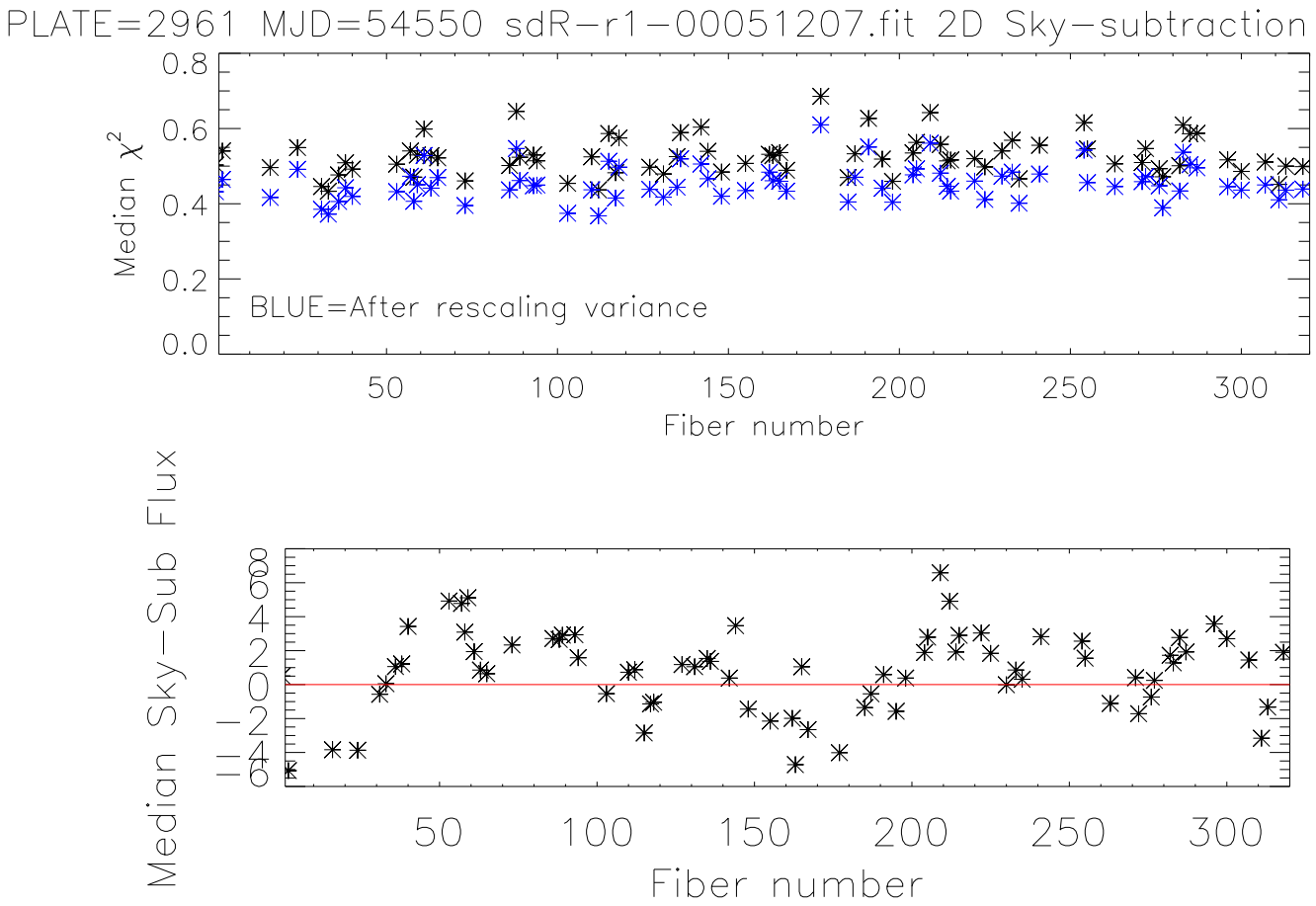

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051207.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)


PLATE=2961 MJD=54550 sdR-r1-00051207.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

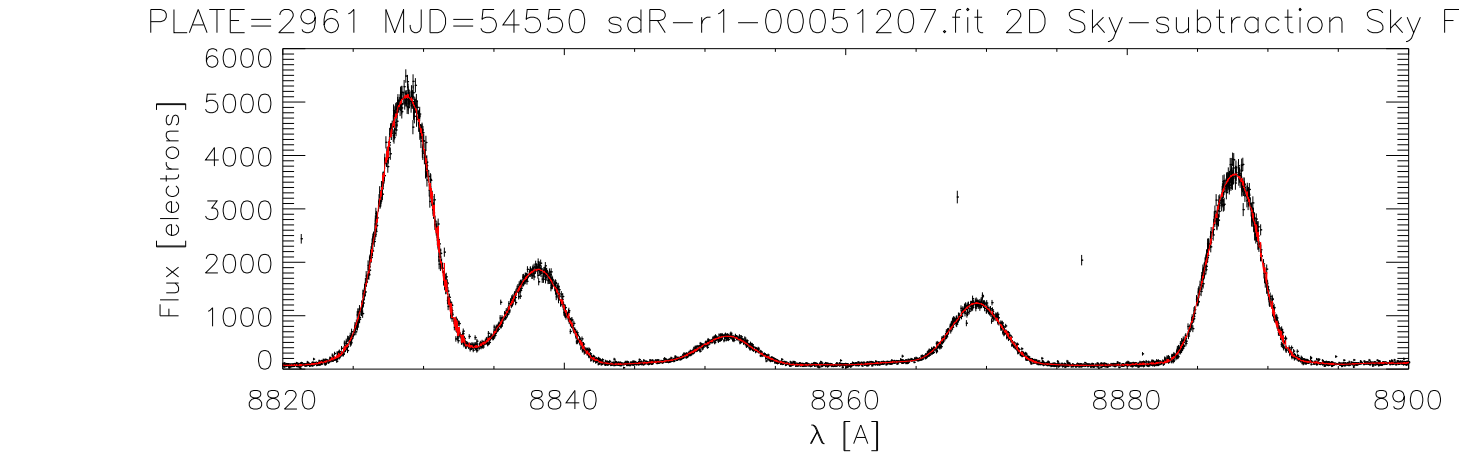

PLATE=2961 MJD=54550 sdR-r1-00051207.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

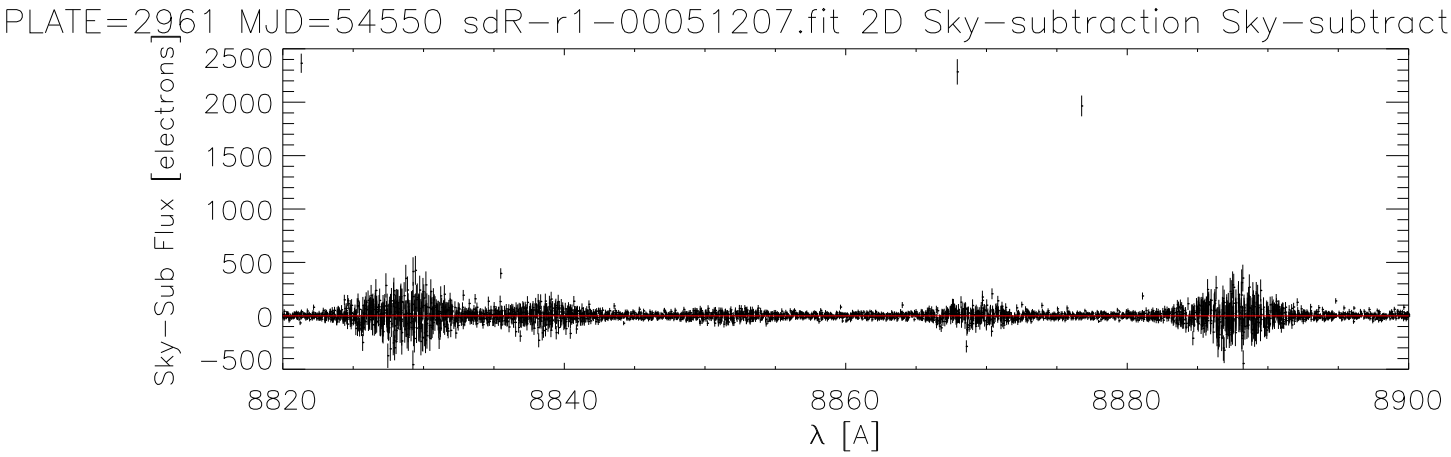

PLATE=2961 MJD=54550 sdR-r1-00051207.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

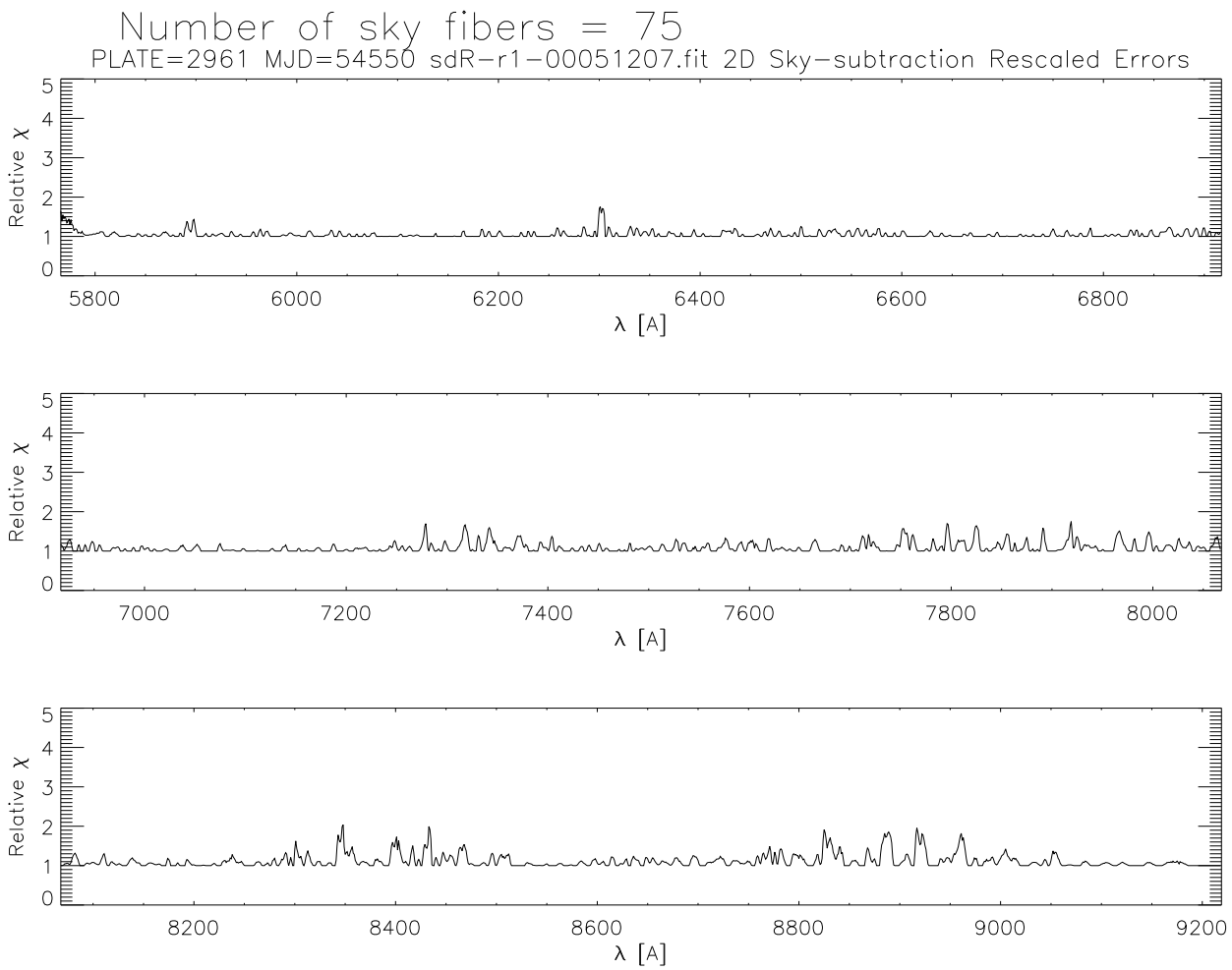

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051207.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

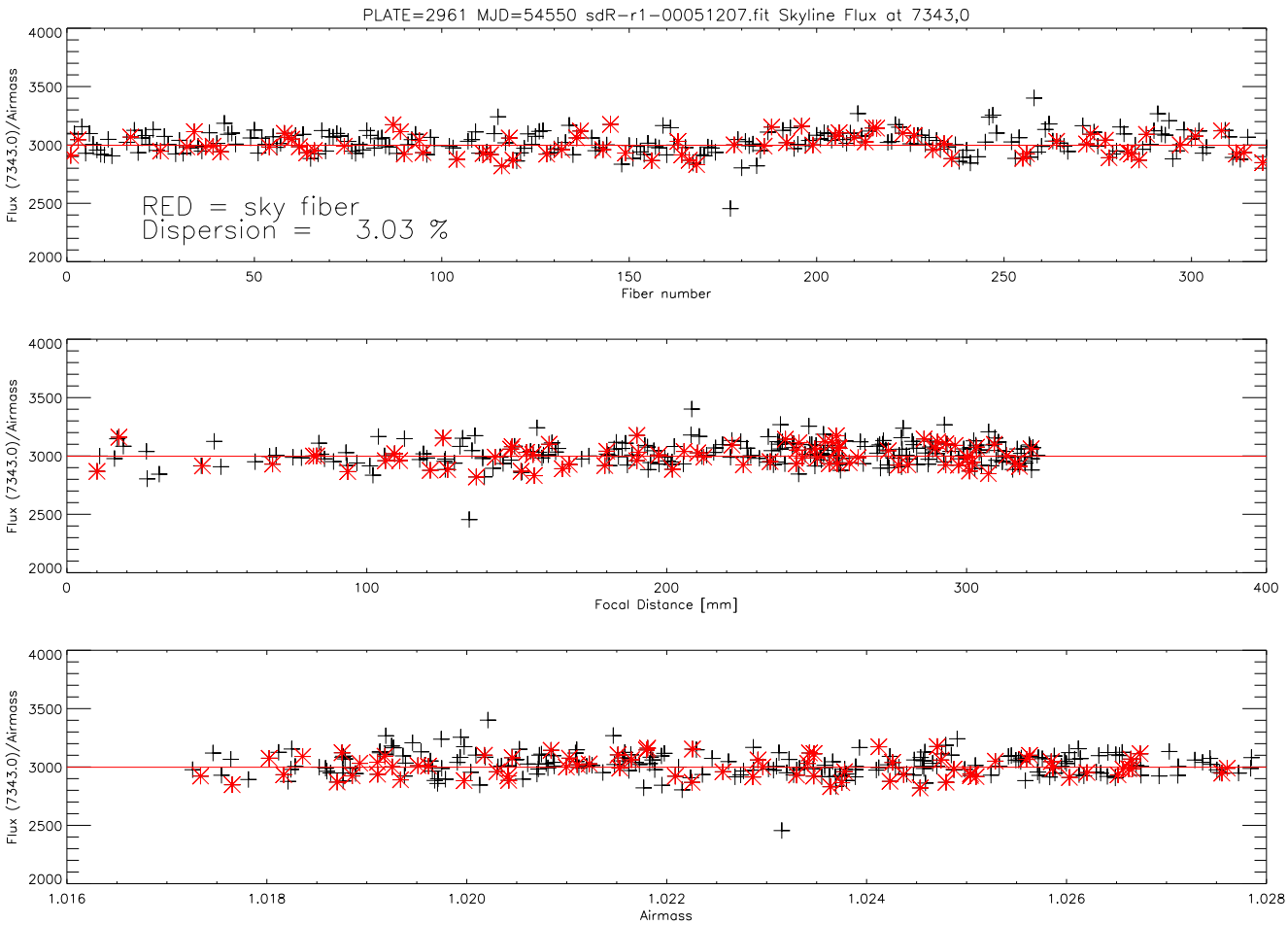

PLATE=2961 MJD=54550 sdR-r1-00051207.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

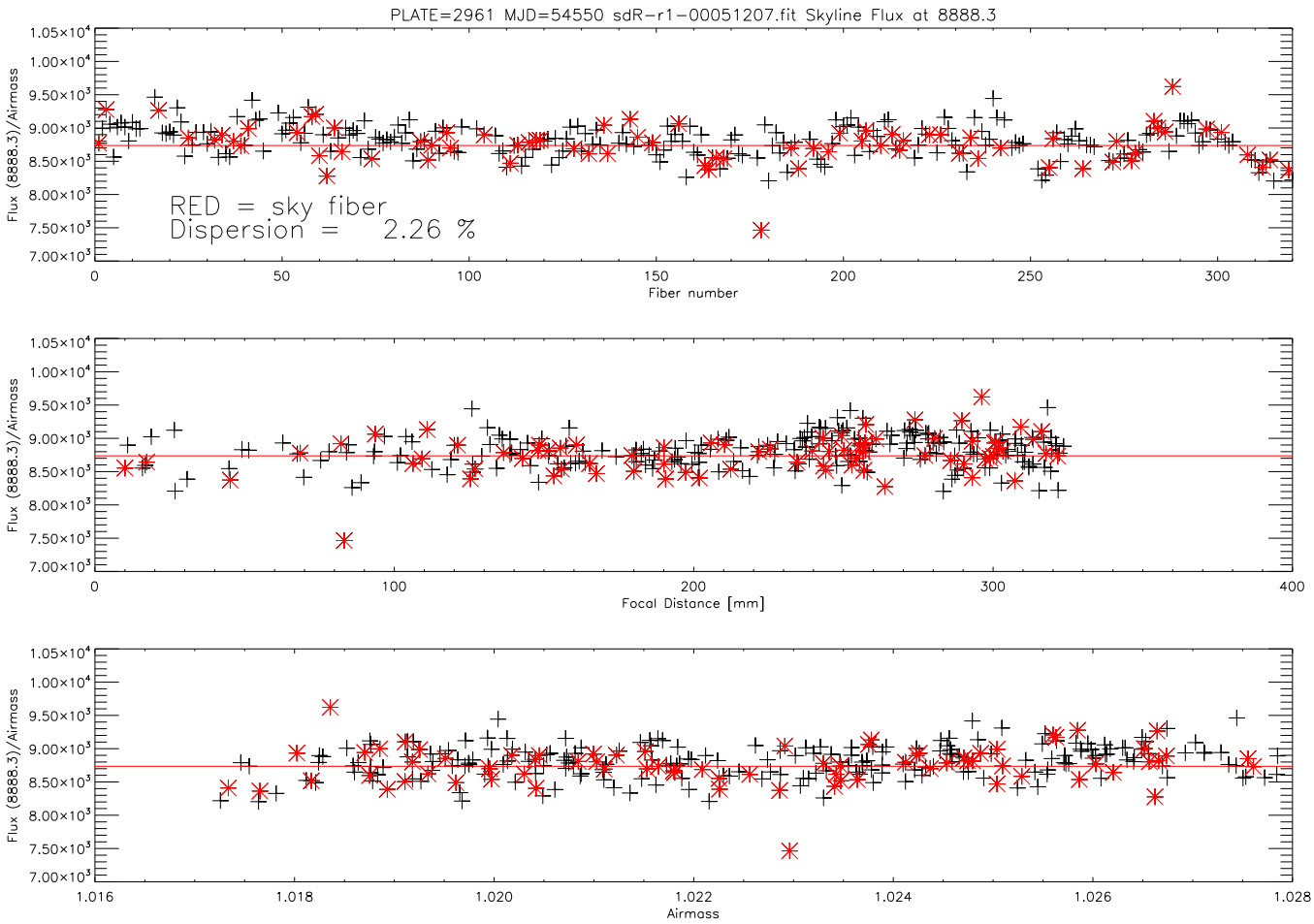
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

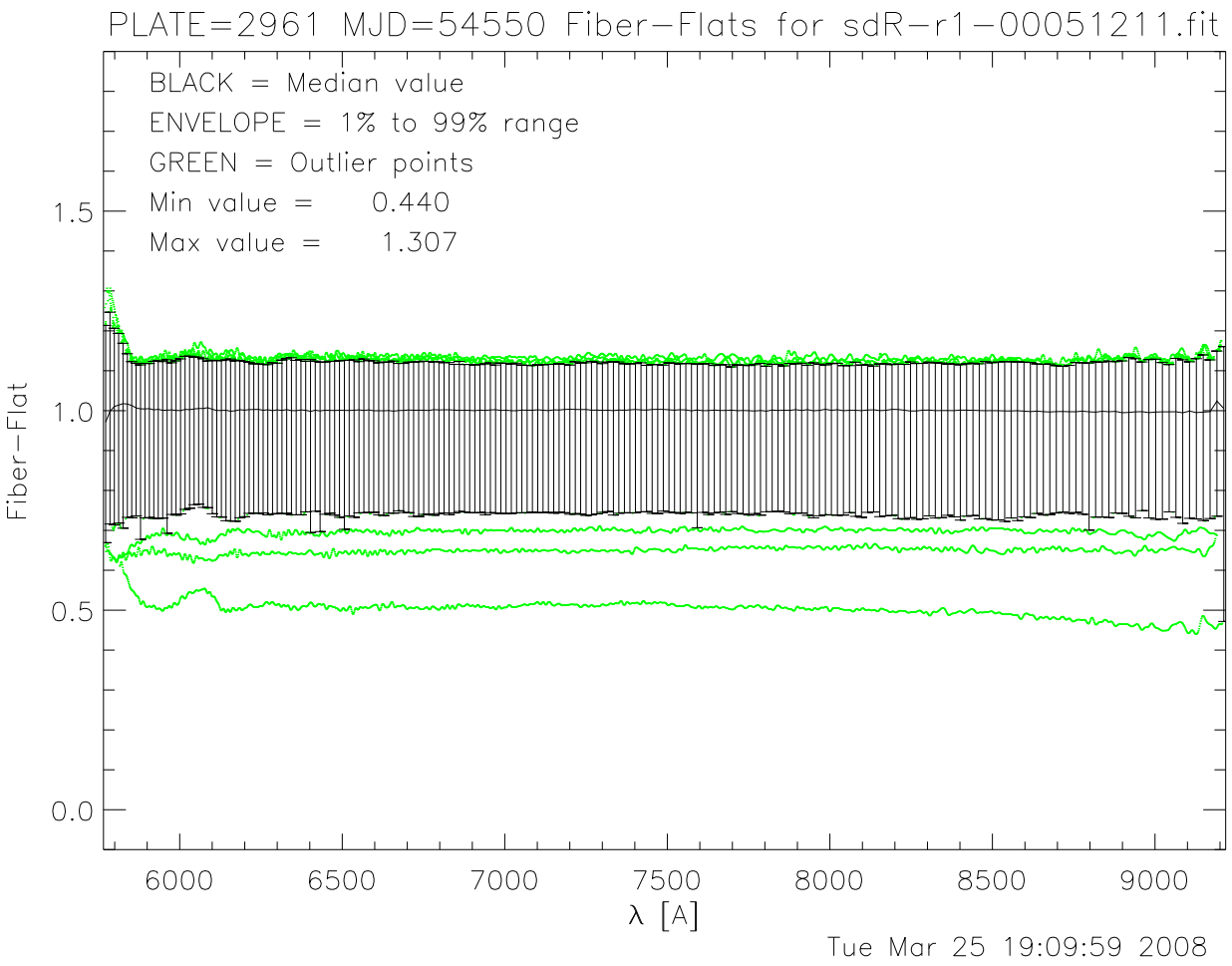

PLATE=2961 MJD=54550 sdR-r1-00051207.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

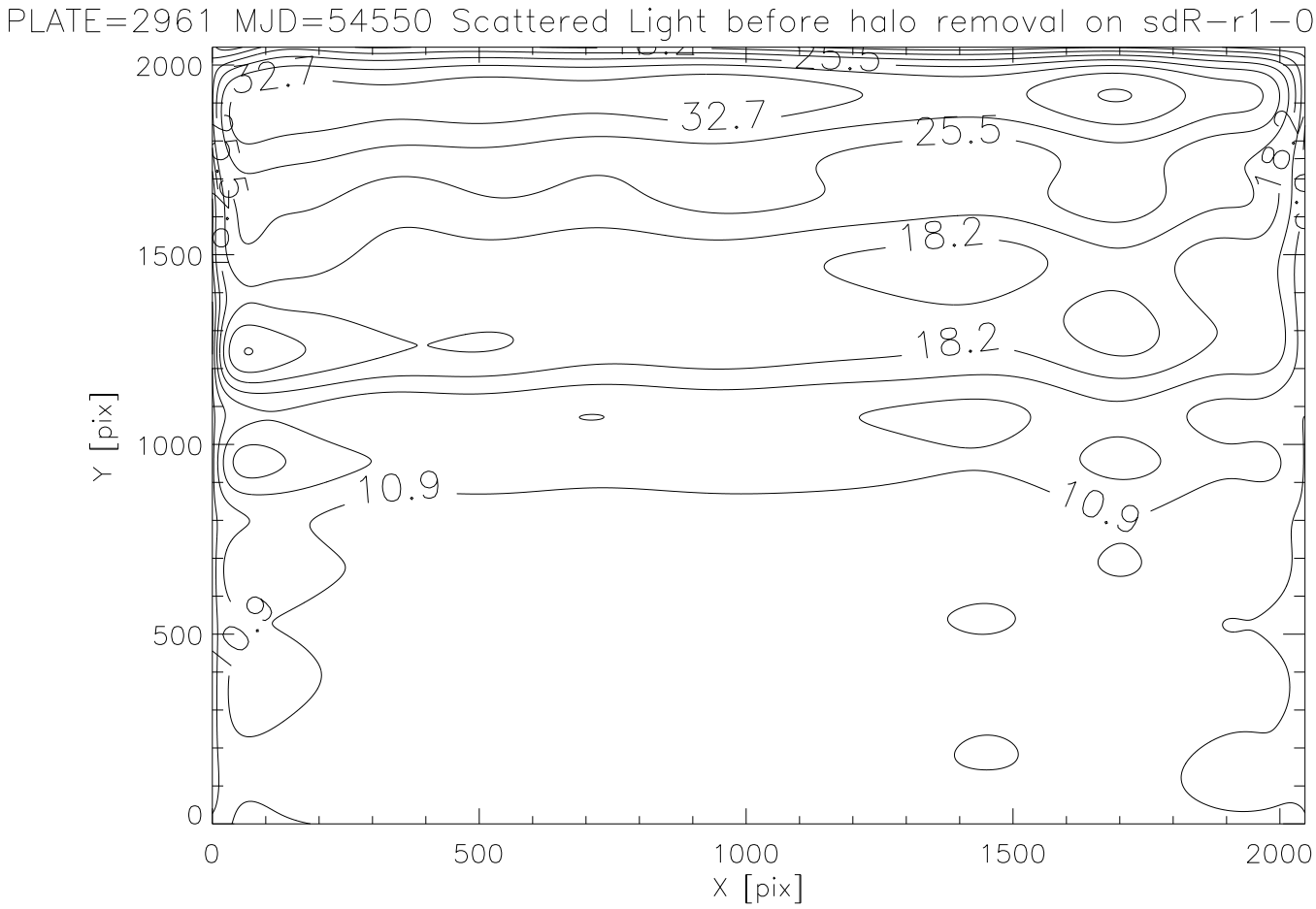

PLATE=2961 MJD=54550 sdR-r1-00051207.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

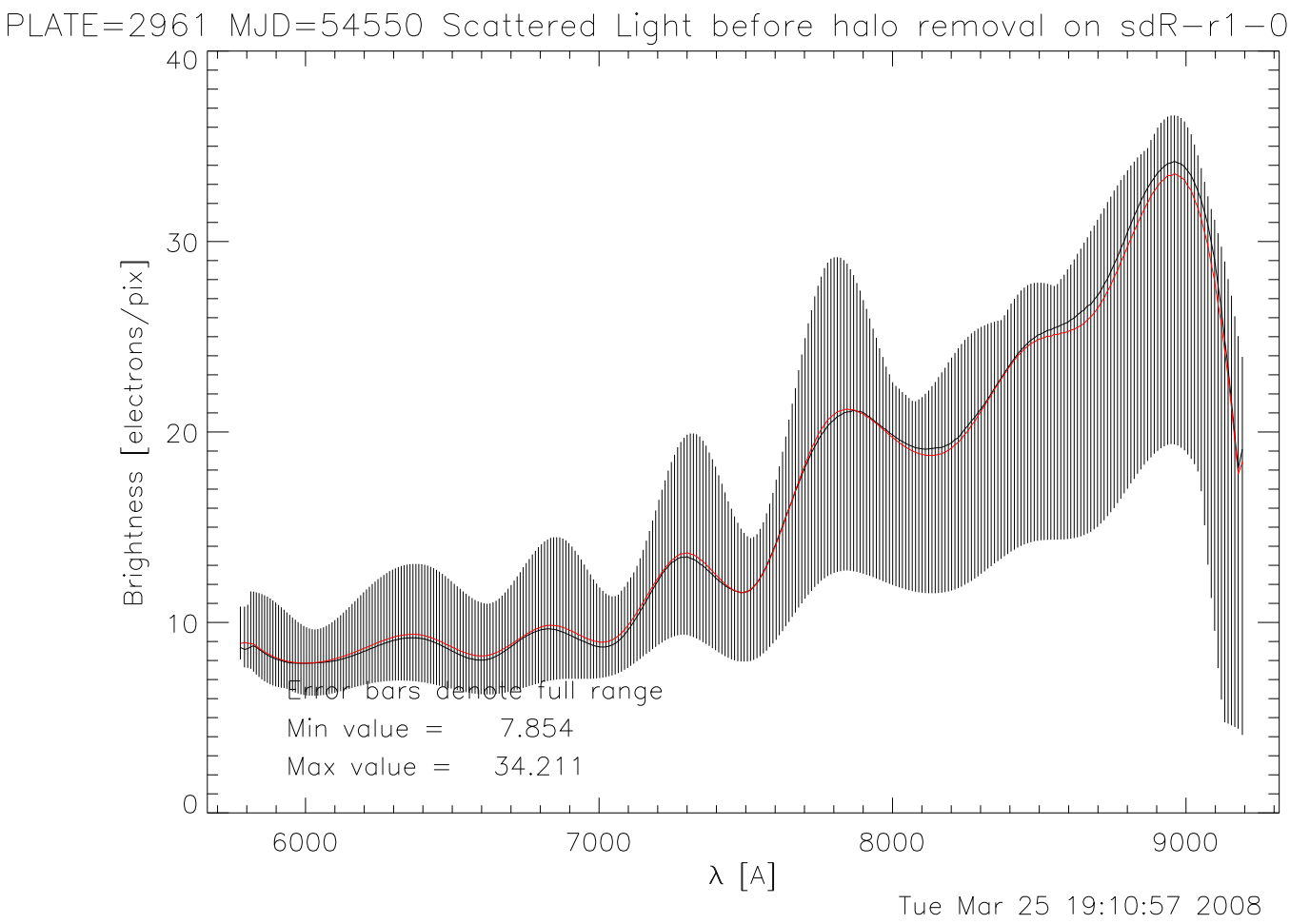

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051207.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

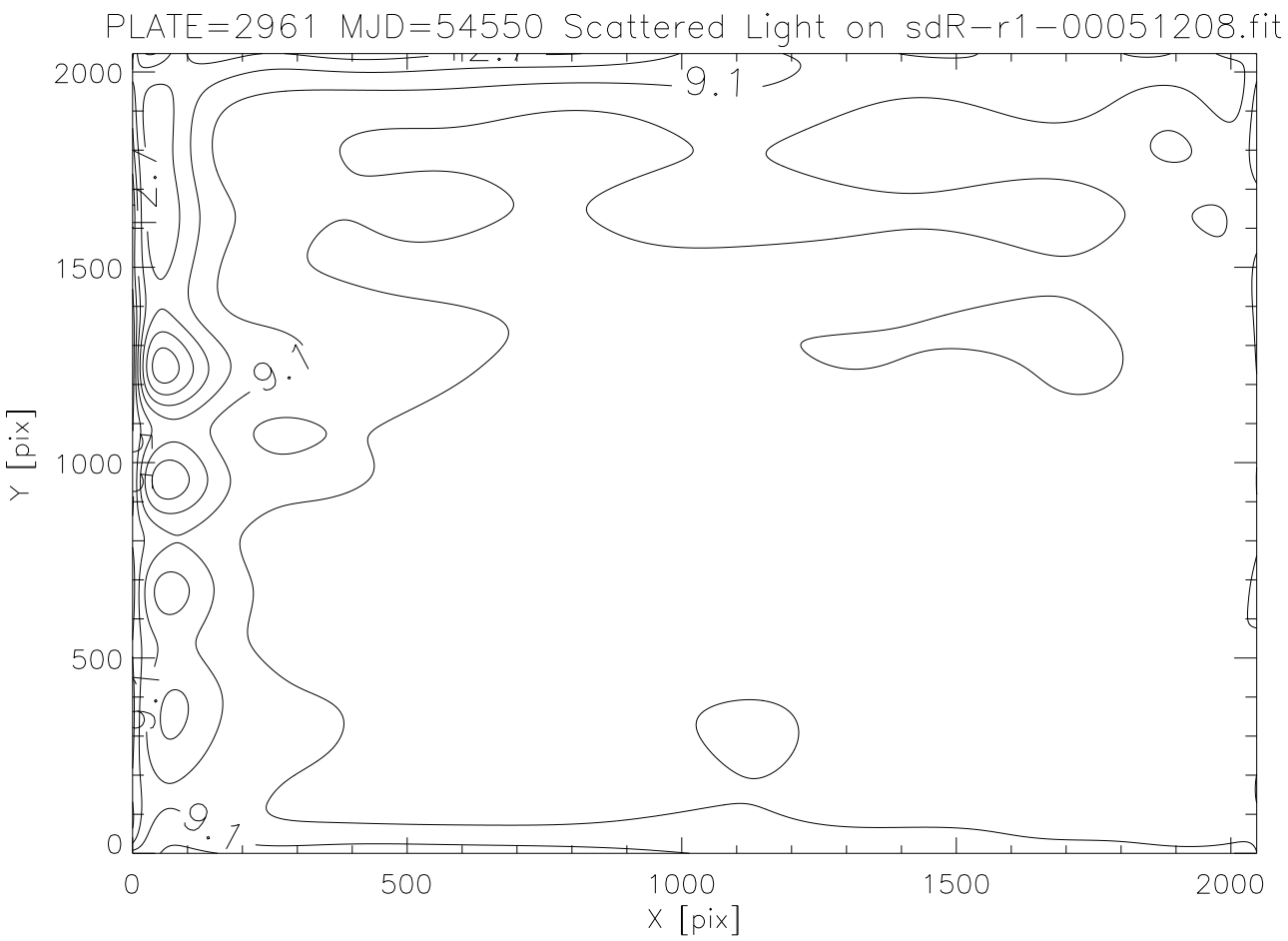

PLATE=2961 MJD=54550 sdR-r1-00051207.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.03 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

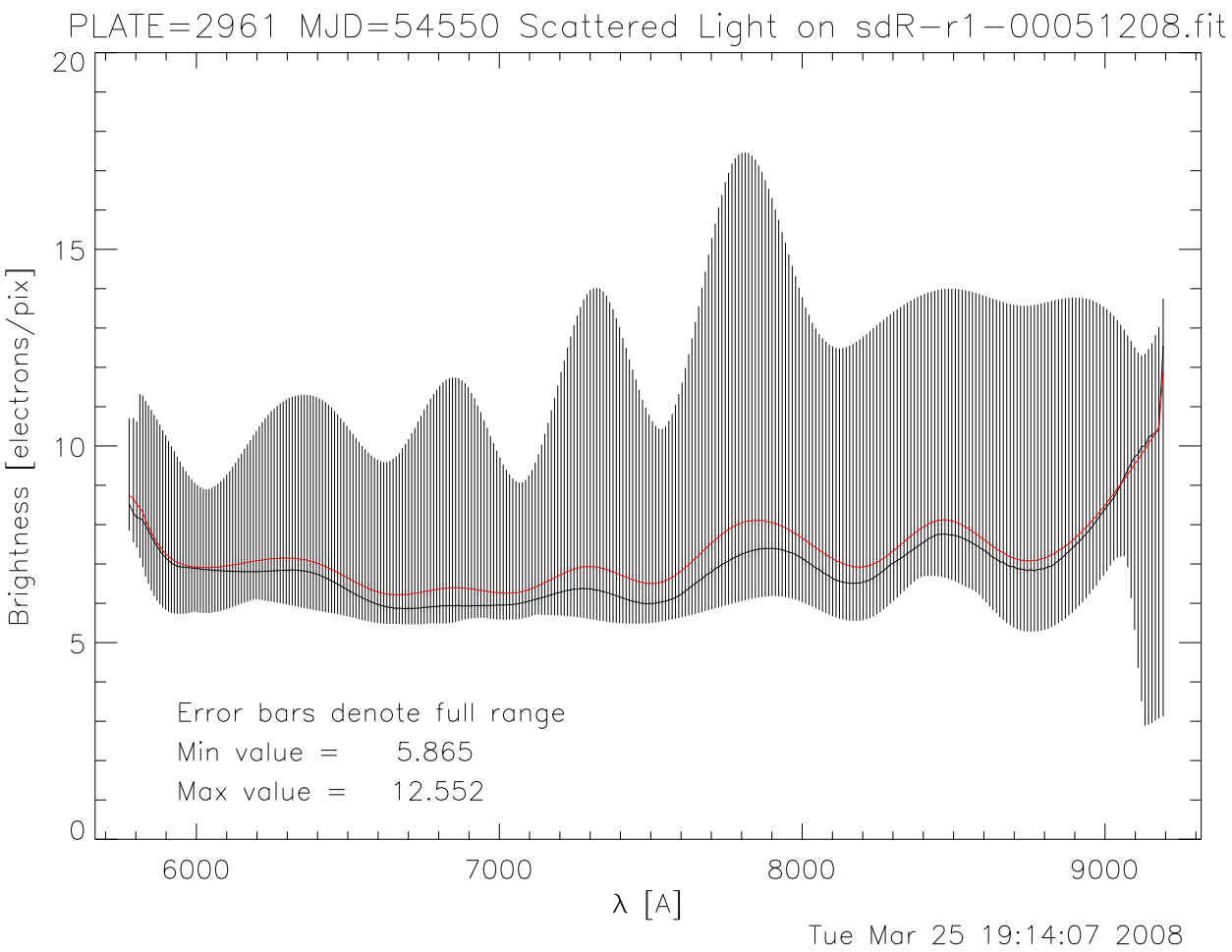

PLATE=2961 MJD=54550 sdR-r1-00051207.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

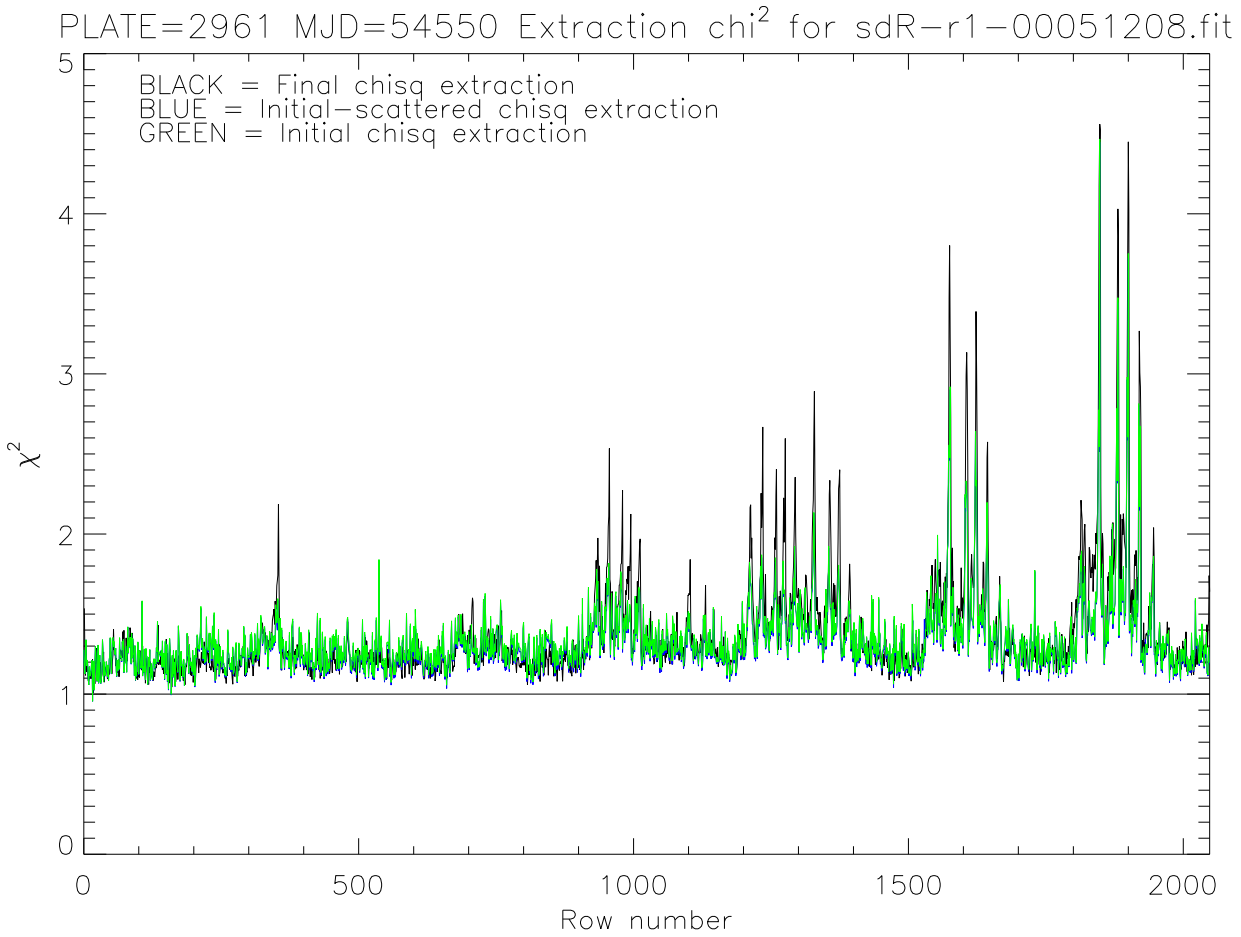

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:09:59 2008

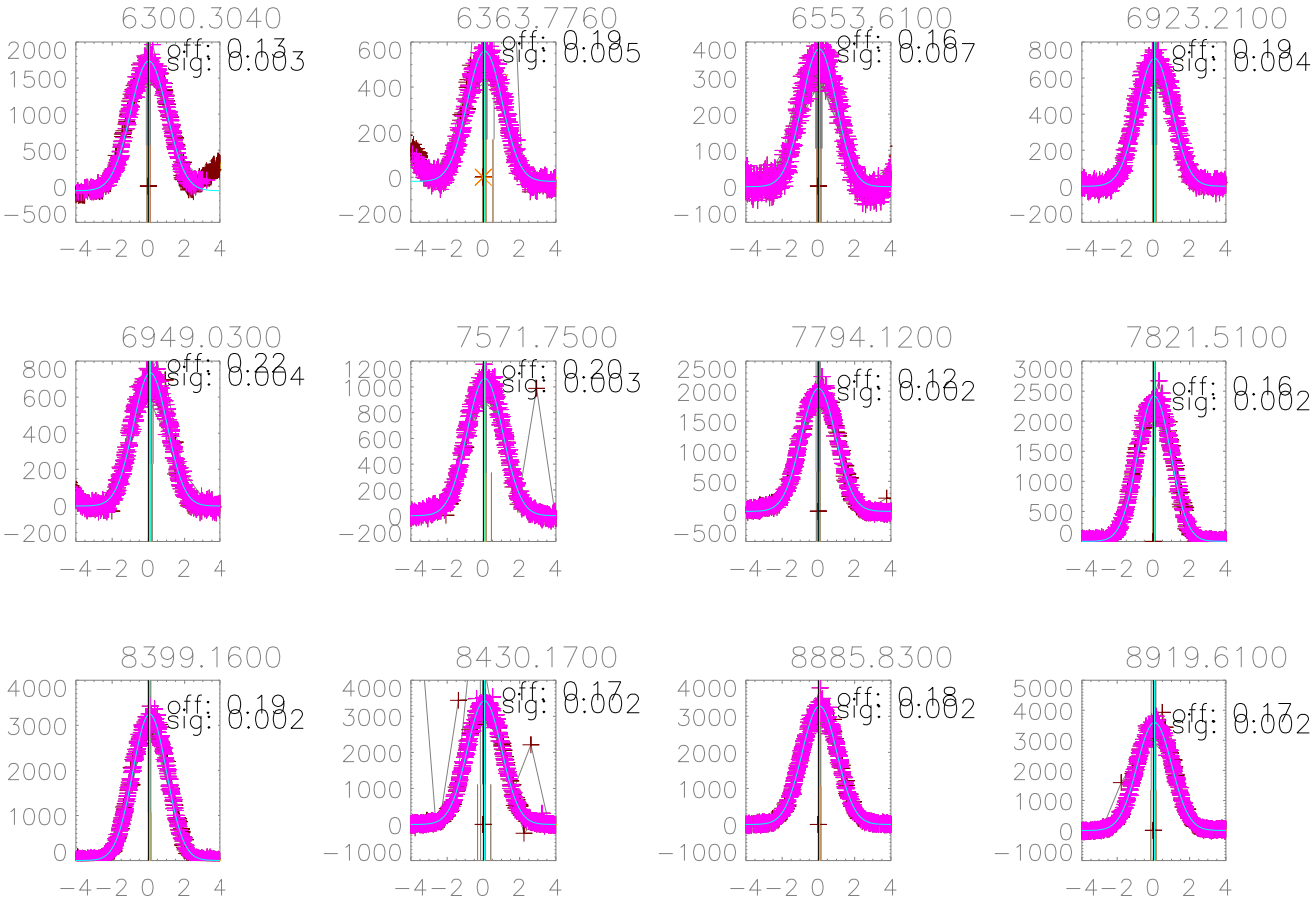

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051208.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

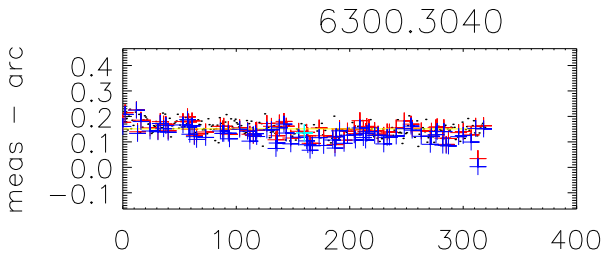

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051208.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.854
Max value = 34.211
Tue Mar 25 19:10:57 2008

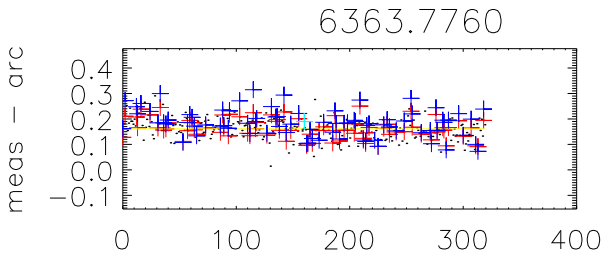

PLATE=2961 MJD=54550 Scattered Light on sdR−r1−00051208.fit
9.1
9.1
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

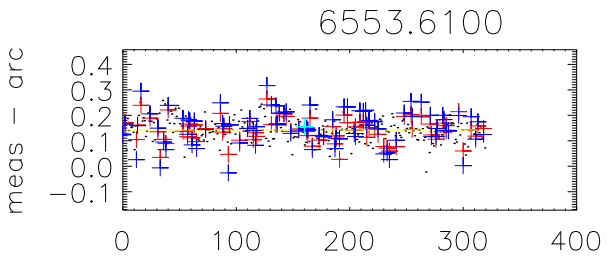

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051208.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.865
Max value = 12.552
Tue Mar 25 19:14:07 2008

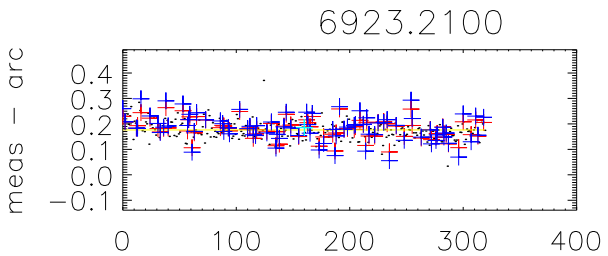

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051208.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

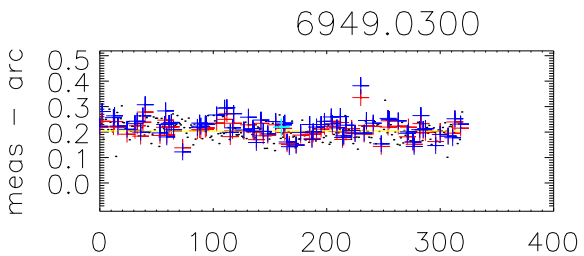

6300.3040
off: 0.13
sig: 0.003
6363.7760
off: 0.18
sig: 0.005
6553.6100
off: 0.16
sig: 0.007
6923.2100
off: 0.19
sig: 0.004
6949.0300
off: 0.22
sig: 0.004
7571.7500
off: 0.20
sig: 0.003
7794.1200
off: 0.12
sig: 0.002
7821.5100
off: 0.16
sig: 0.002
8399.1600
off: 0.19
sig: 0.002
8430.1700
off: 0.17
sig: 0.002
8885.8300
off: 0.18
sig: 0.002
8919.6100
off: 0.17
sig: 0.002

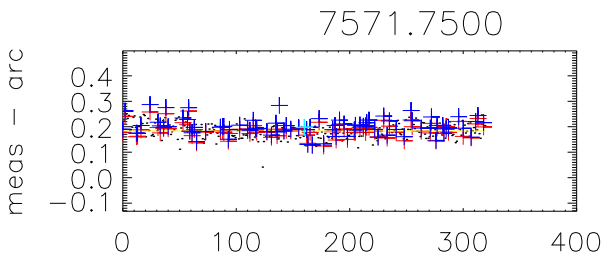

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

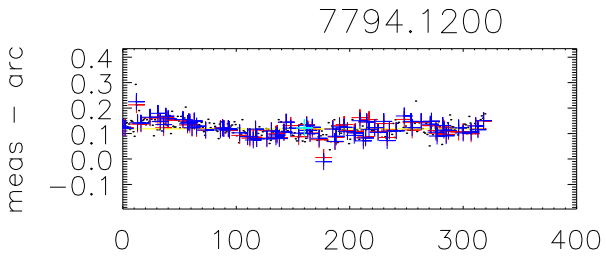

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

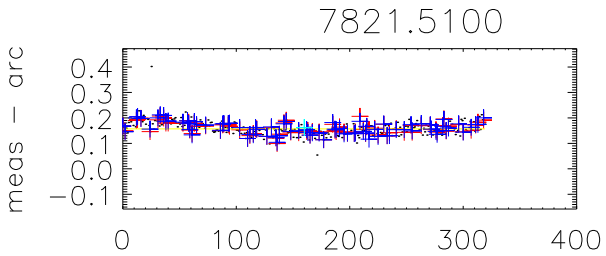

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

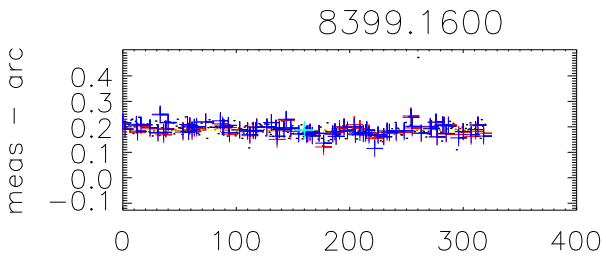

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

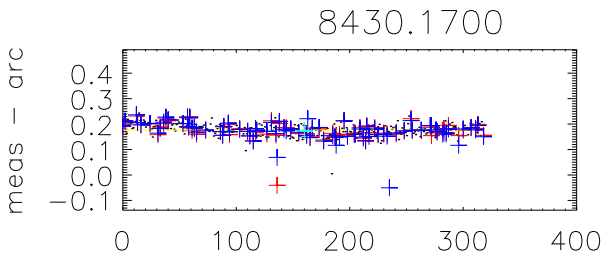

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

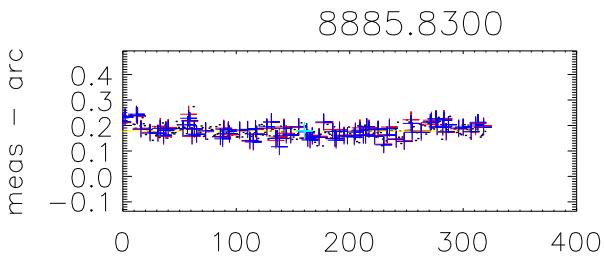

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

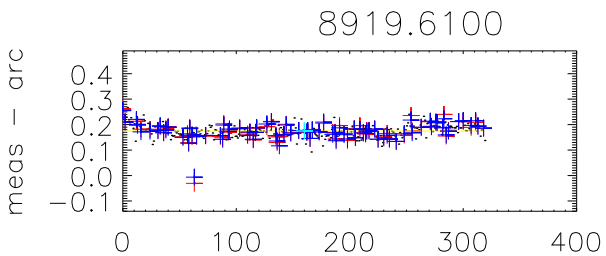

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

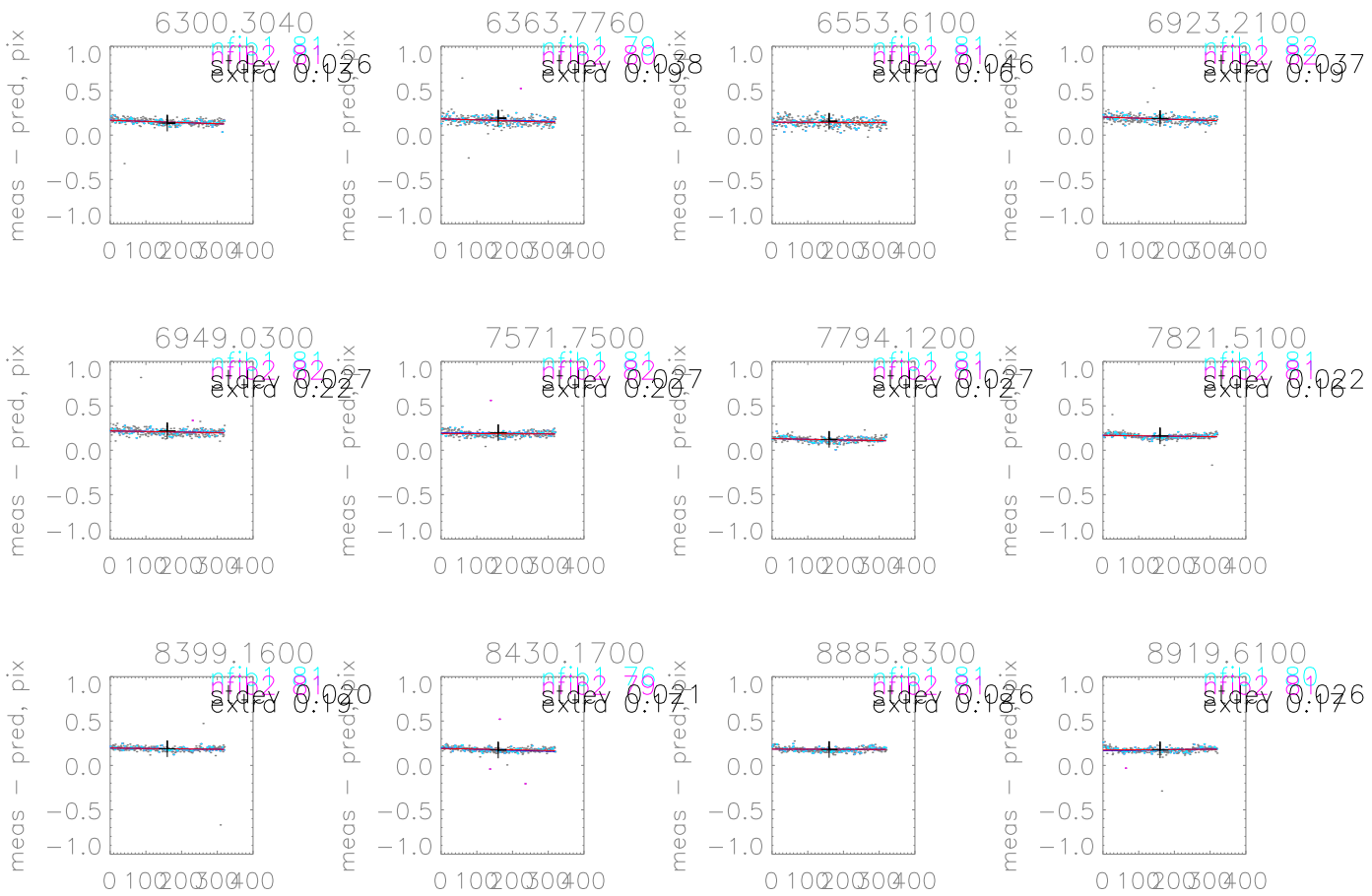

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

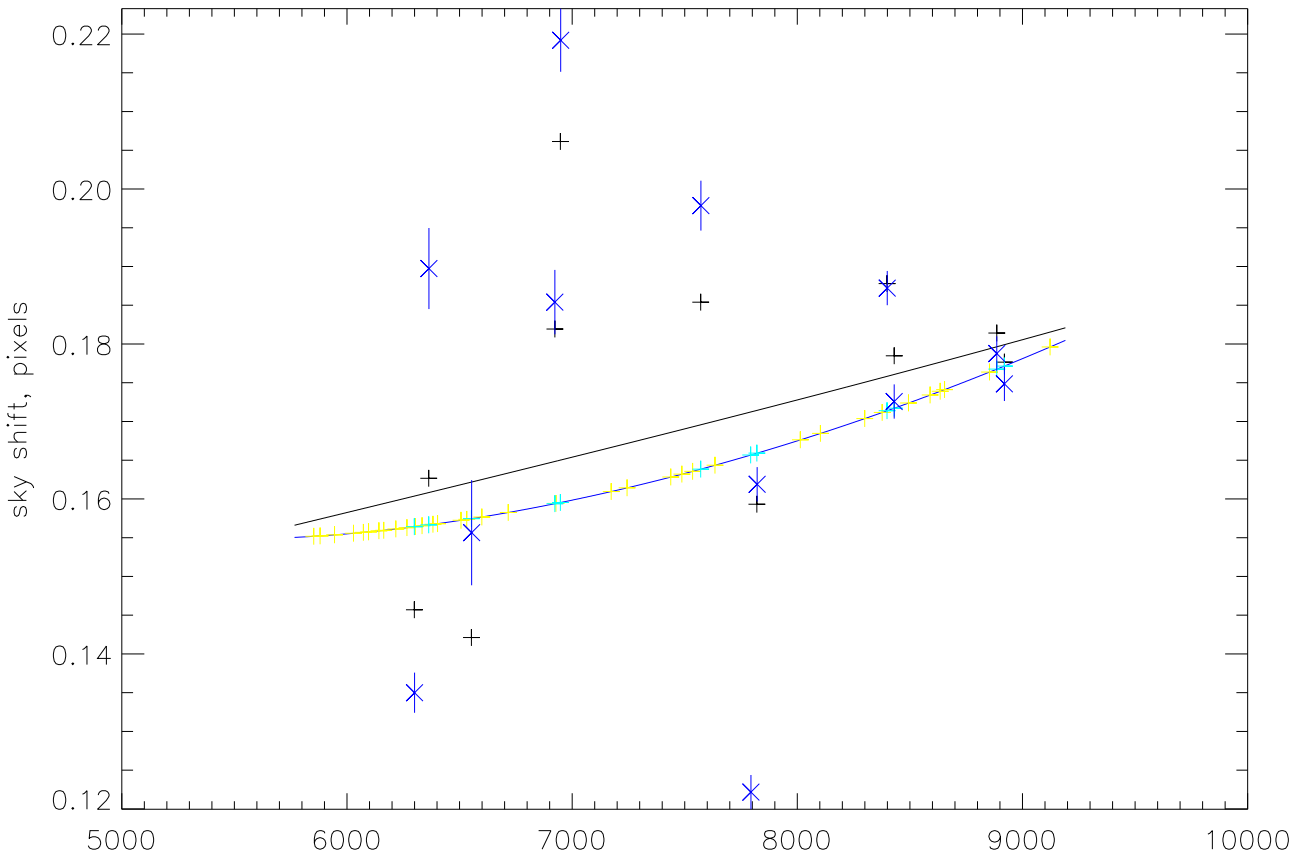

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

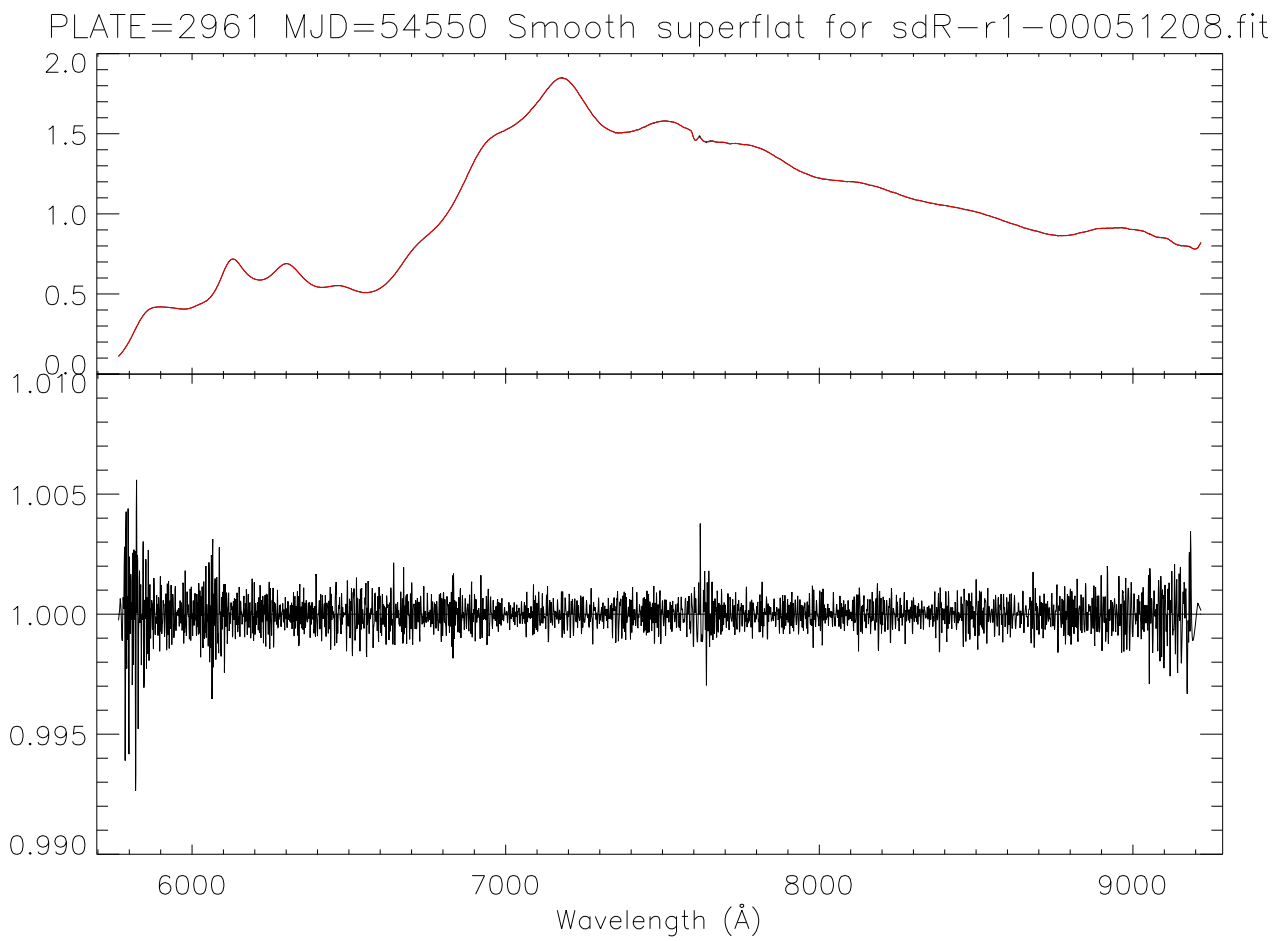

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

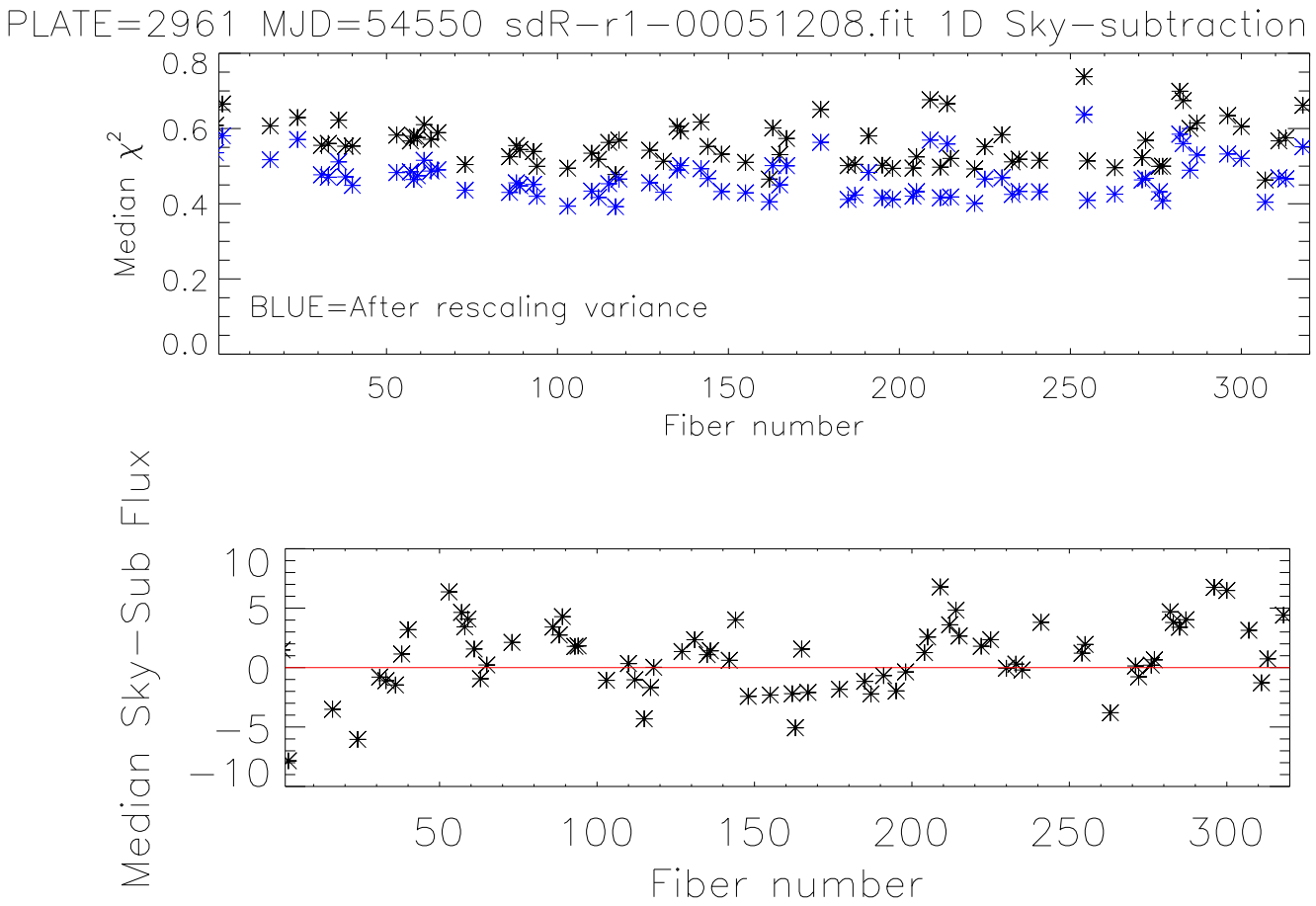

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

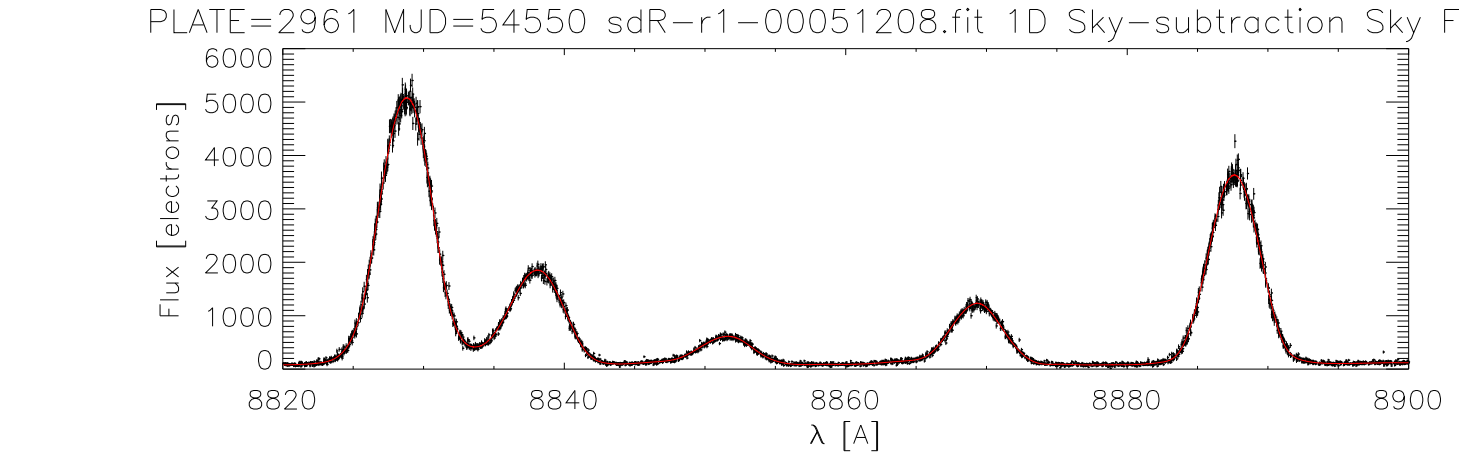

6300.3040
mfhi1 81
mfhi2 81
stdev 0.026
extra 0.13
6363.7760
mfhi1 79
mfhi2 79
stdev 0.038
extra 0.19
6553.6100
mfhi1 81
mfhi2 81
stdev 0.046
extra 0.16
6923.2100
mfhi1 82
mfhi2 82
stdev 0.037
extra 0.19
6949.0300
mfhi1 82
mfhi2 82
stdev 0.027
extra 0.22
7571.7500
mfhi1 81
mfhi2 82
stdev 0.027
extra 0.20
7794.1200
mfhi1 81
mfhi2 81
stdev 0.027
extra 0.12
7821.5100
mfhi1 81
mfhi2 81
stdev 0.022
extra 0.16
8399.1600
mfhi1 81
mfhi2 81
stdev 0.020
extra 0.19
8430.1700
mfhi1 76
mfhi2 79
stdev 0.021
extra 0.17
8885.8300
mfhi1 81
mfhi2 81
stdev 0.026
extra 0.18
8919.6100
mfhi1 80
mfhi2 81
stdev 0.026
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

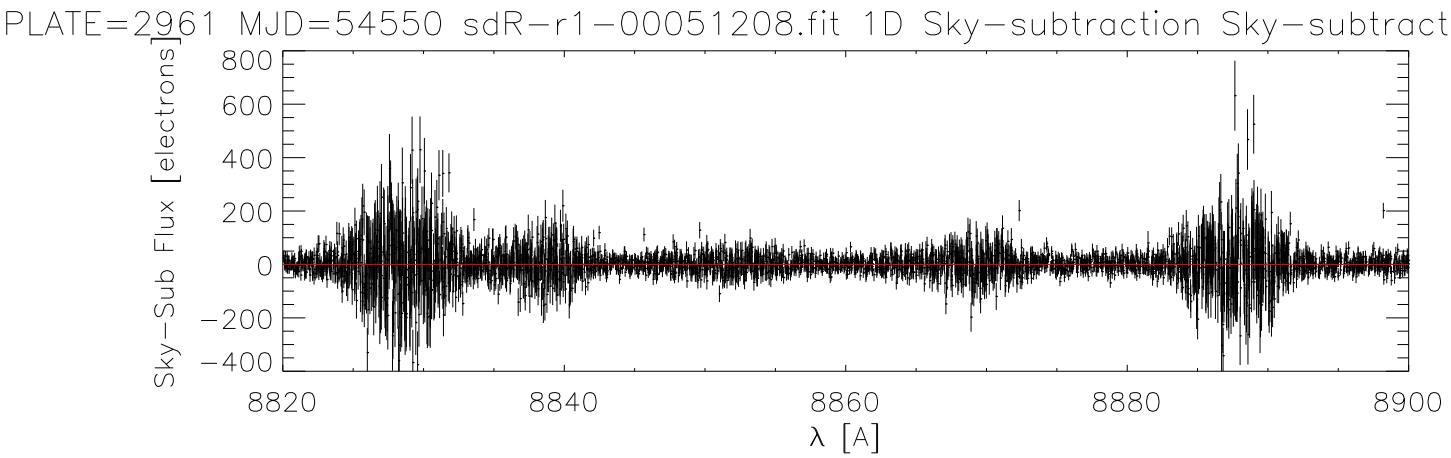

0.22
0.20
0.18
0.16
0.14
0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

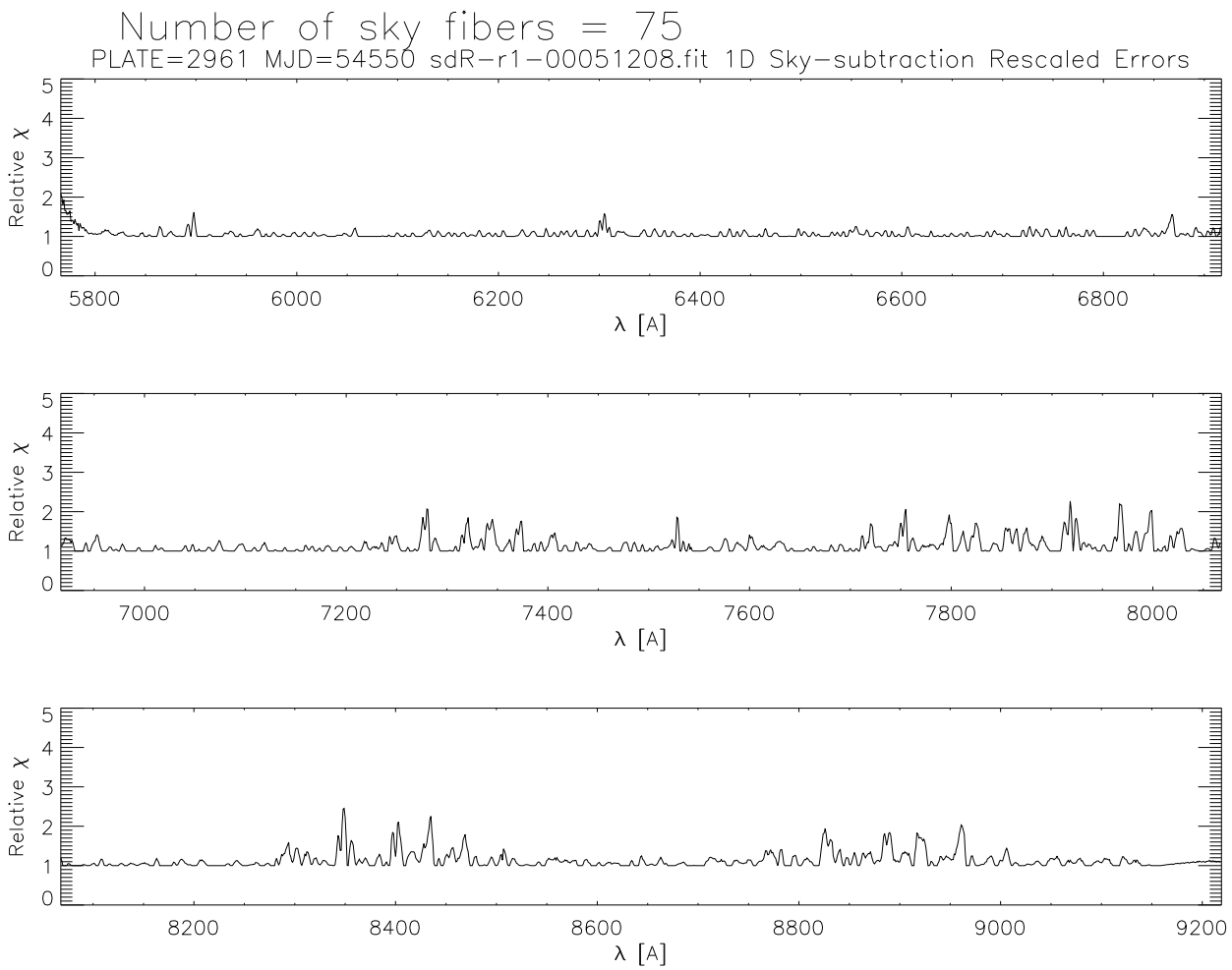
es= 0.0000

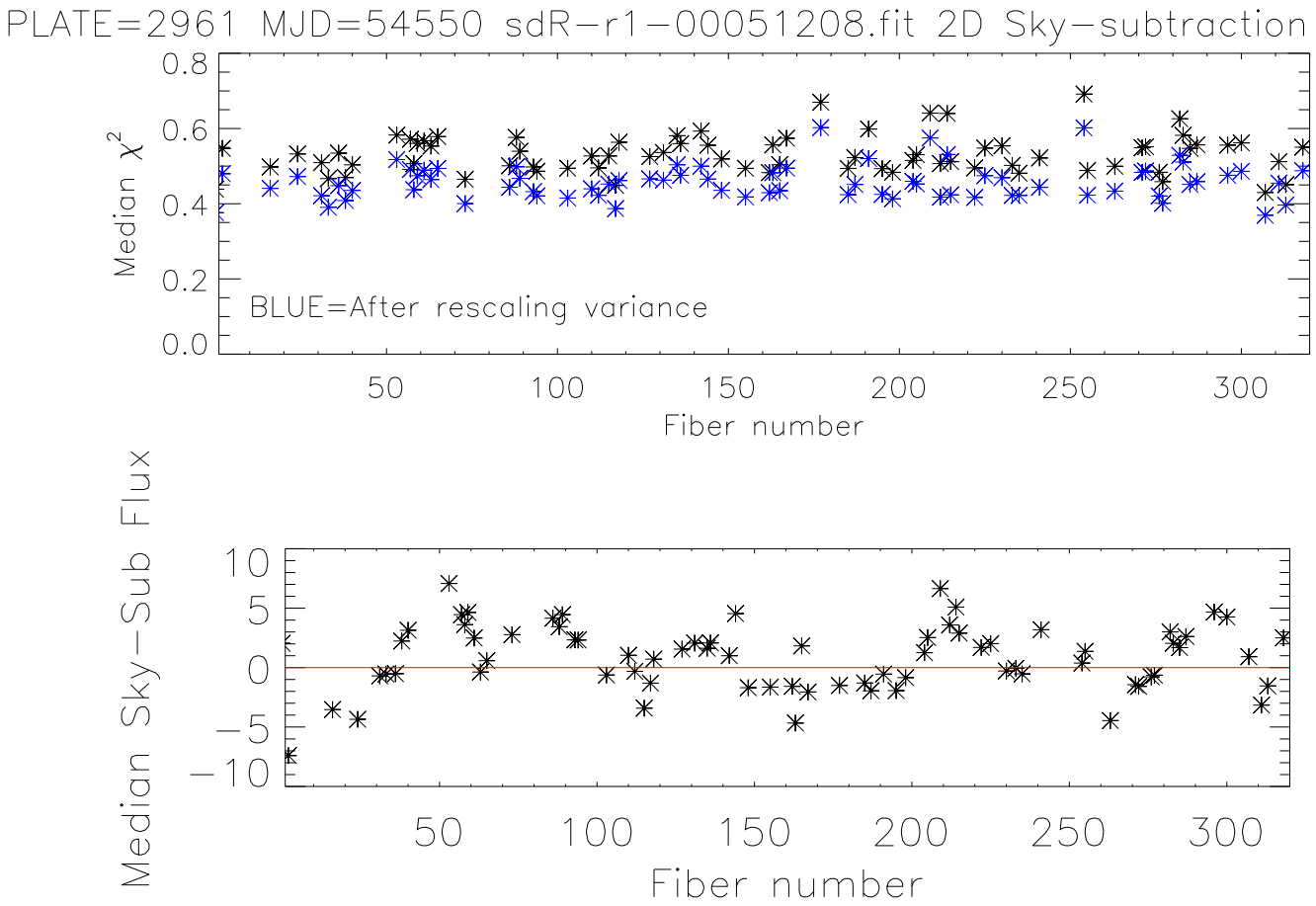

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051208.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

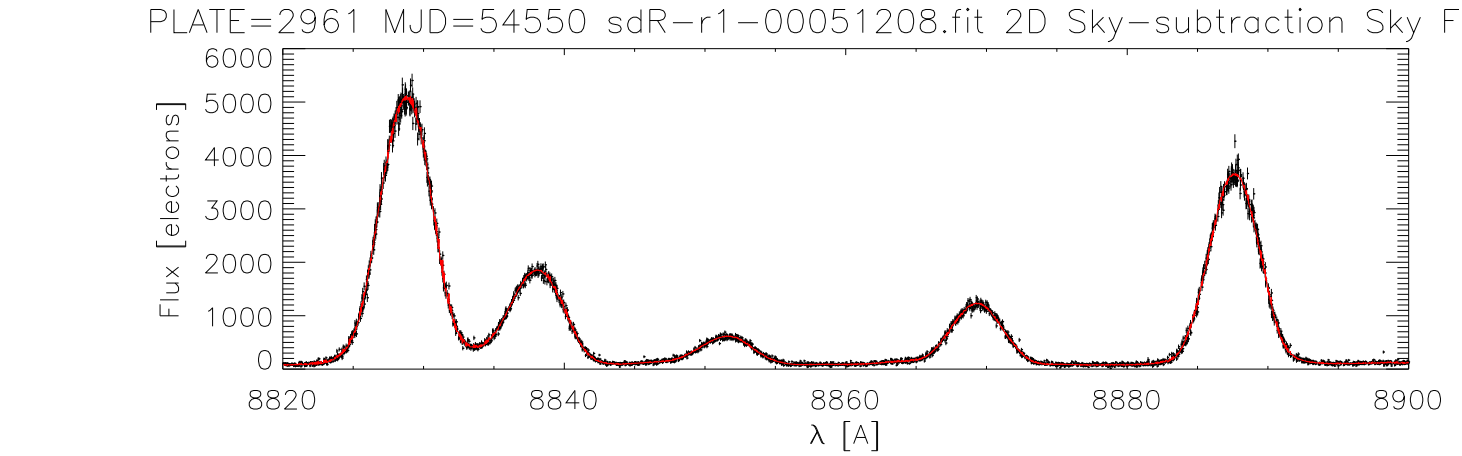

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

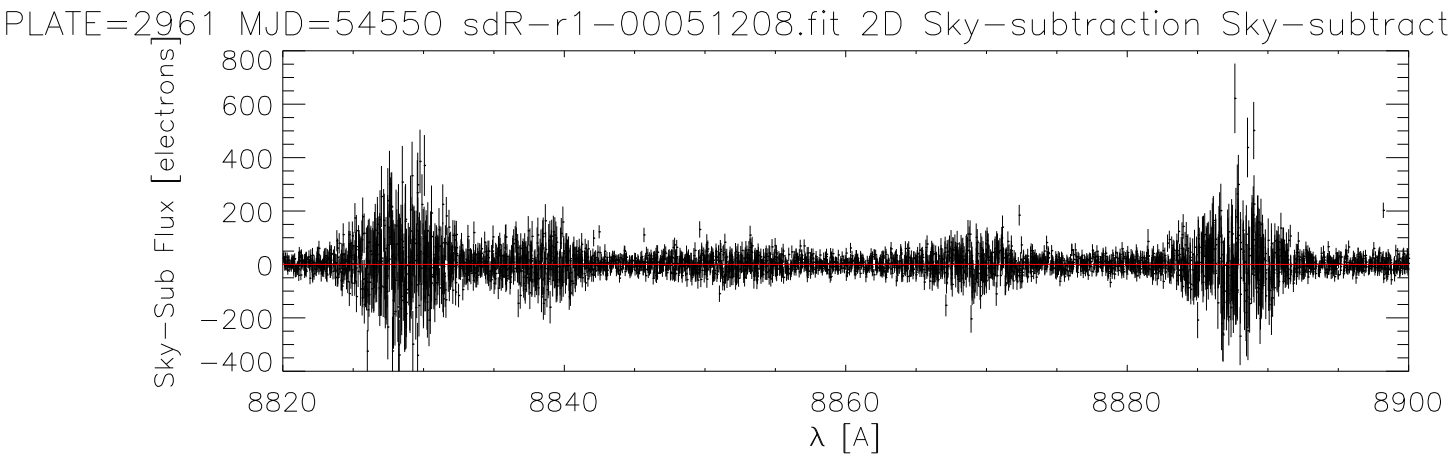

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

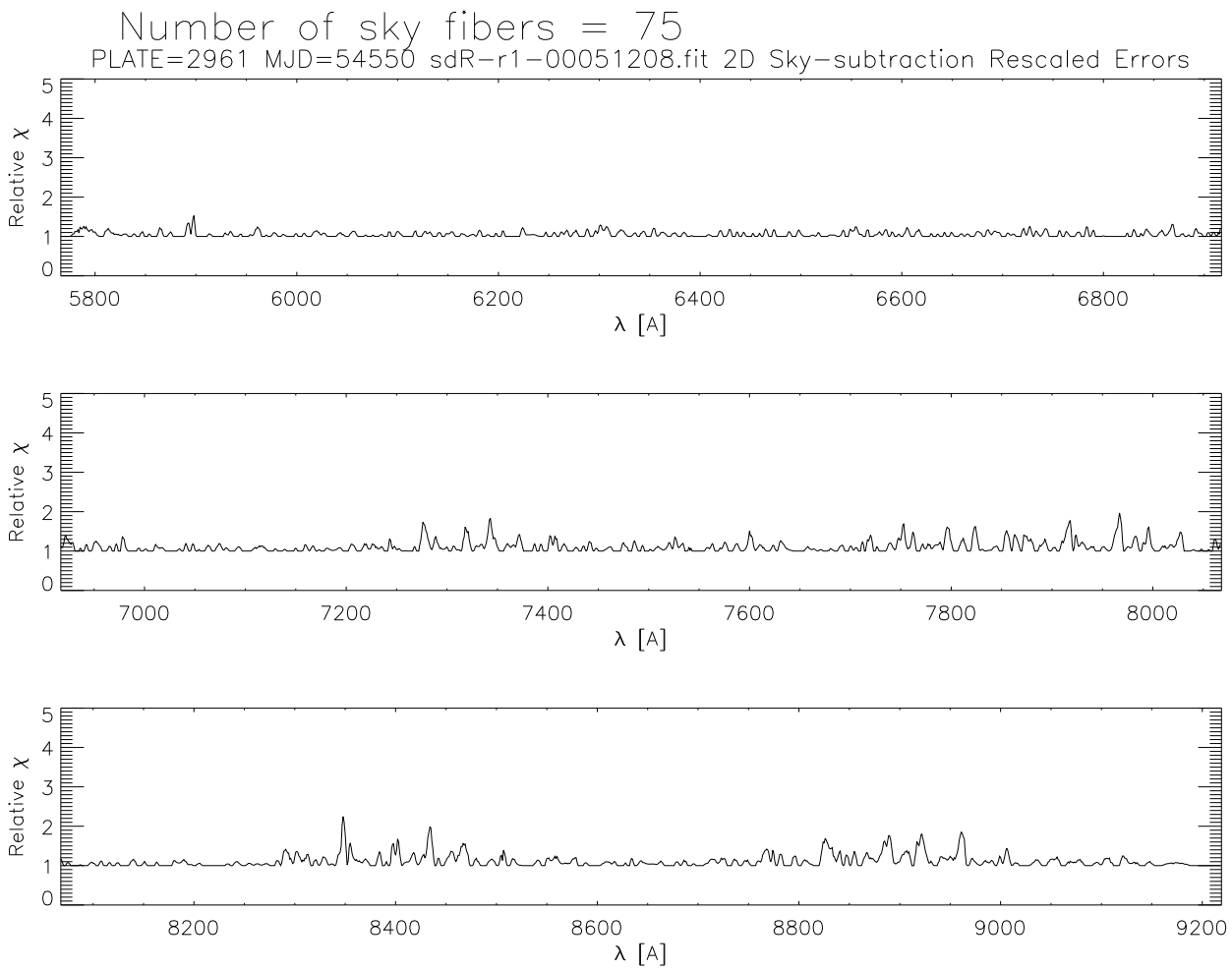

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

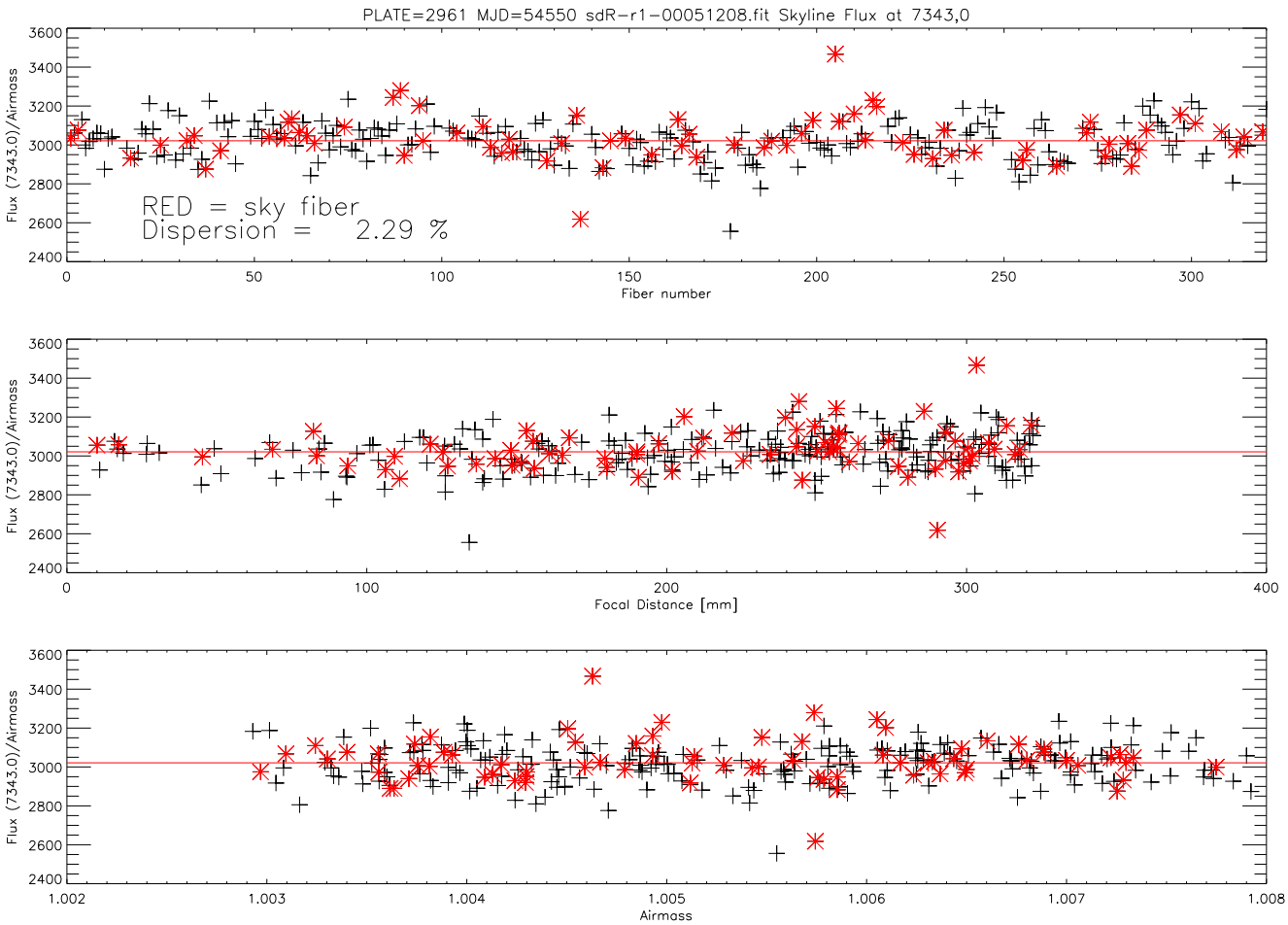

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051208.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

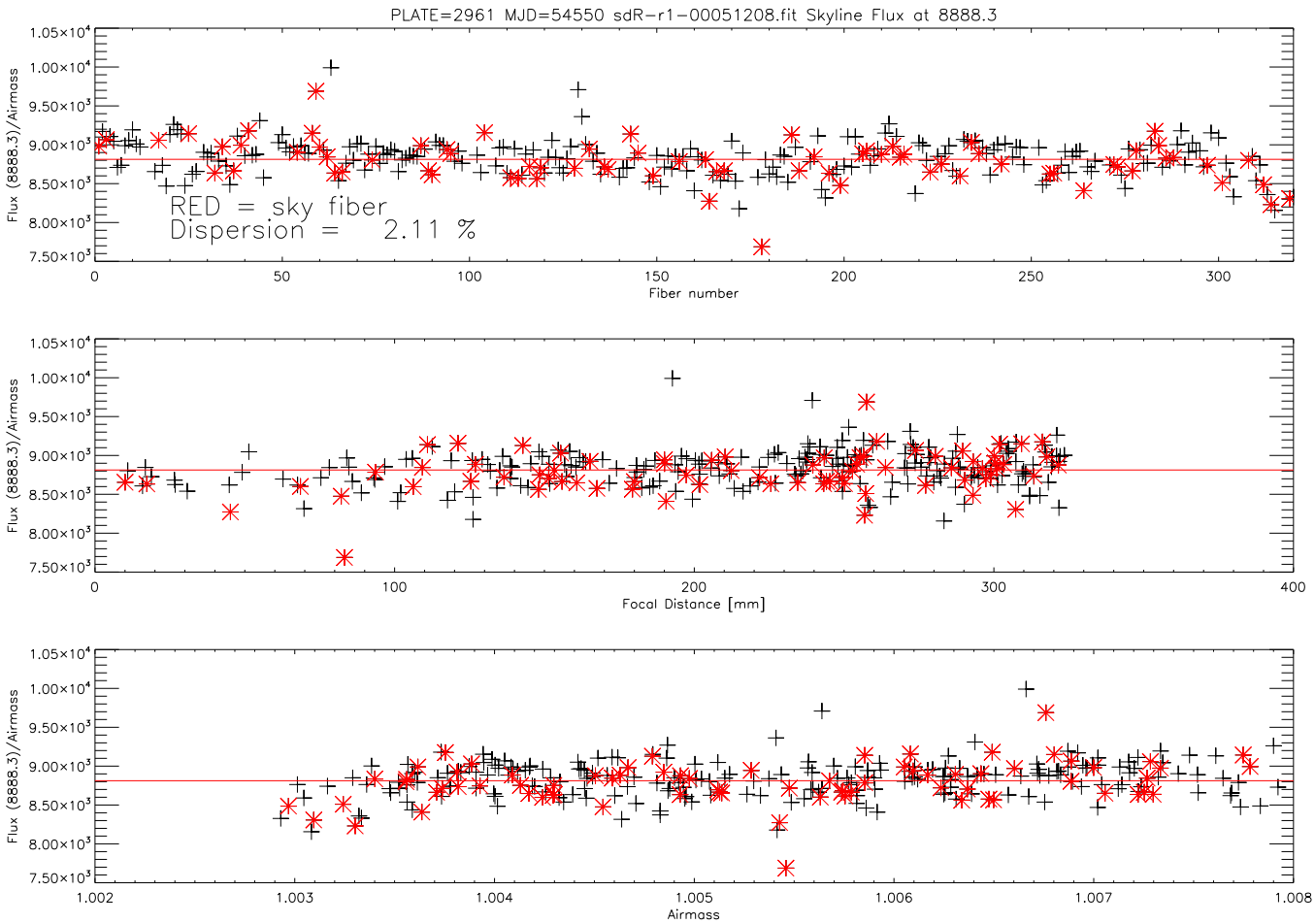

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

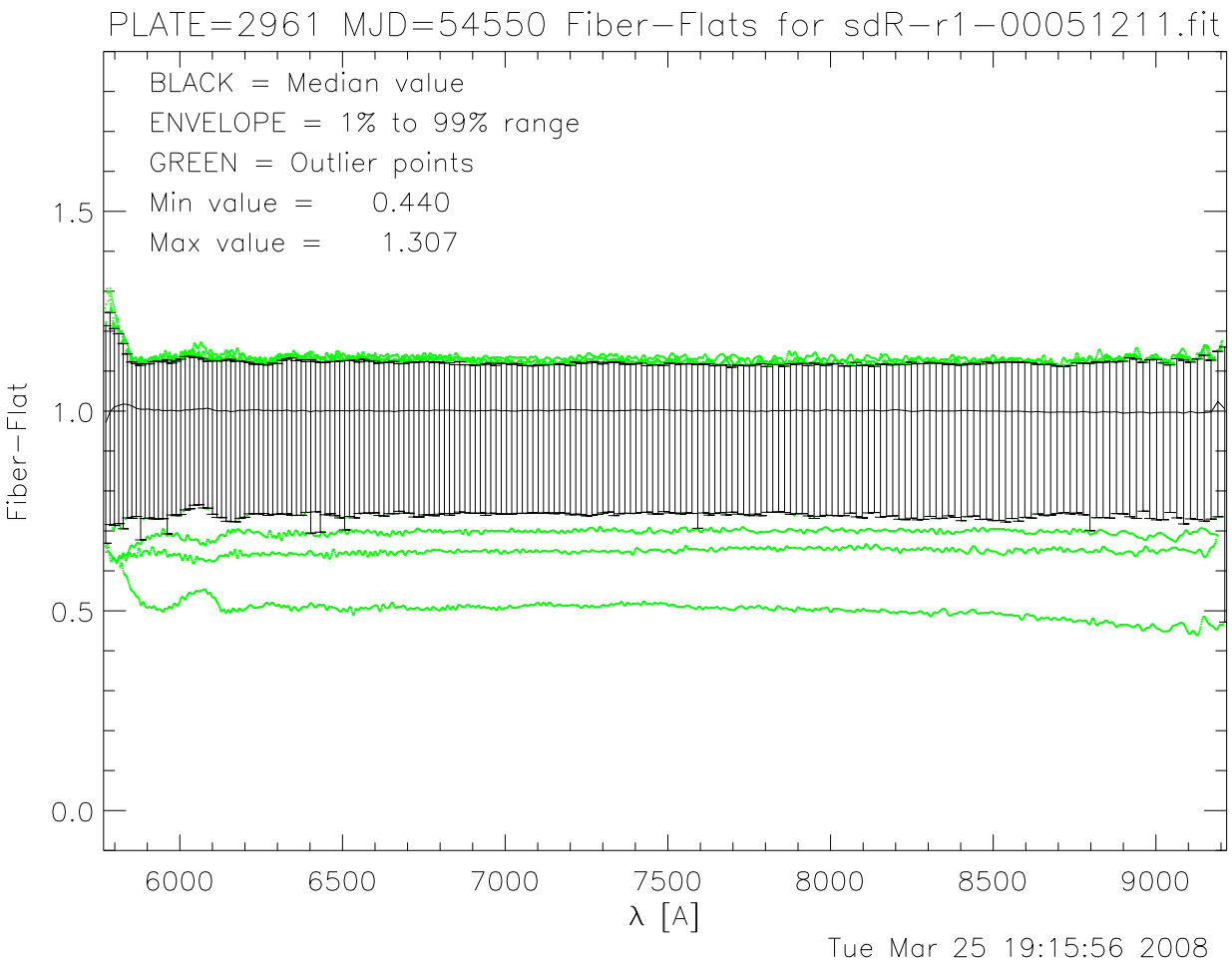

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

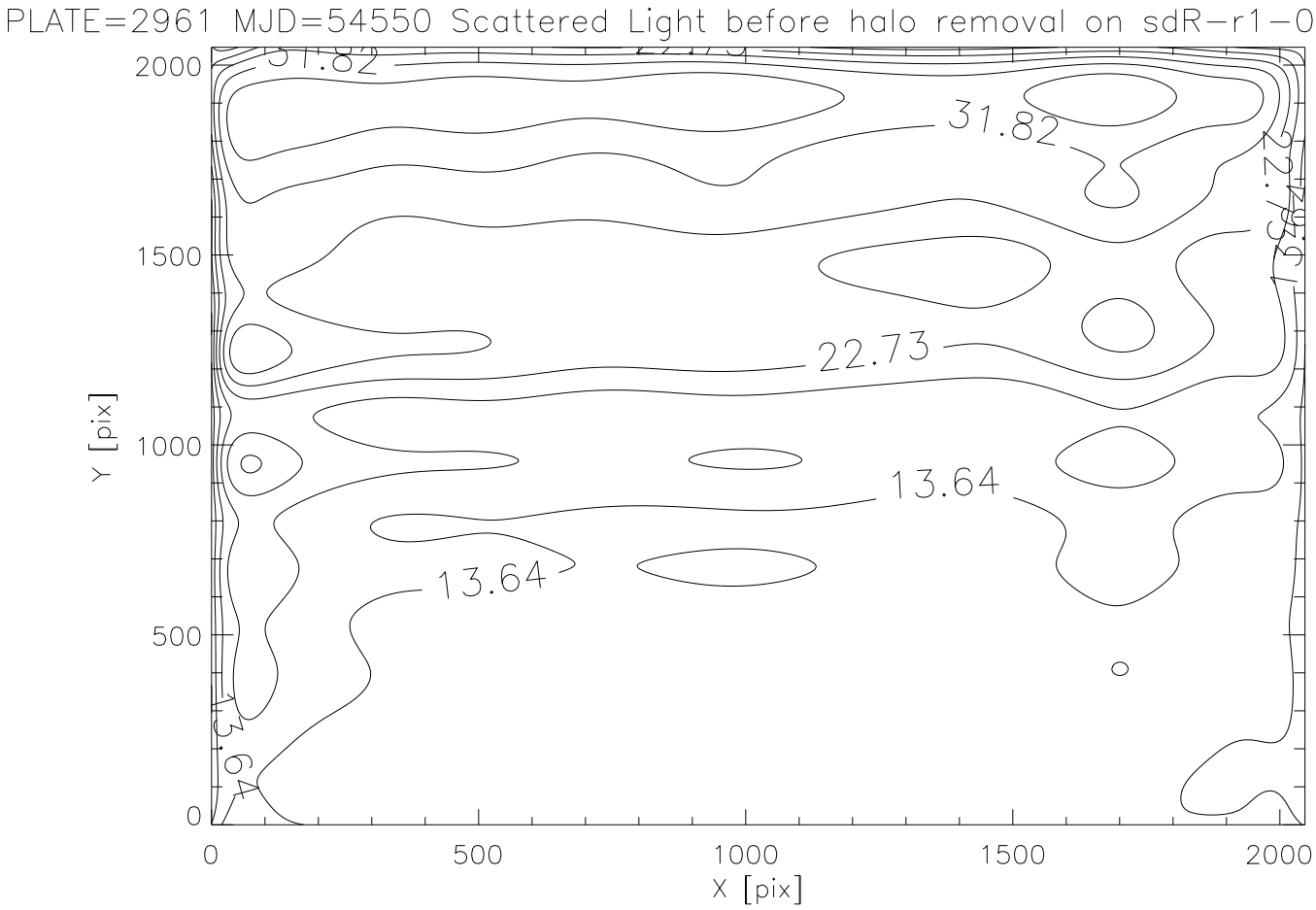

PLATE=2961 MJD=54550 sdR-r1-00051208.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

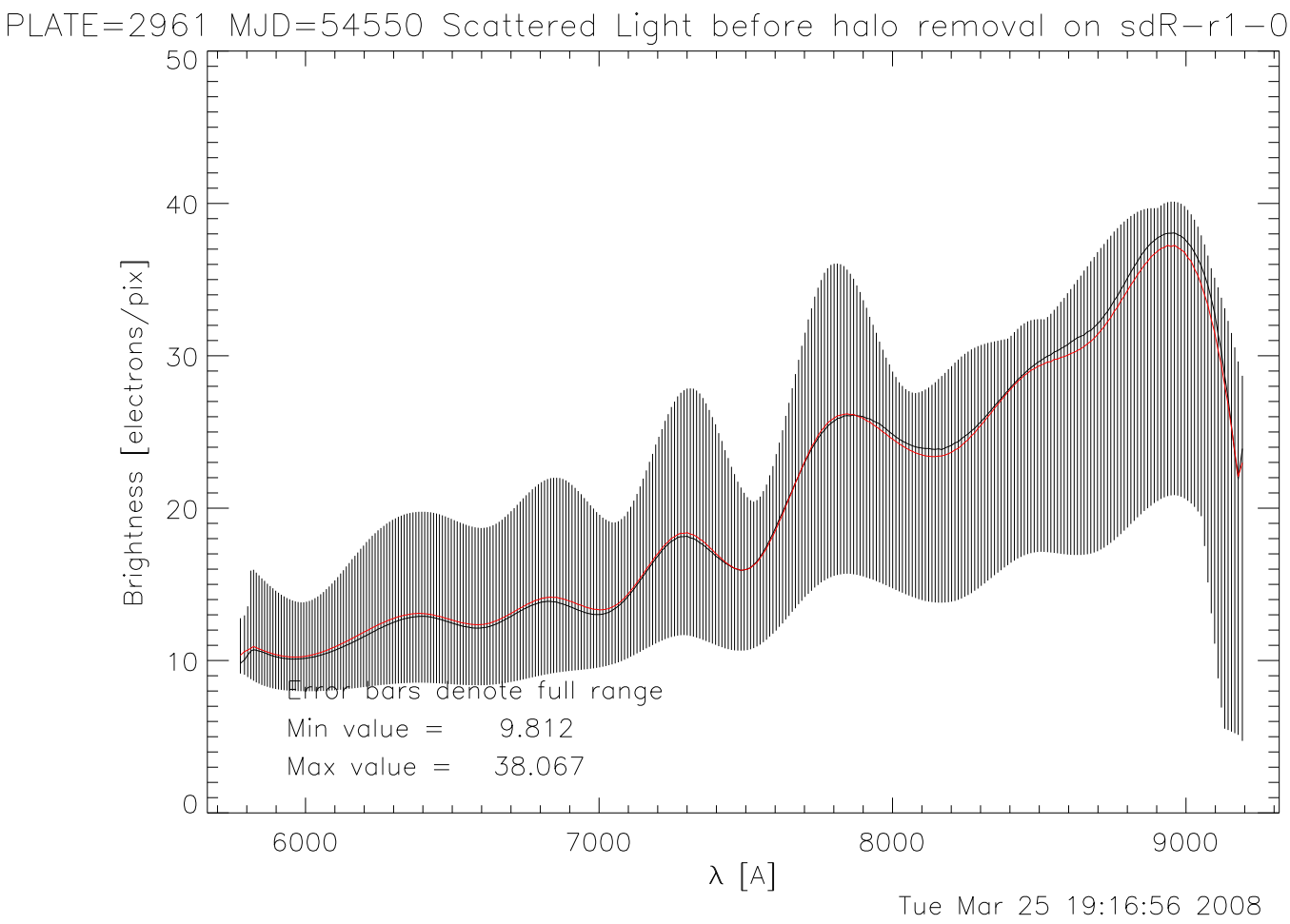

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051208.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

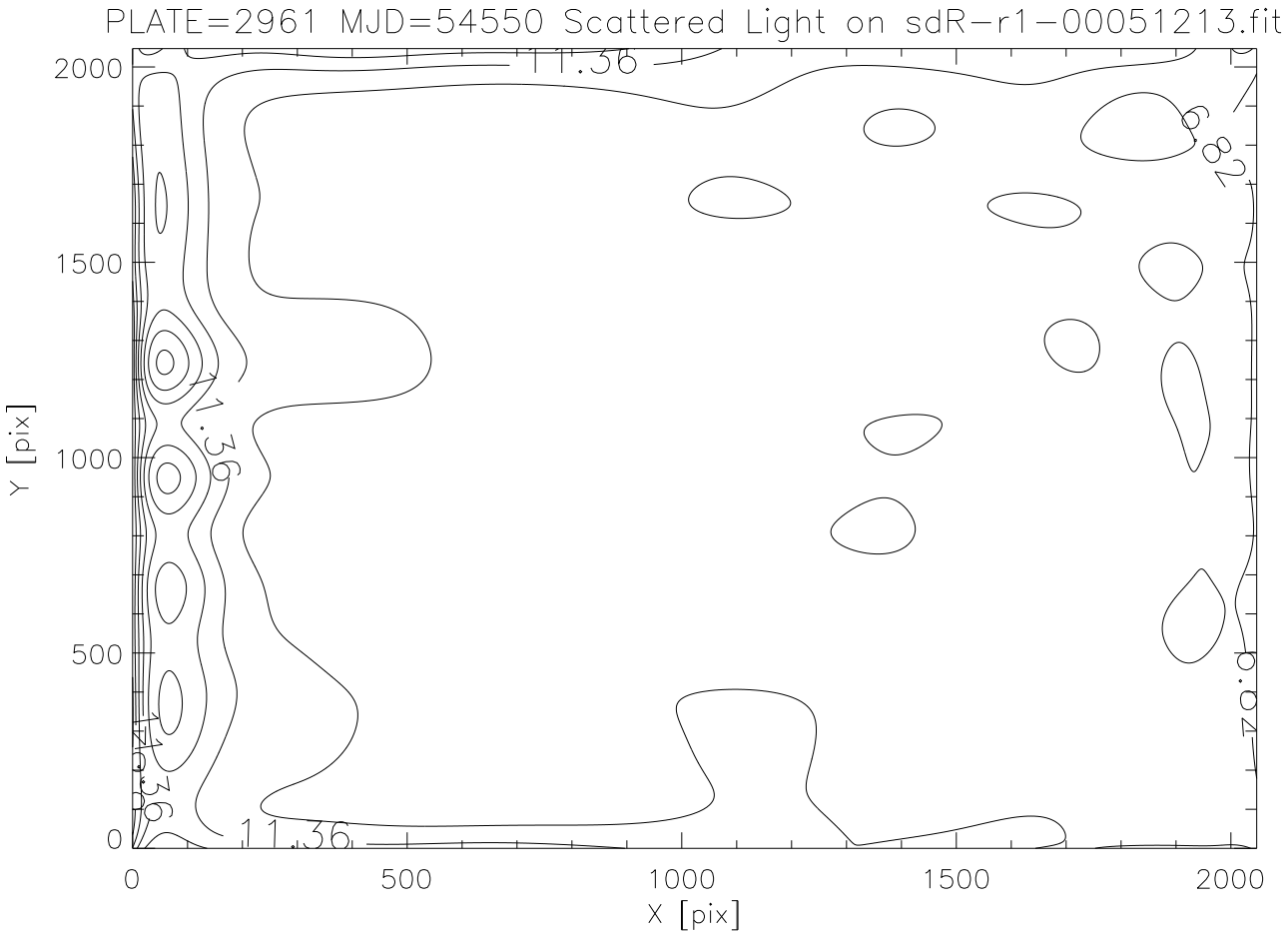

PLATE=2961 MJD=54550 sdR-r1-00051208.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.29 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

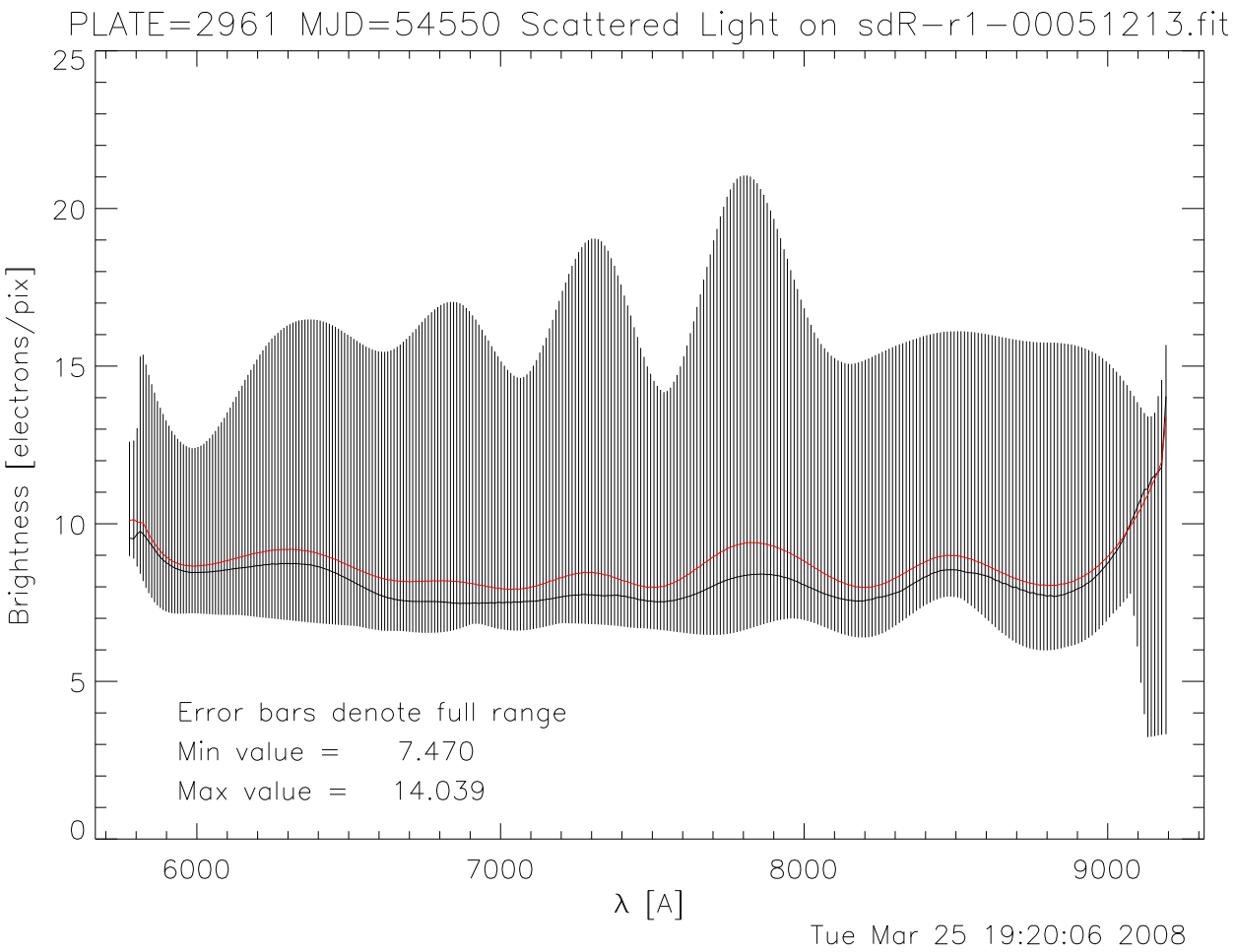

PLATE=2961 MJD=54550 sdR-r1-00051208.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.11 %
Fiber number
Focal Distance [mm]
Airmass

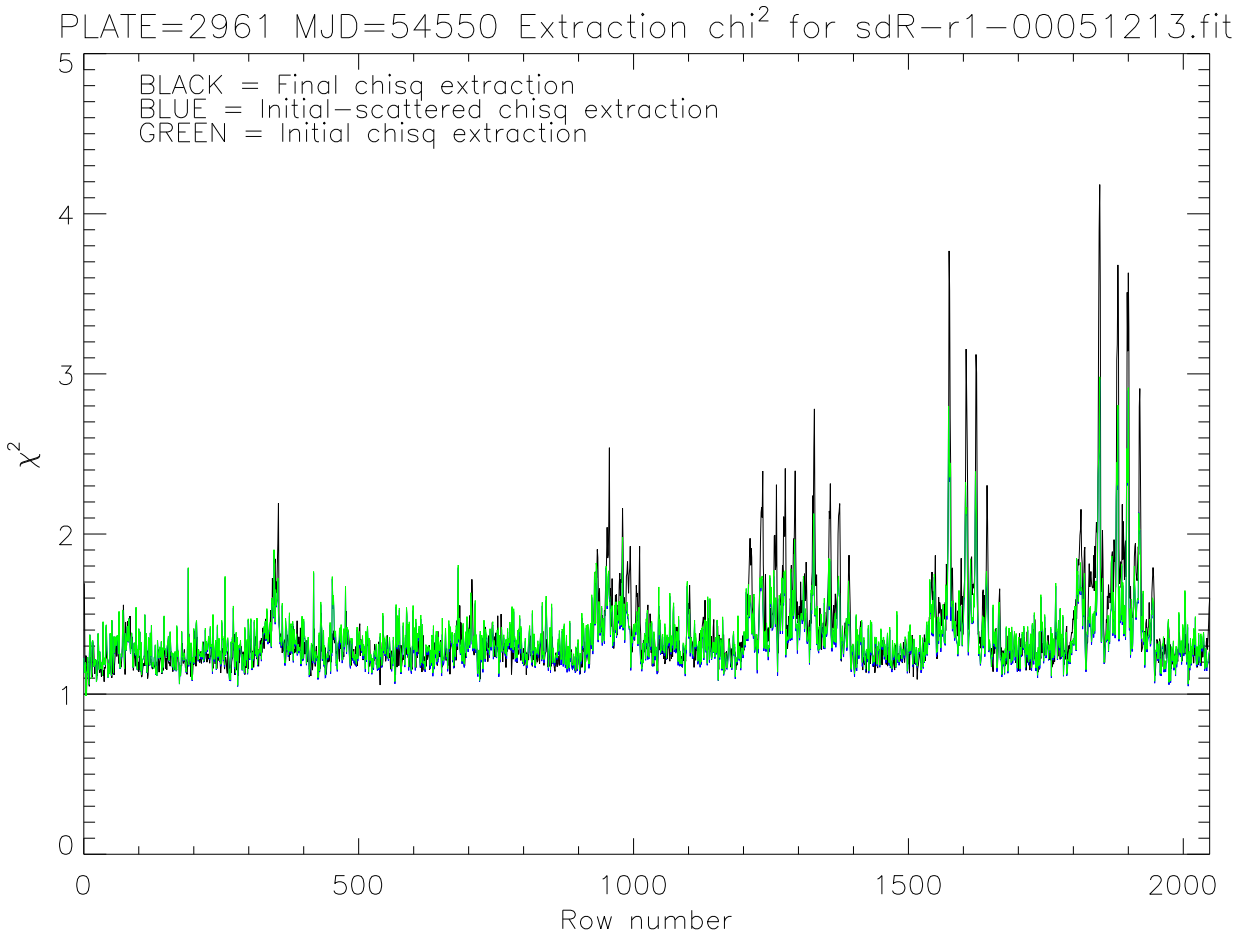

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:15:56 2008

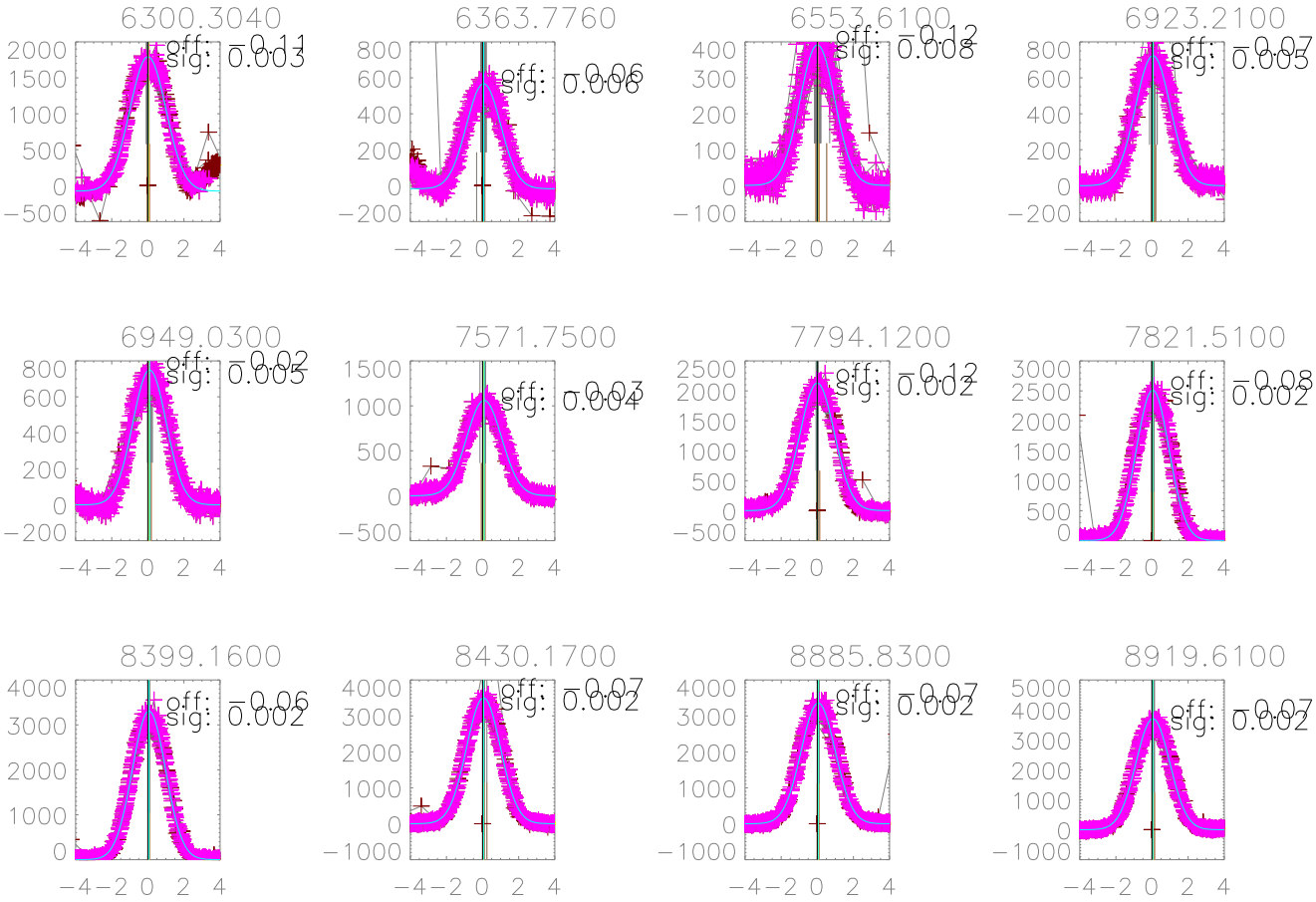

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051213.fi
31.82
31.82
22.73
22.73
13.64
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

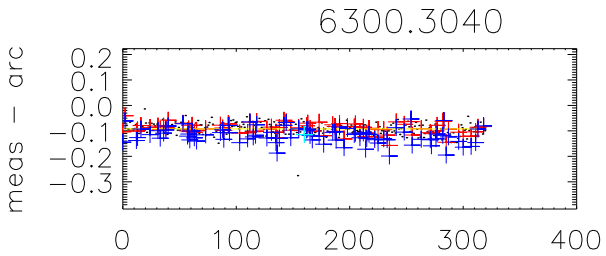

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051213.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.812
Max value = 38.067
Tue Mar 25 19:16:56 2008

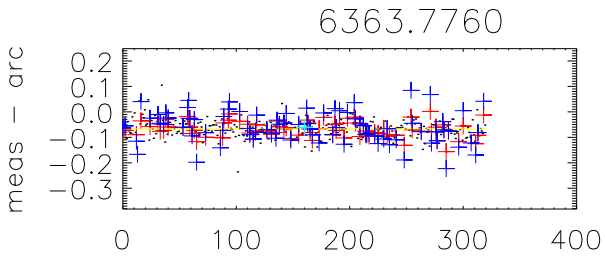

PLATE=2961 MJD=54550 Scattered Light on sdR−r1−00051213.fit
11.36
6.82
11.36
11.36
11.36
0.04
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

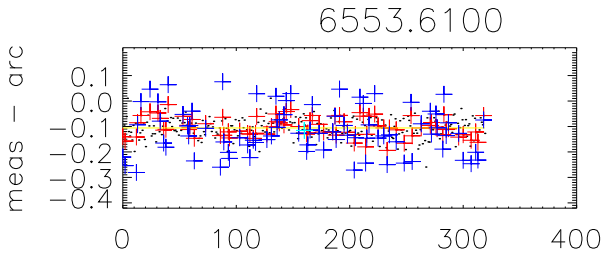

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051213.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.470
Max value = 14.039
Tue Mar 25 19:20:06 2008

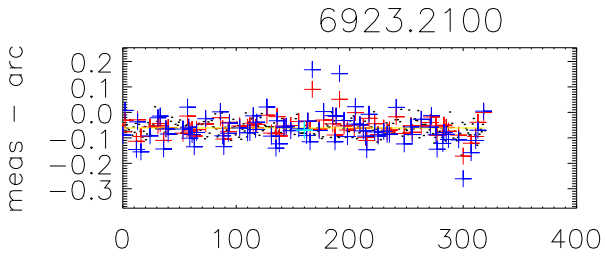

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051213.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

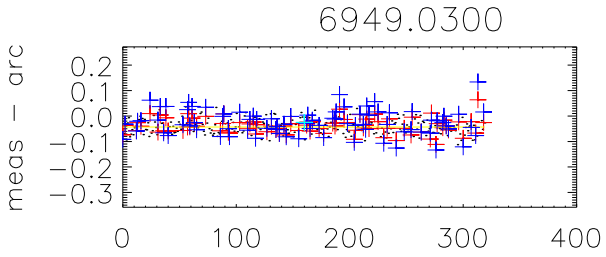

6300.3040
off: −0.11
sig: 0.003
6363.7760
off: −0.06
sig: 0.006
6553.6100
off: −0.12
sig: 0.008
6923.2100
off: −0.07
sig: 0.005
6949.0300
off: −0.02
sig: 0.005
7571.7500
off: −0.03
sig: 0.004
7794.1200
off: −0.12
sig: 0.002
7821.5100
off: −0.08
sig: 0.002
8399.1600
off: −0.06
sig: 0.002
8430.1700
off: −0.07
sig: 0.002
8885.8300
off: −0.07
sig: 0.002
8919.6100
off: −0.07
sig: 0.002

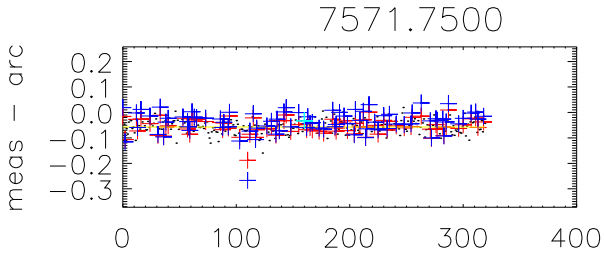

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

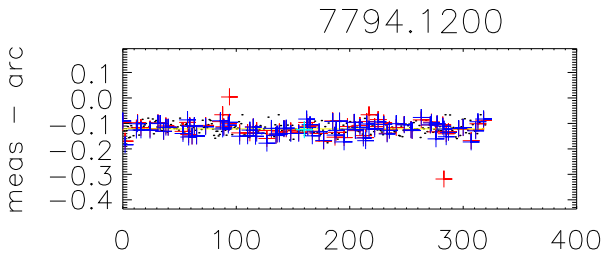

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

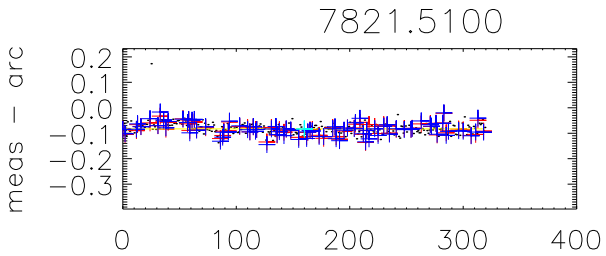

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

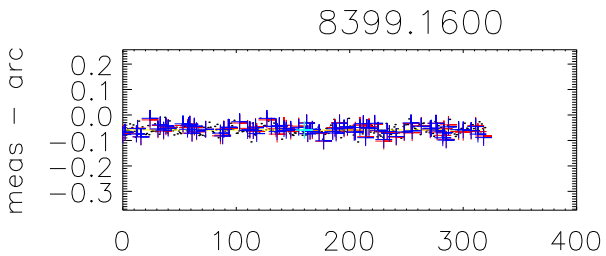

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

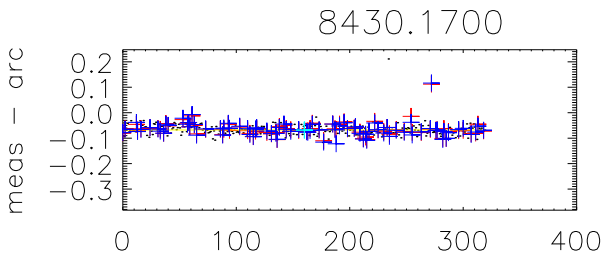

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

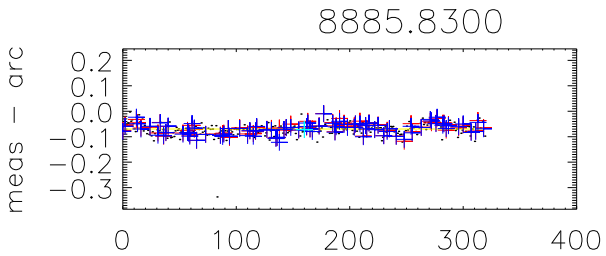

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

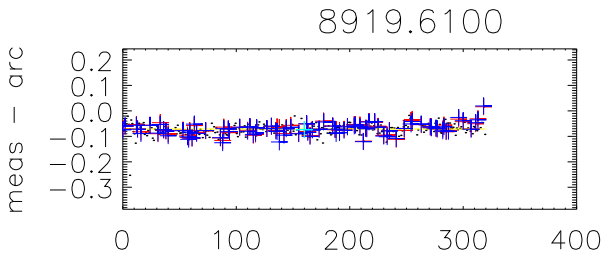

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

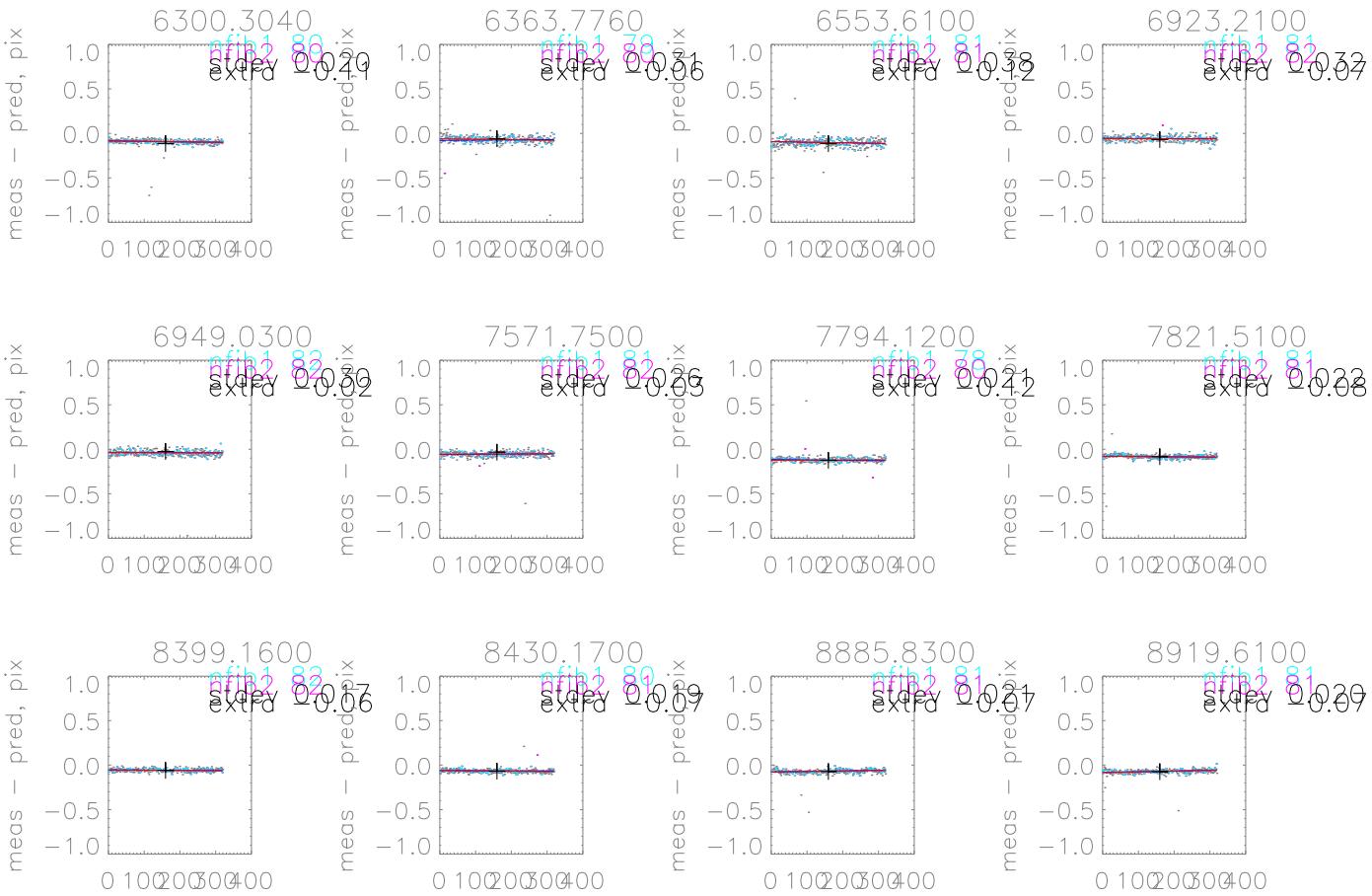

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

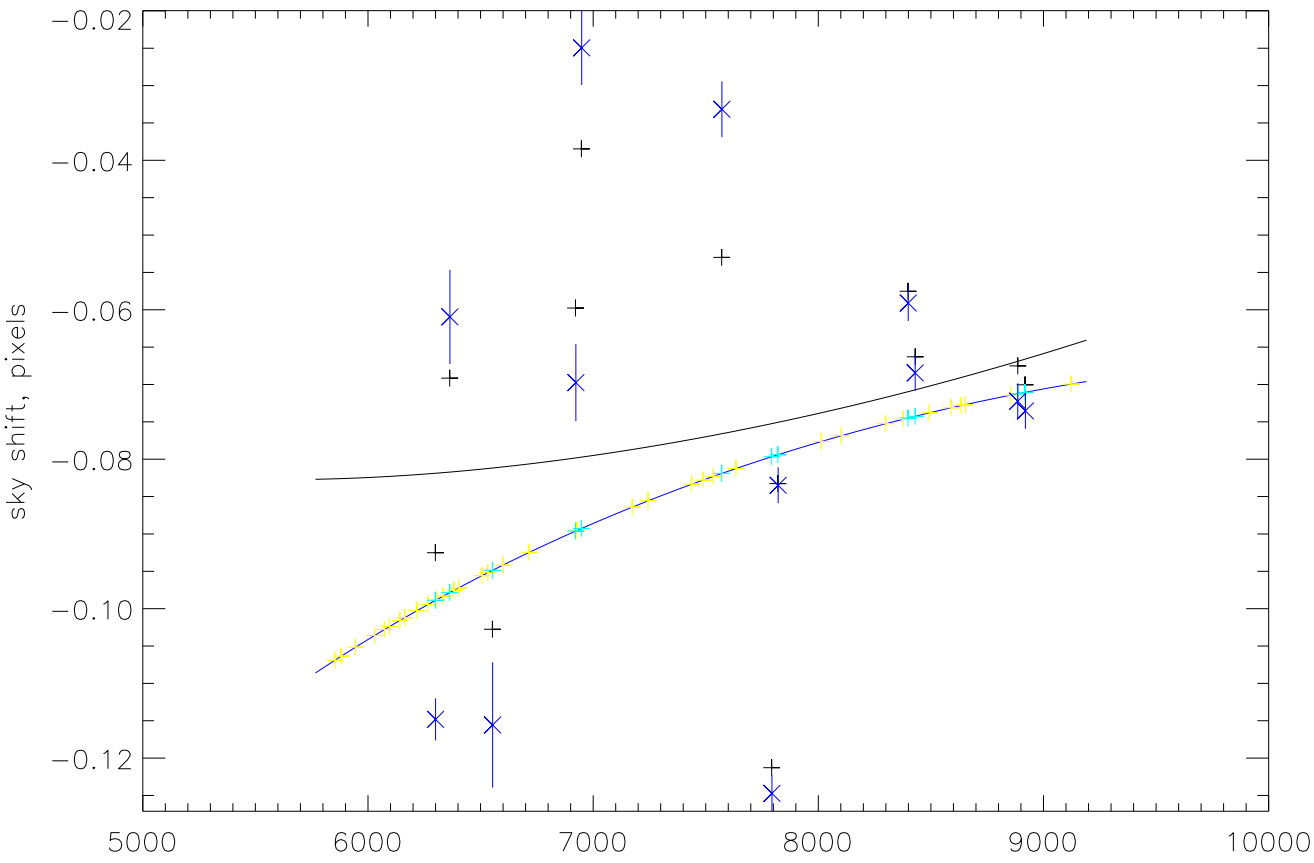

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

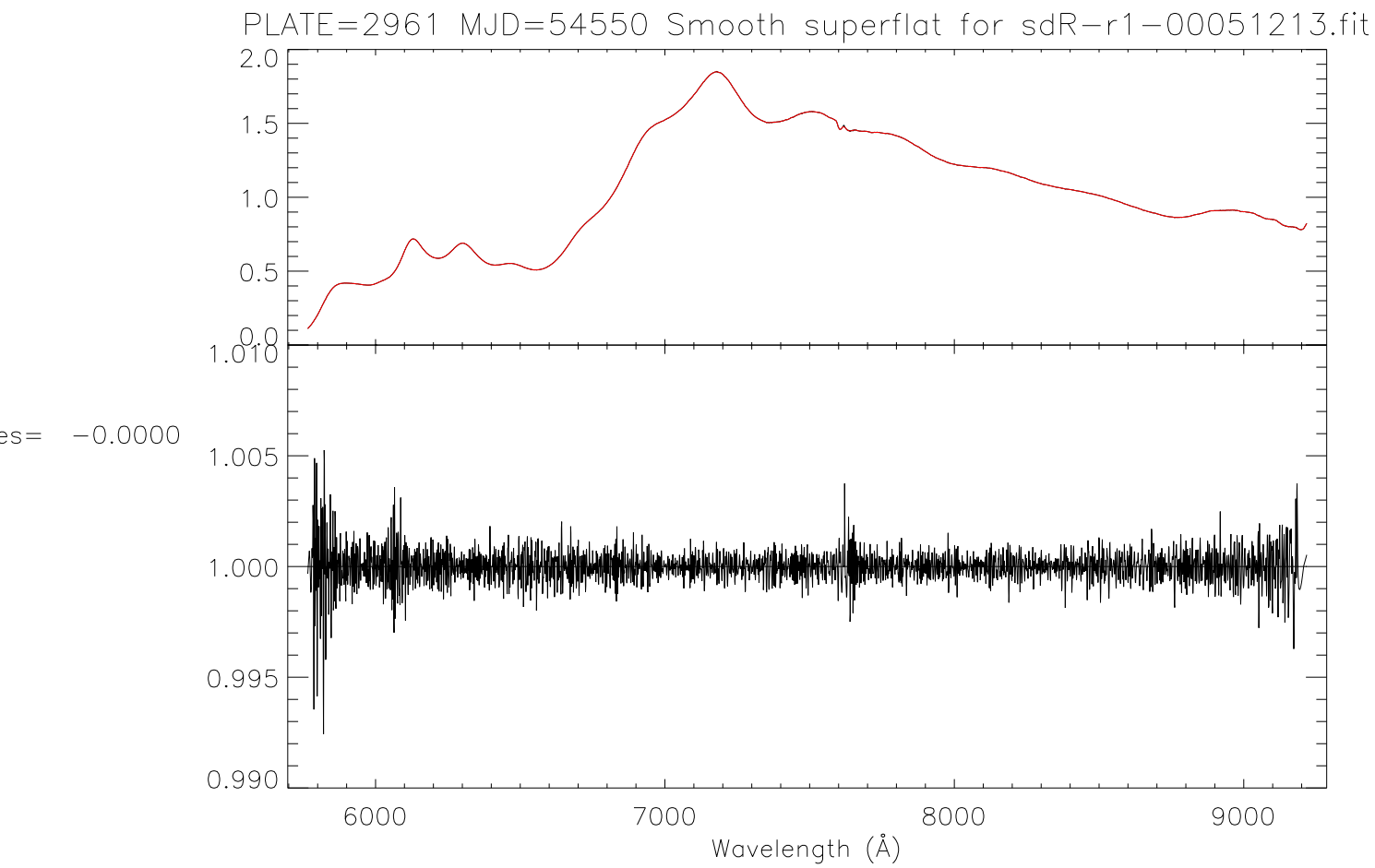

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

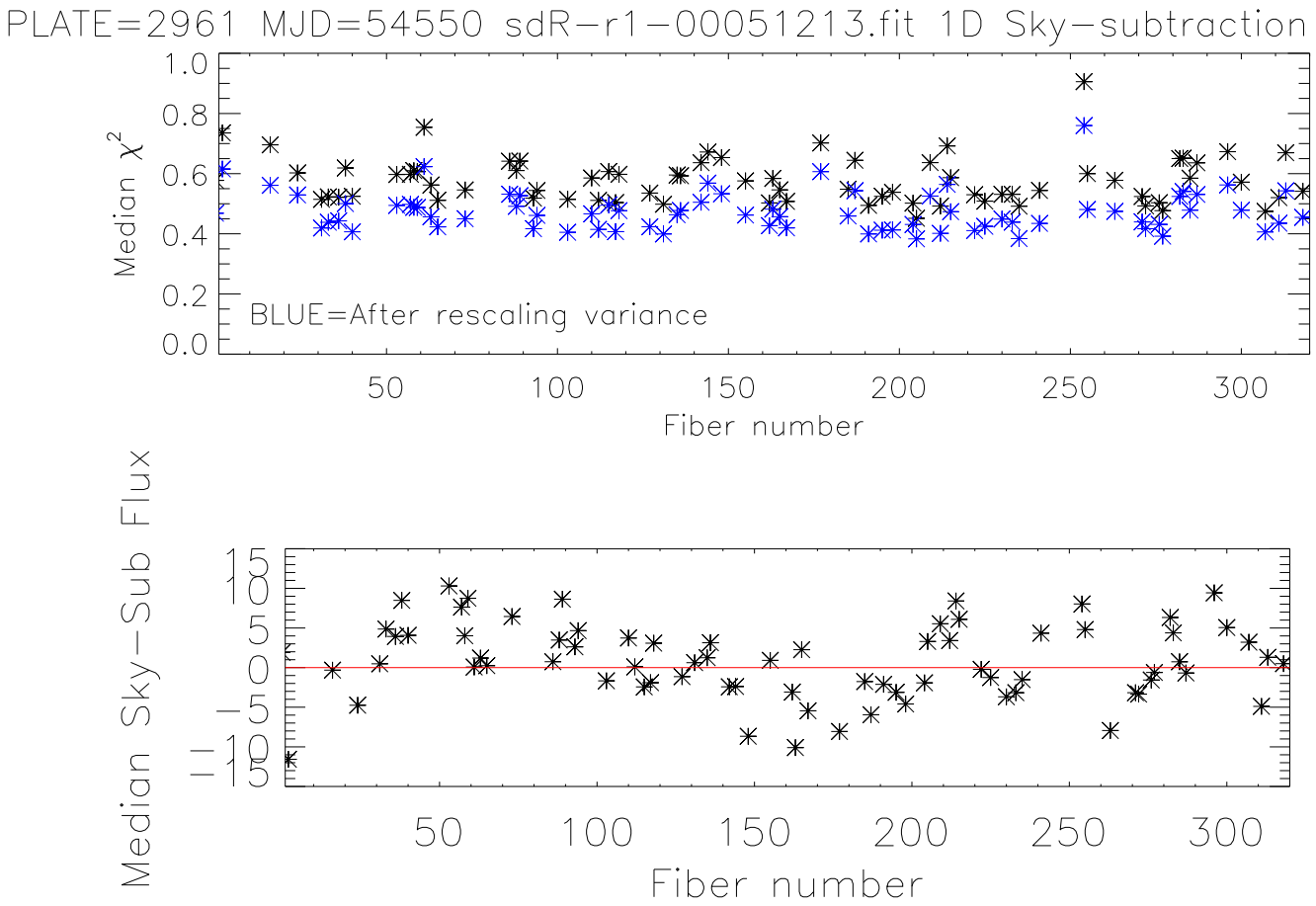

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

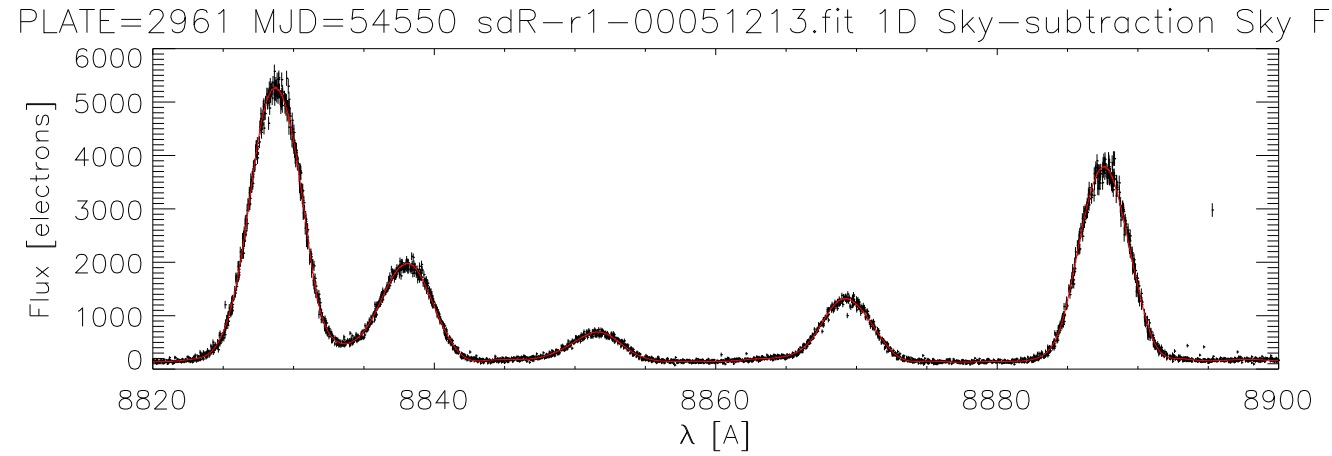

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

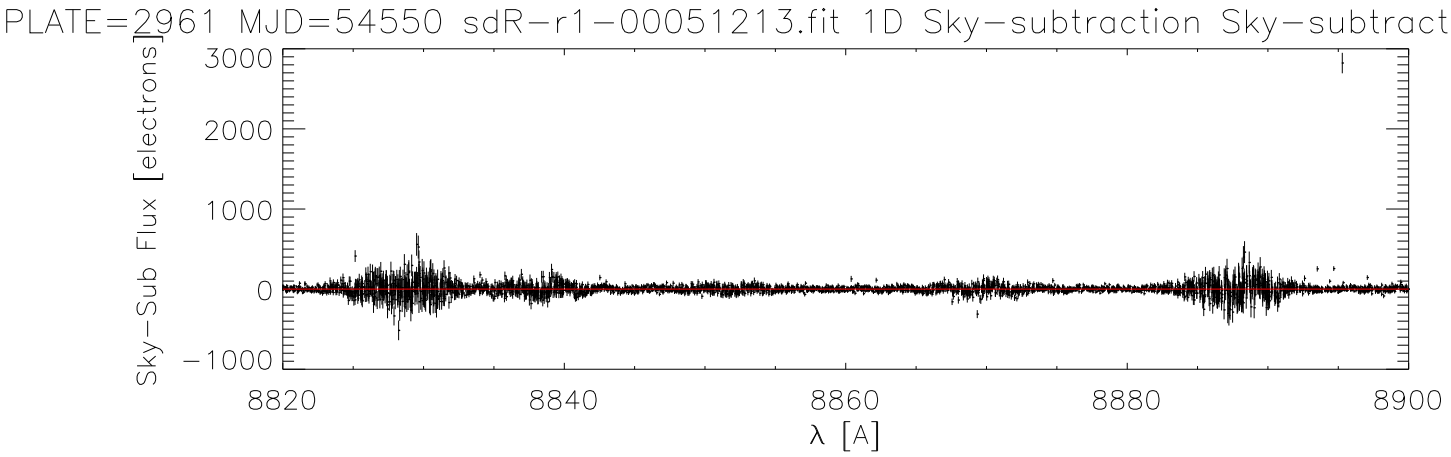

6300.3040
mfhi1 80
mfhi2 82
stdev 0.020
extra −0.041
6363.7760
mfhi1 78
mfhi2 79
stdev 0.031
extra −0.006
6553.6100
mfhi1 81
mfhi2 81
stdev 0.038
extra −0.032
6923.2100
mfhi1 81
mfhi2 82
stdev 0.032
extra −0.007
6949.0300
mfhi1 82
mfhi2 82
stdev 0.030
extra −0.002
7571.7500
mfhi1 81
mfhi2 82
stdev 0.026
extra −0.003
7794.1200
mfhi1 78
mfhi2 80
stdev 0.021
extra −0.042
7821.5100
mfhi1 81
mfhi2 81
stdev 0.023
extra −0.008
8399.1600
mfhi1 82
mfhi2 82
stdev 0.017
extra −0.006
8430.1700
mfhi1 80
mfhi2 81
stdev 0.019
extra −0.007
8885.8300
mfhi1 81
mfhi2 81
stdev 0.021
extra −0.007
8919.6100
mfhi1 81
mfhi2 81
stdev 0.020
extra −0.007
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

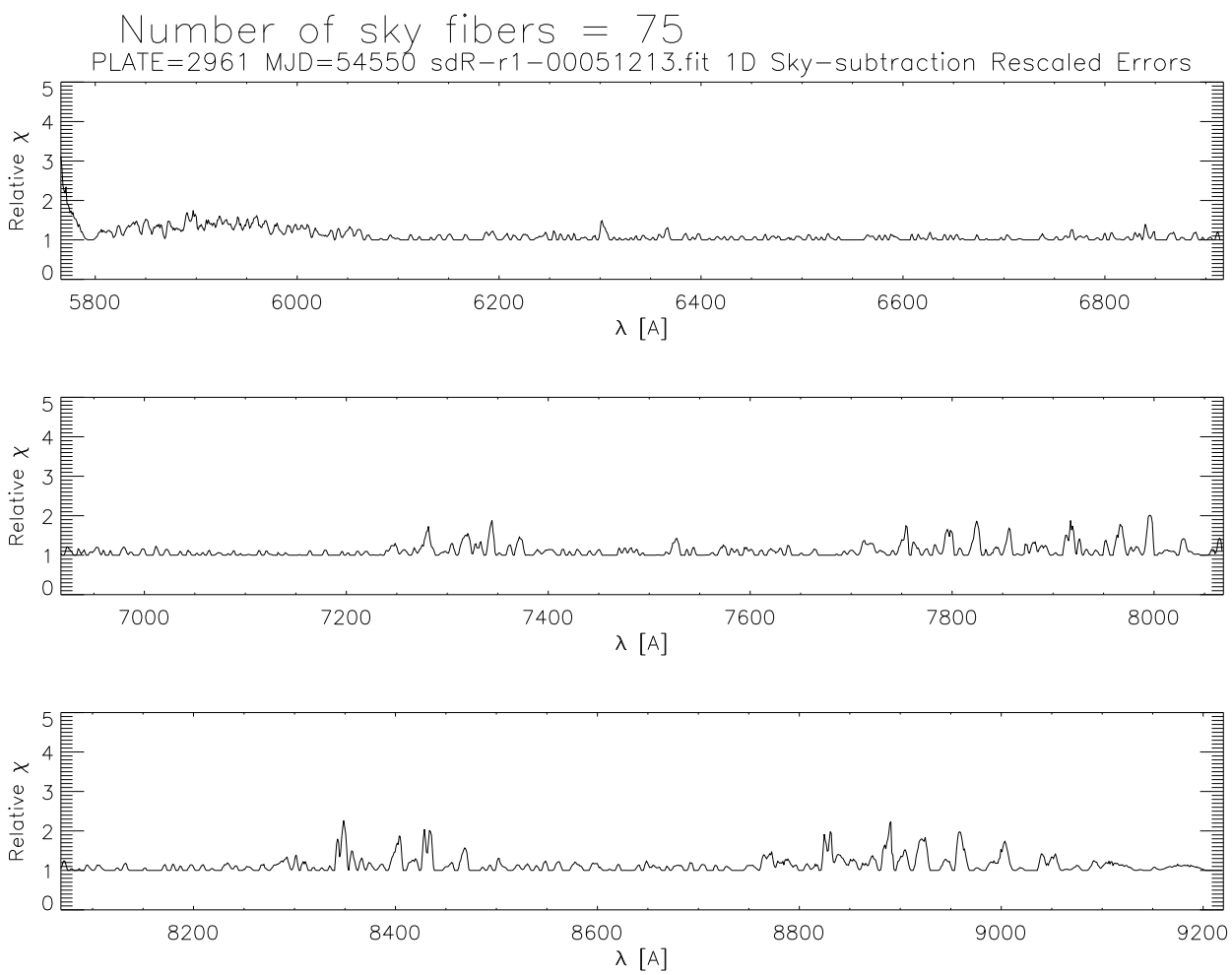

−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

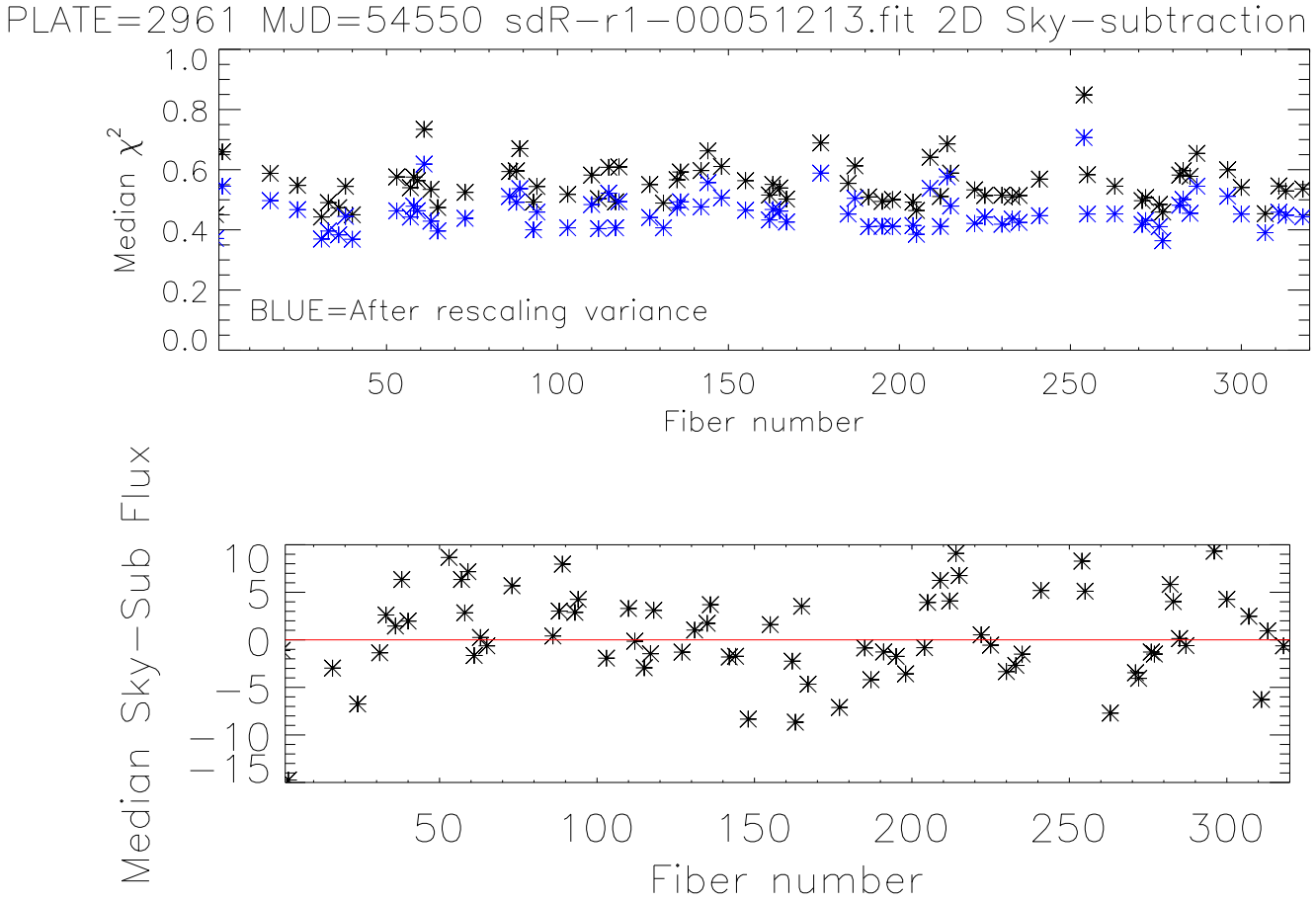

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051213.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

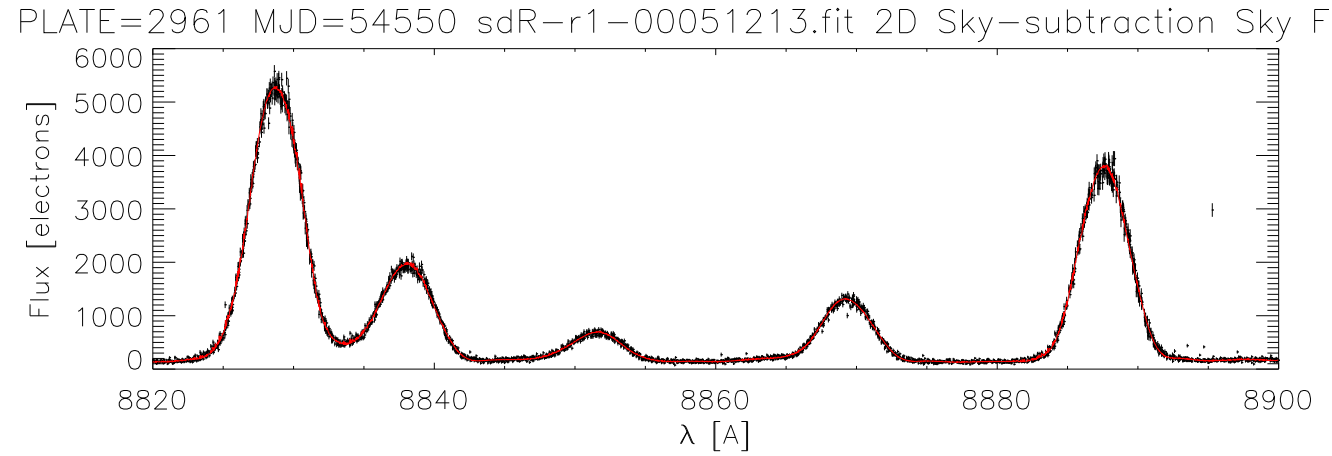

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

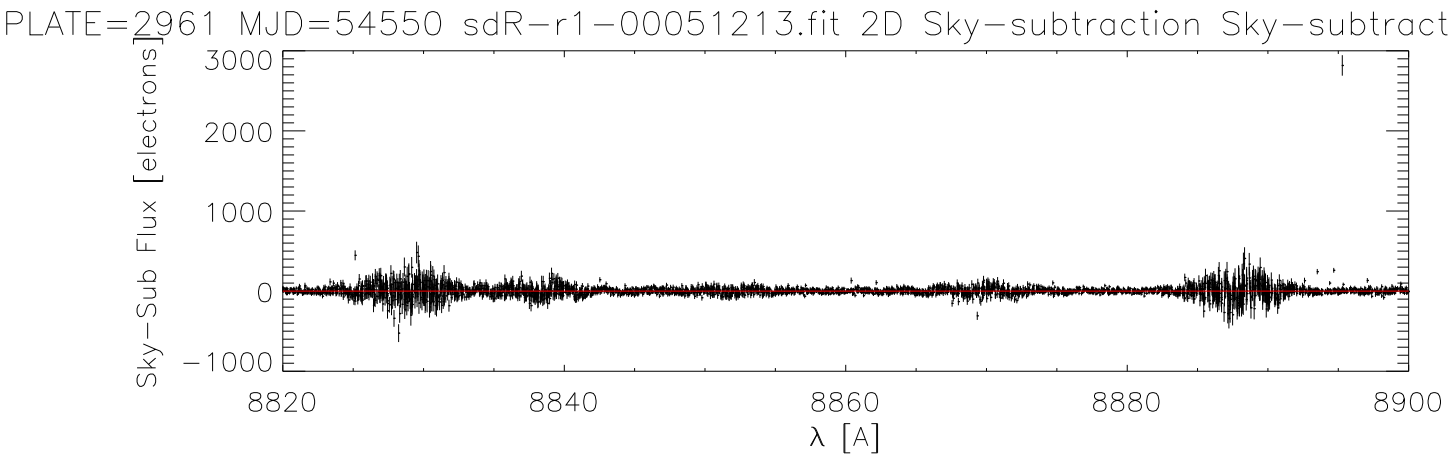

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

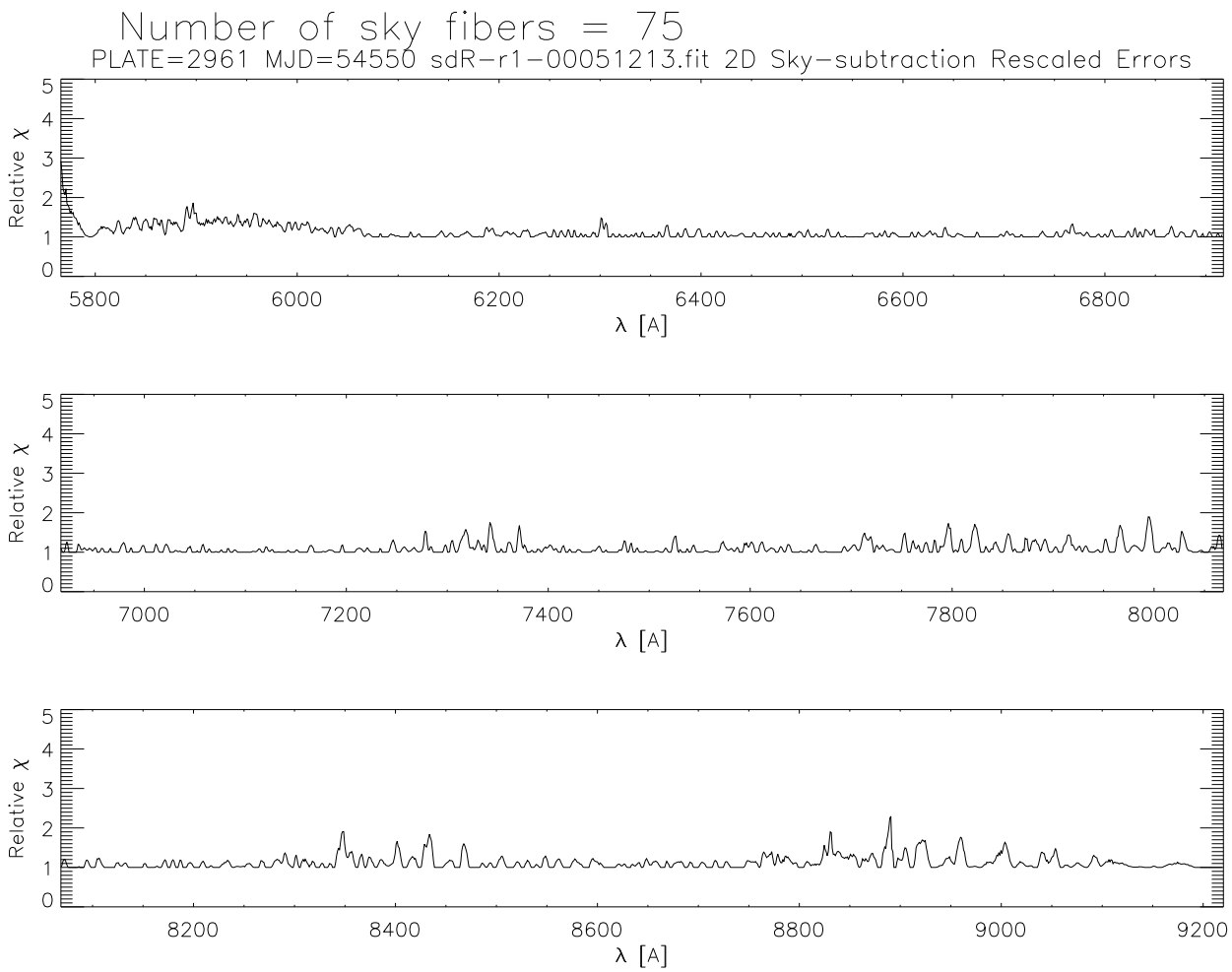

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

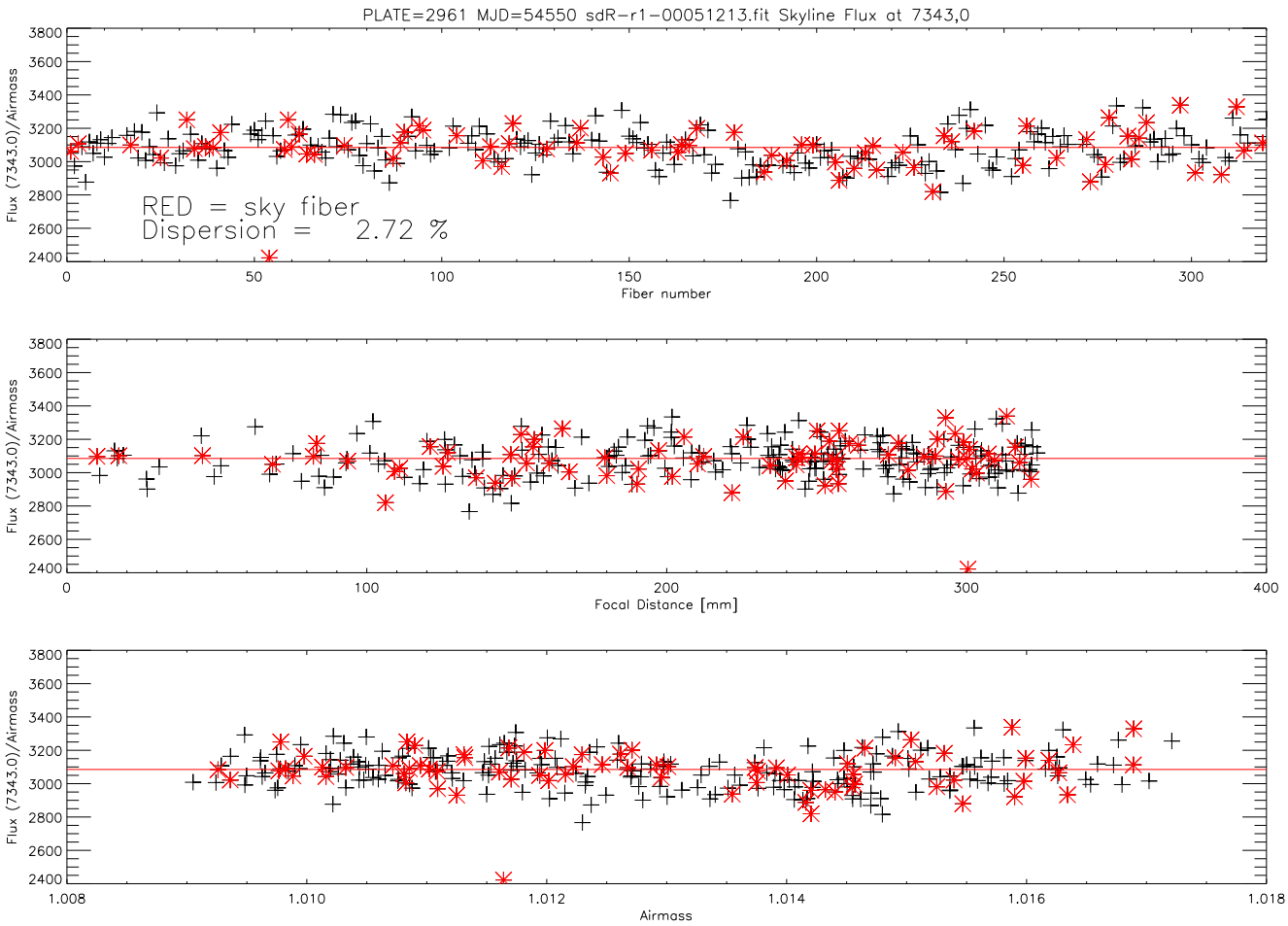

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051213.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

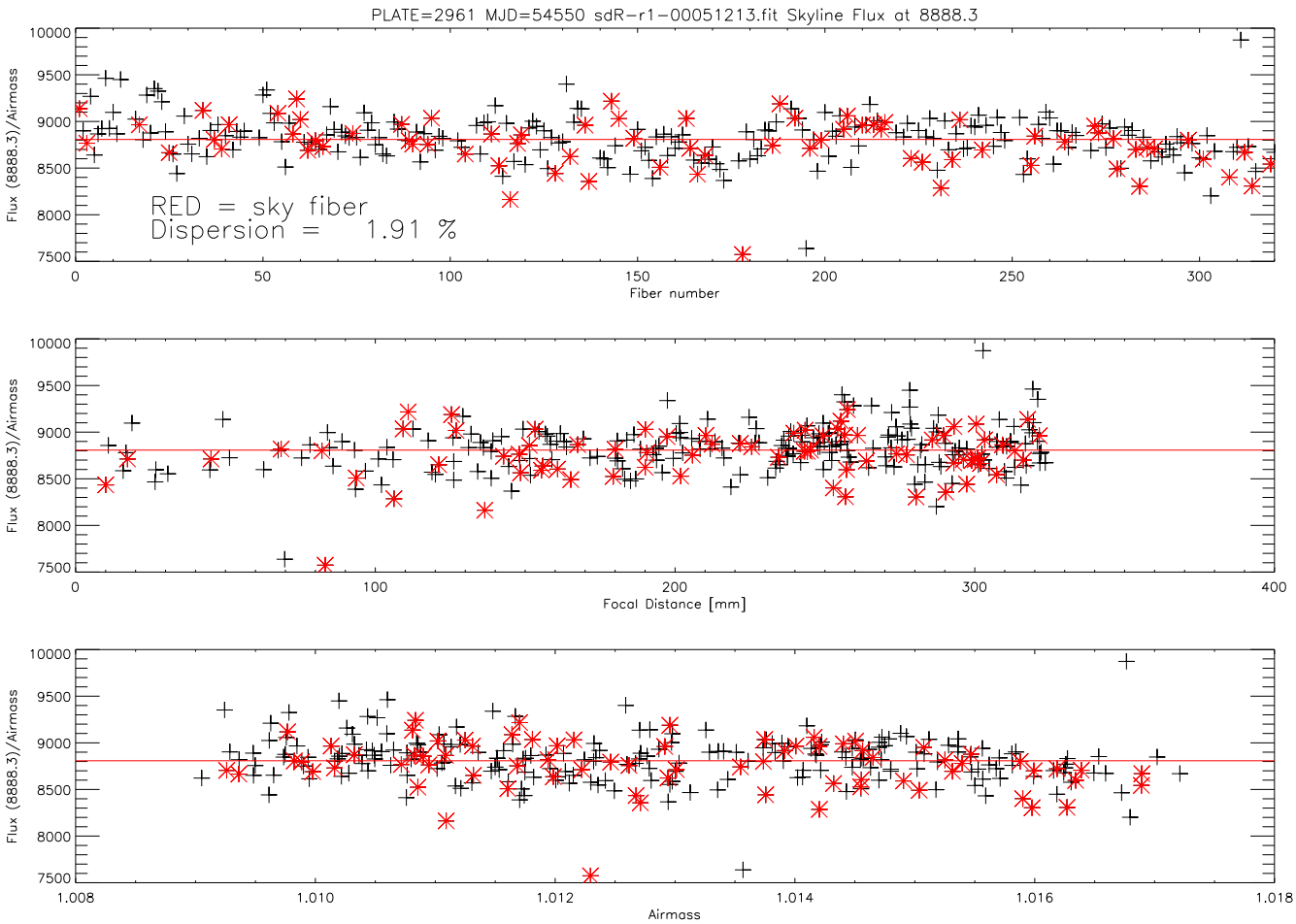

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

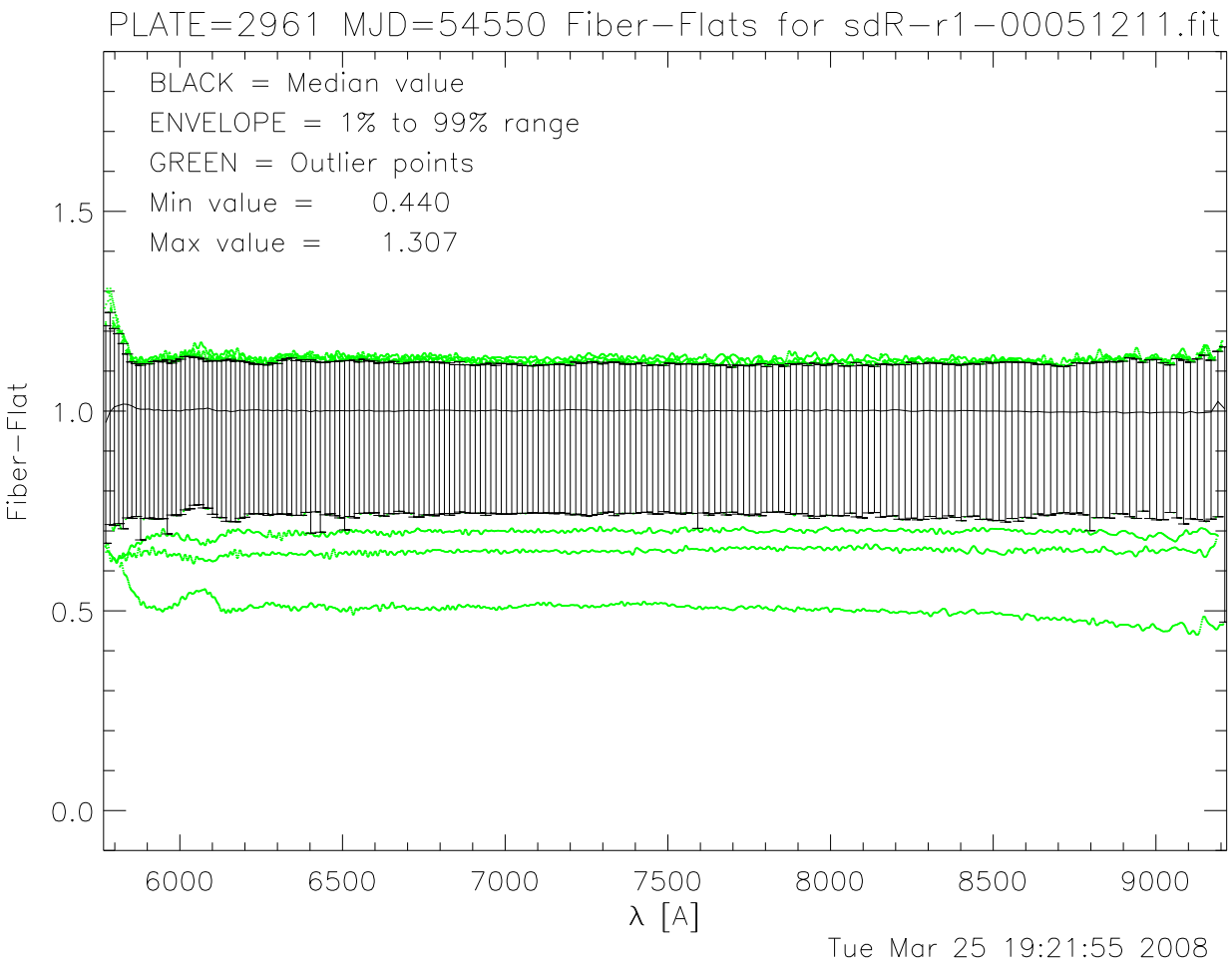

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

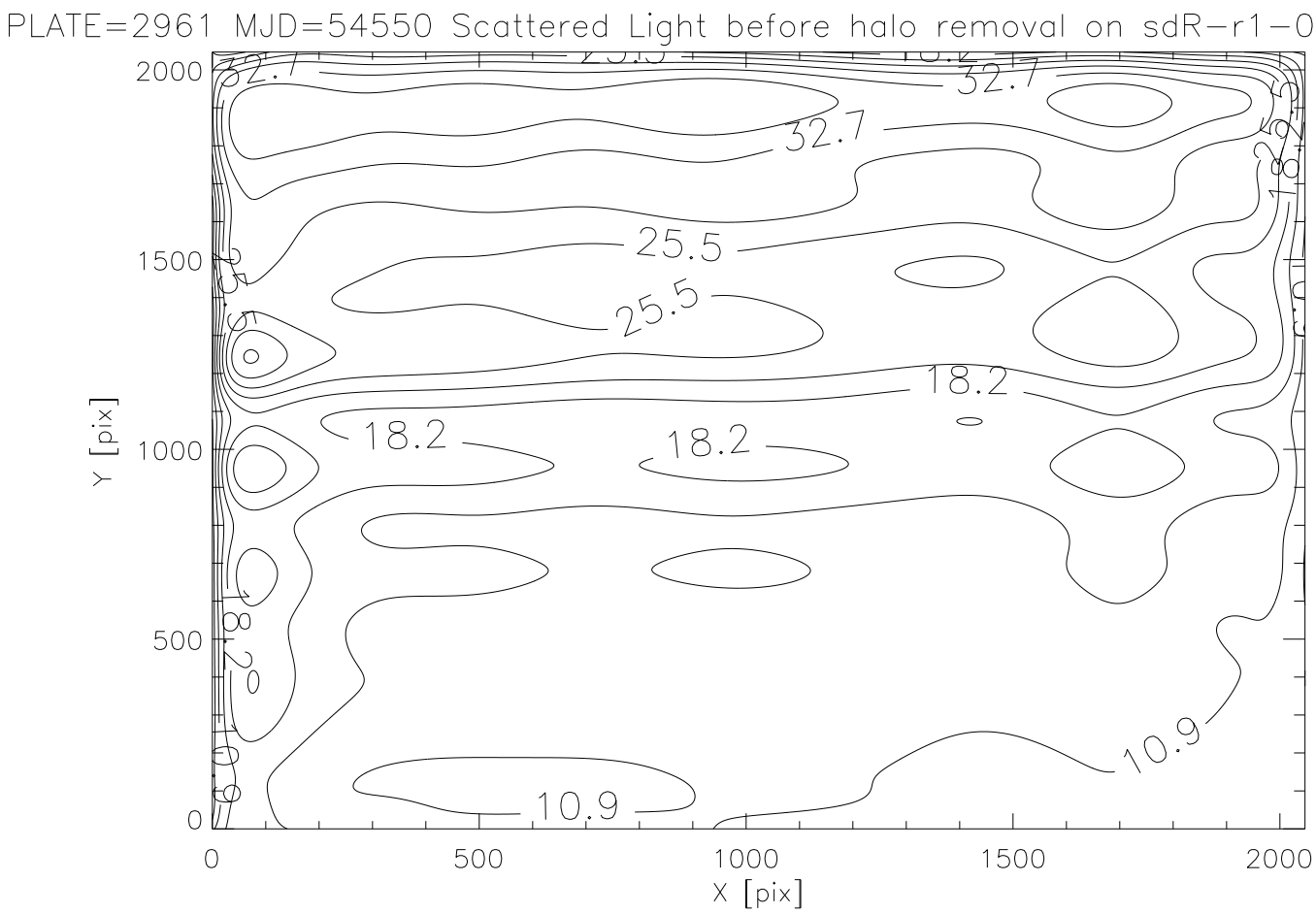

PLATE=2961 MJD=54550 sdR-r1-00051213.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

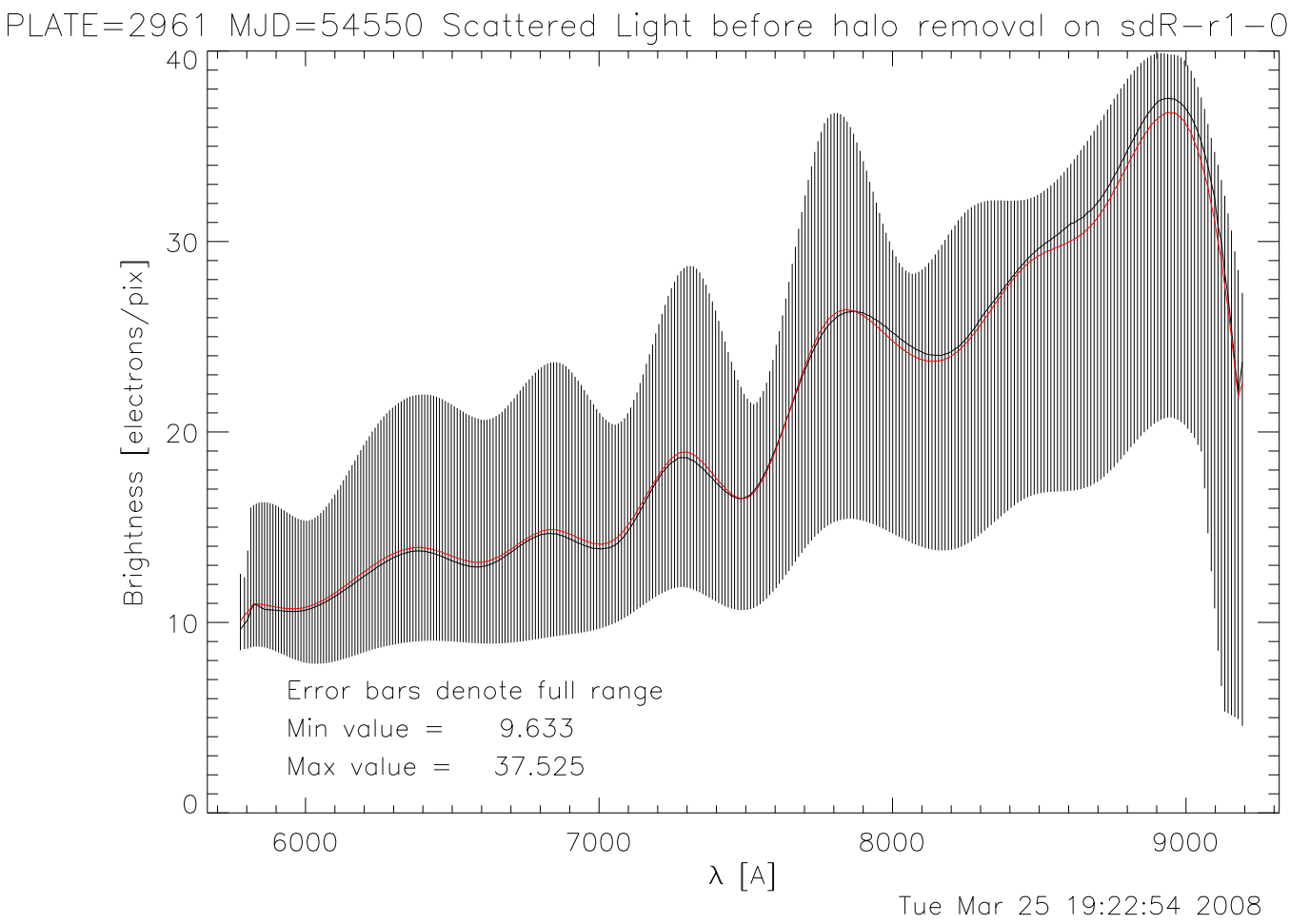

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051213.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

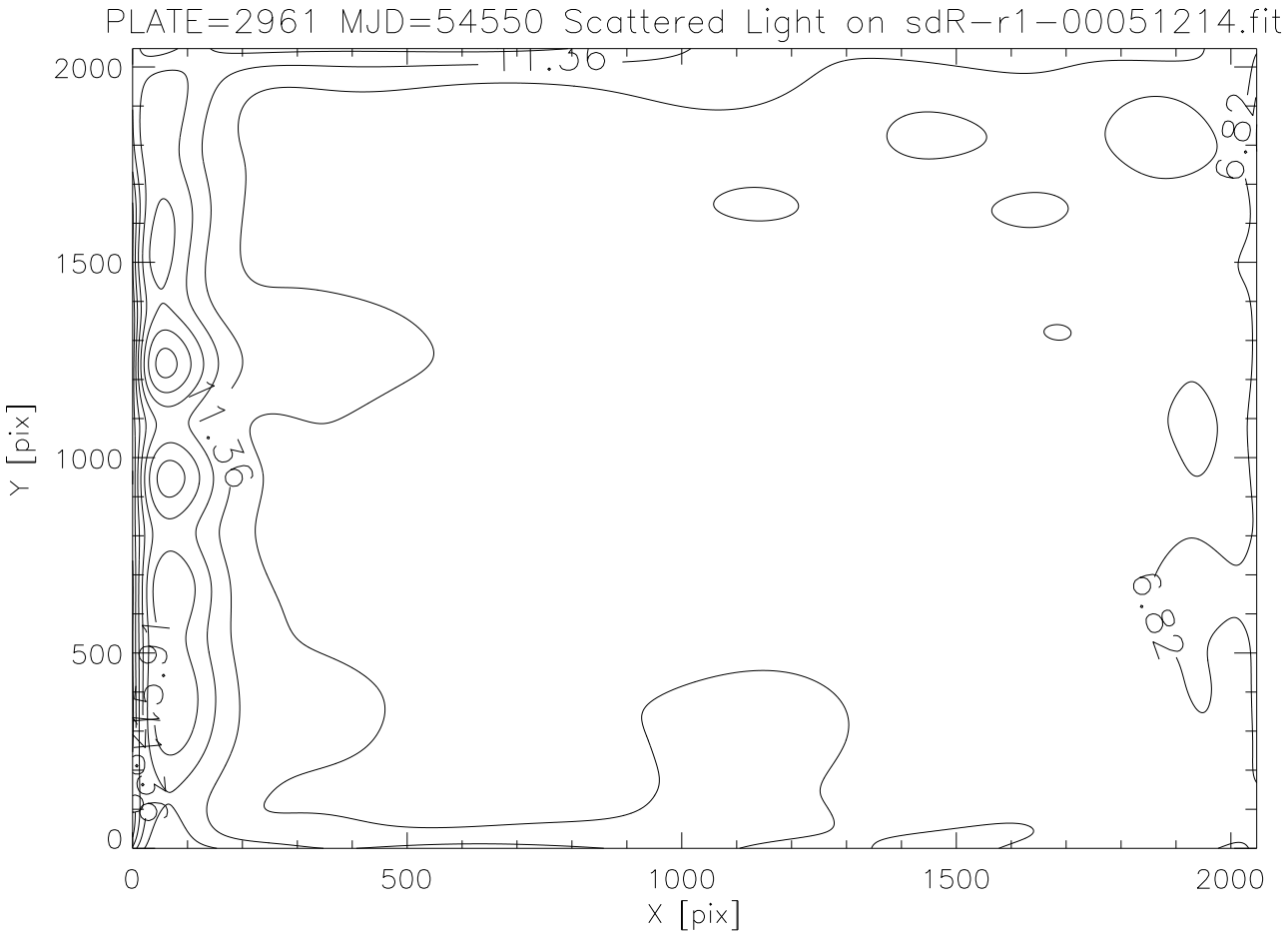

PLATE=2961 MJD=54550 sdR-r1-00051213.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.72 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

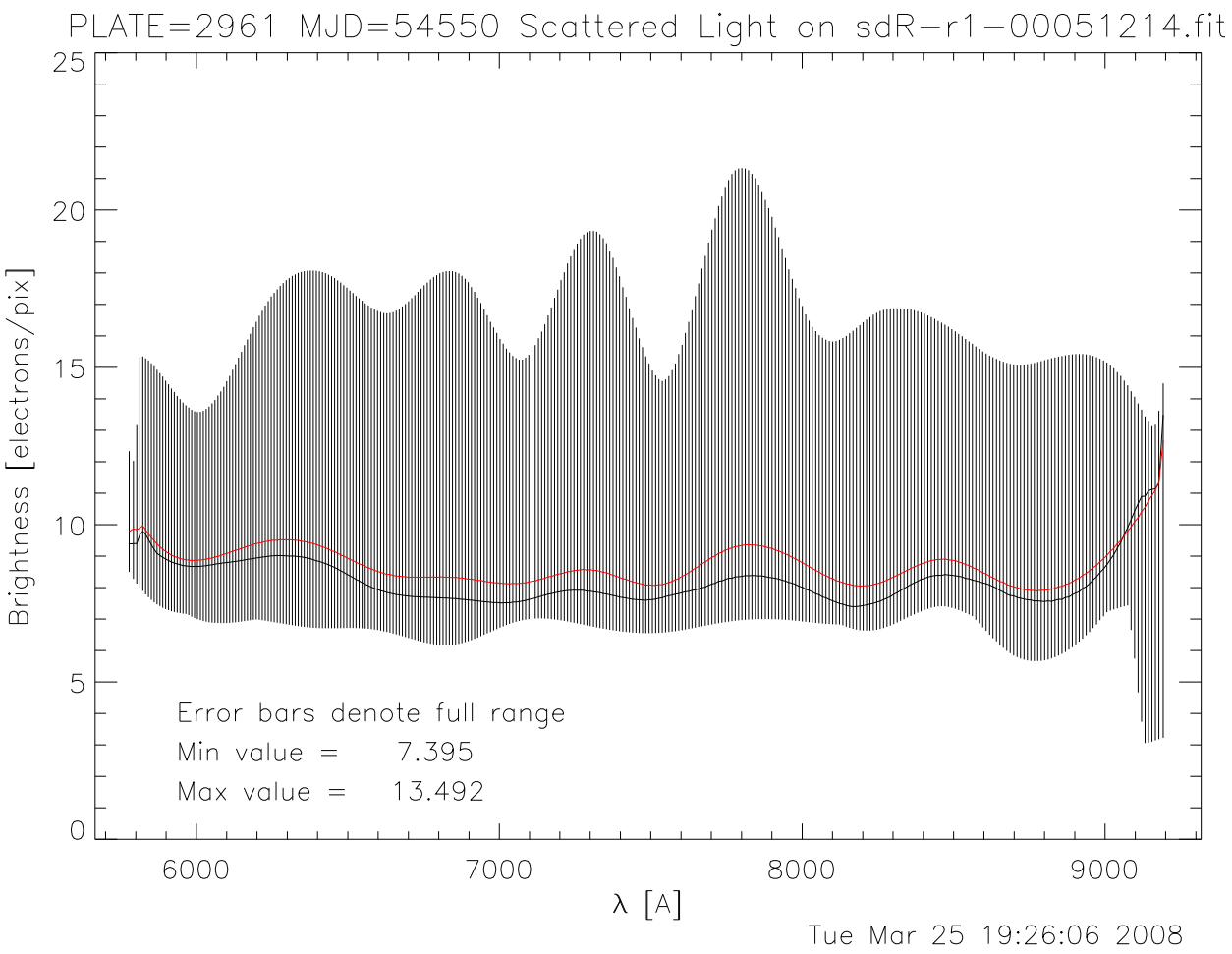

PLATE=2961 MJD=54550 sdR-r1-00051213.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.91 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

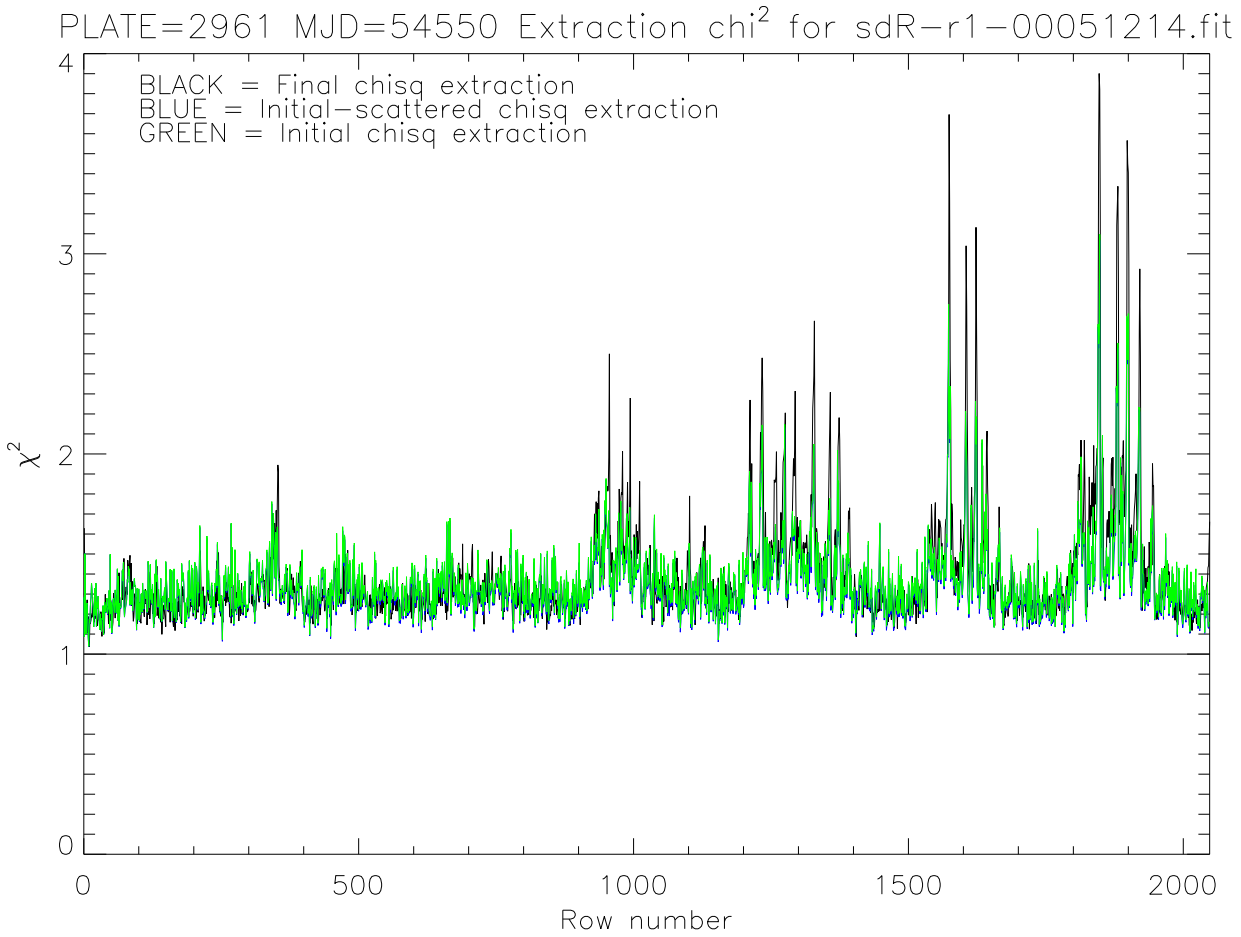

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:21:55 2008

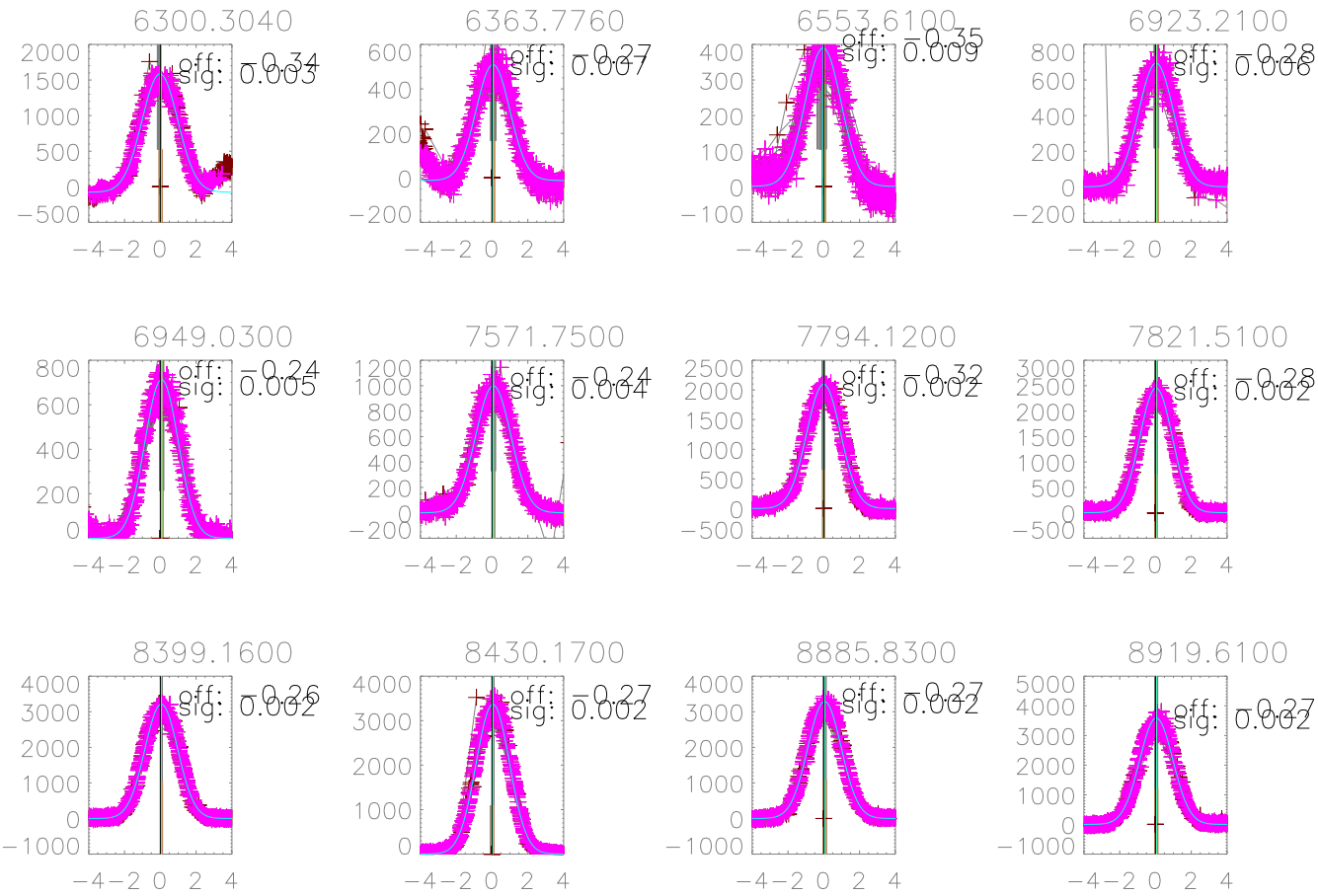

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051214.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

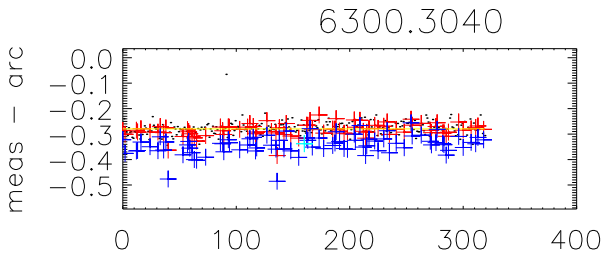

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051214.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.633
Max value = 37.525
Tue Mar 25 19:22:54 2008

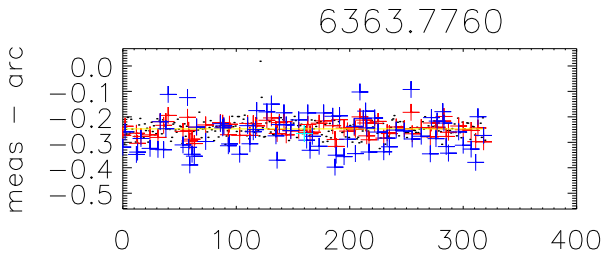

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051214.fit
11.36
6.82
0
6.82
11.36
16.91
16.91
Y [pix]
X [pix]
0
500
1000
1500
2000

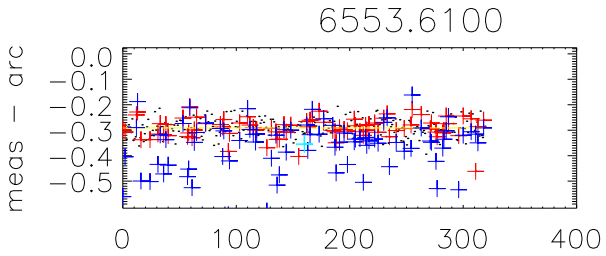

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051214.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.395
Max value = 13.492
Tue Mar 25 19:26:06 2008

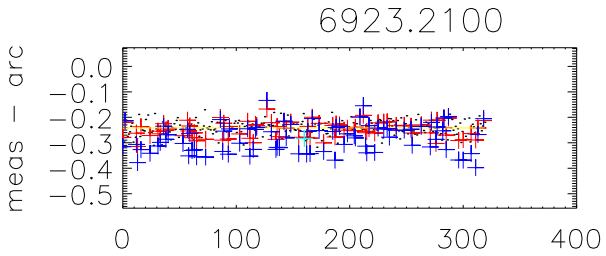

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051214.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

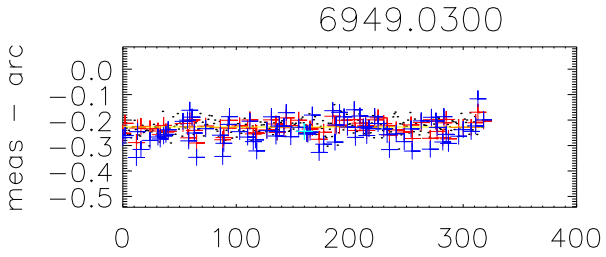

6300.3040
off: −0.34
sig: 0.003
6363.7760
off: −0.27
sig: 0.007
6553.6100
off: −0.35
sig: 0.009
6923.2100
off: −0.28
sig: 0.006
6949.0300
off: −0.24
sig: 0.005
7571.7500
off: −0.24
sig: 0.004
7794.1200
off: −0.32
sig: 0.002
7821.5100
off: −0.28
sig: 0.002
8399.1600
off: −0.26
sig: 0.002
8430.1700
off: −0.27
sig: 0.002
8885.8300
off: −0.27
sig: 0.002
8919.6100
off: −0.27
sig: 0.002

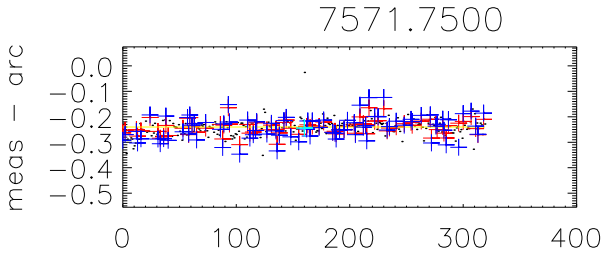

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

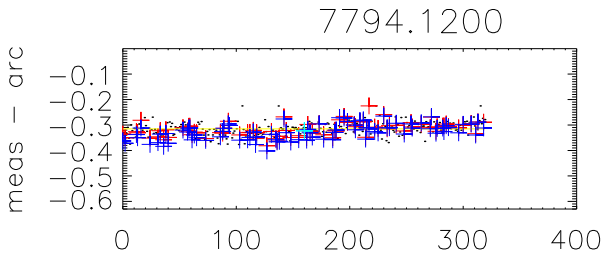

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

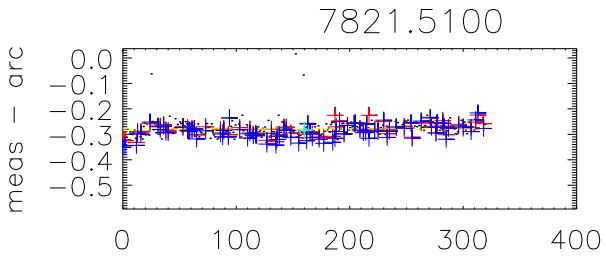

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

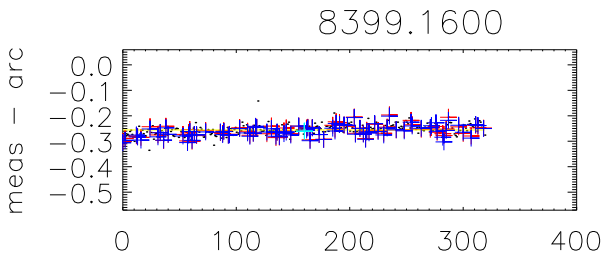

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

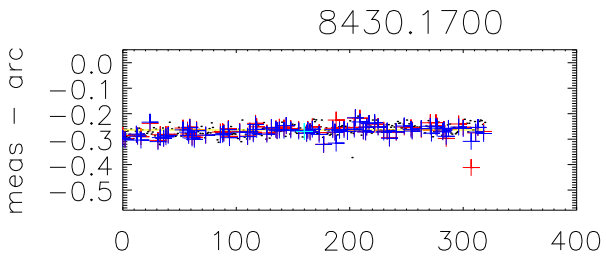

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

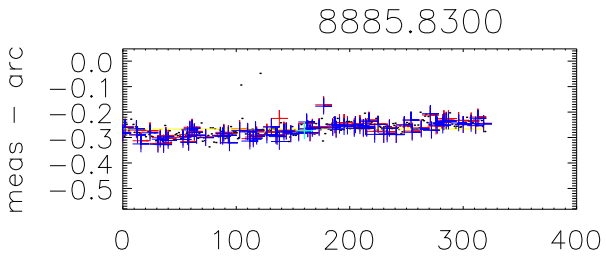

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

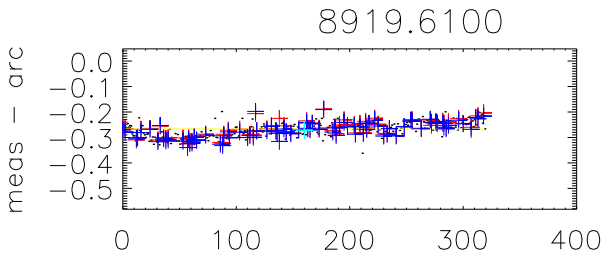

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

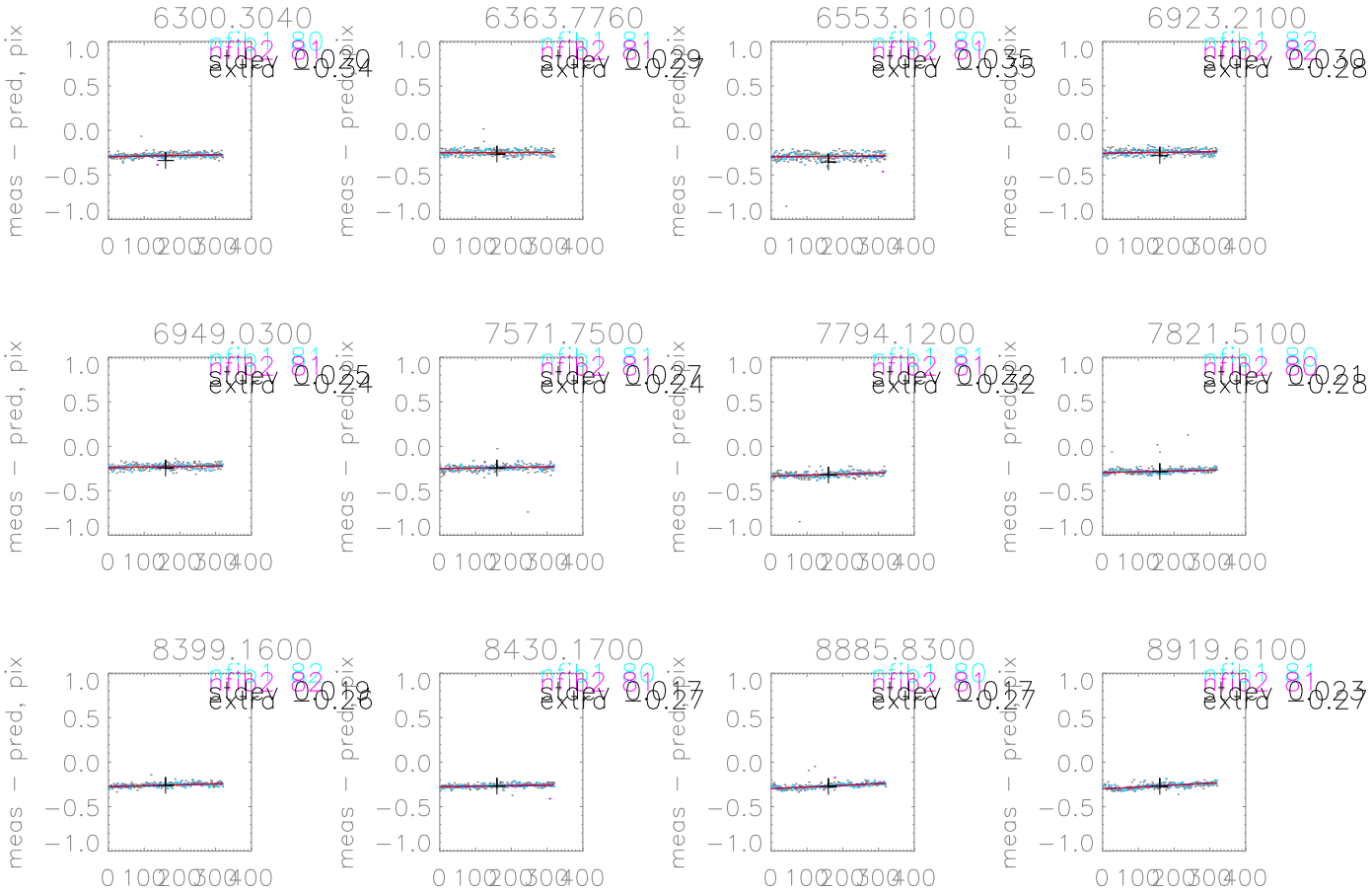

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

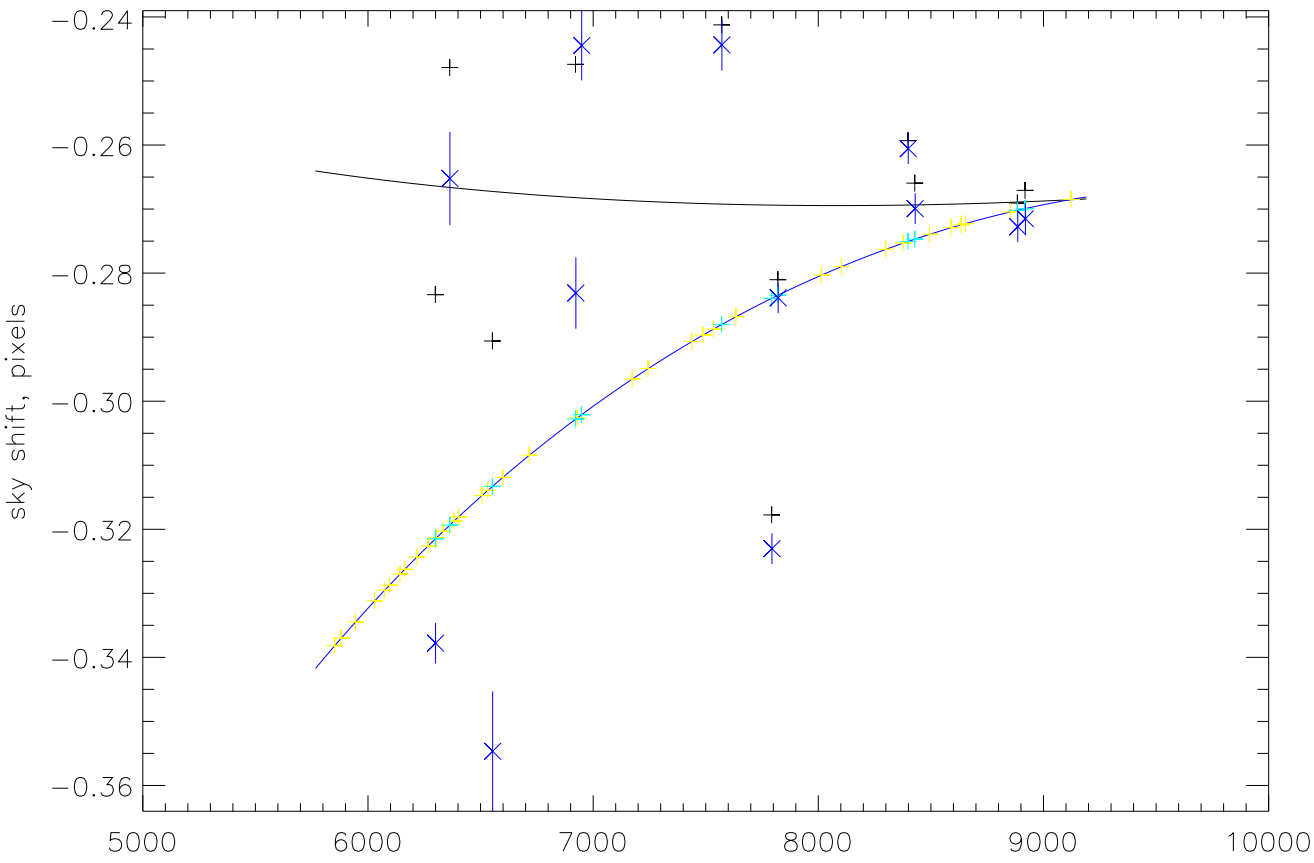

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

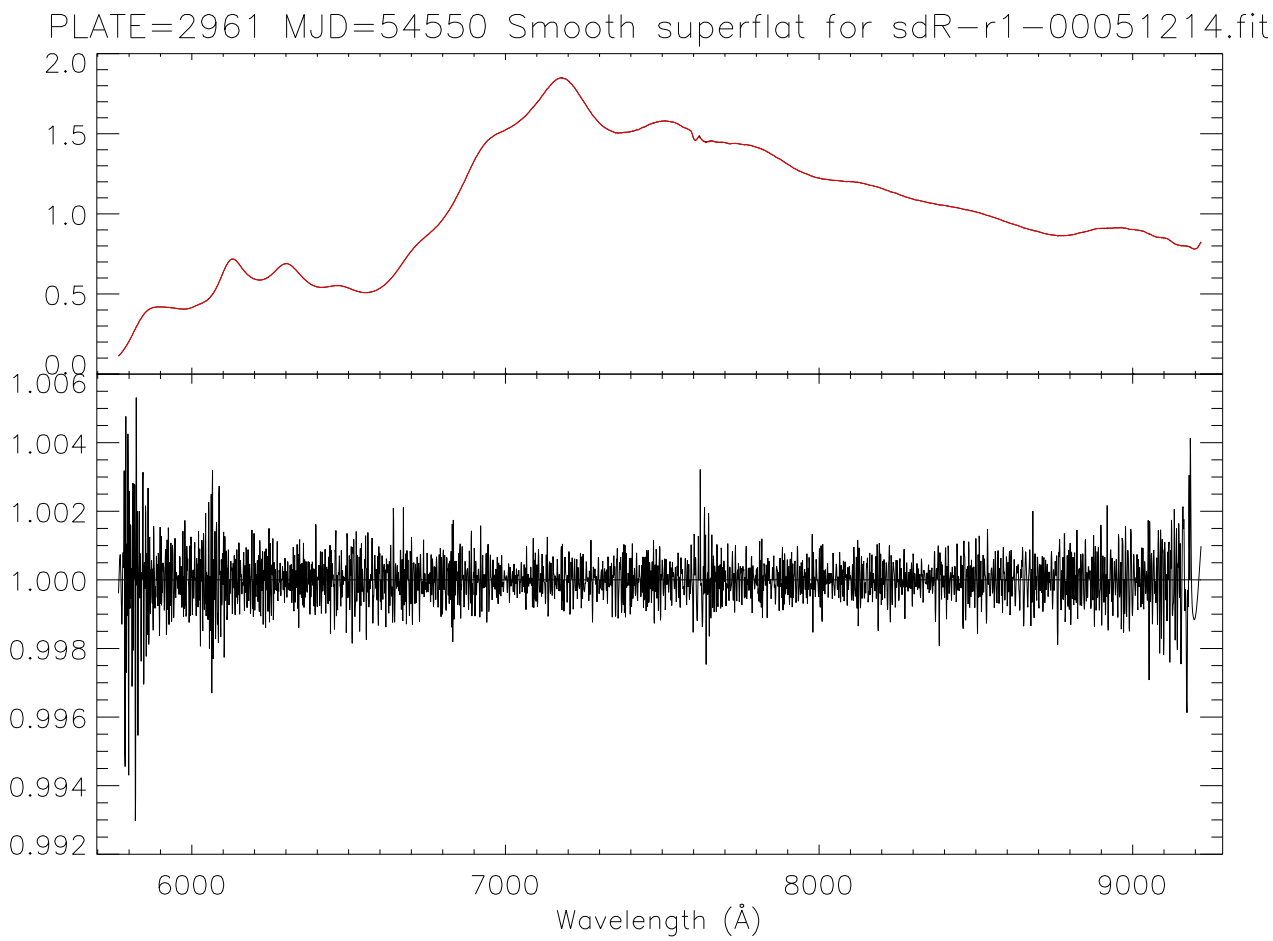

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

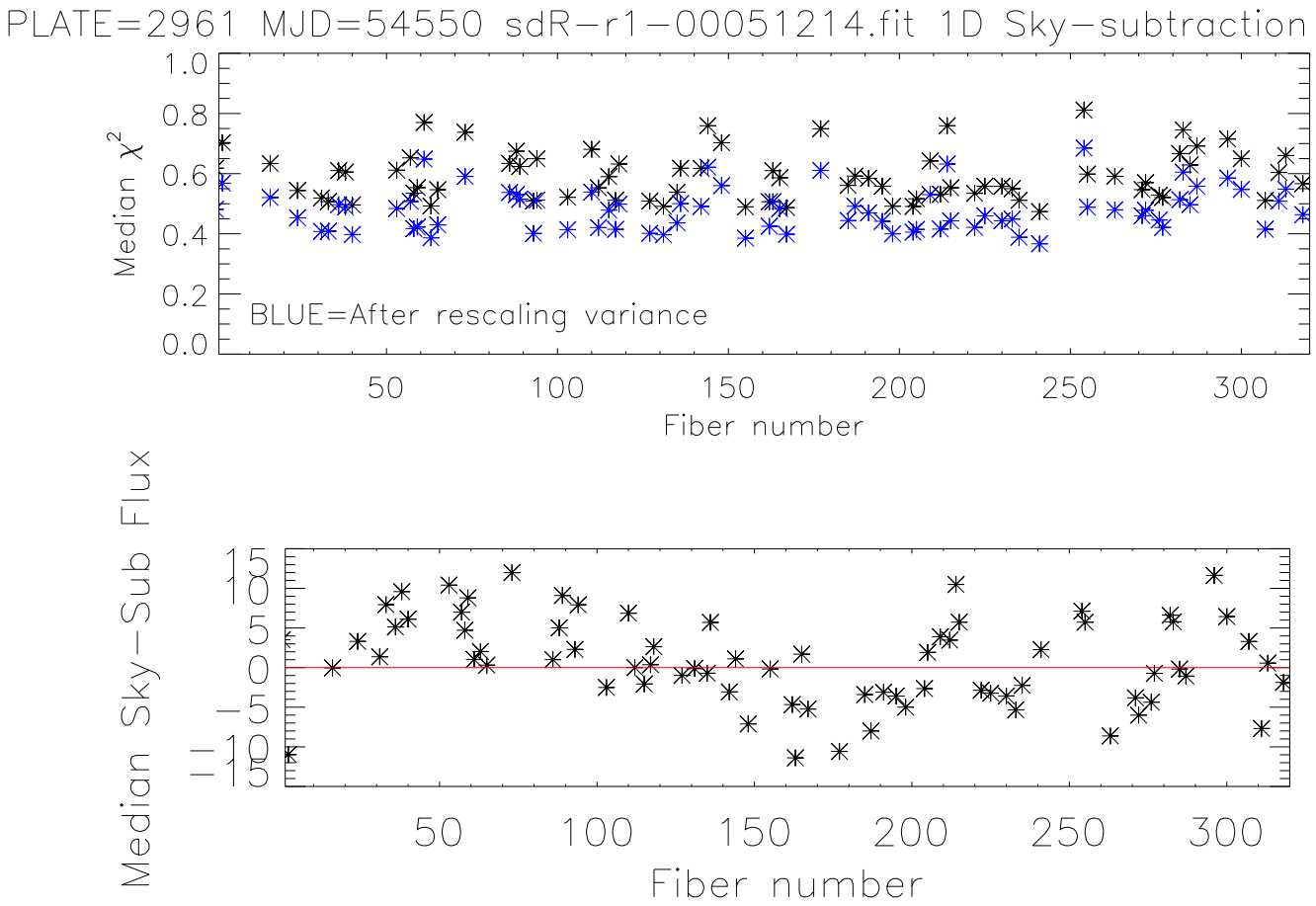

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

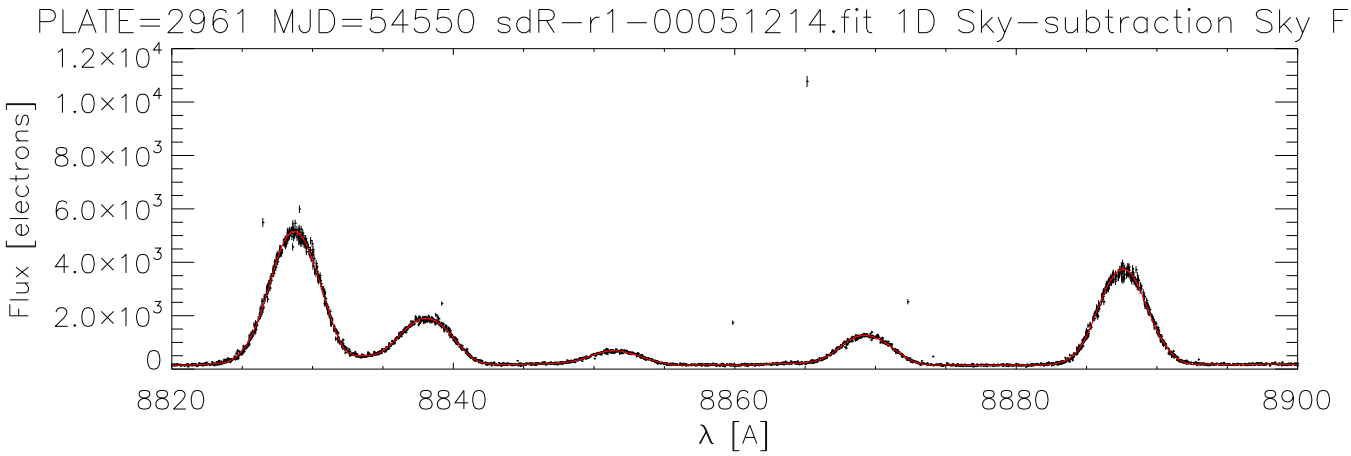

6300.3040
mfhd1 80
mfhd2 81
stdev 0.020
extra 0.34
6363.7760
mfhd1 81
mfhd2 81
stdev 0.029
extra 0.27
6553.6100
mfhd1 80
mfhd2 81
stdev 0.035
extra 0.35
6923.2100
mfhd1 82
mfhd2 82
stdev 0.030
extra 0.28
6949.0300
mfhd1 81
mfhd2 81
stdev 0.025
extra 0.24
7571.7500
mfhd1 81
mfhd2 81
stdev 0.027
extra 0.24
7794.1200
mfhd1 81
mfhd2 81
stdev 0.032
extra 0.32
7821.5100
mfhd1 80
mfhd2 80
stdev 0.021
extra 0.28
8399.1600
mfhd1 82
mfhd2 82
stdev 0.019
extra 0.28
8430.1700
mfhd1 80
mfhd2 81
stdev 0.017
extra 0.27
8885.8300
mfhd1 80
mfhd2 81
stdev 0.017
extra 0.27
8919.6100
mfhd1 81
mfhd2 81
stdev 0.023
extra 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

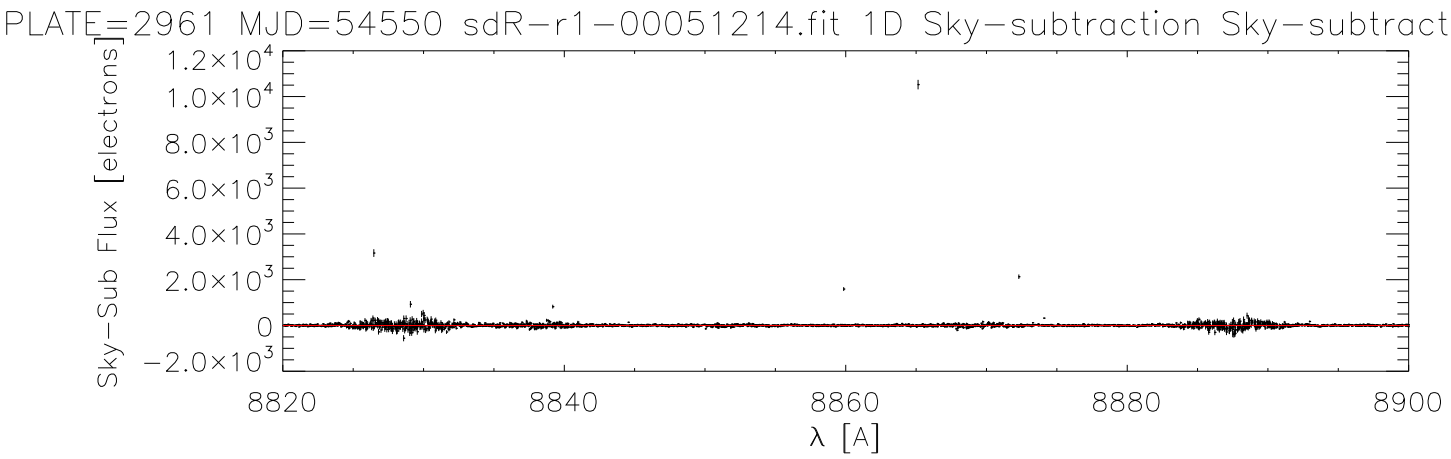

−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
−0.36
sky shift, pixels
5000
6000
7000
8000
9000
10000

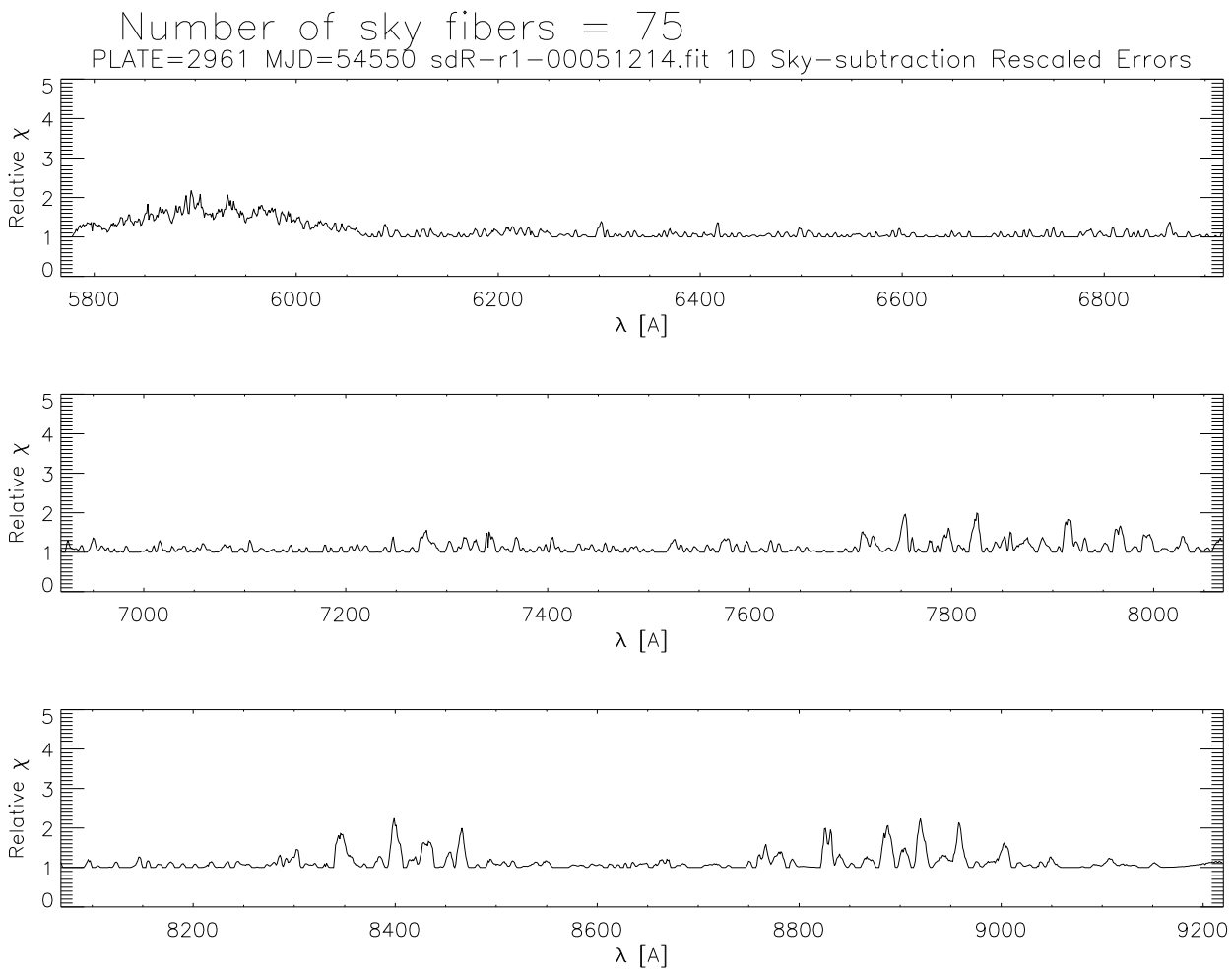
es= 0.0000

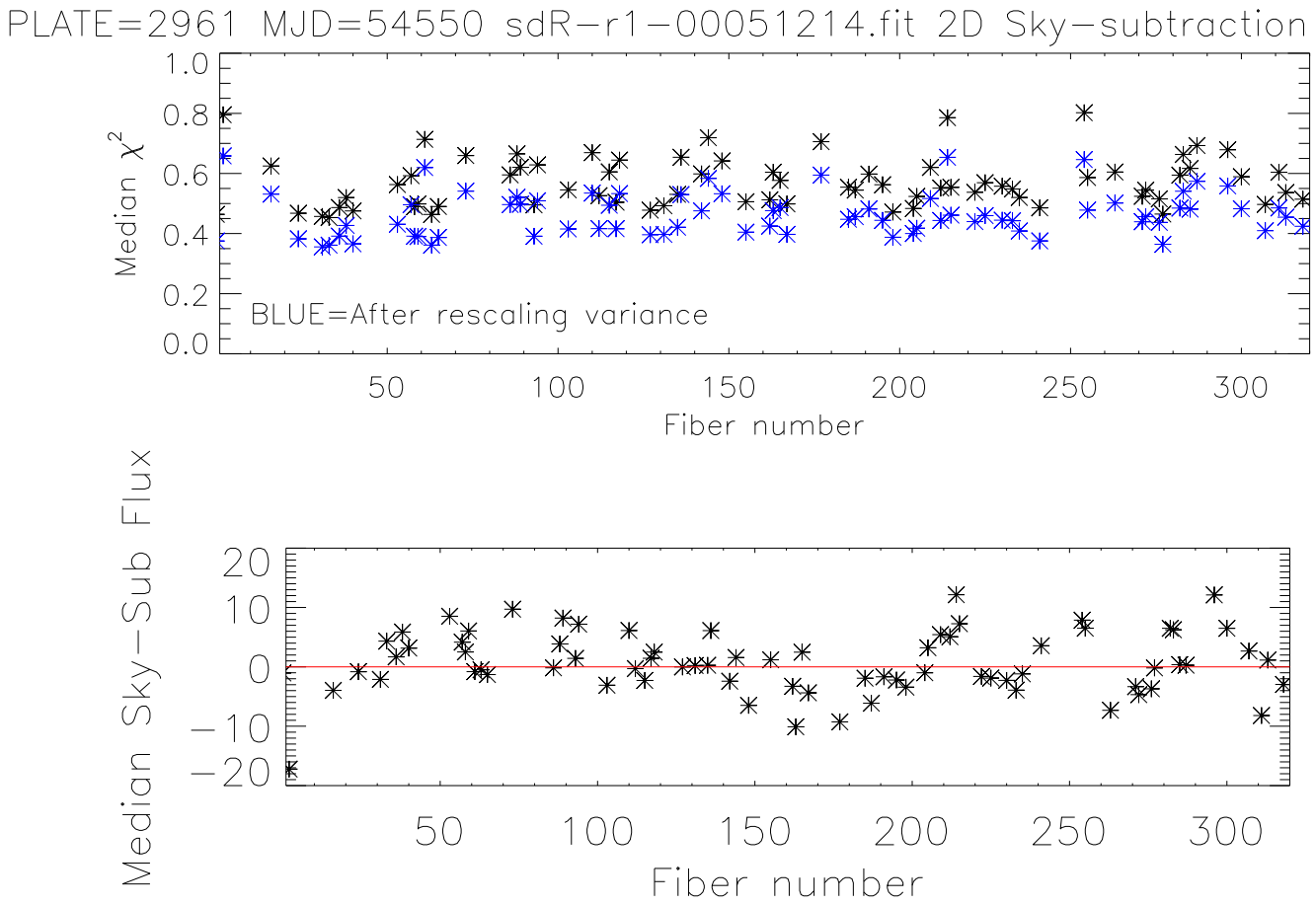

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051214.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

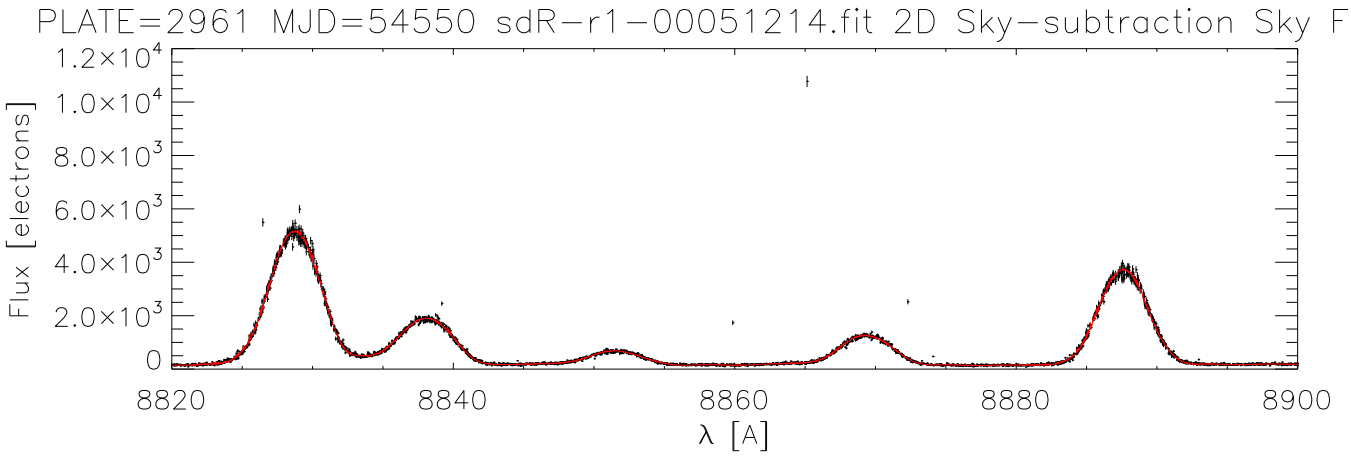

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

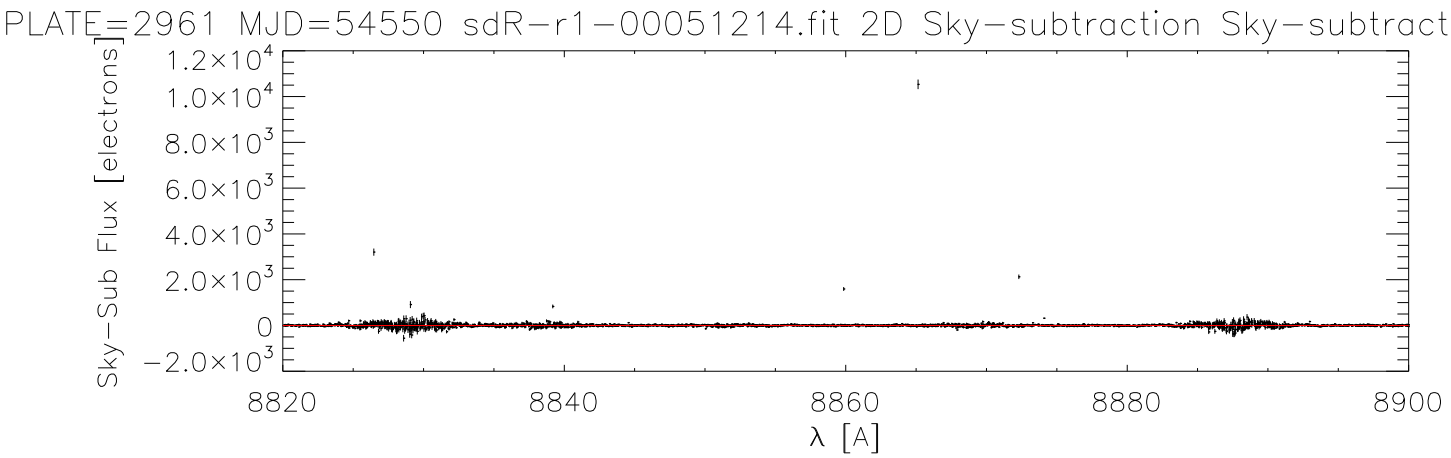

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

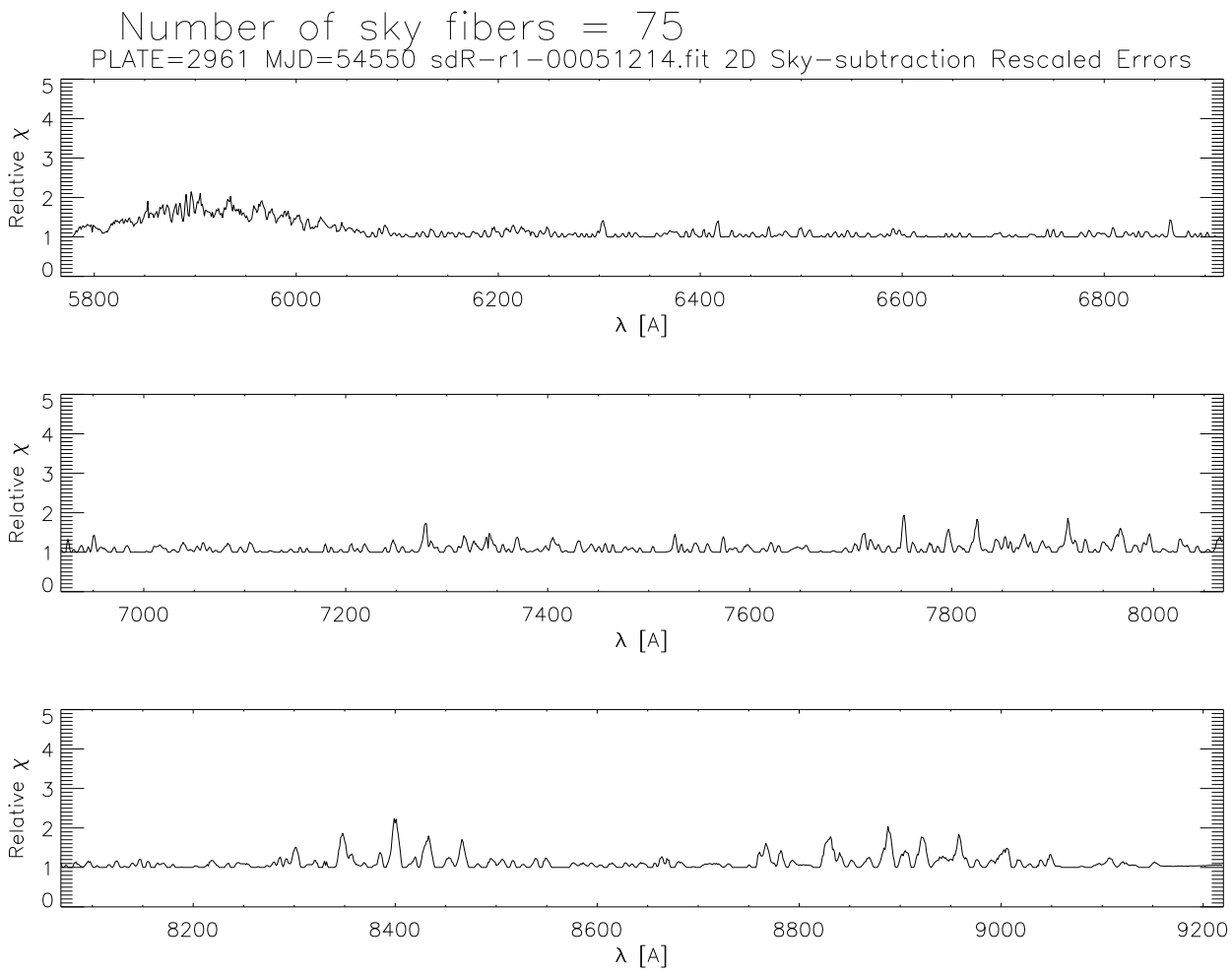

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

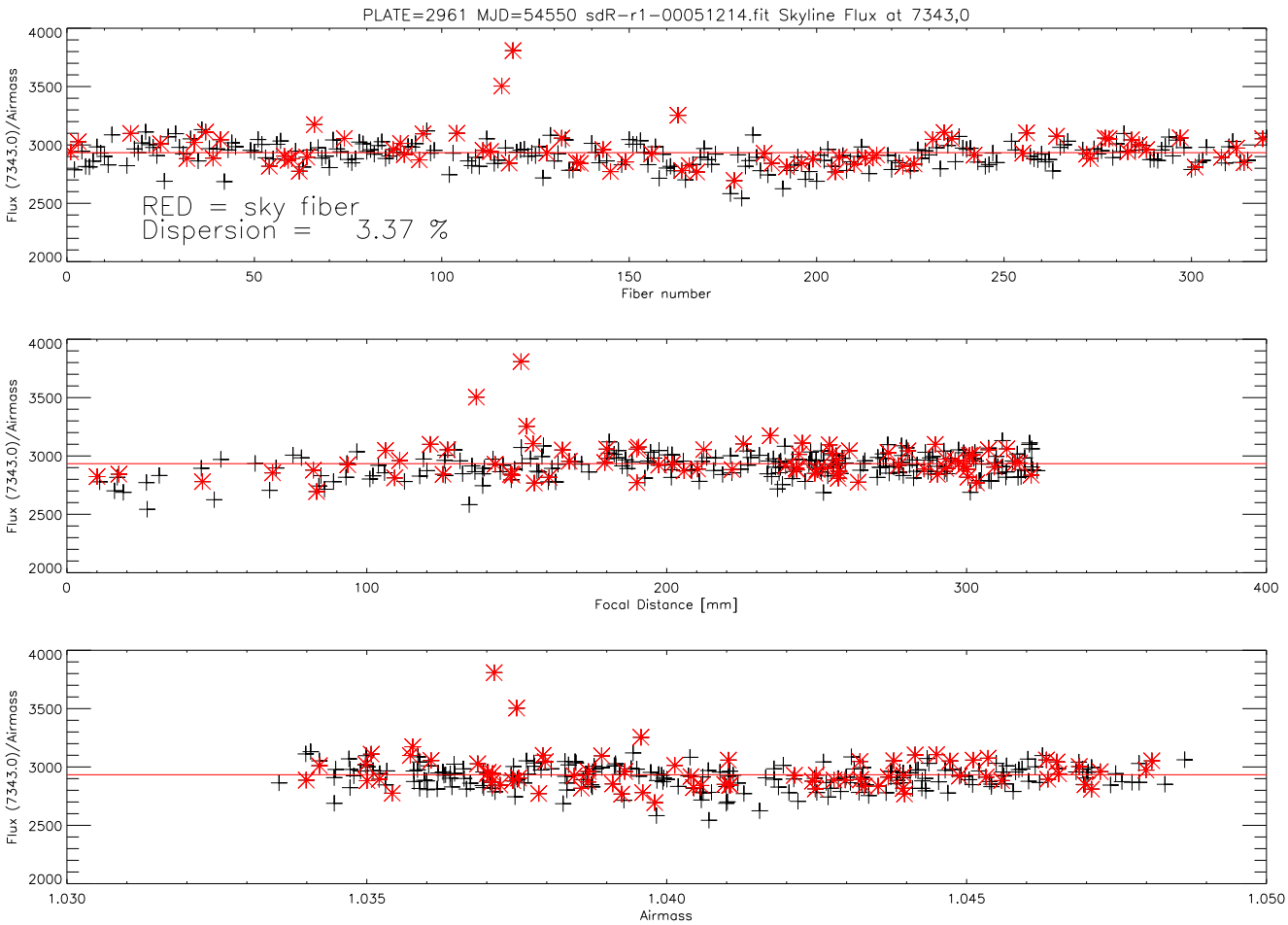

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051214.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

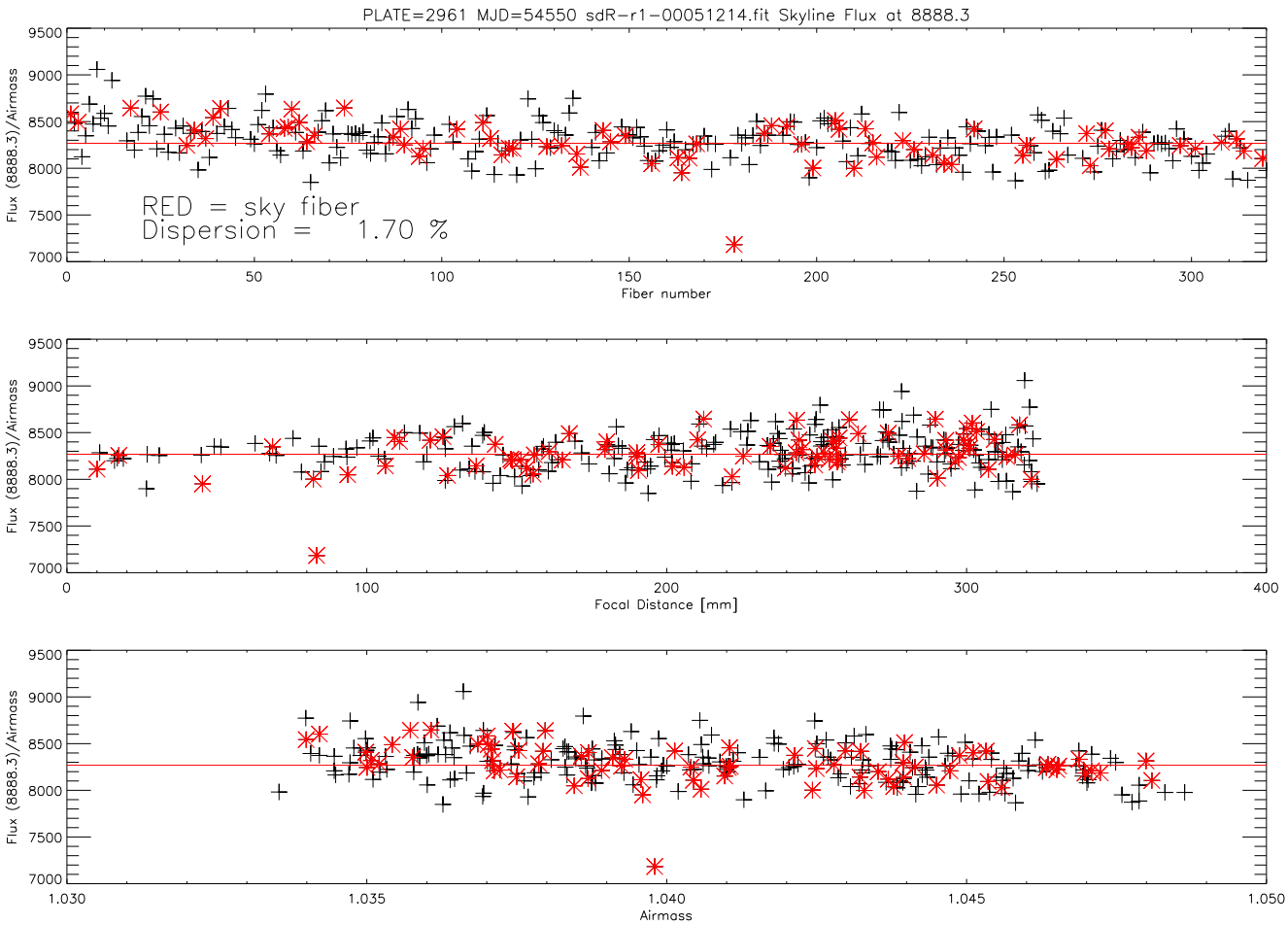

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

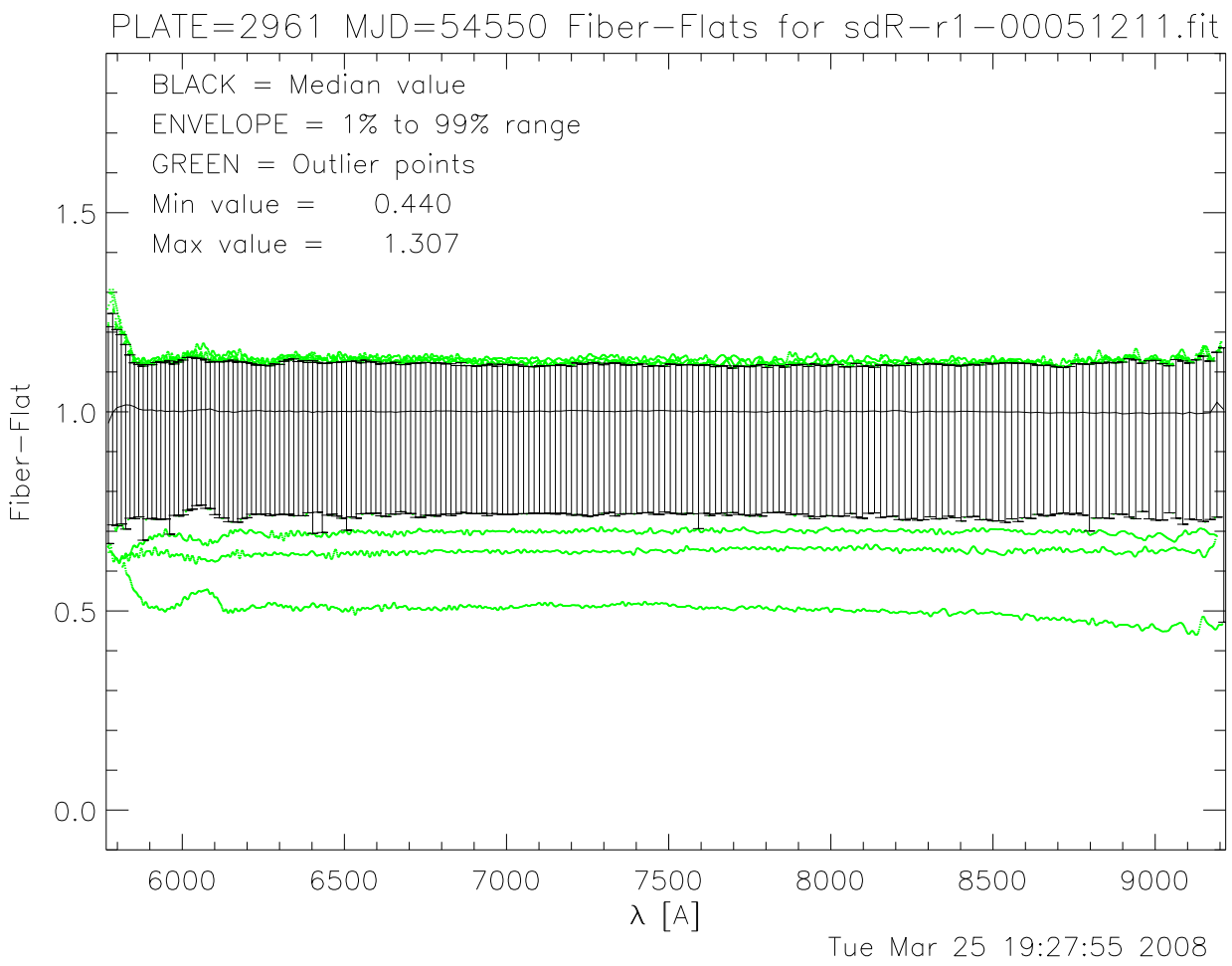

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

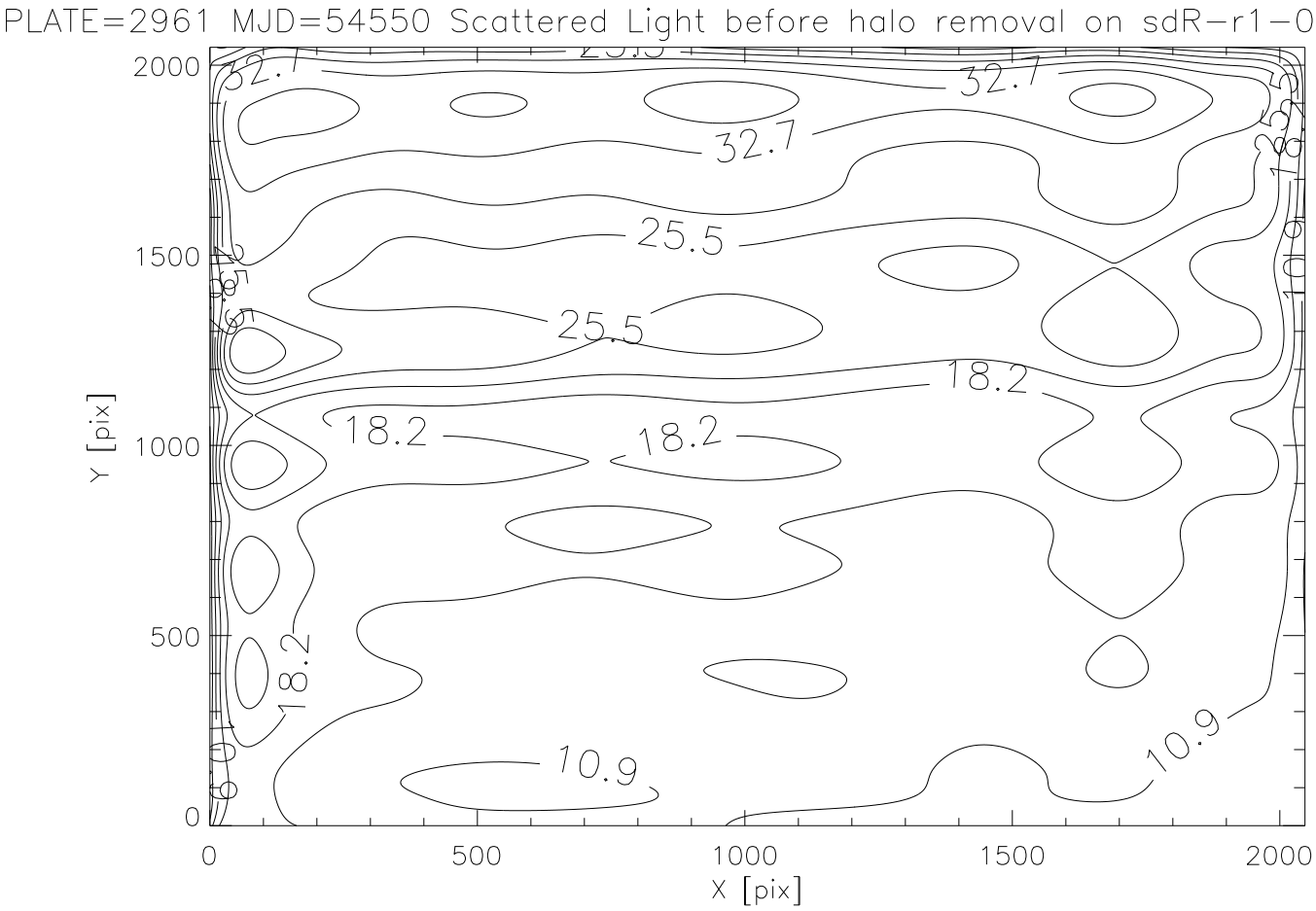

PLATE=2961 MJD=54550 sdR-r1-00051214.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

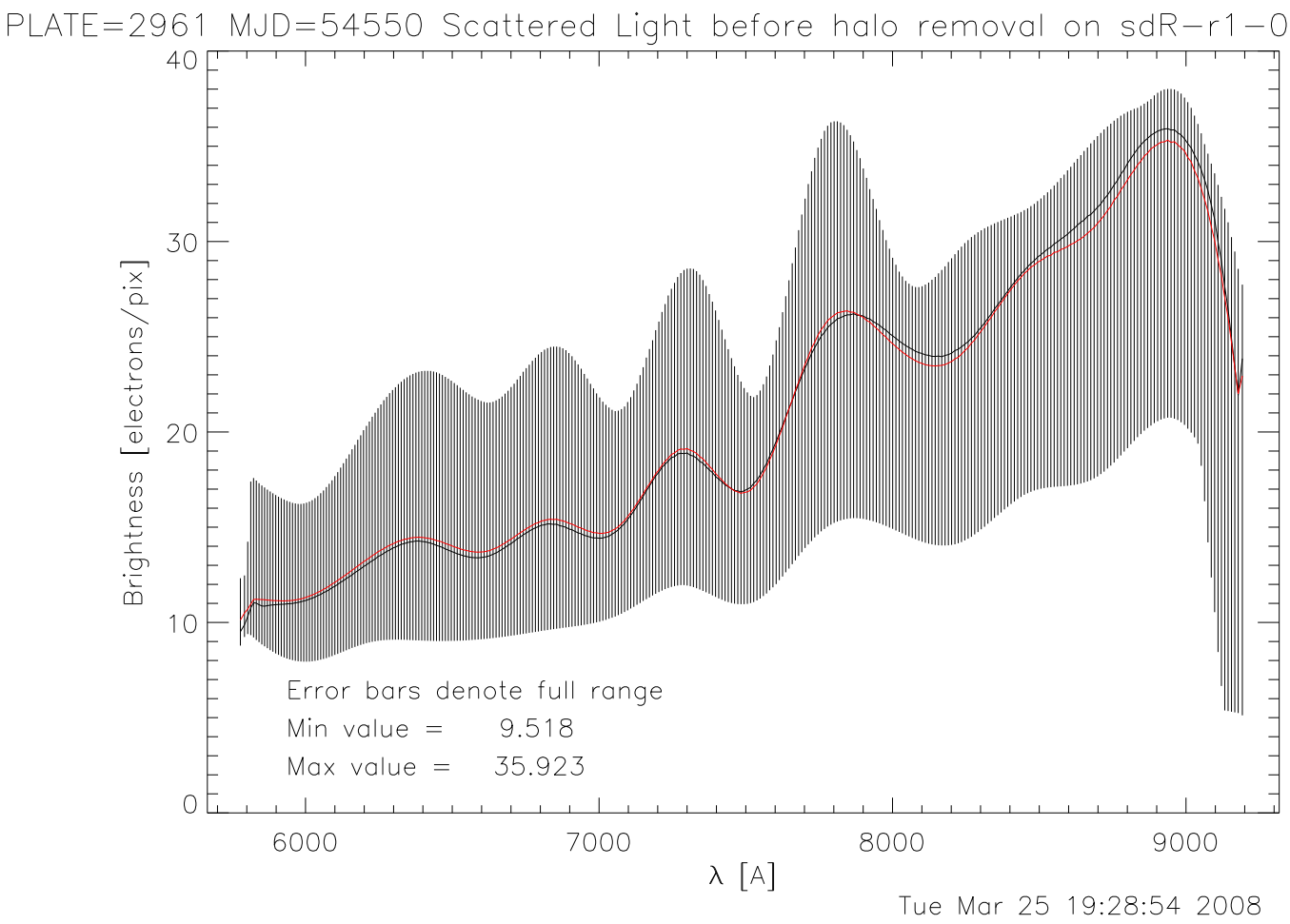

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051214.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

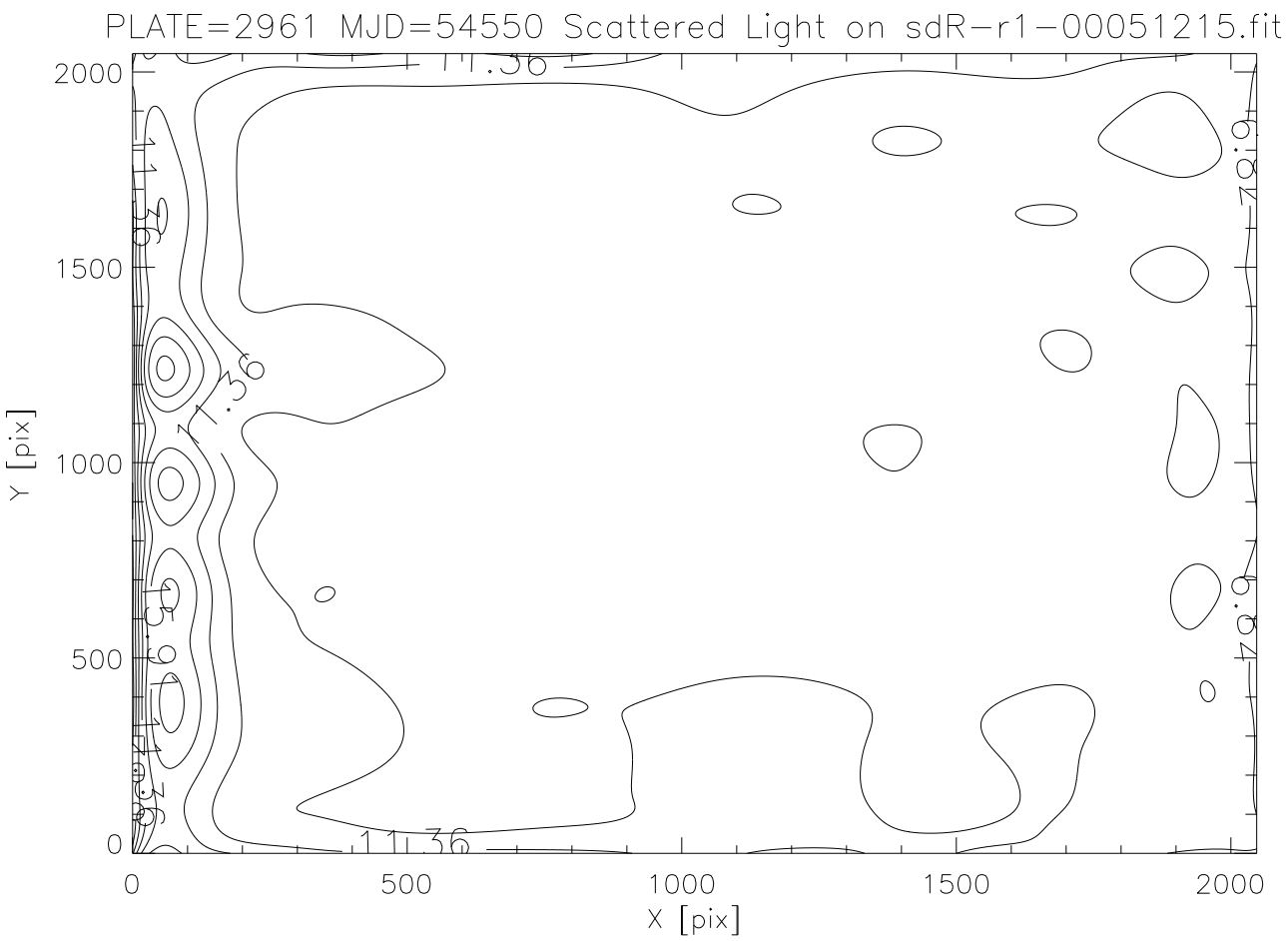

PLATE=2961 MJD=54550 sdR-r1-00051214.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.37 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

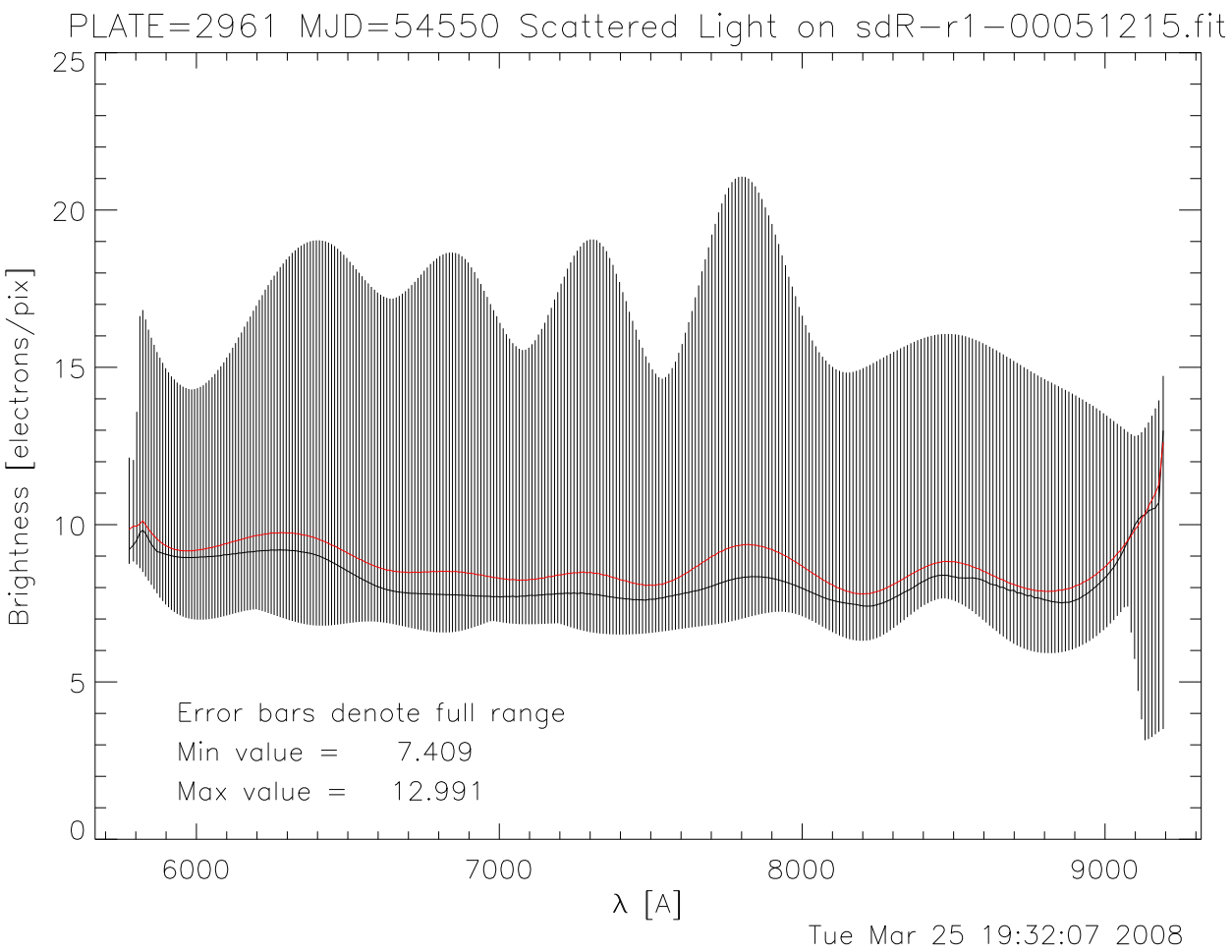

PLATE=2961 MJD=54550 sdR-r1-00051214.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.70 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

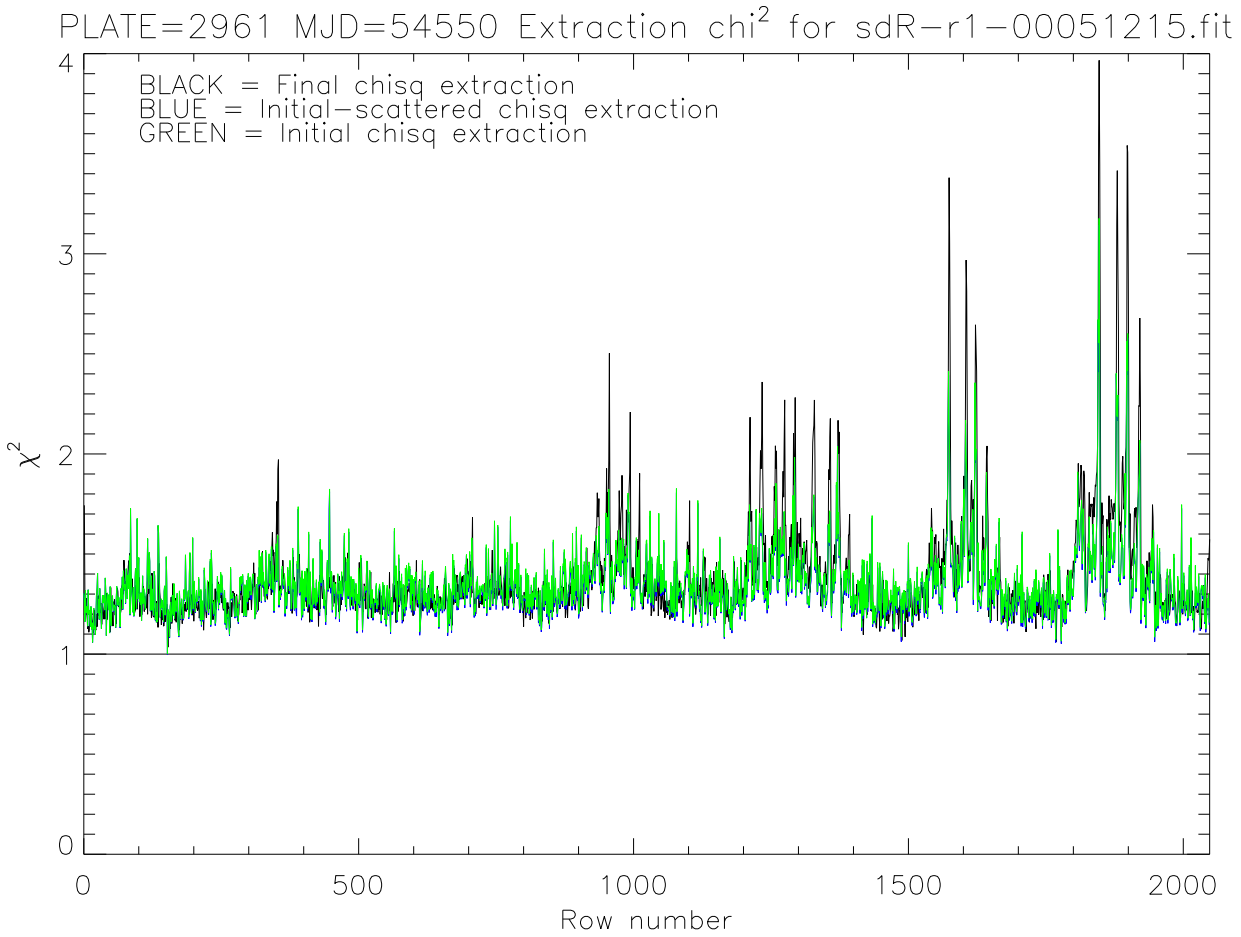

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r1−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.440
Max value = 1.307
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:27:55 2008

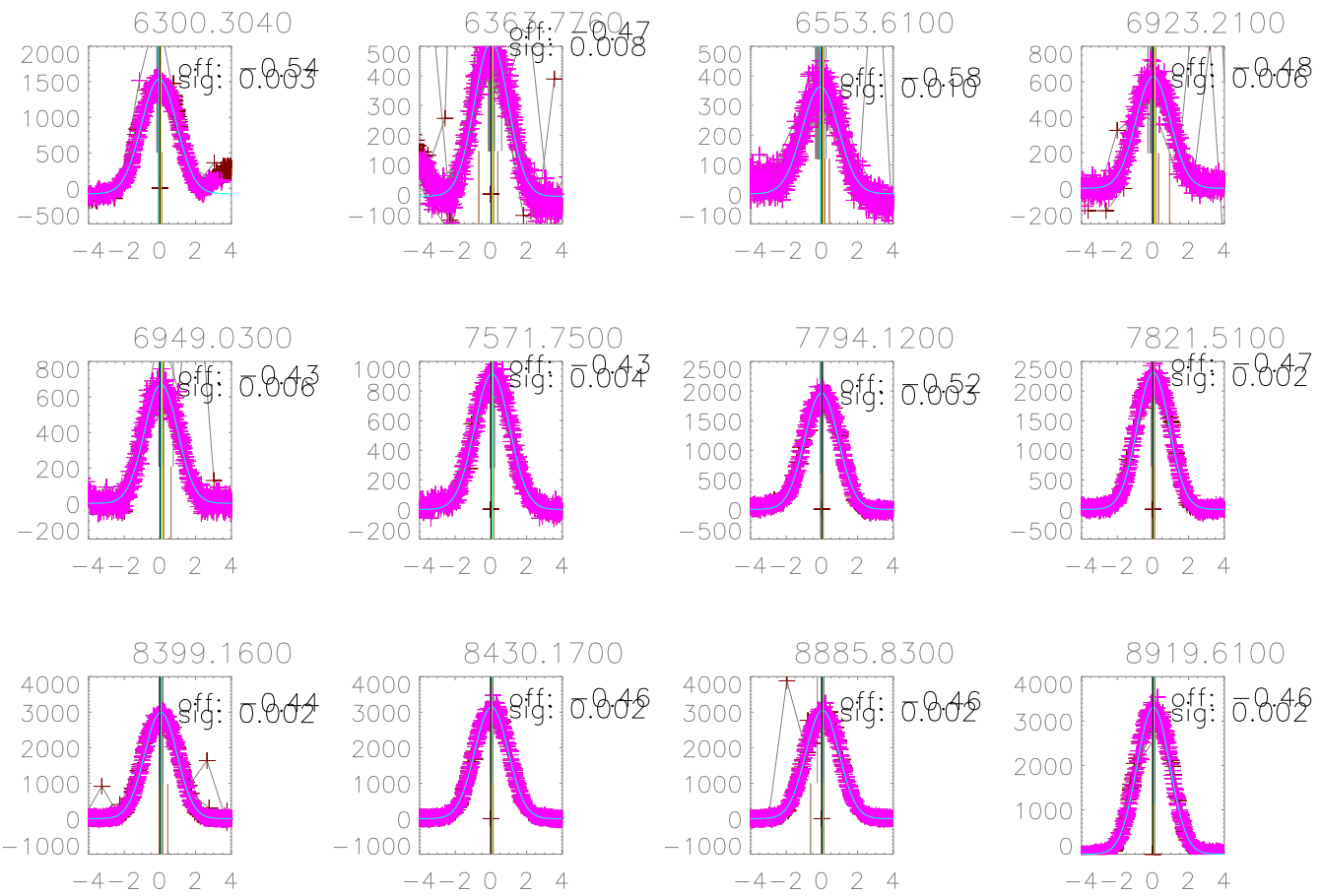

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051215.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

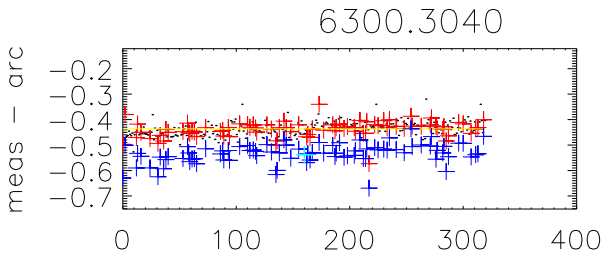

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r1-00051215.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.518
Max value = 35.923
Tue Mar 25 19:28:54 2008

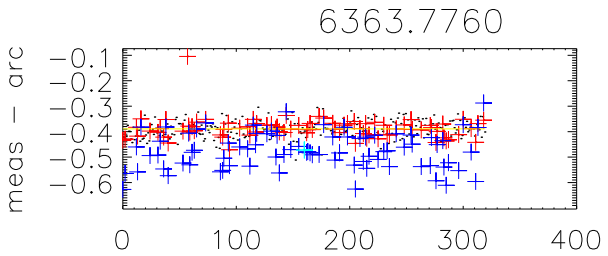

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051215.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
17.36
0.04
0

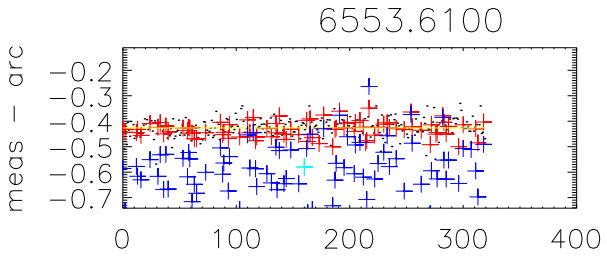

PLATE=2961 MJD=54550 Scattered Light on sdR-r1-00051215.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.409
Max value = 12.991
Tue Mar 25 19:32:07 2008

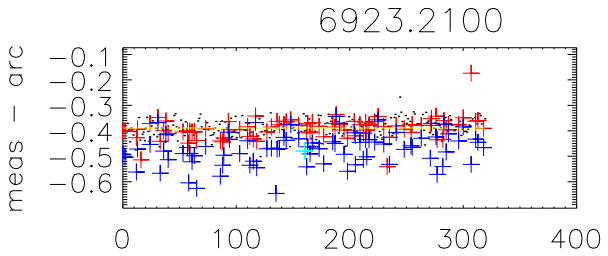

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r1−00051215.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

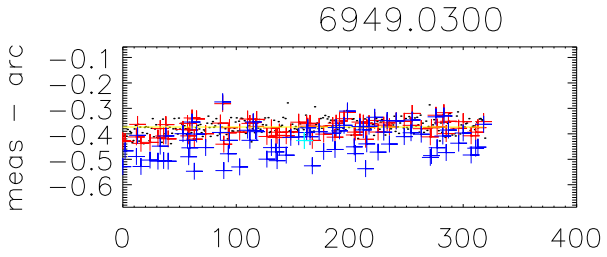

6300.3040
off: −0.54
sig: 0.003
6363.7760
off: −0.47
sig: 0.008
6553.6100
off: −0.58
sig: 0.010
6923.2100
off: −0.48
sig: 0.006
6949.0300
off: −0.43
sig: 0.006
7571.7500
off: −0.43
sig: 0.004
7794.1200
off: −0.52
sig: 0.003
7821.5100
off: −0.47
sig: 0.002
8399.1600
off: −0.44
sig: 0.002
8430.1700
off: −0.46
sig: 0.002
8885.8300
off: −0.46
sig: 0.002
8919.6100
off: −0.46
sig: 0.002

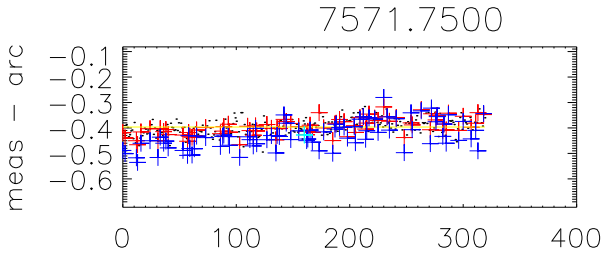

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

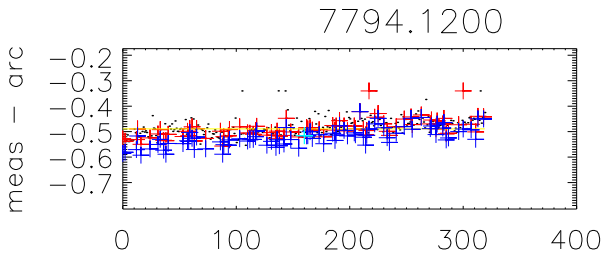

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

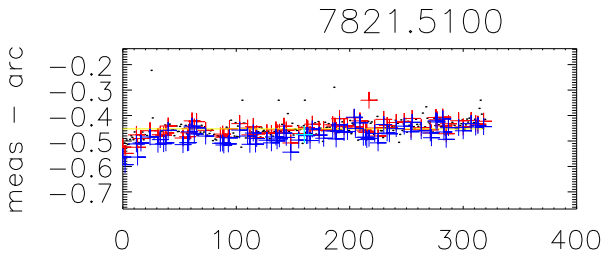

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

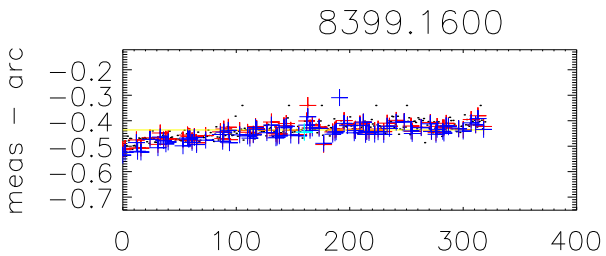

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

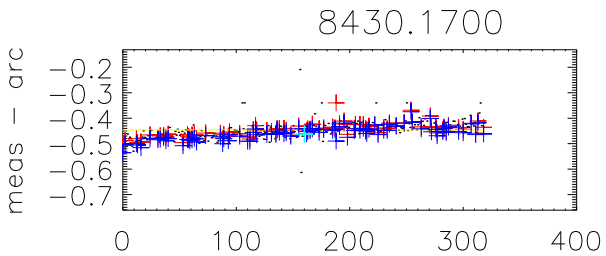

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

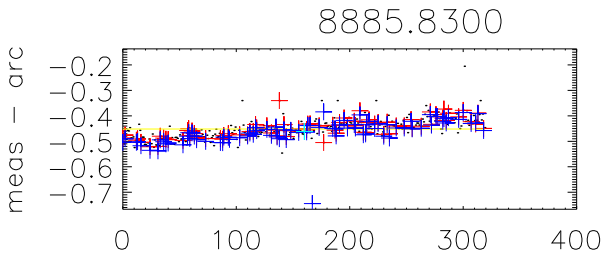

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

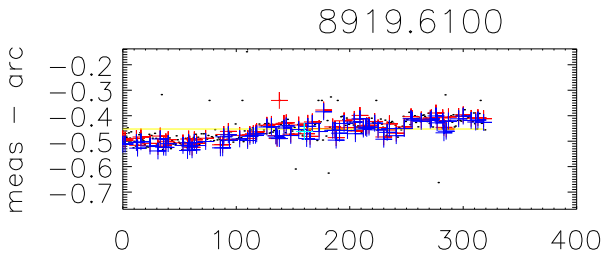

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

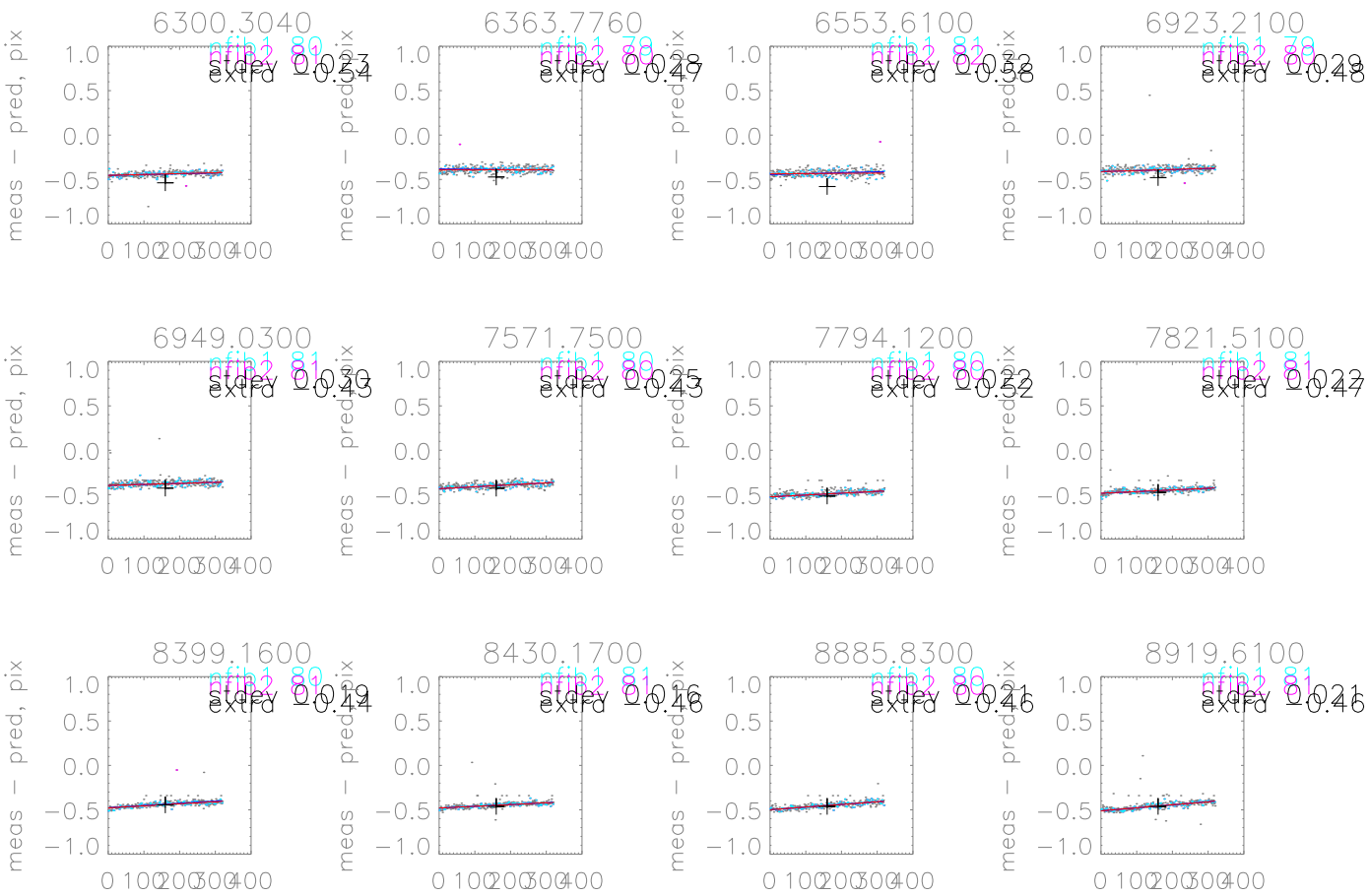

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

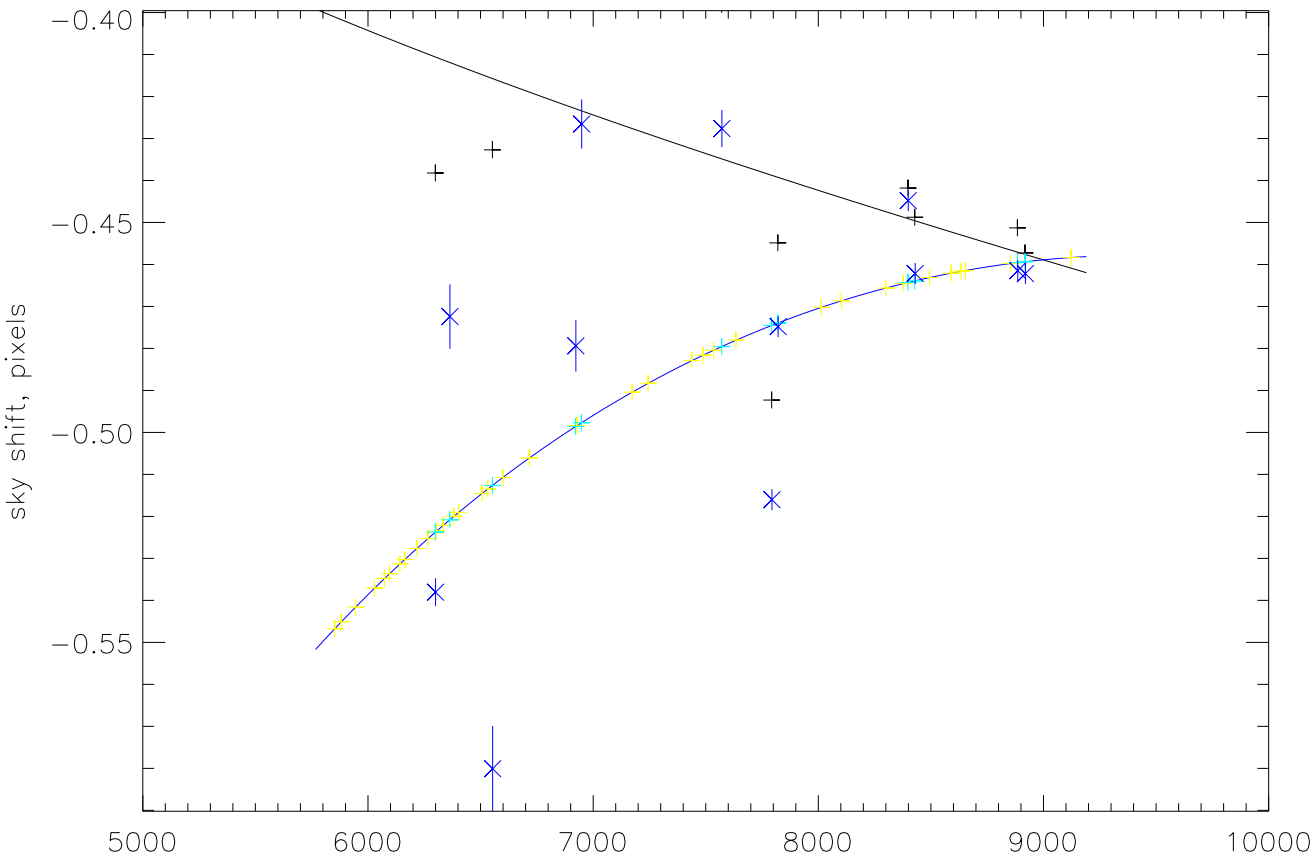

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

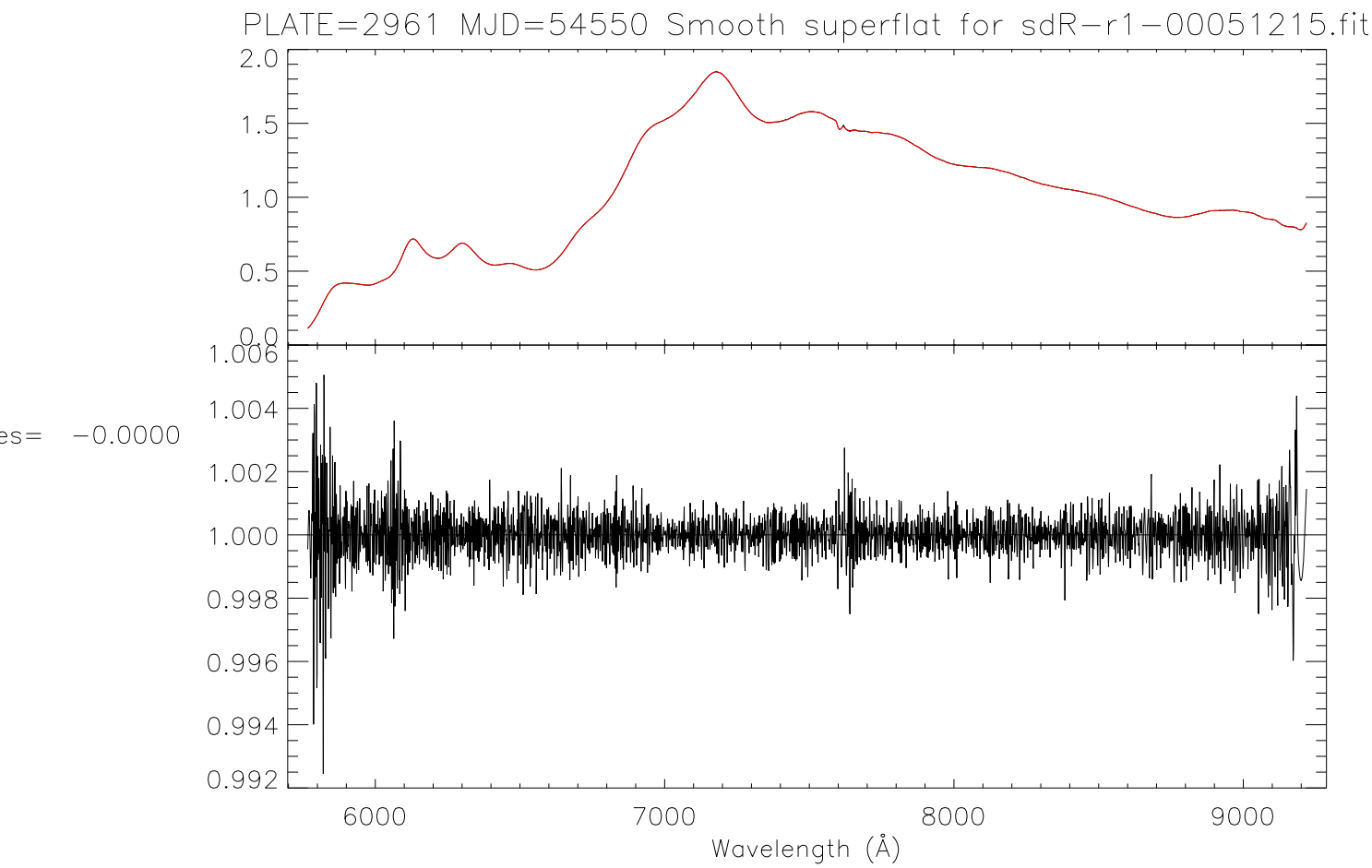

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

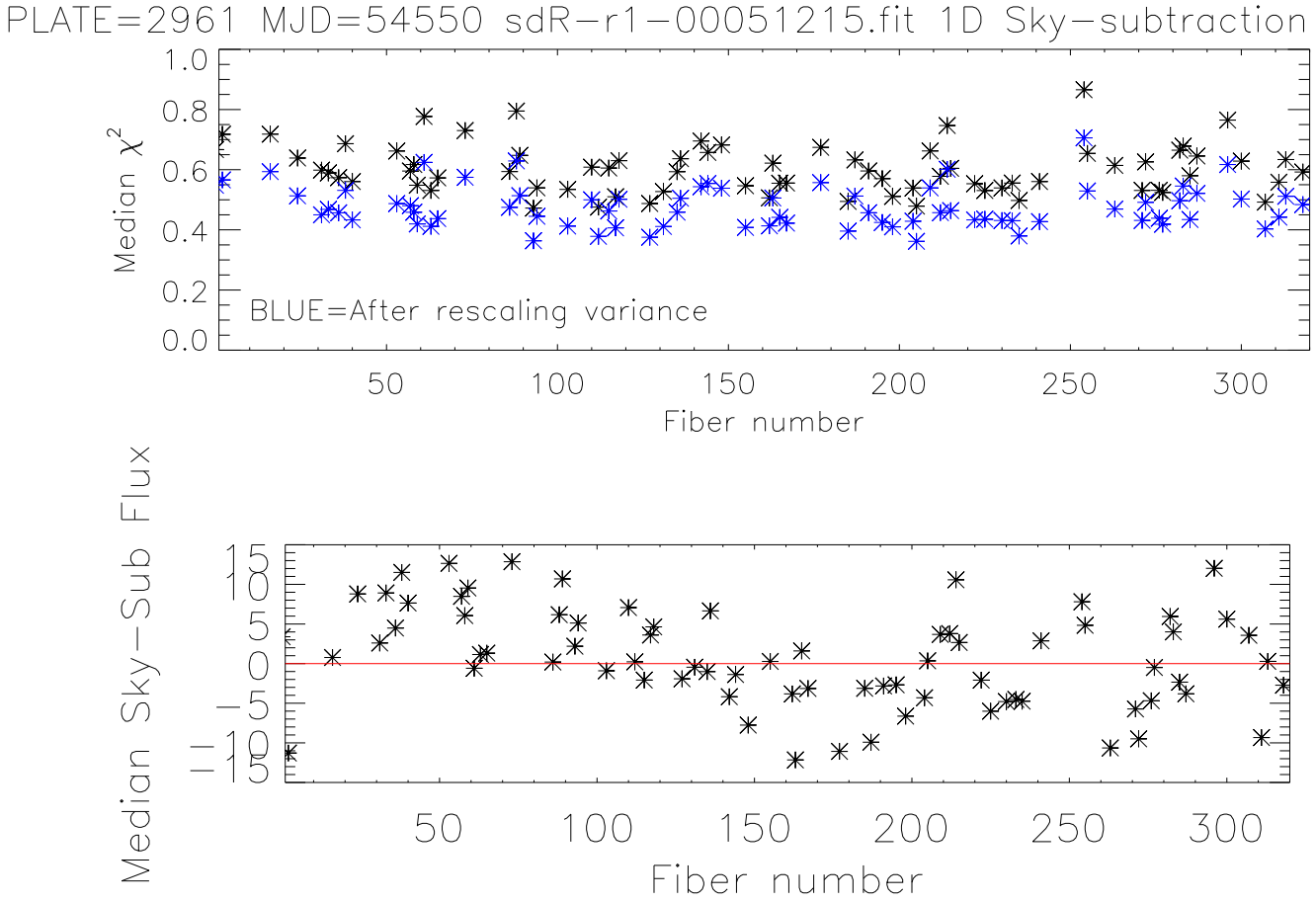

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

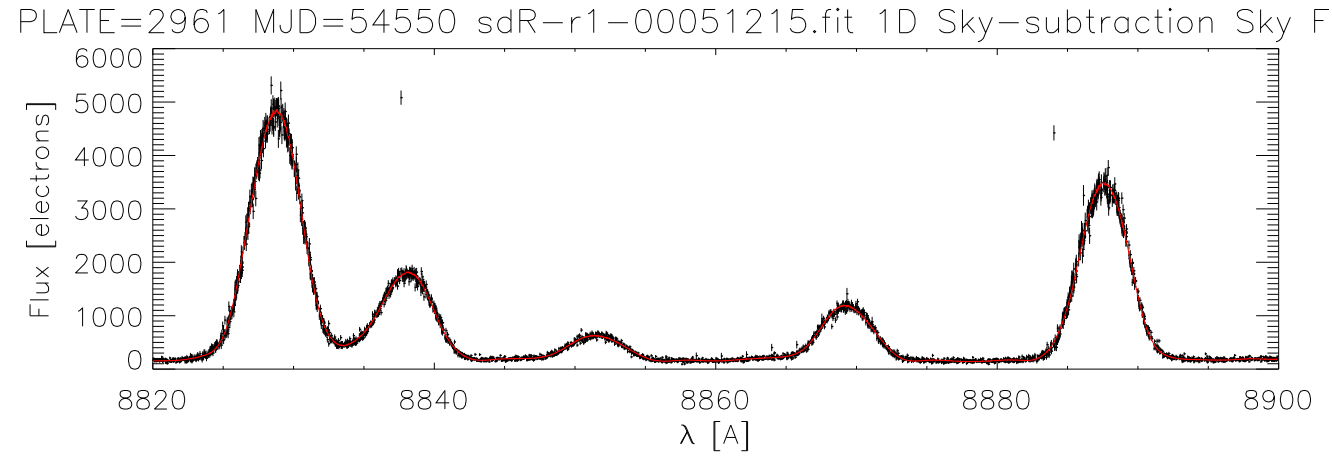

6300.3040
mfhi1 80
mfhi2 81
stdev 0.023
extra −0.54
6363.7760
mfhi1 78
mfhi2 80
stdev 0.028
extra −0.47
6553.6100
mfhi1 81
mfhi2 82
stdev 0.032
extra −0.58
6923.2100
mfhi1 78
mfhi2 79
stdev 0.029
extra −0.48
6949.0300
mfhi1 81
mfhi2 81
stdev 0.030
extra −0.43
7571.7500
mfhi1 80
mfhi2 80
stdev 0.025
extra −0.43
7794.1200
mfhi1 80
mfhi2 80
stdev 0.022
extra −0.52
7821.5100
mfhi1 81
mfhi2 81
stdev 0.022
extra −0.47
8399.1600
mfhi1 80
mfhi2 81
stdev 0.019
extra −0.44
8430.1700
mfhi1 81
mfhi2 81
stdev 0.016
extra −0.46
8885.8300
mfhi1 80
mfhi2 80
stdev 0.021
extra −0.46
8919.6100
mfhi1 81
mfhi2 81
stdev 0.021
extra −0.46
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

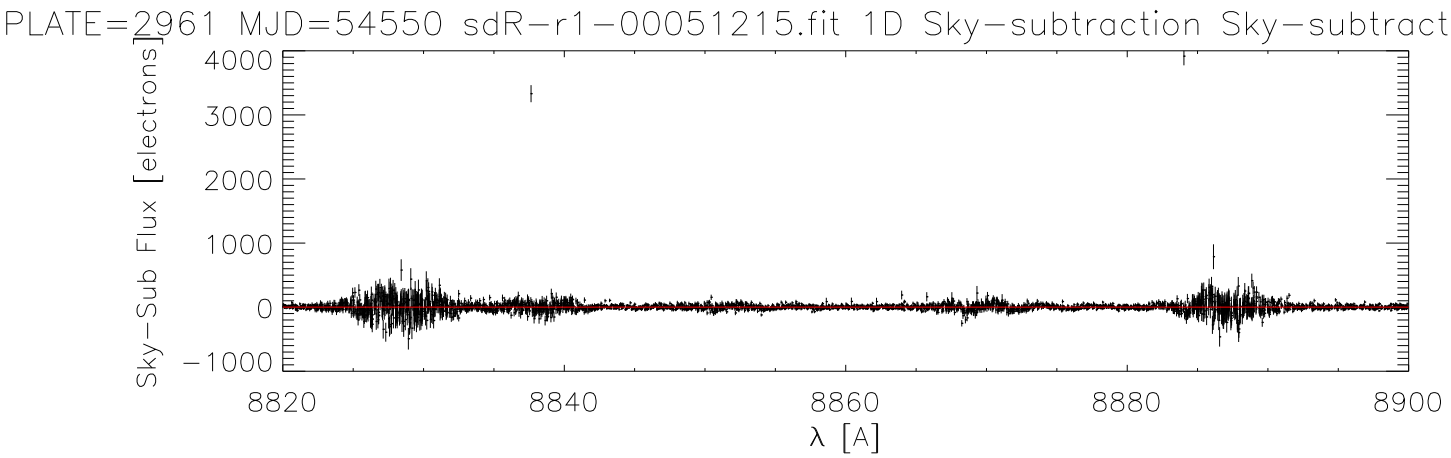

−0.40
−0.45
−0.50
−0.55
sky shift, pixels
5000
6000
7000
8000
9000
10000

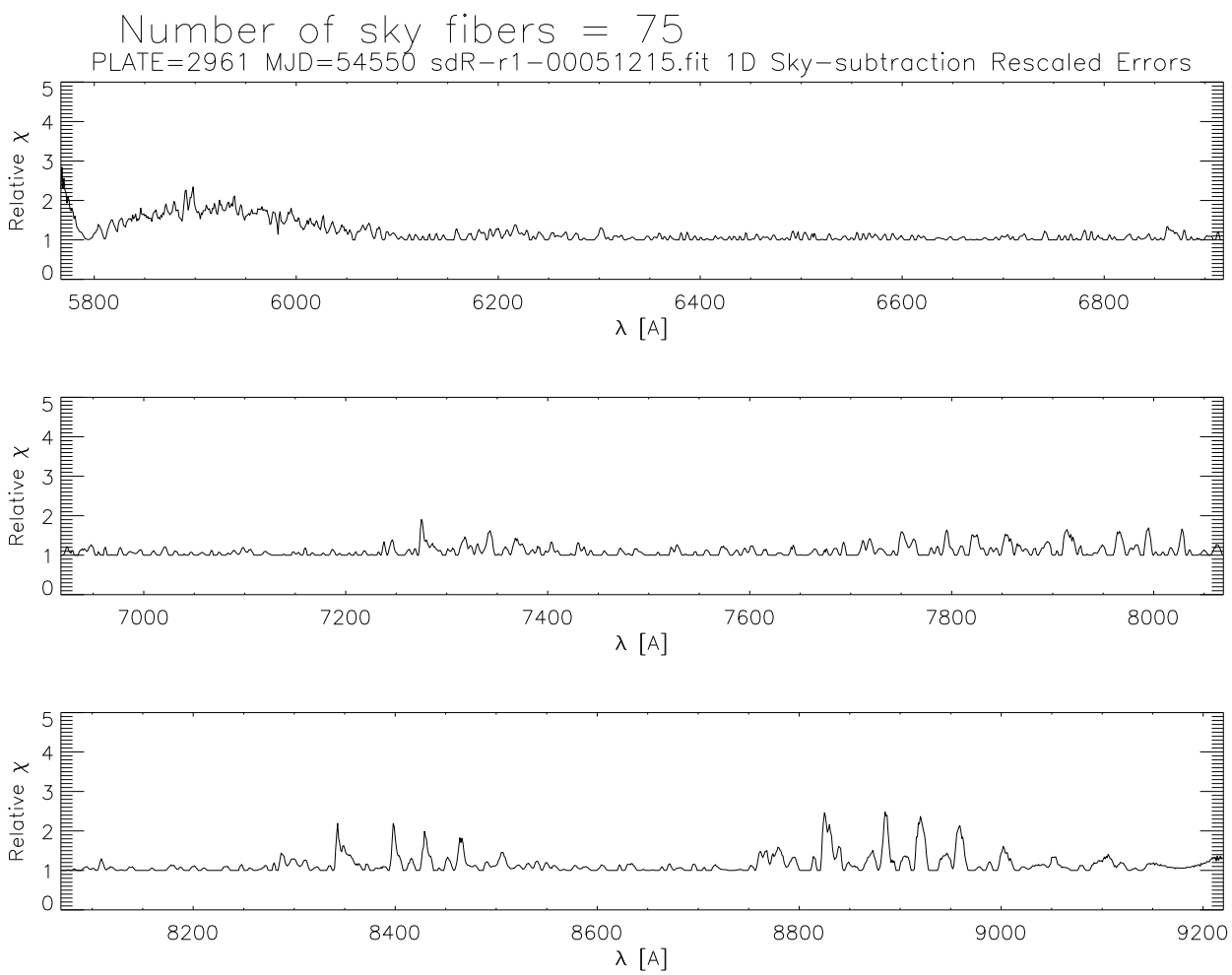

PLATE=2961 MJD=54550 Smooth superflat for sdR-r1-00051215.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

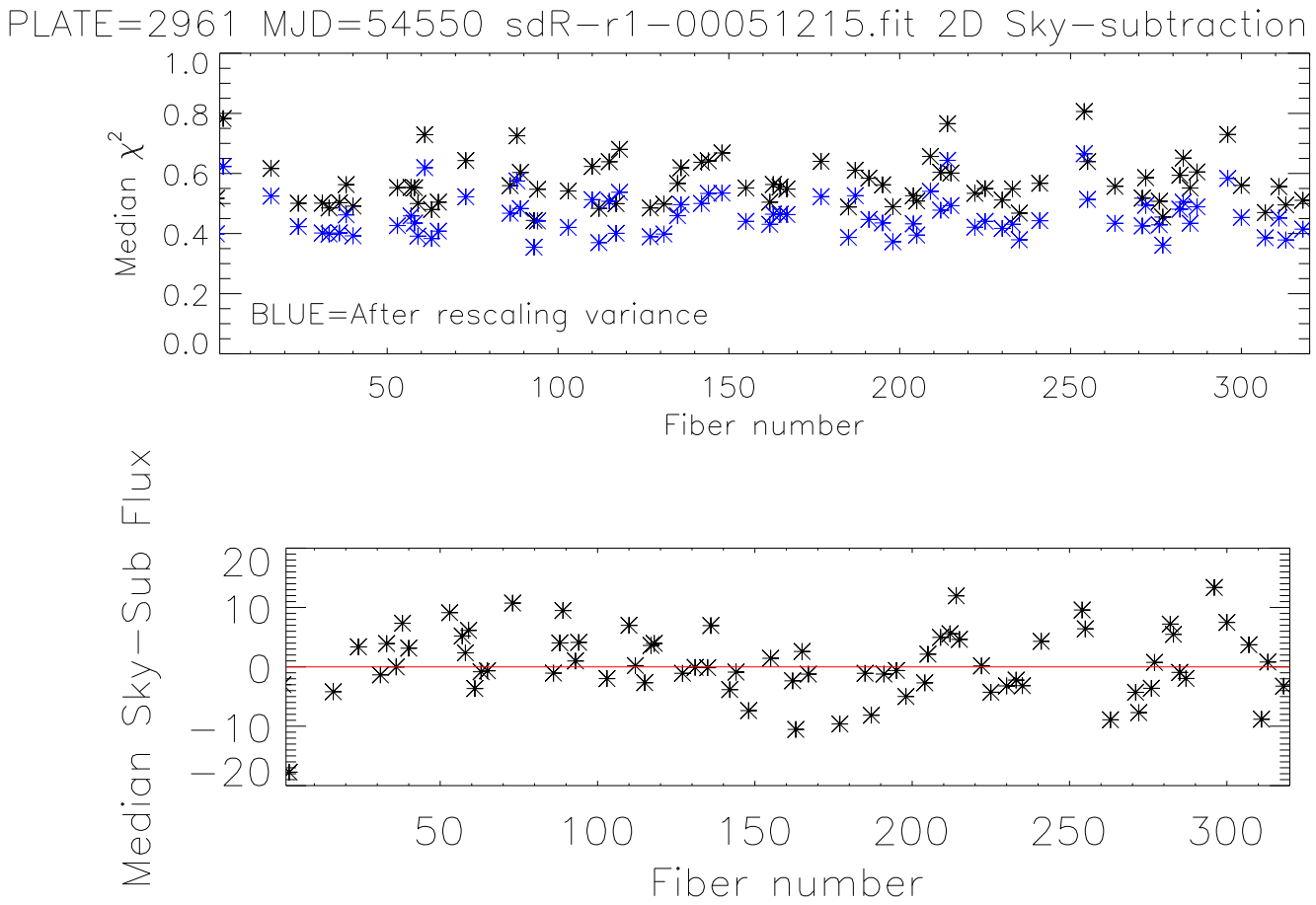
es= −0.0000

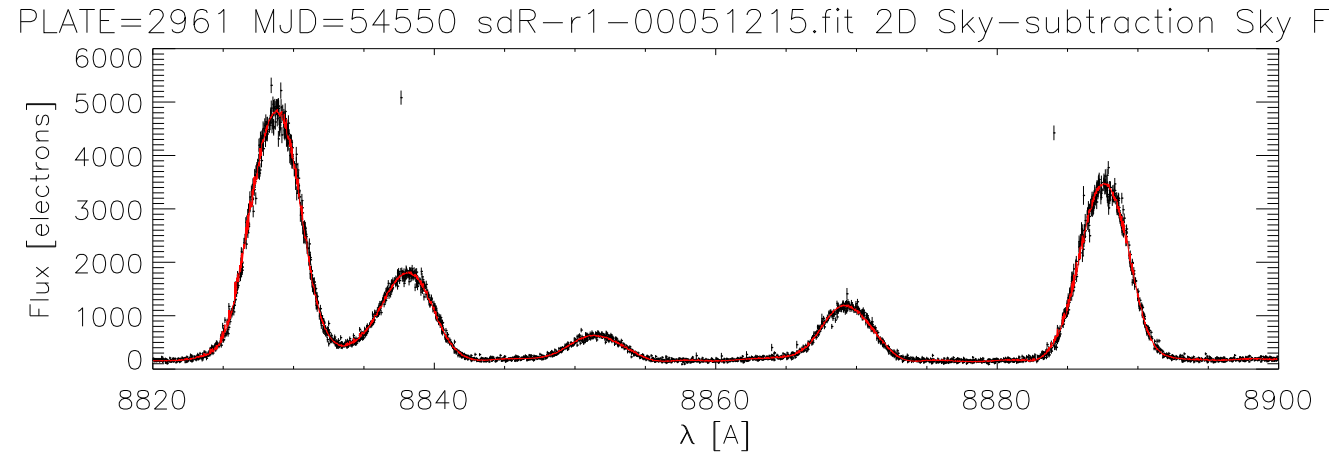

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

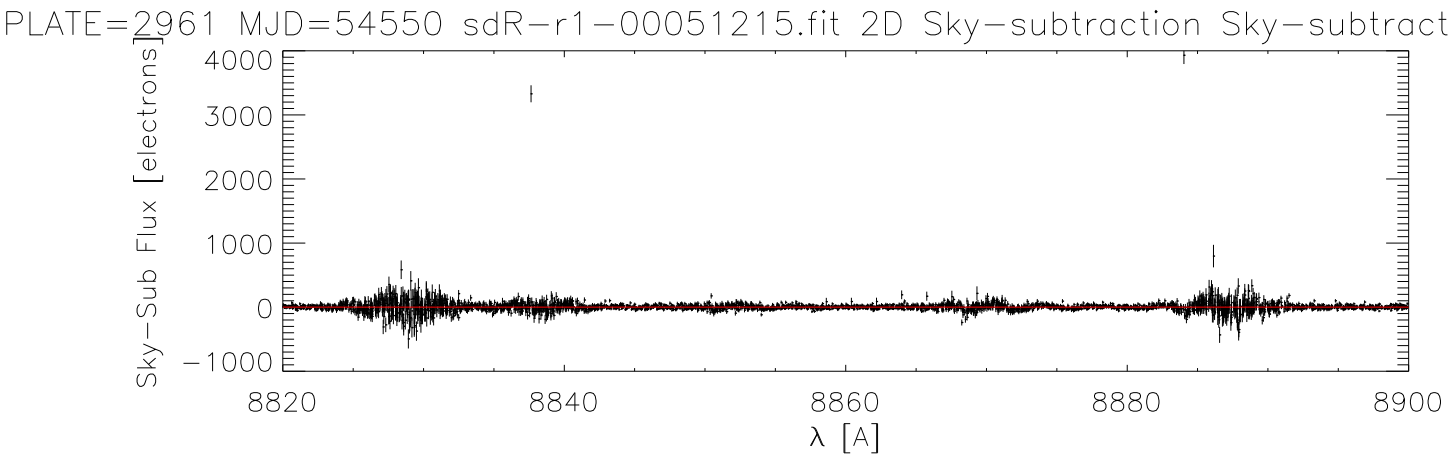

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

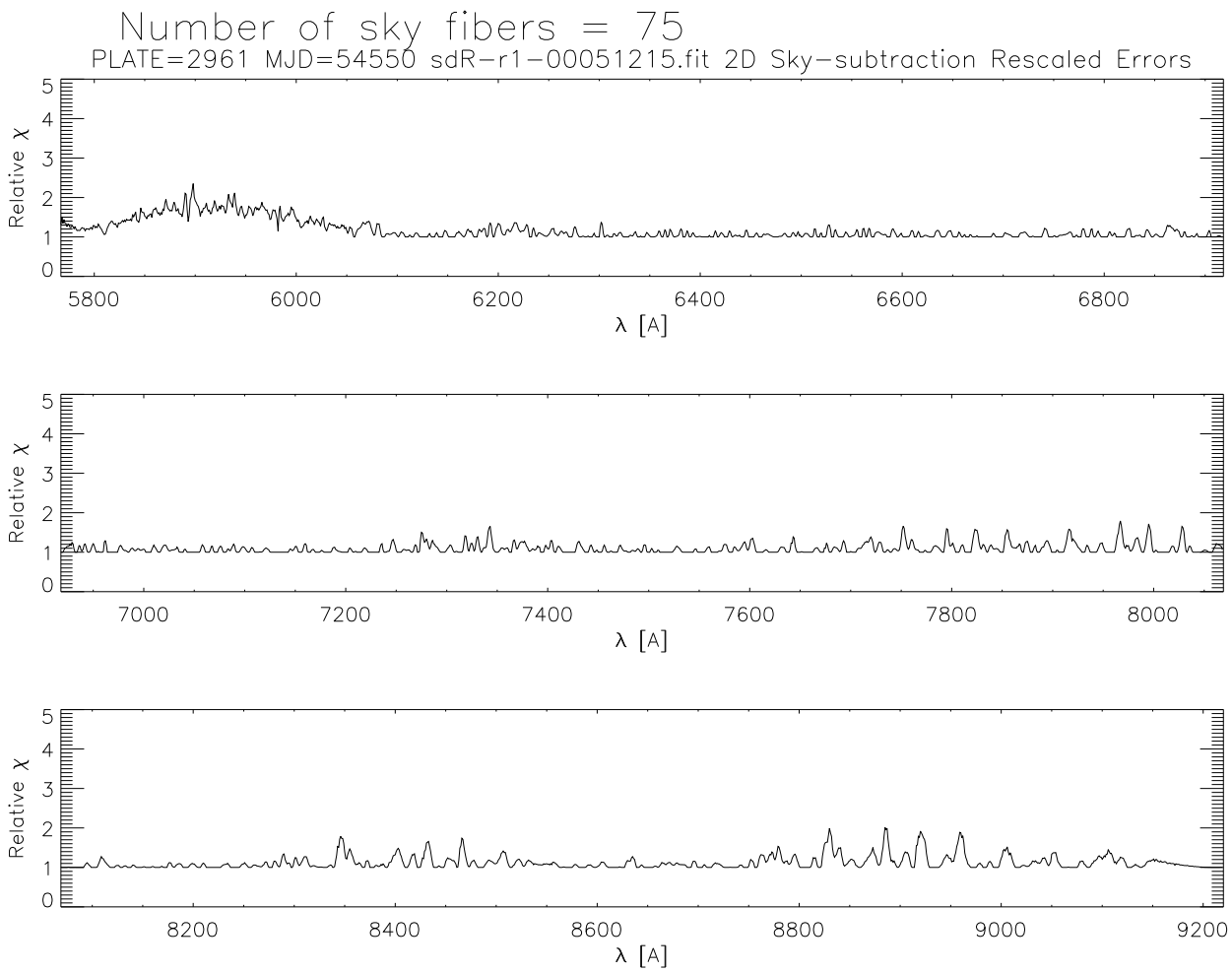

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

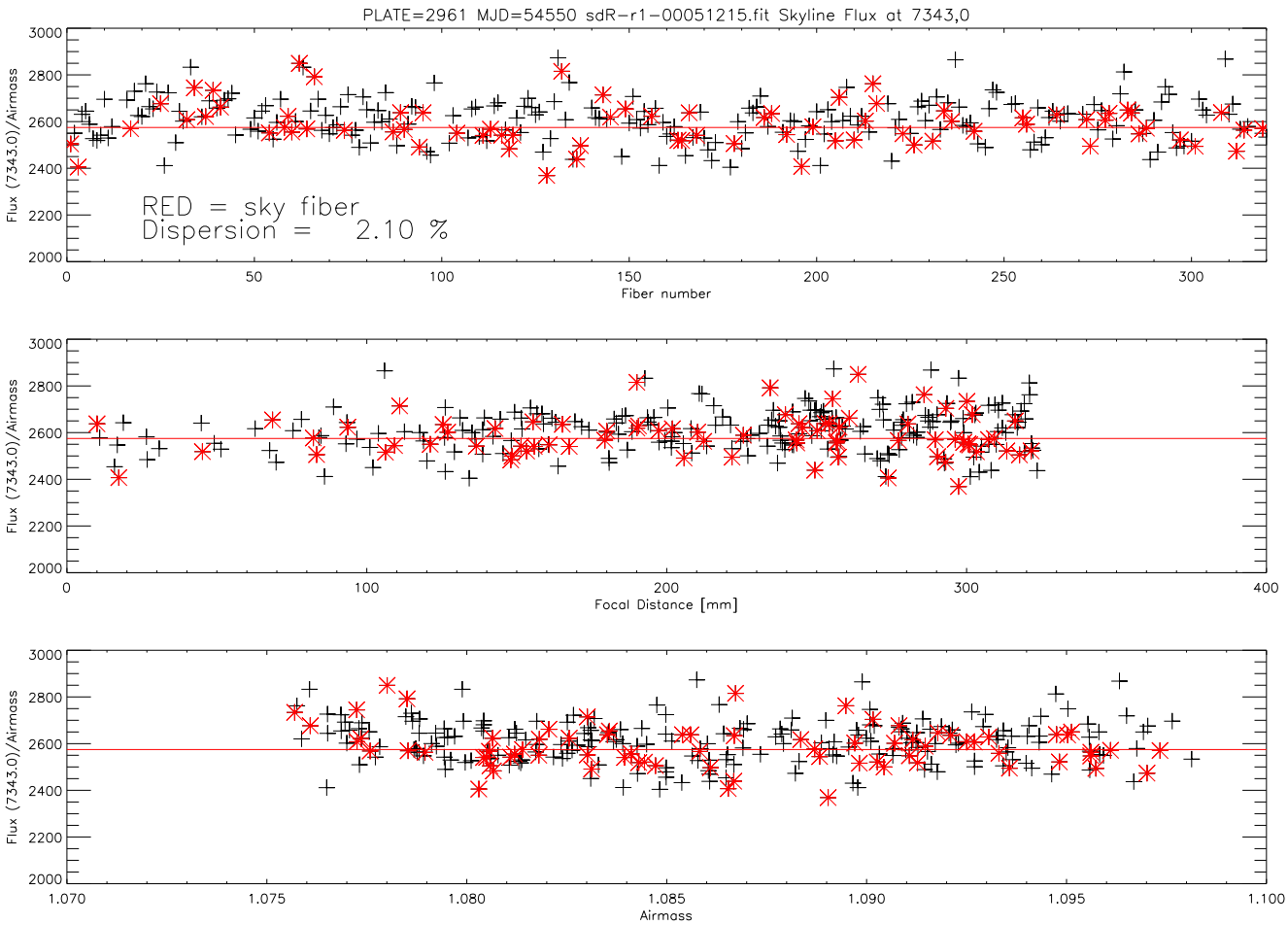

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051215.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

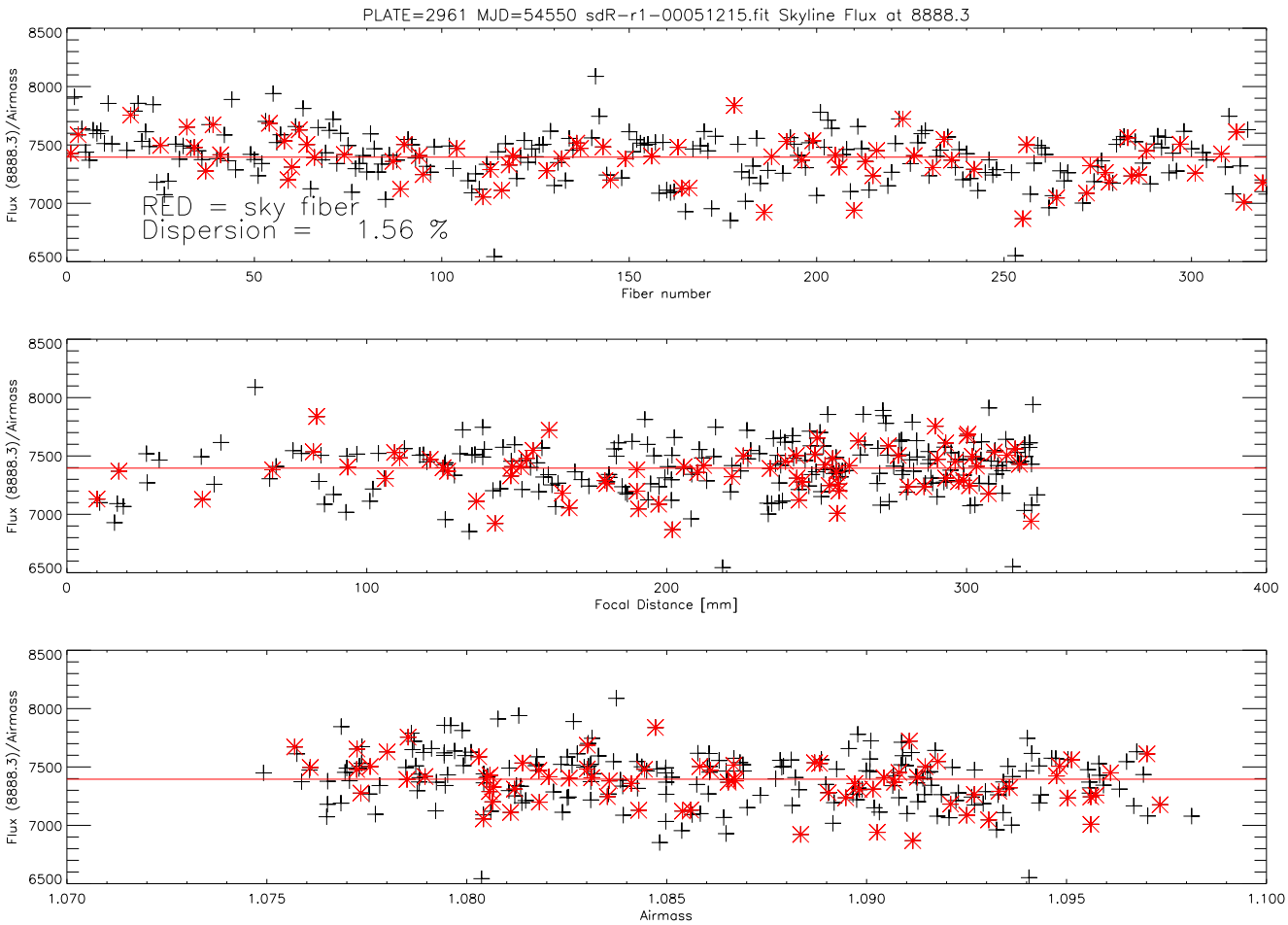

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

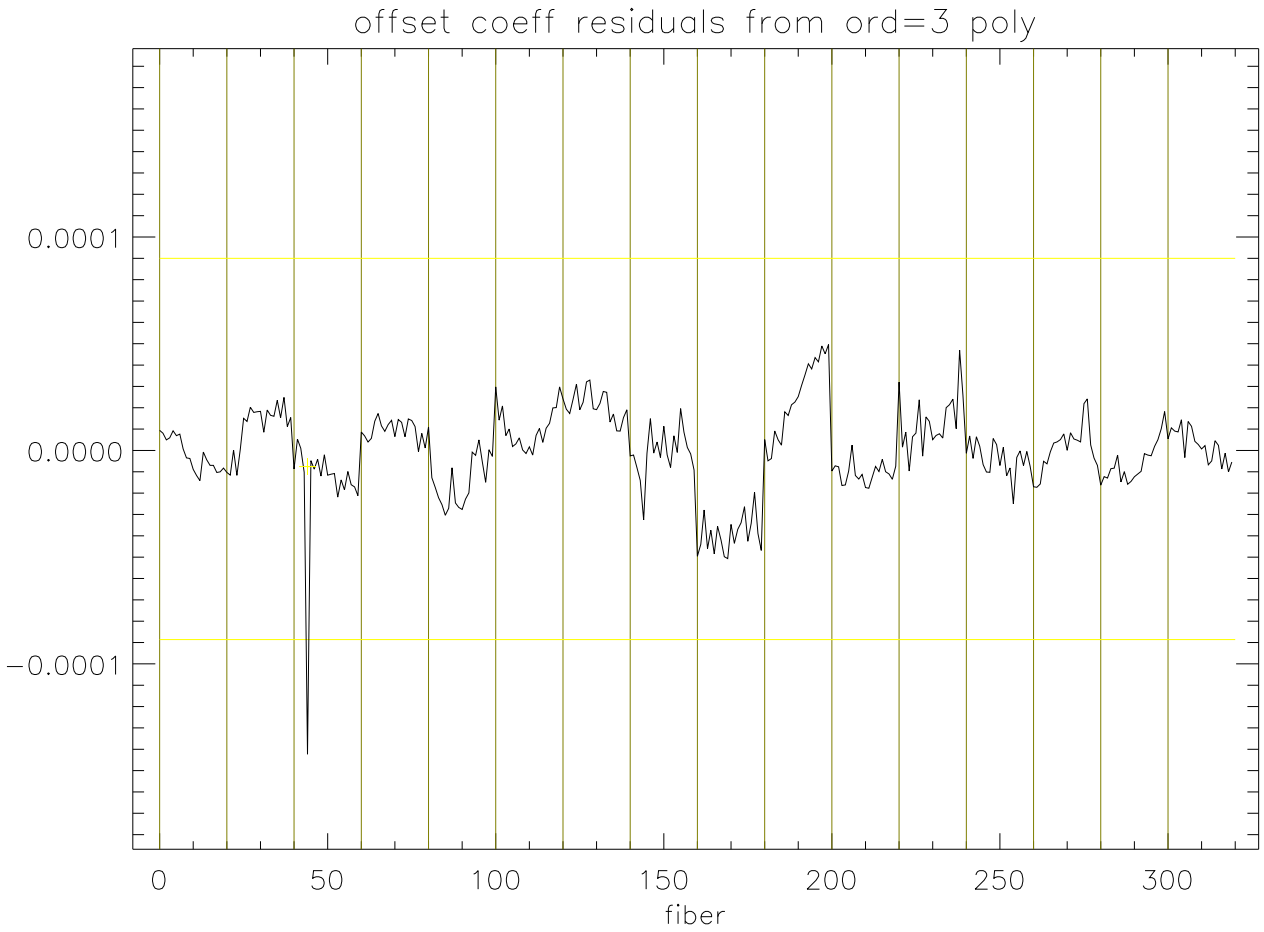

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

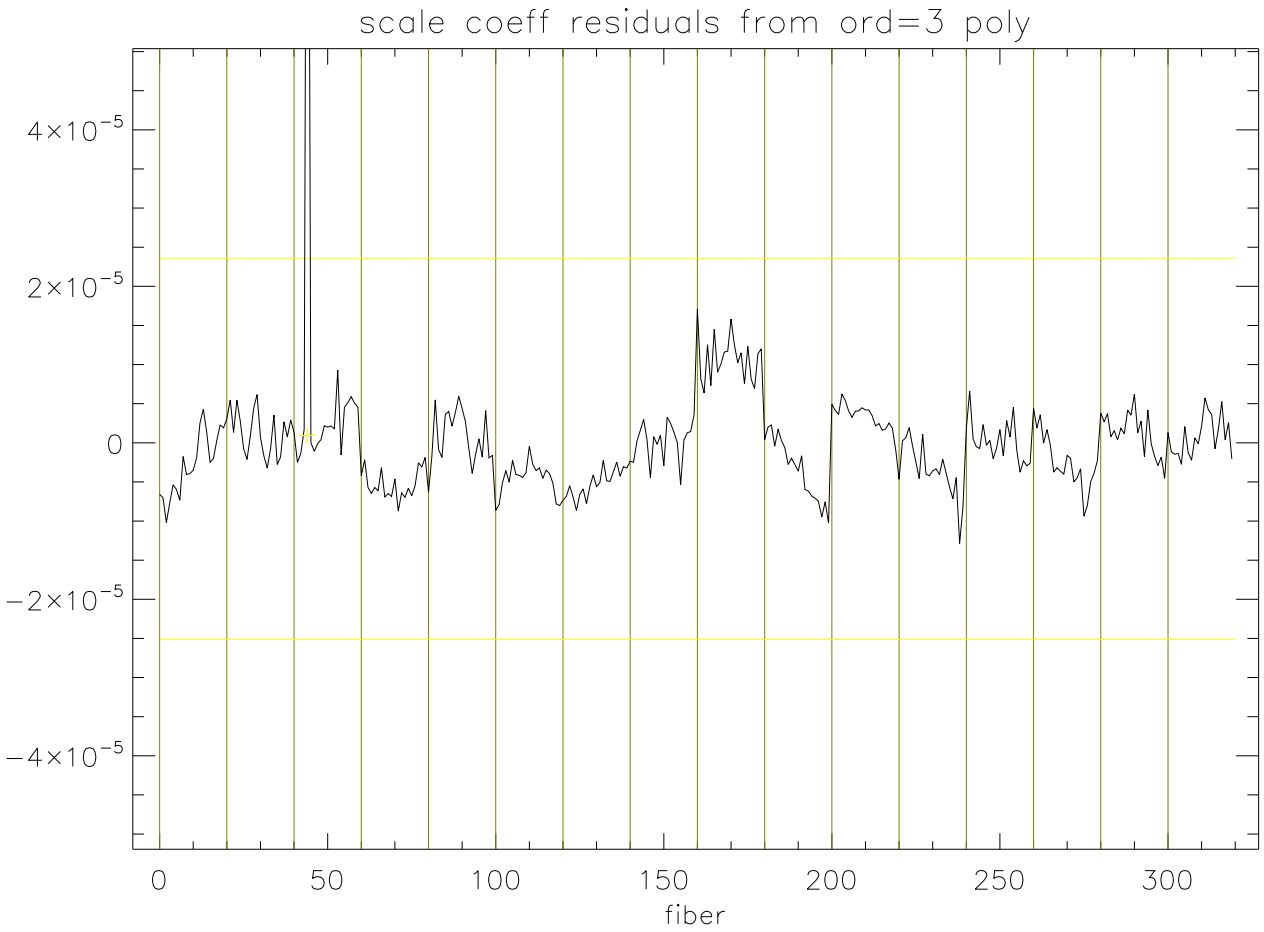

PLATE=2961 MJD=54550 sdR-r1-00051215.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

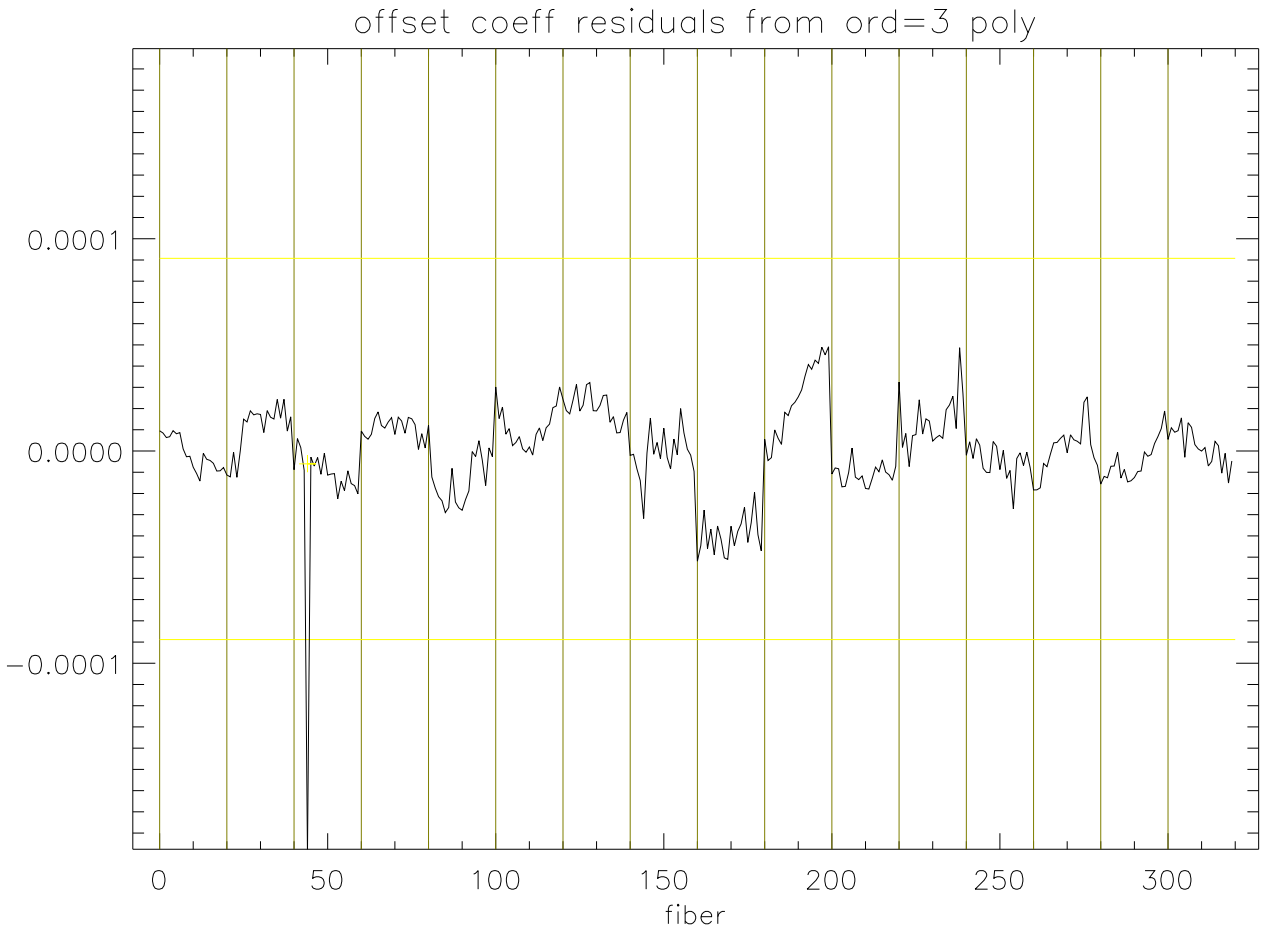

Number of sky fibers = 75
PLATE=2961 MJD=54550 sdR-r1-00051215.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

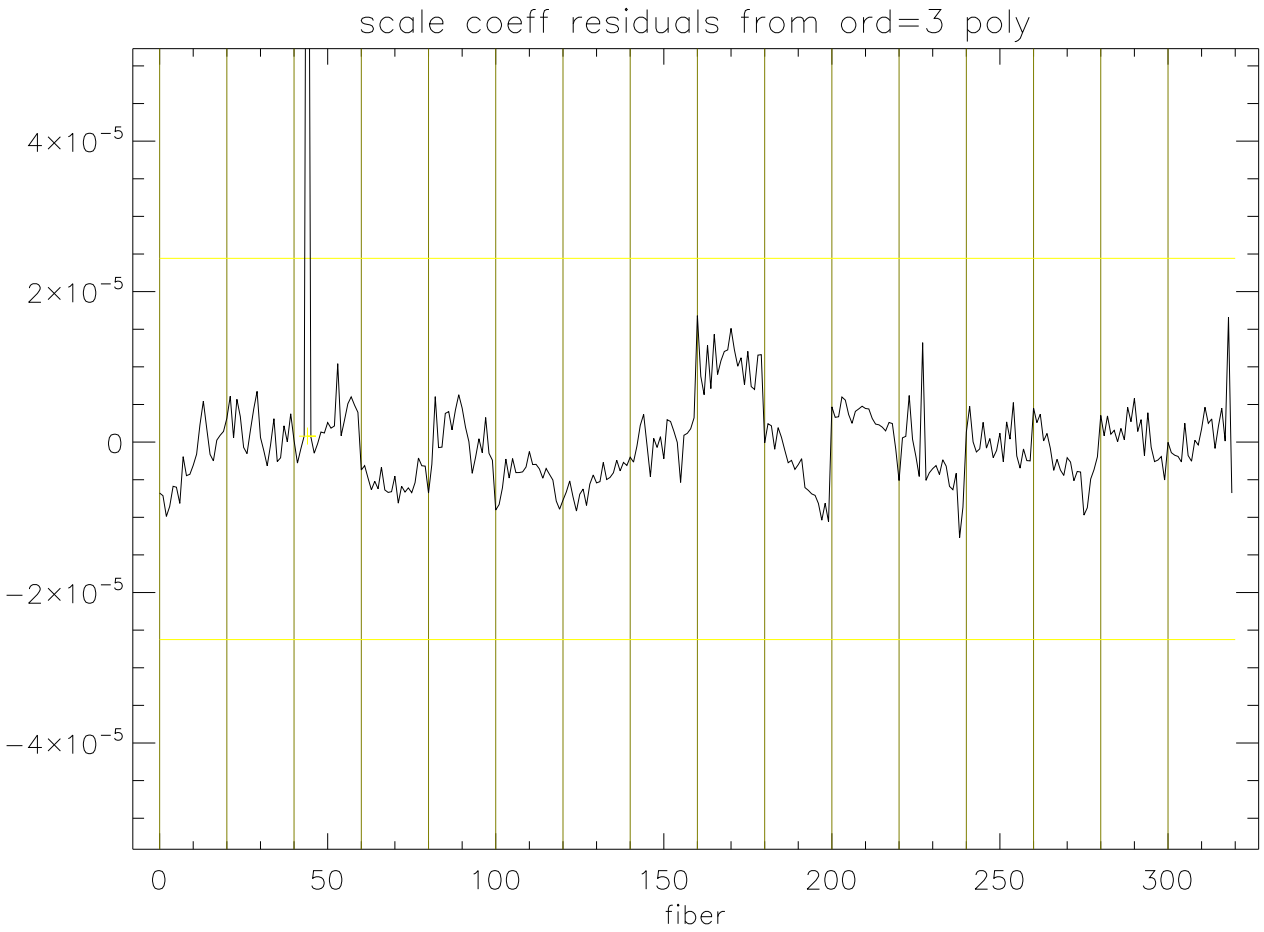

PLATE=2961 MJD=54550 sdR-r1-00051215.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

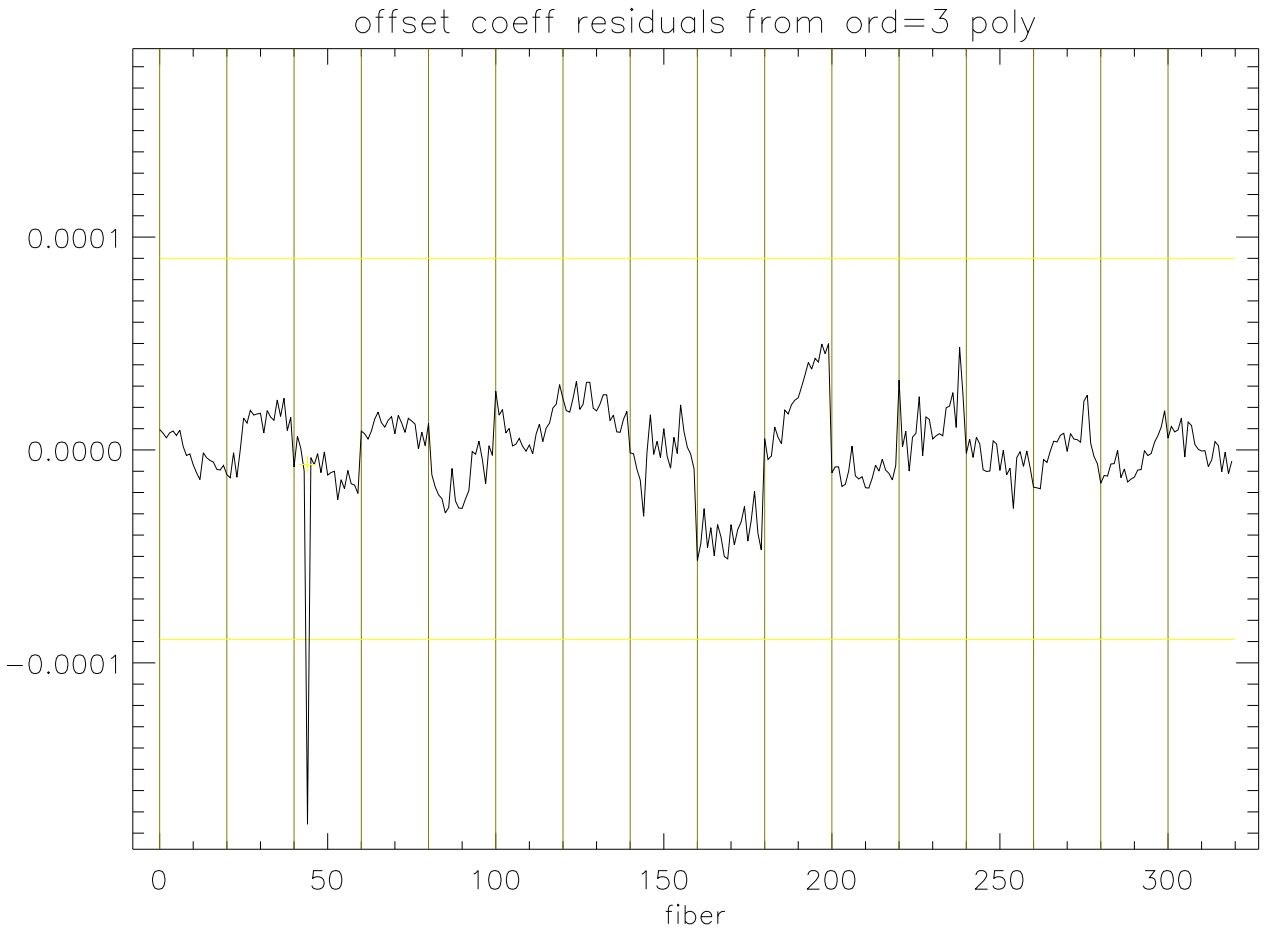

PLATE=2961 MJD=54550 sdR-r1-00051215.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.56 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

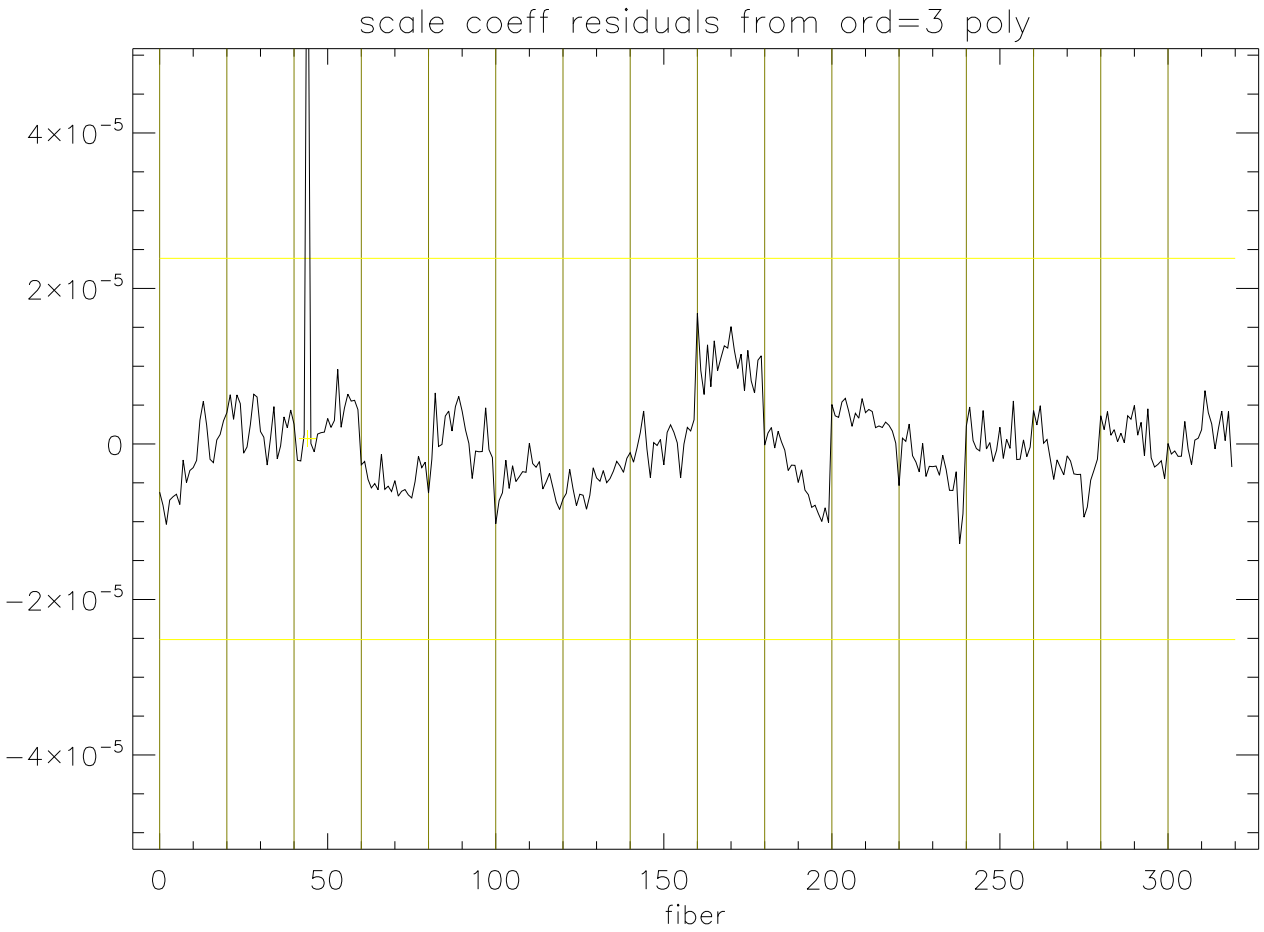

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

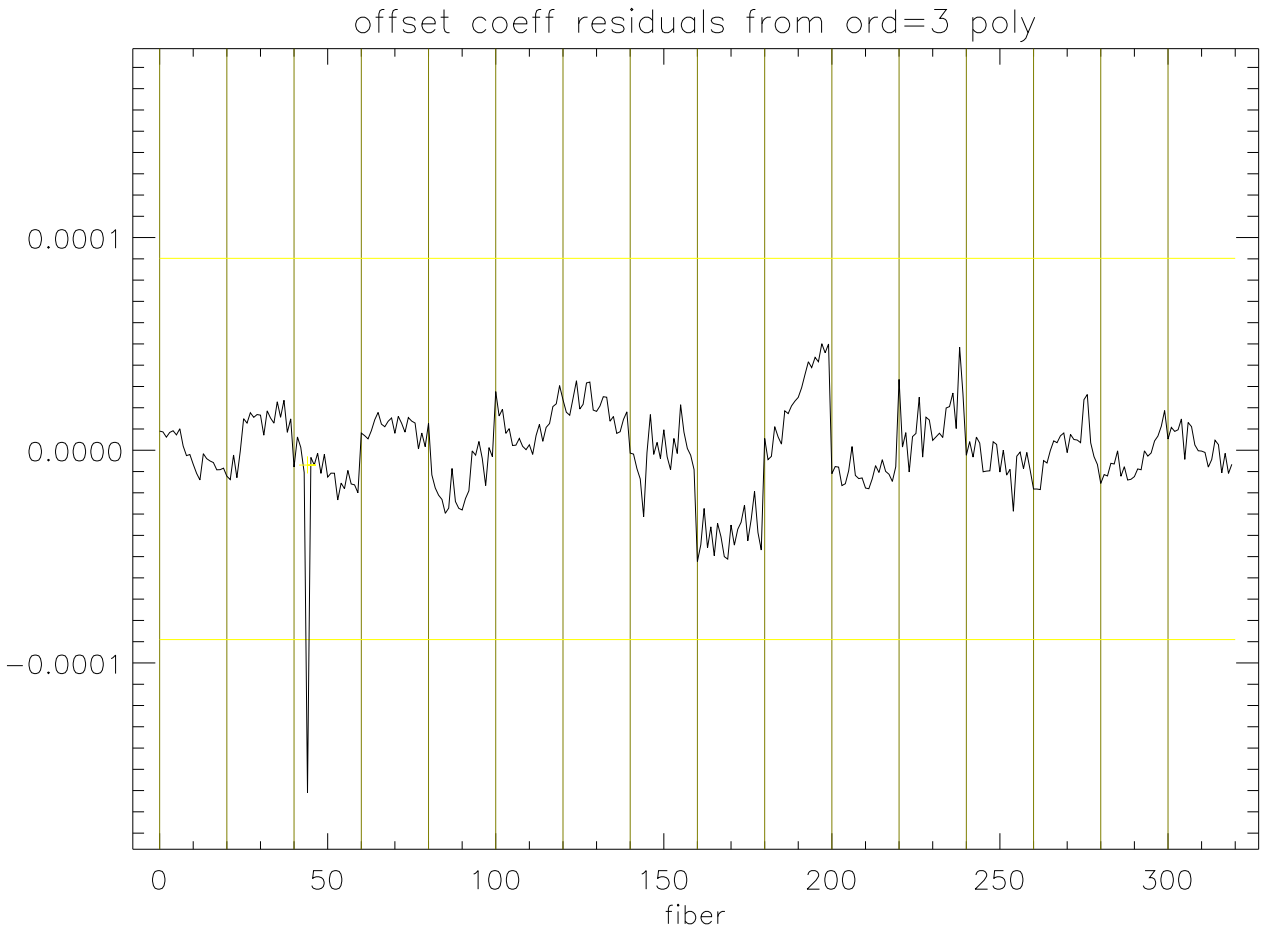

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

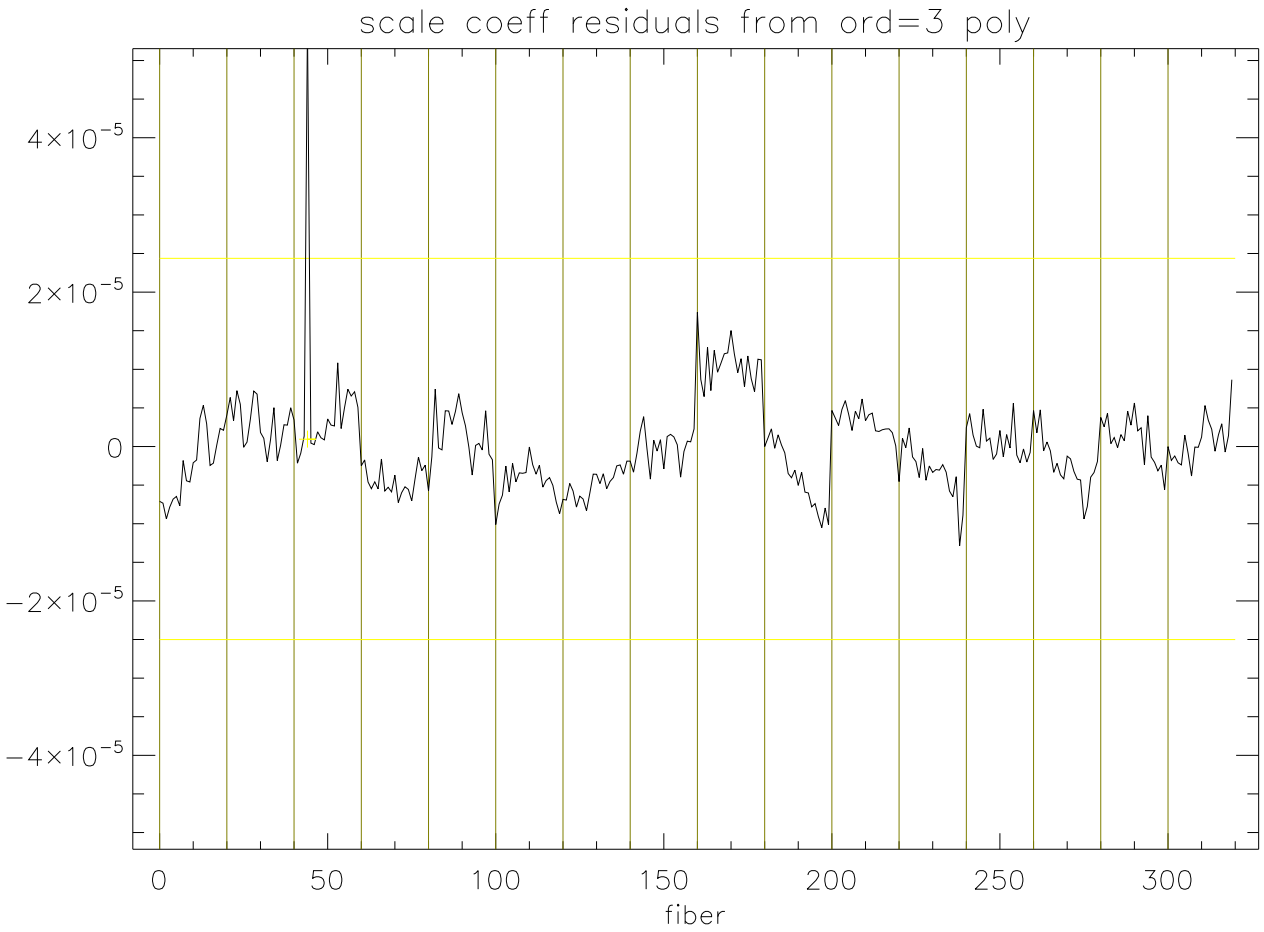

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

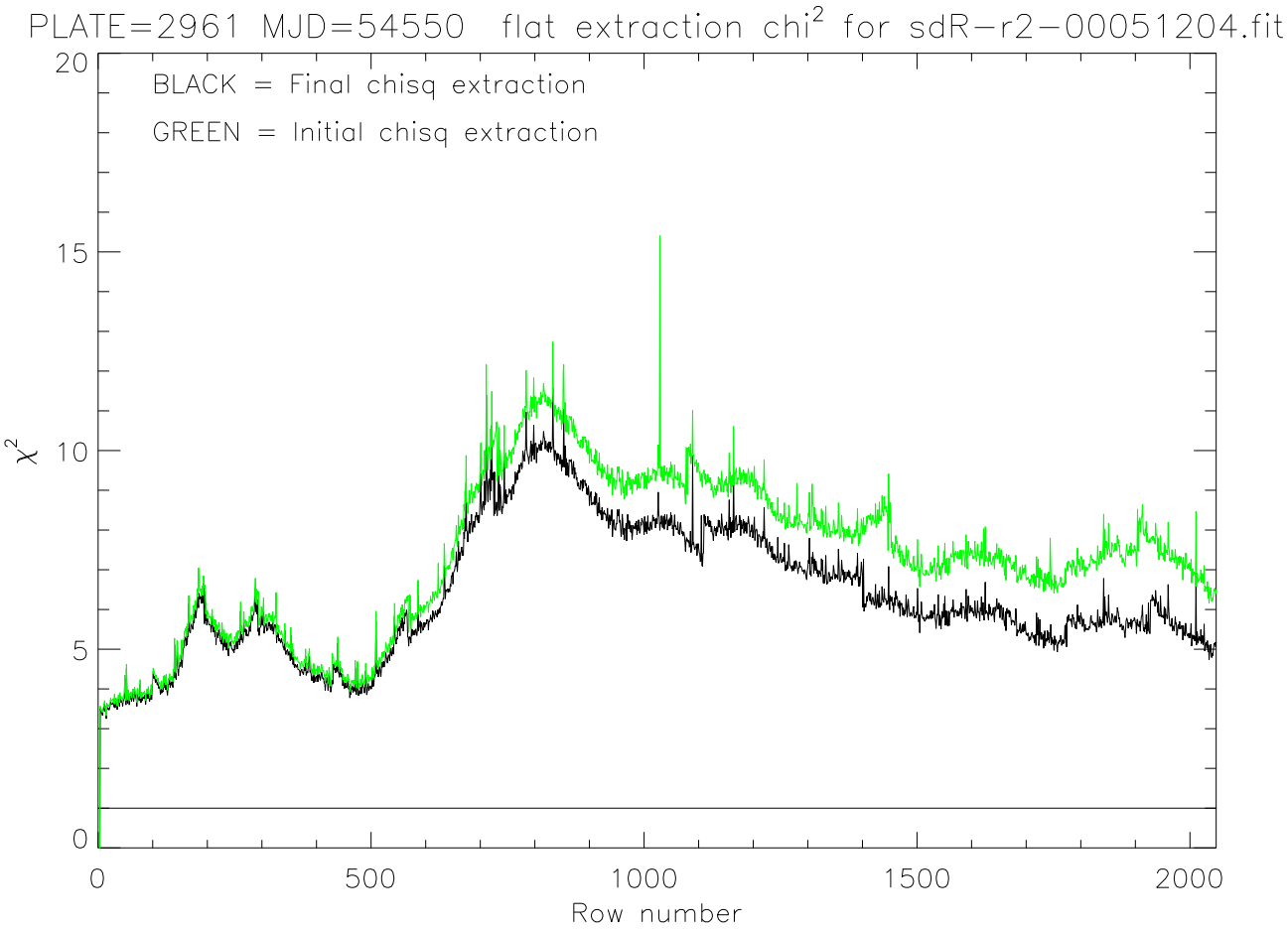

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

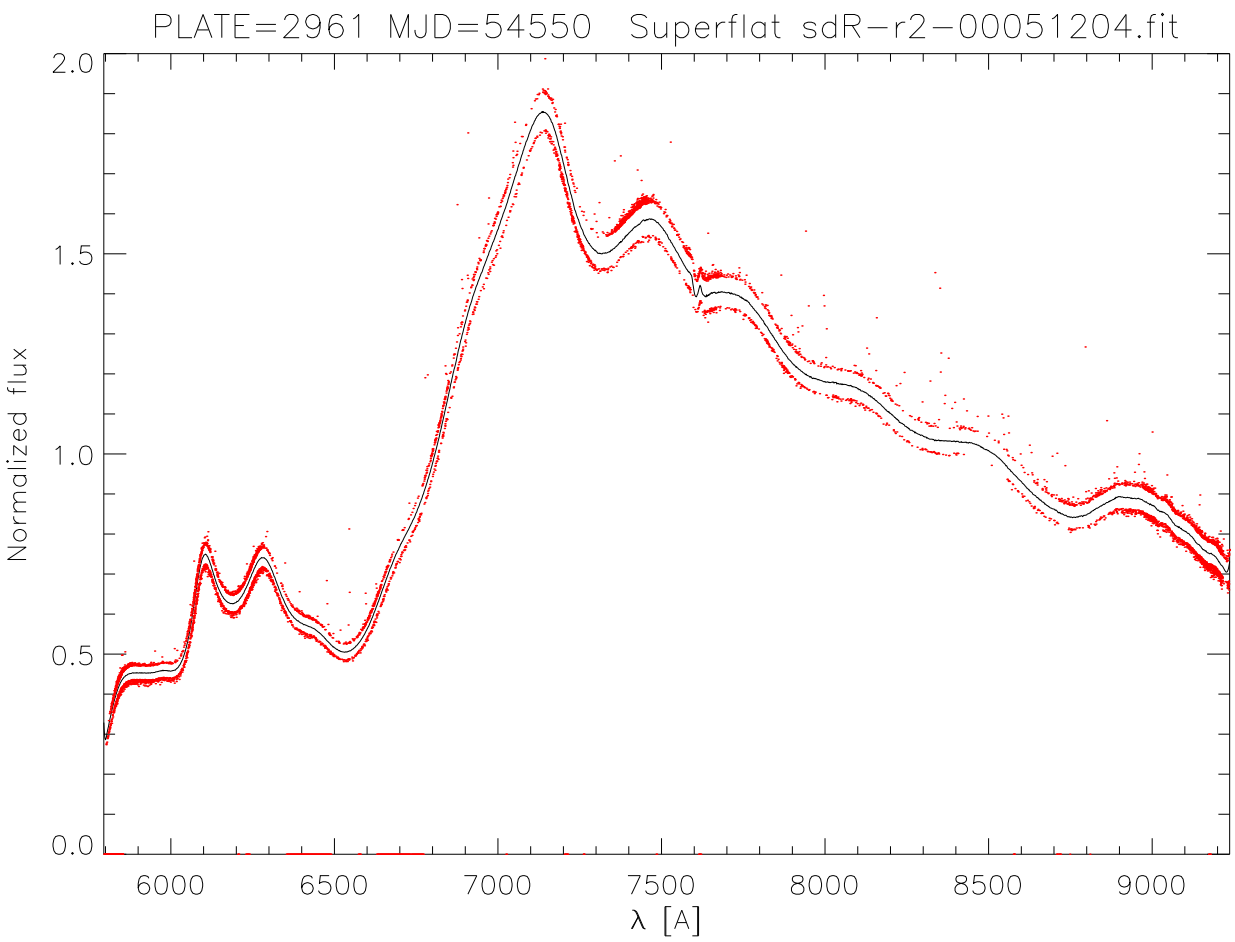

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

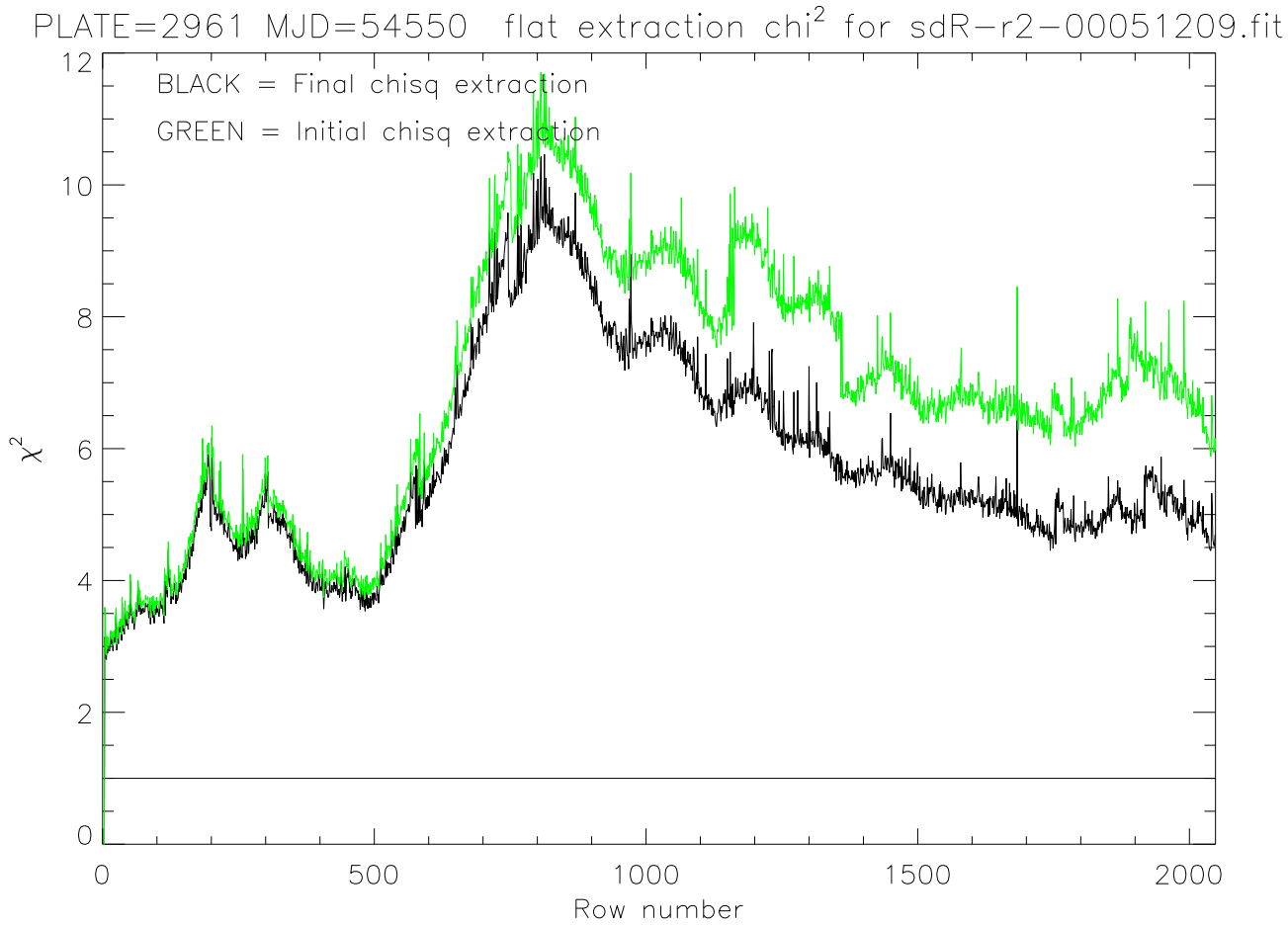

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

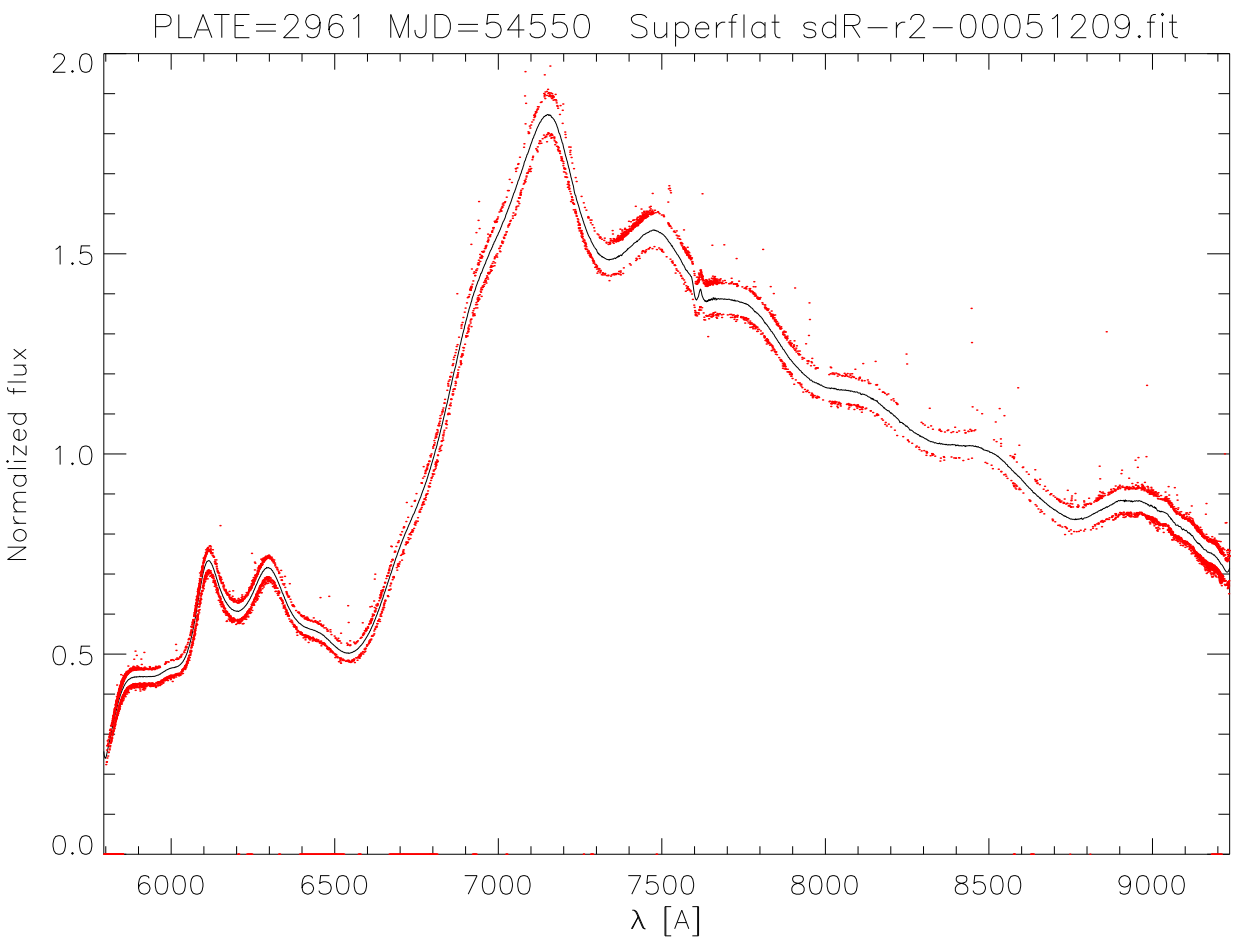

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

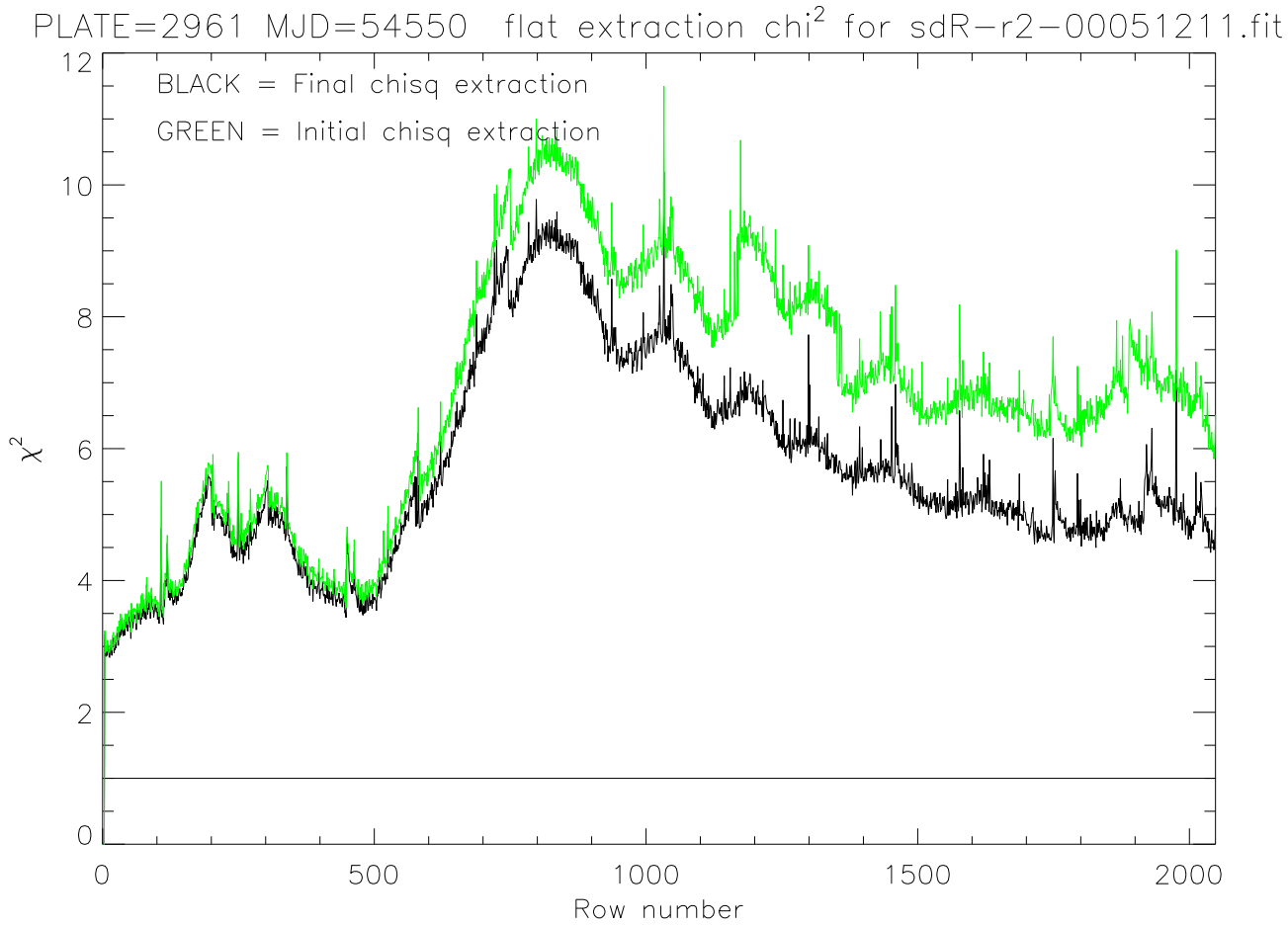

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

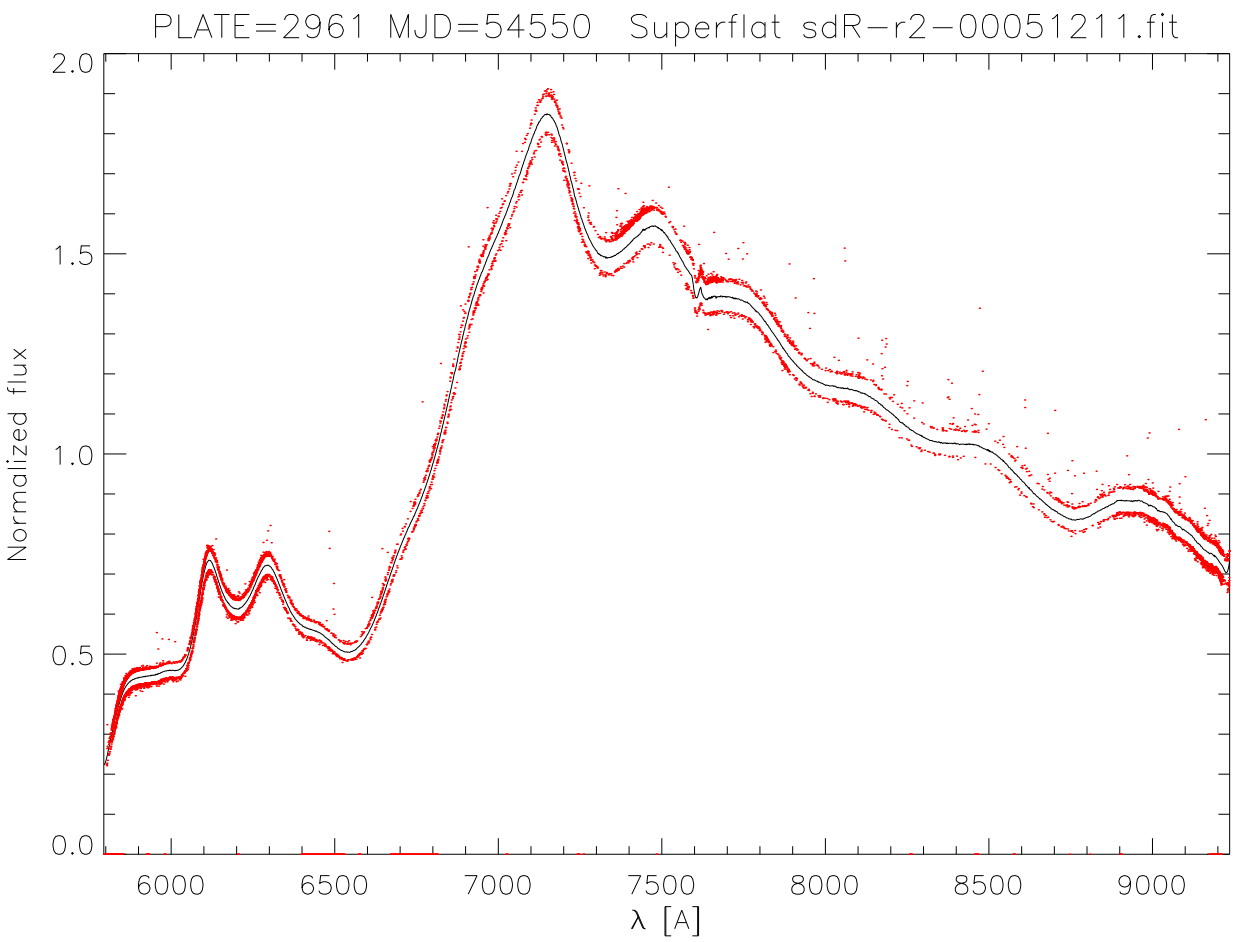

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r2−00051204.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

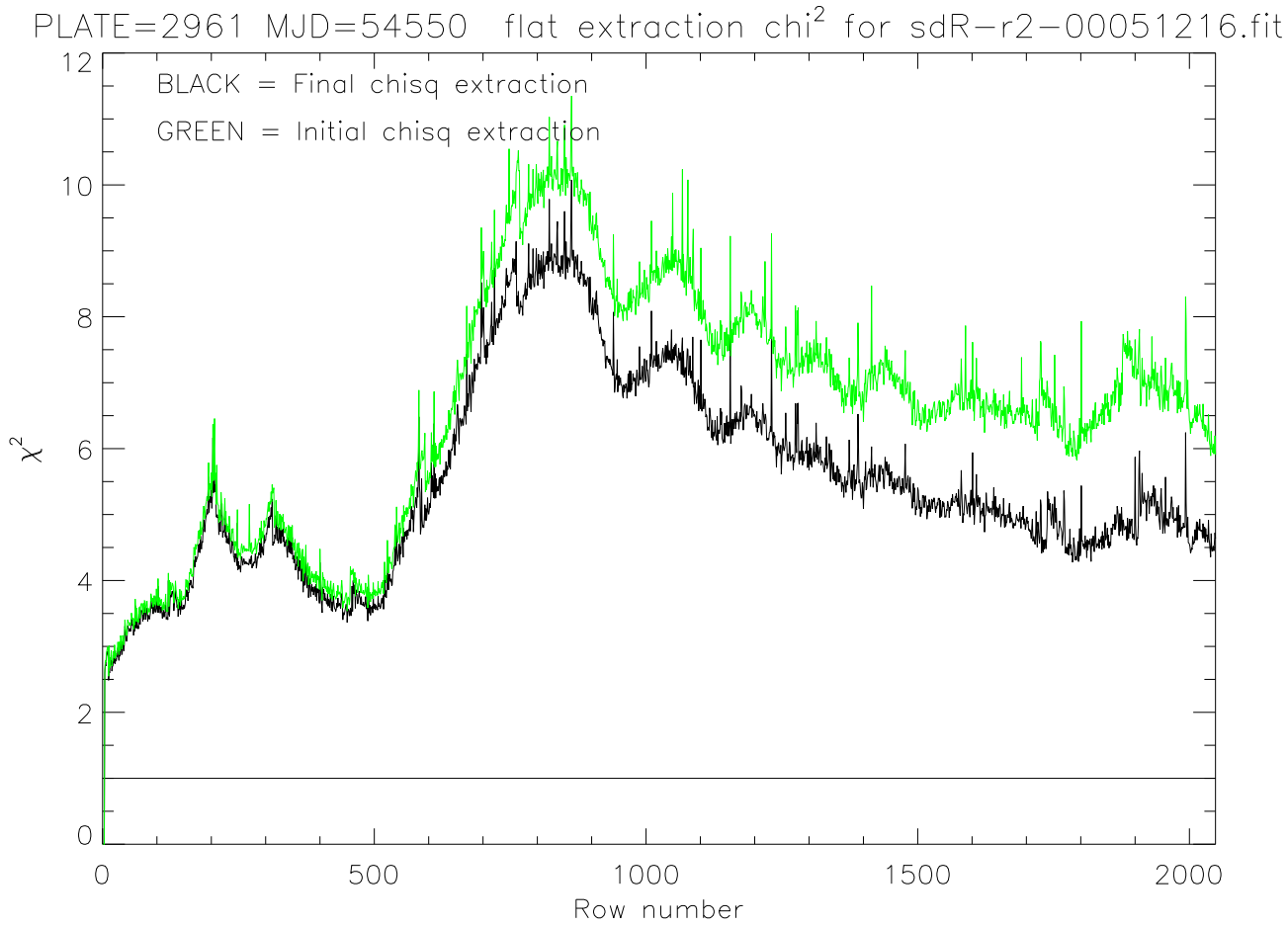

PLATE=2961 MJD=54550 Superflat sdR-r2-00051204.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

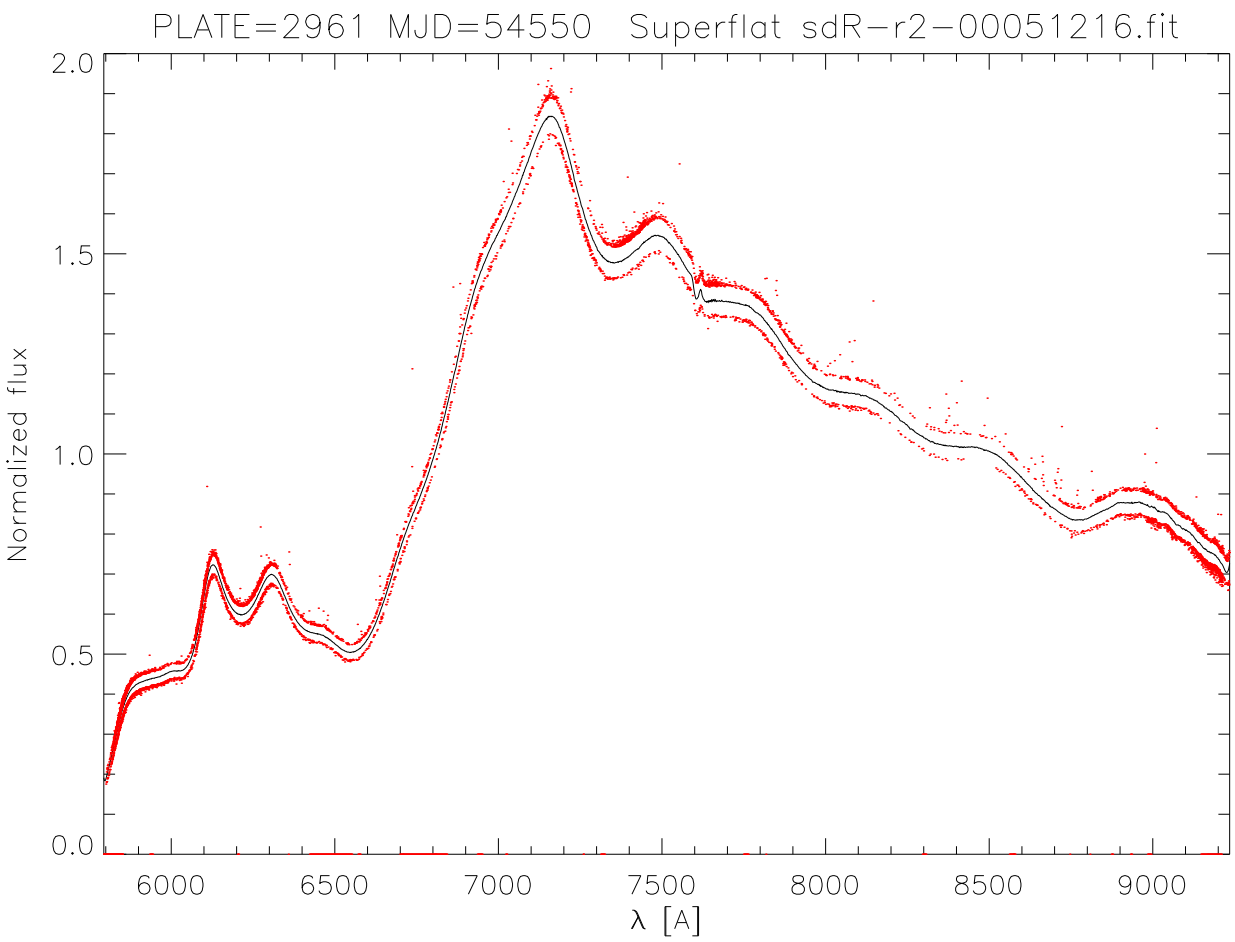

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r2−00051209.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

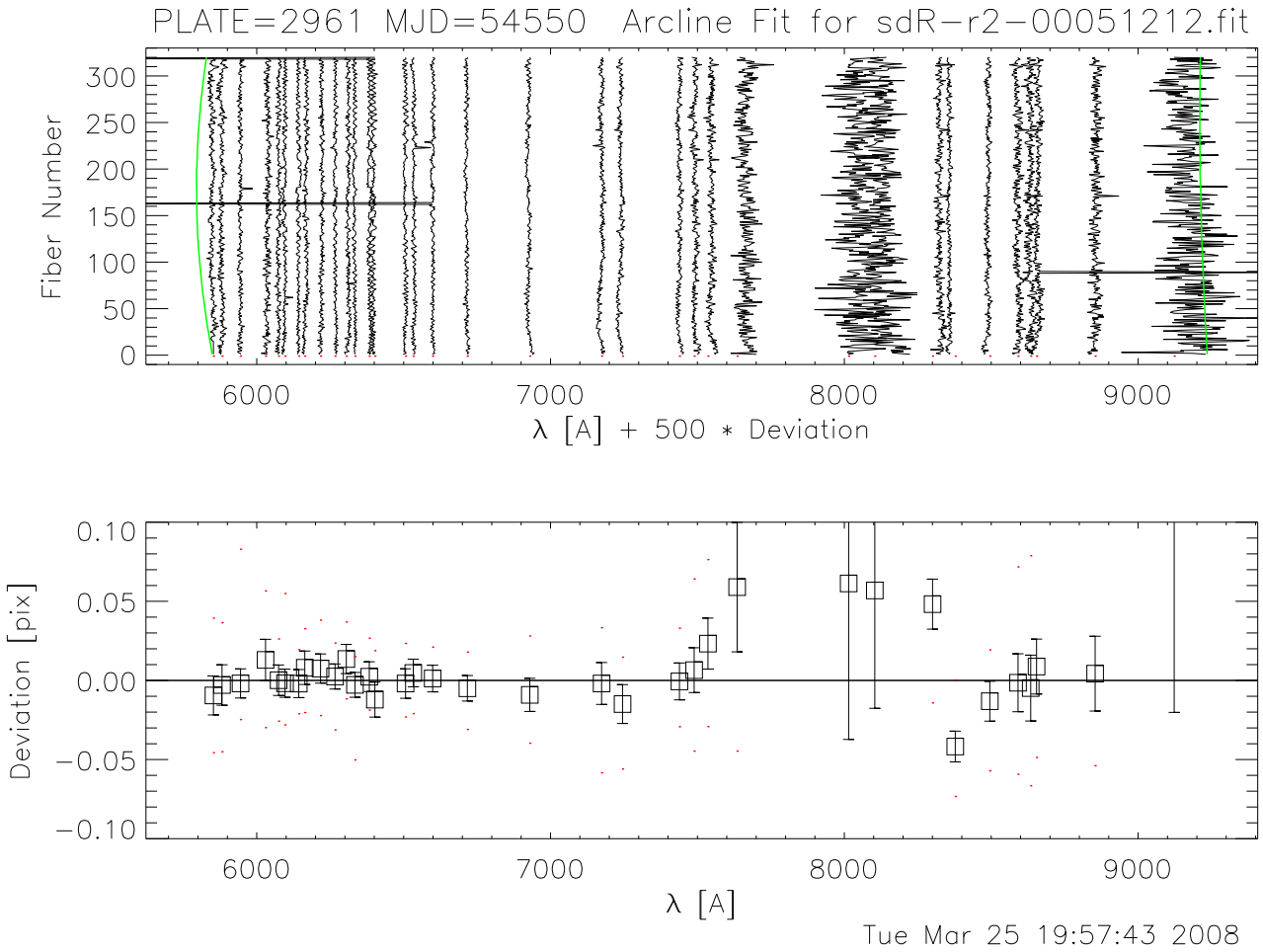

PLATE=2961 MJD=54550 Superflat sdR-r2-00051209.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

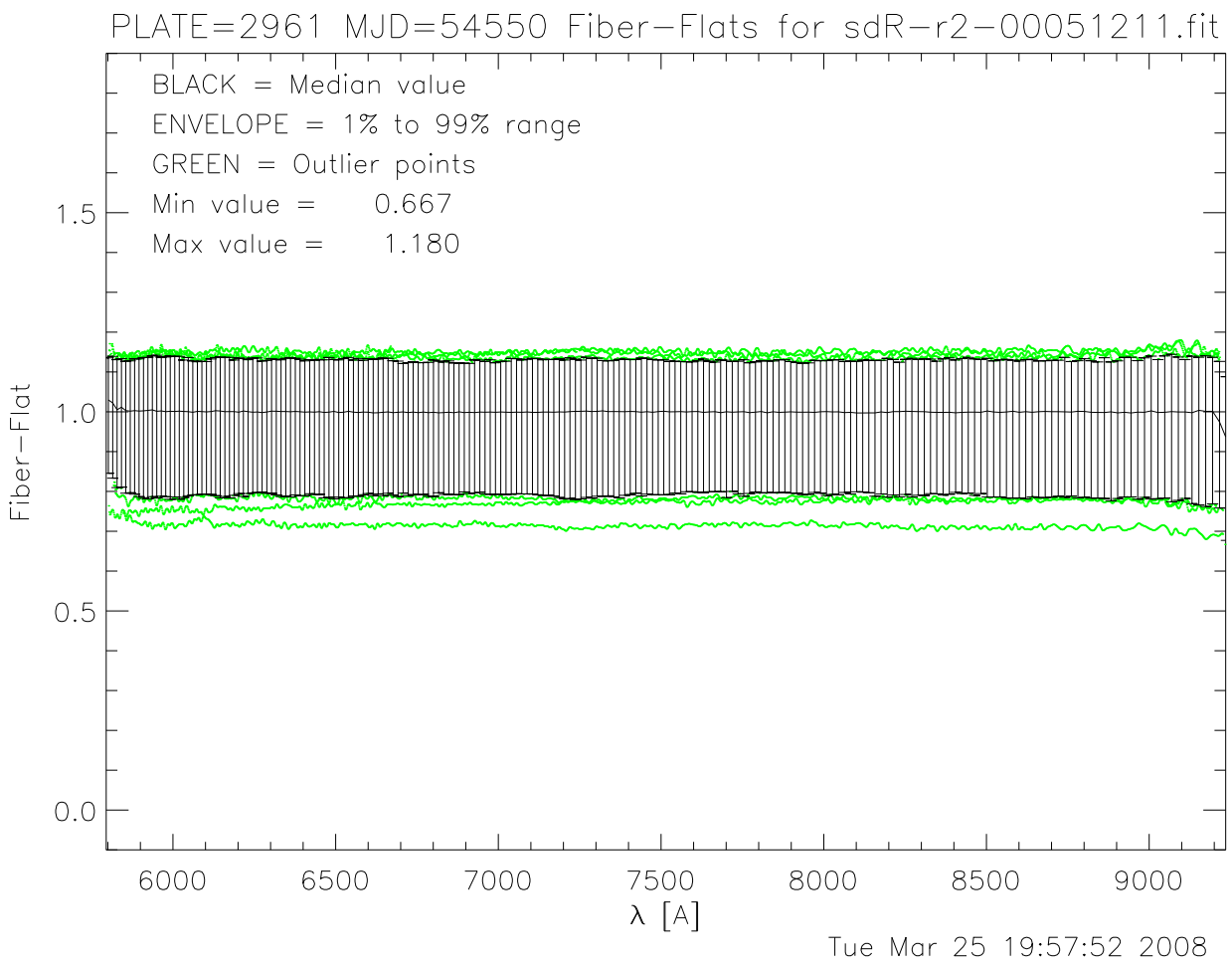

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r2−00051211.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

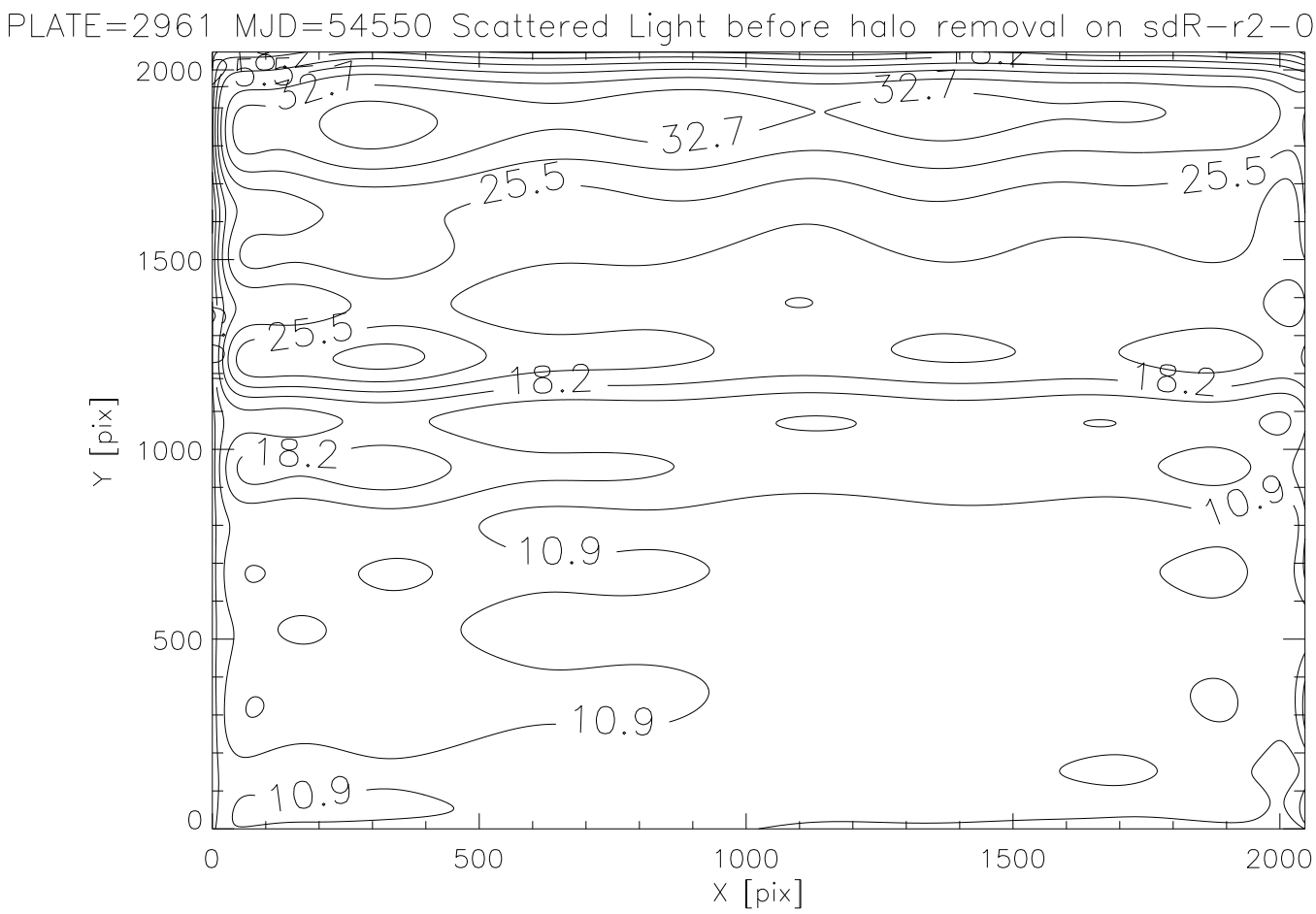

PLATE=2961 MJD=54550 Superflat sdR-r2-00051211.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

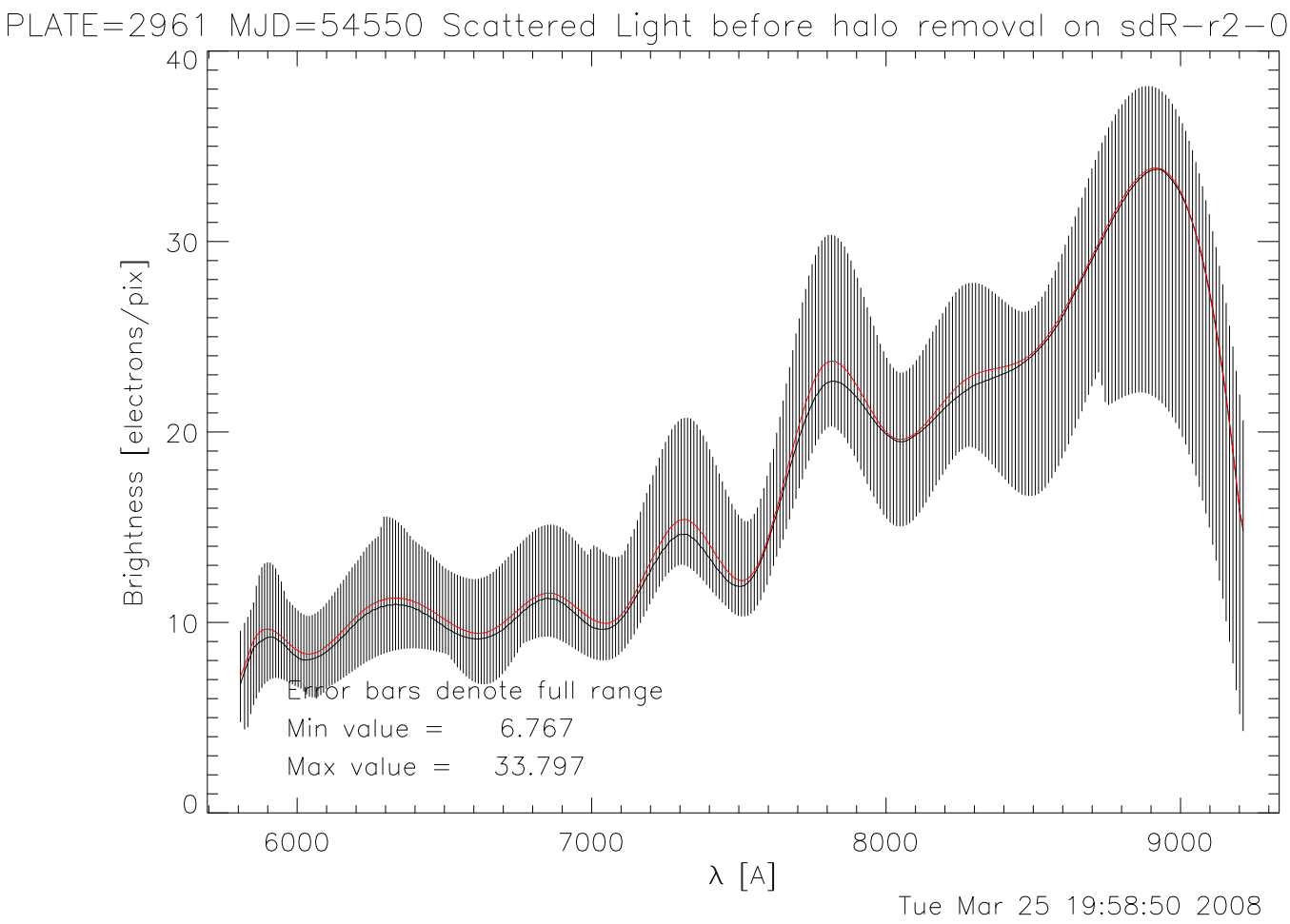

PLATE=2961 MJD=54550 flat extraction chi^2 for sdR−r2−00051216.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

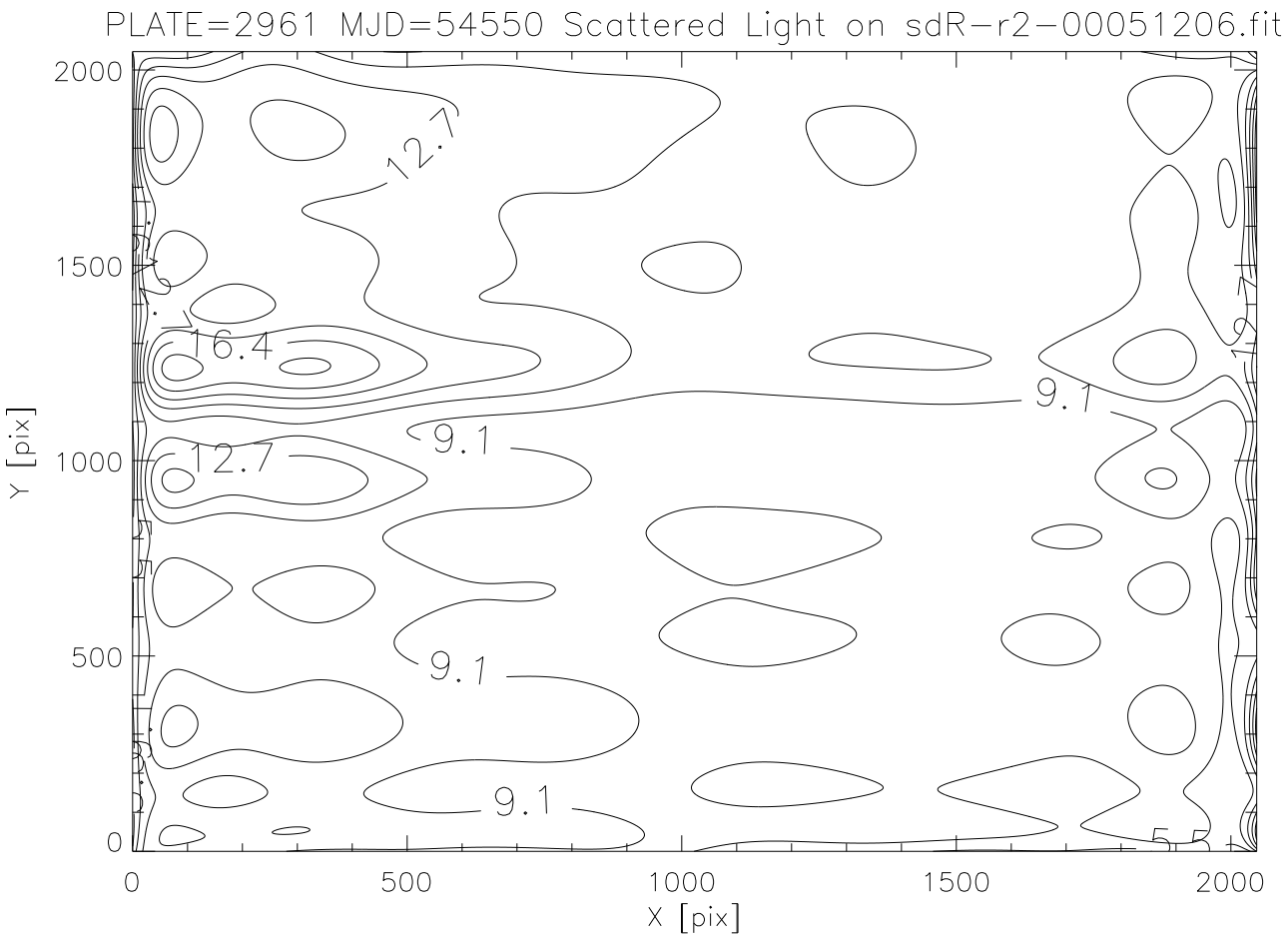

PLATE=2961 MJD=54550 Superflat sdR-r2-00051216.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

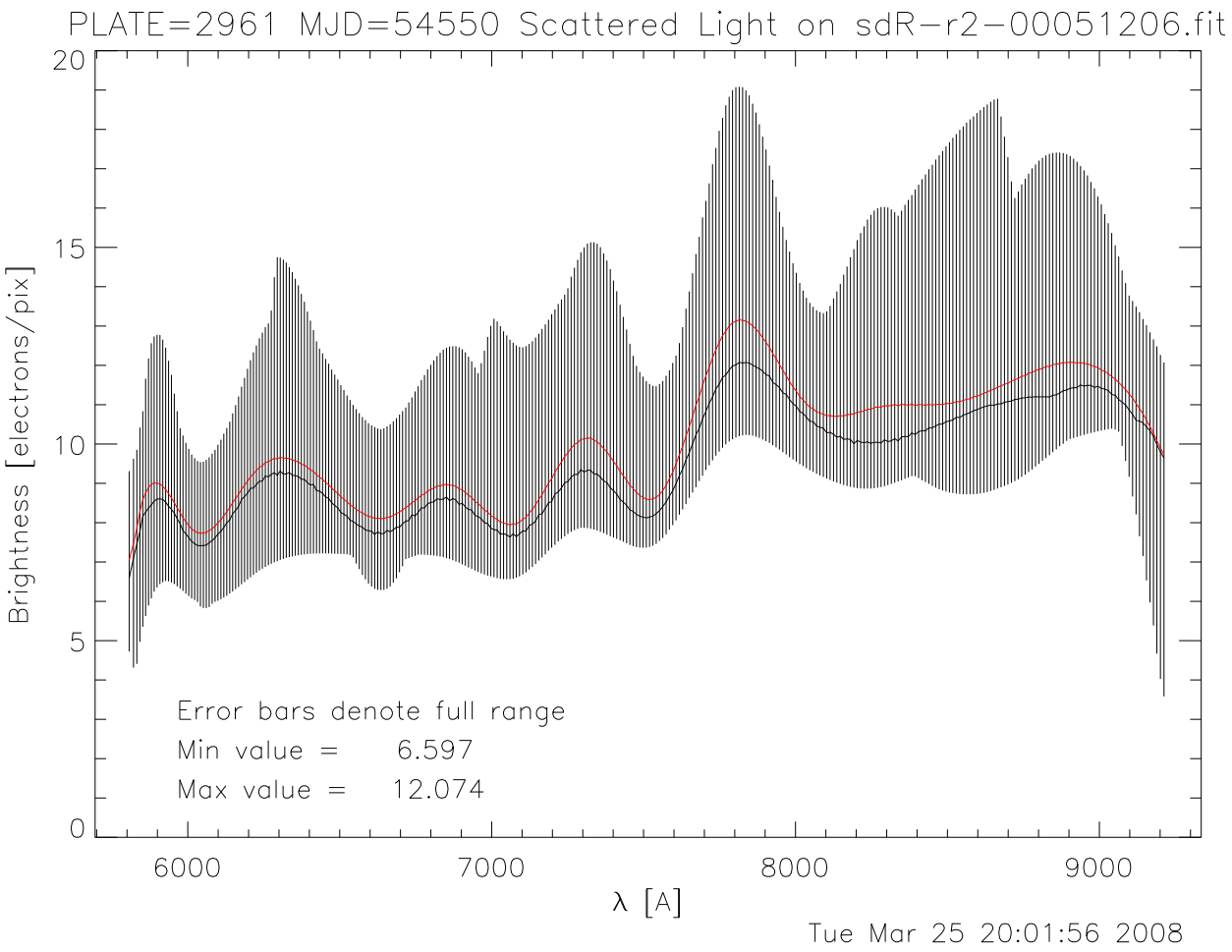

PLATE=2961 MJD=54550 Arcline Fit for sdR-r2-00051212.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Mar 25 19:57:43 2008

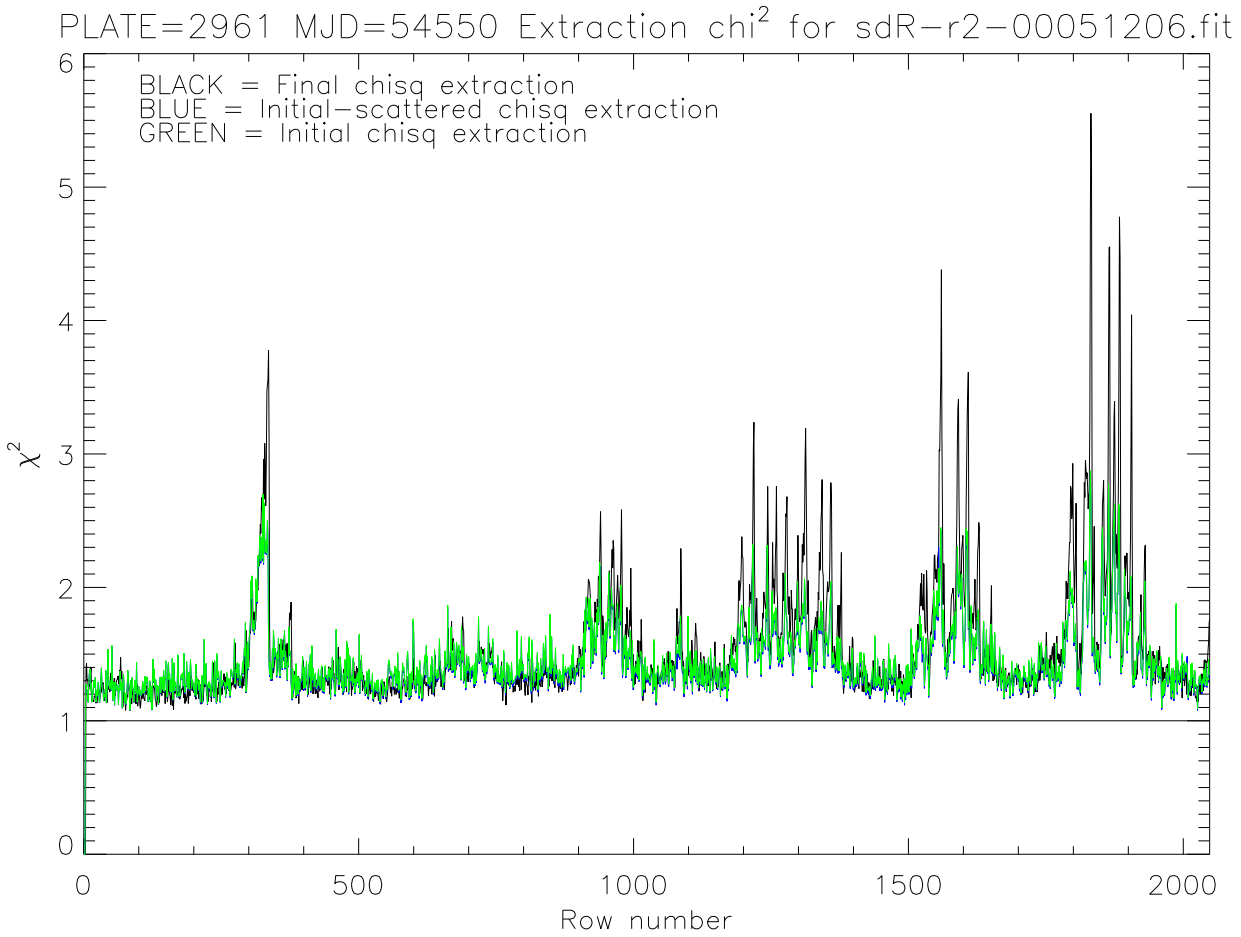

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 19:57:52 2008

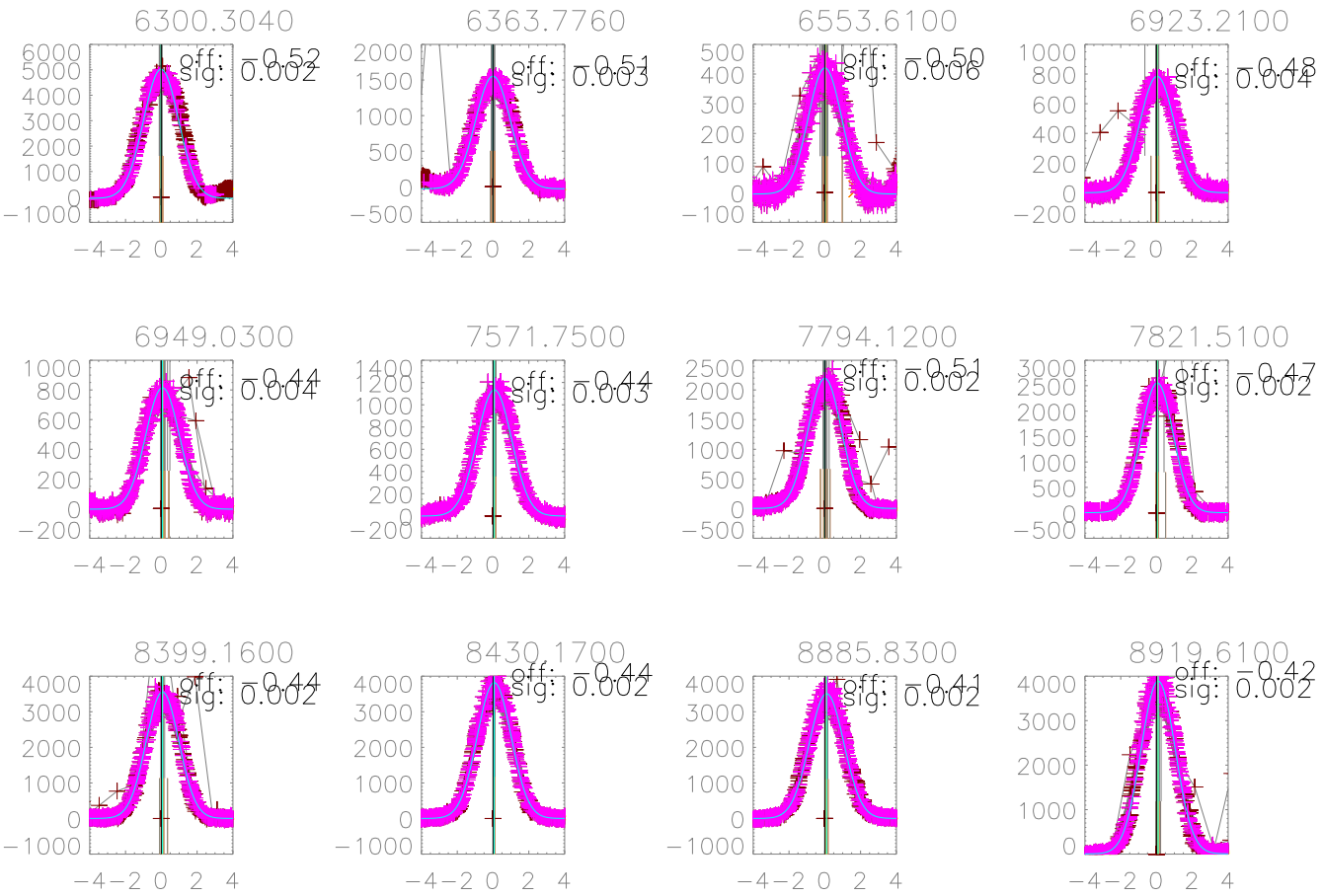

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051206.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

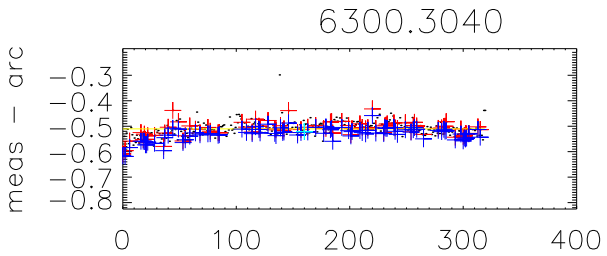

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051206.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.767
Max value = 33.797
Tue Mar 25 19:58:50 2008

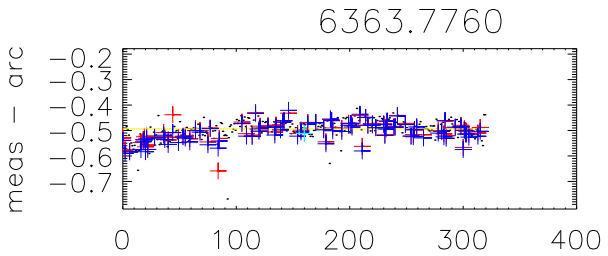

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051206.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.7
16.4
9.1
12.7
9.1
9.1
9.1
12.7
5.5

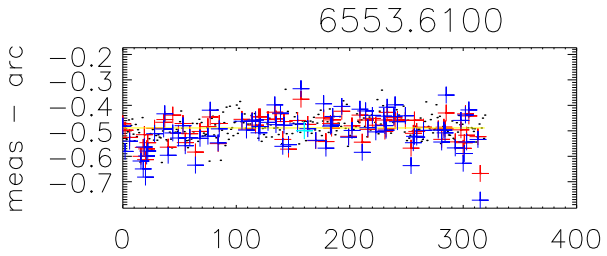

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051206.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.597
Max value = 12.074
Tue Mar 25 20:01:56 2008

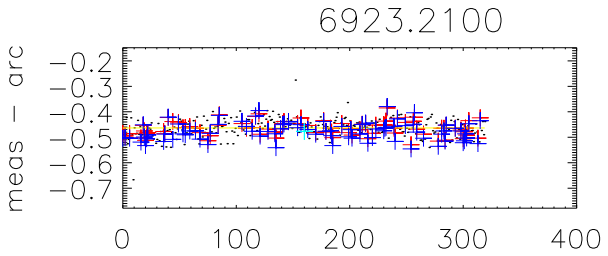

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051206.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

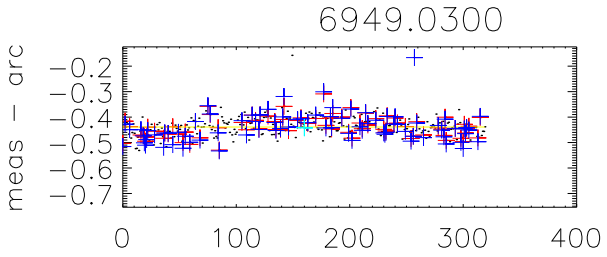

6300.3040
off: −0.52
sig: 0.002
6363.7760
off: −0.51
sig: 0.003
6553.6100
off: −0.50
sig: 0.006
6923.2100
off: −0.48
sig: 0.004
6949.0300
off: −0.44
sig: 0.004
7571.7500
off: −0.44
sig: 0.003
7794.1200
off: −0.51
sig: 0.002
7821.5100
off: −0.47
sig: 0.002
8399.1600
off: −0.44
sig: 0.002
8430.1700
off: −0.44
sig: 0.002
8885.8300
off: −0.41
sig: 0.002
8919.6100
off: −0.42
sig: 0.002

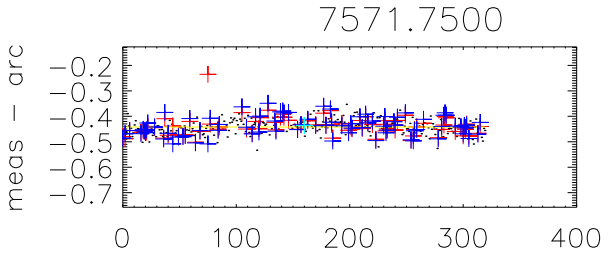

6300.3040
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

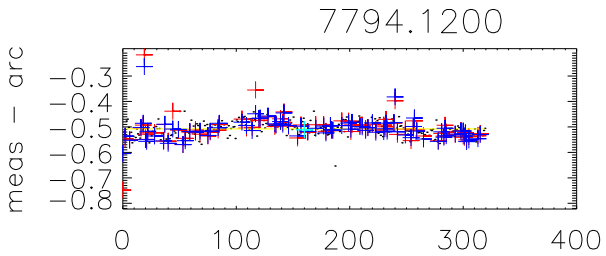

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

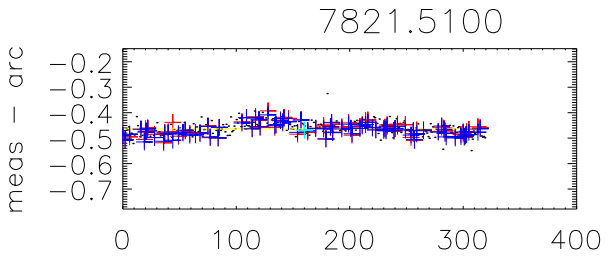

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

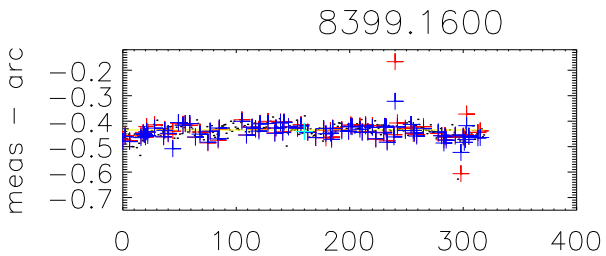

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

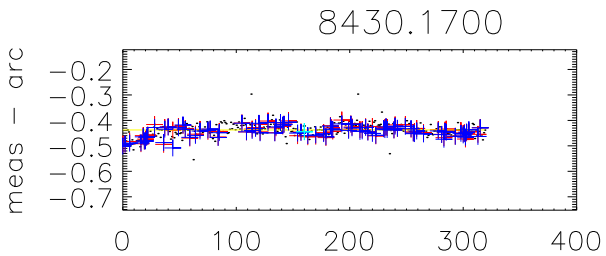

6949.0300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

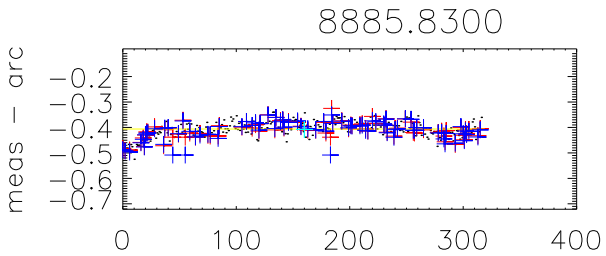

7571.7500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

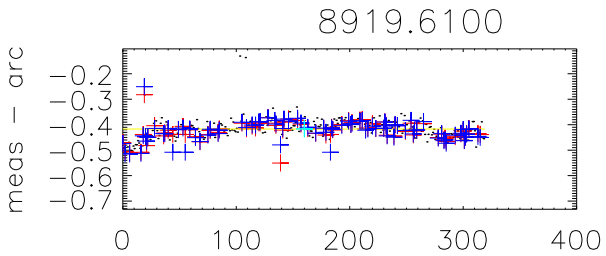

7794.1200
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

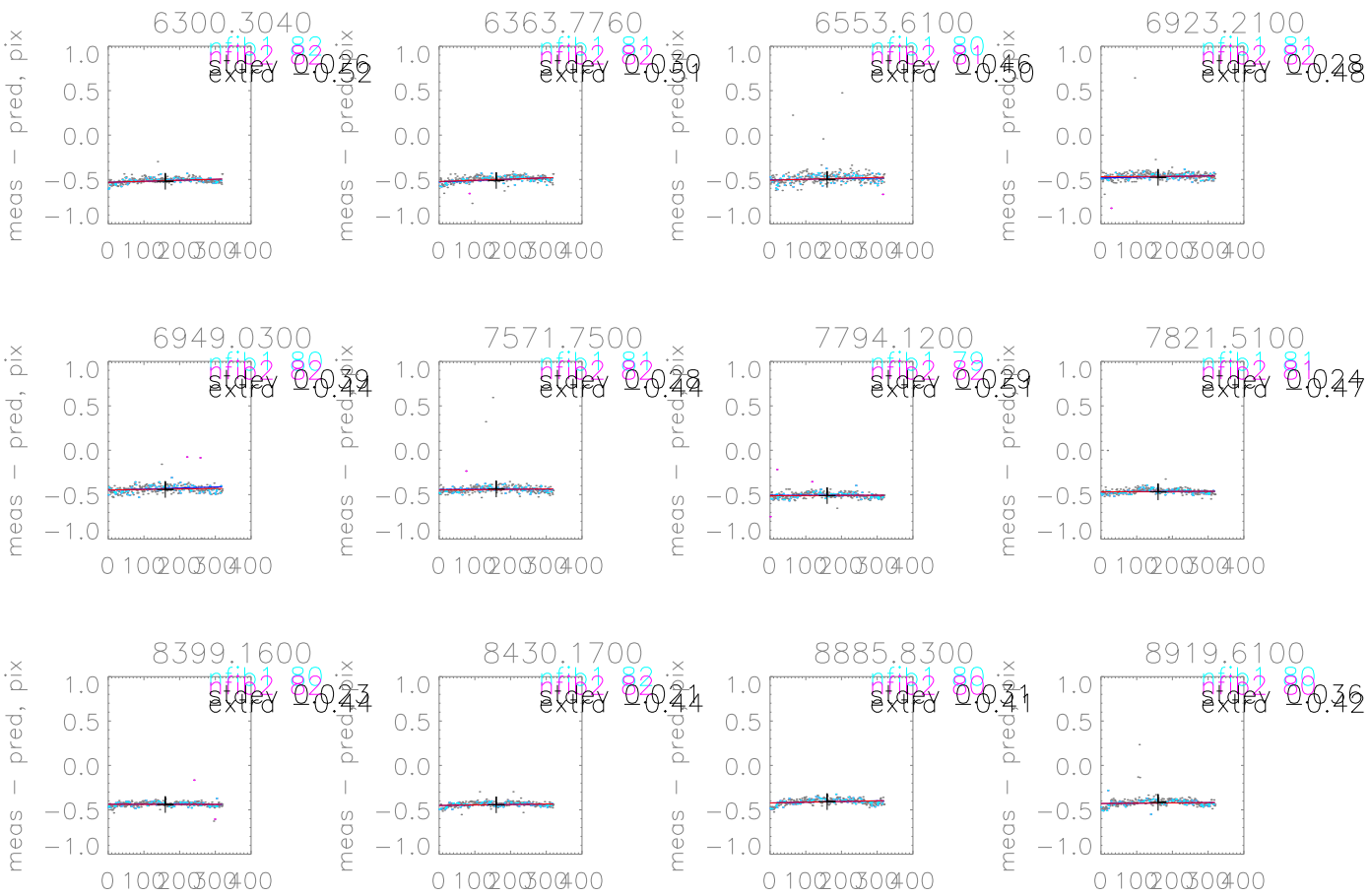

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

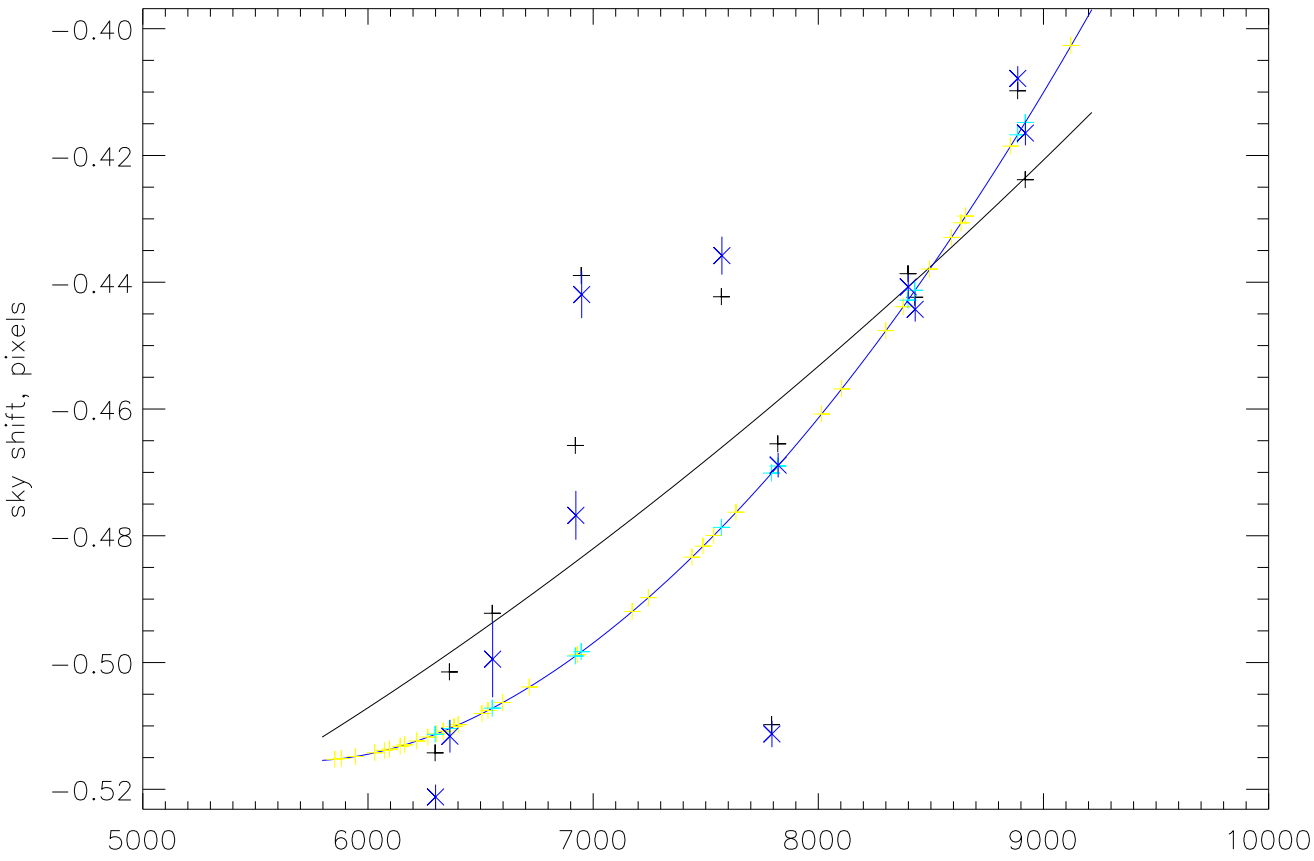

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

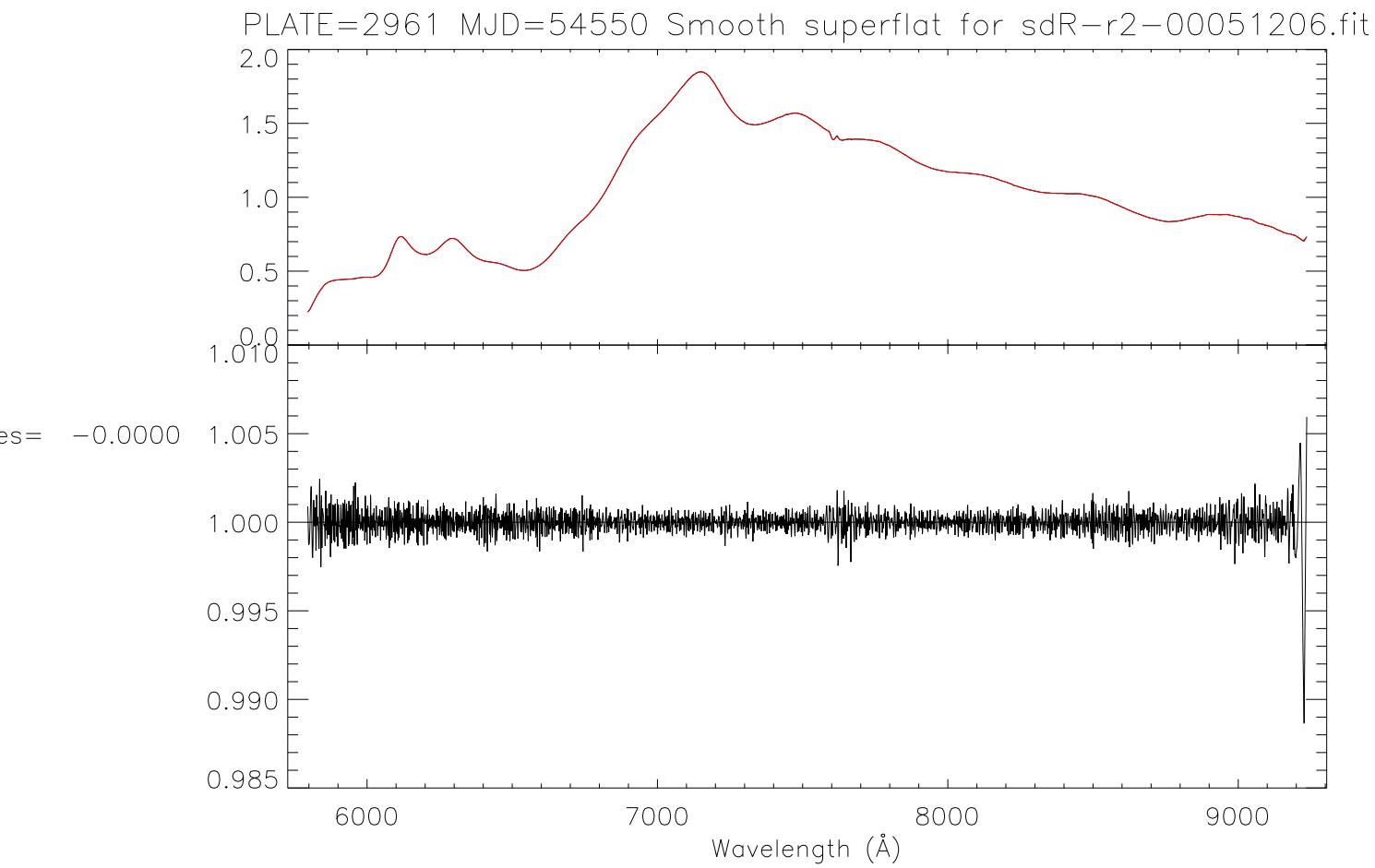

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

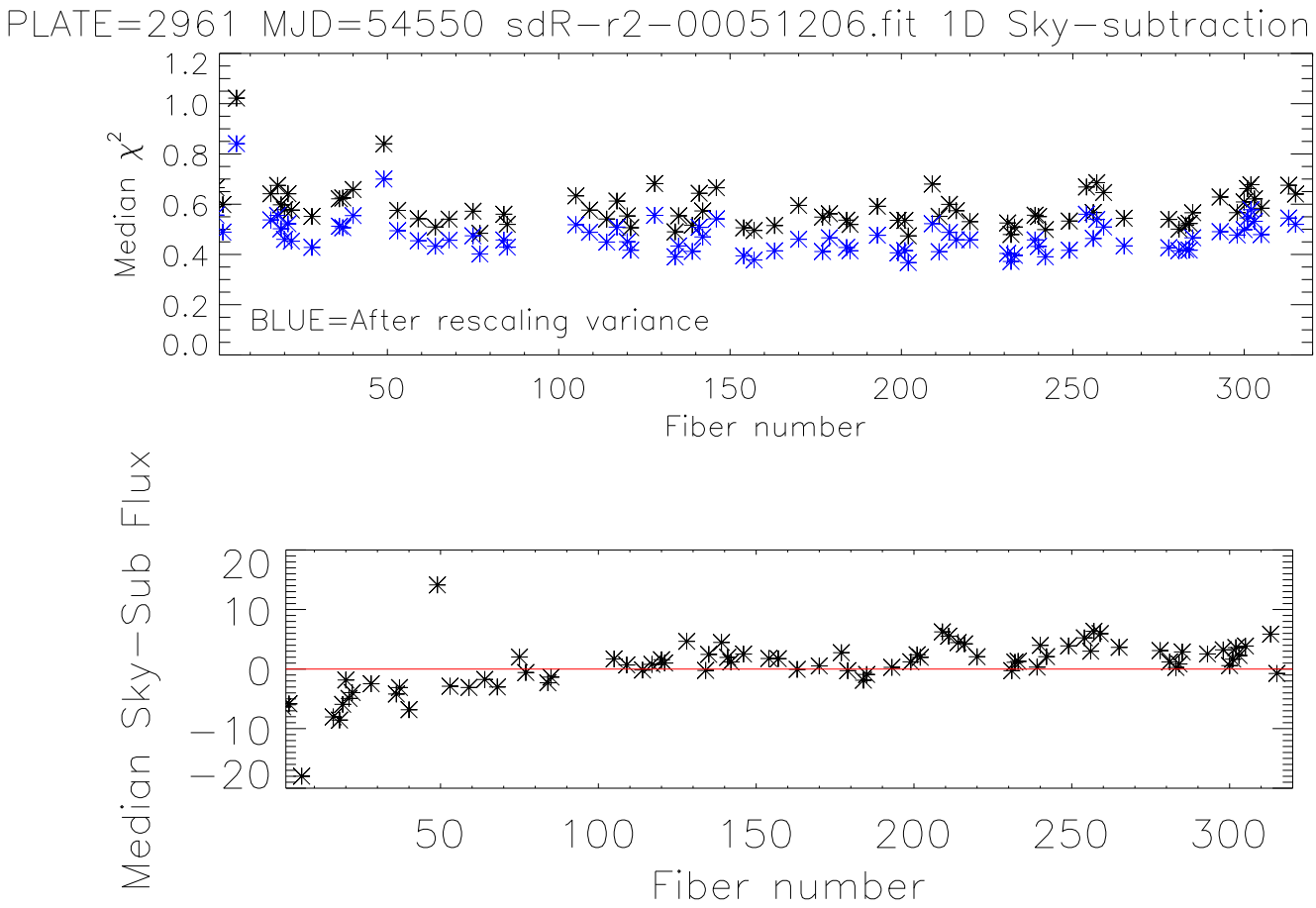

8885.8300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

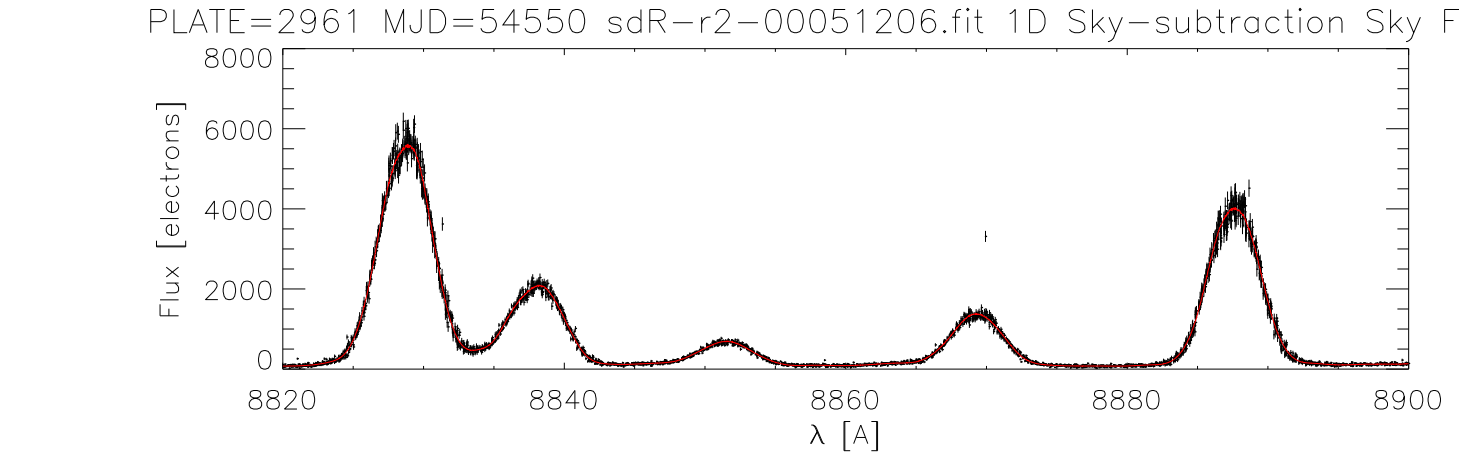

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

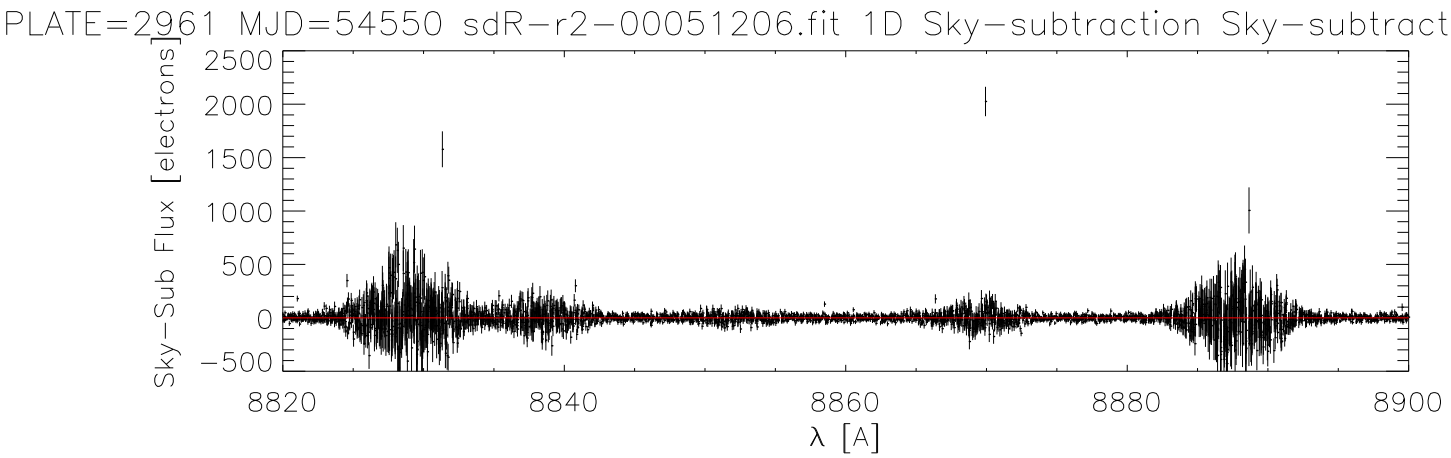

6300.3040
mfhd1 82
mfhd2 82
stdev 0.026
extrd −0.52
6363.7760
mfhd1 81
mfhd2 82
stdev 0.030
extrd −0.51
6553.6100
mfhd1 80
mfhd2 80
stdev 0.046
extrd −0.50
6923.2100
mfhd1 81
mfhd2 82
stdev 0.028
extrd −0.48
6949.0300
mfhd1 80
mfhd2 80
stdev 0.039
extrd −0.44
7571.7500
mfhd1 81
mfhd2 82
stdev 0.028
extrd −0.44
7794.1200
mfhd1 79
mfhd2 79
stdev 0.029
extrd −0.51
7821.5100
mfhd1 81
mfhd2 81
stdev 0.024
extrd −0.47
8399.1600
mfhd1 80
mfhd2 80
stdev 0.023
extrd −0.44
8430.1700
mfhd1 82
mfhd2 82
stdev 0.021
extrd −0.44
8885.8300
mfhd1 80
mfhd2 80
stdev 0.031
extrd −0.41
8919.6100
mfhd1 80
mfhd2 80
stdev 0.036
extrd −0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

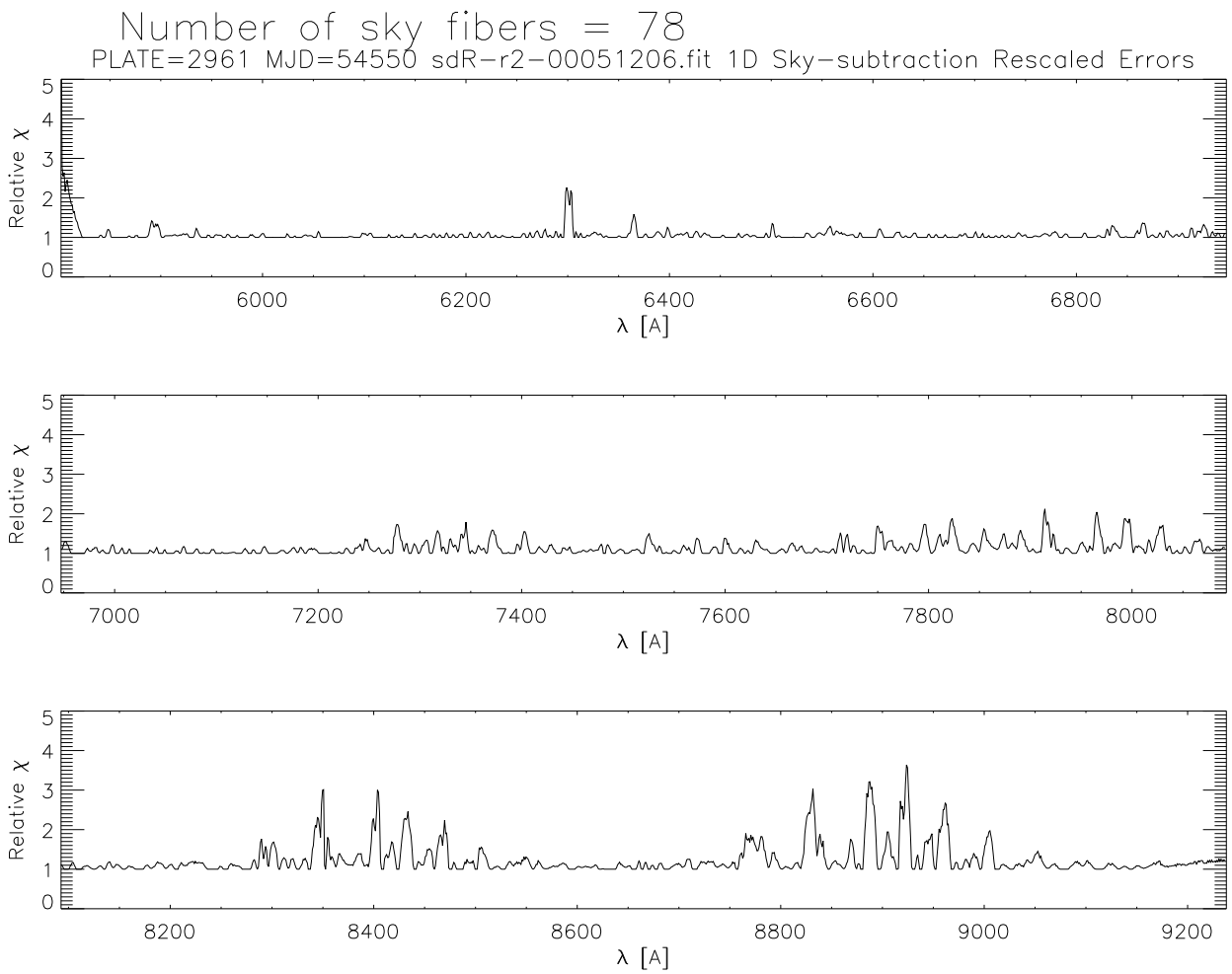

−0.40
−0.42
−0.44
−0.46
−0.48
−0.50
−0.52
sky shift, pixels
5000
6000
7000
8000
9000
10000

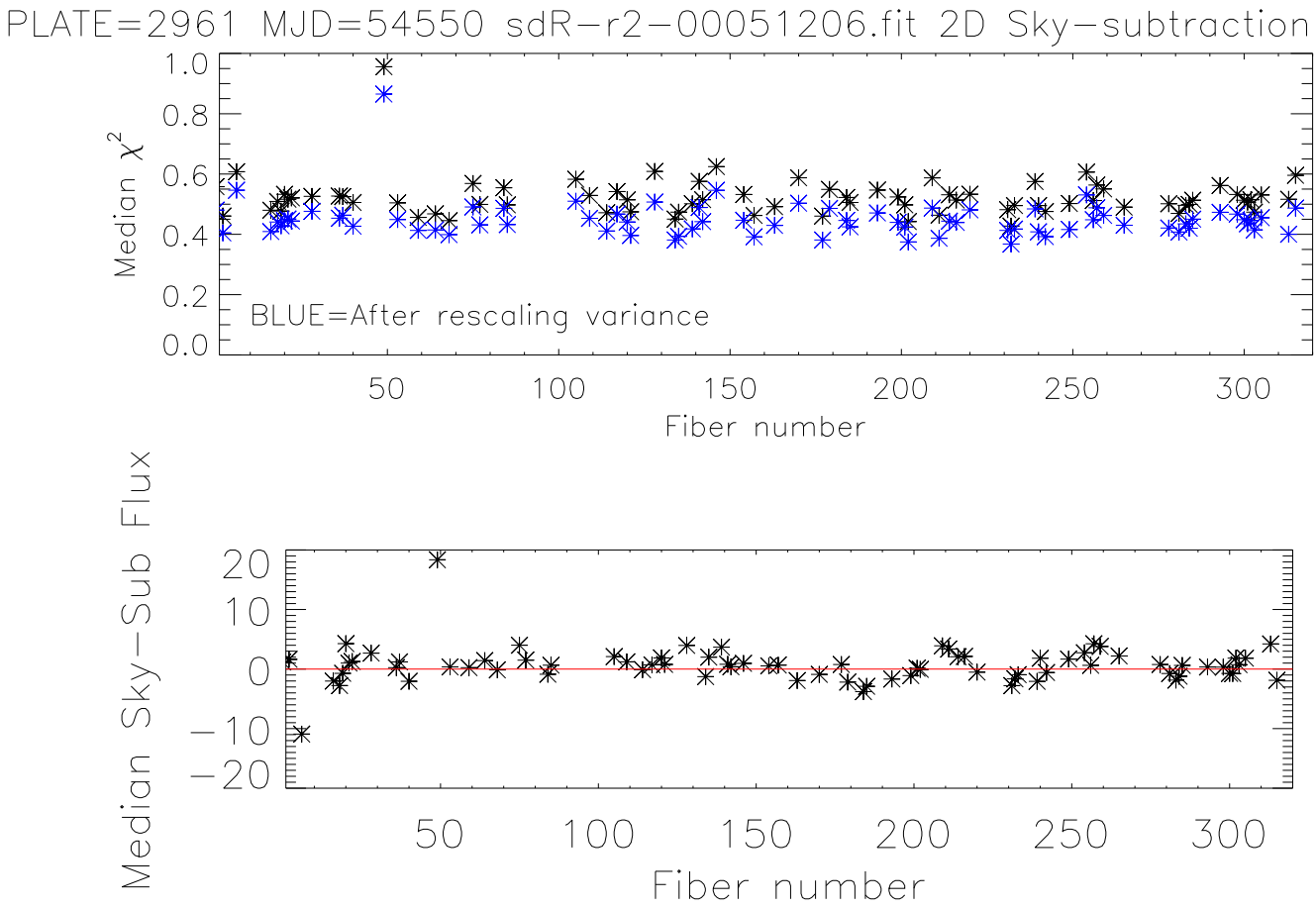

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051206.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

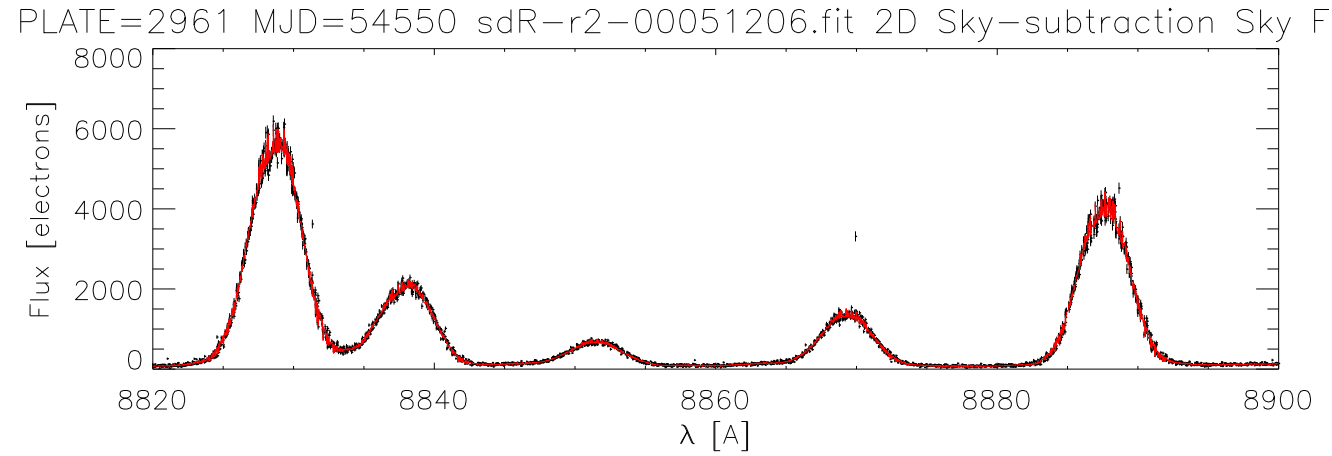

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

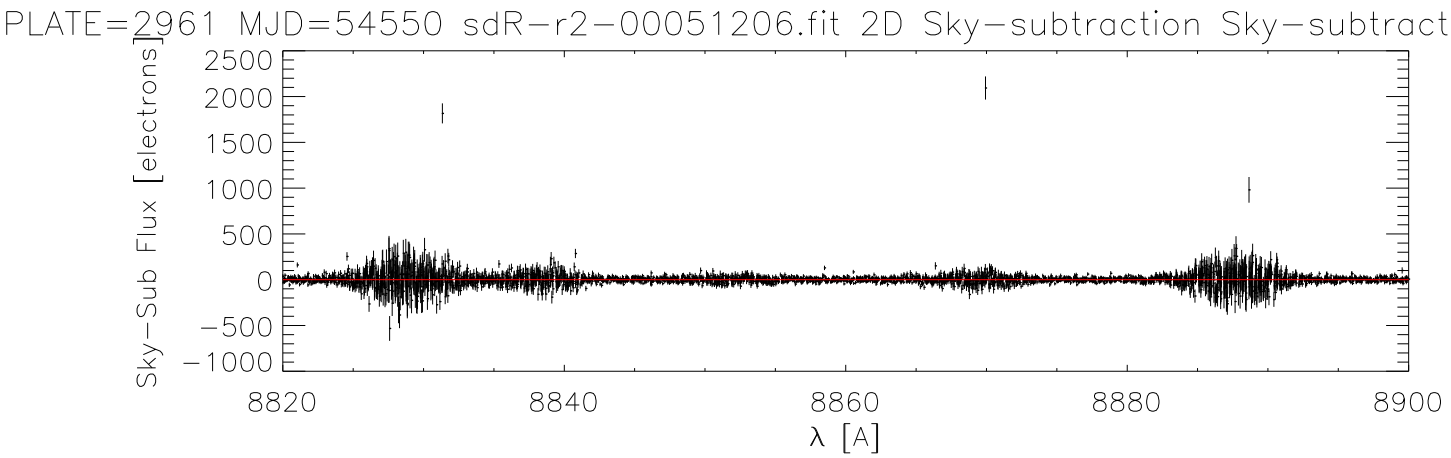

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

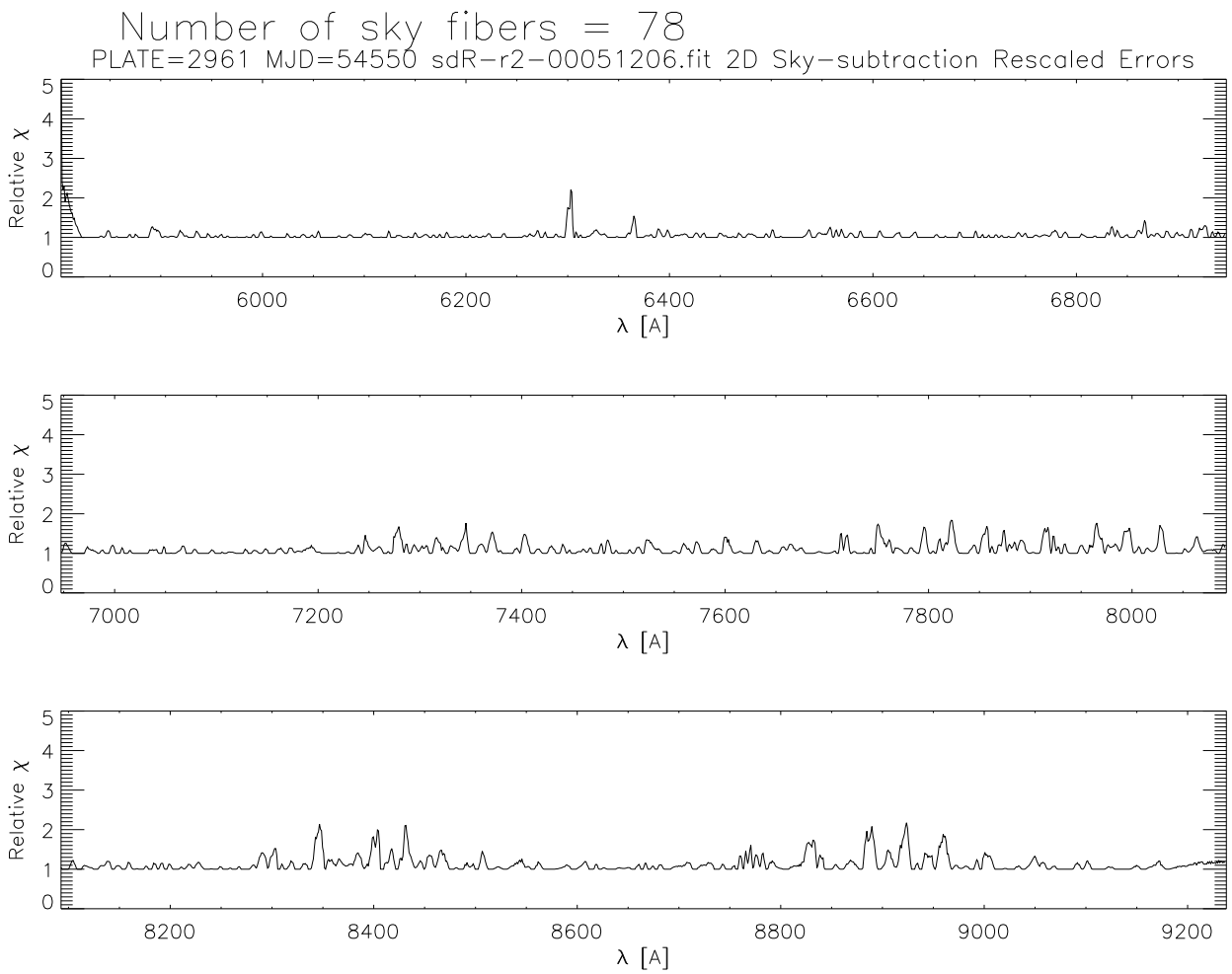

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

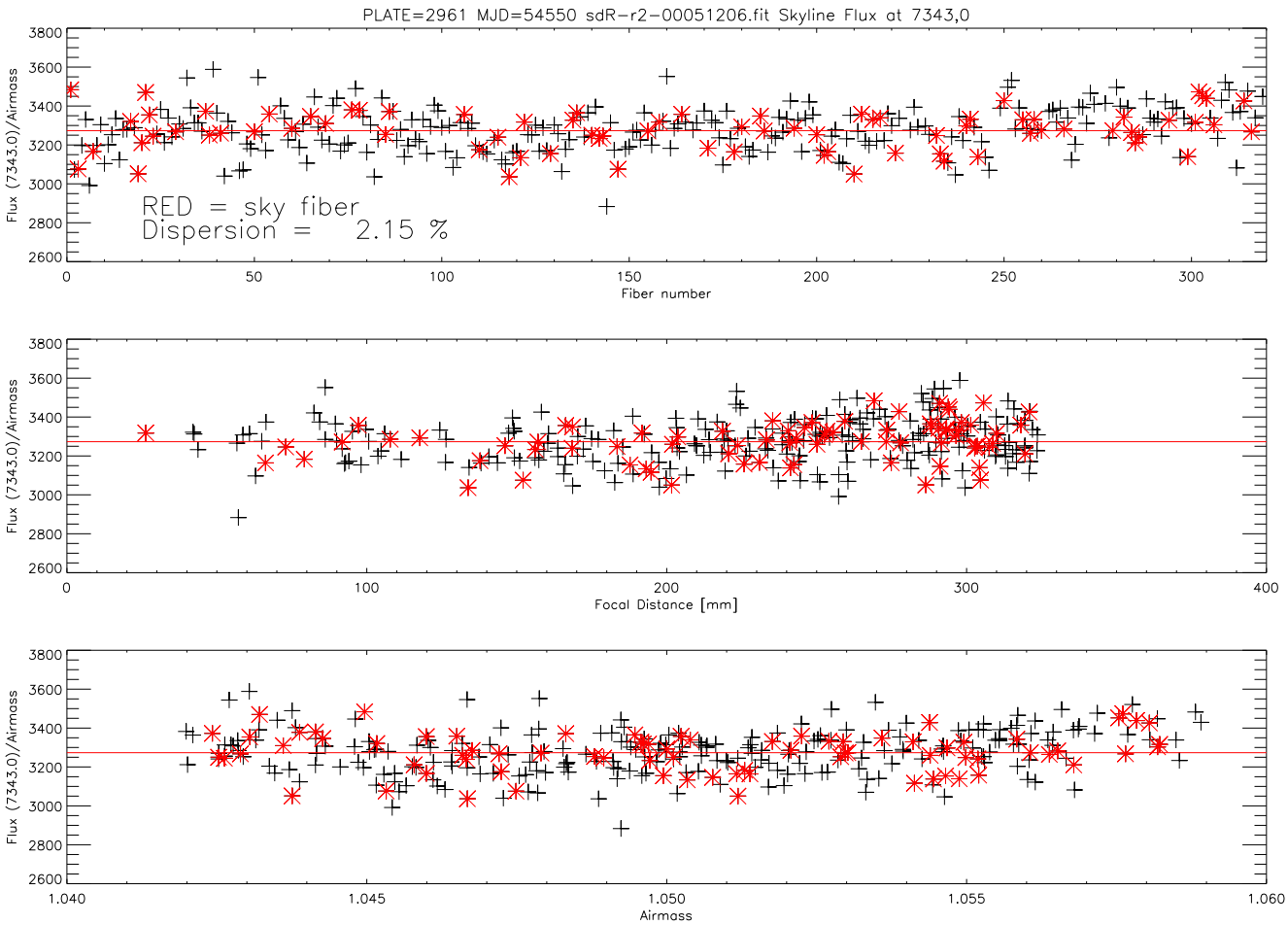

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051206.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

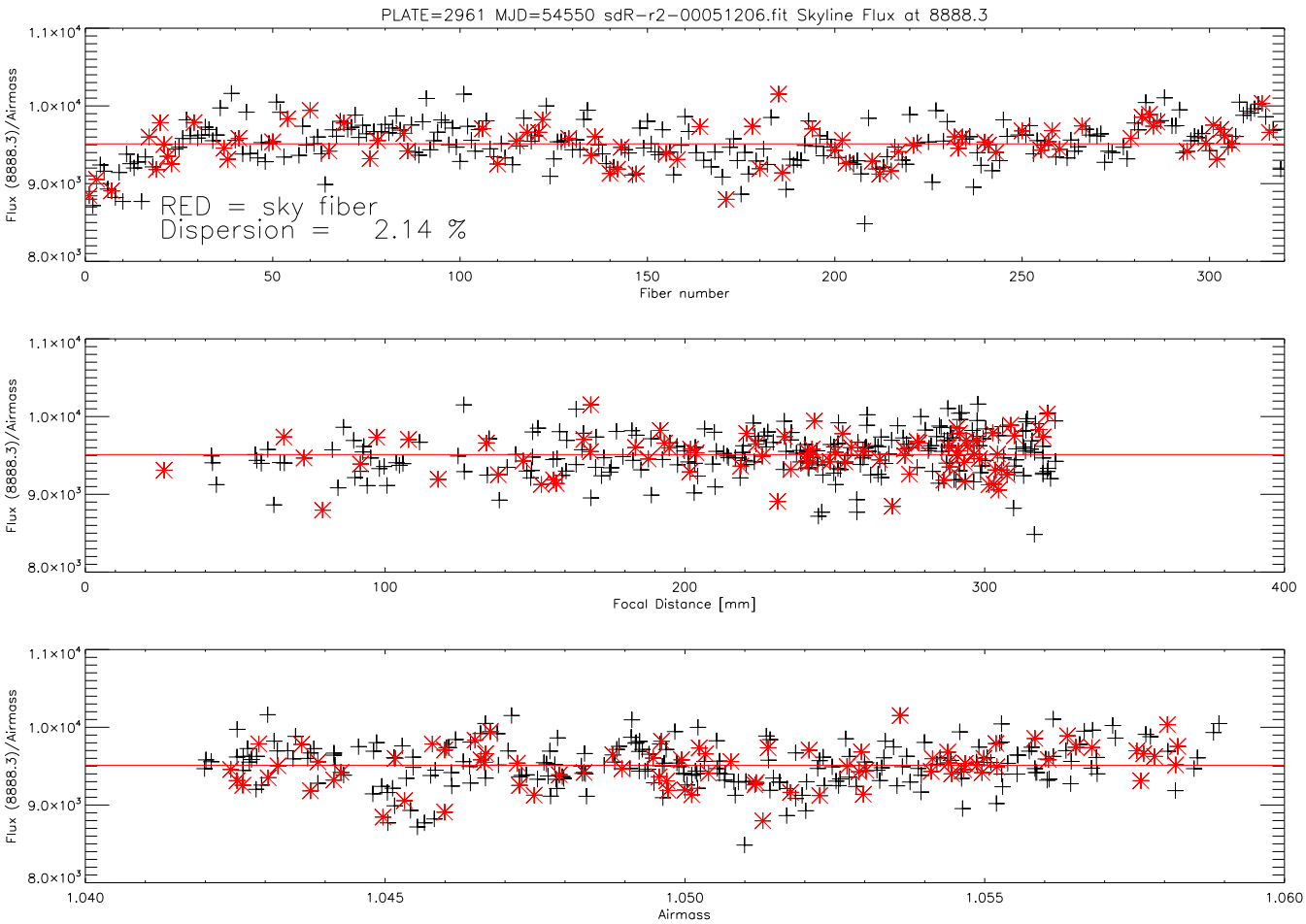

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

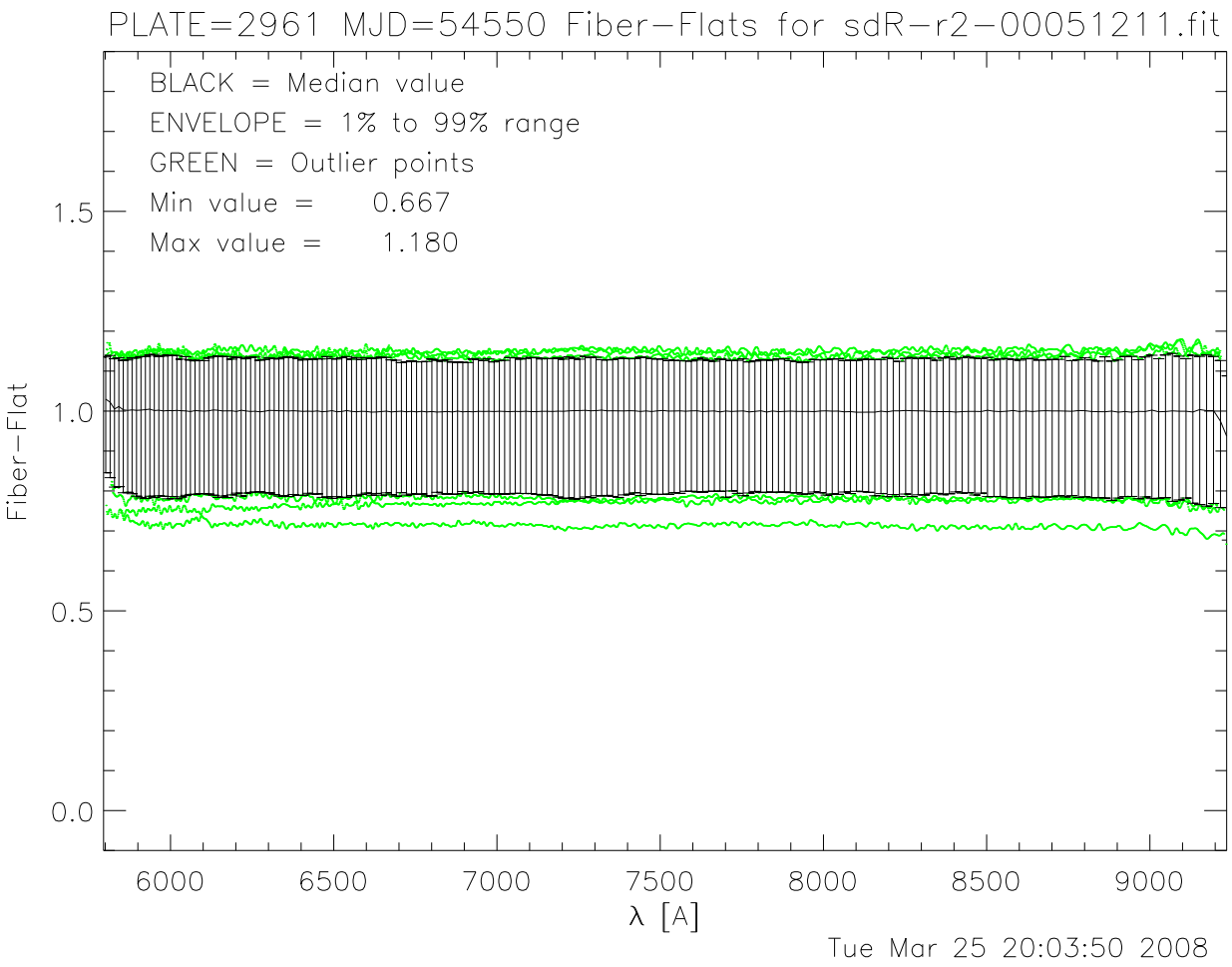

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

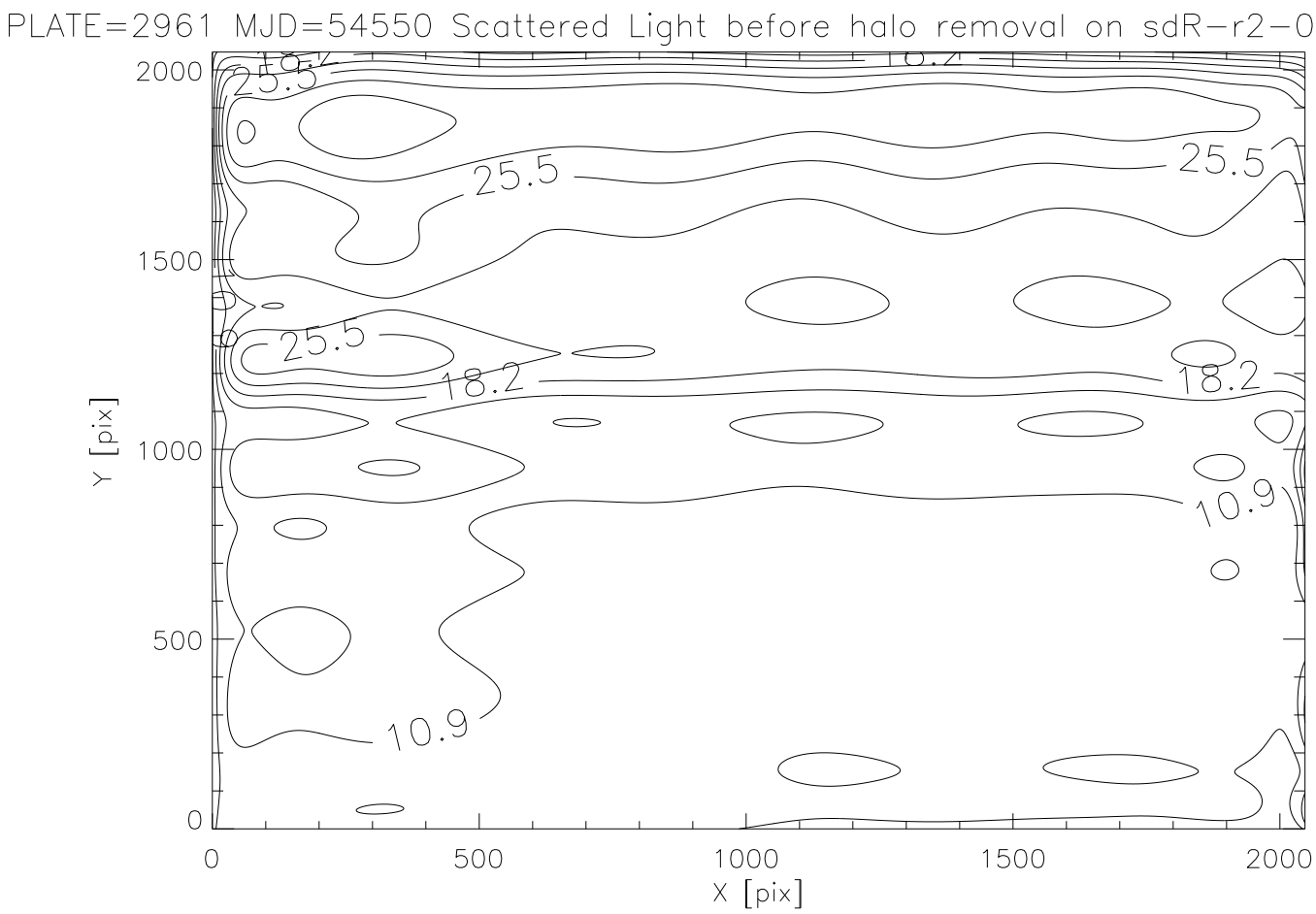

PLATE=2961 MJD=54550 sdR-r2-00051206.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

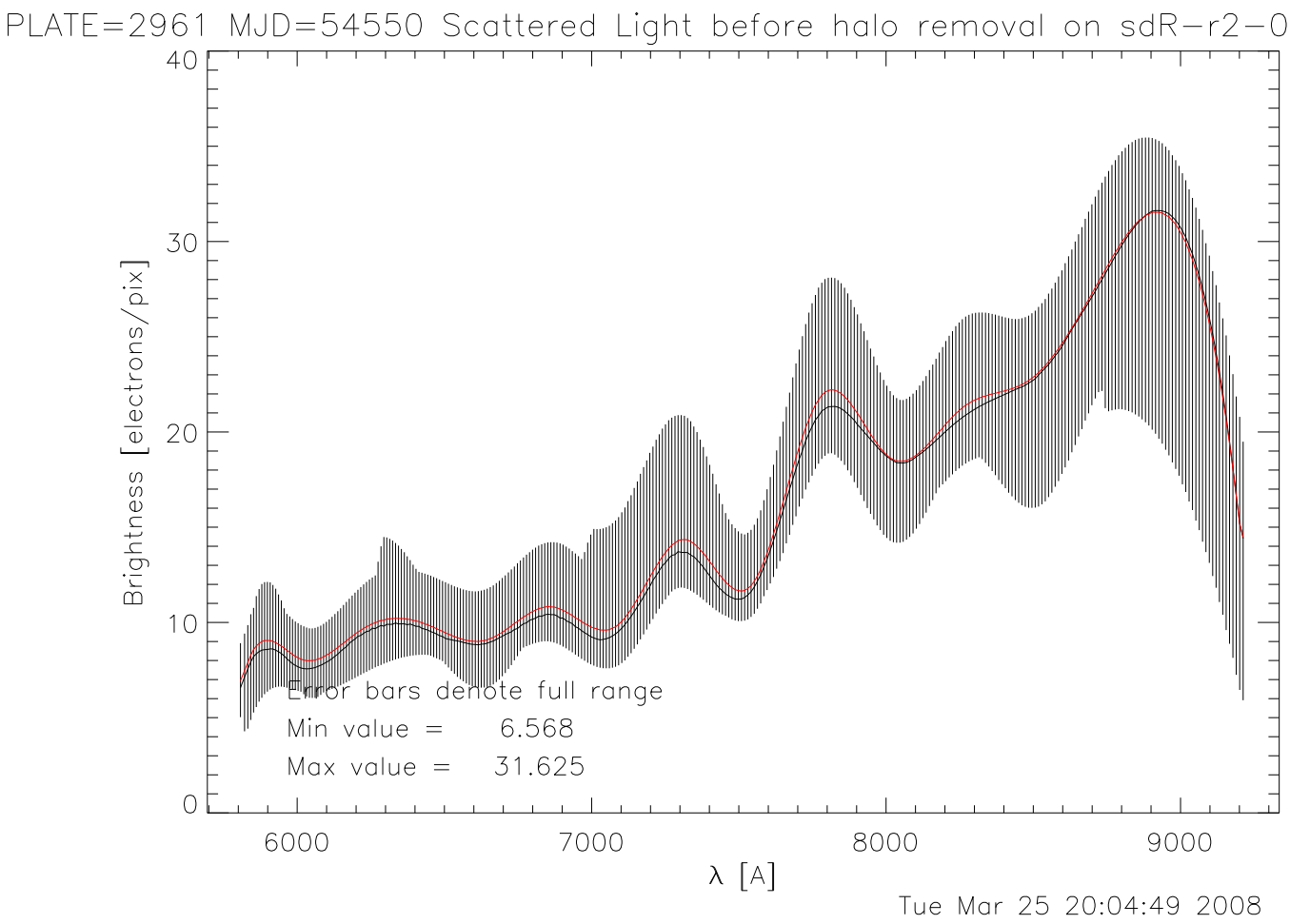

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051206.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

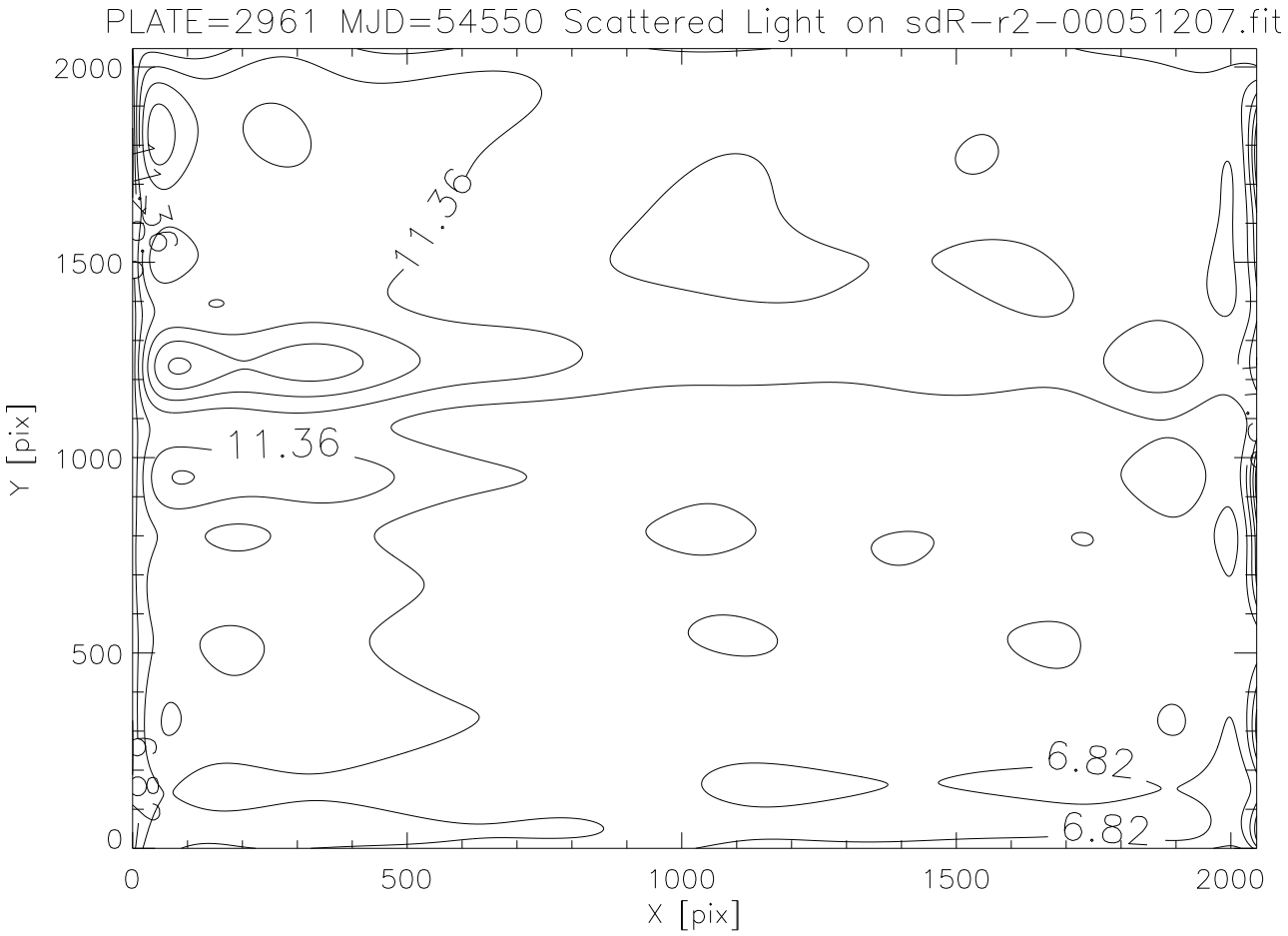

PLATE=2961 MJD=54550 sdR-r2-00051206.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.15 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

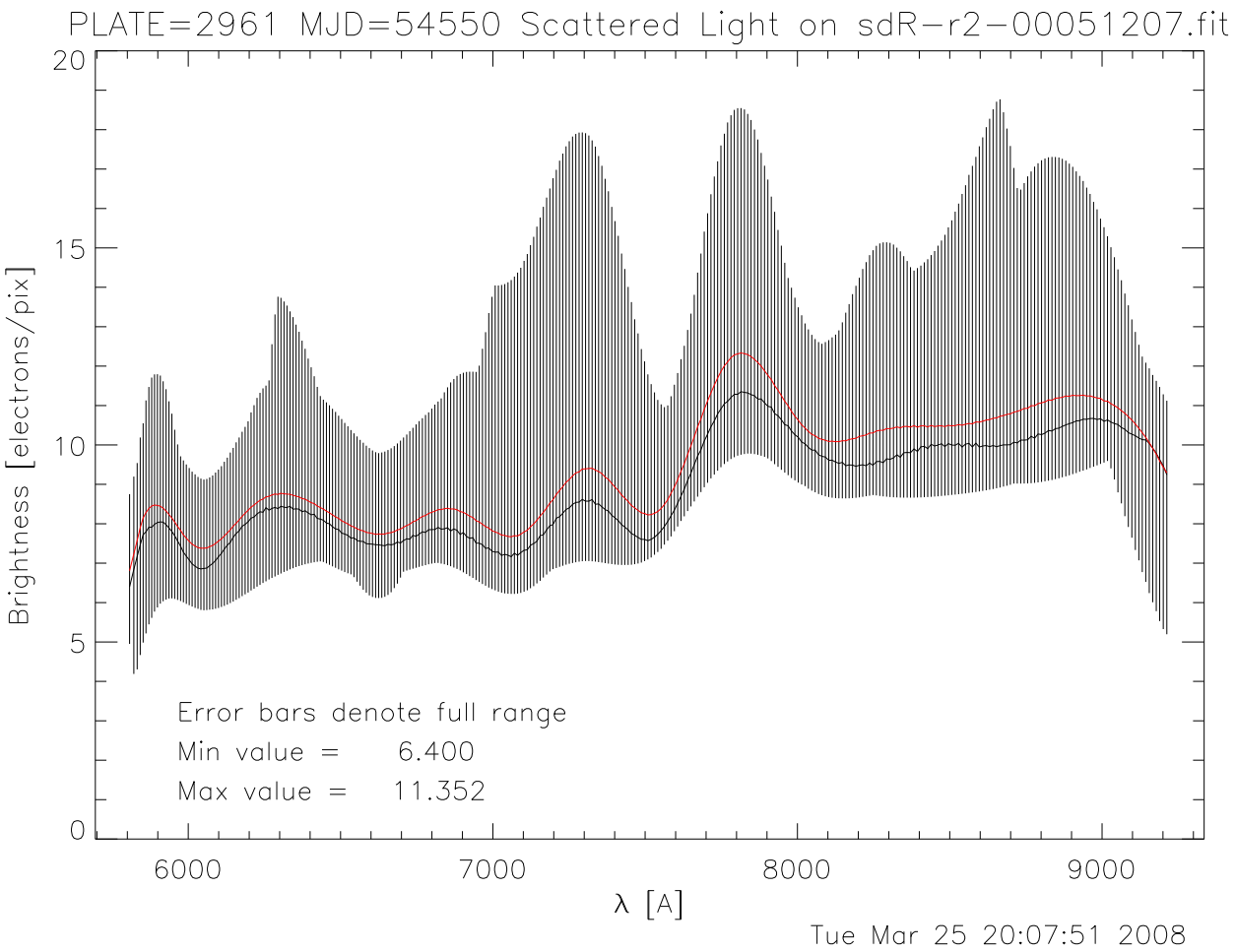

PLATE=2961 MJD=54550 sdR-r2-00051206.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
RED = sky fiber
Dispersion = 2.14 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
1.040
1.045
1.050
1.055
1.060
Airmass

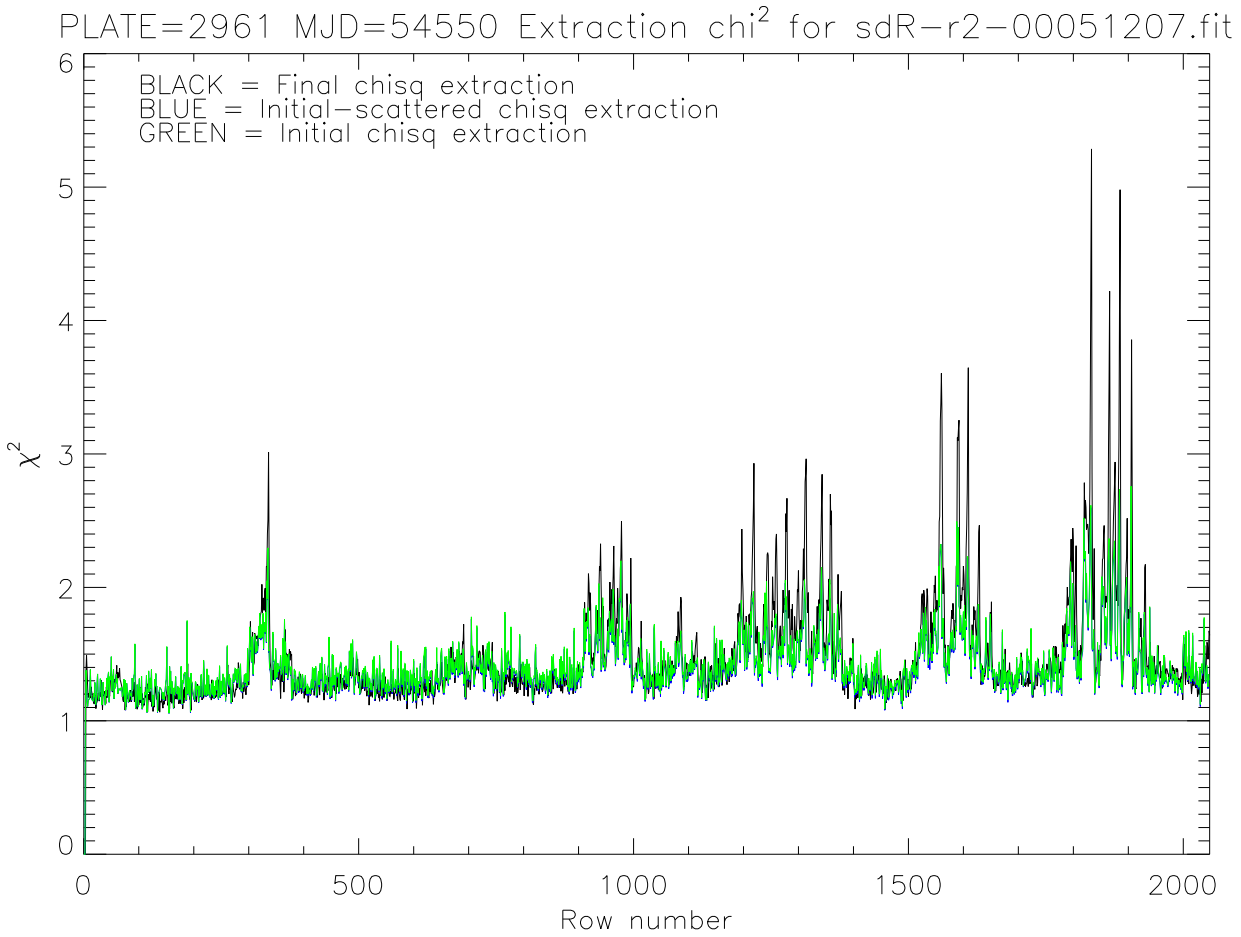

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 20:03:50 2008

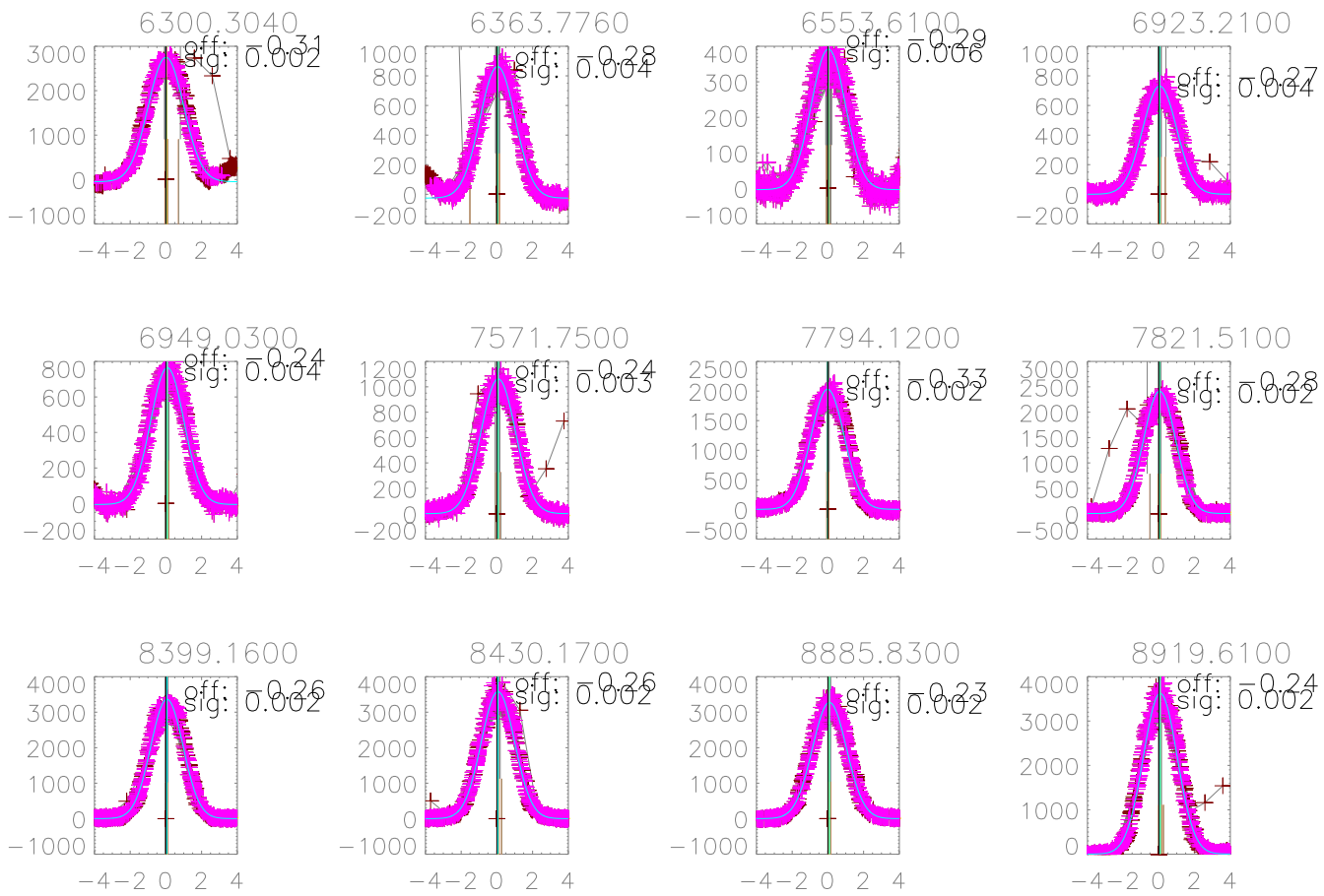

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051207.fi
25.5
0
25.5
25.5
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

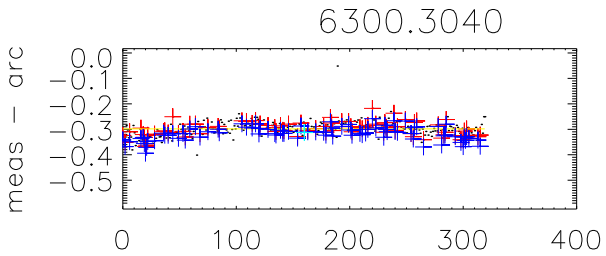

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051207.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.568
Max value = 31.625
Tue Mar 25 20:04:49 2008

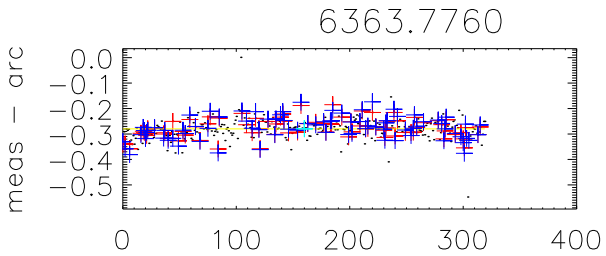

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051207.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
11.36
11.36
6.82
6.82
0
0
0

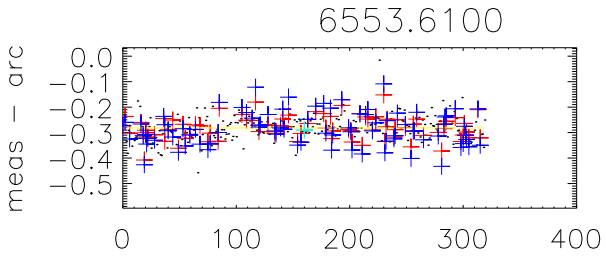

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051207.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.400
Max value = 11.352
Tue Mar 25 20:07:51 2008

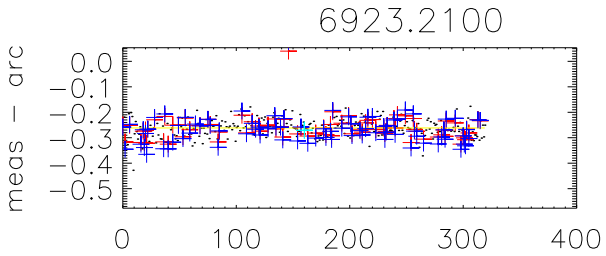

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051207.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

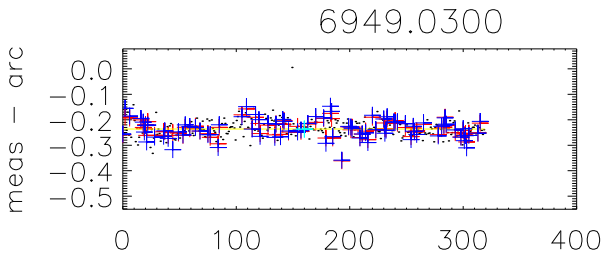

6300.3040
off: −0.31
sig: 0.002
6363.7760
off: −0.28
sig: 0.004
6553.6100
off: −0.29
sig: 0.006
6923.2100
off: −0.27
sig: 0.004
6949.0300
off: −0.24
sig: 0.004
7571.7500
off: −0.24
sig: 0.003
7794.1200
off: −0.33
sig: 0.002
7821.5100
off: −0.28
sig: 0.002
8399.1600
off: −0.26
sig: 0.002
8430.1700
off: −0.26
sig: 0.002
8885.8300
off: −0.23
sig: 0.002
8919.6100
off: −0.24
sig: 0.002

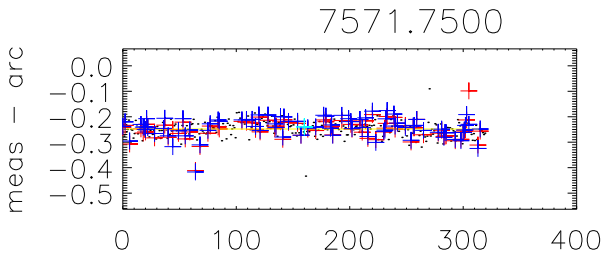

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

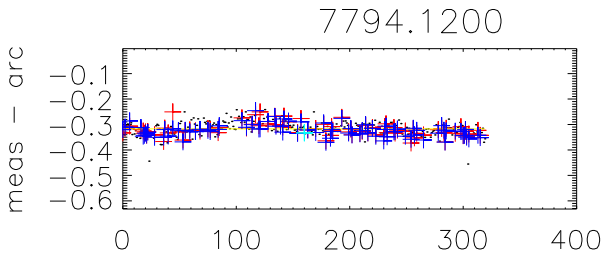

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

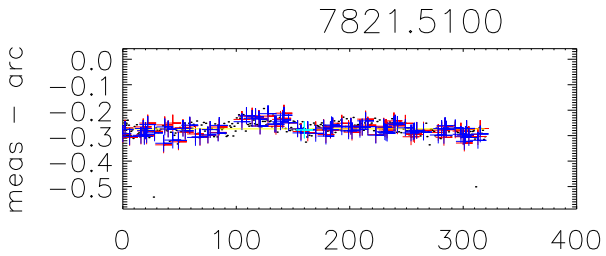

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

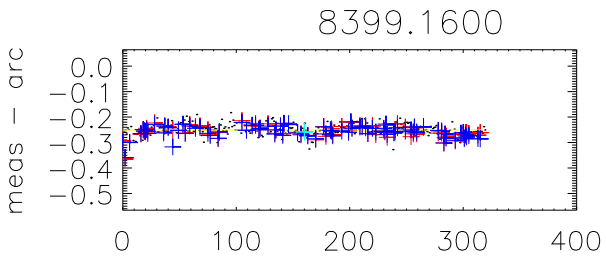

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

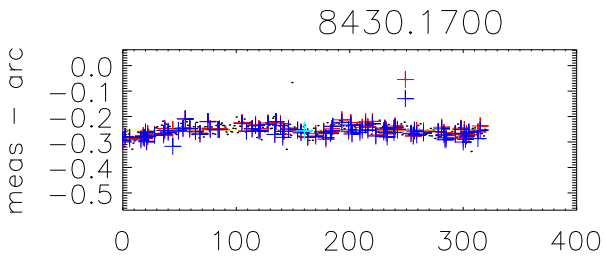

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

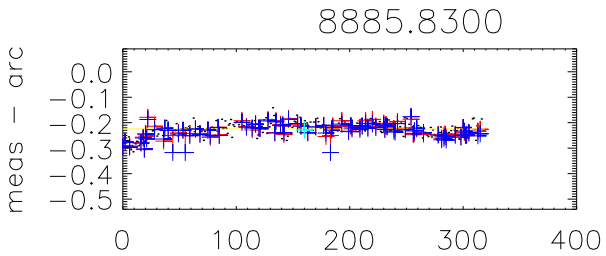

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

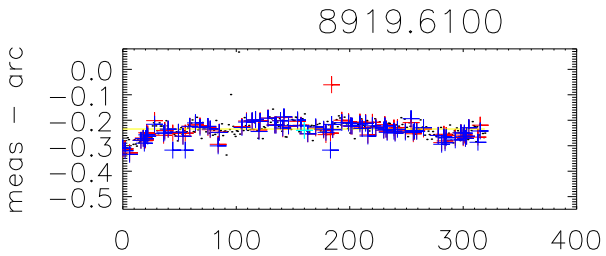

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

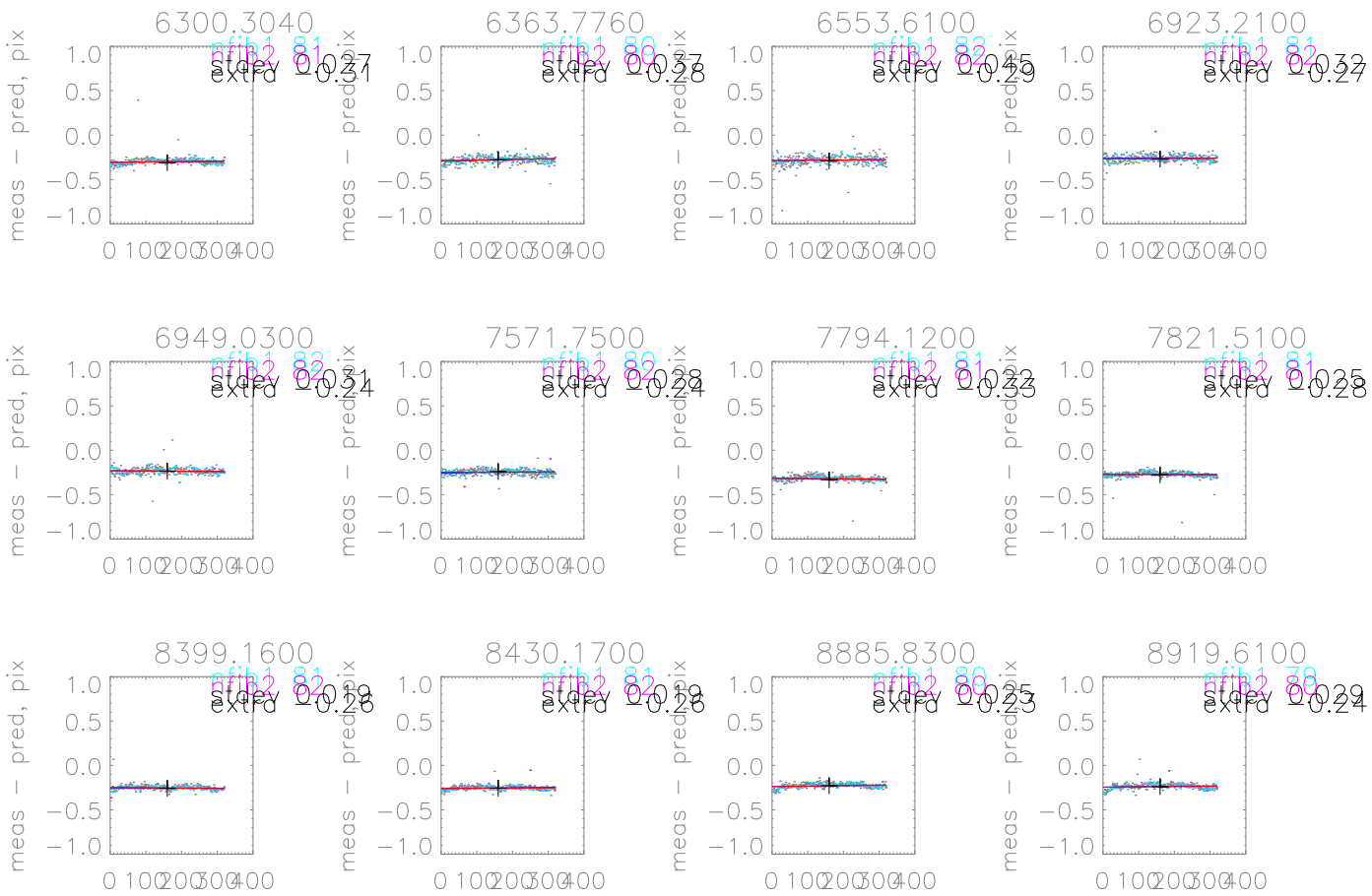

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

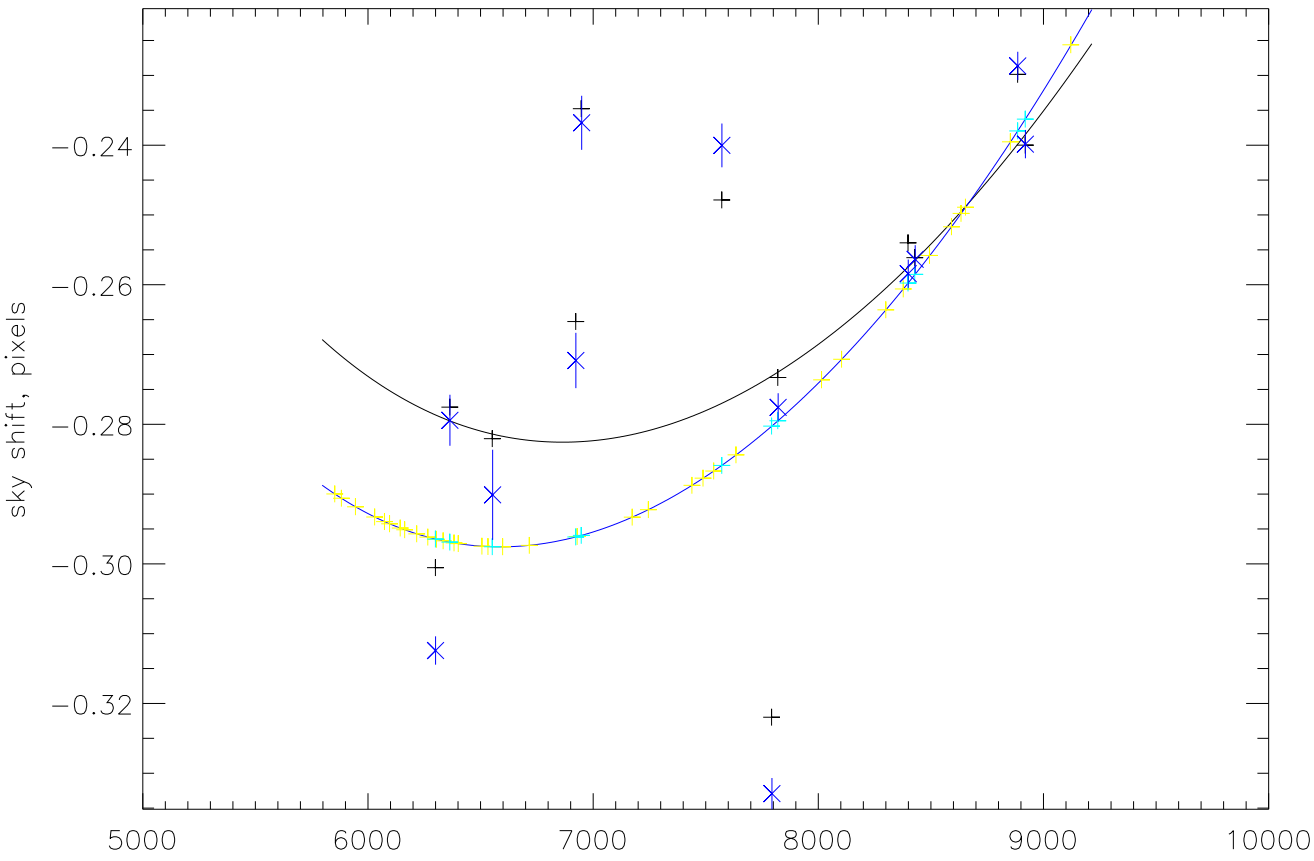

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

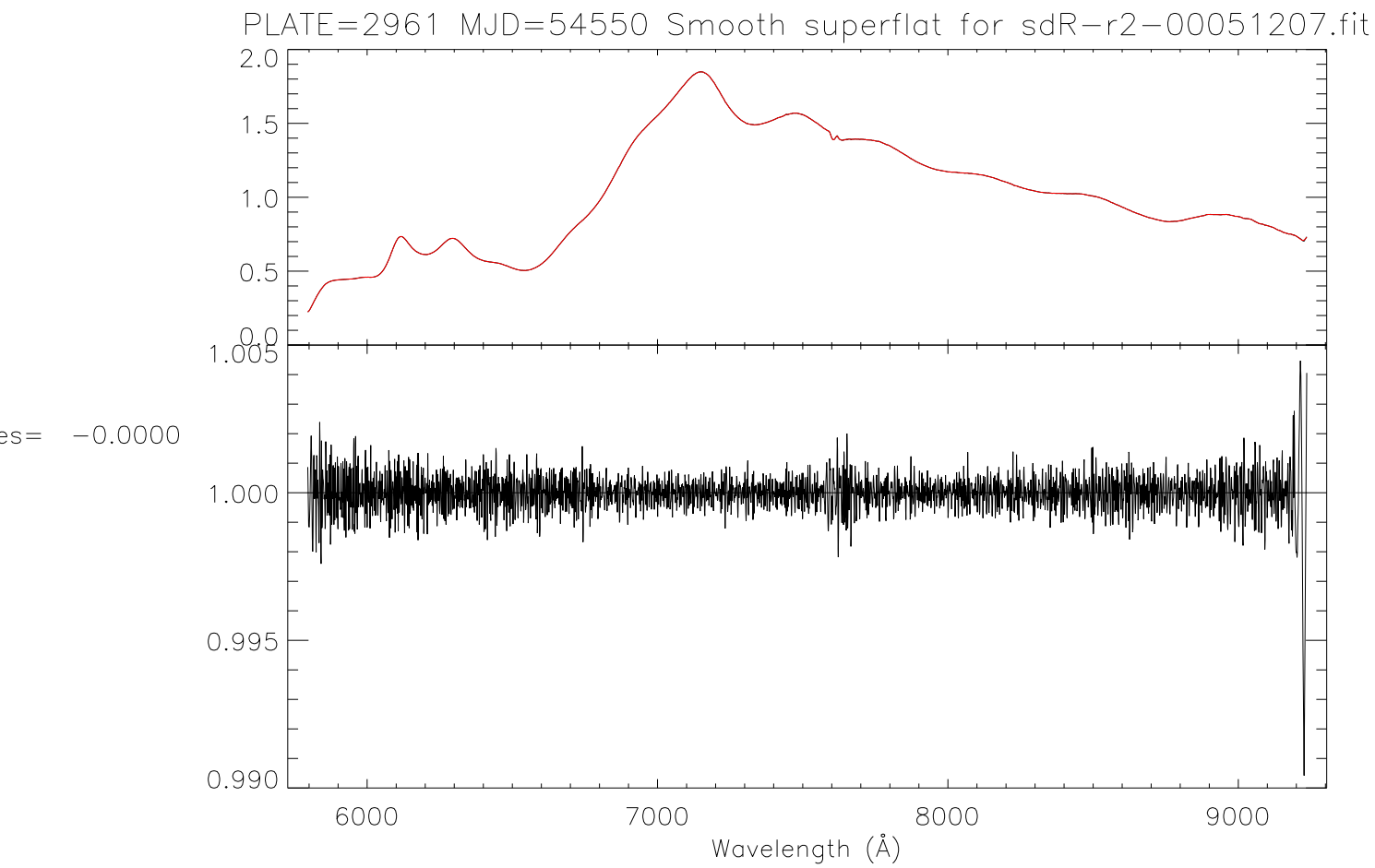

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

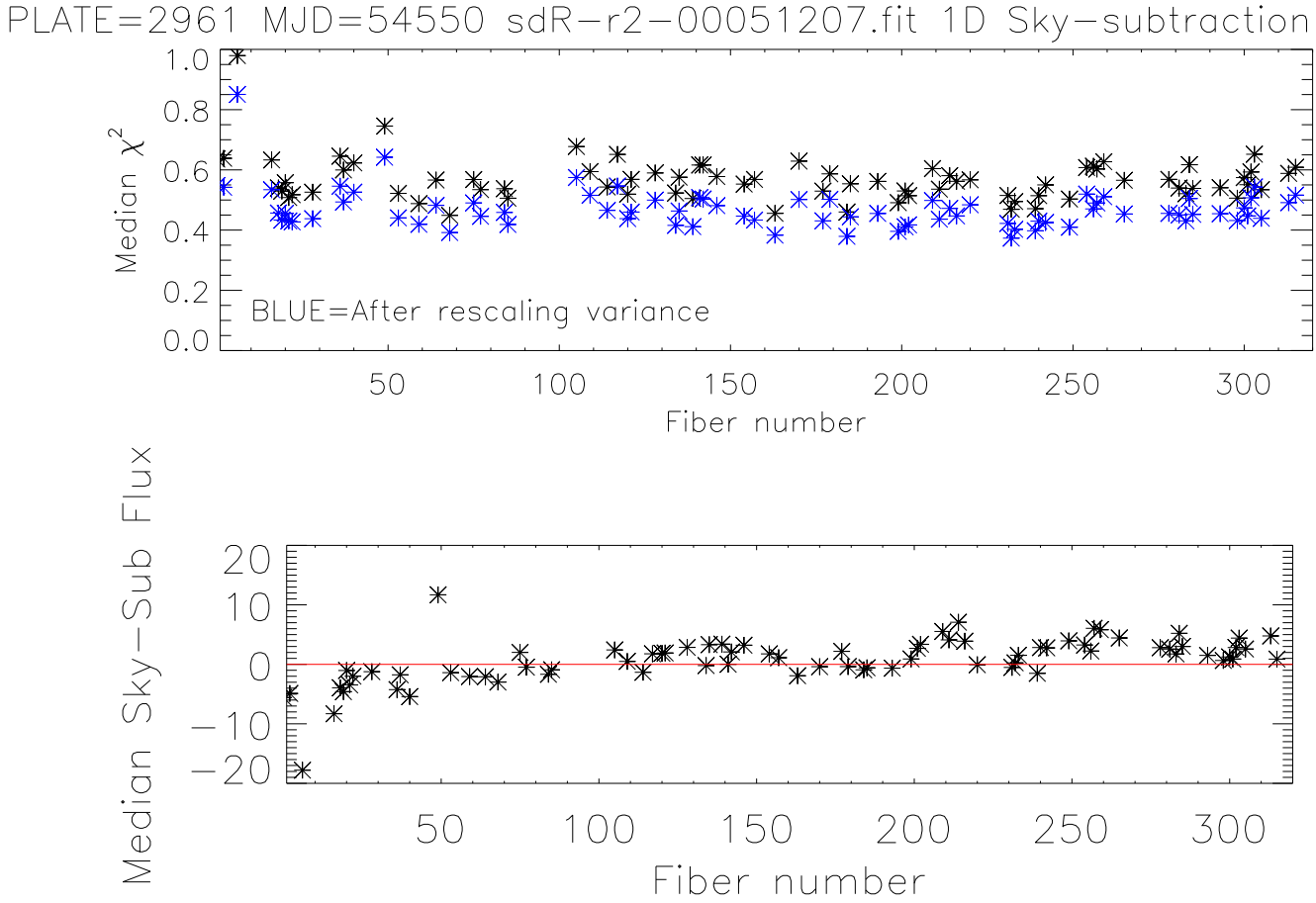

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

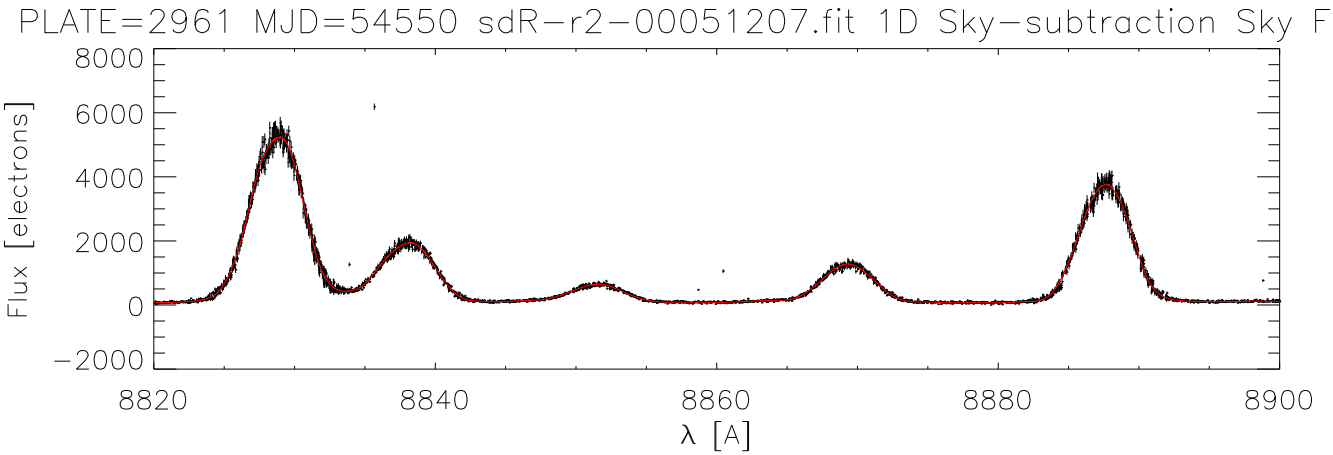

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

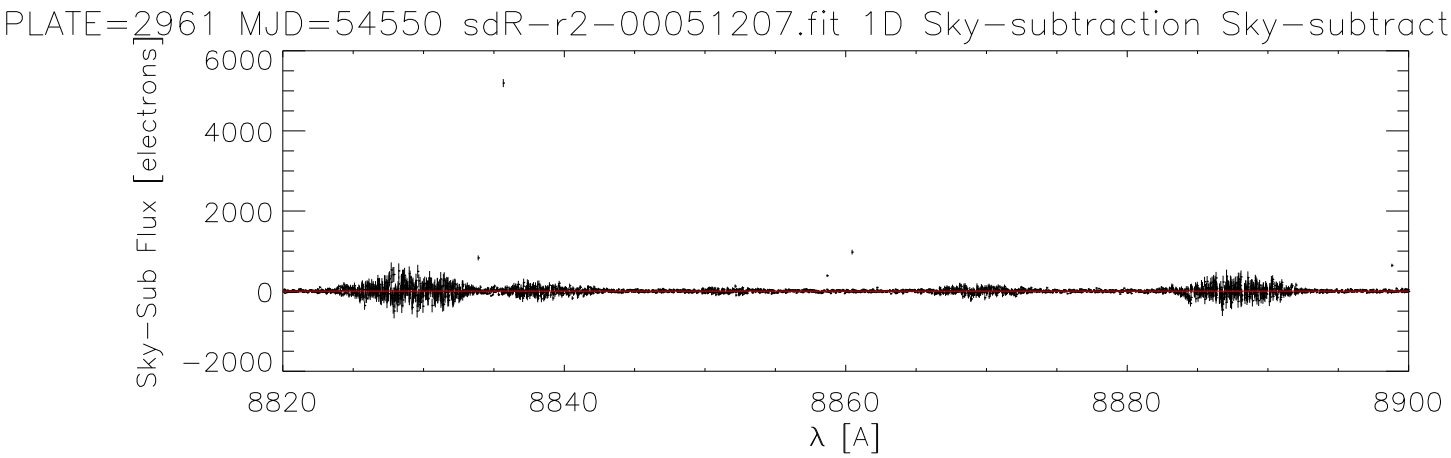

6300.3040
mfhd1 81
mfhd2 82
stdev 0.027
extra 0.31
6363.7760
mfhd1 80
mfhd2 82
stdev 0.037
extra 0.28
6553.6100
mfhd1 82
mfhd2 82
stdev 0.045
extra 0.29
6923.2100
mfhd1 81
mfhd2 82
stdev 0.032
extra 0.27
6949.0300
mfhd1 82
mfhd2 82
stdev 0.031
extra 0.24
7571.7500
mfhd1 80
mfhd2 82
stdev 0.028
extra 0.24
7794.1200
mfhd1 81
mfhd2 82
stdev 0.022
extra 0.33
7821.5100
mfhd1 81
mfhd2 82
stdev 0.025
extra 0.28
8399.1600
mfhd1 81
mfhd2 82
stdev 0.019
extra 0.26
8430.1700
mfhd1 81
mfhd2 82
stdev 0.019
extra 0.26
8885.8300
mfhd1 80
mfhd2 80
stdev 0.025
extra 0.23
8919.6100
mfhd1 79
mfhd2 80
stdev 0.029
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

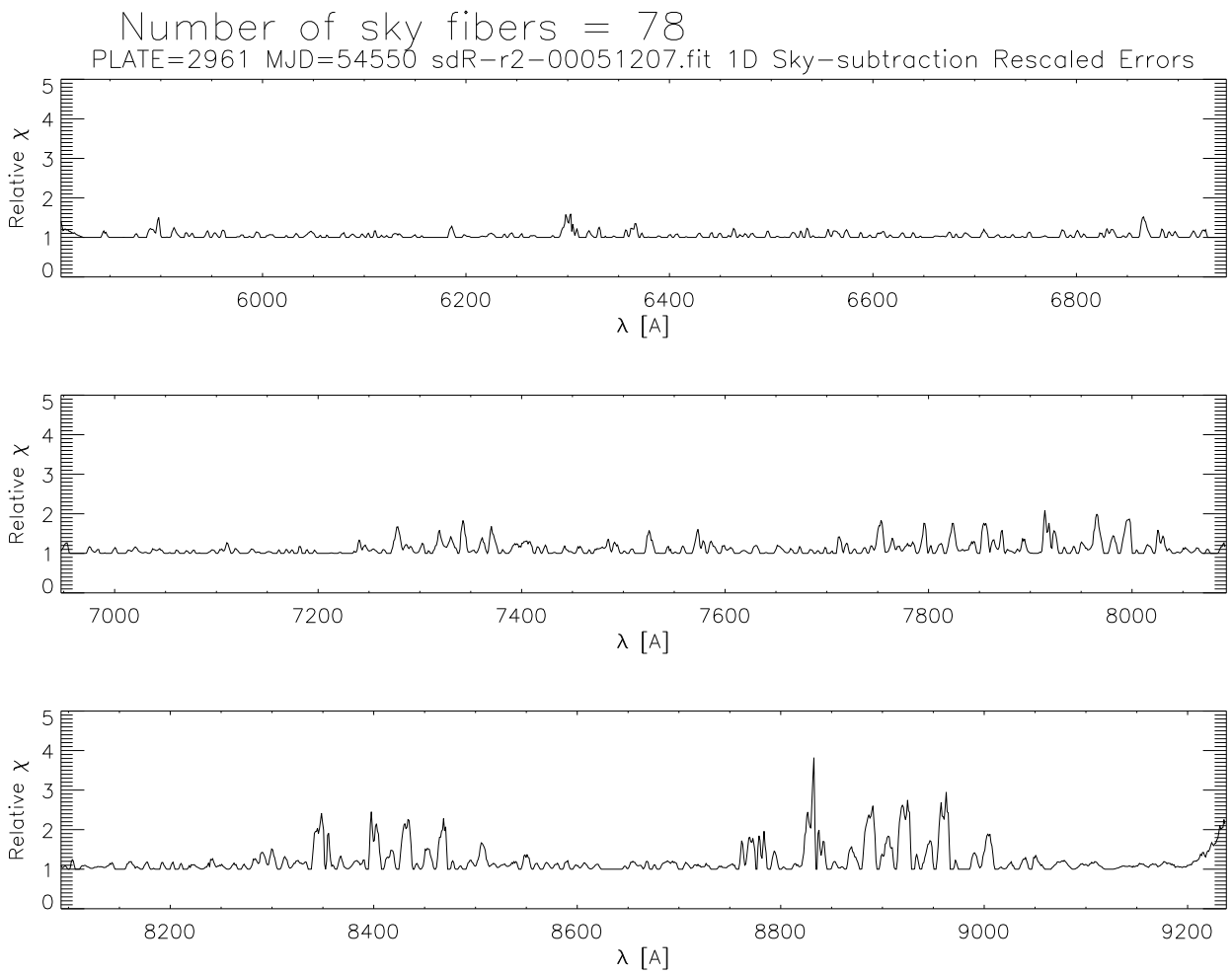

sky shift, pixels
−0.24
−0.26
−0.28
−0.30
−0.32
5000
6000
7000
8000
9000
10000

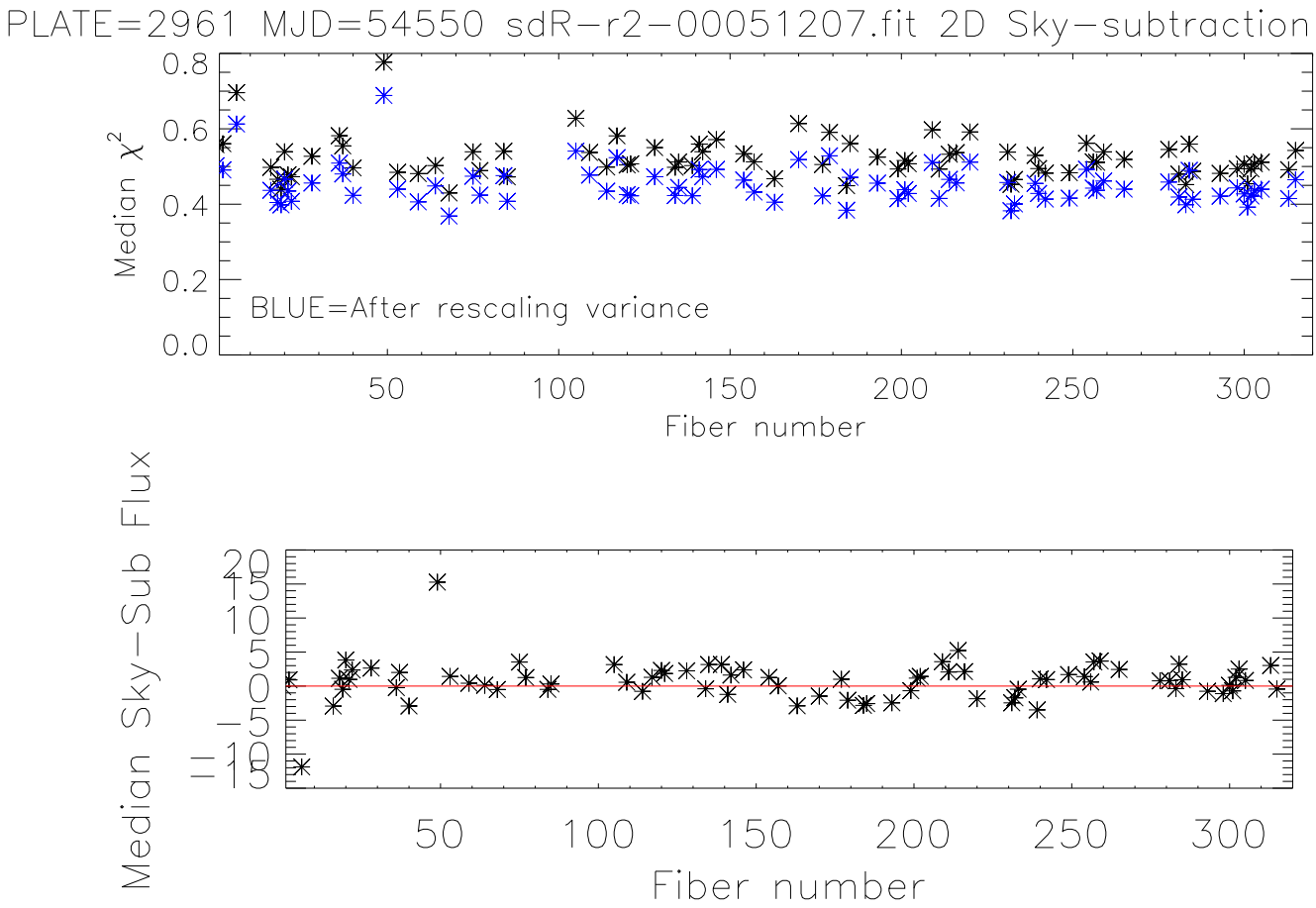

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051207.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

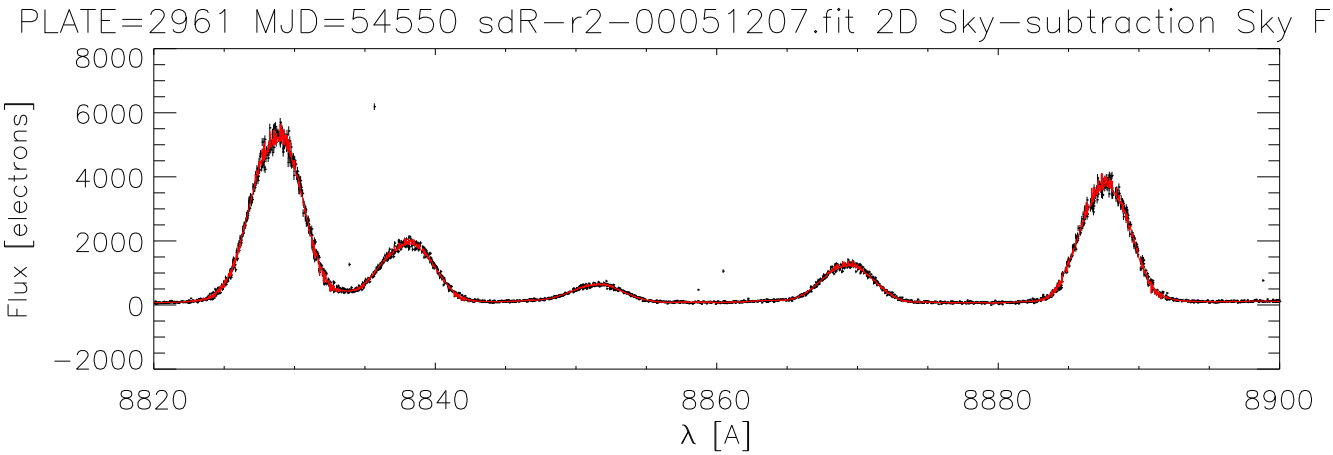

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

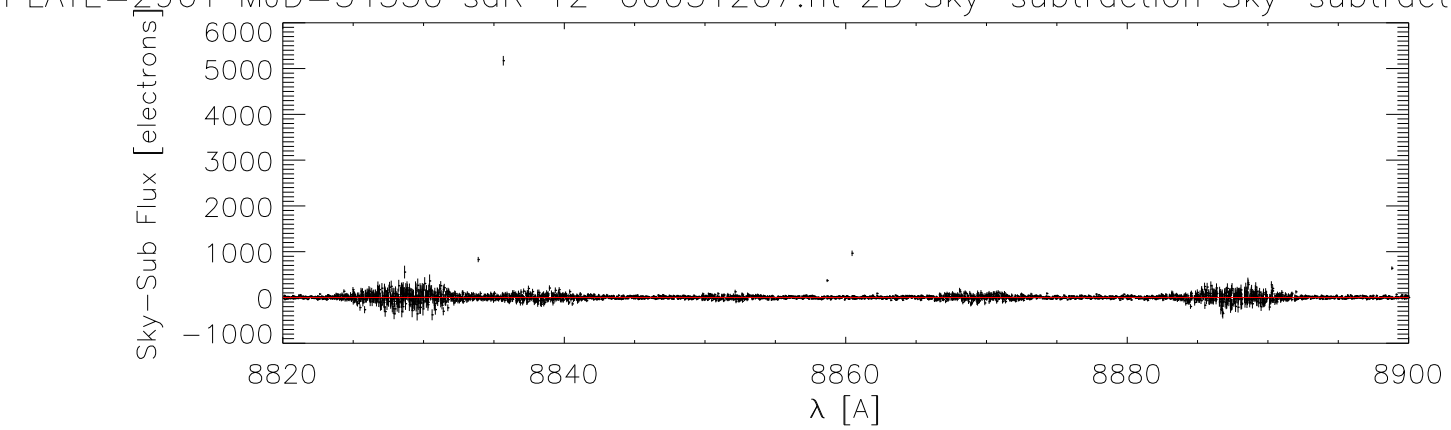

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

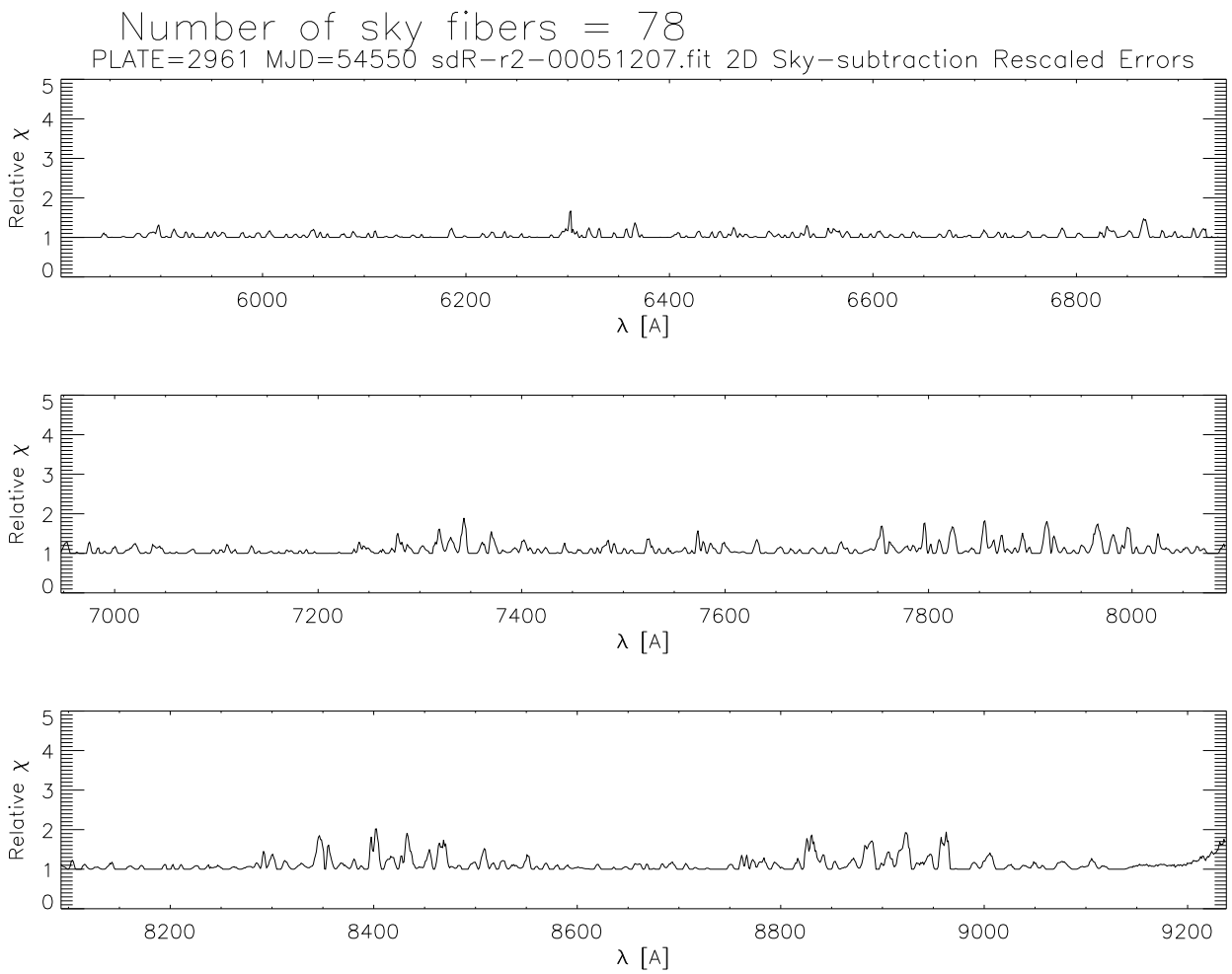

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

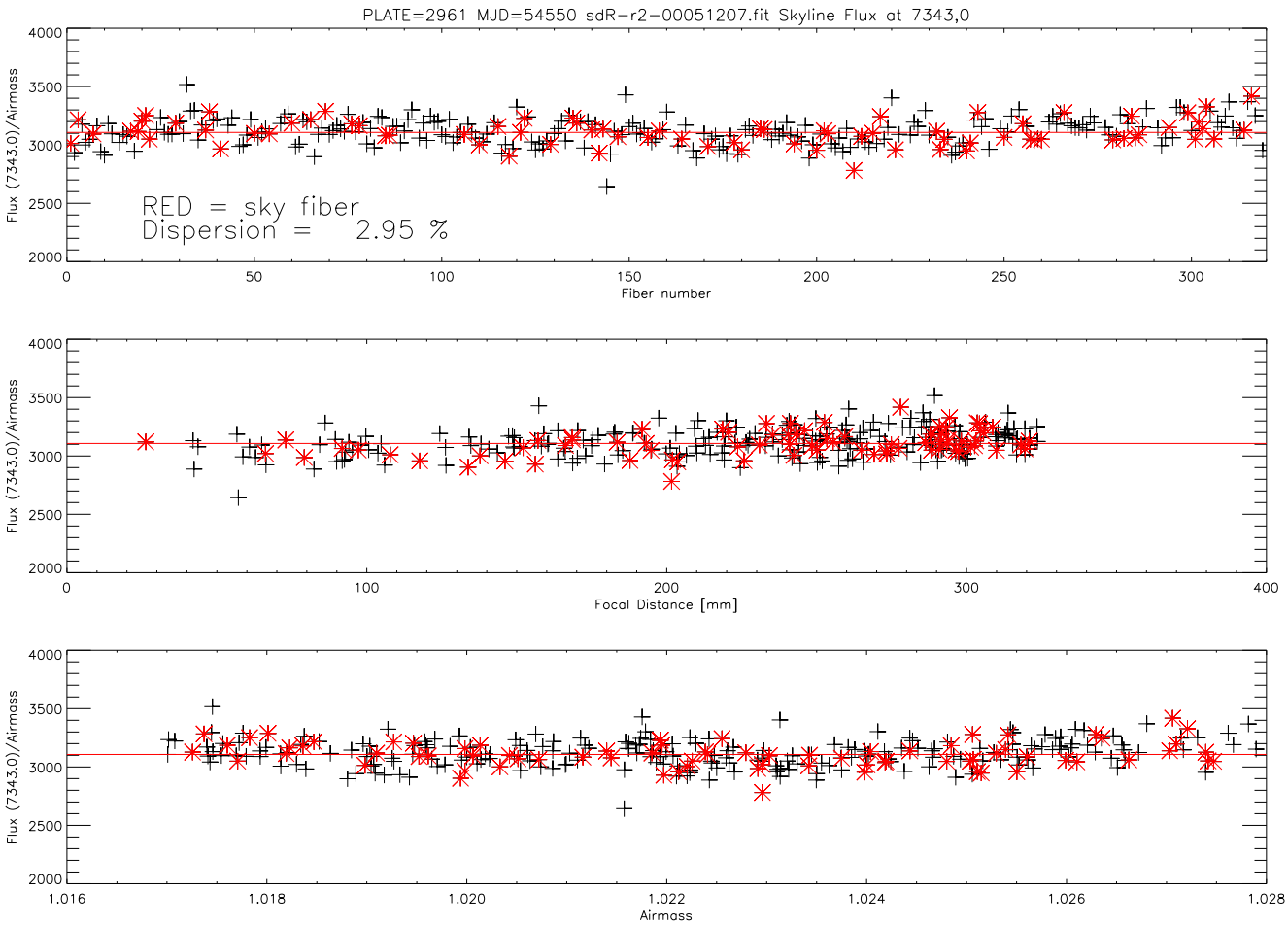

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051207.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

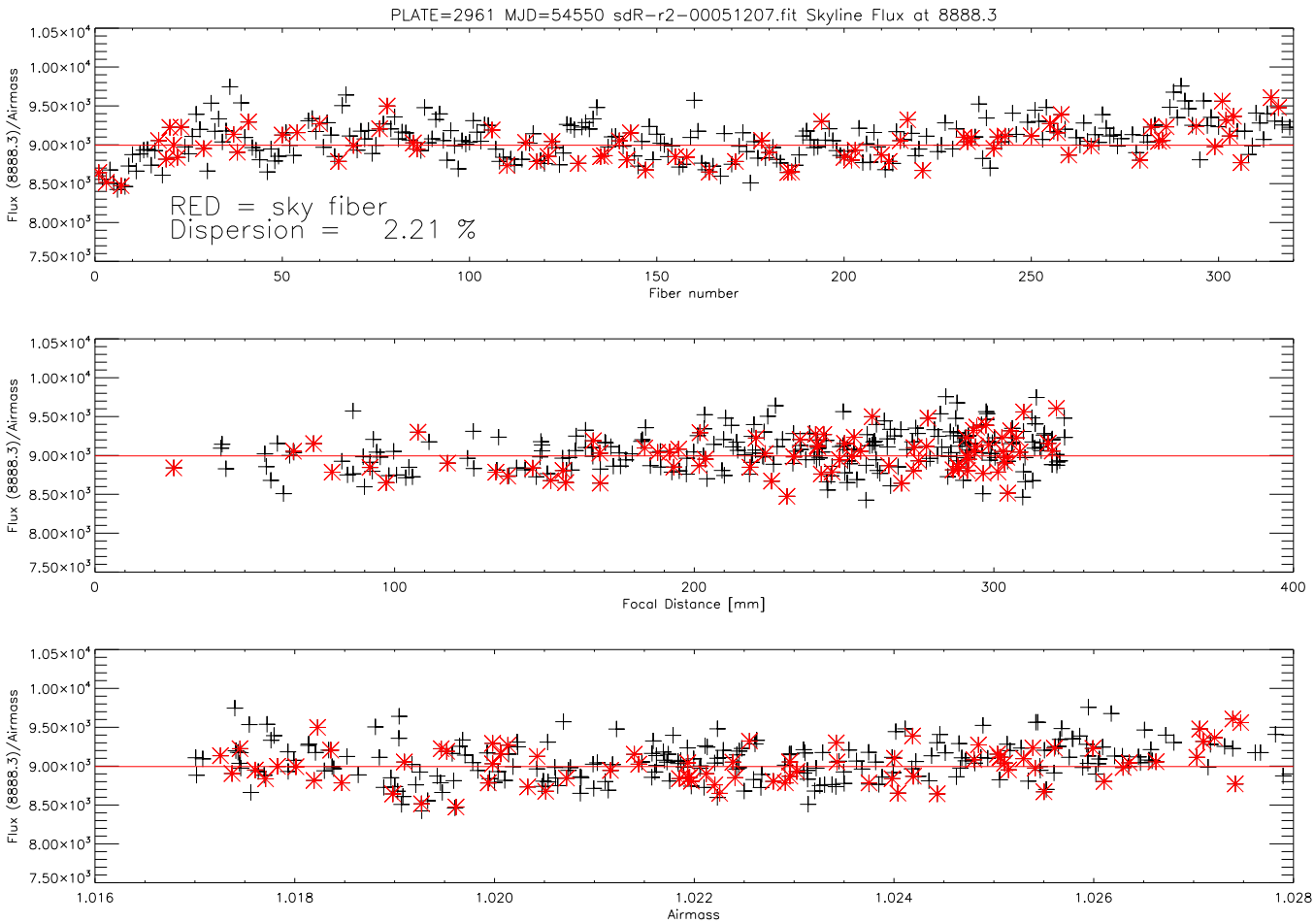

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
20
50
100
150
200
250
300
Fiber number

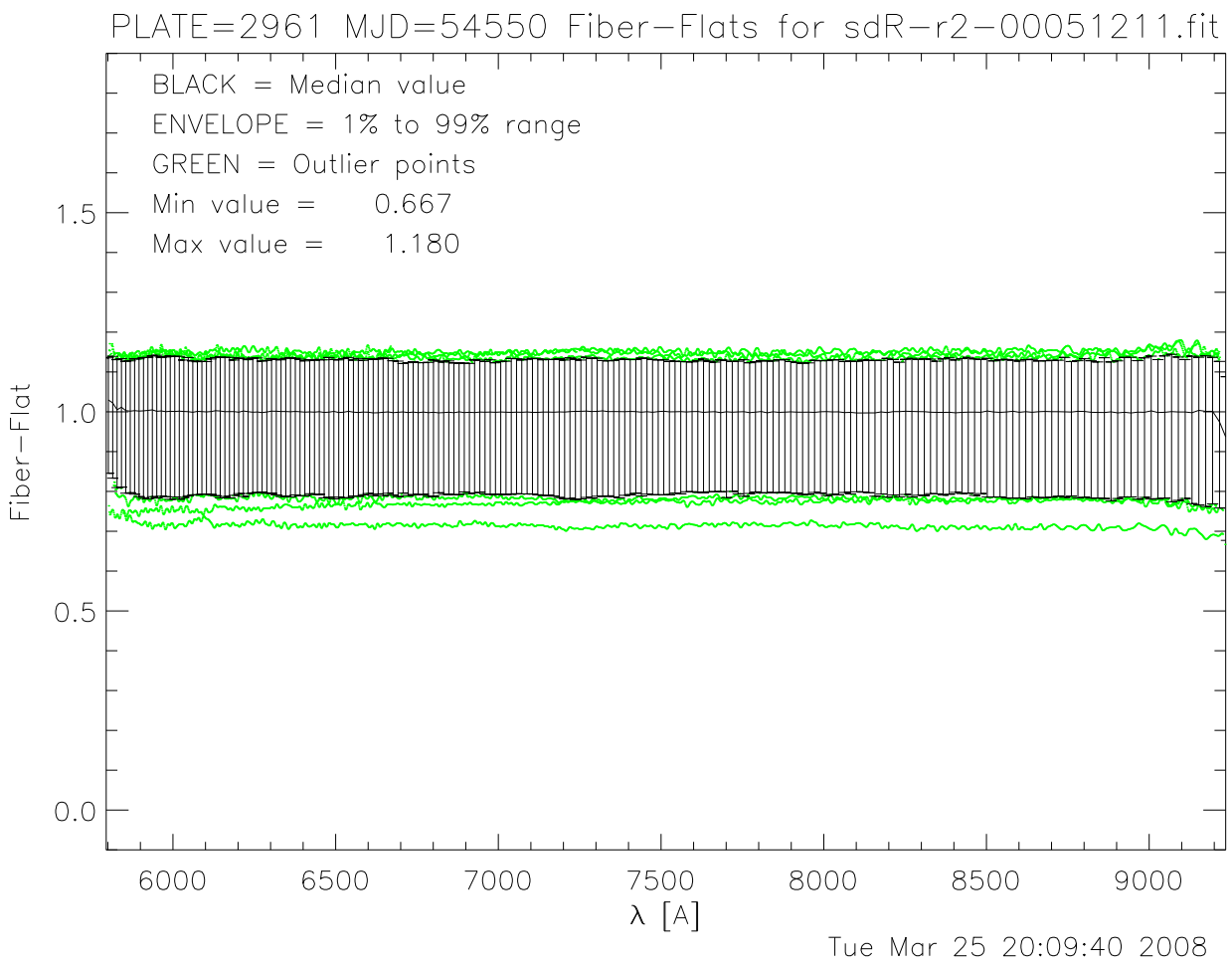

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

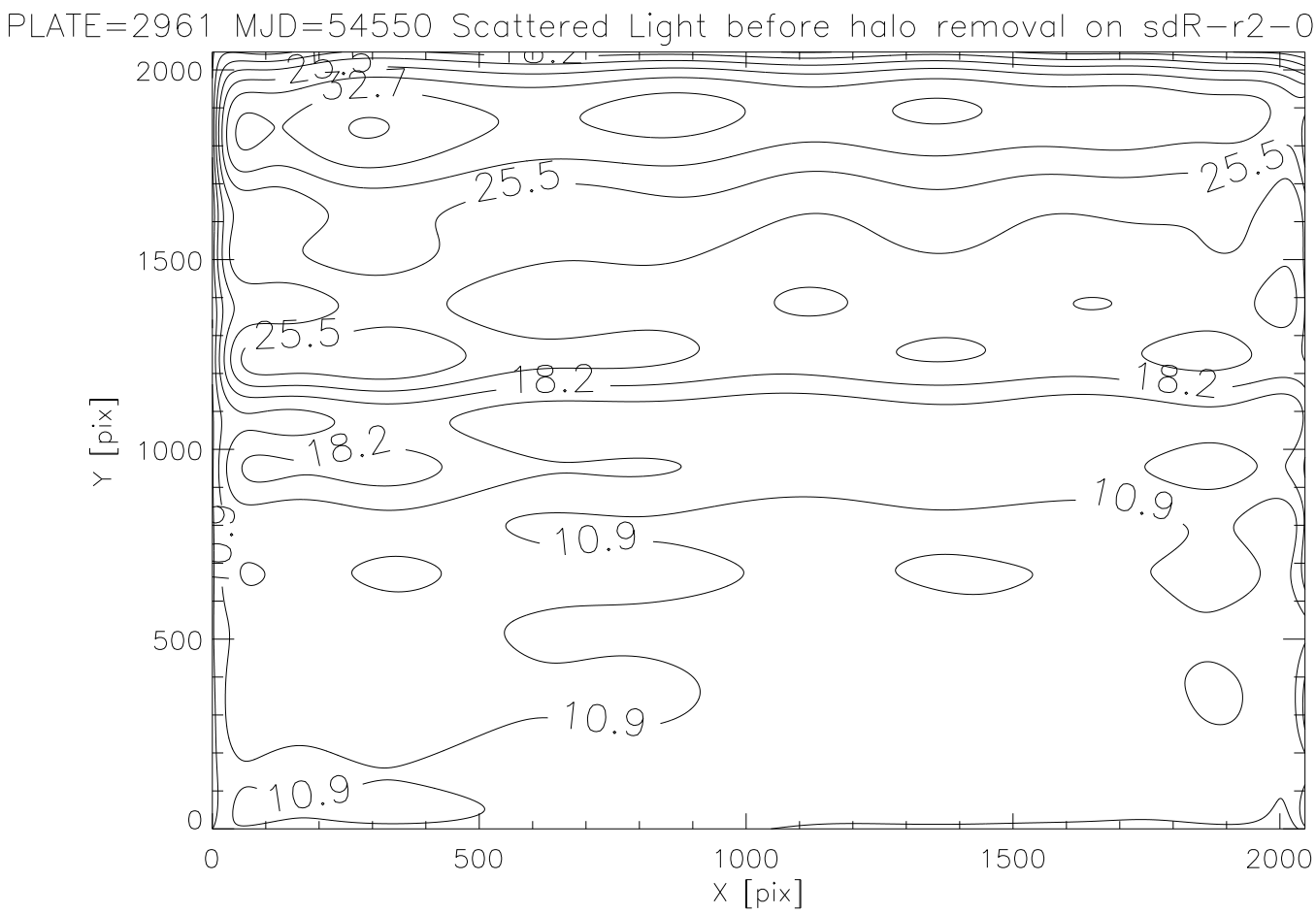

PLATE=2961 MJD=54550 sdR-r2-00051207.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

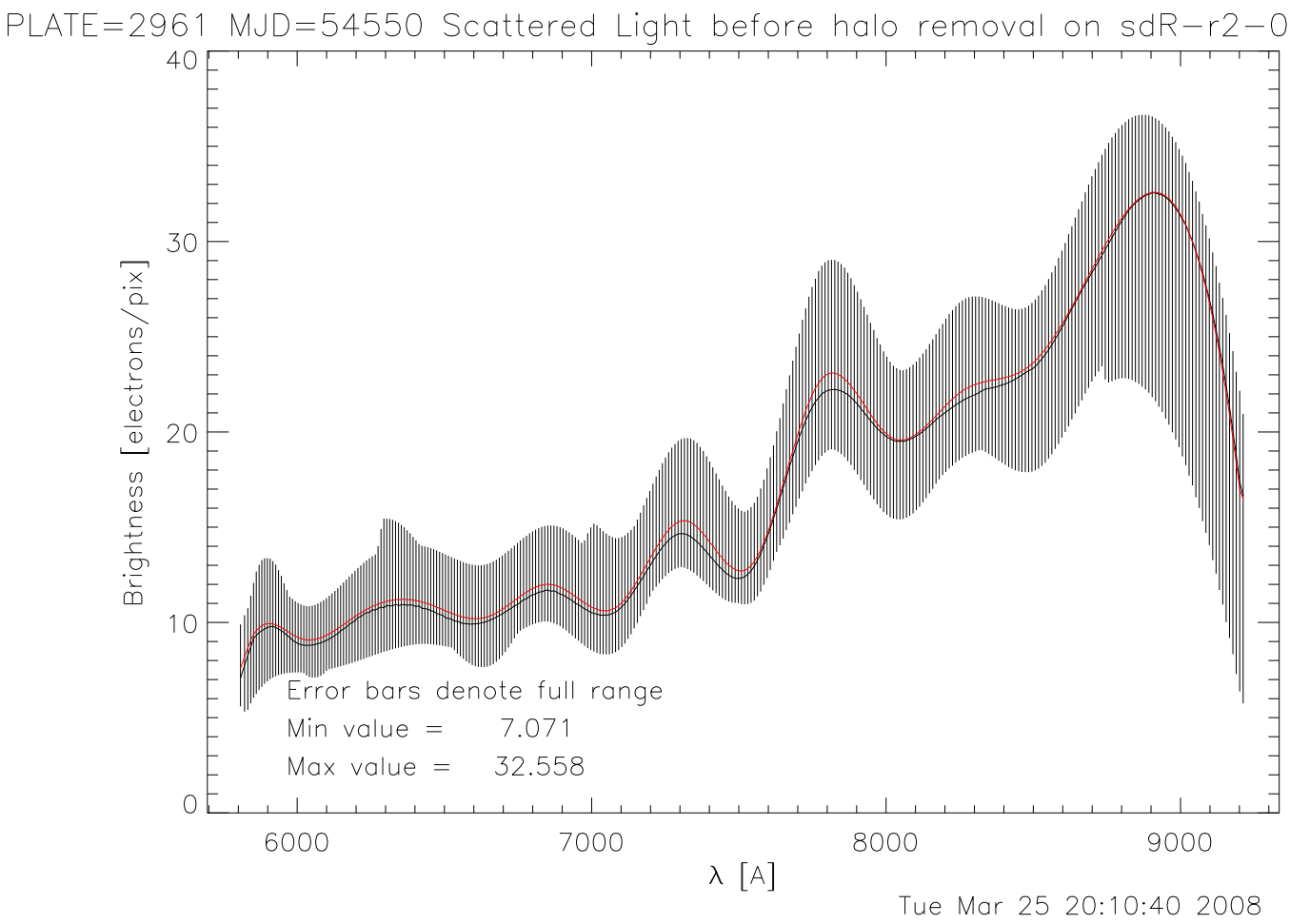

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051207.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

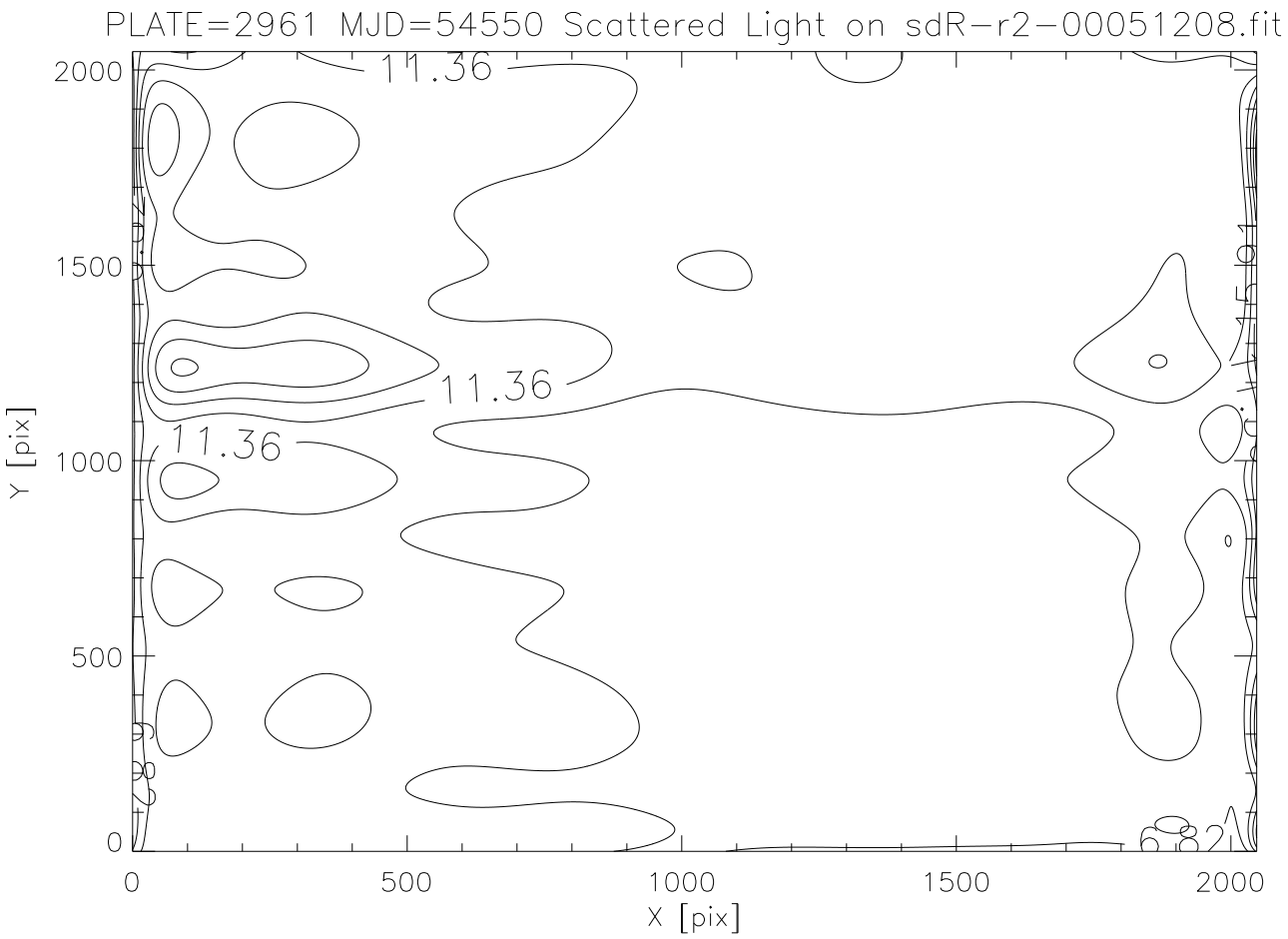

PLATE=2961 MJD=54550 sdR-r2-00051207.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.95 %
Fiber number
Focal Distance [mm]
Airmass

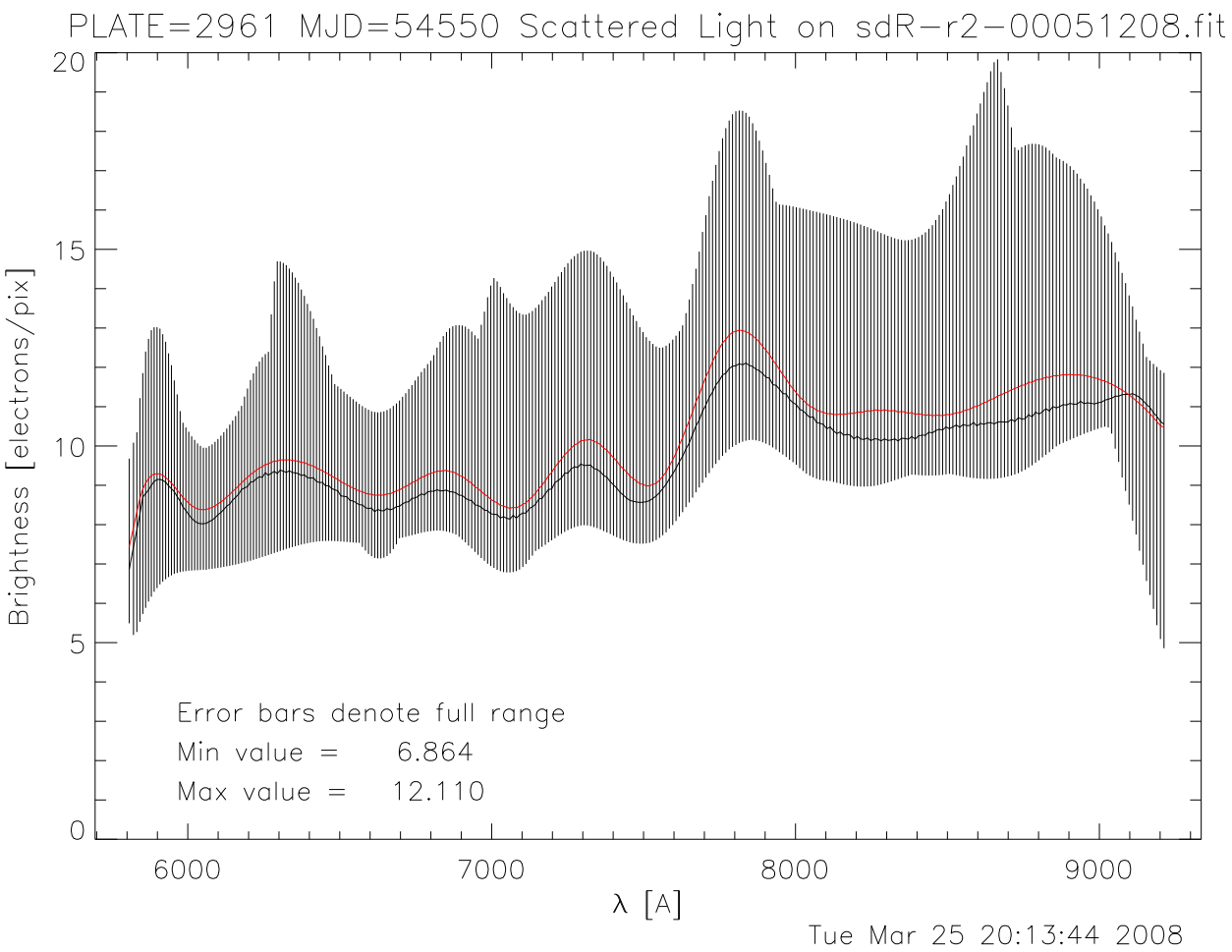

PLATE=2961 MJD=54550 sdR-r2-00051207.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

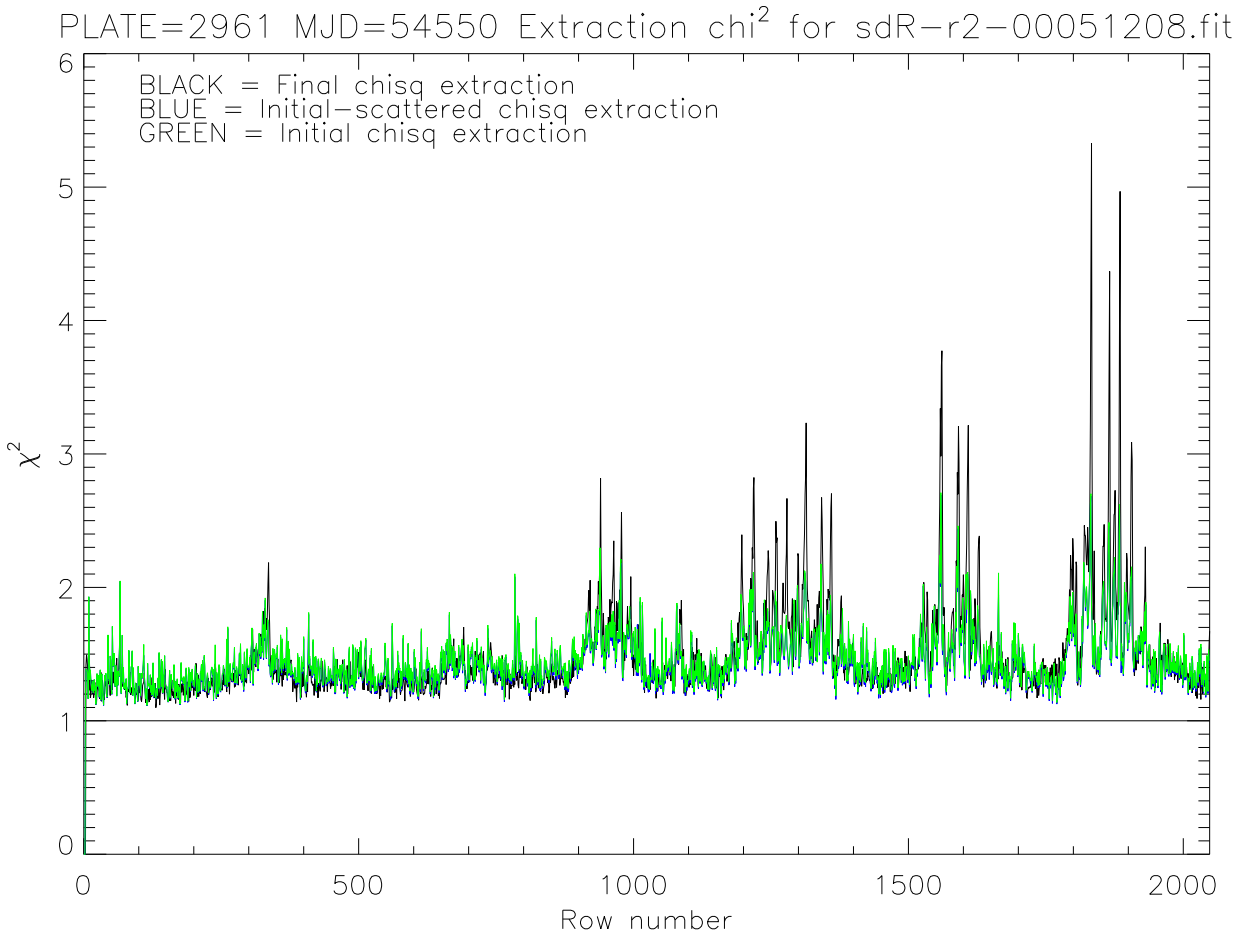

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 20:09:40 2008

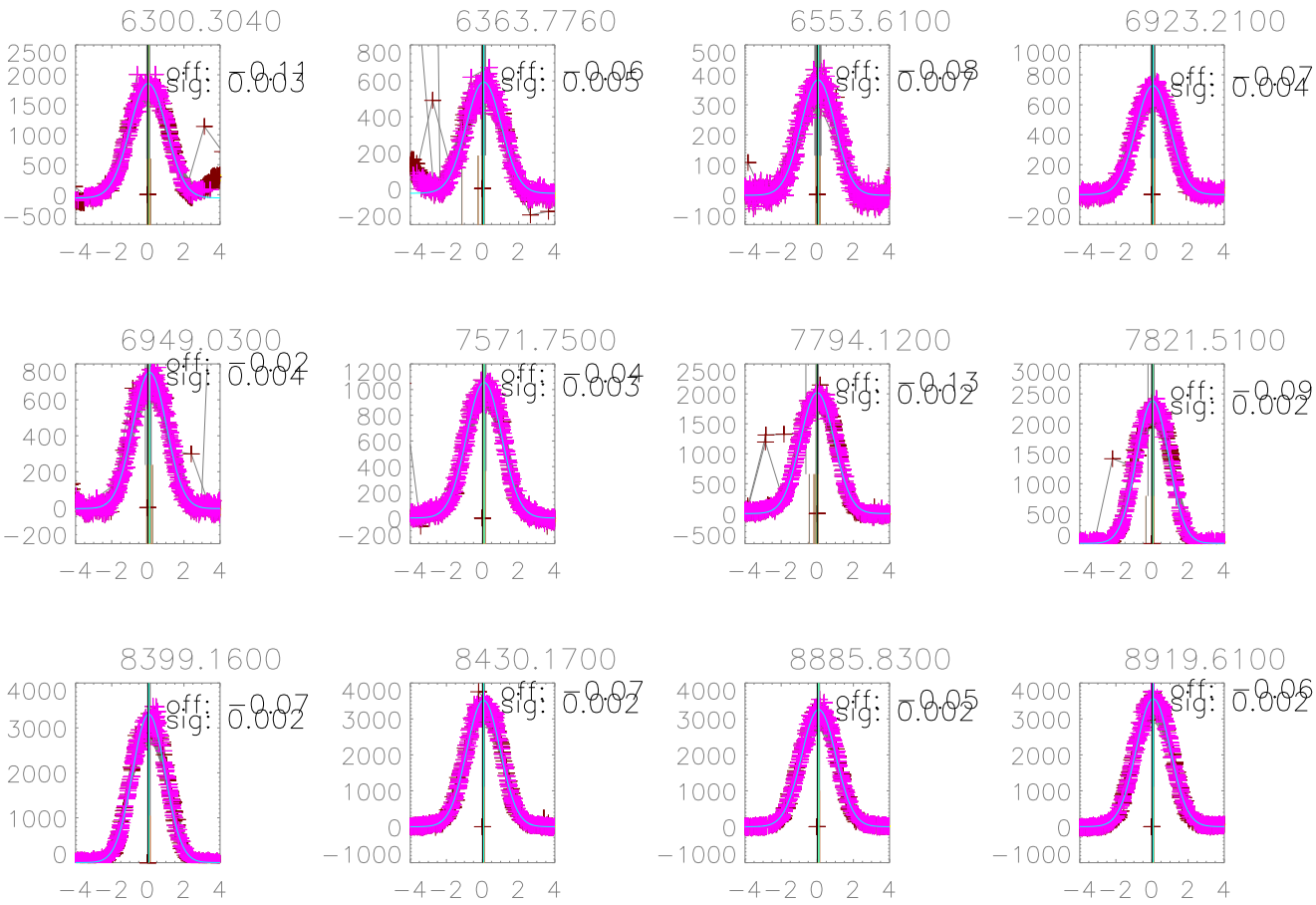

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051208.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
25.5
25.5
25.5
18.2
18.2
18.2
10.9
10.9
10.9
10.9

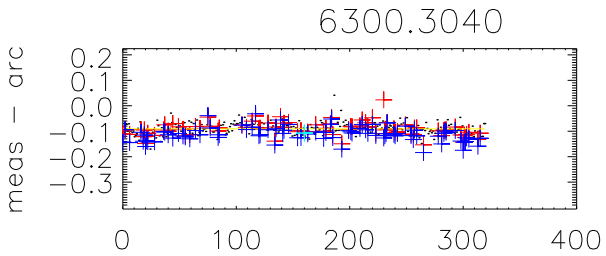

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051208.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.071
Max value = 32.558
Tue Mar 25 20:10:40 2008

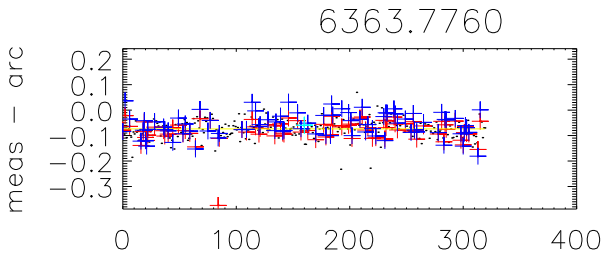

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051208.fit
11.36
11.36
11.36
0
500
1000
1500
2000
Y [pix]
X [pix]

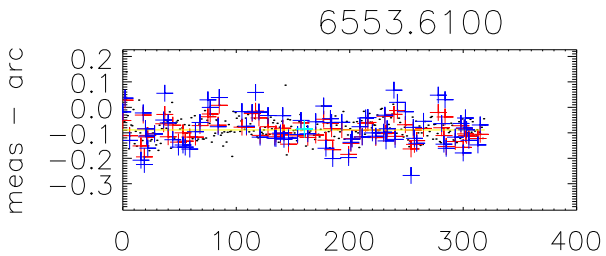

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051208.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.864
Max value = 12.110
Tue Mar 25 20:13:44 2008

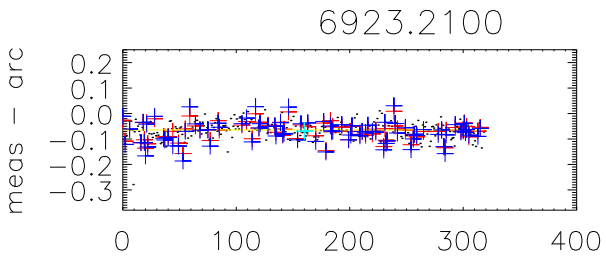

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051208.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

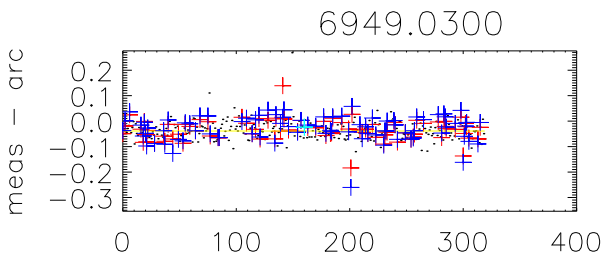

6300.3040
off: −0.11
sig: 0.003
6363.7760
off: −0.06
sig: 0.005
6553.6100
off: −0.08
sig: 0.007
6923.2100
off: −0.07
sig: 0.004
6949.0300
off: −0.02
sig: 0.004
7571.7500
off: −0.04
sig: 0.003
7794.1200
off: −0.13
sig: 0.002
7821.5100
off: −0.09
sig: 0.002
8399.1600
off: −0.07
sig: 0.002
8430.1700
off: −0.07
sig: 0.002
8885.8300
off: −0.05
sig: 0.002
8919.6100
off: −0.06
sig: 0.002

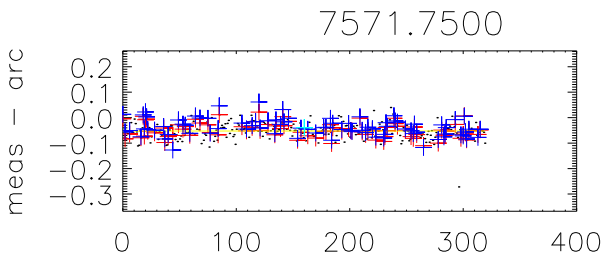

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

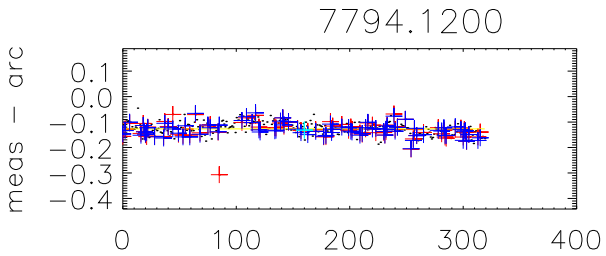

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

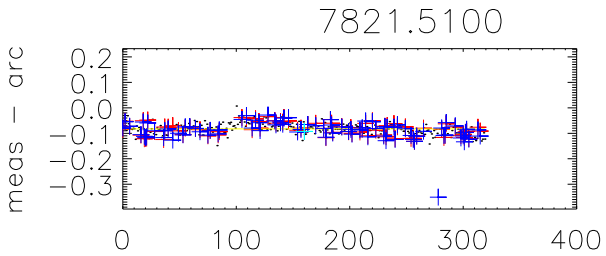

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

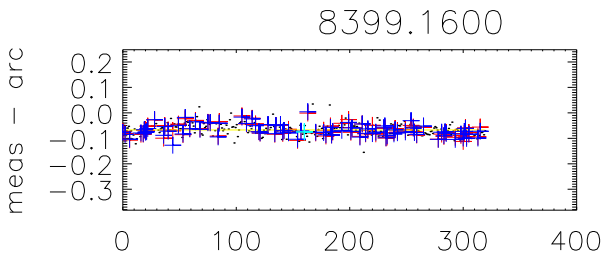

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

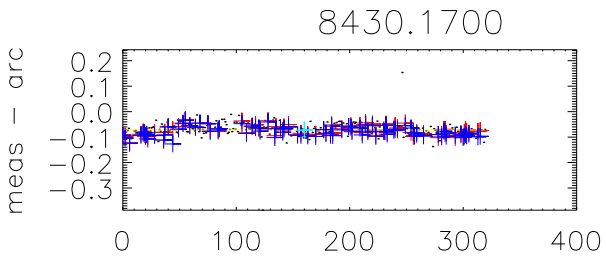

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

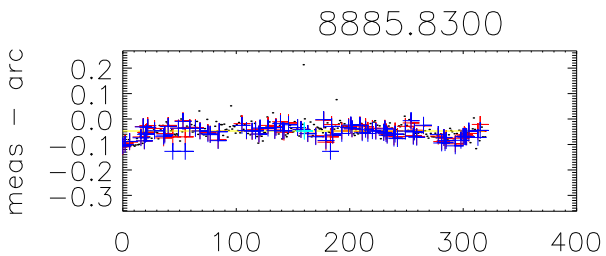

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

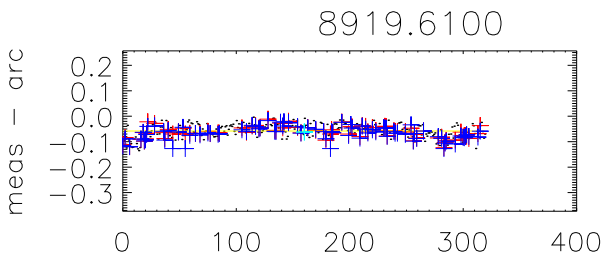

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

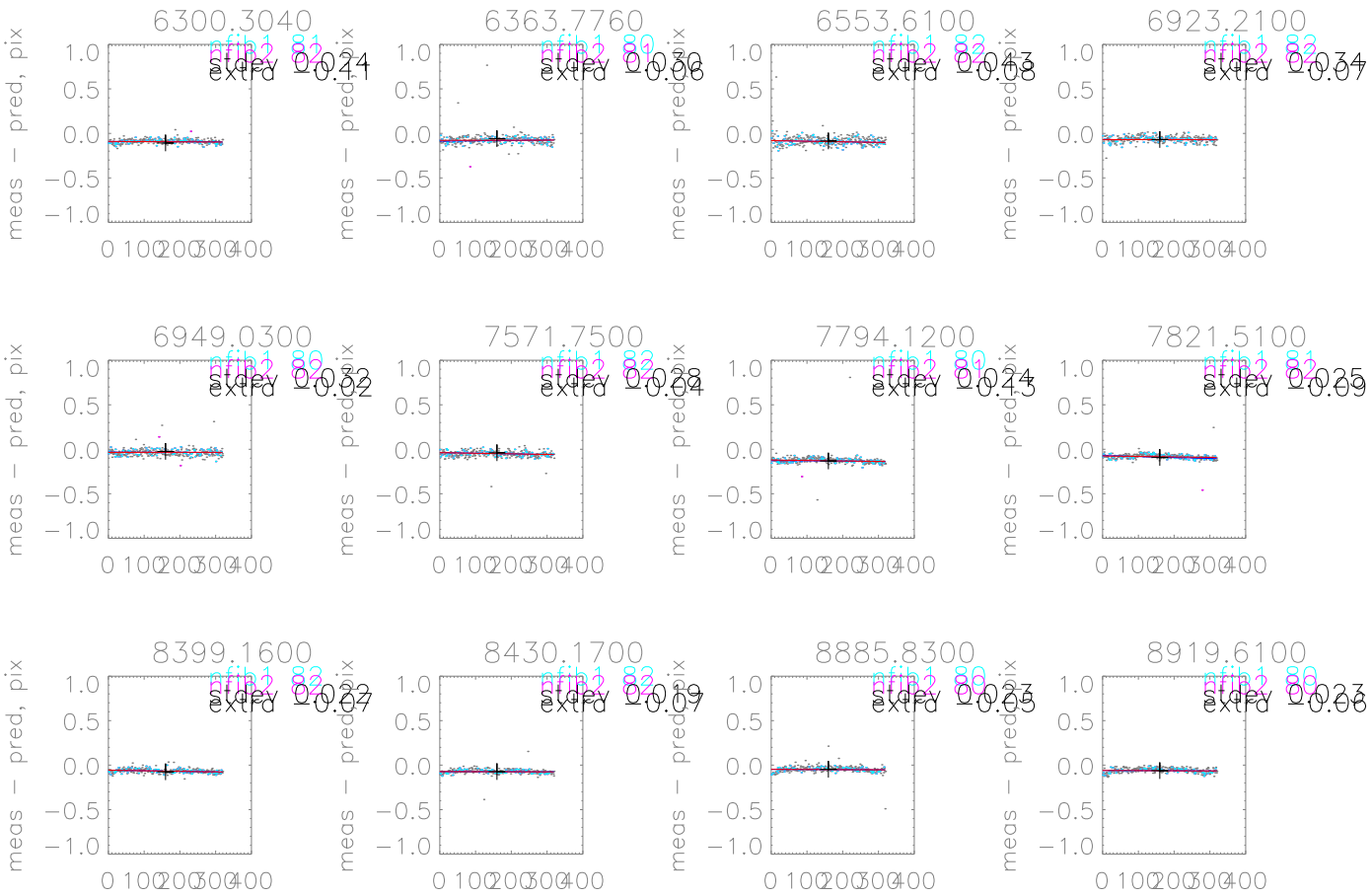

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

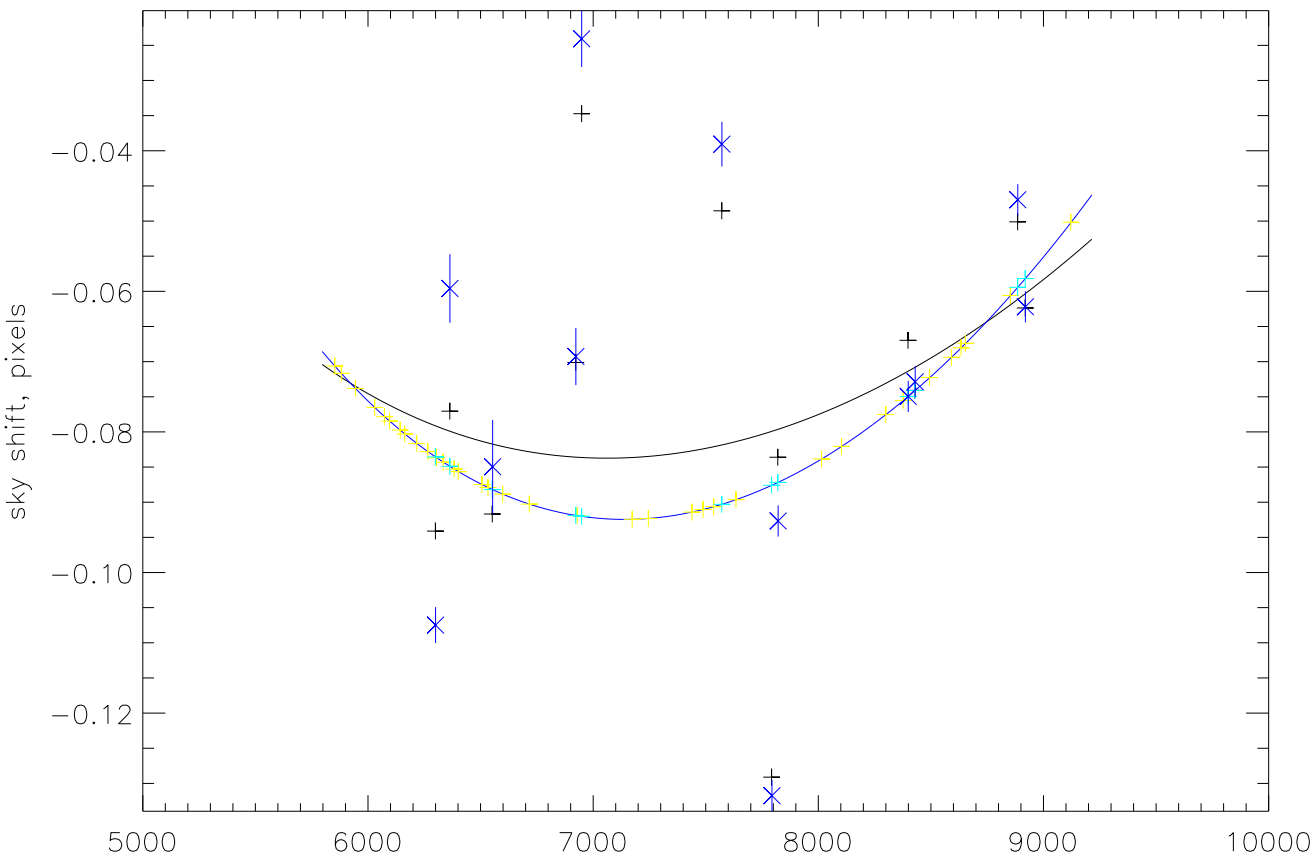

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

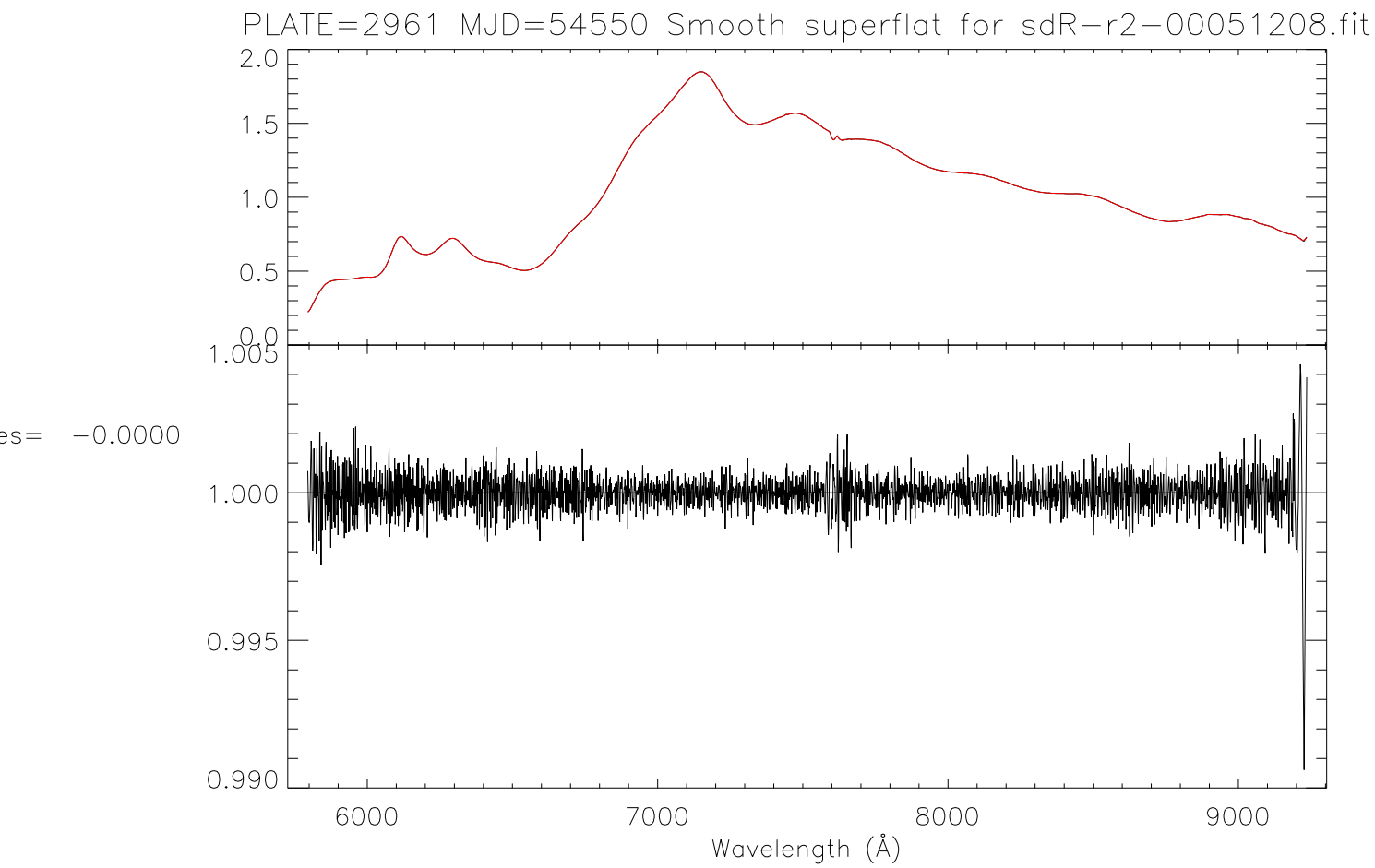

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

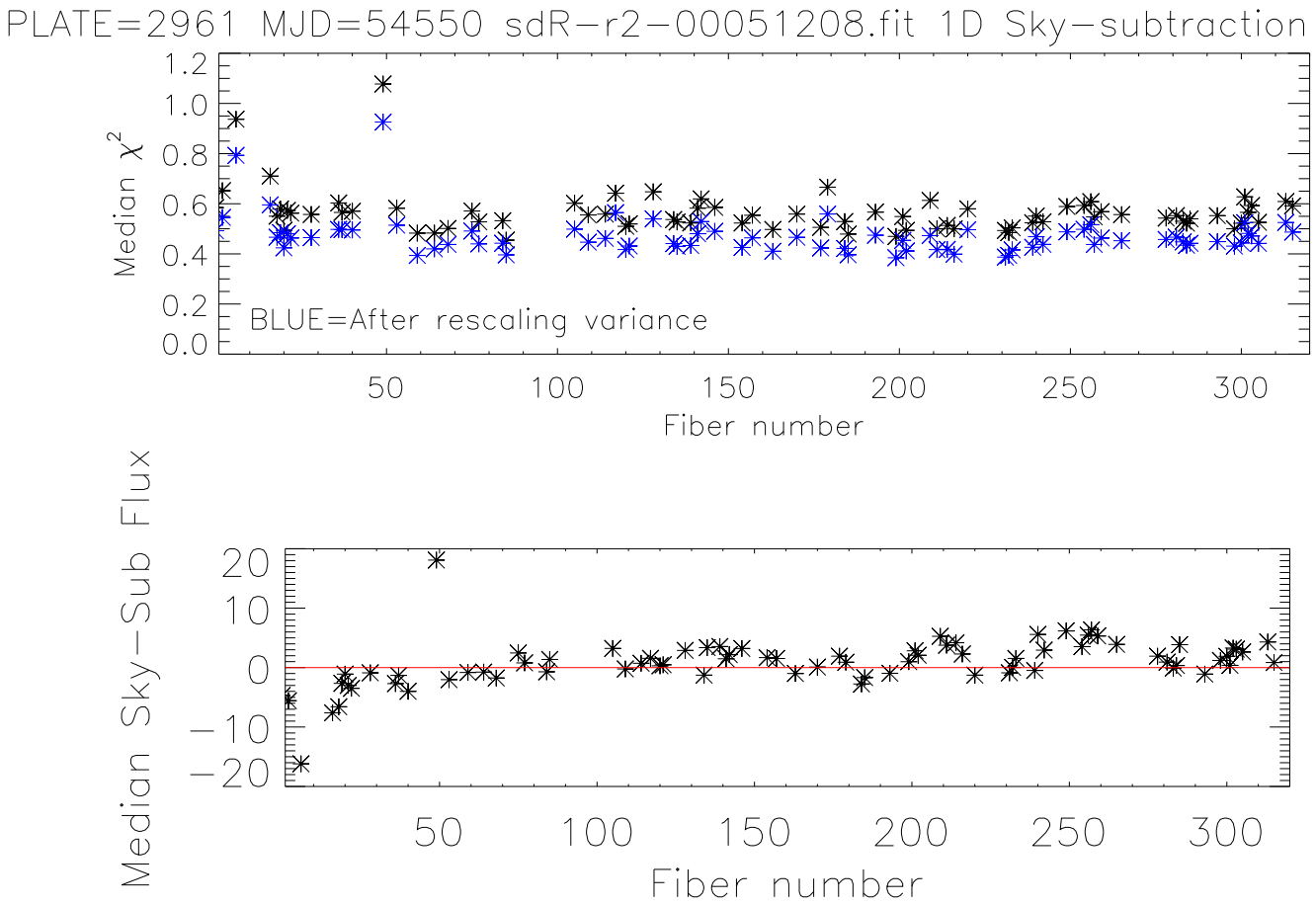

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

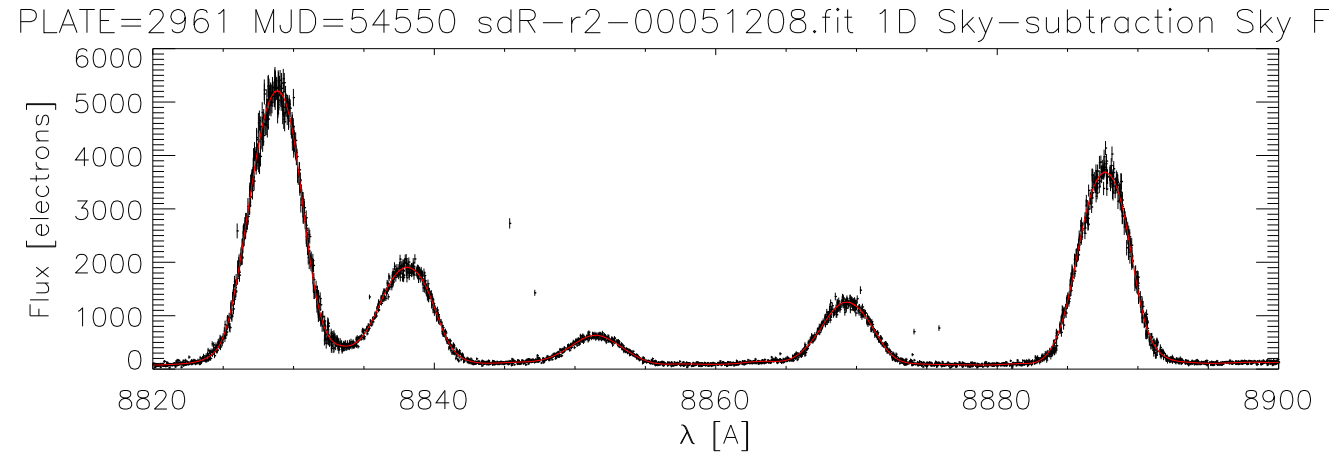

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

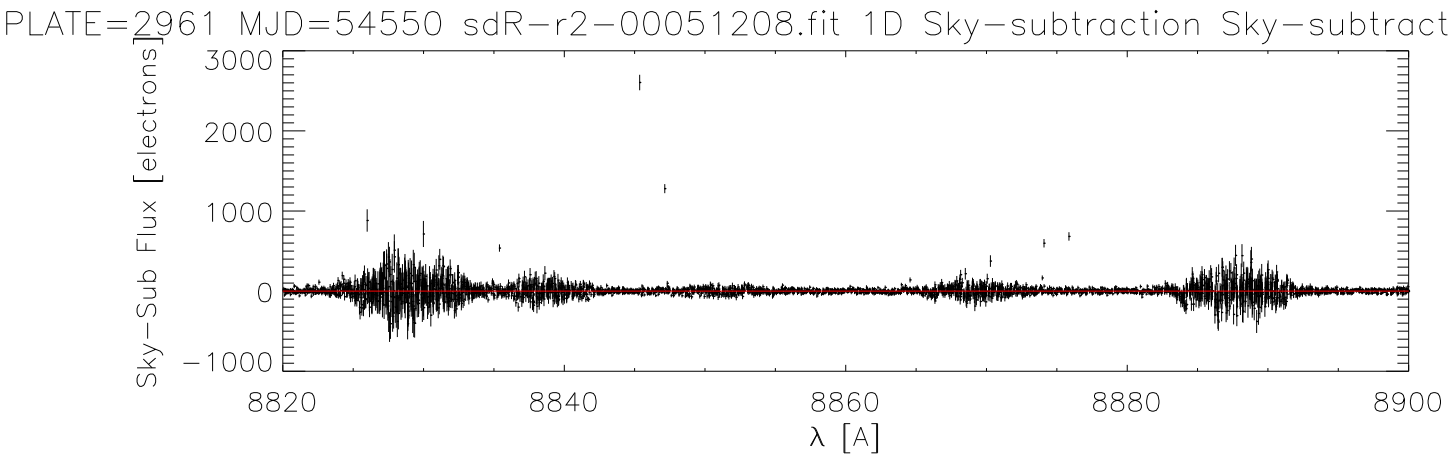

6300.3040
mfhd1 81
mfhd2 82
stdev 0.024
extra −0.041
6363.7760
mfhd1 80
mfhd2 82
stdev 0.030
extra −0.006
6553.6100
mfhd1 82
mfhd2 82
stdev 0.043
extra −0.008
6923.2100
mfhd1 82
mfhd2 82
stdev 0.034
extra −0.007
6949.0300
mfhd1 80
mfhd2 82
stdev 0.032
extra −0.002
7571.7500
mfhd1 82
mfhd2 82
stdev 0.028
extra −0.004
7794.1200
mfhd1 81
mfhd2 82
stdev 0.024
extra −0.003
7821.5100
mfhd1 81
mfhd2 82
stdev 0.025
extra −0.009
8399.1600
mfhd1 82
mfhd2 82
stdev 0.022
extra −0.007
8430.1700
mfhd1 82
mfhd2 82
stdev 0.019
extra −0.007
8885.8300
mfhd1 80
mfhd2 80
stdev 0.023
extra −0.005
8919.6100
mfhd1 80
mfhd2 80
stdev 0.023
extra −0.006
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

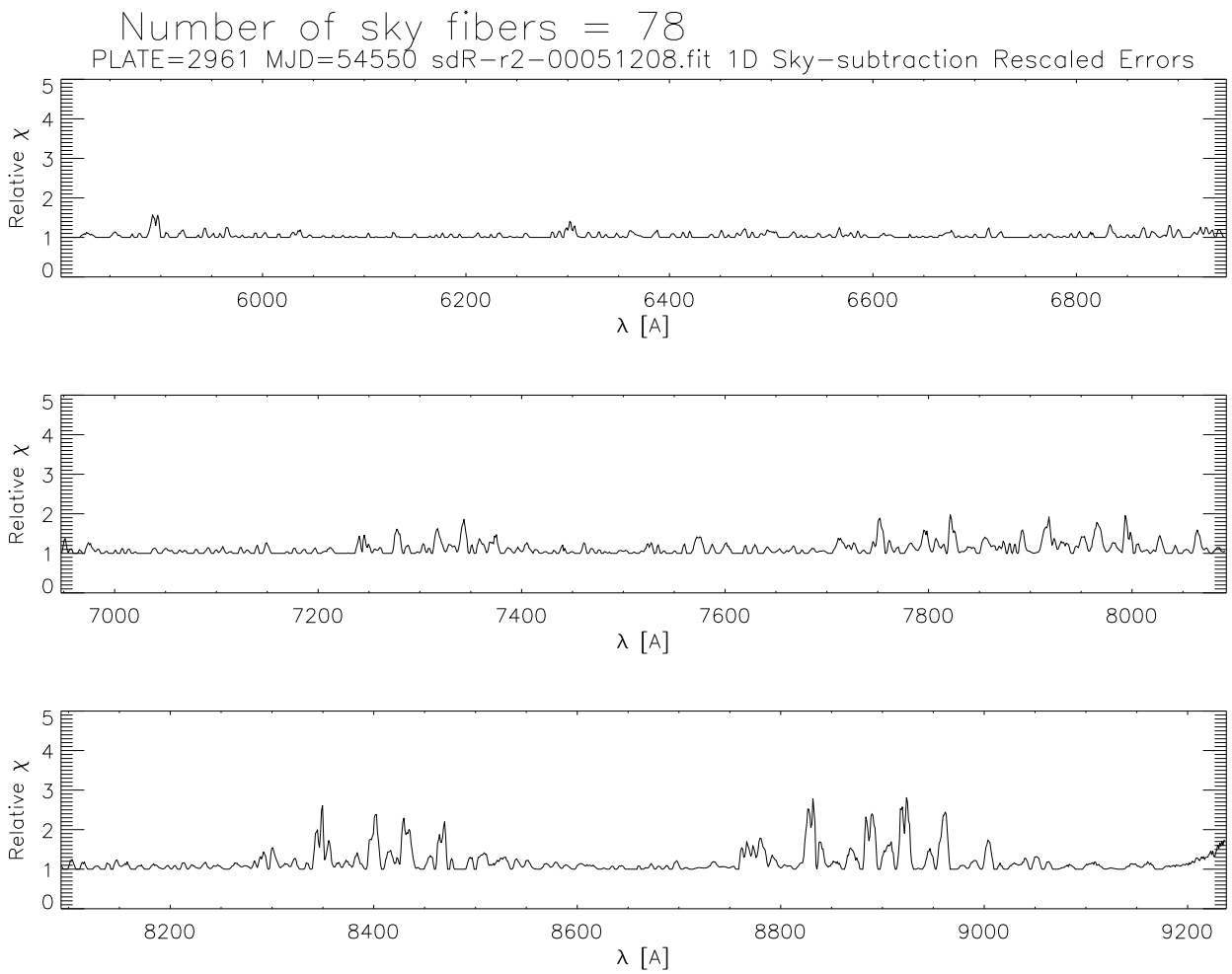

sky shift, pixels
−0.04
−0.06
−0.08
−0.10
−0.12
5000
6000
7000
8000
9000
10000

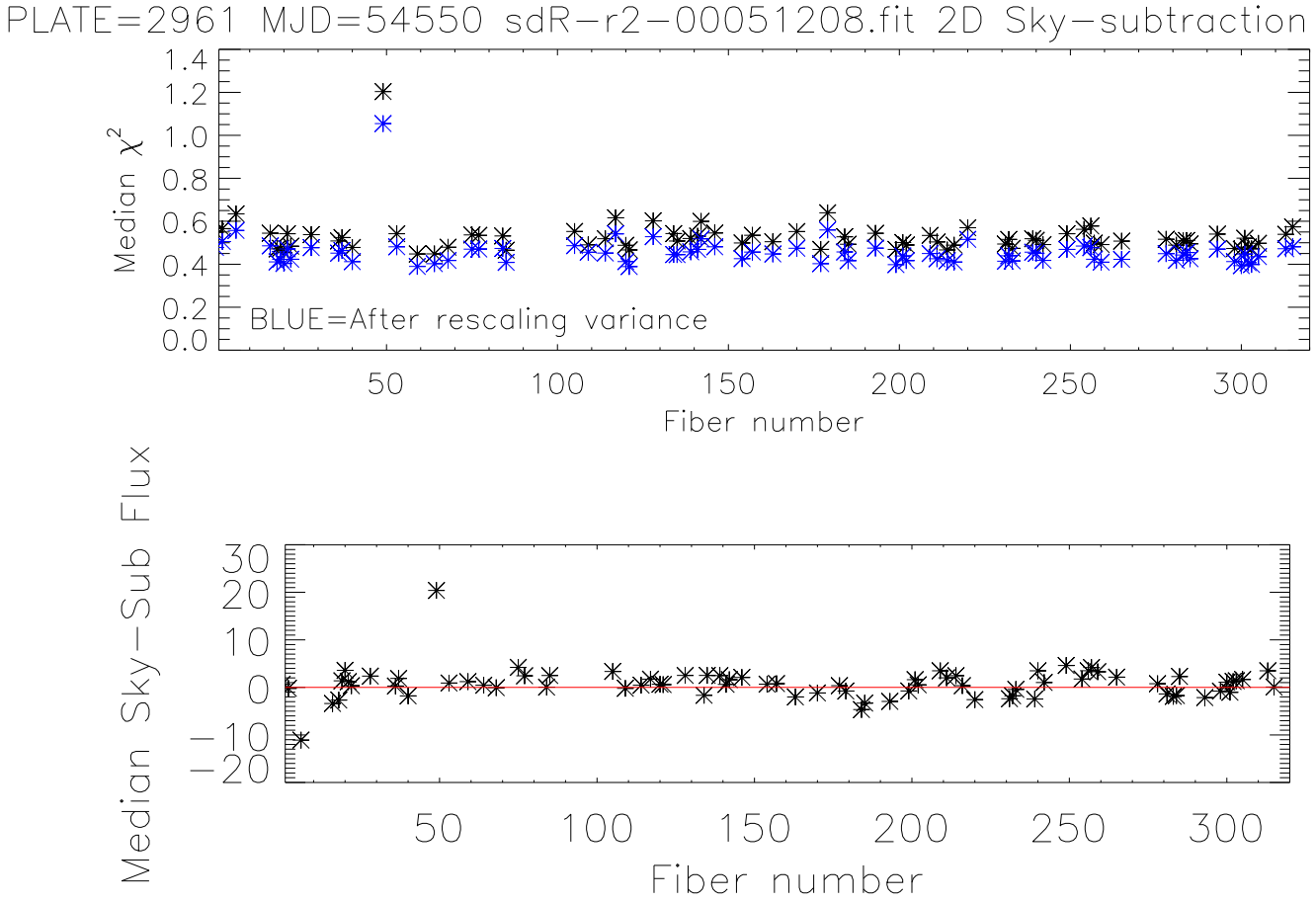

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051208.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

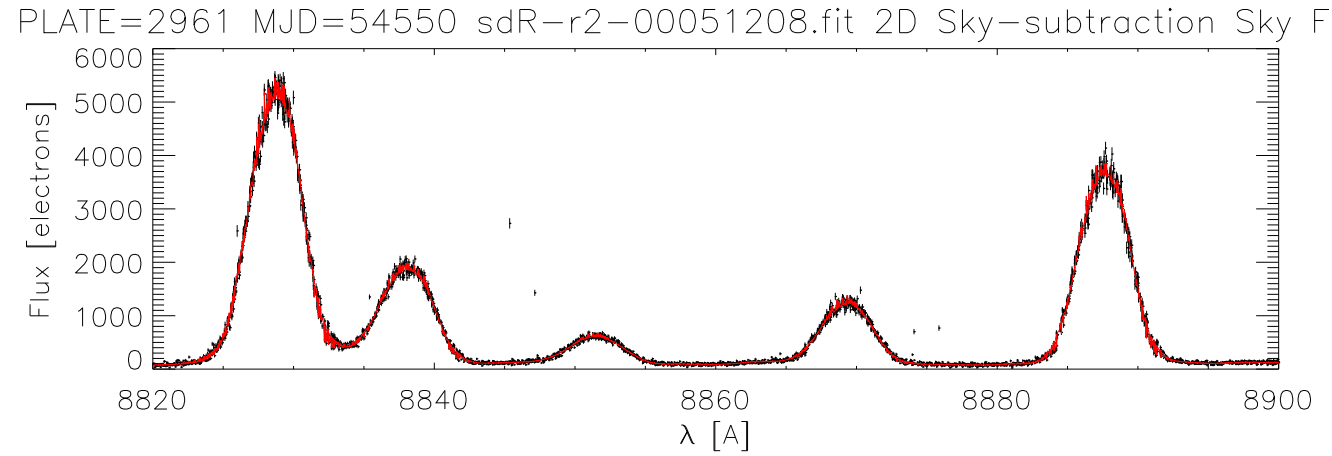

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

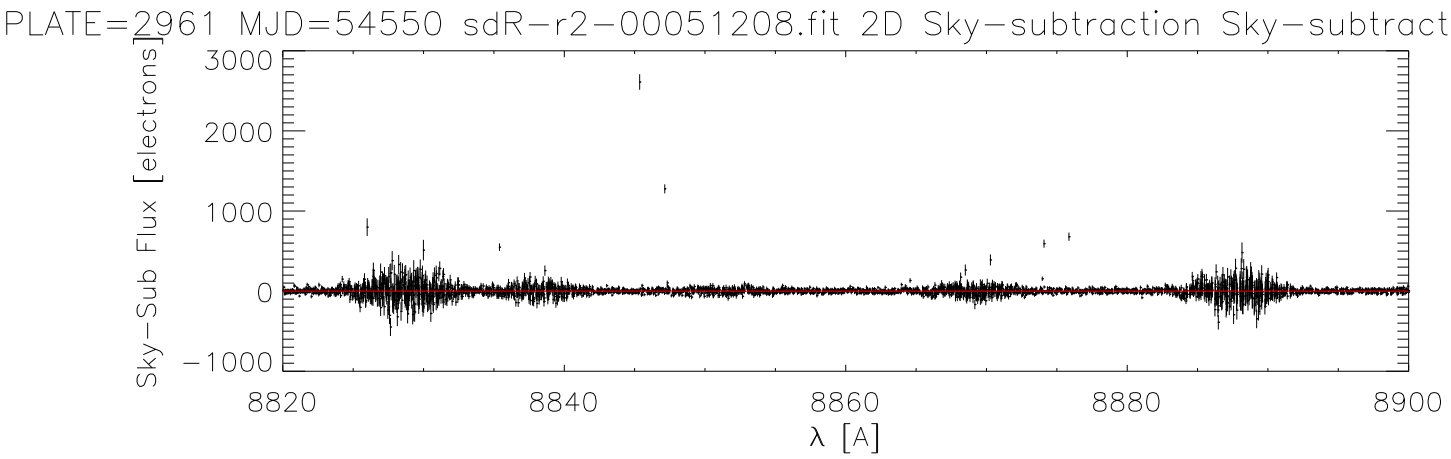

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

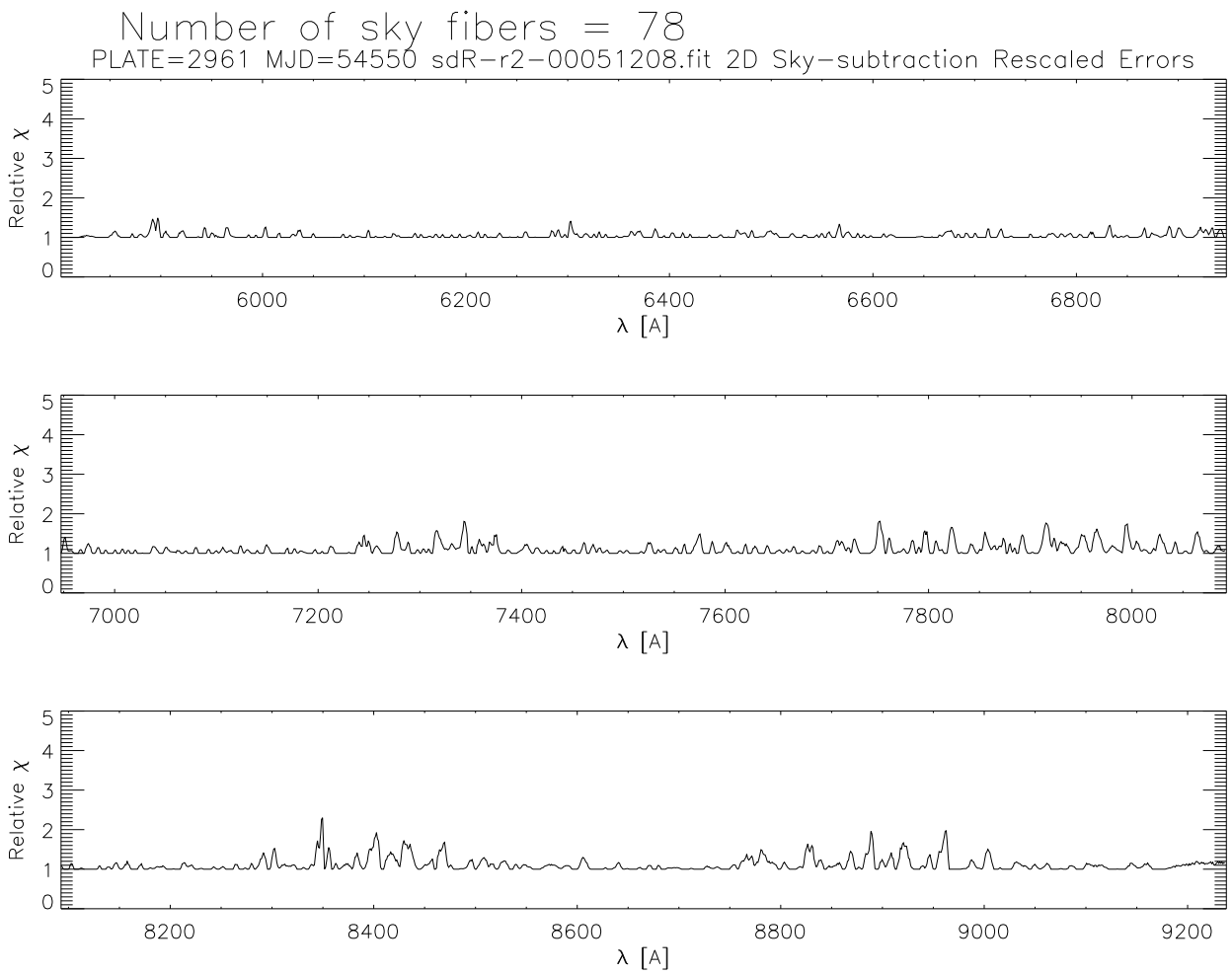

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

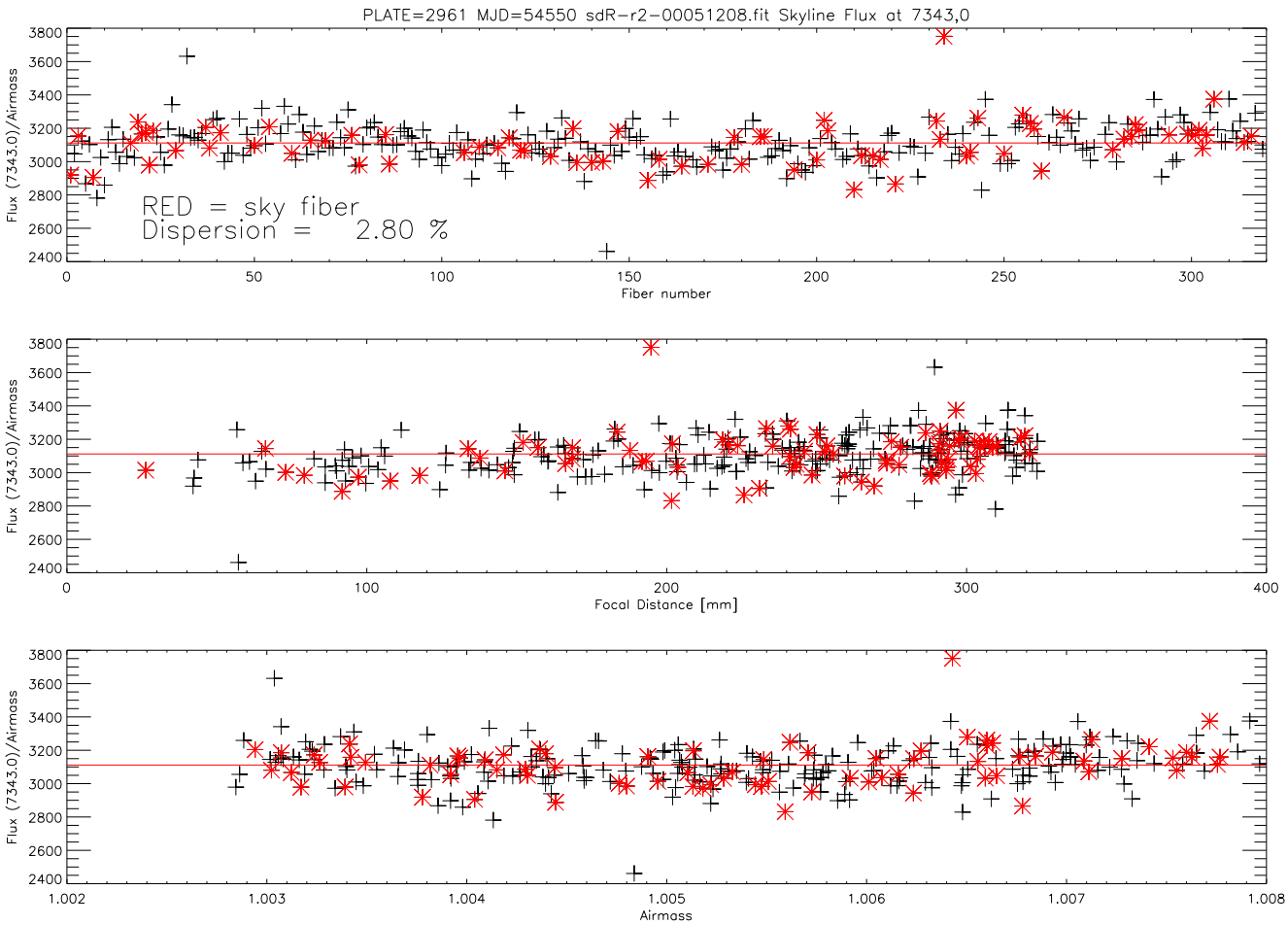

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051208.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

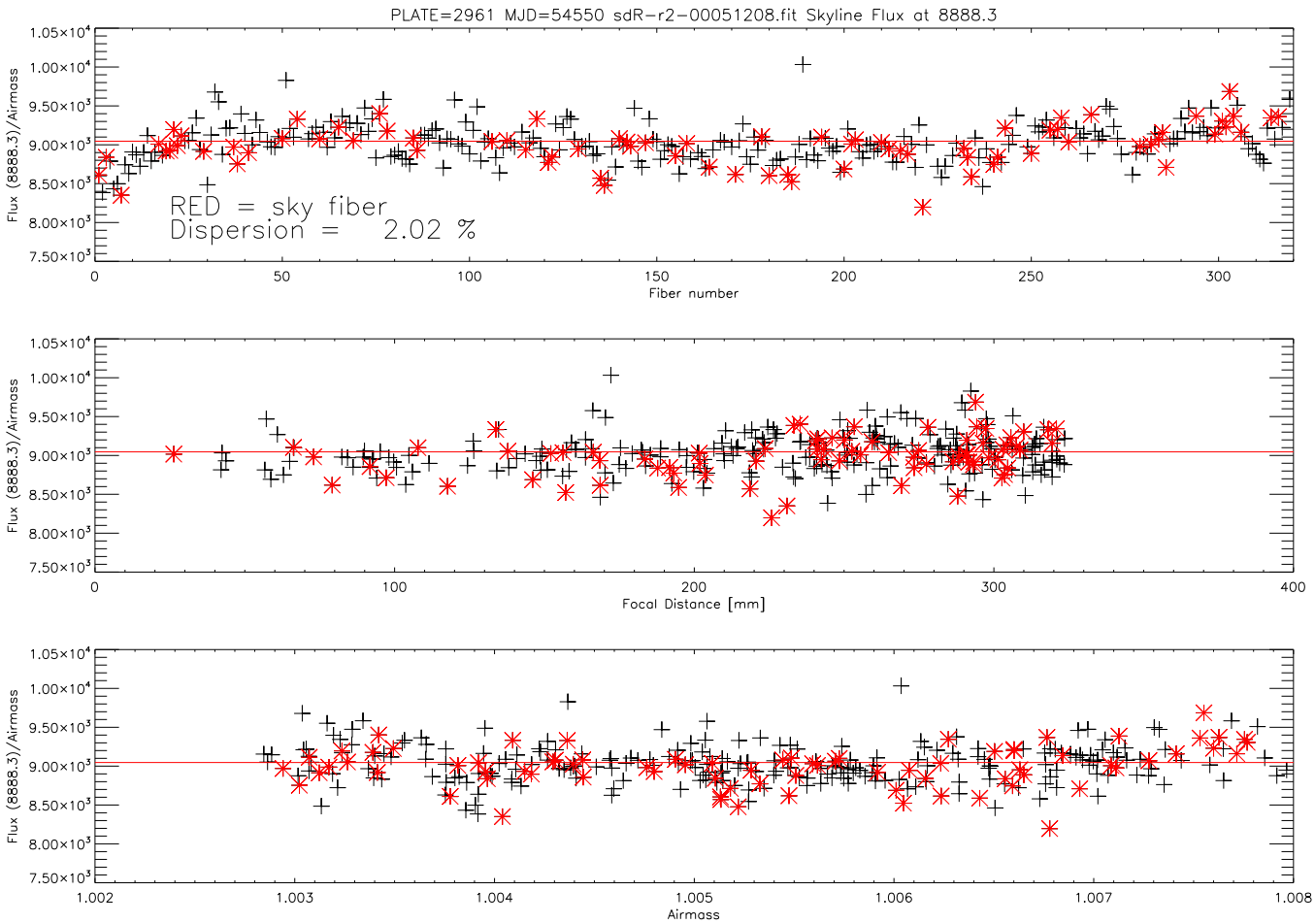

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

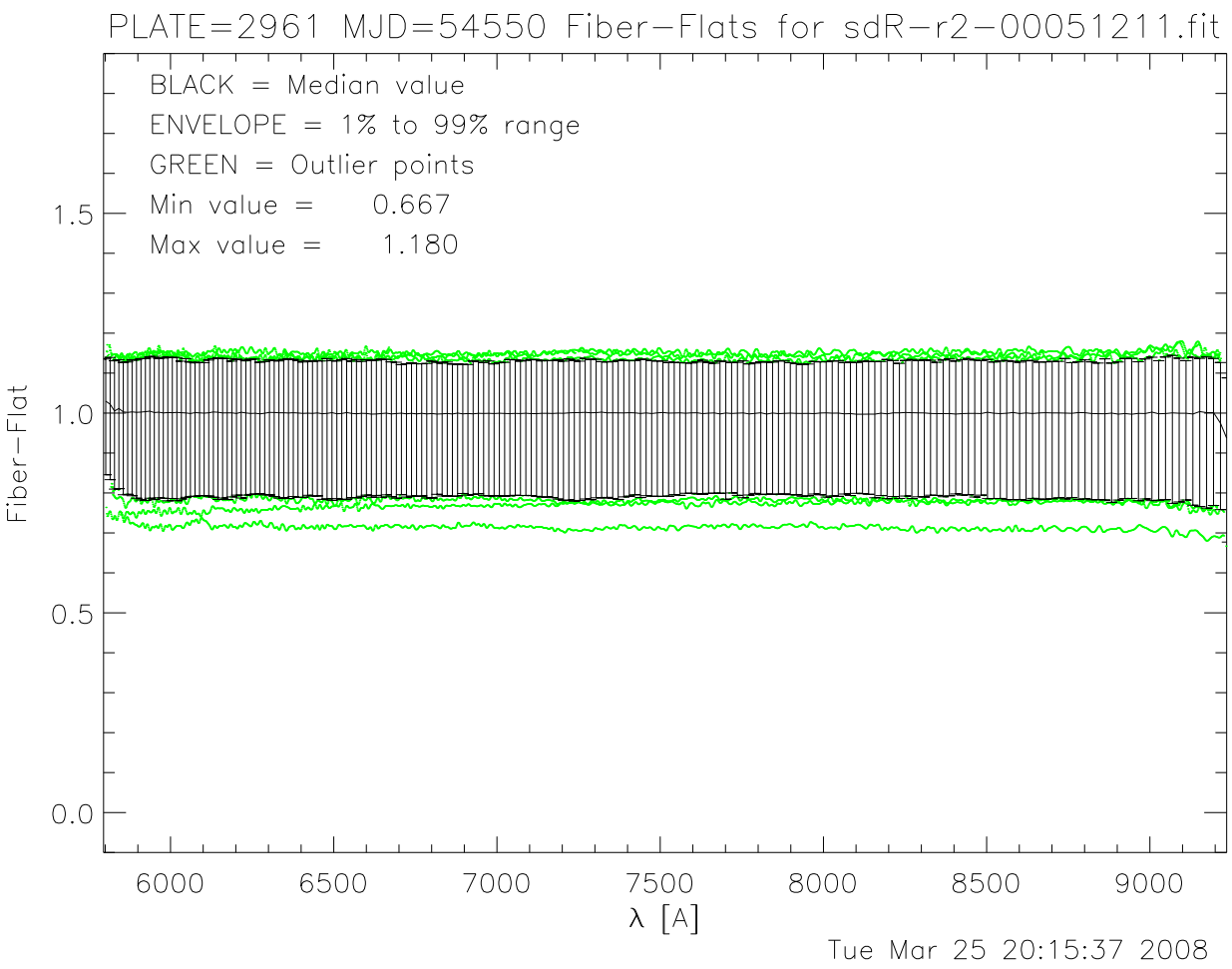

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

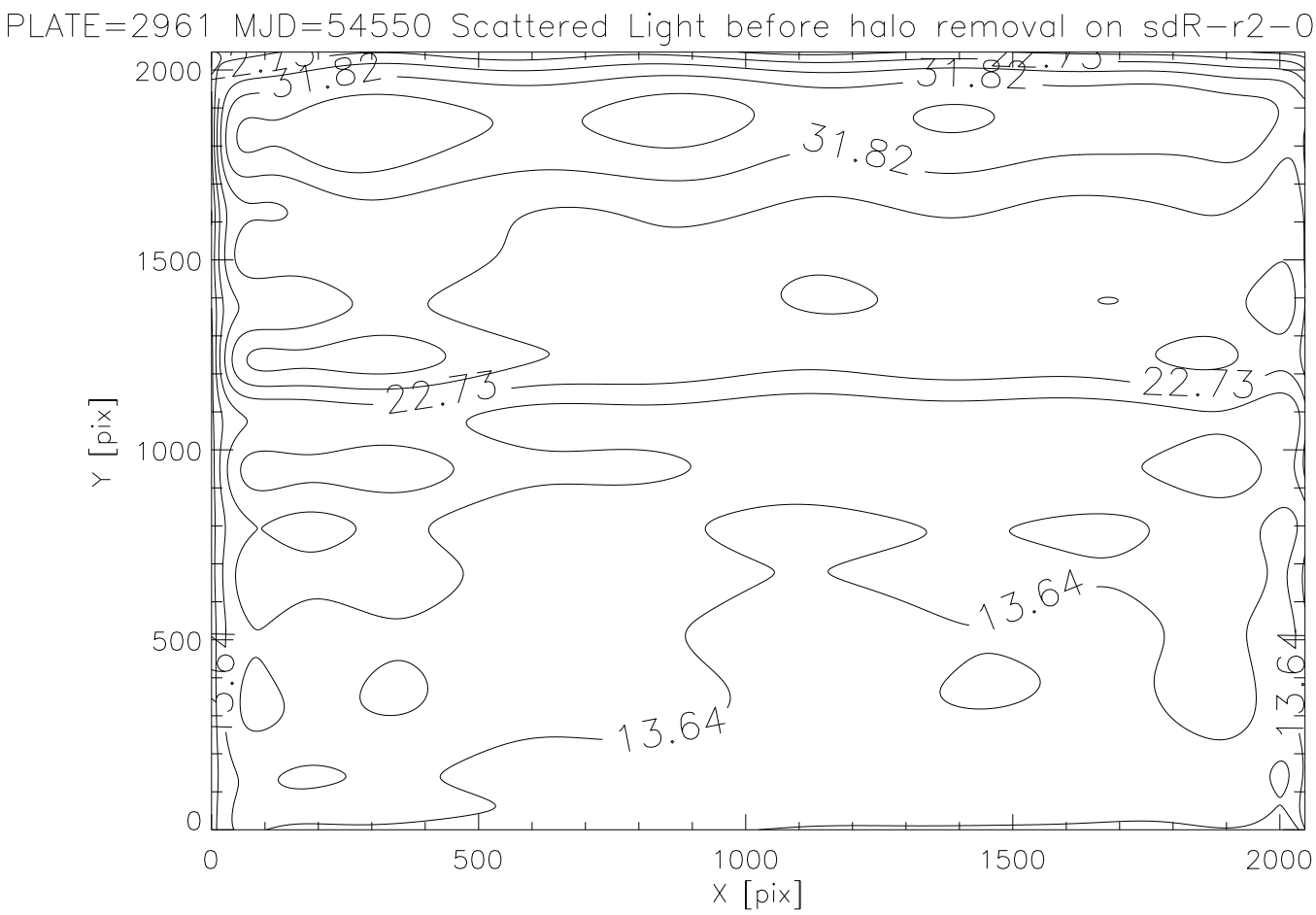

PLATE=2961 MJD=54550 sdR-r2-00051208.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

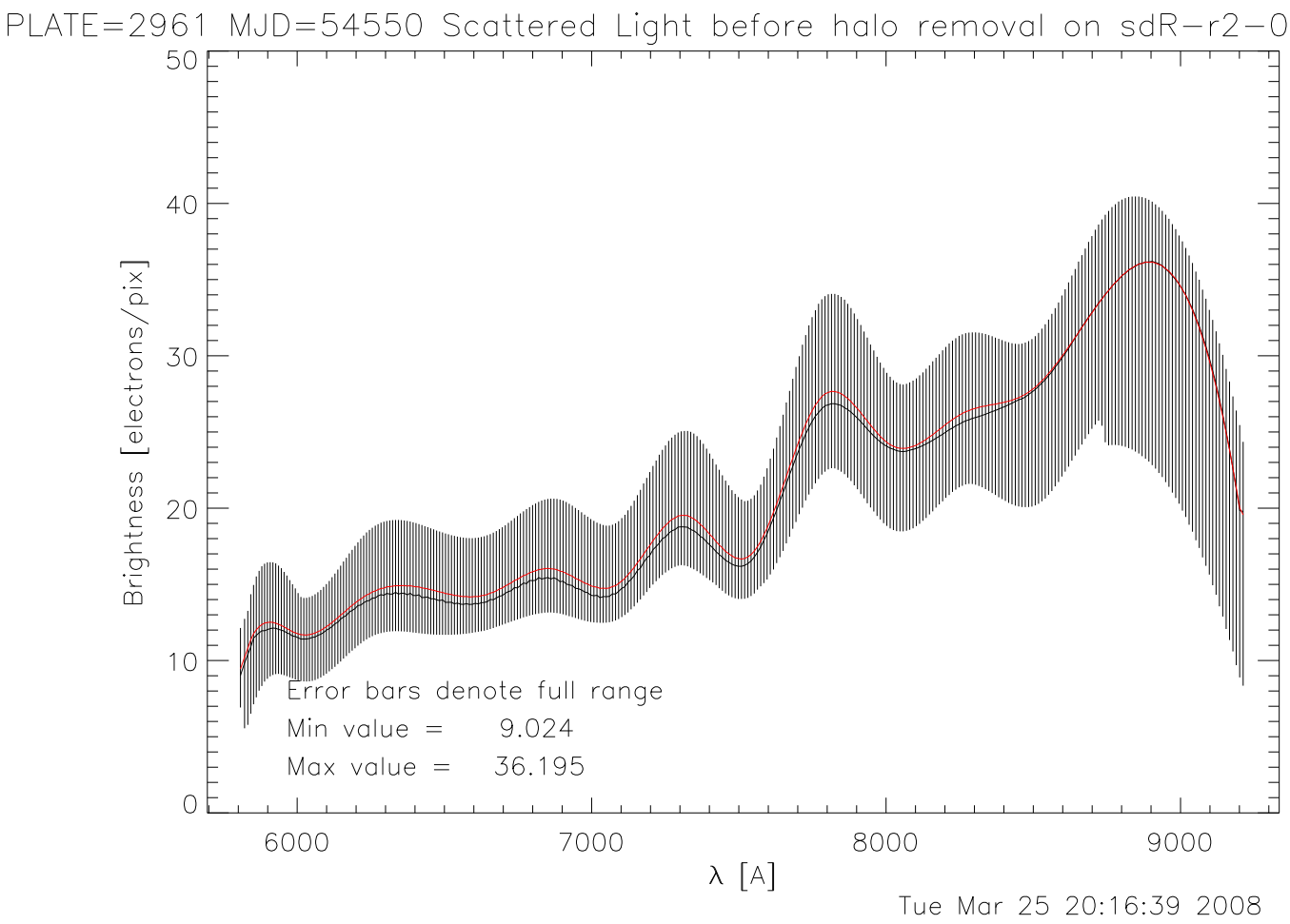

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051208.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

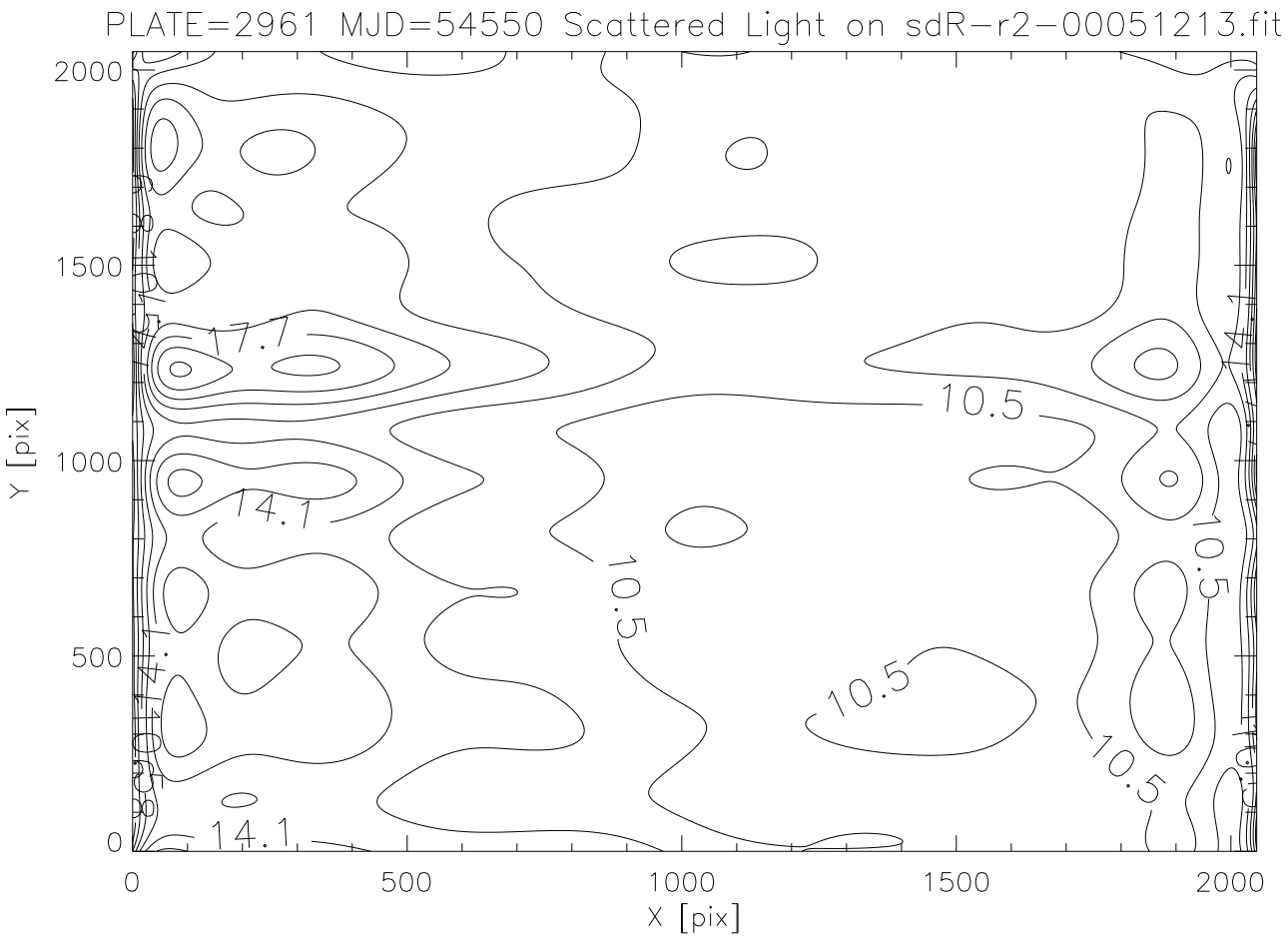

PLATE=2961 MJD=54550 sdR-r2-00051208.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.80 %
Fiber number
Focal Distance [mm]
Airmass

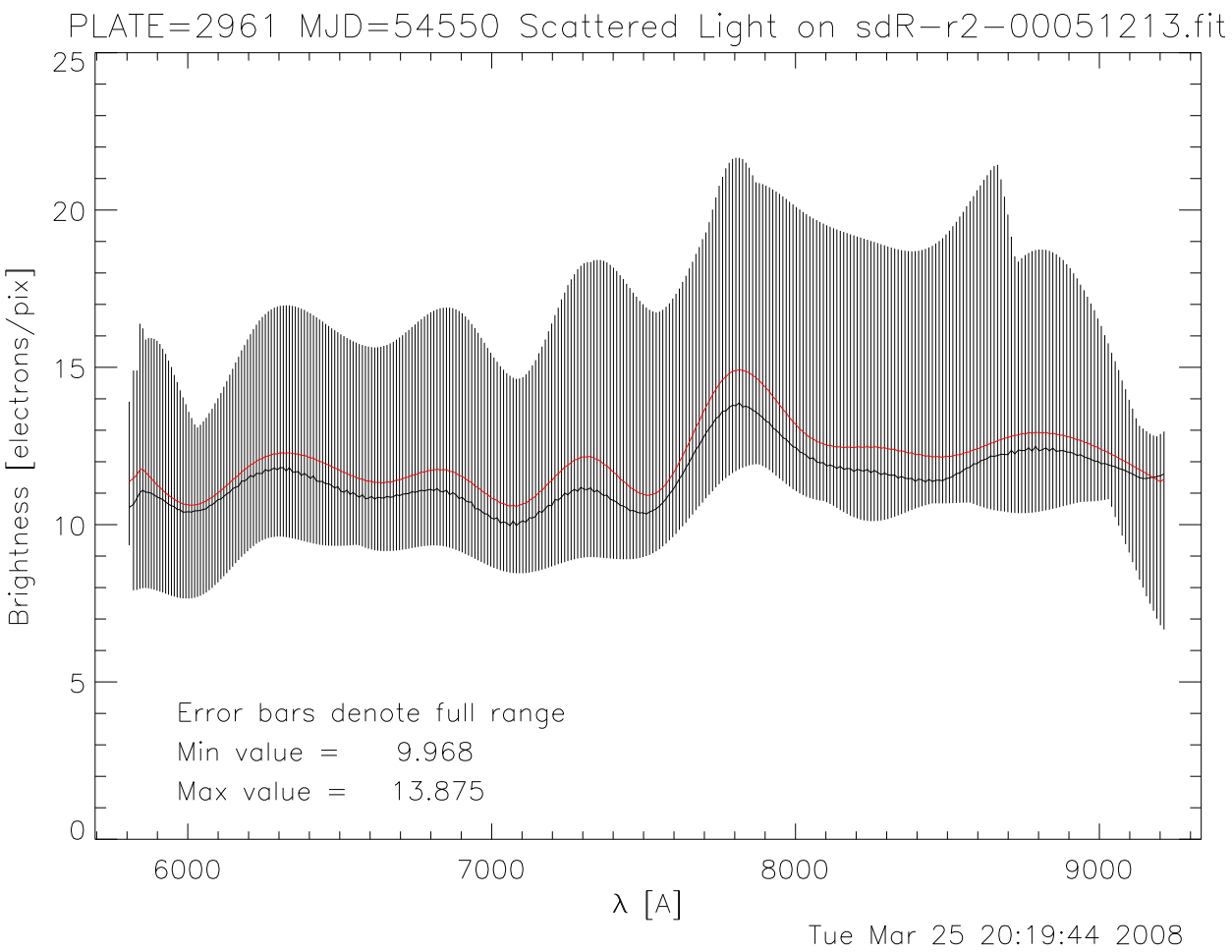

PLATE=2961 MJD=54550 sdR-r2-00051208.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.02 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

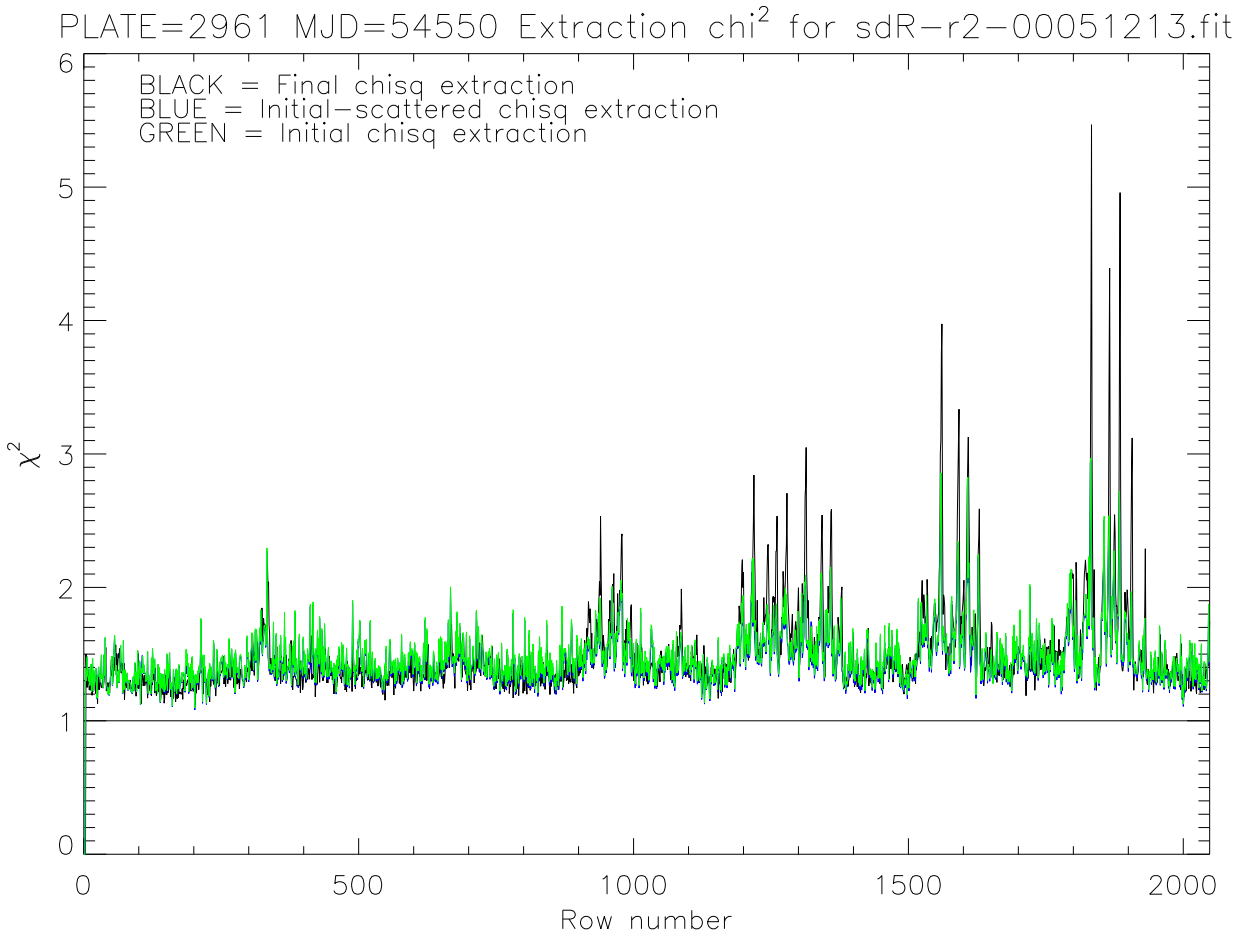

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 20:15:37 2008

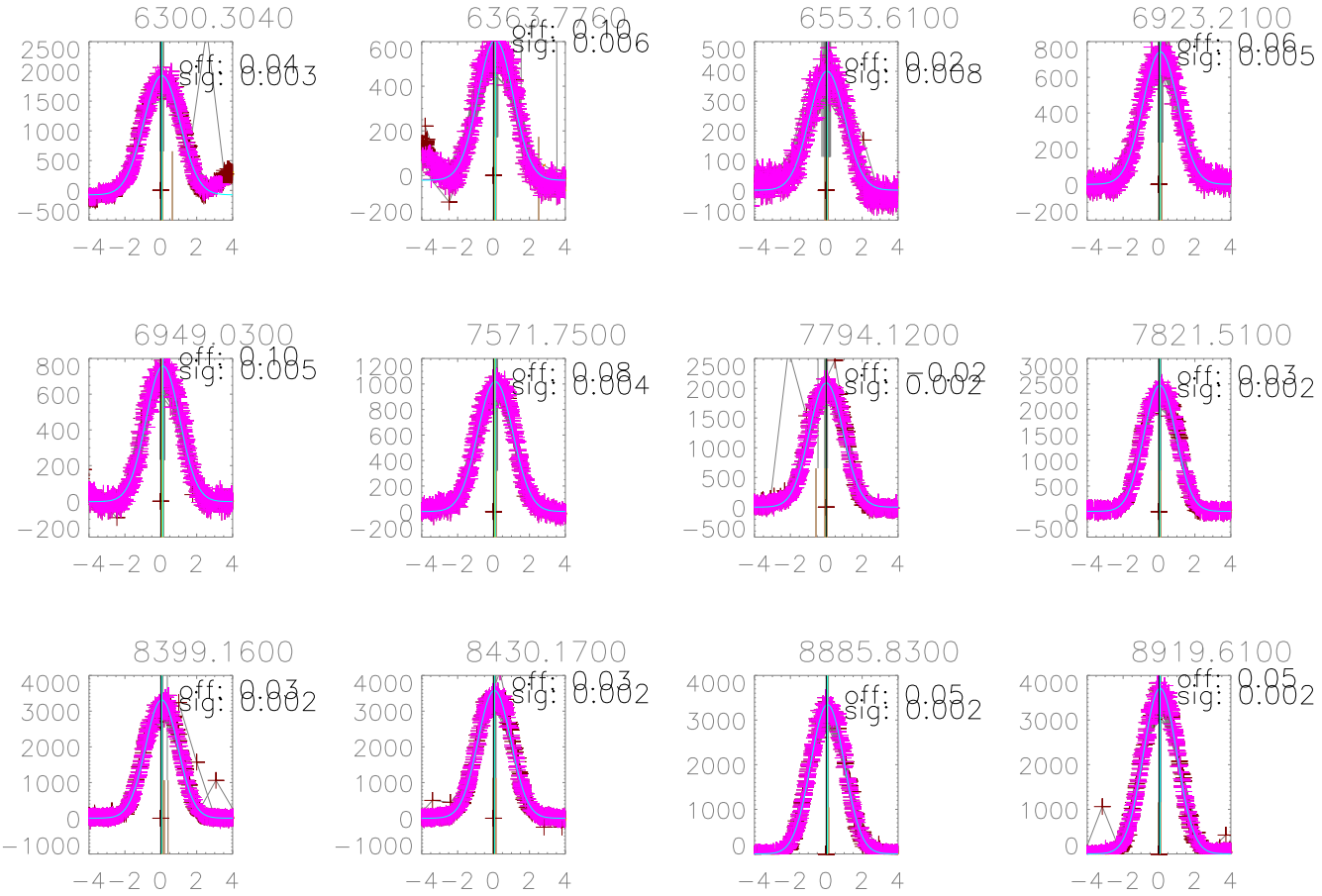

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR−r2−00051213.fi
31.82
31.82
31.82
22.73
22.73
13.64
13.64
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

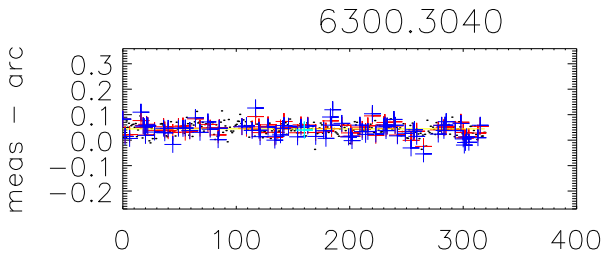

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051213.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.024
Max value = 36.195
Tue Mar 25 20:16:39 2008

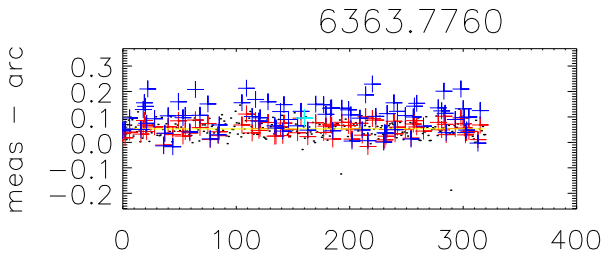

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051213.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
17.7
14.1
10.5

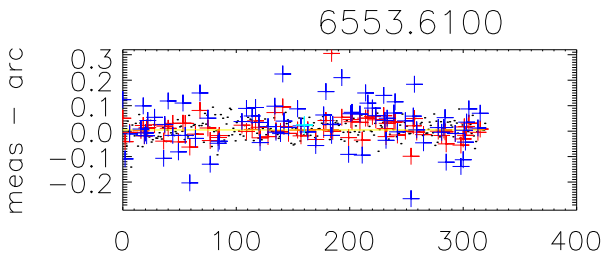

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051213.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.968
Max value = 13.875
Tue Mar 25 20:19:44 2008

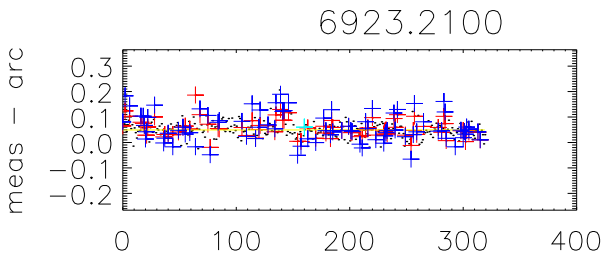

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051213.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

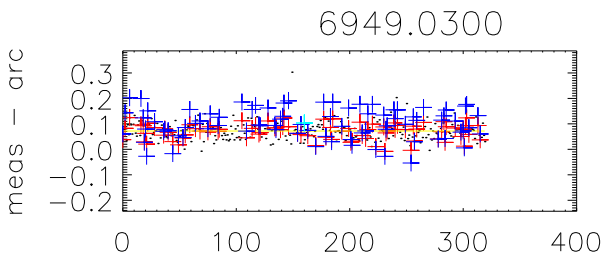

6300.3040
off: 0.04
sig: 0.003
6363.7760
off: 0.10
sig: 0.006
6553.6100
off: 0.02
sig: 0.008
6923.2100
off: 0.06
sig: 0.005
6949.0300
off: 0.10
sig: 0.005
7571.7500
off: 0.08
sig: 0.004
7794.1200
off: −0.02
sig: 0.002
7821.5100
off: 0.03
sig: 0.002
8399.1600
off: 0.03
sig: 0.002
8430.1700
off: 0.03
sig: 0.002
8885.8300
off: 0.05
sig: 0.002
8919.6100
off: 0.05
sig: 0.002

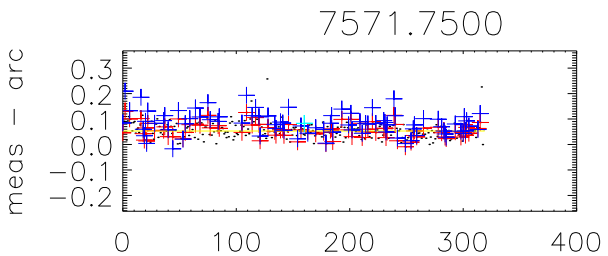

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

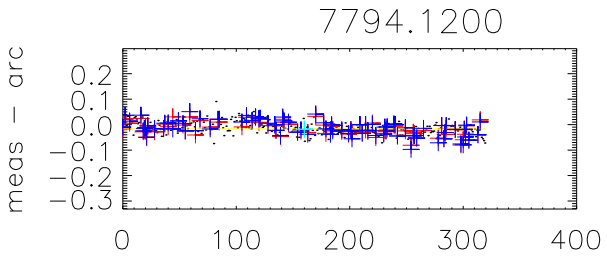

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

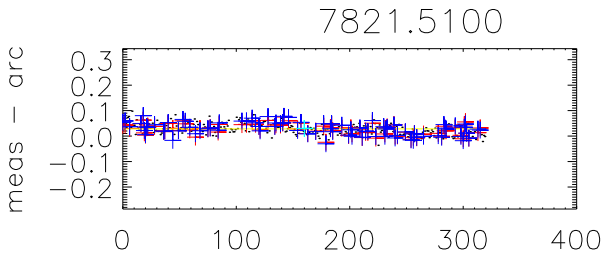

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

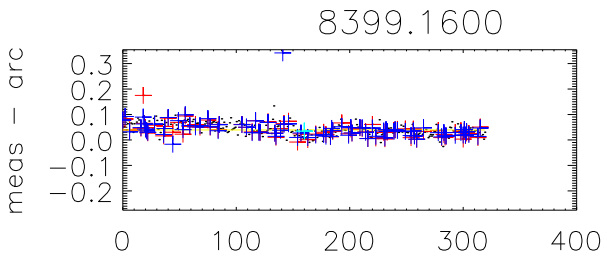

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

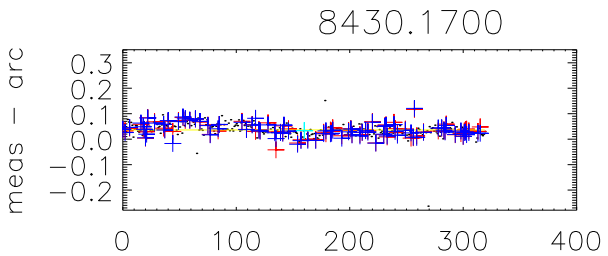

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

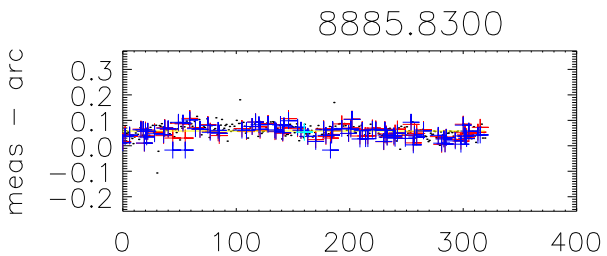

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

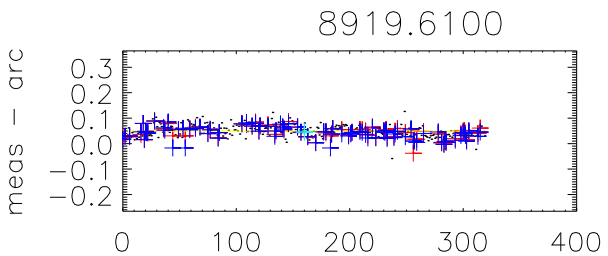

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

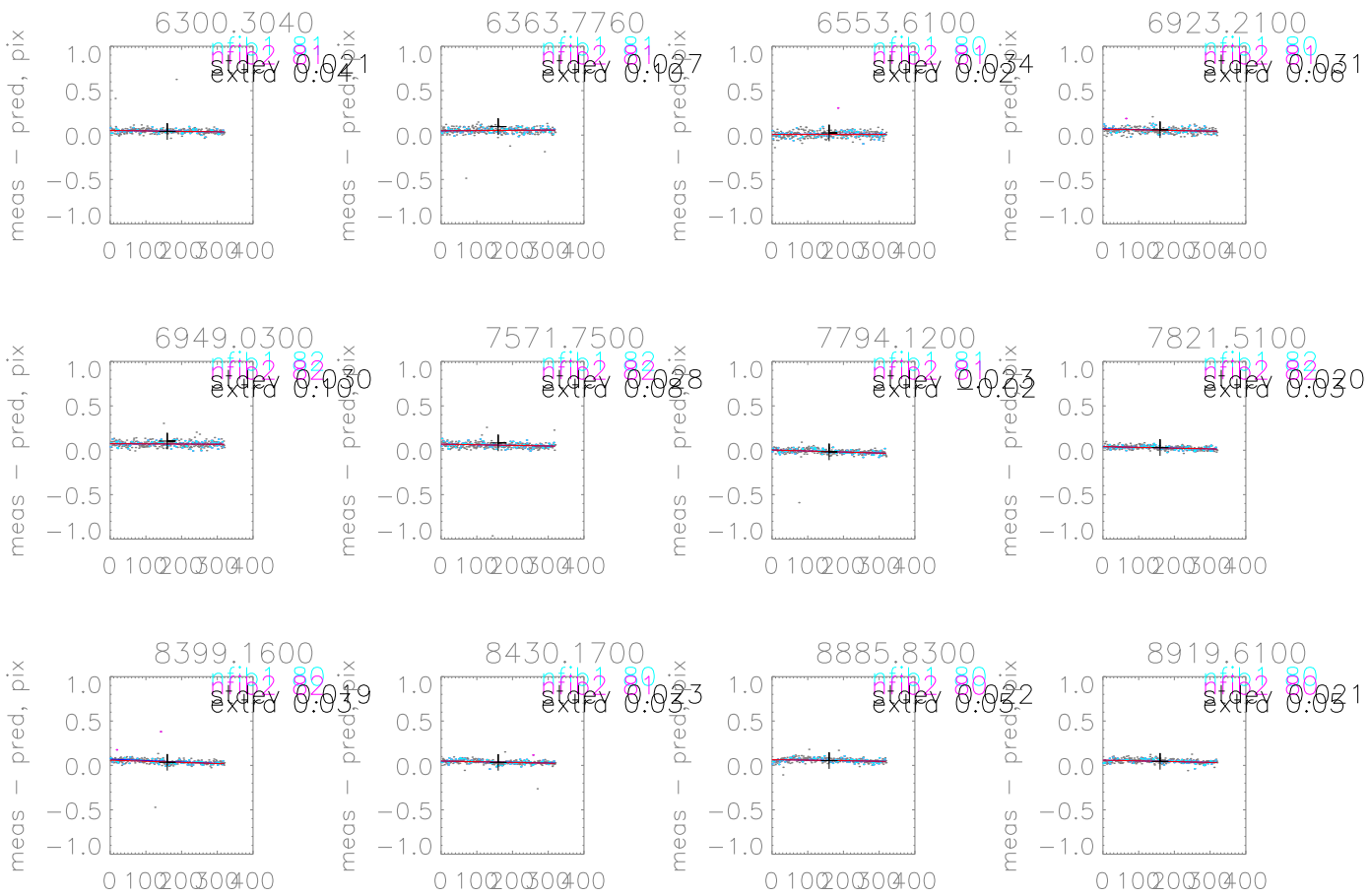

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

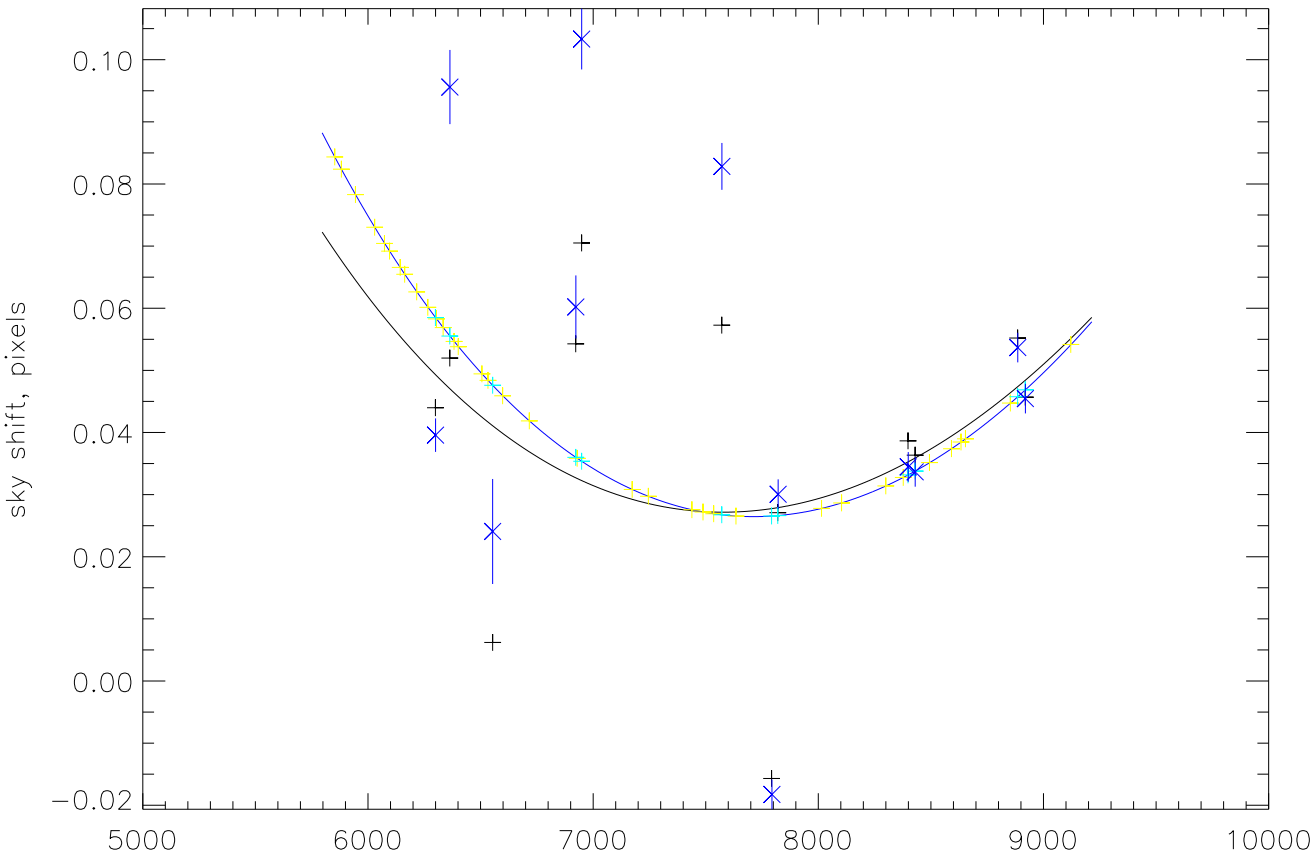

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

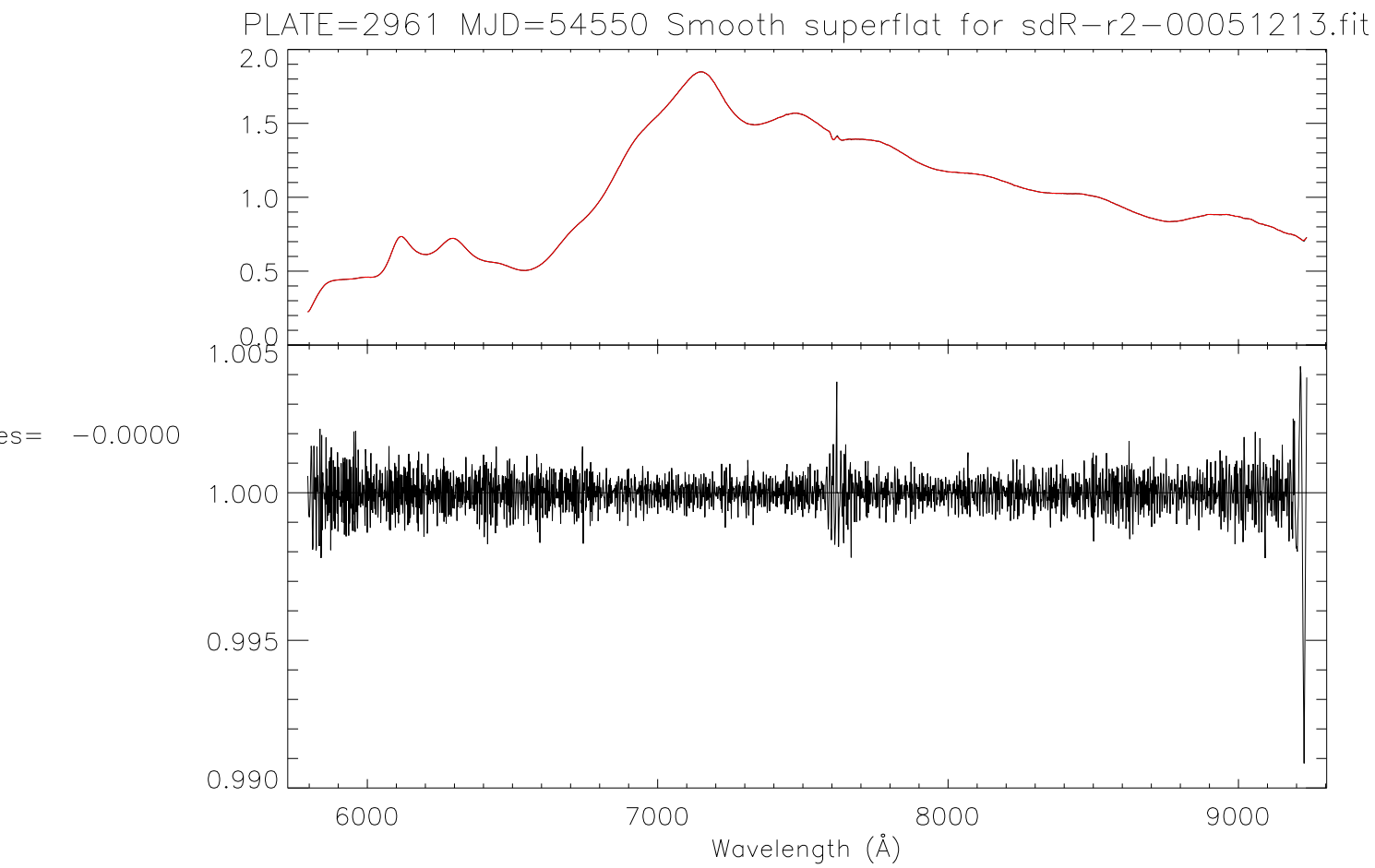

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

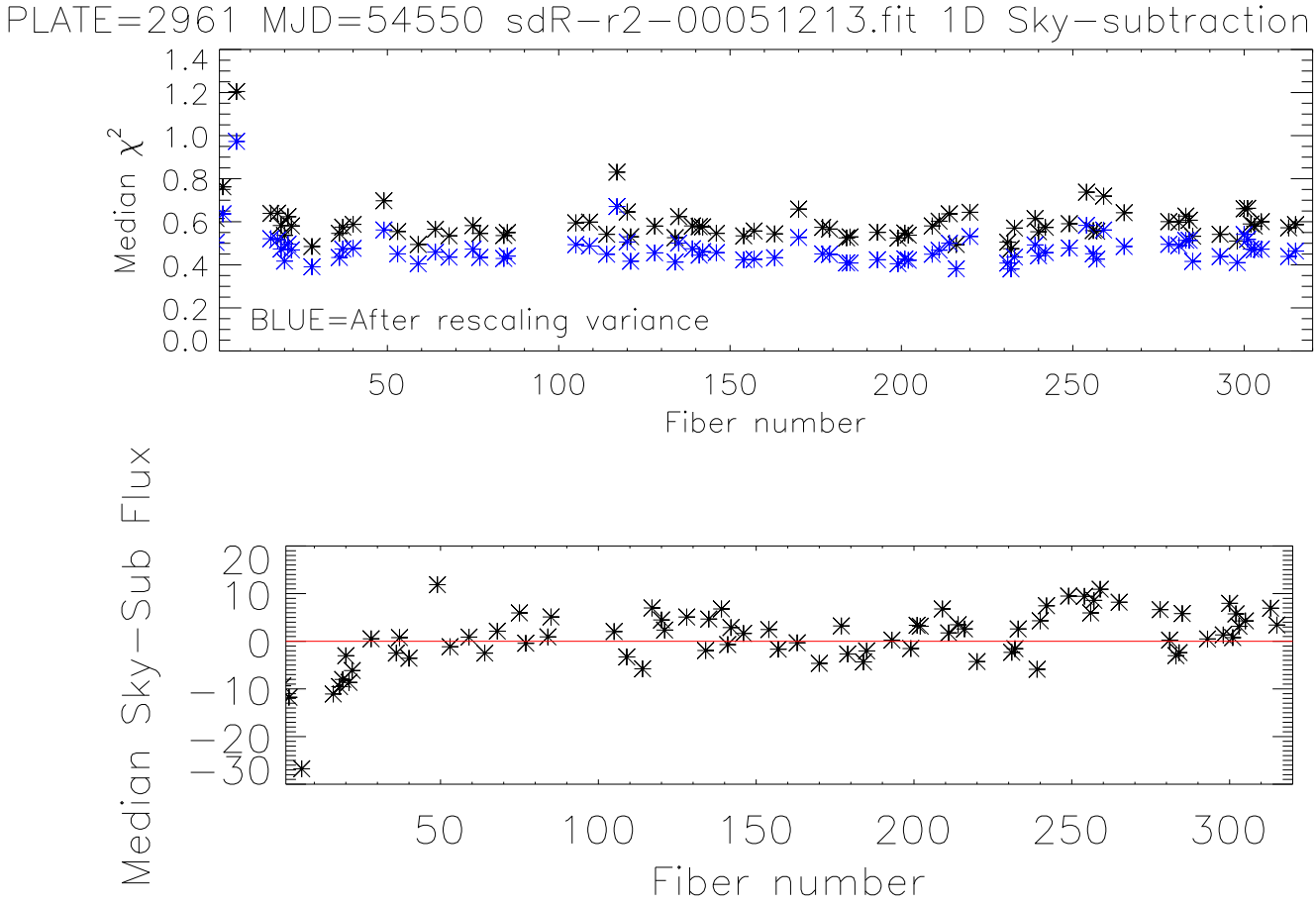

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

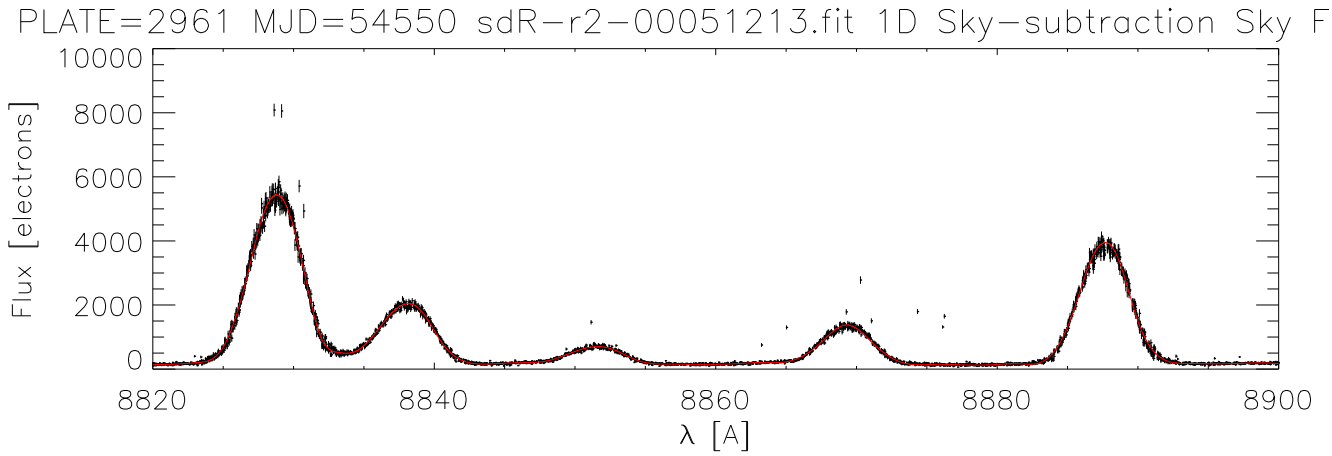

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

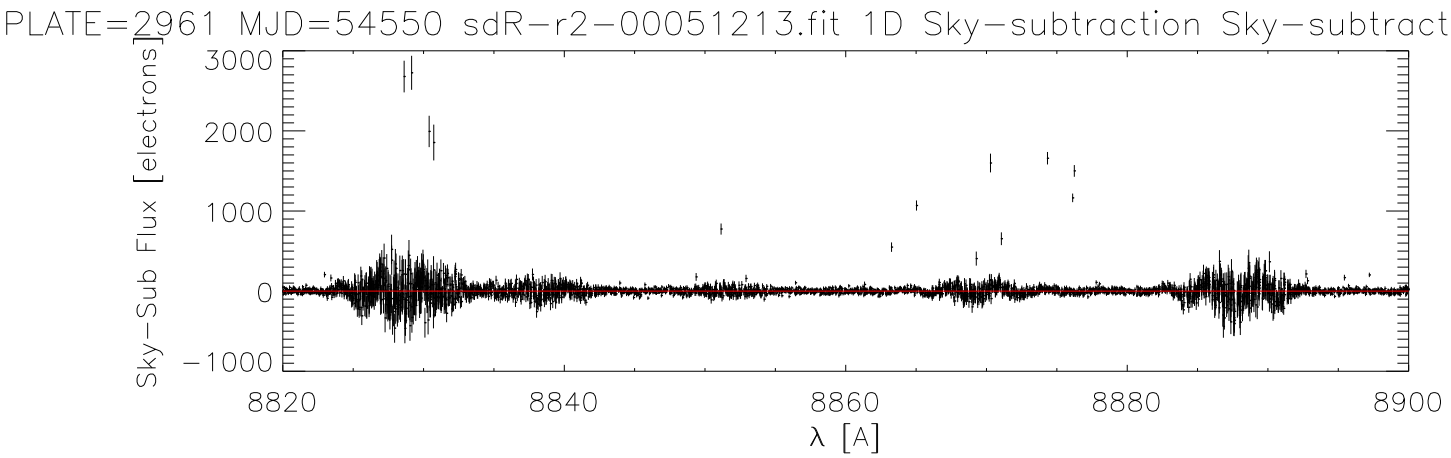

6300.3040
mfhi1 81
mflx2 81
stdev 0.021
extra 0.04
6363.7760
mfhi1 81
mflx2 81
stdev 0.027
extra 0.16
6553.6100
mfhi1 80
mflx2 80
stdev 0.034
extra 0.02
6923.2100
mfhi1 80
mflx2 80
stdev 0.031
extra 0.06
6949.0300
mfhi1 82
mflx2 82
stdev 0.030
extra 0.10
7571.7500
mfhi1 82
mflx2 82
stdev 0.028
extra 0.08
7794.1200
mfhi1 81
mflx2 81
stdev 0.033
extra -0.02
7821.5100
mfhi1 82
mflx2 82
stdev 0.020
extra 0.03
8399.1600
mfhi1 80
mflx2 82
stdev 0.019
extra 0.03
8430.1700
mfhi1 80
mflx2 81
stdev 0.023
extra 0.03
8885.8300
mfhi1 80
mflx2 80
stdev 0.022
extra 0.03
8919.6100
mfhi1 80
mflx2 80
stdev 0.021
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

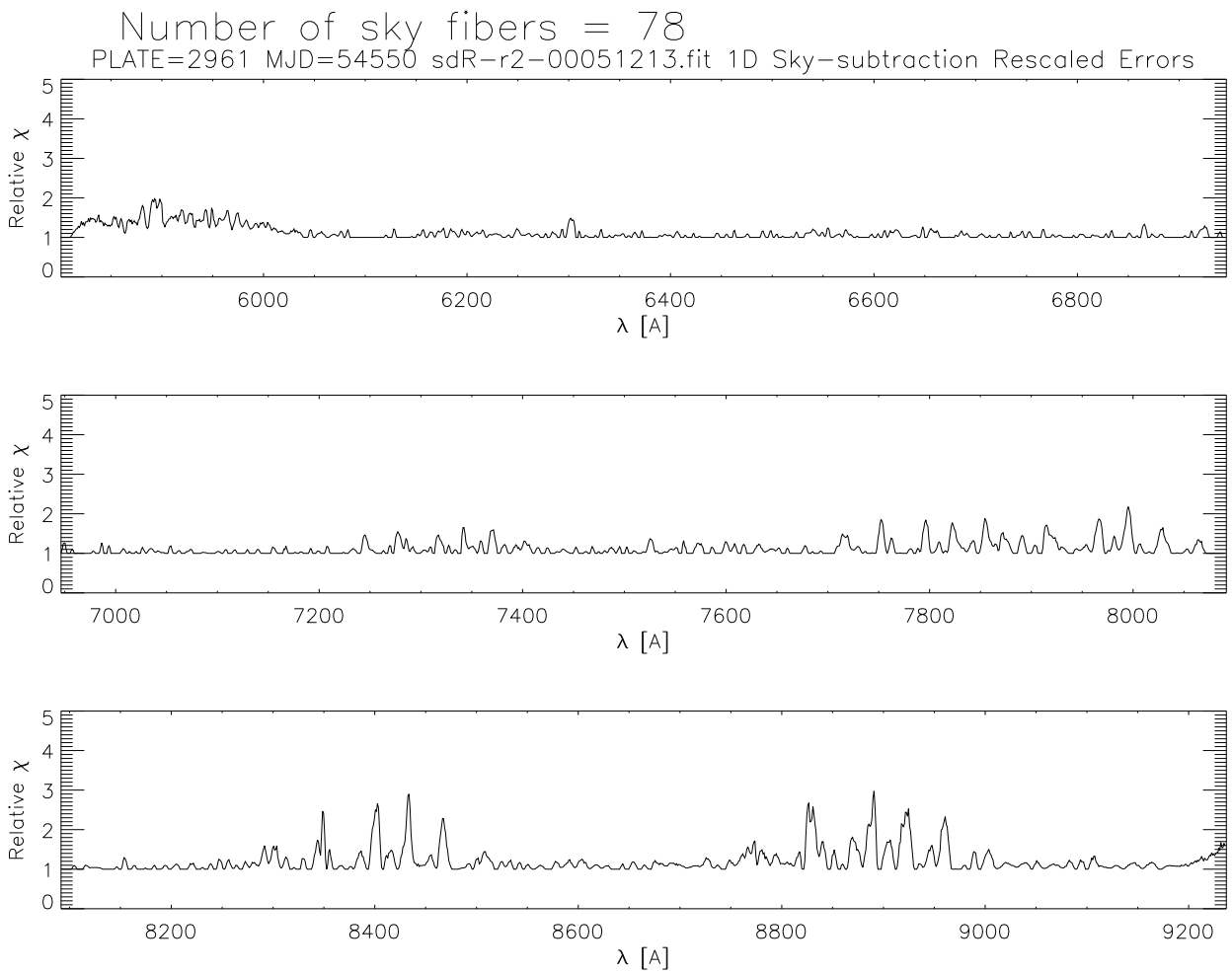

sky shift, pixels
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
5000
6000
7000
8000
9000
10000

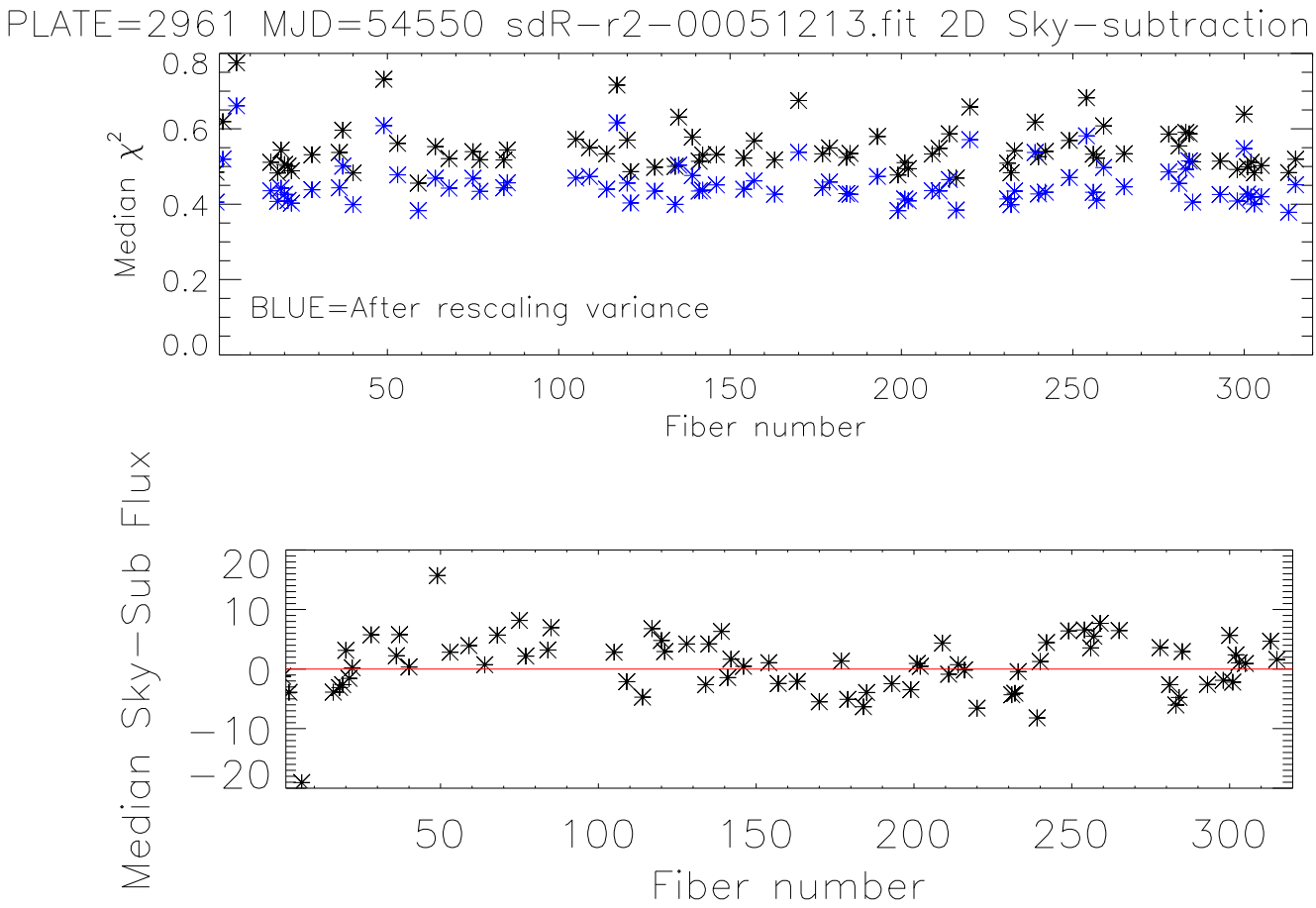

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051213.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

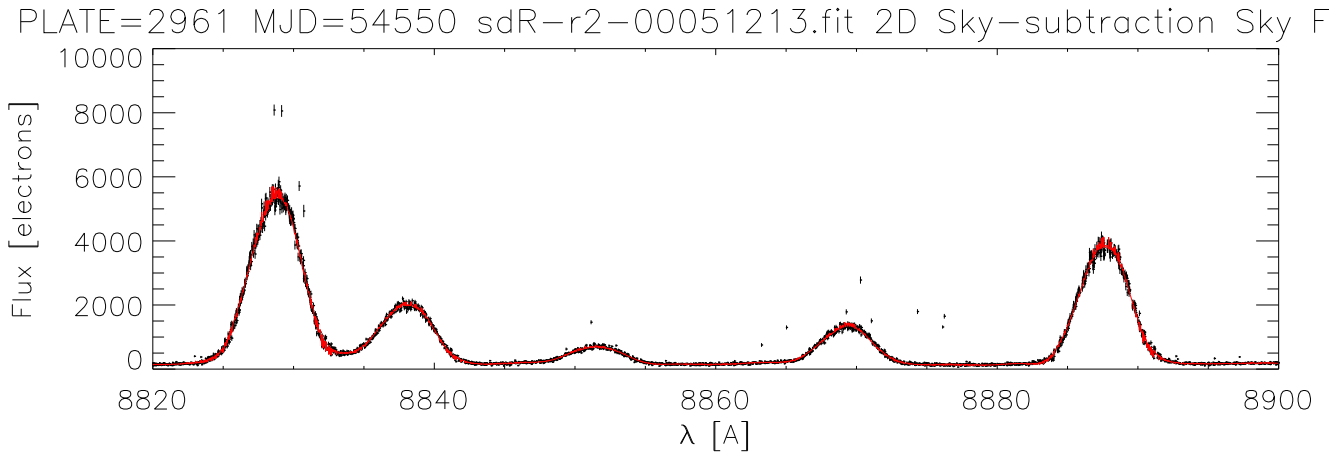

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

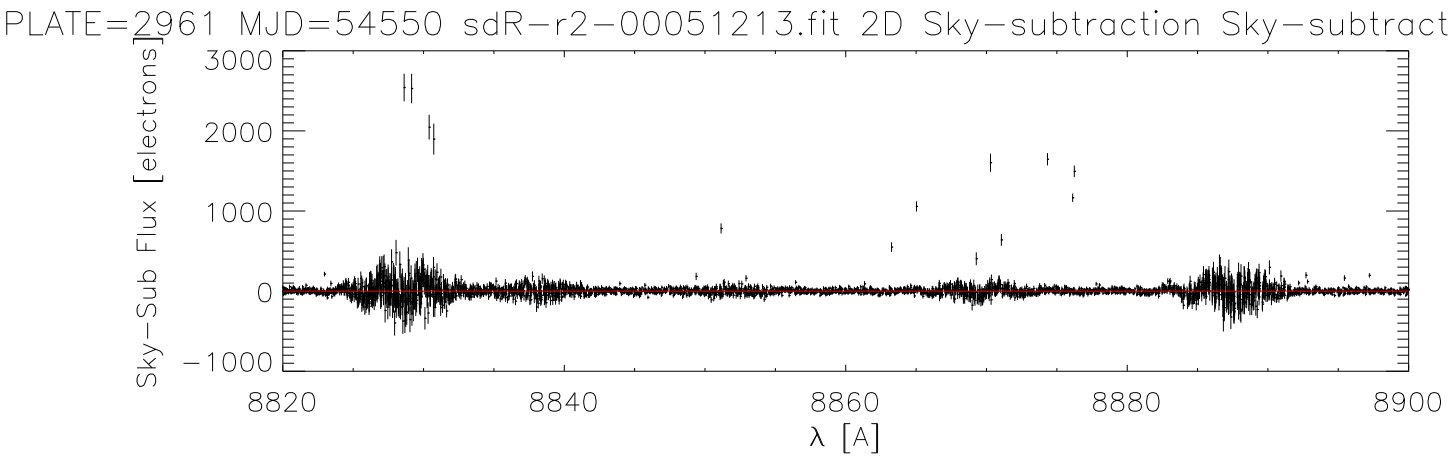

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

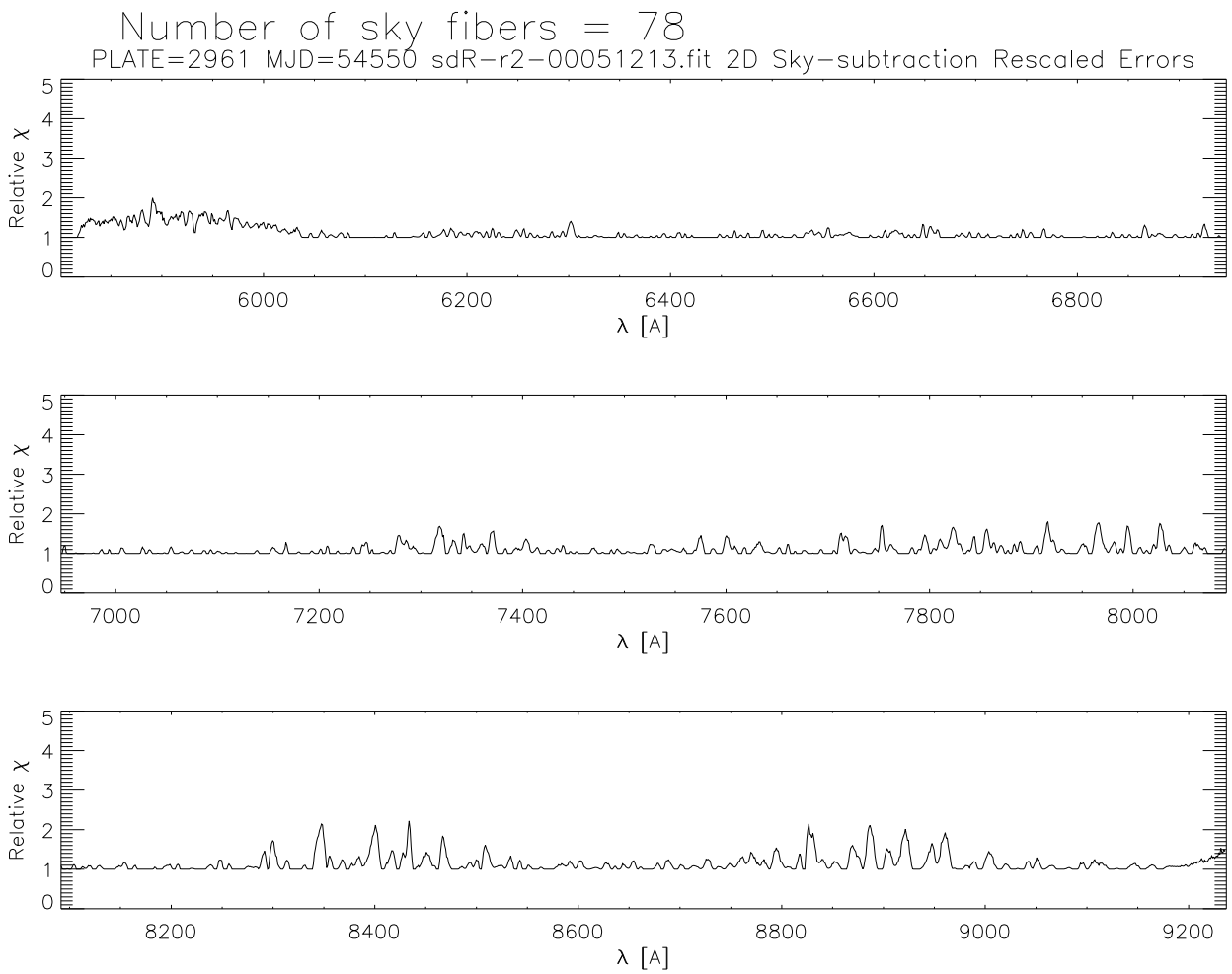

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

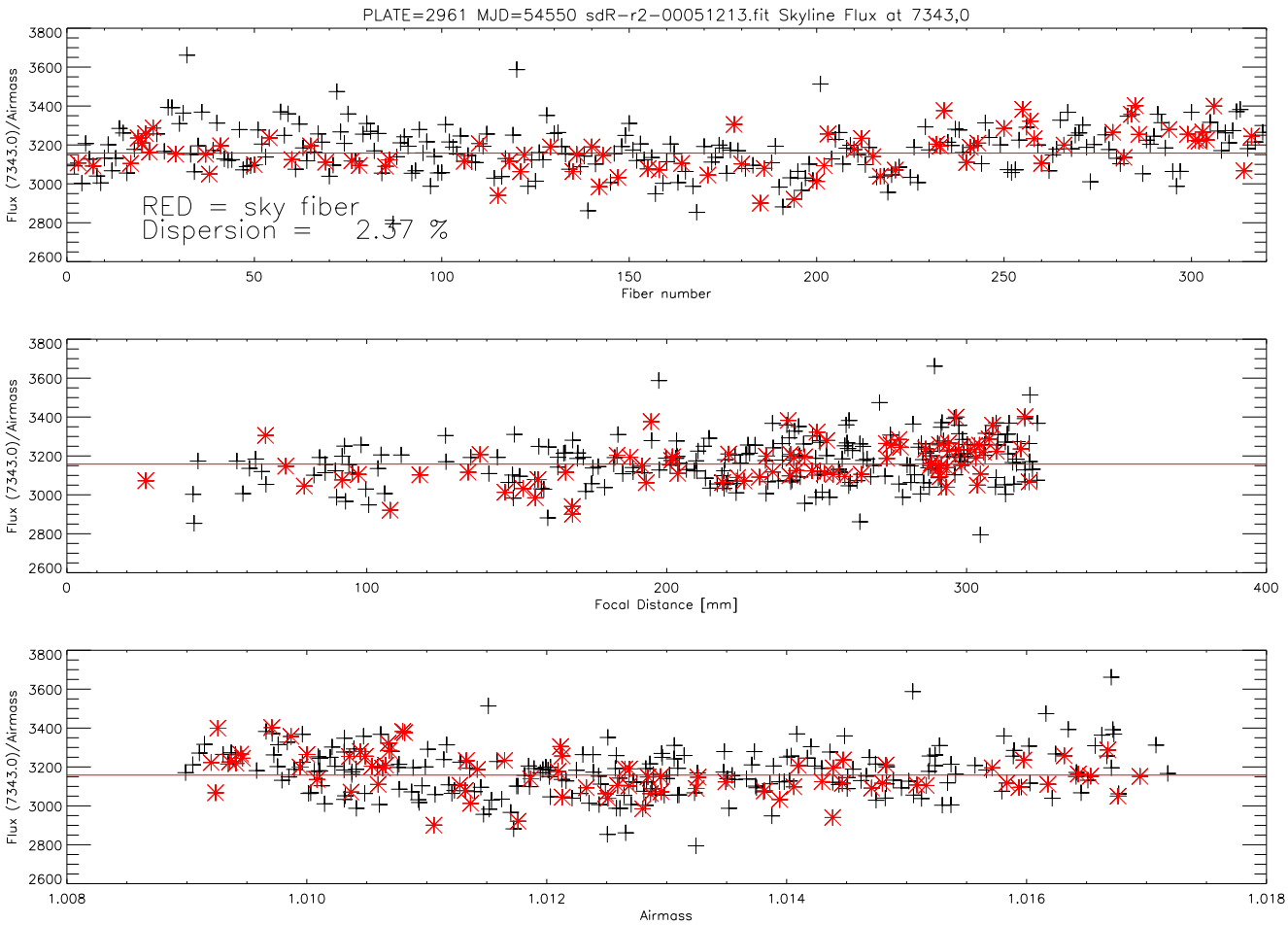

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051213.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

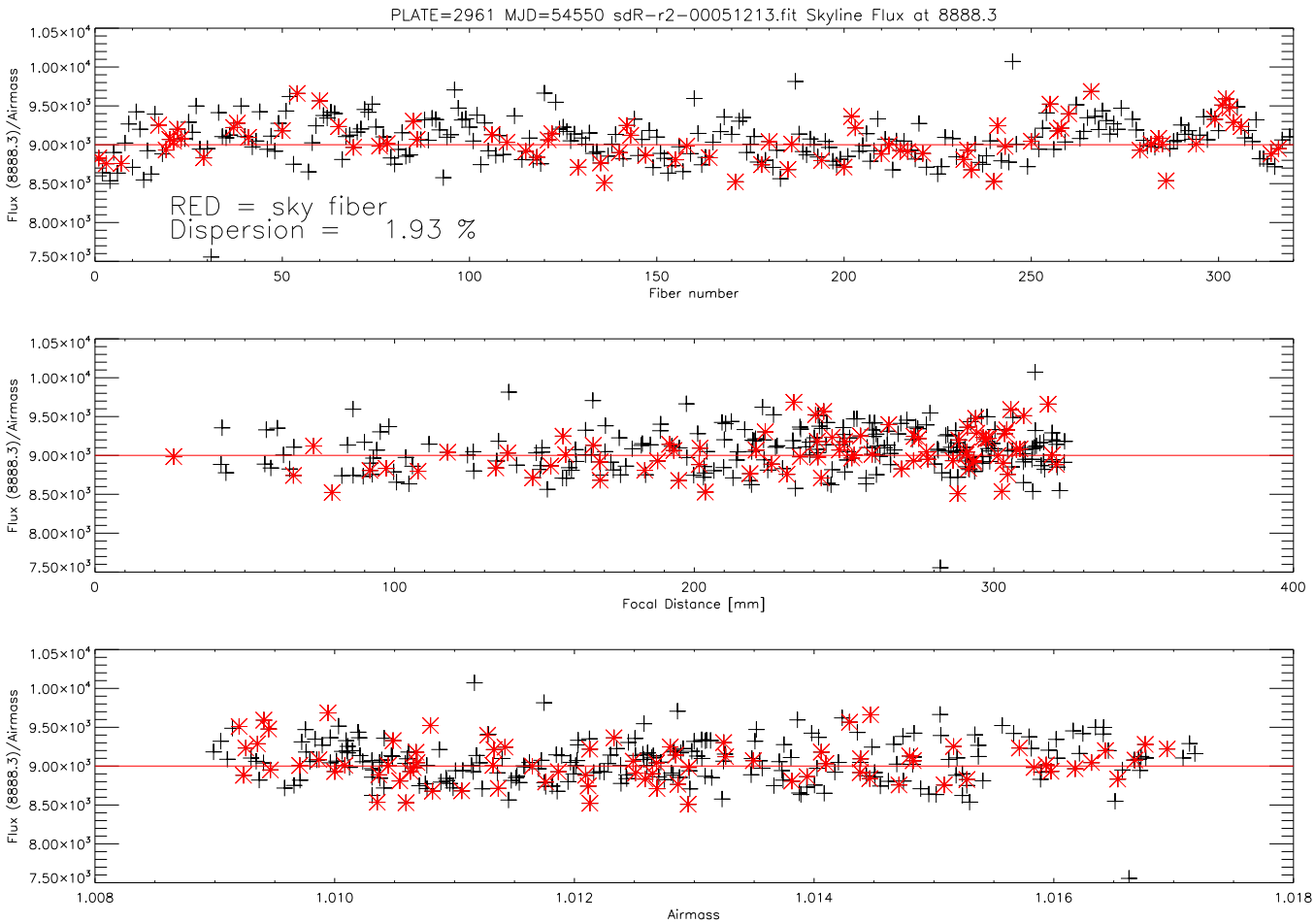

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

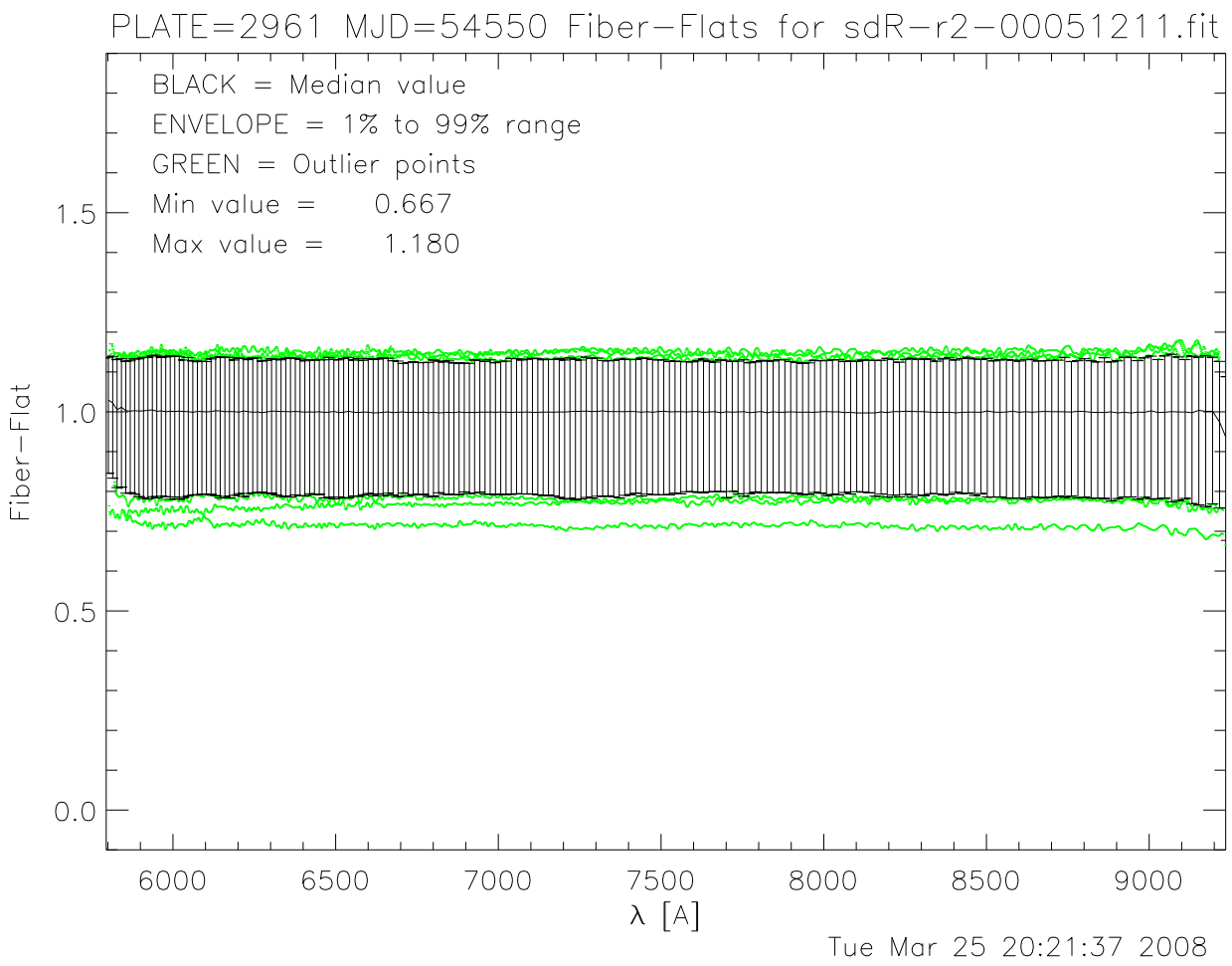

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

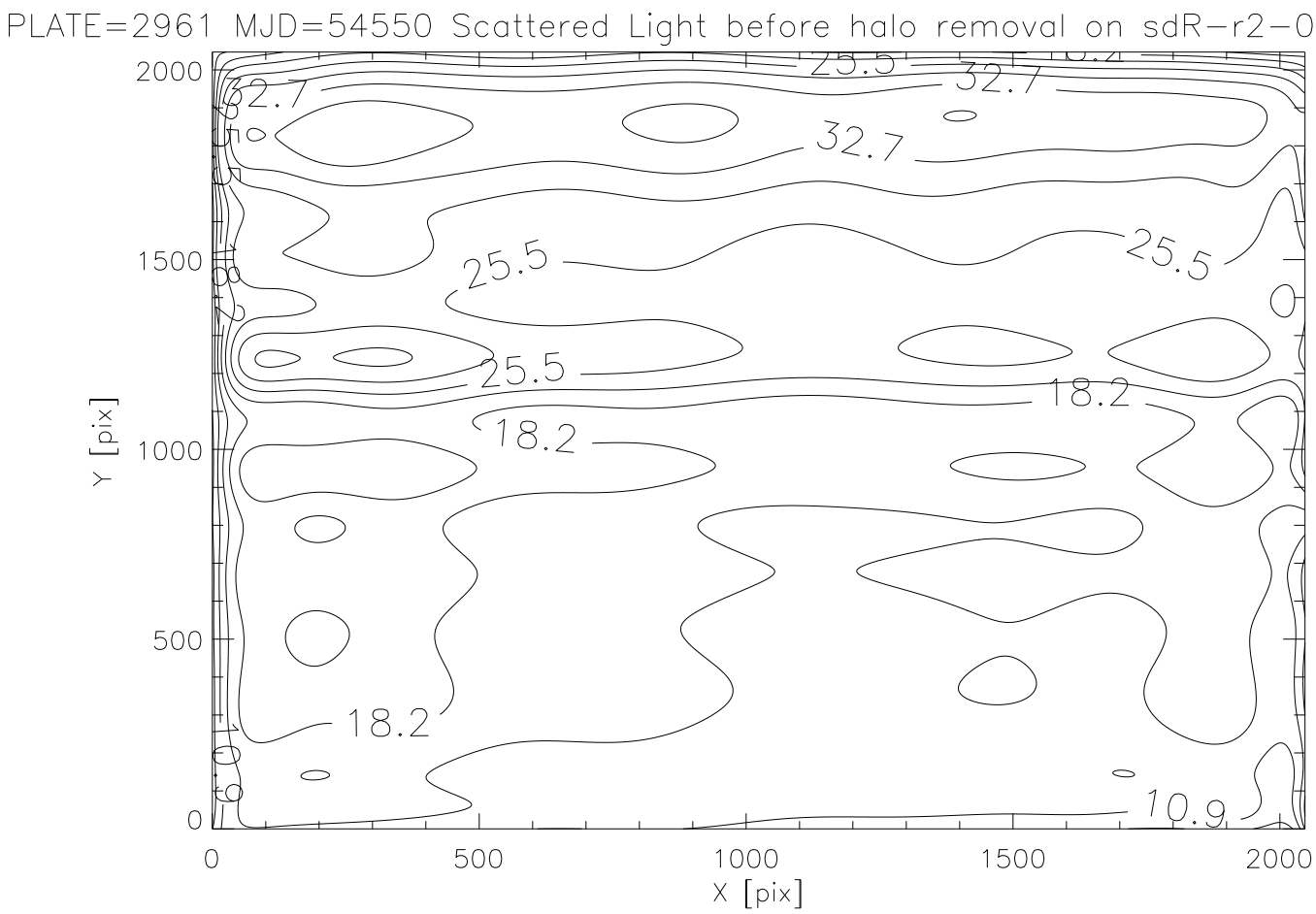

PLATE=2961 MJD=54550 sdR-r2-00051213.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

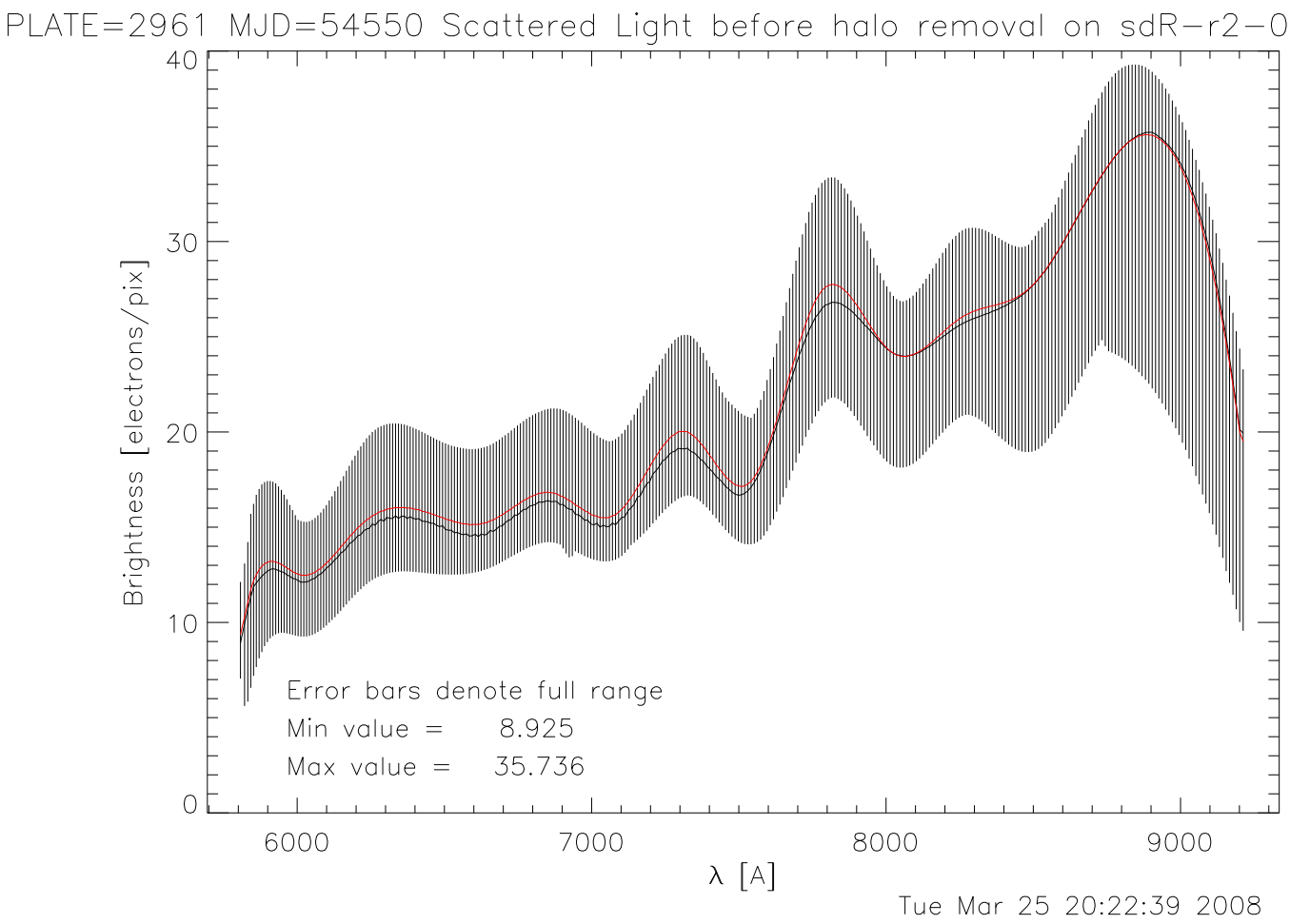

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051213.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

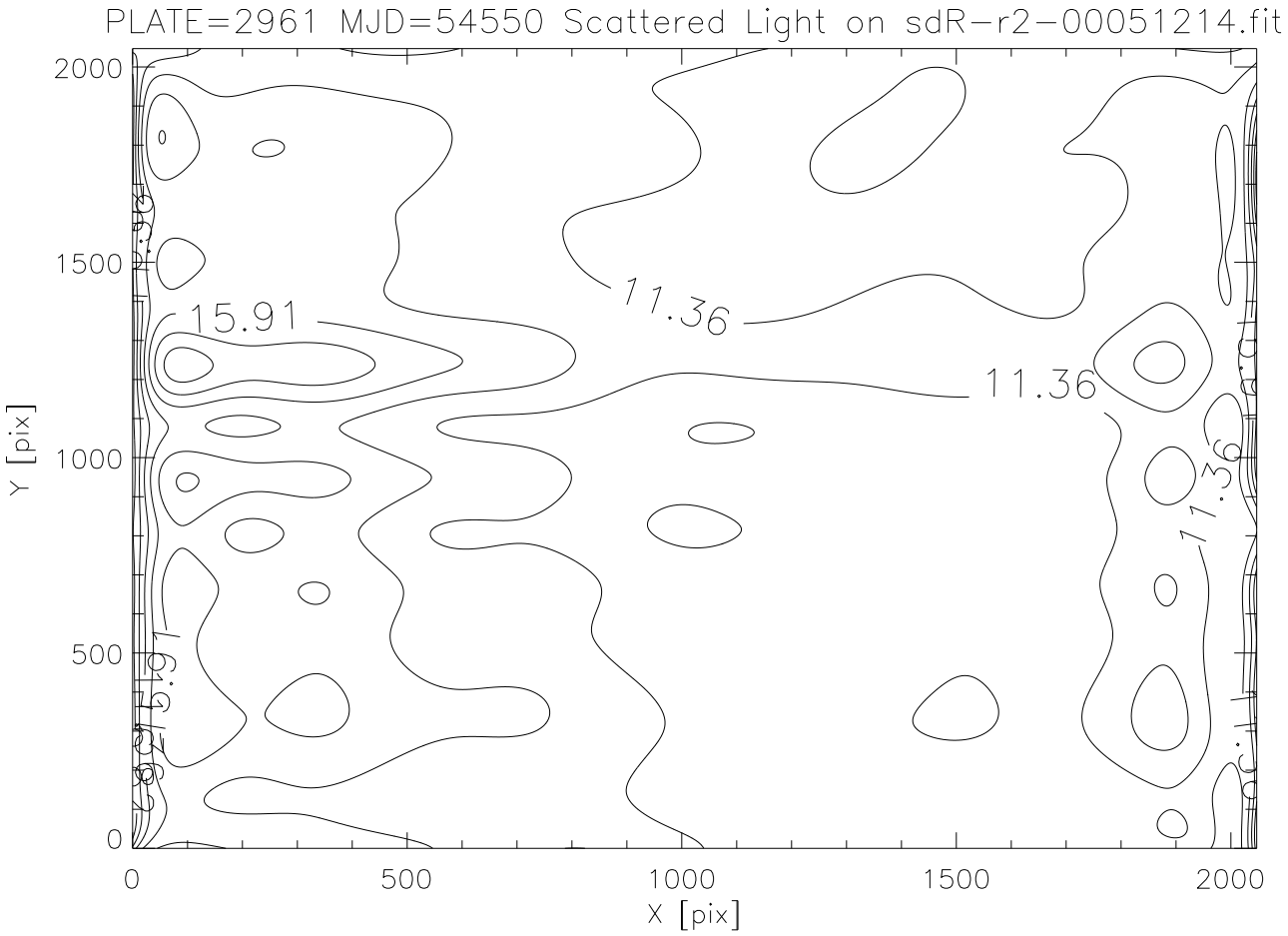

PLATE=2961 MJD=54550 sdR-r2-00051213.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.37 %
Fiber number
Focal Distance [mm]
Airmass

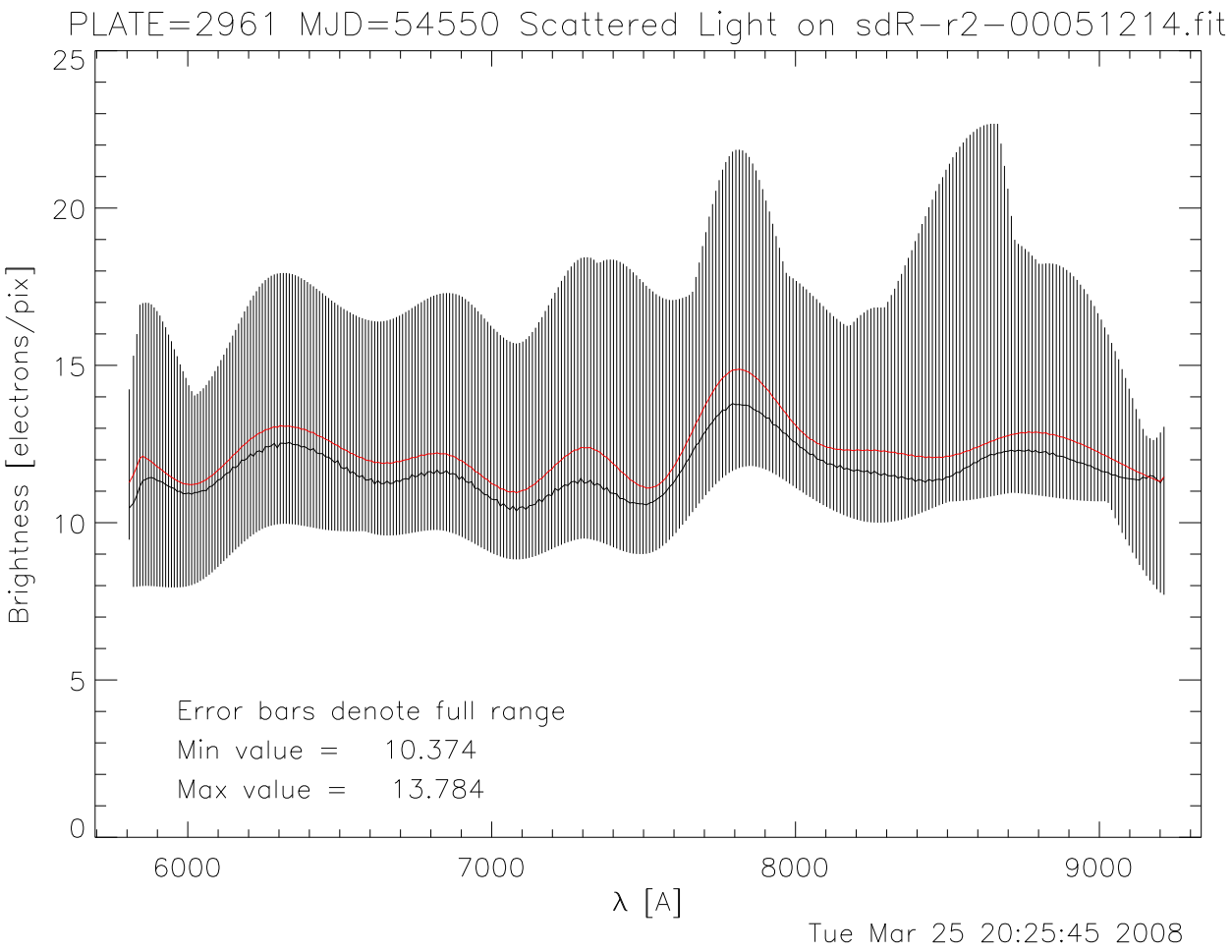

PLATE=2961 MJD=54550 sdR-r2-00051213.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Focal Distance [mm]
Airmass

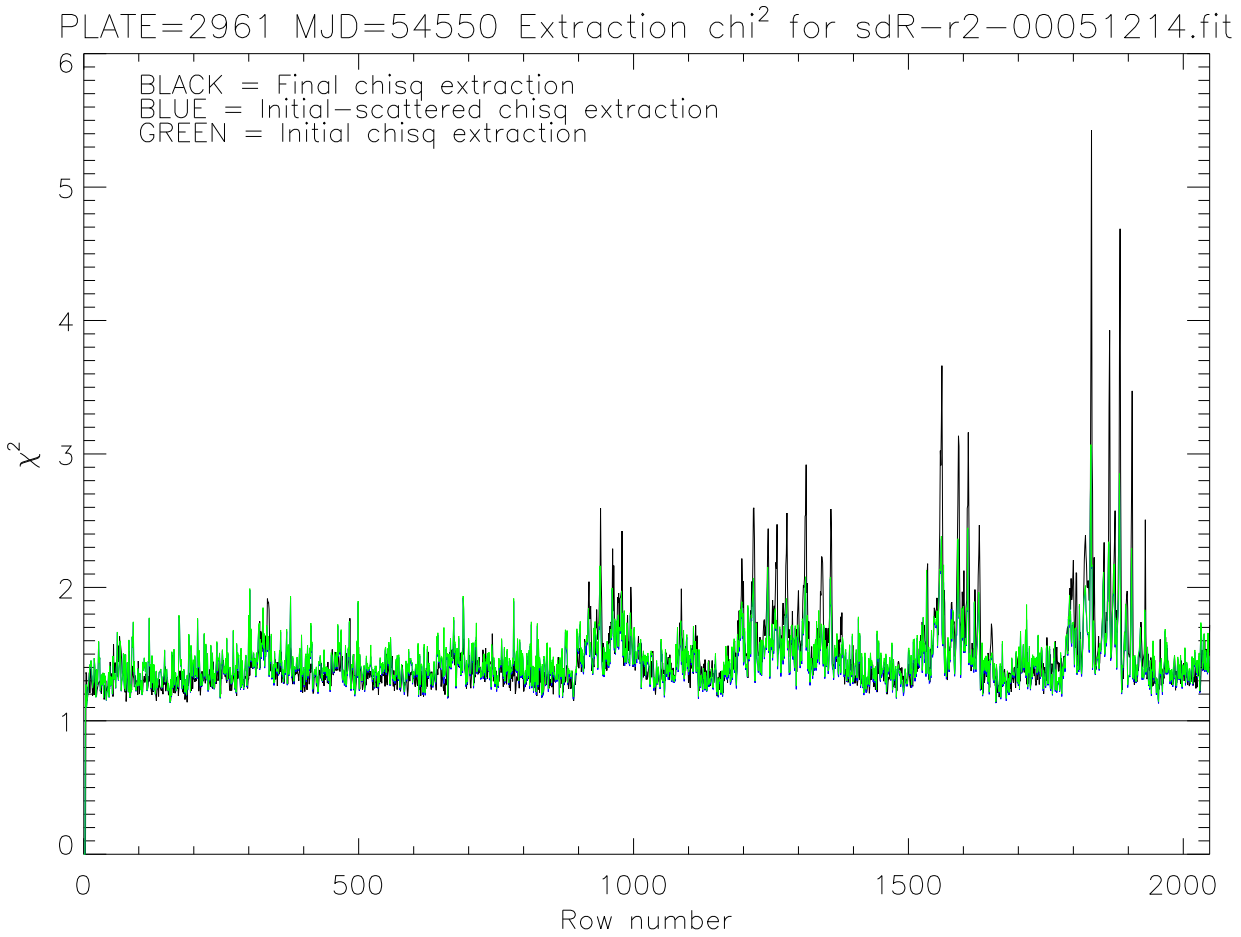

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 20:21:37 2008

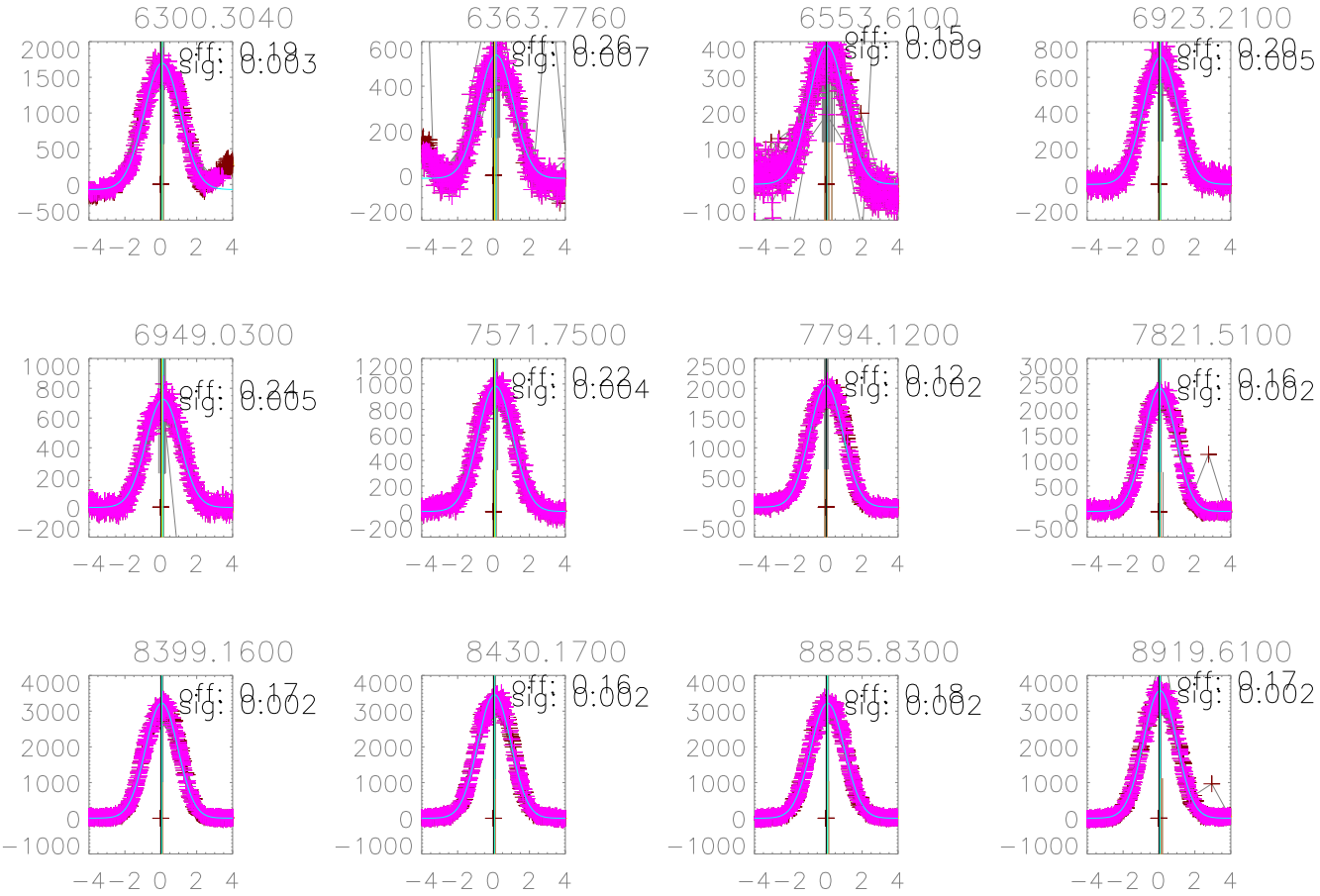

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051214.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

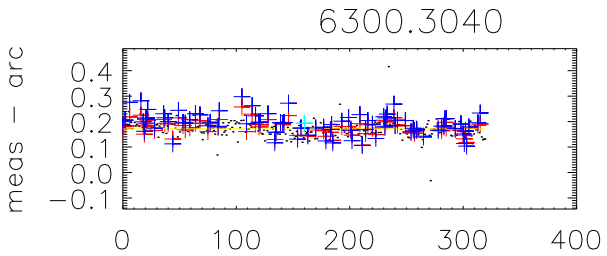

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051214.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.925
Max value = 35.736
Tue Mar 25 20:22:39 2008

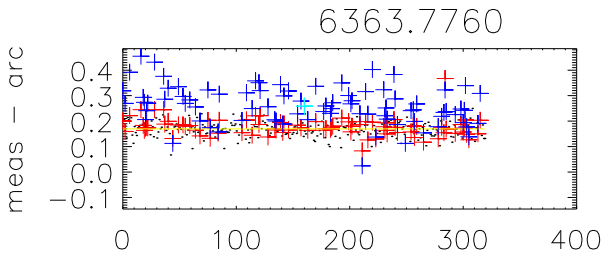

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051214.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0
15.91
11.36
11.36
11.36
15.91
15.91

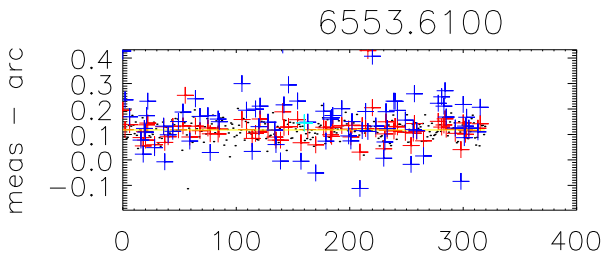

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051214.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.374
Max value = 13.784
Tue Mar 25 20:25:45 2008

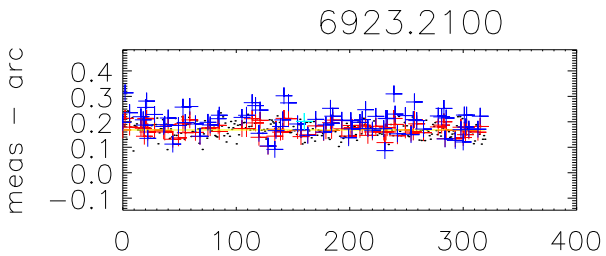

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051214.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

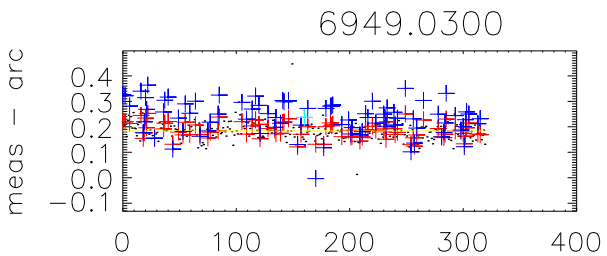

6300.3040
off: 0.19
sig: 0.003
6363.7760
off: 0.26
sig: 0.007
6553.6100
off: 0.15
sig: 0.009
6923.2100
off: 0.20
sig: 0.005
6949.0300
off: 0.24
sig: 0.005
7571.7500
off: 0.22
sig: 0.004
7794.1200
off: 0.12
sig: 0.002
7821.5100
off: 0.16
sig: 0.002
8399.1600
off: 0.17
sig: 0.002
8430.1700
off: 0.16
sig: 0.002
8885.8300
off: 0.18
sig: 0.002
8919.6100
off: 0.17
sig: 0.002

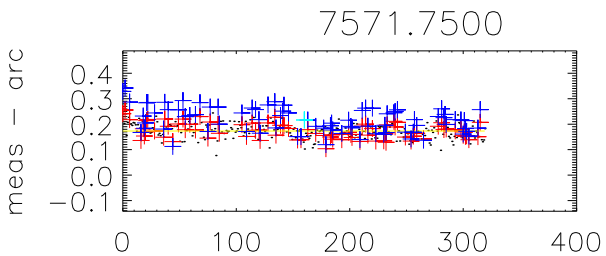

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

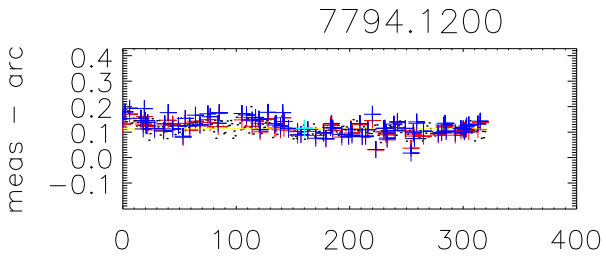

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

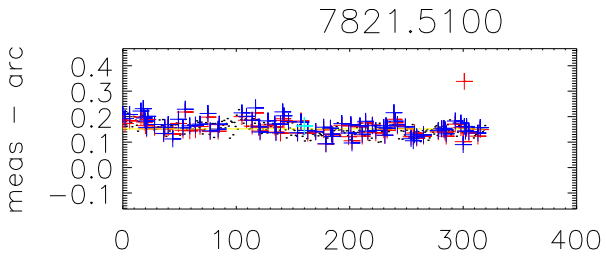

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

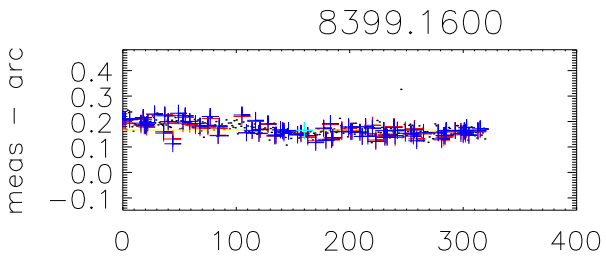

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

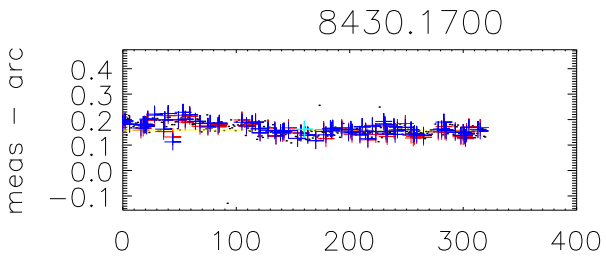

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

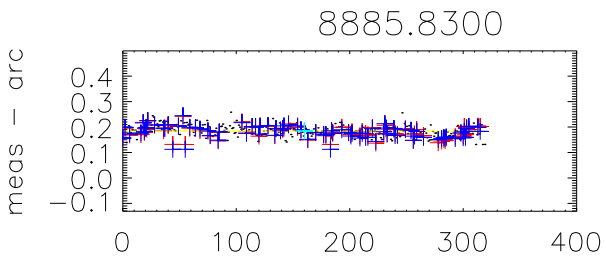

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

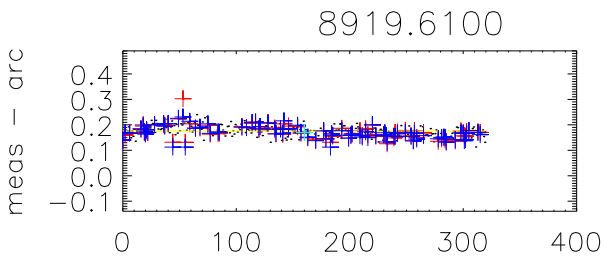

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

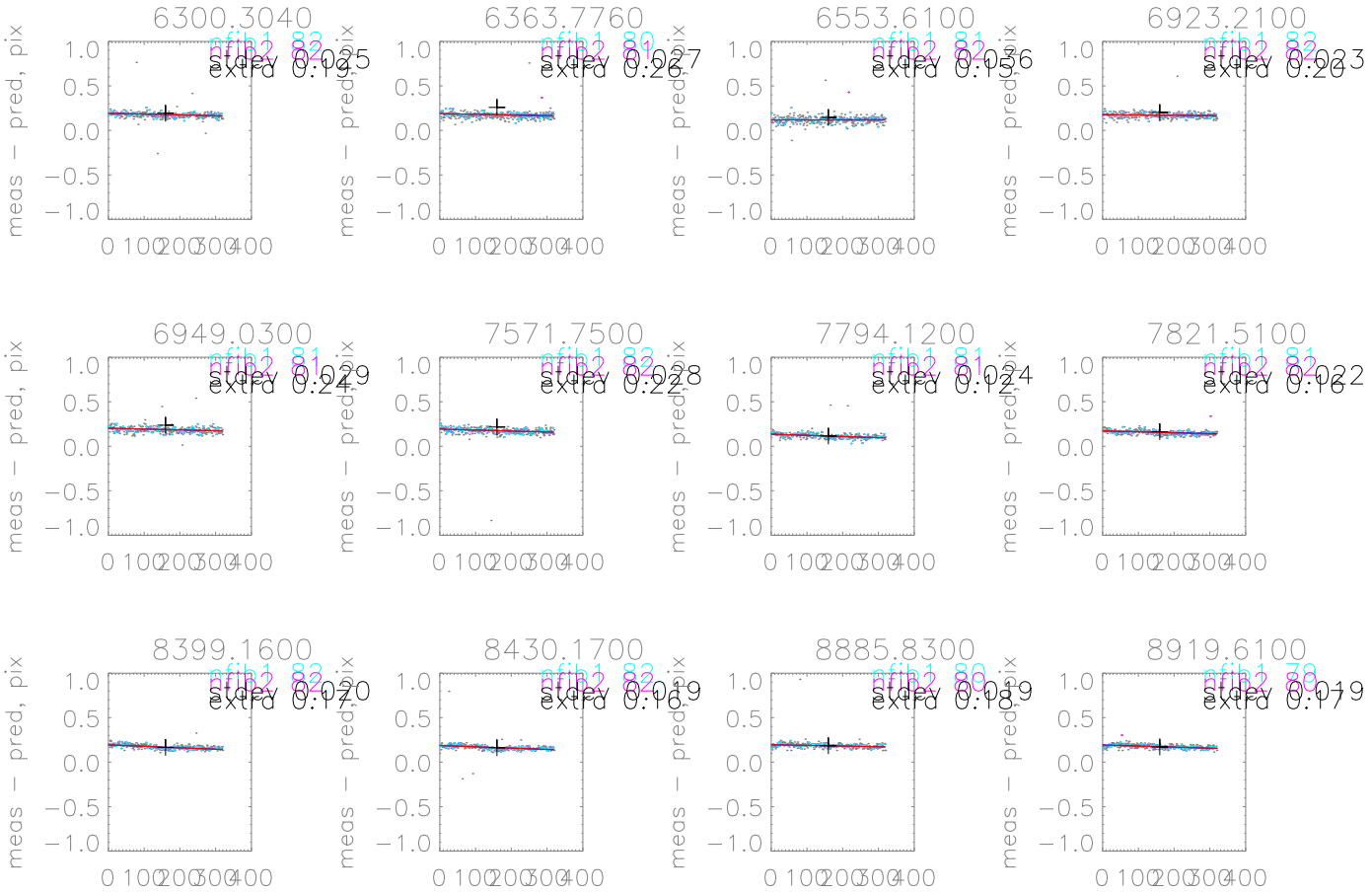

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

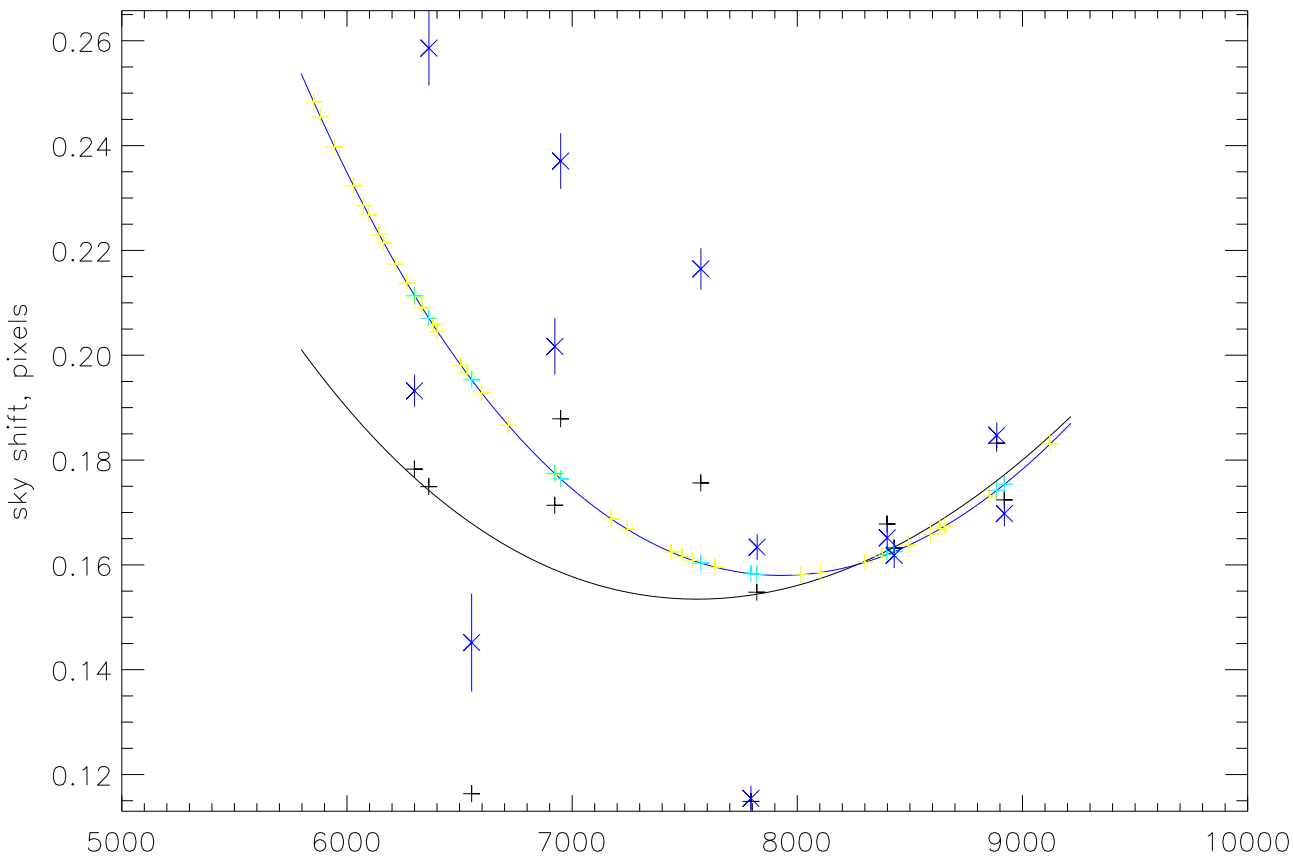

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

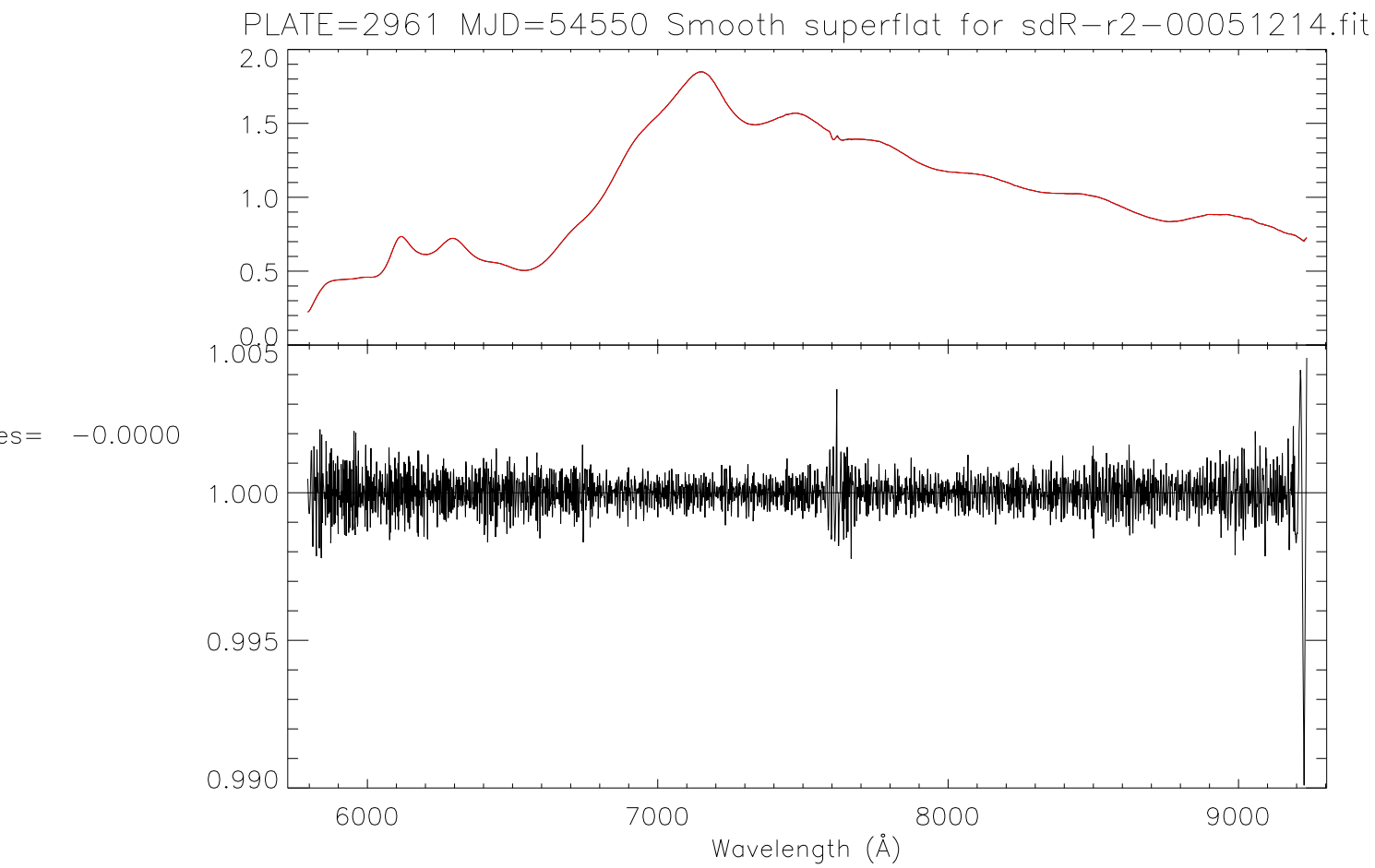

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

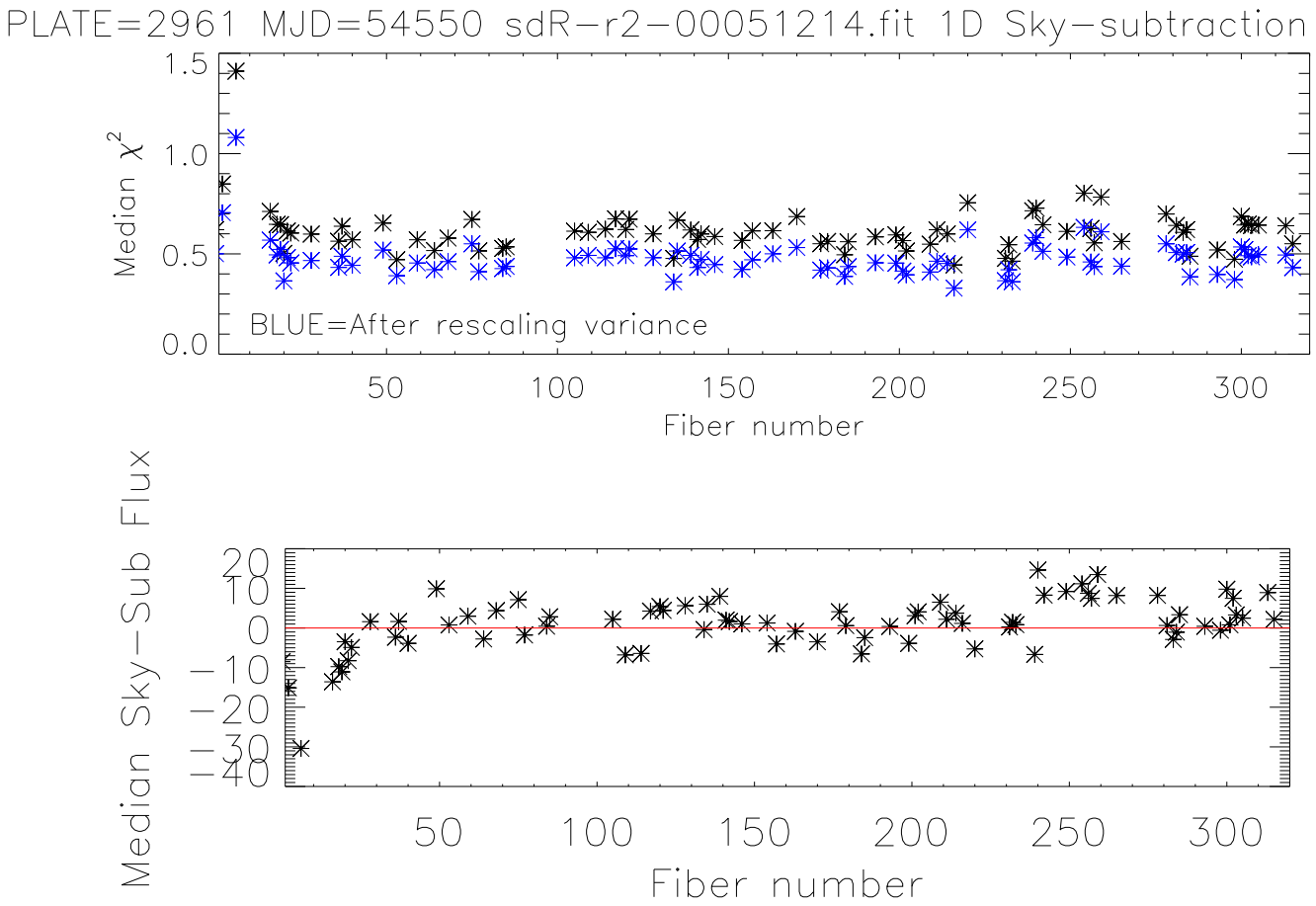

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

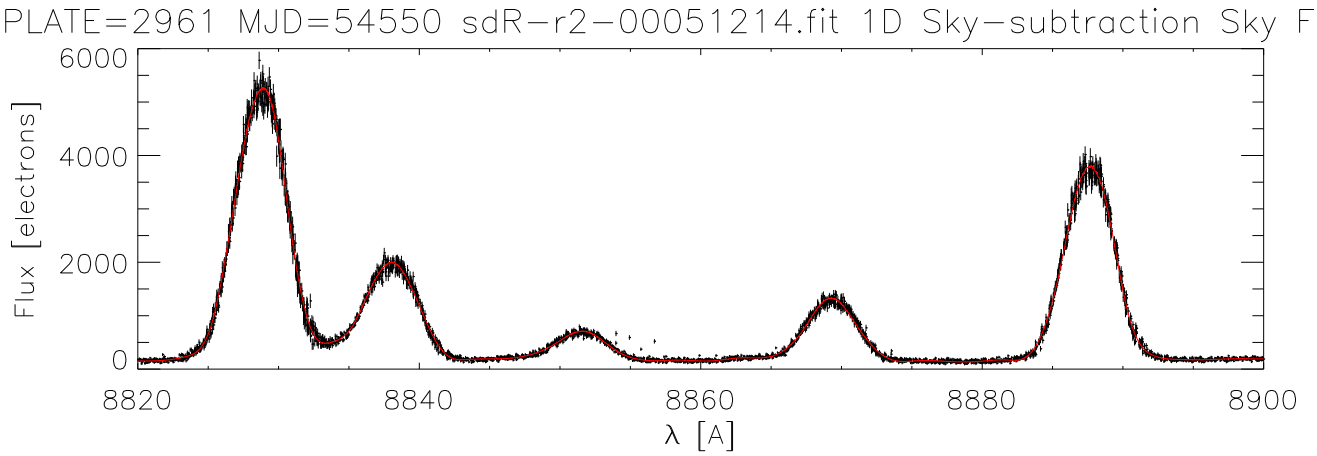

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

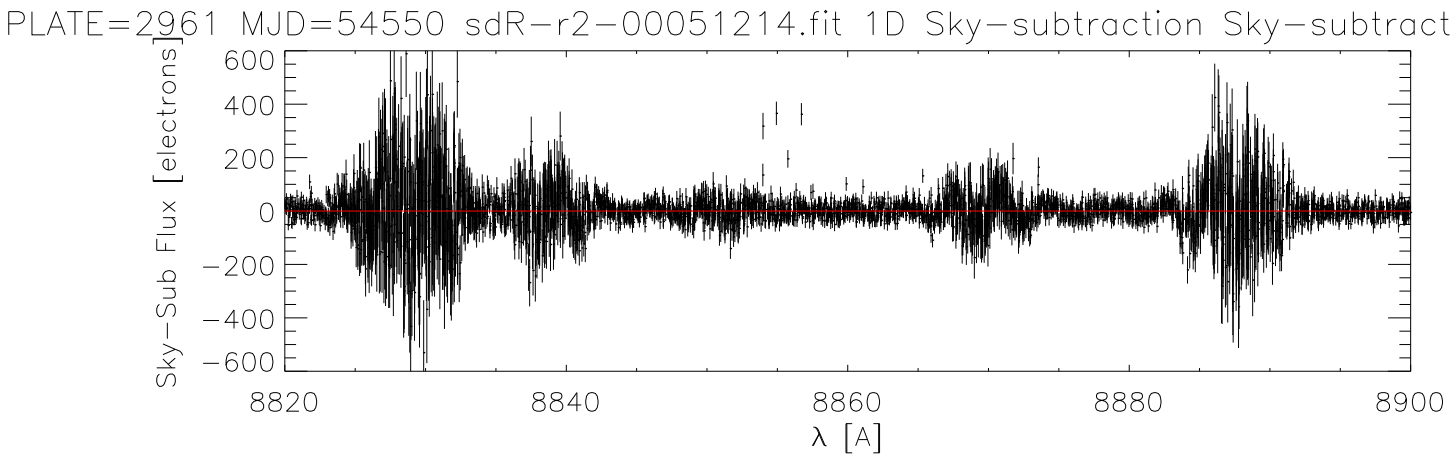

6300.3040
mfhd1 82
mfhd2 82
stdev 0.025
extra 0.19
6363.7760
mfhd1 80
mfhd2 81
stdev 0.027
extra 0.26
6553.6100
mfhd1 81
mfhd2 82
stdev 0.036
extra 0.15
6923.2100
mfhd1 82
mfhd2 82
stdev 0.023
extra 0.20
6949.0300
mfhd1 81
mfhd2 81
stdev 0.029
extra 0.24
7571.7500
mfhd1 82
mfhd2 82
stdev 0.028
extra 0.22
7794.1200
mfhd1 81
mfhd2 81
stdev 0.024
extra 0.12
7821.5100
mfhd1 81
mfhd2 82
stdev 0.022
extra 0.16
8399.1600
mfhd1 82
mfhd2 82
stdev 0.020
extra 0.17
8430.1700
mfhd1 82
mfhd2 82
stdev 0.049
extra 0.16
8885.8300
mfhd1 80
mfhd2 80
stdev 0.049
extra 0.18
8919.6100
mfhd1 79
mfhd2 80
stdev 0.019
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

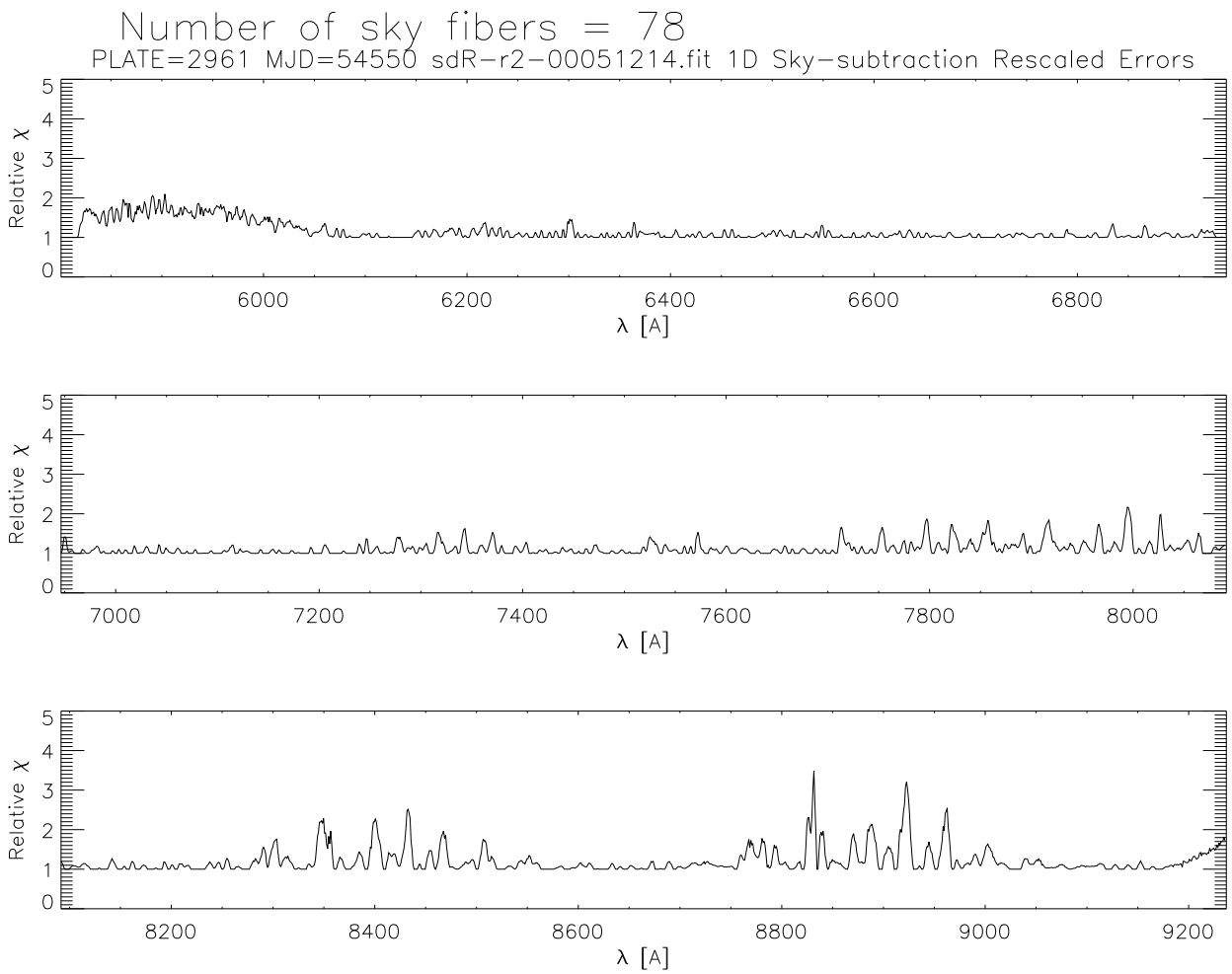

sky shift, pixels
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
5000
6000
7000
8000
9000
10000

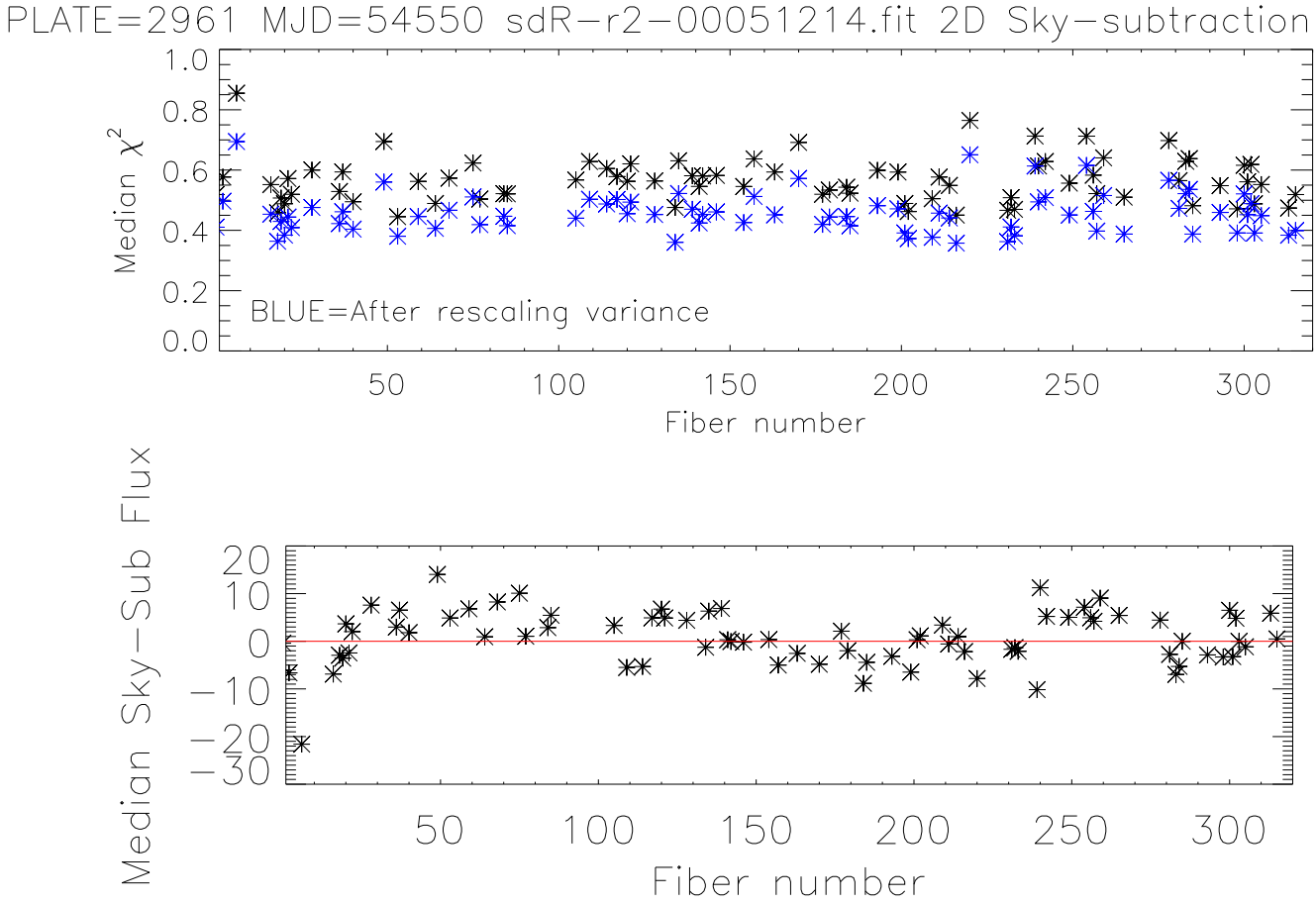

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051214.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

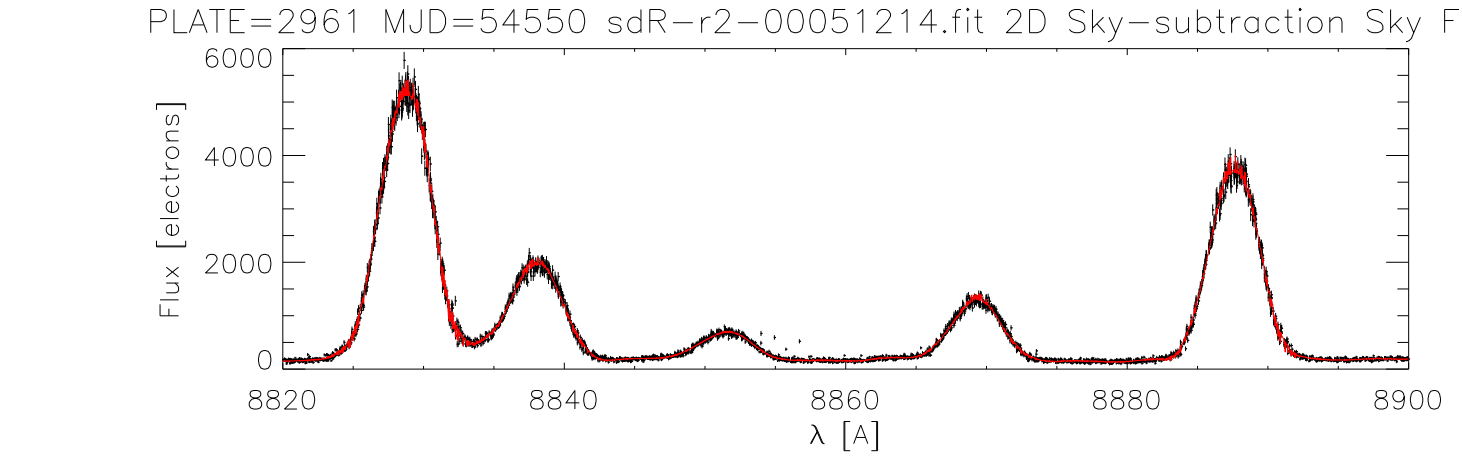

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

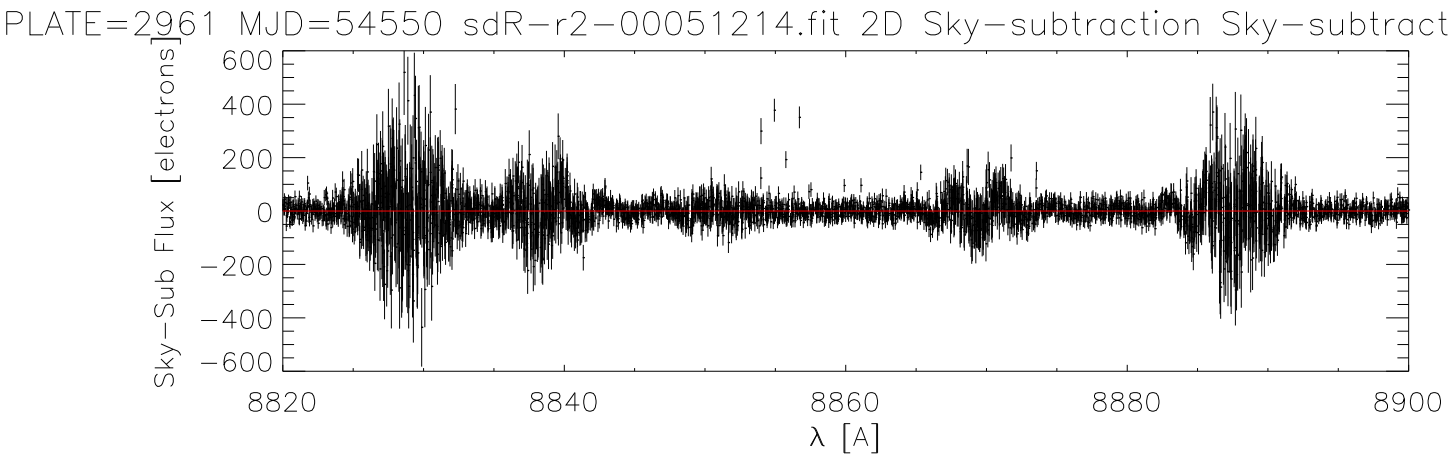

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

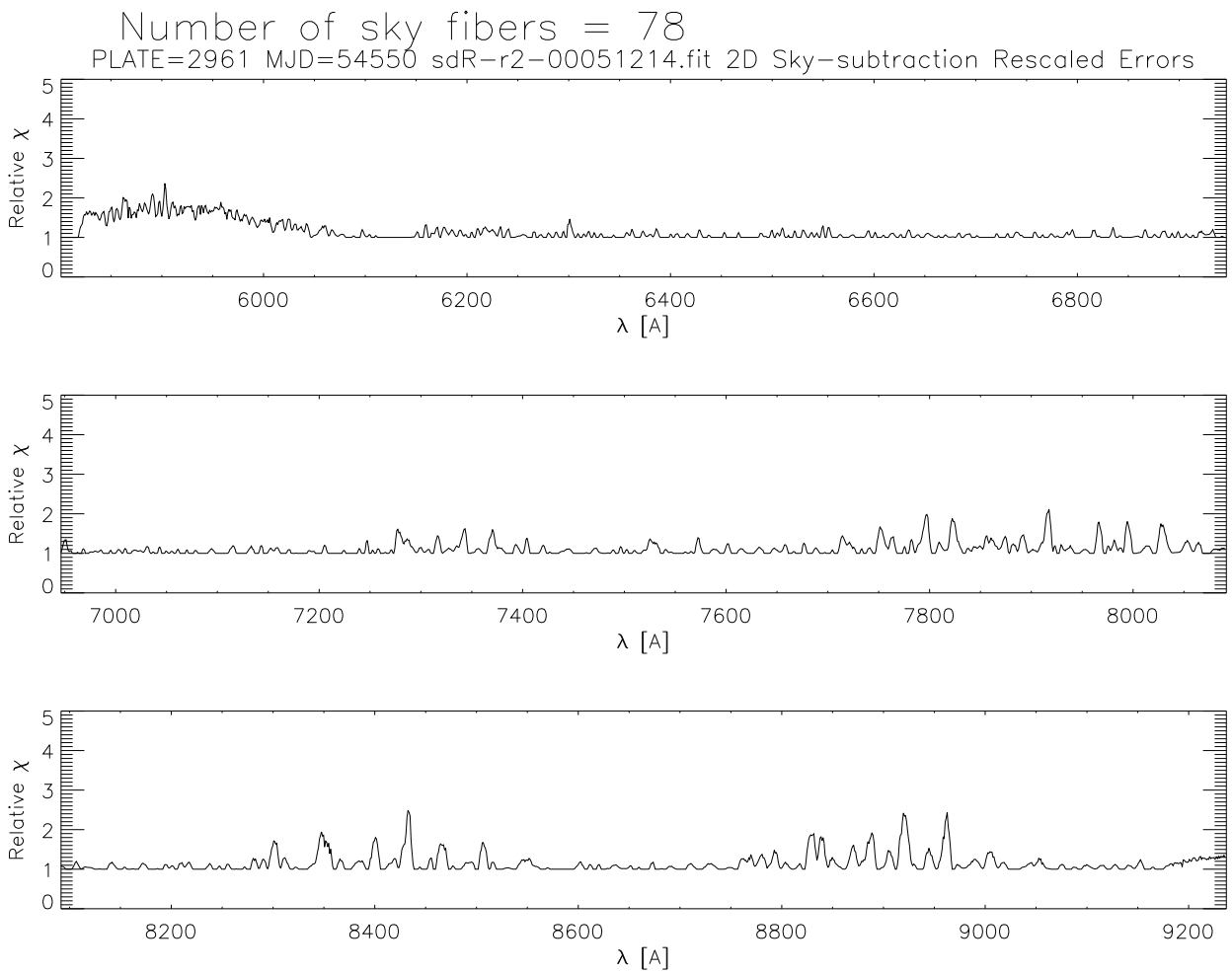

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

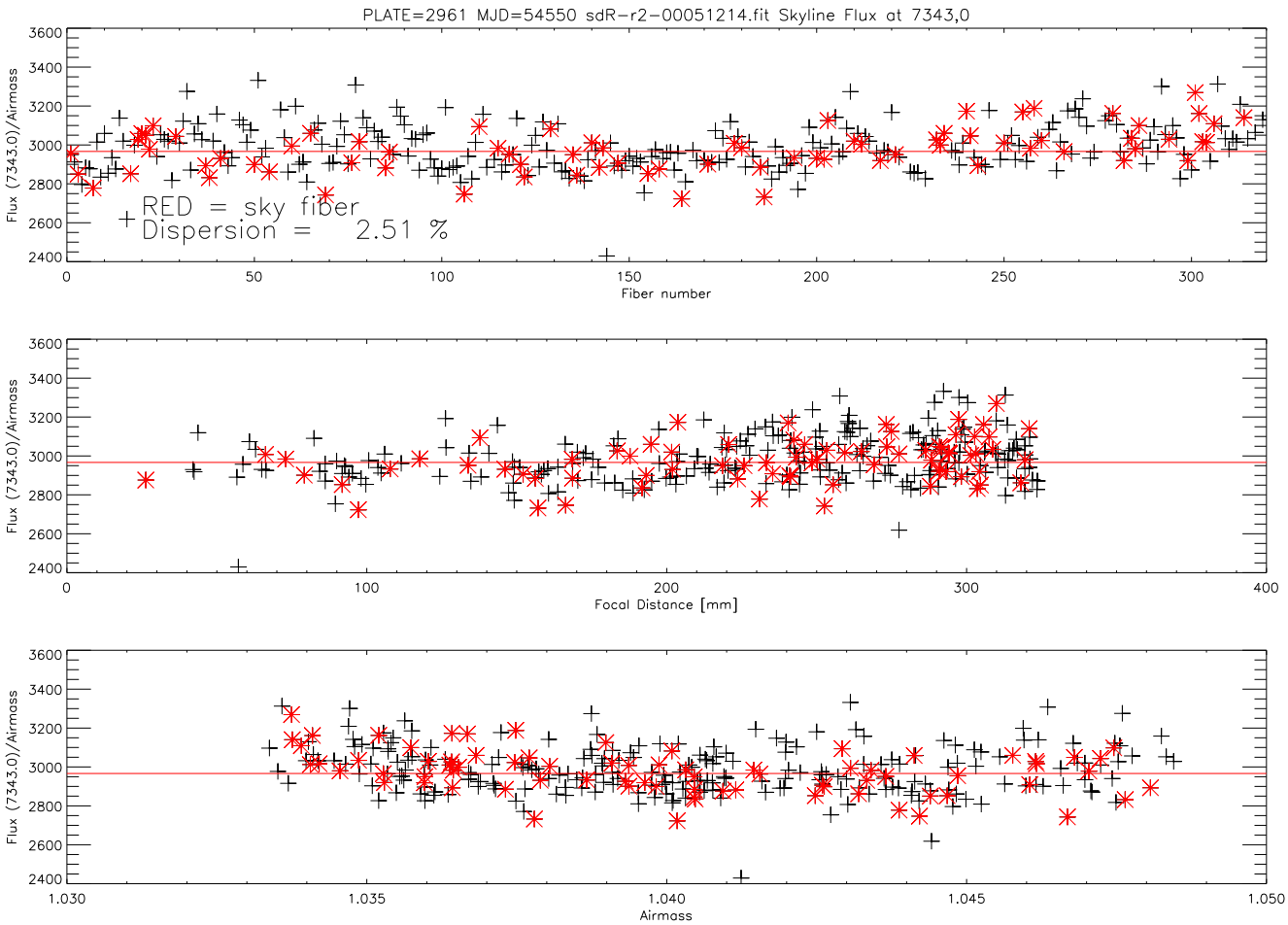

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051214.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

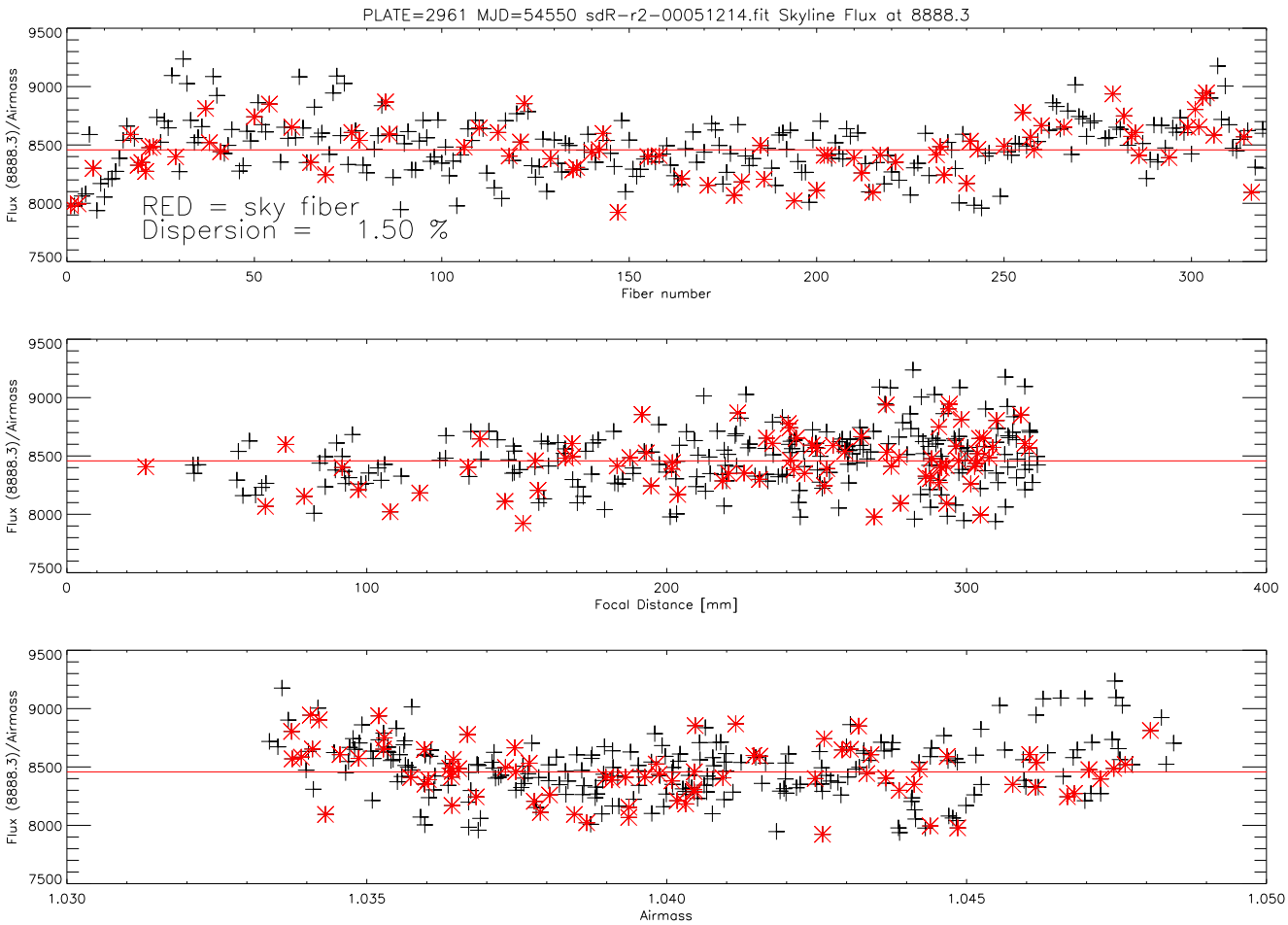

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

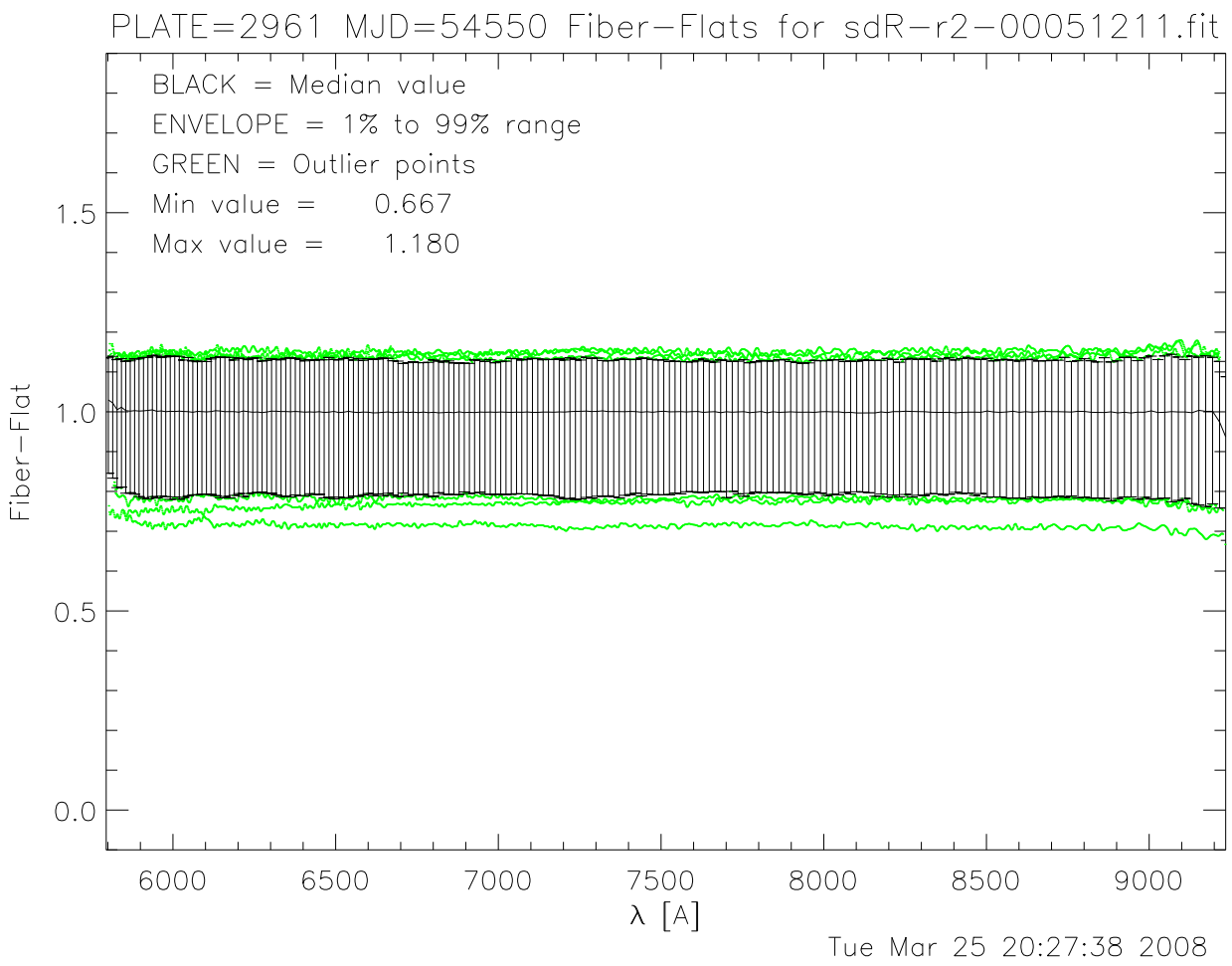

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

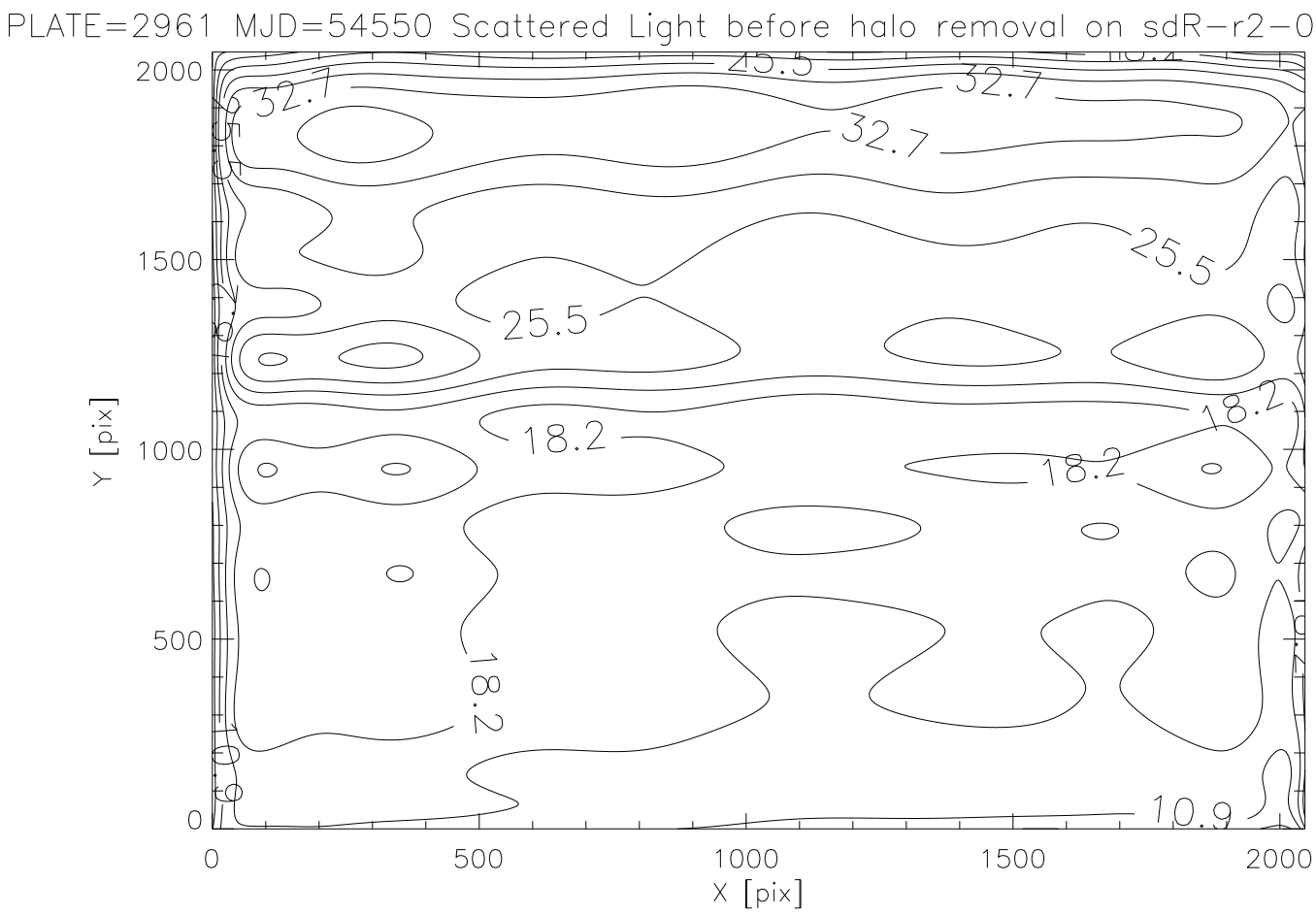

PLATE=2961 MJD=54550 sdR-r2-00051214.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

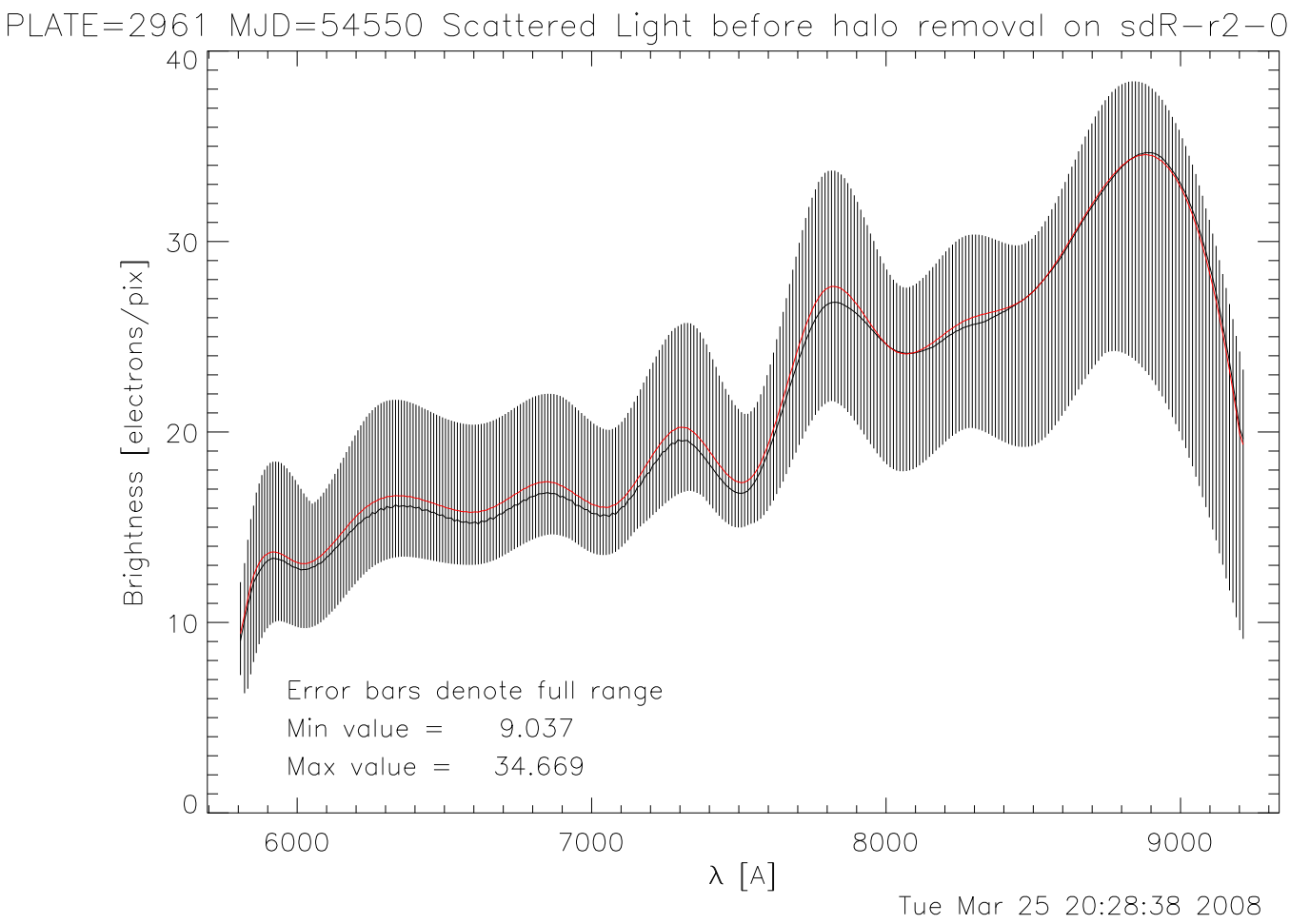

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051214.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

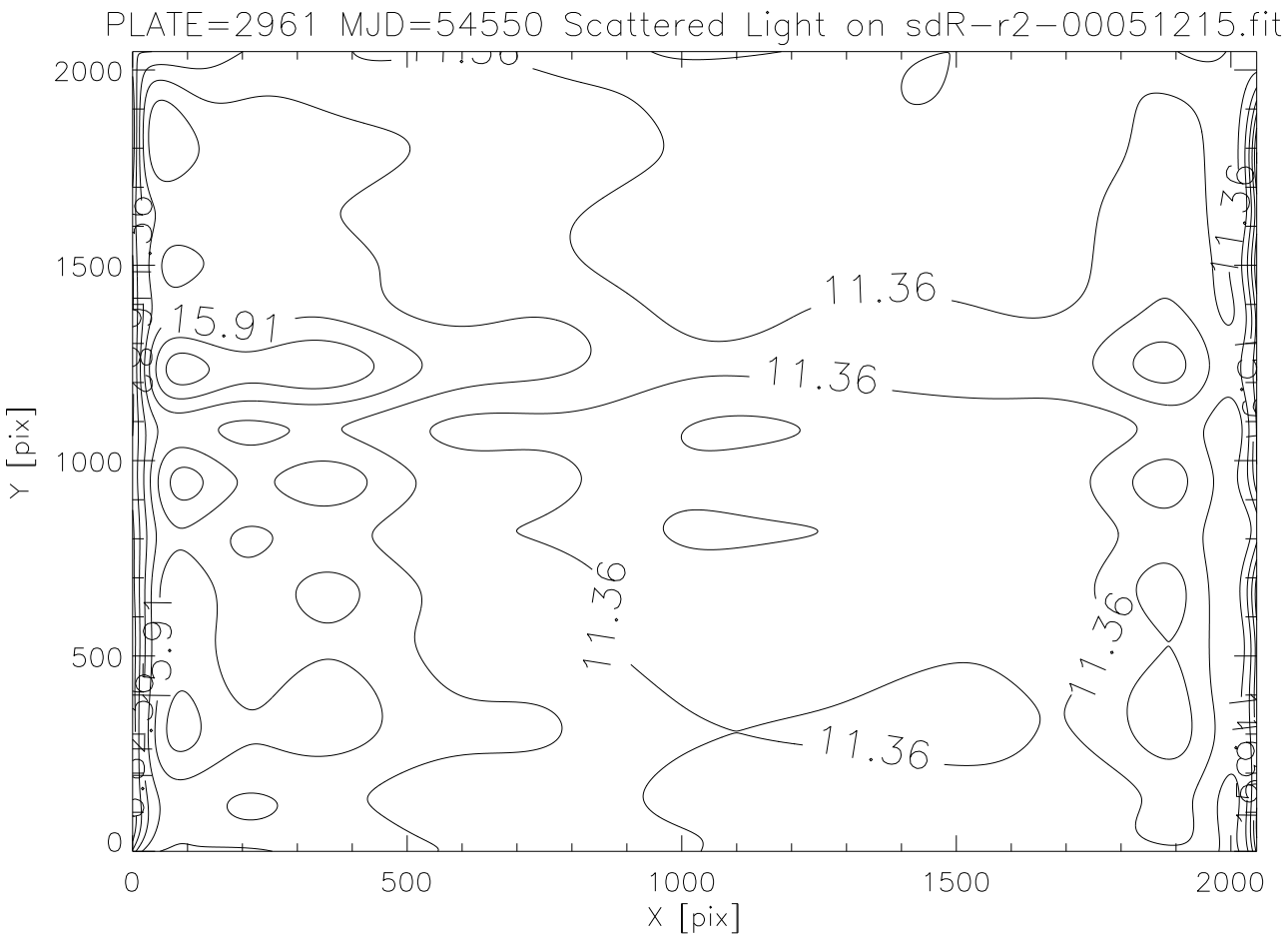

PLATE=2961 MJD=54550 sdR-r2-00051214.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.51 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

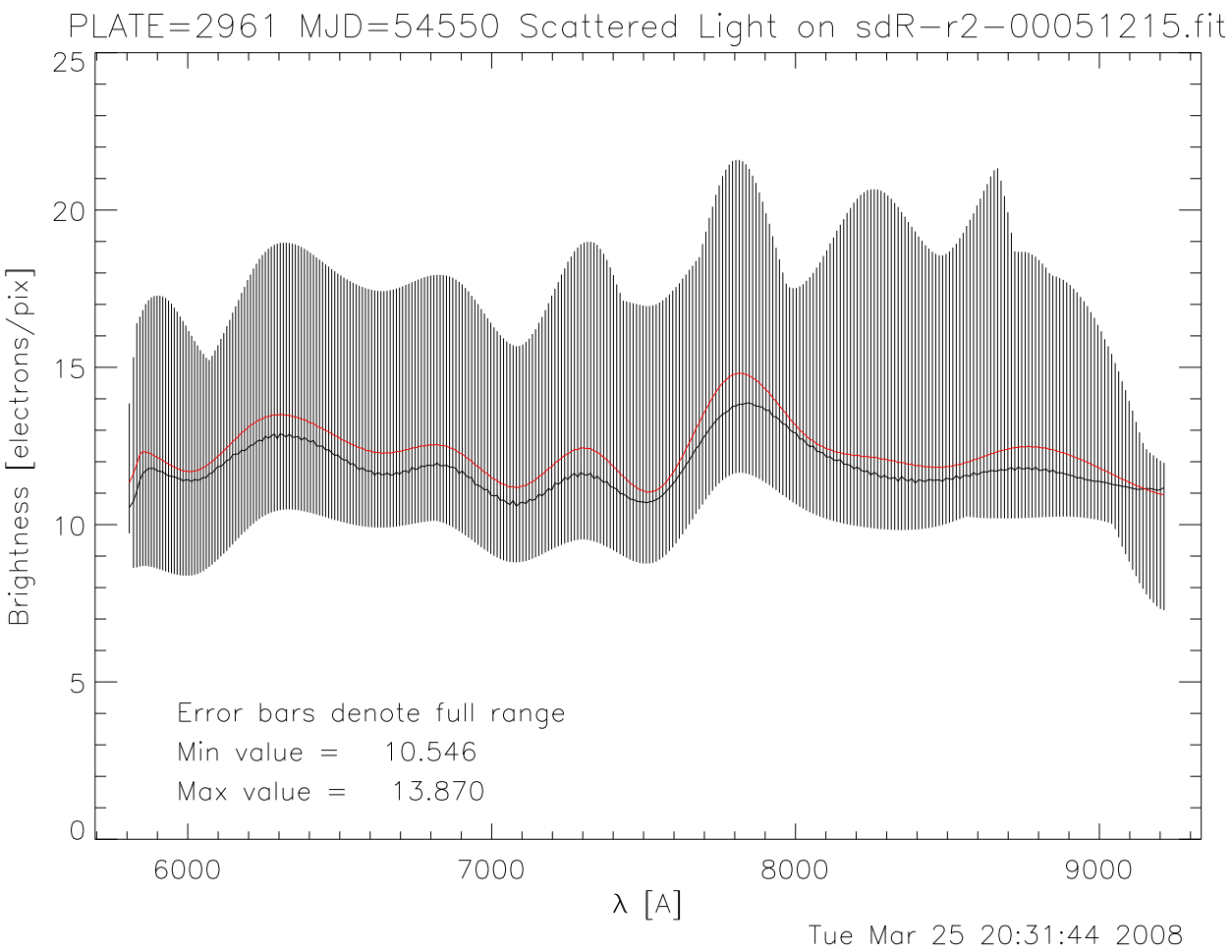

PLATE=2961 MJD=54550 sdR-r2-00051214.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.50 %
Fiber number
Focal Distance [mm]
Airmass

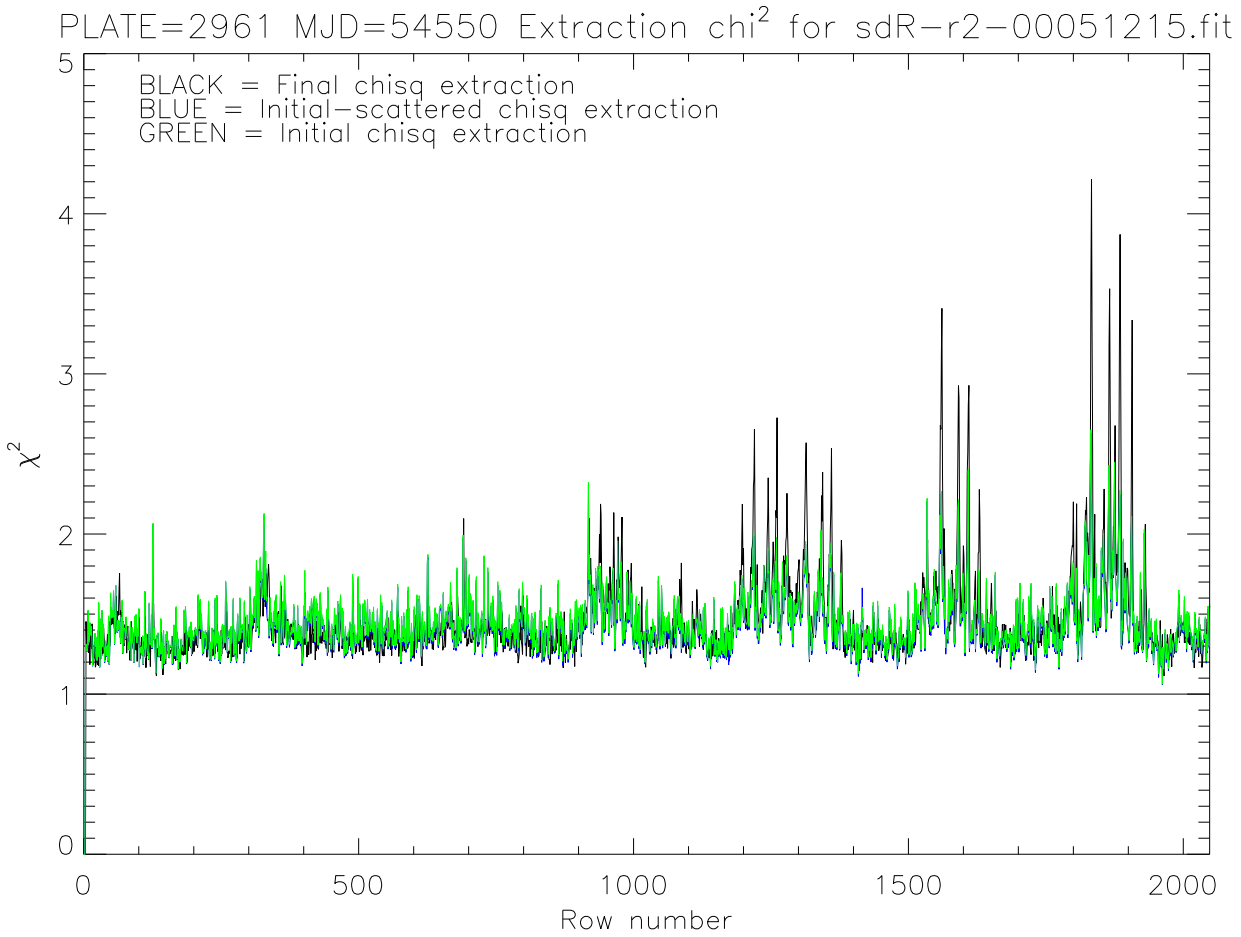

PLATE=2961 MJD=54550 Fiber−Flats for sdR−r2−00051211.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.667
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 25 20:27:38 2008

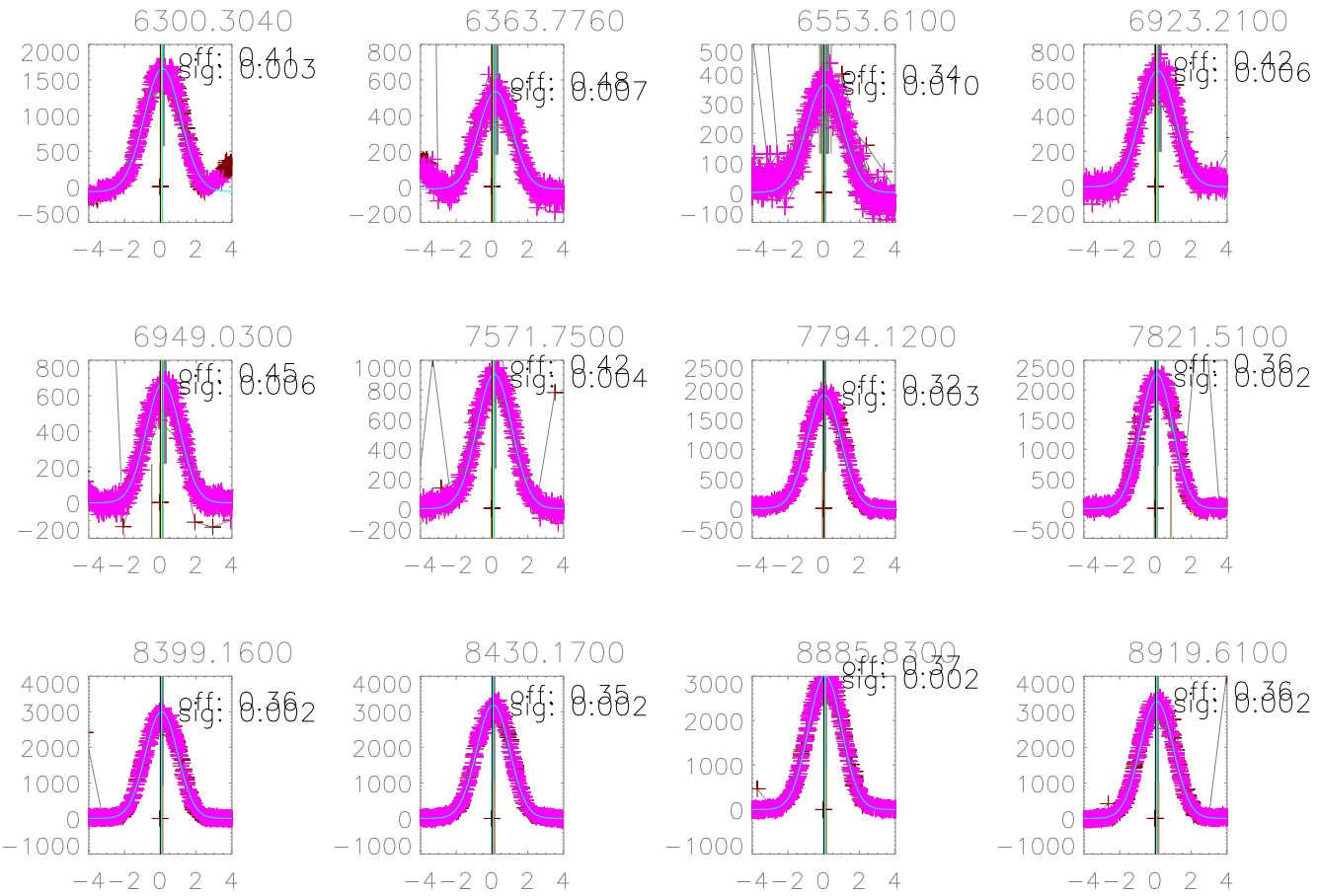

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051215.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
32.7
25.5
18.2
10.9

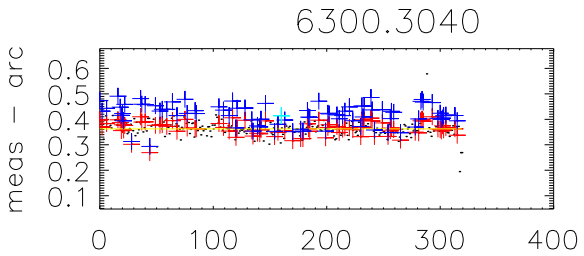

PLATE=2961 MJD=54550 Scattered Light before halo removal on sdR-r2-00051215.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.037
Max value = 34.669
Tue Mar 25 20:28:38 2008

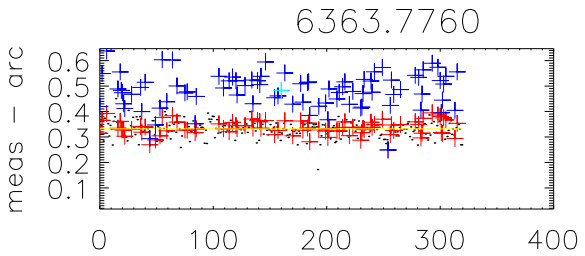

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051215.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
15.91

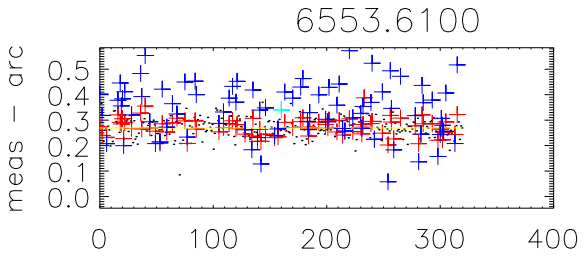

PLATE=2961 MJD=54550 Scattered Light on sdR-r2-00051215.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.546
Max value = 13.870
Tue Mar 25 20:31:44 2008

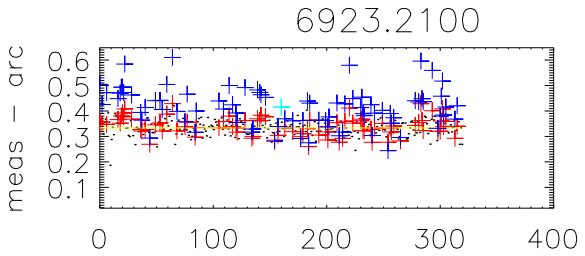

PLATE=2961 MJD=54550 Extraction chi^2 for sdR−r2−00051215.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

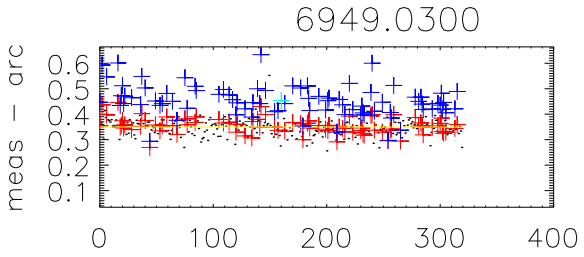

6300.3040
off: 0.41
sig: 0.003
6363.7760
off: 0.48
sig: 0.007
6553.6100
off: 0.34
sig: 0.010
6923.2100
off: 0.42
sig: 0.006
6949.0300
off: 0.45
sig: 0.006
7571.7500
off: 0.42
sig: 0.004
7794.1200
off: 0.32
sig: 0.003
7821.5100
off: 0.36
sig: 0.002
8399.1600
off: 0.36
sig: 0.002
8430.1700
off: 0.35
sig: 0.002
8885.8300
off: 0.37
sig: 0.002
8919.6100
off: 0.36
sig: 0.002

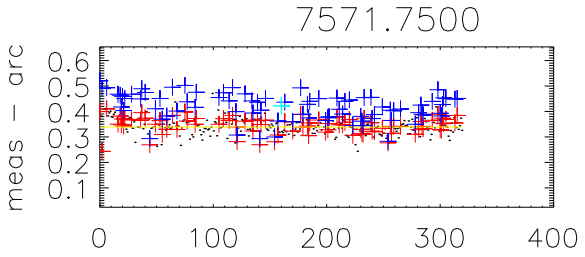

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

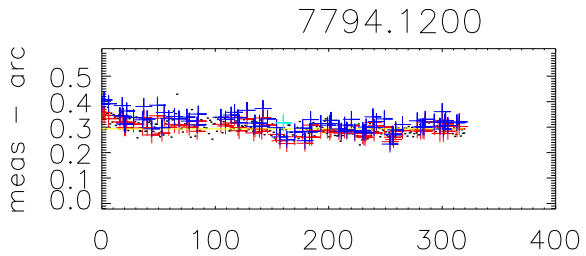

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

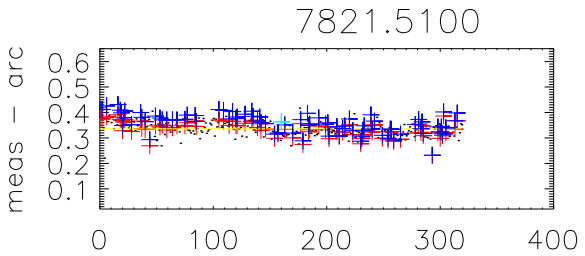

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

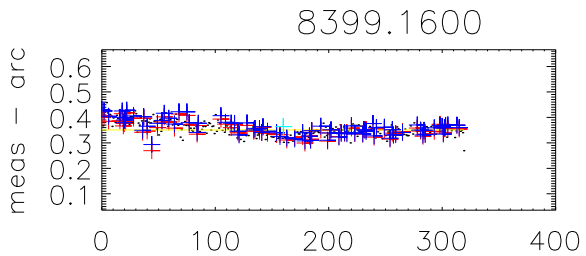

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

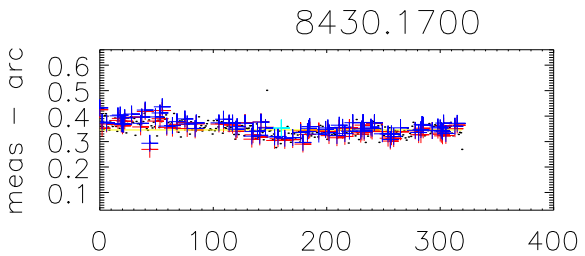

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

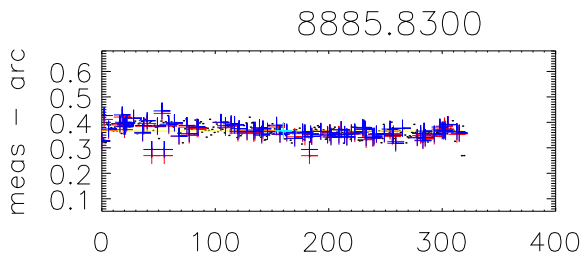

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

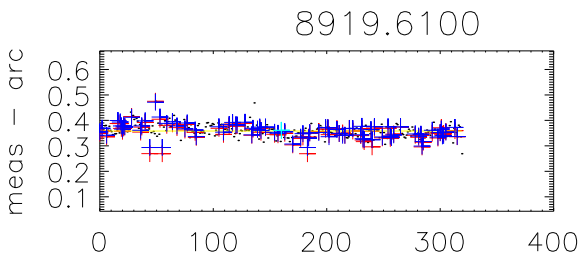

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

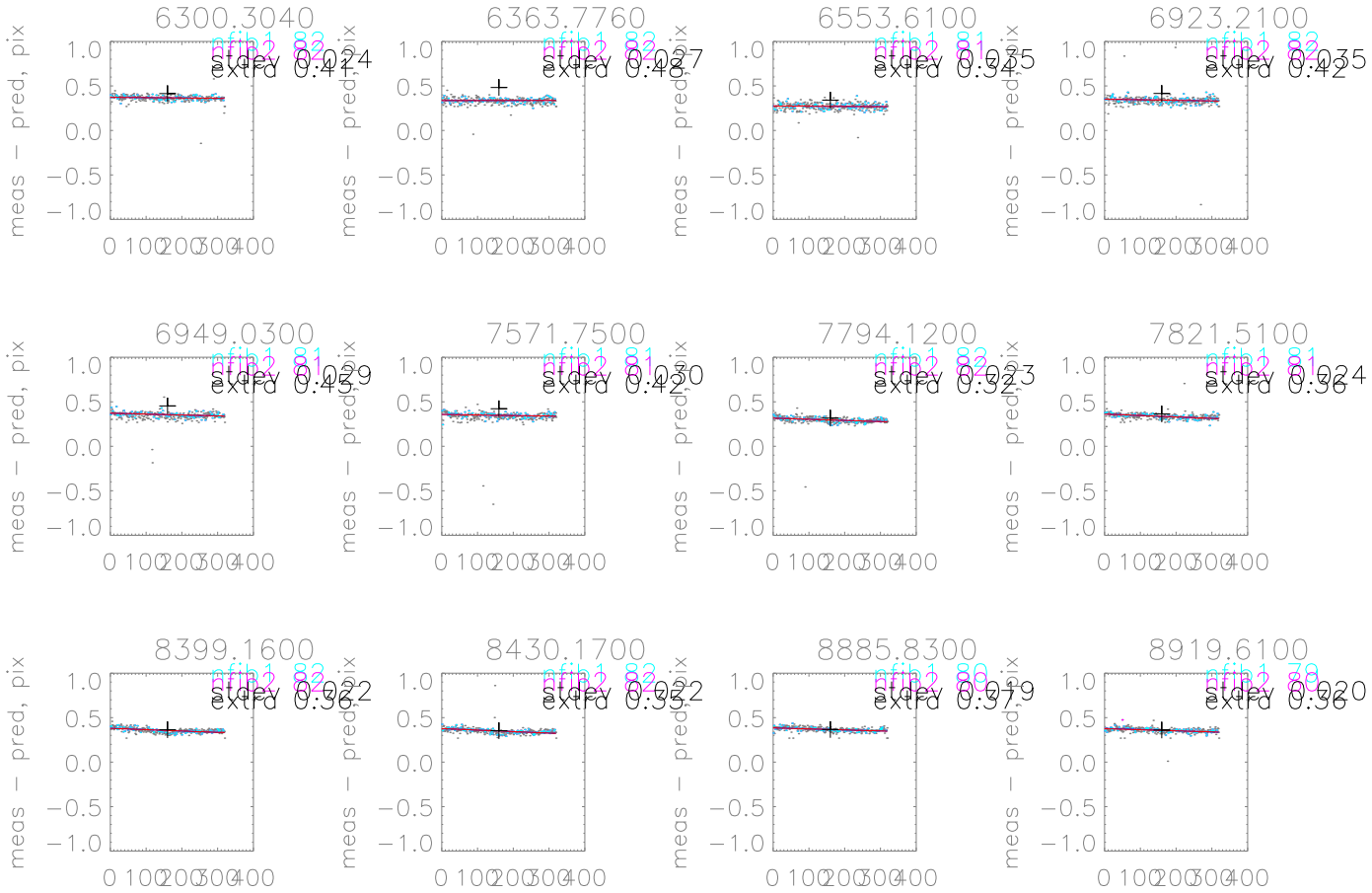

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

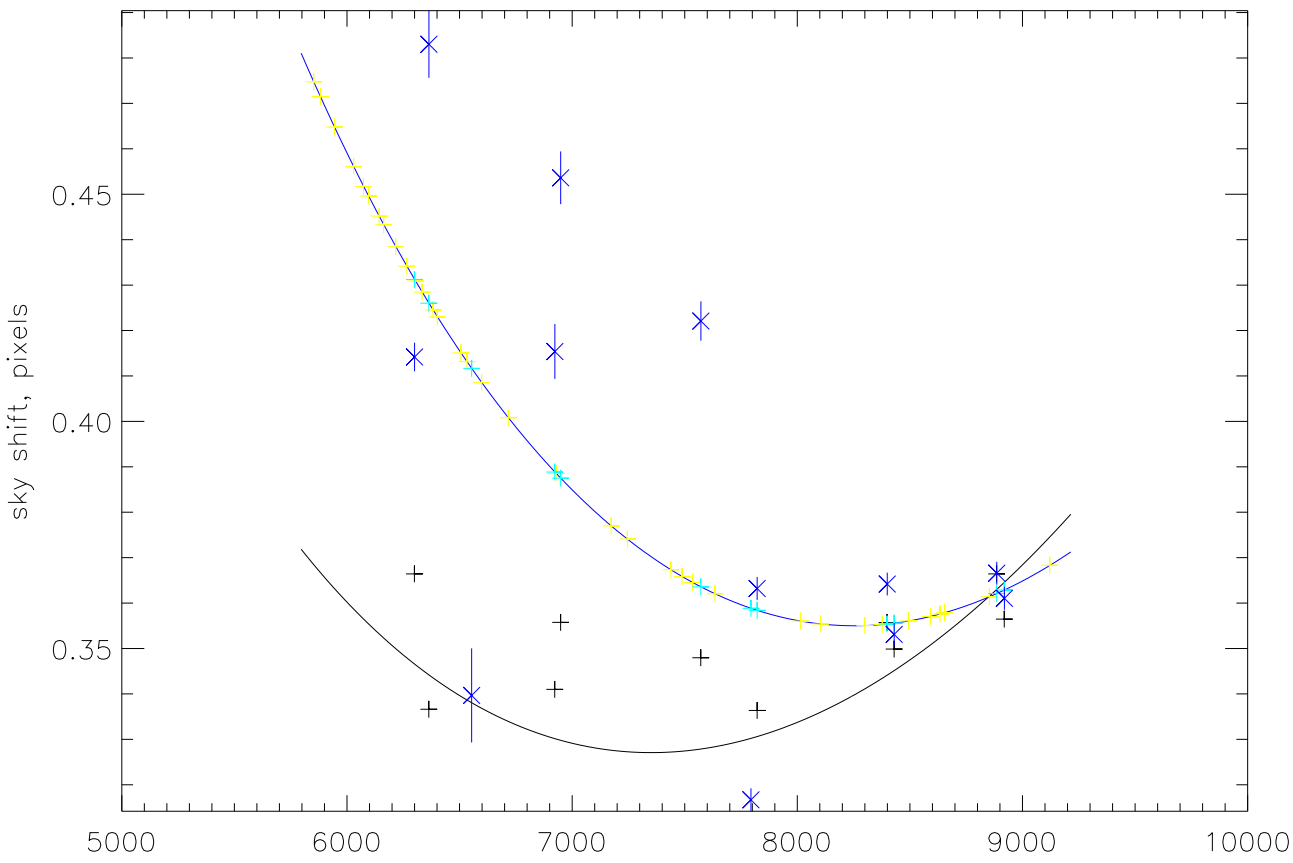

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

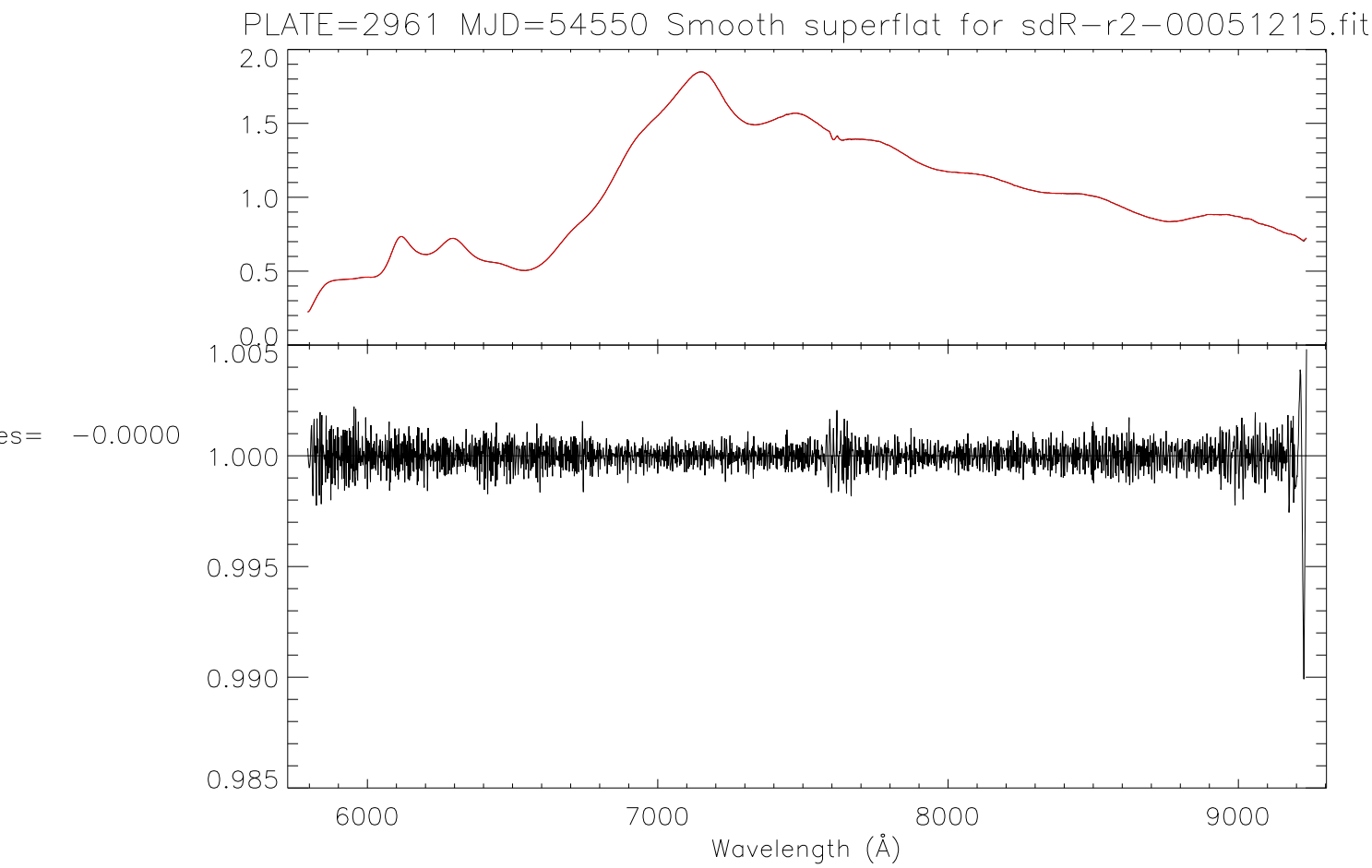

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

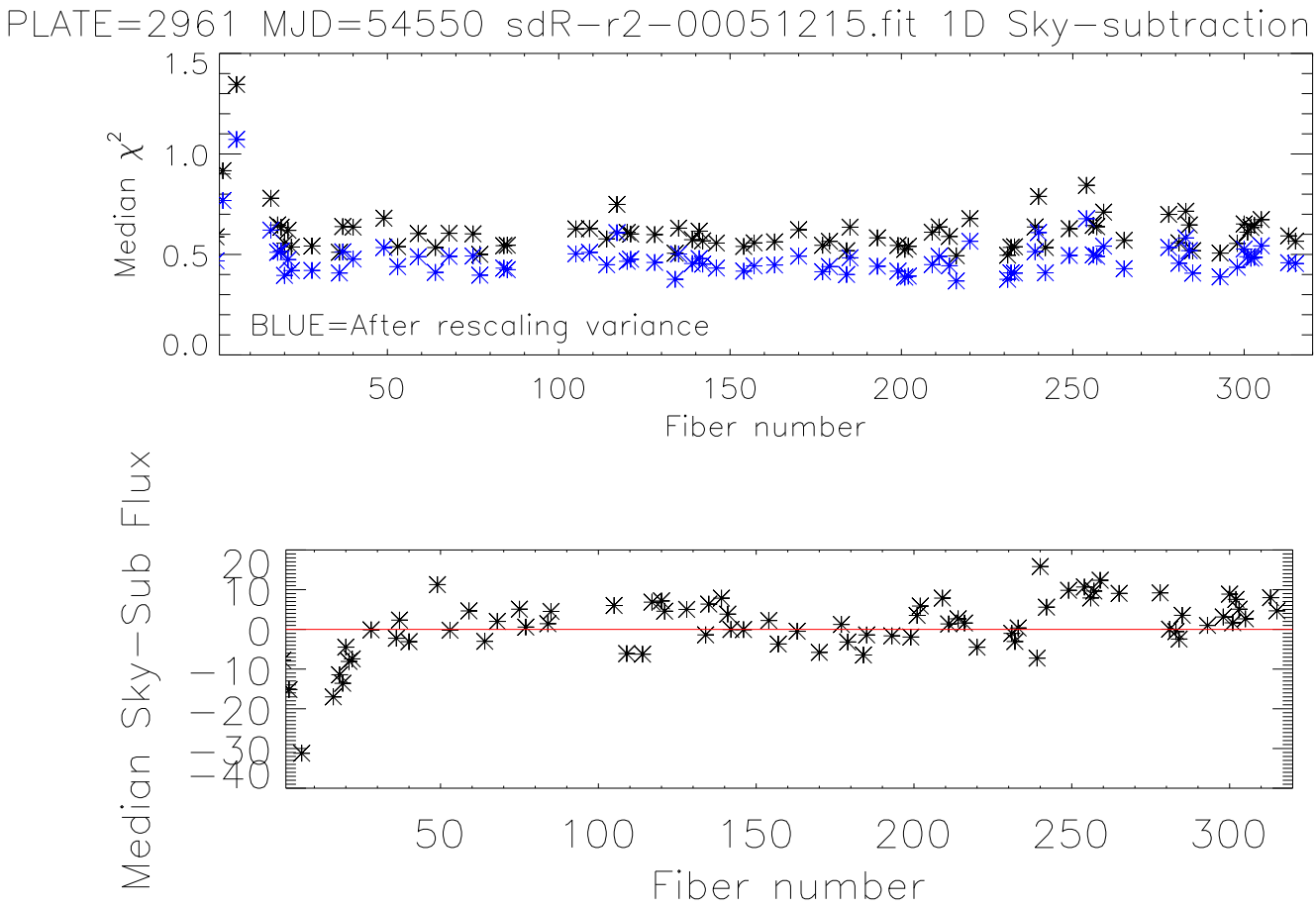

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

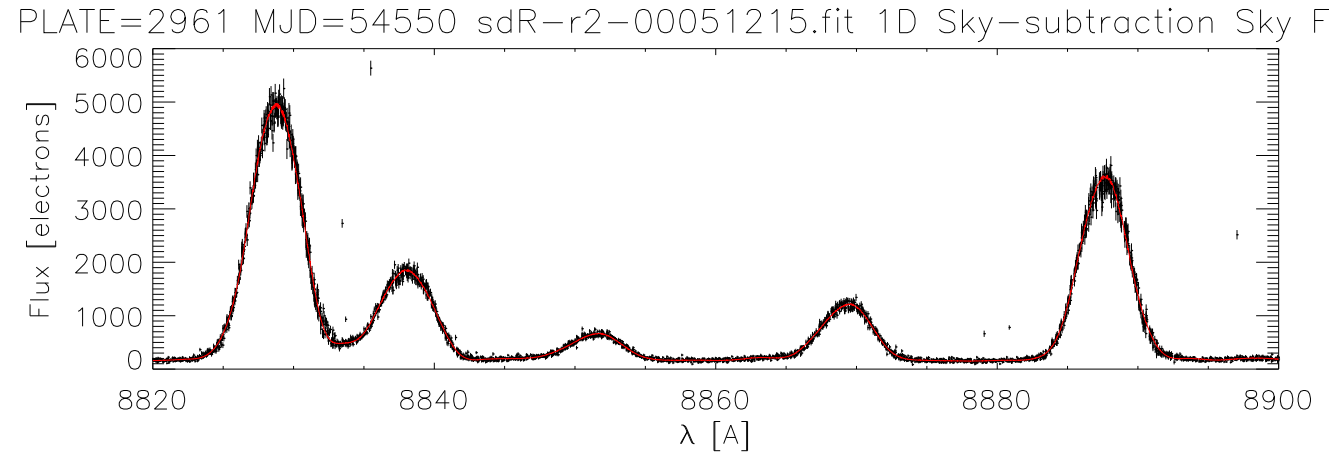

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

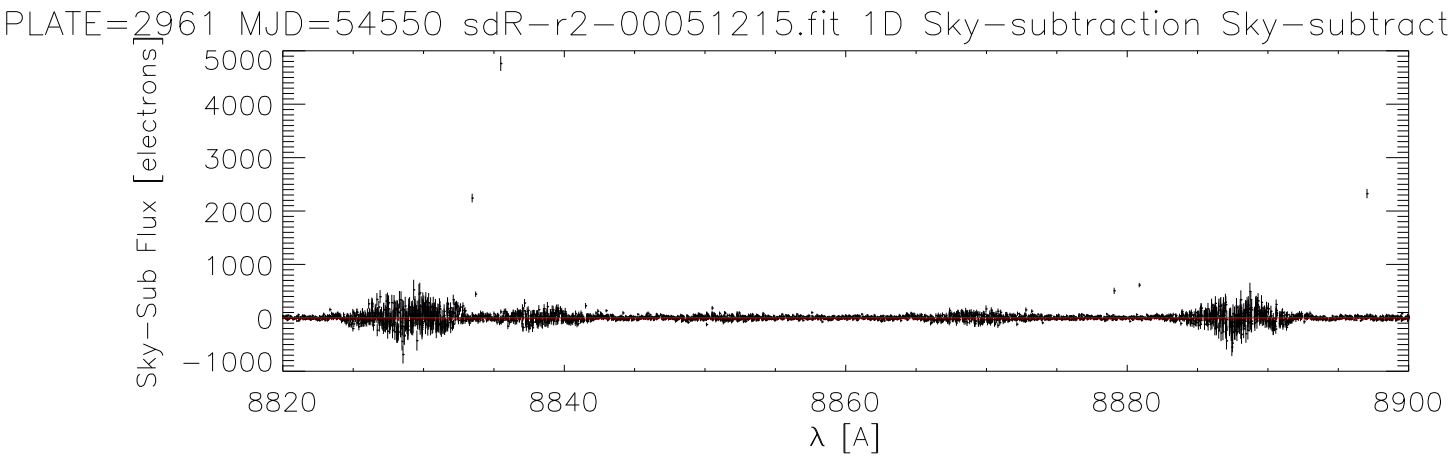

6300.3040
mfhd1 82
mfhd2 82
stdev 0.024
extra 0.41
6363.7760
mfhd1 82
mfhd2 82
stdev 0.027
extra 0.48
6553.6100
mfhd1 81
mfhd2 82
stdev 0.025
extra 0.34
6923.2100
mfhd1 82
mfhd2 82
stdev 0.035
extra 0.42
6949.0300
mfhd1 81
mfhd2 81
stdev 0.029
extra 0.45
7571.7500
mfhd1 81
mfhd2 81
stdev 0.030
extra 0.42
7794.1200
mfhd1 82
mfhd2 82
stdev 0.023
extra 0.32
7821.5100
mfhd1 81
mfhd2 81
stdev 0.024
extra 0.36
8399.1600
mfhd1 82
mfhd2 82
stdev 0.022
extra 0.36
8430.1700
mfhd1 82
mfhd2 82
stdev 0.022
extra 0.33
8885.8300
mfhd1 80
mfhd2 80
stdev 0.019
extra 0.37
8919.6100
mfhd1 79
mfhd2 80
stdev 0.020
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

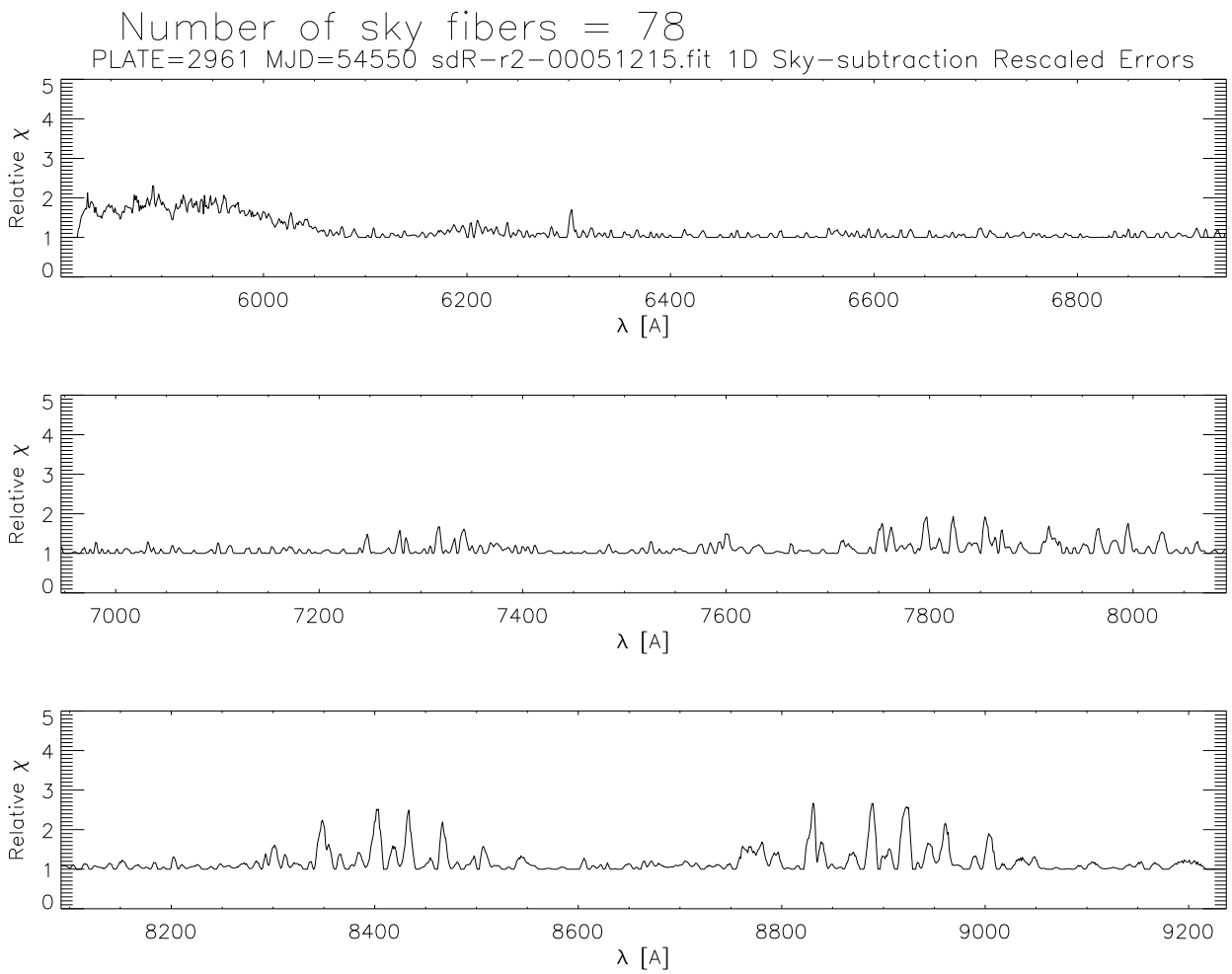

sky shift, pixels
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000

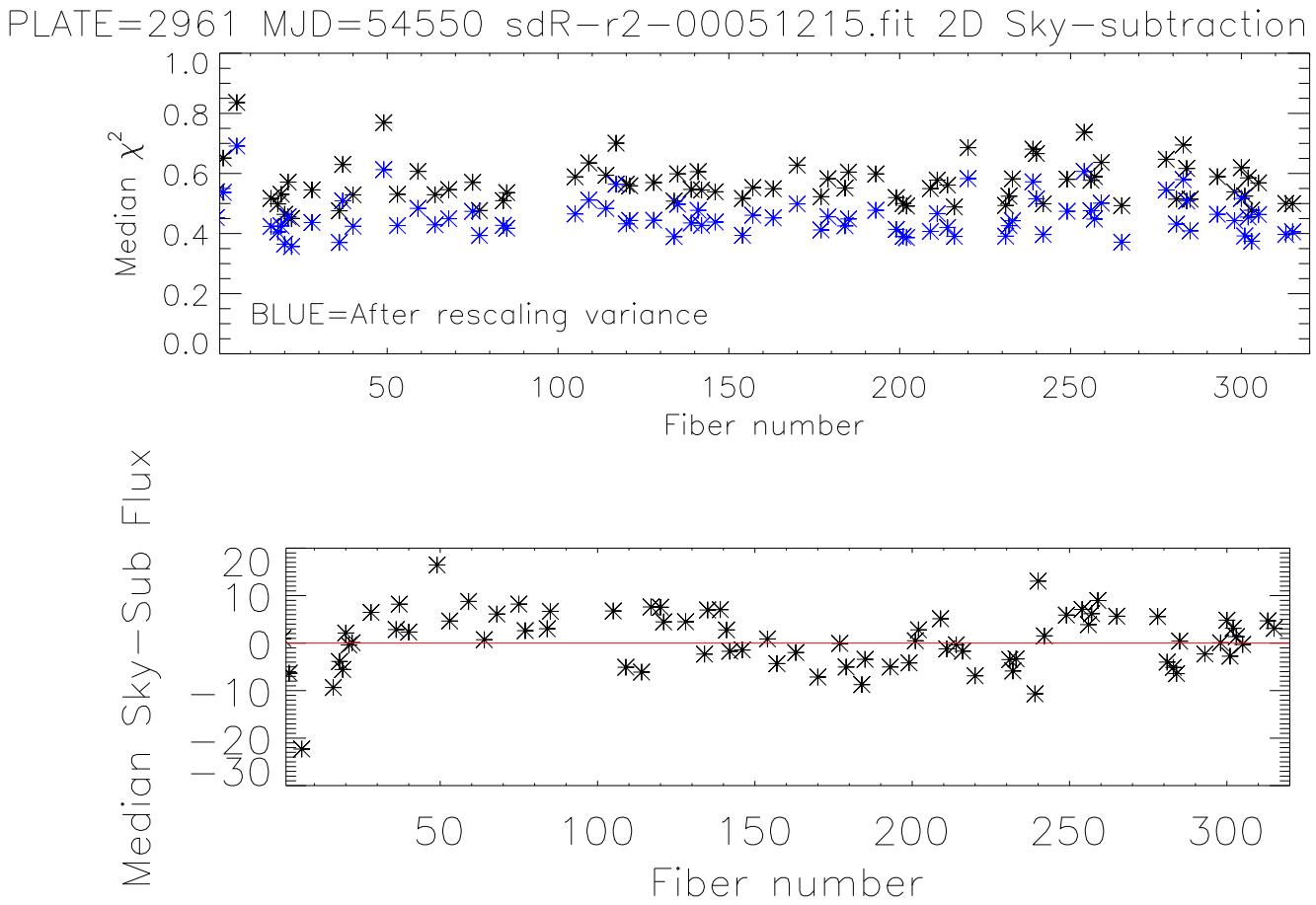

PLATE=2961 MJD=54550 Smooth superflat for sdR-r2-00051215.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
0.985
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

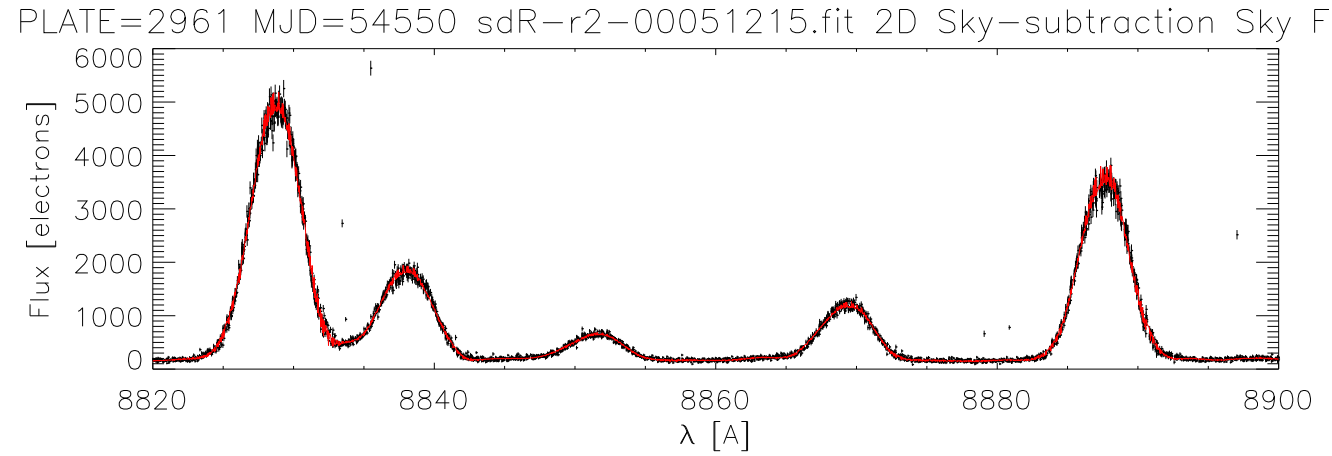

PLATE=2961 MJD=54550 sdR-r2-00051215.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
-40
50
100
150
200
250
300
Fiber number

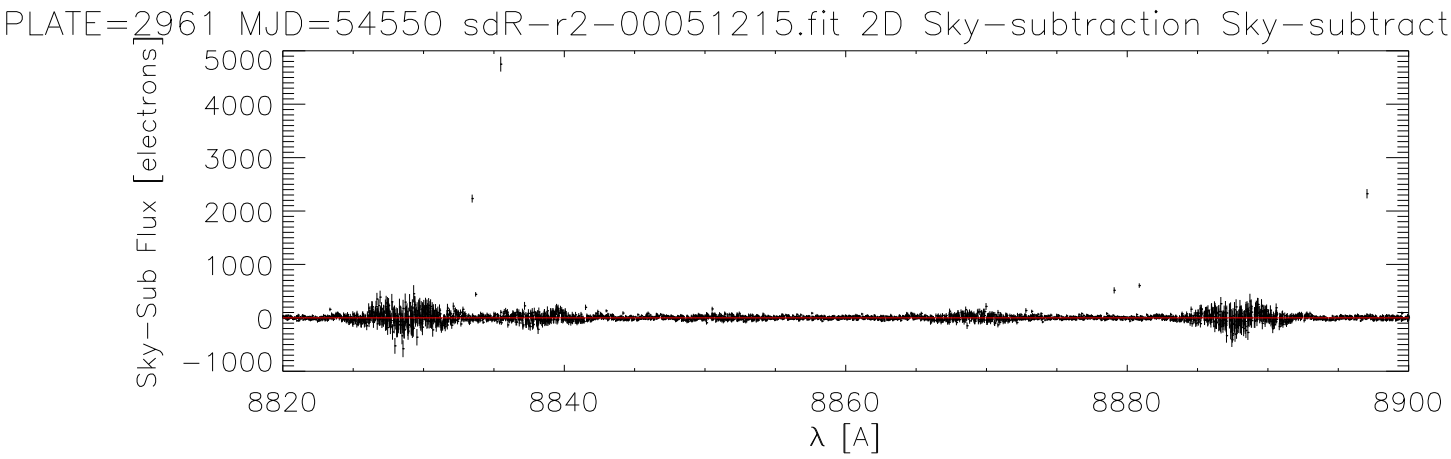

PLATE=2961 MJD=54550 sdR-r2-00051215.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

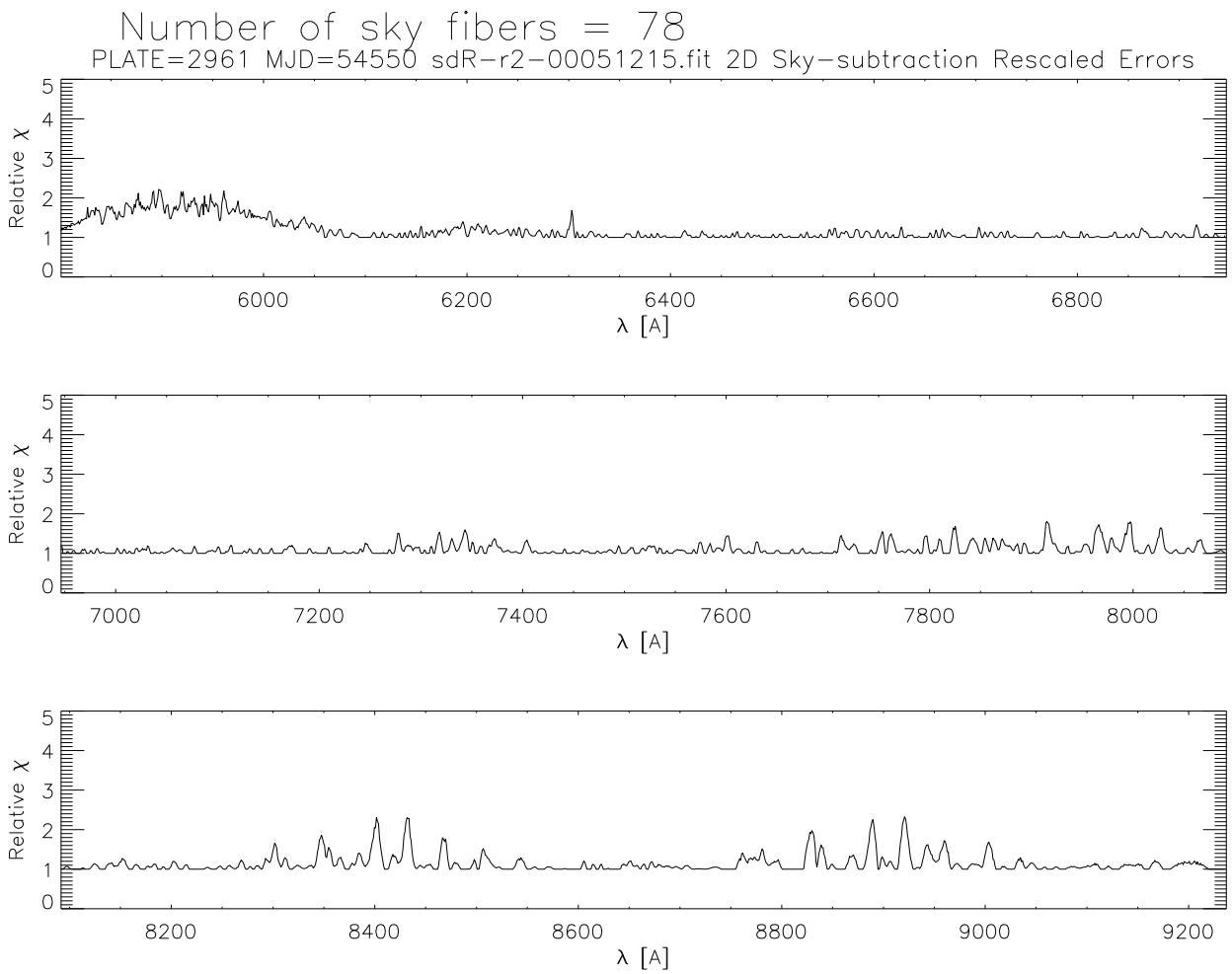

PLATE=2961 MJD=54550 sdR-r2-00051215.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

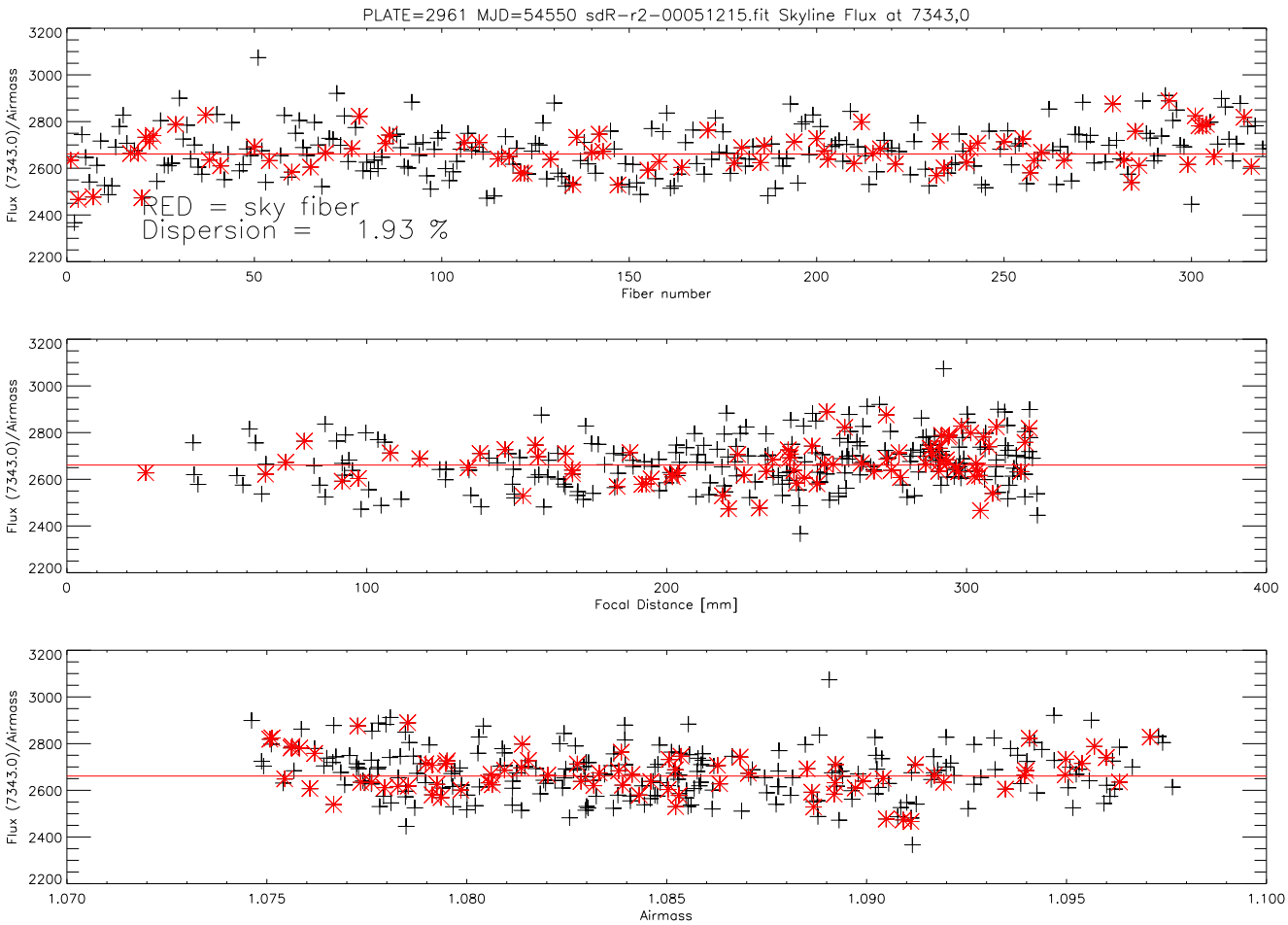

Number of sky fibers = 78
PLATE=2961 MJD=54550 sdR-r2-00051215.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

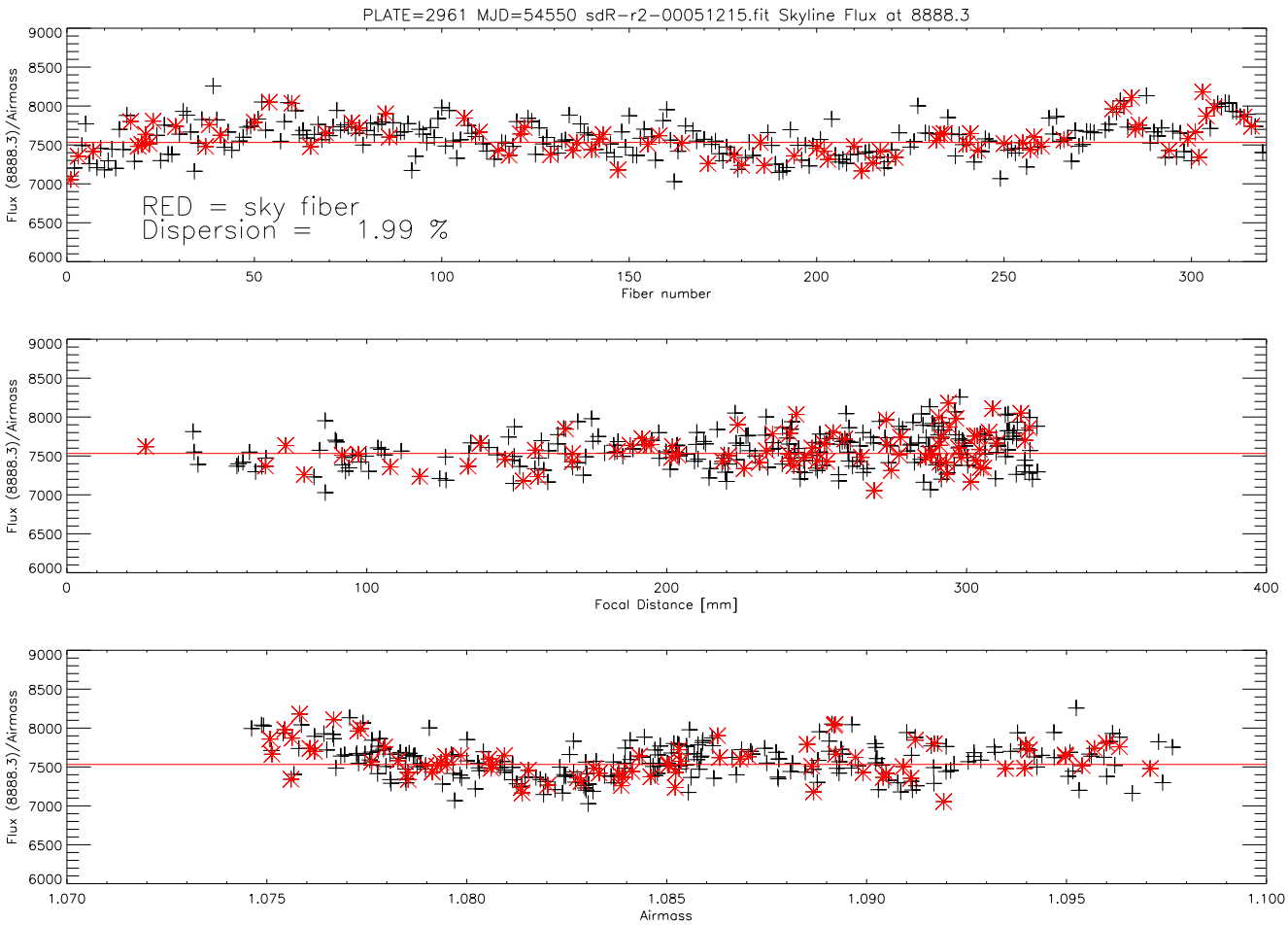

PLATE=2961 MJD=54550 sdR-r2-00051215.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number


PLATE=2961 MJD=54550 sdR-r2-00051215.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2961 MJD=54550 sdR-r2-00051215.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 = 78
PLATE=2961 MJD=54550 sdR-r2-00051215.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=2961 MJD=54550 sdR-r2-00051215.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2961 MJD=54550 sdR-r2-00051215.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass